

K Installation documentation

for water heater Thermo Top Evo

'Inline' coolant circuit with engine preheating

Ford Kuga

Left-hand drive vehicle

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Ford	Kuga	DFK	from 2020	e13* 2007/46* 2188*...

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displacement [cm ³]	Engine code
2.0 EcoBlue hybrid	Diesel	EURO6;WLTP;AP...	6-speed SG	110	1995	YLDC
2.0 EcoBlue	Diesel	EURO6; WLTP;DG...	8-speed AG	140	1995	YMDA

Validity	Equipment variants	Model
		Kuga
Verified equipment variants	2 zone automatic air-conditioning	X
	LED main headlights	X
	LED front fog lights	X
	Halogen main headlights	X
	Headlight washer system	X
	Halogen front fog lights	X
	Keyless Go	X
	Standard- Optic	X
	ST Line Optic Package	X
	FWD	X
AWD	X	

Total installation time	Note
10.3 hours	

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1 List of abbreviations

AAC	Automatic air-conditioning
AG	Automatic transmission
AWD	All-wheel drive
DP	Fuel pump
FWD	Front wheel drive
HG	Heater
SH2	Engine compartment fuse holder for F1/F2
UP	Coolant pump
Veh.	Vehicle
X10	Female plug for control element

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 Ford Kuga 2020 2.0 diesel	1328337A
Additional 'Webasto Comfort' A/C control kit for Ford Focus / Kuga / Puma	1327216_
In case of Telestart, control element, as well as indicator lamp in consultation with end customer	In accordance with price list

2.3 Notes on installation, in coordination with the end customer

- ▶ Arrange for the vehicle to be delivered with the tank only about ¼ full.
- ▶ The installation location of the following elements should be chosen in coordination with the end customer:
 - the push button in case of the Telestart and/or ThermoCall and/or ThermoConnect options
 - the MultiControl CAR option

2.4 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.

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.



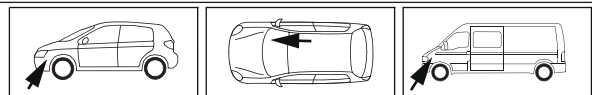
Note on a special technical feature

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
1 / 12 / a1	Position numbers for the image descriptions
① / ⑫ / Ⓐ	Position numbers for the image descriptions for electrical wires and components as well as 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 Preparations

5.1 Vehicle preparation



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



DANGER

Take the high-voltage system out of operation as per the procedure described in the manufacturer's instructions and secure it.

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"> ▶ Battery and battery carrier ▶ Deactivate the hybrid system in accordance with the manufacturer's instructions ▶ Entire air filter box with intake hose ▶ Front wheel on the driver's side ▶ Wheel well trim on the driver's side ▶ Detach the wheel well trim on the front passenger's side in the bumper area ▶ Engine cover underride protection ▶ Bumper trim ▶ Underbody trim on the driver's side ▶ Detach the front part of the exhaust system heat shield plate on the driver's side 	
Passenger compartment	<ul style="list-style-type: none"> ▶ Side instrument panel trim on the driver's and front passenger's side ▶ Detach the lower instrument panel trim on the driver's side ▶ A/C control panel (see dismantling instructions) 	

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 	
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6 Installation overview

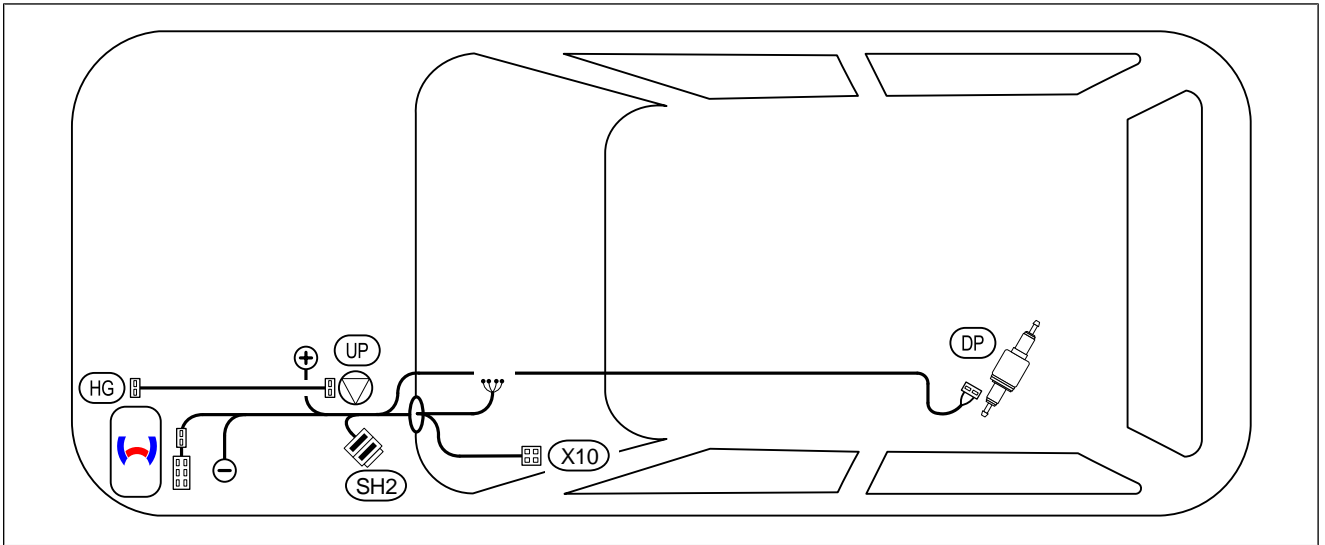


Fig. 1

Legend to installation overview

Abbreviation	Component
DP	Fuel pump
HG	Heater
SH2	Engine compartment fuse holder for F1/F2
UP	Coolant pump
X10	Female plug for control element

Heater installation location



1 Heater

Fig. 2



7 Electrical system of engine compartment

Mounting perforated bracket and retaining plate of SH2

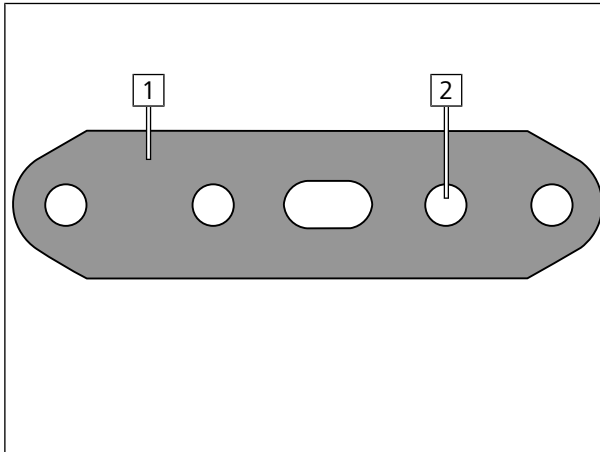


Fig. 3

1 Perforated bracket

2 Fastening point vehicle body

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

2 M6x12 bolt, original vehicle hole, perforated bracket, flanged nut

Installing SH2

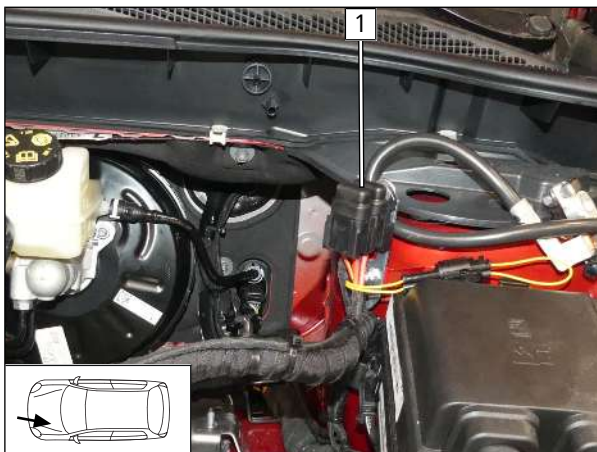


Fig. 4

1 SH2

Positive wire connection

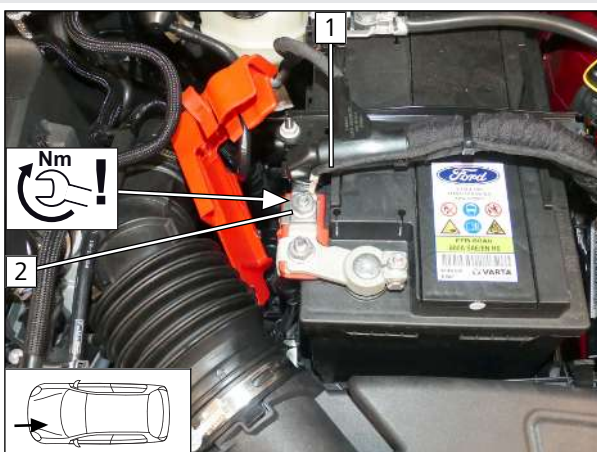


Fig. 5



DANGER

Observe tightening torque



The Fig. shows the installation situation. The battery is connected during the final work phase.

1 Positive wire

2 Original vehicle positive support point



Earth wire connection

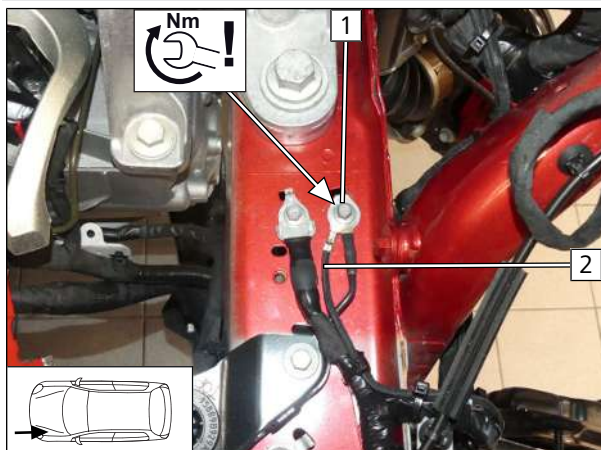


Fig. 6



DANGER

Observe tightening torque

- 1 Original vehicle earth support point
- 2 Earth wire

Passenger compartment wiring harness pass through



Fig. 7



To prevent water seeping into the passenger compartment, the wiring harness must be routed upwards to the protective rubber plug and this plug must then be sealed with a suitable sealing compound.

- 1 Protective rubber plug
- 2 Passenger compartment and control element wiring harnesses



8 Mechanical system

8.1 Preparing installation location

Dismantling original vehicle connector

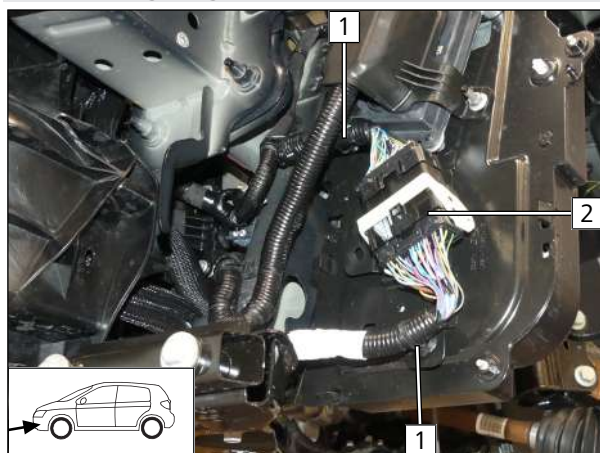


Fig. 8

- 1 Remove clip from hole
- 2 Remove clip of original vehicle connector from hole

Mounting original vehicle connector



Fig. 9

- 1 Cable tie around original vehicle wiring harness (covered)
- 2 Cable tie around original vehicle wiring harness

Premounting cable tie

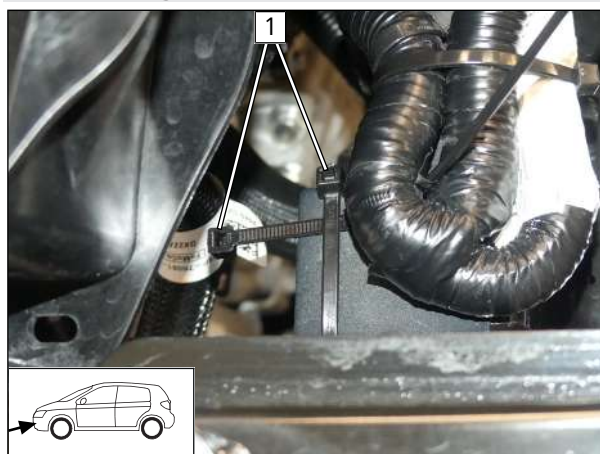
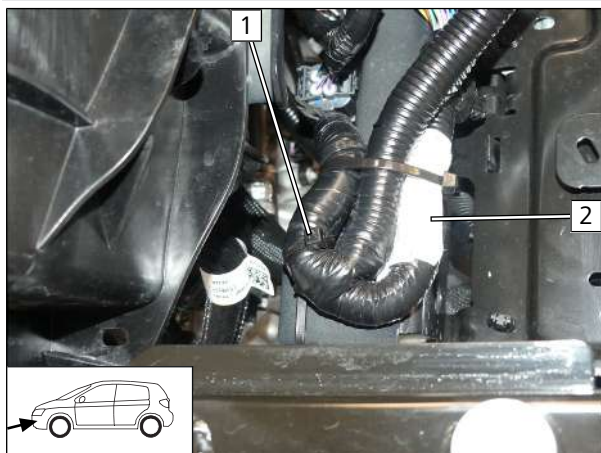


Fig. 10

- Premount two cable ties **1** as shown.



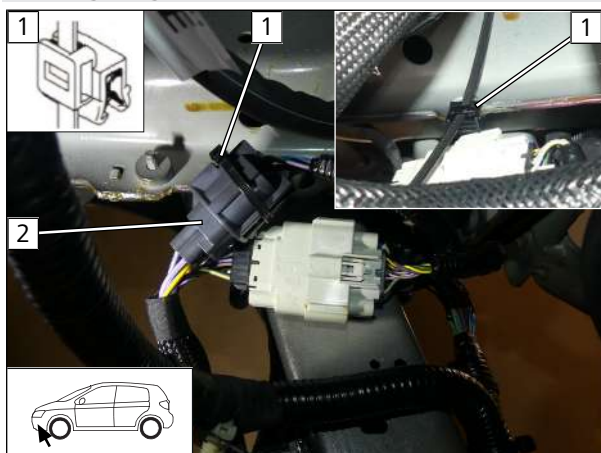
Fastening original vehicle wiring harness



- ▶ Fasten original vehicle wiring harness **2** using cable tie **1**.

Fig. 11

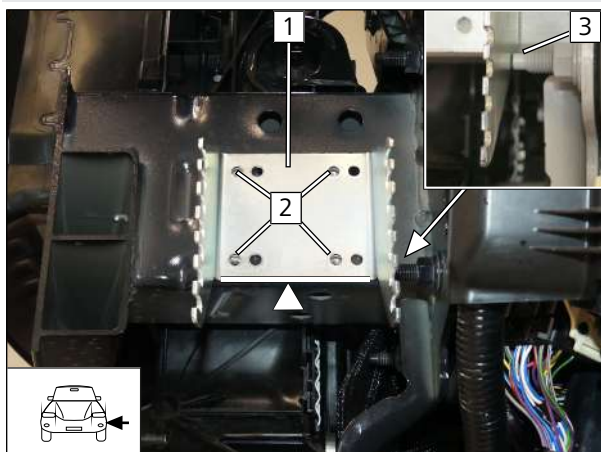
Moving original vehicle connector



- ▶ Remove connector **2** from hole.
- ▶ Fasten edge clip cable tie **1**.

Fig. 12

Copying hole pattern



- ▶ Align HG bracket **1** with the bottom of the carrier and with stud bolt **3**.
- ▶ Copy hole pattern **2** onto carrier.

Fig. 13



Drilling hole, inserting rivet nut

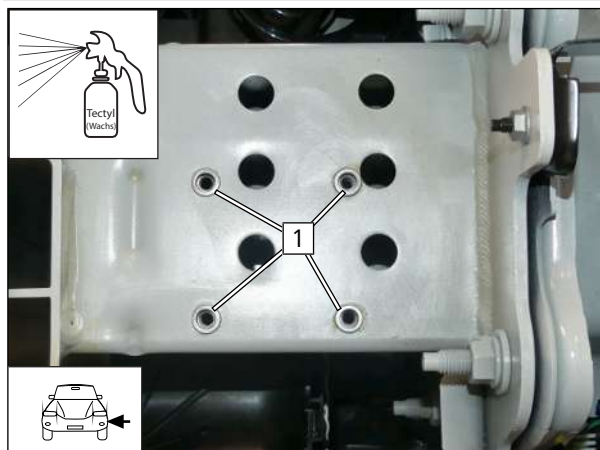


Fig. 14

1 Ø9 hole, rivet nut

Mounting heater bracket

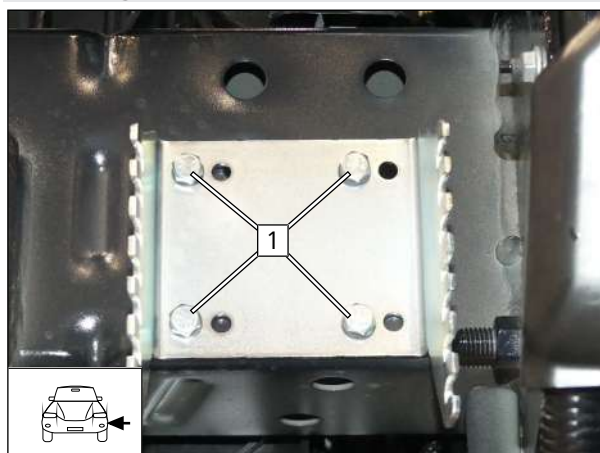


Fig. 15

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

8.2 Premounting heater

Mounting, aligning and fastening with 7Nm water connection piece with sealing ring and retaining plate

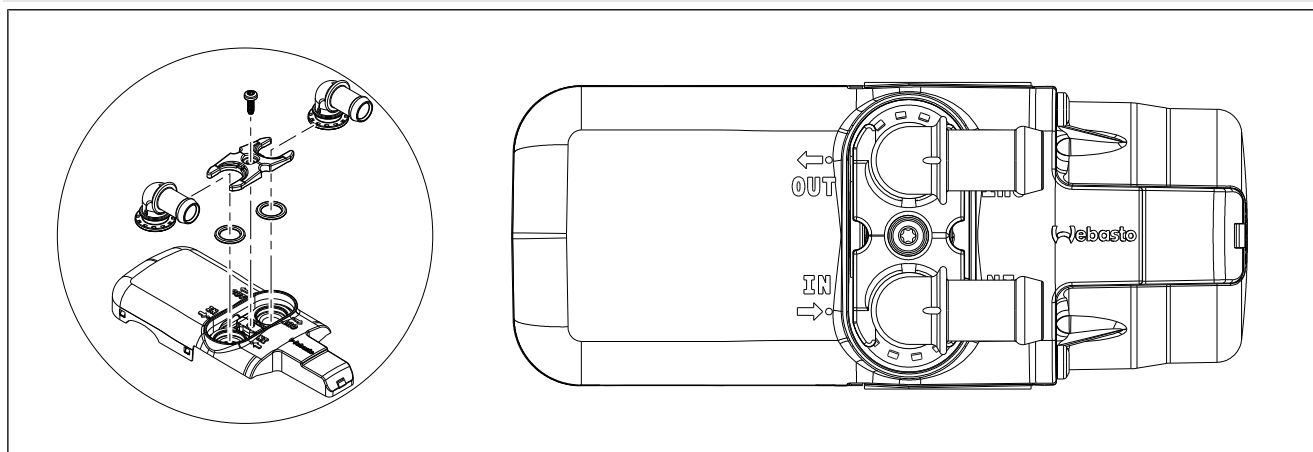


Fig. 16



Premounting M5x13 self-tapping bolts

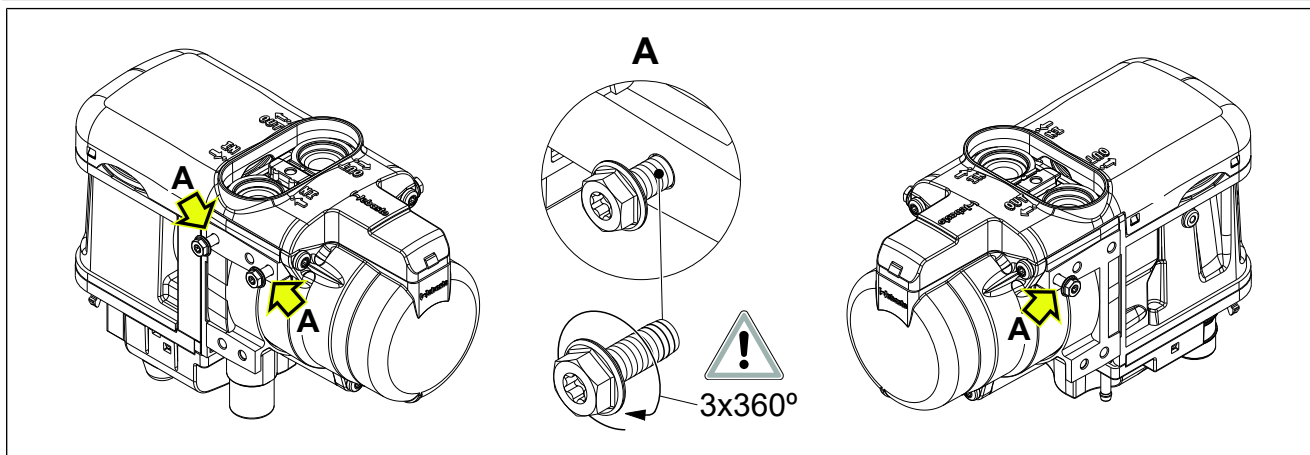
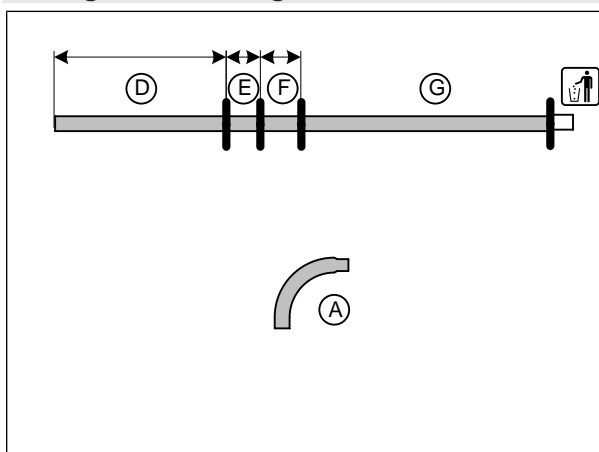


Fig. 17

Cutting hoses to length



(A)	90° moulded hose
(D)	830
(E)	60
(F)	90
(G)	1010

Fig. 18

Mounting hoses (E) and (F) onto HG

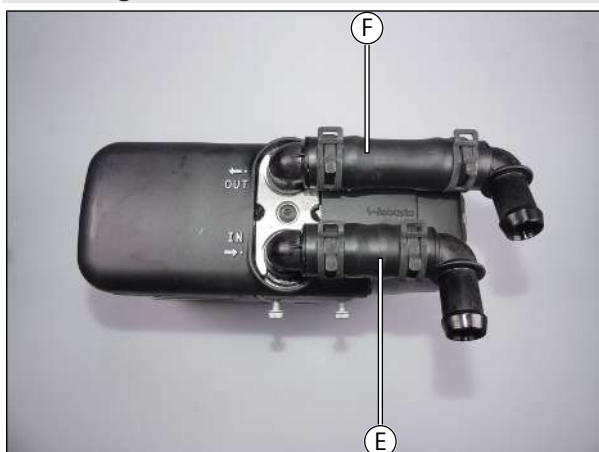


Fig. 19



All spring clips Ø25
All connecting pipes Ø18x18/90°



9 Heater mounting

Mounting heater



Fig. 20



Observe the general installation instructions of the heater.

- 1 Tighten M5x13 self-tapping bolt

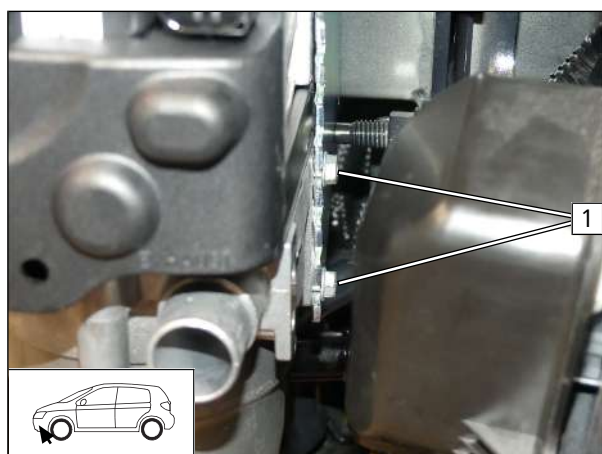


Fig. 21

- 1 Tighten M5x13 self-tapping bolt

Mounting heater and coolant pump wiring harnesses

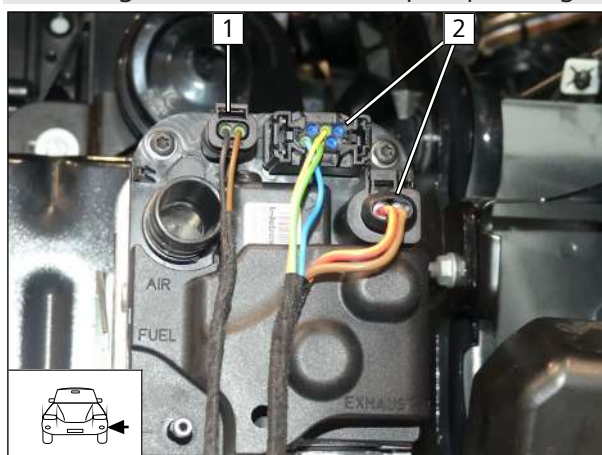


Fig. 22

- 1 Coolant pump wiring harness connector
- 2 Heater wiring harness connector



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

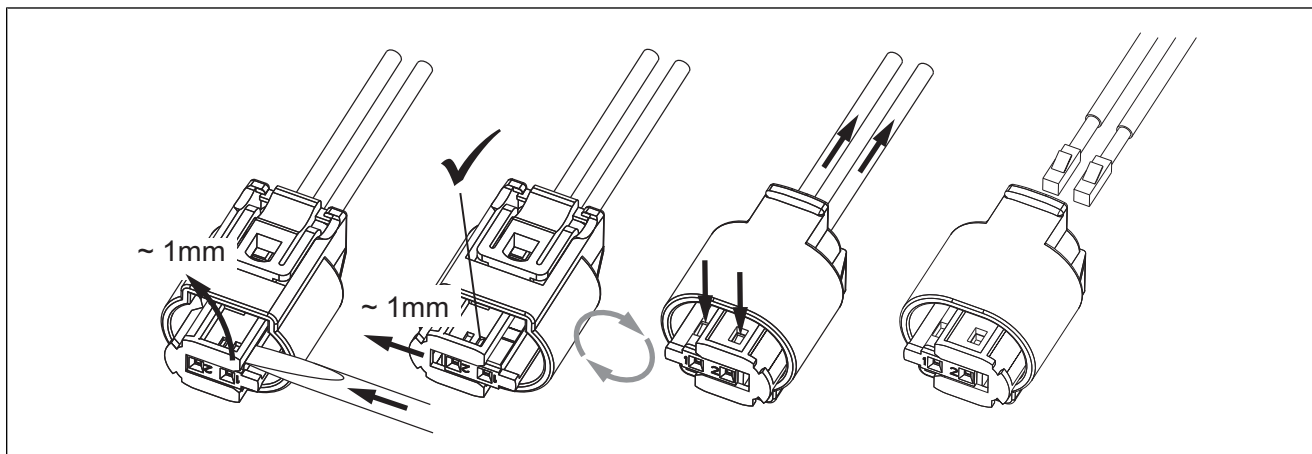


Fig. 23

10.1 Routing fuel line

Cutting corrugated tube to length

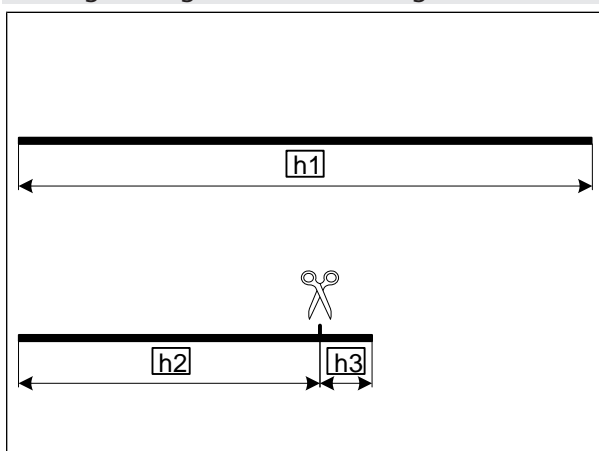


Fig. 24

h1 2100

h2 1120

h3 10



Connecting heater

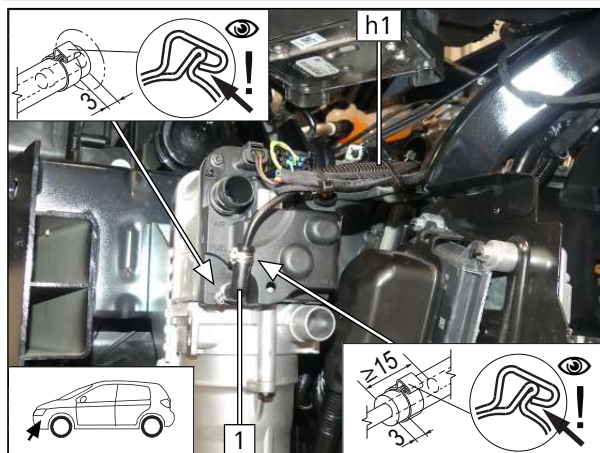


Fig. 25

► Draw fuel line and fuel pump wiring harness into corrugated tube **h1**.

- 1 90° moulded hose (short side on HG), Ø10 clamp [2x]

Routing to the engine compartment

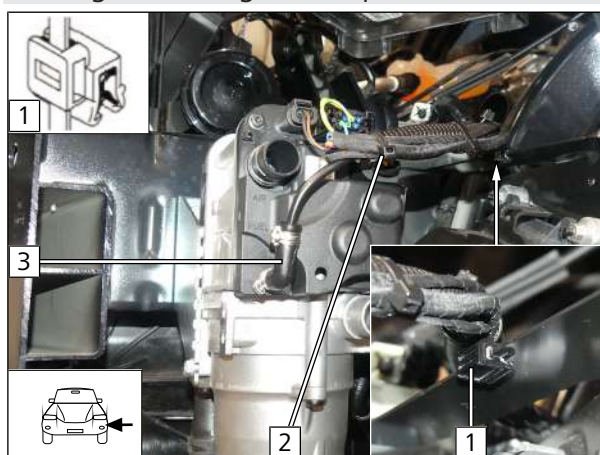


Fig. 26

► Align moulded hose **3** vertically upwards.

- 1 Edge clip cable tie
- 2 Cable tie around corrugated tube, HG wiring harness and coolant pump wiring harness

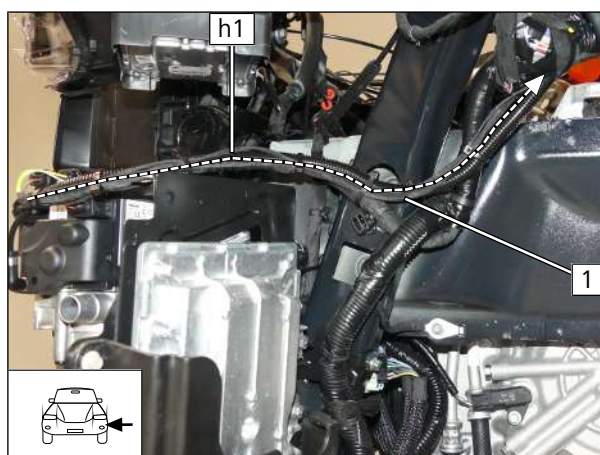


Fig. 27

► Attach rest of HG wiring harness **1** and coolant pump wiring harness together with corrugated tube **h1** to original vehicle wiring harness using cable ties.



Routing in engine compartment

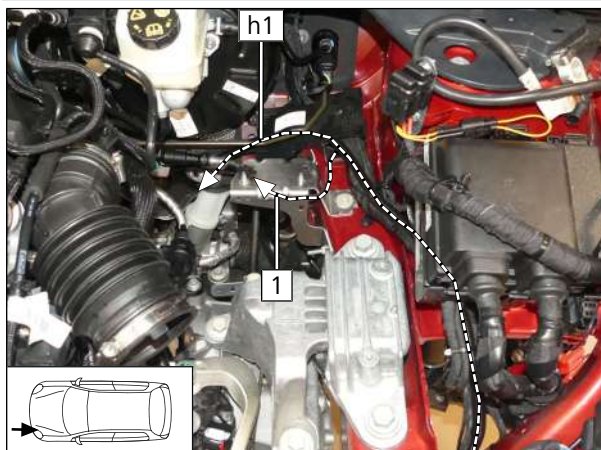


Fig. 28

- ▶ Route corrugated tube **h1** in engine compartment to underbody as shown.
- ▶ Route coolant pump wiring harness to coolant pump installation location **1**.

Routing on underbody

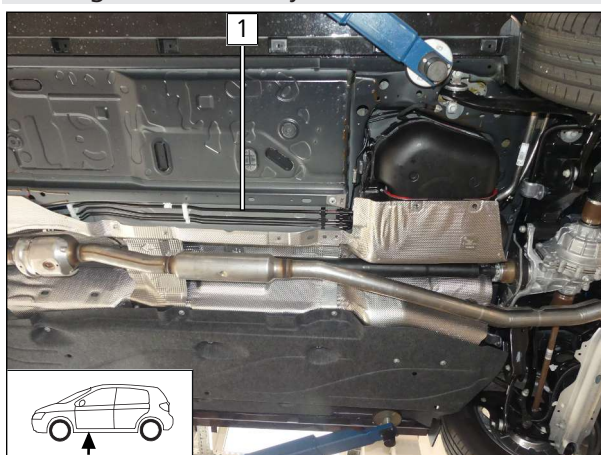


Fig. 29

- ▶ Route fuel line and fuel pump wiring harness **1** along original vehicle fuel lines on the underbody.

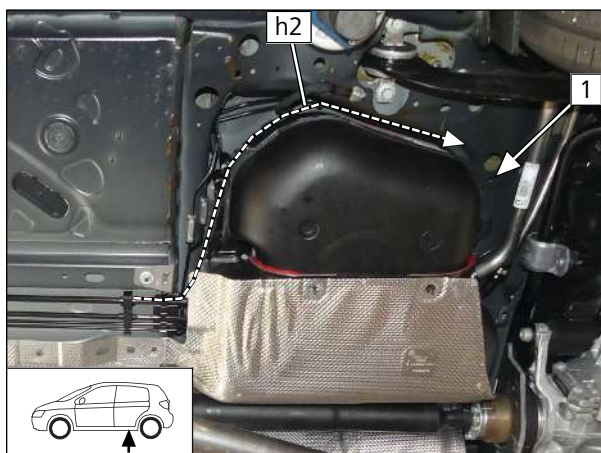


Fig. 30

- ▶ Draw fuel line and fuel pump wiring harness into Ø10 corrugated tube **h2**, route along original vehicle brake lines to the fuel pump installation location **1** and attach with cable ties.



10.2 Mounting and connecting fuel pump

Premounting fuel pump

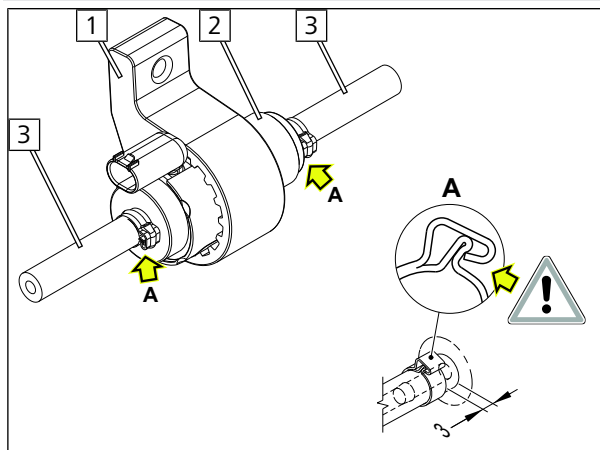


Fig. 31



The alignment of the fuel pump and fuel hoses will be carried out afterwards, during the installation.

- 1 Fuel pump mount
- 2 Fuel pump
- 3 Hose section, Ø10 clamp

Inserting rivet nut

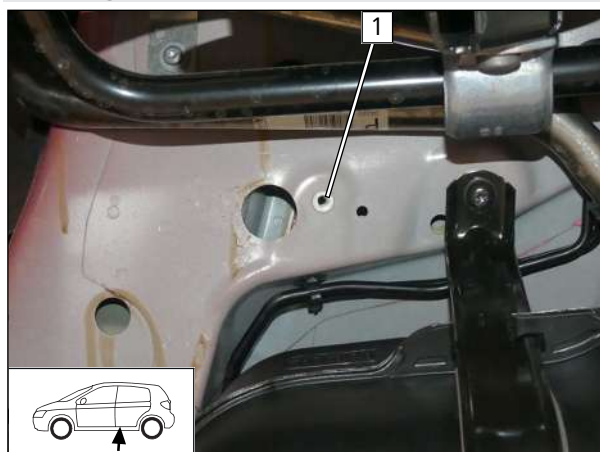


Fig. 32

- 1 M6 rivet nut in original vehicle hole

Mounting fuel pump

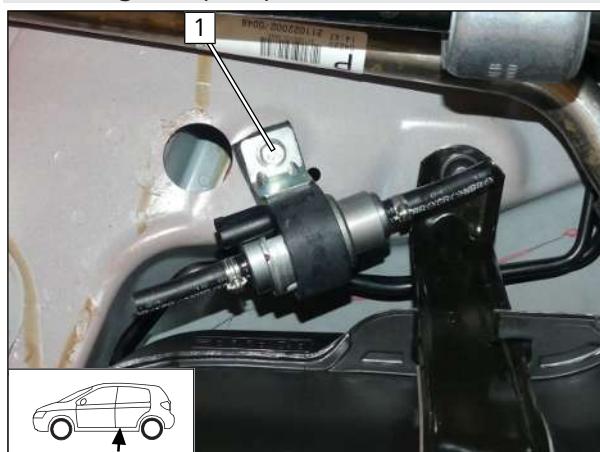


Fig. 33

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



Assembling fuel pump connector X7

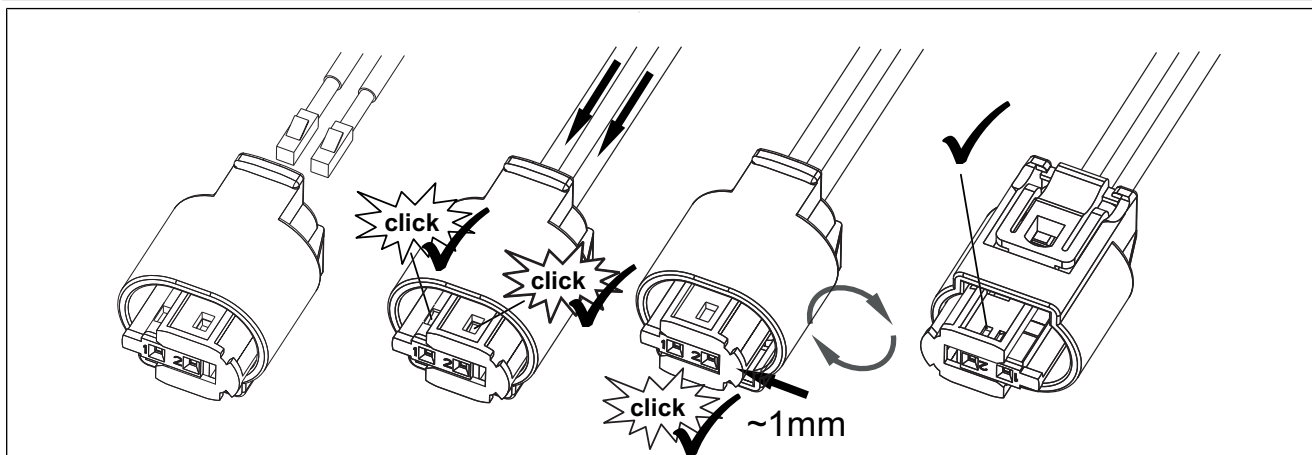
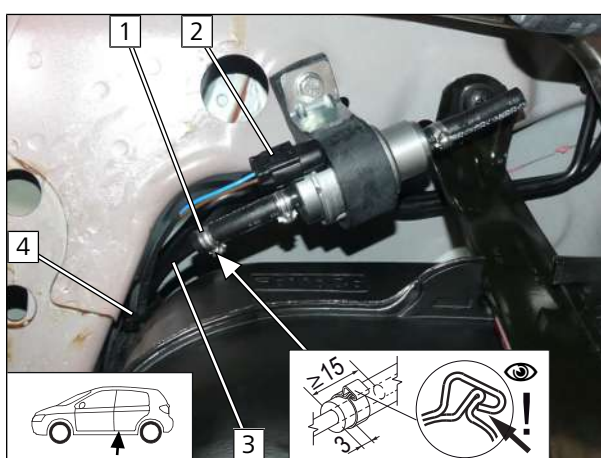


Fig. 34



► Fasten the rest of fuel pump wiring harness **4** with cable ties.

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

Fig. 35

10.3 Installing fuel extractor

Cutting fuel extractor **1** to length

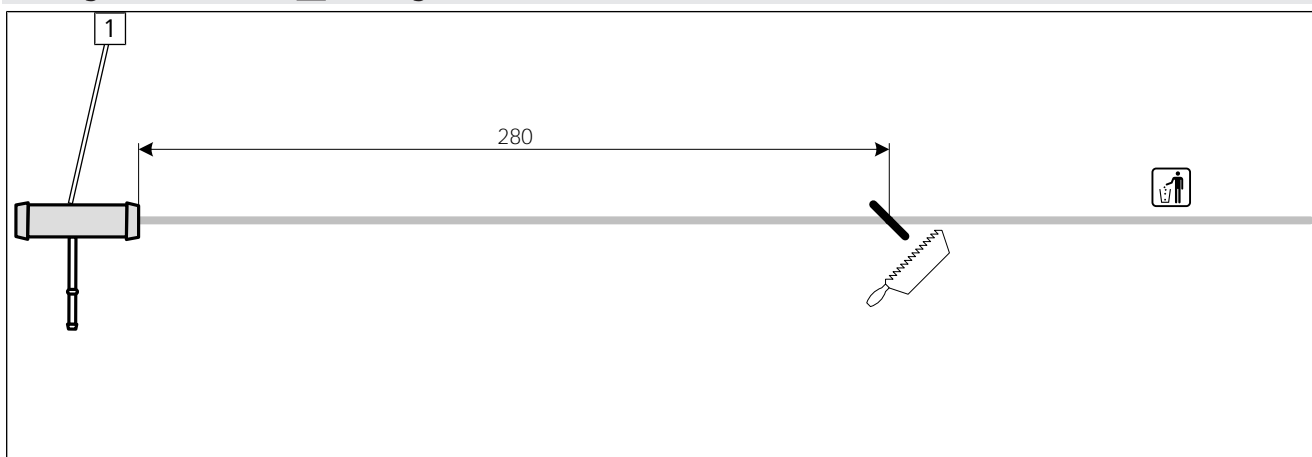


Fig. 36



Premounting fuel extractor

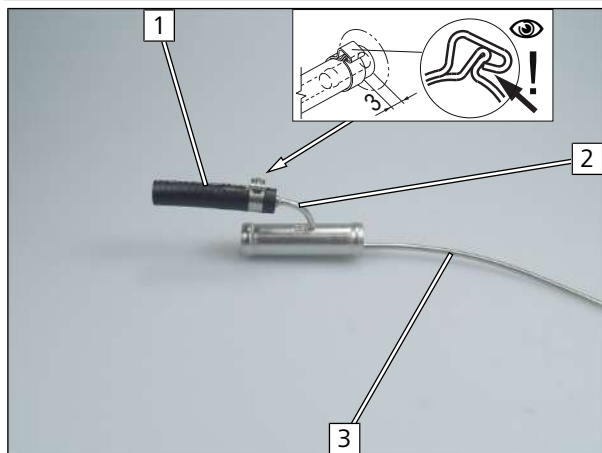


Fig. 37



Observe the installation instructions of the tank extracting device.

- ▶ Bend fuel extractor **3** as shown in template and cut to length.
- ▶ Bend extraction pipe **2** as shown.
 - 1** Hose section, Ø10 clamp

Detaching tank ventilation hose

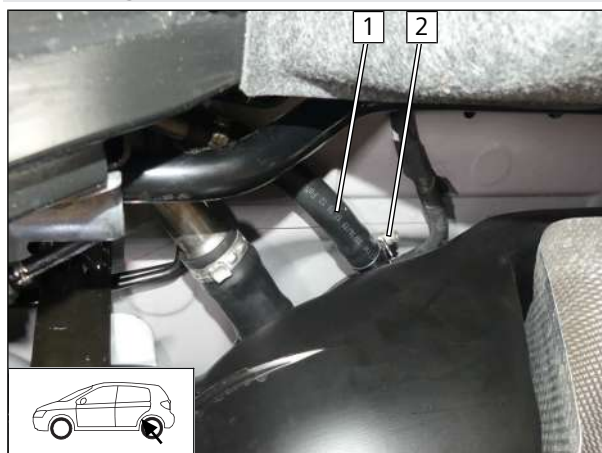


Fig. 38



DANGER

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

- ▶ Remove original vehicle clamp **2**, it will be reused.
- ▶ Pull tank ventilation hose **1** from fuel tank connection piece.

Cutting tank ventilation hose

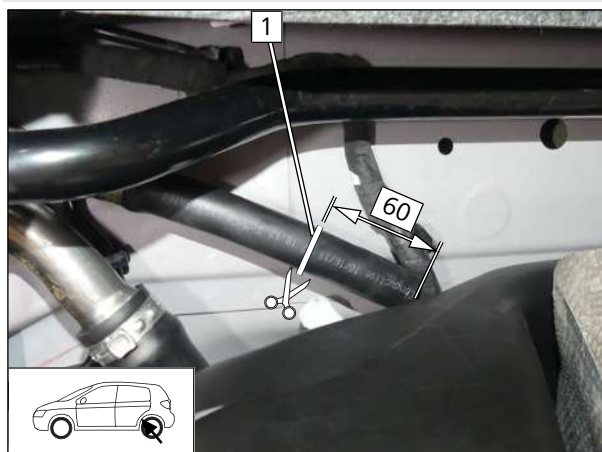


Fig. 39

- 1** Cutting point



Mounting hose section

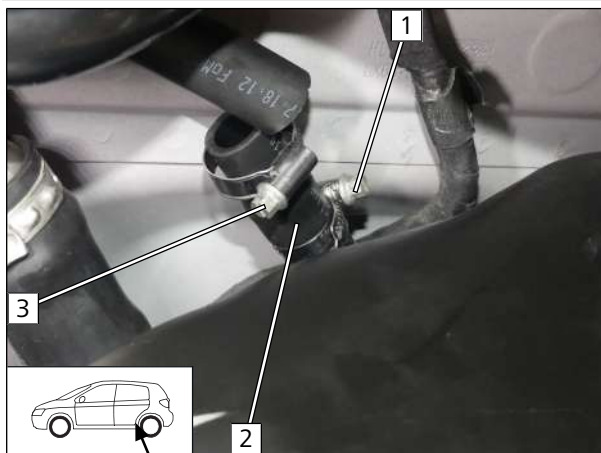


Fig. 40

- 1 Original vehicle clamp
- 2 Cut-off hose section
- 3 Mount Ø16-27 screw clamp loosely

Mounting fuel extractor

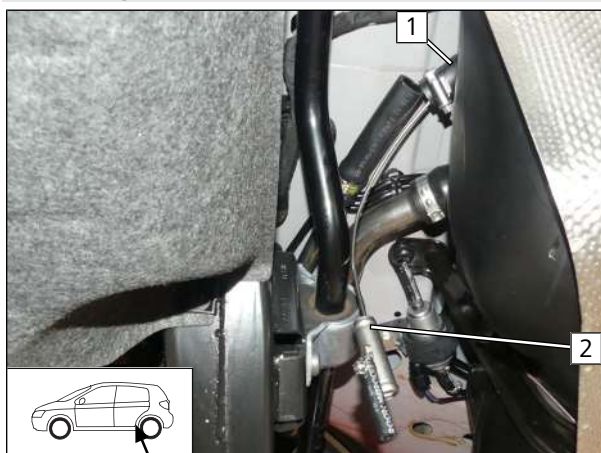


Fig. 41

► Insert fuel extractor **2** through hose section **1**.

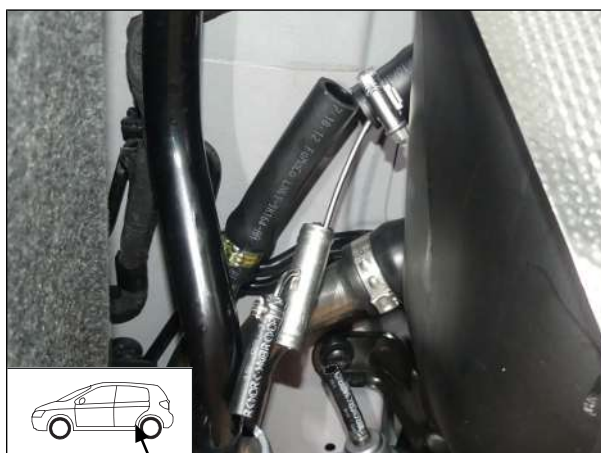


Fig. 42



Aligning fuel extractor

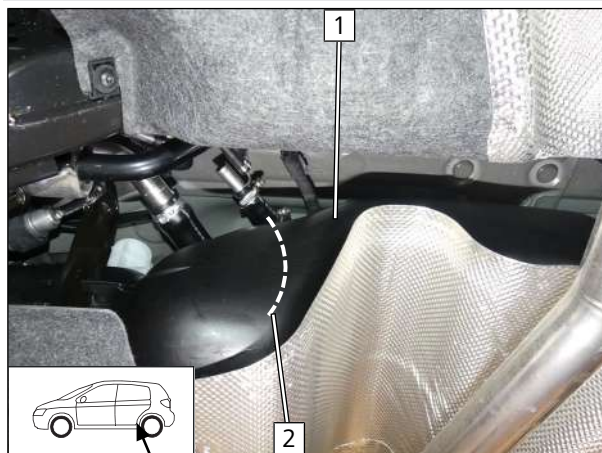


Fig. 43

Align fuel extractor with fuel tank wall. Ensure contact-free final assembly.

- 1 Fuel tank
- 2 Fuel extractor

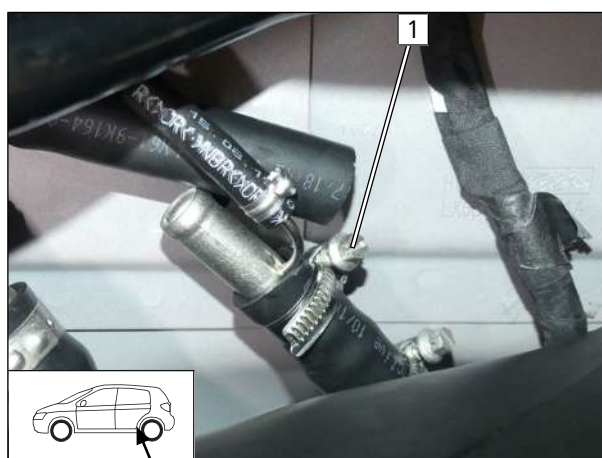


Fig. 44

Pay attention to installation position of the fuel extractor (see Fig.).

► Tighten screw clamp 1.

Connecting tank ventilation hose



Fig. 45

- 1 Ø16-27 screw clamp
- 2 Tank ventilation hose



Connecting fuel extractor and fuel pump

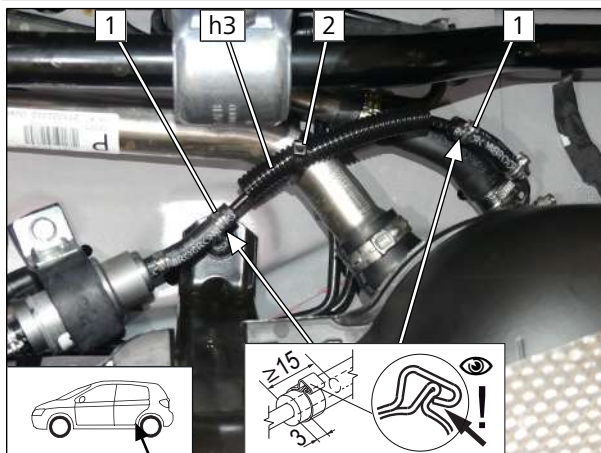


Fig. 46

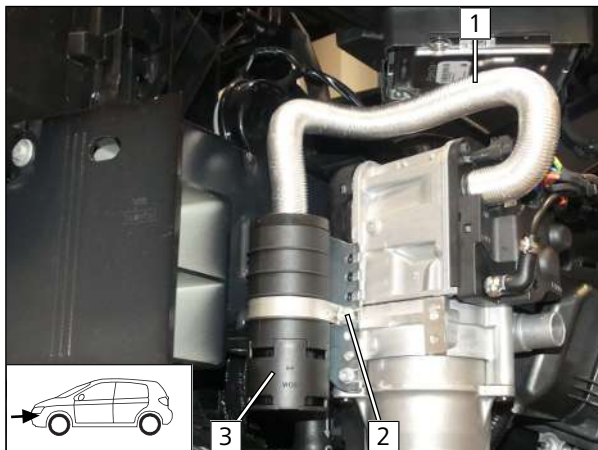
► Draw fuel line into corrugated tube **h3** and attach to original vehicle lines with cable tie **2**.

1 Ø10 clamp



11 Combustion air

Mounting combustion air intake silencer



Observe the installation instructions of the combustion air intake silencer.

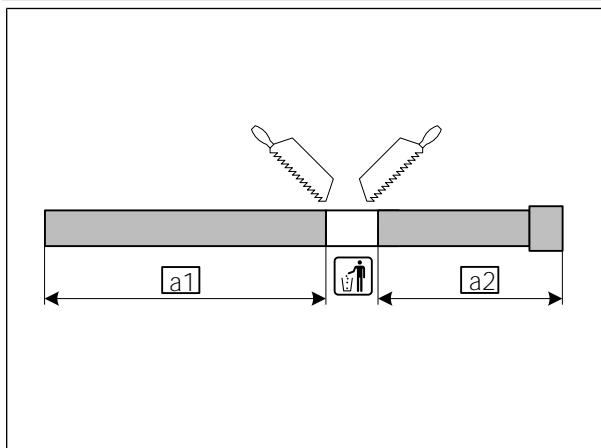
- 1 Combustion air intake line
- 2 5x13 self-tapping bolt, Ø51 clamp, HG bracket, HG hole
- 3 Combustion air intake silencer

Fig. 47



12 Exhaust

Cutting exhaust pipe to length

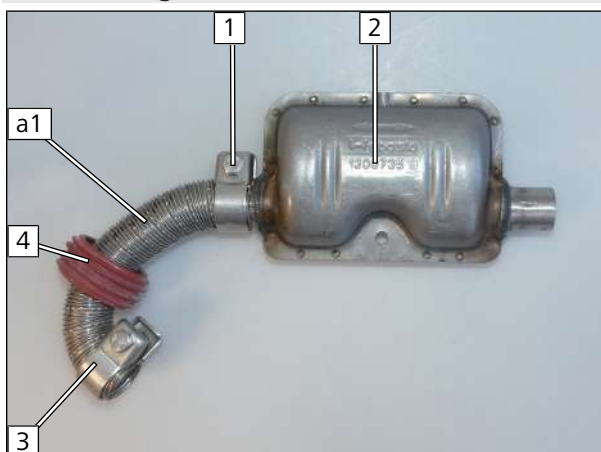


a1 160

a2 120

Fig. 48

Premounting exhaust silencer



1 Hose clamp

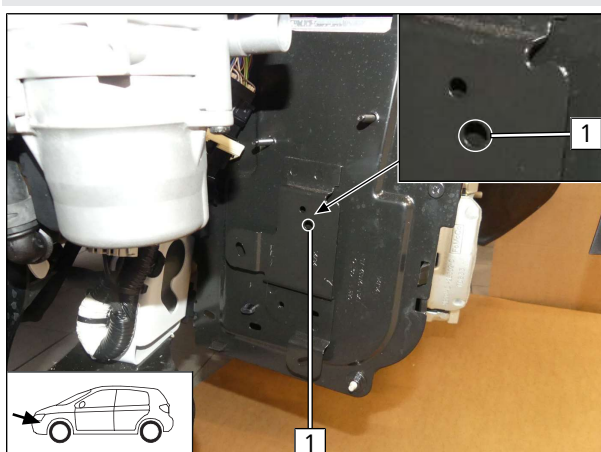
2 Exhaust silencer

3 Mount hose clamp loosely

4 Spacer bracket

Fig. 49

Exhaust silencer installation location



1 View of exhaust silencer fixing point

Fig. 50



Mounting exhaust silencer

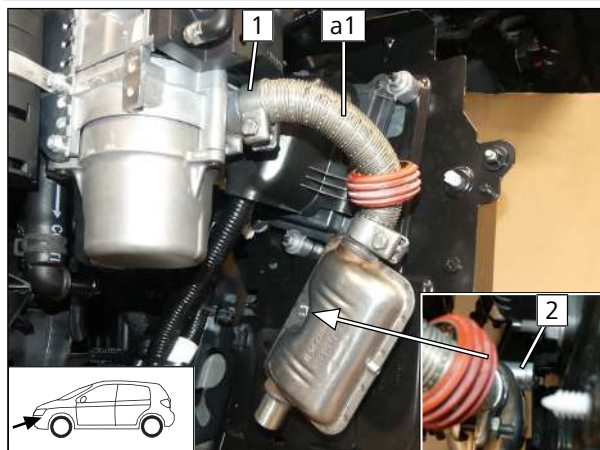


Fig. 51

- 1 Tighten hose clamp
- 2 M6x35 bolt, exhaust silencer, spacer (5), spacer (20), original vehicle hole, flanged nut

Mounting exhaust pipe **a2**

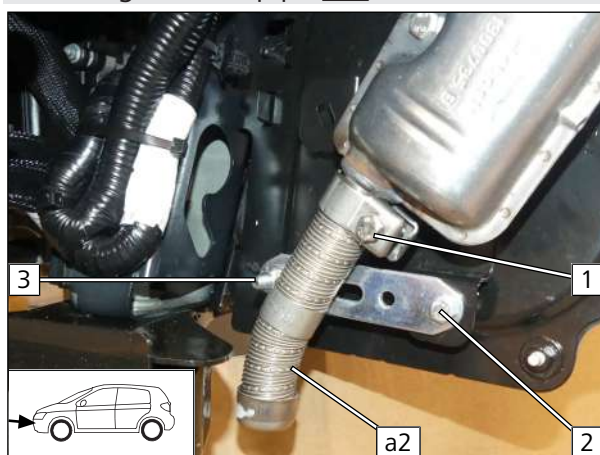


Fig. 52

- 1 Hose clamp
- 2 M6x16 bolt, perforated bracket, original vehicle hole, flanged nut
- 3 M6x20 bolt, perforated bracket, Ø25 pipe clamp, flanged nut



13 Coolant

13.1 Hose routing diagram

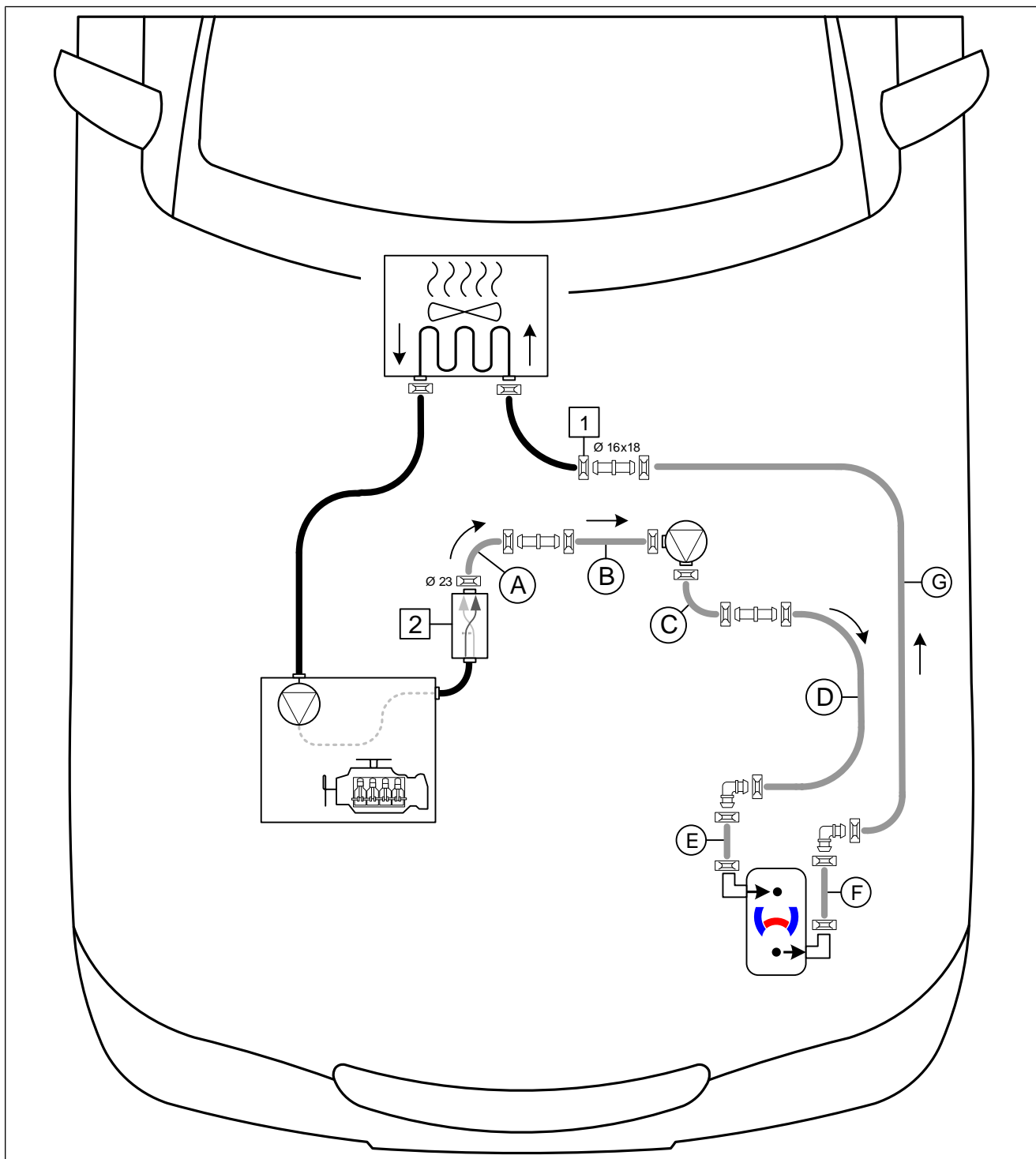


Fig. 53

All spring clips without a specific designation  = Ø25;

All connecting pipes without a specific designation  or  = Ø18x18

1 Original vehicle spring clip; **2** Exhaust gas recirculation valve



13.2 Coolant circuit installation

Mounting fabric heat shrink tubing

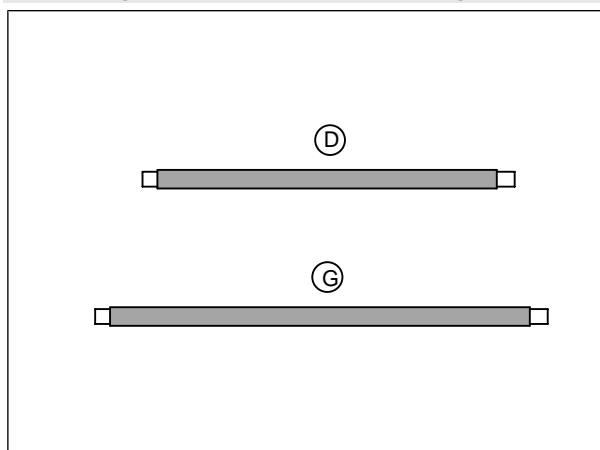


Fig. 54



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

Cutting moulded hose

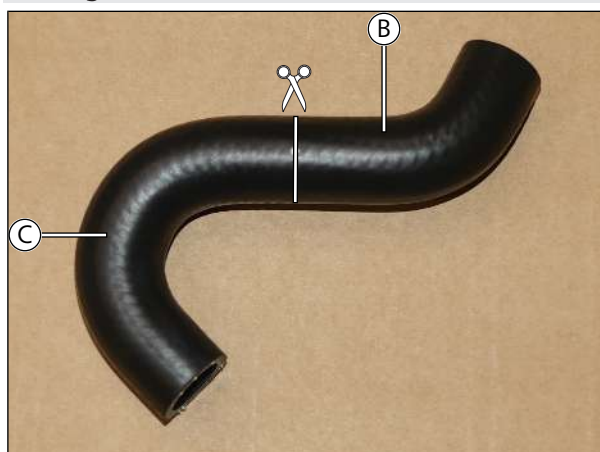


Fig. 55

- ▶ Cut moulded hose as shown.

Preparing coolant pump perforated bracket

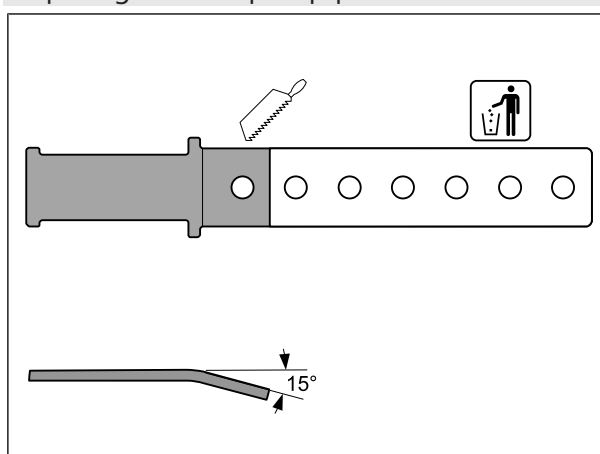


Fig. 56



Premounting coolant pump

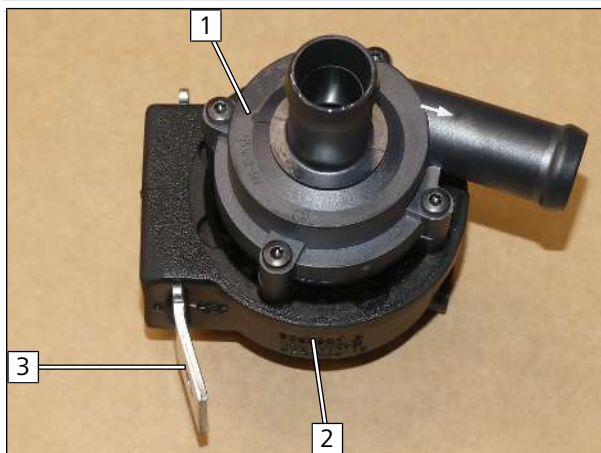


Fig. 57

- 1 Coolant pump
- 2 Coolant pump mount
- 3 Prepared perforated bracket

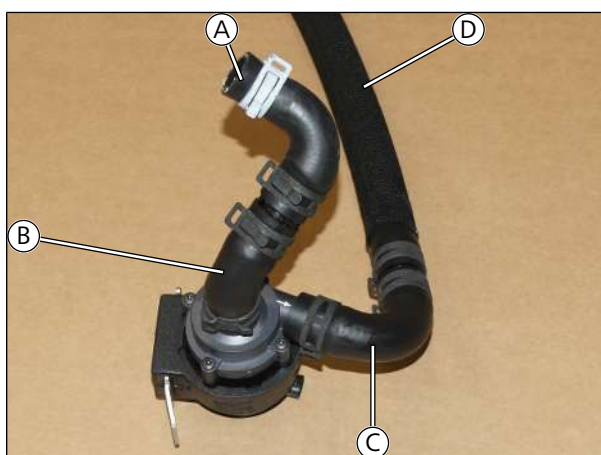


Fig. 58

Cutting point

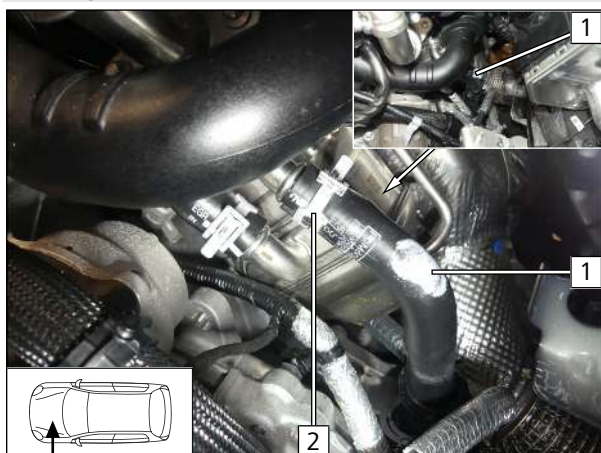


Fig. 59

- ▶ Remove engine outlet / heat exchanger inlet hose **1** from engine outlet connection piece.
- ▶ Original vehicle spring clip **2** will be reused.



Heat exchanger inlet connection



Fig. 60

► Route hose **G** towards the outside of the vehicle.

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

Placing coolant pump in engine compartment

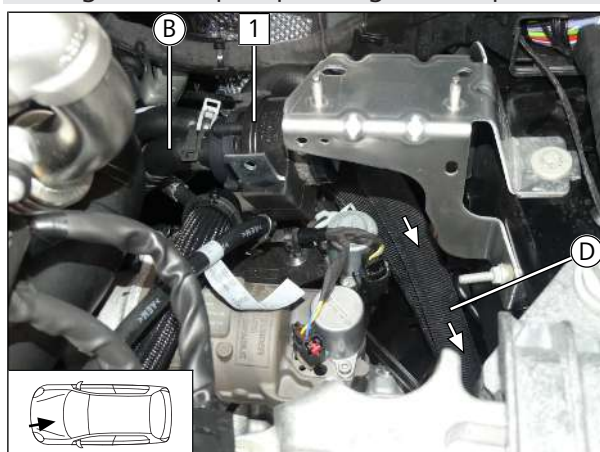


Fig. 61

► Place hoses with coolant pump **1** in engine compartment as shown.

► Route hose **D** towards the outside of the vehicle.

Engine outlet connection

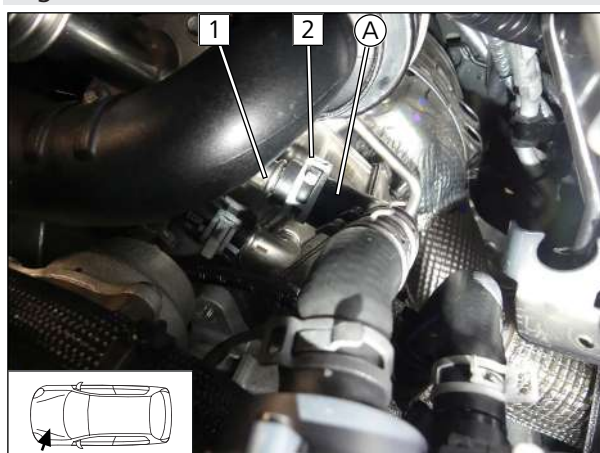


Fig. 62

- 1** Engine outlet connection piece
- 2** Ø23 spring clip



Mounting coolant pump

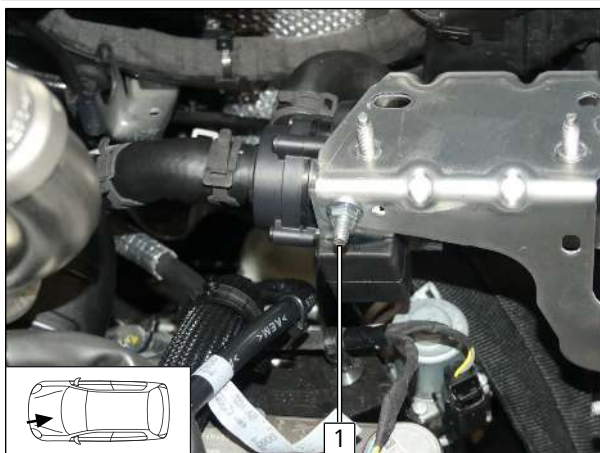


Fig. 63

- 1 M6x20 bolt, premounted perforated bracket, original vehicle hole, flanged nut

Mounting coolant pump wiring harness



Fig. 64

- 1 Coolant pump wiring harness connector

Routing hoses **D** and **G**

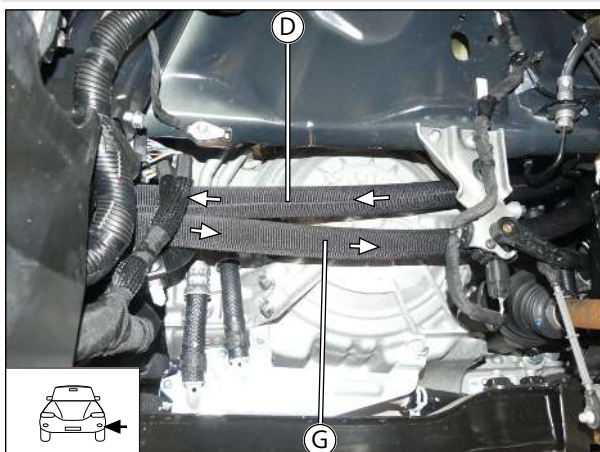


Fig. 65

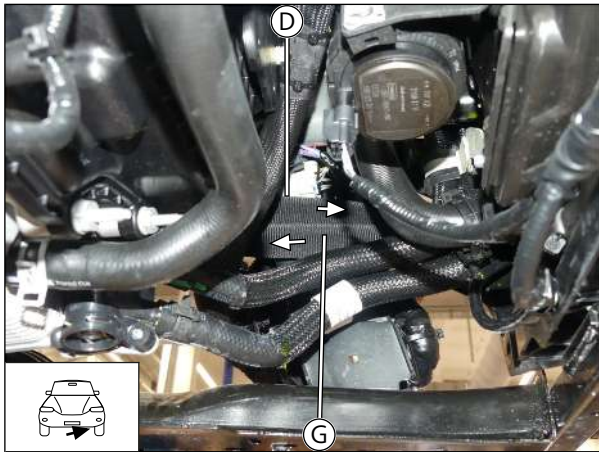


Fig. 66

Connecting hoses **D** and **G**

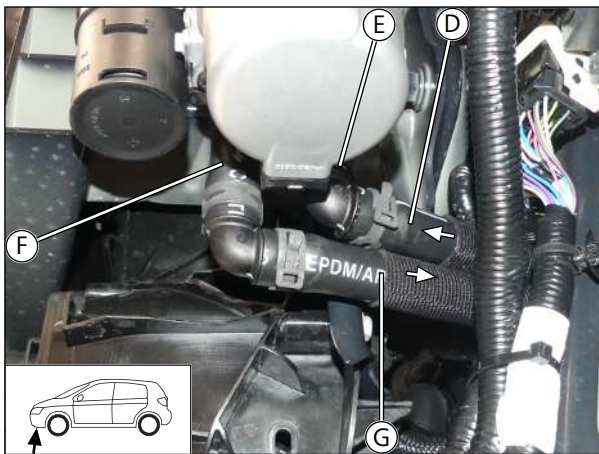


Fig. 67

Fastening hoses **D** and **G**

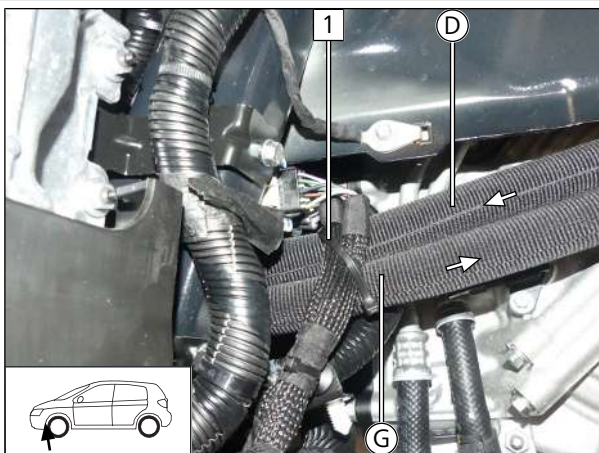
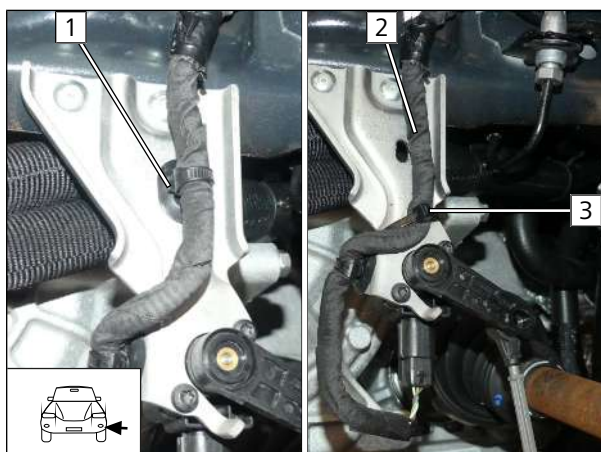


Fig. 68

- 1** Cable tie around hoses **D**, **G** and original vehicle wiring harness



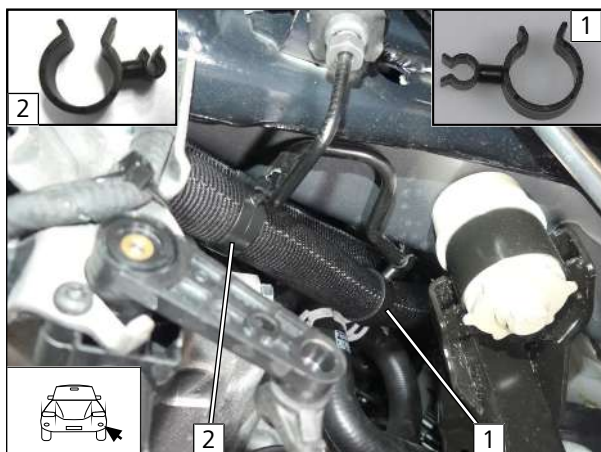
- ▶ Remove clip-type cable tie **1** from hole.
- ▶ Fasten original vehicle wiring harness **2** using cable tie **3**.

Fig. 69



- 1** M6x30 bolt, Ø38 rubber-coated p-clamp, spacer (10), original vehicle hole, flanged nut

Fig. 70



- 1** Hose bracket (Ø22x7) between hose **G** and original vehicle line
- 2** Hose bracket (Ø22x4) between hose **G** and original vehicle line

Fig. 71

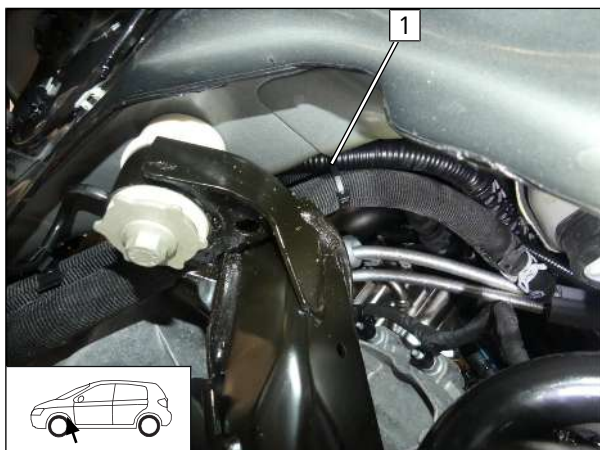


Fig. 72



Manual transmission

- 1 Cable tie around hoses **D** and **G** and original vehicle wiring harness

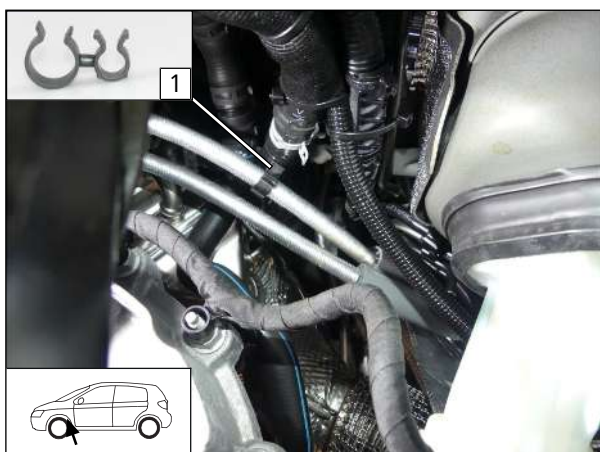


Fig. 73

- 1 Spacer bracket

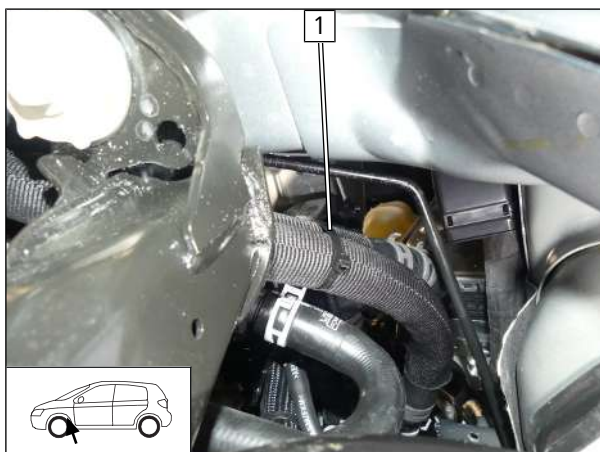


Fig. 74

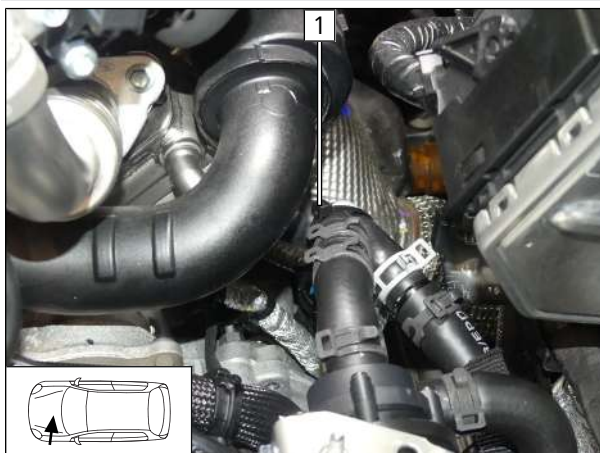


Automatic transmission

- 1 Cable tie around hoses **D** and **G**



Fastening hose (A)



Danger of damage to components

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

- 1 Cable tie around hoses (A) and heat exchanger inlet

Fig. 75



14 Final work in engine compartment

Copying hole pattern, drilling hole in bumper trim

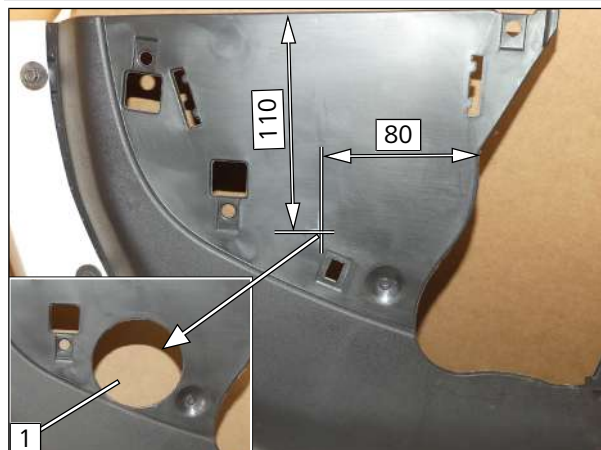


Fig. 76

1 Ø60 hole

Adapting bumper trim

► In case of variant 1 front fog light, cut off star-shaped raised parts 2 as shown.



Fig. 77

Aligning and fastening combustion air intake pipe

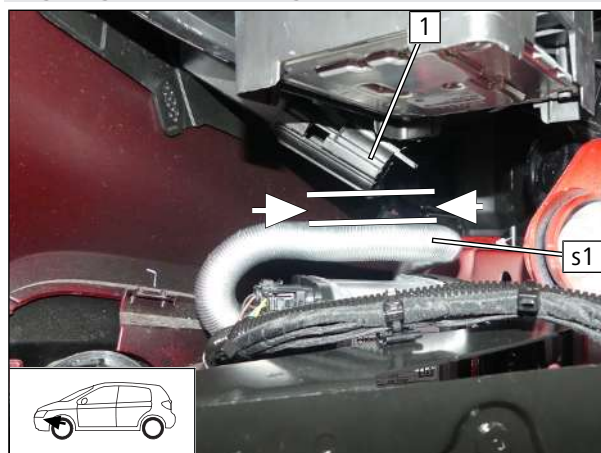


Fig. 78

► Mount bumper trim.



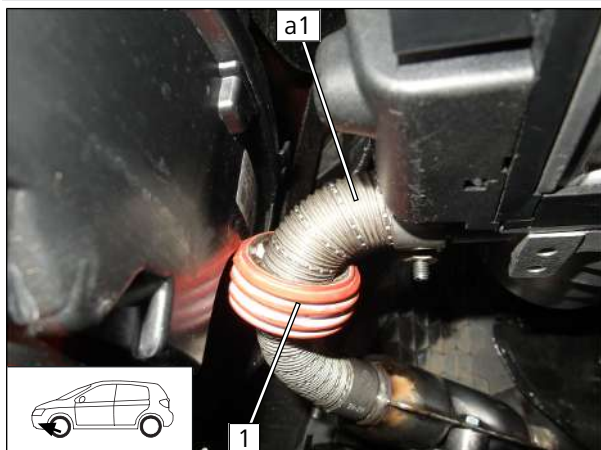
Danger of damage to components

► In case of vehicle with headlight washer system, ensure sufficient distance between combustion air intake pipe s1 and wash nozzle, correct if necessary.

1 Headlight washer system



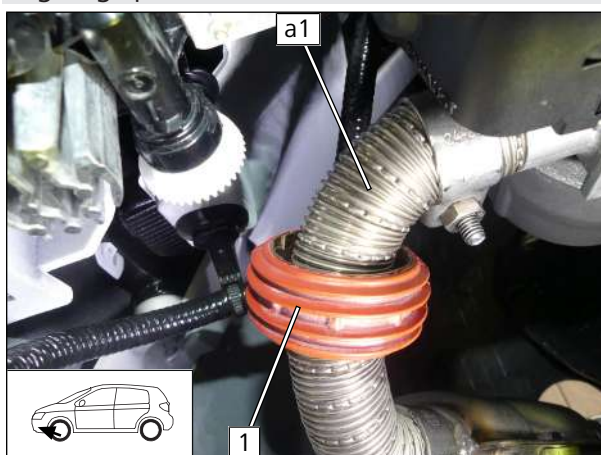
Aligning spacer bracket - variant 1



► Align spacer bracket **1** with bumper as shown.

Fig. 79

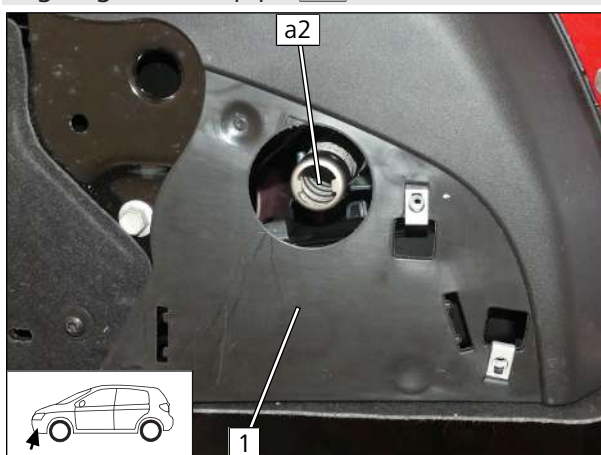
Aligning spacer bracket - variant 2



► Align spacer bracket **1** with front fog lights wiring harness as shown.

Fig. 80

Aligning exhaust pipe **a2**



► Align exhaust pipe **a2** as shown.

Fig. 81



15 Electrical system of passenger compartment

15.1 Air-conditioning control

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



'Webasto Comfort' A/C control installation documentation for Ford Focus / Kuga / Puma with AAC

15.2 Control element installation



Install the control element in accordance with the provided relevant general installation documentation. The installation location of the optional control element MultiControl or the push button of the Telestart or ThermoCall/ThermoConnect options should be confirmed with the end customer and should comply with the installation conditions.



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)



Activation of the hybrid system as per the manufacturer's instructions

Reactivate the hybrid system before connecting the 12V vehicle battery:

1. Activate the hybrid system
2. Connect the battery (12V)



Only use manufacturer-approved coolant.

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



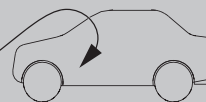
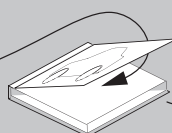
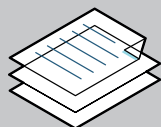
Further information can be found in the general installation and operating instructions of the Webasto components.

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



Vehicle event log after parking heating mode

- ✓ Components of the original vehicle air conditioning system are activated during parking heating mode. Other vehicle components remain inactive, which in some circumstances may be interpreted as an error and can be filed as such in the event log. An increased power consumption (quiescent current) may also be registered for some vehicles.
- ▶ If an incorrect installation can be excluded, these entries are exclusively related to the parking heating mode situation and have no effect on the vehicle functions in driving mode.



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.

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17 Fuel extractor template



100mm



**Set print option to custom scale on 100%.
Check scale 1:1 for print output.**

0

100mm

