## Water Heater



Thermo Top E Parking HeaterThermo Top C Parking Heater

e1
00 0003
e1
00 0002

# Installation documentation

# Kia cee`d / cee`d sw / pro cee`d

Petrol from model year 2007 - 2009 Left-hand drive vehicle Manual transmission



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.



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.

The initial startup is to be executed with the Webasto Thermo Test Diagnosis.

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
Kia	cee'd / cee'd sw	ED	e4 * 2001/116 * 0121 *
Engine type	Engine model	Output in kW	Displacement in cm <sup>3</sup>
G4FA	Petrol	80	1396
G4FC	Petrol	90	1591
G4GC	Petrol	105	1975

Manufacturer	Model	Туре	EG-BE No. / ABE
Kia	pro cee'd	ED	e4 * 2001/116 * 0121 *
Engine type	Engine model	Output in kW	Displacement in cm <sup>3</sup>
G4FC	Petrol	90	1591
G4GC	Petrol	105	1975

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

The installation location of the digital timer is to be coordinated with the end customer before installation.

## Heater/Installation Kit

Quantity	Designation	Order No.:
1	Retail accessories Thermo Top E / C	See Price list
1	Heater control	See Price list
1	Installation kit for Kia cee`d / cee`d sw / pro cee`d 2007 - 2009 B	1312333E

### Heater recommended for the respective vehicle class:

Vehicle	Heater
Compact car	Thermo Top E
Mid-size car, estate car	Thermo Top C

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

This installation documentation applies to Kia cee`d / cee`d sw / pro cee`d Petrol vehicles - for validity, see page 2 - from model year 2007 - 2009 and later, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to this installation documentation.

However, the stipulations in the "installation documentation", the "operating instructions" and "installation instructions" for the *Thermo Top C/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 should be fitted with rub protection (split-open fuel hose).

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

### **Special Tools**

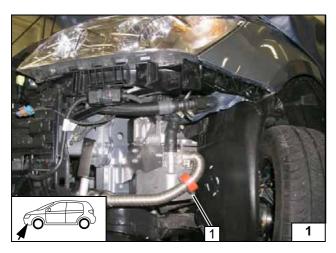
- Torque wrench for 2.0 10 Nm
- Hose clamping pliers
- Metric thread-setter kit

### **Preliminary work**

### WARNING!

- Open the fuel tank cap and vent the fuel tank.
- Close the fuel tank cap again.
- Disconnect the battery "earth" or "ground" connection.
- Depressurise 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.
- Remove the door sill trim on the front passenger's side.
- Remove the A-pillar trim in the front passenger's side footwell.
- Remove the trim for radio/A/C control panel.
- Remove the lower instrument panel trim on the driver's side.
- Remove the rear bench seat.
- Open the tank-fitting service lid.
- Remove the air filter together with the intake hoses.
- Detach the trim of the cable pass through on the firewall.
- Detach the wheel well trim on the right and left.
- Remove the bumper.
- Remove the rear left tank trim.

Remove page 36 "Operating Instructions for the End Customer" and add to the vehicle operating instructions.



## Heater installation location

1 Heater

Installation location

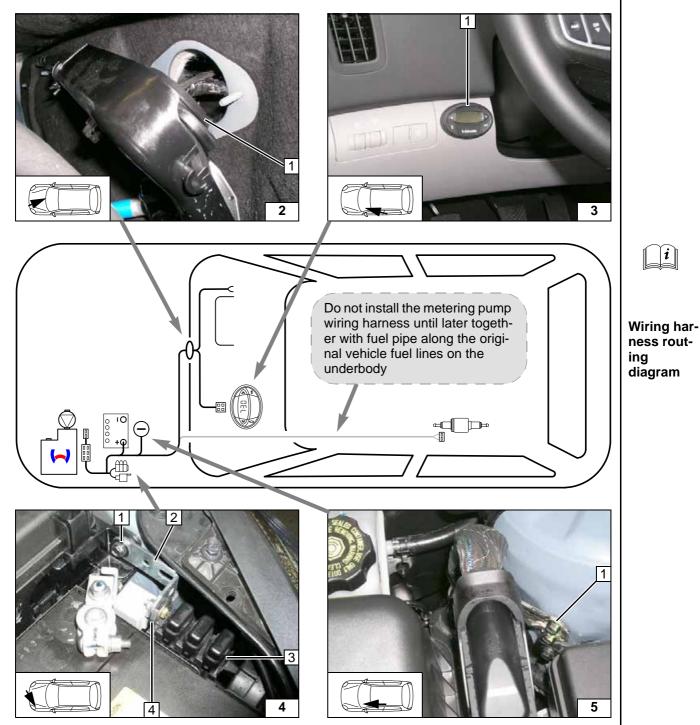
# Electrical Connection

## Wiring harness pass through

1 Protective rubber plug

### **Digital timer**

1 Digital timer



### Fuse holder, K3 relay

Angle down perforated bracket **2** according to template.

- 1 Original vehicle bolt
- 3 Fuse holder, replace F3 25 A fuse with 10 A fuse.4 M5x16 bolt, washer, retaining plate of fuse
- holder, K3 relay, nut

Earth connection

1 Earth point on strut tower

Webasto components

fuse.

Fan relay

TT-C/E Heater

6-pin heater connector

Replace 25 A with 10 A

HG

X1

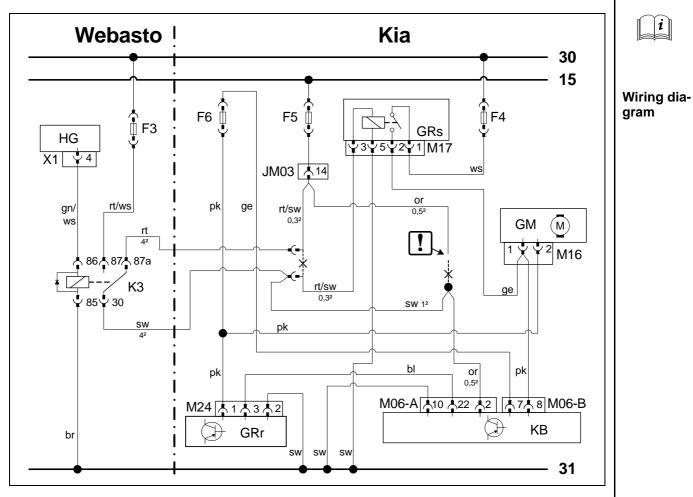
F3

K3

# Fan controller for manual air conditioning

The triggering of the manual air conditioning depends on the respective vehicle equipment and one differentiates between two variants!

### Variant 1



Vehicle components

Fan motor

Fuse, 40A

Fuse, 10A

Fuse, 10A

Fan relay

Connector

Fan controller Connector GRr

Connector GM

A/C control panel

23-pin connector KB

5-pin connector GRs

8-pin connector KB

GM

M16

M06-A

M06-B

KΒ

F4

F5

F6

GRs

M17 JM03

GRr

M24

7

Legend

Colours and symbols

red

white

black

orange

green

vellow

Insulate wire end and tie

blue

pink

back

Cutting point Wiring colours may vary.

rt

ws

sw

or

gn

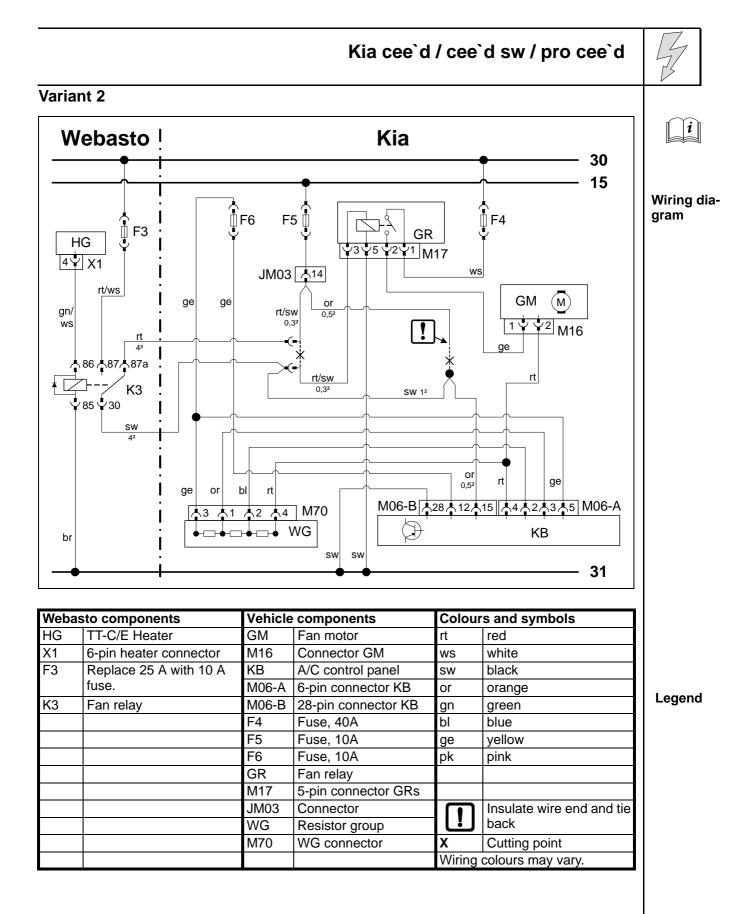
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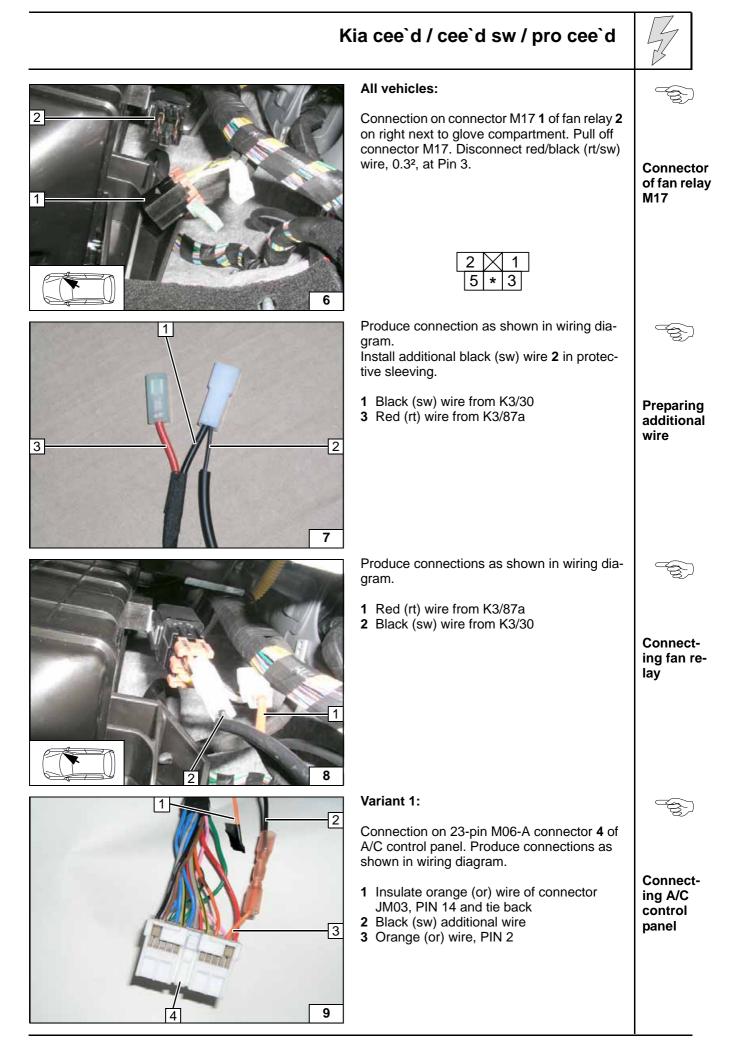
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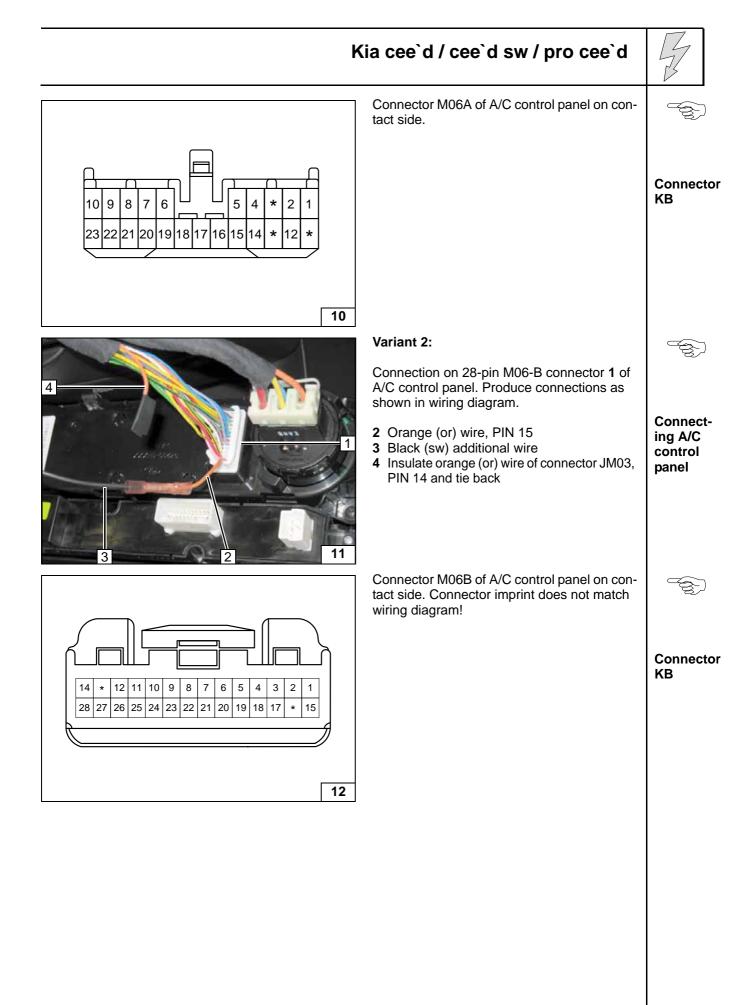
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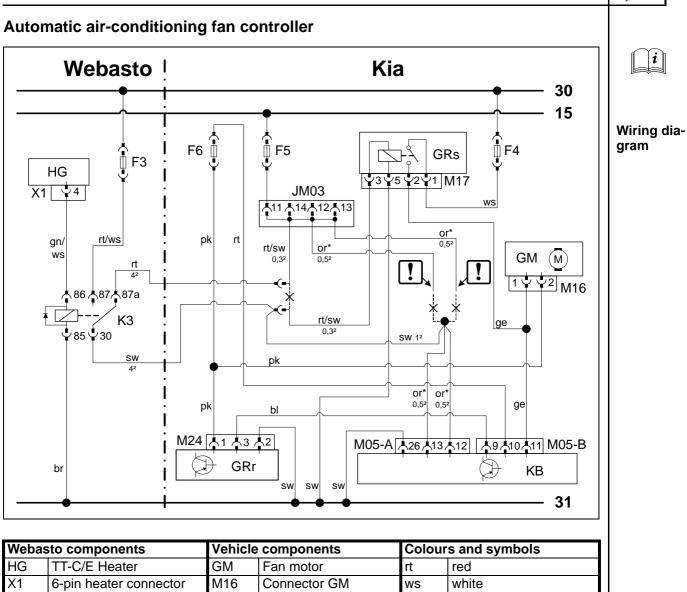










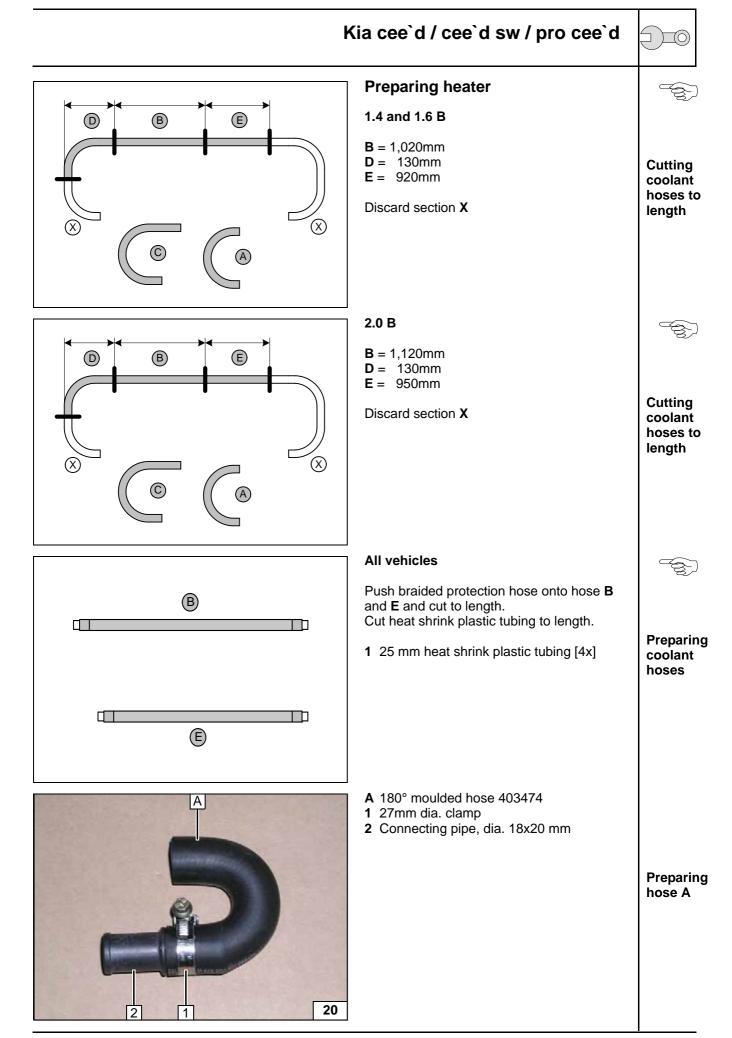


Weba	asto components	Vehicle	components	Colour	s and symbols
HG	TT-C/E Heater	GM	Fan motor	rt	red
X1	6-pin heater connector	M16	Connector GM	WS	white
F3	25 A replaced with 10 A	KB	A/C control panel	SW	black
	fuse.	M05-A	26-pin connector KB	or	orange
K3	Fan relay	M05-B	22-pin connector KB	gn	green
		F4	Fuse, 40A	bl	blue
		F5	Fuse, 10A	ge	yellow
		F6	Fuse, 10A	pk	pink
		GRs	Fan relay		
		M17	5-pin connector GRs	*	orange (or) or red/black (rt/sw)
		JM03	Connector		Insulate wire end and tie
		GRr	Fan controller	l 🕛	back
		M24	Connector GRr	Х	Cutting point
Wiring colours may vary.					

Legend

K	ía cee`d / cee`d sw / pro cee`d	
	Connection on connector M17 <b>1</b> of fan relay <b>2</b> on right next to glove compartment. Pull off connector M17. Disconnect red/black (rt/sw) wire, 0.3 <sup>2</sup> , at Pin 3.	Connector of fan relay M17
	$\begin{bmatrix} 2 \\ 5 \\ * \\ 3 \end{bmatrix}$	
	Produce connection as shown in wiring dia- gram. Install additional black (sw) wire <b>2</b> in protec- tive sleeving.	
32	<ul> <li>1 Black (sw) wire from K3/30</li> <li>3 Red (rt) wire from K3/87a</li> </ul>	Preparing additional wire
	Produce connections as shown in wiring dia- gram. <b>1</b> Red (rt) wire from K3/87a	
	2 Black (sw) wire from K3/30	Connect- ing fan re- lay
	Connection on connector M05-A <b>3</b> of A/C con- trol panel. Insulate orange (or) wires <b>1</b> , <b>6</b> of connector JM03, PIN 12; 13 and tie back. Pro- duce connections as shown in wiring diagram.	
	<ul> <li>2 Black (sw) additional wire</li> <li>4 Orange (or) or red/black (rt/sw) wire, PIN 12</li> <li>2 Orange (or) or red/black (rt/sw) wire, PIN 13</li> </ul>	Connect- ing A/C control panel
6 5 4 16	13       12       11       10       9       8       7       6       *       4       3       2       1         26       25       24       23       22       21       20       19       18       17       16       *       14	

K	ia cee`d / cee`d sw / pro cee`d	Z
	<ul> <li>Remote option (Telestart)</li> <li>1 Receiver, bracket angled down</li> <li>2 5.5 mm dia. hole, M5x16 bolt, flanged nut</li> </ul>	<b>Mounting</b> receiver
	1 Antenna	Mounting antenna
	Temperature sensor for HTM100 only 1 Temperature sensor, fasten with suitable means	Mounting tempera- ture sensor

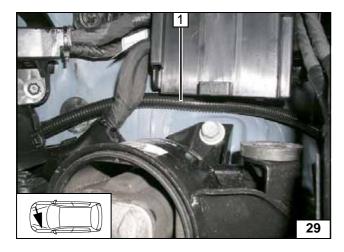


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K	ia cee`d / cee`d sw / pro cee`d	0-C
	<ul> <li>D Hose section, connecting pipe dia. 20x20 mm, 27 mm dia. clamp [2x]</li> <li>C 180° moulded hose 29938, connecting pipe, 20x20 mm dia., 27 mm dia. clamp [2x]</li> </ul>	Premount- ing coolant hoses on heater
	<ol> <li>Hose section, 10 mm dia. clamp [2x]</li> <li>Fuel line in corrugated hose</li> </ol>	Premount- ing fuel hose on heater
	<ul> <li>Preparing installation location</li> <li>1 Original vehicle retaining clip released</li> <li>2 Insert 30 mm edge protection</li> </ul>	Moving wiring har- ness
35mm 2 30mm 1 24	Align bracket 2, copy hole pattern 1 [4x]	Copying hole pat- tern

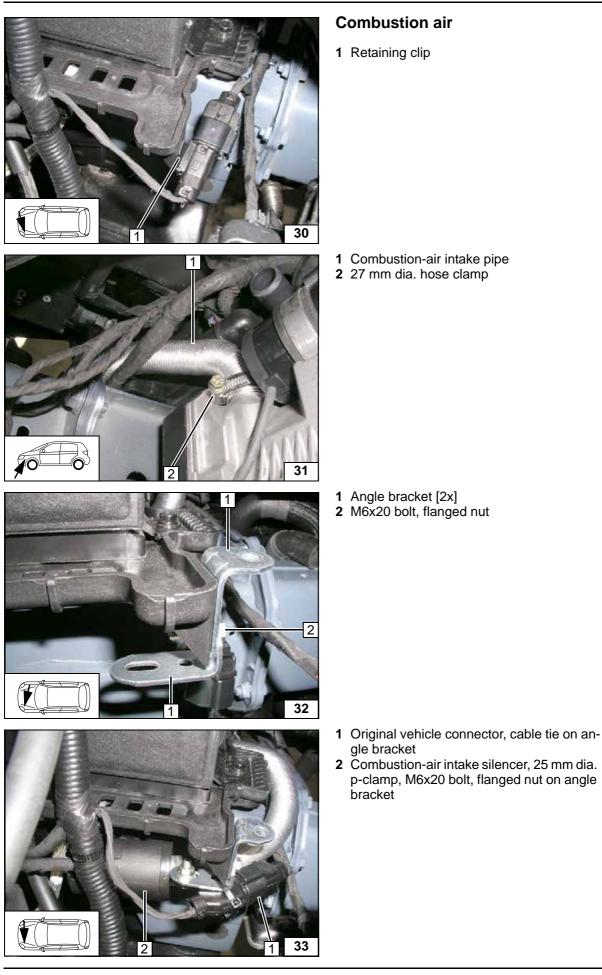
íia cee`d / cee`d sw / pro cee`d	
1 9.1 mm dia. hole; mount rivet nut [4x each]	Installing rivet nuts
1 M6x25 bolt, spring lockwasher [4x each]	Installing bracket
Installing heater	
<ul> <li>Ejot screws, tightening torque 10 Nm. Insert two washers between heater and bracket at position 1.</li> <li>1 Ejot screw, washer [2x]</li> <li>2 Ejot screw [2x]</li> </ul>	Mounting heater
Ejot screw 1, tightening torque 10 Nm.	
	Mounting heater
	<ol> <li>9.1 mm dia. hole; mount rivet nut [4x each]</li> <li>M6x25 bolt, spring lockwasher [4x each]</li> <li>Installing heater</li> <li>Ejot screws, tightening torque 10 Nm. Insert two washers between heater and bracket at position 1.</li> <li>Ejot screw, washer [2x]</li> <li>Ejot screw [2x]</li> </ol>

Route fuel line and wiring harness of metering pump in corrugated tube **1** to firewall and along original vehicle fuel lines to underbody. Cut fuel line to length at installation location of metering pump.



Routing fuel line and wiring harness

 $\mathbf{O}$ 



Releasing retaining clip of connector

6

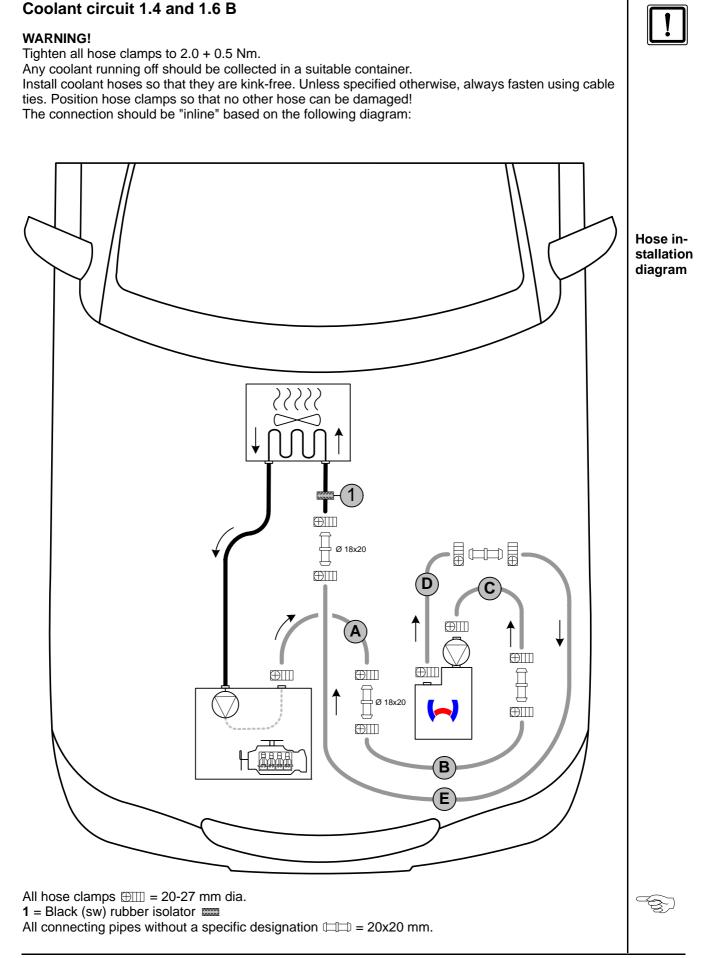
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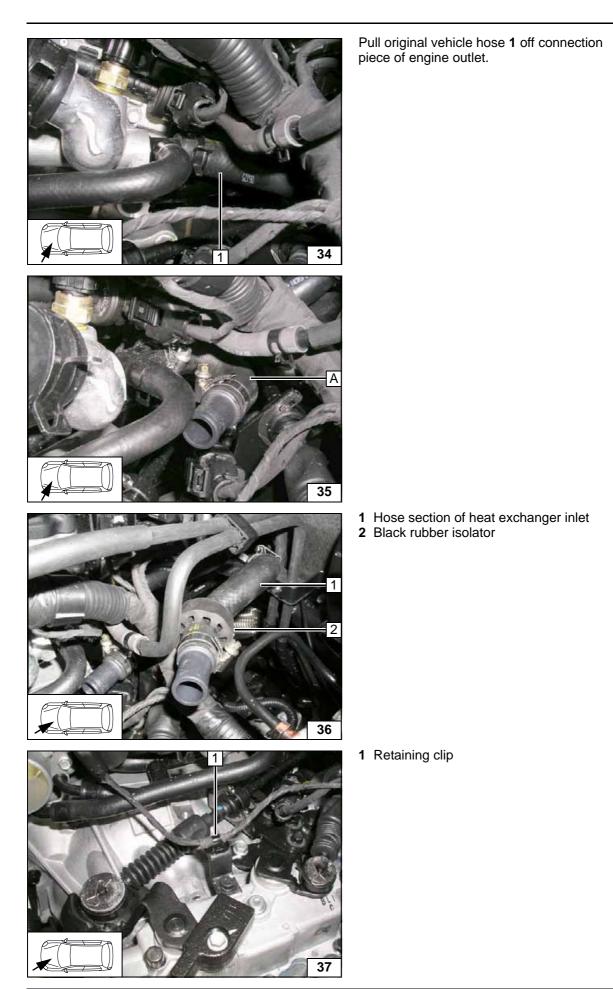
Installing intake pipe

Installing angle bracket

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Mounting silencer





Releasing retaining clip

Cutting point

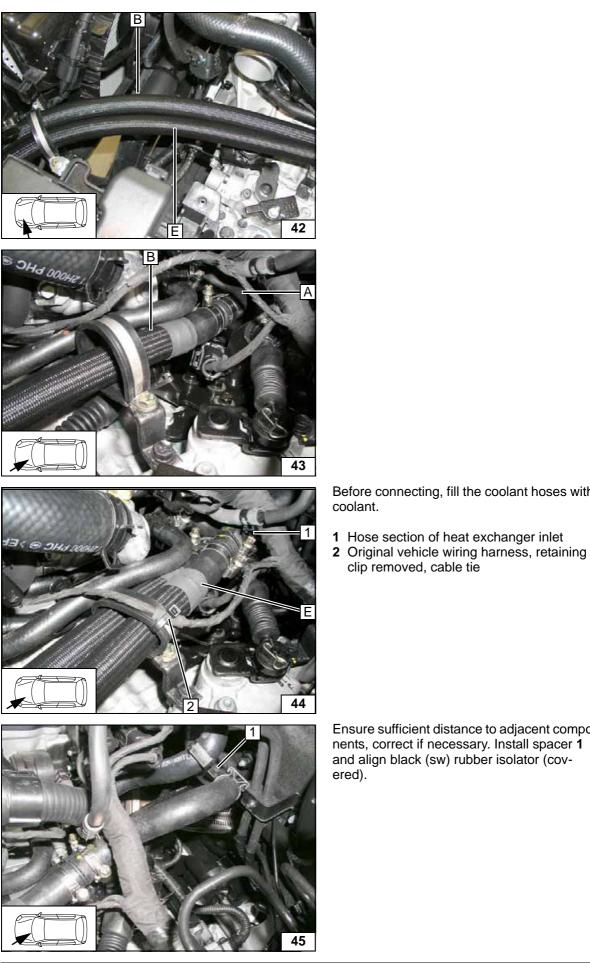
Connecting engine outlet

Installing rubber iso-

lator

Kia cee`d / cee`d sw / pro cee`d	
<ul> <li>1 M6x20 bolt, flanged nut</li> <li>2 Rubber-coated pipe clamp, 48 mm dia.</li> </ul>	Installing p-clamp
<ul> <li>1 Rubber-coated pipe clamp, 48 mm dia.</li> <li>2 M6x20 bolt, flanged nut</li> </ul>	Installing p-clamp
	Connect- ing heater outlet
	Connect- ing heater inlet





Routing in engine compartment

Connecting engine outlet

Before connecting, fill the coolant hoses with

**Connect**ing heat exchanger inlet

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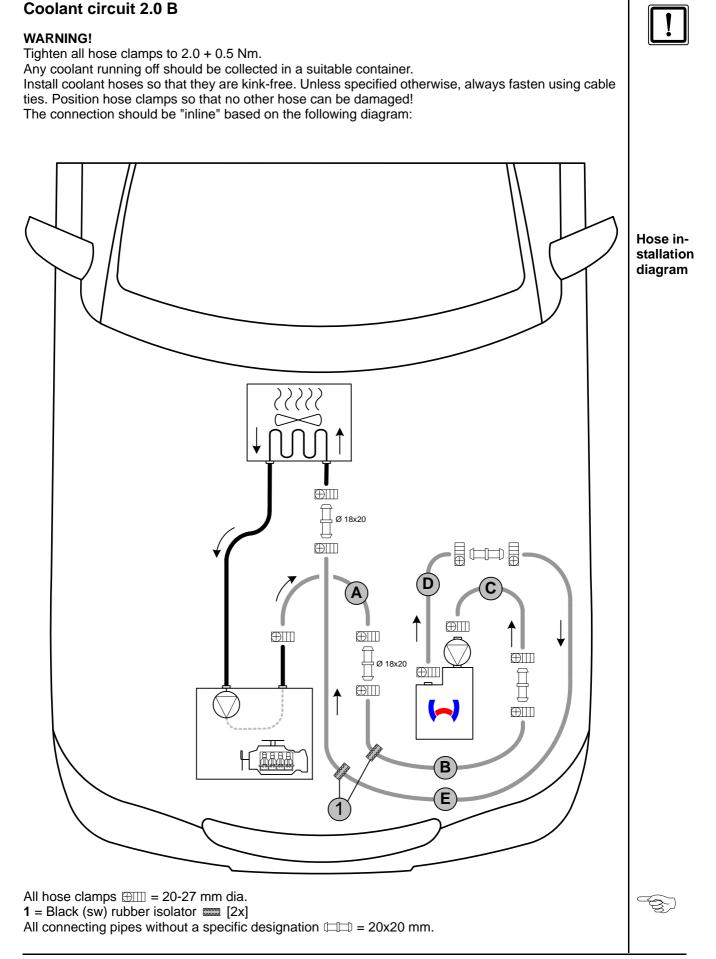
Ensure sufficient distance to adjacent components, correct if necessary. Install spacer 1 and align black (sw) rubber isolator (cov-

Aligning

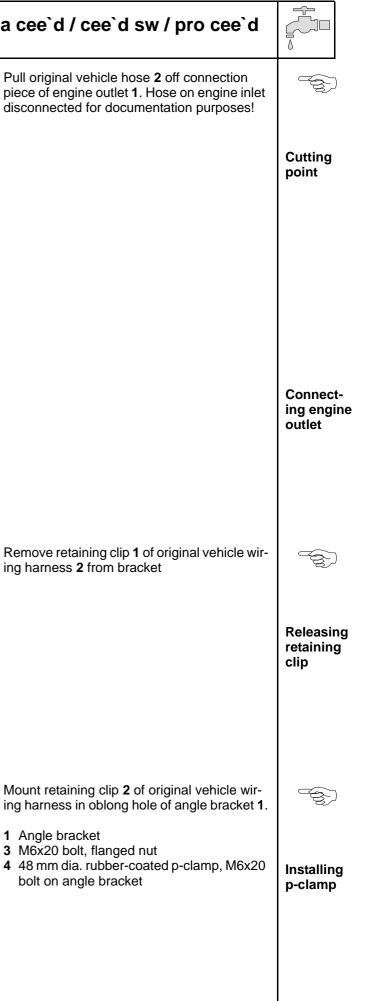
hoses

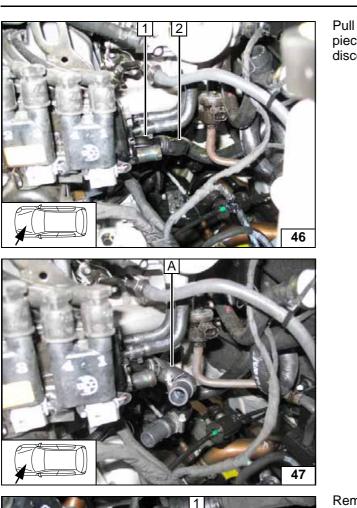
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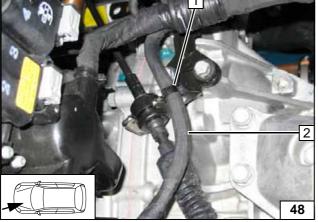
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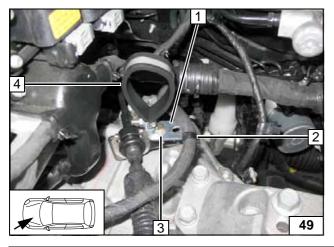












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 Rubber-coated pipe clamp, 48 mm dia.
 M6x20 bolt, flanged nut 50 51 52 1 Rubber-coated pipe clamp

53



Installing p-clamp

Connecting heater outlet

Connecting heater inlet

Routing in engine

Ε

Kia cee`d / cee`d sw / pro cee`d	
1 Black (sw) rubber isolator [2x]	Routing in engine compart- ment
Before connecting, fill the coolant hoses with coolant.	
<ul> <li>1 Rubber-coated pipe clamp</li> <li>2 Hose section of heat exchanger inlet</li> </ul>	Connec- tion on en- gine outlet and heat exchanger inlet
1 Spacer bracket (lockable)	Installing spacer bracket
Ensure sufficient distance to adjacent compo- nents, correct if necessary. Install spacer <b>1</b> and align black (sw) rubber isolator [2x] (cov- ered).	Installing spacer bracket

## Fuel

### **CAUTION!**

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

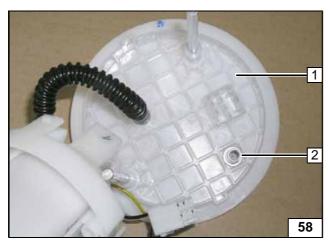
Catch any fuel running off in a suitable container.

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 as shown in the wiring harness routing diagram.

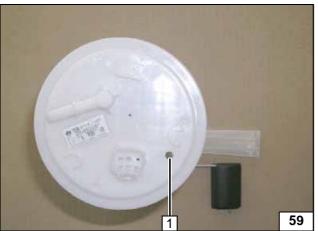
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Remove and dismantle fuel-tank sending unit according to manufacturer's instructions. Mount rivet nut **2** for centring in centre of cover segment **1** and centring 5 mm centring.



Copying hole pattern



1 Drill out 6 mm dia. hole

Drilling hole in fuel-tank sending

unit

Shape fuel standpipe **1** according to template, cut to length and install, see "installation instructions".

Insert 4x 6 mm dia. washers between cover of fuel-tank sending unit and nut of fuel standpipe to adjust height.

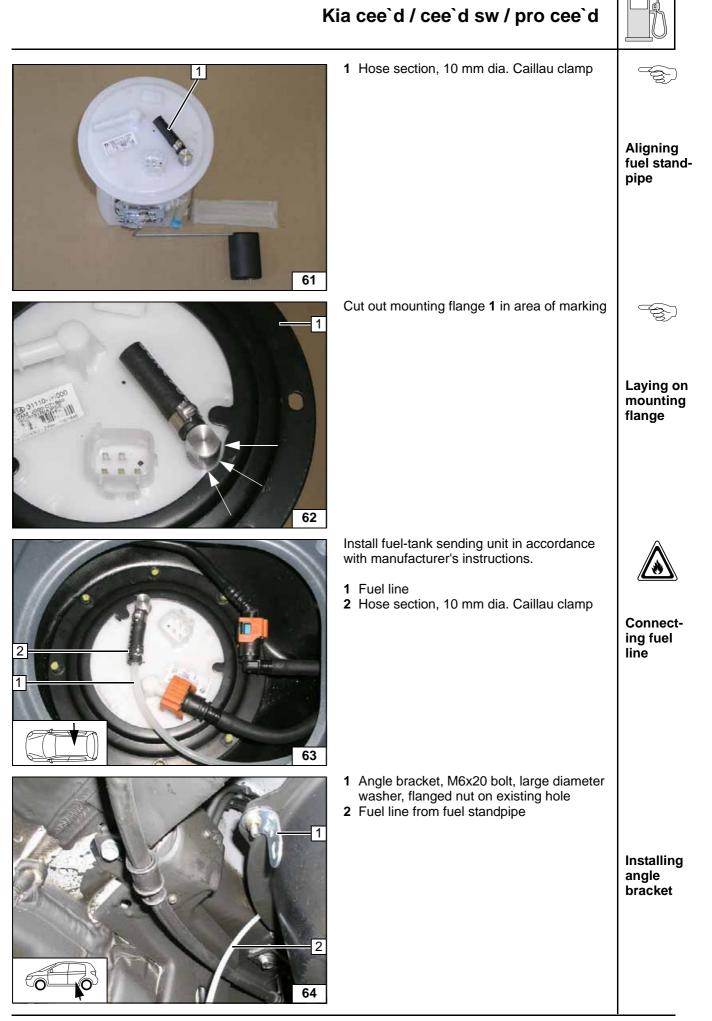


Installing fuel standpipe



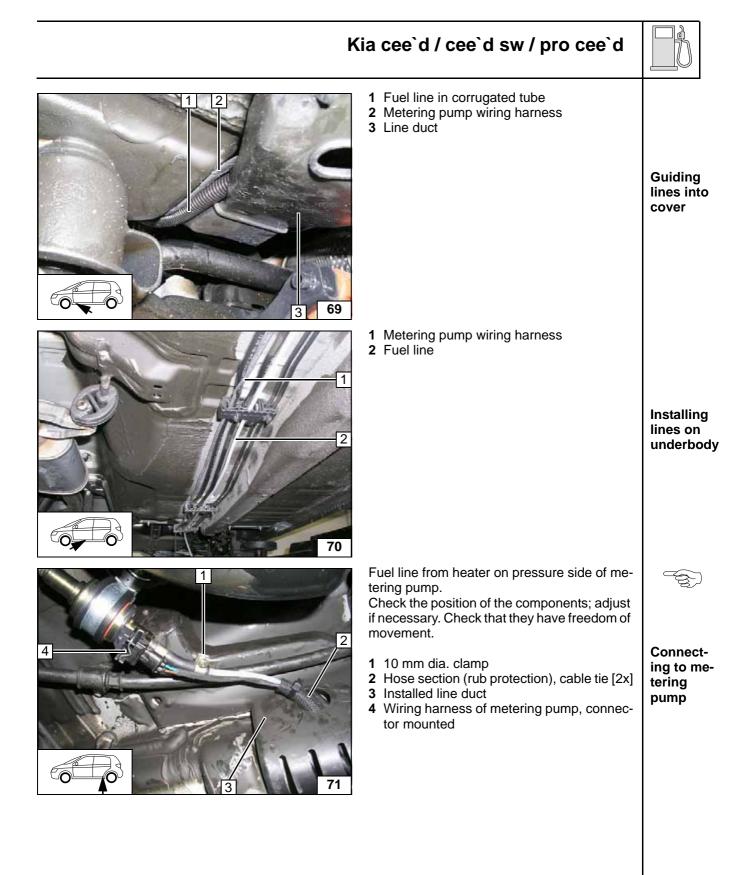
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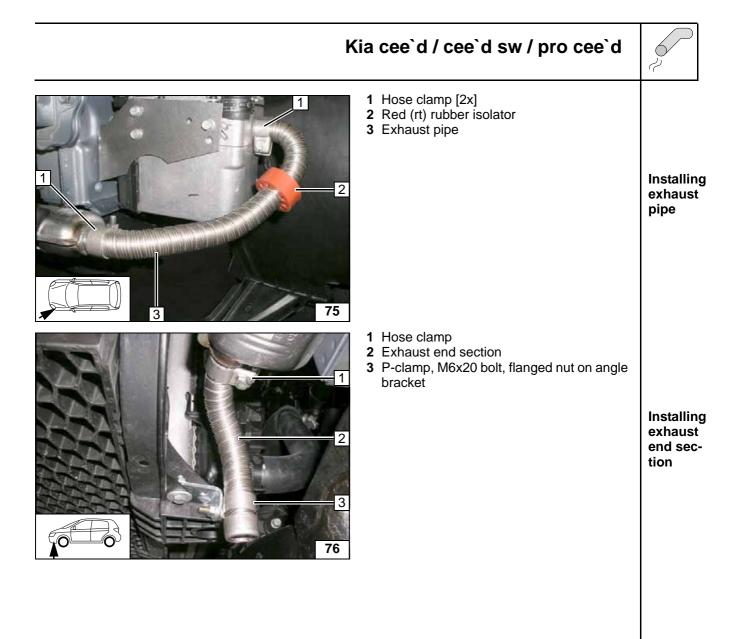


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ĸ	íia cee`d / cee`d sw / pro cee`d	
	<ol> <li>Silent block, rubber-coated p-clamp, flanged nut</li> <li>Hose section, 10 mm dia. clamp [2x each]</li> <li>Metering pump</li> </ol>	Premount- ing meter- ing pump
	<ul><li>Ensure proper installation position of meter- ing pump, see "Installation Instructions".</li><li>1 M6 flanged nut on angle bracket</li></ul>	<b>Mounting</b> metering pump
	<ul> <li>Fuel line from fuel standpipe on intake side of metering pump. Check the position of the components; adjust if necessary. Check that they have freedom of movement.</li> <li>1 Hose section (rub protection), cable tie [2x]</li> <li>2 10 mm dia. clamp</li> </ul>	Connect- ing fuel line
	<ul><li>Detach line duct 3 and fold down, cut out edge at Pos. 2 for corrugated tube.</li><li>1 Fuel line from heater in corrugated tube</li></ul>	Cutting out line duct



Kia cee`d / cee`d sw / pro cee`d		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	<ul> <li>Exhaust gas</li> <li>1 Exhaust pipe a = 310mm</li> <li>2 Exhaust end section b = 175mm</li> <li>Discard section X</li> </ul>	Preparing exhaust pipe
	Disconnect earth cable <b>2</b> and fasten to adjacent earth point <b>1</b> .	Refasten- ing earth wire
	<ol> <li>Angle bracket, M6x20 bolt, large diameter washer, flanged nut</li> <li>Radiator cross member</li> </ol>	Installing angle bracket
	<ol> <li>Angle bracket, original vehicle bolt</li> <li>Exhaust silencer, 40 mm spacer, M6x50 bolt, flanged nut</li> </ol>	Mounting silencer



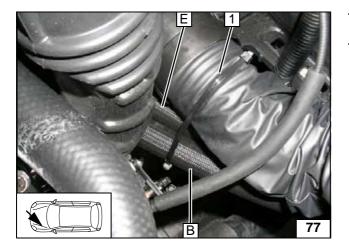
### **Final Work**

### WARNING!

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

Only use manufacturer-approved coolant. Spray the 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, teach telestart transmitter
- Make settings on A/C control panel according to the "Operating Instructions for End Customer".
- Place signboard "Switch off parking heater before refuelling" in the area of the filler neck
- See installation instructions for initial start-up and function test



### 1.4 and 1.6 B

1 Cable tie

Fastening hoses

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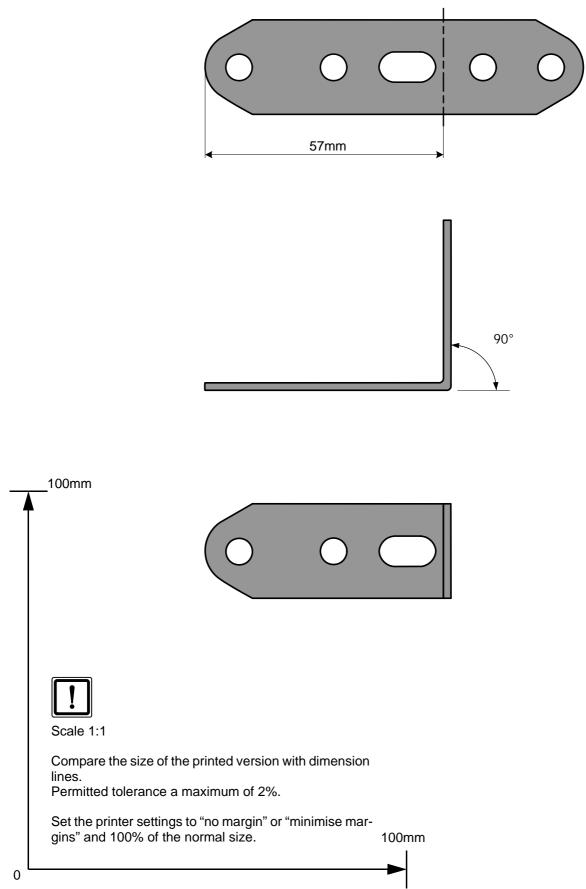
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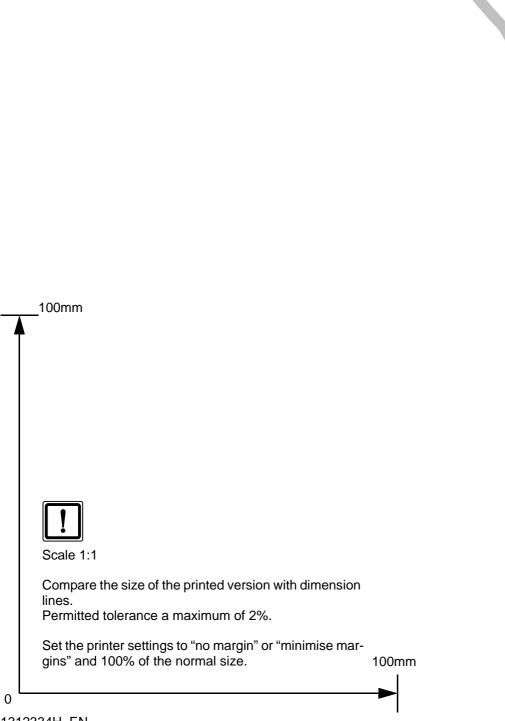


## **Template for Perforated Bracket**





## Template for fuel standpipe



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