

Air Heater

Air Top 2000 STC Air Heater



00 0385

Installation Documentation Ford Transit Custom

Validity

Manufacturer	Model	Type	EG BE No. / ABE
Ford Transit	Transit Custom van	FCC	e1 * 2007 / 46 * 1005 * ...
Ford Transit	Transit Custom	FAC	e11 * 2007 / 46 * 0676 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm ³	Engine code
2.2 TDCi	Diesel	6-speed SG	74	2198	DRFA
2.2 TDCi	Diesel	6-speed SG	74	2198	DRFB
2.2 TDCi	Diesel	6-speed SG	74	2198	DRFC
2.2 TDCi	Diesel	6-speed SG	74	2198	DRFD
2.2 TDCi	Diesel	6-speed SG	74	2198	DRFF
2.2 TDCi	Diesel	6-speed SG	92	2198	CYFA
2.2 TDCi	Diesel	6-speed SG	92	2198	CYFB
2.2 TDCi	Diesel	6-speed SG	92	2198	CYFC
2.2 TDCi	Diesel	6-speed SG	92	2198	CYFD
2.2 TDCi	Diesel	6-speed SG	92	2198	CYFF
2.2 TDCi	Diesel	6-speed SG	114	2198	CVR5

From model year 2010
Left-hand drive vehicle

Verified equipment variants: Van with partition wall
Front passenger twin seat

Not verified: Passenger compartment monitoring
Single front passenger's seat

Exclusion: Vehicles without partition wall (Bus), see installation instructions

Total installation time: approx. 9 hours

Ford Transit Custom

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Necessary Components

- Basic delivery scope of *Air Top 2000 STC* in accordance with price list
- Installation kit for Ford Transit Custom 2010 Air Top 2000 STC Diesel: **1324770A**
- Additional heater control required, choice of control in consultation with the end customer in accordance with price list :
 - Heater control Smart-/ MultiControl HD: **see price list**
 - In case of Smart-/ MultiControl HD installation: MultiControl installation frame: **9030077_**
 - Heater control ThermoCall: **see price list**
 - Bag for external temperature sensor (for temperature control in cargo space): **93205_**

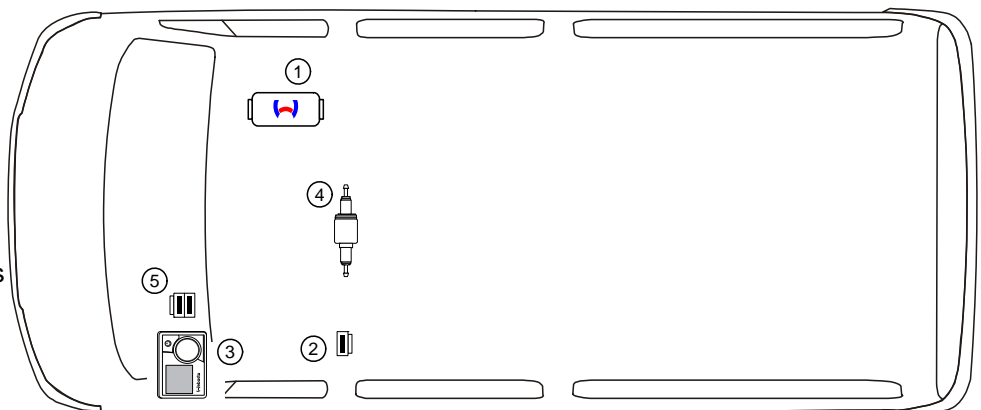
Installation instructions:

- On vehicles without a partition wall, we recommend the installation of an Air Top Evo 40.
- Arrange for the vehicle to be delivered with the tank only about ¼ full.
- The installation location of the push button should be confirmed with the end customer in case of ThermoCall.
- The installation location of the external temperature sensor for the cargo space temperature control should be confirmed with the end customer.

Installation Overview

Legend:

1. Heater
2. Main fuse
3. SmartControl HD/ MultiControl HD
4. Metering pump
5. Heater / heater control fuses



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.

Information on Operating and Installation Instructions

1 Important information (not complete)

1.1 Installation and repair



The improper installation or repair of Webasto heating and cooling systems can cause fire or the leakage of deadly carbon monoxide, leading to serious injury or death.



To install and repair Webasto heating and cooling systems you need to have completed a special company training course and have the appropriate technical documentation, special tools and special equipment.



Installation and repair may ONLY be carried out by persons trained and certified in a Webasto training course. NEVER try to install or repair Webasto heating or cooling systems if you have not completed a Webasto training course, you do not have the necessary technical skills and you do not have the technical documentation, tools and equipment available to ensure that you can complete the installation and repair work properly.

Only use genuine Webasto parts. See the Webasto air and water heaters accessories catalogue for this purpose.

1.2 Operation

To ensure safe operation, we recommend having the heater checked every two years by an authorised Webasto dealer, especially when used over a long period and/or under extreme environmental conditions.

Do not operate the heater in closed rooms due to the danger of poisoning and suffocation.

Always switch off the heater before refuelling.

The heater may only be used with the prescribed fuel Diesel (DIN EN 590) or petrol (DIN EN 228).

The heater may not be cleaned with a high-pressure cleaner.

1.3 Please note

ALWAYS follow all Webasto installation and operating instructions and observe all warnings.

To become familiar with and understand all functions and properties of the heater, the operating instructions must be read carefully and observed at all times.

For proper, safe installation and repair work, the installation instructions with all warnings and safety information must be carefully read and observed at all times. Please always contact a workshop authorised by Webasto for all installation and repair work.

Important

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, 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 should be fitted with rub protection. 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 startup 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.

2 Statutory regulations governing installation

Guidelines	AT 2000 ST
Heating Directive ECE R122	E1 00 0216
EMC Directive ECE R10	E1 03 1085

NOTE

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.

IMPORTANT

Failure to follow the installation instructions will result in the invalidation of the type approval for the heater and therefore invalidation of the general **homologation of the vehicle**.

Note

The heater is licensed in accordance with paragraph 19, section 3, No. 2b of the StVZO (German Road Traffic Licensing Authority).

2.1 Excerpt from ECE regulation 122 (heating system) paragraph 5 for the installation of the heater

Beginning of excerpt.

ANNEX VII

REQUIREMENTS FOR COMBUSTION HEATERS AND THEIR INSTALLATION

1. GENERAL REQUIREMENTS

1.7.1./ 7.1. (Annex 7) A clearly visible tell-tale in the operator's field of view shall inform when the combustion heater is switched on or off.

2. / 5.3. VEHICLE INSTALLATION REQUIREMENTS

2.1. / 5.3.1. (Part I) Scope

2.1.1. / 5.3.1.1 (Part I) Subject to paragraph 2.1.2. combustion heaters shall be installed according to the requirements of this Annex.

2.1.2. / 5.3.1.2 (Part I) Vehicles of category O having liquid fuel heaters are deemed to comply with the requirements of this Annex.

2.2. / 5.3.2. (Part I) Positioning of heater

2.2.1. / 5.3.2.1. (Part I) Body sections and any other components in the vicinity of the heater must be protected from excessive heat and the possibility of fuel or oil contamination.

2.2.2. / 5.3.2.2. (Part I) The combustion heater shall not constitute a risk of fire, even in the case of overheating. This requirement shall be deemed to be fulfilled if the installation ensures an adequate distance to all parts and suitable ventilation, by the use of fire resistant materials or by the use of heat shields.

2.2.3. / 5.3.2.3. (Part I) In the case of M2 and M3 vehicles, the heater must not be positioned in the passenger compartment. However, an installation in an effectively sealed envelope which also complies with the conditions in paragraph 2.2.2 / Subsection 5.3.2.2. (Part I) may be used.

2.2.4. / 5.3.2.4. (Part I) The label referred to in paragraph 1.4 / Annex 7 Subsection 1.4 or a duplicate, must be positioned so that it can be easily read when the heater is installed in the vehicle.

2.2.5. / 5.3.2.5. (Part I) Every reasonable precaution should be taken in positioning the heater to minimise the risk of injury and damage to personal property.

2.3. / 5.3.3. (Part I) Fuel supply

2.3.1. / 5.3.3.1. (Part I) The fuel filler must not be situated in the passenger compartment and must be provided with an effective cap to prevent fuel spillage.

2.3.2. / 5.3.3.2. (Part I) In the case of liquid fuel heaters, where a supply separate to that of the vehicle is provided, the type of fuel and its filler point must be clearly labelled.

2.3.3. / 5.3.3.3. (Part I) A notice, indicating that the heater must be shut down before refuelling, must be affixed to the fuelling point. In addition a suitable instruction must be included in the manufacturer's operating manual.

2.4. / 5.3.4. (Part I) Exhaust system

2.4.1. / 5.3.4.1. (Part I) The exhaust outlet must be located so as to prevent emissions from entering the vehicle through ventilators, heated air inlets or opening windows.

2.5. / 5.3.5. (Part I) Combustion air inlet

2.5.1. / 5.3.4.1. (Part I) The air for the combustion chamber of the heater must not be drawn from the passenger compartment of the vehicle.

2.5.2. / 5.3.5.2. (Part I) The air inlet must be so positioned or guarded that blocking by rubbish or luggage is unlikely.

2.6. / 5.3.6. (Part I) Heating air inlet

2.6.1. / 5.3.6.1. (Part I) The heating air supply may be fresh or recirculated air and must be drawn from a clean area not likely to be contaminated by exhaust fumes emitted either by the propulsion engine, the combustion heater or any other vehicle source.

2.6.2. / 5.3.6.2. (Part I) The inlet duct must be protected by mesh or other suitable means.

2.7. / 5.3.7. (Part I) Heating air outlet

2.7.1. / 5.3.7.1. (Part I) Any ducting used to route the hot air through the vehicle must be so positioned or protected that no injury or damage could be caused if it were to be touched.

2.7.2. / 5.3.7.2. (Part I) The air outlet must be so positioned or guarded that blocking by rubbish or luggage is unlikely.

End of excerpt.

In multilingual versions the German language is binding.

Ford Transit Custom

Information on Validity

This installation documentation applies to Ford Transit Custom Diesel vehicles - for validity, see page 1 - from model year 2010 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.

Technical Information

Special Tools

- Torque wrench for 2.0 - 10 Nm
- 95mm dia. circle bit
- Automatic wire stripper, 0.2 - 6mm²
- Crimping pliers for cable lug / tab connector, 0.5 - 6mm²
- Metric thread-setter kit
- Deep-hole marker
- Webasto Thermo Test Diagnosis with current software

Dimensions

- All dimensions are in mm.

Tightening torque values

- Tightening torque of M6 heater nuts = 6 Nm +1 Nm!
- Tighten bolt connections in accordance with manufacturer's instructions or in accordance with state-of-the-art technology.

Installing heater

- A seal must be fitted between heater and body and replaced prior to every installation.

Explanatory Notes on Document

You will find an identification mark on the outside top right corner of the page in question to provide you with a quick overview of the individual working steps.

Special features are highlighted using the following symbols:

Mechanical System



Specific risk of injury or fatal accidents.



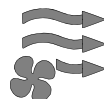
Electrical System



Specific risk due to electrical voltage.



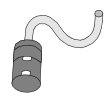
Heating Air



Specific risk of damage to components.



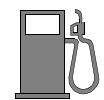
Combustion Air



Specific risk of fire and explosion.



Fuel



Reference to general installation instructions of the Webasto components or to the manufacturer's vehicle-specific documents.



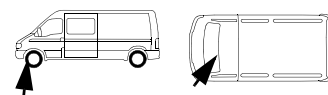
Exhaust Gas



Reference to a special technical feature.



The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.



Software



Tightening torque according to the manufacturer's vehicle-specific documents.



Ford Transit Custom

Preliminary Work

Vehicle

- Open the fuel tank cap, ventilate the fuel tank.
- Close the fuel tank cap again.
- Disconnect the battery.
- Remove the driver's seat.
- Expose the battery.
- Fold up or remove the seating surface of the front passenger's seat (depends on the vehicle equipment).
- Remove the front passenger's seat trim on the left.
- Remove the heat guard plate of the exhaust system.
- Remove the lateral instrument panel trim on the left side.
- Remove the trim / bottle holder on the left.
- Remove the B-pillar trim on the left.
- Remove the entrance trim on the left.

Only carry out the following steps during the corresponding installation sequence:

- Remove the fuel tank according to the manufacturer's instructions.
- Remove the fuel tank sending unit.

Heater

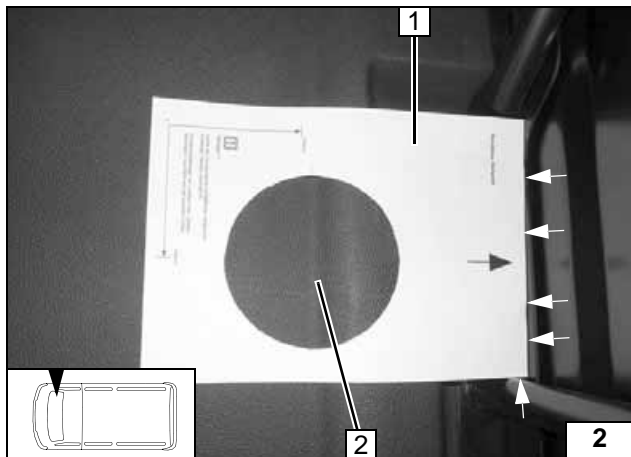
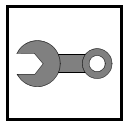
- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) visibly in the appropriate place in the engine compartment.



Heater Installation Location

- 1 Heater

Installation location



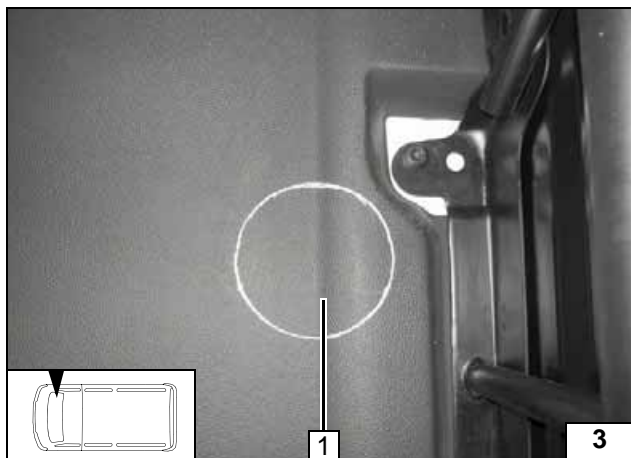
Preparing Installation Location

Cut out heater template 1, apply and align with the markings.

2 Copy hole pattern



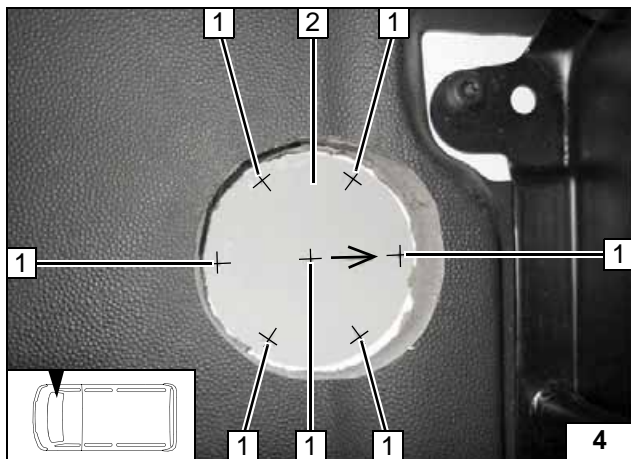
Copying hole pattern



Remove template. Cut out floor covering 1 using a sharp tool.



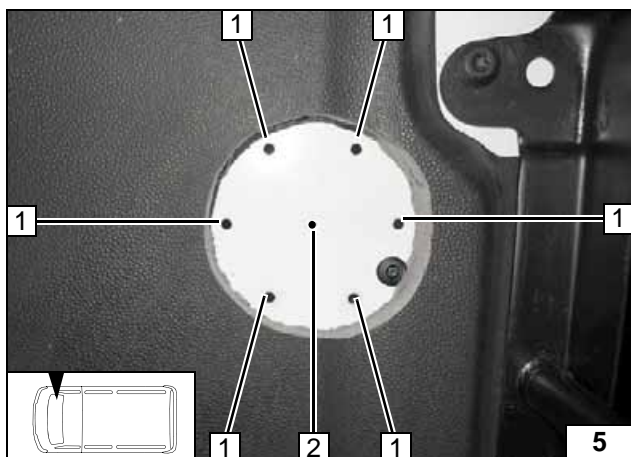
Cutting out floor covering



Place cut out drilling template 2 in the centre of the hole, align with the front in the direction of the arrow and secure to prevent slipping. Copy hole pattern 1 [7x] with a centre punch on the underbody.



Copying hole pattern

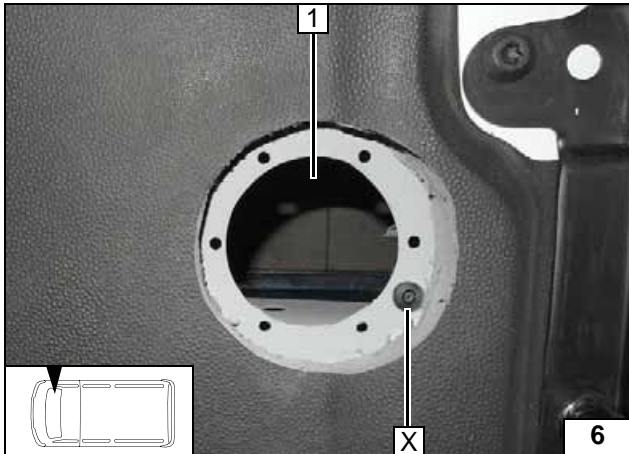


Remove drilling template.

- 1 7 mm dia. holes [6x]
- 2 3 mm dia. holes




Holes in underbody



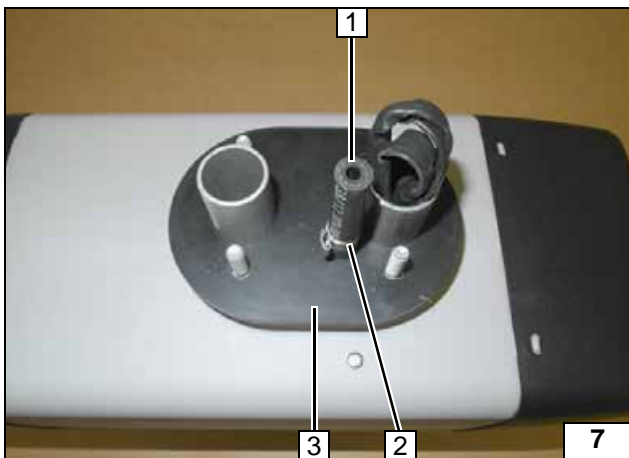
Make a 95 mm dia. hole with the core bit. Apply corrosion protection.

- 1 Drill out 3 mm hole to 95 mm

X = 



Hole in underbody



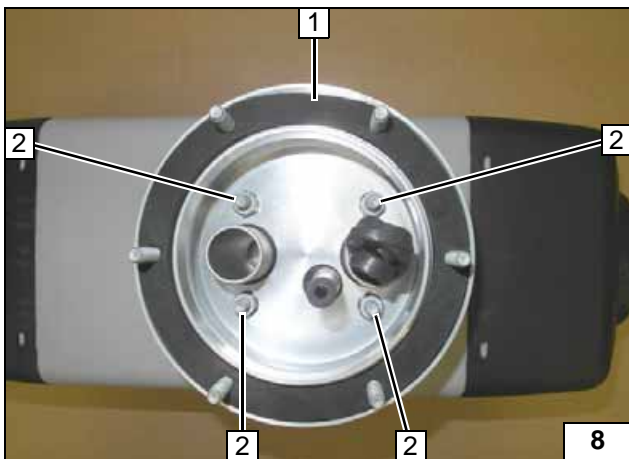
Preparing Heater

Mount base seal 3 onto the stud bolts.

- 1 Hose section
- 2 10 mm dia. clamp

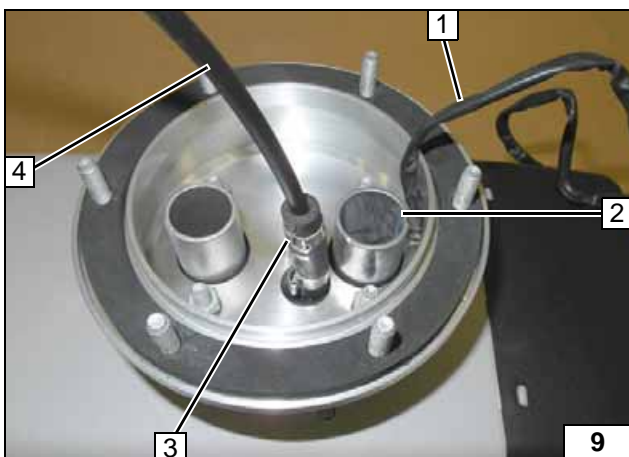


Preparing Heater



- 1 Adapter upper section with sealing ring
- 2 Spring lockwasher, M6 [4x] flanged nut on stud bolt

Assembling adapter upper section

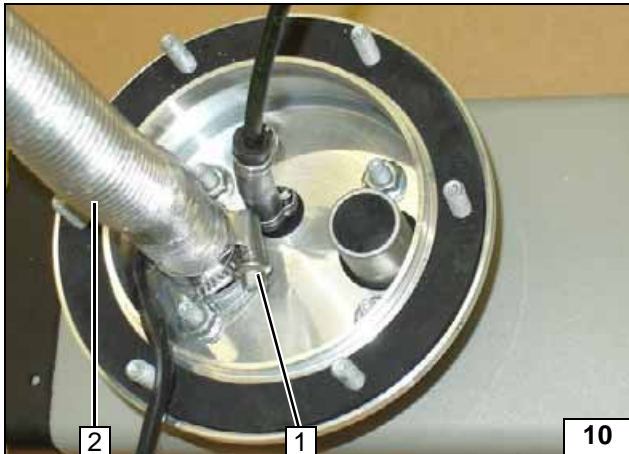


Pull wiring harness 1 out of air intake connection piece and position in the slot at position 2.

- 3 10 mm dia. clamp, position lock
- 4 Fuel line

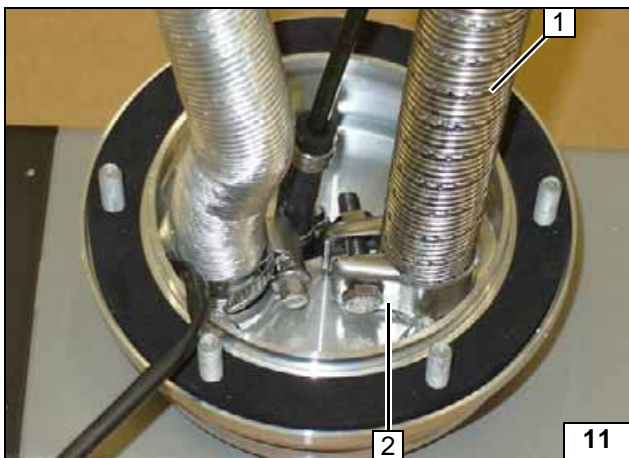


Installing fuel line



- 1 Position 24-27 mm dia. clamp and lock
- 2 Combustion air pipe

Installing combustion air pipe



- 1 Exhaust pipe
- 2 Position hose clamp and lock

Installing exhaust pipe

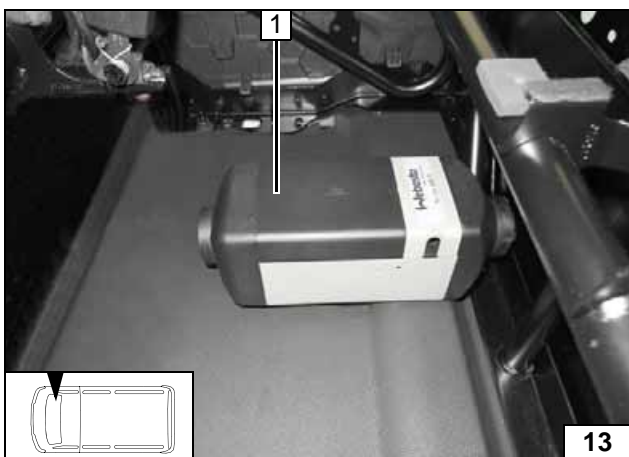


Installing Heater

Route wiring harness for metering pump 1, combustion air pipe 2, fuel line 3 and exhaust pipe 4 down through 95 mm dia. hole.



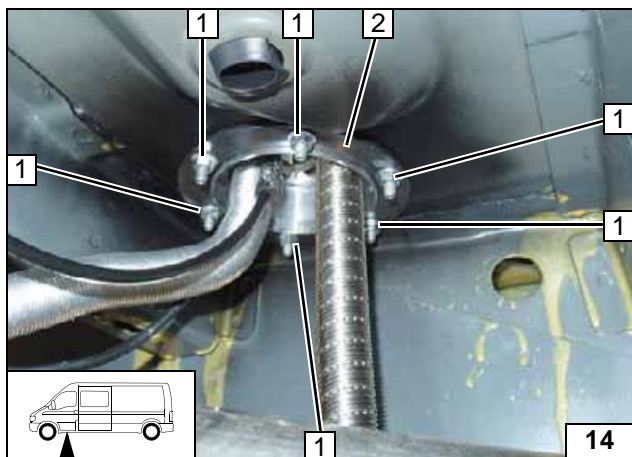
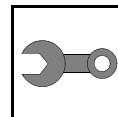
Installing heater



Insert heater 1 with stud bolts in 7 mm dia. holes.



Positioning heater



- 1 M6 [6x] flanged nut on original vehicle stud bolt
- 2 Adapter lower section

Installing heater



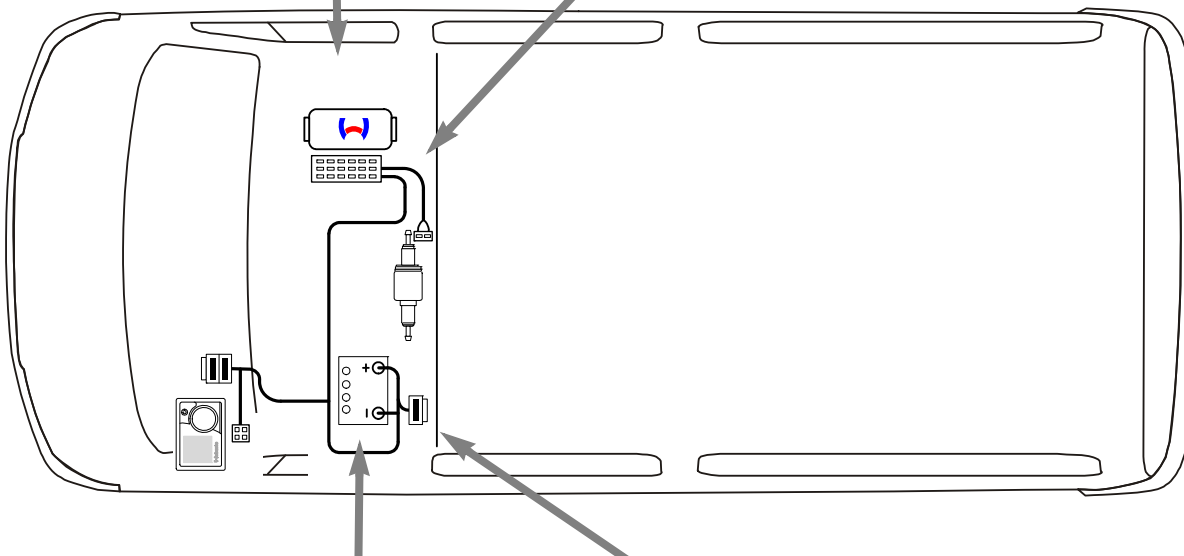
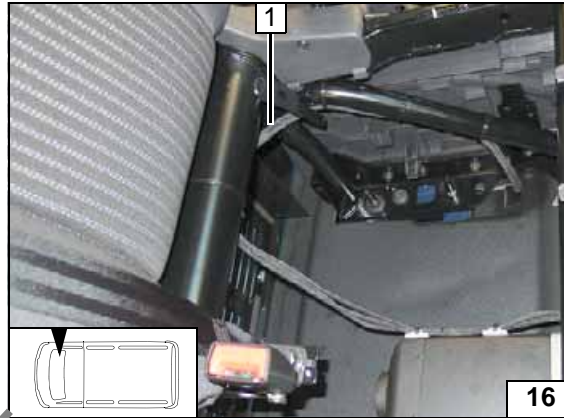
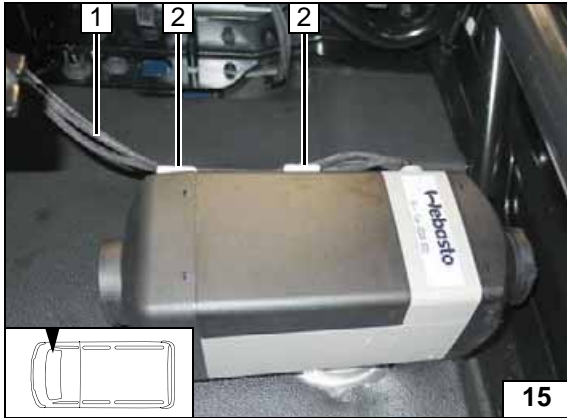
Electrical System

Wiring harness routing

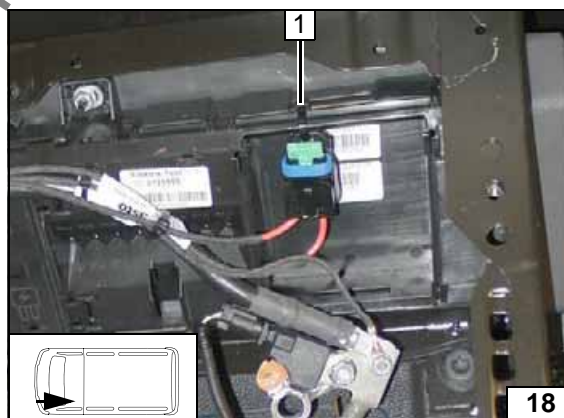
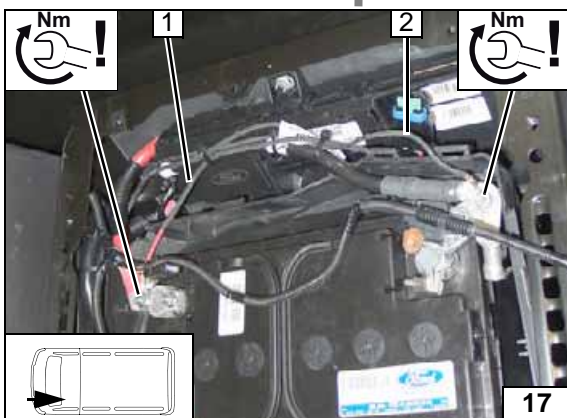
- 1 Wiring harnesses of heater and power supply
- 2 Adhesive base on heater, cable tie [2x each]

Wiring harness routing

- 1 Route the wiring harnesses for the heater up along the left B-pillar and on to the fuse holder installation location; route the power supply wiring harness to the battery.



Wiring harness routing diagram

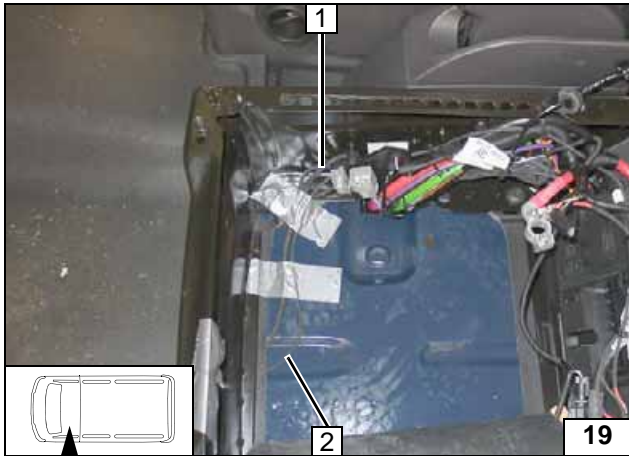


Positive and earth wire

- 1 Positive wire, cable lug on positive battery terminal
- 2 Earth wire, cable lug to negative battery terminal

Fuse holder assembly

- 1 Affix main fuse holder retaining plate to the battery box using a cable tie



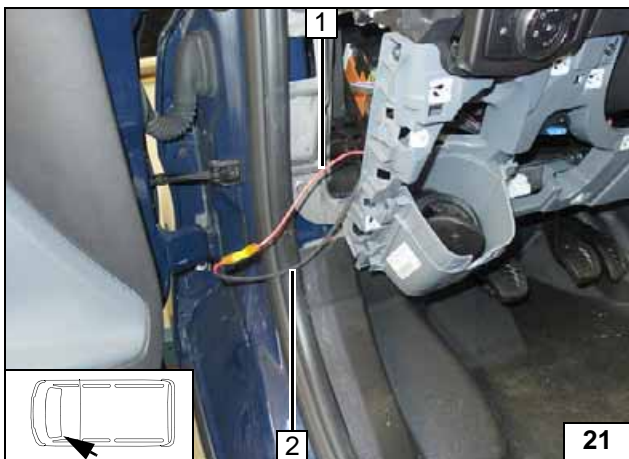
- 1 Heater wiring harness
- 2 Main fuse positive wire

Routing wiring harness



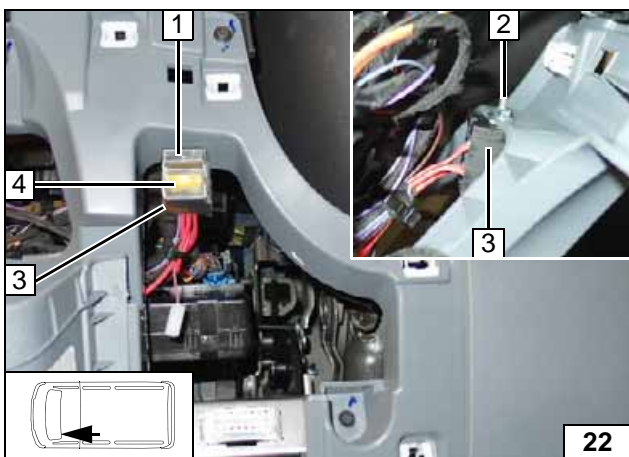
- 1 Heater wiring harness
- 2 Main fuse positive wire

Routing wiring harnesses



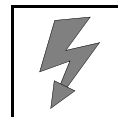
- 1 Fuse holder positive wire
- 2 Main fuse positive wire

Connecting positive wire

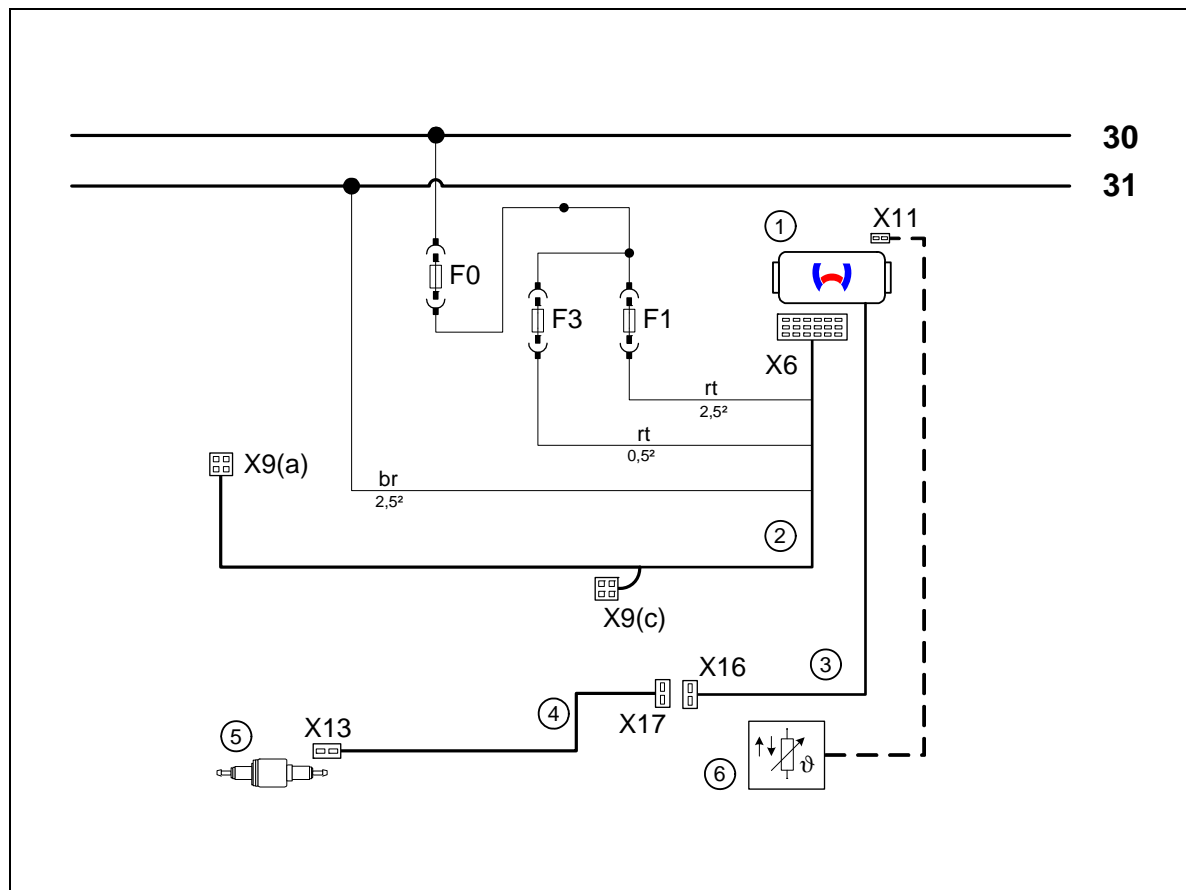


- 1 1A heater fuse F3
- 2 5mm dia. hole, M4x16 countersunk head screw, large diameter washer, nut
- 3 Retaining plate with fuse holder
- 4 20A heater fuse F1

Installing fuse holder



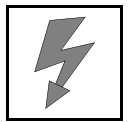
Heater Control Connection Diagram



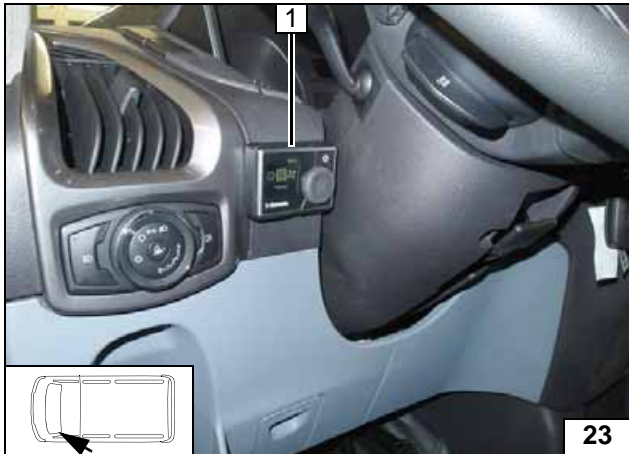
Connection Diagram

Parts		Colours and symbols	
①	AT 2000 STC Heater	rt	red
②	Heater wiring harness		
F0	30A main fuse	br	brown
F1	20A heater fuse (included in wiring harness)		
F3	1A heater control fuse (included in wiring harness)		
X6	18-pin heater connector		
X9(a)	4-pin User Interface /Potentiometer connector (rotary selector)		
X9(c)	4-pin MultiControl HD / Telestart / ThermoCall / Diagnose connector		
③	Metering pump connecting wire		
X16	2-pin connector of metering pump connecting wire		
④	Metering pump wiring harness		
X17	2-pin connector of metering pump wiring harness		
X13	2-pin connector of metering pump		
⑤	Metering pump		
⑥	External room temperature sensor B4		
X11	2-pin connector of external room temperature sensor B4	Wiring colours may vary.	

Legend

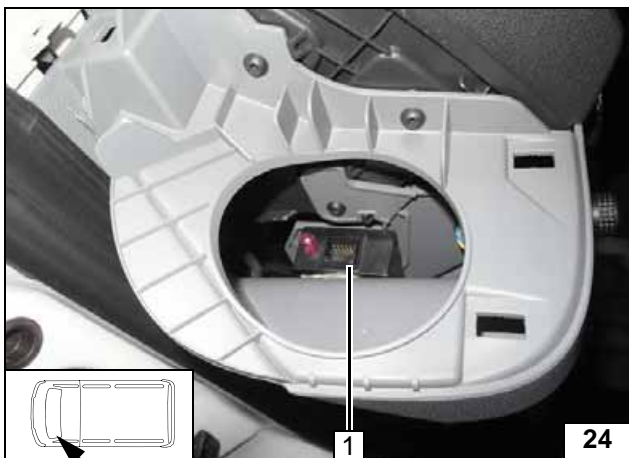


Installing
SmartControl/
MultiControl HD



Smart-/ MultiControl HD

- 1 Installation frame

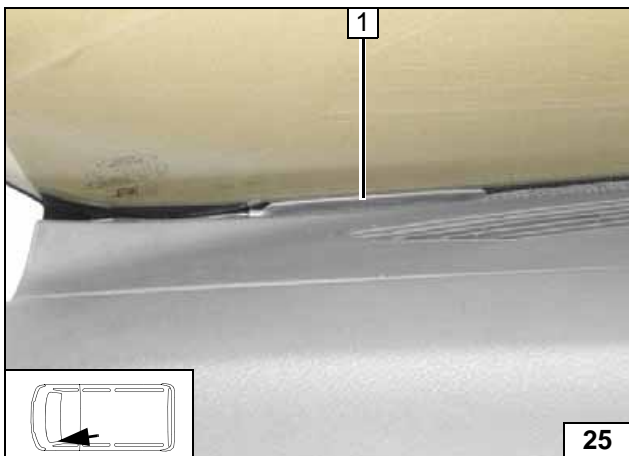


ThermoCall Option

Fasten receiver 1 with double-sided adhesive tape.

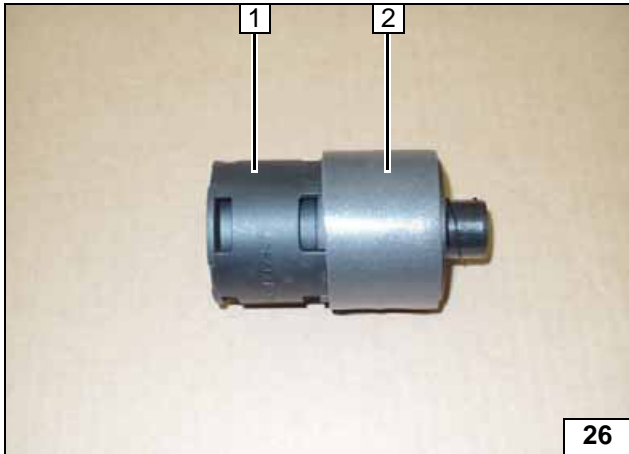
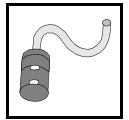


Installing
receiver



- 1 Aerial (optional)

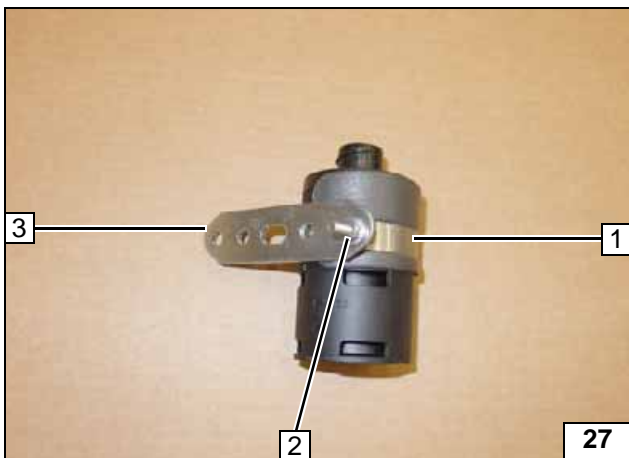
Installing
aerial



Combustion Air

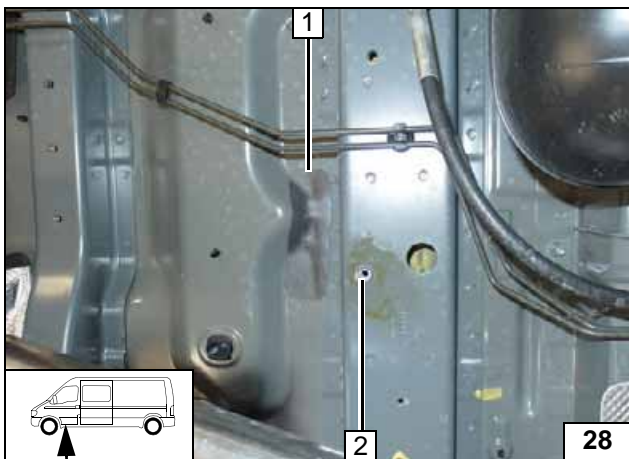
- 1 Silencer
- 2 Self-adhesive foam

Preparing silencer



- 1 51 mm dia. clamp
- 2 M5x16 bolt, flanged nut
- 3 Perforated bracket

Premounting silencer



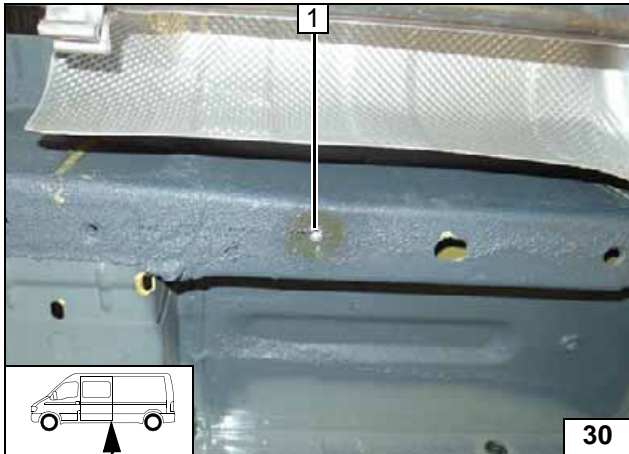
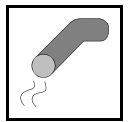
- 1 Self-adhesive foam
- 2 Drill out original vehicle hole to 9mm dia.; insert rivet nut

Installing rivet nut



- 1 M6x20 bolt, spring lockwasher
- 2 Combustion air pipe

Installing combustion air pipe

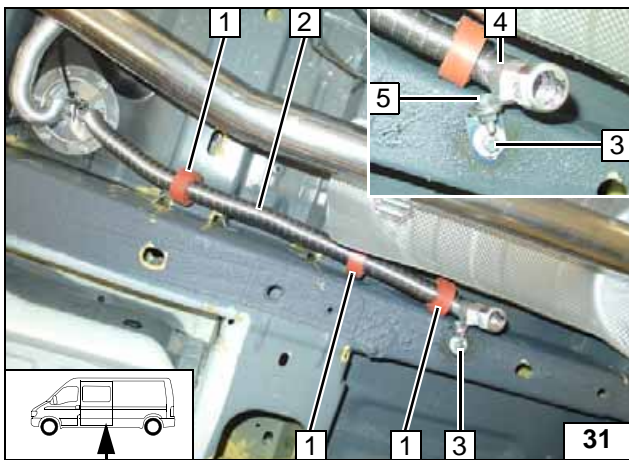


Exhaust Gas

- 1 9mm dia. hole; rivet nut



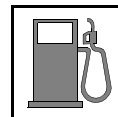
Installing rivet nut



- 1 Red (rt) rubber isolator [3x]
- 2 Exhaust pipe
- 3 M6x20 bolt, spring lockwasher, large diameter washer, angle bracket
- 4 P-clamp
- 5 M6x20 bolt, flanged nut

Installing exhaust pipe

Ford Transit Custom



Fuel

CAUTION!

Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

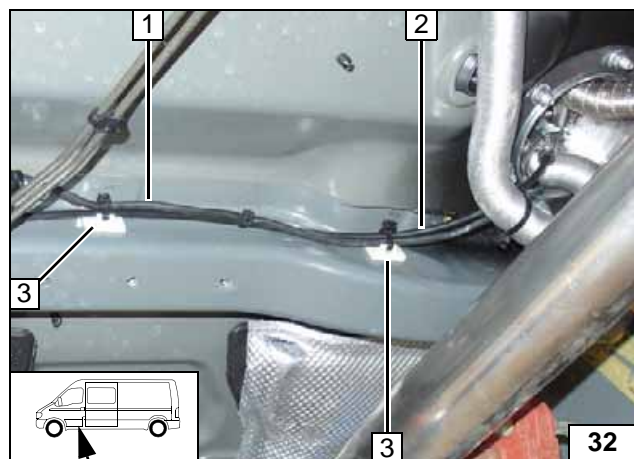
Catch any fuel running off in an appropriate container.

Route fuel line and metering pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties.

Provide rub protection for fuel line and wiring harness in areas where there are sharp edges.

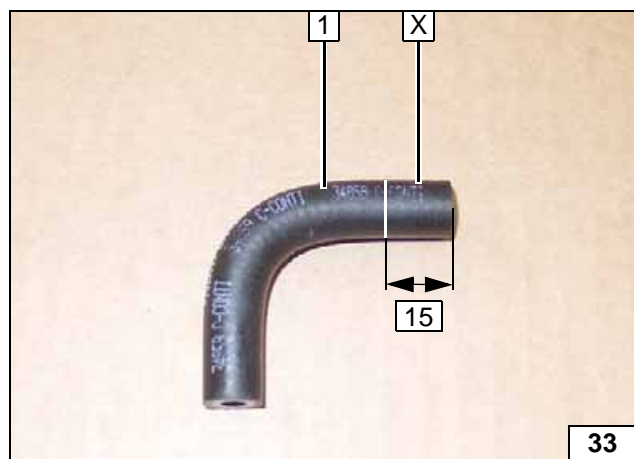
WARNING!

The fuel line and wiring harness are routed to the metering pump as shown in the wiring harness routing diagram.



Stick on socket **3**. Secure metering pump wiring harness **1** and fuel line **2** using cable ties.

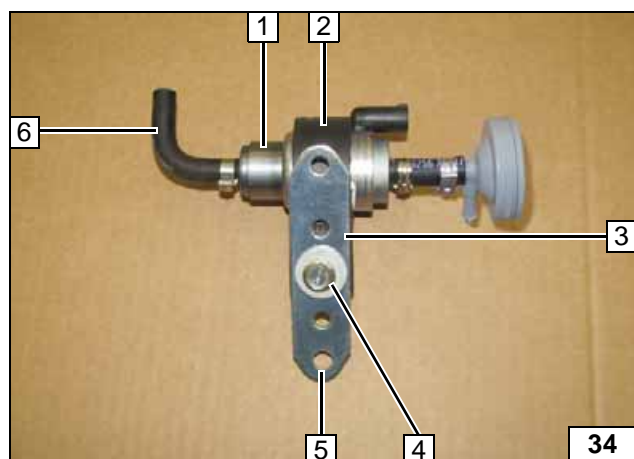
Routing lines



1 90° moulded hose

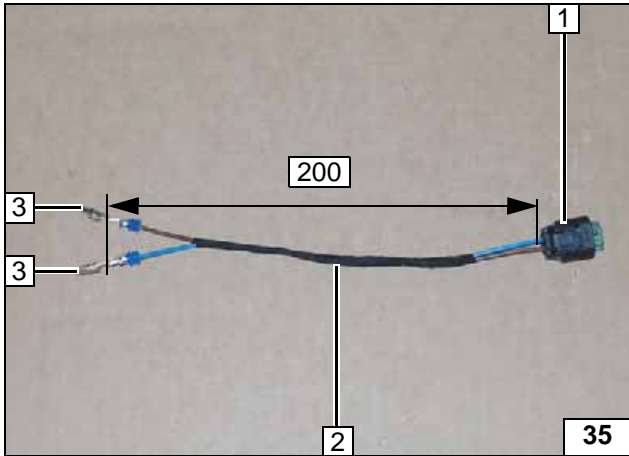
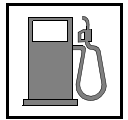
X =

Preparing moulded hose



- 1** Metering pump
- 2** Metering pump mount
- 3** Perforated bracket
- 4** M6x25 bolt, large diameter washer, flanged nut
- 5** Drill out hole to 9mm dia.
- 6** 90° moulded hose, 10 mm dia. clamp

Premounting metering pump

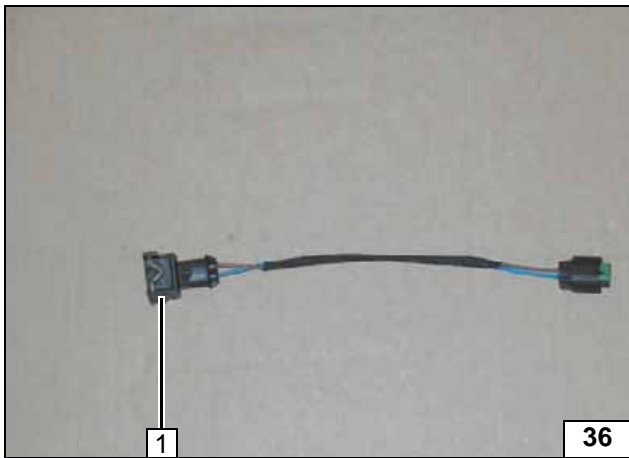


Cut metering pump wiring harness 2 with connector X13 1 to length.

3 Crimp receptacle with single wire sealing [2x each]

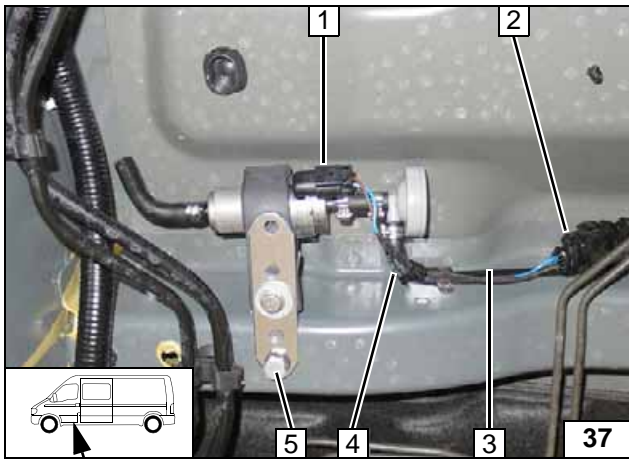


Preparing metering pump cable



1 Install housing of crimp receptacles (X17)

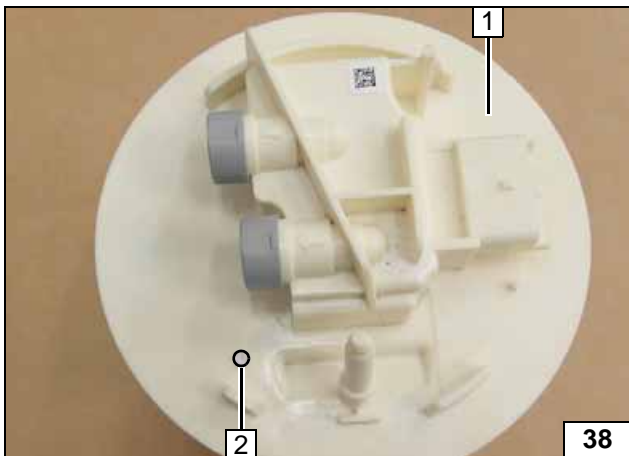
Preparing metering pump cable



- 1 Connector X13
- 2 Connect connectors X16 and X17
- 3 Fuel line of heater
- 4 90° moulded hose, 10mm dia. clamp [2x] with shortened side on metering pump
- 5 M8x20 bolt, spring lockwasher, original vehicle thread



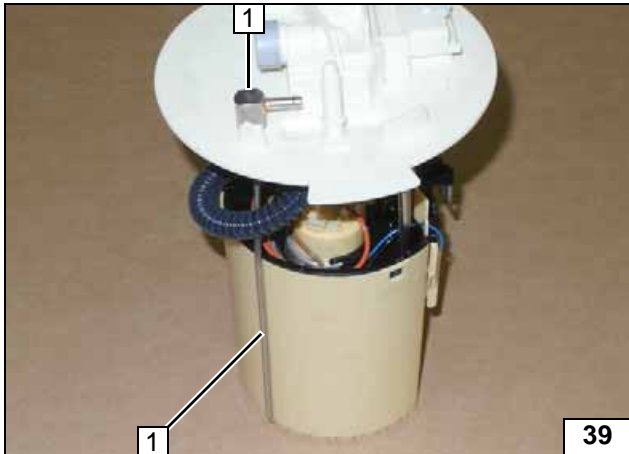
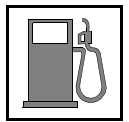
Installing metering pump



Remove the fuel tank according to the manufacturer's instructions. Remove fuel tank sending unit 1 in accordance with manufacturer's instructions. Copy hole pattern 2, drill a 6 mm dia. hole in the centre of the perforation.



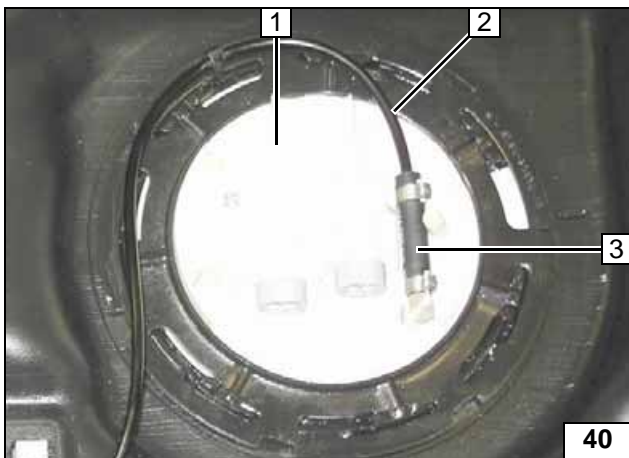
Fuel extraction



Bend fuel standpipe **1** according to template and cut to length.



Installing fuel standpipe

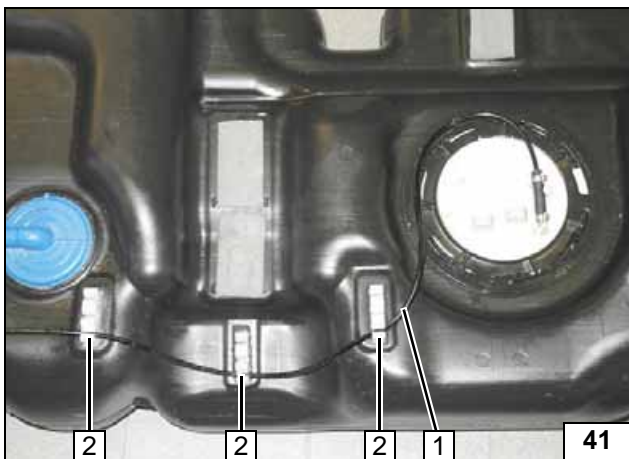


Install fuel tank sending unit **1** according to manufacturer's instructions.



- 2** Fuel line
- 3** Hose section, 10mm dia. clamp [2x]

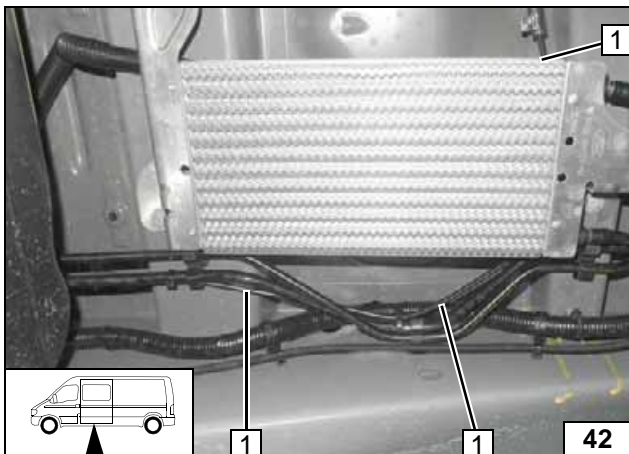
Connecting fuel line



Insert fuel line **1** into retaining clip **2** [3x]. Install fuel tank in accordance with manufacturer's instructions.

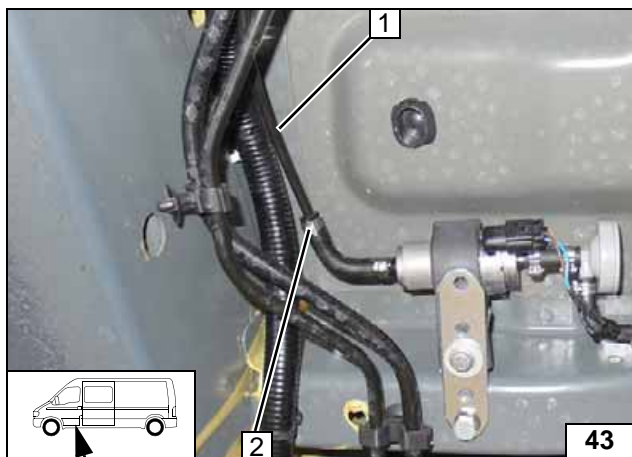
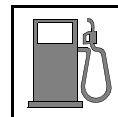


Routing fuel line



1 Fuel line of fuel standpipe

Routing fuel line

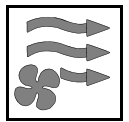


Check the position of the components; adjust if necessary. Check that they have freedom of movement.

- 1 Fuel line of fuel standpipe
- 2 10 mm dia. clamp



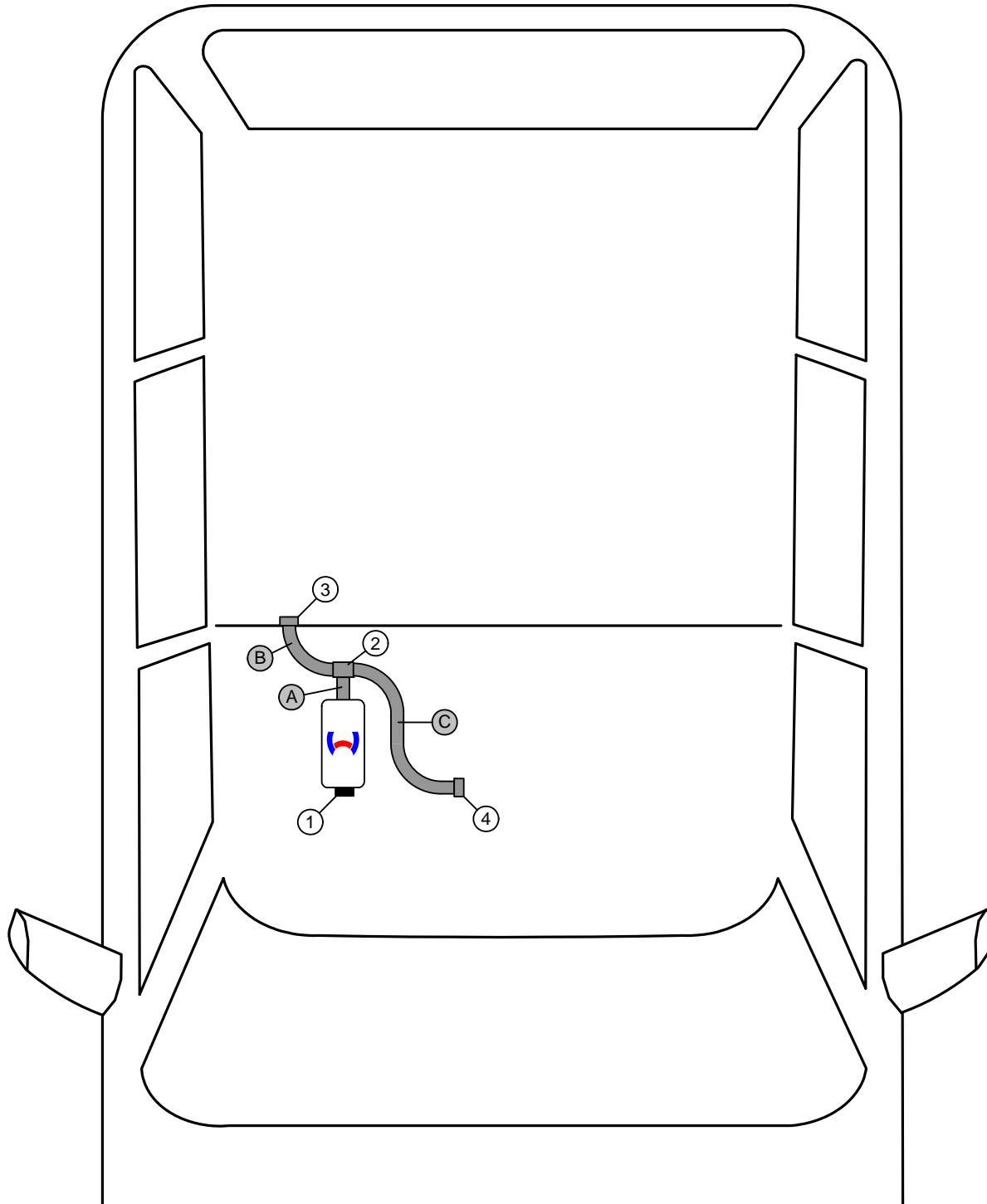
**Connect-
ing meter-
ing pump**



Heating Air

Route flexible tubes kink-free.

The following diagram shows the hot air distribution for the separate heating of the passenger compartment and / or cargo space. By closing or opening the respective air outlet, the hot air flow is regulated in the passenger compartment and / or cargo space.

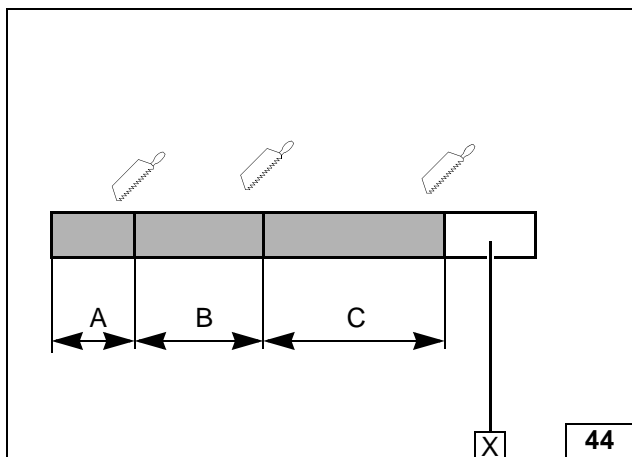
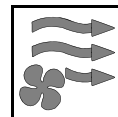


Flexible tube routing diagram

- 1 = Hot air inlet cover cap!
- 2 = 60x60x60 T-piece!
- 3 = Air outlet for cargo space!
- 4 = Air outlet for passenger compartment!

- A = 60 mm dia. flexible tube, length 45 mm
- B = 60 mm dia. flexible tube, length 260 mm
- C = 60 mm dia. flexible tube, length 530 mm

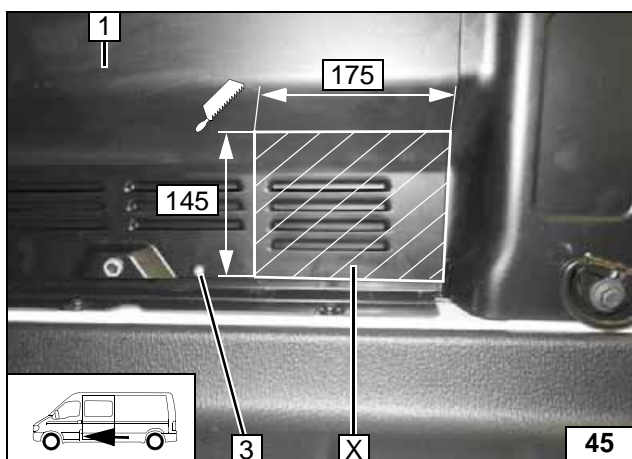




A = 45
B = 260
C = 530

X =

Cutting flexible tube to length

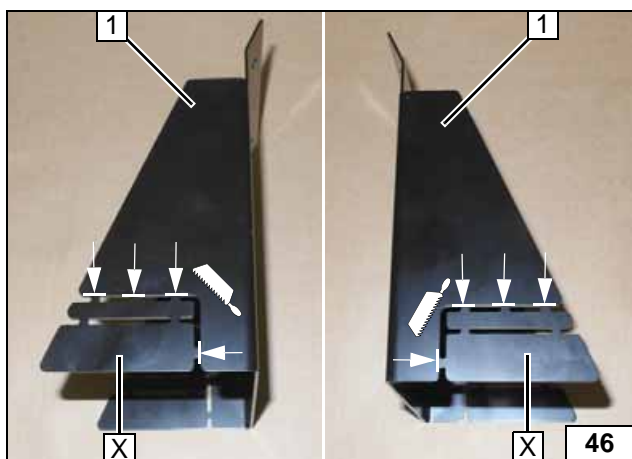


Secure front passenger's side rear flap **1** using self-tapping screw and cut out at marking. Apply corrosion protection to cut edges.

3 5 mm dia. hole, 5.5x13 mm self-tapping screw

X =

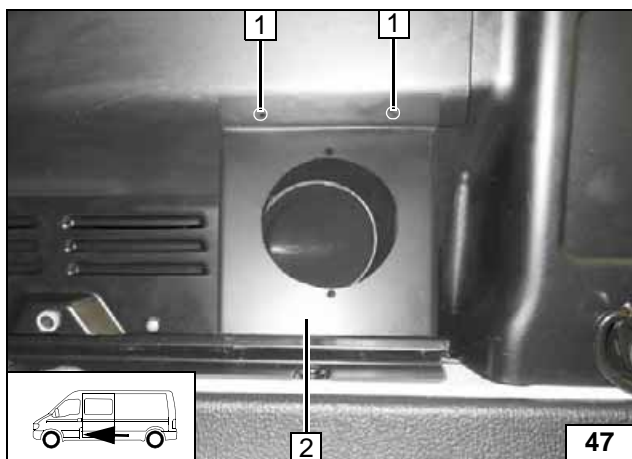
Cutting out flap



Cut out air outlet bracket **1** on both sides at the perforation. Apply corrosion protection to cut edges.

X =

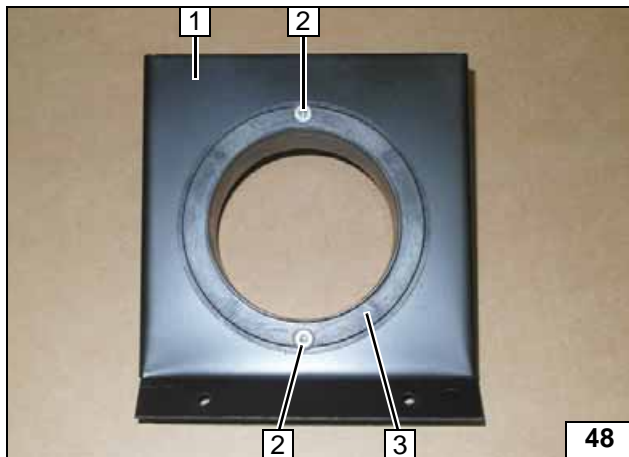
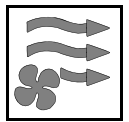
Preparing bracket



Insert air outlet bracket **2** in recess.

1 Copy hole pattern, 5.5 mm dia. hole [2x]

Copying hole pattern

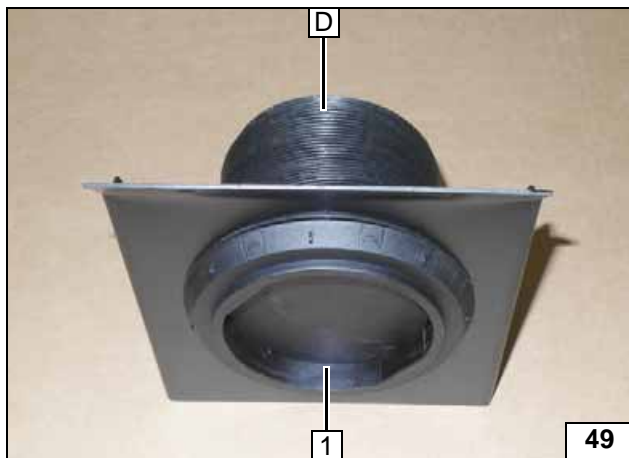


Insert air outlet housing **3** in bracket recess **1** .



2 5.5 mm dia. hole; 5 mm dia. expanding rivet [2x each]

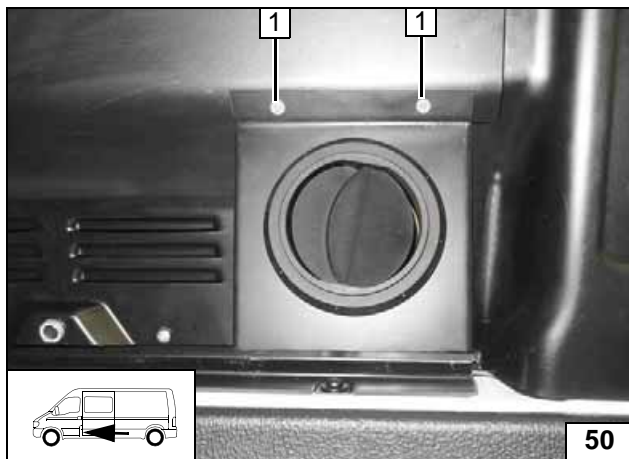
Preparing bracket



Assemble air outlet **1** , screw flexible tube **D** onto air outlet housing as far as the stop.



Preparing bracket



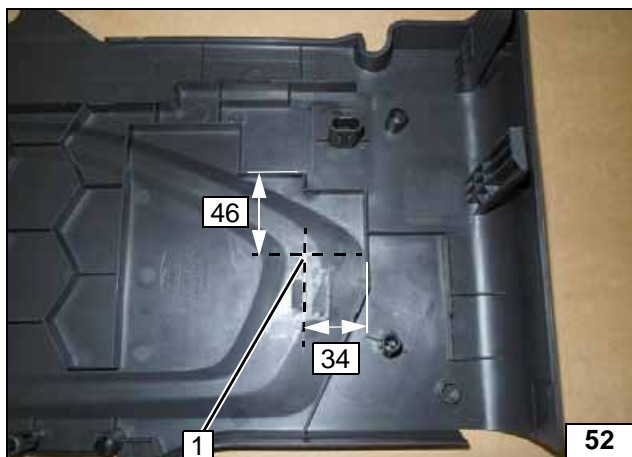
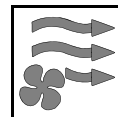
1 5 mm dia. expanding rivet [2x]

Assembling air outlet bracket



1 Front passenger's seat trim on the left
2 Cut off plastic piece flush with the marking

Preparing trim



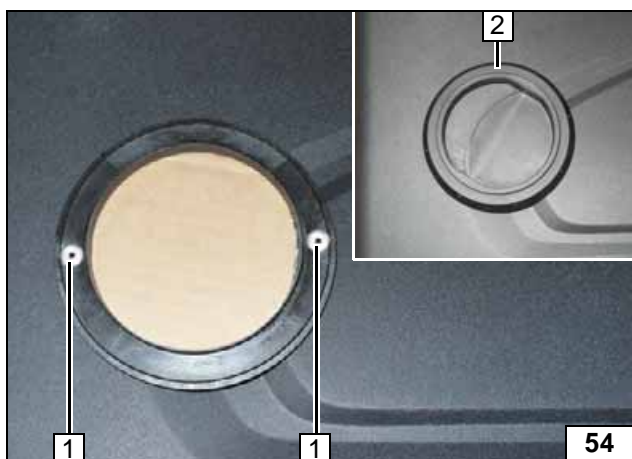
1 62 mm dia. hole

Hole in trim



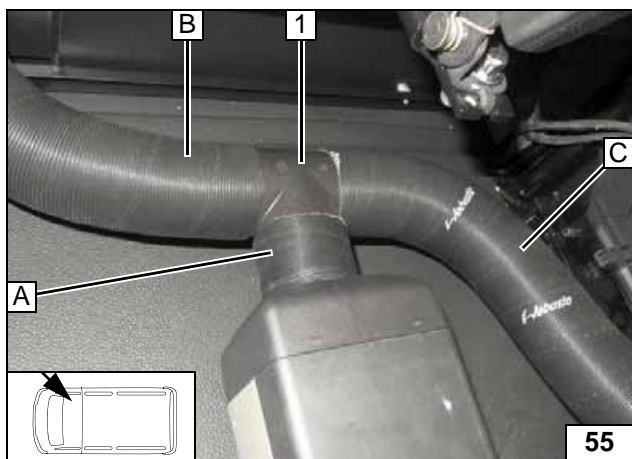
1 Trim
2 Air outlet inserted in hole
3 Copy hole pattern, 5.5 mm dia. hole [2x]

Assembling air outlet



1 5 mm dia. expanding rivet [2x]
2 Completed air outlet

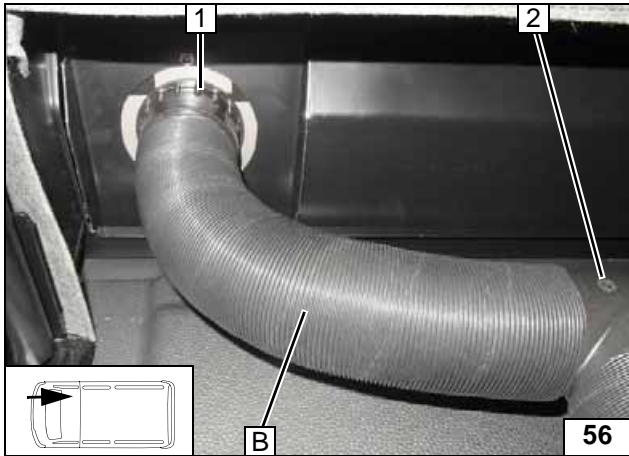
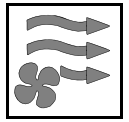
Assembling air outlet



Assemble flexible tube **A** with hot air outlet. Flexible tube **B** and **C** are assembled later.

1 = 60x60x60 T-piece

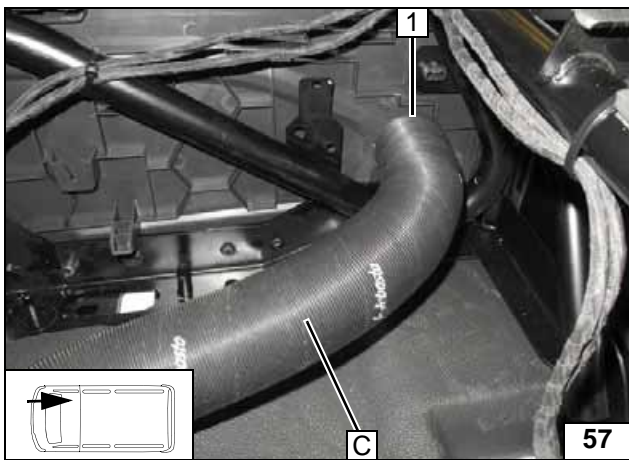
Assembling flexible tube A



First screw flexible tube **B** onto air outlet **1** and then assemble on T-piece **2**.



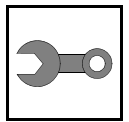
Assembling flexible tube B



First screw flexible tube **C** onto air outlet **1** and then assemble on T-piece.



Assembling flexible tube C



Final Work

WARNING!

Reassemble the components in reverse order. Check all clamps and all electrical connections for firm seating. Insulate loose wire ends and tie back.

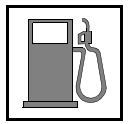
Spray the heater components with anti-corrosion wax (Tectyl 100K).

- **Connect the battery.**
- **Program Smart-/ MultiControl HD, select AT 2000 STC heater**
- **Place the 'Switch off parking heater before refuelling' caution label near the filler neck.**
- **For initial startup and function check, please see installation instructions.**

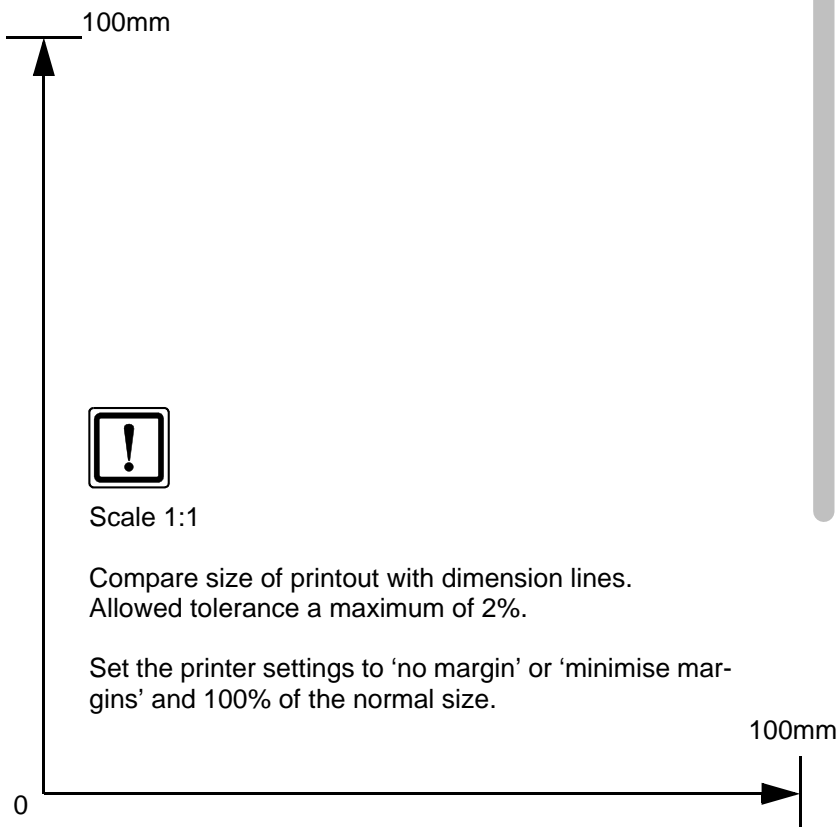


Install heat guard plate as shown, correct if necessary by bending.

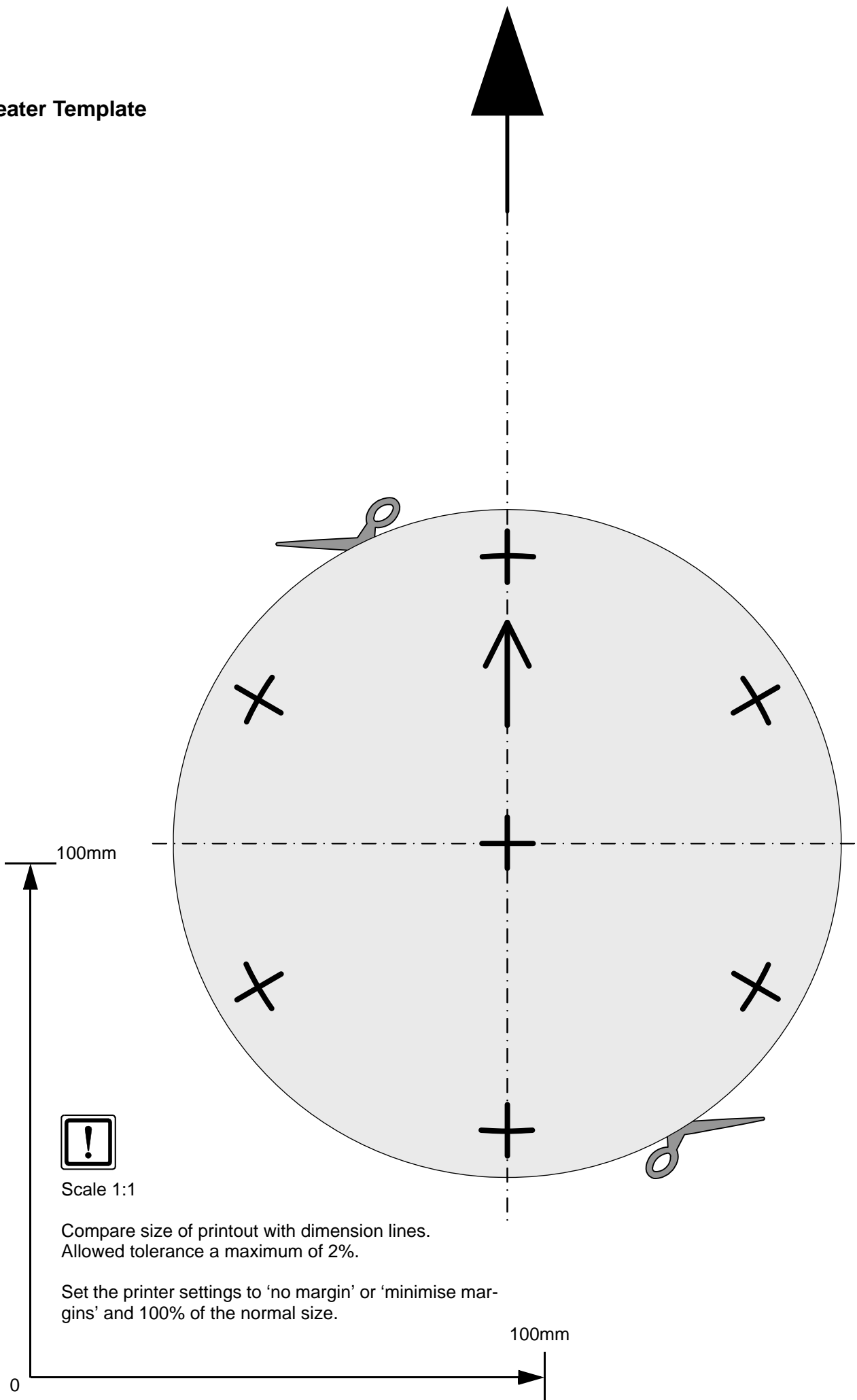
**Aligning
exhaust
pipe**



Fuel Standpipe Template



Heater Template

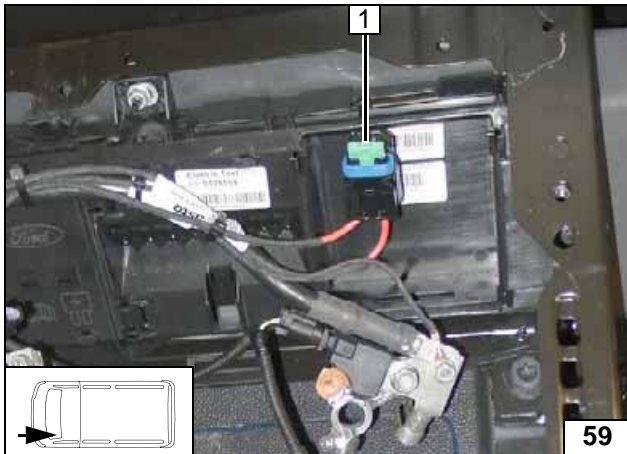


Operating Instructions for End Customer

Please remove page and add to the vehicle operating instructions.

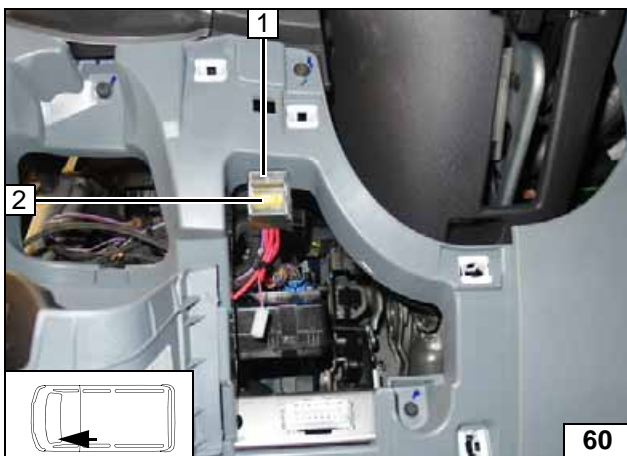
Passenger compartment monitoring, if installed, must be deactivated in addition to the vehicle settings for the heating operation.

For instructions on deactivation, please refer to the operating instructions of the vehicle.



1 30A main fuse F0

Fuse



1 1A heater fuse F3
2 20A heater fuse F1

Fuses

