Water Heater

Webasto
Feel the Drive

***Thermo Top Evo* Parking Heater**

E1
00 0258

Installation Documentation
Skoda Superb

Validity

Manufacturer	Model	Type	EG-BE No./ ABE
Skoda	Superb	3T	e11 * 2001/116 * 0326 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm³	Engine code
2.0 TDI	Diesel	SG	103	1968	CFFB
2.0 TDI	Diesel	DSG	103	1968	CFFB
2.0 TDI	Diesel	SG	125	1968	CFGB
2.0 TDI	Diesel	DSG	125	1968	CFGB

SG = manual transmission
DSG = direct gear transmission

From Model Year 2013
Left-hand drive vehicle

Verified equipment variants: Climatic / Climatronic
Front fog light
Xenon with headlight washer system
Passenger compartment monitoring
LED daytime running light
4 x 4

Not verified: Start - Stop

Total installation time: approx. 8 hours

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Skoda Superb

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Necessary Components

- Basic delivery scope *Thermo Top Evo* in accordance with price list
- Installation kit for Skoda Superb 2013 Diesel: **1321646B**
- To be ordered additionally for Climatronic: Installation kit for Climatronic **1321648A**
- Also to be ordered from Skoda:
  additional bracket **1ZO 810 679C** and two bolts: **N90 749 003**
- Heater control in accordance with price list and upon consultation with end customer
- To be ordered additionally for the installation of a digital timer: Wiring harness extension **1319724A**
- In case of Telestart, indicator lamp in accordance with price list and in consultation with end customer

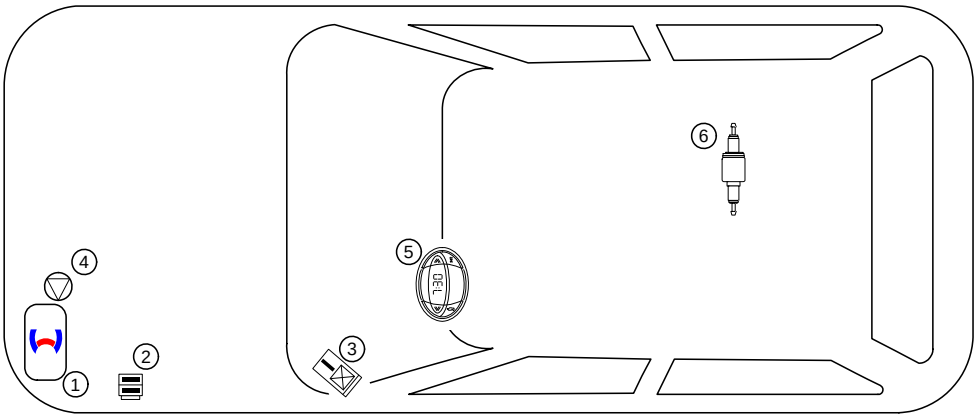
Installation instructions

- Arrange for the vehicle to be delivered with the tank only about 1/4 full.
- The installation location of the push button in the case of Telestart or Thermo Call should be confirmed with the end customer.
- Depending on the space required and the manufacturer's instructions, we recommend the use of a vehicle battery with a higher electrical capacity.

Installation Overview

Legend:

1. Heater
2. Engine compartment fuse holder
3. Passenger compartment relay and fuse holder
4. Circulating pump
5. Digital timer
6. 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.

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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. Connectors on electronic components must audibly snap into place during assembly.

Sharp edges should be fitted with rub protection. 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 PWM-Gateway, 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 04 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.

Skoda Superb

Information on Validity

This installation documentation applies to Skoda Superb Diesel vehicles - for validity, see page 1 - from model year 2013 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

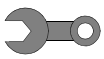
Dimensions
- All dimensions are in mm

Tightening torque values
- Tightening torque values of heater bolts and 5x13 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



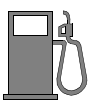
Coolant circuit



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.

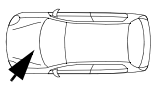


Reference to a special technical feature



The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.





Tightening torque according to the manufacturer's vehicle-specific documents



Skoda Superb

Preliminary Work

Vehicle

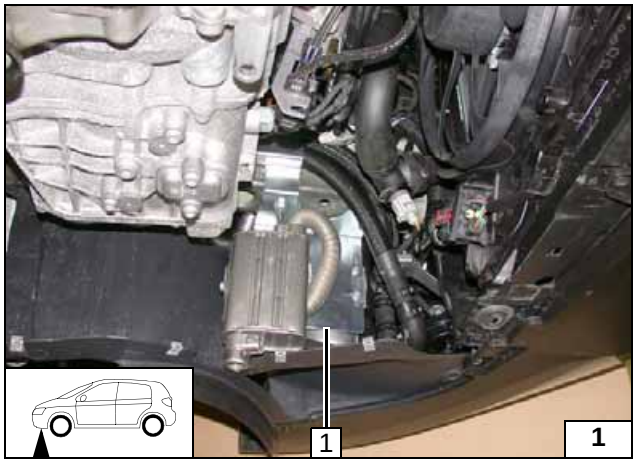
- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect and completely remove the battery together with the carrier.
- Remove the air filter together with the intake hose.
- Remove the underride protection of the engine.
- Remove the right underride protection.
- Remove the wheel-well inner panel on the left.
- Remove the footwell trim on the front passenger's side (only with automatic A/C).
- Remove the A-pillar trim on the driver's side (only with Telestart option).
- Remove the left-hand instrument panel trim.

The following work should only be performed during the corresponding installation sequence:

- Fold the rear bench seat on the right.
- Open the right-hand tank-fitting service lid.
- Remove the fuel-tank sending unit in accordance with the manufacturer's instructions.

Heater

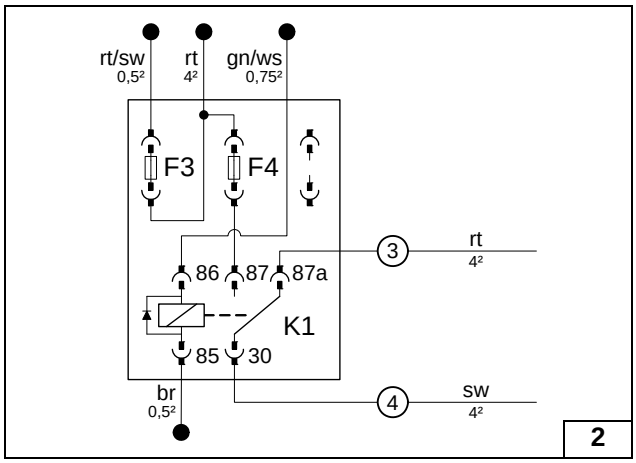
- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) in the appropriate place in the engine compartment.



Heater Installation Location

1 Heater

Installation location



2

Preparing Electrical System

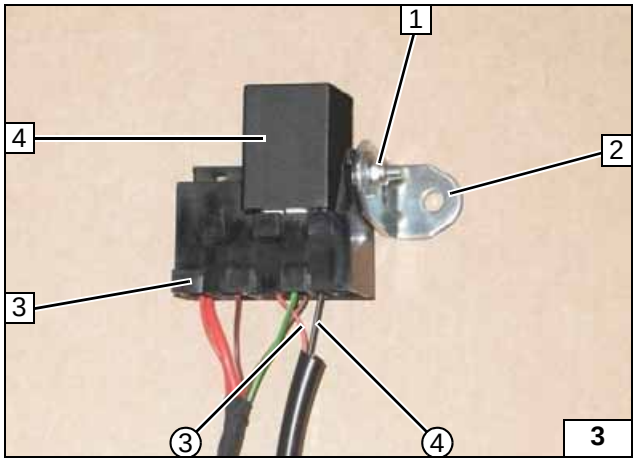
Wire sections retain their numbering throughout the entire document.

Climatic

Preparing K1 relay

Connect wires to K1 relay socket. Insert 25A fuse F4.

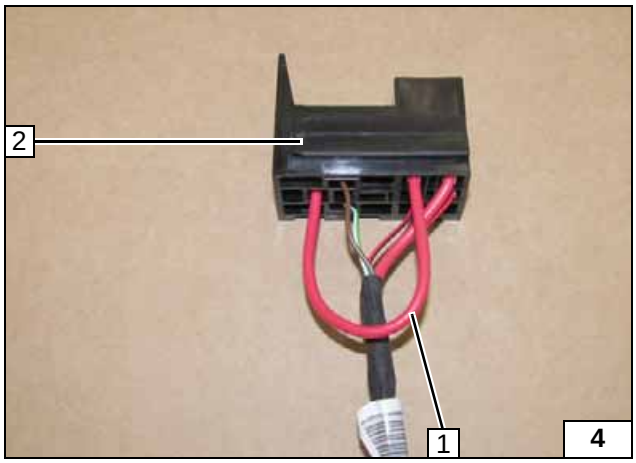
③ Red (rt) wire from K1/87a fan wiring harness
④ Black (sw) wire from K1/30 fan wiring harness



3

1 M5x16 bolt, large diameter washer [2x], self-retaining M5 nut
2 Angle bracket
3 Passenger compartment relay and fuse holder
4 K1 relay
③ Red (rt) wire from K1/87a fan wiring harness
④ Black (sw) wire from K1/30 fan wiring harness

Premounting passenger compartment relay and fuse holder



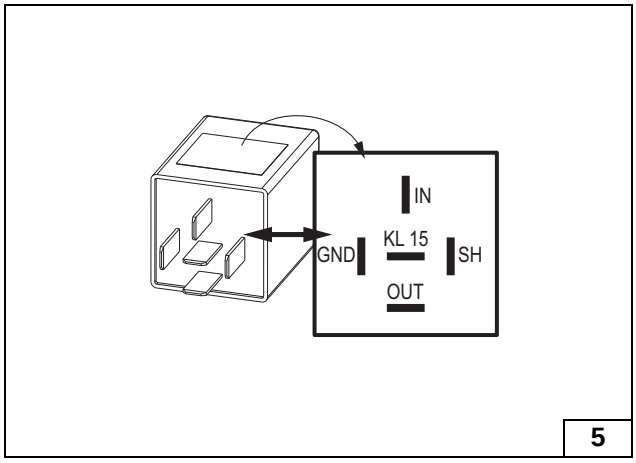
4

Climatronic

Detaching wire

Detach red (rt) wire **1** from fuse F4 and discard.

2 Passenger compartment relay and fuse holder



5

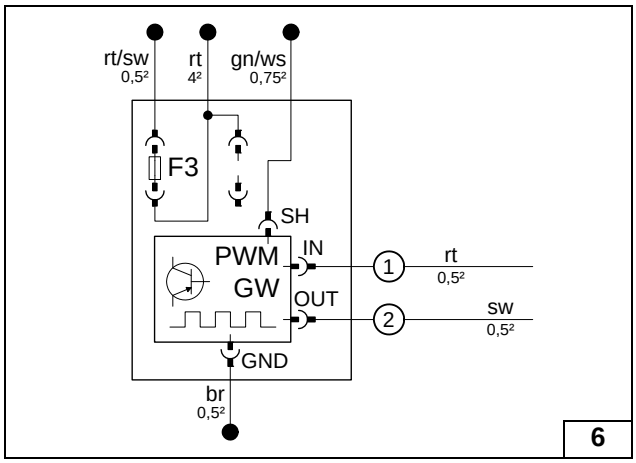
Check PWM Gateway adjustment values when heater ist put into service, adjust when necessary.

PWM Gateway view

Settings:

Duty cycle: 30%
Frequency: 400Hz
Voltage: 8V
Function: High-side

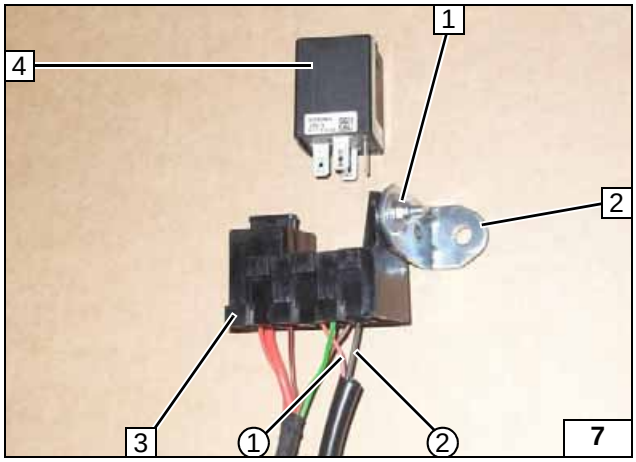
 © Webasto Thermo & Comfort SE



Connect wires to socket of PWM Gateway.

① Red (rt) wire of PWM GW/IN
② Black (sw) wire of PWM GW/OUT

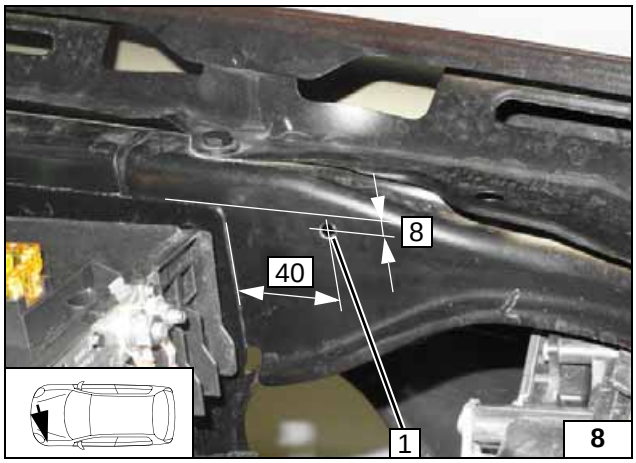
Preparing PWM Gateway



Pull wires ① and ② into protective sleeving.

1 M5x16 bolt, large diameter washer [2x], self-retaining M5 flanged nut
2 Angle bracket
3 Passenger compartment relay and fuse holder
4 PWM GW
① Red (rt) wire of PWM GW/IN
② Black (sw) wire of PWM GW/OUT

Premounting passenger compartment relay and fuse holder

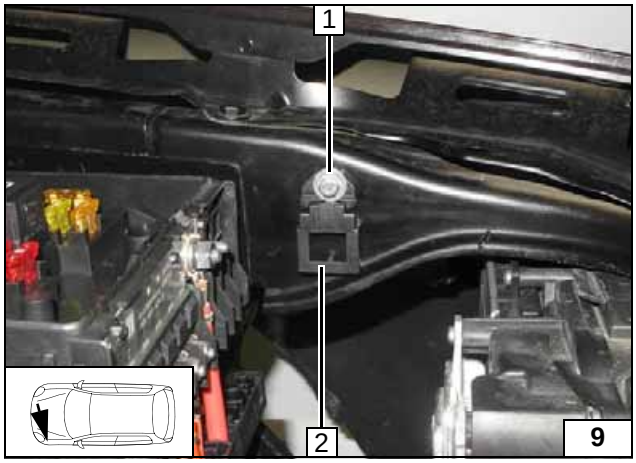


All vehicles

When drilling, watch components located behind!

1 5.5mm dia. hole

Hole for fuse holder engine compartment



1 M5x16 bolt, large diameter washer [2x], nut
2 Retaining plate for engine compartment fuse holder

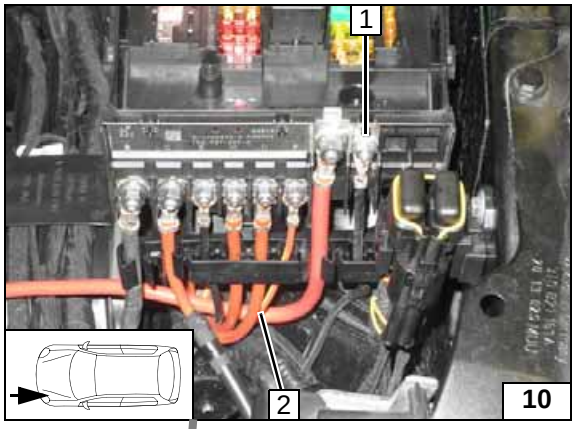
Installing retaining plate fuse holder

 © Webasto Thermo & Comfort SE

Electrical System

Positive wire

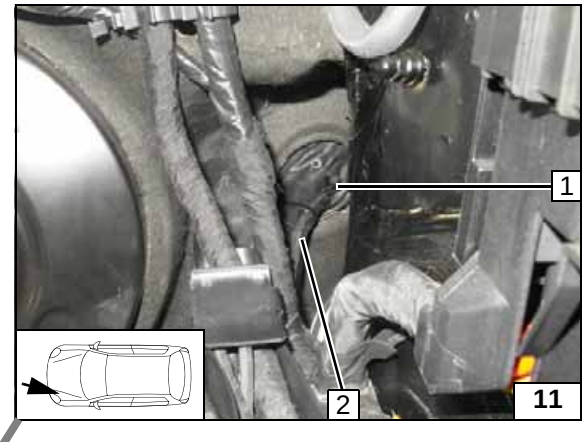
1 Positive wire on positive distributor of battery

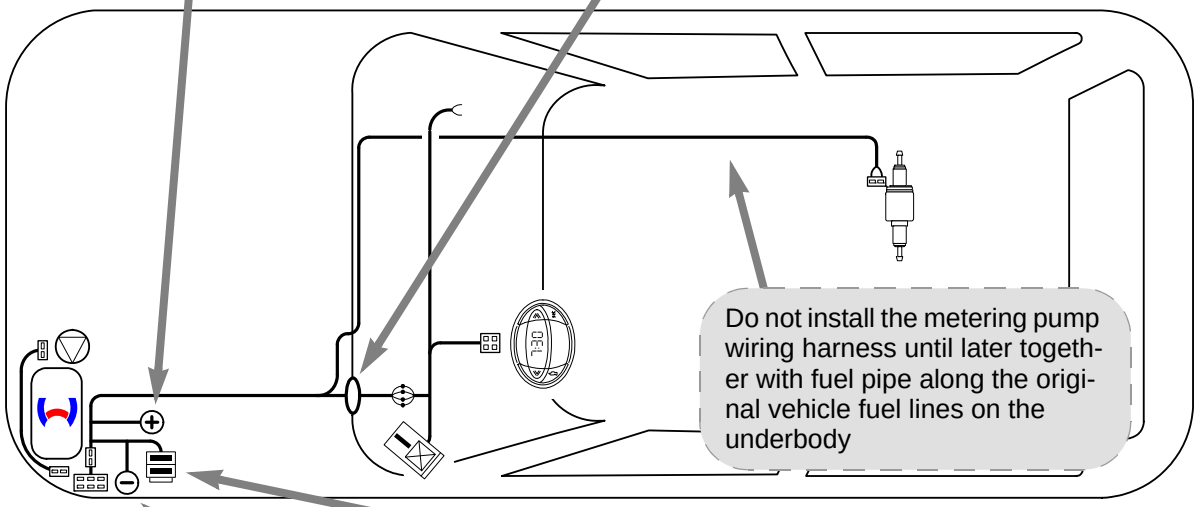


Wiring harness pass through

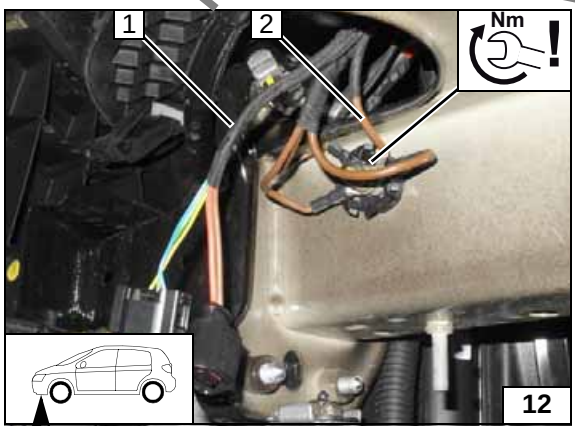
Route wiring harnesses in original vehicle's line duct.

1 Use free protective rubber plug
2 Wiring harnesses of heater, heater control



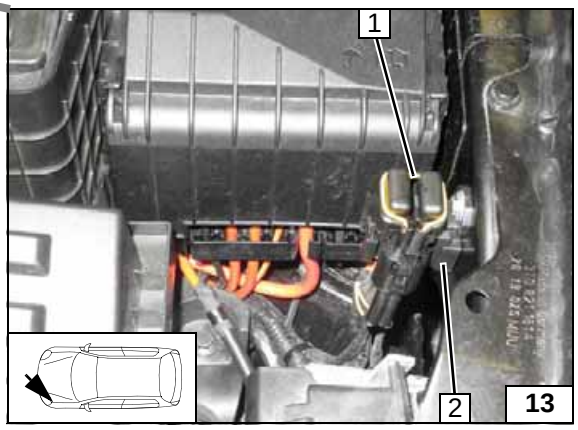


Wiring harness routing diagram



Earth wire

1 Wiring harness of heater
2 Earth wire on original vehicle earth support point



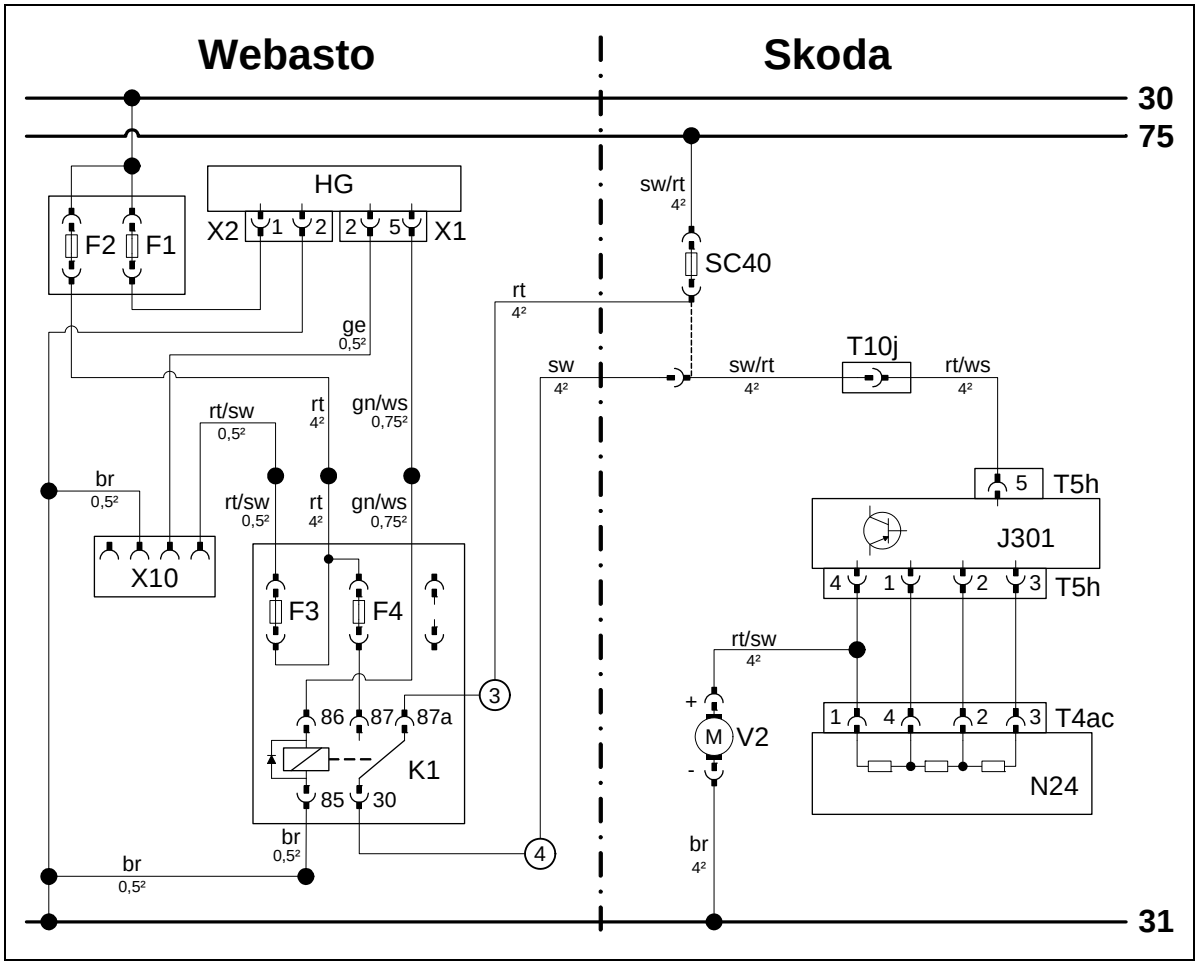
Fuse holder of engine compartment

1 Fuses F1-2
2 Retaining plate for fuse holder

 © Webasto Thermo & Comfort SE

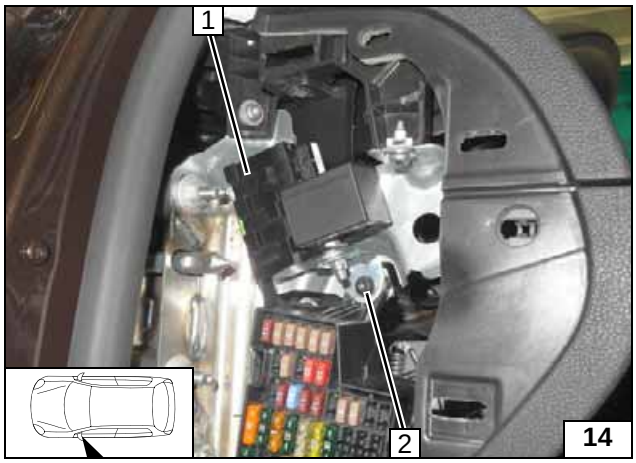
Climatic Fan Controller

Wiring diagram



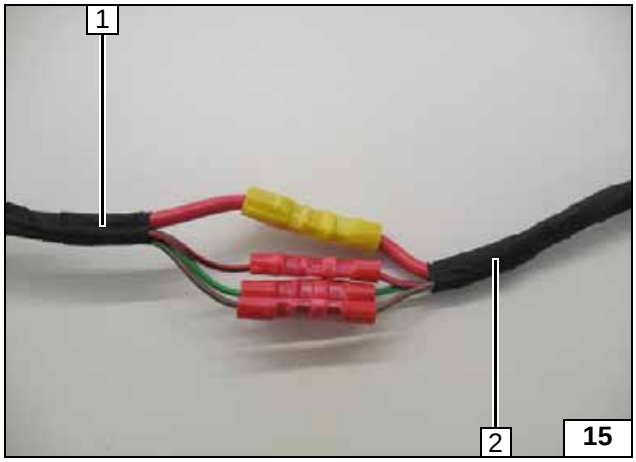
Legend

Webasto components		Vehicle components		Colours and symbols	
HG	Heater TT-Evo	SC40	40 A fan fuse	rt	red
X1	6-pin heater connector	T10j	10-pin plug connection	sw	black
X2	2-pin heater connector			ge	yellow
X10	4-pin connector of heater control	J301	Air-conditioning control unit	gn	green
		T5h	5-pin connector J301	br	brown
K1	Fan relay	T4ac	4-pin connector N24	ws	white
F1	20A fuse	N24	Resistor group		
F2	30A fuse	V2	Fan motor		
F3	1A fuse				
F4	25A fuse				
				X	Cutting point
				Wiring colours may vary.	



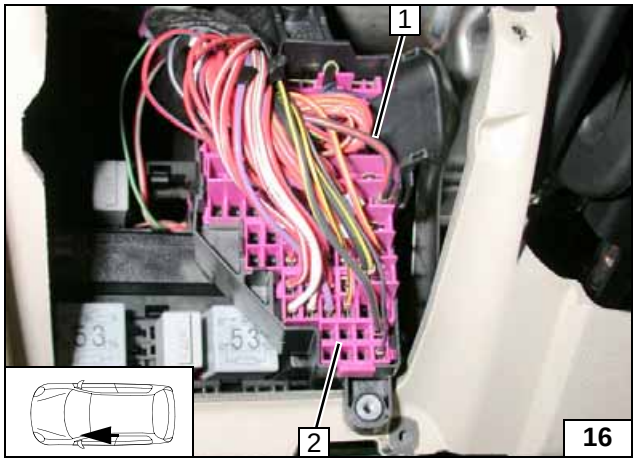
1 Passenger compartment relay and fuse holder
2 Original vehicle bolt

Mounting passenger compartment relay and fuse holder



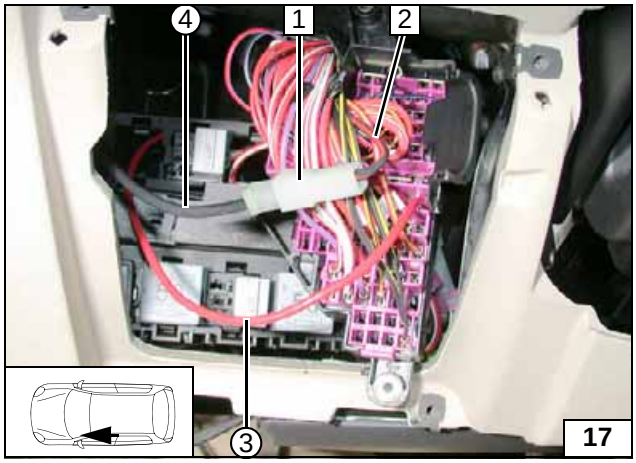
1 Wiring harness of passenger compartment relay and fuse holder
2 Wiring harness of heater

Connecting wiring harnesses using same colour wires



Fuse socket dependent on vehicle equipment. Detach fuse carrier **2** and unlock contact lock. Detach black/red (sw/rt) wire **1** on fuse output SC40.

Connecting central electrical box



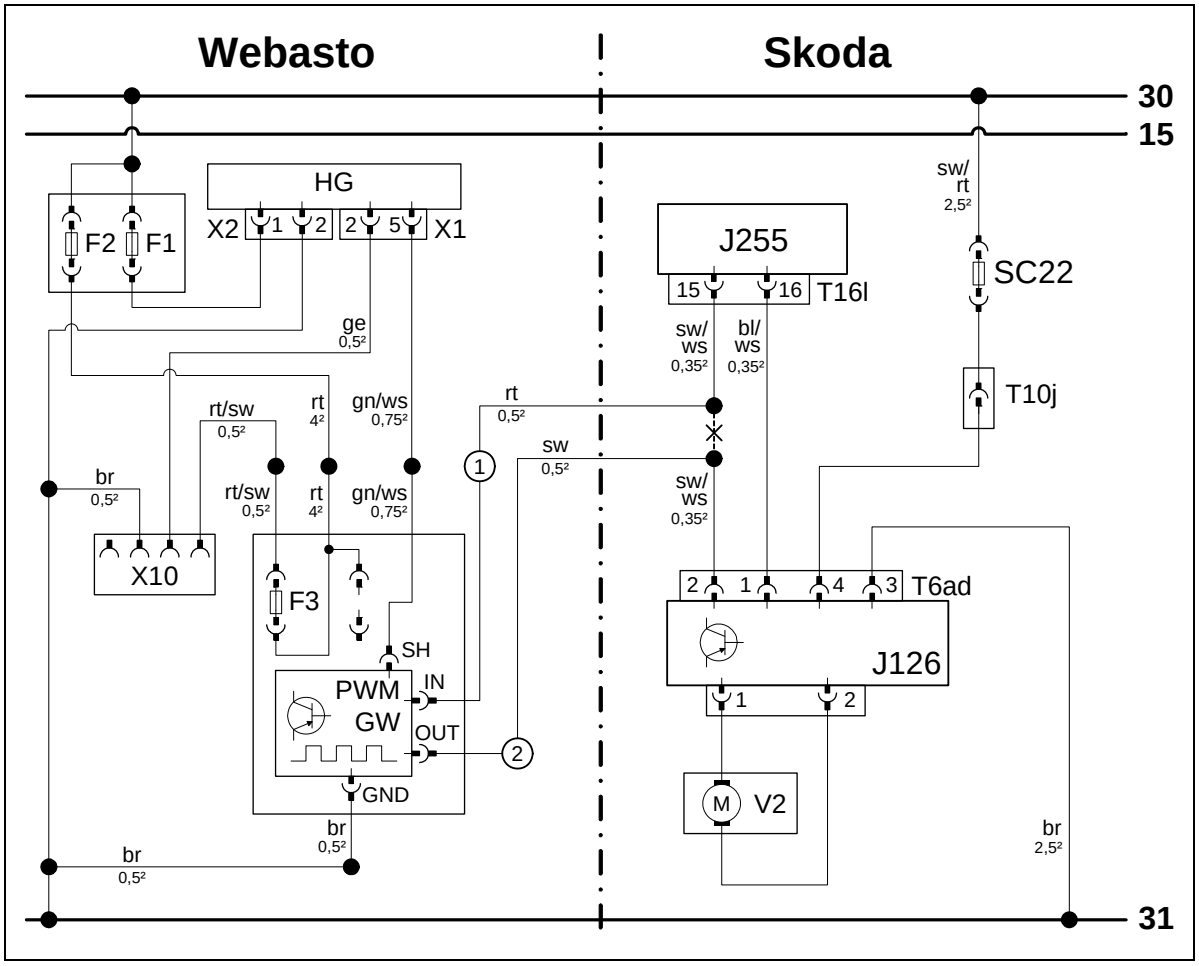
Insert red (rt) wire of K1/87a ③ with Standard-Power-Timer crimped on into socket of fan fuse. Produce connections as shown in wiring diagram.

1 Plug connection
2 Black/red (sw/rt) wire from fuse SC40
④ Black (sw) wire from K1/30

Connecting central electrical box

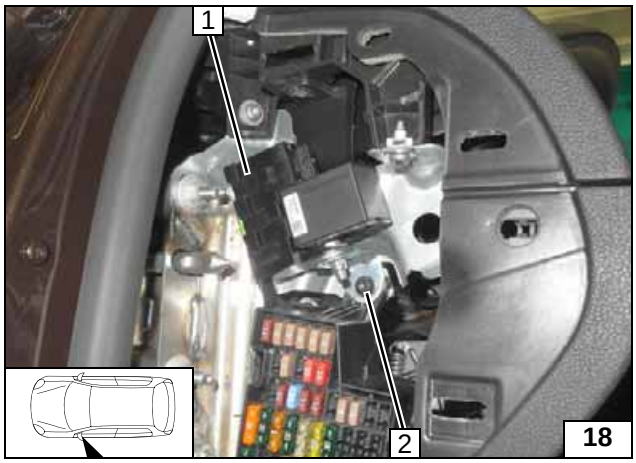
Climatronic Fan Controller

Wiring diagram



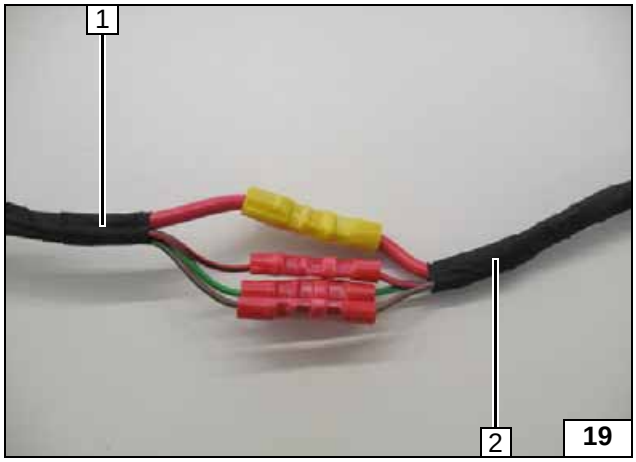
Webasto components		Vehicle components		Colours and symbols	
HG	Heater TT-Evo	J255	Air-conditioning control unit	rt	red
X1	6-pin heater connector	T16l	16-pin connector J255	sw	black
X2	2-pin heater connector	SC22	40A fuse	ge	yellow
X10	4-pin connector of heater control	T10j	10-pin plug connection	gn	green
				bl	blue
K1	Fan relay	T6ad	6-pin connector J126	ws	white
F1	20A fuse	J126	Fan unit	br	brown
F2	30A fuse	V2	Fan motor		
F3	1A fuse				
PWM GW	PWM Gateway				
PWM GW settings:					
Duty cycle: 30%					
Frequency: 400Hz					
Voltage: 8V				**X**	Cutting point
Function: High-side				Wiring colours may vary.	

Legend



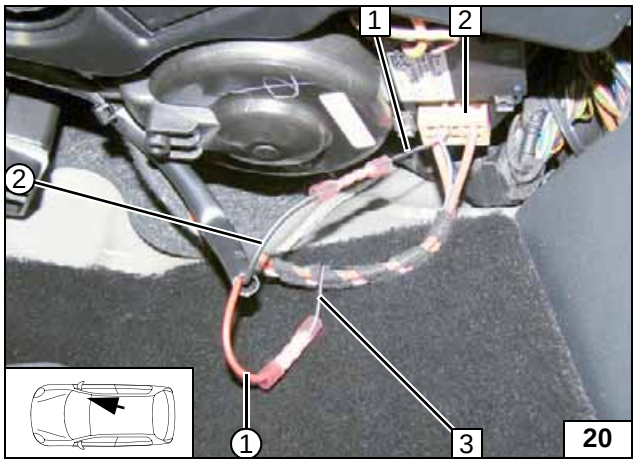
1 Passenger compartment relay and fuse holder
2 Original vehicle bolt

Mounting passenger compartment relay and fuse holder



1 Wiring harness of passenger compartment relay and fuse holder
2 Wiring harness of heater

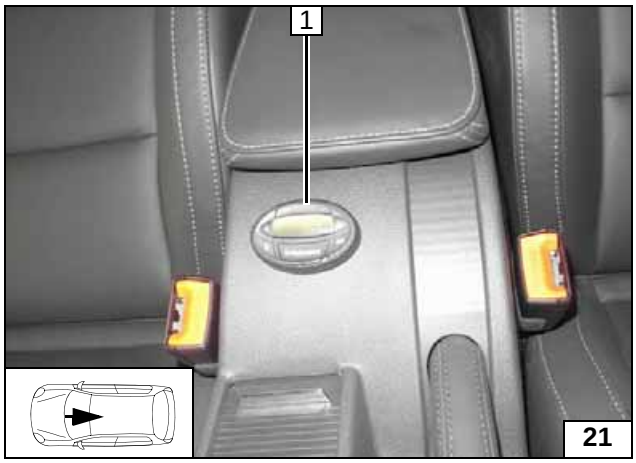
Connecting wiring harnesses using same colour wires



Connection to 6-pin connector T6ad **2** of fan unit. Produce connections as shown in wiring diagram.

1 Black/white (sw/ws) wire of 6-pin connector T6ad, Pin 2
3 Black/white (sw/ws) wire of A/C control unit
① Red (rt) wire of PWM GW/IN
② Black (sw) wire of PWM GW/OUT

Connection to fan unit

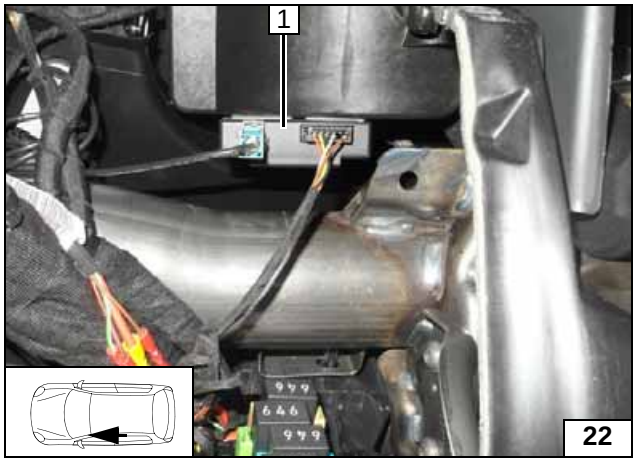


Digital Timer

Use wiring harness extension.

1 Digital timer

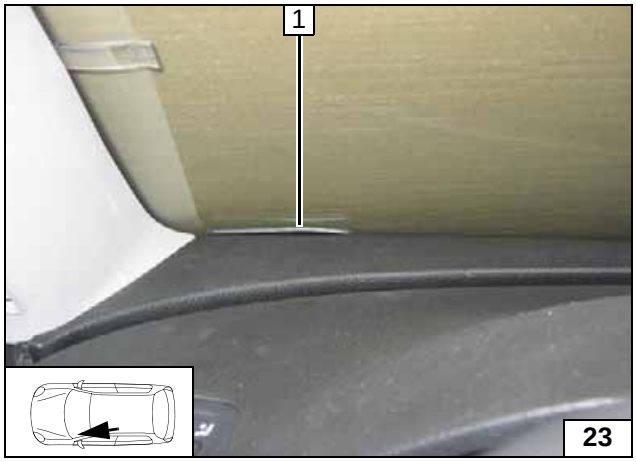
Installing digital timer



Remote Option (Telestart)

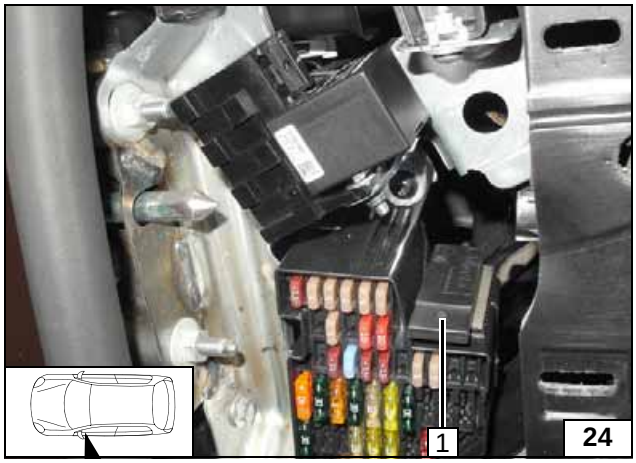
Fasten receiver **1** with adhesive tape.

Installing receiver



1 Antenna

Installing antenna



Temperature sensor T100 HTM

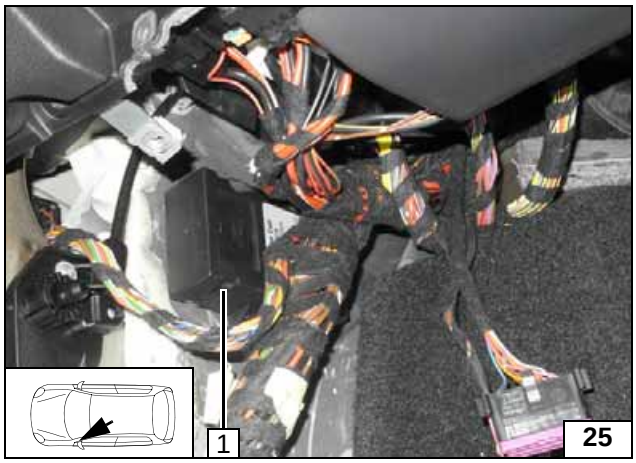
Fasten temperature sensor **1** with double-sided adhesive tape.

Installing temperature sensor

Thermo Call Option

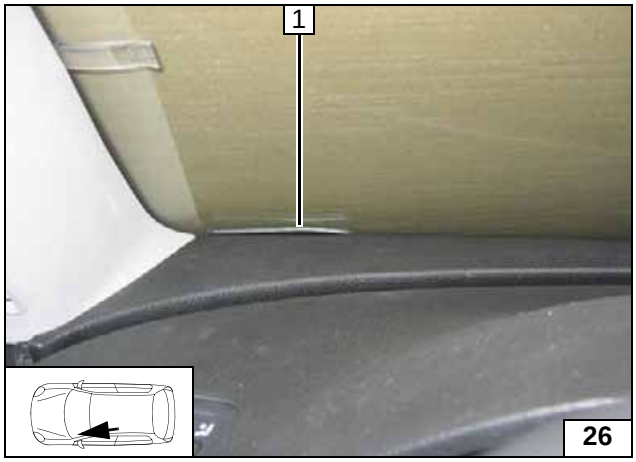
Installing receiver

Fasten receiver **1** with adhesive tape.

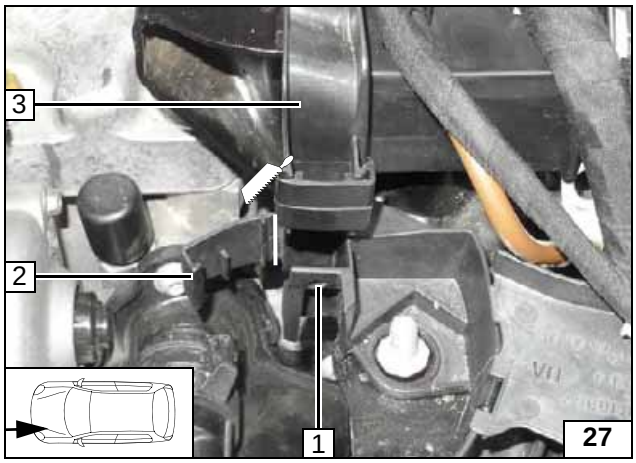


1 Antenna

Installing antenna



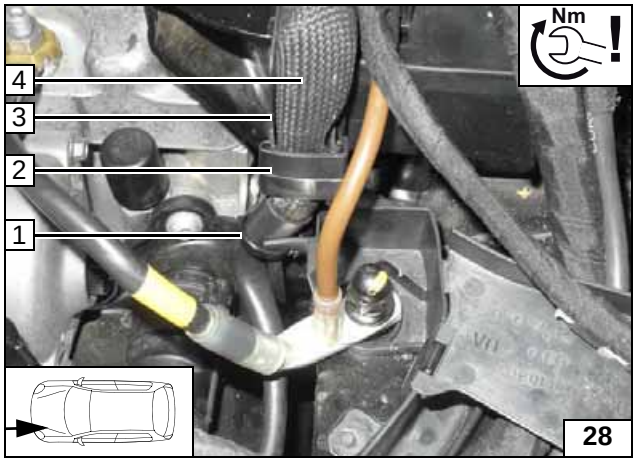
Preparing Installation Location



Detach original vehicle wiring harness from bracket **3** and set aside. Cut off locking device **2** at the marking and discard. When drilling, watch components located behind!

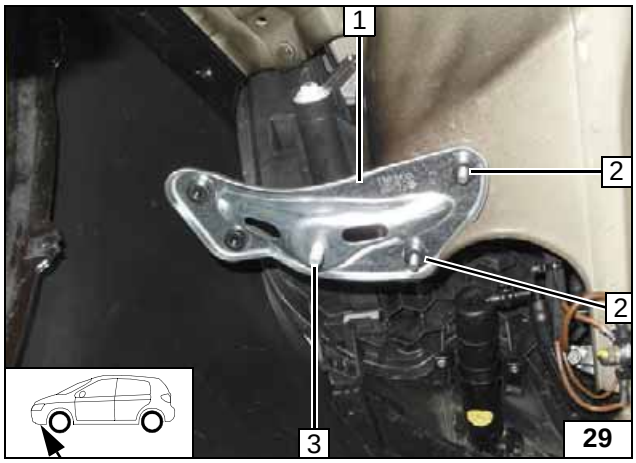
1 5mm dia. hole in original vehicle bracket

Moving wiring harness



Original vehicle positive cable **4**
- align in bracket **3**,
- close lock **2**,
- fasten cable tie **1**!

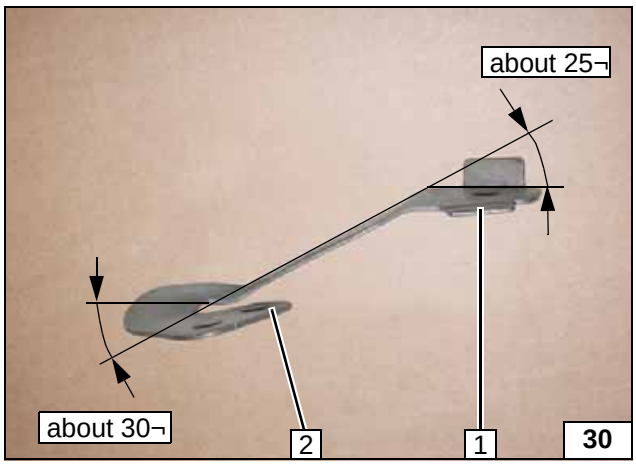
Original vehicle positive cable



Insert M8x20 bolt **3** before installing additional bracket **1** (Ident. No.: 1ZO 810 679C) in existing hole.

2 M6x20 bolt, existing hole [2x]

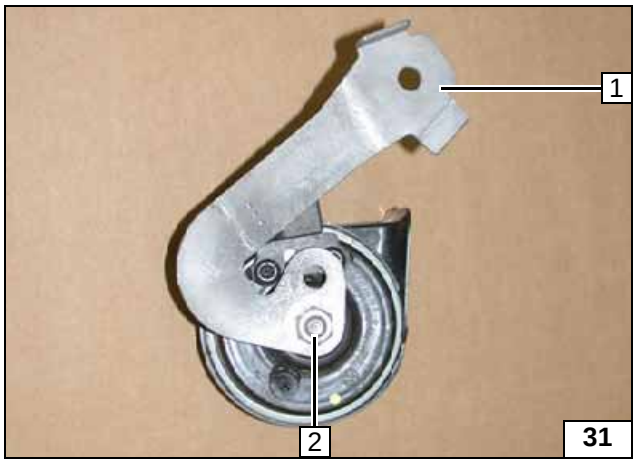
Installing additional bracket



Remove bracket of horn **2** and bend as shown. Straighten tab **1**.

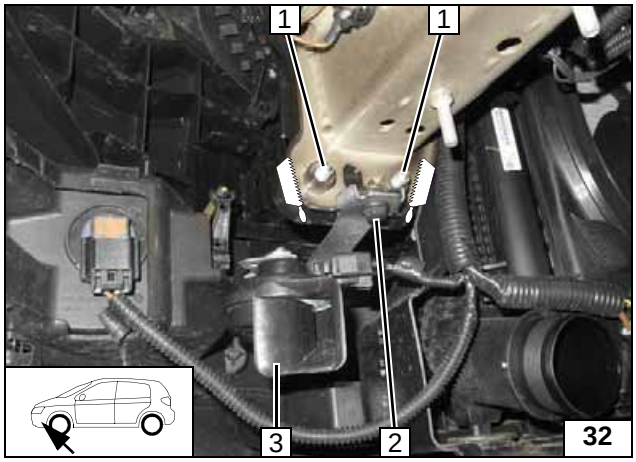
Processing horn bracket

 © Webasto Thermo & Comfort SE



Mount horn with original vehicle nut **2** on bracket **1**.

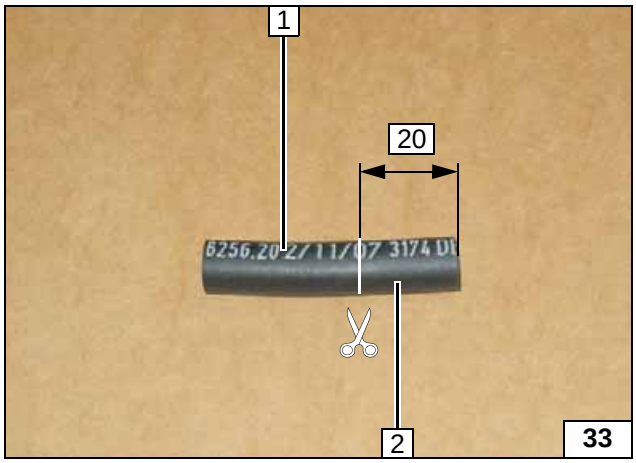
Premounting horn



Shorten bolts at position **1** if necessary (distance to hose D)!

2 Original vehicle bolt
3 Horn

Installing horn



1 Discard section
2 Hose section

Shortening hose section

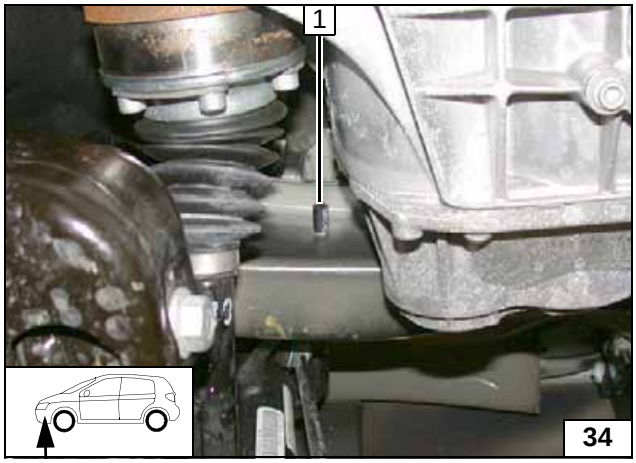
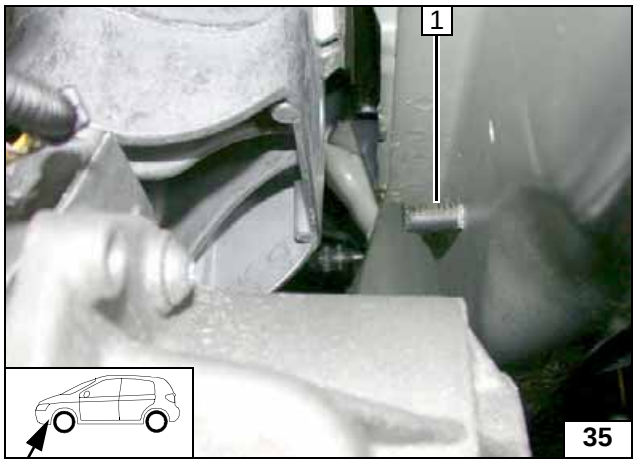


Figure shows automatic transmission.
Slide 20mm moulded hose **1** onto original vehicle stud bolt.

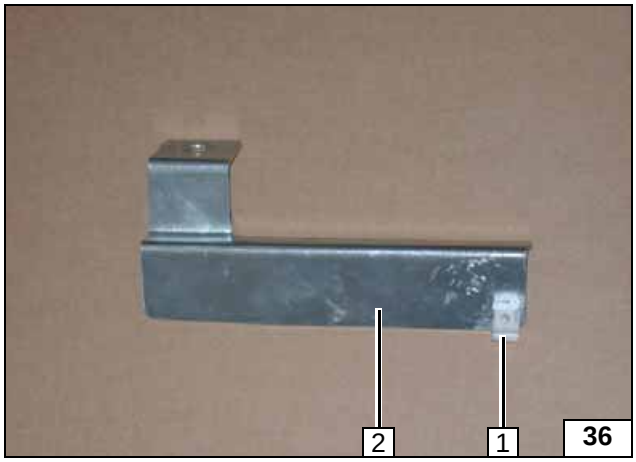
Installing hose section



Only in case of manual transmission

Remove clip for coupling line, will be reused later. Slide 20mm moulded hose **1** onto original vehicle stud bolt (on the frame side member, over the transmission).

Installing hose section

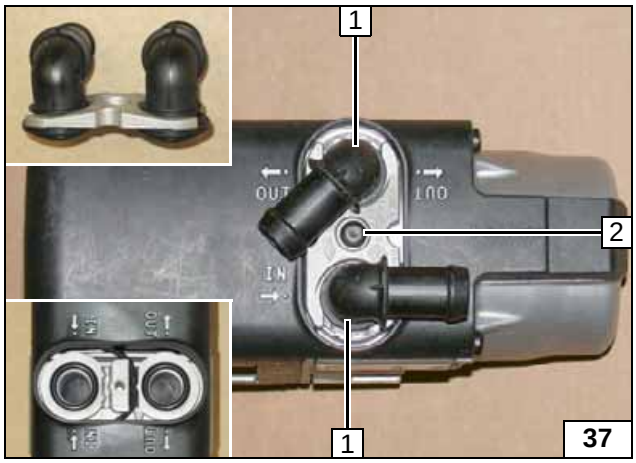


Premount coupling line clip **1** onto hose bracket **2**.

1 M6x12 countersunk head screw

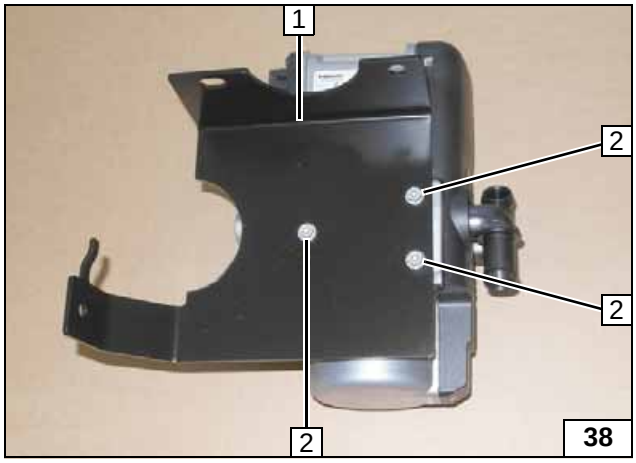
Preparing hose bracket

Preparing Heater



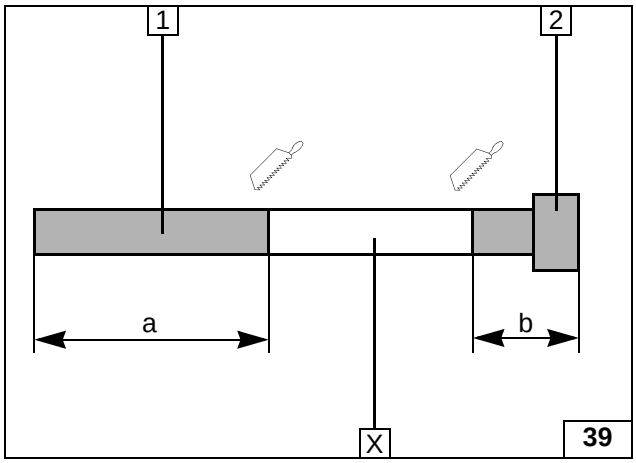
1 Water connection piece, sealing ring [2x each]
2 5x15mm self-tapping bolt, retaining plate of water connection piece

Installing water connection piece



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

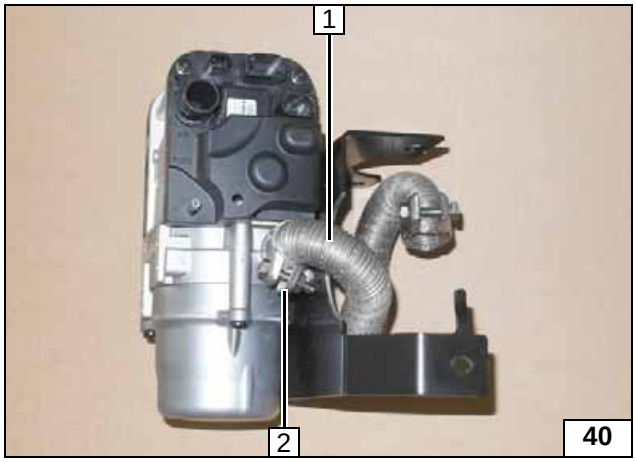
Installing bracket



Discard section **X**.

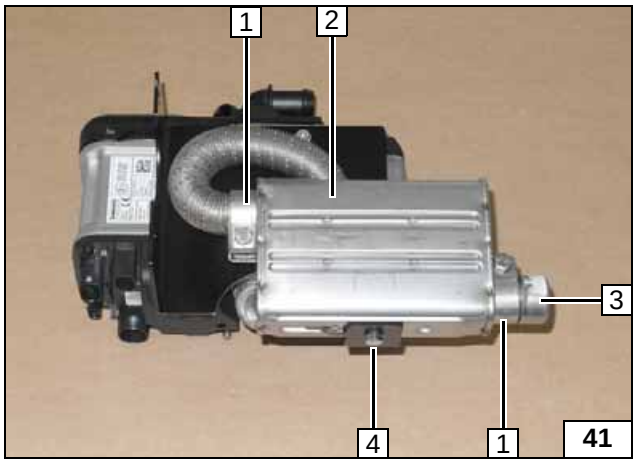
1 Exhaust pipe
a = 330
2 Exhaust end section
b = 35

Preparing exhaust pipe



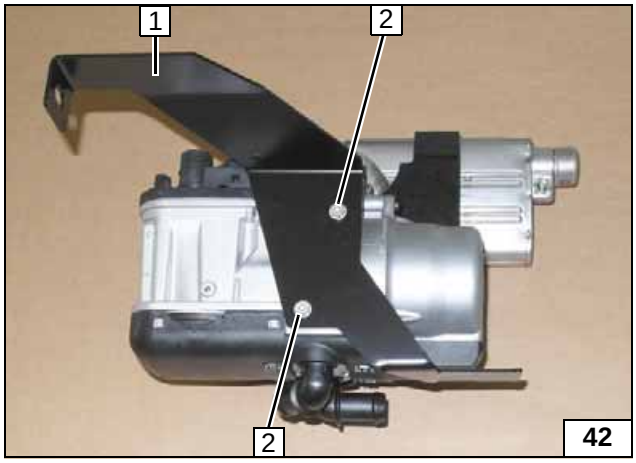
1 Exhaust pipe
2 Hose clamp

Installing exhaust pipe



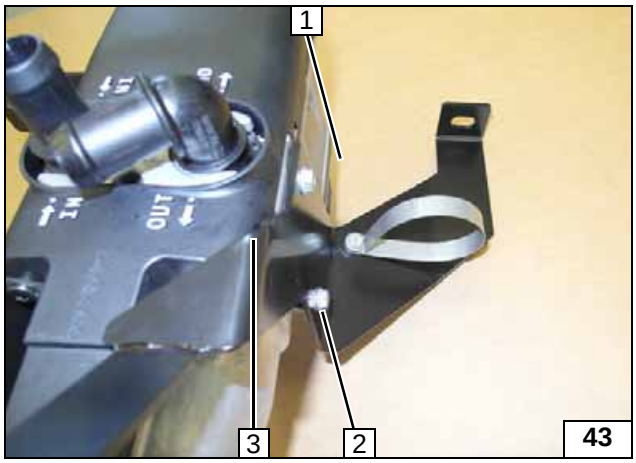
1 Hose clamp [2x]
2 Silencer
3 Exhaust end section
4 M6x16 bolt, spring lockwasher

Installing silencer and exhaust end section



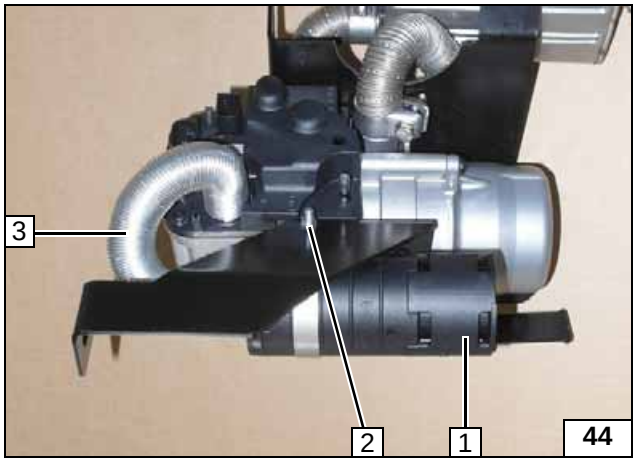
1 Bracket part **B**
2 5x13 self-tapping bolt [2x]

Installing bracket part B



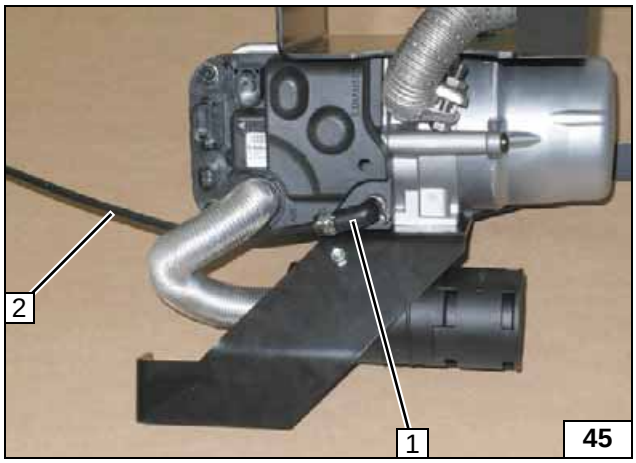
1 51mm dia. clamp
2 Bracket part **B**
3 M5x16 bolt, flanged nut, mount loosely

Installing clamp



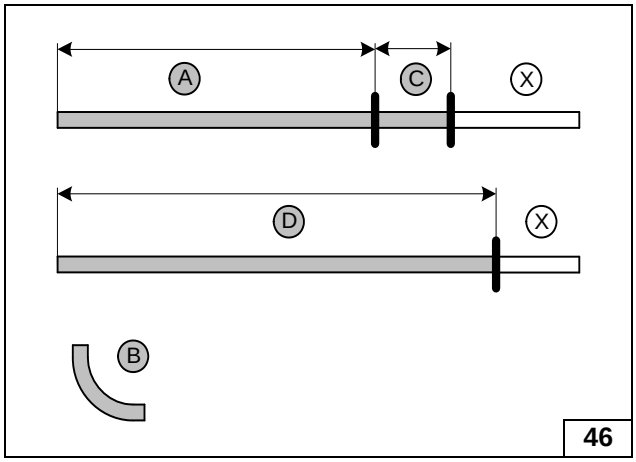
1 Silencer
2 M5x16 bolt, flanged nut, tighten
3 Combustion air pipe

Installing silencer and combustion air pipe



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

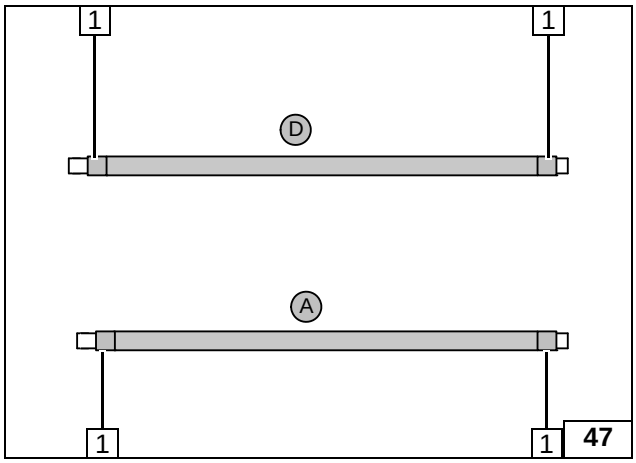
Premounting fuel line



Discard section **X**.
Hose **B** =90°, 18 mm dia. moulded hose

A = 1050
C = 65
D = 1130

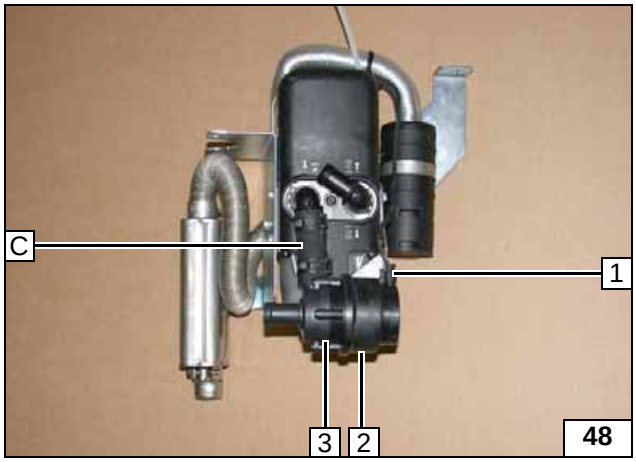
Cutting hoses to length



Push braided protection hoses onto hose **A** and **D** and cut to length. Cut heat shrink plastic tubing to length.

1 50 mm long heat shrink plastic tubing [4x]

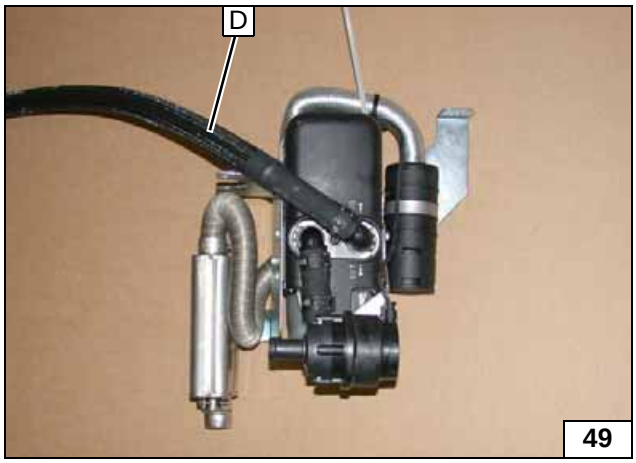
Preparing hoses



All spring clips = 25mm dia.

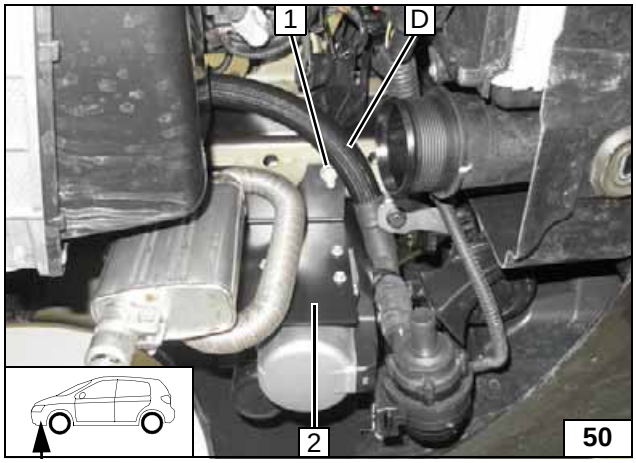
1 Mount wiring harness of circulating pump
2 Circulating pump mounting
3 Circulating pump

Mounting hose C and circulating pump



All spring clips = 25mm dia.

Installing hose D

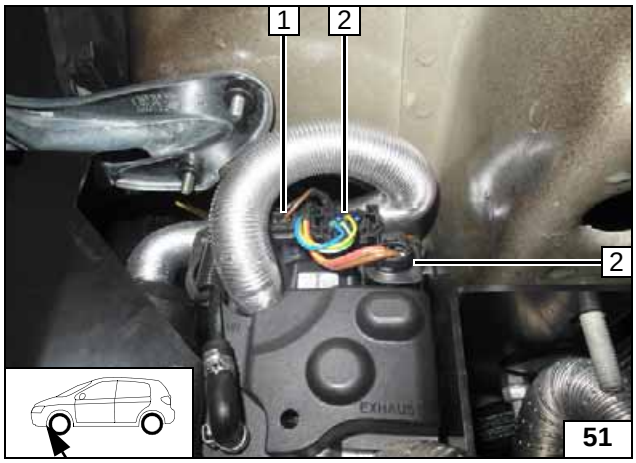


Installing Heater

Route hose **D** to brake booster.

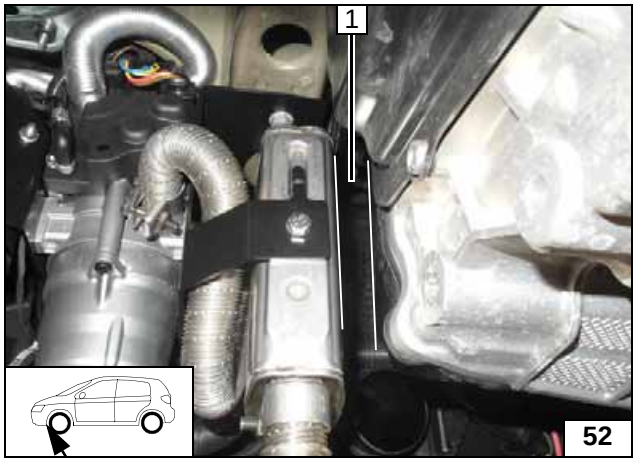
1 Original vehicle stud bolt, M8 flanged nut
2 Bracket part **A**

Installing heater



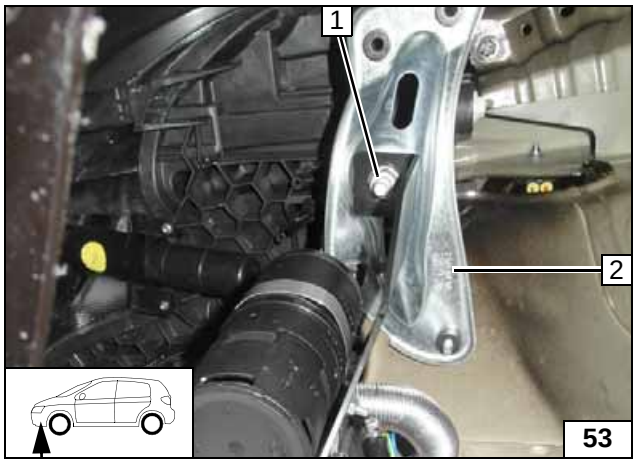
1 Wiring harness of circulating pump
2 Wiring harness of heater [2x]

Installing heater



Ensure sufficient distance to neighbouring components, especially between exhaust silencer and transmission at position **1** (25mm), correct if necessary.

Installing heater



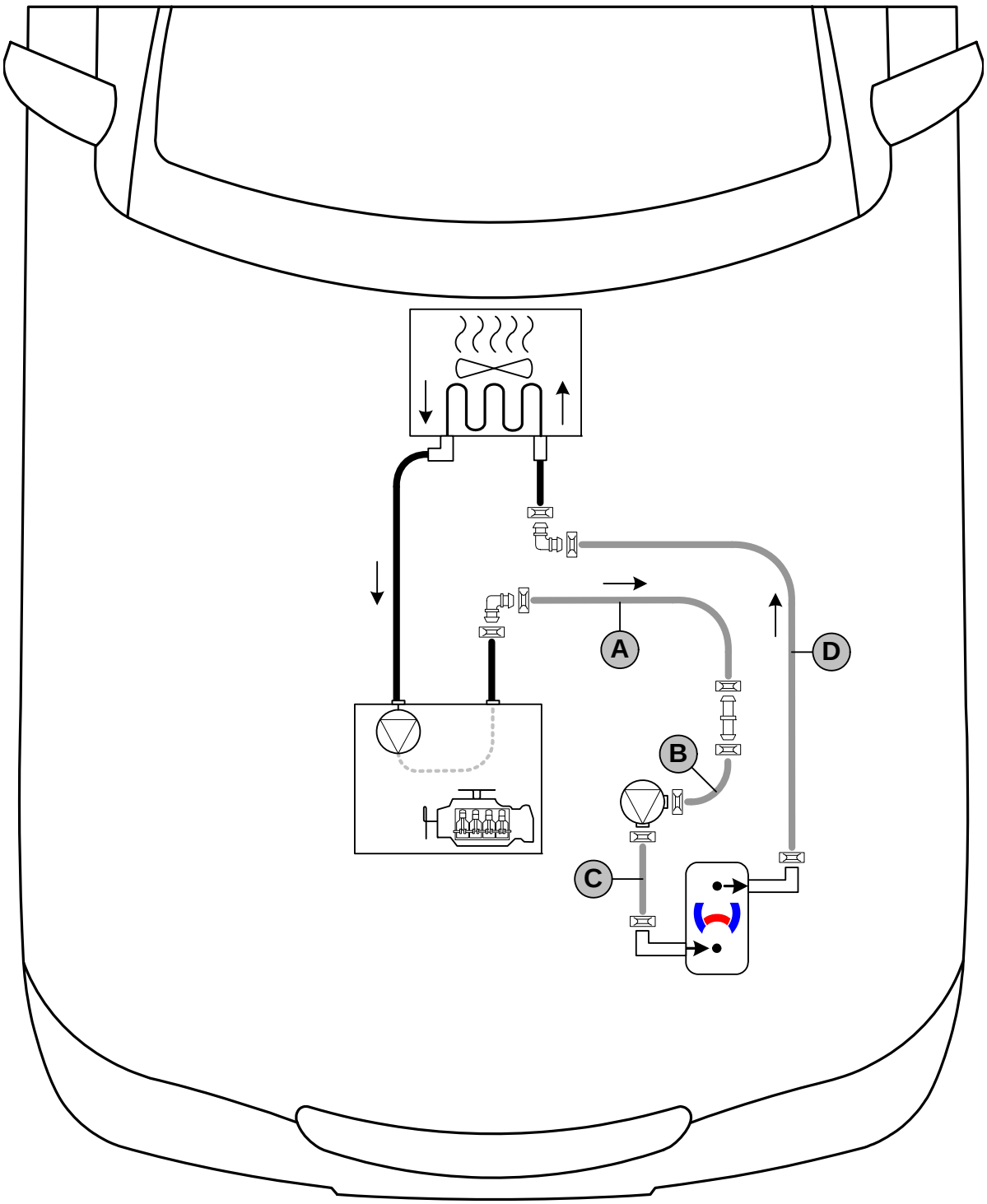
1 M8 flanged nut on M8x20 bolt
2 Additional bracket (Ident. No.: 1ZO 810 679C)

Installing heater

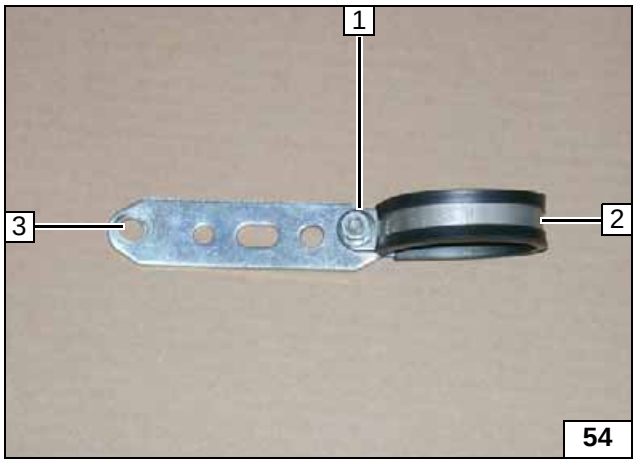
Coolant Circuit

WARNING!
Any coolant running off should be collected using an appropriate container. Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that no other hose can be damaged! When installing the hoses, the heater must be filled with coolant.
The connection should be modelled on an "inline" circuit and based on the following diagram:

Hose routing diagram



All spring clips = 25mm dia.
All connecting pipes and = 18x18mm dia.



1 Install M6x20 bolt, M6 flanged nut loosely
2 38mm dia. rubber-coated p-clamp
3 8.5mm dia. hole

Preparing perforated bracket

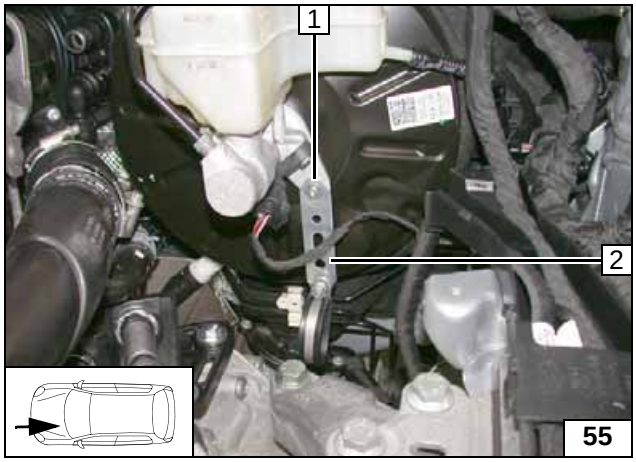


Figure shows manual transmission.

1 Loosely mount original vehicle bolt, M8 nut
2 Premounted perforated bracket

Installing perforated bracket

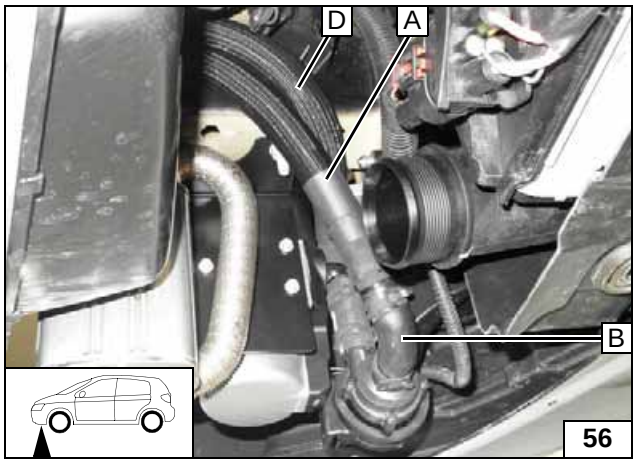


Figure shows direct gear transmission.
Route hose **A** to brake booster.

Routing on frame side member

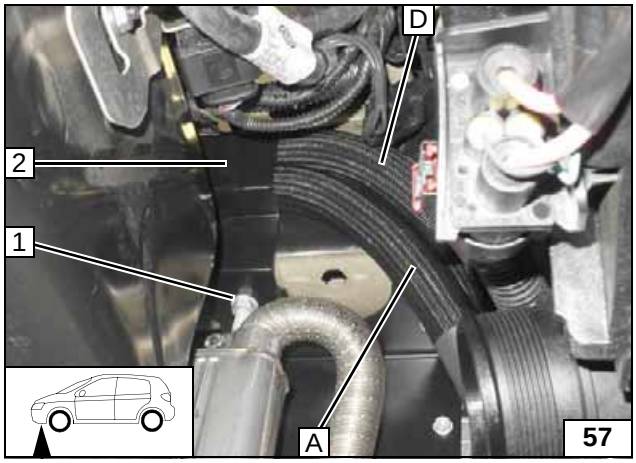
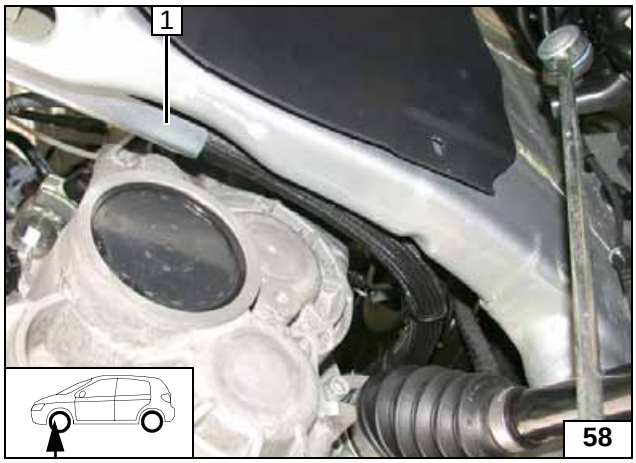


Figure shows direct gear transmission.
Align hoses **A** and **D** behind hose bracket **2**.
Ensure sufficient distance from neighbouring components.

1 Original vehicle stud bolt, M8 flanged nut

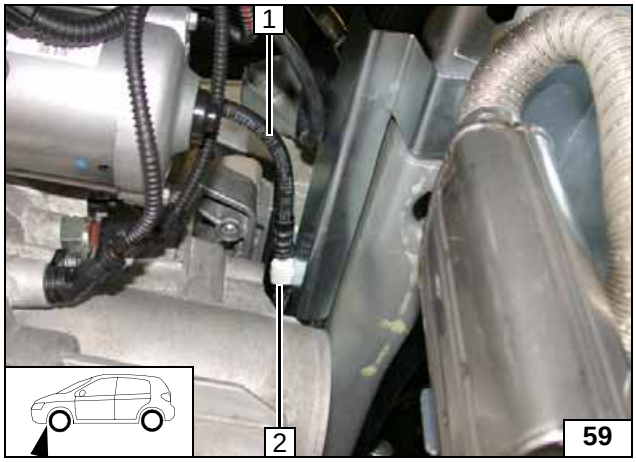
Routing on frame side member



Manual transmission

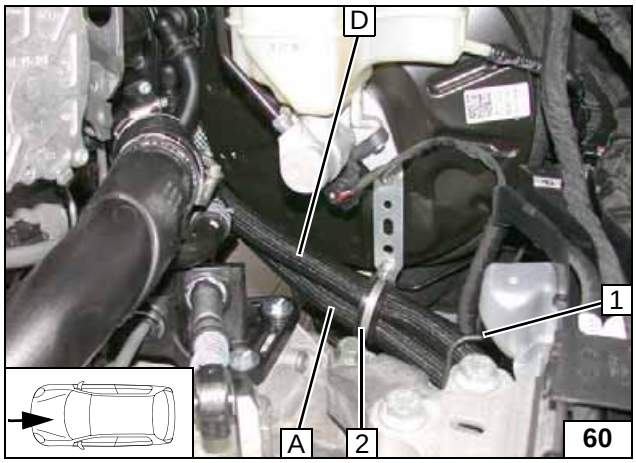
Ensure sufficient distance between hose bracket **1** and transmission.

Routing on frame side member



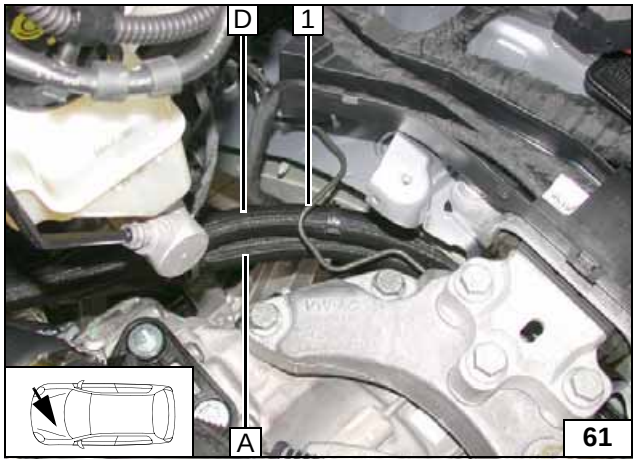
Engage coupling line **1** in clip **2** and align. Ensure sufficient distance from neighbouring components.

Routing of coupling line



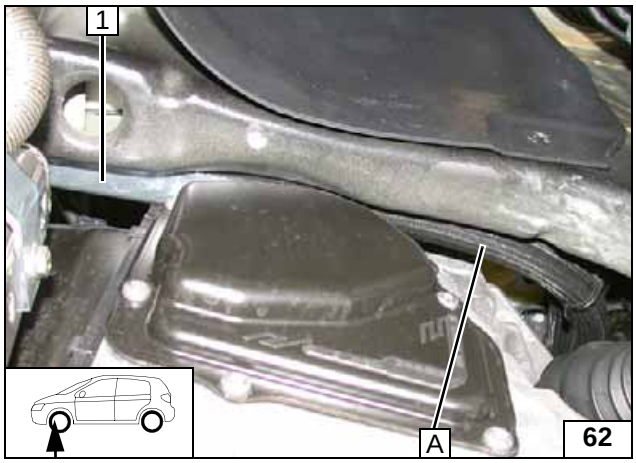
Route hoses **A** and **D** behind coupling line **1** and through rubber-coated p-clamp **2**.

Routing in engine compartment



Ensure sufficient distance from coupling line **1**.

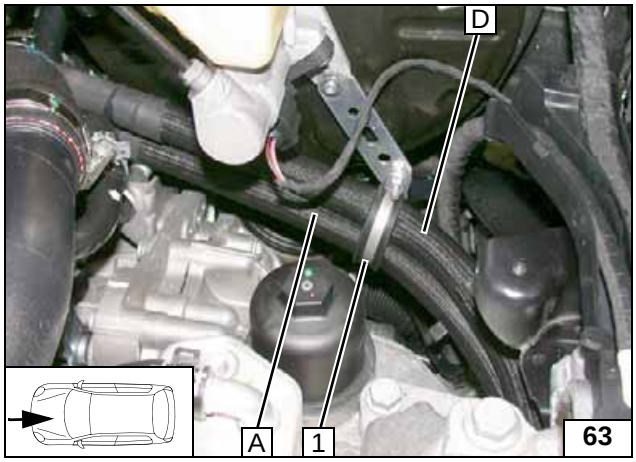
Routing in engine compartment



Automatic transmission

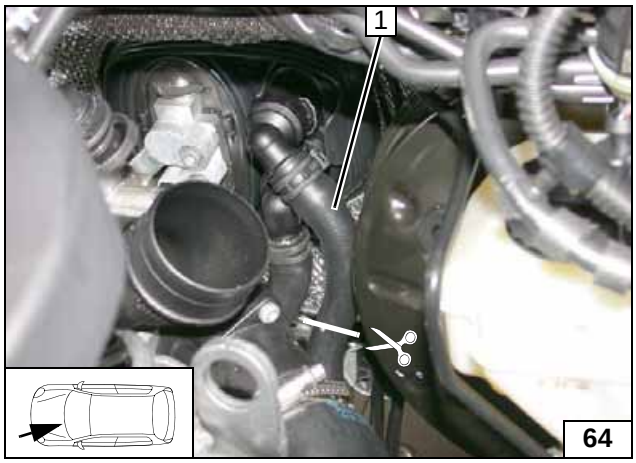
Ensure sufficient distance between hose bracket **1** and transmission.

Routing on frame side member



Route hoses **A** and **D** through rubber-coated p-clamp **1**.

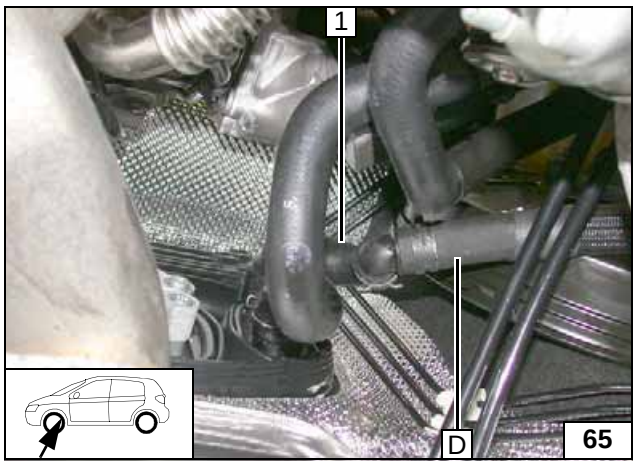
Routing in engine compartment



All vehicles

Cut off hose on engine outlet/heat exchanger inlet **1** at marking.

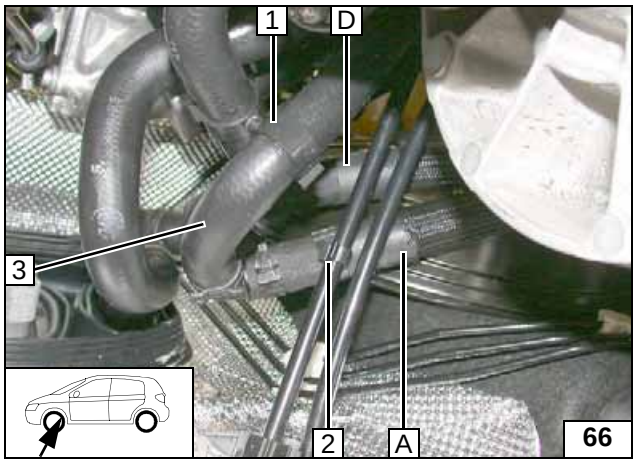
Cutting point



1 Hose on heat exchanger inlet

Connecting heat exchanger inlet

 © Webasto Thermo & Comfort SE



1 Spacer bracket
2 22x8mm spacer bracket
3 Hose of engine outlet

Connecting engine outlet

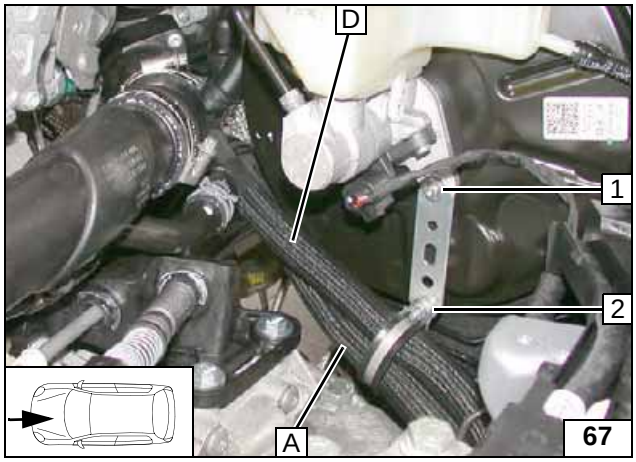


Figure shows manual transmission.
Align hoses **A** and **D**. Tighten M8 nut **1** and M6 flanged nut **2**.

Routing in engine compartment

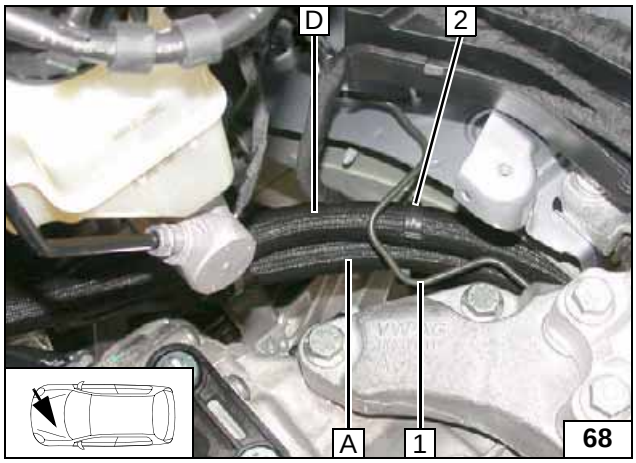


Figure shows manual transmission.
Ensure sufficient distance from coupling line **1**.

2 23x23mm hose bracket (retaining clip removed)

Routing in engine compartment

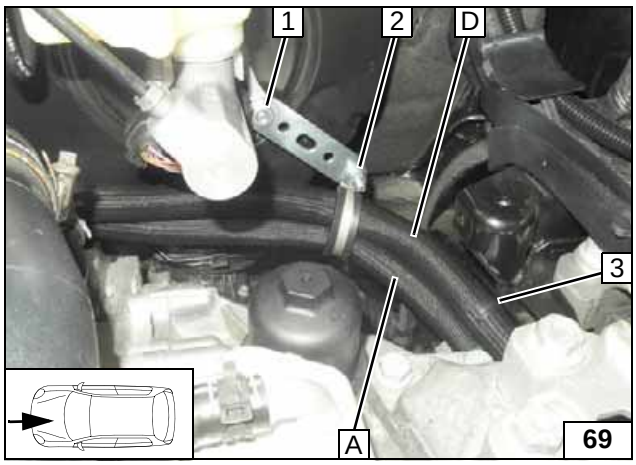


Figure shows direct gear transmission.
Tighten M8 nut **1** and M6 flanged nut **2**. Align hoses **A** and **D**. Ensure sufficient distance to neighbouring components, correct if necessary.

3 23x23mm hose bracket (retaining clip removed)

Routing in engine compartment

Fuel

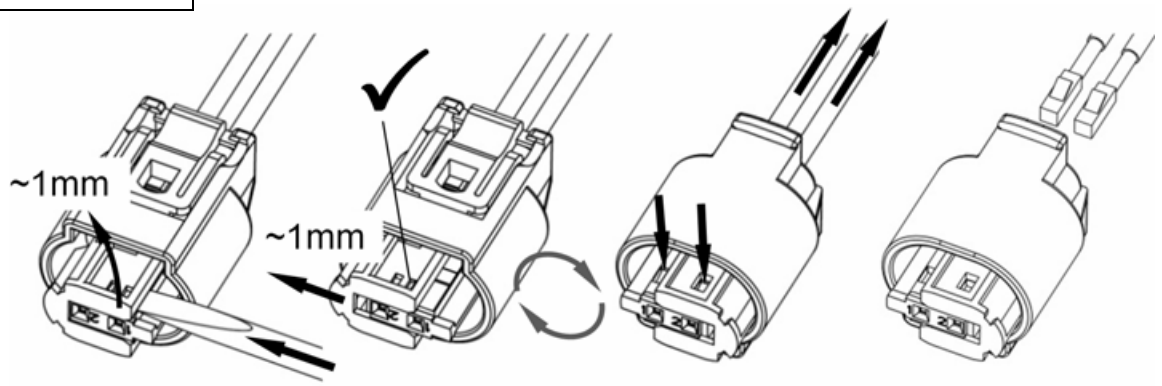
CAUTION!
Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

Catch any fuel running off 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.
Provide rub protection for fuel line and wiring harness in areas where there are sharp edges.

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

Connector X7



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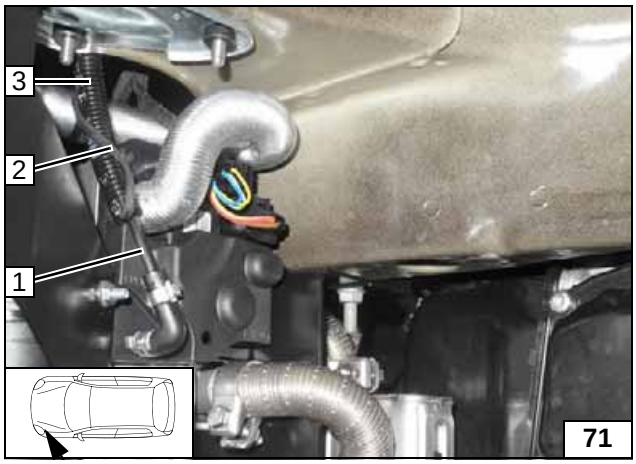
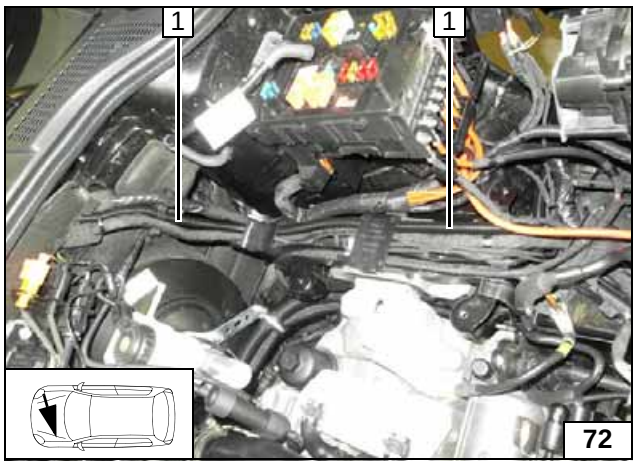
Dismantling connector of metering pump



71

Pull fuel line **1** and wiring harness of metering pump **2** into 1130mm corrugated tube **3** and route in the engine compartment!

Routing lines



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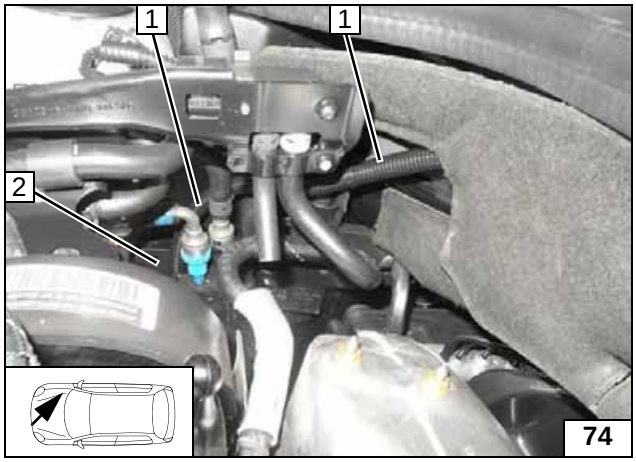
Route corrugated tube **1** with fuel line and wiring harness of metering pump in original vehicle line duct to firewall.

Routing lines



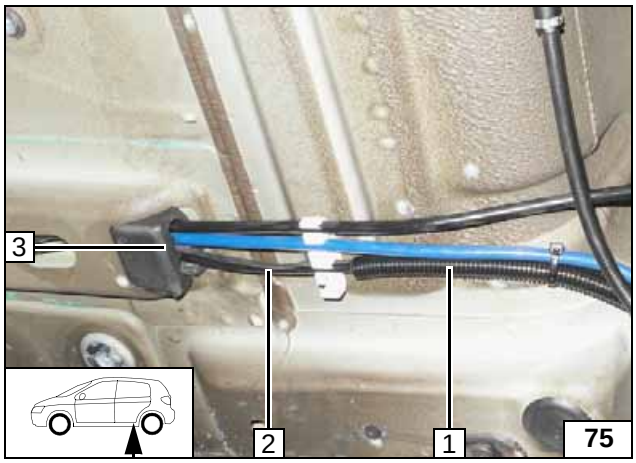
Route fuel line and wiring harness of metering pump **1** to the right side of the vehicle along the firewall and behind the insulation mat.

Routing lines



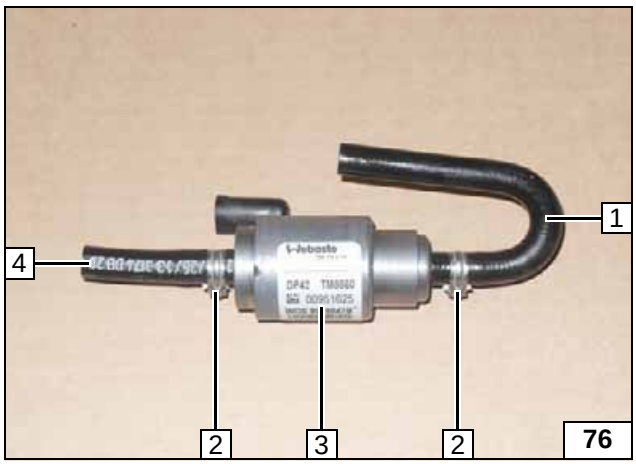
Cut 300mm long, 10mm dia. corrugated tube to length and push onto fuel line and wiring harness of metering pump. Lead fuel line and wiring harness of metering pump **1** into original vehicle line duct **2** and route to underbody.

Routing lines



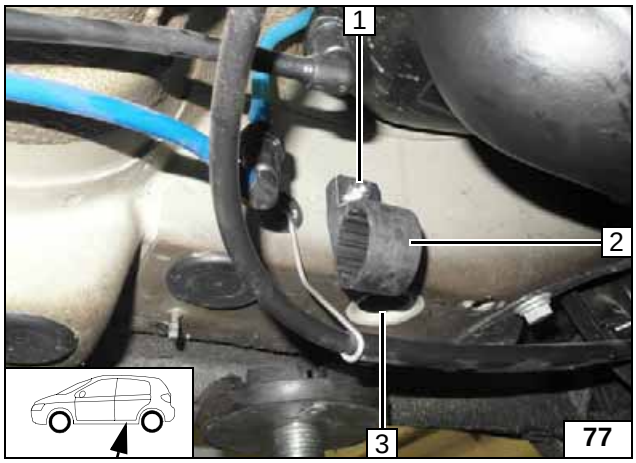
Guide fuel line and wiring harness of metering pump **2** out of original vehicle line duct **3** and route along original vehicle fuel lines to fuel tank. Cut approx. 300mm from 10mm dia. corrugated tube **1** and slide onto fuel line and wiring harness of metering pump.

Routing lines



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

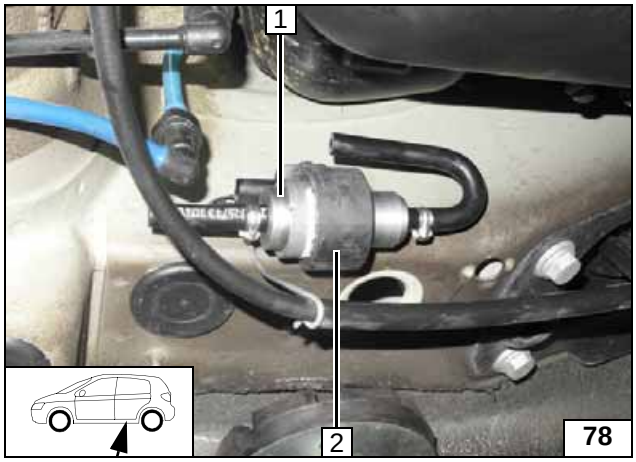
Premounting metering pump



Mount bolt **1** through hole in frame side member **3**.

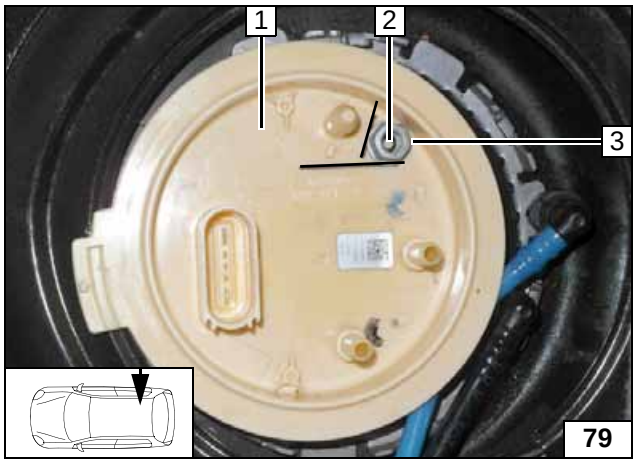
1 M6x25 bolt, support angle bracket, flanged nut, existing hole
2 Metering pump mount

Preassembling mount of metering pump



1 Metering pump
2 Metering pump mount

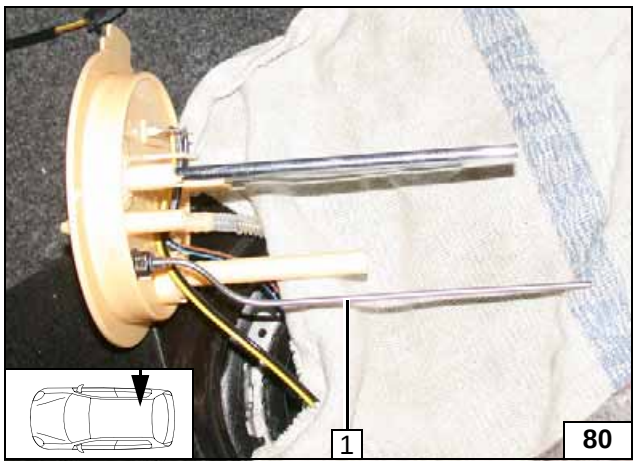
Installing metering pump



Detach fuel-tank sending unit **1** in accordance with manufacturer's instructions. Place M8 flanged nut **3** at the markings.

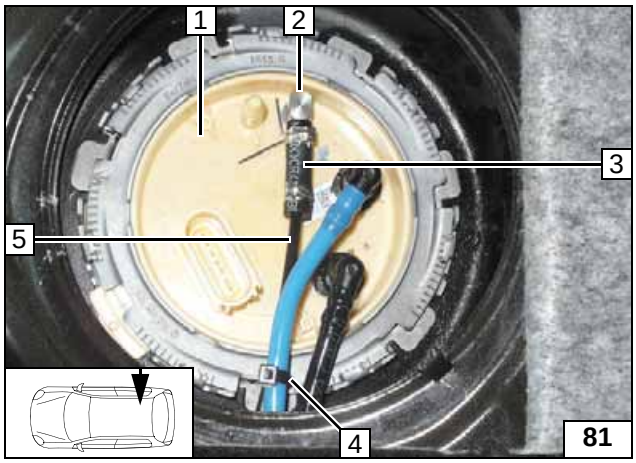
2 Copy hole pattern, 6 mm dia. hole

Fuel extraction



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

Installing fuel standpipe

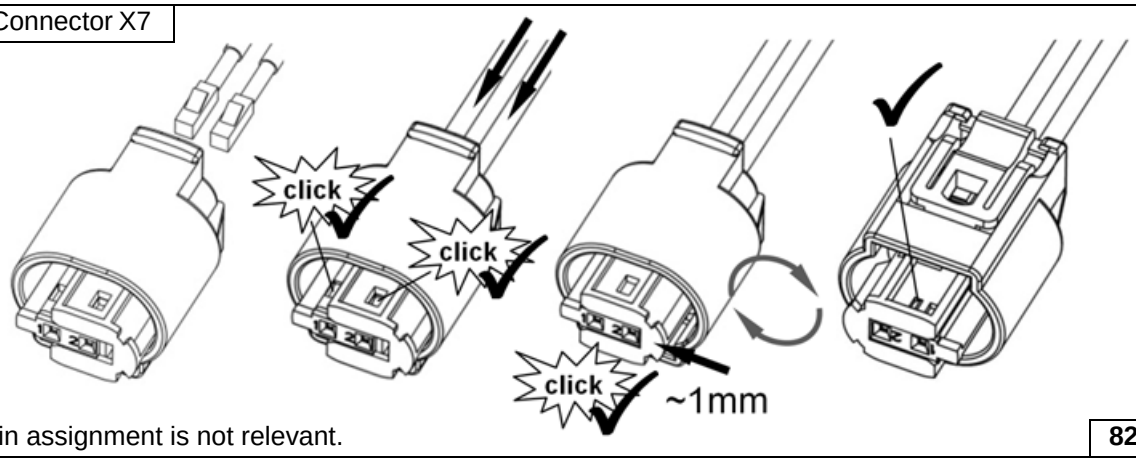


Install fuel-tank sending unit **1** in accordance with manufacturer's instructions.

2 Fuel standpipe
3 Hose section, 10 mm dia. clamp [2x]
4 Cable tie
5 Fuel line

Connecting fuel line

Connector X7



Pin assignment is not relevant.

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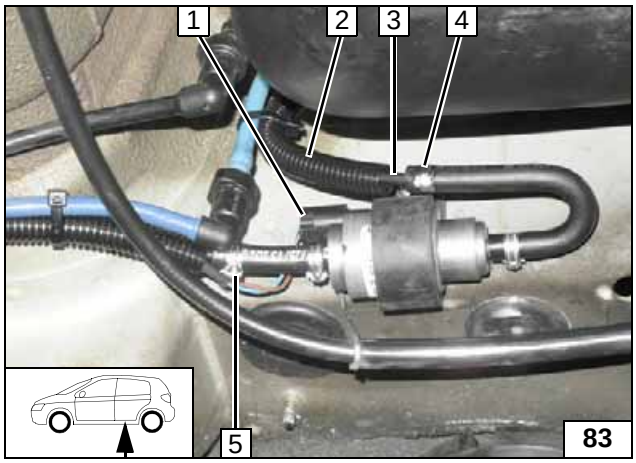
Completing connector of metering pump

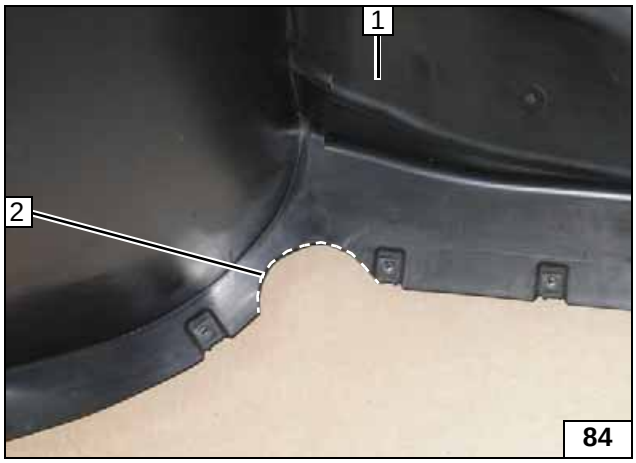


Cut approx. 300mm from 10mm dia. corrugated tube **2** and slide onto fuel line of fuel standpipe **3**. Ensure sufficient distance to neighbouring components, correct if necessary.

1 Wiring harness of metering pump, connector X7 mounted
4 10 mm dia. clamp
5 Fuel line of heater,10mm dia. clamp

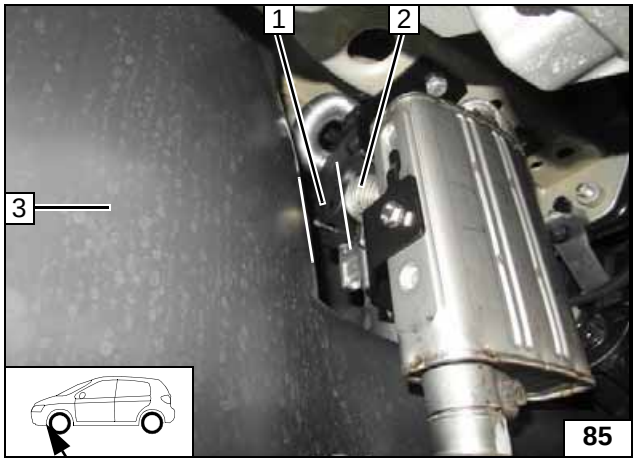
Connecting metering pump

Final Work



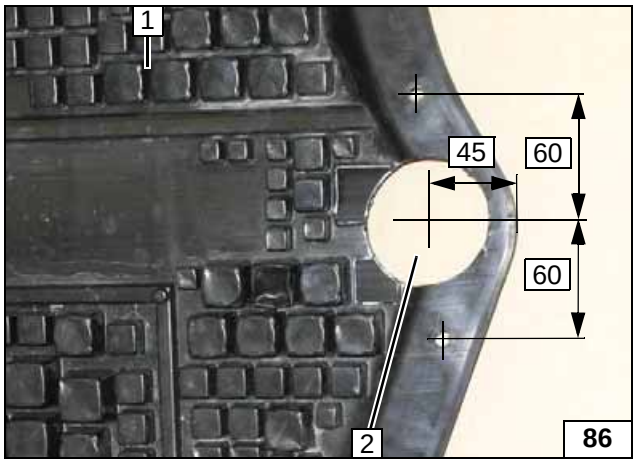
Cut out wheel-well inner panel **1** at marking **2**.

Cutting out wheel-well inner panel



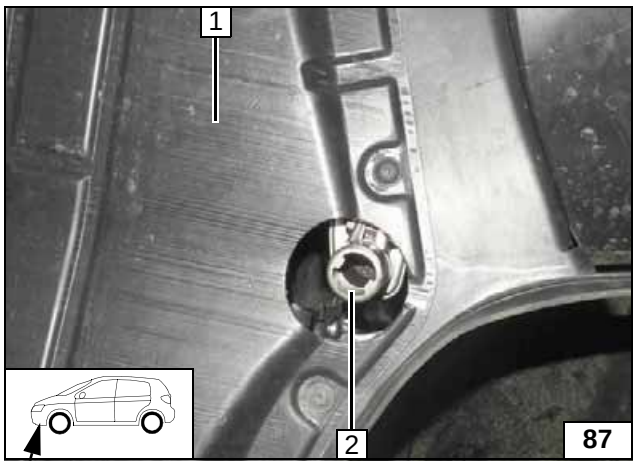
Ensure sufficient distance between wheel-well inner panel **3** and exhaust pipe **2** at position **1** (min. 20mm)!

Installing wheel-well inner panel



1 Underride protection
2 60mm dia. hole

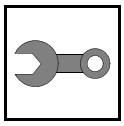
Cutting out underride protection



Centrally align exhaust end section **2** in hole and flush with underride protection **1**.

Aligning exhaust end section

 © Webasto Thermo & Comfort SE



WARNING!
Reassemble the disassembled components in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate all loose wires and tie back.
Only use manufacturer-approved coolant. Spray heater components with anti-corrosion wax (Tectyl 100K, Order No. 111329).



- **Connect the battery.**
- **Fill and bleed the coolant circuit according to the vehicle manufacturer’s specifications.**
- **Adjust digital timer, teach Telestart transmitter.**
- **Make settings on A/C control panel according to the "Operating Instructions for End Customer".**
- **Place caution label "Switch off parking heater before refuelling“ in the area of the filler neck**
- **For initial start-up and function test, refer to installation instructions**



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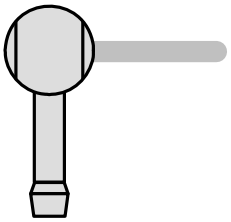
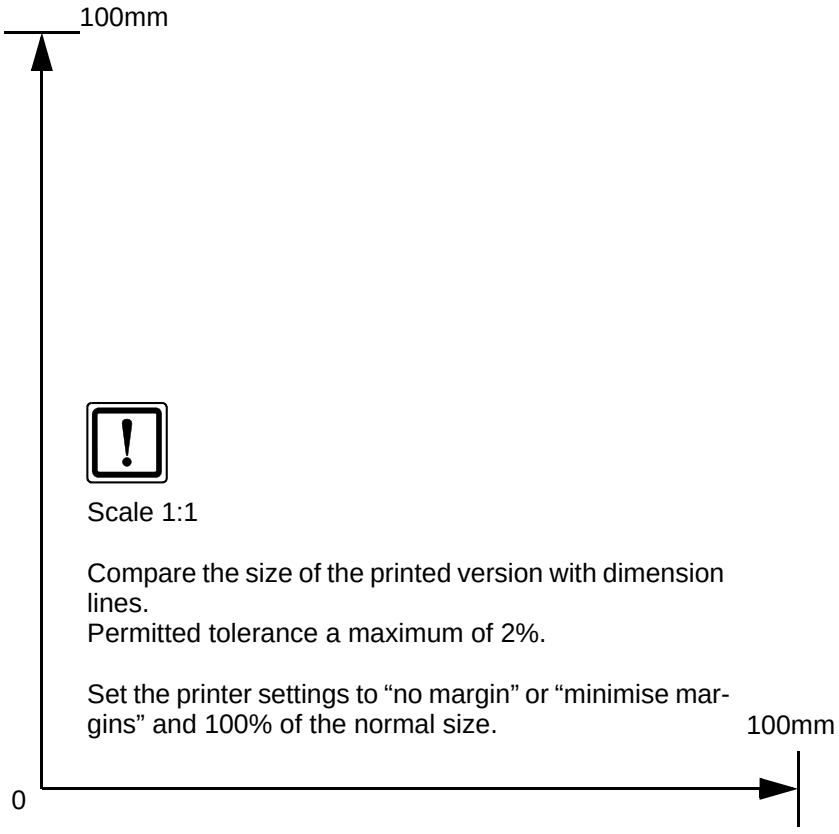
Template for Fuel Standpipe



Top view





Scale 1:1

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

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

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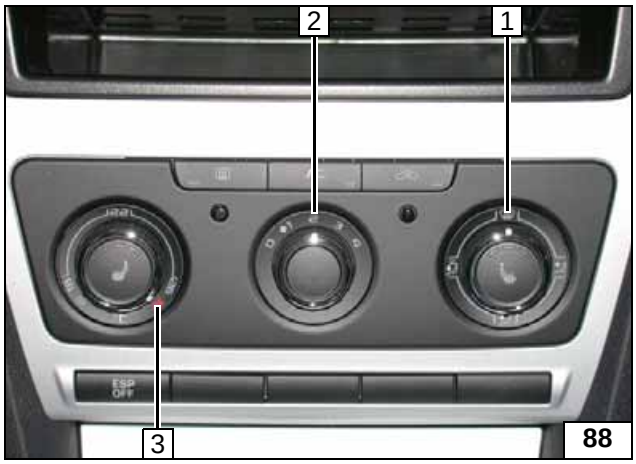
Operating Instructions for Climatic

Please remove page and add to the vehicle operating instructions.

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

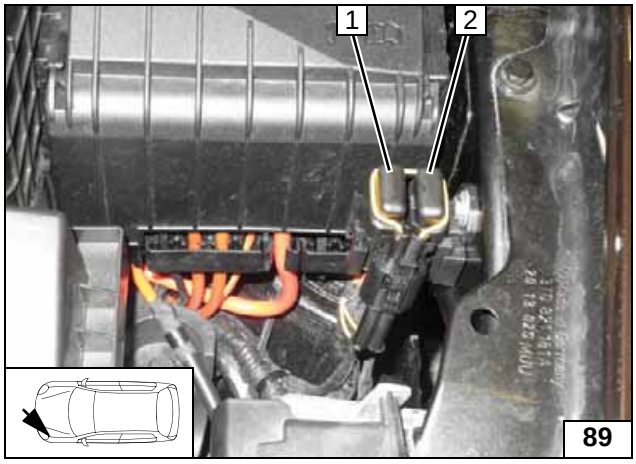
Passenger compartment monitoring, if installed, must be deactivated in addition to the vehicle settings for the heating operation.
For information on deactivation, please see the vehicle owner's manual.

Before parking the vehicle, make the following settings:



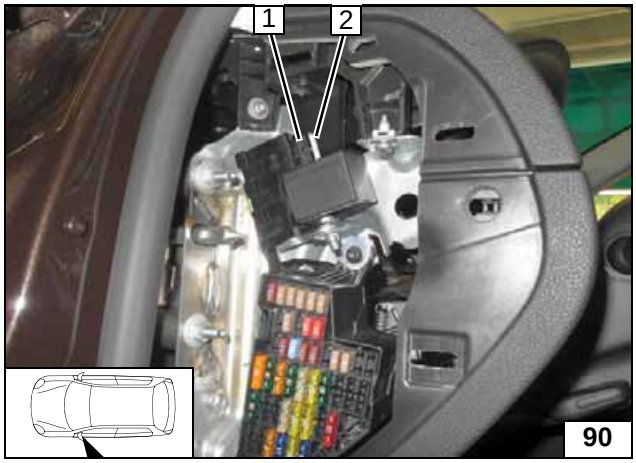
1 Direct air outlet towards windscreen
2 Set fan to level "1", or possibly "2"
3 Set temperature to "max."

A/C control panel



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

Engine compartment fuses



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

Passenger compartment fuses

Operating Instructions for Climatronic

Please remove page and add 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.

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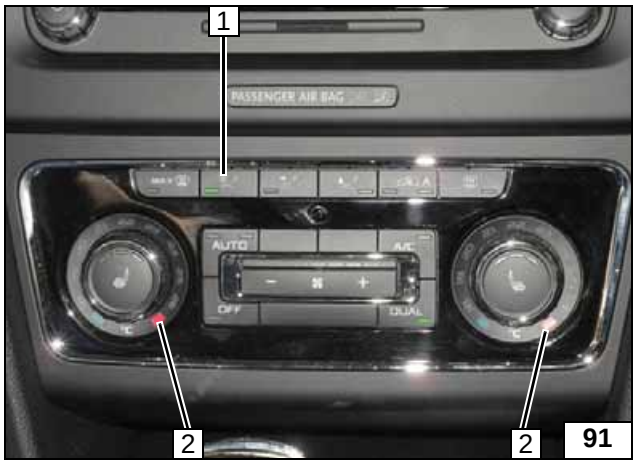
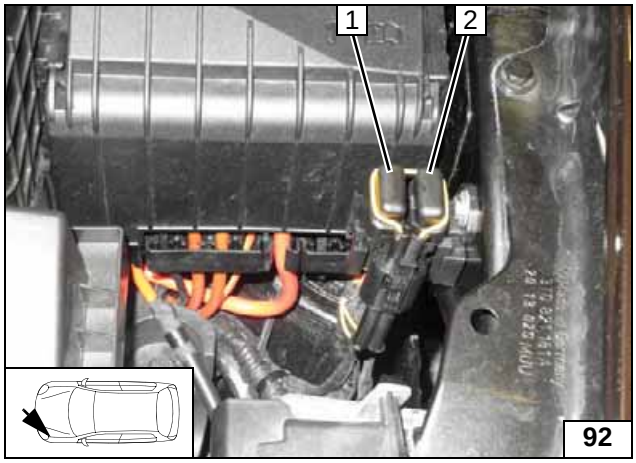
Before parking the vehicle, make the following settings:



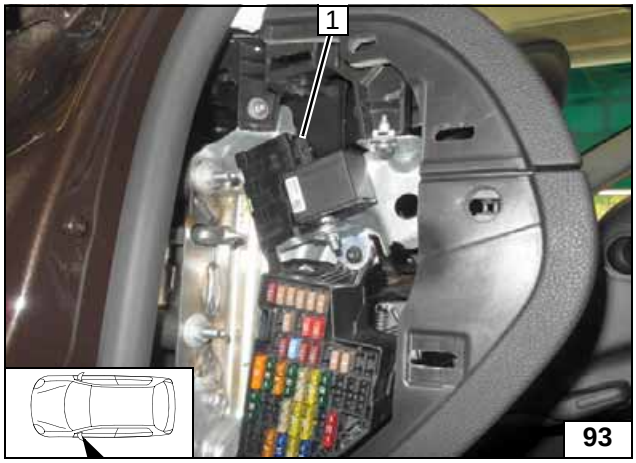
1 Direct air outlet towards windscreen
2 Set temperature on both sides to "HI".

A/C control panel



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

Engine compartment fuses



1 1A fuse F3 of heater control

Passenger compartment fuses