Water Heater

***Thermo Top Evo* Parking Heater** E1 00 0258

Installation Documentation
Jeep Compass

Validity

Manufacturer	Model	Type	EG-BE-Nr. / ABE
Chrysler (USA)	Compass	MK 49	e11 * 2001 / 116 * 0142 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm³	Engine code
2.2	Diesel	SG	100	2143	ENE

SG = Manual transmission

from Model Year 2011
Left-hand drive vehicle

verified equipment variants: Automatic air-conditioning
Front fog light

not verified: Manual air conditioning
Passenger compartment monitoring
Headlight washer system

Total installation time: about 9 hours

Jeep Compass

Table of Contents

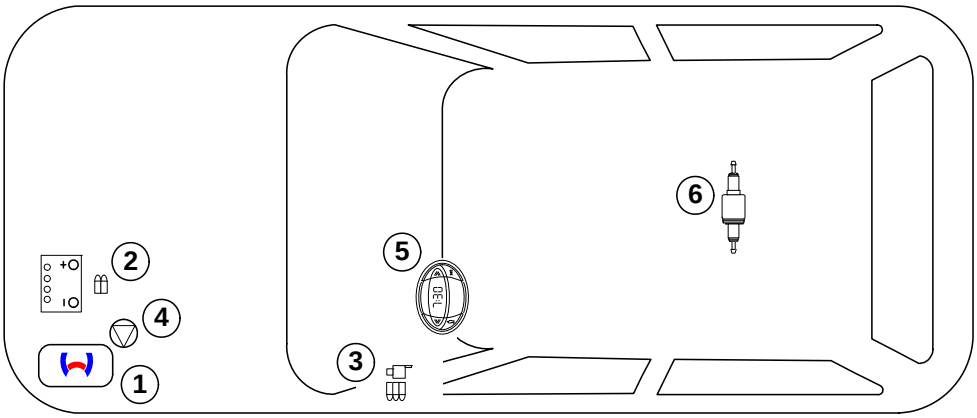
Necessary Components

- Basic delivery scope *Thermo Top Evo* based on price list
- Installation kit for Jeep Compass 2011 2.2 CRD: **1318148A**
- 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. Fuse holder of engine compartment
3. Fuse holder of passenger compartment
4. Circulating pump
5. Digital timer
6. Metering pump



Notes 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 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 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.

Jeep Compass

Notes on Validity

This installation document applies to the Jeep Compass 2.2 CRD 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 Instructions

Special Tools
- Hose clamp pliers for auto-tightening 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

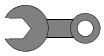
Dimensions
- All dimensions in mm.

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-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.

Mechanical system



Electrical system

Coolant circuit

Combustion air

Fuel

Exhaust gas

Software

Special features are highlighted using the following symbols:

Specific risk of injury or fatal accidents

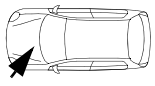
Specific risk of damage to components

Specific risk of fire 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



Jeep Compass

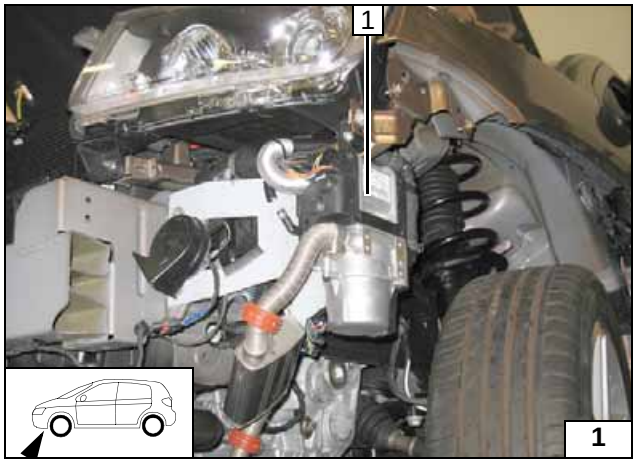
Preliminary Work

Vehicle

- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect and remove the battery.
- Remove the engine design cover.
- Remove the air filter together with the intake hose.
- Loosen the wheel well trim on the right side, remove the wheel well trim on the left side.
- Remove the horn on the left side.
- Remove the bumper.
- Remove the seat bench of the rear bench seat.
- Open the left tank-fitting service lid.
- Remove the left fuel-tank sending unit according to the manufacturer's instructions.
- Remove the lower instrument panel trim on the driver's side.
- Remove the trim under the glove compartment.

Heater

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

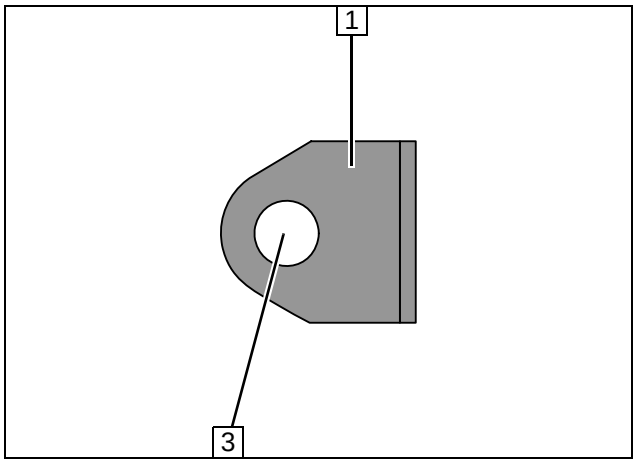


Heater Installation Location

1 Heater

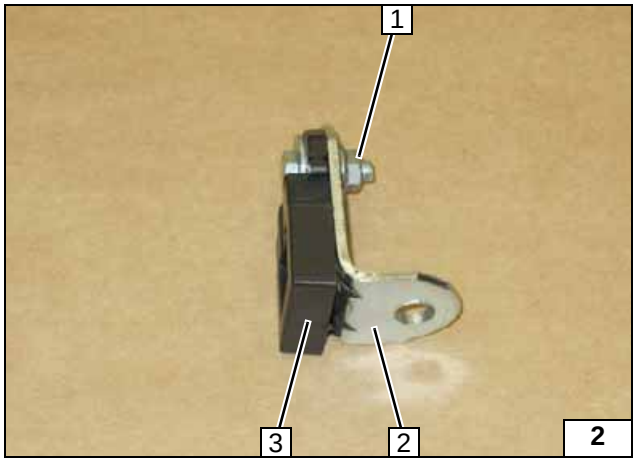
Installation location

Preparing Electrical System



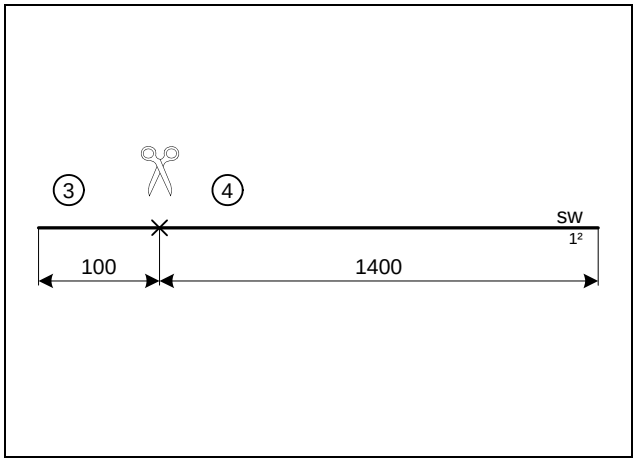
1 Angle bracket
2 8.5 mm dia. hole

Drilling out angle bracket



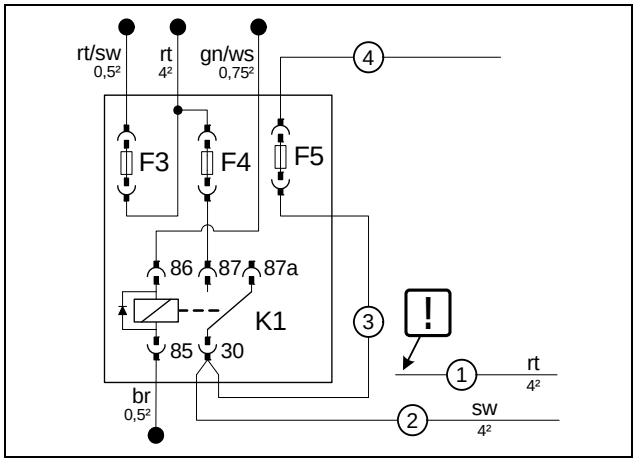
1 M5x16 bolt, washer [2x], nut
2 Angle bracket
3 Retaining plate for engine compartment fuse holder

Premounting fuse holder of engine compartment



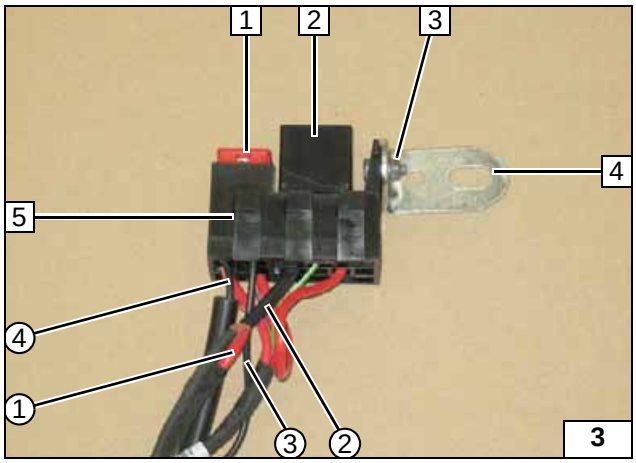
Wire sections retain their numbering in the whole document.
Install wire section ④ in the provided protective sleeving.

Cutting wires to length



Produce connections as shown in wiring diagram. Insert wires into K1-relay socket and fuse F5. Insulate red (rt) wire from K1/87a ① and tie back.

Inserting F4 and F5, preparing K1-relay

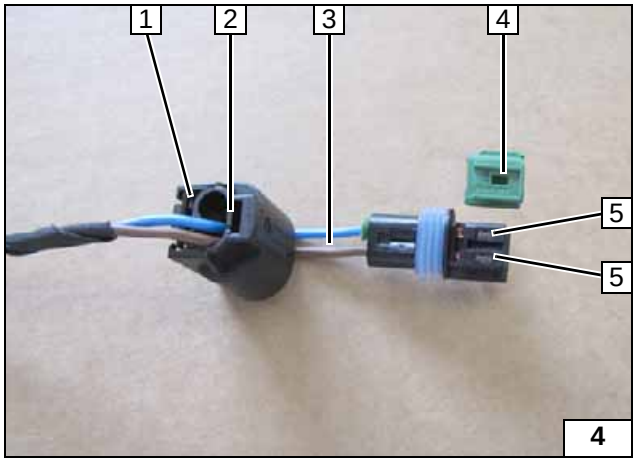


3

10A fuse F5 **1** and K1-relay **2** will be inserted after the installation of the fuse holder.

3 M5x16 bolt, washer [2x], nut
4 Angle bracket
5 Fuse holder of passenger compartment
① Red (rt) wire from K1/87a insulated
② Black (Sw) wire from K1/30
③ Wire from K1/30, fuse F5
④ Wire from Fuse F5

Premounting fuse holder of passenger compartment



4

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

1 Connector housing
2 Lock
3 Blue (bl) / brown (br) wires
4 Coding
5 Timer lock

Removing connector

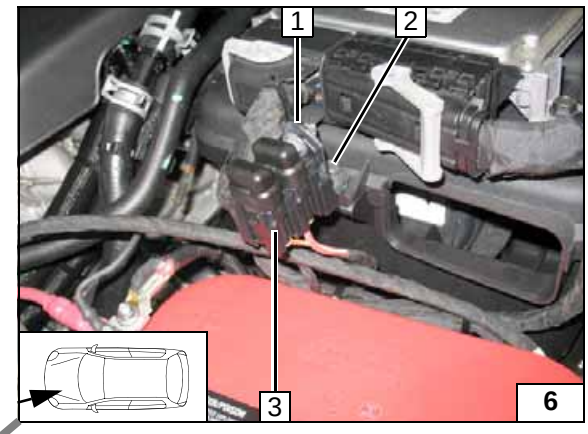
Electrical System

Positive wire and earth wire

1 Earth wire on original vehicle earth support point
2 Positive wire on positive battery terminal

Fuse holder of engine compartment

1 Angle bracket
2 Original vehicle bolt
3 Fuses F1-2



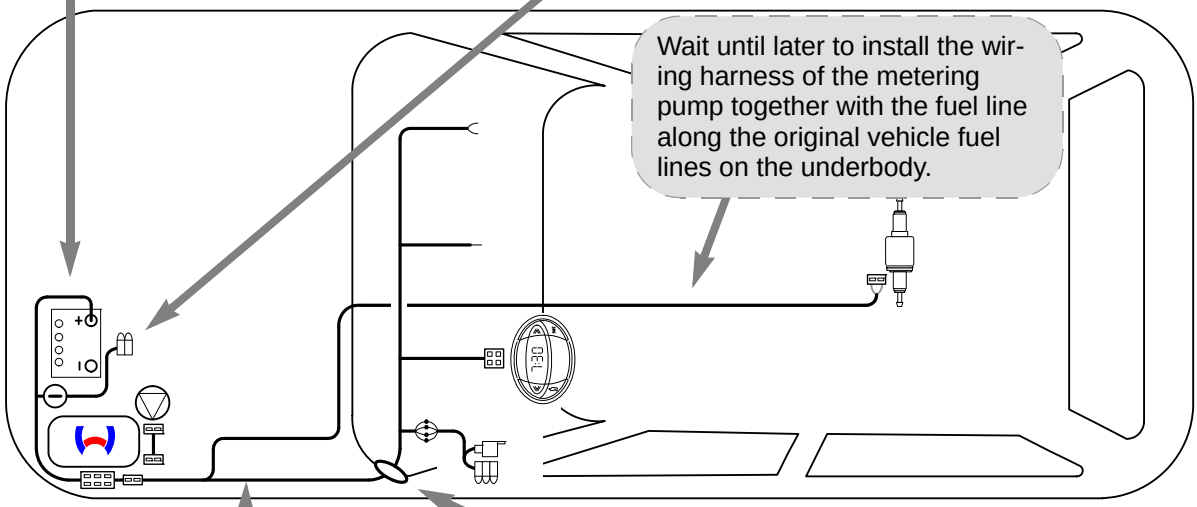
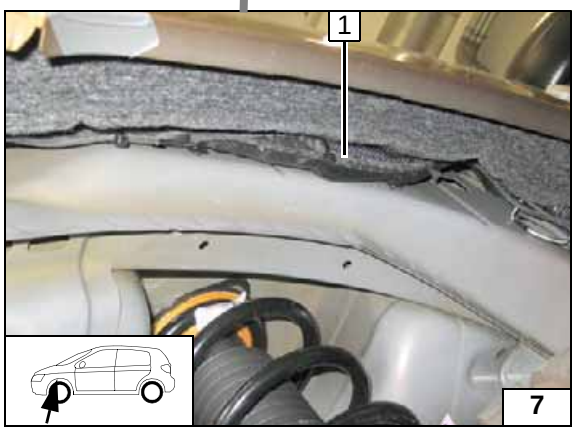
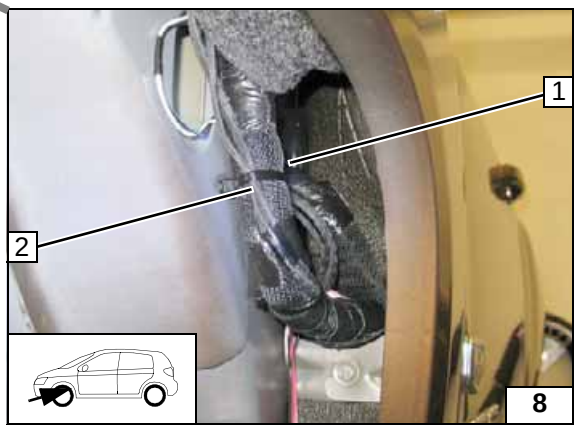


Diagram of wiring harness routing



Wiring harness routing

1 Wiring harnesses of heater, heater control and black (sw) wire ④ Fuse F5

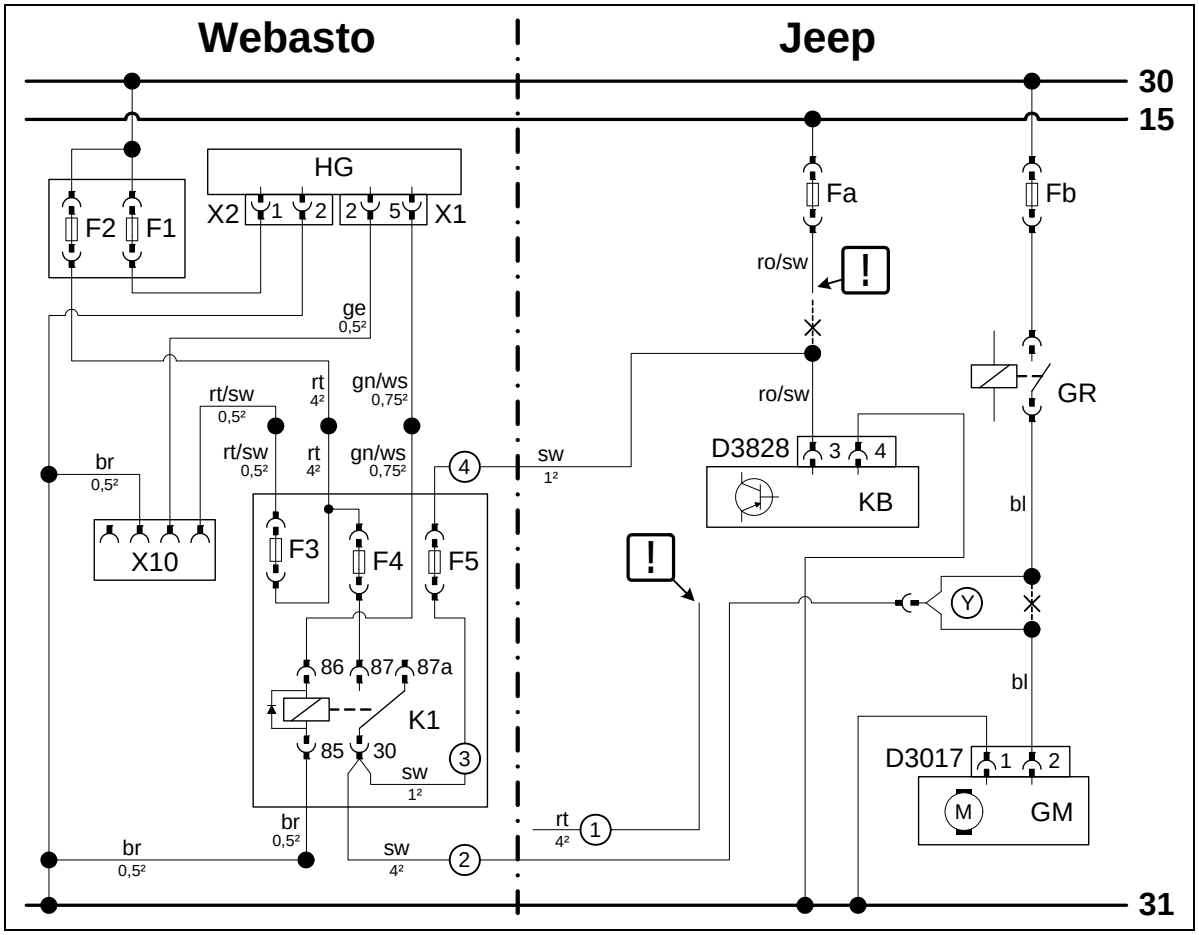


Wiring harness pass through

1 Protective rubber plug
2 Wiring harnesses of heater, heater control and black (sw) wire ④ Fuse F5

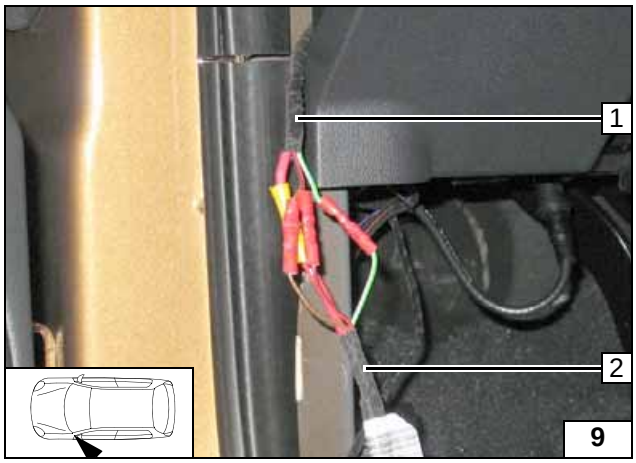
Fan Control

Wiring diagram



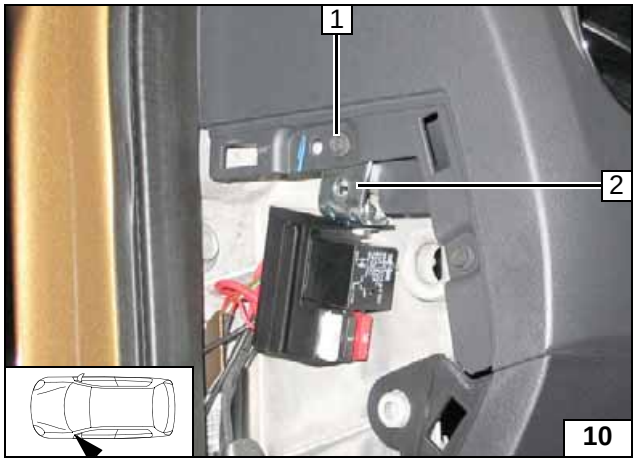
Legend

Webasto components		Vehicle components		Colours and symbols	
HG	Heater TT-Evo	Fa	Fuse	rt	red
X1	6-pin heater connector	Fb	Fuse	sw	black
X2	2-pin heater connector	GR	Fan relay	ge	yellow
X10	4-pin connector Heater control	D3828	16-pin connector of KB	gn	green
		KB	A/C control panel	bl	blue
K1	Fan relay	D3017	2-pin connector GM	ws	white
F1	20A fuse	GM	Fan motor	br	brown
F2	30A fuse			ro	pink
F3	1A fuse				
F4	25A fuse			!	Insulate and tie back wire end
F5	10 A fuse				
				X	Cutting point
				Wiring colours may vary.	



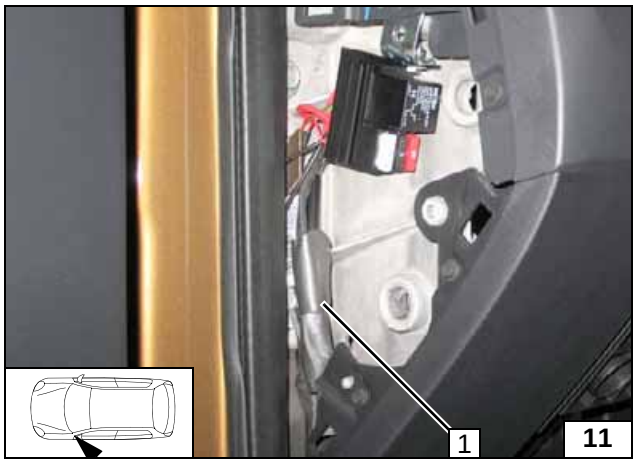
Connect same colour wires from wiring harness of passenger compartment fuse holder **2** and wiring harness of heater **1** as shown on wiring diagram.

Connecting wiring harnesses



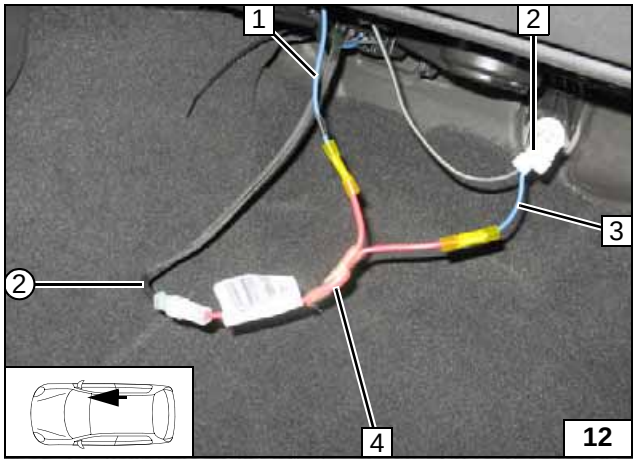
1 Original vehicle bolt
2 Angle bracket

Installing fuse holder of passenger compartment



1 Rub protection around wiring harnesses

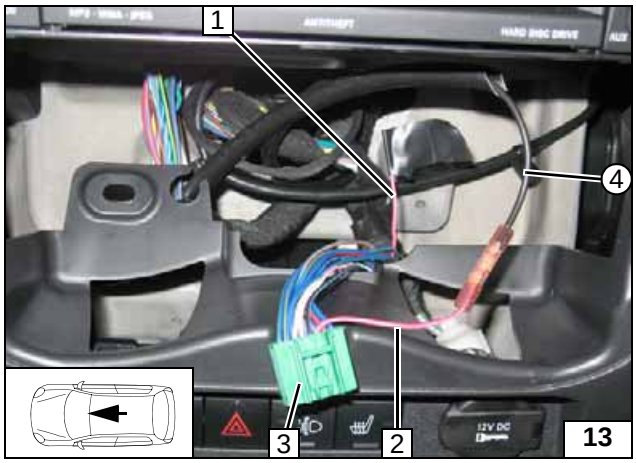
Securing wiring harnesses



Connection to 2-pin connector D3017 **2** from fan motor. Produce connections as shown in wiring diagram.

1 Blue (bl) wire of fuse Fb
3 Blue (bl) wire from two-pin connector D3017 Pin 2
4 Y-Adapter
② Black (Sw) wire from K1/30

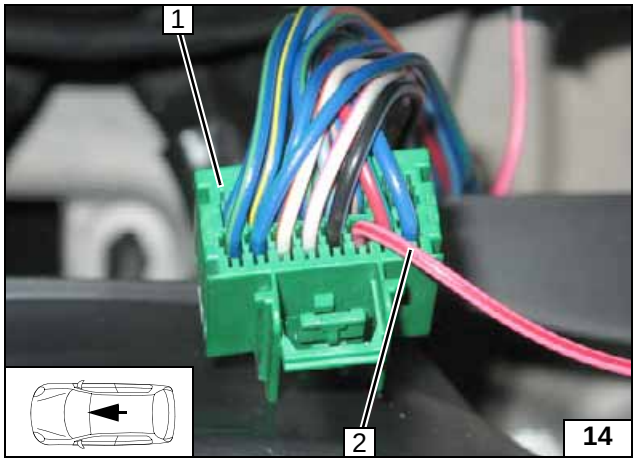
Connecting fan motor



Connection to 16-pin connector D3828 **3** from the A/C control unit (see following image). Establish connections in accordance with wiring diagram. Insulate and tie back pink/black (ro/sw) wire **1** from fuse Fa.

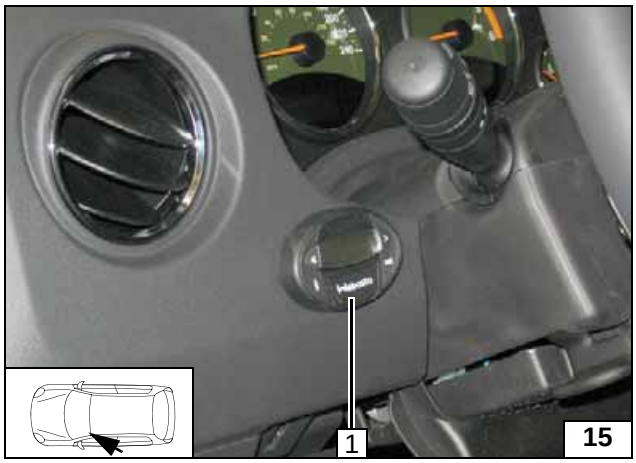
2 Pink/black (ro/sw) wire of 16-pin connector D3828, Pin 3
④ Black (sw) wire from fuse F5

Connecting A/C control unit



1 16-pin connector D3828 Pin 3
2 Pink/black (ro/sw) wire of pin 3

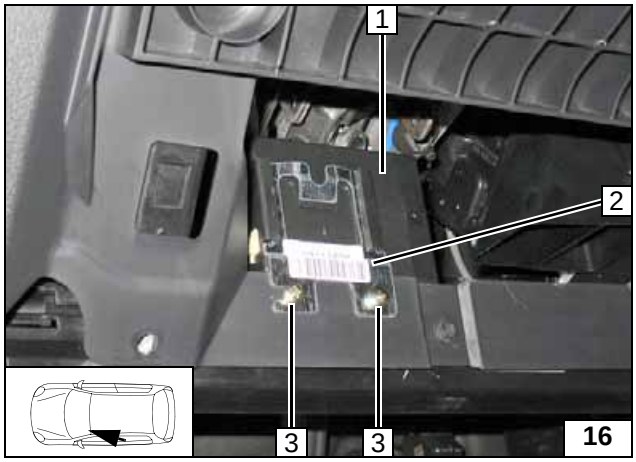
View of connector D3828



Digital Timer

1 Digital timer

Installing digital timer

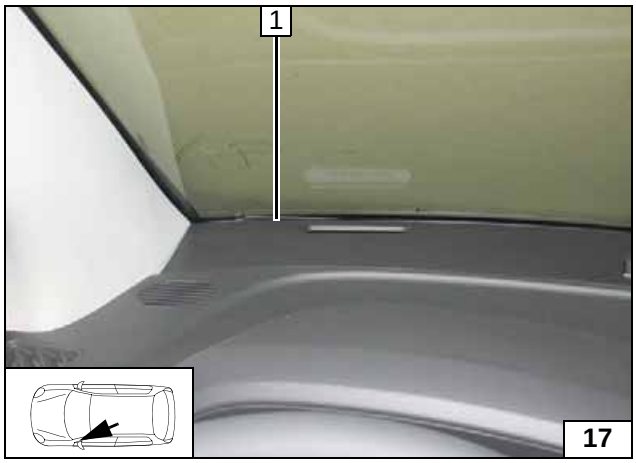


Remote Option (Telestart)

When drilling, watch the components behind.

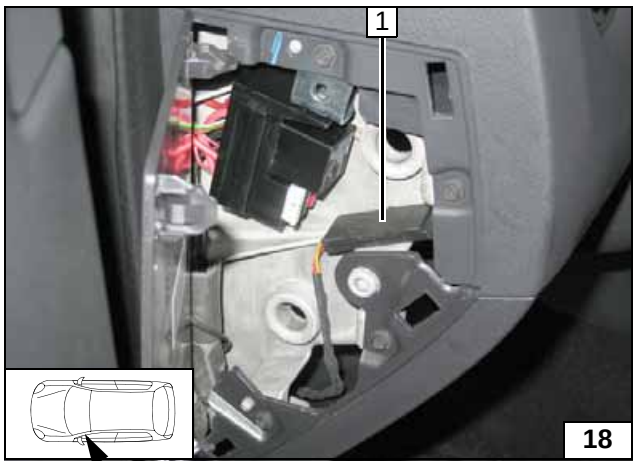
1 Receiver
2 Bracket
3 4mm dia. hole, 5.5x13 self-tapping screw [2x each]

Installing receiver



1 Antenna

Installing antenna

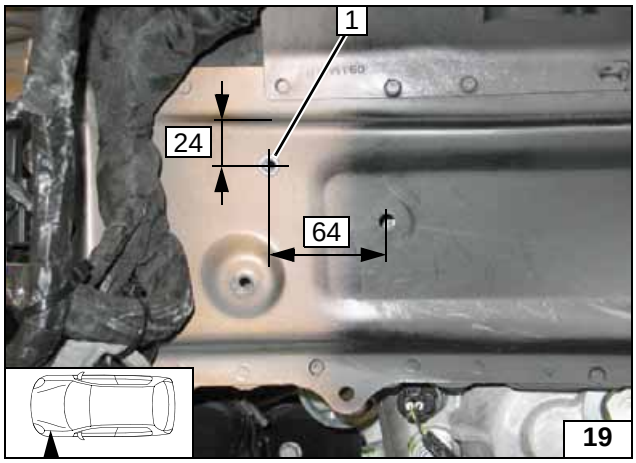


Temperature sensor T100 HTM

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

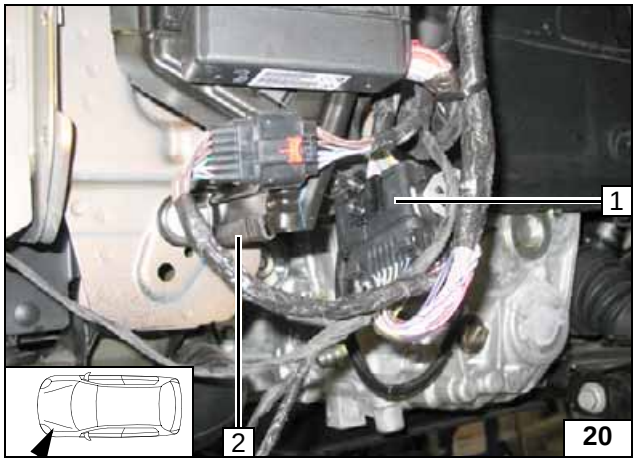
Installing temperature sensor

Preparing Installation Location



1 9.1 mm dia. hole; rivet nut

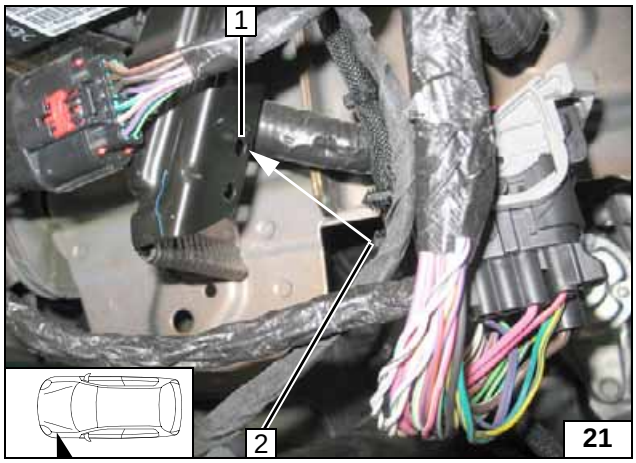
Installing rivet nut



Separate 100mm edge protection in the middle. Separate original vehicle compact connector **1** from bracket (two detents).

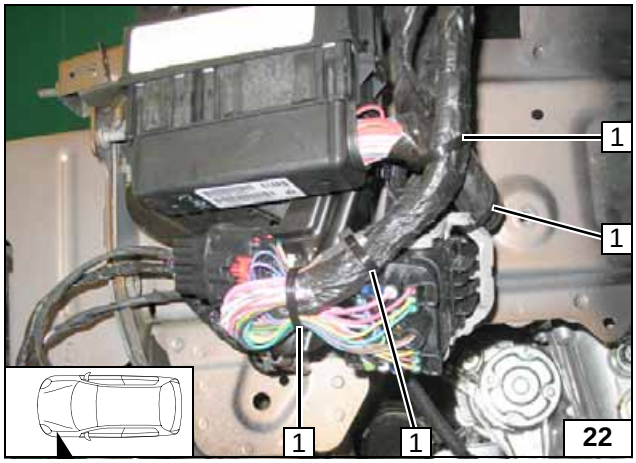
2 50mm edge protection

Loosening connector



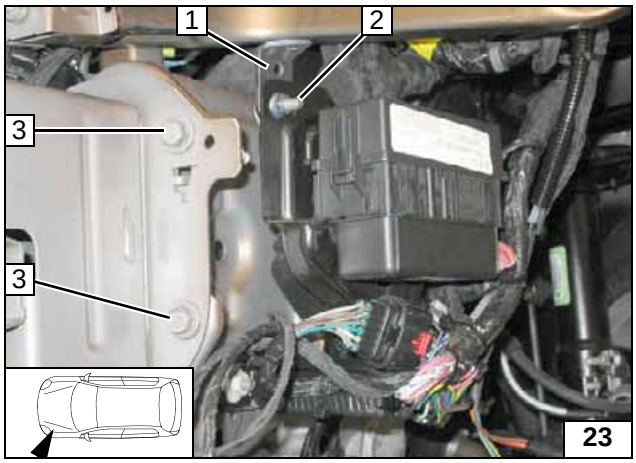
Insert lower detent **2** of compact connector into upper hole **1** of bracket.

Displacing connector



Fasten original vehicle wiring harnesses with cable tie **1**.

Fastening wiring harnesses

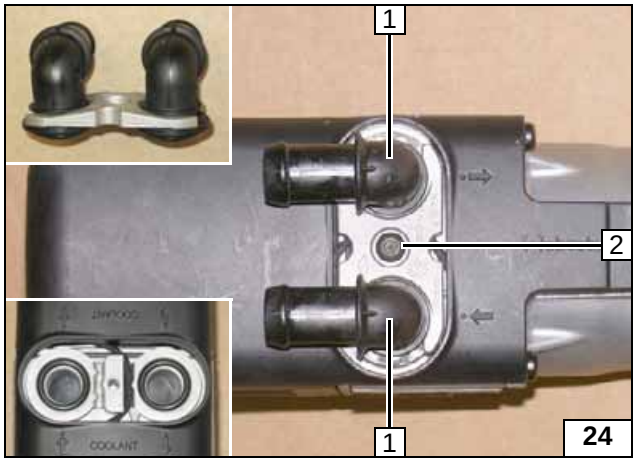


Remove original vehicle M8 bolts **3** [2x], will be reused.

1 Angle bracket
2 M6x20 bolt, large diameter washer, flanged nut, existing hole

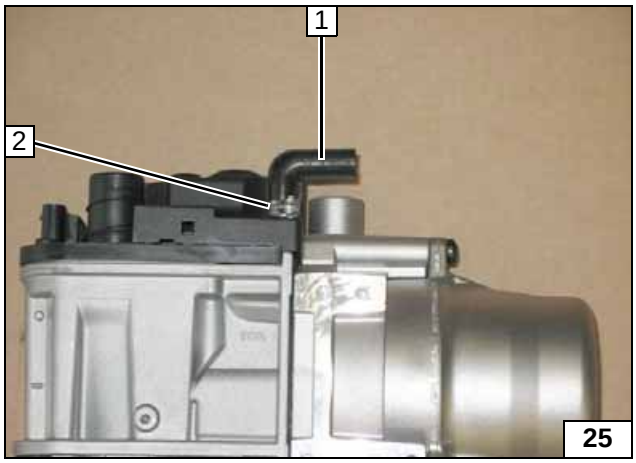
Removing bolts

Preparing Heater



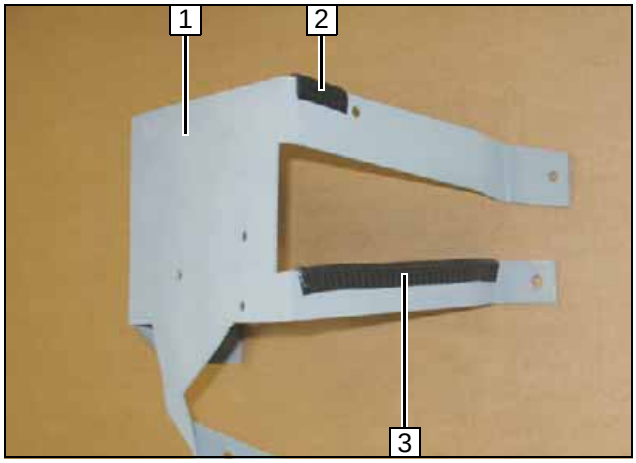
1 Water connection piece, sealing ring [2x each]
2 5x15 self-tapping bolt, retaining plate of water connection piece

Installing water connection piece



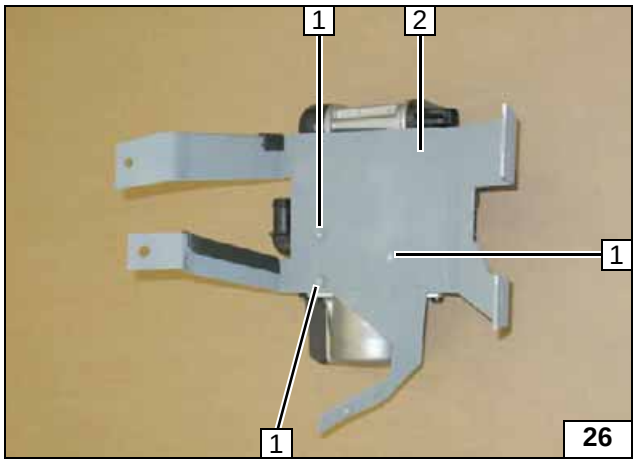
1 90° moulded hose
2 10 mm dia. clamp

Premounting fuel line on heater



1 Bracket
2 30mm edge protection
3 160mm edge protection

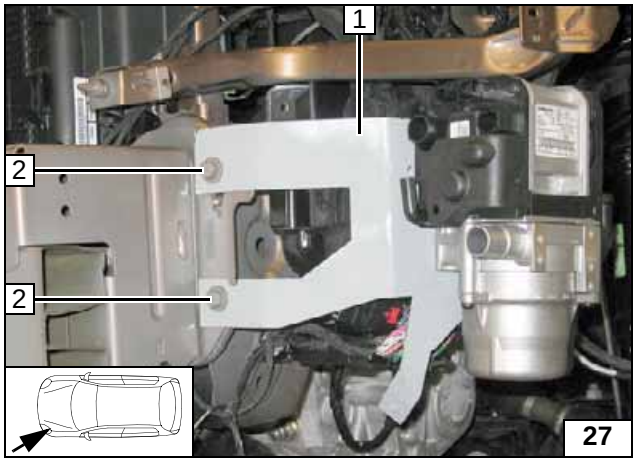
Preparing bracket



1 5x13 self-tapping bolt [3x]
2 Bracket

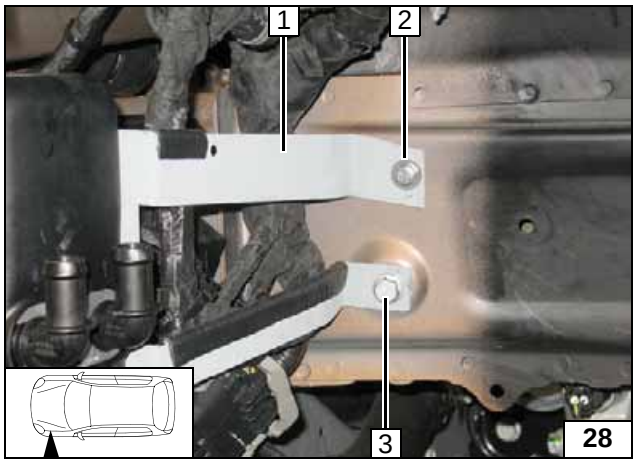
Premounting bracket

Installing Heater



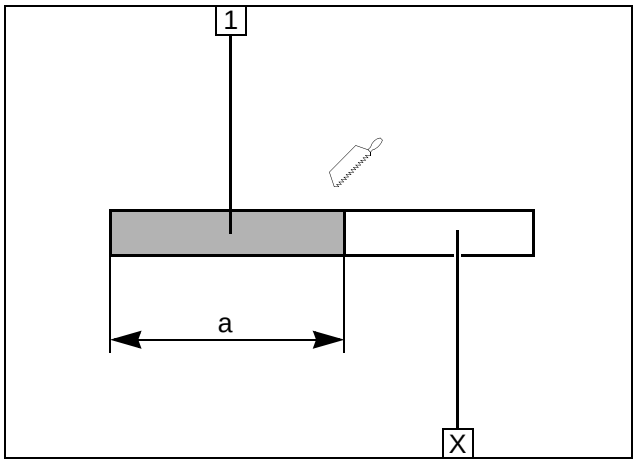
1 Bracket
2 Original vehicle M8 bolt [2x]

Mounting heater



1 Bracket
2 M6x20 bolt, spring lockwasher, large diameter washer
3 M8x20 bolt, spring lockwasher

Mounting heater

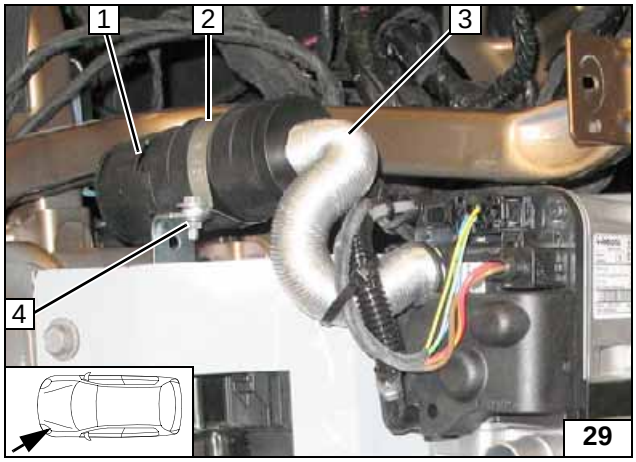


Combustion Air

Discard section **X**.

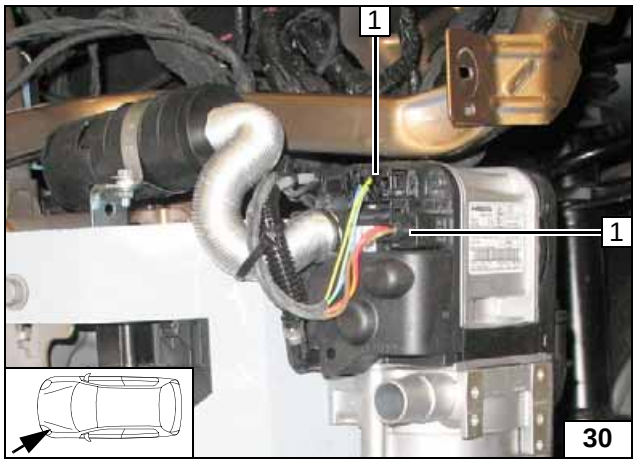
1 Combustion air pipe
a = 220

Cutting combustion air pipe to length



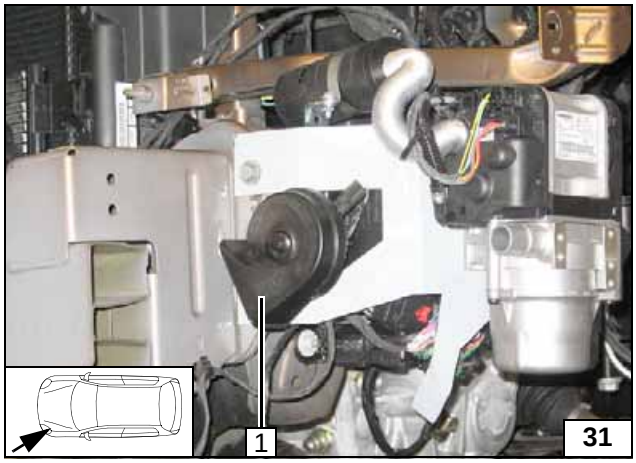
1 Silencer
2 51 mm dia. clamp
3 Combustion air pipe
4 M6x20 bolt, flanged nut

Installing combustion air pipe



1 Attach wiring harness of heater [2x]

Attaching wiring harness



Ensure sufficient distance during bumper installation, if necessary correct installation position of the horn.

1 Horn

Installing horn

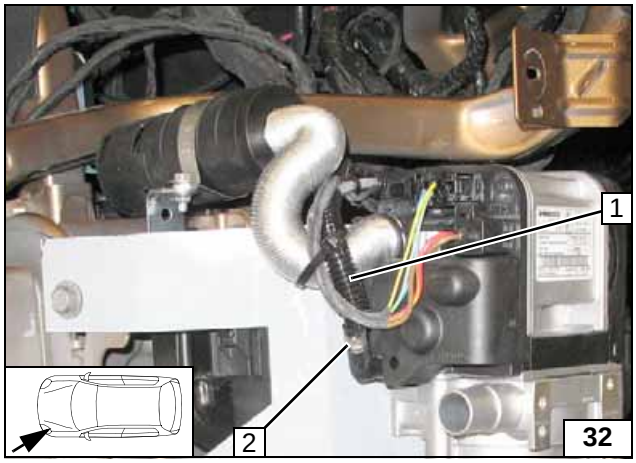
Fuel

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.

Route 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.



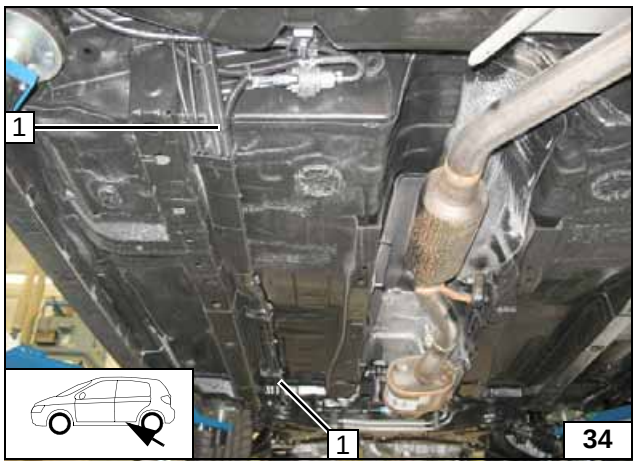
Connect fuel line to 90° moulded hose and pull into corrugated tube **1** along with wiring harness of metering pump.

2 10 mm dia. clamp

Connecting heater

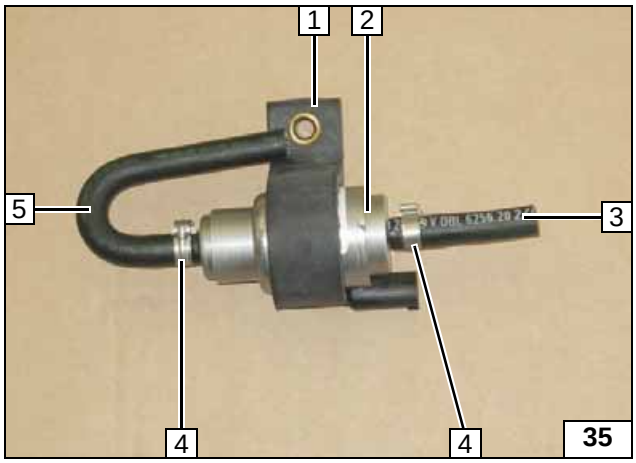
Route fuel line and wiring harness of metering pump in corrugated tube **1** to the firewall and continue on to the underbody.

Routing lines



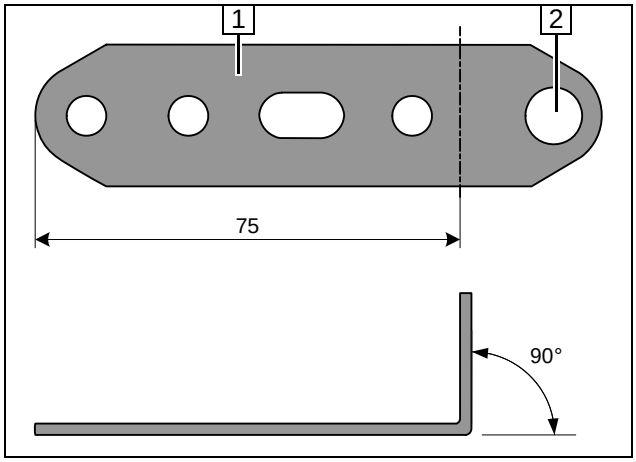
Route fuel line and wiring harness of metering pump in corrugated tube **1** on original vehicle lines to metering pump's installation location.

Routing lines



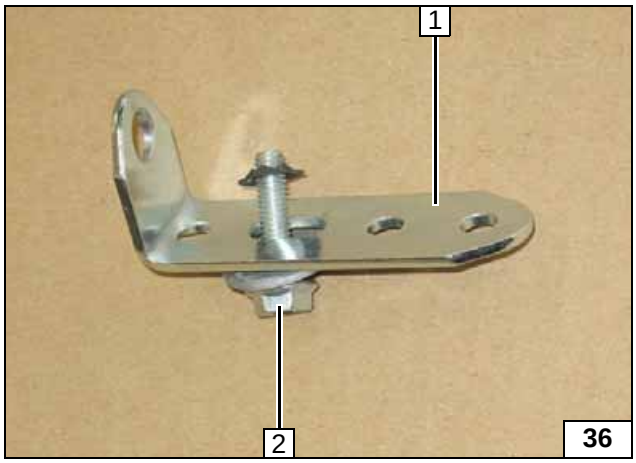
1 Metering pump mounting
2 Metering pump
3 Hose section
4 10 mm dia. clamp [2x]
5 180° moulded hose

Premounting metering pump



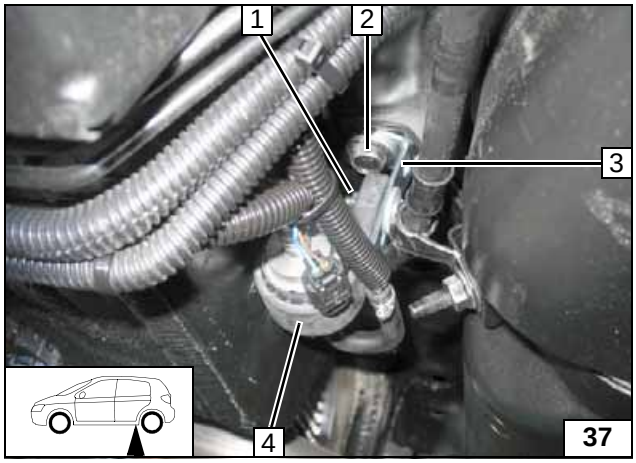
1 Perforated bracket
2 10.5 mm dia. hole

Preparing perforated bracket



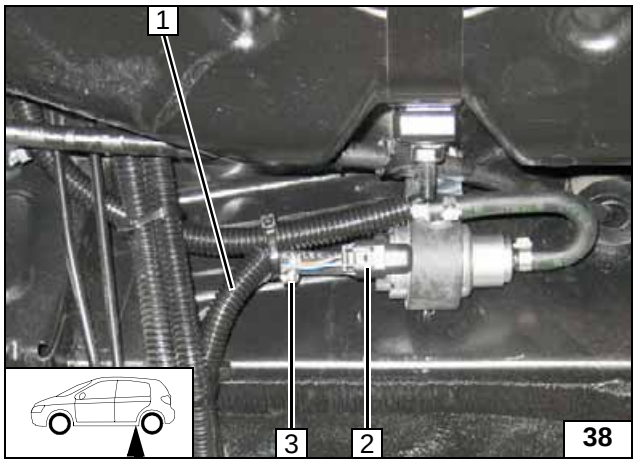
1 Perforated bracket
2 M6x25 bolt, large diameter washer, pin lock

Premounting perforated bracket



1 M6 flanged nut
2 Original vehicle bolt
3 Perforated bracket
4 Metering pump mounting

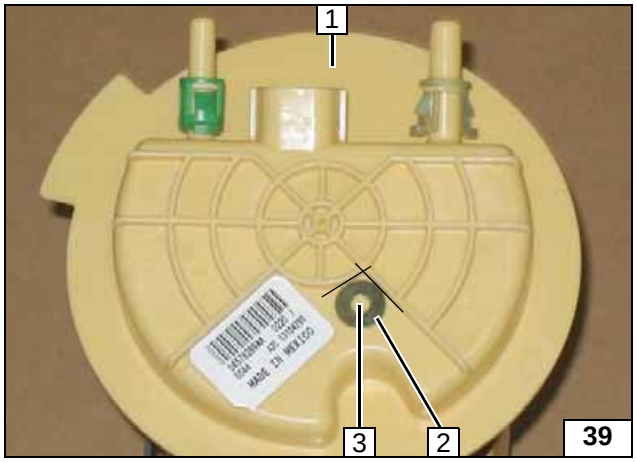
Installing metering pump



Connect fuel line of heater to hose section.

1 Fuel line of heater and wiring harness of metering pump in 10mm dia. corrugated tube
2 Wiring harness of metering pump, connector mounted
3 10 mm dia. clamp [2x]

Connecting metering pump



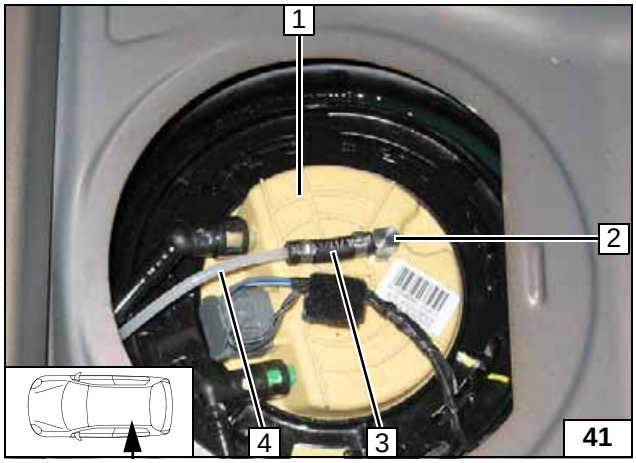
Remove fuel-tank sending unit **1** in accordance with manufacturer's instructions.

2 Place washer outer dia. = 21.6mm against the bars.
3 Copy hole pattern, 6 mm dia. hole

Fuel extraction

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

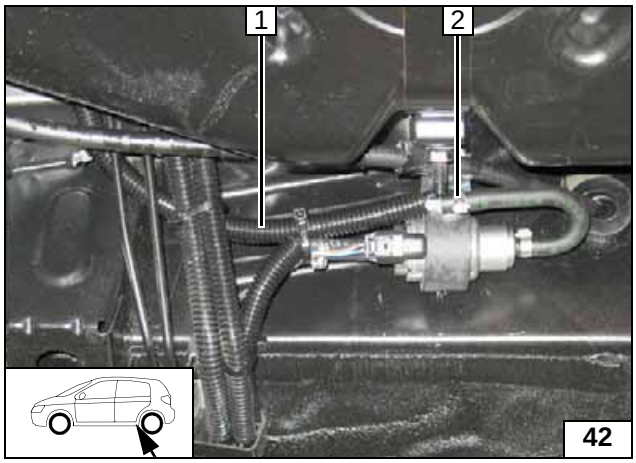
Fuel extraction



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

2 Fuel standpipe
3 Moulded hose, 10 mm dia. clamp [2x]
4 Fuel line

Connecting fuel line



Slide 400mm long corrugated tube **1** onto the fuel line of the fuel standpipe. Connect fuel line to 180° moulded hose.
Check the position of the components; adjust if necessary. Check that they have freedom of movement.

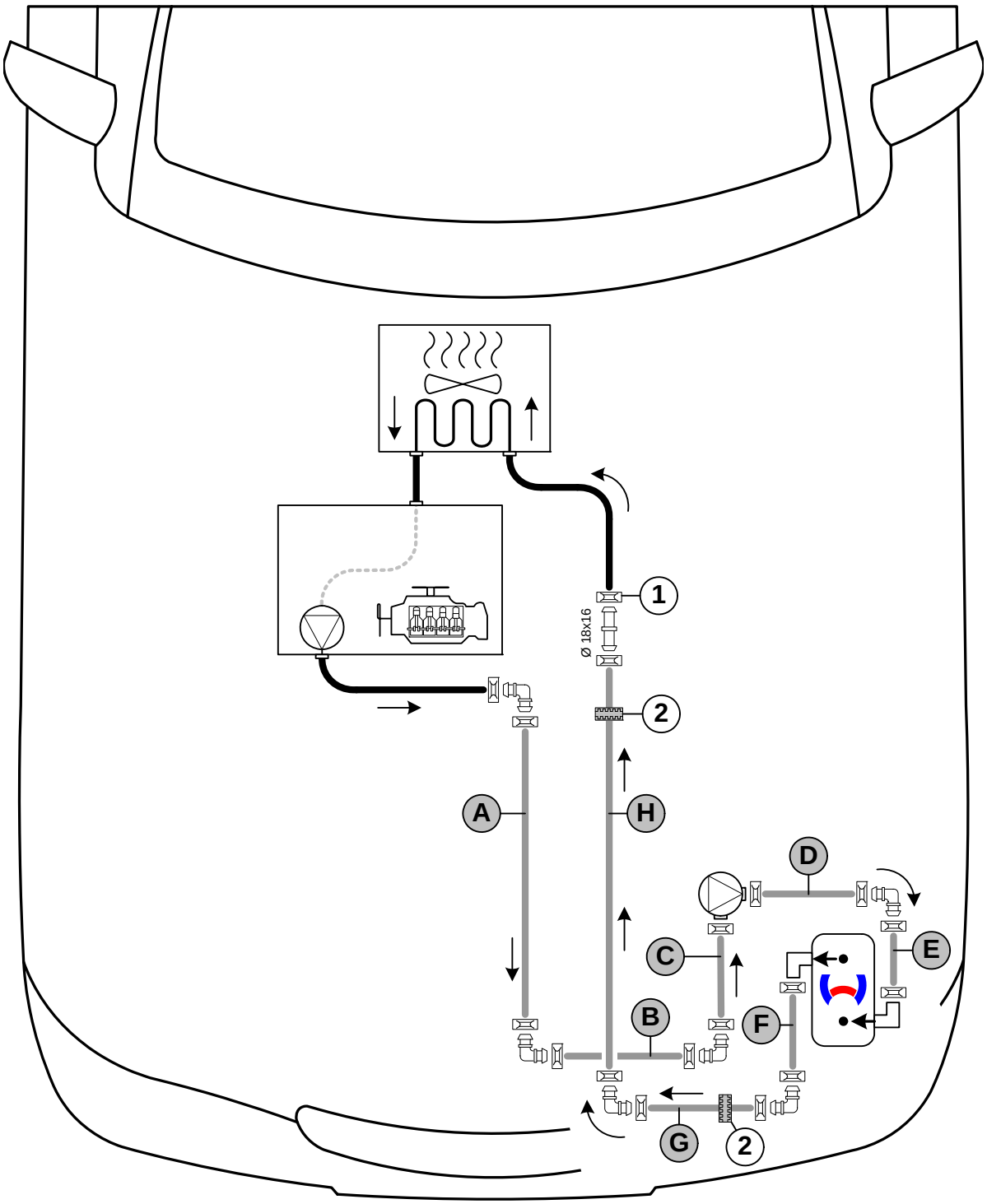
2 10 mm dia. clamp

Connecting metering pump

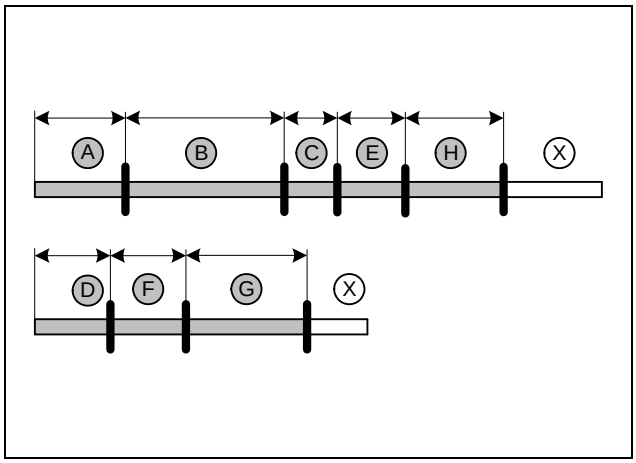
Coolant Circuit

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 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



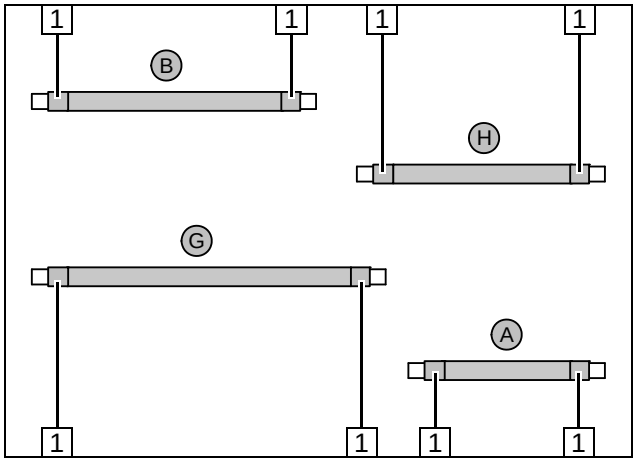
All spring clips without a specific designation = 25 mm dia.
1 = Original vehicle spring clip. **2** = Black (sw) rubber isolator.
All connecting pipes = 18x18 mm dia.



Discard section **X**.

A = 310
B = 490
C = 60
D = 130
E = 80
F = 130
G = 670
H = 360

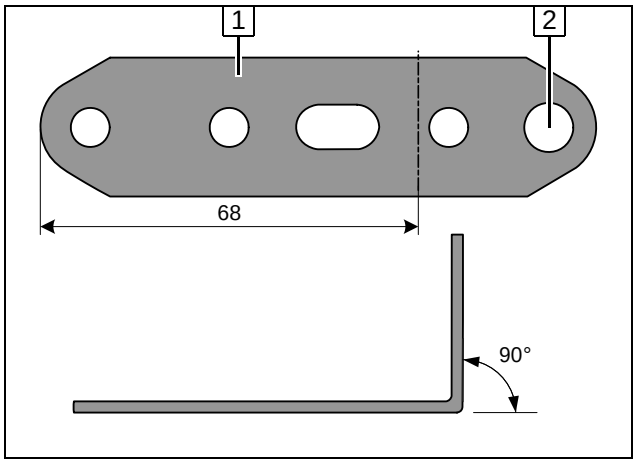
Cutting hoses to length



Slide braided protection hoses onto hoses **A**, **B**, **G** and **H** and cut to length.
Cut heat shrink plastic tubing to length.

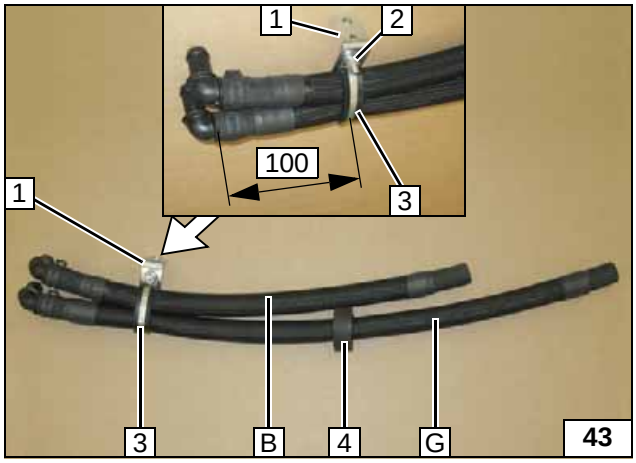
1 Heat shrink plastic tubing, length 50 mm [8x]

Preparing hoses



1 Perforated bracket
2 8.5 mm dia. hole

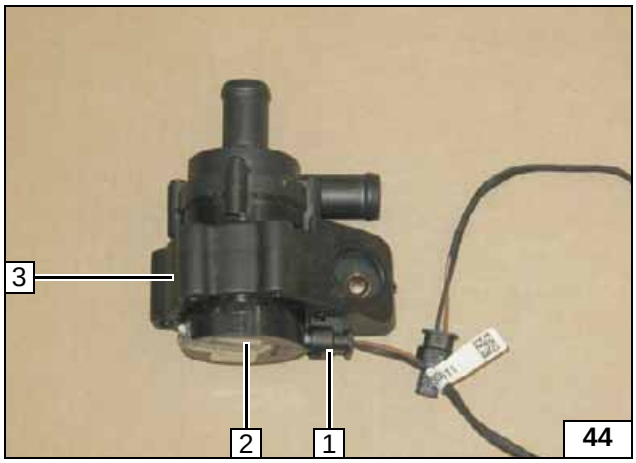
Preparing perforated bracket



Premount 90°, 18x18 mm dia. connecting pipes [2x] and 25 mm dia. spring clips [2x].

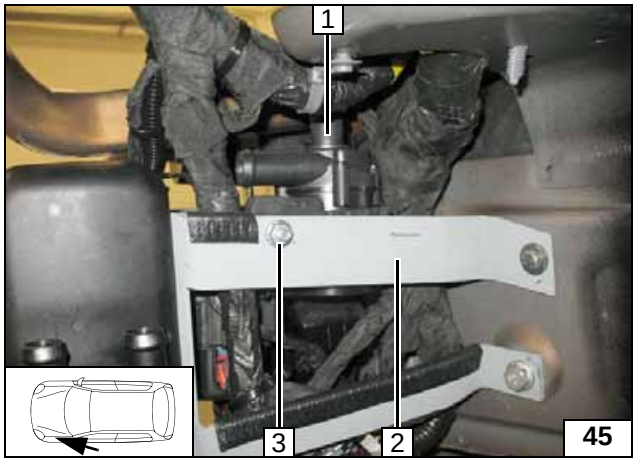
1 Perforated bracket
2 M6x20 bolt, large diameter washer, flanged nut
3 38 mm dia. rubber-coated pipe clamp
4 Slide on black (sw) rubber isolator

Premounting hoses B and G



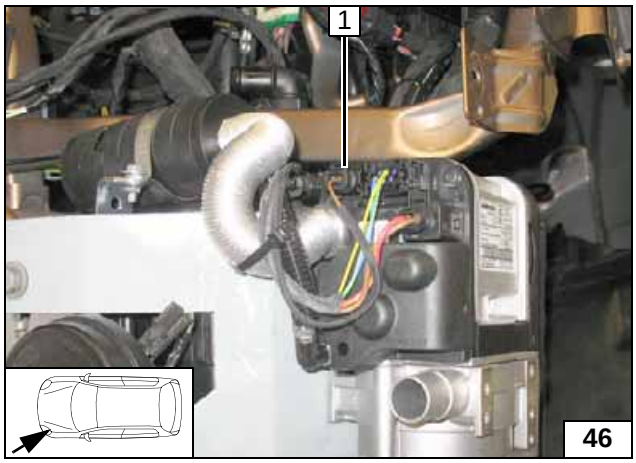
1 Wiring harness of circulating pump
2 Circulating pump
3 Circulating pump mounting

Premounting circulating pump



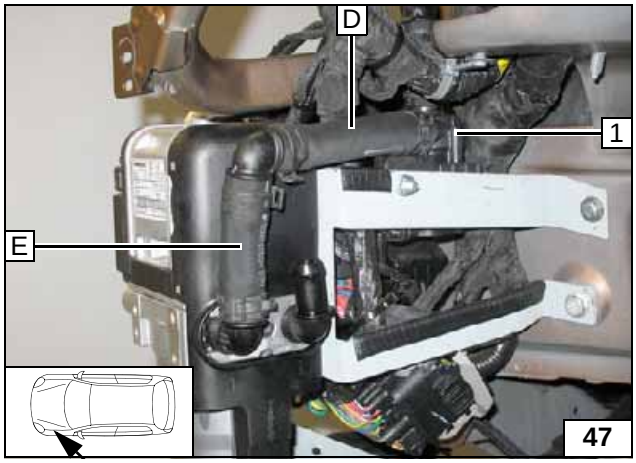
1 Circulating pump
2 Bracket of heater
3 M6x25 bolt, flanged nut, existing hole

Installing circulating pump



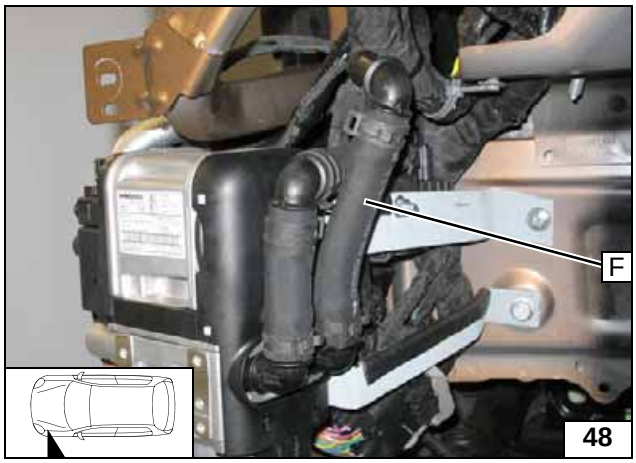
1 Wiring harness of circulating pump

Attaching wiring harness

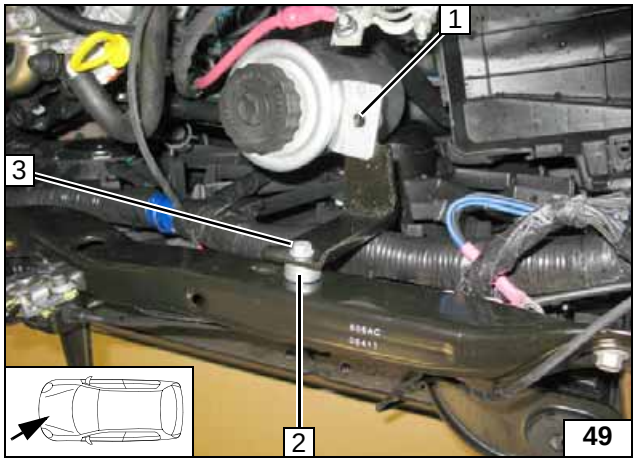


1 Circulating pump

Connecting heater inlet



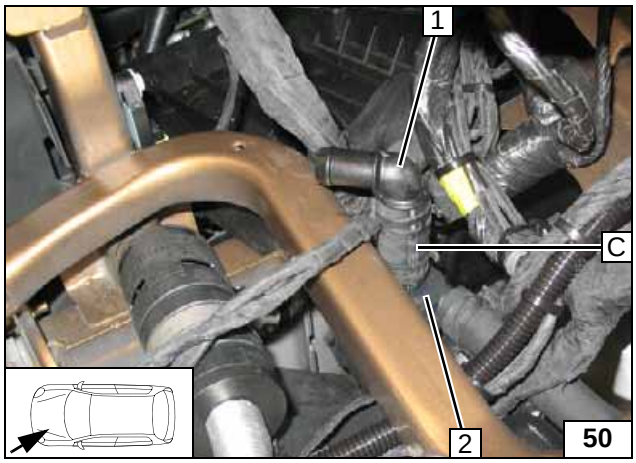
Connecting heater outlet



Remove original vehicle bolts at positions **1** and **3** and discard.

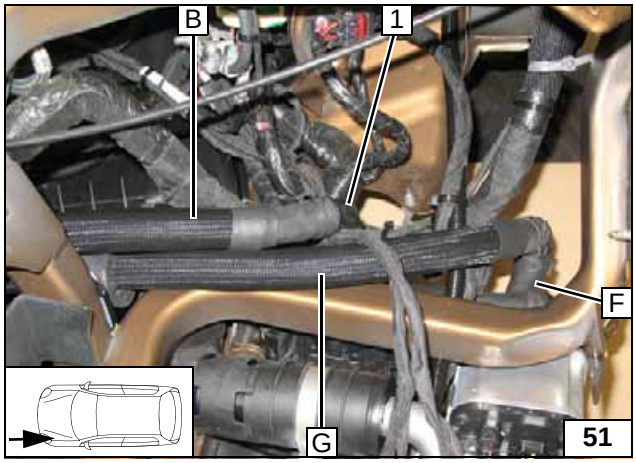
2 10 mm shim
3 M6x25 bolt, existing threaded hole

Preparing installation location



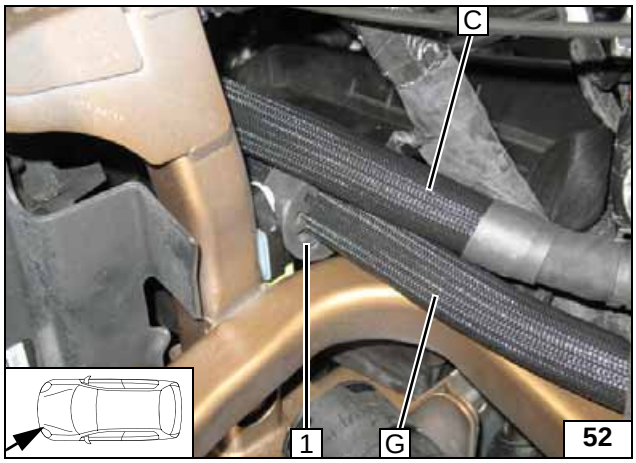
1 90°, 18x18 mm dia. connecting pipe
2 Circulating pump

Connecting circulating pump



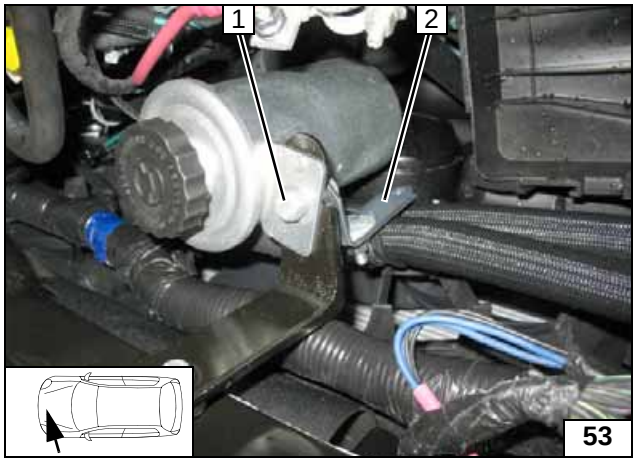
1 90° connecting pipe of hose **C**

Installing hose group B / G



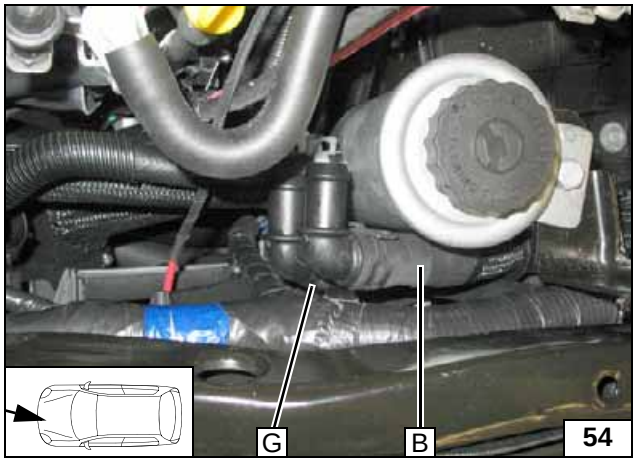
1 Black (sw) rubber isolator

Positioning rubber isolator

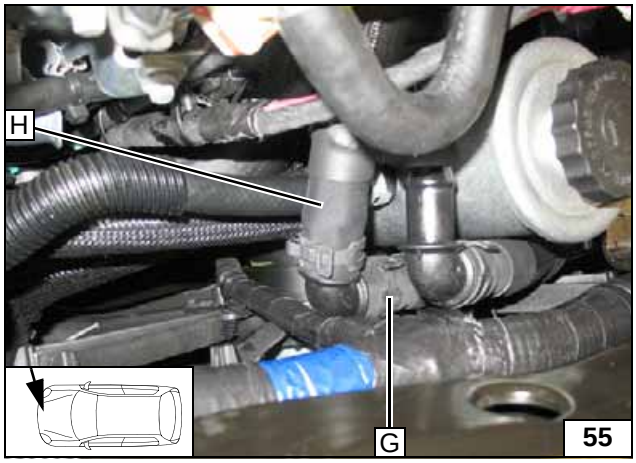


1 M8x30 bolt, spring lockwasher, flanged nut
2 Perforated bracket

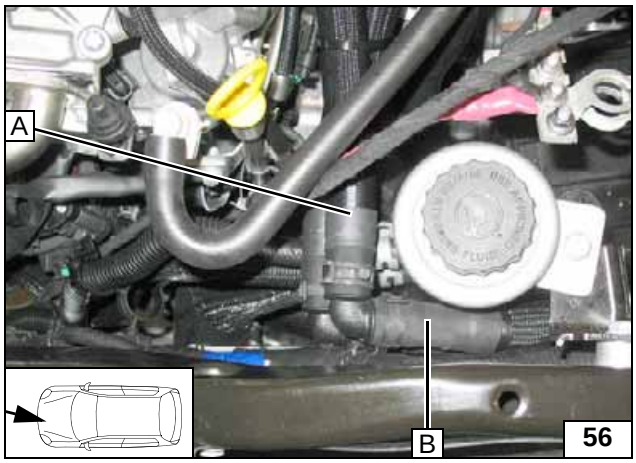
Fastening hose group B / G



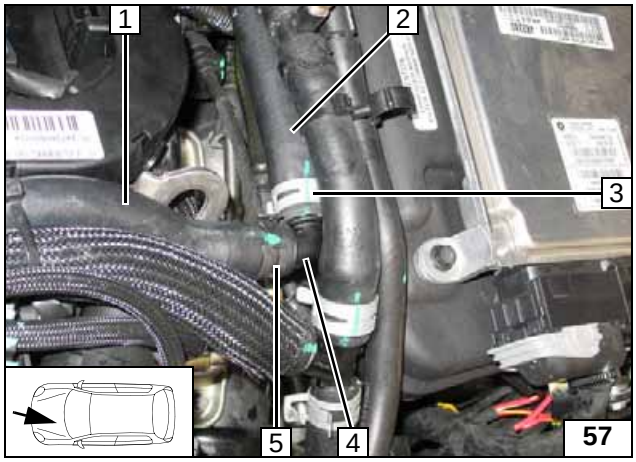
Fastening hose group B / G



Installing hose H



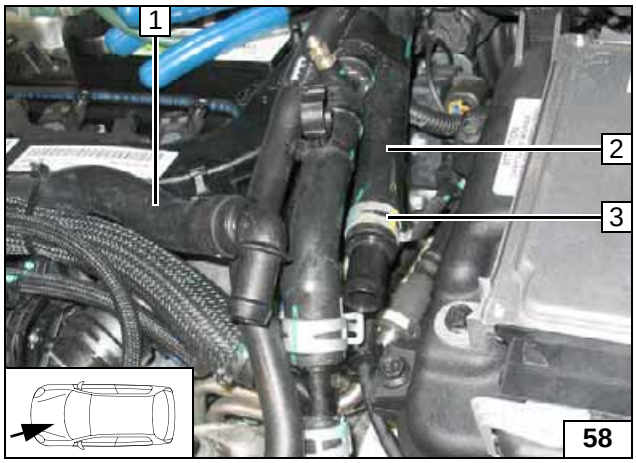
Installing hose A



Remove and discard original vehicle connecting pipe **4**. Spring clip **3** will be reused. Discard spring clip **5**.

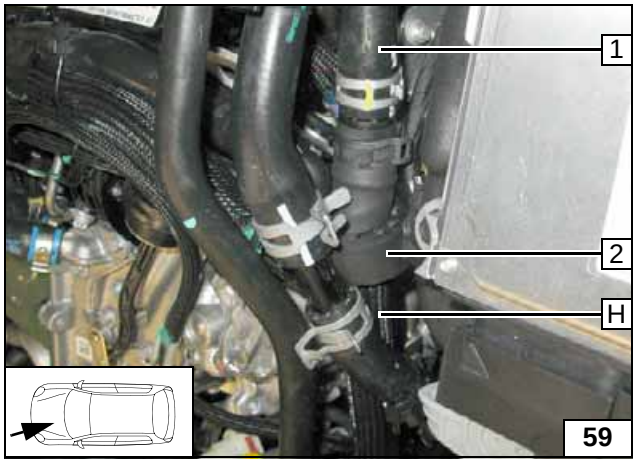
1 Hose of engine outlet
2 Hose on heat exchanger inlet

Cutting point



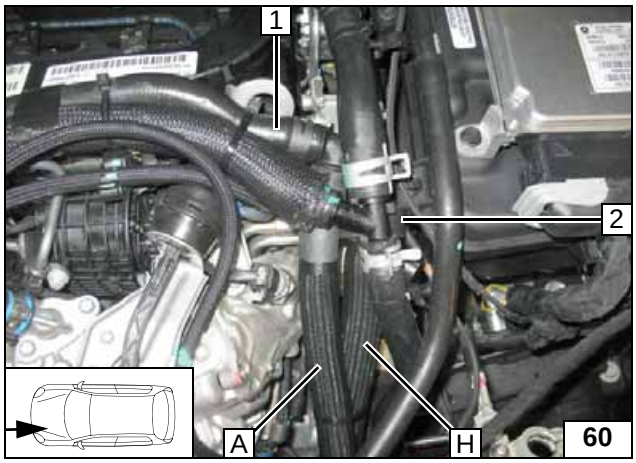
1 Hose of engine outlet
2 Hose on heat exchanger inlet
3 Original vehicle spring clip

Installing connecting pipes



1 Hose on heat exchanger inlet
2 Slide on black (sw) rubber isolator

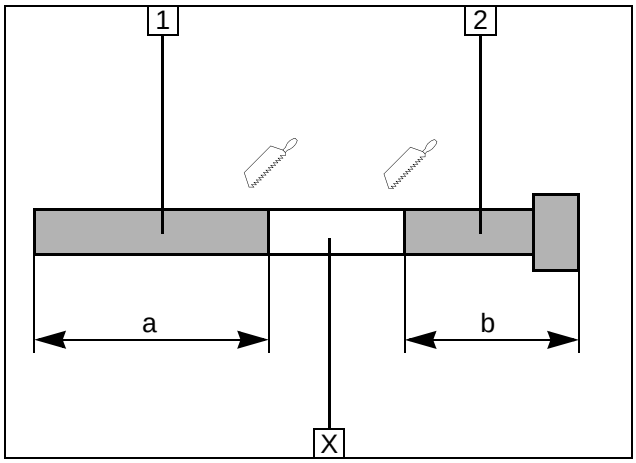
Connecting heat exchanger inlet



Align hoses and rubber isolator **2**. Ensure sufficient distance from neighbouring components, correct if necessary.

1 Hose of engine outlet

Connecting engine outlet

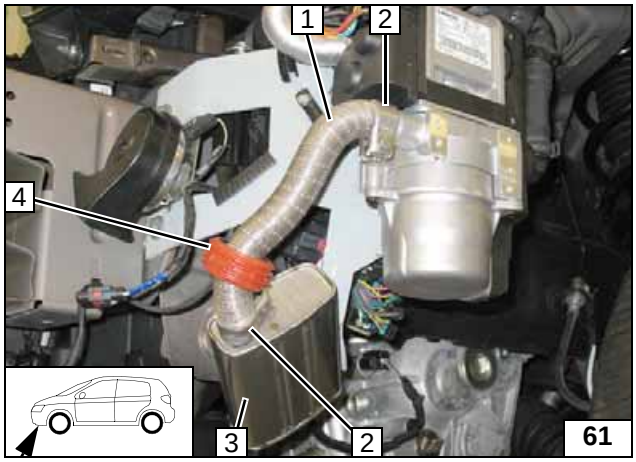


Exhaust Gas

Discard section **X**.

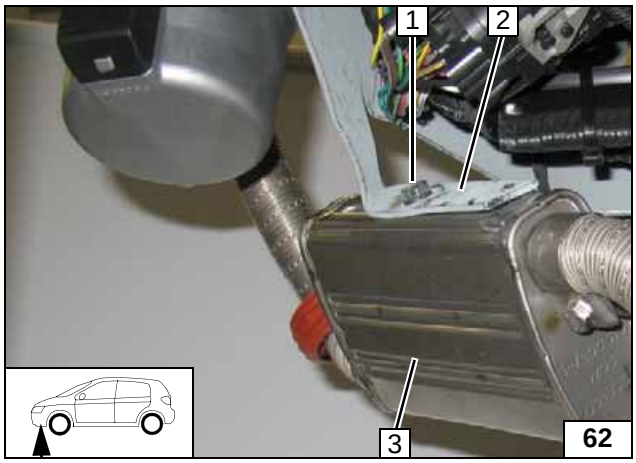
1 Exhaust pipe
a = 240
2 Exhaust end section
b = 185

Preparing exhaust pipe



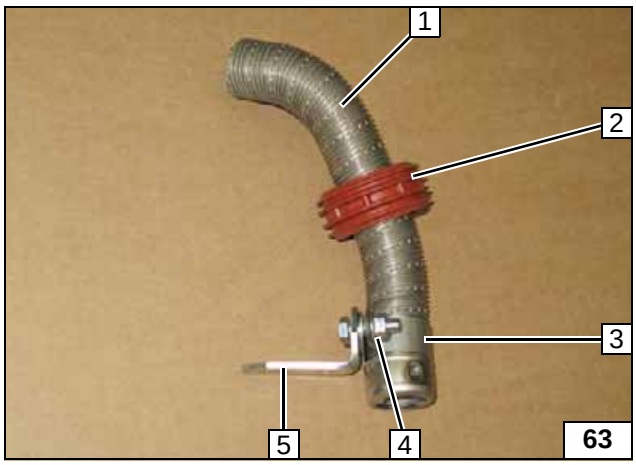
1 Exhaust pipe
2 Hose clamp [2x]
3 Exhaust silencer
4 Spacer bracket

Mounting exhaust pipe



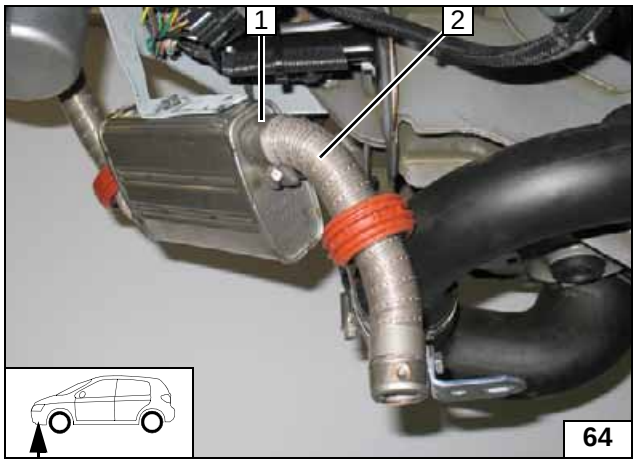
1 M6x16 bolt, spring lockwasher, existing hole
2 Bracket of heater
3 Silencer

Installing silencer



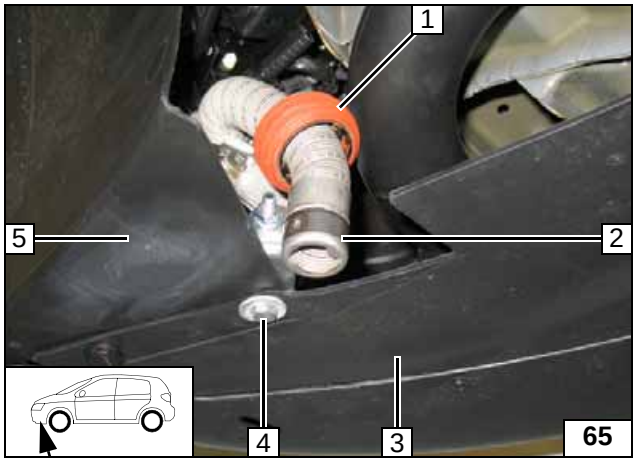
1 Exhaust end section
2 Spacer bracket
3 Pipe-clamp
4 M6x20 bolt, flanged nut
5 Angle bracket

Premounting end section



1 Hose clamp
2 Exhaust end section

Installing exhaust end section



Retaining clip at position **4** will not be reused.
Align spacer bracket of flexible tube **1** with charge-air tube. Centrally align exhaust end section **2** in recess.
Ensure sufficient distance from neighbouring components, correct if necessary.

3 Bumper installed
4 M6x20 bolt, large diameter washer, flanged nut
5 Wheel well trim installed

Aligning exhaust end section

Final Work

WARNING!
Reassemble the disassembled components in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate and tie back all loose wires.
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 instructions.**
- **Set digital timer, teach Telestart transmitter.**
- **Make settings on A/C control panel according to the "Operating Instructions for End Customer".**
- **Place signboard "Switch off parking heater before refueling" in the area of the filler neck.**
- **For initial startup and function check, please see Installation Instructions.**

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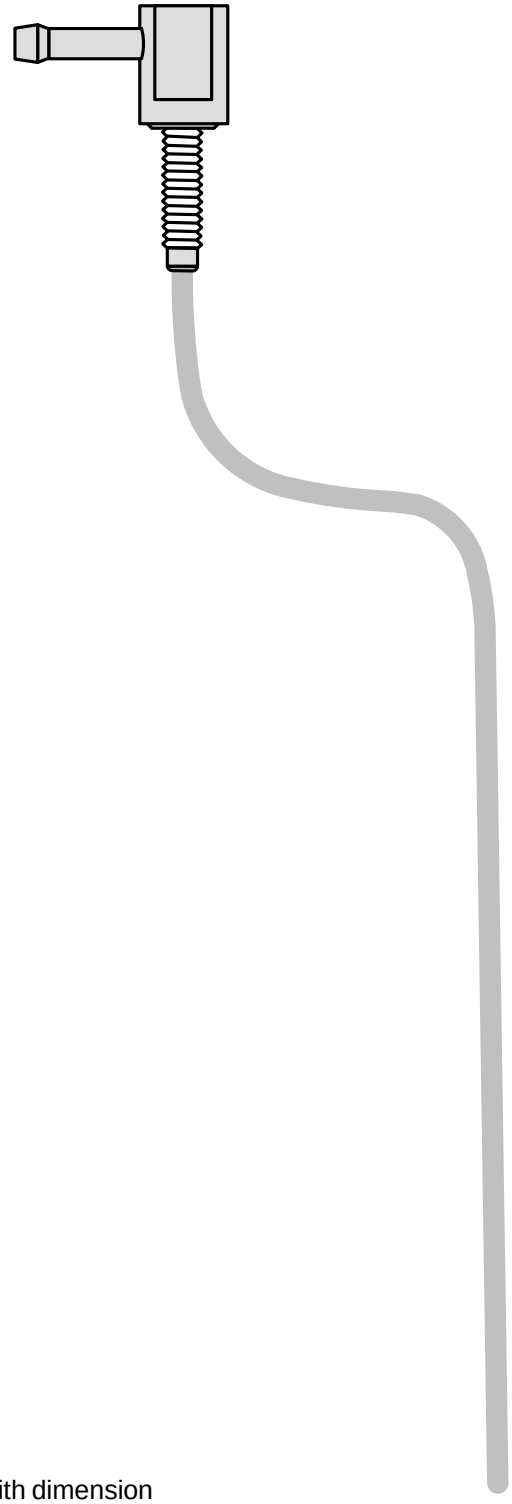
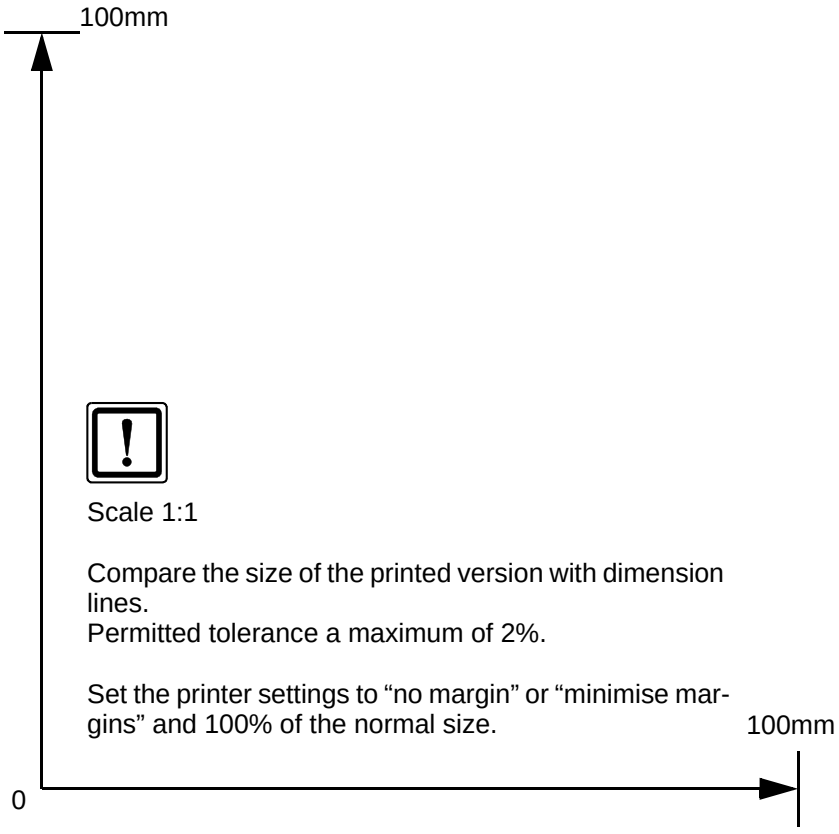
http://dealers.webasto.com

Template for Fuel Standpipe





Operating Instructions for Automatic Air-Conditioning

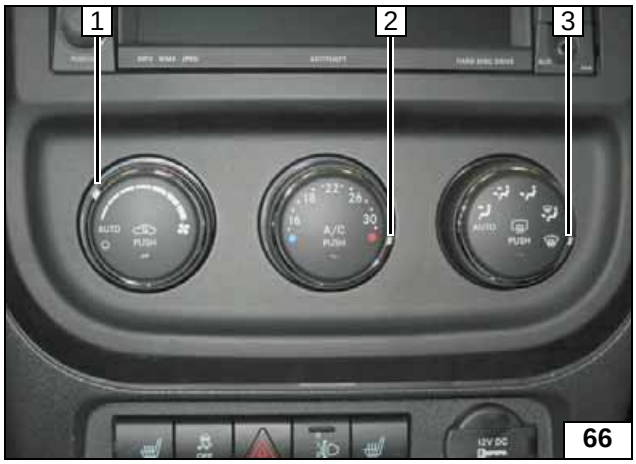
Please remove this page in case of automatic air-conditioning and add it to the vehicle operating instructions.

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.

If vehicles have passenger compartment monitoring, this must be deactivated in addition to the vehicle settings for the heating operation.
Instructions for deactivation are given in the Operating Manual of the vehicle!

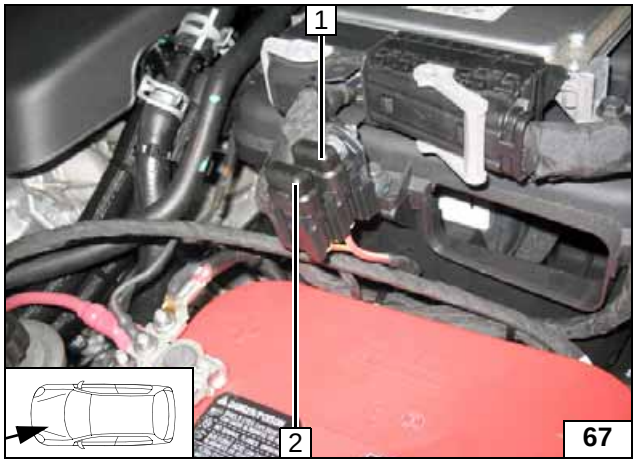
Before parking the vehicle, make the following settings:

A/C control panel



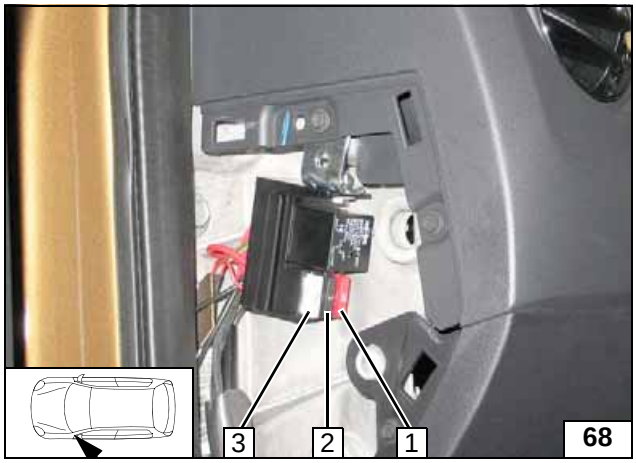
1 Set fan to level "1", or possibly "2"
2 Set temperature to "max."
3 Air outlet to windscreen

Fuses of engine compartment



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

Fuses of passenger compartment



1 10A fan fuse F5
2 1A fuse F3 of heater control
3 25A fan fuse F4