

Water Heater



Thermo Top E Parking Heater


00 0003

Thermo Top C Parking Heater


00 0002

Installation documentation

Peugeot 607

2.7 I HDI

from Model Year 2005

Only for left-hand drive vehicle

Automatic air-conditioning



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	Type	EG-BE No. / ABE
Peugeot	607	Z9	e2 * 98 / 14 * 0199 * ...

Engine type	Engine model	Output in kW	Displacement in cm ³
UHZ	Diesel	155	2720

Vehicle and engine types as well as equipment variants 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 should be confirmed with the end customer before installation.

Heater/Installation Kit

Quantity	Designation	Order No.:
1	Retail accessories of <i>Thermo Top E / C</i>	See price list
1	Installation kit for Peugeot 607 2.7 I HDI	1303794A
1	Heater control	See price list

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 the vehicles Peugeot 607 with 2.7 I HDI engine - for validity, see page 2 - from model year 2005 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 this "installation documentation", the "operating instructions" and the "installations instructions" for the *Thermo Top E / C* 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). While installing an IPCU, the corresponding settings must be checked or adjusted before the installation.

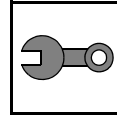
Special Tools

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

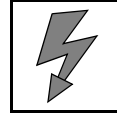
Explanatory Notes on Document

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

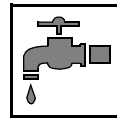
Mechanical system



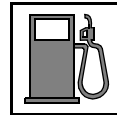
Electrical system



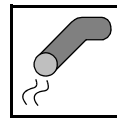
Coolant circuit



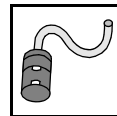
Fuel



Exhaust gas



Combustion air



Special features are highlighted using the following symbols:



Specific risk of injury or fatal accidents.



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.



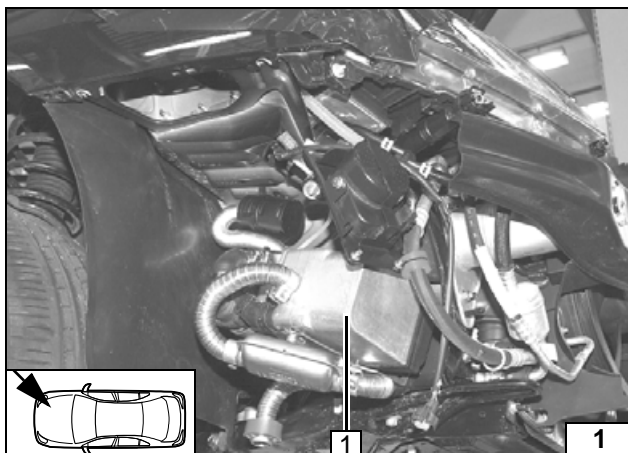
The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.

Preliminary Work

WARNING!

- Detach left luggage compartment trim and de-clamp battery
- 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 engine cover
- Remove engine compartment trims
- Remove cover of central electrical box
- Dismantle windscreen wipers
- Remove coolant reservoir cap
- Open the fuel tank cap, ventilate the tank.
- Close the fuel tank cap again.
- Remove the underride protection.
- Remove left and right wheel well trim
- Remove bumper
- Remove the footwell trim on the front passenger side.
- Remove glove compartment
- Push back footmats/carpet in the area of the left A-pillar
- Remove rear bench seat

Remove page 27 "Operating instructions for the end customer" and add to the operating instructions.



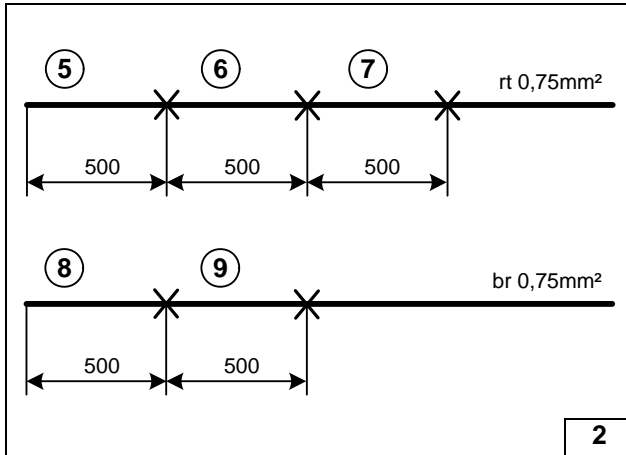
Heater installation location

(1) Heater

Installation location



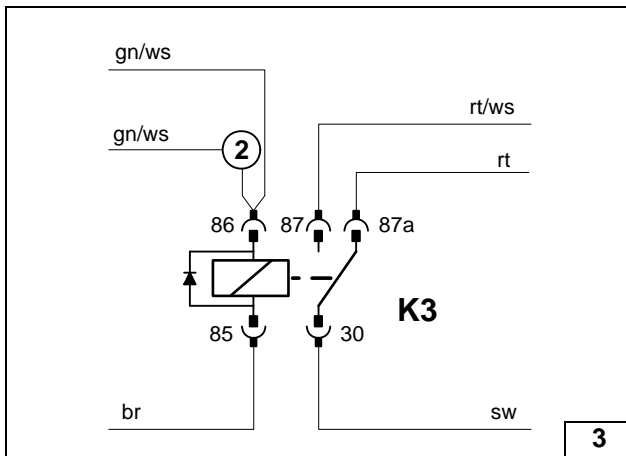
Preparing electrical system



Cut three 500 mm sections **5, 6, 7** from the provided red (rt) wire.

Cut two 500 mm sections **8, 9** from the provided brown (br) wire.

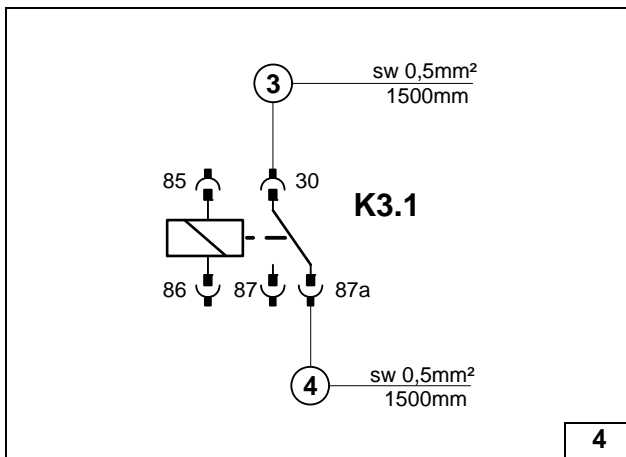
Cutting wires to length



Connect the provided green/white (gn/ws) wire **2** to K3/86.

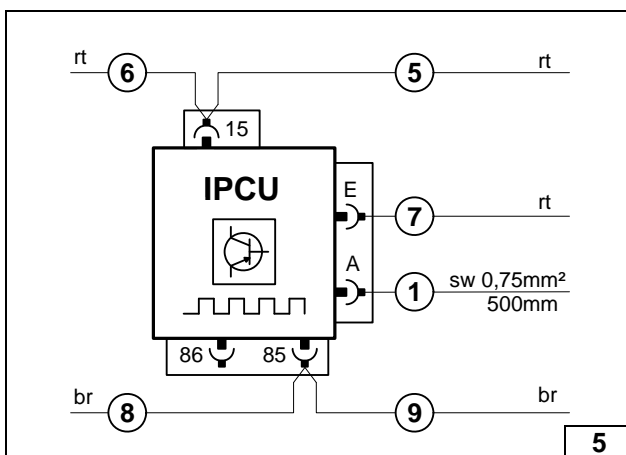


Preparing K3 relay



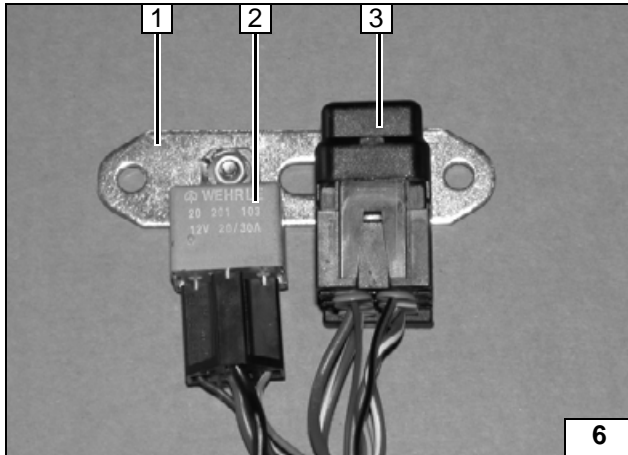
Connect provided black (sw) wires **3, 4** to K3.1/30 and K3.1/87a.

Preparing K3.1 relay



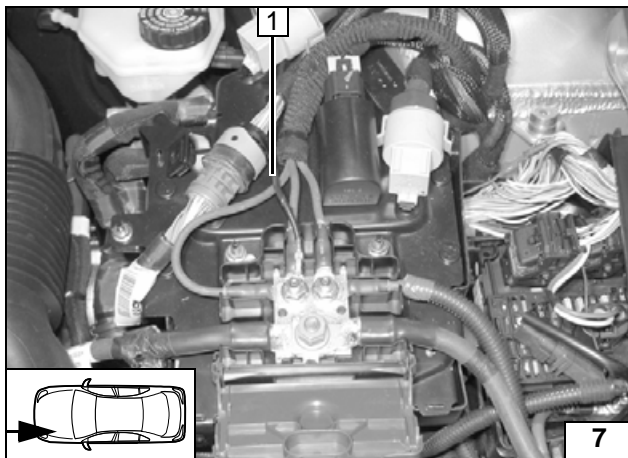
Connect provided black (sw) wire **1** to IPCU output. Connect sized red (rt) wires **5, 6, 7** and brown (br) wires **8, 9**.

Preparing IPCU



- (1) Perforated bracket
- (2) K3 relay, M5x12 bolt, large diameter washer, M5 flanged nut
- (3) Retaining plate of blade-type fuse holder, M5x12 bolt, large diameter washer [2x], M5 flanged nut

Premounting wiring harness



- (1) Red (rt) wire with 8 mm dia. cable lug on positive support point

Connecting positive wire



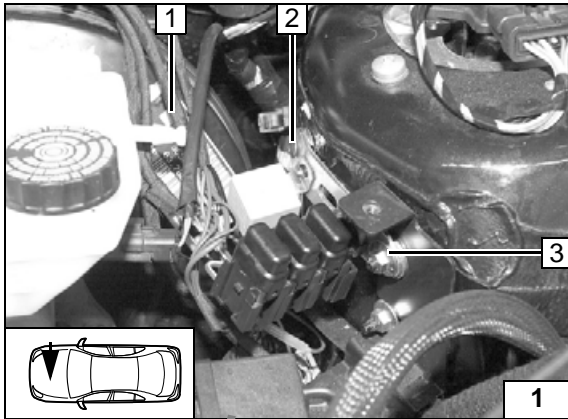
Electrical system



Installing premounted wiring harness

Large diameter washer between perforated bracket and strut tower

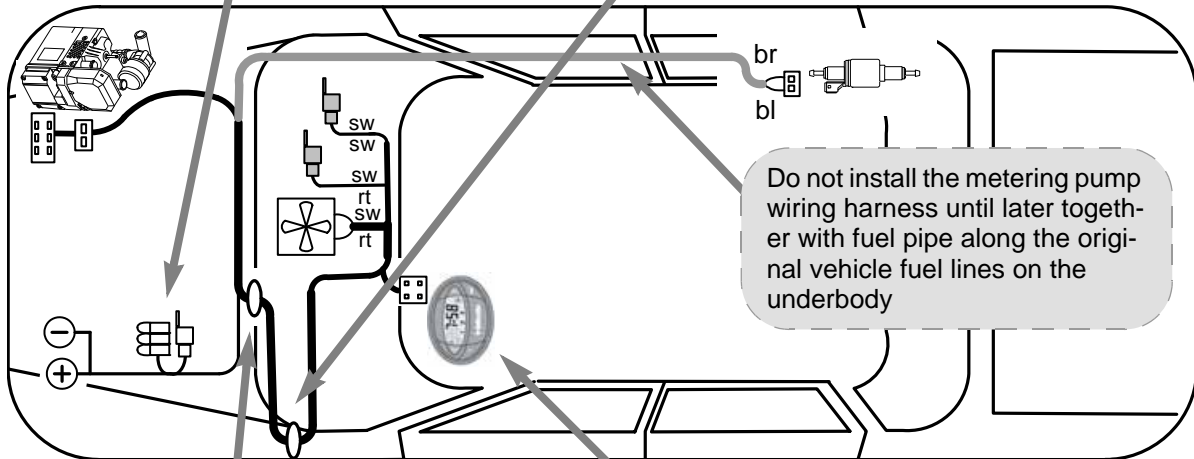
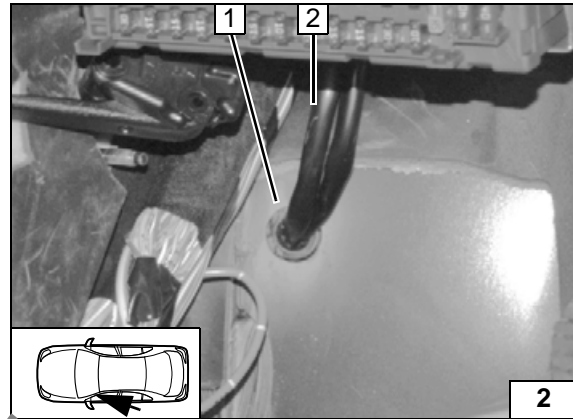
- (1) Premounted wiring harness
- (2) 4.8 mm dia. hole; large diameter washer; 5.5x13 self-tapping screw
- (3) M6 flanged nut



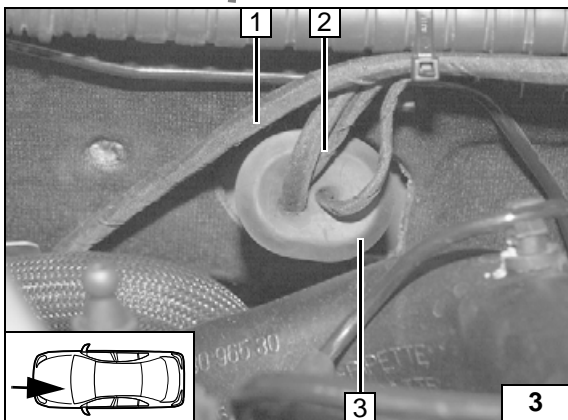
Wiring harness pass through of passenger compartment

Remove insulation protection mat before drilling in the passenger compartment.

- (1) 18 mm dia. hole, protective rubber plug
- (2) Wiring harness of fan control, digital timer, extra green/white (gn/ws) wire 2 from K3/86

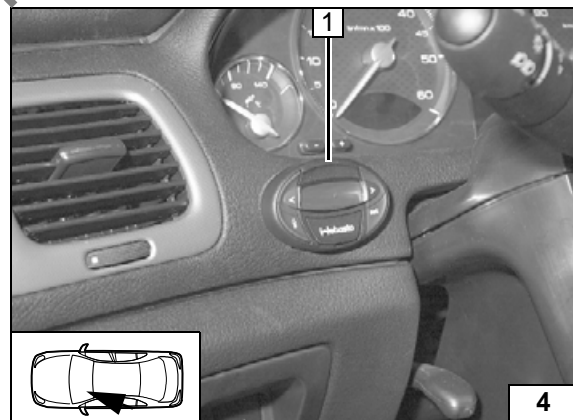


Wiring harness routing diagram



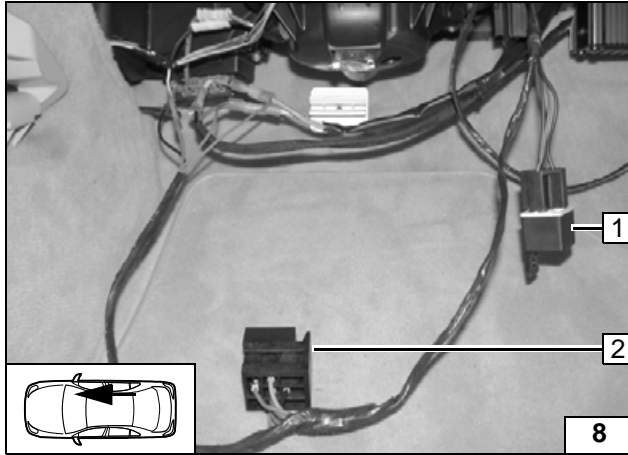
Wiring harness pass through of coolant reservoir

- (3) Protective rubber plug
- (2) Wiring harness of fan control, digital timer, extra green/white (gn/ws) wire 2 from K3/86
- (1) Heater wiring harness



Digital timer

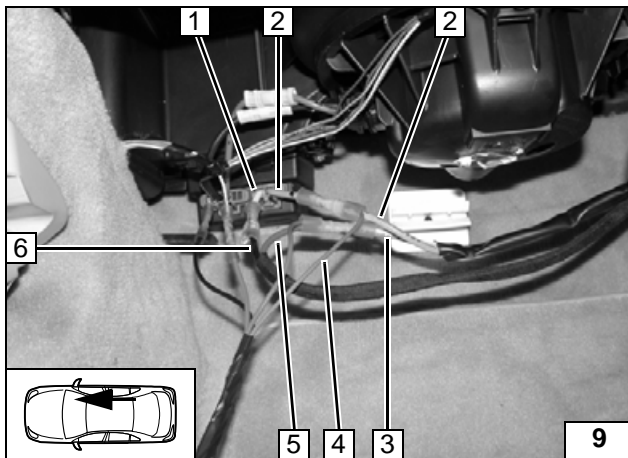
- 1 Digital timer



Fan control

- (1) Additional relay K 3.1
- (2) IPCU

Routing wiring harnesses

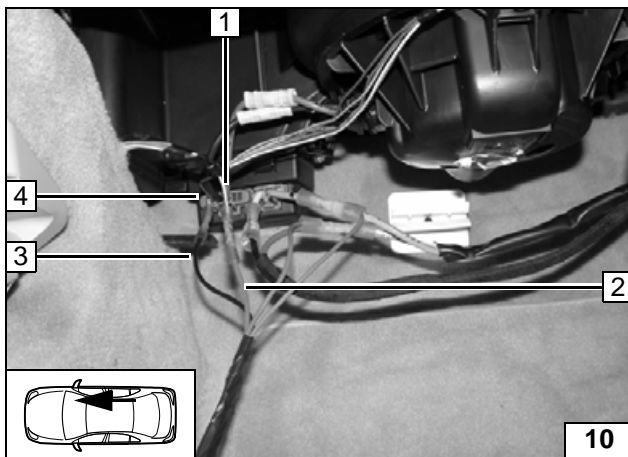


Produce connections as shown in wiring diagram.

- (6) Black (sw) wire from fan relay K3/30
- (1) White (ws) wire from original vehicle fan relay, Pin 5
- (5) Red (rt) wire from fan relay K3/87a
- (3) White (ws) wire to the original vehicle fan controller, Pin 1
- (2) Green/yellow (gn/ge) wire from fan controller (8045), Pin 2
- (4) Brown (br) wire 9 from IPCU/85



Connecting to fan controller

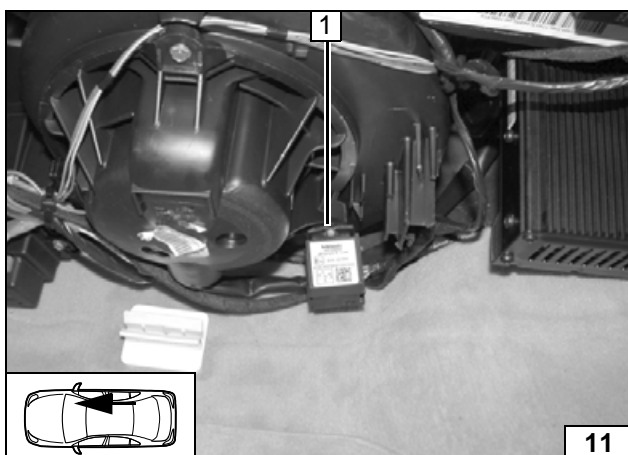


Produce connections as shown in wiring diagram.

- (3) Black (sw) wire 1 from IPCU/A
- (4) White (ws) wire from original vehicle fan controller, Pin 6
- (2) Red (rt) wire 7 from IPCU/E
- (1) White (ws) wire to the A/C control panel, Pin 6



Connecting to fan controller

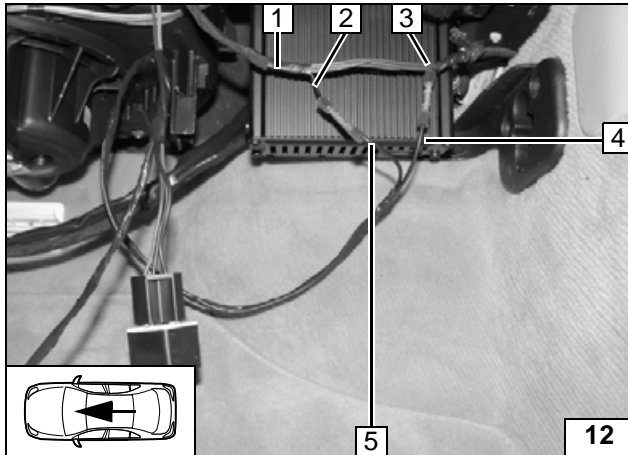


Produce connections as shown in wiring diagram.

Connect green/white (gn/ws) wire from K3/86 2 to IPCU/86.

- (1) IPCU on existing fan motor bolt

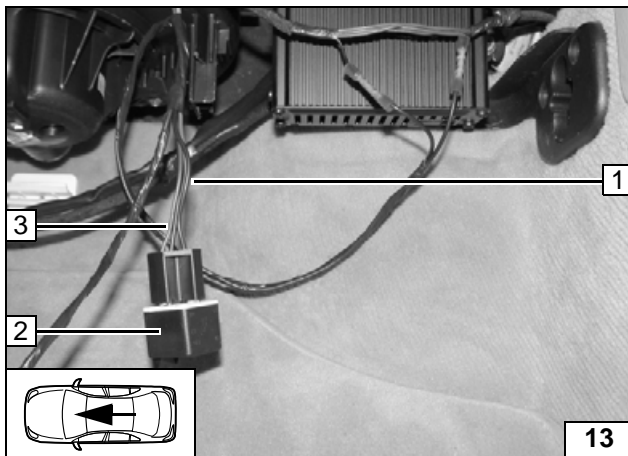
Connecting IPCU



Produce connections as shown in wiring diagram.

- (1) Wiring harness of digital timer
- (2) Black (sw) wire to the digital timer
- (5) Black (sw) wire 3 from K3.1/30
- (3) Black (sw) wire from heater
- (4) Black (sw) wire 4 from K3.1/87a

Connecting K3.1

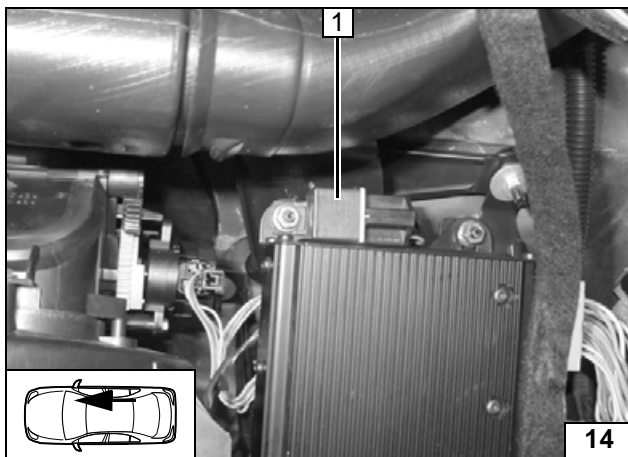


Produce connections as shown in wiring diagram.

Drill retaining tab of relay K3.1 to 6 mm.
Route brown (br) wire 8 from IPCU/85 and red (rt) wire 6 from IPCU/86 to K3.1.

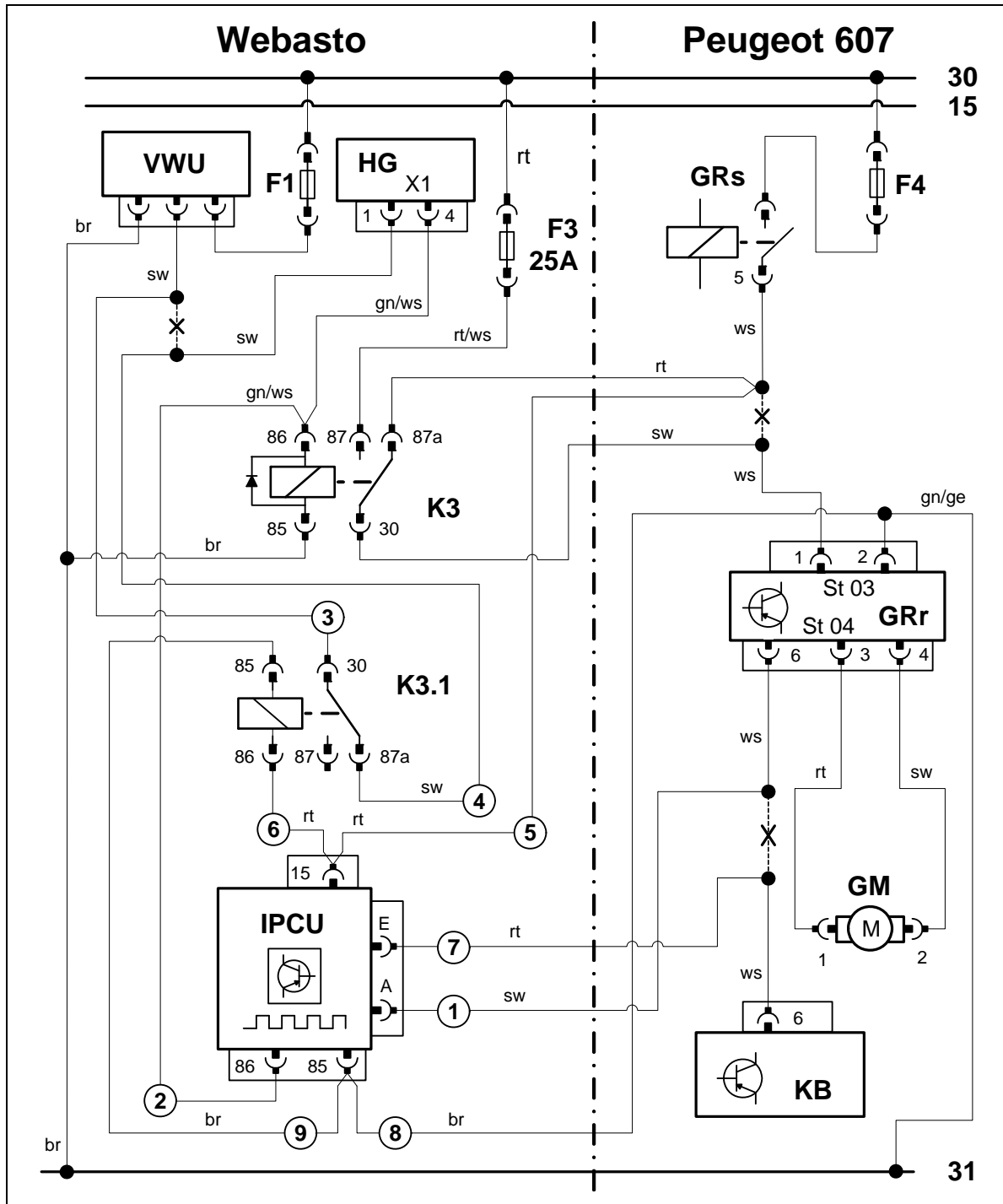
- (2) Additional relay K3.1
- (1) Brown (br) wire 8 from IPCU/85
- (3) Red (rt) wire 6 from IPCU/15

Connecting K3.1



- (1) K3.1 relay on original vehicle stud bolt, M6 nut

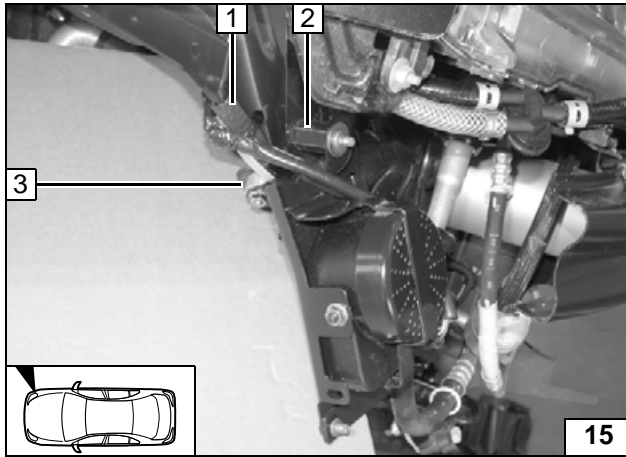
Installing K3.1



Wiring diagram

Webasto components		Peugeot components		Colours and symbols	
HG	Heater TT-C	F4	Fuse	gn	green
F3	Blade fuse 25A	GRs	Fan relay 8048	ws	white
K3	Fan relay	GRr	Fan controller 8045	rt	red
K3.1	Additional relay	St 03	2-pin connector green (gn)	sw	black
IPCU	Pulse width modulator	St 04	6-pin connector green (gn)	br	brown
F1	Blade fuse 1A	KB	A/C control panel 8080	ws	white
VWU	Digital timer	GM	Fan motor 8050	ge	yellow
				X	Cutting point

Legend



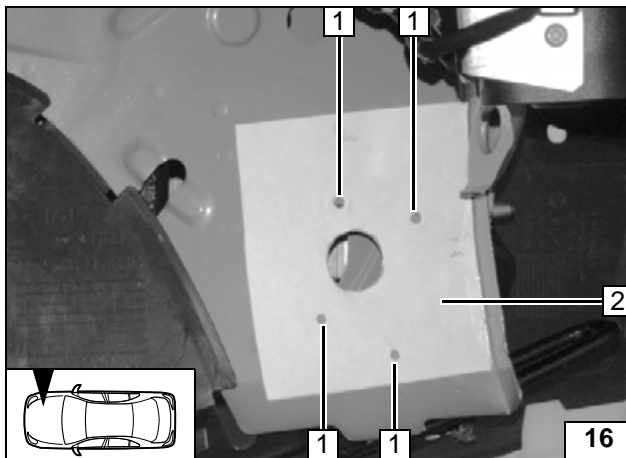
Preparing installation location

Dismantle alarm-system control unit. Mount 30 mm spacer nut to original vehicle stud bolt. Mount alarm-system control unit with original vehicle bolt and large diameter washer on spacer nut.

- (1) Produce 50 mm edge protection from fuel hose
- (2) 30mm spacer nut
- (3) M6x20 bolt, 10 mm spacer sleeve, flanged nut

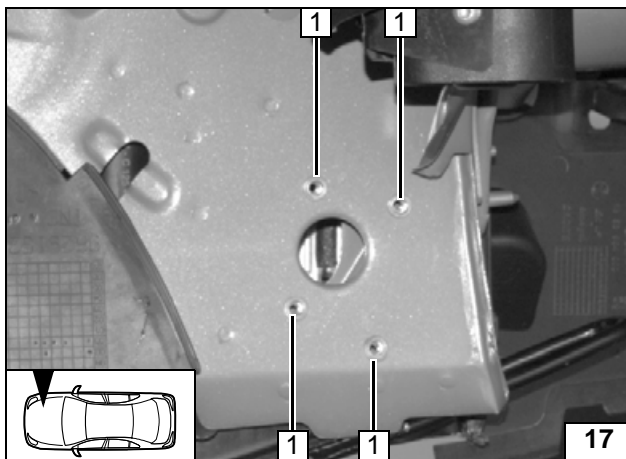


Moving alarm-system control unit



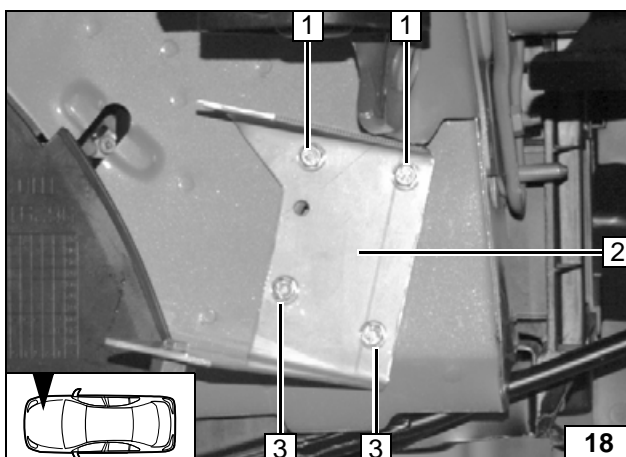
- (2) Template
- (1) Copy hole pattern [4x]

Preparing installation location



- (1) 9.1mm dia. hole, rivet nut [4x]

Installing rivet nuts

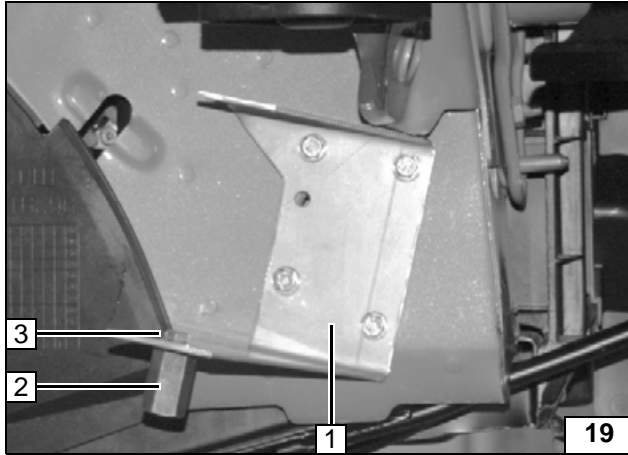
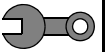


Insert a 10 mm shim between bracket and body at position 1 and an 8 mm shim at position 3.

- (2) Bracket
- (1) M6x40 bolt, spring lockwasher, 10 mm shim [2x each]
- (3) M6x40 bolt, spring lockwasher, 8mm shim [2x each]

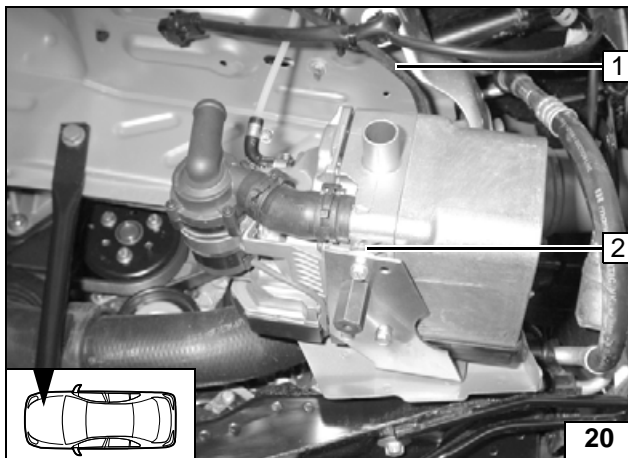


Mounting bracket



- (1) Bracket
- (2) M6x30 spacer nut
- (3) M6x16 bolt, spring lockwasher

Mounting
spacer nut



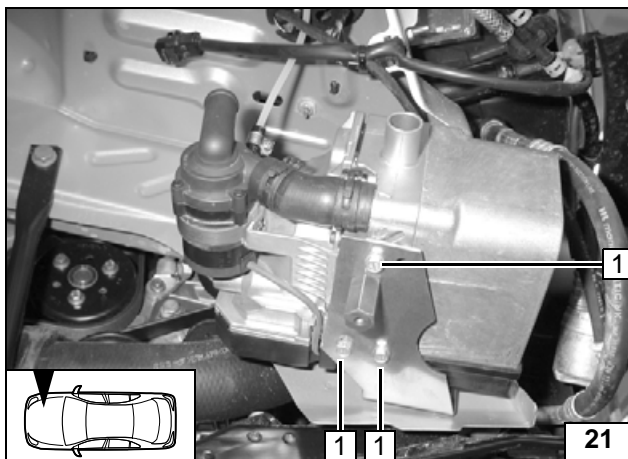
Installing heater

Mount wiring harness of heater before installation.
Insert 5 mm spacer sleeve between heater and bracket at position 2.

- (1) Wiring harness of heater
- (2) 5mm spacer sleeve



Mounting
heater

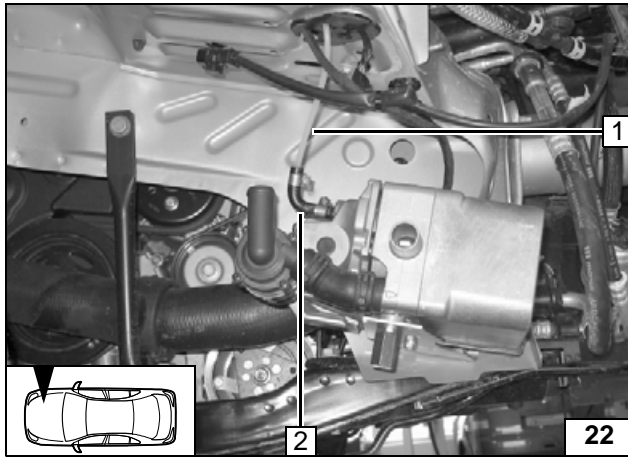
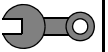


Tighten EJOT screws to 10 Nm. Fasten the 4th Ejoy screw from top (not visible here).

- (1) Ejoy screw [4x]

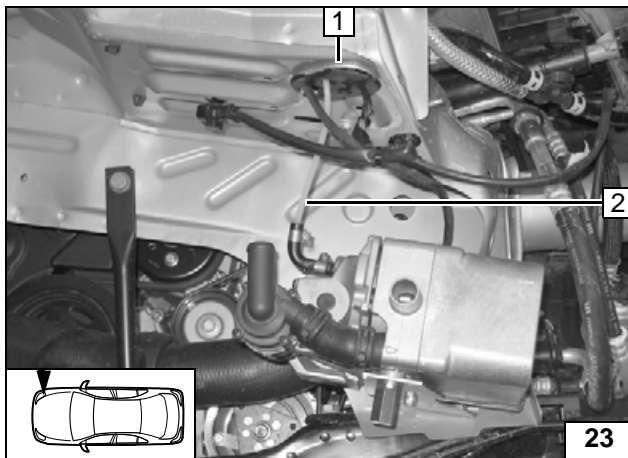


Mounting
heater



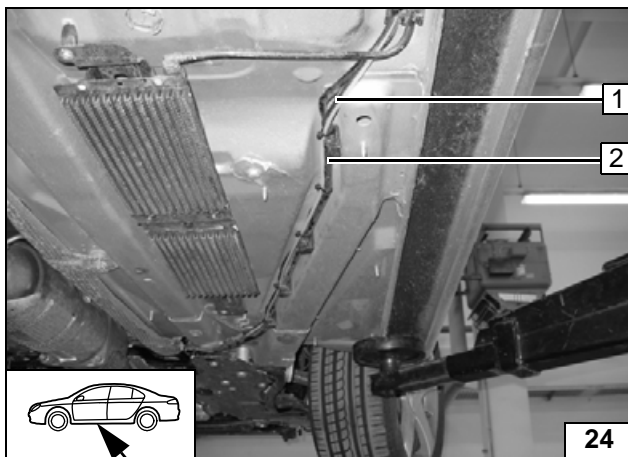
- (1) Mecanyl fuel line
- (2) 90° moulded hose, 10 mm dia. hose clamp [2x]

Conne-
tion on
heater



- (2) Mecanyl fuel line
- (1) Original vehicle pass through

Routing
Mecanyl
line

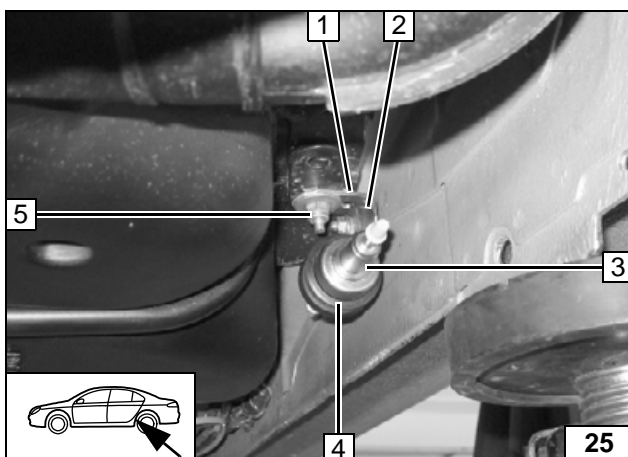


Routing to original vehicle fuel lines.

- (1) Mecanyl fuel line
- (2) Metering pump wiring harness



Line rout-
ing to un-
derbody



Ensure proper installation position of metering pump, see "Installation Instructions". Installation location at the right next to vehicle fuel tank.

- (1) Angle bracket
- (5) Original vehicle stud bolt, large diameter washer, flanged nut
- (2) Silent block, flanged nut [2x] on angle bracket
- (3) Metering pump
- (4) Rubber-coated p-clamp



Installa-
tion of me-
tering
pump



Fuel

CAUTION!

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

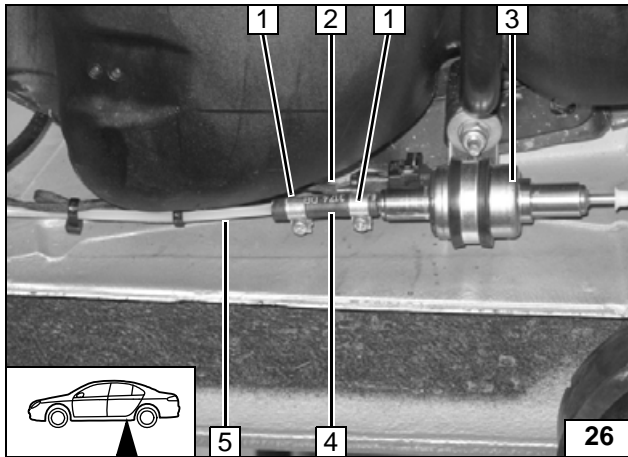
Catch any fuel running off in an appropriate container.

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.

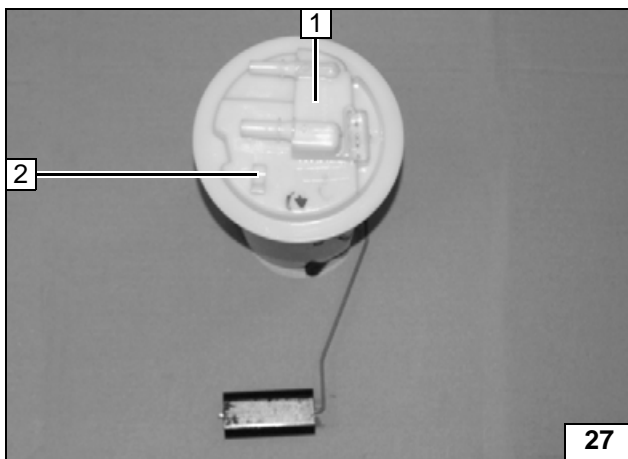
WARNING!

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



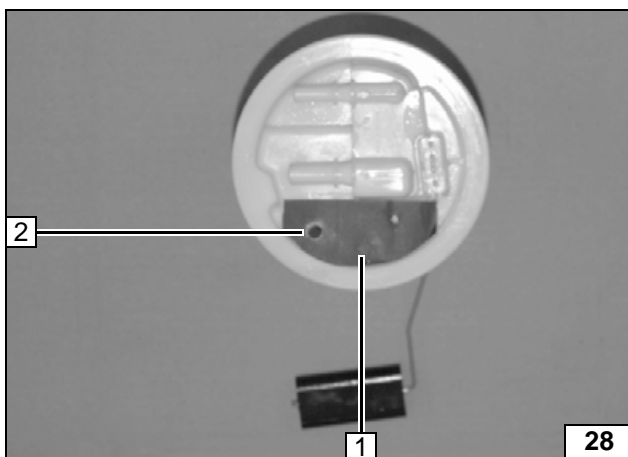
Fuel line from heater on pressure side of metering pump [side with connector].

- (3) Metering pump
- (5) Mecanyl fuel line
- (4) Hose section
- (1) 10 mm dia. hose clamp [2x]
- (2) Wiring harness of metering pump, single-wire seal, tab connector, connector housing



Remove and dismantle fuel-tank sending unit in accordance with manufacturer's instructions.

- (1) Fuel-tank sending unit
- (2) Remove tab



Remove and dismantle fuel-tank sending unit in accordance with manufacturer's instructions.

- (1) Template
- (2) Copy hole pattern, 6 mm dia. hole



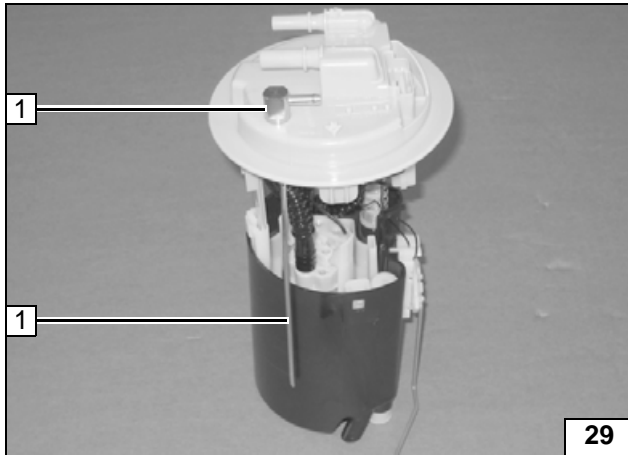
**Connect-
ing to me-
tering
pump**



**Preparing
fuel-tank
sending
unit**



**Preparing
fuel-tank
sending
unit**

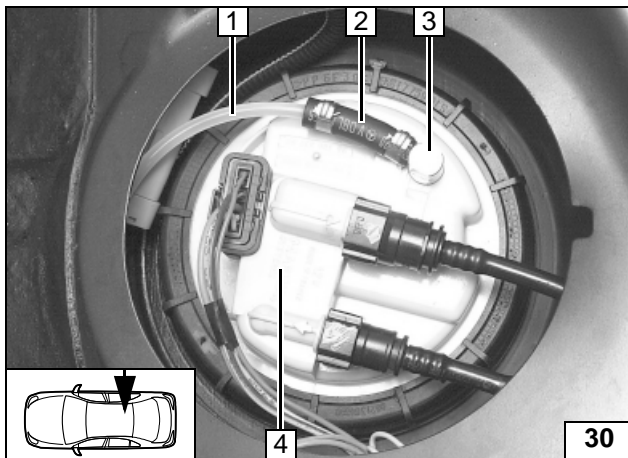


Shape fuel standpipe according to template, cut to length and install, see "installation instructions".

(1) Fuel standpipe



Installing fuel standpipe

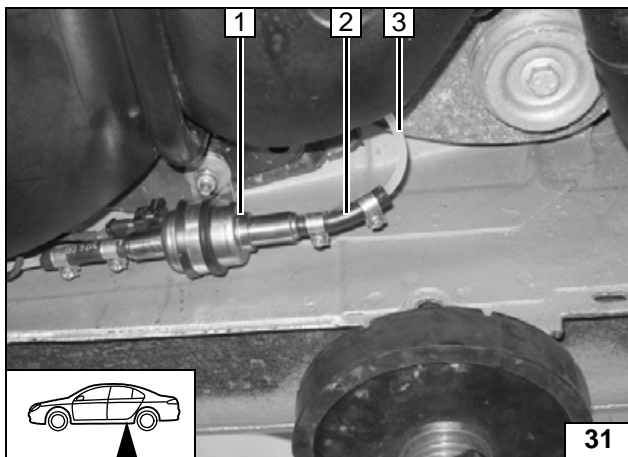


Install fuel-tank sending unit according to manufacturer's instructions.

- (4) Fuel-tank sending unit
- (3) Fuel standpipe
- (1) Residual unit of Mecanyl fuel line
- (2) Hose section, 10 mm dia. Caillau clamp[2x]



Connecting fuel line

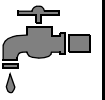


Fuel line from fuel standpipe on intake side of metering pump [side without connector]. Check the position of the components; adjust if necessary. Check that they have freedom of movement.

- (1) Metering pump
- (3) Mecanyl fuel line
- (2) Hose section, 10 mm dia. hose clamps [2x]



Connecting to metering pump



Coolant circuit

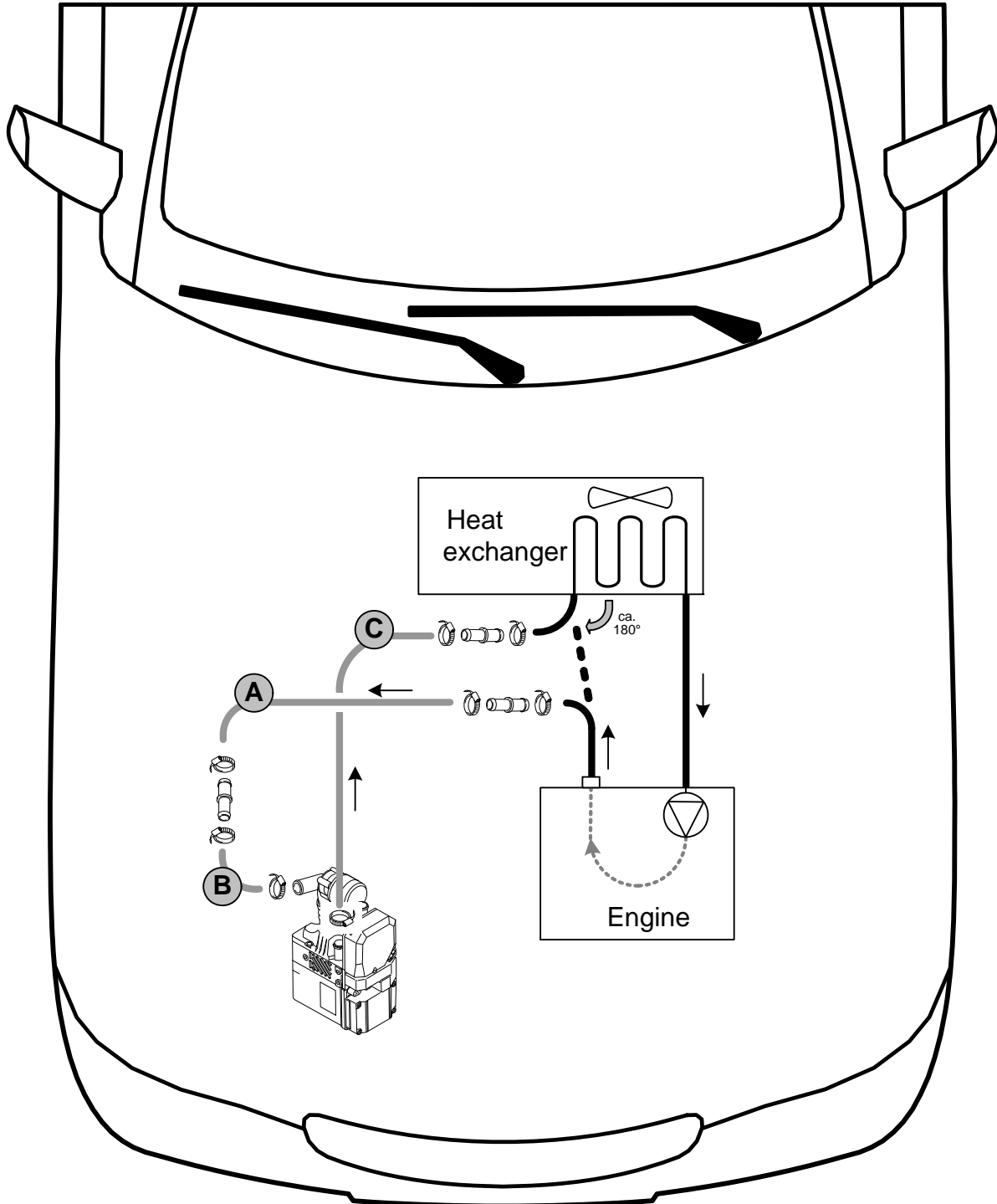
WARNING!

Tighten all hose clamps to 2.0 + 0.5 Nm.

Any coolant running off should be collected in an appropriate container.

Install coolant hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position hose clamps and spring clips so that other hoses cannot be damaged.

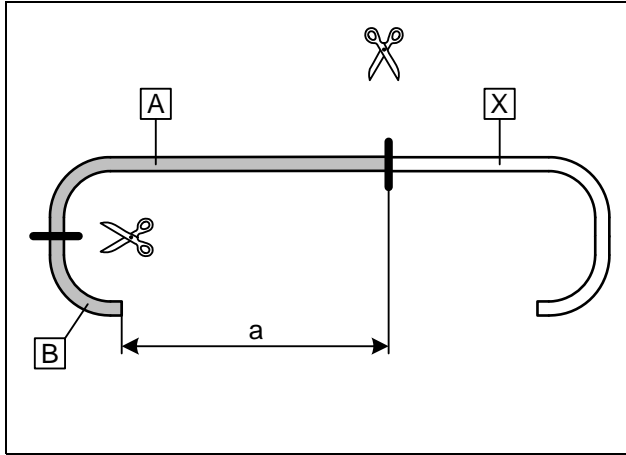
The connection should be "inline" based on the following diagram:



Hose routing diagram

All hose clamps = 20 - 27mm dia.
All connecting pipes = 20x20 dia..



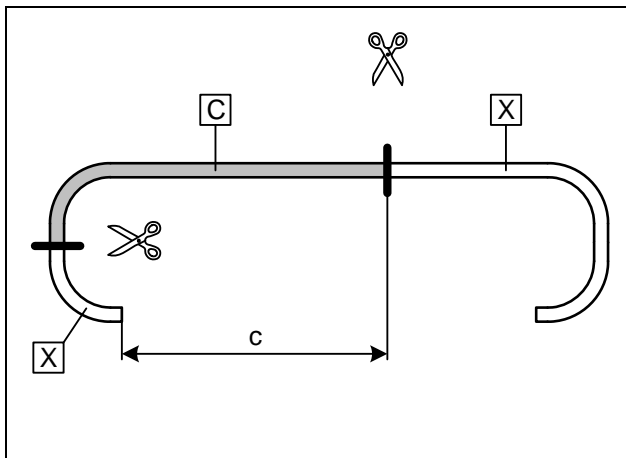


a = 980 mm

Discard section X

Slide on braided protection hose onto hose A. Split heat shrink plastic tubing at centre, slide onto ends of the braided protection hoses, shrink.

Cutting coolant hoses to length

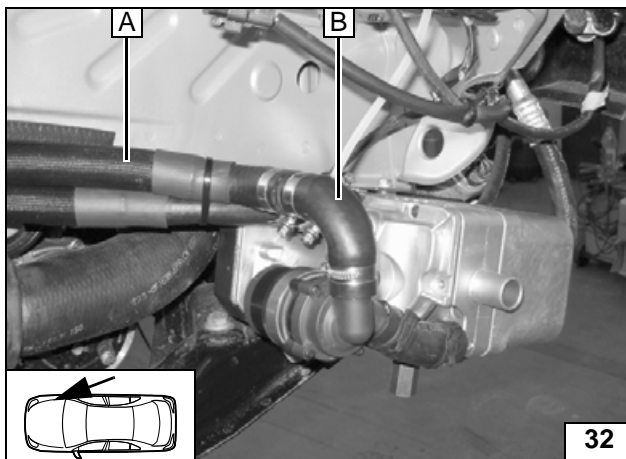


c = 920 mm

Discard section X

Slide on braided protection hose onto hose C. Split heat shrink plastic tubing at centre, slide onto ends of the braided protection hoses, shrink.

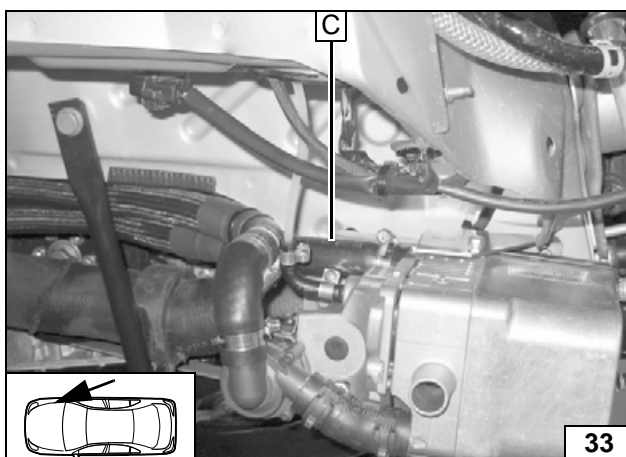
Cutting coolant hoses to length



Connect 90° elbow of hose A and hose B.



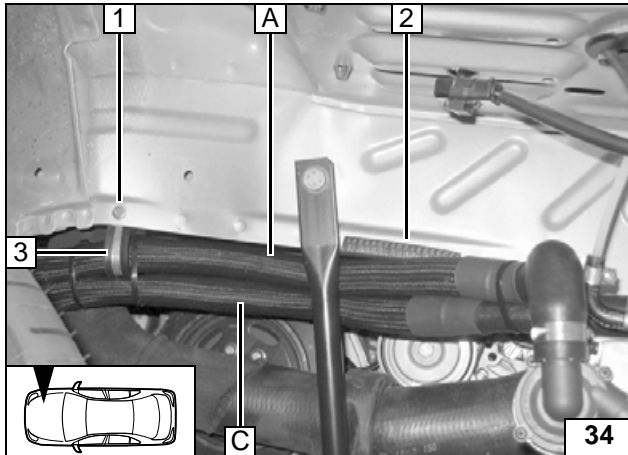
Connecting to heater inlet



Install coolant hose C with 90° elbow on heater outlet.



Connecting to heater outlet

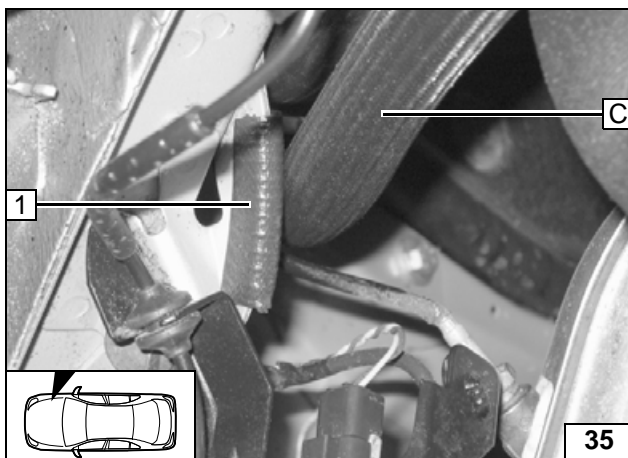


Drill 7 mm dia. hole at position 1.
Cut out 140 mm from provided edge protection.

- (1) M6x20 bolt, flanged nut
- (3) Rubber-coated p-clamp
- (2) 140mm edge protection

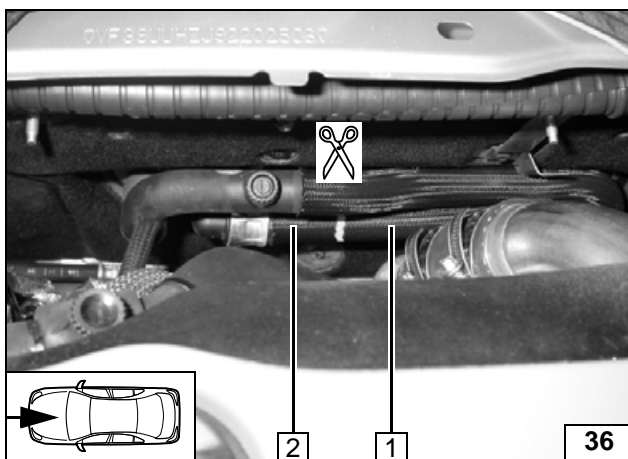


Routing in the engine compartment



- (1) Remaining 60 mm edge protection

Installing edge protection



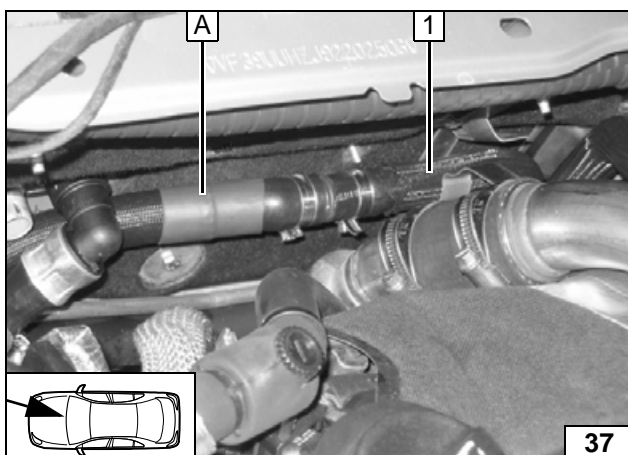
De-clamp original vehicle hose from engine outlet to heat exchanger inlet with de-clamping pliers and cut at marking.

Turn hose section of heat exchanger inlet by approx. 180° to the right.

- (1) Hose section of engine outlet
- (2) Hose section of heat exchanger inlet



Cutting point



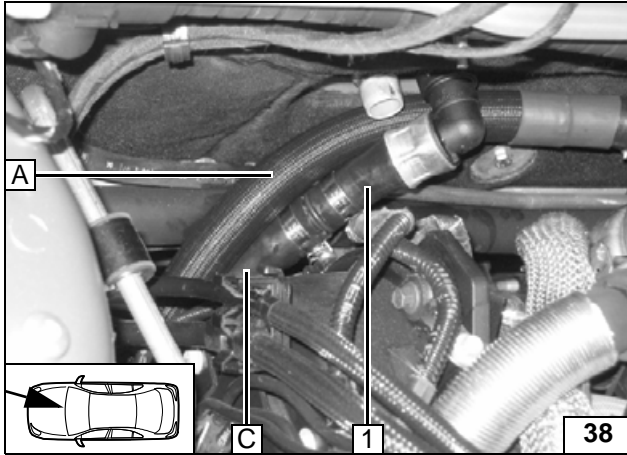
Before connecting, fill the coolant hoses with coolant.

Coolant hose of heat exchanger outlet removed for demonstration purposes.

- (1) Hose section of engine outlet



Connection on engine outlet

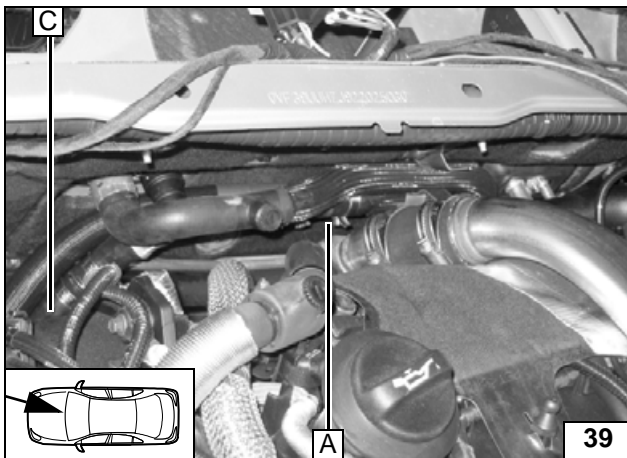


Before connecting, fill the coolant hoses with coolant.
Coolant hose of heat exchanger outlet removed for demonstration purposes.

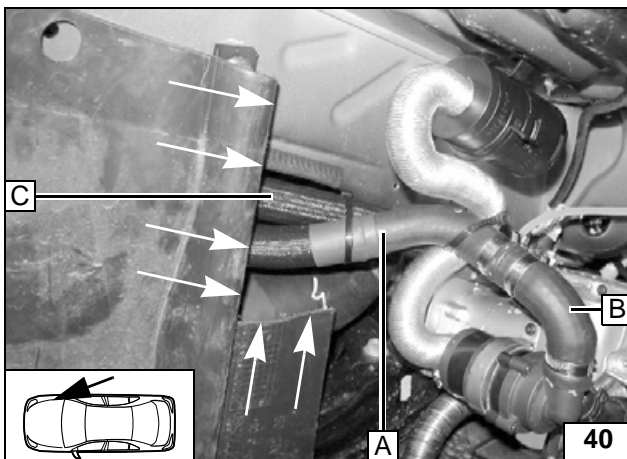
(1) Hose section of heat exchanger inlet



**Conne-
ction on
heat ex-
changer in-
let**



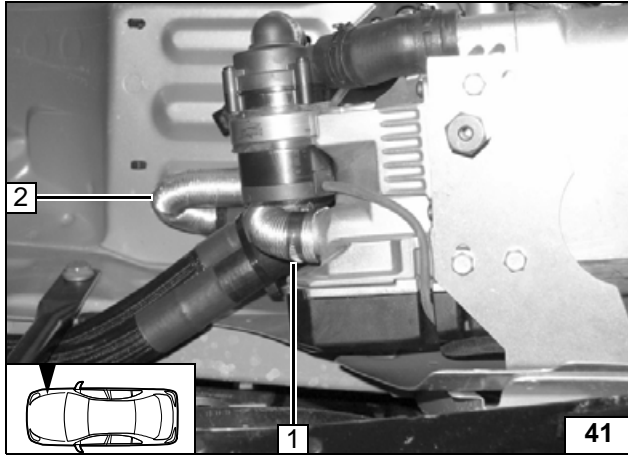
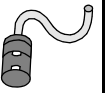
**Aligning
coolant
hoses**



Cut out wheel well trim in the area of the marking.

**Mounting
wheel well
trim**

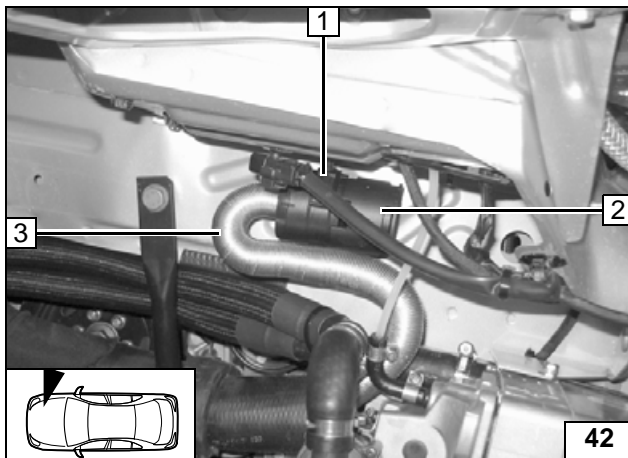




Combustion air

- (2) Combustion-air intake pipe
- (1) 27 mm dia. hose clamp

Mounting combustion air pipe

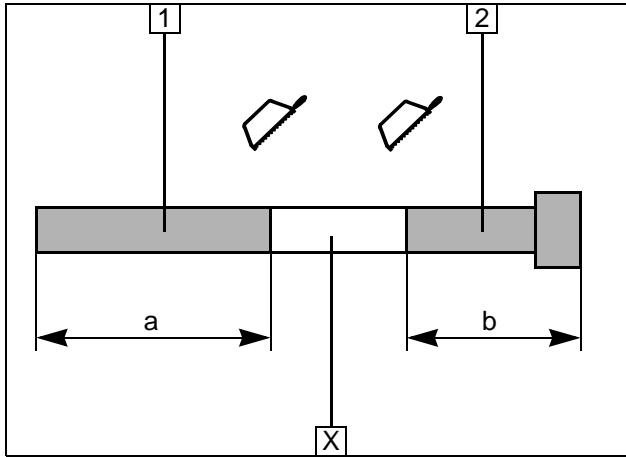


Observe installation position of combustion-air intake silencer, see "Installation Instructions".

- (3) Combustion air pipe
- (1) Retaining clip in existing hole
- (2) Combustion-air intake silencer



Mounting silencer

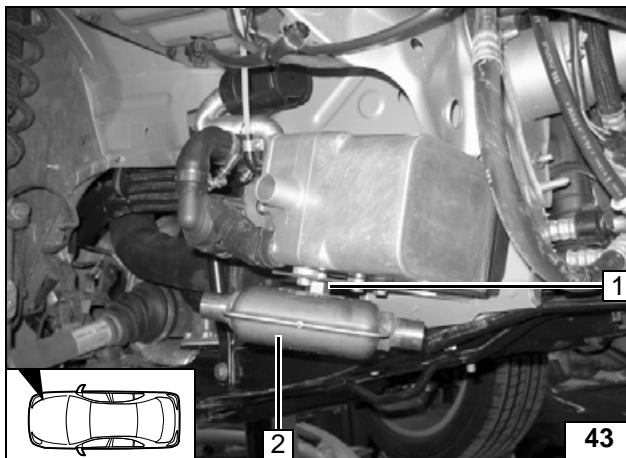


Exhaust gas

- (1) Exhaust pipe
a = 270 mm
- (2) Exhaust end section
b = 320 mm

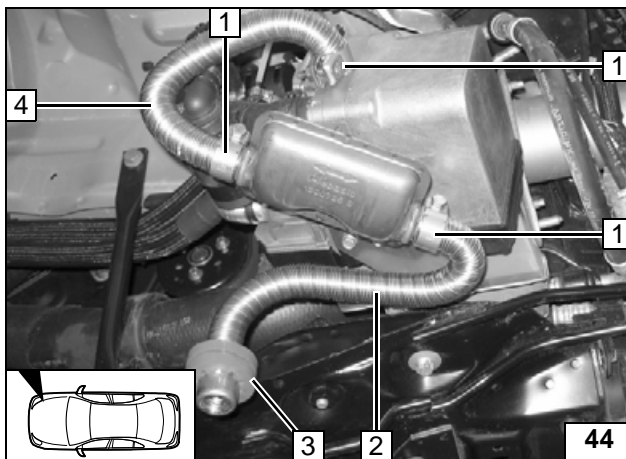
Discard section X

Preparing exhaust pipe



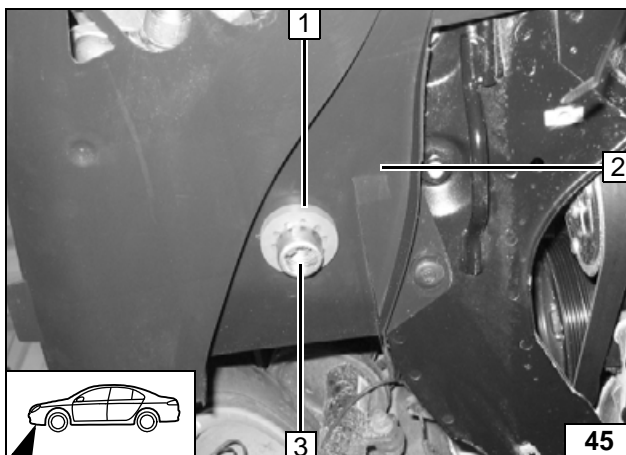
- (2) Silencer, M6x16 bolt, spring lockwasher on spacer nut
- (1) Pre-mounted spacer nut

Mounting silencer



- (4) Exhaust pipe
- (2) Exhaust end section
- (1) Hose clamp [3x]
- (3) Position red (rt) rubber isolator

Mounting exhaust system



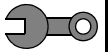
42 mm dia. hole in under-ride protection at position 3.

Position red rubber isolator 1 on exhaust end section 3 from below, then insert with groove in the under-ride protection 2. Align end cap of exhaust end section 3 flush on rubber isolator 1. Check the position of the components; adjust if necessary. Check that they have freedom of movement.

- (2) Under-ride protection
- (3) Exhaust end section
- (1) Rubber isolator

Mounting under-ride protection



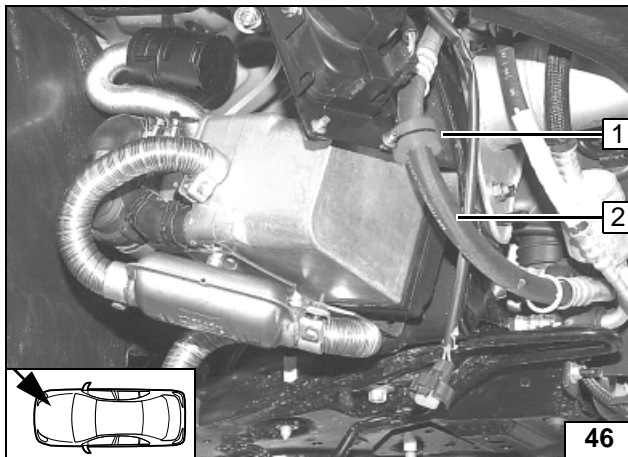


Final Work

WARNING!

Mount removed parts in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate all loose wires 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.**
- **Adjust digital timer, teach Telestart transmitter**
- **Make settings on A/C control panel according to the "Operating Instructions for End Customer".**
- In vehicles from 10/2005, switch A/C control panel with vehicle diagnosis to **parking heater mode**
- In vehicles before 10/2005, the **flap of air distribution is in the footwell**
- Parking heater mode is not possible in the drive mode. Hence, switch the heater off via the controls without fail, as the default heating time has possibly not expired yet.
- **Place the "Switch off parking heater before refuelling" signboard near the filler neck.**
- **For initial start-up and function check, see installation instructions**



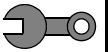
Cut out red (rt) rubber isolator, slide on A/C line and fasten in the groove with cable tie.

- 1 Red (rt) rubber isolator with groove
- 2 A/C line

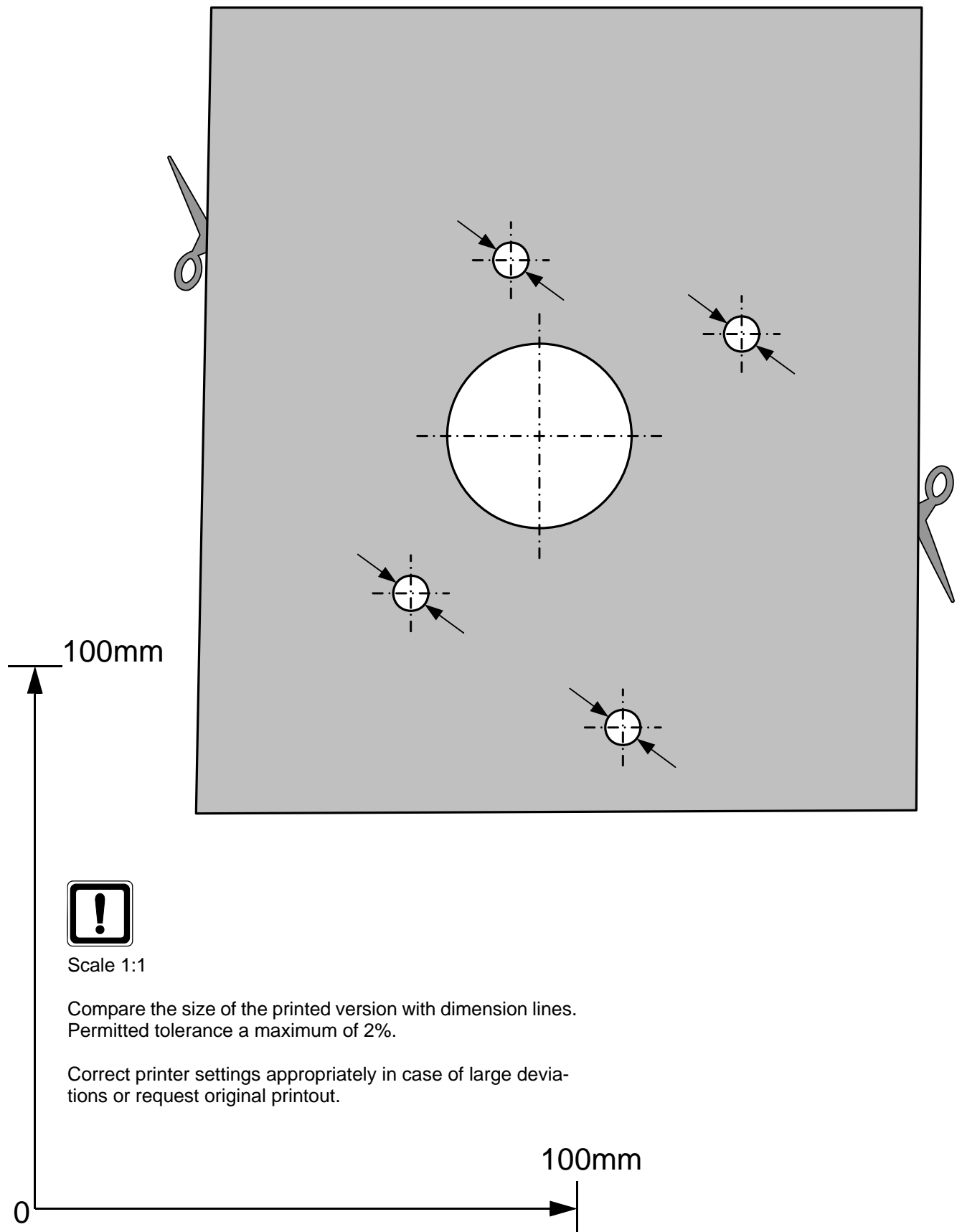
Mounting rubber iso-lator



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.com>



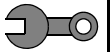
Template for bracket



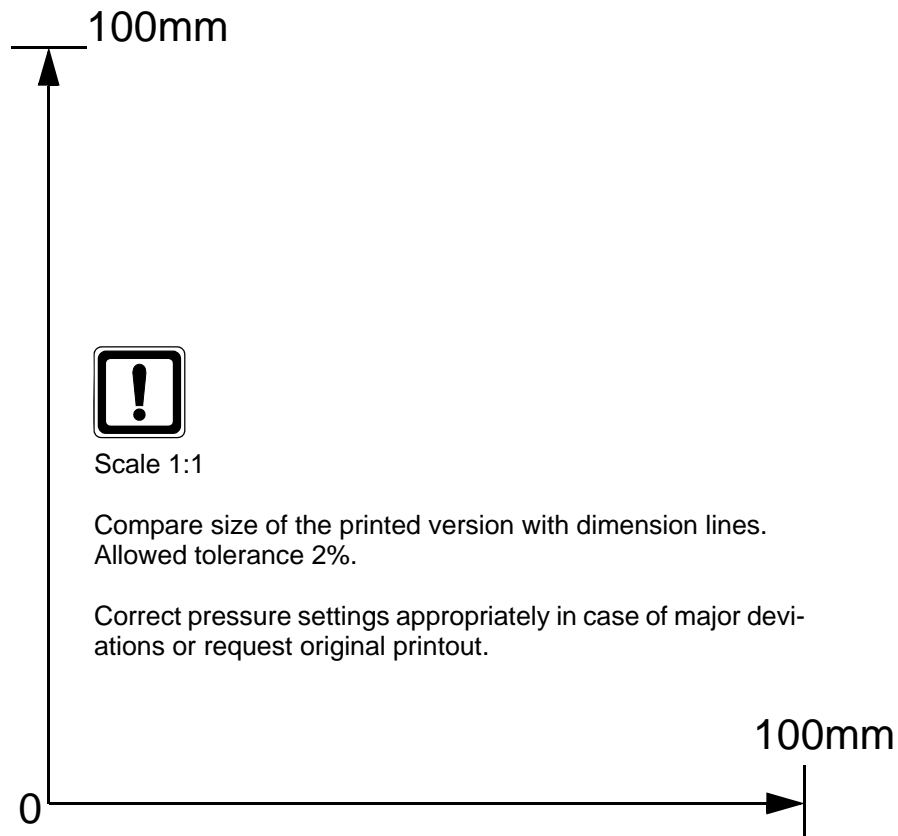
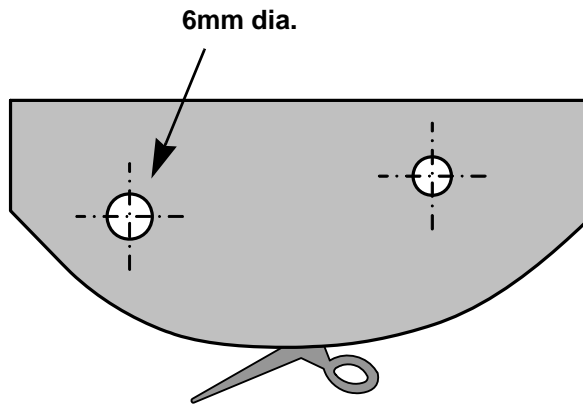
Scale 1:1

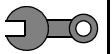
Compare the size of the printed version with dimension lines.
Permitted tolerance a maximum of 2%.

Correct printer settings appropriately in case of large deviations or request original printout.



Template for fuel-tank sending unit

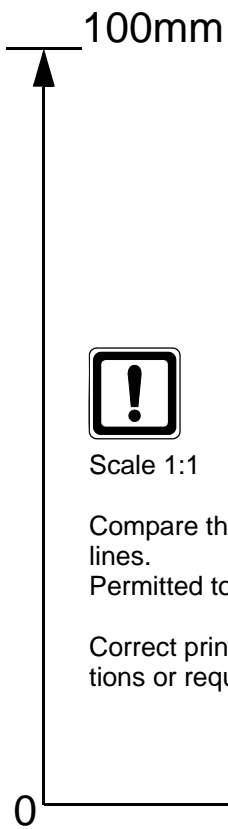
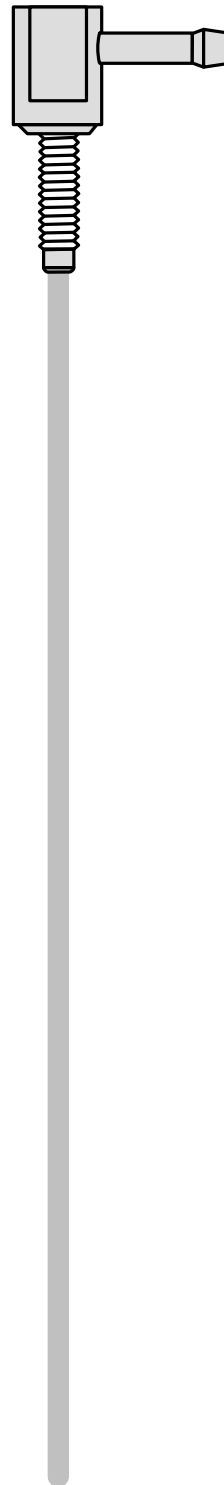




Template for fuel standpipe

Front view

Side view



Scale 1:1

Compare the size of the printed version with dimension lines.
Permitted tolerance a maximum of 2%.

Correct printer settings appropriately in case of large deviations or request original printout.

Operating Instructions for End Customer

Please remove page and add to the vehicle operating instructions.

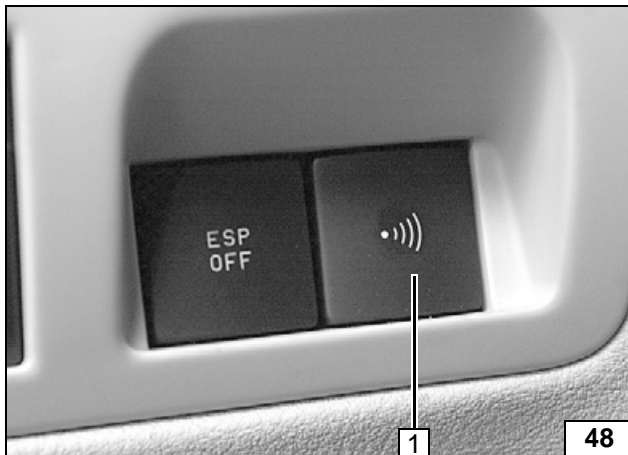
In vehicles before 10/2005, the flap of air distribution is in the footwell

Parking heater mode is not possible when driving. Hence, switch the heater off via the controls without fail, as the default heating time has possibly not expired yet.

Before parking the vehicle, make the following settings:



- (2) Air flow on "Defrost"
- (1) Temperature right and left on 29°C



During the heating operation, passenger compartment monitoring must be deactivated according to the manufacturer's instructions.

- (1) Switching off passenger compartment monitoring



Settings



Switch-off function passenger compartment monitoring