EN

K

Installation documentation

for Thermo Top Evo water heater

'Inline' coolant circuit with engine preheating

Toyota RAV 4

Left-hand drive vehicle

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Toyota	RAV 4	XA5 (EU,M)	from 2019	e6* 2007/46* 0289*…

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displace-ment [cm³]	Engine code
2.0P	Petrol	Euro 6d temp	6-speed SG	129	1987	M20A

Validity	Equipment variants	Model
		RAV 4
Verified equipment variants	Manual air-conditioning	x
	2 zone automatic A/C	x
	LED main headlights	x
	Matrix LED main headlights	x
	LED daytime running lights	x
	Halogen front fog lights	x
	Headlight washer system	x
	Start button with keycard	x
	2 WD	x
	4 WD	x

Total installation time	Note
8.5 hours	

Contents

1	**List of abbreviations**	**3**
2	**Installation notes**	**4**
2.1	Information on Validity	4
2.2	Components used	4
2.3	Information on Total Installation Time	4
2.4	Installation recommendations	4
3	**About this document**	**5**
3.1	Purpose of the document	5
3.2	Warranty and liability	5
3.3	Safety	5
3.4	Using this document	6
4	**Technical Information**	**7**
5	**Preparing measures**	**8**
5.1	Vehicle preparation	8
5.2	Heater preparation	8
6	**Installation overview**	**9**
7	**Electrical system of engine compartment**	**10**
8	**Mechanical system**	**16**
8.1	Preparing installation location	16
8.2	Premounting heater	17
8.3	Mounting heater	21
9	**Coolant**	**23**
9.1	Hose routing diagram	23
9.2	Coolant circuit installation	24
10	**Fuel**	**27**
10.1	Routing fuel line	27
10.2	Tank extracting device installation	31
11	**Combustion air**	**35**
12	**Exhaust**	**36**
12.1	Mounting exhaust silencer	36
12.2	Mounting exhaust end fastener	38
13	**Final work in engine compartment**	**41**
14	**Electrical system of passenger compartment**	**42**
14.1	Air-conditioning control	42
15	**Electrical system of control element**	**43**
15.1	Telestart option	43
15.2	ThermoCall option	44
16	**Final Work**	**46**

1 List of abbreviations

DP	Fuel pump
EFIX	Exhaust end fastener
EPT	Telestart receiver
HG	Heater
PWM	Pulse width modulator
RSH	Relay and fuse holder of passenger compartment
SG	Manual transmission
SH2	Engine compartment fuse holder for F1/F2
UP	Coolant pump

2 Installation notes

2.1 Information on Validity

This installation documentation applies to vehicles listed on page 1, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to this installation documentation. Vehicle and engine types, equipment variants and other specifications not listed in this installation documentation have not been tested. However, installation according to this installation documentation may be possible.

2.2 Components used

Designation	Order number
Basic delivery scope of Thermo Top Evo	In accordance with price list
Installation kit for Toyota RAV4 2.0 petrol 2019	1327288A
Additional 'Webasto Standard' air-conditioning control kit for Toyota / Lexus	1324414_
2 gaskets for tank fittings	Toyota ID: 77169-47040
In case of Telestart, control element, as well as indicator lamp in consultation with end customer	In accordance with price list

2.3 Information on Total Installation Time

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

2.4 Installation recommendations

Arrange for the vehicle to be delivered with the tank only about ¼ full.
For the MultiControl CAR option, the recommended installation locations for the Telestart or ThermoCall push button should be confirmed with the end customer.
Depending on the space required and the vehicle manufacturer's instructions, we recommend the use of a vehicle battery with a higher electrical capacity.

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

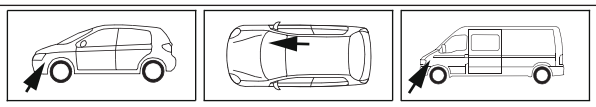
3.4.3 Work step identification marks

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
▶	Necessary action
⇨	Result of an action
1 / 12 / a1	Position numbers for the image descriptions
① / ⑫ / Ⓐ	Position numbers for the image descriptions for electrical wires and coolant hose sections

4 Technical Information

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

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

Specified temperature for fabric heat shrink tubing
– Shrink temperature max. 230°C

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

5 Preparing measures

5.1 Vehicle preparation

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

Vehicle area	Components to be removed	Other applicable documents
General	▶ Open the fuel tank cap ▶ Ventilate the fuel tank ▶ Close the fuel tank cap again ▶ Depressurise the cooling system	K
Engine compartment and body	▶ Disconnect the battery ▶ Windscreen wiper ▶ Water drain chamber cover ▶ Windscreen wiper motor ▶ Water drain chamber ▶ Front underride protection ▶ Lower engine cover ▶ Underbody trim on the driver's side	K
Passenger compartment	▶ Glove box ▶ Lower instrument panel trim on the front passenger's side ▶ Lower left instrument panel trim on the front passenger's side ▶ Footwell trim on the driver's side ▶ Accelerator pedal	K G

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.

Passenger compartment	▶ Rear bench seat as per the workshop manual	i
Vehicle body	▶ Open the tank fitting service lid on the left and right ▶ Tank fitting on the left and right	K

5.2 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

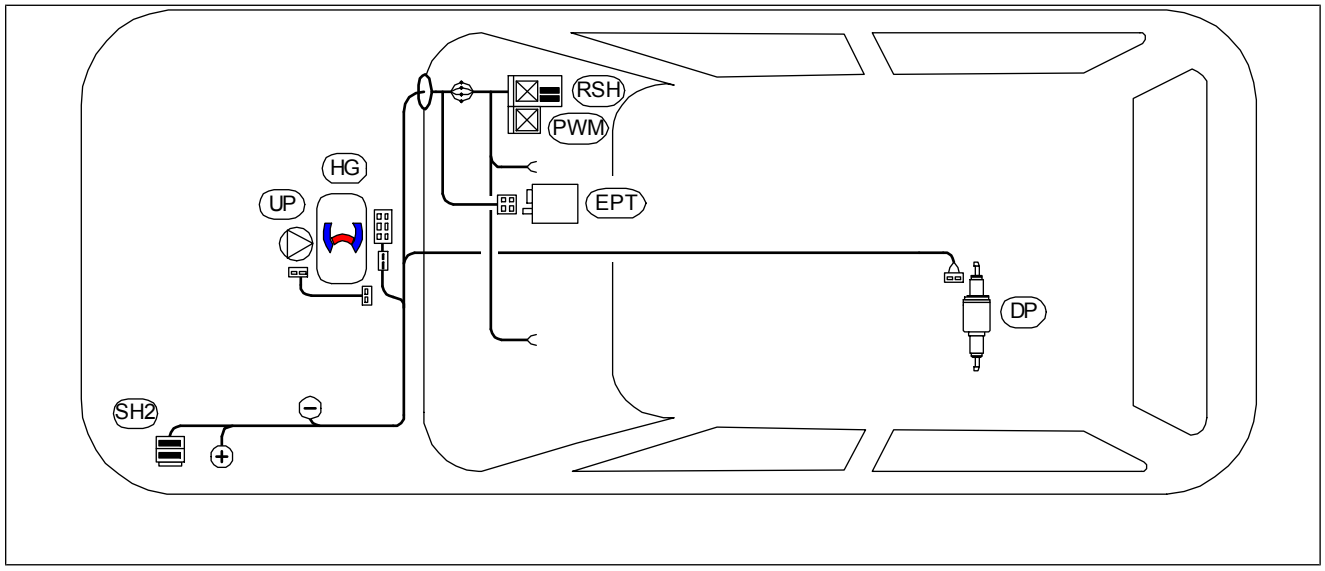


Fig. 1

Legend to installation overview

Abbreviation	Component
DP	Fuel pump
HG	Heater
EPT	Telestart receiver
PWM	Pulse width modulator
RSH	Relay and fuse holder of passenger compartment
SH2	Engine compartment fuse holder
UP	Coolant pump

Heater installation location

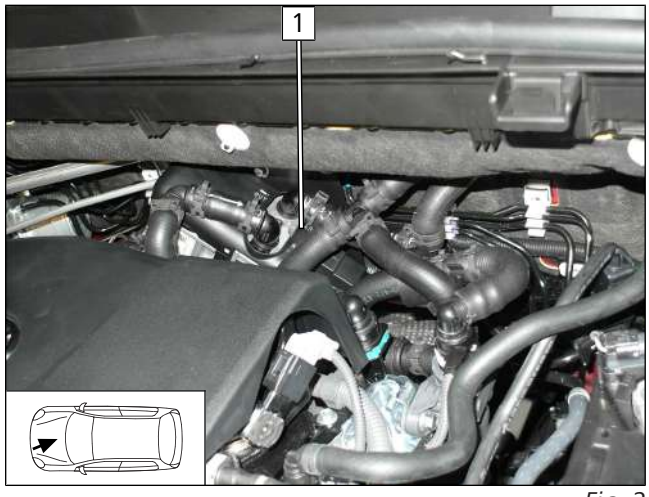


Fig. 2

1 Heater

7 Electrical system of engine compartment

Preparing wiring harness

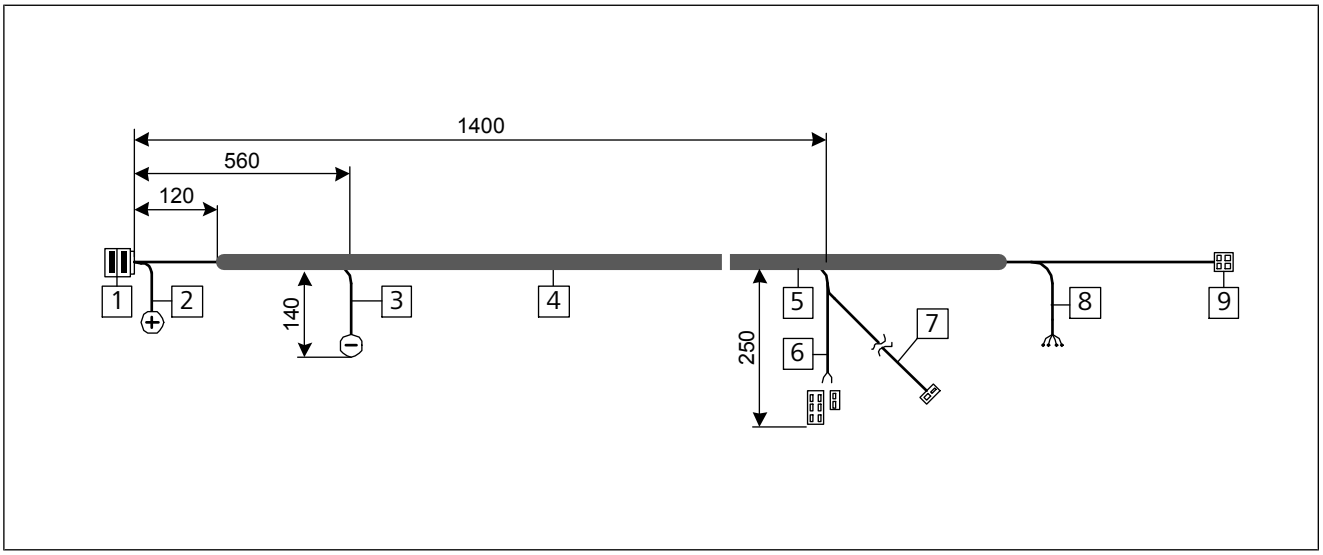


Fig. 3

1. SH2
2. Positive wire
3. Earth wire
4. Ø13, 1200 long slit corrugated tube
5. Ø13, 500 long slit corrugated tube
6. Heater wiring harness
7. Fuel pump wiring harness
8. Passenger compartment wiring harness
9. Control element wiring harness

Bending perforated bracket

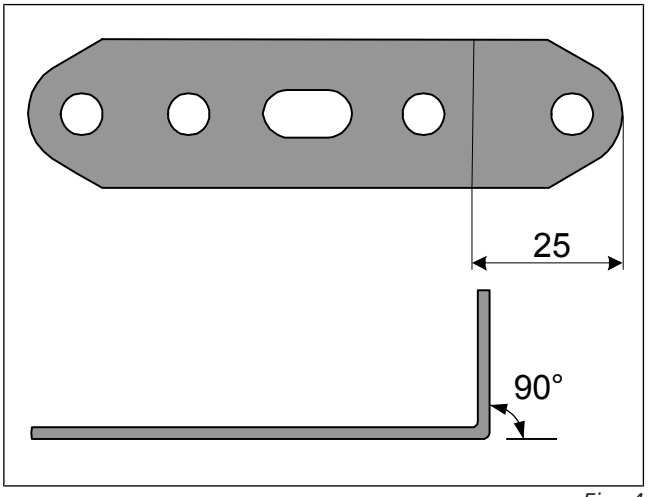


Fig. 4

Premounting retaining plate of SH2

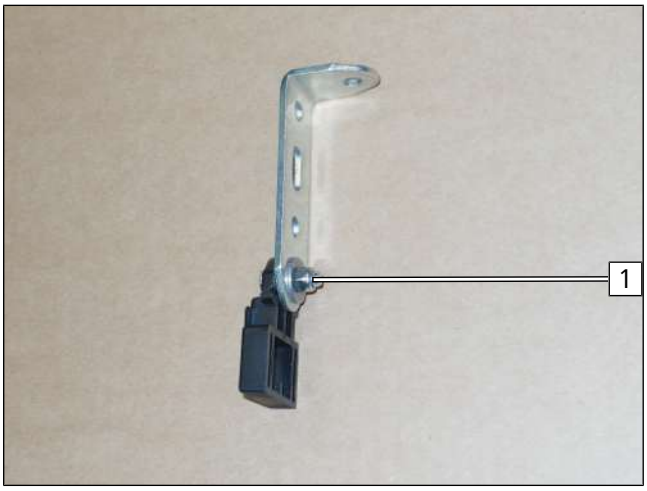


Fig. 5

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

Mounting retaining plate of SH2

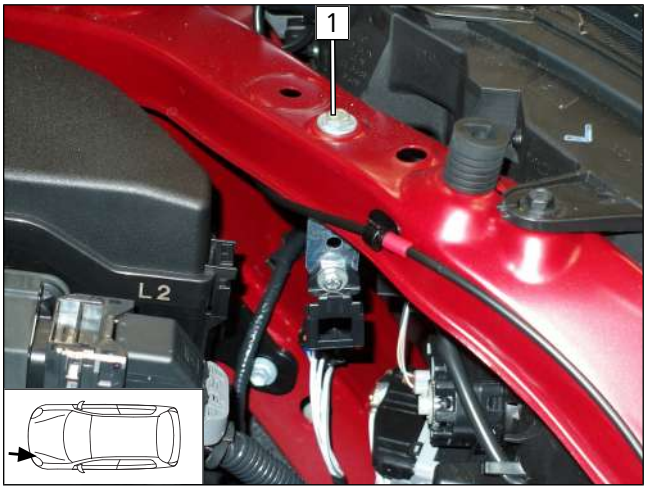


Fig. 6

1 M6x20 bolt, large diameter washer, perforated bracket, original vehicle hole, flanged nut

Installing SH2

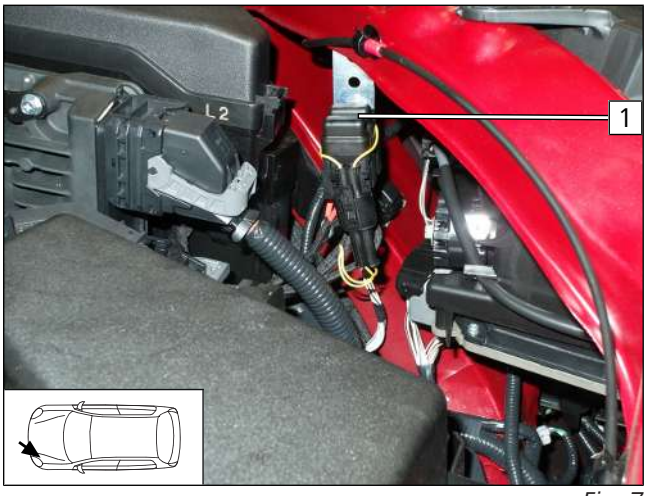


Fig. 7

1 Fuses F1 / F2

Detaching original vehicle connector and nut

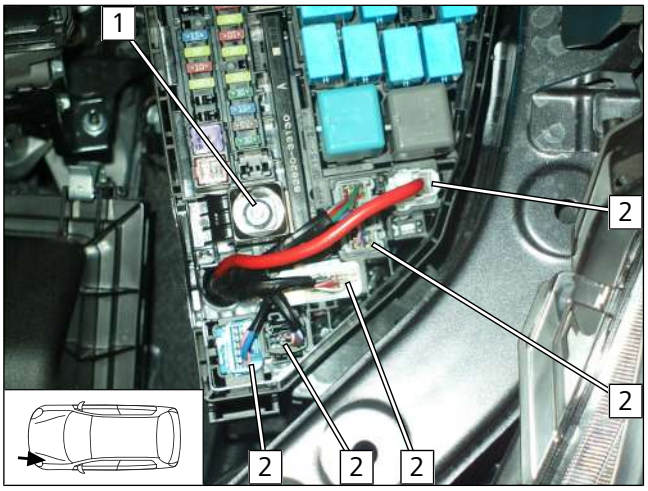


Fig. 8

1 Original vehicle nut
2 Original vehicle connector

Removing original vehicle trim

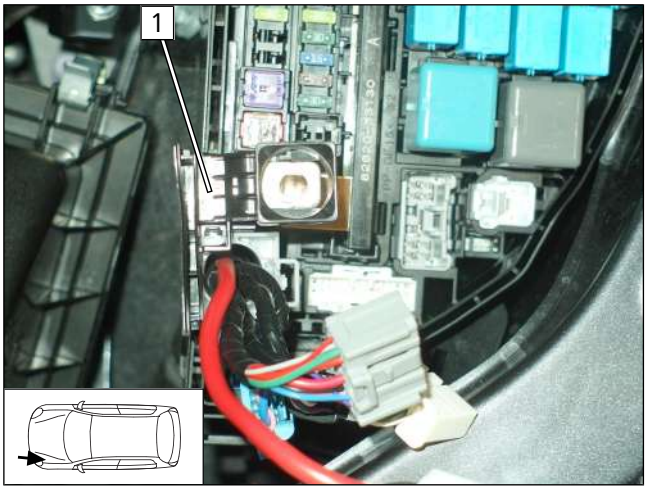


Fig. 9

1 Original vehicle trim

Removing original vehicle positive support point trim

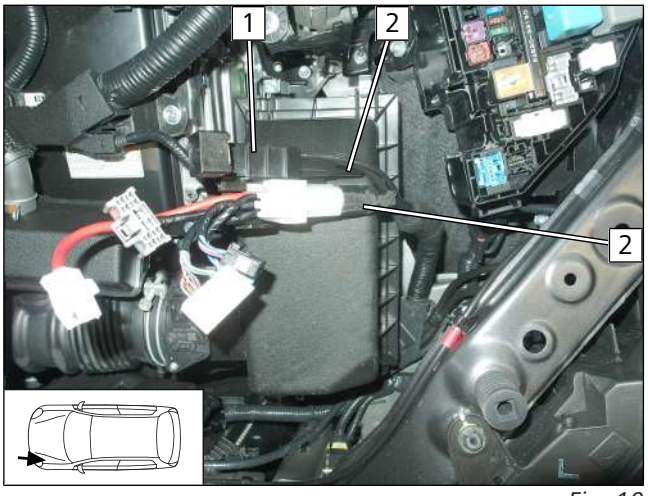


Fig. 10

▶ Remove insulating tape at pos. 2.

1 Original vehicle positive support point trim

Creating a recess

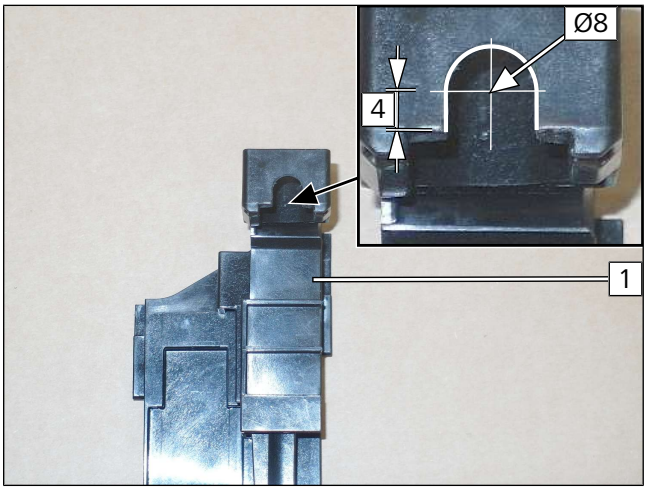


Fig. 11

1 Original vehicle positive support point trim

Routing positive wire

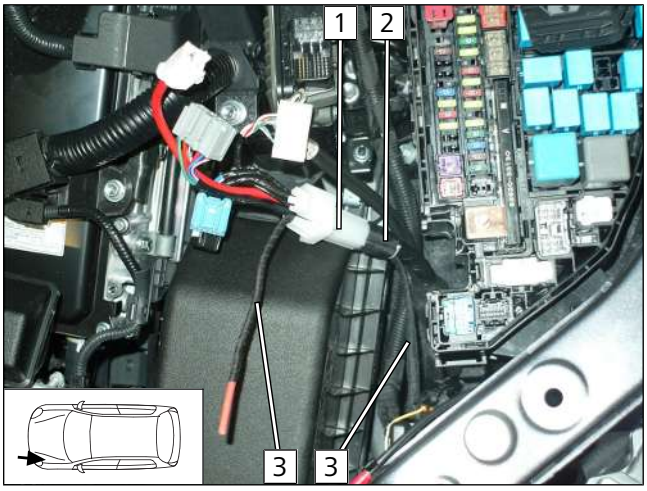


Fig. 12

▶ Rewrap wiring harness at pos. 2 with insulating tape.

1 Original vehicle wiring harness pass through

2 Positive wire

Connecting positive wire

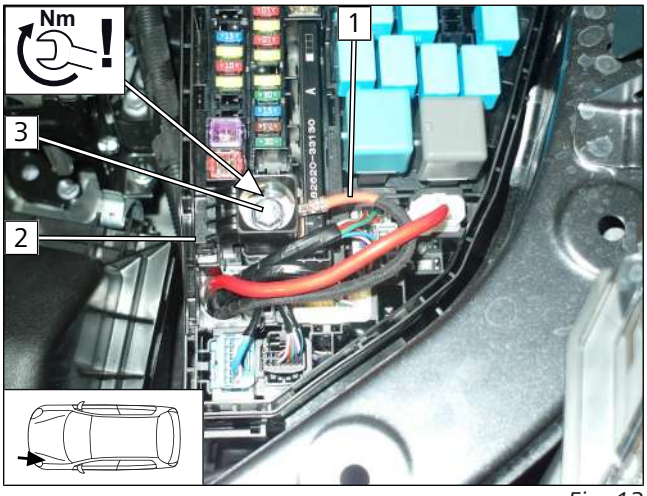


Fig. 13

▶ Reinstall original vehicle trim 2 and connector.

1 Positive wire

3 Original vehicle positive support point, original vehicle nut

Routing heater wiring harness

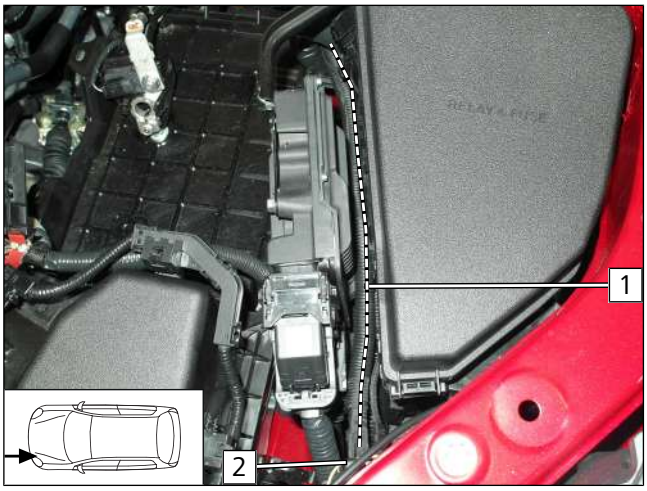


Fig. 14

▶ Route corrugated tube 1 with heater wiring harness, passenger compartment wires and control element wiring harness to firewall.

2 SH2

Connecting earth wire

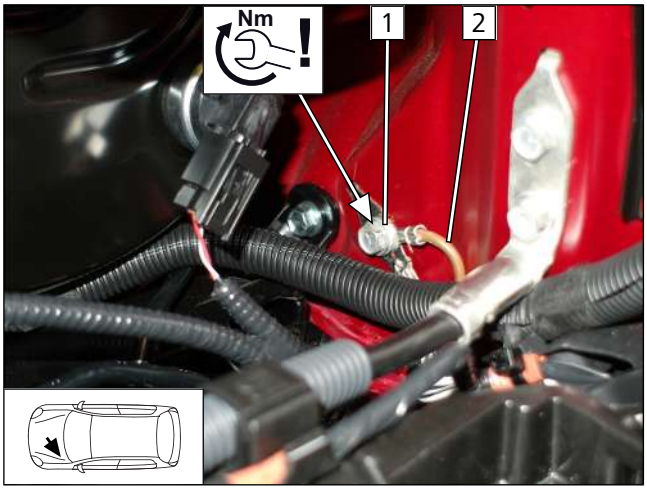


Fig. 15

1 Original vehicle earth support point

2 Earth wire

Routing heater wiring harness

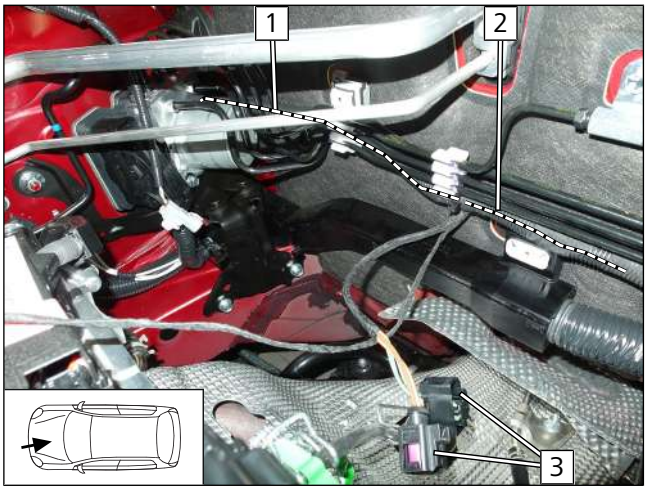


Fig. 16

▶ Route corrugated tube 2 with heater, passenger compartment and control element wiring harnesses to heater installation location and fasten with cable ties to original vehicle lines.

▶ Route corrugated tube 1 with passenger compartment and control element wiring harnesses further to passenger compartment pass through.

3 Heater wiring harness connector

Passenger compartment pass through

Fig. 17

1 Protective rubber plug

8 Mechanical system

8.1 Preparing installation location

Removing original vehicle components, inserting rivet nut

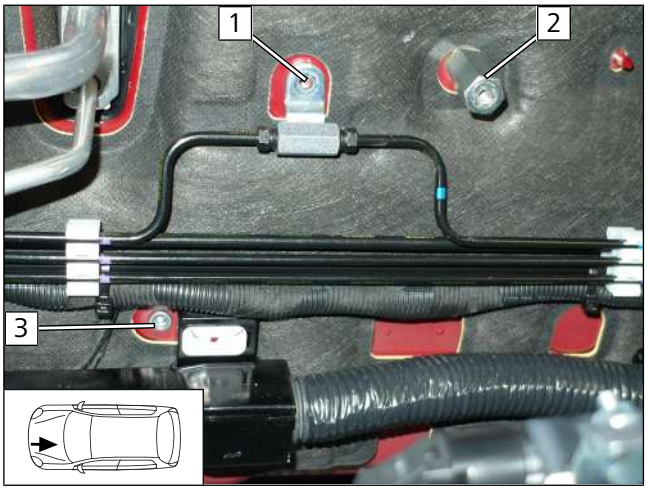


Fig. 18

- ▶ Remove and discard original vehicle bolt at pos. 1.
- ▶ Remove original vehicle plug at pos. 3 and then insert rivet nut M6 in original vehicle hole.

2 M6x40 spacer nut on original vehicle stud bolt

Premounting HG bracket

Fig. 19

1 M6x90 bolt, spring lock washer, large diameter washer, bracket, spacer (40), spacer (20), lock washer

2 M6x50 bolt, spring lock washer, large diameter washer, bracket, spacer (30), lock washer

Mounting heater bracket

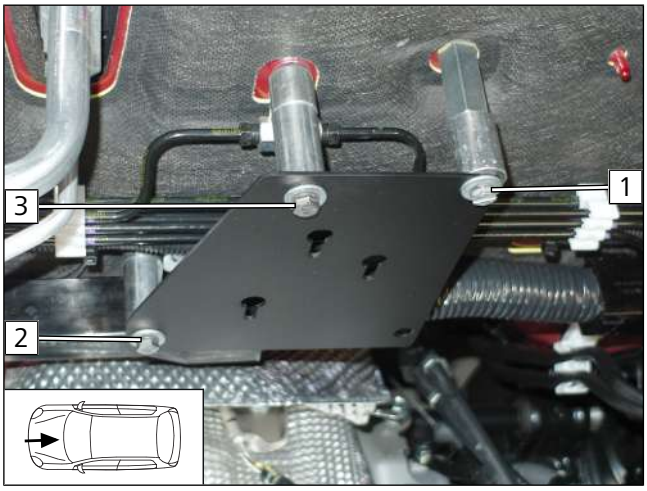


Fig. 20

1 Premounted M6x50 bolt at spacer nut

2 Premounted M6x90 bolt at rivet nut

3 Premounted M6x90 bolt at original vehicle threaded hole

8.2 Premounting heater

Mounting water connection piece

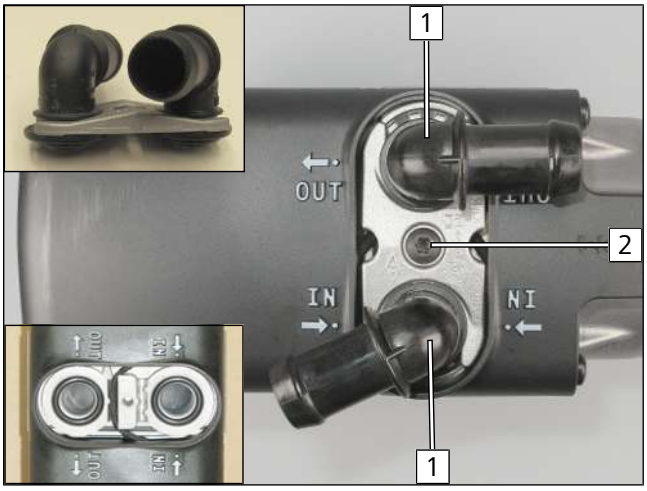


Fig. 21

Observe the general installation instructions of the heater.

1 Water connection piece, seal

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

Premounting bolts loosely

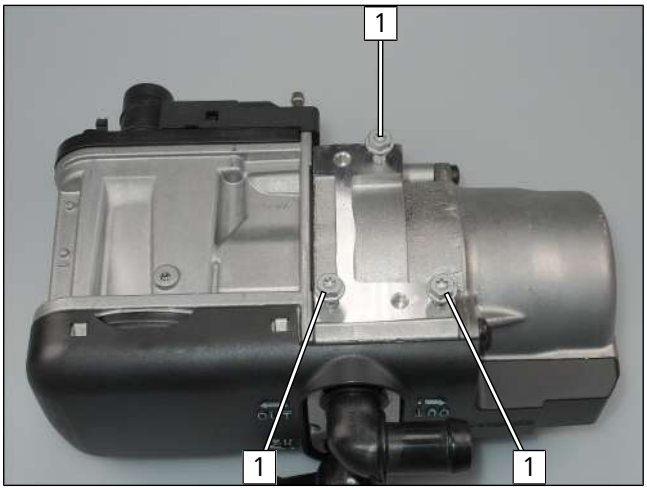


Fig. 22

1 5x13 self-tapping bolt, screw inwards by max. 3 threads

Cutting fuel line to length

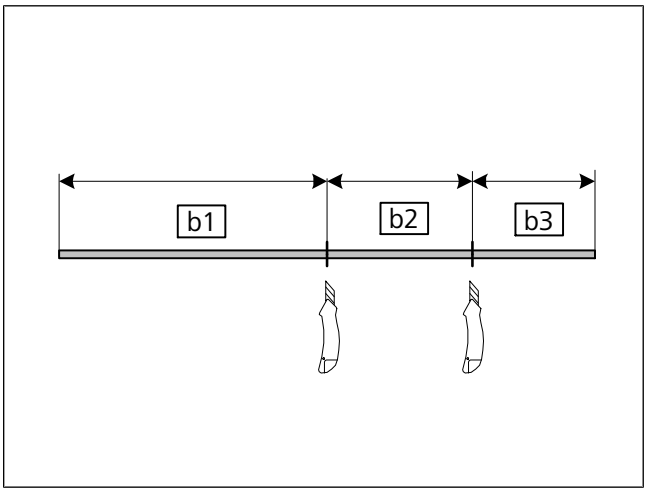


Fig. 23

	Length	Used for
b1	2650	Connection between heater and fuel pump
b2	1100	Connection between left tank fitting and right tank fitting
b3	1250	Connection between fuel pump and tank extracting device

Mounting lines and wiring harness

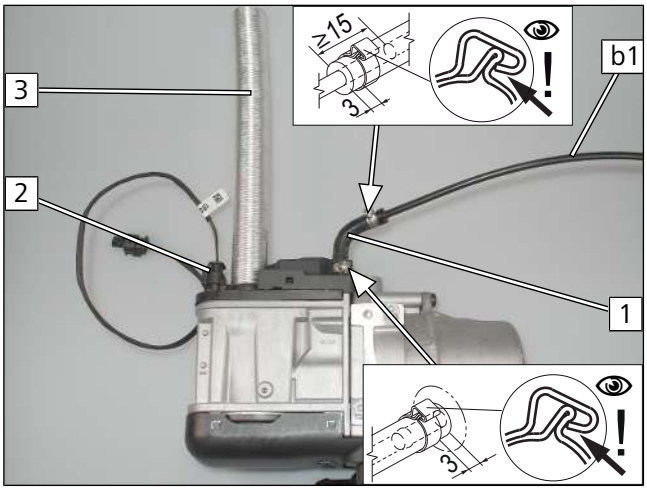


Fig. 24

1 90° moulded hose, Ø10 clamp [2x]
2 Coolant pump wiring harness connector
3 Combustion air pipe

Mounting stud bolt

Fig. 25

1 M5/M6x15 self-tapping stud bolt

Bending perforated bracket

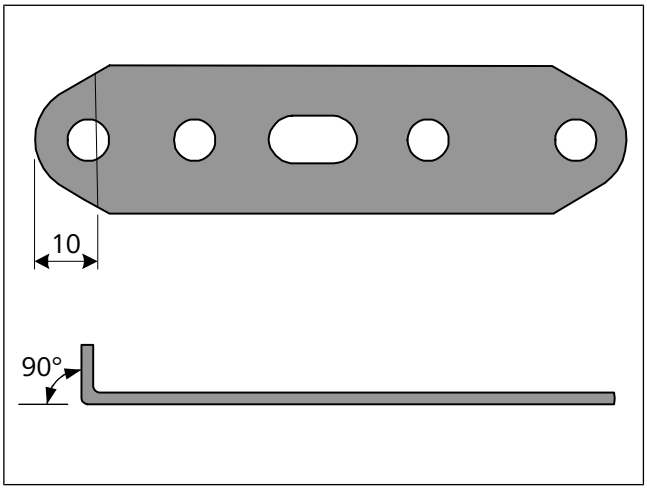


Fig. 26

Premounting coolant pump

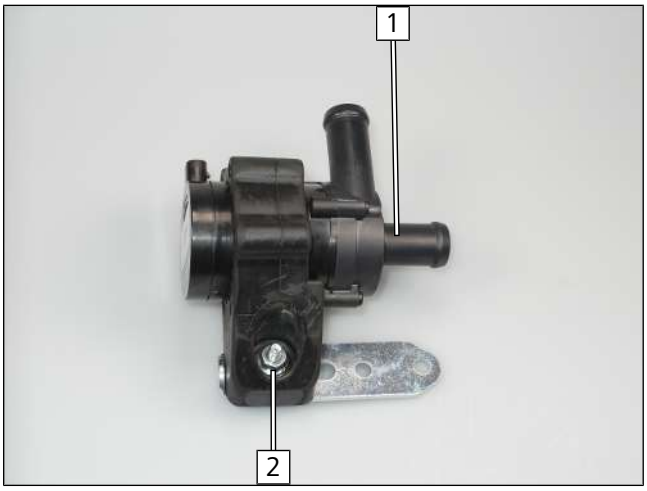


Fig. 27

1 Coolant pump
2 M6x25 bolt, perforated bracket, coolant pump mount, flanged nut

Mounting coolant pump

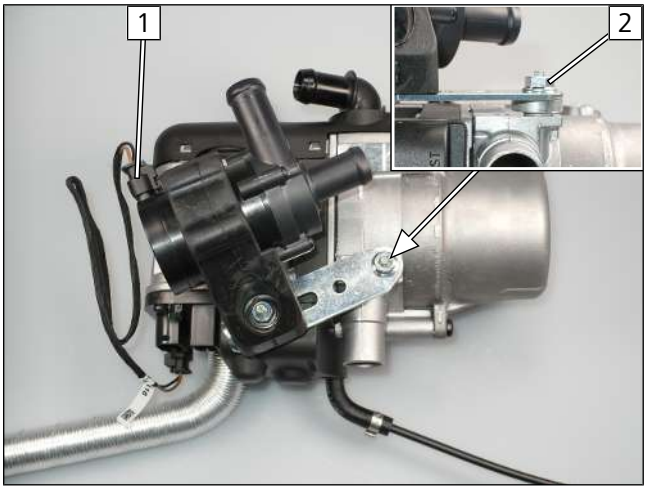


Fig. 28

1 Coolant pump wiring harness connector
2 Stud bolt, spacer (5), perforated bracket, flanged nut

Cutting hoses to length

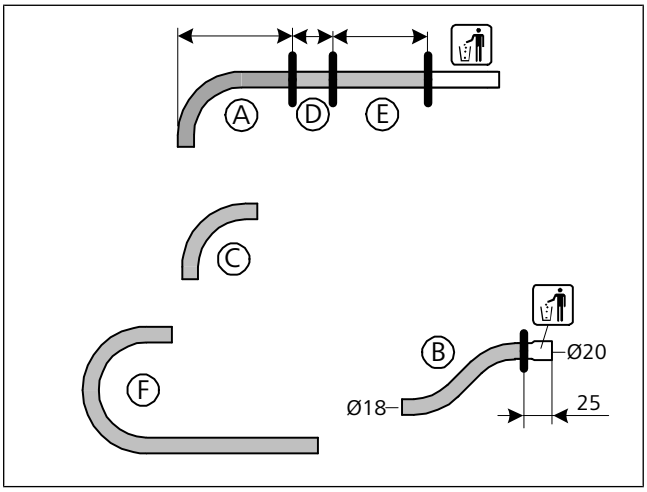


Fig. 29

Ⓐ	90°/110 long moulded hose
Ⓑ	2x45° moulded hose
Ⓒ	90° moulded hose
Ⓓ	60
Ⓔ	120
Ⓕ	180° moulded hose

Dismantling hoses

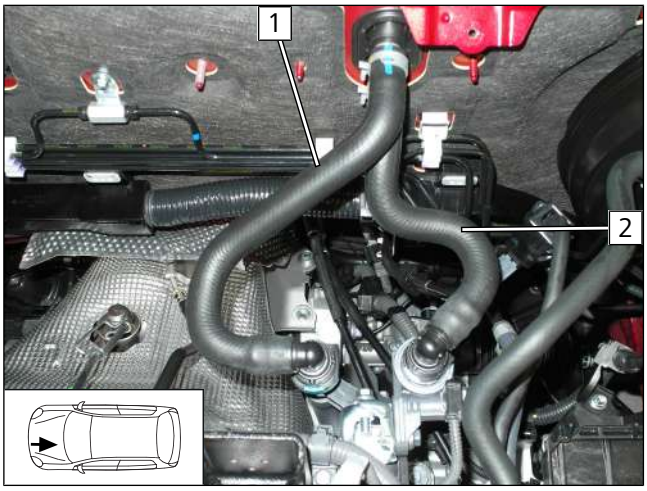


Fig. 30

Original vehicle spring clips will be reused.

1 Heat exchanger outlet / engine inlet hose
2 Heat exchanger inlet / engine outlet hose

Preparing hose of engine outlet / heat exchanger inlet

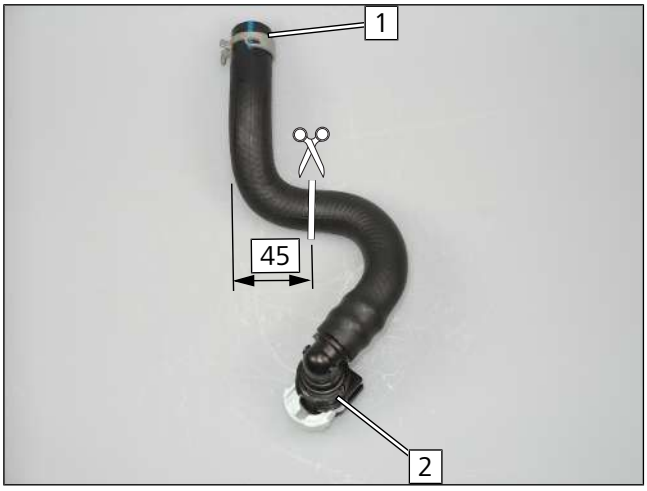


Fig. 31

1 Heat exchanger inlet connection
2 Quick-release coupling of engine outlet connection

Mounting hoses

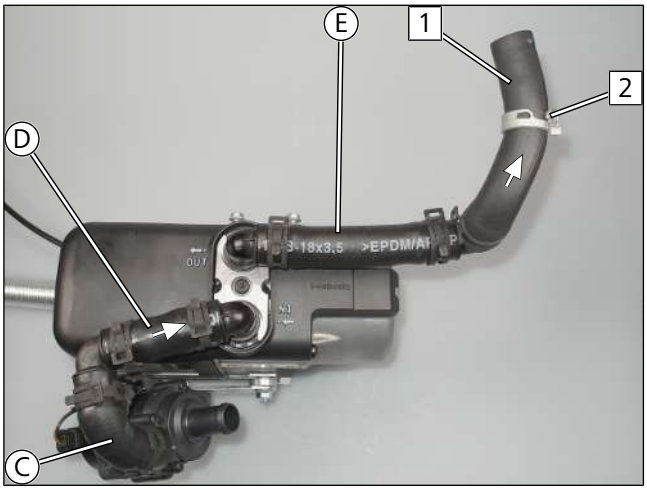


Fig. 32

All spring clips without a specific designation
Ø25,
Ø18x18/90° connecting pipe

1 Heat exchanger inlet hose section
2 Original vehicle spring clip

Cutting exhaust pipe to length

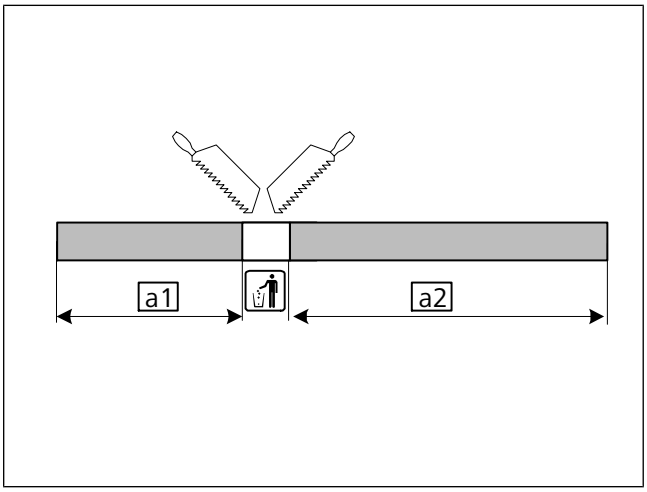


Fig. 33

a1 350
a2 600

Mounting exhaust pipe **a1**

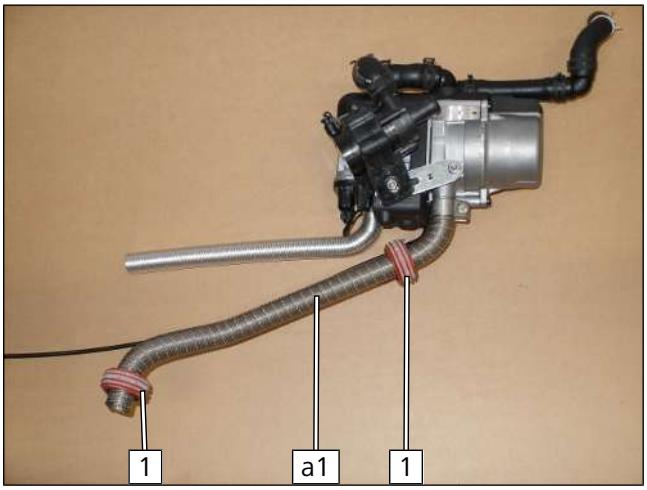


Fig. 34

▶ Bend exhaust pipe **a1** as shown.

1 Spacer bracket

8.3 Mounting heater

Positioning heater at installation location

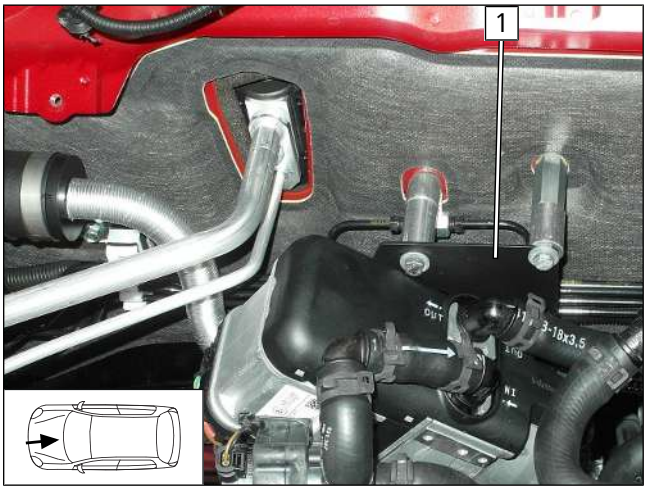


Fig. 35

1 Heater bracket

Mounting heater

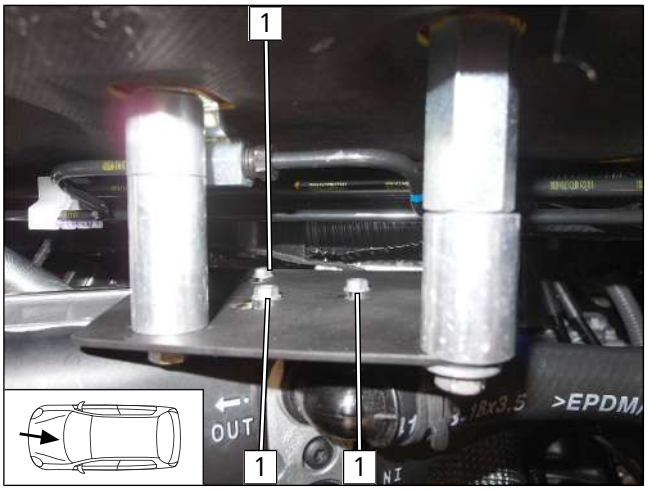


Fig. 36

▶ Insert premounted heater in bracket and tighten self-tapping bolts 1.

Mounting heater wiring harness

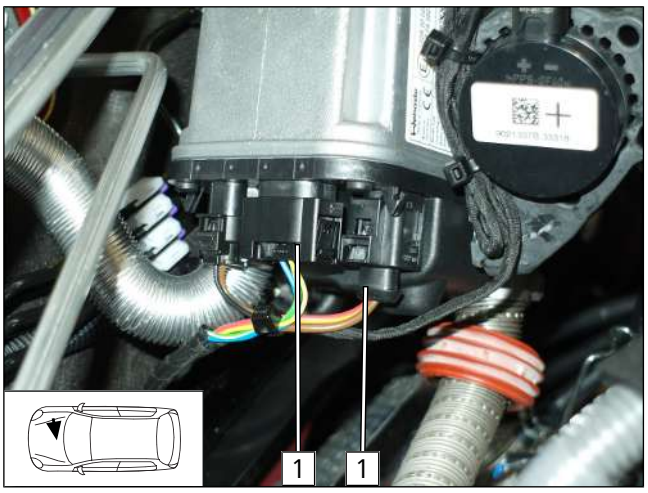


Fig. 37

1 Heater wiring harness connector

9 Coolant

9.1 Hose routing diagram

'Inline' coolant circuit

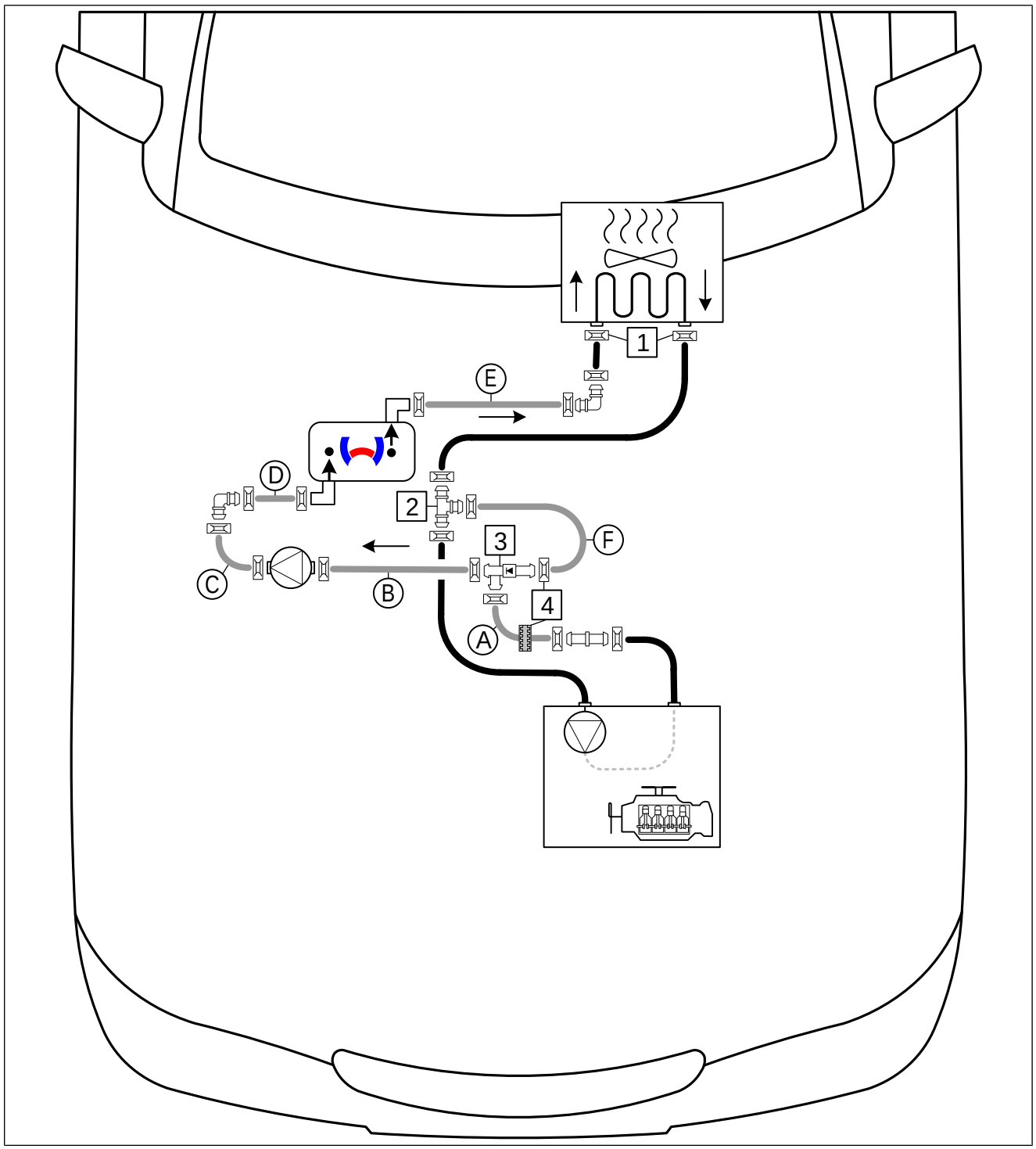


Fig. 38

All spring clips without a specific designation = Ø25

All connecting pipes = Ø18x18/90° or =Ø18x18

[1] Original vehicle spring clip; [2] T-piece; [3] non-return valve; [4] black rubber isolator

9.2 Coolant circuit installation

Premounting non-return valve hose group

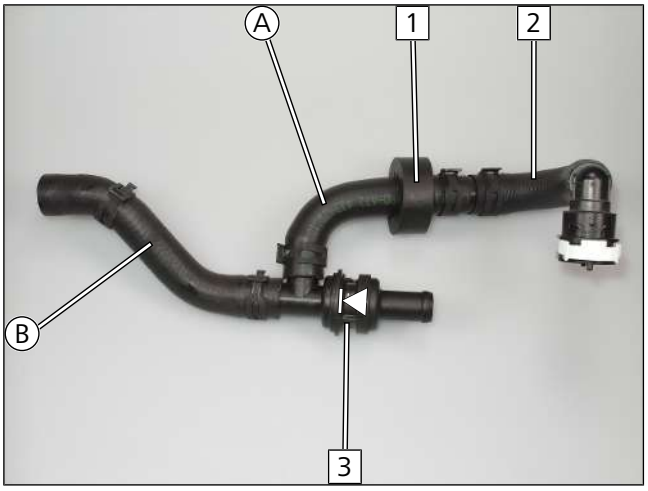


Fig. 39

1 Black (sw) rubber isolator
2 Hose section of engine outlet with quick-release coupling
3 Non-return valve

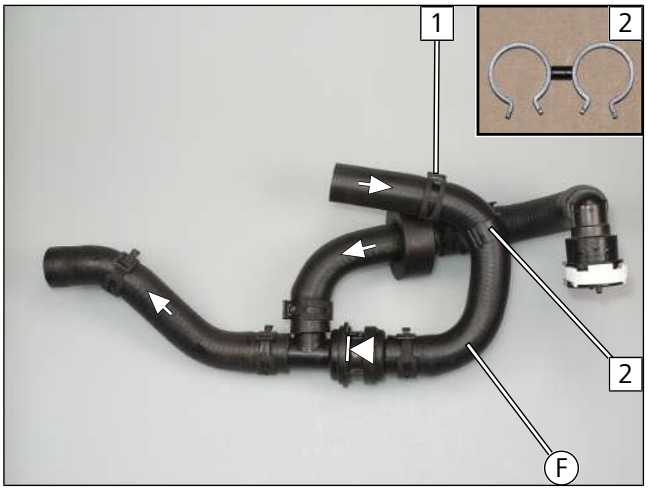


Fig. 40

1 Mount spring clip loosely
2 Hose bracket between hose (F) and engine outlet hose section

Cutting point

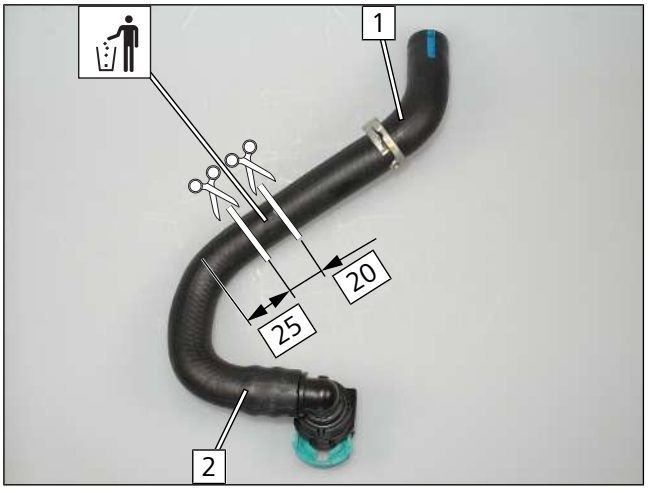


Fig. 41

1 Heat exchanger outlet hose section
2 Hose section of engine inlet with quick-release coupling

Premounting T-piece hose group

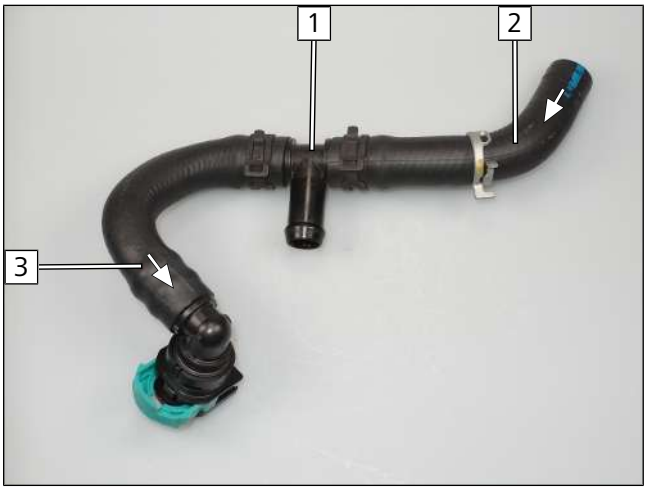


Fig. 42

1 T piece
2 Heat exchanger outlet hose section
3 Engine inlet connection with quick-release coupling

Connection to heat exchanger inlet

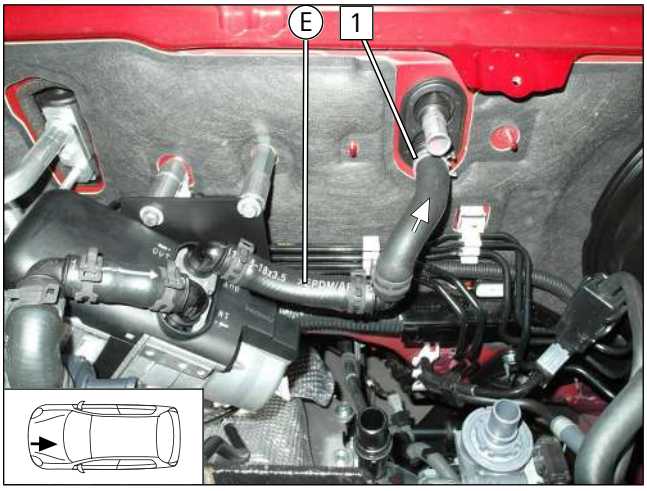


Fig. 43

1 Heat exchanger inlet connection with original vehicle spring clip

Mounting non-return valve hose group

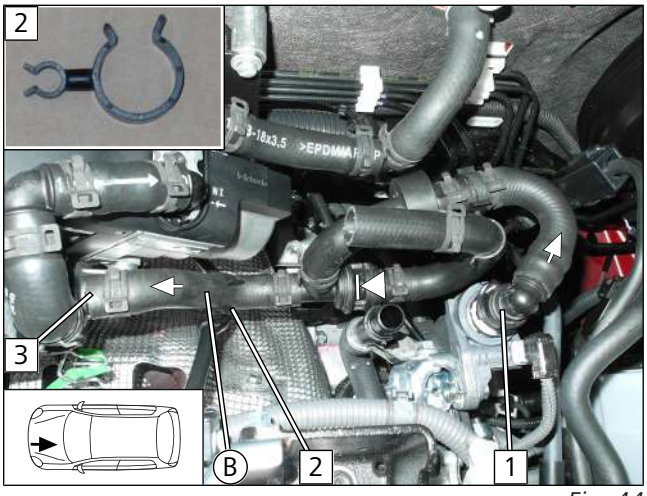


Fig. 44

1 Engine outlet connection with quick-release coupling
2 Hose bracket between hose (B) and original vehicle line
3 Hose (B) on coolant pump inlet

Mounting T-piece hose group

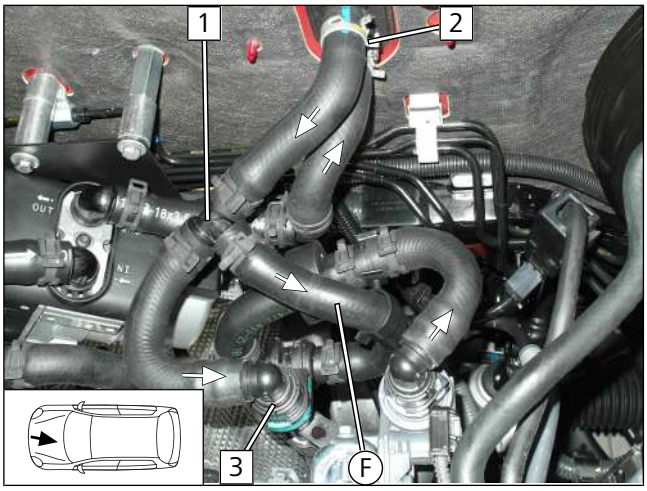


Fig. 45

▶ Mount hose Ⓕ with premounted spring clip onto T-piece 1.

- 2 Heat exchanger outlet connection with original vehicle spring clip
- 3 Engine inlet connection with quick-release coupling

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

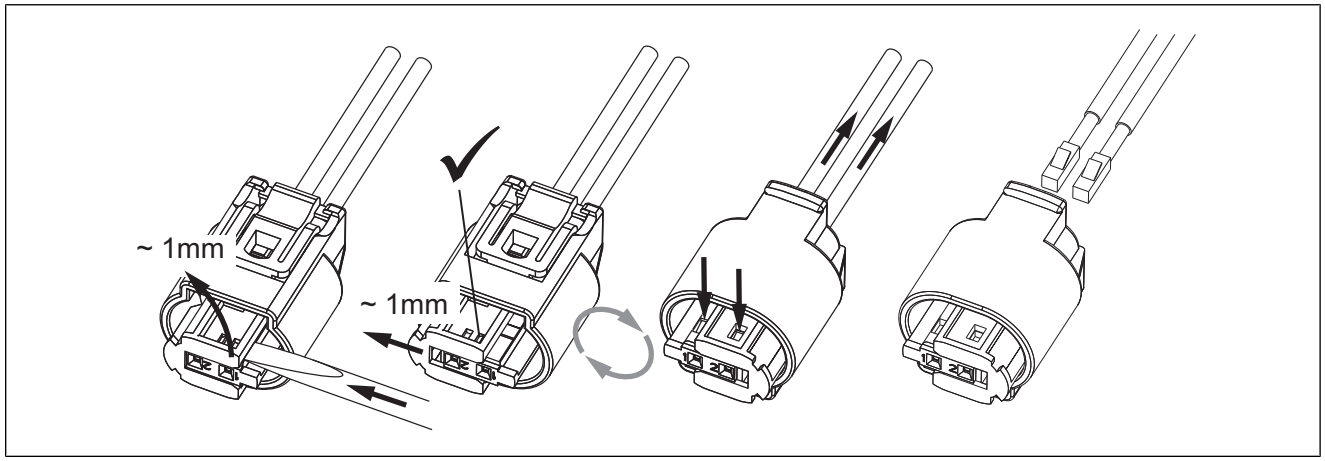


Fig. 46

10.1 Routing fuel line

Routing from heater

Fig. 47

- ▶ Draw fuel line **b1** and fuel pump wiring harness into Ø10 corrugated tube **1**, route to underbody and fasten.

Routing on underbody

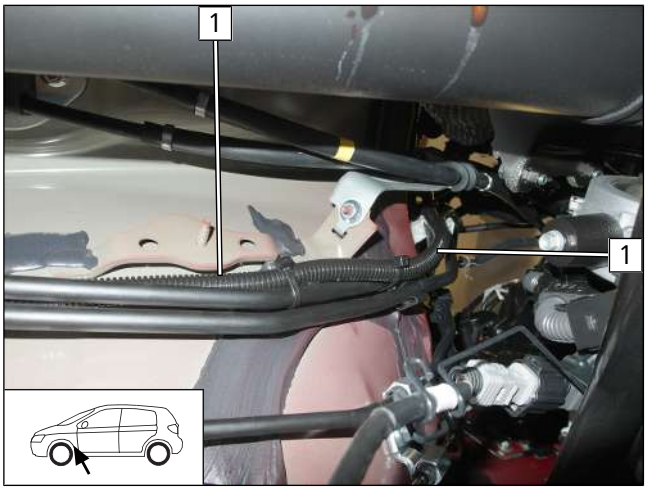


Fig. 48

▶ Route corrugated tube **1** with fuel line **b1** and fuel pump wiring harness to fuel pump installation location and attach to original vehicle lines with cable ties.

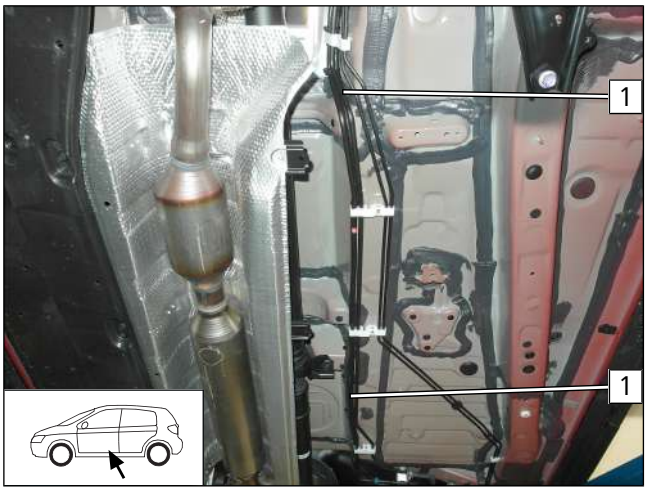


Fig. 49

▶ Route corrugated tube **1** with fuel line **b1** and fuel pump wiring harness to fuel pump installation location and attach to original vehicle lines with cable ties.

Fuel pump installation location

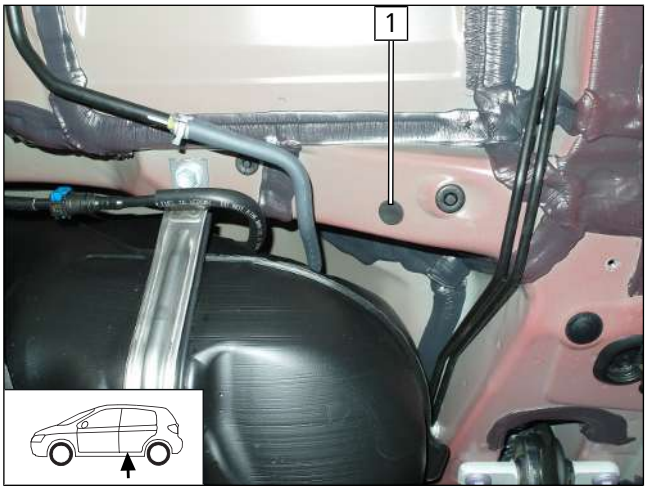


Fig. 50

1 Remove sticker

Enlarging hole, inserting rivet nut

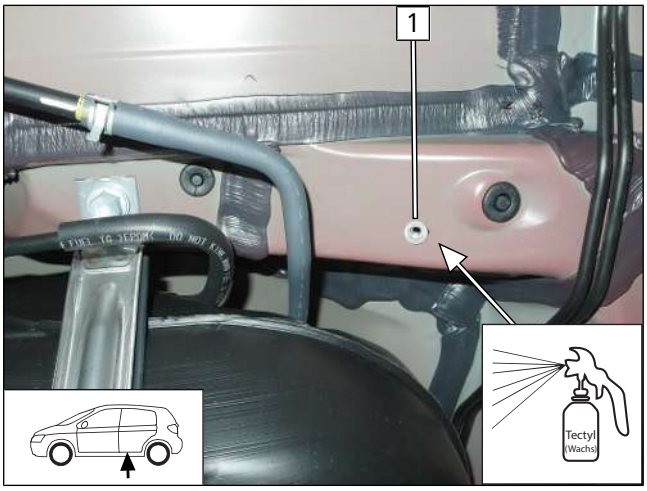


Fig. 51

1 Enlarge original vehicle oblong hole to Ø9, insert rivet nut

Premounting fuel pump

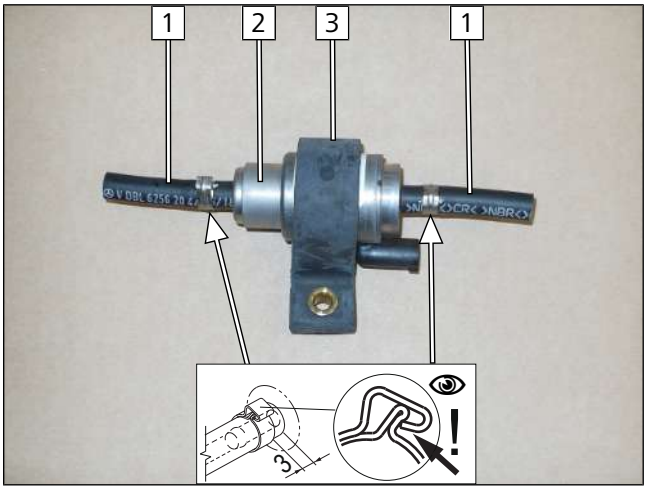


Fig. 52

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

Mounting fuel pump

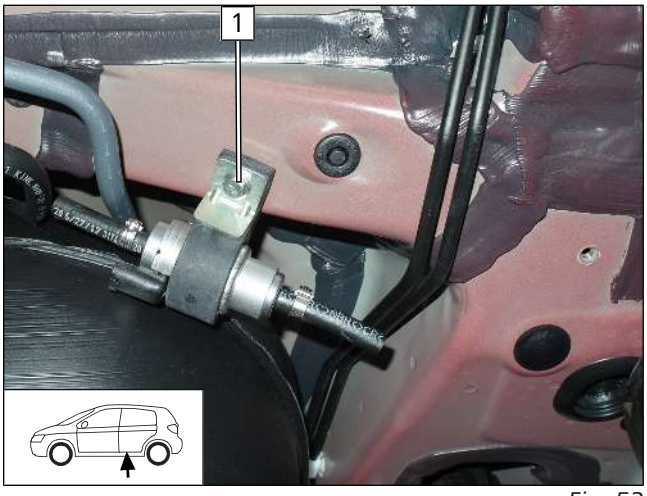


Fig. 53

1 M6x25 bolt, support angle bracket, DP mount, rivet nut

Assembling fuel pump connector X7

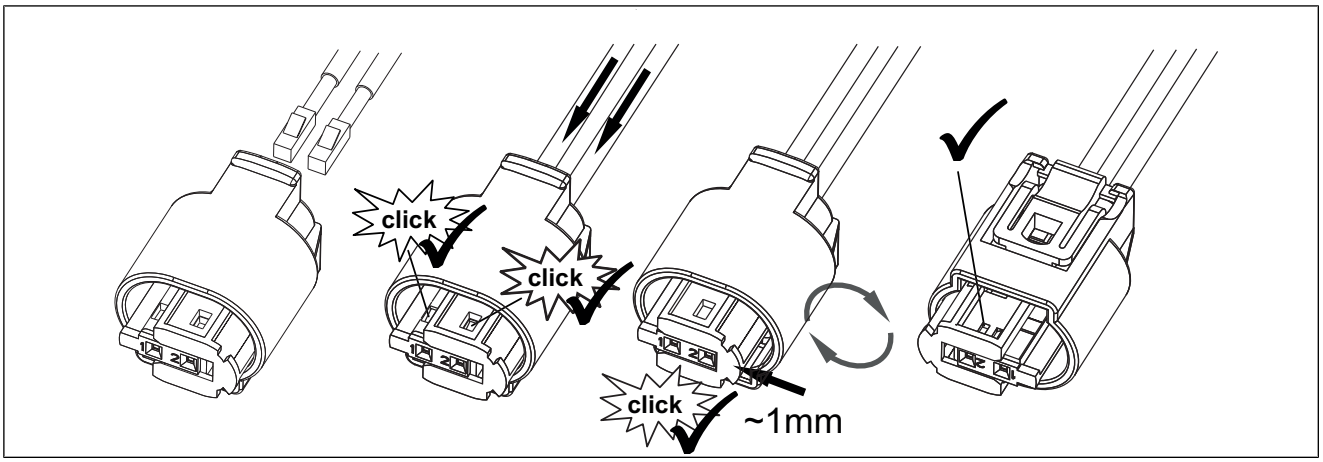


Fig. 54

Fuel pump connection

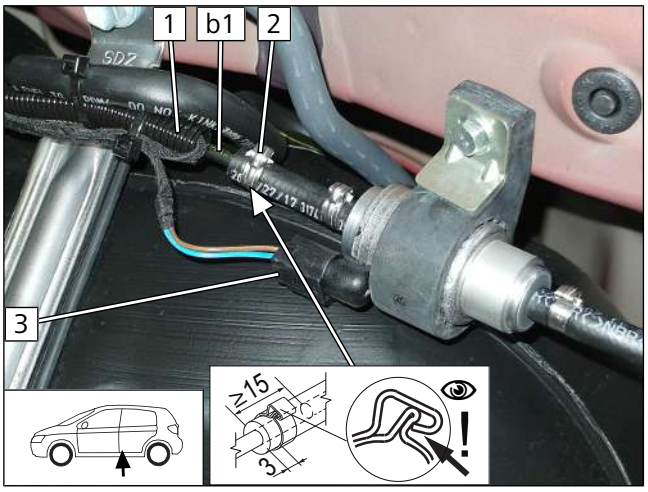


Fig. 55

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

Fastening wiring harness

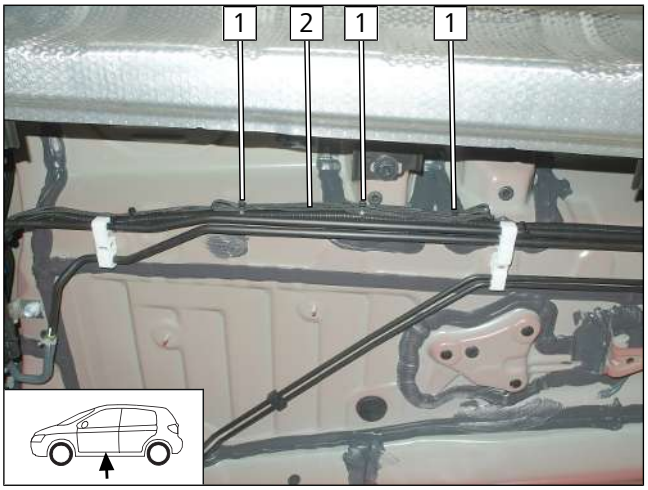


Fig. 56

▶ Attach the rest of wiring harness 2 to original vehicle lines with cable ties 1.

10.2 Tank extracting device installation

Removing rear bench seat

Danger of damage to the rear bench seat

Dismantle the rear bench seat as per the manufacturer's workshop manual.

Assigning tank fitting

Fig. 57

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

▶ Remove the right and left tank fitting as per the manufacturer's instructions.

[1] Left tank fitting with gauge

[2] Right tank fitting with gauge

Copying hole pattern

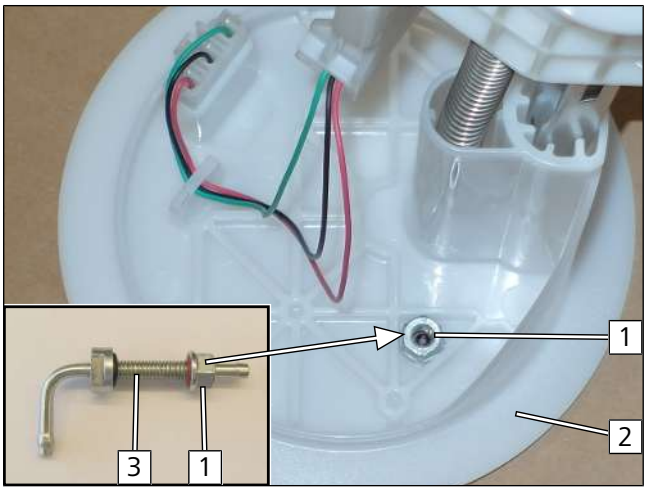


Fig. 58

▶ Remove nut [1] from tank extracting device [3].

▶ Insert nut [1] in right tank fitting [2], copy hole pattern.

Drilling hole

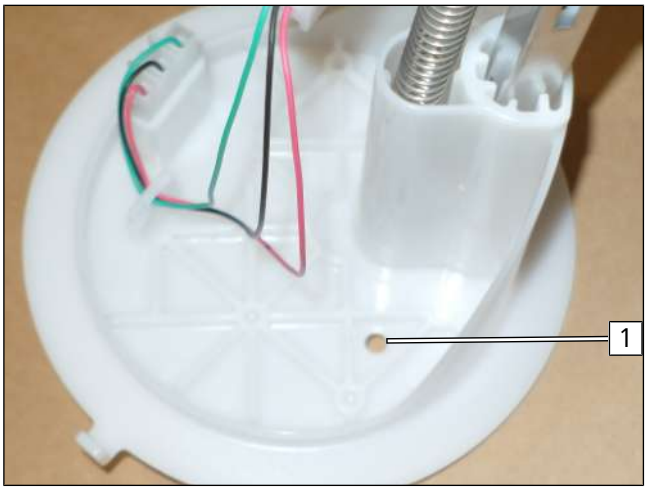


Fig. 59

1 Ø6 hole

Mounting tank extracting device

Fig. 60

Observe the installation instructions of the tank extracting device.

1 Tank extracting device

Mounting fuel line b2

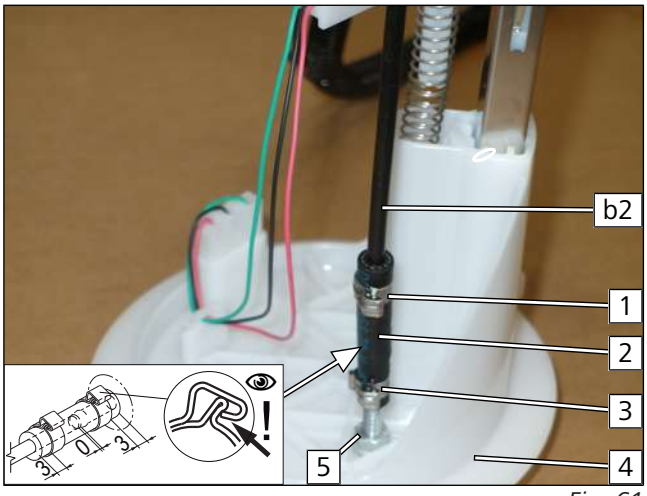


Fig. 61

1 Ø10 clamp
2 Ø3.5x4.5 hose section
3 Ø9 clamp
4 Right tank fitting
5 Tank extracting device

Preparing right tank fitting

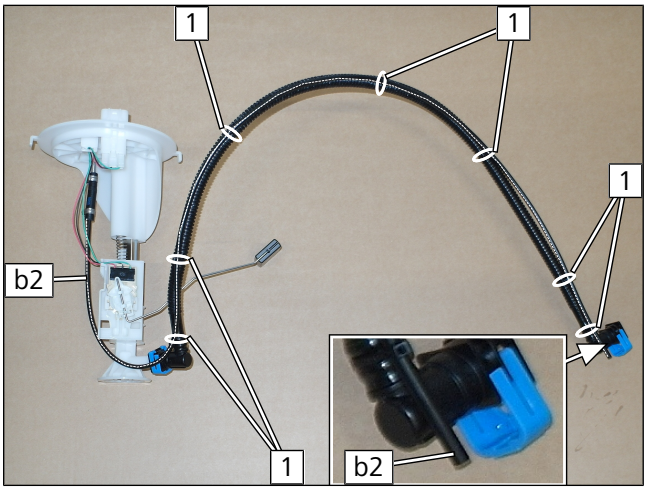


Fig. 62

▶ Attach fuel line **b2** to original vehicle line with cable ties **1** as shown.

Inserting right tank fitting

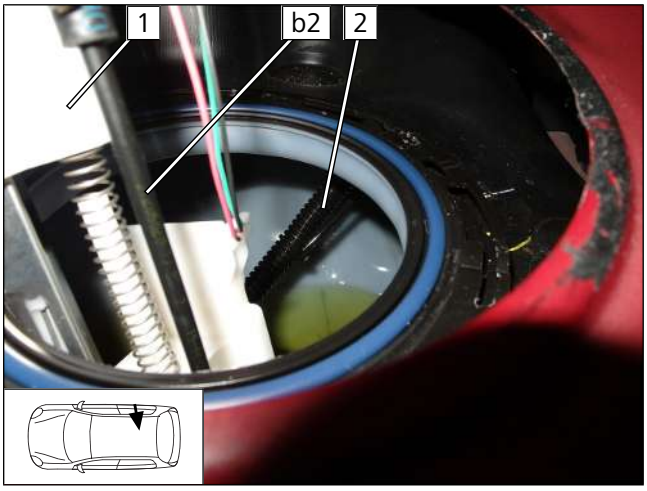


Fig. 63

▶ Insert right tank fitting **1**.

▶ Route original vehicle line **2** with fuel line **b2** to left tank fitting.

Inserting left tank fitting

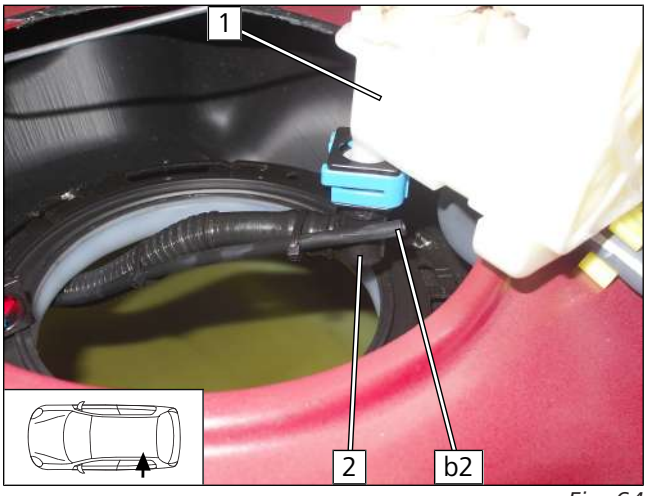


Fig. 64

▶ Insert left tank fitting **1**.

▶ Connect original vehicle line **2** to tank fitting.

Mounting fuel line **b3**

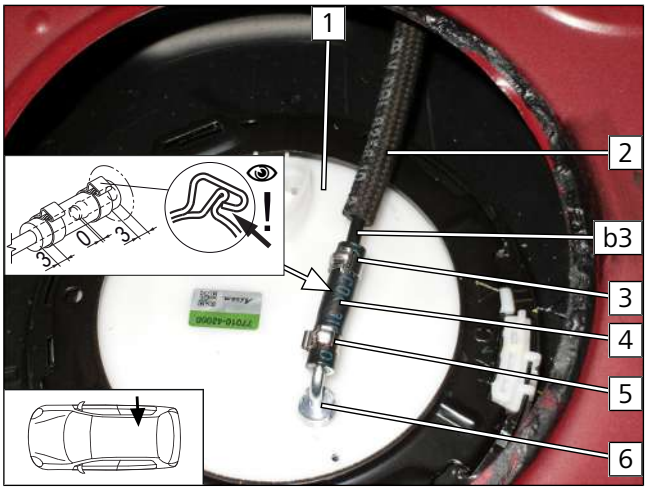


Fig. 65

▶ Draw fuel line **b3** into fabric-reinforced hose **2**.

- **1** Right tank fitting
- **2** Fuel line
- **3** Ø10 clamp
- **4** Ø3.5x4.5 hose section
- **5** Ø9 clamp
- **6** Tank extracting device

Routing fuel line **b3**

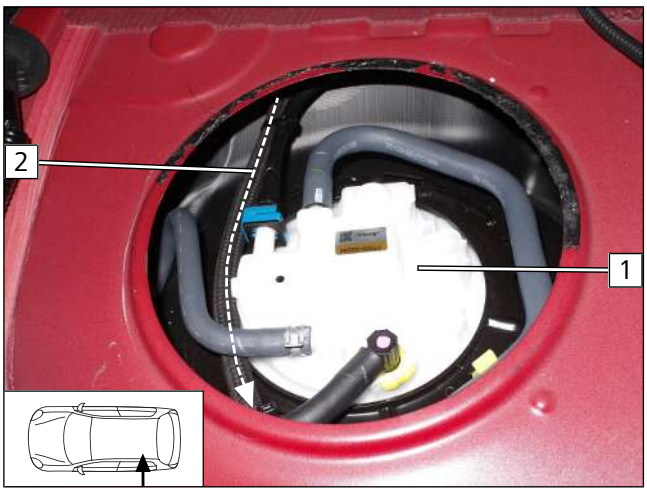


Fig. 66

▶ Route fuel line in fabric-reinforced hose **2** to left tank fitting **1**, then to fuel pump installation location.

Fuel pump connection

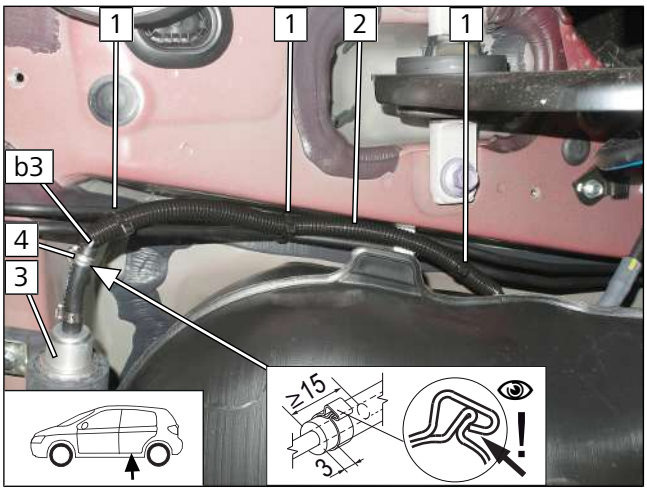


Fig. 67

▶ Draw fuel line **b3** into Ø10 corrugated tube **2** and attach to original vehicle lines with cable ties **1**.

- **3** Fuel pump
- **4** Ø10 clamp

11 Combustion air

Premounting combustion air intake silencer

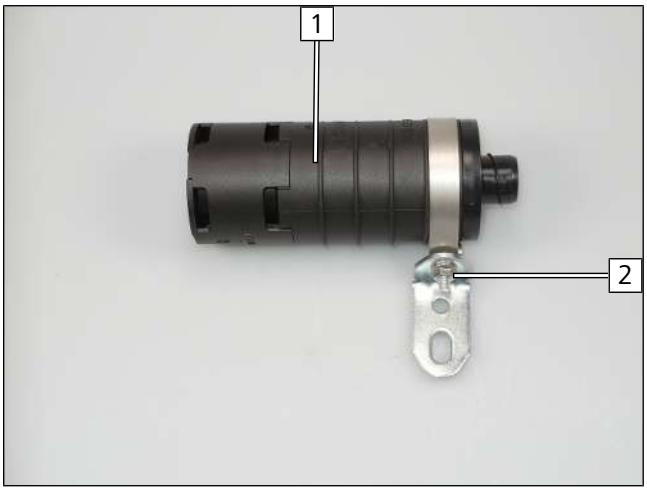


Fig. 68

1 Combustion air intake silencer

2 M5x16 bolt, Ø51 clamp, angle bracket, flanged nut

Mounting combustion air intake silencer

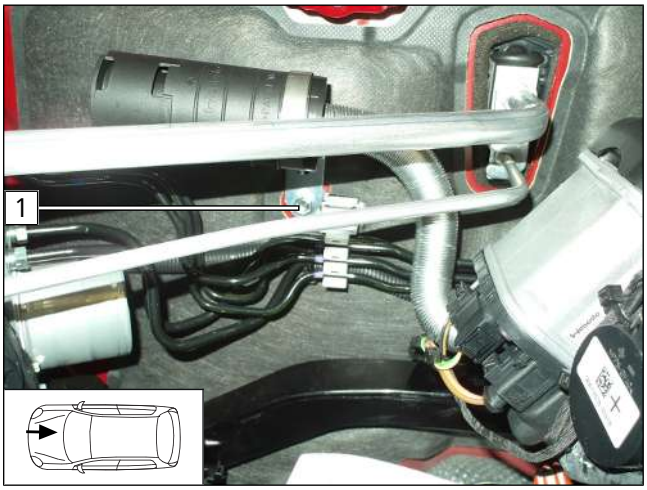


Fig. 69

Observe the installation instructions of the combustion air intake silencer.

1 Original vehicle bolt, angle bracket, original vehicle threaded hole

12 Exhaust

12.1 Mounting exhaust silencer

Premounting exhaust silencer

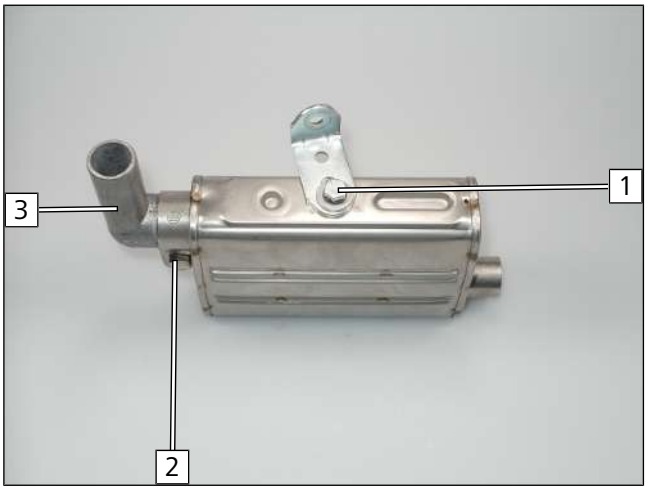


Fig. 70

1 M6x16 bolt, spring lock washer, large diameter washer, angle bracket, exhaust silencer

2 Hose clamp

3 Exhaust elbow

Mounting exhaust silencer

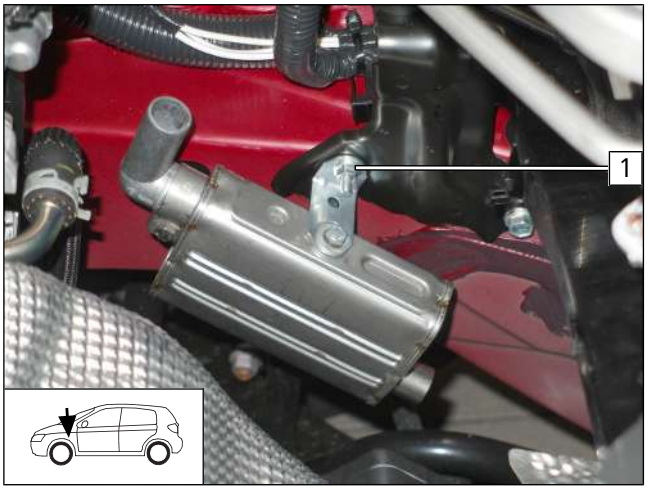


Fig. 71

1 M6x20 bolt, large diameter washer, original vehicle hole, premounted angle bracket, flanged nut

Mounting exhaust pipe **a1**, aligning spacer bracket

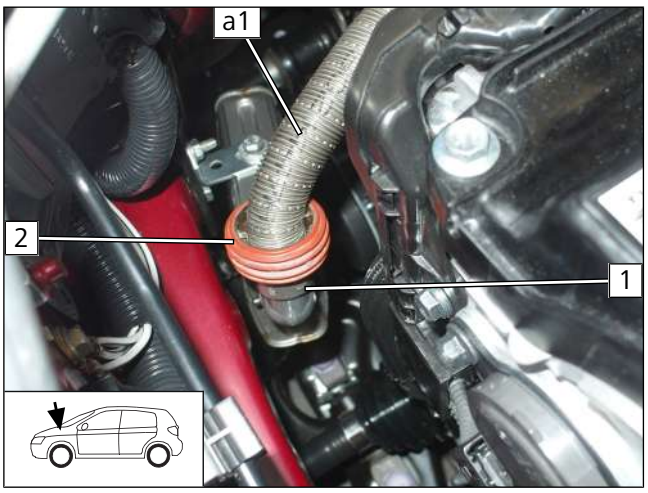


Fig. 72

Danger of damage to components

▶ Ensure sufficient distance between exhaust pipe **a1** and neighbouring components, correct if necessary.

1 Hose clamp

2 Spacer bracket, align with frame side member

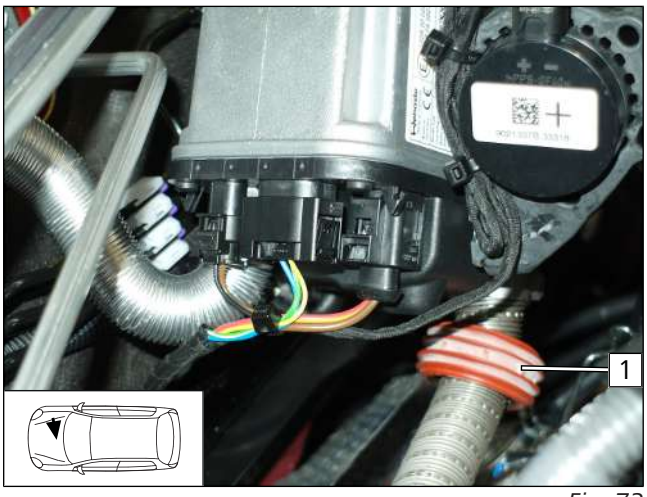


Fig. 73

Danger of damage to components

▶ Align spacer bracket 1 with neighbouring components.

Premounting exhaust pipe a2

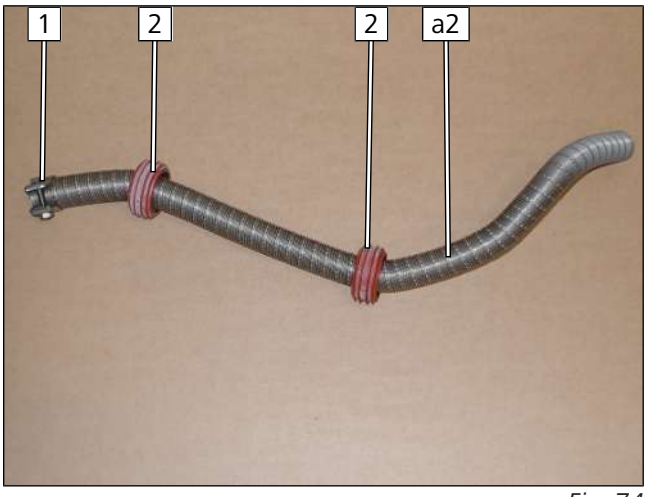


Fig. 74

1 Mount hose clamp loosely
2 Spacer bracket

Mounting exhaust pipe a2, aligning spacer bracket

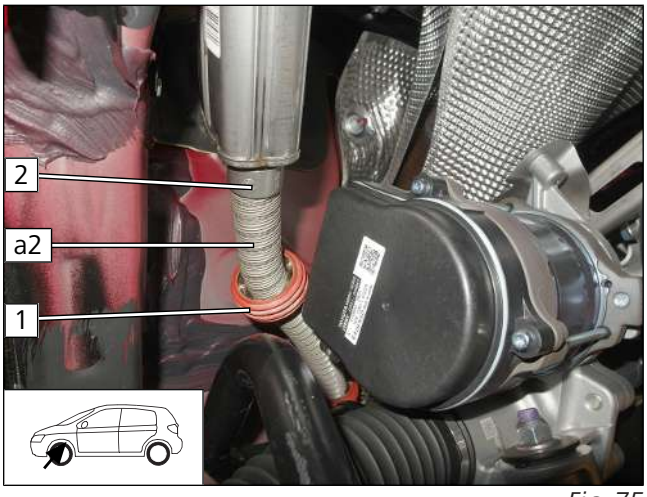


Fig. 75

1 Spacer bracket
2 Tighten hose clamp

Fig. 76

Danger of damage to components

▶ Align spacer bracket 1 with servomotor.

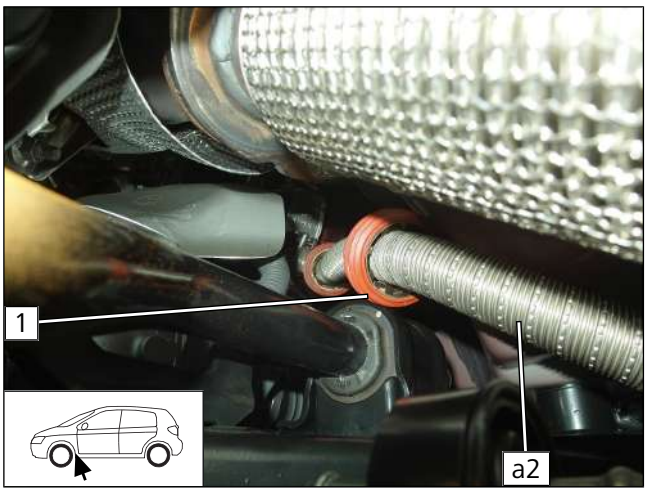


Fig. 77

Danger of damage to components

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

1 Spacer bracket, align with anti-roll bar

12.2 Mounting exhaust end fastener

Work step E1

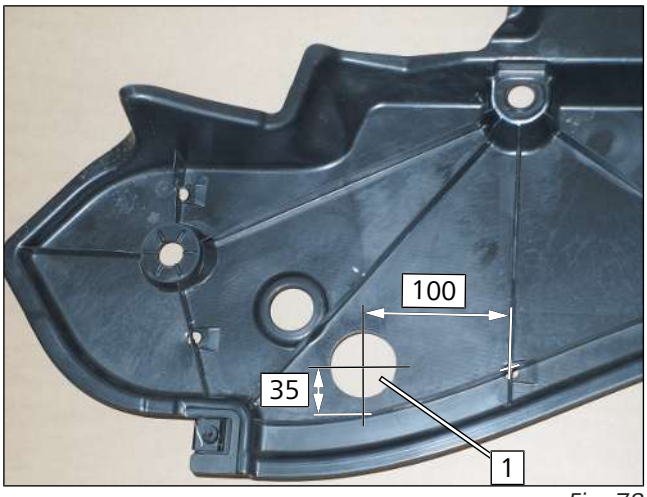


Fig. 78

Observe the EFIX installation instructions.

▶ Drill hole in underride protection.

1 Hole

Work step E3

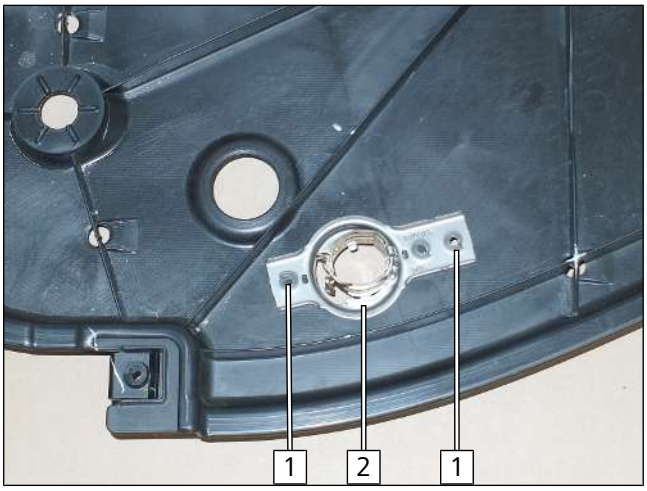


Fig. 79

▶ Copy hole pattern.

1 Hole pattern
2 EFIX

Work step E4

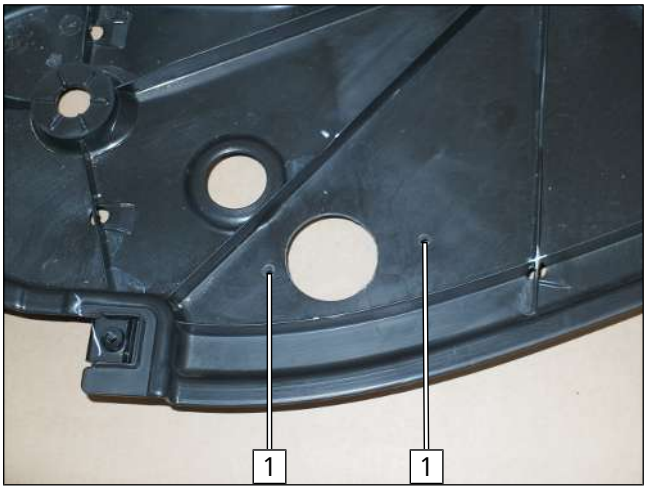


Fig. 80

▶ Drill holes in underride protection.

1 Hole

Work step E5

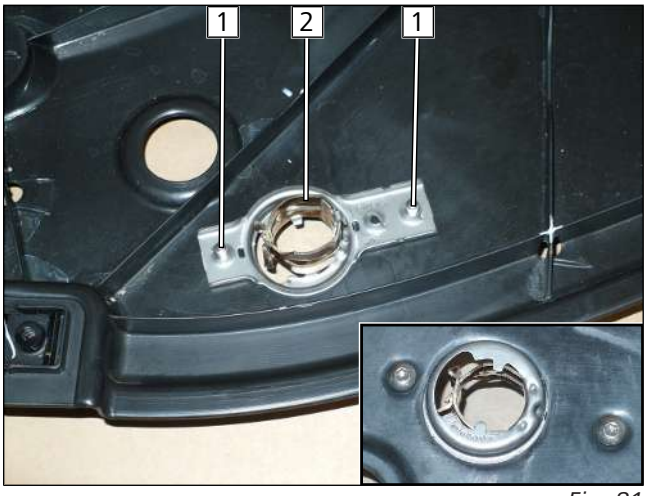


Fig. 81

▶ Mount exhaust end fastener.

1 5x13 self-tapping screw
2 EFIX

Work steps E6-E8

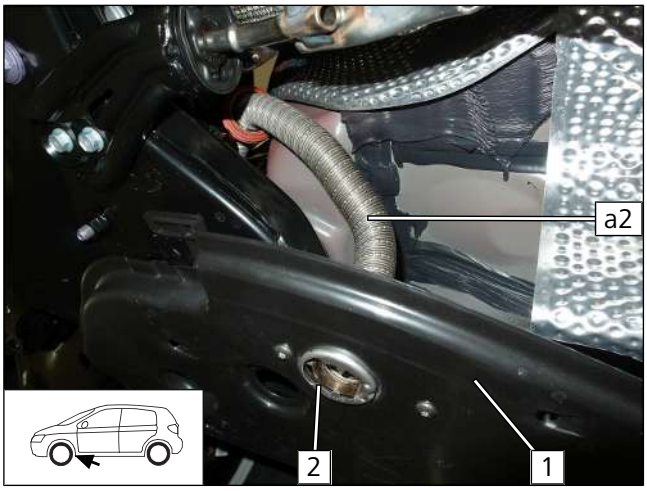


Fig. 82

▶ Mount exhaust pipe **a2**.

▶ Mount underride protection **1**.

Danger of damage to components

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

2 EFIX

13 Final work in engine compartment

Checking distance

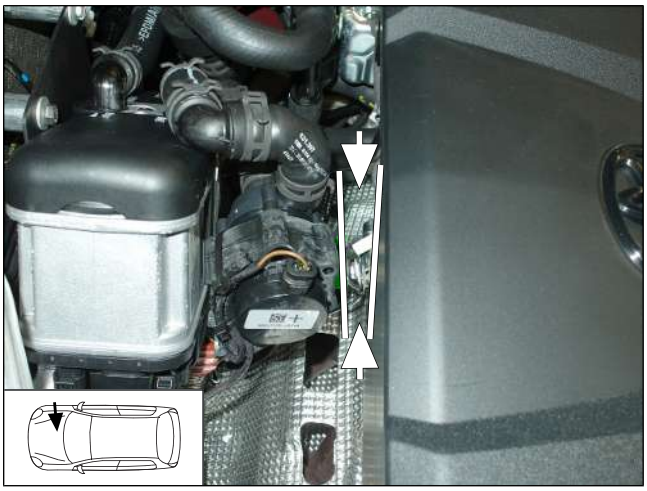


Fig. 83

Ensure sufficient distance between engine and coolant circuit components, correct if necessary.

14 Electrical system of passenger compartment

14.1 Air-conditioning control

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

'**Webasto Standard**' A/C control installation documentation for Toyota

15 Electrical system of control element

15.1 Telestart option

Preparing bracket

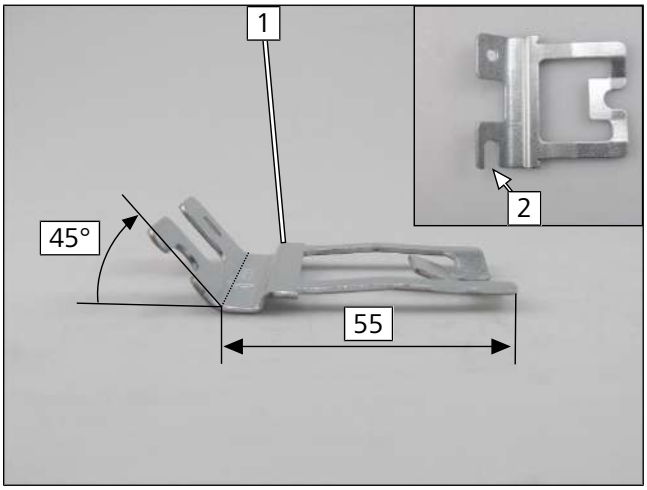


Fig. 84

▶ Enlarge oblong hole at position 2 to Ø6.5.

1 Telestart bracket

Premounting bracket

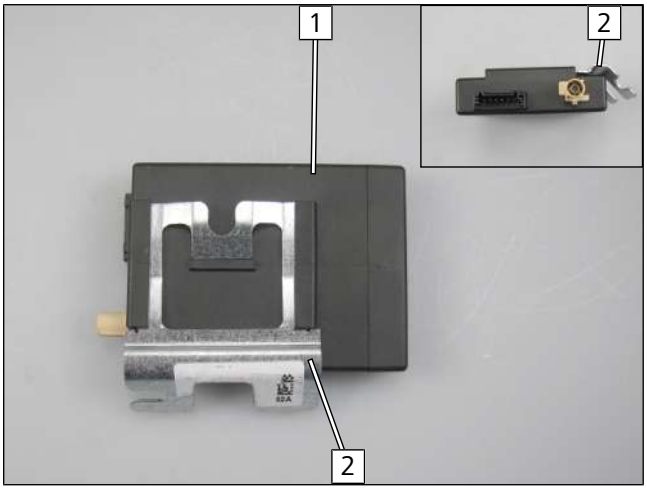


Fig. 85

1 Telestart receiver

2 Telestart bracket

Mounting receiver

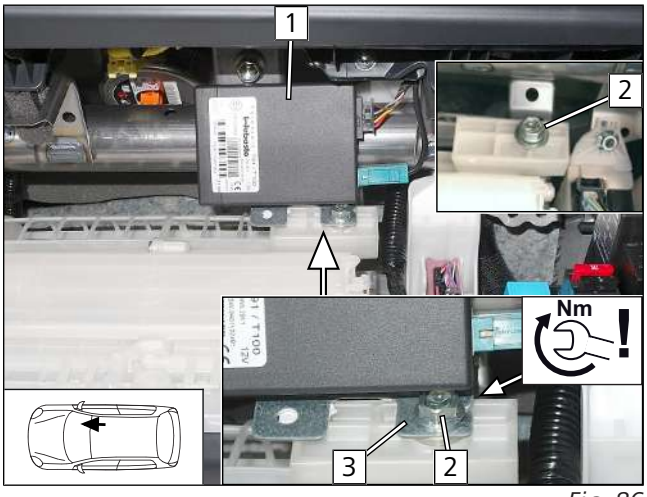


Fig. 86

Observe the Telestart installation documentation.

▶ Unscrew original vehicle bolt 2 by 2-3 threads, insert premounted bracket 3 as shown and tighten the bolt again.

1 Receiver

Mounting temperature sensor, only in case of T100 HTM

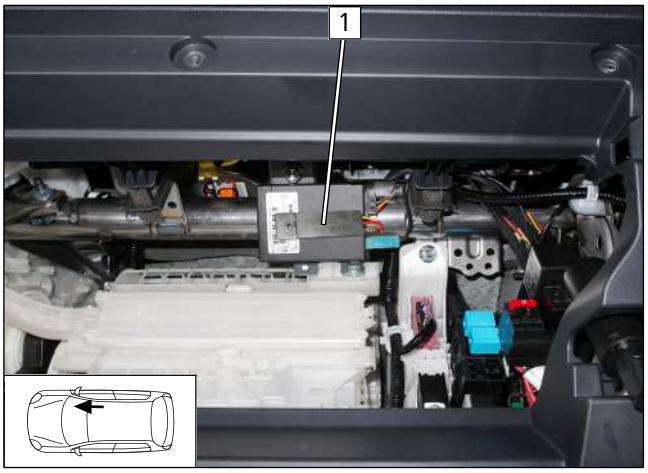


Fig. 87

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

Mounting aerial

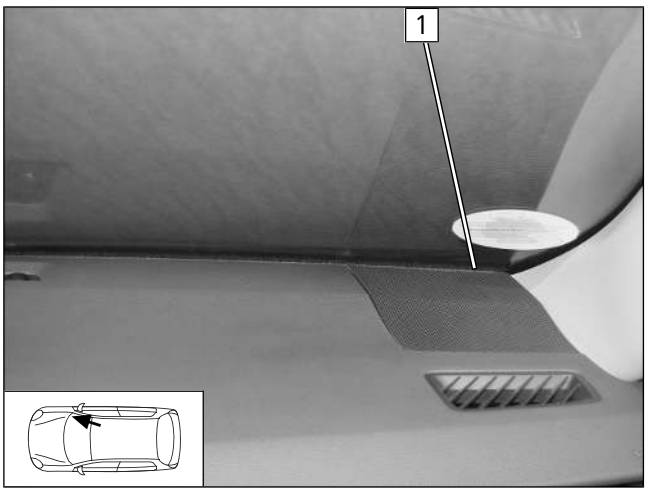


Fig. 88

1 Aerial

15.2 ThermoCall option

Mounting receiver

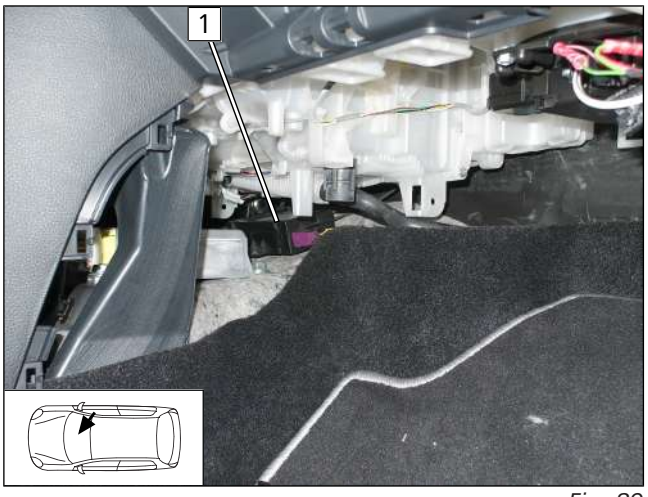


Fig. 89

Observe the ThermoCall installation documentation.

▶ Fasten receiver 1 using double-sided adhesive tape.

Mounting aerial (optional)

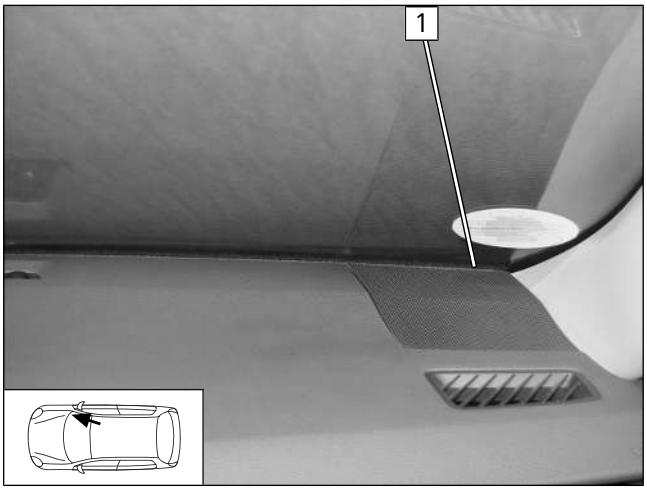


Fig. 90

1 Aerial

16 Final Work

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

- ▶ Mount removed parts in reverse order.

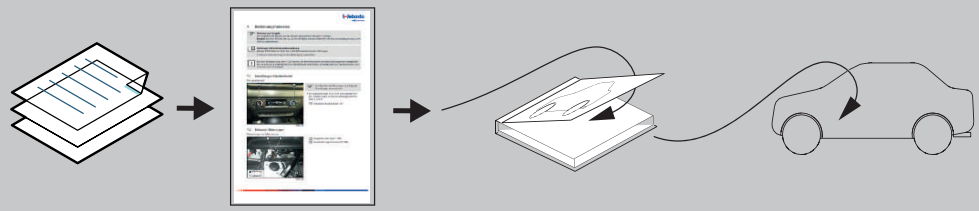
- ▶ Check all hoses, clamps and all electrical connections for firm seating.
- ▶ Insulate and tie back loose lines
- ▶ Spray heater and electrical components with anti-corrosion wax (Tectyl 100K).
- ▶ Connect the battery.

Only use manufacturer-approved coolant.

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

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

- ▶ Program MultiControl CAR, teach Telestart transmitter
- ▶ Make settings on A/C control panel according to the 'Operating Instructions'.
- ▶ Initial operation and functional test
- ▶ Affix 'Switch off parking heater before refueling' caution label in area of filler neck



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

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