

Water Heater

Thermo Top Evo Parking Heater



Installation Documentation Nissan Qashqai

Validity

Manufacturer	Model	Type	EG-BE No. / ABE
Nissan	Qashqai	J11	e11 * 2007 / 46 * 0963 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm ³	Engine code
1.2 P	Petrol	Xtronic	85	1197	HRA2

Xtronic = continuously variable automatic transmission

From Model Year 2014
Left-hand drive vehicle

Verified equipment variants: Manual air-conditioning
2 zone automatic air-conditioning
Front fog light
2 WD
LED daytime running lights
Start / Stop
Euro 5b+

Not verified: Passenger compartment monitoring
LED headlights
4 WD

Total installation time: approx. 8.5 hours without A/C control
approx. 9.5 hours with A/C control 'Standard' or 'Comfort'

Nissan Qashqai

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Necessary Components

- Basic delivery scope *Thermo Top Evo* based on price list
- Installation kit for Nissan Qashqai 2014 1.6 D/1.2 Petrol: **1324075A**
- Additional kit Nissan A/C control 'Standard' for manual and automatic air-conditioning: **1324070_** or additional kit Nissan / Renault A/C control 'Comfort' for automatic air-conditioning: **1324068_**
- Heater control in accordance with price list and upon consultation with end customer
- In case of Telestart, indicator lamp in accordance with price list and upon consultation with end customer

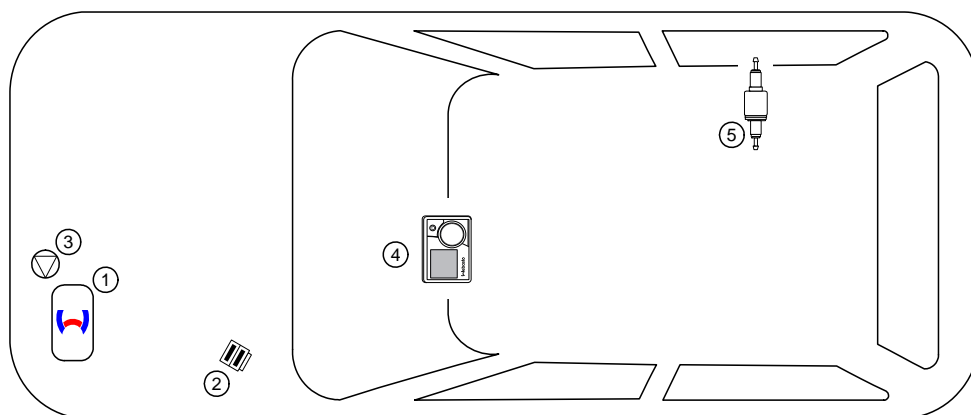
Installation instructions:

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

Installation Overview

Legend:

1. Heater
2. Fuse holder of engine compartment
3. Circulating pump
4. MultiControl CAR
5. Metering pump



Notes 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 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.

Nissan Qashqai

Notes on Validity

This installation documentation applies to Nissan Qashqai 1.2 Petrol vehicles - for validity, see page 1 - from model year 2014 and later, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to this installation documentation.

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

Technical Instructions

Special Tools

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

Dimensions

- All dimensions are in mm

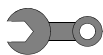














Tightening torque values

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

Explanatory Notes on Document

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

Special features are highlighted using the following symbols:

Mechanical system		Specific risk of damage to components.	
Electrical system		Specific risk due to electrical voltage	
Coolant circuit		Specific risk of injury or fatal accidents.	
Combustion air		Specific risk of fire or explosion	
Fuel		Reference to manufacturer's vehicle-specific documents or to the installation instructions of Webasto components	
Exhaust gas		Reference to a special technical feature.	
Software		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 and completely remove the battery together with the carrier (only in case of 'Comfort' additional kit, in case of 'Standard' additional kit the battery information can be found in the provided installation documentation).
- Remove the air filter completely with the intake hose as far as the engine.
- Remove the front left-hand wheel well trim.
- Remove the front bumper trim.
- Remove the underride protection of the engine.
- Remove the underride protection on the underbody on the right.
- Remove the fuse and relay box [2x] with the front left bracket.
- Remove the rear bench seat.

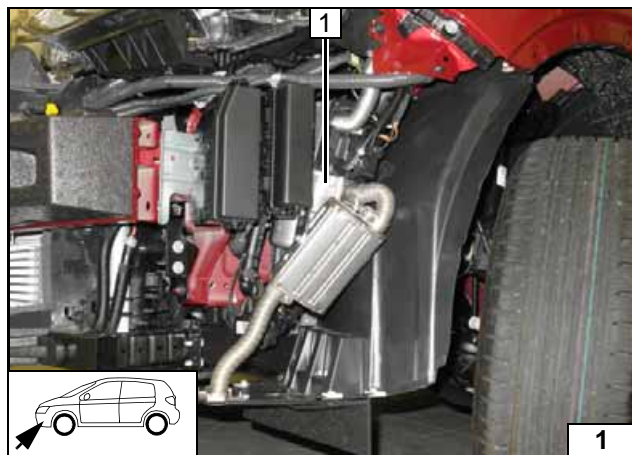
The following work should only be performed during the corresponding installation sequence:



- Open the tank-fitting service lid.
- Remove the fuel tank sending unit in accordance with the manufacturer's instructions.

Heater

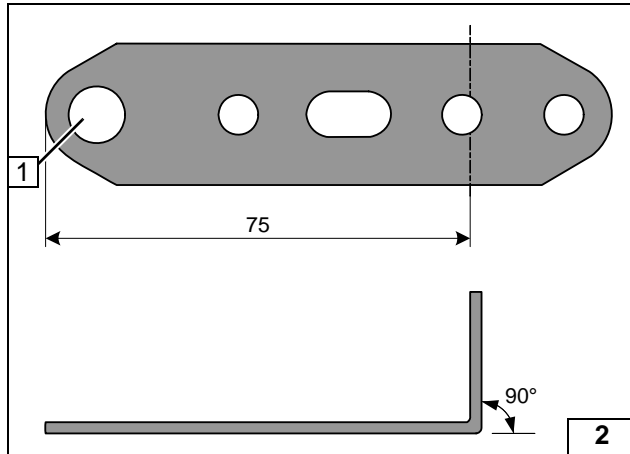
- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) in the appropriate place inside the engine compartment.



Heater Installation Location

- 1 Heater

Installation location



Preparing Electrical System

- 1 Drill out hole to 8.5 mm dia.



Preparing perforated bracket for engine compartment fuse holder

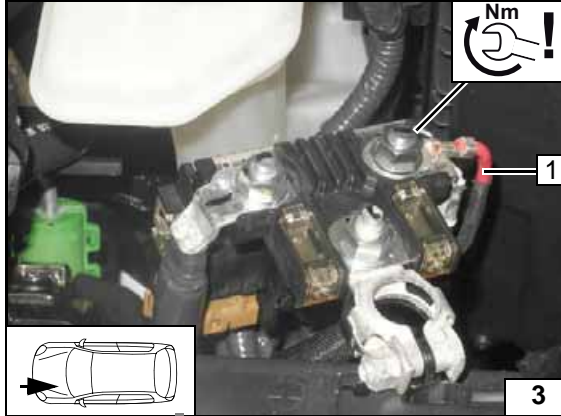


Electrical System



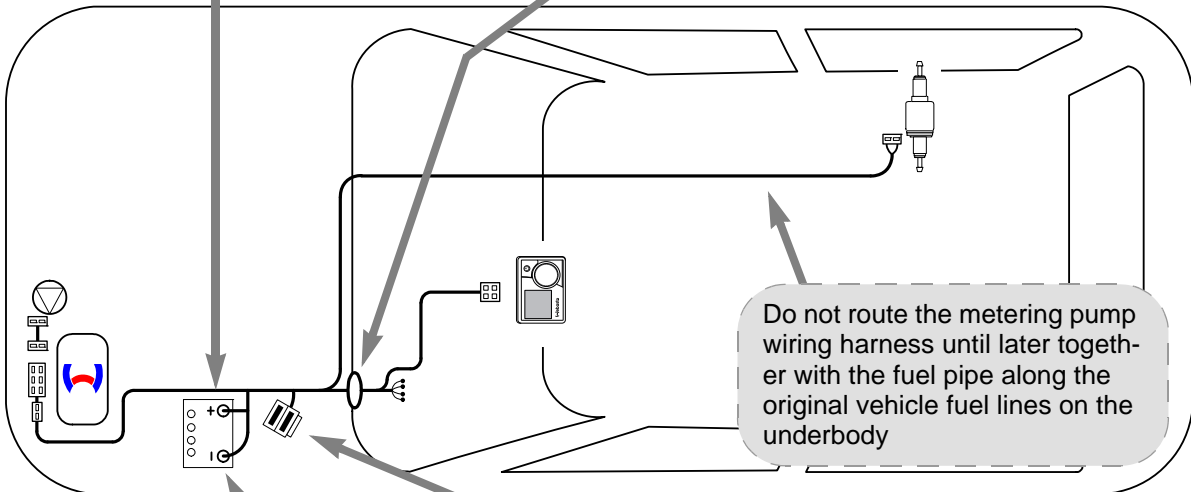
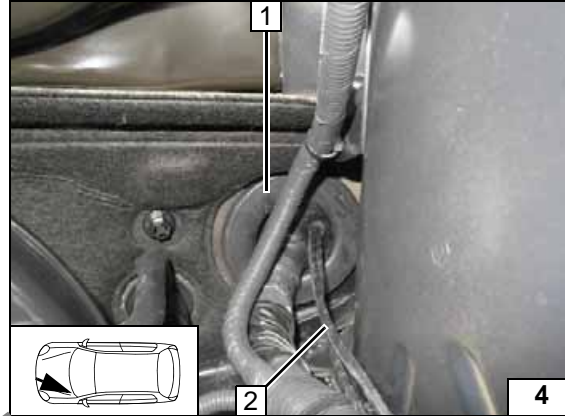
Positive wire

- 1 Positive wire on positive battery terminal

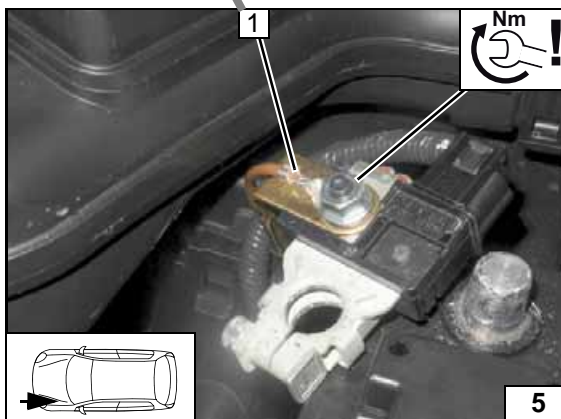


Wiring harness pass through

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

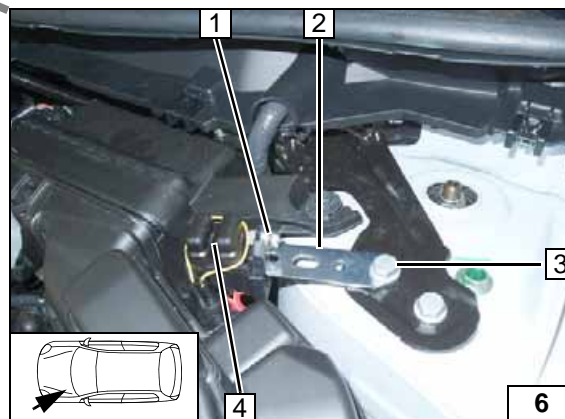


Wiring harness routing diagram



Earth wire

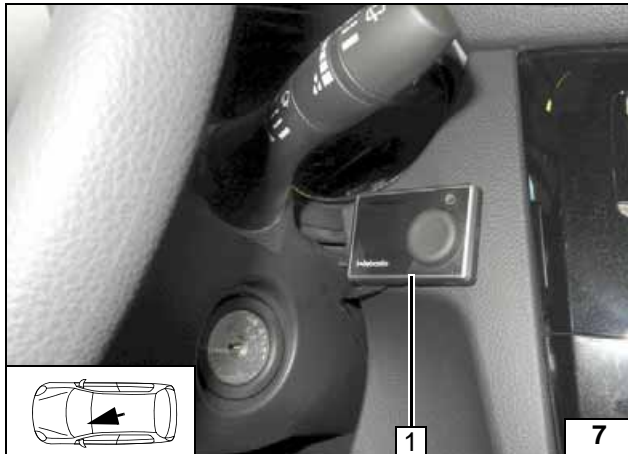
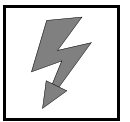
- 1 Earth wire on negative battery terminal



Fuse holder of engine compartment

- 1 M5x16 bolt, large diameter washer [2x], retaining plate of fuse holder, nut
- 2 Prepared perforated bracket
- 3 Original vehicle bolt
- 4 F1-2 fuses



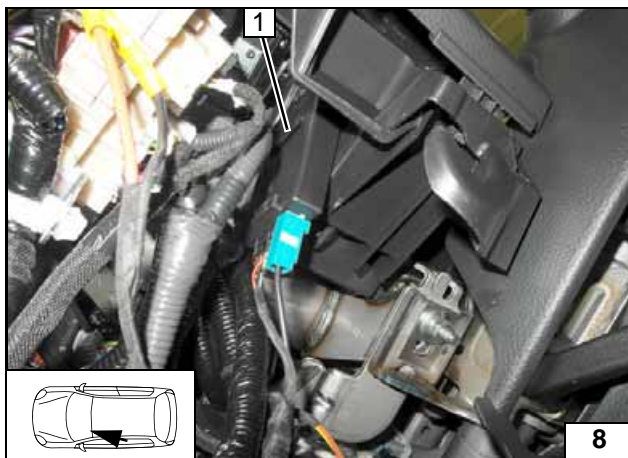


MultiControl CAR

1 MultiControl CAR



Installing MultiControl CAR

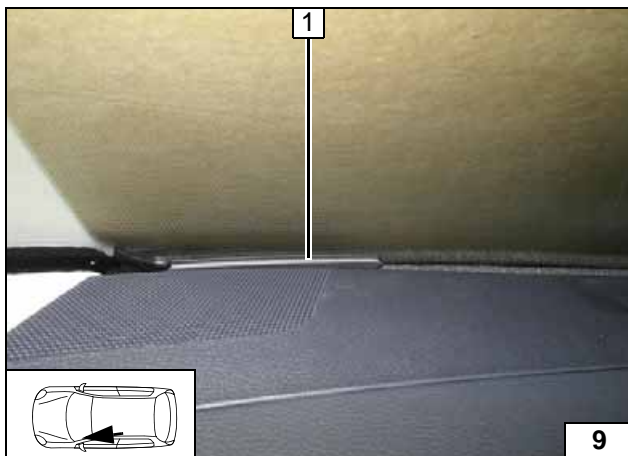


Remote Option (Telestart)

Fasten receiver 1 with adhesive tape as shown in the image.



Installing receiver

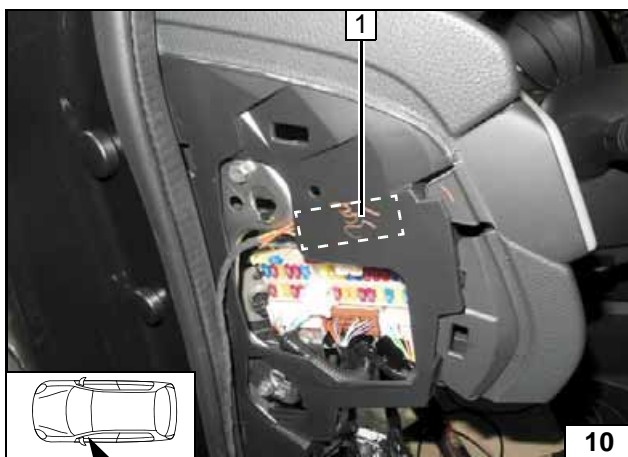


For windscreens with a special coating or heater, use only the area recommended by the manufacturer to assemble aerial.

1 Aerial



Mounting aerial

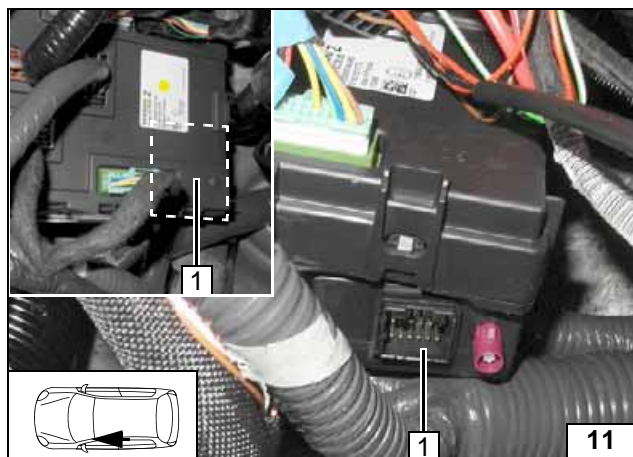


Temperature sensor T100 HTM

Secure temperature sensor 1 behind trim at the marking using adhesive tape.



Mounting temperature sensor

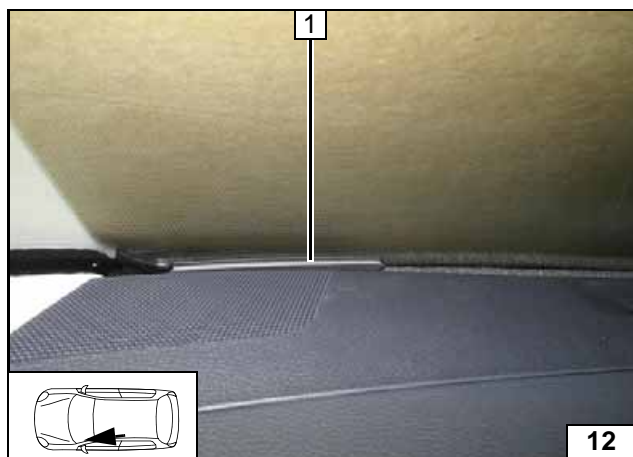


Remote Option Thermo Call

Secure receiver 1 behind the control unit at the marking using adhesive tape.



Installing receiver

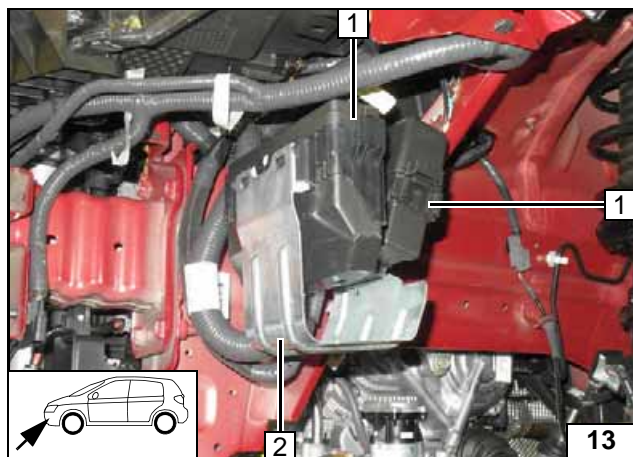


For windcreens with a special coating or heater, use only the area recommended by the manufacturer to assemble aerial.



- 1 Aerial

Mounting aerial

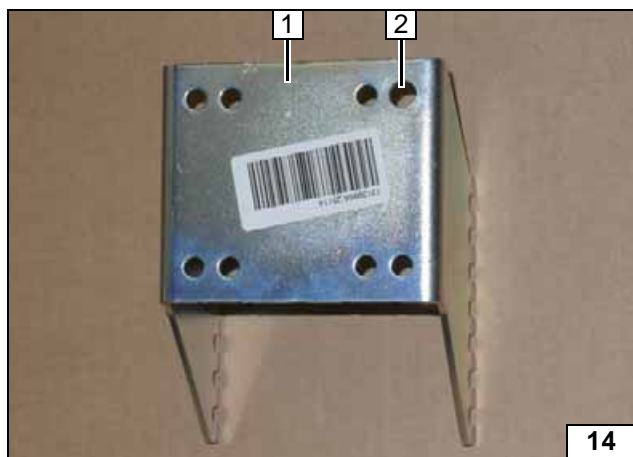


Preparing Installation Location

Detach fuse and relay box **1** [2x]. Remove bracket **2**, will be reused

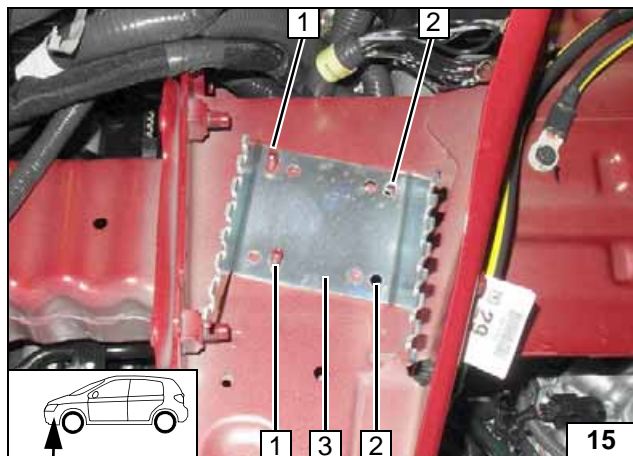


Preparing installation location



- 1 Bracket
- 2 Drill out hole to 9mm dia.

Preparing bracket

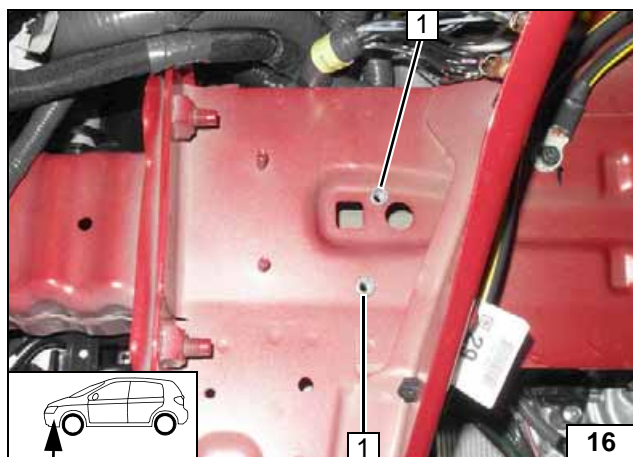


Mount bracket **3** on original vehicle stud bolts **1** [2x].

- 2 Copy hole pattern [2x]



Copying hole pattern

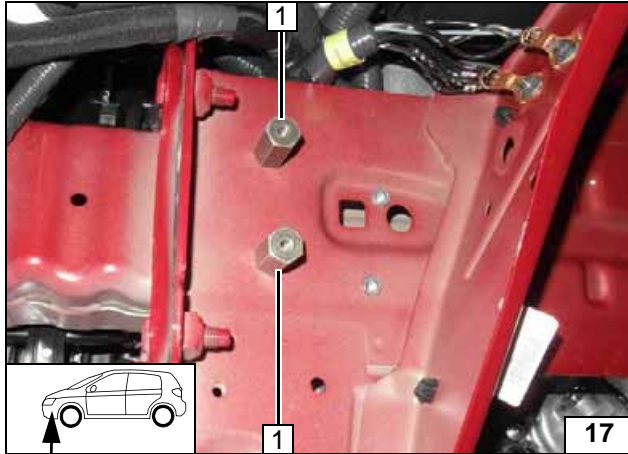
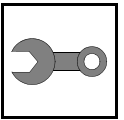


Remove bracket.

- 1 9.1mm dia. hole, rivet nut [2x]

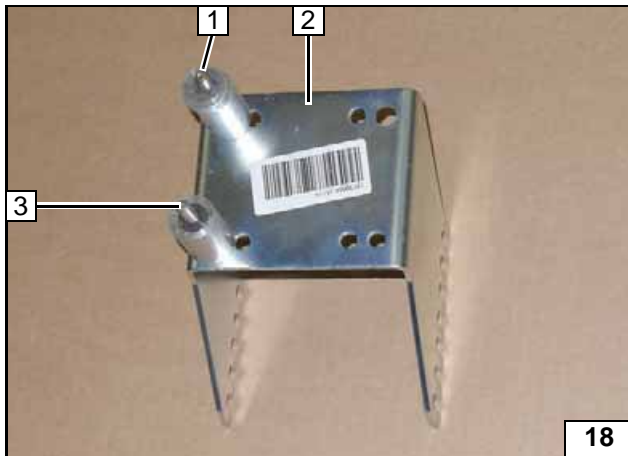


Installing rivet nut



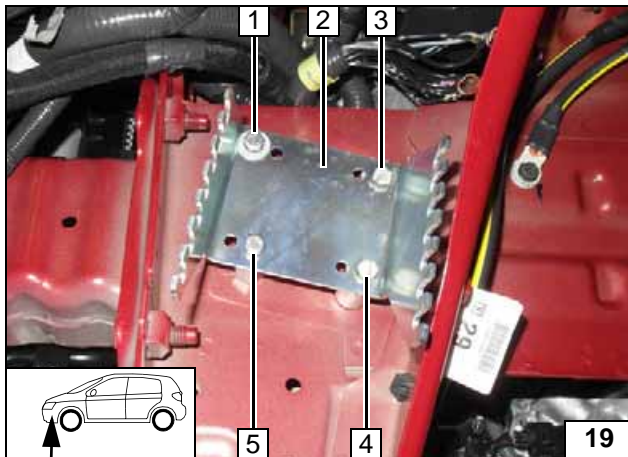
- 1 M6x30 spacer nut [2x] on original vehicle stud bolts

Installing spacer nuts



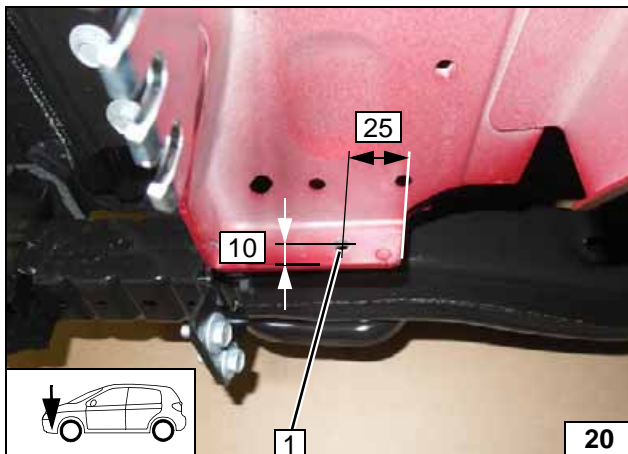
- 1 M6x60 bolt, spring lockwasher, 30mm shim, 5mm shim, pin lock
- 2 Bracket
- 3 M6x50 bolt, spring lockwasher, 30mm shim, pin lock

Premounting bracket



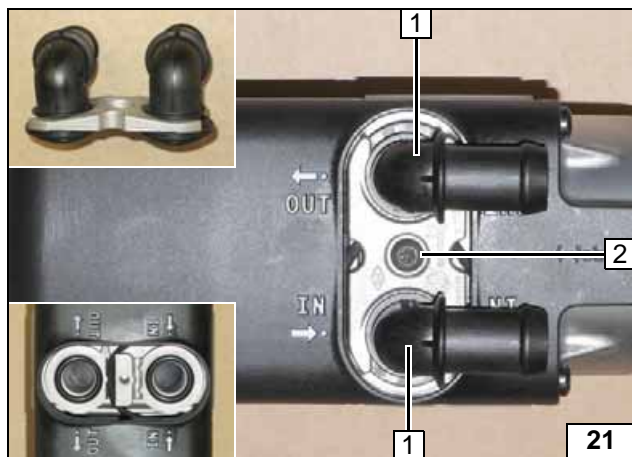
- 1 M6x16 bolt, spring lockwasher, large diameter washer
- 2 Bracket
- 3 M6x60 bolt on rivet nut
- 4 M6x50 bolt on rivet nut
- 5 M6x16 bolt, spring lockwasher

Installing bracket



- 1 7mm dia. hole

Hole for circulating pump

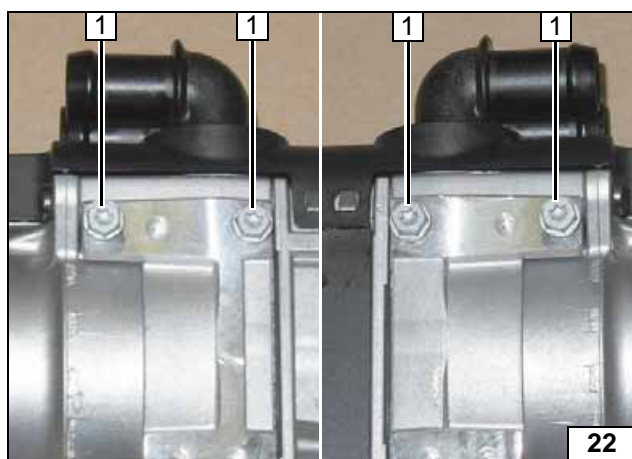


Preparing Heater

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



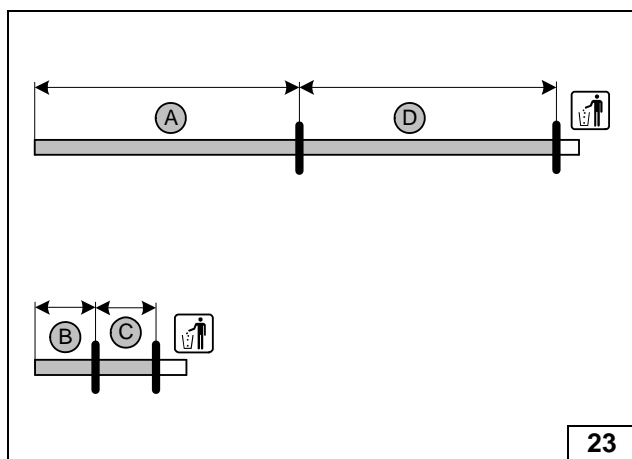
Installing water connection piece



Screw 5x13 self-tapping bolts 1 [4x] into existing holes by a maximum of 3 thread turns.

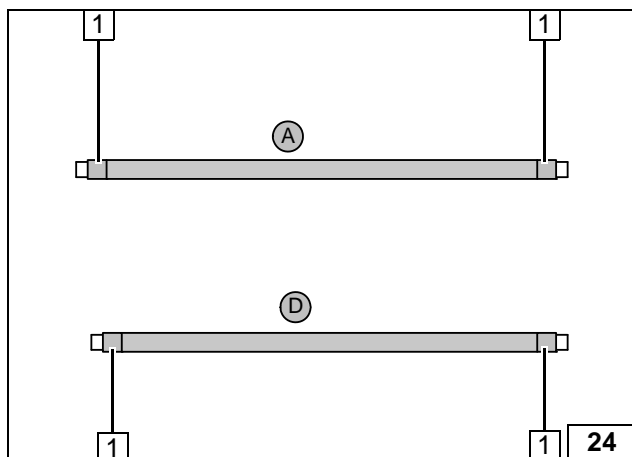


Loosely premounting bolts



- A = 1100
- B = 180
- C = 150
- D = 1070

Cutting hoses to length

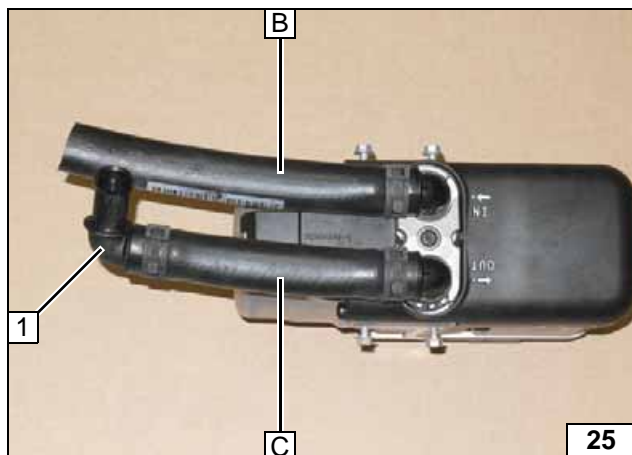


Push braided protection hoses onto hose **A** and **D** and cut to length. Cut heat shrink plastic tubing to length.



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

Preparing hoses

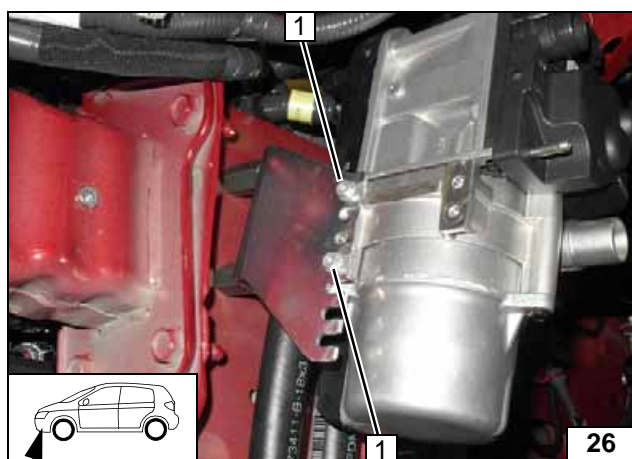


All spring clips = 25mm dia.

- 1 90° 18mm dia., connecting pipe



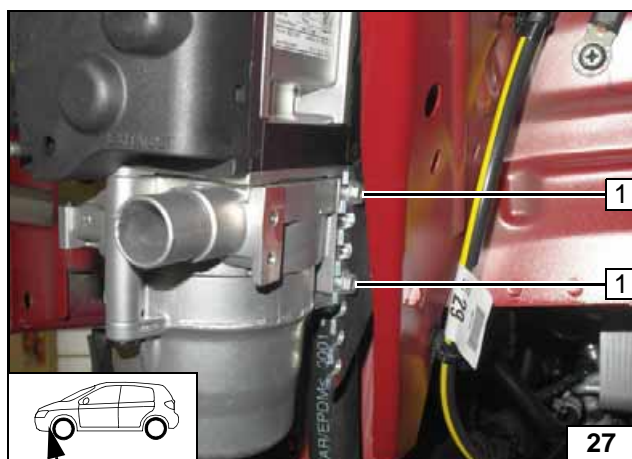
Premounting hoses



Installing Heater

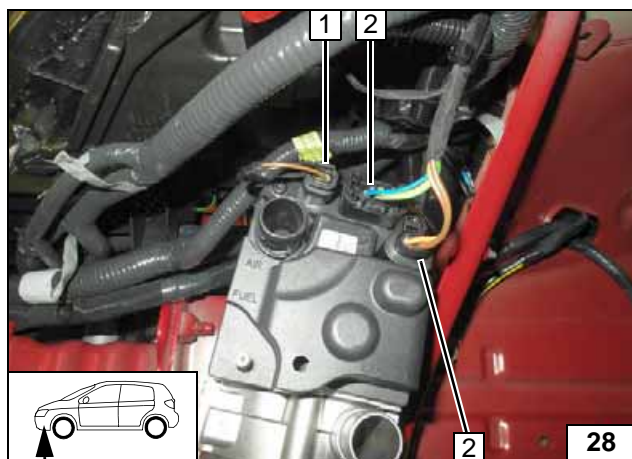
- 1 Tighten 5x13 self-tapping bolt [2x]

Installing heater



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

Installing heater



- 1 Connector of circulating pump wiring harness
- 2 Connector for wiring harness of heater [2x]

Installing wiring harnesses



Fuel



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

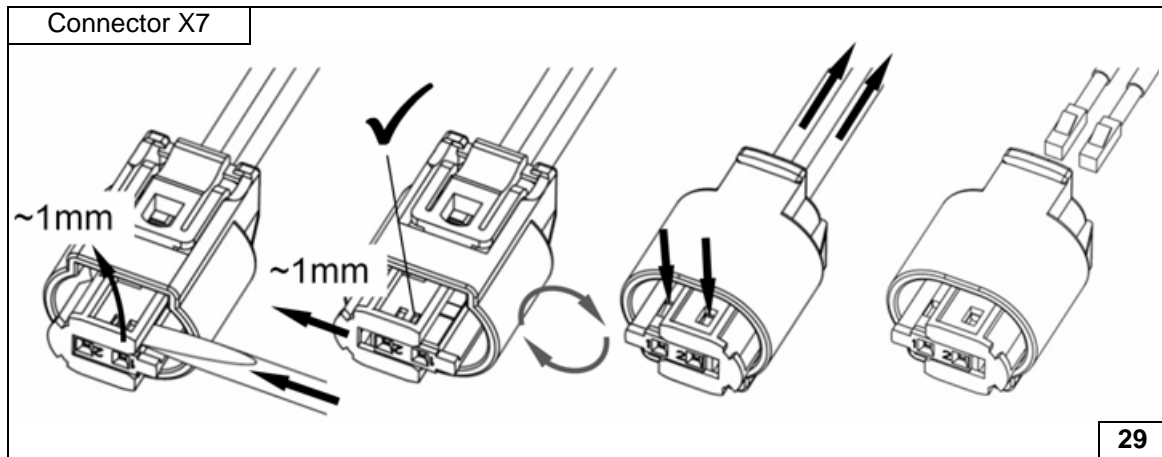
Catch any fuel running off in an appropriate container.

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

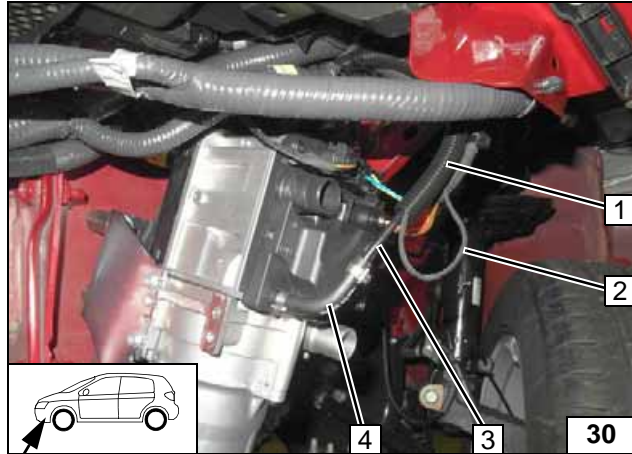


Provide rub protection for fuel line and wiring harness in areas where there are sharp edges.

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



Removing metering pump connector

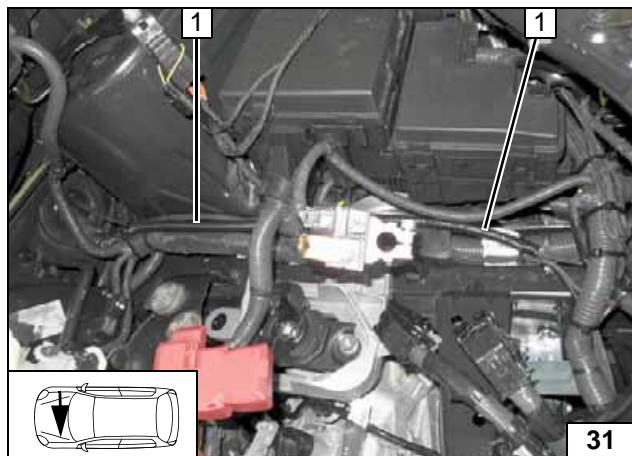


Route fuel line 3 and wiring harness of metering pump 2 in 10mm dia. corrugated tube 1 in the engine compartment.

4 90° moulded hose, 10mm dia. clamp [2x]



Connecting heater



Route fuel line and wiring harness of metering pump into 10mm dia. corrugated tube 1 towards the firewall and on to the underbody along the original vehicle lines.

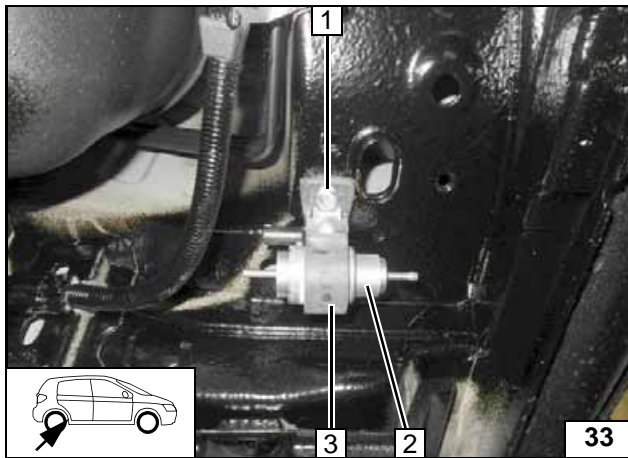


Routing lines



Route fuel line and wiring harness of metering pump in 10mm dia. corrugated tube 1 along original vehicle lines to installation location of metering pump.

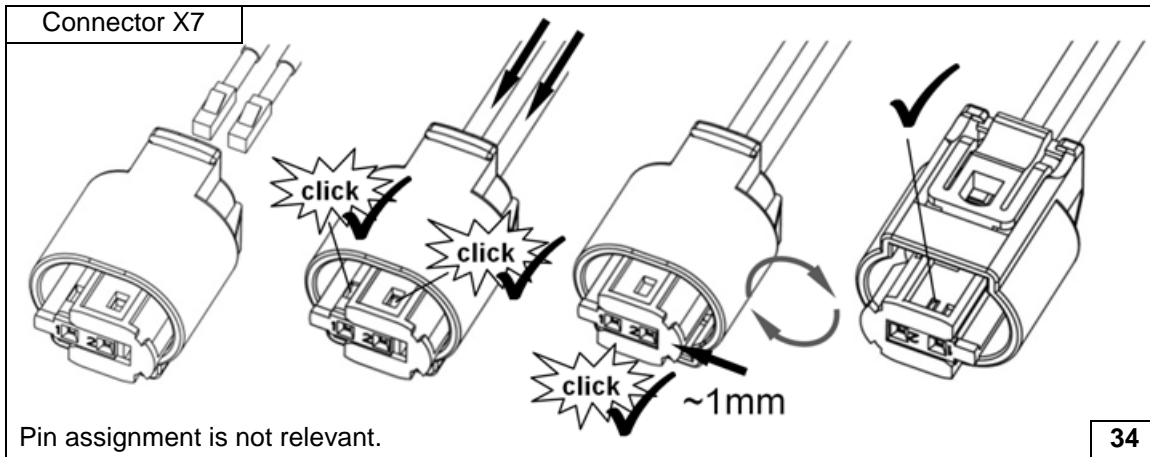
Routing lines



- 1 M6x25 bolt, support angle bracket, original vehicle threaded hole
- 2 Metering pump
- 3 Metering pump mounting bracket

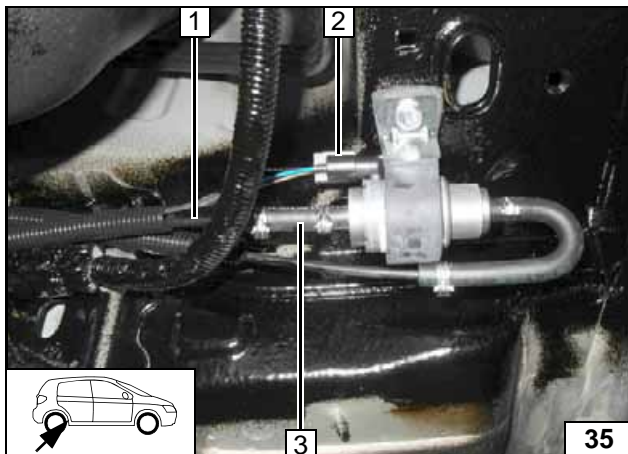


Installing metering pump



Pin assignment is not relevant.

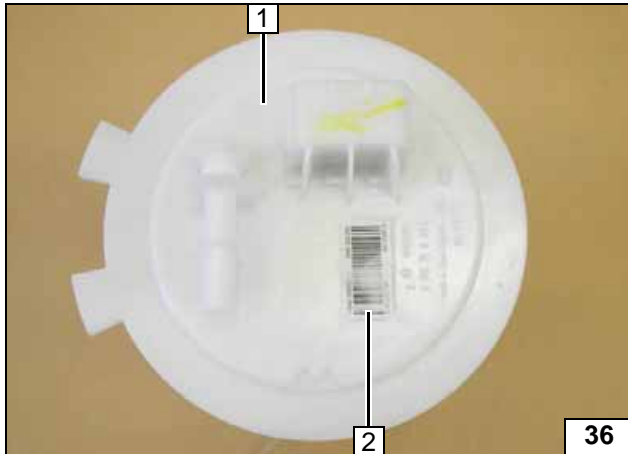
Completing metering pump connector



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



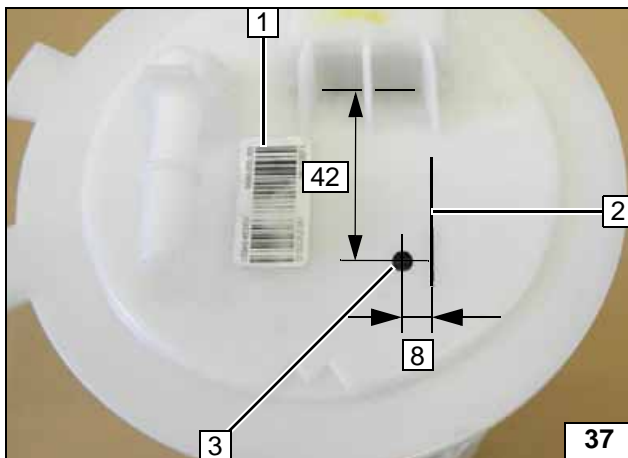
Connecting metering pump



Remove fuel tank sending unit **1** in accordance with manufacturer's instructions. Loosen sticker **2** and reaffix according to the image below.

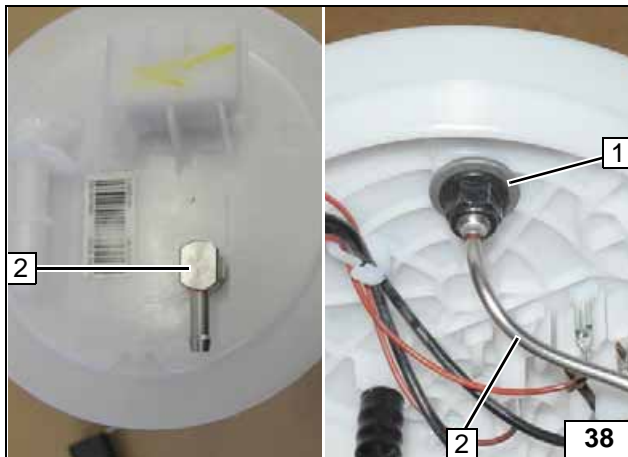


Fuel extraction



- 1 Sticker displaced
- 2 Existing formed ridge
- 3 Copy hole pattern, 6mm dia. hole

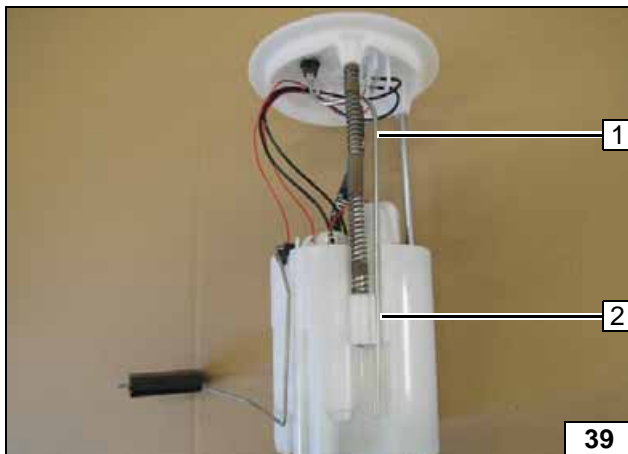
Fuel extraction



Bend fuel standpipe **2** according to template and cut to length. Insert large diameter washer with outer dia. $d_a = 17.6\text{mm}$ **1** between fuel tank sending unit and fuel standpipe **2**.



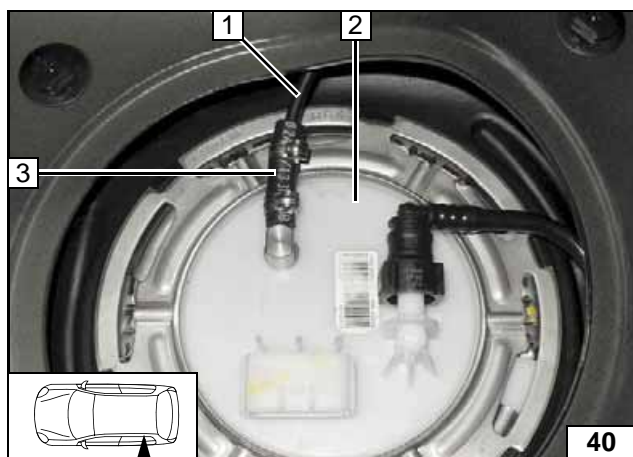
Installing fuel standpipe



Engage fuel standpipe **1** in existing groove at position **2**.



Installing fuel standpipe

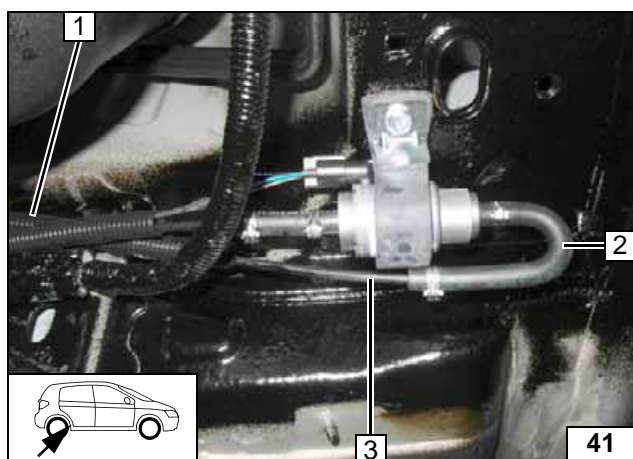


Install fuel tank sending unit **2** and connect in accordance with manufacturer's instructions.



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

**Connect-
ing fuel line**



Slide 10mm dia. corrugated tube **1** onto fuel line of fuel standpipe **3**. Ensure sufficient distance to neighbouring components, correct if necessary.



- 2** 180° moulded hose, 10mm dia. clamp [2x]

**Connect-
ing meter-
ing pump**

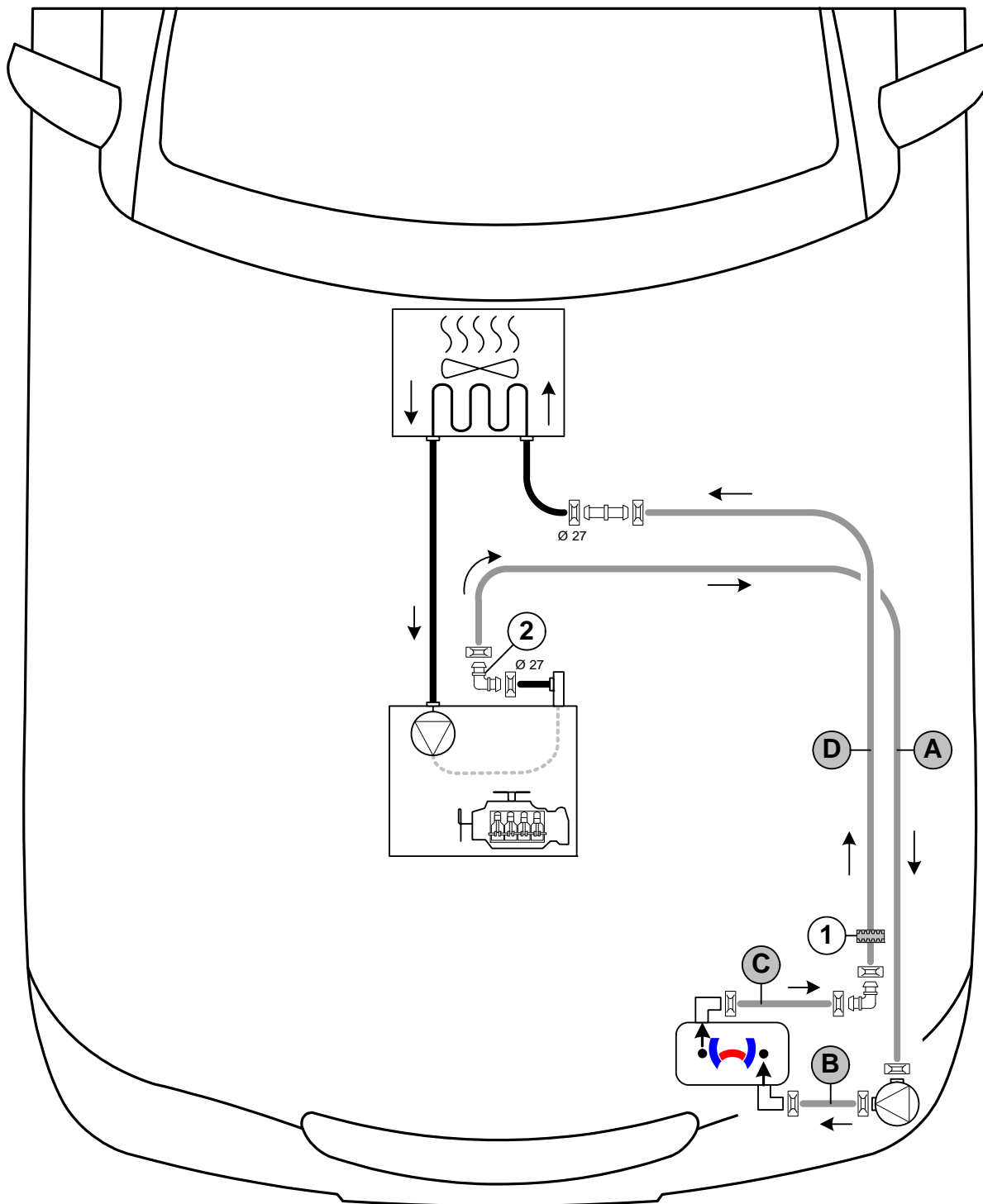


Coolant Circuit





Any coolant running off should be collected in an appropriate container. Route hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that no other hoses can be damaged. When installing the hoses, the heater must be filled with coolant.



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



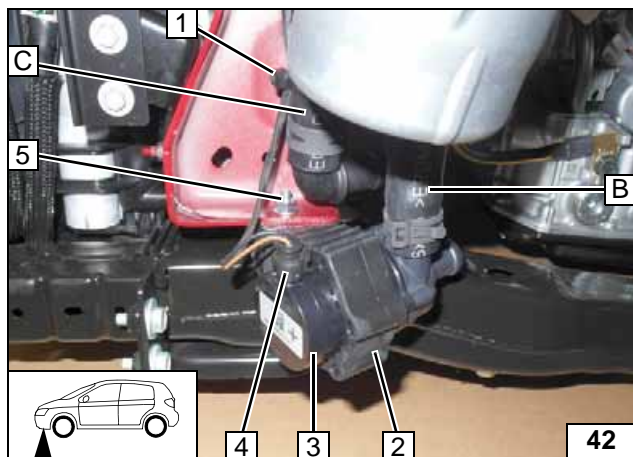
Hose routing diagram

All spring clips without a specific designation  = 25mm dia.

Connecting pipe  = 18x20mm dia. All connecting pipes without a specific designation  = 18x18mm dia.

1 = Black (sw) rubber isolator . 2 = connecting pipe  = 18x20mm dia.

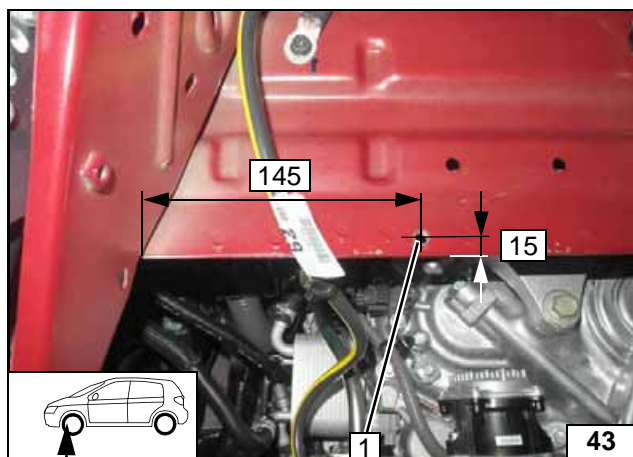




Install hose **B**. Attach wiring harness of circulating pump to hose **C** using cable tie **1**.

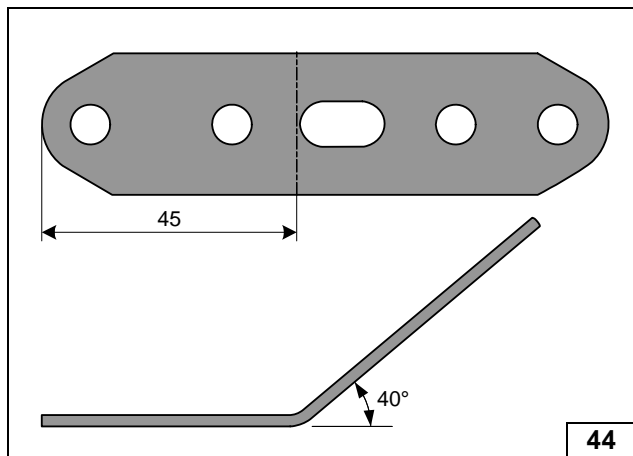
- 2 Circulating pump mounting bracket
- 3 Circulating pump
- 4 Connector of circulating pump wiring harness
- 5 M6x25 bolt, flanged nut, prepared hole

Installing and connecting circulating pump

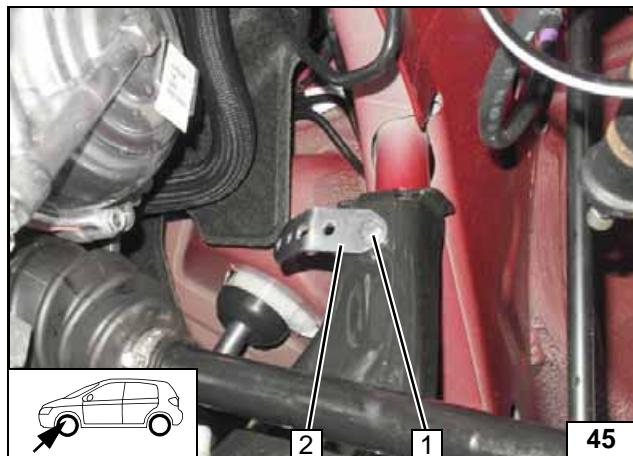


1 7mm dia. hole

Hole for rubber-coated p-clamp



Preparing perforated bracket



- 1 M6x20 bolt, flanged nut, original vehicle hole
- 2 Perforated bracket

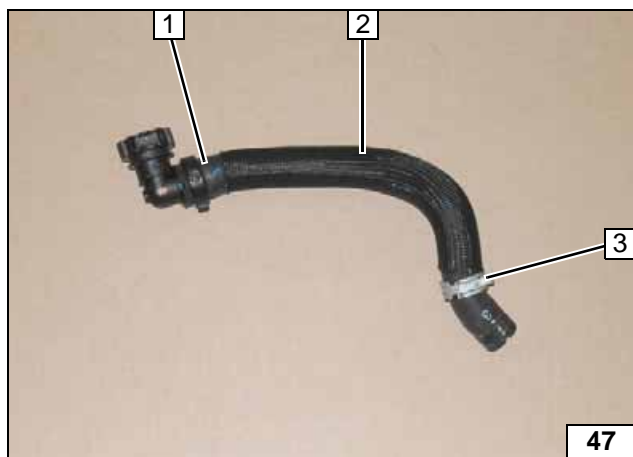
Installing perforated bracket



Remove hose of engine outlet / heat exchanger inlet 1.



Removing hose

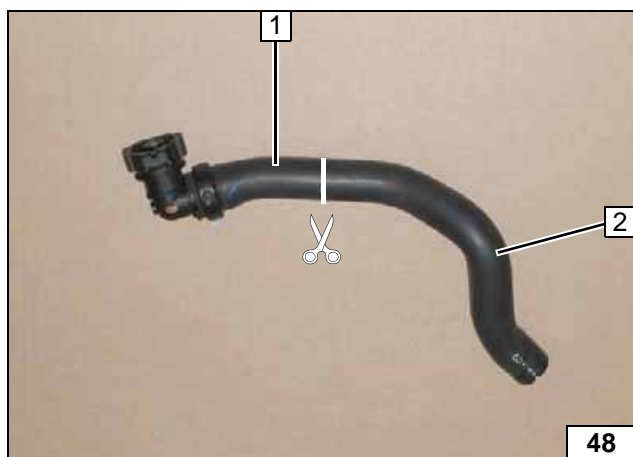


Remove braided protection hose 2 (if present). Spring clip 3 will be reused.



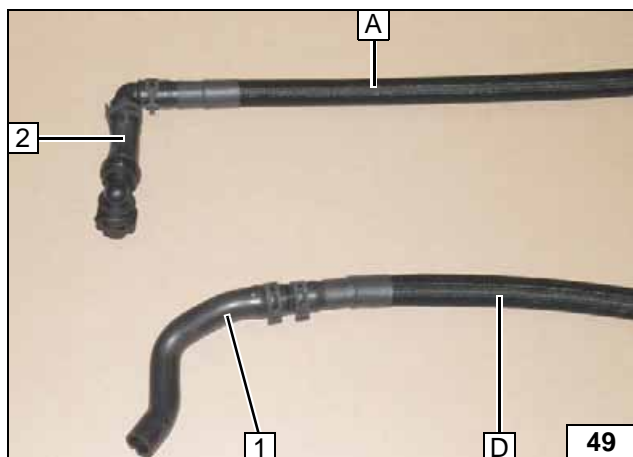
Preparing hose

- 1 Hose of engine outlet/heat exchanger inlet



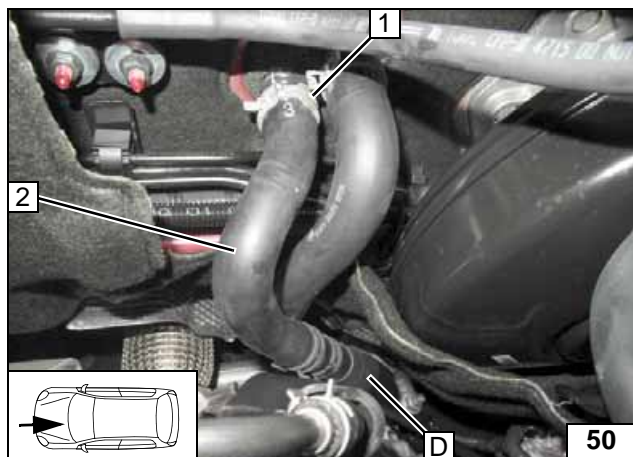
- 1 Engine outlet hose section
- 2 Hose section of heat exchanger inlet

Cutting point



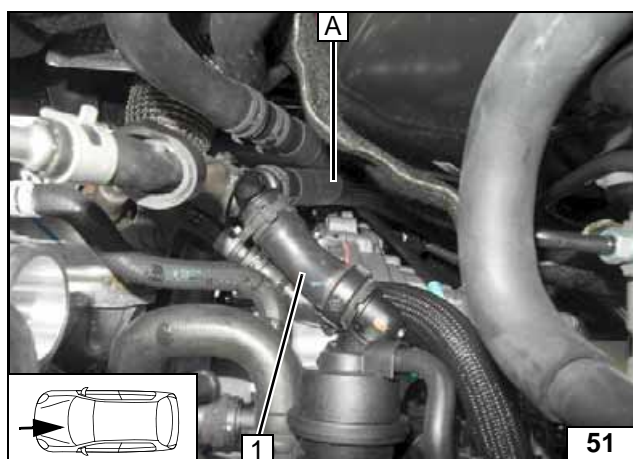
- 1 Hose section of heat exchanger inlet
- 2 Engine outlet hose section

Preparing hoses



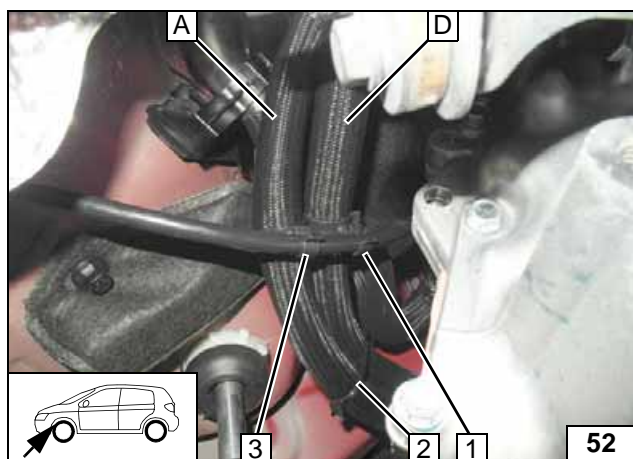
- 1 Original vehicle spring clip
- 2 Hose section of heat exchanger inlet

Connect-
ing heat ex-
changer
inlet



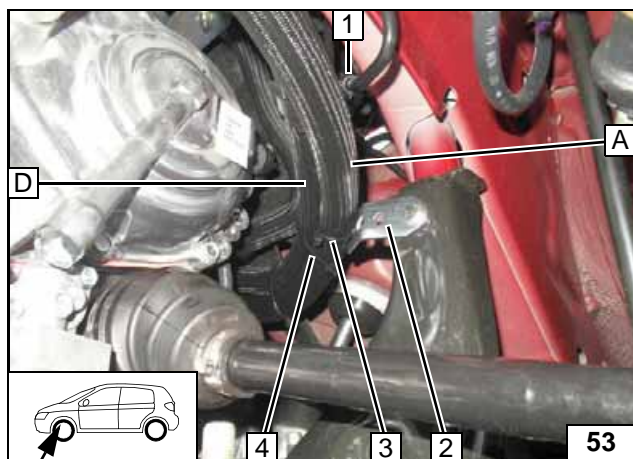
- 1 Engine outlet hose section

Connect-
ing engine
outlet



- 1 9x20 hose bracket between hose **D** and gearshift cable
- 2 Cable tie
- 3 9x20 hose bracket between hose **A** and gearshift cable

Routing in
engine
compart-
ment

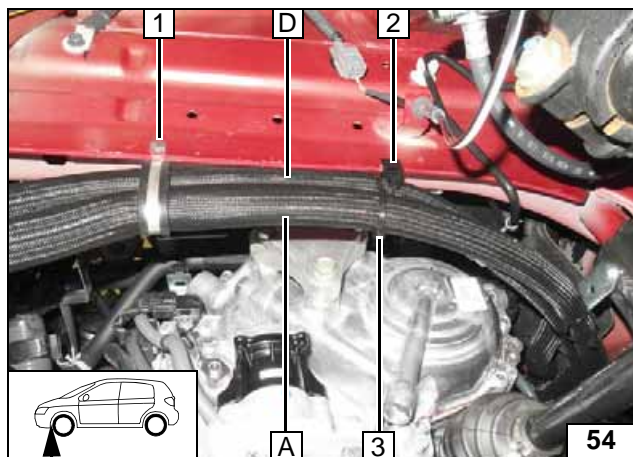


Attach hose **A** to perforated bracket **2** us-
ing cable tie **3**.

- 1 8x20 hose bracket between hose **D** and brake line
- 4 Cable tie



Routing in
engine
compart-
ment

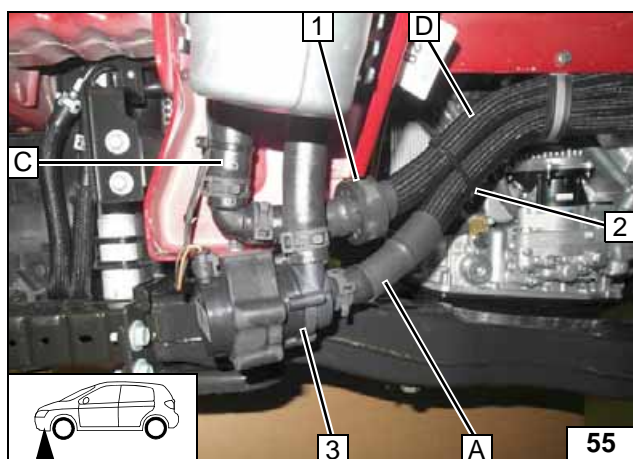


Mount retaining clip **2** to the edge of the body, close cable tie around hose **D**.

- 1** M6x20 bolt, 38mm dia. rubber-coated p-clamp, flanged nut
- 3** Cable tie



Routing in engine compartment

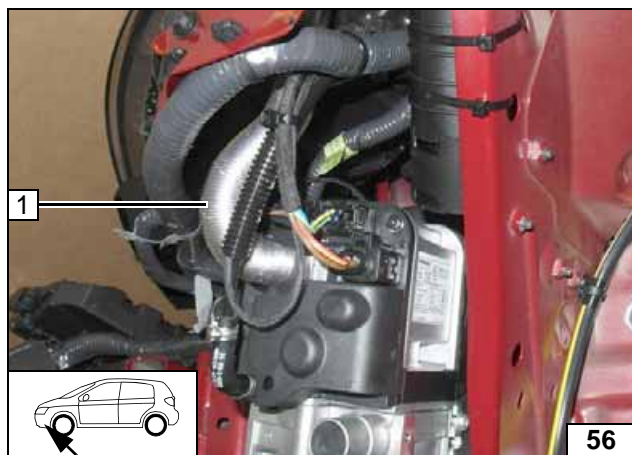
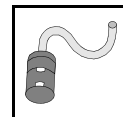


Slide black (sw) rubber isolator **1** onto hose **D** and align with the edge of the body.

- 2** Cable tie
- 3** Circulating pump



Connecting heater

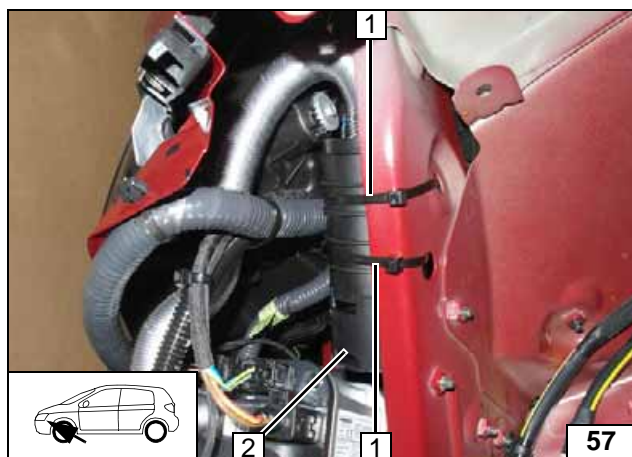


Combustion Air

Route combustion air pipe 1 upwards as shown.



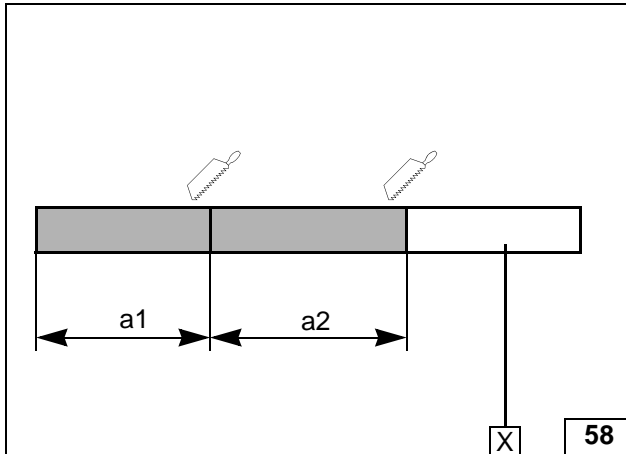
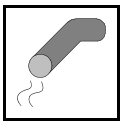
Installing combustion air pipe



- 1 Cable tie [2x] through original vehicle holes
- 2 Silencer



Mounting silencer



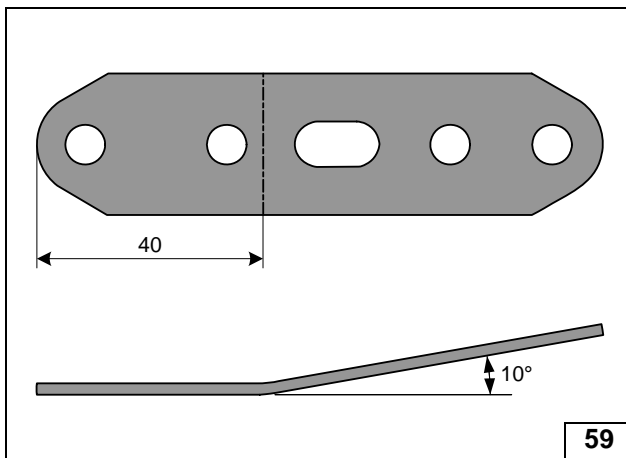
Exhaust Gas

$a_1 = 120$
 $a_2 = 190$

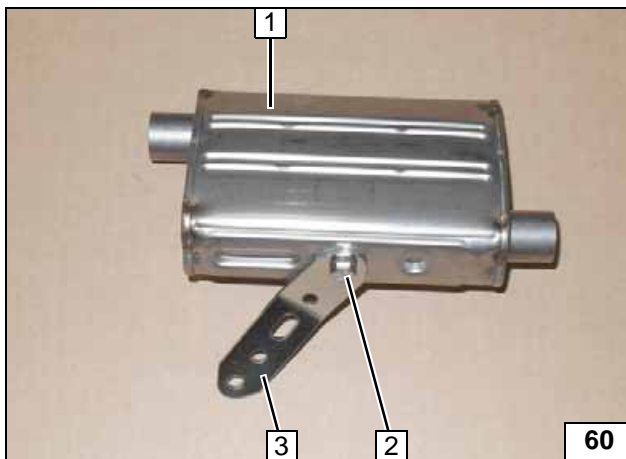
X =



Preparing exhaust pipe

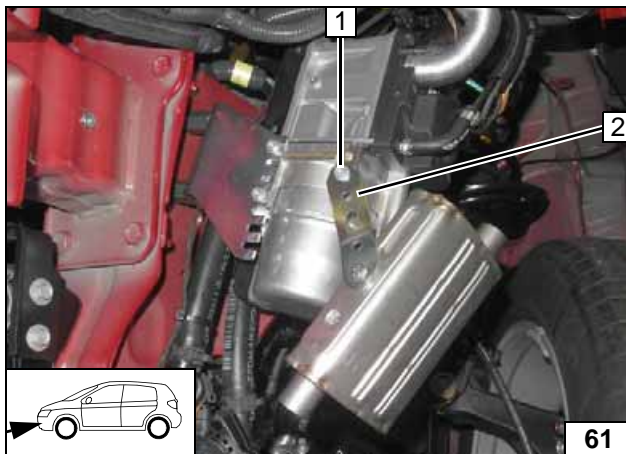


Preparing perforated bracket



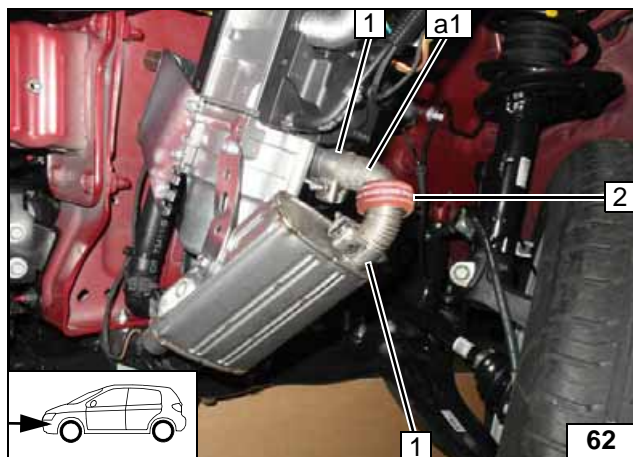
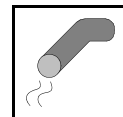
- 1 Silencer
- 2 M6x16 bolt, spring lockwasher
- 3 Perforated bracket

Premounting silencer



- 1 5x13 self-tapping bolt
- 2 Perforated bracket

Mounting silencer

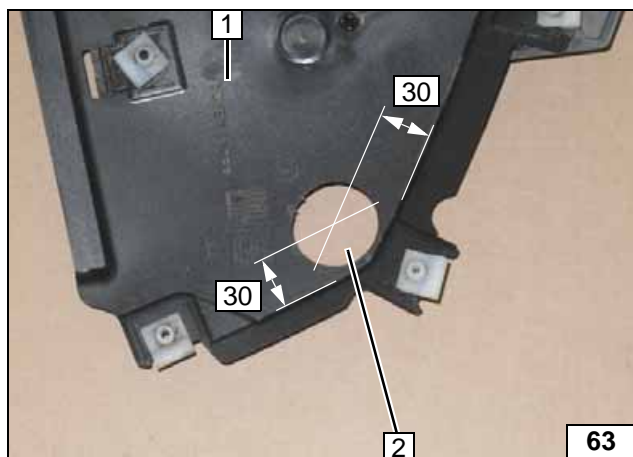


Slide spacer bracket **2** onto exhaust pipe **a1**.

- 1 Hose clamp [2x]



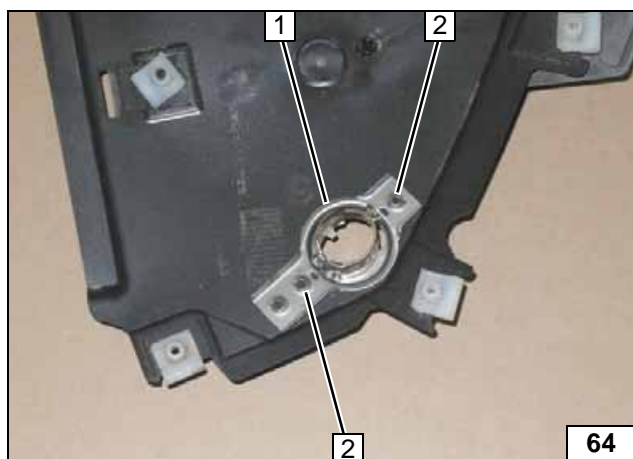
Installing exhaust pipe a1



- 1 Wheel well trim
- 2 Hole (as per work step 1 of the installation instructions)



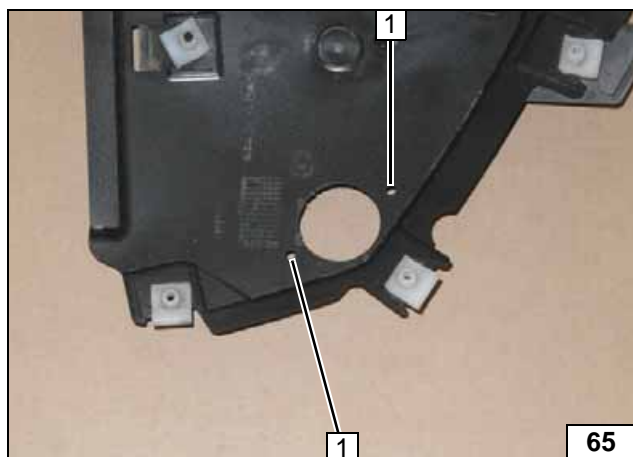
Hole in wheel well trim



Position exhaust end fastener **1** as per work step 3 of the installation instructions and copy hole pattern **2** [2x].



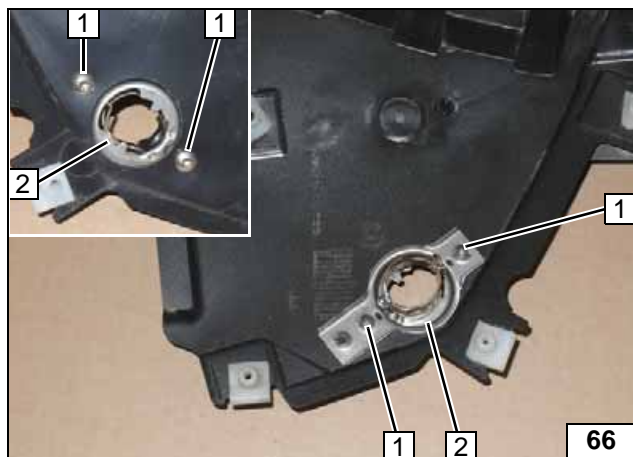
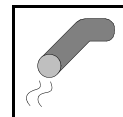
Copying hole pattern



Hole **1** [2x] as per work step 4 of the installation instructions!



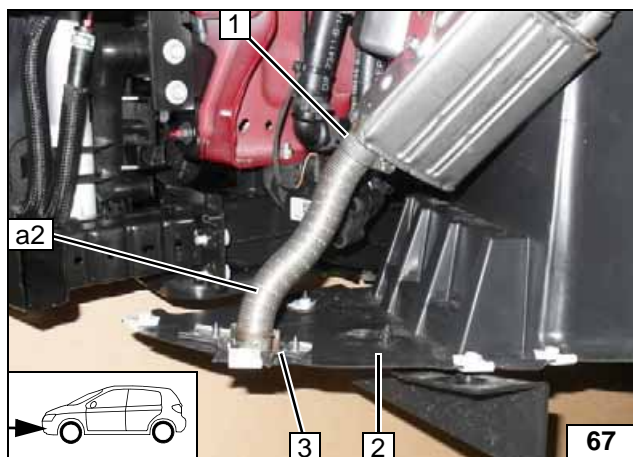
Hole in wheel well trim



- 1 5x13 self-tapping screw [2x] as per work step 5 of the installation instructions
- 2 Exhaust end fastener



**Mounting ex-
haust end
fastener**

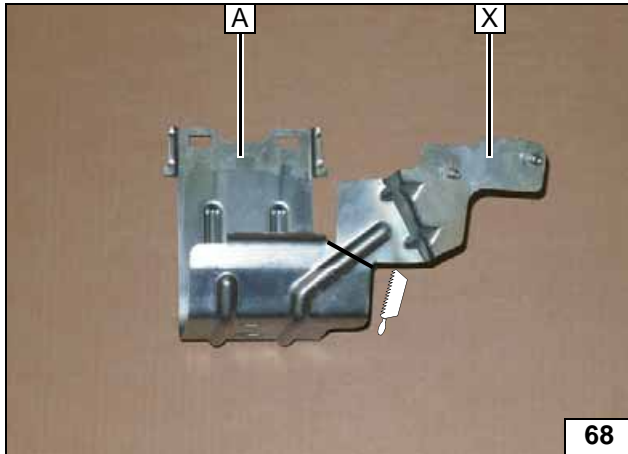
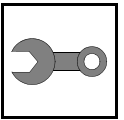


Install wheel well trim **2**. Install exhaust pipe **a2** as per work steps 6 - 8 of the installation instructions.

- 1 Hose clamp
- 3 Exhaust end fastener



**Installing
exhaust
pipe a2**

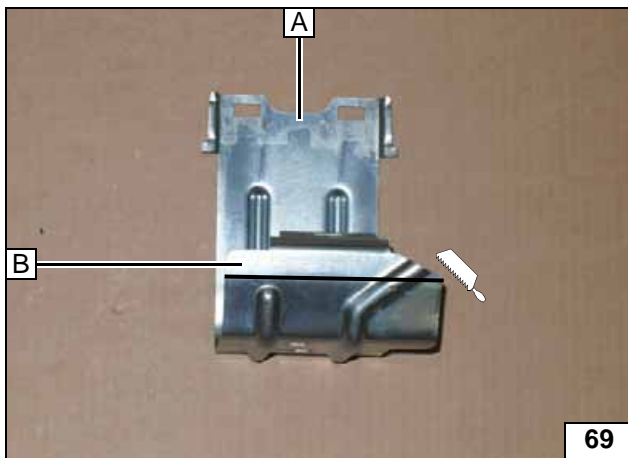


Installing Fuse and Relay Box

A Bracket of fuse and relay box

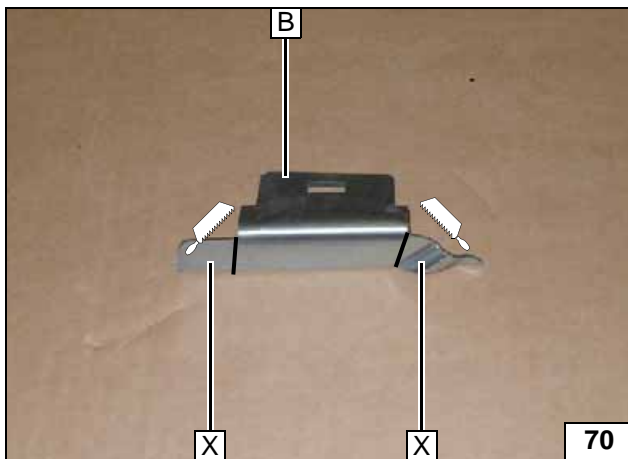
X =

Preparing bracket of relay box



A Bracket of fuse and relay box
B Bracket section will be reused (see next figure)

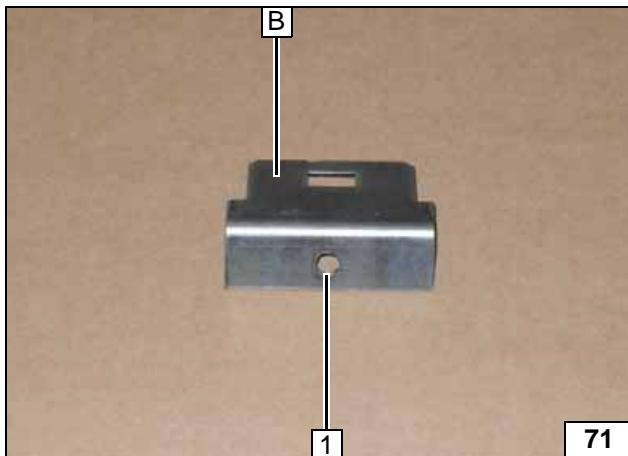
Cutting bracket



B Bracket section

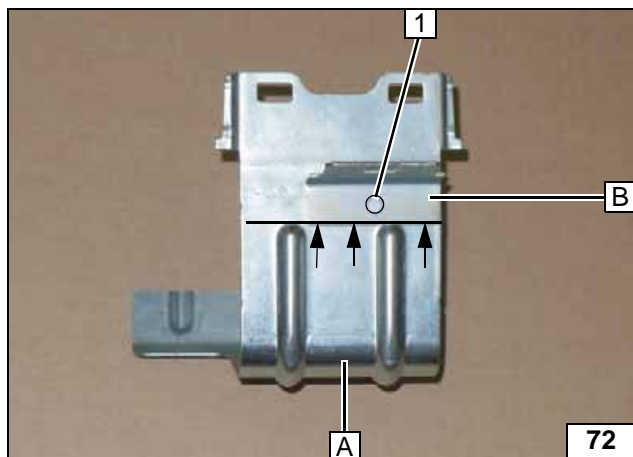
X =

Cutting bracket section to length



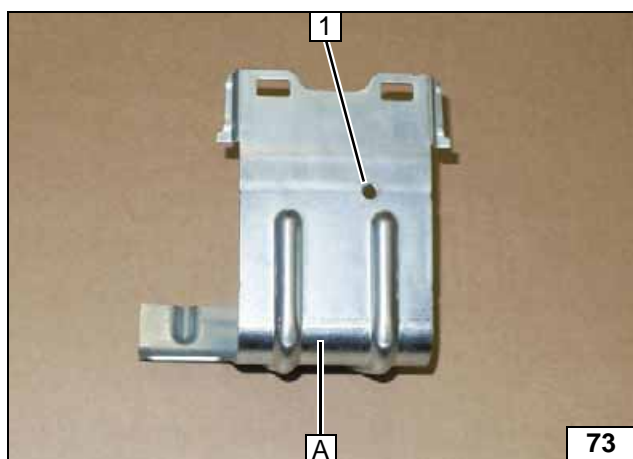
B Bracket section
1 7mm dia. hole as shown

Hole in bracket section



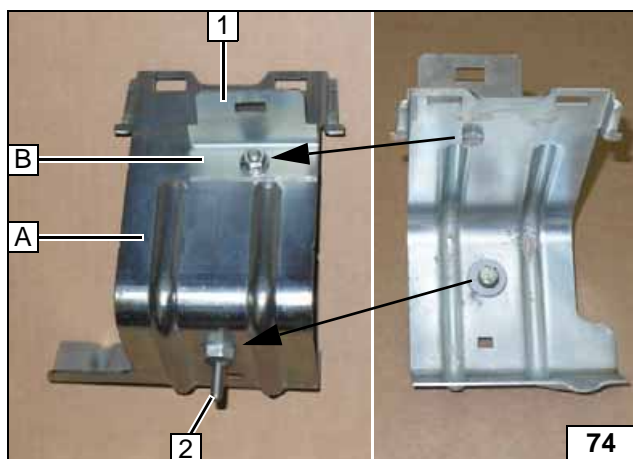
Position bracket section **B** at the bead of fuse and relay box bracket **A** as shown and copy hole pattern **1**.

Copying hole pattern



1 7mm dia. hole in bracket **A**

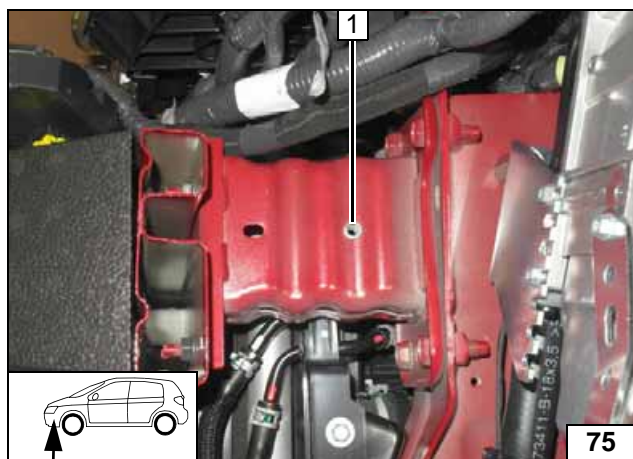
Hole in bracket **A**



- 1 M6x12 bolt, flanged nut
- 2 M6x30 bolt, spring lockwasher, large diameter washer, M8 flanged nut (with flanged nut on bracket **A**), pin lock, original vehicle hole

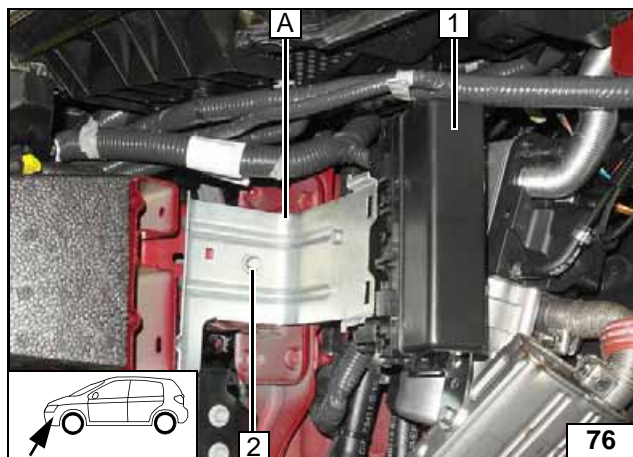
A Bracket of fuse and relay box
B Bracket section

Completing bracket of relay box



1 Drill out original vehicle hole to 9.1mm dia.; rivet nut

Installing rivet nut

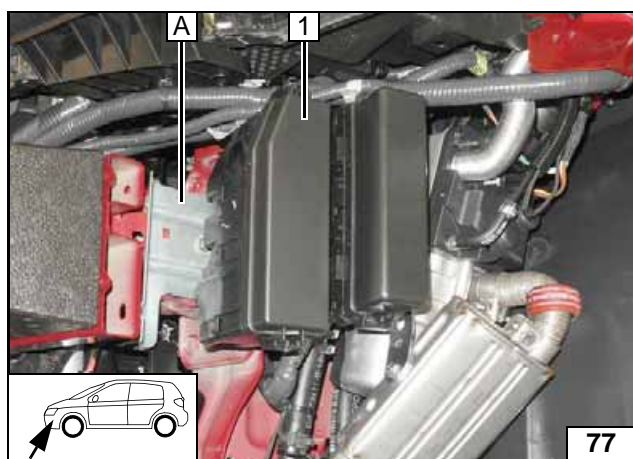


Mount rear relay box **1** first onto bracket section **B** (hidden)!

- A** Bracket of relay box
- 2** M6x30 bolt on rivet nut



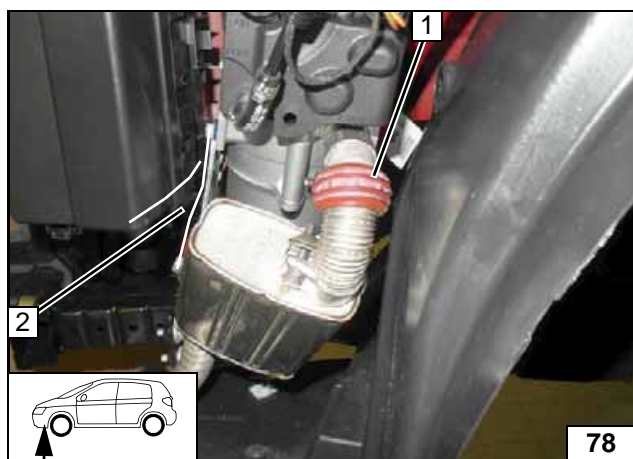
Installing rear relay box



Mount front relay box **1** onto bracket **A**.



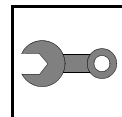
Mounting front relay box



Align spacer bracket **1** with wheel well trim. Ensure sufficient distance (at least 20mm) between exhaust silencer and relay box in position **2**, correct if necessary!



Checking distance

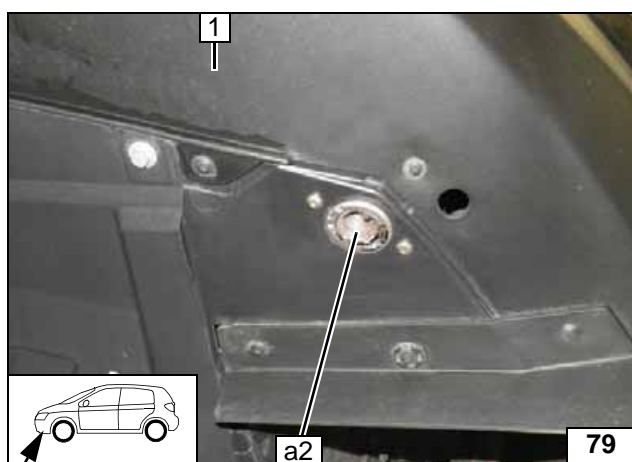


Final Work



Reassemble the disassembled components in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate all loose lines and tie back. 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 specifications**
- **Program MultiControl CAR, teach Telestart transmitter**
- **See installation instructions for initial start-up and function check**
- **If the fan function or A/C control panel settings need to be checked, see the installation documentation in the additional kit A/C control 'Standard' or 'Comfort', section 'Final Work'**
- **Apply the caution label 'Switch off parking heater before refuelling' in the area of the filler neck**



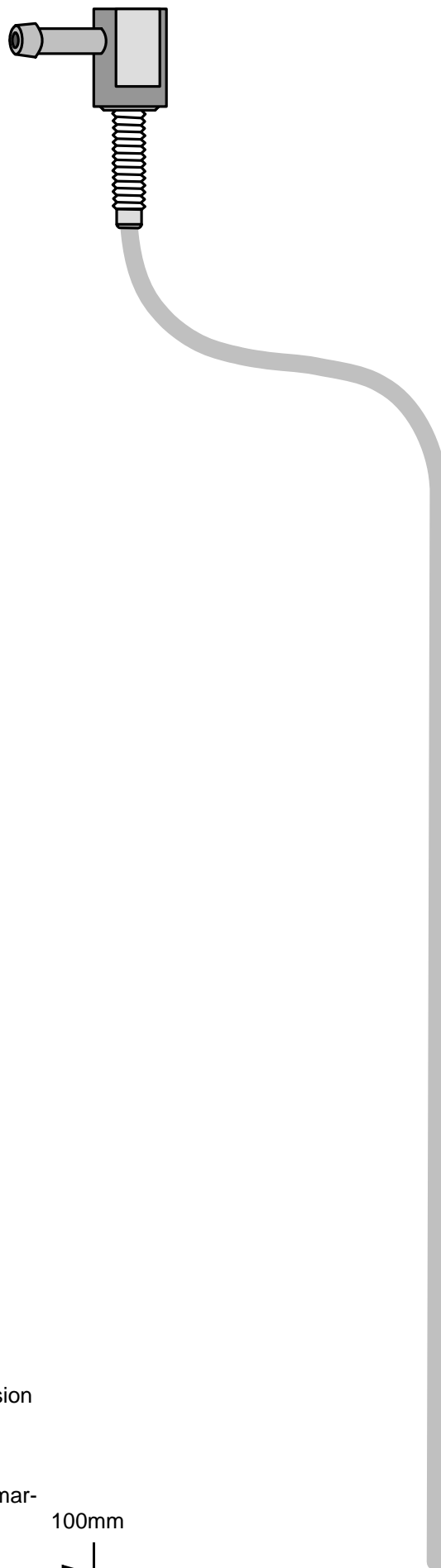
Install bumper 1.
Check the correct seating of exhaust end section a2 in exhaust end fastener.



Checking exhaust end section a2



Template for Fuel Standpipe



Top view

