

# Installation Documentation

for water heater Thermo Top Evo

'Island' coolant circuit without engine preheating

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# Renault Megane

Left-hand drive vehicle

Manufacturer	Model		Туре	Model year	EG-BE-No.	/ ABE
Renault	Megane		RFB	from 2020	e2* 2007/46	5* 0546*
Motorisation	Fuel	Emission standard	Transmission type	Output [kW]	Displace- ment [cm³]	Engine code
1.3P	Petrol	Euro 6;WLTP;DG	6-speed SG	85	1332	H5H
1.3P	Petrol	Euro 6;WLTP;DG	6-speed SG	103	1332	H5H
1.3P	Petrol	Euro 6;WLTP;DG	7-speed DKG	103	1332	H5H

Validity	Equipment variants	Model	
		Megane	
Verified	2 zone automatic air-conditioning	х	
equipment variants	LED main headlights	х	
	LED daytime running lights	х	
	Halogen front fog lights	Х	
	Start button with keycard	Х	

Total installation time	Note
8.5 hours	

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15 Tank extracting device template

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# 1 List of abbreviations

- AAC Automatic air-conditioning
- DKG Dual clutch transmission
- DP Fuel pump
- EFIX Exhaust end fastener
- HG Heater
- MY Model year
- SG Manual transmission
- SH2 Engine compartment fuse holder for F1/F2
- 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. However, installation according to this installation documentation may be possible.

# 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 Renault Megane petrol	1328494B
Additional 'Webasto Standard' air-conditioning control kit for Renault Megane	1324475_
or Additional 'Webasto Comfort' air-conditioning control kit for Renault Megane from MY 2020	1328425_
In case of Telestart, control element, as well as indicator lamp in consultation with end cus- tomer	In accordance with price list

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

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

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

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

# 2.4 Information on Total Installation Time

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

The total installation time may vary for vehicle equipment other than provided.

# **3** About this document

#### 3.1 Purpose of the document

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

#### 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

## 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.

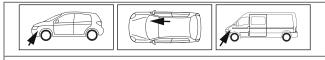
Note on a special technical feature

# 3.4.3 Work step identification marks

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

Mechanical system	Electrical sys- tem	High-voltage	Coolant
<b>X</b>	<b>-</b>		
Combustion air	Fuel	Exhaust	Software
ME		¥	

# 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 for electrical wires and components as well 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 area	Components to be removed	Other ap- plicable documents
General	► Open the fuel tank cap	K
	► Ventilate the fuel tank	
	► Close the fuel tank cap again	
	Depressurise the cooling system	
Engine	► Battery and battery carrier	K
compart-	► Engine control unit	
ment and	► Air filter complete with intake hose	
body	Detaching fuse and relay box	
	► Front wheel on the driver's side	
	► Front wheel well trim on the driver's side	
	► Lower engine cover	
	Underbody trim on the front passenger's side	
	Tank underbody trim on the front passenger's side	
Passenger	► Side instrument panel trim	<b>K H</b>
compart- ment	Lower instrument panel trim on the driver's side	
	Front footwell trim, centre console on the driver's and front passenger's side	G
	► Fold back the carpet on the driver's side	
	► Fold up the rear bench seat	
	Open the tank fitting service lid on the driver's side	

(B)

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



# DANGER

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

Vehicle body	Tank fitting in accordance with the manufacturer's instructions	K
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# 5.2 Heater preparation

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

#### Installation overview 6

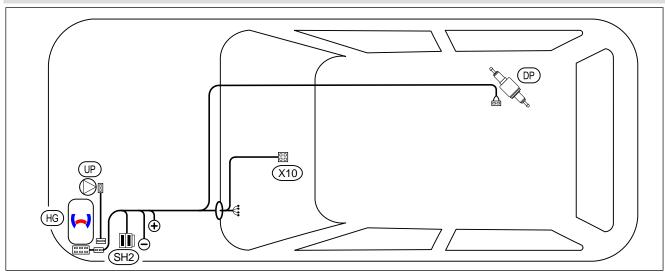
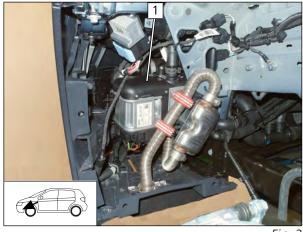


Fig. 1

# Legend to installation overview

Abbreviation	Component	
DP	Fuel pump	
HG	Heater	
SH2	Engine compartment fuse holder for F1/F2	
UP	Coolant pump	
X10	Female plug for control element	

# Heater installation location



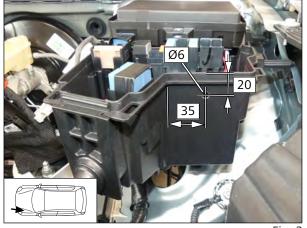


**1** Heater

- +

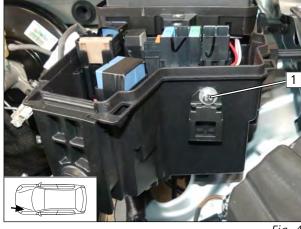
# 7 Electrical system of engine compartment

Drilling hole





Mounting retaining plate of SH2



1 M5x16 bolt, large diameter washer, retaining plate of SH2, drilled hole, large diameter washer, nut

Danger of damage to components

5 mm

nax.

Fig. 4

Earth wire connection

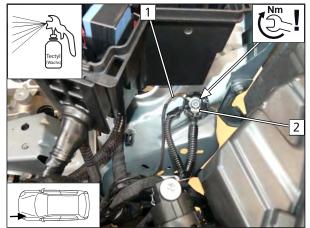


Fig. 5

# DANGER

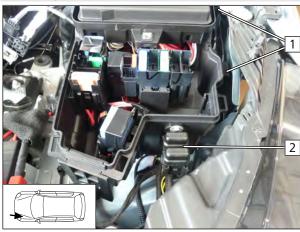
Observe tightening torque

**1** Earth wire

**2** Original vehicle earth point



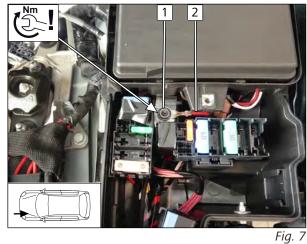
# Installing SH2



- **1** Mount relay and fuse holder
- **2** Fuses F1 / F2

Fig. 6

# Positive wire connection



# Routing HG wiring harness

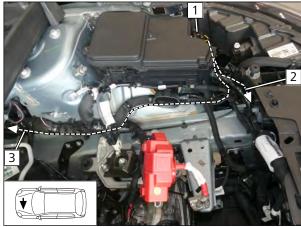


Fig. 8



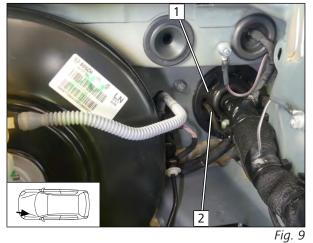
# DANGER

- Observe tightening torque
- **1** Original vehicle positive point
- **2** Positive wire

- **1** SH2
- **2** HG wiring harness to the HG installation location
- 3 Passenger compartment and control element wiring harnesses to the passenger compartment pass through



# Passenger compartment wiring harness pass through

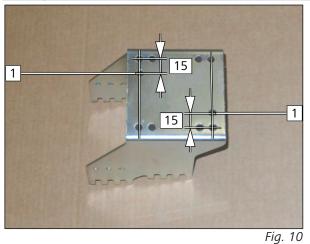


- To prevent water seeping into the passenger compartment, the wiring harness must be routed upwards to the protective rubber plug and this plug must then be sealed with a suitable sealing compound.
  - **1** Protective rubber plug
  - **2** Passenger compartment and control element wiring harnesses

#### **Mechanical system** 8

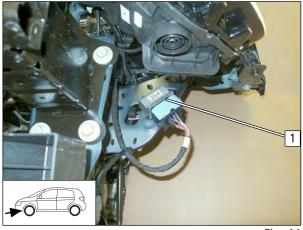
#### 8.1 **Preparing bracket**

# Drilling hole



#### **Preparing installation location** 8.2

# Removing original vehicle control unit

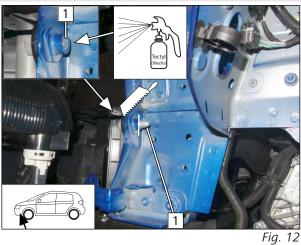


**1** Copy hole pattern, 7mm dia. hole

- ▶ Bumper dismantled for documentation purposes only.
  - 1 Original vehicle control unit, if present

Fig. 11

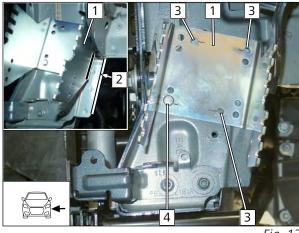
# Schortening bolt



▶ Shorten original vehicle bolt **1** as shown.



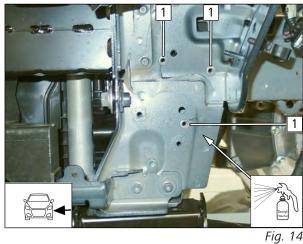
# Copy hole pattern



- ▶ Mount bracket 1 loosely and align parallel to edge 2 as shown.
  - 3 Hole pattern
  - **4** M6x30 bolt, original vehicle threaded hole

Fig. 13

## Inserting rivet nut



#### Premounting bracket

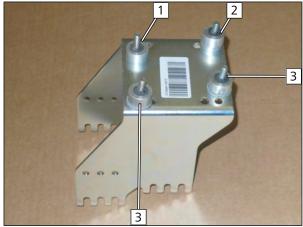


Fig. 15

- ▶ Remove the bracket again.
  - 1 Ø9.1 hole; rivet nut

- 1 M6x30 bolt, spring lock washer, bracket, distance washer (10), lock washer
- 2 M6x30 bolt, spring lock washer, bracket, distance washer (5), distance washer (10), lock washer
- **3** M6x30 bolt, spring lock washer, bracket, large diameter washer, distance washer (10), lock washer

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# Cutting self-adhesive foam in half

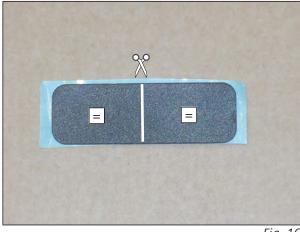
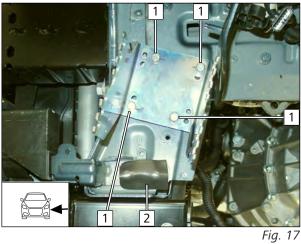


Fig. 16

# Mounting bracket



Fitting edge protection

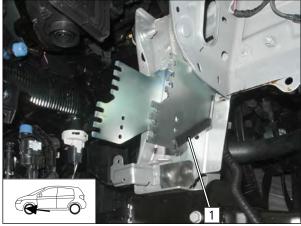


Fig. 18

- ► Tighten bolts 1.
- ► Glue one half of foam strip **2**.

**1** 80mm long edge protection

# Gluing foam



#### Splash guard version 1

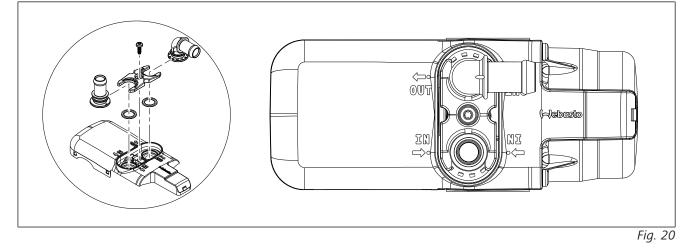
**1** Self-adhesive foam

## Splash guard version 2

**1** Glue self-adhesive foam on the back, in marked area

# 8.3 **Premounting heater**

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



# Premounting M5x13 self-tapping bolts

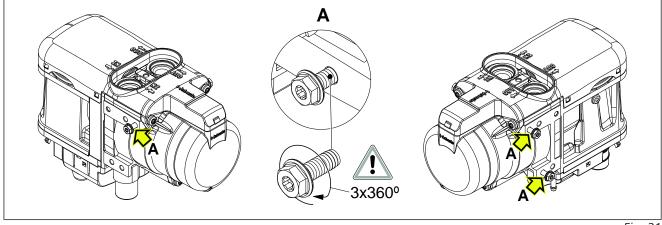
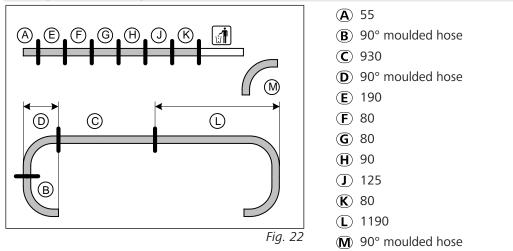


Fig. 21

Fig. 19

# Cutting hoses to length



# Mounting fabric heat shrink tubing on hoses $\odot$ and $\bigcirc$

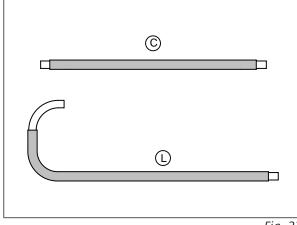
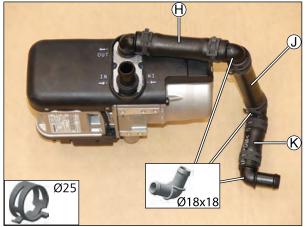


Fig. 23

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Premounting hoses



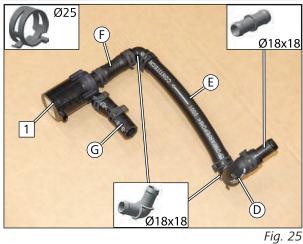


▶ 1. Slide on and cut to length

▶ 2. Shrink, use at most 230 °C

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# Premounting coolant pump

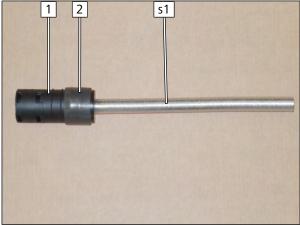


Mounting coolant pump hose group 1 on HG



Fig. 26

Preparing combustion air intake pipe and combustion air intake silencer



~	$\frown$	1
	1	

Observe the installation instructions of the combustion air intake silencer.

- **1** Combustion air intake silencer
- 2 Self-adhesive foam

**1** Coolant pump

**s1** Combustion air intake line



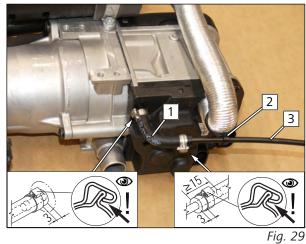
# Mounting combustion air intake silencer



- **1** 5x13 self-tapping bolt
- **2** Ø51 clamp



# Mounting fuel line



Mounting coolant pump wiring harness 1

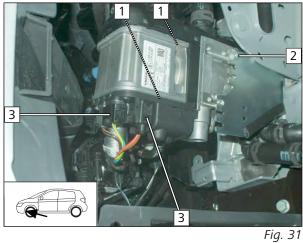


Fig. 30

- **1** 90° moulded hose, Ø10 clamp
- **3** 5000 long fuel line
- ► Fasten fuel line 3 with two interlaced cable ties 2 to combustion air intake pipe **s1**.

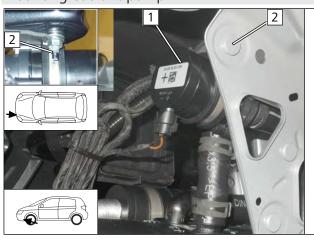
# 8.4 Heater mounting

# Mounting heater



- ▶ Route fuel line in the engine compartment.
  - **1** Tighten 5x13 self-tapping bolts (covered)
  - **2** Tighten 5x13 self-tapping bolt
  - **3** Heater wiring harness connector

Mounting coolant pump



# 

Fig. 32

#### Splash guard version 1

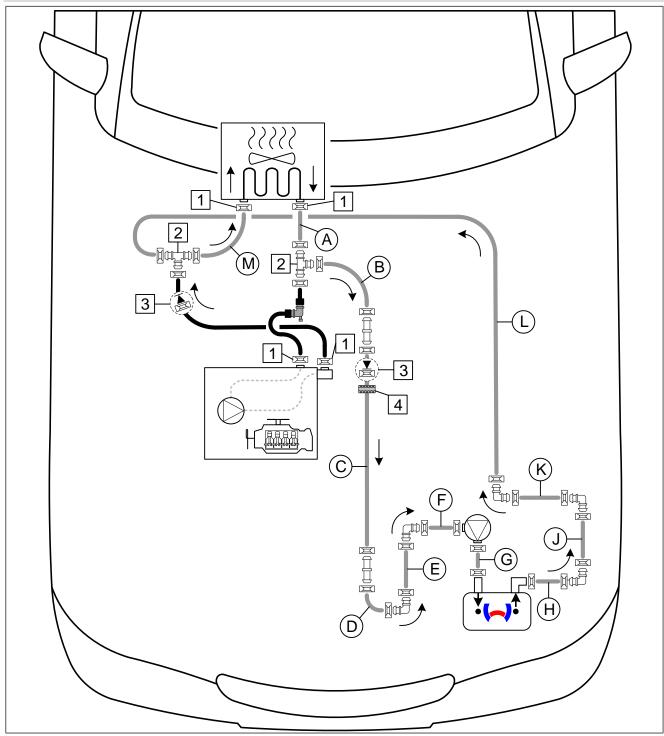
- 1 Coolant pump
- **2** Original vehicle stud bolt, Ø48 rubber-coated pclamp, M6 flanged nut

## Splash guard version 2

- 1 Coolant pump
- **2** M6x20 bolt, Ø48 rubber-coated p-clamp, original vehicle hole, flanged nut

# 9 Coolant

# 9.1 Hose routing diagram



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

All connecting pipe  $\square$  or  $\square$  = Ø18x18

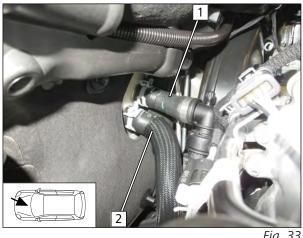
1 Original vehicle spring clip; 2 T-piece; 3 Non-return valve with Ø27 spring clip;

4 Rubber isolator



#### 9.2 **Preliminary Work**

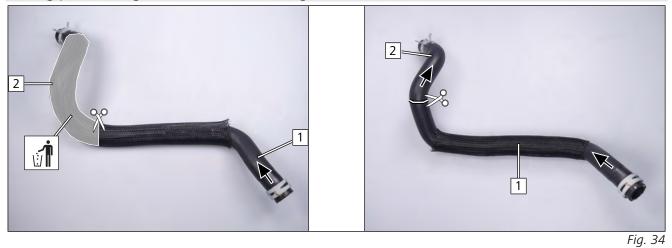
# **Dismantling hoses**



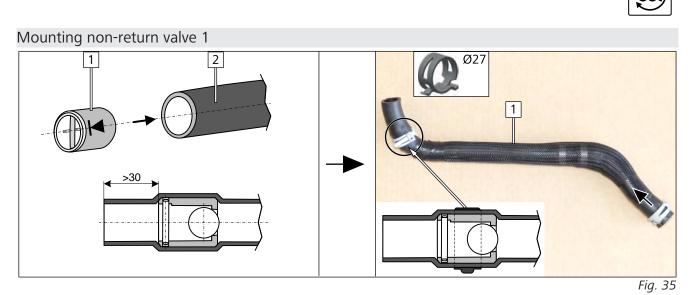
- Original vehicle clamps will be reused ~@`
- ▶ Remove hose of heat exchanger outlet / engine inlet 1 and hose of heat exchanger inlet / engine outlet 2.

Fig. 33

# Cutting point 1, engine outlet / heat exchanger inlet hose



- **1** Engine outlet / heat exchanger inlet hose
- ▶ Remove marked section of original vehicle braided protection **2**.
- **1** Engine outlet hose section
- **2** Heat exchanger inlet hose section



- 1 Non-return valve
- **2** Engine outlet hose section

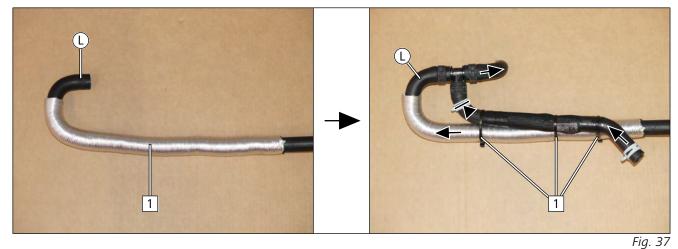
**1** Engine outlet hose section

Premounting engine outlet / heat exchanger inlet hose group



- **1** 3x Ø18 T-piece
- **2** Engine outlet hose section



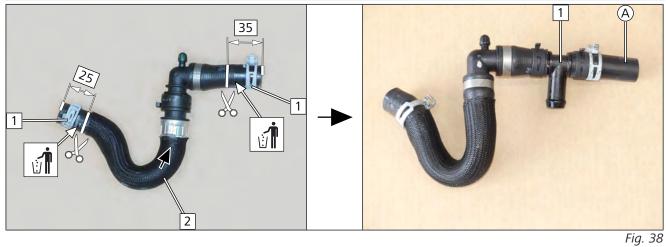


**1** Ø28 heat protection tube

**1** Cable tie

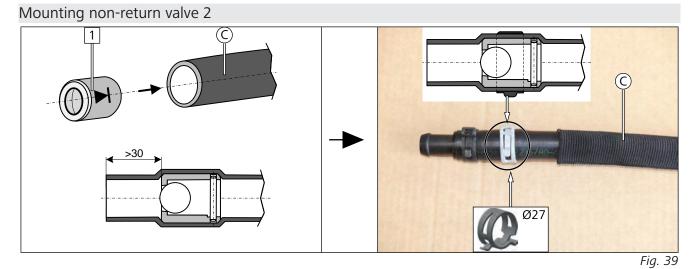


# Cutting point 2, heat exchanger outlet / engine inlet hose



- 1 Original vehicle spring clip, will be reused
- **2** Heat exchanger outlet / engine inlet hose





1 Non-return valve

# Mounting rubber isolator

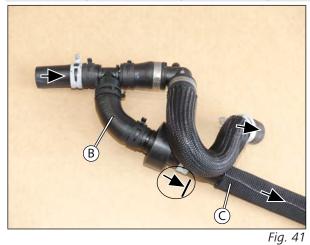




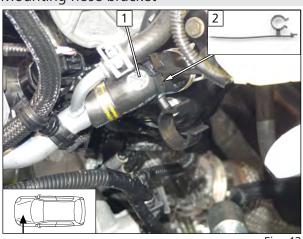
1 Rubber isolator over Ø25 spring clip



# Premounting heat exchanger outlet/engine inlet hose group



# 9.3 Coolant circuit installation

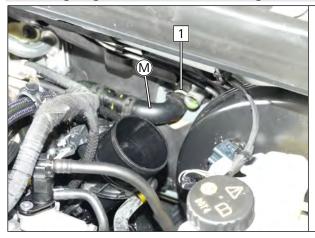


Mounting hose bracket

- 1 Original vehicle hose
- 2 Hose bracket

Fig. 42

Mounting engine outlet/ heat exchanger inlet hose group



**1** Heat exchanger inlet connection piece

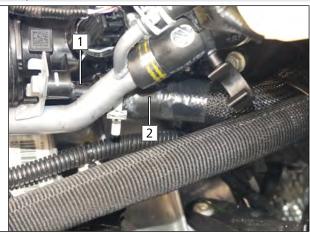


Fig. 43

- **1** Engine outlet connection piece
- **2** Engine outlet hose section



# Routing in engine compartment and heater outlet connection

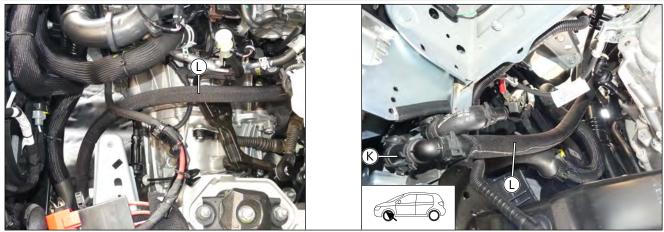
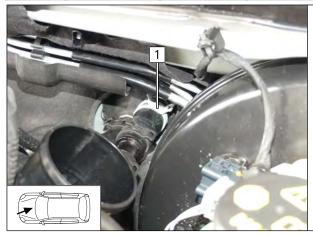


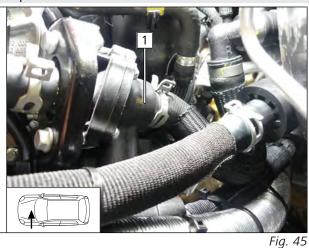
Fig. 44

## Mounting heat exchanger outlet/engine inlet hose group

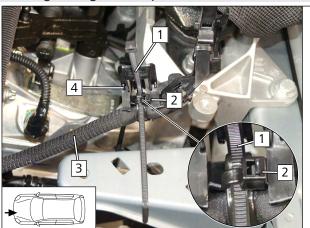


1 heat exchanger outlet connection piece

#### Routing in engine compartment



**1** Engine inlet connection piece

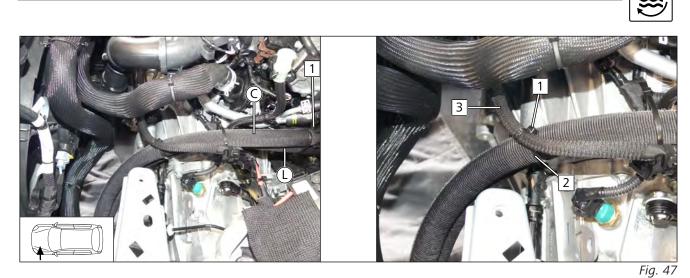


- ▶ Mount cable ties **1** and **2** as shown.
- **3** Original vehicle positive wire
- **4** Original vehicle positive wire bracket



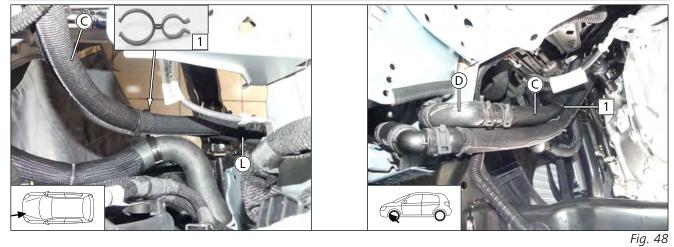
Fig. 46

1 Close cable tie



- ▶ Mount hose ⓒ onto hose bracket 1 as shown.
- Mount cable ties **1** and **2** as shown
- **3** Original vehicle positive wire

# Routing in engine compartment and heater inlet connection for vehicles with manual transmission



1 Hose bracket

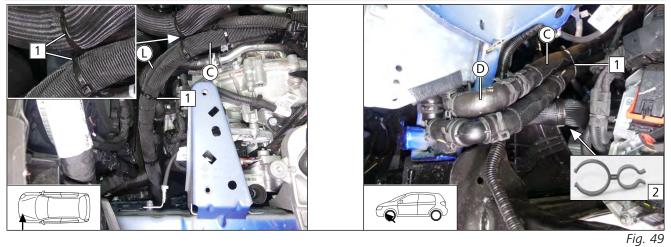
1 Cable tie

Danger of damage to components

▶ Ensure sufficient distance from neighbouring components, correct if necessary.



# Routing in engine compartment and heater inlet connection for vehicles with dual clutch transmission



**1** Cable tie





Danger of damage to components

Ensure sufficient distance from neighbouring components, correct if necessary.



# 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.

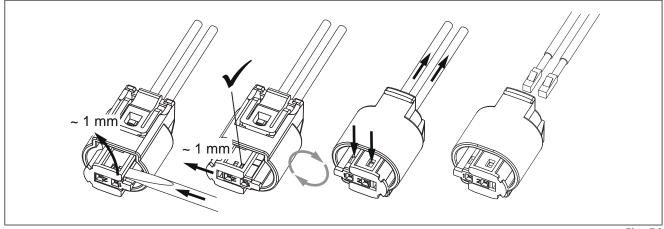
- Avoid electrostatic discharges and open fire
- ▶ When working on the fuel system, ensure sufficient ventilation and bleeding
- Open the fuel tank cap of the vehicle
- Ventilate the fuel tank
- ► Re-close the tank lock
- > Catch any fuel running off with an appropriate container



#### 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



#### Fig. 50

#### 10.1 Routing fuel line

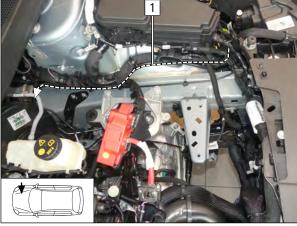




Bumper dismantled for documentation purposes.

- Draw fuel line and fuel pump wiring harness into corrugated tube (2100) 1 and route into the engine compartment.
- ► Attach all the routed lines with cable ties.



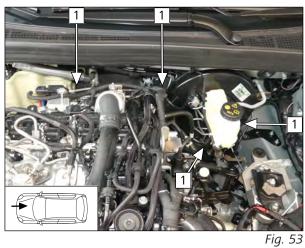


Route corrugated tube 1 along original vehicle wiring harness to bulkhead.

Route corrugated tube 1 (covered) along original vehicle wiring harness to the front passenger's side and further to



the underbody.



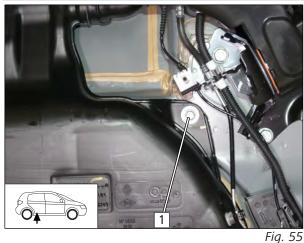
- 1 1130mm corrugated tube
- **2** Fuel line and fuel pump wiring harness

Fig. 54



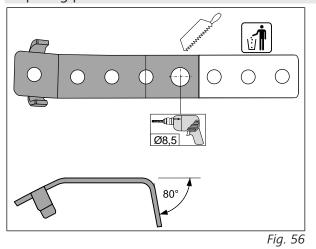
# 10.2 Fuel pump connection

# Removing original vehicle bolt

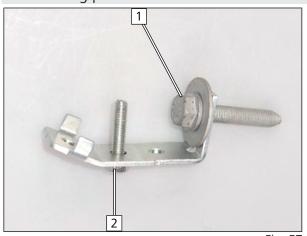


▶ Remove original vehicle bolt **1**, it will be reused.

Preparing perforated bracket



Premounting perforated bracket

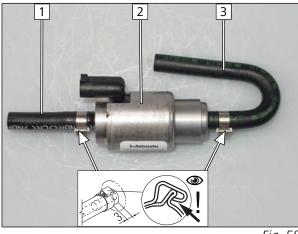




- 1 Original vehicle bolt, perforated bracket
- 2 M6x25 bolt, perforated bracket



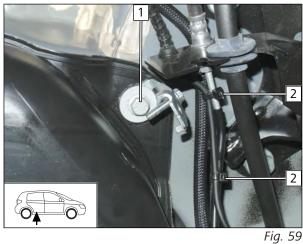
# Premounting fuel pump



- 1 Hose section, Ø10 clamp
- 2 Fuel pump
- **3** 180° moulded hose, Ø10 clamp

Fig. 58

# Installing perforated bracket



Mounting fuel pump mount

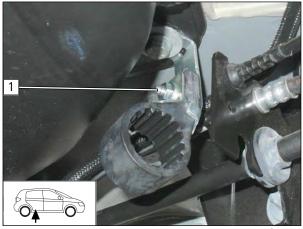


Fig. 60

- 1 Original vehicle bolt, perforated bracket, original vehicle threaded hole
- **2** Cable tie to fasten the original vehicle wire

1 Premounted bolt in perforated bracket, fuel pump mount, support angle bracket, flanged nut



# Mounting fuel pump

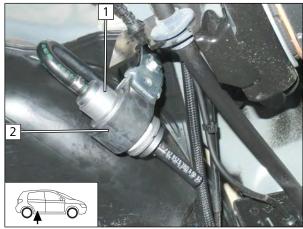
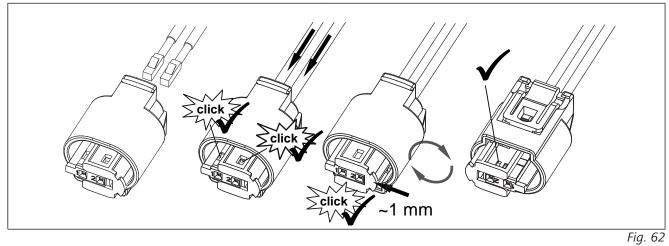
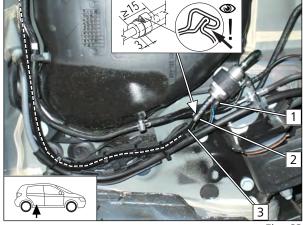


Fig. 61

Assembling fuel pump connector X7



# Connecting fuel pump





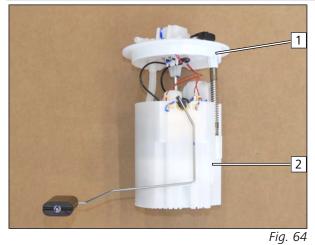
- **1** Fuel pump wiring harness, connector X7 mounted
- 2 Ø10 clamp
- **3** Heater fuel line

▶ Mount fuel pump **1** in mount **2**.



# 10.3 Installing tank extracting device

## Dismantling tank fitting



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

*i* Dismantle tank fitting in accordance with manufacturer's instructions.

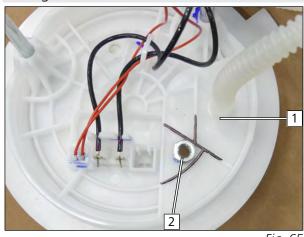
▶ Detach upper section of tank fitting from lower section.

**1** Upper section of tank fitting

i

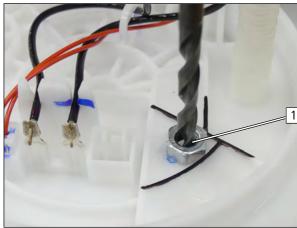
**2** Lower section of tank fitting with pump and level sensor

Drilling Ø6 hole



Position M6 nut 2 at embossed area on tank fitting 1 as shown.

Fig. 65



with a tool.

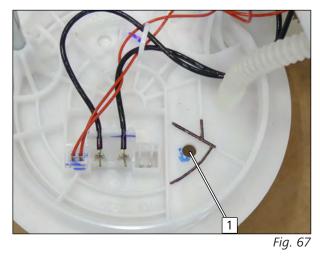
▶ Drill Ø5 hole through M6 nut **1**. Hold the nut if necessary

Fig. 66

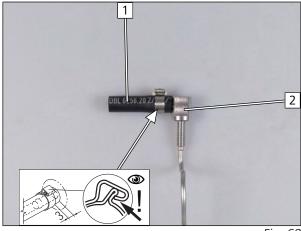
34



• Drill out hole 1 to Ø 6.



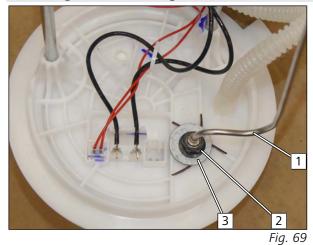
Premounting tank extracting device



- Bend tank extracting device 2 according to template and cut to length.
  - **1** Hose section, Ø10 clamp
  - **2** Tank extracting device

Fig. 68

Mounting tank extracting device



- Observe the installation instructions of the tank extracting device.
- **1** Tank extracting device
- **2** Locking nut
- **3** Large diameter washer, outer  $Ø d_a = 22$



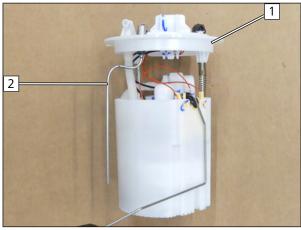
# Aligning tank extracting device



► Align tank extracting device **1** parallel to the part as shown.



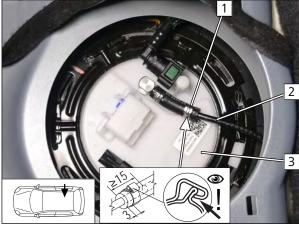
# Reassembling tank fitting



▶ Reassemble tank fitting 1, align tank extracting device 2.

Fig. 71

Connecting tank extracting device



*i* Mount tank fitting in accordance with manufacturer's instructions.

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

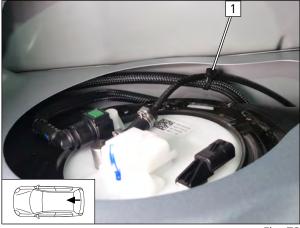
**1** Ø10 clamp

- **2** Fuel line of tank extracting device
- **3** Tank fitting

Fig. 72



Fastening fuel line of tank extracting device

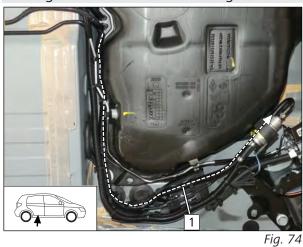


**1** Cable tie for tension relief

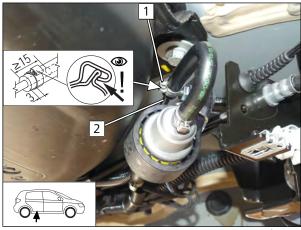
Fig. 73

## Routing fuel line of tank extracting device to fuel pump and fastening it





Connecting fuel pump





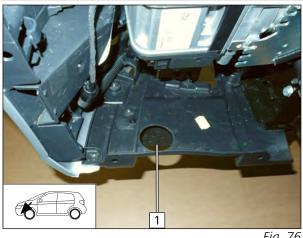
1 Ø10 clamp



#### 11 **Exhaust**

#### Mounting exhaust end fastener 11.1

## View of original vehicle hole



Observe the EFIX installation instructions.

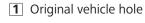
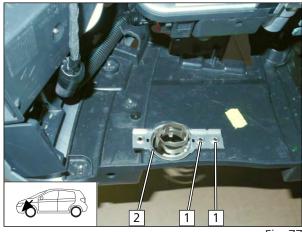


Fig. 76

## Work step E3

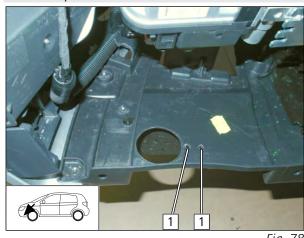


**1** Hole pattern 2 EFIX

1 Hole

Fig. 77

Work step E4



11/04/2022

Renault Megane

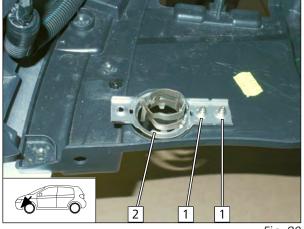


## Placing large diameter washers as height compensation



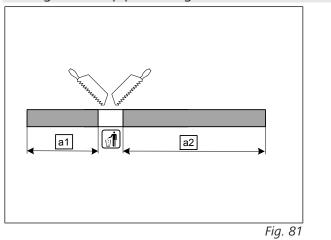


## Work step E5



11.2 Mounting exhaust pipe

## Cutting exhaust pipe to length



5x13 self-tapping screw
EFIX

**1** 5.3mm large diameter washer

Fig. 80

a1 170a2 390

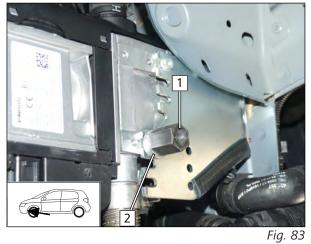


## Mounting stud bolt



Fig. 82

Mounting spacer and spacer nut



Preparing exhaust silencer

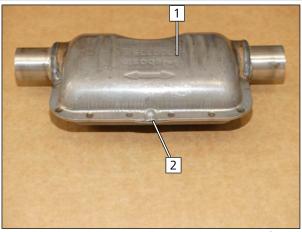


Fig. 84

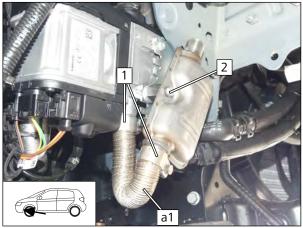
1 M5/6 x15 self-tapping stud bolt

M6x20 spacer nut
5 spacer

- 1 Exhaust silencer
- **2** Close the opening



## Mounting exhaust silencer and exhaust pipe a1

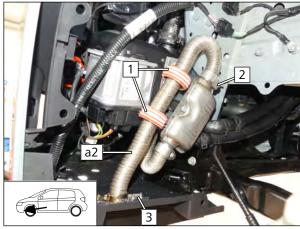


### **1** Hose clamp

2 M6x12 bolt, spring lockwasher

Fig. 85

## Mounting exhaust pipe **a2**





Danger of damage to components

Ensure sufficient distance from neighbouring components, correct if necessary.



Observe the EFIX installation instructions.

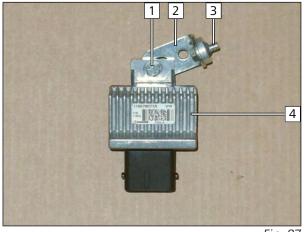
## ► Work steps E6-E8

- **1** Spacer bracket
- **2** Hose clamp
- 3 EFIX

Fig. 86

## 12 Final work in engine compartment

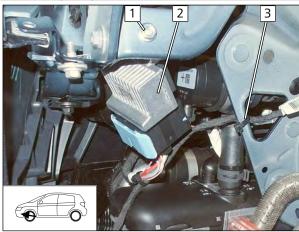
Preparing original vehicle control unit, if present



- ► Mount M6x20 bolt loosely using flanged nut 1.
  - 2 Angle bracket
  - 3 M6x16 bolt, 5mm shim, lock washer
  - **4** Original vehicle control unit

Fig. 87

Mounting original vehicle control unit (if present), fastening wiring harness



## Version 1 - control unit is present

- ► Align original vehicle control unit **2** and tighten bolts.
- ▶ Reroute original vehicle wiring harness and fasten with cable tie 3.
- 1 M6 flanged nut

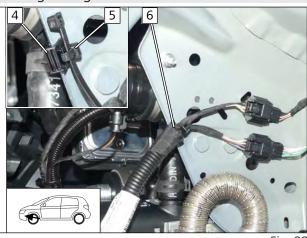


Fig. 88

## Variante 2 - control unit is not present

- ► Fasten edge clip cable tie 4 and additional cable tie 5 together.
- Close cable tie around original vehicle wiring harness 6.

## Gluing on heat protection film



Fig. 89

## Checking distances



Fig. 90

- **1** Wheel-well inner panel
- **2** Heat protection film



Ensure sufficient distance from neighbouring components, correct if necessary.



► Figure for demonstration purposes without bumper.

# ÷

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

## **13.1** Air-conditioning control

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



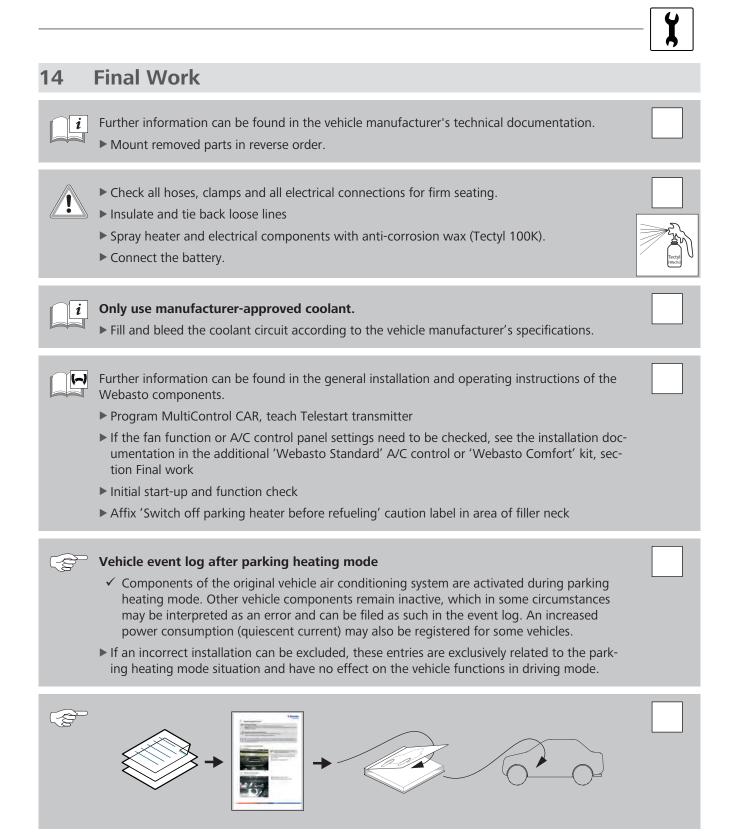
'Webasto Standard' A/C control installation documentation for Renault Megane with AAC



'Webasto Comfort' A/C control installation documentation for Renault Megane with AAC

## 13.1.1 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.



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

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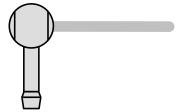
## 15 Tank extracting device template



0

100 mm

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



 $\bigcirc$ 

100 mm