EN

K

Installation documentation

for Thermo Top Evo water heater

'Inline' coolant circuit with engine preheating

Hyundai Kona

Left-hand drive vehicle

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Hyundai	Kona	YB	from 2018	e4 * 2007 / 46 * 1259 * ..

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displace-ment [cm³]	Engine code
1.6 T-Gdi	Petrol	Euro 6d Temp	DKG	130	1591	G4FJ

Validity	Equipment variants	Model
		Kona
Verified equipment variants	Automatic air-conditioning	x
	Halogen main headlights	x
	Halogen front fog lights	x
	LED daytime running lights	x
	Automatic Start-Stop system	x
	2 WD	x
Unverified equipment variants	Manual air-conditioning	x
	Alarm system	x
	Smart Key incl. Start/Stop button	x
	Full LED headlight	x
Exclusion	4 WD	x

Total installation time	Note
8.2 hours	

Contents

1 List of abbreviations

DKG	Dual clutch transmission
DP	Fuel pump
FF	FuelFix (tank extracting device)
Fig.	Figure
HG	Heater
MCC	MultiControl (control element)
RSH	Relay and fuse holder of passenger compartment
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.

2.2 Components used

Designation	Order number
Basic delivery scope of Thermo Top Evo	In accordance with price list
Installation kit incl. cold start system for Hyundai Kona 1.6 petrol with DKG	1327298A
In case of Telestart, control element, as well as indicator lamp in consultation with end customer	In accordance with price list
MultiControl installation frame, for installation of MultiControl CAR	9030077_

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

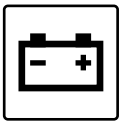
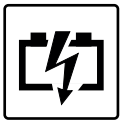
▶ Actions to protect yourself against risks.

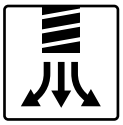
Reference to the vehicle manufacturer's specific documents.

Note on a special technical feature

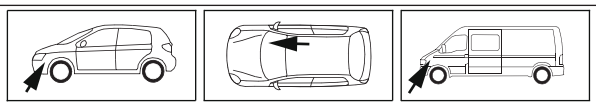
3.4.3 Work step identification marks

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 Preparing measures

5.1 Vehicle preparation

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

Vehicle area	Components to be removed	Other applicable documents
General	▶ Open the fuel tank cap ▶ Ventilate the fuel tank ▶ Close the fuel tank cap again ▶ Depressurise the cooling system	
Engine compartment and body	▶ Complete battery with battery carrier ▶ Complete air filter with intake hose ▶ Vacuum hose for brake booster ▶ Engine control unit with bracket ▶ Engine underride protection ▶ Underride protection on the driver's side	
Passenger compartment	▶ Footwell trim on the driver's and front passenger's side ▶ Side instrument panel trim on the driver's side ▶ Lower instrument panel trim on the driver's side ▶ Glove box ▶ Rear bench seat (see dismantling instructions) ▶ Open the tank fitting service lid	

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

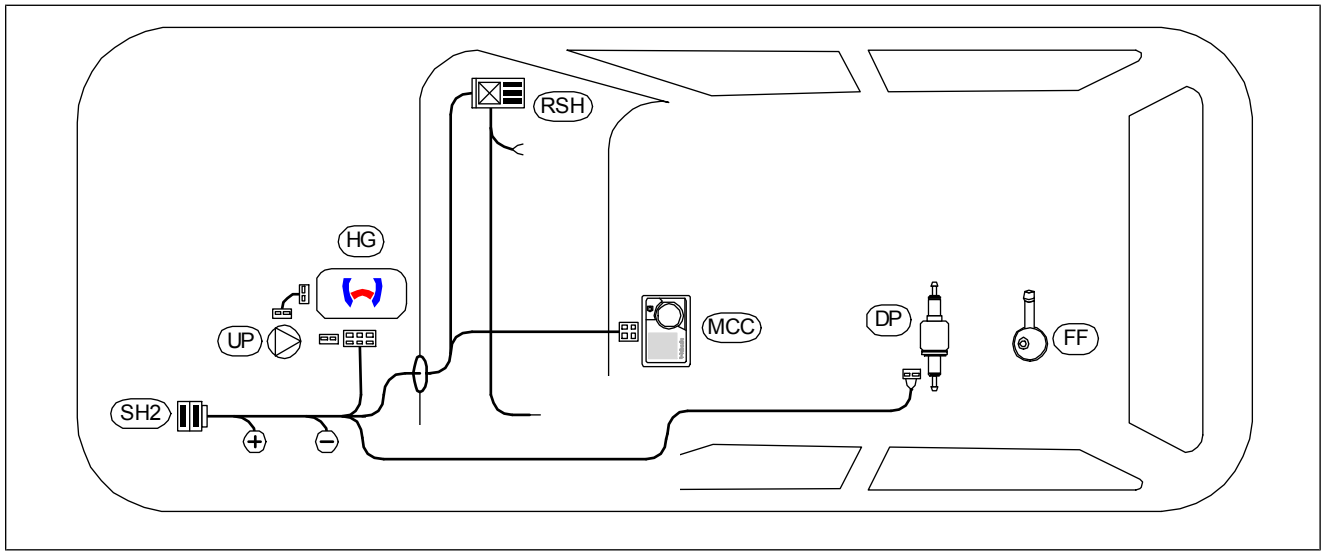


Fig. 1

Legend to installation overview

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

Heater installation location

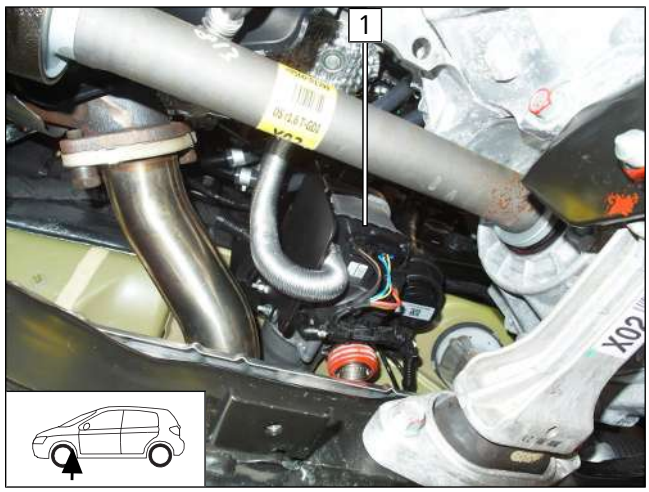


Fig. 2

1 Heater

7 Electrical system of engine compartment

Bending perforated bracket

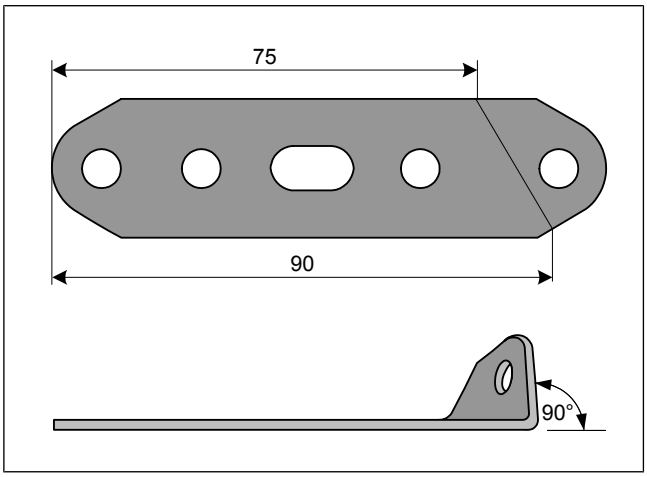


Fig. 3

Mounting perforated bracket and retaining plate of SH2

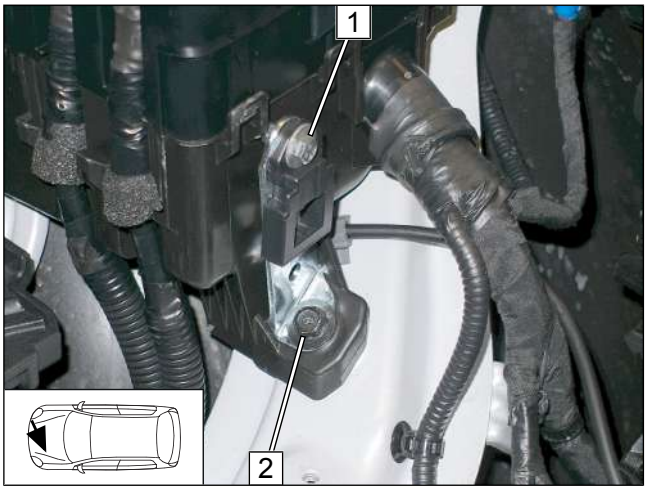


Fig. 4

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

2 Original vehicle bolt, perforated bracket

Mounting fuse holder

Fig. 5

1 Fuse F1/F2

Connecting positive wire

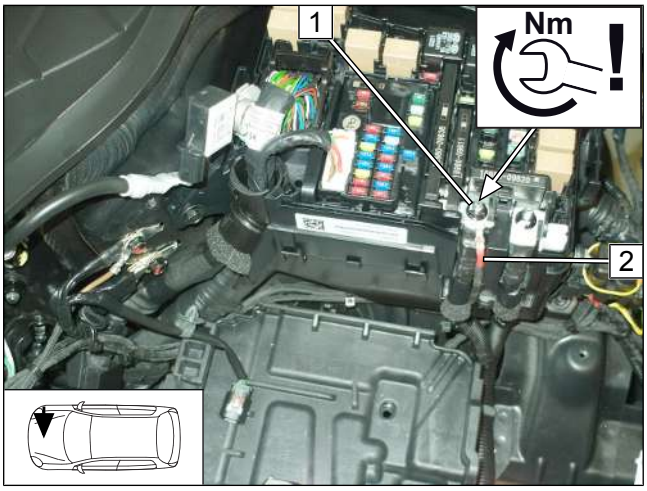


Fig. 6

DANGER

Fire hazard due to insufficient tightening torque

▶ Observe tightening torque

1 Positive support point

2 Positive wire

Connecting earth wire

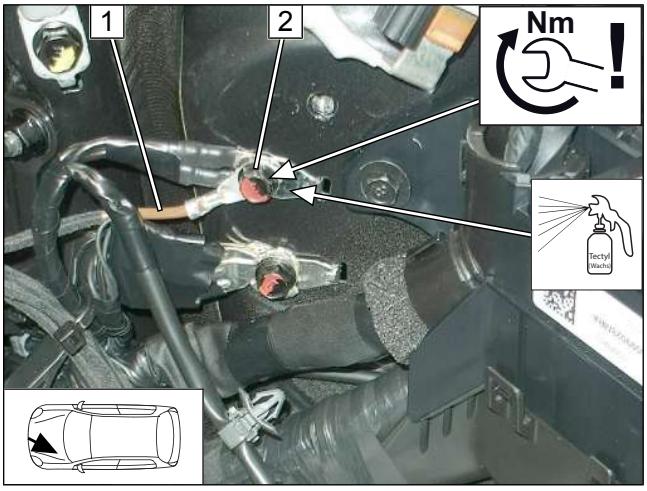


Fig. 7

DANGER

Fire hazard due to insufficient tightening torque

▶ Observe tightening torque

1 Earth wire

2 Earth support point

Routing wiring harnesses

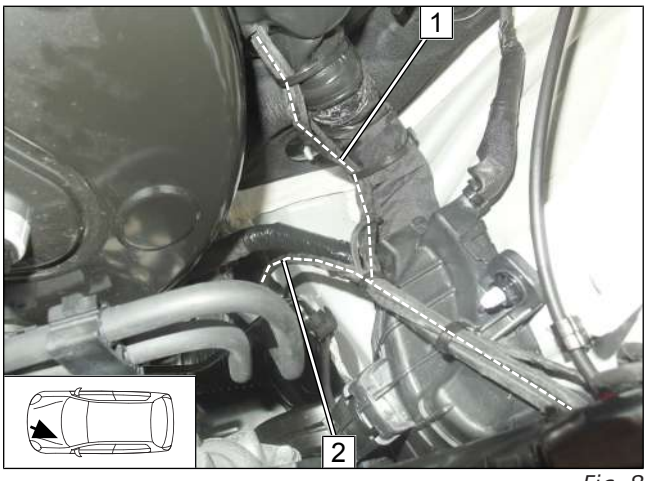


Fig. 8

▶ Route control element and passenger compartment wiring harness 1 on original vehicle wires to the passenger compartment pass through.

▶ Route heater wiring harness 2 on original vehicle lines to the heater installation location.

Preparing passenger compartment pass through

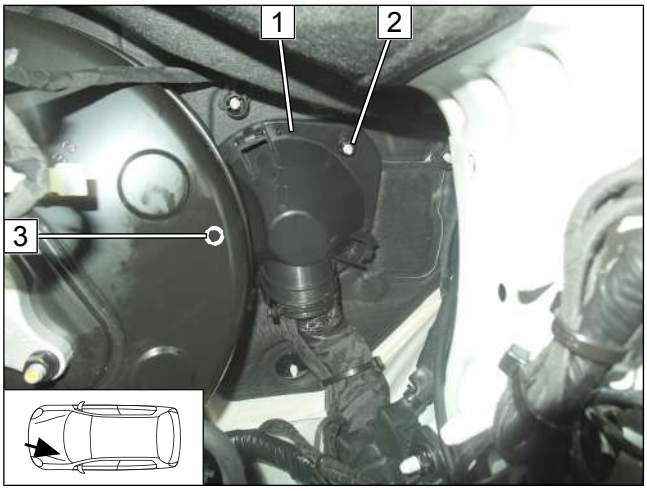


Fig. 9

▶ Remove wiring harness pass through cover 1.

2 Original vehicle nut

3 Original vehicle nut covered by brake booster

Passenger compartment wiring harness pass through

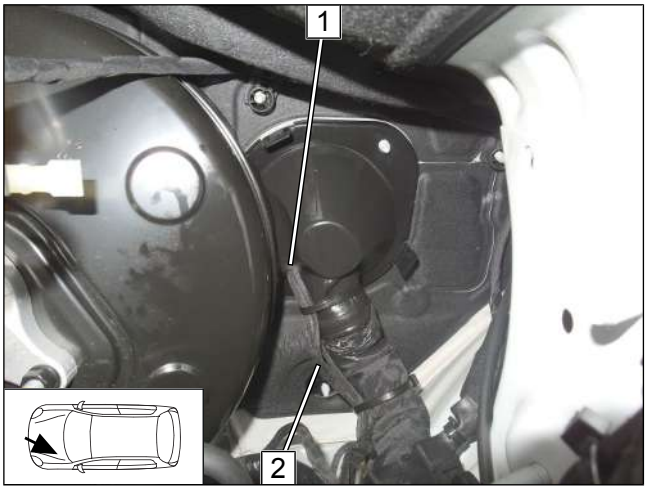


Fig. 10

1 Protective rubber plug

2 Passenger compartment and control element wiring harness

8 Mechanical system

8.1 Assigning 2-piece heater bracket

Bracket A

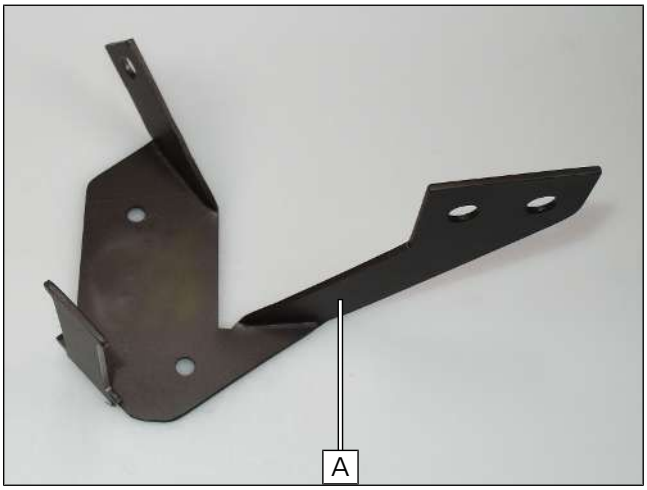


Fig. 11

Bracket B

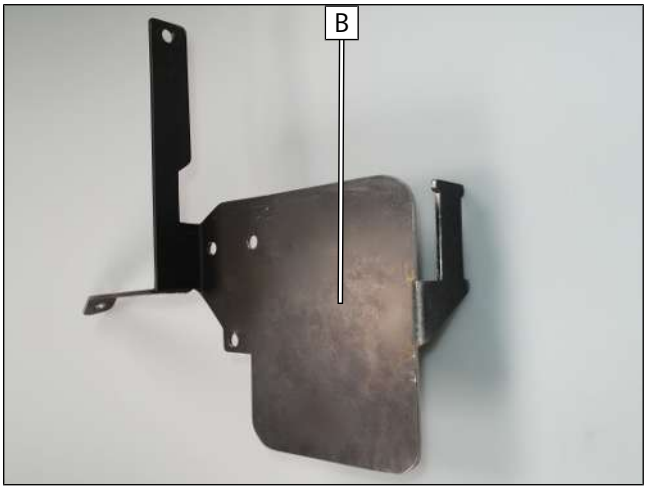


Fig. 12

8.2 Installation location preparation

Fastening points for bracket A

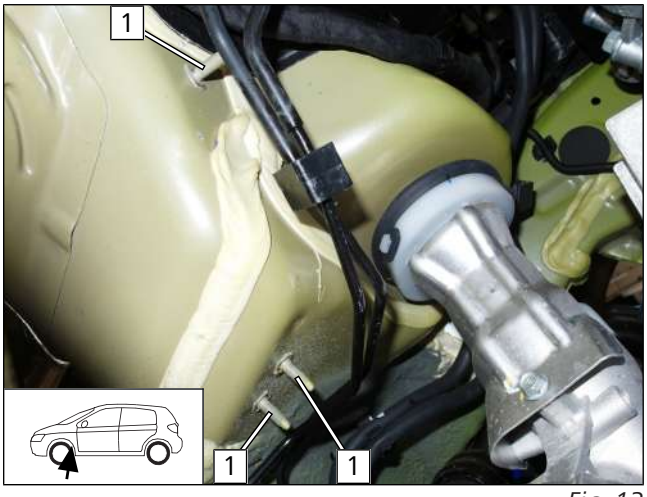


Fig. 13

1 Original vehicle stud bolt

Fastening points for bracket B

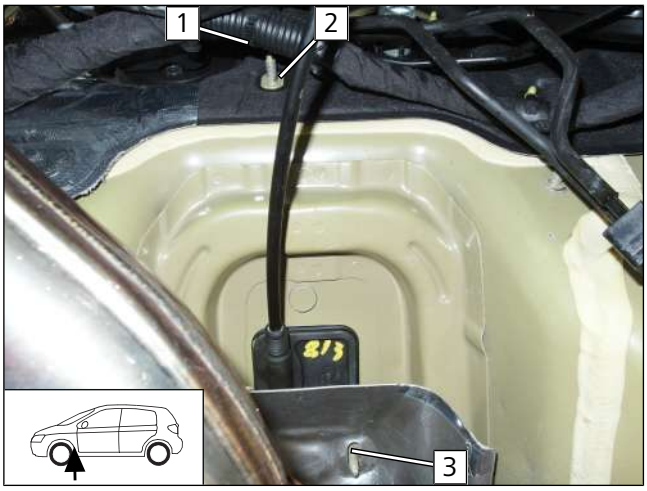


Fig. 14

- ▶ Pull wiring harness bracket 1 from stud bolt 2, it will be reattached later.
- ▶ Remove original vehicle flanged nut at pos. 3, it will be reused.

8.3 Premounting heater

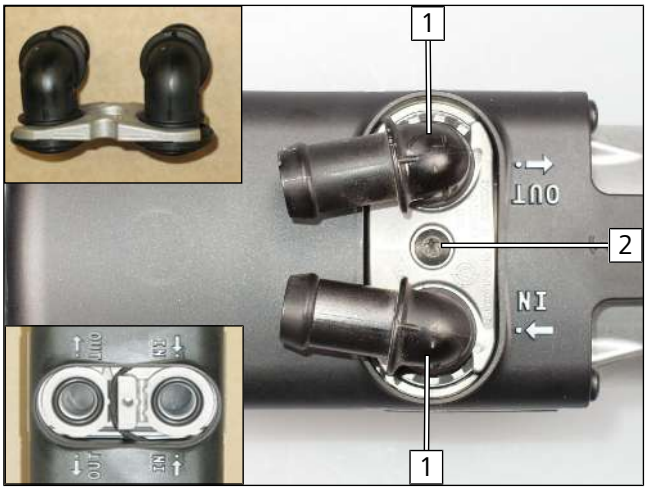


Fig. 15

Observe the general installation instructions of the heater.

1 Water connection piece 90°, sealing ring

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

Mounting fuel hose

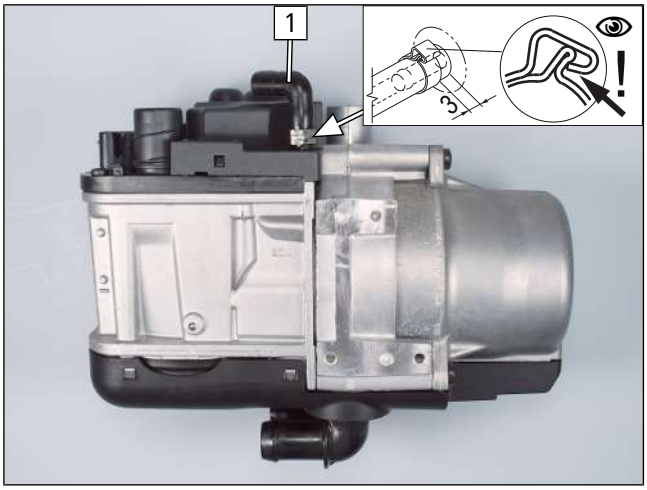


Fig. 16

- ▶ Connect the long side of 90° moulded hose 1 to the heater.

1 90° moulded hose, Ø10 clamp

Mounting stud bolt

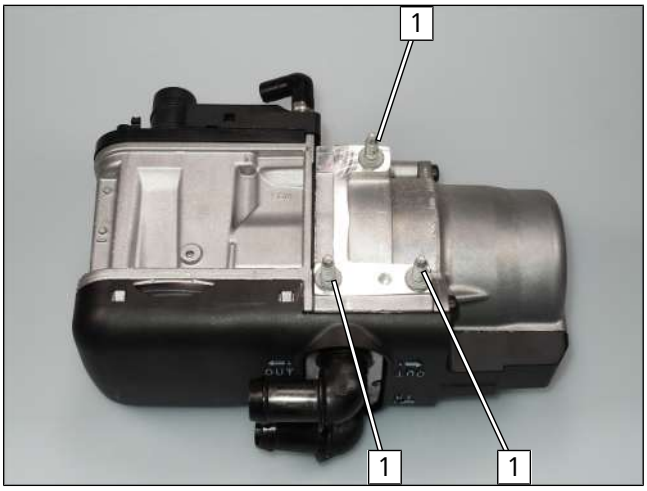


Fig. 17

1 Self-tapping M5/6 x15.5 stud bolt

Mounting bracket A

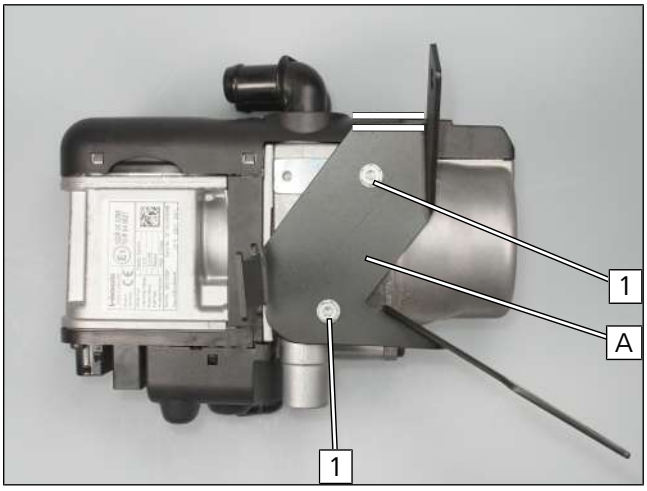


Fig. 18

▶ Align bracket A parallel to HG as shown.

1 5x13 self-tapping bolt

Mounting edge protection on bracket B

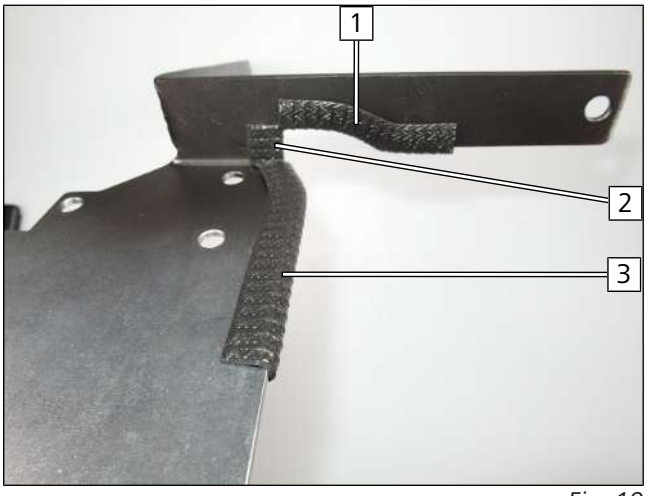


Fig. 19

1 70 lg. edge protection
2 15 lg. edge protection
3 100 lg. edge protection

8.4 Heater installation

Mounting bracket A

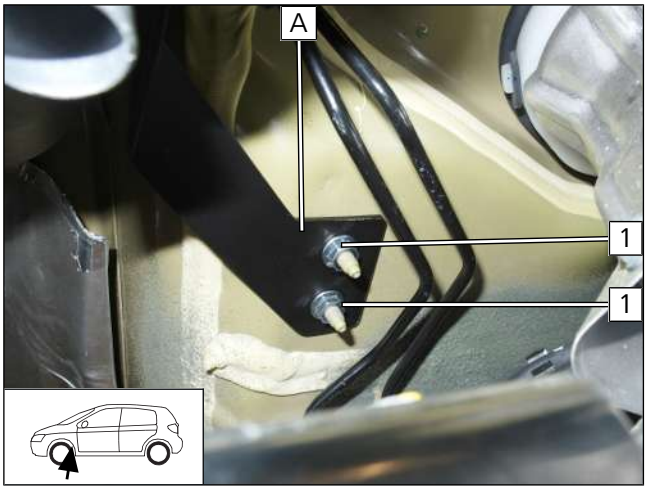


Fig. 20

Observe the general installation instructions of the heater.

▶ Insert the HG from below into the engine compartment and mount the bracket.

Mount all screw connections loosely.

1 Original vehicle stud bolt, bracket A, flanged nut

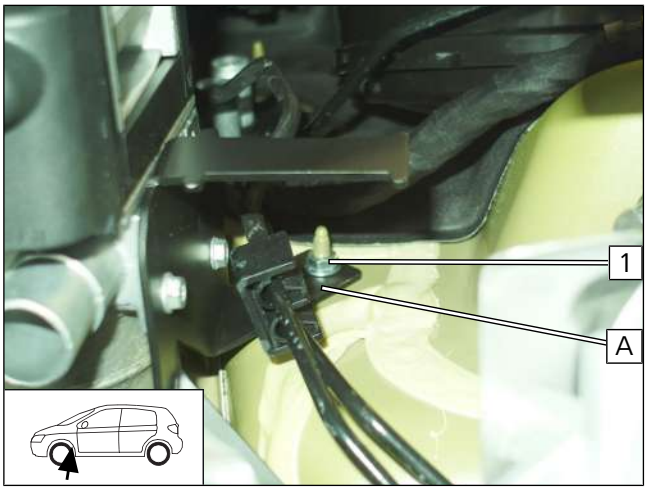


Fig. 21

1 Original vehicle stud bolt, bracket A, flanged nut

Mounting bracket B

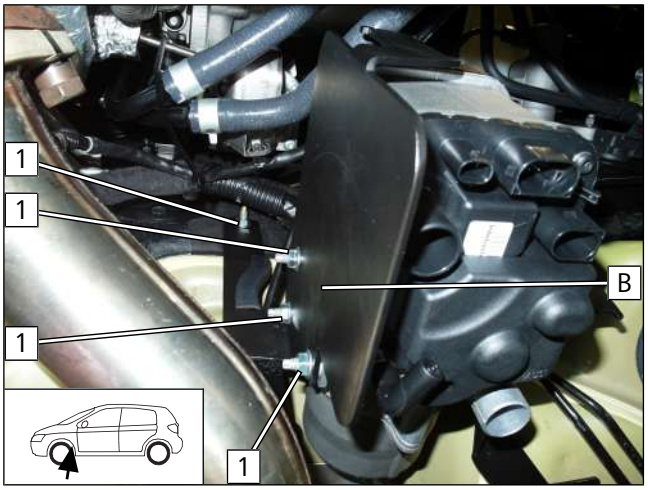


Fig. 22

1 Stud bolts on HG, bracket B, flanged nut

Fig. 23

Align HG and tighten all screw connections.

1 Original vehicle stud bolt, spacer (5), bracket B, flanged nut

Mounting heater wiring harness

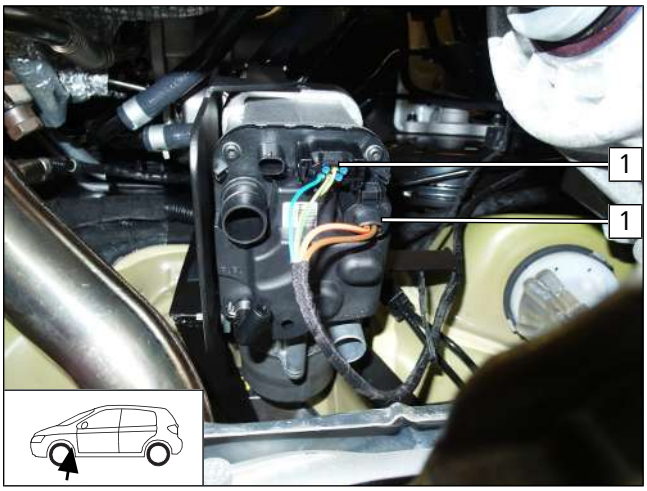


Fig. 24

1 Heater wiring harness connector

9 Fuel

DANGER

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

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

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

Danger of damage to components

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

Dismantling fuel pump connector X7

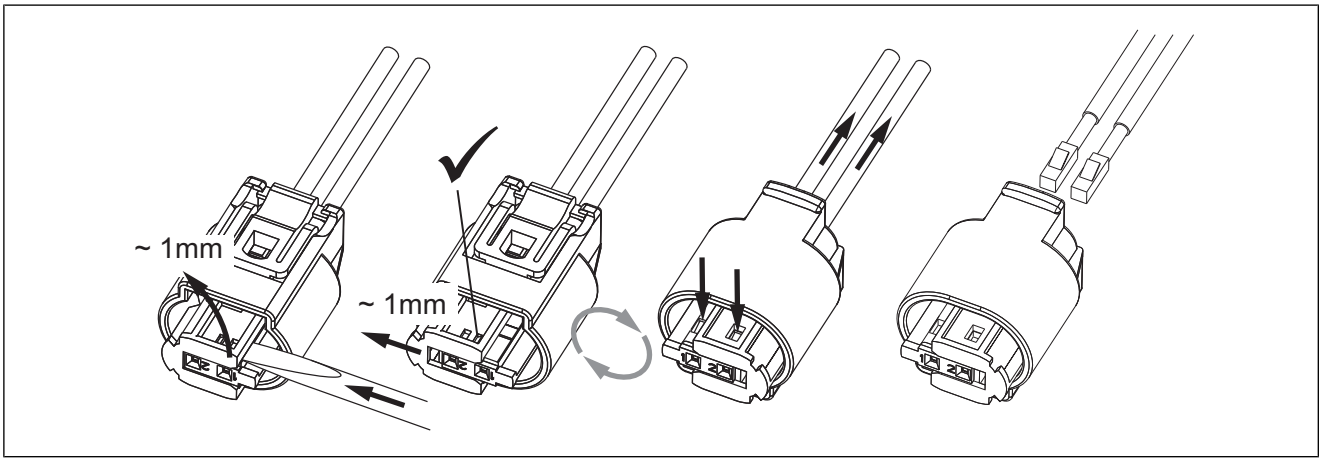


Fig. 25

9.1 Routing fuel line

Connection to heater

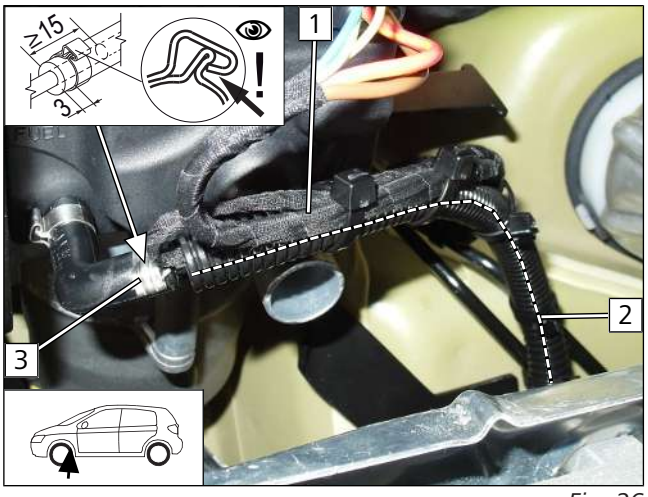


Fig. 26

- ▶ Draw fuel line and fuel pump wiring harness into Ø10 corrugated tube [2].
- ▶ Route corrugated tube [2] with fuel line and fuel pump wiring harness in engine compartment and attach together with HG wiring harness [1] to original vehicle brake lines using cable ties.

[3] Ø10 clamp

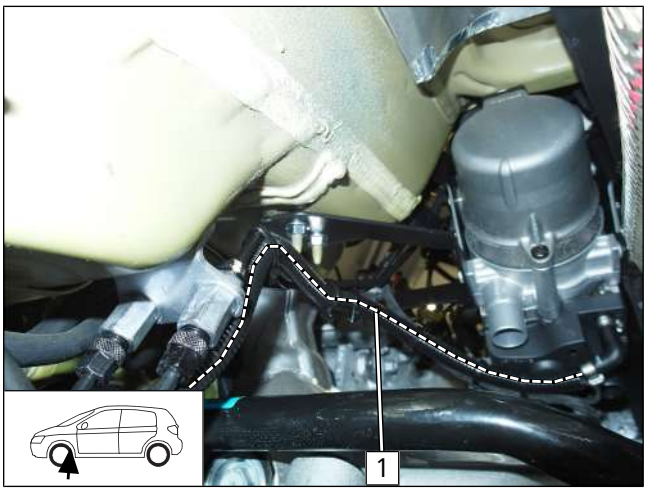


Fig. 27

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

Fig. 28

▶ Route corrugated tube **1** with fuel line and fuel pump wiring harness to the underbody and attach to original vehicle lines using cable ties.

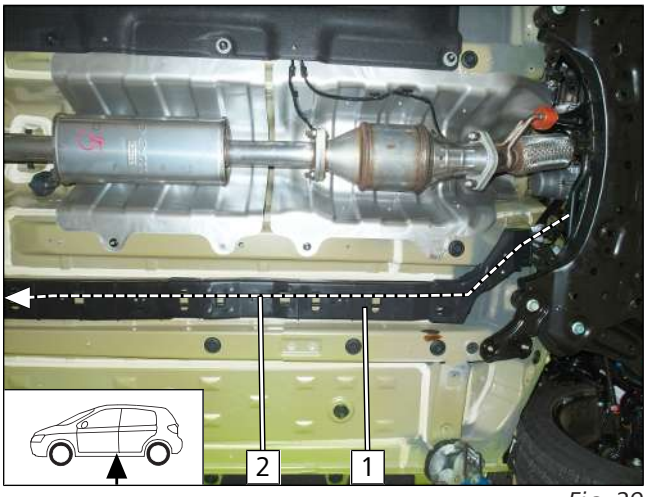


Fig. 29

▶ Remove cover **1**.

▶ Route fuel line and fuel pump wiring harness **2** on the underbody along original vehicle lines to the fuel pump installation location and fasten with cable ties.

Shortening perforated bracket

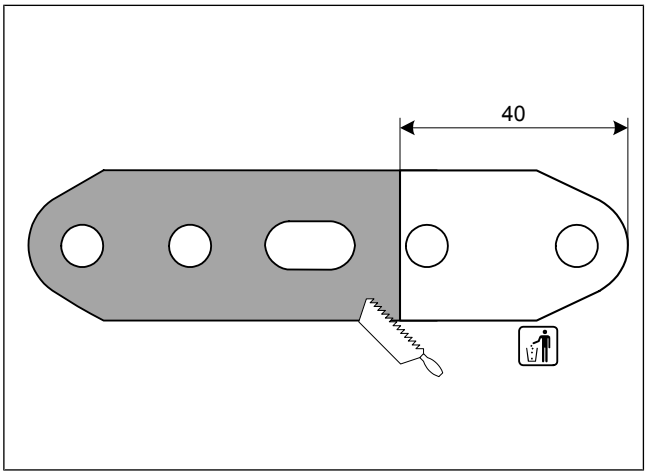


Fig. 30

Premounting fuel pump

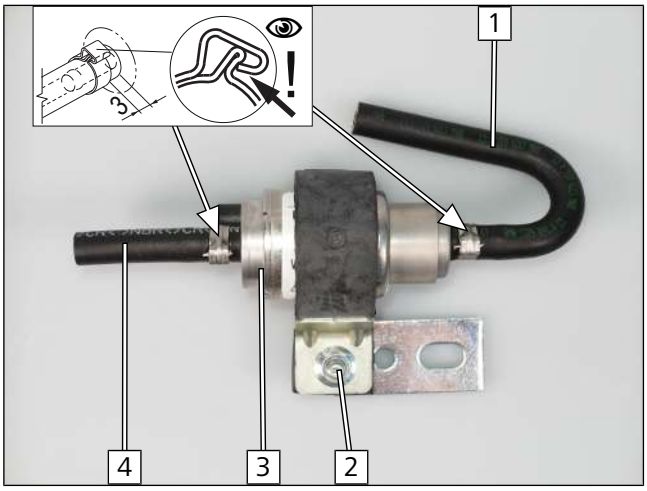


Fig. 31

1 180° moulded hose, Ø10 clamp

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

3 Fuel pump

4 Hose section, Ø10 clamp

Mounting fuel pump

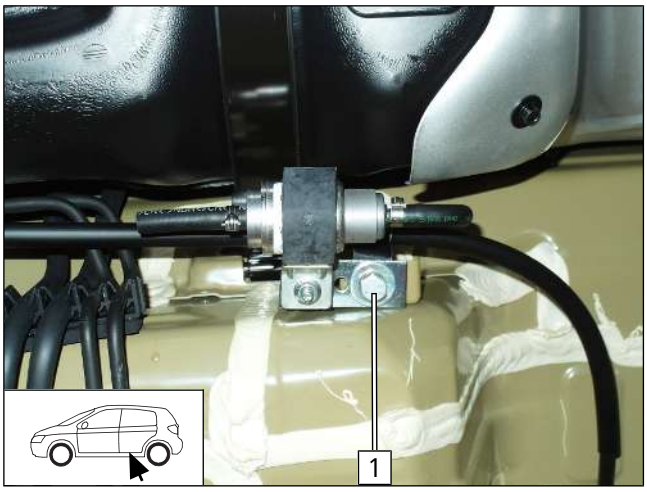


Fig. 32

▶ Remove and discard original vehicle bolt at position **1**.

1 M8x20 bolt, spring lock washer, large diameter washer, original vehicle threaded hole

Assembling fuel pump connector X7

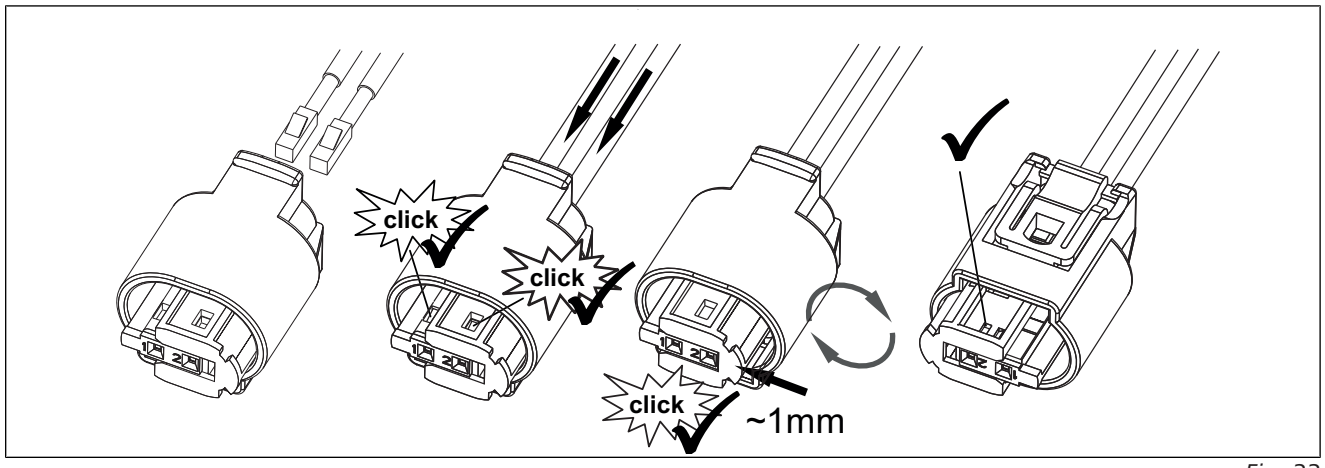


Fig. 33

Connecting fuel pump

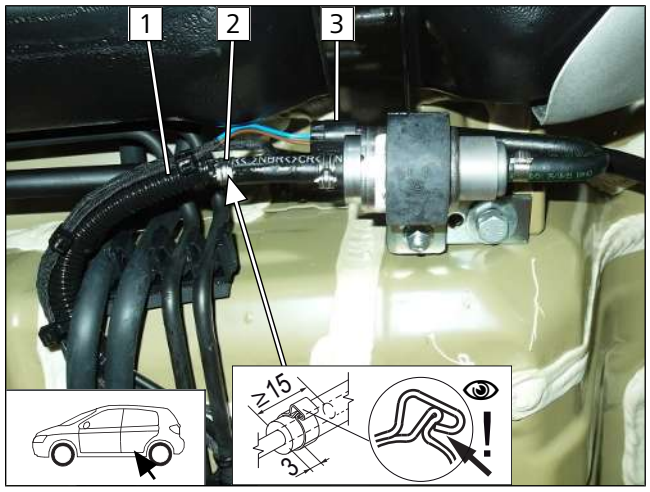


Fig. 34

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

9.2 Installing FuelFix

Removing rear seat

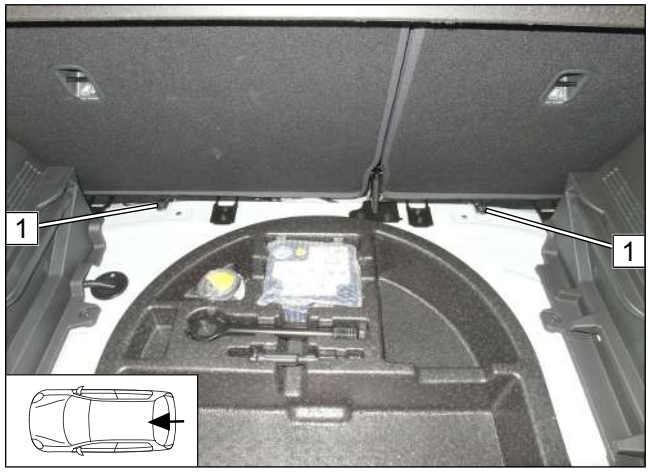


Fig. 35

▶ Unclip rear seat in the front area and remove original vehicle bolt at position 1.

Work steps F1, F2

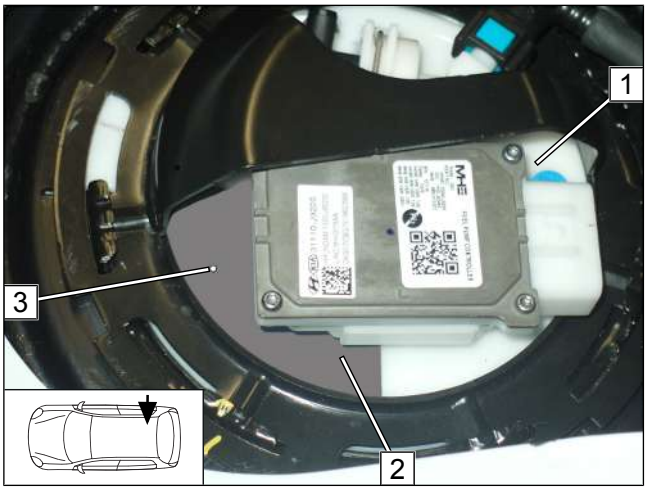


Fig. 36

Observe the installation instructions of the tank extracting device.

1 Tank fitting

2 Cut out and position drilling template as shown in fig..

3 Copying hole pattern

Work step F3

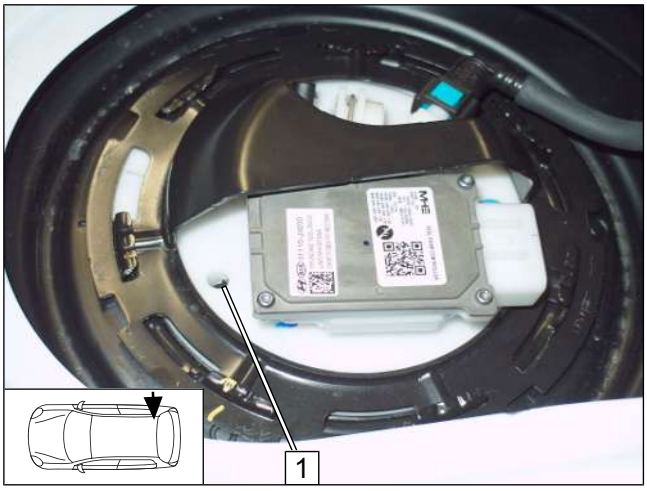


Fig. 37

DANGER

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

1 Hole made with provided drill

Work steps F4, F5

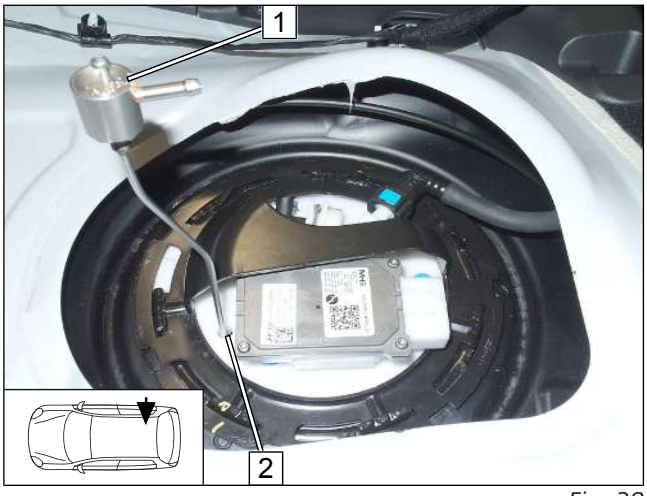


Fig. 38

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

Fig. 39

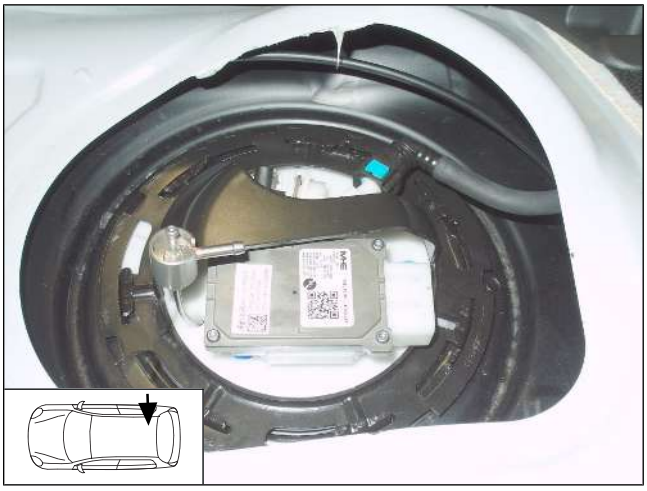


Fig. 40

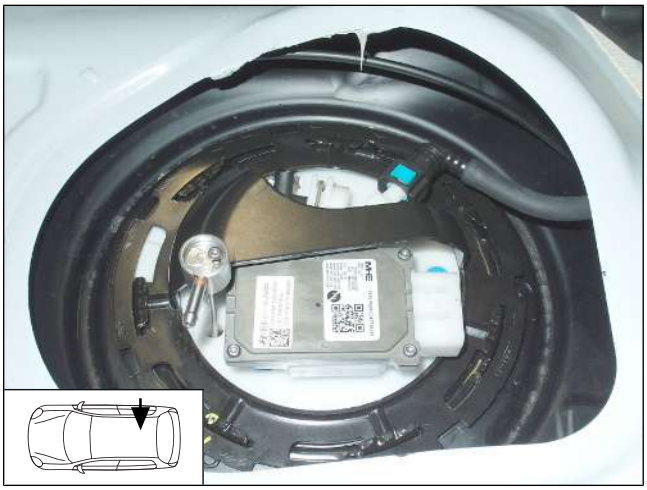


Fig. 41

Work steps F5.3, F5.4

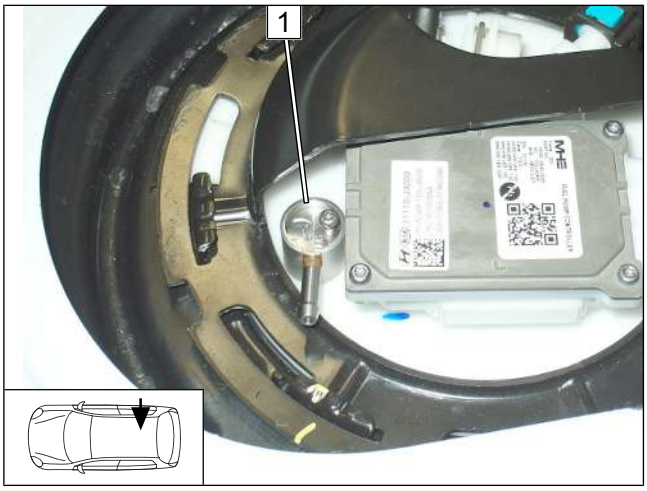


Fig. 42

▶ Align FuelFix [1] as shown.

Work step F6

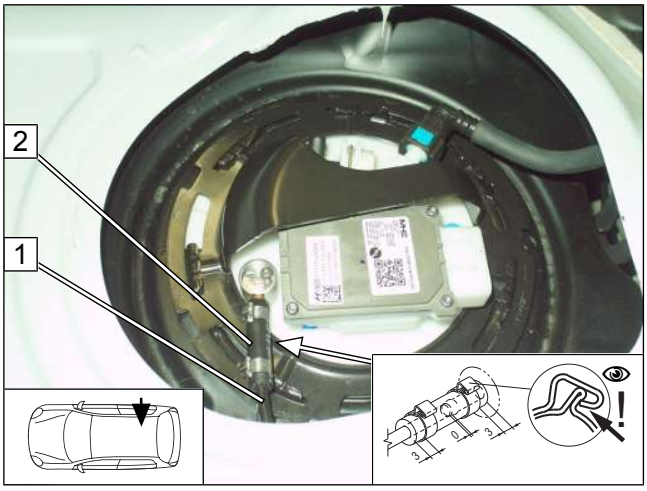


Fig. 43

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

Work step F7

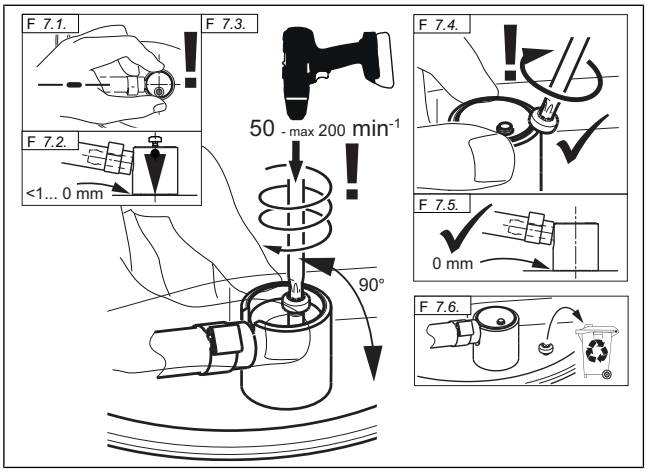


Fig. 44

DANGER

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

Work step F8

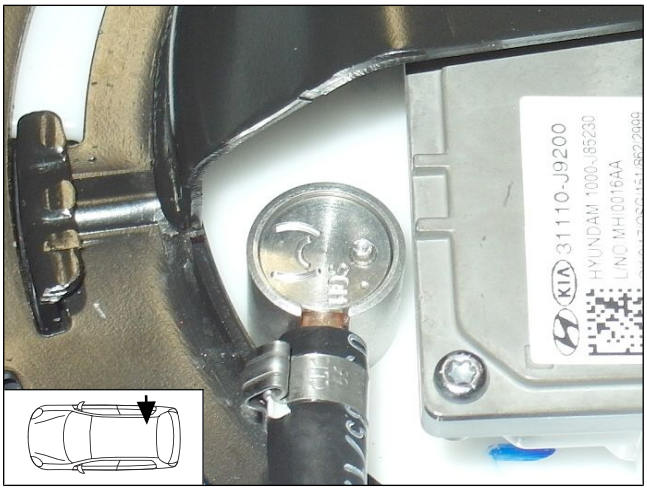


Fig. 45

Securing fuel line

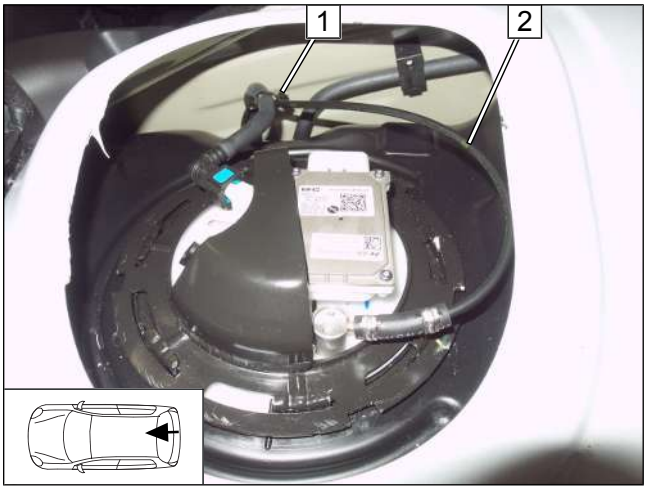


Fig. 46

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

9.3 Fuel pump connection

Connecting fuel line of FuelFix

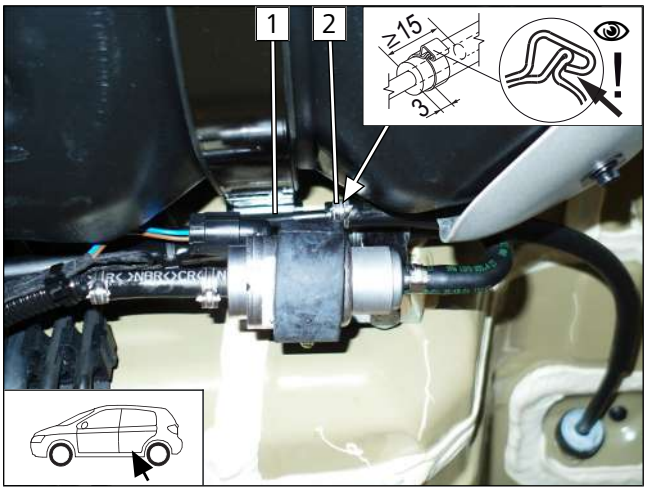


Fig. 47

1 Fuel line of FuelFix
2 Ø10 clamp

10 Coolant

10.1 Hose routing diagram

'Inline' coolant circuit

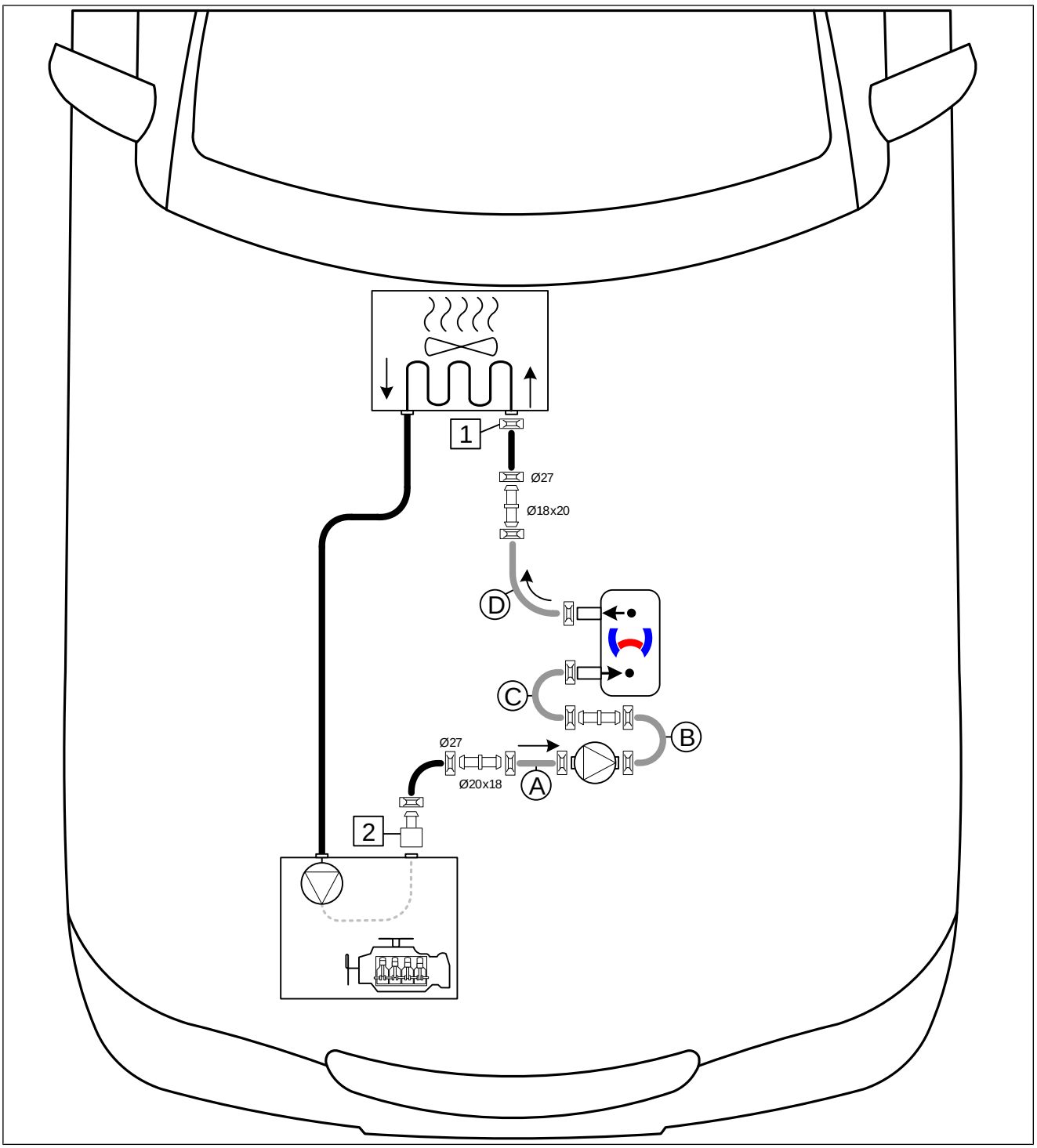


Fig. 48

All spring clips without a specific designation = Ø25

All connecting pipes without a specific designation = Ø18x18

1 Original vehicle spring clip; 2 Original vehicle quick-release coupling with spring clip

10.2 Coolant circuit installation

Removing original vehicle hose

Fig. 49

1 Original vehicle spring clip for heat exchanger inlet
2 Engine outlet / heat exchanger inlet hose
3 Original vehicle engine outlet quick-release coupling

Cutting point

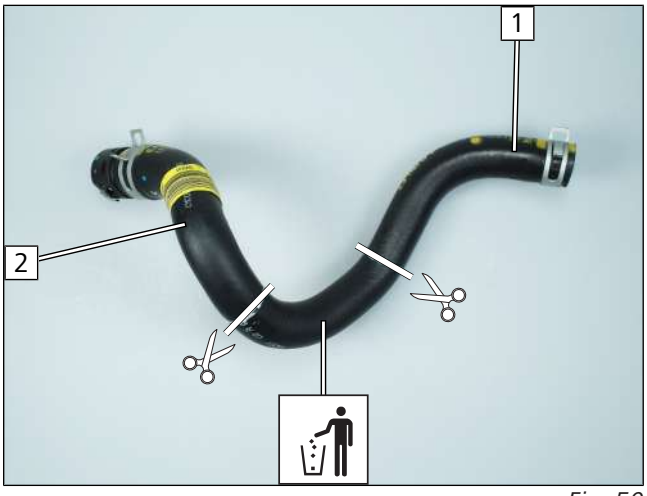


Fig. 50

1 Heat exchanger inlet hose section
2 Engine outlet hose section

Cutting hoses to length

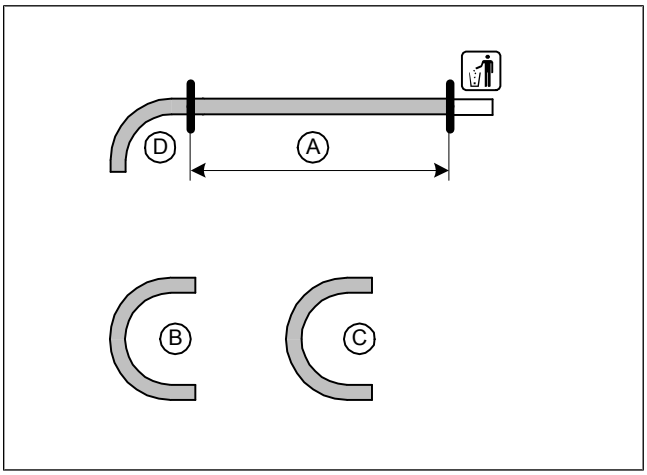


Fig. 51

A	120
B	180° moulded hose
C	180° moulded hose
D	90°

Preparing hose section of engine outlet

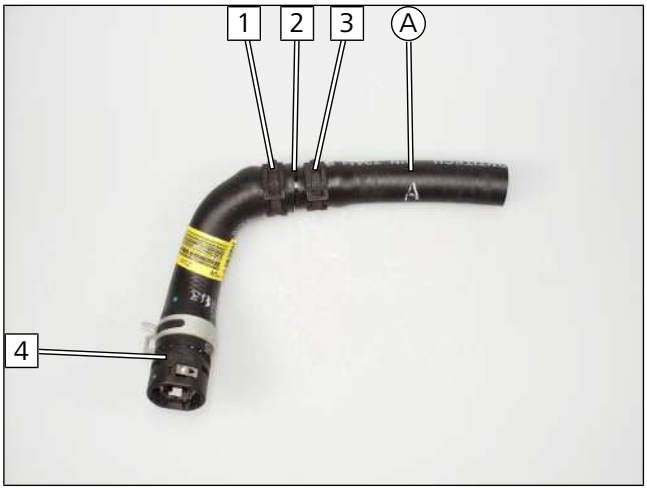


Fig. 52

1 Ø27 spring clip
2 Ø20x18 connecting pipe
3 Ø25 spring clip
4 Quick-release coupling of engine outlet connection

Premounting coolant pump

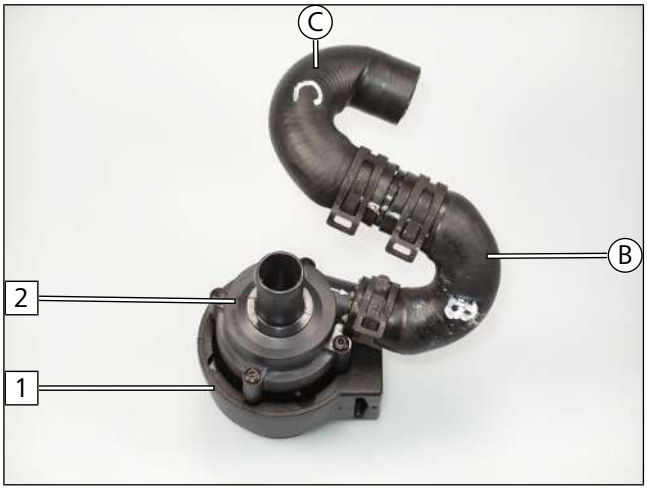


Fig. 53

1 Coolant pump mount
2 Coolant pump

Mounting hose Ⓐ on coolant pump

Fig. 54

1 Coolant pump

Mounting coolant pump

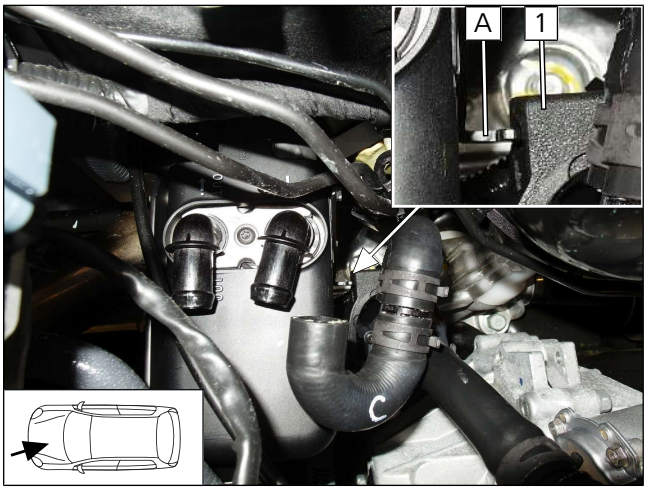


Fig. 55

▶ Push coolant pump mount 1 onto bracket A.

Connecting hose Ⓒ to HG

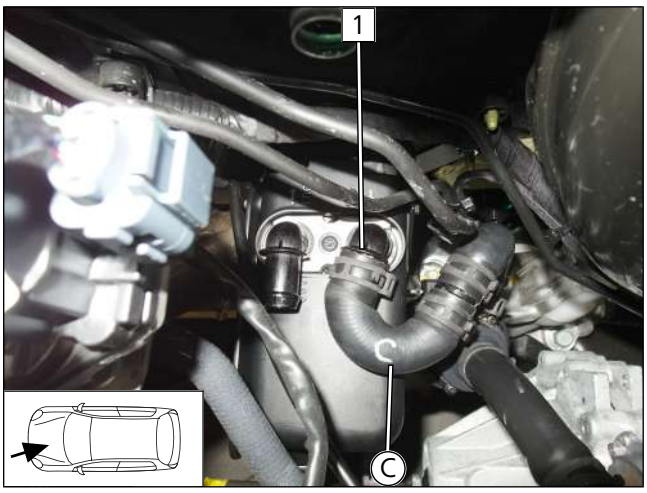


Fig. 56

1 Heater inlet connection piece 'HG/IN'

Connection to engine outlet

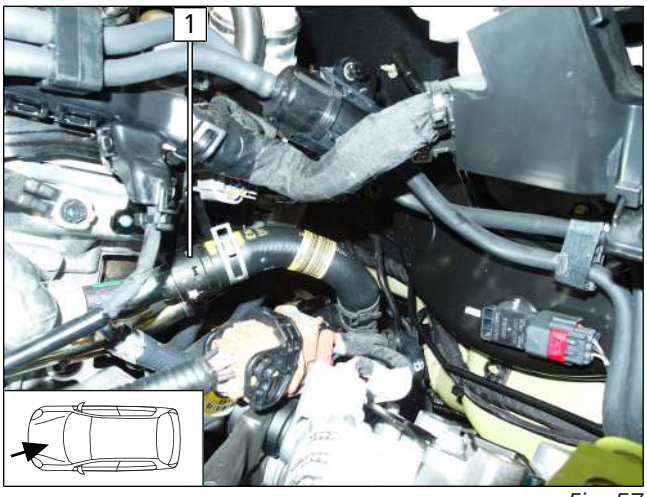


Fig. 57

1 Quick-release coupling of engine outlet connection

Connect coolant pump wiring harness

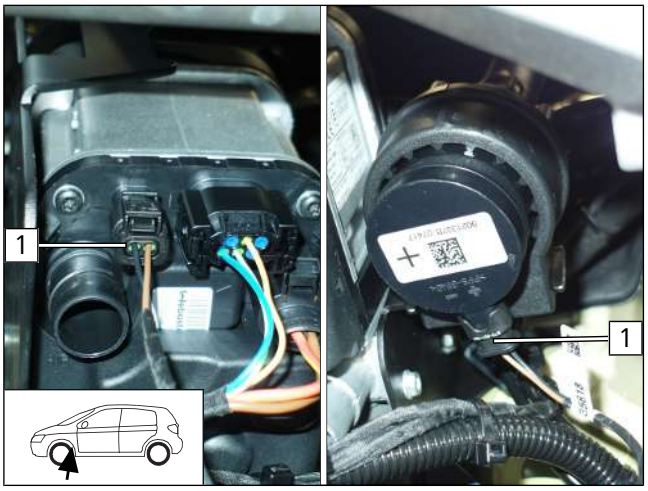


Fig. 58

1 Coolant pump wiring harness connector

Premounting hose Ⓓ

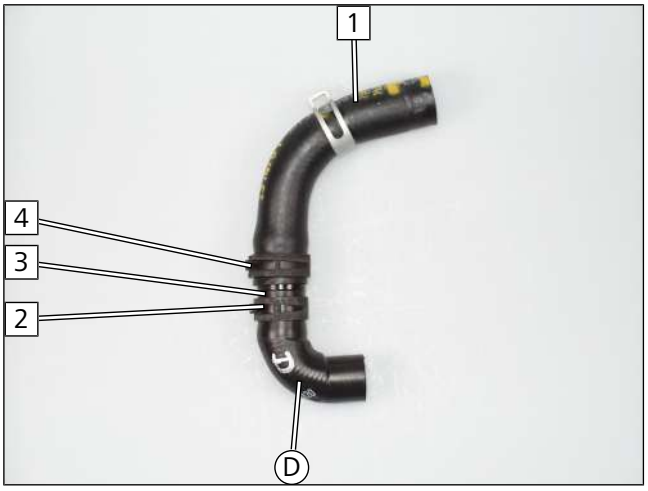


Fig. 59

1 Heat exchanger inlet hose section
2 Ø25 spring clip
3 Ø20x18 connecting pipe
4 Ø27 spring clip

Connecting hose Ⓓ to HG

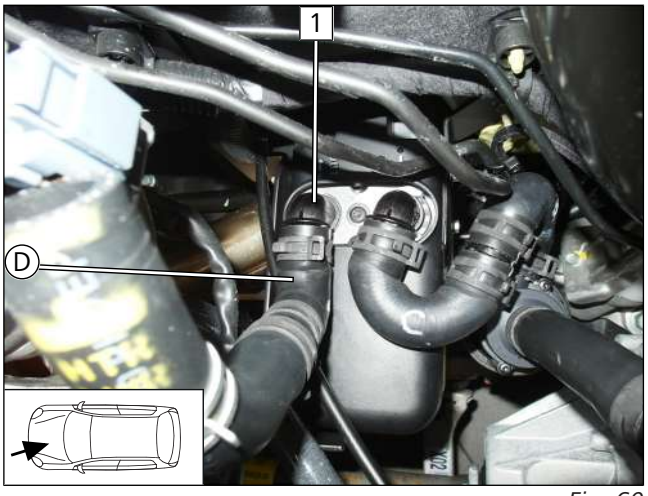


Fig. 60

1 Heater outlet connection piece 'HG/OUT'

Connection to heat exchanger inlet

Fig. 61

For a better view, the heat exchanger outlet / engine inlet hose is removed.

1 Heat exchanger inlet hose section with original vehicle spring clip

Mounting hose bracket

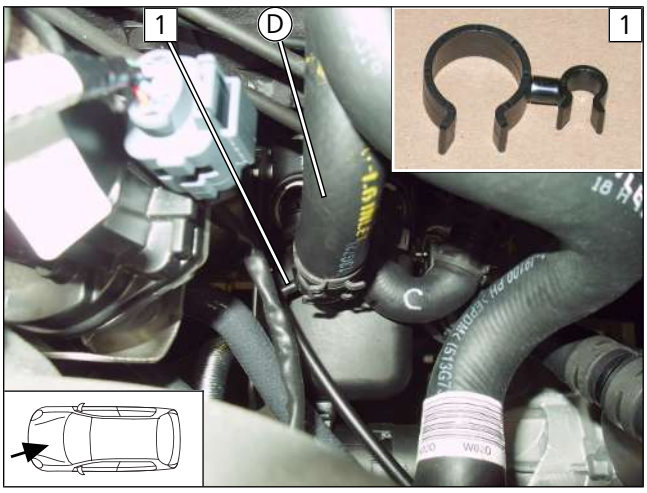


Fig. 62

1 Hose bracket between hose (D) and gearshift cable

11 Exhaust

Cutting exhaust pipe to length

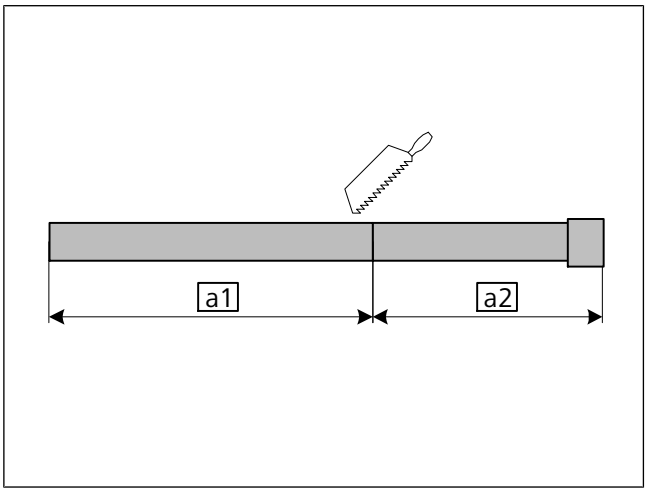


Fig. 63

a1	250
a2	150

Preparing perforated bracket

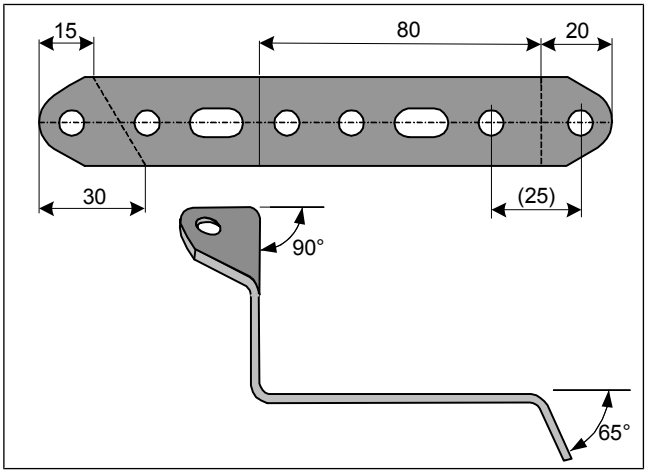


Fig. 64

Premounting exhaust silencer

Fig. 65

1 M6x16 bolt, spring lockwasher, perforated bracket, exhaust silencer

Mounting exhaust silencer

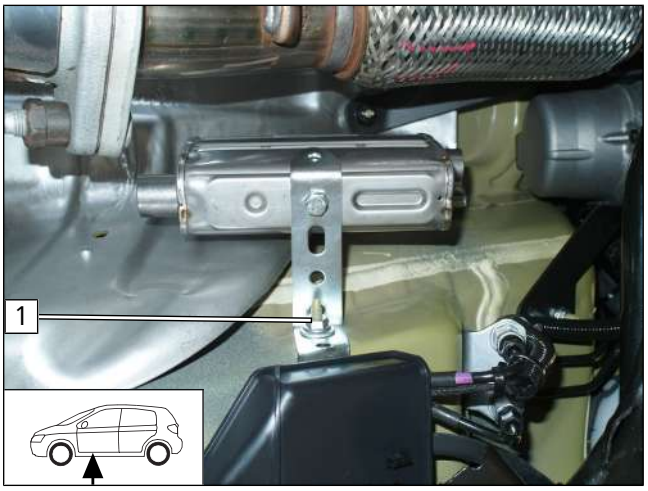


Fig. 66

1 Original vehicle stud bolt, perforated bracket, large diameter washer, M6 flanged nut

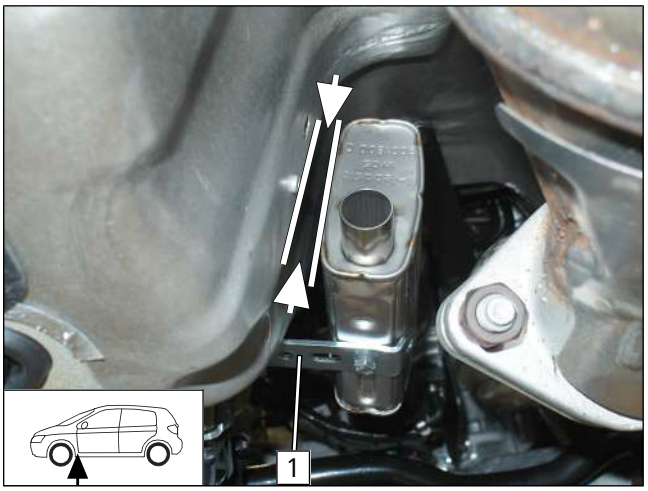


Fig. 67

Danger of damage to components

- Ensure sufficient distance to neighbouring components, correct by bending perforated bracket 1 if necessary.

Mounting exhaust pipe a1

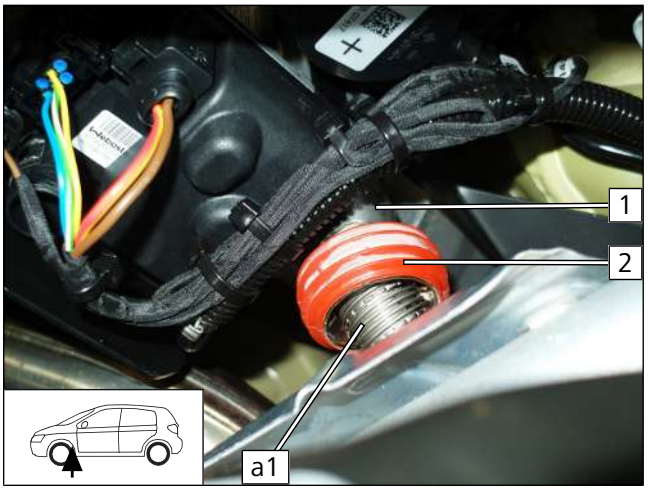


Fig. 68

- Install spacer bracket 2 before mounting a1 and position as close as possible to p-clamp 1.

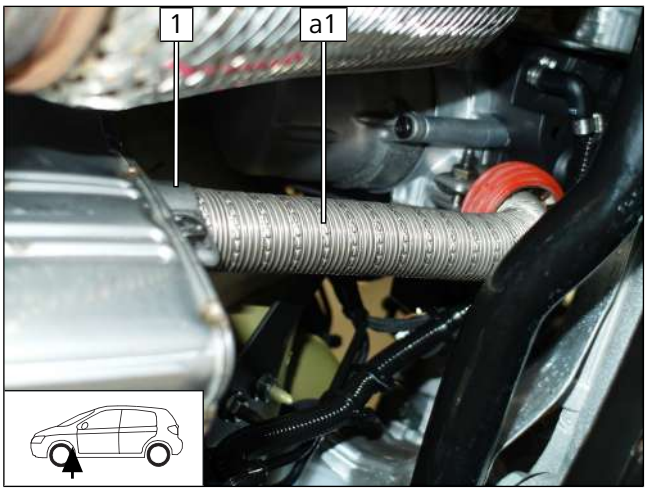


Fig. 69

1 Hose clamp

Mounting exhaust pipe **a2**

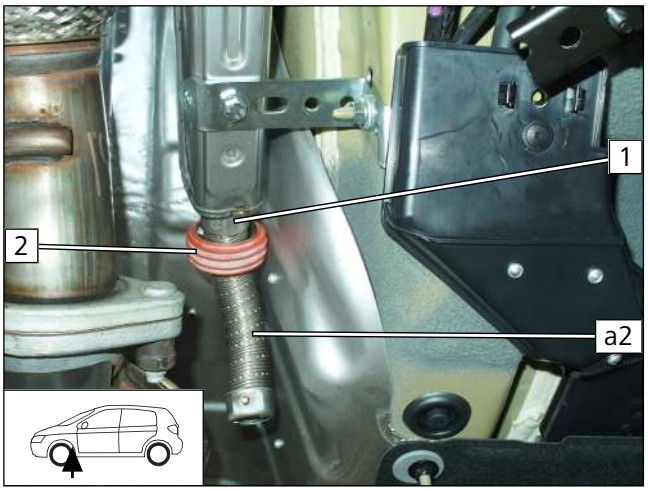


Fig. 70

1 Hose clamp

2 Align spacer bracket, position on heat shield plate

12 Combustion air

Preparing combustion air intake silencer

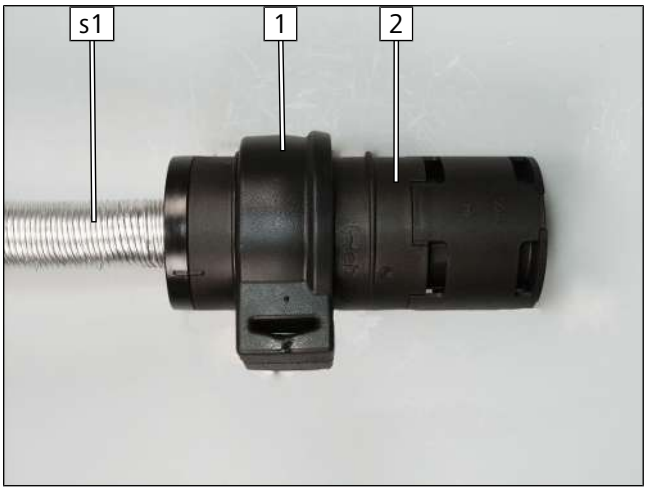


Fig. 71

1 Combustion air intake silencer mount
2 Combustion air intake silencer
s1 Combustion air pipe

Mounting combustion air pipe **s1**

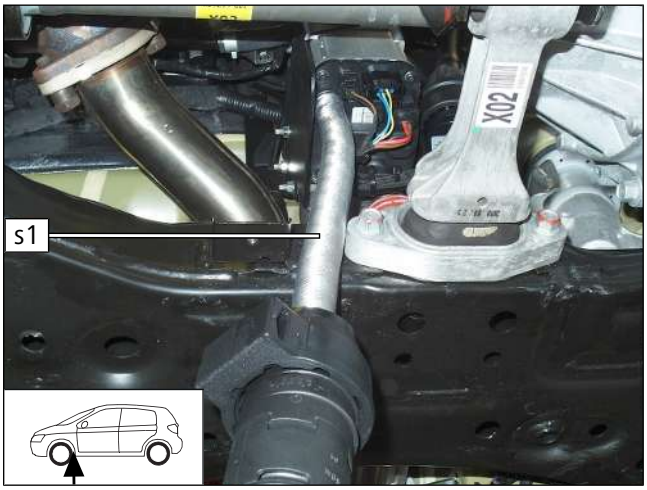


Fig. 72

Observe the installation instructions of the combustion air intake silencer.

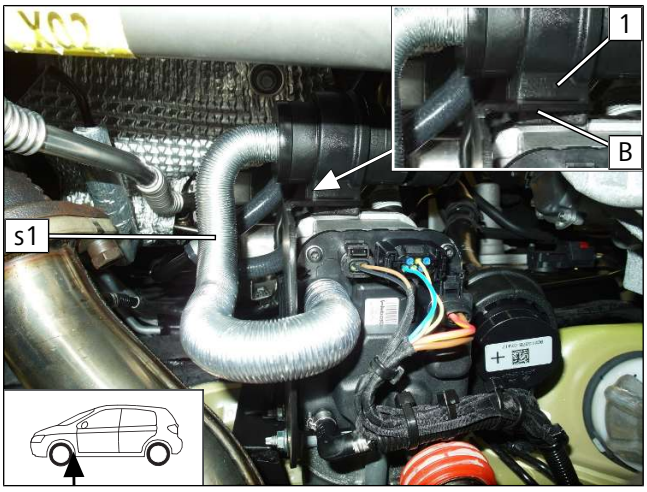


Fig. 73

- ▶ Push combustion air silencer mount **1** onto bracket B.
- ▶ Align combustion air pipe **s1** as shown.

13 Electrical system of passenger compartment

13.1 Mounting cold start system

Integrate the cold start system as per the separate installation documentation 'Cold start for Hyundai Kona petrol'.

13.2 Electrical system preparation

Assigning wires

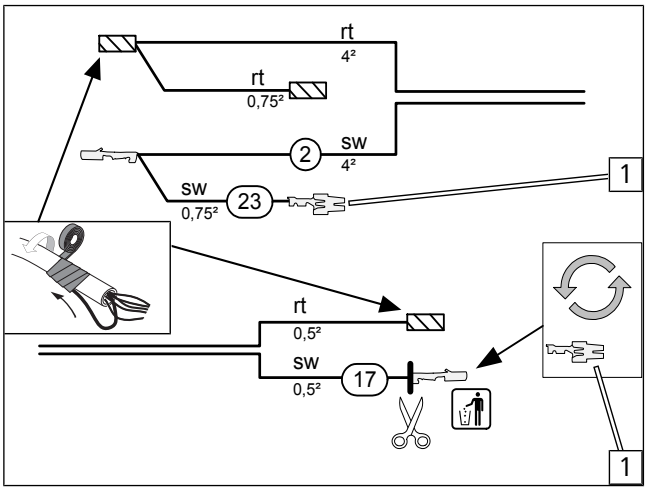


Fig. 74

Wire sections retain their numbering in the entire document.

1 Flat spring contact
2 Black (sw) wire of fan wiring harness
17 Black (sw) wire of power supply wiring harness

Connecting wires to RSH

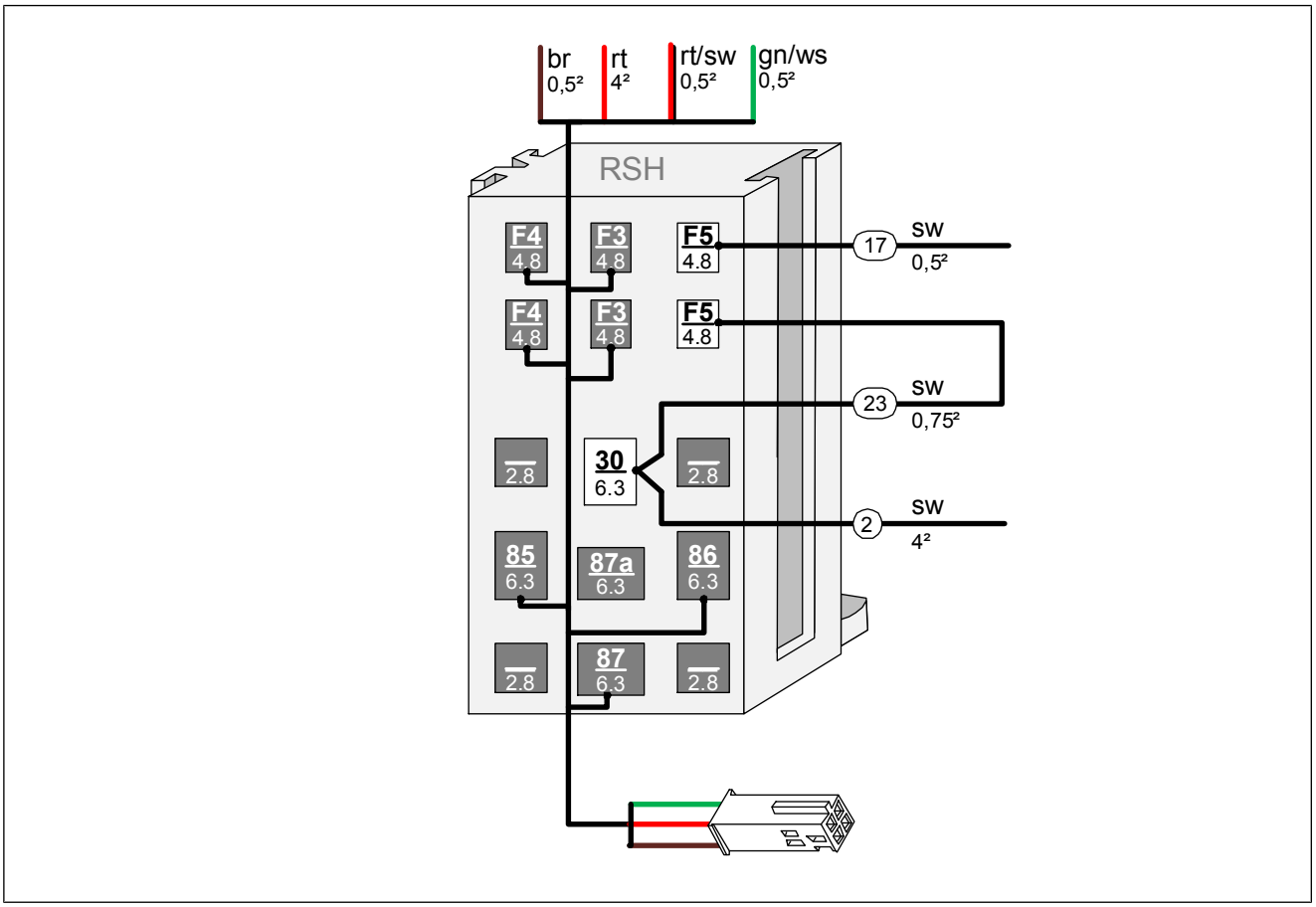


Fig. 75

Preparing angle bracket

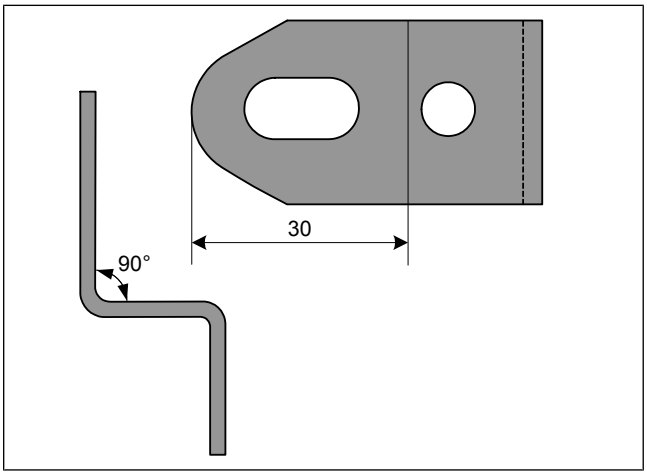


Fig. 76

Premounting RSH

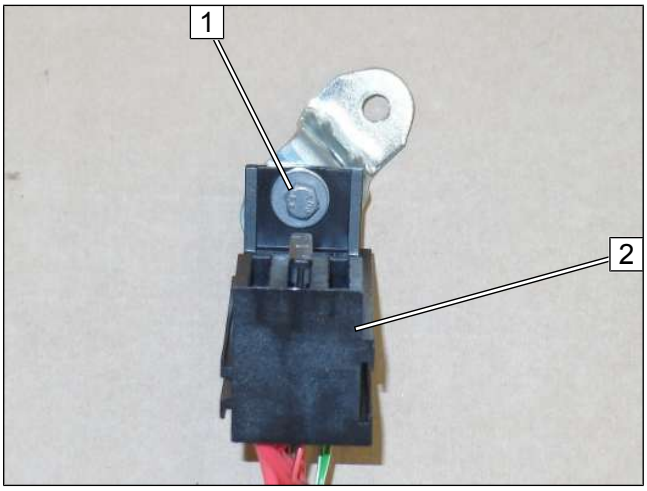


Fig. 77

1 M5x16 bolt, large diameter washer, RSH, angle bracket, large diameter washer, nut

2 RSH

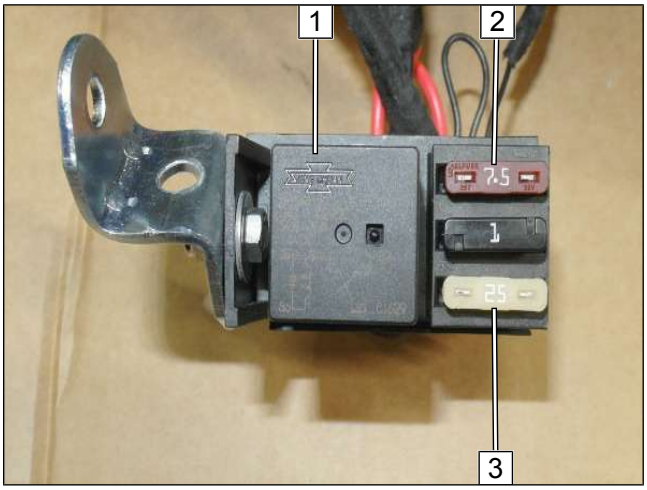


Fig. 78

1 Relay K1

2 7.5A fuse F5

3 25A fuse F4

13.3 Wiring diagram

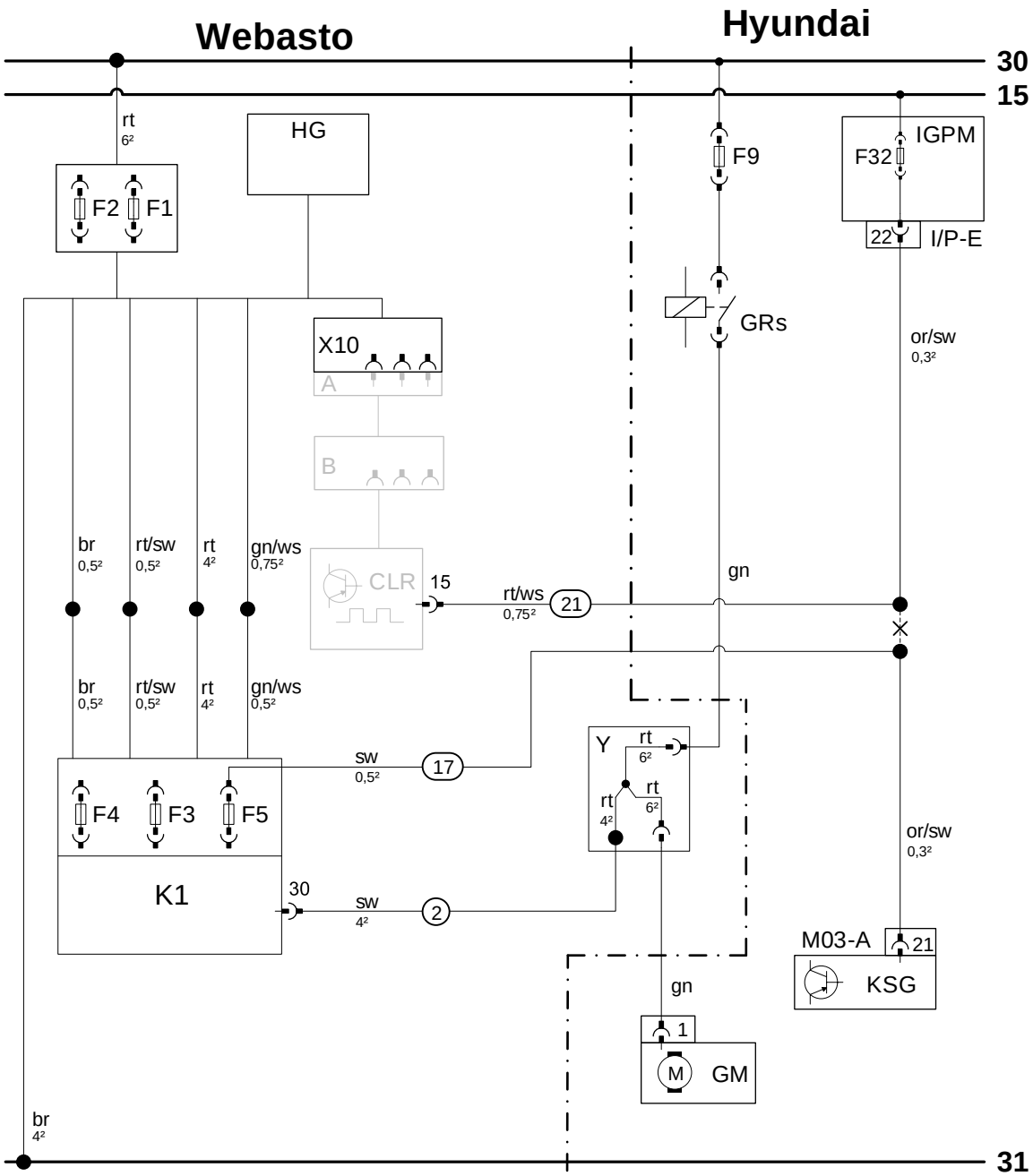


Fig. 79

Legend to wiring diagram

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

Vehicle components		Symbols	
Abbreviation	Component	Abbreviation	Explanation
IGPM	Fuse and relay box of passenger compartment	X	Cutting point
F32	Fuse 7.5A	Y	Power adapter
I/P-E	32-pin IGPM connector		
F9	Fuse 40A		
GRs	Fan relay		
KSG	Air-conditioning control unit		
M03-A	40-pin KSG connector		
GM	Fan motor		

Webasto components		Cable colours	
Abbreviation	Component	Abbreviation	Colour
A	Male plug for CLR module wiring harness	bg	beige
B	Female plug for CLR module wiring harness	bl	blue
C	Male plug for adapter wiring harness	br	brown
D	Female plug for adapter wiring harness	dbl	dark blue
E	Male plug for Plug&Play wiring harness	dgn	dark green
F	Female plug for Plug&Play wiring harness	ge	yellow
CCL GW	CAN CAN LIN Gateway	gn	green
CL GW	CAN LIN Gateway	gr	grey
CLR	Cold start module	hbl	light blue
D1	Diode	hgn	light green
D2	Diode group	or	orange
F0	Additional fuse for power supply	pk	pink
F1	Heater main fuse	rt	red
F2	Passenger compartment fan controller main fuse	sw	black
F3	Control element fuse	vi	violet
F4	Fan controller fuse	ws	white
F5	Additional fuse		
HG	Heater TT-Evo		
K1	Relay K1		
K2	Relay K2		
K3	Relay K3		
LIN GW	LIN Gateway		
PWM GW	Pulse width modulator gateway		
RSH	Relay and fuse holder of passenger compartment		
RTD	Temperature sensor		
X10	Female plug for control element		
Y	Power adapter		

13.4 Fan controller

Mounting RSH passenger compartment

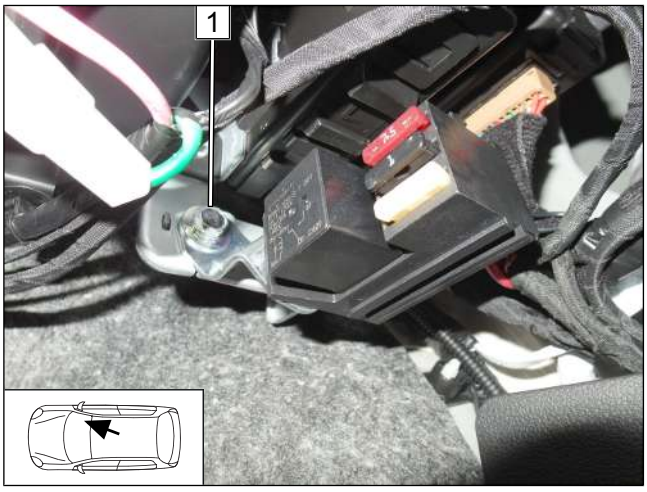


Fig. 80

1 Original vehicle bolt

Connecting same colour wires of wiring harnesses

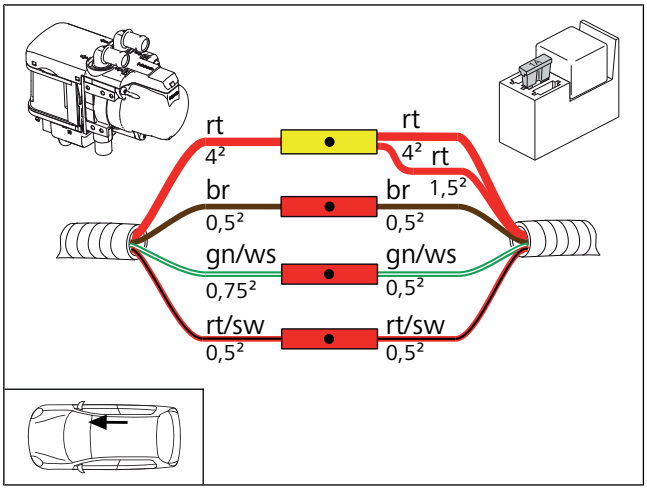


Fig. 81

Fan motor connection

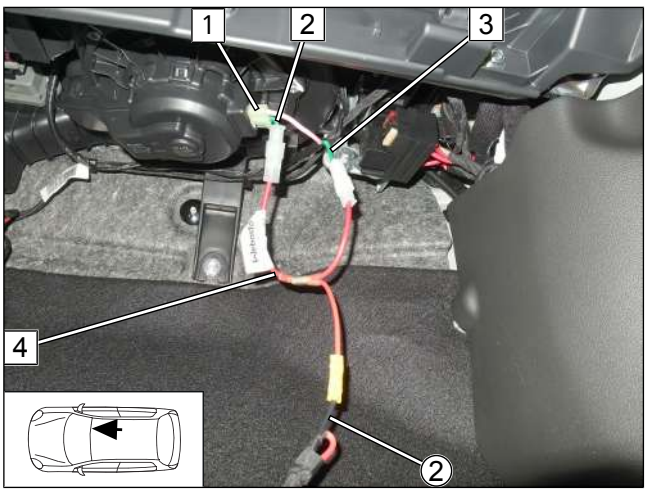


Fig. 82

▶ Connect to 2-pin connector 1 from fan motor.

2 Green (gn) wire of 2-pin connector, pin 1
3 Green (gn) wire of GRs
4 Power adapter
② Black (sw) wire of fan wiring harness

Connecting KSG

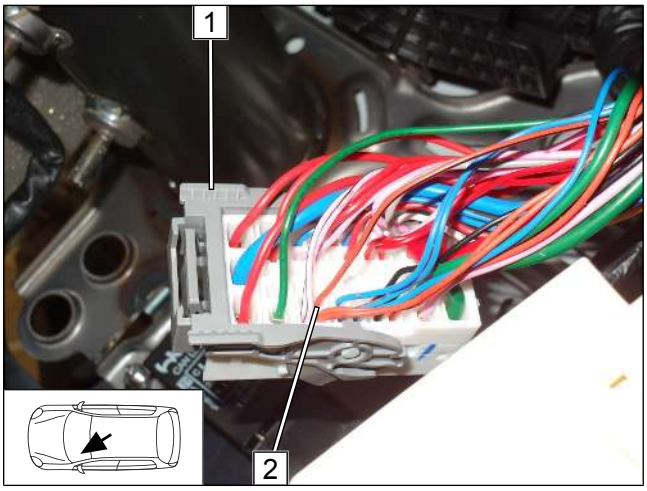


Fig. 83

1 32-pin connector of I/P-E

2 Orange/black (or/sw) wire from pin 22 of fuse F32

Connecting air-conditioning control unit

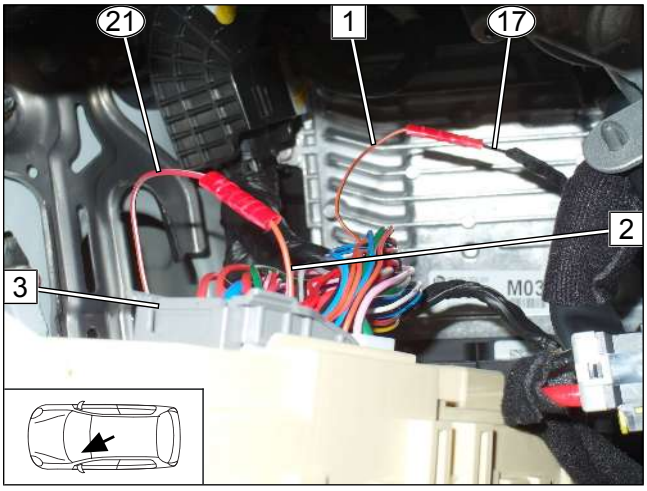


Fig. 84

- Connection to 32-pin connector I/P-E 3 of passenger compartment fuse and relay box IGPM.
- Route black (sw) wire (17) of power supply wiring harness to the driver's side.

1 Orange/black (or/sw) wire from connector M03, pin 21

2 Orange/black (or/sw) wire from connector I/P-E, pin 22 of fuse F32

(21) Red/white (rt/ws) wire from CLR module/ 15

14 Electrical system of control elements

14.1 MultiControl CAR option

Mounting MultiControl CAR

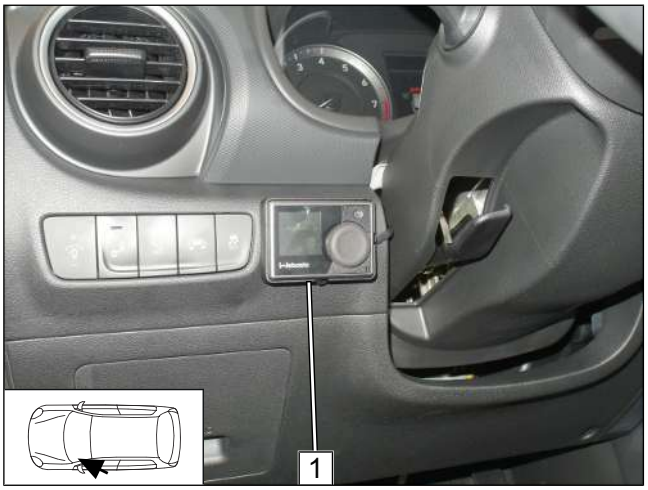


Fig. 85

Observe the MultiControl CAR installation documentation.

1 Installation frame

14.2 Telestart option

Preparing receiver bracket Telestart

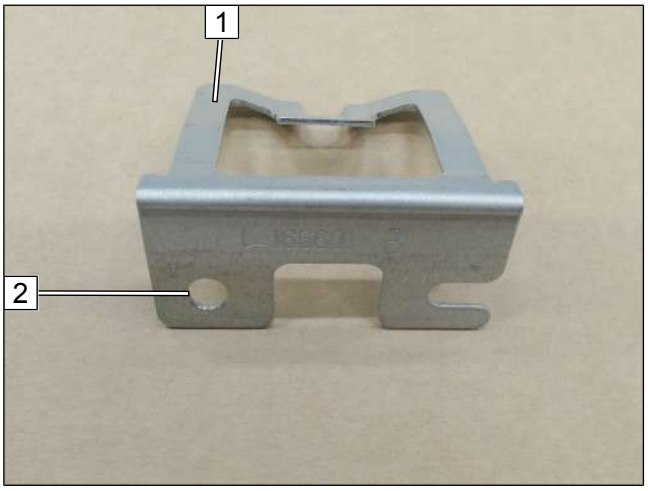


Fig. 86

1 Receiver bracket Telestart
2 Drill hole to Ø6.5

Mounting receiver

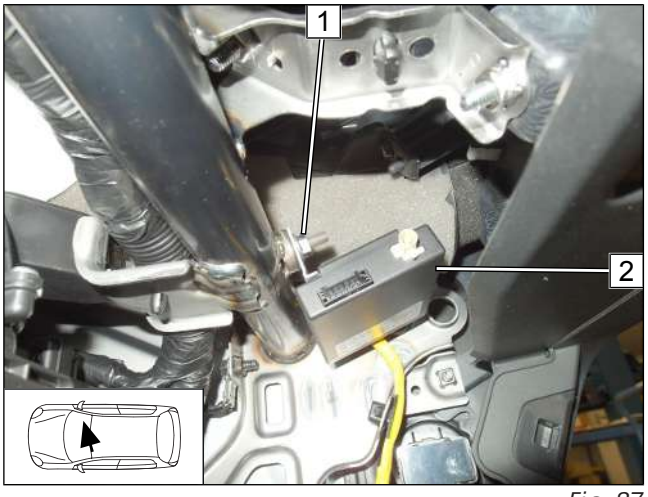


Fig. 87

Observe the Telestart installation documentation.

1 Original vehicle stud bolt, bracket Telestart, flanged nut
2 Telestartreceiver

Mounting temperature sensor T100 HTM

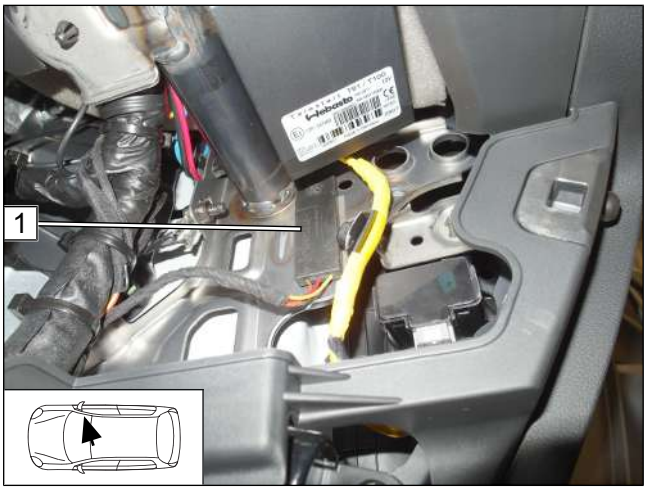


Fig. 88

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

Mounting aerial

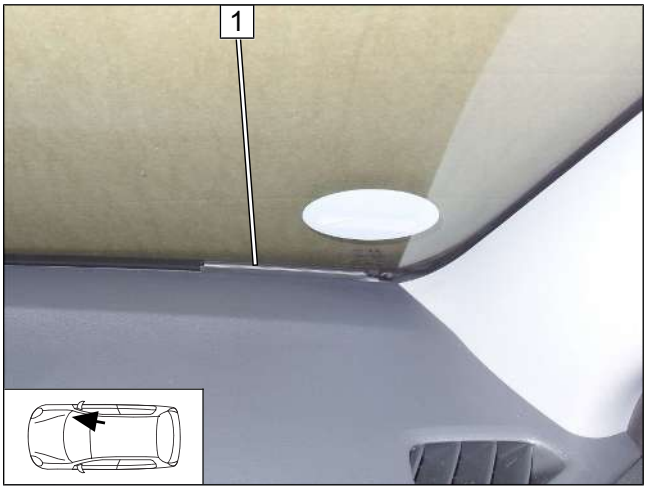


Fig. 89

1 Aerial

14.3 ThermoCall option

Mounting receiver

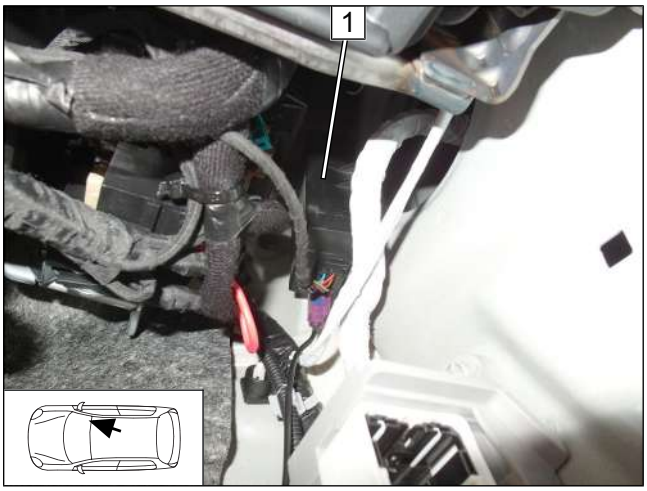


Fig. 90

Observe the ThermoCall installation documentation.

▶ Fasten receiver 1 using double-sided adhesive tape.

Mounting aerial (optional)

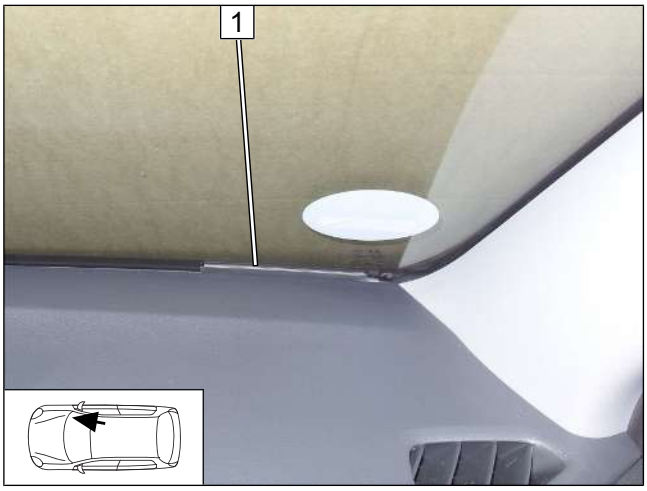


Fig. 91

1 Aerial

15 Final Work

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

- ▶ Mount removed parts in reverse order.

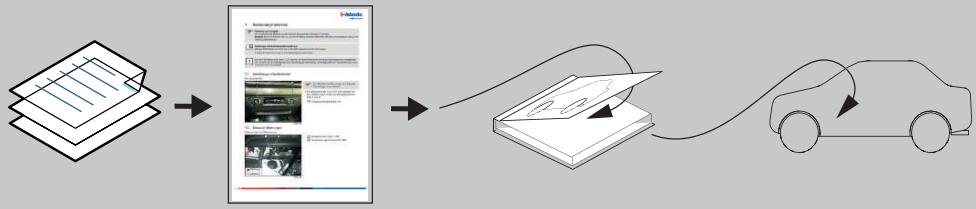
- ▶ Check all hoses, clamps and all electrical connections for firm seating.
- ▶ Insulate and tie back loose lines
- ▶ Spray heater and electrical components with anti-corrosion wax (Tectyl 100K).
- ▶ Connect the battery.

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

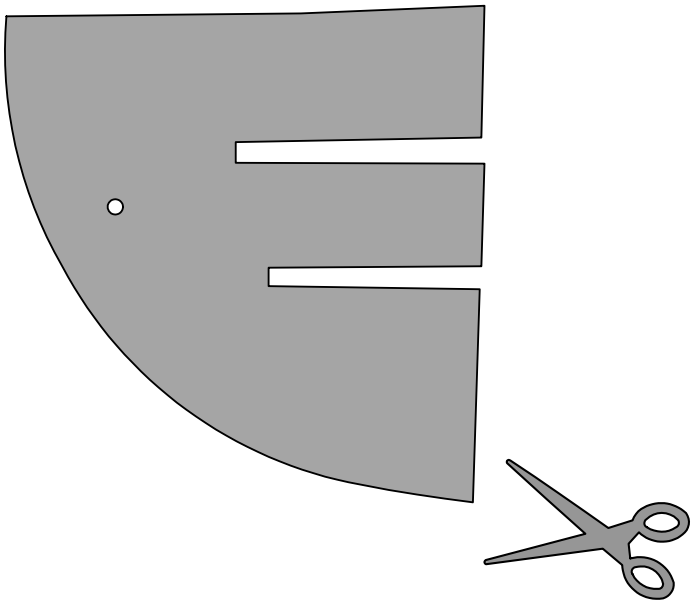
Company address:
Friedrichshafener Str. 9
82205 Gilching
Germany

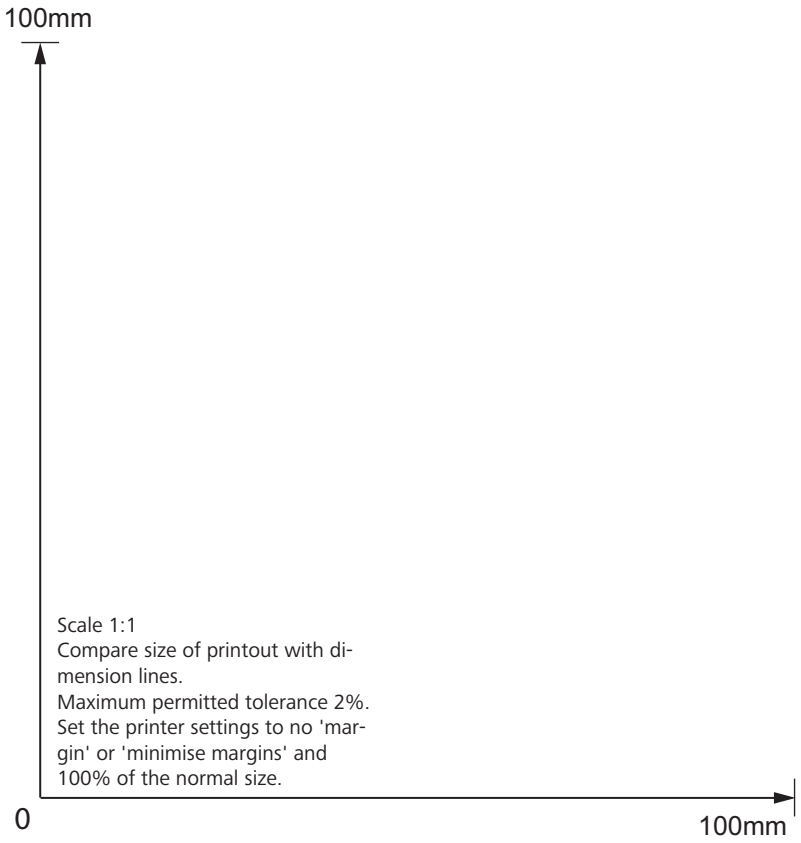
Technical Extranet: https://dealers.webasto.com

CE

WWW.WEBASTO.COM

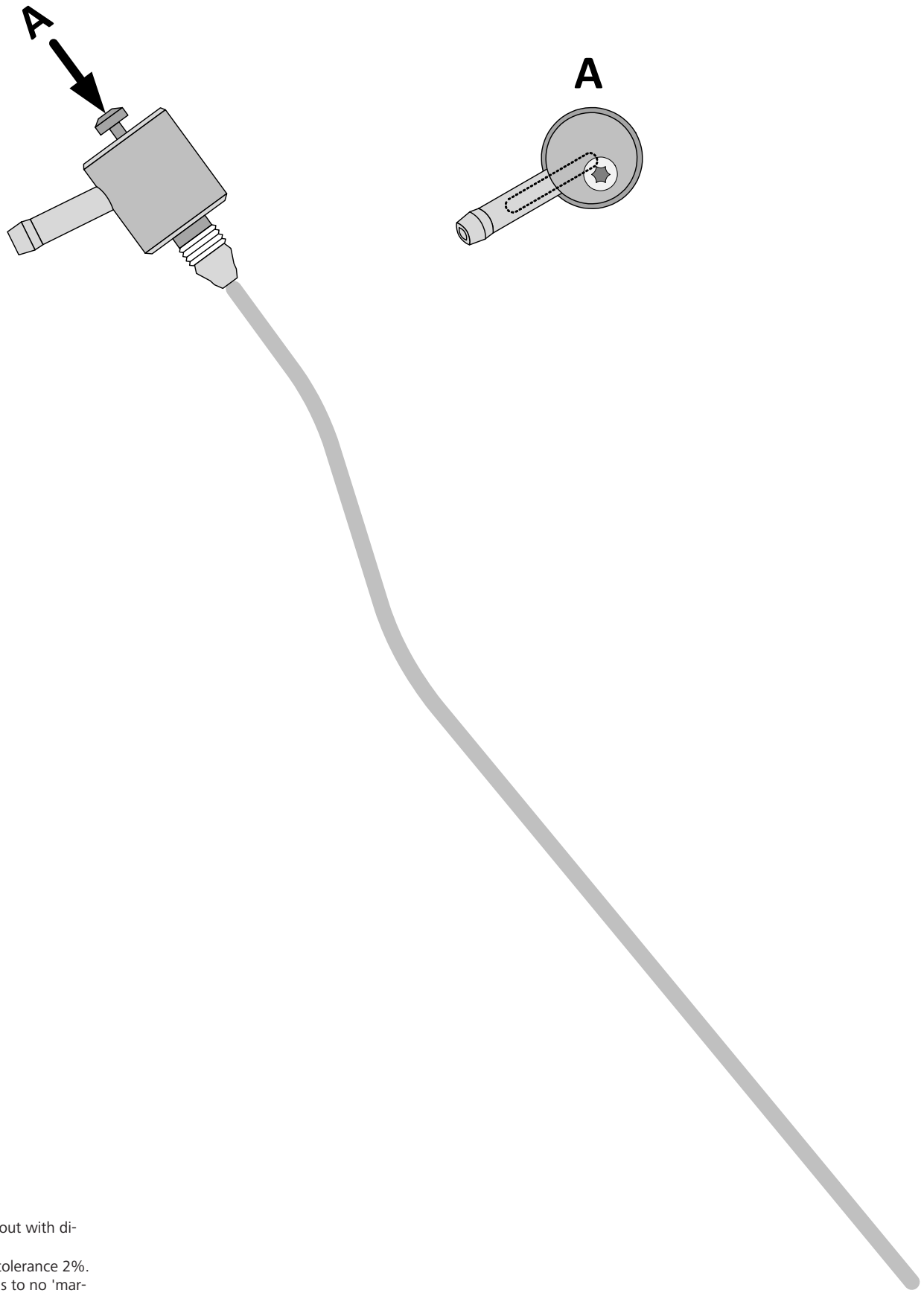
16 Drilling template FuelFix





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.

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

18 Operating instructions for automatic air-conditioning

Information regarding the heating time:

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

Vehicles with passenger compartment monitoring:

Further information can be found in the vehicle operating instructions.

▶ Deactivate passenger compartment monitoring for the heating operation

Note for parking heater function

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

18.1 A/C control panel settings

Automatic A/C control panel

Fig. 92

Before parking the vehicle, make the following settings:

1. Set temperature to 'HI'
2. Set fan to level '2', max. '3'
3. Air outlet to windscreen

18.2 Installation location of fuses

Fuses in engine compartment

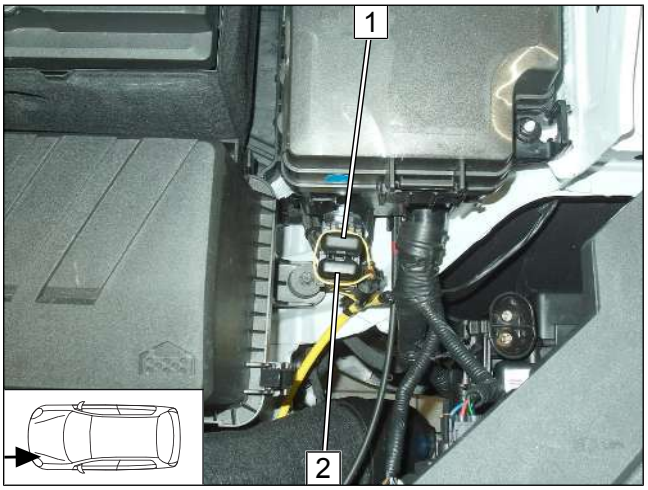


Fig. 93

1. F2 - 30A passenger compartment fan controller main fuse
2. F1 - 20A heater main fuse

Fuses in passenger compartment

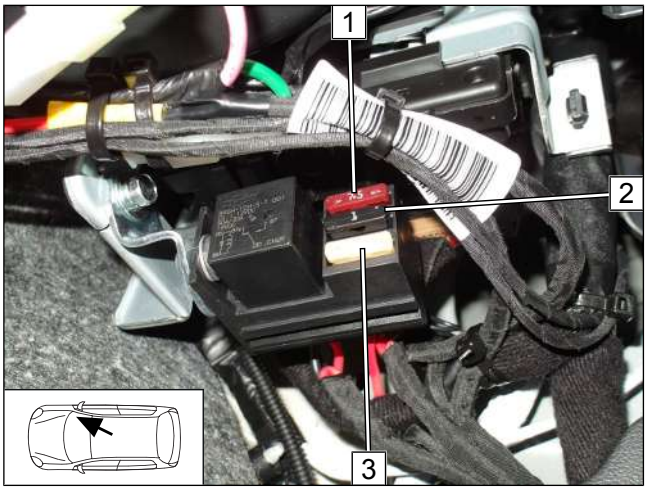


Fig. 94

1 F5 - 7.5A fan controller fuse
2 F3 - 1A control element fuse
3 F4 - 25A fan fuse