Water Heater

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

Installation Documentation
Hyundai i10

Validity

Manufacturer	Model	Type	EG-BE No./ABE
Hyundai	i10	PA	e1 * 2001 / 116 * 0131 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm³	Engine code
1.2	Petrol	5-speed SG	63	1248	G4LA
1.2	Petrol	4-stage AT	63	1248	G4LA
1.2	Petrol	5-speed SG	57	1248	G4LA

SG = Manual transmission
AT = Automatic transmission

From Model Year 2011
Left-hand drive vehicle

Verified equipment variants: Without air-conditioning / Manual air-conditioning
Front fog light

Not verified: Passenger compartment monitoring
Headlight washer system
LPG

Total installation time: approx. 7 hours

Hyundai i10

Table of Contents

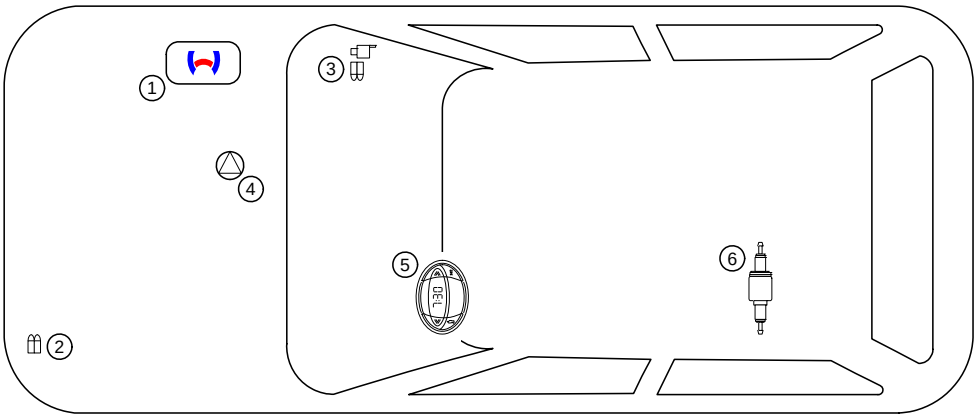
Necessary Components

- Basic delivery scope *Thermo Top Evo* in accordance with price list
- Installation kit for Hyundai i10 2011 1.2 Petrol **1317387A**
- Heater control in accordance with price list and upon consultation with end customer
- In case of Telestart, indicator lamp in accordance with price list and in consultation with end customer

Installation Overview

Legend:

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



Information on Total Installation Time

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

Information on Operating and Installation Instructions

1 Important Information (not complete)

1.1 Installation and Repair

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

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

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

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

1.2 Operation

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

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

Always switch off the heater before refuelling.

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

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

1.3 Please note

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

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

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

IMPORTANT

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

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

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

Installation should be carried out according to the general, standard rules of technology. Unless specified otherwise, fasten hoses, lines and wiring harnesses to original vehicle lines and wiring harnesses using cable ties. Insulate loose wire ends and tie back.

Sharp edges should be fitted with rub protection (split-open fuel hose)! Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K, Order No. 111329).

Observe the instructions and guidelines of the respective vehicle manufacturer for demounting and mounting vehicle specific components!

The initial startup is to be executed with the Webasto Thermo Test Diagnosis.

When installing an IPCU, the corresponding settings must be checked or adjusted before the installation.

2 Statutory regulations governing installation

Guidelines	Thermo Top Evo
Heating Directive ECE R122	E1 00 0258
EMC Directive ECE R10	E1 03 5627

NOTE

The regulations of these guidelines are binding in the scope of the Directive 70/156/EEC and/or 2007/46/EC (for new vehicle models from 29/04/2009) and should also be observed in countries in which there are no special regulations.

IMPORTANT

Failure to follow the installation instructions will result in the invalidation of the type approval for the heater and therefore invalidation of the general **homologation of the vehicle**.

NOTE

For vehicles with an EU permit, no entry in accordance with § 19 Sub-Section 4 of Annex VIII b to the Road Traffic Act is required.

2.1 Excerpt from the directive 2001/56/EC Appendix VII for the installation of the heater

Beginning of excerpt.

ANNEX VII

REQUIREMENTS FOR COMBUSTION HEATERS AND THEIR INSTALLATION

1. GENERAL REQUIREMENTS

1.7.1. A clearly visible tell-tale in the operator's field of view shall inform when the combustion heater is switched on or off.

2. VEHICLE INSTALLATION REQUIREMENTS

2.1. Scope

2.1.1. Subject to paragraph 2.1.2. combustion heaters shall be installed according to the requirements of this Annex.

2.1.2. Vehicles of category O having liquid fuel heaters are deemed to comply with the requirements of this Annex.

2.2. Positioning of heater

2.2.1. Body sections and any other components in the vicinity of the heater must be protected from excessive heat and the possibility of fuel or oil contamination.

2.2.2. The combustion heater shall not constitute a risk of fire, even in the case of overheating. This requirement shall be deemed to be fulfilled if the installation ensures an adequate distance to all parts and suitable ventilation, by the use of fire resistant materials or by the use of heat shields.

2.2.3. In the case of M2 and M3 vehicles, the heater must not be positioned in the passenger compartment. However, an installation in an effectively sealed envelope which also complies with the conditions in paragraph 2.2.2 may be used.

2.2.4. The label referred to in paragraph 1.4 or a duplicate, must be positioned so that it can be easily read when the heater is installed in the vehicle.

2.2.5. Every reasonable precaution should be taken in positioning the heater to minimise the risk of injury and damage to personal property.

2.3. Fuel supply

2.3.1. The fuel filler must not be situated in the passenger compartment and must be provided with an effective cap to prevent fuel spillage.

2.3.2. In the case of liquid fuel heaters, where a supply separate to that of the vehicle is provided, the type of fuel and its filler point must be clearly labelled.

2.3.3. A notice, indicating that the heater must be shut down before refuelling, must be affixed to the fuelling point. In addition a suitable instruction must be included in the manufacturer's operating manual.

2.4. Exhaust system

2.4.1. The exhaust outlet must be located so as to prevent emissions from entering the vehicle through ventilators, heated air inlets or opening windows.

2.5. Combustion air inlet

2.5.1. The air for the combustion chamber of the heater must not be drawn from the passenger compartment of the vehicle.

2.5.2. The air inlet must be so positioned or guarded that blocking by rubbish or luggage is unlikely.

2.6. Heating air inlet

2.6.1. The heating air supply may be fresh or recirculated air and must be drawn from a clean area not likely to be contaminated by exhaust fumes emitted either by the propulsion engine, the combustion heater or any other vehicle source.

2.6.2. The inlet duct must be protected by mesh or other suitable means.

2.7. Heating air outlet

2.7.1. Any ducting used to route the hot air through the vehicle must be so positioned or protected that no injury or damage could be caused if it were to be touched.

2.7.2. The air outlet must be so positioned or guarded that blocking by rubbish or luggage is unlikely.

End of excerpt.

In multilingual versions the German language is binding.

Information on Validity

This installation documentation applies to Hyundai i10 1.2 Petrol vehicles - for validity, see page 1 - from model year 2011 and later, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to this installation documentation.

Vehicle and engine types, equipment variants and other specifications not listed in this installation documentation have not been tested. However, installation according to this installation documentation may be possible.

Technical Information

Special Tools
- Hose clamp pliers for self-clamping hose clamps
- Hose clamp pliers for Clic hose clamps of type W
- Automatic wire stripper 0.2 - 6mm²
- Crimping pliers for cable lug / tab connector 0.5 - 6mm²
- Torque wrench for 2.0 - 10 Nm
- Hose clamping pliers
- Metric thread-setter kit
- Webasto Thermo Test diagnosis with current software

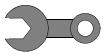
Dimensions
- All dimensions are in mm.

Tightening torque values
- Tightening torque values of 5x13 heater bolts = 8Nm.
- Tightening torque values of 5x15 retaining plate of water connection piece 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 injury or fatal accidents

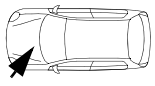
Specific risk of damage to components

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



Hyundai i10

Preliminary Work

WARNING!

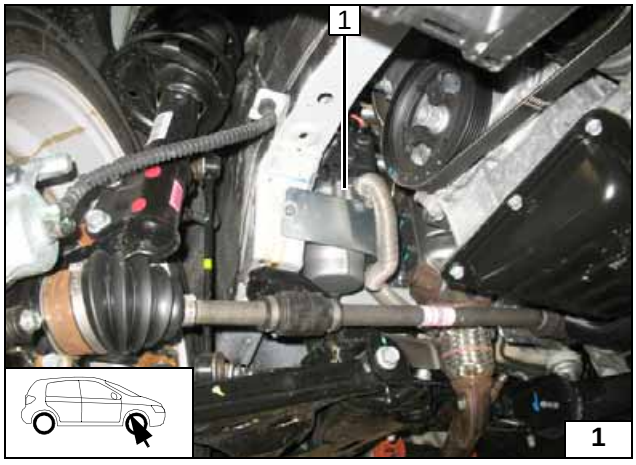
The heater can be installed only in the rebound condition of the front axle.

Vehicle

- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect and completely remove the battery together with the carrier.
- Remove the windscreen wiper.
- Remove the coolant reservoir cap.
- Remove the windscreen wiper motor.
- Remove the coolant reservoir partition wall with the engine compartment.
- Remove the air ducting of the engine intake air.
- Drain out the engine cooling liquid.
- Remove the lateral trim on the right below the engine.
- Remove the trim of the front entrance strip on the right.
- Remove the footwell trim of the centre console at the right.
- Remove the lower A-pillar trim at the right.
- Remove the glove compartment.
- Fold up the floor trim at the right.
- Fold up the rear seat surface.
- Remove the fuel-tank sending unit in accordance with the manufacturer's instructions.

Heater

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

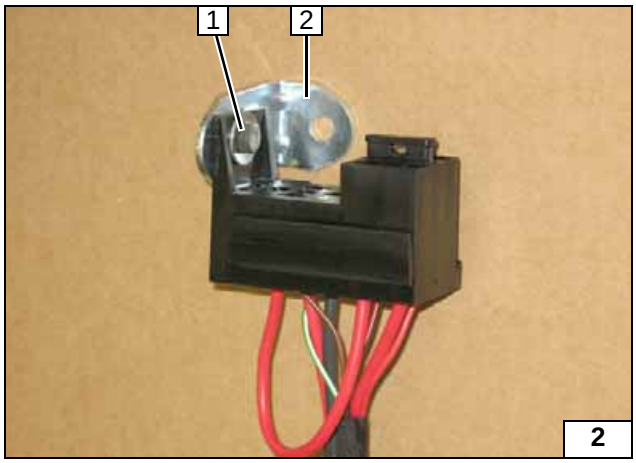


Heater Installation Location

1 Heater

Installation location

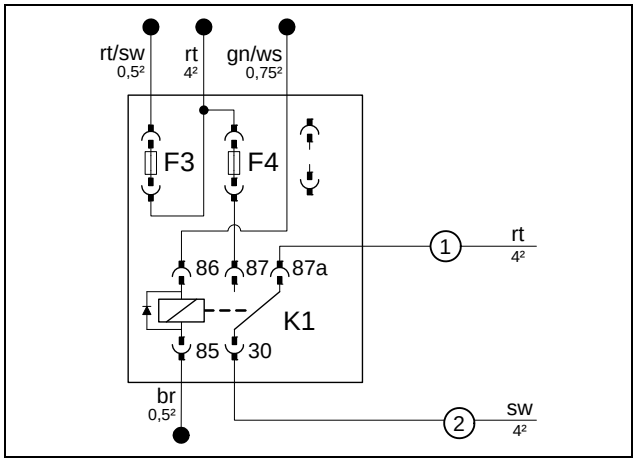
Preparing Electrical System



Fuse holder, passenger compartment

1 M5x16 bolt, large diameter washer [2x], nut
2 Angle bracket

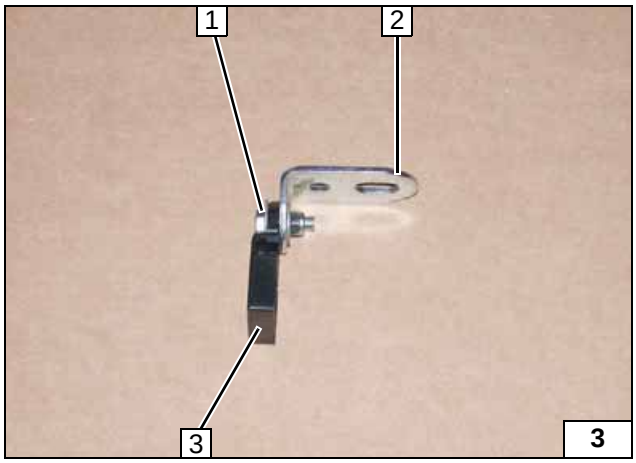
Preparing fuse holder for passenger compartment



Insert 25A fuse F4. Insert wires into socket of K1 relay. K1 relay will be attached later.

① Red (rt) wire of K1/87a
② Black (sw) wire of K1/30

Installing F4, preparing K1 relay



Fuse holder for engine compartment

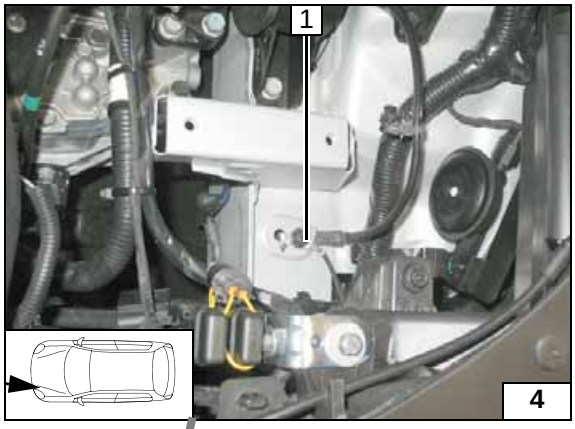
1 M5x16 bolt, large diameter washer [2x], nut
2 Angle bracket
3 Retaining plate for fuse holder

Preparing fuse holder for engine compartment

Electrical System

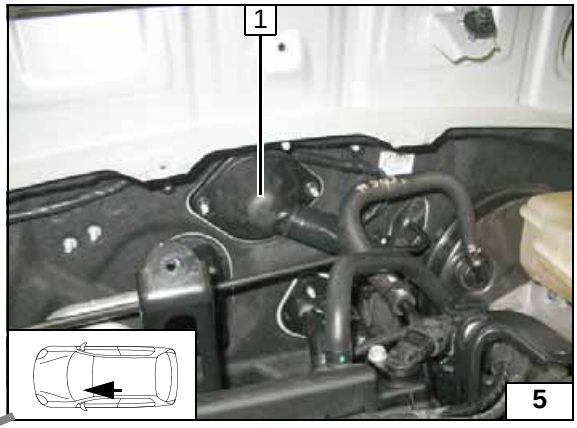
Earth wire

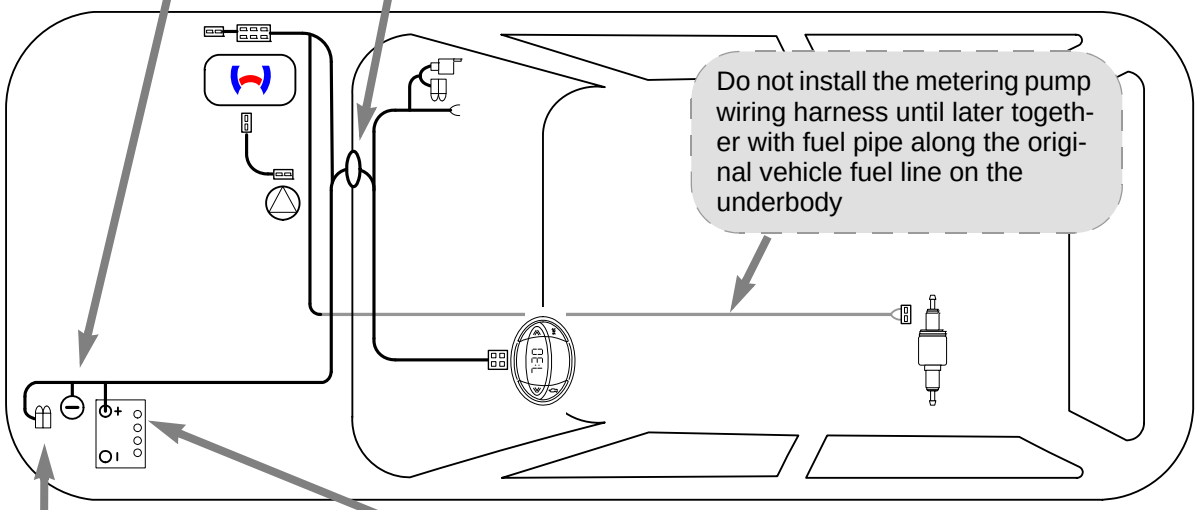
1 Earth wire on original vehicle earth point



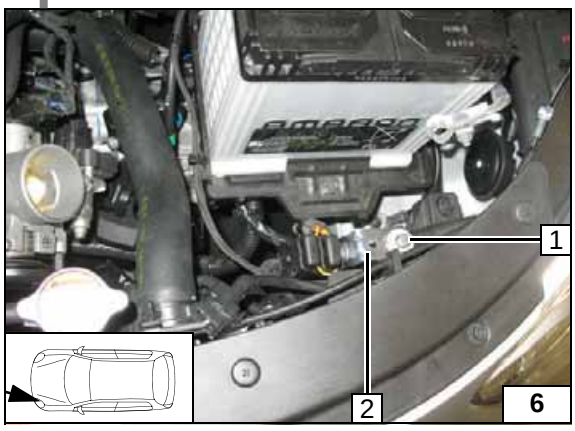
Cable pass through

1 Protective rubber plug



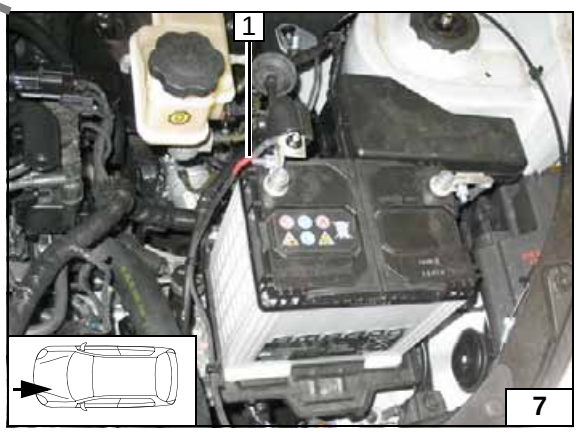


Wiring harness routing diagram



Fuse holder for engine compartment

1 M6x20 bolt, spring lockwasher, large diameter washer, original vehicle threaded hole
2 Angle bracket

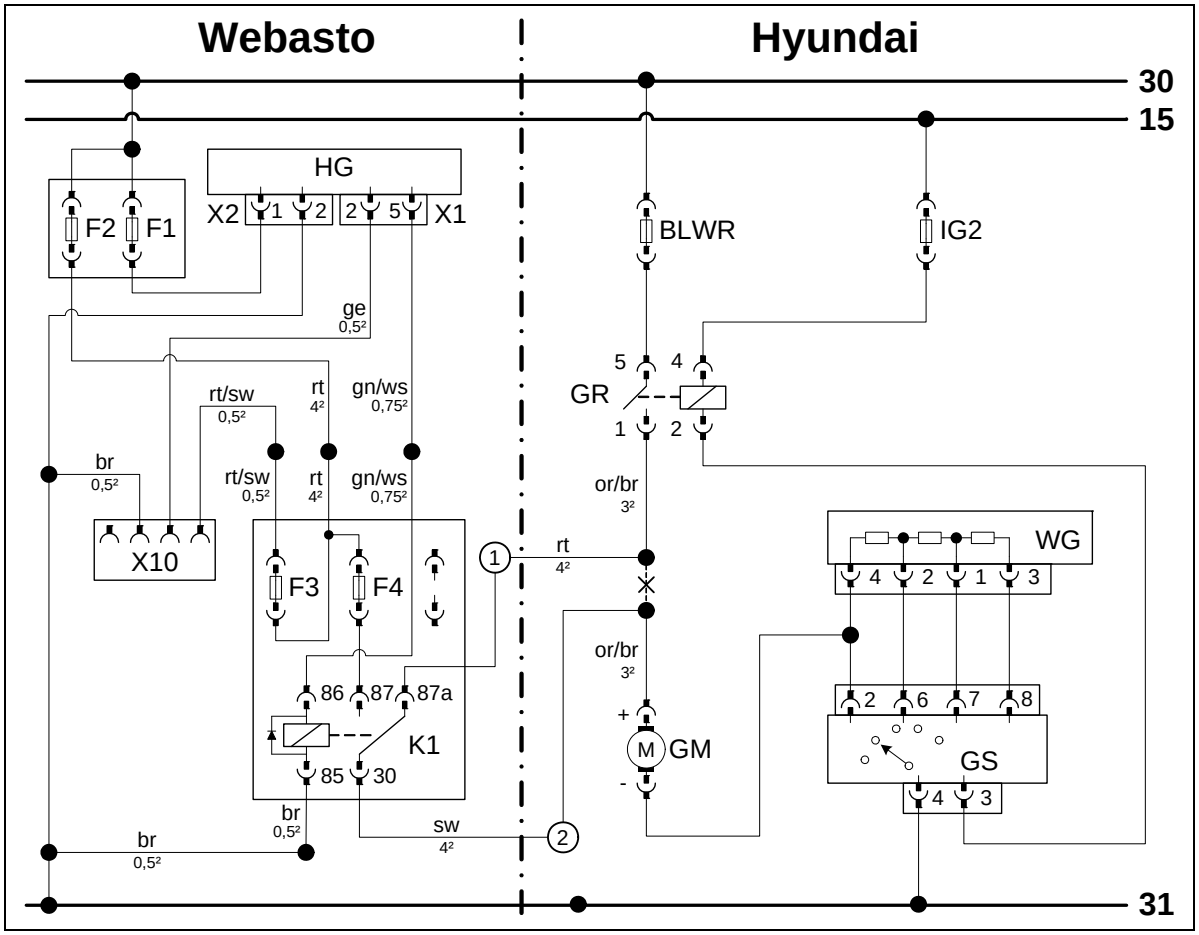


Positive wire

1 Positive wire

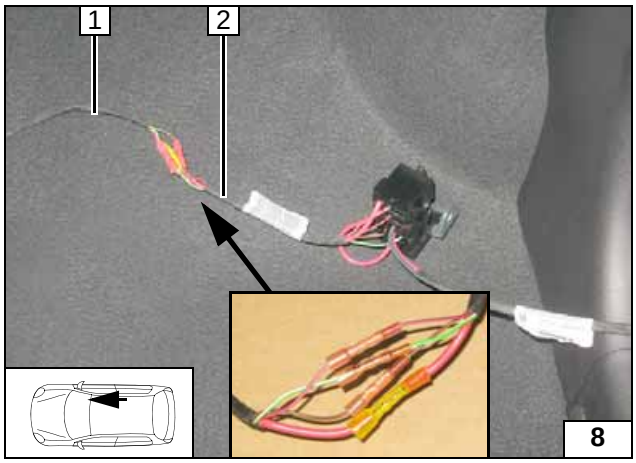
Fan Controller

Wiring diagram



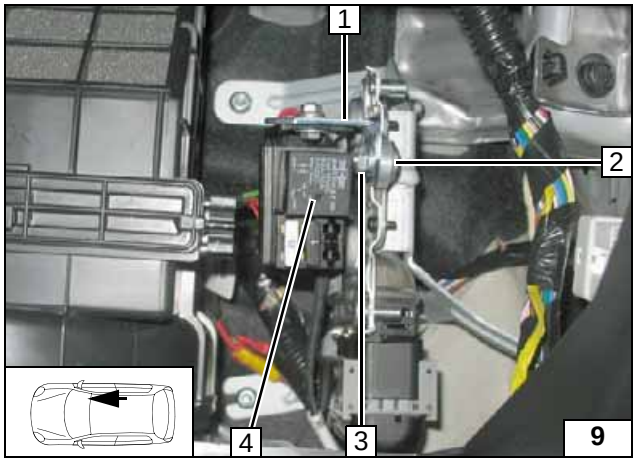
Legend

Webasto components		Vehicle components		Colours and symbols	
HG	TT-Evo heater	GM	Fan motor	rt	red
X1	6-pin heater connector	GR	Fan relay	sw	black
X2	2-pin heater connector	WG	Resistor group	ge	yellow
X10	4-pin connector Heater control	GS	Fan switch	gn	green
		IG2	10A fuse	or	orange
K1	Fan relay	BLWR	30A fuse	ws	white
F1	20A fuse			br	brown
F2	30A fuse				
F3	1A fuse				
F4	25A fuse				
				X	Cutting point
				Wiring colours may vary.	



Connect the wiring harness of heater **1** to wiring harness of passenger compartment **2** according to wiring diagram, with same colour wires connected to each other.

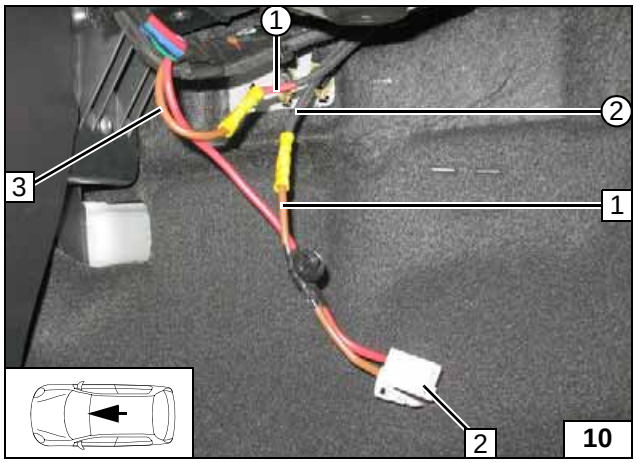
Connecting wiring harnesses



Mount 5mm shim on original vehicle stud bolt **2**.

1 Angle bracket
3 Flanged nut
4 K1 relay attached

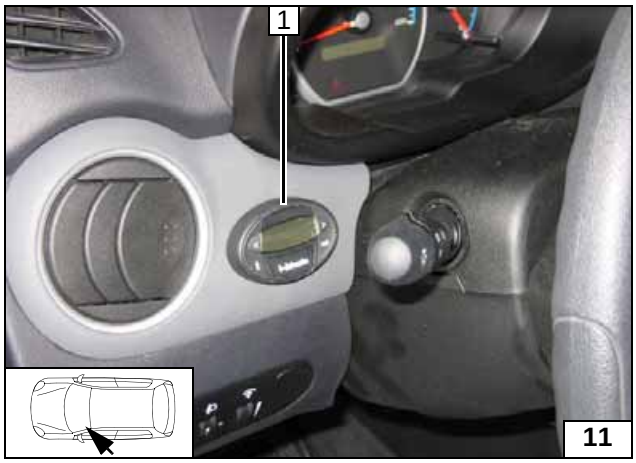
Installing fuse holder of passenger compartment



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

1 Brown (br) wire of fan motor connector
3 Brown(br) wire of fan relay
① Red (rt) wire of K1/87a
② Black (sw) wire of K1/30

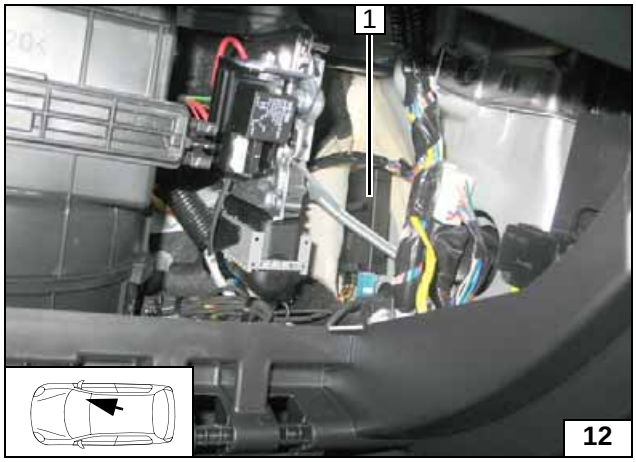
Connecting fan motor



Digital Timer

1 Digital timer

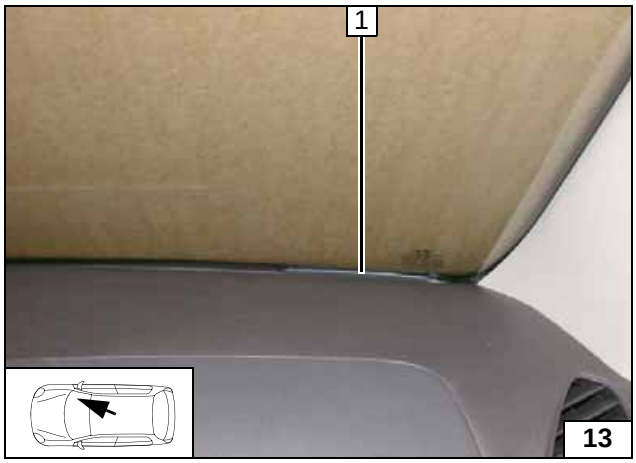
Installing digital timer



Remote Option (Telestart)

Fasten receiver **1** with adhesive tape.

Installing receiver



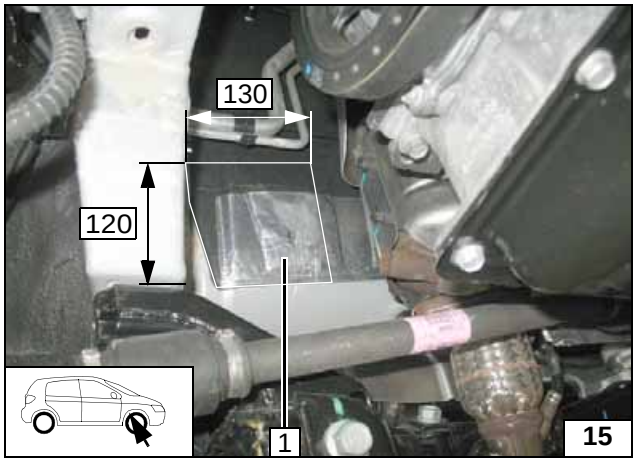
1 Antenna

Installing antenna

Preparing Installation Location

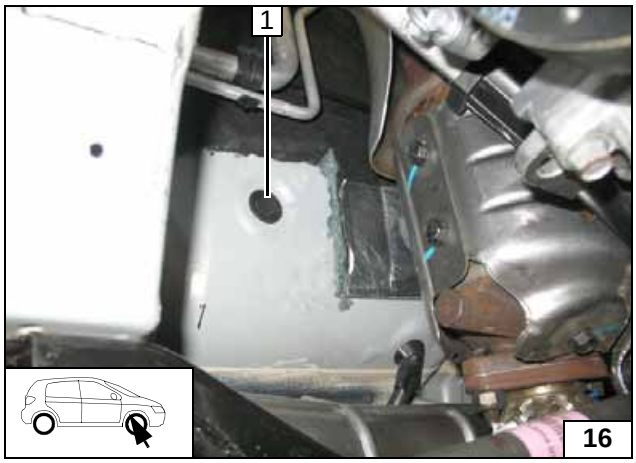
1 Floor covering

Folding back floor covering



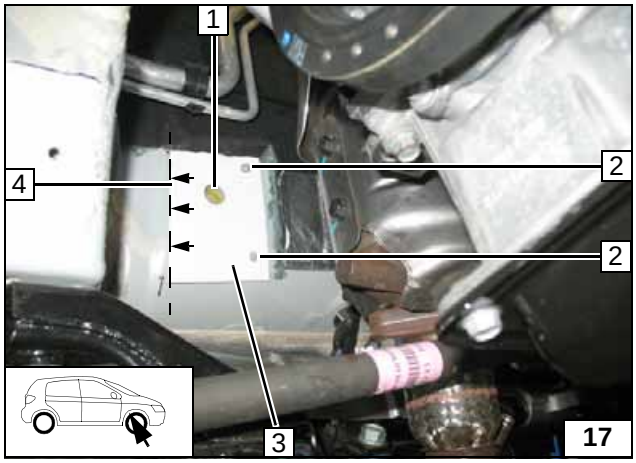
Cut out insulation mat **1** at the marking.

Cutting out insulation mat



Remove protective rubber plug **1**, will be re-used later.

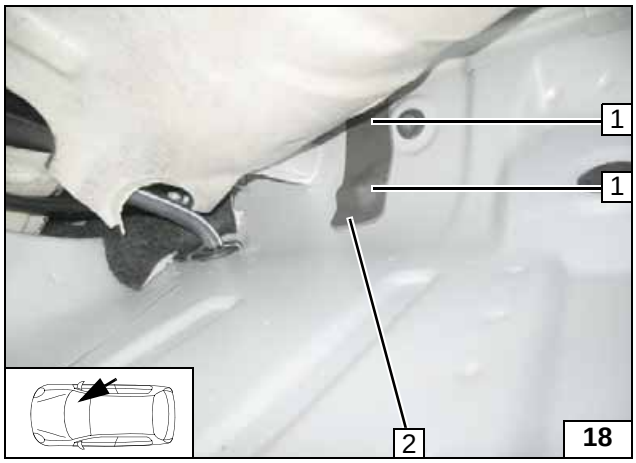
Removing protective rubber plug



Cut out template **3** and align with beading **4** and hole **1**. Copy hole pattern **2** [2x] of template.

2 6.5mm dia. hole [2x]

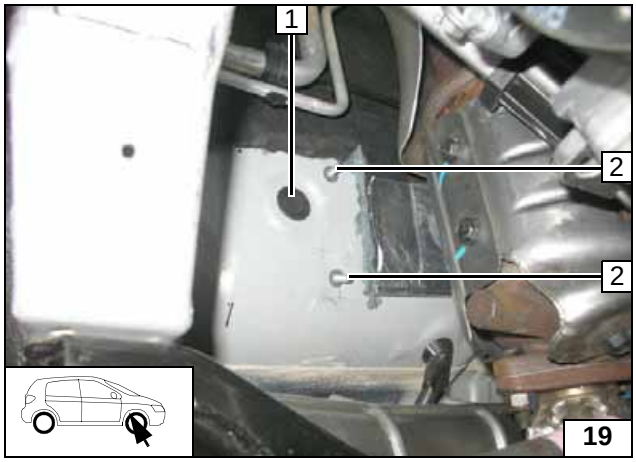
Holes in firewall



After inserting bolts **1**, paste foam strips **2** on the bolt heads as installation aids.

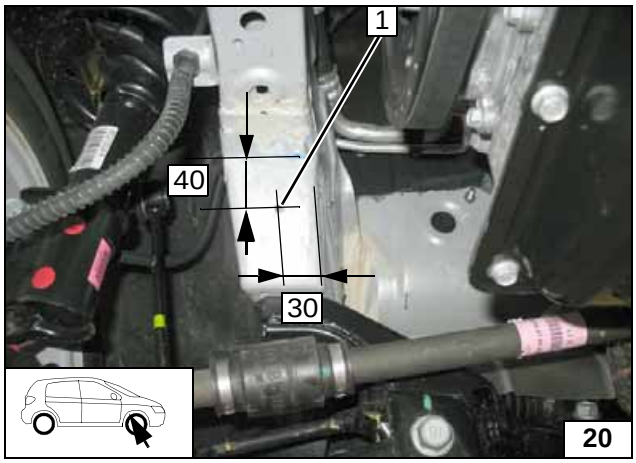
1 M6x20 bolt, large diameter washer [2x]

Preparing installation location



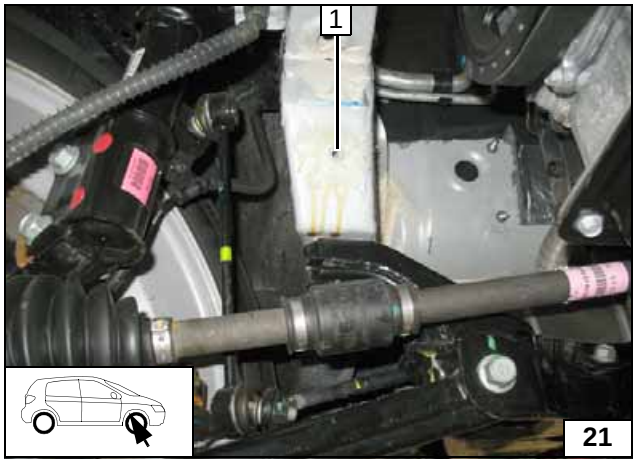
Insert protective rubber plug **1**. Mount pin lock **2** [2x] on M6x20 bolts.

Attaching fuses



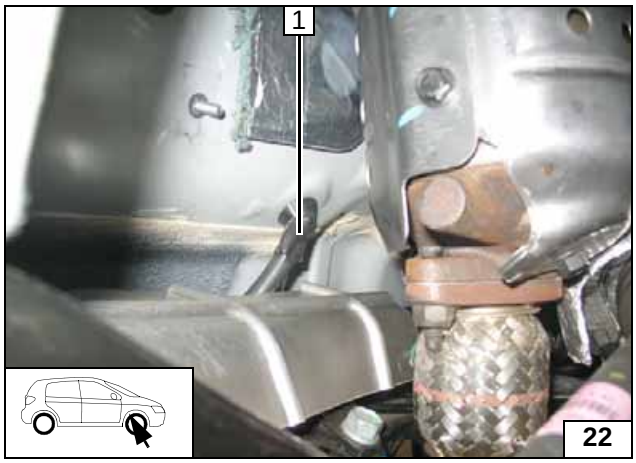
1 Copy hole pattern

Copying hole pattern



1 9.1 mm dia. hole, rivet nut

Installing rivet nut

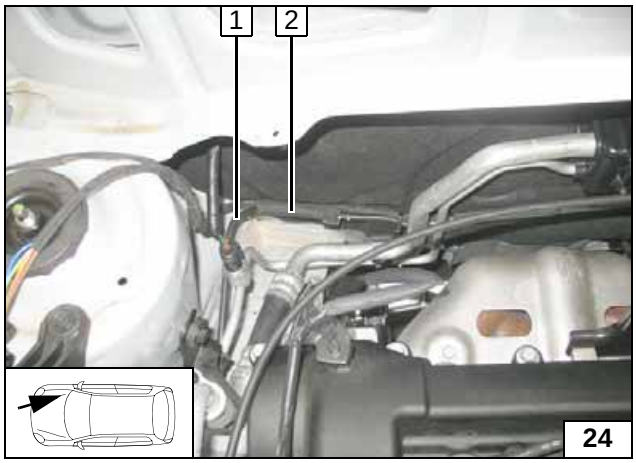


Route condensate drain **1** (air-conditioning system) as shown in the driving direction to the rear over the steering.

Routing drain pipe

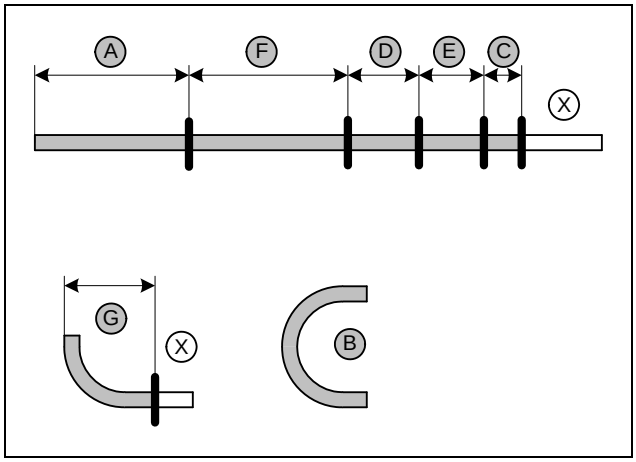
1 Condensate discharge

Routing drain pipe



Split 6x11mm hose **2** longitudinally and push it onto the brake line **1**.

Protection on brake line

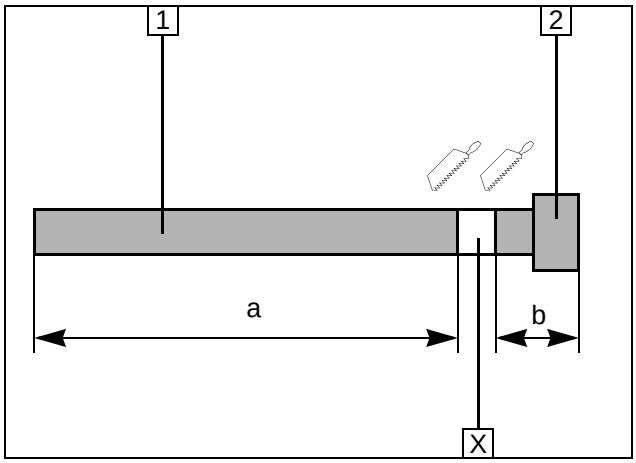


Preparing Heater

Discard section **X**.
Hose **B** = 180°, 18mm dia. moulded hose

A = 330
C = 60
D = 220
E = 240
F = 390
G = 60

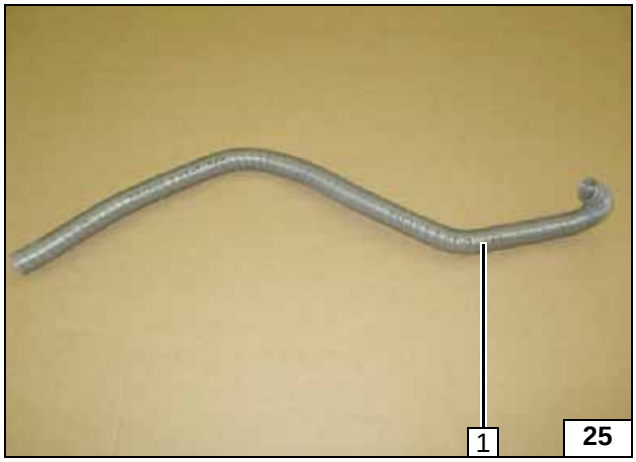
Cutting hoses to length



Discard section **X**.

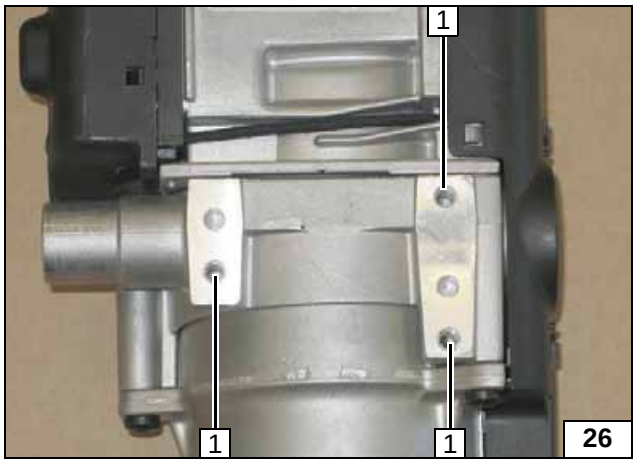
1 Exhaust pipe
a = 770
2 Exhaust end section
b = 70

Preparing exhaust pipe



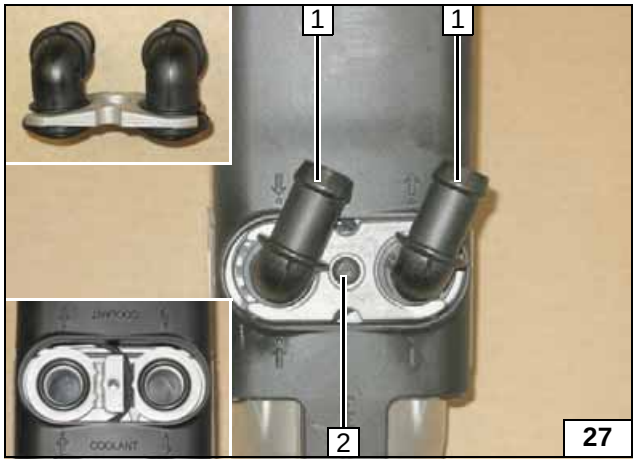
1 Exhaust pipe

Shaping exhaust pipe



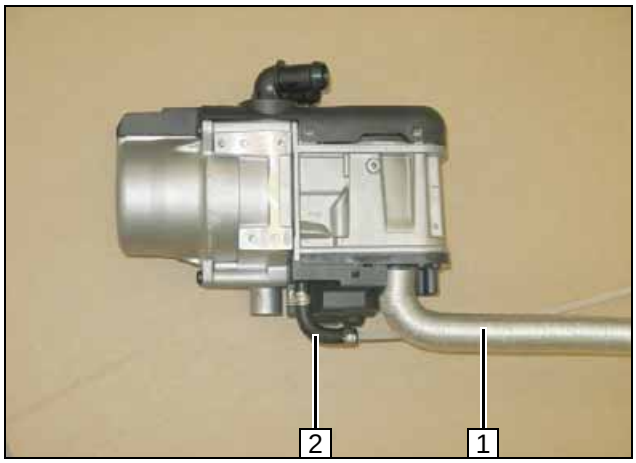
Tap threads at positions **1** on heater with 5x13mm self-tapping bolts.

Precutting thread



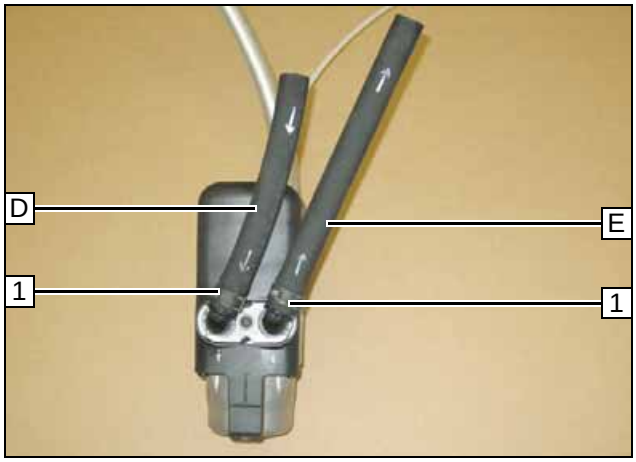
1 Water connection piece, sealing ring [2x]
2 Self-tapping bolt 5x13, retaining plate of water connection piece

Mounting water connection piece



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

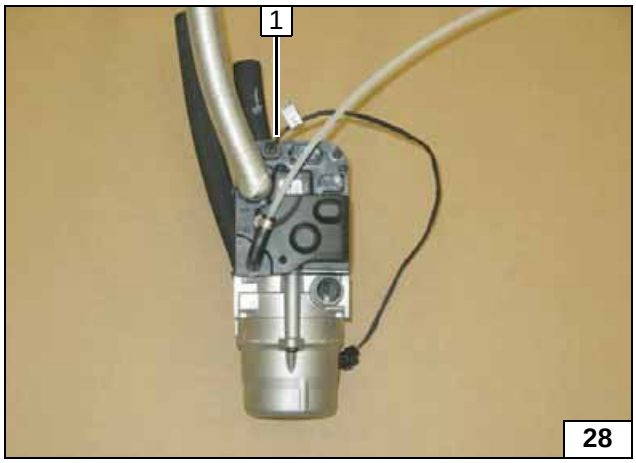
Preparing heater



Mark flow direction of hoses.

1 Spring clip 25 mm dia. [2x]

Premounting hoses



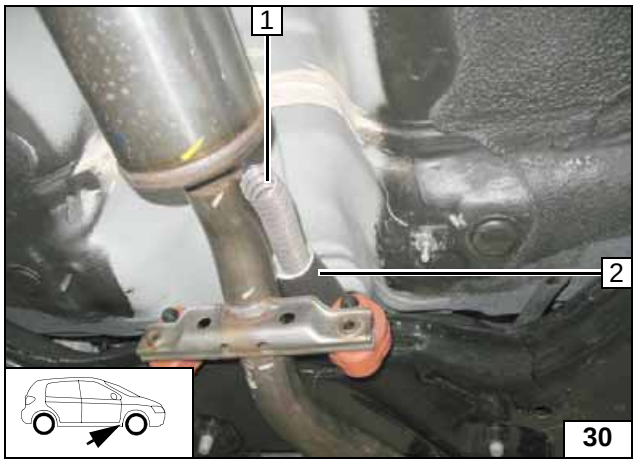
1 Wiring harness of circulating pump

Attaching wiring harness

Preparing to Install Heater

1 Exhaust pipe

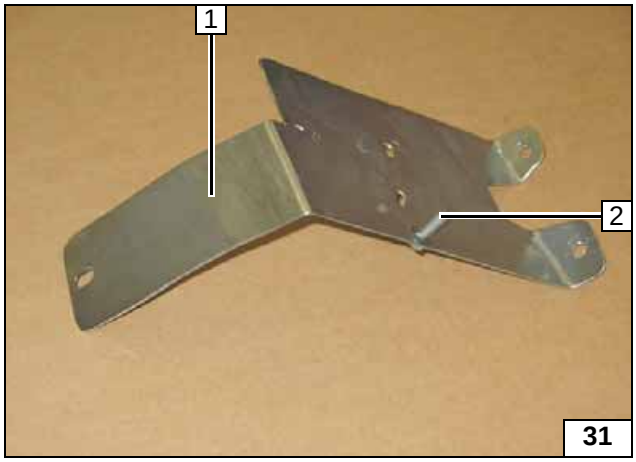
Routing exhaust pipe



1 Exhaust pipe
2 330mm exhaust-gas insulation

Routing exhaust pipe

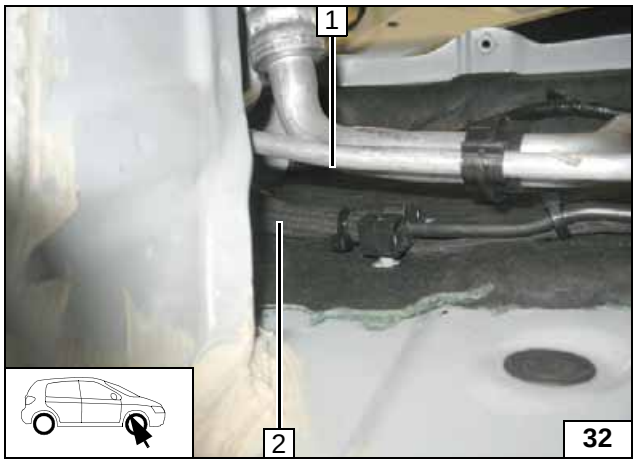
Preparing Bracket



1 Bracket
2 M6x20 bolt, pin lock

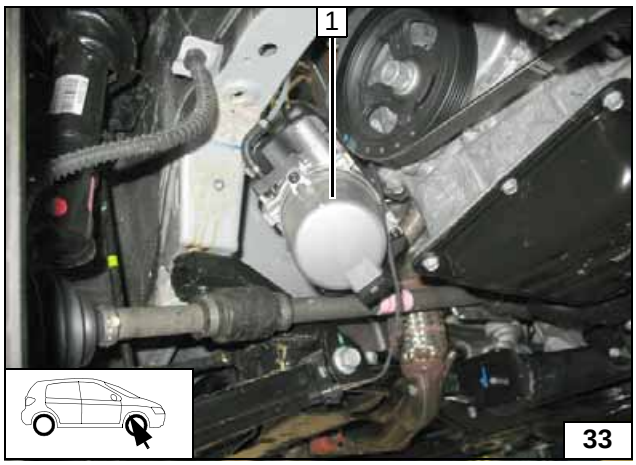
Preparing bracket

Installing Heater



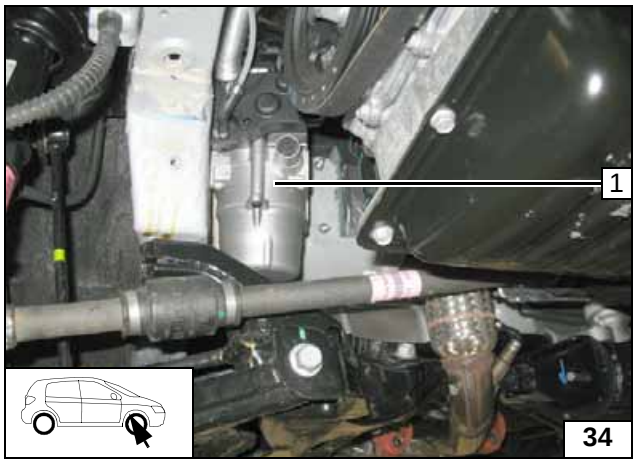
View of coolant hose pass through, hoses **D** and **E** are routed between position **1** and **2**.

Preparing installation



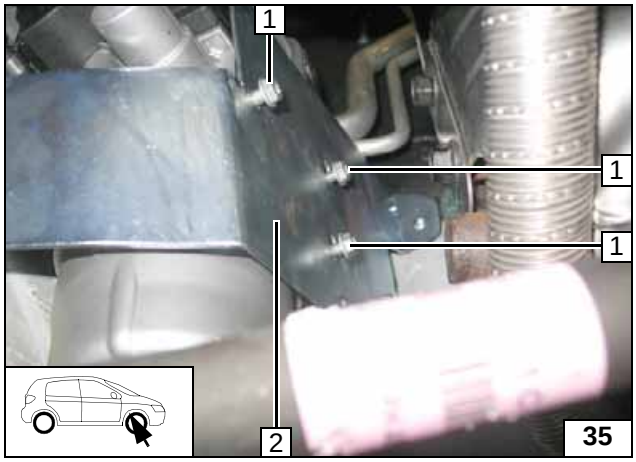
Turn heater **1** during installation appropriately, it can be pushed into one position only.

Inserting heater



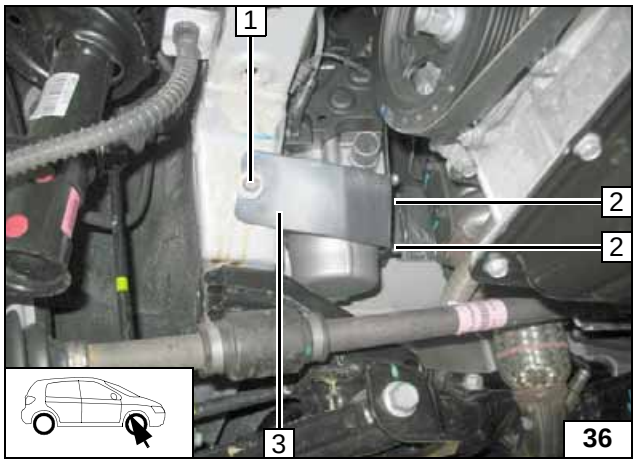
Position heater **1** at the installation location. Mind pass through of hoses!

Mounting heater



Position bracket **2** of heater and loosely mount with 5x13 self-tapping bolts **1** [3x].

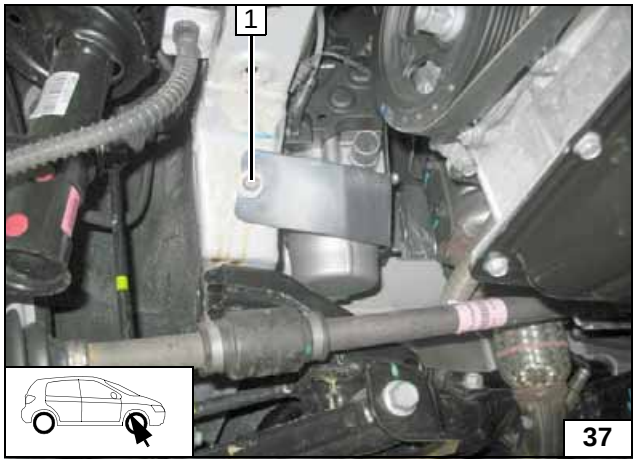
Loosely installing heater



Mount bracket **3** on premounted bolts **2** and unscrew flanged nuts loosely.

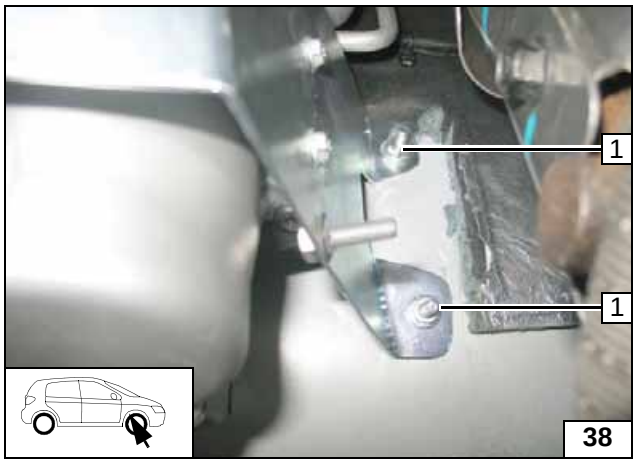
1 Loosely install M6x20 bolt, spring lock-washer, large diameter washer

Loosely installing heater



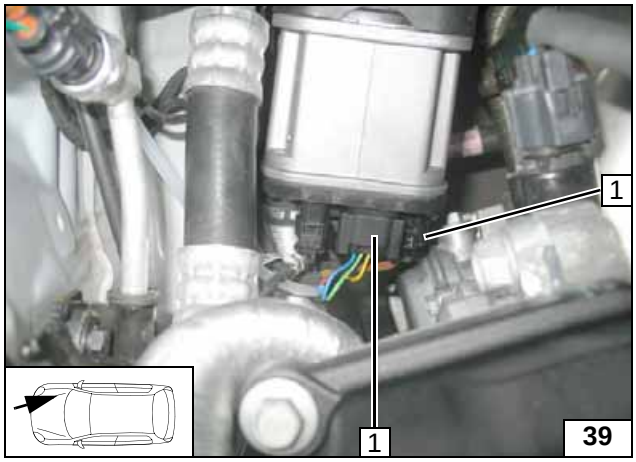
1 Tighten M6x20 bolt.

Mounting heater



1 Tighten flanged nut [2x]

Mounting heater

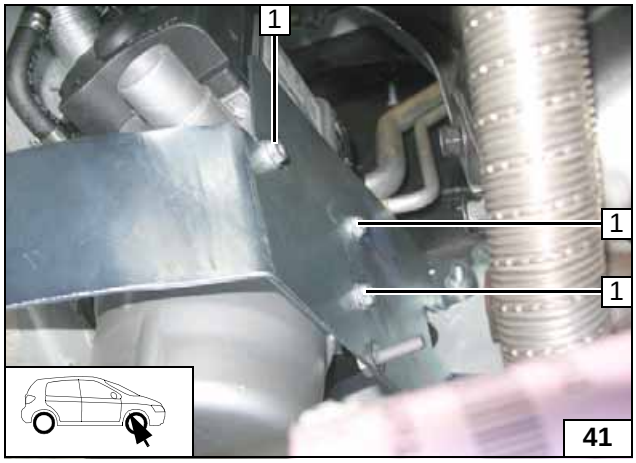


1 Wiring harness of heater [2x]

Attaching wiring harness

Align heater, mind the distance to the A/C lines.

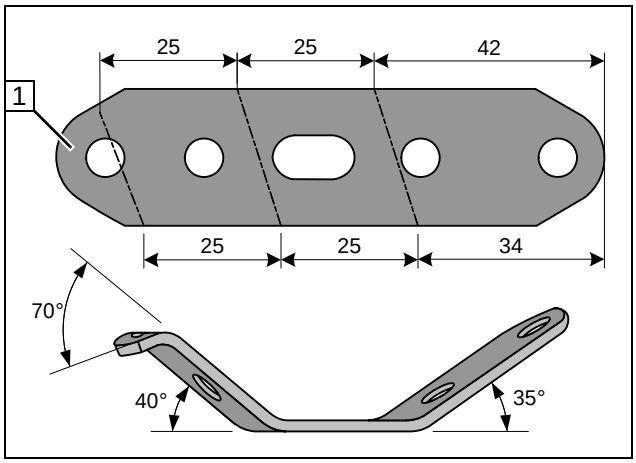
Aligning heater



1 Tighten 5x13 bolts [3x]!

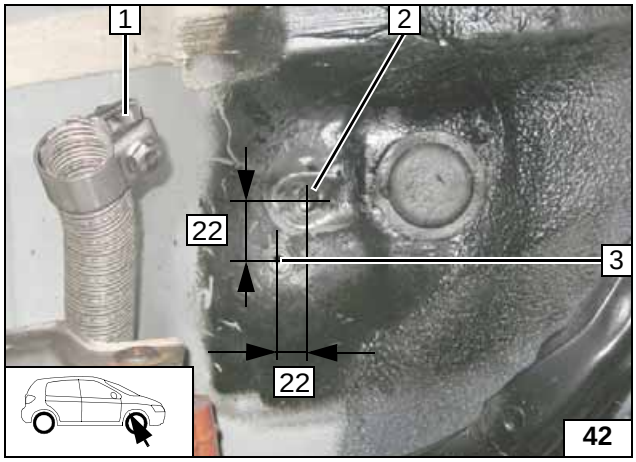
Mounting heater

Exhaust Gas



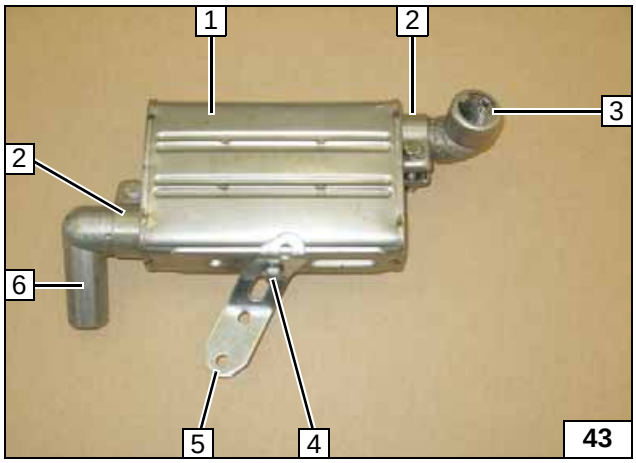
1 Perforated bracket

Angling down perforated bracket



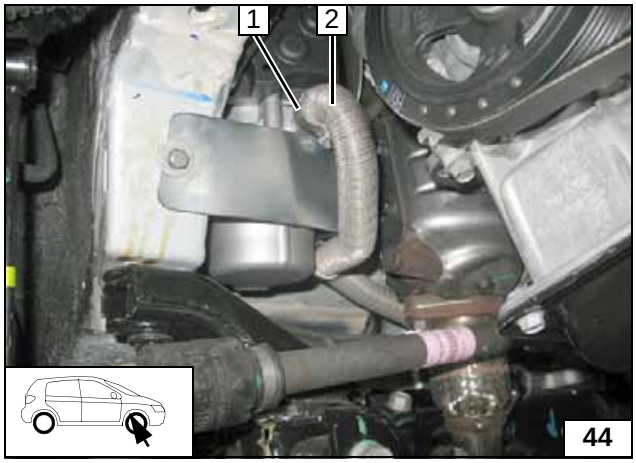
1 Hose clamp placed loosely on exhaust pipe
2 Original vehicle stud bolt
3 9.1 mm dia. hole, rivet nut

Installing rivet nut



1 Exhaust silencer
2 Hose clamp [2x]
3 Exhaust end section
4 M6x16 bolt, spring lockwasher
5 Perforated bracket
6 Exhaust elbow

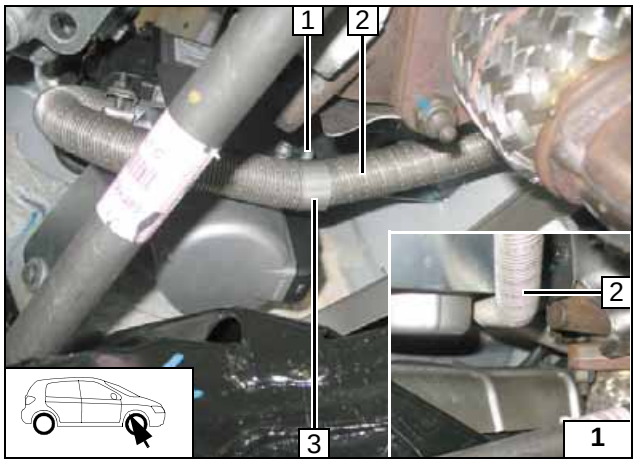
Premounting silencer



Ensure sufficient distance from neighbouring components.

1 Hose clamp
2 Exhaust pipe

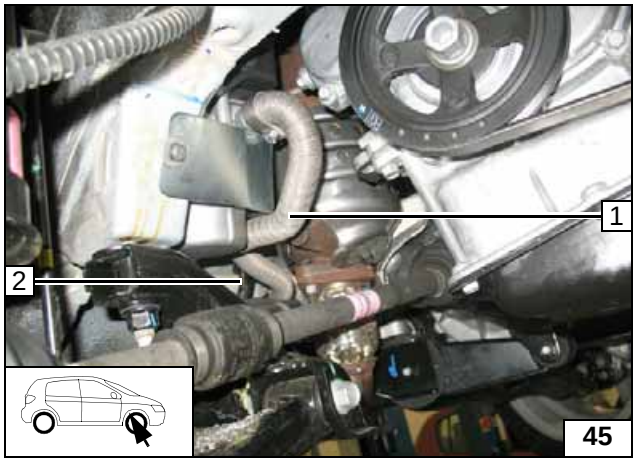
Mounting exhaust pipe



Ensure sufficient distance from neighbouring components.

1 M6x20 bolt, flanged nut
2 Exhaust pipe
3 P-clamp

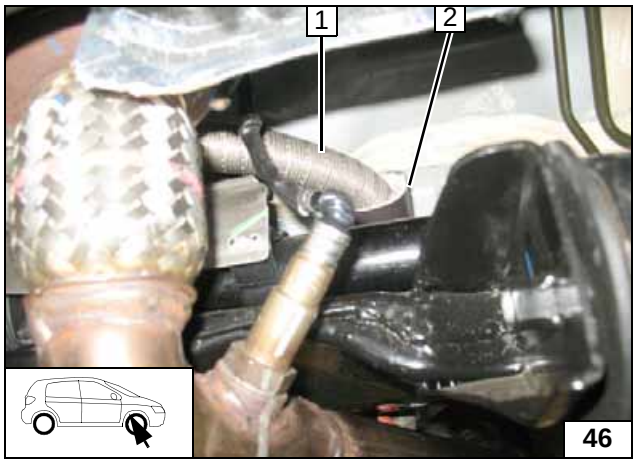
Fastening exhaust pipe



Ensure sufficient space from condensate drain **2** and parts of the steering.

1 Exhaust pipe

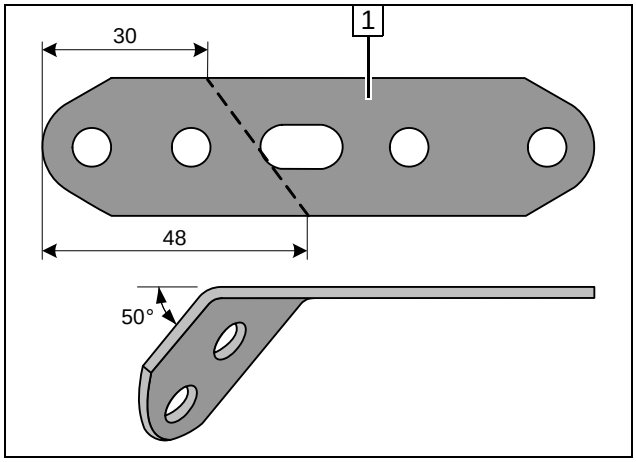
Routing of exhaust pipe



Ensure sufficient distance from neighbouring components.

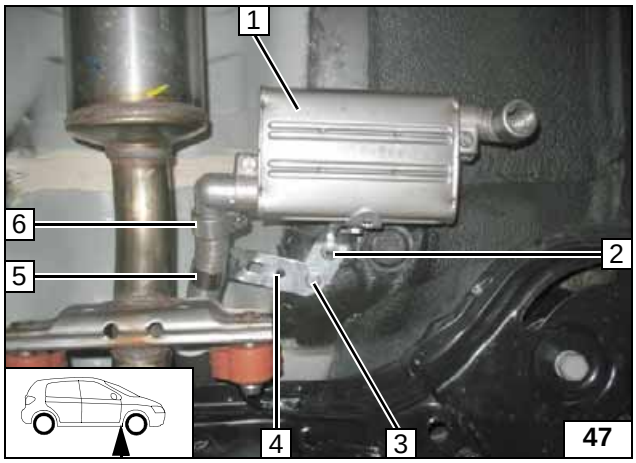
1 Exhaust pipe
2 Align exhaust-gas insulation

Routing of exhaust pipe



1 Perforated bracket

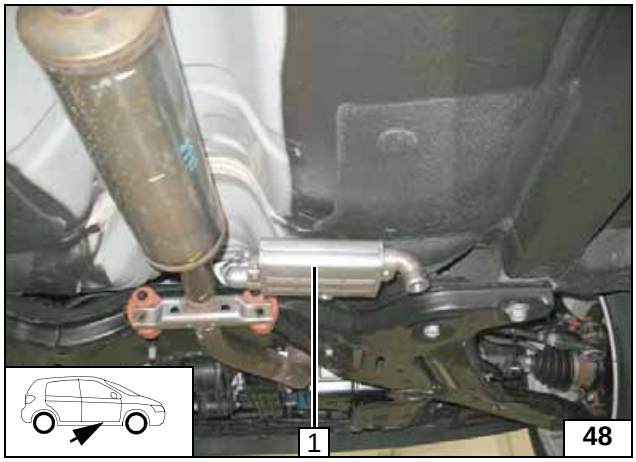
Angling down perforated bracket



Ensure sufficient distance from neighbouring components.

1 Exhaust silencer
2 Original vehicle stud bolt, flanged nut
3 M6x20 bolt, spring lockwasher
4 Perforated bracket
5 Pipe clamp, M6x20 bolt, flanged nut
6 Hose clamp

Mounting silencer



Ensure sufficient distance (approx. 30mm) between exhaust silencer **1** and vehicle underbody.

Aligning silencer

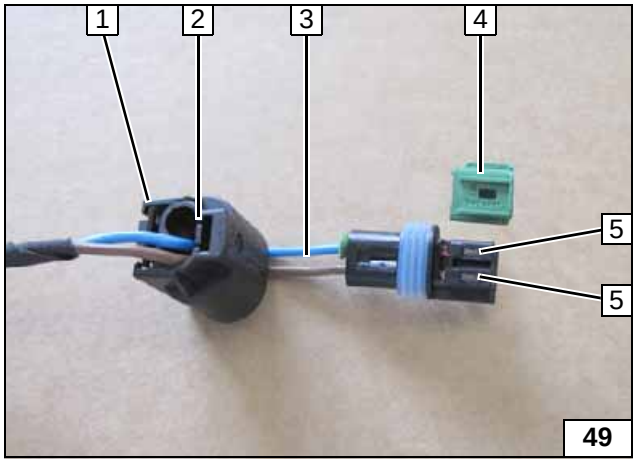
Fuel

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

Catch any fuel running off in a suitable container.

Install fuel line and metering pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties.
Mount the fuel line and wiring harness with rub protection on sharp edges.

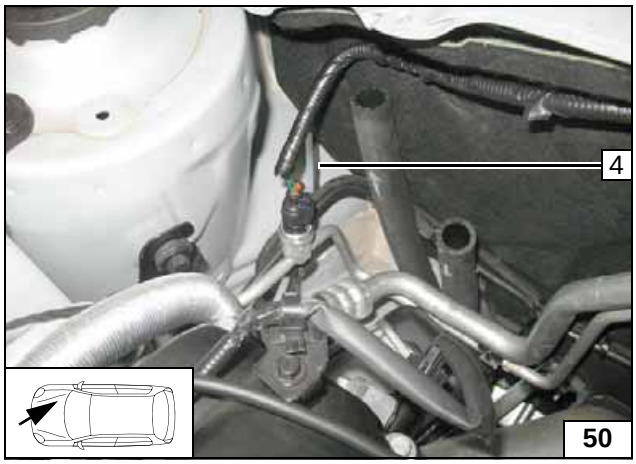
WARNING!
The fuel line and wiring harness are routed to the metering pump as shown in the wiring harness routing diagram.



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

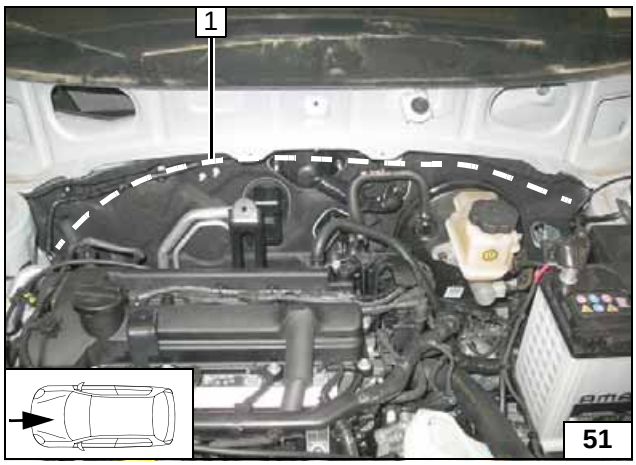
1 Connector housing
2 Lock
3 Blue / brown (bl / br) wires
4 Coding
5 Timer lock

Dismantling connector



Route fuel line **1** together with wiring harness of metering pump behind the insulation mat.

Routing in engine compartment



Route fuel line **1** together with wiring harness of metering pump behind the insulation mat to the left vehicle side.

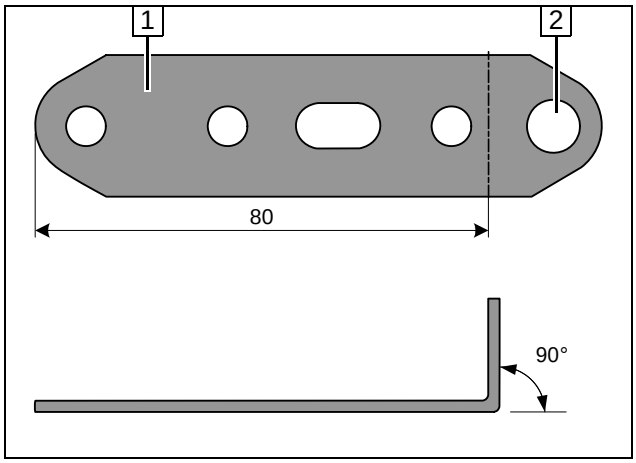
Routing in engine compartment

Route fuel line **1** together with wiring harness of metering pump in 10mm dia. corrugated tube to vehicle underbody.

Routing in engine compartment

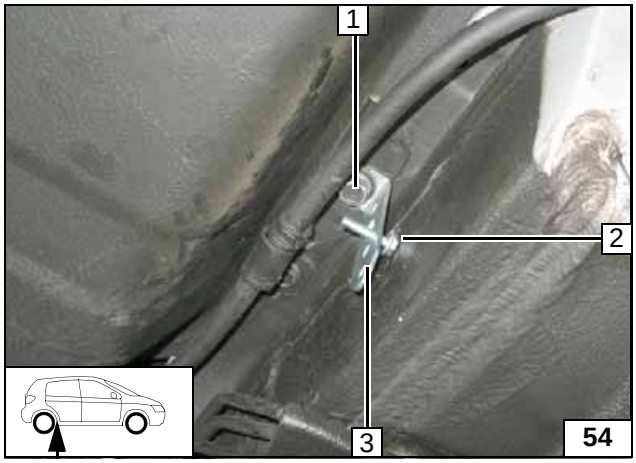
Route fuel line **1** together with wiring harness of metering pump in 10mm dia. corrugated tube along original vehicle fuel line on the vehicle underbody to the installation location of the metering pump.

Routing underbody



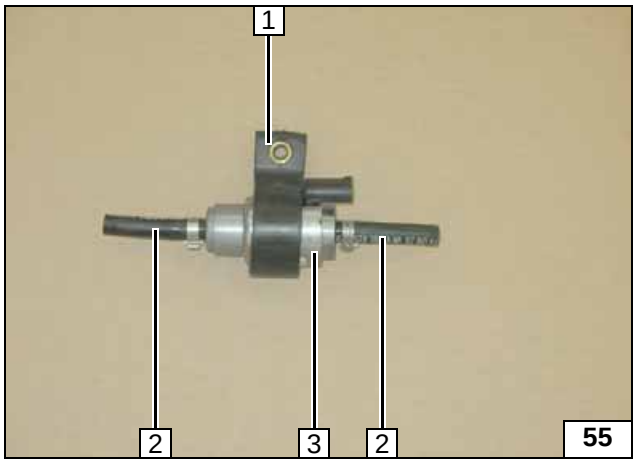
1 Perforated bracket
2 Drill out 9mm dia. hole

Preparing perforated bracket



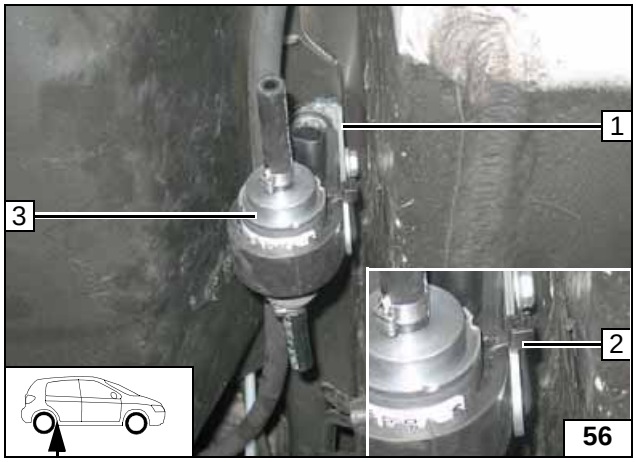
1 Original vehicle bolt
2 Install M6x25 bolt
3 Perforated bracket

Mounting perforated bracket



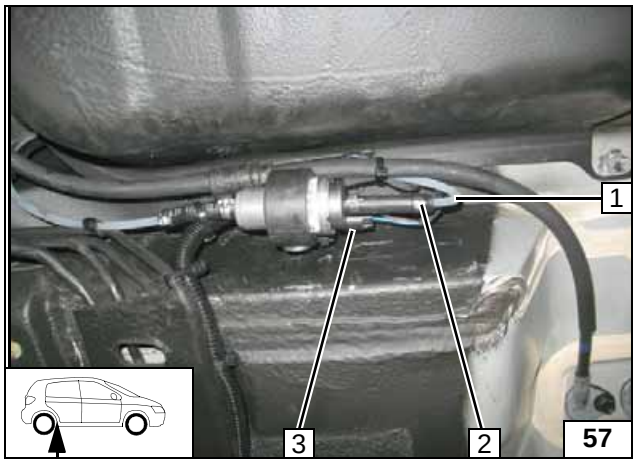
1 Mounting of metering pump
2 Hose section, 10 mm dia. clamp [2x each]
3 Metering pump

Premounting metering pump



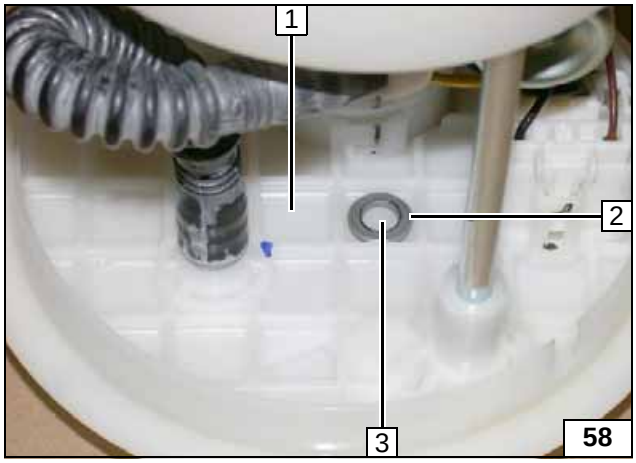
1 Perforated bracket
2 Cable tie
3 Metering pump

Mounting metering pump



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

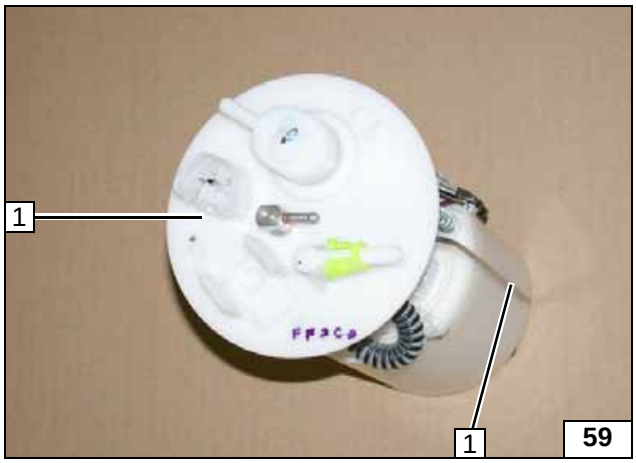
Connecting metering pump



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

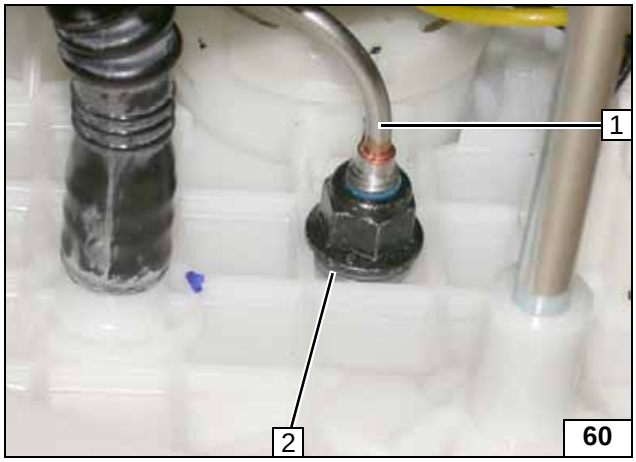
2 Washer outer dia. = 11.8 mm
3 Copy hole pattern, 6 mm dia. hole

Fuel extraction



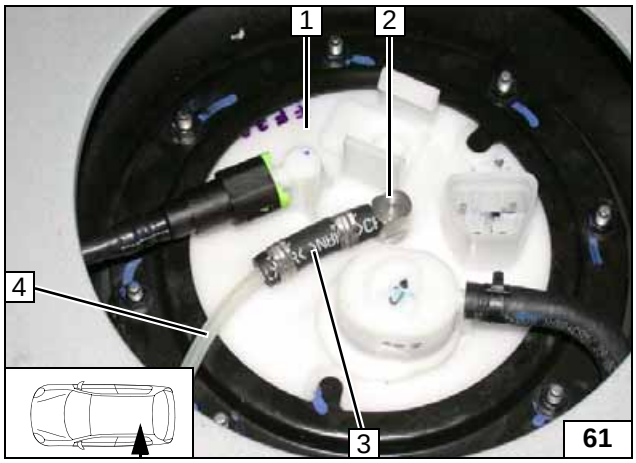
Shape fuel standpipe **1** according to template, cut to length and install. During installation, install three washers according to the following figure to serve as height adjustment.

Inserting fuel standpipe



1 Fuel standpipe
2 Washer [3x]

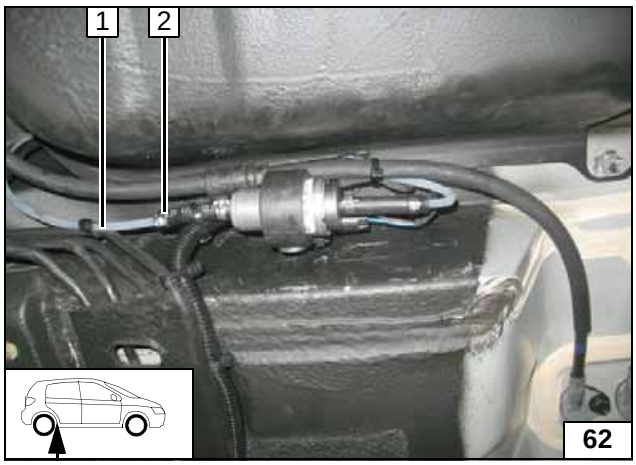
Inserting fuel standpipe



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

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

Connecting fuel line



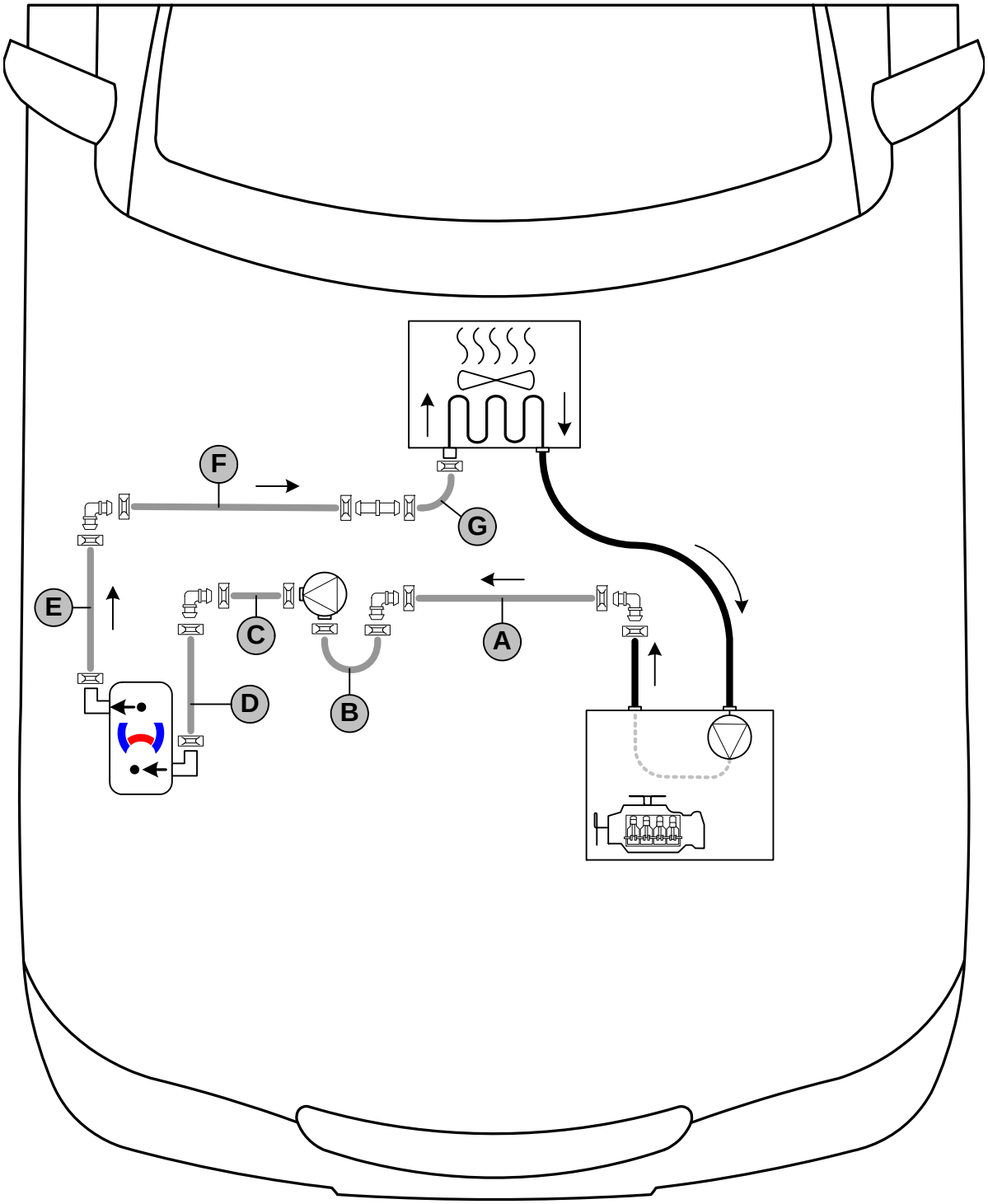
1 Fuel line of fuel standpipe
2 10mm dia. clamp

Connecting metering pump

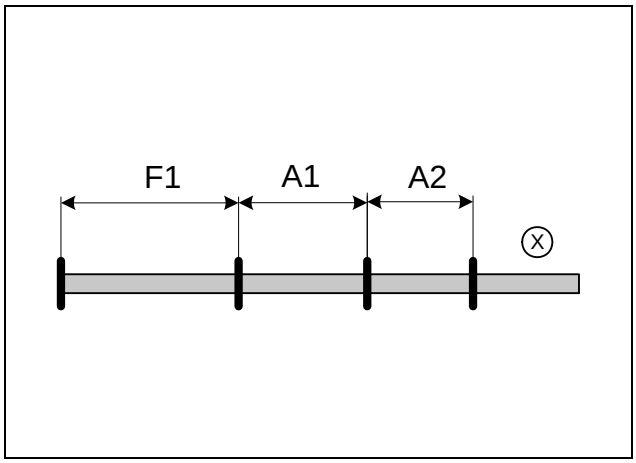
Coolant Circuit

WARNING!
Any coolant running off should be collected using a suitable container. Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that other hoses cannot be damaged. The heater must be filled with coolant when installing the hoses.
The connection should be "inline" based on the following diagram:

Hose installation diagram



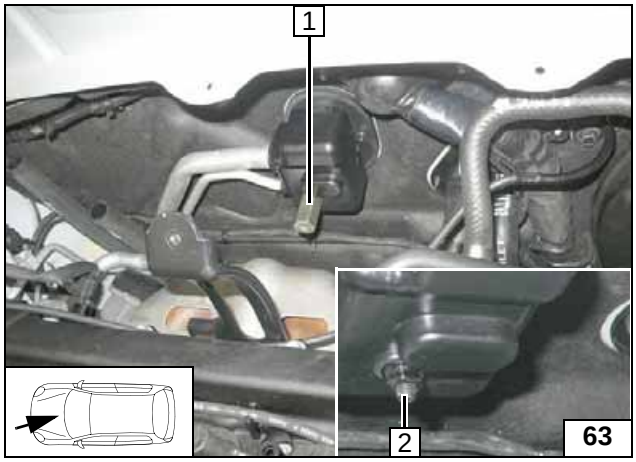
All spring clips without a specific designation = 25 mm dia.
All connecting pipes and = 18x18mm dia.



Discard section **X**.

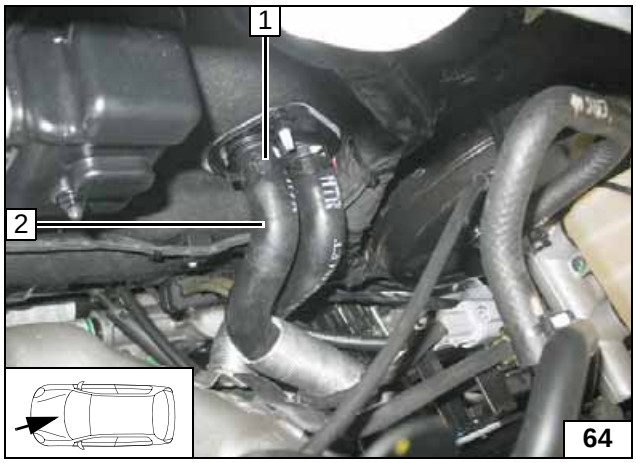
F1 = 180
A1 = 150
A2 = 100

Cutting heat protection hose to length



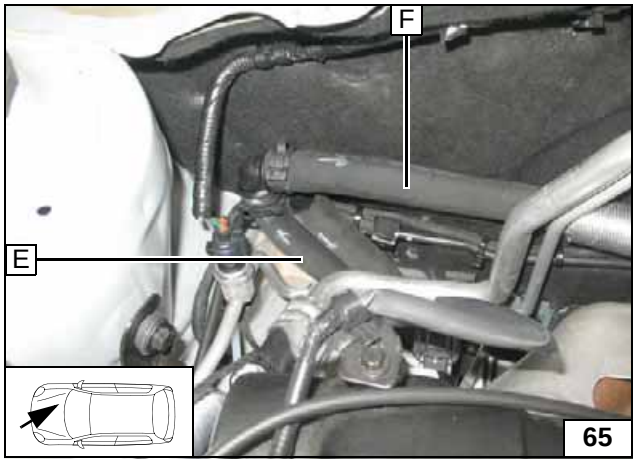
Remove flanged nut from the original vehicle stud bolt **2** and install the M6x30 spacer nut **1** on the stud bolt.

Preparing installation of circulating pump

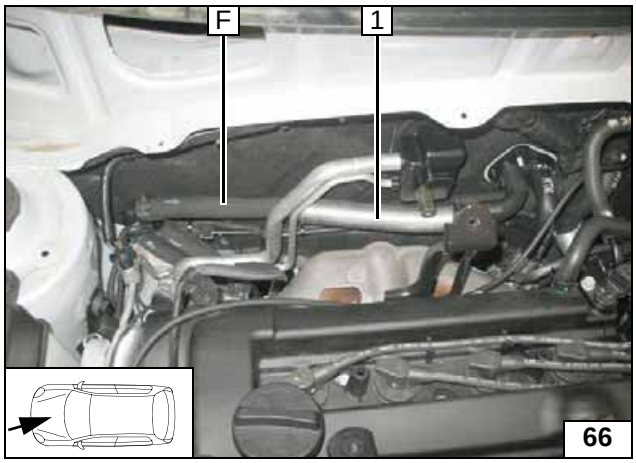


Pull off hose of heat exchanger inlet **2**. Discard spring clip **1**.

Cutting point

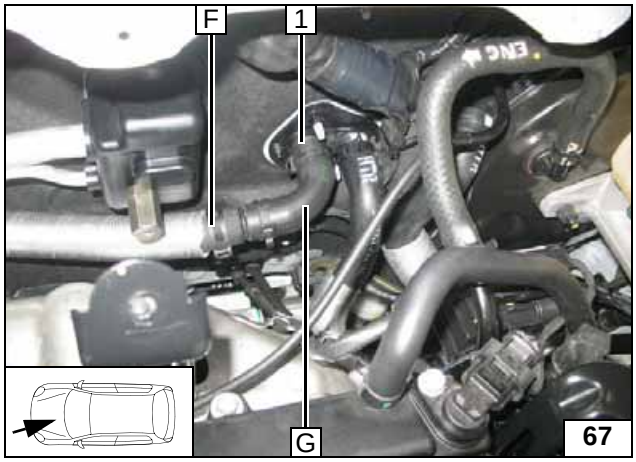


Connecting heater



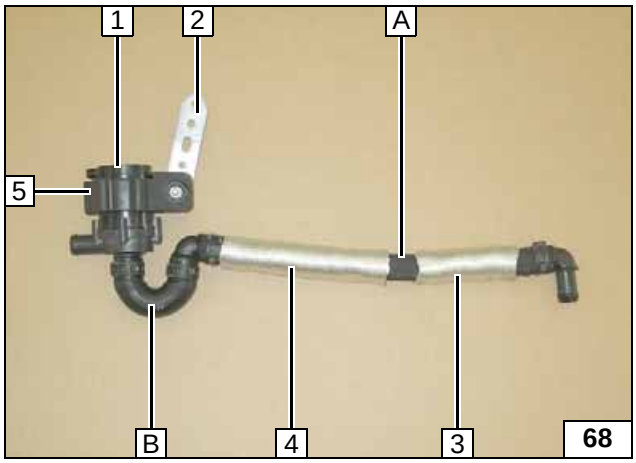
1 Push on and align heat protection hose F1

Routing in engine compartment



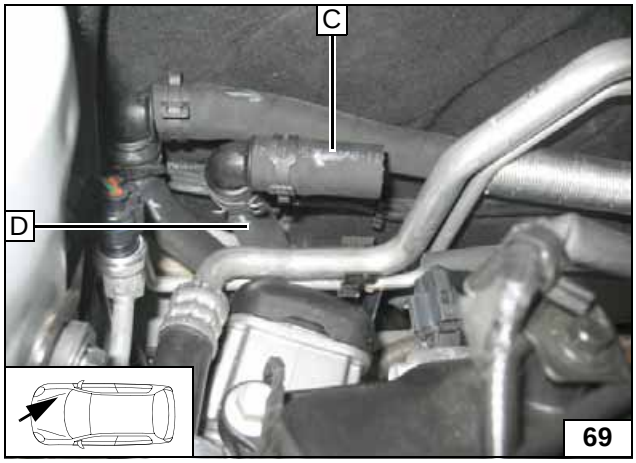
1 Connection piece of heat exchanger inlet

Connecting heat exchanger inlet

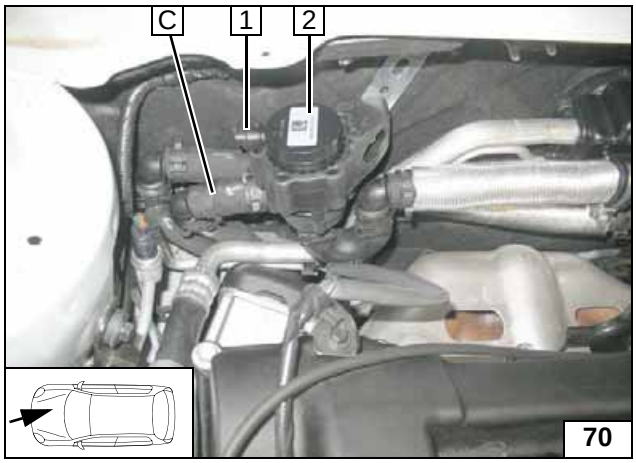


1 Circulating pump
2 Perforated bracket
3 Heat protection hose A2
4 Heat protection hose A1
5 Circulating pump mounting, M6x25 bolt, flanged nut

Premounting circulating pump

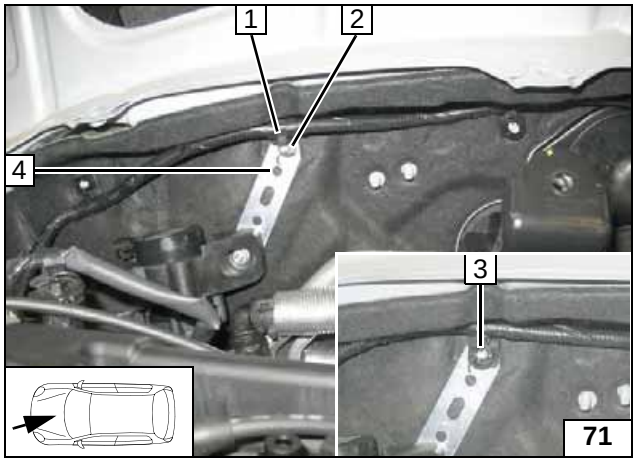


Connecting heater



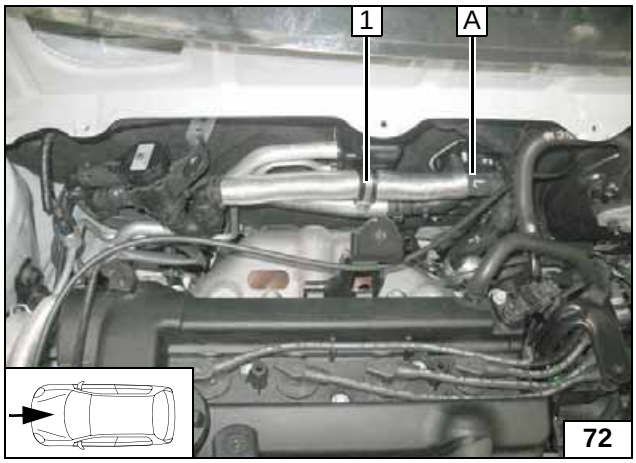
1 Wiring harness of circulating pump
2 Circulating pump

Connecting circulating pump



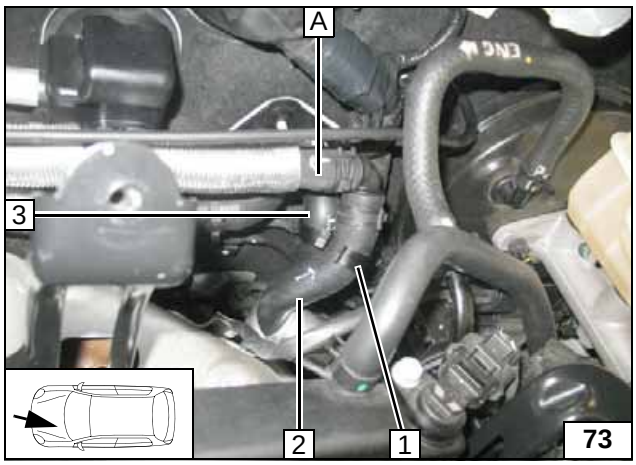
1 Bracket of original vehicle wiring harness pulled off of stud bolt
2 Stud bolt, flanged nut
3 Bracket fixed after stud bolt installation
4 Perforated bracket

Mounting circulating pump



1 25mm dia. rubber-coated clamp, M6x16 bolt, spring lockwasher, M6x30 spacer nut

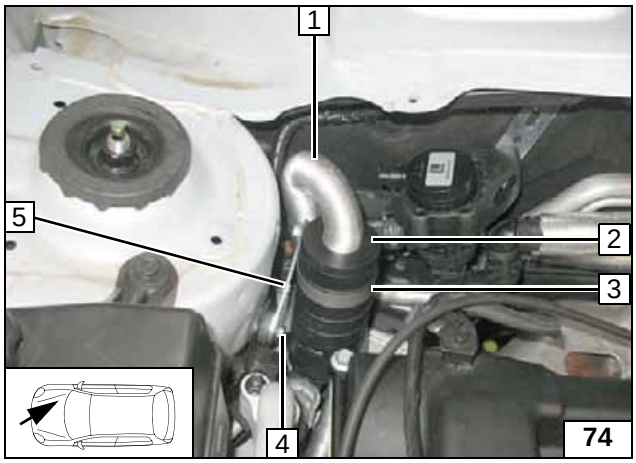
Routing in engine compartment



Install hose bracket **1** between hose on heat exchanger outlet **3** and hose on engine outlet **2**.

2 Hose of engine outlet

Connecting engine outlet



Combustion Air

Ensure sufficient distance from neighbouring components.

1 Combustion air pipe
2 Silencer
3 51mm dia. clamp, M5x16 bolt, large diameter washer, flanged nut
4 Original vehicle bolt
5 Perforated bracket

Mounting silencer

Final Work

WARNING!
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.**
- **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 refueling" signboard near the filler neck.**
- **See installation instructions for initial start-up and function check.**

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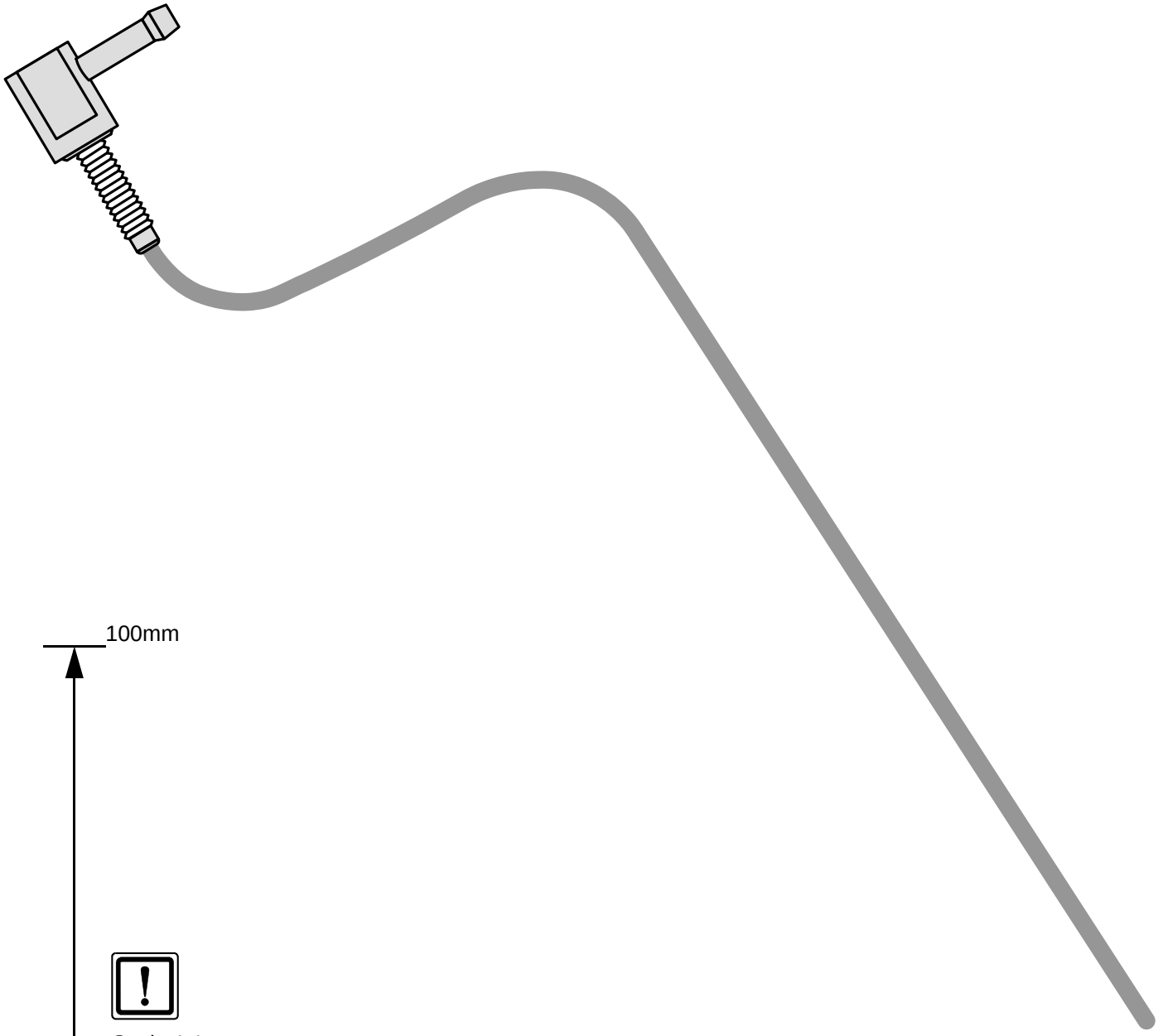
Germany
Internet: www.webasto.com
Technical Extranet:
http://dealers.webasto.com

Template for Fuel Standpipe

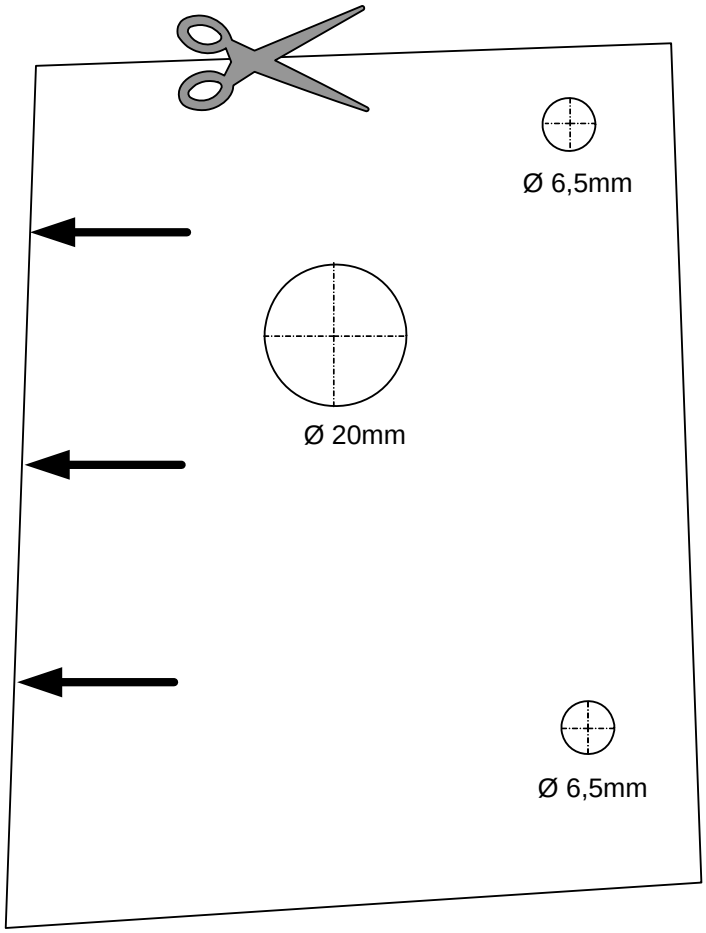


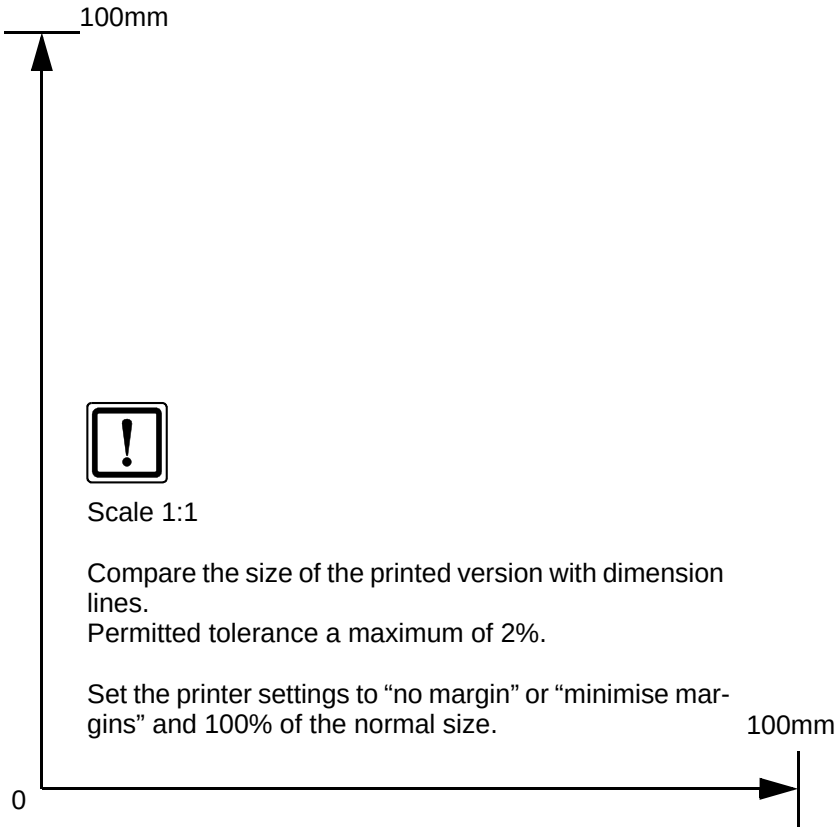
Scale 1:1

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

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

Template for Bracket





Scale 1:1

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

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

Operating Instructions for End Customer

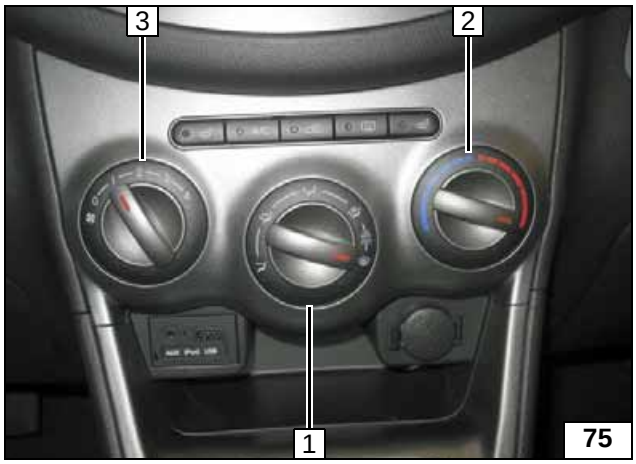
Please remove this page in case of manual air-conditioning and add it to the vehicle operating instructions.

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 the vehicle has passenger compartment monitoring this must be deactivated in addition to the vehicle settings for the heating operation.
Instructions for de-activation may be obtained from the operating instructions of the vehicle.

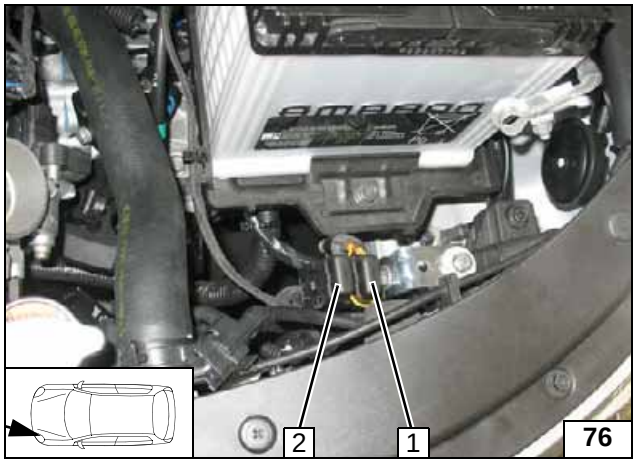
Before parking the vehicle, make the following settings:

A/C control panel



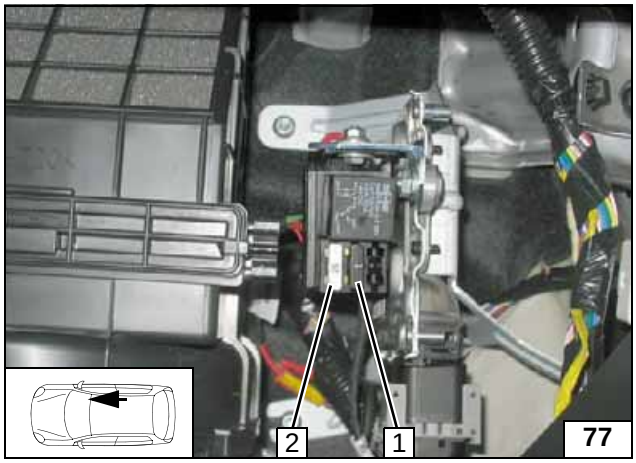
1 Air outlet to windscreen
2 Set temperature to "max."
3 Set fan to level "1", max. "2"

Fuses of engine compartment



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

Fuses of passenger compartment



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