

# K Installation documentation

for Thermo Top Evo water heater

'Inline' coolant circuit with engine preheating

Renault Espace

Left-hand drive vehicle

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Renault	Espace	RFC	2019	e2* 2007/46* 0470*...

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displacement [cm <sup>3</sup> ]	Engine code
2.0D	Diesel	Euro 6d Temp	6-speed DKG	147	1997	M9R

Validity	Equipment variants	Model
		Espace
Verified equipment variants	3 zone automatic air-conditioning	x
	LED main headlights	x
	LED daytime running lights	x
	Automatic Start-Stop system	x
	Start button with keycard	x
	All-wheel steering	x
	Heated windscreen	x
Unverified equipment variants	Sun protect windscreen	x
	2 zone automatic air-conditioning	x

Total installation time	Note
10 hours	

---

# Contents

<b>1</b>	<b>List of abbreviations</b>	<b>3</b>	<b>14</b>	<b>Electrical system of passenger compartment</b>	<b>43</b>
<b>2</b>	<b>Installation notes</b>	<b>4</b>	14.1	Air-conditioning control	43
2.1	Information on Validity	4	<b>15</b>	<b>Electrical system of control elements</b>	<b>44</b>
2.2	Components used	4	15.1	MCC option	44
2.3	Information on Total Installation Time	4	15.2	Remote option (Telestart)	44
2.4	Installation recommendations	4	15.3	ThermoCall option	45
<b>3</b>	<b>About this document</b>	<b>5</b>	<b>16</b>	<b>Final Work</b>	<b>47</b>
3.1	Purpose of the document	5	<b>17</b>	<b>FuelFix template</b>	<b>49</b>
3.2	Warranty and liability	5			
3.3	Safety	5			
3.4	Using this document	6			
<b>4</b>	<b>Technical Information</b>	<b>7</b>			
<b>5</b>	<b>Preparations</b>	<b>8</b>			
5.1	Vehicle preparation	8			
5.2	Heater preparation	8			
<b>6</b>	<b>Installation overview</b>	<b>9</b>			
<b>7</b>	<b>Electrical system of engine compartment</b>	<b>10</b>			
<b>8</b>	<b>Mechanical system</b>	<b>12</b>			
8.1	Preparing installation location	12			
8.2	Premounting heater	15			
8.3	Heater mounting	16			
<b>9</b>	<b>Coolant</b>	<b>18</b>			
9.1	Hose routing diagram	18			
9.2	Coolant circuit installation	19			
<b>10</b>	<b>Fuel</b>	<b>25</b>			
10.1	Routing fuel line	25			
10.2	Installing FuelFix	29			
10.3	Fuel pump connection	33			
<b>11</b>	<b>Combustion air</b>	<b>34</b>			
<b>12</b>	<b>Exhaust</b>	<b>36</b>			
12.1	Mounting exhaust pipe	36			
12.2	Mounting exhaust end fastener	38			
<b>13</b>	<b>Final work in engine compartment</b>	<b>41</b>			

---

# 1 List of abbreviations

AAC	Automatic air-conditioning
DKG	Dual clutch transmission
DP	Fuel pump
EFIX	Exhaust end fastener
FF	FuelFix (tank extracting device)
Fig.	Figure
HG	Heater
MCC	MultiControl (control element)
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 of Thermo Top Evo	In accordance with price list
Installation kit for Renault Espace diesel 2019	1327460A
Additional 'Webasto Standard' A/C control kit for Renault Espace/Talisman AAC	1324475_
Additional 'Webasto Comfort' A/C control kit for Renault Espace/Talisman AAC	1325545_
MultiControl installation frame, for installation of MultiControl CAR	9030077_
In case of Telestart, control element, as well as indicator lamp in consultation with end customer	In accordance with price list

### 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  $\frac{1}{4}$  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.

---

## 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.



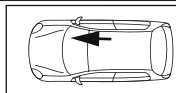
Note on a special technical feature

#### 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
✓	Action
►	Necessary action
⇒	Result of an action
<b>1</b> / <b>12</b> / <b>a1</b>	Position numbers for the image descriptions
<b>①</b> / <b>⑫</b> / <b>Ⓐ</b>	Position numbers for the image descriptions for electrical wires and wiring harnesses 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 mm<sup>2</sup>
- Crimping pliers for cable lugs 0.5 – 10 mm<sup>2</sup>
- Crimping pliers for male connector 0.14 – 6 mm<sup>2</sup>
- Crimping pliers for connector 0.25 – 6 mm<sup>2</sup>
- Torque wrench for 2.0 - 10 Nm
- Deep-hole marker
- Metric thread-setter kit
- Webasto Thermo Test Diagnosis with current software

## 5 Preparations

### 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"> <li>▶ Open the fuel tank cap</li> <li>▶ Ventilate the fuel tank</li> <li>▶ Close the fuel tank cap again</li> <li>▶ Depressurise the cooling system</li> </ul>	
Engine compartment and body	<ul style="list-style-type: none"> <li>▶ Complete air filter box</li> <li>▶ Engine cover</li> <li>▶ Front wheel on the driver's side</li> <li>▶ Engine underride protection</li> <li>▶ Underbody trim on the driver's side</li> <li>▶ Tank underbody trim on the driver's side</li> <li>▶ Bumper trim</li> <li>▶ Headlights on the driver's side</li> </ul>	
Passenger compartment	<ul style="list-style-type: none"> <li>▶ Side instrument panel trim on the driver's side</li> <li>▶ Door sill trim on the driver's side</li> <li>▶ Lower instrument panel trim on the driver's side</li> <li>▶ Lower A-pillar trim on the driver's side</li> <li>▶ Centre console trim on the driver's and front passenger's side</li> <li>▶ Lower instrument panel trim on the driver's side</li> <li>▶ Rear bench seat in the middle and on the front passenger's side</li> <li>▶ Tank fitting service lid</li> </ul>	

### 5.2 Heater preparation

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



## 6 Installation overview

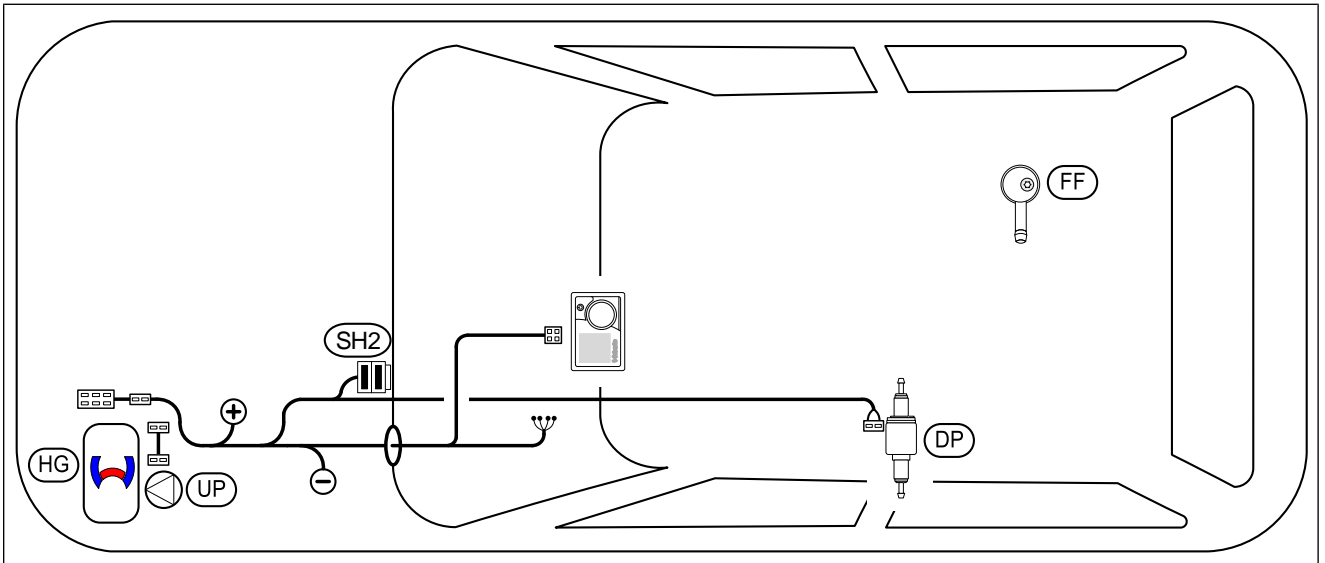


Fig. 1

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

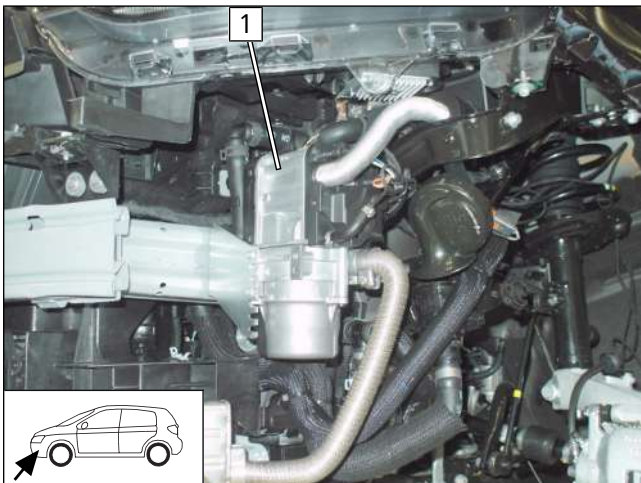


Fig. 2

1 Heater



## 7 Electrical system of engine compartment

### Drilling hole

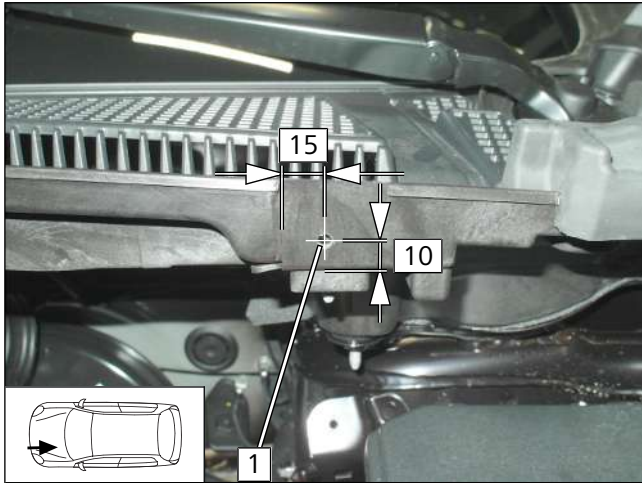


Fig. 3

- 1 Ø6 hole

### Premounting retaining plate of SH2

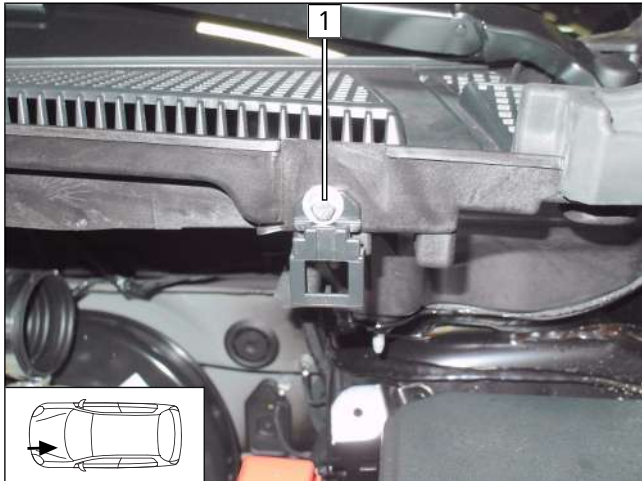


Fig. 4

- 1 M5x16 bolt, large diameter washer, retaining plate SH2, drilled hole, large diameter washer, nut

### Installing SH2



Fig. 5

- 1 SH2 with fuse F1 and F2



## Connecting positive wire

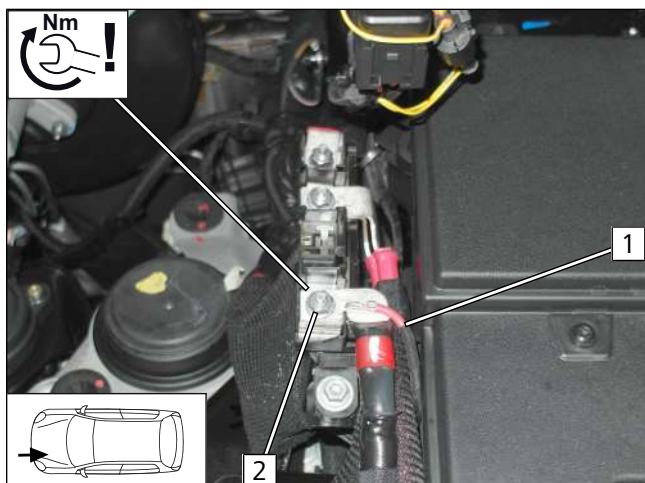


Fig. 6



### DANGER

Fire hazard due to insufficient tightening torque

► Observe tightening torque

- 1 Positive wire
- 2 Positive distributor

## Connecting earth wire

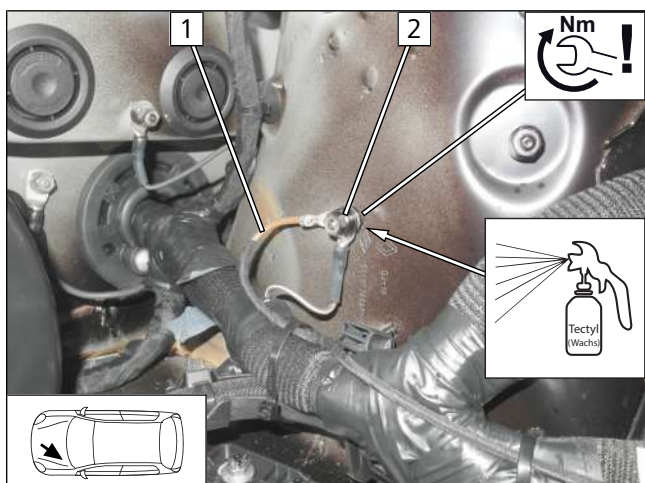


Fig. 7



### DANGER

Fire hazard due to insufficient tightening torque

► Observe tightening torque

- 1 Earth wire
- 2 Earth support point

## Passenger compartment wiring harness pass through

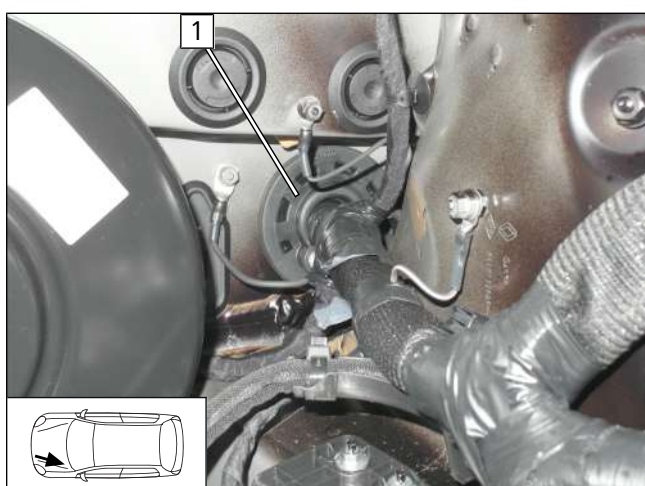


Fig. 8

- 1 Passenger compartment wiring harness pass through



## 8 Mechanical system

### 8.1 Preparing installation location

#### Preparing bracket

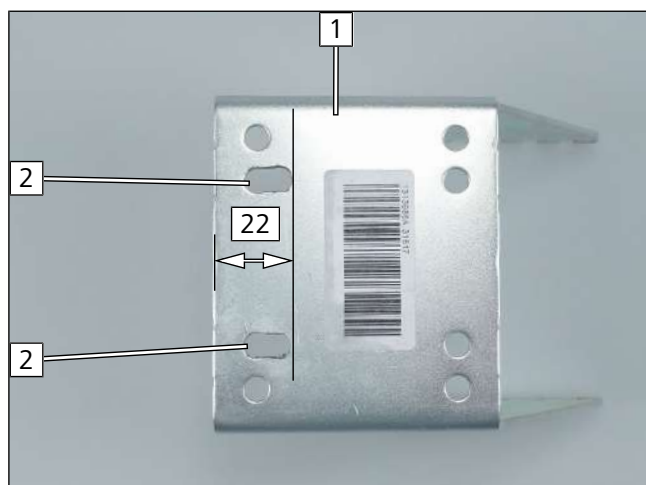


Fig. 9

► Enlarge available holes at positions **2** to form oblong holes as shown in the Fig..

**1** Bracket

#### Removing horn

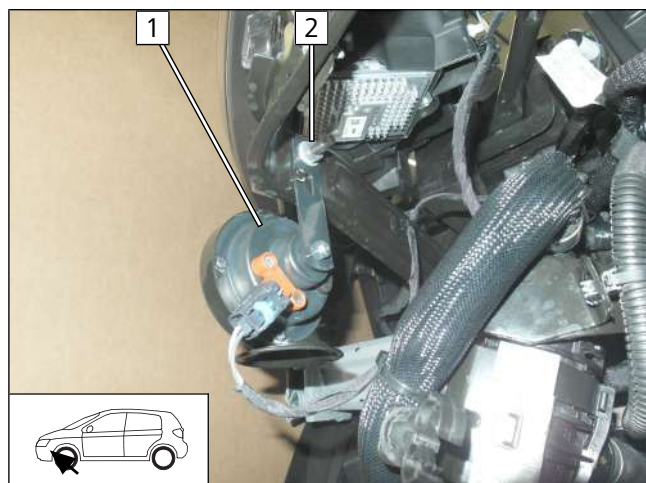


Fig. 10

**1** Horn with bracket

**2** Original vehicle nut (will be reused)

#### Drawing a guide line

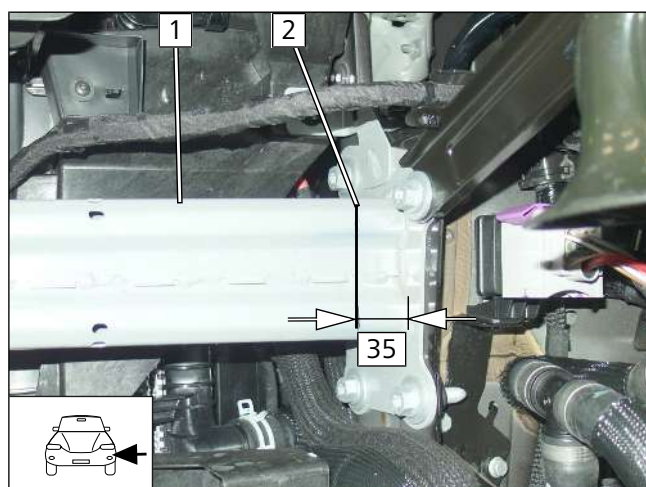


Fig. 11

► Draw guide line **2** on frame side member **1** as shown.



## Copying hole pattern of bracket

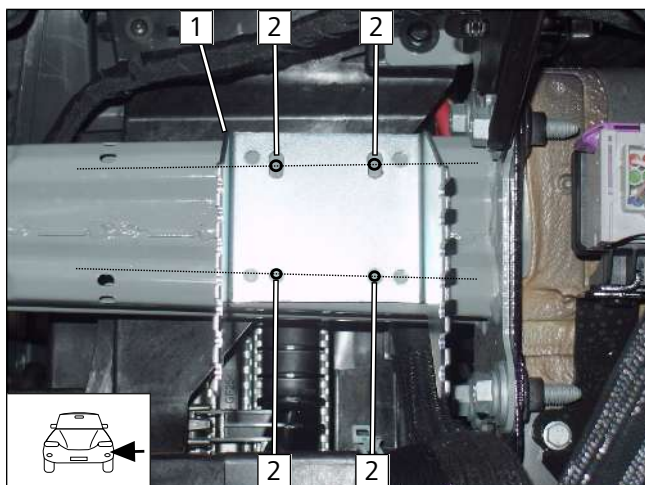


Fig. 12

► Position bracket **1** at the guide line and align at the centre of the frame side member (see next fig.).

**2** Hole pattern

## Inserting and tightening rivet nuts

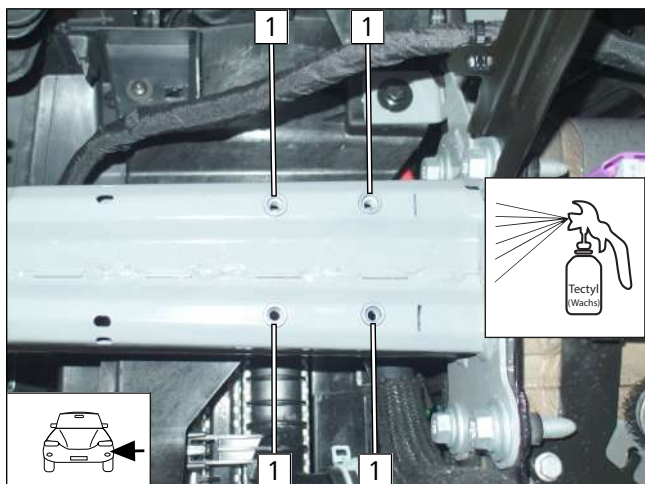


Fig. 13

**1** Ø9 hole, rivet nut

## Mounting bracket

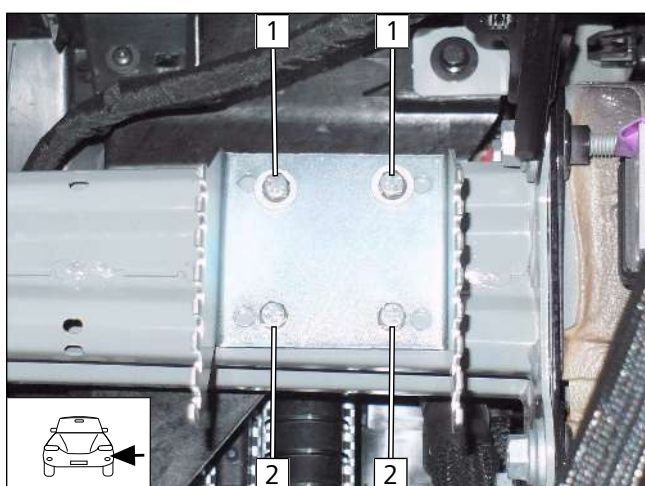


Fig. 14

**1** M6x20 bolt, spring lock washer, large diameter washer, bracket, rivet nut

**2** M6x20 bolt, spring lock washer, bracket, rivet nut



## Removing original vehicle clip

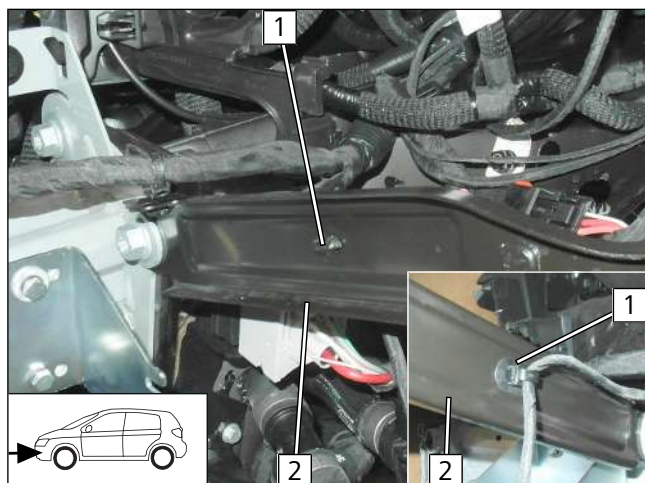


Fig. 15

- 1 Original vehicle clip
- 2 Original vehicle strut

## Shortening coolant pump perforated bracket

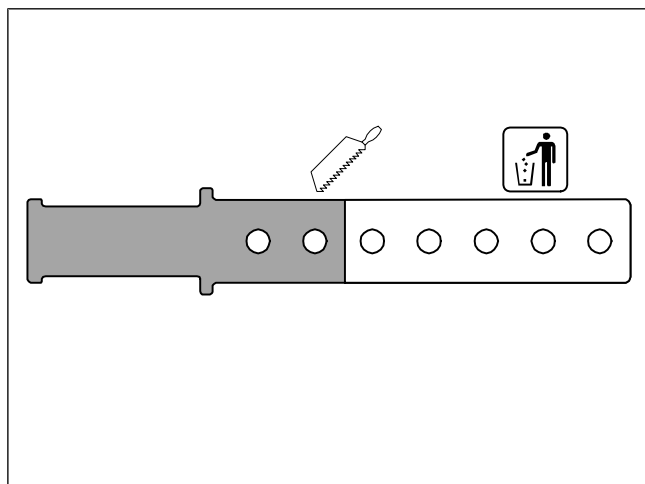


Fig. 16

## Mounting coolant pump perforated bracket

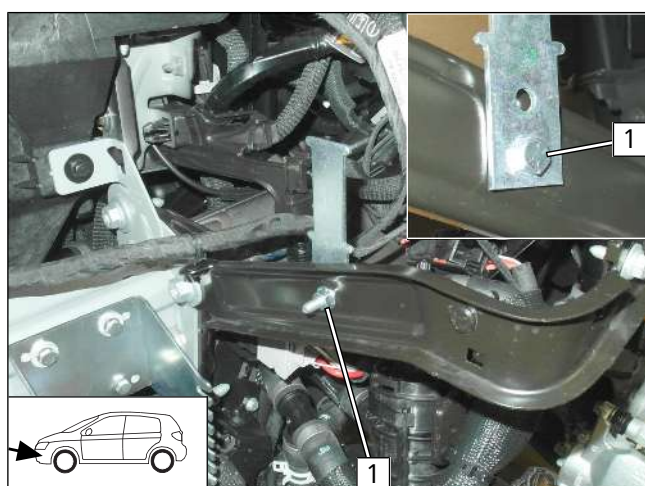


Fig. 17

- 1 M6x20 bolt, perforated bracket, original vehicle strut, flanged nut



## 8.2 Premounting heater

### Mounting water connection piece

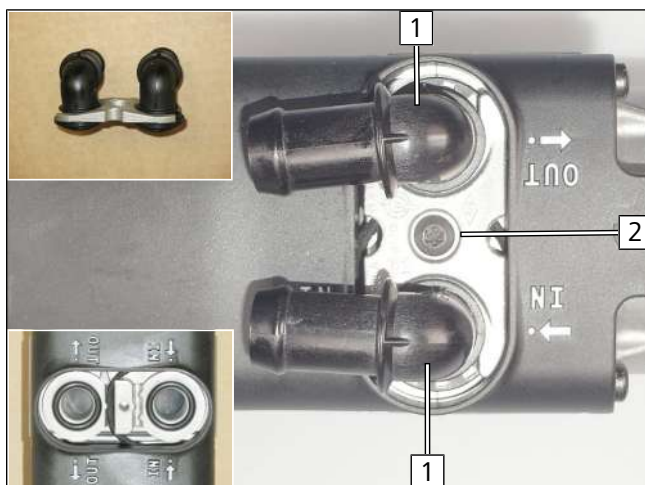


Fig. 18



Observe the general installation instructions of the heater.

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

### Premounting bolts

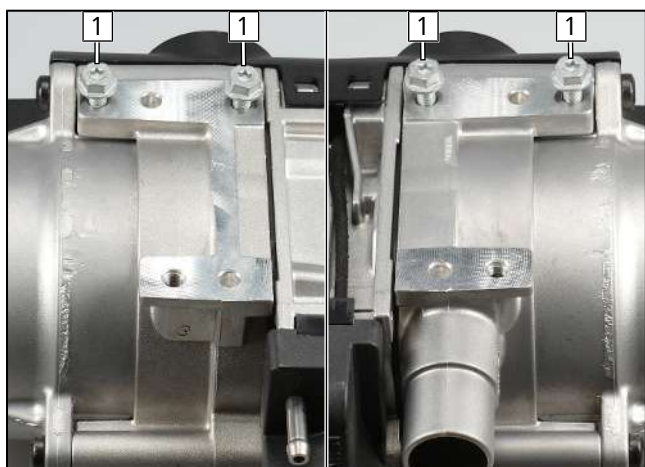


Fig. 19

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

### Preparing hoses

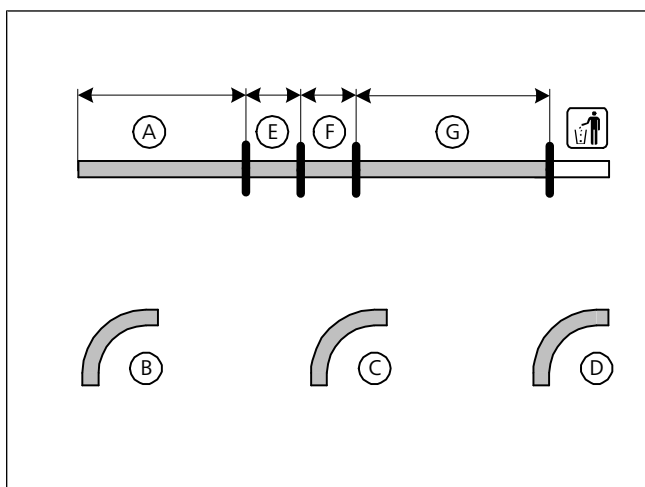


Fig. 20

<b>A</b>	500
<b>B</b>	90° moulded hose
<b>C</b>	90° moulded hose
<b>D</b>	90° moulded hose
<b>E</b>	100
<b>F</b>	130
<b>G</b>	730



## Mounting hoses **E** and **F**

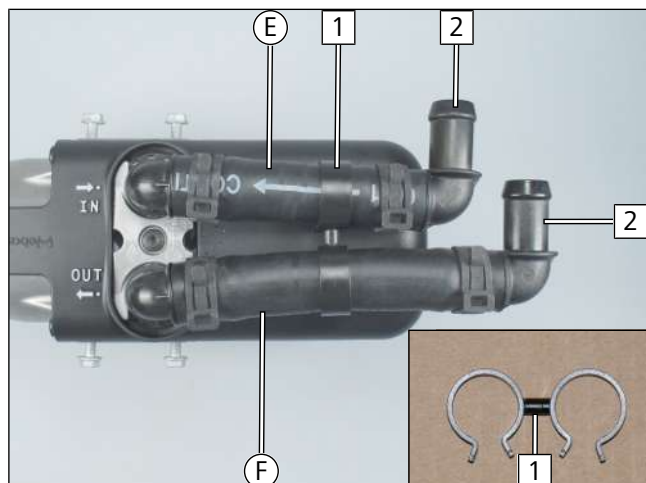


Fig. 21



All spring clips Ø25

- 1** Hose bracket
- 2** 18x18, 90° connecting pipe

## 8.3 Heater mounting

### Mounting heater

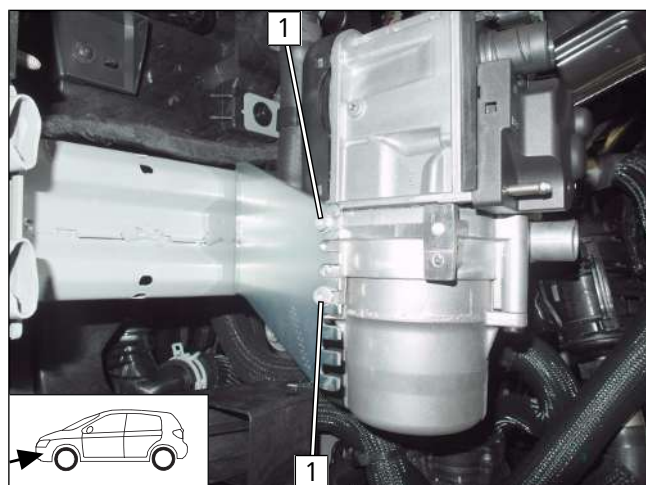


Fig. 22

- 1** Tighten 5x13 self-tapping bolt

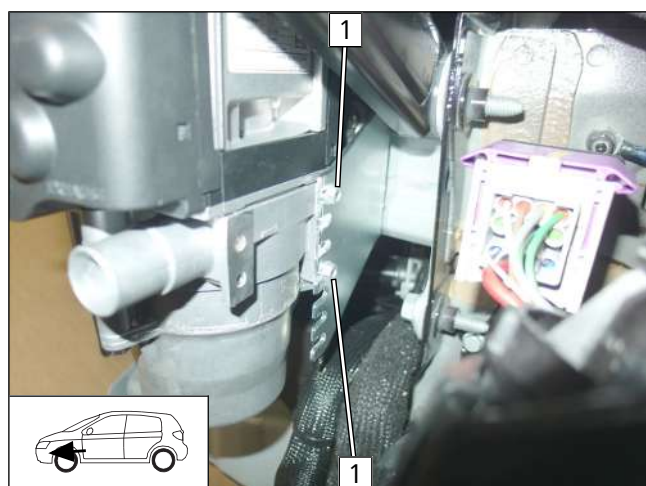


Fig. 23

- 1** Tighten 5x13 self-tapping bolt





## Mounting heater wiring harness

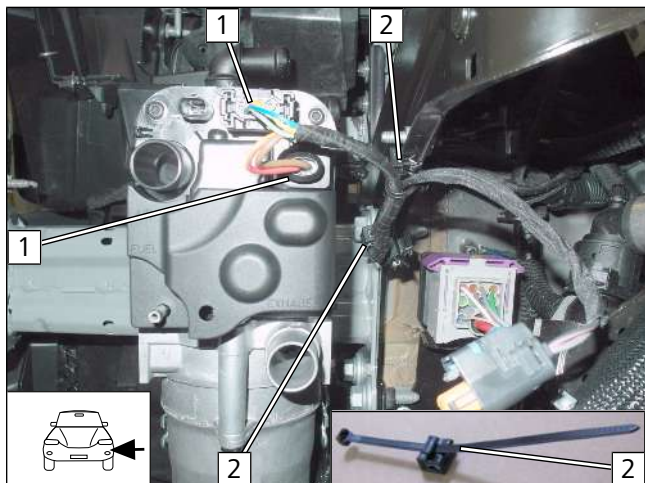


Fig. 24

► Fasten heater wiring harness and original vehicle wiring harness with edge clip cable tie **2** as shown.

- 1** Heater wiring harness connector

## Fastening original vehicle wiring harness

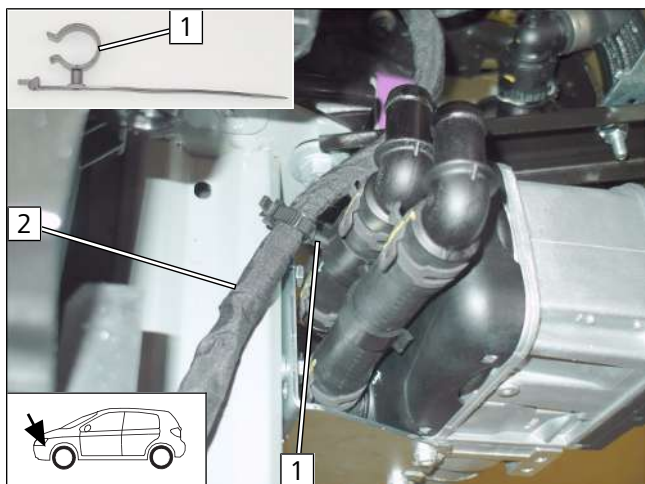


Fig. 25

- 1** Hose bracket with cable tie
- 2** Original vehicle wiring harness

## 9 Coolant

### 9.1 Hose routing diagram

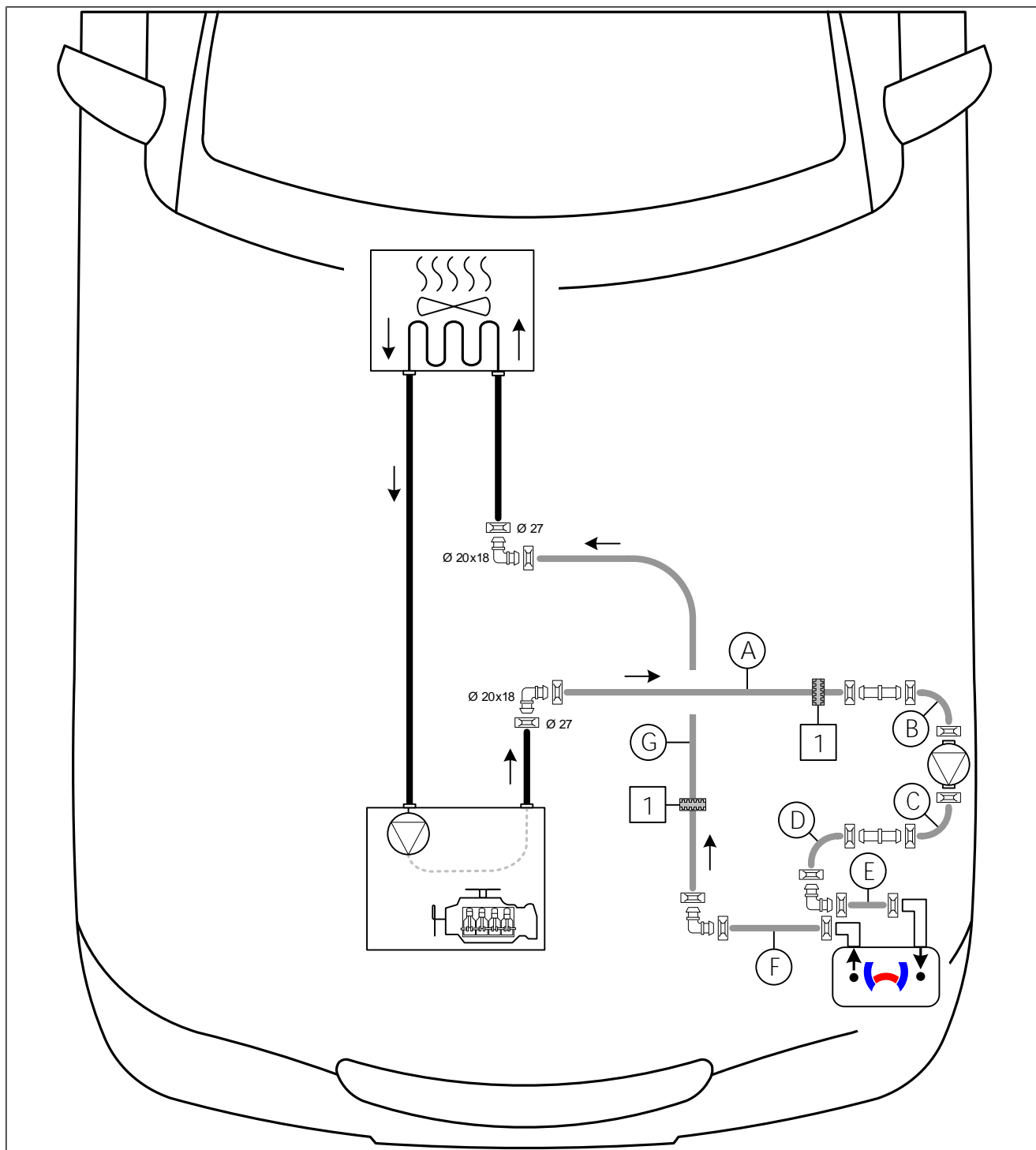



Fig. 26

All spring clips without a specific designation  = Ø25;

All connecting pipes without a specific designation  or  = Ø18x18

 Black (sw) rubber isolator

## 9.2 Coolant circuit installation

### Preparing hoses

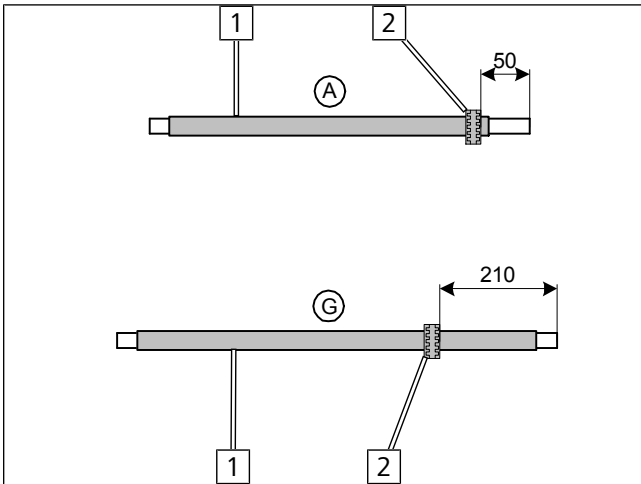


Fig. 27



Mount fabric heat shrink tubing **1**.

► 1. Slide on and cut to length

► 2. Shrink, use at most 230 °C

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

### Premounting hoses

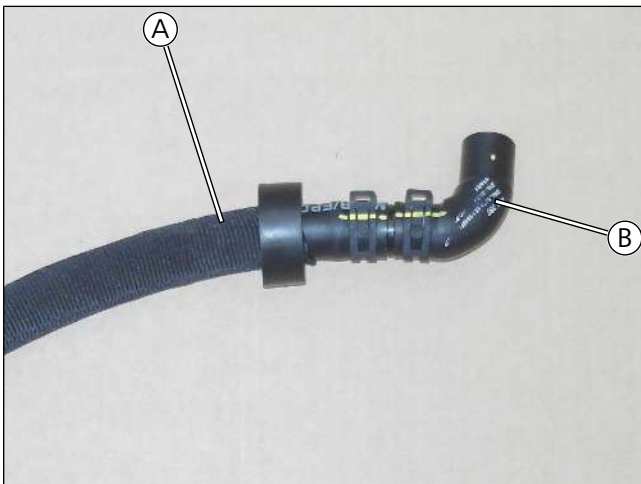


Fig. 28

### Mounting coolant pump

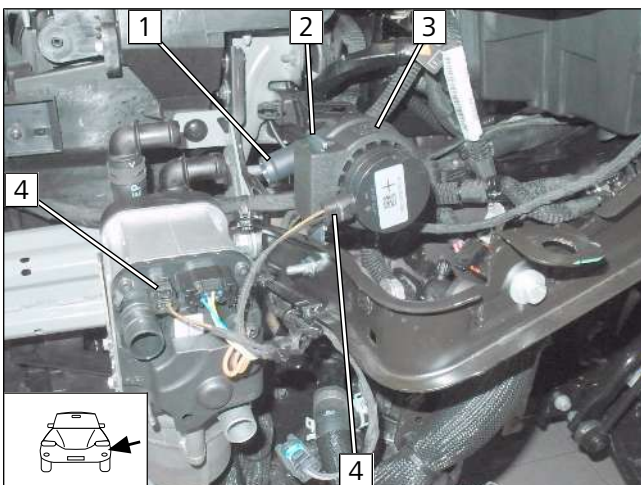


Fig. 29

- 1** Coolant pump
- 2** Pre-mounted perforated bracket
- 3** Coolant pump mount
- 4** Coolant pump wiring harness connector

### Connecting hoses **C** and **D**

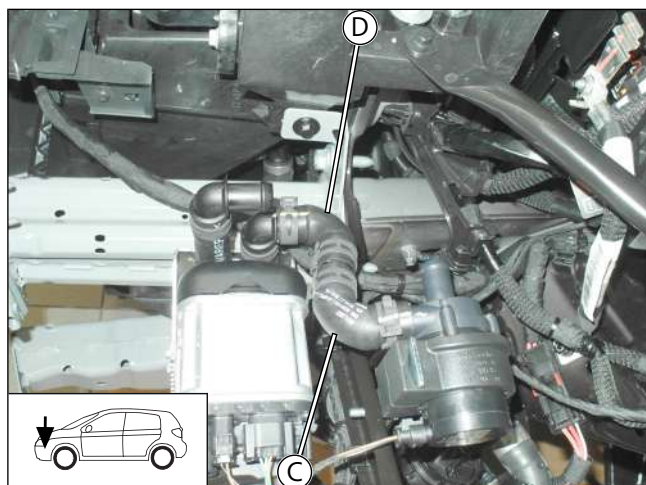


Fig. 30

### Fitting edge protection

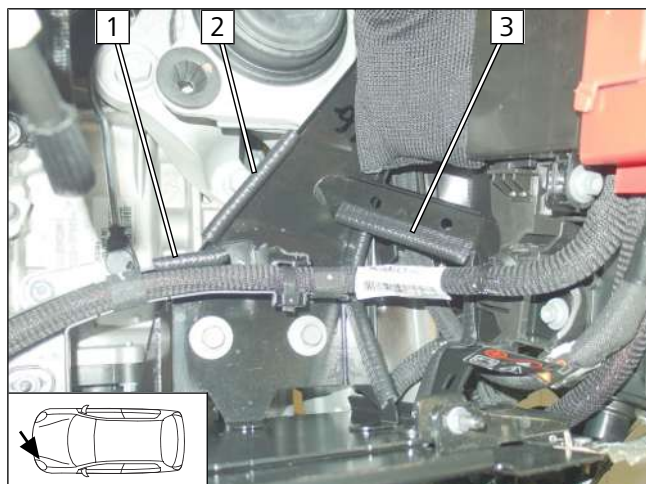


Fig. 31

- 1** 40 edge protection
- 2** 90 edge protection
- 3** 90 edge protection

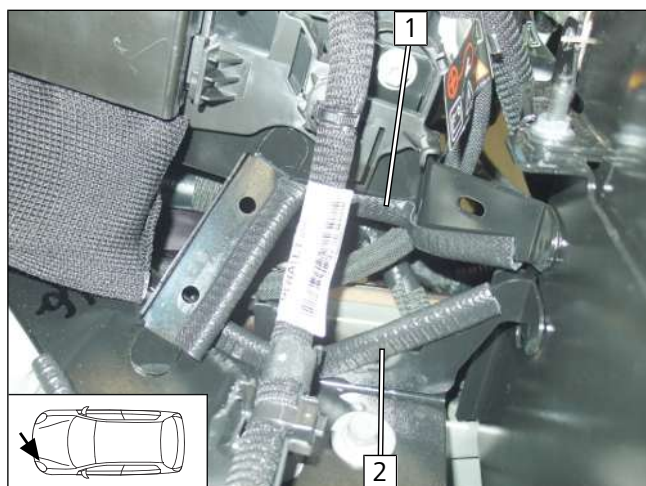


Fig. 32

- 1** 130 edge protection
- 2** 140 edge protection

## Removing cable tie

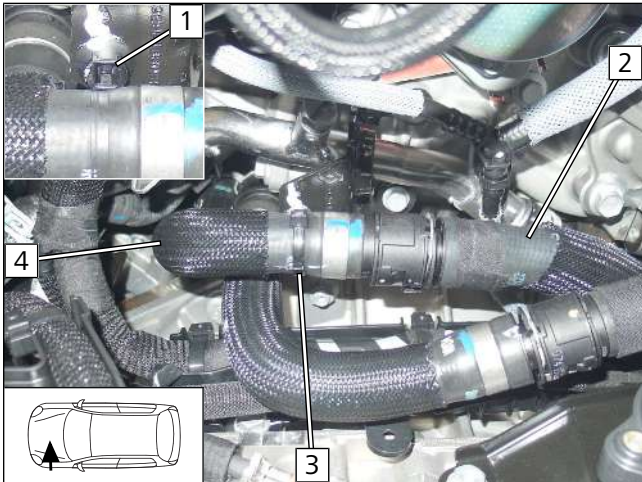


Fig. 33

► The socket of original vehicle cable tie **1** remains on the vehicle.

- 2** Heat exchanger inlet hose
- 3** Remove original vehicle cable tie
- 4** Hose of engine outlet

## Cutting point

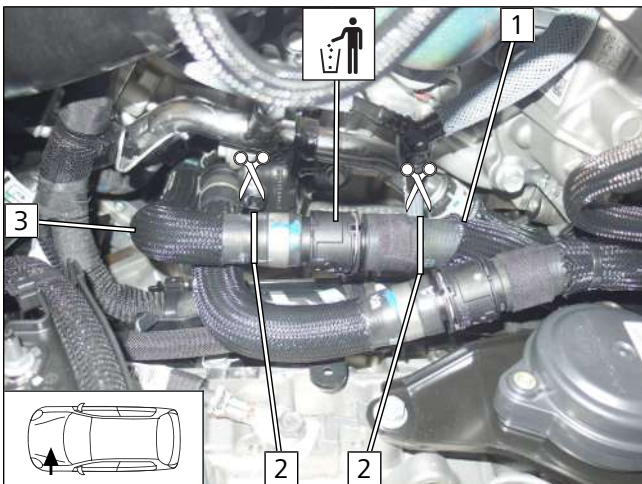


Fig. 34

► Cut engine outlet hose **3** and heat exchanger inlet hose **1** at positions **2**.

- 2** Cutting point

## Connection of hose (G) to hose (F)

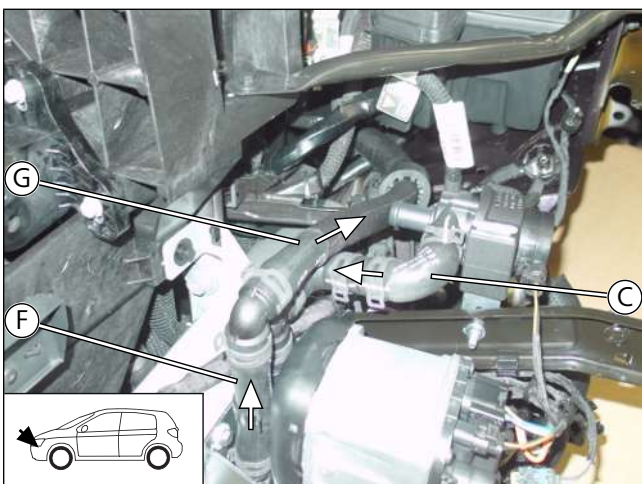


Fig. 35

## Routing hose **G**

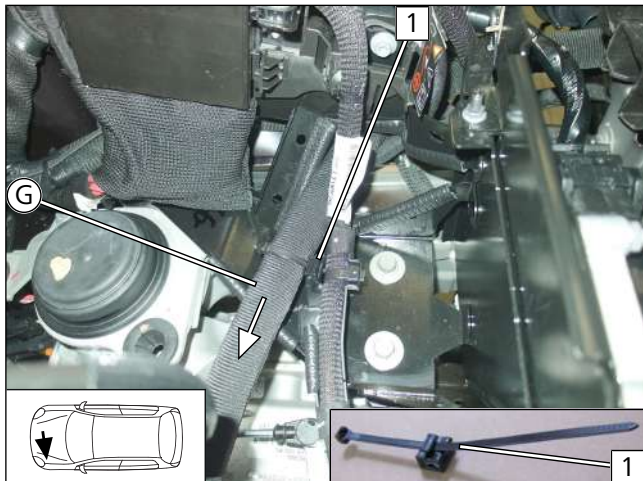


Fig. 36

- Route hose **G** to the cutting point as shown and fasten using edge clip cable tie **1**.

## Connecting premounted hoses **A** and **B**

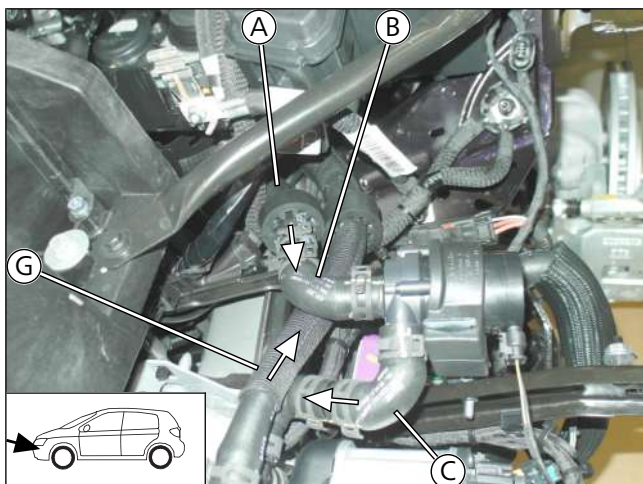


Fig. 37

## Fastening black (sw) rubber isolator

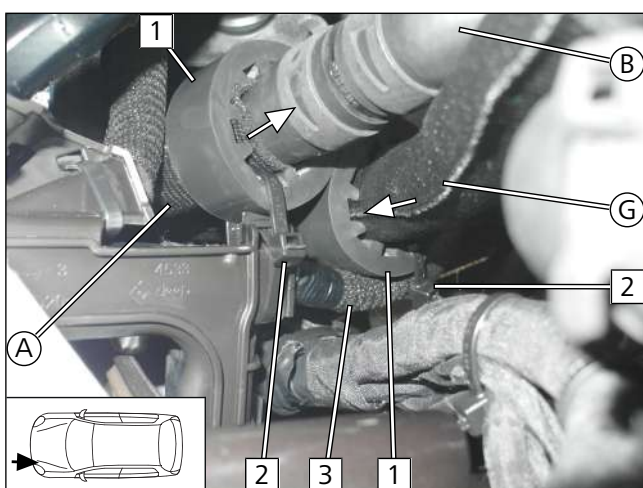


Fig. 38

- Fasten black (sw) rubber isolator **1** with cable tie **2** to original vehicle wiring harness **3** as shown.

## Routing hose **A**

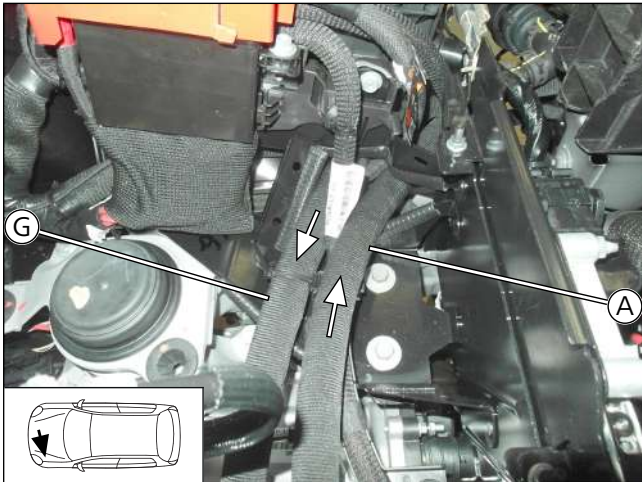


Fig. 39

► Route hose **A** to the cutting point as shown.

## Engine outlet and heat exchanger inlet connection

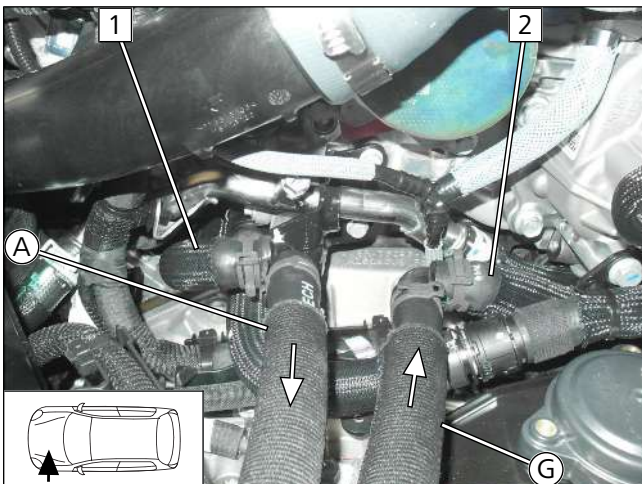


Fig. 40

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

## Fastening hoses

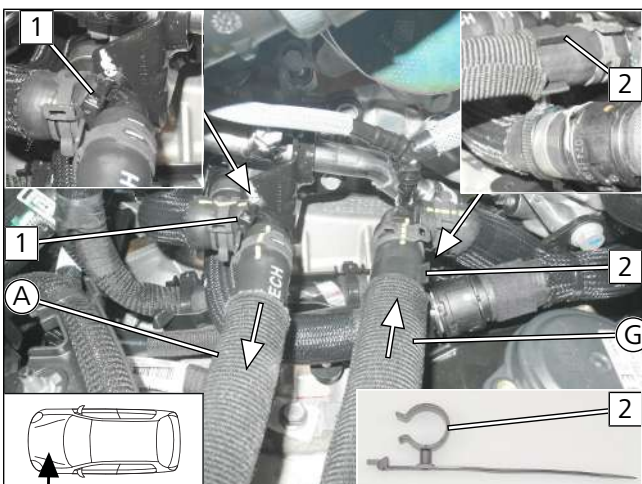


Fig. 41

► Thread cable tie **1** through socket of removed original vehicle cable tie and tie around the connecting pipe.

- 2** Hose bracket with cable tie

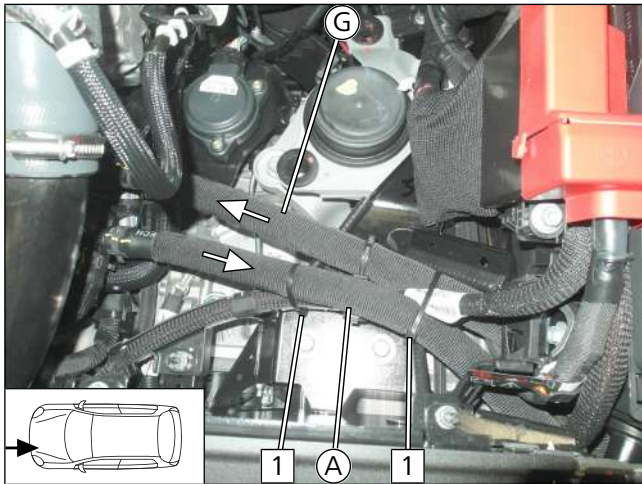


Fig. 42



Danger of damage to components

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

1 Cable tie

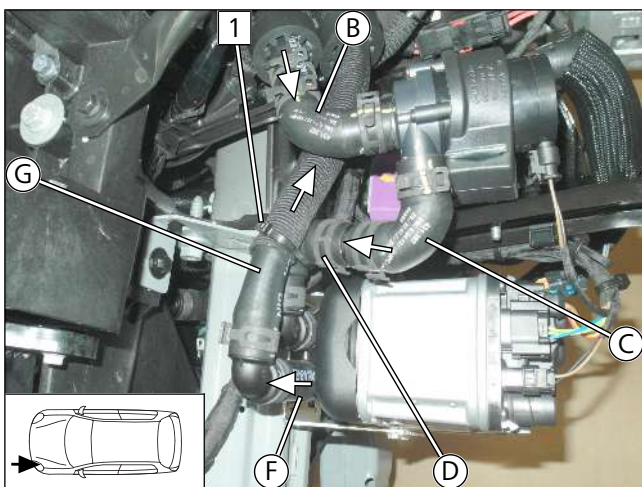


Fig. 43

1 Cable tie





## 10 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

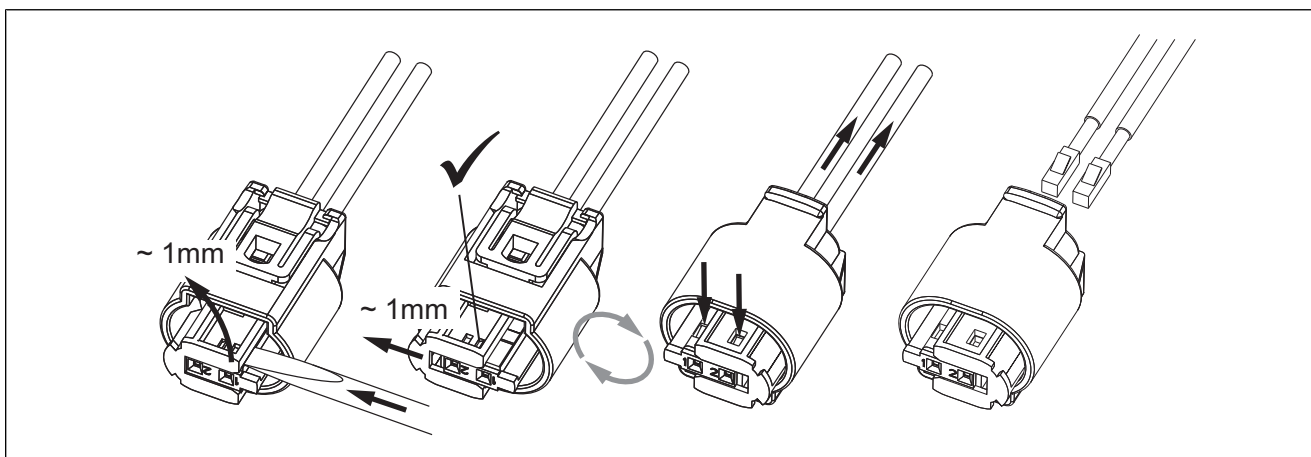


Fig. 44

## 10.1 Routing fuel line

### Connecting heater

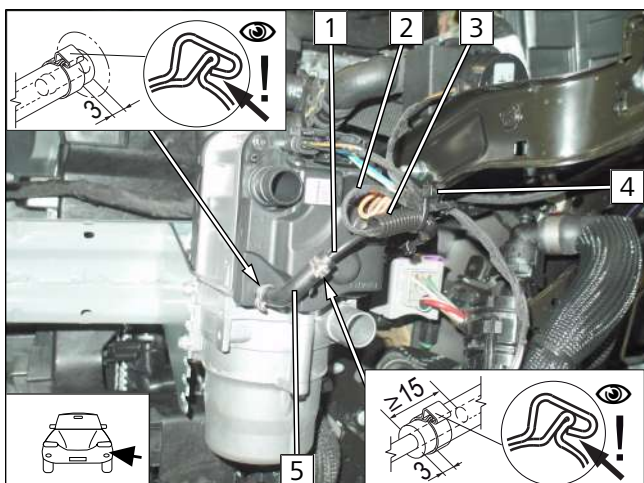


Fig. 45

- ▶ Draw fuel line **1** and fuel pump wiring harness **2** into Ø10 corrugated tube **3**.

- 4** Cable tie
- 5** 90° moulded hose, Ø10 clamp [2x]



## Routing fuel line

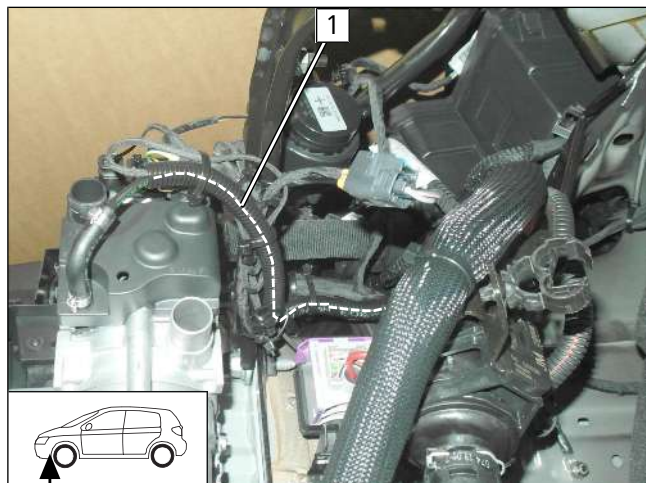


Fig. 46

- ▶ Route corrugated tube **1** with fuel line and fuel pump wiring harness along original vehicle lines in the engine compartment and fasten with cable ties.



Fig. 47

- ▶ Route corrugated tube **1** with fuel line and fuel pump wiring harness along original vehicle lines to the bulkhead and further to the underbody and fasten with cable ties.

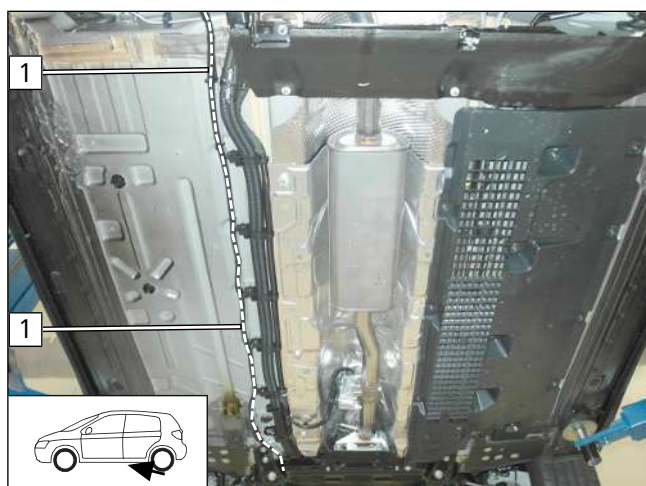


Fig. 48

- ▶ Route corrugated tube **1** with fuel line and fuel pump wiring harness along original vehicle lines to the installation location of the fuel pump and fasten with cable ties.



## Preparing fuel pump installation location

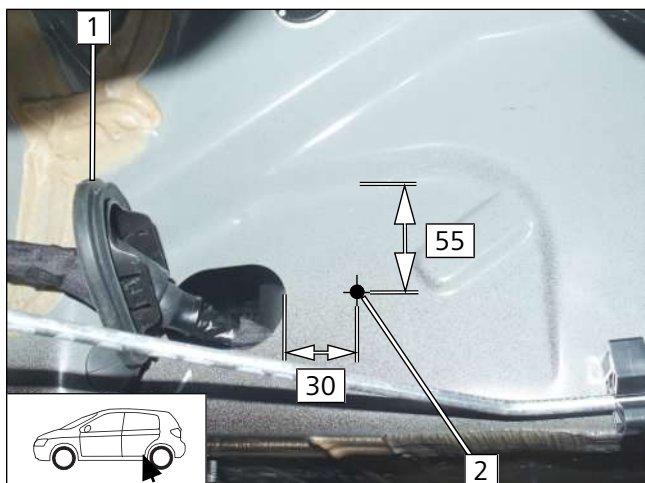


Fig. 49

- ▶ Remove original vehicle protective rubber plug **1** as shown, copy hole pattern **2**.

## Inserting rivet nut

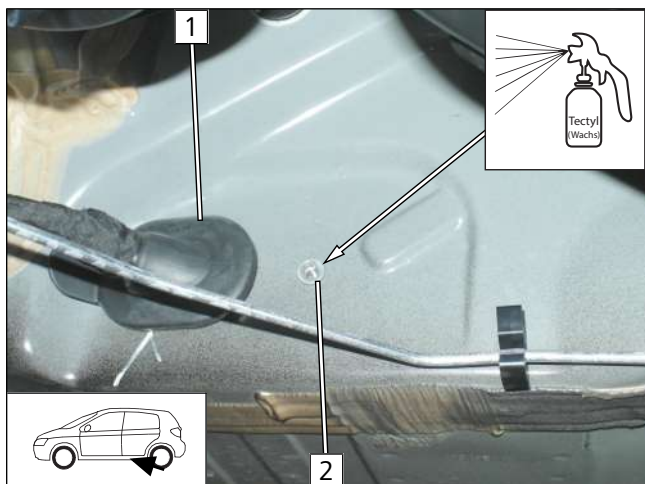


Fig. 50



Danger of damage to components

- ▶ When drilling, be careful of components located behind.

**2** Ø9 hole, rivet nut

- ▶ Mount original vehicle protective rubber plug **1**.

## Premounting fuel pump

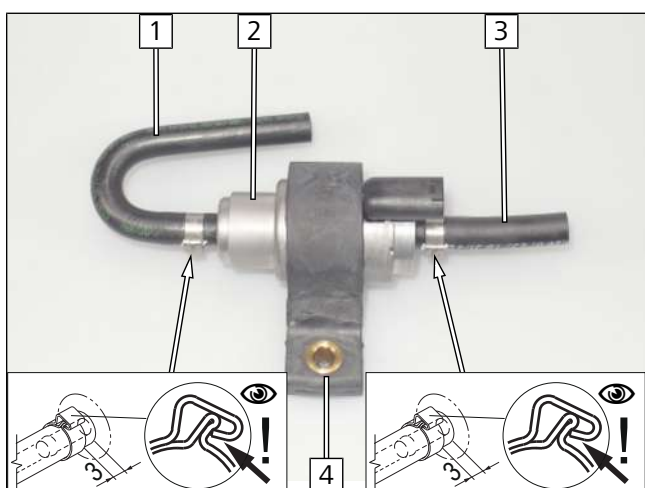


Fig. 51

**1** 180° moulded hose, Ø10 clamp

**2** Fuel pump

**3** Hose section, Ø10 clamp

**4** Fuel pump mount



## Preparing fuel pump perforated bracket

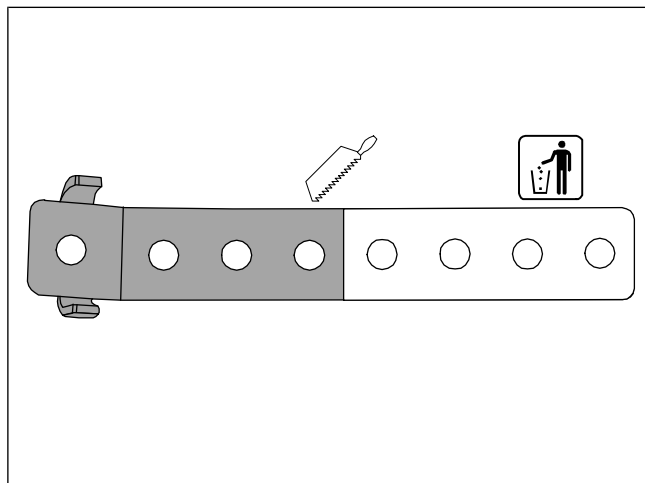
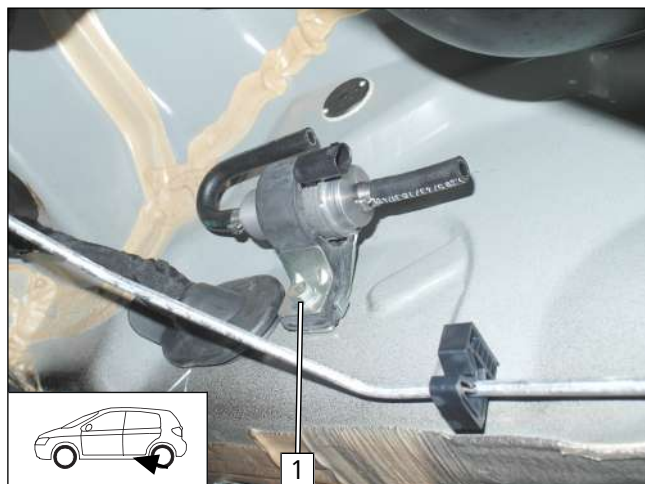


Fig. 52

## Mounting fuel pump



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

Fig. 53

## Assembling fuel pump connector

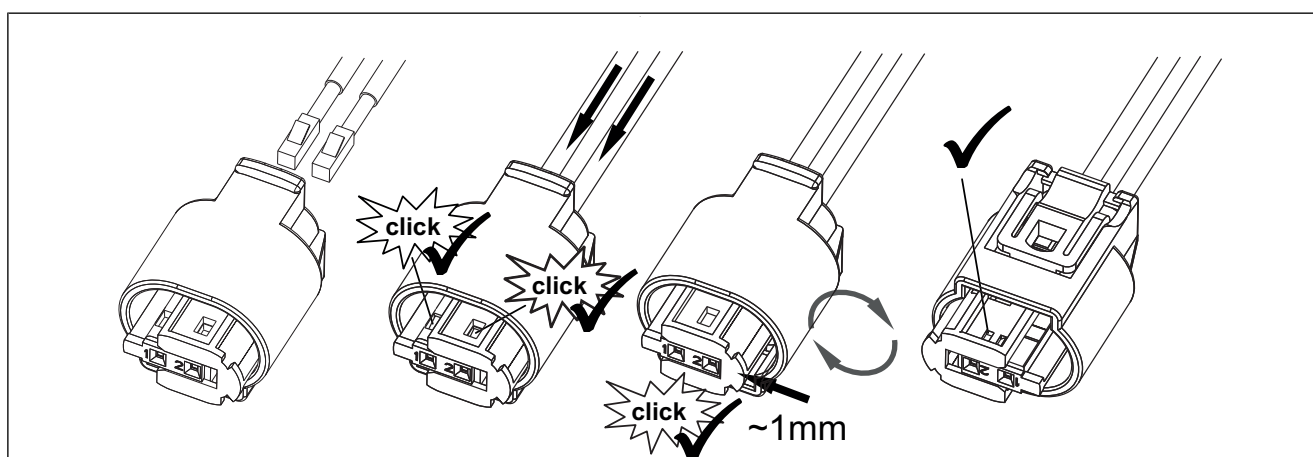


Fig. 54



## Fuel pump connection

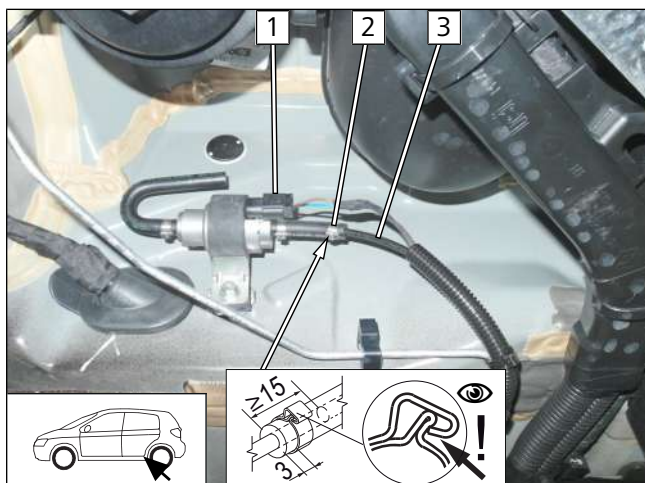


Fig. 55

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

## 10.2 Installing FuelFix

### Preparing fuel line

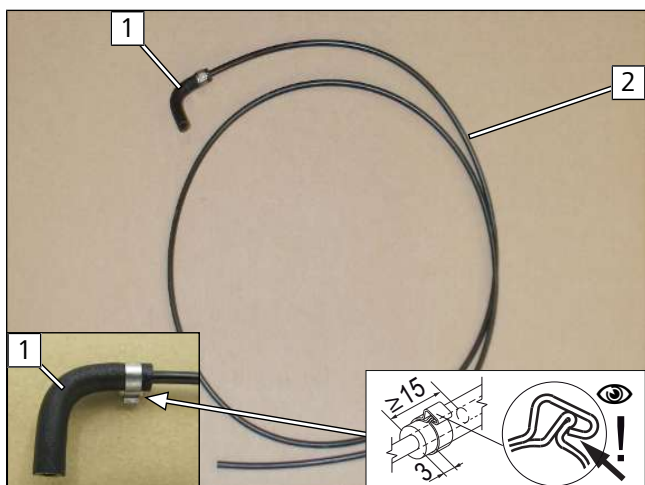


Fig. 56

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

### View of drilling template

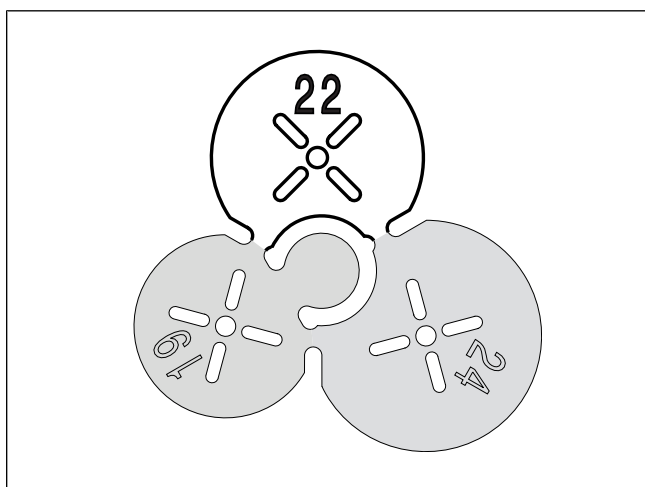


Fig. 57



## Work steps F1, F2

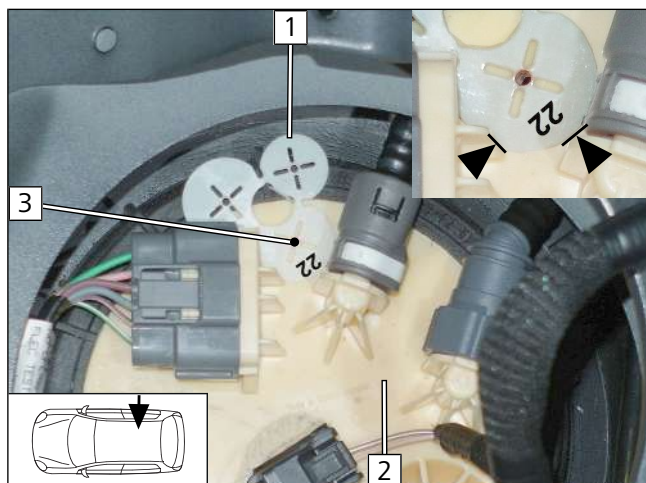


Fig. 58



Observe the installation instructions of the tank extracting device.

► Position template **1** at the raised parts as shown.

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

## Work step F3

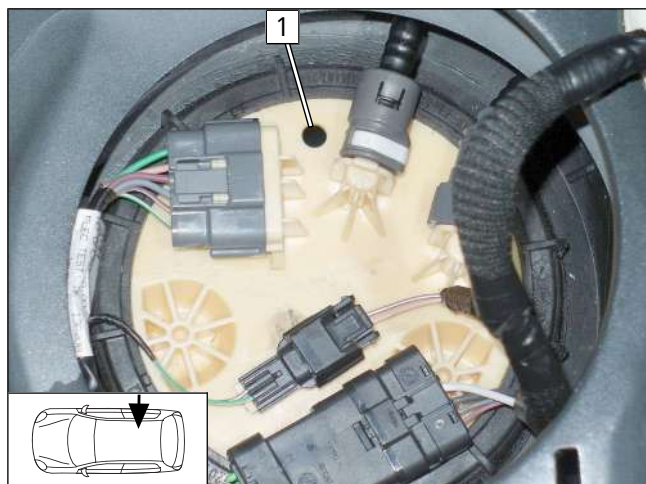


Fig. 59



### DANGER

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

- 1** Hole made with provided drill

## Work steps F4, F5

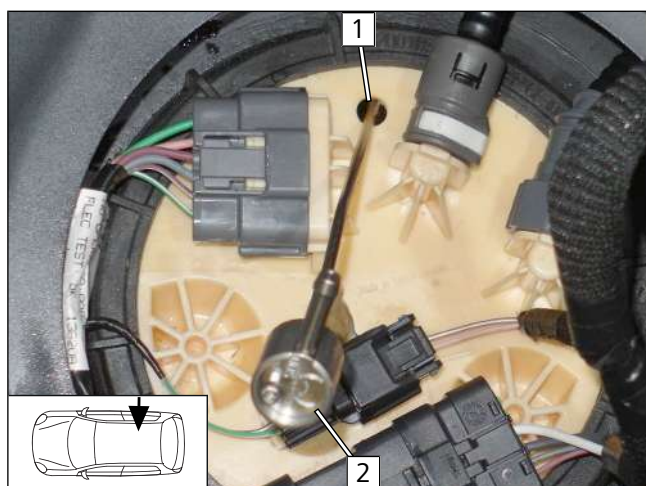


Fig. 60

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

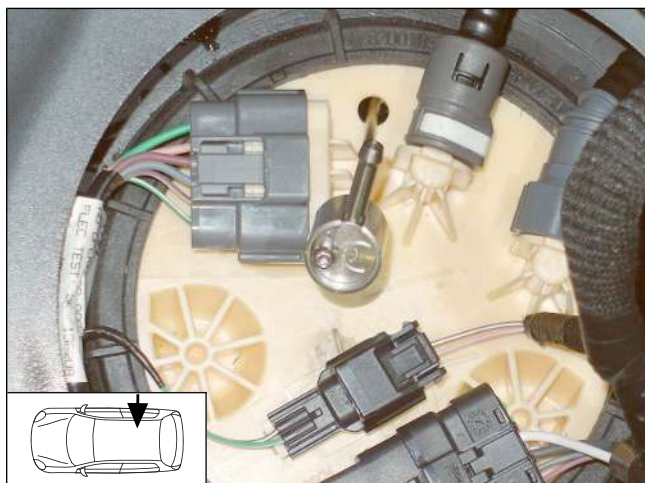


Fig. 61

Work steps F5.3, F5.4

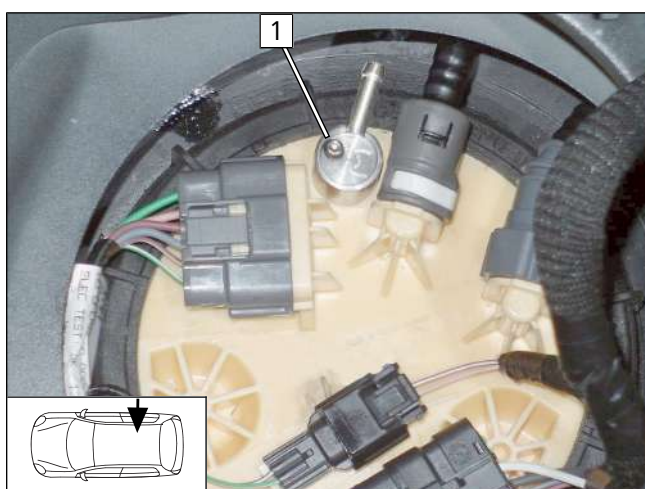


Fig. 62

► Align FuelFix **1** as shown.

Work step F6

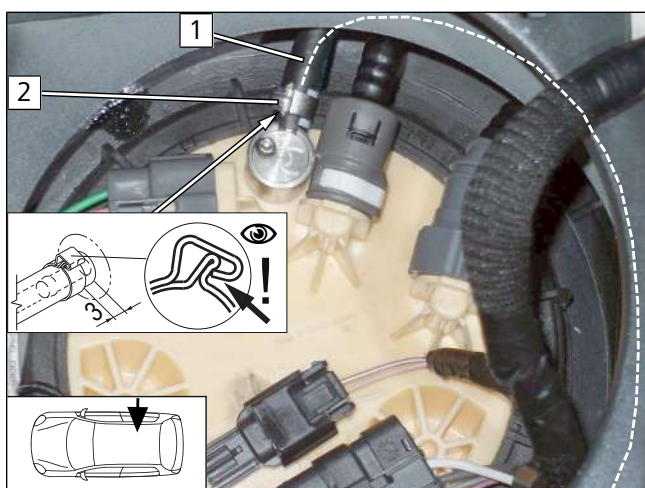


Fig. 63

- 1** Prepared fuel line
- 2** Ø10 clamp



## Work step F7

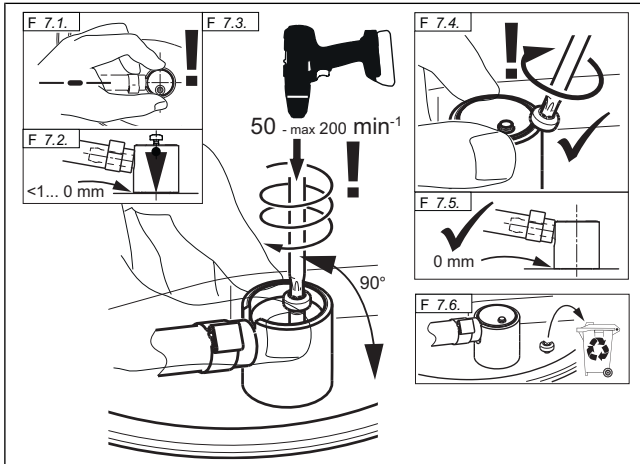


Fig. 64

## Work step F8

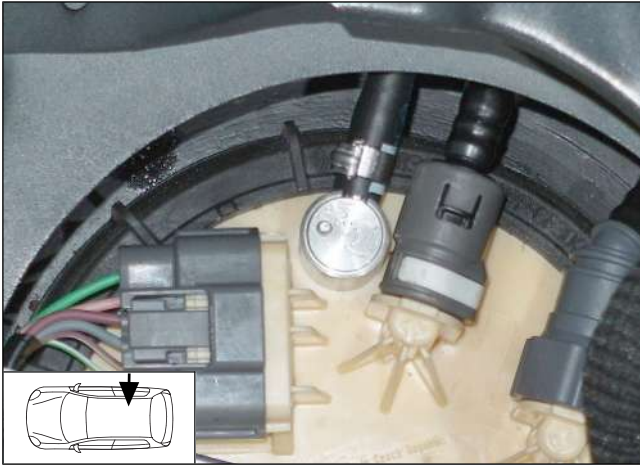


Fig. 65

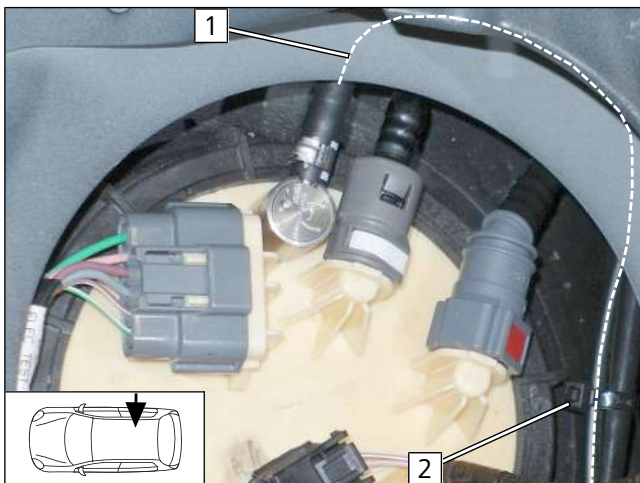


Fig. 66



## DANGER

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

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





## 10.3 Fuel pump connection

### Routing fuel line

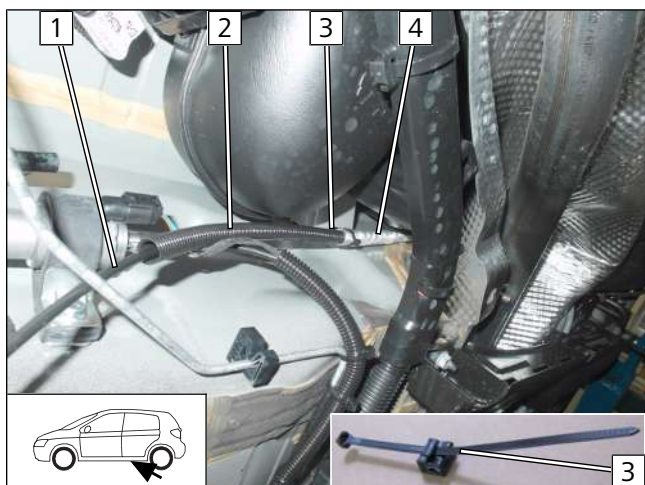


Fig. 67

- ▶ Relocate fuel line of FuelFix **1** in 800 long corrugated tube **2**.
- ▶ Slide 450 long heat protection **4** over corrugated tube **2** and fasten with edge clip cable tie **3** as shown.

### Connecting fuel line of FuelFix

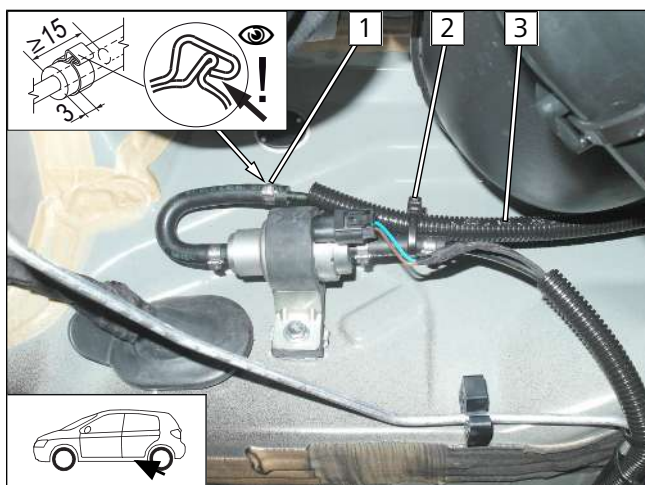


Fig. 68

- 1** Ø10 clamp
- 2** Cable tie
- 3** Corrugated tube with fuel line of FuelFix



## 11 Combustion air

Assigning combustion air intake pipe

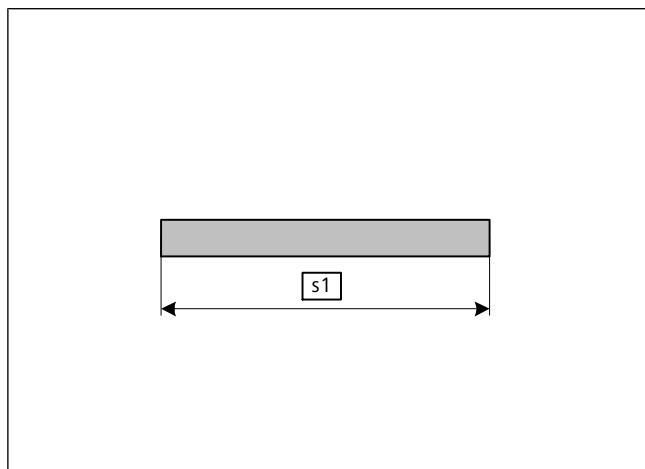


Fig. 69

**s1** 210

Mounting angle bracket

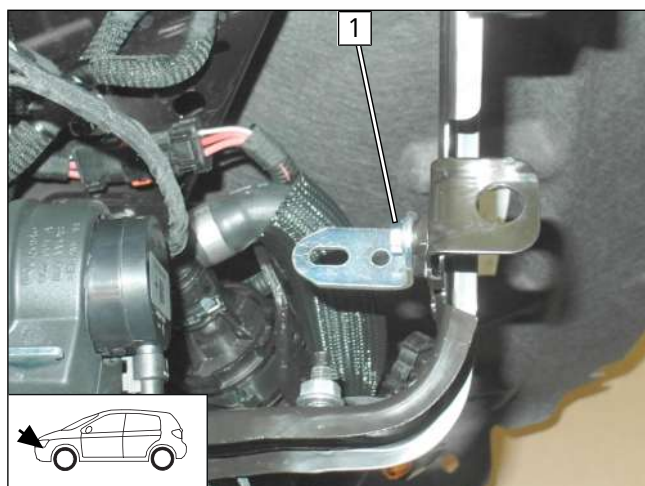


Fig. 70

**1** Original vehicle bolt, angle bracket, flanged nut

Mounting combustion air intake pipe **s1**

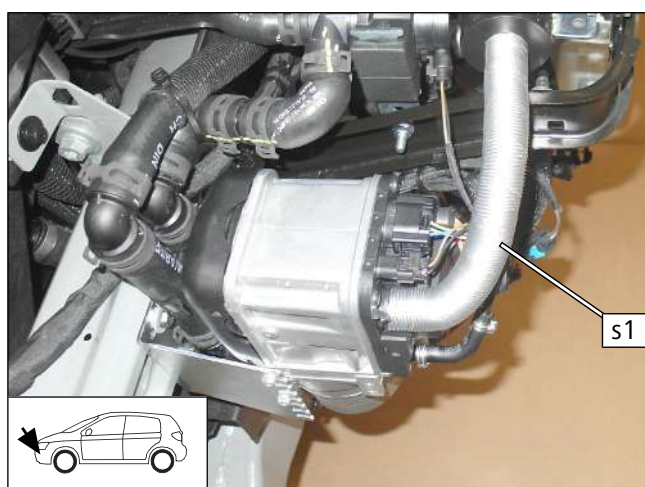


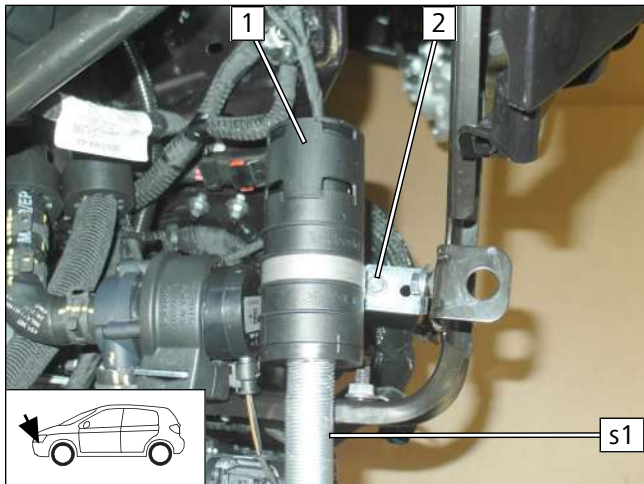
Fig. 71



Observe the installation instructions of the combustion air intake silencer.



## Mounting combustion air intake silencer



- 1 Combustion air intake silencer
- 2 M5x16 bolt, large diameter washer, angle bracket, Ø51 clamp, nut

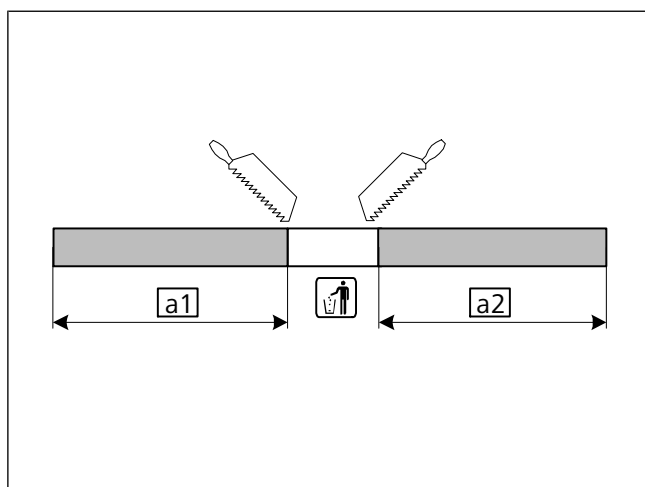
Fig. 72



## 12 Exhaust

### 12.1 Mounting exhaust pipe

Cutting exhaust pipe to length



**a1** 380

**a2** 330

Fig. 73

Preparing exhaust pipe **a2**

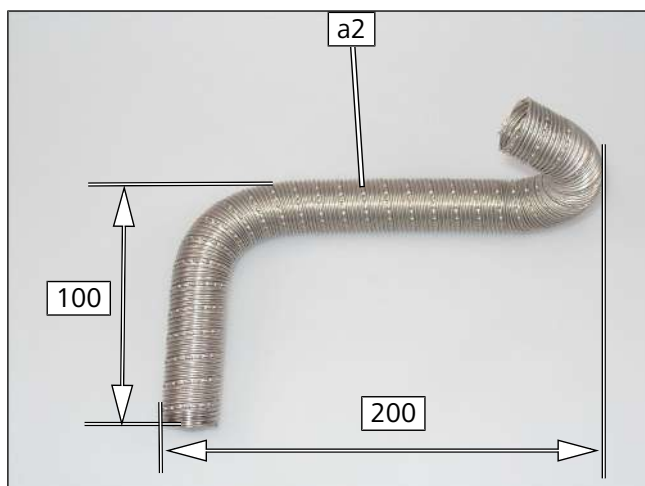
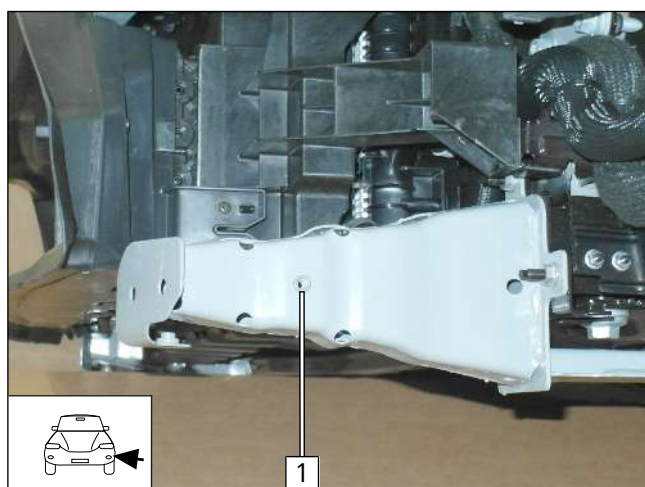


Fig. 74

Inserting rivet nut



**1** Rivet nut, original vehicle hole

Fig. 75



## Mounting exhaust silencer

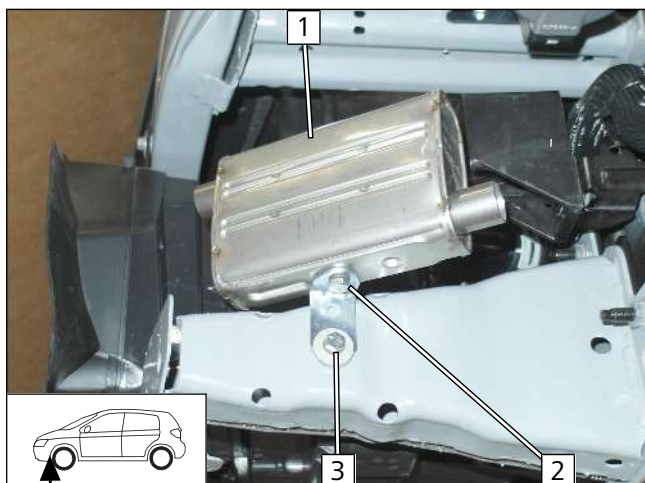


Fig. 76

- 1 Exhaust silencer
- 2 Mount M6x16 bolt, spring lock washer, angle bracket loosely
- 3 M6x20 bolt, spring lock washer, large diameter washer, angle bracket, rivet nut

## Aligning exhaust silencer

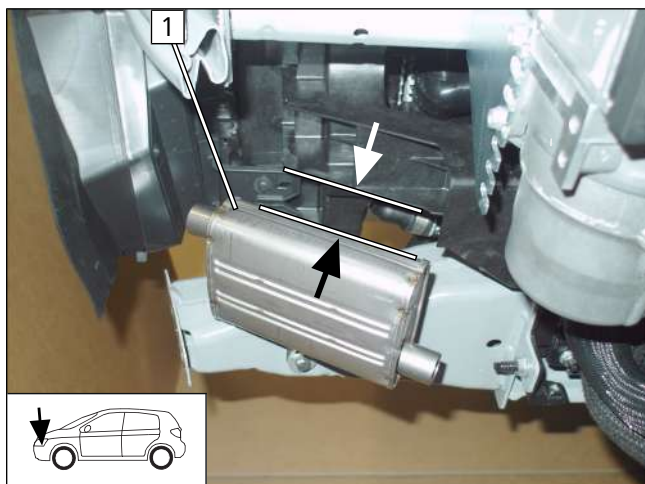


Fig. 77

- Align exhaust silencer 1 parallel to vehicle as shown and tighten M6x16 bolt.

## Mounting exhaust pipe a1

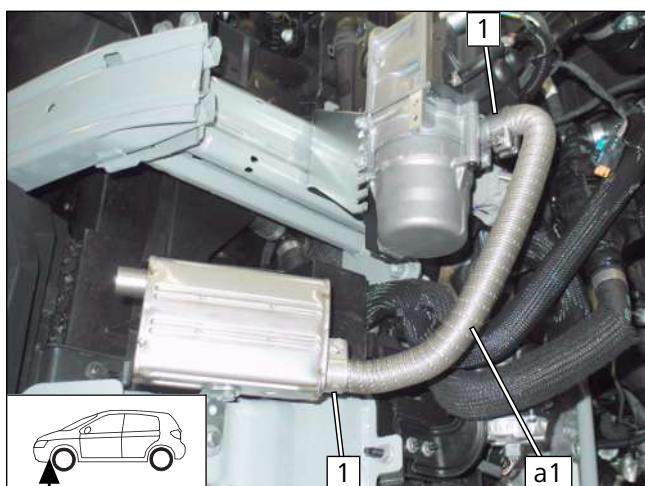


Fig. 78

- 1 Hose clamp



## Mounting exhaust pipe **a2**

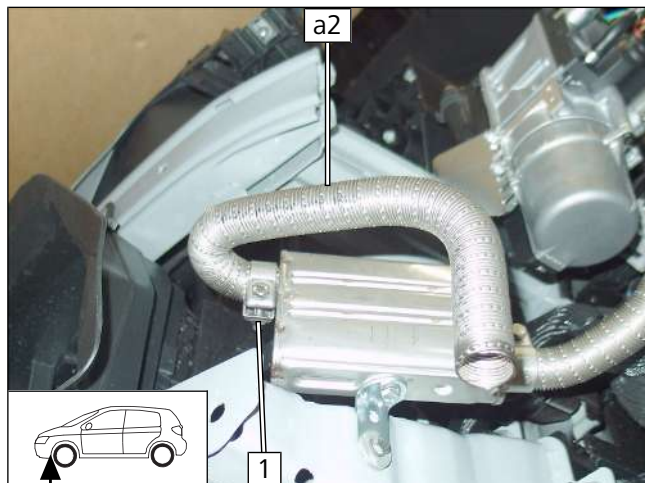


Fig. 79

**1** Hose clamp

## 12.2 Mounting exhaust end fastener

### Removing lower bumper trim

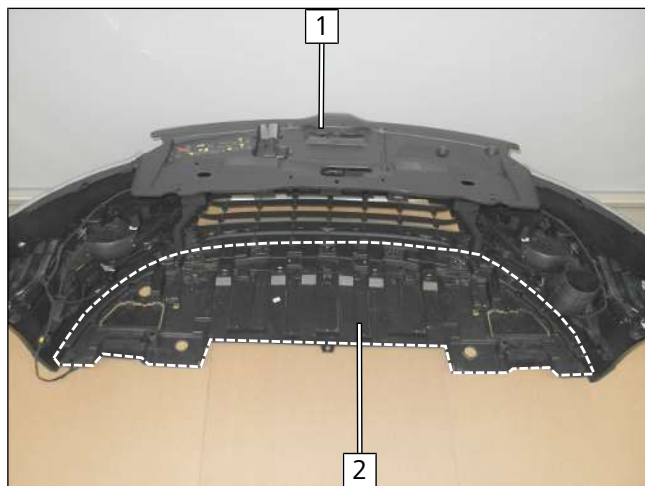


Fig. 80

► Detach lower bumper trim **2** from bumper trim **1**.

### Shortening EFIX

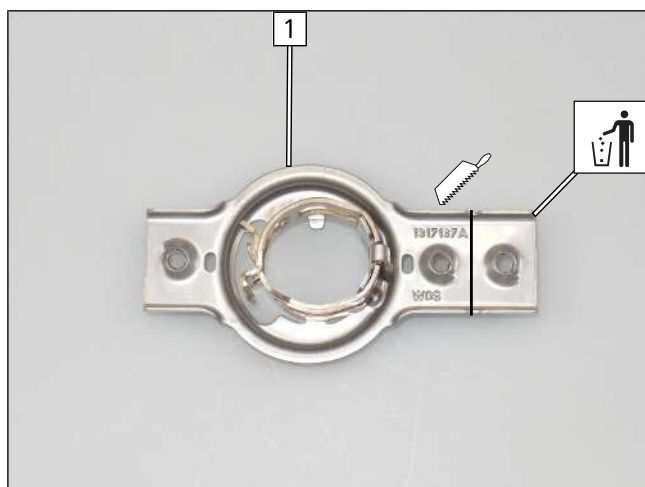


Fig. 81

**1** EFIX



### Work step E1

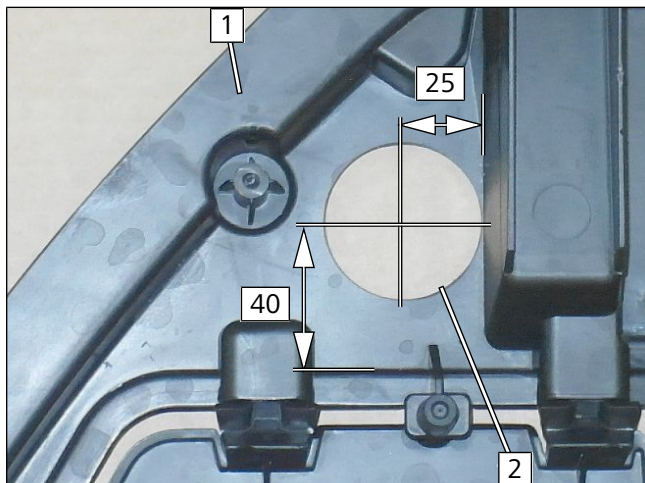


Fig. 82



Observe the EFIX installation instructions.

- 1 Underride protection
- 2 Hole

### Work step E3

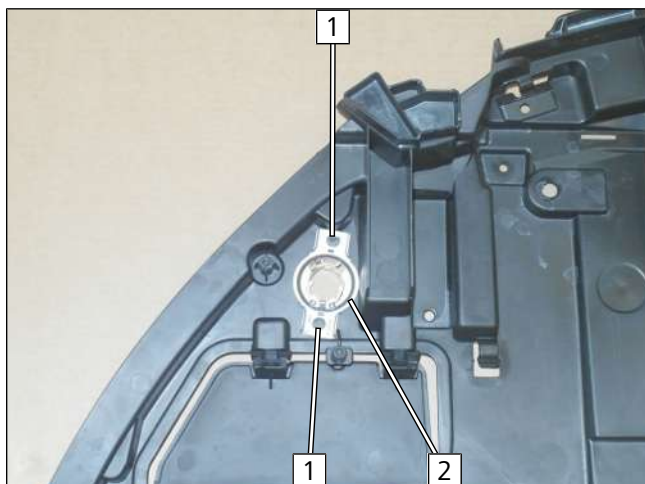


Fig. 83

- 1 Copy hole pattern
- 2 EFIX

### Work step E4

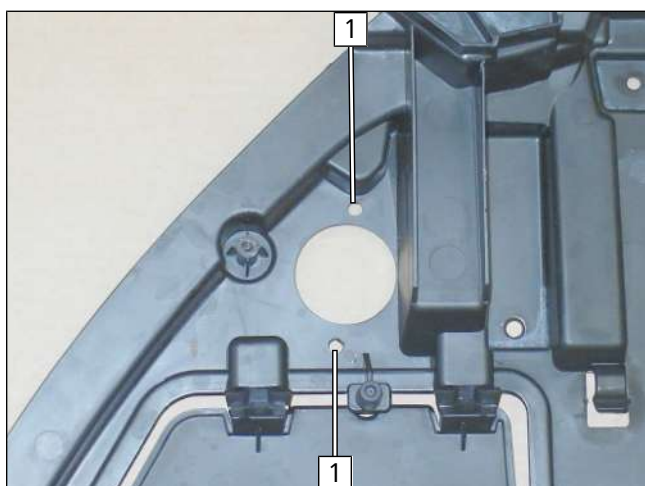
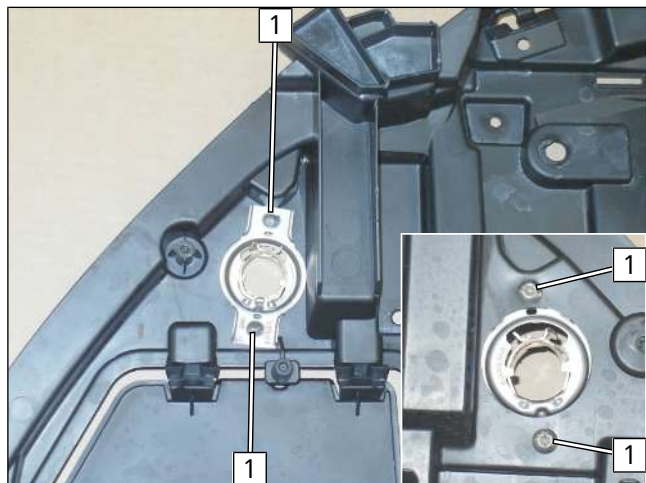


Fig. 84

- 1 Hole



Work step E5



1 5x13 self-tapping screw

Fig. 85





## 13 Final work in engine compartment

### Adapting horn bracket

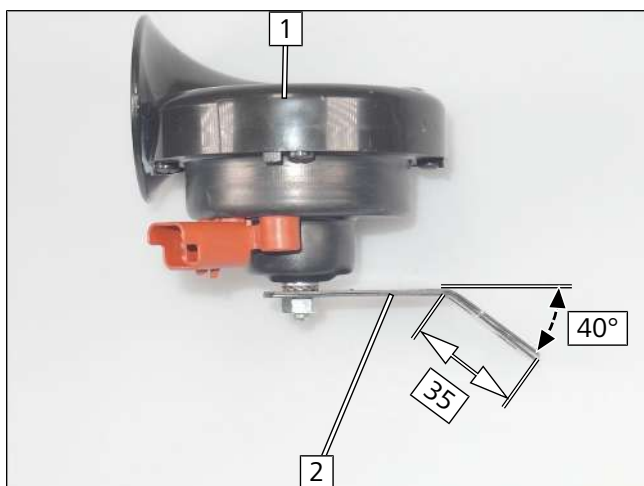


Fig. 86

- 1 Horn
- 2 Horn bracket

### Mounting horn

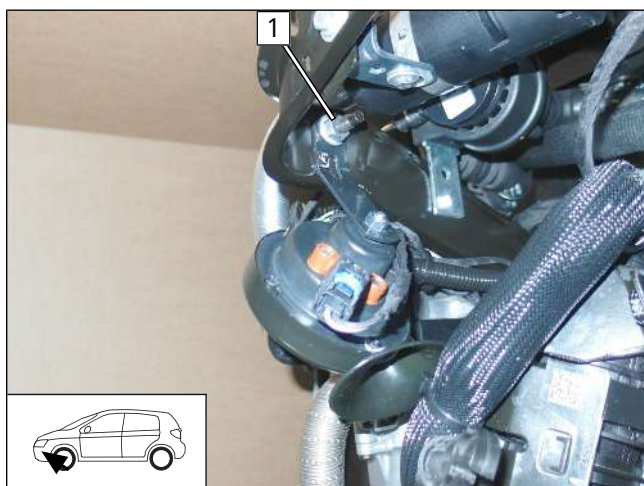


Fig. 87

- 1 Original vehicle bolt, horn, original vehicle nut

### Work step E6-8

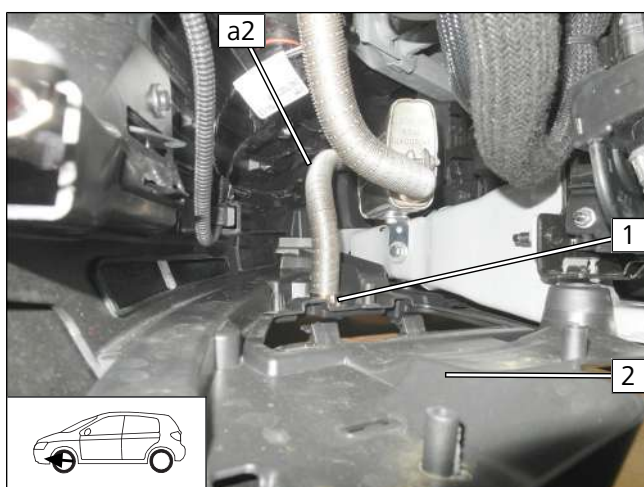
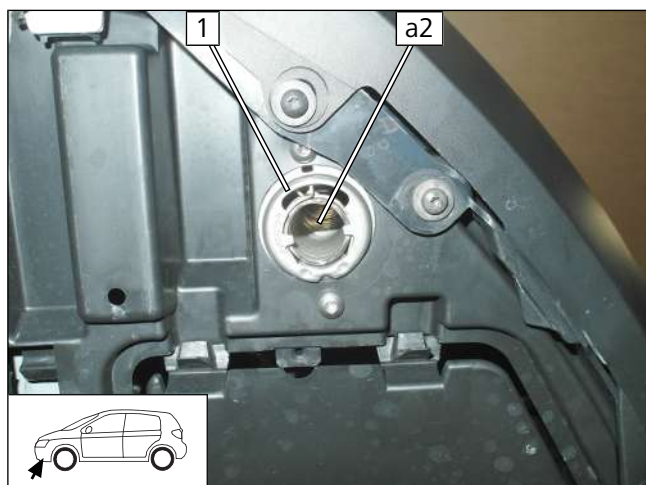


Fig. 88



Observe the EFIX installation instructions.

- ▶ Assemble bumper trim and lower bumper trim 2.
- ▶ Mount exhaust pipe a2 in EFIX 1 as shown.



Danger of damage to components

► Ensure sufficient distance between exhaust pipe **a2** and neighbouring components, correct if necessary.

**1** EFIX

Fig. 89



## 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 Renault Espace with AAC



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



## 15 Electrical system of control elements

### 15.1 MCC option

#### Mounting MCC

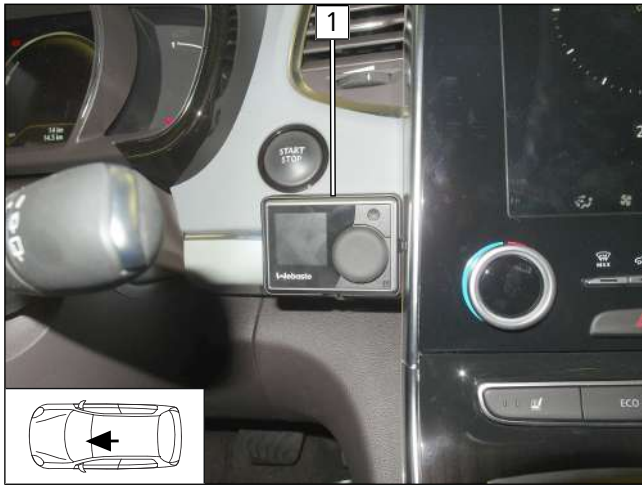


Fig. 90



Observe the MultiControl CAR installation documentation.

- 1 MCC installation frame

### 15.2 Remote option (Telestart)

#### Premounting receiver

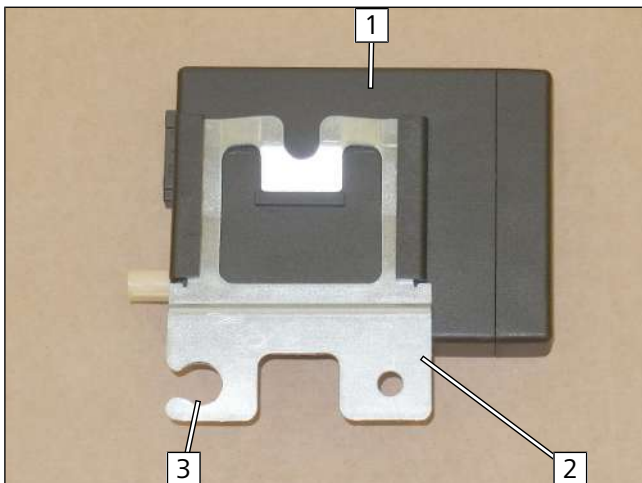


Fig. 91



Observe the Telestart installation documentation.

- 1 Receiver
- 2 Bracket
- 4 Ø8.5 hole

#### Mounting receiver

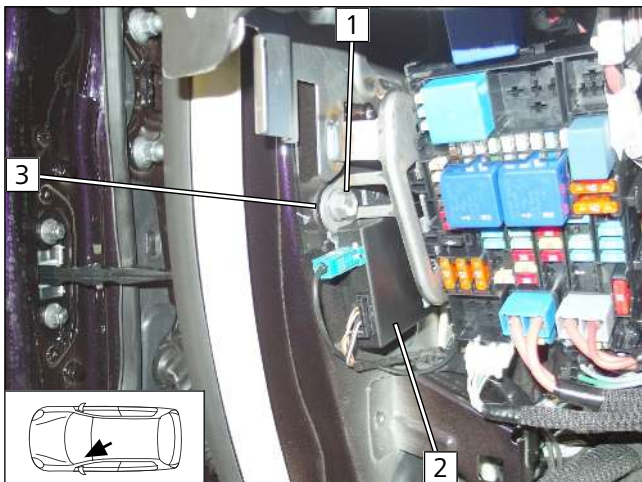


Fig. 92

► Remove original vehicle bolt 1. Insert Telestart bracket between vehicle and original vehicle retaining plate at position 3 and fasten with original vehicle bolt.

- 2 Receiver



## Mounting aerial

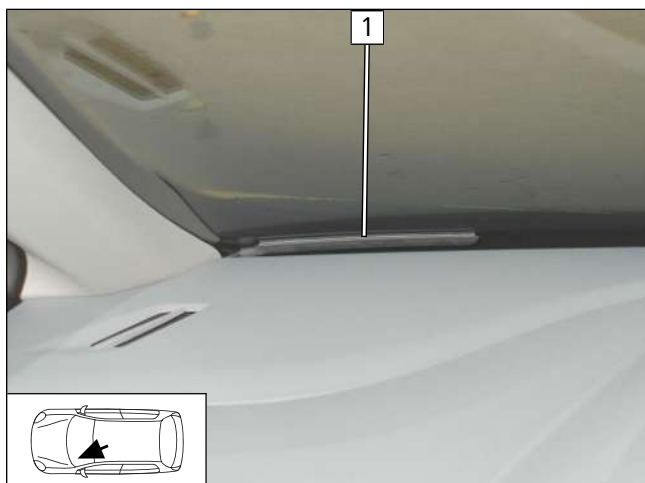


Fig. 93

1 Aerial

## Mounting temperature sensor, only in case of T100 HTM

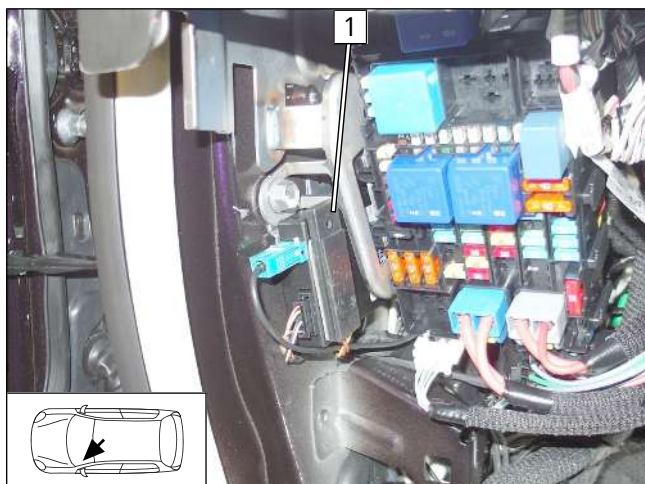


Fig. 94

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

## 15.3 ThermoCall option

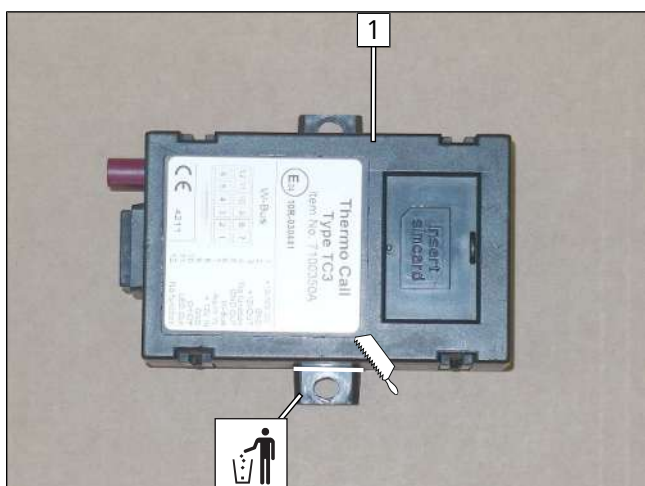


Fig. 95



Observe the ThermoCall installation documentation.



## Mounting receiver

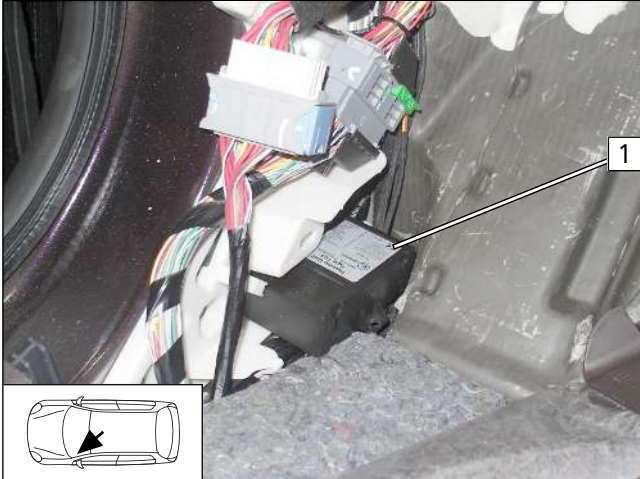


Fig. 96

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

## Mounting aerial (optional)

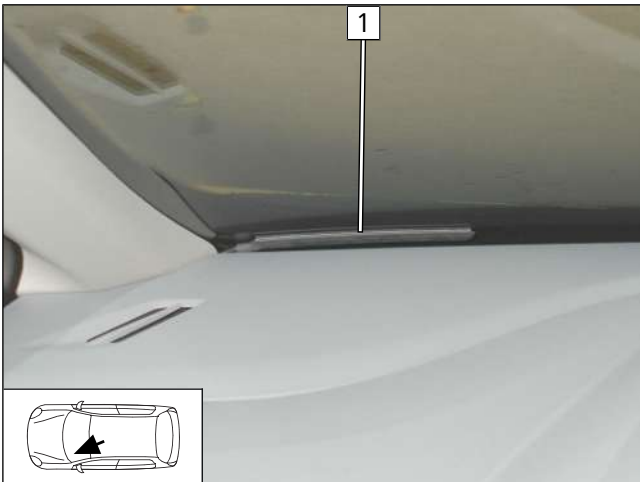


Fig. 97

**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.



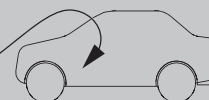
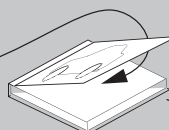
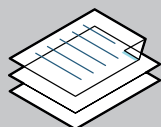
**Only use manufacturer-approved coolant.**

- ▶ 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. 1327461A\_EN • 10/19 • 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>

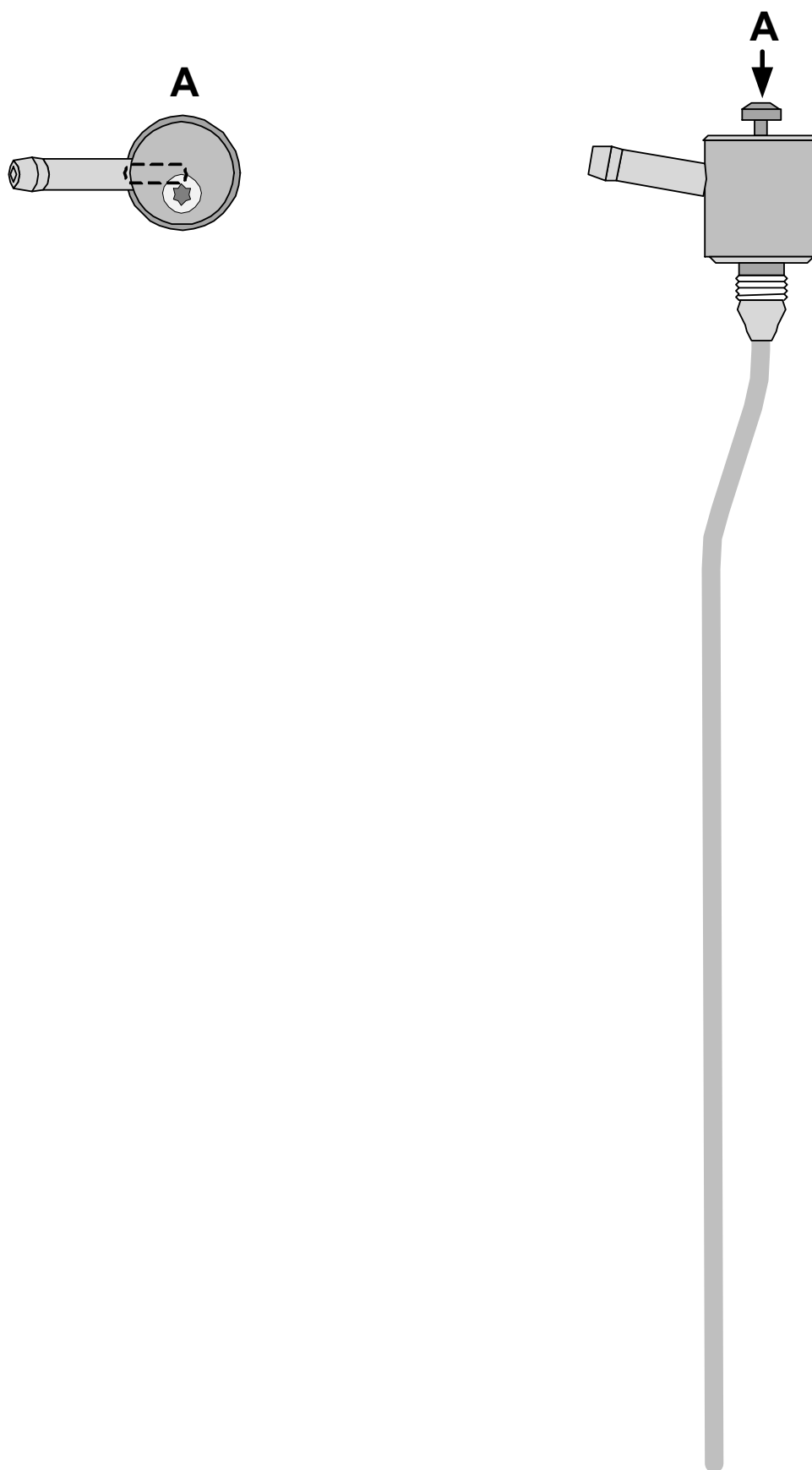


WWW.WEBASTO.COM





## 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.

