

# Installation Documentation

for water heater Thermo Top Evo

'Island' coolant circuit without engine preheating

#### 

# Jeep Compass

Left-hand drive vehicle

| Manufacturer | Model   |                 | Type Mode |                     | el year            | EG-BE-No.      | / ABE                                   |             |
|--------------|---------|-----------------|-----------|---------------------|--------------------|----------------|---|-------------|
| Jeep         | Compass |                 | MP 2020   |                     | e3* 2007/46* 0508* |                | o* 0508*                                |             |
| Motorisation | Fuel    | Emission stand  | ard       | Transmissio<br>type |                    | Output<br>[kW] | Displace-<br>ment<br>[cm <sup>3</sup> ] | Engine code |
| 1.3 T-GDI    | Petrol  | Euro6;WLTP;AP;. |           | 6-speed DC1         | Г                  | 110            | 1332                                    | 55282328    |

| Validity           | Equipment variants                | Model   |
|--------------------|-----------------------------------|---------|
|                    |                                   | Compass |
| Verified           | 2 zone automatic air-conditioning | х       |
| equipment variants | Xenon main headlights             | х       |
|                    | LED daytime running lights        | х       |
|                    | Halogen front fog lights          | х       |
|                    | Start button                      | х       |
|                    | FWD                               | X       |

| Total installation time | Note |
|-------------------------|------|
| 9.3 hours               |      |

#### Note

- The model year can be identified by the Vehicle identification number (VIN): ZACNJDEWOLPRXXXX (L = model year 2020)

- This installation documentation describes only the installation of a parking heater for vehicles with model year 2020.

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15 Tank extracting device template

# 1 List of abbreviations

- DP Fuel pump
- EFIX Exhaust end fastener
- FWD Front wheel drive
- HG Heater
- MY Model year
- SH2 Engine compartment fuse holder for F1/F2
- TE Tank extracting device
- UP Coolant pump
- Veh. Vehicle
- X10 Female plug for control element

# 2 Installation notes

#### 2.1 Information on Validity

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

#### 2.2 Components used

| Designation   | Order number                  |
|---|-------------------------------|
| Basic delivery scope of Thermo Top Evo 4 (see 'Notes on installation')                                  | In accordance with price list |
| Installation kit for Jeep Compass MY 2020 petrol  | 1328277B                      |
| Additional 'Webasto Comfort' A/C control kit for Jeep   | 1325260_                      |
| In case of Telestart, control element, as well as indicator lamp in consultation with end cus-<br>tomer | In accordance with price list |

#### 2.3 Additional components from manufacturer

| Designation                     | Jeep order number |
|---------------------------------|-------------------|
| Gasket for 1.3TGDI tank fitting | 51807863          |

#### 2.4 Notes on installation, in coordination with the end customer

Arrange for the vehicle to be delivered with the tank only about 1/4 full.

- ▶ The installation location of the following elements should be chosen in coordination with the end customer:
- the push button in case of the Telestart and/or ThermoCall and/or ThermoConnect options
- the MultiControl CAR option

(-s

<sup>2</sup> The heater is integrated into the coolant circuit as an 'island' and heats up the vehicle passenger compartment. There is no engine pre-heating.

#### 2.5 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:

#### Thermo Top Evo heater

#### 3.2 Warranty and liability

Webasto shall assume no liability for defects, damage and injuries resulting from a failure to observe the installation, repair and operating instructions of the information contained in them.

This liability exclusion particularly applies to improper installations and repairs by untrained persons or in the case of a failure to use genuine spare parts.

The liability due to culpable disregard to life, limb or health and due to damage or injuries caused by a wilful or reckless breach of duty remain unaffected, as does the obligatory product liability.

Installation should be carried out according to the general, standard rules of technology. Unless specified otherwise, fasten hoses, lines and wiring harnesses to original vehicle lines and wiring harnesses using cable ties. Insulate loose wire ends and tie back. Connectors on electronic components must audibly snap into place during assembly.

Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K).

Observe the instructions and guidelines of the respective vehicle manufacturer for demounting and mounting vehicle specific components.

The initial start-up is to be executed with the Webasto Thermo Test Diagnosis.

When installing a programmable control module (e.g. a PWM Gateway), the corresponding settings must be checked or adjusted.

#### 3.2.1 Statutory regulations governing installation

The Thermo Top Evo heater has been type-tested and approved in accordance with ECE-R 10 (EMC) and ECE-R 122 (heater). The regulations of these guidelines are binding in the scope of the Directive 70/156/EEC and/or 2007/46/EC (for new vehicle models from 29/04/2009) and should also be observed in countries in which there are no special regulations.

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

#### 3.3 Safety

Qualifications of installation personnel

The installation personnel must have the following qualifications:

- Successful completion of Webasto training
- Corresponding qualification for working on technical systems

Regulations and legal requirements

The regulations from the heater's general installation and operating instructions must be observed.

#### 3.3.1 Safety information on installation

#### Danger posed by live parts

- ▶ Prior to installation, disconnect the vehicle from the voltage supply.
- Make sure the electrical system is earthed correctly.
- Always comply with legal requirements.
- Observe data on type label.

# Danger of fire and leaking toxic gases due to improper installation

- Vehicle parts in the vicinity of the heater must be protected against excessive heating by the following measures:
  - ⇒ Maintain minimum safety distances.
  - ⇒ Ensure adequate ventilation.
  - ⇒ Use fire-resistant materials or heat shields.

#### Danger due to sharp edges

- Lacerations
- Short circuit due to electrical wire damage
- Fit protectors on sharp edges.

#### 3.4 Using this document

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

#### 3.4.1 Explanatory Notes on the Document

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

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

## 3.4.2 Use of symbols

#### DANGER

Type and source of the risk

Consequences: Failure to follow the instructions can result in death.

Actions to protect yourself against risks.

# WARNING

Type and source of the risk

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

Actions to protect yourself against risks.



# CAUTION

Type and source of the risk

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

Actions to protect yourself against risks.



#### Type and source of the risk

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

Actions to protect yourself against risks.



Reference to the vehicle manufacturer's specific documents.

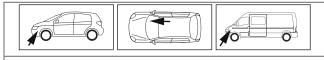
Note on a special technical feature

#### 3.4.3 Work step identification marks

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

| Mechanical<br>system | Electrical sys-<br>tem | High-voltage | Coolant  |
|----------------------|------------------------|--------------|----------|
| <b>X</b>             | <b>-</b>               |              |          |
| Combustion<br>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  |
|--------------|--|
| $\checkmark$ | Action   |
|              | Necessary action   |
| ⇔            | Result of an action  |
| 1/12/a1      | Position numbers for the image descriptions  |
| 1 / 12 / A   | Position numbers for the image descriptions<br>for electrical wires and components as well<br>as coolant hose sections |

# 4 Technical Information

#### **Dimension specifications**

- All dimensions specified in mm
- Perforated brackets and mounting angles are shown to scale
- Observe data regarding scale on the templates

#### **Tightening torque specifications**

- Tightening torque values of 5x13 heater bolts and 5x11 heater stud bolts = 8Nm
- Tightening torque values of 5x15 retaining plate of water connection piece bolts = 7Nm
- 5x12 bolt tightening torque of 2-part heater bracket = 6Nm
- Tighten other bolt connections in accordance with manufacturer's instructions or in accordance with state-of-theart-technology

#### Temperature specification for heat shrink plastic tubings

- Fabric heat shrink tubing: shrink temperature max. 230°C
- Standard heat shrink plastic tubing: shrink temperature max. 300°C

#### **Necessary special tools**

- Hose clamp pliers for auto-tightening hose clamps
- Hose clamp pliers for Clic hose clamps of type W
- Hose clamping pliers
- Hose cutter
- Automatic wire stripper 0.2 6 mm<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**

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# 5.1 Vehicle preparation

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

| Vehicle<br>area | Components to be removed   | Other ap-<br>plicable<br>documents |
|-----------------|--|------------------------------------|
| General         | ► Open the fuel tank cap   | K                                  |
|                 | ► Ventilate the fuel tank  |                                    |
|                 | Close the fuel tank cap again                                      |                                    |
|                 | Depressurise the cooling system                                    |                                    |
| Engine          | ► Drain off the coolant  | ΠK                                 |
| compart-        | Disconnect the battery and remove it with the carrier              |                                    |
| ment<br>and     | Engine design cover  |                                    |
| body            | Complete air filter box  |                                    |
|                 | ► Windscreen wiper   |                                    |
|                 | ► Water drain chamber cover  |                                    |
|                 | ► Front wheel on the driver's side                                 |                                    |
|                 | Wheel-well inner panel on the driver's side                        |                                    |
|                 | Wheel-well inner panel on the front passenger's side               |                                    |
|                 | ► Bumper trim  |                                    |
| Passenger       | ► Instrument panel side trim on the driver's side                  |                                    |
| compart-        | Lower instrument panel trim on the driver's side                   |                                    |
| ment            | ► A-pillar trim on the driver's side                               |                                    |
|                 | Centre tunnel side trim on the driver's and front passenger's side |                                    |
|                 | ► Lower air duct on the driver's side                              |                                    |
|                 | ► Accelerator pedal  |                                    |
|                 | ► Rear bench seat  |                                    |
|                 | Open the tank fitting service lid                                  |                                    |



### DANGER

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

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

| Vehicle<br>body | ► Tank fitting | K |
|-----------------|----------------|---|
|-----------------|----------------|---|

| 5.2 He | eater preparation  |  |
|--------|--|--|
|        | <ul> <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> |  |

# 6 Installation overview

### Installation overview for 110kW

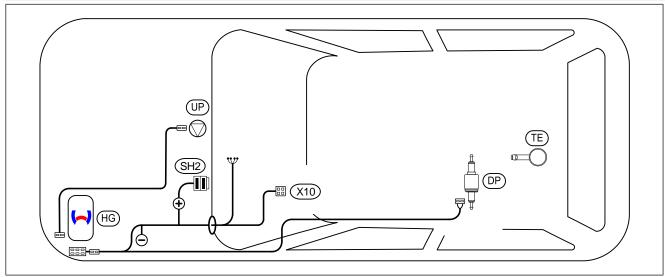


Fig. 1

#### Legend to installation overview

| Abbreviation | Component                                |
|--------------|--|
| DP           | Fuel pump                                |
| HG           | Heater                                   |
| SH2          | Engine compartment fuse holder for F1/F2 |
| UP           | Coolant pump                             |
| TE           | Tank extracting device                   |
| X10          | Female plug for control element          |

**1** Heater

#### Heater installation location



- +

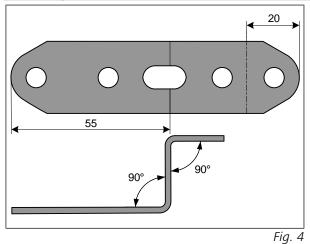
# 7 Electrical system of engine compartment

Removing clip

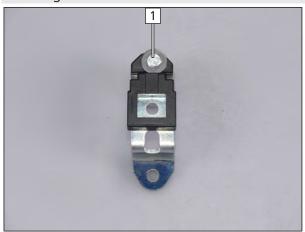


1 Original vehicle clip

Preparing perforated bracket



### Installing SH2





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

1 M6x20 bolt, premounted perforated bracket, original vehicle hole, flanged nut

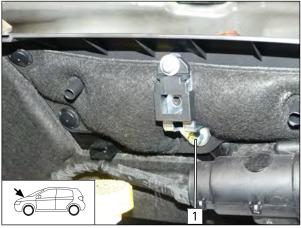
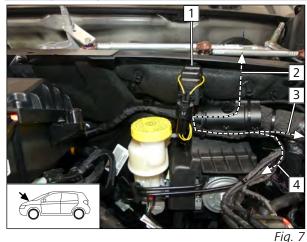


Fig. 6

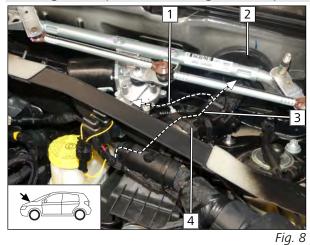
#### Routing wiring harnesses



# SH2 with fuse F1 and F2 Passenger compartment

- **2** Passenger compartment wiring harnesses, control element and earth wire
- **3** Heater wiring harness
- **4** Positive wire

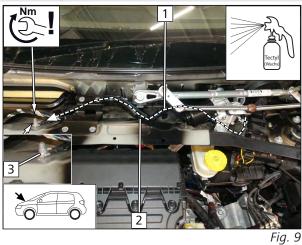
Passenger compartment wiring harness pass through



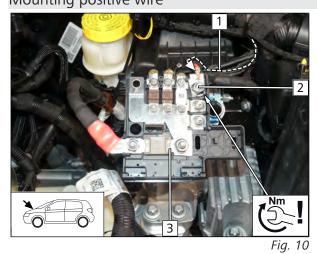
- To prevent water seeping into the passenger compartment, the wiring harness must be routed upwards to the protective rubber plug and this plug must then be sealed with a suitable sealing compound.
  - **1** Earth wire
  - **2** Protective rubber plug
  - **3** Passenger compartment and control element wiring harnesses
  - 4 Cable duct



### Mounting earth wire



# Mounting positive wire



## HG wiring harness routing



#### Fig. 11



# DANGER

Observe tightening torque

- **1** Earth wire
- **2** Original vehicle wiring harness
- **3** Original vehicle earth support point



# DANGER

Observe tightening torque

- **1** Positive wire
- **2** Original vehicle positive support point
- **3** Positive battery distributor

- **1** Original vehicle wiring harness
- **2** HG wiring harness

# 8 Mechanical system

# 8.1 Preparing installation location

### Fitting edge protection

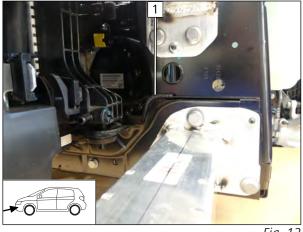
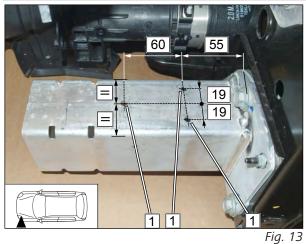


Fig. 12

# Drilling holes for mounting heater



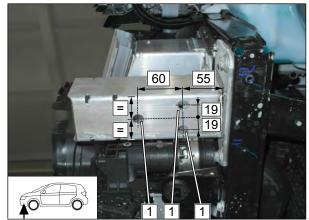


Fig. 14

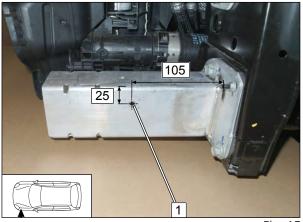
**1** 70 long, narrow edge protection

**1** Ø6.5 hole

**1** Ø16 hole



#### Drilling hole for mounting exhaust silencer





#### Drilling hole for combustion air intake silencer installation

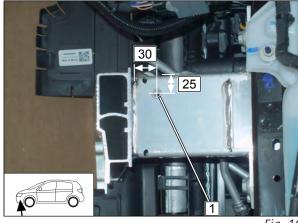


Fig. 16

**1** 7mm dia. hole

1 Insert rivet nut into 9mm dia. hole

# 8.2 Premounting heater

Mounting, aligning and fastening with 7Nm water connection piece with sealing ring and retaining plate

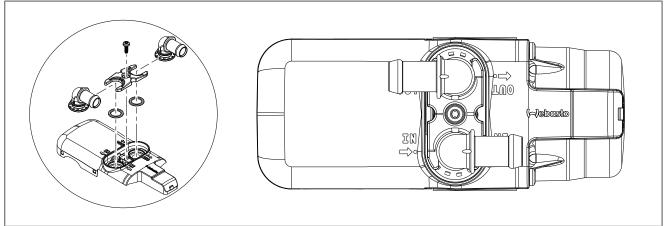
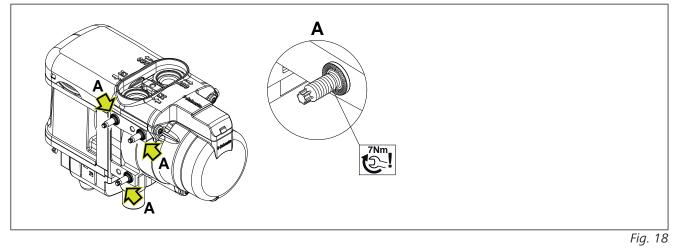
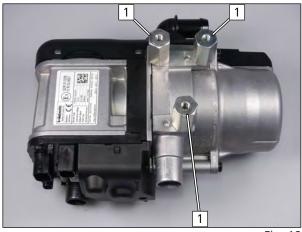


Fig. 17

Mounting M6/5x15 self-tapping stud bolt



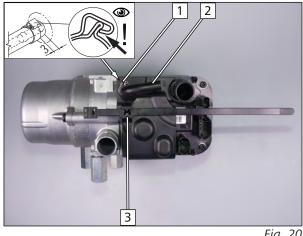
#### Mounting spacer nuts







#### Mounting fuel hose and clip-type cable tie



**1** Ø10 clamp

**s1** 630

- **2** 90° moulded hose
- **3** Clip-type cable tie, existing hole

Fig. 20

#### Cutting combustion air intake pipe to length

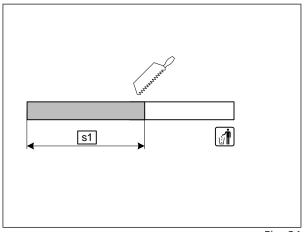


Fig. 21

Mounting combustion air intake pipe







Observe the installation instructions of the combustion air intake silencer.

**1** Tighten clip-type cable tie





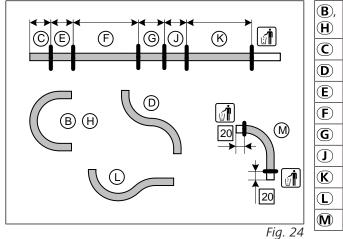
#### 1 M6x20 bolt, perforated bracket, Ø25 clamp, M6 flanged nut

**2** 5x13 self-tapping bolt, perforated bracket

Fig. 23

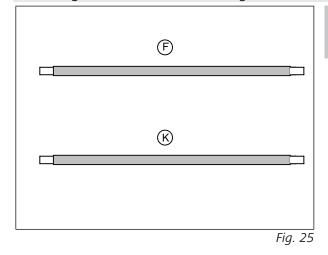
#### **Premounting heater** 8.3

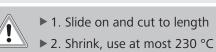
Cutting hoses to length



| <b>B</b> , | 180° moulded hose  |
|------------|--------------------|
| H          |                    |
| C          | 60                 |
| D          | 2x90° moulded hose |
| E          | 60                 |
| F          | 690                |
| G          | 100                |
| J          | 160                |
| K          | 700                |
| L          | 135° moulded hose  |
| M          | 90° moulded hose   |
|            |                    |

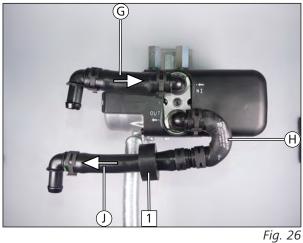
Mounting fabric heat shrink tubing





Jeep Compass

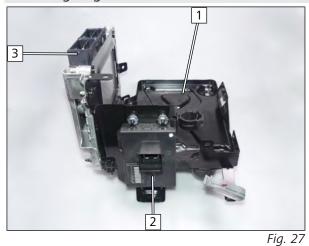
### Mounting hoses G, H and J



### **1** Ø22 rubber isolator

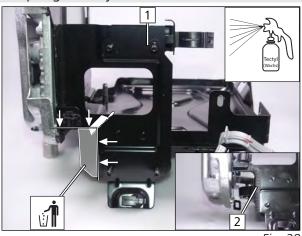
#### 8.4 **Preparing battery carrier**

Removing original vehicle control unit



- **1** Battery carrier
- **2** Control unit (if present)
- **3** Engine control unit

Adapting battery carrier



- ► Cut out marked area of battery carrier **1** as shown.
  - 2 Narrow edge protection

#### Removing clip



**1** Clip (will be reused)

Fig. 29

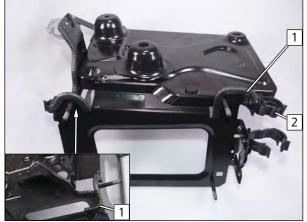
Bending tab of original vehicle clip



Bend tab **1** as shown.

Fig. 30

Mounting edge protection and original vehicle clip



1 Narrow edge protection

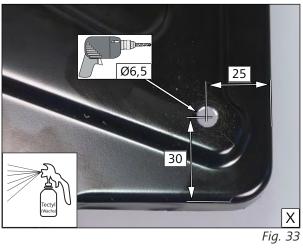
**2** Original vehicle clip

Ĭ

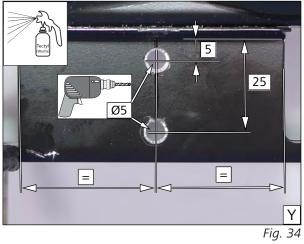
### Copying hole pattern and drilling hole



 $\blacktriangleright$  Drill holes at positions **X** and **Y** as shown in next figures.







#### Mounting angle bracket

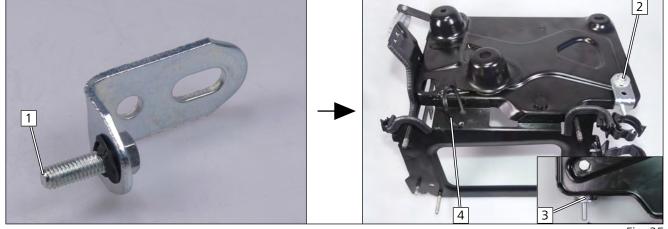
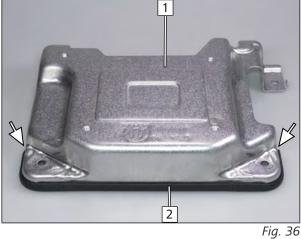


Fig. 35

- **1** M6x20 bolt, angle bracket, lock washer
- 2 M6x12 bolt, hole in carrier, oblong hole in angle bracket, large diameter washer, flanged nut
- 3 M6x20 bolt, premounted
- 4 Cable tie

# Fitting edge protection on control unit cover



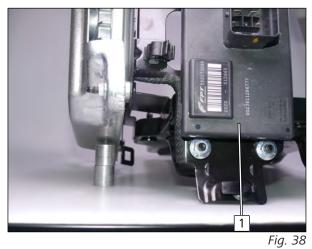
- **1** Control unit cover
- **2** Narrow edge protection

# Mounting original vehicle control unit



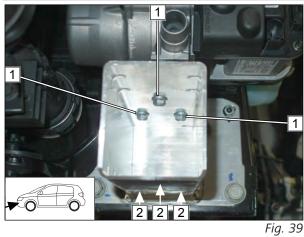
Fig. 37

- **1** Control unit with cover
- **2** Battery carrier



## 8.5 Mounting heater

#### Mounting heater



Mounting wiring harnesses

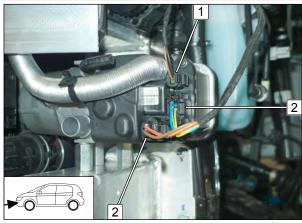


Fig. 40

Pass M6x16 bolt with serrated flange 1 through 16mm dia. hole 2.

**1** Control unit (if present)

- 1 Coolant pump wiring harness connector
- **2** Heater wiring harness connector

# Coolant 9 9.1 Hose routing diagram Ø 20x18 2 m Ĕ D 3 Ø 27D ſĒŋŊ Ø 27 \_\_\_\_\_ Ø 20×18 B ⊕III (F)K) ↓

Fig. 41

All spring clips without a specific designation  $\square = \emptyset 25$ 

All screw clamps  $\bigcirc$  = Ø16-25

All rubber isolators without a specific designation  $\emptyset$  =  $\emptyset$ 22

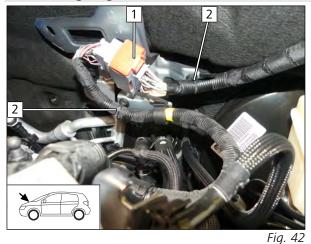
All connecting pipes without a specific designation  $\square$  or  $\square$  = Ø18x18

**1** Ø25 rubber isolator; **2** 3x Ø18 T-piece; **3** Ø18 double non-return valve

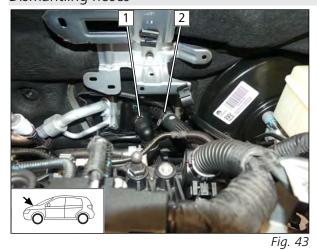


# 9.2 Coolant circuit installation

#### Dismantling original vehicle connector

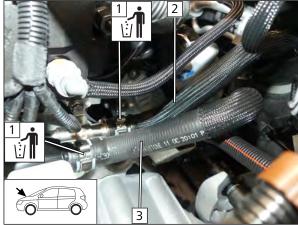


### Dismantling hoses



- 1 Disconnect original vehicle connector
- **2** Detach original vehicle wiring harness

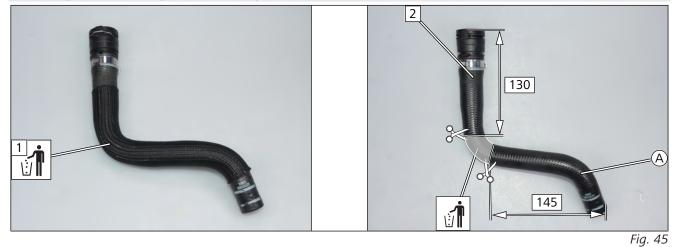
- 1 Pull off heat exchanger inlet hose
- **2** Pull off heat exchanger outlet hose



- **1** Original vehicle hose clamp
- **2** Engine inlet hose
- **3** Hose of engine outlet

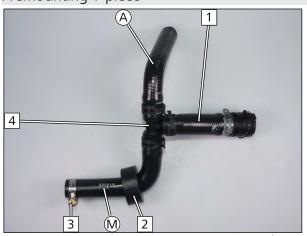


#### Preparing heat exchanger outlet / engine inlet hose



**1** Braided protection hose

#### Premounting T-piece



- 2 Heat exchanger outlet hose section
- (A) Engine inlet hose section
- **1** Heat exchanger outlet hose section
- **2** Ø22 rubber isolator
- **3** Screw clamp
- 4 3x Ø18 T-piece

Fig. 46

#### Preparing hose of heat exchanger inlet / engine outlet



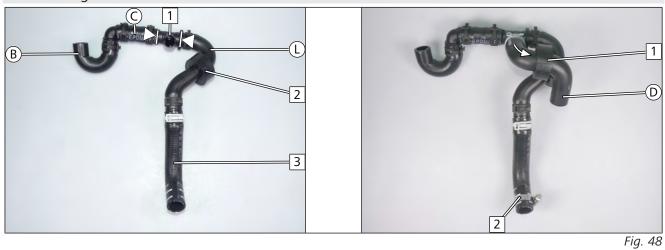
Fig. 47

**1** Braided protection hose

- 2 Heat exchanger inlet hose section
- **3** Engine outlet hose section

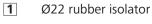


#### Premounting double non-return valve



- 1 3x Ø18 double non-return valve
- 2 Ø22 rubber isolator
- 3 Engine outlet hose section

#### Preparing coolant pump perforated bracket



2 Screw clamp

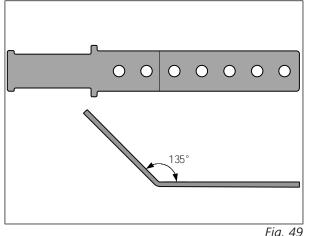
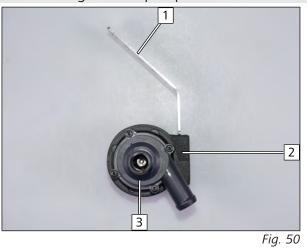


Fig. 49

### Premounting coolant pump



- 1 Coolant pump perforated bracket
- **2** Coolant pump mount
- 3 Coolant pump



#### Mounting coolant pump

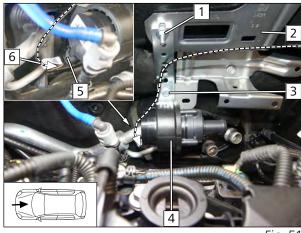
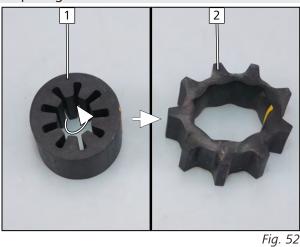


Fig. 51

#### Preparing rubber isolators



For easier installation, turn two rubber isolators 1 inside out.

1 M6x20 bolt, large diameter washer, original vehicle hole, coolant pump perforated bracket, flanged nut

**3** M6x20 bolt, coolant pump perforated bracket, spacer (8), original vehicle hole, large diameter

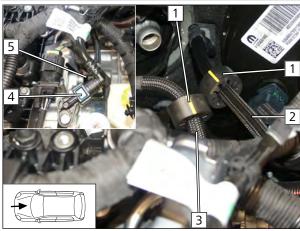
- ► After the installation turn the rubber isolators back again.
  - **1** Ø13.5 rubber isolator, original

**2** Original vehicle bracket

washer, flanged nut
Premounted coolant pump
Coolant pump connector
Coolant pump wiring harness

**2** Rubber isolator turned inside out

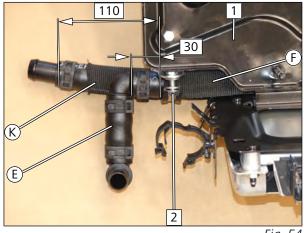
Fitting rubber isolators



Disconnect original vehicle lines 2 and 3 using quick-release couplings 4 and 5. Slide rubber isolators 1 on lines
 2 and 3 and position them as shown.



# Premounting battery carrier





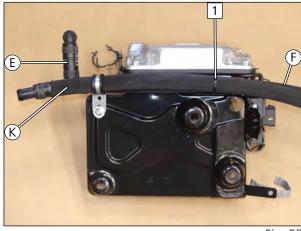


Fig. 55

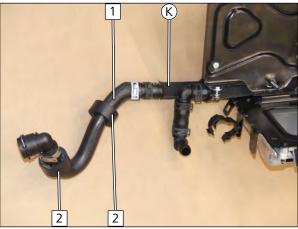


Fig. 56

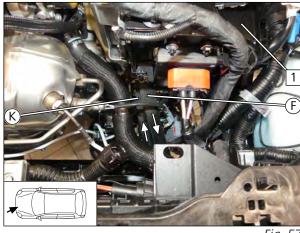
- **1** Premounted battery carrier
- 2 Ø38 rubber-coated p-clamp, premounted M6x20 bolt, M6 flanged nut

**1** Close cable tie

- **1** Heat exchanger inlet hose section
- **2** Ø25 rubber isolator



# Installing battery carrier



- $\blacktriangleright$  Route hoses  $\textcircled{\textbf{F}}$  and  $\textcircled{\textbf{K}}$  to HG installation location.
  - 1 Premounted battery carrier

Fig. 57

## Mounting heat exchanger inlet

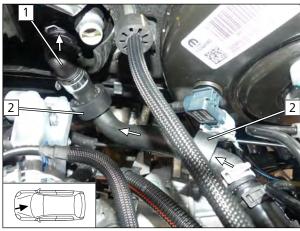


Fig. 58

Coolant pump outlet connection

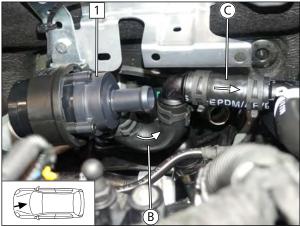


Fig. 59

- 1 Heat exchanger inlet hose section
- **2** Aligning rubber isolator

1 Coolant pump

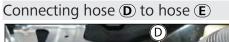


### Mounting engine outlet hose section



- **1** Engine outlet hose section
- 2 Screw clamp
- **3** Engine outlet connection piece

Fig. 60



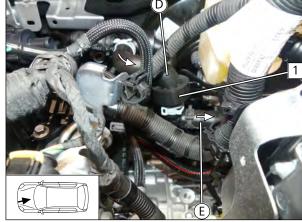


Fig. 61

#### Fixing rubber isolator

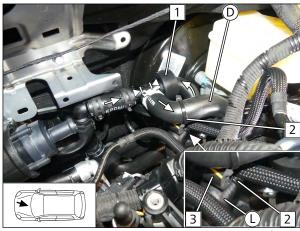


Fig. 62

**1** Aligning rubber isolator

Align rubber isolators 1 and 3 as shown. Fix rubber isolator 3 with cable tie 2.



### Mounting edge clip cable tie

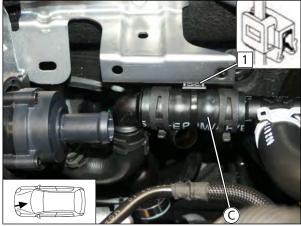


Fig. 63

# Mounting heat exchanger outlet

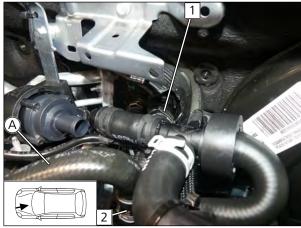


Fig. 64

#### Mounting hose A

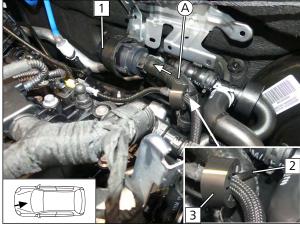


Fig. 65

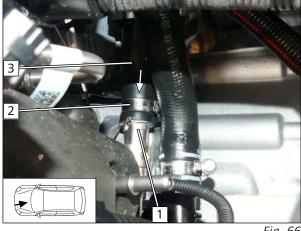
- 1 Heat exchanger outlet hose section
- 2 Premounted T-piece

**1** Edge clip cable tie

- **1** Coolant pump
- **2** Cable tie
- **3** Premounted rubber isolator



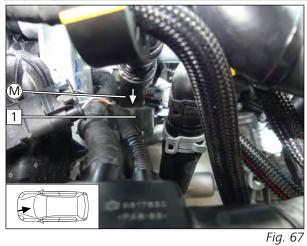
## Mounting engine inlet hose section



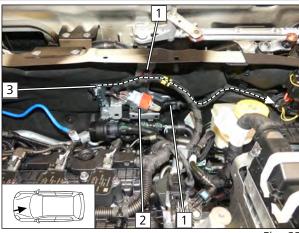
- **1** Engine inlet connection piece
- **2** Premounted screw clamp
- **3** Engine inlet hose section

Fig. 66

#### Aligning rubber isolator



Reinstalling original vehicle connector



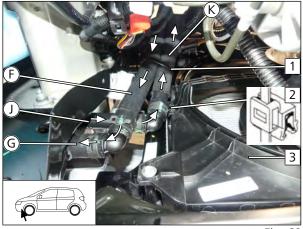
#### Fig. 68

**1** Rubber isolator

- 1 Original vehicle clip
- **2** Original vehicle connector
- **3** Coolant pump wiring harness



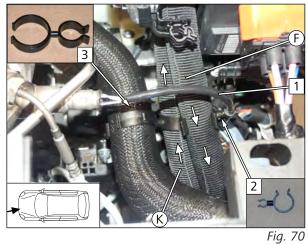
#### Connecting and fastening hoses (F) and (G) as well as hoses (K) and (J)



- 1 Cable tie
- **2** Edge clip cable tie
- 3 Radiator trim

Fig. 69

# Mounting spacer bracket



Rubber-coated p-clamp



Danger of damage to components

- Ensure sufficient distance from neighbouring components, correct if necessary.
- Tighten all loose screw connections.

**1** Original vehicle wiring harness

Ø7/22 hose bracketØ25/37 hose bracket

1 Ø38 rubber-coated p-clamp

Fig. 71



10

### Fuel

#### DANGER

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

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

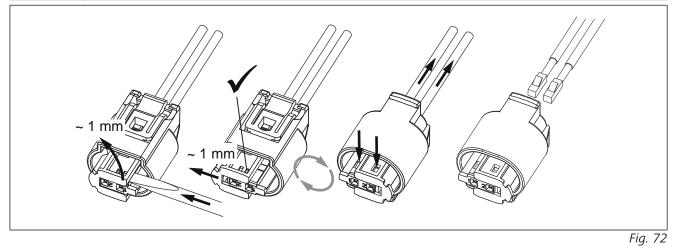
- Avoid electrostatic discharges and open fire
- ▶ When working on the fuel system, ensure sufficient ventilation and bleeding
- Open the fuel tank cap of the vehicle
- Ventilate the fuel tank
- ▶ Re-close the tank lock
- ► Catch any fuel running off with an appropriate container



#### Danger of damage to components

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

#### Dismantling fuel pump connector X7



#### 10.1 Connecting and routing fuel line

#### Connecting heater

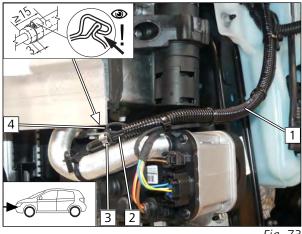
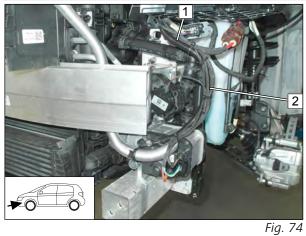


Fig. 73

- 1 Corrugated tube
- **2** Fuel line in corrugated tube
- **3** Ø10 clamp
- **4** Fuel pump wiring harness in corrugated tube



#### Routing fuel line



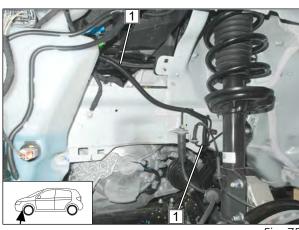


Fig. 75

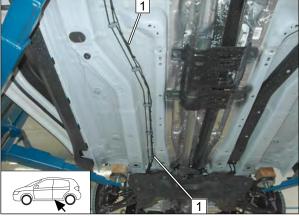


Fig. 76

- **1** Corrugated tube with fuel pump wiring harness and fuel line
- 2 Fasten corrugated tube as well as heater and coolant pump wiring harnesses with cable ties

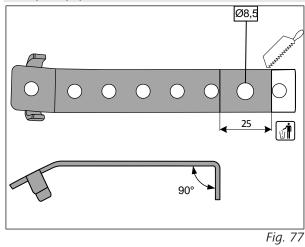
Fasten corrugated tube with fuel pump wiring harness and fuel line using cable ties.

► Fasten fuel pump wiring harness and fuel line to original vehicle brake line with cable ties.

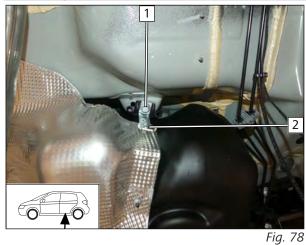


# 10.2 Mounting fuel pump

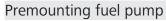
#### Fuel pump perforated bracket

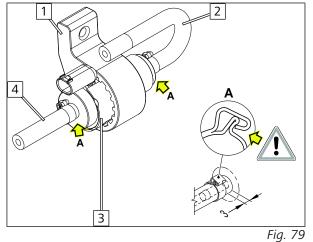


Mounting fuel pump perforated bracket



- **1** Original vehicle bolt
- **2** Fuel pump perforated bracket



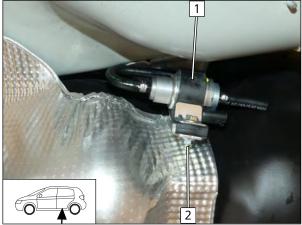


- The alignment of the fuel pump and fuel hoses will be carried out afterwards, during the installation.
  - **1** Fuel pump mount
  - 2 180° moulded hose, Ø10 clamp
  - **3** Fuel pump
  - 4 Hose section, Ø10 clamp

36



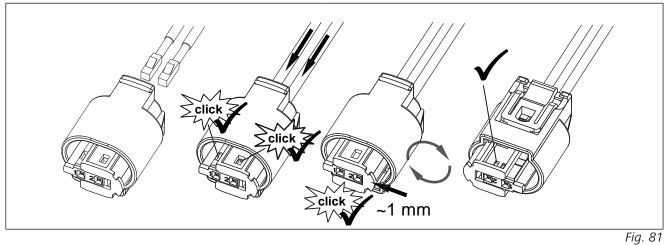
#### Mounting fuel pump



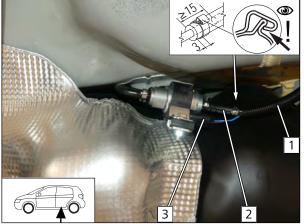
- 1 Premounted fuel pump
- 2 M6x25 bolt, support angle bracket, fuel pump mount, perforated bracket, flanged nut

Fig. 80

Assembling fuel pump connector X7



#### Connecting fuel line





- **1** HG fuel line in corrugated tube
- **2** Hose section, Ø10 clamp
- **3** Fuel pump wiring harness, connector X7 mounted



#### Removing rear seat



# i

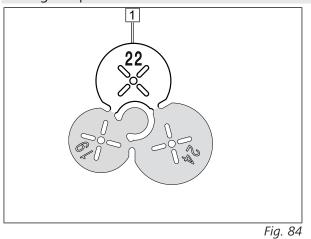
Further information can be found in the vehicle manufacturer's technical documentation.

**1** Remove original vehicle bolt

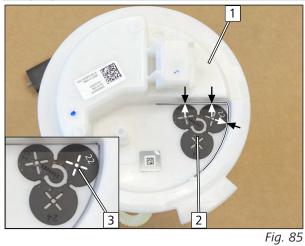
Fig. 83

#### 10.3 Mounting tank extracting device

#### Drilling template



#### Copying hole pattern



1 22mm dia. drilling template

- *i* Dismantle tank fitting in accordance with manufacturer's instructions.
- **1** Tank fitting
- **2** Position Ø22 drilling template as shown in fig.
- 3 Hole pattern



#### Hole for tank extracting device



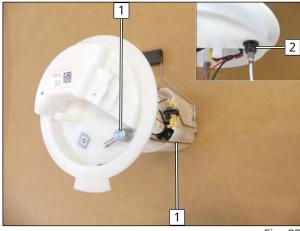
## DANGER

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

**1** Ø6 hole



#### Mounting tank extracting device

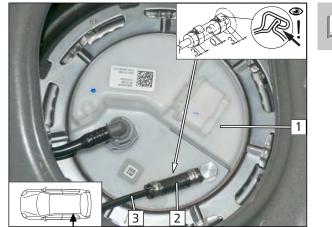


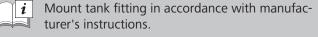
Observe the installation instructions of the tank extracting device.

- ▶ Bend tank extracting device **1** according to template and cut to length. Insert tank extracting device in hole and align as shown.
  - **2** Provided locking nut

Fig. 87

#### Connecting fuel line

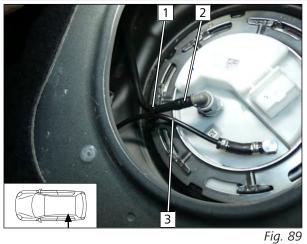




- **1** Tank fitting
- **2** Hose section, Ø10 clamp [2x]
- **3** Fuel line of tank extracting device

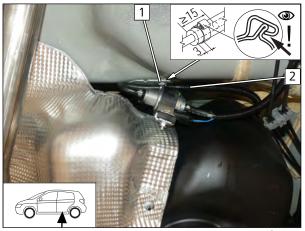


#### Securing fuel line



#### 10.4 Fuel pump connection

#### Connecting fuel pump



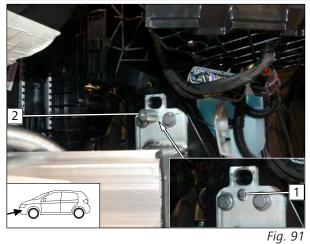
- **1** Cable tie for tension relief
- **2** Original vehicle fuel line
- **3** Fuel line of tank extracting device

- 1 Ø10 clamp
- **2** Fuel line of tank extracting device in corrugated tube

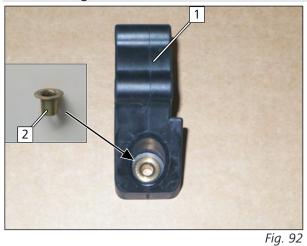


## **11** Combustion air

#### Installing spacer nut



Premounting combustion air intake silencer



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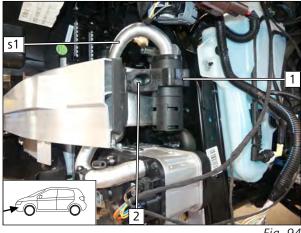
- **1** Remove and discard original vehicle nut
- **2** M6x40 spacer nut, original vehicle stud bolt

- **1** Combustion air intake silencer mount
- 2 Tubular rivet

- **1** Combustion air intake silencer
- **2** Combustion air intake silencer mount



#### Mounting combustion air intake silencer



Observe the installation instructions of the combustion air intake silencer.

- 1 Combustion air intake silencer, premounted
- 2 M6x25 bolt, spring lock washer, combustion air intake silencer mount, rivet nut

Fig. 94

#### Fastening combustion air intake pipe

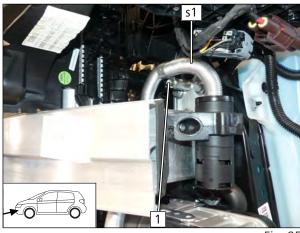
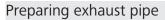
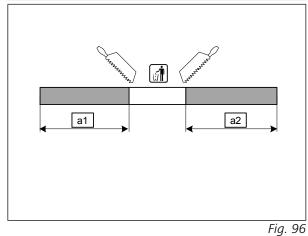


Fig. 95

1 M6x20 bolt, spring lock washer, Ø25 p-clamp, spacer nut

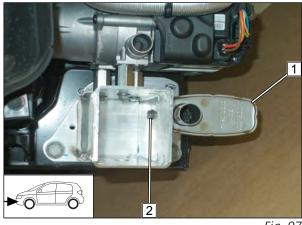
## 12 Exhaust





**a1** 170 **a2** 190

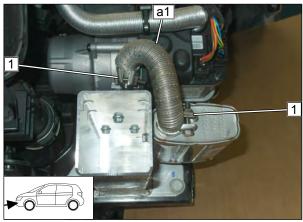
Mounting exhaust silencer



Exhaust silencer
 M6x16 bolt, spring lockwasher

Fig. 97

Mounting exhaust pipe **a1** 





1 Hose clamp



## Mounting exhaust pipe **a2**

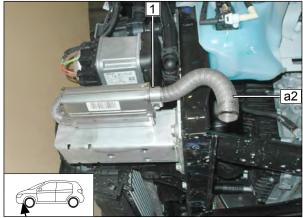
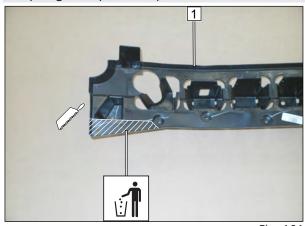


Fig. 99

Remove bumper trim piece



Fig. 100



Adapting bumper trim piece

Fig. 101

1 Hose clamp

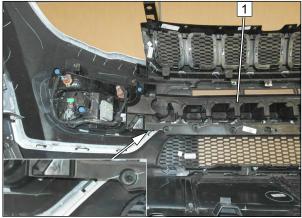
**1** Bumper trim piece

► Cut out marked area of trim piece **1** as shown.

44

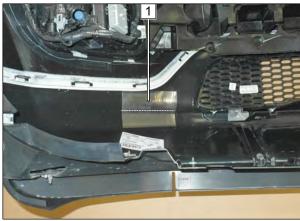


#### Mounting bumper trim piece





#### Affixing heat protection

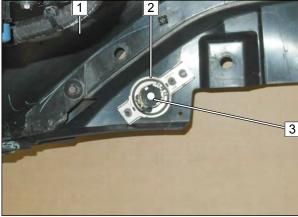


▶ Split heat protection **1** and affix as shown.

**1** Bumper trim piece

Fig. 103

#### Copying hole pattern



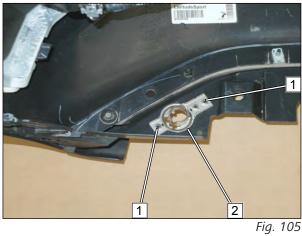
Observe the EFIX installation instructions.

## Work steps E1.1, E1.2

- **1** Bumper
- **2** Exhaust end fastener
- **3** Hole pattern, hole



#### Copying hole pattern



- ► Work step E3
  - **1** Hole pattern
  - 2 EFIX

Drilling holes in underride protection

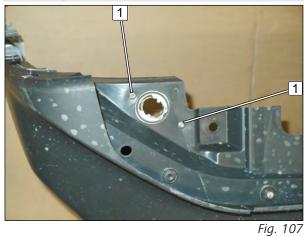


► Work step E4

**1** Hole

Fig. 106

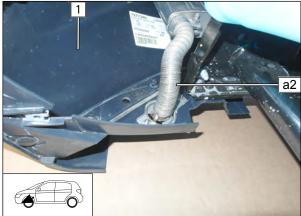
#### Mounting EFIX



- ► Work step E5
  - **1** 5x13 self-tapping screw



#### Mounting exhaust pipe **a2**



- ► Work steps E6-E8
- ► Mount bumper **1**.

► Work steps E6-E8

Fig. 108

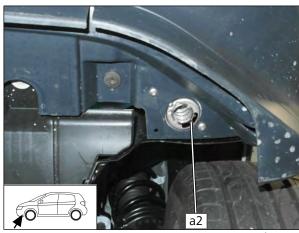


Fig. 109

Checking distance

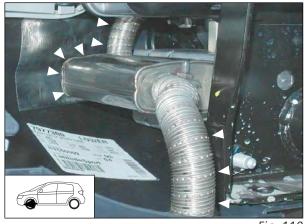


Fig. 110

Danger of damage to components

Ensure sufficient distance from neighbouring components, correct if necessary.



## **13** Electrical system of passenger compartment

#### **13.1** Air-conditioning control

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



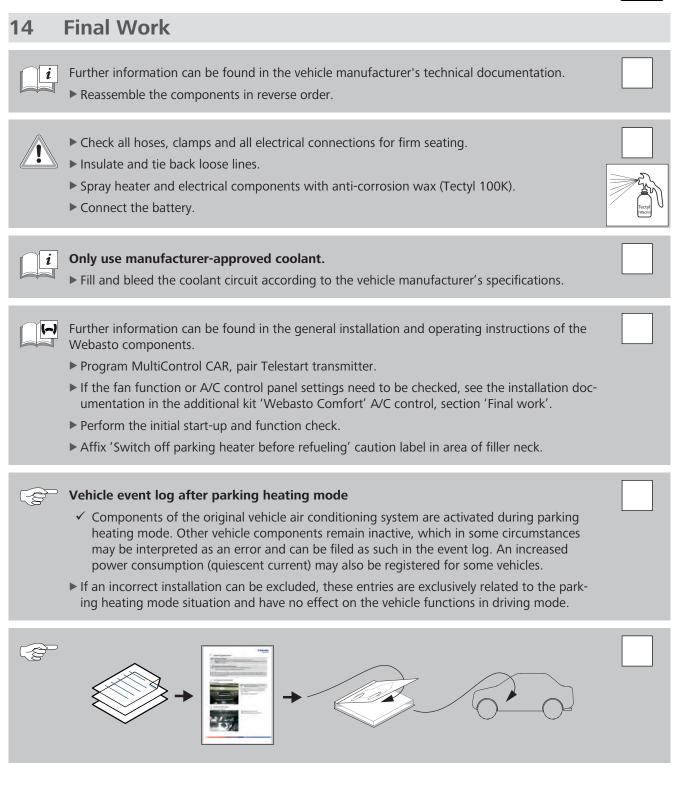
(~)

'Webasto Comfort' installation documentation for Jeep Compass air-conditioning control

#### **13.2** Control element installation

Install the control element in accordance with the provided relevant general installation documentation. The installation location of the optional control element MultiControl or the push button of the Telestart or ThermoCall/ThermoConnect options should be confirmed with the end customer and should comply with the installation conditions.

# Ĭ



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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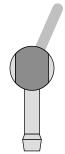
Webasto Thermo & Comfort SE Postfach 1410 82199 Gilching Germany

Company address: Friedrichshafener Str. 9 82205 Gilching Germany

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

WWW.WEBASTO.COM

## 15 Tank extracting device template





100 mm

!

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

0