

K Installation documentation

for Thermo Top Evo water heater

'Island' coolant circuit without engine preheating

Nissan Qashqai / Renault Kadjar

Left-hand drive vehicle

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Nissan	Qashqai	J11	from 2019	e11* 2007/46* 0963*...

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displacement [cm ³]	Engine code
1.3P	Petrol	Euro 6d temp	6-speed SG	103	1332	HR 13
1.3P	Petrol	Euro 6d temp	6-speed SG	117	1332	HR 13

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Renault	Kadjar	RFE	from 2019	e2* 2007/46* 0475*...

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displacement [cm ³]	Engine code
1.3P	Petrol	Euro 6d temp	6-speed SG	103	1332	H5H
1.3P	Petrol	Euro 6d temp	6-speed SG	117	1332	H5H

Validity	Equipment variants	Model	
		Qashqai	Kadjar
Verified equipment variants	2 zone automatic air-conditioning	X	X
	LED daytime running lights	X	X
	Halogen main headlights	X	X
	Headlight washer system	X	X
	LED main headlights	X	-
	Halogen front fog lights	X	X
	LED front fog lights	X	-
	Start button with keycard	X	X

Total installation time	Note
8.0 hours	

Contents

1	List of abbreviations	3	14	Electrical system of passenger compartment	47
2	Installation notes	4	14.1	Air-conditioning control	47
2.1	Information on Validity	4	15	Electrical system of control elements	48
2.2	Components used	4	15.1	Nissan Qashqai	48
2.3	Information on Total Installation Time	4	15.1.1	MCC option	48
2.4	Installation Recommendations	4	15.1.2	Remote option (Telestart)	48
3	About this document	5	15.1.3	ThermoCall option	49
3.1	Purpose of the document	5	15.2	Renault Kadjar	50
3.2	Warranty and liability	5	15.2.1	MCC option	50
3.3	Safety	5	15.2.2	Remote option (Telestart)	50
3.4	Using this document	6	15.2.3	ThermoCall option	52
4	Technical Information	7	16	Final Work	53
5	Preparing measures	8	17	FuelFix template	55
5.1	Vehicle preparation	8			
5.2	Heater preparation	8			
6	Installation overview	9			
7	Electrical system of engine compartment	10			
8	Mechanical system	12			
8.1	Preparing bracket	12			
8.2	Preparing installation location	12			
8.3	Premounting heater	15			
8.4	Heater mounting	16			
9	Fuel	18			
9.1	Routing fuel line	18			
9.2	Mounting and connecting fuel pump	21			
9.3	Installing FuelFix	22			
10	Coolant	28			
10.1	Hose routing diagram	28			
10.2	Coolant circuit installation	29			
11	Combustion air	38			
12	Exhaust	40			
12.1	Mounting exhaust pipe	40			
12.2	Mounting exhaust end fastener	42			
13	Final work in engine compartment	46			

1 List of abbreviations

AAC	Automatic air-conditioning
AC	Manual air-conditioning
DP	Fuel pump
EFIX	Exhaust end fastener
FF	FuelFix (tank extracting device)
Fig.	Figure
HG	Heater
SG	Manual transmission
SH2	Engine compartment fuse holder for F1/F2
UP	Coolant pump

2 Installation notes

2.1 Information on Validity

This installation documentation applies to vehicles listed on page 1, 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.

2.2 Components used

Designation	Order number
Basic delivery scope for Thermo Top Evo (see 2.4: 'Installation recommendations')	In accordance with price list
Installation kit for Nissan Qashqai/Renault Kadjar 2019 island petrol	1327230A
Additional 'Webasto Standard' A/C control kit for Nissan Qashqai or Additional 'Webasto Comfort' A/C control kit for Nissan Qashqai or Additional 'Webasto Standard' A/C control kit for Renault Kadjar or Additional 'Webasto Comfort' A/C control kit for Renault Kadjar	1324070_ 1324068_ 1324475_ 1327415_
In case of MultiControl CAR installation - MultiControl installation frame	9030077_
In case of Telestart, control element, as well as indicator lamp in consultation with end customer	In accordance with price list
The installation location for the MultiControl CAR should be chosen in coordination with the end customer.	

2.3 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.

2.4 Installation Recommendations

Arrange for the vehicle to be delivered with the tank only about ¼ full.

For the MultiControl CAR option, the recommended installation locations for the Telestart or ThermoCall push button 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.

We recommend installing a Thermo Top Evo 4. The heater is integrated into the coolant circuit as an 'island' and heats up the vehicle passenger compartment. There is no engine pre-heating.

3 About this document

3.1 Purpose of the document

This installation documentation is part of the product and contains all the information required to ensure professional vehicle specific installation of the:

Thermo Top Evo heater

3.2 Warranty and liability

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 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.

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.

3.2.1 Statutory regulations governing installation

The Thermo Top Evo heater has been type-tested and approved in accordance with ECE-R 10 (EMC) and ECE-R 122 (heater). 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.

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

3.3 Safety

Qualifications of installation personnel

The installation personnel must have the following qualifications:

- Successful completion of Webasto training
- Corresponding qualification for working on technical systems

Regulations and legal requirements

The regulations from the heater's general installation and operating instructions must be observed.

3.3.1 Safety information on installation

Danger posed by live parts

- ▶ Prior to installation, disconnect the vehicle from the voltage supply.
- ▶ Make sure the electrical system is earthed correctly.
- ▶ Always comply with legal requirements.
- ▶ Observe data on type label.

Danger of fire and leaking toxic gases due to improper installation

- ▶ Vehicle parts in the vicinity of the heater must be protected against excessive heating by the following measures:
 - ⇒ Maintain minimum safety distances.
 - ⇒ Ensure adequate ventilation.
 - ⇒ Use fire-resistant materials or heat shields.

Danger due to sharp edges

- Lacerations
- Short circuit due to electrical wire damage
- ▶ Fit protectors on sharp edges.

3.4 Using this document

Before installing and operating the heater, read this installation documentation, the installation instructions of the heater, the operating instructions and supplementary sheets provided.

3.4.1 Explanatory Notes on the Document

There is an identification mark near the respective work step to allow you to quickly allocate the other applicable documents to the Webasto components to be installed:

Generally valid Webasto documentation	
Vehicle-specific installation documentation	
Vehicle-specific installation documentation of the cold start kit	
Webasto Comfort A/C control	
Webasto Standard A/C control	
Tank extracting device (e.g. FuelFix)	
Exhaust end fastener (EFIX)	
Combustion air intake silencer	
Spacer bracket (ASH)	

3.4.2 Use of symbols



DANGER

Type and source of the risk

Consequences: Failure to follow the instructions can result in death

► Actions to protect yourself against risks.



WARNING

Type and source of the risk

Consequences: Failure to follow the instructions can lead to serious or even fatal injuries

► Actions to protect yourself against risks.



CAUTION

Type and source of the risk

Consequences: Failure to follow the instructions can lead to minor injuries

► Actions to protect yourself against risks.



Type and source of the risk

Consequences: Failure to follow the instructions can lead to material damage

► Actions to protect yourself against risks.



Reference to the vehicle manufacturer's specific documents.



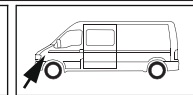
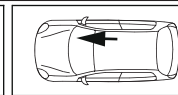
Note on a special technical feature

3.4.3 Work step identification marks

The ongoing work step is indicated on the outside top corner of the page:

Mechanical system	Electrical system	High-voltage	Coolant
Combustion air	Fuel	Exhaust	Software

3.4.4 Orientation aid



The arrow indicates the position on the vehicle and the viewing angle

3.4.5 Use of highlighting

Highlight	Explanation
►	Necessary action
⇒	Result of an action
1 / 12 / a1	Position numbers for the image descriptions
① / ⑫ / Ⓐ	Position numbers for the image descriptions for electrical wires and coolant hose sections

4 Technical Information

Dimension specifications

- All dimensions specified in mm
- Perforated brackets and mounting angles are shown to scale
- Observe data regarding scale on the templates

Tightening torque specifications

- Tightening torque values of 5x13 heater bolts and 5x11 heater stud bolts = 8Nm
- Tightening torque values of 5x15 retaining plate of water connection piece bolts = 7Nm
- 5x12 bolt tightening torque of 2-part heater bracket = 6Nm
- Tighten other bolt connections in accordance with manufacturer's instructions or in accordance with state-of-the-art-technology

Temperature specification for heat shrink plastic tubings

- Fabric heat shrink tubing: shrink temperature max. 230°C
- Standard heat shrink plastic tubing: shrink temperature max. 300°C

Necessary special tools

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

5 Preparing measures

5.1 Vehicle preparation



Further information can be found in the vehicle manufacturer's technical documentation.

Vehicle area	Components to be removed	Other applicable documents
General	<ul style="list-style-type: none"> ▶ Open the fuel tank cap ▶ Ventilate the fuel tank ▶ Close the fuel tank cap again ▶ Depressurise the cooling system 	
Engine compartment and body	<ul style="list-style-type: none"> ▶ Disconnect the battery ▶ Complete battery with battery carrier ▶ Complete air filter with intake hose up to the engine ▶ Engine underdrive protection ▶ Underbody underdrive protection on the front passenger's side 	
Passenger compartment	<ul style="list-style-type: none"> ▶ Side instrument panel trim on the driver's side ▶ Detach the lower instrument panel trim on the driver's side ▶ Rear bench seat ▶ Open the tank fitting service lid on the front passenger's side 	

5.2 Heater preparation

Engine compartment	<ul style="list-style-type: none"> ▶ Remove years that do not apply from the type and duplicate label ▶ Attach the duplicate label (type label) in the appropriate place in the engine compartment 	
--------------------	--	--

6 Installation overview

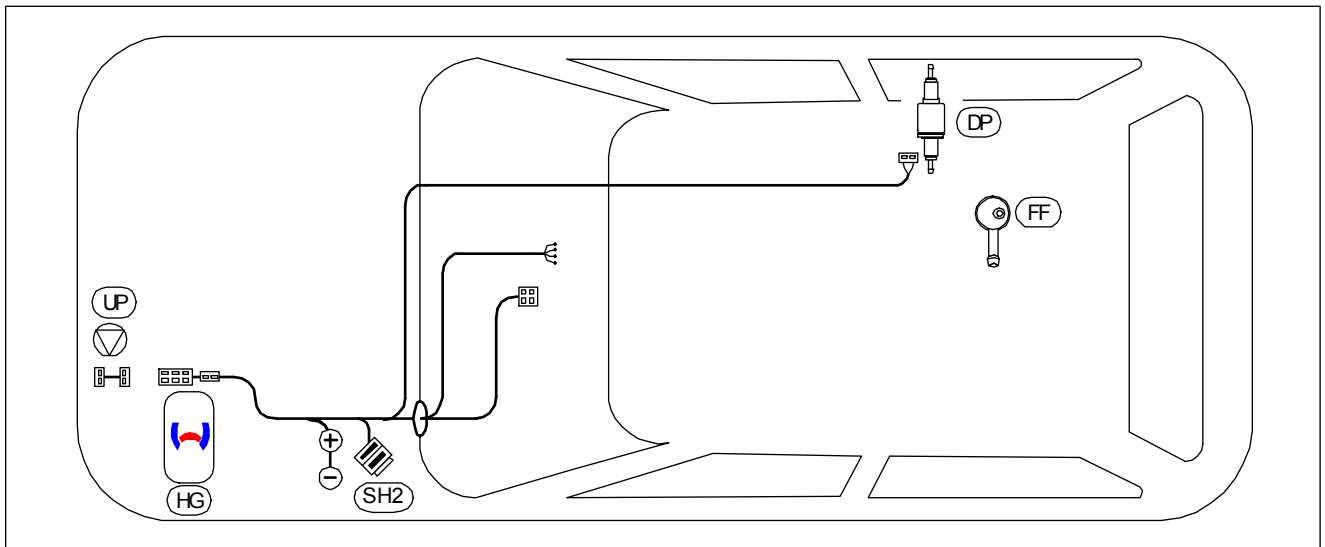
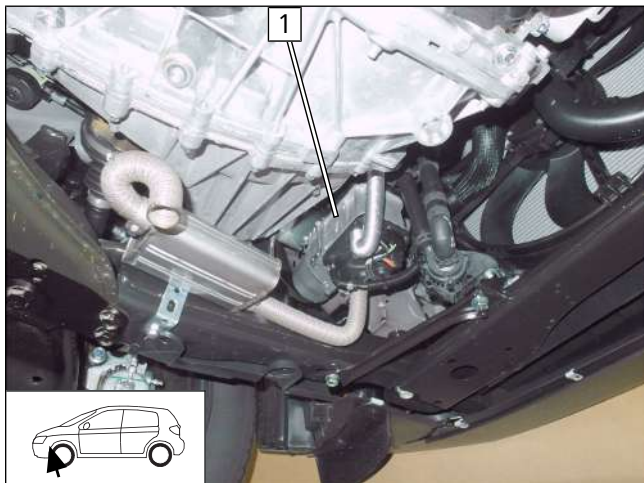


Fig. 1

Legend to installation overview

Abbreviation	Component
DP	Fuel pump
FF	FuelFix
HG	Heater
SH2	Engine compartment fuse holder for F1/F2
UP	Coolant pump

Heater installation location



1 Heater

Fig. 2



7 Electrical system of engine compartment

Preparing perforated bracket

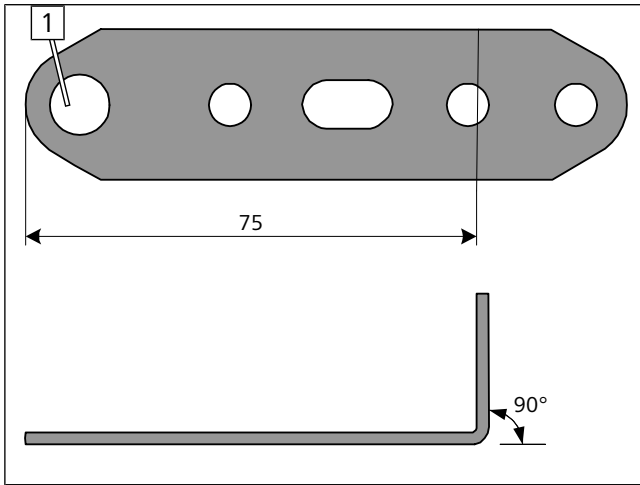


Fig. 3

- 1 Drill out hole to $\text{Ø}8.5$

Preparing fuse holder of engine compartment

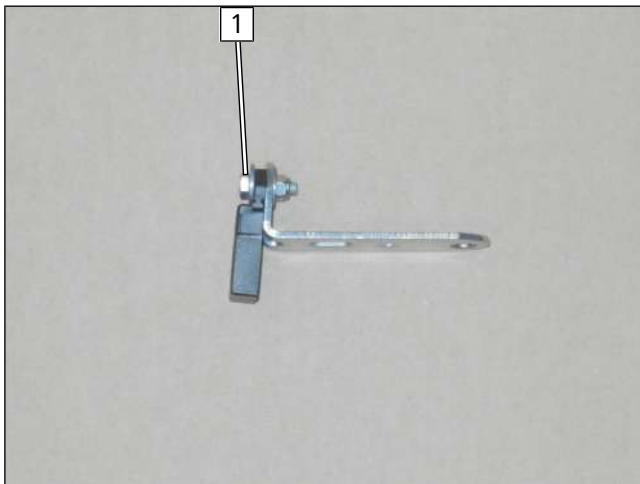


Fig. 4

- 1 M5x16 bolt, large diameter washer, retaining plate of SH2, perforated bracket, large diameter washer, nut

Installing SH2

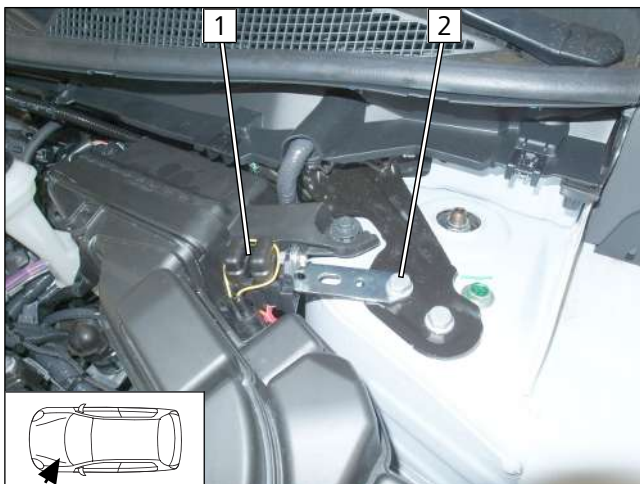


Fig. 5

- 1 Fuses F1 / F2
- 2 Original vehicle bolt



Positive wire connection

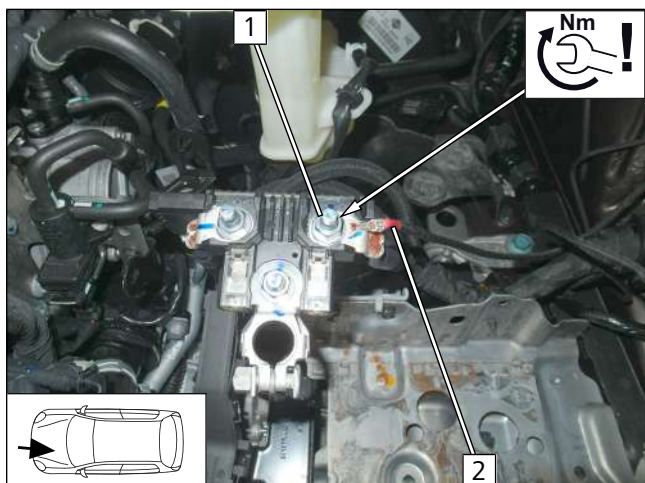


Fig. 6



DANGER

Fire hazard due to insufficient tightening torque

► Observe tightening torque

- 1 Original vehicle positive distributor
- 2 Positive wire

Earth wire connection

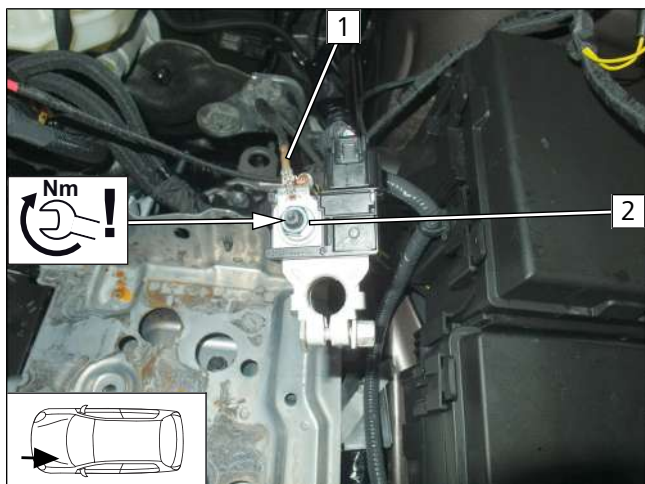


Fig. 7



DANGER

Fire hazard due to insufficient tightening torque

► Observe tightening torque

- 1 Earth wire
- 2 Original vehicle earth distributor

Passenger compartment wiring harness pass through

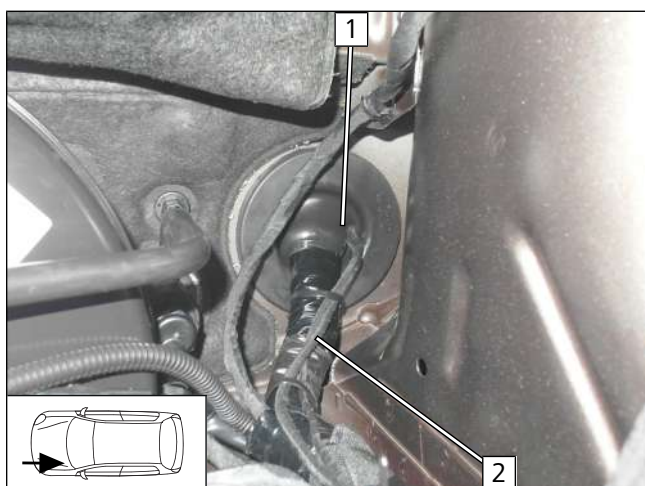


Fig. 8

- 1 Protective rubber plug
- 2 Passenger compartment wiring harness, control element



8 Mechanical system

8.1 Preparing bracket

Mounting angle bracket

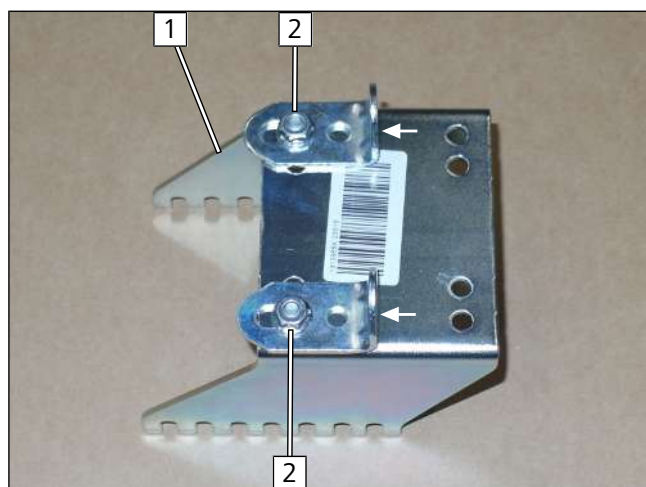


Fig. 9



Push both angle brackets, before fastening, as far as possible in the oblong holes in the direction of the arrow.

- 1 Bracket
- 2 M6x12 bolt, bracket, angle bracket, tighten flanged nut hand-tight

8.2 Preparing installation location

Turning earth wire/drawing guide line

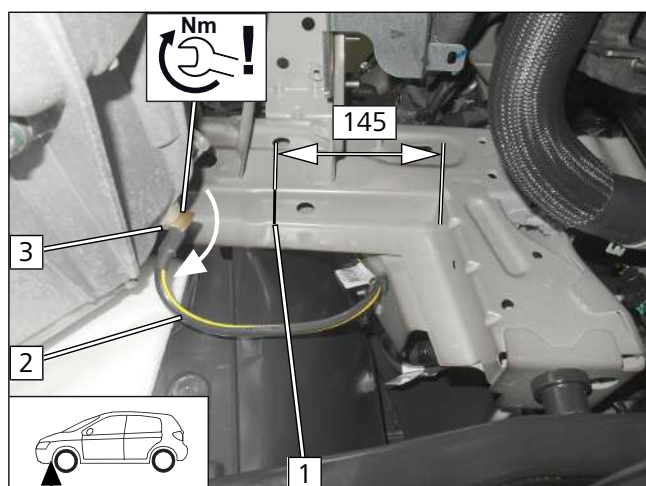


Fig. 10



DANGER

Fire hazard due to insufficient tightening torque

► Observe tightening torque

- Draw guide line 1 as shown in Fig.
- Loosen original vehicle earth cable 2 at position 3, turn as shown and tighten again.

Copying hole pattern

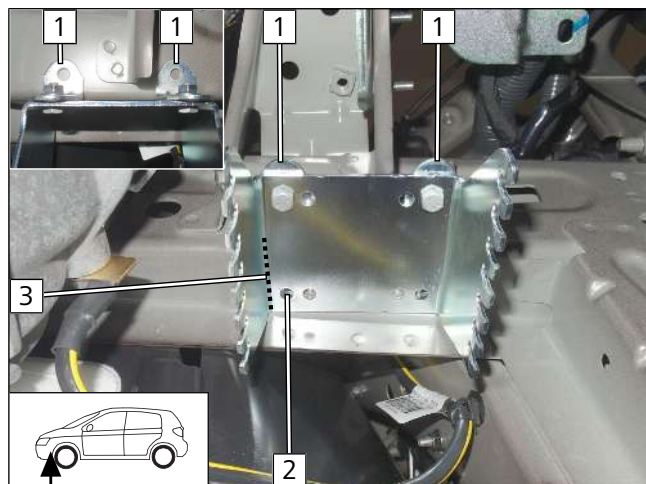


Fig. 11

- Position the bracket at marking 3 and align with angle brackets 1 on frame side member.
- Copy hole pattern 2 and remove bracket.



Inserting rivet nut

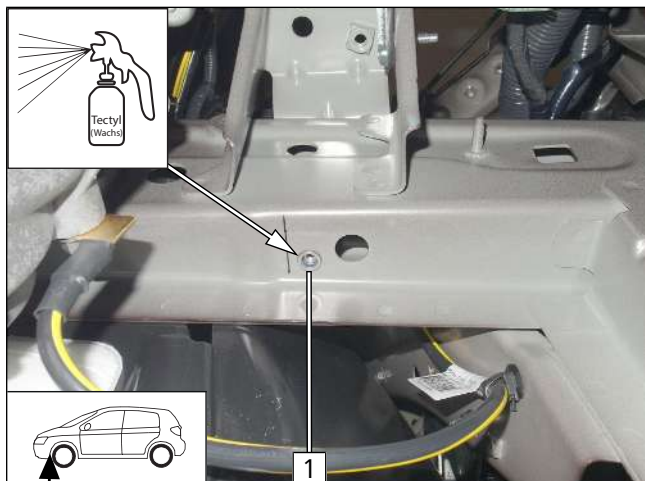


Fig. 12

- 1 Ø9 hole, rivet nut

Copying hole pattern

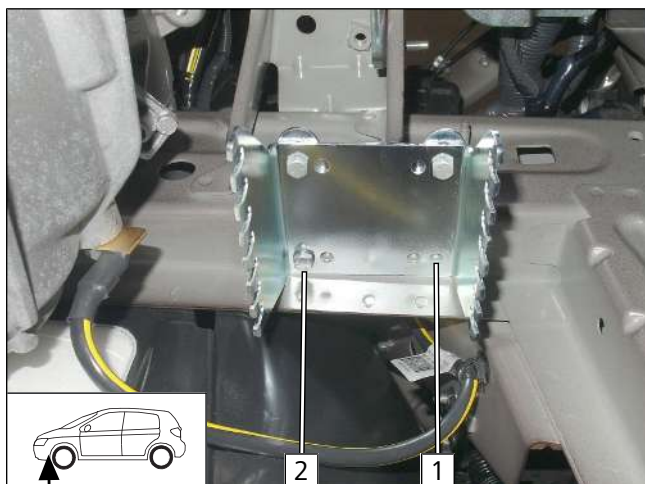


Fig. 13

► Install bracket.

- 1 Copy hole pattern
- 2 M6x20 bolt, spring lockwasher, rivet nut

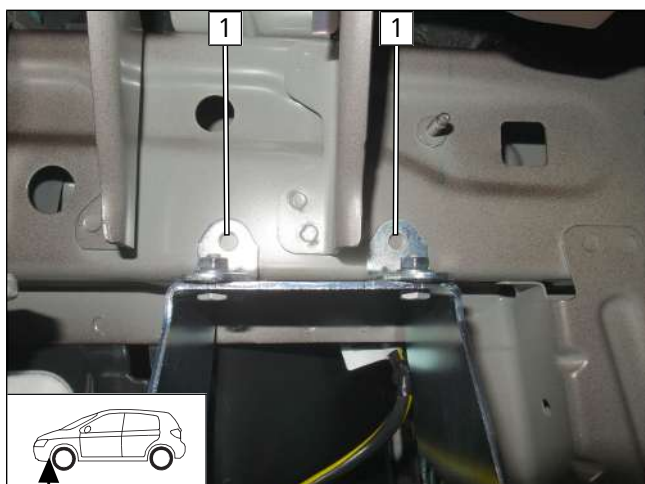


Fig. 14

- Align angle bracket on frame side member and copy hole pattern **1**.
- Remove bracket.



Inserting rivet nut

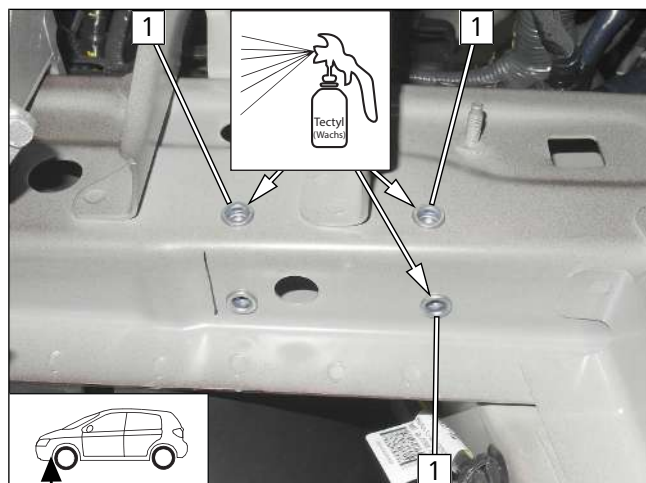


Fig. 15

- 1 Ø9 hole, rivet nut

Mounting bracket

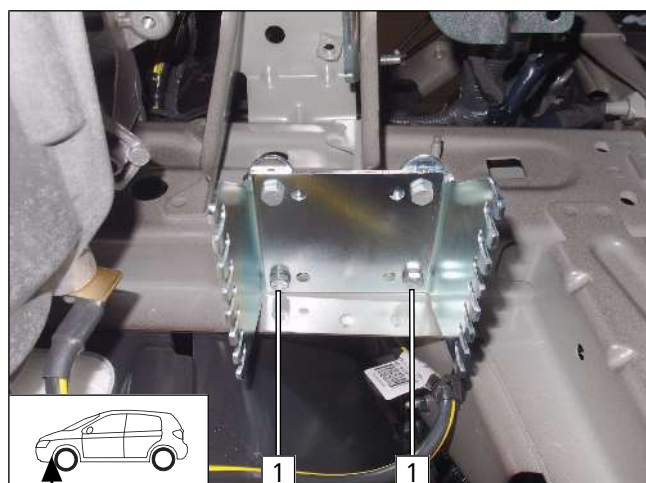


Fig. 16

- 1 M6x20 bolt, spring lock washer, bracket, rivet nut

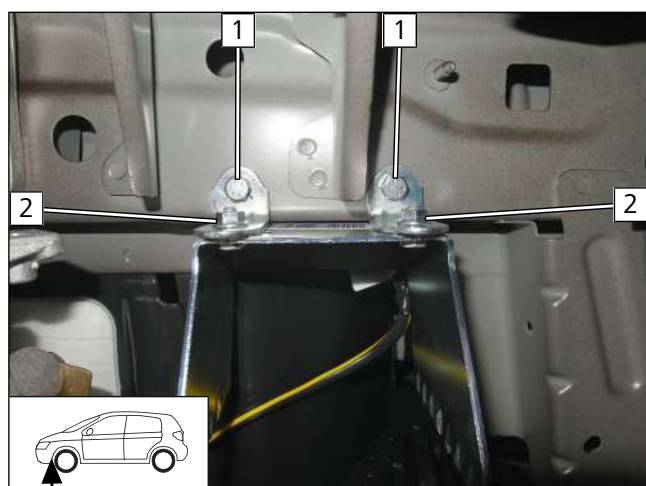


Fig. 17

- 1 M6x20 bolt, spring lockwasher, angle bracket, rivet nut
- 2 Tighten screw connections



8.3 Premounting heater

Mounting water connection piece

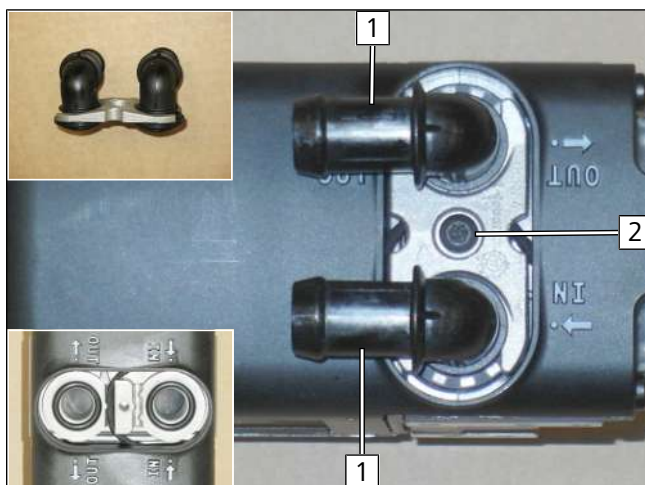


Fig. 18



Observe the general installation instructions of the heater.

- 1 90° water connection piece, seal
- 2 5x15 self-tapping bolt, water connection piece retaining plate

Premounting bolts loosely

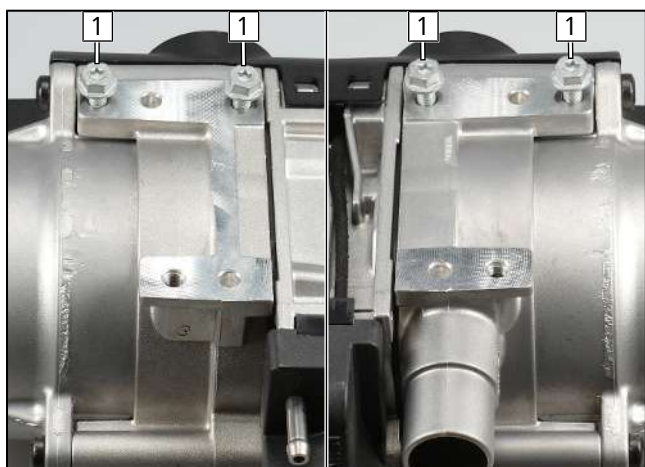


Fig. 19

► Screw 5x13 self-tapping bolts 1 into existing holes by a maximum of 3 thread turns.

Cutting hoses to length

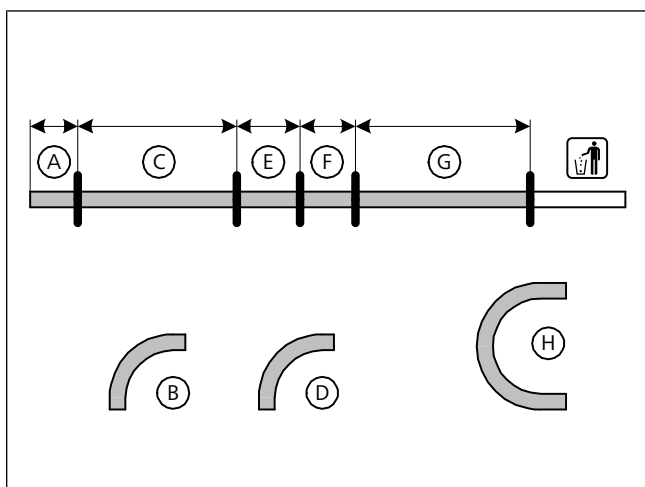


Fig. 20

A	60
B	90°
C	760
D	90°
E	150
F	120
G	810
H	180°



Premounting hoses

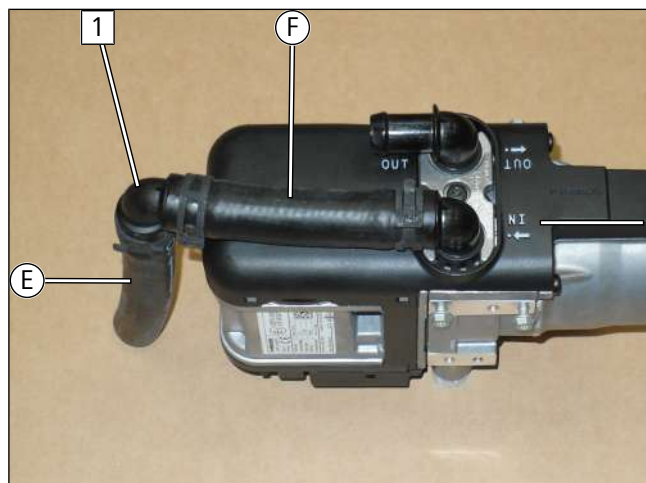


Fig. 21



All spring clips Ø25

- 1 18x18, 90° connecting pipe

8.4 Heater mounting

Mounting heater



Fig. 22

- Tighten 5x13 self-tapping bolt 1.

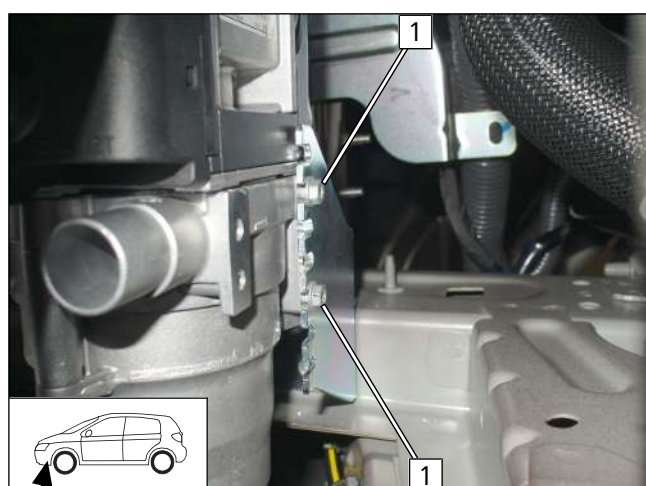
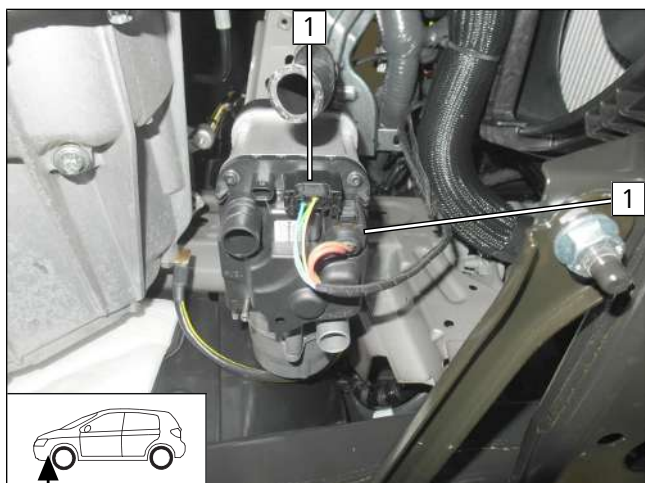


Fig. 23

- Tighten 5x13 self-tapping bolt 1.



Mounting heater wiring harness



- 1 Heater wiring harness connector

Fig. 24



9 Fuel



DANGER

Risk of fire and explosion due to leaking fuel and escaping fuel vapours.

The incorrect installation of the fuel extractor can cause damage and fire.

- ▶ Avoid electrostatic discharges and open fire
- ▶ When working on the fuel system, ensure sufficient ventilation and bleeding
- ▶ Open the fuel tank cap of the vehicle
- ▶ Ventilate the fuel tank
- ▶ Re-close the tank lock
- ▶ Catch any fuel running off with an appropriate container



Danger of damage to components

- ▶ Install fuel line and fuel pump wiring harness so that they are protected against stone impact
- ▶ Provide rub protection for fuel line and wiring harness in areas where there are sharp edges

Dismantling fuel pump connector X7

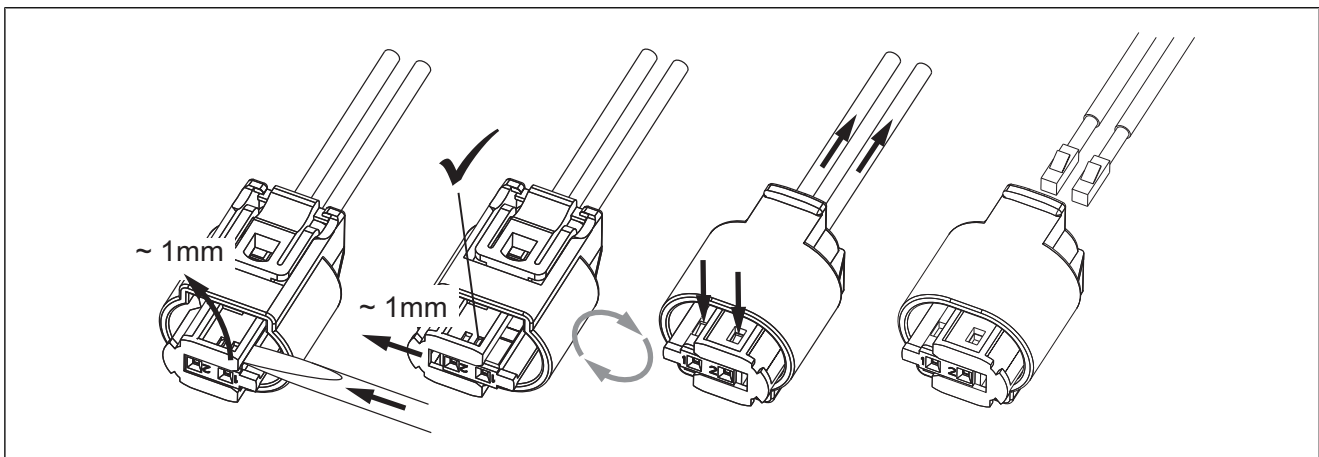


Fig. 25

9.1 Routing fuel line

Assigning / cutting to length corrugated tube

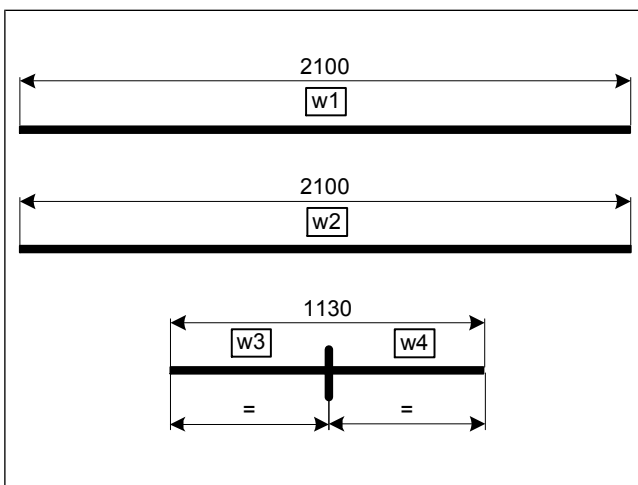


Fig. 26



Connecting heater

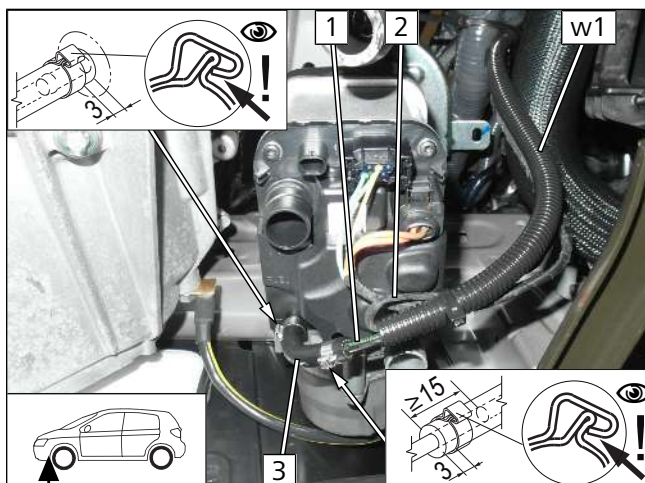


Fig. 27

► Draw fuel line **1** and fuel pump wiring harness **2** into corrugated tube **w1** and route in the engine compartment.

3 90° moulded hose, Ø10 clamp [2x]

Routing in engine compartment

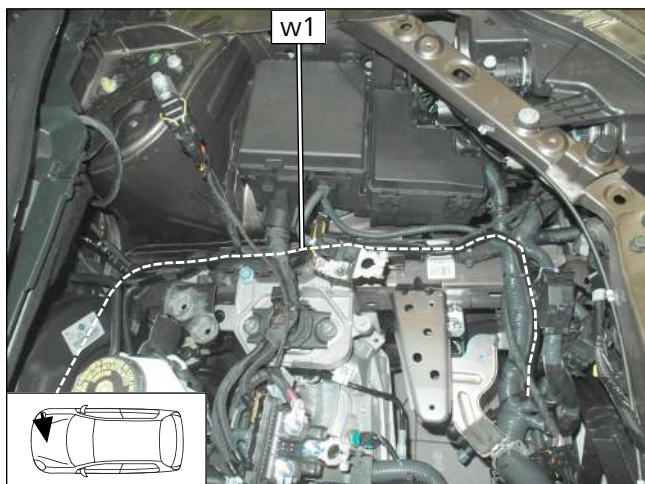


Fig. 28

► Route corrugated tube with fuel line and fuel pump wiring harness **w1** to the firewall.

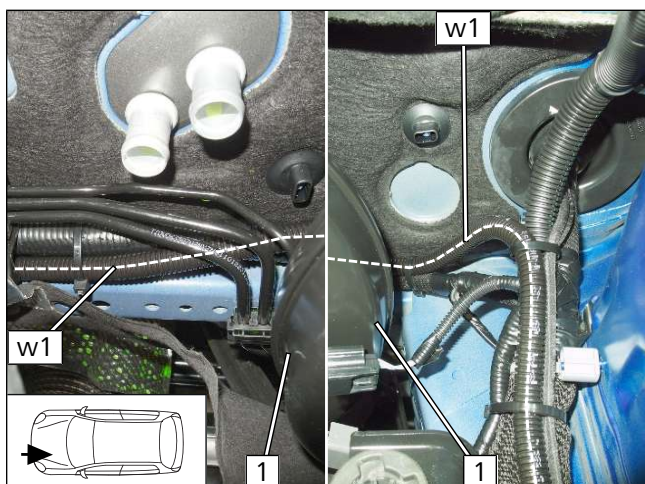


Fig. 29

► Route fuel line and fuel pump wiring harness in corrugated tube **w1** behind brake booster **1** to the right side of the vehicle.

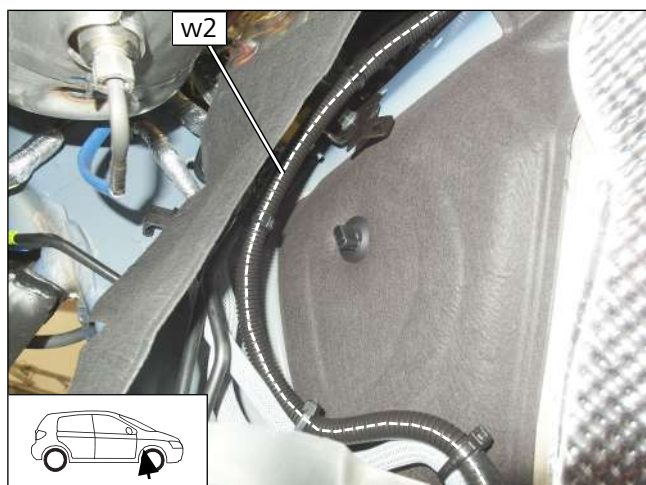


Fig. 30

- ▶ Route corrugated tube **w2** with fuel line and fuel pump wiring harness along original vehicle fuel lines to the underbody.

Routing on underbody

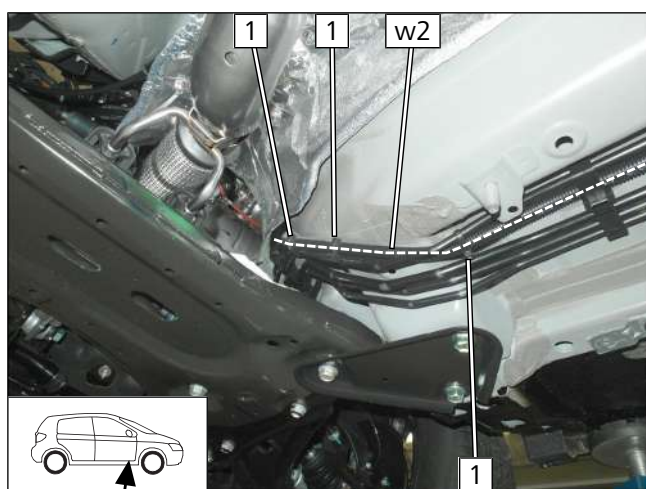


Fig. 31

- ▶ Route corrugated tube **w2** with fuel line and fuel pump wiring harness along original vehicle fuel lines on the underbody.

1 Cable tie



Fig. 32

- ▶ Route corrugated tubes **w2** and **w3** with fuel line and fuel pump wiring harness along original vehicle fuel lines to the installation location of the fuel pump.



9.2 Mounting and connecting fuel pump

Premounting fuel pump

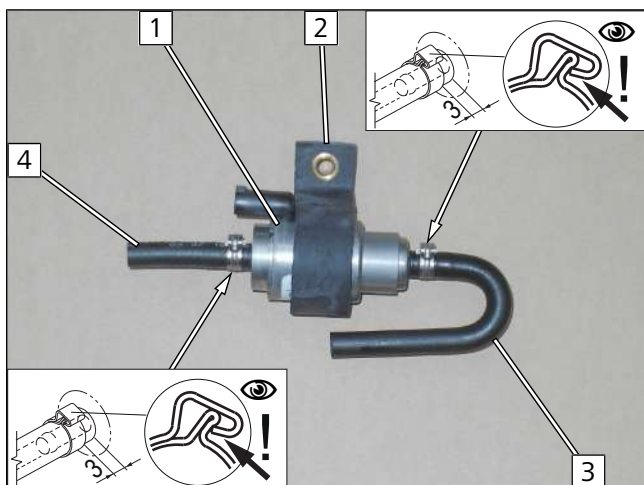


Fig. 33

- 1 Fuel pump
- 2 Fuel pump mount
- 3 180° moulded hose, Ø10 clamp
- 4 Hose section, Ø10 clamp

Preparing fuel pump installation location

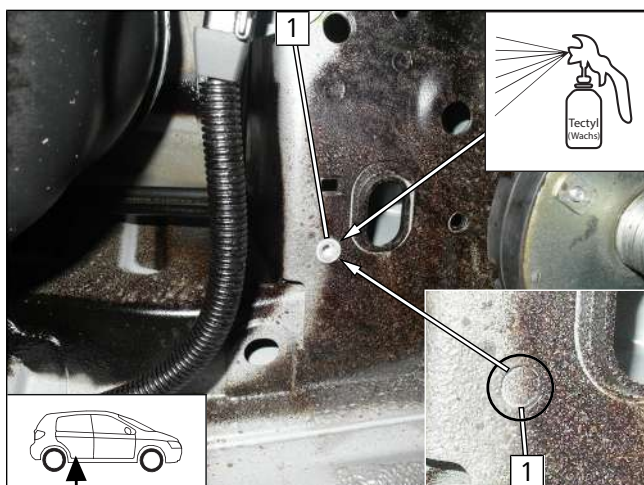


Fig. 34

► Drill a Ø9 hole at position 1 in the 2nd layer of the double walled metal sheet.

- 1 Inserting rivet nut

Mounting fuel pump

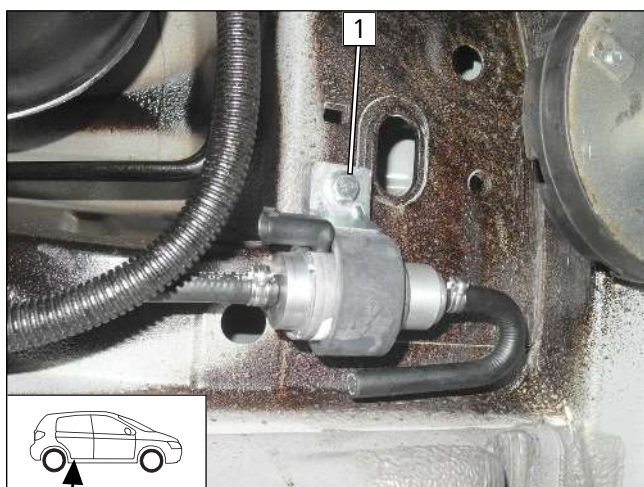


Fig. 35

- 1 M6x25 bolt, support angle bracket, premounted fuel pump, rivet nut



Assembling fuel pump connector X7

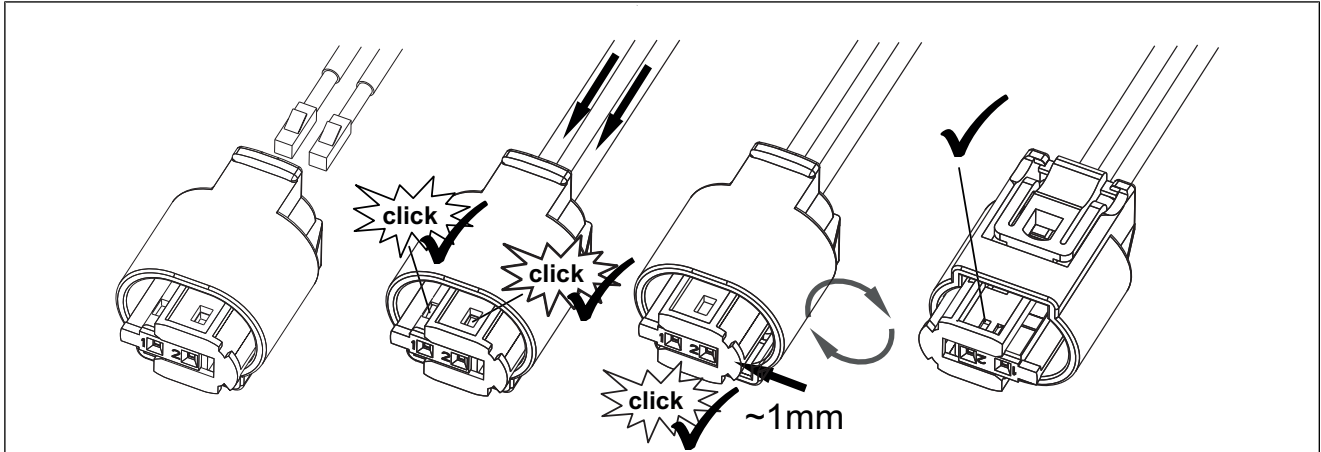


Fig. 36

Connecting fuel pump

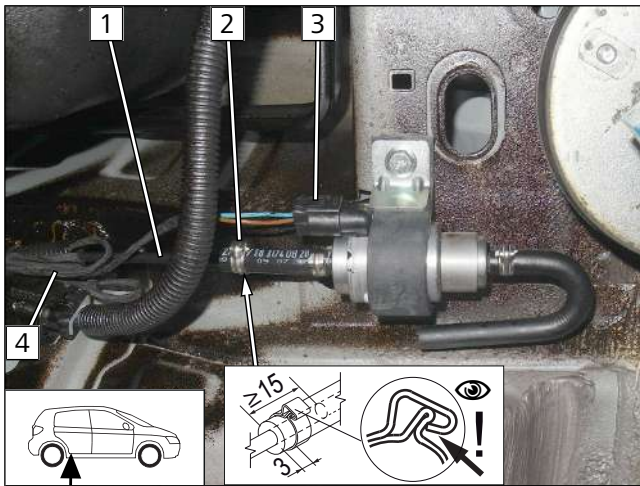


Fig. 37

► Cut corrugated tube **w3** in front of the fuel pump. Attach the rest of the fuel pump wiring harness **4** to the original vehicle lines.

- 1 Heater fuel line
- 2 Ø10 clamp
- 3 Connector X7 of fuel pump wiring harness

9.3 Installing FuelFix

Preparing fuel line

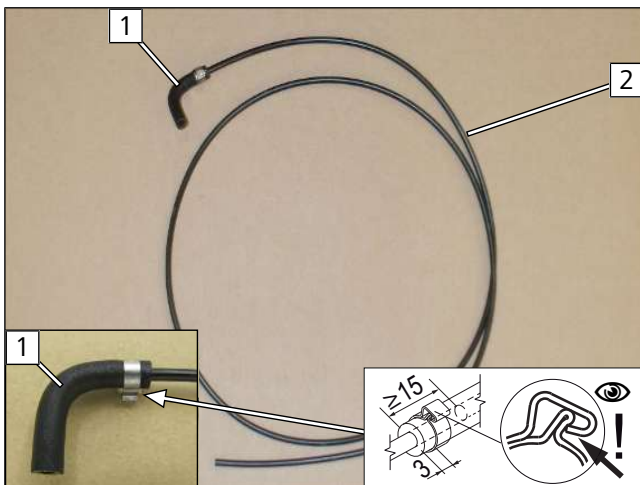


Fig. 38

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



Moving label

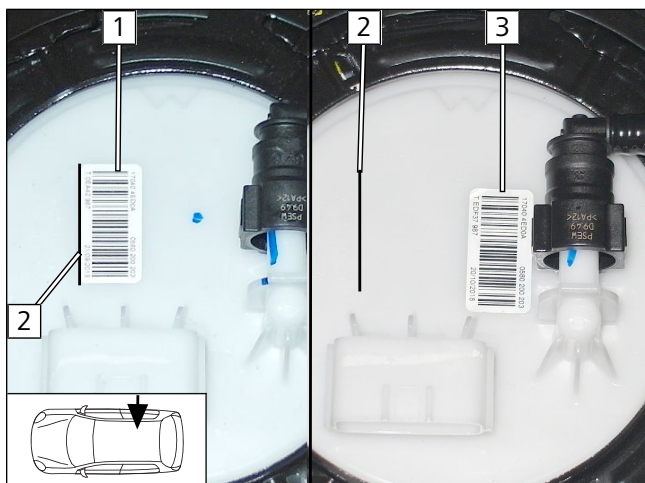


Fig. 39

► Draw guide line **2** on existing embossing.

- 1** Original position of label
- 3** New position of label

View of drilling template

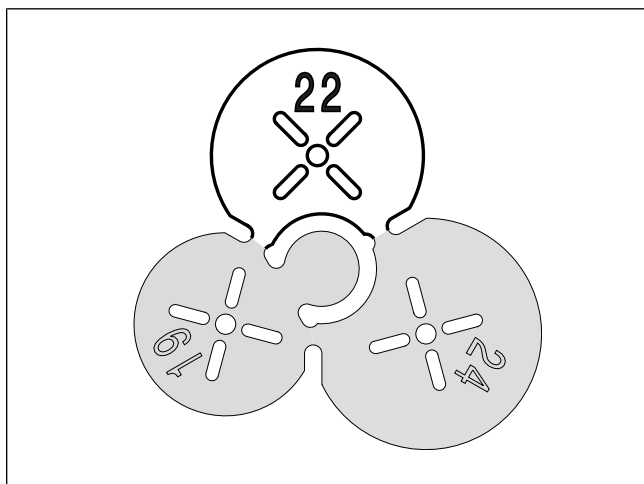


Fig. 40

Work steps F1, F2

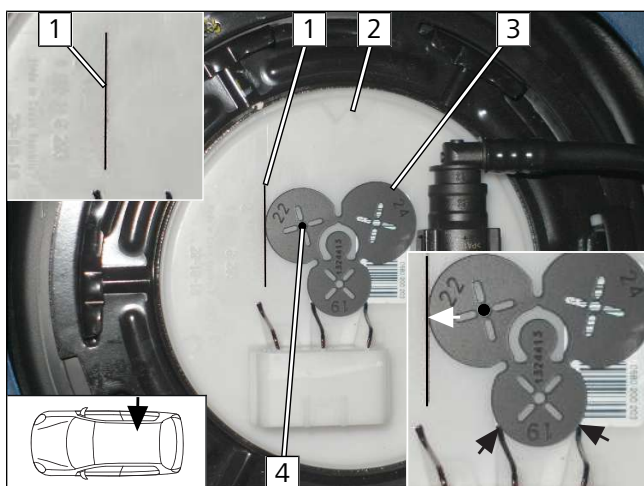


Fig. 41



Observe the installation instructions of the tank extracting device.

► Position template **3** tangent to guide line **1** and against the ribs as shown.

- 2** Tank fitting
- 4** Copy hole pattern



Work step F3

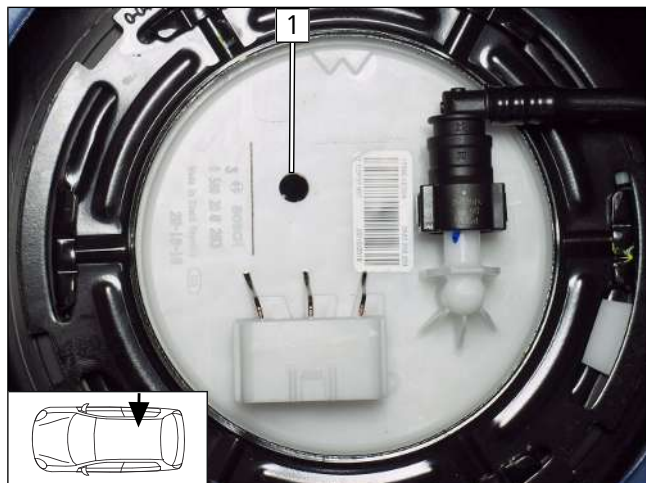


Fig. 42



DANGER

Risk of fire and explosion due to leaking fuel and escaping fuel vapours.

- 1 Hole made with provided drill

Work steps F4, F5

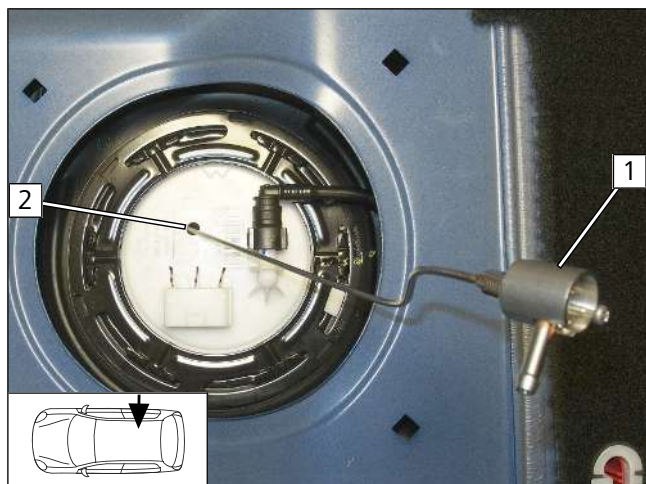


Fig. 43

- Bend FuelFix **1** according to template and cut to length. Insert in hole **2**.

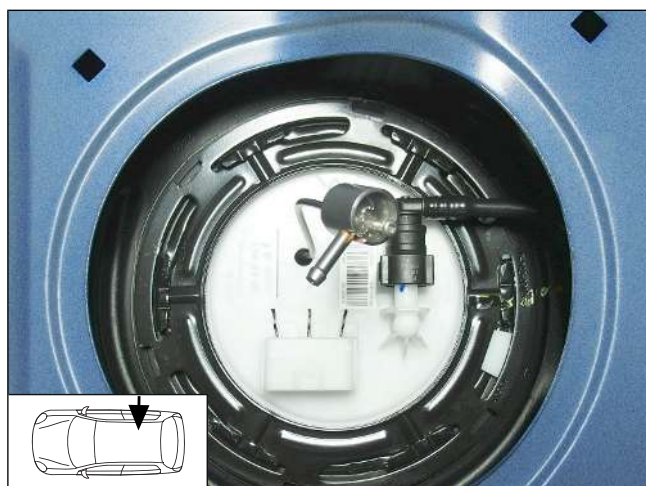


Fig. 44

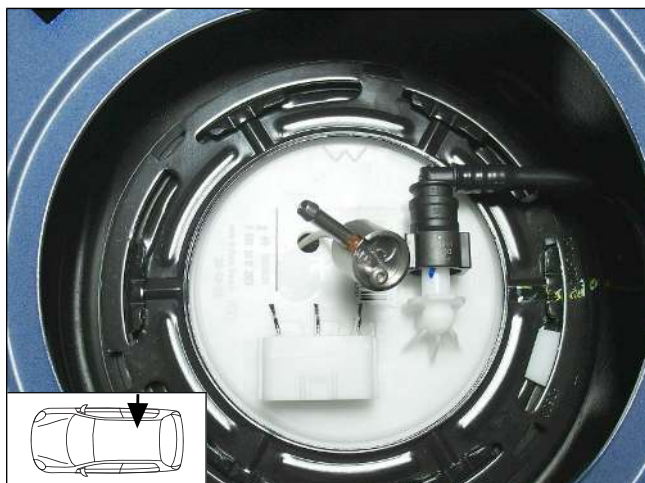


Fig. 45



Fig. 46

Work steps F5.3, F5.4

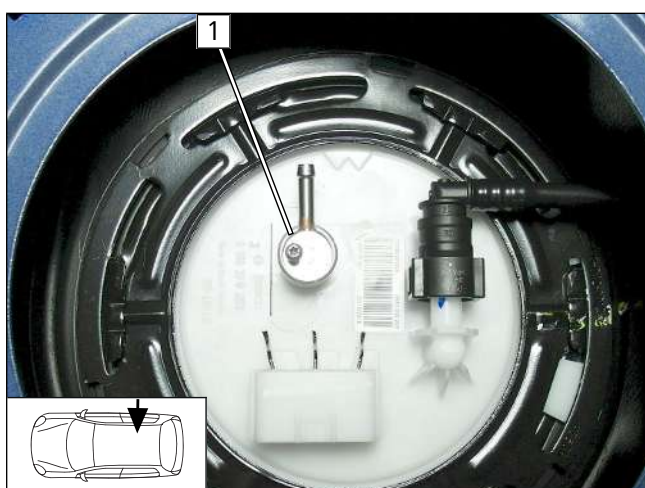


Fig. 47

► Align FuelFix **1** as shown.



Work step F6

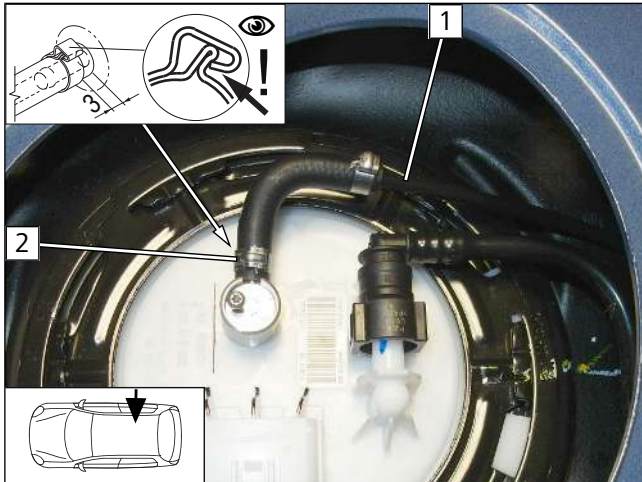


Fig. 48

- 1 Prepared fuel line
- 2 Ø10 clamp

Work step F7

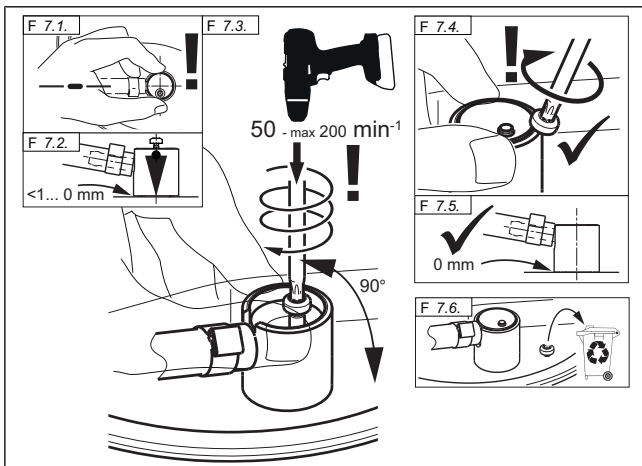



Fig. 49

 **DANGER**
Risk of fire and explosion due to leaking fuel and escaping fuel vapours

Work step F8

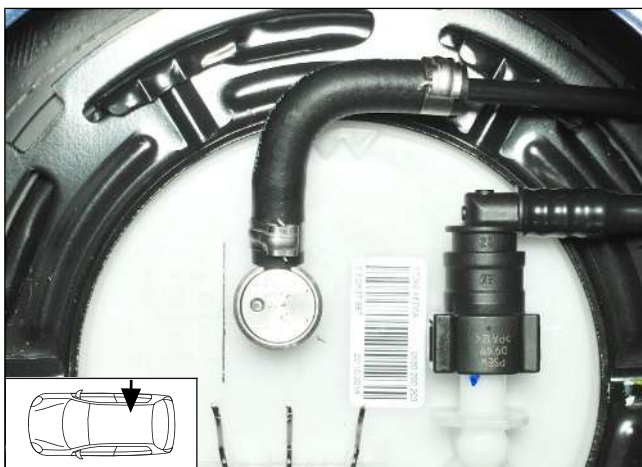


Fig. 50



Securing fuel line

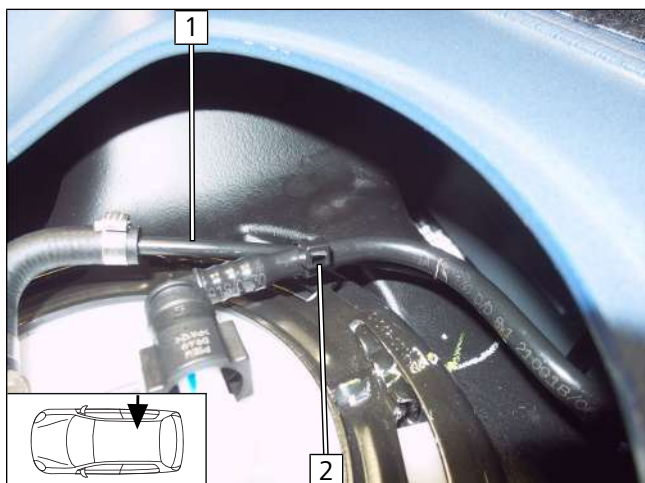


Fig. 51

► Secure fuel line **1** using cable tie **2** for tension relief.

Connecting fuel pump

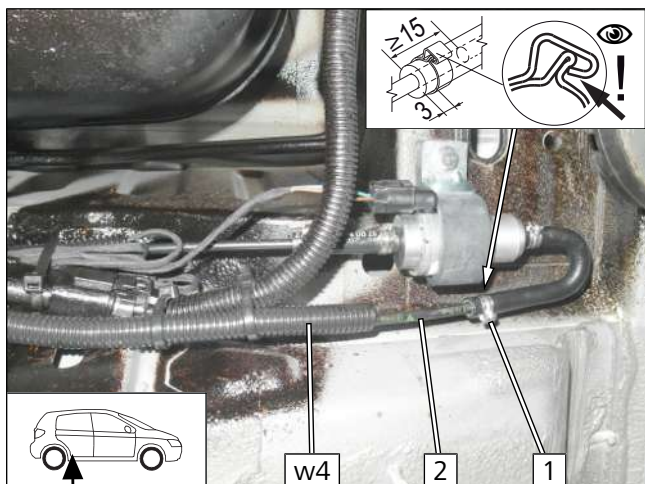


Fig. 52



Danger of damage to components

► Ensure sufficient distance from neighbouring components, correct if necessary.

1 Ø10 clamp

2 Fuel line of FuelFix in corrugated tube **w4**



10 Coolant

10.1 Hose routing diagram

'Island' coolant circuit

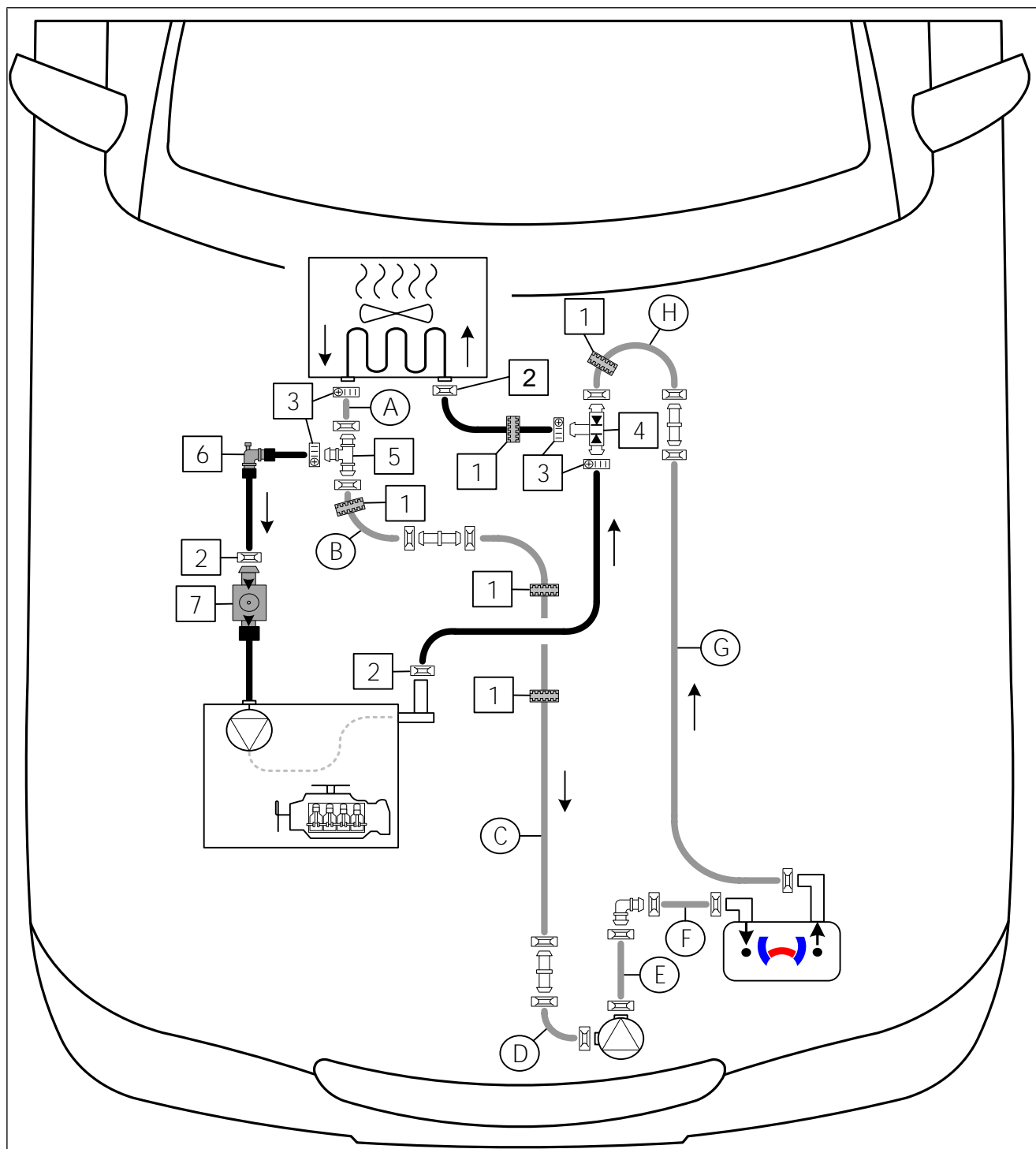





Fig. 53

- ▶ All spring clips without a specific designation  = Ø25; All connecting pipes  or  = Ø18x18
- ▶ **1** Black rubber isolator; **2** Original vehicle spring clip; **3** Ø16-27 hose clamp; **4** double non-return valve; **5** T-piece; **6** Original vehicle 90° connecting pipe with bleeder valve; **7** Original vehicle shut-off valve



10.2 Coolant circuit installation

Preparing hoses ① and ②

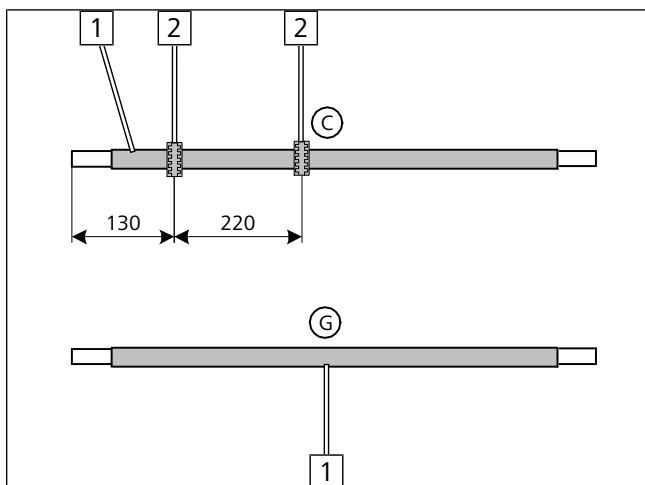


Fig. 54

- ▶ Push fabric protective hose **1** onto hoses ① and ②, cut to length and shrink.
- ▶ Position black (sw) rubber isolator **2** as shown.

Preparing coolant pump mount

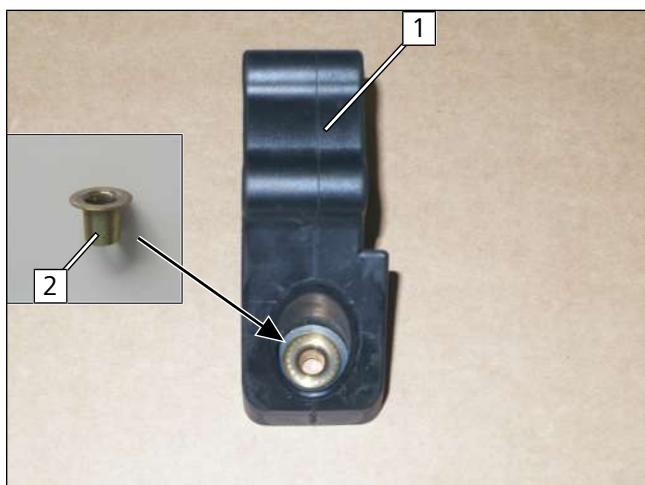


Fig. 55

- 1** Coolant pump mount
- 2** Sleeve

Premounting coolant pump

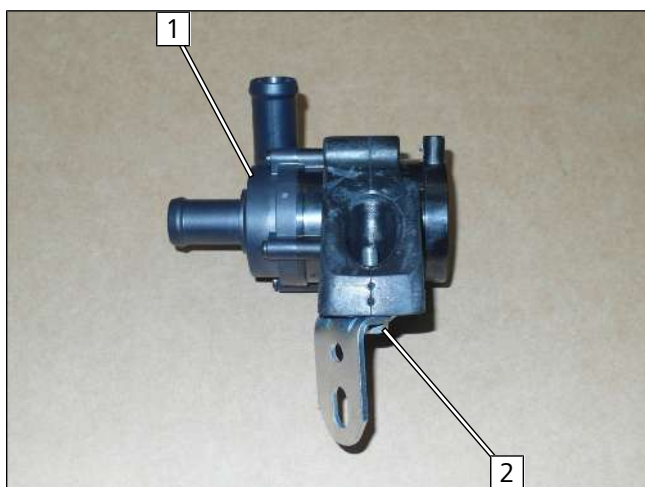


Fig. 56

- 1** Coolant pump
- 2** M6x25 bolt, angle bracket, coolant pump mount, flanged nut



Mounting coolant pump

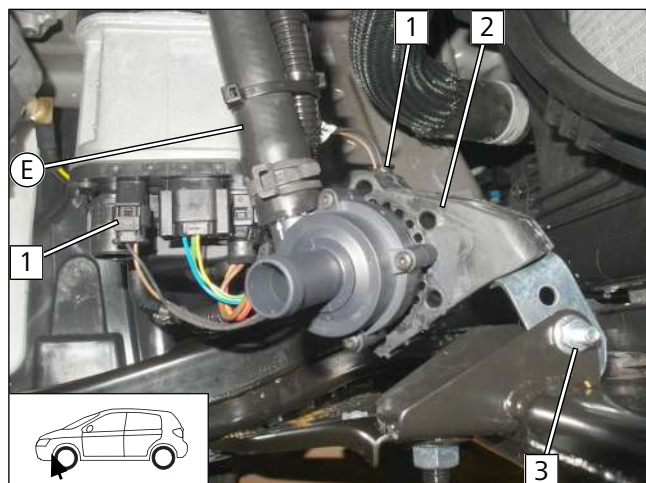


Fig. 57

- 1 Coolant pump wiring harness
- 2 Premounted coolant pump
- 3 M6x20 bolt, large diameter washer, premounted coolant pump, original vehicle hole, flanged nut

Preparing perforated bracket

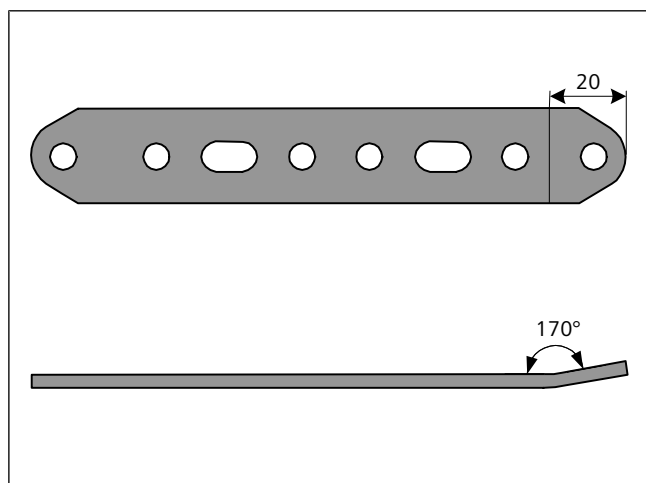


Fig. 58

Installing perforated bracket

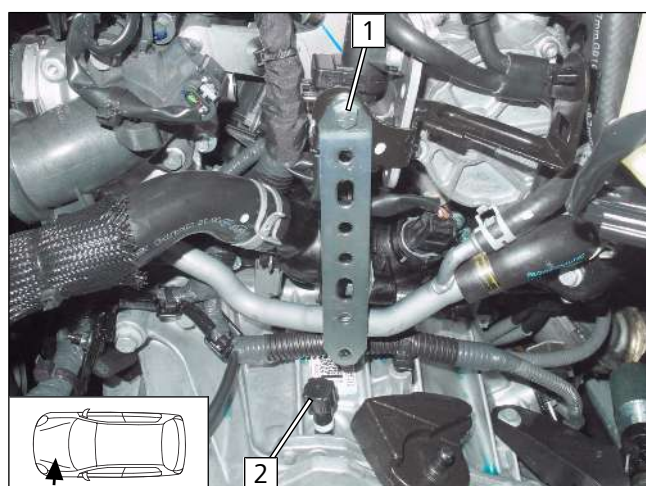


Fig. 59

- Dismantle original vehicle gearbox breather hose 2.
- 1 M6x20 bolt, prepared perforated bracket, original vehicle hole, flanged nut



Shortening original vehicle gearbox breather hose

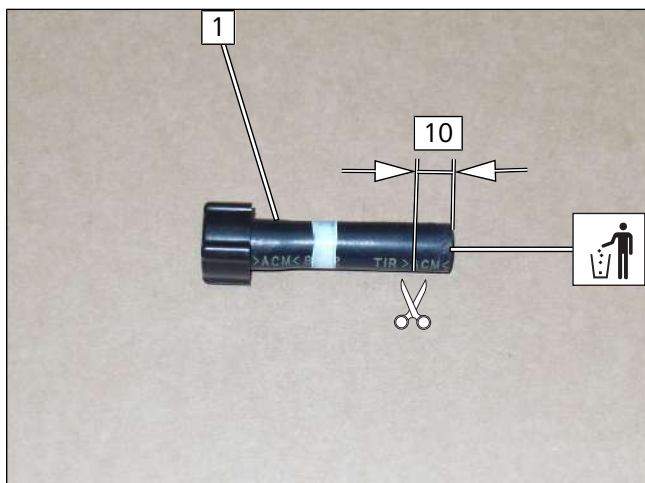


Fig. 60

1 Gearbox breather hose

► Reinstall gearbox breather hose.

Dismantling original vehicle hoses

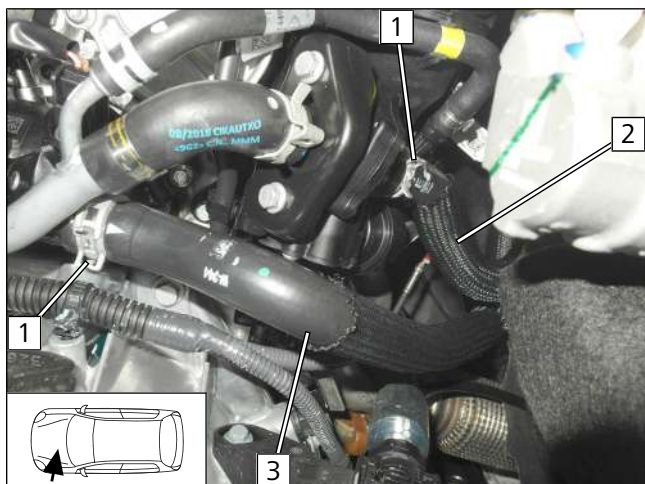


Fig. 61

► Original vehicle spring clip **1** will be reused.

2 Remove heat exchanger outlet/engine inlet hose

3 Remove engine outlet/heat exchanger inlet hose

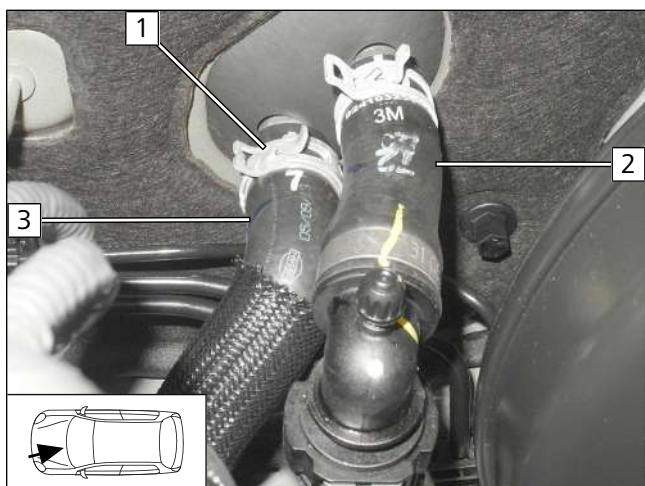


Fig. 62

► Original vehicle spring clip **1** will be reused.

2 Remove heat exchanger outlet/engine inlet hose

3 Remove engine outlet/heat exchanger inlet hose



Cutting point 1

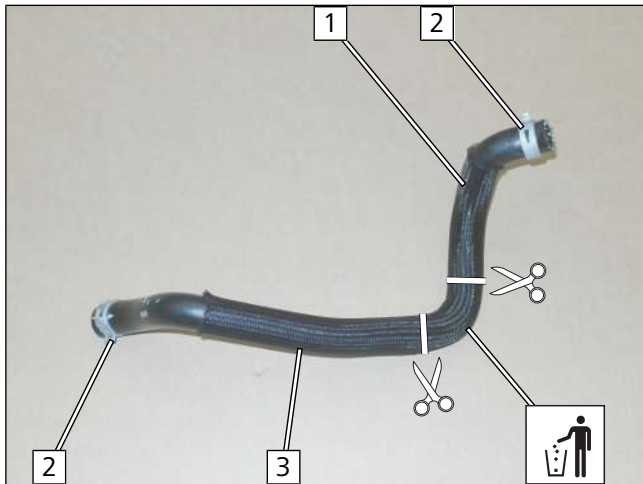


Fig. 63

► Remove original vehicle braided protection **3** completely.

- 1** Engine outlet / heat exchanger inlet hose
- 2** Original vehicle spring clip, will be reused

Cutting heat protection hose to length

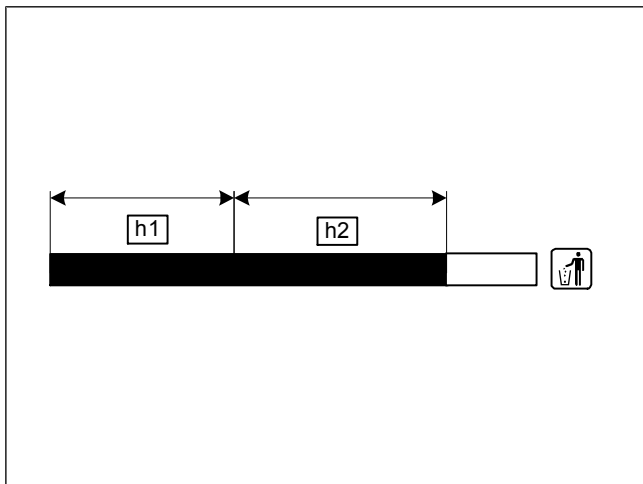


Fig. 64

- h1** 220 long heat protection hose
- h2** 250 long heat protection hose

Premounting double non-return valve

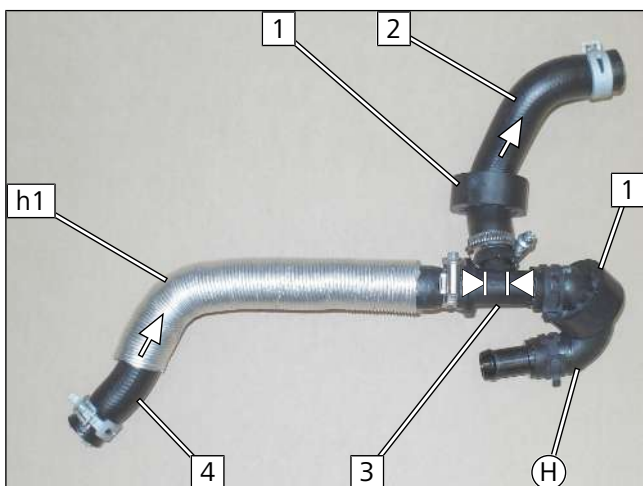


Fig. 65

► Produce all the following connections of the cooling system as shown in the hose routing diagram.

► Position heat protection hose **h1** onto engine outlet hose section **4**.

- 1** Black (sw) rubber isolator
- 2** Heat exchanger inlet hose section
- 3** Double non-return valve

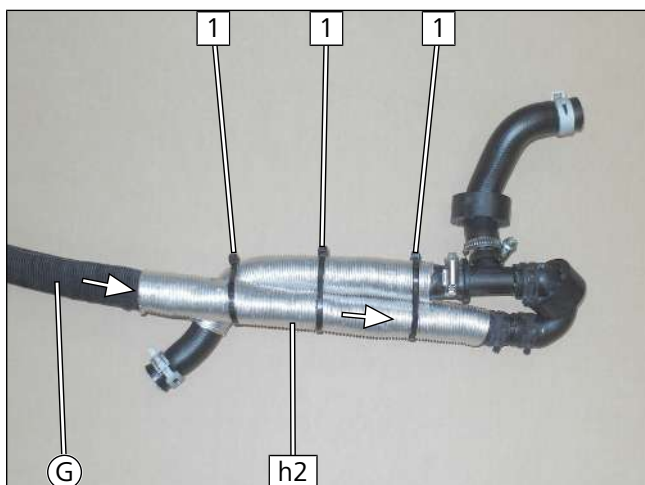


Fig. 66

► Position heat protection hose **h2** onto hose **G**.

- 1** Cable tie

Heat exchanger inlet connection

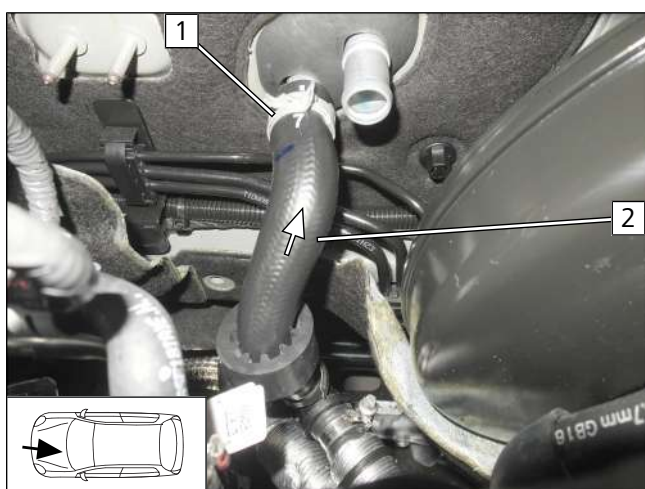


Fig. 67

- 1** Original vehicle spring clip
- 2** Heat exchanger inlet hose section

Engine outlet connection

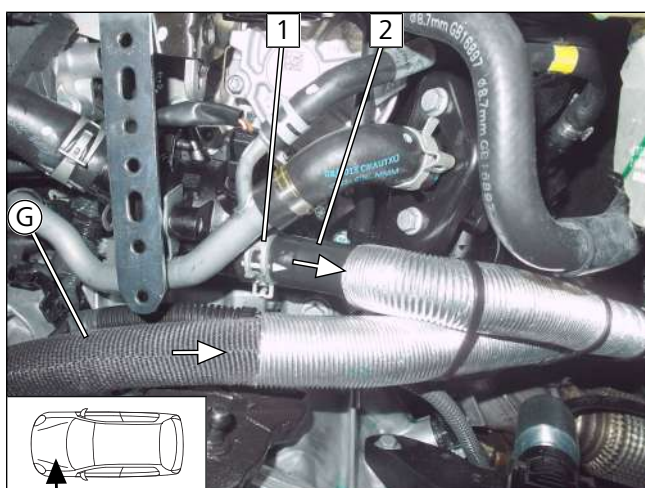


Fig. 68

- 1** Original vehicle spring clip
- 2** Engine outlet hose section



Routing in engine compartment

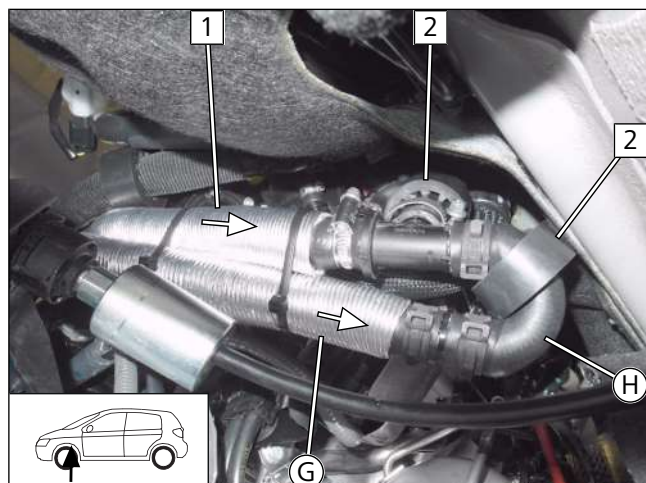


Fig. 69

► Position black (sw) rubber isolator **2** as shown.

1 Engine outlet hose section

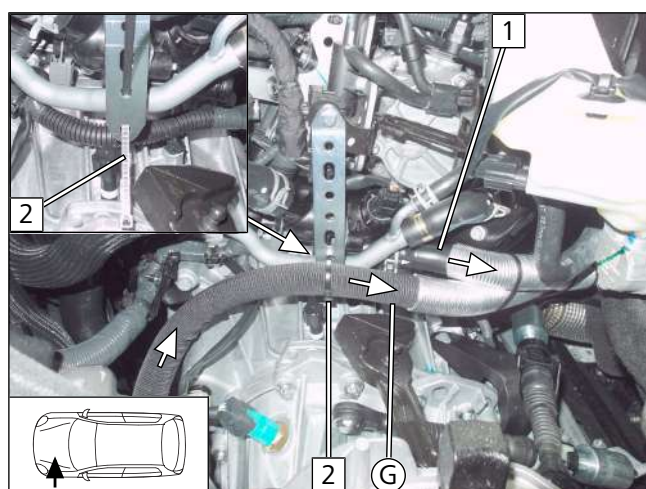


Fig. 70

1 Engine outlet hose section

2 Cable tie

Connection of hose **G** to heater outlet

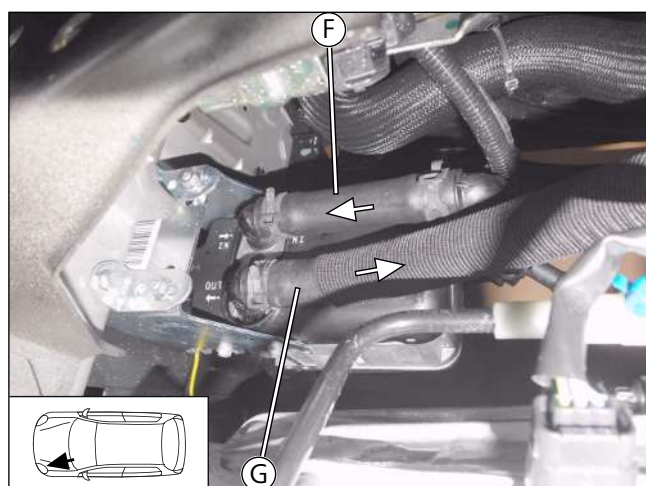


Fig. 71



Cutting point 2

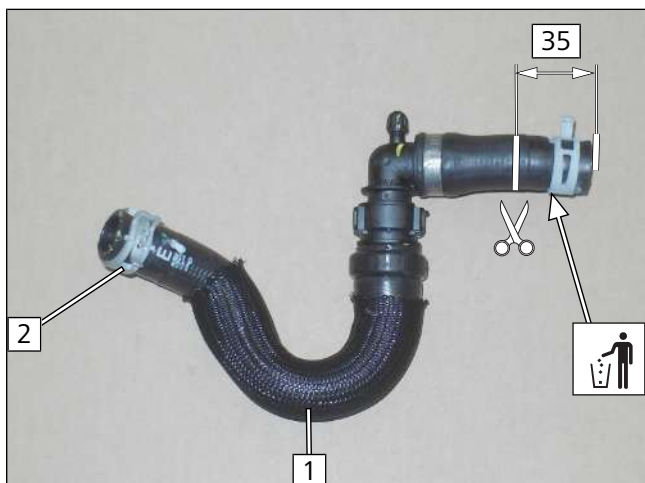


Fig. 72

- 1 Heat exchanger outlet / engine inlet hose
- 2 Original vehicle spring clip, will be reused

Premounting T-piece

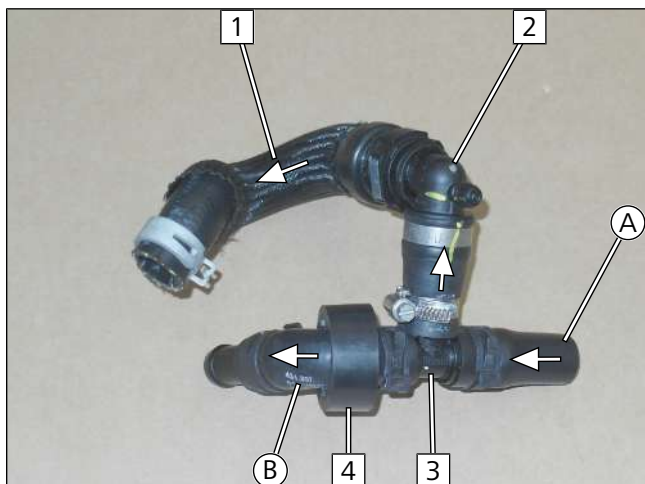


Fig. 73

- 1 Original vehicle hose section, engine inlet connection
- 2 Original vehicle 90° connecting pipe with bleeder valve
- 3 T piece
- 4 Black (sw) rubber isolator

Premounting hose ©

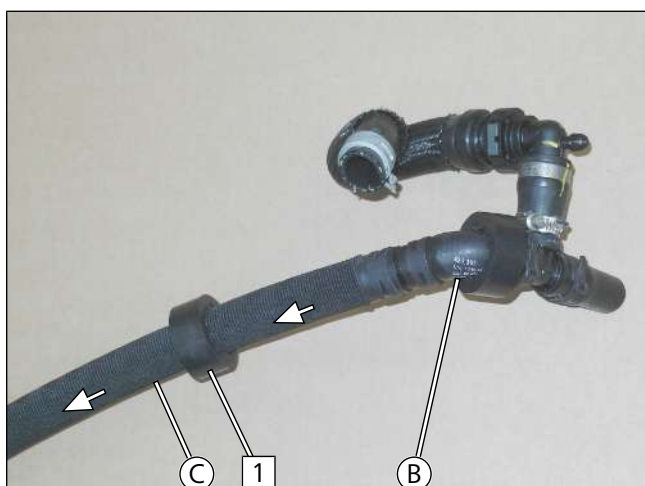


Fig. 74

- 1 Black (sw) rubber isolator



Heat exchanger outlet connection

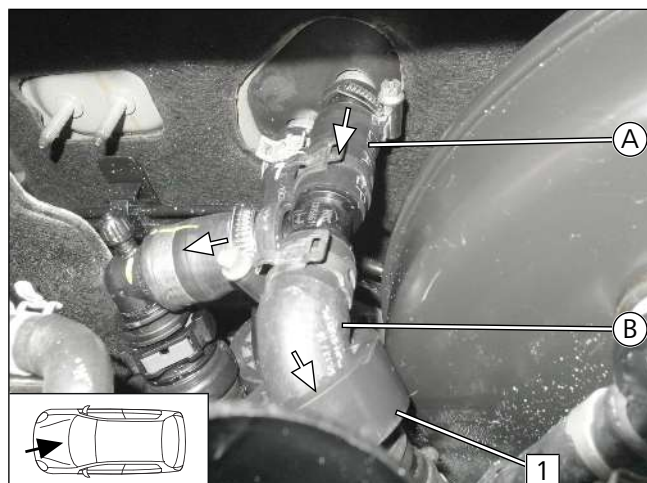


Fig. 75

- 1 Position black (sw) rubber isolator

Engine inlet connection

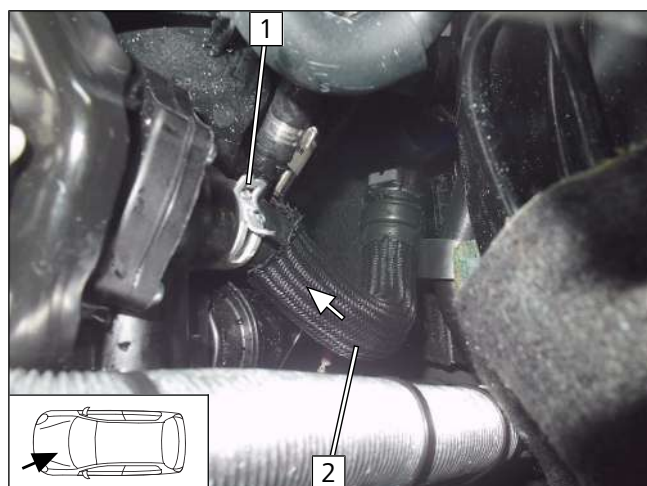


Fig. 76

- 1 Original vehicle spring clip
- 2 Engine inlet hose section

Routing in engine compartment

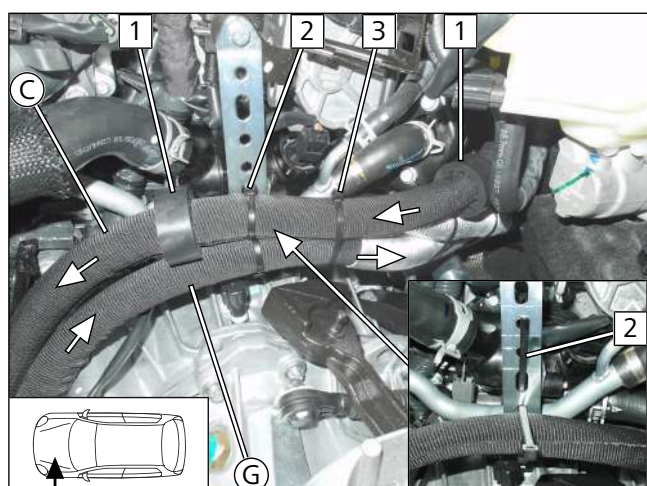


Fig. 77

- Position black (sw) rubber isolator 1.
- 2 Cable tie around hose C
- 3 Cable tie around hoses C and G



Coolant pump inlet connection

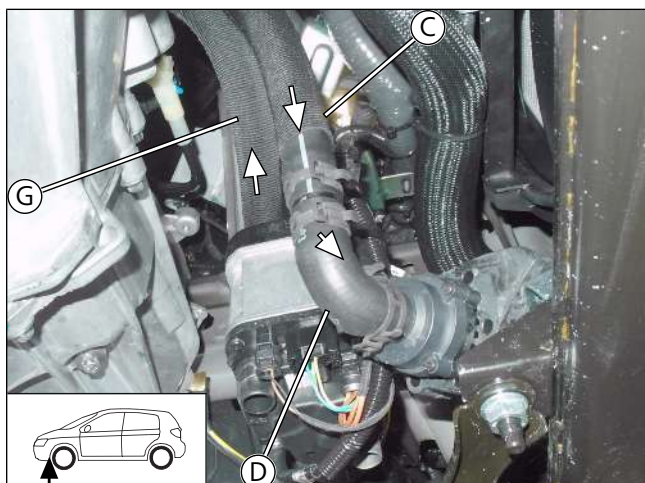


Fig. 78

Aligning and fastening hoses

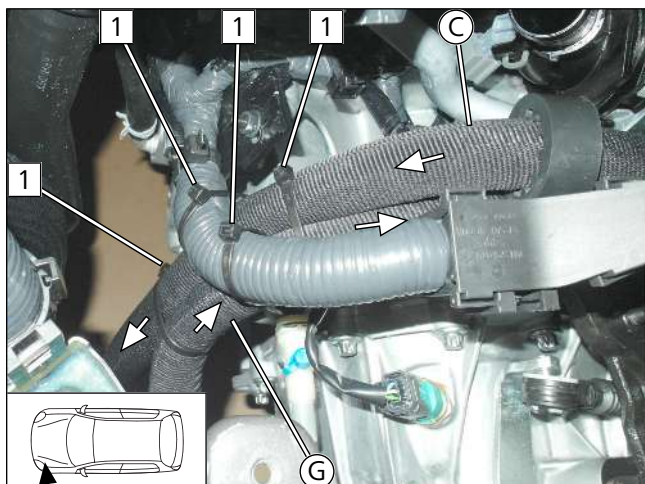


Fig. 79



Danger of damage to components

- Ensure sufficient distance from neighbouring components, correct if necessary.

1 Cable tie

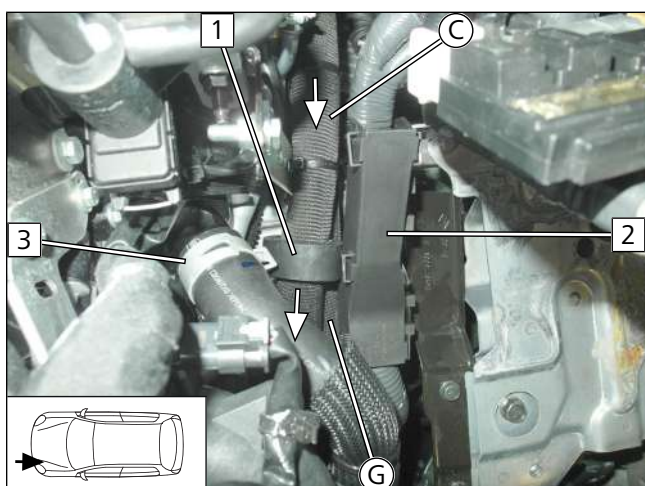


Fig. 80



Danger of damage to components

- Ensure sufficient distance between hoses **C** and **G** and original vehicle cable duct **2**, correct if necessary.
- Position black (sw) rubber isolator **1** between original vehicle cable duct **2** and original vehicle spring clip **3**.



11 Combustion air

Assigning combustion air intake pipe

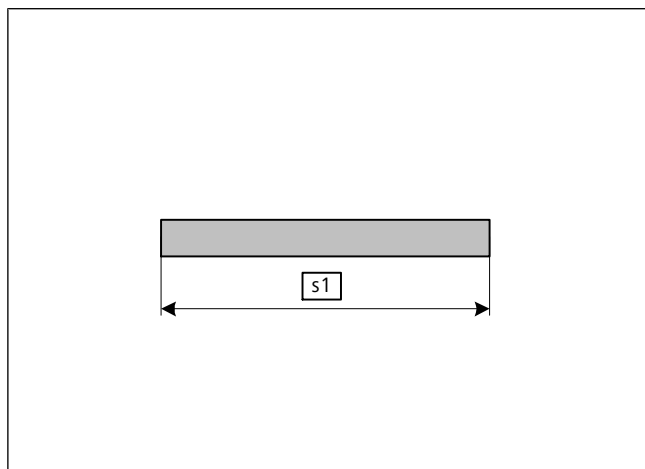


Fig. 81

s1 400

Premounting combustion air intake pipe **s1** and combustion air intake silencer

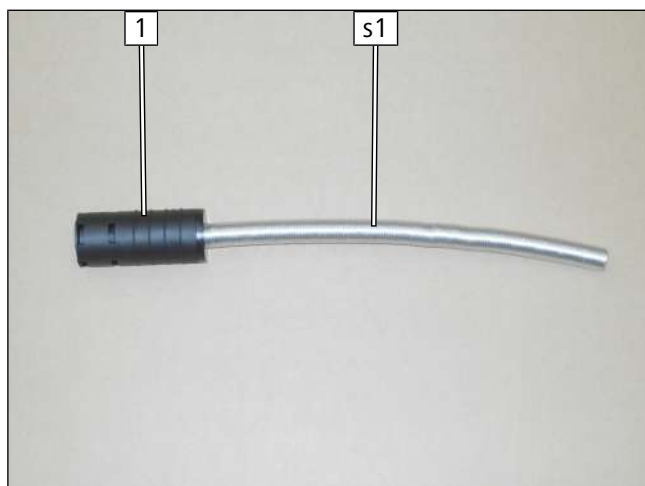


Fig. 82

1 Combustion air intake silencer

Mounting combustion air intake pipe **s1**



Fig. 83



Routing combustion air intake pipe **s1**

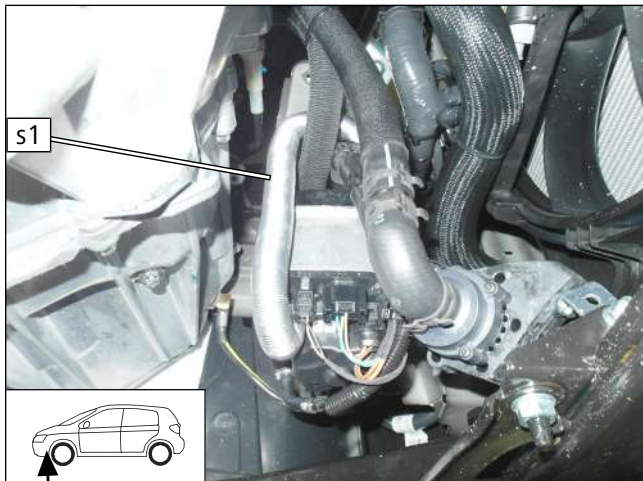


Fig. 84

Mounting combustion air intake silencer

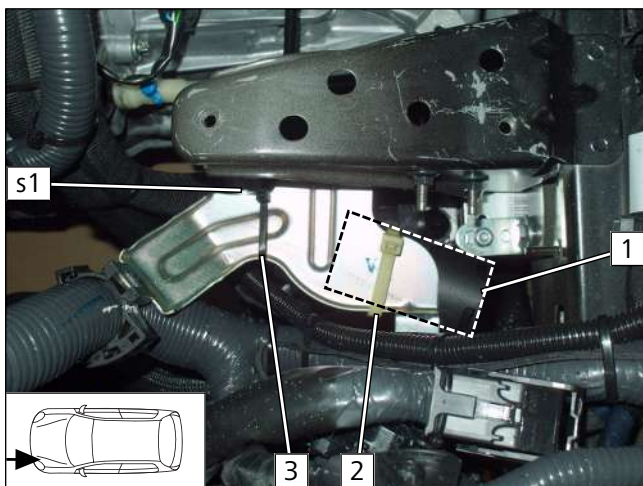


Fig. 85



Observe the installation instructions of the combustion air intake silencer.

- 1** Combustion air intake silencer
- 2** Yellow cable tie around combustion air intake silencer and original vehicle cross member
- 3** Cable tie around **s1** and original vehicle cross member



12 Exhaust

12.1 Mounting exhaust pipe

► Cut tab of wheel-well inner panel **1** as shown.

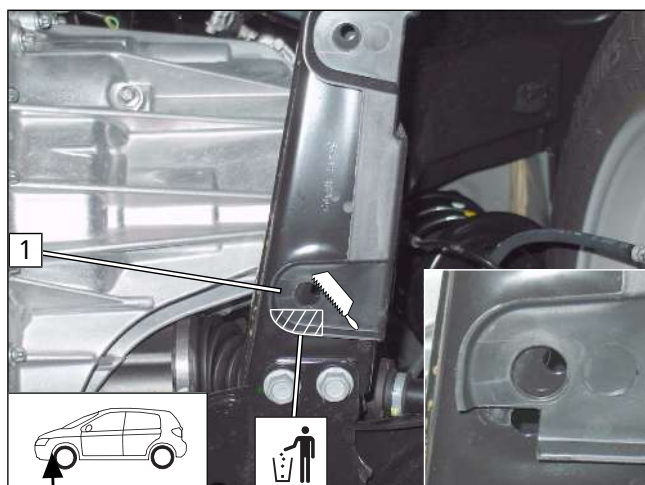


Fig. 86

Inserting rivet nut



Fig. 87

1 Existing hole, rivet nut

Cutting exhaust pipe to length

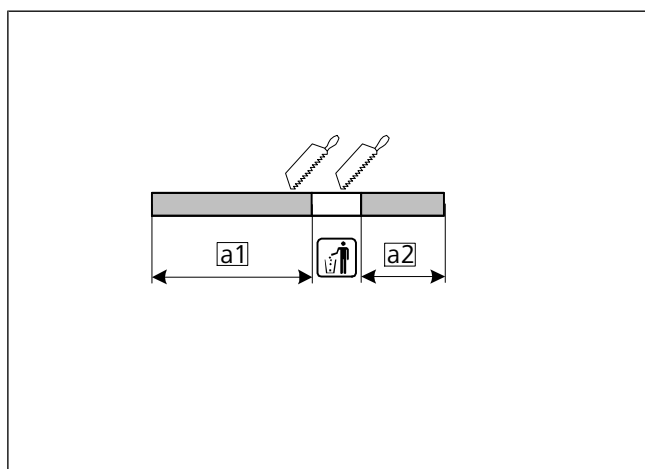


Fig. 88

a1 280

a2 110



Preparing perforated bracket

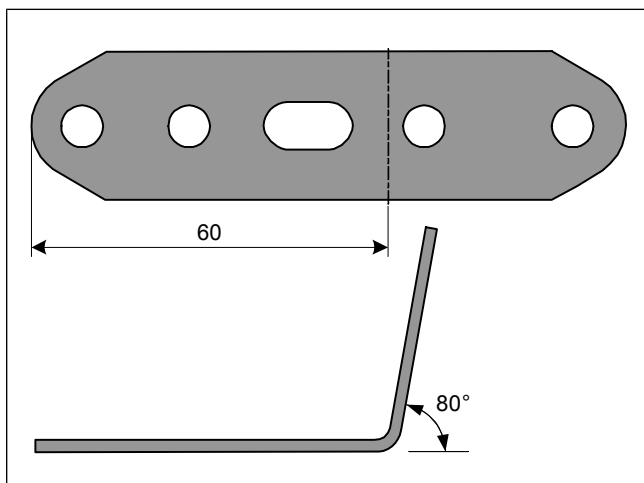


Fig. 89

Premounting exhaust silencer

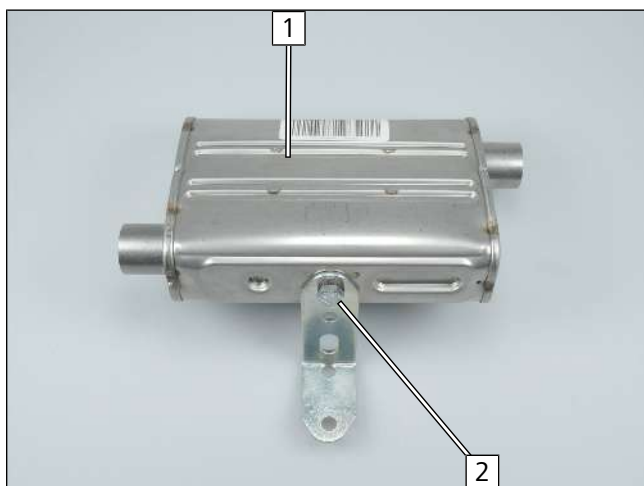


Fig. 90

- 1 Exhaust silencer
- 2 M6x16 bolt, spring lock washer, prepared perforated bracket

Premounting exhaust silencer

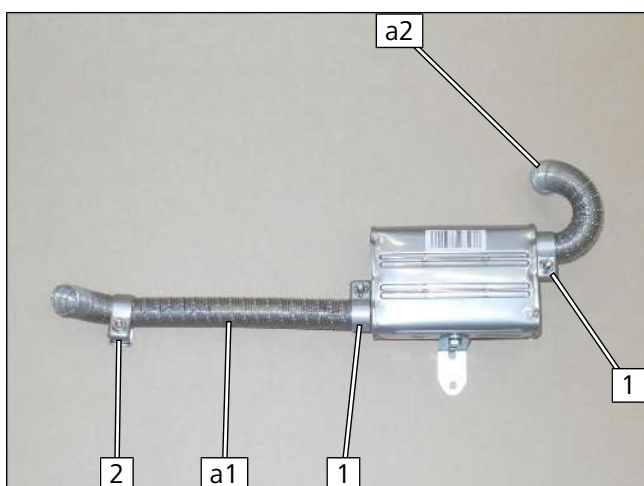


Fig. 91

- 1 Hose clamp
- 2 Hose clamp, mounted loosely



Mounting exhaust silencer

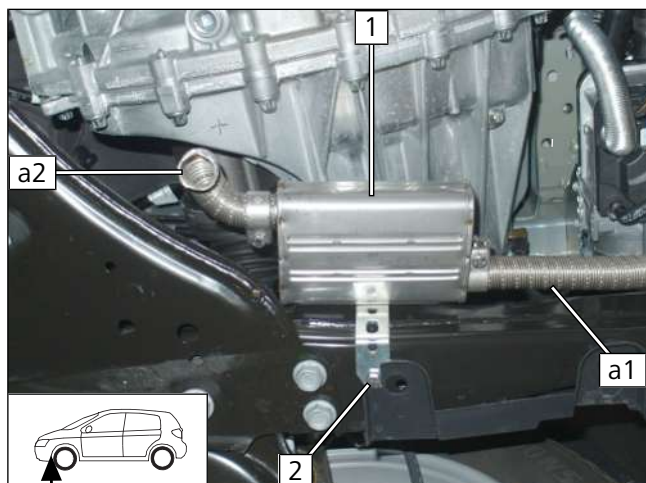
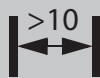


Fig. 92



Ensure sufficient distance between transmission and exhaust silencer, correct if necessary.



- 1 Premounted exhaust silencer
- 2 M6x20 bolt, spring lock washer, premounted exhaust silencer, rivet nut

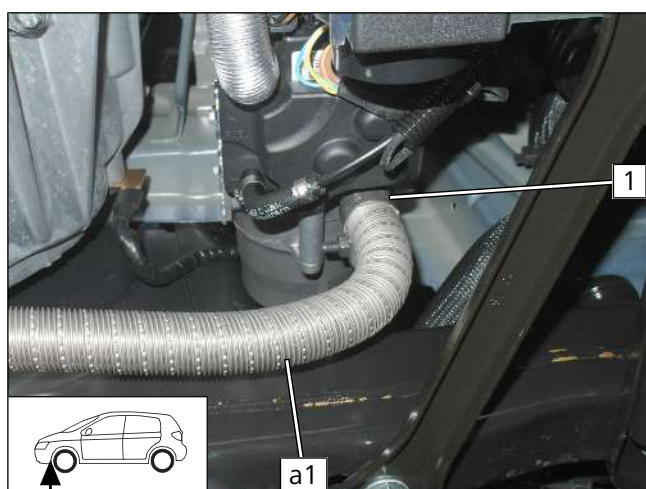


Fig. 93

- 1 Tighten hose clamp

12.2 Mounting exhaust end fastener

Removing insulation

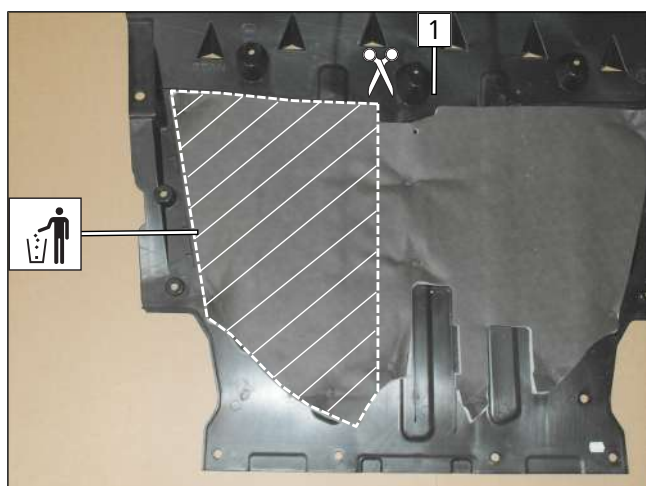


Fig. 94



Nissan Qashqai only

- 1 Underride protection



Work step E1

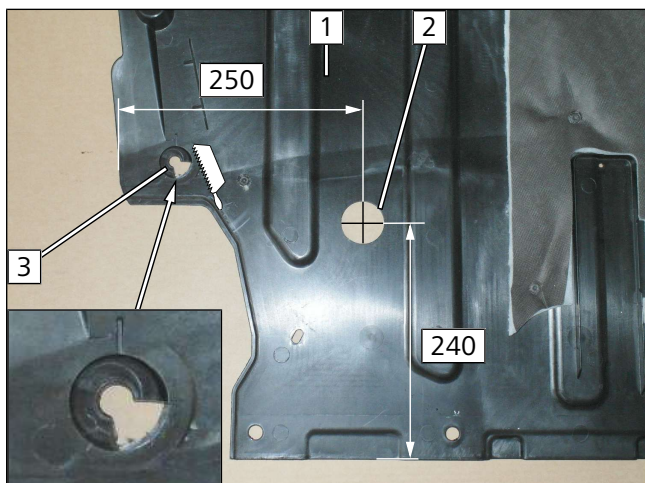


Fig. 95



Observe the EFIX installation instructions.

► Cut override protection **1** at position **3** as shown (will be needed for the fitting of the exhaust silencer).

2 Hole

Work step E3

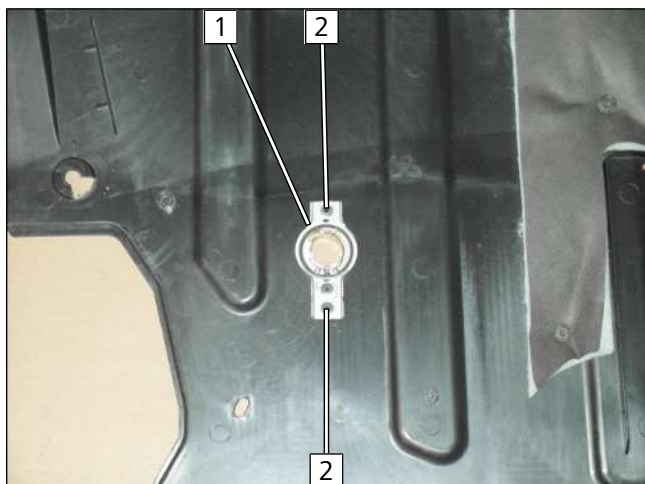


Fig. 96

1 EFIX

2 Hole pattern

Work step E4

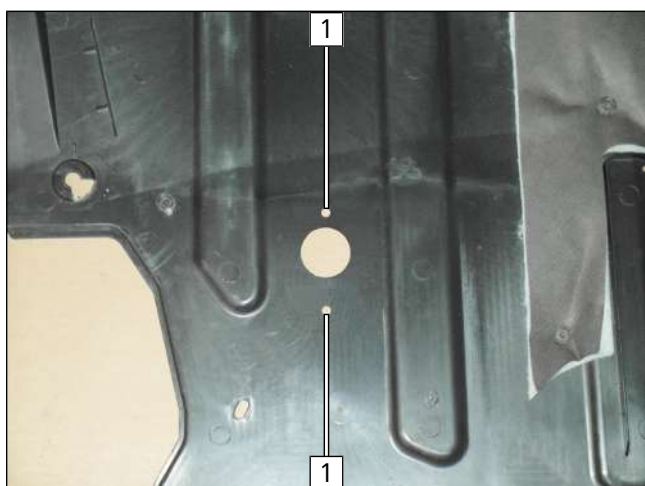


Fig. 97

1 Hole



Work step E5

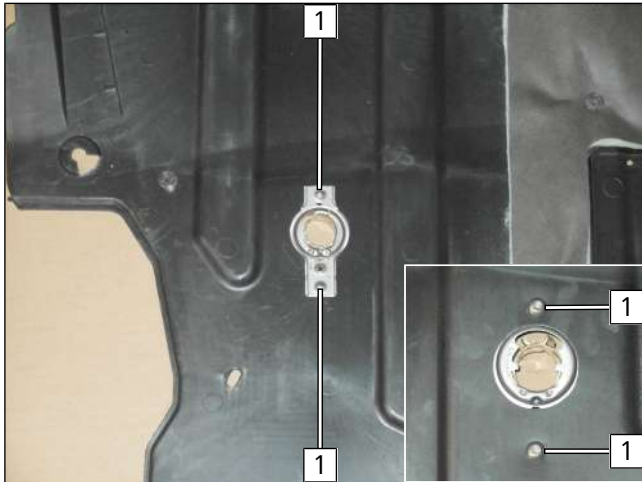


Fig. 98

1 5x13 self-tapping screw

Removing insulation (if present)

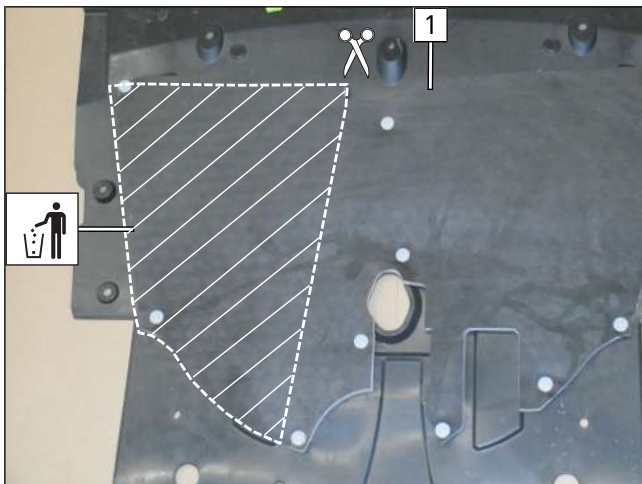



Fig. 99

 Renault Kadjar only

1 Underride protection

Work step E1

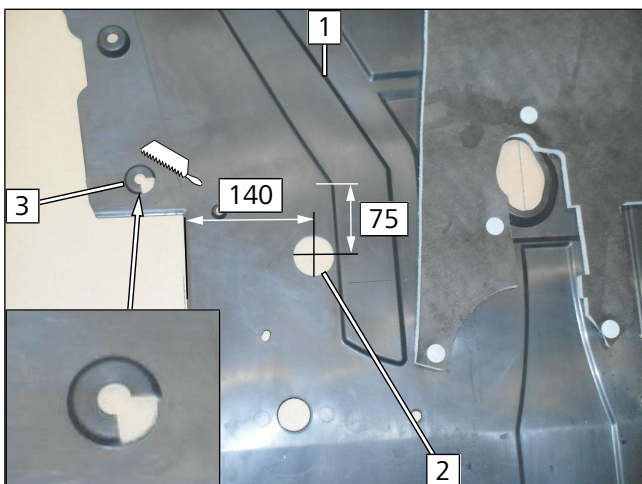



Fig. 100

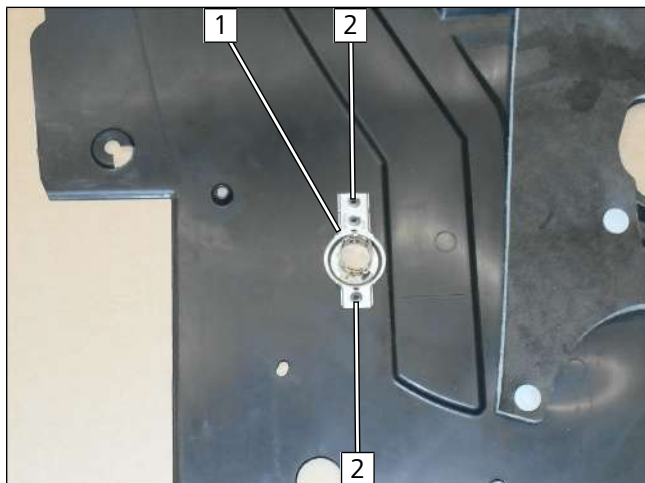
 **E** Observe the EFIX installation instructions.

► Cut underride protection **1** at position **3** as shown (will be needed for the fitting of the exhaust silencer).

2 Hole



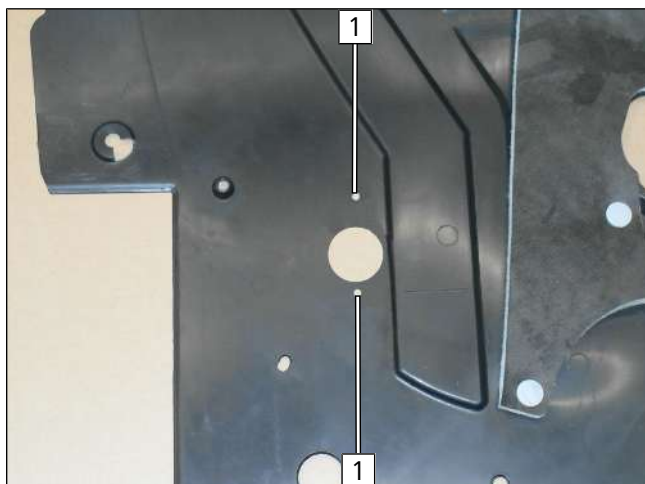
Work step E3



- 1** EFIX
- 2** Hole pattern

Fig. 101

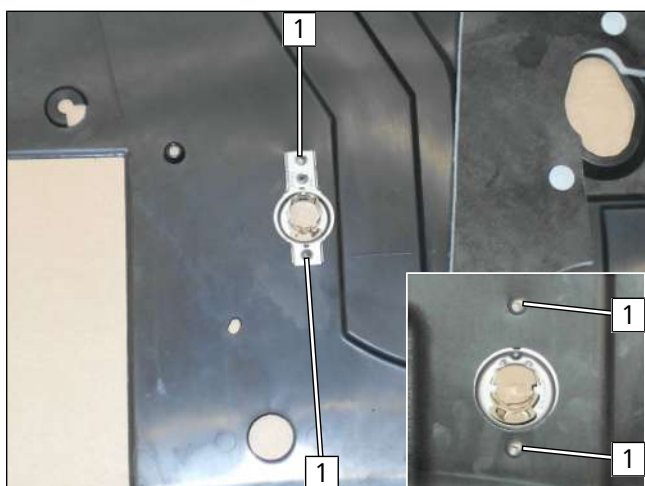
Work step E4



- 1** Hole

Fig. 102

Work step E5



- 1** 5x13 self-tapping screw

Fig. 103



13 Final work in engine compartment

Mounting underide protection

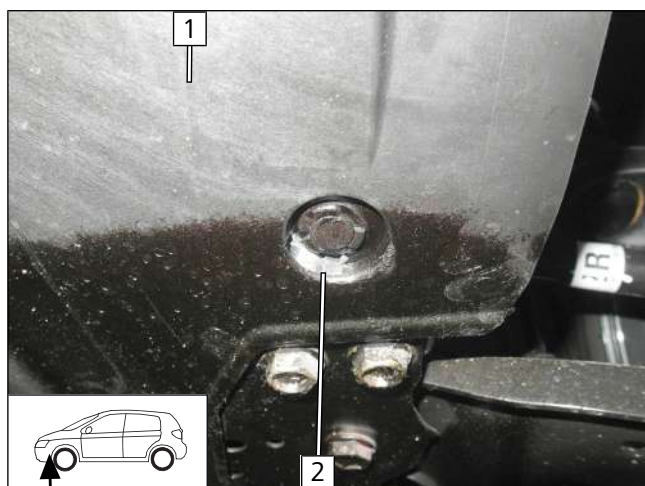


Fig. 104



Ensure sufficient distance from neighbouring components, correct if necessary.



- Ensure freedom of movement of the recess in underide protection **1** for the M6x20 bolt and the perforated bracket at position **2**, adapt if necessary.

Work steps E6 - E8

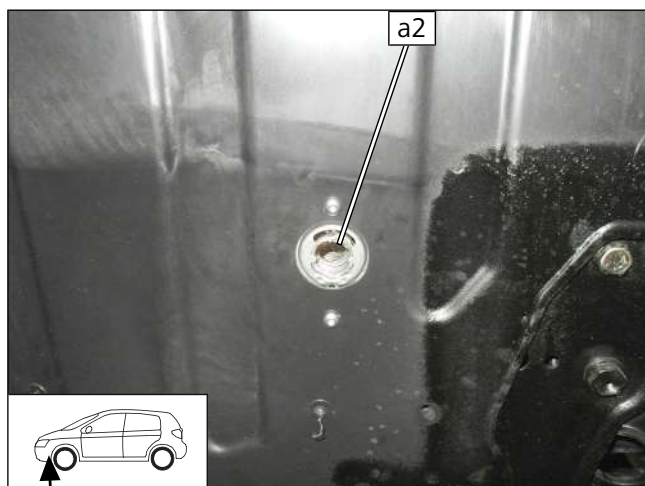


Fig. 105



Nissan Qashqai only



Observe the EFIX installation instructions.



Danger of damage to components

- Ensure sufficient distance from neighbouring components, correct if necessary.

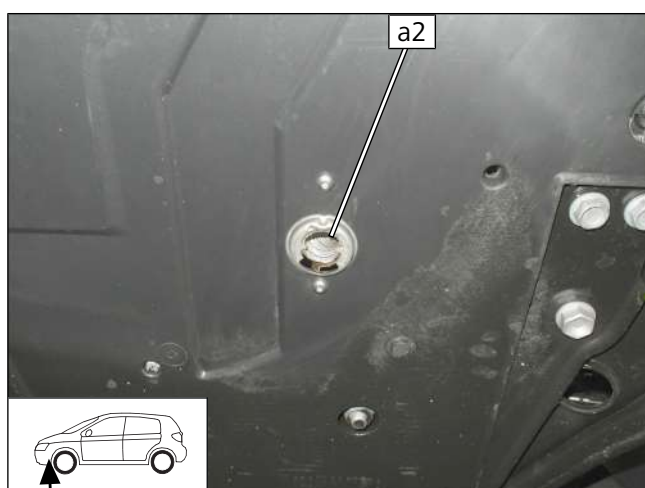


Fig. 106



Renault Kadjar only



Observe the EFIX installation instructions.



Danger of damage to components

- Ensure sufficient distance from neighbouring components, correct if necessary.



14 Electrical system of passenger compartment

14.1 Air-conditioning control

Integrate the air-conditioning control as per the separate installation documentation:



'**Webasto Standard**' A/C control installation documentation for Nissan Qashqai with AC / AAC



'**Webasto Comfort**' A/C control installation documentation for Nissan Qashqai with AAC



'**Webasto Standard**' A/C control installation documentation for Renault Kadjar with AC / AAC



'**Webasto Comfort**' A/C control installation documentation for Renault Kadjar with AAC



15 Electrical system of control elements

15.1 Nissan Qashqai

15.1.1 MCC option

Mounting MCC



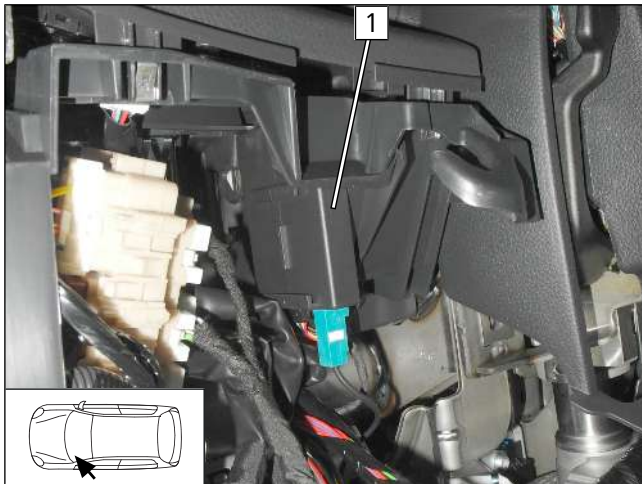
Observe the MultiControl CAR installation documentation.

- 1 MCC installation frame

Fig. 107

15.1.2 Remote option (Telestart)

Mounting receiver



Observe the Telestart installation documentation.

- Fasten receiver 1 using double-sided adhesive tape.

Fig. 108



Mounting aerial

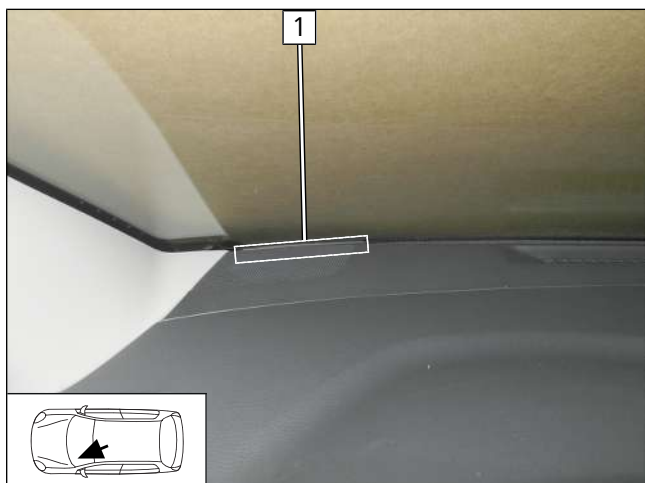


Fig. 109

1 Aerial

Mounting temperature sensor, only in case of T100 HTM

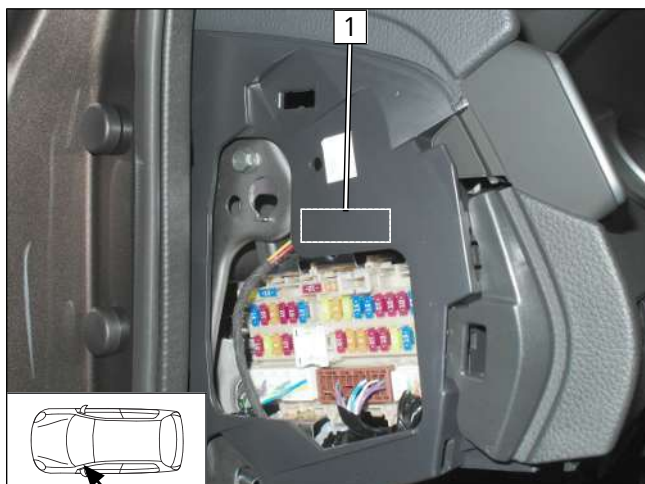


Fig. 110

► Fasten temperature sensor 1 with double-sided adhesive tape behind the trim at the marking.

15.1.3 ThermoCall option

Mounting receiver

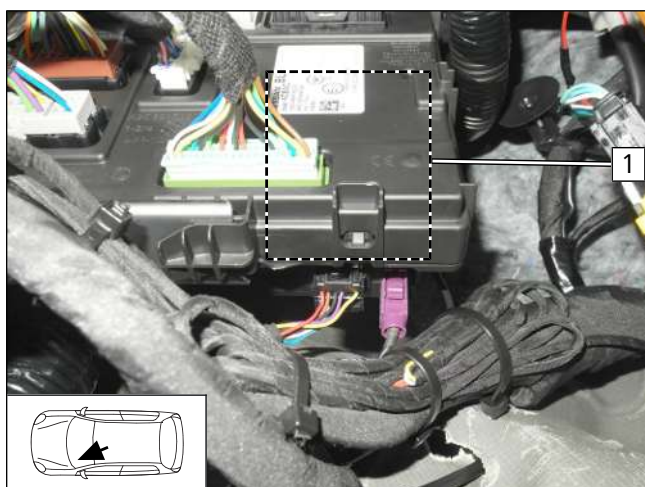


Fig. 111



Observe the ThermoCall installation documentation.

► Fasten receiver 1 with double-sided adhesive tape behind the original vehicle box at the marking.



Mounting aerial (optional)

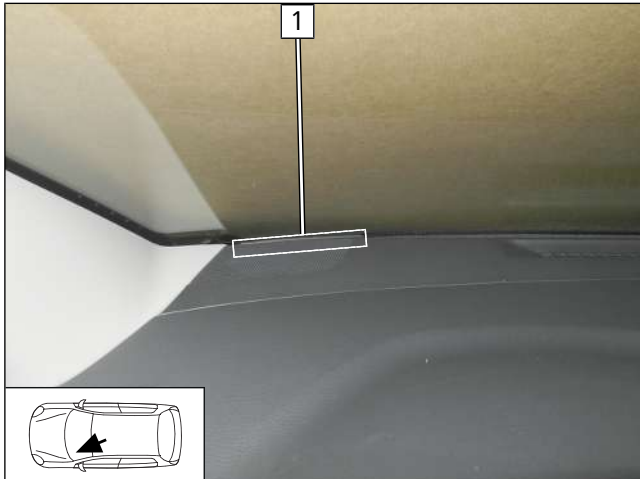


Fig. 112

- 1 Aerial

15.2 Renault Kadjar

15.2.1 MCC option

Mounting MCC

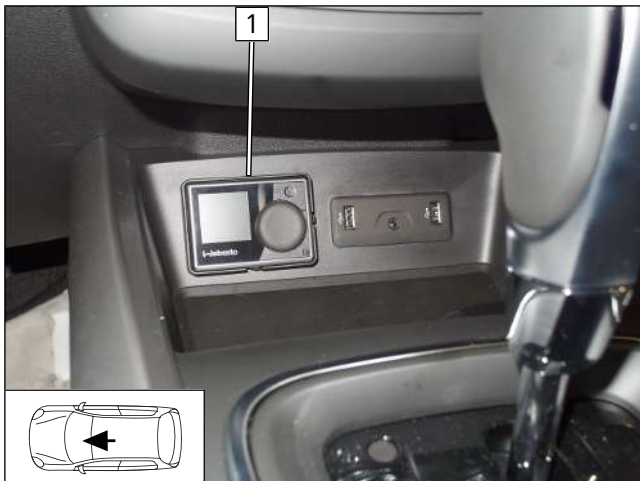


Fig. 113



Observe the MultiControl CAR installation documentation.

- 1 MCC installation frame

15.2.2 Remote option (Telestart)

Preparing receiver bracket

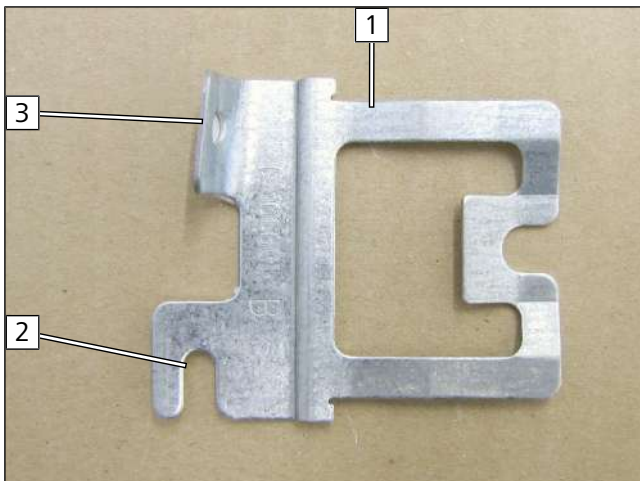


Fig. 114

- 1 Telestart receiver bracket
- 2 Enlarge slot to 6mm
- 3 Bend tab by 90°



Mounting receiver

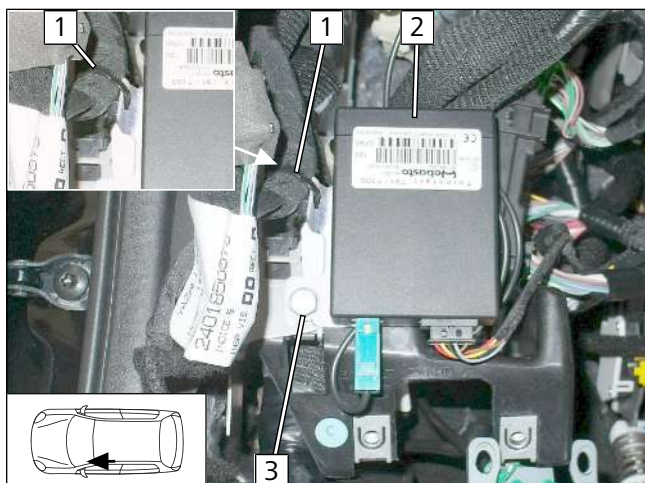


Fig. 115



Observe the Telestart installation documentation.

- 1 Cable tie
- 2 Receiver
- 3 Original vehicle bolt, Telestart receiver bracket, original vehicle thread

Mounting aerial

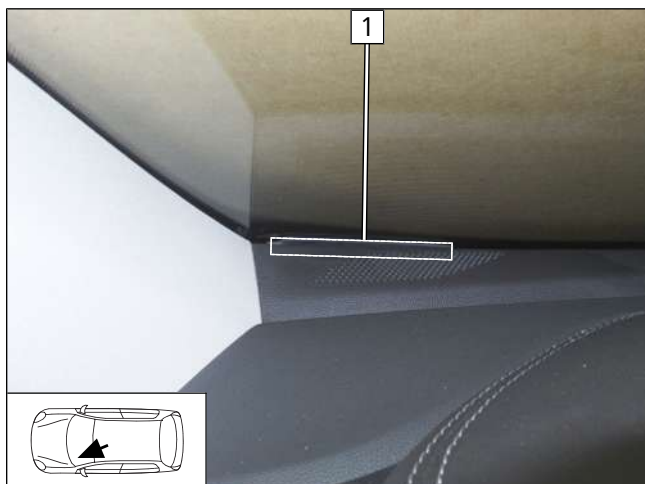


Fig. 116

- 1 Aerial

Mounting temperature sensor, only in case of T100 HTM

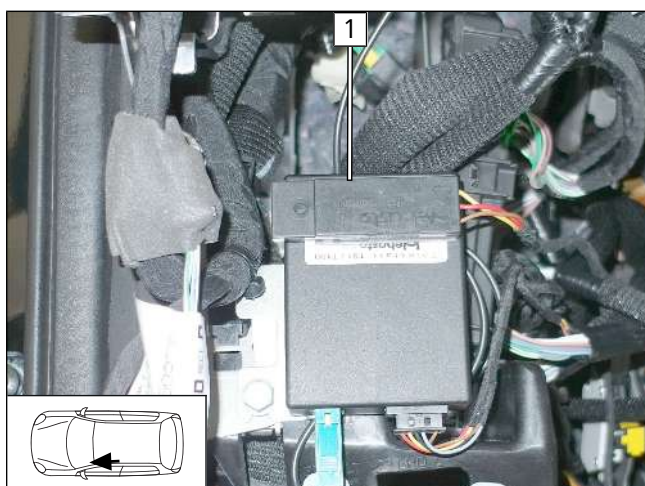


Fig. 117

- Fasten temperature sensor 1 using double-sided adhesive tape.



15.2.3 ThermoCall option

Mounting receiver

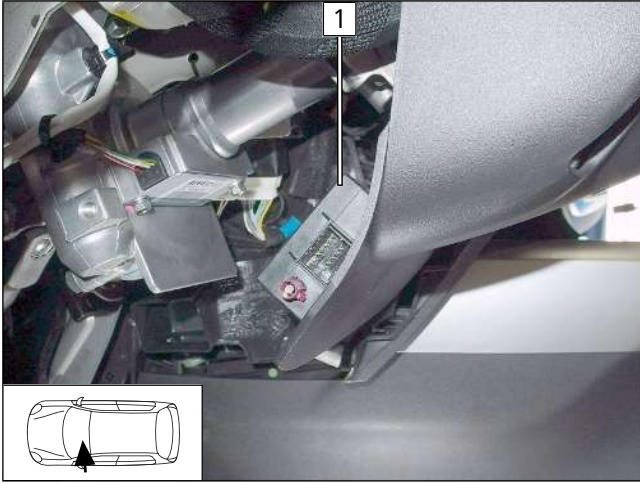



Fig. 118

 Observe the ThermoCall installation documentation.

► Fasten receiver **1** using double-sided adhesive tape.

Mounting aerial (optional)

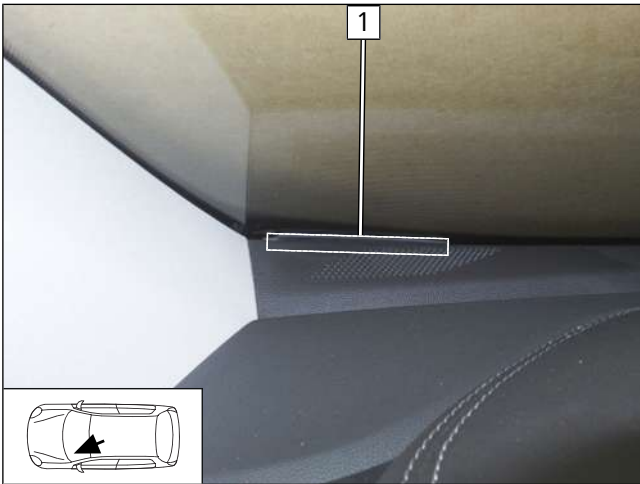


Fig. 119

1 Aerial



16 Final Work



Further information can be found in the vehicle manufacturer's technical documentation.

- ▶ Mount removed parts in reverse order.



- ▶ Check all hoses, clamps and all electrical connections for firm seating.
- ▶ Insulate and tie back loose lines
- ▶ Spray heater and electrical components with anti-corrosion wax (Tectyl 100K).
- ▶ Connect the battery.



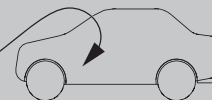
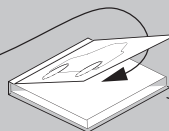
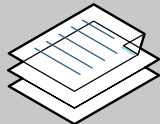
Only use manufacturer-approved coolant.

- ▶ Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.



Further information can be found in the general installation and operating instructions of the Webasto components.

- ▶ Program MultiControl CAR, teach Telestart transmitter
- ▶ If the fan function or A/C control panel settings need to be checked, see the installation documentation in the additional 'Webasto Standard' A/C control or 'Webasto Comfort' kit, section Final work
- ▶ Initial start-up and function check
- ▶ Affix 'Switch off parking heater before refueling' caution label in area of filler neck



These are the original instructions. The German language is binding.
You can request your language if it is missing. The telephone number of each country can be found in the Webasto service centre leaflet or the website of the respective Webasto representative of your country.

Ident No. 1327231A_EN • 08/19 • Errors and omissions excepted • © Webasto Thermo & Comfort SE • 2019

Webasto Thermo & Comfort SE
Postfach 1410
82199 Gilching
Germany

Company address:
Friedrichshafener Str. 9
82205 Gilching
Germany

Technical Extranet: <https://dealers.webasto.com>



WWW.WEBASTO.COM



17 FuelFix template



100mm

0

100mm

Scale 1:1
Compare size of printout with dimension lines.
Maximum permitted tolerance 2%.
Set the printer settings to no 'margin' or 'minimise margins' and 100% of the normal size.

