



Water heater

Thermo Top Evo parking heater



Installation documentation Honda HRV

Validity

Manufacturer	Model	Type	Model year	EG BE No. / ABE
Honda	HRV	RU	From model year 2016	e6 * 2007 / 46 * 0158 * ...

Motorisation	Fuel	Emission standard	Transmission type	Output in kW	Displacement in cm ³	Engine code
1.5 P	Petrol	Euro 6	6-speed SG	96	1498	L15BY
1.5 P	Petrol	Euro 6d-Temp	6-speed SG	96	1498	L15BY

SG = manual transmission

Left-hand drive vehicle

Verified equipment variants: 1 zone automatic air-conditioning
2 zone automatic air-conditioning
Halogen main headlights
LED daytime running lights
Start button

Not verified: LED main headlights
Keyless Go

Total installation time: approx. 10 hours

Honda HRV

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Necessary components

Description	Order No.:
Basic delivery scope of Thermo Top Evo	In accordance with price list
Installation kit for Honda HRV 2016 Petrol	1325167B
In case of Telestart, control element, as well as indicator lamp in consultation with end customer	In accordance with price list
In case of installation of MultiControl CAR - MultiControl installation frame	9030077_

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.

Information on total installation time

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

Information on operating and installation instructions

1 Important information (not complete)

1.1 Installation and repair



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



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



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

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

1.2 Operation

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

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

Always switch off the heater before refuelling.

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

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

1.3 Please note

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

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

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

Important

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

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

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

Installation should be carried out according to the general, standard rules of technology. Unless specified otherwise, fasten hoses, lines and wiring harnesses to original vehicle lines and wiring harnesses using cable ties. Insulate loose wire ends and tie back. Connectors on electronic components 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 start-up is to be executed with the Webasto Thermo Test Diagnosis.

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

2 Statutory regulations governing installation

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

Note

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

Important

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

Note

The heater is licensed in accordance with paragraph 19, section 3, No. 2b of the 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.

Honda HRV

Information on validity

This installation documentation applies to Honda HRV Petrol vehicles - for validity, see page 1 - from model year 2016 and later, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to this installation documentation.

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

Technical information

Special tools

- Hose clamp pliers for auto-tightening hose clamps
- Hose clamp pliers for Clic hose clamps of type W
- Hose clamping pliers
- Automatic wire stripper, 0.2 - 6mm²
- Crimping pliers for male connector 0.14 - 6mm²
- Crimping pliers for cable lug 0.5 - 10mm²
- Crimping pliers for connector 0.25 - 6mm²
- Torque wrench for 2.0 - 10 Nm
- 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.

Mechanics



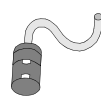
Electrics



Coolant circuit



Combustion air



Fuel



Exhaust gas



Software



Special features are highlighted using the following symbols:

Specific risk of damage to components.



Specific risk due to electrical voltage.



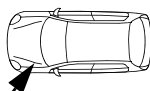
Specific risk of fire or explosion.



Reference to a special technical feature.



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



Reference to the manufacturer's vehicle-specific documents.



Reference to specific installation instructions of Webasto components (demonstrated with the example of the FuelFix).



Reference to general installation instructions of Webasto components.



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



Honda HRV

Preliminary work

Vehicle



- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Remove the engine cover (if available).
- Disconnect and remove the battery completely together with the carrier.
- Remove the air filter box completely, together with the intake hose.
- Remove the engine underdrive protection.
- Remove the underbody trim.
- Remove the left front wheel.
- Remove the left wheel-well inner panel.
- Remove the resonator.
- Remove the lower footwell trim on the left.
- Remove the lower instrument panel trim on the left.
- Detach the passenger compartment fuse and relay box.



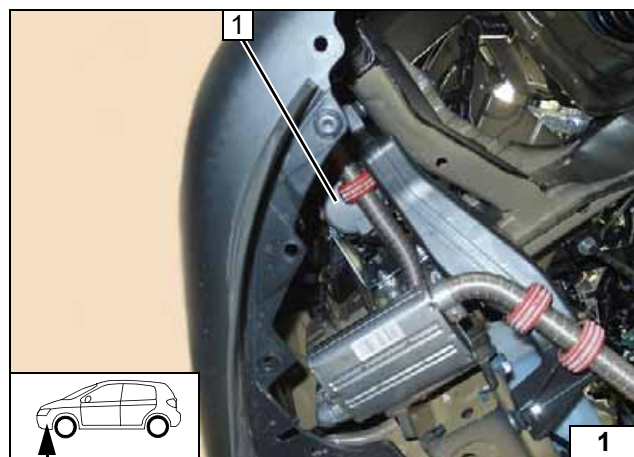
The following work should only be performed during the corresponding installation sequence:

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



Heater

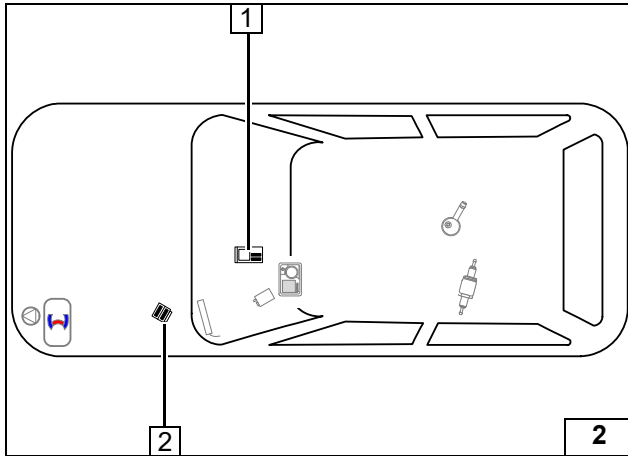
- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) visibly in the appropriate place in the engine compartment.



Heater installation location

- 1 Heater

Installation location

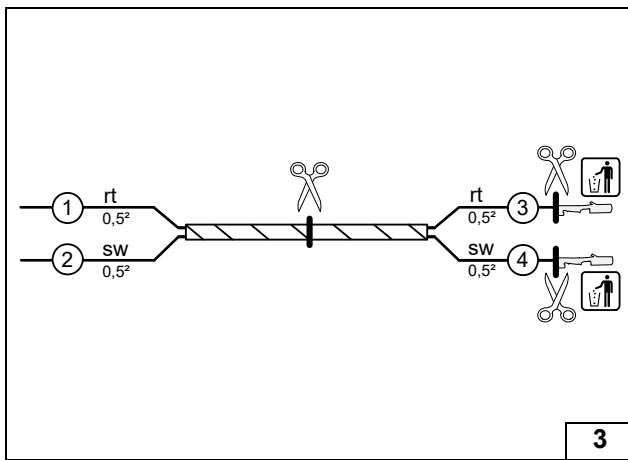


Preparing electrical system

- 1 Passenger compartment relay and fuse holder
- 2 Engine compartment fuse holder



Installation overview

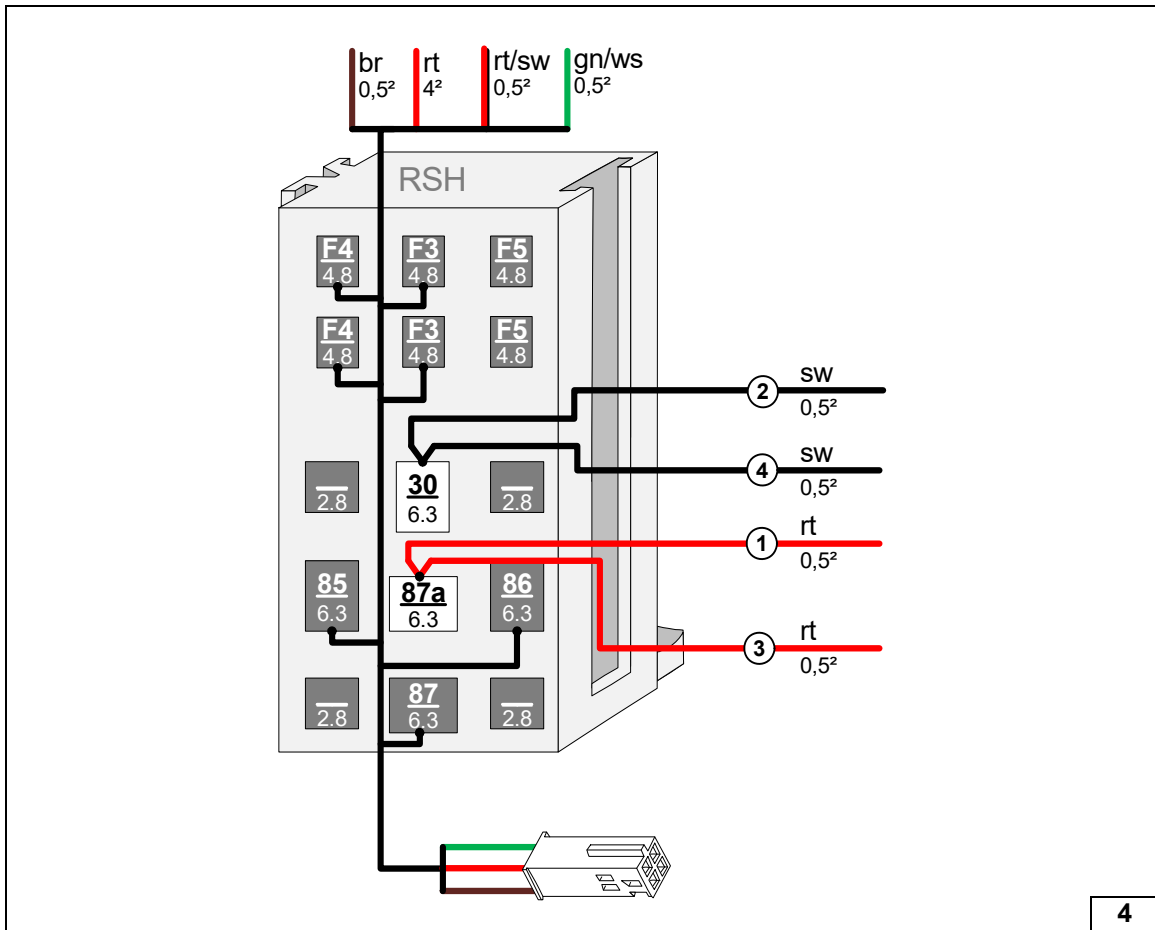


Wire sections retain their numbering in the entire document.

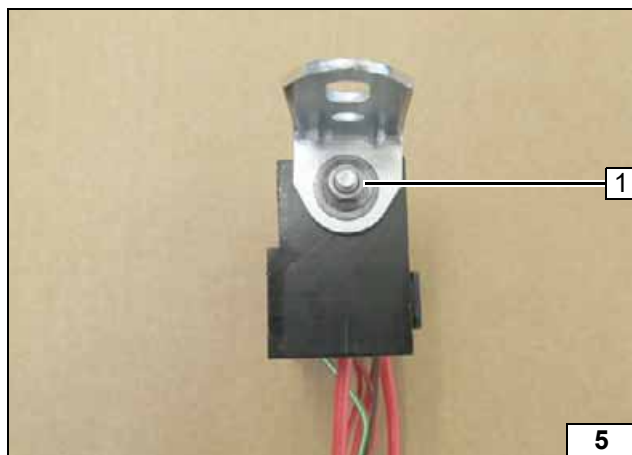
Cut the provided wiring harness in half.

- ① Red (rt) wire of fan wiring harness 1
- ② Black (sw) wire of fan wiring harness 1
- ③ Red (rt) wire of fan wiring harness 2
- ④ Black (sw) wire of fan wiring harness 2

Cutting to length / assigning wires

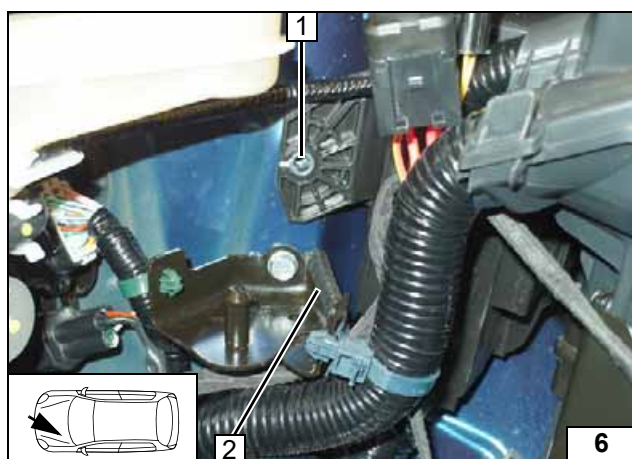


Connecting wires to passenger compartment relay and fuse holder



- 1 M5x16 bolt, large diameter washer, passenger compartment relay and fuse holder, angle bracket, large diameter washer, nut

Installing angle bracket

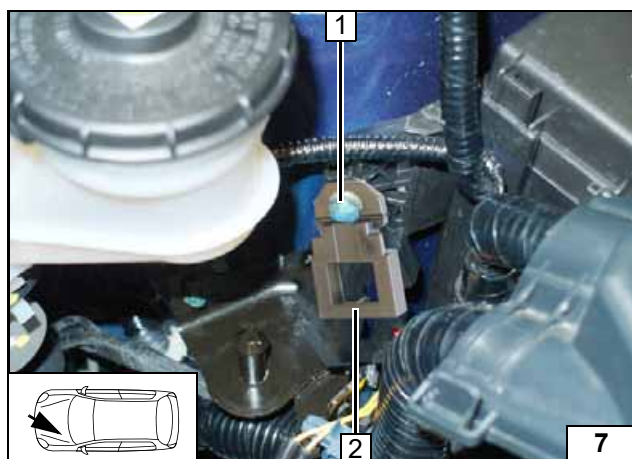


Remove original vehicle bolt at position 1 and discard.



- 2 50 long edge protection

Preparing engine compartment for fuse holder



- 1 M6x20 bolt, washer
- 2 Fuse holder retaining plate

Mounting engine compartment fuse holder retaining plate

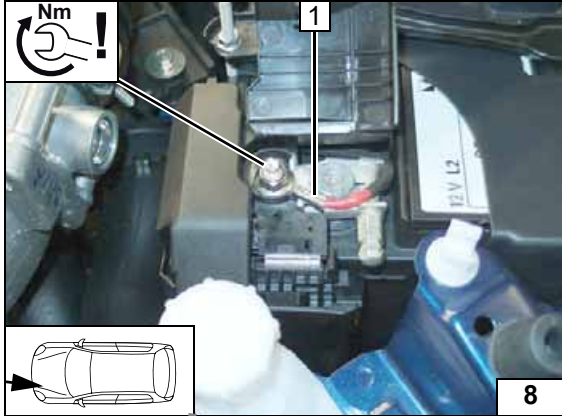


Electrical system



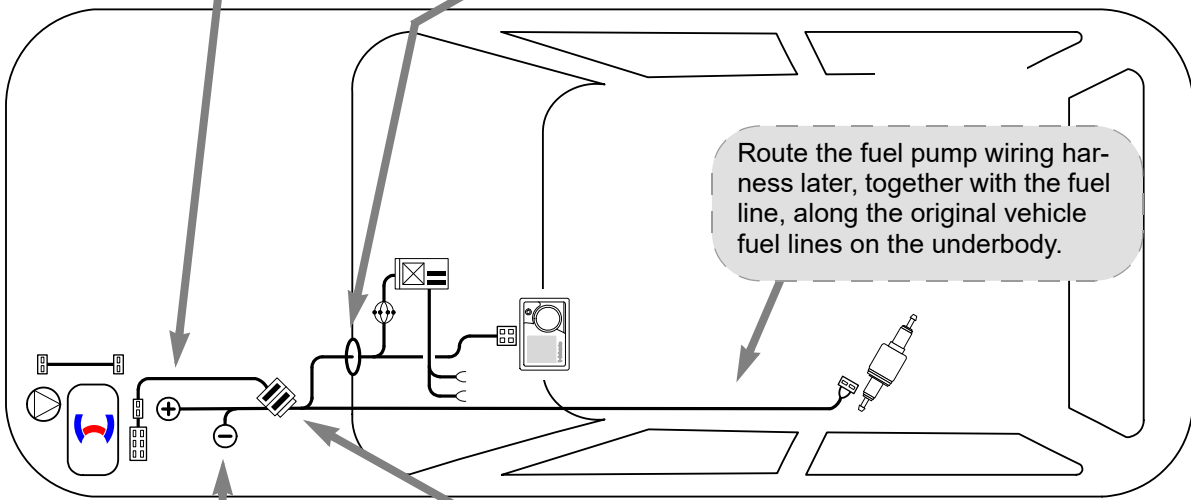
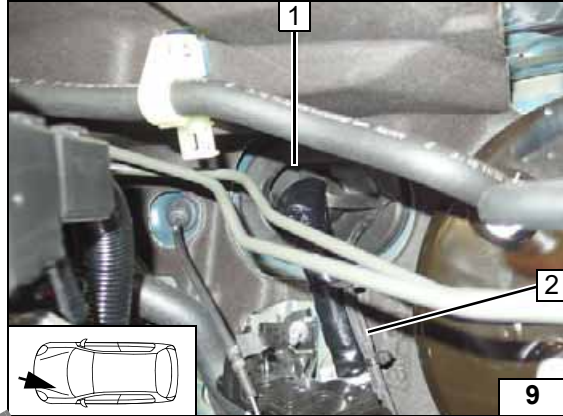
Positive wire

- 1 Positive wire on positive battery terminal

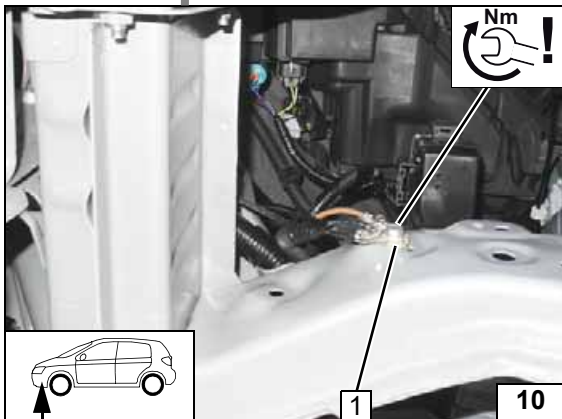


Wiring harness pass through

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

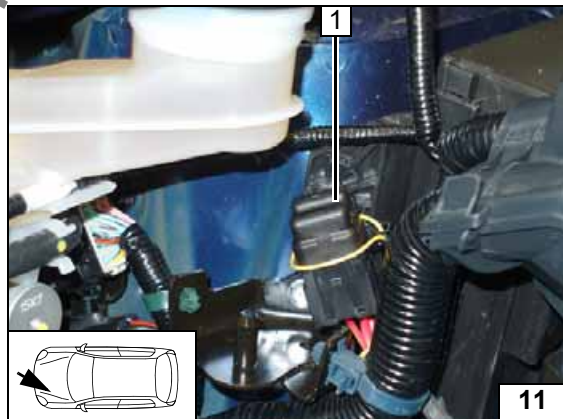


Wiring harness routing diagram



Earth wire

- 1 Earth wire on original vehicle earth support point



Engine compartment fuse holder

- 1 Fuses F1-2

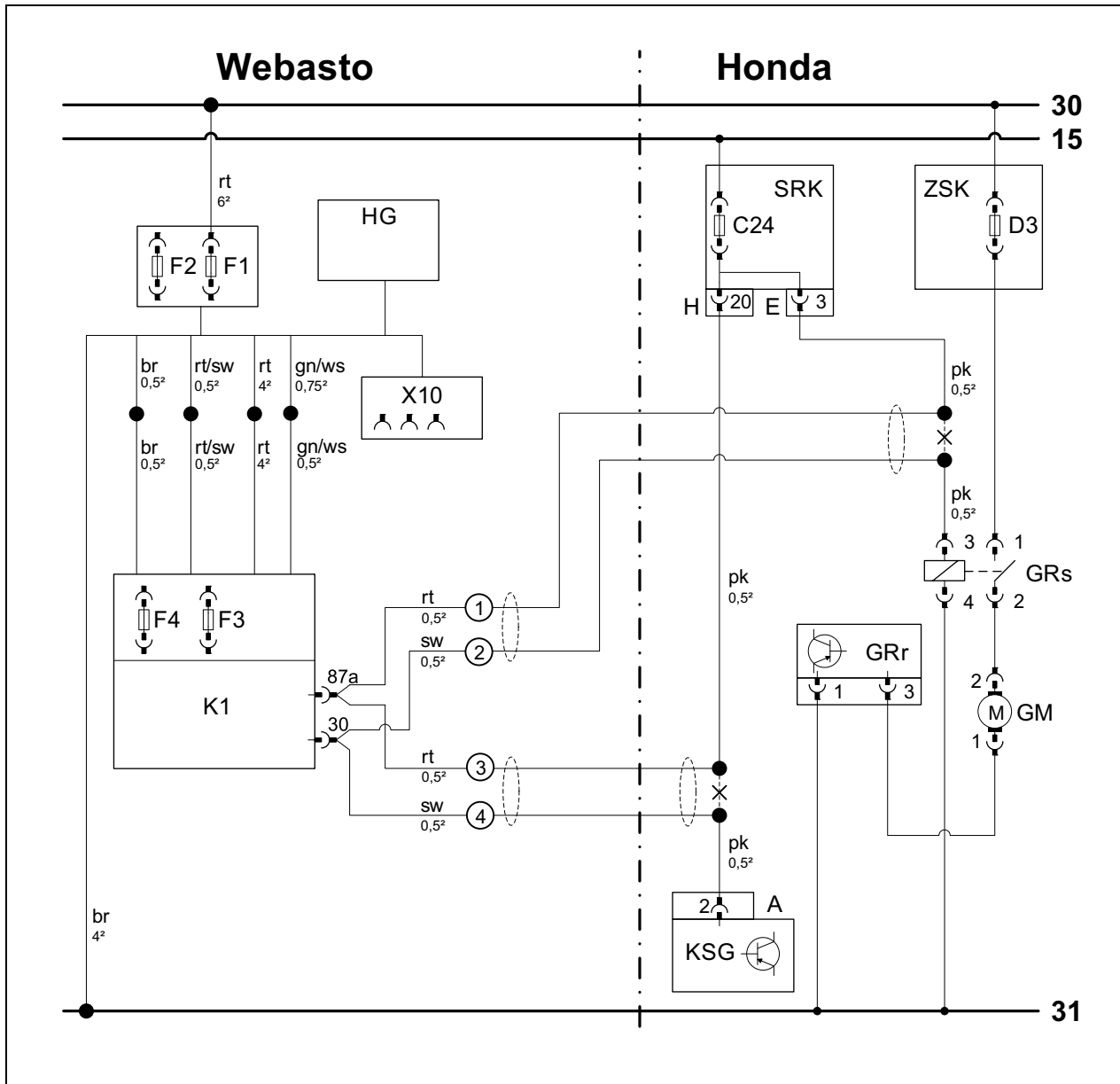




Fan controller

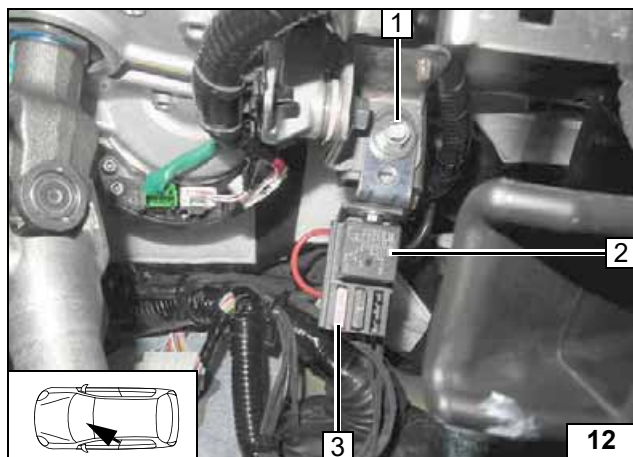


System wiring diagram



Webasto components		Vehicle components		Colours and symbols	
HG	TT-Evo heater	ZSK	Passenger compartment additional fuse box	rt	red
F1	20A fuse	D3	40A fuse	sw	black
F2	30A fuse	SRK	Passenger compartment fuse and relay box	ws	white
X10	4-pin female connector of control element	C24	7.5A fuse	gn	green
F3	1A fuse	H	20-pin connector of SRK	br	brown
F4	3A fuse	E	12-pin connector of SRK	pk	pink
K1	Fan relay	GRs	Fan relay		
		GRr	Fan controller		
		GM	Fan motor		
		KSG	A/C control unit	X	Cutting point
		A	Connector of KSG		Wiring colours may vary.

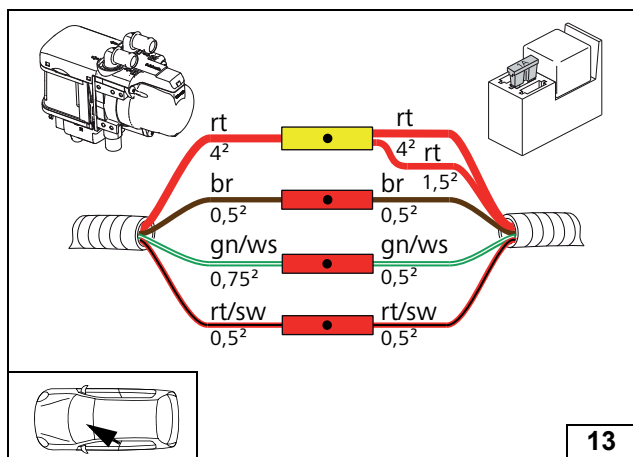
Legend



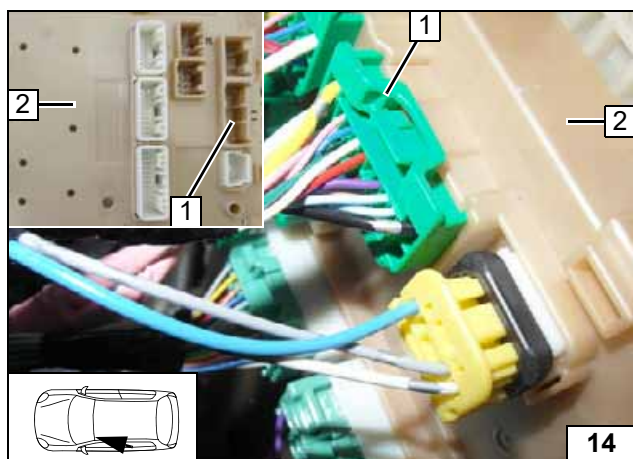
Produce all following electrical connections as shown in the system wiring diagram.

- 1 Original vehicle bolt
- 2 Relay K1
- 3 3A fuse F4

Installing passenger compartment relay and fuse holder

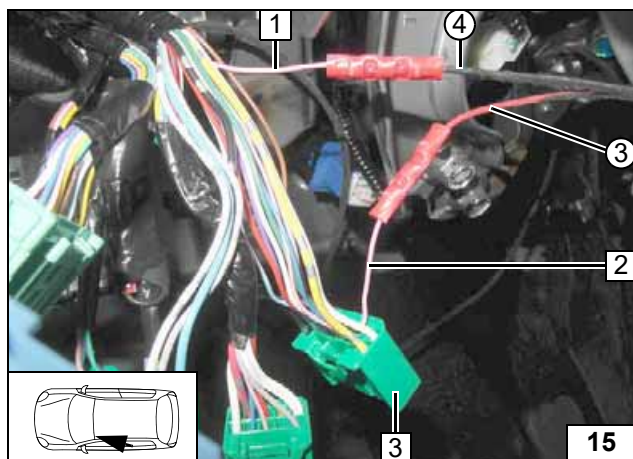


Connecting same colour wires of wiring harnesses



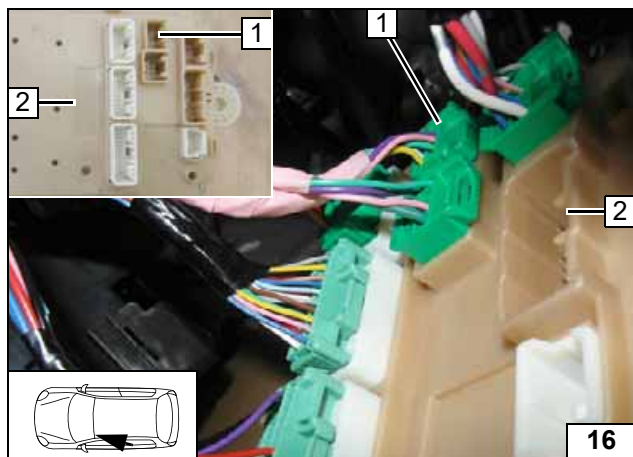
- 1 20-pin connector H
- 2 Rear view of passenger compartment fuse and relay box

View of connector H from SRK



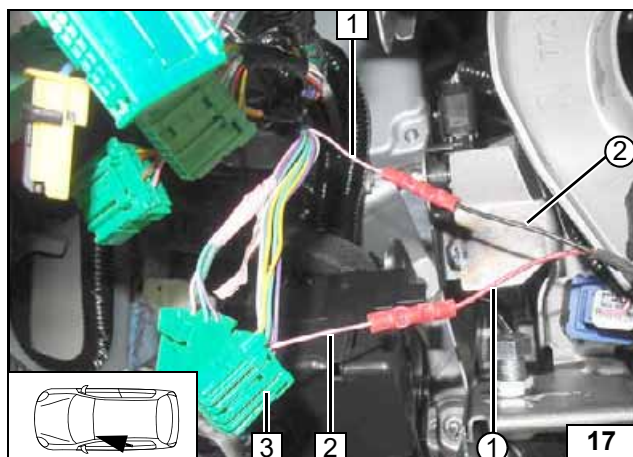
- 1 Pink (pk) wire of connector A of KSG / pin 2
- 2 Pink (pk) wire of connector H / pin 20
- 3 20-pin connector H of SRK
- ③ Red (rt) wire of K1/87a, fan wiring harness 2
- ④ Black (sw) wire of K1/30, fan wiring harness 2

Connecting KSG



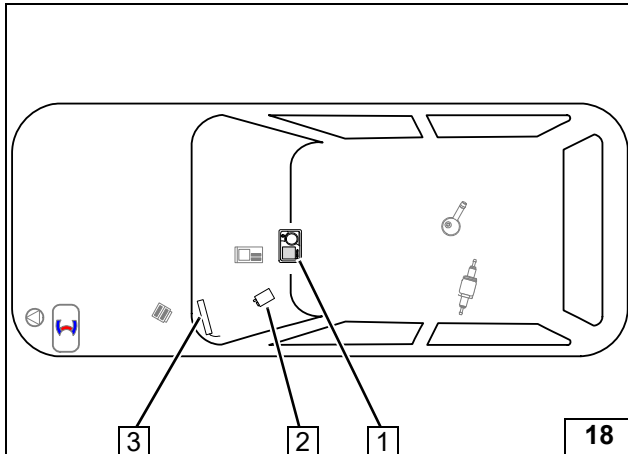
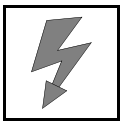
- 1 12-pin connector E
- 2 Rear view of passenger compartment fuse and relay box

View of connector E from SRK



- 1 Pink (pk) wire of fan relay / pin 3
- 2 Pink (pk) wire of connector E / pin 3
- 3 12-pin connector E of SRK
- ① Red (rt) wire of K1/87a, fan wiring harness 1
- ② Black (sw) wire of K1/30, fan wiring harness 1

Connect-
ing fan re-
lay

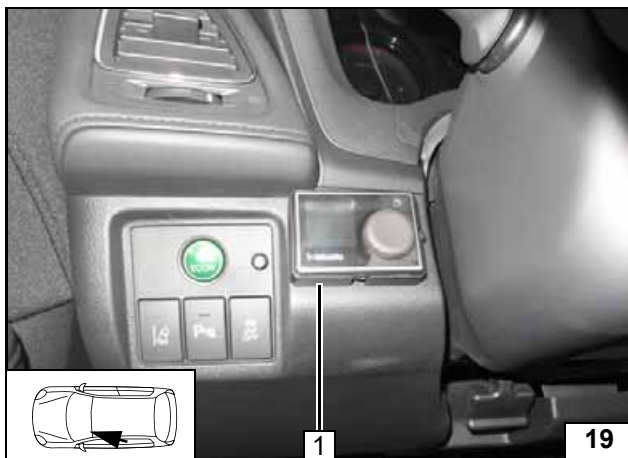


Control element installation

- 1 MultiControl CAR
- 2 Telestart receiver
- 3 Telestart / ThermoCall aerial



Installation overview

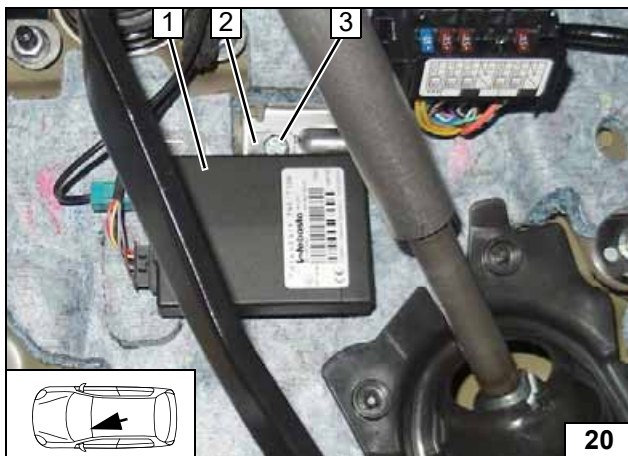


MultiControl CAR option

- 1 Installation frame



Installing MultiControl CAR



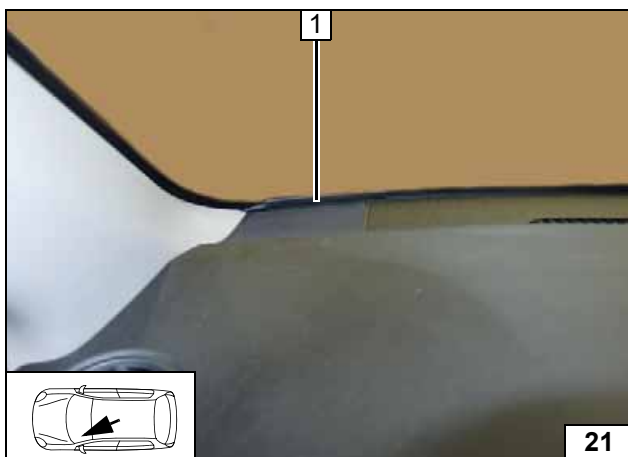
Remote option (Telestart)

Enlarge hole in Telestart bracket 2 at position 3 to $\varnothing 7$.

- 1 Receiver
- 3 Original vehicle bolt

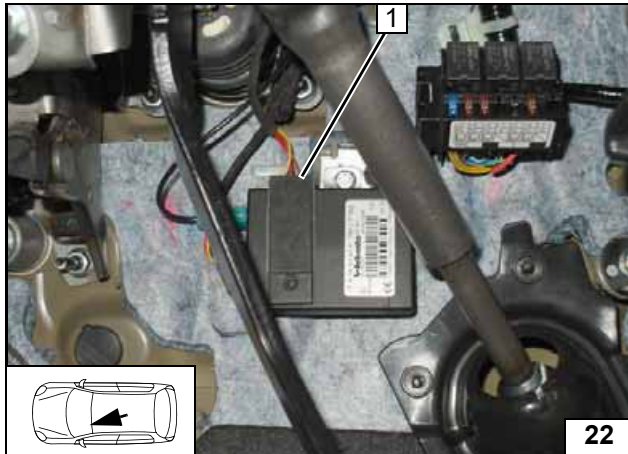
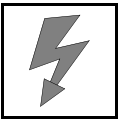


Installing receiver



- 1 Aerial

Installing aerial

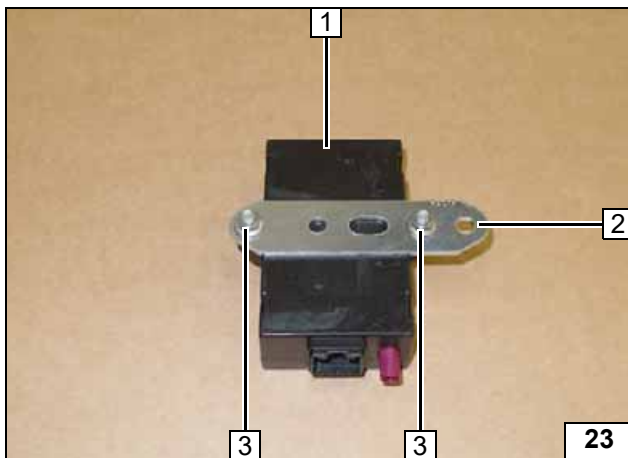


Temperature sensor only for T100 HTM

Fasten temperature sensor 1 with double-sided adhesive tape.



Installing temperature sensor

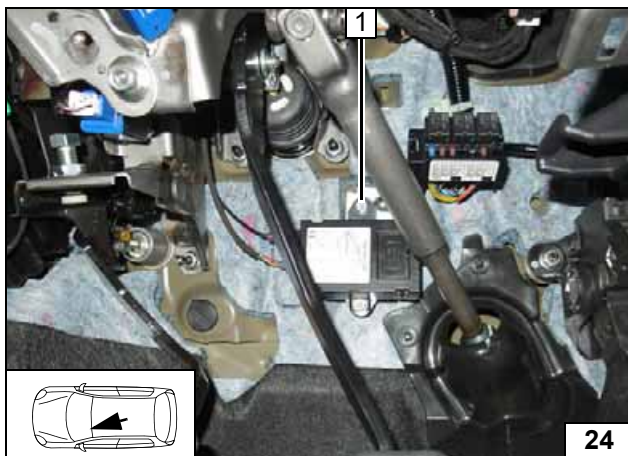


ThermoCall option

- 1 Receiver
- 2 Perforated bracket
- 3 M5x13 bolt, flanged nut



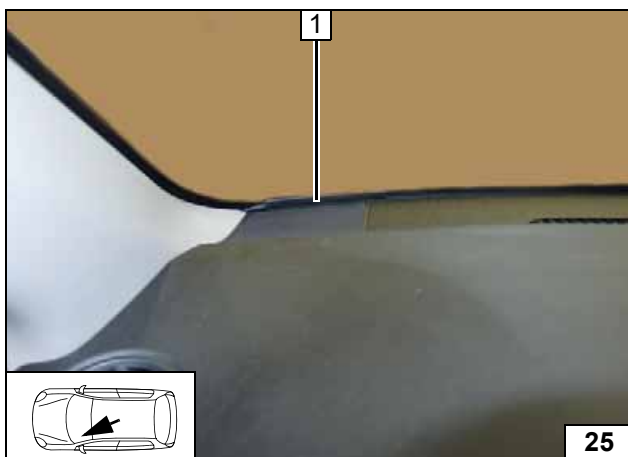
Premounting receiver



- 1 Original vehicle bolt

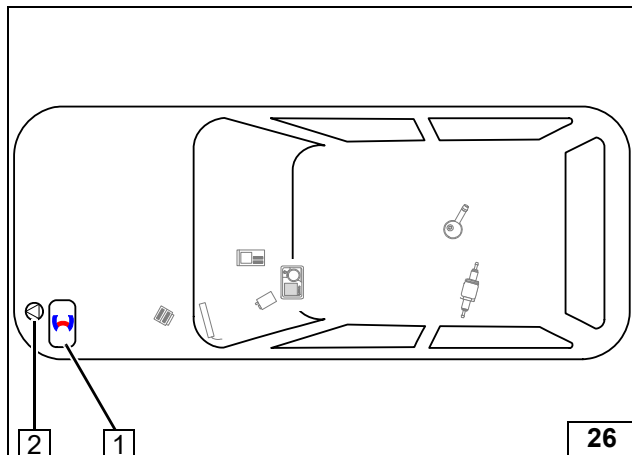


Installing receiver



- 1 Aerial (optional)

Installing aerial

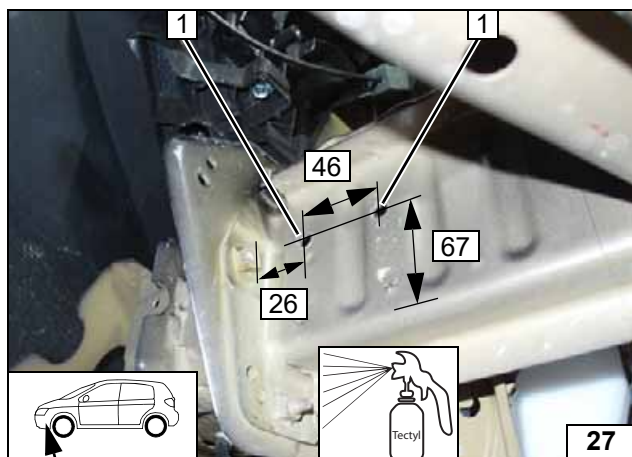


Preparing installation location

- 1 Heater
- 2 Coolant pump

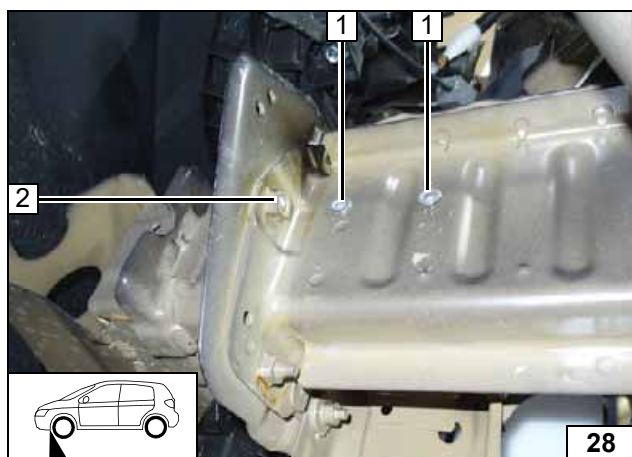


Installation overview



- 1 Hole pattern, Ø9 hole

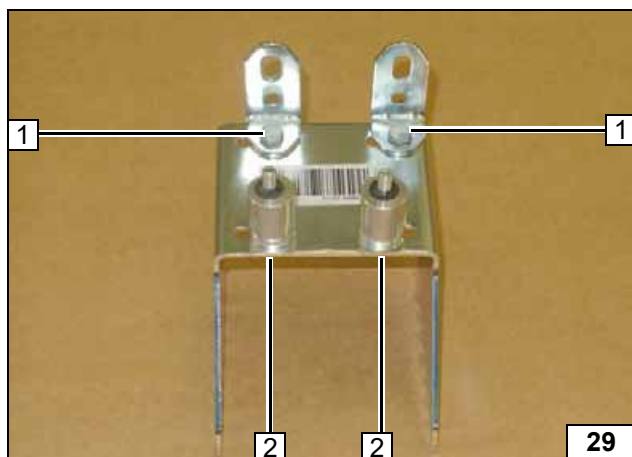
Copying hole pattern



Shorten original vehicle bolt at position 2 as shown.

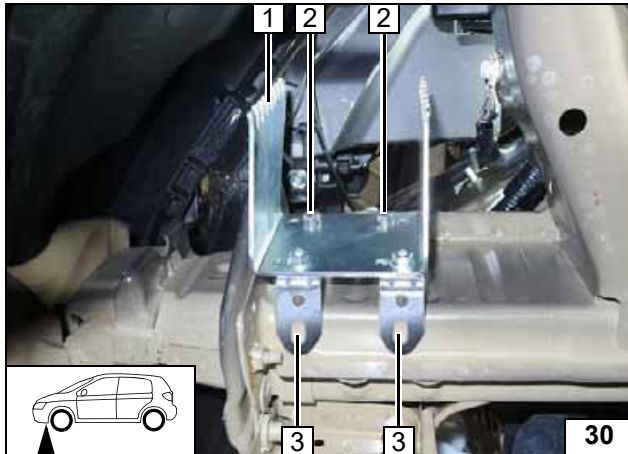
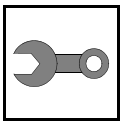
- 1 Rivet nut

Installing rivet nut



- 1 M6x12 bolt, angle bracket, bracket, flanged nut
- 2 M6x40 bolt (inserted from below), spring lock washer, bracket, distance washer (5), distance washer (20), lock washer

Preparing bracket



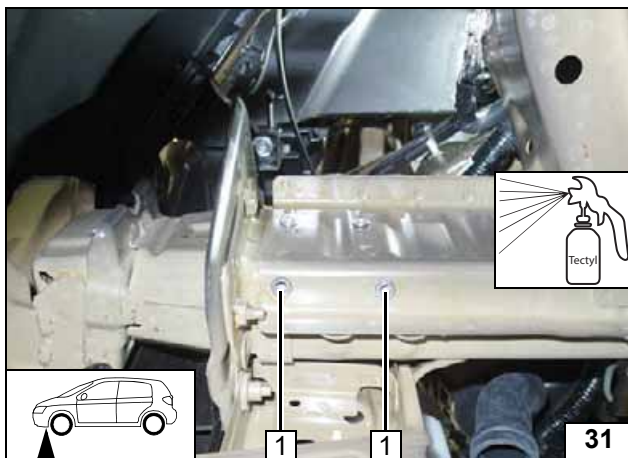
Install and align bracket 1 as shown.

- 2 M6x40 bolt, premounted
- 3 Hole pattern



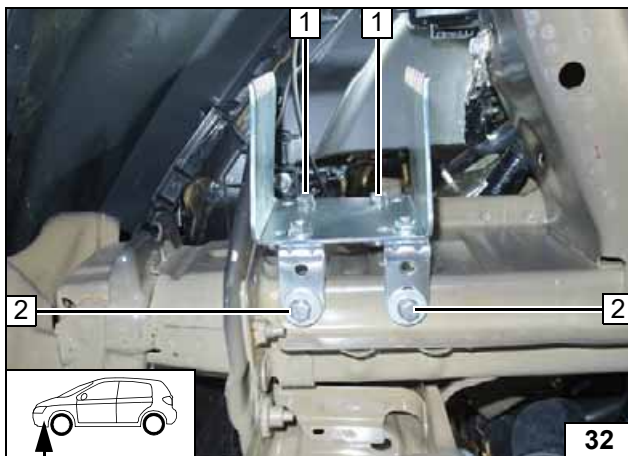
Dismantle bracket.

Copying hole pattern



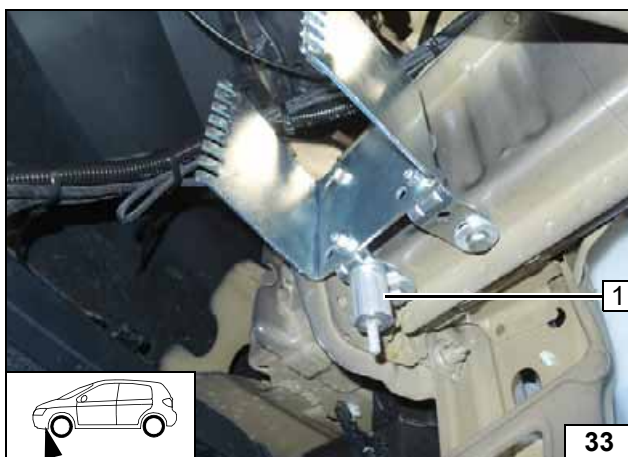
- 1 Ø9 hole, rivet nut

Installing rivet nut



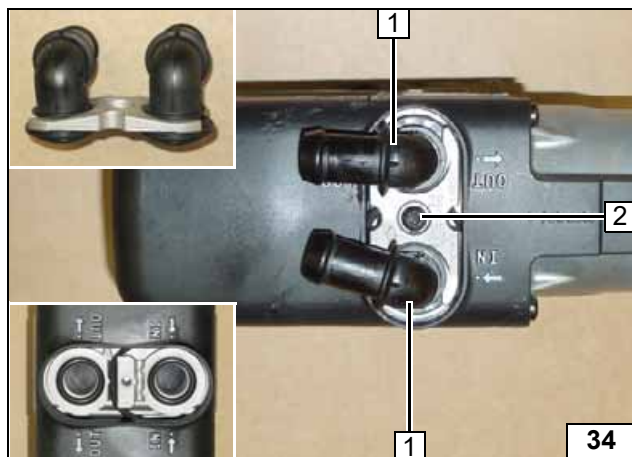
- 1 M6x40 bolt, premounted
- 2 M6x25 bolt, spring lock washer, large diameter washer, premounted angle bracket, rivet nut

Installing bracket



- 1 M6x55 bolt, premounted angle bracket, spacer (30), lock washer

Installing bolt with spacer

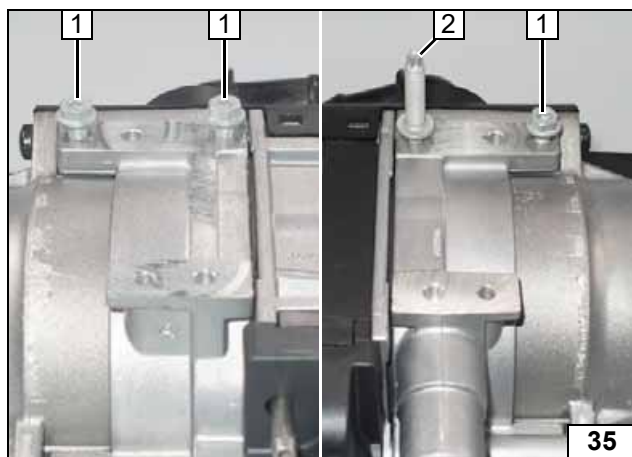


Preparing heater

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



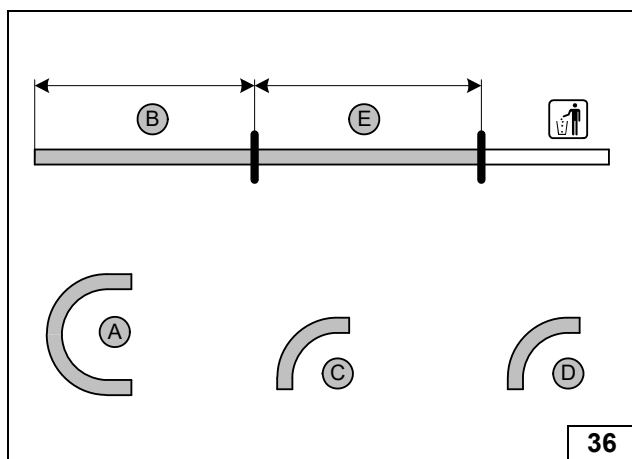
Installing water connection piece



Screw 5x13 self-tapping bolts **1** and M6/M5x25 self-tapping stud bolt **2** in existing holes by a maximum of 3 thread turns.

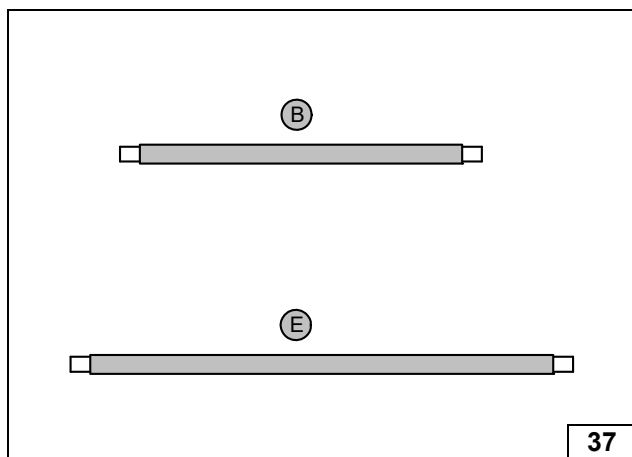


Premounting bolts loosely



- A = 180°, Ø18
- B = 770
- C = 90°, Ø18
- D = 90°, Ø18
- E = 970

Cutting hoses to length

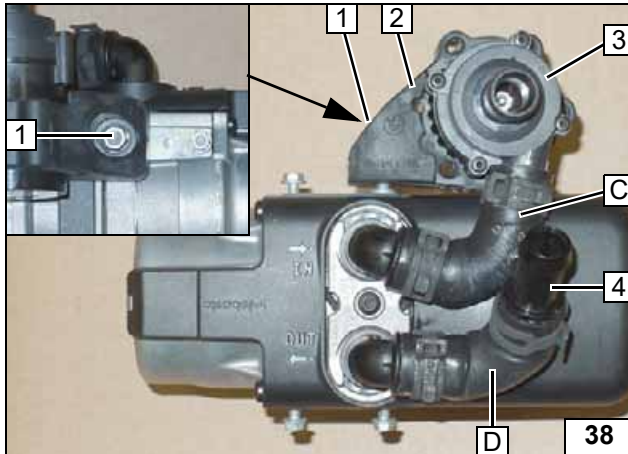
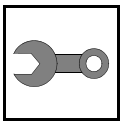


Mount fabric heat shrink tubing:

1. Slide on and cut to length
2. Shrink, use at most 230 °C



Preparing hoses

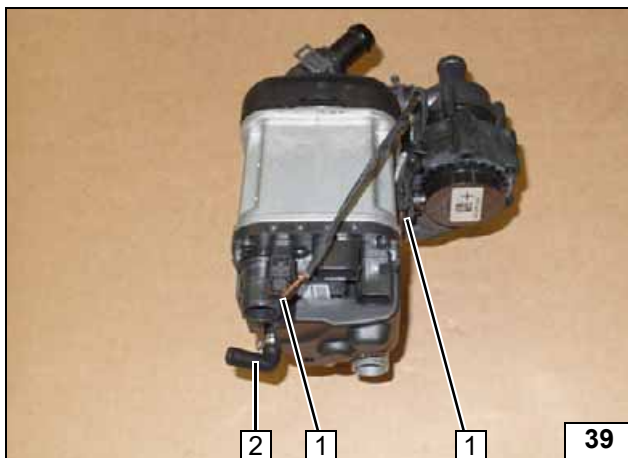


All spring clips = Ø25.

- 1 Mount flanged nut loosely on pre-mounted stud bolt
- 2 Coolant pump mount
- 3 Coolant pump
- 4 Ø18x18 connecting pipe



Premounting coolant pump and hoses



- 1 Connector of coolant pump wiring harness
- 2 90° moulded hose, Ø10 clamp

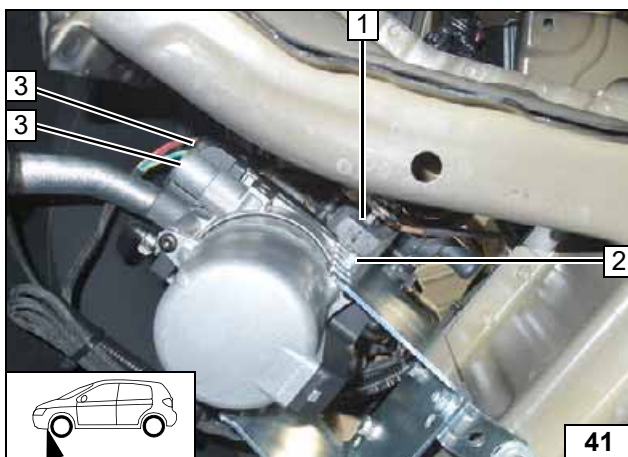
Premounting coolant pump wiring harness and moulded hose



- 1 Combustion air pipe
- 2 Combustion air silencer



Premounting combustion air silencer



Installing heater

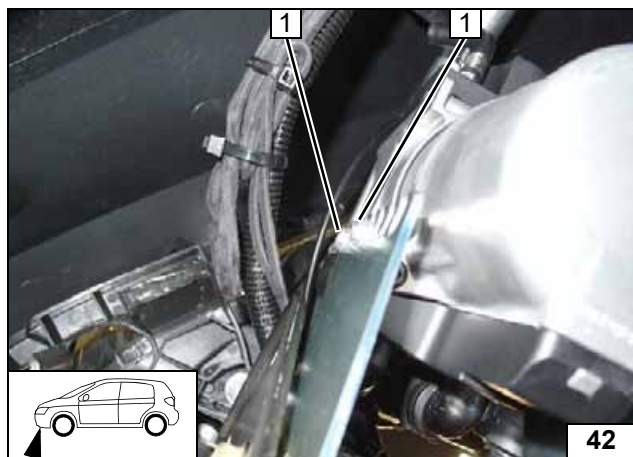
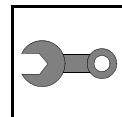
In position 1 tighten first the self-tapping stud bolt and then the flanged nut.

- 2 Tighten 5x13 self-tapping bolt
- 3 Mount heater wiring harness connector



Installing heater





1 Tighten 5x13 self-tapping bolt

Installing
heater



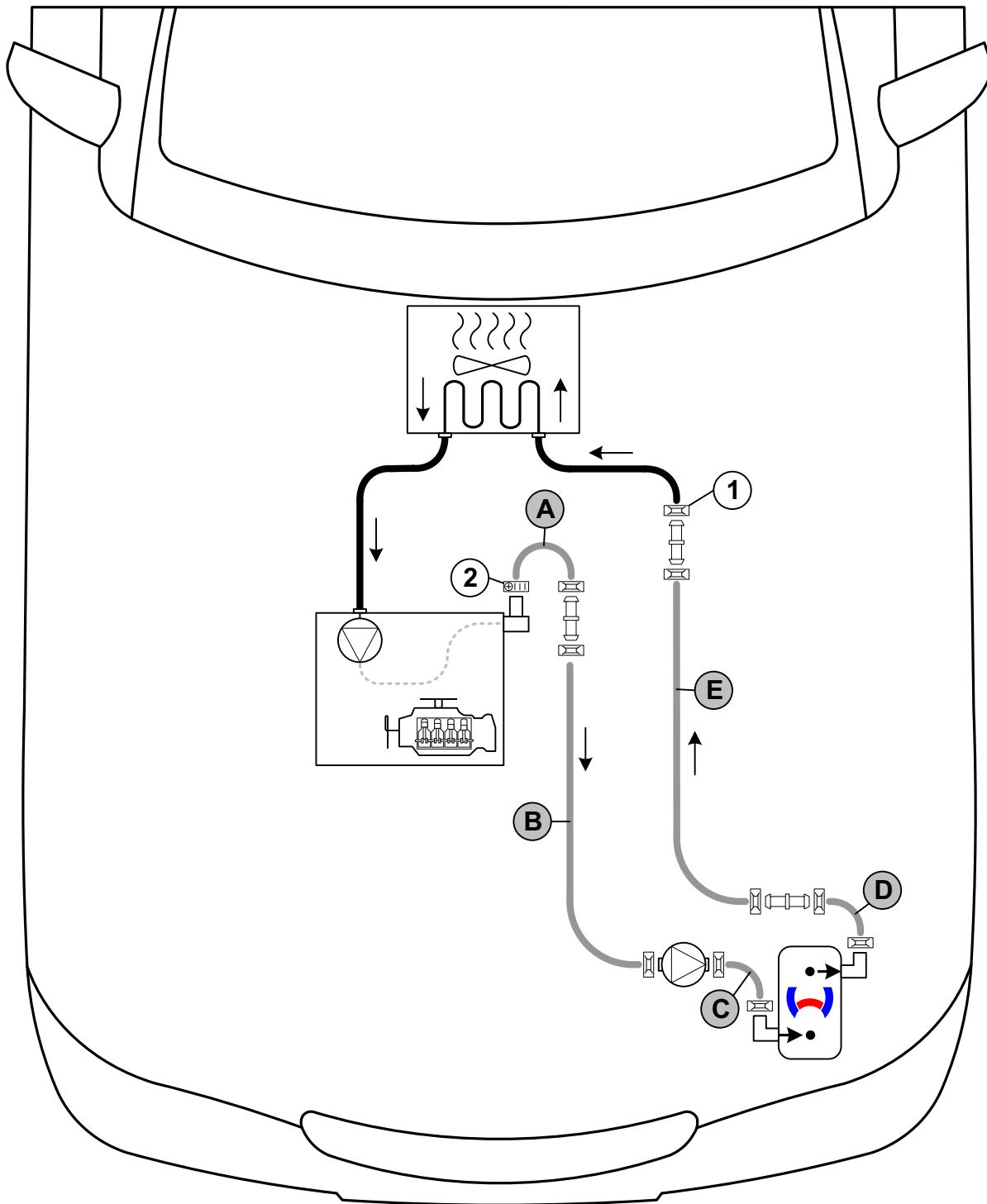
Coolant circuit







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.



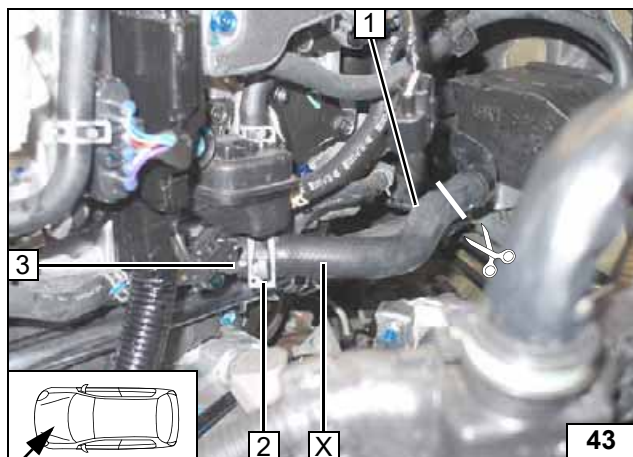
The connection should be modelled on an 'inline' circuit and based on the following diagram:



Hose routing diagram

All spring clips without a specific designation  = Ø25. Connecting pipe  = Ø18x18.
 1 = Original vehicle spring clip . 2 = hose clamp  = Ø20-27.





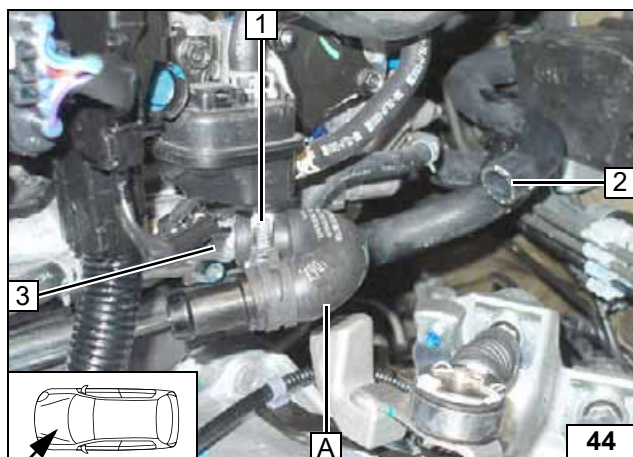
Cut hose of engine outlet / heat exchanger inlet **1** at the marking. Original vehicle spring clip **2** will be reused.



3 Engine outlet connection piece

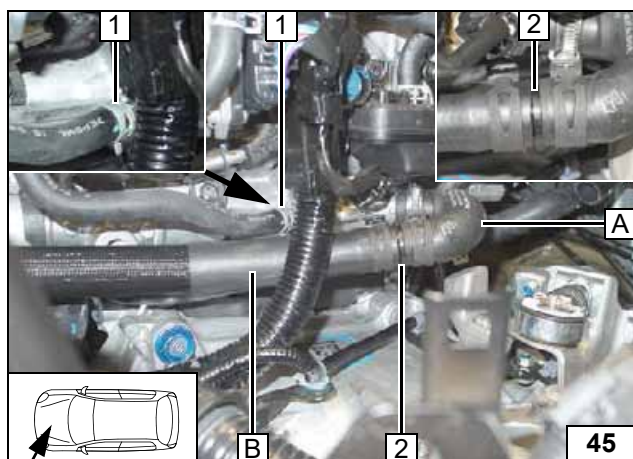
X =

Cutting point



1 Ø20-27 hose clamp
2 Hose section of heat exchanger inlet
3 Engine outlet connection piece

**Connect-
ing engine
outlet**

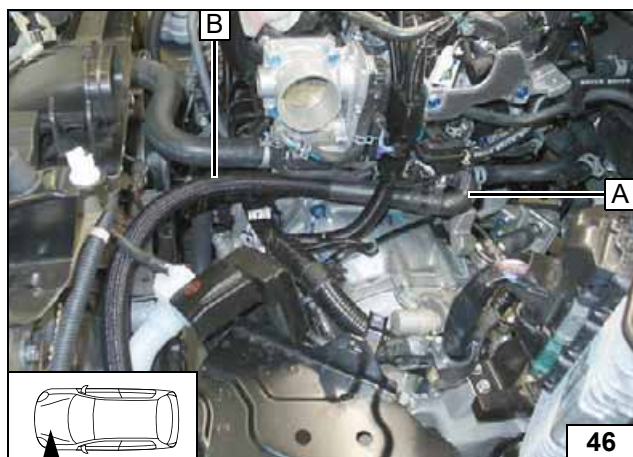


Install spring clips at position **2** as shown.

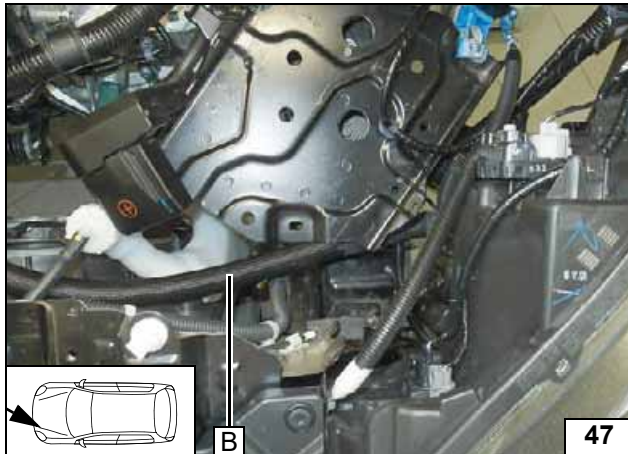
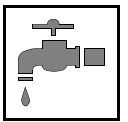


1 Twist original vehicle spring clip

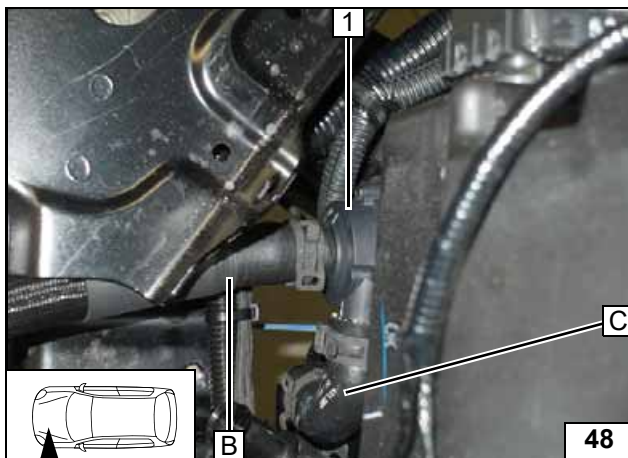
**Connect-
ing hose B**



**Routing in
engine
compartment**

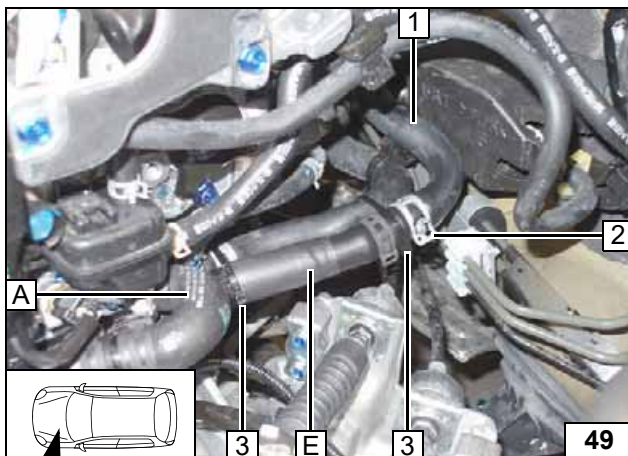


Routing in engine compartment



1 Coolant pump

Coolant pump connection



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



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

Heat exchanger inlet connection

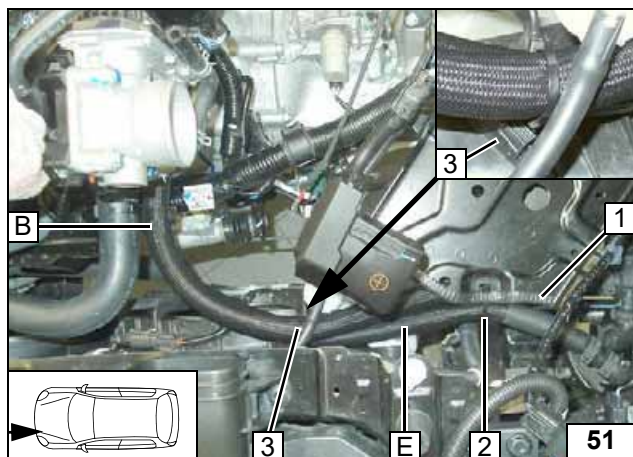


Align hoses. Ensure sufficient distance from neighbouring components, correct if necessary.



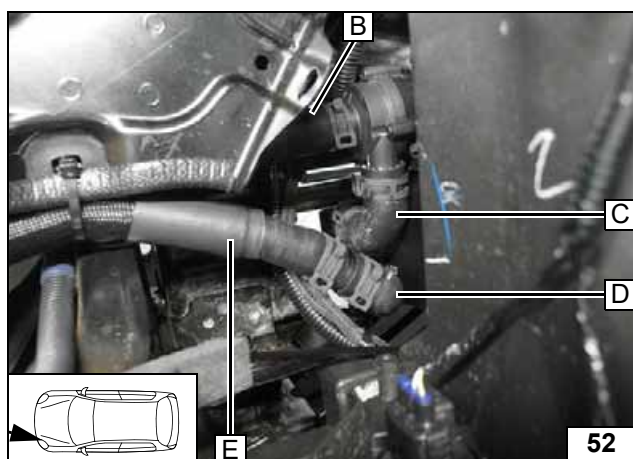
- 1 Ø25-37 hose bracket between hose E and original vehicle hose
- 2 Cable tie
- 3 Ø25-28 hose bracket between hose B and hose E

Routing in engine compartment



- 1 Edge protection
- 2 Cable tie [2x]
- 3 Edge clip cable tie around hose **B**

Routing in engine compartment



Connecting heater



Fuel



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

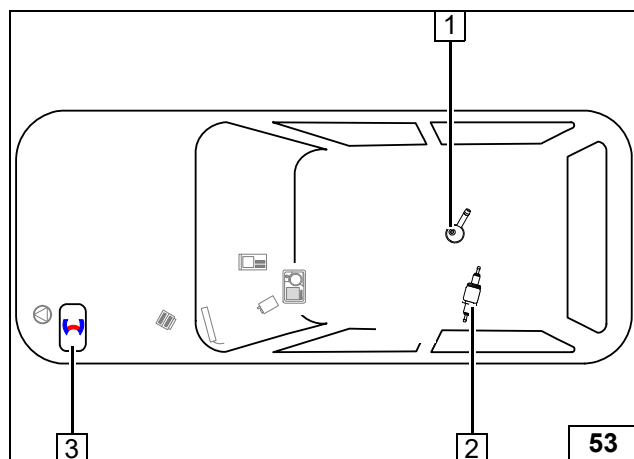
Catch any fuel running off in an appropriate container.

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

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

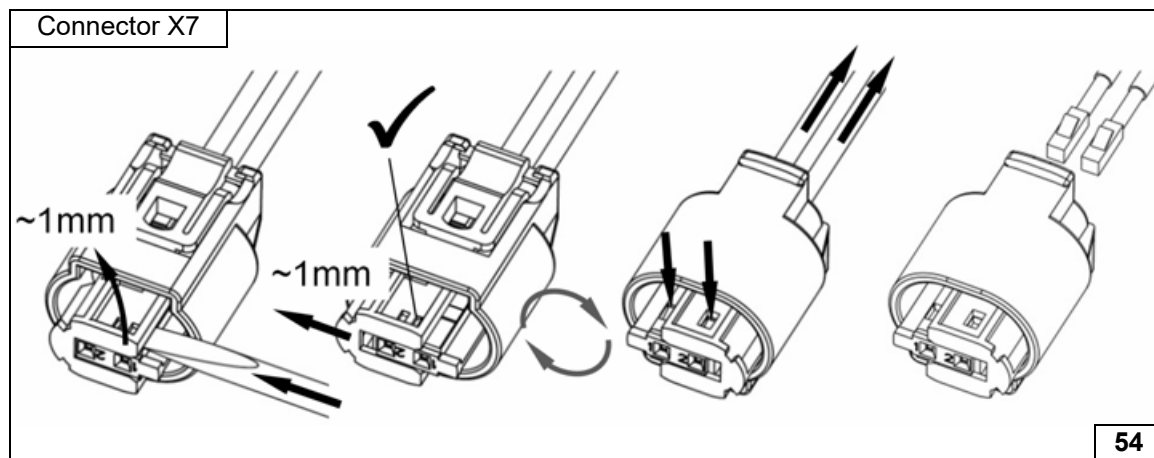


The fuel line and wiring harness are routed to the fuel pump as shown in the wiring harness routing diagram.

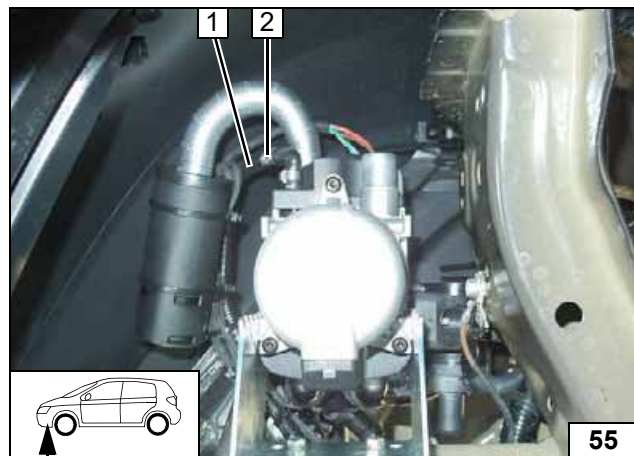


- 1 FuelFix
- 2 Fuel pump
- 3 Heater

53



54



- 1 Fuel line
- 2 Ø10 clamp

55

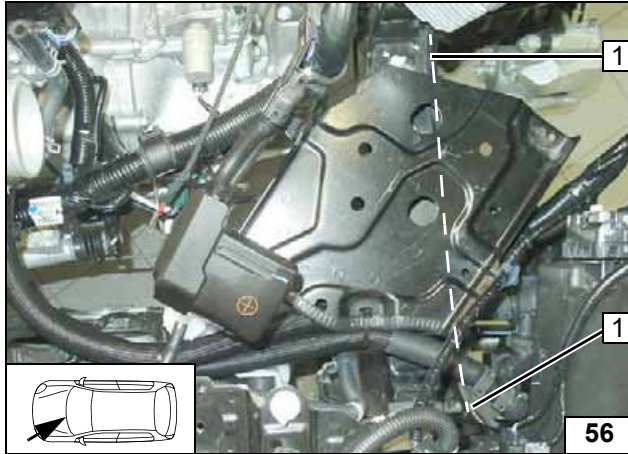
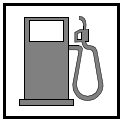


Installation overview

Dismantling fuel pump connector



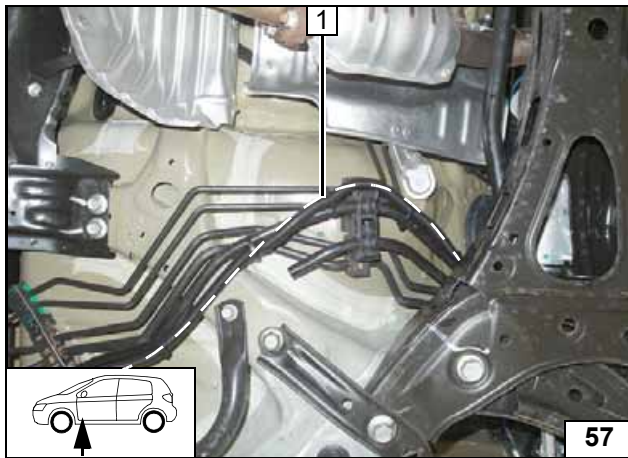
Connecting heater



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



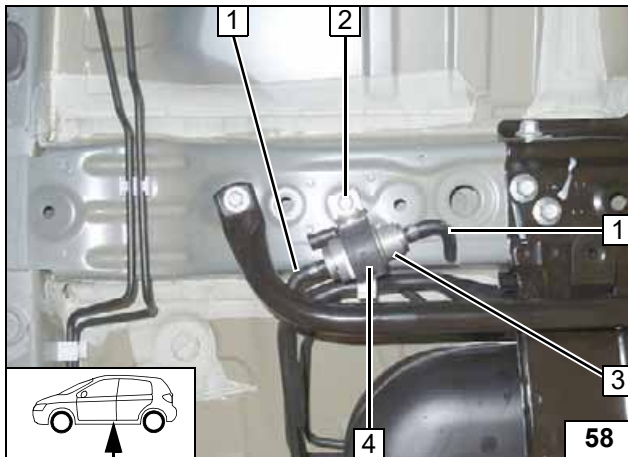
Routing in engine compartment



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



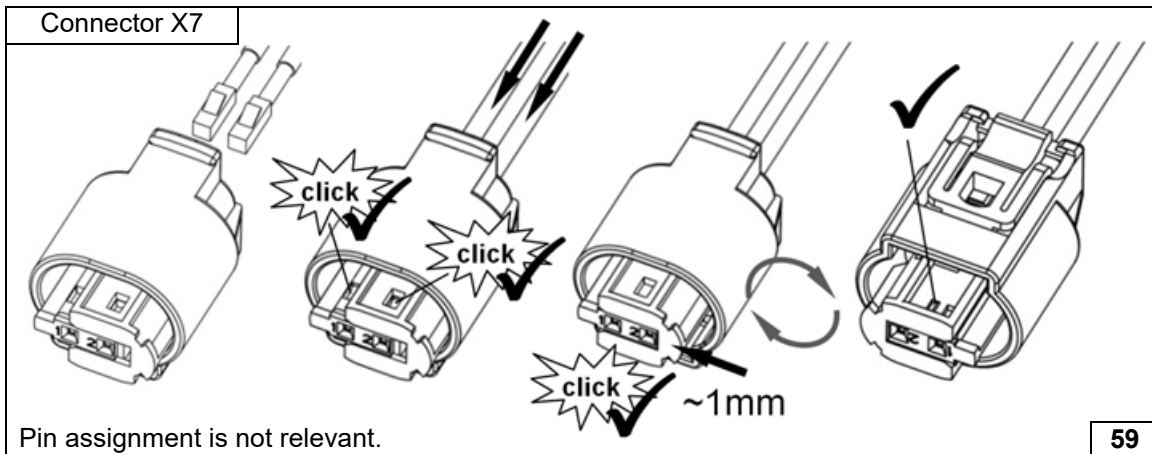
Routing on underbody



- 1 90° moulded hose, Ø10 clamp
- 2 M6x25 bolt, support angle bracket, original vehicle thread
- 3 Fuel pump
- 4 Fuel pump mount

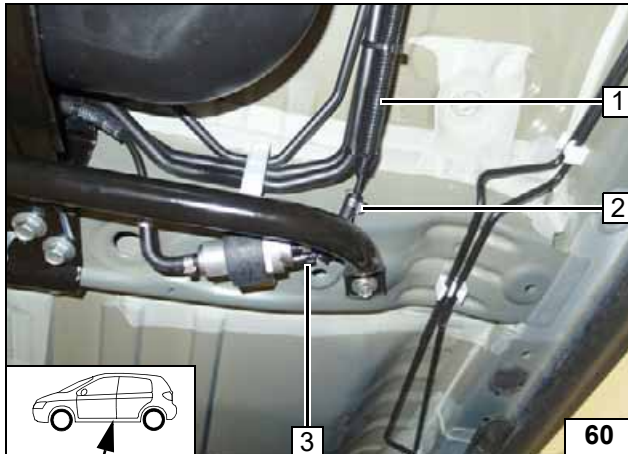
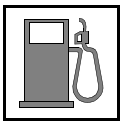


Mounting fuel pump



Pin assignment is not relevant.

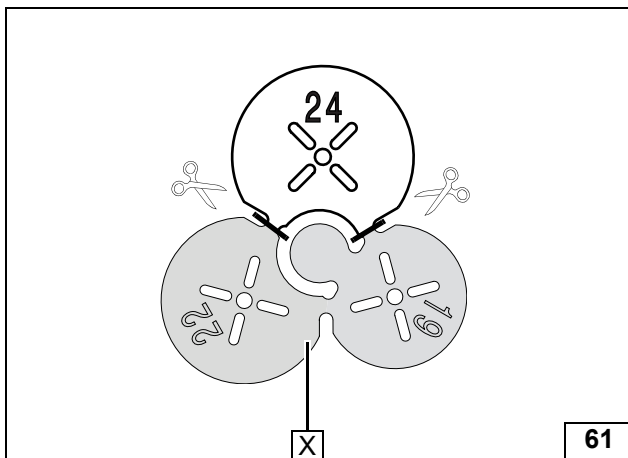
Completing fuel pump connector



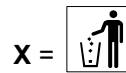
- 1 Corrugated tube with fuel line and fuel pump wiring harness
- 2 Ø10 clamp
- 3 Fuel pump wiring harness, connector X7 mounted



Fuel pump connection



Installing FuelFix



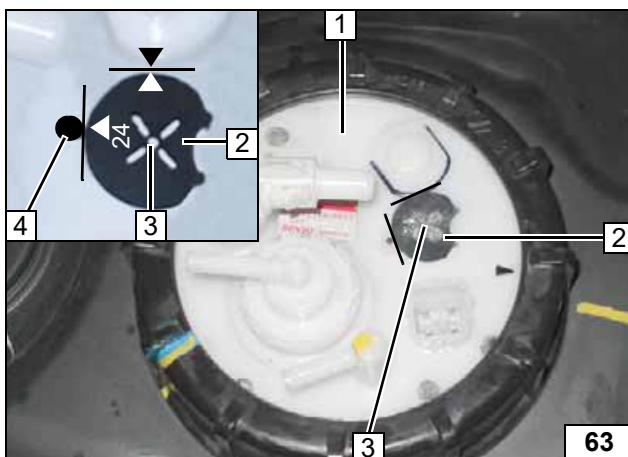
Preparing drilling template



Remove fuel tank according to manufacturer's instructions.
Move label 1 as shown.



Moving label



Work steps F1 and F2.

- 1 Tank fitting
- 2 Position Ø24 template as shown
- 3 Hole pattern
- 4 Plastic pin



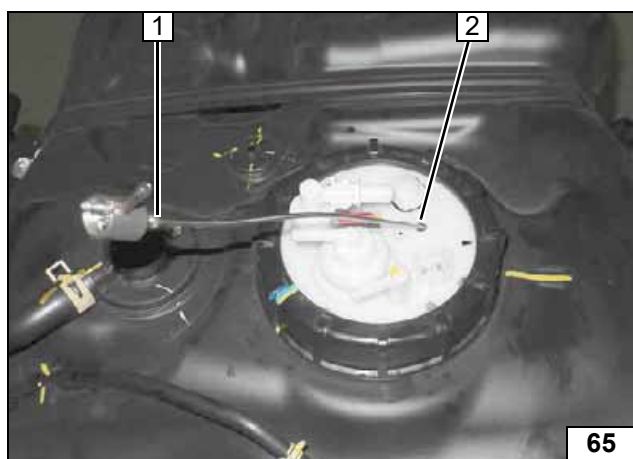
Copying hole pattern



Work step F3.

- 1 Hole made with provided drill

Hole for FuelFix



Work steps F4 and F5.

Bend FuelFix 1 according to template and cut to length. Insert into hole 2.



Inserting FuelFix

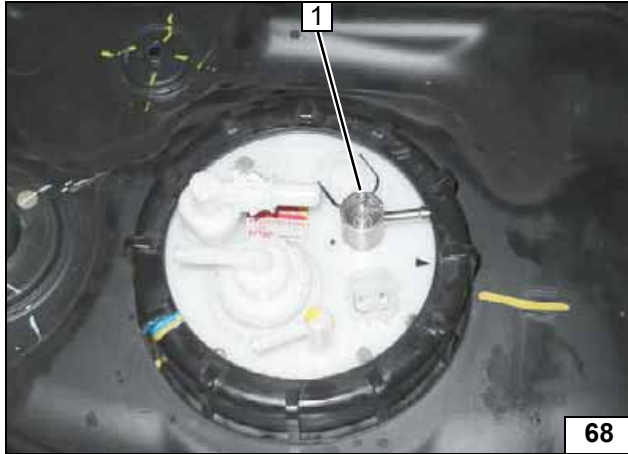
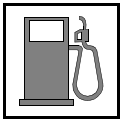


Work step F5.

Inserting FuelFix



Inserting FuelFix



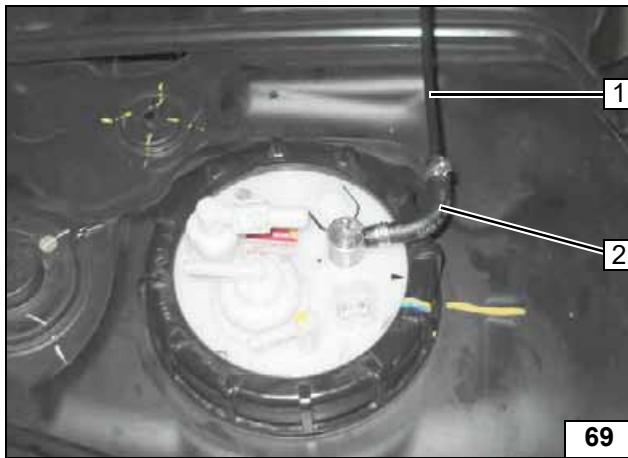
68

Work steps F5.3 and F5.4.

Align FuelFix 1 as shown.



Aligning FuelFix

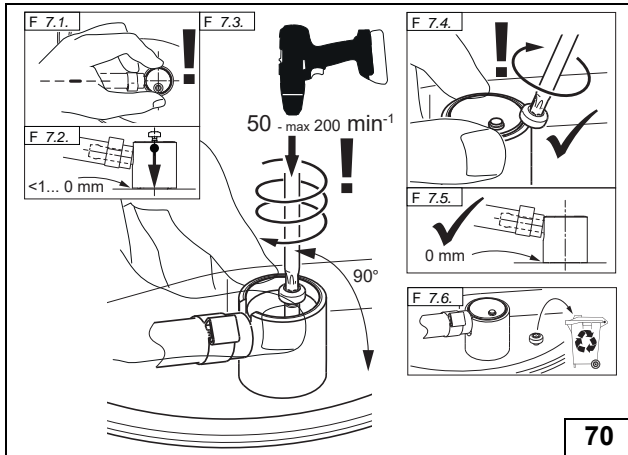


69

Work step F6.

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

Connecting fuel line



70

Work step F7.



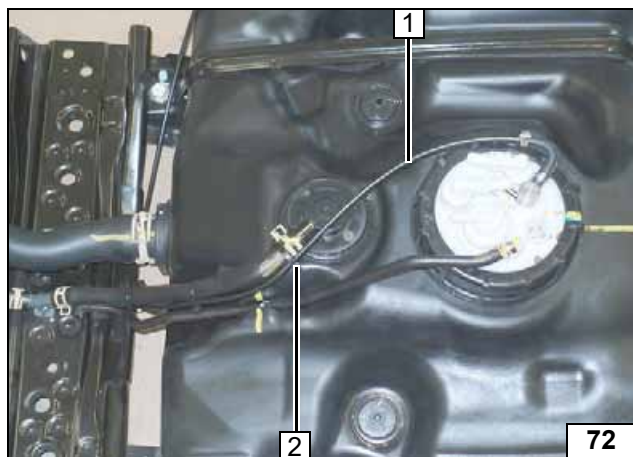
Installing FuelFix



71

Work step F8.

Ensuring firm seating of FuelFix



- 1 Fuel line of FuelFix
- 2 Cable tie as tension relief

Securing fuel line

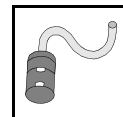


Install tank according to manufacturer's instructions.



- 1 Corrugated tube
- 2 Ø10 clamp
- 3 Fuel line of FuelFix

Fuel pump connection

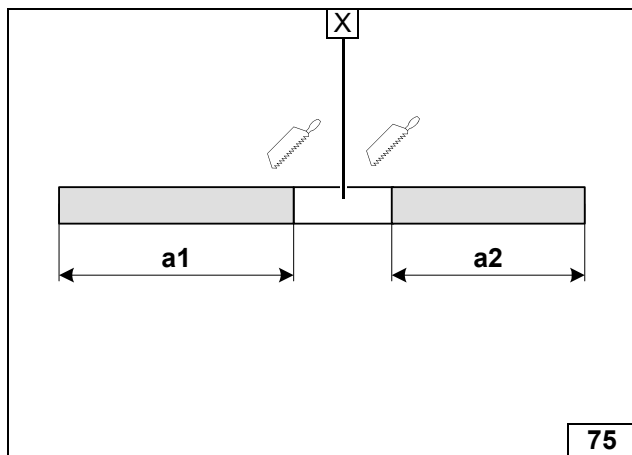
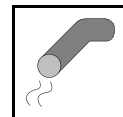


Combustion air

Fasten combustion air silencer **1** to fuel line and rest of heater wiring harness using cable ties **2**.



Installing silencer



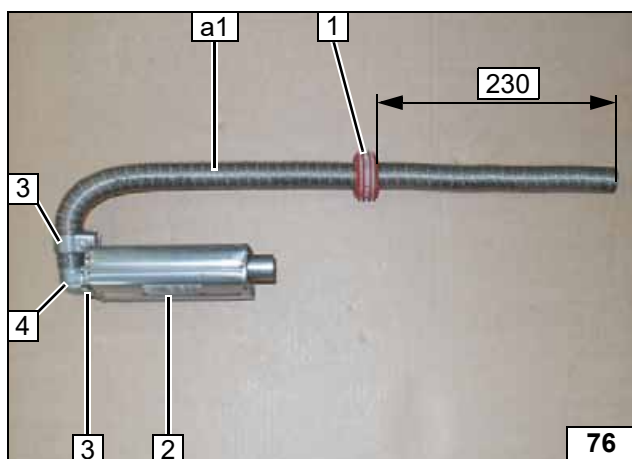
Exhaust gas

a1 = 590

a2 = 470

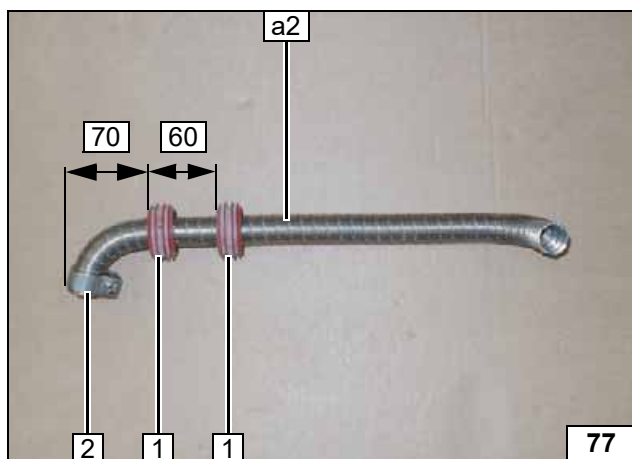
X =

**Preparing ex-
haust pipe**



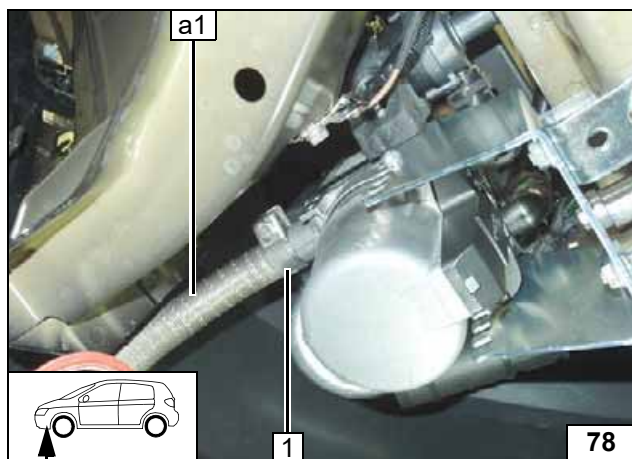
- 1 Spacer bracket
- 2 Exhaust silencer
- 3 Hose clamp
- 4 Exhaust elbow

**Premounting ex-
haust silen-
cer and exhaust
pipe a1**



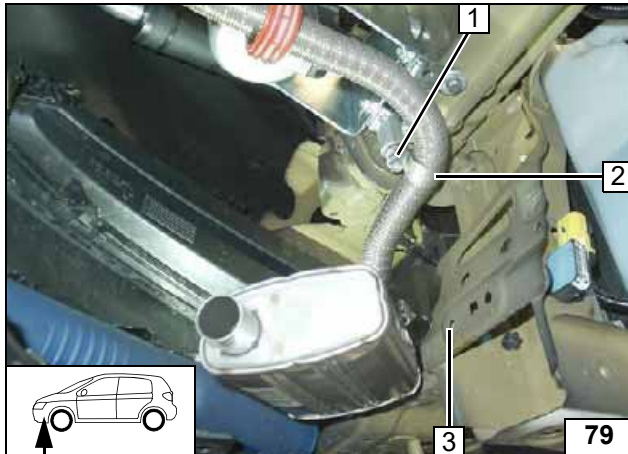
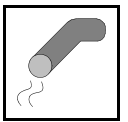
- 1 Spacer bracket
- 2 Hose clamp

**Premounting
exhaust pipe
a2**



- 1 Hose clamp

**Installing
exhaust
pipe a1**

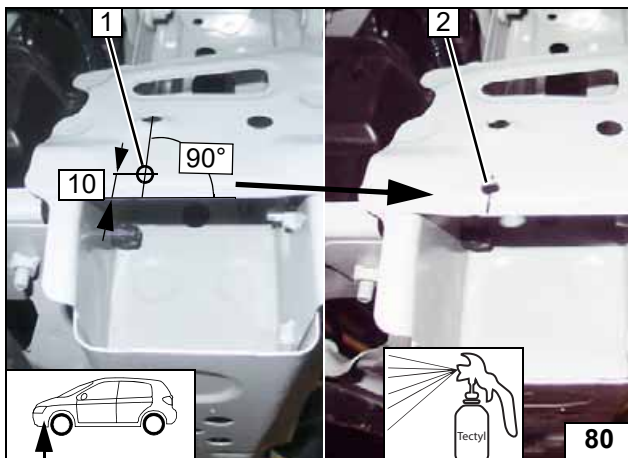


Check if there is already a hole at position 3. If there isn't one, drill a hole as shown in the next figure.



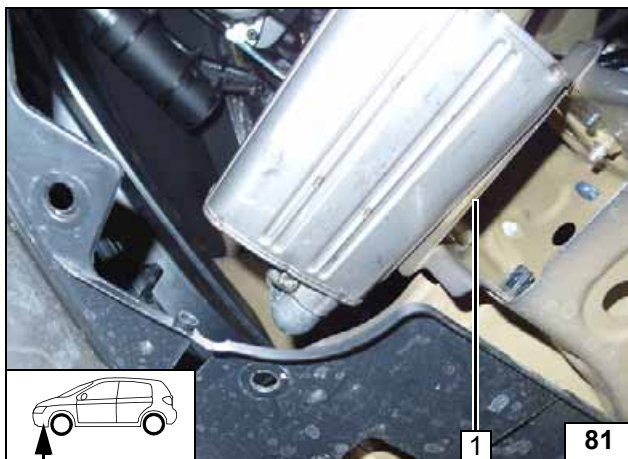
- 1 Flanged nut
- 2 P-clamp
- 3 Original vehicle hole for fastening the exhaust silencer (if present)

Installing exhaust pipe a1



- 1 Copy hole pattern
- 2 Ø7 hole

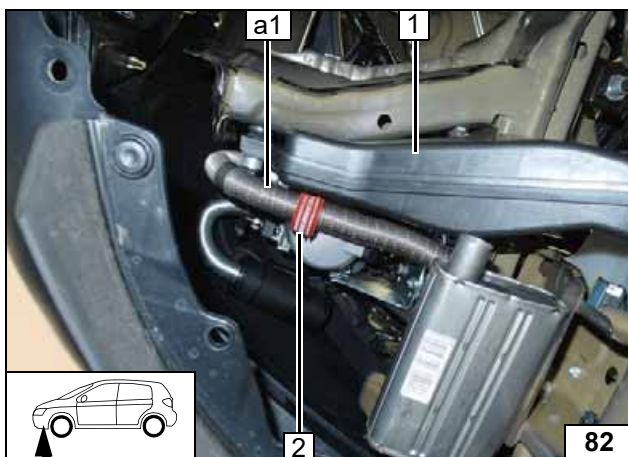
Drilling hole



- 1 M6x16 bolt, spring lock washer (covered)



Installing exhaust silencer

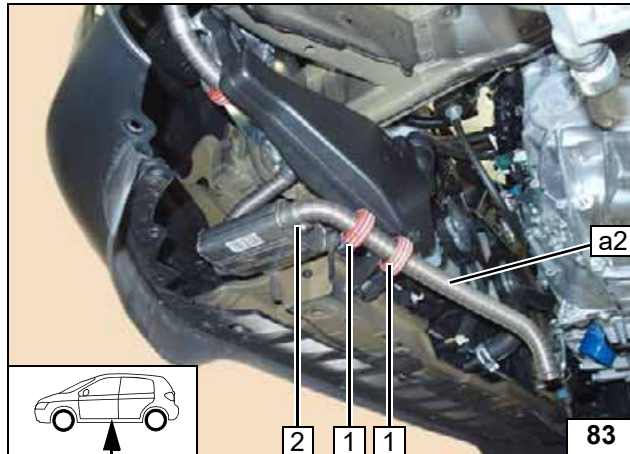
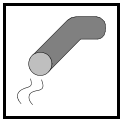


Install resonator 1. Ensure sufficient distance from neighbouring components, correct if necessary.



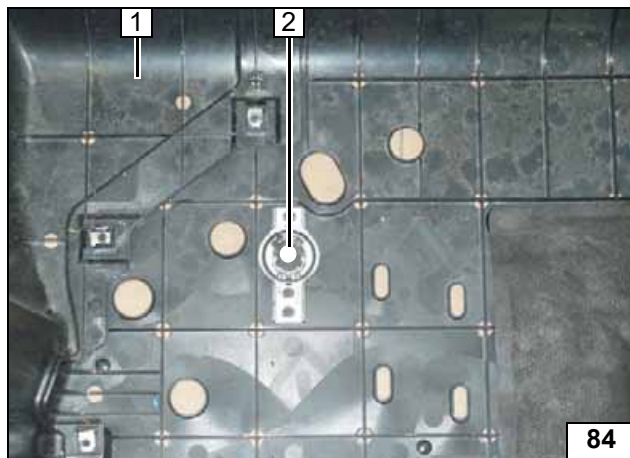
- 2 Align spacer bracket

Aligning exhaust pipe a1



- 1 Align spacer bracket
- 2 Hose clamp

Installing exhaust pipe a2



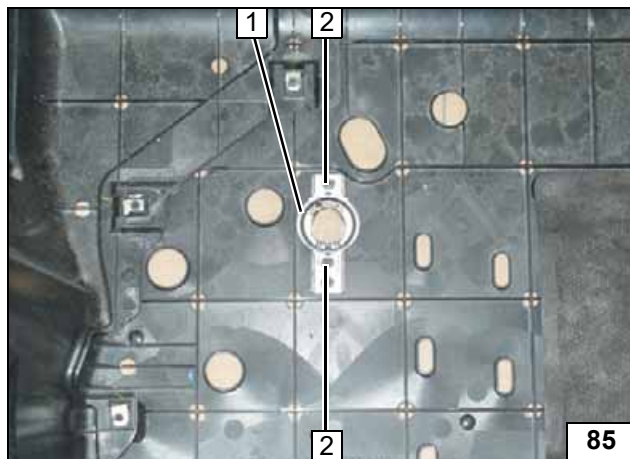
Exhaust end fastener installation

Work step E1.

- 1 Underride protection
- 2 Hole



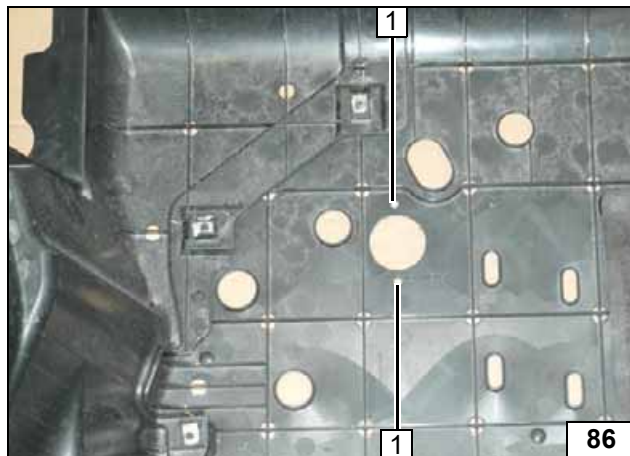
Hole in underride protection



Work step E3.

- 1 Exhaust end fastener
- 2 Hole pattern

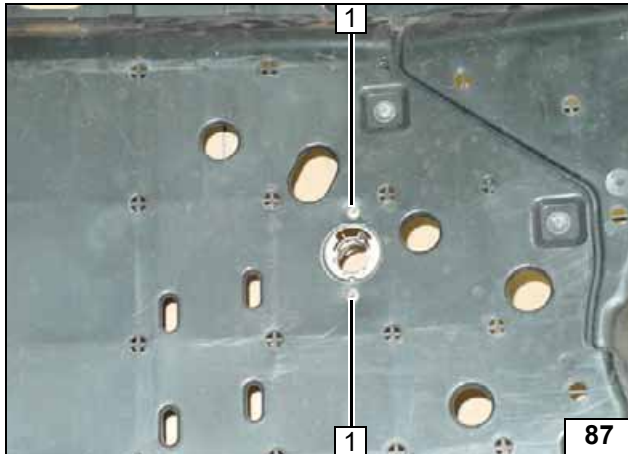
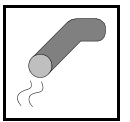
Copying hole pattern



Work step E4.

- 1 Hole

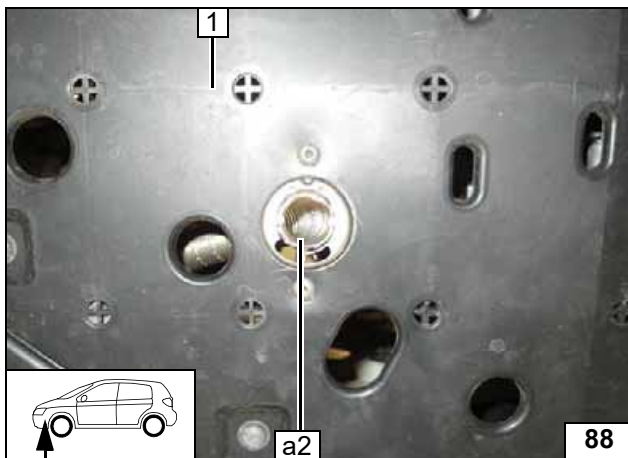
Holes in underride protection



Work step E5.

- 1 5x13 self-tapping screw, large diameter washer

Installing exhaust end fastener

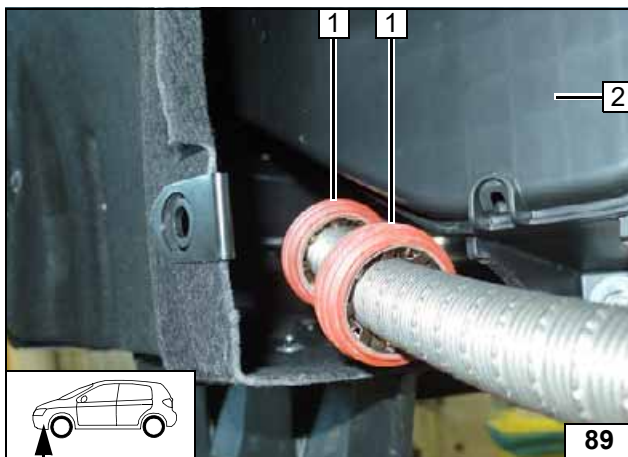


Install underide protection 1.



Installing exhaust pipe a2

Work steps E6 - E8.



Ensure sufficient distance from neighbouring components, correct if necessary.



- 1 Align spacer bracket
- 2 Resonator

Aligning exhaust pipe a2



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).

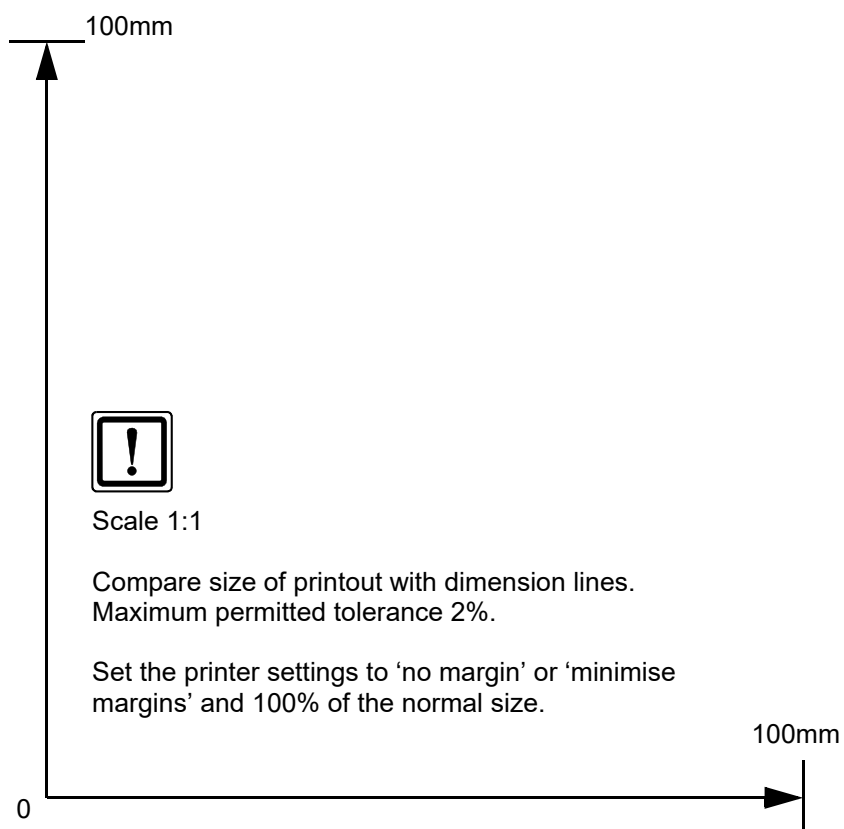
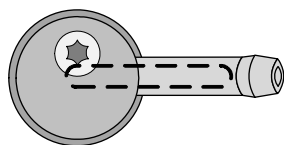
- **Connect the battery.**
- **Fill and bleed the coolant circuit according to the vehicle manufacturer's instructions.**
- **Program MultiControl CAR, teach Telestart transmitter.**
- **For initial start-up and function check, please see installation instructions.**
- **Make setting on the A/C control panel according to the 'operating instructions'.**
- **Place the 'Switch off parking heater before refuelling' caution label near the filler point.**





FuelFix template

Top view



Operating instructions

Please remove page and add to the vehicle operating instructions.

Note:

We recommend matching the heating time to the driving time.

Heating time = driving time

Example:

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

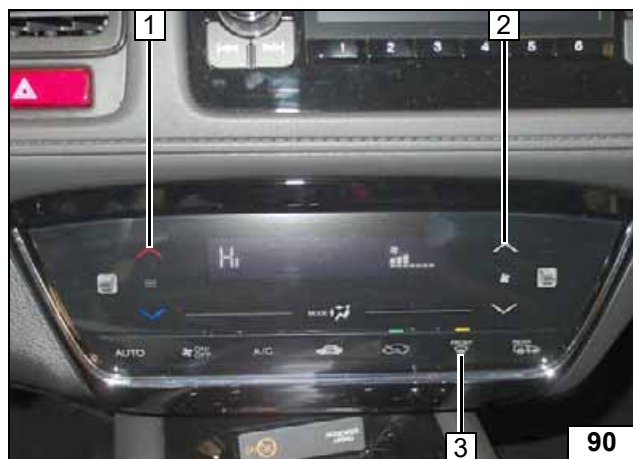
Passenger compartment monitoring, if installed, must be deactivated in addition to the vehicle settings for the heating operation.

For instructions on deactivation, please refer to the operating instructions of the vehicle.

Note for parking heater function

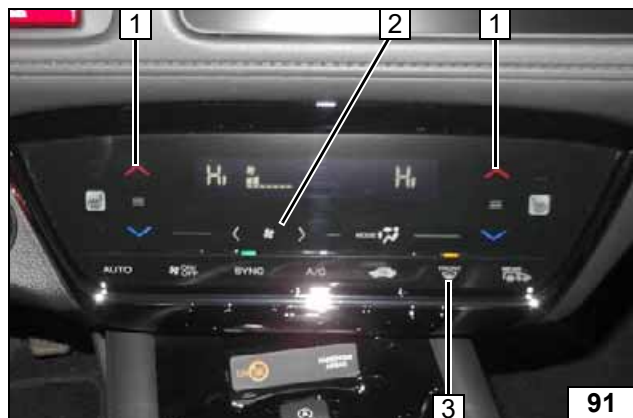
Your vehicle is equipped with a passenger compartment and engine preheating unit.

Before parking the vehicle, make the following settings:



1 zone automatic air-conditioning

- 1 Set temperature to 'HI'
- 2 Set fan to level '2', or max. '3'
- 3 Air outlet to windscreen



2 zone automatic air-conditioning

- 1 Set temperature to 'HI'
- 2 Set fan to level '2', or max. '3'
- 3 Air outlet to windscreen



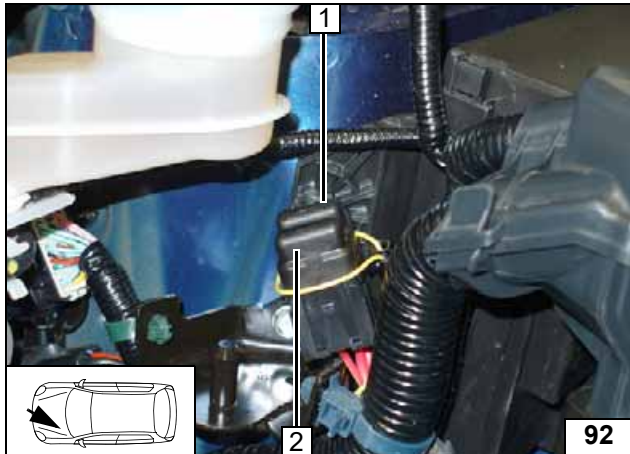
A/C control panel



A/C control panel

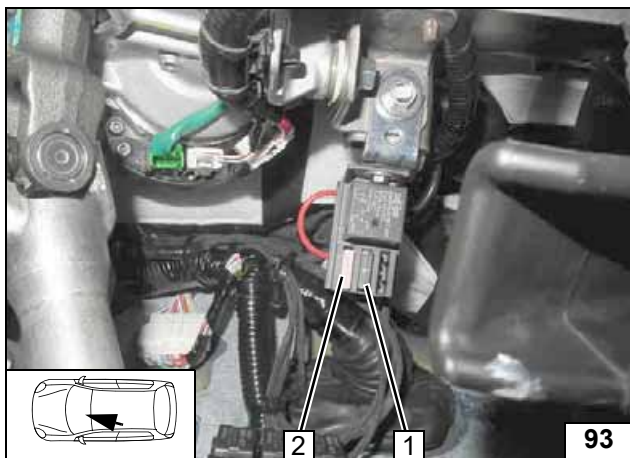


Honda HRV



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

Engine compartment fuses



- 1 1A control element fuse F3
- 2 3A fan fuse F4

Passenger compartment fuses