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Installation documentation

for air heater AT 2000 STC

Ford Transit

Left-hand drive vehicle

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Ford	Transit	FCD	from 2014	e1* 2007/46* 1100*…
Ford	Transit	FCD	from 2020	e1* 2007/46* 1096*…

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displace-ment [cm³]	Engine code
2.2TDCi	Diesel	Euro 5 / 6	SG	74	2198	DRF5
2.2TDCi	Diesel	Euro 5 / 6	SG	92	2198	DRF5
2.2TDCi	Diesel	Euro 5 / 6	SG	114	2198	CVR5
2.0TDCi	Diesel	Euro6;WLTP;CI;…	SG	96	1995	BKRA
2.0TDCi	Diesel	Euro6;WLTP;CI;…	SG	96	1995	BKFB

Validity	Equipment variants	Model
		Transit
Verified equipment variants	Passenger double-bench seat	x
	Van with partition wall	x
	Single cabin / double cabin	x
	Front wheel drive	x
	Rear-wheel drive	x
	70 L, 80 L, 95 L and 100 L tank	x
Unverified equipment variants	Alarm system	x
	Single front passenger's seat	x
	2. Battery	x

Total installation time	Note
7.5 hours	

Contents

1 List of abbreviations

HG	Heater
MCC	MultiControl (control element)
SG	Manual transmission
Veh.	Vehicle

2 Installation notes

2.1 Information on validity

This installation documentation applies to vehicles - see page 1 – and later, 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 Air Top 2000STC diesel	In accordance with price list
Air Top 2000STC Standard installation kit	9032244_
Installation kit for Ford Transit diesel	1323193B
Additional cargo space heating kit	1328188A

Setpoint sensor option	Order number
Setpoint sensor	82819_
Setpoint sensor installation frame	1319733_
Mounting plate for installation frame	474630

MultiControl HD option	Order number
MultiControl HD	9030025_
In case of MultiControl HD installation - MultiControl installation frame	9030077_
In case of MultiControl HD installation - timer cable extension	1319724_

2.3 Notes on installation, in coordination with the end customer

▶ Arrange for the vehicle to be delivered with the tank only about ¼ full.

▶ The installation location of the following elements should be chosen in coordination with the end customer:

- Setpoint sensor
- for the MultiControl HD option

2.4 Information on total installation time

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

3 About this document

3.1 Purpose of the document

This installation documentation is part of the product and contains all the information required to ensure professional vehicle specific installation of the:

Air Top 2000STC 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.

Sharp edges must be provided with rub protection.
Spray unfinished body areas, e.g. 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.

Statutory regulations governing installation

The Air Top 2000STC, Air Top 3900/5500 and
Air Top 40/55 heaters have 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.

  ⇨ In the case of M2 and M3 vehicles, the combustion heater must not be positioned in the passenger compartment.

Danger due to sharp edges

- Lacerations
- Short circuit due to electrical wire damage

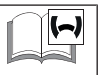
▶ Fit protectors on sharp edges.

3.4 Using this document

Before installing and operating the heater, read this installation documentation, the installation instructions of the heater, the operating instructions and supplementary sheets provided.

3.4.1 Explanatory Notes on the Document

There is an identification mark near the respective work step to allow you to quickly allocate the other applicable documents to the Webasto components to be installed:

Generally valid Webasto documentation	
Vehicle-specific installation documentation	
Vehicle-specific installation documentation of the cold start kit	
Webasto Comfort A/C control	
Webasto Standard A/C control	
Tank extracting device (e.g. FuelFix)	
Exhaust end fastener (EFIX)	
Combustion air intake silencer	
Spacer bracket (ASH)	

3.4.2 Use of symbols

DANGER

Type and source of the risk

Consequences: Failure to follow the instructions can result in death

▶ Actions to protect yourself against risks.

WARNING

Type and source of the risk

Consequences: Failure to follow the instructions can lead to serious or even fatal injuries

▶ Actions to protect yourself against risks.

CAUTION

Type and source of the risk

Consequences: Failure to follow the instructions can lead to minor injuries

▶ Actions to protect yourself against risks.

Type and source of the risk

Consequences: Failure to follow the instructions can lead to material damage

▶ Actions to protect yourself against risks.

Reference to the vehicle manufacturer's specific documents.

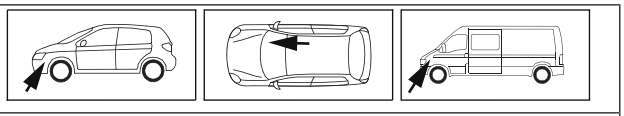
Note on a special technical feature

3.4.3 Work step identification marks

The ongoing work step is indicated on the outside top corner of the page:

Mechanical system	Electrical system	High-voltage	Hot air
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 flex pipe sections of the hot air distributor

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 of M6 heater nut = 6Nm + 1Nm
– Tighten other bolt connections in accordance with manufacturer's instructions or in accordance with state-of-the-art-technology

Heater mounting
– A seal must be fitted between the heater and the vehicle body. It should be replaced before each re-installation

Necessary special tools
– Hose clamp pliers for Clic hose clamps of type W
– Ø55 and Ø 60 circle bit
– Automatic wire stripper 0.2 - 6 mm²
– Crimping pliers for cable lugs 0.5 – 10 mm²
– Crimping pliers for male connector 0.14 – 6 mm²
– Crimping pliers for connector 0.25 – 6 mm²
– Torque wrench for 2.0 - 10 Nm
– Deep-hole marker
– Metric thread-setter kit
– Webasto Thermo Test Diagnosis with current software

5 Preparations

5.1 Vehicle preparation

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

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	
Passenger compartment	▶ Disconnect the battery ▶ Driver's seat ▶ Uncover the battery ▶ Remove the front passenger bench seat (or fold it up) ▶ Left trim of the front passenger's seat (only for vehicles with partition wall)	

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

DANGER

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

Vehicle body	▶ Exhaust system heat guard plate beneath the heater installation location ▶ Tank in accordance with the manufacturer's instructions ▶ Tank fitting in accordance with the manufacturer's instructions	

5.2 Heater preparation

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

6 Installation overview

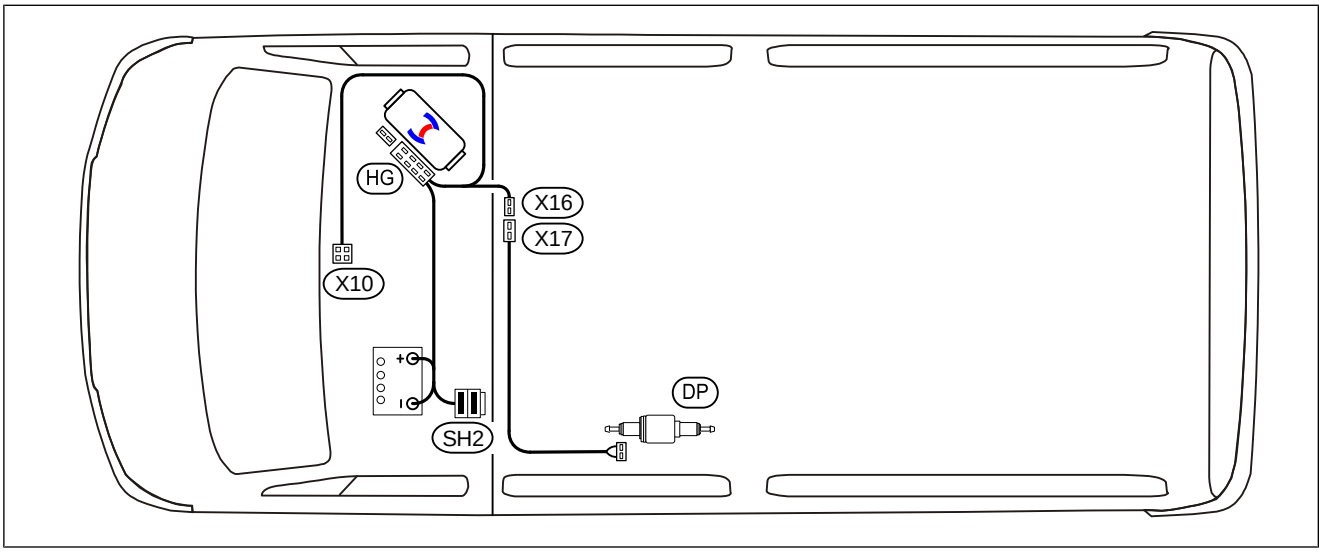


Fig. 1

Legend to installation overview

Abbreviation	Component
DP	Fuel pump
HG	Heater
SH2	F1/F3 fuse holder
X10	Female plug for control element
X16	Fuel pump plug connection
X17	Fuel pump plug connection

Heater installation location

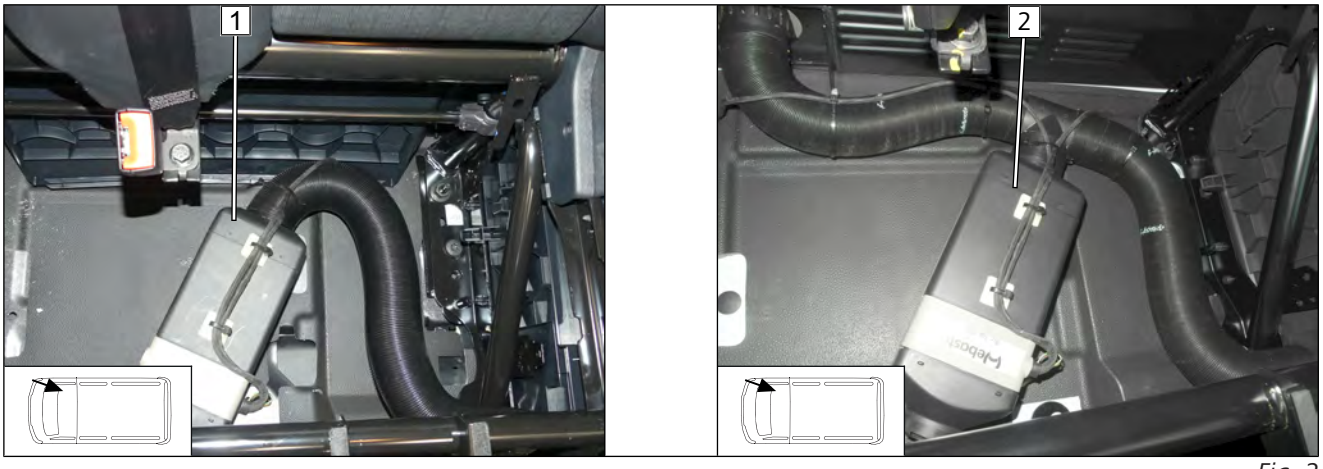


Fig. 2

1 Heater (cabin heating)

2 Heater (cabin and cargo space heating)

7 Mechanical system

7.1 Preparing installation location

Removing towing eye

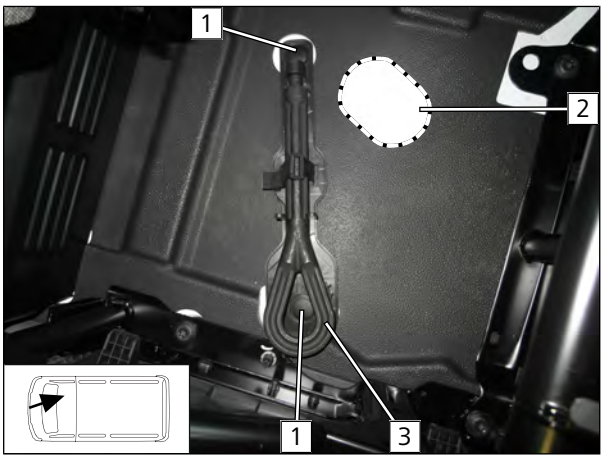


Fig. 3

1 Detach clip (one clip will be reused)
2 Heater position
3 Towing eye with bracket

Cutting out template

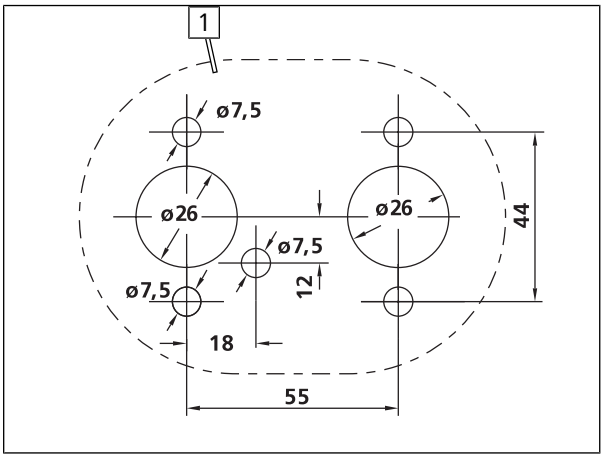


Fig. 4

Observe the AT 2000STC installation documentation.

▶ Cut template 1 out of provided general AT 2000STC installation documentation.

Copying hole pattern

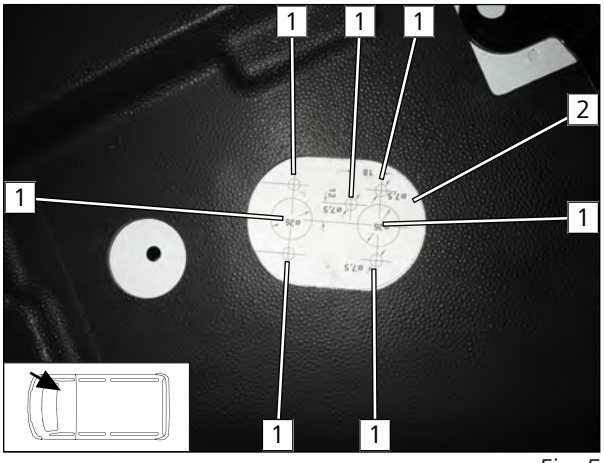


Fig. 5

▶ Position and align template 2. Copy hole pattern 1.

Drilling hole in underbody

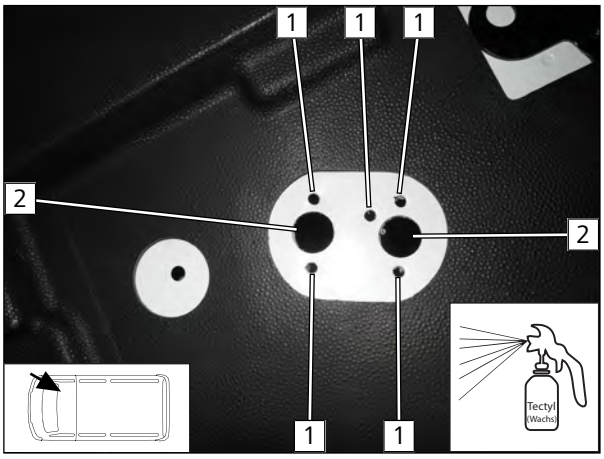


Fig. 6

1 Ø7.5 hole
2 Ø26 hole

7.2 Preparing heater

Preparing heater

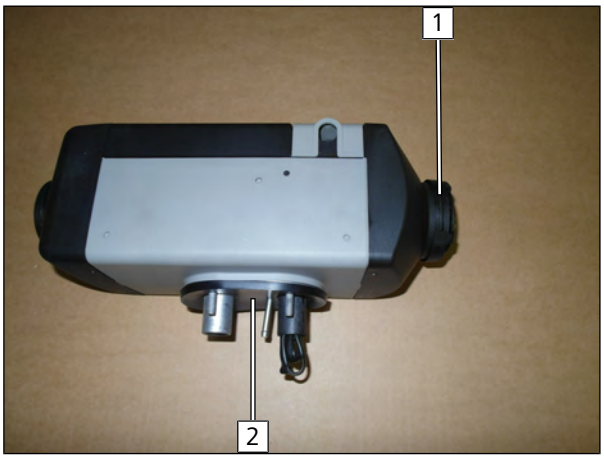


Fig. 7

1 Cover grille (air intake side)
2 Rubber gasket

7.3 Heater mounting

Positioning and aligning heater

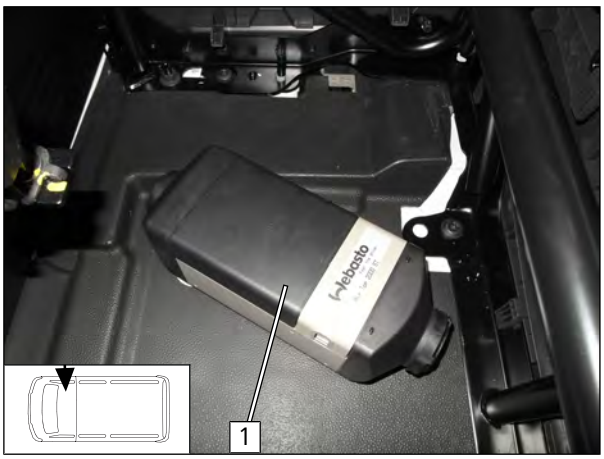


Fig. 8

1 Heater

Mounting heater

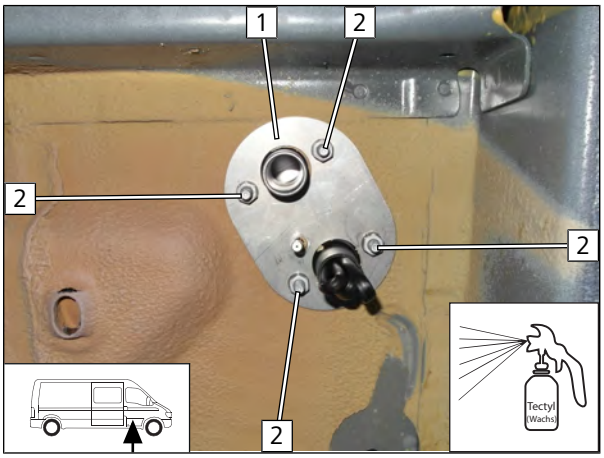


Fig. 9

1 Retaining plate

2 Large diameter washer, spring lock washer, flanged nut

8 Combustion air

Removing bolt

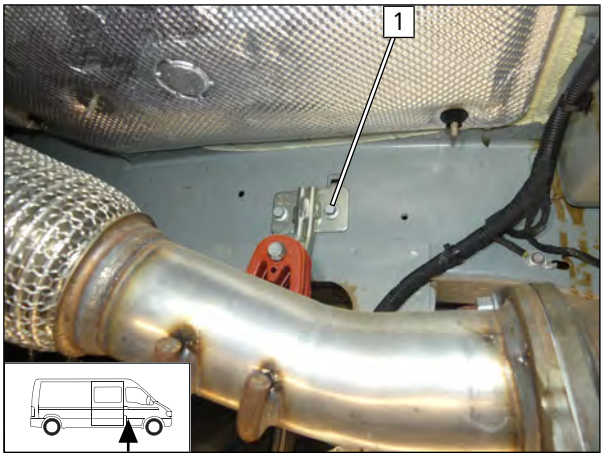


Fig. 10

1 Original vehicle bolt (will be reused)

Preparing rubber-coated p-clamp

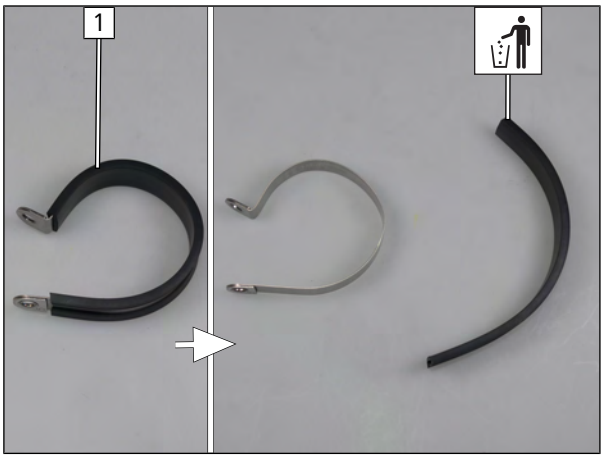


Fig. 11

1 Ø48 rubber-coated p-clamp

Combustion air intake line

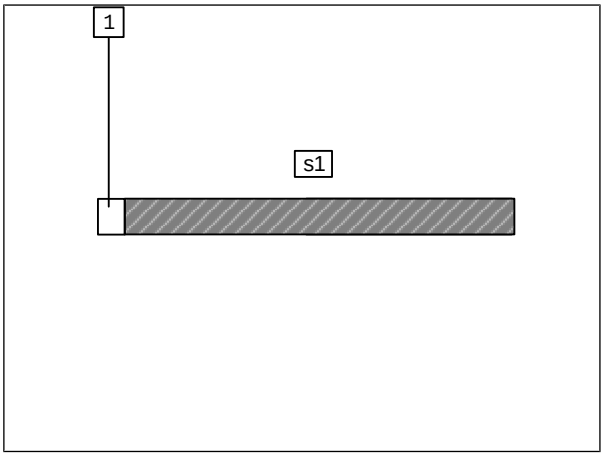


Fig. 12

1 Expanded side of the combustion air intake pipe (heater)

Enlarging hole in perforated bracket

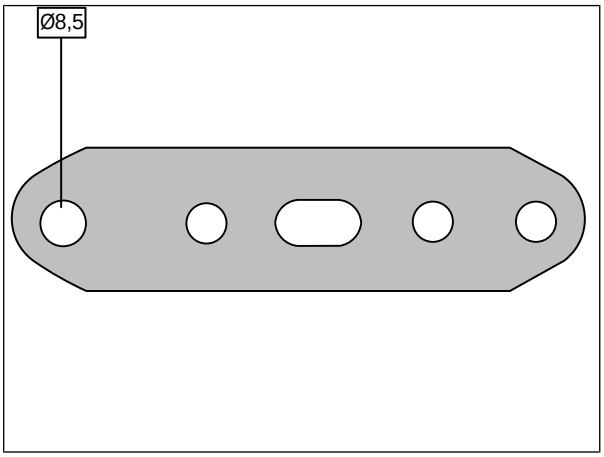


Fig. 13

Premounting combustion air intake silencer

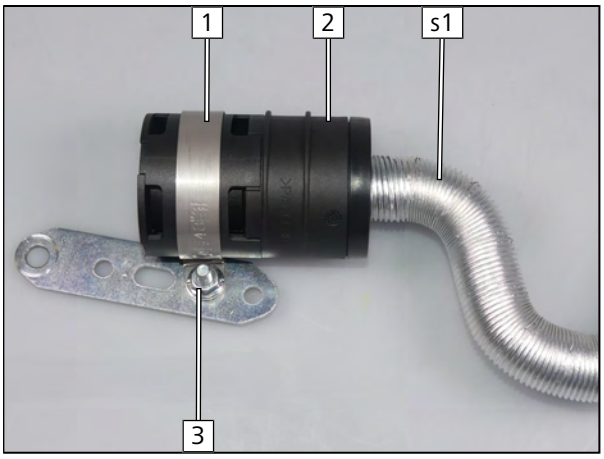


Fig. 14

1 Ø48 pipe clamp
2 Combustion air intake silencer
3 M6x20 bolt, Ø48 pipe clamp, perforated bracket, flanged nut
s1 Combustion air intake line

Mounting combustion air intake pipe **s1**

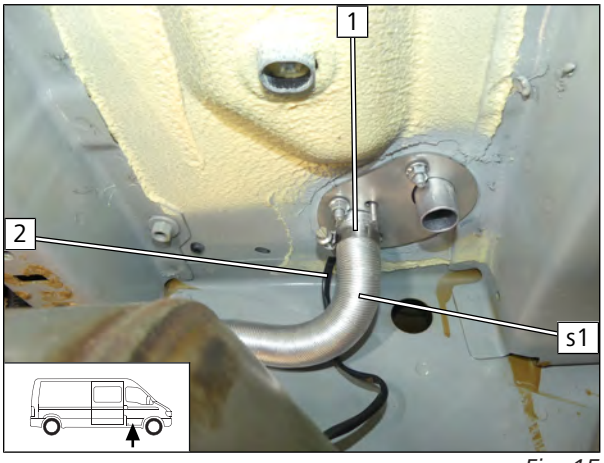


Fig. 15

1 Ø16-27 screw clamp
2 Fuel pump wiring harness

Mounting combustion air intake silencer

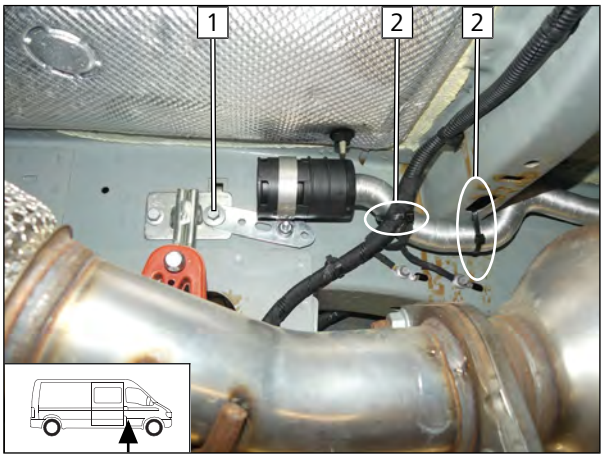


Fig. 16

1 Original vehicle bolt, perforated bracket

2 Cable tie

9 Exhaust

Differentiation between variants

1 Version 1

2 Version 2

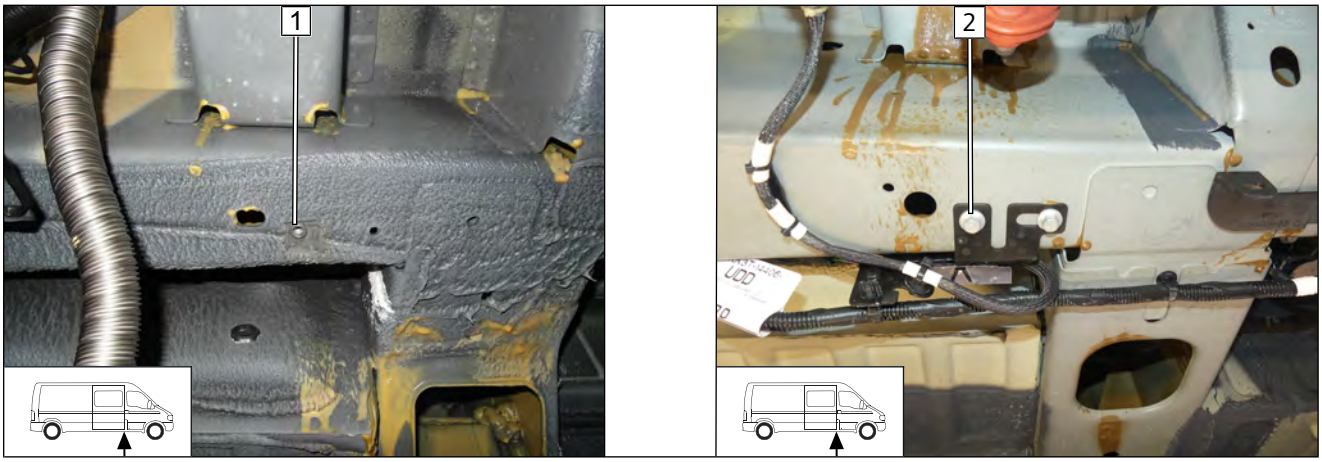


Fig. 17

9.1 Exhaust variant 1

Mounting exhaust pipe **a1**

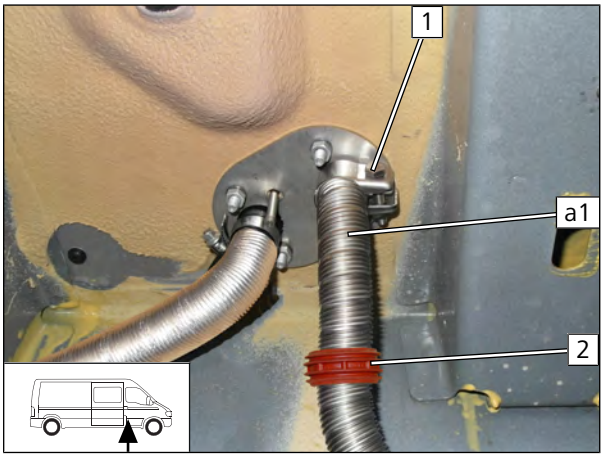


Fig. 18

1 Hose clamp

2 Spacer bracket

Inserting rivet nut

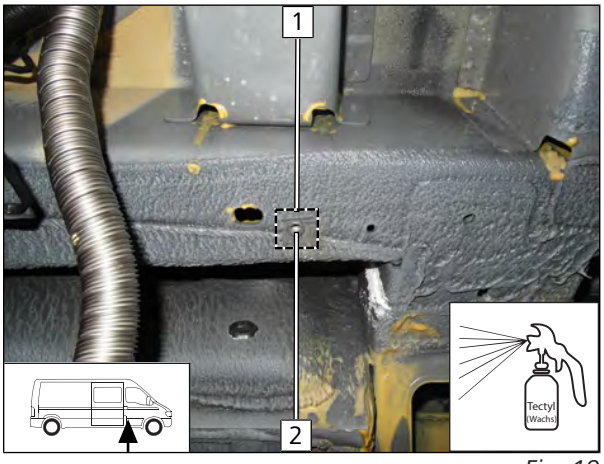


Fig. 19

▶ Remove underbody protection **1** around existing hole **2**.

2 Enlarge original vehicle hole to Ø9, rivet nut

Mounting angle bracket

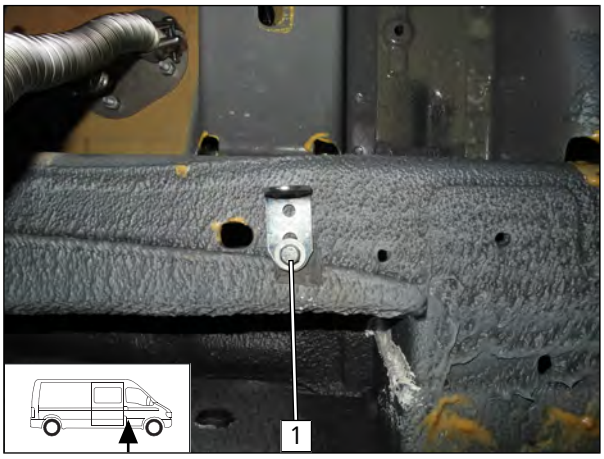


Fig. 20

1 M6x20 bolt, spring lock washer, large diameter washer, angle bracket, rivet nut

Positioning bolt

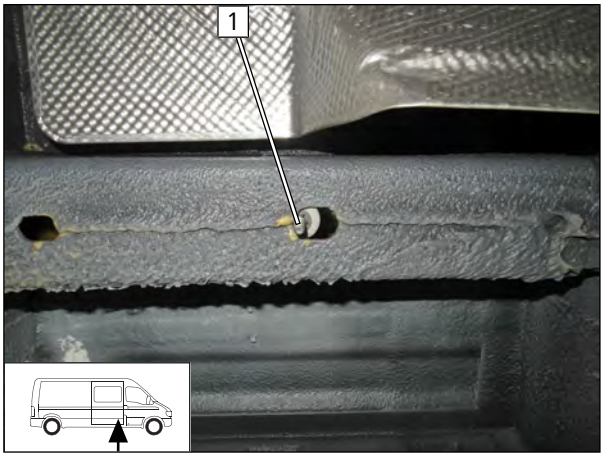


Fig. 21

▶ Place a large diameter washer and a lock washer on M6x20 bolt 1 and position in existing hole.

Mounting angle bracket

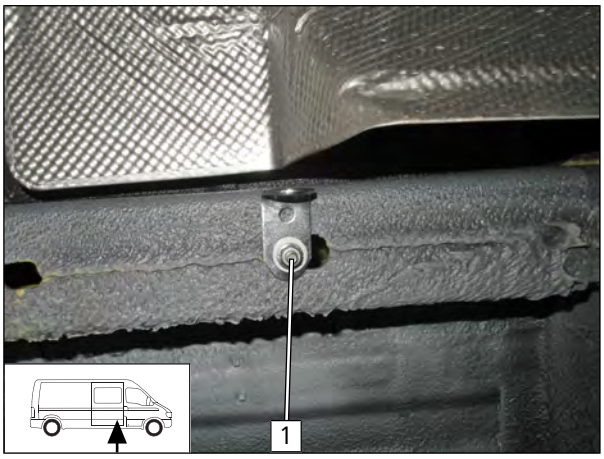


Fig. 22

1 Angle bracket, large diameter washer, flanged nut

Mounting and routing exhaust pipe **a1**

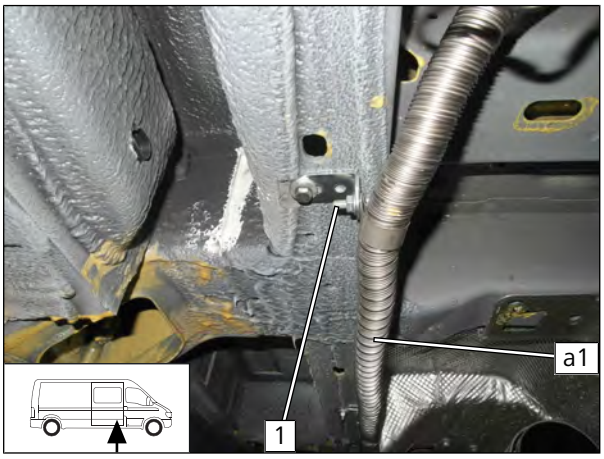


Fig. 23

Ensure sufficient distance from neighbouring components, correct if necessary.

>30

1 M6x20 bolt, pipe clamp, angle bracket, flanged nut

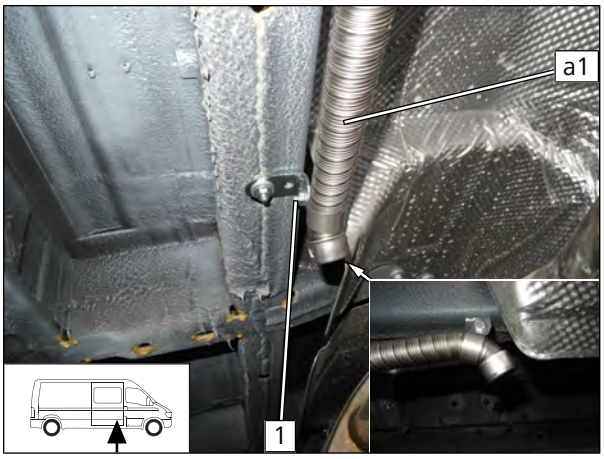


Fig. 24

Ensure sufficient distance from neighbouring components, correct if necessary.

>30

1 M6x20 bolt, pipe clamp, angle bracket, flanged nut

9.2 Exhaust variant 2

Mounting exhaust pipe **a1**

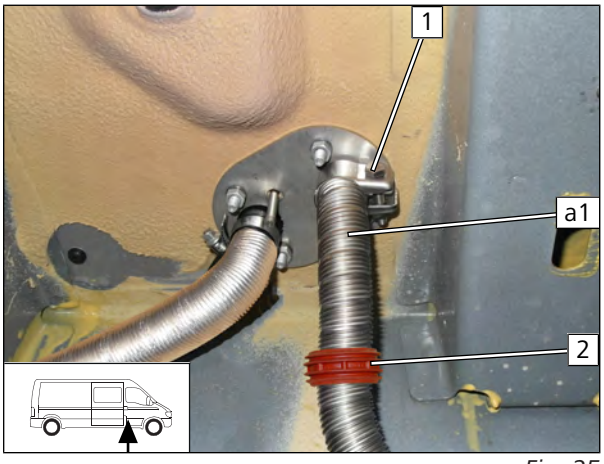


Fig. 25

1 Hose clamp

2 Spacer bracket

Mounting angle bracket

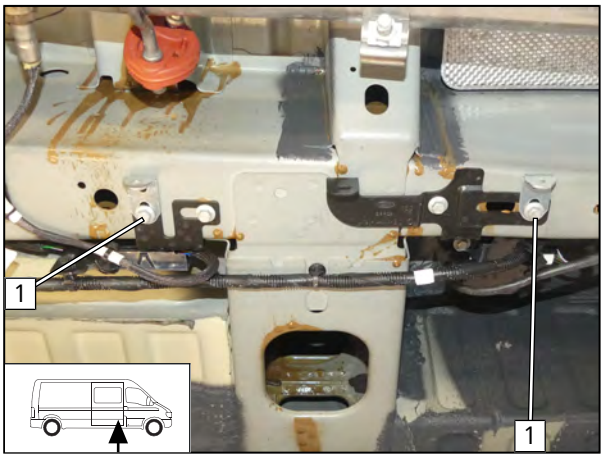


Fig. 26

1 Original vehicle bolt, angle bracket

Mounting and routing exhaust pipe a1

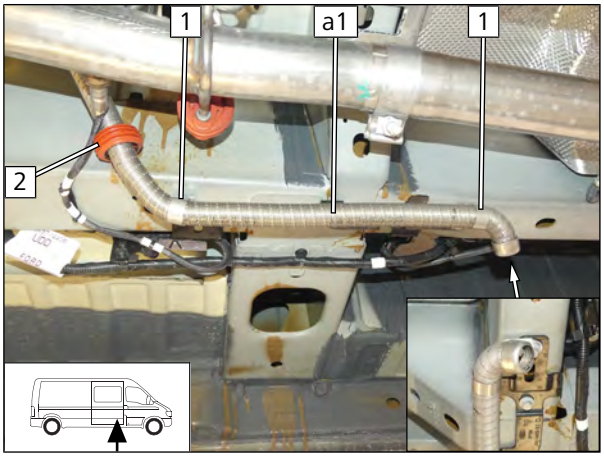


Fig. 27

Ensure sufficient distance from neighbouring components, correct if necessary.

>30

1 M6x20 bolt, pipe clamp, angle bracket, flanged nut

2 Spacer bracket

10 Fuel

10.1 Connecting and routing

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

Cutting additional fuel pump wiring harness to length

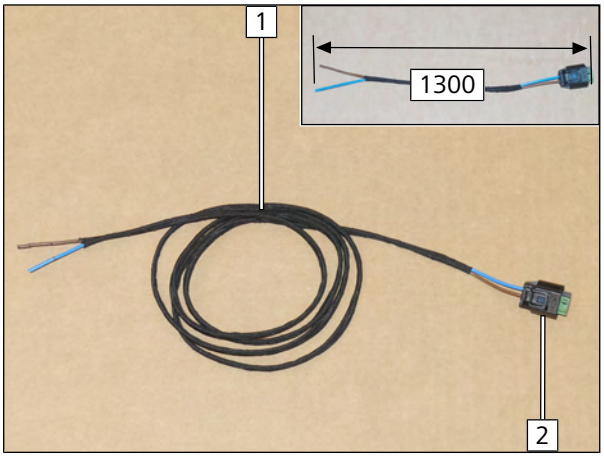


Fig. 28

- ▶ Shorten additional fuel pump wiring harness 1 to 1300.

2 Fuel pump connection plug

Preparing additional fuel pump wiring harness

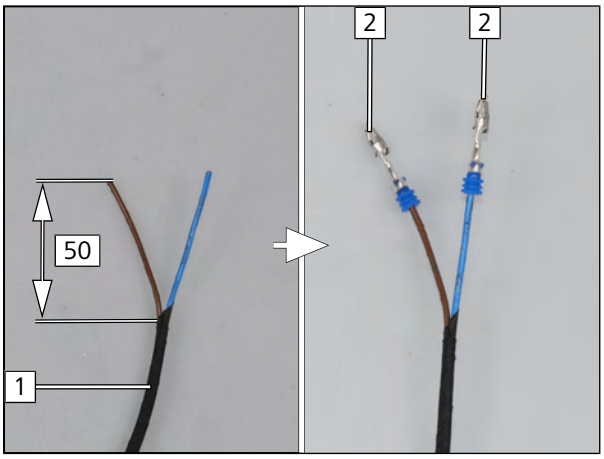


Fig. 29

1 Additional fuel pump wiring harness

2 Single-wire seal, socket contact

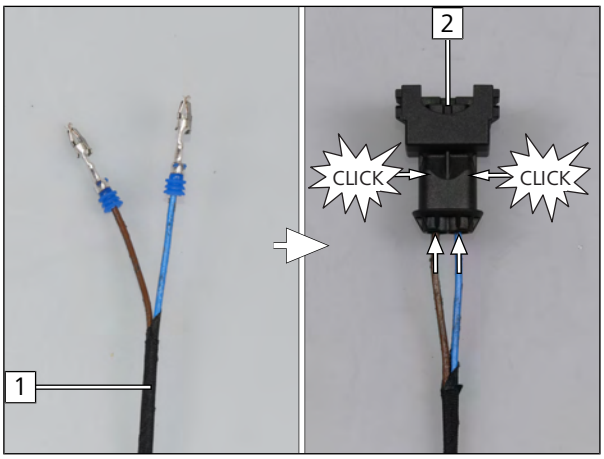


Fig. 30

1 Additional fuel pump wiring harness
2 Female plug X17

Mounting retaining clamp

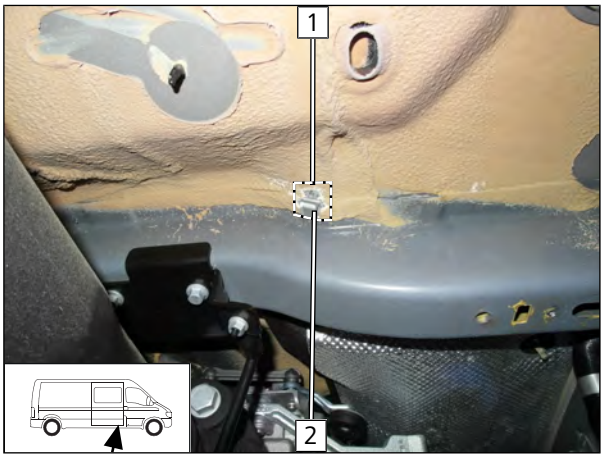


Fig. 31

▶ Remove underbody protection an position 1.

2 Retaining clamp

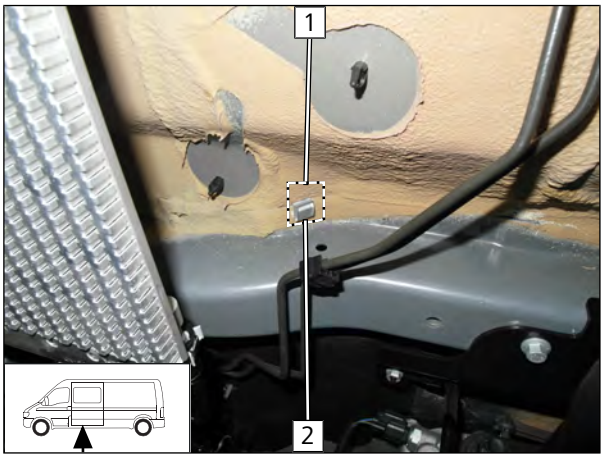


Fig. 32

▶ Remove underbody protection an position 1.

2 Retaining clamp

Connecting fuel line

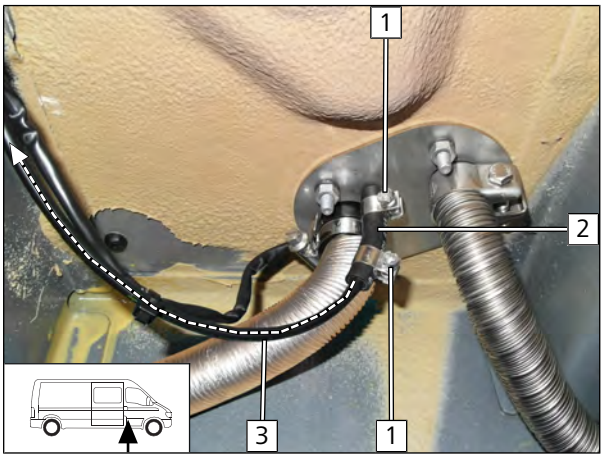


Fig. 33

[1] Ø10 clamp
[2] Hose section
[3] Fuel line, fuel pump wiring harness

Routing fuel line

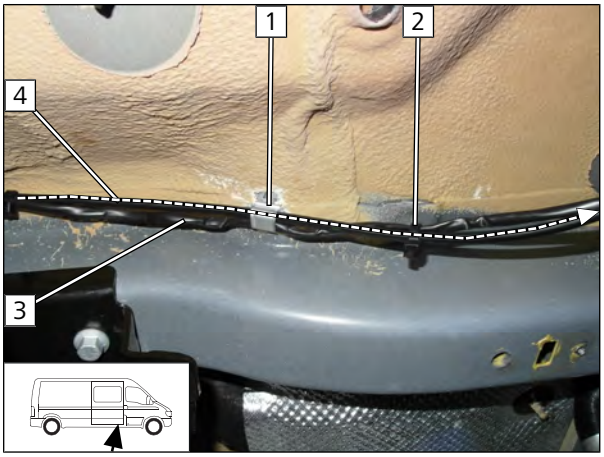


Fig. 34

▶ Insert first fuel pump wiring harness [3] and then fuel line [4] in retaining clamp [1].

[2] Cable tie

Connecting connector

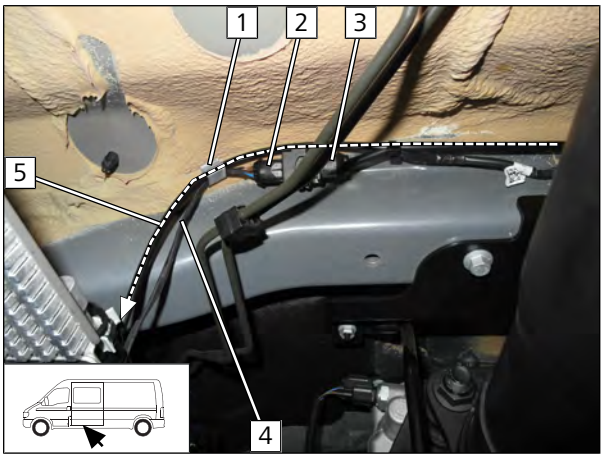


Fig. 35

▶ Connect connector X16 [3] and connector X17 [2].

[1] Retaining clamp
[4] Fuel pump wiring harness
[5] Fuel line

10.2 Fuel pump

Premounting fuel pump

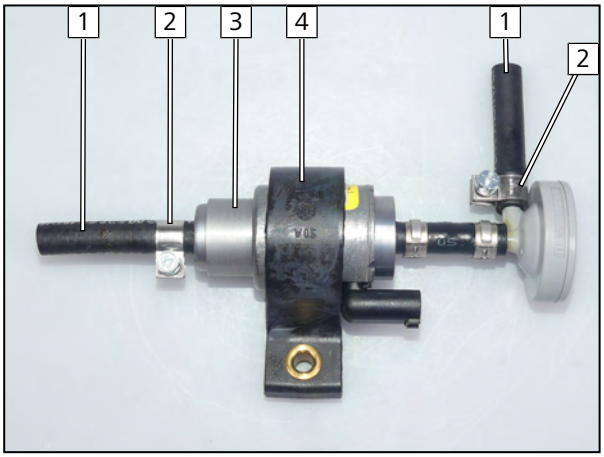


Fig. 36

1 Hose section
2 Ø10 screw clamp
3 Fuel pump
4 Fuel pump mount

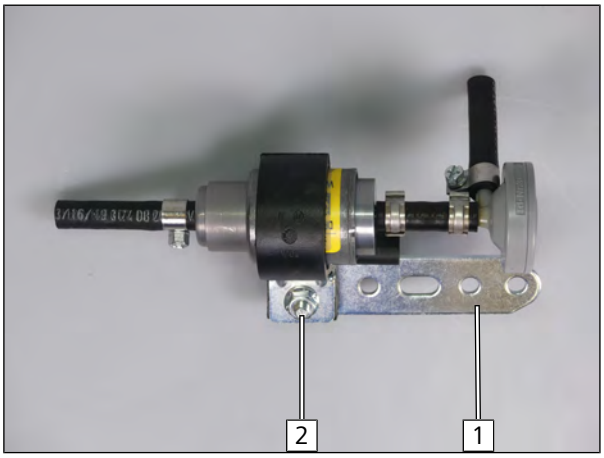


Fig. 37

1 Perforated bracket
2 M6x25 bolt, support angle bracket, premounted fuel pump, flanged nut

Mounting fuel pump

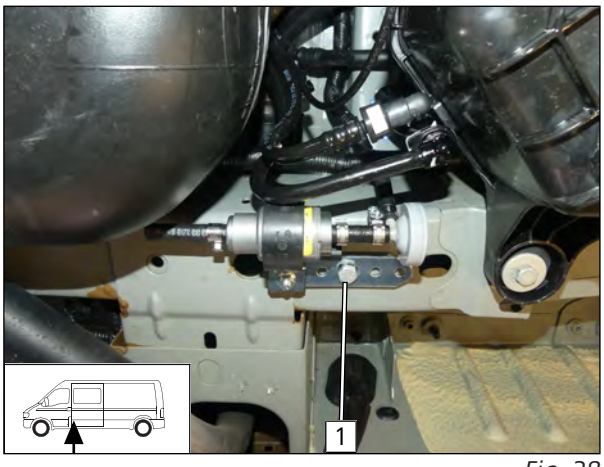


Fig. 38

1 M8x20 bolt with flange, perforated bracket, distance washer (5), existing threaded hole

Fuel pump connection

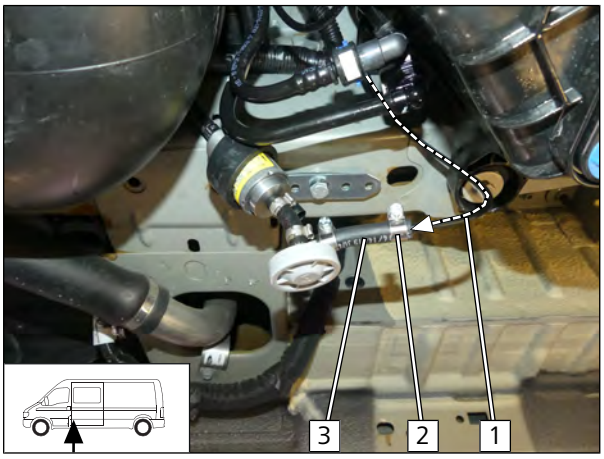


Fig. 39

1 Fuel line
2 Ø10 screw clamp
3 Hose section

Mounting fuel pump connector

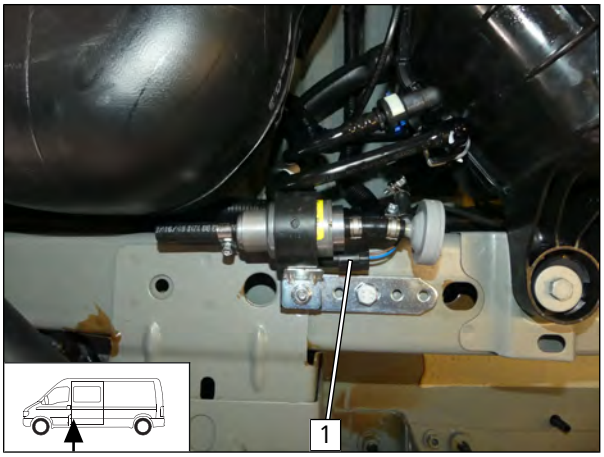


Fig. 40

1 Fuel pump wiring harness, connector X17 mounted

10.3 Tank extracting device

Dismantle tank and tank fitting in accordance with manufacturer's instructions.

Moving tank fitting labels

▶ Move labels 2 and 3 of tank fitting 1 as shown.

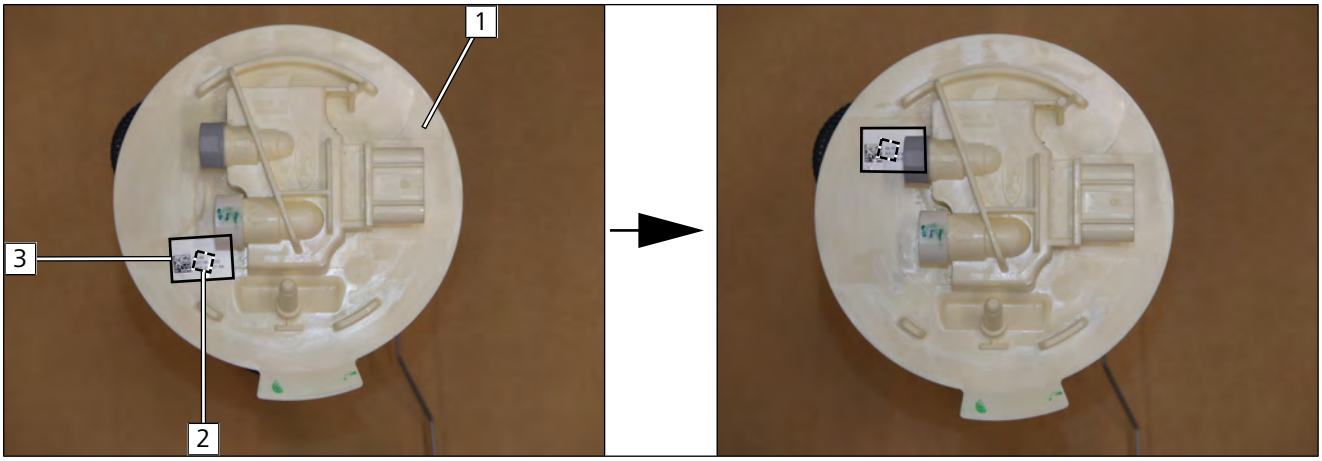


Fig. 41

Copy hole pattern

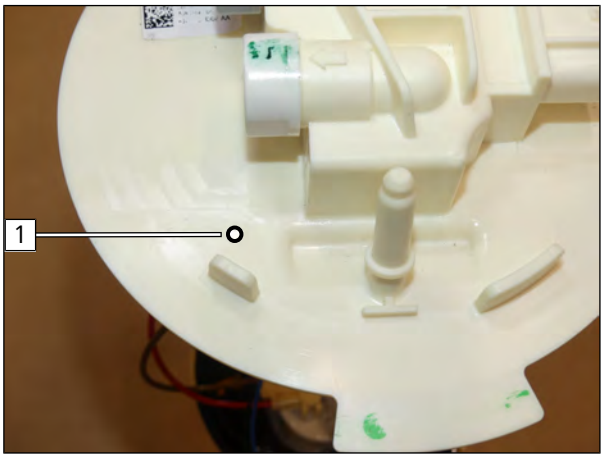


Fig. 42

▶ Copy hole pattern **1** in the middle of the embossing.

Drilling hole

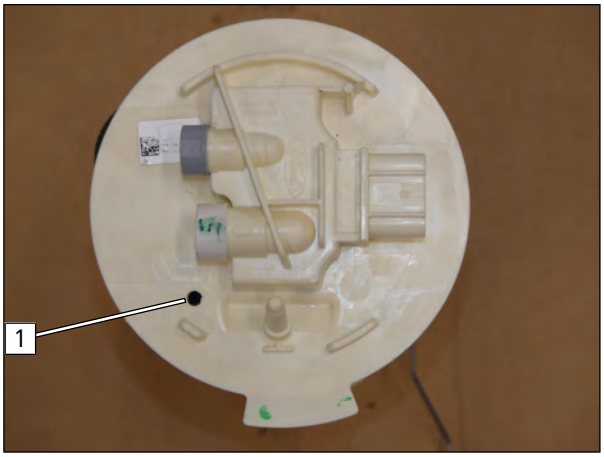


Fig. 43

1 Ø6 hole

Premounting tank extracting device

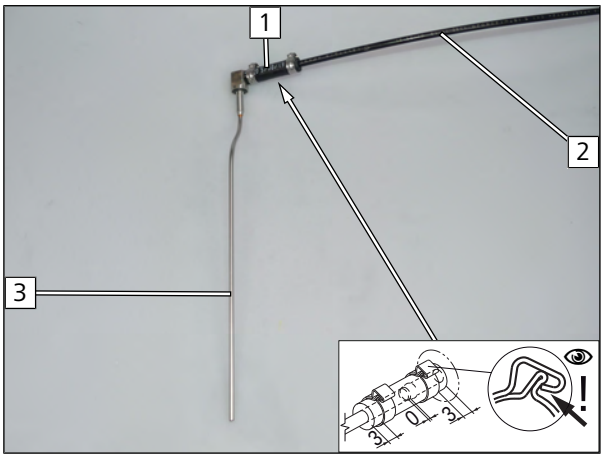


Fig. 44

Observe the installation instructions of the tank extracting device.

▶ Bend tank extracting device **3** according to template and cut to length.

1 Hose section, Ø10 clamp [2x]

2 Fuel line

Installing tank extracting device

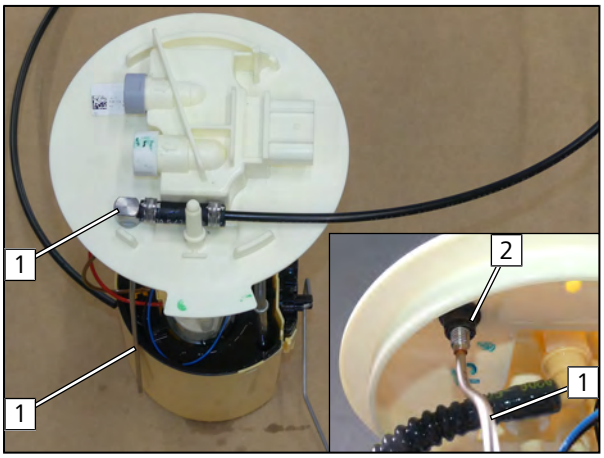


Fig. 45

1 Tank extracting device
2 Locking nut

Inserting tank fitting

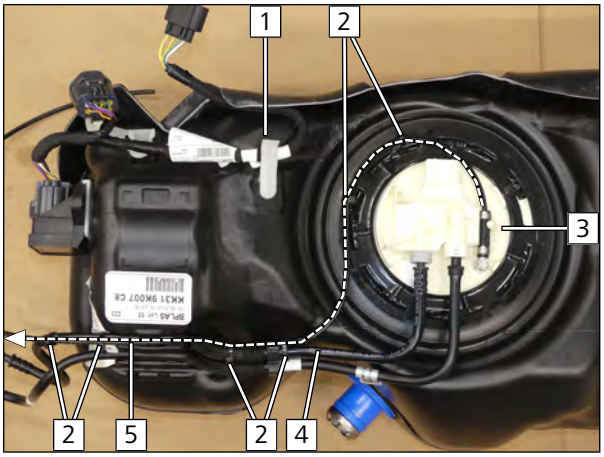


Fig. 46

▶ Attach fuel line 5 with cable tie to original vehicle fuel line 4.

Mount the tank as per the manufacturer's instructions.

1 Fuel tank
2 Cable tie
3 Tank fitting

10.4 Connecting tank extracting device fuel line to fuel pump

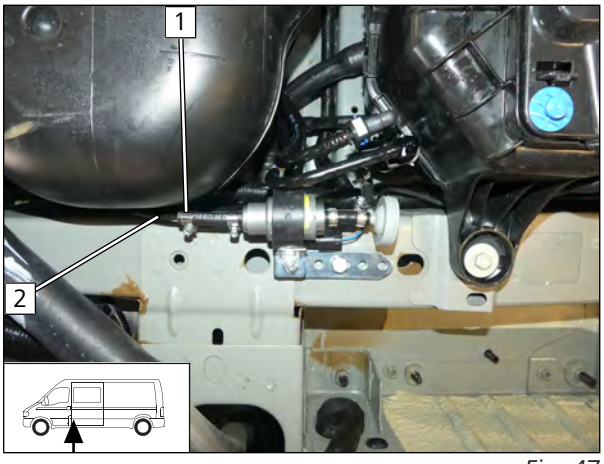


Fig. 47

1 Ø10 screw clamp
2 Fuel line of tank extracting device

11 Hot air option A, cab heating

11.1 Hot air routing diagram

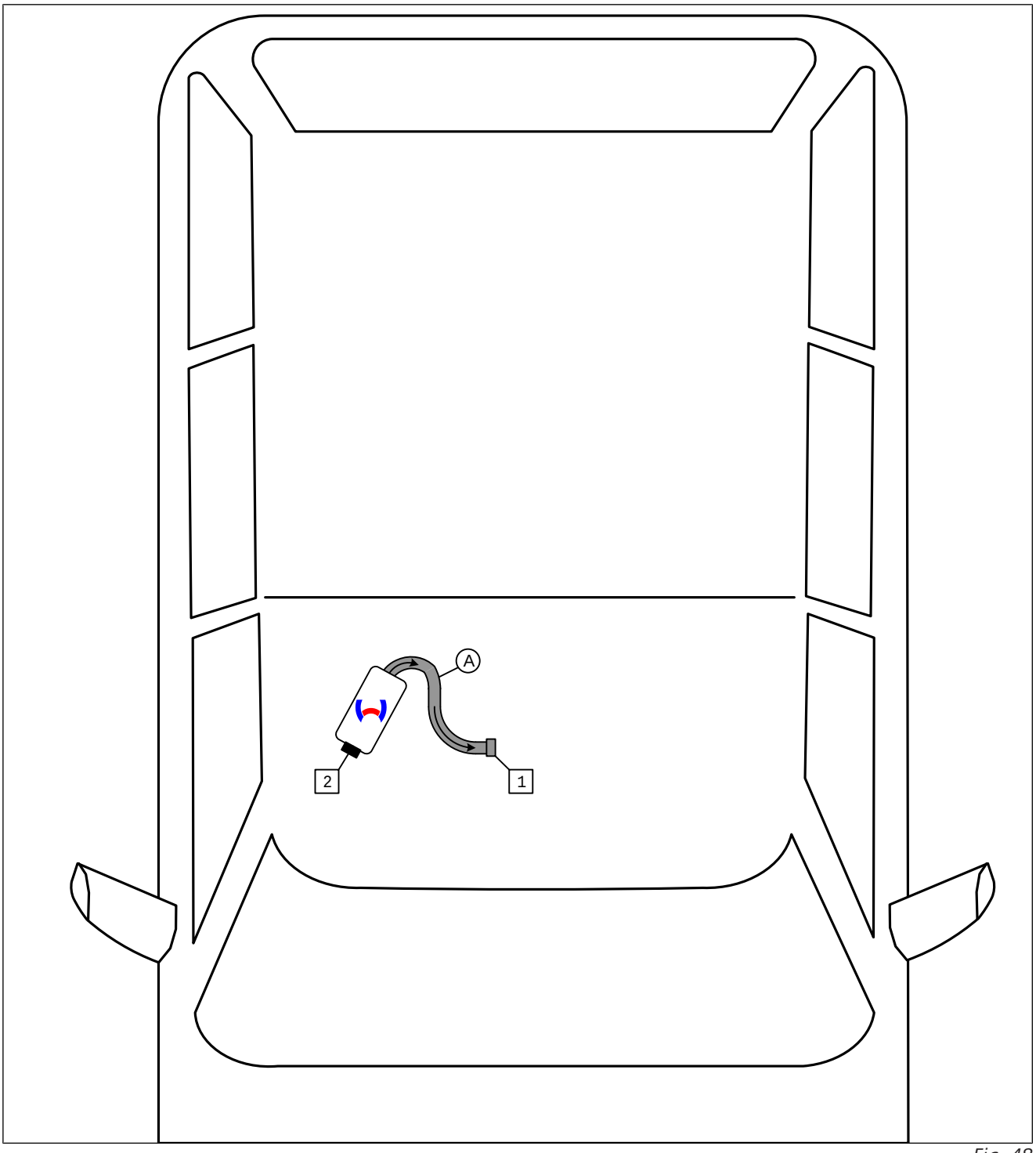


Fig. 48

1 Hot air outlet; 2 Cover grille for hot air inlet

11.2 Hot air routing

Preparing seat trim

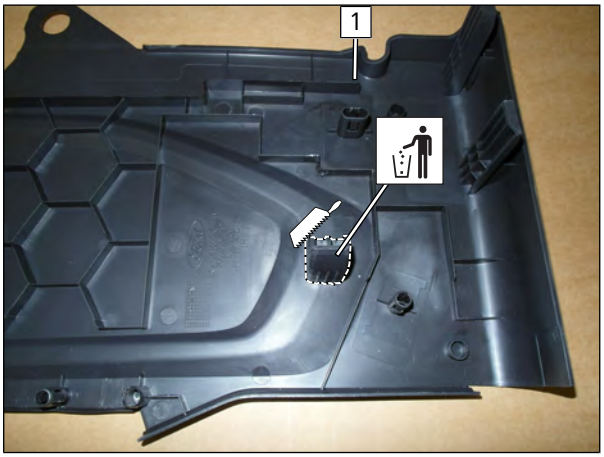


Fig. 49

1 Left trim on the front passenger's seat

Copying hole pattern and drilling hole

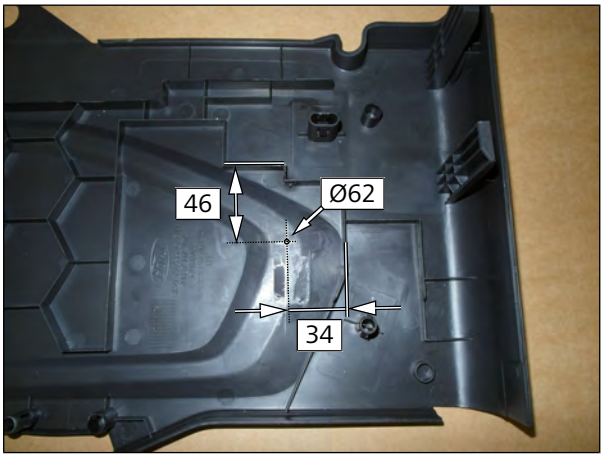


Fig. 50

Copying hole pattern of air outlet

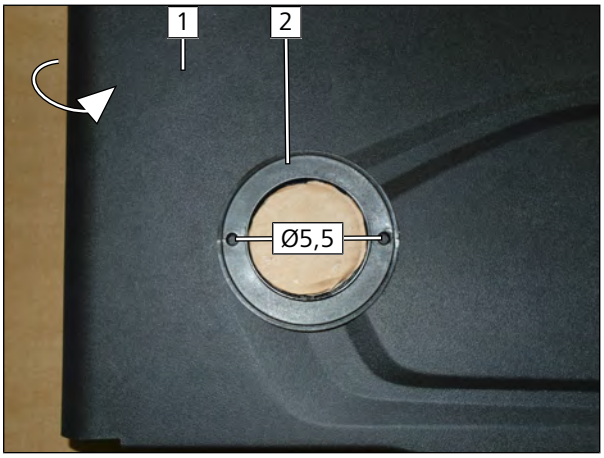


Fig. 51

1 Left trim on the front passenger's seat
2 Air outlet, copy hole pattern

Mounting air outlet

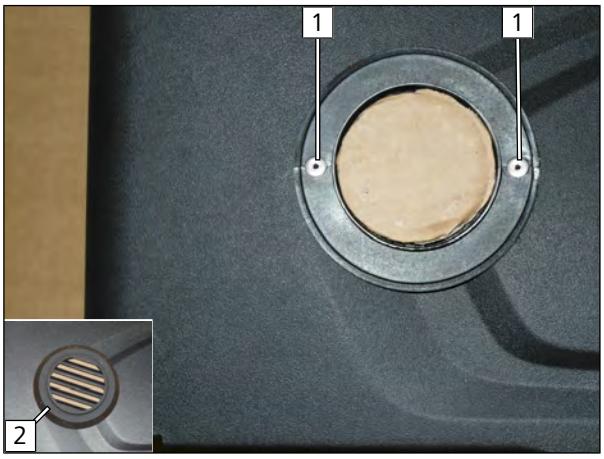


Fig. 52

1 Expanding rivet
2 Complete the air outlet

Cutting flexible tube to length

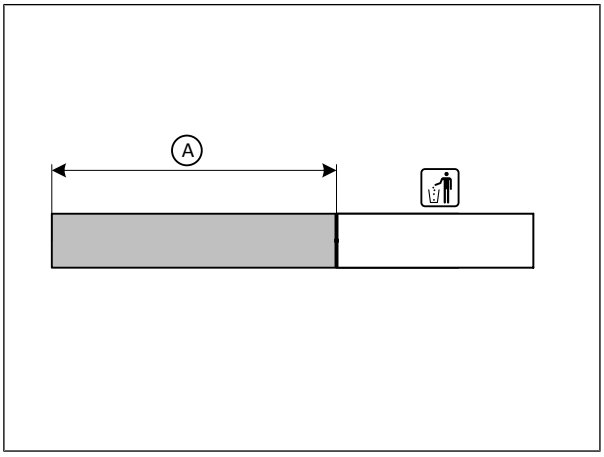


Fig. 53

Ⓐ	550

Mounting flexible tube Ⓐ

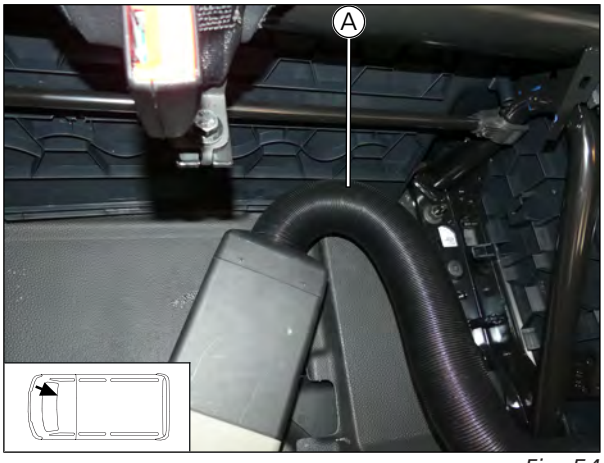


Fig. 54

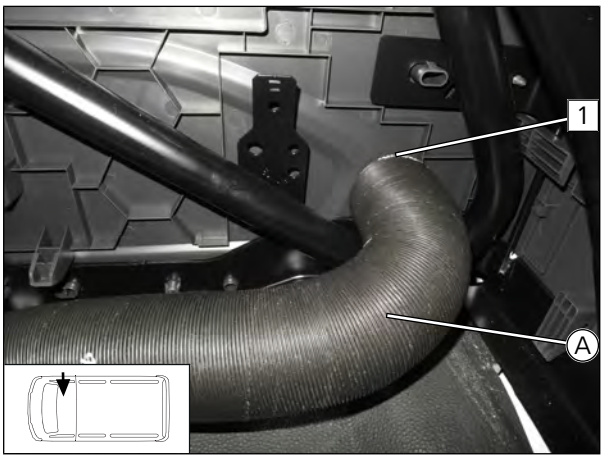


Fig. 55

1 Hot air outlet

12 Hot air option B, with cargo space heating

12.1 Hot air routing diagram

The installation of a 45° air outlet in open position 1 and closable air outlet 3 should be confirmed with the end customer.

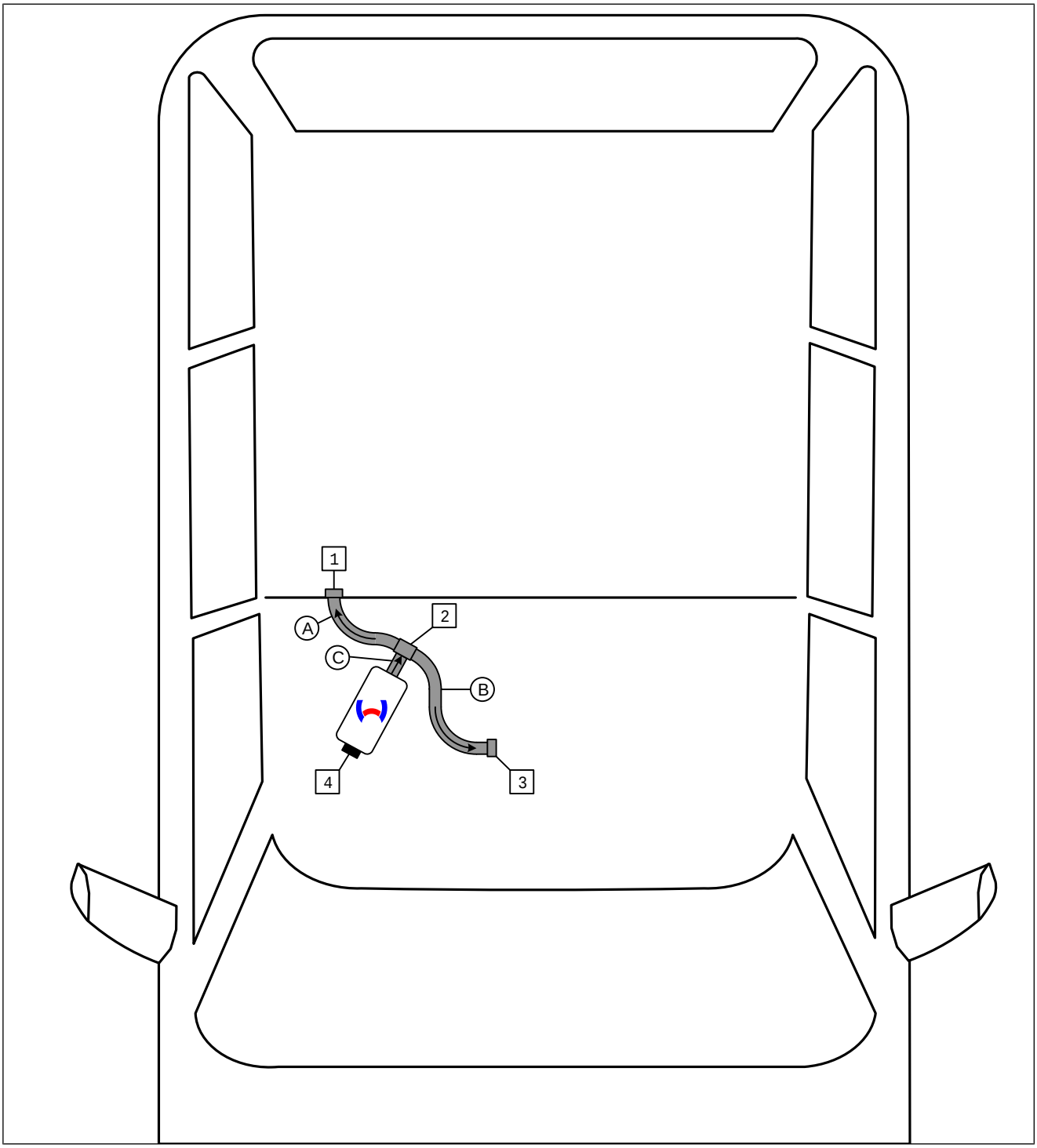


Fig. 56

1 Cargo space air outlet; 2 T-piece; 3 Cabin air outlet; 4 Cover grille for hot air inlet

12.2 Hot air routing

Preparing cargo space air outlet bracket

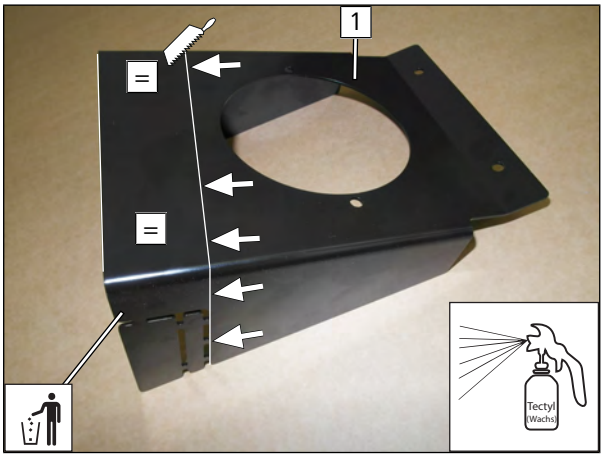


Fig. 57

1 Cargo space air outlet bracket

Adapting partition wall

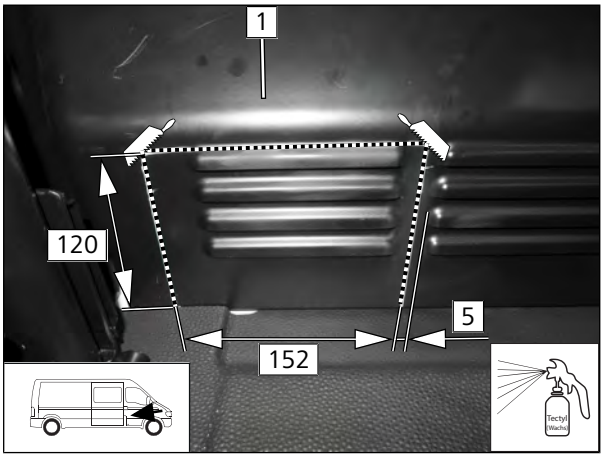


Fig. 58

▶ Cut rear panel on front passenger's side **1** at the markings. The bottom will be cut later!

Cutting out trim piece

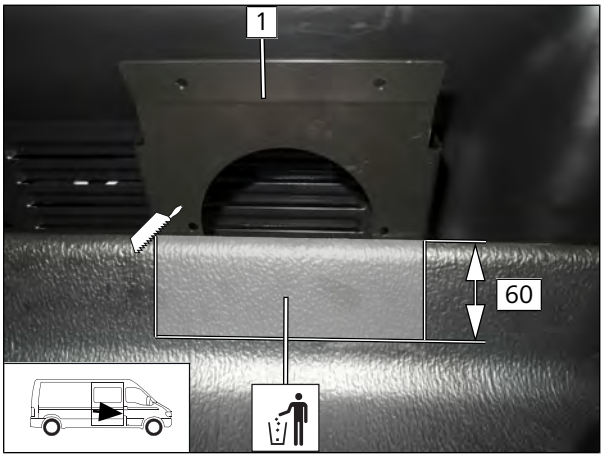


Fig. 59

▶ Position bracket **1** at the cutting line. Copy outer edges of bracket **1** onto trim.

Adapting partition wall

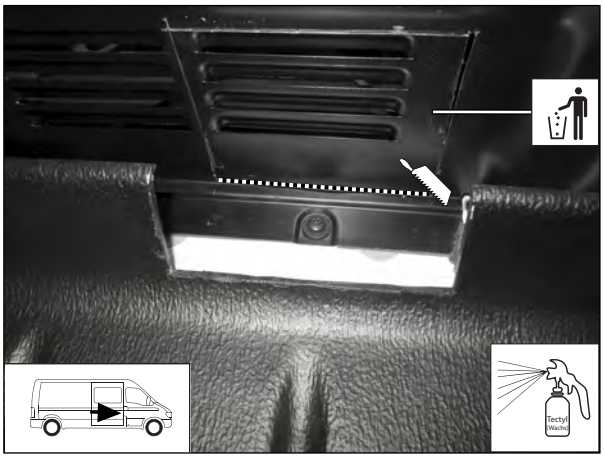


Fig. 60

Fitting edge protection

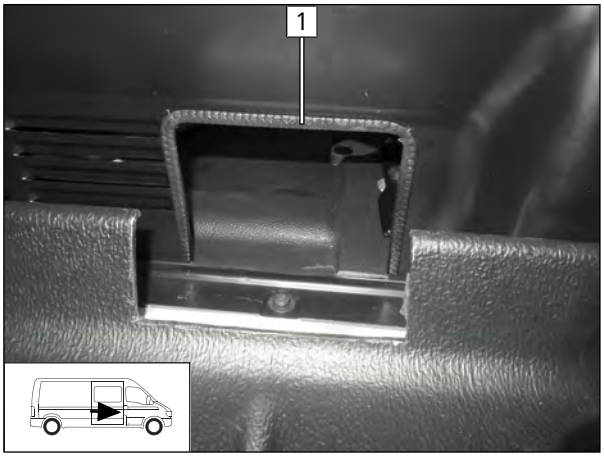


Fig. 61

[1] Edge protection

Drilling holes in cargo space air outlet bracket

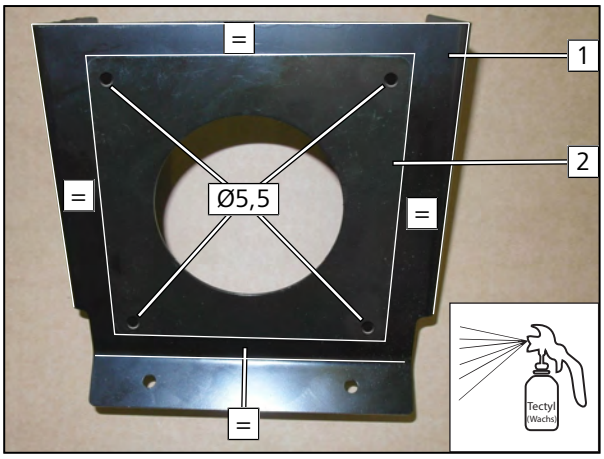


Fig. 62

▶ Position cargo space air outlet retaining plate [2] at the centre of cargo space air outlet bracket [1] as shown and copy hole pattern.

Premounting cargo space air outlet bracket

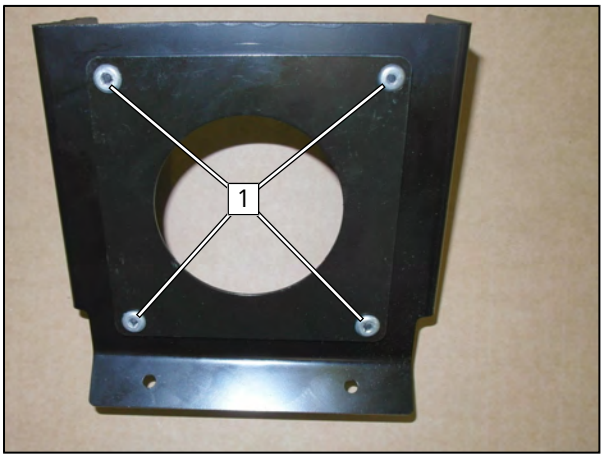


Fig. 63

1 Expanding rivet

Premounting air outlet

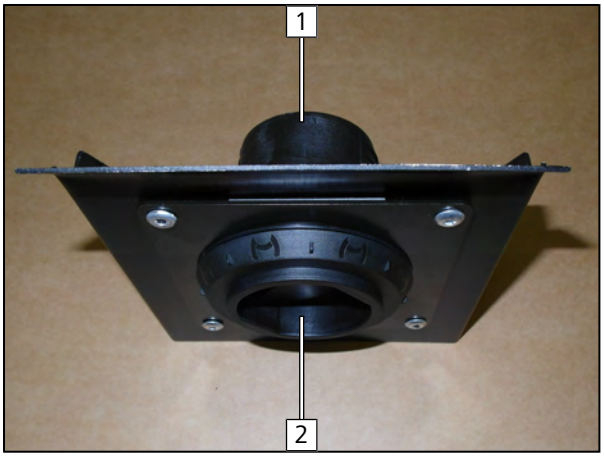


Fig. 64

The installation of cover **2** should be confirmed with the end customer.

1 Socket

2 Cargo space air outlet

Copying bracket hole pattern onto partition wall

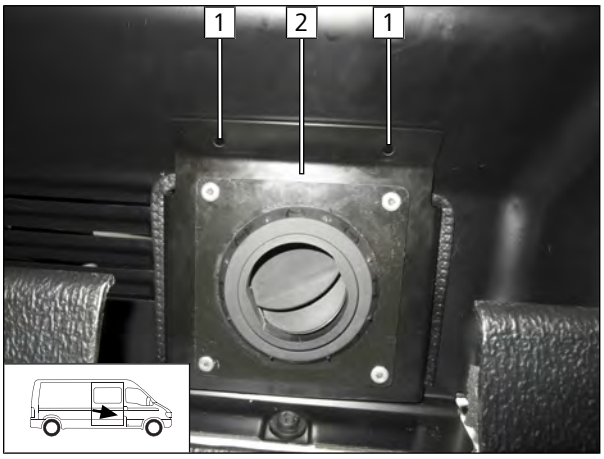


Fig. 65

1 Ø5.5 hole

2 Cargo space air outlet bracket

Mounting air outlet bracket

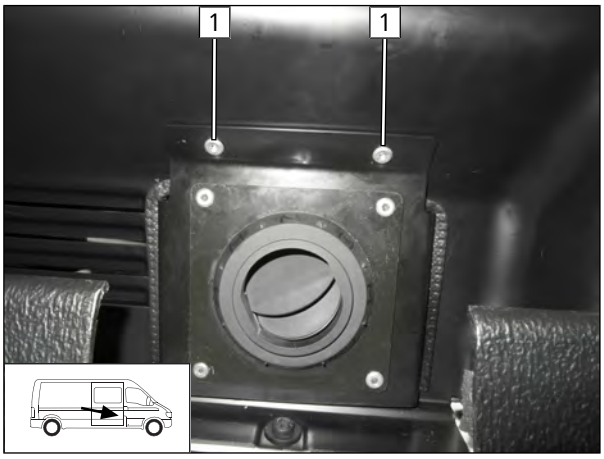


Fig. 66

1 Expanding rivet

Preparing seat trim

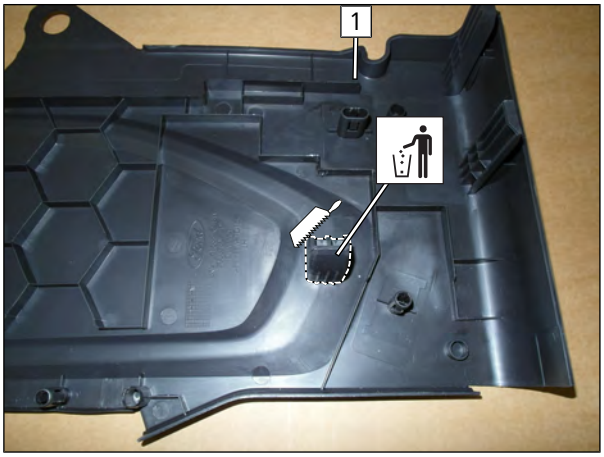


Fig. 67

1 Left trim on the front passenger's seat

Copying hole pattern and drilling hole

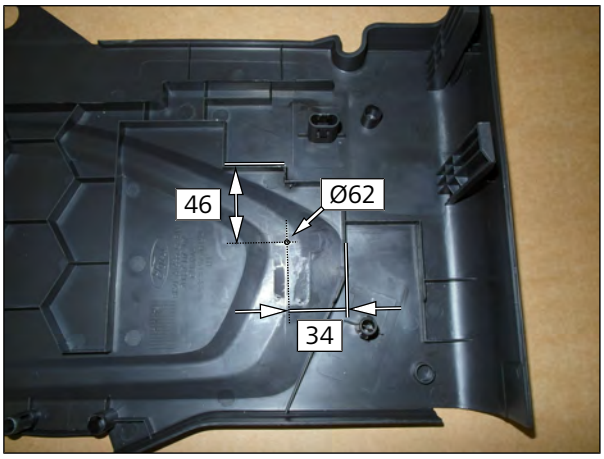


Fig. 68

Copying hole pattern of air outlet

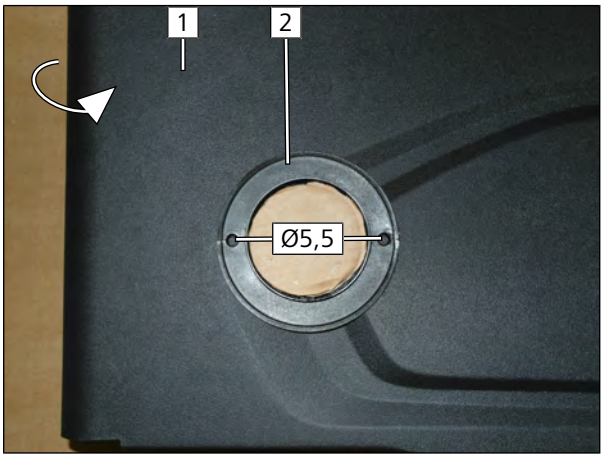


Fig. 69

1 Left trim on the front passenger's seat
2 Air outlet, copy hole pattern

Mounting air outlet

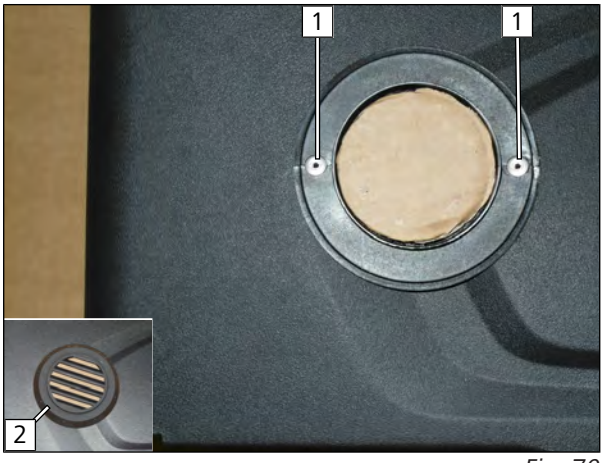


Fig. 70

The installation of cover 2 should be confirmed with the end customer.

1 Expanding rivet
2 Complete the air outlet

Cutting flexible tube to length

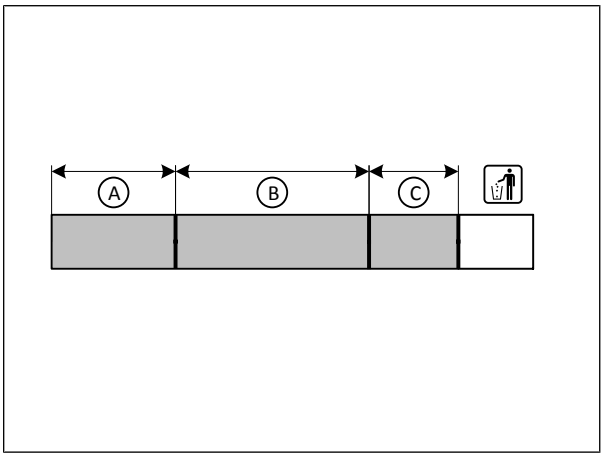


Fig. 71

A	380
B	470
C	50

Mounting flexible tubes Ⓐ , Ⓑ and Ⓒ

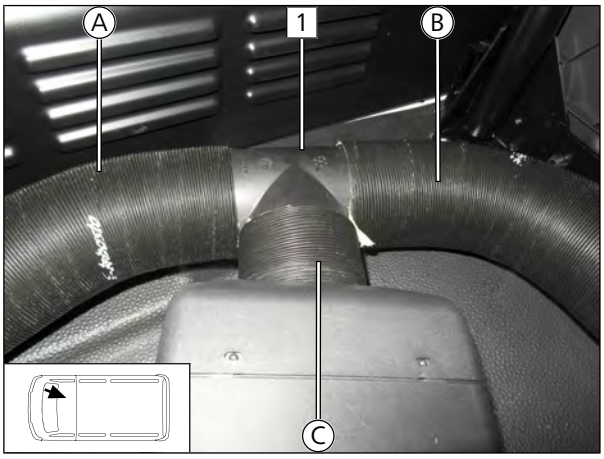


Fig. 72

1 60x60x60 T-piece

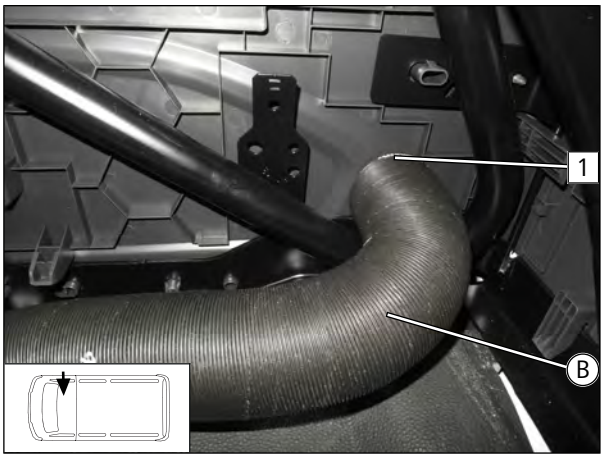


Fig. 73

1 Cabin air outlet

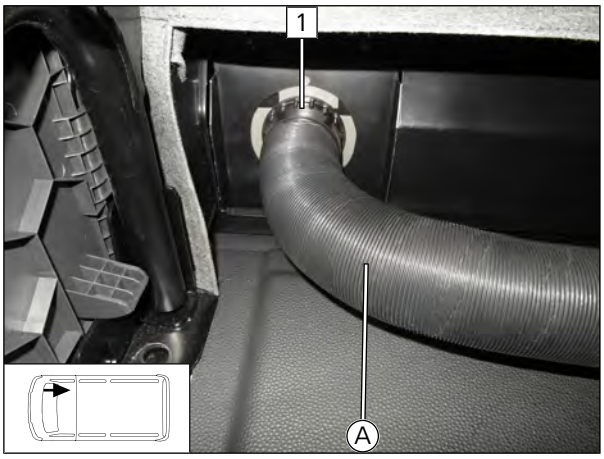


Fig. 74

1 Cargo space air outlet

Removing SH2

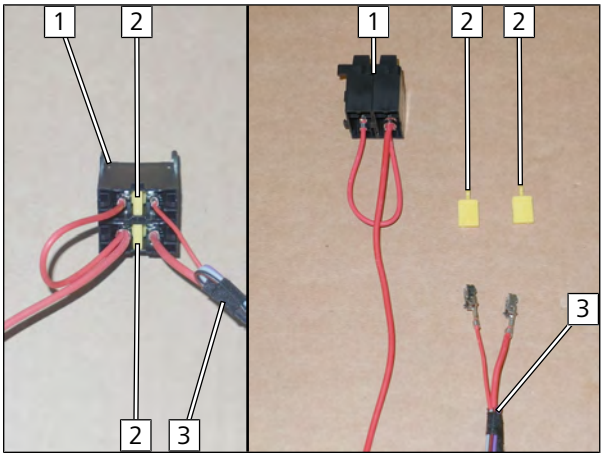


Fig. 75

▶ Detach HG wiring harness 3 from SH2 1.

2 Secondary lock

Connection and routing of heater wiring harness

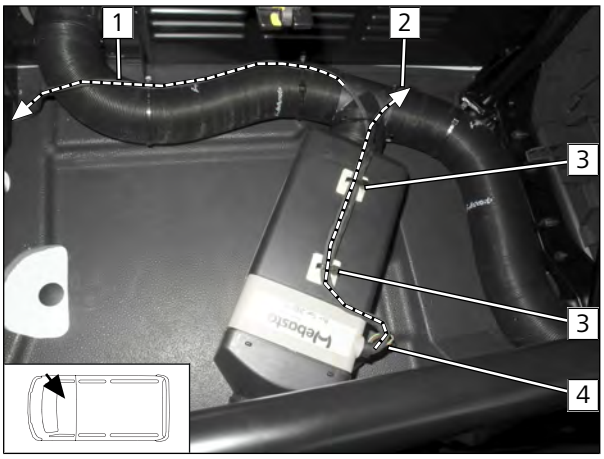


Fig. 76

1 Control element wiring harness
2 HG wiring harness
3 Adhesive base, cable tie
4 HG connector

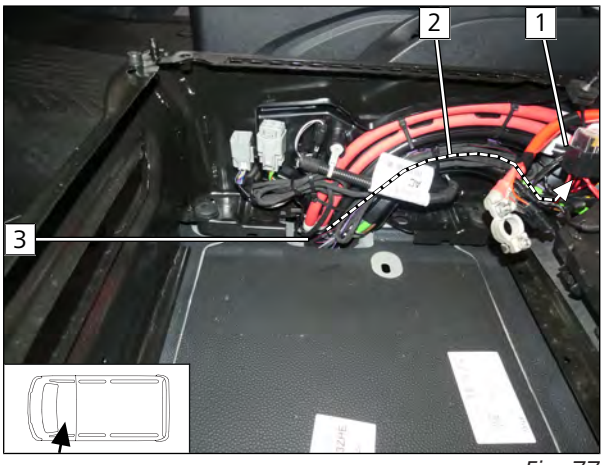


Fig. 77

1 SH2
2 HG wiring harness
3 Original vehicle cable duct

Completing SH2

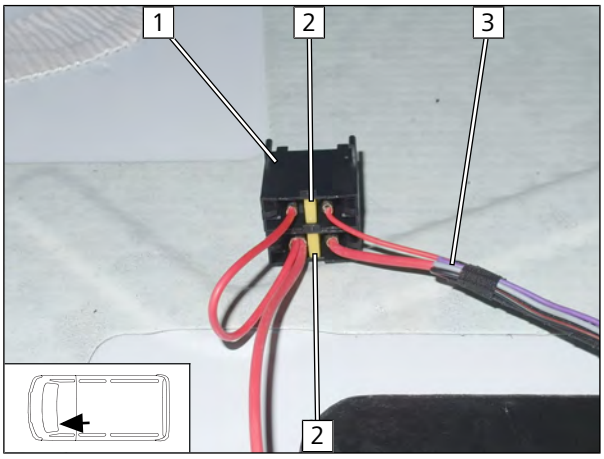


Fig. 78

1 SH2
2 Secondary lock
3 HG wiring harness

Drilling hole in battery box

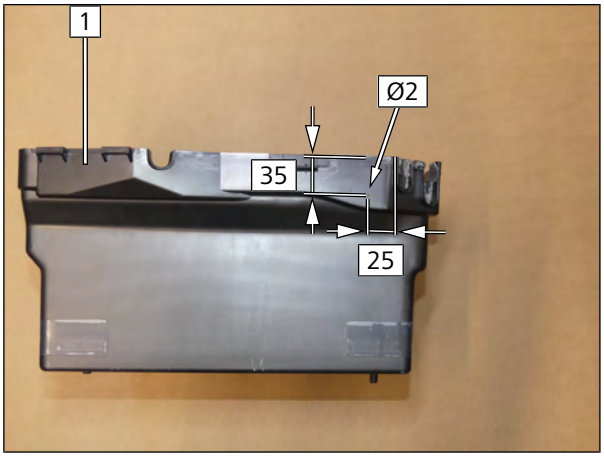


Fig. 79

1 Battery box

Mounting retaining plate of SH2

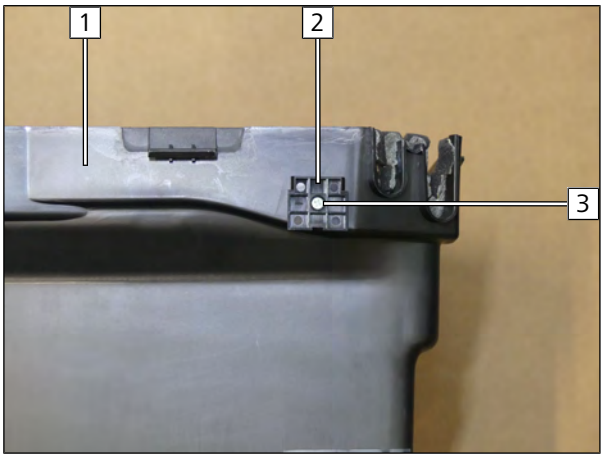


Fig. 80

1 Battery box
2 Retaining plate SH2
3 Bolt

Installing SH2

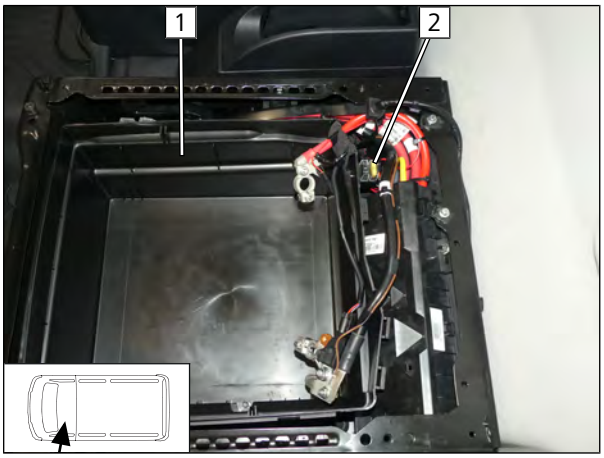


Fig. 81

1 Battery box
2 SH2

Connection of positive and negative wires to vehicle battery

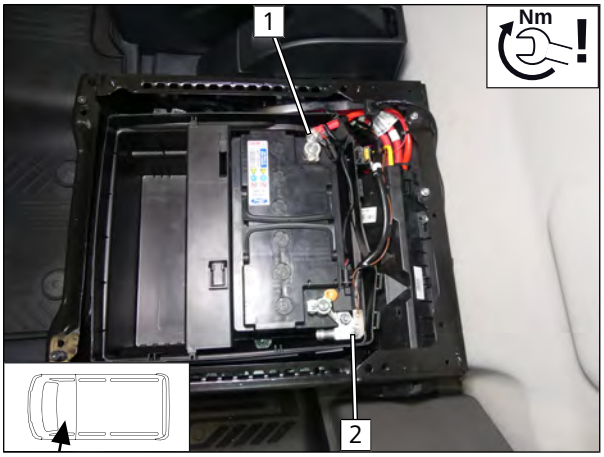


Fig. 82

DANGER

Observe tightening torque

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

1 Positive wire on positive support point
2 Negative wire on negative terminal

14 Electrical system of control element

14.1 Setpoint sensor

Removing storage compartment

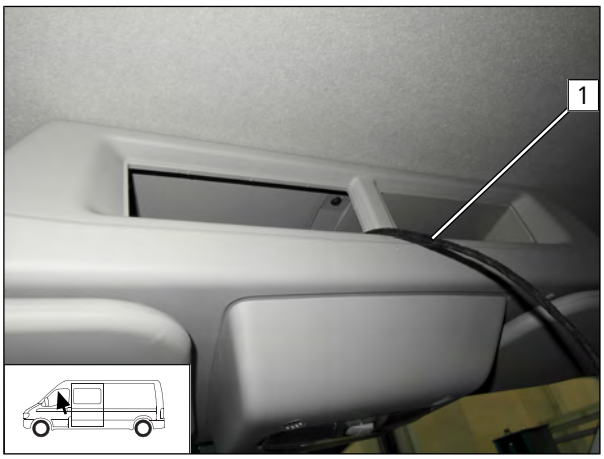


Fig. 83

▶ Remove left storage compartment.

[1] Setpoint sensor wiring harness

Premounting cover frame

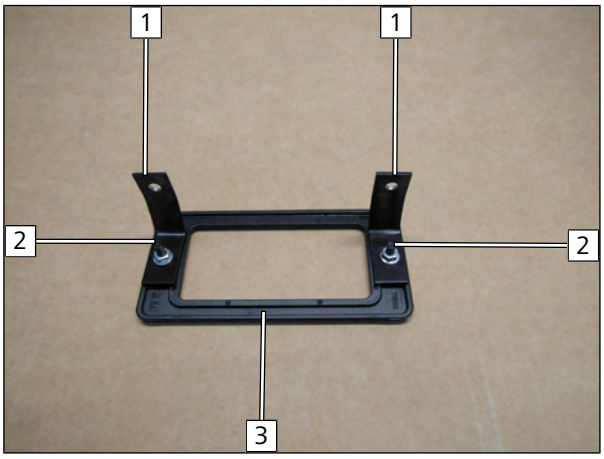


Fig. 84

▶ Bend angle bracket [1] as shown and adapt it to the storage compartment.

[2] M4 bolt, washer, nut

[3] Control element cover frame

Copying hole pattern and drilling holes

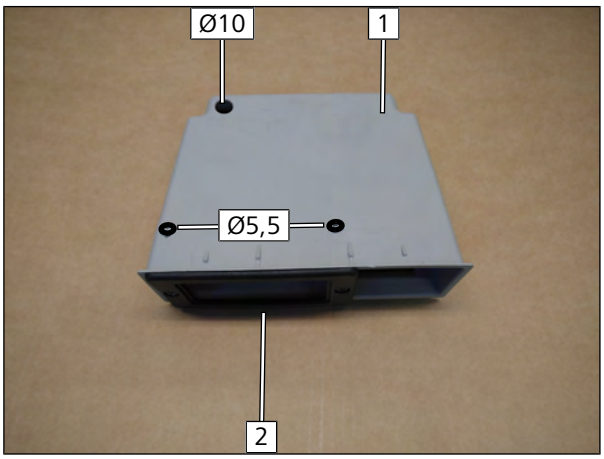


Fig. 85

[1] Storage compartment

[2] Control element cover frame

Mounting cover frame

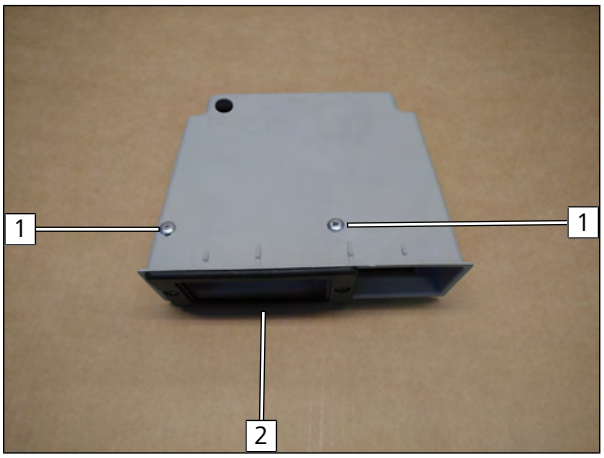


Fig. 86

1 Expanding rivet
2 Control element cover frame

Mounting storage compartment

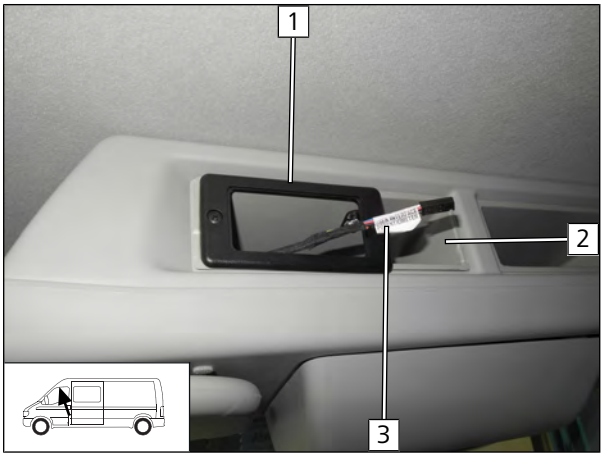


Fig. 87

1 Control element cover frame
2 Storage compartment
3 Setpoint sensor wiring harness

Premounting setpoint sensor

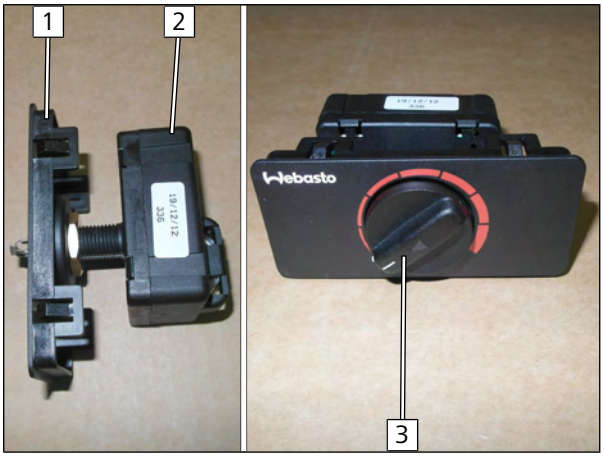


Fig. 88

1 Trim piece
2 Setpoint sensor
3 Rotary knob

Mounting setpoint sensor

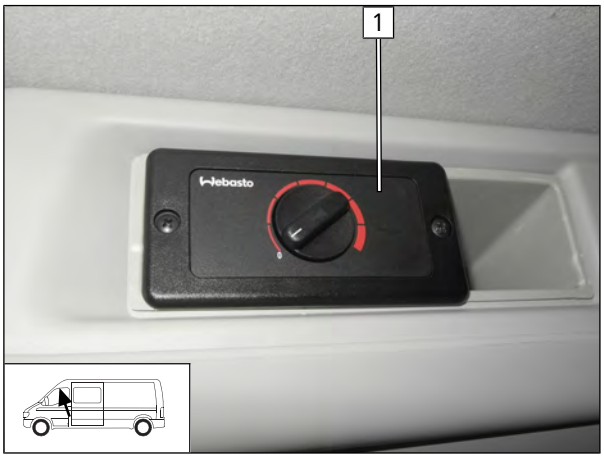


Fig. 89

1 Setpoint sensor

15 Final work for vehicle

Mounting towing eye

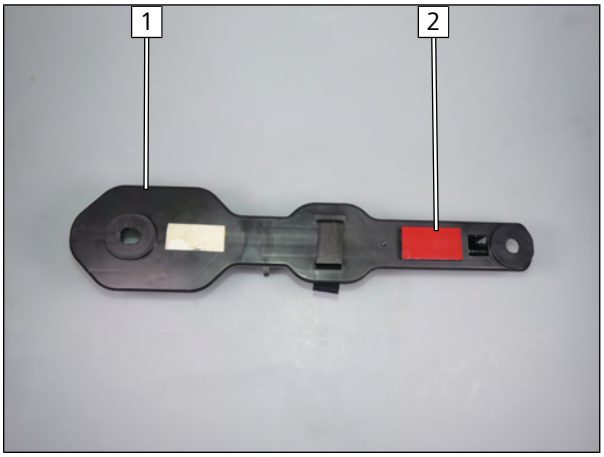


Fig. 90

1 Towing eye bracket
2 Double-sided hook-and-loop fastener

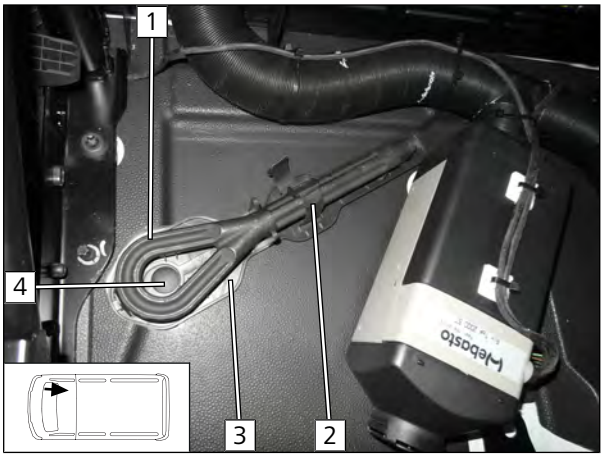


Fig. 91

▶ Mount bracket 3 as shown.

1 Towing eye
2 Close strap
4 Original vehicle clip

Mounting heat shield plate

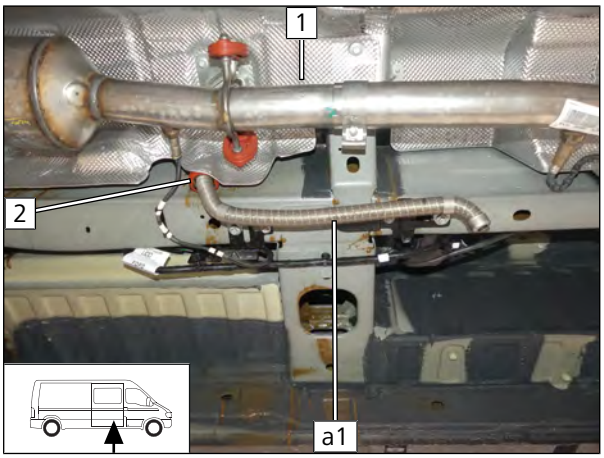


Fig. 92

1 Heat shield plate
2 Aligning spacer bracket

16 Final work

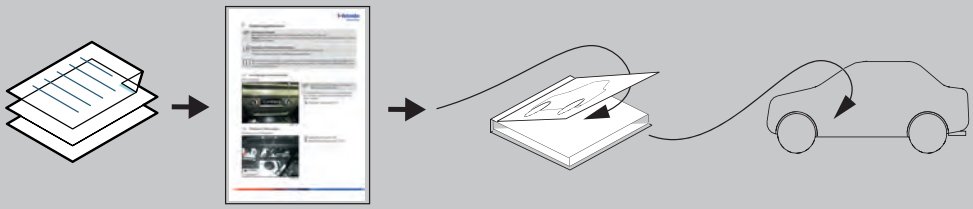
Further information can be found in the vehicle manufacturer's technical documentation.

- ▶ 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

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

- ▶ Program MultiControl HD
- ▶ 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.

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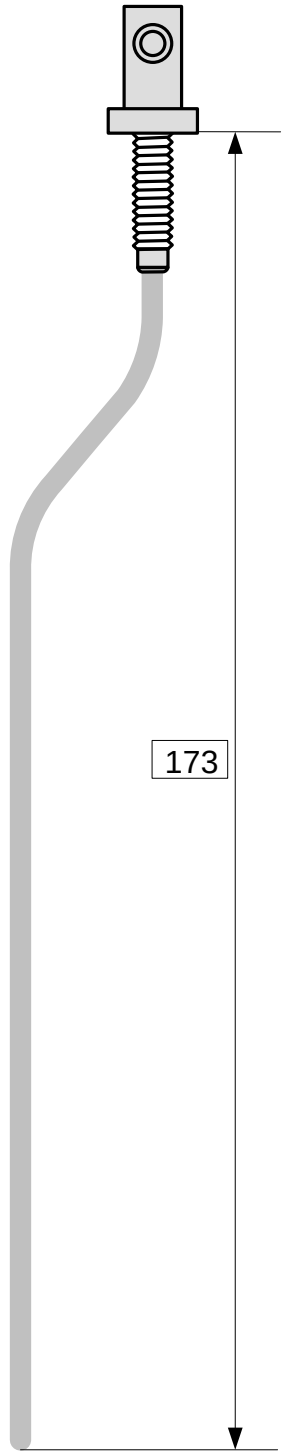
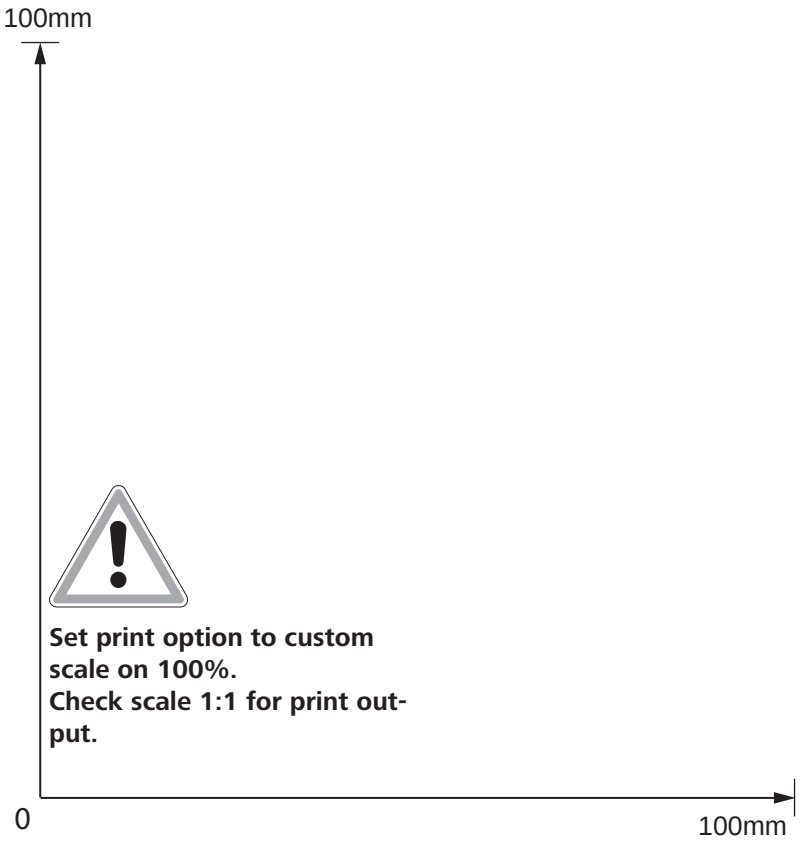
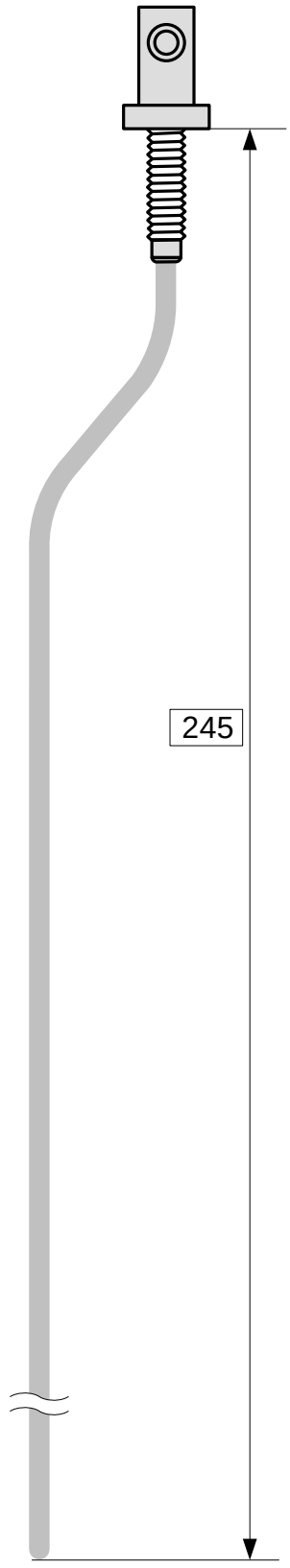
17 Tank extracting device template for 70 L and 80 L

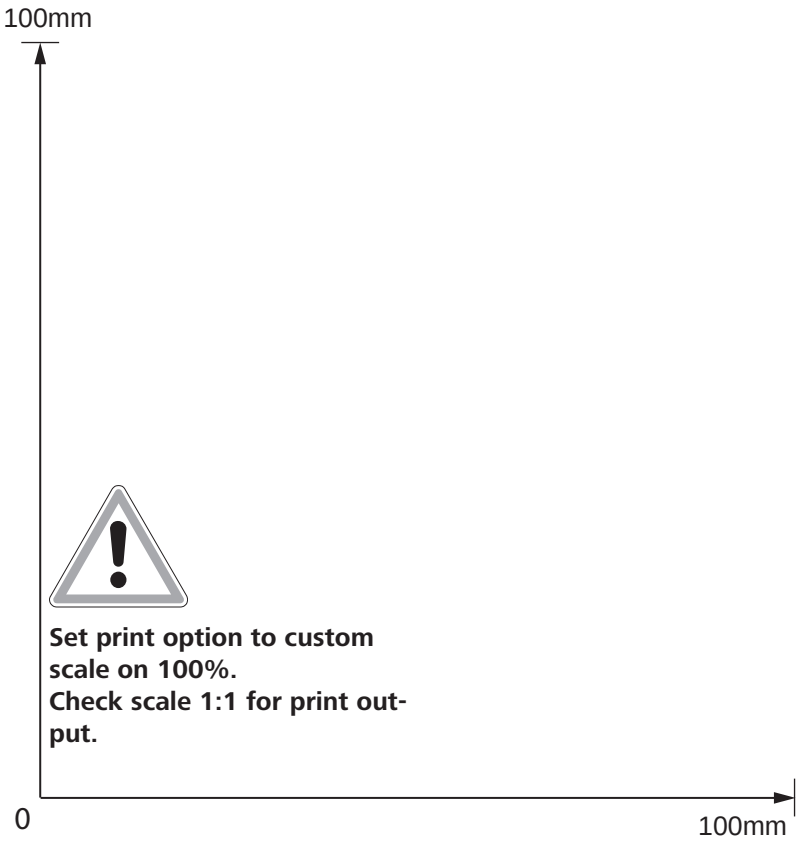




Set print option to custom scale on 100%.
Check scale 1:1 for print output.

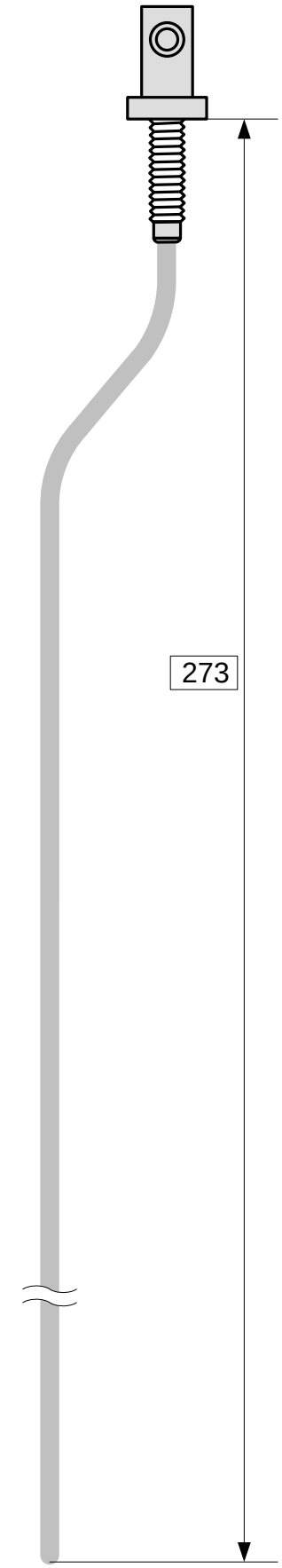
18 Tank extracting device template for 95 L

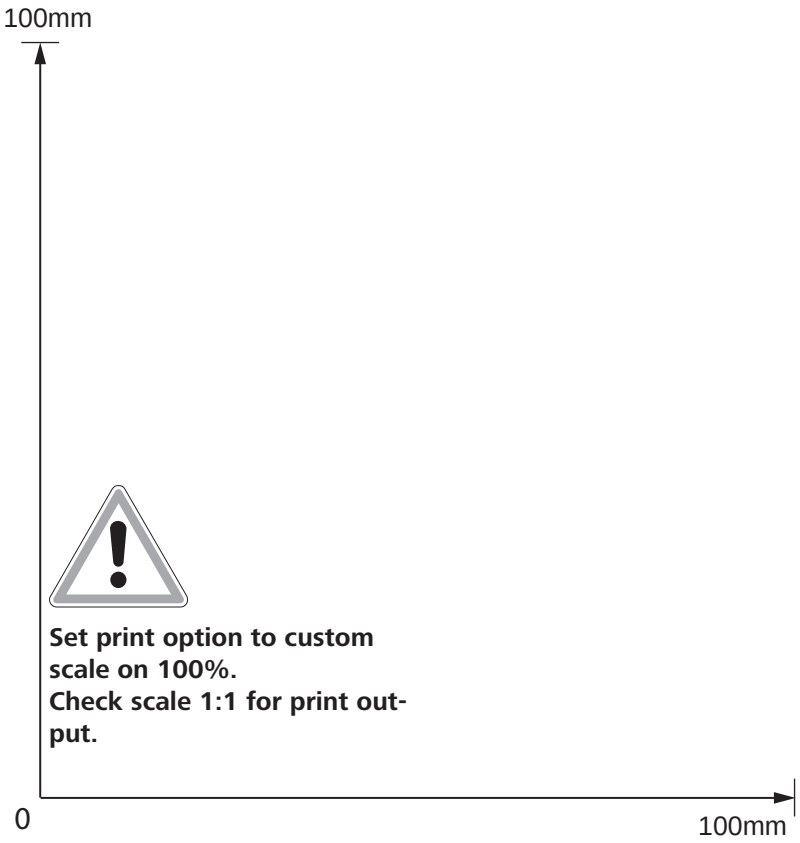




Set print option to custom scale on 100%.
Check scale 1:1 for print output.

19 Tank extracting device template for 100 L





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

20 Operating instructions

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 the continuous heating mode

If the heater will be used in the continuous heating mode we recommend the installation of a second battery and/or a sufficient charging current supply.

DANGER

Risk of fire or damage due to overheating

When loading the vehicle, please ensure that at the heater neither the intake side for hot air in front of the passenger seat nor the air outlet for hot air behind the seat are closed off or blocked.

20.1 Installation location of fuses

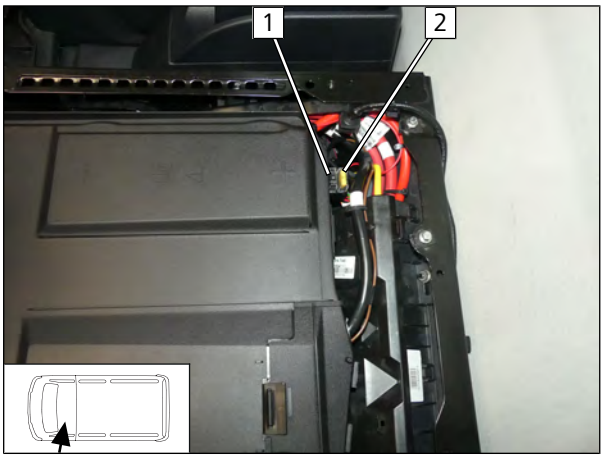


Fig. 93

1 Control element fuse F3: 1A
2 Heater fuse F1: 20A