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Installation documentation

for Thermo Top Evo water heater

'Parallel' coolant circuit with engine preheating

Nissan Qashqai

Left-hand drive vehicle

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

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displace-ment [cm³]	Engine code
1.7D	Diesel	Euro 6d Temp	CVT	110	1749	R9N

Validity	Equipment variants	Model
		Qashqai
Verified equipment variants	Manual air-conditioning	x
	2 zone automatic air-conditioning	x
	LED main headlights	x
	Halogen front fog lights	x
	LED daytime running lights	x
	Automatic Start-Stop system	x
	Windscreen heater	x
Unverified equipment variants	Passenger compartment monitoring	x

Total installation time	Note
11.5 hours	

Contents

1 List of abbreviations

AAC	Automatic air-conditioning
AC	Manual air-conditioning
CVT	Continuously variable automatic transmission
DP	Fuel pump
EFIX	Exhaust end fastener
FF	FuelFix (tank extracting device)
HG	Heater
MCC	MultiControl (control element)
SH2	Engine compartment fuse holder for F1/F2
UP	Coolant pump

2 Installation notes

2.1 Information on Validity

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

2.2 Components used

Designation	Order number
Basic delivery scope of Thermo Top Evo	In accordance with price list
Installation kit for Nissan Qashqai 1.7 diesel 2019	1327448A
Additional 'Webasto Standard' A/C control kit for Nissan Qashqai or Additional 'Webasto Comfort' A/C control kit for Nissan Qashqai	1324070_ 1324068_
MultiControl installation frame, for installation of MultiControl CAR	9030077_
In case of Telestart, control element, as well as indicator lamp in consultation with end customer	In accordance with price list

2.3 Information on Total Installation Time

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

2.4 Installation recommendations

Arrange for the vehicle to be delivered with the tank only about 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

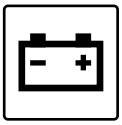
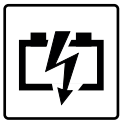
▶ Actions to protect yourself against risks.

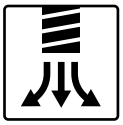
Reference to the vehicle manufacturer's specific documents.

Note on a special technical feature

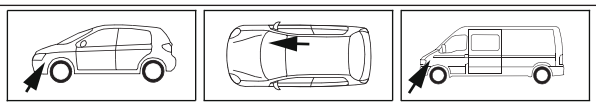
3.4.3 Work step identification marks

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

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 Preparations

5.1 Vehicle preparation

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

Vehicle area	Components to be removed	Other applicable documents
General	▶ Open the fuel tank cap ▶ Ventilate the fuel tank ▶ Close the fuel tank cap again ▶ Depressurise the cooling system	K
Engine compartment and body	▶ Battery ▶ Remove the starter relay at the battery carrier ▶ Complete air filter box ▶ Engine design cover ▶ Front wheel on the driver's and front passenger's side ▶ Wheel well trim on the driver's and front passenger's side ▶ Bottom, front and rear engine compartment trim ▶ Underbody trim on the front passenger's side ▶ Front bumper	K H
Passenger compartment	▶ Footwell trim on the driver's side ▶ Bottom instrument panel trim on the driver's side ▶ Door sill strip on the driver's side ▶ Bottom A-pillar trim on the driver's side ▶ Lower instrument panel trim on the driver's side ▶ Front centre console trim on the driver's and front passenger's side ▶ Rear bench seat ▶ Tank fitting service lid	K H

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

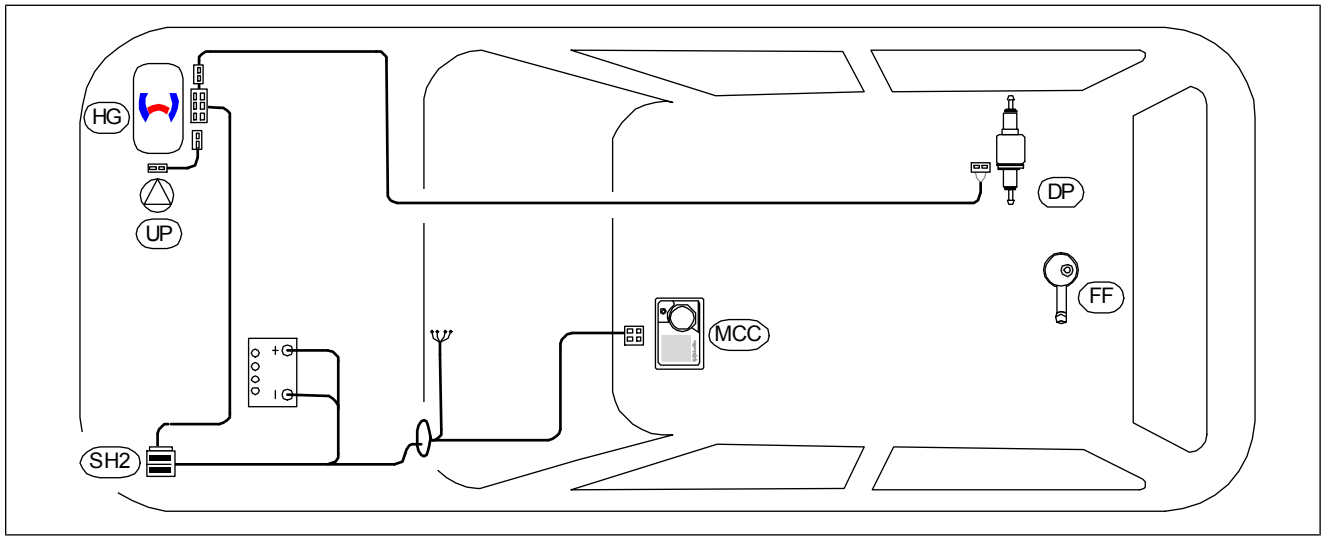


Fig. 1

Legend to installation overview

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

Heater installation location

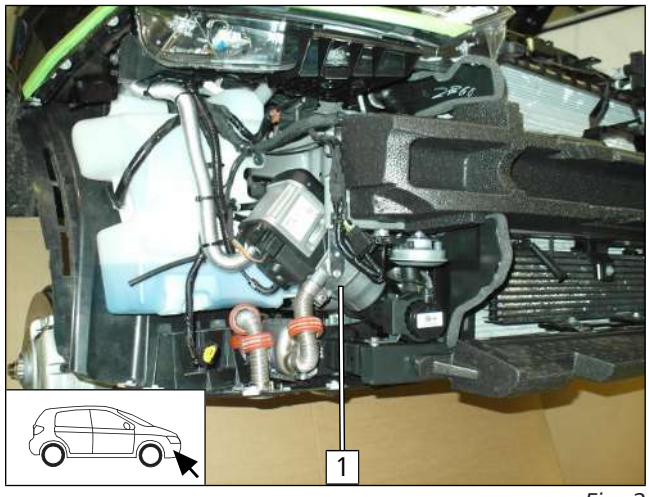


Fig. 2

1 Heater

7 Electrical system of engine compartment

Preparing wiring harness

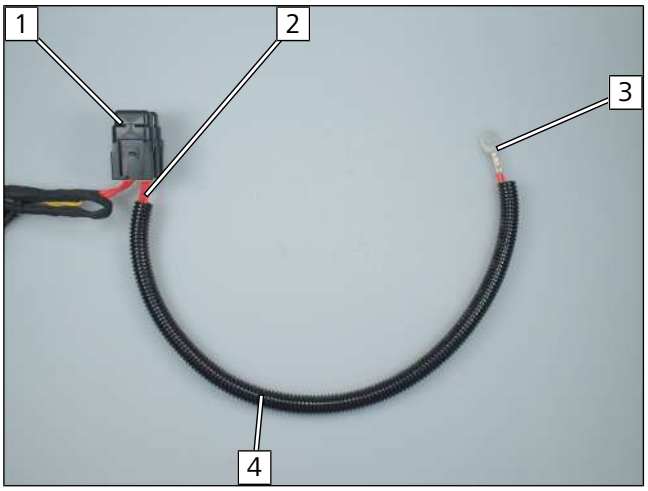


Fig. 3

Determine the cable lug size at the positive support point before crimping.

▶ Slide Ø10, 430 long corrugated tube **4** over positive wire **2**, then crimp on cable lug **3**.

1 SH2

Premounting retaining plate of SH2

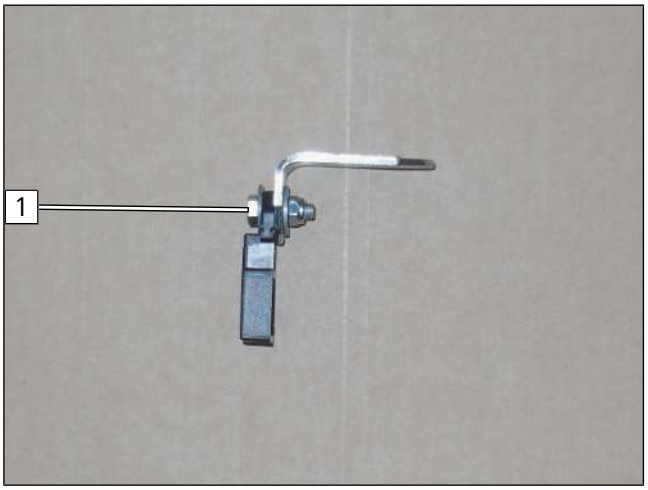


Fig. 4

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

Mounting angle bracket

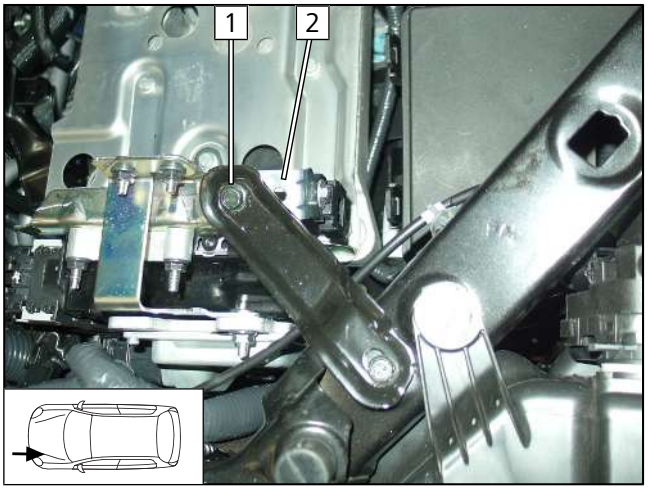


Fig. 5

▶ Unscrew original vehicle bolt **1**, position premounted angle bracket **2**, fit the bolt again.

Installing SH2

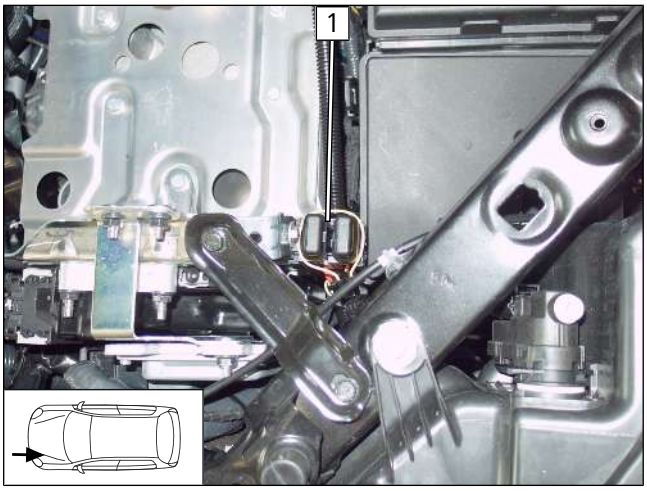


Fig. 6

1 SH2 with fuse F1 and F2

Connecting positive wire

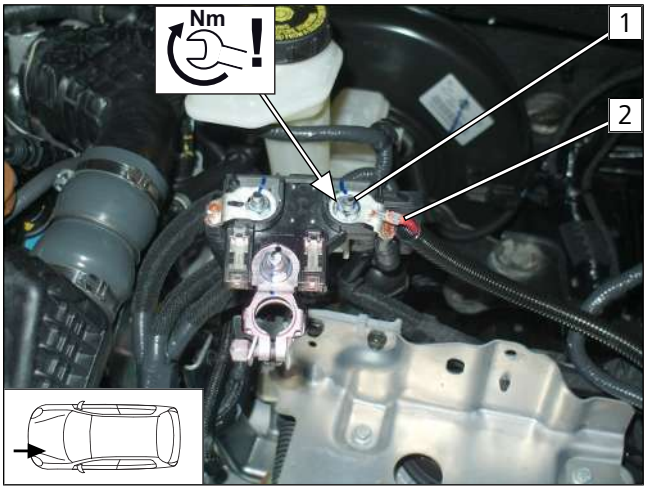


Fig. 7

DANGER

Fire hazard due to insufficient tightening torque

▶ Observe tightening torque

1 Original vehicle positive support point

2 Positive wire

Connecting earth wire

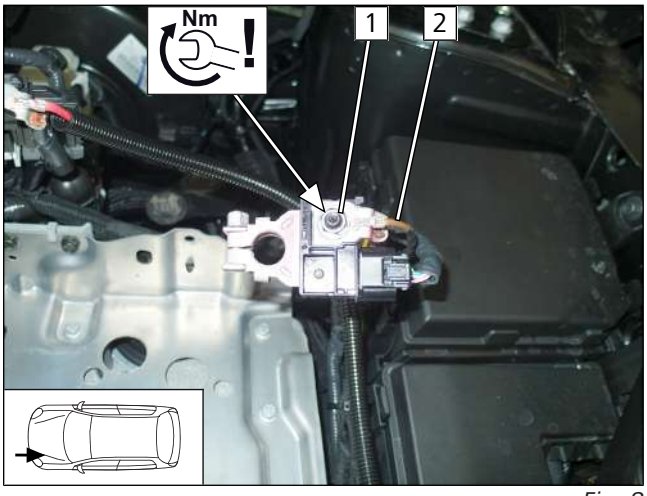


Fig. 8

DANGER

Fire hazard due to insufficient tightening torque

▶ Observe tightening torque

1 Original vehicle earth support point

2 Earth wire

Routing wiring harness

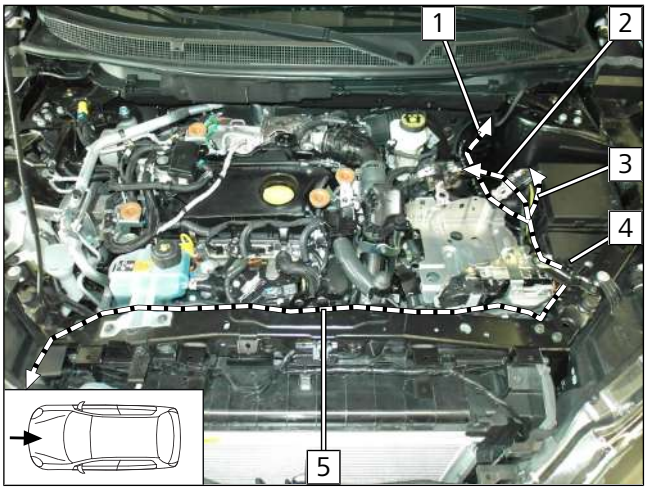


Fig. 9

1 Passenger compartment wiring harness pass through
2 Positive wire
3 Earth wire
4 SH2
5 Wiring harness to heater installation location

Passenger compartment wiring harness pass through

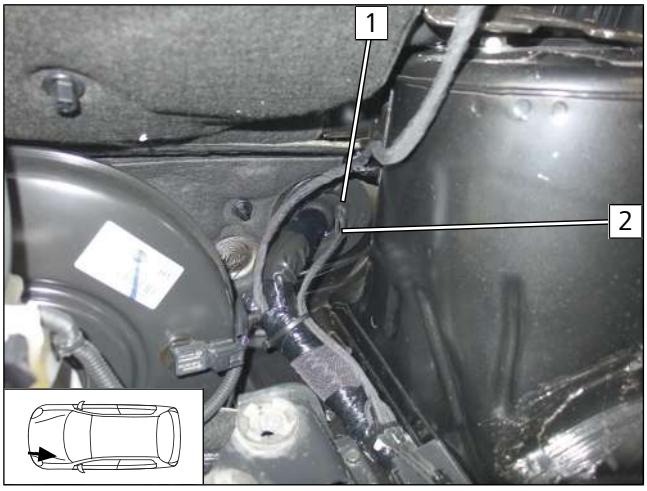


Fig. 10

1 Passenger compartment wiring harness pass through
2 Control element and passenger compartment wiring harnesses

8 Mechanical system

8.1 Preparing installation location

Removing horn and bumper impact absorber

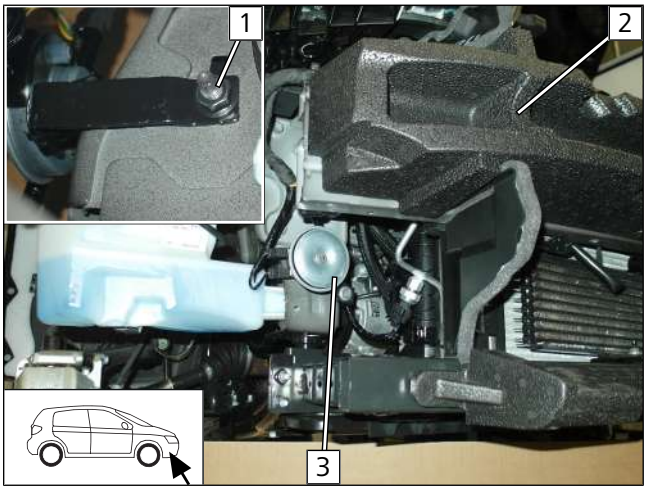


Fig. 11

- ▶ Remove the horn with bracket [3] at pos. [1].
- ▶ Remove bumper impact absorber [2].

Disconnecting original vehicle wiring harness

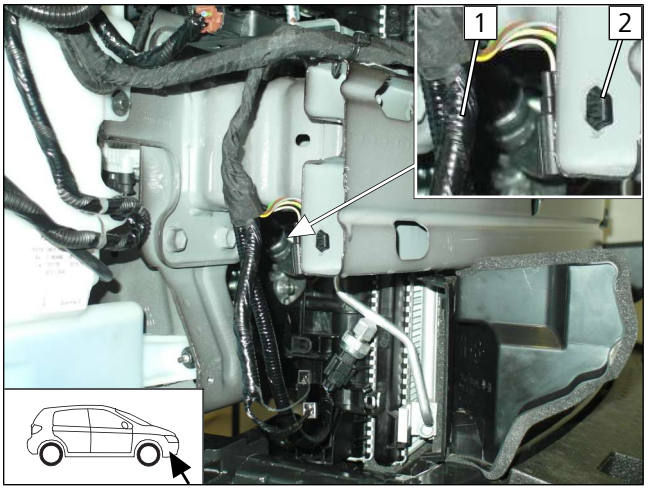


Fig. 12

- ▶ Detach original vehicle wiring harness [1] at pos. [2].

Mounting original vehicle wiring harness

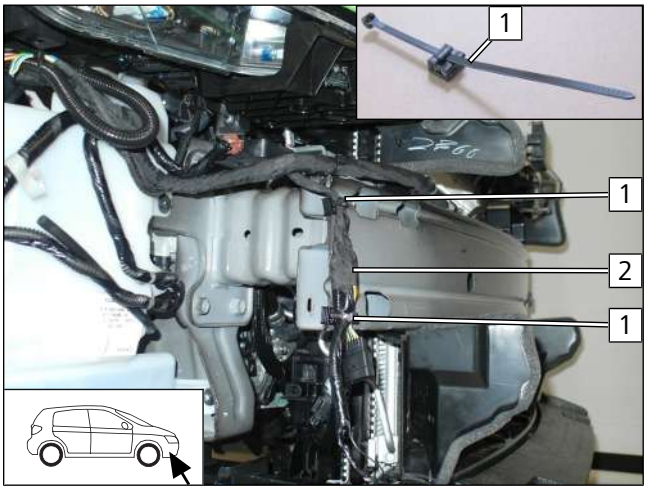


Fig. 13

- ▶ Fasten original vehicle wiring harness [2] with edge clip cable tie [1] to carrier.

Drilling hole 1

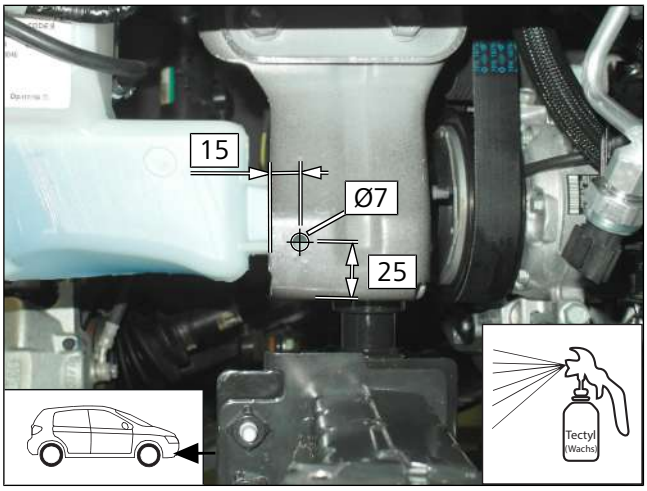


Fig. 14

Drilling hole 2

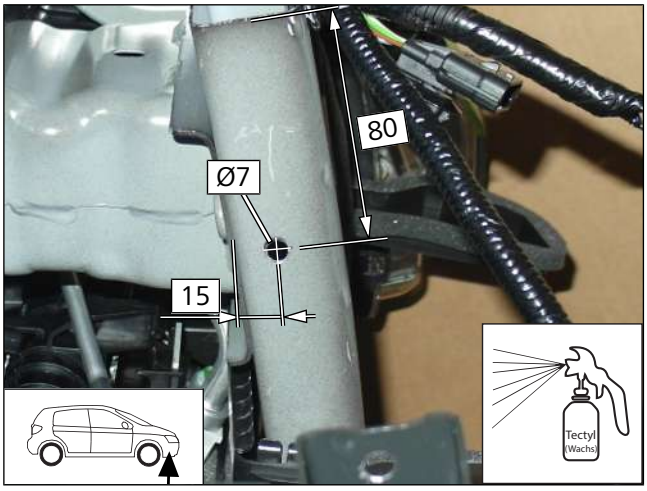


Fig. 15

Drilling hole 3

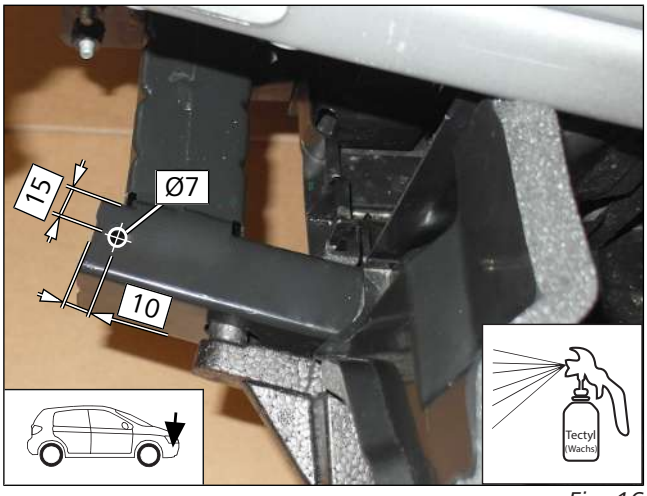


Fig. 16

Fitting edge protection

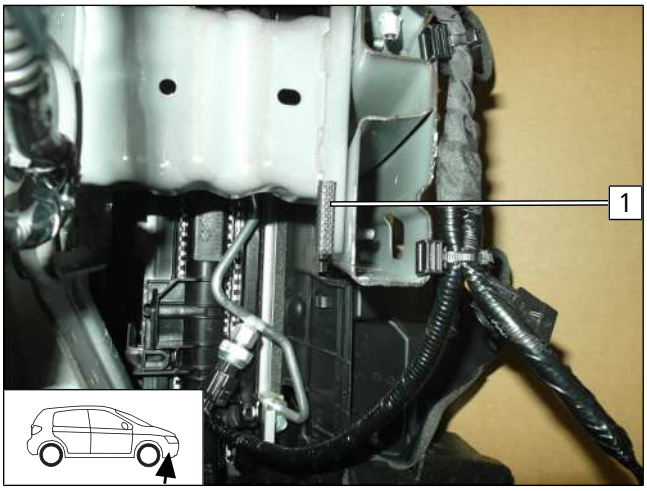


Fig. 17

1 35 lg. edge protection

8.2 Premounting heater

Mounting water connection piece

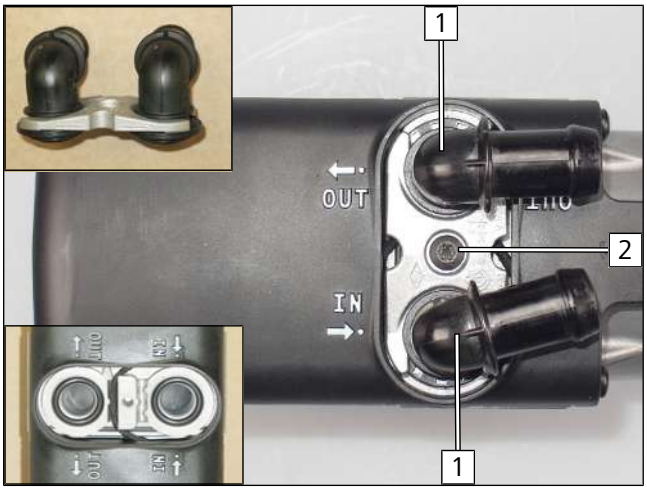


Fig. 18

Observe the general installation instructions of the heater.

1 Water connection piece, seal

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

Preparing hoses

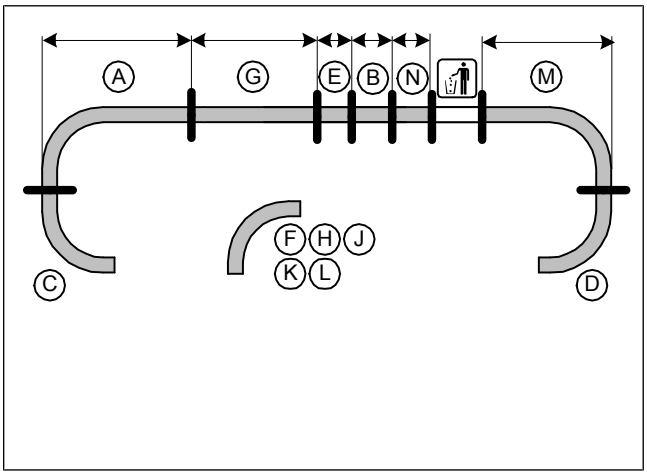


Fig. 19

A	500
B	140
C	90°
D	90°
E	80
F / H / J / K / L	90° moulded hose
G	780
M	440
N	130

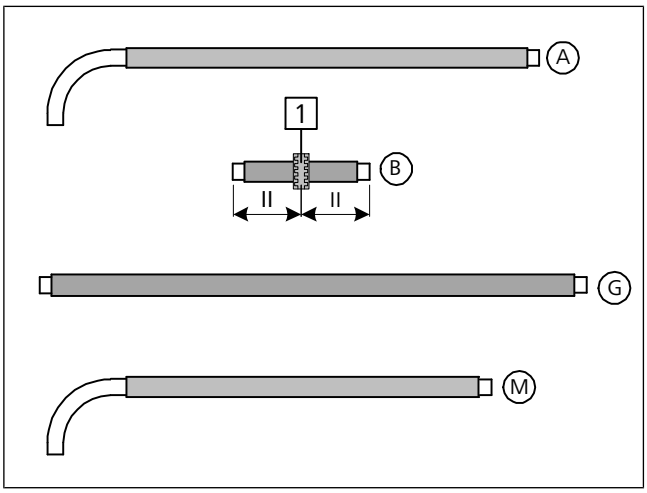


Fig. 20

▶ Slide on fabric heat shrink tubings, cut to length and shrink.

1 Black (sw) rubber isolator

Mounting hoses

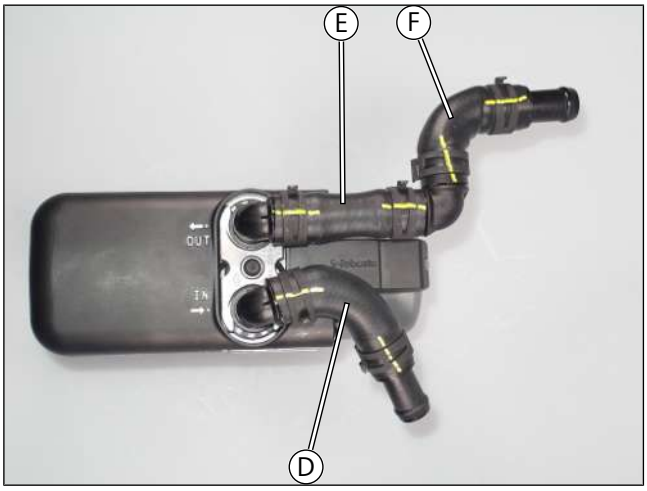


Fig. 21

All spring clips Ø25,
All connecting pipe Ø18x18 or Ø18x18/90°

Mounting hose G onto hose F

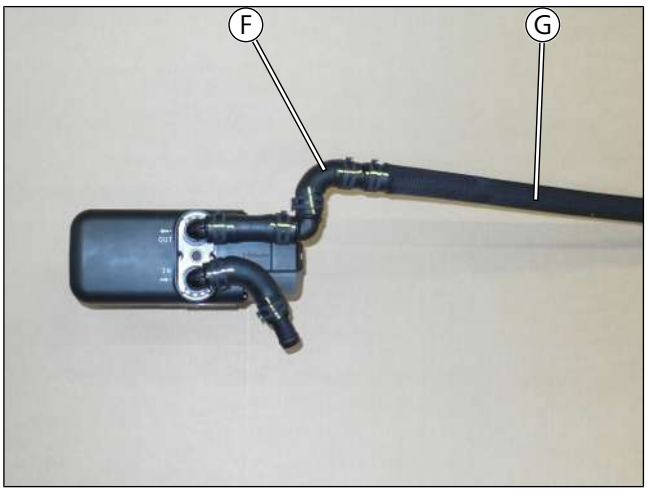


Fig. 22

Ø25 spring clip

Premounting perforated bracket 1 and angle bracket loosely

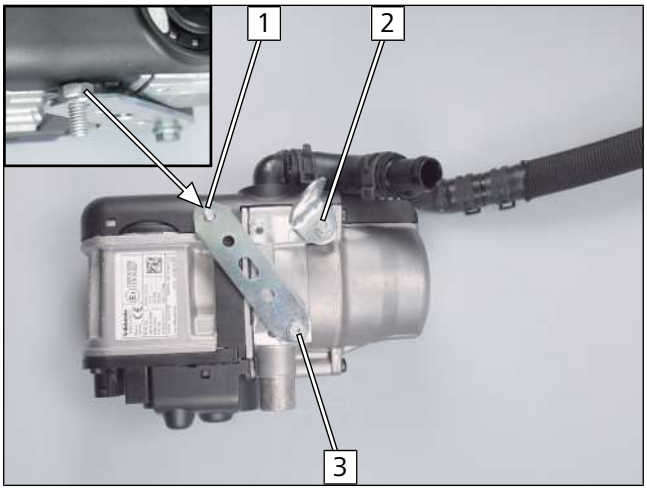


Fig. 23

1 Insert M6x12 bolt in perforated bracket 1
2 5x13 self-tapping bolt, angle bracket, hole in HG
3 5x13 self-tapping bolt, perforated bracket 1, hole in HG

Premounting perforated bracket 2

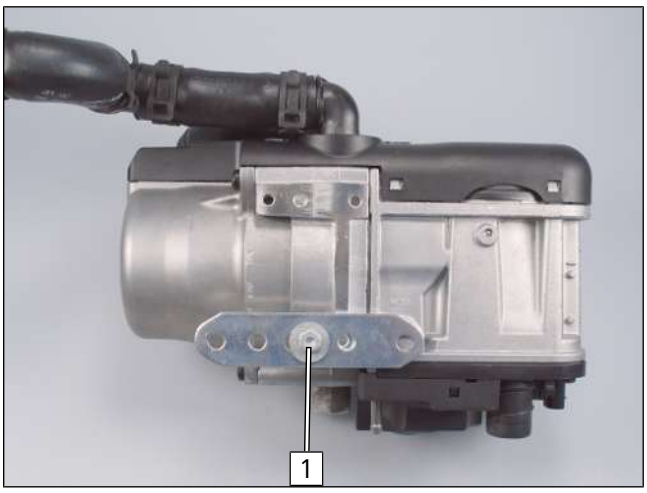


Fig. 24

1 5x13 self-tapping bolt, large diameter washer, perforated bracket 2, hole in HG

Mounting fuel hose

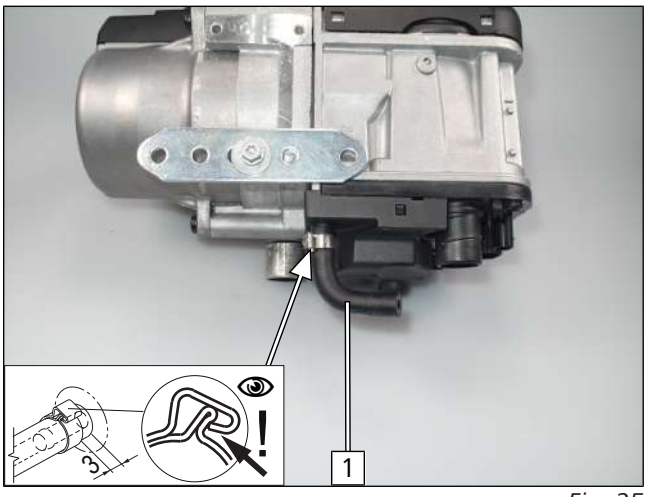


Fig. 25

1 90° moulded hose, Ø10 clamp

8.3 Heater mounting

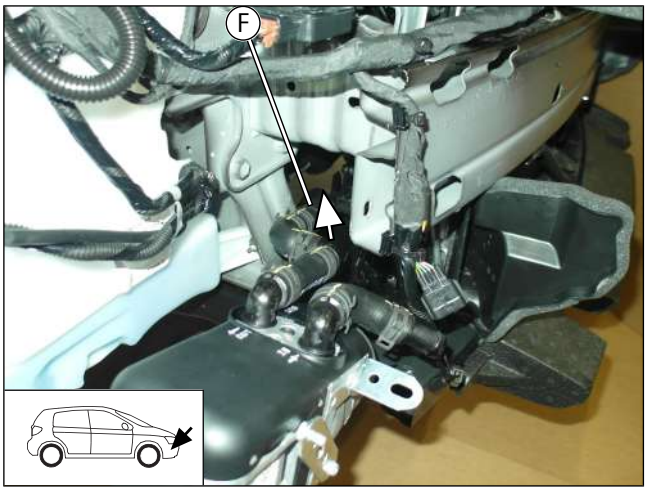


Fig. 26

Observe the general installation instructions of the heater.

▶ Route hose (F) in the direction of the engine compartment.

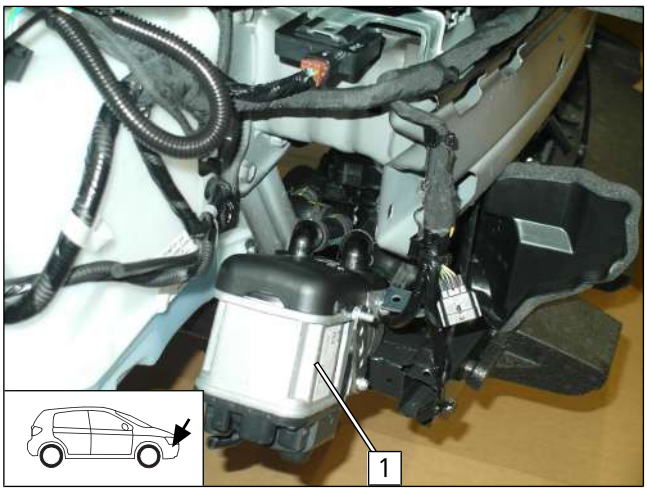


Fig. 27

▶ Move heater [1] closer to the installation position.

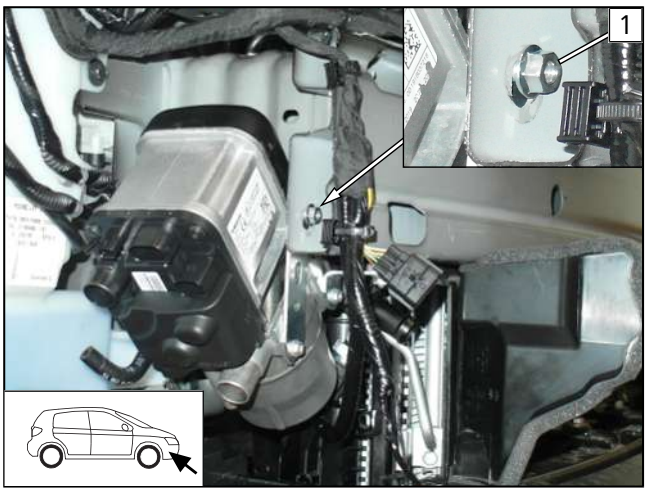


Fig. 28

[1] Premounted M6x12 bolt in perforated bracket 1, original vehicle hole, mount flanged nut loosely

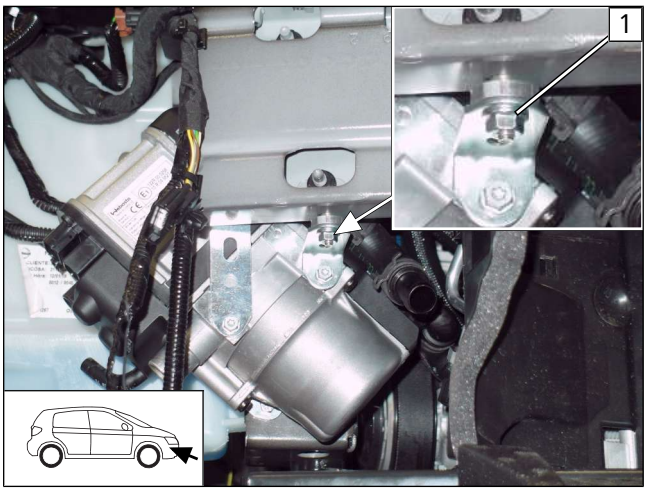


Fig. 29

1 M6x20 bolt, drilled hole 2, spacer (5), angle bracket, mount flanged nut loosely

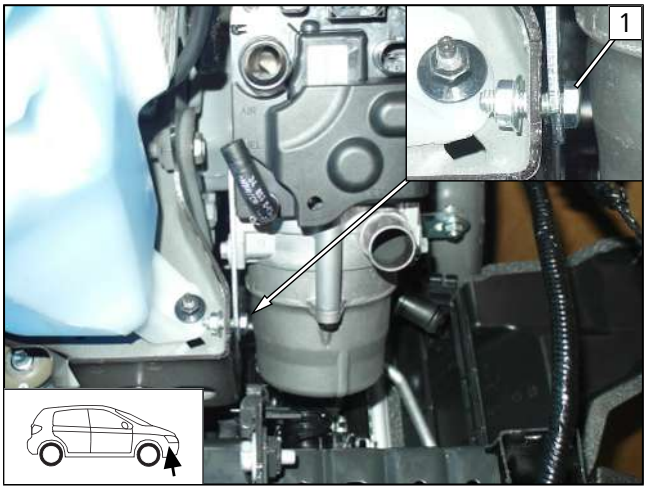


Fig. 30

1 M6x20 bolt, perforated bracket 2, drilled hole 1, mount flanged nut loosely

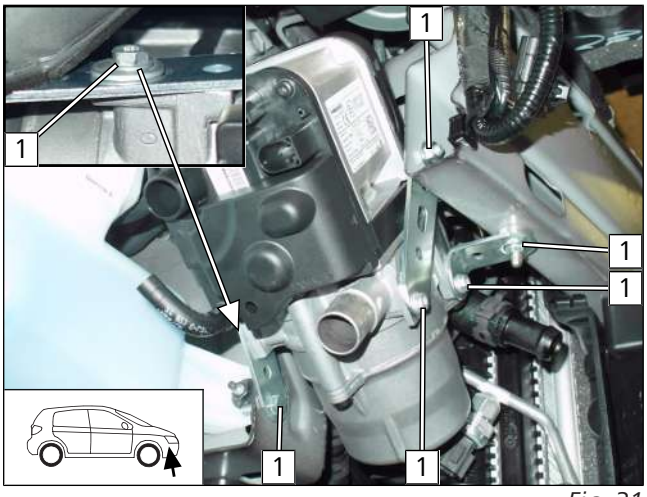


Fig. 31

▶ Align heater, tighten all bolts **1**.

Installing wiring harness

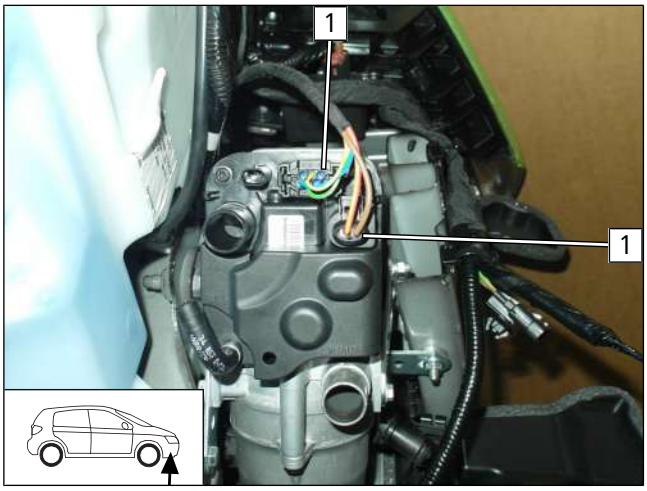


Fig. 32

1 Heater wiring harness connector

9 Coolant

9.1 Hose routing diagram

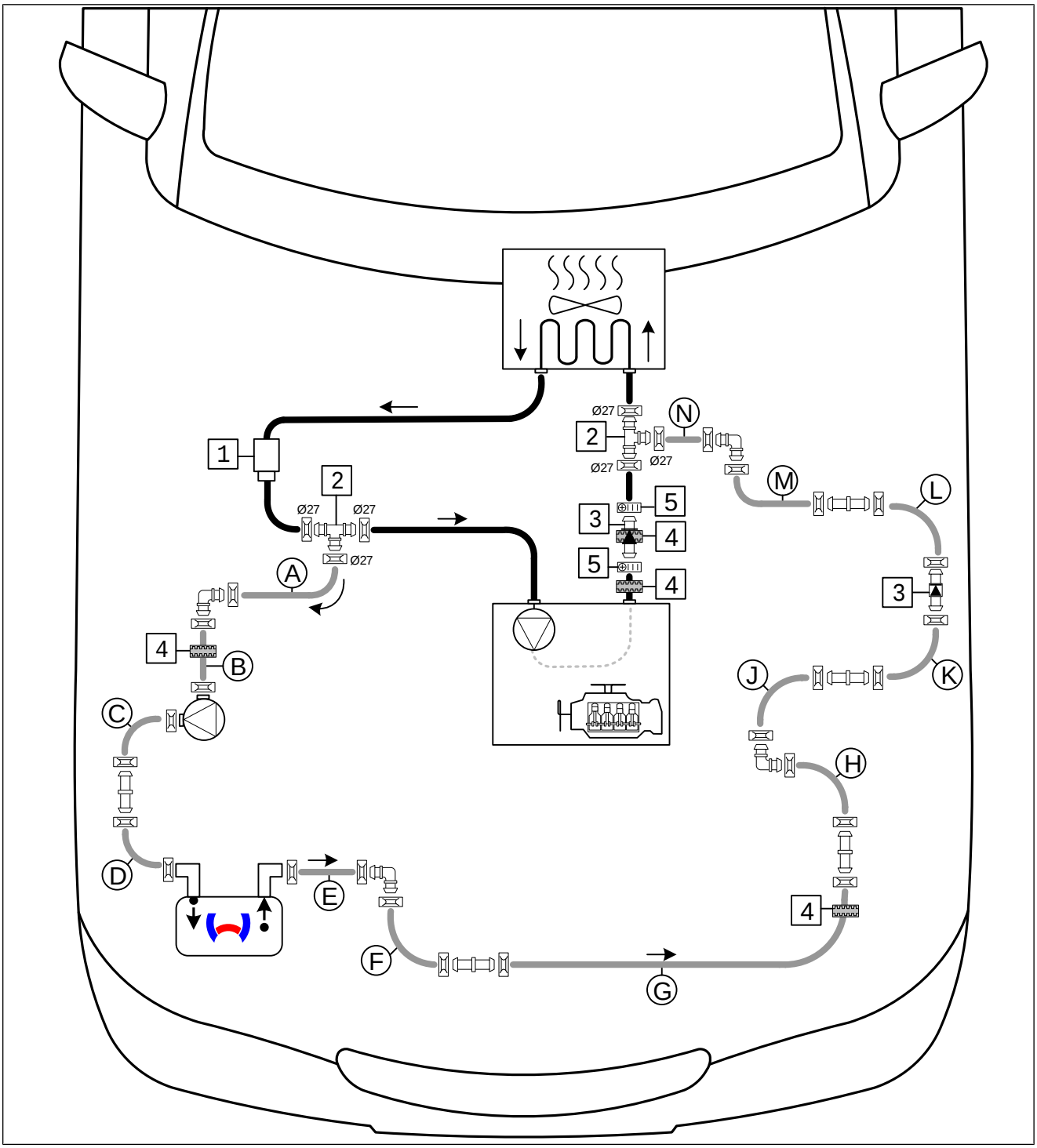


Fig. 33

All spring clips without a specific designation = Ø25

All connecting pipes = Ø18x18 or = Ø18x18/90°

[1] Original vehicle heating element; [2] 3xØ20 T-piece; [3] Ø18x18 non-return valve;

[4] Black (sw) rubber isolator; [5] Ø16-27 screw clamp

9.2 Coolant circuit preparation

Premounting angle bracket 1

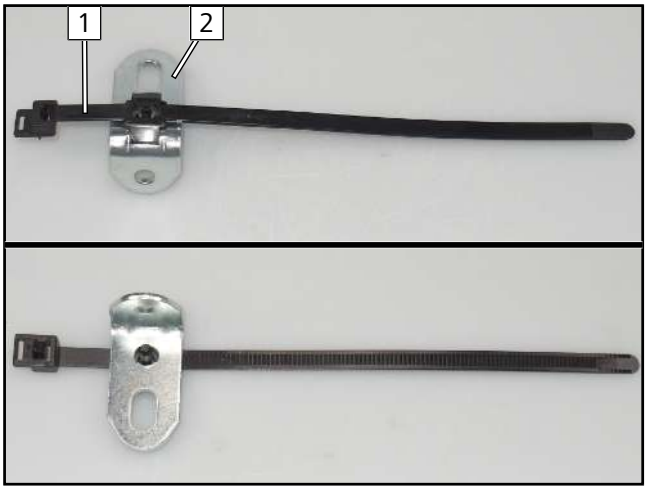


Fig. 34

▶ Mount clip-type cable tie **1** in hole of angle bracket **2** and snap it into position.

Premounting angle bracket 2

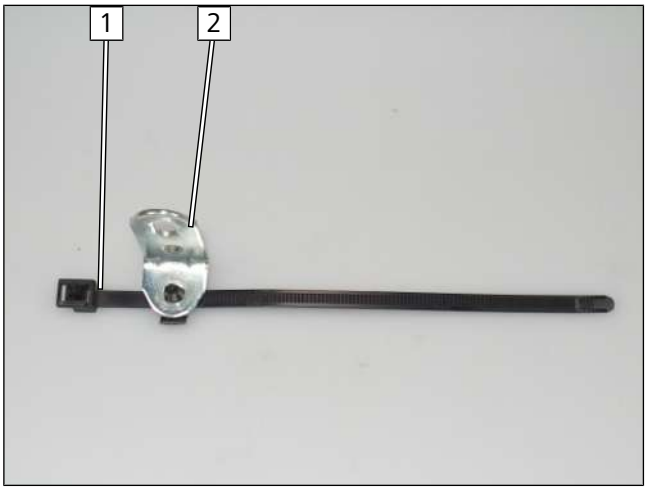


Fig. 35

▶ Mount clip-type cable tie **1** in hole of angle bracket **2** and snap it into position.

Preparing non-return valve 1

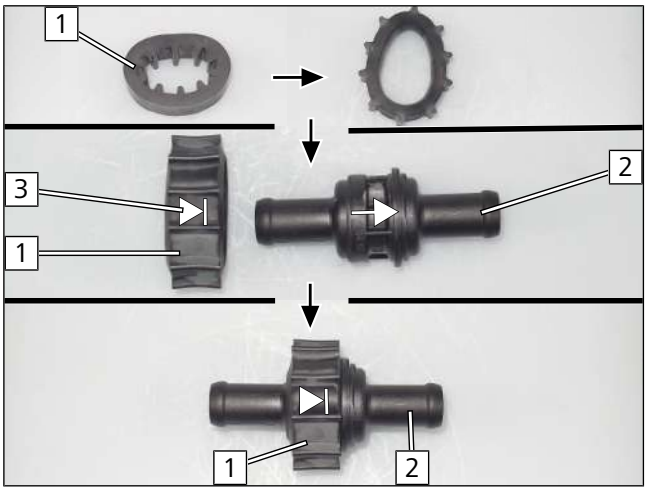


Fig. 36

▶ Copy direction of flow **3** of valve **2** onto turned inside out rubber isolator **1**, then push it onto non-return valve **2**.

Preparing non-return valve hose group 2

Fig. 37

1 Non-return valve 2

Mounting hoses J and H

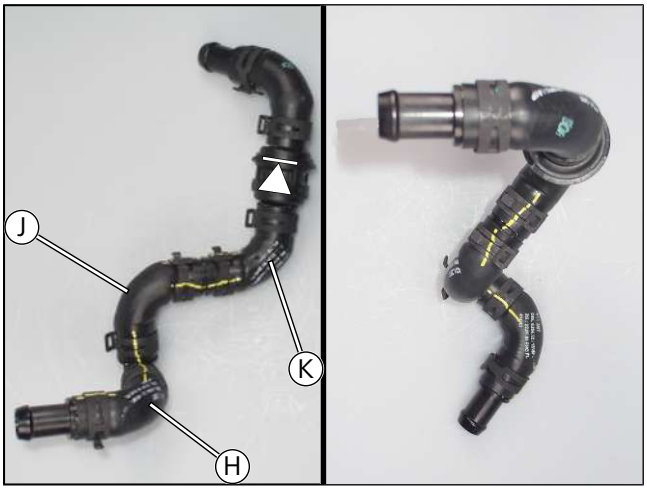


Fig. 38

Mounting rubber-coated p-clamp

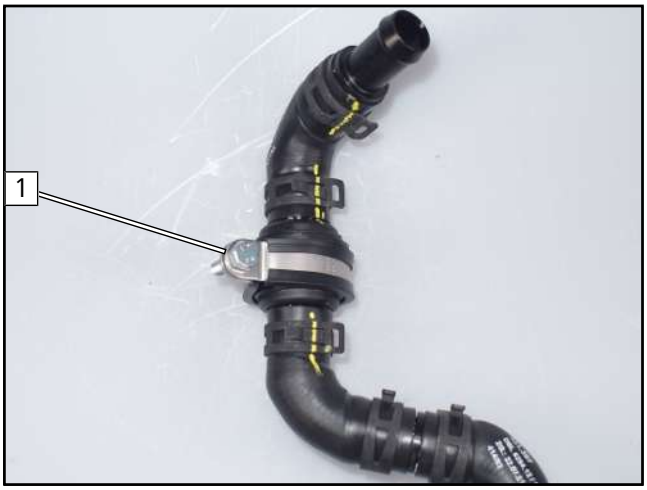


Fig. 39

1 M6x20 bolt, Ø38 rubber-coated p-clamp, lock washer

Premounting T-piece

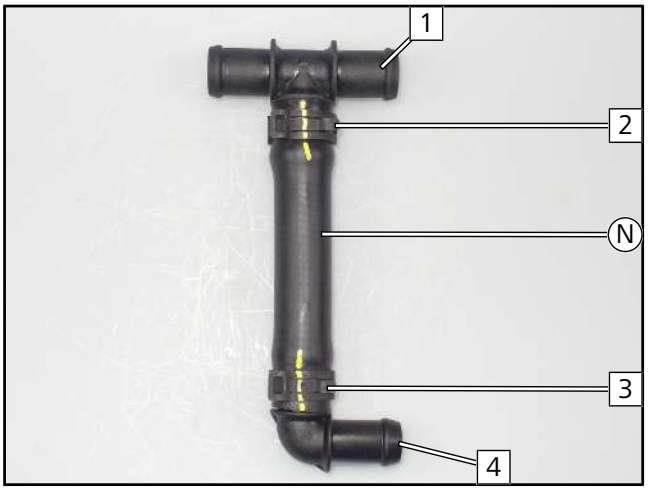


Fig. 40

1. Ø20x20x20 T-piece
2. Ø27 spring clip
3. Ø25 spring clip
4. Ø18x18 / 90° connecting pipe

Preparing perforated bracket

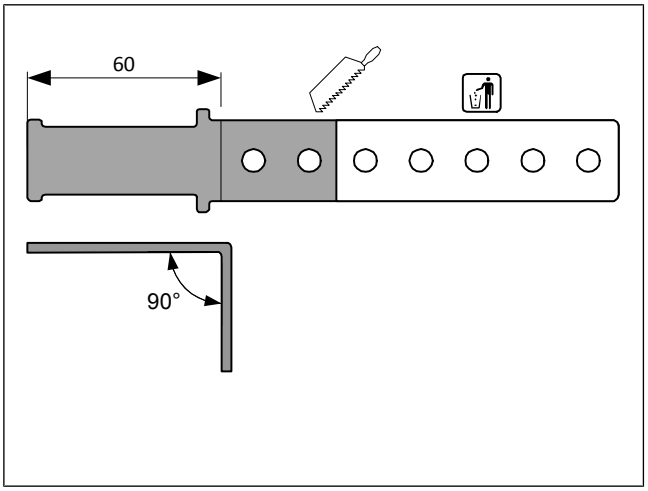


Fig. 41

Premounting coolant pump

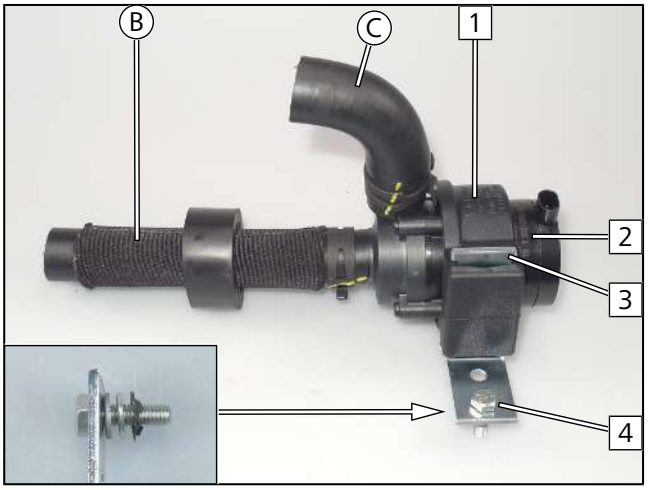


Fig. 42

1. Coolant pump mount
2. Coolant pump
3. Perforated bracket
4. M6x20 bolt, perforated bracket, washer [2x], lock washer

Mounting hose Ⓐ onto hose Ⓑ

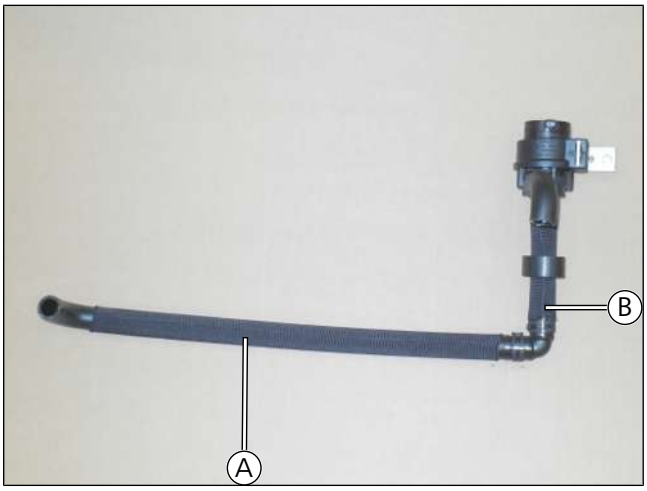


Fig. 43

9.3 Coolant circuit installation

Mounting coolant pump hose group

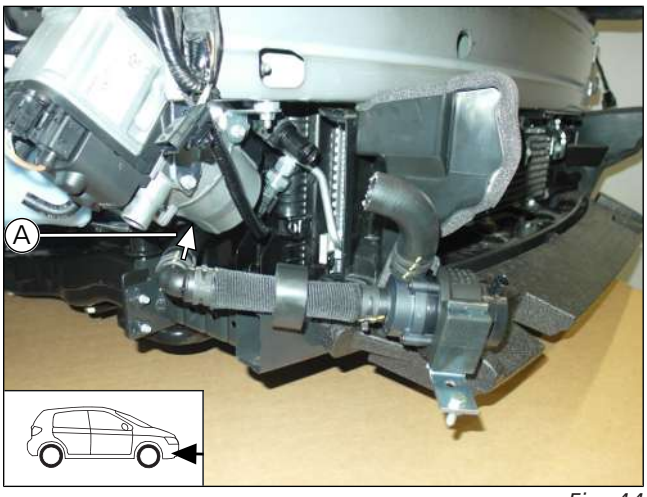


Fig. 44

▶ Route hose Ⓐ in the engine compartment.

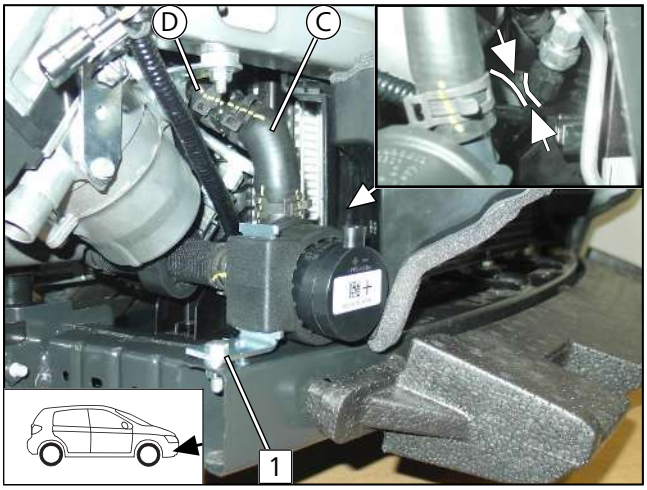


Fig. 45

▶ Connect hose Ⓒ to hose Ⓓ.

Danger of damage to components

▶ Ensure sufficient distance between rubber isolator and air conditioning system pressure sensor, correct if necessary.

1 Premounted bolt in perforated bracket, drilled hole 3, flanged nut

Routing and connecting coolant pump wiring harness

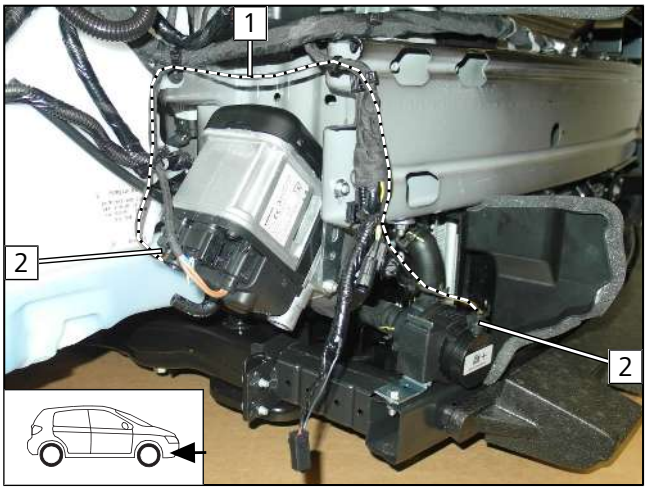


Fig. 46

▶ Route coolant pump wiring harness **1** on original vehicle wiring harness and attach using cable ties.

2 Coolant pump wiring harness connector

Mounting angle bracket 1

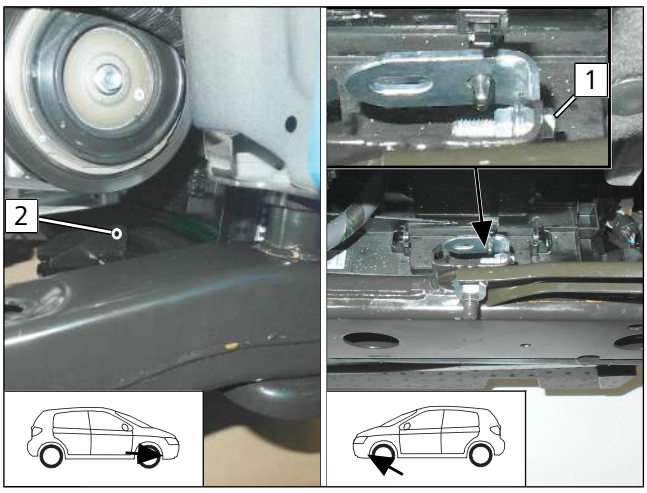


Fig. 47

1 M6x20 bolt, premounted angle bracket 1, original vehicle hole **2**, flanged nut

Removing original vehicle hose

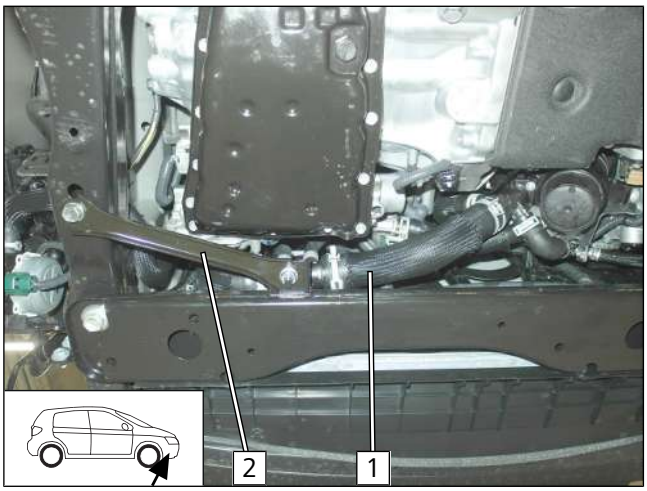


Fig. 48

1 Coolant hose

2 Remove strut to facilitate the installation

Cutting point 1

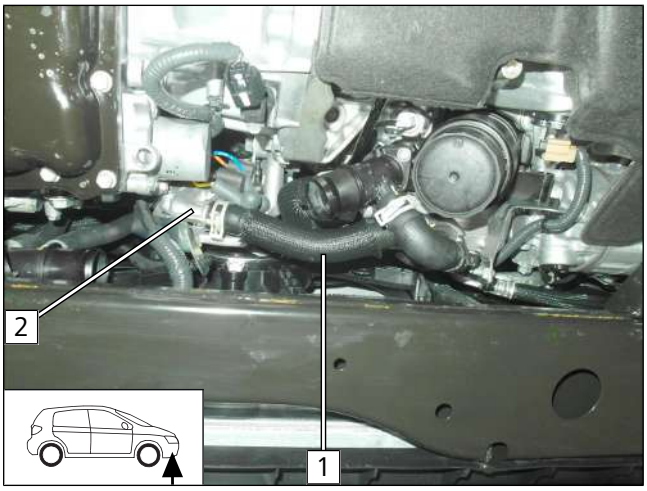


Fig. 49

▶ Remove braided protection 1 from heat exchanger outlet/engine inlet hose.

2 Original vehicle heating element

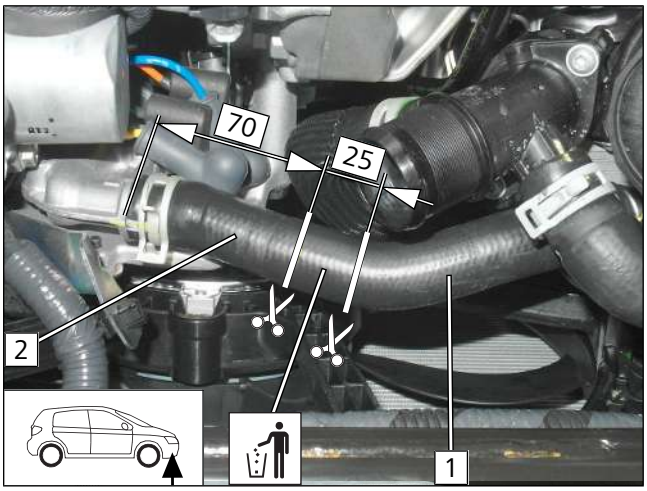


Fig. 50

1 Engine inlet hose section

2 Heat exchanger outlet hose section

Mounting T-piece and hose Ⓐ

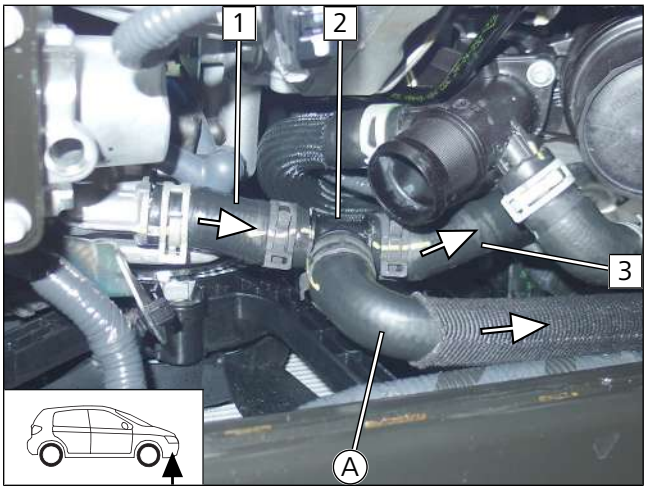


Fig. 51

Ø27 spring clips

1 Heat exchanger outlet hose section

2 T piece

3 Engine inlet hose section

Mounting angle bracket 2

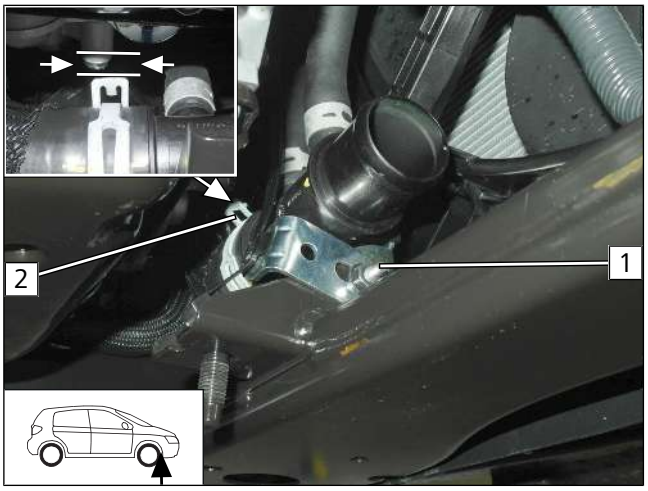


Fig. 52

Danger of damage to components

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

[1] Original vehicle stud bolt, premounted angle bracket 2, original vehicle nut

[2] Turn the spring clip so that the lock is facing up

Mounting original vehicle hose

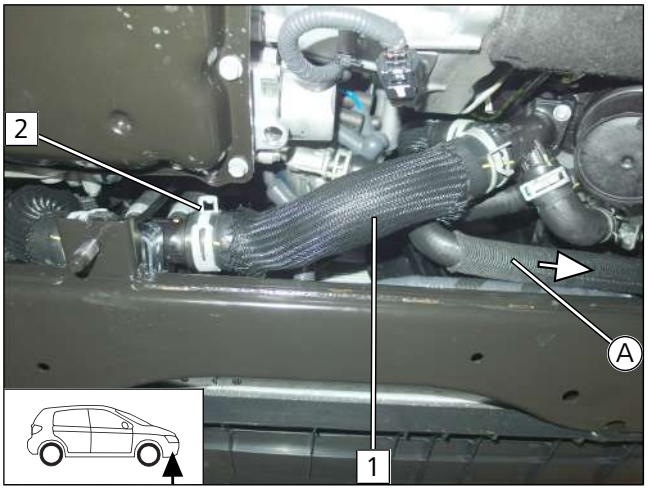


Fig. 53

[1] Coolant hose

[2] Turn the spring clip so that the lock is facing up

Fitting edge protection

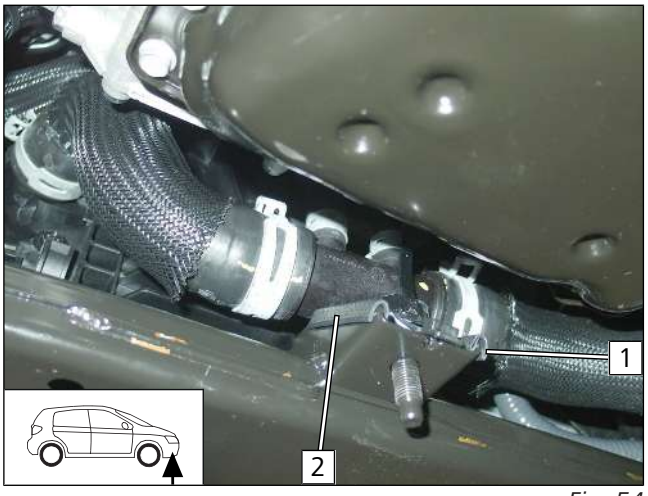


Fig. 54

[1] 30 lg. edge protection

[2] 50 lg. edge protection

Drilling hole 1

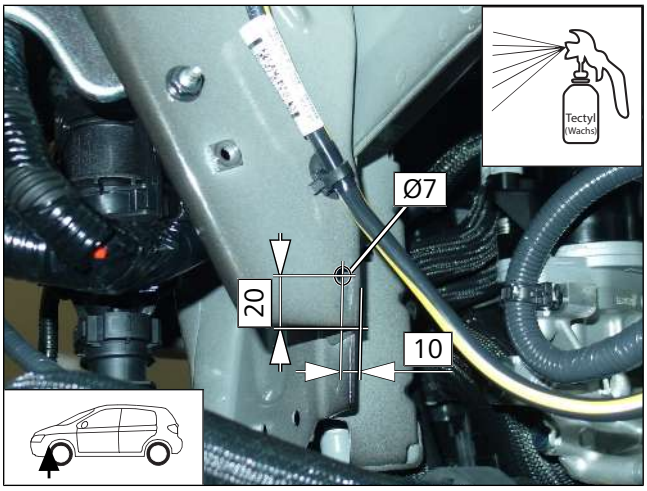


Fig. 55

Drilling hole 2 [2x]

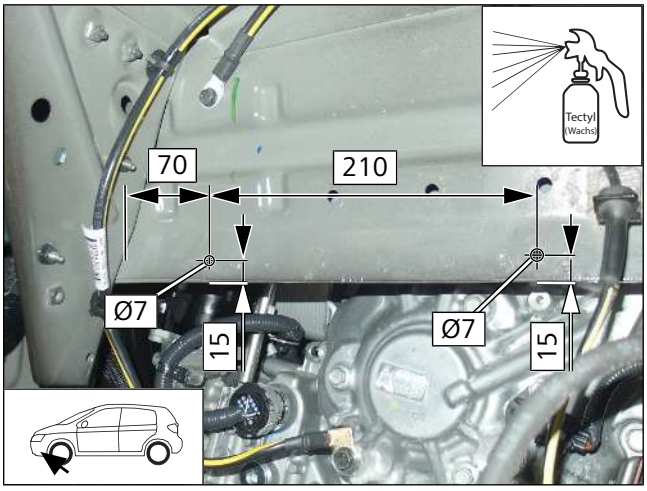


Fig. 56

Mounting non-return valve hose group 2

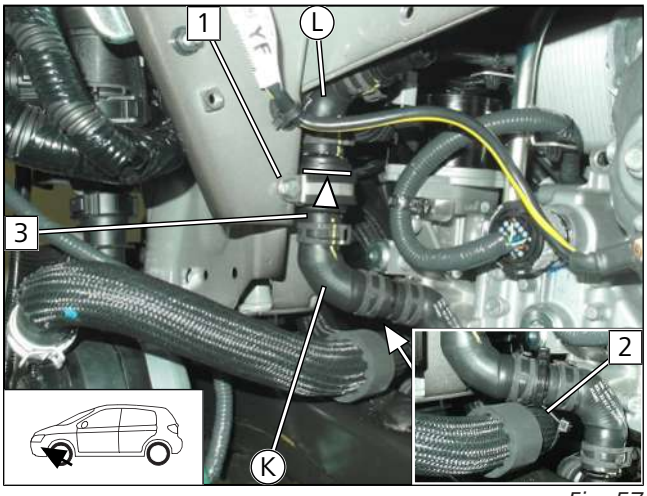


Fig. 57

1 Premounted M6x20 bolt , drilled hole 1, flanged nut

2 Fasten hoses using 2 cable ties

3 Non-return valve 2

Routing and fastening hoses Ⓐ and Ⓖ

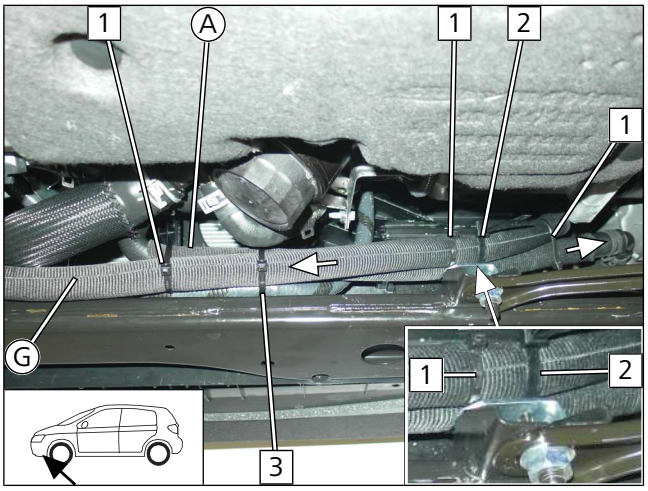


Fig. 58

1 Cable tie around hoses Ⓐ and Ⓖ
2 Hoses Ⓐ and Ⓖ through cable tie of angle bracket 1
3 Cable tie around hoses Ⓐ , Ⓖ and original vehicle wiring harness

Connecting hose Ⓖ to hose Ⓗ

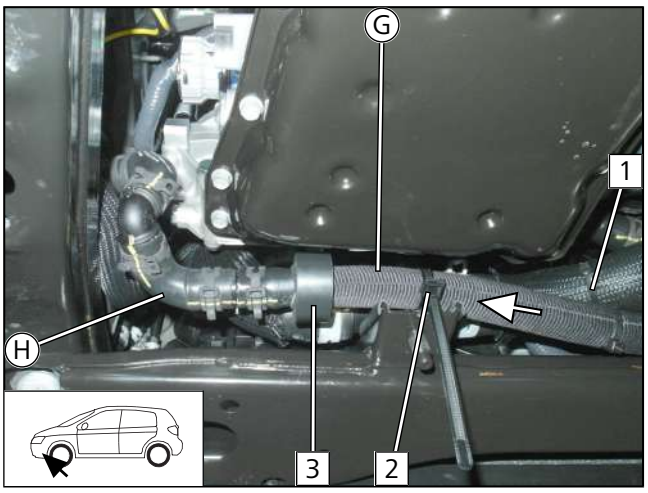


Fig. 59

1 Fasten hoses using 2 cable ties
2 Hose Ⓖ through cable tie of angle bracket 2
3 Mount and align rubber isolator

View of cutting point 2

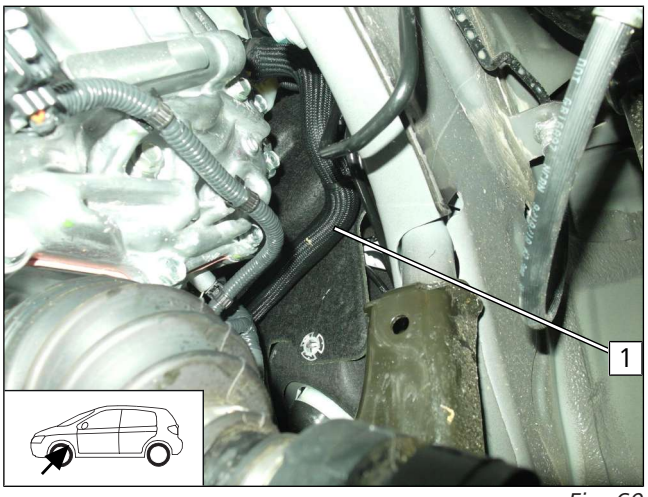


Fig. 60

1 Engine outlet / heat exchanger inlet hose

Cutting point 2

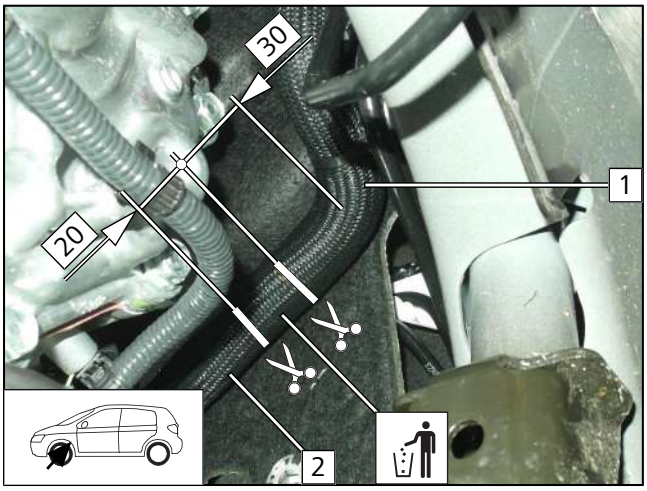


Fig. 61

1 Engine outlet hose section
2 Heat exchanger inlet hose section

Removing braided protection

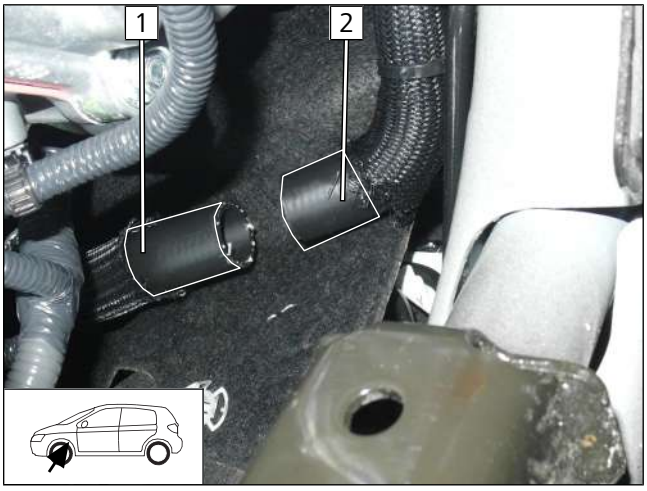


Fig. 62

1 Push back braided protection on heat exchanger inlet hose section
2 Remove braided protection on engine outlet hose section

Connecting premounted T-piece

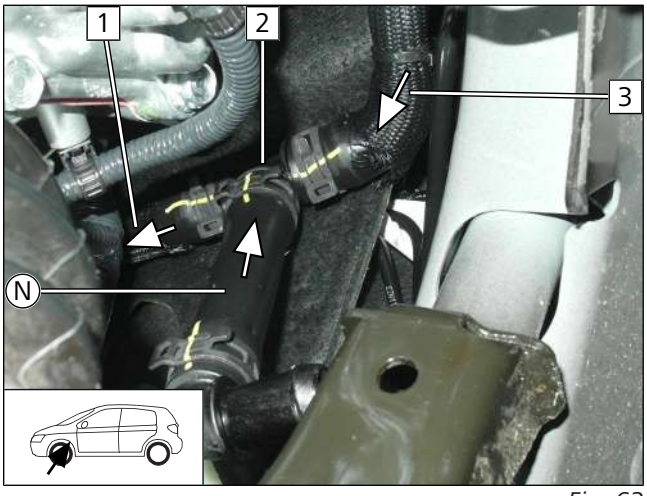


Fig. 63

Ø27 spring clips

1 Heat exchanger inlet hose section
2 Ø20x20x20 T-piece
3 Engine outlet hose section

Connecting hose Ⓜ

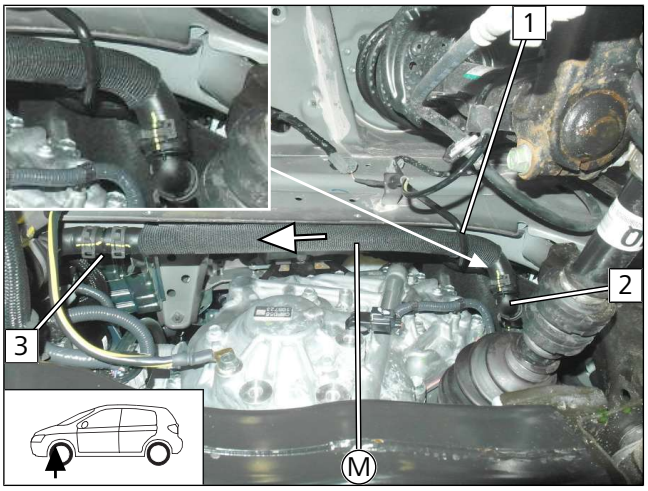


Fig. 64

1 Hose Ⓜ between brake line and cross member
2 Connection to hose Ⓝ
3 Connection to hose Ⓛ

Fastening hose Ⓜ

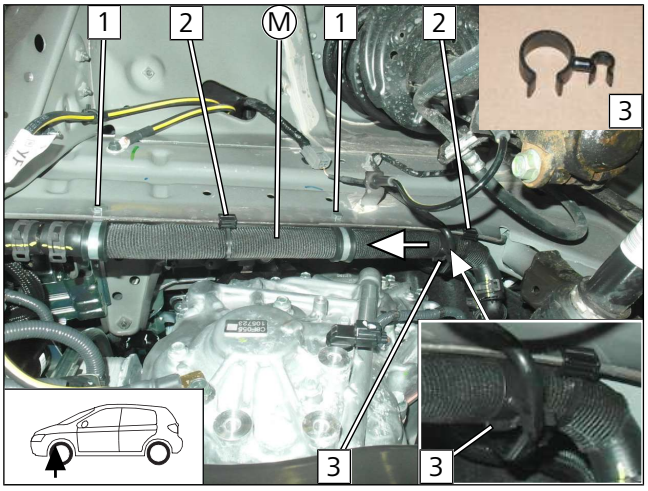


Fig. 65

1 M6x20 bolt, drilled hole 2, Ø25 rubber-coated p-clamp, flanged nut
2 Edge clip cable tie
3 Hose bracket between hose Ⓖ and brake line

Removing original vehicle connecting pipe

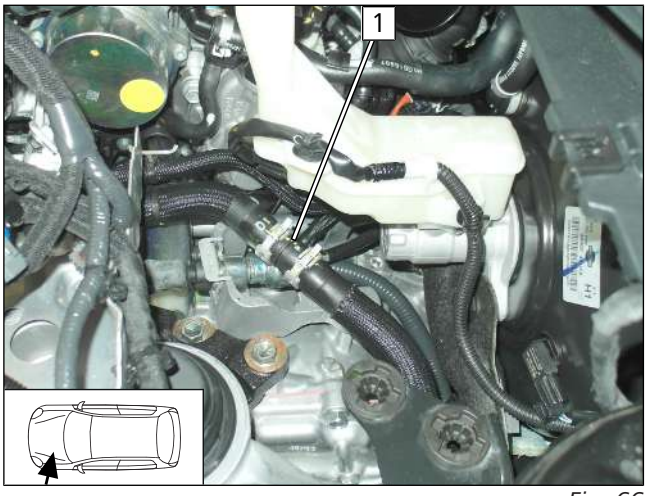


Fig. 66

▶ Remove and discard original vehicle connecting pipe 1 and both spring clips.

Cutting point 3

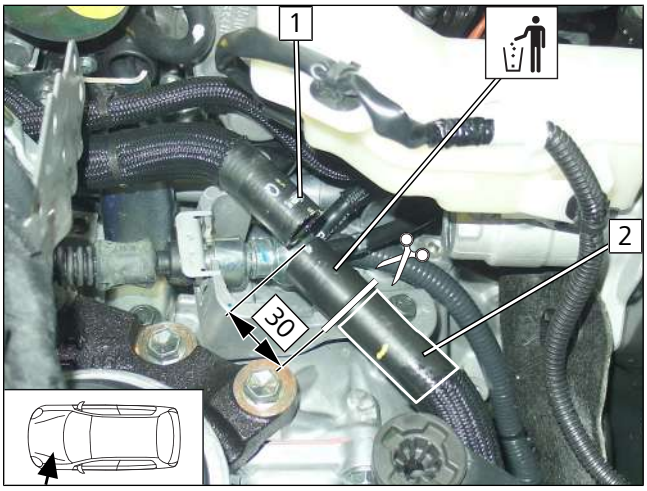


Fig. 67

1 Engine outlet hose section

2 Heat exchanger inlet hose section, remove braided protection in marked area

Positioning rubber isolator

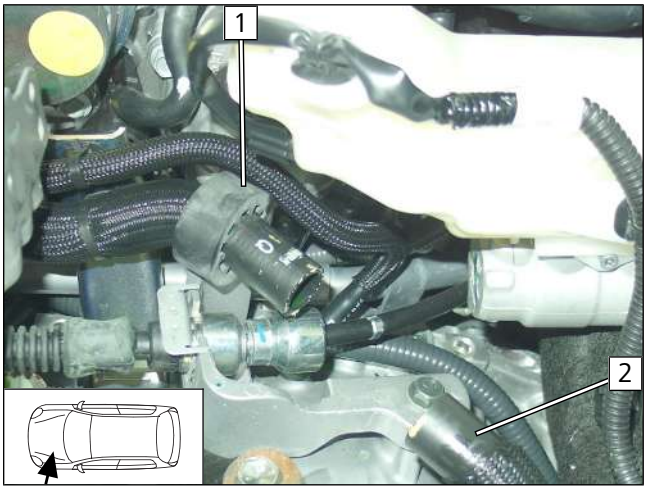


Fig. 68

1 Black (sw) rubber isolator on engine outlet hose section

2 Heat exchanger inlet hose section

Mounting non-return valve 1

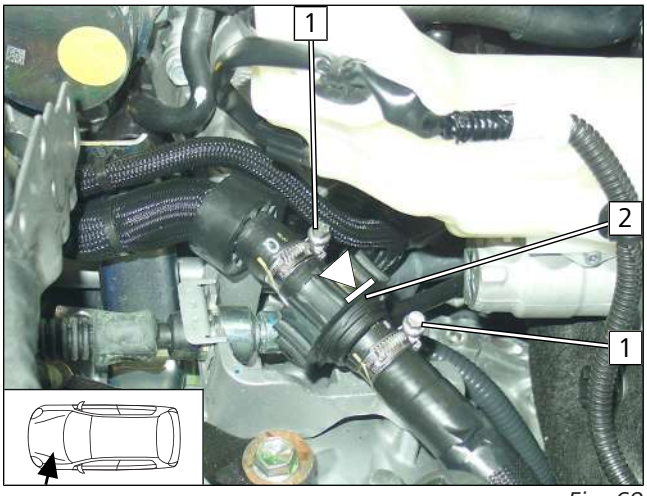


Fig. 69

1 Screw clamp

2 Non-return valve 1

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

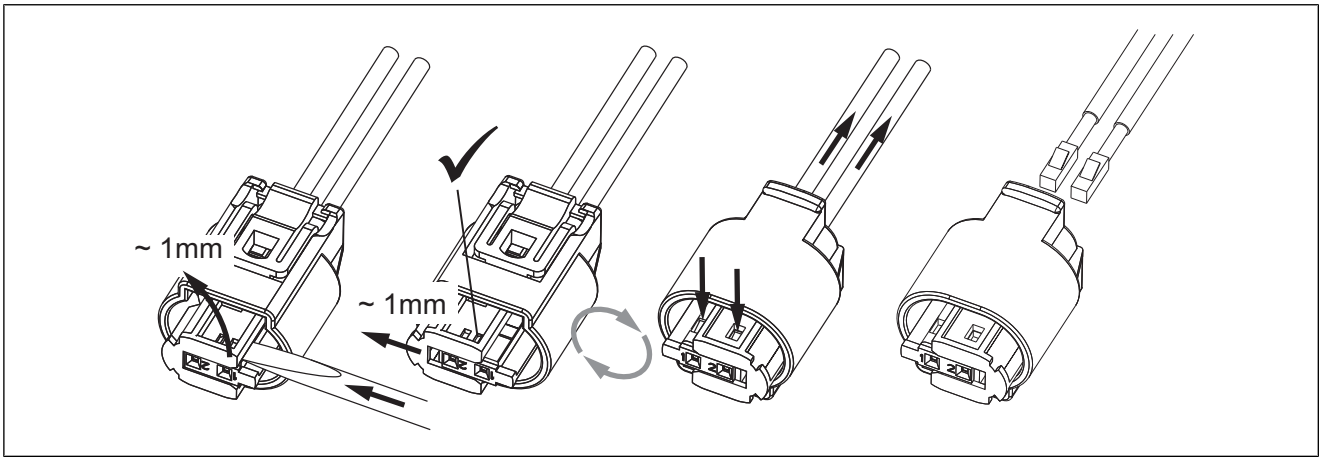


Fig. 70

10.1 Routing fuel line

Connecting fuel line to heater

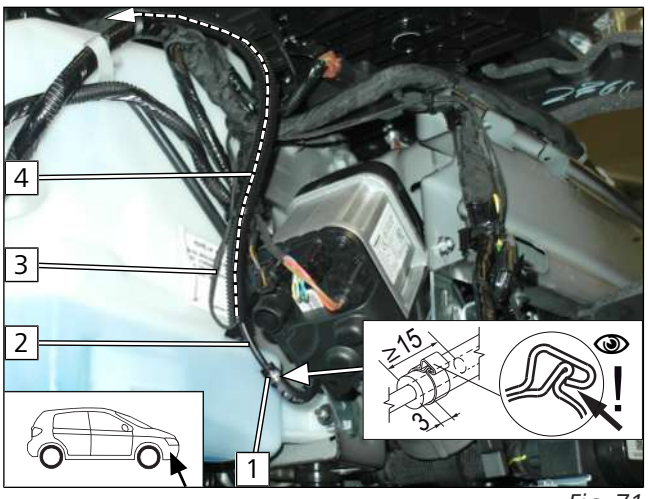


Fig. 71

- ▶ Draw fuel line [2] and fuel pump wiring harness [3] into corrugated tube [4] and route into the wheel well.

[1] Ø10 clamp

Routing in wheel well

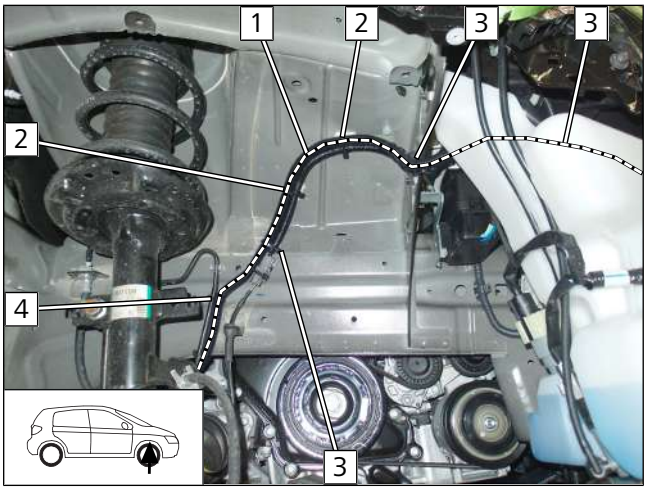


Fig. 72

1 Corrugated tube with fuel line and fuel pump wiring harness
2 Fastening with glue pad and cable tie
3 Fastening with cable tie to original vehicle wiring harness
4 Fastening with cable tie to original vehicle brake line

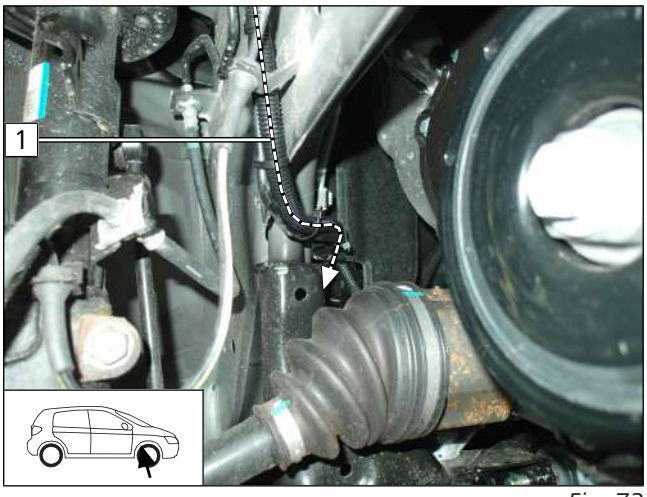


Fig. 73

▶ Route corrugated tube with fuel line and fuel pump wiring harness 1 along original vehicle lines to the underbody.

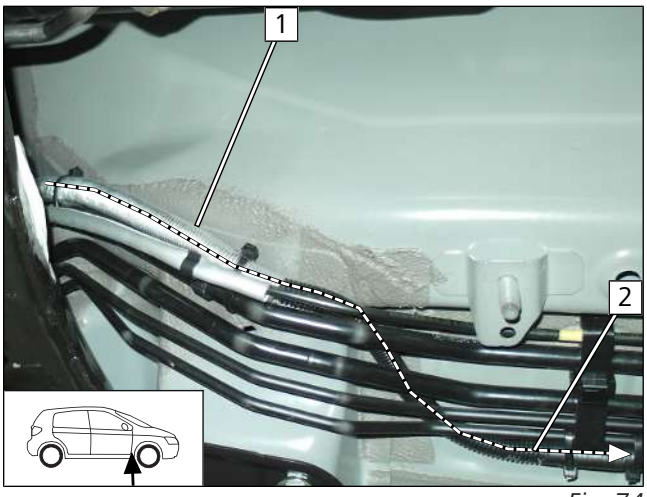


Fig. 74

▶ Pull 450 lg. heat protection tube 1 over the corrugated tube and attach to original vehicle fuel line. Route corrugated tube with fuel line and fuel pump wiring harness 2 to the underbody.

Routing on underbody

Fig. 75

▶ Attach corrugated tube [1] with fuel line and fuel pump wiring harness to original vehicle fuel lines and route to the fuel pump installation location.

10.2 Mounting and connecting fuel pump

Preparing fuel pump installation location

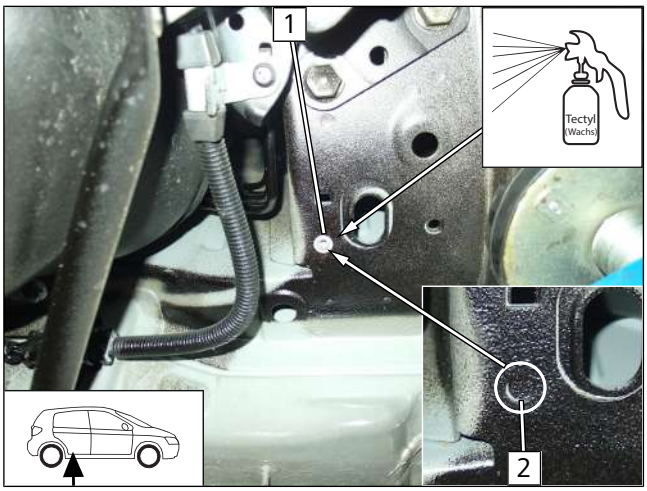


Fig. 76

▶ Drill a Ø9 hole at position [2] in the 2nd layer of the double walled metal sheet.

[1] Inserting rivet nut

Premounting fuel pump

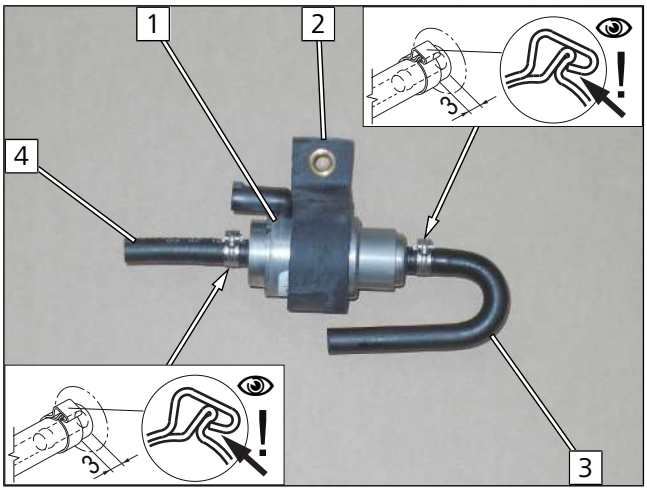


Fig. 77

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

Mounting fuel pump

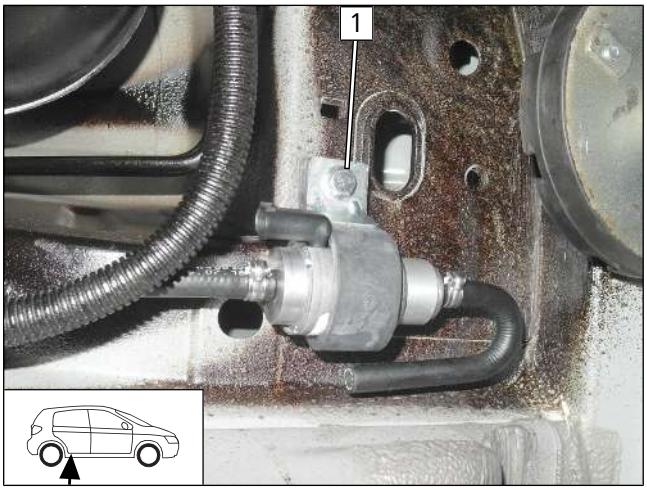


Fig. 78

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

Assembling fuel pump connector X7

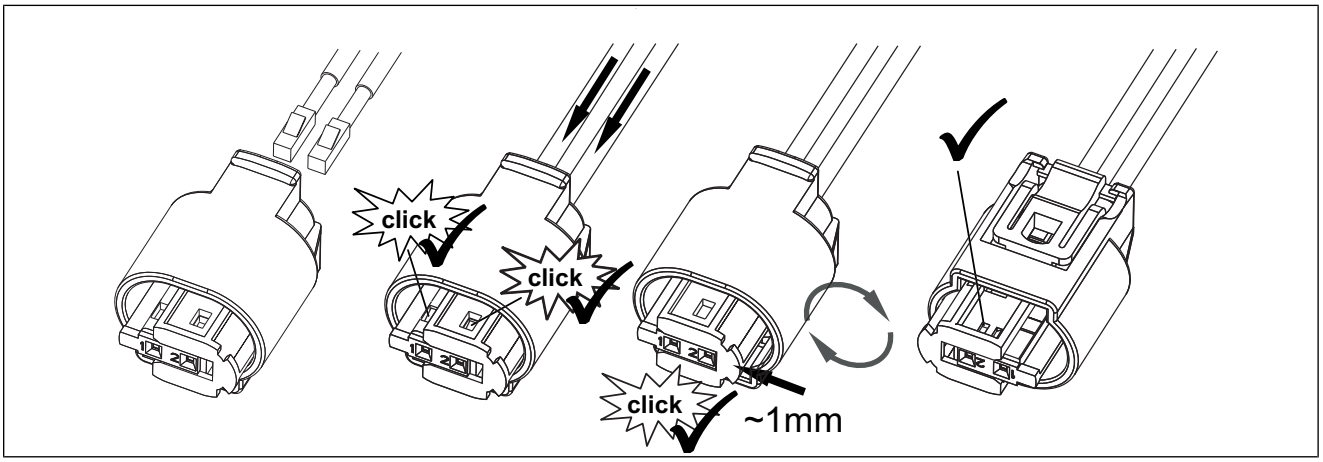


Fig. 79

Connecting fuel pump

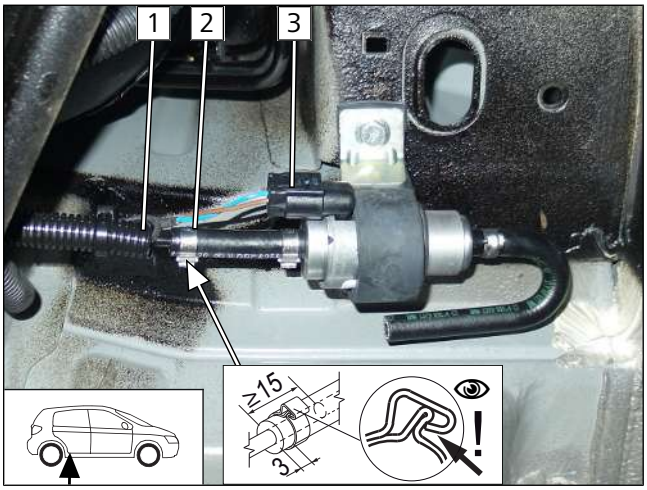


Fig. 80

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

10.3 Installing FuelFix

Repositioning sticker

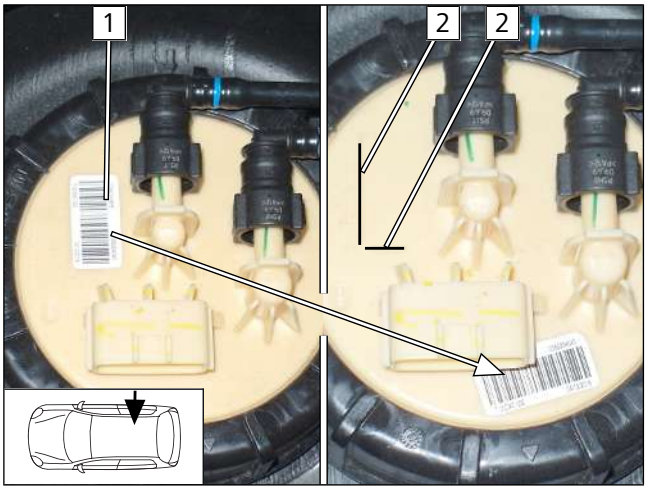


Fig. 81

▶ Draw guide line [2] on existing embossing.

[1] Sticker

Preparing drilling template

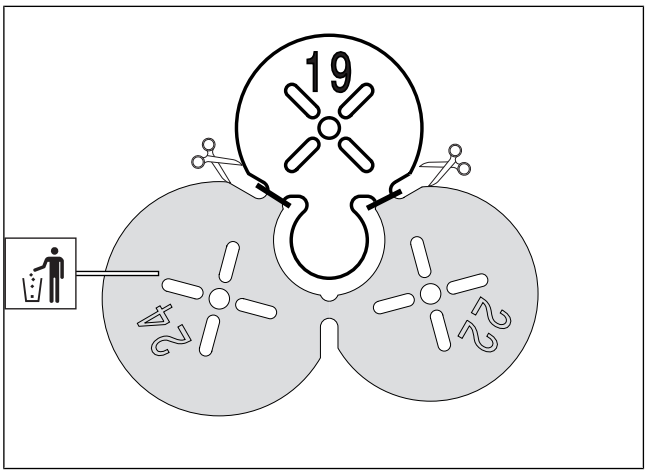


Fig. 82

Work steps F1, F2

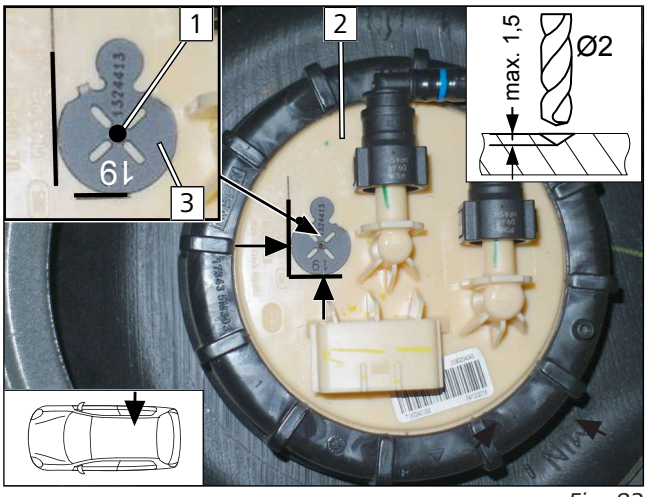


Fig. 83

Observe the installation instructions of the tank extracting device.

▶ Position template [3] at the guide lines as shown.

[1] Ø2 centring hole

[2] Tank fitting

Work step F3

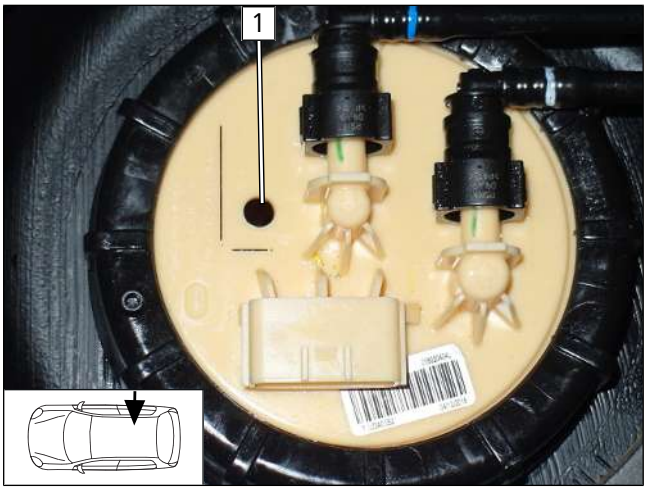


Fig. 84

DANGER

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

[1] Hole made with provided drill

Work steps F4, F5

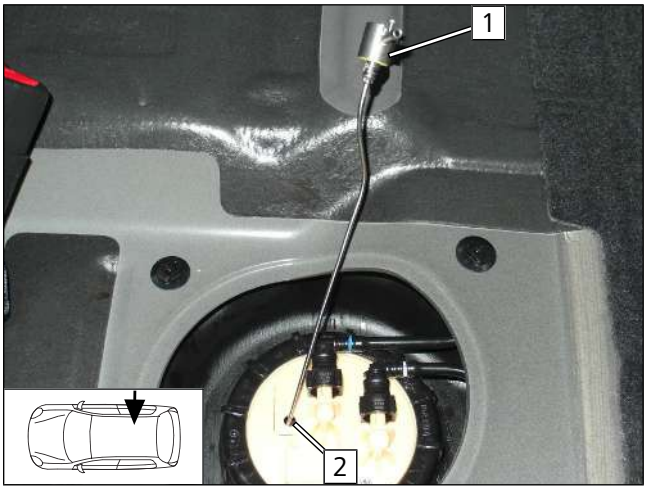


Fig. 85

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

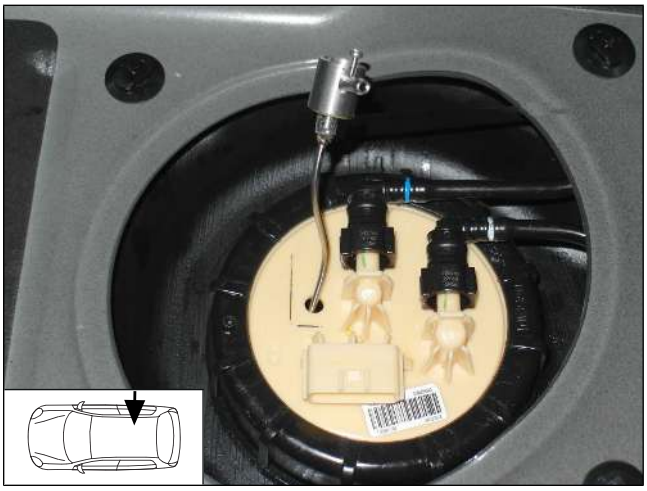


Fig. 86

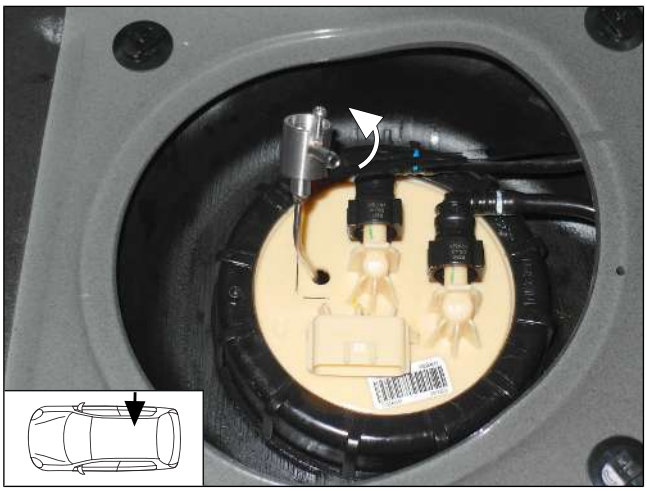


Fig. 87

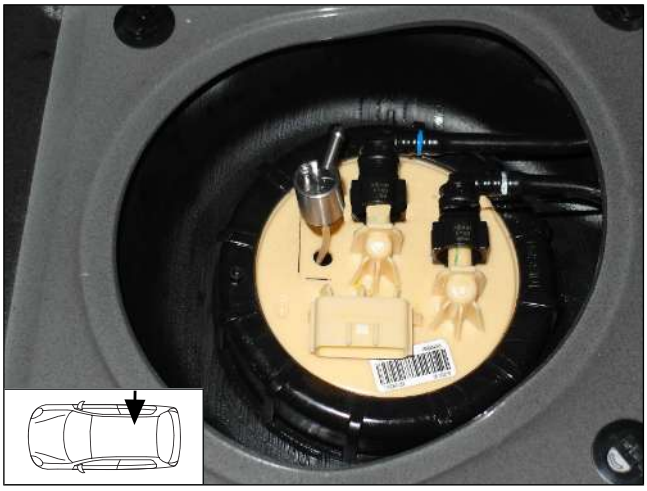


Fig. 88

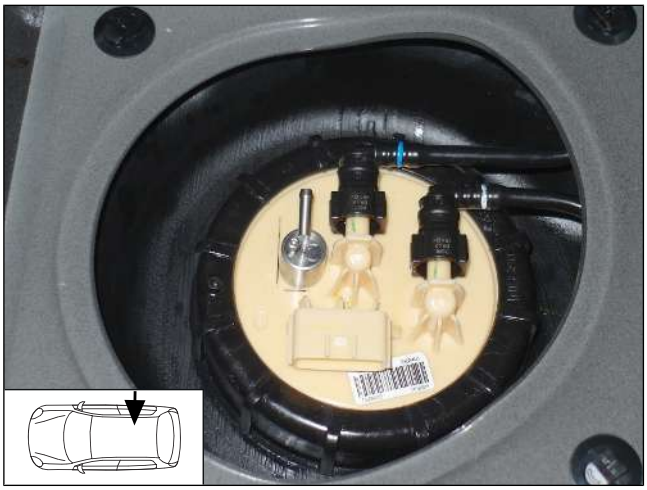


Fig. 89

Work steps F5.3, F5.4

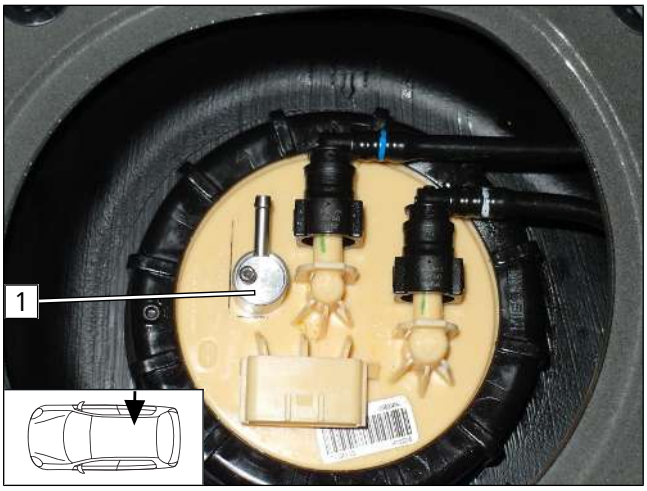


Fig. 90

▶ Align FuelFix [1] as shown.

Work step F6

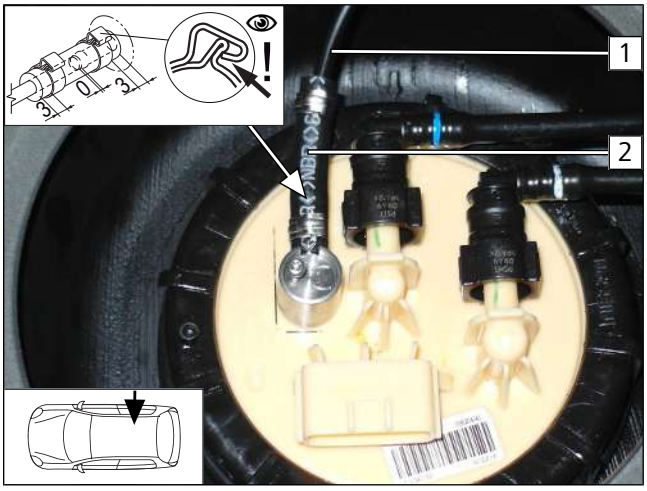


Fig. 91

[1] Fuel line of FuelFix
[2] Hose section, Ø10 clamp [2x]

Work step F7

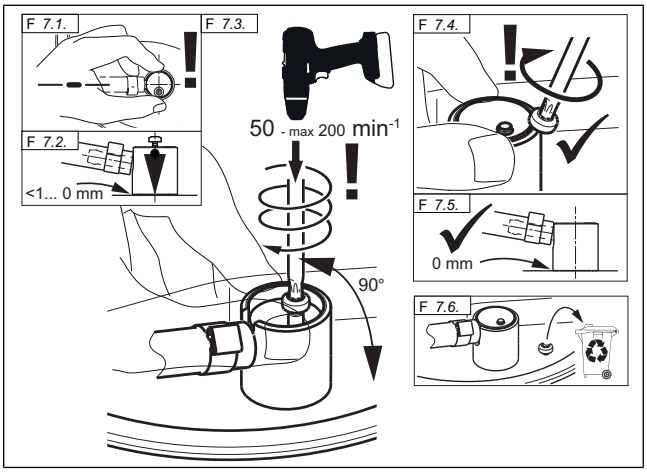


Fig. 92

DANGER

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

Work step F8

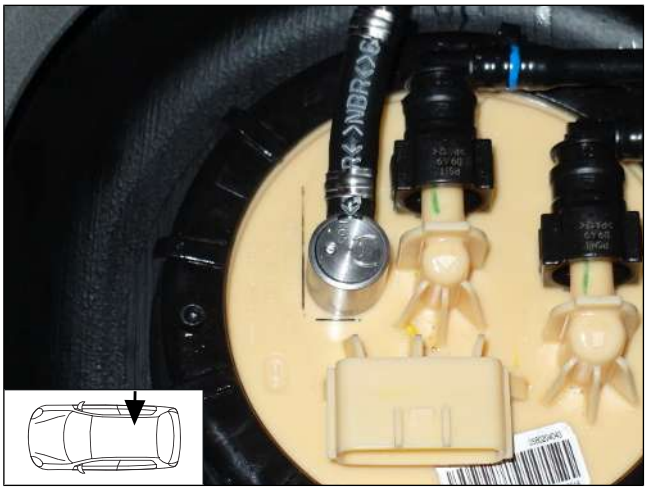


Fig. 93

Securing fuel line

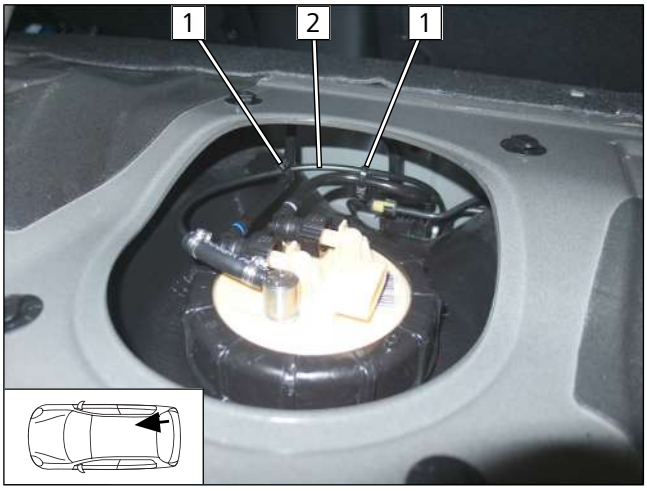


Fig. 94

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

Connecting fuel pump

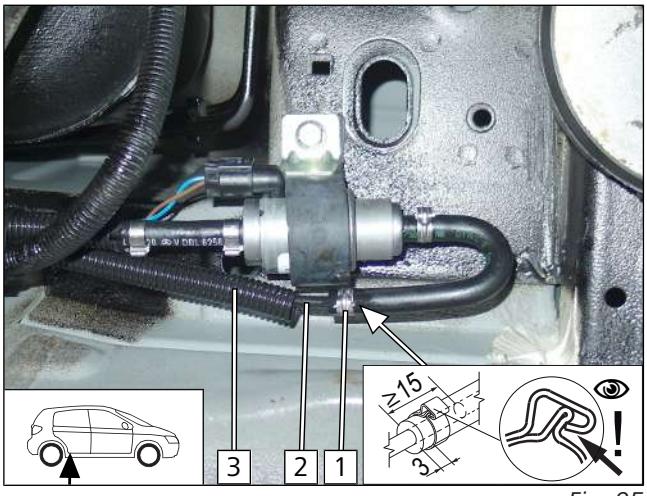


Fig. 95

1 Ø10 clamp
2 Fuel line of FuelFix
3 500 lg. corrugated tube

11 Combustion air

Cutting combustion air intake pipe **s1** to length

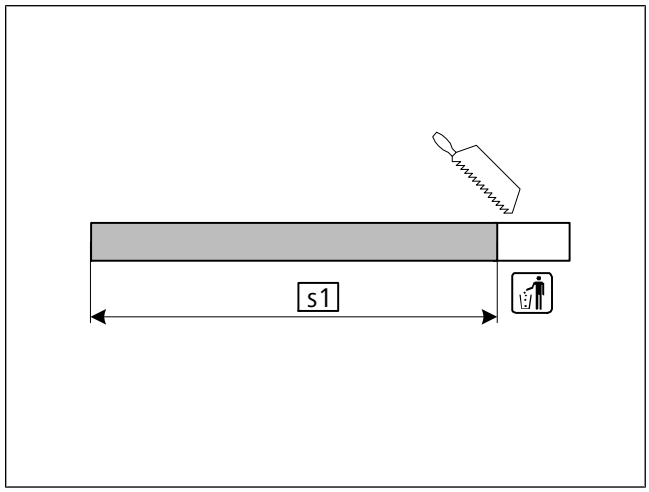


Fig. 96

s1 700

Shortening perforated bracket

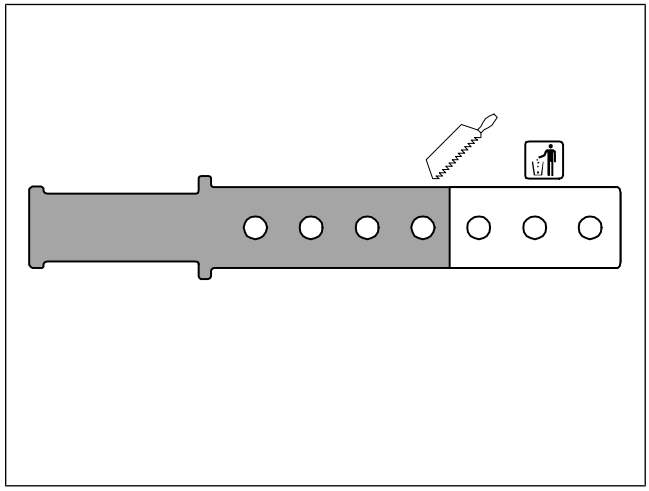


Fig. 97

Premounting combustion air intake silencer

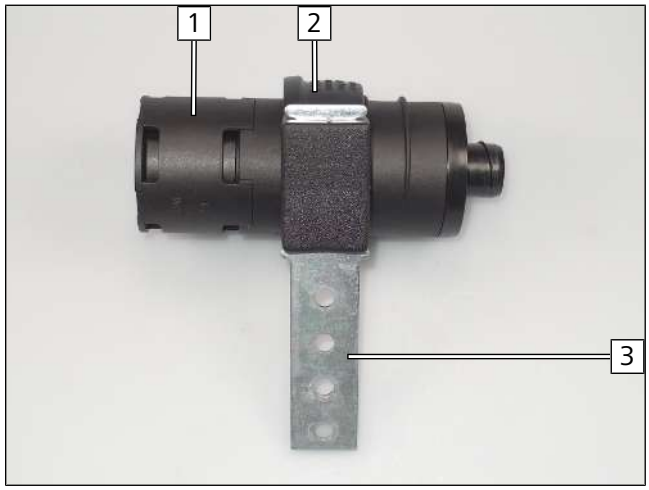


Fig. 98

Observe the installation instructions of the combustion air intake silencer.

1 Combustion air intake silencer
2 Combustion air intake silencer mount
3 Perforated bracket

Mounting and fastening combustion air intake pipe

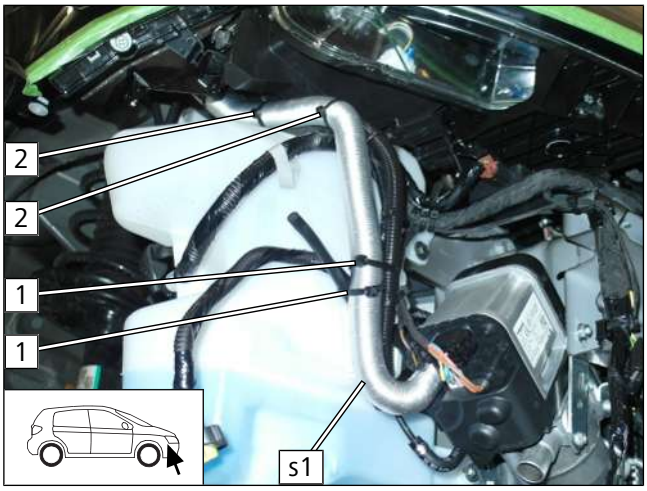


Fig. 99

1 Cable ties for fixing the front fog light wire and headlight washer system hose

2 Cable tie to fasten **s1**

Drilling hole/inserting rivet nut

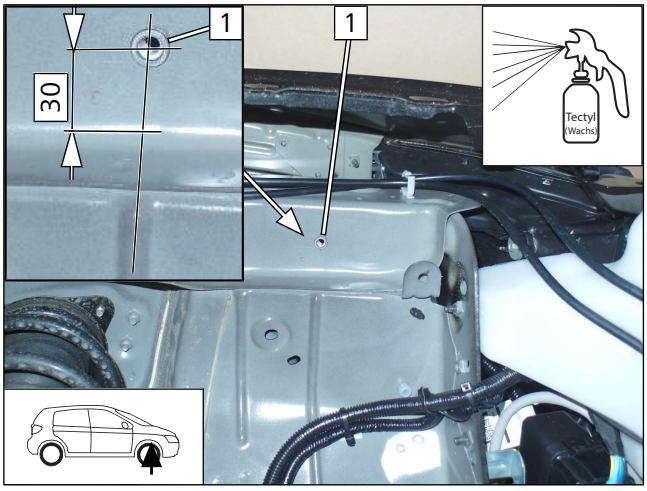


Fig. 100

1 Ø9 hole, rivet nut

Mounting combustion air intake silencer

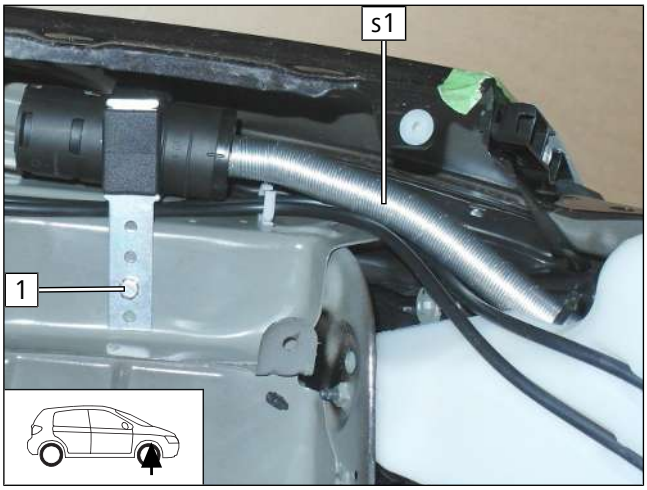


Fig. 101

1 M6x20 bolt, spring lockwasher, perforated bracket, rivet nut

12 Exhaust

12.1 Mounting exhaust pipe

Cutting exhaust pipe to length

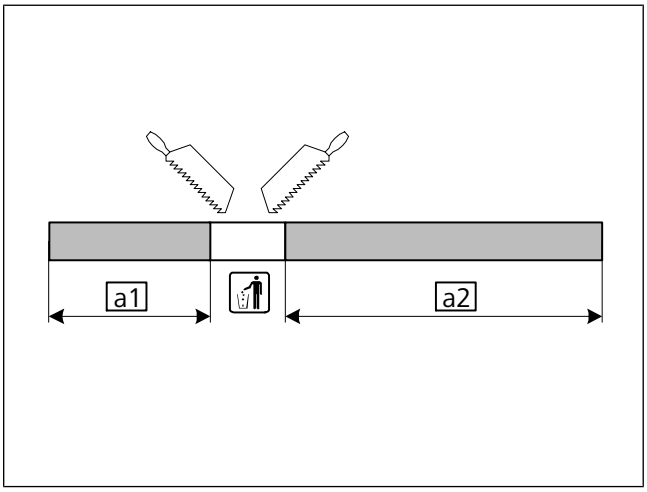


Fig. 102

a1 150
a2 320

Enlarging hole in angle bracket

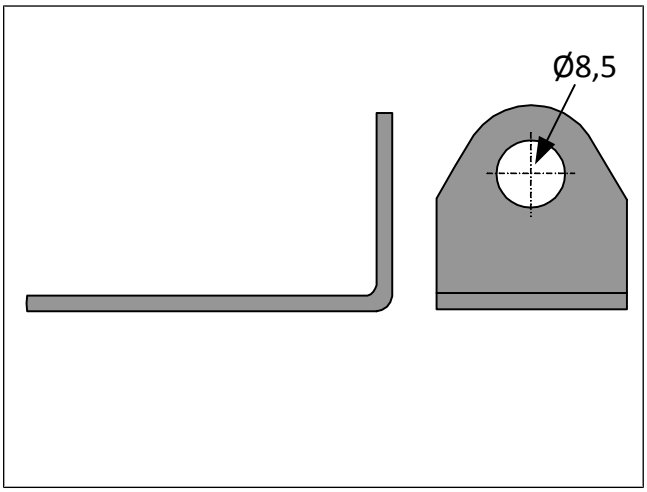


Fig. 103

Preparing exhaust silencer

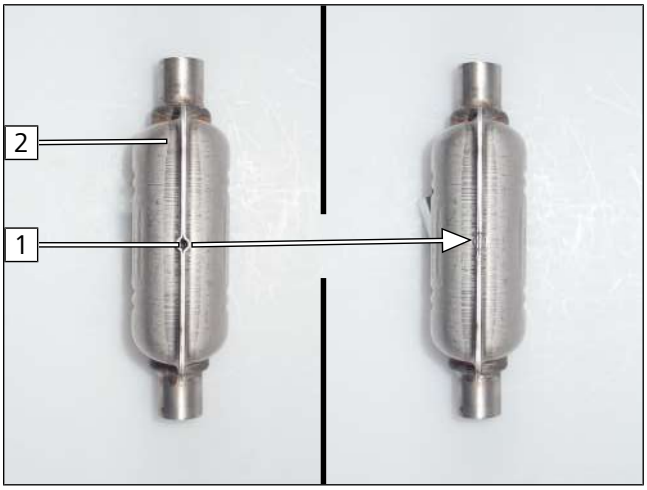


Fig. 104

▶ Close opening **1** in exhaust silencer **2**.

Premounting exhaust silencer

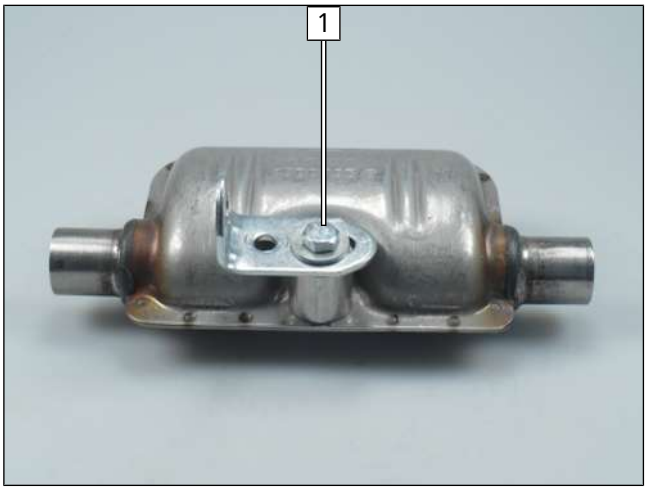


Fig. 105

1 M6x35 bolt, large diameter washer, angle bracket, spacer (20), exhaust silencer, flanged nut

Replacing bolt

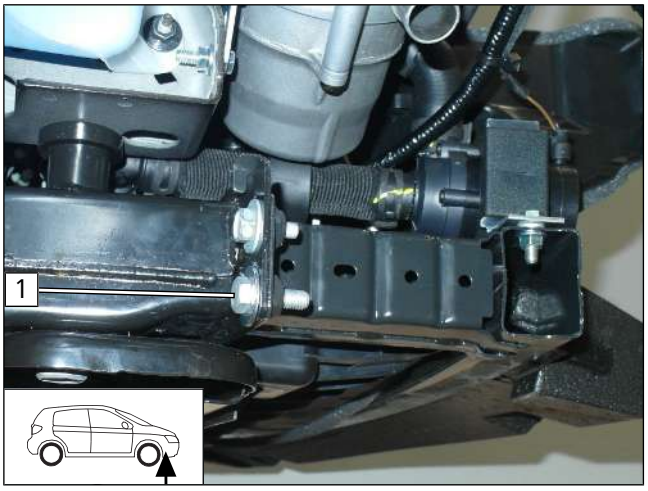


Fig. 106

1 M8x25 bolt, large diameter washer (remove and discard original vehicle bolt)

Mounting exhaust silencer

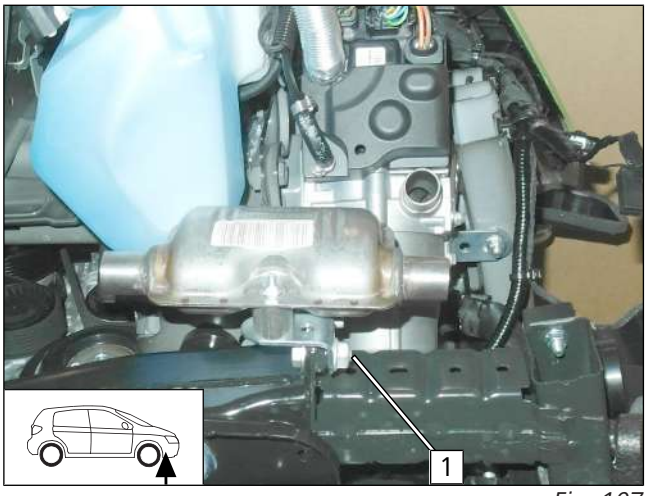


Fig. 107

1 M8x25 bolt, large diameter washer, angle bracket, flanged nut M8

Mounting exhaust pipe **a1**

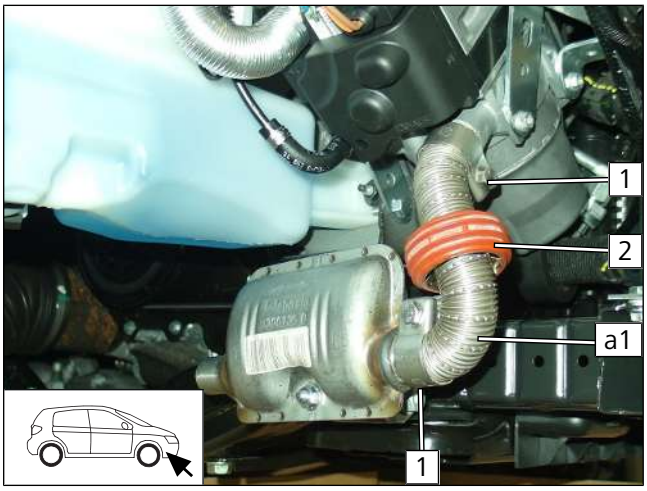


Fig. 108

1 Hose clamp
2 Spacer bracket, position as shown

Preparing exhaust pipe **a2**

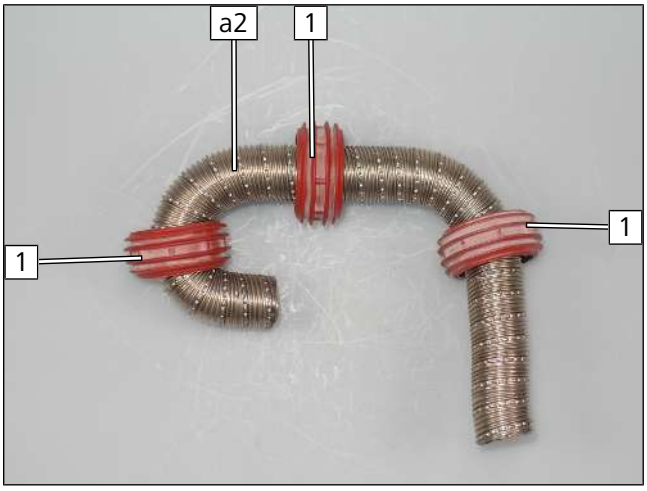


Fig. 109

1 Spacer bracket

Mounting exhaust pipe **a2**

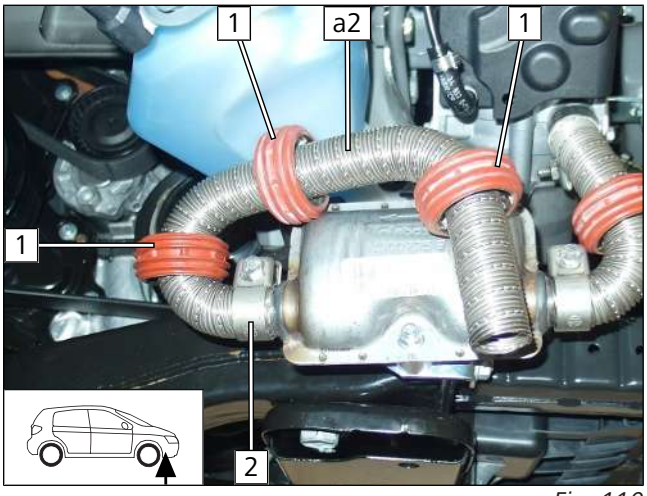


Fig. 110

1 Spacer bracket, position as shown
2 Hose clamp

12.2 Mounting exhaust end fastener

Work step E1

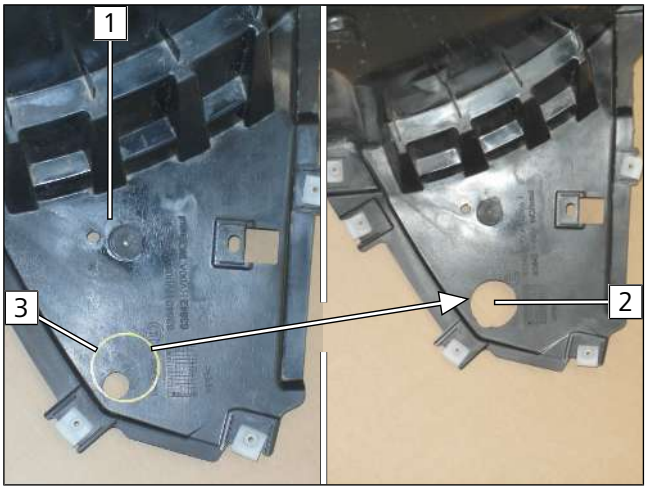


Fig. 111

Observe the EFIX installation instructions.

1 Underride protection
2 Hole
3 Copy hole pattern

Work step E3

Fig. 112

1 Copy hole pattern
2 EFIX

Work step E4

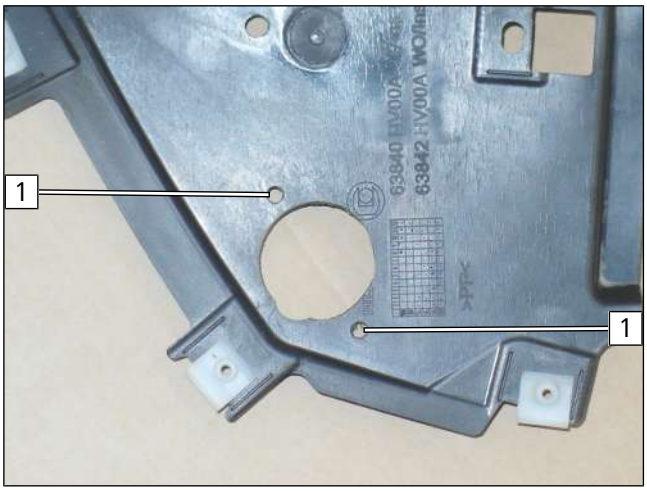


Fig. 113

1 Hole

Work step E5

Fig. 114

1 5x13 self-tapping screw

13 Electrical system of passenger compartment

13.1 Air-conditioning control

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

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

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

14 Electrical system of control elements

14.1 MCC option

Mounting MCC

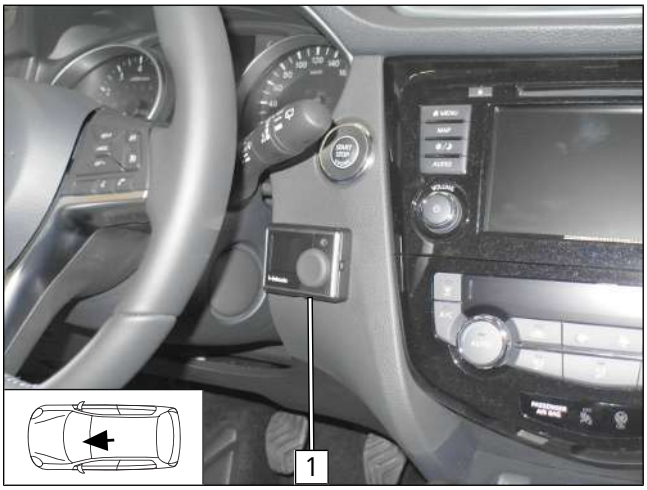


Fig. 115

Observe the MultiControl CAR installation documentation.

1 MCC installation frame

14.2 Remote option (Telestart)

Mounting receiver

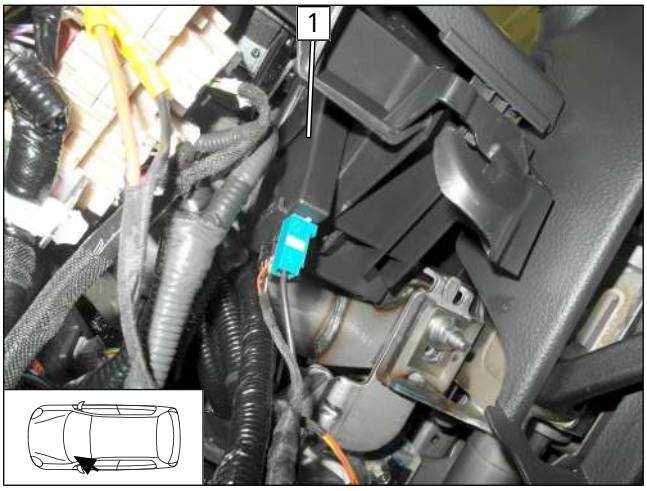


Fig. 116

Observe the Telestart installation documentation.

▶ Fasten receiver 1 using double-sided adhesive tape.

Mounting aerial

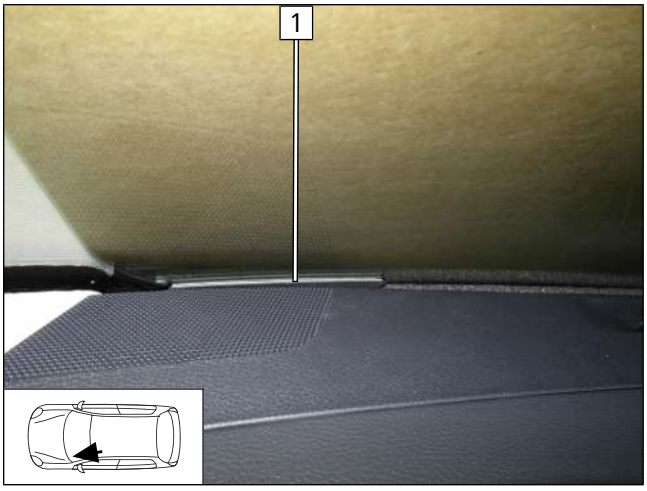


Fig. 117

1 Aerial

Mounting temperature sensor, only in case of T100 HTM

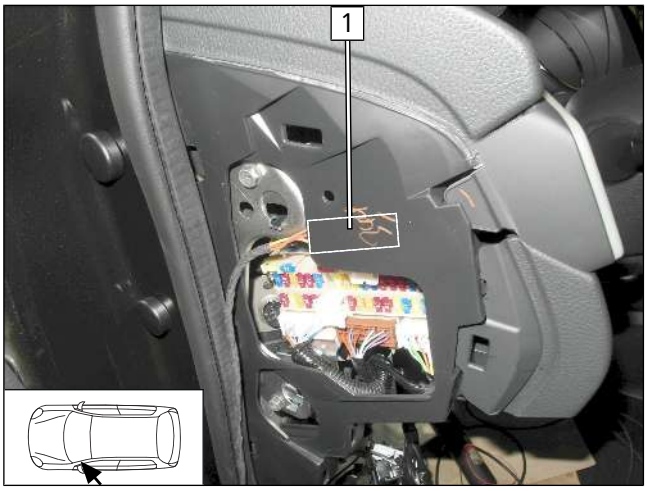


Fig. 118

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

14.3 ThermoCall option

Mounting receiver

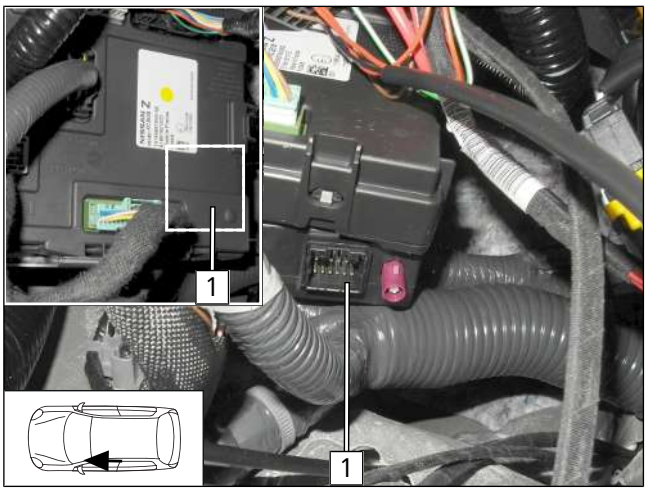


Fig. 119

Observe the ThermoCall installation documentation.

▶ Secure receiver [1] behind the control unit at the marking using double-sided adhesive tape.

Mounting aerial (optional)

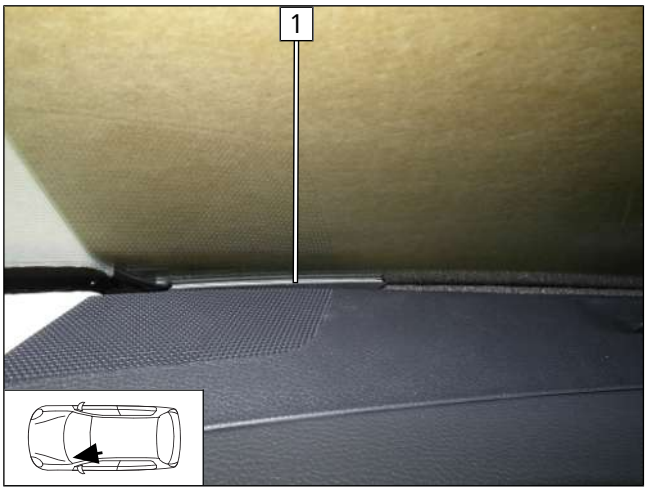


Fig. 120

[1] Aerial

15 Final work in engine compartment

Preparing horn

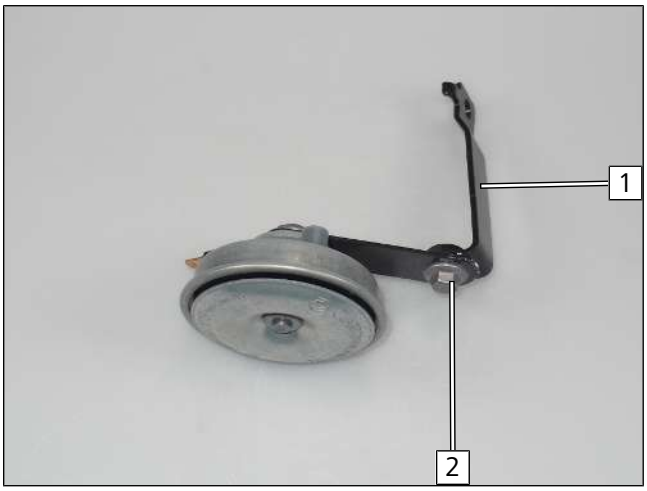


Fig. 121

▶ Unsrew original vehicle bolt [2], remove horn bracket [1], discard both.

Mounting horn

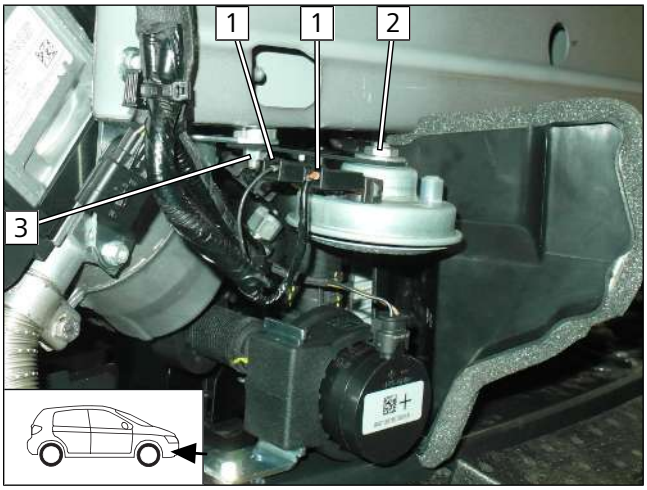


Fig. 122

▶ Loosen nut of horn [2], turn horn and align electrical connections.

▶ Connect horn connector [1].

▶ Unscrew nut [3], mount horn bracket.

Mounting bumper impact absorber

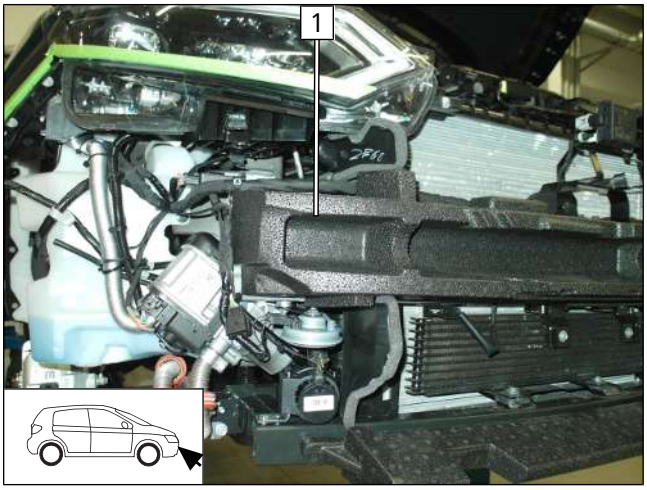


Fig. 123

[1] Impact absorber

Fastening original vehicle wiring harness

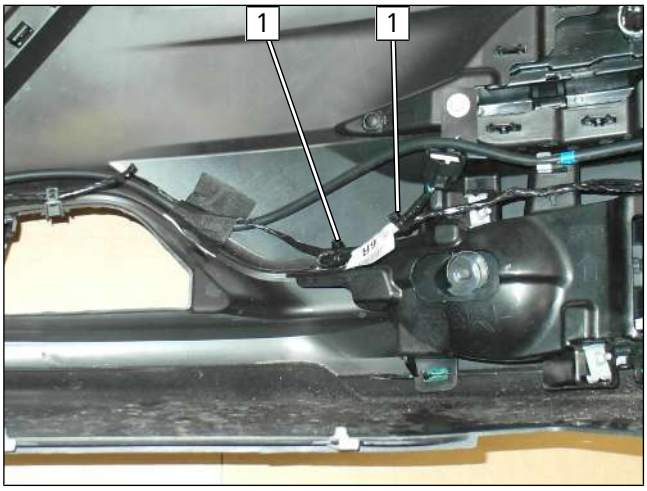


Fig. 124

▶ Fasten original vehicle wiring harness to bumper line using cable tie **1**.

Connecting bumper connector

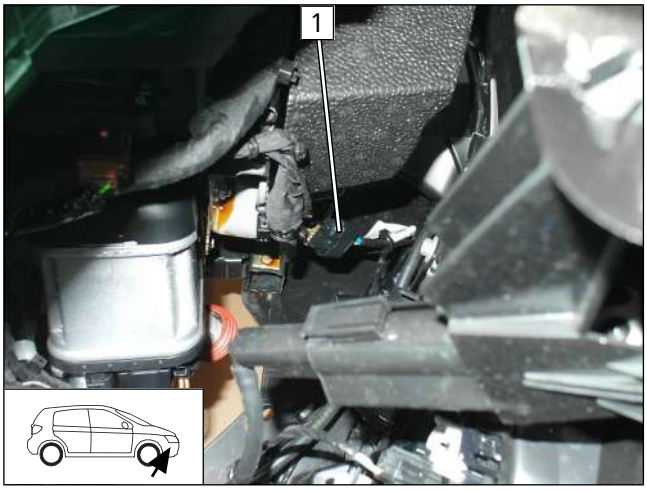


Fig. 125

▶ Install bumper.

1 Bumper connector

Front fog light connector and headlight washer system hose connection

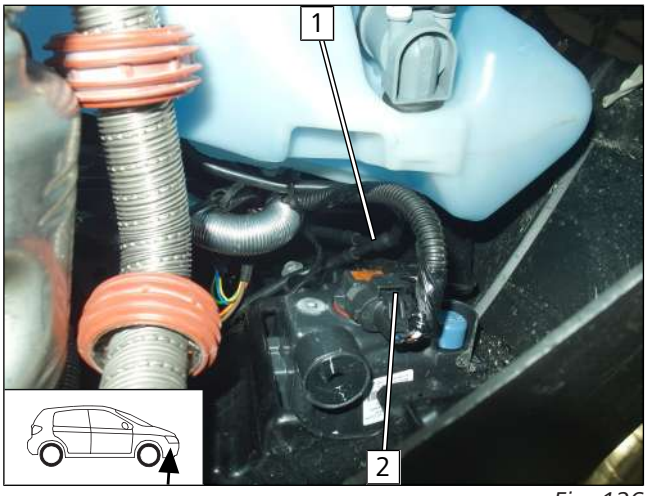


Fig. 126

Danger of damage to components

▶ Ensure sufficient freedom of movement of the headlight washer system nozzle, correct if necessary.

Danger of damage to components

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

1 Headlight washer system hose

2 Front fog light connector

Work steps E6 - E8

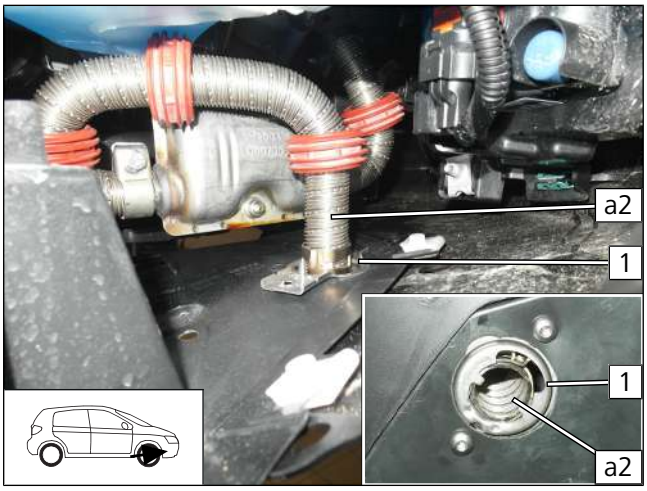


Fig. 127

Observe the EFIX installation instructions.

Danger of damage to components

▶ Check position of spacer bracket, correct if necessary.

▶ Install wheel wrench.

1 EFIX

16 Final Work

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

▶ Mount removed parts in reverse order.

▶ Check all hoses, clamps and all electrical connections for firm seating.

▶ Insulate and tie back loose lines

▶ Spray heater and electrical components with anti-corrosion wax (Tectyl 100K).

▶ Connect the battery.

Only use manufacturer-approved coolant.

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

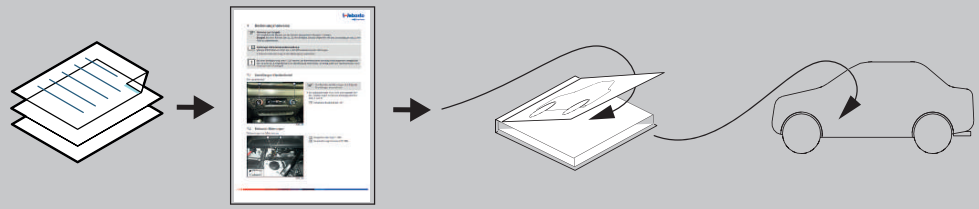
Further information can be found in the general installation and operating instructions of the Webasto components.

▶ Program MultiControl CAR, teach Telestart transmitter

▶ If the fan function or A/C control panel settings need to be checked, see the installation documentation in the additional 'Webasto Standard' A/C control or 'Webasto Comfort' kit, section Final work

▶ Initial start-up and function check

▶ Affix 'Switch off parking heater before refueling' caution label in area of filler neck



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

Webasto Thermo & Comfort SE
Postfach 1410
82199 Gilching
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Company address:
Friedrichshafener Str. 9
82205 Gilching
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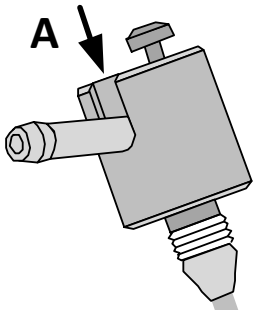
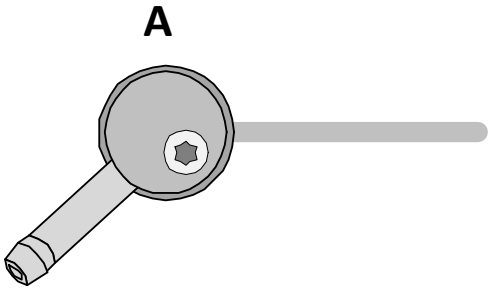
Technical Extranet: https://dealers.webasto.com

CE

WWW.WEBASTO.COM

17 FuelFix template





100mm

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

0

100mm