Water Heater



Thermo Top E Parking Heater *Thermo Top C* Parking Heater *Thermo Top P* Parking Heater

Installation instructions

Citroen C4

Gasoline and Diesel from Model Year 2004 Left-hand drive vehicle



WARNING!

Hazard warning:

Incorrect installation or repair of Webasto heating systems may cause a fire or result in the emission of carbon monoxide, which can be fatal. Serious or fatal injuries can be caused as a result.

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Specialist company training, technical documentation, specialised tools and equipment are required to install and repair Webasto heating and cooling systems.

Only original Webasto parts must be used. For this, also see the catalog of air and water heater accessories from Webasto.

NEVER attempt to install or repair Webasto heating or cooling systems if you have not successfully completed the company training and thereby acquired the required technical skills, or if you do not have access to the required technical documentation, tools and equipment needed to carry out correct installation and repairs.

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

Webasto does not accept any liability for defects and damage that are attributable to installation by untrained staff.

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Validity

Manufacturer	Model	Туре	EG-BE No./ABE
Citroen	C4	L	e2 * 2001/116 * 0360 *

Engine type	Engine model	Output in kW	Displacement in cm ³
KFU	Gasoline	65	1360
NFU	Gasoline	80	1587
5FW	Gasoline	88	1598
RFN	Gasoline	100	1997
9HX	Diesel	66	1560
9HZ	Diesel	80	1560
9HY	Diesel	80	1560
RHR	Diesel	100	1997

Vehicle and engine types, equipment variants and national specifications not listed in these installation instructions have not been tested. However, installation according to these installation instructions may be possible.

The installation location of a digital timer and summer/winter switch should be confirmed with the end customer before installation.

Heater/Installation Kit

Quantity	Description	Order No.:
1	Retail accessories Thermo Top E/C/P	See price list
1	Heater control	See price list
1	Installation kit for Citroen C4 Gasoline and Diesel Manual air conditioning	1303584B
or		
1	Installation kit for Citroen C4 Gasoline and Diesel Automatic air-conditioning	1303568C

Heater recommended for the respective vehicle class:

Vehicle	Heater
Compact car	Thermo Top E
Mid-size car, station wagon	Thermo Top C
Full-size car, van, offroader	Thermo Top P

The selection of the heater is based on the passenger compartment size of the vehicle and the level of comfort required by the customer!

Foreword

These installation instructions apply to the vehicles Citroen C4 Gasoline and Diesel - for validity, see page 2 - from model year 2004 and later, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to these installation instructions.

However, the stipulations in these "installation instructions" and "operating and maintenance instructions" for the *Thermo Top C/P/E* must always be observed.

The corresponding rules of technology and any information from the vehicle manufacturer should be observed during the installation work.

General Instructions

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.

Sharp edges must be provided with rub protection (cut-open fuel hose)!

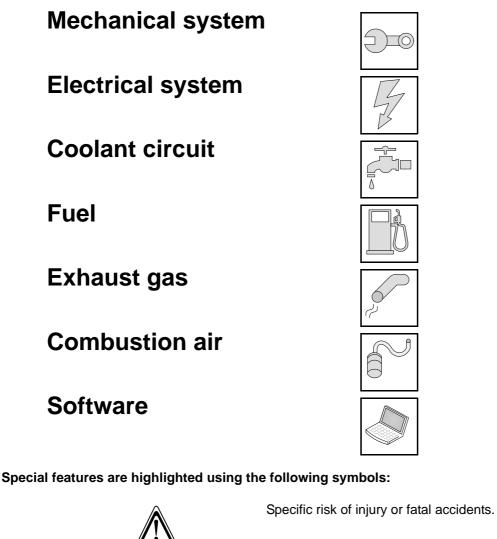
Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K, Order No. 111329).

Special Tools

- Torque wrench for 2.0 10 Nm
- Hose clamping pliers
- Metric thread-setter kit

Explanatory Notes on Document

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



Specific risk of damage to components.

Specific risk of fire or explosion.

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

Reference to a special technical feature.

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

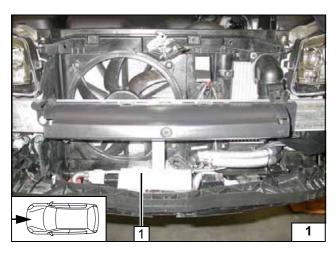
All dimensions are in mm! Tightening torque of hose clamps = 2.0 + 0.5 Nm! Tightening torque of Ejot screws, Ejot studs = 10 Nm!

Preliminary Work

WARNING!

- Open the fuel tank cap and vent the fuel tank.
- Close the tank cap again.
- Disconnect the battery "earth" or "ground" connection.
- Depressurize the cooling system.
- Copy the factory number from the original type label to the duplicate type label.
- Remove years that do not apply from the duplicate label.
- Attach the duplicate label (type label) in the appropriate place.
- Completely remove the battery and the battery carrier.
- Remove the engine cover (depending on the vehicle equipment, if installed)
- Remove the air cleaner box with the intake hose and resonator (depending on the vehicle equipment, if installed)
- Detach the wheel well trim on the right and left.
- Remove the bumper.
- Remove the underride protection
- Open the right-hand fuel sender service lid.
- Remove the lower instrument panel trim on the driver's side.
- Remove radio
- Remove the A/C control panel (only with automatic air-conditioning).

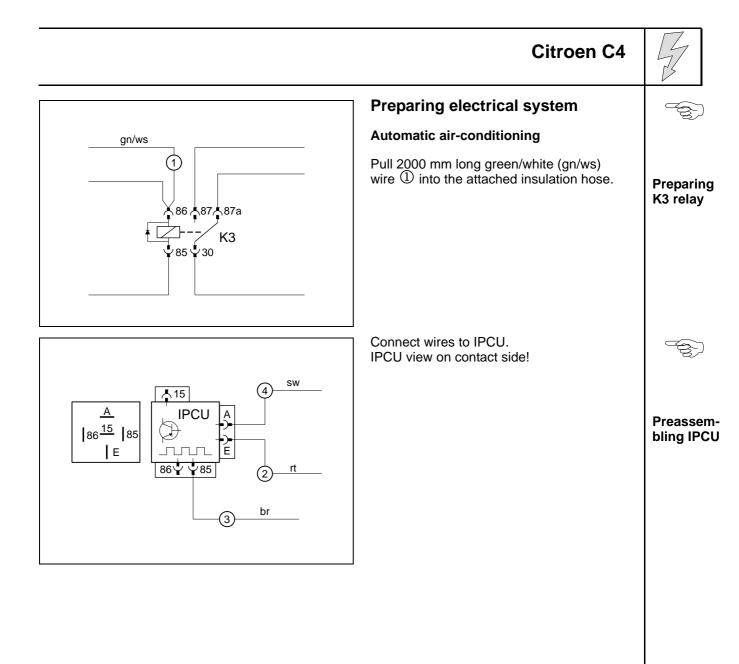
Remove page 35 "Operating Instructions for End Customer" and add to the vehicle operating instructions.



Heater installation location

1 Heater

Installation location





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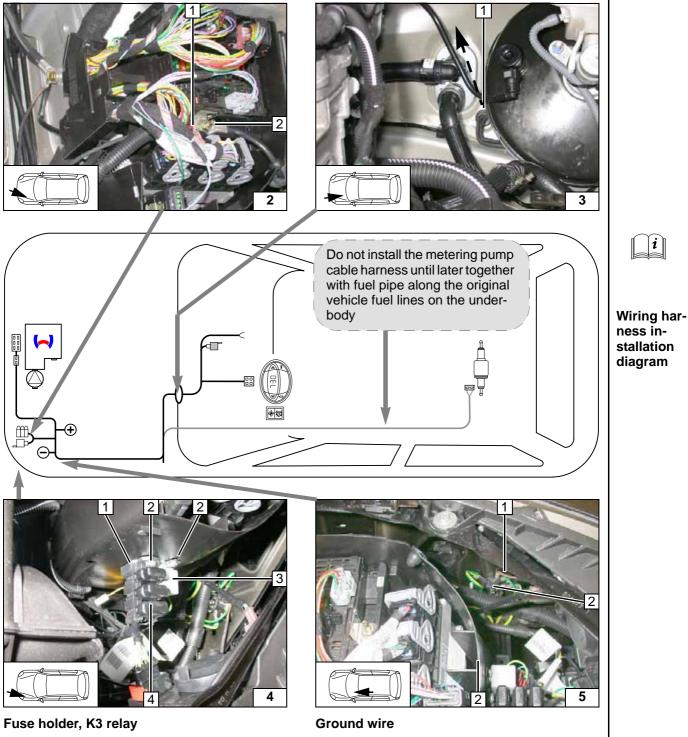
Electrical system

Positive wire

- 1 Red (rt) wire
- 2 Original vehicle positive support point

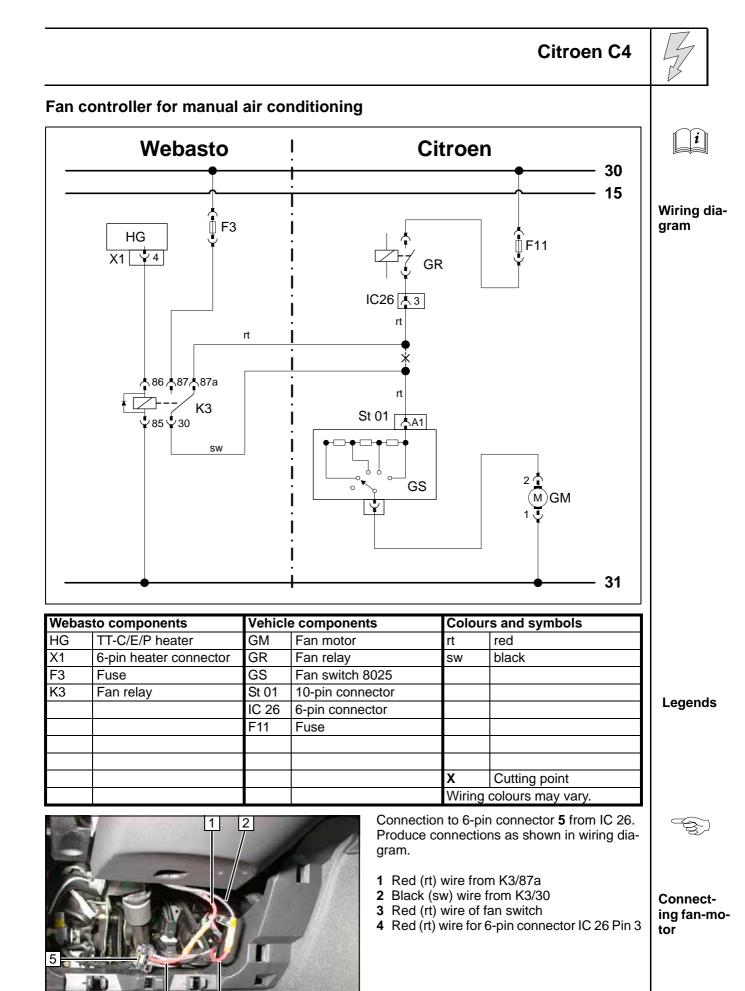
Wiring harness pass through

Route wiring harnesses (digital timer, fan control and red (rt) wire in the insulation hose of the automatic \dot{A}/\dot{C}) just behind the rubber plug 1 in the direction of the upper vehicle centre!



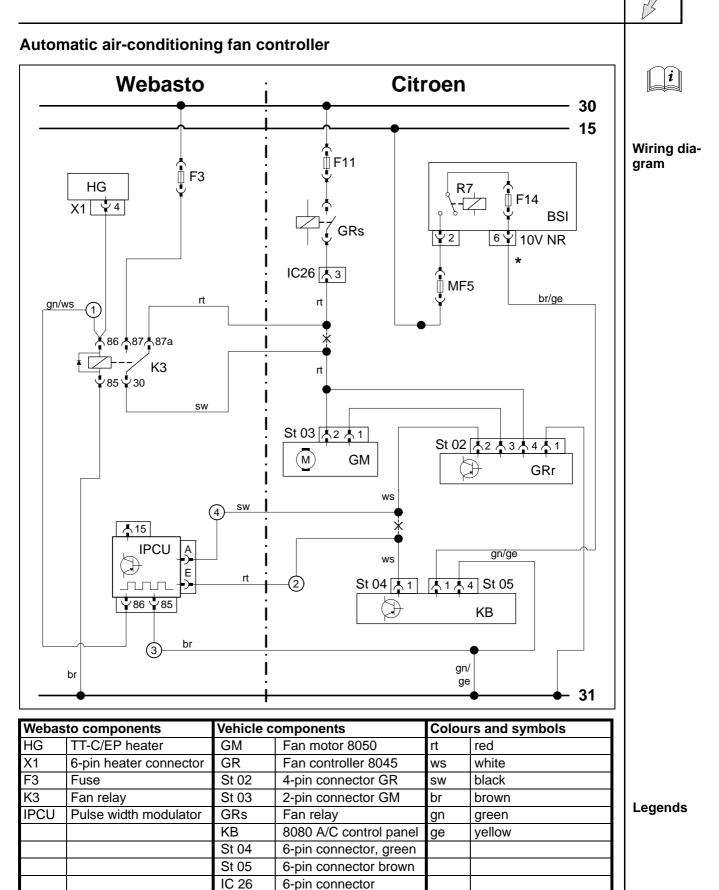
- 1 Retaining plate for fuse holder
- 3 K3 relay
- 2 5.5x13 self-tapping screw; plastic nut [2x each]
- 4 F1-3 fuses mounted

- 1 Brown (br) wire
- 2 Original vehicle ground support point



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Central switching unit

BSI connector

Fan motor 8050

Fan controller 8045

4-pin connector GR

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15 mm terminal from BSI delayed power-off

Cutting point

Wiring colours may vary.

Duty cycle:

Frequency:

Voltage:

Function:

IPCU adjustment values:

100%

1.7 V

14 kHz

High-side

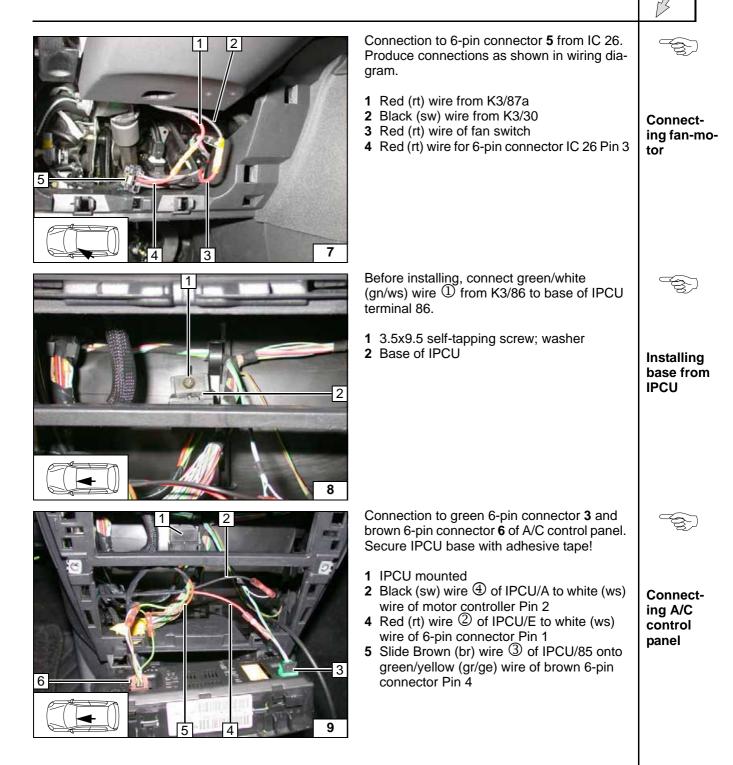
BSI

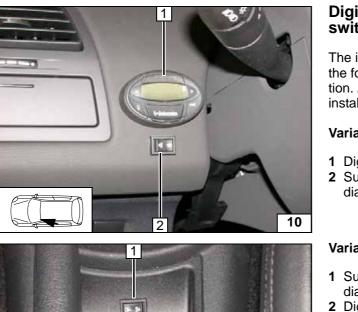
GM

GR

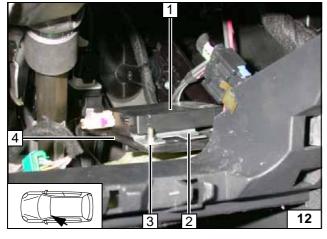
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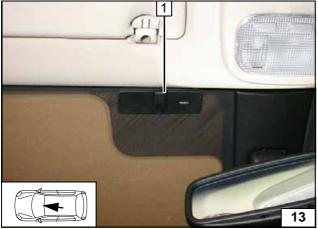
10 V NR











Digital timer, summer/winter switch option

The installation location according to this or the following figure is only a recommendation. Agree upon with final customer before installing.

Variant 1

- 1 Digital timer
- 2 Summer/winter switch, drilled hole 12 mm dia.

Variant 2

- 1 Summer/winter switch, drilled hole 12 mm dia.
- 2 Digital timer



Installing

er

digital tim-

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Installing digital timer

R	emote option (Telestart)	i
m	case of simultaneous installation with Ther- o-Call, the Telestart receiver is fastened un- er the bracket 4 .	
_	Receiver Receiver bracket M5x16 bolt, flanged nut, existing hole	Installing receiver
1	Antenna	

Installing antenna

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Citroen C4	A
Remote option Thermo Call	i
Secure the receiver of Thermo Call 1 on the bracket 2 with adhesive tape.	
	Installing receiver
1 Antenna	
	Installing antenna
1 Pushbutton	
	Installing
	push but- ton

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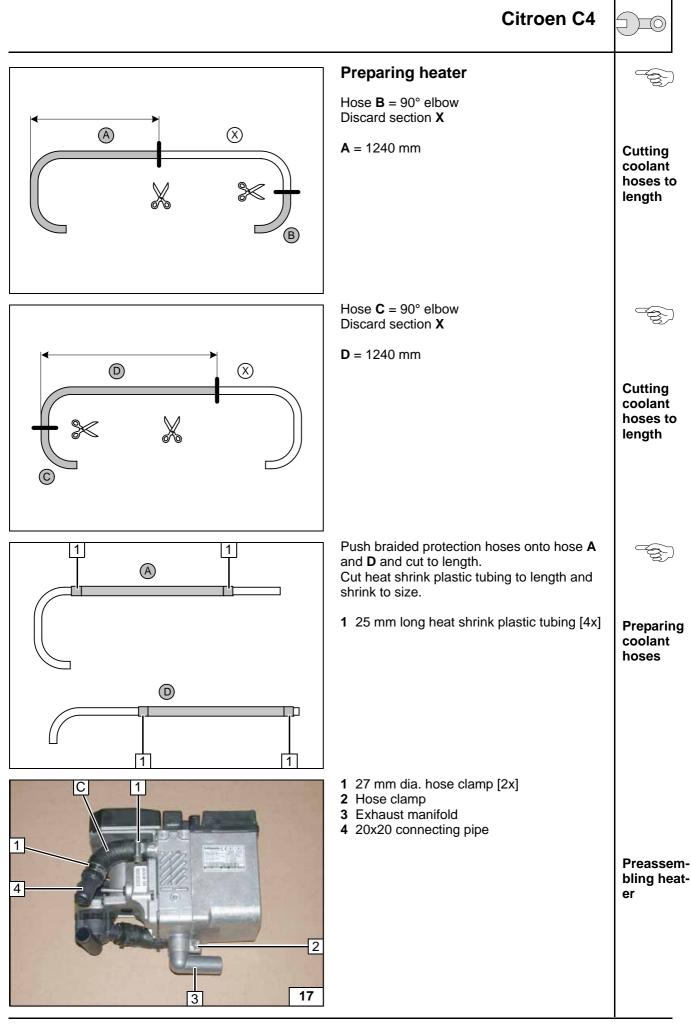
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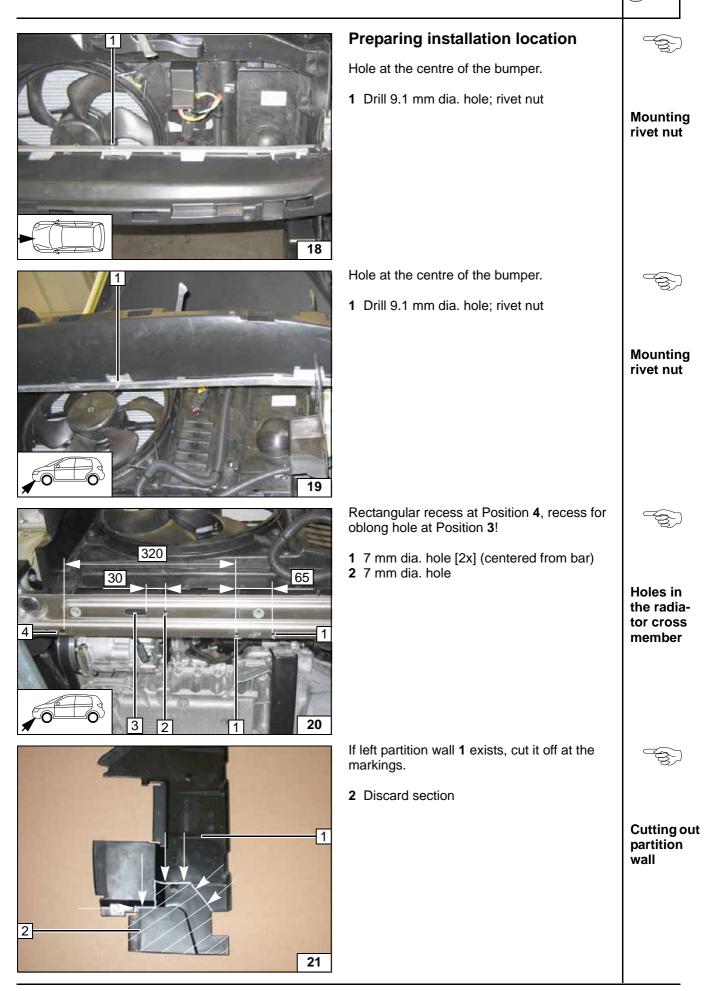
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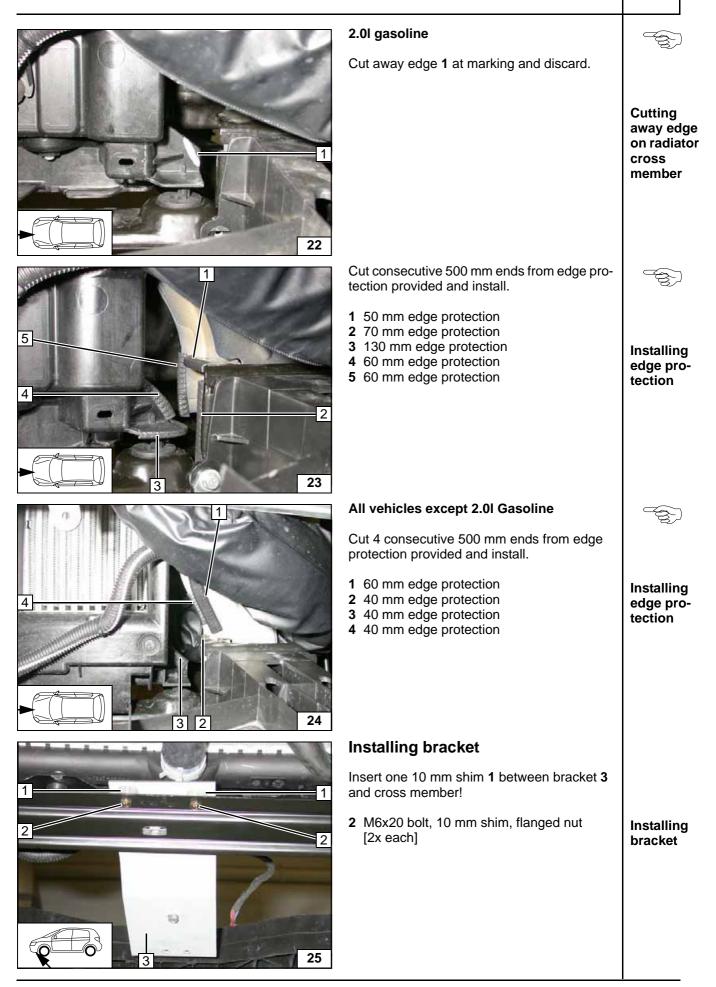
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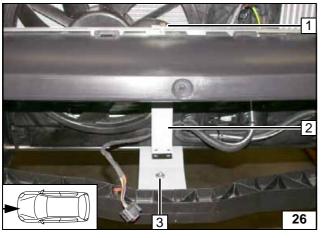


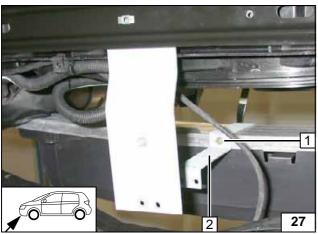
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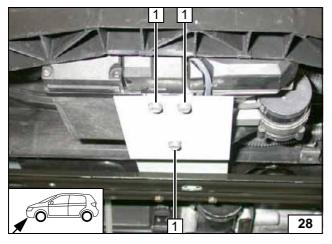


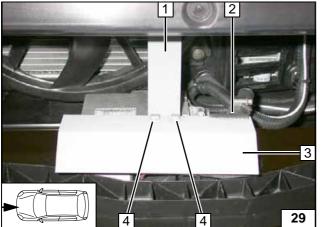


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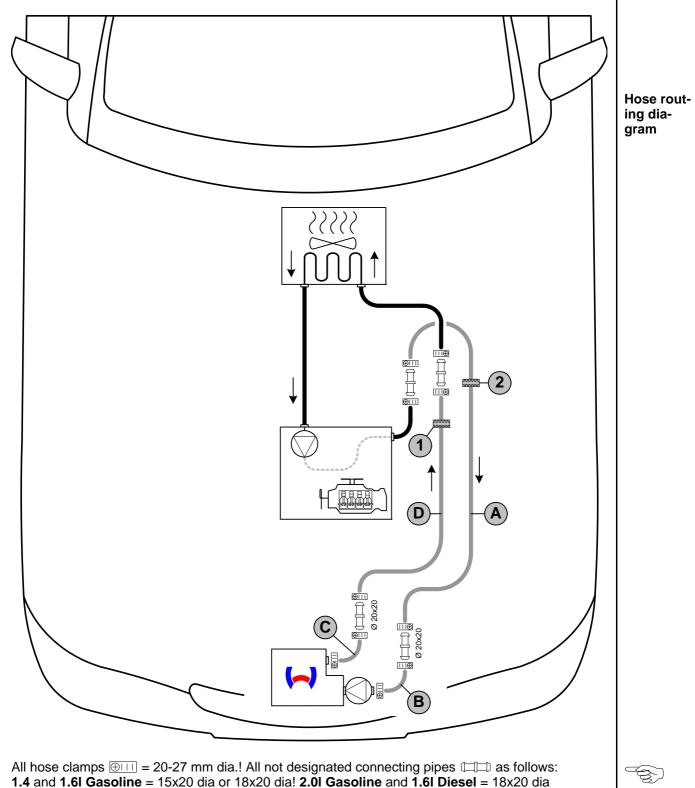
Citroen C4	
 M6x20 bolt, spring lockwasher Strut Ejot screw, washer [2x], pin lock 	
	Installing strut
 M6x20 bolt, spring lockwasher Strut 	
	Fastening strut
Installing heater	
Mount wiring harness of heater before instal- lation.	
1 Ejot screw [3x]	Installing heater
1 Strut	
2 50 mm edge protection3 Wind deflector plate4 Ejot screw [2x]	
	Installing heater



Coolant circuit

WARNING!

Any coolant running off should be collected using an appropriate container! Route coolant hoses kinkfree! Unless specified otherwise, always fasten using cable ties. Position clamps so that no other hose can be damaged! When installing the hoses, the heater must be filled with coolant. The connection should be "inline" based on the following diagram:

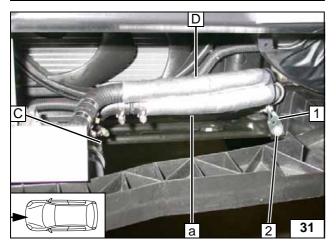


All hose clamps \bigcirc = 20-27 mm dia.! All not designated connecting pipes \bigcirc as follows: **1.4** and **1.6I Gasoline** = 15x20 dia or 18x20 dia! **2.0I Gasoline** and **1.6I Diesel** = 18x20 dia **2.0 liter diesel** = 20x20 dia. **1** = Black (sw) rubber isolator \bigcirc (Gasoline). **2** = Black (sw) rubber isolator \bigcirc (Diesel).

Turn perforated bracket **2** by approx. 75° on longitudinal axis.

- M6x20 bolt, flanged nut
 Perforated bracket
- 3 Rubber-coated pipe clamp

Preparing perforated bracket

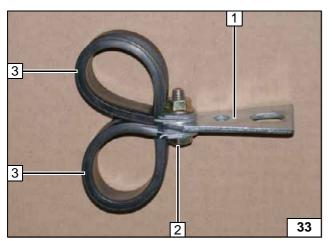


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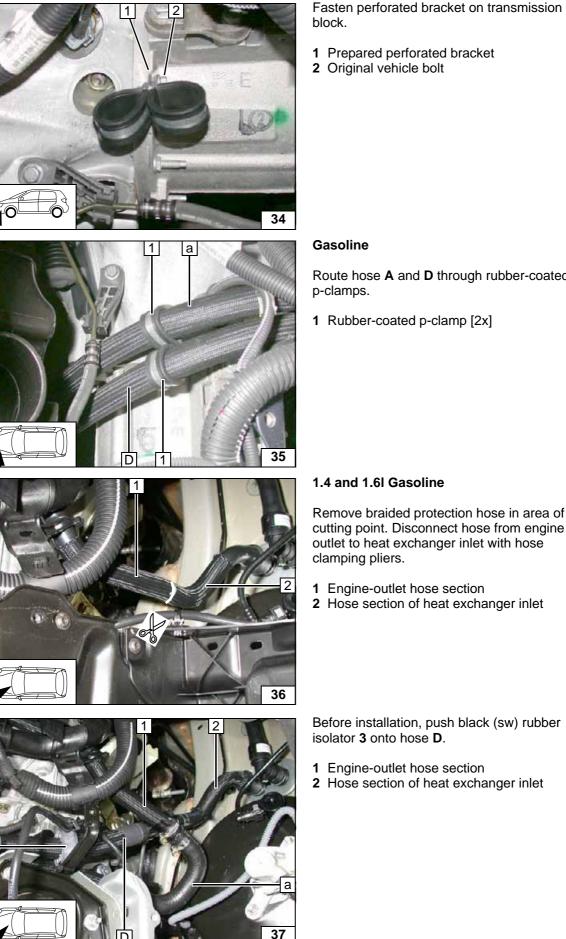
2

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32 а



Sliding on heat protection hoses. Route hoses A and D through pass-through in the cooler at the left of the heater. When doing so, guide hose A through rubber-coated p-clamp. 1 Prepared perforated bracket Installing 2 Original vehicle bolt coolant hoses Connection to heater Cut perforated bracket to approx. 58 mm. Ś 1 Perforated bracket 2 M6x20 bolt, flanged nut 3 Rubber-coated p-clamp [2x] Preparing perforated . bracket



Installing perforated bracket Route hose **A** and **D** through rubber-coated **1** Rubber-coated p-clamp [2x] Routing to cutting point Remove braided protection hose in area of cutting point. Disconnect hose from engine outlet to heat exchanger inlet with hose Cutting point 2 Hose section of heat exchanger inlet Before installation, push black (sw) rubber 2 Hose section of heat exchanger inlet **Connect**ing heat exchanger inlet and engine outlet

Cutting point

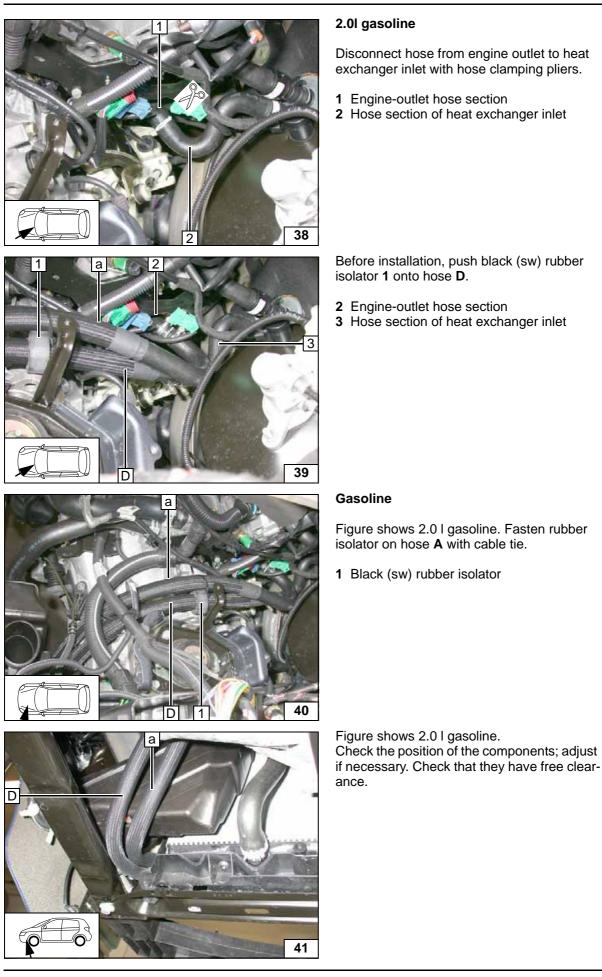
Connecting heat exchanger inlet and engine out-

Routing in engine compartment

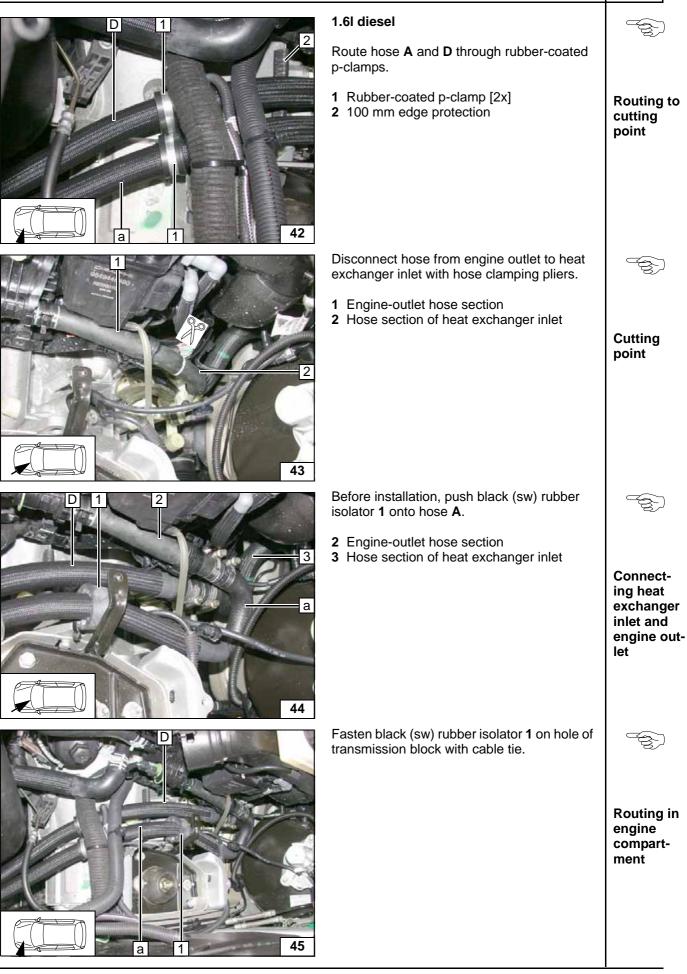
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Positioning hose A and D

let

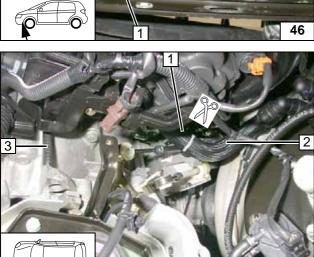


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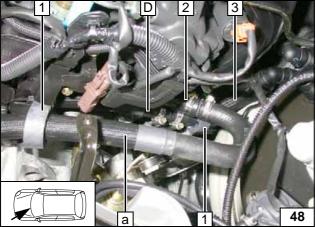


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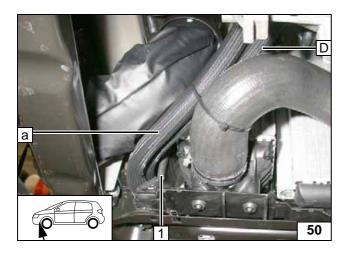
Citroen C4	
Check the position of the components; adjust if necessary. Check that they have free clear- ance. 1 50 mm edge protection	Position- ing hose A and D
2.0l diesel	
Remove braided protection hose in area of cutting point.	
 Engine-outlet hose section Hose section of heat exchanger inlet 50 mm edge protection 	Cutting point
Before installing, push black (sw) rubber iso- lator 1 onto hose A and onto hose section of heat exchanger inlet 3 .	
2 Engine-outlet hose section	Connect- ing heat exchanger inlet and engine out- let
Fasten black (sw) rubber isolator 1 on original vehicle wiring harness bracket with cable tie.	Position- ing hose A and D



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Check the position of the components; adjust if necessary. Check that they have free clearance.

1 50 mm edge protection



Fuel

CAUTION!

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

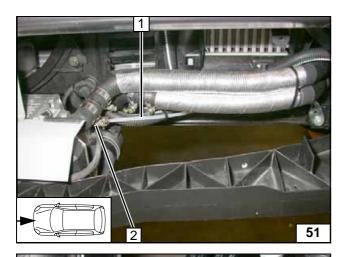
Catch any fuel running off with an appropriate container.

Install fuel line and metering-pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties. Mount the fuel line and wiring harness with rub protection on sharp edges.

WARNING!

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

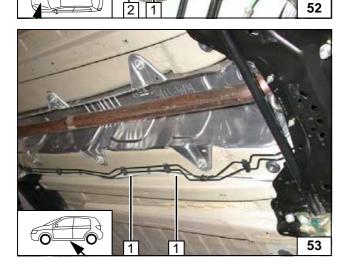
1 Fuel line

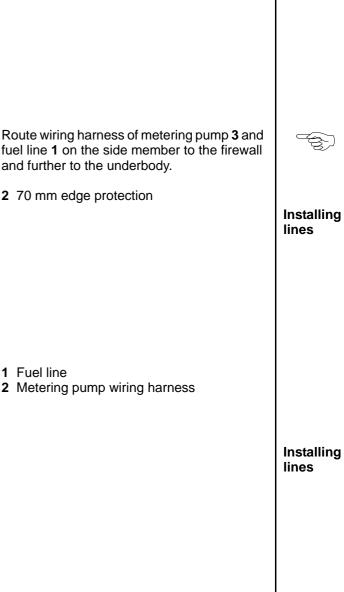


fuel line 1 on the side member to the firewall and further to the underbody.

2 Hose section, 10 mm dia. clamp [2x]

2 70 mm edge protection



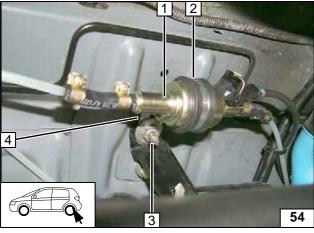


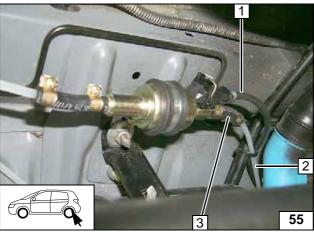


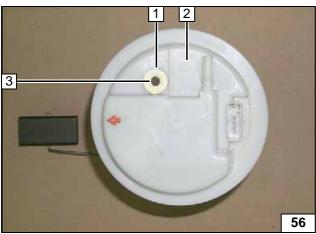


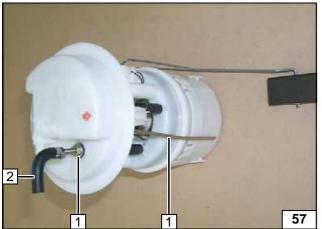
Connecting heater

	Citroen C4	
	Secure angle bracket 4 with oblong hole and large diameter washer on the stud bolt of the tank suspension 3 .	i
4	 Metering pump Rubber-coated p-clamp, silent block, flanged nut [2x] on angle bracket 	Installing metering pump
2	 Wiring harness of metering pump, connector mounted Fuel line from heater Hose section, 10 mm dia. clamp [2x] 	Connect- ing meter- ing pump
	Gasoline	
	One differentiates between 2 variants, depending on the vehicle equipment.	
	Variant 1 Remove fuel-tank sending unit 2 in accord- ance with manufacturer's specifications.	Removing fuel
õ	 Large diameter washer Copy hole pattern, 6 mm dia. hole 	
	Shape fuel standpipe 1 according to tem- plate, cut to length and install. Moulded hose section of 3.5 mm dia on fuel tank standpipe.	i
	2 3.5x4.5 dia moulded hose; 8 mm dia clamp	Installing fuel stand- pipe

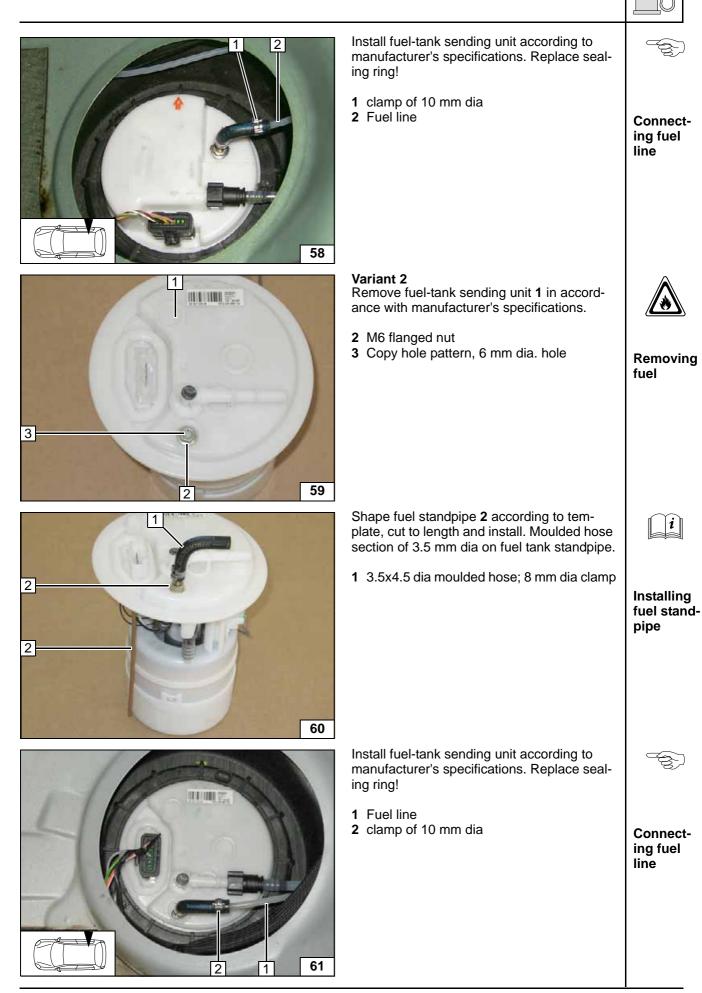






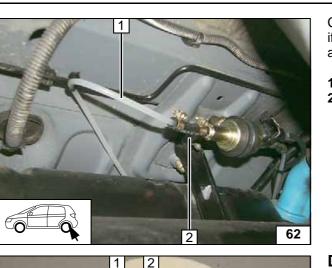


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Check the position of the components; adjust if necessary. Check that they have free clearance.

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



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Diesel

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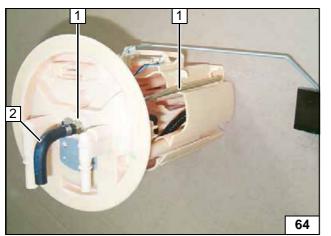
Remove fuel-tank sending unit **1** in accordance with manufacturer's specifications.

- **1** Large diameter washer
- 3 Copy hole pattern, 6 mm dia. hole



Removing fuel





Shape fuel standpipe **1** according to template, cut to length and install. Moulded hose section of 3.5 mm dia on fuel tank standpipe.

2 3.5x4.5 dia moulded hose; 8 mm dia clamp

Installing fuel stand pipe	-

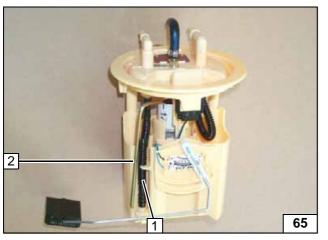


Figure shows fuel tank sending unit of HDI FAP!

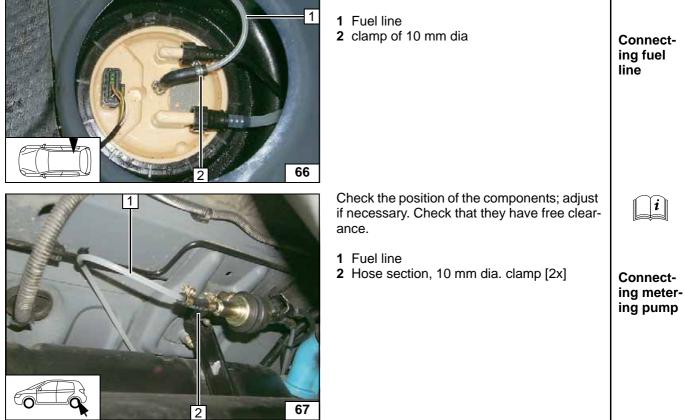
Guide fuel tank sending unit **2** along the fuel return line **1**.



Installing fuel standpipe

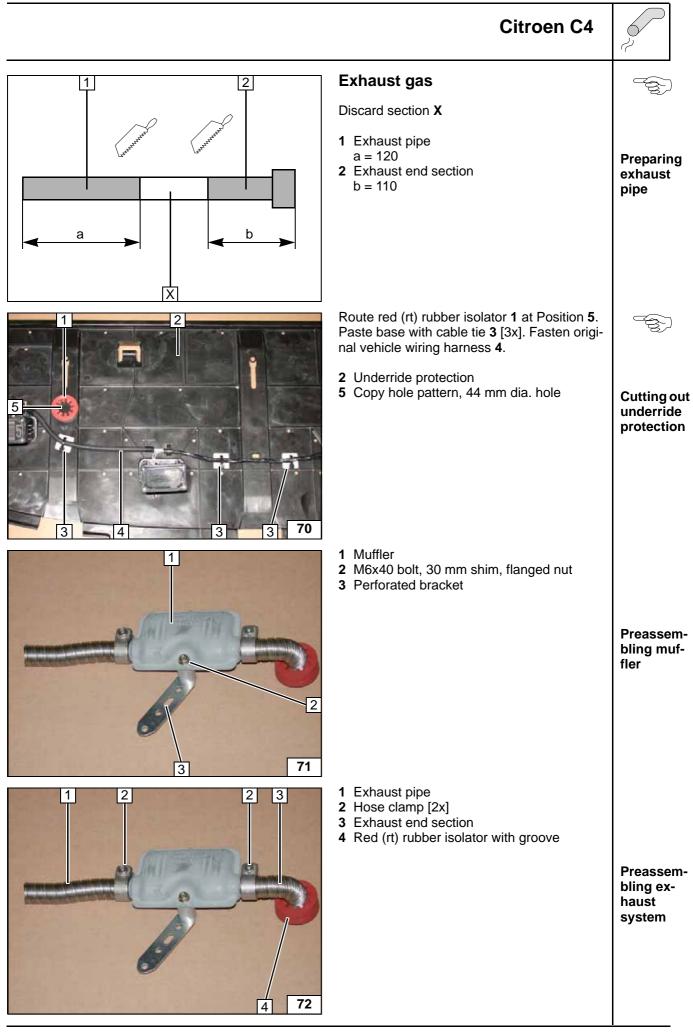
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Install fuel-tank sending unit according to manufacturer's specifications. Replace sealing ring!



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	Citroen C4	
[1]	Combustion air	
	Discard section X.	
Laware and the second sec	1 Combustion air pipe a = 250	Cutting combus [,]
		tion air pipe to length
	Drill hole in side member from rear at Position 1 .	
	1 6.2 mm dia. hole (centered from bar)	Hole for muffler
	 Combustion air pipe Retaining clip in hole Muffler 27 mm dia. clamp 	Installing muffler



Ensure sufficient distance to neighbouring components.

Hose clamp on exhaust manifold
 M6x20 bolt, flanged nut

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Install underride protection **1**. Insert red rubber isolator **2** in underride protection **1**. Align exhaust end section **3** flush on red rubber isolator **2**.

> Mounting rubber isolator

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Final Work

WARNING!

Mount removed parts in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Secure all loose cables using cable ties. Only use manufacturer-approved coolant. Spray heater components with anti-corrosion wax (Tectyl 100K, Order No. 111329).

- Connect the battery.
- Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.
- Set the digital timer.
- Make settings on A/C control panel according to the "Operating Instructions for End Customer".
- Check the proper operation of the parking heater, see the operating instructions/installation instructions.
- Attach instruction label "Switch off parking heater before refueling" in the area of the filling neck

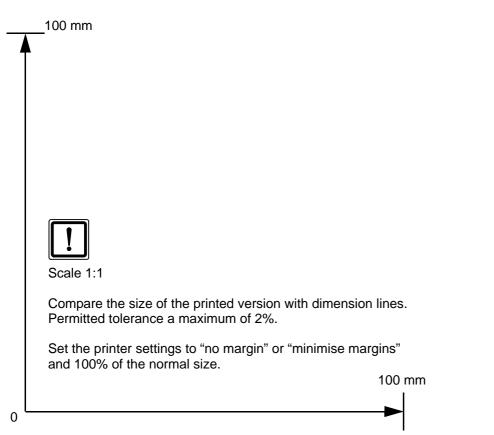


Webasto AG Postfach 80 D-82132 Stockdorf / Germany National Hotline: 01805 93 22 78 (14 Cent aus dem deutschen Festnetz) Hotfax: 0395 5592 353 Hotmail: technikcenter@webasto.com http://www.webasto.de

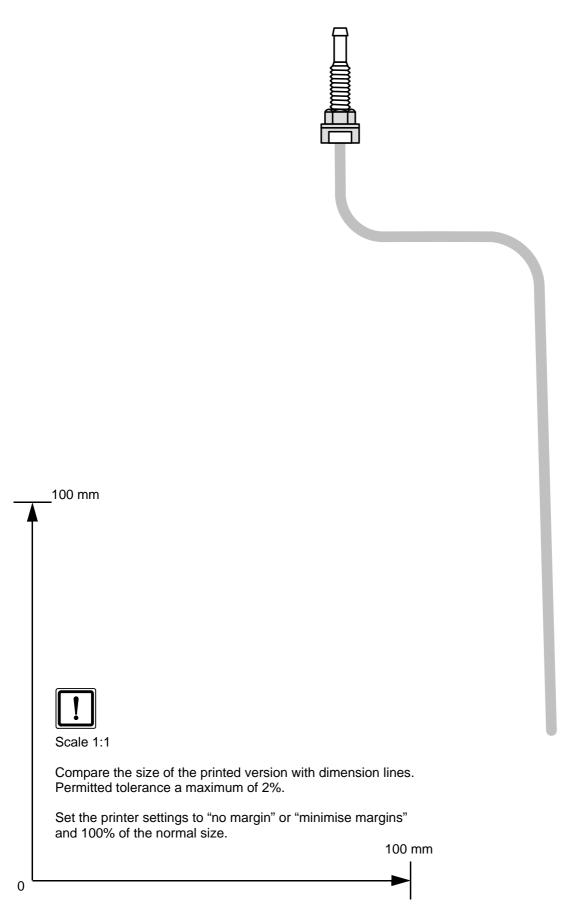
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Gasoline fuel standpipe





Diesel fuel standpipe



Operating Instructions for End Customer

Please remove page and add to the vehicle operating instructions.

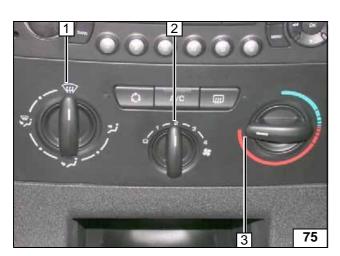
Note:

We recommend matching the heating time to the driving time. Heating time = driving time **Example:** For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.

The passenger compartment monitoring must be disabled in vehicles with anti-theft alarm system. Deactivation instructions can be taken from the operating instructions of the vehicle!

If the summer/winter switch option has been installed, this must be switched in accordance with the time of year. The heater will then only switch on the vehicle fan to ventilate the vehicle interior in the position Winter with heat and in the position Summer S.

Before parking the vehicle, make the following settings:



- 1 Air outlet to windshield
- 2 Set fan to level "1", max. "2"
- 3 Set temperature to "max."

Manual air conditioning

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- 1 Air outlet to windshield
- 2 Set temperature to "HI"

Automatic air-conditioning