

Water Heater Unit



Thermo Top C Additional Heater ^{e1} 00 0002

Installation Instructions

Jeep Compass

Gasoline

from Model Year 2007

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.

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

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	Type	EG-BE No./ABE
Daimler Chrysler (USA)	Compass	pk	e11*2001/116*0142...

Engine type	Engine model	Output in kW	Displacement in cm ³
Code: B	Gasoline	125	2359

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 Unit/Installation Kit

Quantity	Description	Order No.:
1	LU Thermo Top C (B) with digital timer	See price list
1	LU Thermo Top C (B) with Telestart	See price list
1	Installation kit for Jeep Compass Gasoline	1312899A

Foreword

These installation instructions apply to Jeep Compass Gasoline vehicles - for validity, see page 2 - from model year 2007 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 the "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 should be fitted with edge protectors (split-open plastic hose).

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

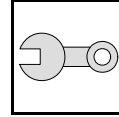
Special Tools

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

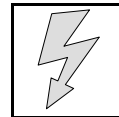
Explanatory Notes on Document

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.

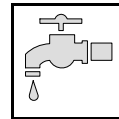
Mechanical system



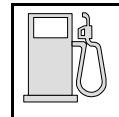
Electrical system



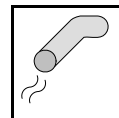
Water



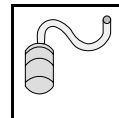
Fuel



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.



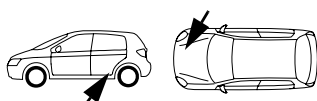
Specific risk of fire or explosion.



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.

All dimensions are in mm!

Tightening torque of hose clamps = 2.0 + 0.5 Nm!

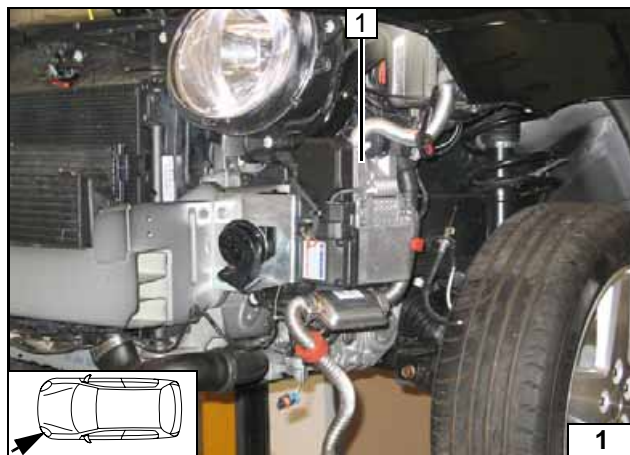
Tightening torque of Ejet screws, Ejet studs = 10 Nm!

Preliminary Work

WARNING!

- Open the fuel tank cap, ventilate the 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.
- Remove the battery.
- Remove the entire air filter.
- Remove the lower engine cover.
- Remove the bumper.
- Remove the left wheel well trim.
- Remove the rear left underride protection.
- Remove the seat bench of the rear bench seat.
- Open the left tank mounting service lid.
- Remove the left fuel-tank sending unit according to the manufacturer's specifications.
- Remove the lower left instrument panel trim.
- Remove the lower steering column trim.
- Remove the trim above the pedals.
- Remove the trim below the glove compartment.

Remove page 26 "Operating Instructions for End Customer" and add to the vehicle operating instructions.



Heater unit installation location

- 1 Heater unit

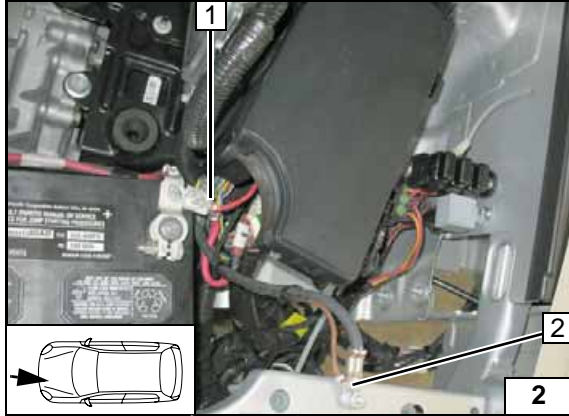
Installation location



Electrical system

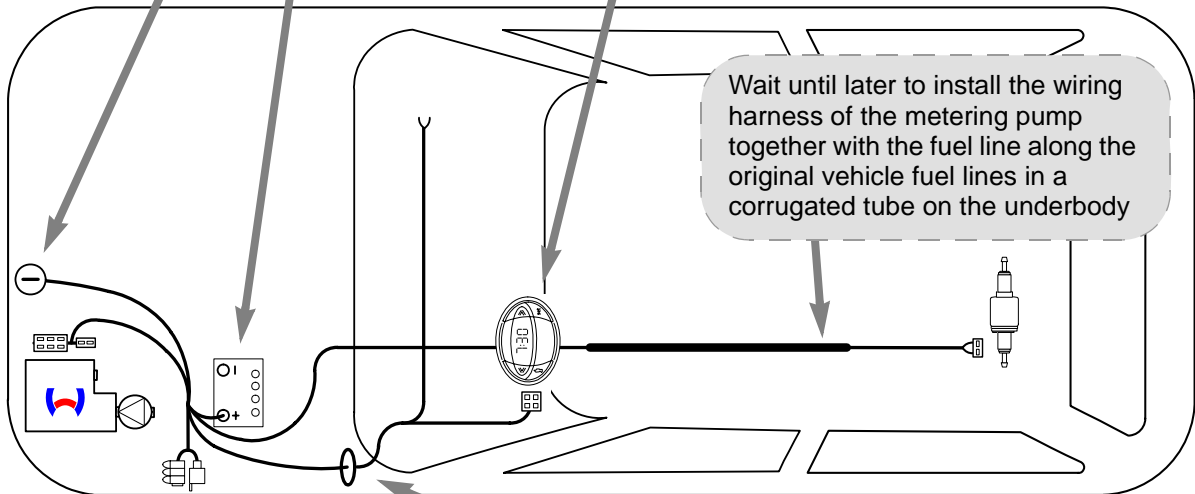
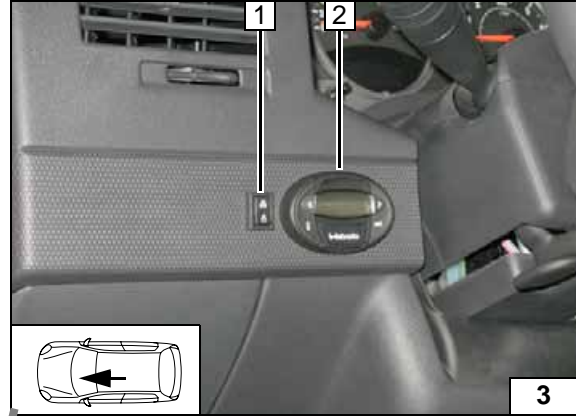
Power supply

- 1 Positive battery terminal
- 2 Ground point

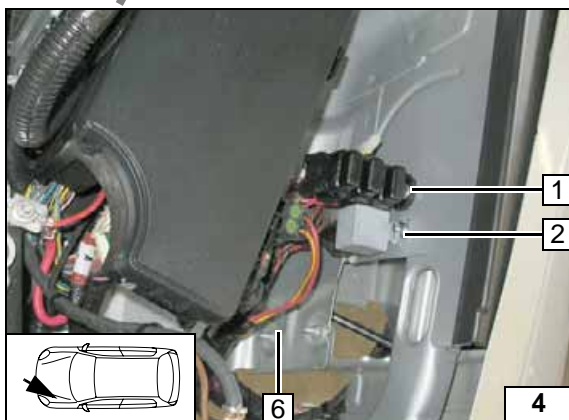


Digital timer

- 1 Summer/winter switch option
- 2 Digital timer

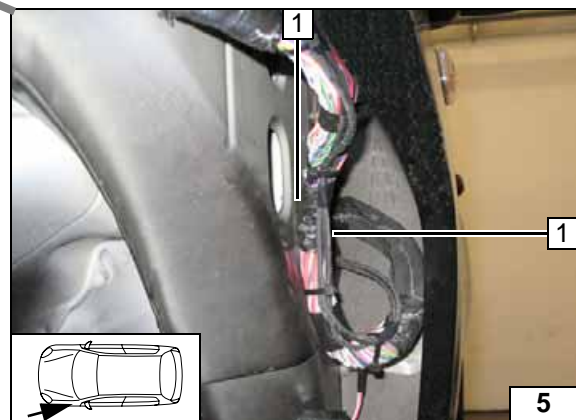


Wiring harness installation diagram



Fuse holder, relay K3

- 1 Fuse holder, 4.5 mm dia. hole, 5.5x13 self-tapping screw
- 2 K3 relay, 4.5 mm dia. hole; 5.5x13 self-tapping screw

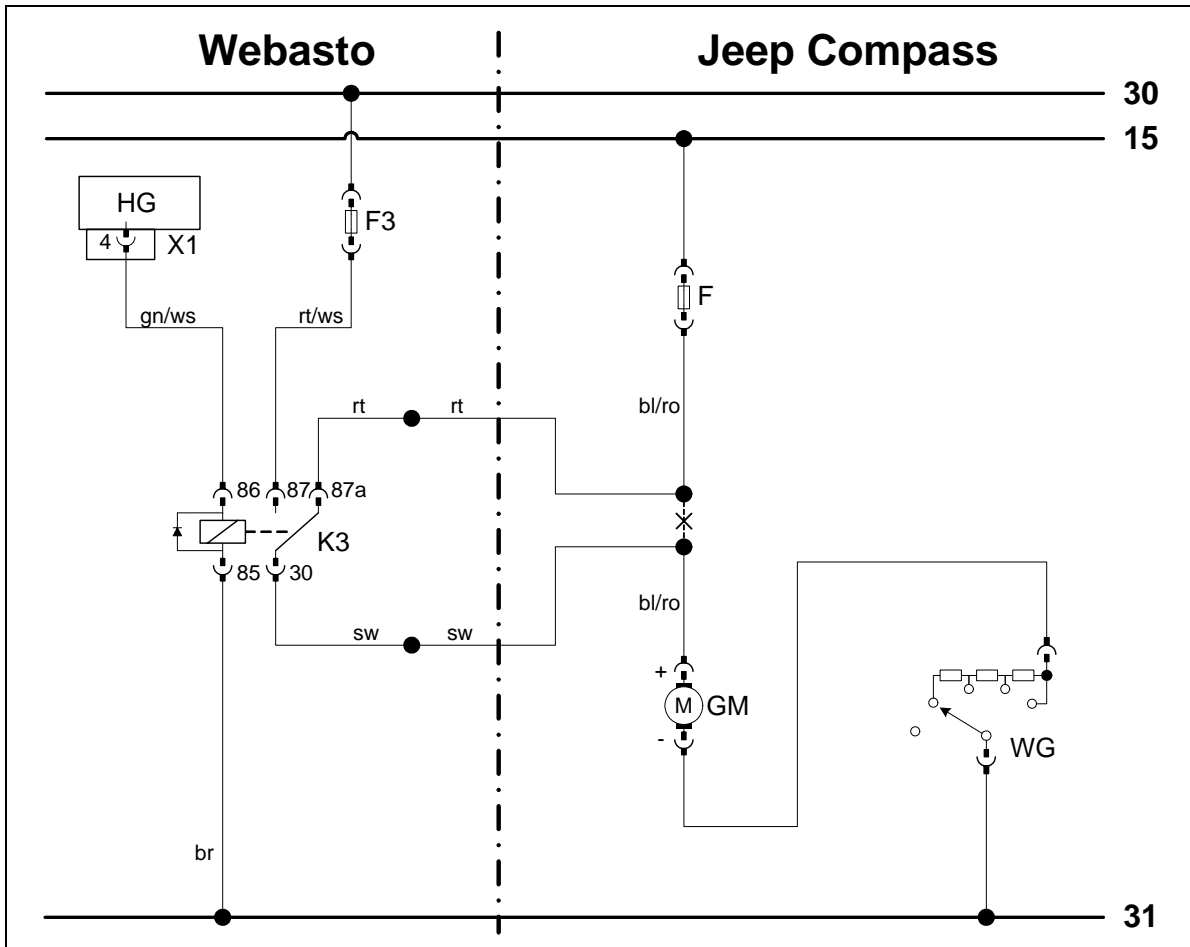


Wiring harness pass through

- 1 Protective rubber plug



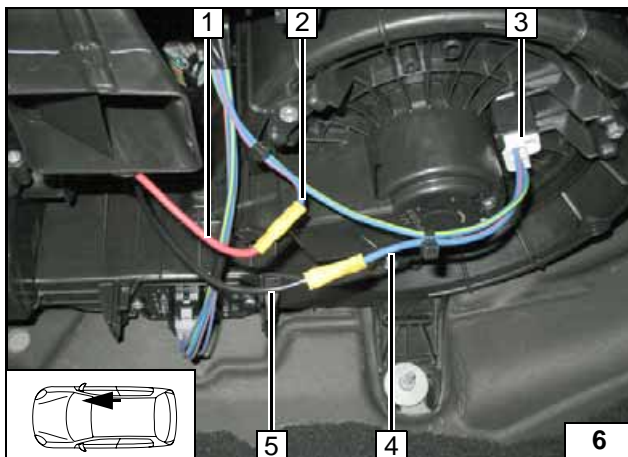
Fan controller for manual air conditioning



Wiring diagram

Webasto components		Vehicle components		Colors and symbols	
HG	Heater unit TT-C	GM	Fan motor	rt	red
X1	6-pin heater unit connector	WG	Resistor group	ws	white
F3	Fuse, 25 A	F	Fan fuse	sw	black
K3	Fan relay			br	brown
				gn	green
				X	Cutting point
				Wiring colors may vary.	

Legend

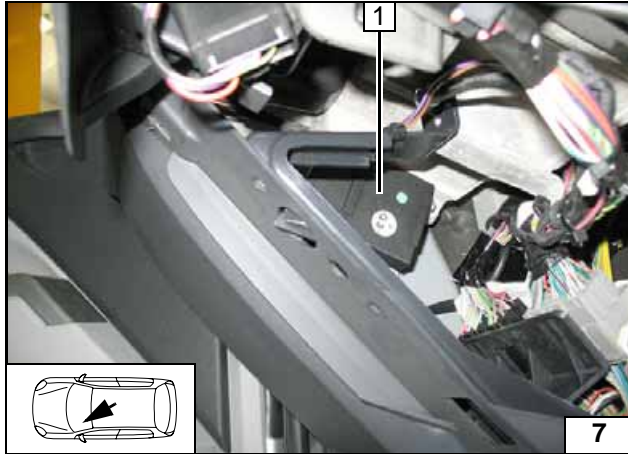


Connection to 2-pin connector 3 from the blower motor.
Produce connections as shown in wiring diagram.

- 1 Red (rt) wire from K3/87a
- 2 Blue/red (bl/rt) wire of fan fuse
- 4 Blue/red (bl/rt) wire of fan motor
- 5 Black (sw) wire from K3/30



Connecting fan-motor

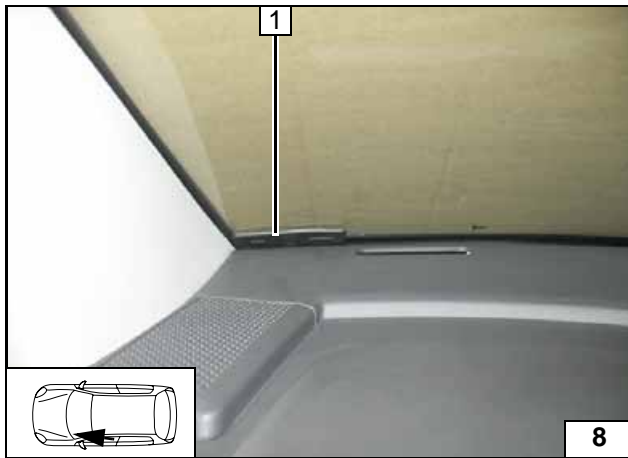


Remote option (Telestart)

1 Fasten receiver with adhesive tape

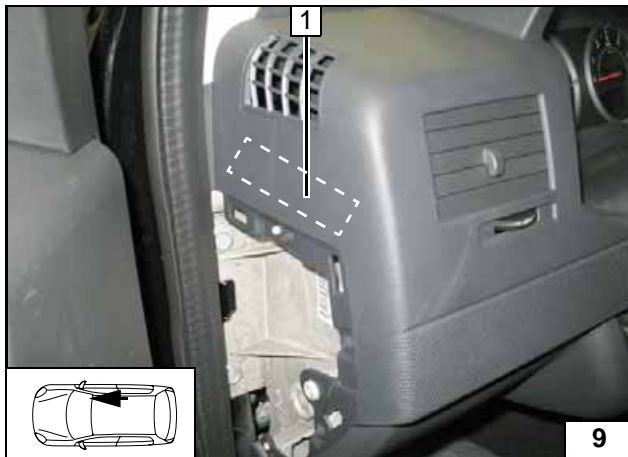


Installing receiver



1 Antenna

Installing antenna

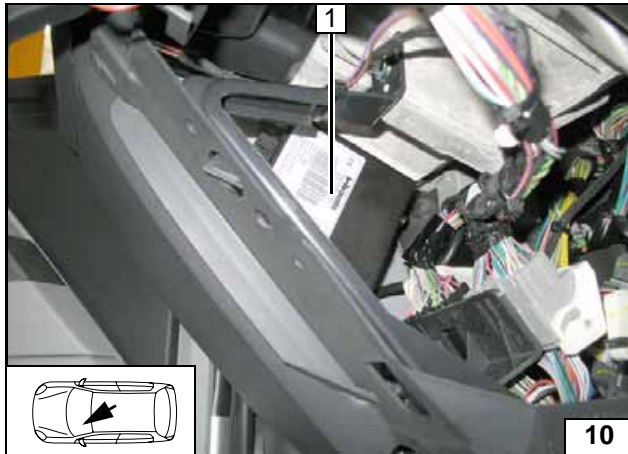


Temperature sensor for HTM100 only

Fasten temperature sensor 1 with adhesive tape on air duct behind instrument panel trim (see marking).



Installing temperature sensor

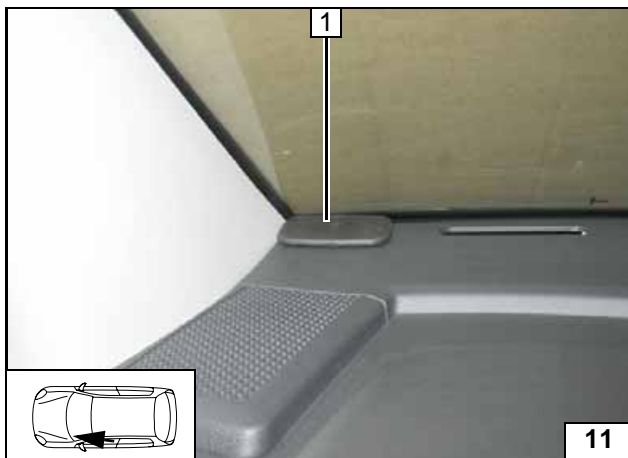


Remote option (Thermo Call)

1 Fasten receiver with adhesive tape

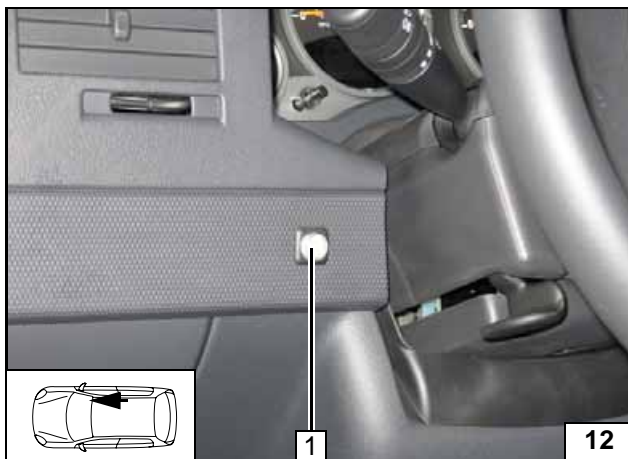


Installing receiver



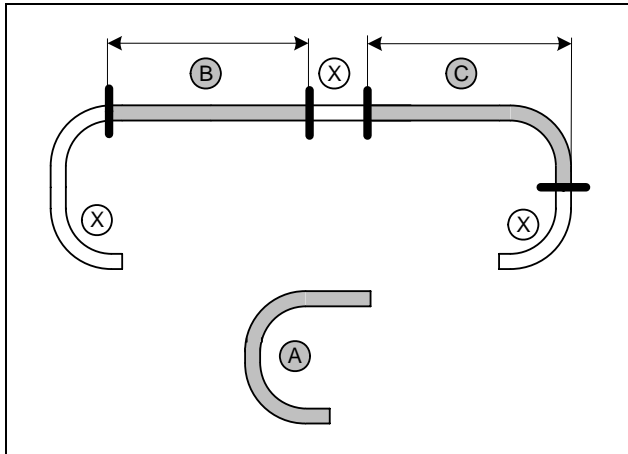
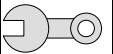
1 Antenna

Installing antenna



1 Pushbutton

Installing push button

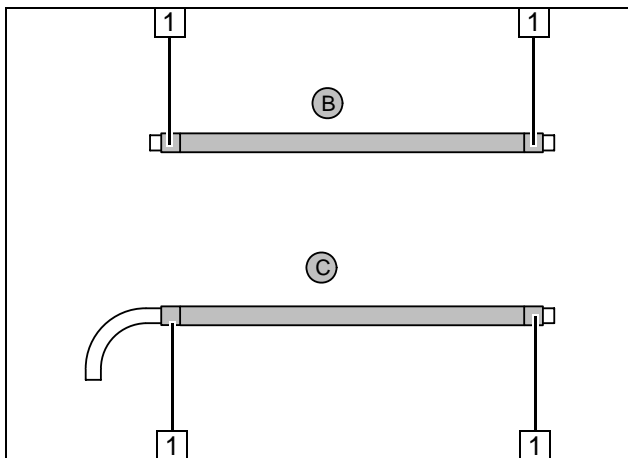


Preparing installation

A = Molded hose
 b = 1090
 c = 1060

Discard section X

Cutting coolant hoses to length

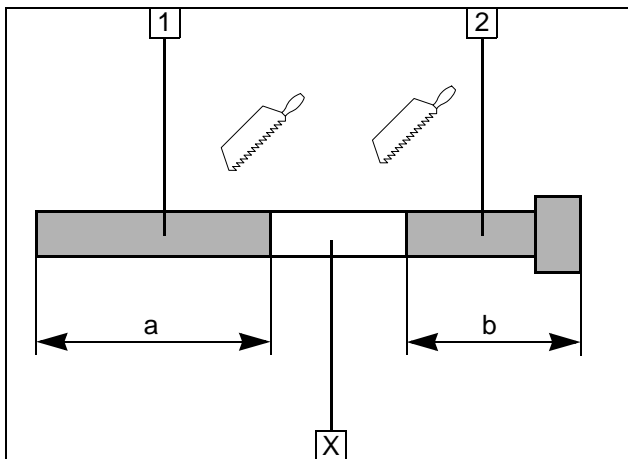


Push braided protection hoses onto hose B and C.
 Cut heat shrink plastic tubing to length.

1 25 mm long heat shrink plastic tubing [4x]



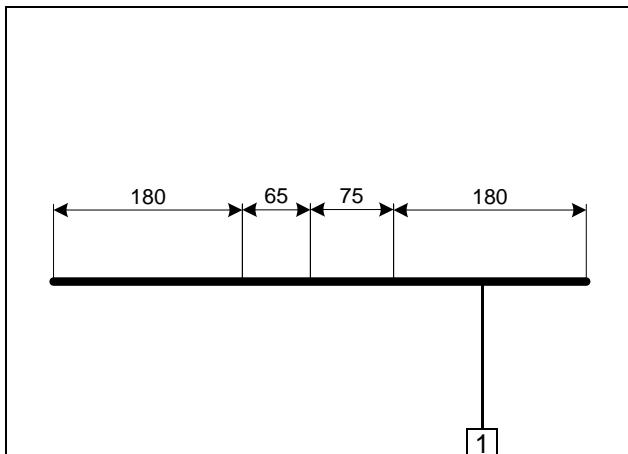
Preparing coolant hoses



1 Exhaust pipe
 a = 210
 2 Exhaust end section
 b = 450

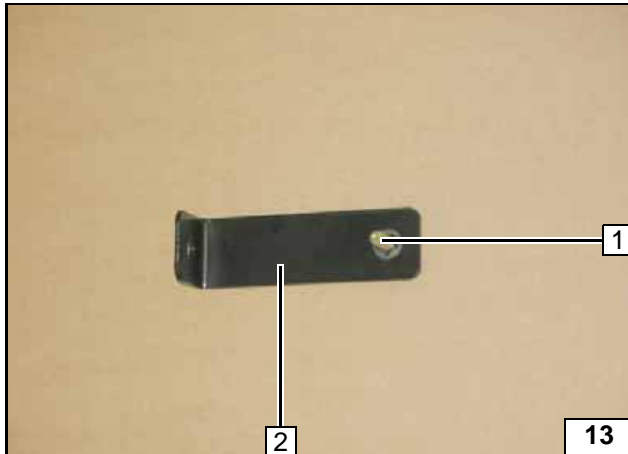
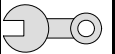
Discard section X

Preparing exhaust pipe



1 Edge protection

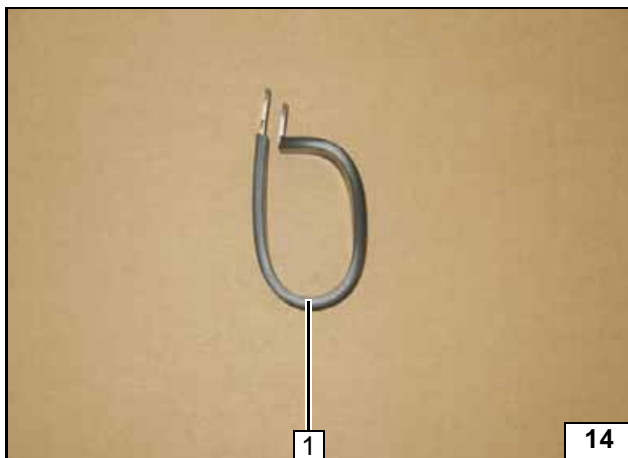
Cutting edge protection to size



- 1 M6x20 bolt, pin lock
- 2 Bracket



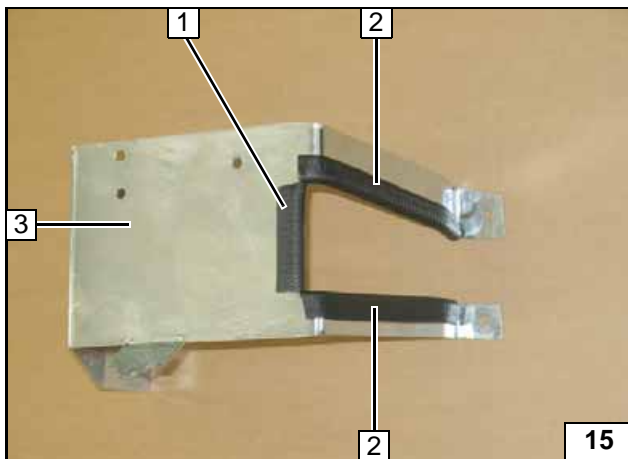
Preparing bracket for coolant hoses



Shape 48 mm dia. rubber-coated p-clamps 1 [2x] provided as shown.



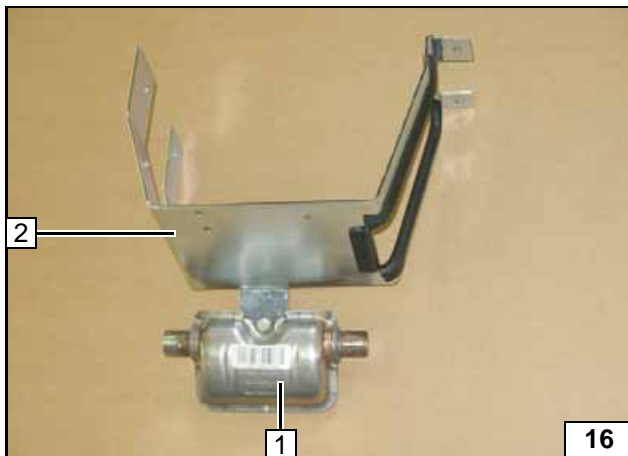
Preparing rubber-coated p-clamps



Preparing installation location

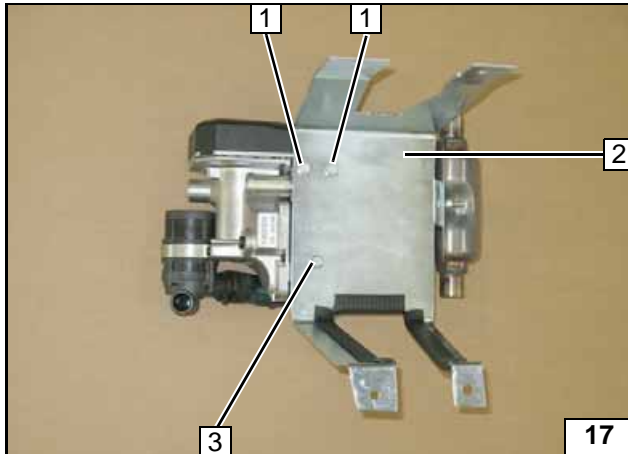
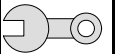
- 1 Edge protection 65
- 2 Edge protection 180 [2x]
- 3 Bracket

Preparing bracket



- 1 Exhaust muffler, M6x20 bolt, flanged nut
- 2 Bracket

Preparing bracket

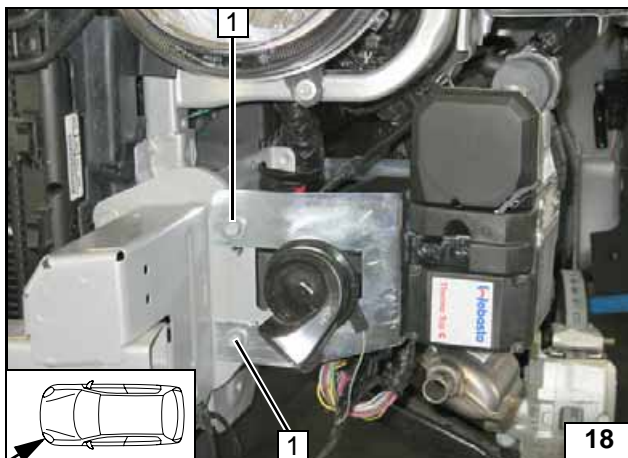


Insert two washers between heater unit and bracket 2 at position 3.

- 2 E-jot screw [2x]
- 3 E-jot screw, washer [2x]

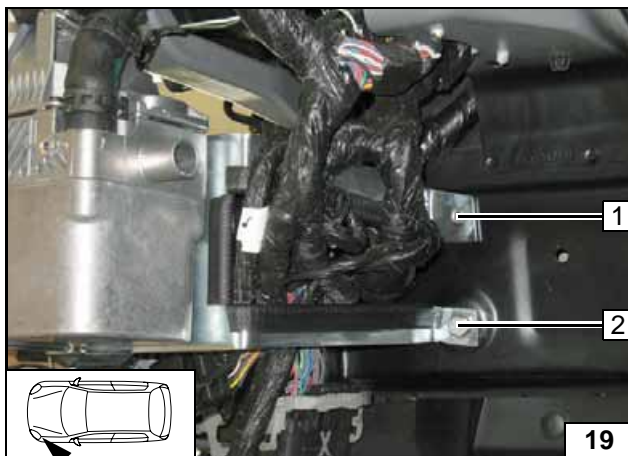


Pre-assembly heater unit



- 1 Loosely mount original vehicle bolt [2x].

Loosely mounting heater unit

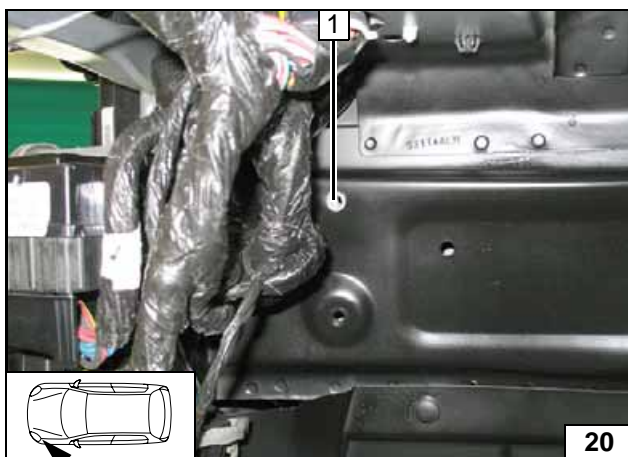


Be carefully not to damage wiring harness of heater unit when inserting!
Remove heater unit after copying 9.1 mm dia. hole pattern 1.

- 2 Loosely mount M8x20 bolt, spring lockwasher

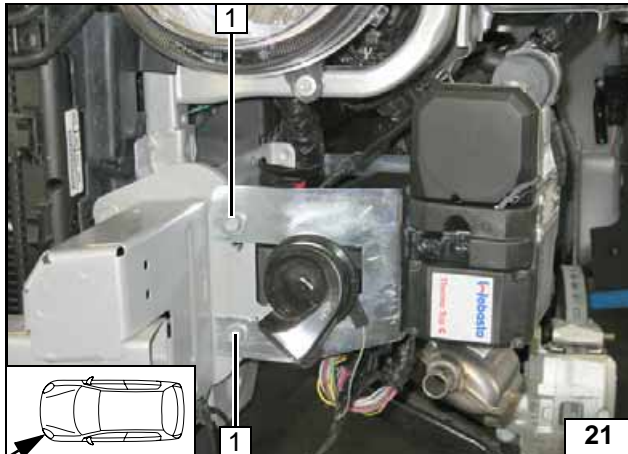
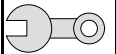


Copying hole pattern



- 1 9.1 mm dia. hole; M6 rivet nut

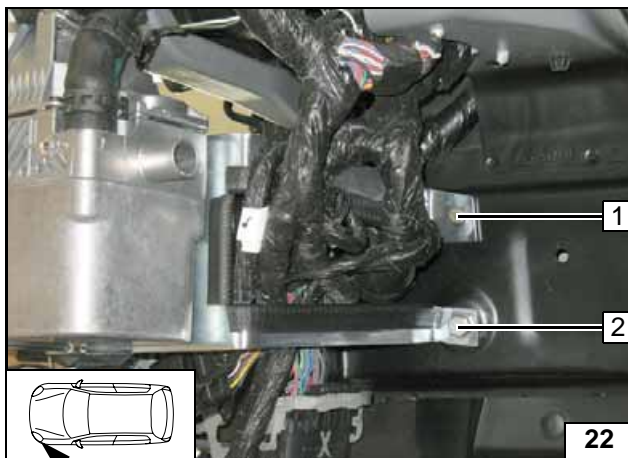
Installing rivet nut



Installing heater unit

- 1 Original vehicle bolt [2x]

Installing bracket

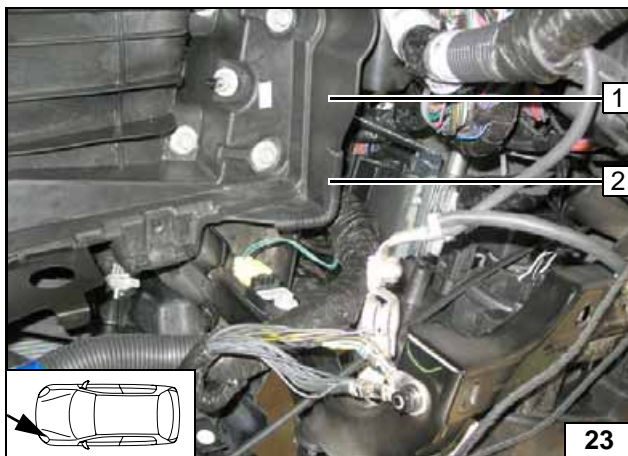


Be carefully not to damage wiring harness of heater unit when inserting!

- 1 M6x20 bolt, spring lockwasher
- 2 M8x20 bolt, spring lockwasher



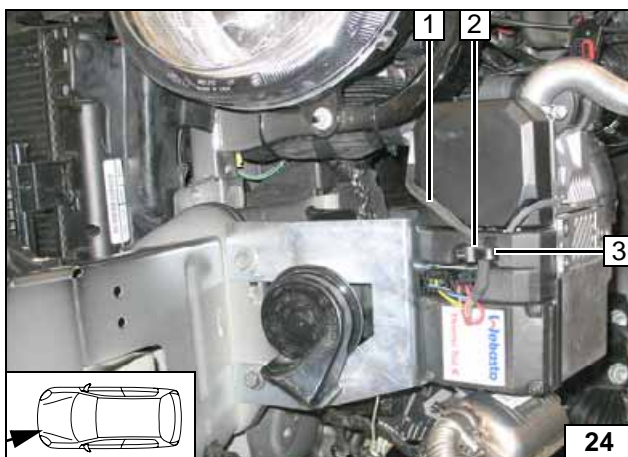
Installing bracket



Install 75 mm edge protection 2 on battery carrier 1.



Installing edge protection

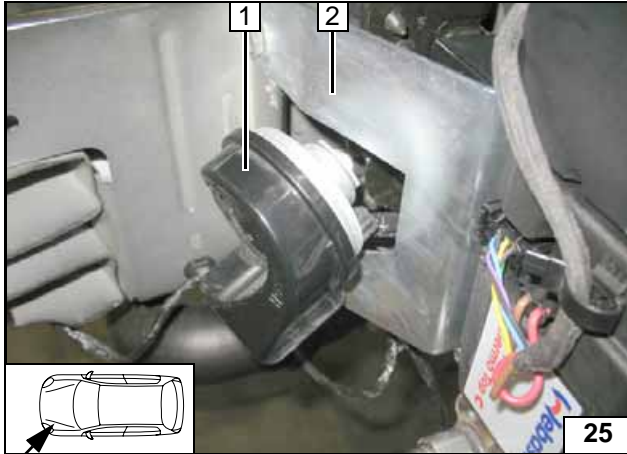
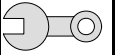


Push through perforation of heater unit cover 2 and insert clip-type cable tie 3.

- 1 Wiring harness of heater unit



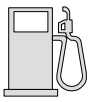
Mounting wiring harness of heater unit



Ensure proper freedom of movement of horn 1 to bracket 2.



Aligning horn



Fuel

CAUTION!

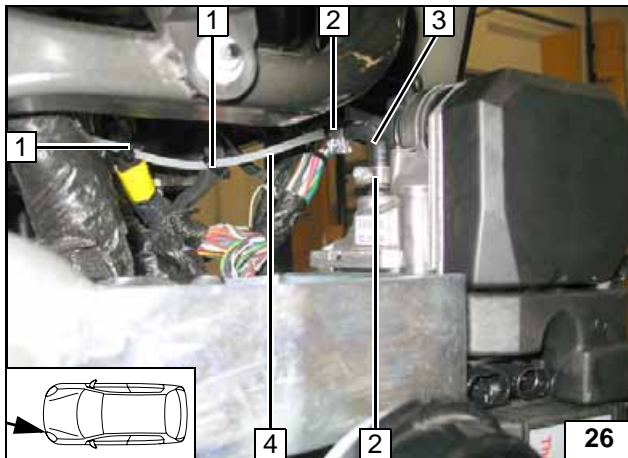
Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

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.

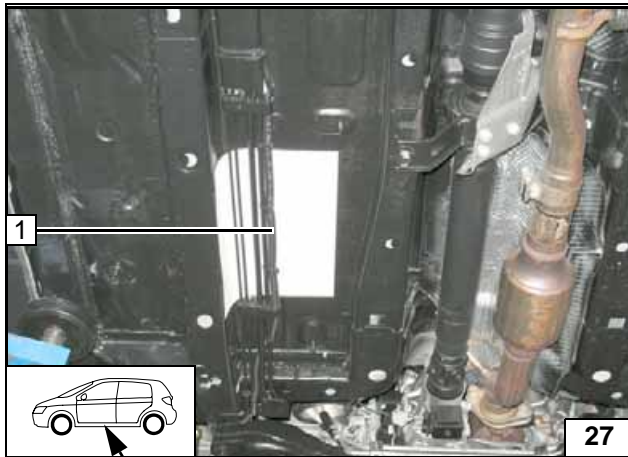
WARNING!

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



- 1 Cable tie [2x]
- 2 10 mm dia. clamp [2x]
- 3 90° molded hose
- 4 Fuel line

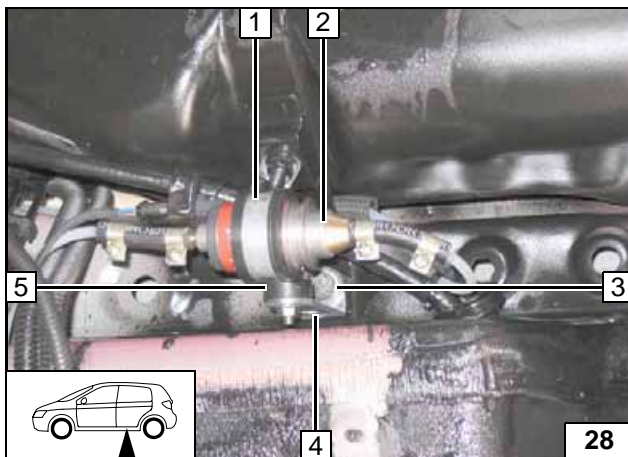
Con-
necting
heater unit



Route fuel line and wiring harness of metering pump 1 in corrugated tube above original vehicle fuel line and secure with cable ties.



Installing
lines

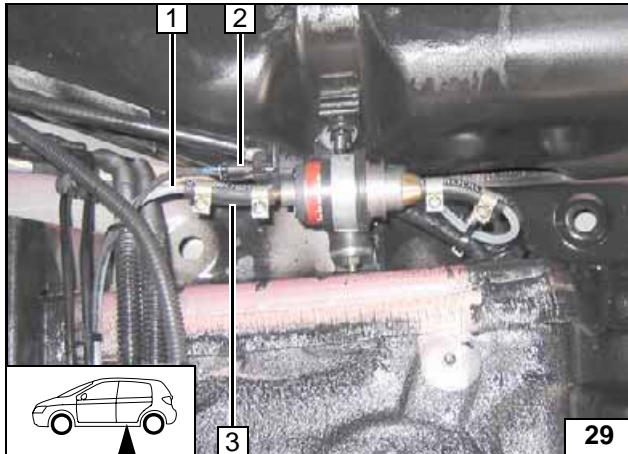


Drill and bend perforated bracket 4 in accordance with template.

- 1 Rubber-coated pipe clamp
- 2 Metering pump
- 3 Original vehicle bolt
- 5 Silent block, flanged nut [2x]



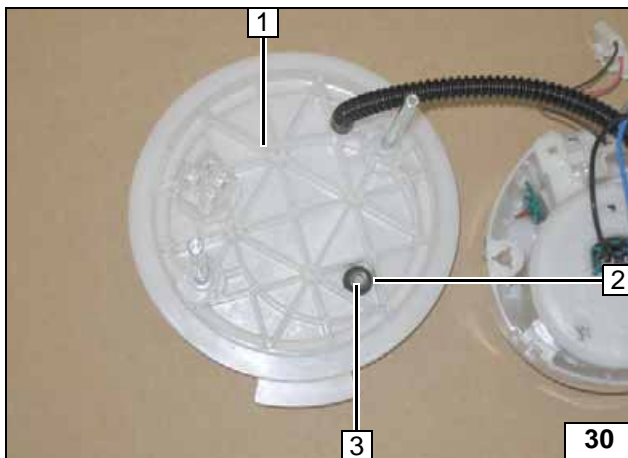
Installing
metering
pump



- 1 Fuel line
- 2 Wiring harness of metering pump, connector mounted
- 3 Hose section, 10 mm dia. hose clamp [2x]



Connecting metering pump



Remove fuel-tank sending unit according to manufacturer's specifications. Remove upper section.

- 1 Upper section of fuel-tank sending unit
- 2 Position flanged nut between bars
- 3 Copy hole pattern, 6 mm dia. hole



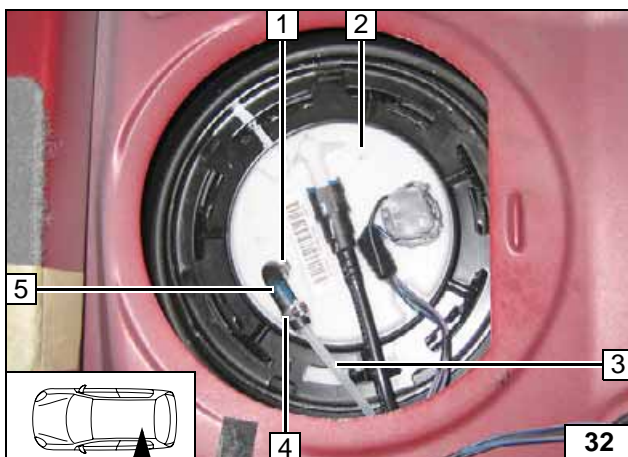
Removing fuel



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



Installing fuel standpipe

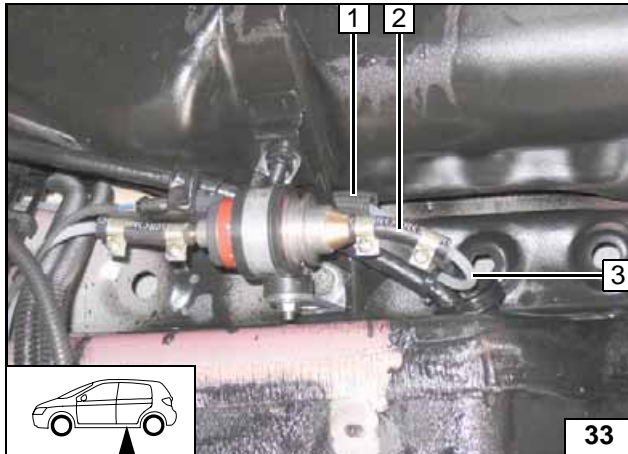
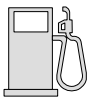


Install fuel-tank sending unit 2 in accordance with manufacturer's instructions. Shorten molded hose 5 by 10 mm at 3.5 mm dia. and slid onto fuel standpipe.

- 1 9 mm dia. Caillau clamp
- 3 Fuel line
- 4 10 mm dia. Caillau clamp

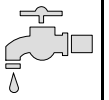


Connecting fuel line



- 1 Slide protective hose onto fuel line
- 2 Hose section, 10 mm dia. hose clamp [2x]
- 3 Fuel line

Con-
necting
metering
pump

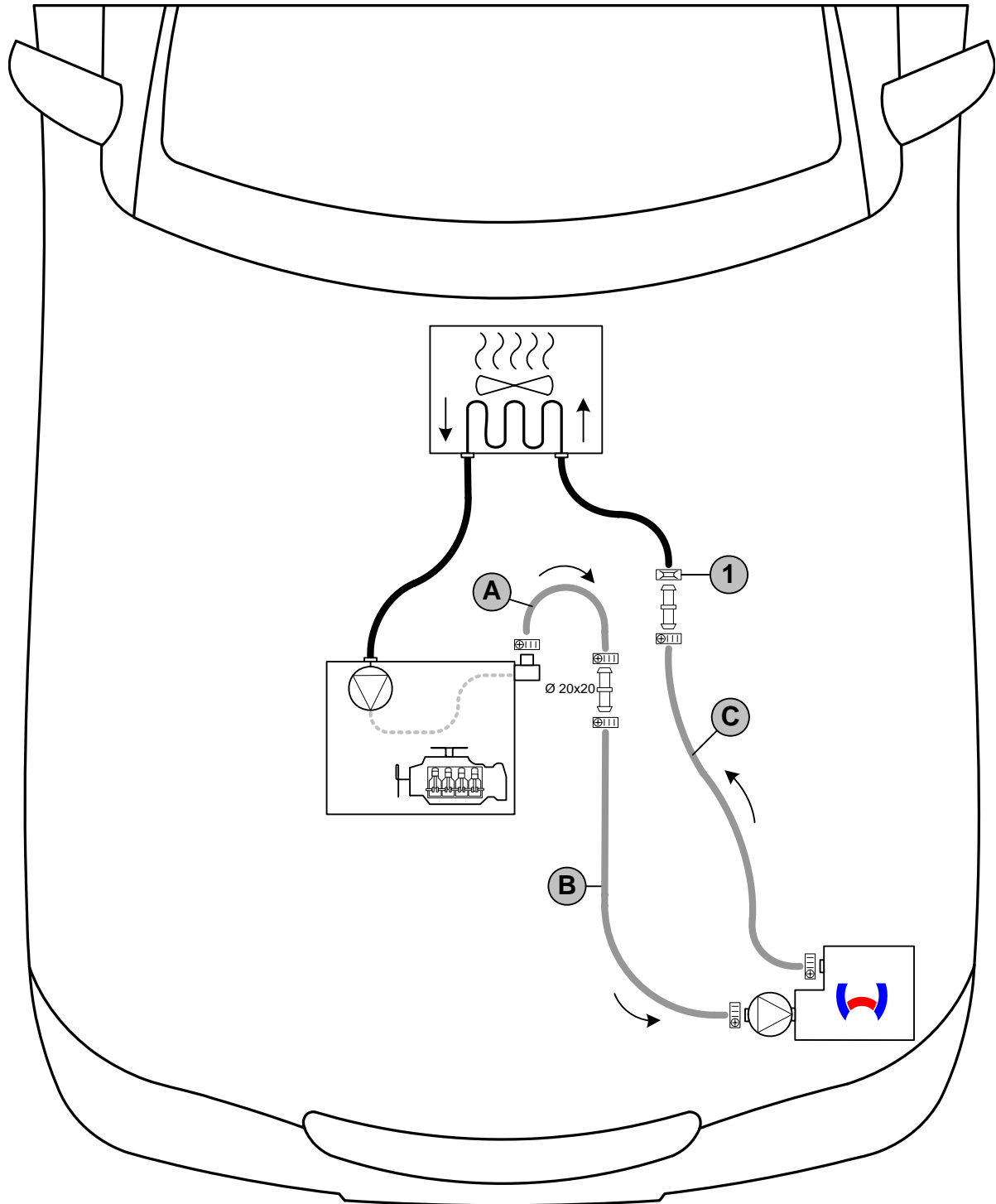


Water




WARNING!

Any coolant running off should be collected using an appropriate container. Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that no other hose can be damaged! When installing the coolant hose, the heater unit must be filled with coolant.

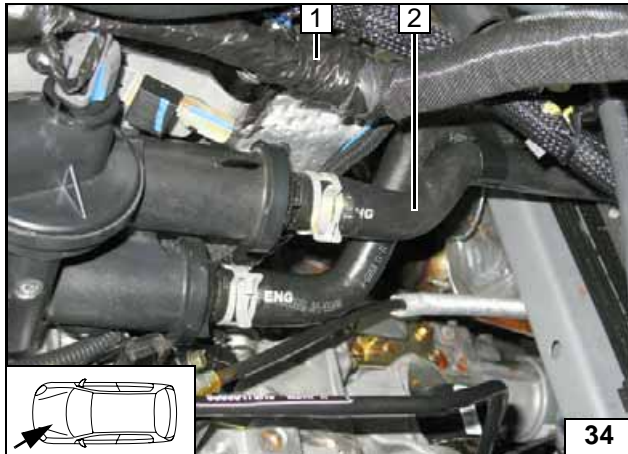
The connection should be "inline" based on the following diagram:



Coolant routing diagram

- 1 = Original vehicle spring clip  .
- All hose clamps  = 20-27 mm dia.!
- All connecting pipes without a specific designation  = dia. 20x22.

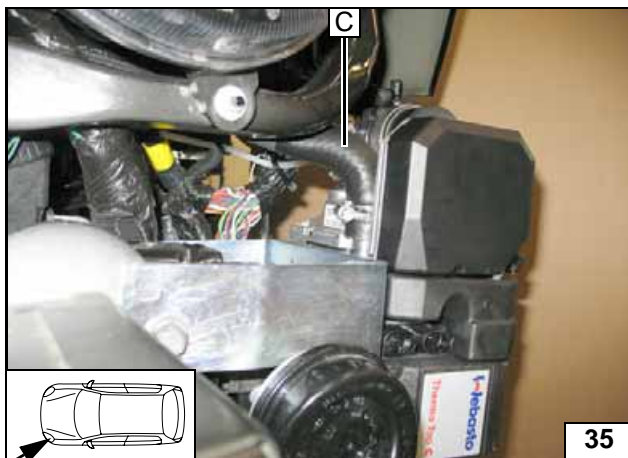




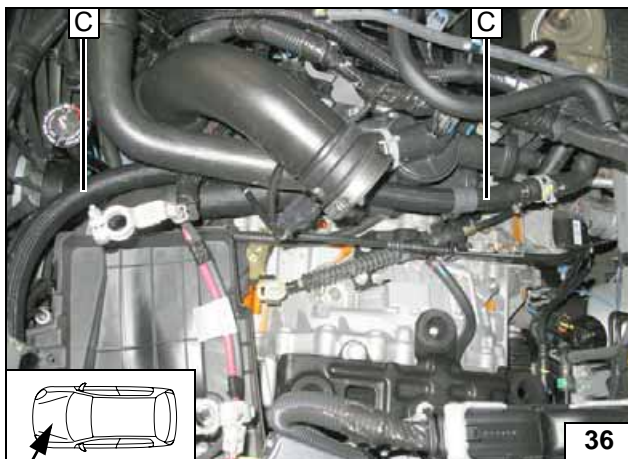
Unclip wiring harness 1.
Pull hose off engine outlet 2; original vehicle clamp will be reused.



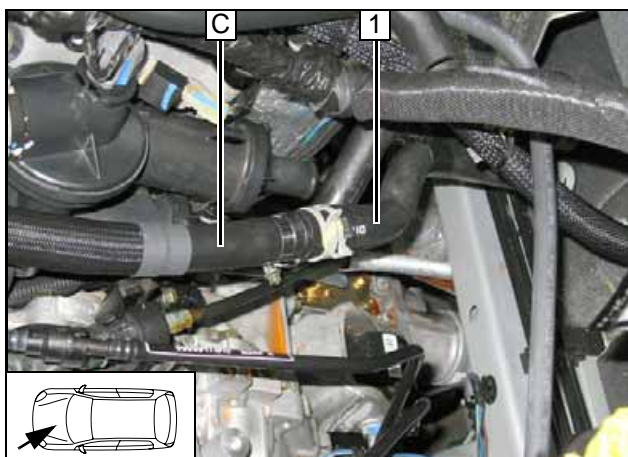
Cutting point



Connecting heater unit

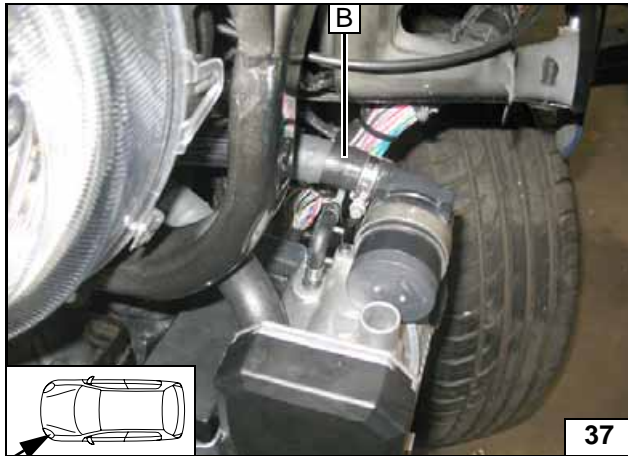


Routing in engine compartment



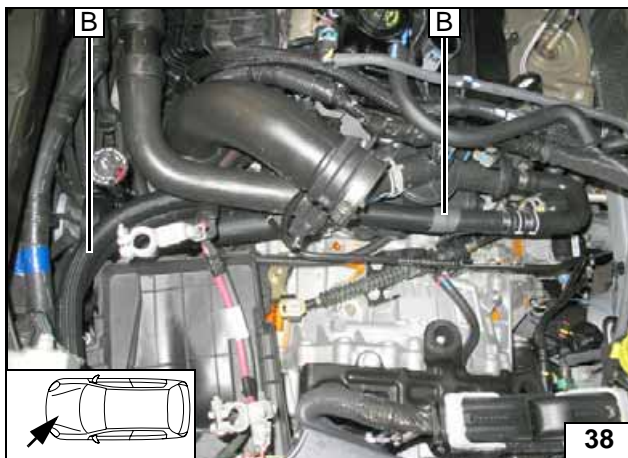
1 Hose on heat exchanger inlet

Connecting heat exchanger inlet



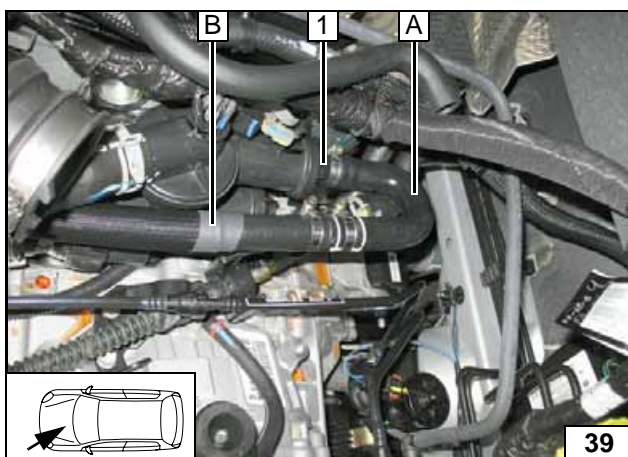
37

Con-necting heater unit



38

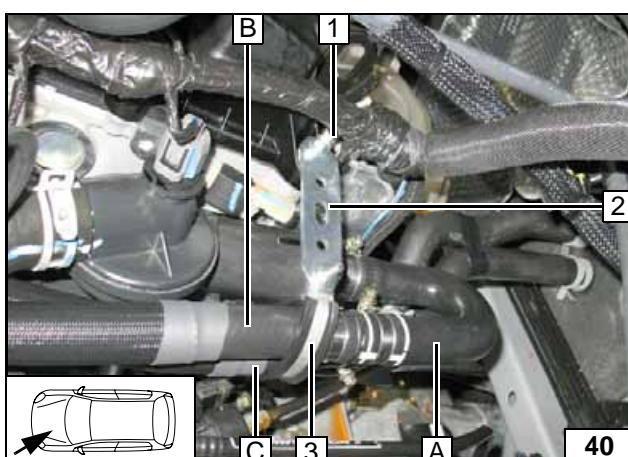
Routing in engine compart-ment



39

1 Connection piece on engine outlet

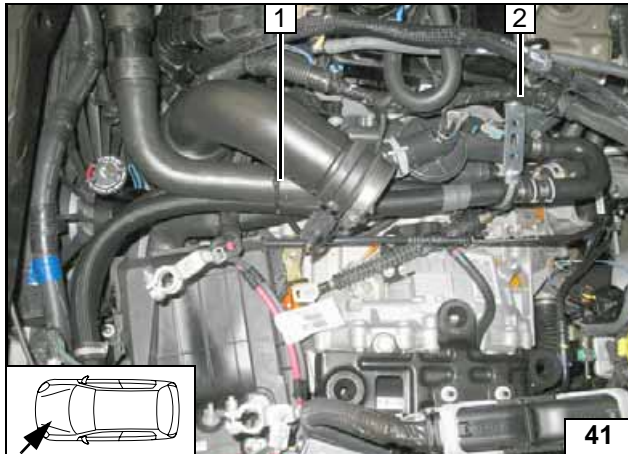
Con-necting engine outlet



40

- 1 Original vehicle stud bolt, flanged nut
- 2 Perforated bracket
- 3 48 mm dia. rubber-coated p-clamp, M6x20 bolt, flanged nut

Fastening hoses

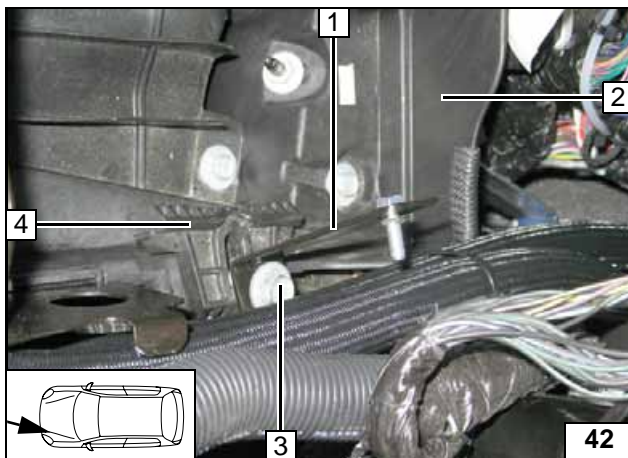


Clip wiring harness **2** onto stud bolt again.

- 1** Cable tie



Routing in engine compartment

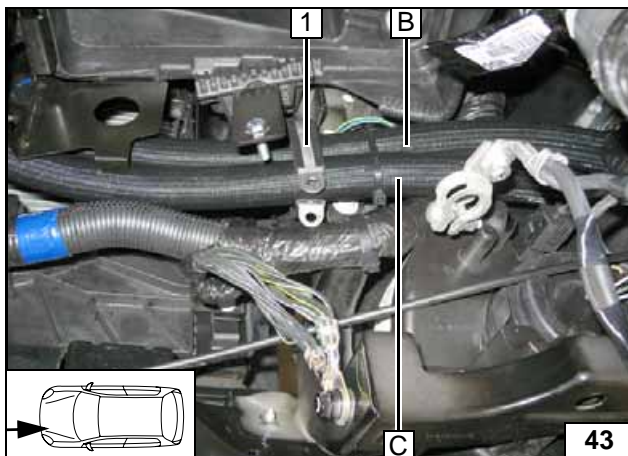


Loosely mount bracket **1** so that battery can be installed later.

- 2** Battery carrier
- 3** Original vehicle bolt
- 4** Battery clamping piece



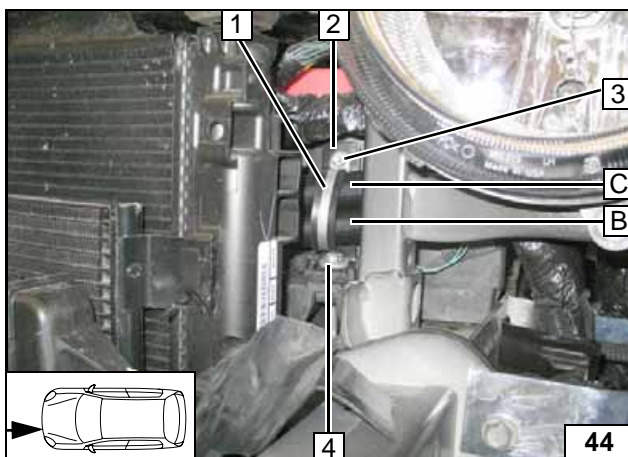
Loosely mount bracket



Position 48 mm dia. rubber-coated p-clamp **1**. Install vehicle battery.

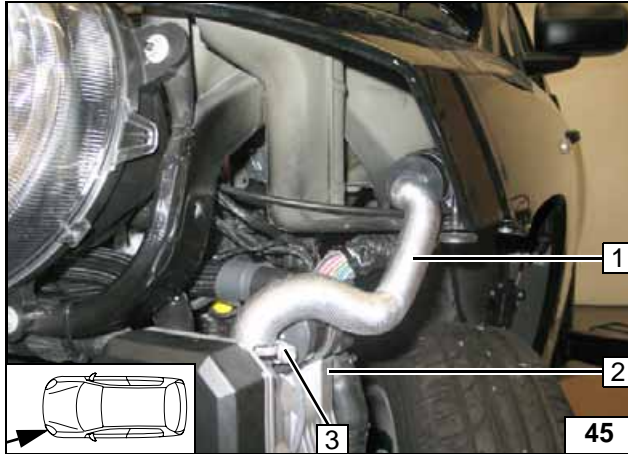
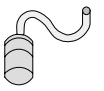


Pre-mounting p-clamp



- 1** 48 mm dia. rubber-coated p-clamp
- 2** Bracket
- 3** Flanged nut, M6x20 bolt premounted
- 4** Original vehicle bolt of battery bracket

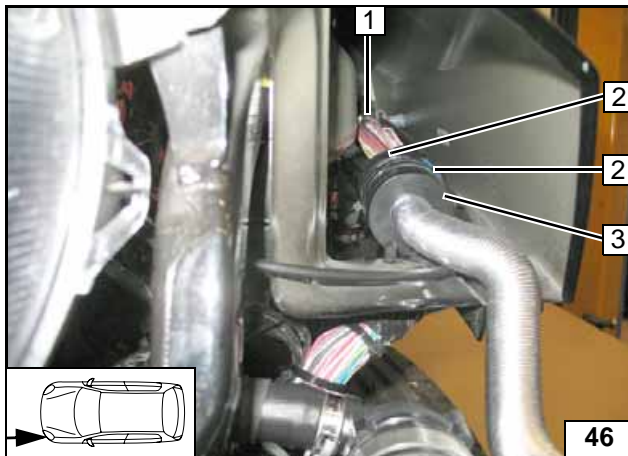
Installing p-clamp



Combustion air

- 1 Combustion-air intake pipe
- 2 Heater unit
- 3 27 mm dia. clamp

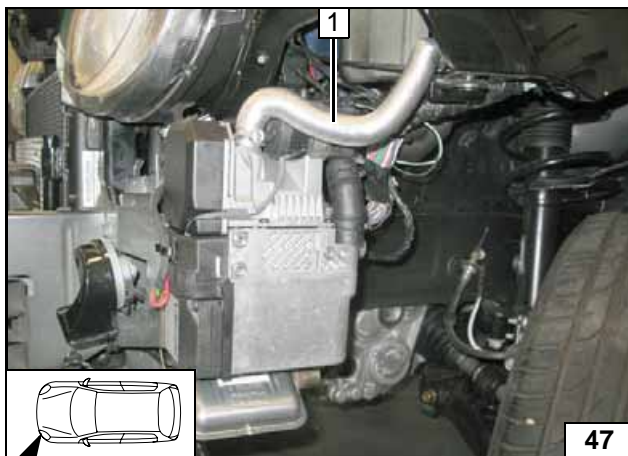
Installing intake pipe



Fasten air intake muffler 3 to original vehicle wiring harness 1 with cable ties 2 [2x].



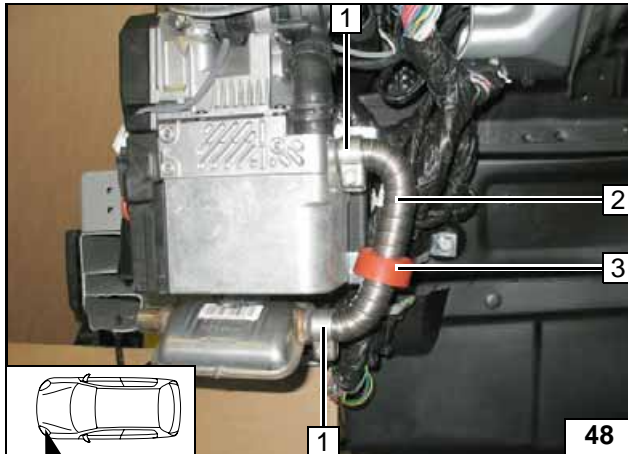
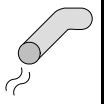
Installing muffler



Shape combustion air pipe 1 and ensure sufficient space is available for left turn signal by positioning bumper.



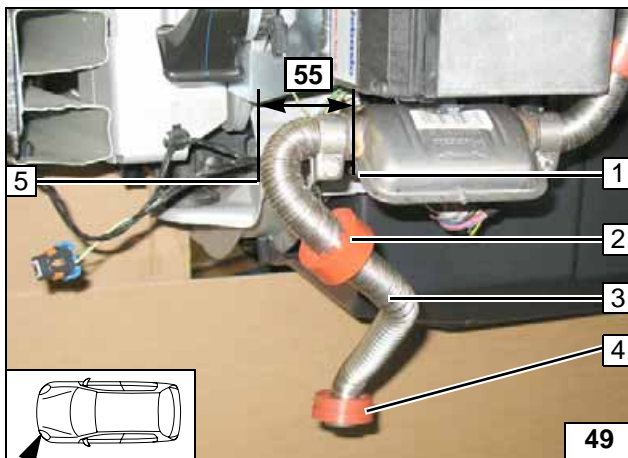
Aligning intake line



Exhaust gas

- 1 Hose clamp [2x]
- 2 Exhaust pipe
- 3 Red (rt) rubber isolator

Installing exhaust pipe

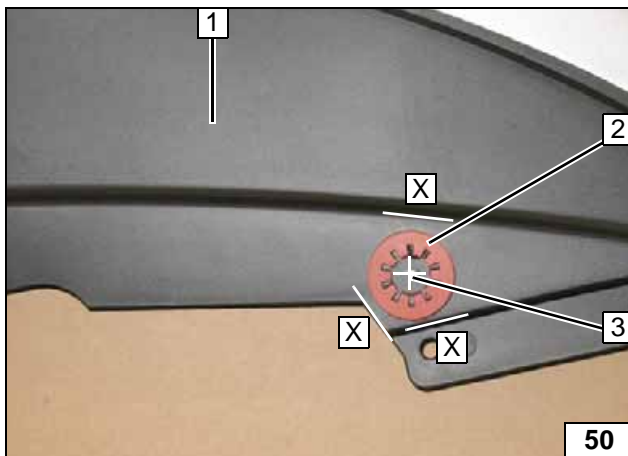


Bend exhaust end section 3 so that spacing of 55 mm is achieved between muffler fold 1 and outer edge 5.



- 2 Red (rt) rubber isolator
- 3 Exhaust end section, hose clamp
- 4 Red (rt) rubber isolator with groove

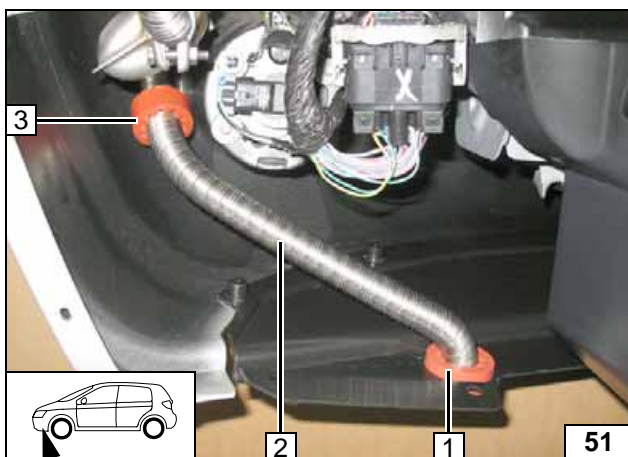
Installing exhaust end section



Position red (rt) rubber isolator with groove 2 on underside of bumper at left 1 with a distance of 5 mm to markings X and copy hole pattern. 42 mm dia. hole at position 3



Cutting out underride protection

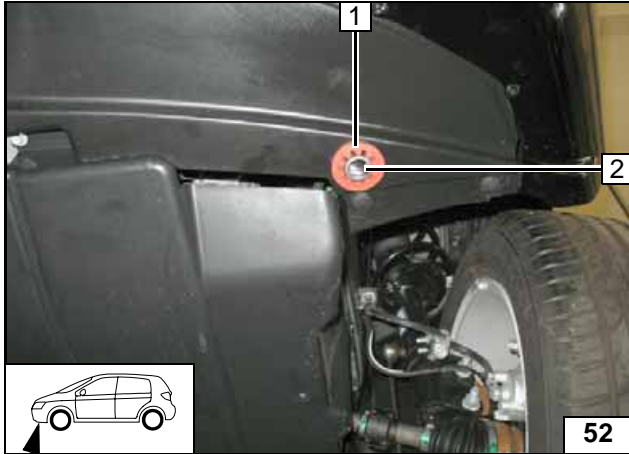
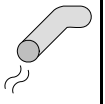


Install bumper. Align red (rt) rubber isolator 3 relative to bumper.



- 1 Red (rt) rubber isolator with groove
- 2 Exhaust end section

Installing exhaust end section



Align exhaust end section **2** flush on red rubber isolator **1**.



**Aligning
exhaust
end
section**

Final Work**WARNING!**

Reassemble the disassembled components 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 the heater unit 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 additional heater, see the operating instructions/installation instructions.
- Attach the "Switch off additional heater before refueling" sticker to the left-hand B-pillar.



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.

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



Before parking the vehicle, make the following settings:

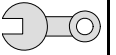
Note:

On vehicle with a factory-installed alarm system, the passenger compartment monitoring must be deactivated. Please see the vehicle owner's manual for instructions.

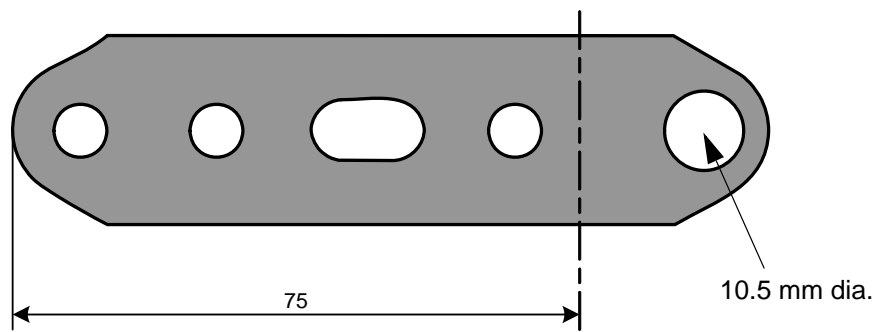


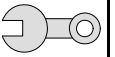
- 1 Air outlet to windshield
- 2 Set fan to level "1", or possibly "2"
- 3 Set temperature to "max."

Manual air conditioning



Template for Perforated Fastening Strap





Template for Gasoline Fuel Standpipe

