

Water Heater

Thermo Top Evo 4 Parking Heater



Installation Documentation

Hyundai i10

Validity

Manufacturer	Model	Type	EG-BE No. / ABE
Hyundai	i10	P/C	e11 * 2007 / 46 * 1008 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm ³	Engine code
1.0 B	Petrol	SG	49	998	G3LA
1.2 B	Petrol	SG	64	1248	G4LA

SG = manual transmission

From Model Year 2014
Left-hand drive vehicle

Verified equipment variants: Manual air-conditioning
 Front fog light

Not verified: Automatic air-conditioning

Total installation time: approx. 6.5 hours

Hyundai i10

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Necessary Components

- Basic delivery scope of *Thermo Top Evo 4* in accordance with price list
- Installation kit for Hyundai i10 2014 Petrol **1322337A**
- Heater control in accordance with price list and upon consultation with end customer
- In case of Telestart, indicator lamp in accordance with price list and in consultation with end customer

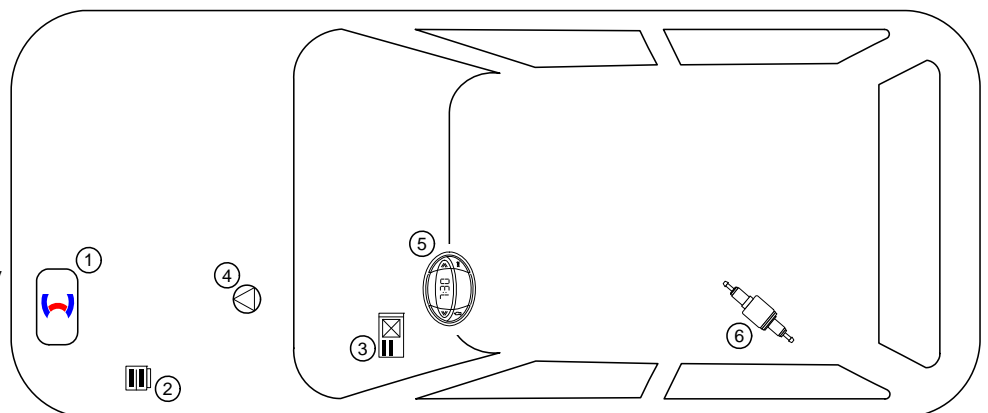
Installation instructions:

- Arrange for the vehicle to be delivered with the tank only about $\frac{1}{4}$ full.
- The installation location of the push button for Telestart or Thermo Call must be agreed with the end customer.
- Depending on the space requirement and the manufacturer's instructions for the vehicle, we recommend the use of a vehicle battery with a higher electrical capacity.

Installation Overview

Legend:

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



Information on Total Installation Time

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

The total installation time may vary for vehicle equipment other than provided.

Information on Operating and Installation Instructions

1 Important Information (not complete)

1.1 Installation and Repair



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



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



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

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

1.2 Operation

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

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

Always switch off the heater before refuelling.

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

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

1.3 Please note

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

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

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

Important

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

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

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

Installation should be carried out according to the general, standard rules of technology. Unless specified otherwise, fasten hoses, lines and wiring harnesses to original vehicle lines and wiring harnesses using cable ties. Insulate loose wire ends and tie back. Connectors on electronic components must audibly snap into place during assembly.

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

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

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

When installing an PWM-Gateway, the corresponding settings must be checked or adjusted before the installation.

2 Statutory regulations governing installation

Guidelines	Thermo Top Evo
Heating Directive ECE R122	E1 00 0258
EMC Directive ECE R10	E1 04 5627

Note

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

Important

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

Note

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

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

Beginning of excerpt.

ANNEX VII

REQUIREMENTS FOR COMBUSTION HEATERS AND THEIR INSTALLATION

1. GENERAL REQUIREMENTS

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

2. VEHICLE INSTALLATION REQUIREMENTS

2.1. Scope

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

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

2.2. Positioning of heater

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

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

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

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

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

2.3. Fuel supply

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

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

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

2.4. Exhaust system

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

2.5. Combustion air inlet

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

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

2.6. Heating air inlet

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

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

2.7. Heating air outlet

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

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

End of excerpt.

In multilingual versions the German language is binding.

Information on Validity

This installation documentation applies to Hyundai i10 Petrol vehicles - for validity, see page 1 - from model year 2014 and later, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to this installation documentation.

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

Technical Information

Special Tools

- Hose clamp pliers for 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 and 5x11 heater stud 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.

Special features are highlighted using the following symbols:

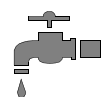
Mechanical system



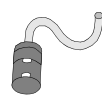
Electrical system



Coolant circuit



Combustion air



Fuel



Exhaust gas



Software



Specific risk of injury or fatal accidents.



Specific risk of damage to components.



Specific risk of fire and explosion



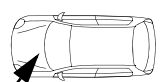
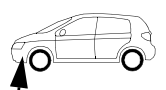
Reference to general installation instructions of the Webasto components or to the manufacturer's vehicle-specific documents.



Reference to a special technical feature



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



Hyundai i10

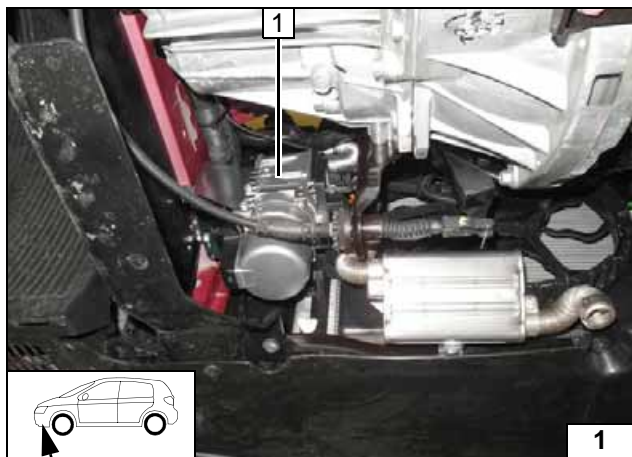
Preliminary Work

Vehicle

- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Remove the coolant expansion tank.
- Disconnect and completely remove the battery together with the carrier.
- Remove the lateral engine compartment trim.
- Remove the underbody trim under the bumper.
- Remove the rear bench seat.
- Open the right-hand tank-fitting service lid.
- Remove the fuel-tank sending unit in accordance with the manufacturer's instructions.
- Remove the instrument panel trim under the steering wheel.

Heater

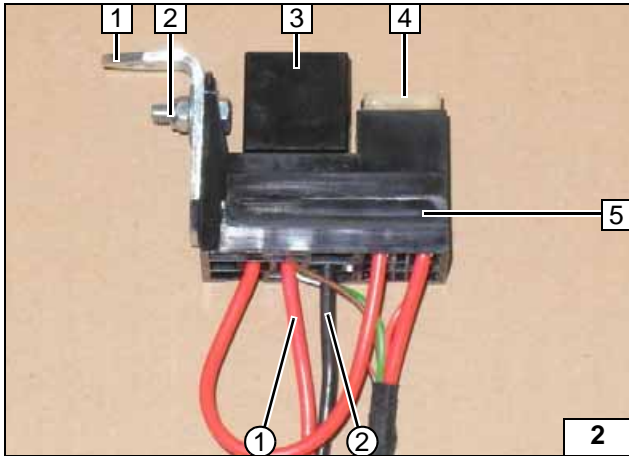
- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) in the appropriate place in the engine compartment.



Heater Installation Location

1 Heater

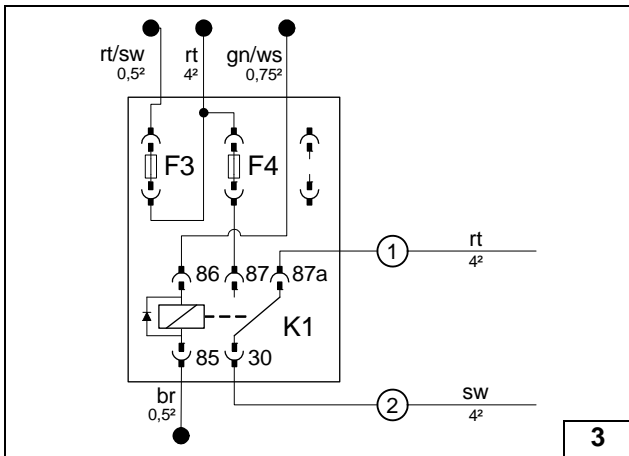
Installation
location



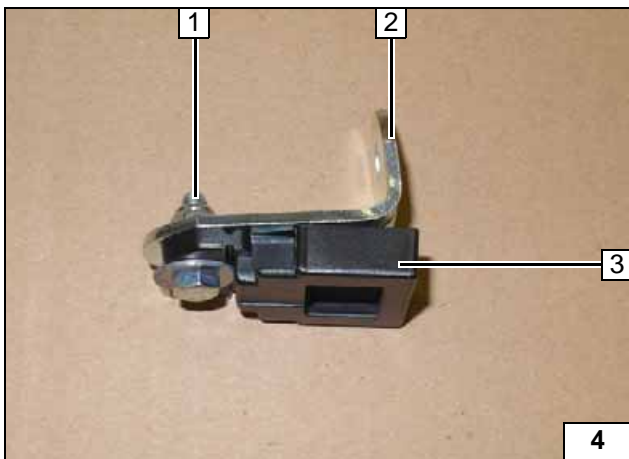
Preparing Electrical System

- 1 Angle bracket
- 2 M5x16 bolt, large diameter washer [2x], nut
- 3 K1 relay
- 4 25 A fuse F4
- 5 Passenger compartment relay and fuse holder
- ① Mount red (rt) wire of K1/87a
- ② Mount black (sw) wire of K1/30

Preparing passenger compartment relay and fuse holder

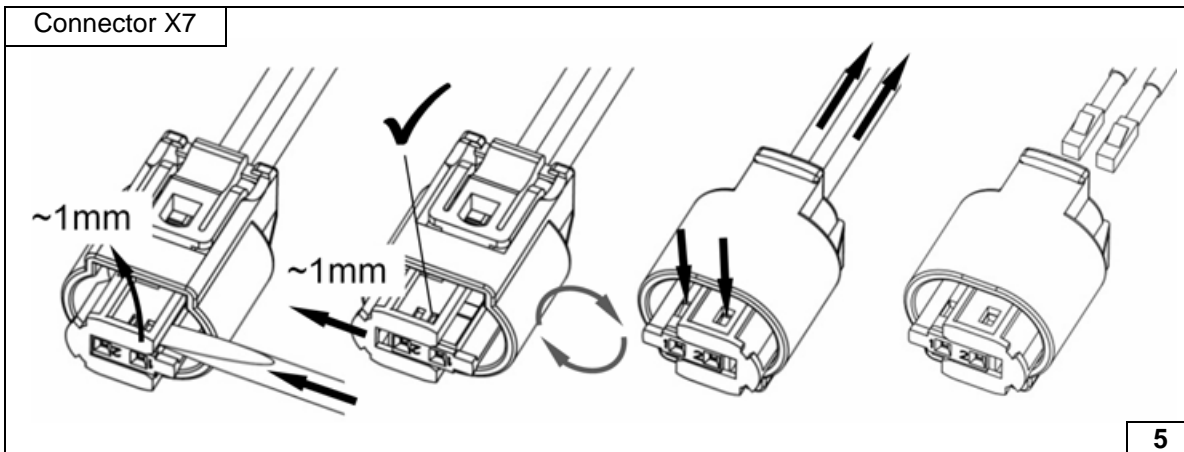


Preparing F4 and K1 relay



- 1 M6x20 bolt, large diameter washer [2x], flanged nut
- 2 Angle bracket
- 3 Retaining plate for fuse holder

Preparing engine compartment retaining plate of fuse holder



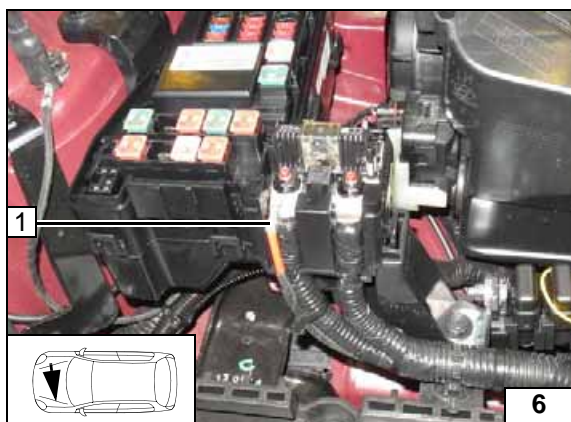
Removing metering pump connector



Electrical System

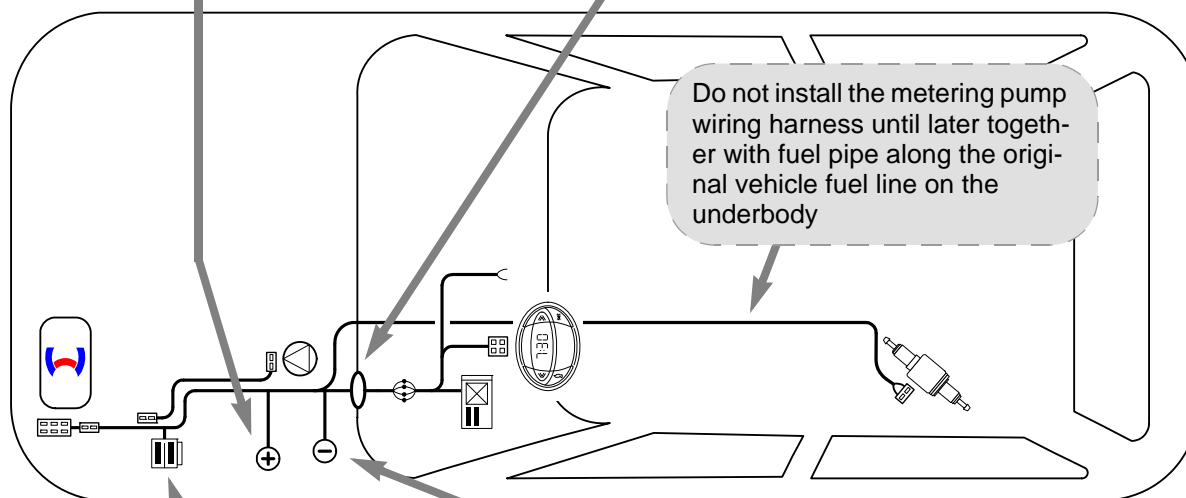
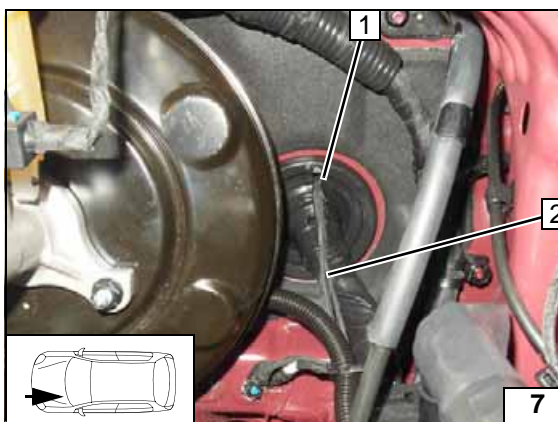
Positive wire

- 1 Positive wire on positive distributor

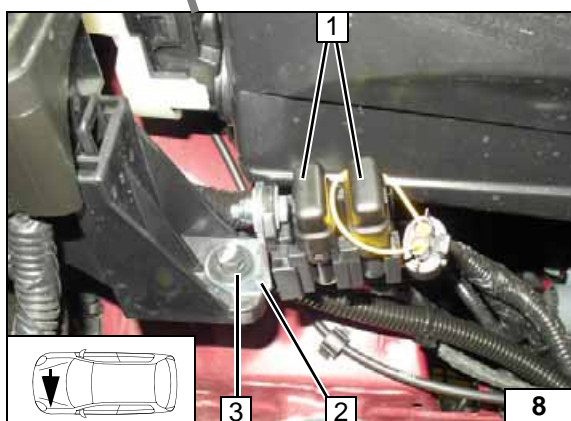


Wiring harness pass through

- 1 Protective rubber plug
- 2 Wiring harnesses of heater, heater control



Wiring harness routing diagram



Fuse holder for engine compartment

- 1 Fuses F1-2
- 2 Angle bracket
- 3 Original vehicle bolt, flanged nut (flanged nut will be removed again for the installation of the battery carrier!)

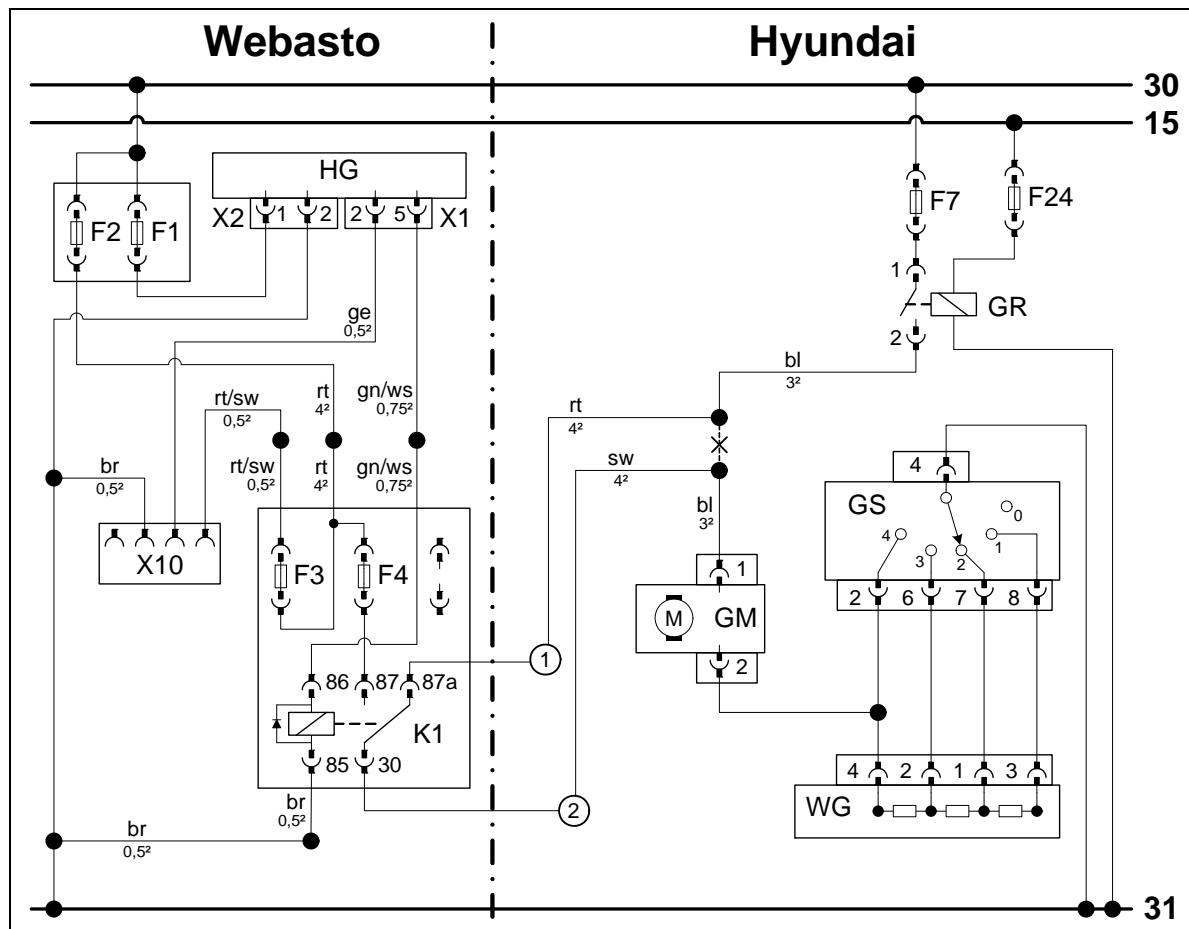


Earth wire

- 1 Earth wire on original vehicle earth support point



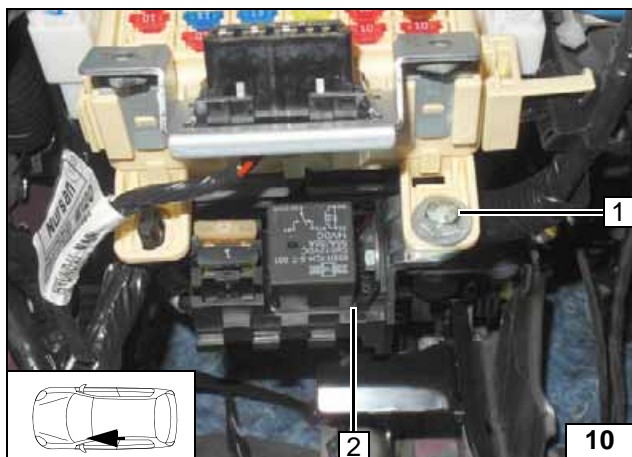
Fan Controller



Wiring diagram

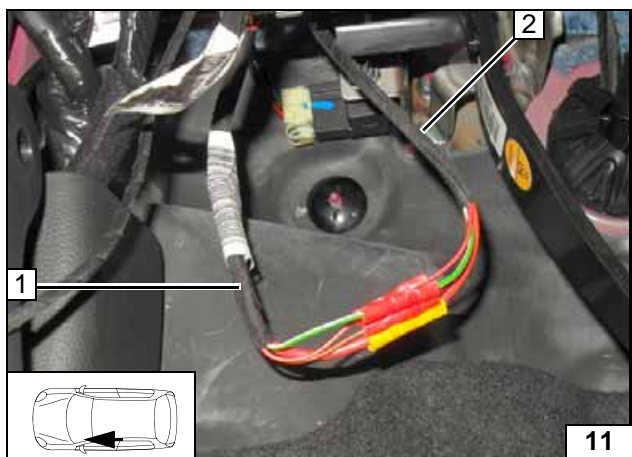
Webasto components		Vehicle components		Colours and symbols	
HG	TT-Evo heater	F7	40A fuse	rt	red
X1	6-pin heater connector	F24	10A fuse	sw	black
X2	2-pin heater connector	GR	Fan relay	ge	yellow
F1	20A fuse	GS	Fan switch	gn	green
F2	30A fuse	GM	Fan motor	bl	blue
X10	4-pin connector of heater control	WG	Resistor group	ws	white
F3	1A fuse			br	brown
F4	25A fuse				
K1	Fan relay			X	Cutting point
Wiring colours may vary.					

Legend



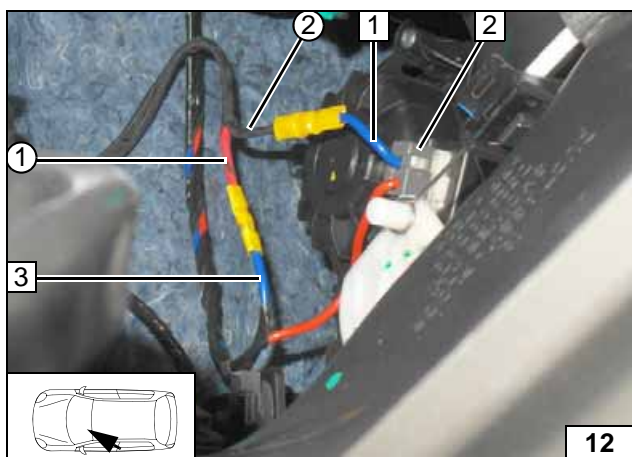
- 1 M6x20 bolt, large diameter washer with outer dia. $d_a = 17.6\text{mm}$; flanged nut, existing hole
- 2 Passenger compartment relay and fuse holder

Mounting passenger compartment fuse holder



- 1 Passenger compartment relay and fuse holder wiring harness
- 2 Wiring harness of heater

Connecting same colour wires of wiring harnesses

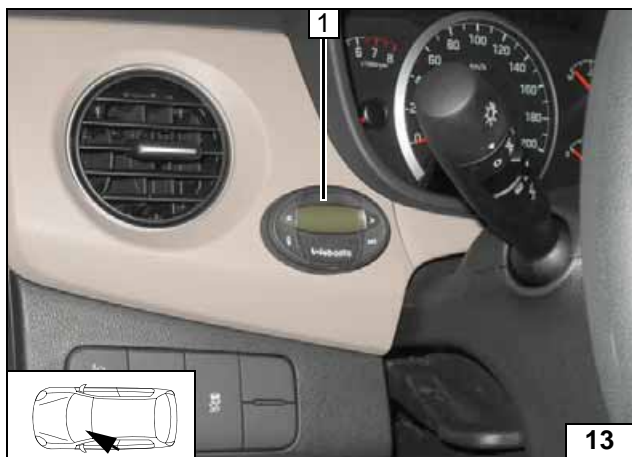


Connection to 2-pin connector **2** from the fan motor. Produce connections as shown in wiring diagram.

- 1 Blue (bl) wire of fan motor connector, pin 1
- 3 Blue (bl) wire of fan relay
- ① Red (rt) wire of K1/87a
- ② Black (sw) wire of K1/30



Connection of fan motor

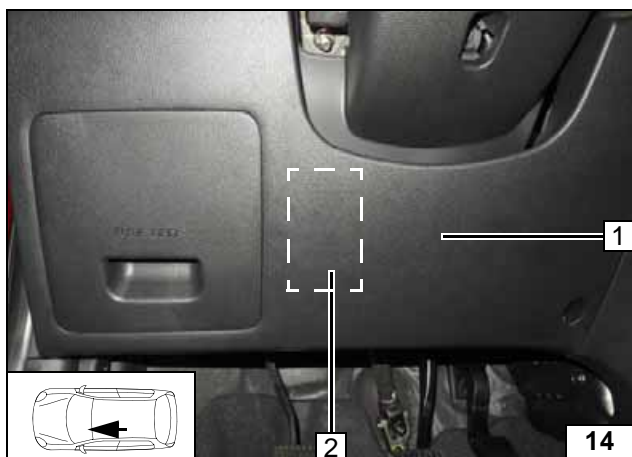


Digital Timer

- 1 Digital timer



Mounting digital timer

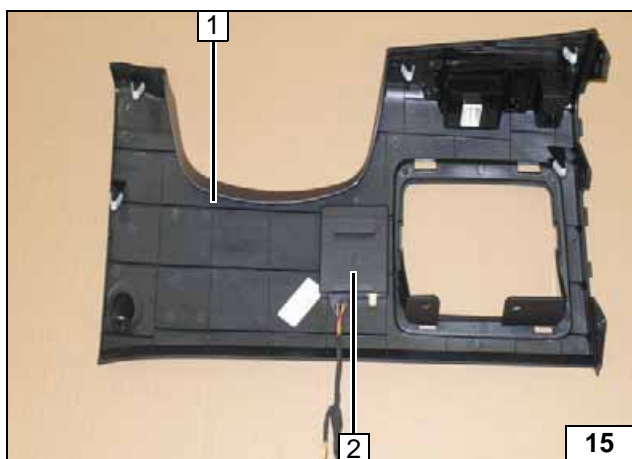


Remote Option (Telestart)

- 1 Instrument panel trim
- 2 Installation location of receiver (see following figure)



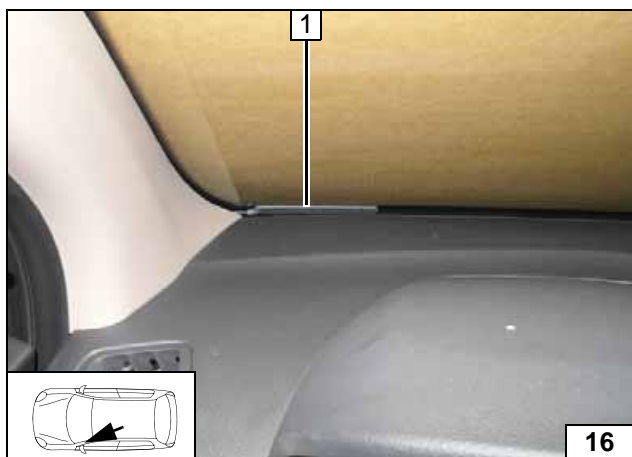
Installing receiver



Verify during dismantling that there is sufficient distance between installation space and neighbouring components. Receiver 2 fastened with adhesive tape to instrument panel trim 1.

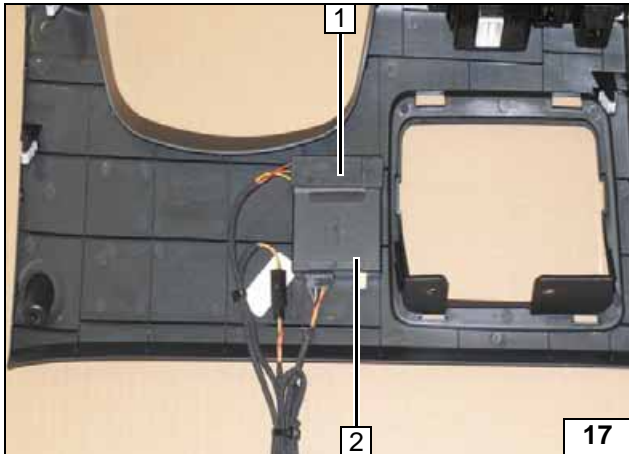


Installing receiver



- 1 Antenna

Installing antenna

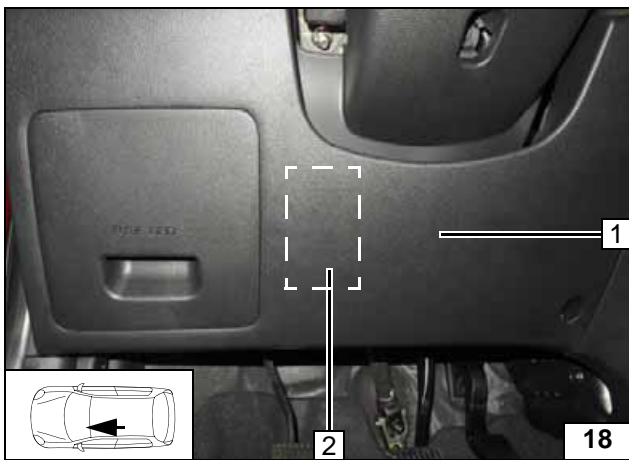


Temperature sensor T100 HTM

Fasten temperature sensor 1 with adhesive tape on receiver 2.



Installing temperature sensor

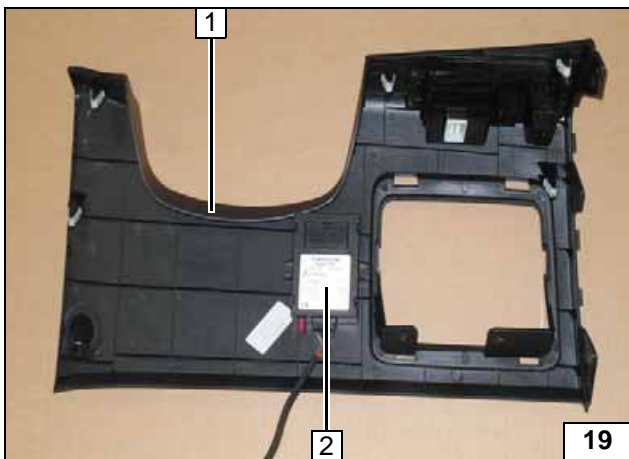


Thermo Call option

- 1 Instrument panel trim
- 2 Installation location of receiver (see following figure)



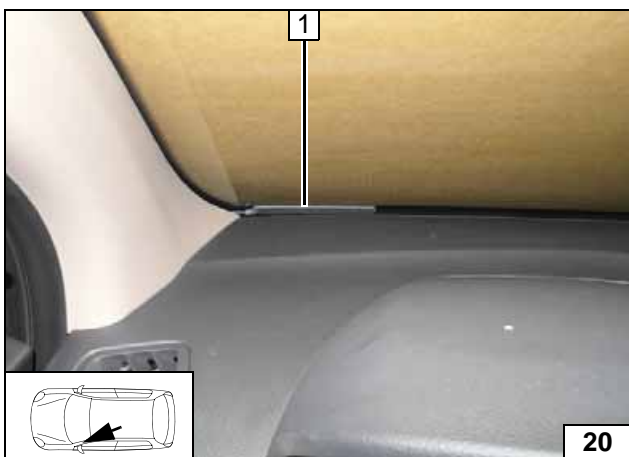
Installing receiver



Verify during dismantling that there is sufficient distance between installation space and neighbouring components. Receiver 2 fastened with adhesive tape to instrument panel trim 1.

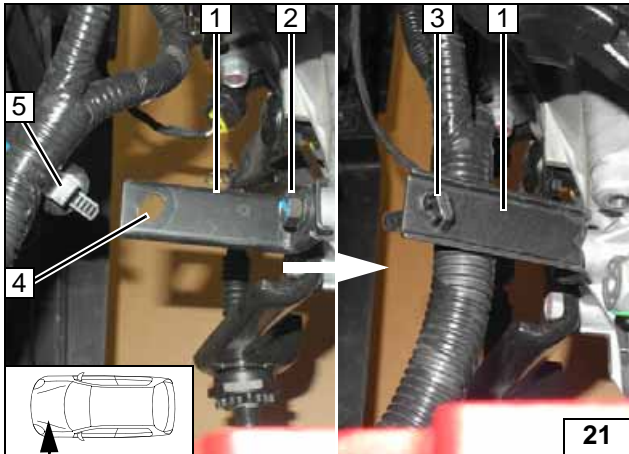


Installing receiver



- 1 Antenna

Installing antenna

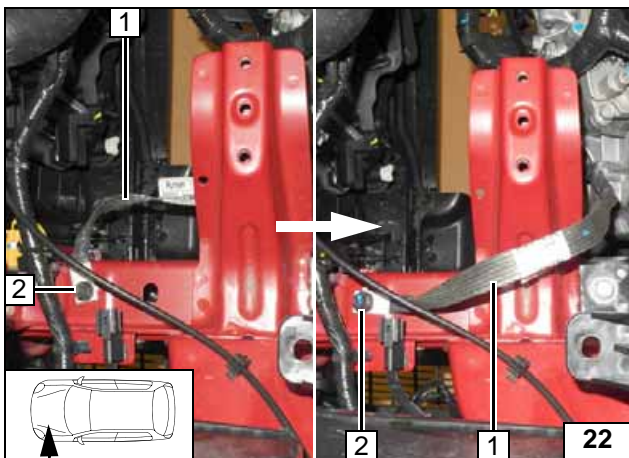


Preparing Installation Location

Remove retaining clip **5** from original vehicle wiring harness at position **4**. Remove bracket **1** at position **2**, turn bracket **1** upwards by 180° and fasten again. Reinstall original vehicle wiring harness with retaining clip **5** at position **3** from below.



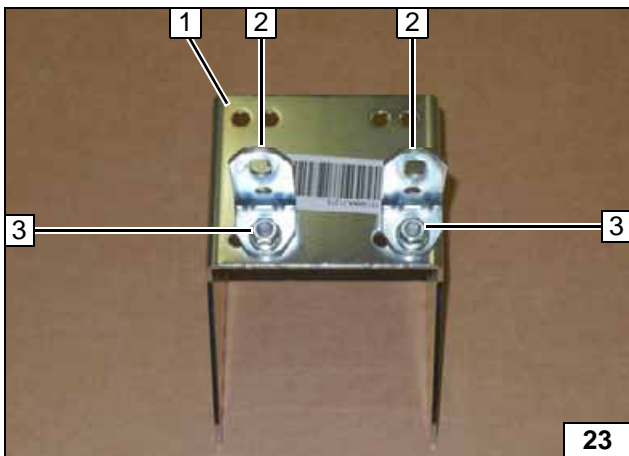
**Moving wir-
ing har-
ness**



Detach original vehicle earth wire **1** at position **2**, route as shown and fasten again at position **2**.



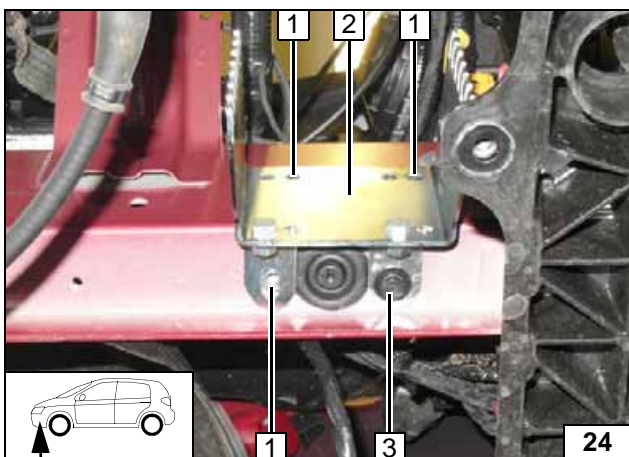
**Reinstall-
ing earth
wire**



Mounting Bracket

- 1** Bracket
- 2** Angle bracket [2x]
- 3** M6x12 bolt, flanged nut [2x each]

**Premount-
ing bracket**

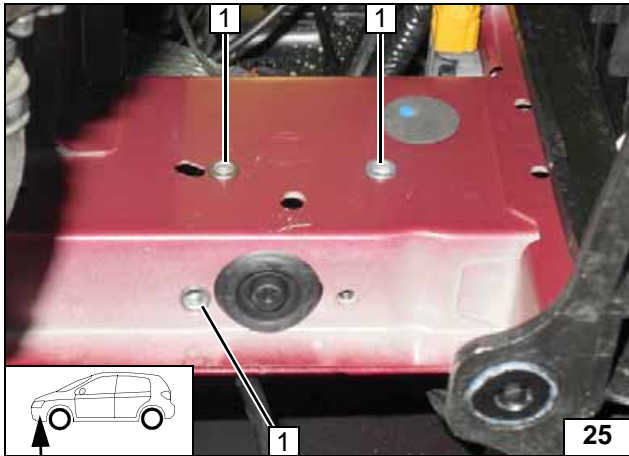


Loosely mount bracket **2**.

- 1** Copy hole pattern [3x]
- 3** Original vehicle bolt, existing threaded hole

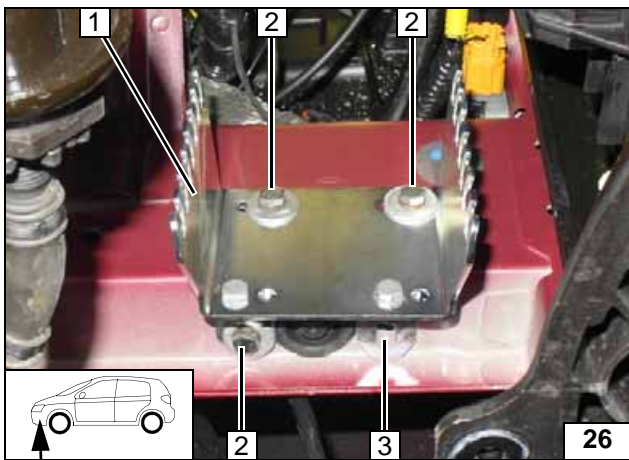


**Copying
hole pat-
tern**



1 9.1 mm dia. hole; rivet nut [3x each]

Installing rivet nuts

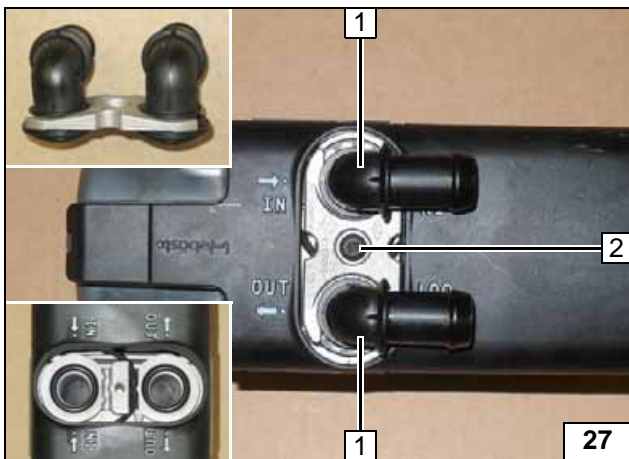


Installation at position 3 takes place later during the "Final Work" stage



- 1 Bracket
- 2 M6x20 bolt, spring lockwasher, large diameter washer [3x each]

Mounting bracket

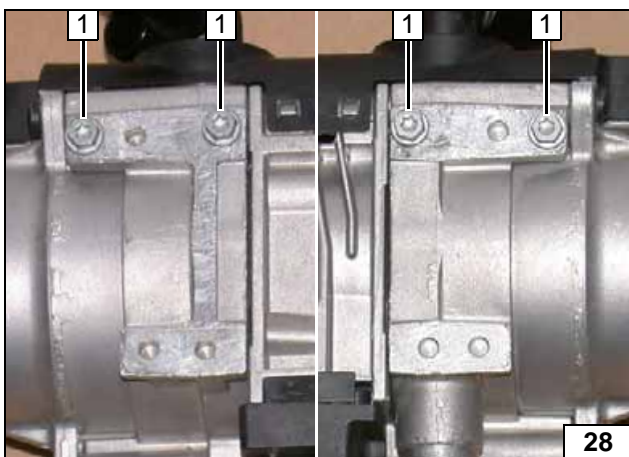


Preparing Heater



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

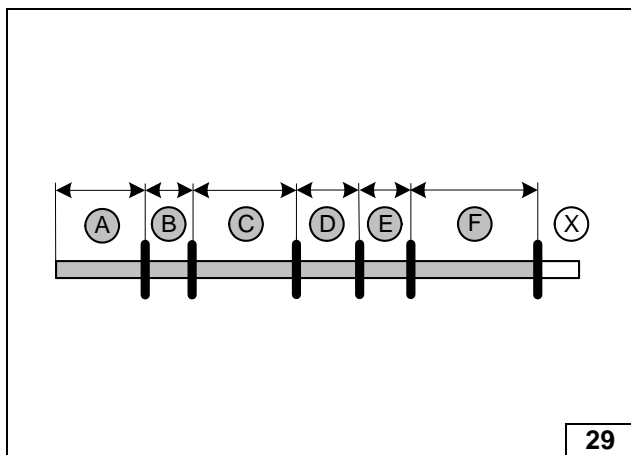
Mounting water connection piece



Insert self-tapping screws 5x13 1 [4x] in existing holes, screw in a max. of 3 threads.



Loosely premounting bolts

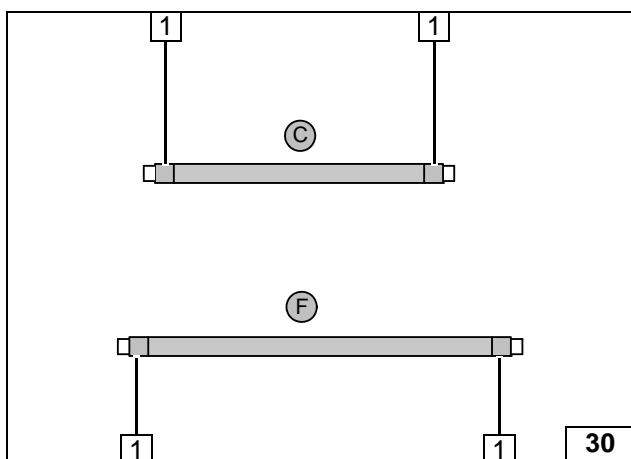


Discard section X.

- A = 230
- B = 80
- C = 480
- D = 110
- E = 80
- F = 740



Cutting hoses to length

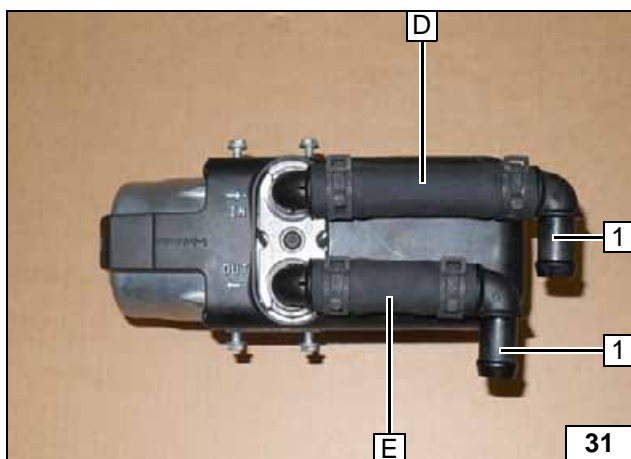


Push braided protection hoses onto hose C and F and cut to length. Cut heat shrink plastic tubing to length.

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



Preparing hoses

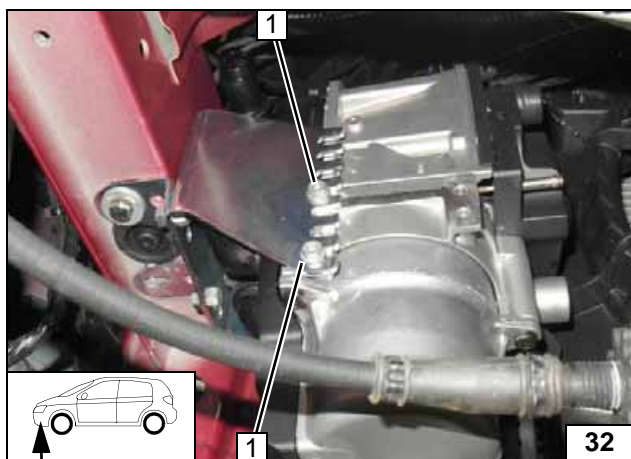


All spring clips = 25mm dia.

- 1 18mm dia., 90° connecting pipe [2x]



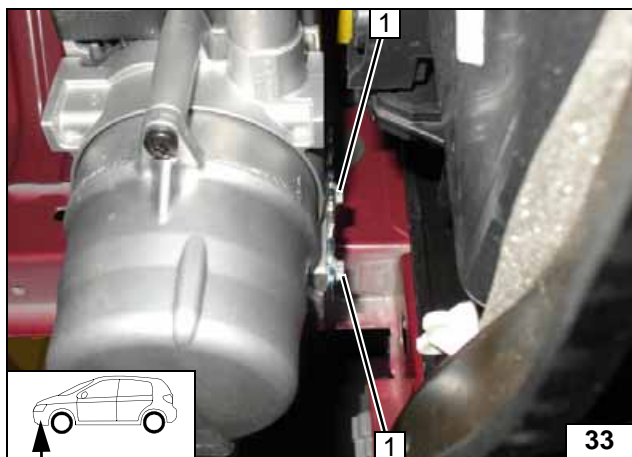
Premounting hoses



Installing Heater

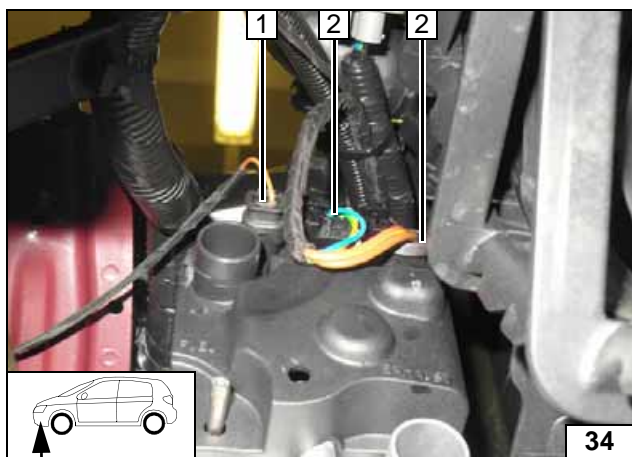
- 1 5x13 mm self-tapping bolt [2x]

Mounting heater



- 1 5x13 mm self-tapping bolt [2x]

Mounting
heater



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

Installing
wiring har-
nesses



Fuel

CAUTION!

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

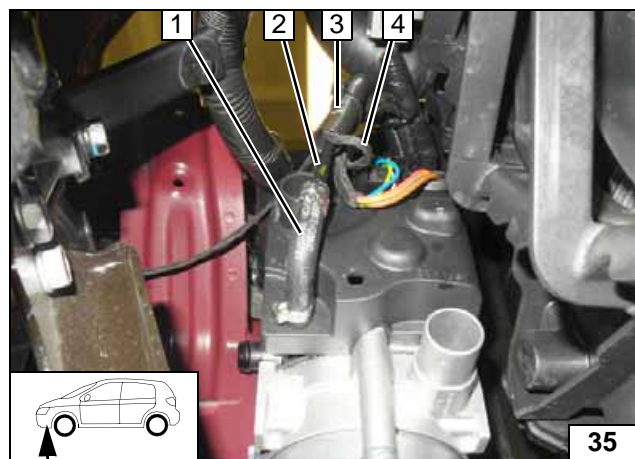
Catch any fuel running off in a suitable container.

Install fuel line and metering pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties.

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.

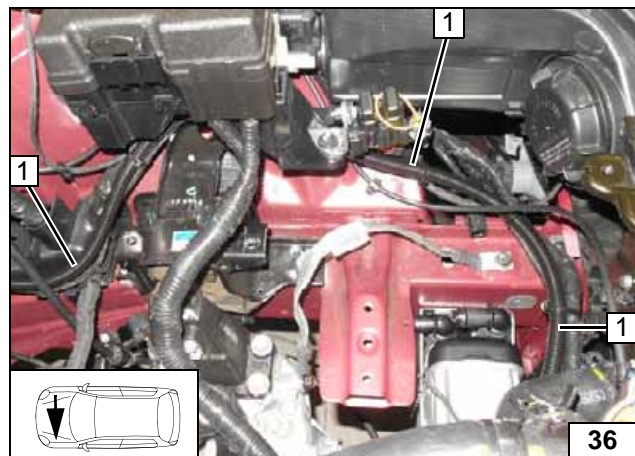


Route fuel line **2** and wiring harness of metering pump **4** together in 10mm dia. corrugated tube **3** in engine compartment.

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



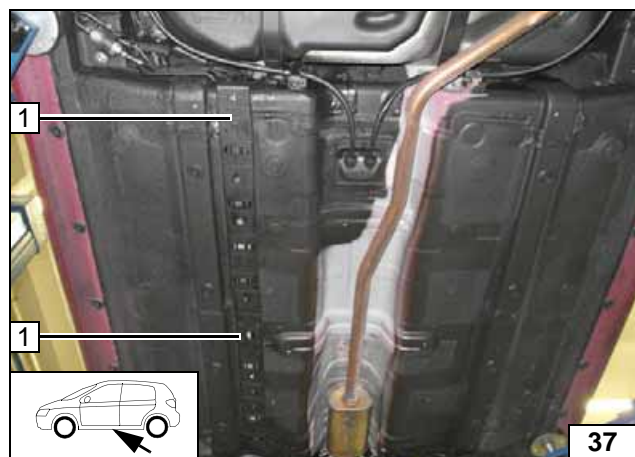
Connect-
ing heater



Route fuel line and wiring harness of metering pump in 10mm dia. corrugated tube **1** to firewall and further along original vehicle lines to underbody.



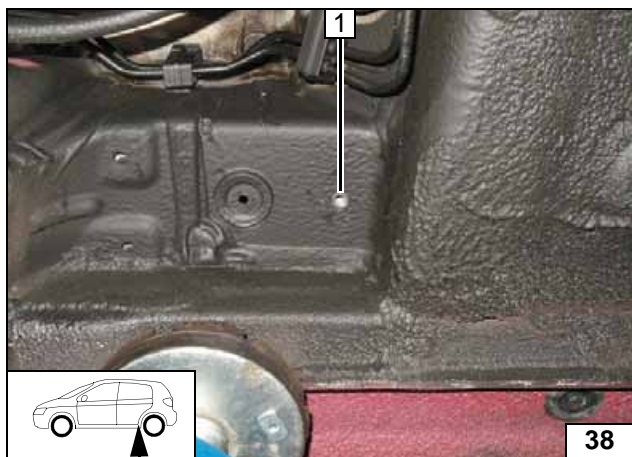
Routing
lines



Route fuel line and wiring harness of metering pump behind trim **1** along original vehicle lines to installation location of metering pump.

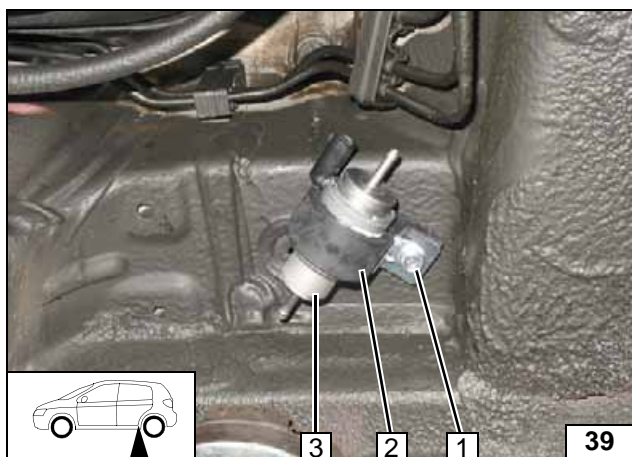


Routing
lines



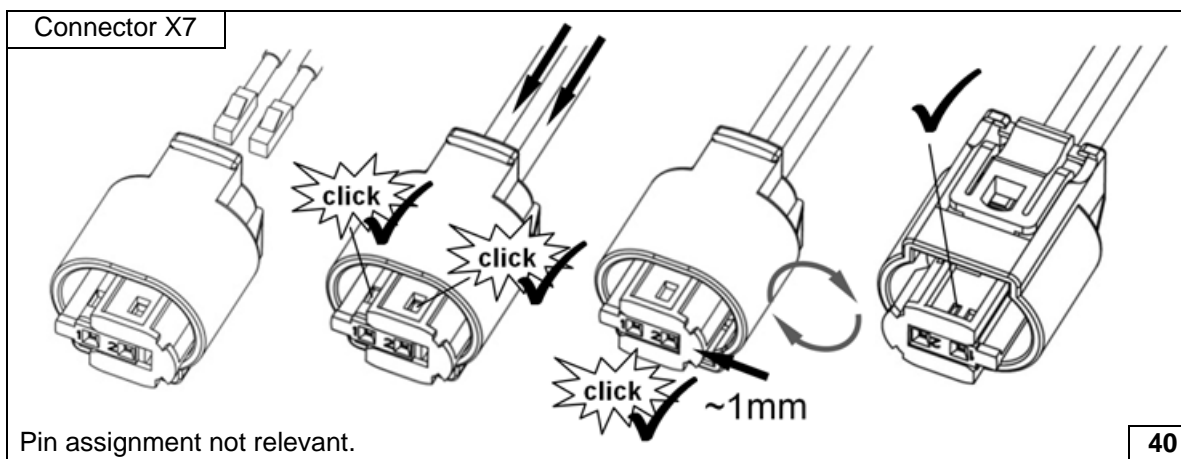
- 1 Drill out hole to 9.1 mm dia., install rivet nut

Installing rivet nut

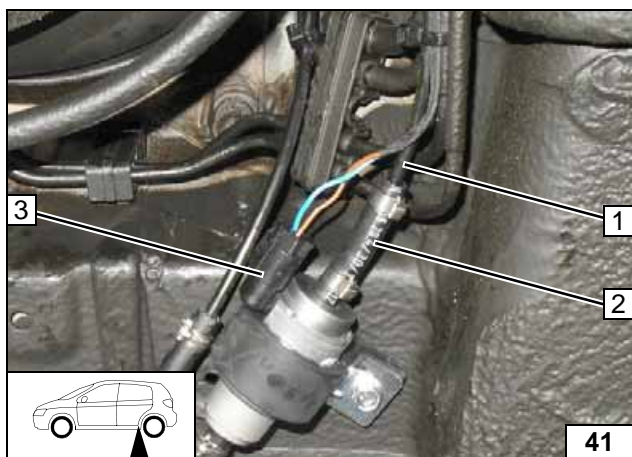


- 1 M6x25 bolt, support angle bracket
- 2 Mounting of metering pump
- 3 Metering pump

Mounting metering pump



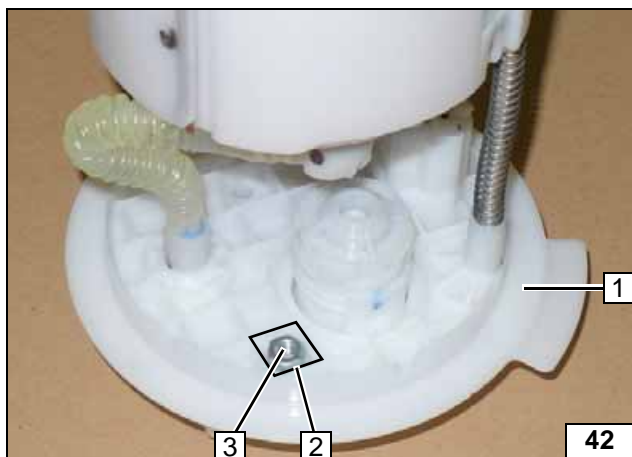
Completing metering pump connector



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

Mounting metering pump



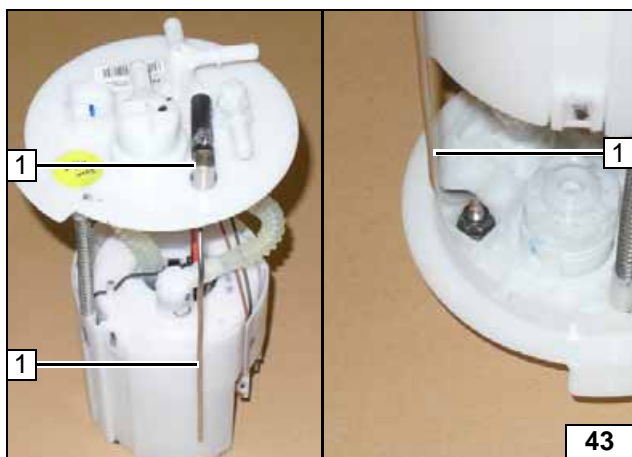


Remove fuel-tank sending unit **1** in accordance with manufacturer's instructions. Position M6 flanged nut **2** centrally between the bars.

3 Copy hole pattern, 6 mm dia. hole



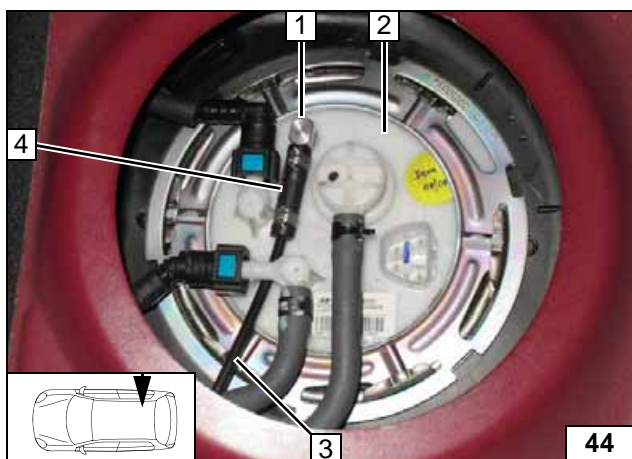
Fuel extraction



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



Mounting fuel stand-pipe

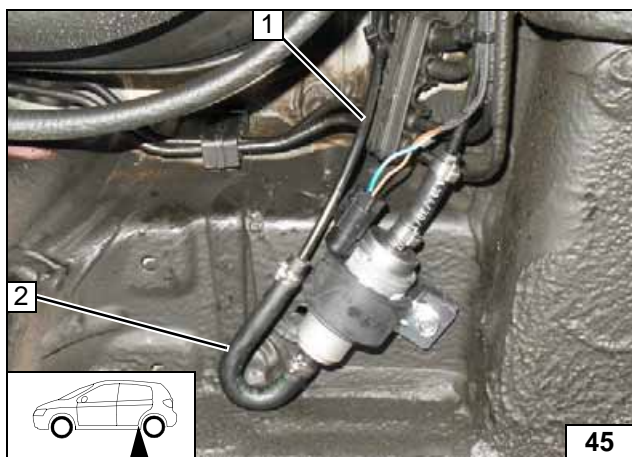


Install fuel-tank sending unit **2** in accordance with manufacturer's instructions.

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



Installing fuel line

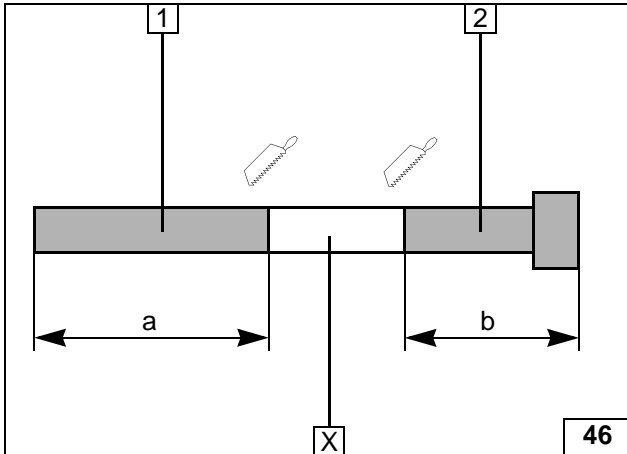


Ensure sufficient distance from neighbouring components, adjust if necessary.

- 1** Fuel line of fuel standpipe
- 2** 180° moulded hose, 10 mm dia. clamp [2x]



Connecting metering pump

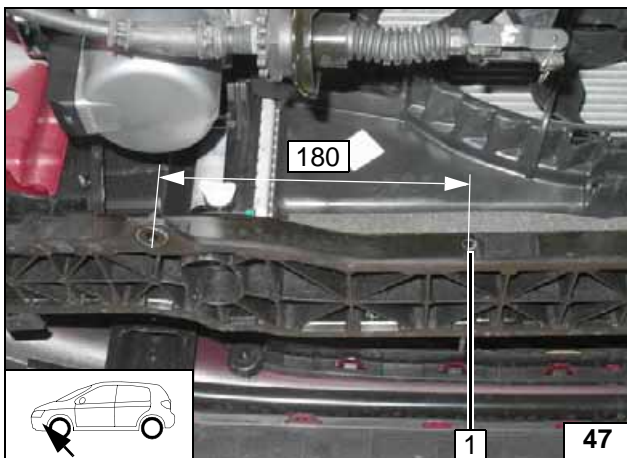


Exhaust Gas

Discard section X.

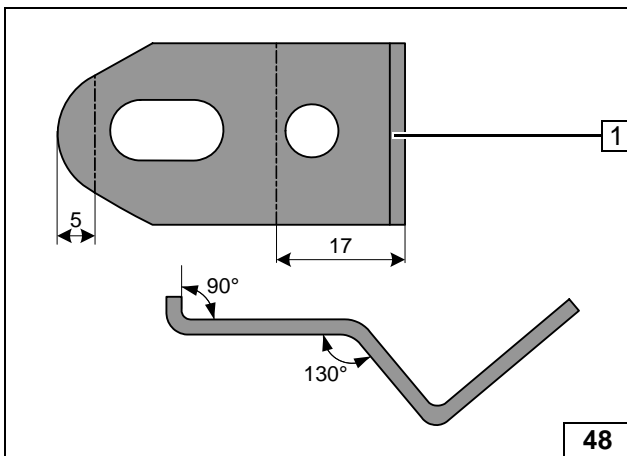
- 1 Exhaust pipe
a = 200
- 2 Exhaust end section
b = 120

Preparing exhaust pipe



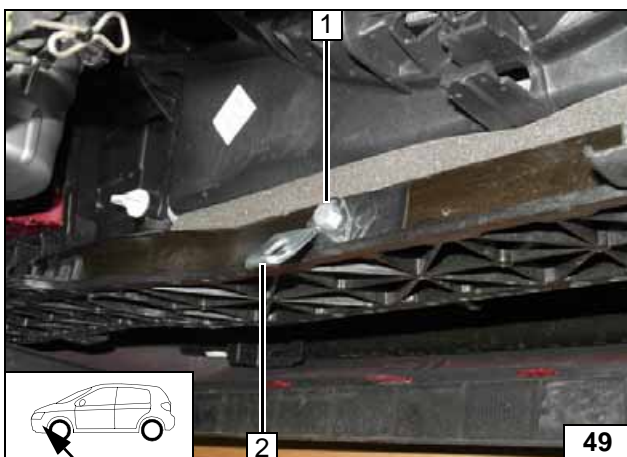
- 1 7 mm dia. hole

Hole for silencer



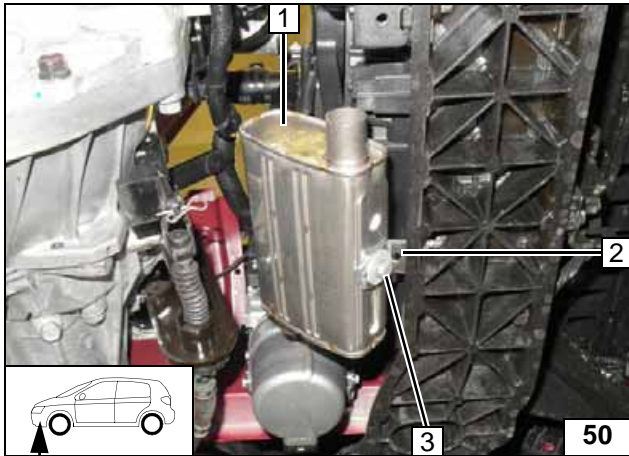
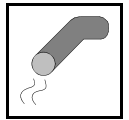
- 1 Angle bracket

Preparing angle bracket



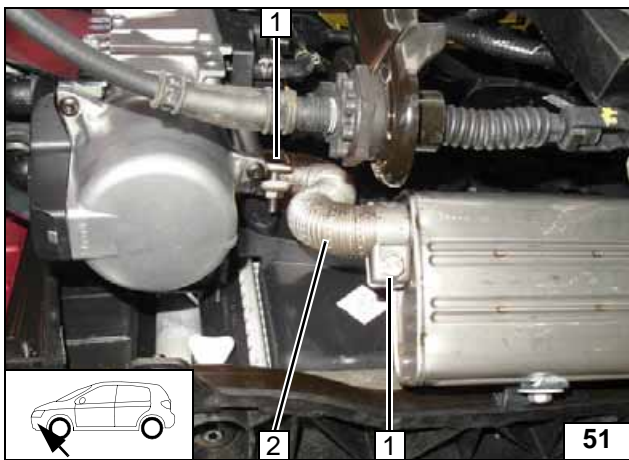
- 1 M6x12 bolt, flanged nut
- 2 Angle bracket

Mounting angle bracket



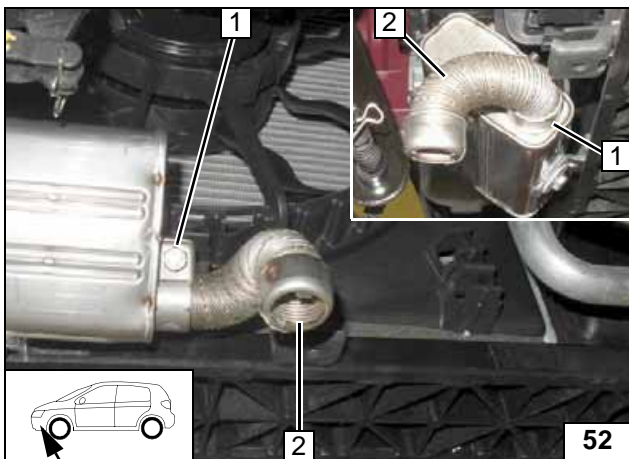
- 1 Silencer
- 2 Angle bracket
- 3 M6x16 bolt, large diameter washer, spring lockwasher

Mounting silencer



- 1 Hose clamp [2x]
- 2 Exhaust pipe

Mounting exhaust pipe



Ensure sufficient distance from neighbouring components, adjust if necessary.

- 1 Hose clamp
- 2 Exhaust end section



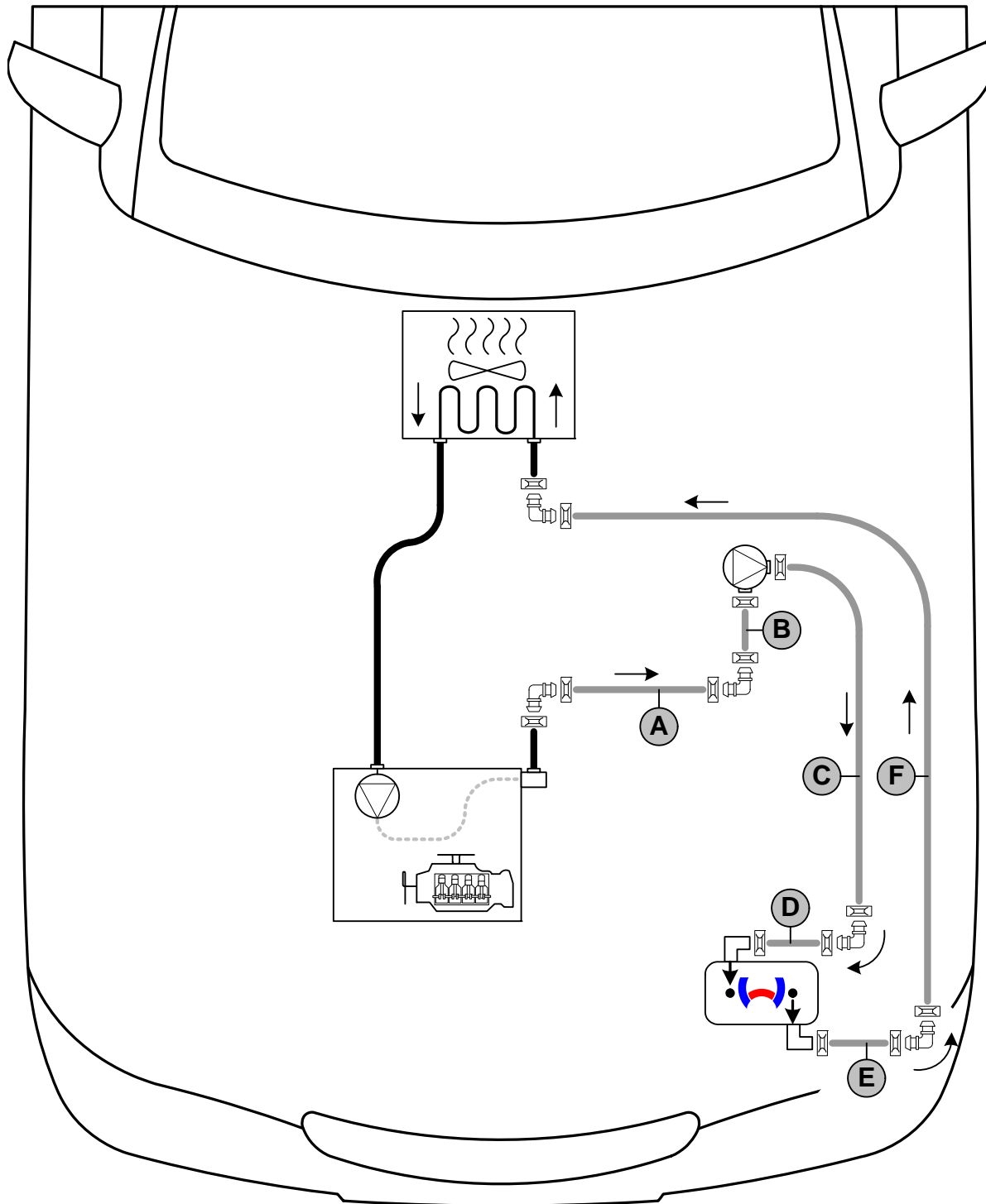
Mounting exhaust end section






Coolant Circuit

WARNING!

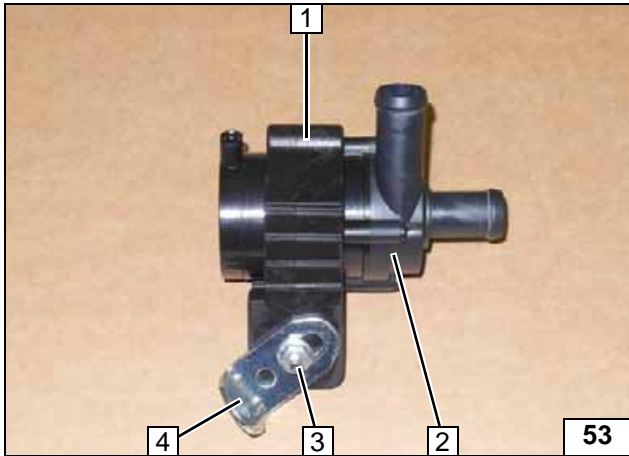
Any coolant running off should be collected using a suitable container. Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position the clamps so that other hoses cannot be damaged. The heater must be filled with coolant when installing the hoses. The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



Hose installation diagram

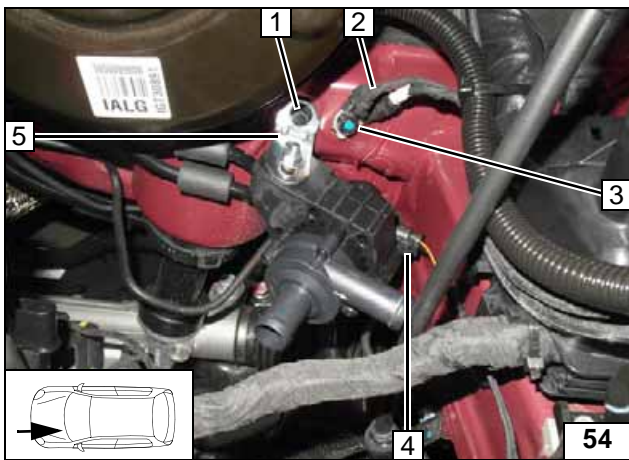
All spring clips without a specific designation  = 25mm dia.
 All connecting pipes  and  = 18x18mm dia.





- 1 Mounting for circulating pump
- 2 Circulating pump
- 3 M6x25 bolt, flanged nut
- 4 Angle bracket

Premounting circulating pump

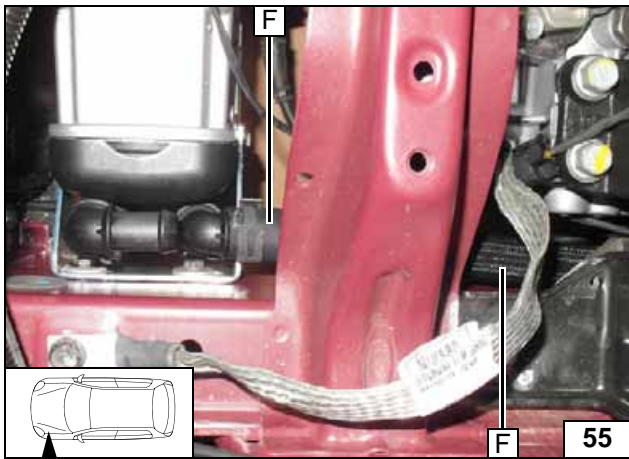


Remove original vehicle earth wire **2** at position **1** and fasten to original vehicle earth support point **3**.

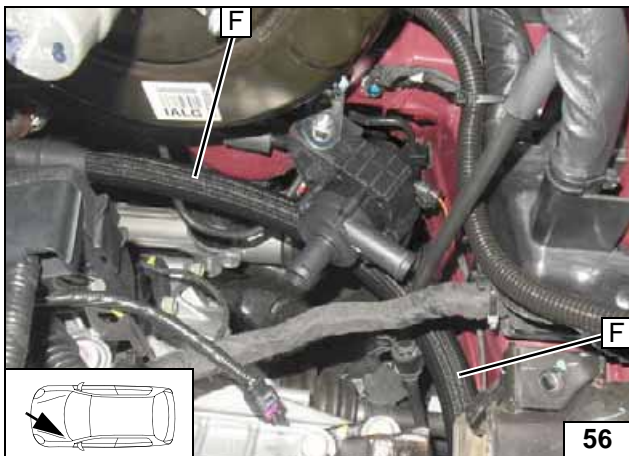


- 1 Original vehicle bolt
- 4 Mount wiring harness of circulating pump
- 5 Angle bracket

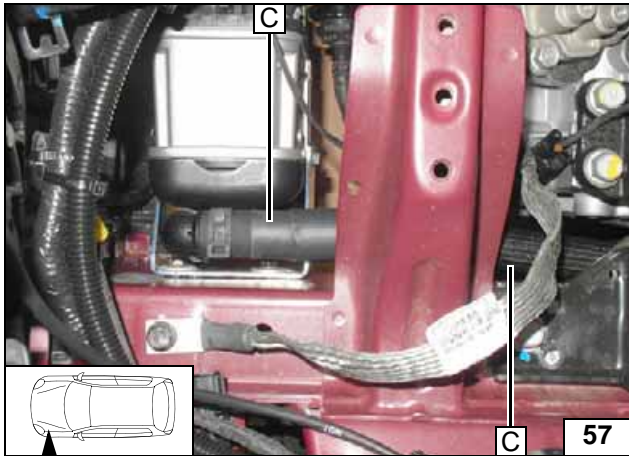
Mounting circulating pump



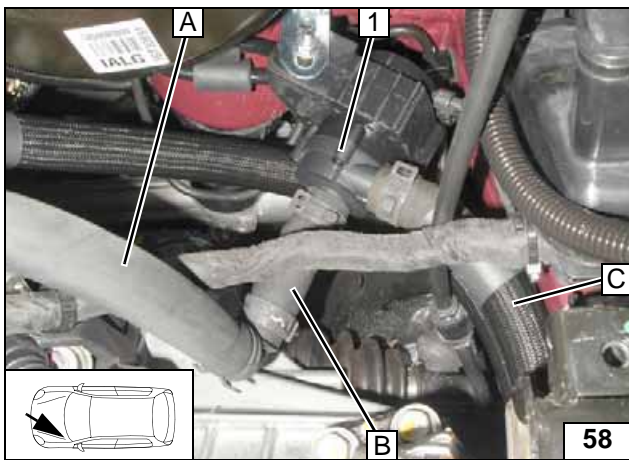
Connecting heater outlet



Routing in engine compartment

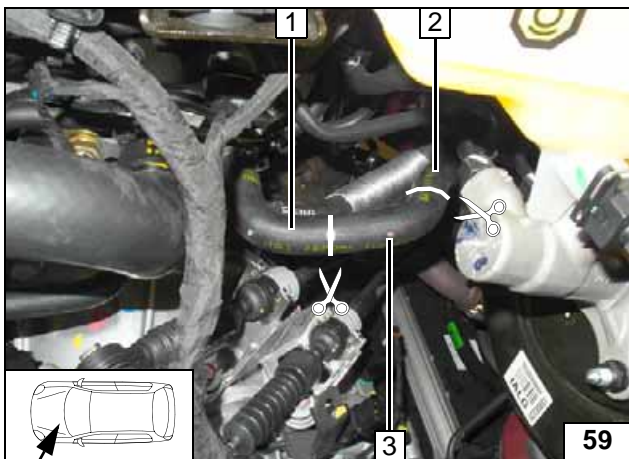


Connect-
ing heater
inlet



1 Circulating pump

Connect-
ing circu-
lating
pump



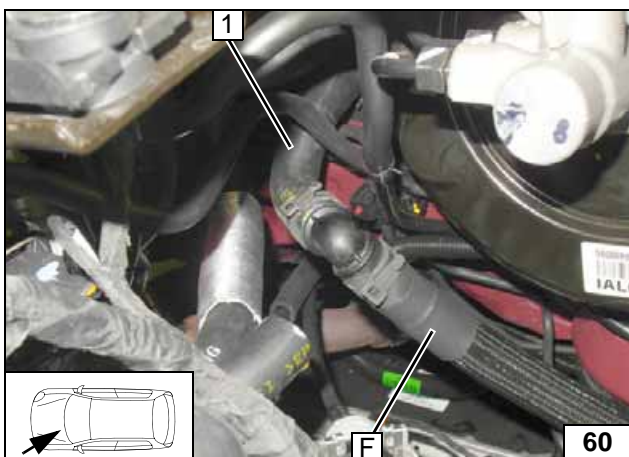
1.0 B

Cut hose of engine outlet/heat exchanger in-
let along the marking.

- 1 Engine outlet hose section
- 2 Hose section of heat exchanger inlet
- 3 Discard section

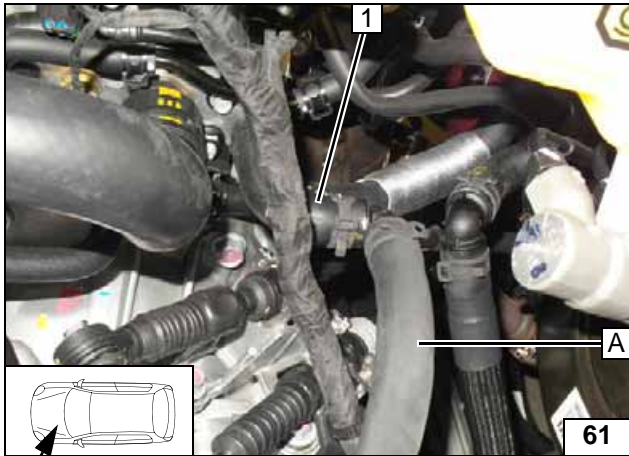


Cutting
point



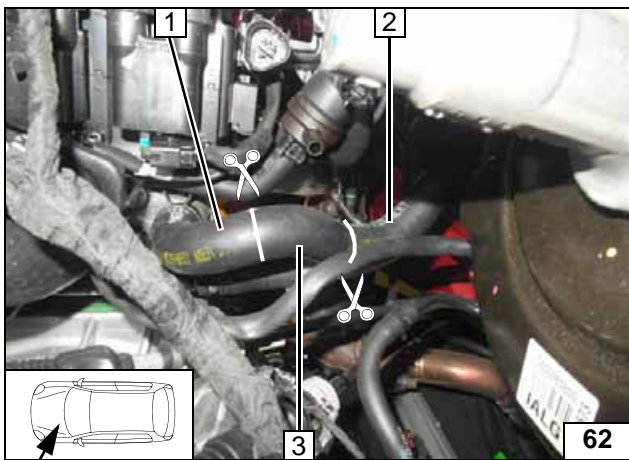
1 Hose on heat exchanger inlet

Connect-
ing heat ex-
changer
inlet



1 Hose of engine outlet

Connect-
ing engine
outlet



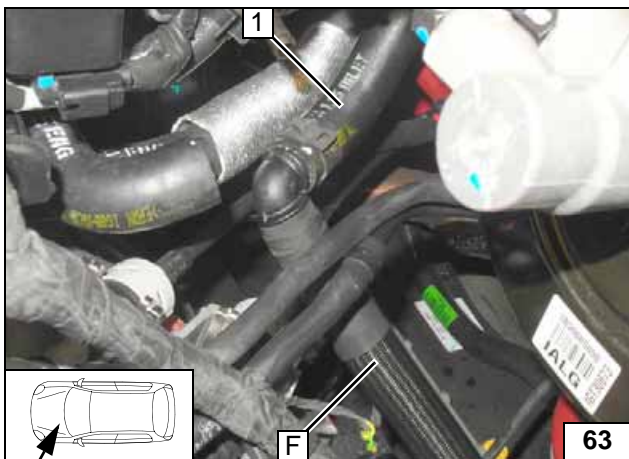
1.2 B

Cut hose of engine outlet/heat exchanger in-
let along the marking.

- 1 Engine outlet hose section
- 2 Hose section of heat exchanger inlet
- 3 Discard section

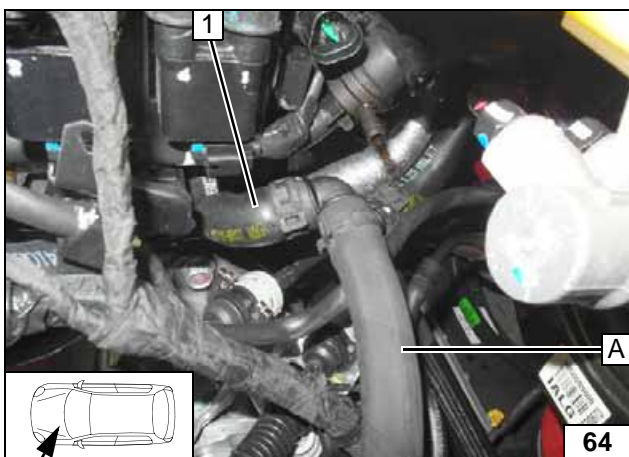


Cutting
point



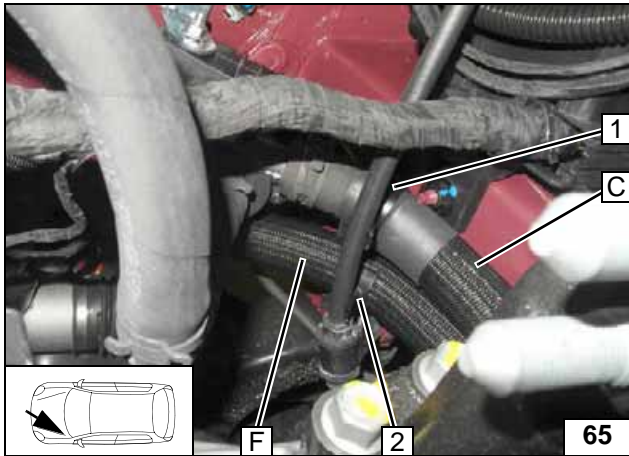
1 Hose on heat exchanger inlet

Connect-
ing heat ex-
changer
inlet



1 Hose of engine outlet

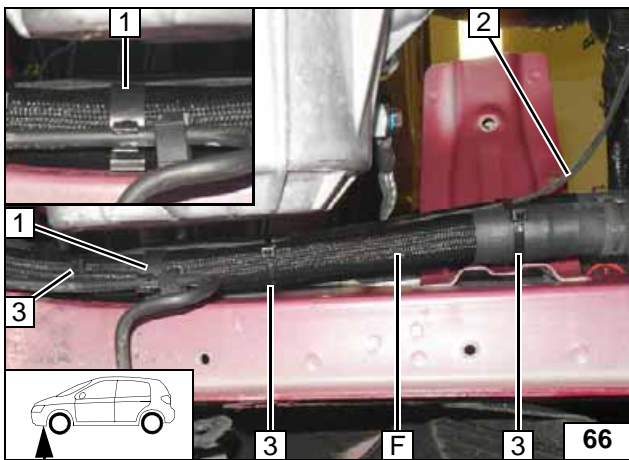
Connect-
ing engine
outlet



All vehicles

- 1 Hose bracket between hose **C** and clutch cable
- 2 Hose bracket between hose **F** and clutch cable

Mounting hose bracket

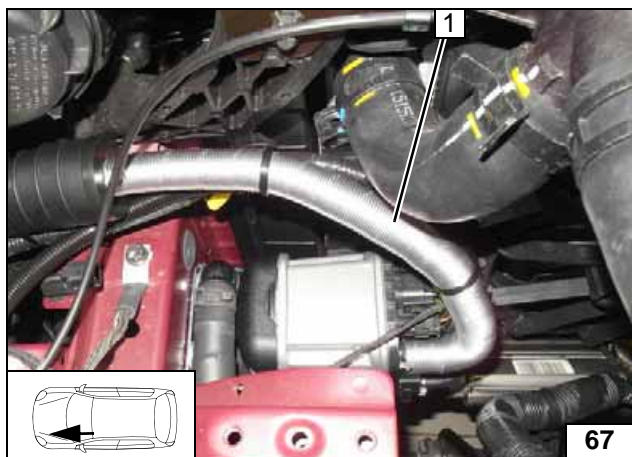
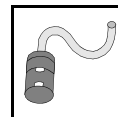


Align hoses. Fasten wiring harness of circulating pump **2** to hoses **C** and **F** using a cable tie. Ensure sufficient distance from neighbouring components, adjust if necessary.

- 1 Hose bracket between hose **F** and brake line
- 3 Cable tie [3x]

Mounting hose bracket

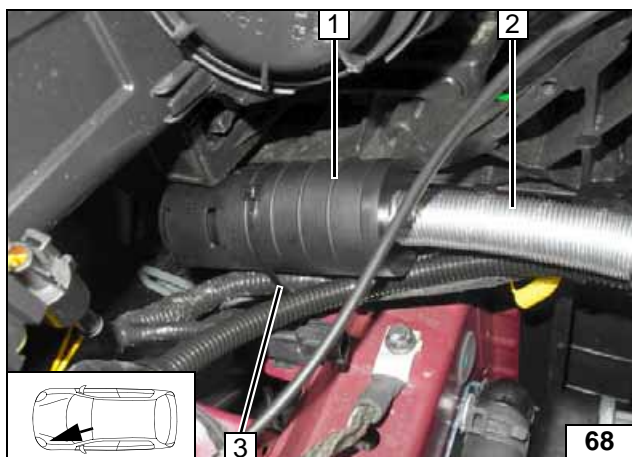




Combustion Air

- 1 Combustion air pipe

Mounting
combustion
air pipe

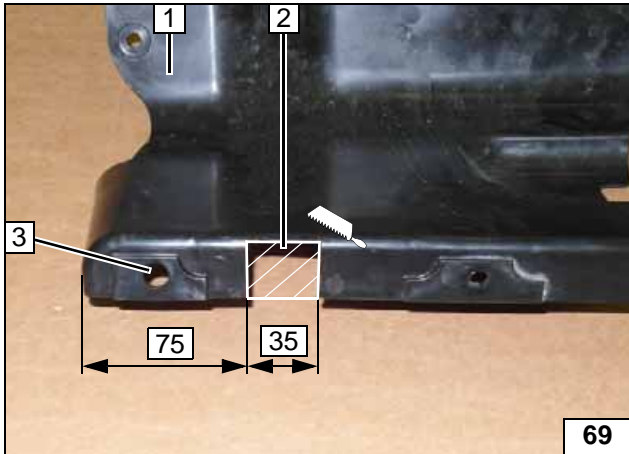


Fasten silencer 1 to original vehicle wiring harness using cable tie 3.

- 2 Combustion air pipe



Mounting
silencer

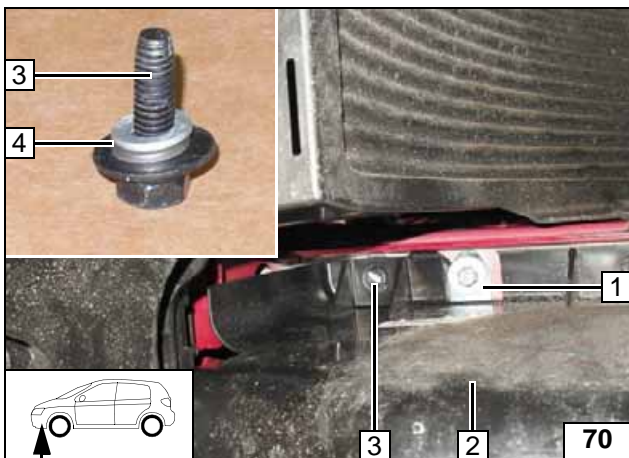


Final Work

- 1 Lateral engine compartment cover
- 2 Discard section
- 3 Drill out hole to 12mm dia.



Cutting out engine compartment cover

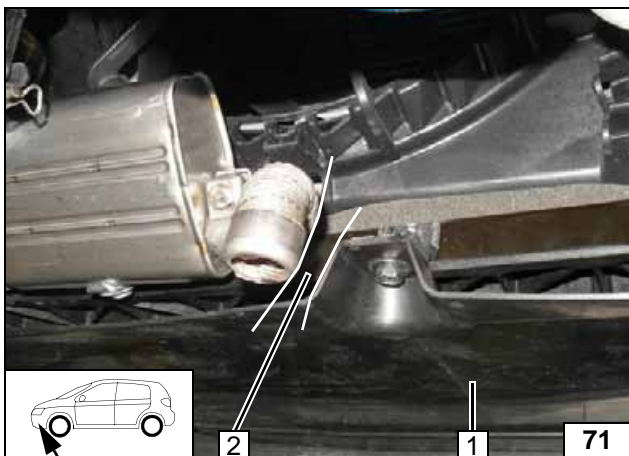


Put before installation two washers 4 with outer dia. $d_a = 11.6\text{mm}$ onto original vehicle bolt 3.

- 1 Angle of heater bracket mounted
- 2 Mount lateral engine compartment cover



Mounting engine compartment cover



Ensure sufficient distance from exhaust end section (at least 20mm) at position 2, correct if necessary.

- 1 Mount underbody trim for bumper



Mounting underbody trim



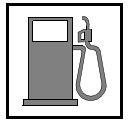
WARNING!

Reassemble the components in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate and tie back all loose lines.

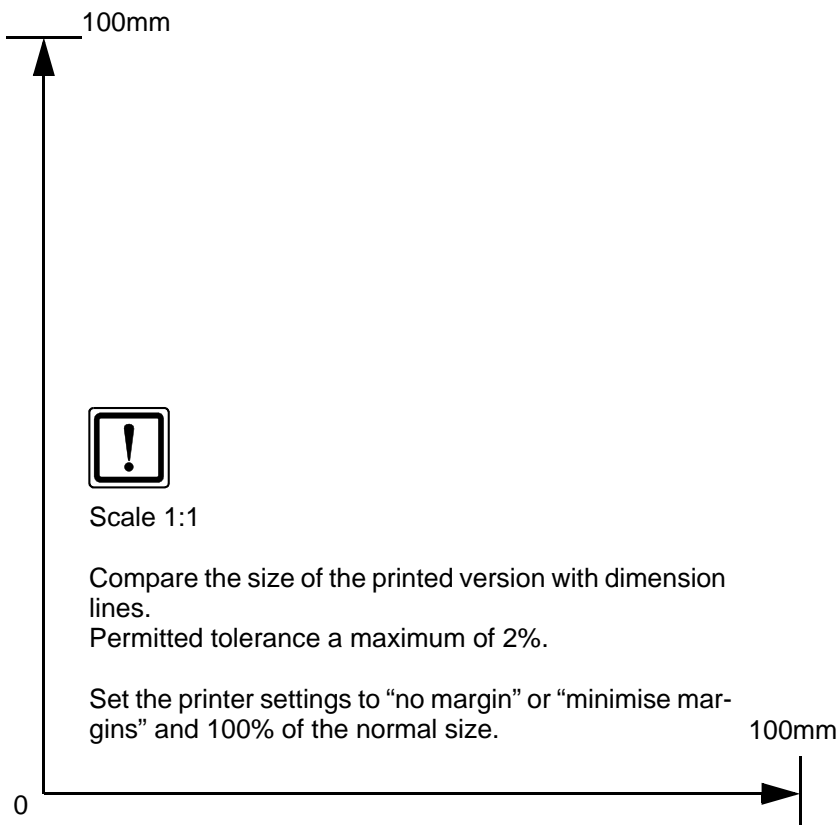
Only use manufacturer-approved coolant. Spray the heater components with anti-corrosion wax (Tectyl 100K, Order No. 111329).



- **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" caution label near the filler neck**
- **See installation instructions for initial start-up and function check**



Template for Fuel Standpipe



Operating Instructions for End Customer

Please remove page and add to the vehicle operating instructions.

Note:

We recommend matching the heating time to the driving time.
 Heating time = driving time

Example:

For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.

If the vehicle has passenger compartment monitoring this must be deactivated in addition to the vehicle settings for the heating operation.

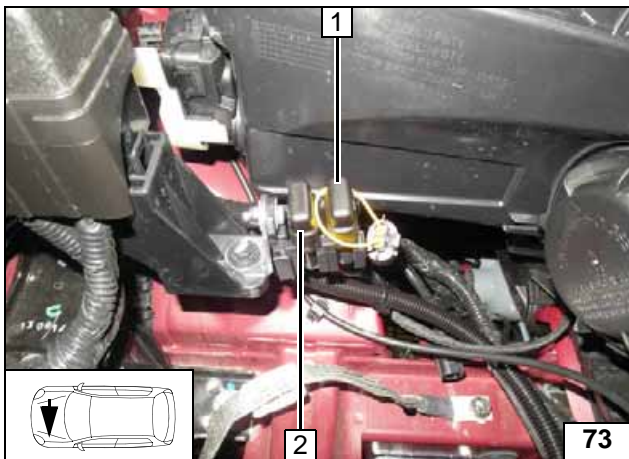
Instructions for de-activation may be obtained from the operating instructions of the vehicle.

Before parking the vehicle, make the following settings:

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

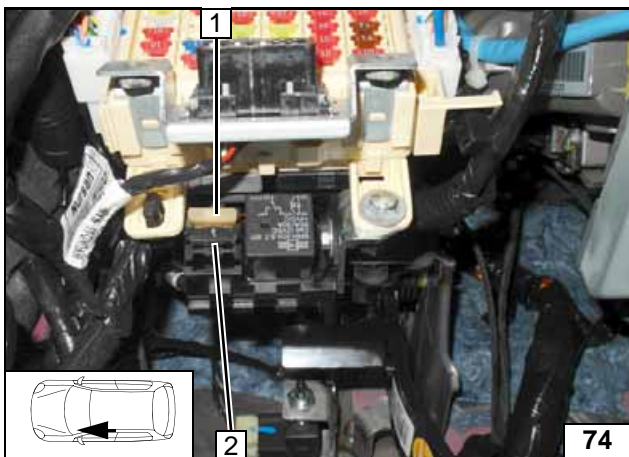


A/C control panel



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

Engine compartment fuses



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

Passenger compartment fuses

