



Water Heater

Thermo Top Evo Parking Heater
'Island based circuit'



Installation Documentation

Mini Cooper (F56)

Validity

Manufacturer	Model	Type	EG BE No. / ABE
Mini	Cooper	UKL-L	e1 * 2007 / 46 * 0371*...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm ³	Engine code
1.5 D	Diesel	AG	85	1496	B37

AG = automatic transmission

From model year 2014

Left-hand drive vehicle

Verified equipment variants: Manual air-conditioning
Multi-zone automatic air-conditioning (2 zones)
LED front fog lights with parking light
Parking light without front fog lights
2 WD

Not verified: Halogen front fog lights

Total installation time: approx. 7.5 hours

Mini Cooper (F56)

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Necessary Components

- Basic delivery scope of Thermo Top Evo in accordance with price list
- Installation kit for Mini Cooper (F56) 2014 Diesel: **1324865A**
- Additional kit 'Webasto Comfort' A/C control for BMW / Mini: **1324388_**
- Heater control in accordance with price list and upon consultation with end customer
- In case of MultiControl CAR installation: Timer cable extension: **1319724_**
- In case of Telestart, indicator lamp in accordance with price list and installation location in consultation with end customer

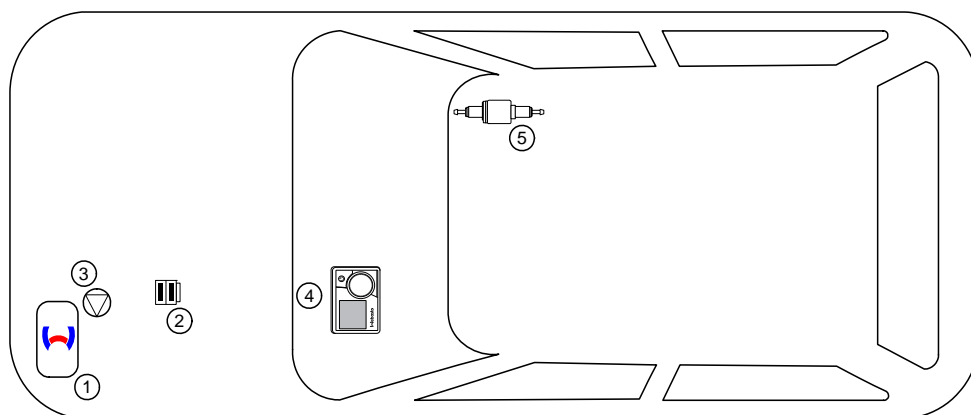
Installation instructions:

- 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.
- Depending on the space required and the vehicle manufacturer's instructions, we recommend the use of a vehicle battery with a higher electrical capacity.
- The heater will be integrated as an 'island' in the coolant circuit and is used to heat up the vehicle interior. The engine is **not** preheated!

Installation Overview

Legend:

1. Heater
2. Engine compartment fuse holder
3. Circulating pump
4. MultiControl CAR
5. Metering 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.

Mini Cooper (F56)

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 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).

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

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

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

2 Statutory regulations governing installation

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

Note

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

Important

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

Note

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

2.1 Excerpt from ECE regulation 122 (heating system) paragraph 5 for the installation of the heater

Beginning of excerpt.

ANNEX VII

REQUIREMENTS FOR COMBUSTION HEATERS AND THEIR INSTALLATION

1. GENERAL REQUIREMENTS

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

2. VEHICLE INSTALLATION REQUIREMENTS

2.1. Scope

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

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

2.2. Positioning of heater

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

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

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

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

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

2.3. Fuel supply

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

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

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

2.4. Exhaust system

2.4.1. The exhaust 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.

Mini Cooper (F56)

Information on Validity

This installation documentation applies to Mini Cooper (F56) Diesel vehicles - for validity, see page 1 - from model year 2014 and later, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to this 'installation documentation'.

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

Technical Information

Special Tools

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

Dimensions

- All dimensions are in mm.

Tightening torque values

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

Explanatory Notes on Document

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

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



Reference to a special technical feature.



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



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



Mini Cooper (F56)

Preliminary Work

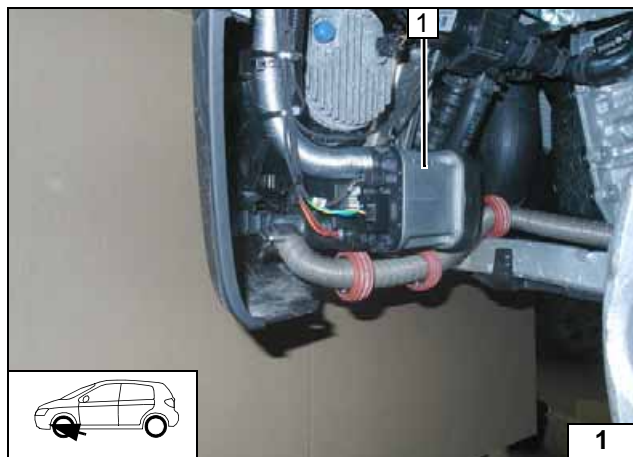
Vehicle



- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect the battery.
- Remove the windscreen wipers.
- Remove the coolant reservoir cap completely.
- Remove the air filter box with the intake hose.
- Remove the intercooler hose.
- Remove the left wheel.
- Remove the left front wheel-well inner panel.
- Remove the brake air duct in the front on the left.
- Remove the rear seat bench.

Heater

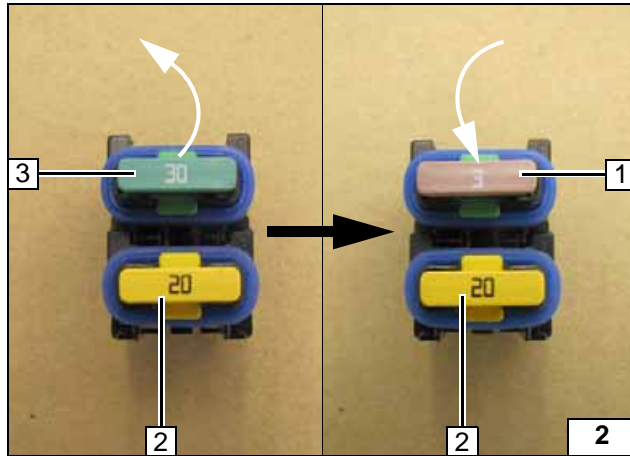
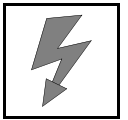
- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) visibly in the appropriate place in the engine compartment.



Heater Installation Location

- 1 Heater

Installation location



Preparing Electrical System

Wire sections retain their numbering in the entire document.

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

Replace passenger compartment 30A main fuse F2 **3** with 3A fuse **1**.

- 2** 20A heater fuse F1



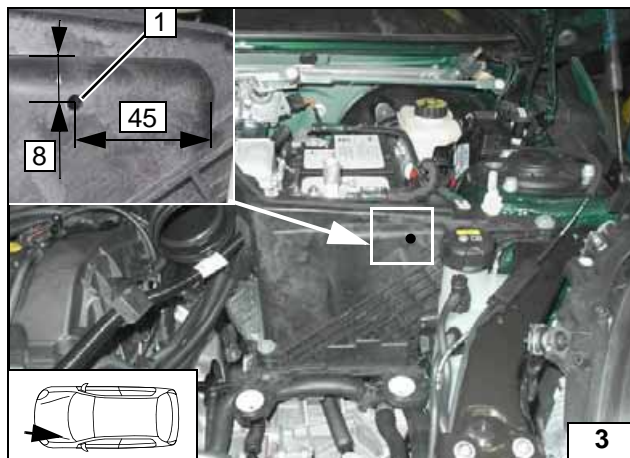
Preparing engine compartment fuses

Be careful of battery vent hose located behind.

- 1** Copy hole pattern, 6mm dia. hole

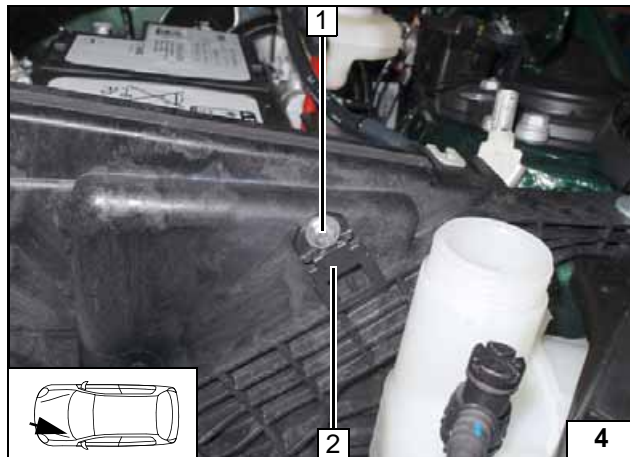


Hole for fuse holder



- 1** M5x16 bolt, large diameter washer [2x], nut
- 2** Fuse holder

Installing fuse holder



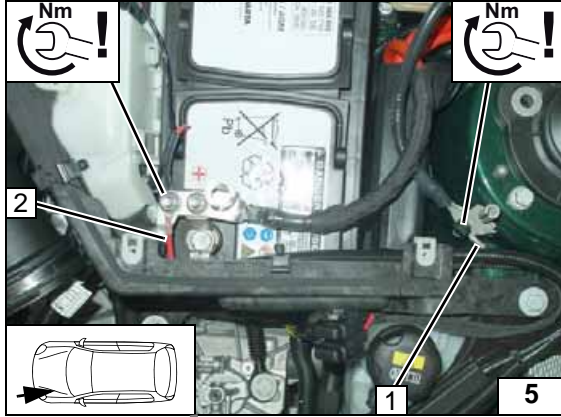


Electrical System



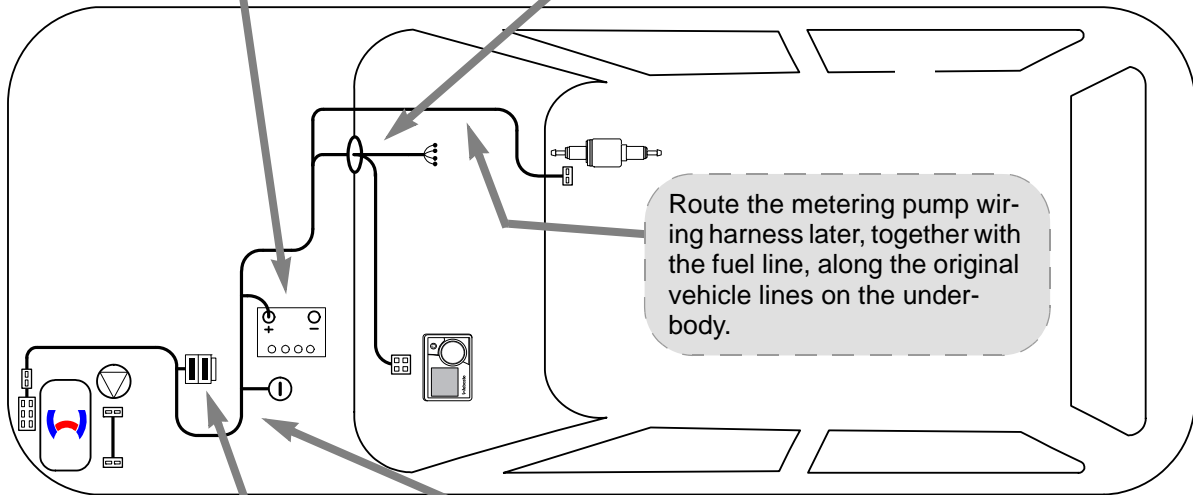
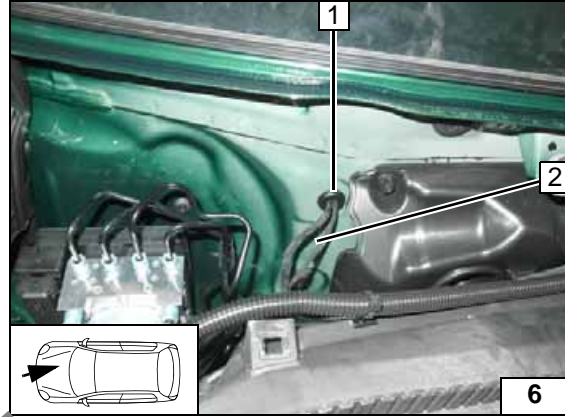
Positive and earth wire

- 1 Earth wire on original vehicle earth support point
- 2 Positive wire on positive battery terminal

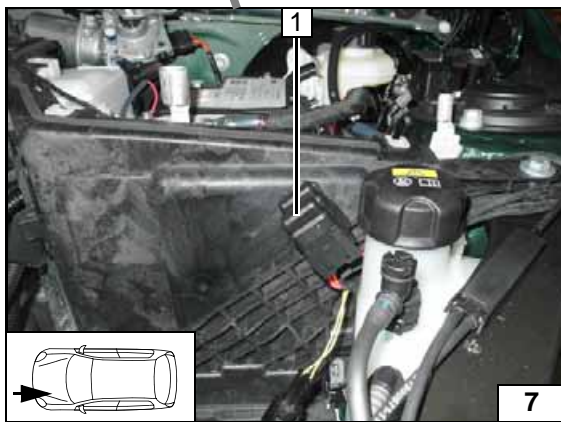


Wiring Harness Routing

- 1 Protective rubber plug
- 2 Heater wiring harnesses, heater control

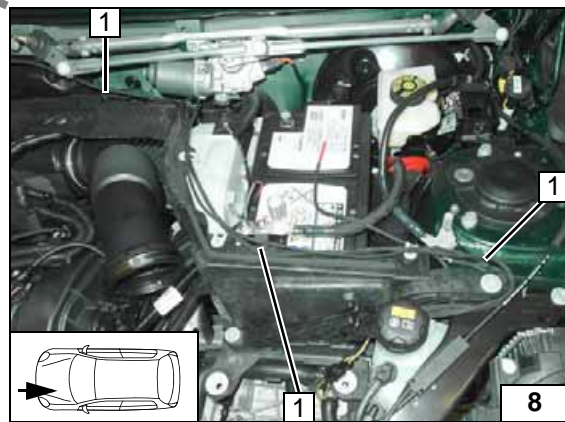


Wiring harness routing diagram



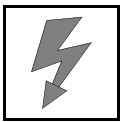
Engine compartment fuse holder

- 1 Fuses F1-2



Coolant reservoir wiring harness pass through

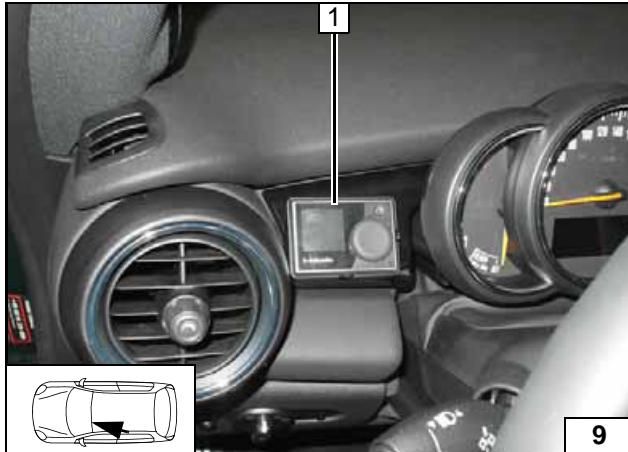
- 1 Heater, heater control wiring harnesses (will be routed/fastened later together with the fuel line!)



Air-Conditioning Control

! Integrate the A/C control as explained in the separate installation documentation:

Installation documentation 'Webasto Comfort' A/C control for Mini

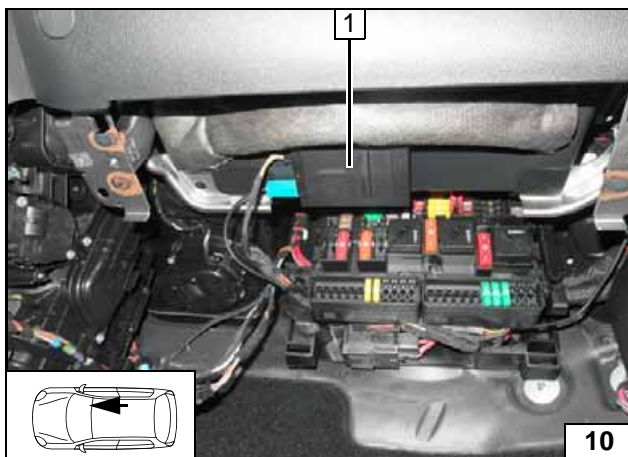


MultiControl CAR Option

1 MultiControl CAR with installation frame



Installing MultiControl CAR

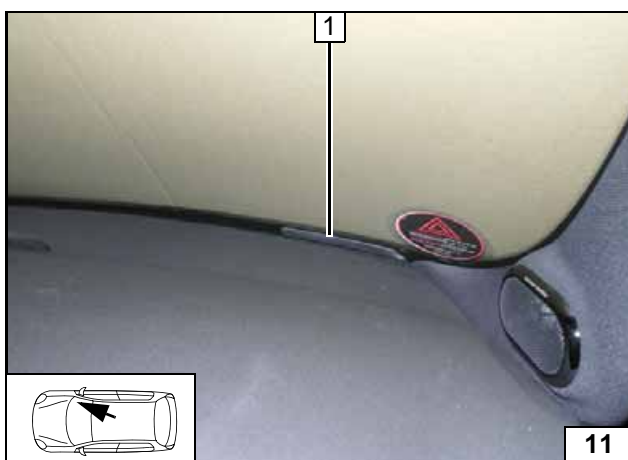


Remote Option (Telestart)

Fasten receiver 1 with double-sided adhesive tape.

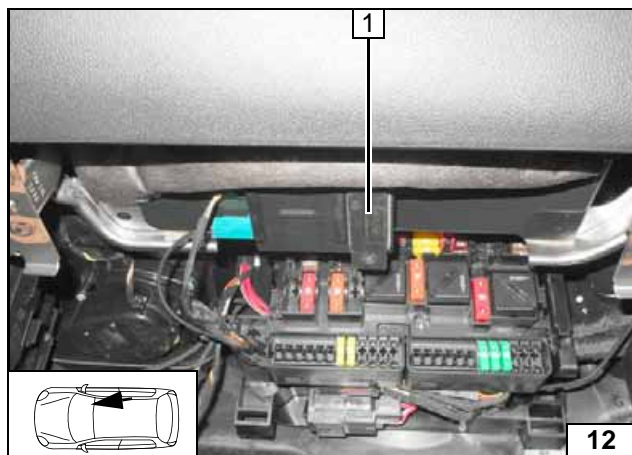


Installing receiver



1 Aerial

Installing aerial

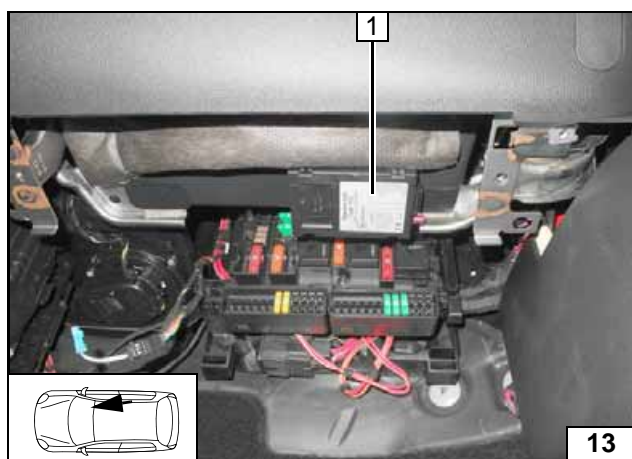


Temperature sensor T100 HTM

Fasten temperature sensor 1 with double-sided adhesive tape.



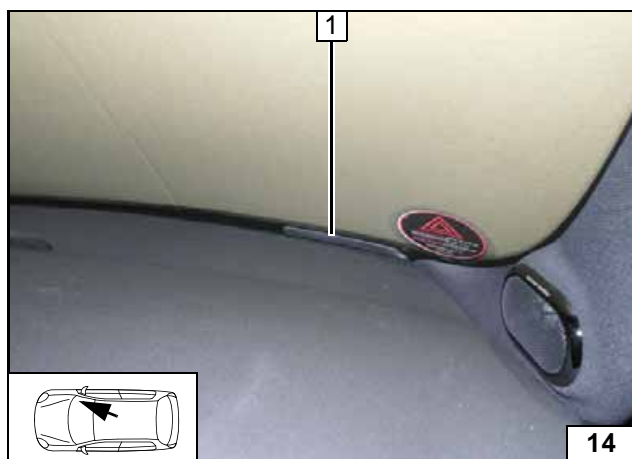
Installing temperature sensor



ThermoCall Option

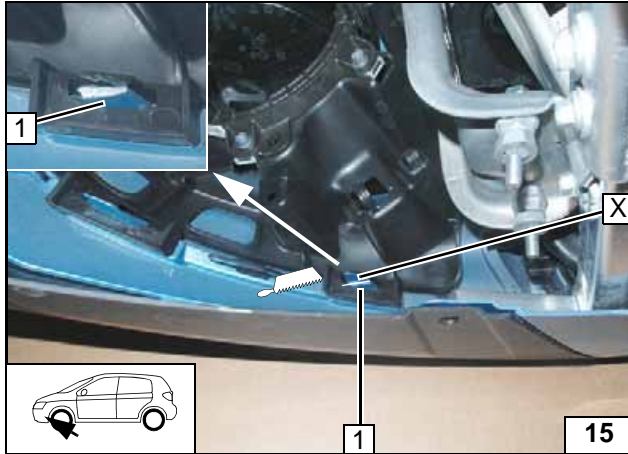
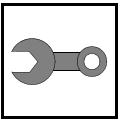
Fasten receiver 1 with double-sided adhesive tape.

Installing receiver



1 Aerial (optional)

Installing aerial

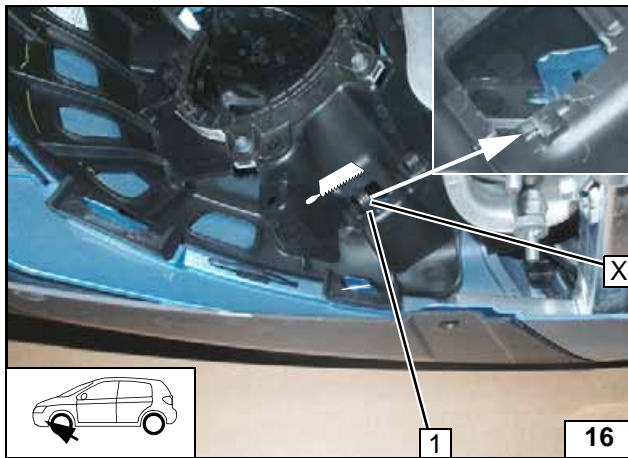


Preparing Installation Location

1 Cut off tab

X =

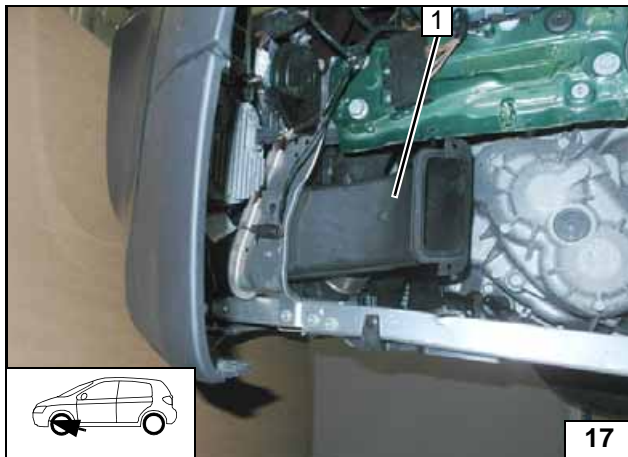
Adapting bumper



1 Cut off tab

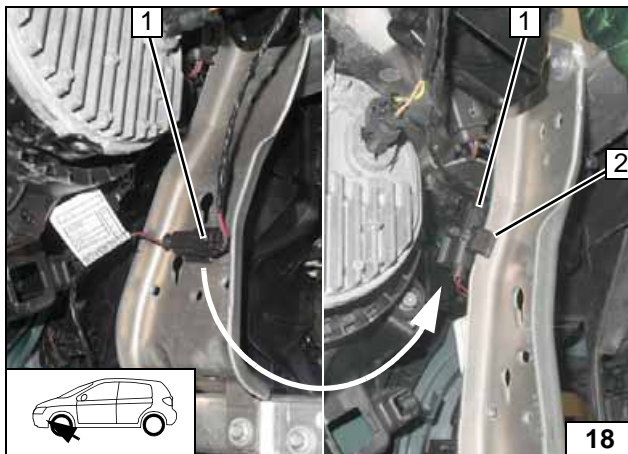
X =

Adapting bumper



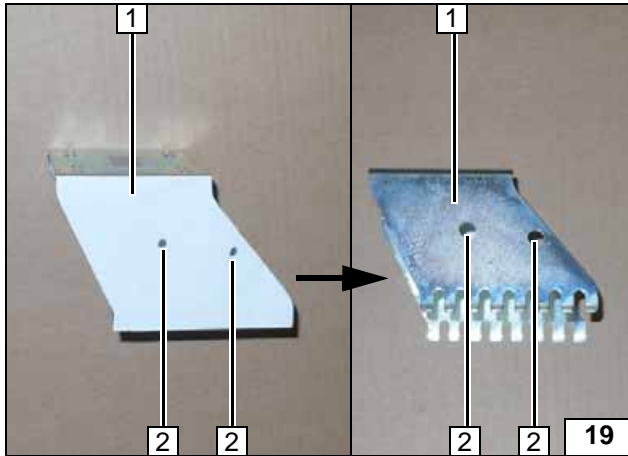
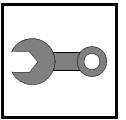
1 Brake air duct (if present)

Dismantling brake air duct



Detach original vehicle connector at position 1 (if present) and fasten at position 2 using a edge clip cable tie.

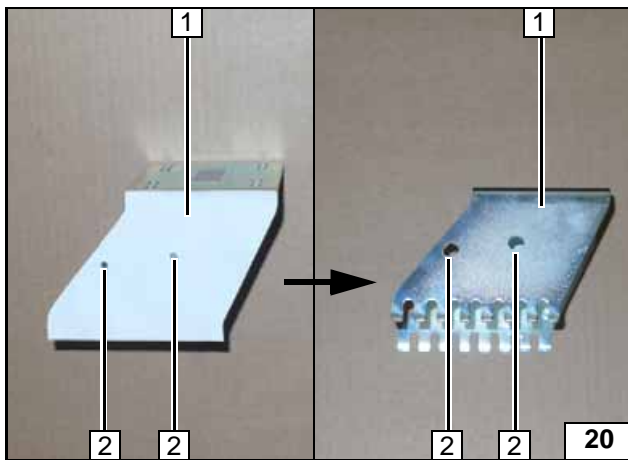
Moving connector



Preparing Bracket

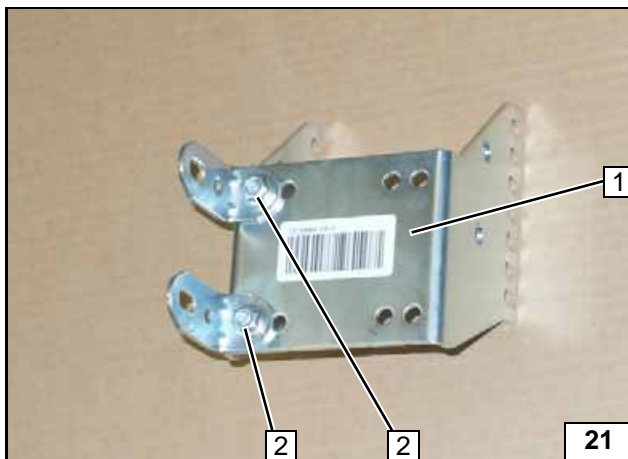
- 1 Bracket on the left side
- 2 Position template, copy hole pattern, 9mm dia. hole

Hole in bracket, left side



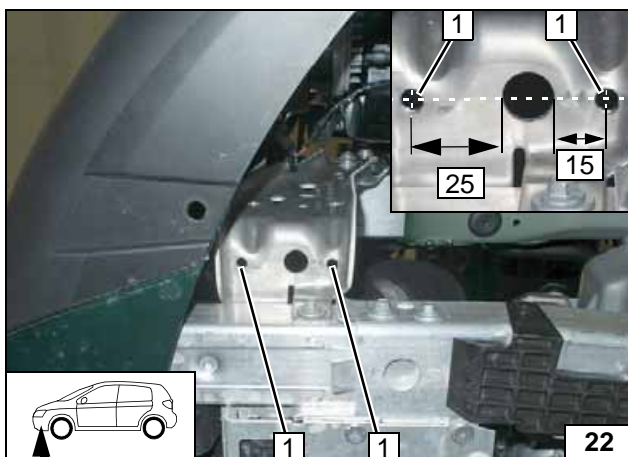
- 1 Bracket on the right side
- 2 Position template, copy hole pattern, 9mm dia. hole

Hole in bracket, right side



- 1 Bracket
- 2 M6x12 bolt, angle bracket, flanged nut [2x each]

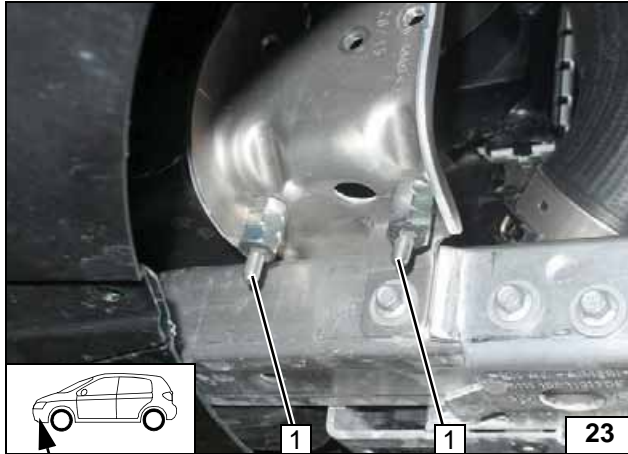
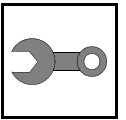
Premounting angle bracket



- 1 Copy hole pattern, 7mm dia. hole [2x each]

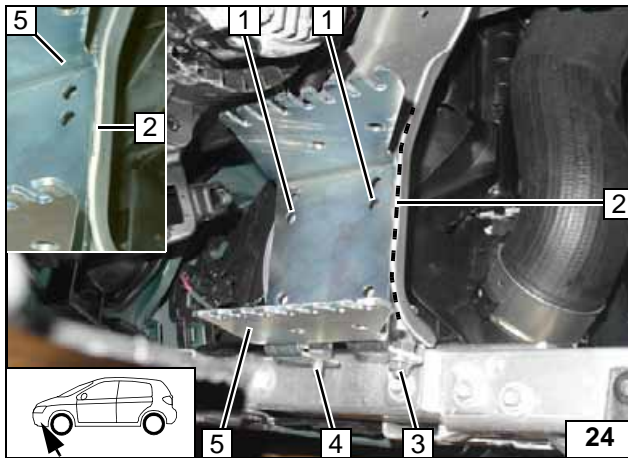
Drilling holes





- 1 M6x35 bolt, M8 nut [3x], pin lock [2x each]

Premounting bolts

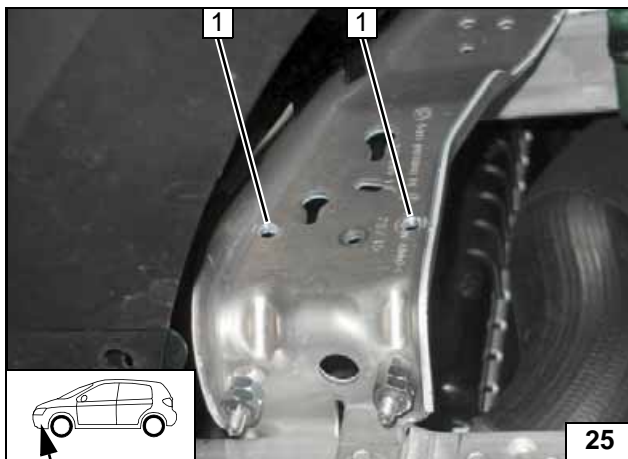


Install bracket 5 loosely and align parallel to edge of frame side member 2!



- 1 Copy hole pattern [2x]
- 3 Loosely mount M6 flanged nut
- 4 Bolt premounted

Copying hole pattern

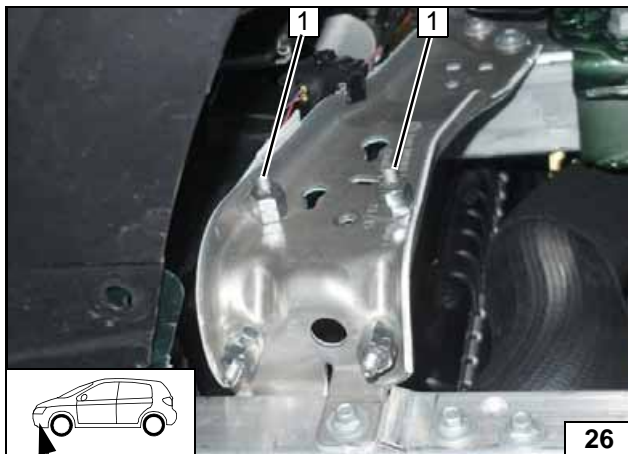


Remove the bracket again.

- 1 7 mm dia. hole [2x]

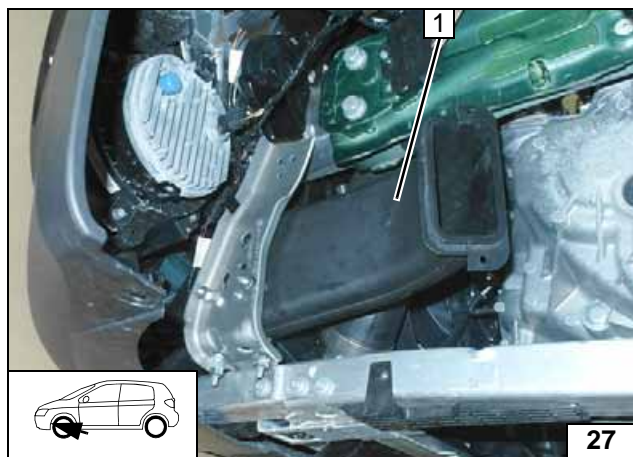
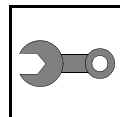


Drilling holes



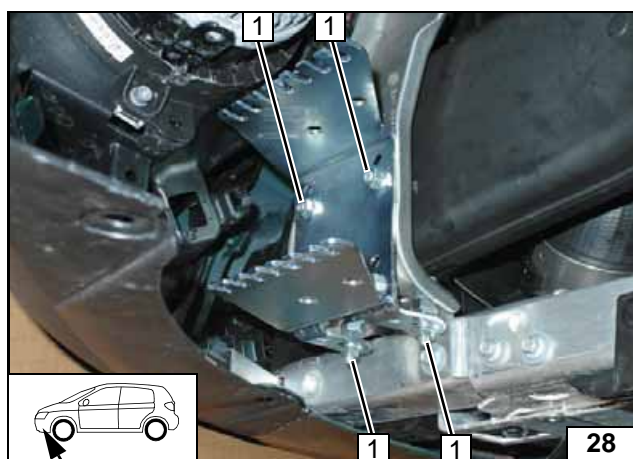
- 1 M6x25 bolt, M8 nut [2x], pin lock [2x each]

Premounting bolts



1 Brake air duct (if present)

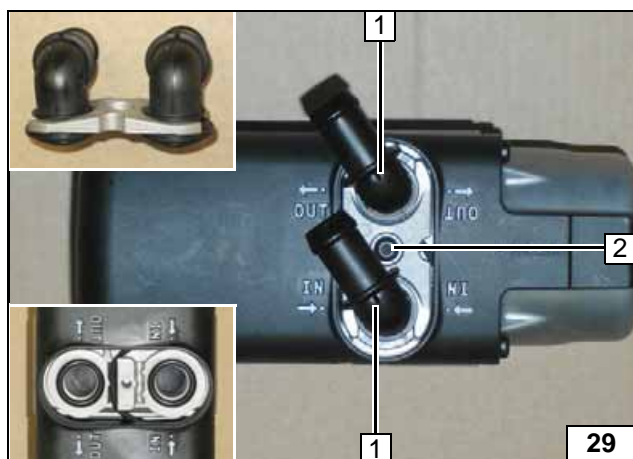
Installing
brake air
duct



1 M6 flanged nut on premounted bolts [4x]



Installing
bracket

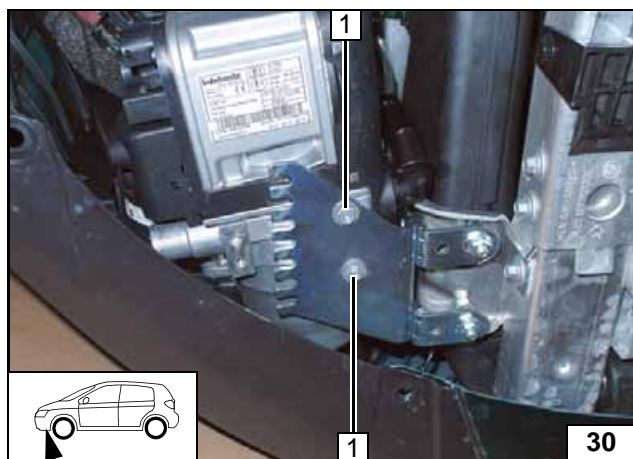


Preparing Heater

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



Installing
water con-
nection
piece



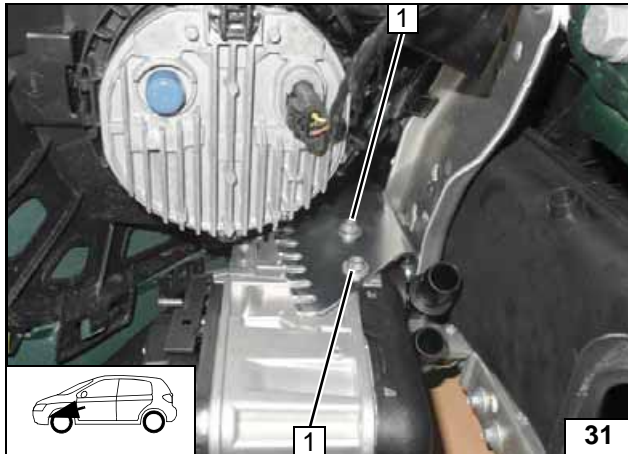
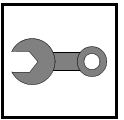
Installing Heater

Do not tighten bolts 1 yet!

- 1 5x13 self-tapping bolts, large diameter washer [2x]



Loosely in-
stalling
heater

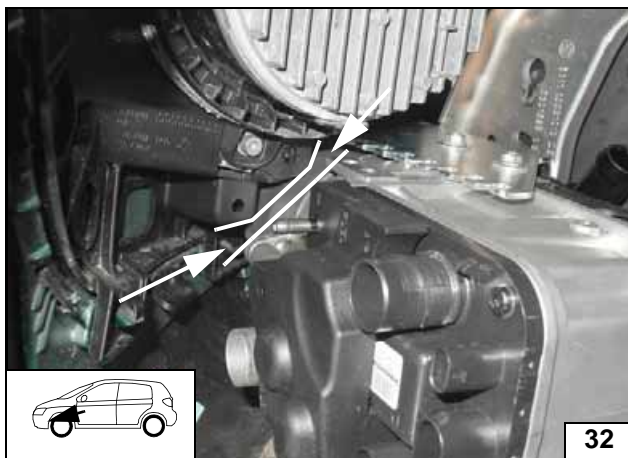


Do not tighten bolts 1 yet!

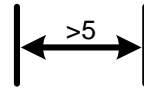
- 1 5x13 self-tapping bolts, large diameter washer [2x]



Loosely installing heater

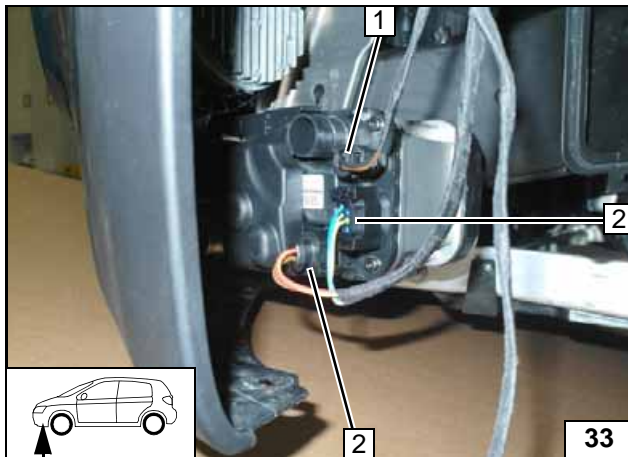


Ensure sufficient distance from neighbouring components, correct if necessary.



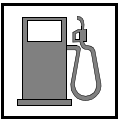
Aligning, installing heater

Tighten heater bolts [4x] on both sides!



- 1 Connector of circulating pump wiring harness
- 2 Heater wiring harness connector [2x]

Installing wiring harnesses



Fuel



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

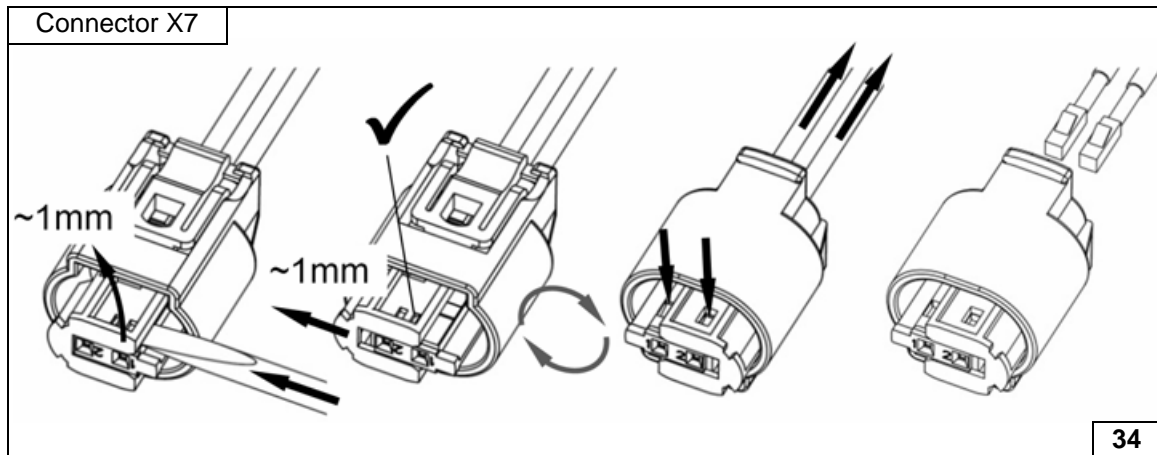
Catch any fuel running off in an appropriate container.

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

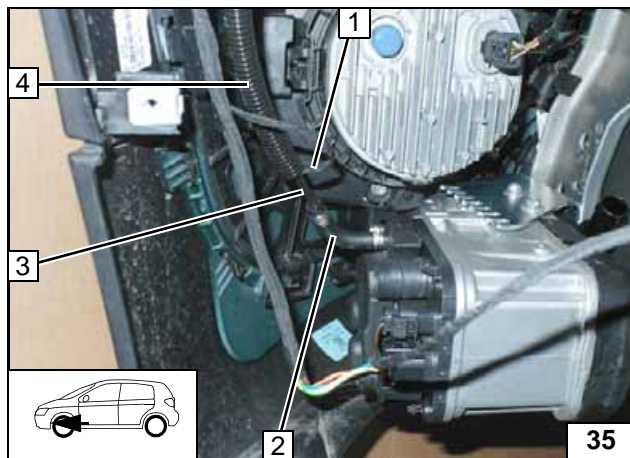


Provide rub protection for fuel line and wiring harness in areas where there are sharp edges.

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



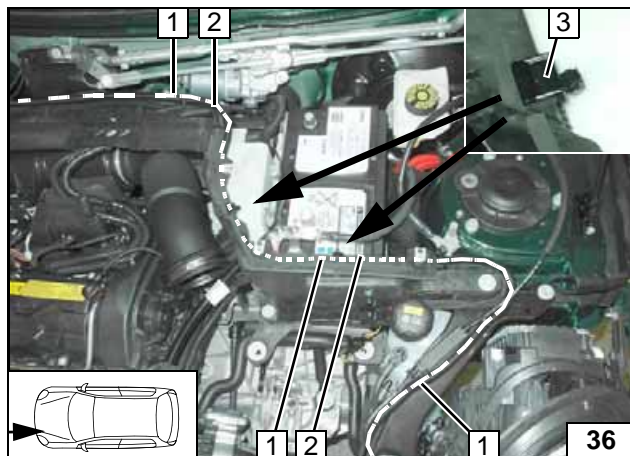
Dismantling metering pump connector



Pull wiring harness of metering pump 1 and fuel line 3 together into corrugated tube 4 and route in the engine compartment.

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

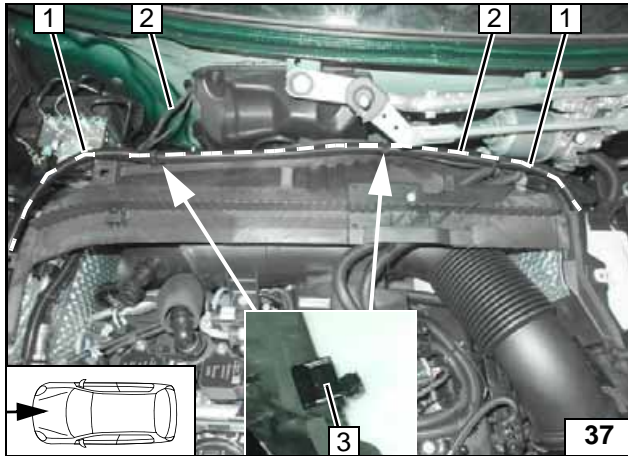
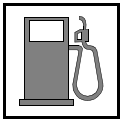
Connecting heater



Route corrugated tube 1 with fuel line and metering pump wiring harness as well as heater and heater control wiring harness 2 in the coolant reservoir and attach using edge clip cable tie 3.

3 Edge clip cable tie [2x]

Routing lines

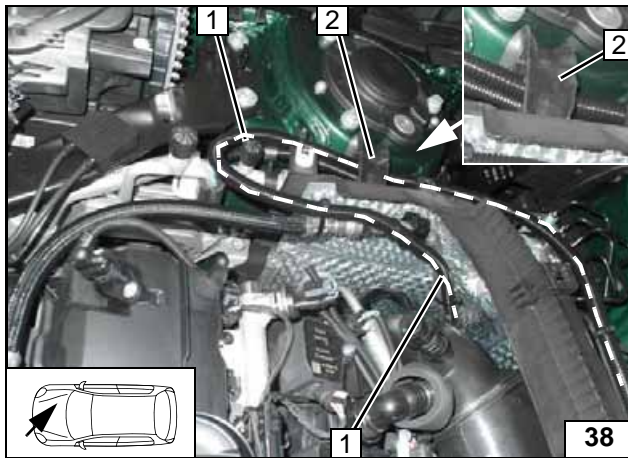


Route corrugated tube 1 with fuel line and metering pump wiring harness as well as heater and heater control wiring harness 2 to the right side and attach using edge clip cable tie 3.



- 3 Edge clip cable tie [2x]

Routing lines

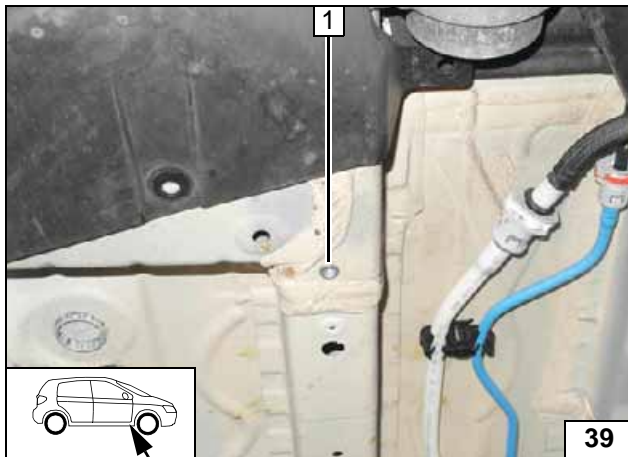


Route corrugated tube 1 with fuel line and metering pump wiring harness to the underbody and attach accordingly.



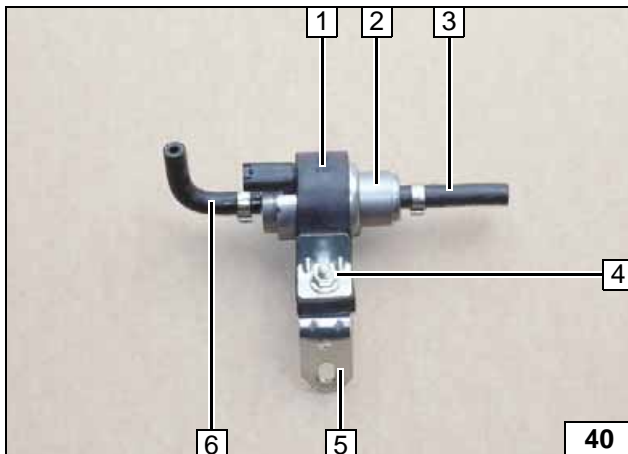
- 2 Coolant reservoir / engine compartment cable pass through

Routing lines



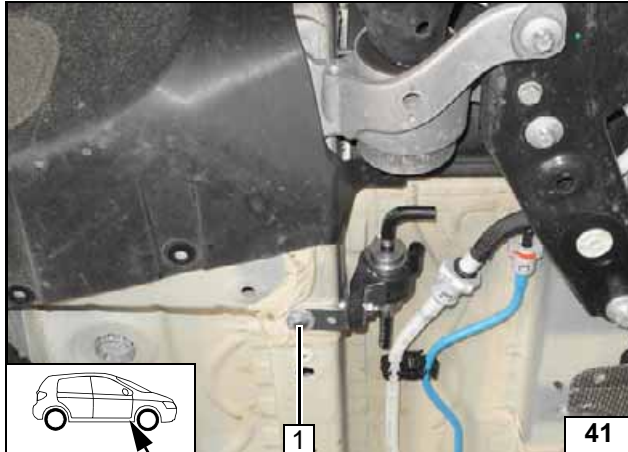
- 1 Original vehicle hole, rivet nut

Installing rivet nut



- 1 Metering pump mount
- 2 Metering pump
- 3 Hose section, 10 mm dia. clamp
- 4 M6x25 bolt, support angle bracket, flanged nut
- 5 Angle bracket
- 6 90° moulded hose, 10 mm dia. clamp

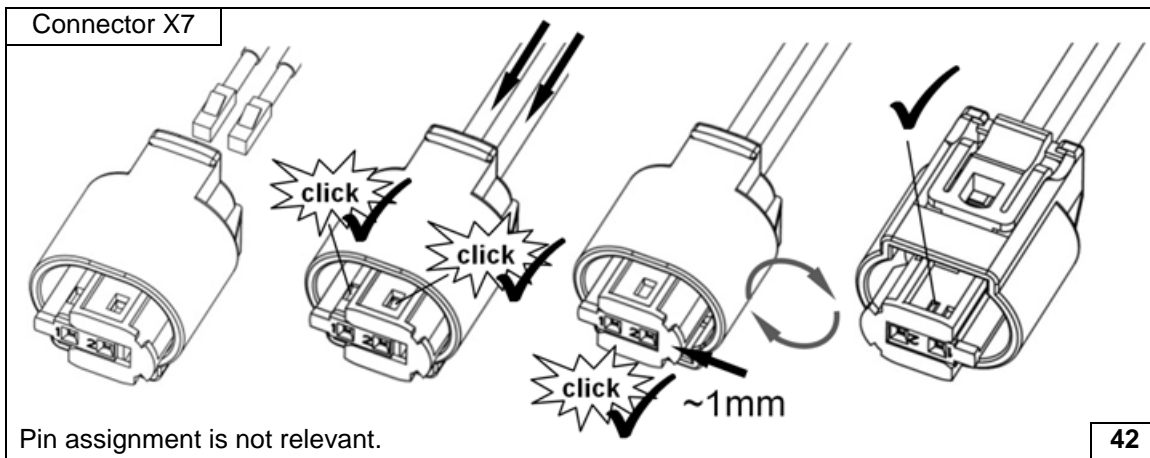
Premounting metering pump



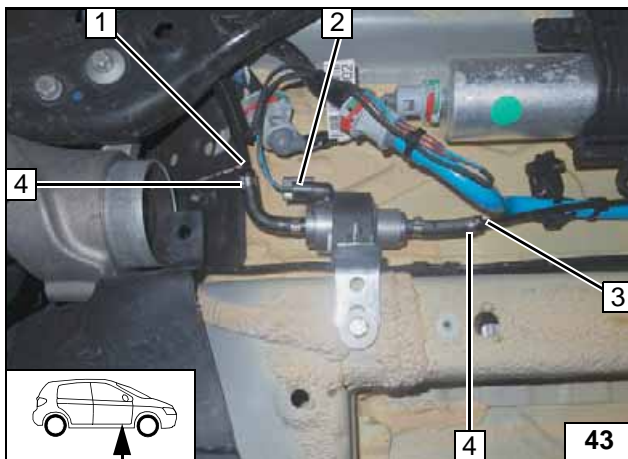
- 1 M6x20 bolt, spring lockwasher, large diameter washer



Installing metering pump



Completing metering pump connector

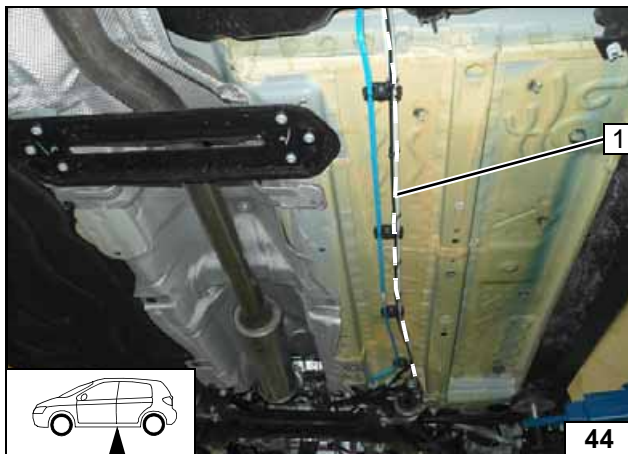


Ensure sufficient distance from neighbouring components, correct if necessary.

- 1 Fuel line of heater
- 2 Metering pump wiring harness, connector X7 mounted
- 3 Fuel line of fuel standpipe
- 4 10 mm dia. clamp [2x]



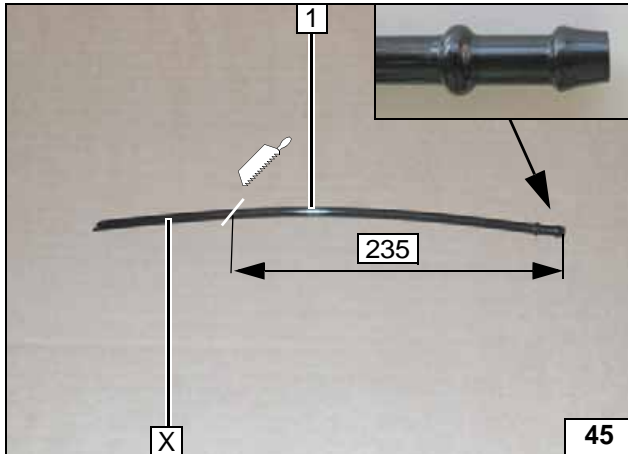
Connecting metering pump



Route fuel line of fuel standpipe 1 along original vehicle fuel lines to the fuel tank sending unit, attach accordingly.



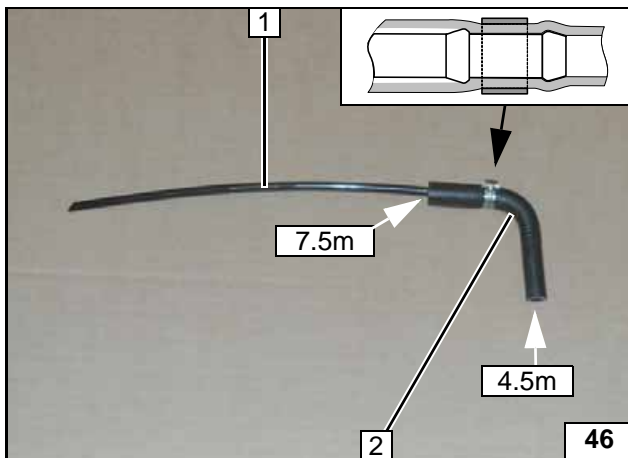
Routing lines



1 Standpipe

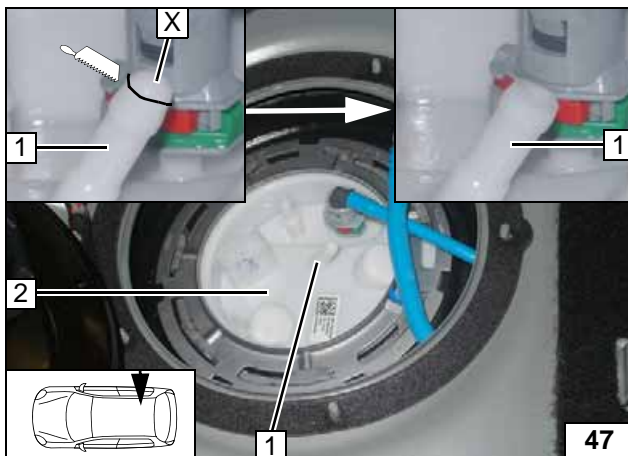
X =

Shortning standpipe



1 Standpipe
2 90°, 4.5x7.5mm moulded hose, 10mm dia. clamp

Premounting moulded hose



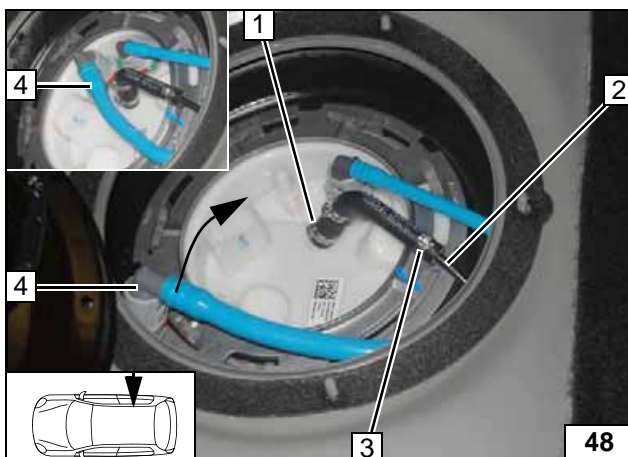
Remove end cap from connection piece 1.



2 Fuel tank sending unit

X =

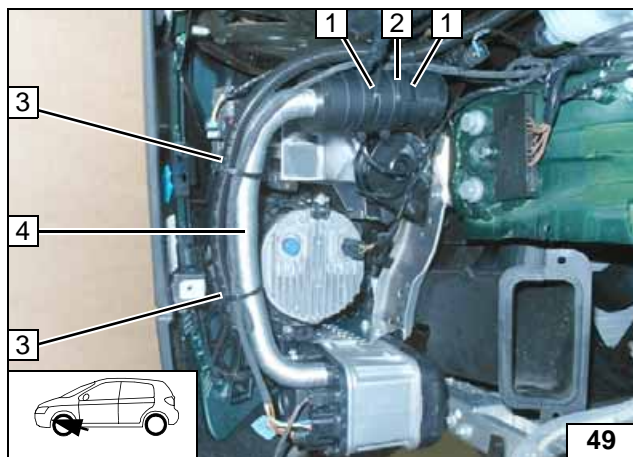
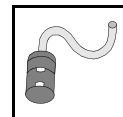
Adapting connection piece



1 13.5mm dia. clamp
2 Fuel line of fuel standpipe
3 10 mm dia. clamp
4 Original vehicle fuel line



Installing standpipe



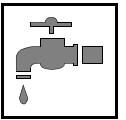
Combustion Air

Ensure sufficient distance from neighbouring components, correct if necessary.

- 1 Cable tie [2x]
- 2 Silencer on bulb socket
- 3 Corrugated tube with fuel line and metering pump wiring harness as well as heater wiring harness, cable tie [2x]
- 4 Combustion air pipe



Installing silencer

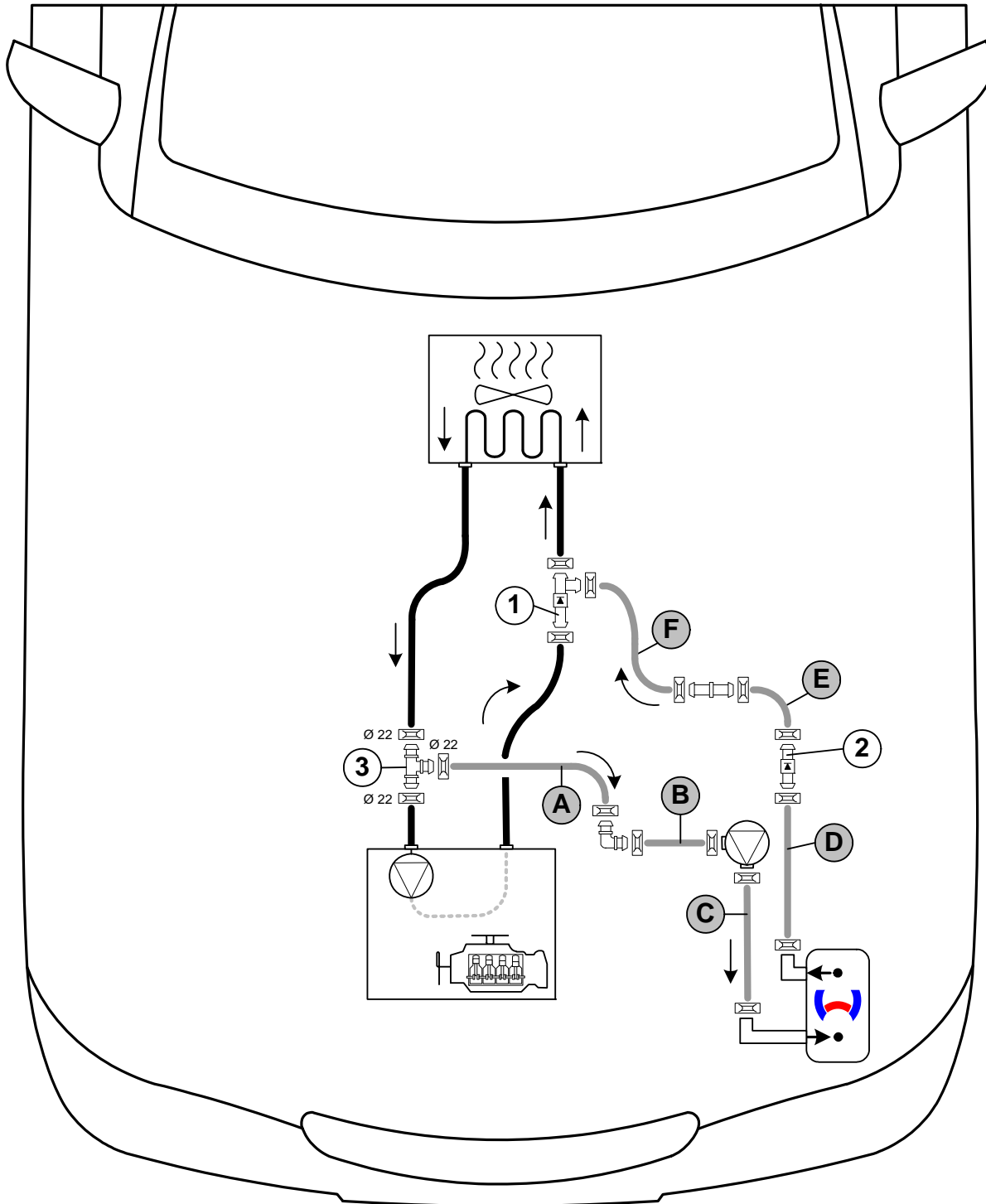


Coolant Circuit









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

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

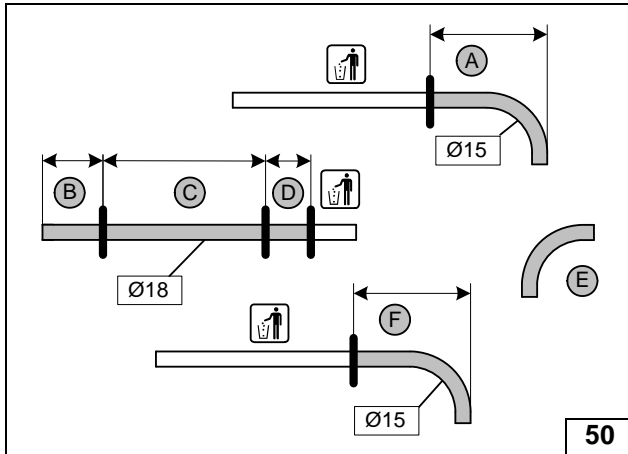
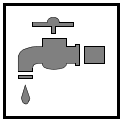


Hose routing diagram

All spring clips without a specific designation  = 25 mm dia. All connecting pipes  and  = 18x18 mm dia.

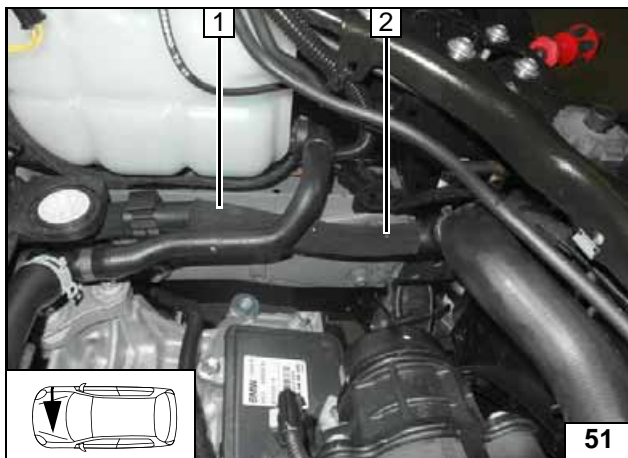
1 = Check valve . 2 = Check valve . 3 = T-piece .





- A = 180
- B = 70
- C = 170
- D = 60
- E = 90°, 18mm dia.
- F = 170

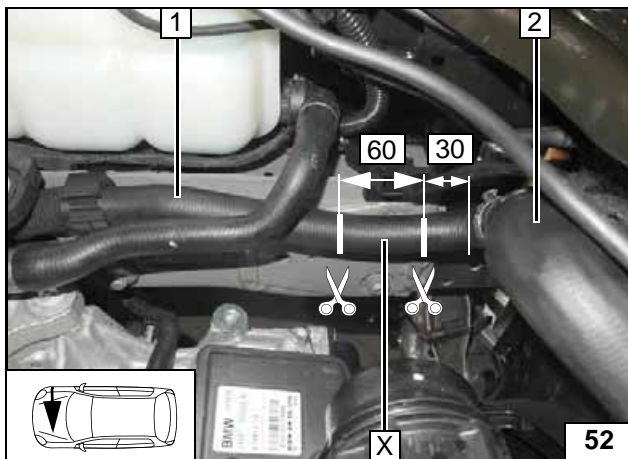
Cutting hoses to length



Remove braided protection 2 from hose of engine outlet / heat exchanger inlet 1 and discard.



Preparing cutting point



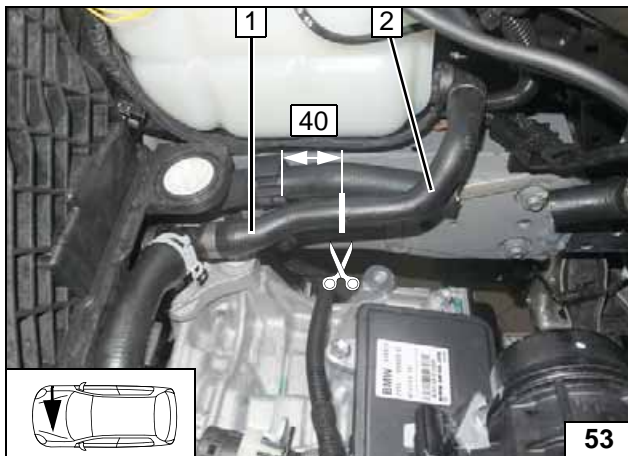
Cut hose of engine outlet / heat exchanger inlet 1 at the markings.

- 1 Heat exchanger inlet hose section
- 2 Engine outlet hose section

X =



Cutting point 1

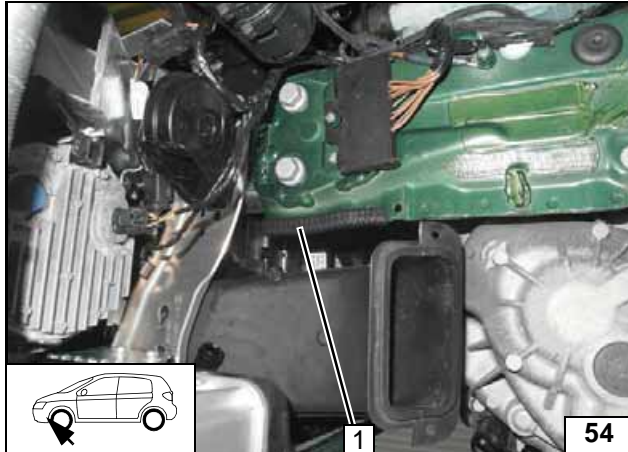


Cut hose of heat exchanger outlet / engine inlet 1 at the markings.

- 1 Heat exchanger outlet hose section
- 2 Engine inlet hose section

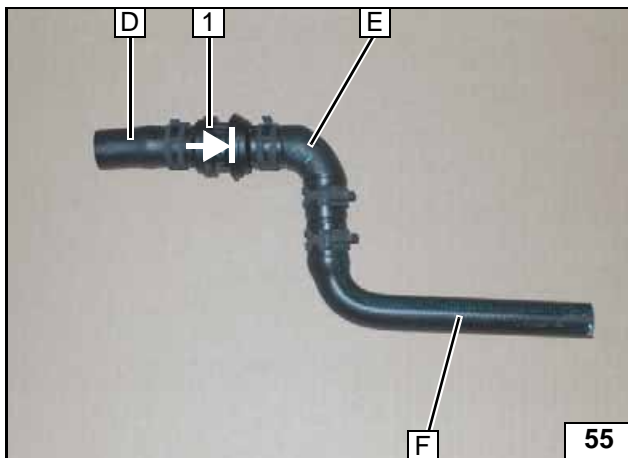


Cutting point 2



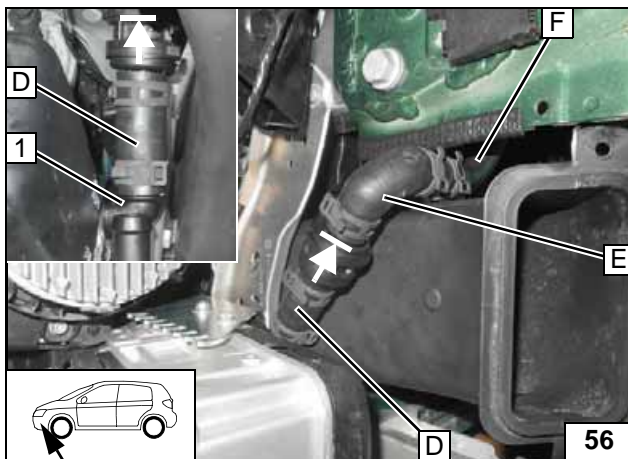
1 100 mm edge protection

Installing edge protection



1 Check valve

Premounting hoses

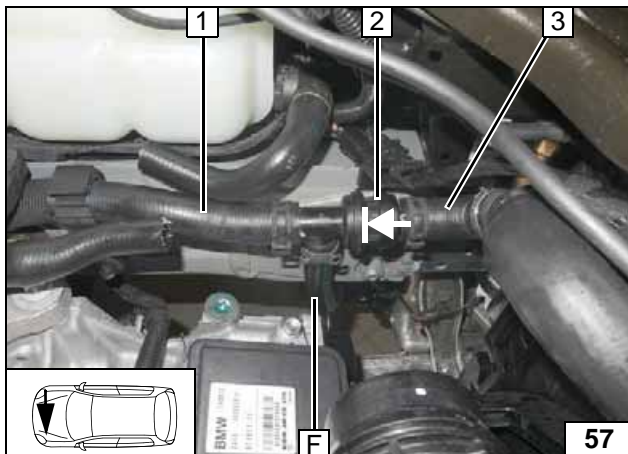


Route hose F in the engine compartment.



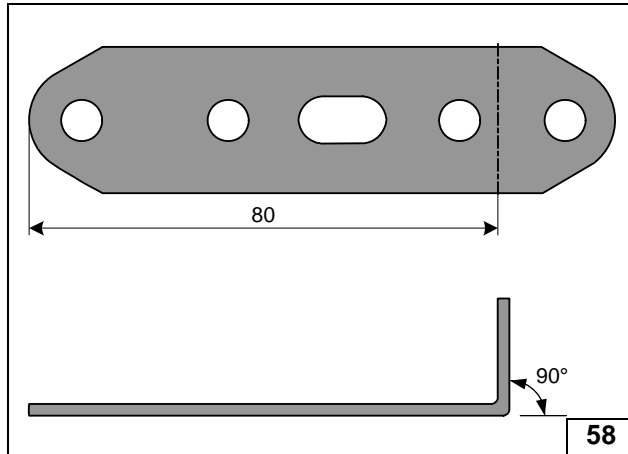
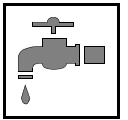
1 Heater outlet connection piece

Connecting heater outlet

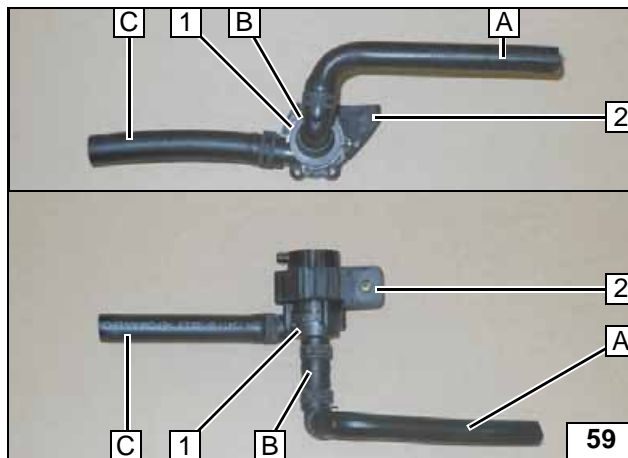


1 Heat exchanger inlet hose section
2 Check valve (observe direction of flow)
3 Engine outlet hose section

Connecting engine outlet / heat exchanger inlet

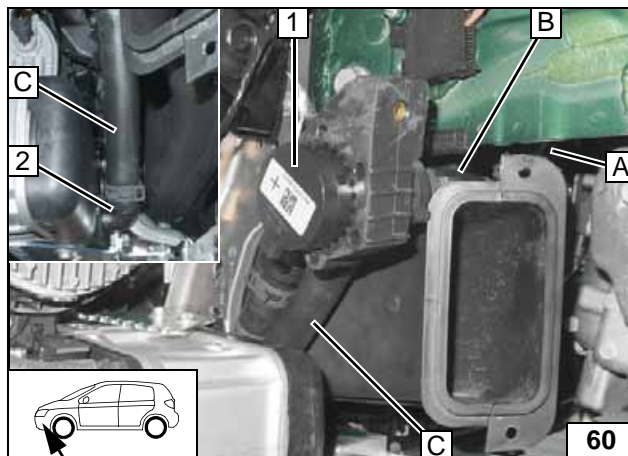


Bending perforated bracket



- 1 Circulating pump
- 2 Circulating pump mount

Premounting circulating pump

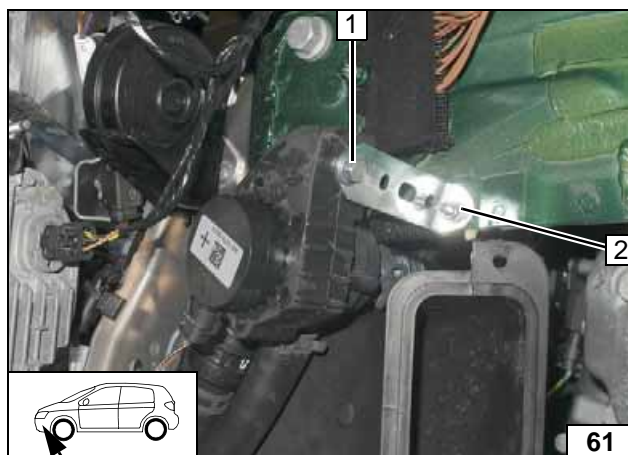


Route hose A in the engine compartment.



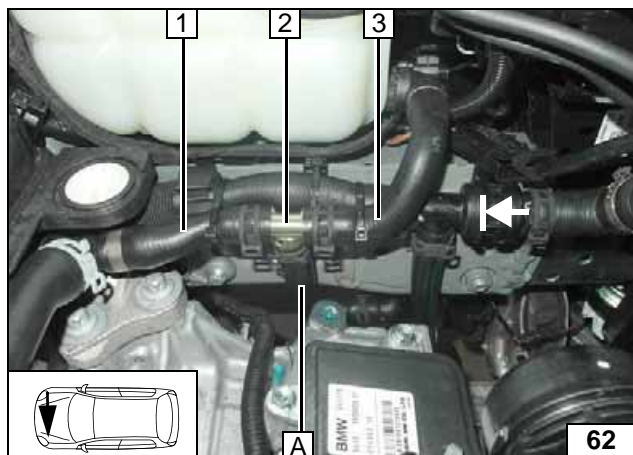
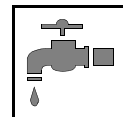
- 1 Circulating pump
- 2 Connection piece of heater inlet

Connecting heater inlet



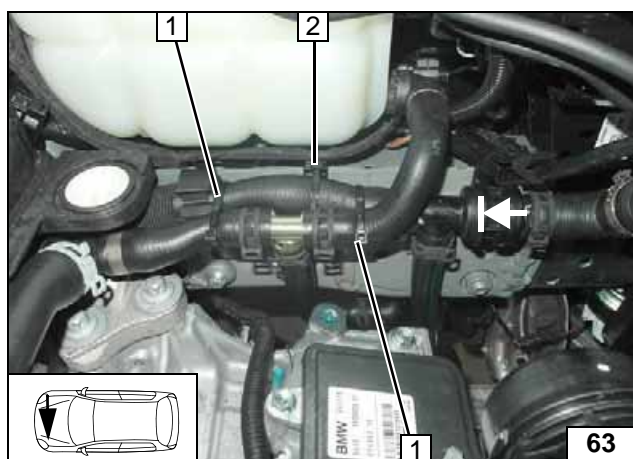
- 1 M6x25 bolt, perforated bracket, circulating pump mount, flanged nut
- 2 M6x16 bolt, existing hole, large diameter washer, flanged nut

Installing circulating pump



- 1 Heat exchanger outlet hose section
- 2 15x15x15 T-piece
- 3 Engine inlet hose section

**Connect-
ing engine
inlet / heat
exchanger
outlet**

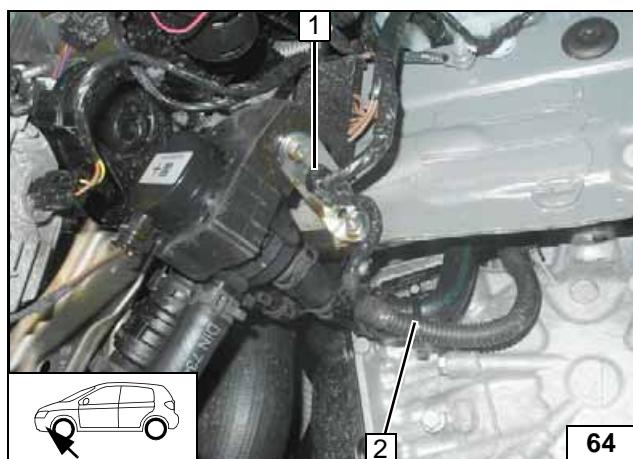


Ensure sufficient distance from neighbour-
ing components, correct if necessary.



- 1 Cable tie [2x]
- 2 Edge clip cable tie

**Fastening
hoses**

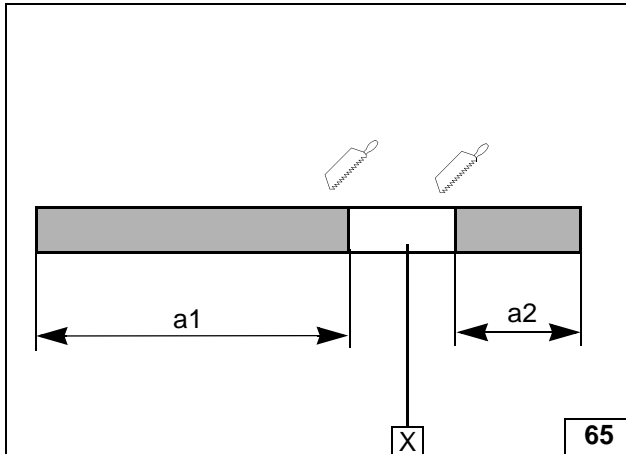
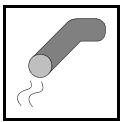


Ensure sufficient distance from neighbour-
ing components, correct if necessary.



- 1 Original vehicle eyelet cable tie in per-
forated bracket
- 2 Cable tie

**Attaching
wires**

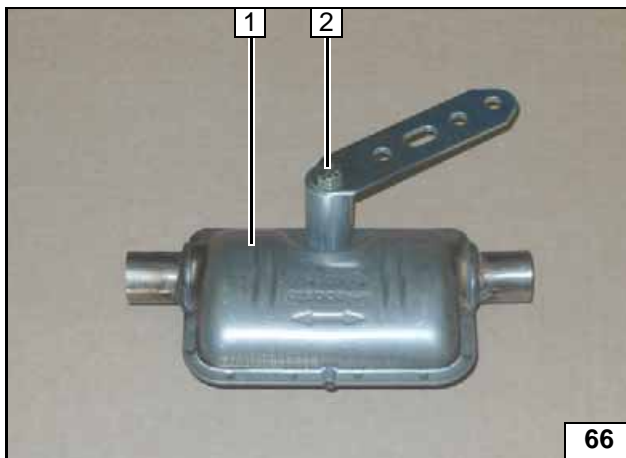


Exhaust Gas

a1 = 600
a2 = 300

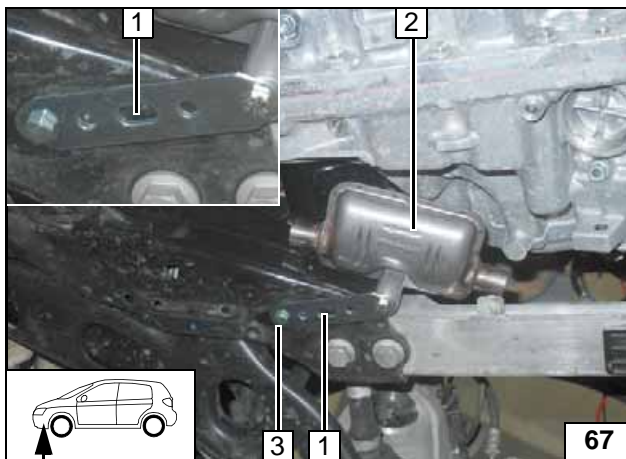
X =

Preparing exhaust pipes



- 1 Silencer
- 2 Install M6x50 bolt, perforated bracket, 40mm shim and flanged nut loosely

Premounting silencer



Align silencer 2 while keeping a sufficient distance (at least 20mm) from the transmission, copy hole pattern 1.



- 1 6.5 mm dia. hole
- 3 Install M6x20 bolt, premounted perforated bracket, large diameter washer, flanged nut at existing hole loosely

Installing silencer

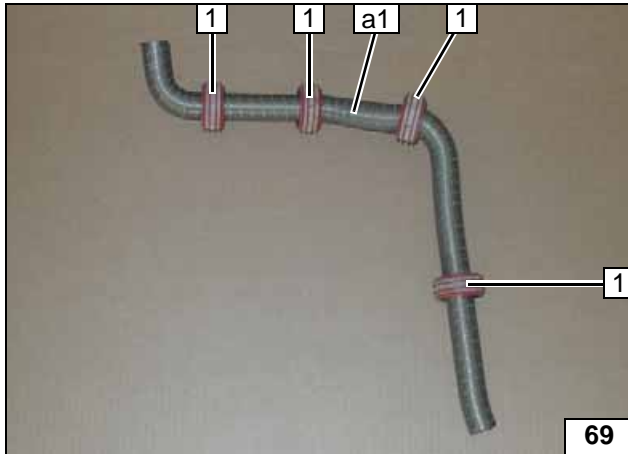
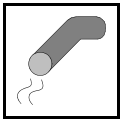


Tighten bolts 1 [2x]!



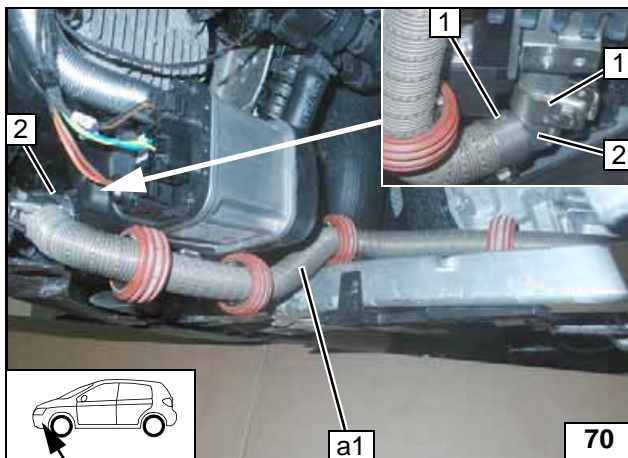
- 2 M6x20 bolt, large diameter washer, flanged nut

Installing silencer



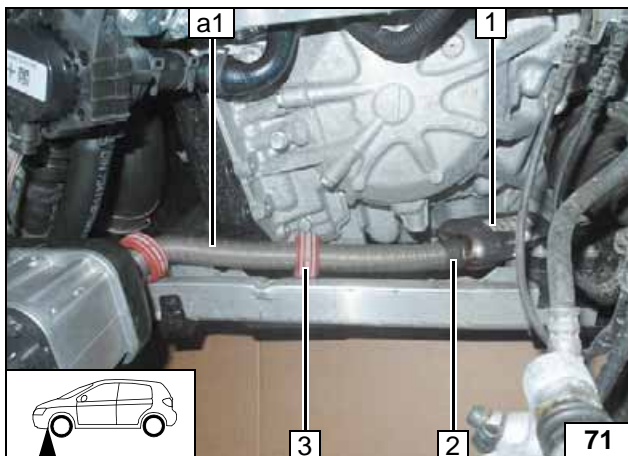
- 1 Spacer bracket [4x]

Preparing exhaust pipe a1



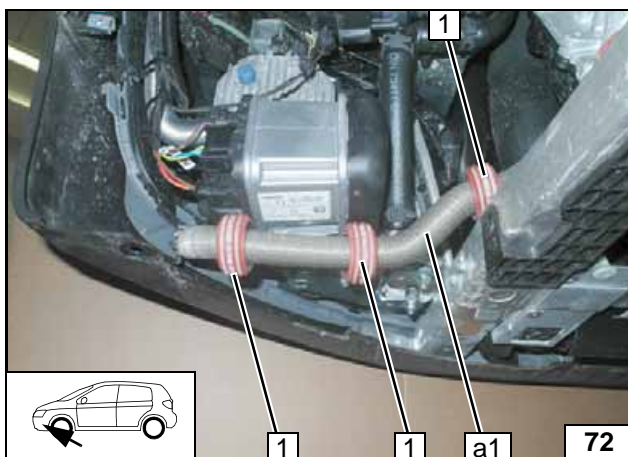
- 1 Hose clamp [2x]
- 2 Exhaust elbow

Installing exhaust pipe a1



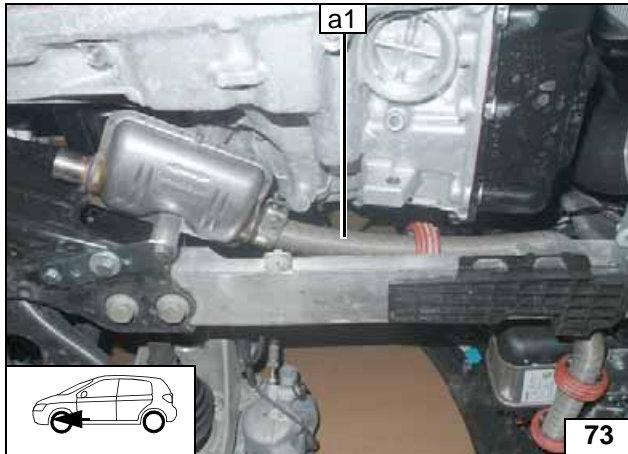
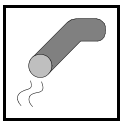
- 1 Silencer
- 2 Hose clamp
- 3 Align spacer bracket

Installing exhaust pipe a1



- 1 Spacer bracket [3x]

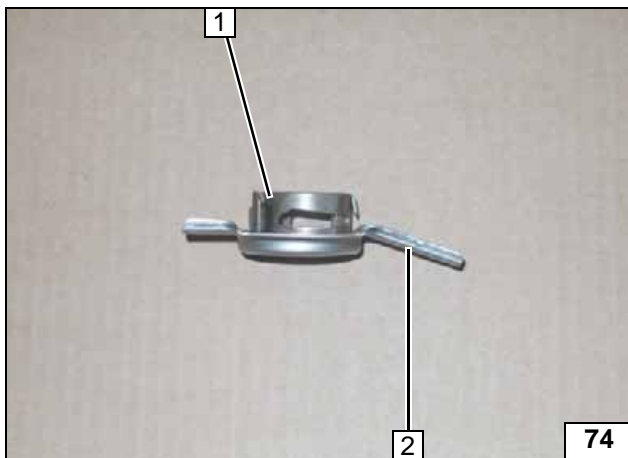
Aligning spacer bracket



Ensure sufficient distance from neighbouring components, correct if necessary.



Checking distance

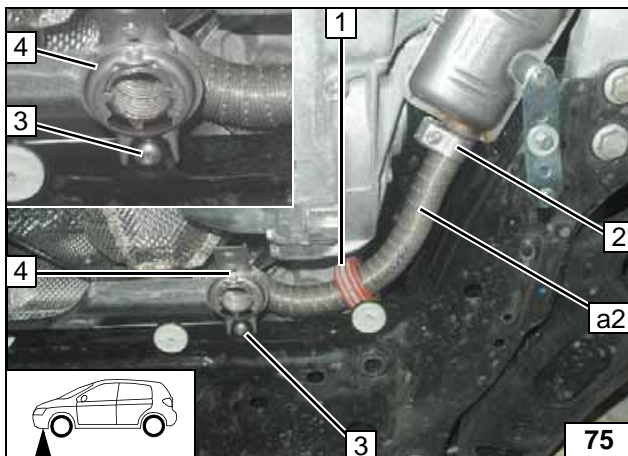


Exhaust End Fastener Installation



- 1 Exhaust end fastener
- 2 Bend blade by 20°

Preparing exhaust end fastener



Install exhaust pipe **a2** as per work steps 6-8 of the installation instructions in exhaust end fastener **4**.



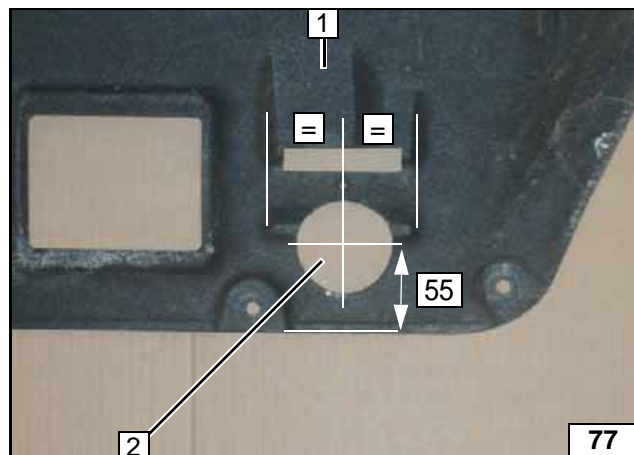
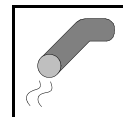
- 1 Align spacer bracket with transmission and plastic plug
- 2 Hose clamp
- 3 5x13 self-tapping screw as per work step 5 of the installation instructions, existing hole

Installing exhaust end fastener



- 1 Lower engine cover (inside)
- 2 Hole for exhaust end fastener

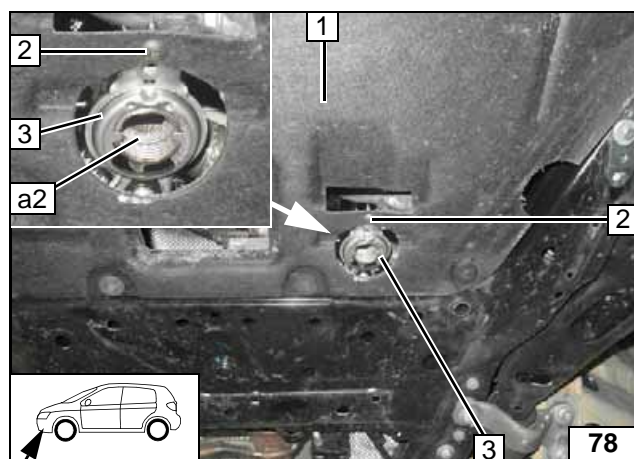
View of hole for exhaust outlet



- 1 Lower engine cover (outside)
- 2 60 mm dia. hole



Hole for ex-
haust outlet

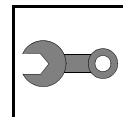


Mount lower engine cover 1.
Install 5x13 self-tapping screw 2
through lower engine cover as per
work step 5 of the installation
instructions.

- 3 Exhaust end fastener



Installing
exhaust end
fastener



Final Work

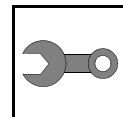


Reassemble the components in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate and tie back loose lines.

Only use manufacturer-approved coolant. Spray the heater components with anti-corrosion wax (Tectyl 100K).

- **Connect the battery.**
- **Fill and bleed the coolant circuit according to the vehicle manufacturer's instructions.**
- **Program MultiControl CAR, teach Telestart transmitter.**
- **For initial startup and function check, please see installation instructions.**
- **The A/C control panel settings can be found in the installation documentation of the 'Webasto Comfort' A/C control additional kit, section 'Final Work'.**
- **Place the 'Switch off parking heater before refuelling' caution label near the filler neck.**





Template for Right and Left bracket

