EN

K

Installation Documentation

for water heater Thermo Top Evo

'Inline' coolant circuit with engine preheating

Seat Tarraco

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Seat	Tarraco	KN	from 2019 to 2020	e9* 2007/46* 6666*…

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displace-ment [cm³]	Engine code
2.0D	Diesel	Euro 6d Temp	DSG	140	1968	DFHA

Validity	Equipment variants	Model
		Tarraco
Verified equipment variants	Multi-zone automatic air-conditioning	x
	LED main headlights	x
	LED daytime running lights	x
	Dynamic cornering light	x
	Passenger compartment monitoring	x
	Alarm system	x
	Automatic Start-Stop system	x
	Easy Start	x
	Kessy	x
	2 WD	x
	4 WD	x

Total installation time	Note
7.3 hours	

Contents

1 List of abbreviations

2 WD	Front wheel drive
4 WD	All-wheel
CR	Cronus (passenger compartment control unit)
DP	Fuel pump
DSG	Direct gear transmission
FF	FuelFix (tank extracting device)
HG	Heater
MY	Model year
SH2	Engine compartment fuse holder for F1/F2/F3
UP	Coolant pump
Veh.	Vehicle

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
Delivery scope for MQB A_B SUV diesel MY 2016-2020 TT-Evo	1328969B
In case of Telestart, control element, as well as indicator lamp in consultation with end customer	In accordance with price list
In case of MultiControl CAR installation - MultiControl installation frame	9030077_
The following must also be ordered for the ThermoConnect option: retrofitting Y adapter wiring harness	1319820_

2.3 Necessary software

Designation	Download via
9040790_Software Update - Cronus VW MQB ▶ For information about the download see section 'Preparing measures'	Dealer portal

2.4 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 Cronus push button as well as the push button in case of the Telestart and/or ThermoConnect options
- the MultiControl CAR option

2.5 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	K
Vehicle-specific installation documentation of the cold start kit	M
Webasto Comfort A/C control	H
Webasto Standard A/C control	G
Tank extracting device (e.g. FuelFix)	F
Exhaust end fastener (EFIX)	E
Combustion air intake silencer	L
Spacer bracket (ASH)	S

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

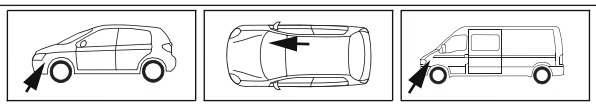
3.4.3 Work step identification marks

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 mm^2
- Crimping pliers for cable lugs 0.5 – 10 mm^2
- Crimping pliers for male connector 0.14 – 6 mm^2
- Crimping pliers for connector 0.25 – 6 mm^2
- Torque wrench for 2.0 - 10 Nm
- Deep-hole marker
- Metric thread-setter kit
- Webasto Thermo Test Diagnosis with current software

5 Preparing measures

5.1 Vehicle preparation

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

Vehicle area	Components to be removed	Other applicable documents
General	▶ Open the fuel tank cap ▶ Ventilate the fuel tank ▶ Close the fuel tank cap again ▶ Depressurise the cooling system	
Engine compartment and body	▶ Battery with battery carrier ▶ Air filter complete with intake hose ▶ Front wheel on the front passenger's side ▶ Wheel well trim on the front passenger's side ▶ Engine underride protection ▶ Underride protection on the front passenger's side ▶ Tank underride protection (if available)	
Passenger compartment	▶ Footwell trim on the driver's and front passenger's side ▶ Side instrument panel trim on the driver's side (in case of Telestart) ▶ A-pillar trim on the driver's side (in case of Telestart) ▶ Rear seat	

Carry out the following work only during the corresponding installation sequence:

DANGER

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

Vehicle body	▶ Open the tank fitting service lid on the front passenger's side	

5.2 Preparations for Cronus

Engine compartment	▶ Download the software specified in section 'Necessary software' from the Dealer portal at https://dealers.webasto.com/: ⇨ Dealer Portal ▶ Product Services ▶ Software & Tools ▶ Cronus Software The software will be used according to section 'Final work' under the item 'Downloading software to Cronus'.	

5.3 Heater preparation

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

6 Installation overview

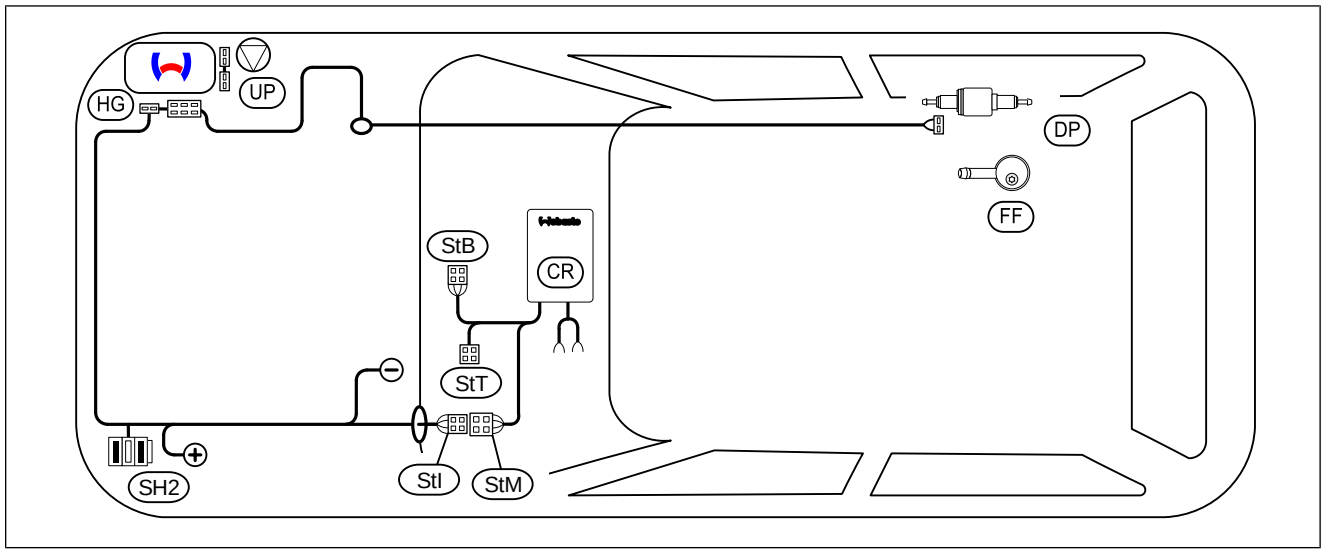


Fig. 1

Legend to installation overview

Abbreviation	Component
CR	Cronus (passenger compartment control unit)
DP	Fuel pump
FF	FuelFix
HG	Heater assembly
SH2	Engine compartment fuse holder for F1/F2/F3
StB	Female plug for control element wiring harness
StI	Female plug for passenger compartment wiring harness
StM	Male plug for engine compartment wiring harness
StT	Male plug for push button wiring harness
UP	Coolant pump

Heater assembly installation location

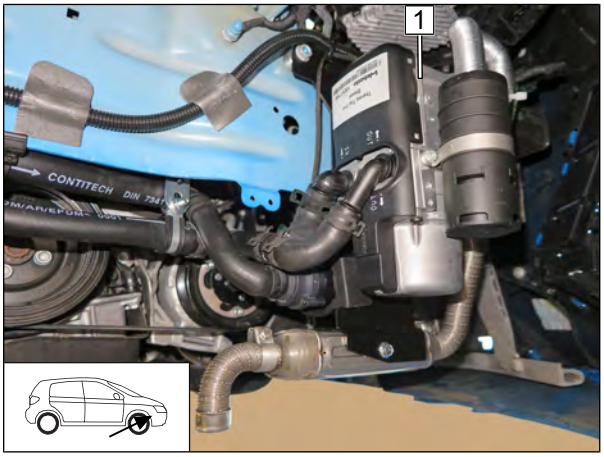


Fig. 2

1 Heater assembly

7 Electrical system of engine compartment

Removing cover

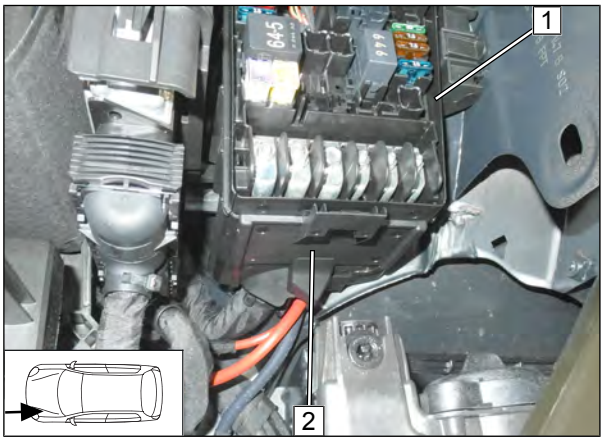


Fig. 3

▶ Remove original vehicle cover 2 from engine compartment fuse and relay box 1.

Copying hole pattern, drilling hole

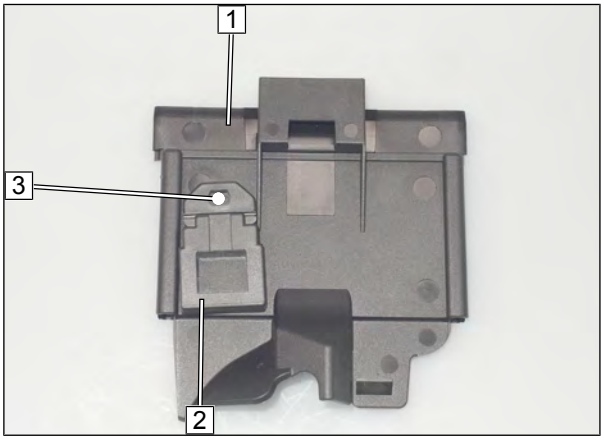


Fig. 4

▶ Position retaining plate of SH2 2 onto cover 1, copy hole pattern 3 and drill a Ø6 hole.

Premounting retaining plate of SH2

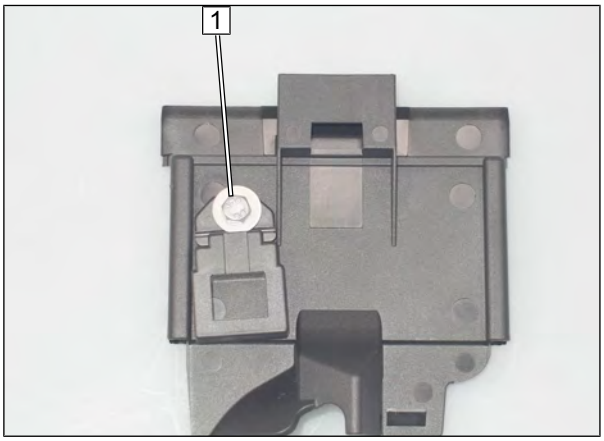


Fig. 5

1 M5x12 bolt, large diameter washer, retaining plate of SH2, original vehicle cover, large diameter washer, flanged nut

Preparing wiring harness

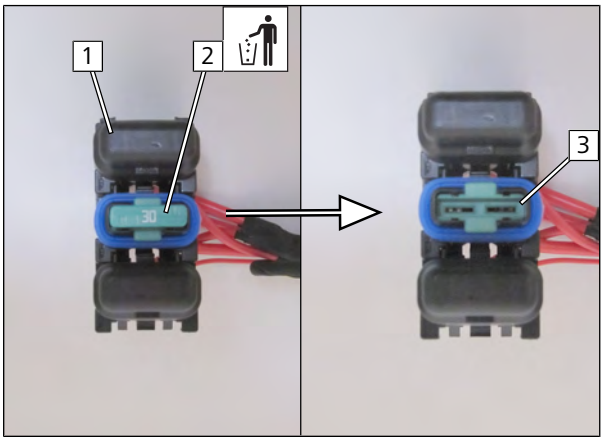


Fig. 6

Remove and discard 30A fuse [2] from SH2 [1].

[3] Fuse removed

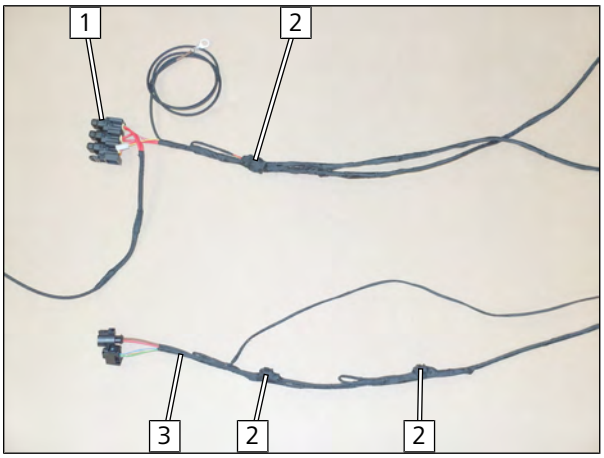


Fig. 7

Tie back connectors [2] using insulating tape, they will not be reused.

[1] SH2

[3] Heater wiring harness

Installing SH2

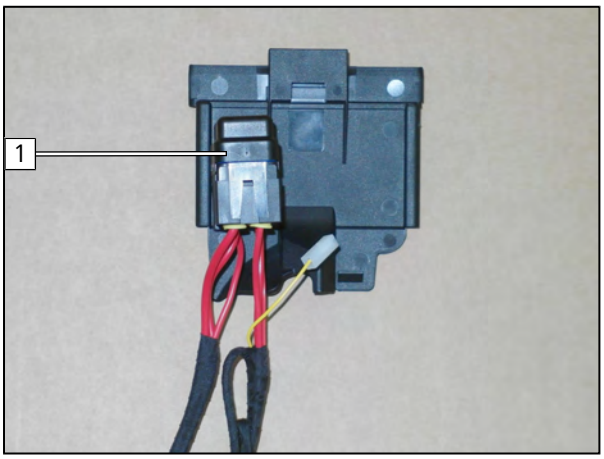


Fig. 8

[1] Fuse F1, F2 (empty) and F3

Positive wire connection

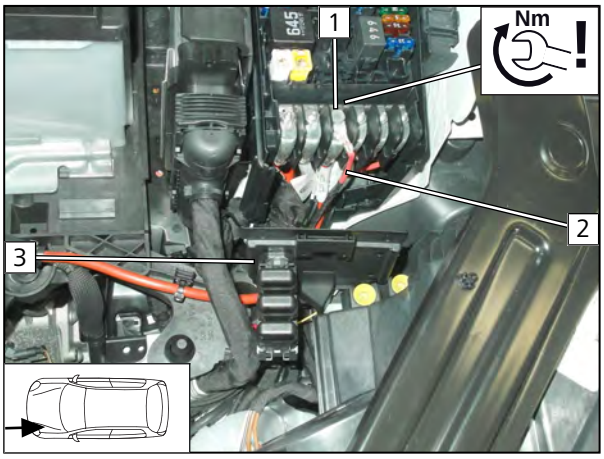


Fig. 9

DANGER

Observe tightening torque

▶ Position premounted original vehicle cover [3] as shown.

[1] Original vehicle positive point

[2] Positive wire

Mounting cover

Fig. 10

▶ Mount original vehicle cover [1] of engine compartment fuse and relay box.

Routing passenger compartment, control element and earth wiring harnesses

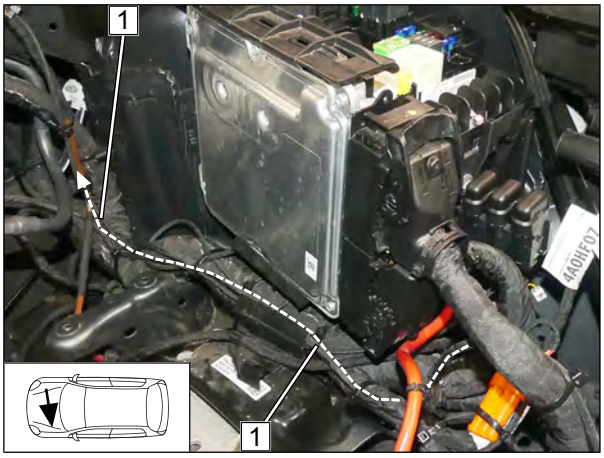


Fig. 11

▶ Route wiring harnesses [1] along original vehicle wiring harness as shown.

Earth wire connection

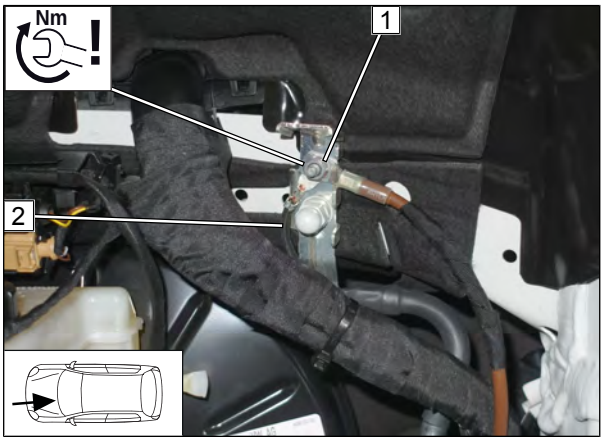


Fig. 12

DANGER

Observe tightening torque

1 Original vehicle earth point

2 Earth wire

Passenger compartment wiring harness pass through

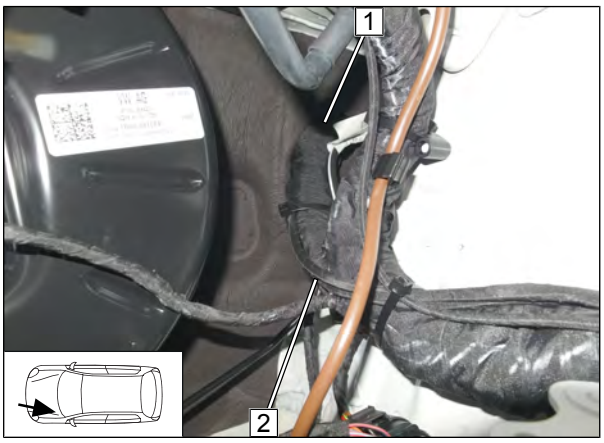


Fig. 13

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

Heater wiring harness routing

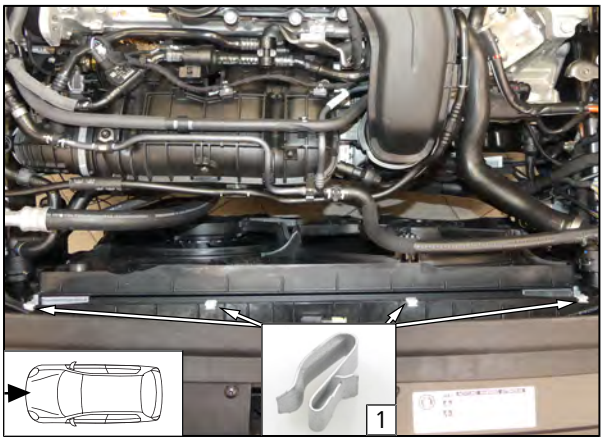


Fig. 14

1 Metal clip

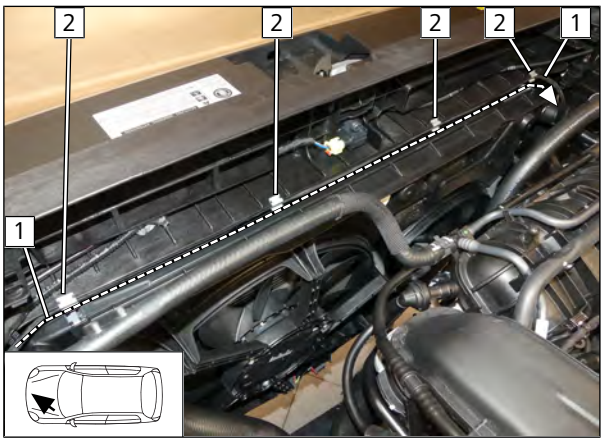


Fig. 15

▶ Route heater wiring harness **1** as shown and secure using metal clip **2**.

8 Mechanical system

8.1 Installation location preparation

Positioning spacer

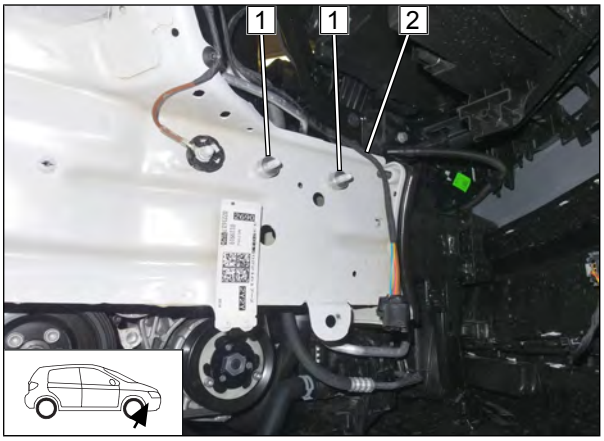


Fig. 16

1 Spacer (5), spacer 10, on original vehicle stud bolt
2 Heater wiring harness

Aligning horn

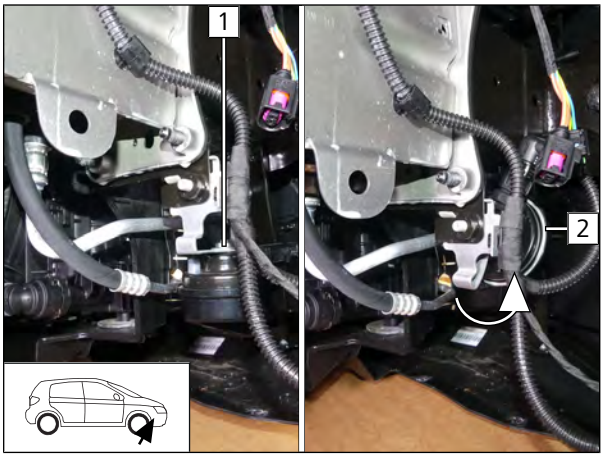


Fig. 17

If present

1 Original position of horn
2 Horn, aligned

Loosening original vehicle wiring harness

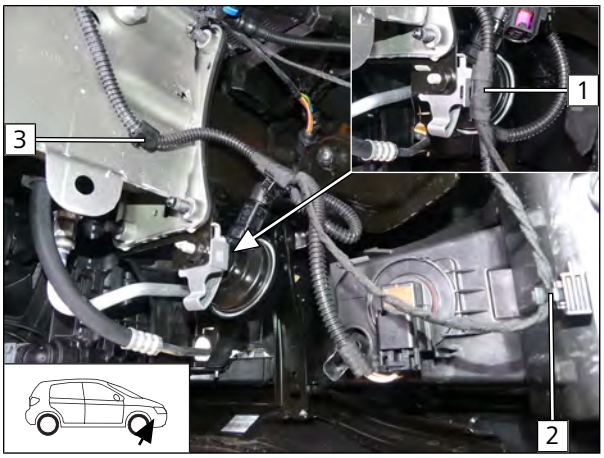


Fig. 18

1 Original position of wiring harness bracket
2 Remove original vehicle edge clip cable tie
3 Remove and discard original vehicle clip

Routing original vehicle wiring harness again

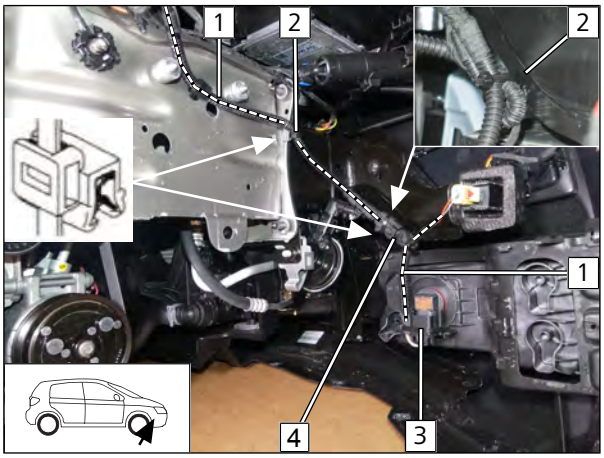


Fig. 19

1 Original vehicle wiring harness
2 Edge clip cable tie
3 Cable tie, front fog lights connector housing
4 Cable tie

Aligning original vehicle tab

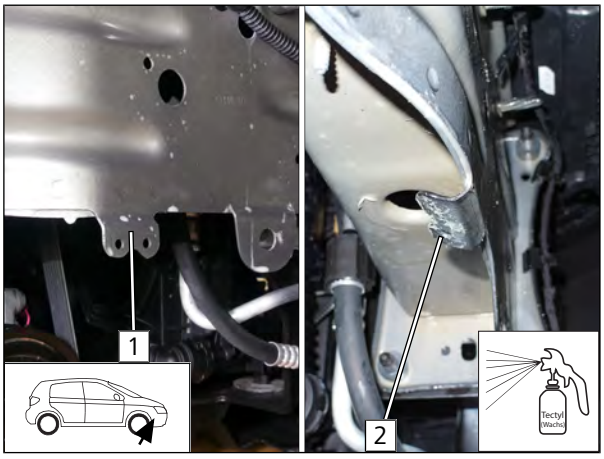


Fig. 20

1 Original position of original vehicle tab
2 Original vehicle tab, aligned

8.2 Heater assembly installation

Heater assembly

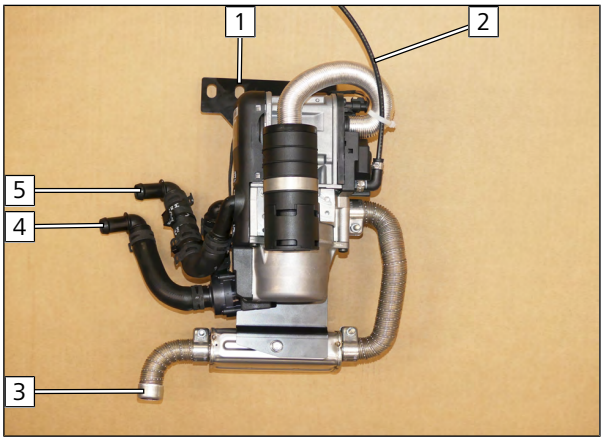


Fig. 21

1 Heater assembly
2 Fuel line
3 Exhaust end section
4 Heater inlet connection
5 Heater outlet connection

Assigning heater assembly hoses

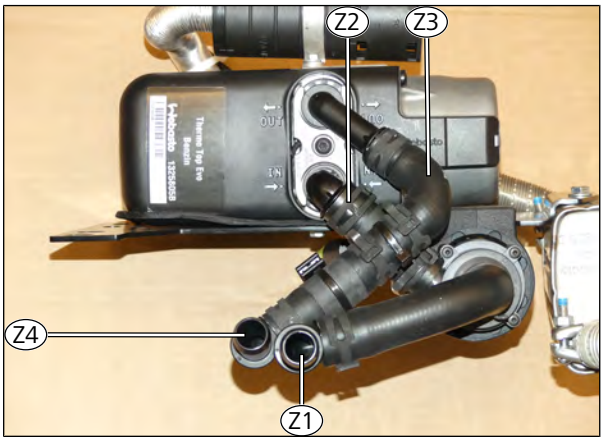


Fig. 22

Z1 Coolant pump inlet hose section
Z2 Coolant pump outlet/heater inlet hose section
Z3 Heater outlet hose section
Z4 Hose section on hose **Z3** (heater outlet)

Preparing heater assembly

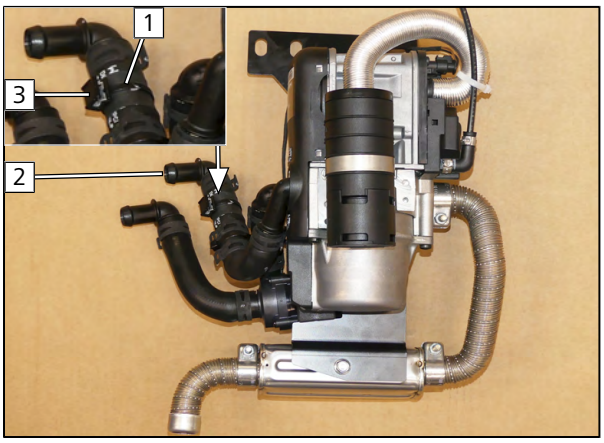


Fig. 23

1 Remove cable tie
2 Heater outlet connection
3 The clip will be reused

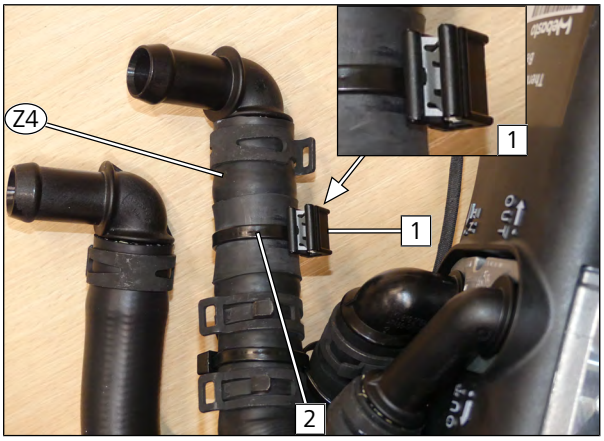


Fig. 24

▶ Reinstall clip **1** with new cable tie **2** turned by 180°.

Z4 Hose section

Heater wiring harness installation

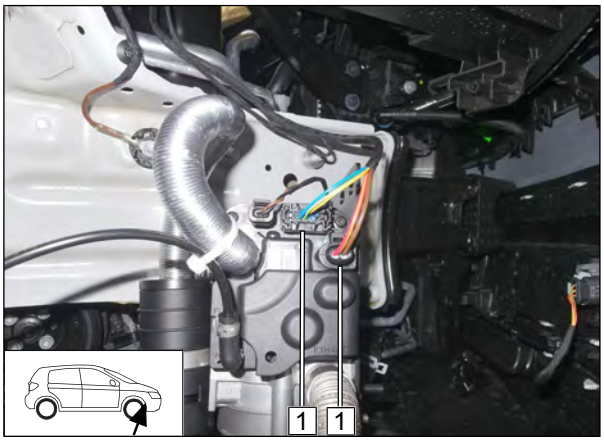


Fig. 25

1 Heater wiring harness connector

Heater assembly installation

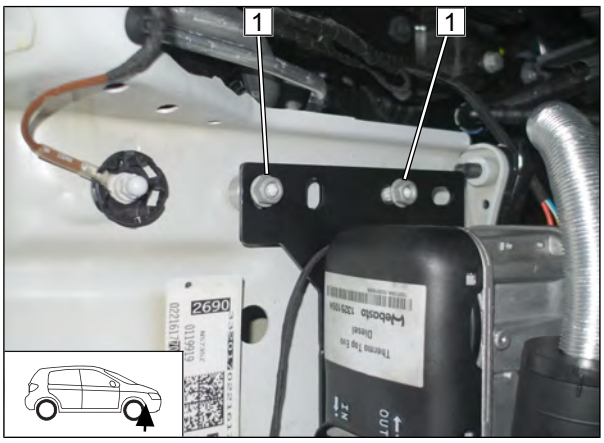


Fig. 26

▶ Mount flanged nut 1 loosely.

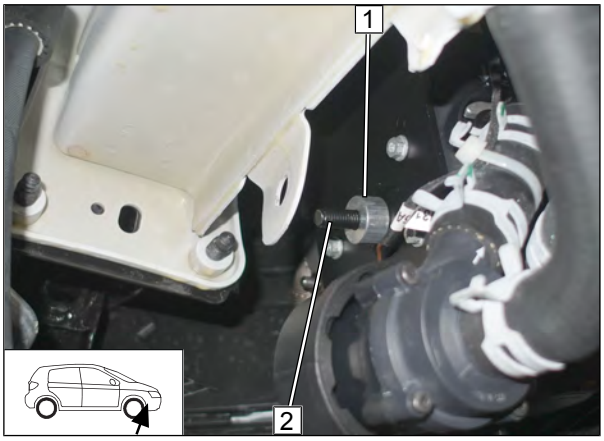


Fig. 27

1 10 spacer

2 Heater bracket stud bolt

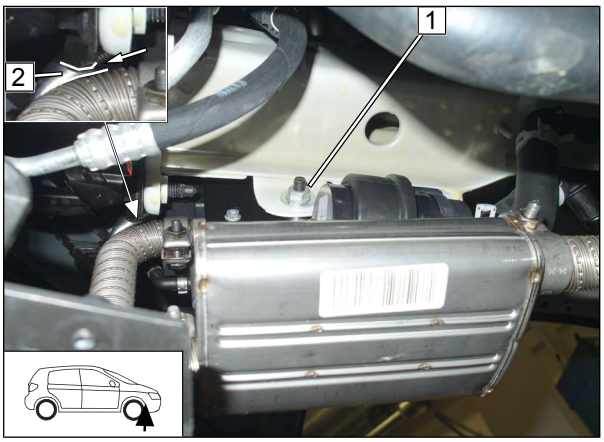


Fig. 28

Ensure sufficient distance from neighbouring components at position 2, correct if necessary.

1 Large diameter washer, flanged nut

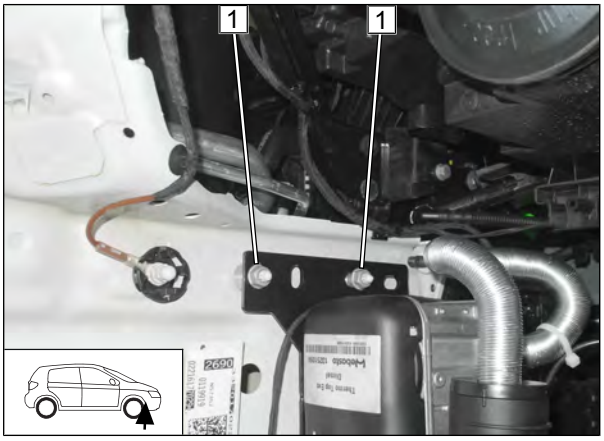


Fig. 29

▶ Tighten flanged nut 1.

Mounting edge clip cable tie

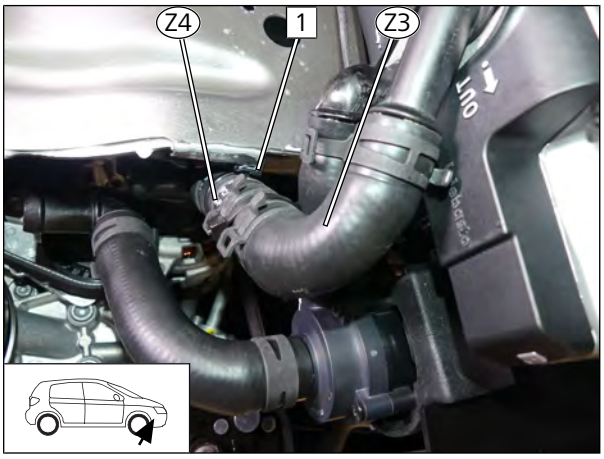


Fig. 30

▶ Fasten edge clip cable tie 1 on folded edge.

Checking distance

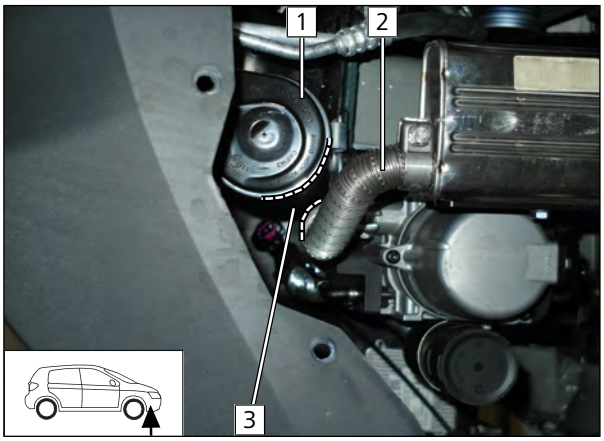


Fig. 31

Ensure sufficient distance from neighbouring components at position 3, correct if necessary.

1 Horn

2 Exhaust pipe

9 Fuel

DANGER

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

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

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

Danger of damage to components

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

Dismantling fuel pump connector X7

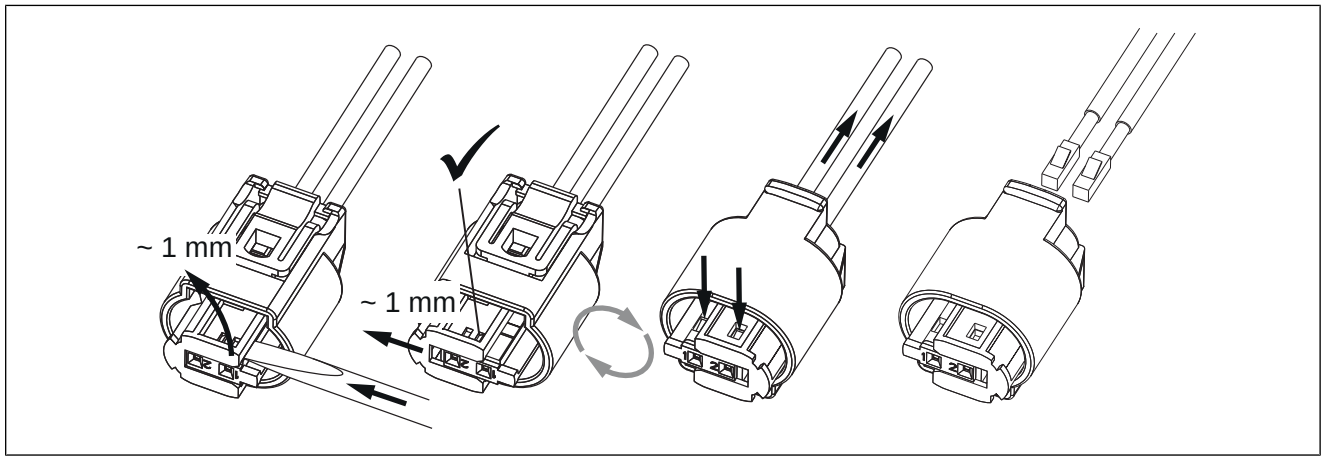


Fig. 32

9.1 Routing fuel line

Routing fuel line in wheel well

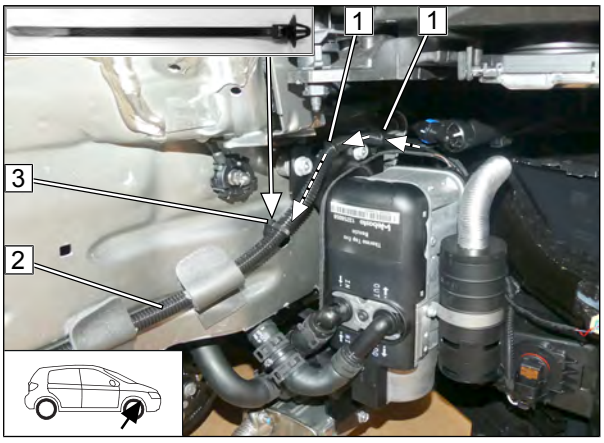


Fig. 33

1 Cable tie

2 Fuel line and fuel pump wiring harness in corrugated tube

3 Clip-type cable tie

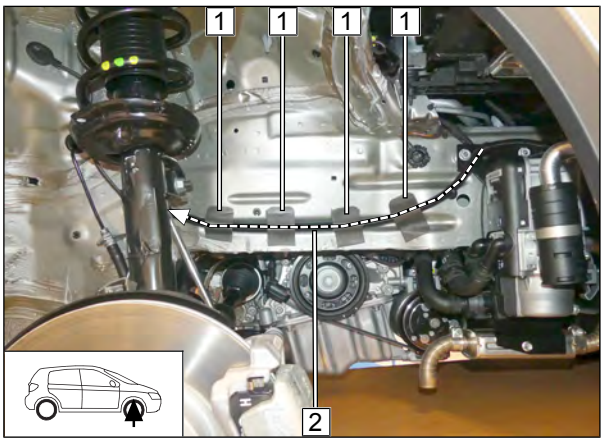


Fig. 34

1 Self-adhesive foam cut in half

2 Fuel line and fuel pump wiring harness in corrugated tube

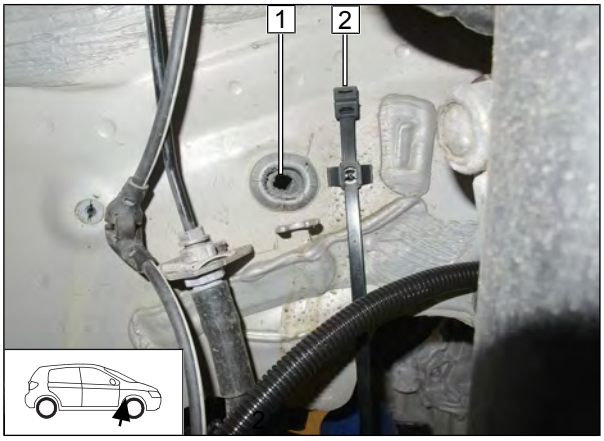


Fig. 35

▶ Pierce original vehicle pass through 1 in the middle as shown.

2 Eyelet cable tie in original vehicle hole

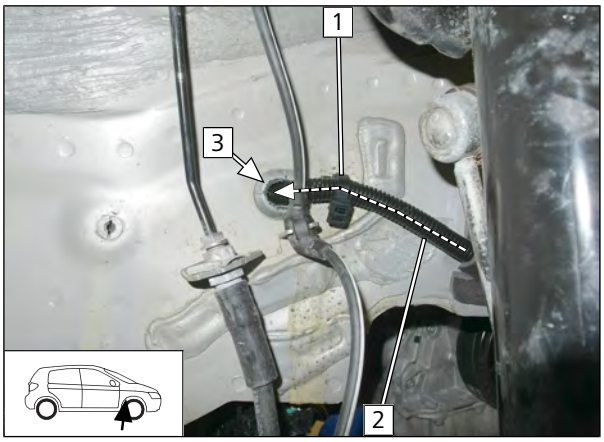


Fig. 36

▶ Route the fuel line and the fuel pump wiring harness through the crossbeam of the vehicle to the fuel pump installation location (see next fig.). Corrugated tube 2 ends at pass through 3.

1 Close eyelet cable tie

2 Fuel line and fuel pump wiring harness in corrugated tube

Preparing fuel pump installation location

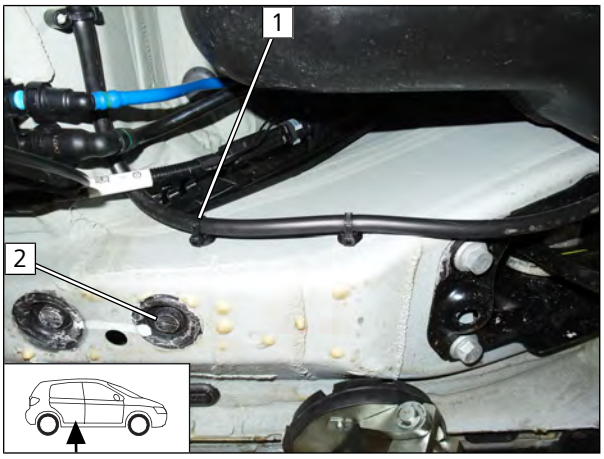


Fig. 37

▶ Remove clip-type cable tie 1 and plug 2. Plug 2 and clip-type cable tie 1 will be reused.

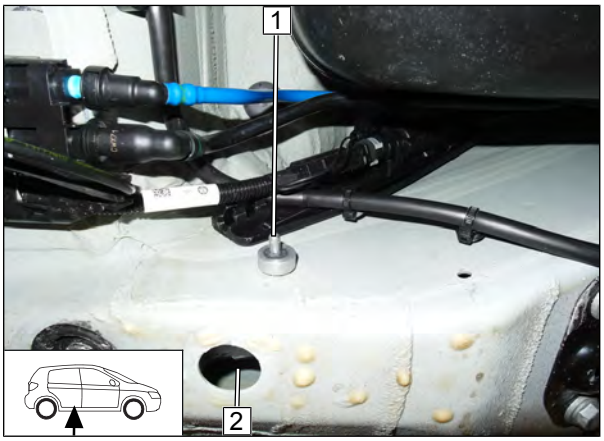


Fig. 38

▶ Insert M6x25 bolt 1 through opening 2 using flat nose pliers.

1 M6x25 bolt, spacer (5), lock washer

Premounting fuel pump

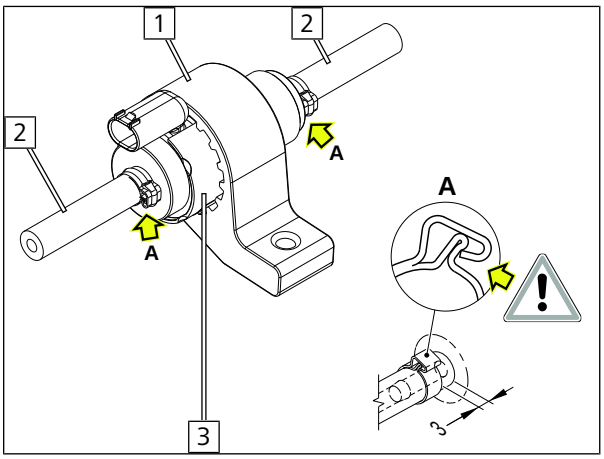


Fig. 39

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

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

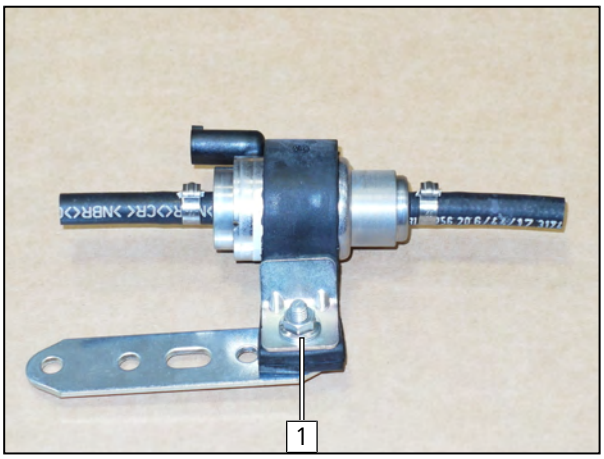


Fig. 40

1 M6x25 bolt, perforated bracket, fuel pump mount, support angle bracket, flanged nut

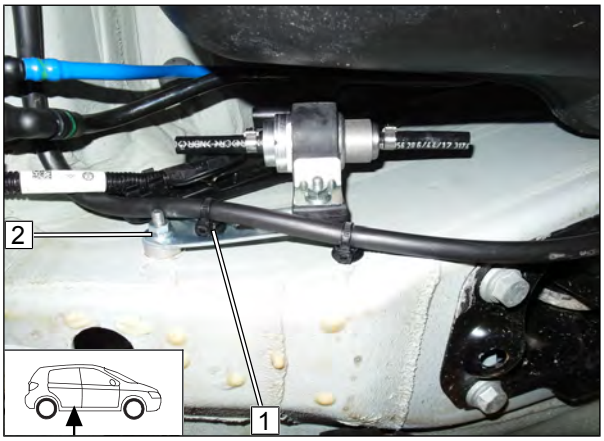


Fig. 41

1 Insert original vehicle clip-type cable tie through perforated bracket

2 Flanged nut

Assembling fuel pump connector X7

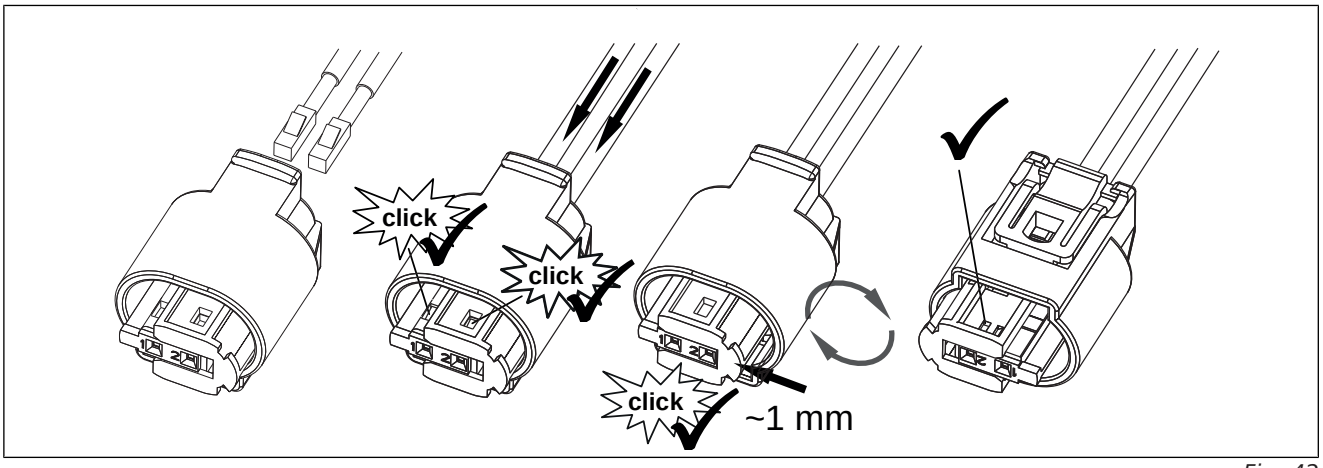


Fig. 42

Fuel pump connection

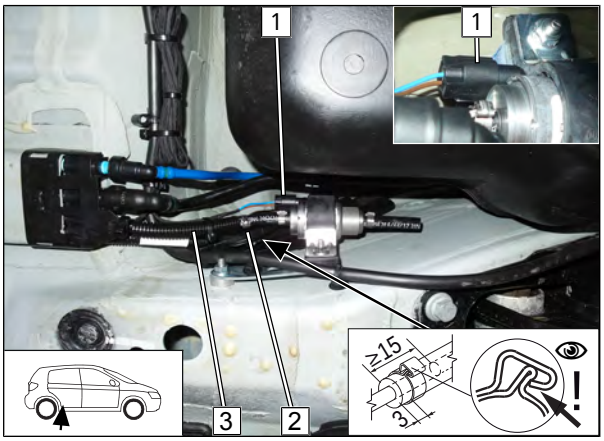


Fig. 43

1 Fuel pump wiring harness, connector X7 mounted
2 Ø10 clamp
3 Heater fuel line, rest of corrugated tube

9.2 FuelFix installation for 2WD

Moving label

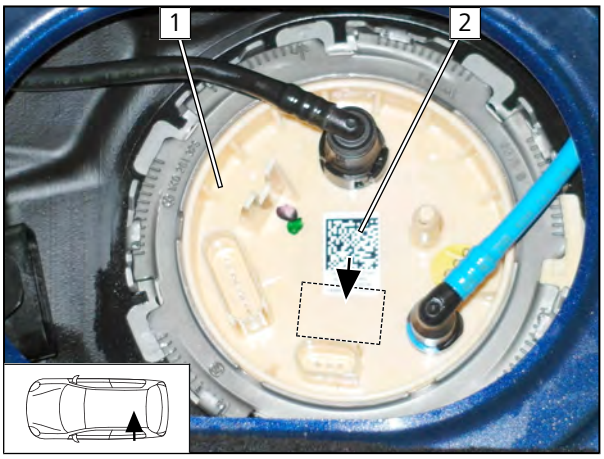


Fig. 44

The colour of the tank fitting may vary.

1 Tank fitting
2 Label

Preparing drilling template

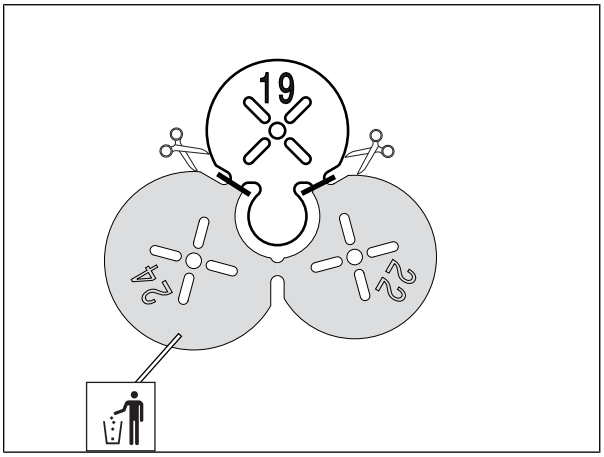


Fig. 45

Work steps F1, F2

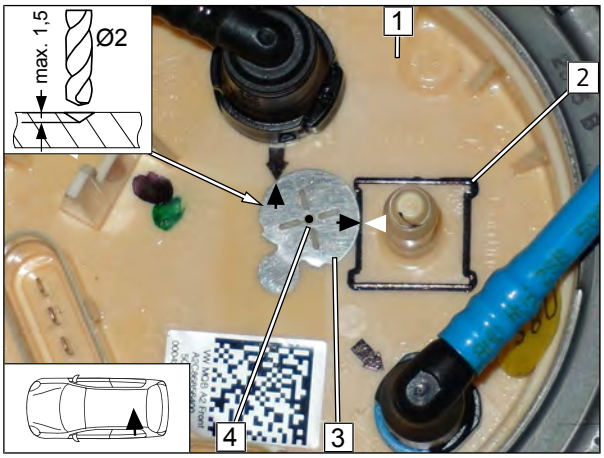


Fig. 46

Observe the installation instructions of the tank extracting device.

▶ Draw guide line [2] on existing embossing.

[1] Tank fitting
[3] Position Ø19 drilling template as shown in fig.
[4] Ø2 centring hole

Work step F3

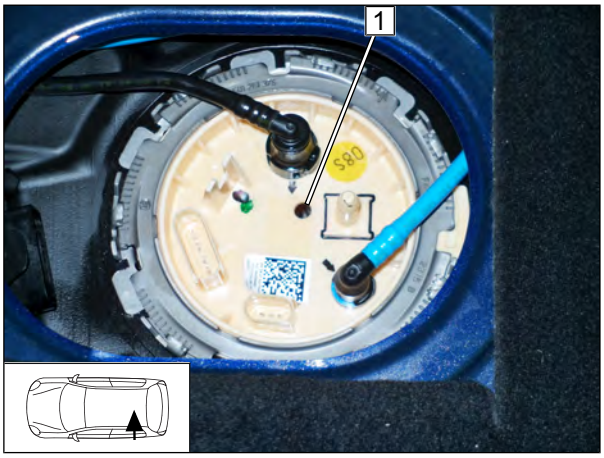


Fig. 47

DANGER

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

[1] Hole made with provided drill

Work steps F4, F5

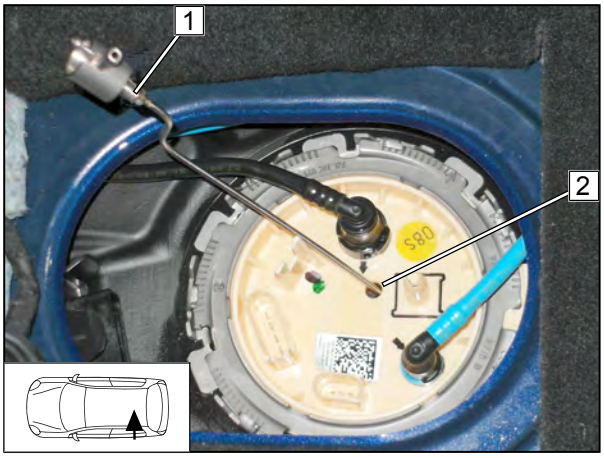


Fig. 48

▶ Bend FuelFix [1] according to template and cut to length. Insert in hole [2].

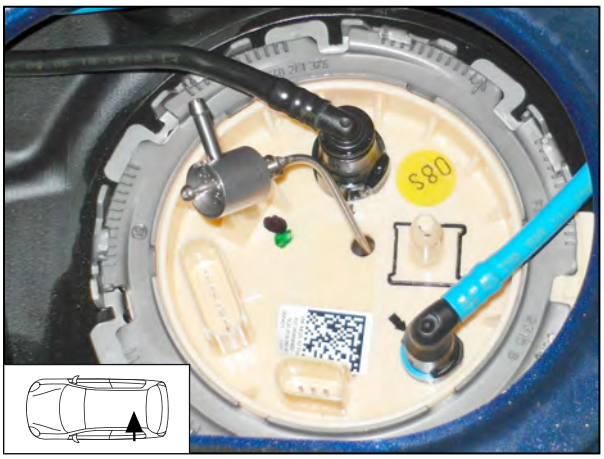


Fig. 49

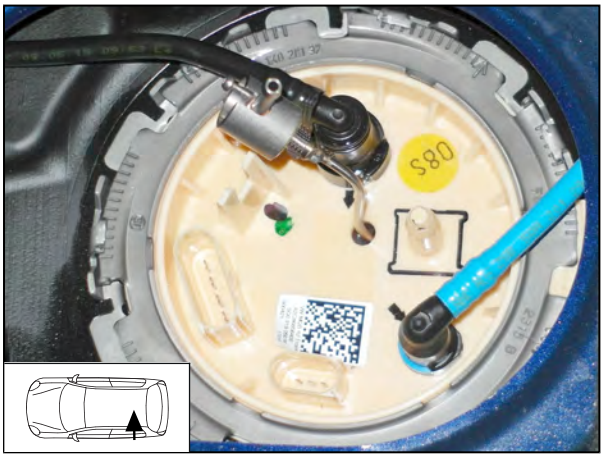


Fig. 50

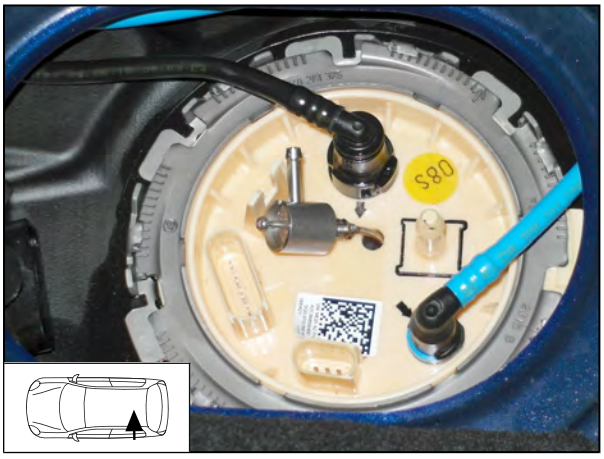


Fig. 51

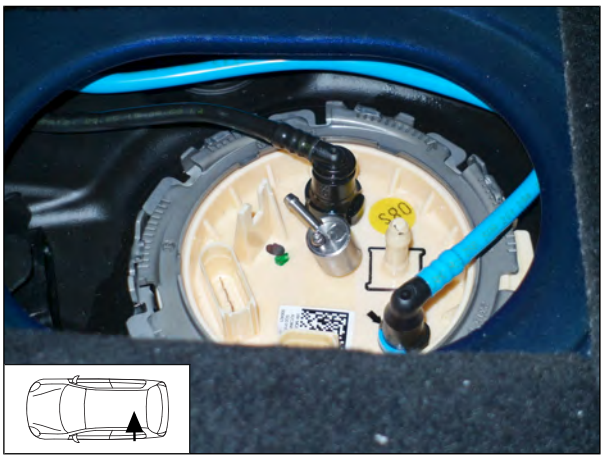


Fig. 52

Work steps F5.3, F5.4

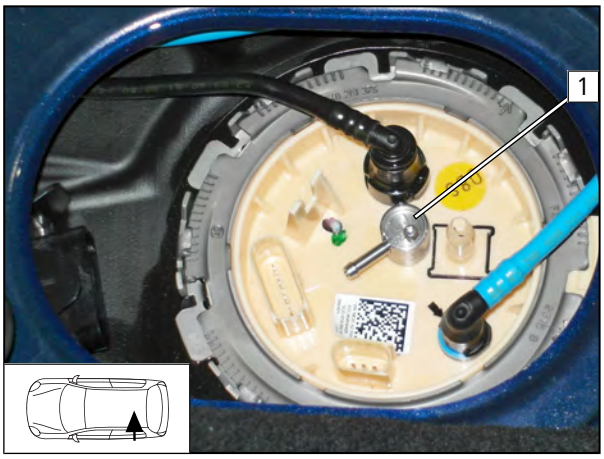


Fig. 53

▶ Align FuelFix 1 as shown.

Shortening moulded hose

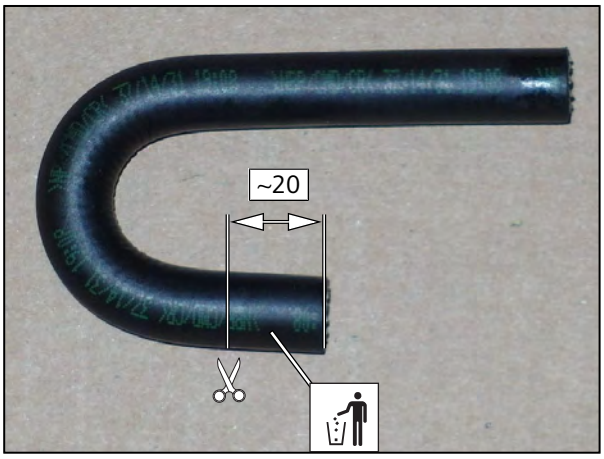


Fig. 54

Work step F6

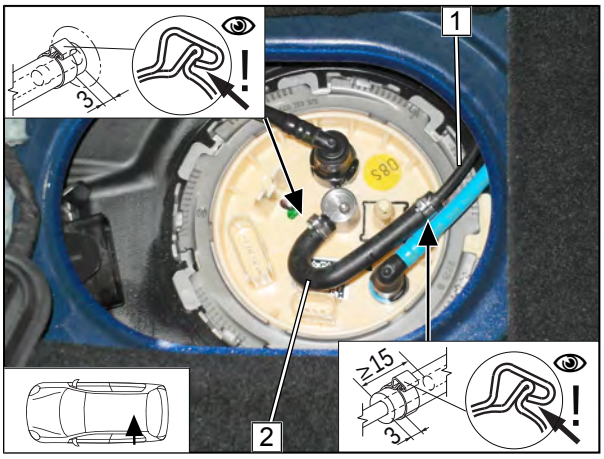


Fig. 55

1 Fuel line

2 180° moulded hose, Ø10 clamp [2x]

Work step F7

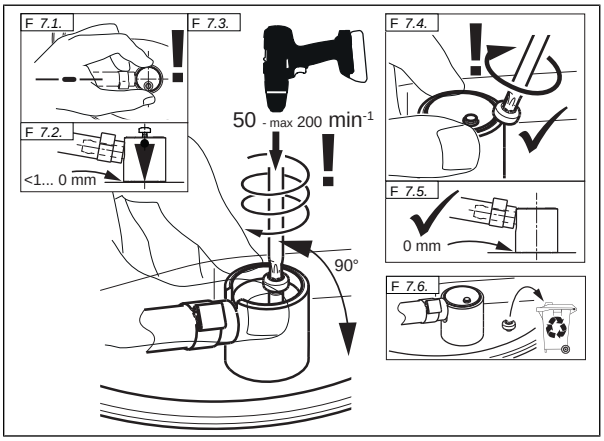


Fig. 56

DANGER

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

Work step F8

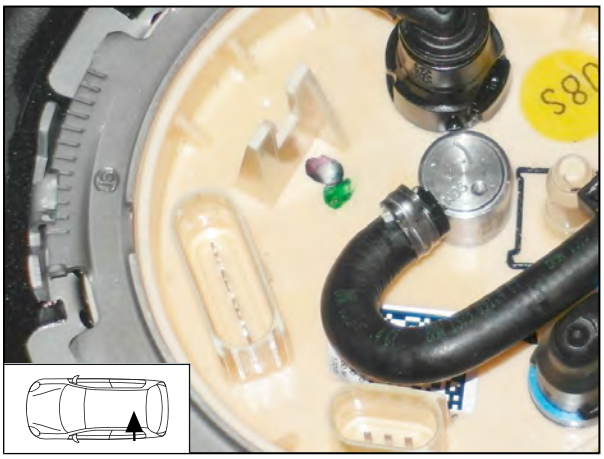


Fig. 57

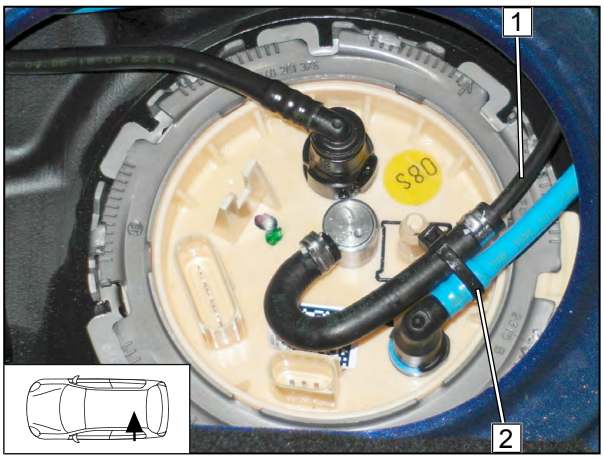


Fig. 58

▶ Attach fuel line 1 using cable tie 2 in a suitable location for tension relief.

9.3 FuelFix installation for 4WD

Preparing drilling template

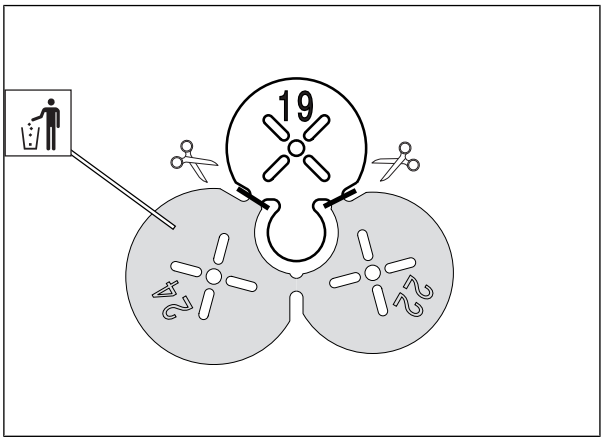


Fig. 59

Moving label

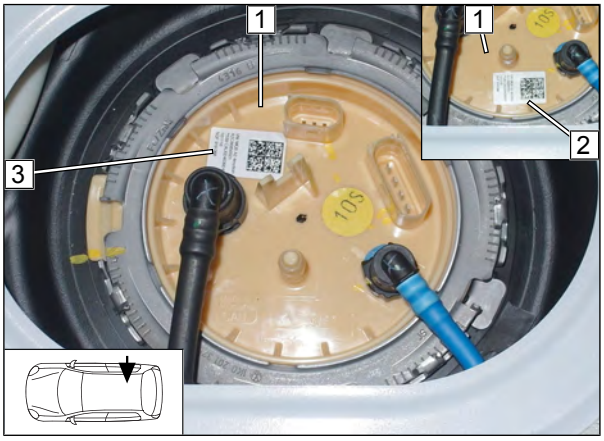


Fig. 60

1 Tank fitting
2 Original position of label
3 New position of label

Work steps F1, F2

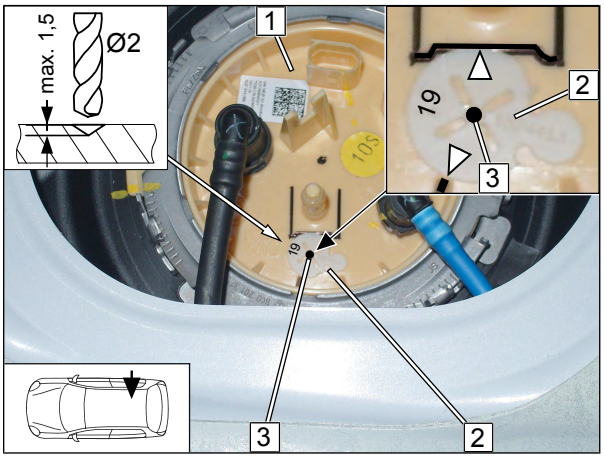


Fig. 61

Observe the installation instructions of the tank extracting device.

1 Tank fitting
2 Position Ø19 drilling template as shown in fig.
3 Ø2 centring hole

Work step F3

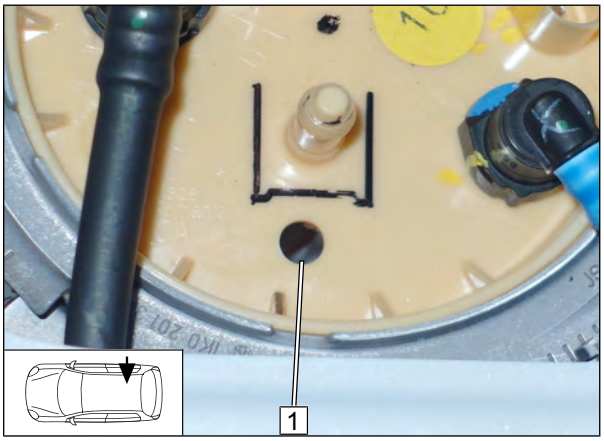


Fig. 62

DANGER

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

1 Hole made with provided drill

Work steps F4, F5

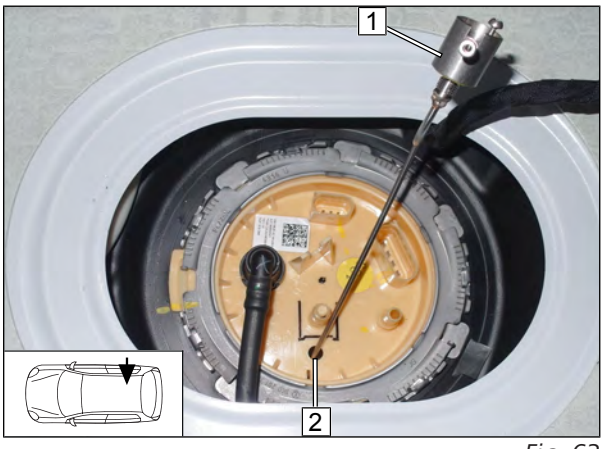


Fig. 63

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

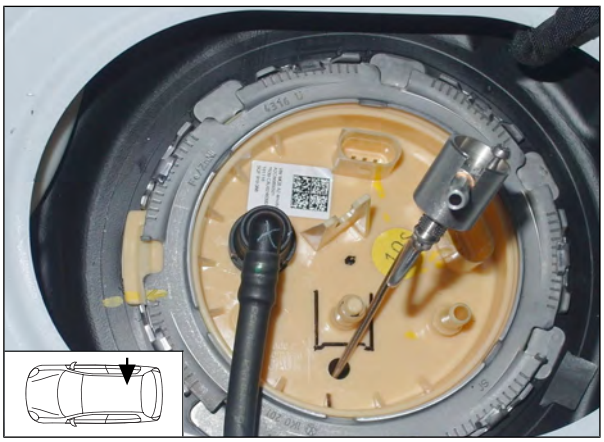


Fig. 64

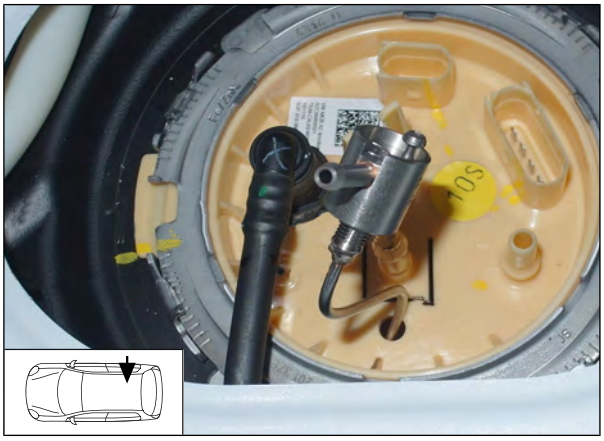


Fig. 65

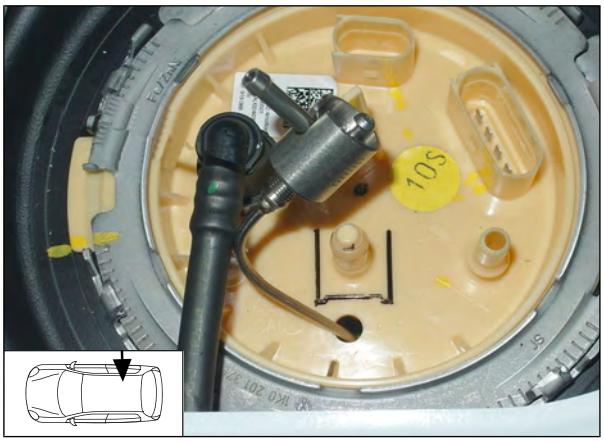


Fig. 66

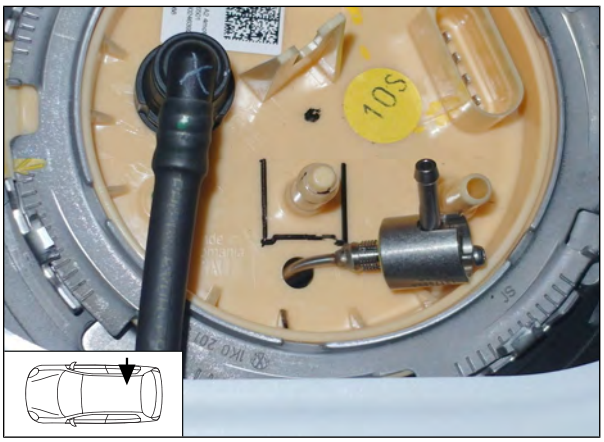


Fig. 67

Work steps F5.3, F5.4

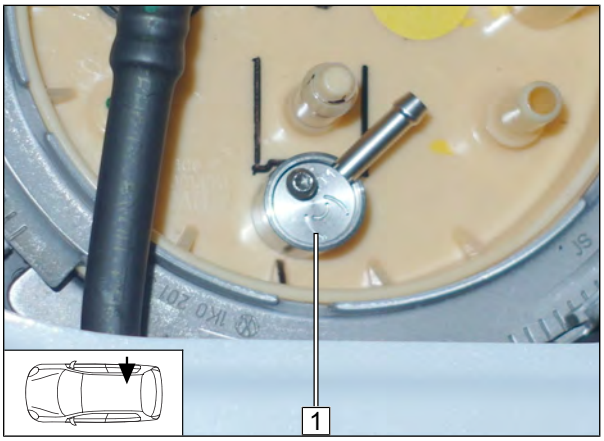


Fig. 68

▶ Align FuelFix 1 as shown.

Work step F6

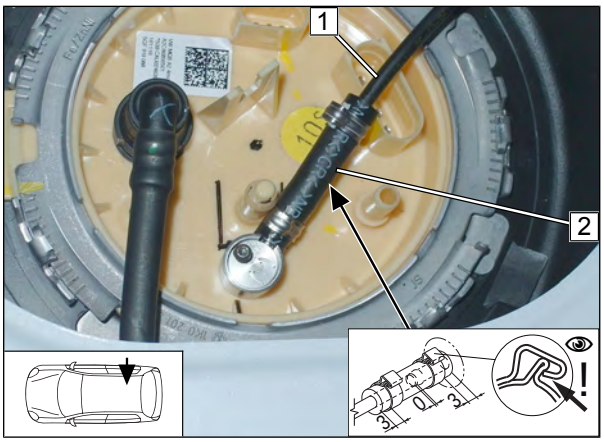


Fig. 69

1 Fuel line

2 Hose section, Ø10 clamp [2x]

Work step F7

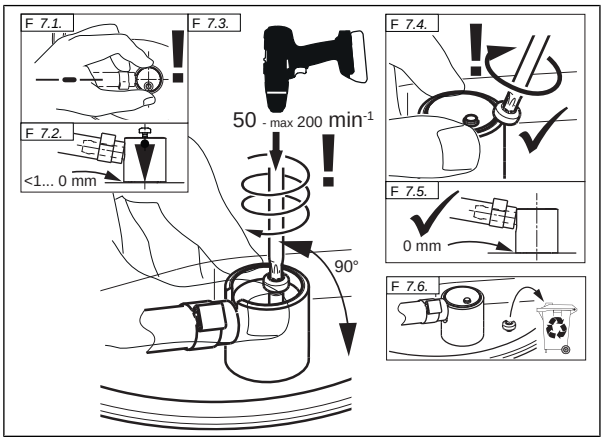


Fig. 70

DANGER

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

Work step F8

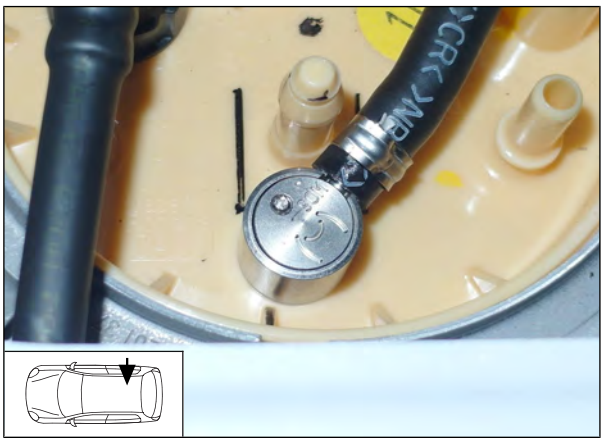


Fig. 71

Securing fuel line

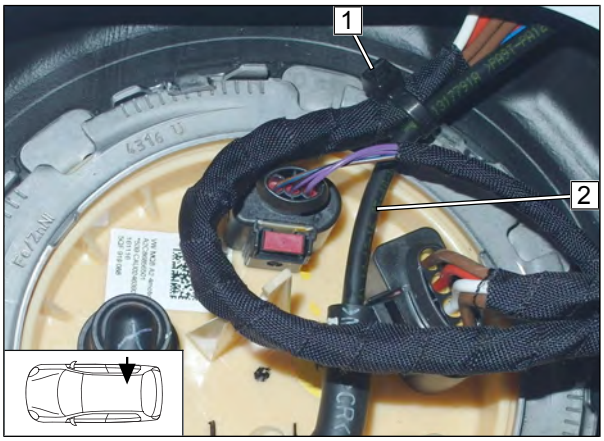


Fig. 72

1 Cable tie for tension relief

2 Fuel line of FuelFix

9.4 Fuel pump connection, all vehicles

Connecting fuel line of FuelFix

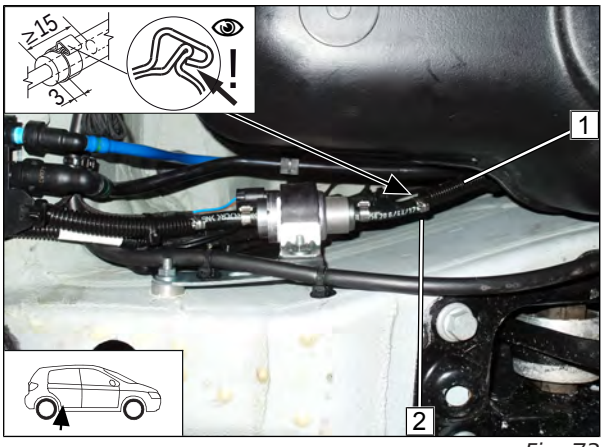


Fig. 73

all vehicles

1 Fuel line of FuelFix in rest of corrugated tube

2 Hose section, Ø10 clamp

10 Coolant

10.1 Hose routing diagram

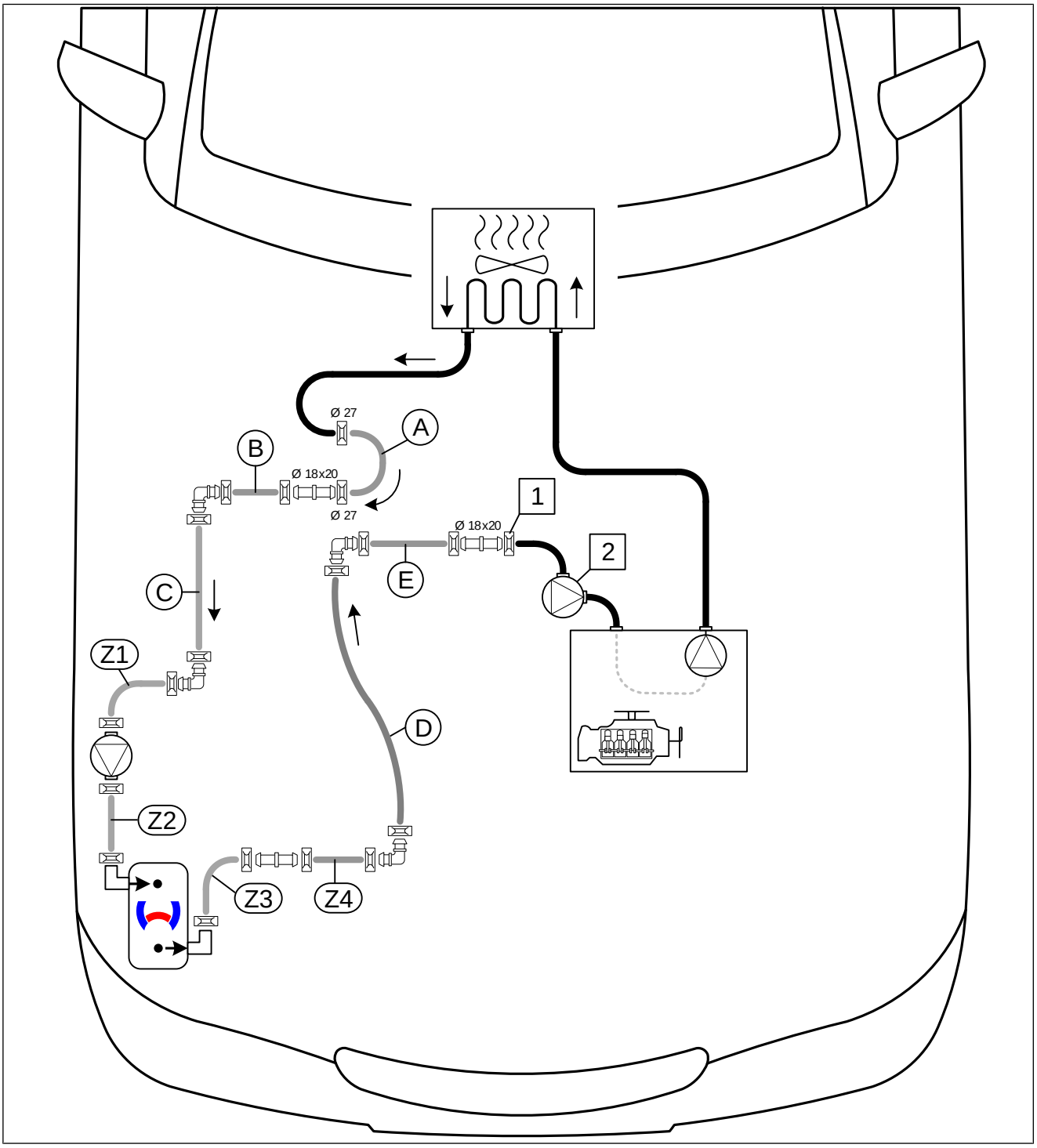


Fig. 74

All spring clips without a specific designation = Ø25

All connecting pipes without a specific designation or = Ø18x18

1 Original vehicle spring clip ; 2 Original vehicle auxiliary water pump

10.2 Coolant circuit installation

Cutting hoses to length

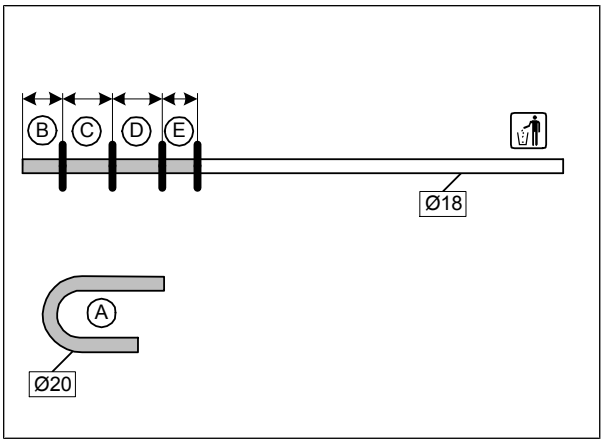


Fig. 75

▶ Hose Ⓐ = 180° moulded hose

Ⓑ	100
Ⓒ	230
Ⓓ	220
Ⓔ	120

Mounting fabric heat shrink tubing

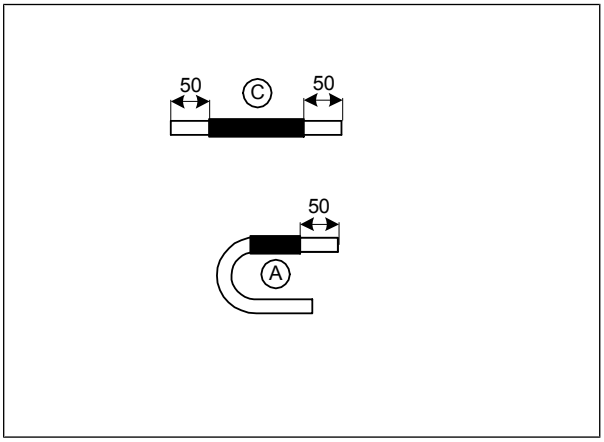


Fig. 76

Slide on fabric heat shrink tubing as shown, cut to length and use 230°C at most to shrink it.

Premounting hoses Ⓐ, Ⓑ and Ⓒ

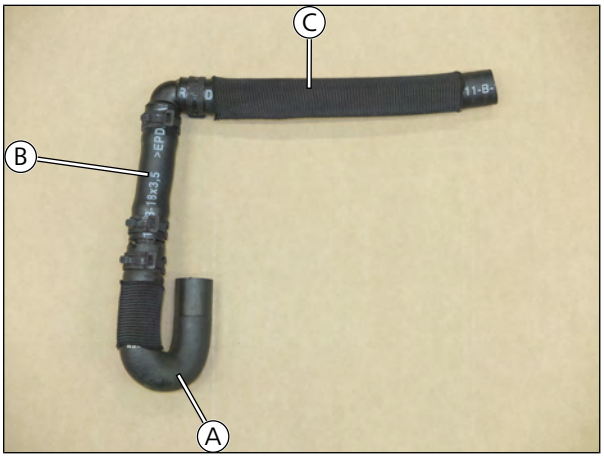


Fig. 77

Premounting hoses Ⓓ and Ⓔ

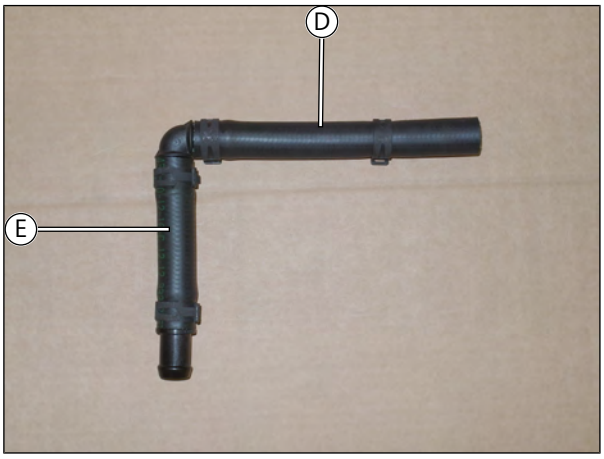


Fig. 78

Cutting point

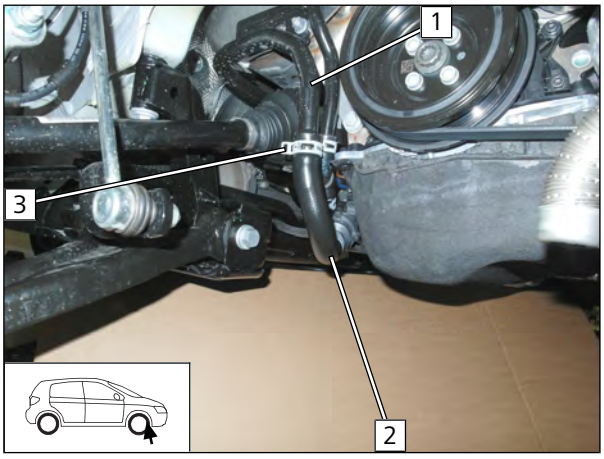


Fig. 79

▶ Disconnect heat exchanger outlet / engine inlet hose **2** at position **3** from heat exchanger outlet line **1**. Original vehicle spring clip **3** will be reused.

Heat exchanger outlet connection

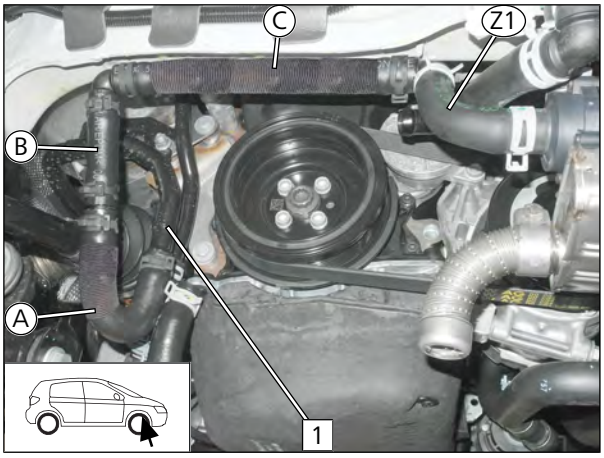


Fig. 80

1 Heat exchanger outlet line

Engine inlet connection

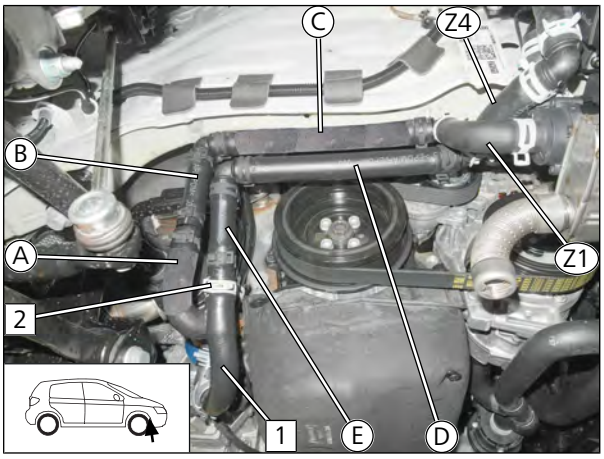


Fig. 81

1 Engine inlet hose section
2 Original vehicle spring clip

Fastening hose Ⓒ

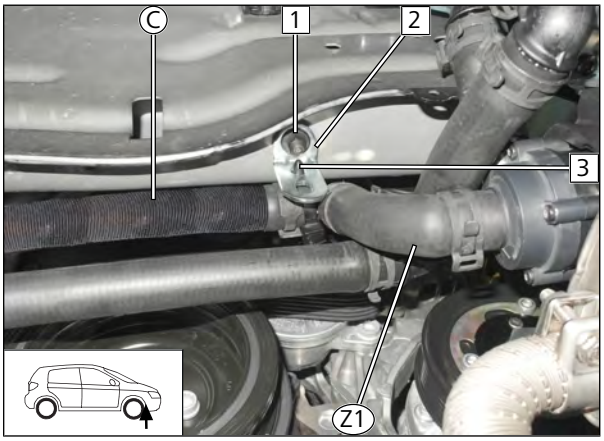


Fig. 82

1 Original vehicle stud bolt, plastic nut
2 Angle bracket
3 Clip-type cable tie around hose Ⓒ

Fastening hose Ⓓ

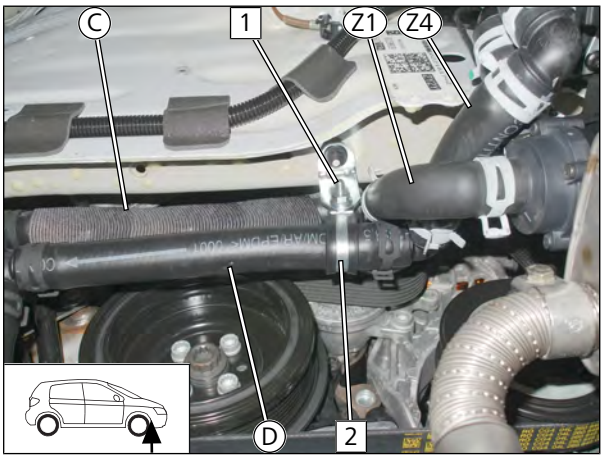


Fig. 83

1 M6x20 bolt, flanged nut
2 Ø25 rubber-coated p-clamp

Fastening hoses

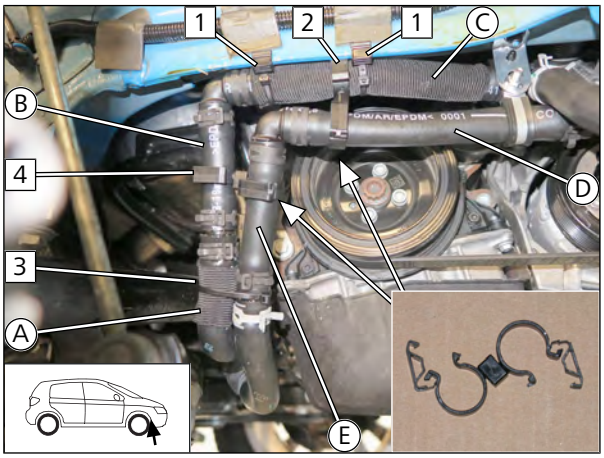


Fig. 84

1 Edge clip cable tie around hose (C)
2 Closable hose bracket around hoses (C) and (D)
3 Cable tie around hoses (A) and (E)
4 Closable hose bracket around hoses (B) and (E)

11 Final work in engine compartment

Aligning exhaust outlet

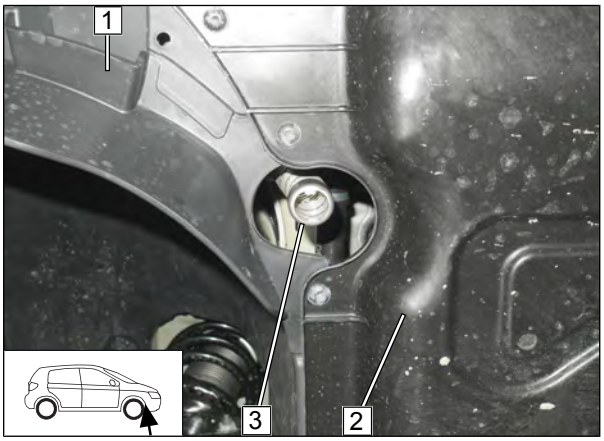


Fig. 85

- ▶ Mount wheel well trim **1** and underride protection **2**.
- ▶ Align exhaust outlet **3** with the centre of the pass through.

12 Electrical system of passenger compartment

12.1 Preliminary Work

Preparing Cronus wiring harnesses 1 and 2, assigning only connectors StT, StB and StM

▶ Insulate components, wires and connectors individually as shown and tie back

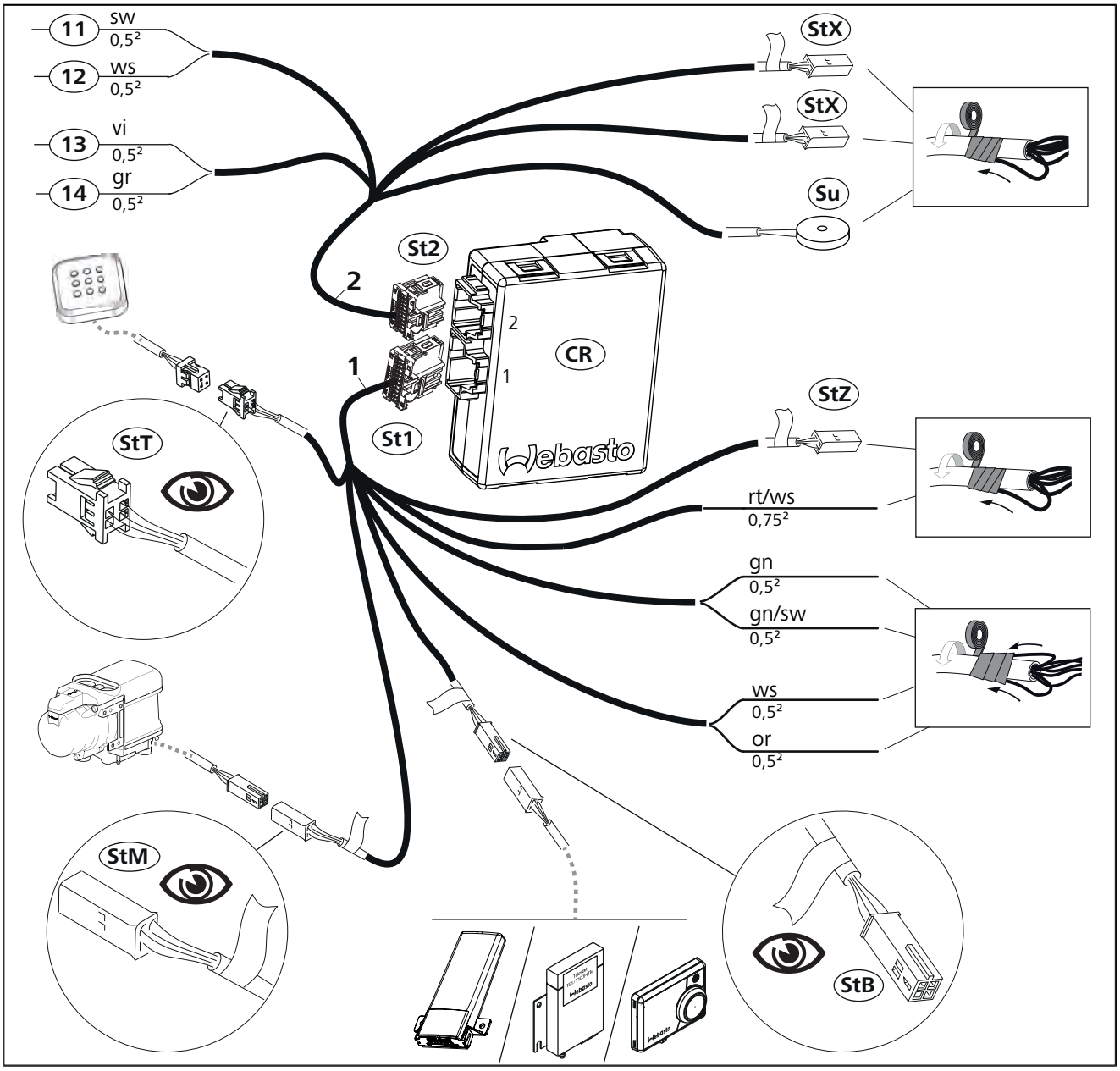


Fig. 86

Legend

Abbreviation	Component	Abbreviation	Component
(CR)	Cronus	(StT)	4-pin male plug for push button wiring harness
(St1)	16-pin, black connector of Cronus wiring harness 1	(SU)	Buzzer, will not be used
(St2)	12-pin, grey connector of Cronus wiring harness 2	(StX)	4-pin male plug, will not be used
(StB)	4-pin female plug for control element wiring harness	(StZ)	4-pin male plug for additional relay wiring harness, will not be used

StM	4-pin male plug for engine compartment wiring harness		

Preparing Cronus

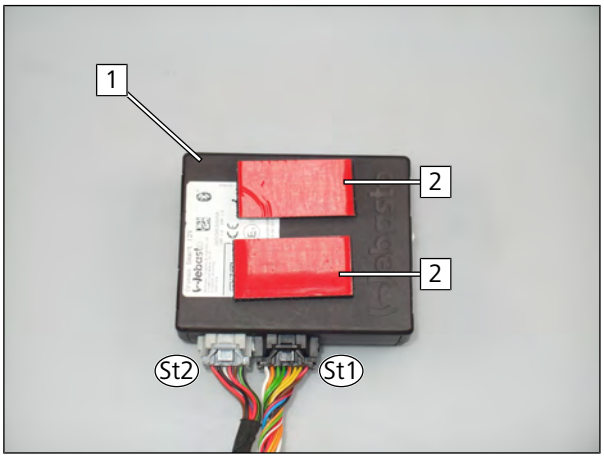


Fig. 87

▶ On Cronus [1], mount connectors (St1) and (St2).

[2] Double-sided adhesive tape

Mounting Cronus

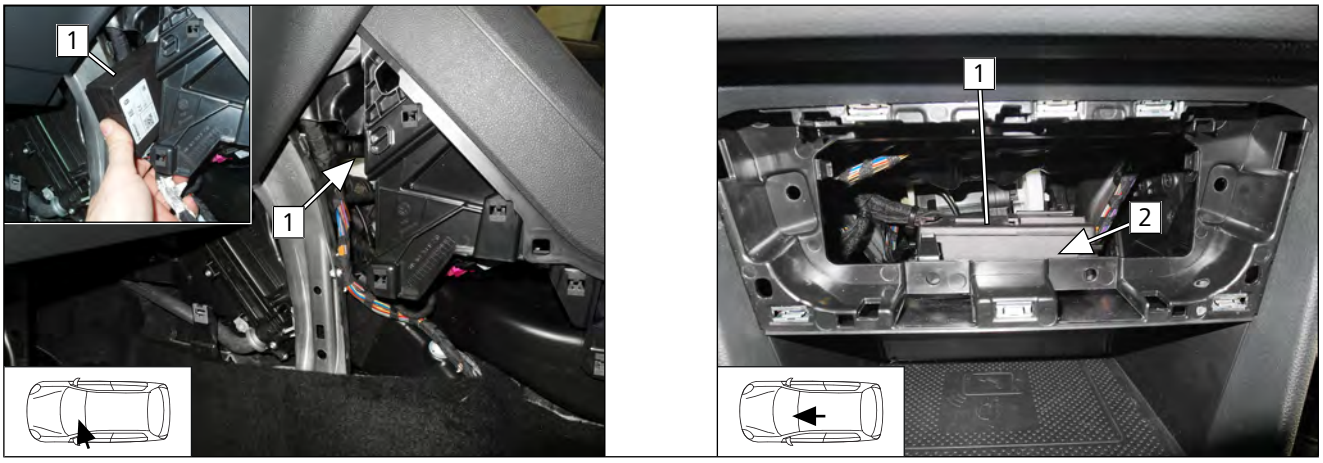


Fig. 88

▶ Insert Cronus [1] behind the A/C control panel as shown and fasten it with double-sided adhesive tape. Ensure a distance of approx. 20mm from KSG installation frame (sufficient space for the pins) at position [2], mount the A/C control unit temporarily for testing.

12.2 Wiring diagram

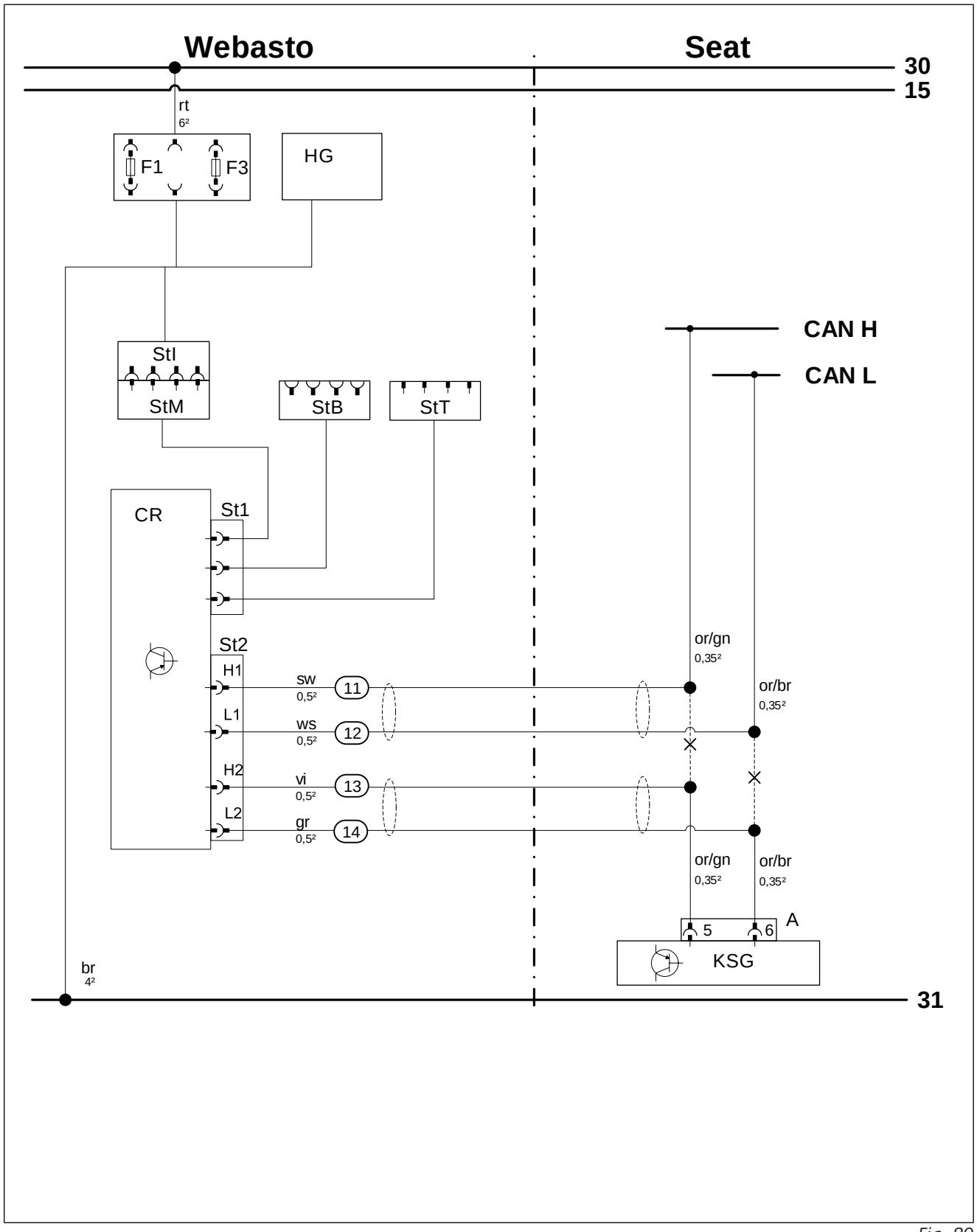


Fig. 89

Legend to wiring diagram

The vehicle connector and component designations are freely chosen by Webasto.
Wiring colours may vary.

Vehicle components	
Abbreviation	Component
KSG	Air-conditioning control unit
A	20-pin connector of A/C control unit

Note	
Graphic	Designation

Webasto components	
Abbreviation	Component
CLR	Cold start module
CR	Cronus (passenger compartment control unit)
D1	Diode
D2	Diode group
Dia	Diagnosis connection
E	Male plug for Plug&Play wiring harness
F	Female plug for Plug&Play wiring harness
F0	Additional fuse for power supply
F1	Heater main fuse
F2	Fan main fuse
F3	Cronus main fuse
HG	Heater TT-Evo
LA	Power adapter
PWM GW	Pulse width modulator gateway
RTD	Temperature sensor
St1	16-pin, black connector of Cronus wiring harness 1
St2	14-pin, grey connector of Cronus wiring harness 2
StB	4-pin female plug for control element wiring harness
StI	Female plug for passenger compartment wiring harness
StM	Male plug for engine compartment wiring harness
StT	Male plug for push button wiring harness
StZ	Male plug for additional relay

Symbols	
Graphic	Designation
X	Cutting point
●	existing electrical connection
●	new electrical connection
	Wiring harness section or protective sleeving
!	Insulate and tie back wire
Y	The connection is carried out as described in the heater installation documentation

Wire colours	
Abbreviation	Colour
bg	beige
bl	blue
br	brown
dbl	dark blue
dgn	dark green
ge	yellow
gn	green
gr	grey
hbl	light blue
hgn	light green
la	salmon
or	orange
pk	pink
ro	Pink
rt	red
sw	black
vi	violet
ws	white

12.3 Fan controller

Connection to air-conditioning control unit

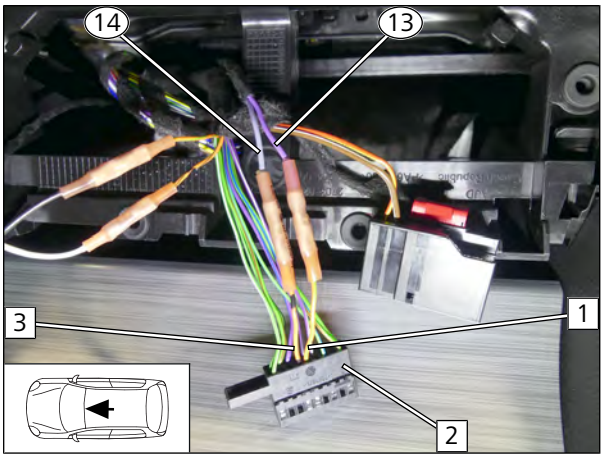


Fig. 90

- ▶ Locate connector A 2 on A/C control unit, detach it and remove it as shown.
- ▶ Detach part of the wiring harness wrapping carefully if necessary.

Produce all the following electrical connections only with shrinkable butt connectors.

- ▶ 1. crimp
- ▶ 2. shrink

1 Orange/green (or/gn) wire of KSG connector A / pin 5
2 20-pin KSG connector A
3 Orange/brown (or/br) wire of KSG connector A / pin 6
13 Violet (vi) wire of Cronus wiring harness 2
14 Grey (gr) wire of Cronus wiring harness 2

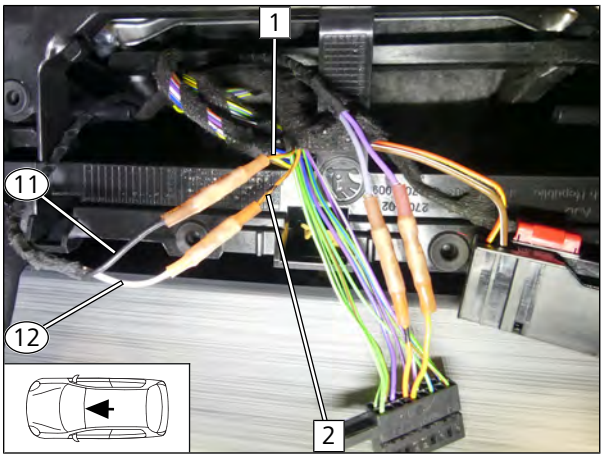


Fig. 91

1 Orange/green (or/gn) wire of CAN High
2 Orange/brown (or/br) wire of CAN Low
11 Black (sw) wire of Cronus wiring harness 2
12 White (ws) wire of Cronus wiring harness 2

12.4 Connection of Cronus to push button

The installation location of the Cronus push button should be confirmed with the end customer and should comply with the installation conditions.

- Mount the push button and connect male plug (StT) of Cronus wiring harness 1 with the connection plug of the Cronus push button as shown.
- When using the push button only as control element, it is necessary at this point to connect connection plug [1] of the engine compartment wiring harness with female plug (StM) of Cronus wiring harness 1.

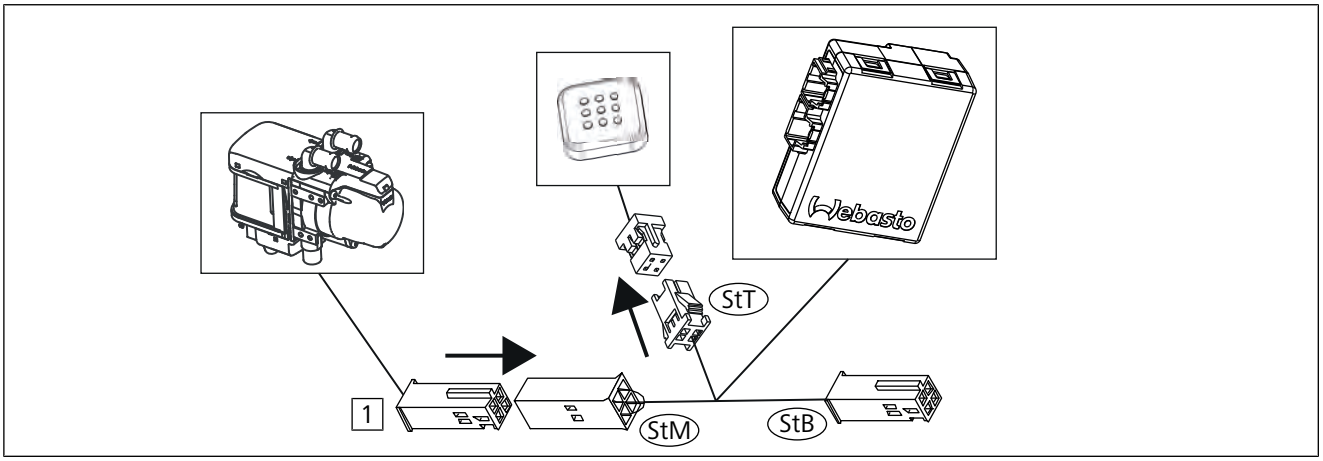


Fig. 92

12.5 Heater connection and installation of Telestart or MultiControll AM control element

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 option should be confirmed with the end customer and should comply with the installation conditions.

- Connect female plug (StM) of Cronus wiring harness 1 with connection plug [1] of the engine compartment wiring harness as shown.
- Connect female plug (StB) of Cronus wiring harness 1 with connection plug [2] of the relevant control element as shown.

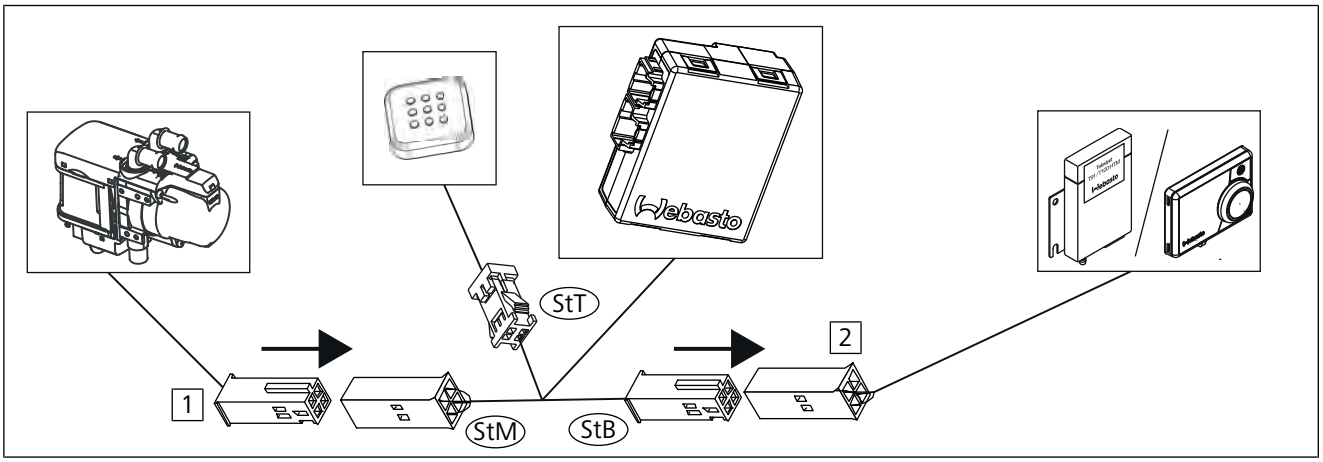


Fig. 93

12.6 Heater connection and installation of ThermoConnect control element

Install the control element in accordance with the provided relevant general installation documentation. The installation location of the push button of the ThermoConnect option should be confirmed with the end customer and should comply with the installation conditions.

Preparing Y wiring harness

The Y wiring harness mentioned in section 'Components used' must also be ordered.

- ▶ Locate connection plug [2] of ThermoConnect wiring harness on the wiring harness branch of Y wiring harness [1].
- ▶ Detach black (sw) wire [3] from connection plug [2], tie back and insulate.

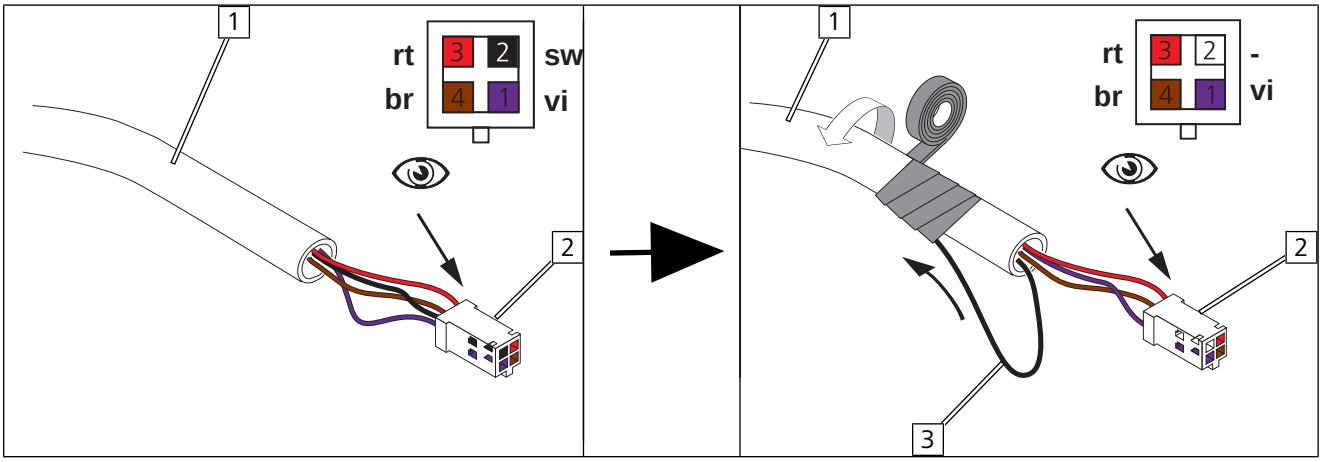


Fig. 94

Connecting wiring harnesses

- ▶ Connect female plug (StM) of Cronus wiring harness 1 and connection plug [1] of the engine compartment wiring harness using Y wiring harness [2] as shown.
- ▶ Connect connection plug [3] of the ThermoConnect wiring harness with prepared connector [4] of the Y wiring harness as shown.

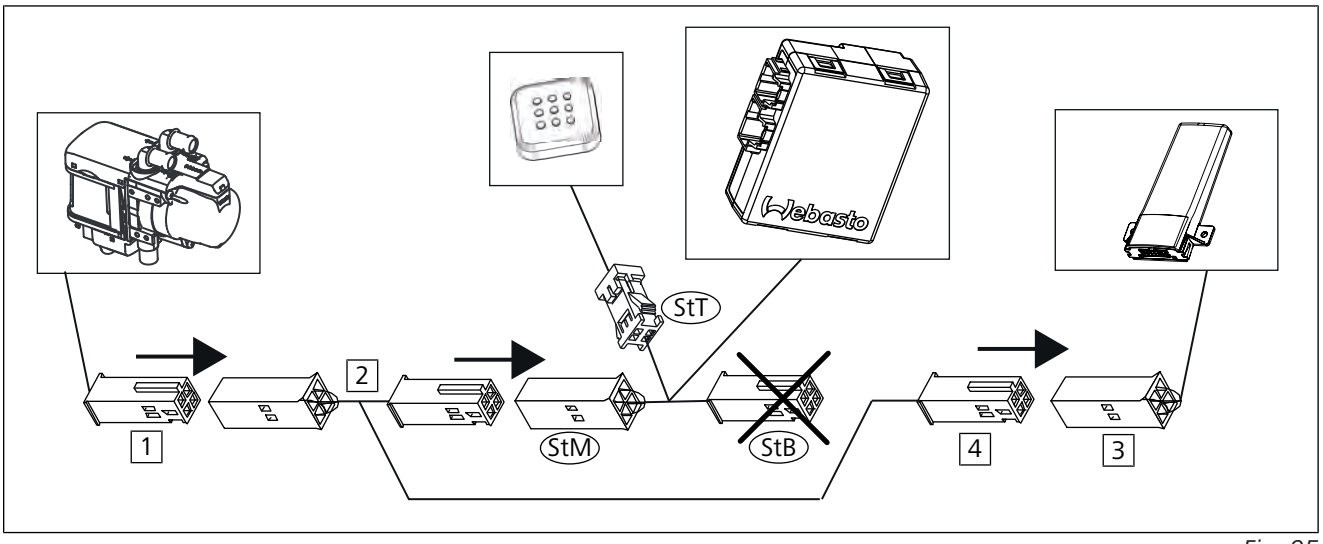


Fig. 95

13 Final Work

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

▶ Reassemble the components 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.

Downloading software to Cronus

✓ For more information, see the instructions in the 'Software Update Cronus – PKW.pdf' file in the relevant software download folder at:
https://dealers.webasto.com

▶ Connect Webasto Thermo Test Diagnosis as described in the instructions.

▶ Install the Cronus software downloaded as described in section 'Preparations for Cronus' according to the instructions.

▶ Save or print the final report.

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

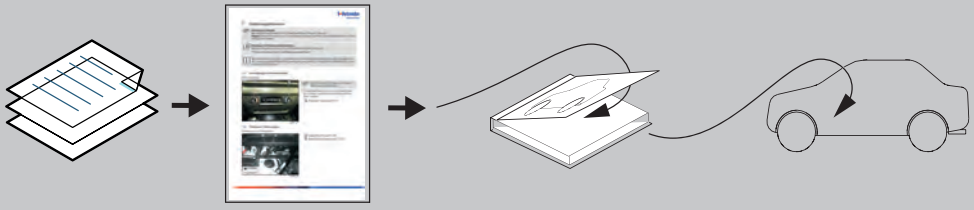
▶ Program MultiControl CAR, pair Telestart transmitter.

▶ 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.



This is a translation from the original German installation instructions.
To request this Installation Documentation in another language, please locate and contact your local Webasto dealer.
You can find your nearest dealer at: https://dealerlocator.webasto.com/en-int.

Ident No. 1328956B_EN • 04/22 • Errors and omissions excepted • © Webasto Thermo & Comfort SE • 2022

Webasto Thermo & Comfort SE
Postfach 1410
82199 Gilching
Germany

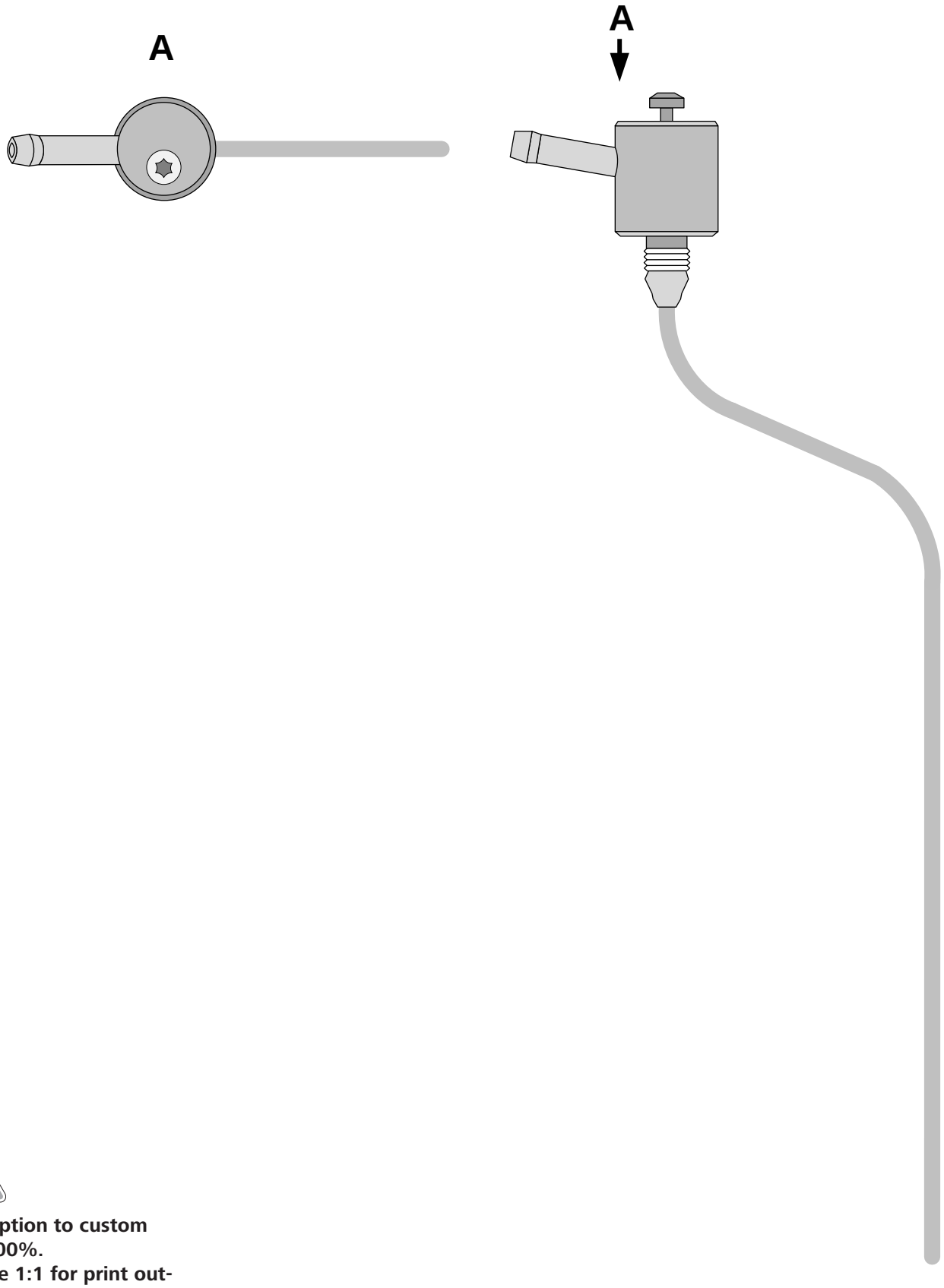
Company address:
Friedrichshafener Str. 9
82205 Gilching
Germany

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

CE

WWW.WEBASTO.COM

14 FuelFix template for 2WD



100 mm

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

0

100 mm

15 FuelFix template for 4WD

100 mm

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

0

100 mm

16 Operating instructions

Vehicles with passenger compartment monitoring

Further information can be found in the vehicle operating instructions.

▶ Deactivate passenger compartment monitoring for the heating operation.

Information regarding the heating time

We recommend matching the heating time to the driving time (heating time = driving time)
Example: for a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.

Notes about the A/C control panel presettings

Your vehicle is equipped with a comfort air-conditioning control. As a result, **no** settings are required on the A/C control panel when switching off the vehicle. All necessary presettings, such as fan speed, temperature and flap positions are set automatically.

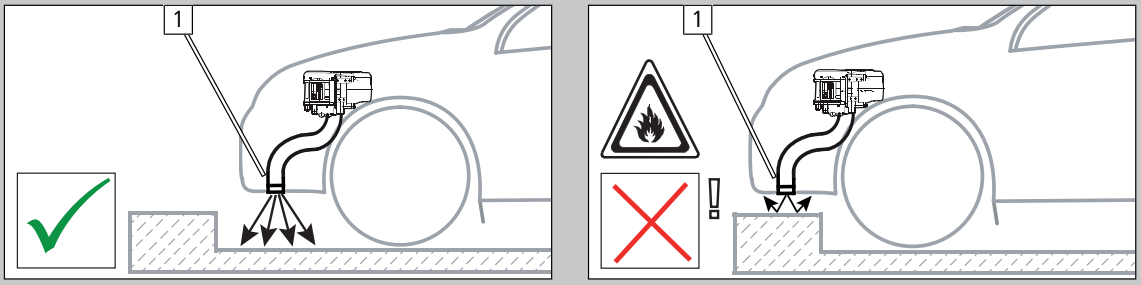
Notes about the active parking heating mode

The vehicle fan is deactivated when the vehicle is opened and is available again once the ignition is switched on.
After the vehicle is closed again, it can take several minutes for it to be active again.

Note for parking heater function

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

Notes on parking heater exhaust outlet 1



16.1 Installation location of fuses

Fuses in engine compartment

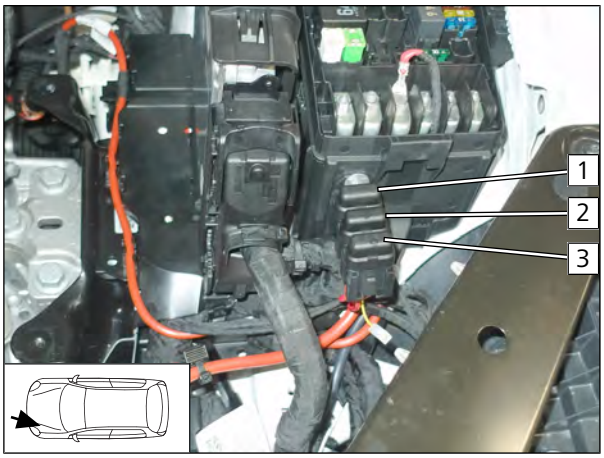


Fig. 96

1 F3 - 5A Cronus main fuse
2 F2 - not in use
3 F1 - 20A heater main fuse