Water Heater

Webasto
Feel the Drive

Thermo Top Evo Parking Heater

E1
00 0258

Installation Documentation
Subaru Outback

SUBARU

Validity

Manufacturer	Model	Type	EG-BE No. / ABE
Subaru	Outback	BM /BR	e1 * 2007 / 46 * 0079 * ...
Subaru	Outback	BM /BRS	e13 * 2007 / 46 * 1074 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm³	Engine code
2.0 D	Diesel	CVT	108	1998	EE20

CVT = Lineartronic transmission

From Model Year 2013
Left-hand drive vehicle

Verified equipment variants: 2 zone automatic air-conditioning
Front fog light
4 WD
Xenon with headlight washer system
Euro 5 Emission Standard

Not verified: Stop & Go automatic choke
Keyless acces

Total installation time: about 6 hours

Subaru Outback

Table of Contents

Necessary Components

- Basic delivery scope of *Thermo Top Evo*based on price list
  Subaru part number: **1166**
- Installation kit for Subaru Outback 2013 Diesel: **1321320B**
  Subaru part number: **1166-02**
- Heater control in accordance with price list and upon consultation with final customer
- In case of Telestart, indicator lamp in accordance with price list and upon consultation with final customer

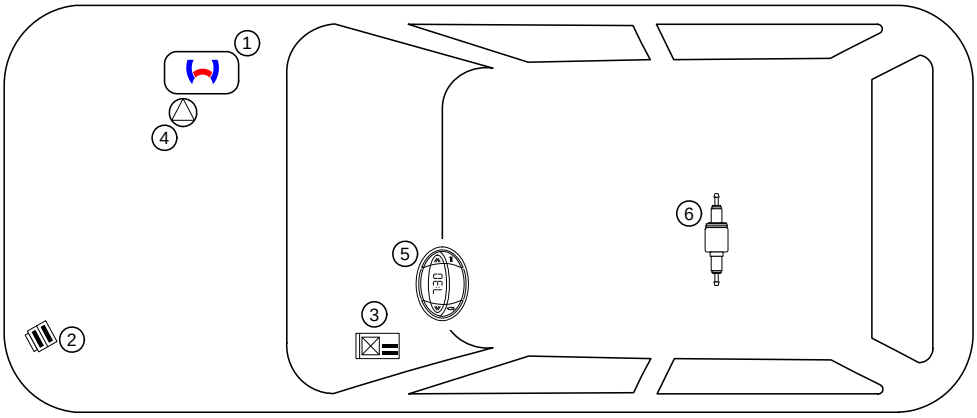
Installation instructions:

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

Installation Overview

Legend:

1. Heater
2. Fuse holder of engine compartment
3. Relay and fuse holder of passenger compartment
4. Circulating pump
5. Digital timer
6. Metering pump



Notes on Total Installation Time

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

Information on Operating and Installation Instructions

1 Important Information (not complete)

1.1 Installation and Repair

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

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

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

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

1.2 Operation

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

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

Always switch off the heater before refuelling.

The heater may only be used with the prescribed fuel Diesel (DIN EN 590) or petrol (DIN EN 227).

The heater may not be cleaned with a high-pressure cleaner.

1.3 Please note

ALWAYS follow all Webasto installation and operating instructions and observe all warnings.

To become familiar with and understand all functions and properties of the heater, the operating instructions must be read carefully and observed at all times.

For proper, safe installation and repair work, the installation instructions with all warnings and safety information must be carefully read and observed at all times. Please always contact a workshop authorised by Webasto for all installation and repair work.

Important

Webasto shall assume no liability for defects, damage and injuries resulting from a failure to observe the installation, repair and operating instructions of the information contained in them.

This liability exclusion particularly applies to improper installations and repairs, installations and repairs by untrained persons or in the case of a failure to use genuine spare parts.

The liability due to culpable disregard to life, limb or health and due to damage or injuries caused by a wilful or reckless breach of duty remain unaffected, as does the obligatory product liability.

Installation should be carried out according to the general, standard rules of technology. Unless specified otherwise, fasten hoses, lines and wiring harnesses to original vehicle lines and wiring harnesses using cable ties. Insulate loose wire ends and tie back. 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 IPCU, the corresponding settings must be checked or adjusted before the installation.

2 Statutory regulations governing installation

Guidelines	Thermo Top Evo
Heating Directive ECE R122	E1 00 0258
EMC Directive ECE R10	E1 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.

Subaru Outback

Notes on Validity

This installation documentation applies to Subaru Outback 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 Instructions

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

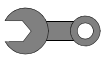
Dimensions
- All dimensions are in mm

Tightening torque values
- Tightening torque values for 5x13 heater bolts and 5x11 heater stud bolts = 8Nm.
- Tightening torque values for 5x15 retaining plate of water connection piece bolt = 7Nm.
- Tighten other screw 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

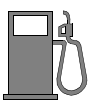


Electrical system

Coolant circuit

Combustion air

Fuel



Exhaust gas

Software

Special features are highlighted using the following symbols:

Specific risk of injury or fatal accidents.

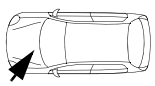
Specific risk of damage to components.

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

Subaru Outback

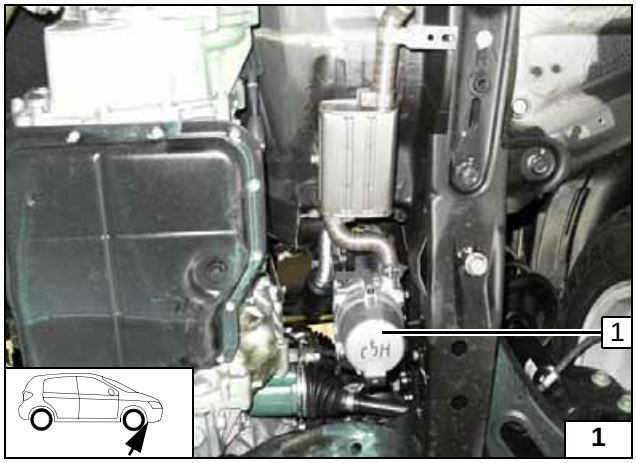
Preliminary Work

Vehicle

- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect the battery.
- Remove the engine cover.
- Remove the intercooler above the engine.
- Remove the underride protection on the left-hand side.
- Remove the underride protection of the transmission (if present).
- Remove the rear bench seat.
- Open the tank-fitting service lid on the right and left.
- Remove the fuel-tank sending unit on the right in accordance with manufacturer's instructions.
- Remove the lateral instrument panel trim.
- Remove the lateral instrument panel trim on the right (only with Telestart option).
- Remove the lower instrument panel trim on the front passenger's side.
- Remove the instrument panel trim on the driver's side.

Heater

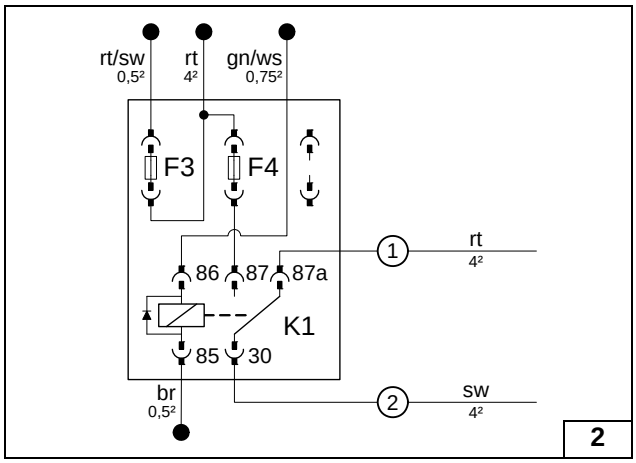
- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) in the appropriate place inside the engine compartment.



Heater Installation Location

1 Heater

Installation location



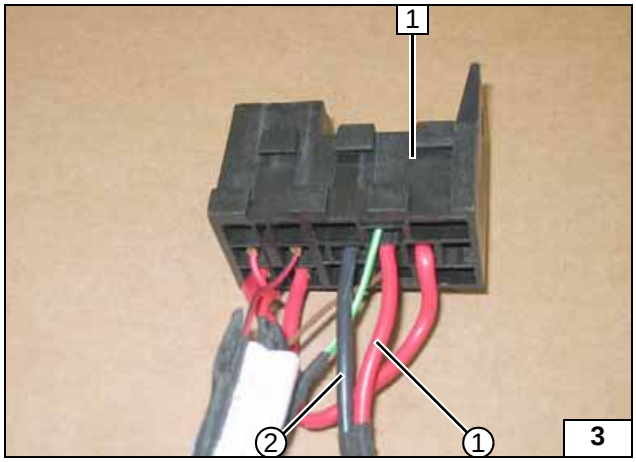
2

Preparing Electrical System

Wire sections retain their numbering in the entire document.

Produce connections as shown in wiring diagram. K1 relay and 10A fuse F4 are only inserted after installation.

Premounting passenger compartment relay and fuse holder

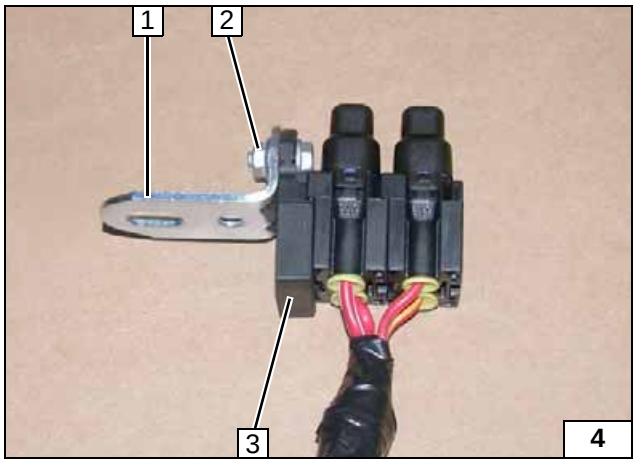


3

Connect wires according to wiring diagram. K1 relay and 10A fuse F4 are only inserted after installation.

1 Relay and fuse holder of passenger compartment
① Red (rt) wire of K1/87a
② Black (sw) wire of K1/30

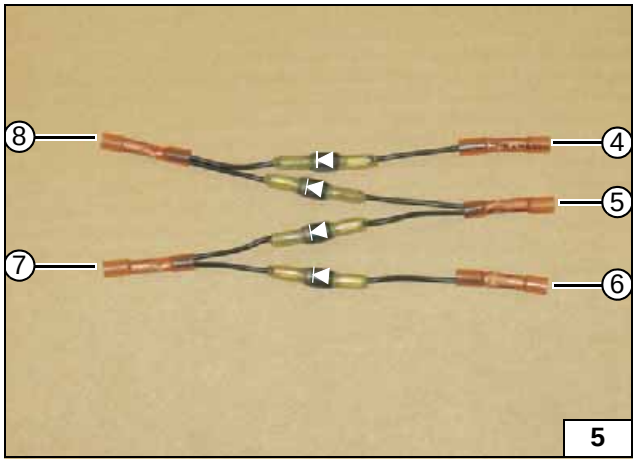
Connecting wires



4

1 Angle bracket
2 M5x16 bolt, large diameter washer [2x], nut
3 Retaining plate of fuse holder

Preparing engine compartment fuse holder



5

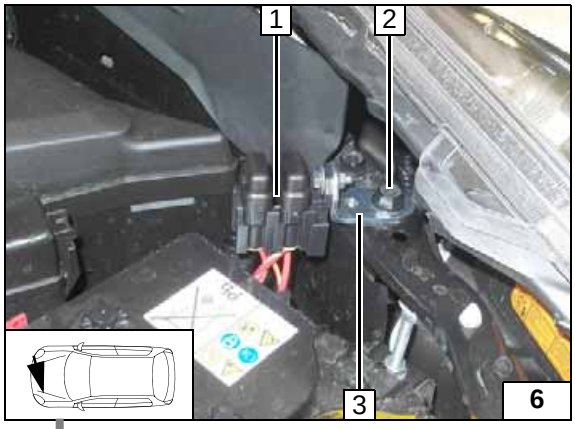
Premount four diodes with connectors to diode group D1 as shown. Mind the direction of flow of the diodes!

Premounting diode group

Electrical System

Fuse holder of engine compartment

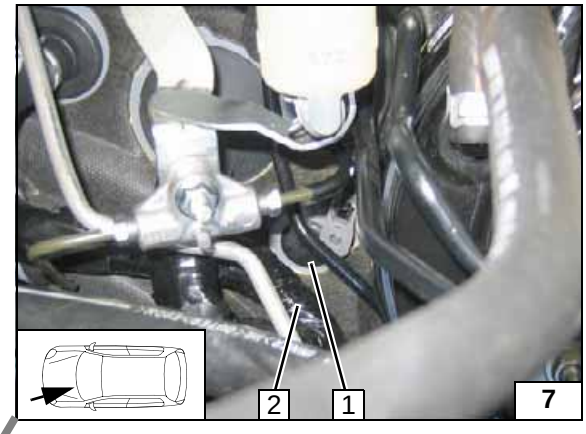
1 fuses F1-2
2 Original vehicle bolt
3 Angle bracket

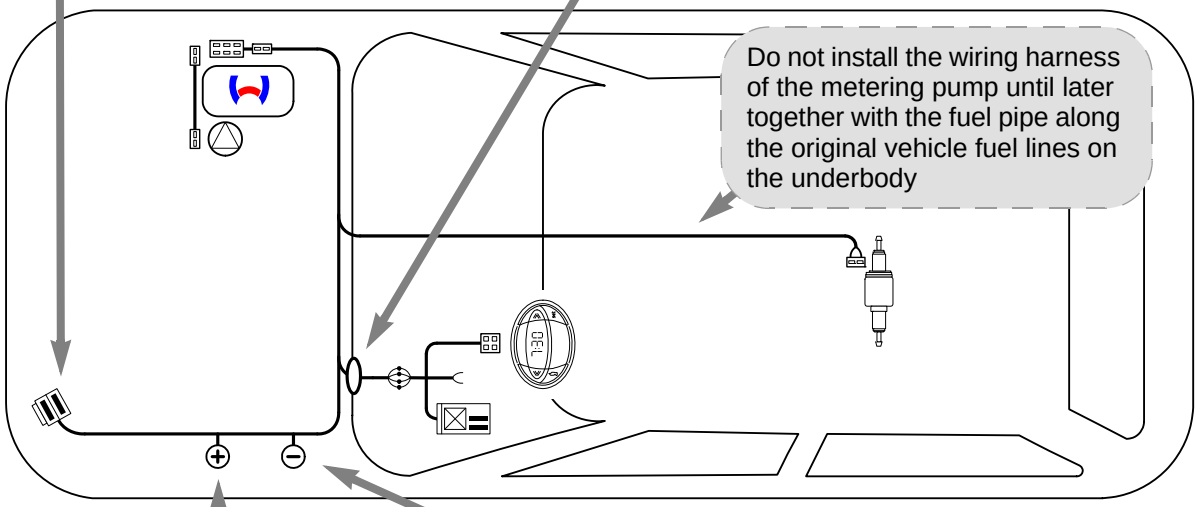


Wiring harness pass through

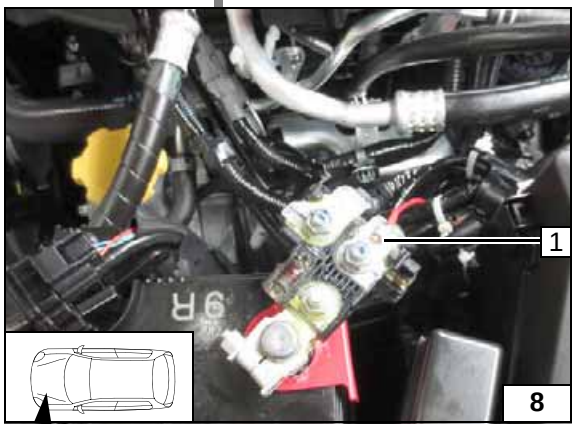
Detach original vehicle wiring harness **2** and put it aside.

1 Protective rubber plug



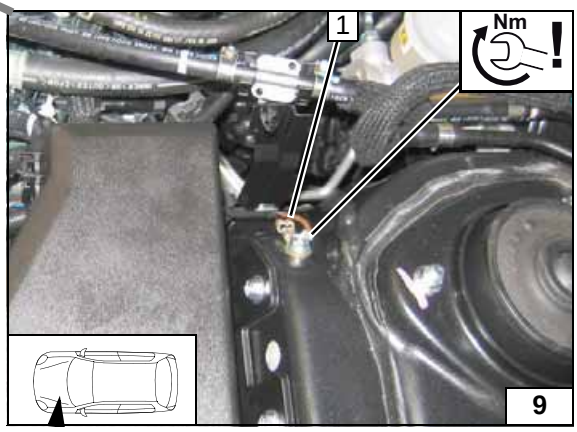


Wiring harness routing diagram



Positive wire

1 Positive wire to positive battery distributor

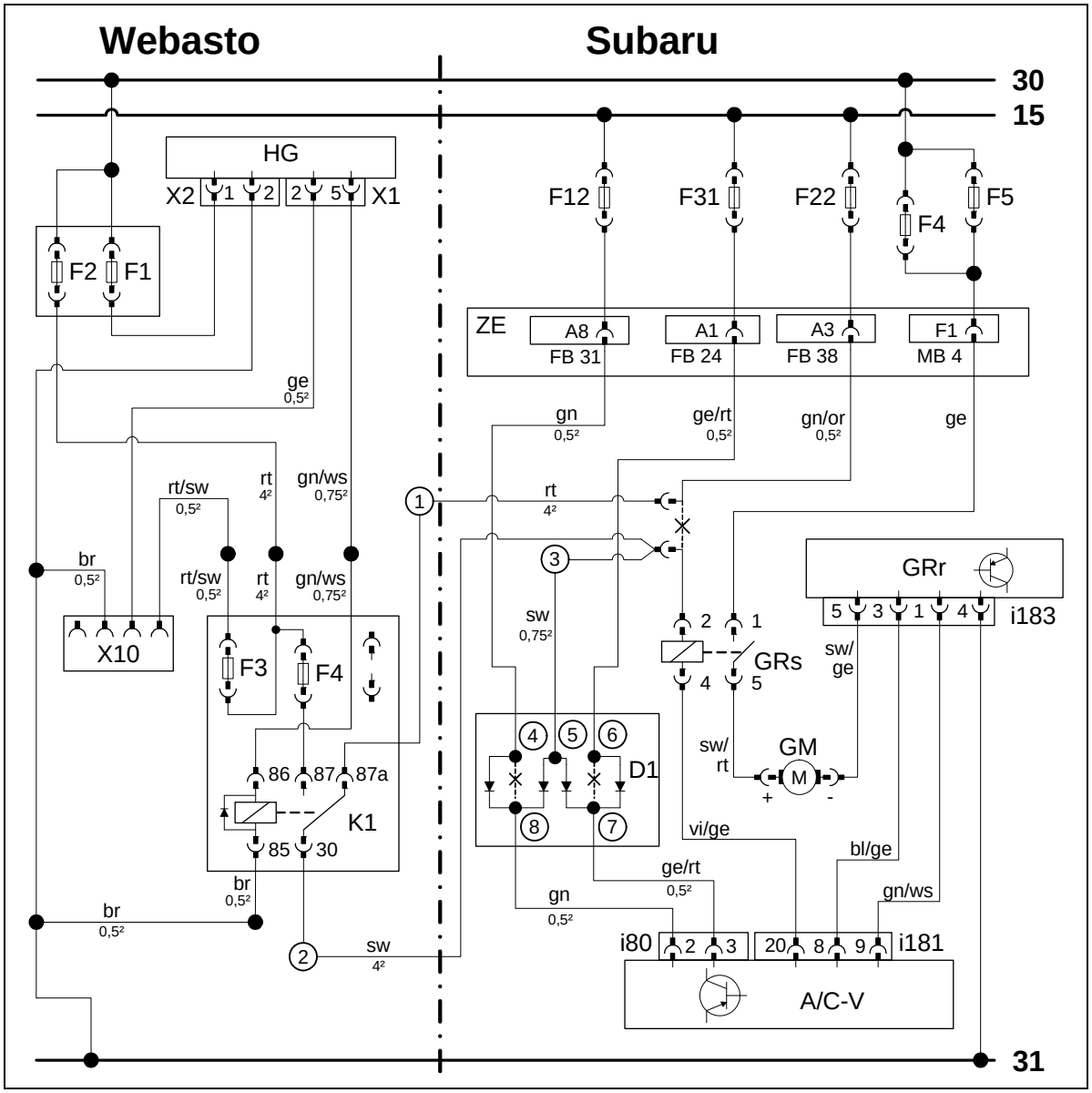


Earth wire

1 Earth wire on original vehicle earth support point

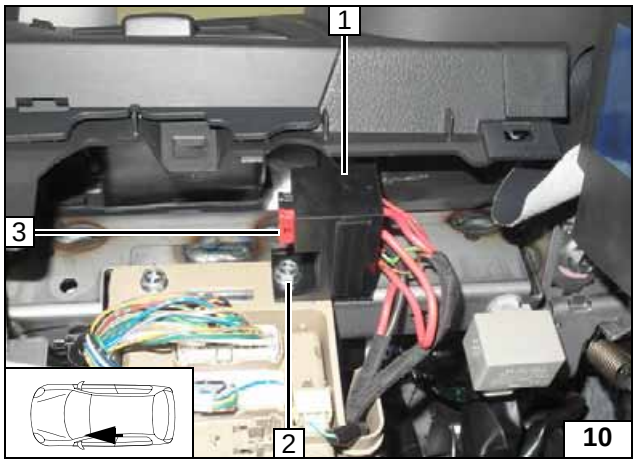
Fan Controller

Wiring diagram



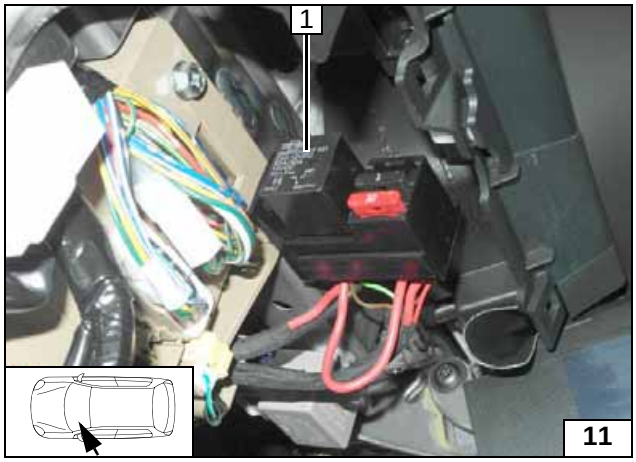
Webasto components		Vehicle components		Colours and symbols	
HG	TT-Evo heater	F12	15A fuse	rt	red
X1	6-pin heater connector	F22	15A fuse	ws	white
X2	2-pin heater connector	F31	7.5A fuse	sw	black
F1	20A fuse	F5	15A fuse	br	brown
F2	30A fuse	F4	15A fuse	gn	green
X10	4-pin connector of heater control	ZE	Central electrical box	bl	blue
		A8	Connector A (i5) PIN 8 ZE	ge	yellow
F3	1 A fuse	A1	Connector A (i5) PIN 1 ZE	vi	violet
F4	Replace 25 A with 10A fuse.	A3	Connector A (i5) PIN 3 ZE	or	orange
		GRr	Fan controller		
K1	Fan relay	i183	5-pin connector, GRr		
D1	Diode group	GRs	Fan relay		
		GM	Fan motor		
		A/C-V	A/C booster		
		i80	26-pin connector A/C-V	**X**	Cutting point
		i181	24-pin connector A/C-V	Wiring colours may vary.	

Legend



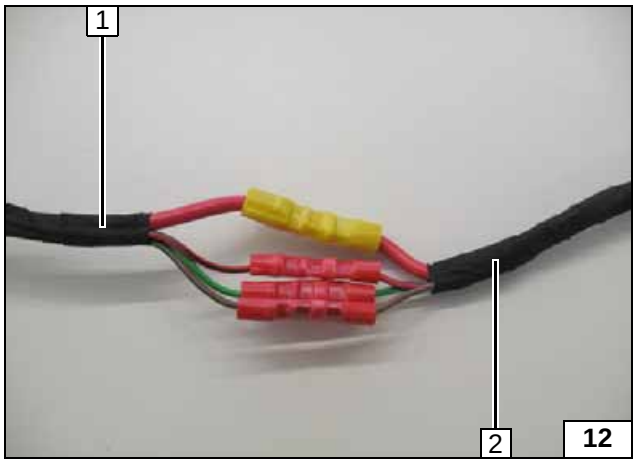
1 Relay and fuse holder of passenger compartment
2 Original vehicle bolt
3 10A fuse F4

Installing relay and fuse holder of passenger compartment



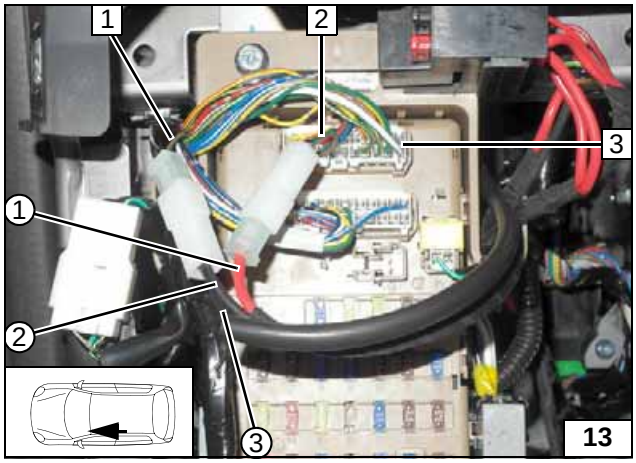
1 K1 relay

Attaching K1 relay



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

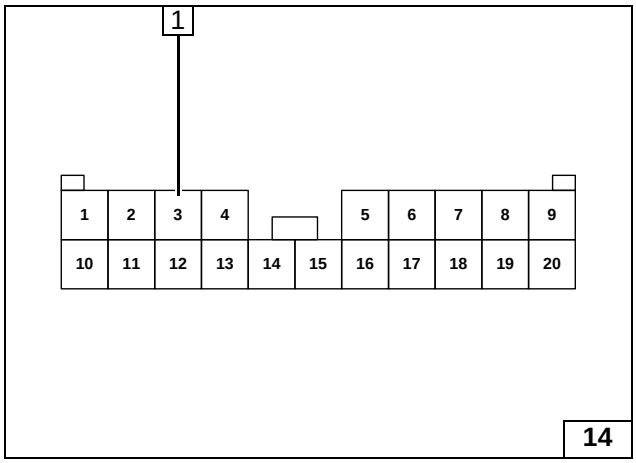
Connecting wiring harnesses using same colour wires



Connection on 20-pin connector A (i5) **3** of central electrical box. Produce connections as shown in wiring diagram.

1 Green/orange (gn/or) wire of fan relay Pin 2
2 Green/orange (gn/or) wire of connector A(i5), Pin 3
① Red (rt) wire of K1/87a
② Black (sw) wire of K1/30
③ Additional black (sw) wire of diode group

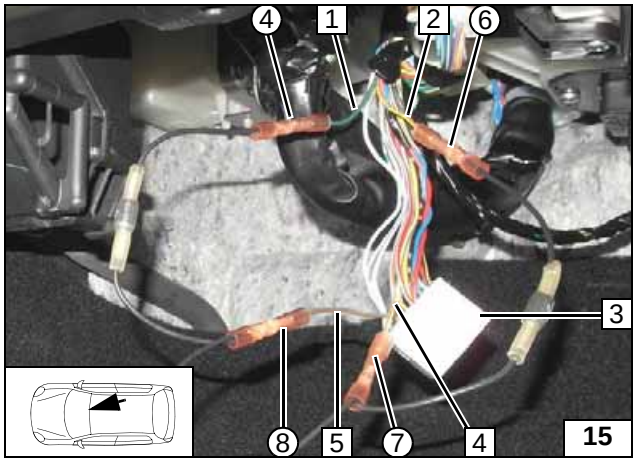
Connection to central electrical box



Connector A (i5) on contact side.

1 Socket for green/orange (gn/or) wire, pin 3

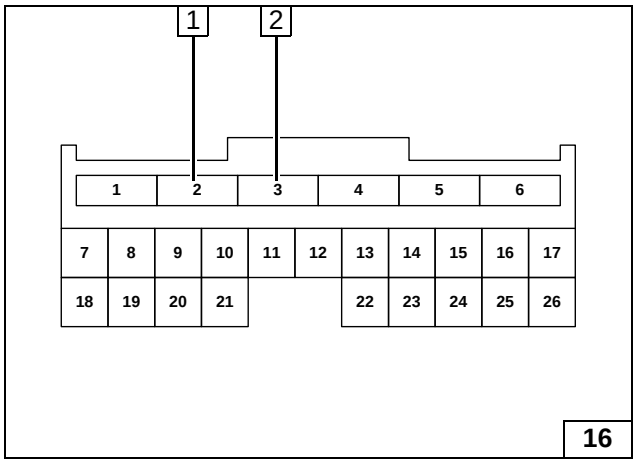
Connector A (i5)



Connection on 26-pin connector A (i80) **3** from A/C booster (see following figure). Produce connections as shown in wiring diagram.

1 Green (gn) wire of fuse F12
2 Yellow/red (ge/rt) wire of fuse F31
4 Yellow/red (ge/rt) wire of connector A(i80), pin 3
5 Green (gn) wire of connector A (i80), Pin 2

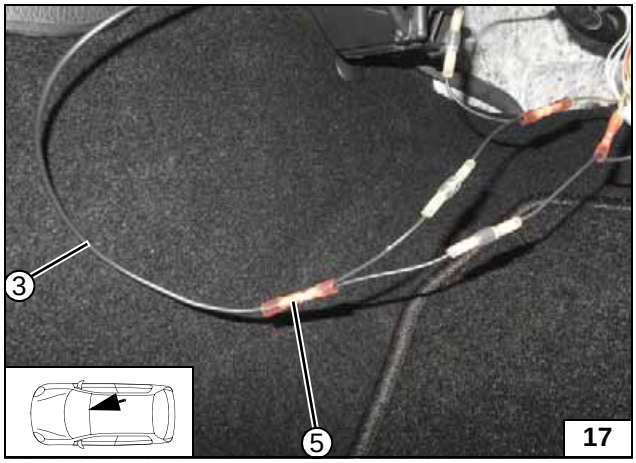
Connection of A/C booster



Connector A (i80) on contact side.

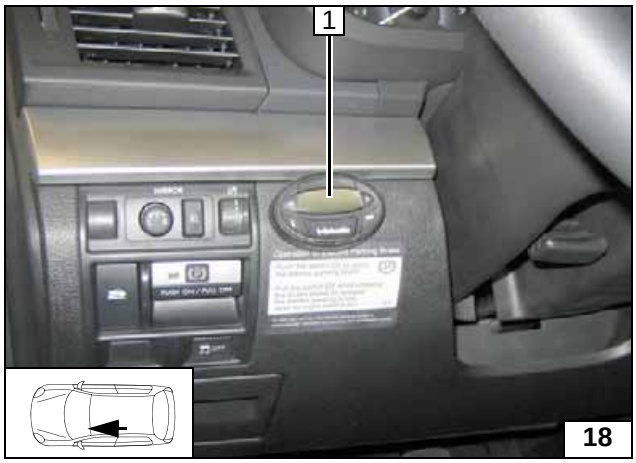
1 Green/red (gn/rt) wire of Pin 2
2 Yellow/red (ge/rt) wire of Pin 3

Connector A (i80)



Produce connection as shown in wiring diagram.

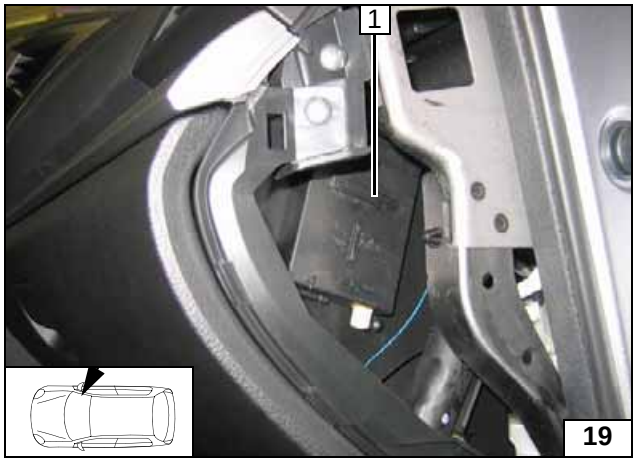
Connection of A/C booster



Digital Timer

1 Digital timer

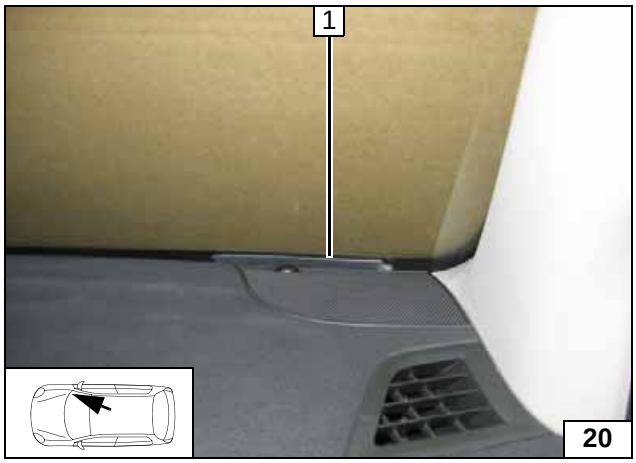
Installing digital timer



Remote Option (Telestart)

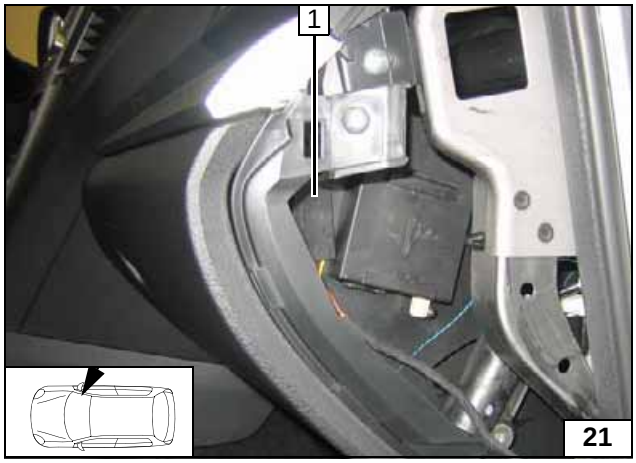
Fasten receiver **1** with adhesive tape.

Installing receiver



1 Antenna

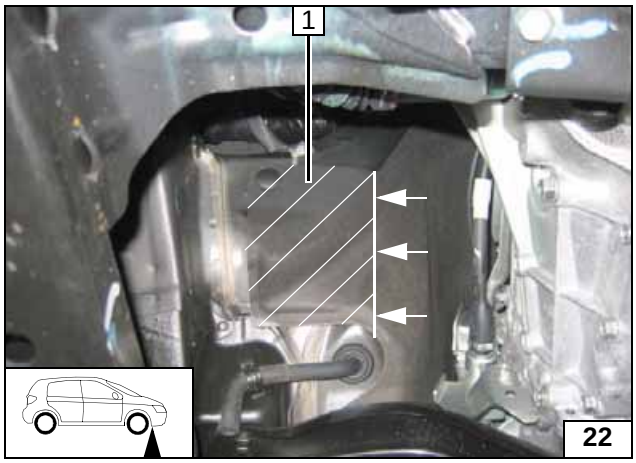
Installing antenna



Temperature sensor T100 HTM

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

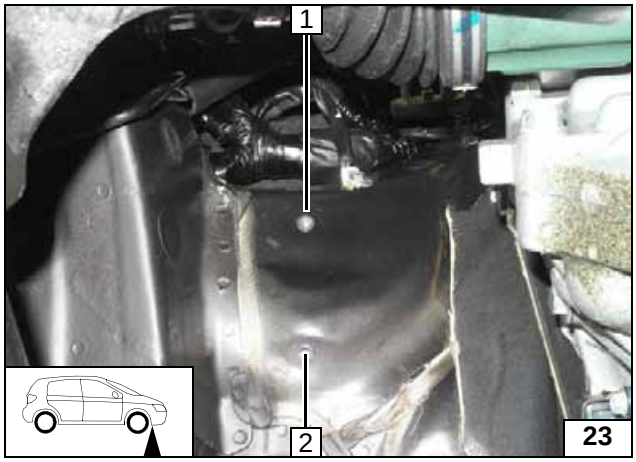
Mounting temperature sensor



Preparing Installation Location

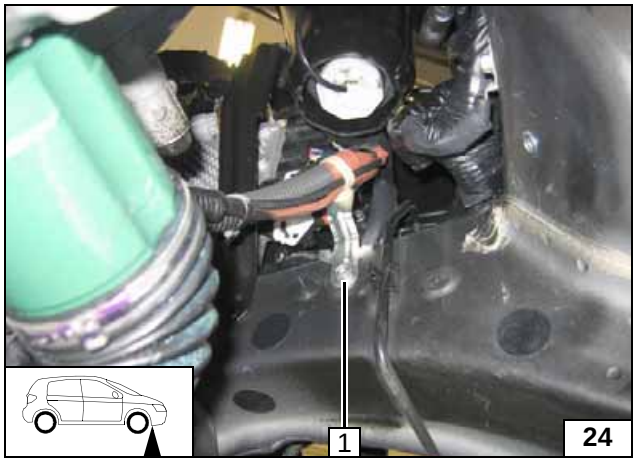
Cut out insulation mat **1**, remove and discard with clip.

Preparing installation location



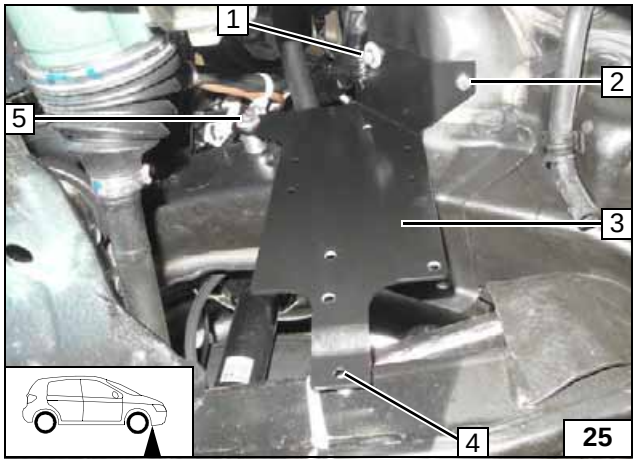
1 Drill out hole to 9.1 mm dia., rivet nut
2 Rivet nut, existing hole

Installing rivet nuts



1 Remove original vehicle bolt and discard

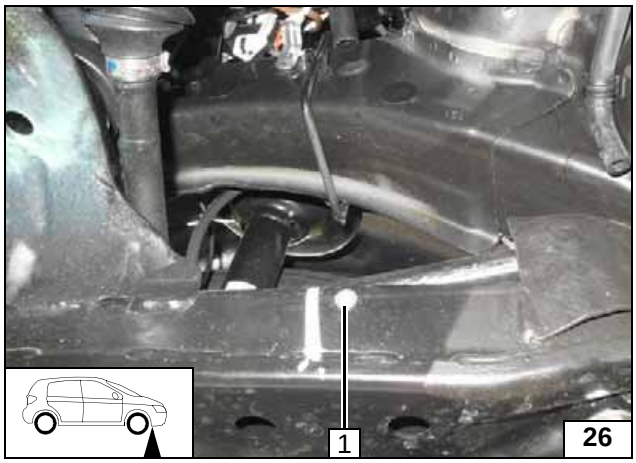
Removing bolt



Install retaining plate **3** loosely. Place bolts at position **1**, **2** and **5**. Copy hole pattern at position **4**.

1 M6x30 bolt
2 M6x20 bolt
5 M6x40 bolt, existing threaded hole

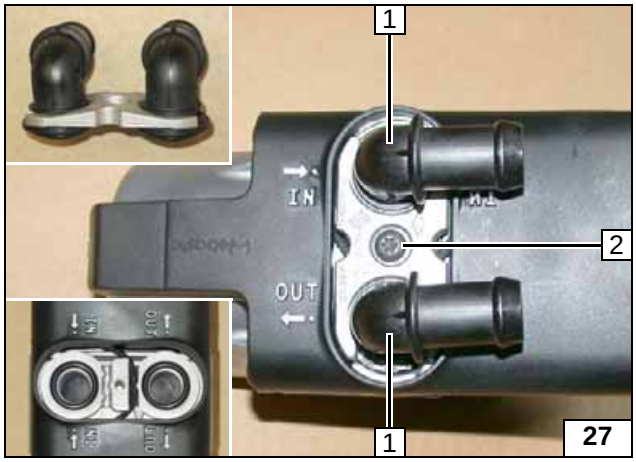
Copying hole pattern



Remove holding plate **3**.

1 Drill 9.1 mm dia. hole; install rivet nut

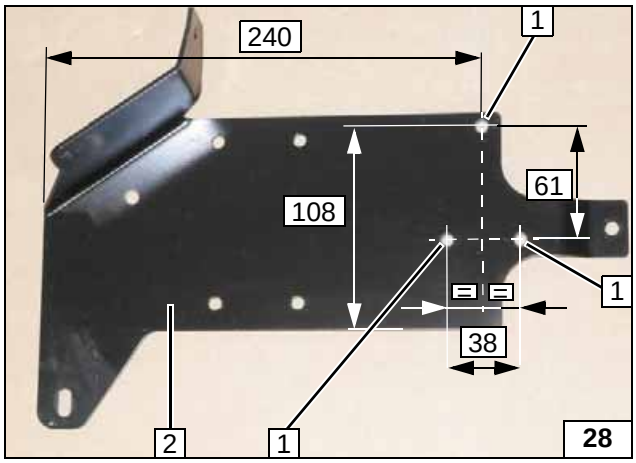
Installing rivet nut



Preparing Heater

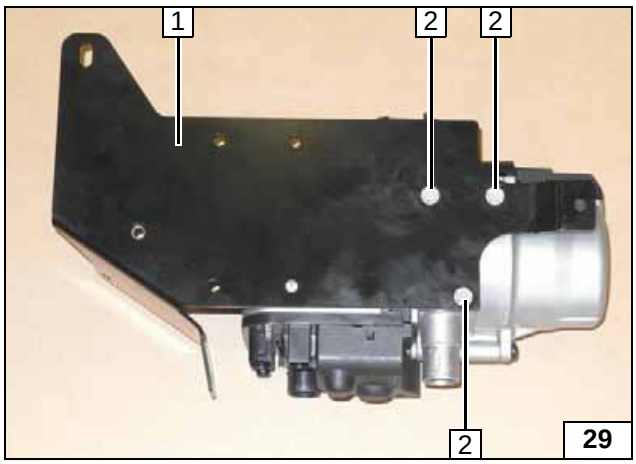
1 Water connection piece, sealing ring [2x each]
2 5x15 self-tapping bolt, retaining plate of water connection piece

Installing water connection piece



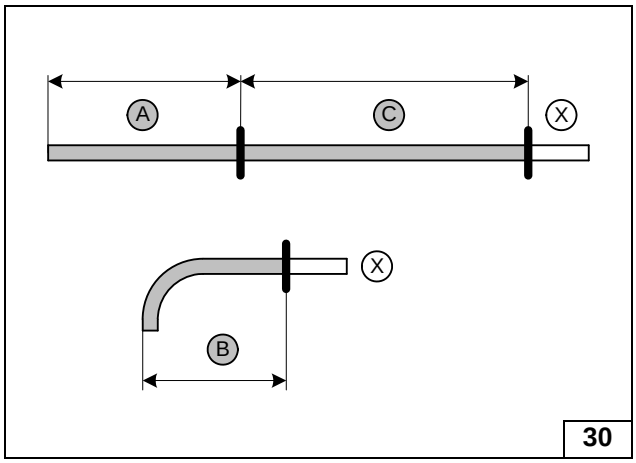
Only for bracket **2** with identification number 1315488A, 6mm dia. hole [3x] at position **1**. In case of bracket **2** with identification number 1315488B, holes **1** are already present.

Preparing bracket



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

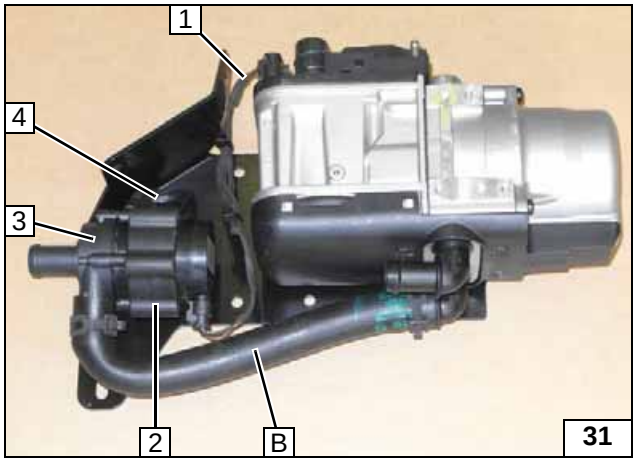
Premounting bracket



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

A = 590
B = 230
C = 730

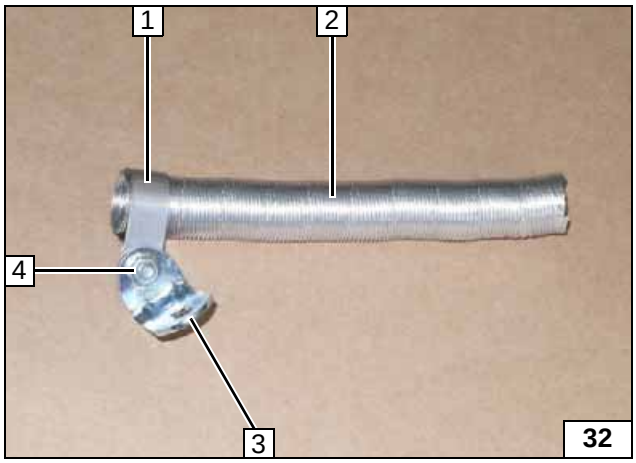
Cutting hoses to length



All spring clips = 25mm dia.

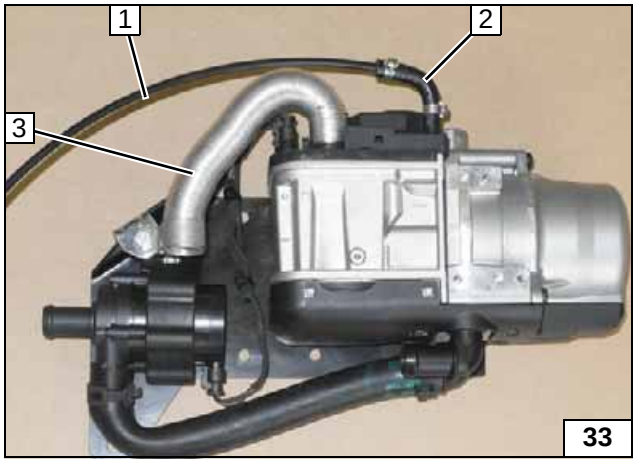
1 Wiring harness of circulating pump [2x]
2 Circulating pump support
3 Circulating pump
4 M6x25 bolt, flanged nut, existing hole

Installing circulating pump



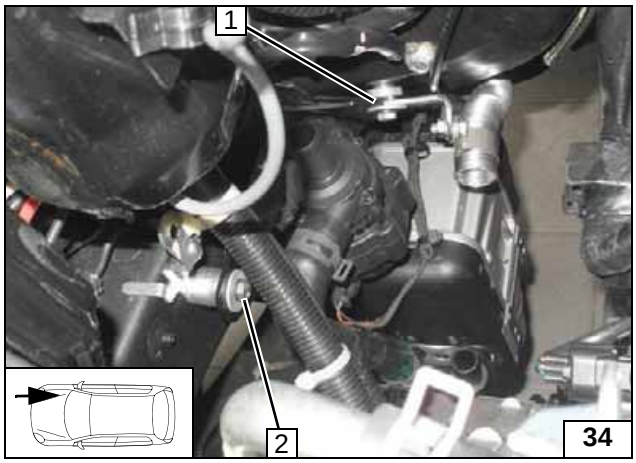
1 P-clamp
2 210mm combustion air pipe
3 Angle bracket
4 M6x20 bolt, flanged nut

Preparing combustion air pipe



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

Premounting fuel line

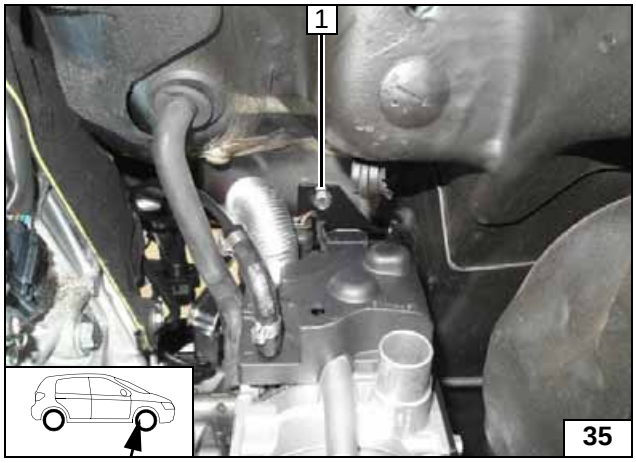


Installing Heater

1 Mount M6x25 bolt, spring lockwasher, large diameter washer, angle bracket, bracket with existing hole, 5mm shim loosely on rivet nut

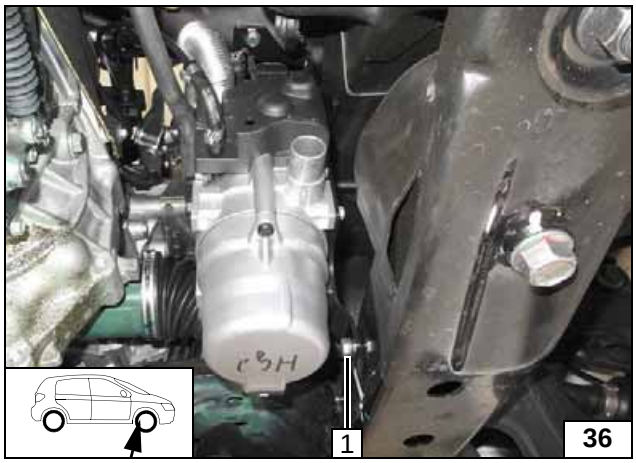
2 Mount M6x40 bolt, spring lockwasher, large diameter washer, bracket with existing hole, 20mm shim loosely using the existing threaded hole

Installing heater



1 Mount M6x20 bolt, spring lockwasher, bracket with existing hole, loosely on rivet nut

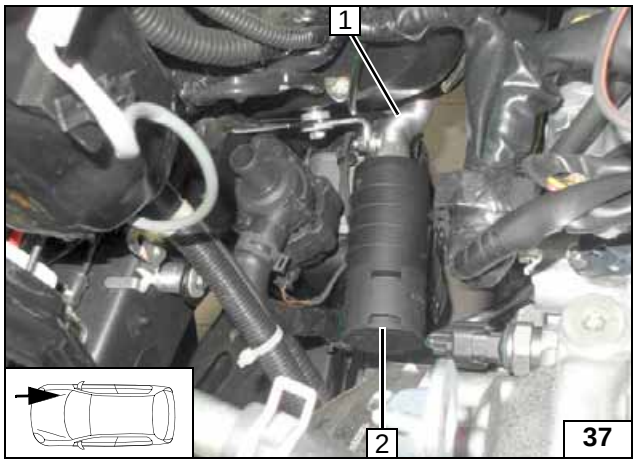
Installing heater



Align heater, tighten all loose screw connections.

1 M6x20 bolt, spring lockwasher, bracket with existing hole on rivet nut

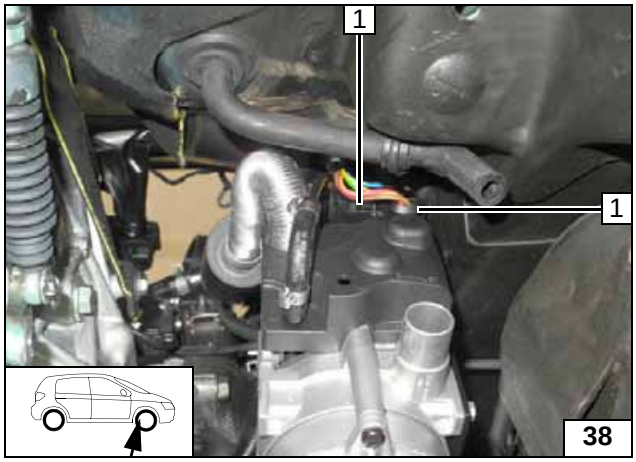
Installing heater



Combustion Air

Screw silencer **2** into combustion air pipe **1** and align it. Ensure sufficient distance from adjacent components, correct if necessary.

Mounting silencer



1 Wiring harness of heater [2x]

Installing wiring harness of heater

Fuel

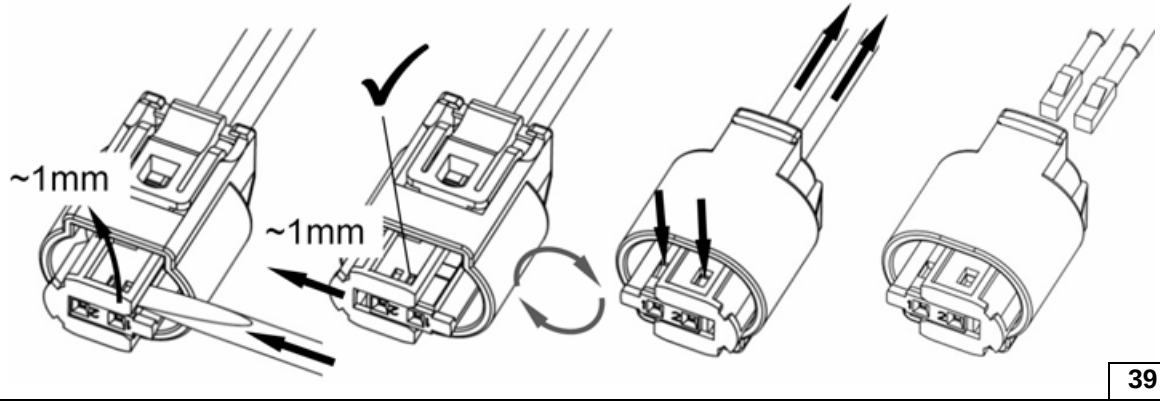
CAUTION!
Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

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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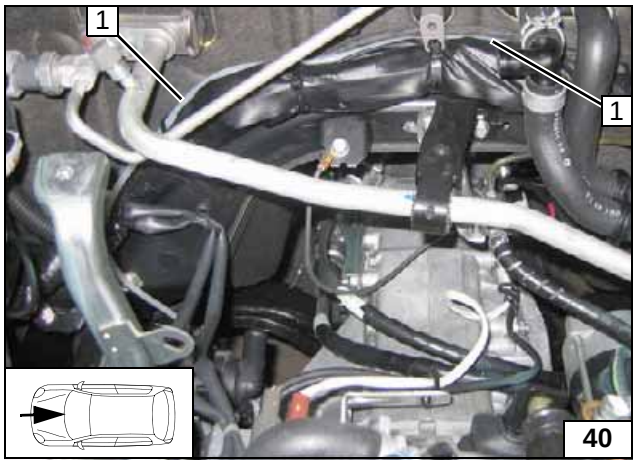
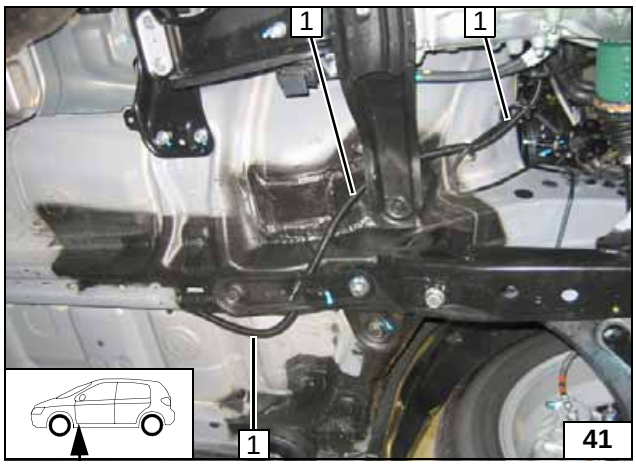
Disassembling connector



40

Route wiring harness of heater and fuel line **1** to original vehicle wiring harness on the left side of vehicle.

Installing lines



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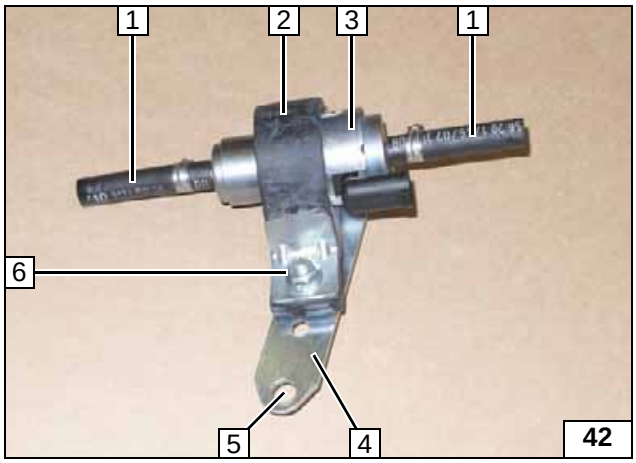
Cut 10mm dia. corrugated tube in the middle. Route fuel line and wiring harness of metering pump in corrugated tube **1** to the underbody!

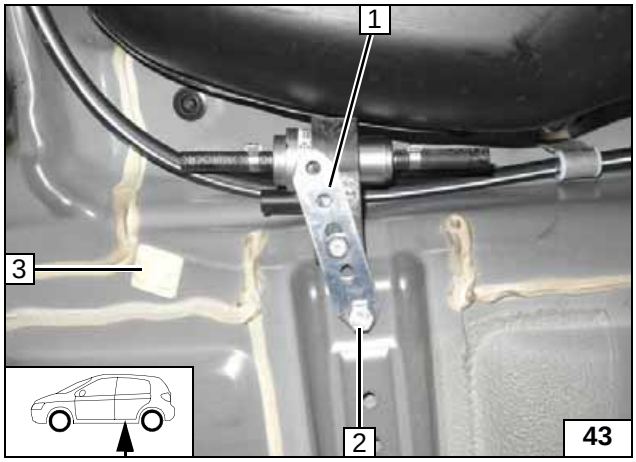
Installing lines



Drill out perforated bracket **4** to 8.5 mm dia. at position **5**.

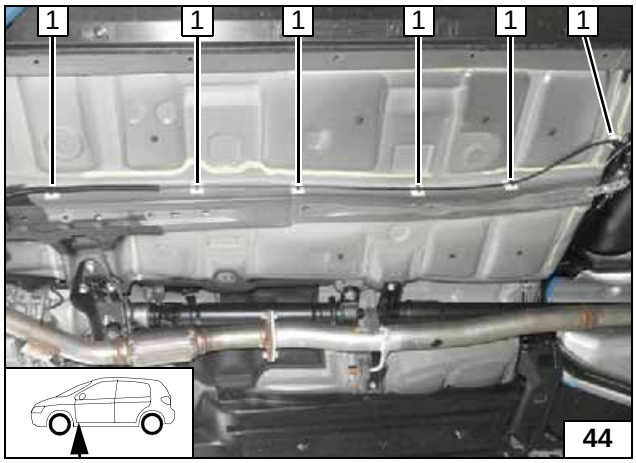
1 Hose section, 10 mm dia. clamp [2x]
2 Metering pump support
3 Metering pump
6 M6x25 bolt, support angle bracket, flanged nut

Premounting metering pump



1 Perforated bracket
2 M8x25 bolt, spring lockwasher, existing threaded hole
3 Adhesive base

Installing metering pump

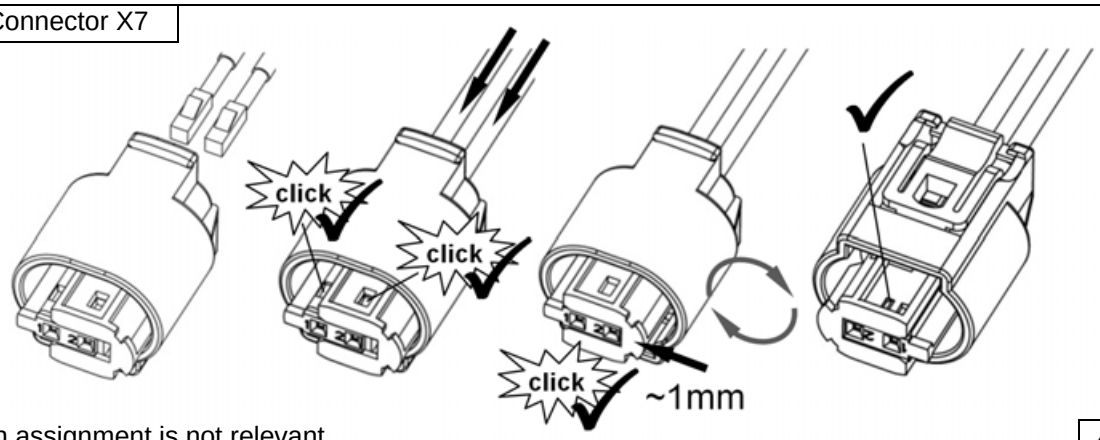


Route fuel line and wiring harness of metering pump to the installation location of metering pump.

1 Adhesive base, cable tie [6x each]

Installing lines

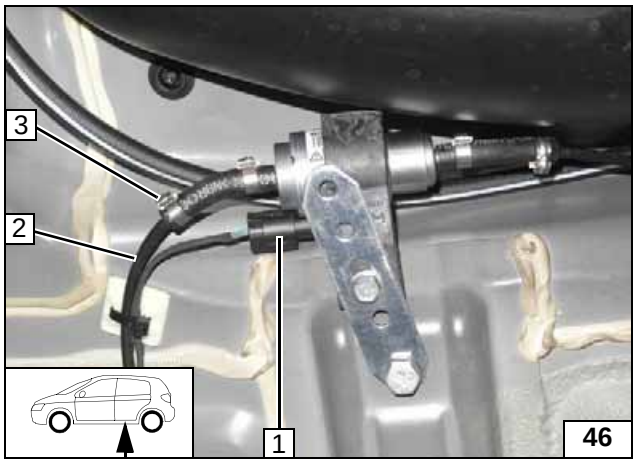
Connector X7



Pin assignment is not relevant.

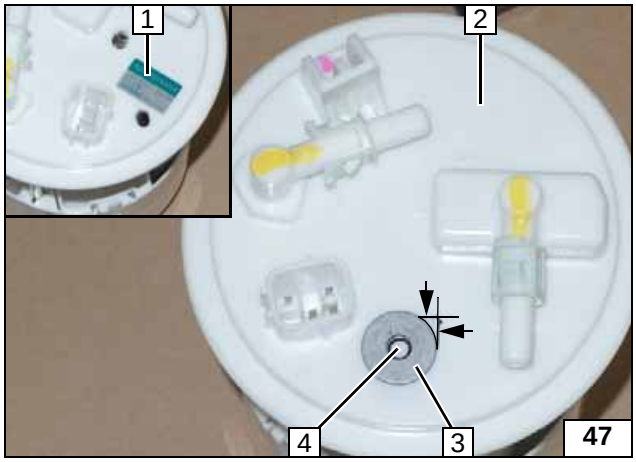
45

Completing connector of metering pump



1 Wiring harness of metering pump, connector mounted
2 Fuel line of Heater
3 10 mm dia. clamp

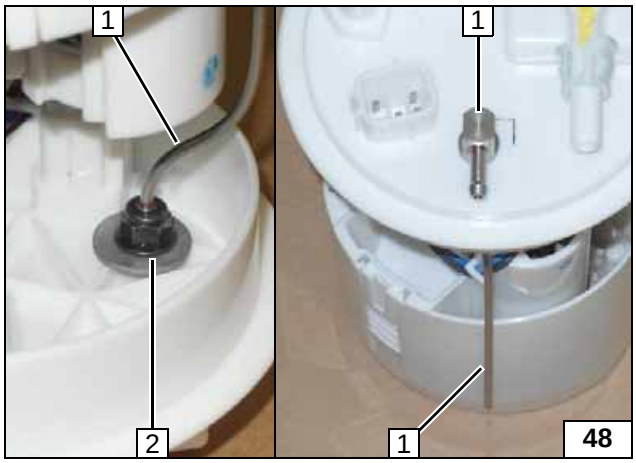
Connection of metering pump



Remove fuel-tank sending unit on the right **2** in accordance with manufacturer's instructions. Remove sticker **1**. Place large diameter washer with outer dia. d_a = 21.6mm **3** at the marking.

4 Copy hole pattern, 6 mm dia. hole

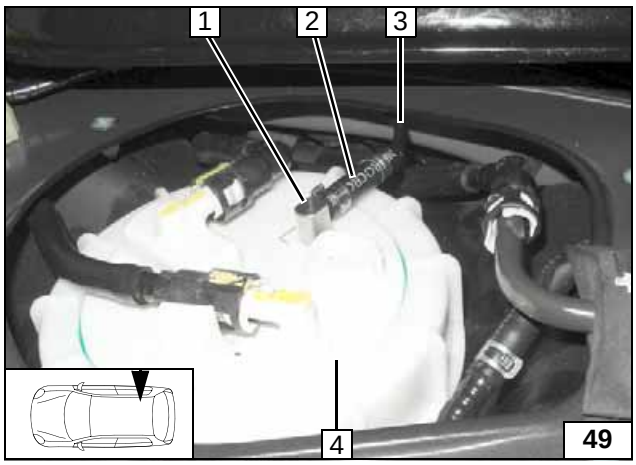
Fuel extraction



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

1 Fuel standpipe
2 Large diameter washer with outer dia. d_a = 21.6mm

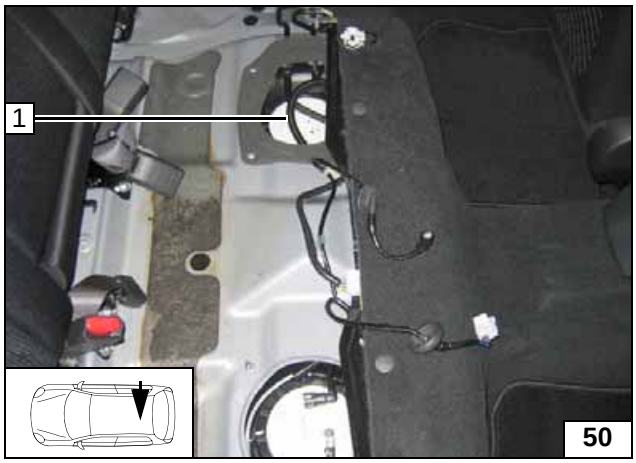
Installing fuel standpipe



Install fuel-tank sending unit **4** in accordance with manufacturer's instructions.

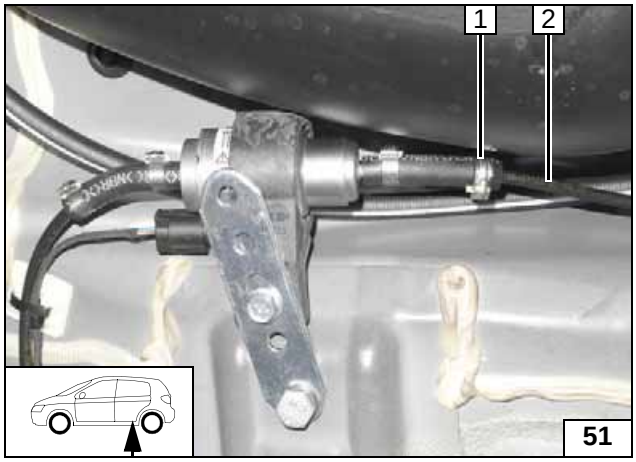
1 Fuel standpipe
2 Hose section, 10 mm dia. clamp [2x]
3 Fuel line

Connecting fuel line



Route fuel line in 10mm dia. corrugated tube **1** to the metering pump.

Routing fuel line



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

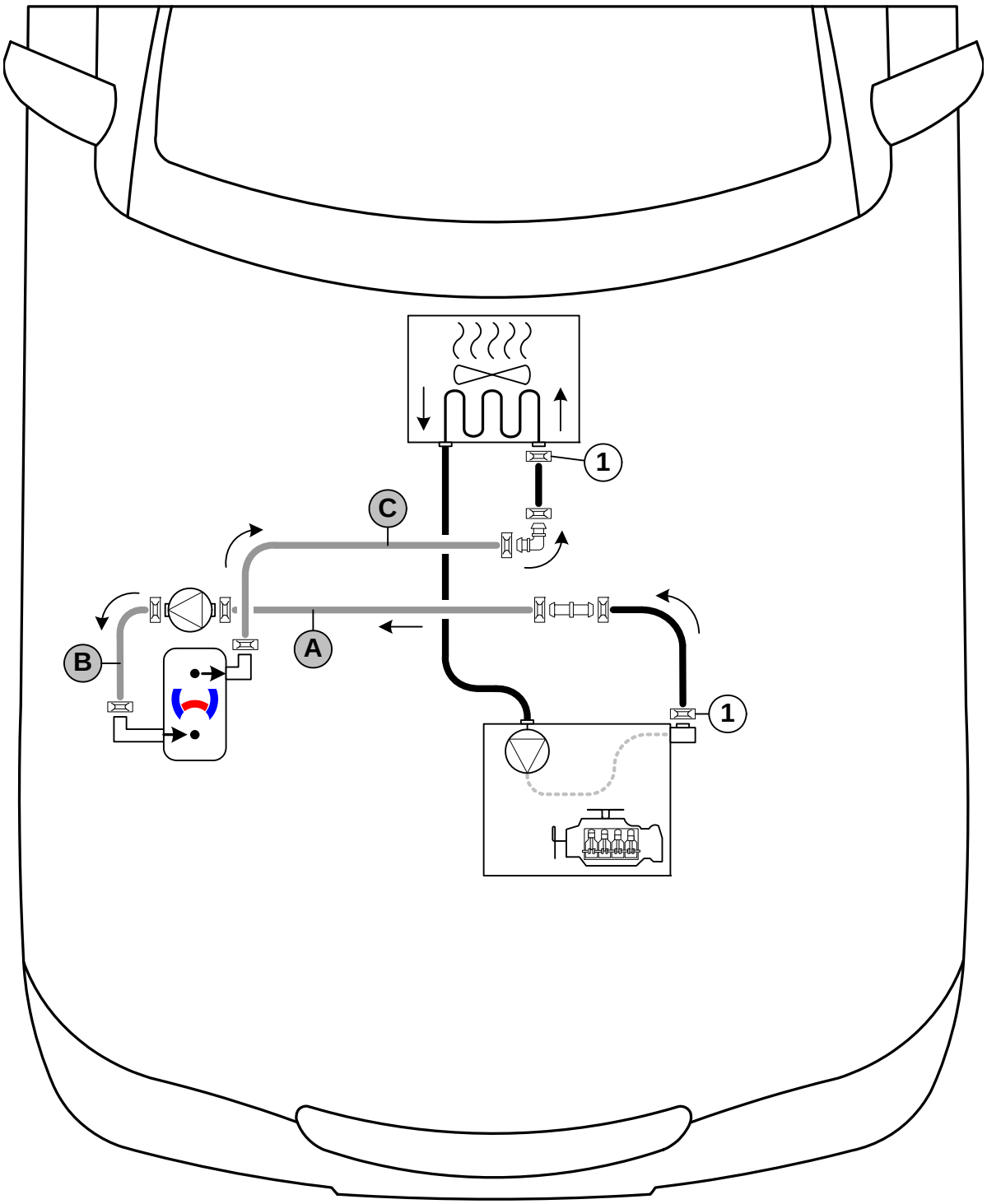
1 10 mm dia. clamp
2 Fuel line of fuel standpipe

Connection of metering pump

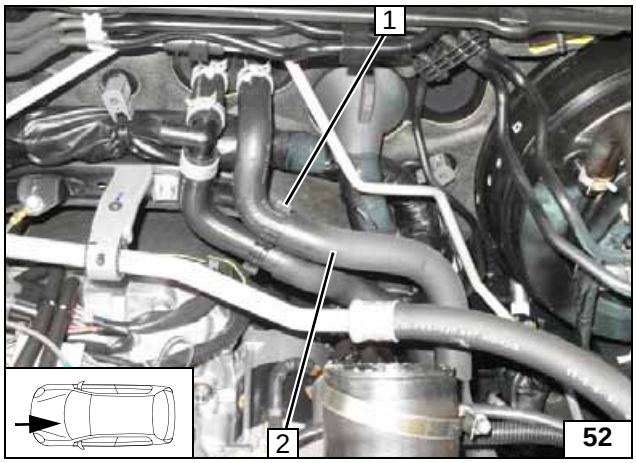
Coolant Circuit

WARNING!
Any coolant running off should be collected using an appropriate container. Install coolant hoses kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that other hoses cannot 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

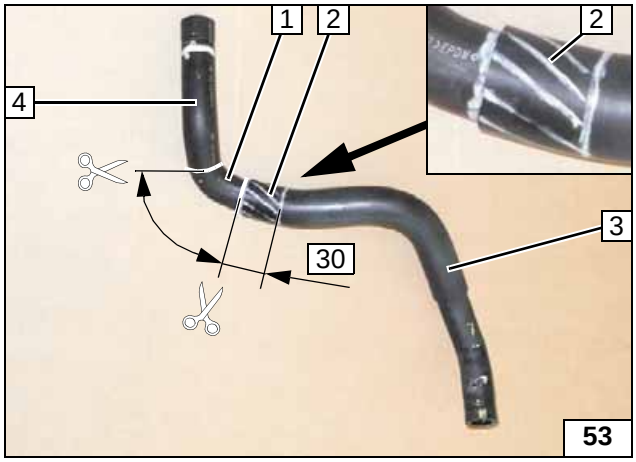


All non-designated spring clips = 25mm dia.
1 = Original vehicle spring clips!
Connecting pipes and = 18x18 mm dia.!



Remove hose of engine outlet / heat exchanger inlet **2** . Spring clips and original vehicle hose bracket **1** will be reused.

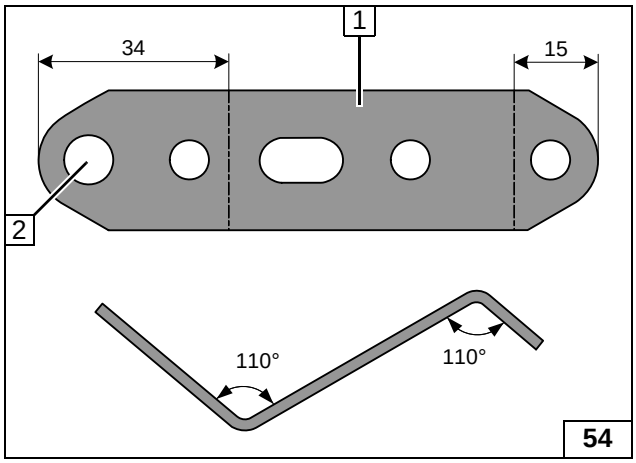
Cutting point



Remove protective hose **2** at the marking.

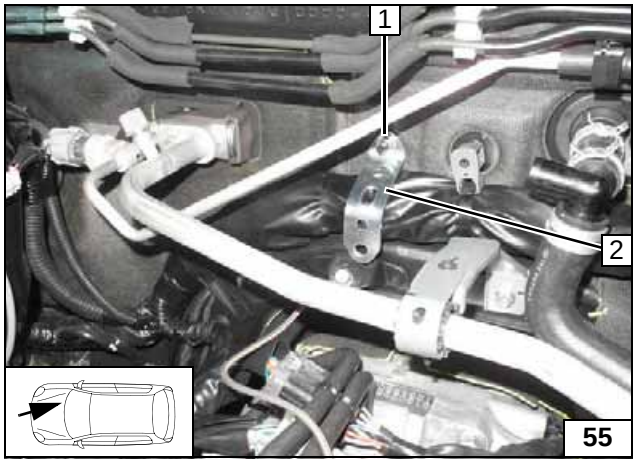
1 Discard section (hose elbow)
3 Engine outlet hose section
4 Hose section of heat exchanger inlet

Cutting point



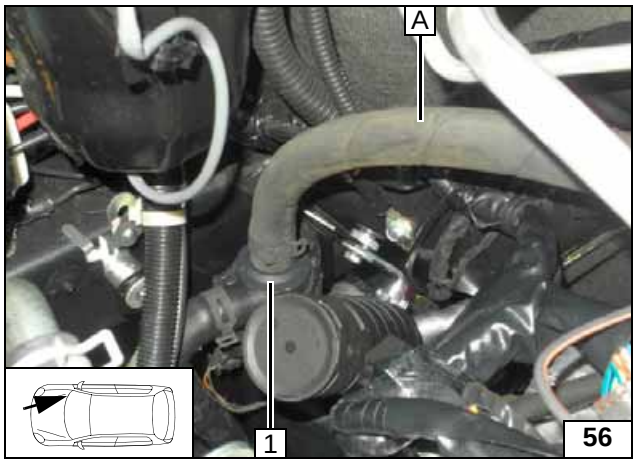
1 Perforated bracket
2 Drill out hole to 8 mm dia.

Preparing perforated bracket



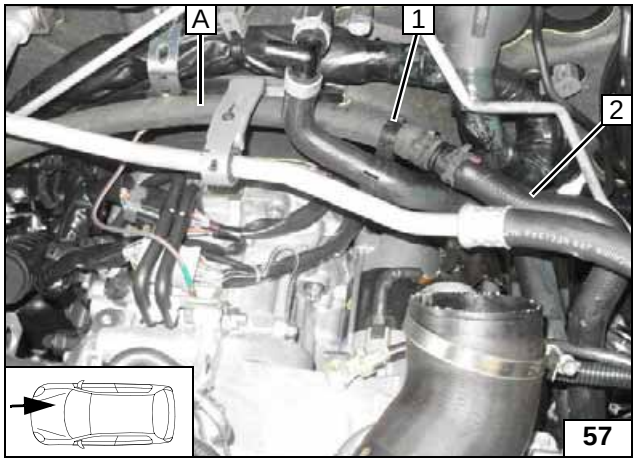
1 Original vehicle stud bolt, M6 flanged nut
2 Perforated bracket

Installing perforated bracket



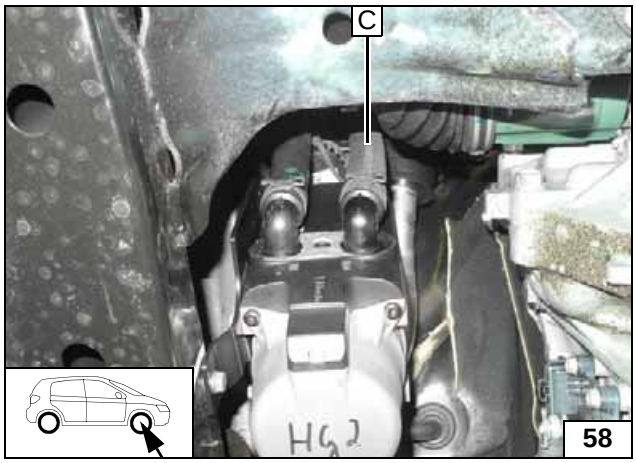
1 Circulating pump

Connection of circulating pump

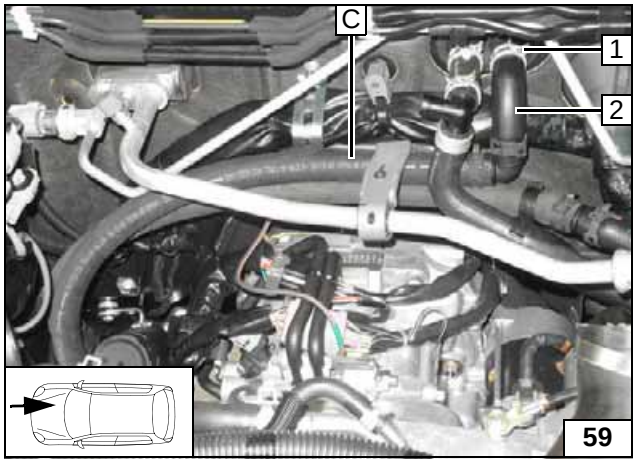


1 Original vehicle hose bracket
2 Hose of engine outlet

Connecting engine outlet

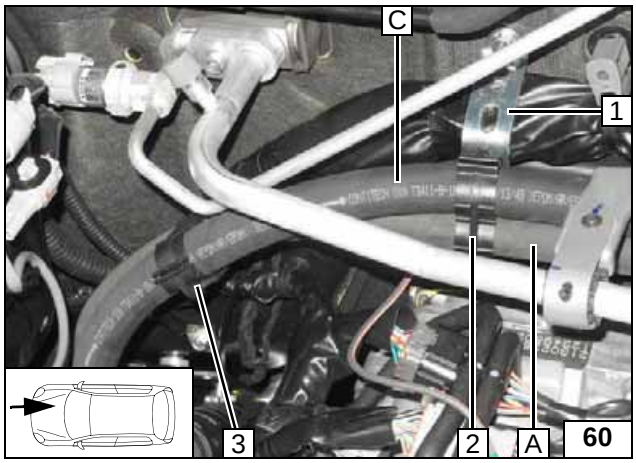


Connecting heater outlet



1 Original vehicle spring clip
2 Hose on heat exchanger inlet

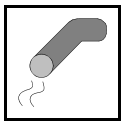
Connecting heat exchanger inlet



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

1 Perforated bracket
2 Hose bracket on perforated bracket
3 Hose bracket

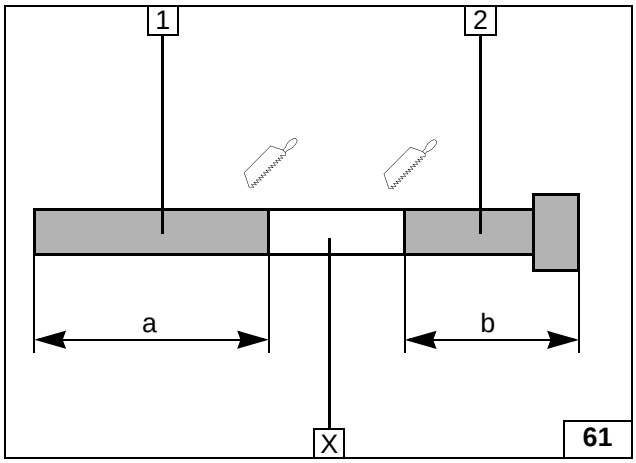
Mounting hose bracket



Exhaust Gas

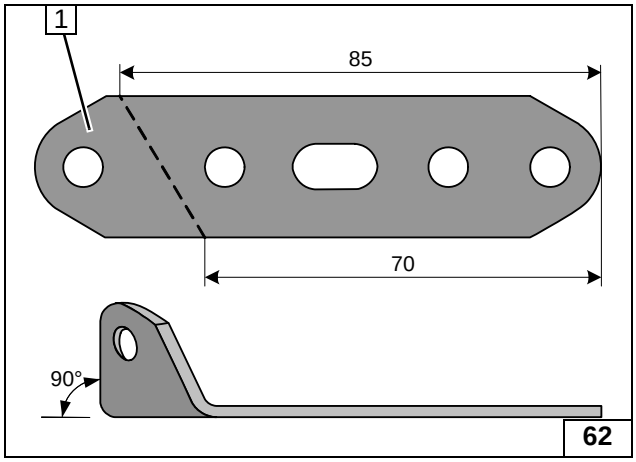
Discard section **X**.

1 Exhaust pipe
a = 130
2 Exhaust end section
b = 120



Preparing exhaust pipe

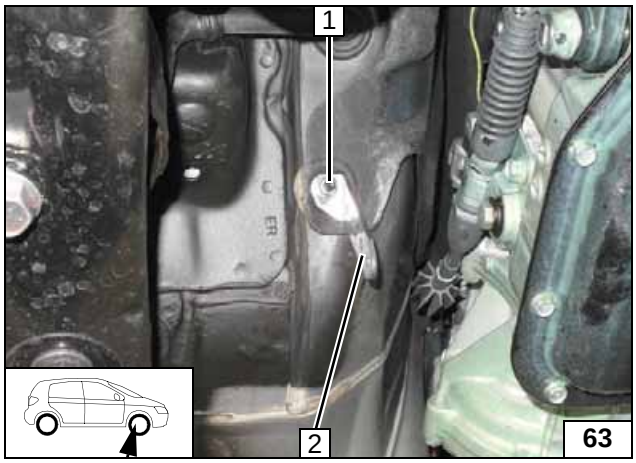
1 Perforated bracket



Preparing perforated bracket

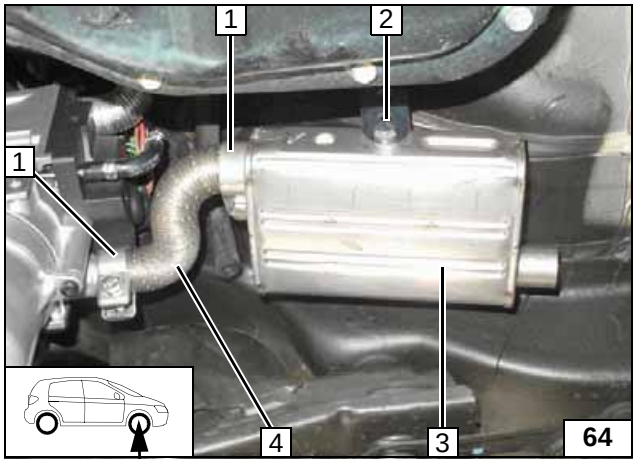
Remove plastic nut at position **1**.

1 Original vehicle stud bolt, M6 flanged nut
2 Perforated bracket

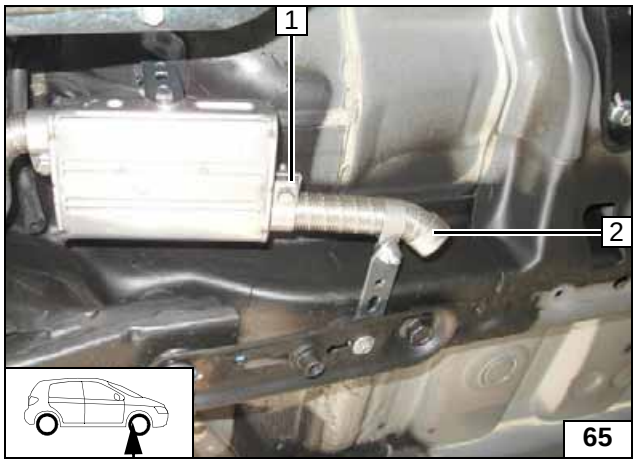


Installing perforated bracket

1 Hose clamp [2x]
2 M6x16 bolt, spring lockwasher, perforated bracket
3 Silencer
4 Exhaust pipe

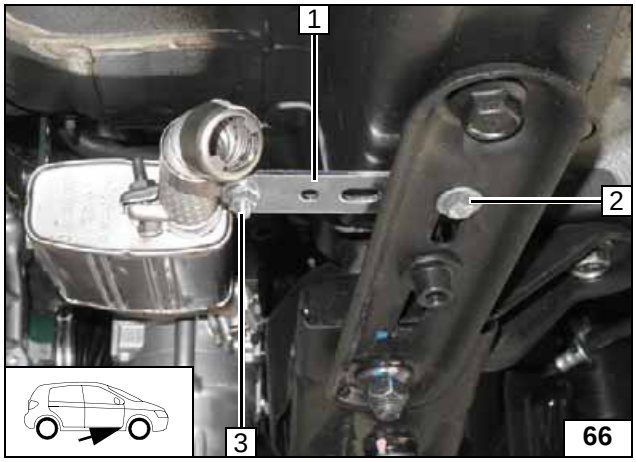


Mounting silencer and exhaust pipe



1 Hose clamp
2 Exhaust end section

Mounting exhaust end section



1 Perforated bracket
2 M6x16 bolt, large diameter washer, flanged nut
3 M6x16 bolt, p-clamp, flanged nut

Fastening exhaust end section

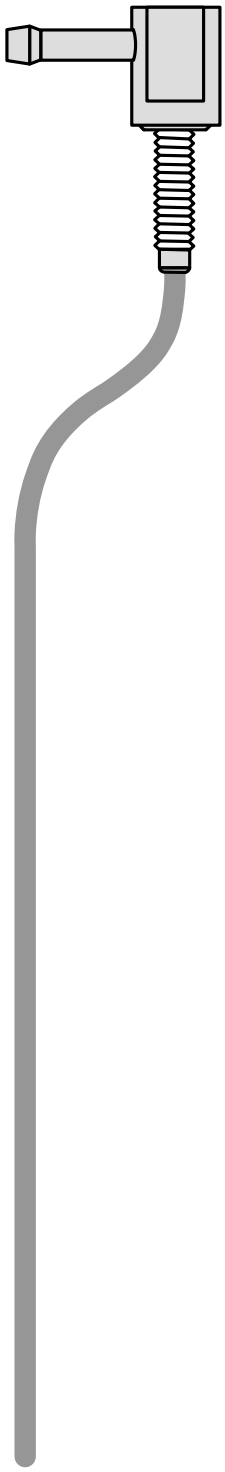
Final Work

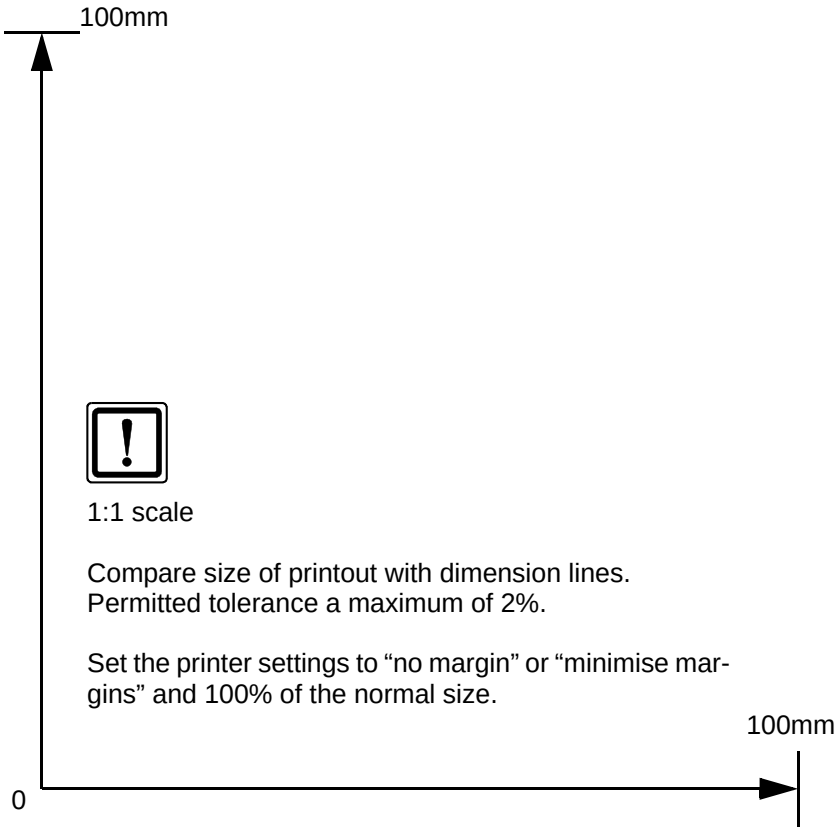
WARNING!
Reassemble the disassembled components in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate and tie back all loose lines.
Only use manufacturer-approved coolant. Spray heater components with anti-corrosion wax (Tectyl 100K, Order No. 111329).

- **Connect the battery.**
- **Fill and bleed the coolant circuit according to the vehicle manufacturer's instructions.**
- **Set digital timer, 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 in the area of the filler neck**
- **For initial start-up and function check, see installation instructions**

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

Template for Fuel Standpipe





1:1 scale

Compare size of printout 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 End Customer

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

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

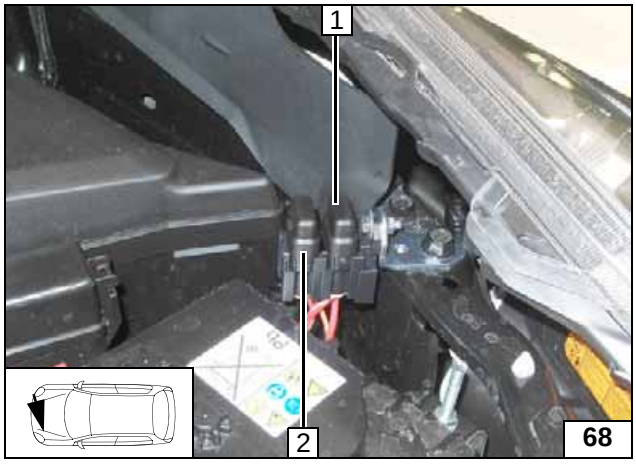
If vehicles have passenger compartment monitoring, this must be deactivated in addition to vehicle settings for the heating operation.
Deactivation instructions can be found in the operating instructions of the vehicle.

Before parking the vehicle, make the following settings:

A/C control panel

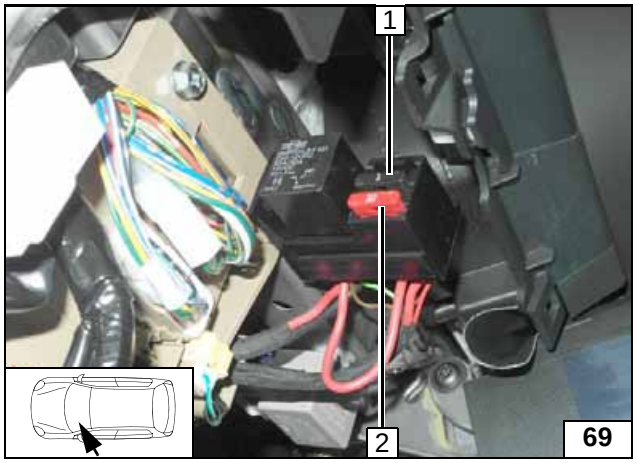
1 Air outlet to windscreen
2 Set temperature on both sides to "HI"

Engine compartment fuses



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

Passenger compartment fuses



1 1A fuse F3 of heater control
2 10A fan fuse F4