

# K Installation documentation

for air heater AT 2000STC

Fiat Ducato / Peugeot Boxer / Citroen Jumper

Left-hand drive vehicle

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Fiat	Ducato	250	from 2009	e3* 2007/46* 0044*...
Fiat	Ducato	250	from 2009	e3* 2001/116* 0232*...
Fiat	Ducato	250	from 2014	L778
Fiat	Ducato	250L	from 2014	L779
Fiat	Ducato	250	from 2020	e3* 2007/46* 0044*...
Fiat	Ducato Series 8	250	from 2021	e3* 2007/46* 0044*...

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displacement [cm <sup>3</sup> ]	Engine code
2.0D	Diesel	Euro 5	SG	85	1956	4HV
2.2D	Diesel	Euro6;WLTP;AR;...	SG	88	2184	46349131
2.2D	Diesel	Euro6;WLTP;AR;...	SG	103	2184	46349131
2.2D	Diesel	Euro6;WLTP;AR;...	AG	103	2184	46349131
2.2D	Diesel	Euro6;WLTP;AR;...	SG	118	2184	46348913
2.2D	Diesel	Euro6;WLTP;AR;...	AG	118	2184	46348913
2.2D	Diesel	Euro6;WLTP;AR;...	SG	132	2184	46348913
2.2D	Diesel	Euro6;WLTP;AR;...	AG	132	2184	46348913
2.3D	Diesel	Euro 6d	SG	88	2287	F1AGL4114
2.3D	Diesel	Euro 5	SG	96	2287	F1AE3481D
2.3D	Diesel	Euro 6d	SG	103	2287	F1AGL4113
2.3D	Diesel	Euro 6d	AG	103	2287	F1AGL4113
2.3D	Diesel	Euro 6b	SG	109	2287	F1AE3481E
2.3D	Diesel	Euro 6d	SG	117	2287	F1AGL4112
2.3D	Diesel	Euro 6d	AG	117	2287	F1AGL4112
2.3D	Diesel	Euro6;WLTP;CI;...	SG	130	2287	F1AGL411...

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Peugeot	Boxer	100 / 130	from 2009	e3* 2007/46* 0045*...
Peugeot	Boxer	X2/50	from 2010	L772
Peugeot	Boxer	X2/50	from 2016	e3* 2007/46* 0045*...

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displacement [cm <sup>3</sup> ]	Engine code
2.0	Diesel	Euro 6	SG	81	1997	DYZZ
2.0	Diesel	Euro 6	SG	96	1997	DYZZ
2.2	Diesel	Euro 5	SG	74	2198	4H03/4HY
2.2	Diesel	Euro 5	SG	81	2198	4H03/4HG
2.2	Diesel	Euro 5	SG	96	2198	4H03/4HH

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Citroen	Jumper	100 / 130 / 150	from 2009	e3* 2007/46* 0046*...
Citroen	Jumper	X2/50	from 2010	L773
Citroen	Jumper	X2/50	from 2016	e3* 2007/46* 0046*...

Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displacement [cm <sup>3</sup> ]	Engine code
2.0	Diesel	Euro 6	SG	81	1997	DYZZ
2.0	Diesel	Euro 6	SG	96	1997	DYZZ
2.2	Diesel	Euro 5	SG	81	2198	4H03/4HG
2.2	Diesel	Euro 5	SG	96	2198	4H03/4HH
2.2	Diesel	Euro 5	SG	110	2198	4H03/4HJ

Validity	Equipment variants	Model		
		Ducato	Boxer	Jumper
Verified equipment variants	Twin seat	x	x	x
	With partition wall	x	x	x
	Single cabin	x	x	x
Unverified equipment variants	Alarm system	x	x	x
	Single seat	x	x	x
	Double cabin	x	x	x
	Bus	x	x	x

Total installation time	Note
6 hours	

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# 1 List of abbreviations

AG	Automatic transmission
DP	Fuel pump
Fig.	Figure
HG	Heater
MCC	MultiControl (control element)
SG	Manual transmission
SH2	Engine compartment fuse holder for F1/F3
Veh.	Vehicle
X13	Female plug for additional fuel pump wiring harness
X16	Male plug for fuel pump wiring harness
X17	Female plug for additional fuel pump wiring harness
X9 (c)	Control element connector

## 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	9032244A
Installation kit for Fiat Ducato / Peugeot Boxer / Citroen Jumper diesel	1315904B
For cargo space heating option: additional cargo space heating kit	1328353_

MultiControl HD option	Order number
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  $\frac{1}{4}$  full.
- ▶ The installation location of the following elements should be chosen in coordination with the end customer:
  - Rotary switch
  - 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.




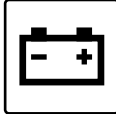






Reference to the vehicle manufacturer's specific documents.



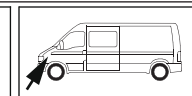
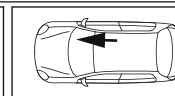
Note on a special technical feature

#### 3.4.3 Work step identification marks

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

<p>Mechanical system</p> 	<p>Electrical system</p> 	<p>High-voltage</p> 	<p>Hot air</p> 
<p>Combustion air</p> 	<p>Fuel</p> 	<p>Exhaust</p> 	<p>Software</p> 

#### 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
<b>1</b> / <b>12</b> / <b>a1</b>	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



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## 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 Ø60 circle bit
- Webasto flattening tool, Ident. No.: 1319729\_
- Automatic wire stripper 0.2 - 6 mm<sup>2</sup>
- Crimping pliers for cable lugs 0.5 – 10 mm<sup>2</sup>
- Crimping pliers for male connector 0.14 – 6 mm<sup>2</sup>
- Crimping pliers for connector 0.25 – 6 mm<sup>2</sup>
- 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	<ul style="list-style-type: none"> <li>▶ Open the fuel tank cap</li> <li>▶ Ventilate the fuel tank</li> <li>▶ Close the fuel tank cap again</li> </ul>	
Passenger compartment	<ul style="list-style-type: none"> <li>▶ Disconnect the battery</li> <li>▶ Front passenger's seat trim on the left and right (if present)</li> <li>▶ Driver's and front passenger's seats</li> <li>▶ Lower A-pillar trim on the driver's / front passenger's side</li> <li>▶ Lower B-pillar trim on the driver's / front passenger's side</li> <li>▶ Trim at the door on the driver's / front passenger's side</li> <li>▶ Fold up the floor covering</li> <li>▶ Detach partially the exhaust system bracket (see 'Preparing installation location' section)</li> <li>▶ Heat shield plate in the centre and on the right next to the tank (see 'Preparing installation location' section)</li> <li>▶ Tool box on the front passenger's side</li> </ul>	

### 5.2 Heater preparation

Engine compartment	<ul style="list-style-type: none"> <li>▶ Copy the factory number from the original type label to the duplicate type label</li> <li>▶ Remove years that do not apply from the type and duplicate label</li> <li>▶ Attach the duplicate label (type label) in the appropriate place in the engine compartment</li> </ul>	
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## 6 Installation overview

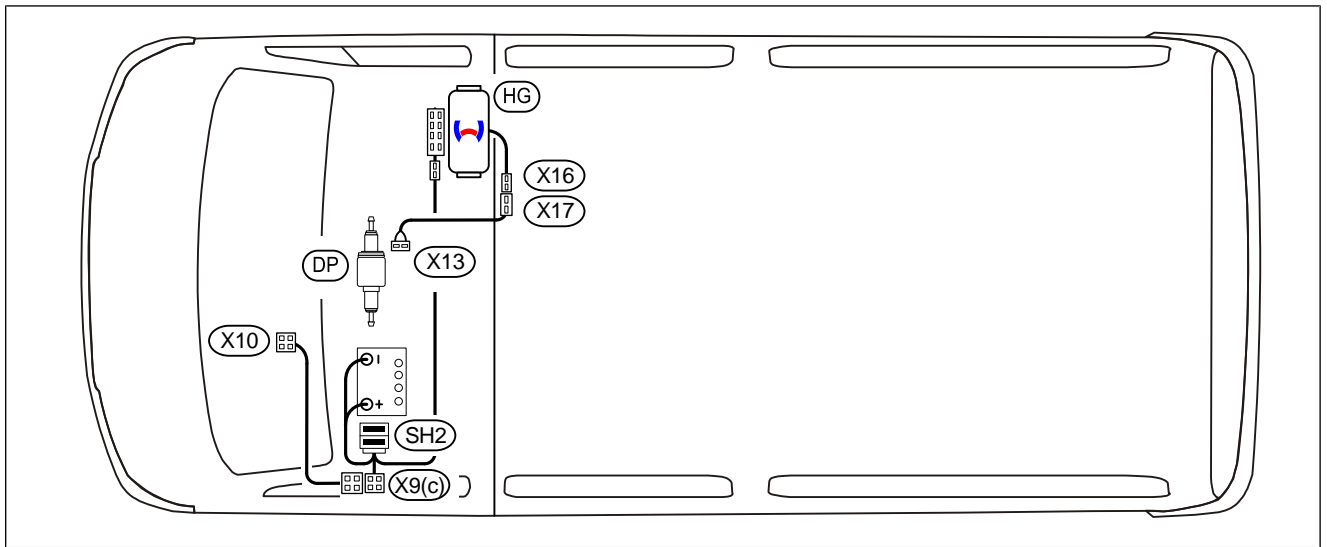


Fig. 1

### Legend to installation overview

Abbreviation	Component
DP	Fuel pump
HG	Heater
SH2	F1/F3 fuse holder
X9(c)	Control element connector
X10	Female plug for control element
X13	Female plug for additional fuel pump wiring harness
X16	Male plug for fuel pump wiring harness
X17	Female plug for additional fuel pump wiring harness

### Heater installation location



1 Heater

Fig. 2



## 7 Electrical system

### Installing SH2

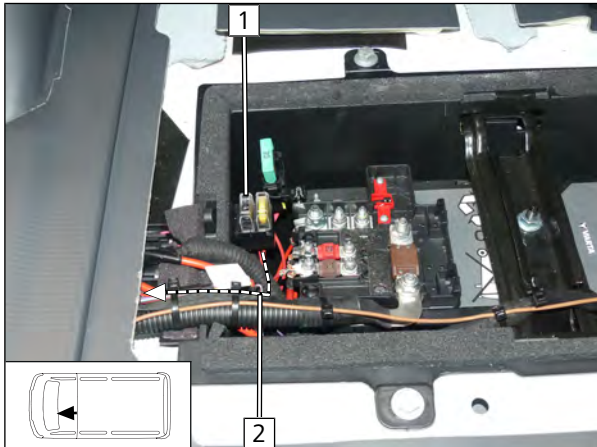


Fig. 3

- 1 SH2
- 2 HG wiring harness

### Connection of positive and negative wires to vehicle battery

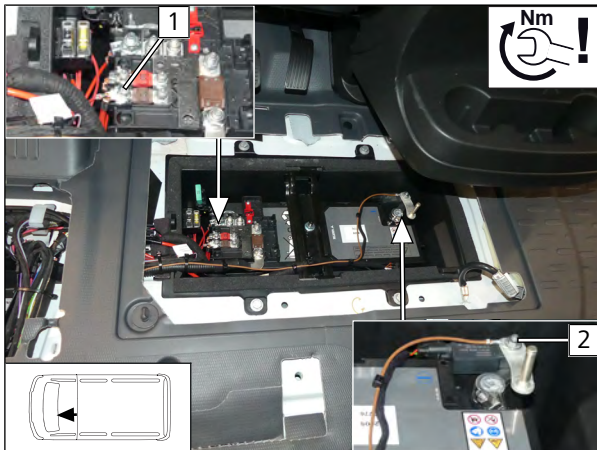


Fig. 4



#### DANGER

Observe tightening torque



The Fig. shows already the installation situation. The connection to the battery is carried out according to the 'Final work' chapter.

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

### Routing wiring harness

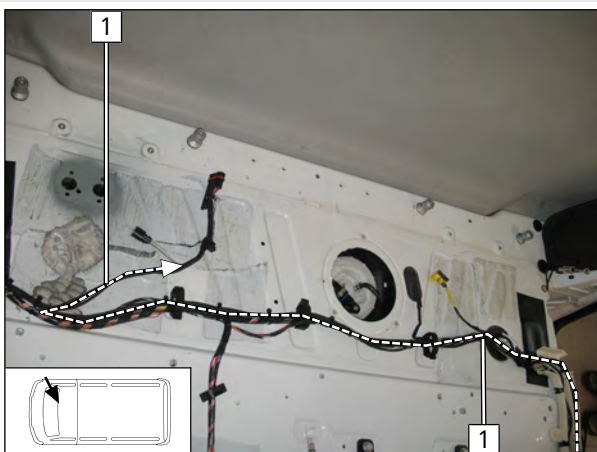


Fig. 5

- Route heater wiring harness 1 along original vehicle wiring harness and fasten with cable ties.



## 8 Mechanical system

### 8.1 Preparing installation location

#### Detaching exhaust system and removing heat shield plate

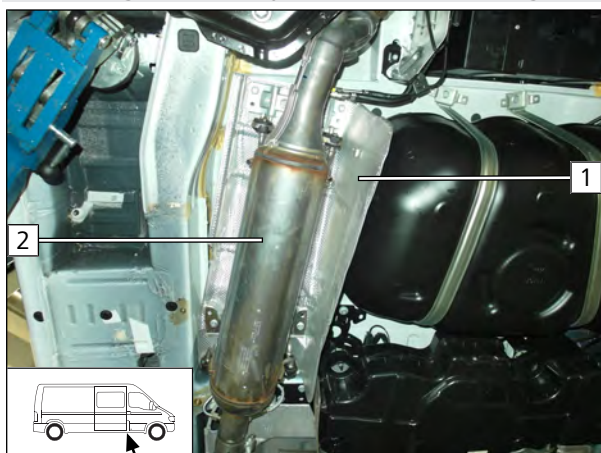


Fig. 6



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

- ▶ Detach exhaust system **2** from bracket and lower it.
- ▶ Detach original vehicle AdBlue line on heat shield plate **1** from the retaining clips (see next Fig. ) and remove the heat shield plate.

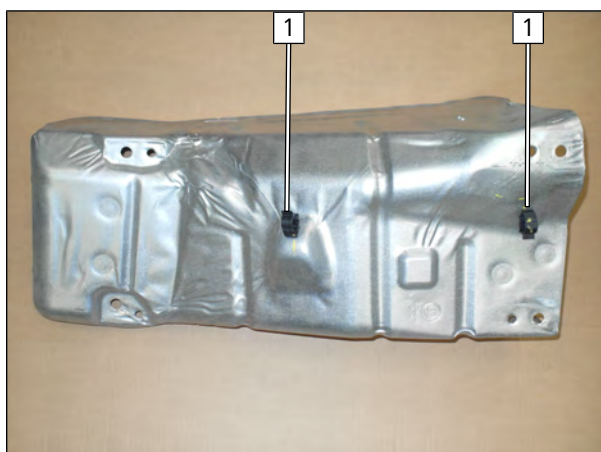


Fig. 7

- 1** Original vehicle AdBlue line retaining clip

#### Removing floor insulation

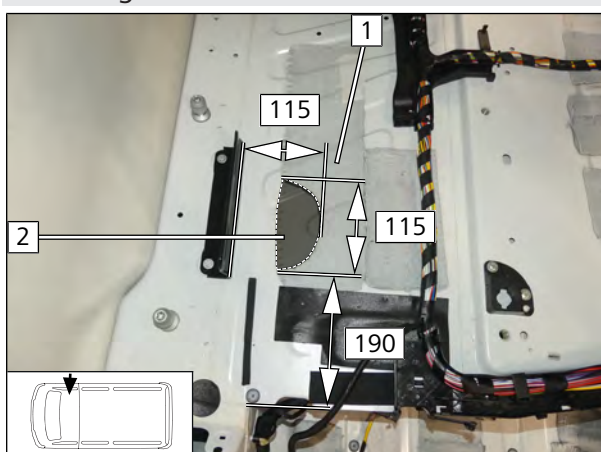


Fig. 8

- ▶ Mark floor insulation **1** as shown in Fig. **2** and remove.



## Cutting out template

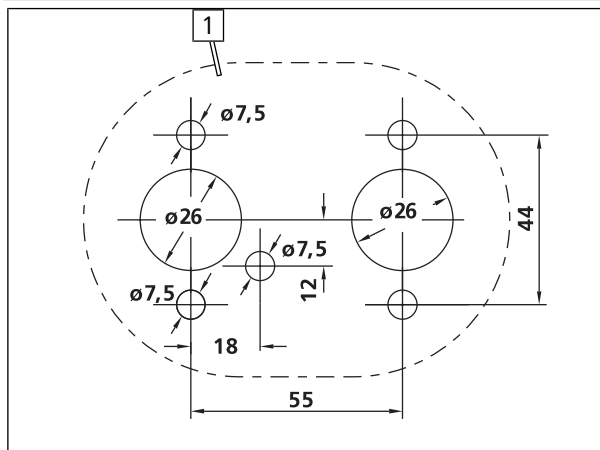


Fig. 9



Observe the AT 2000STC installation documentation.

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

## Copying hole pattern

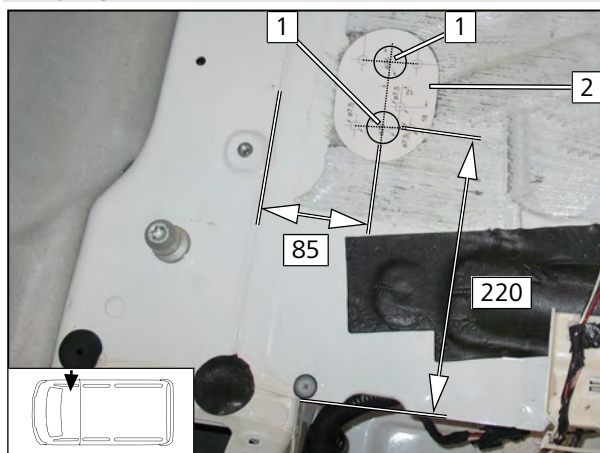


Fig. 10

- Position and align template **2**. Copy hole pattern at position **1**.

## Drilling hole in underbody

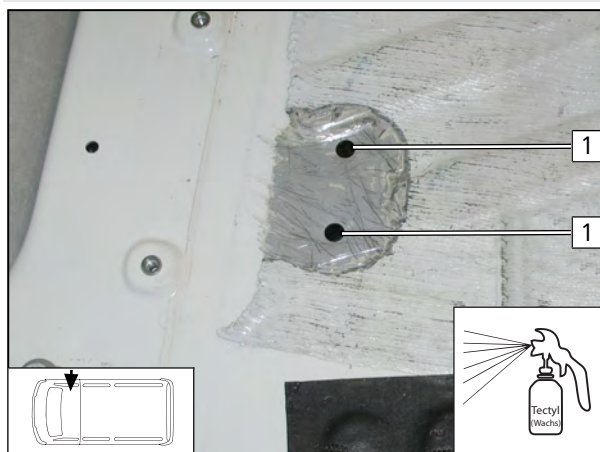


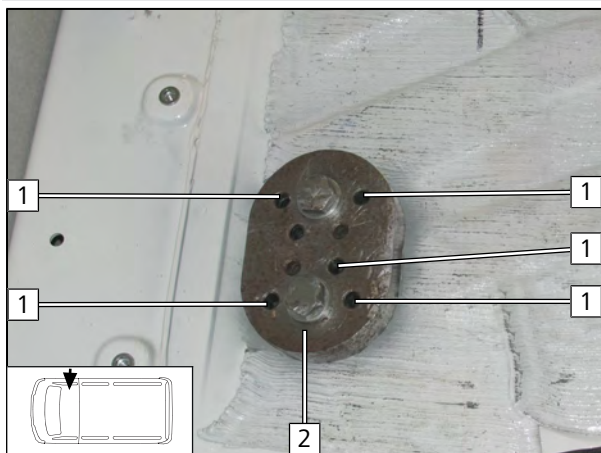
Fig. 11

- 1** Ø12 hole





## Flattening underbody

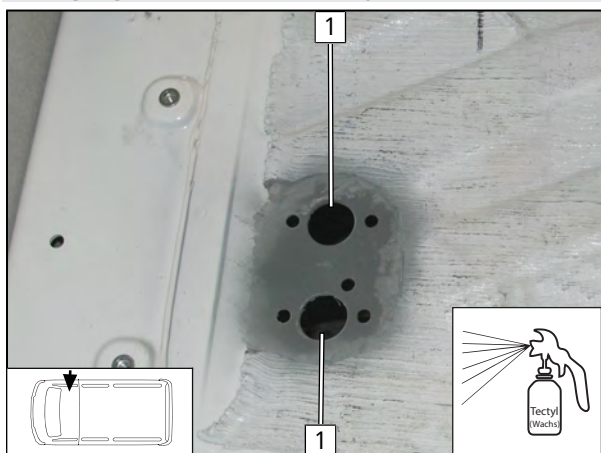


► Mount flattening tool **2** and flatten underbody. (Use Webasto flattening tool).

**1** Ø7 hole

Fig. 12

## Enlarging hole in underbody

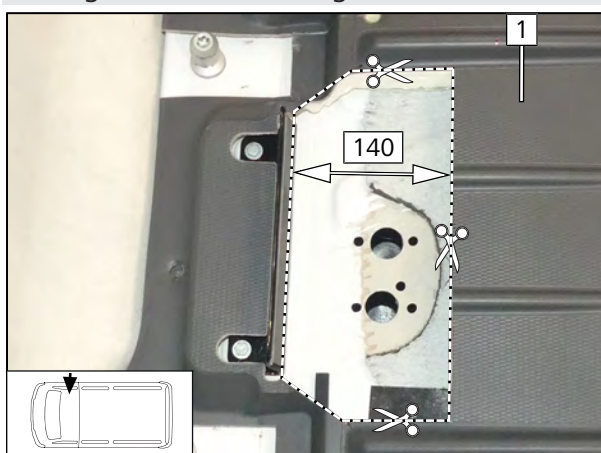


► Remove the flattening tool.

**1** Ø26 hole

Fig. 13

## Cutting out floor covering



► Cut out floor covering **1** as shown.

Fig. 14



## 8.2 Preparing heater

### Preparing heater

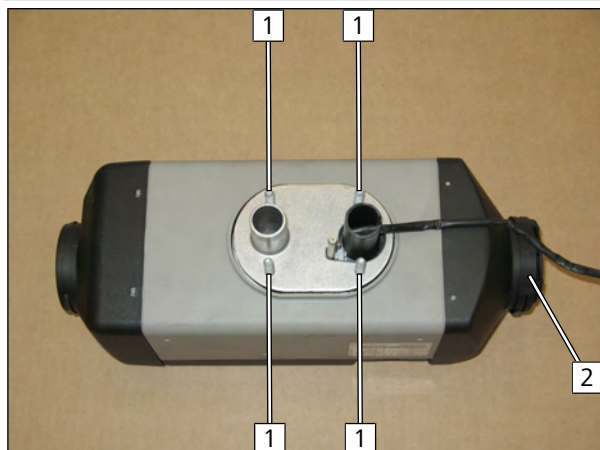


Fig. 15

► Replace bolt at position **1** with an M6 stud bolt.

**2** Cover grille

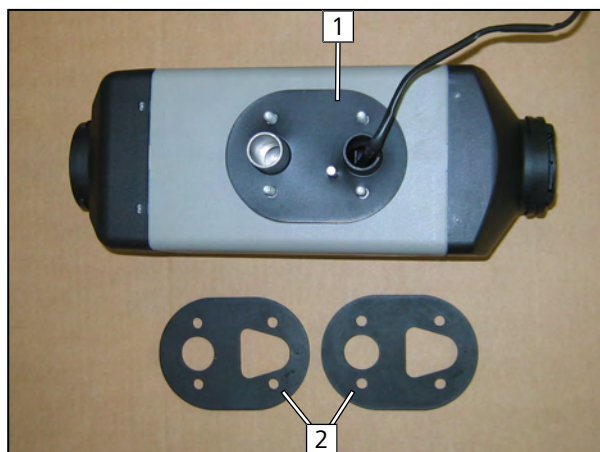


Fig. 16

**1** Rubber gasket

**2** Spacer plate

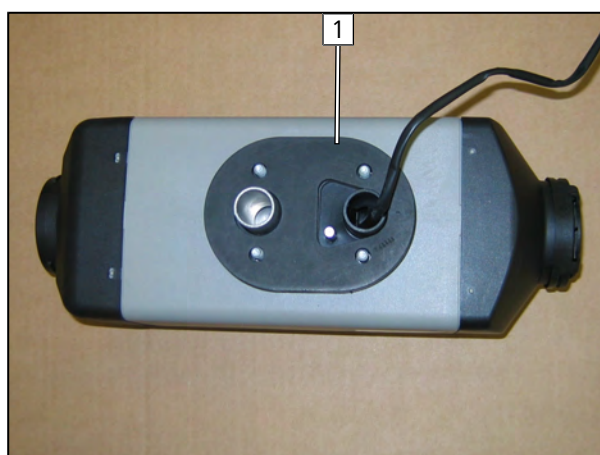


Fig. 17

**1** Mount spacer plate (2x)





## 8.3 Heater mounting

### Positioning and aligning heater

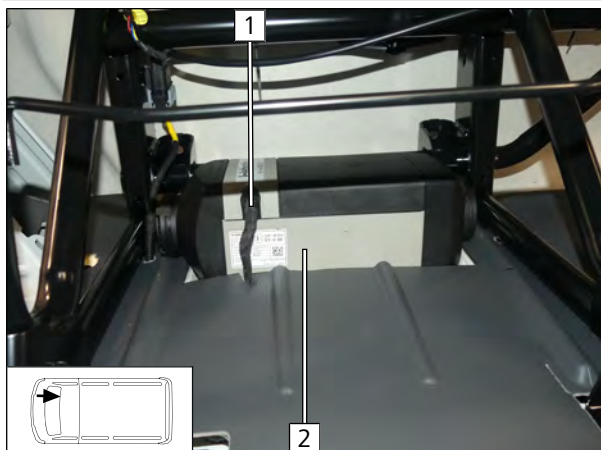


Fig. 18



Mount the twin seat again.

- ▶ Insert heater **2** into the prepared holes and align as shown.
- ▶ Connect wiring harness **1** to heater, close the cover again.

### Mounting heater



Fig. 19

- 1** Large diameter washer, flanged nut



## 9 Combustion air

### Shortening combustion air intake pipe

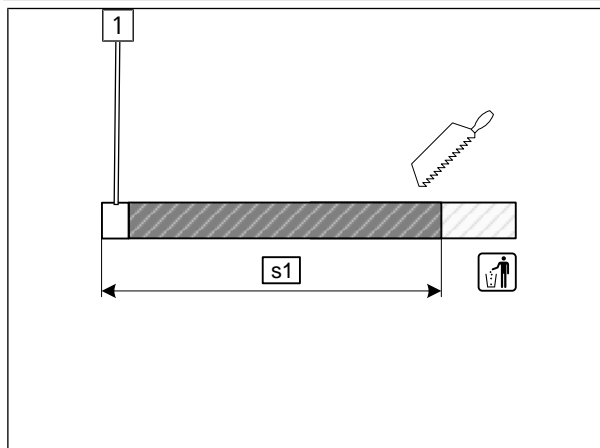


Fig. 20

**s1** 180

**1** Expanded side of the combustion air intake pipe

### Drilling hole

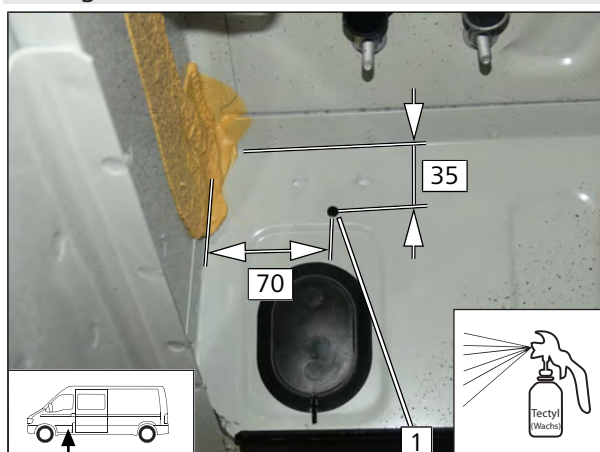


Fig. 21

**1** Ø6 hole

### Mounting combustion air intake silencer

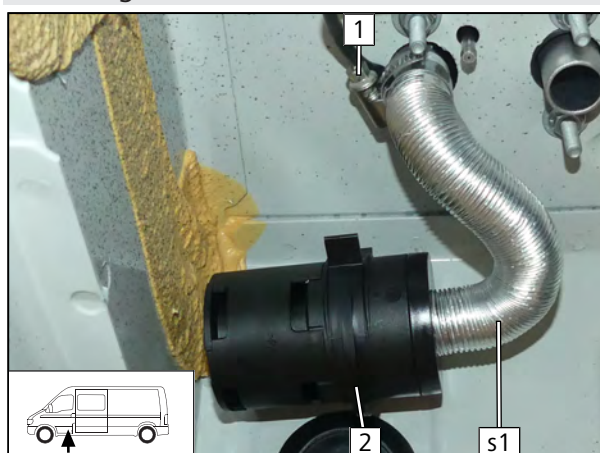


Fig. 22

**1** Ø16-27 clamp

**2** Combustion air intake silencer bracket in drilled hole



## 10 Fuel



### DANGER

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

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

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



### Danger of damage to components

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

### Cutting additional fuel pump wiring harness to length

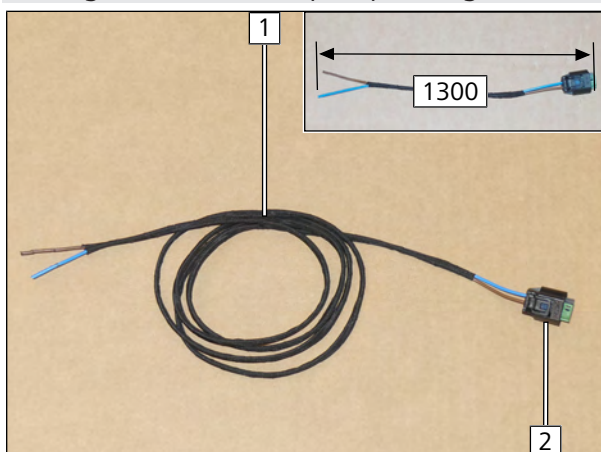


Fig. 23

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

**2** Connector X13

### Preparing additional fuel pump wiring harness

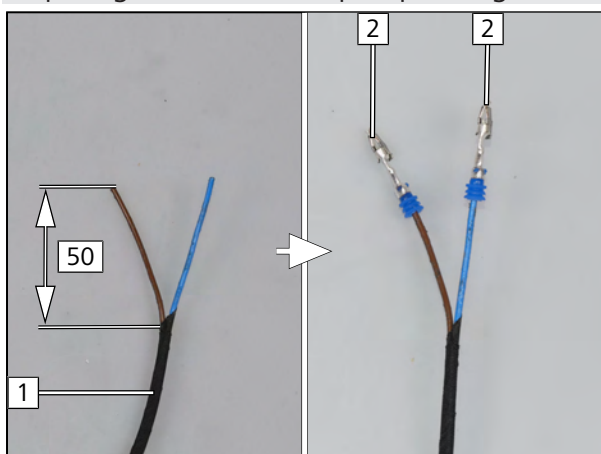


Fig. 24

**1** Additional fuel pump wiring harness

**2** Single-wire seal, socket contact

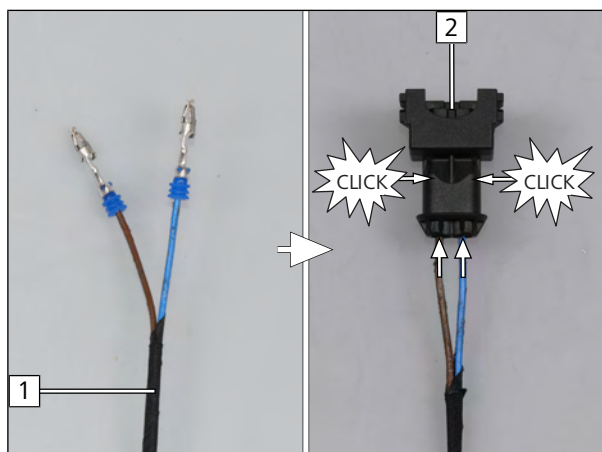


Fig. 25

- 1 Additional fuel pump wiring harness
- 2 Female plug X17

### Drilling hole

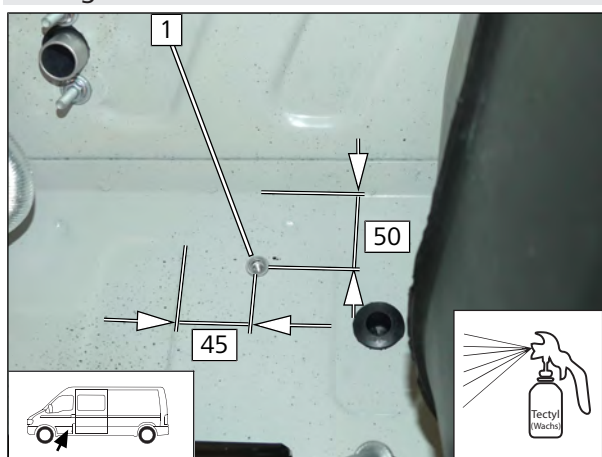


Fig. 26

- 1 Ø9 hole, rivet nut

### Connecting fuel line

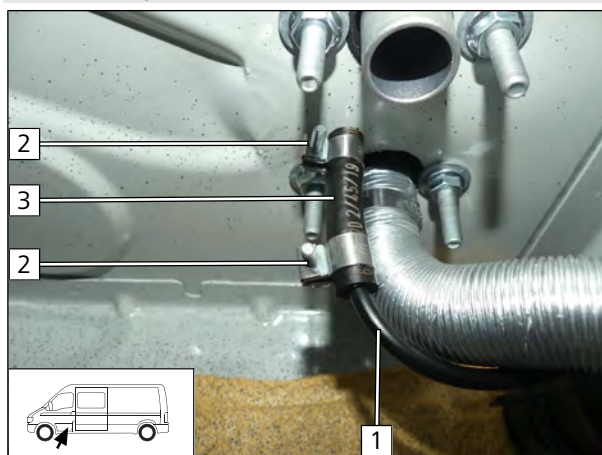


Fig. 27

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



## Connecting connector

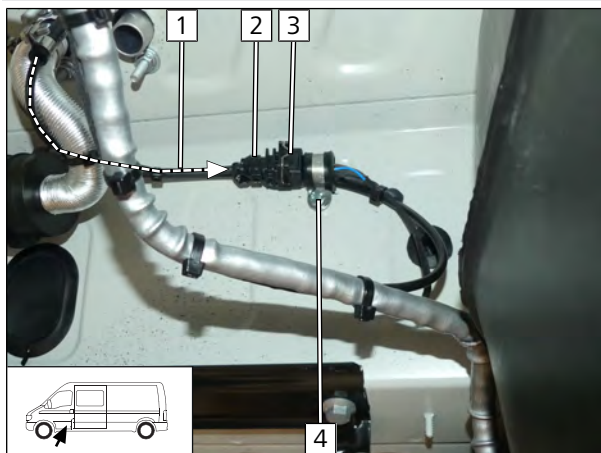


Fig. 28

► Connect connector X16 **2** and connector X17 **3**.

- 1** Fuel line, fuel pump wiring harness
- 4** M6x20 bolt, spring lock washer, Ø15 rubber-coated p-clamp, rivet nut

## Routing fuel line

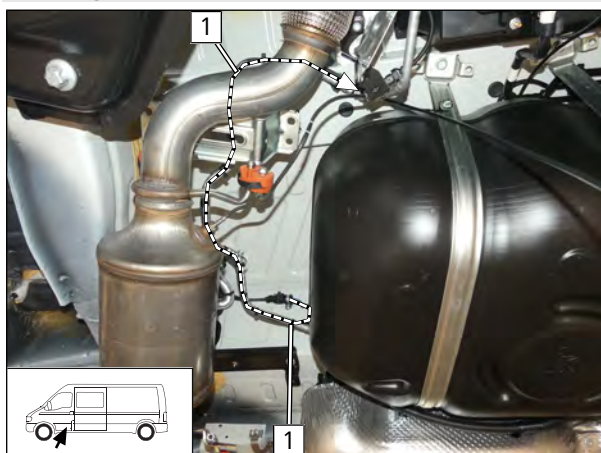


Fig. 29

► Attach fuel line and additional fuel pump wiring harness to original vehicle line with cable ties.

## Mounting fuel pump

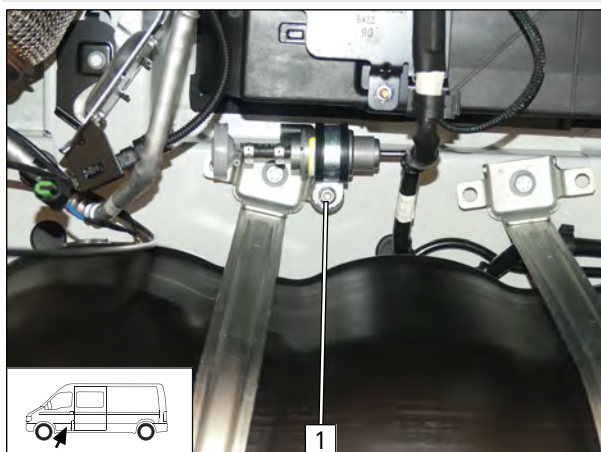


Fig. 30

- 1** Flanged nut, existing hole, silent block, fuel pump, rubber-coated clamp, flanged nut





## Fuel pump connection

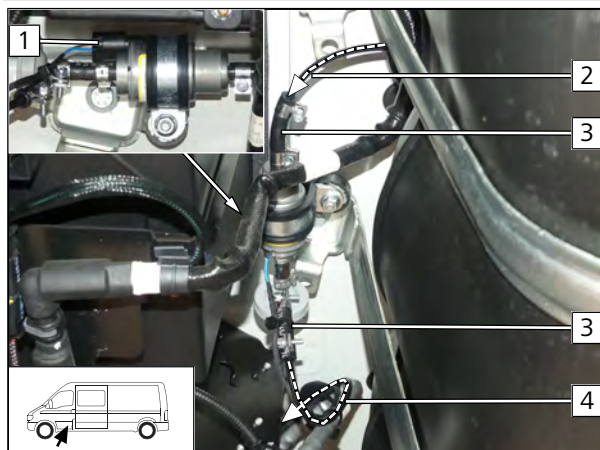


Fig. 31

- 1 Additional fuel pump wiring harness, connector X13
- 2 Fuel line of tank extracting device
- 3 Hose section, Ø10 clamp [2x]
- 4 HG fuel line

## Preparing heat protection tube

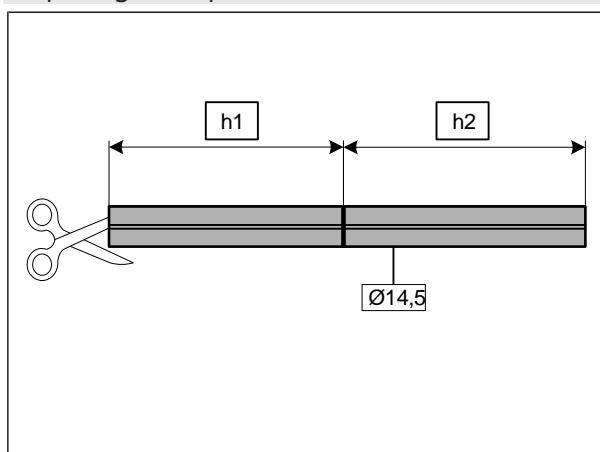


Fig. 32



Only for vehicles without original vehicle insulation on the AdBlue line (see next Fig.).

<b>h1</b>	150
<b>h2</b>	150

## Mounting heat protection tube

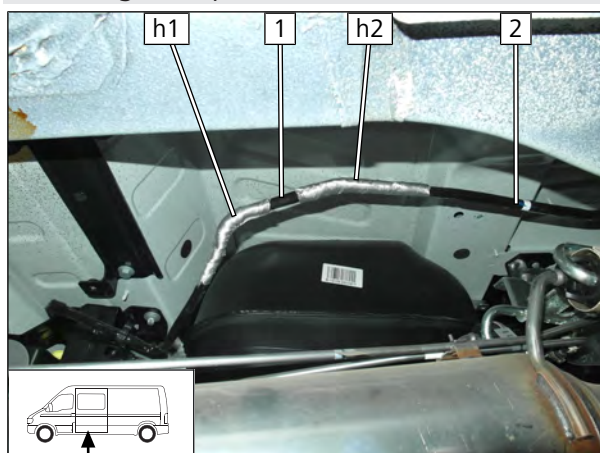


Fig. 33

- 1 Installation area of the retaining clip
- 2 AdBlue line



## View of drilling template

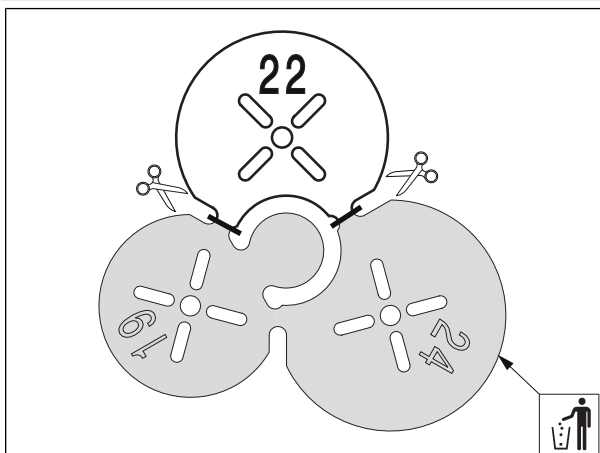


Fig. 34

## Copy hole pattern

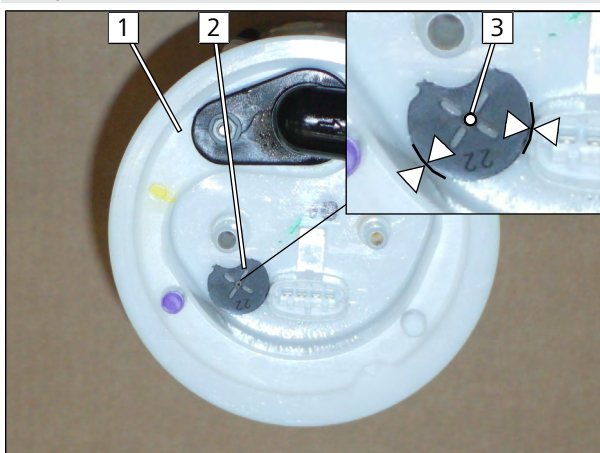


Fig. 35



Dismantle tank fitting **1** according to manufacturer's instructions.

- 1** Tank fitting
- 2** Position Ø22 drilling template as shown in fig.
- 3** Copy hole pattern, Ø6 hole

## Mounting tank extracting device

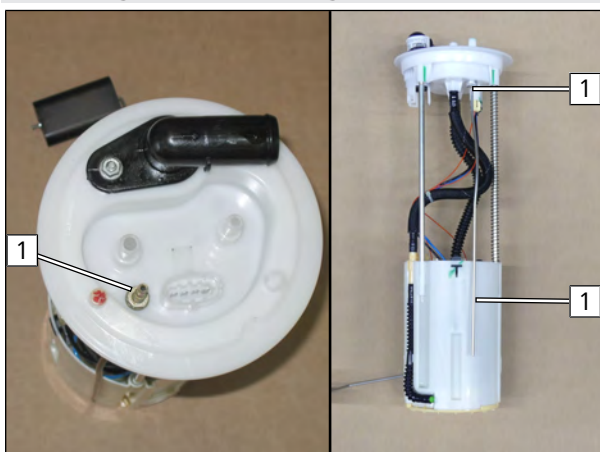


Fig. 36



Bend tank extracting device **1** according to template and cut to length.



## Mounting moulded hose

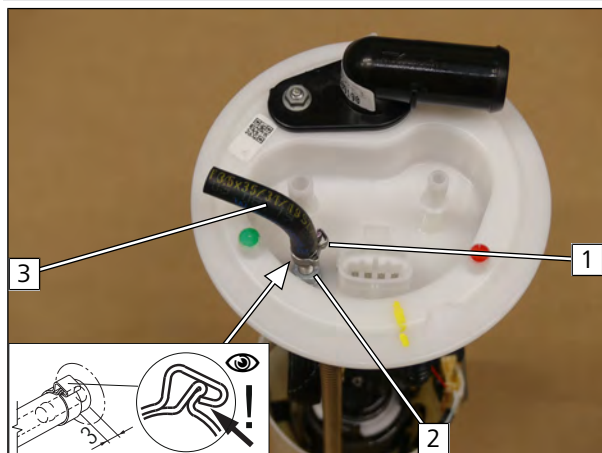


Fig. 37

- 1 Ø9 clamp
- 2 Tank extracting device
- 3 90°, Ø3.5 moulded hose (tank extracting device side) x4.5

## Mounting fuel line

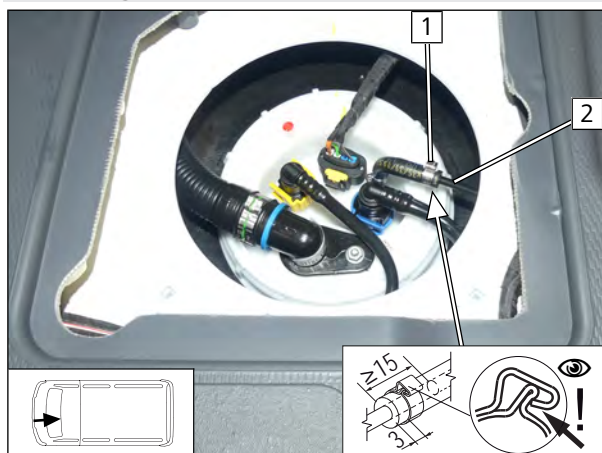


Fig. 38



Mount tank fitting in accordance with manufacturer's instructions.

- 1 Ø10 clamp
- 2 Fuel line

## Securing fuel line

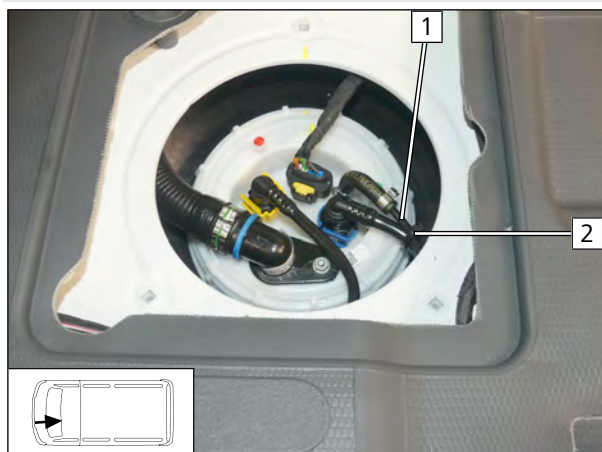


Fig. 39

- 1 Fuel line of tank extracting device
- 2 Original vehicle fuel line, cable tie for tension relief





## 11 Exhaust

### Preparing exhaust pipe **a1**

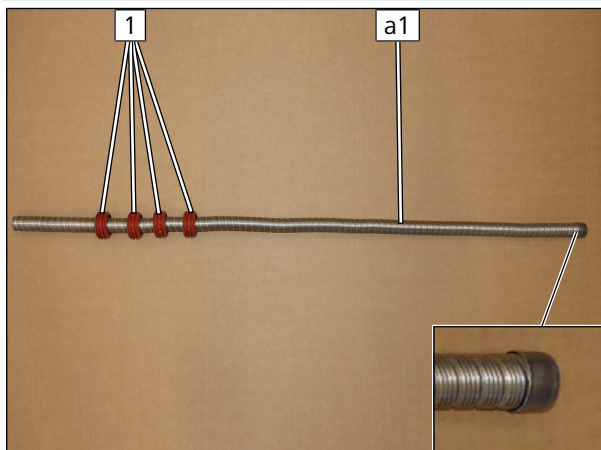


Fig. 40

- 1 Spacer bracket

### Mounting and routing exhaust pipe **a1**

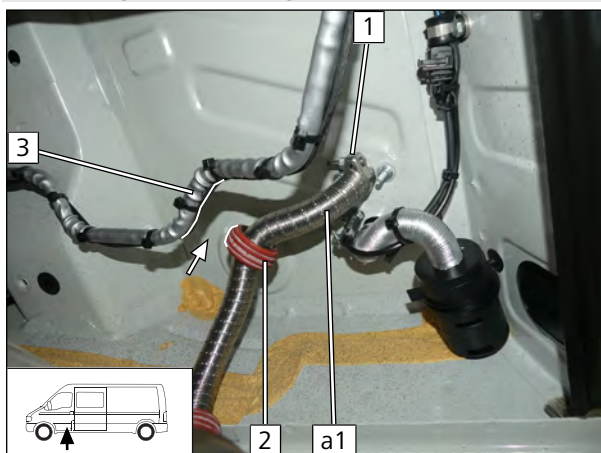


Fig. 41



Ensure sufficient distance from neighbouring components, correct if necessary.



- 1 Hose clamp
- 2 Aligning spacer bracket
- 3 AdBlue line

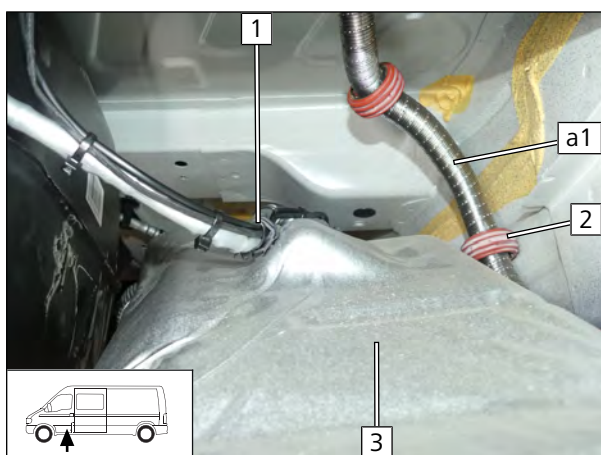


Fig. 42



Ensure sufficient distance from neighbouring components, correct if necessary.



- 1 AdBlue line retaining clip
- 2 Aligning spacer bracket
- 3 Lowered heat shield plate



## Drilling hole, inserting rivet nut

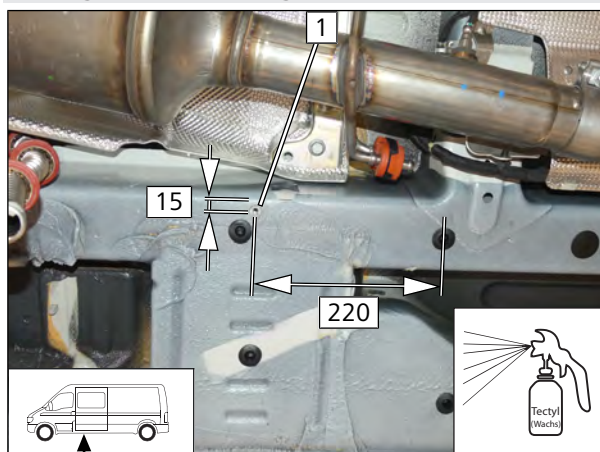



Fig. 43

 Mount heat shield plate and exhaust system.

**1** Ø9 hole, rivet nut

## Mounting angle bracket

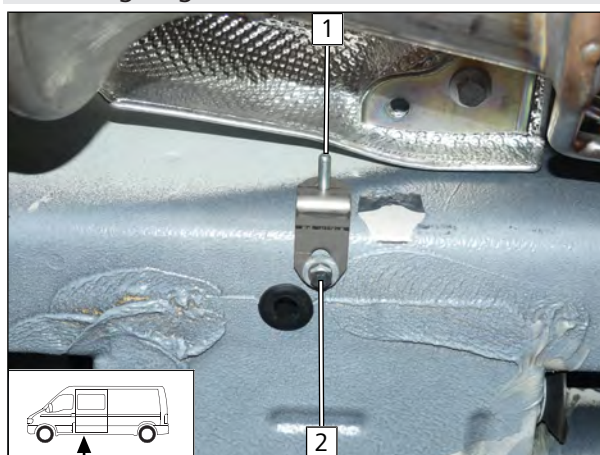


Fig. 44

► Premount M6x20 bolt **1**.

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

## Routing and mounting exhaust pipe **a1**

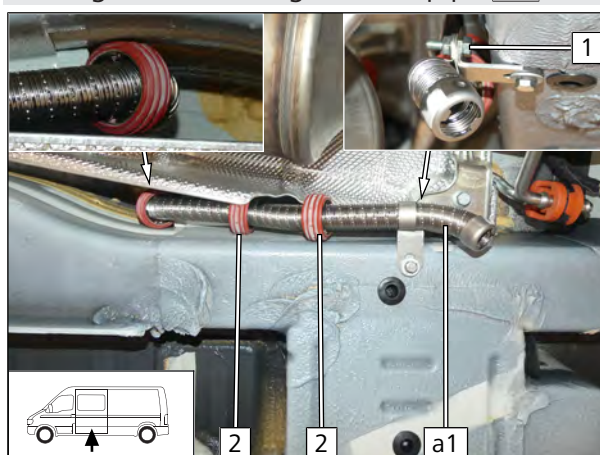


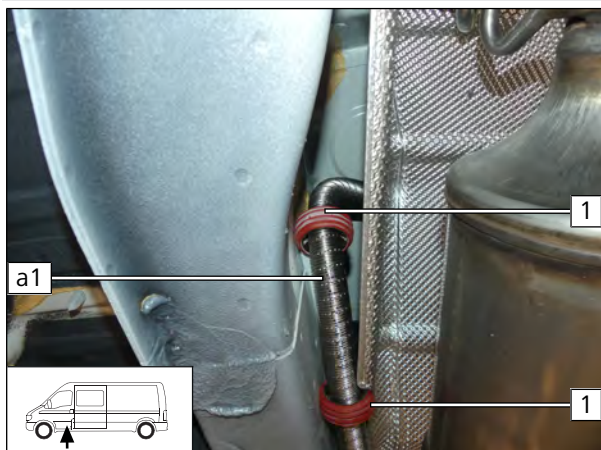
Fig. 45

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

**2** Aligning spacer bracket



## Aligning spacer bracket



Ensure sufficient distance from neighbouring components, correct if necessary.



**1** Spacer bracket

Fig. 46



## 12 Hot air option A, without cargo space heating

### 12.1 Hot air routing diagram

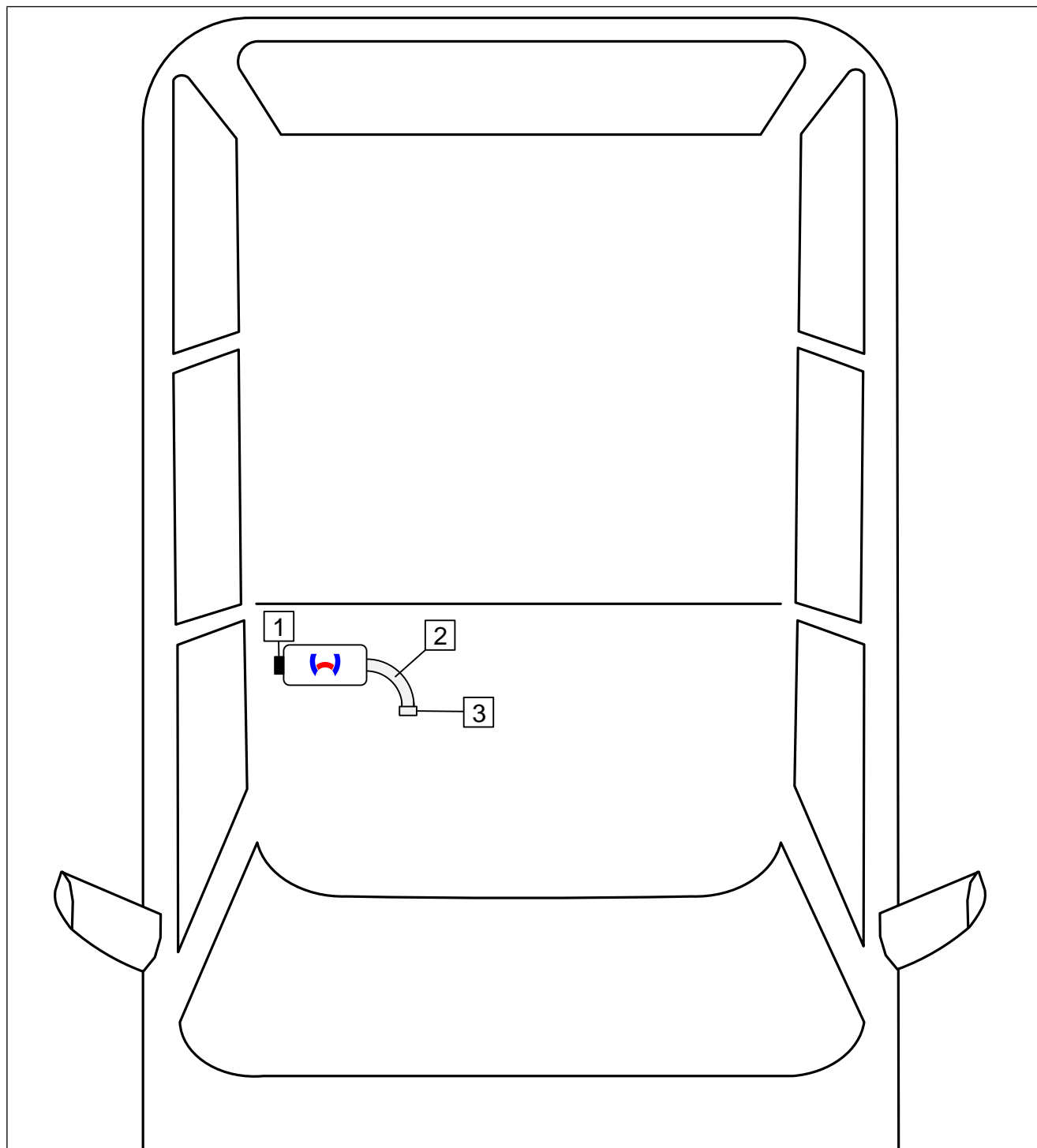


Fig. 47

**1** Cover grille for hot air inlet; **2** Hot air elbow; **3** Cover grille for hot air outlet



## 12.2 Hot air routing

### Mounting hot air elbow

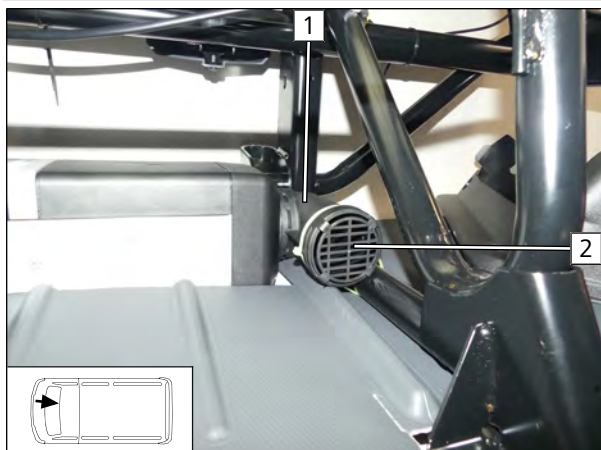


Fig. 48

- 1 Hot air elbow
- 2 Cover grille

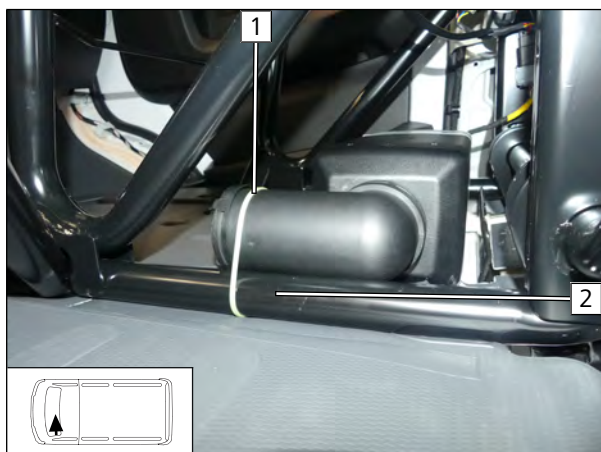


Fig. 49

- 1 Long cable tie
- 2 Frame of seat group on front passenger's side



## 13 Hot air option B, with cargo space heating



The necessary installation materials are not included in the installation kit. Please order and use additional 'Fiat Ducato cargo space heating' kit as mentioned in section 'Components used'.

### 13.1 Hot air routing diagram

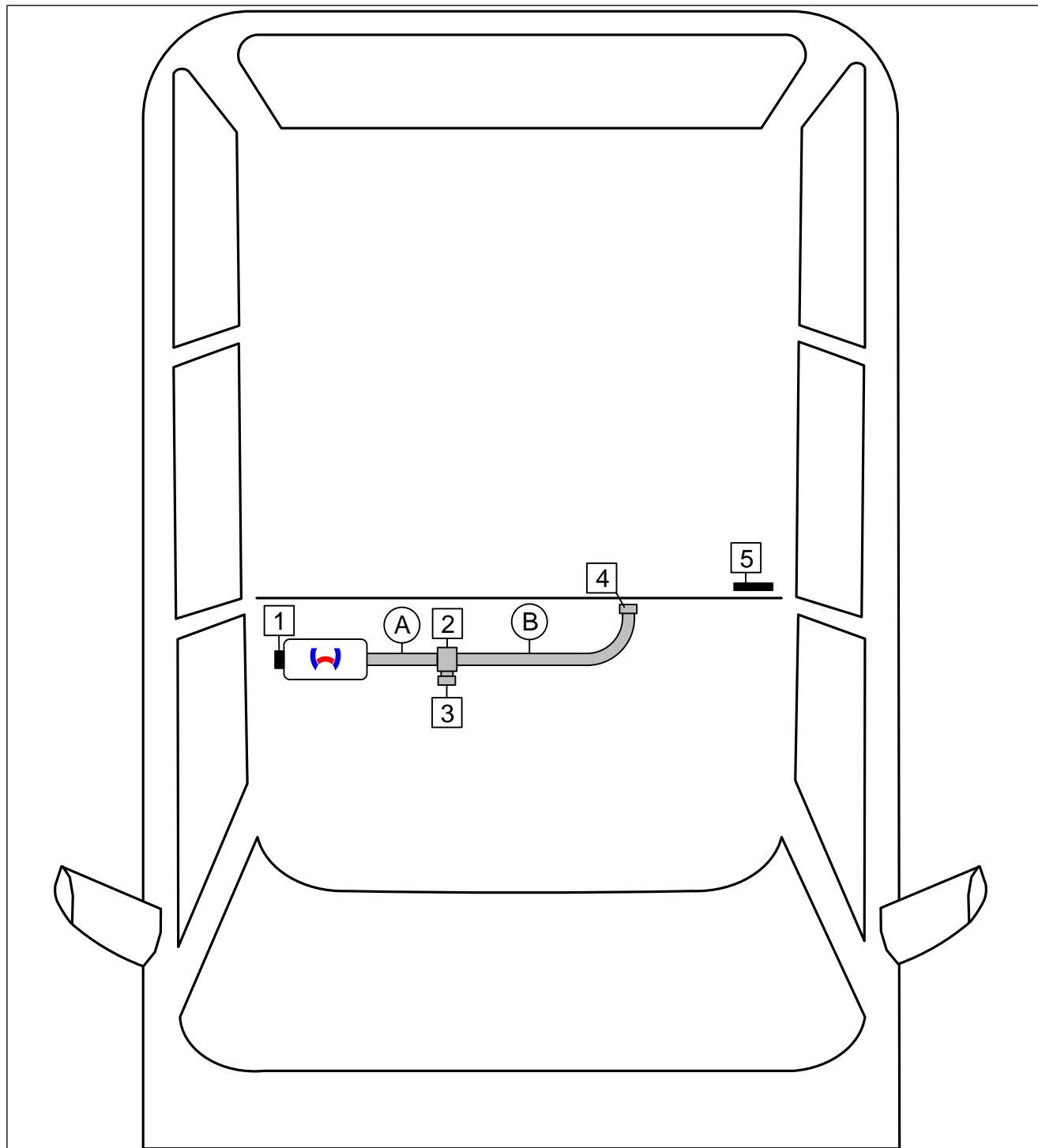


Fig. 50

- 1** Cover grille for hot air inlet; **2** Air distribution flap; **3** Cover grille for hot air outlet in the cabin;  
**4** Air outlet in the cargo space; **5** External temperature sensor



## 13.2 Hot air routing

### Drilling hole

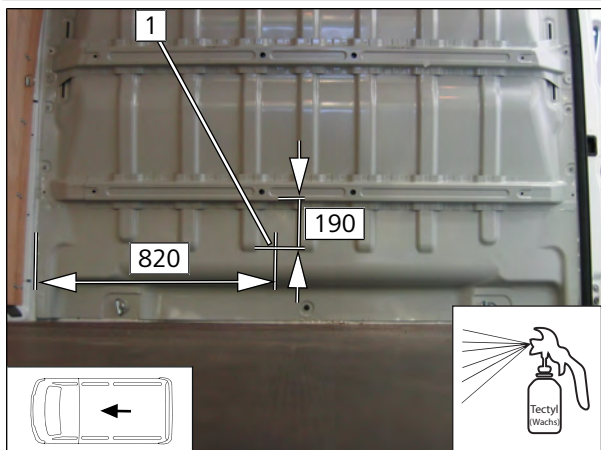


Fig. 51

- 1 Hole, Ø60

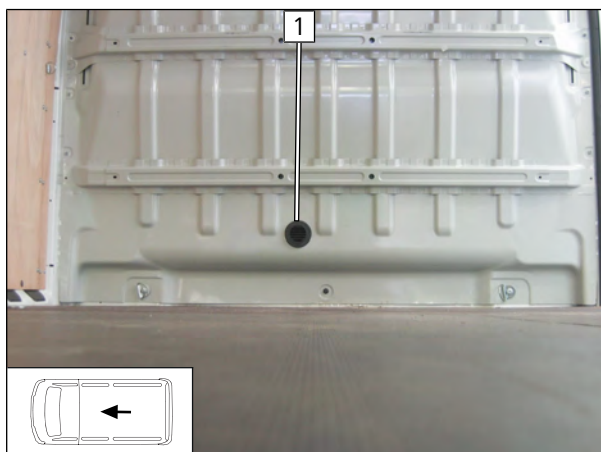


Fig. 52

- 1 Mount air outlet with provided self-tapping screws

### Premounting air distribution flap

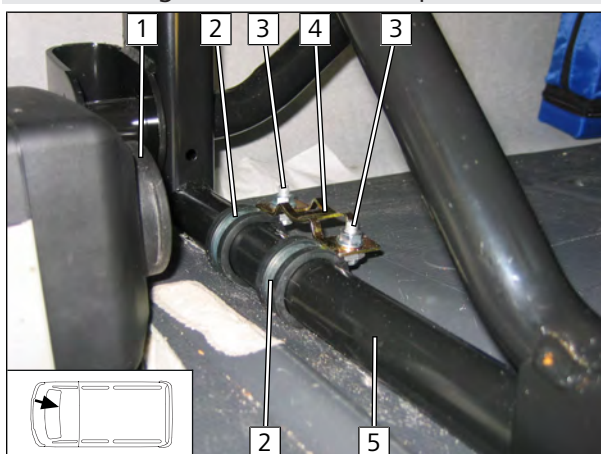


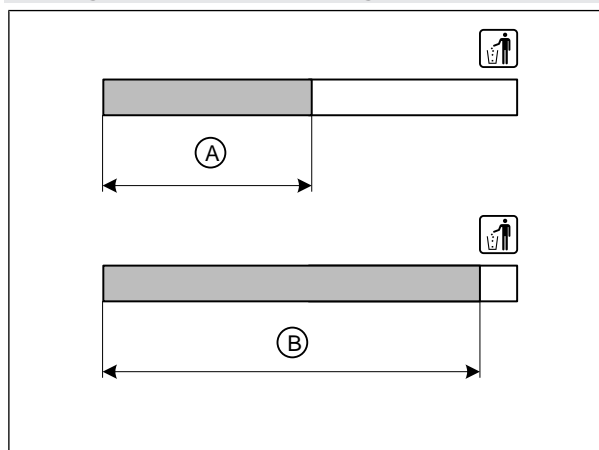
Fig. 53

► Before tightening pipe clamp **2**, align console **4** with heater outlet **1**.

- 1 Heater outlet
- 2 Ø29 rubber-coated p-clamp
- 3 M6x20 bolt, flanged nut
- 4 Console
- 5 Tubular frame of front passenger's seat



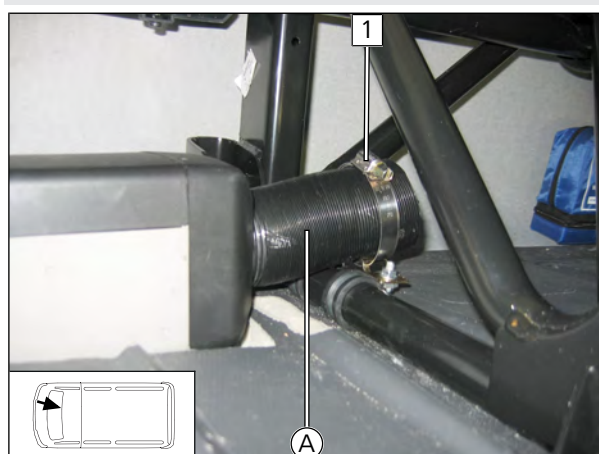
## Cutting flexible tube to length



A	130
B	480

Fig. 54

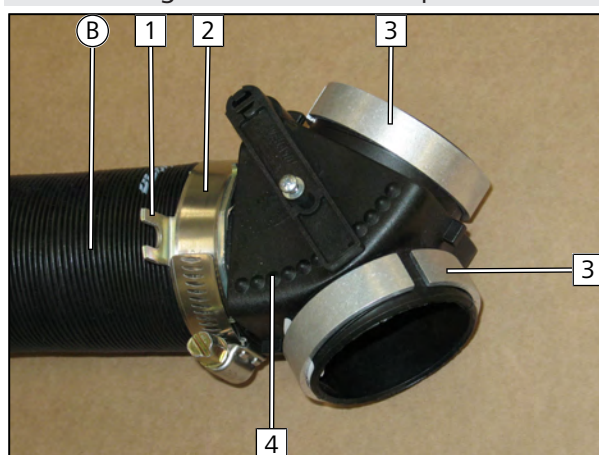
## Flexible tube **A**



- 1 Mount Ø60-80 clamp loosely

Fig. 55

## Premounting air distribution flap



- 1 Support for Bowden cable
- 2 Ø60-80 clamp
- 3 Distance ring
- 4 55x55x55 distribution flap

Fig. 56



## Premounting Bowden cable

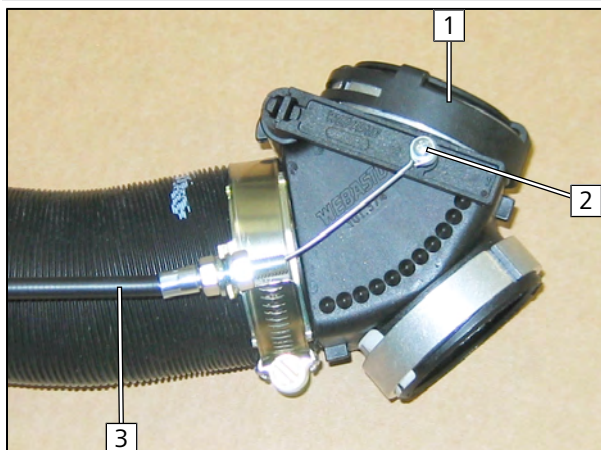


Fig. 57

- 1 Cover grille
- 2 Self-tapping screw
- 3 Bowden cable

## Mounting air distribution flap with Bowden cable

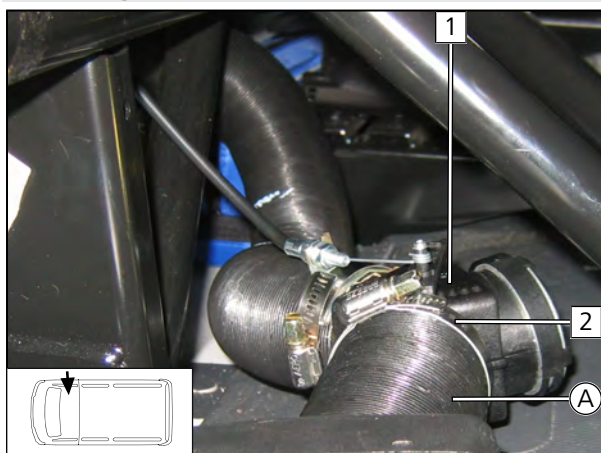


Fig. 58

Tighten all loosely mounted clamps.

- 1 Distribution flap
- 2 Ø60-80 clamp

## Routing and fastening flexible tube (B)



Fig. 59

- 1 Ø60-80 clamp



## Mounting angle bracket

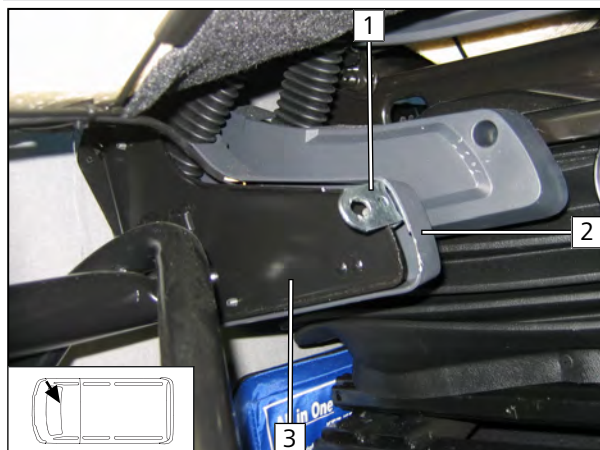


Fig. 60

- ▶ Remove original vehicle bolt for fastening trim **2**. Position angle bracket **1** between front passenger's seat frame **3** and trim and mount with an M5x12 cap screw.

## Mounting Bowden cable



Fig. 61

- 1** Bowden cable

## Installing temperature sensor



Fig. 62

- 1** Temperature sensor



## 14 Electrical system of control element

### 14.1 Rotary switch option

#### Mounting rotary switch



Fig. 63



Observe the rotary switch installation documentation.

- 1 Rotary switch

### 14.2 MultiControl HD option

#### Mounting MultiControl HD



Fig. 64



Observe the MultiControl HD installation documentation.

- 1 MultiControl HD installation frame

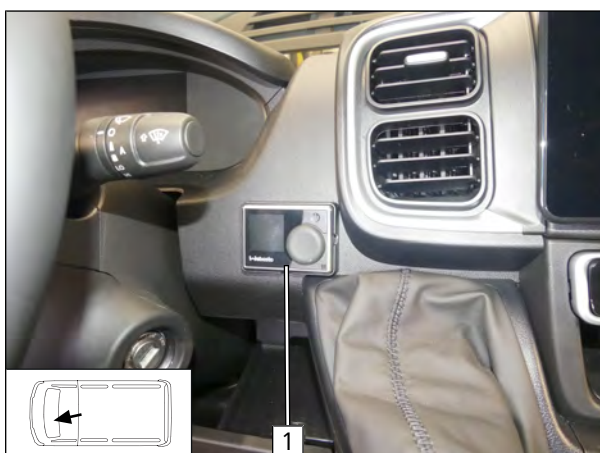


Fig. 65



Observe the MultiControl HD installation documentation.



Fig. shows Fiat Ducato Series 8.

- 1 MultiControl HD installation frame




## 15 Final work tool kit



Fig. 66

 Version 1

 Discuss the installation location with the customer.

- ▶ Copy hole pattern for tool kit bracket **1** and drill hole.
- ▶ Fasten tool kit bracket **1** with original vehicle bolts and nuts, secure maybe also with a lashing strap.

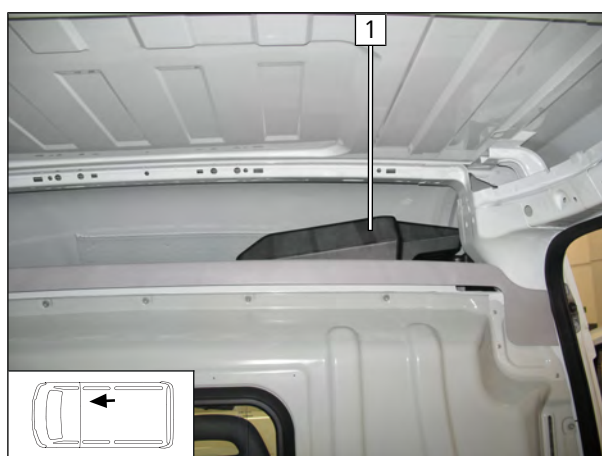



Fig. 67

 Version 2

 Discuss the installation location with the customer.

- ▶ Secure tool kit **1** with lashing strap to storage compartment.



## 16 Final work

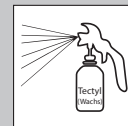


Further information can be found in the vehicle manufacturer's technical documentation.

- ▶ Mount removed parts in reverse order

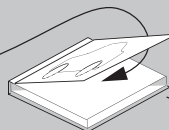
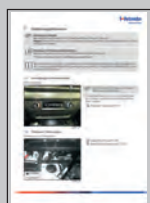
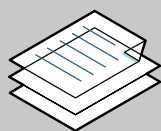


- ▶ Check all hoses, clamps and all electrical connections for firm seating
- ▶ Insulate and tie back loose lines
- ▶ Spray heater and electrical components with anti-corrosion wax (Tectyl 100K)
- ▶ Connect the battery



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



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

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Webasto Thermo & Comfort SE  
Postfach 1410  
82199 Gilching  
Germany

Company address:  
Friedrichshafener Str. 9  
82205 Gilching  
Germany

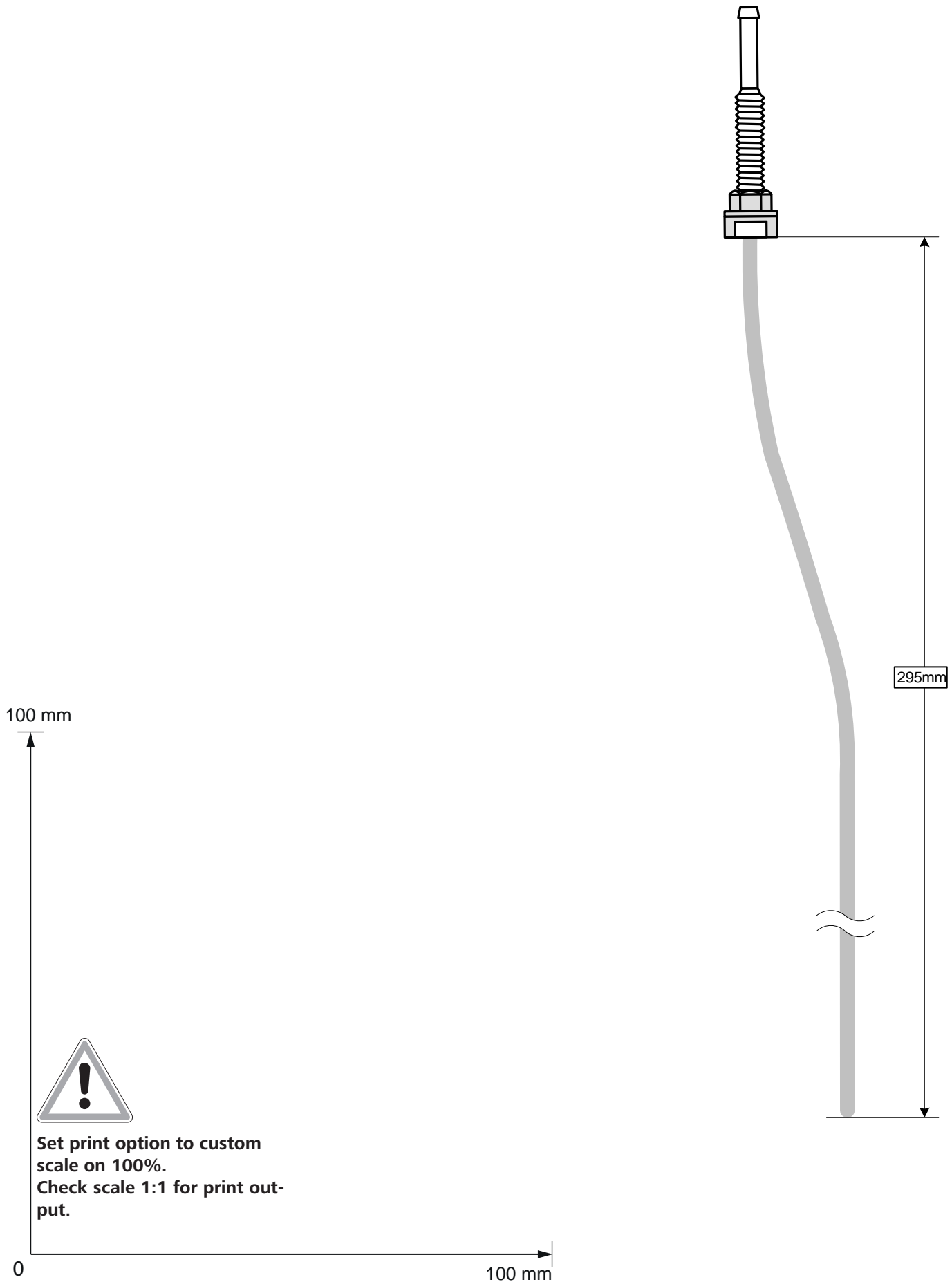
Technical Extranet: <https://dealers.webasto.com>



[WWW.WEBASTO.COM](http://WWW.WEBASTO.COM)



## 17 Tank extracting device template







## 18 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.

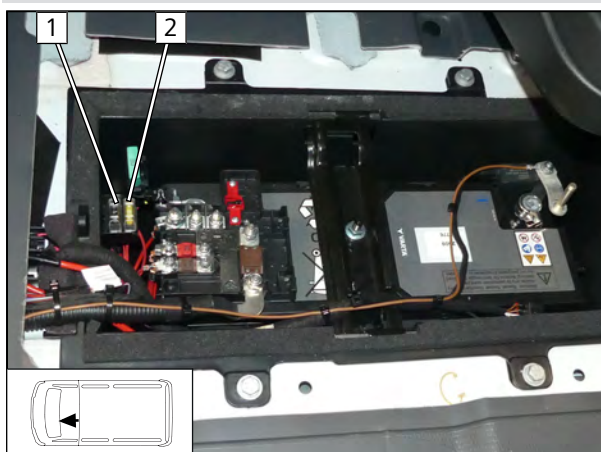


## DANGER

### 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.

### 18.1 Installation location of fuses



1 1A control element fuse F3

2 20A heater fuse F1

Fig. 68

