



Water heater

Thermo Top Evo parking heater



Installation documentation Lexus RX 450H / RX 450HL

Validity

Manufacturer	Model	Type	EG-BE No. / ABE
Lexus	RX 450H / RX 450HL	AL2	e6 * 2007 / 46 * 0163 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm ³	Engine code
3.5 P hybrid	Petrol	E-CVT	193	3456	2GR-FXS

E-CVT = Electronic continuously variable transmission

Model 2016

Left-hand drive vehicle

Verified equipment variants: 2 zone automatic air-conditioning
3 zone automatic air-conditioning
LED front fog lights
LED headlights
LED daytime running lights
Headlight washer system
Start button with keycard
Euro 6
Passenger compartment monitoring

Total installation time: about 9 hours

Note:

Only experts in high-voltage systems for vehicles should be authorised to carry out independent work on hybrid vehicles!
The high-voltage system must be taken out of operation, secured and reactivated according to the manufacturer's instructions.

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Necessary components

- Basic delivery scope of Thermo Top Evo based on price list
- Installation kit for Lexus RX 450H / RX 450HL 2016 Petrol: **1324886C**
- Additional 'Webasto Standard' automatic air-conditioning control kit for Lexus RX 450H: **1326931_**
- Additionally required tank fitting gasket, Lexus order No.: **77169 -33030**
- In case of Telestart, control element, as well as indicator lamp in accordance with price list and in consultation with end customer

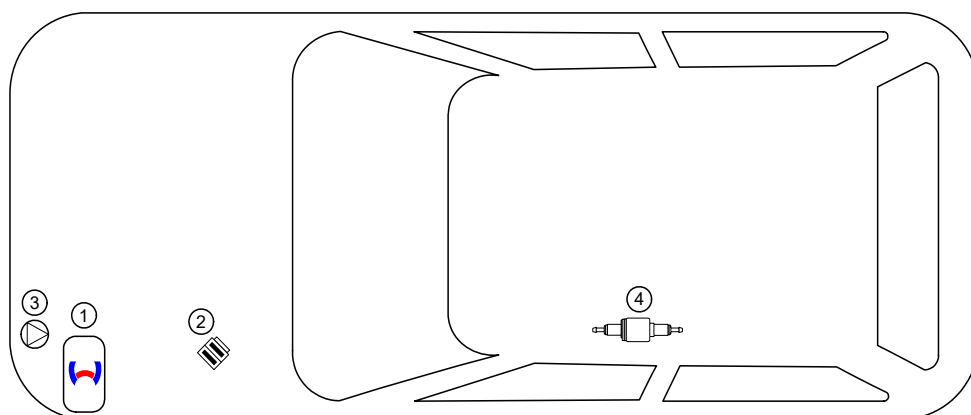
Installation instructions:

- Arrange for the vehicle to be delivered with the tank only about $\frac{1}{4}$ full!
- The installation location of the push button in case of Telestart or ThermoCall should be confirmed with the end customer.

Installation overview

Legend:

1. Heater
2. Engine compartment fuse holder
3. Coolant pump
4. Fuel pump



Information on total installation time

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

Information on operating and installation instructions

1 Important information (not complete)

1.1 Installation and repair



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



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



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

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

1.2 Operation

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

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

Always switch off the heater before refuelling.

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

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

1.3 Please note

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

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

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

Important

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

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

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

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

Sharp edges should be fitted with rub protection. Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K).

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

The initial start-up is to be executed with the Webasto Thermo Test Diagnosis.

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

2 Statutory regulations governing installation

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

Note

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

Important

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

Note

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

2.1 Excerpt from the ECE directive 122 (heater) section 5 for the installation of the heater.

Beginning of excerpt.

ANNEX VII

REQUIREMENTS FOR COMBUSTION HEATERS AND THEIR INSTALLATION

1. GENERAL REQUIREMENTS

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

2. VEHICLE INSTALLATION REQUIREMENTS

2.1. Scope

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

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

2.2. Positioning of heater

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

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

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

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

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

2.3. Fuel supply

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

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

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

2.4. Exhaust system

2.4.1. The exhaust 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 Lexus RX 450H / RX 450HL Petrol vehicles - for validity, see page 1 - from model year 2016 and later, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to this installation documentation.

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

Technical information

Special tools

- Hose clamp pliers for auto-tightening hose clamps
- Hose clamp pliers for Clic hose clamps of type W
- Automatic wire stripper 0.2 - 6mm²
- Crimping pliers for male connector, 0.14 - 6mm²
- Crimping pliers for cable lug 0.5 - 10mm²
- Crimping pliers for connector 0.25 - 6mm²
- Torque wrench for 2.0 - 10 Nm
- Hose clamping pliers
- Metric thread-setter kit
- Deep-hole marker
- 10mm tubular spanner
- Webasto Thermo Test Diagnosis with current software

Dimensions

- All dimensions are in mm.

Tightening torque values

- Tightening torque values of 5x13 heater bolts and 5x11 heater stud bolts = 8Nm.
- Tightening torque value of 5x15 water connection piece retaining plate bolt = 7Nm.
- Tighten other bolt connections in accordance with manufacturer's instructions or in accordance with state-of-the-art technology.

Explanatory notes on document

You will find an identification mark on the outside top right corner of the page in question to provide you with a quick overview of the individual working steps.

Special features are highlighted using the following symbols:

Mechanical system



Electrical system



Coolant circuit



Combustion air



Fuel



Exhaust gas



Software



Specific risk of damage to components.



Specific risk due to electrical voltage.



Specific risk of injury or fatal accidents.



Specific risk of fire or explosion.



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



Reference to a special technical feature.



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



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



Preliminary work

Vehicle



- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect the 12V battery.
- Deactivate the hybrid system according to the vehicle manufacturer's workshop manual.
- Remove the air filter together with the intake hose.
- Remove the engine compartment trim on the right and left.
- Remove the windscreen wiper.
- Remove the water drain chamber cover.
- Remove the windscreen wiper motor.
- Remove the water drain chamber.
- Detach the wheel well trim on the bumper trim on the right and the left.
- Remove the upper bumper trim.
- Remove the bumper trim.
- Remove the underride protection of the engine.
- Remove the underbody underride protection on the left.
- Remove the lower A-pillar trim on the left (only in case of Telestart and/or ThermoCall).
- Remove the upper footwell trim on the driver's side (only in case of Telestart and/or ThermoCall).
- Remove the lateral instrument panel trim on the left (only in case of Telestart and/or ThermoCall).

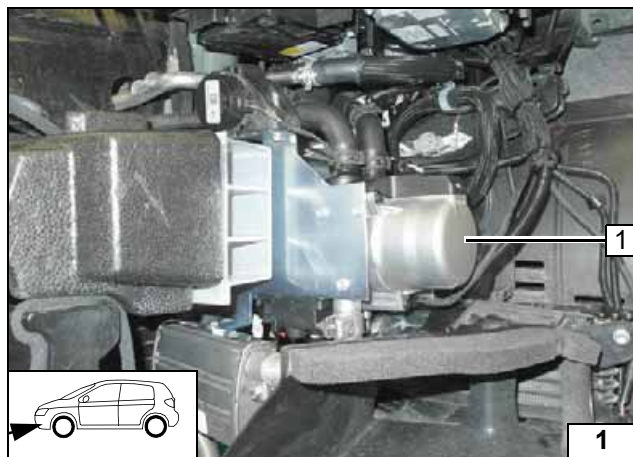


The following work should only be performed during the corresponding installation sequence:

- Remove the fuel tank according to the manufacturer's instructions.
- Remove the tank fitting 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.

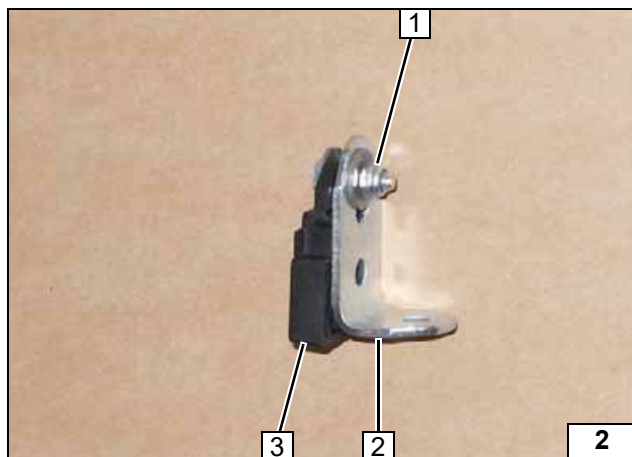


Heater installation location

- 1 Heater



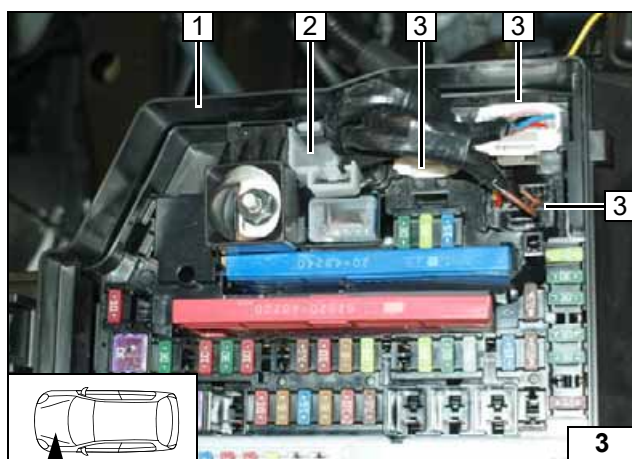
Installation location



Preparing electrical system

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

Premounting fuse holder retaining plate

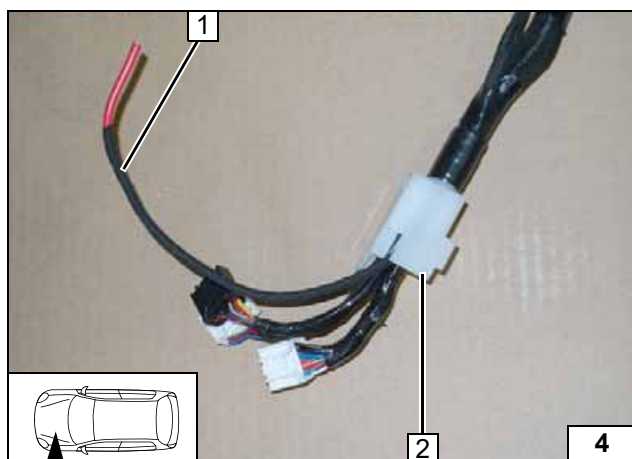


Remove the cover and top half of fuse and relay box housing 1.



- 2 Remove wiring harness pass through
- 3 Detach the connector of the original vehicle wiring harness [3x]

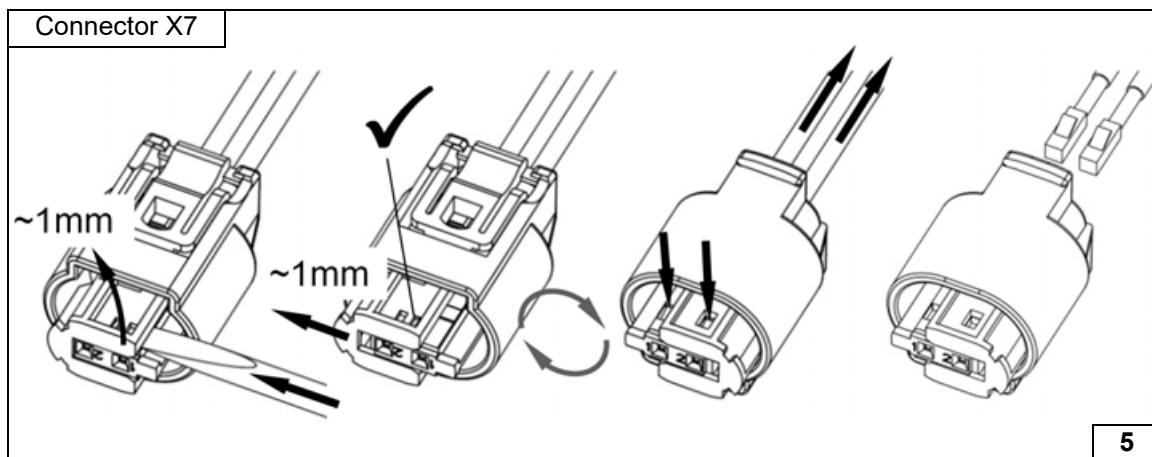
Removing wiring harness pass through



Insert positive wire 1. Then install wiring harness pass through 2.



Preparing positive connection



Dismantling fuel pump connector

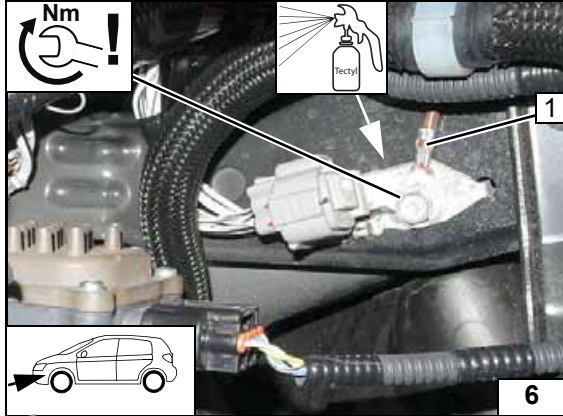


Electrical system



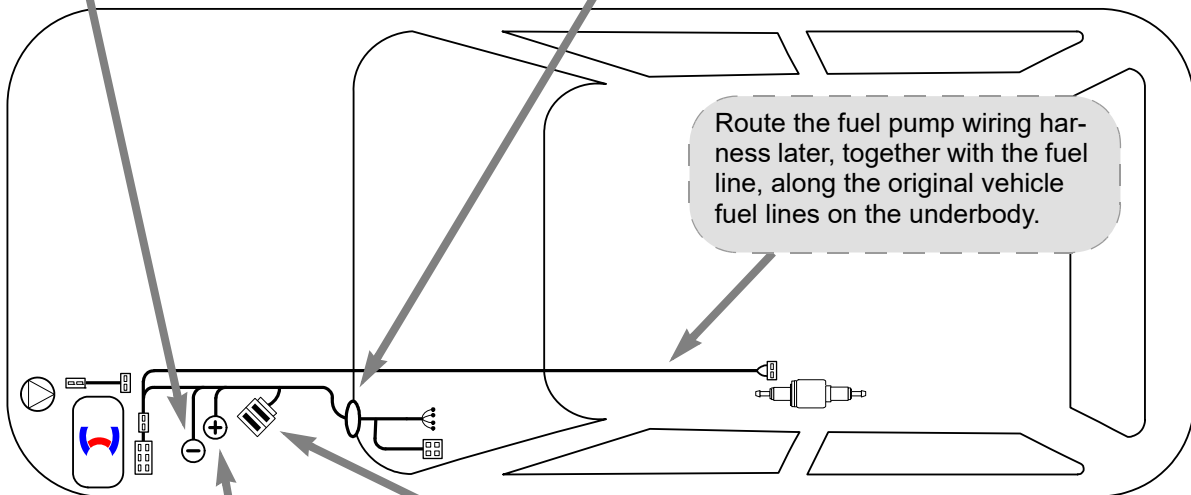
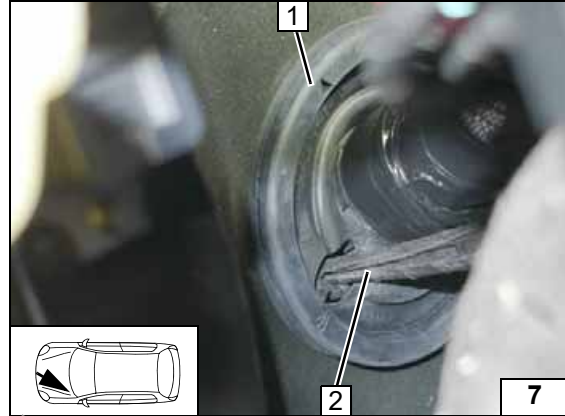
Earth wire

- 1 Earth wire on original vehicle earth support point

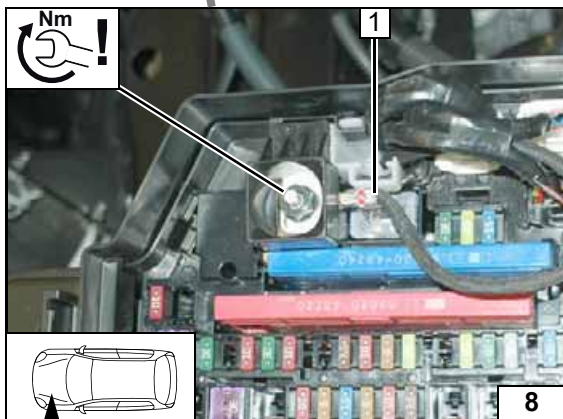


Wiring harness pass through

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

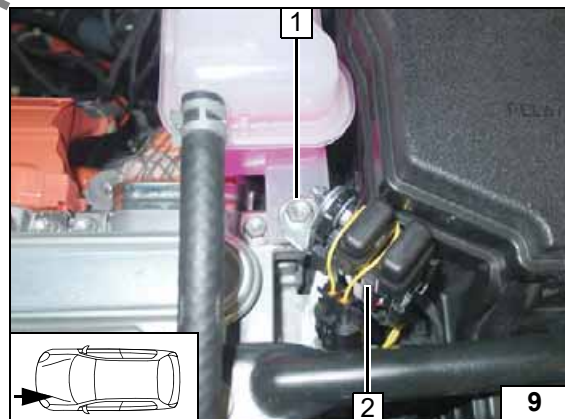


Wiring harness routing diagram



Positive wire

- 1 Positive wire on positive support point



Engine compartment fuse holder

- 1 Original vehicle bolt
- 2 Fuses F1-2



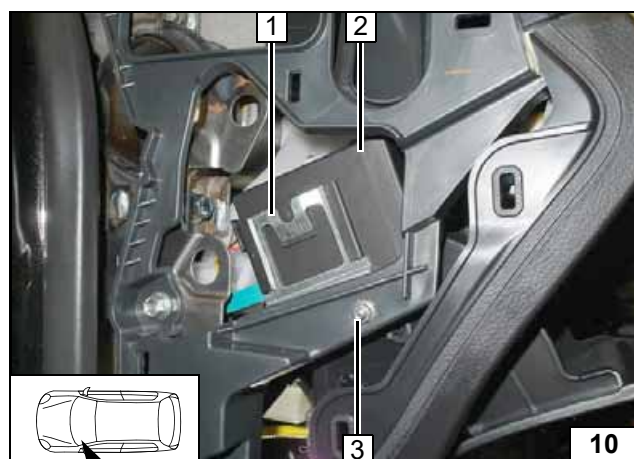


Air-conditioning control



Connect the A/C control in accordance with the separate installation documentation:

'Webasto Standard' A/C control installation documentation for Lexus

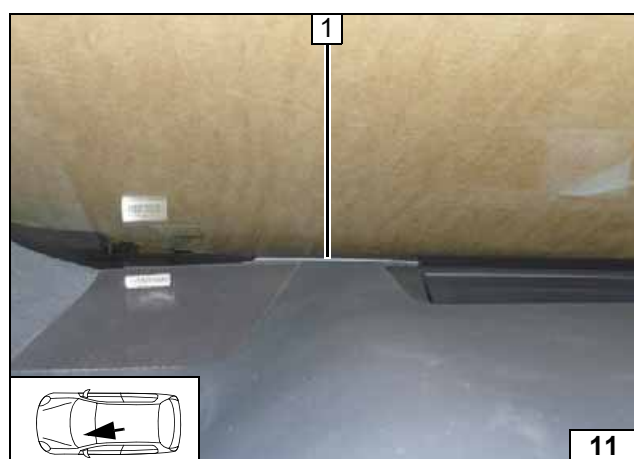


Remote option (Telestart)

- 1 Receiver bracket
- 2 Receiver
- 3 Ø5.5 hole; M5x16 bolt, flanged nut

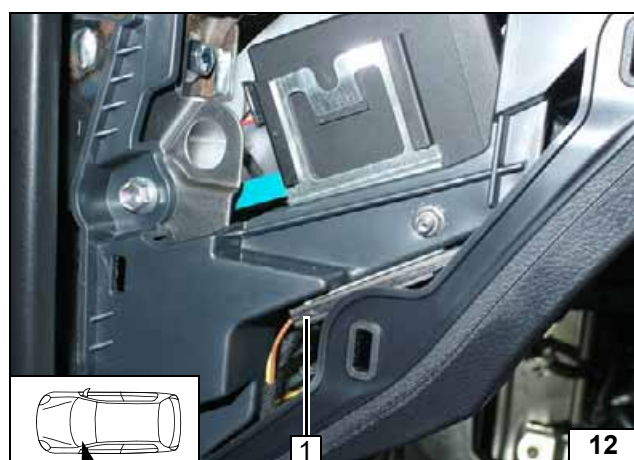


Installing receiver



- 1 Aerial

Installing aerial

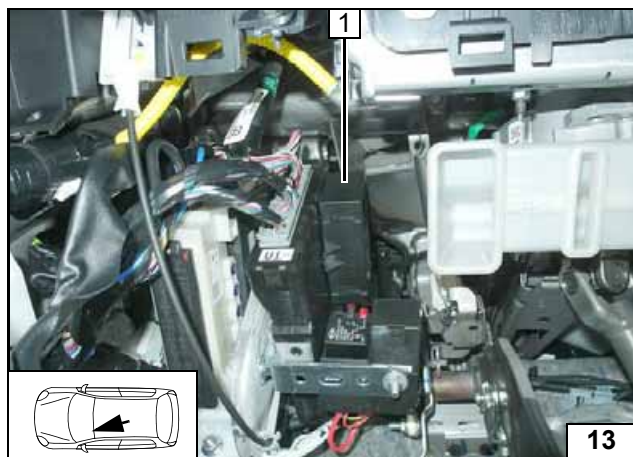


Temperature sensor T100 HTM

Fasten temperature sensor 1 with double-sided adhesive tape.



Installing temperature sensor

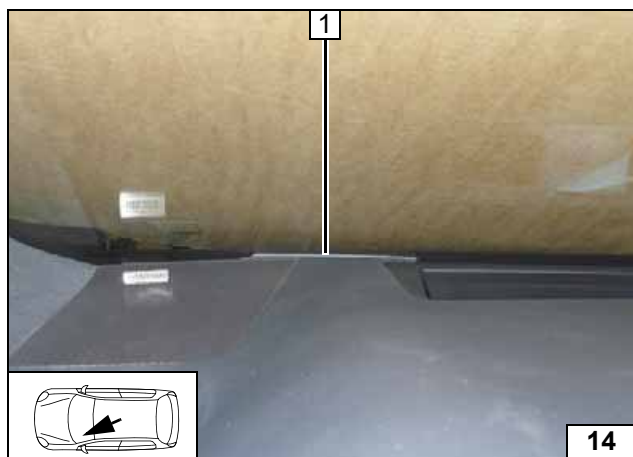


ThermoCall option

Fasten receiver 1 with double-sided adhesive tape.

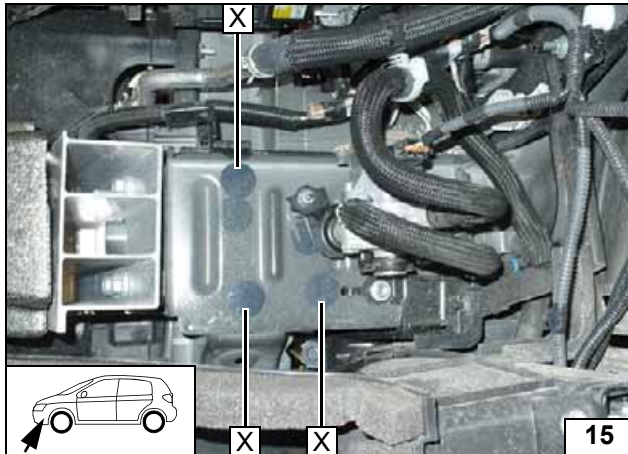
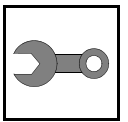


Installing receiver



1 Aerial (optional)

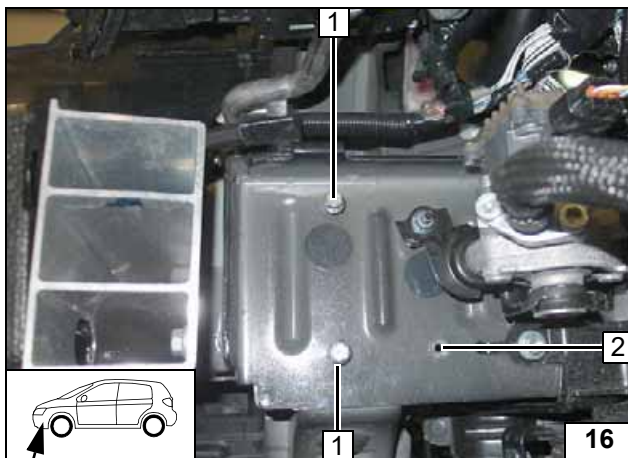
Installing aerial



Preparing installation location

X = [3x]

Removing self-adhesive film

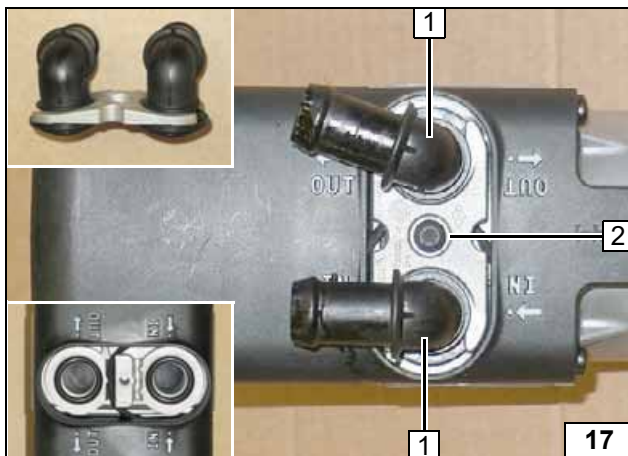


Screw M6x16 bolt with serrated flange 1 [2x] half way in the original vehicle thread.



2 Original vehicle thread

Premounting bolts

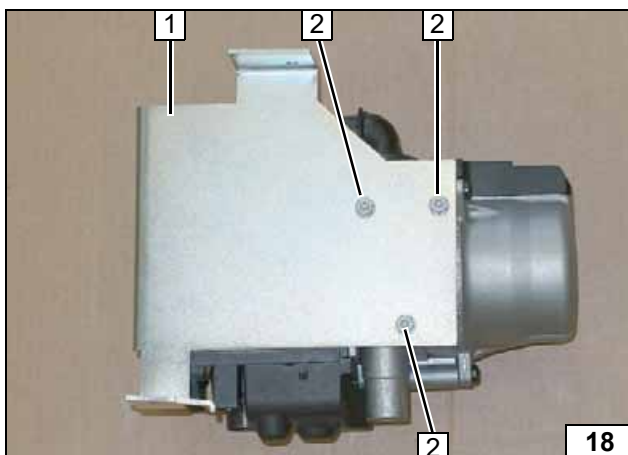


Preparing heater

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

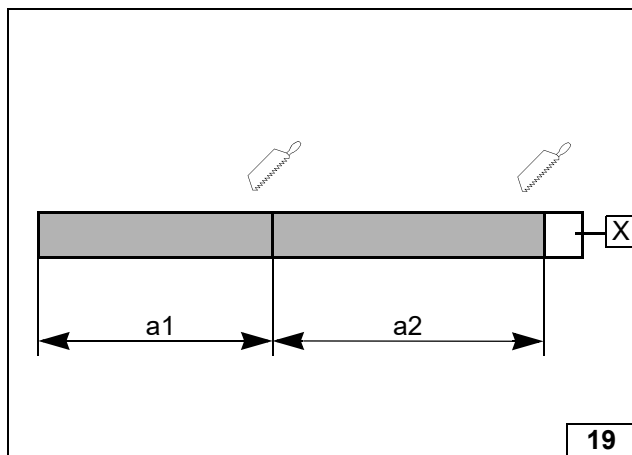


Installing water connection piece



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

Installing bracket 1

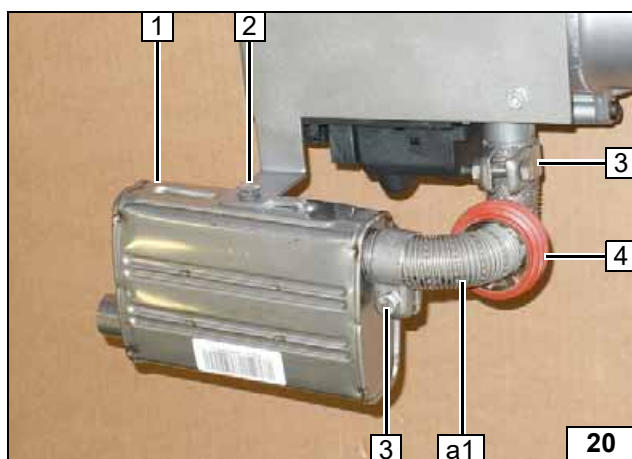


a1 = 140

a2 = 180

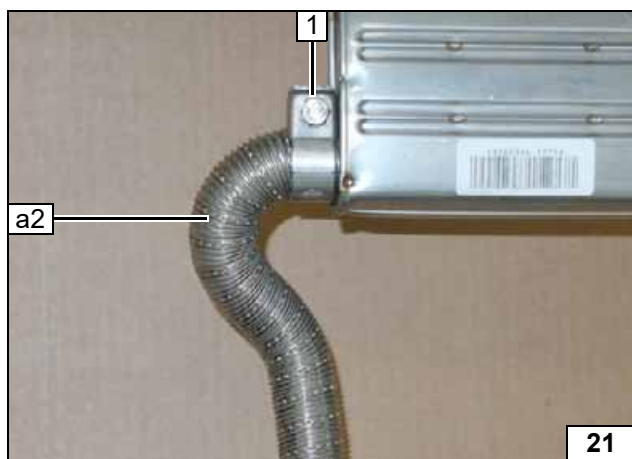
X =

Preparing exhaust pipe



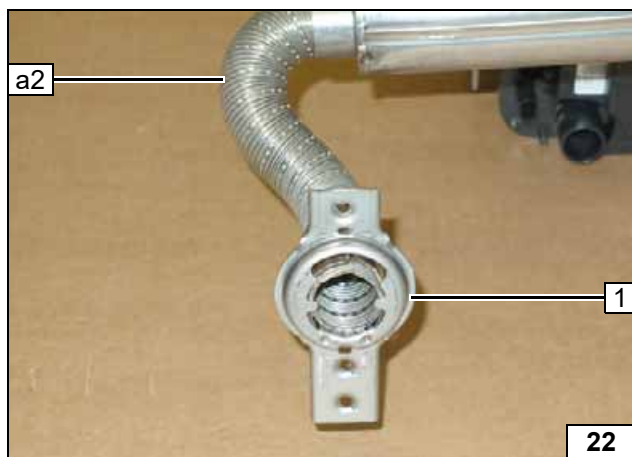
- 1 Silencer
- 2 M6x16 bolt, spring lock washer
- 3 Hose clamp [2x]
- 4 Spacer bracket

Installing exhaust silencer and exhaust pipe a1



- 1 Hose clamp

Installing exhaust pipe a2

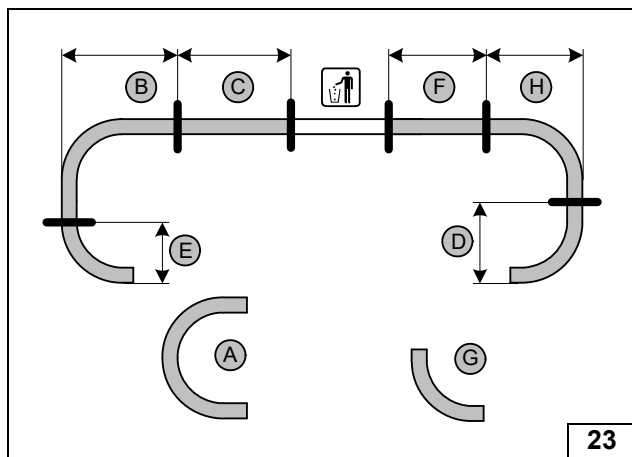


Work steps E6 - E8.

- 1 Exhaust end fastener

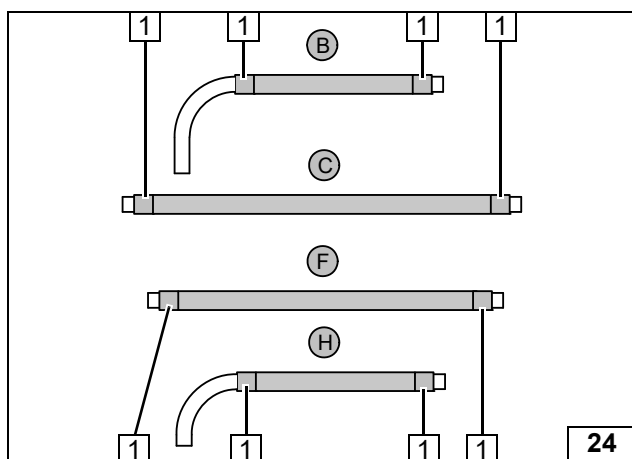


Installing exhaust end fastener



- A = 180°, 15x20
- B = 320
- C = 550
- D = 60
- E = 45
- F = 490
- G = 90°, 18x18
- H = 360

Cutting hoses to length

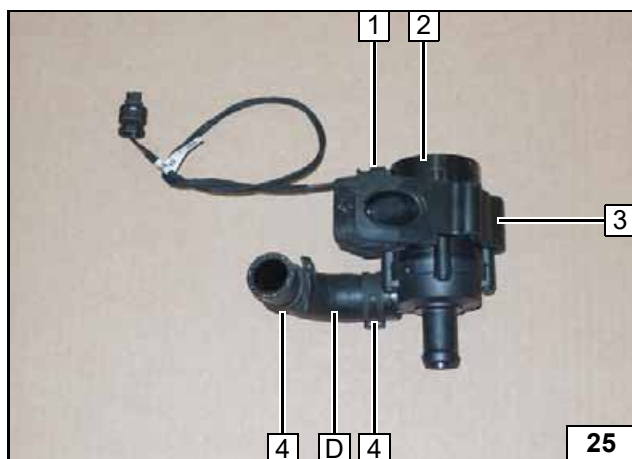


Push braided protection hoses onto hoses B, C, F and H and cut to length. Cut heat shrink plastic tubing to size.



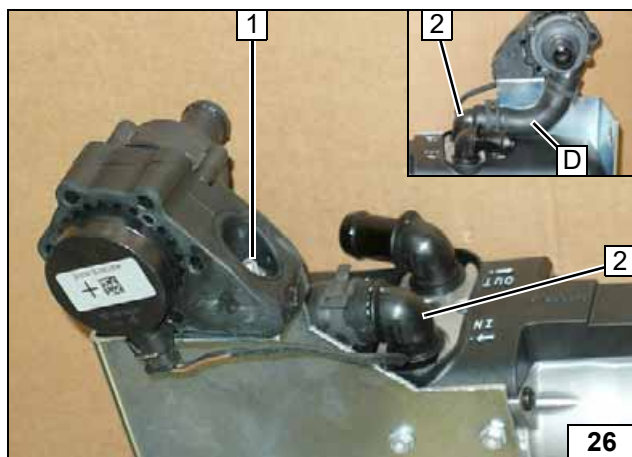
- 1 Heat shrink plastic tubing, 50 length [8x]

Preparing hoses



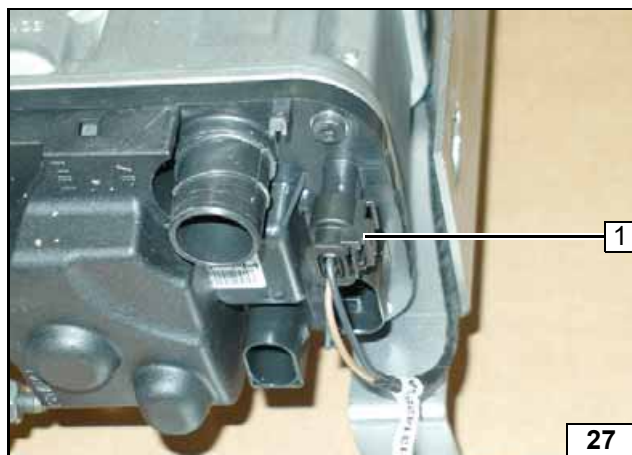
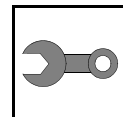
- 1 Connector of coolant pump wiring harness
- 2 Coolant pump
- 3 Coolant pump mount
- 4 Ø25 spring clip [2x]

Premounting coolant pump



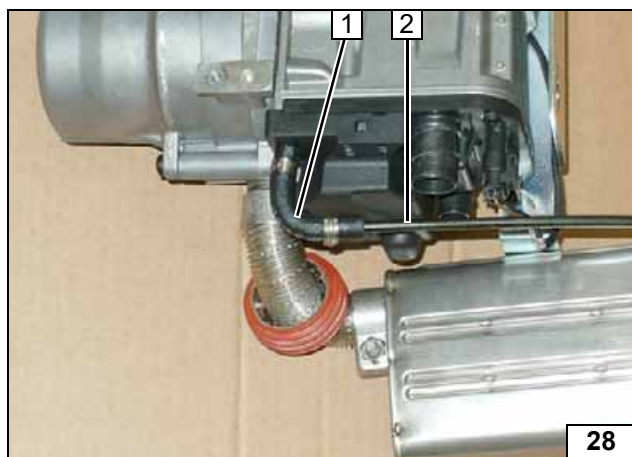
- 1 M6x25 bolt, flanged nut
- 2 Connection piece of heater inlet

Mounting coolant pump



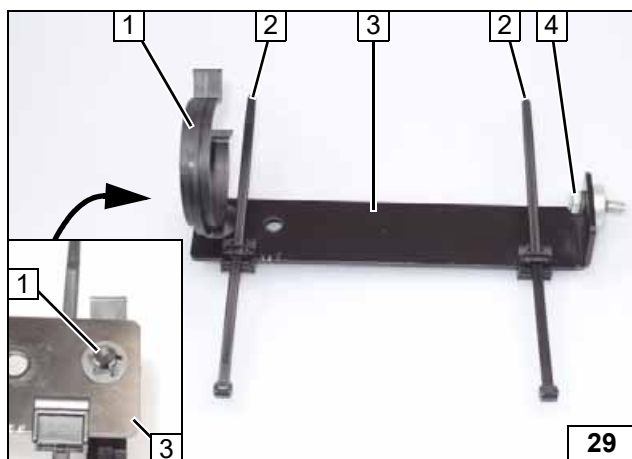
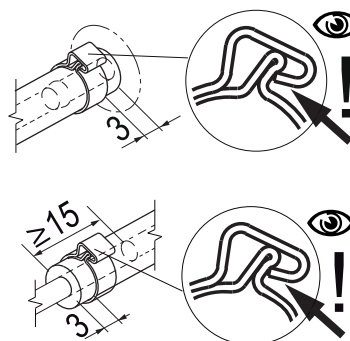
1 Connector of coolant pump wiring harness

Mounting coolant pump wiring harness



1 90° moulded hose, Ø10 clamp [2x]
2 Fuel line

Premounting fuel line

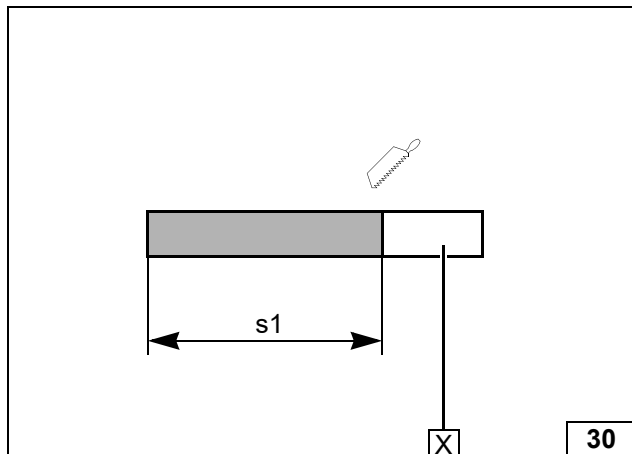


1 Retaining clip in hole, lock washer
2 Edge clip cable tie [2x]
3 Bracket 2
4 M6x20 bolt, spring lock washer, distance washer (5), lock washer

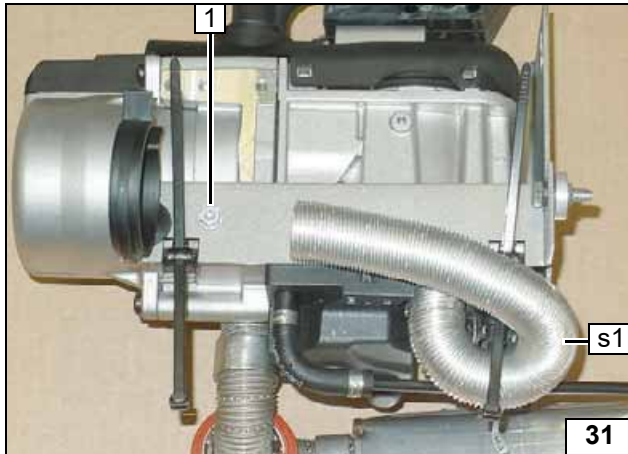
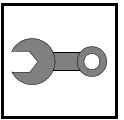
Premounting bracket 2

s1 = 230

X =

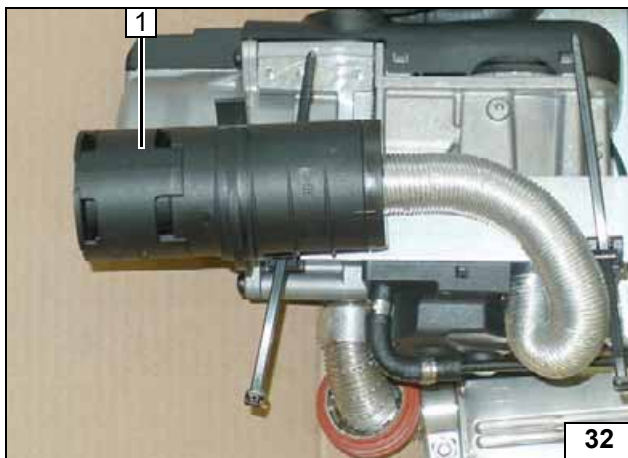


Cutting combustion air pipe to length



1 Tighten 5x13 self-tapping bolt hand-tight

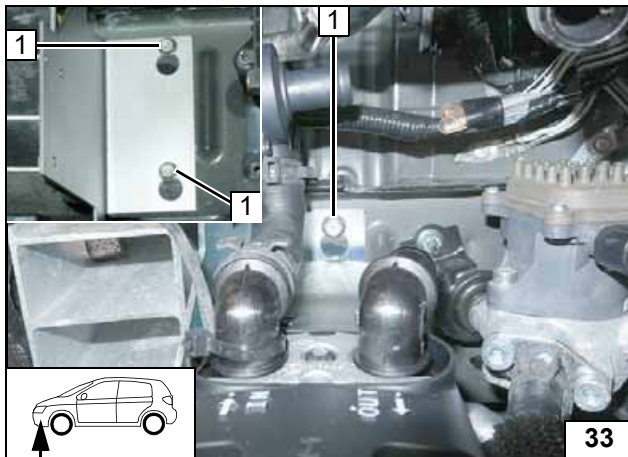
Installing bracket 2 and combustion air intake pipe s1



1 Combustion air intake silencer



Premounting combustion air intake silencer

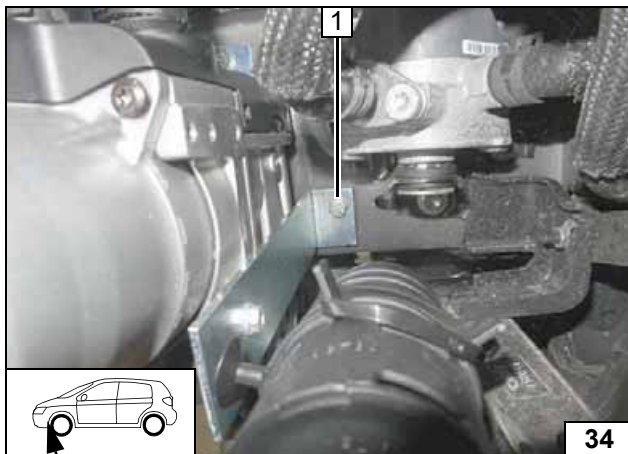


Installing heater

Suspend bracket 1 on M6x16 bolt with serrated flange 1 [2x].



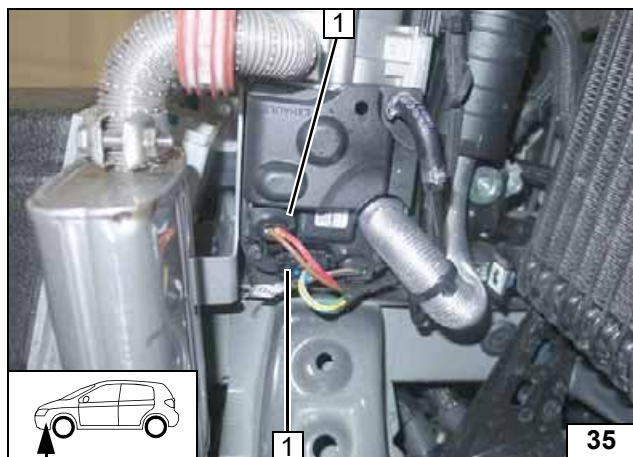
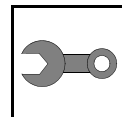
Mounting heater



Install bracket 2 using M6x20 bolt 1. Tighten all loose screw connections.

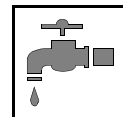


Mounting heater



- 1 Heater wiring harness connector [2x]

Installing
heater wir-
ing harness

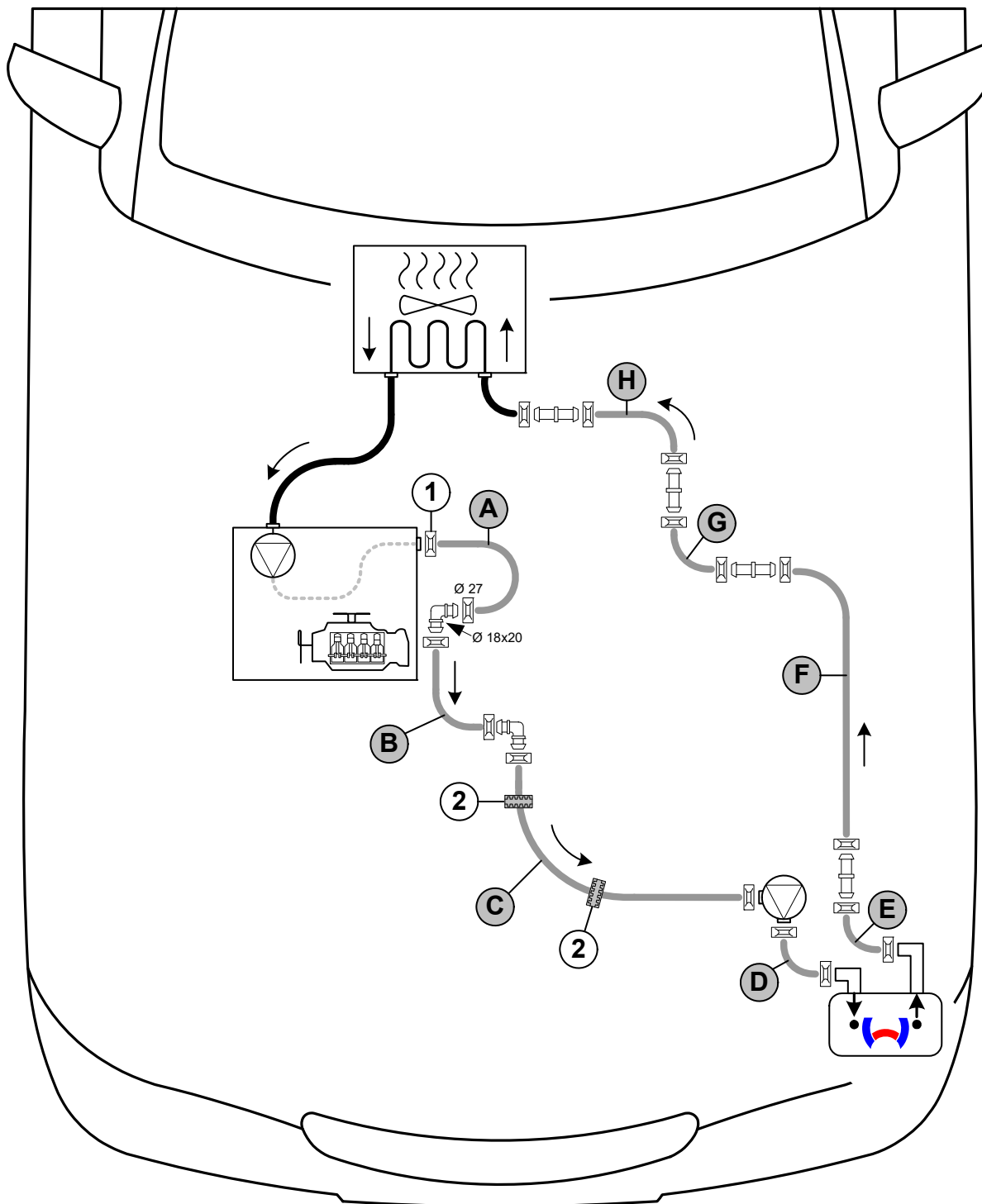


Coolant circuit








Any coolant running off should be collected in a suitable container. Route 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.

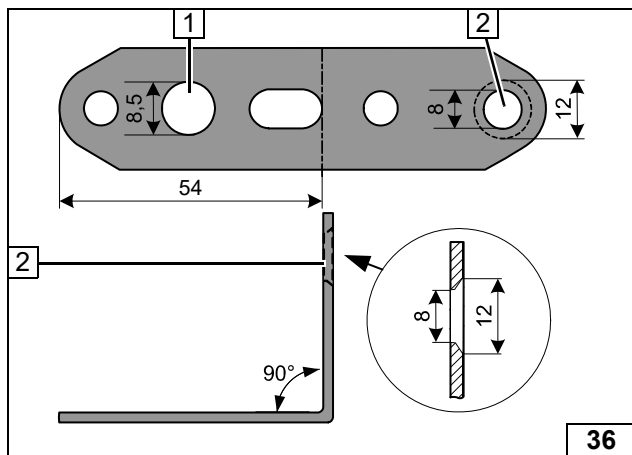
The connection should be modelled on an 'inline' circuit and based on the following diagram:



Hose routing diagram

1 = Original vehicle spring clip . 2 = Black (sw) rubber isolator  [2x]
 All spring clips without a specific designation  = Ø25.
 All connecting pipes without a specific designation  and  = Ø18x18.



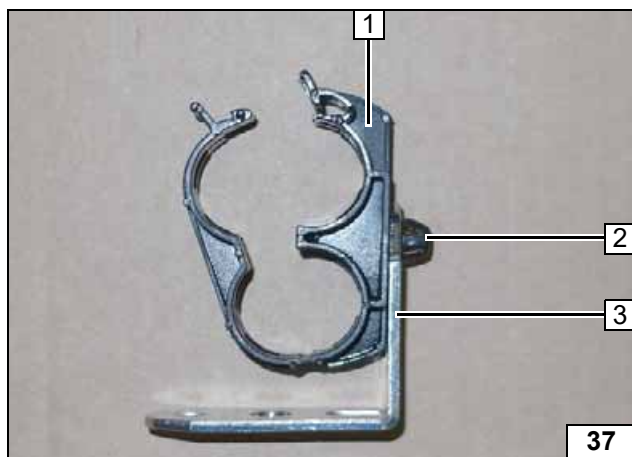


Countersink hole **2** as shown using $\varnothing 12$ drill bit.



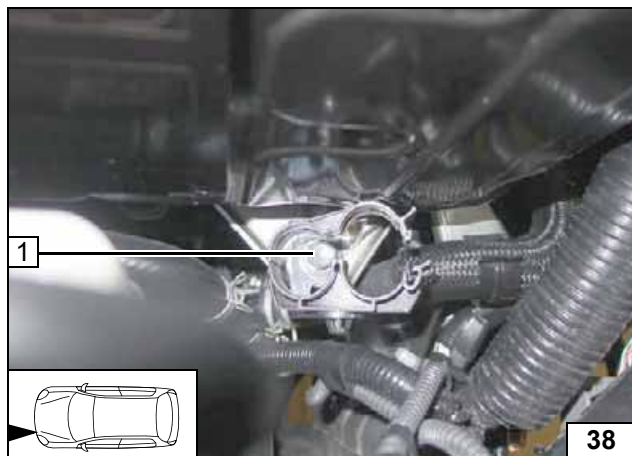
- 1 $\varnothing 8.5$ hole
- 2 $\varnothing 8.0$ hole

Preparing perforated bracket



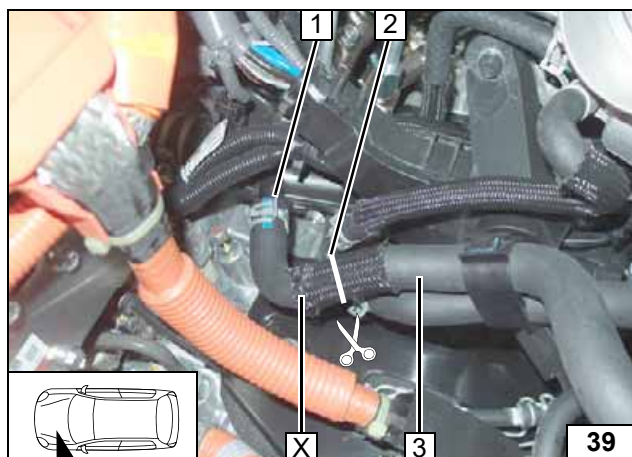
- 1 Hose bracket
- 2 Interlock locking tabs
- 3 Perforated bracket

Premounting hose bracket



- 1 Original vehicle bolt

Installing hose bracket with perforated bracket

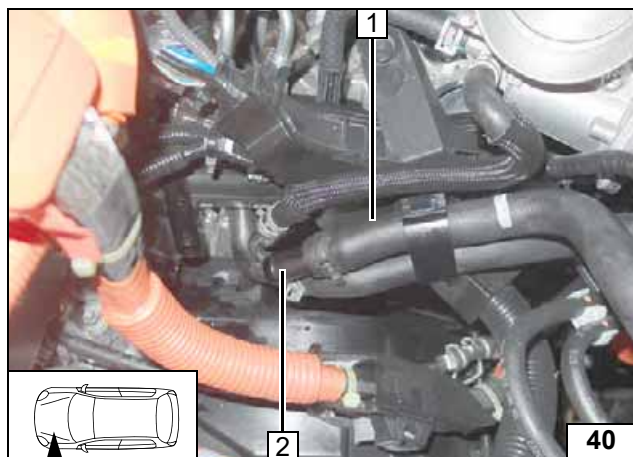


Cut hose of engine outlet/heat exchanger inlet **3** at marking **2**. Original vehicle spring clip **1** will be reused.



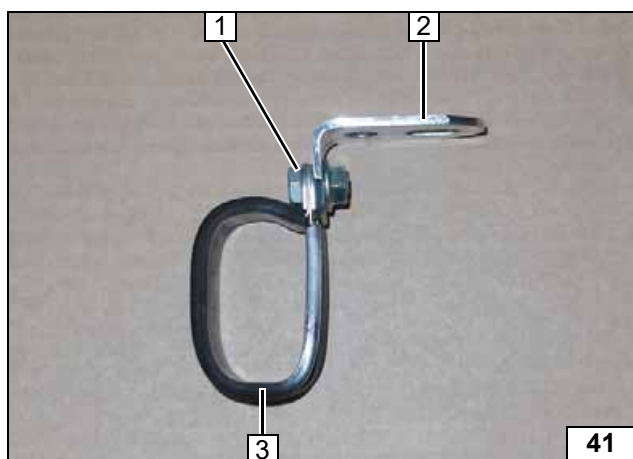
X =

Cutting point



- 1 Heat exchanger inlet hose section
- 2 Connecting pipe

Preparing heat exchanger inlet

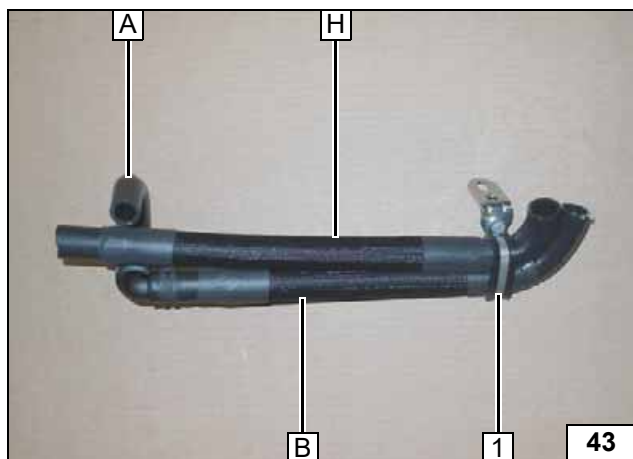


- 1 M6x12 bolt, flanged nut
- 2 Angle bracket
- 3 Ø38 rubber-coated p-clamp

Premounting clamp

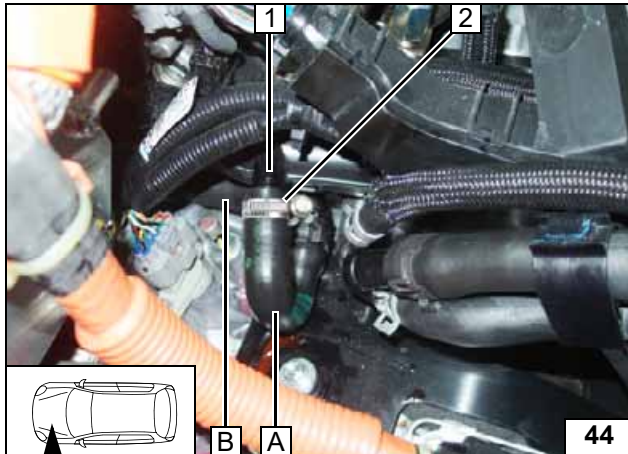
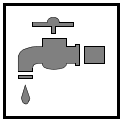


Premounting hoses



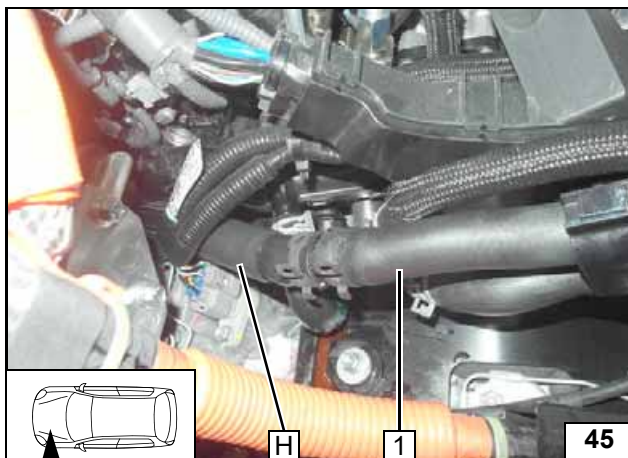
- 1 Ø38 rubber-coated p-clamp

Premounting hoses



- 1 Connection piece for engine outlet
- 2 Ø16-27 screw clamp

Connect-
ing engine
outlet

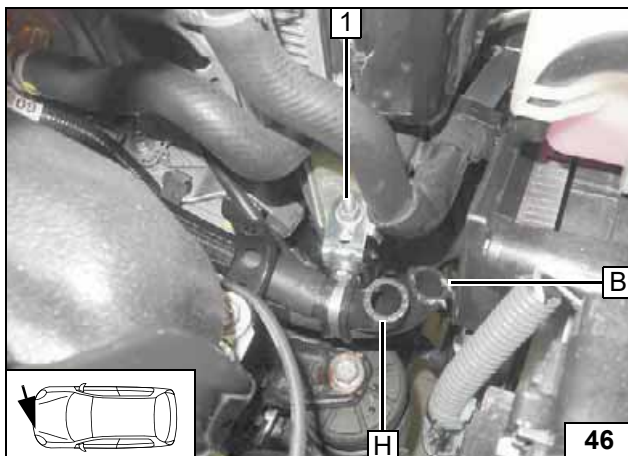


Align hoses.
Ensure sufficient distance from neighbour-
ing components; correct if necessary.



- 1 Heat exchanger inlet hose section

Heat ex-
changer in-
let
connection



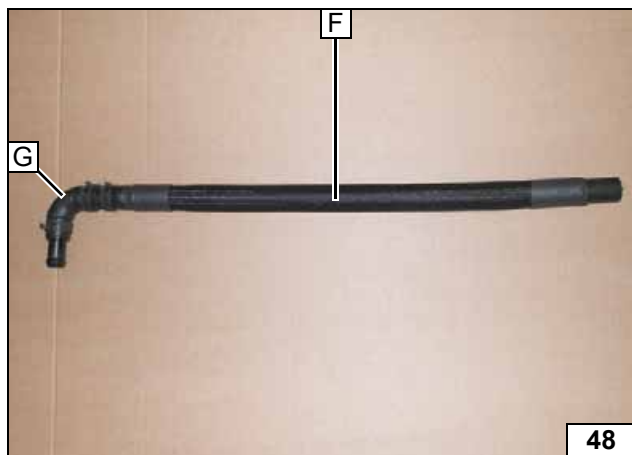
- 1 Original vehicle stud bolt, original ve-
hicle nut

Routing in
engine
compart-
ment

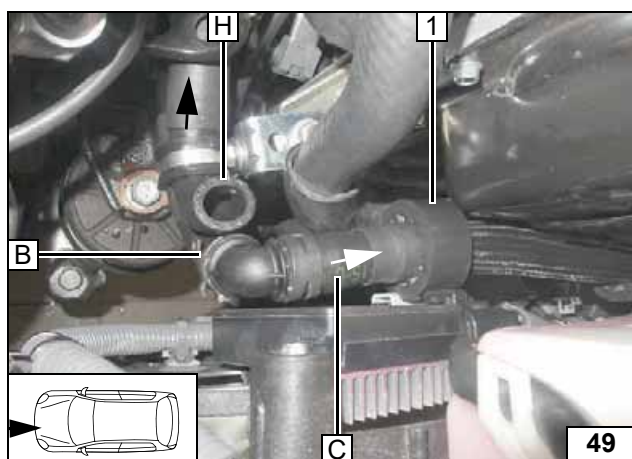


- 1 Black (sw) rubber isolator [2x]

Preparing
hose C

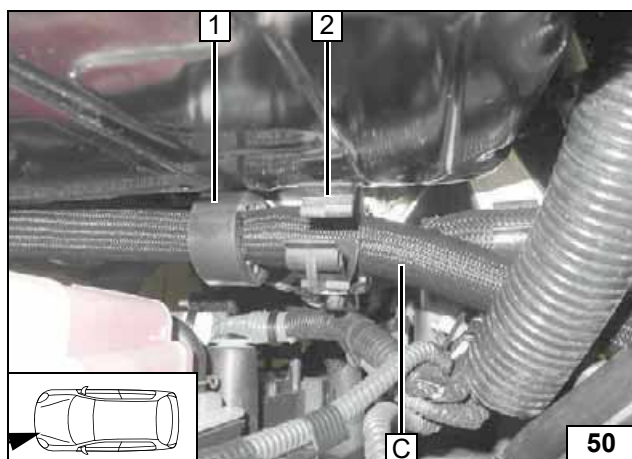


Premounting hoses F and G



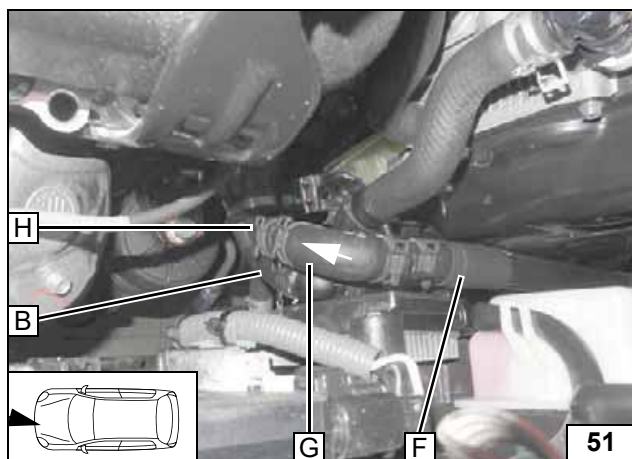
1 Position black (sw) rubber isolator

Installing hose C

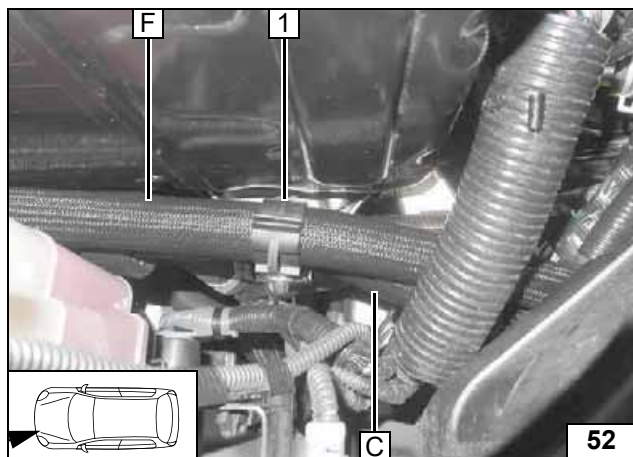


1 Position black (sw) rubber isolator
2 Hose bracket

Installing hose C

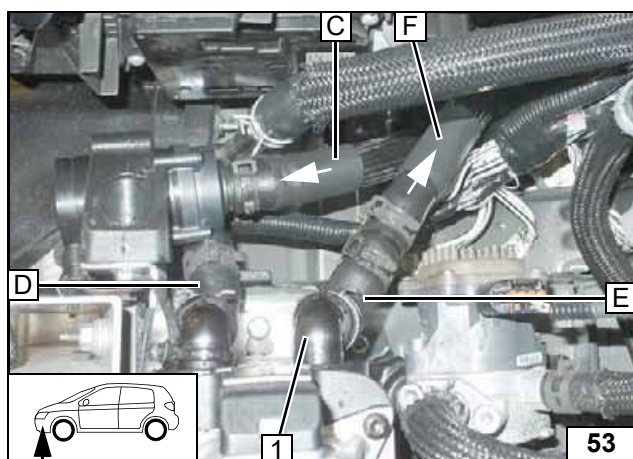


Mounting hoses F and G



1 Close lock of hose bracket

Installing hose F



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



1 Connection piece of heater outlet

Connect-
ing heater



Fuel



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

Catch any fuel running off in an appropriate container.



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

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

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

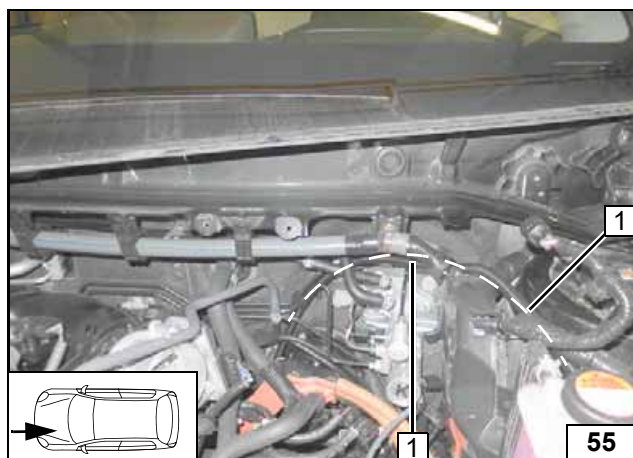


Route fuel line and fuel pump wiring harness in Ø10 corrugated tube 2 in the engine compartment.

Secure corrugated tube and heater wiring harness with edge clip cable tie 1 [2x].



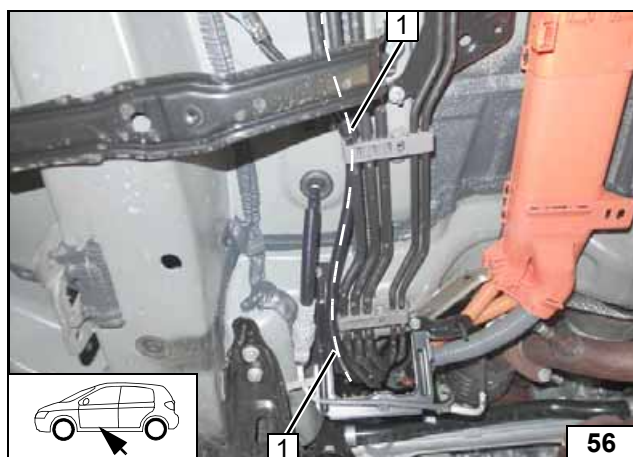
Routing lines



Route fuel line and fuel pump wiring harness in Ø10 corrugated tube 1 to the underbody.



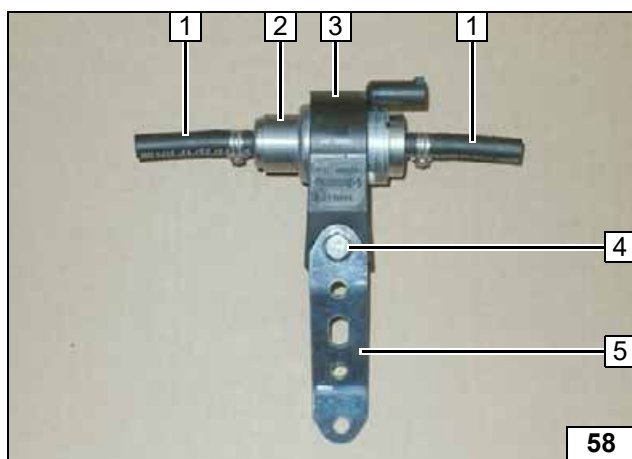
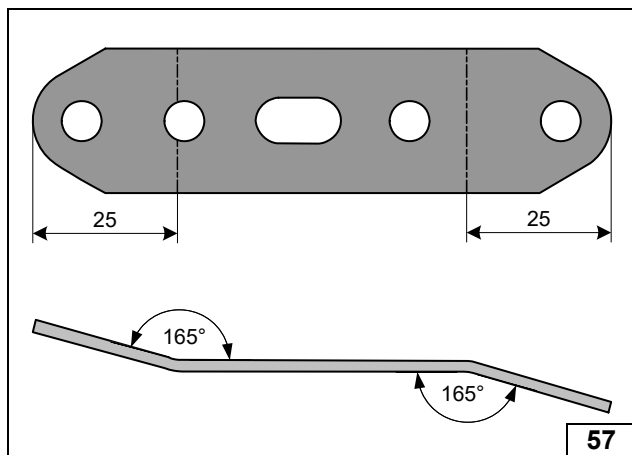
Routing lines



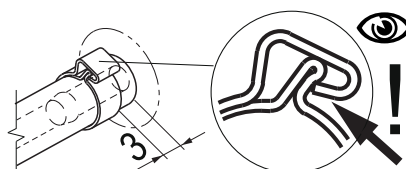
Route fuel line and fuel pump wiring harness in Ø10 corrugated tube 1 to the fuel pump installation location.



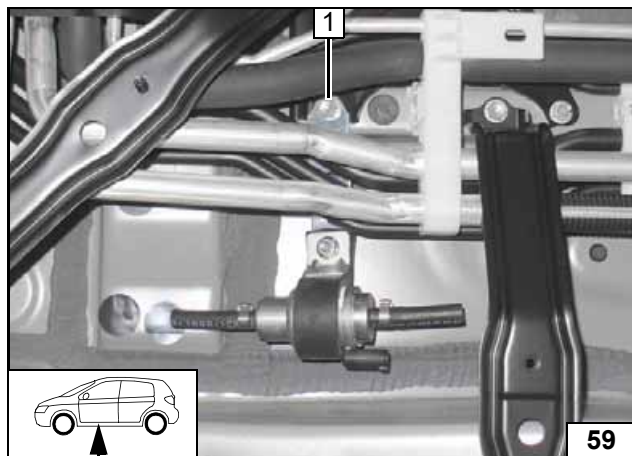
Routing lines



- 1 Hose section, Ø10 clamp
- 2 Fuel pump
- 3 Fuel pump mount
- 4 M6x25 bolt, support angle bracket, flanged nut
- 5 Perforated bracket



- 1 Original vehicle bolt

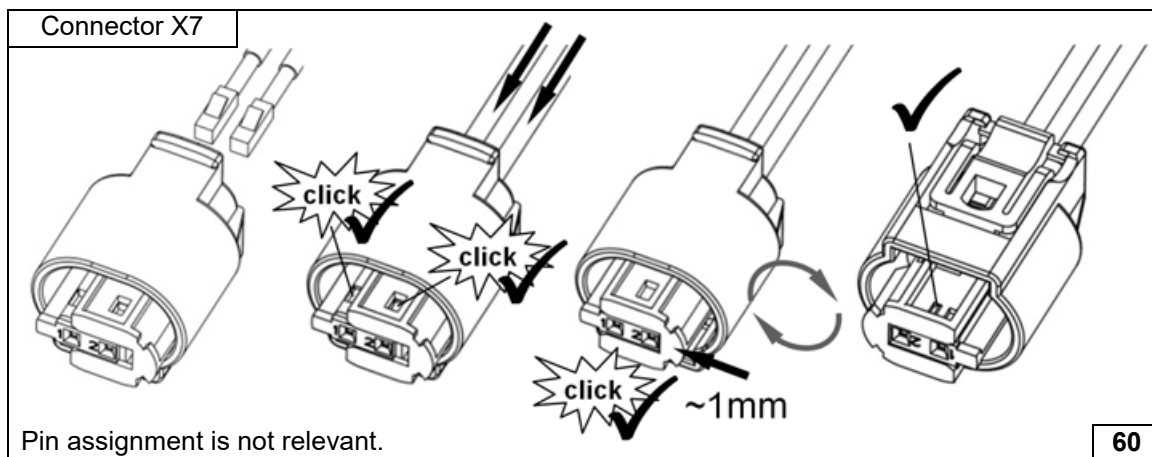


Preparing perforated bracket

Premounting fuel pump

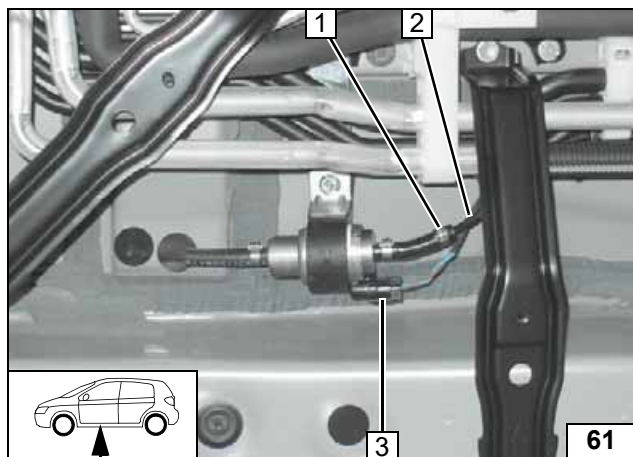


Mounting fuel pump



Pin assignment is not relevant.

Completing fuel pump connector

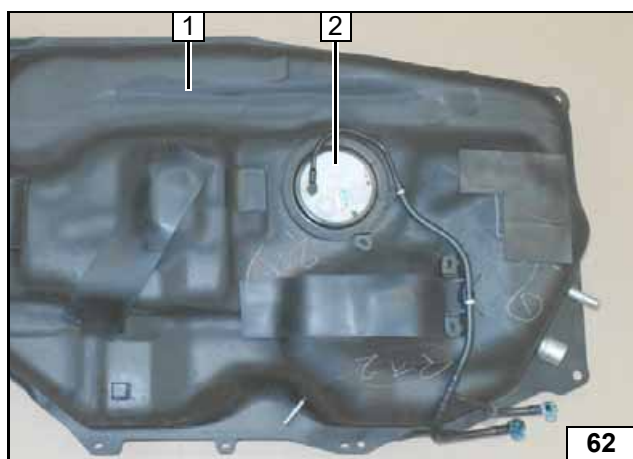
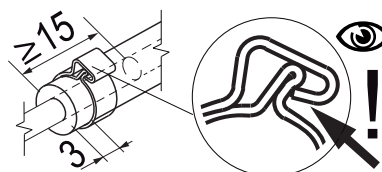


Ensure sufficient distance from neighbouring components; correct if necessary.



- 1 Ø10 clamp
- 2 Fuel line
- 3 Fuel pump wiring harness, connector X7 mounted

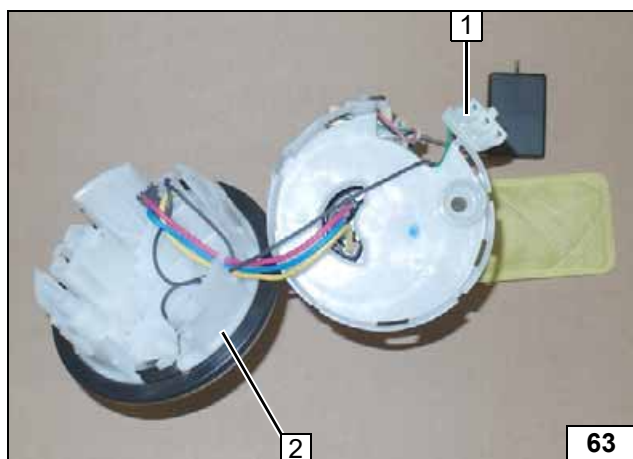
Fuel pump connection



Remove tank 1 according to the manufacturer's instructions.
Remove tank fitting 2 in accordance with the manufacturer's instructions.



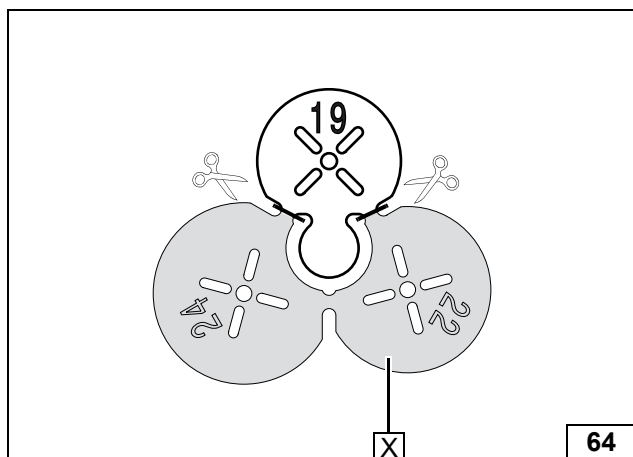
Preparing fuel extraction



Detach original vehicle connector 1 from top.
Unclip top of tank fitting 2 carefully!

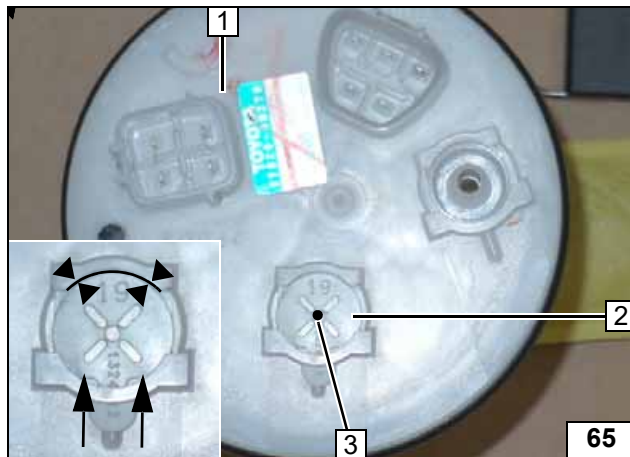
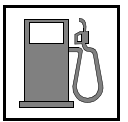


Unclipping top of tank fitting



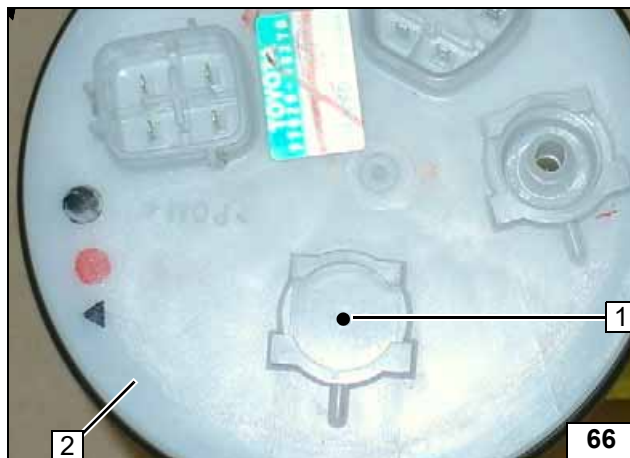
X =

Preparing drilling template



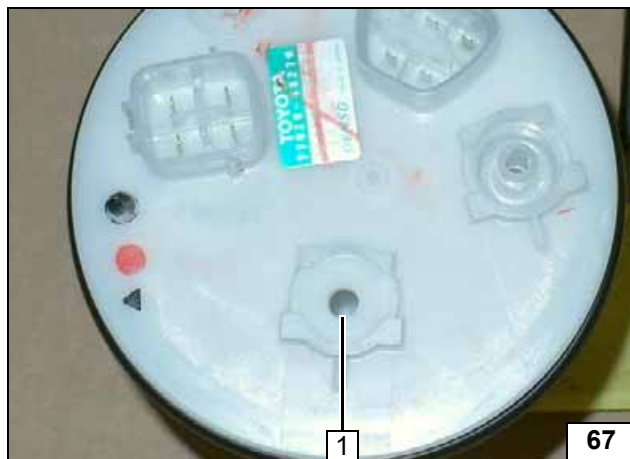
- 1 Tank fitting
- 2 Insert $\varnothing 19$ template up to the edge as shown
- 3 Hole pattern

Copying hole pattern



- 1 $\varnothing 2$ centring hole
- 2 Tank fitting

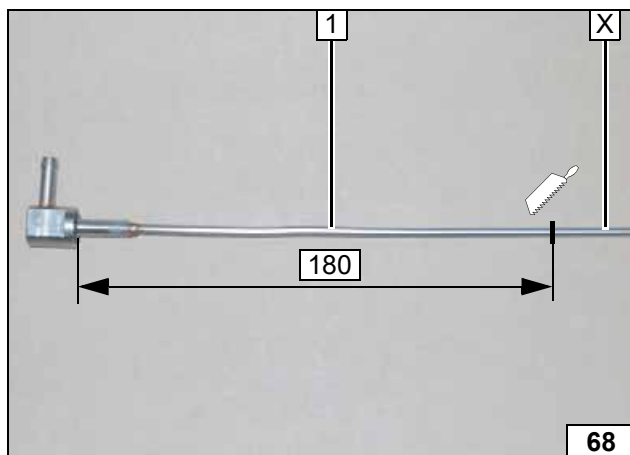
Drilling centring hole



- 1 $\varnothing 6$ hole



Hole for tank extracting device

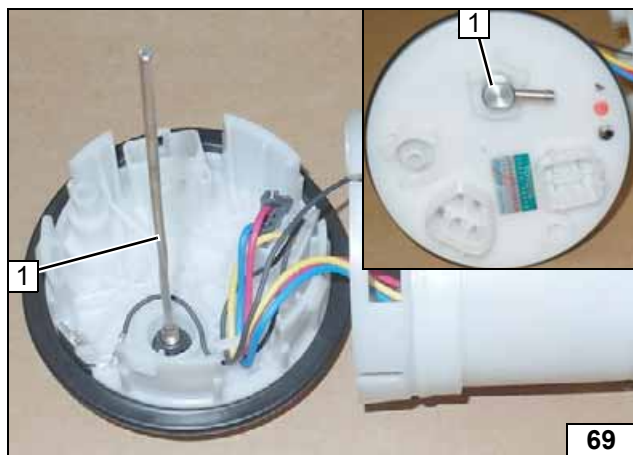


- 1 Tank extracting device

X =



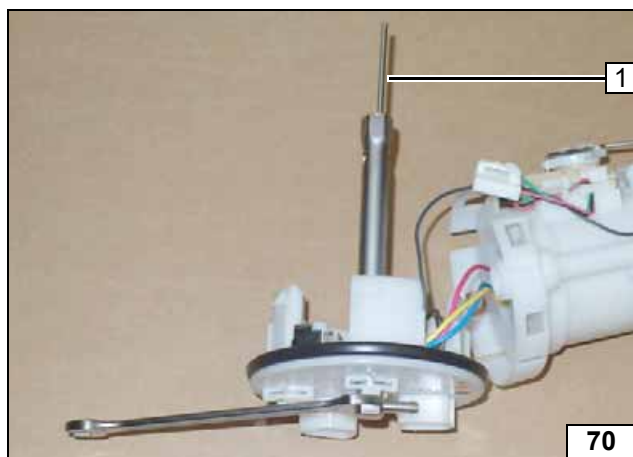
Cutting tank extracting device to length



Align tank extracting device 1 as shown.



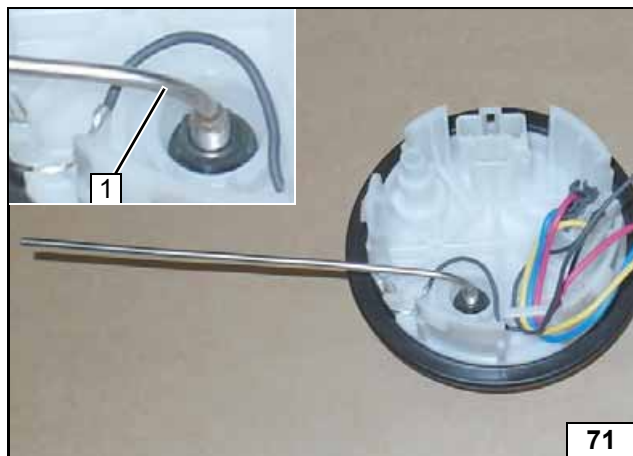
Screwing in tank extracting device



Tighten tank extracting device 1 using a 10mm tubular spanner!

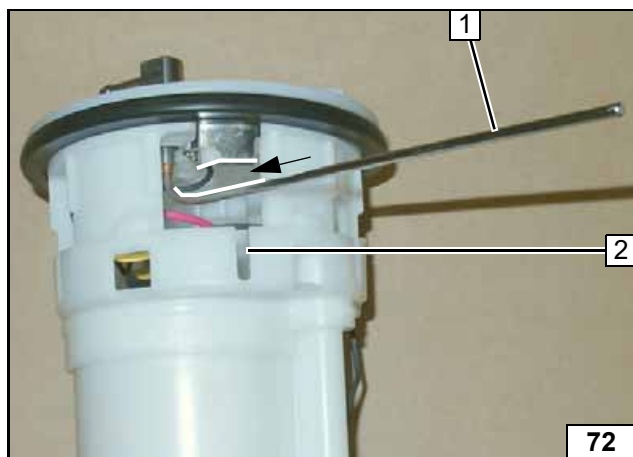


Screwing in tank extracting device



1 First tank extracting device bend, align as shown in the next figure.

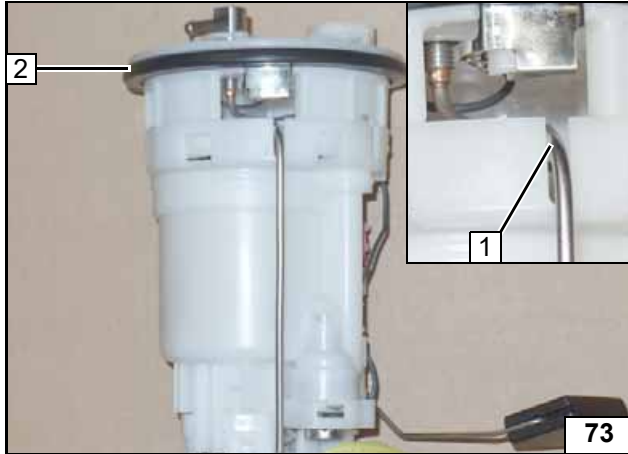
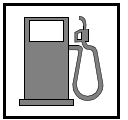
Bending tank extracting device



Ensure sufficient distance between tank extracting device 1 and original vehicle earth connection, correct if necessary. Align tank extracting device 1 with groove 2.



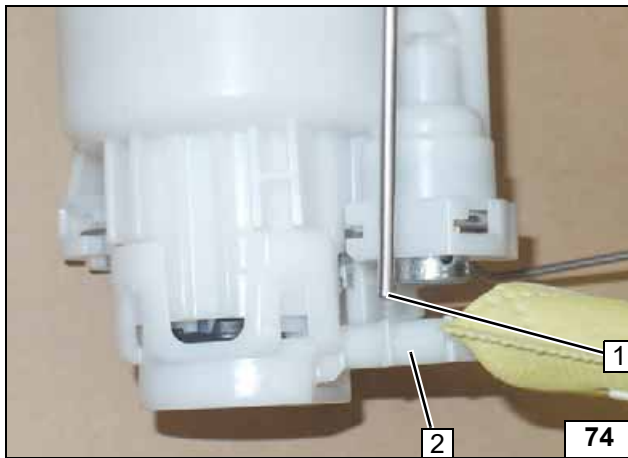
Bending tank extracting device



Do not assemble top of tank fitting **2** yet. Lead tank extracting device closely to the housing of the tank fitting and align in groove!

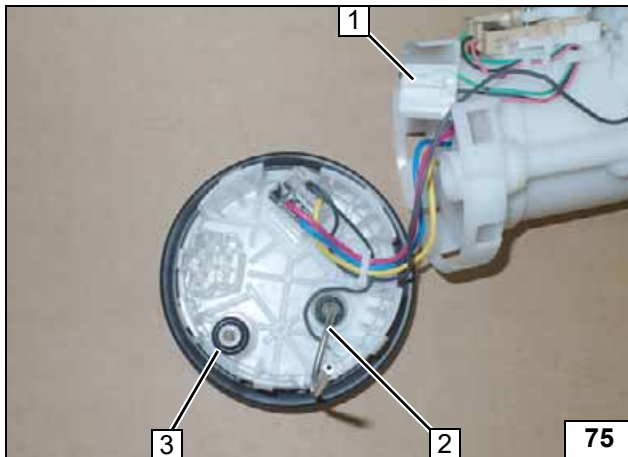
- 1 Second tank extracting device bend

Bending tank extracting device



The intake end of tank extracting device **1** is located above the original vehicle fuel extraction point of fuel pump **2**!

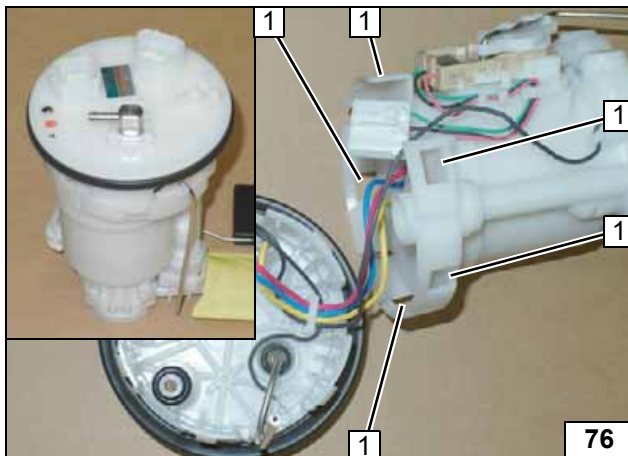
Bending tank extracting device



Do not clamp or squeeze the original vehicle lines and ensure sufficient distance from tank extracting device **2**, correct if necessary!

- 1 Connect connector
- 3 Original vehicle sealing ring

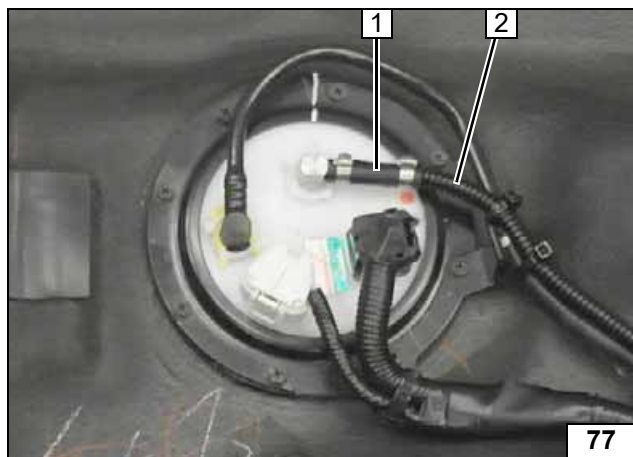
Closing tank fitting



Engage all locking tabs **1** correctly!

Closing tank fitting



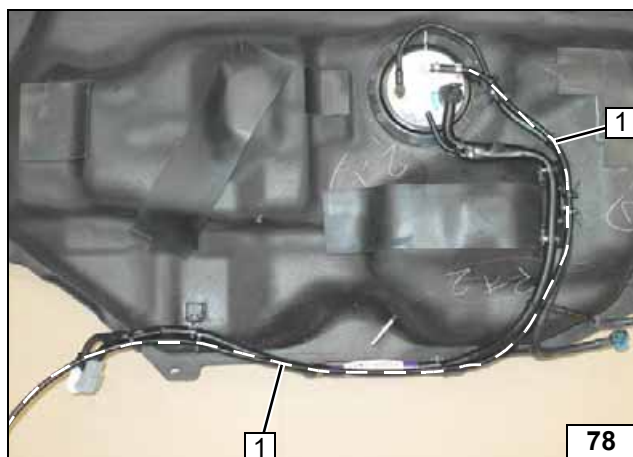
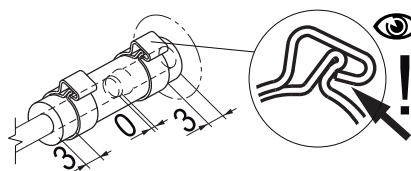


Install tank fitting according to manufacturer's instructions.

- 1 Hose section, Ø10 clamp [2x]
- 2 Fuel line in Ø6 corrugated tube



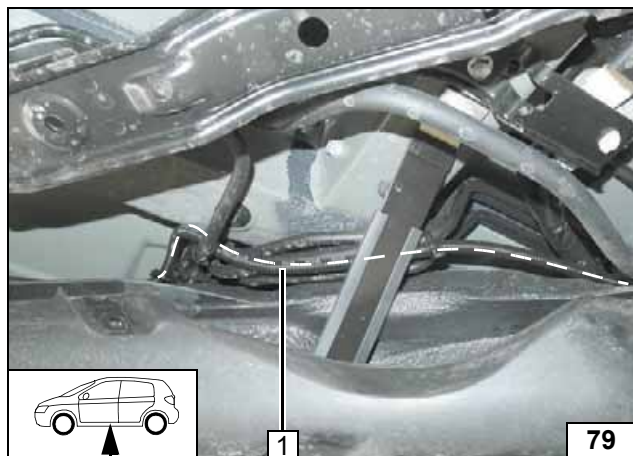
Mounting tank fitting / connecting fuel line



Attach fuel line in Ø6 corrugated tube 1 to original vehicle lines with a cable tie.



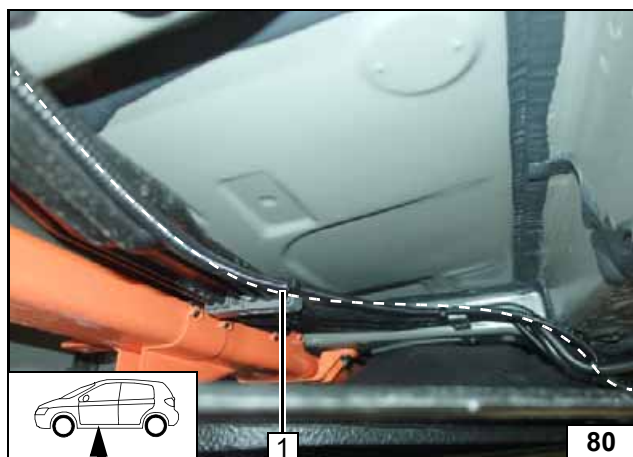
Routing lines



Install fuel tank in accordance with manufacturer's instructions. Attach fuel line in Ø6 corrugated tube 1 to original vehicle lines.



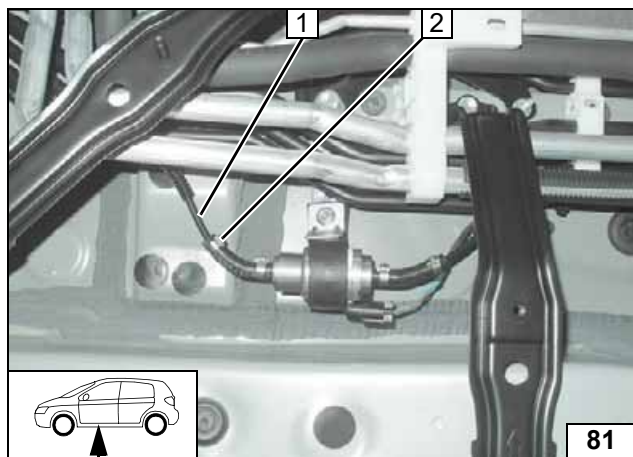
Routing lines



Attach fuel line in Ø6 corrugated tube 1 to original vehicle lines.

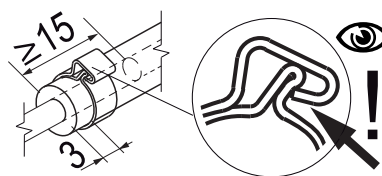


Routing lines

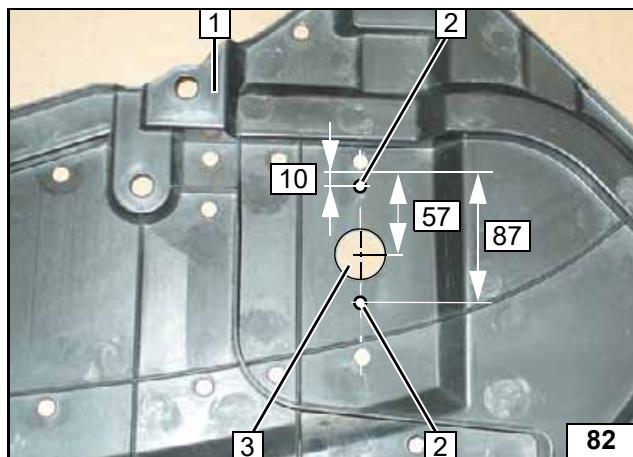
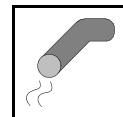


Ensure sufficient distance from neighbouring components; correct if necessary.

- 1 Fuel line
- 2 Ø10 clamp



Fuel pump connection



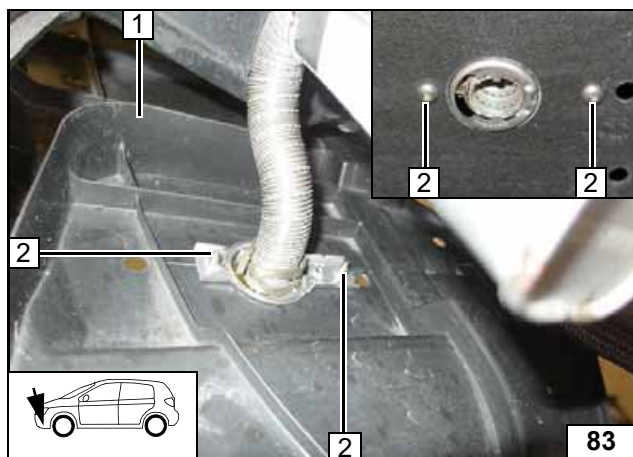
Exhaust end fastener installation

Work steps E1 and E4.

- 1 Underride protection
- 2 Hole [2x]
- 3 Hole



Holes in under-ride protection



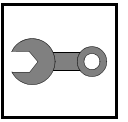
Mount under-ride protection 1.

Work step E5.

- 2 Self-tapping screw 5x13 [2x]



Installing exhaust end fastener



Final work



Reassemble the components in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate and tie back loose lines. Only use manufacturer-approved coolant. Spray the heater components with anti-corrosion wax (Tectyl 100K).



Activation of hybrid system

The hybrid system should be re-activated prior to the connection of the 12V vehicle battery.



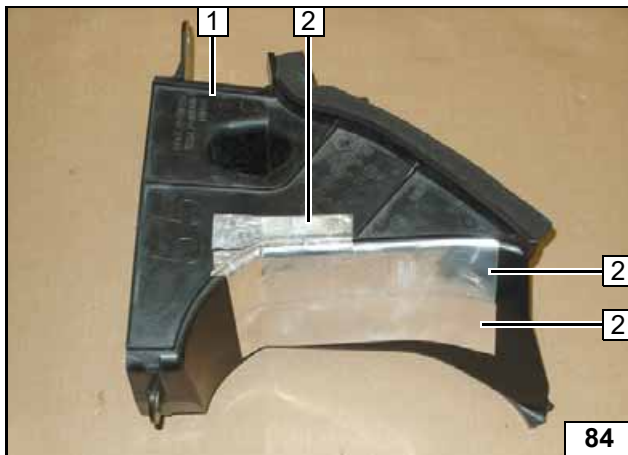
- **Connect the battery.**
- **Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.**
- **Teach Telestart transmitter**
- **For initial start-up and function check, see installation instructions**
- **If the fan function or A/C control panel settings need to be checked, see the installation documentation in the additional 'Webasto Standard' automatic A/C control kit for Lexus.**
- **Place the 'Switch off parking heater before refuelling' caution label near the filler point**

Vehicle event log after parking heating mode

Components of the original vehicle air conditioning system are activated during parking heating mode.

Other vehicle components remain inactive, which in some circumstances may be interpreted as an error and can be filed as such in the event log.

An increased power consumption (quiescent current) may also be registered for some vehicles. If an incorrect installation can be excluded, these entries are exclusively related to the parking heating mode situation and have no effect on the vehicle functions in driving mode.

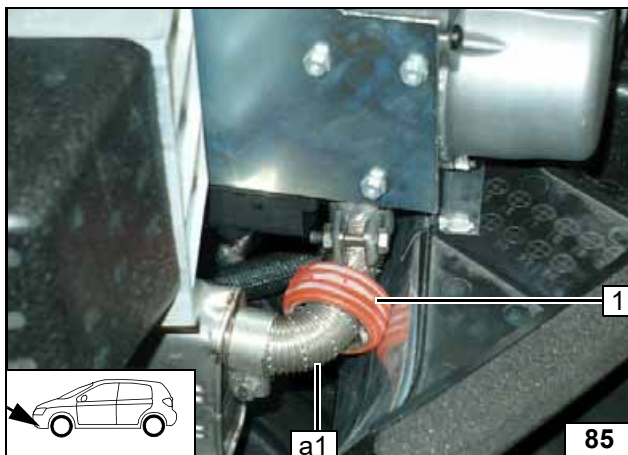


Stick on heat protection film **2** as shown.

1 Ventilation channel



Gluing on heat protection film



Position spacer bracket **1**.



Installing ventilation channel

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