Water Heater

Thermo Top Evo Parking Heater

E1
00 0258

With FuelFix

Installation Documentation
Seat Altea

Validity

Manufacturer	Model	Type	EG-BE No. / ABE
Seat	Altea	5P	e9 * 2001 / 116 * 0050 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm³	Engine code
1.4 TSI	Petrol	6-speed SG	92	1390	CAXC
1.6 TDI	Diesel	5-speed SG	77	1598	CAYC
2.0 TDI	Diesel	6-speed SG	103	1968	CFHC

SG = manual transmission

From model year 2014
Left-hand drive vehicle

Verified equipment variants: Climatic / Climatronic
Front fog lights
Headlight washer system
Front wheel drive
4Drive

Not verified: Passenger compartment monitoring

Total installation time: approx. 7.5 hours

Seat Altea

Table of Contents

Necessary Components

- Basic delivery scope of Thermo Top Evo based on price list
- Installation kit with FuelFix for Seat Altea 2014 Diesel: **1323539B**
- Also required with Climatronic: Installation kit for Climatronic **1322928A**
- 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

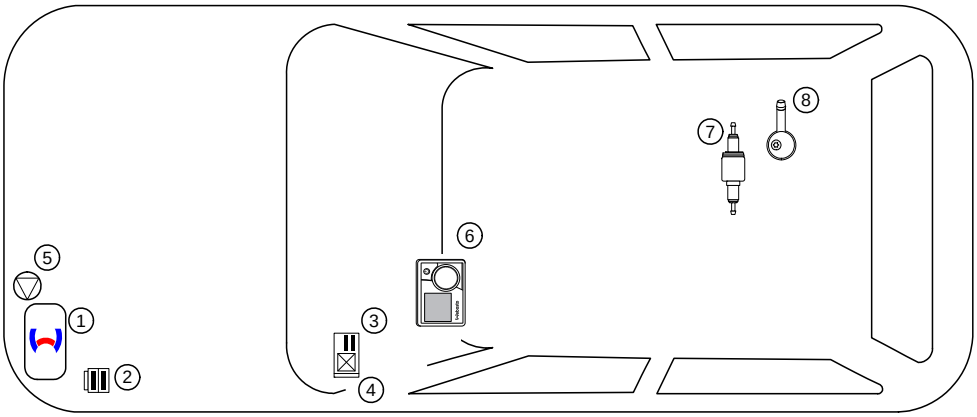
Installation instructions:

- Arrange for the vehicle to be delivered with the tank only about ¼ full.
- The installation location of the push button in case of Telestart or Thermo Call should be confirmed with the end customer.
- Depending on the available space and manufacturer's instructions, we recommend theuse of a vehicle battery with more electrical capacity.

Installation Overview

Legend:

1. Heater
2. Engine compartment fuse holder
3. Passenger compartment relay and fuse holder
4. PWM GW (only in case of Climatronic)
5. Circulating pump
6. MultiControl CAR
7. Metering pump
8. FuelFix



Information on Total Installation Time

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

Information on Operating and Installation Instructions

1 Important information (not complete)

1.1 Installation and repair

The improper installation or repair of Webasto heating and cooling systems can cause fire or the leakage of deadly carbon monoxide, leading to serious injury or death.

To install and repair Webasto heating and cooling systems you need to have completed a special company training course and have the appropriate technical documentation, special tools and special equipment.

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

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

1.2 Operation

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

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

Always switch off the heater before refuelling.

The heater may only be used with the prescribed fuel Diesel (DIN EN 590) or petrol (DIN EN 228).

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 have to audibly click into place during installation.

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 a programmable control module (e.g. a PWM Gateway), the corresponding settings must be checked or adjusted.

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

The heater is licensed in accordance with paragraph 19, section 3, No. 2b of the StVZO (German Road Traffic Licensing Authority).

2.1 Excerpt from ECE regulation 122 (heating system) paragraph 5 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 gas 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.

Seat Altea

Information on Validity

This installation documentation applies to Seat Altea Diesel vehicles - for validity, see page 1 - from model year 2014 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 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
- Deep-hole marker
- Webasto Thermo Test diagnosis with current software

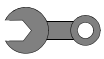
Dimensions
- All dimensions are in mm.

Tightening torque values
- Tightening torque values of 5x13 heater bolts and 5x11 heater stud bolts = 8Nm.
- Tightening torque value of 5x15 water connection piece retaining plate bolt = 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 damage to components.

Specific risk due to electrical voltage.

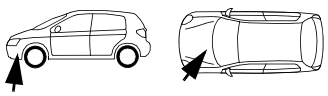
Specific risk of injury or fatal accidents.

Specific risk of fire or explosion.

Reference to the manufacturer's vehicle-specific documents or to the general installation instructions of Webasto components.

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.

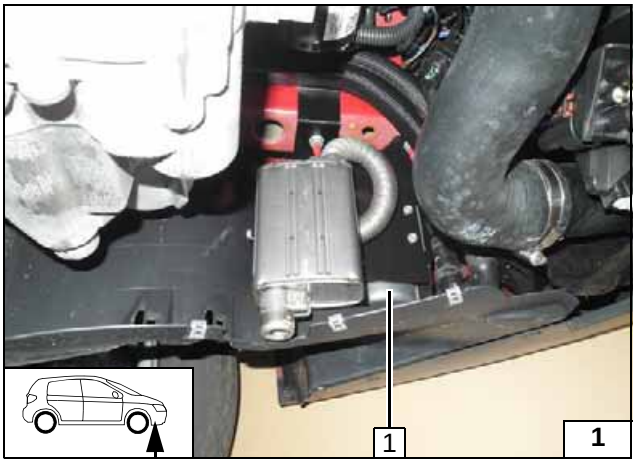
Preliminary Work

Vehicle

- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect the battery and remove it completely, including the carrier.
- Remove the air filter completely.
- Remove the underride protection.
- Remove the wheel-well inner panel on the left.
- Remove the side trim of the A-pillar on the driver's side.
- Remove the footwell trim on the driver's side.
- Remove the footwell trim on the front passenger's side (only in case of Climatronic).
- Remove the instrument panel trim on the driver's side.
- Remove the rear bench seat on the right.
- Open the right-hand tank-fitting service lid.

Heater

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



Heater Installation Location

Figure shows 2.0 litre TDI!

1 Heater

Installation location

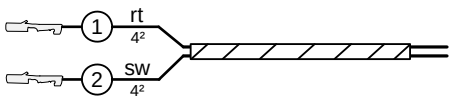
Preparing Electrical System

Wire sections retain their numbering in the entire document.

Produce all following electrical connections as shown in the wiring diagram.

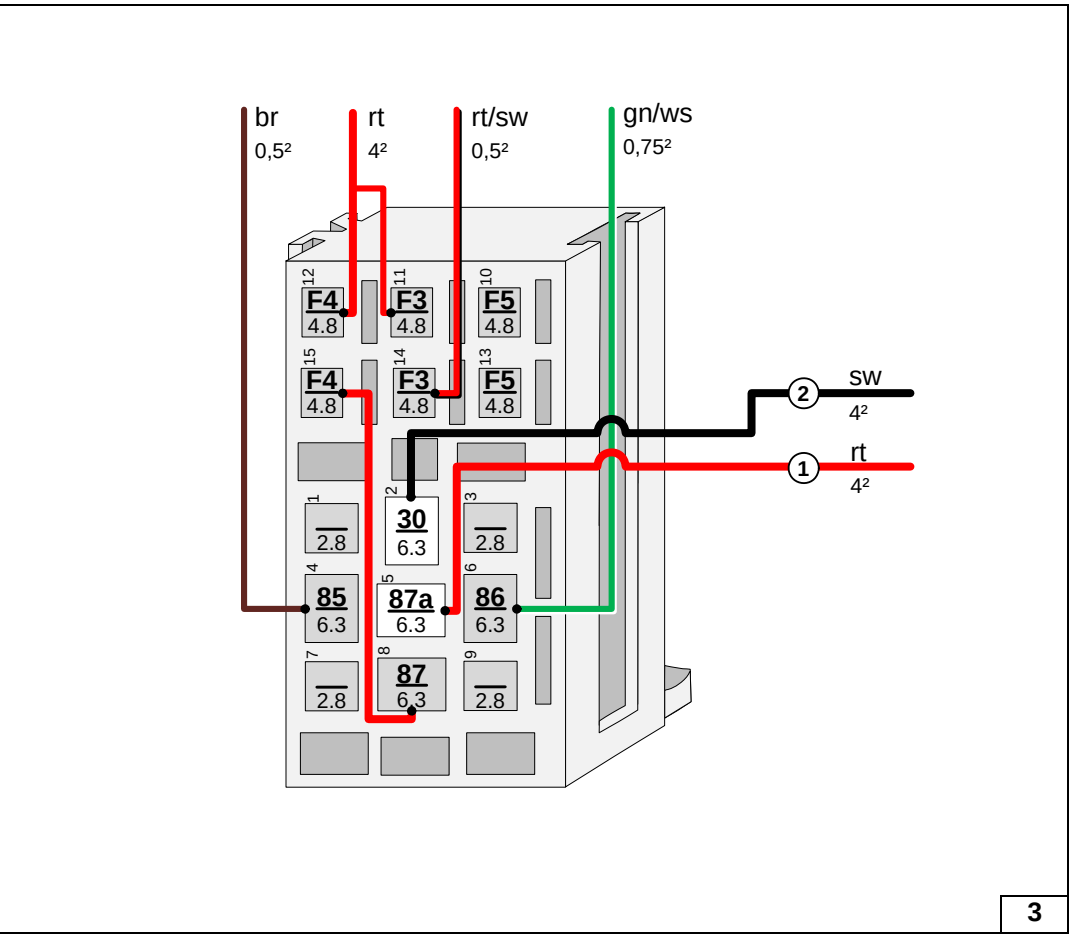
Climatic

① Red (rt) wire of fan wiring harness
② Black (sw) wire of fan wiring harness



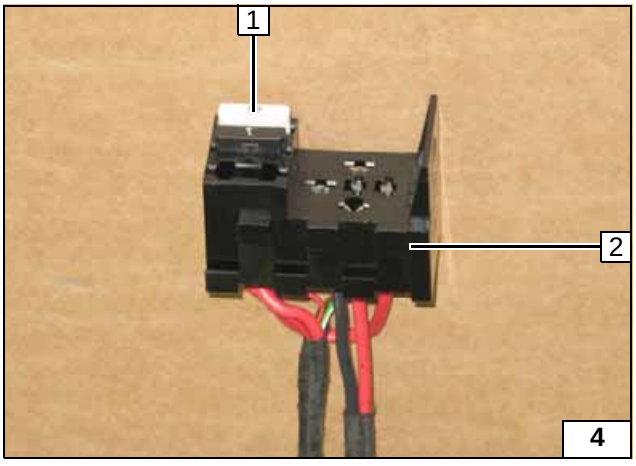
2

Assigning wires



3

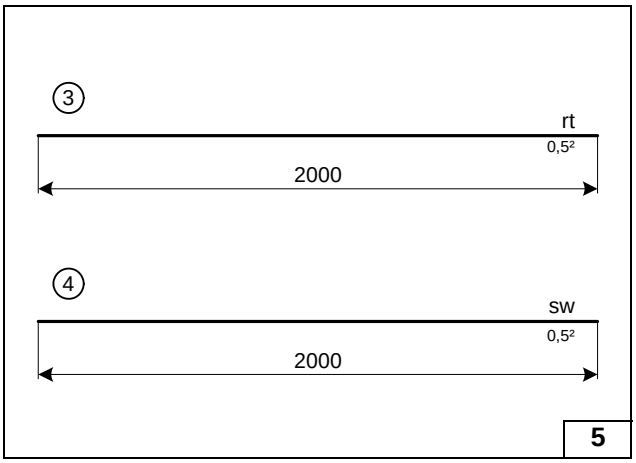
Connecting wires to passenger compartment relay and fuse holder



4

1 25A fuse F4
2 Passenger compartment relay and fuse holder

Installing fuse F4

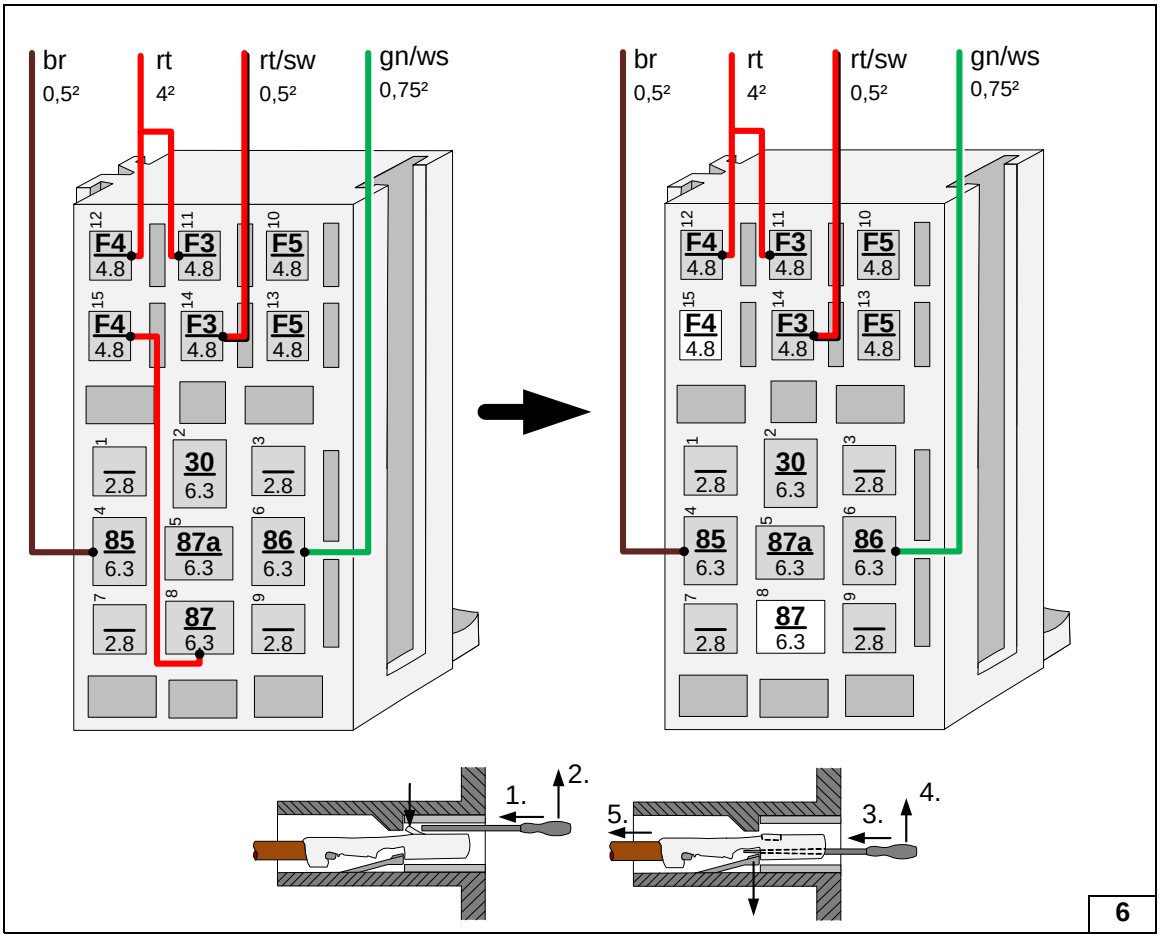


5

Climatronic

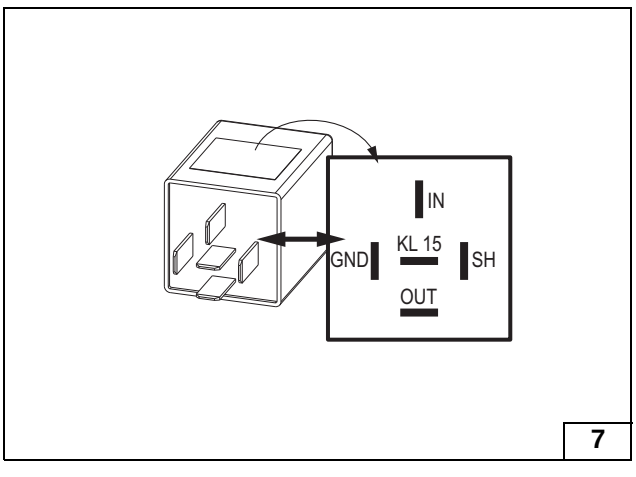
Pull wires ③ and ④ into protective sleeving.

Assigning wires



6

Removing red (rt) wire from passenger compartment relay and fuse holder



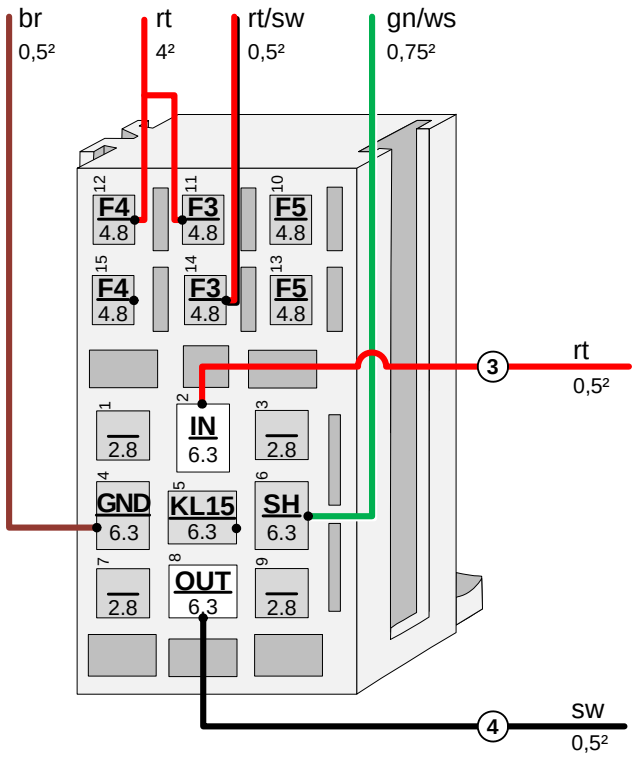
7

Check the PWM Gateway settings when starting up the heater and adjust if necessary.

Settings:

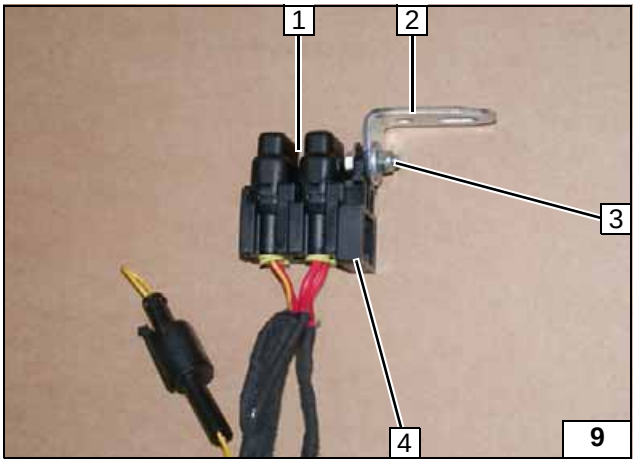
Duty cycle: 30%
Frequency: 400 Hz
Voltage: 8V
Function: High side

View of PWM-GW



8

Installing wires of passenger compartment relay and fuse holder for PWM-GW connection



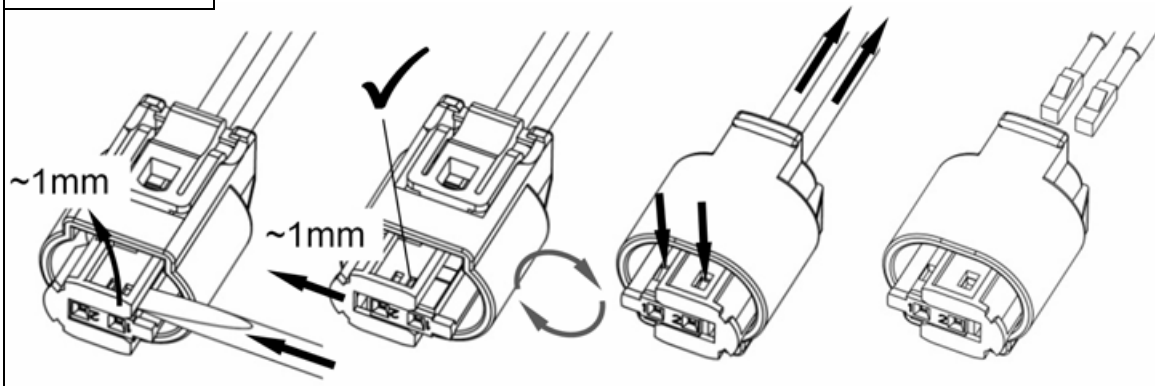
9

All vehicles

1 Fuses F1-2
2 Angle bracket
3 M5x16 bolt, large diameter washer [2x], self-locking nut
4 Retaining plate of fuse holder

Preparing engine compartment fuse holder

Connector X7



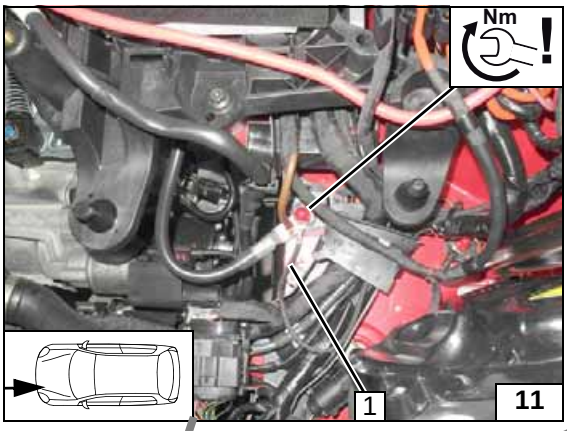
10

Dismantling metering pump connector

Electrical System

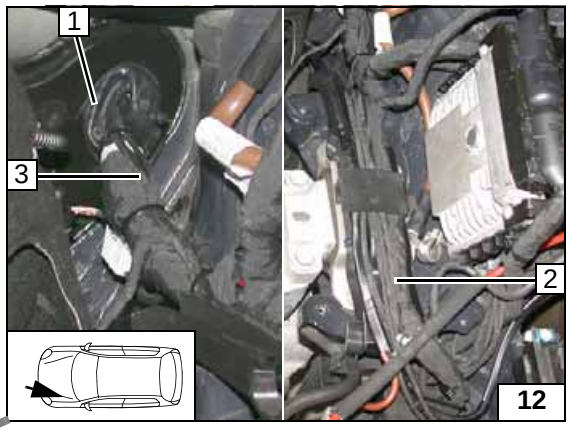
Earth wire

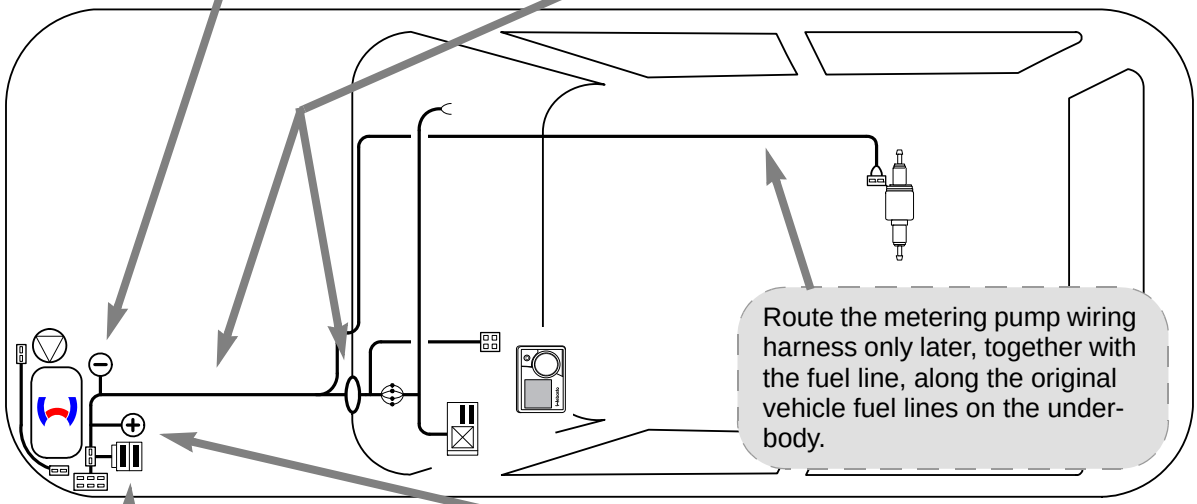
1 Earth wire on original vehicle earth support point



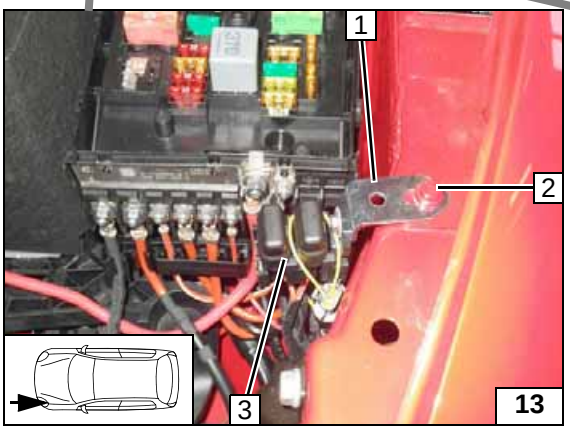
Wiring harness routing, wiring harness pass through

1 Use available protective rubber plug
2 Route wiring harnesses in original vehicle cable duct
3 Wiring harnesses of heater, heater control



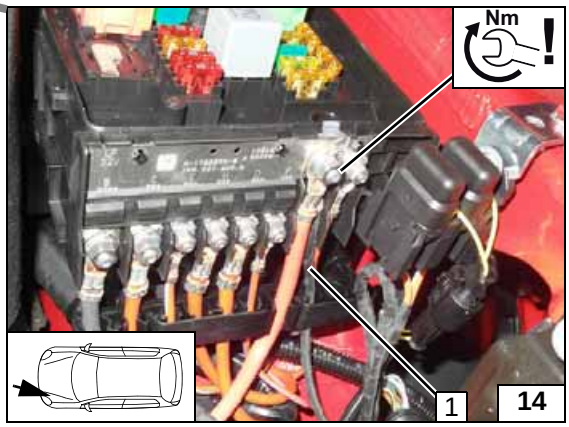


Wiring harness routing diagram



Engine compartment fuse holder

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

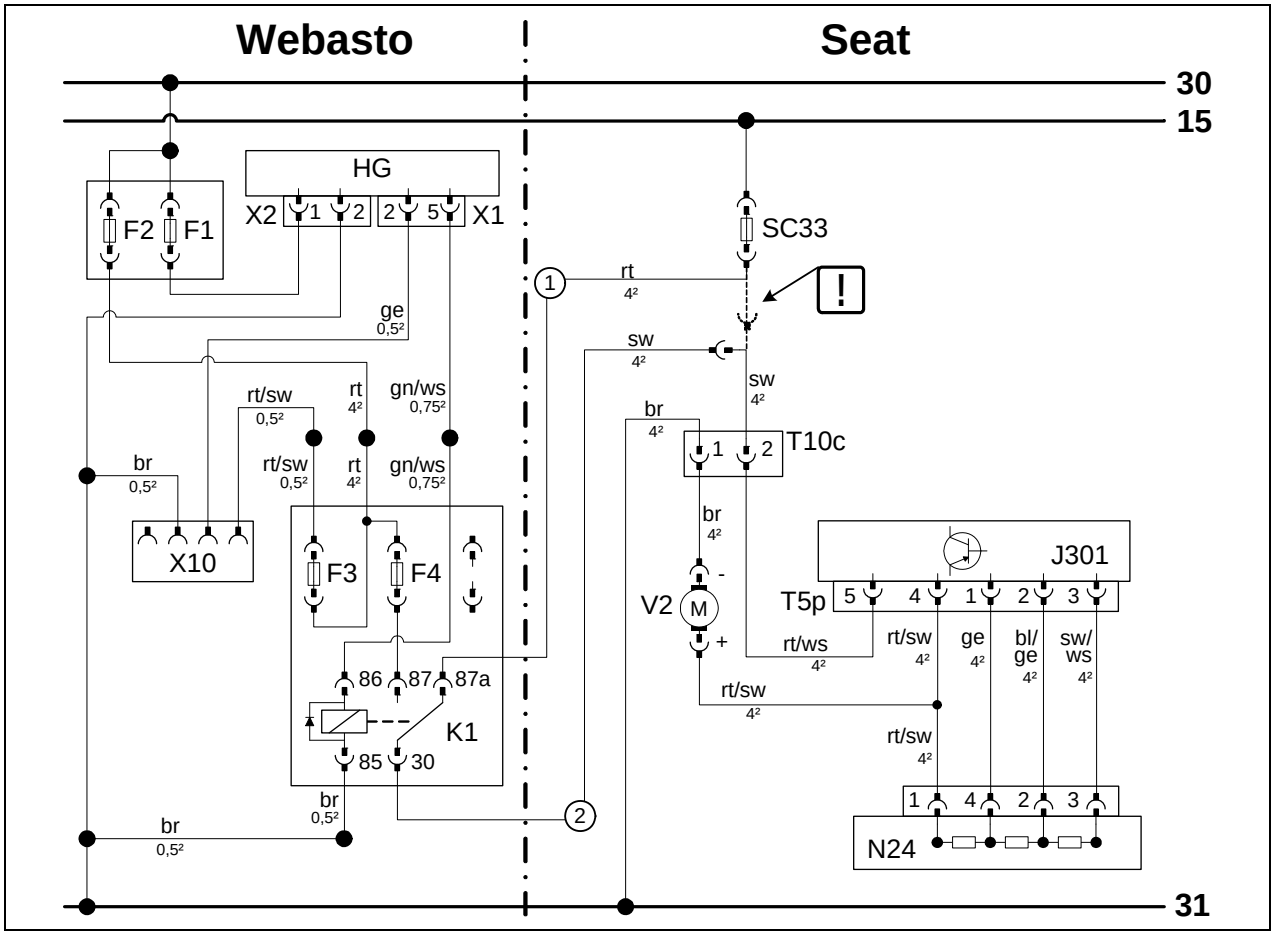


Positive wire

1 Positive wire on positive battery distributor

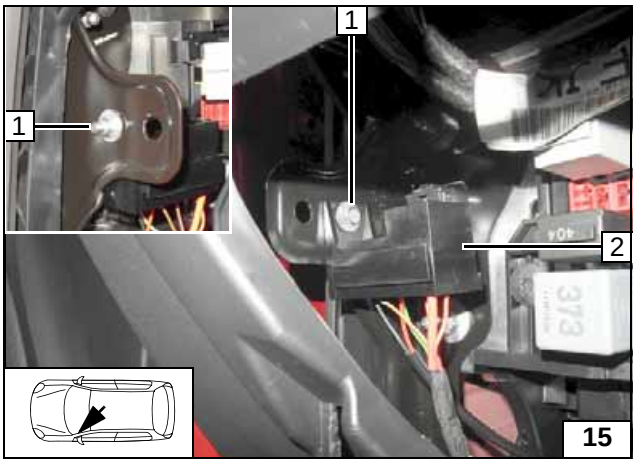
Climatic Fan Controller

Wiring diagram



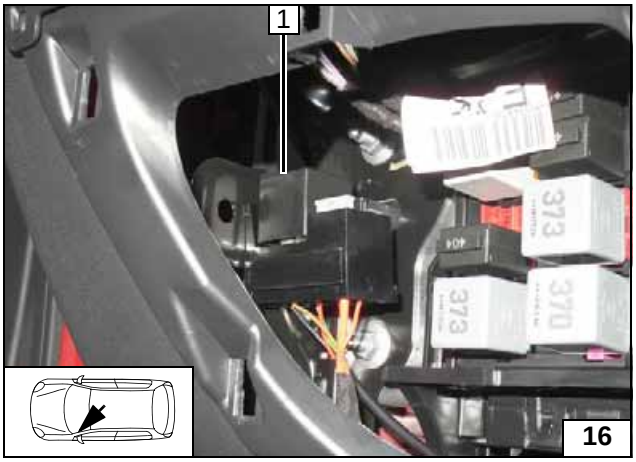
Legend

Webasto components		Vehicle components		Colours and symbols	
HG	TT-Evo heater	SC33	40A fuse	rt	red
X1	6-pin heater connector	T10c	10-pin connector	ge	yellow
X2	2-pin heater connector	J301	Control unit of air-conditioning	sw	black
F1	20A fuse	T5p	5-pin connector J301	br	brown
F2	30A fuse	V2	Fan motor	ws	white
X10	4-pin connector of heater control	N24	Resistor group	gn	green
				bl	blue
F3	1A fuse				
F4	25 A fuse			!	Remove original Power Timer
K1	Fan relay				
				Wiring colours may vary.	



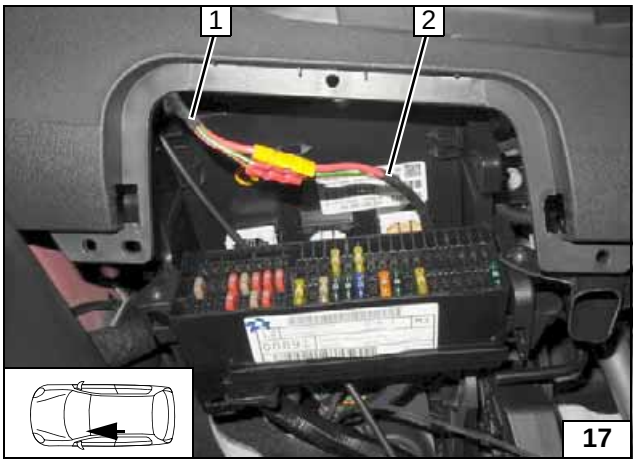
1 M5x16 bolt, large diameter washer [2x], nut in existing hole
2 Passenger compartment relay and fuse holder

Installing passenger compartment relay and fuse holder



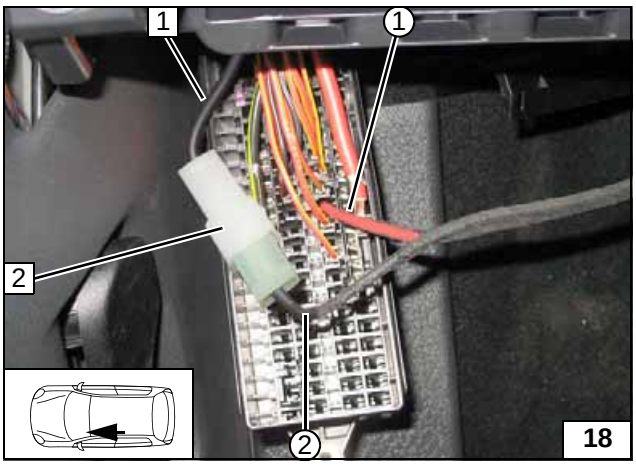
1 K1 relay

Inserting K1 relay



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

Connecting same colour wires of wiring harnesses



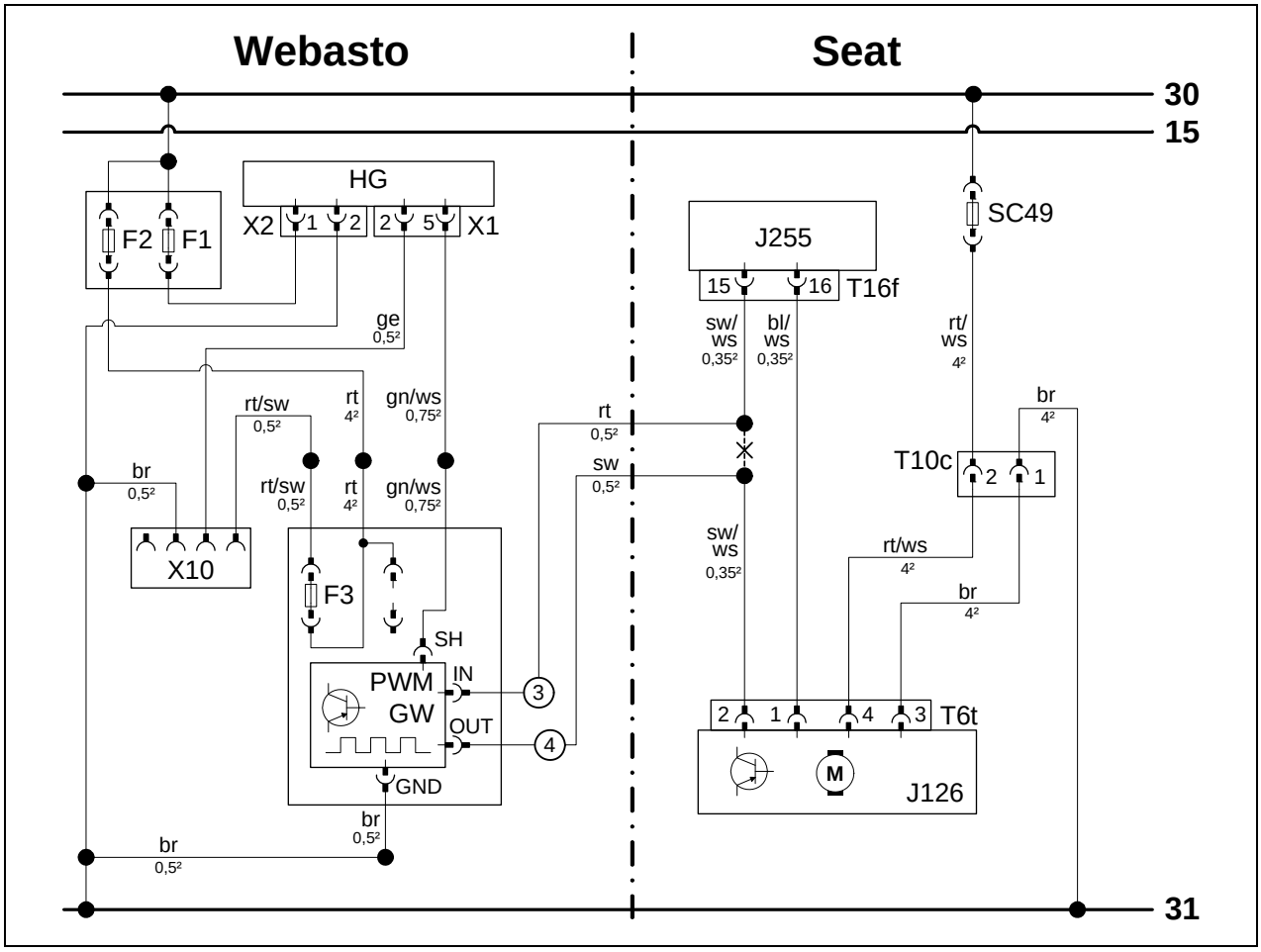
Uncrimp black (sw) wire **1** of socket SC33. Crimp Standard Power Timer onto red (rt)wire of K1/87a from fan wiring harness ① andinsert into socket SC33.

2 Connector
② Black (sw) wire of K1/30, fan wiring harness

Connecting wires

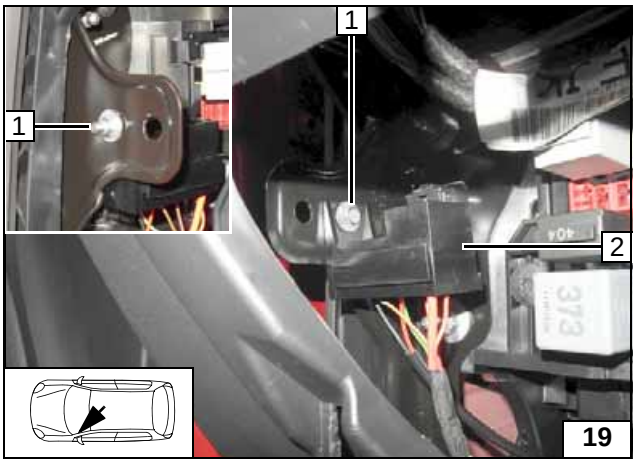
Climatronic Fan Controller

Wiring diagram



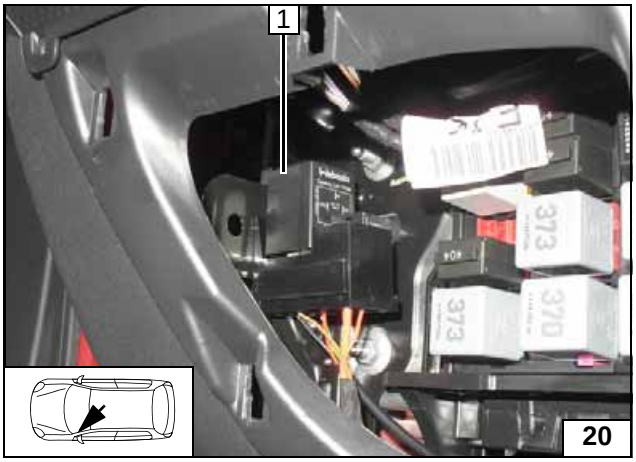
Webasto components		Vehicle components		Colours and symbols	
HG	TT-Evo heater	SC49	40A fuse	rt	red
X1	6-pin heater connector	J255	Air-conditioning control unit	sw	black
X2	2-pin heater connector	T16f	16-pin connector J255	ge	yellow
F1	20A fuse	T10c	10-pin connector	gn	green
F2	30A fuse			bl	blue
X10	4-pin connector of heater control	J126	Fan unit	ws	white
		T6t	6-pin connector J126	br	brown
F3	1A fuse				
PWM-GW	Pulse width modulator				
PWM GW settings:					
Duty cycle:	30%				
Frequency:	400Hz				
Voltage:	8V			**X**	Cutting point
Function:	High side			Wiring colours may vary.	

Legend



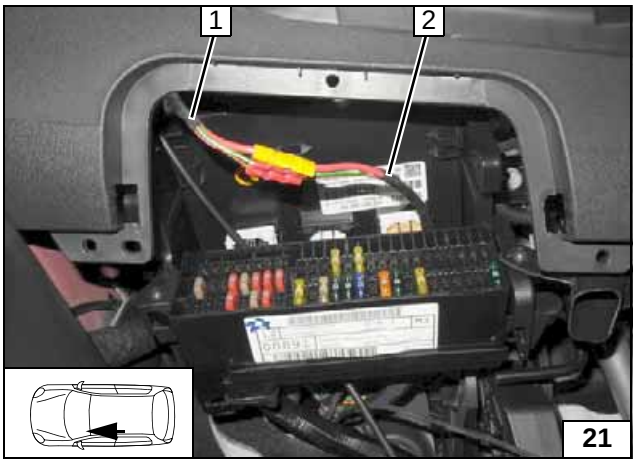
1 M5x16 bolt, large diameter washer [2x], nut in existing hole
2 Passenger compartment relay and fuse holder

Installing passenger compartment relay and fuse holder



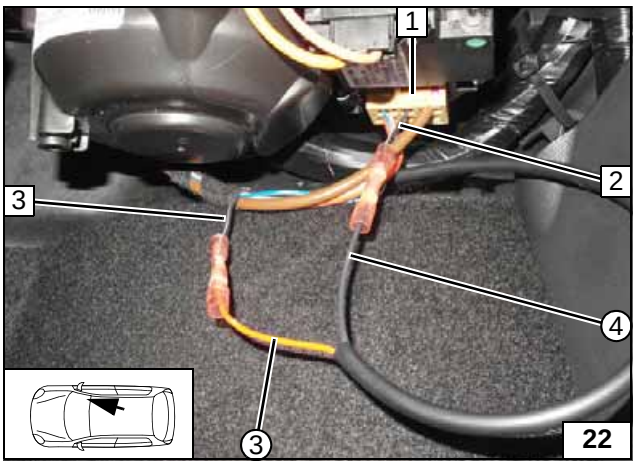
1 PWM GW

Inserting PWM GW



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

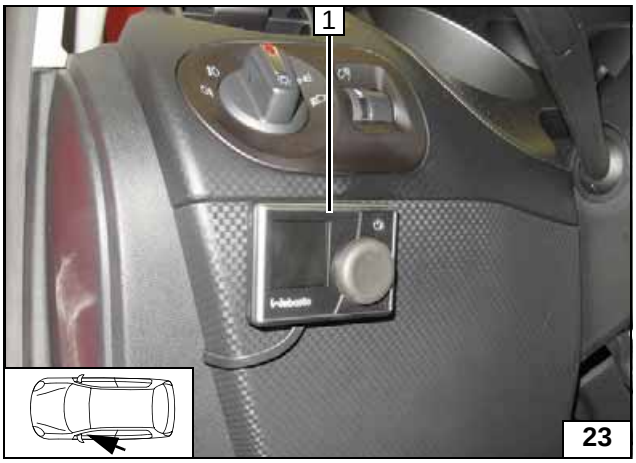
Connecting same colour wires of wiring harnesses



Connection to 6-pin connector T6t **1** from fan unit.

2 Black/white (sw/ws) wire of 6-pin connector T6t, Pin 2
3 Black/white (sw/ws) wire of A/C controlunit
③ Red (rt) wire of PWM-GW/IN
④ Black (sw) wire of PWM-GW/OUT

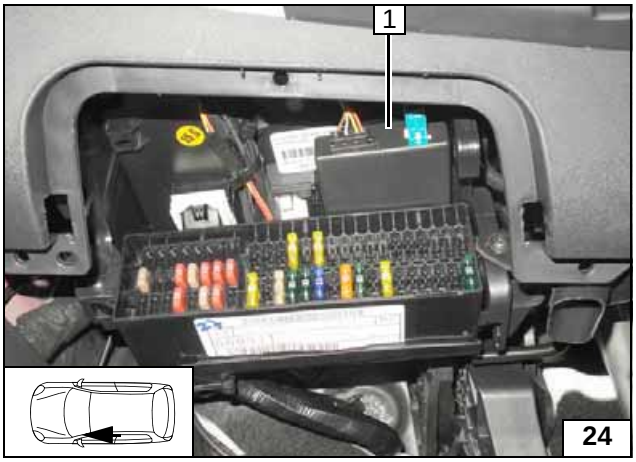
Connecting fan unit



MultiControl CAR Option

1 MultiControl CAR

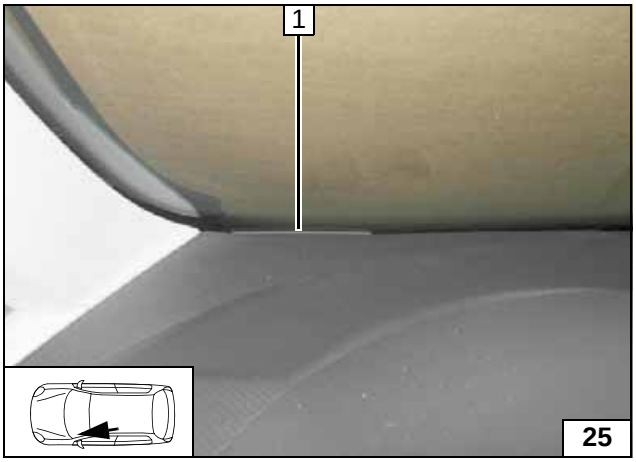
Installing MultiControl CAR



Remote Option (Telestart)

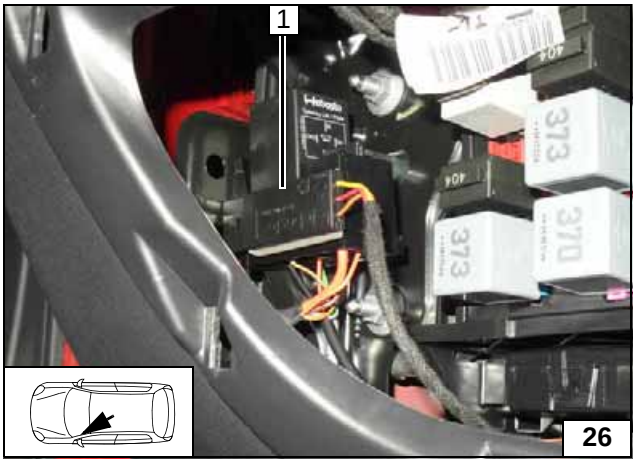
Fasten receiver **1** to fuse carrier using double-sided adhesive tape!

Installing receiver



1 Aerial

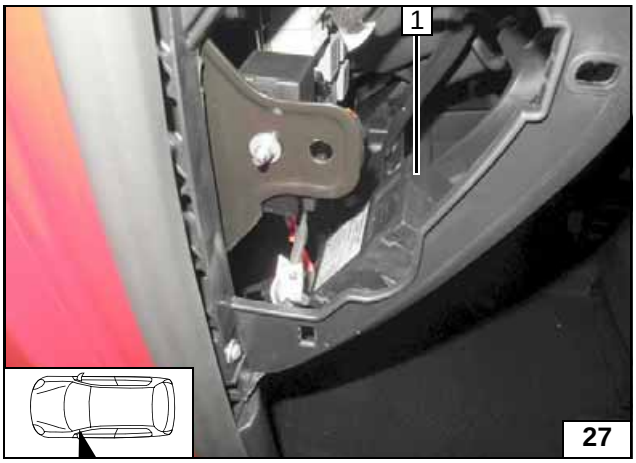
Installing aerial



Temperature sensor T100 HTM

Fasten temperature sensor **1** to passenger compartment relay and fuse holder using double-sided adhesive tape.

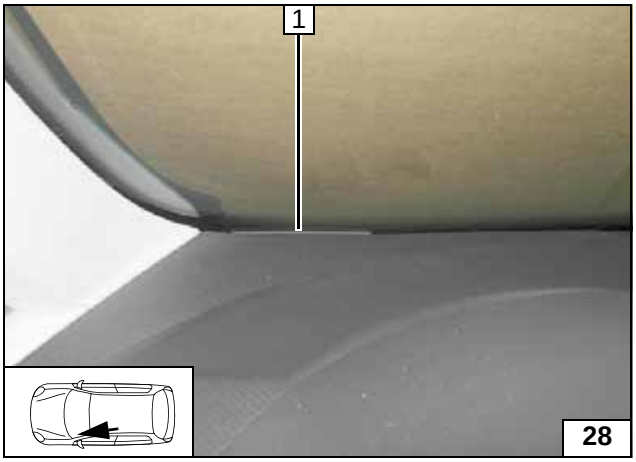
Installing temperature sensor



Remote Option (ThermoCall)

Fasten receiver **1** to instrument panel trim usingdouble-sided adhesive tape.

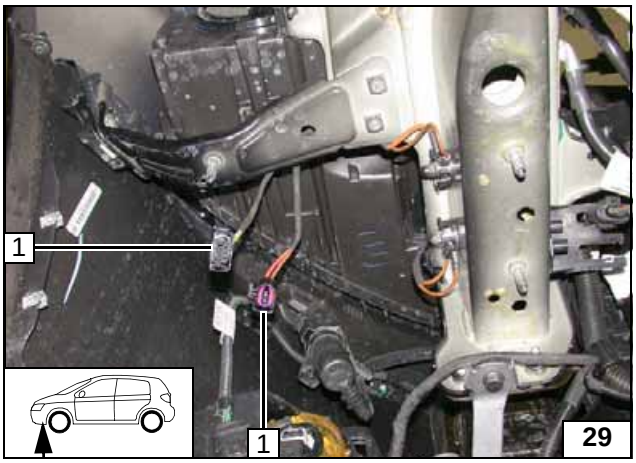
Installing receiver



1 Aerial

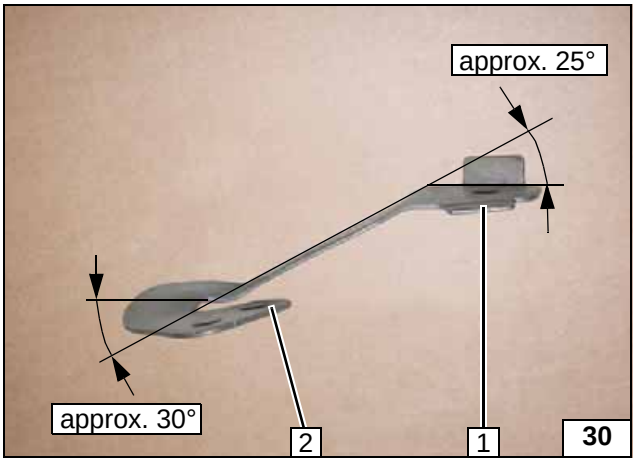
Installing aerial

Preparing Installation Location



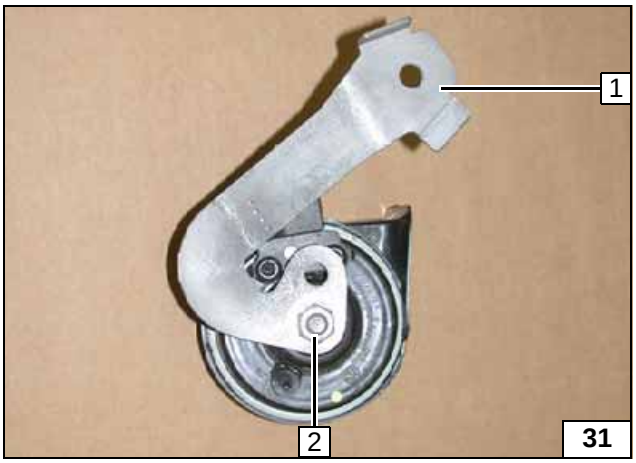
1 Wiring harness of heater [2x]

Routing wiring harness



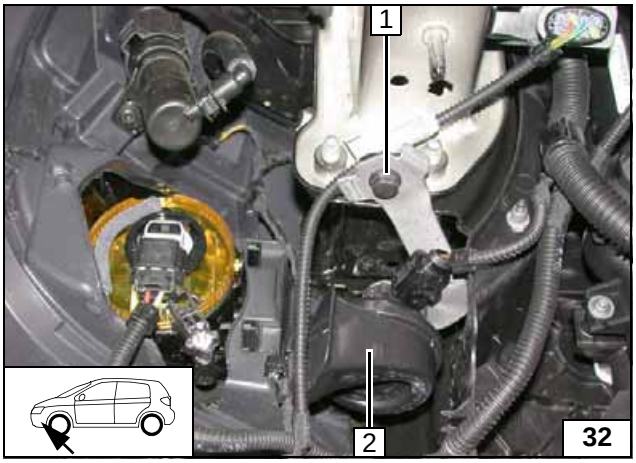
Remove horn bracket **2** and bend as shown. Straighten tab **1**.

Processing horn bracket



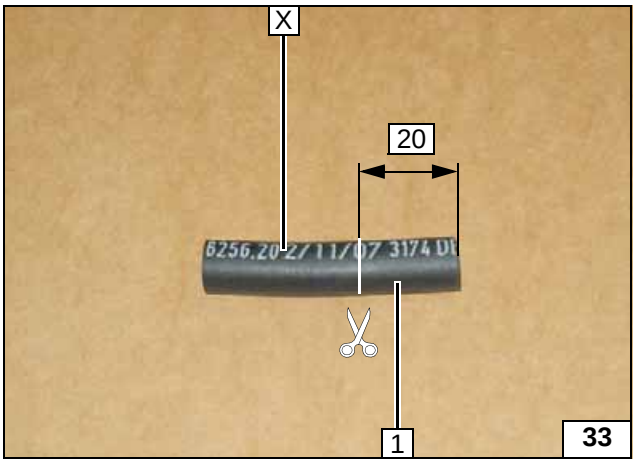
Using original vehicle nut **2** install horn onto horn bracket **1**.

Premounting horn



1 Original vehicle bolt
2 Horn

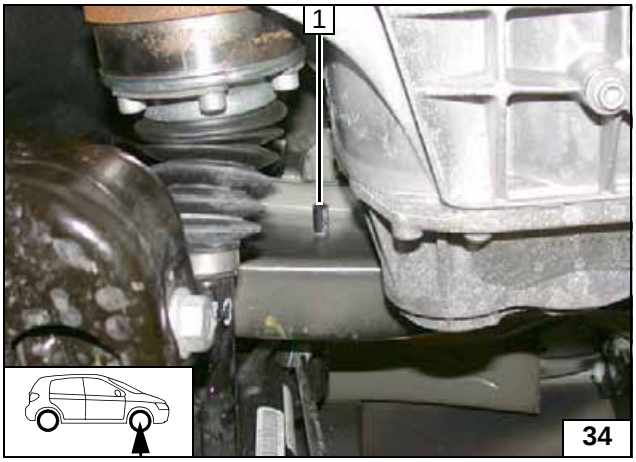
Installing horn



Discard section **X**.

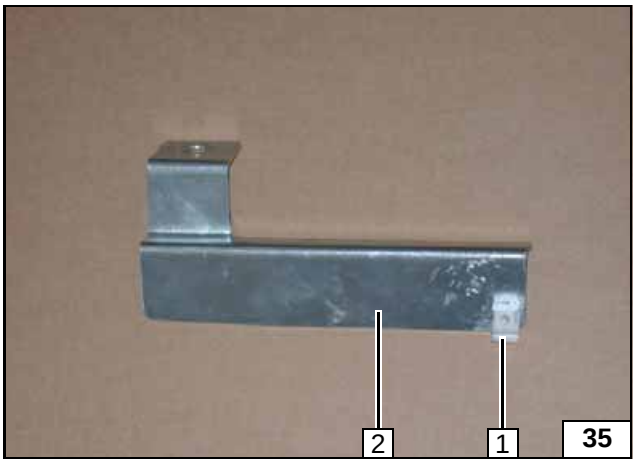
1 Hose section

Shortening hose section



Remove clip for coupling line in position **1**, will be reused. Slide 20mm hose section **1** onto original vehicle stud bolt.

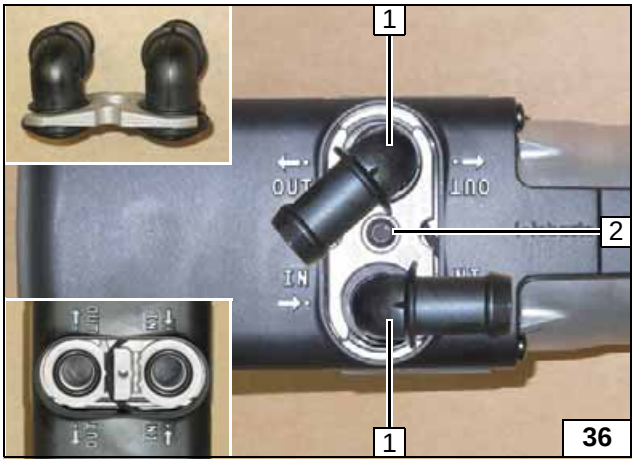
Installing hose section



Install clip of coupling line **1** onto hose bracket **2** .

1 M6x12 countersunk head screw

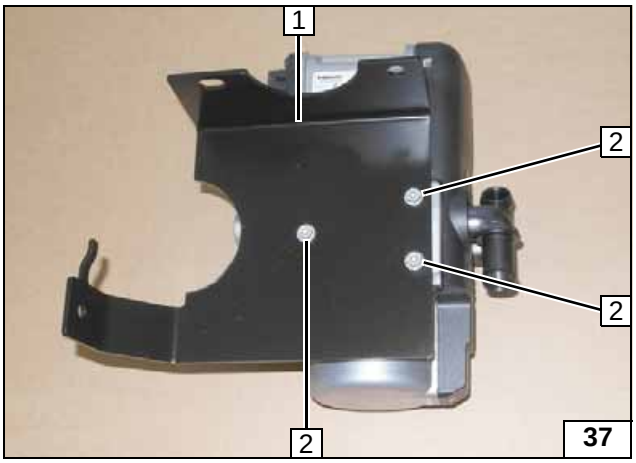
Preparing hose bracket



Preparing Heater

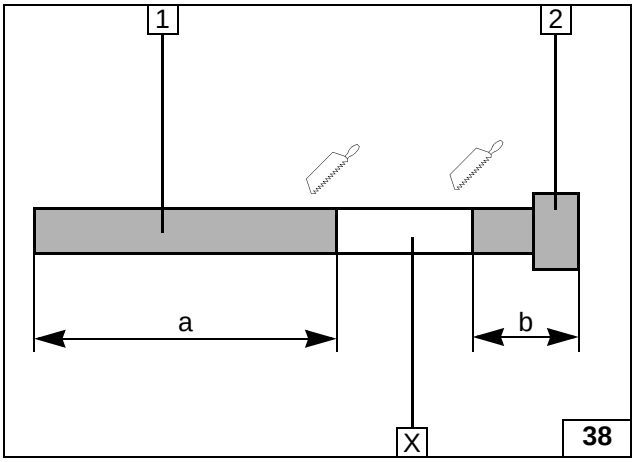
1 Water connection piece, sealing ring [2x each]
2 5x15 self-tapping bolt, retaining plate of water connection piece

Mounting water connection piece



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

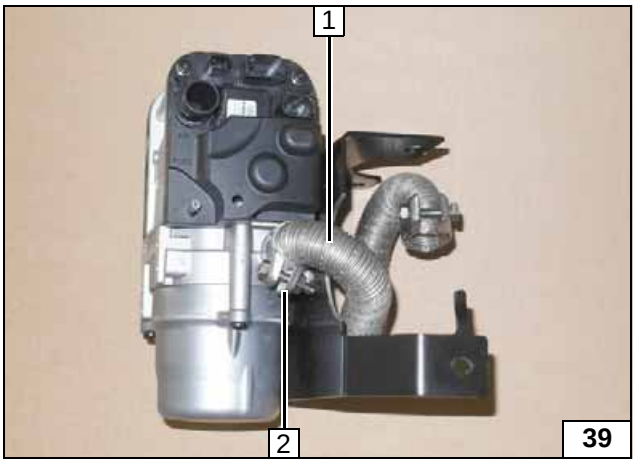
Installing bracket



Discard section **X**.

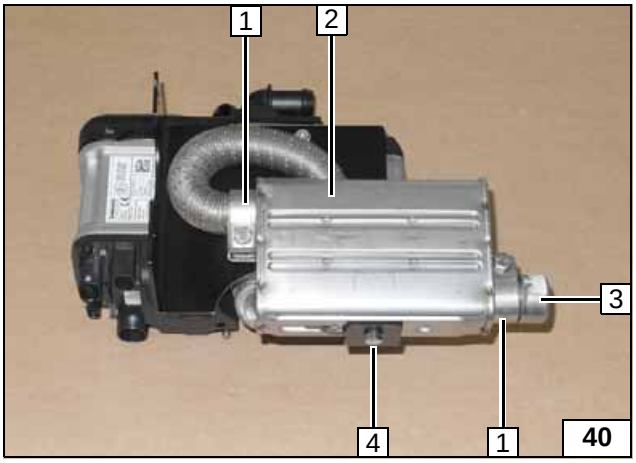
1 Exhaust pipe
a = 330
2 Exhaust end section
b = 35

Preparing exhaust pipe



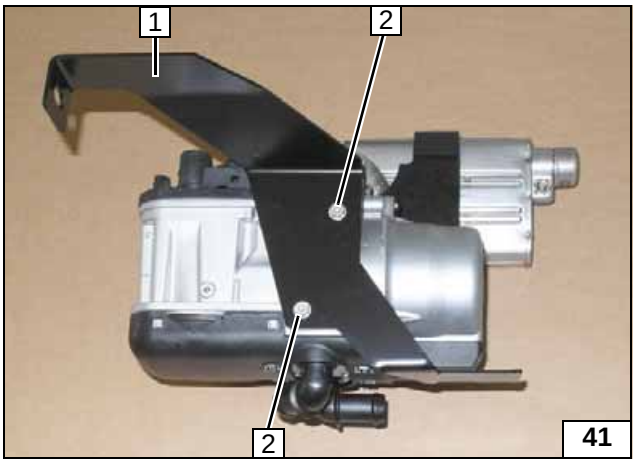
1 Exhaust pipe
2 Hose clamp

Installing exhaust pipe



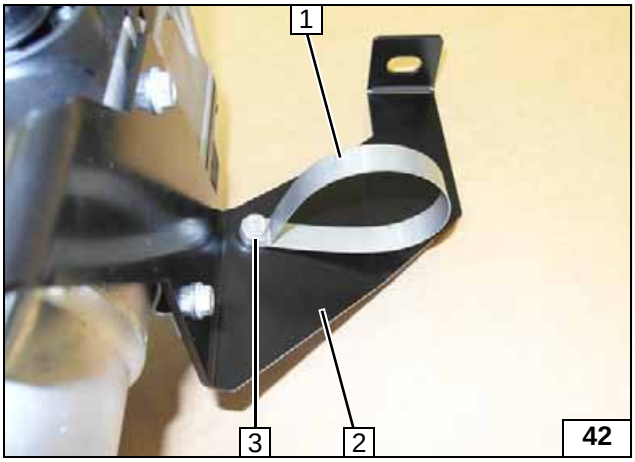
1 Hose clamp [2x]
2 Silencer
3 Exhaust end section
4 M6x16 bolt, spring lockwasher

Installing silencer and exhaust end section



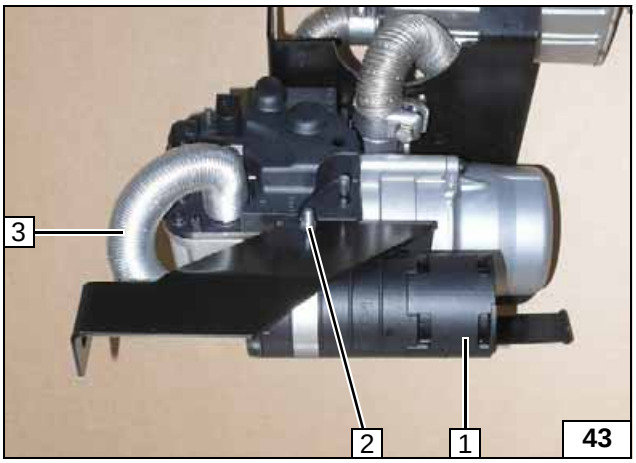
1 Bracket part **B**
2 5x13 self-tapping bolt [2x]

Installing bracket part B



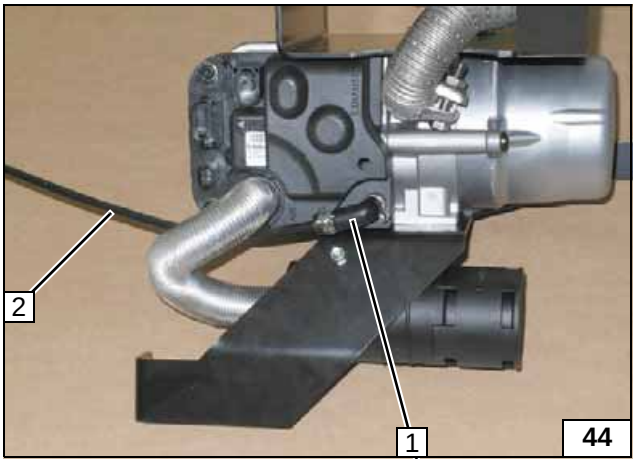
1 51mm dia. clamp
2 Bracket part B
3 Install M5x16 bolt, flanged nut loosely

Installing clamp



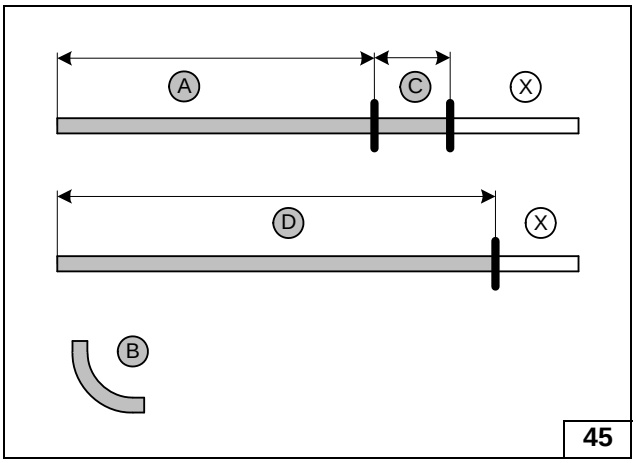
1 Silencer
2 Tighten M5x16 bolt, flanged nut
3 Combustion air pipe

Installing silencer and combustion air pipe



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

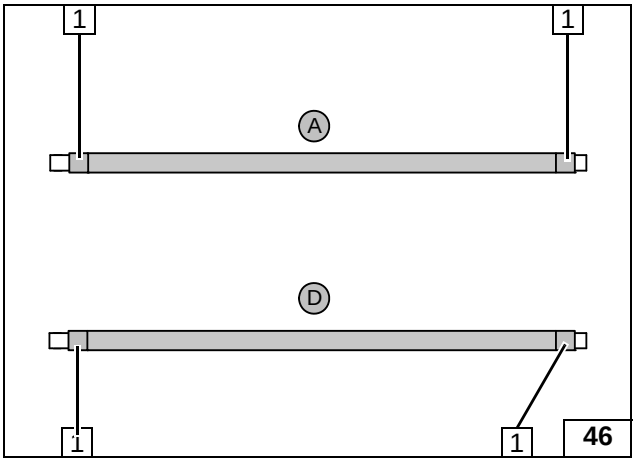
Premounting fuel line



Discard section **X**.
Hose **B** = 90°, 18x18mm dia. moulded hose

	1.4 TSI	1.6 / 2.0 TDI
A =	1170	1050
C =	65	65
D =	1250	1130

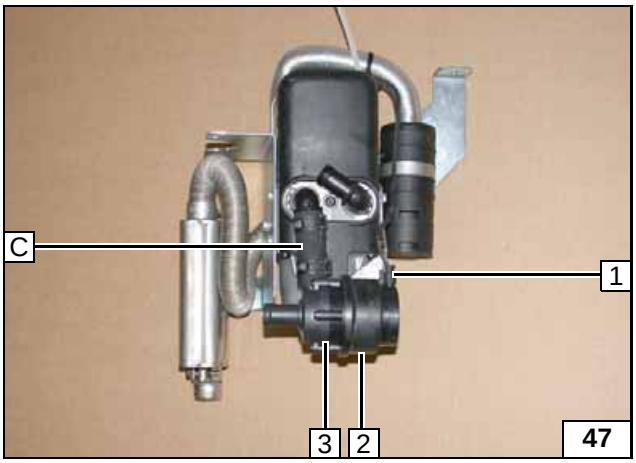
Cutting hoses to length



Slide on braided protection hose and cut to length. Cut heat shrink plastic tubing to size.

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

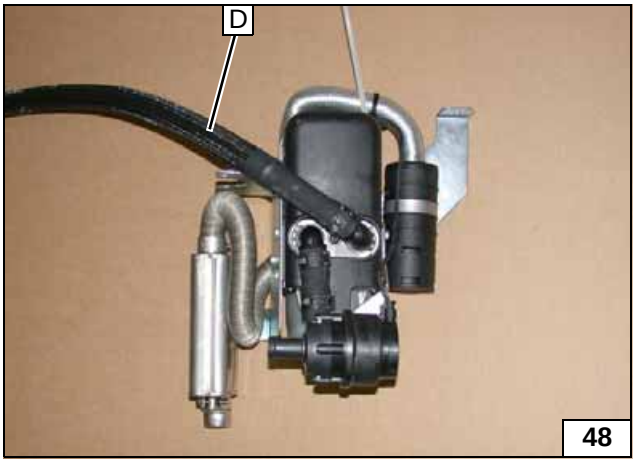
Preparing hoses



All spring clips = 25 mm dia.

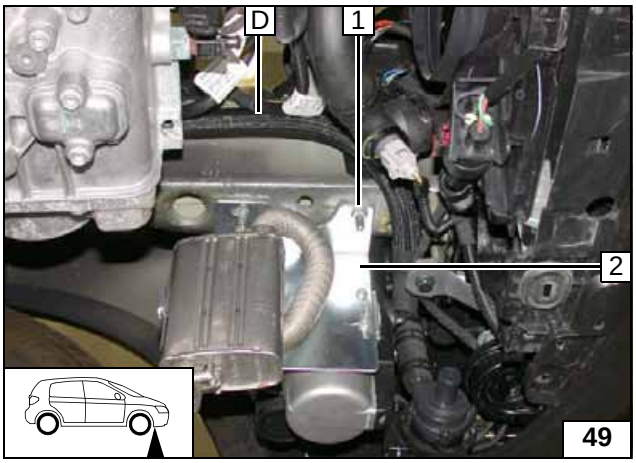
1 Connector of circulating pump wiring harness
2 Circulating pump mount
3 Circulating pump

Installing circulating pump



All spring clips = 25 mm dia.

Installing hose of heater outlet

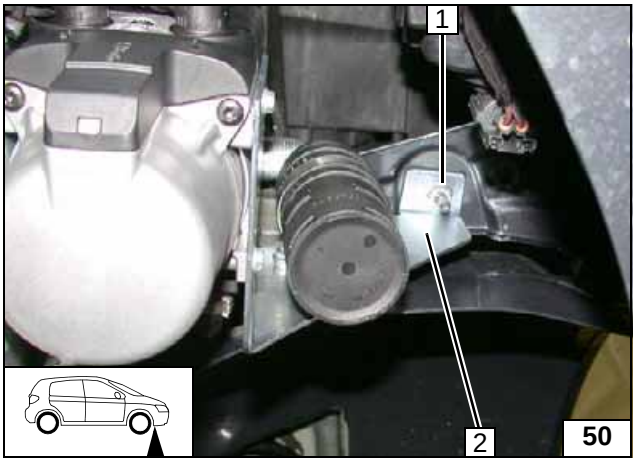


Installing Heater

Route hose **D** to brake booster.

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

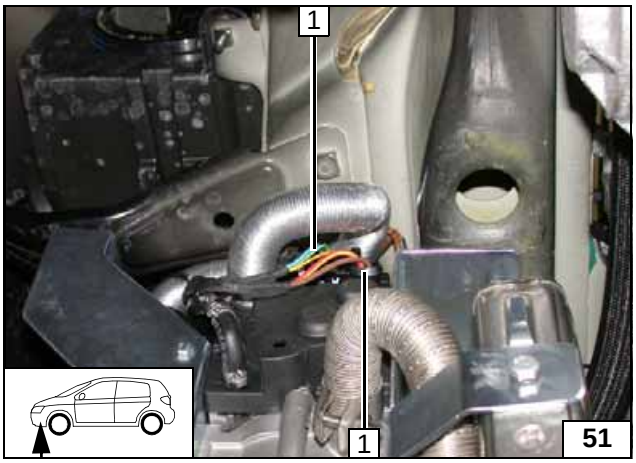
Installing heater



On vehicles without stud bolt, drill a 8.5mm dia. hole through the bracket in the cross member and secure with a M8x20 bolt and a flanged nut. When drilling, watch components located behind!

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

Installing heater



1 Wiring harness of heater [2x]

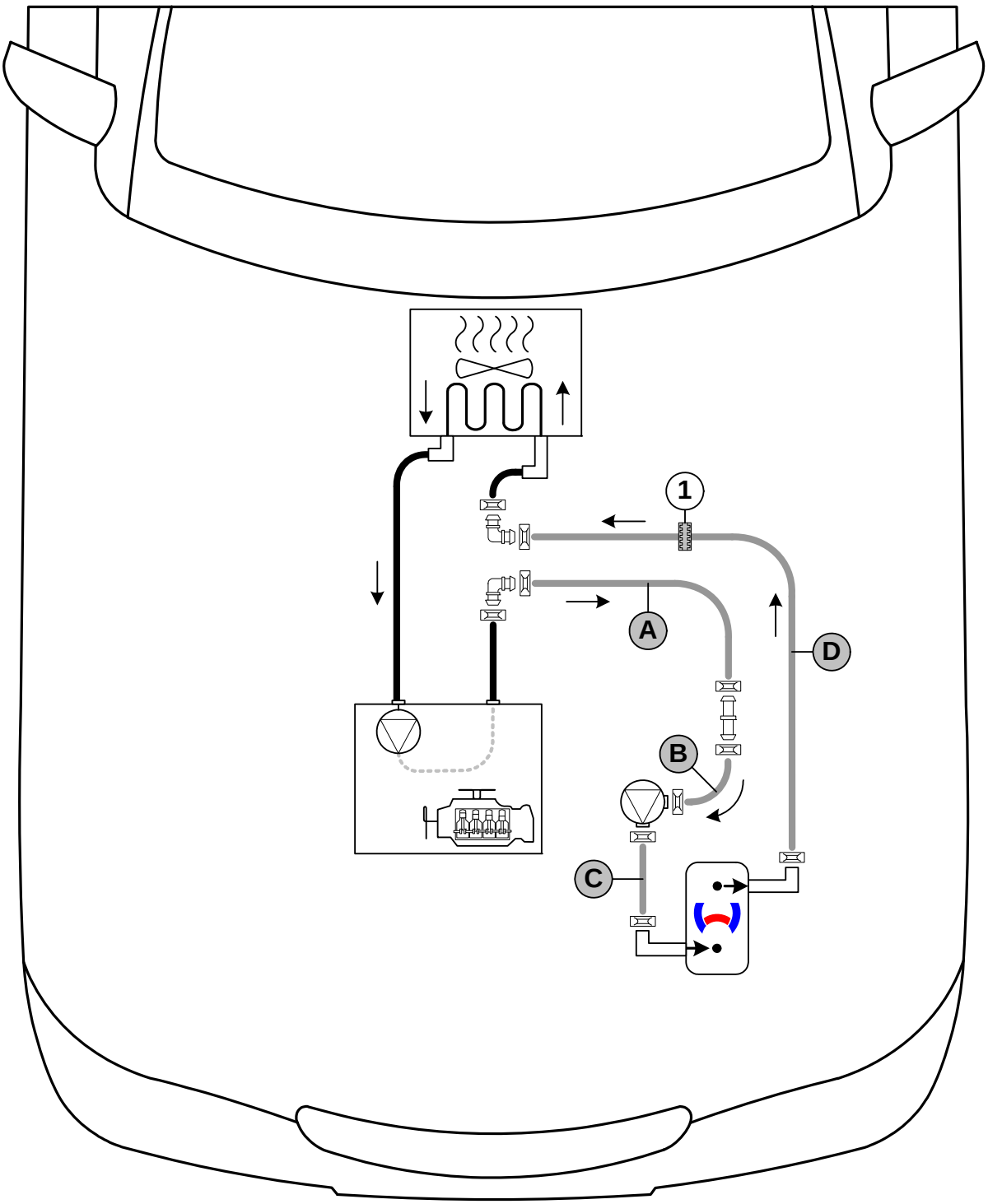
Mounting wiring harness

Coolant Circuit

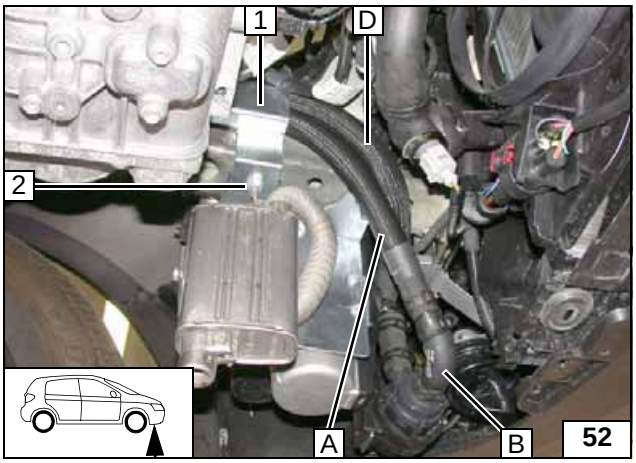
Any coolant running off should be collected in an appropriate container. Route hoses kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that other hoses cannot be damaged. The heater must be filled with coolant when installing the hoses.

The connection should be modelled on an 'inline' circuit and based on the following diagram:

Hose routing diagram



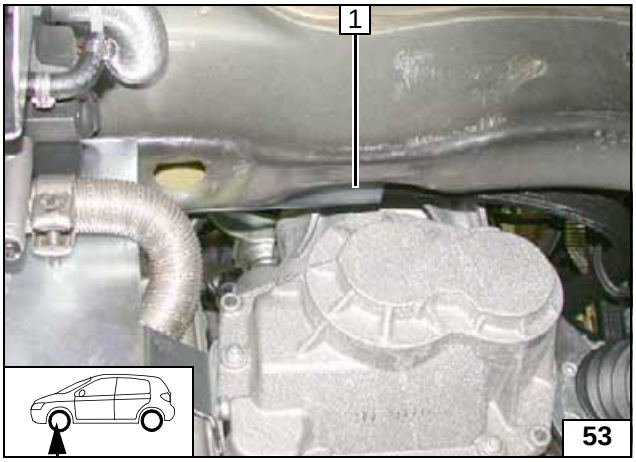
All spring clips = 25mm dia. **1** = Black (sw) rubber isolator
All connecting pipes and = 18x18 mm dia.



Route hose **A** to brake booster. Install hose bracket **1**.
Align hoses **A** and **D** behind the hose bracket.
Ensure sufficient distance from neighbouring components.

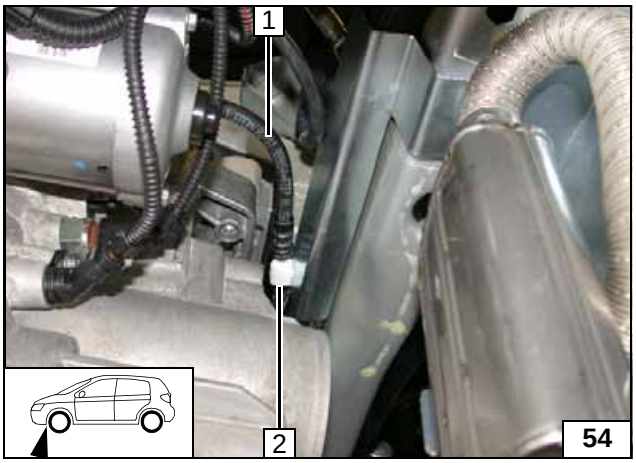
2 Original vehicle stud bolt, M8 flanged nut

Moving hose bracket



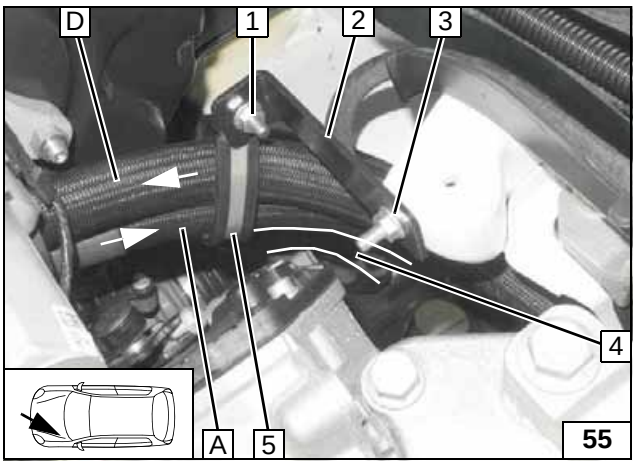
Ensure sufficient distance between hose bracket **1** and transmission.

Moving frame side member



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

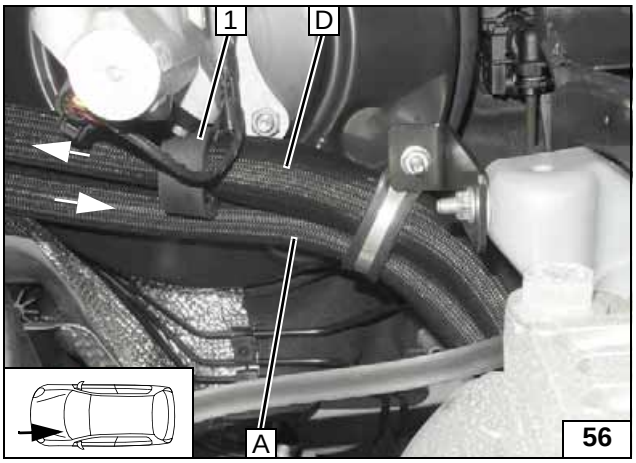
Routing coupling line



Route hoses **A** and **D** through 38mm dia. rubber-coated p-clamp **5**. Align bracket **2** as shown. Ensure sufficient distance at position **4**

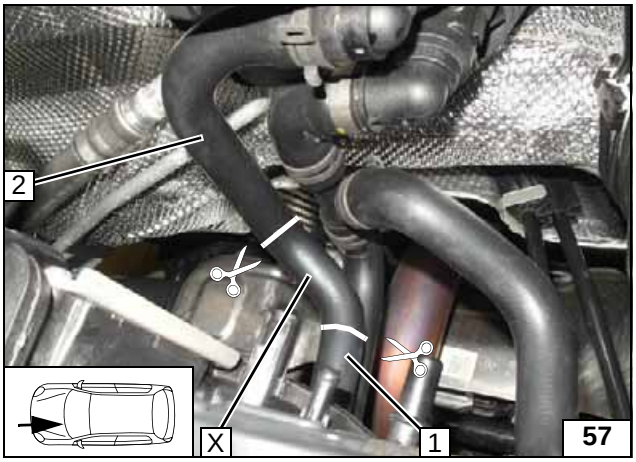
1 M6x20 bolt, flanged nut
3 M6x20 bolt, large diameter washer (between body and bracket), flanged nut, existing hole

Routing in engine compartment



Slide black (sw) rubber isolator **1** onto hose **D**.

Routing in engine compartment

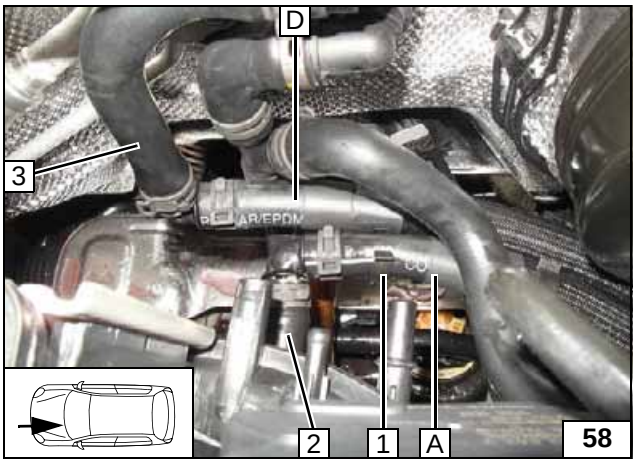


1.4 TSI

Cut hose of engine outlet / heat exchanger inlet at the markings.
Discard section **X**.

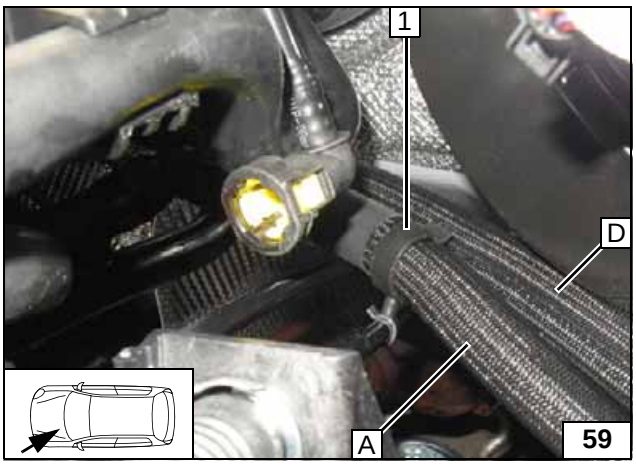
1 Hose section of engine outlet
2 Hose section of heat exchanger inlet

Cutting point



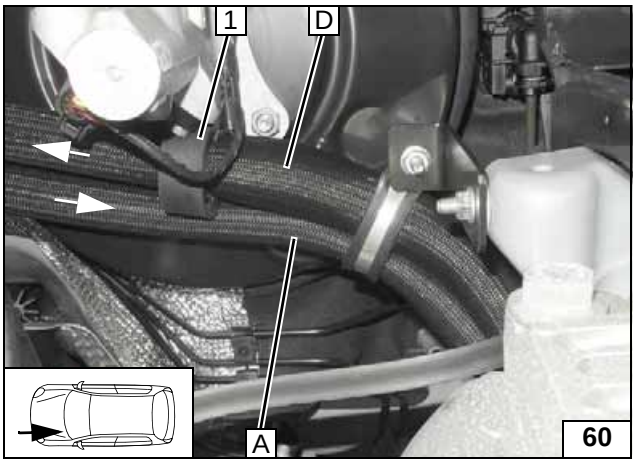
1 23x23 hose bracket between hose **A** and hose **D**
2 Hose section of engine outlet
3 Hose section of heat exchanger inlet

Connecting engine outlet / heat exchanger inlet



1 22x8 hose bracket between hoses **A** and gearshift cable

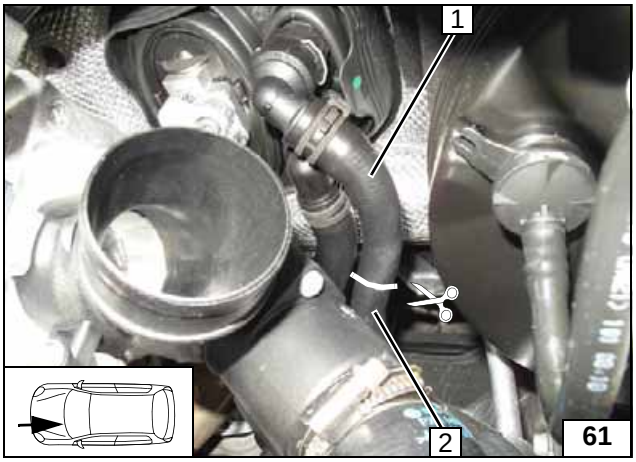
Installing hose bracket



Align hoses. Ensure sufficient distance from neighbouring components, correct if necessary.

1 Align black (sw) rubber isolator with-brake booster

Aligning rubber isolator

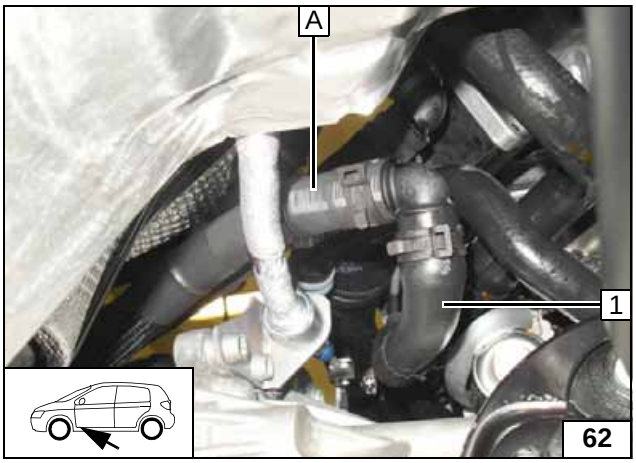


1.6 and 2.0 TDI

Cut hose of engine outlet / heat exchanger inlet at the marking.

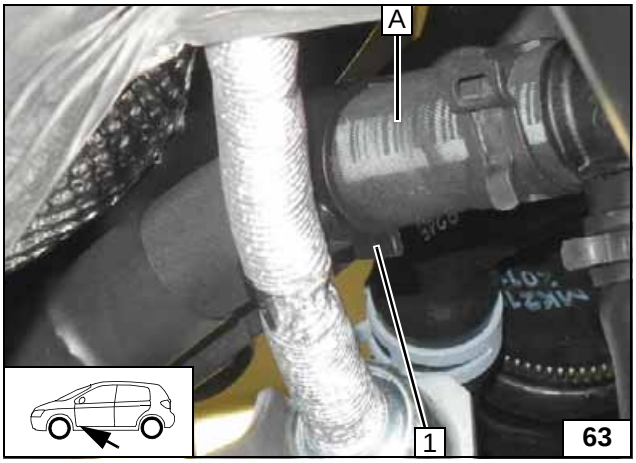
1 Hose section of heat exchanger inlet
2 Hose section of engine outlet

Cutting point



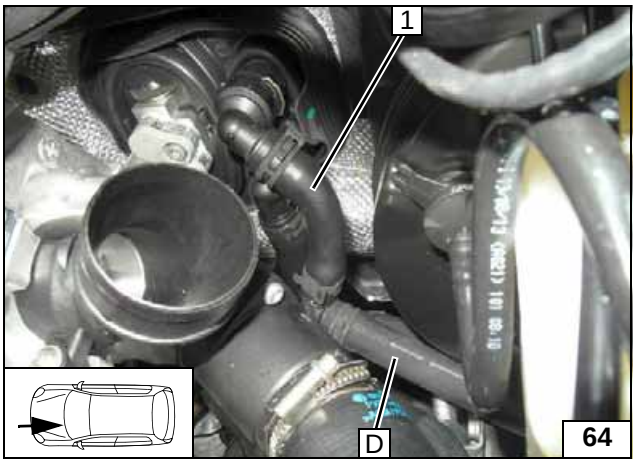
1 Hose section of engine outlet

Connecting engine outlet



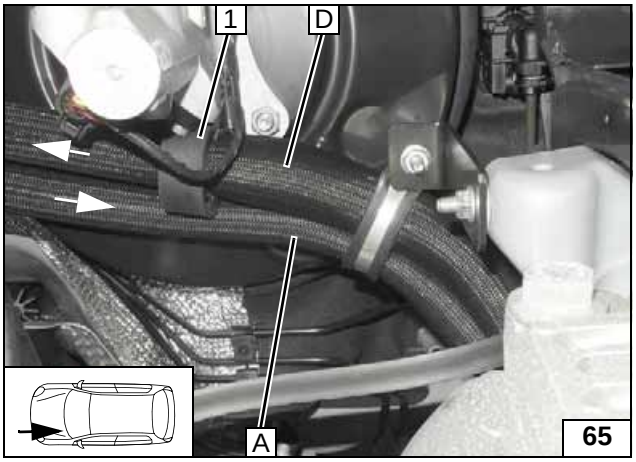
1 22x10 hose bracket between hoses **A** and gearshift cable

Installing hose bracket



1 Hose section of heat exchanger inlet

Connecting heat exchanger inlet



Align hoses. Ensure sufficient distance from neighbouring components, correct if necessary.

1 Align black (sw) rubber isolator with brake booster

Aligning rubber isolator

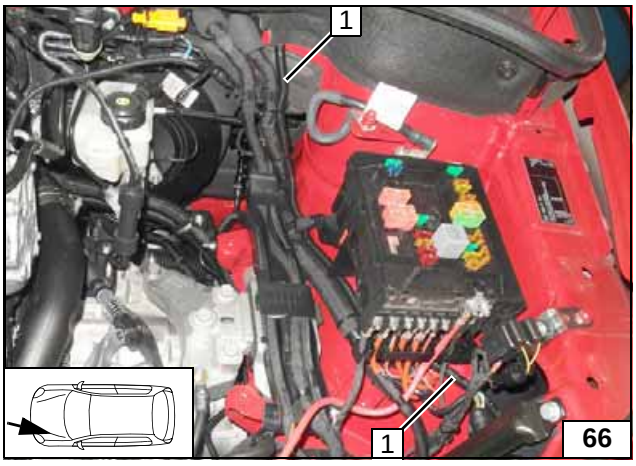
Fuel

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

Catch any fuel running off in an appropriate container.

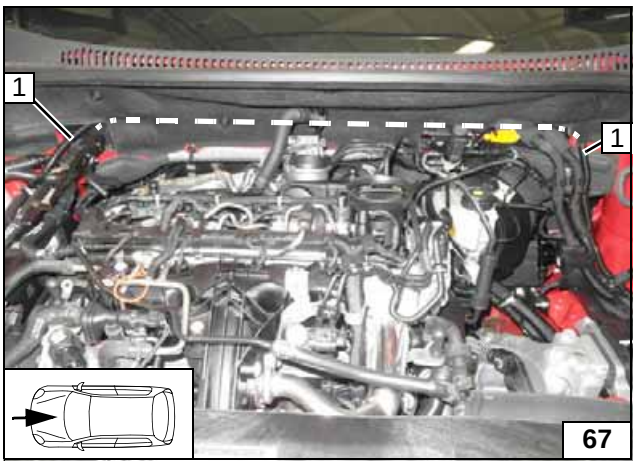
Route fuel line and metering pump wiring harness so that they are protected against stone impact.
Unless specified otherwise, always fasten using cable ties.
Provide rub protection for fuel line and wiring harness in areas where there are sharp edges.

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



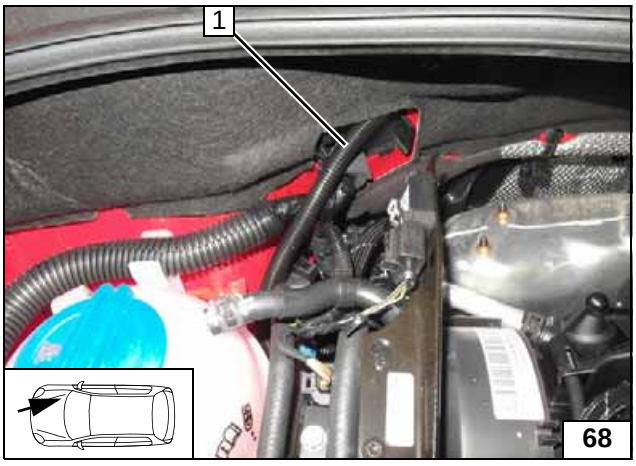
Route fuel line and wiring harness of metering pump in 10mm dia., 1130mm corrugated tube **1** to firewall.

Routing lines



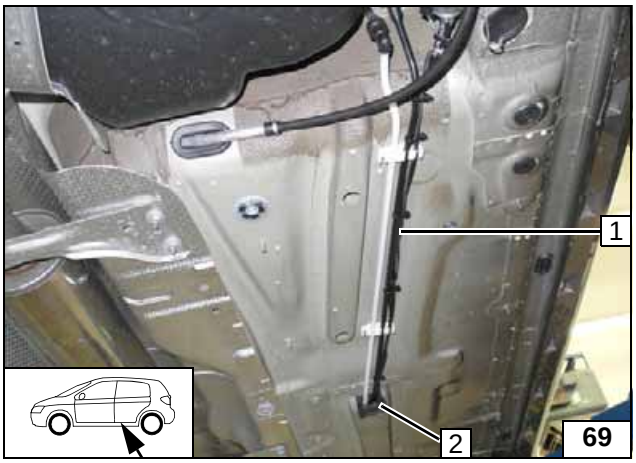
Route fuel line and wiring harness of metering pump **1** on the firewall behind the insulation mat to the right side of the vehicle.

Routing lines



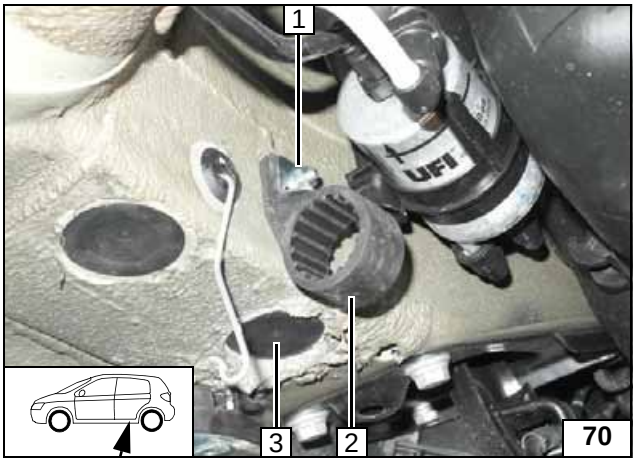
Cut off approx. 300mm from 10mm dia. corrugated tube and slide onto fuel line and wiring harness of metering pump. Introduce fuel line and wiring harness of metering pump **1** into original vehicle line duct and route to the underbody.

Routing lines



1 Fuel line and wiring harness of metering pump
2 Original vehicle line duct

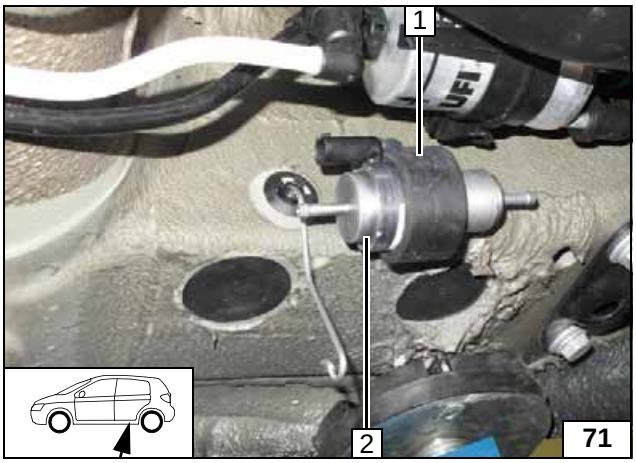
Routing lines



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

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

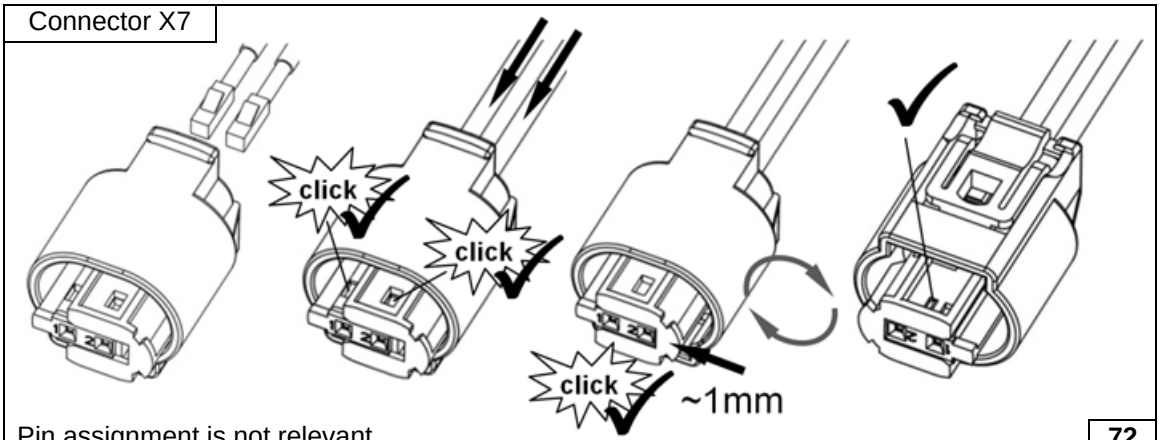
Installing metering pump mount



1 Metering pump mount
2 Metering pump

Installing metering pump

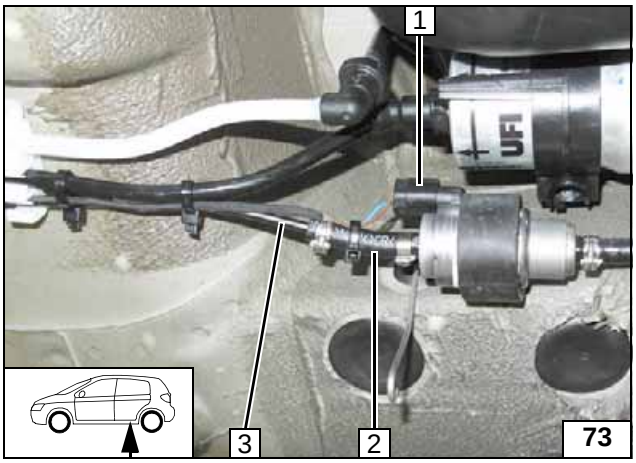
Connector X7



Pin assignment is not relevant.

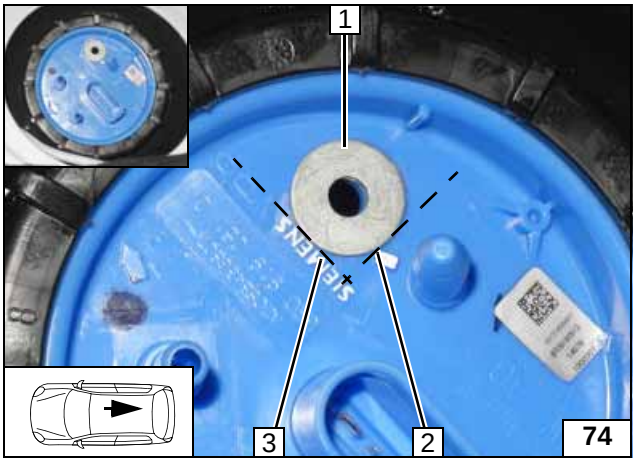
72

Completing metering pump connector



1 Wiring harness of metering pump, connector X7 mounted
2 Hose section, 10mm dia. clamp [2x]
3 Fuel line of heater

Connecting metering pump



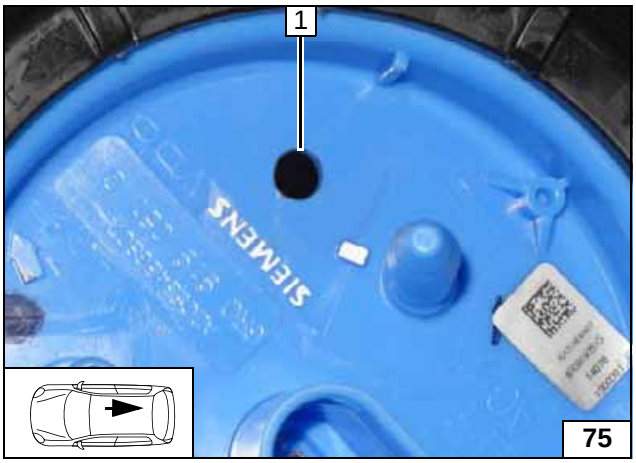
Installing FuelFix

1.4 TSI, 1.6 TDI and 2.0 TDI (FWD)

Work steps 1 and 2.

1 Washer with outer dia. d_a = 21.6mm, will be used as a template
2 Position of raised part
3 Position of writing

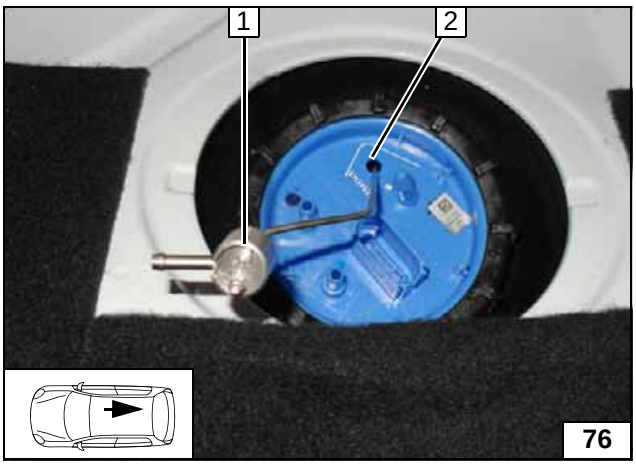
Fuel extraction



Work step 3.

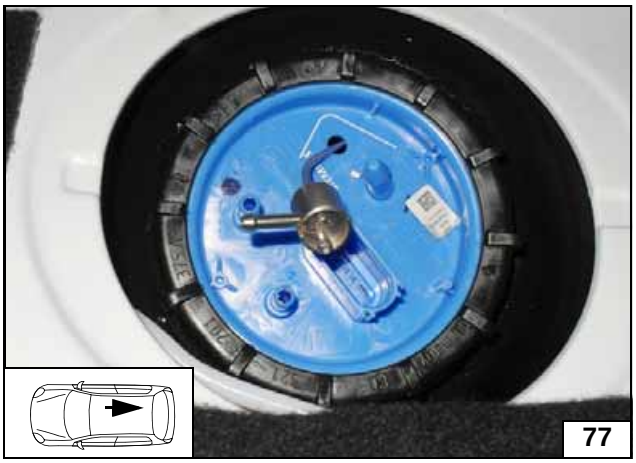
1 Hole made with provided drill

Hole for FuelFix

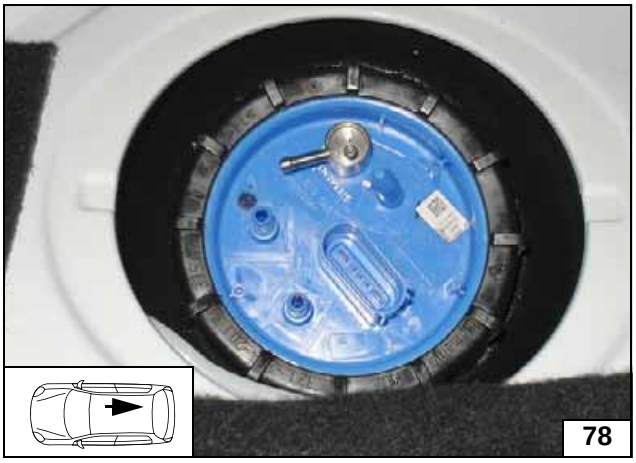


Work steps 4 and 5.
Bend FuelFix **1** according to template and cut to length.
Insert into hole **2**.

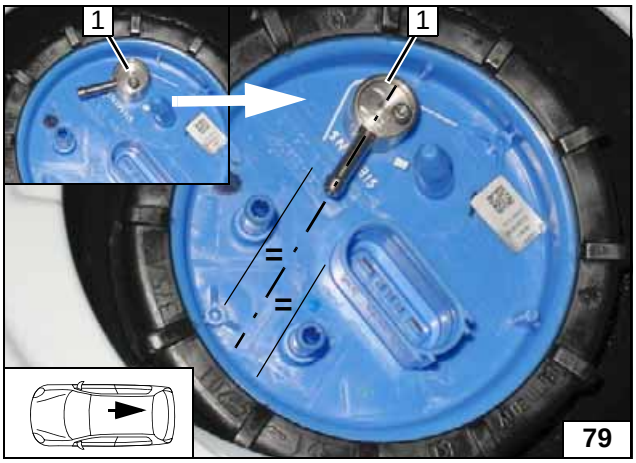
Inserting FuelFix



Inserting FuelFix

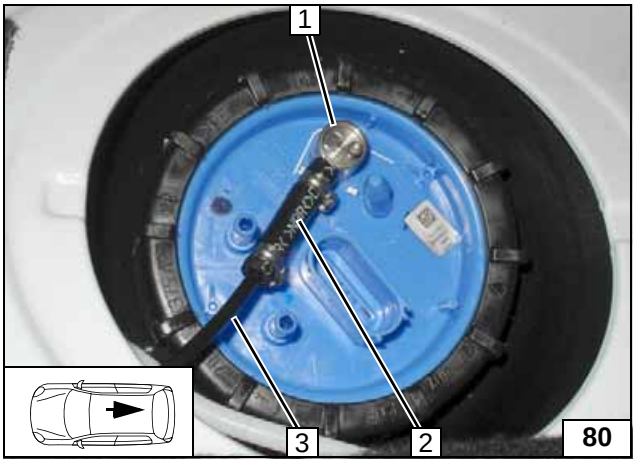


Inserting FuelFix



Work step 5.4.
Turn FuelFix **1** as shown to align it.

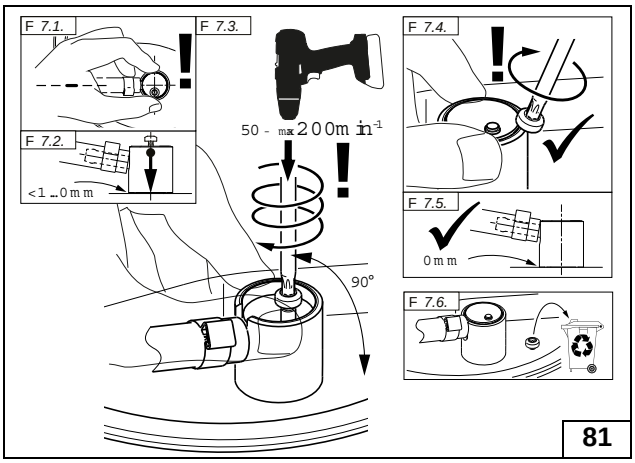
Aligning FuelFix



Work step 6.

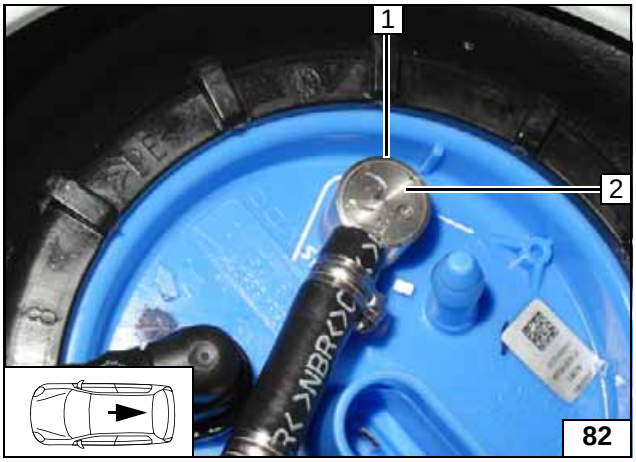
1 Fuel standpipe
2 Hose section, 10mm dia. clamp [2x]
3 Fuel line

Connecting fuel line



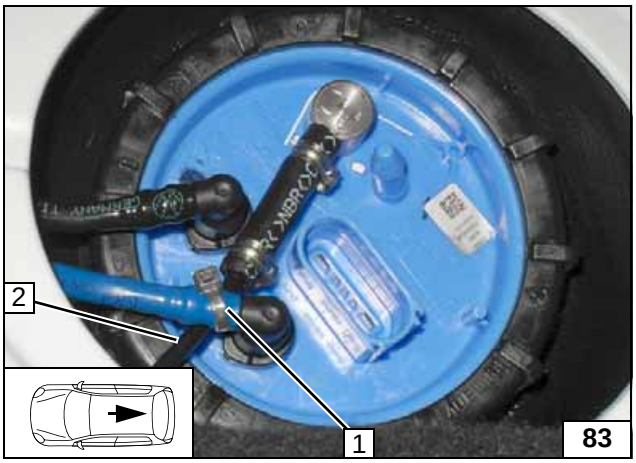
Work step 7.

Mounting FuelFix



Work step 8.
Ensure firm seating of the FuelFix and check the positioning of clamping piece **2** with respect to upper edge **1** of the housing.

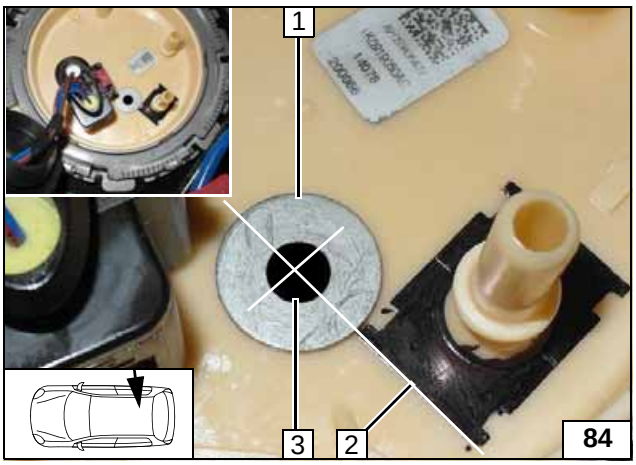
Checking final position



Work step 8.

1 Cable tie as tension relief
2 Fuel line of fuel standpipe

Securing fuel line

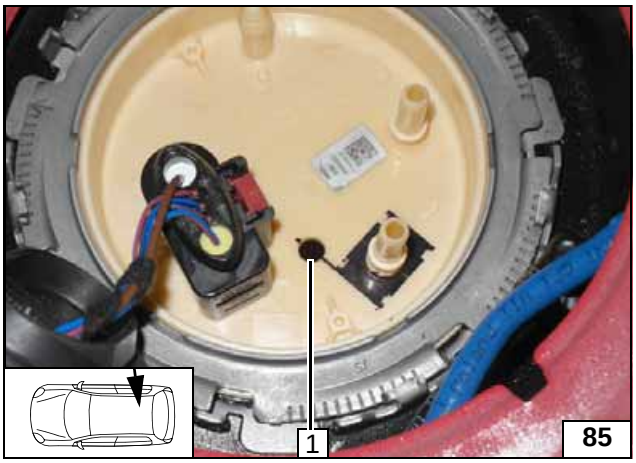


2.0 TDI (4Drive)

Work steps 1 and 2.

1 Washer with outer dia. d_a = 21.6mm, will be used as a template
2 Position and align with socket of connection piece
3 Copy hole pattern

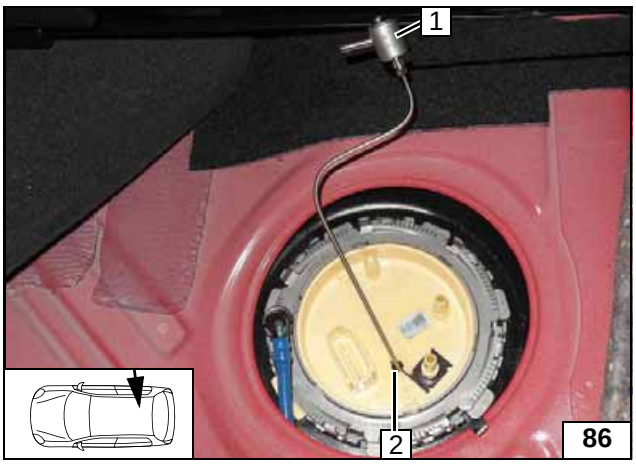
Copying hole pattern



Work step 3.

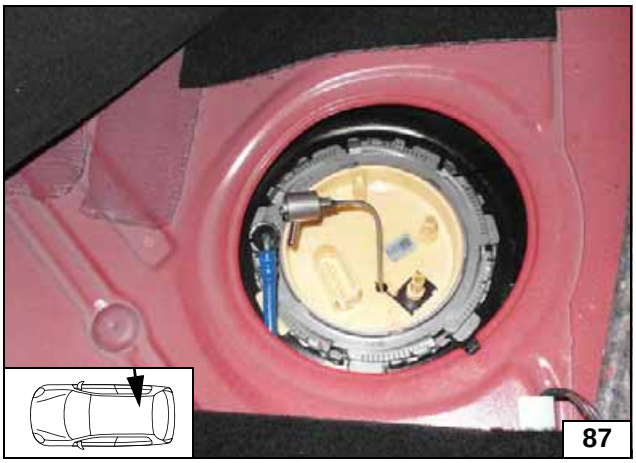
1 Hole made with provided drill

Hole for FuelFix

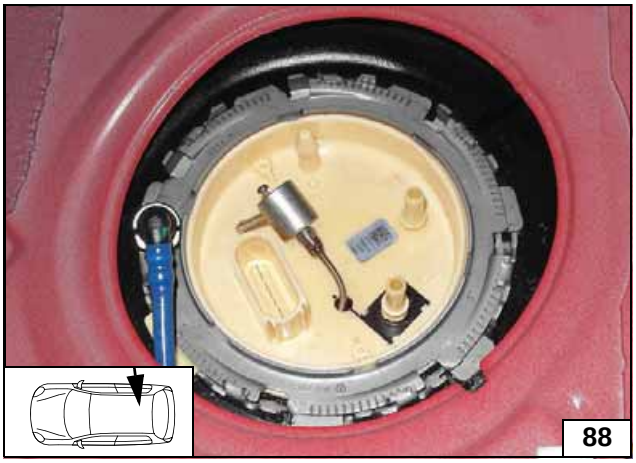


Work steps 4 and 5.
Bend FuelFix **1** according to template and cut to length.
Insert into hole **2**.

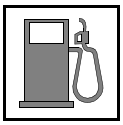
Inserting FuelFix

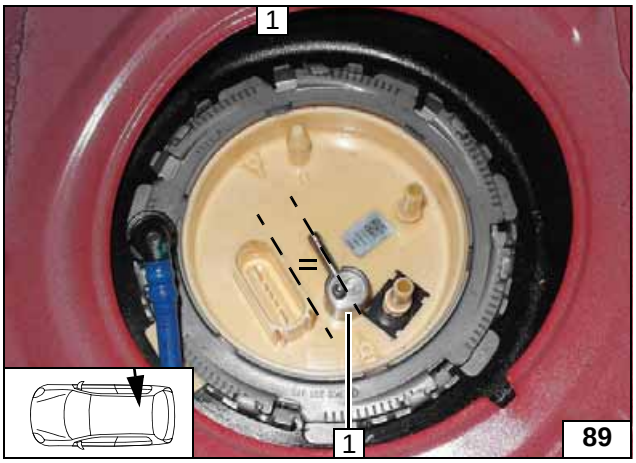


Inserting FuelFix



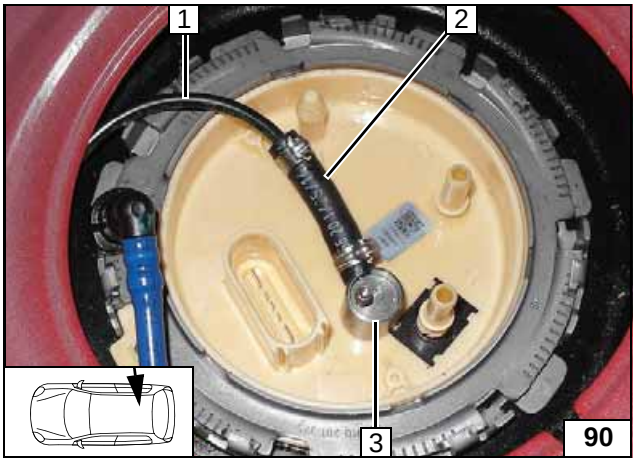
Inserting FuelFix





Work step 5.4.
Turn FuelFix **1** as shown to align it.

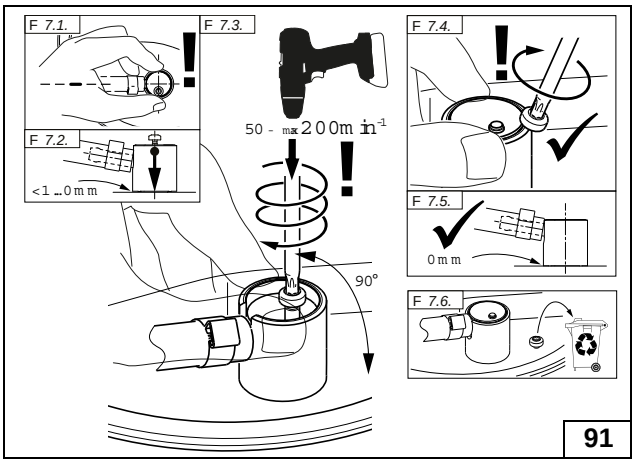
Aligning FuelFix



Work step 6.

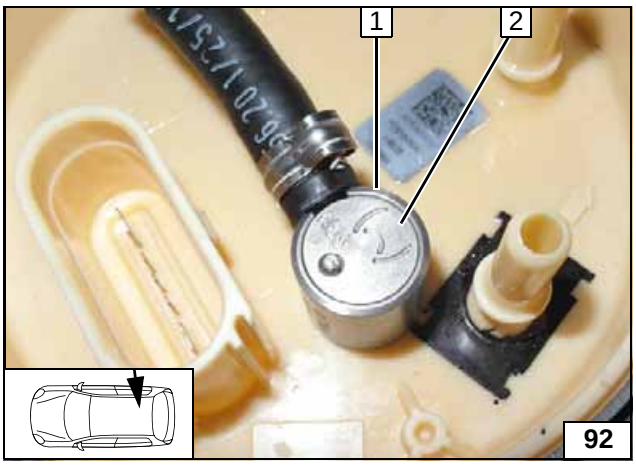
1 Fuel line
2 Hose section, 10mm dia. clamp [2x]
3 FuelFix

Connecting fuel line



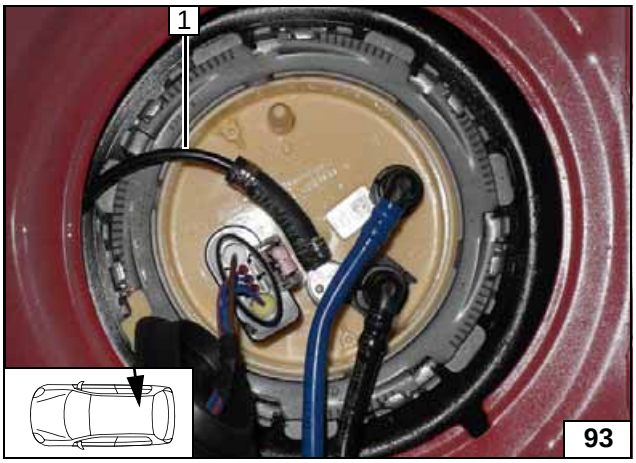
Work step 7.

Mounting FuelFix



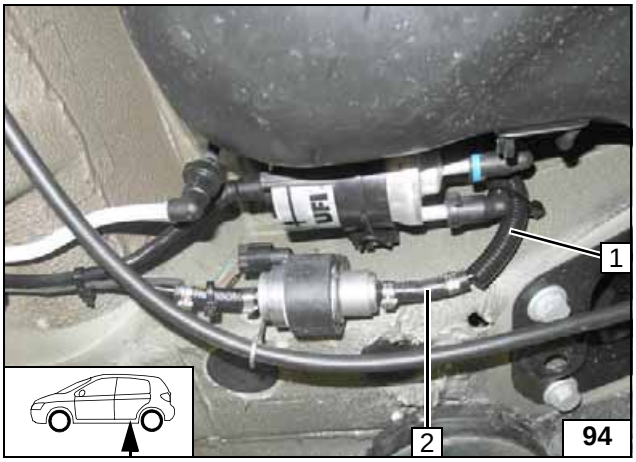
Work step 8.
Ensure firm seating of the FuelFix and check the positioning of clamping piece **2** with respect to upper edge **1** of the housing.

Checking final position



Work step 8.
Secure fuel line **1** at an appropriate place using a cable tie to provide tension relief.

Securing fuel line

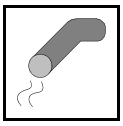


All vehicles

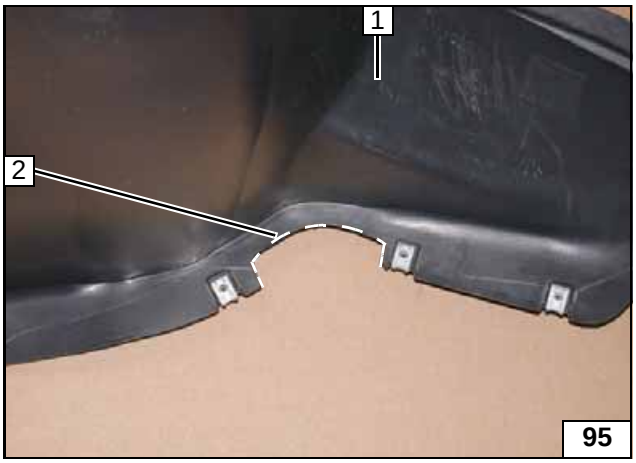
Slide 10mm dia. corrugated tube **1** onto fuel line of FuelFix. Ensure sufficient distance from neighbouring components, correct if necessary.

2 Fuel line, hose section, 10 mm dia. clamp [2x]

Connecting metering pump

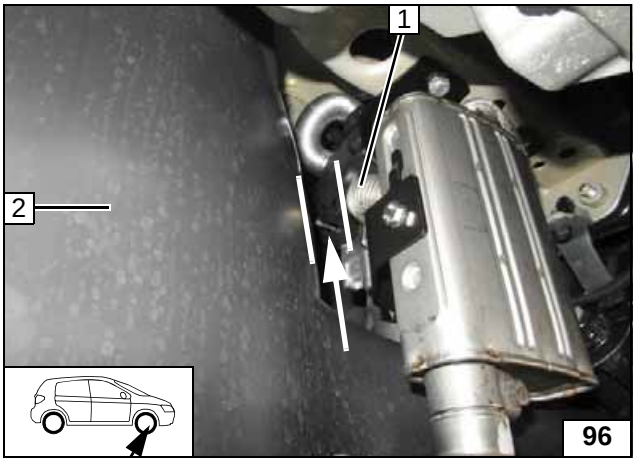


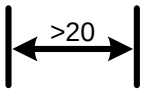
Wheel-Well Inner Panel / Underride Protection



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

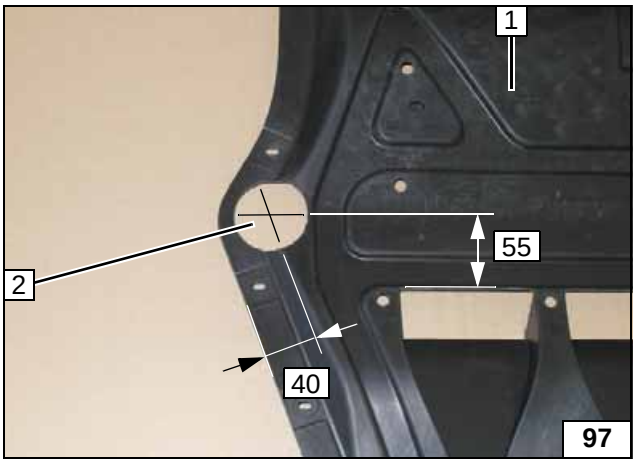
Cutting out wheel-well inner panel





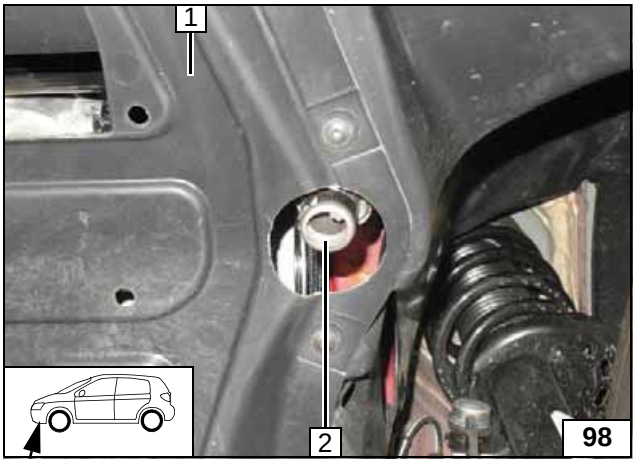
1 Exhaust pipe
2 Wheel-well inner panel

Installing wheel-well inner panel



1 Underride protection
2 60 mm dia. hole

Cutting out underride protection



Align exhaust end section **2** centrally in the hole and flush with underride protection **1**.

Aligning exhaust end section

Final Work

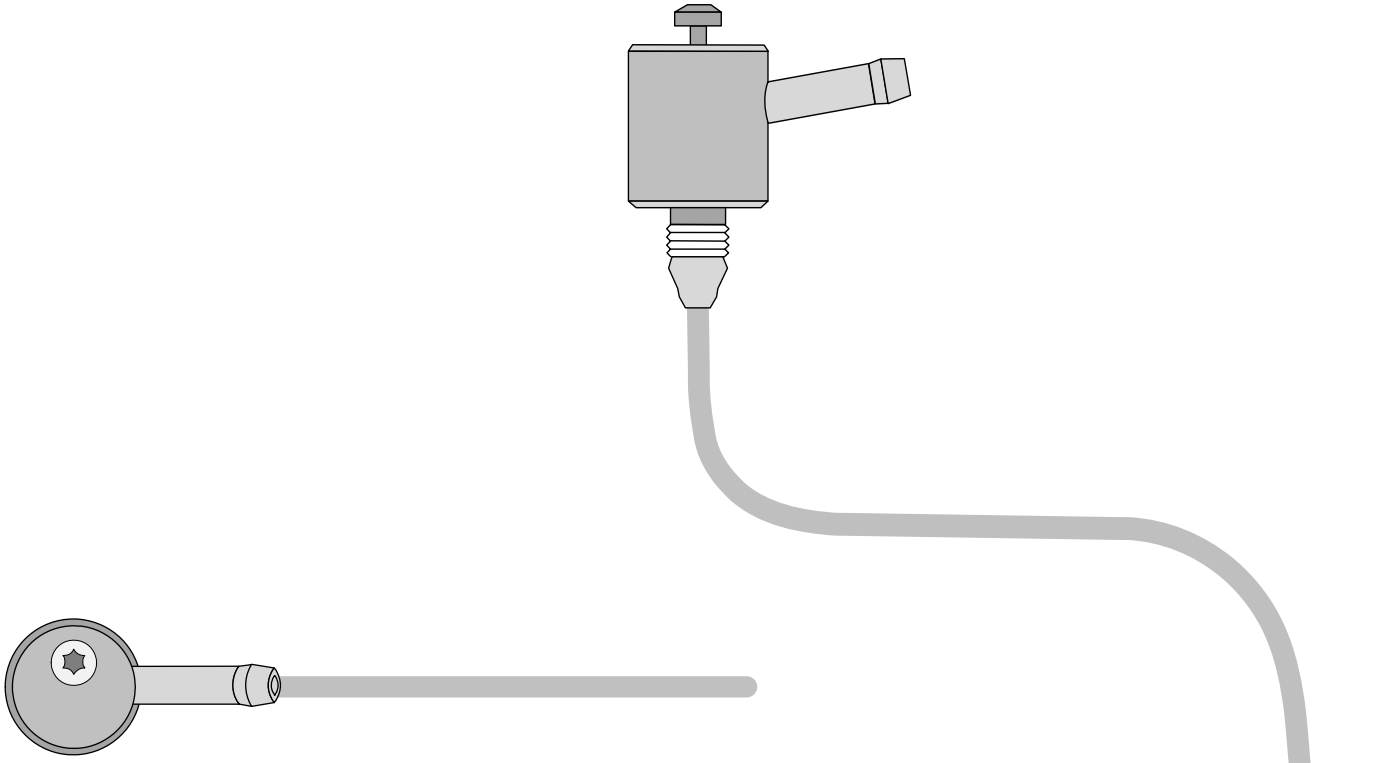
Reassemble the components in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate and tie back all loose lines.
Only use manufacturer-approved coolant. Spray the heater components with anti-corrosion wax (Tectyl 100K, Order No. 111329).

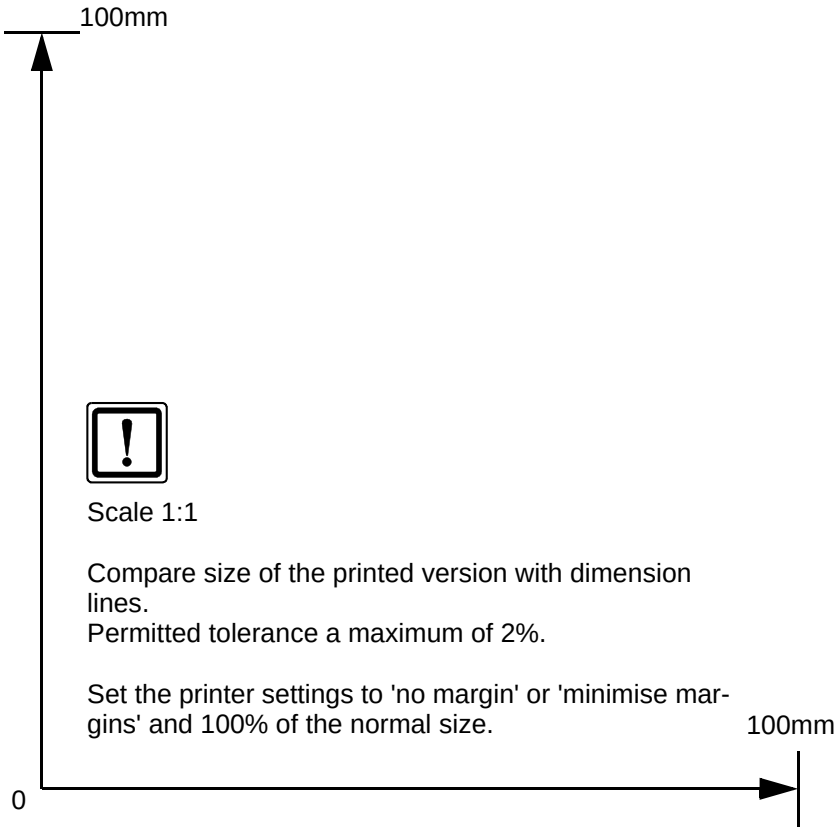
- **Connect the battery.**
- **Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.**
- **Program MultiControl CAR, teach Telestart transmitter.**
- **Make settings on A/C control panel according to the 'Operating Instructions for End Customer'.**
- **Place the 'Switch off parking heater before refuelling' caution label near the filler neck.**
- **For initial startup and function check, please see installation instructions.**

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

FuelFix 2.0 TDI (4Drive) Template

Top view





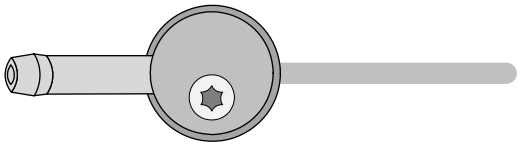
Scale 1:1

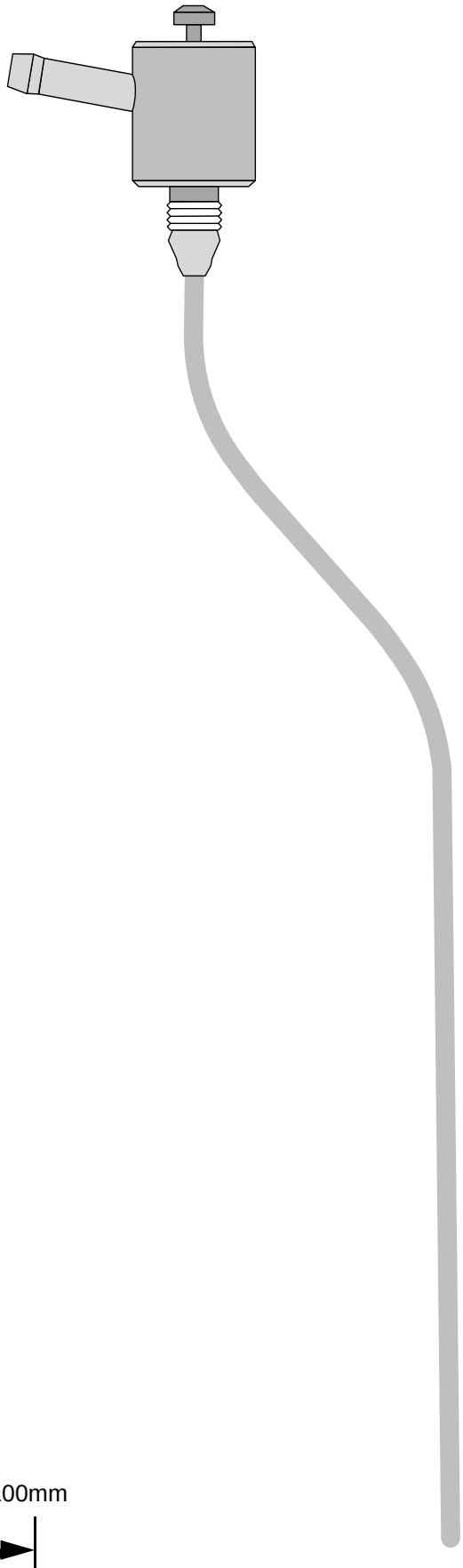
Compare size of the printed version with dimension lines.
Permitted tolerance a maximum of 2%.

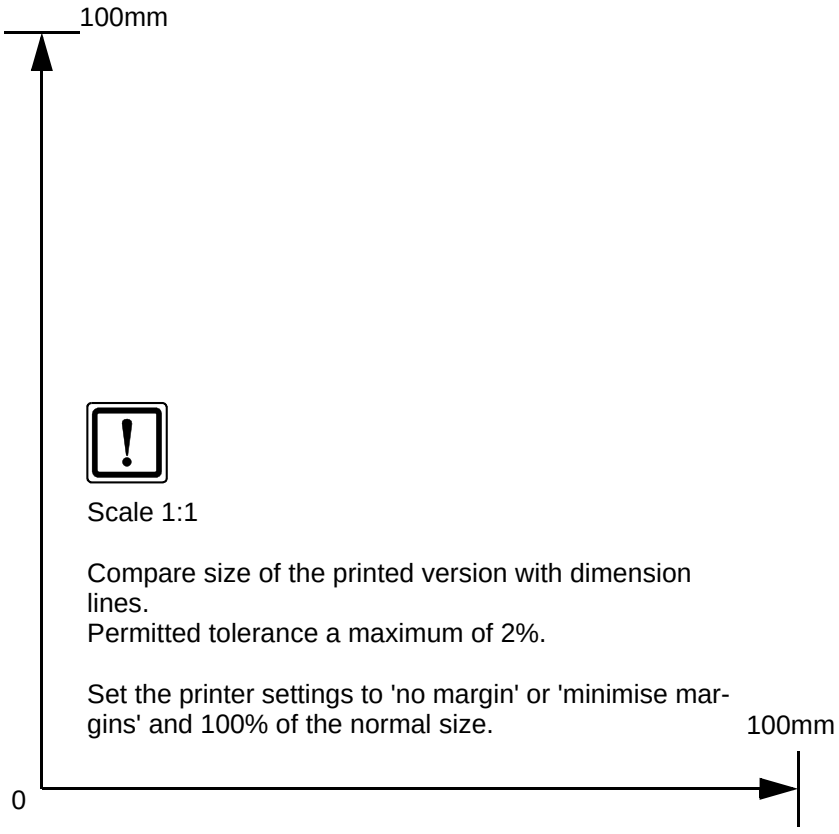
Set the printer settings to 'no margin' or 'minimise margins' and 100% of the normal size.

FuelFix 1.4 TSI, 1.6 TDI and 2.0 TDI (FWD) Template

Top view







Scale 1:1

Compare 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.

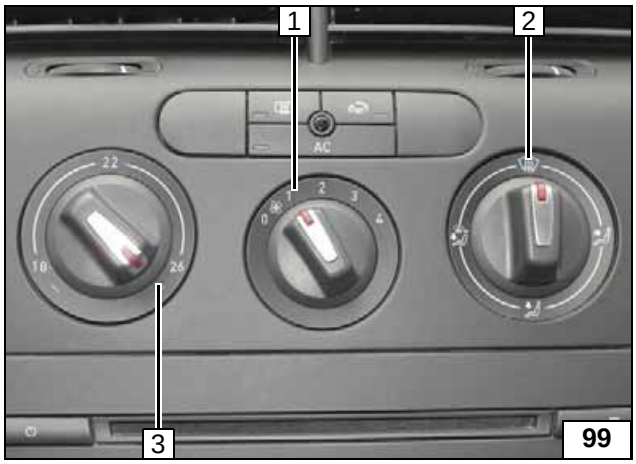
Operating instructions for Climatic

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.

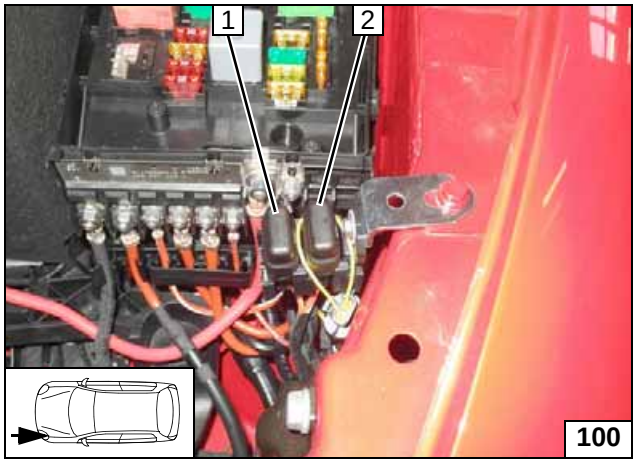
Passenger compartment monitoring, if installed, must be deactivated in addition to the vehicle settings for the heating operation.
For instructions on deactivation, please refer to the operating instructions of the vehicle.

Before parking the vehicle, make the following settings:



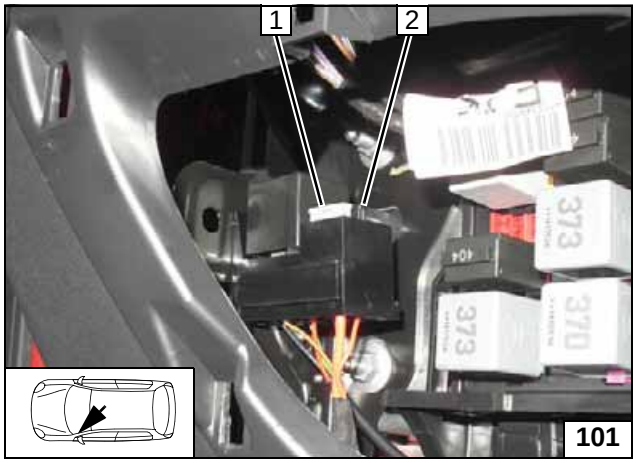
1 Set fan to level ‘1’, or max. ‘2’
2 Air outlet to windscreen
3 Set temperature to ‘max.’

Air-conditioning control panel



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

Engine compartment fuses



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

Passenger compartment fuses

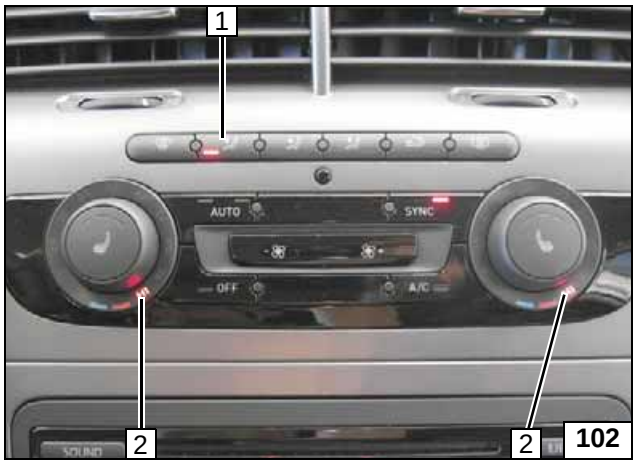
Operating instructions for Climatronic

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.

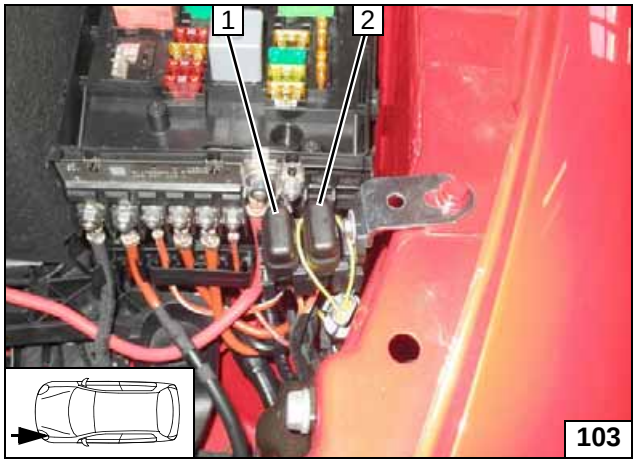
Passenger compartment monitoring, if installed, must be deactivated in addition to the vehicle settings for the heating operation.
For instructions on deactivation, please refer to the operating instructions of the vehicle.

Before parking the vehicle, make the following settings:



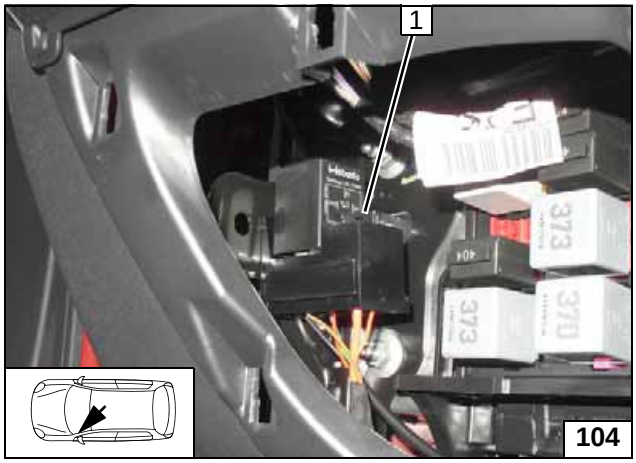
1 Air outlet to windscreen
2 Set temperature on both sides to ‘HI’

Air-conditioning control panel



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

Engine compartment fuses



1 1A heater control fuse F3

Passenger compartment fuse