

Water Heater Unit



Thermo Top E Additional Heater e1 00 0003

Thermo Top C Additional Heater e1 00 0002

Thermo Top P Additional Heater e1 00 0104

Installation Instructions

Seat Ibiza

Gasoline and Diesel
from Model Year 2009
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.

Table of Contents

Validity	2	Preparing heater unit	13
Heater Unit/Installation Kit	3	Preparing installation location	14
Foreword	3	Installing heater unit	14
General Instructions	3	Combustion air	16
Special Tools	3	Exhaust gas	17
Explanatory Notes on Document	4	Coolant for gasoline engine	18
Preliminary Work	5	Coolant for diesel engine	23
Heater unit installation location	5	Fuel	26
Preparing electrical system	6	Final Work	30
Electrical system	8	Operating Instructions for End Customer	31
Fan controller for Climatic/without air conditioning	9		
Climatronic fan controller	10		
Digital timer	12		
Remote option (Telestart)	12		

Validity

Manufacturer	Model	Type	EG-BE No./ABE
Seat	Ibiza	6J	e9 * 2001/116 * 0067 * ...

Engine type	Engine model	Output in kW	Displacement in cm ³
BZG	Gasoline	51	1198
BXW	Gasoline	63	1390
BLS	Diesel	77	1986

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 the digital timer should be confirmed with the end customer before installation.

Heater Unit/Installation Kit

Quantity	Description	Order No.:
1	Retail accessories with desired heater control	See price list
1	Installation kit for Seat Ibiza Gasoline and Diesel	1314373A

Also required with Climatronic:

Quantity	Description	Order No.:
1	Climatronic kit	1311752A

Heater unit recommended for the respective vehicle class:

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

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



Foreword

These installation instructions apply to Seat Ibiza Gasoline and Diesel vehicles - for validity, see page 2 - from model year 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 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).

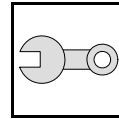
Special Tools

- Torque wrench for 2.0 - 10 Nm
- Hose clamping pliers

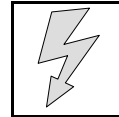
Explanatory Notes on Document

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.

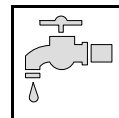
Mechanical system



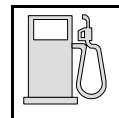
Electrical system



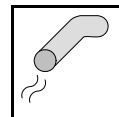
Water



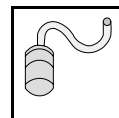
Fuel



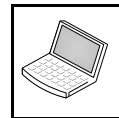
Exhaust gas



Combustion air



Software



Special features are highlighted using the following symbols:



Specific risk of injury or fatal accidents.



Specific risk of damage to components.



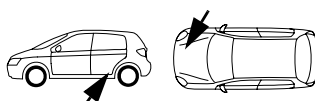
Specific risk of fire or explosion.



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 fuel tank cap, ventilate 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 engine cover.
- Remove the wiper arms.
- Remove the complete wiper linkage.
- Remove the coolant reservoir cap.
- Remove the bracket of the engine control unit.
- Remove the sound-insulating mat from the partition wall of the engine compartment (if present)
- Remove the partition wall of the coolant reservoir to the engine compartment.
- Open fuel tank cap, ventilate tank.
- Close the tank cap again.
- Detach the wheel well trim on the right and left.
- Remove the underride protection.
- Remove the bumper.
- Remove the underbody trim on the right.
- Fold up the seat surface of the rear bench seat on the right.
- Open the tank-fitting service lid.
- Remove the fuel-tank sending unit in accordance with the manufacturers specifications.
- Remove the glove compartment (only with Thermo Call).
- Remove the lower instrument panel trim on the driver's side.
- Detach the central electrical box [2 screws]
- Remove the A/C control panel in accordance with the manufacturer's instructions (only with Climatronic)
[2 screws from below]

Remove page 31 "Operating Instructions for End Customer" and add to the vehicle operating instructions.



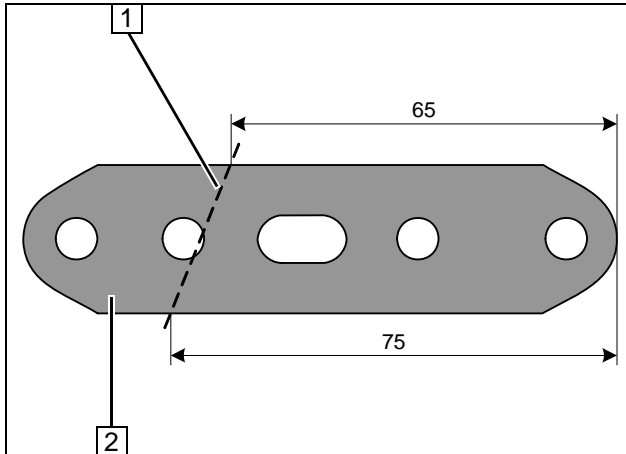
Heater unit installation location

Photo shows gasoline vehicle!

1 Heater unit



Installation location

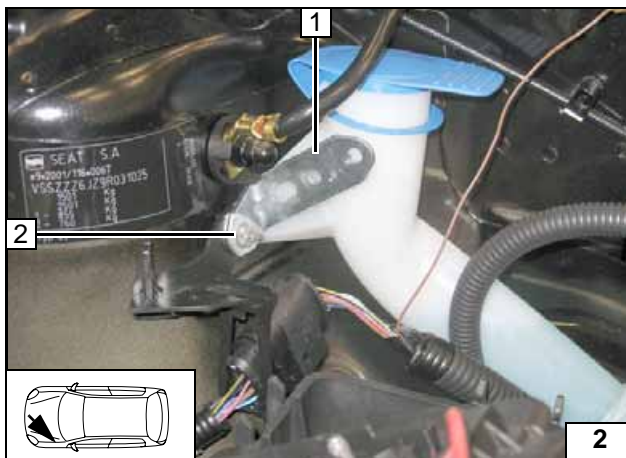


Preparing electrical system

Angle down perforated bracket 2 at bending line 1 by 70°.

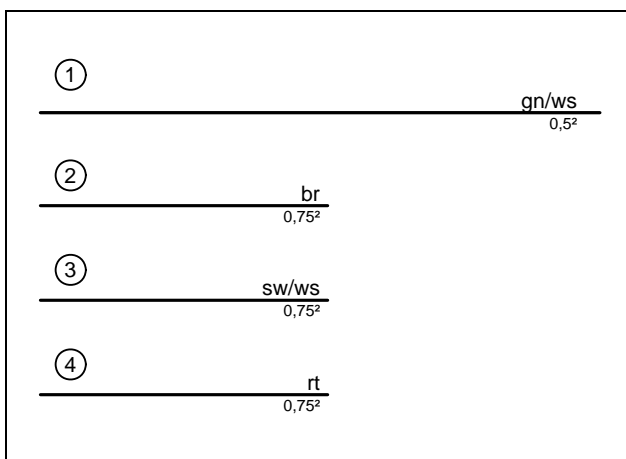


Bending perforated bracket



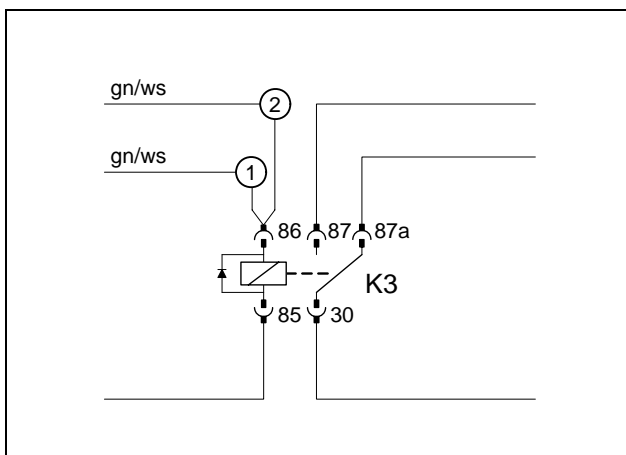
- 1 Perforated bracket
- 2 Original vehicle bolt

Installing perforated bracket



Climatronic

Preparing lines

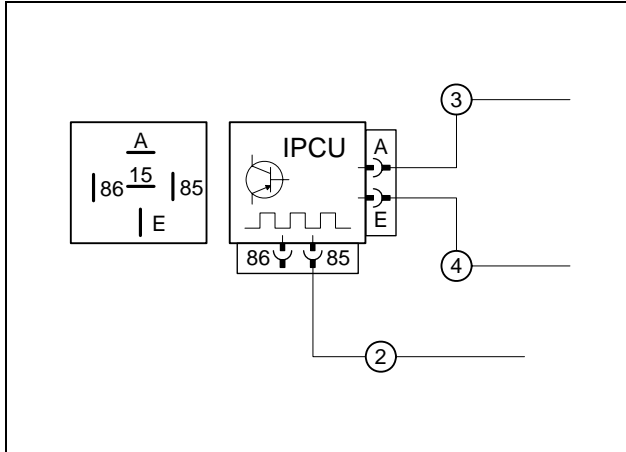


Produce connections as shown in wiring diagram. Install wire section 1 in the protective sleeving provided.



- 1 Additional green/white (gn/ws) wire
- 2 Additional green/white (gn/ws) wire of heater unit

Preparing K3 relay



Connect wires to IPCU.
 IPCU view on contact side!
 IPCU must be programmed with following adjustment value prior to installation:

Duty cycle: 100 %
 Frequency: 14 kHz
 Voltage: 3.5 V
 Function: High-side



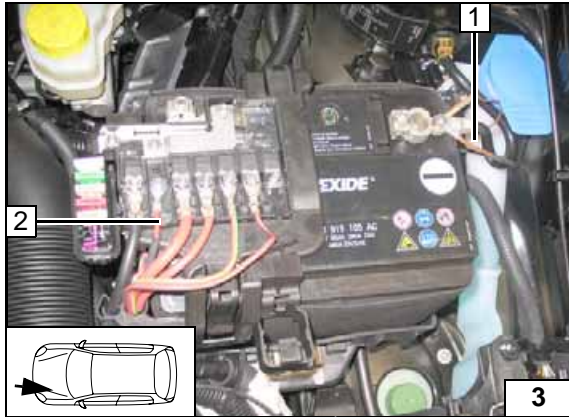
Preassembling IPCU



Electrical system

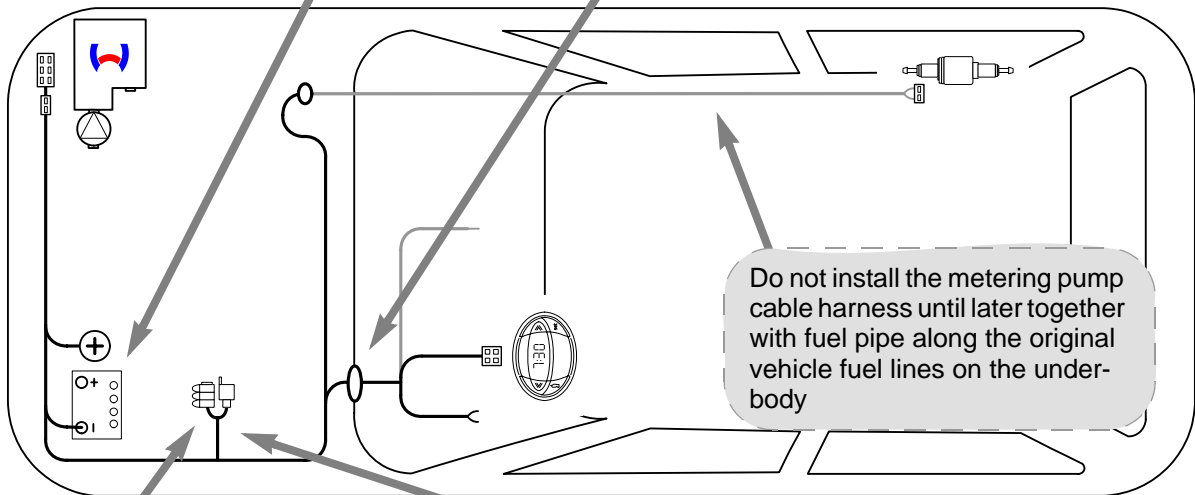
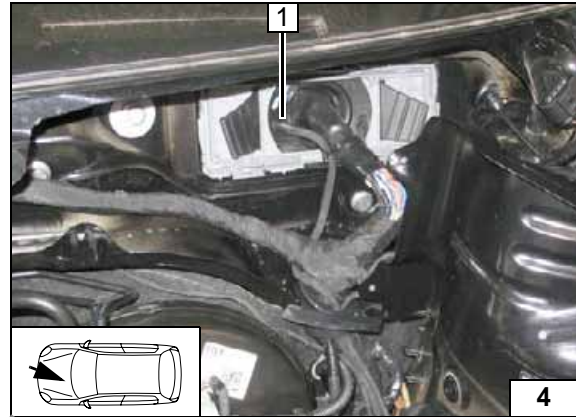
Positive and ground connection

- 1 Ground wire on negative battery terminal
- 2 Positive wire on positive support point

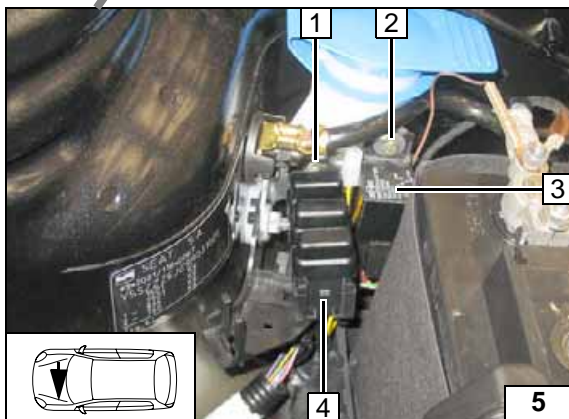


Wiring harness pass through

- 1 Protective rubber plug

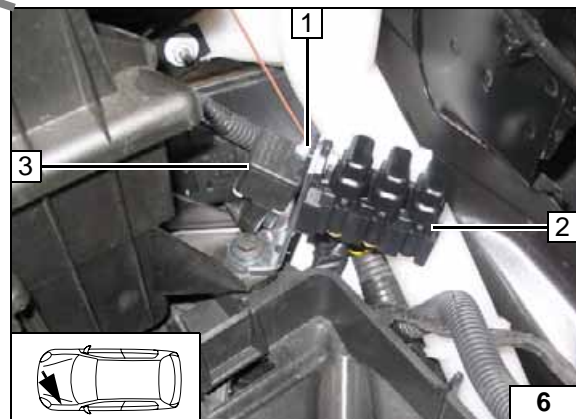


Wiring harness installation diagram



Preparing fuse holder, relay K3 gasoline

- 1 M5x16 bolt, retaining plate for fuse holder, washers, flanged nut
- 2 M5x16 bolt, washers, flanged nut
- 3 K3 relay
- 4 Fuse holder

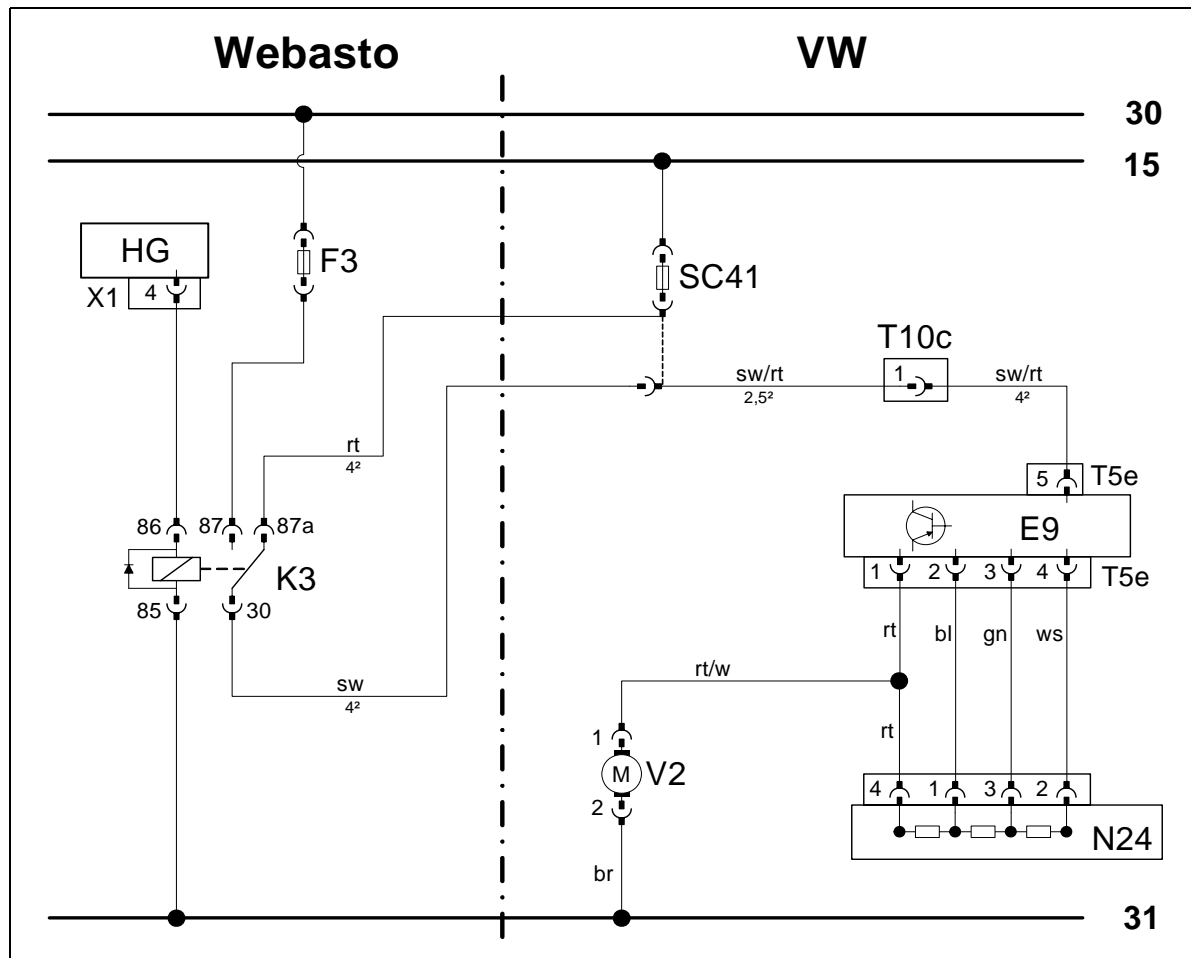


Preparing fuse holder, relay K3 diesel

- 1 M5x16 bolt, retaining plate for fuse holder, washers, flanged nut
- 2 Fuse holder
- 3 K3 relay



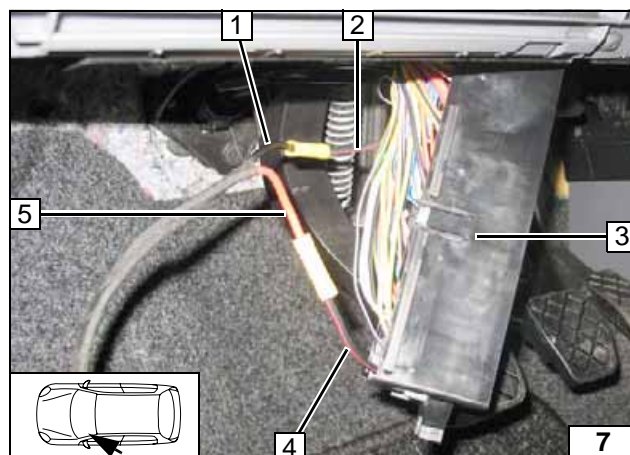
Fan controller for Climatic/without air conditioning



Wiring diagram

Webasto components		Components of VW Polo		Colors and symbols	
HG	Heater unit	V2	Fan motor	rt	red
X1	6-pin heater unit connector	SC41	25 A fuse	br	brown
F3	25 A fuse	N24	Resistor group	sw	black
K3	Fan relay	E9	Switch unit	bl	blue
		T...	Connectors	gn	green
				ws	white
				X	Cutting point
				Wiring colors may vary.	

Legend



Connection to central electrical box 3.
Produce connections as shown in wiring diagram.

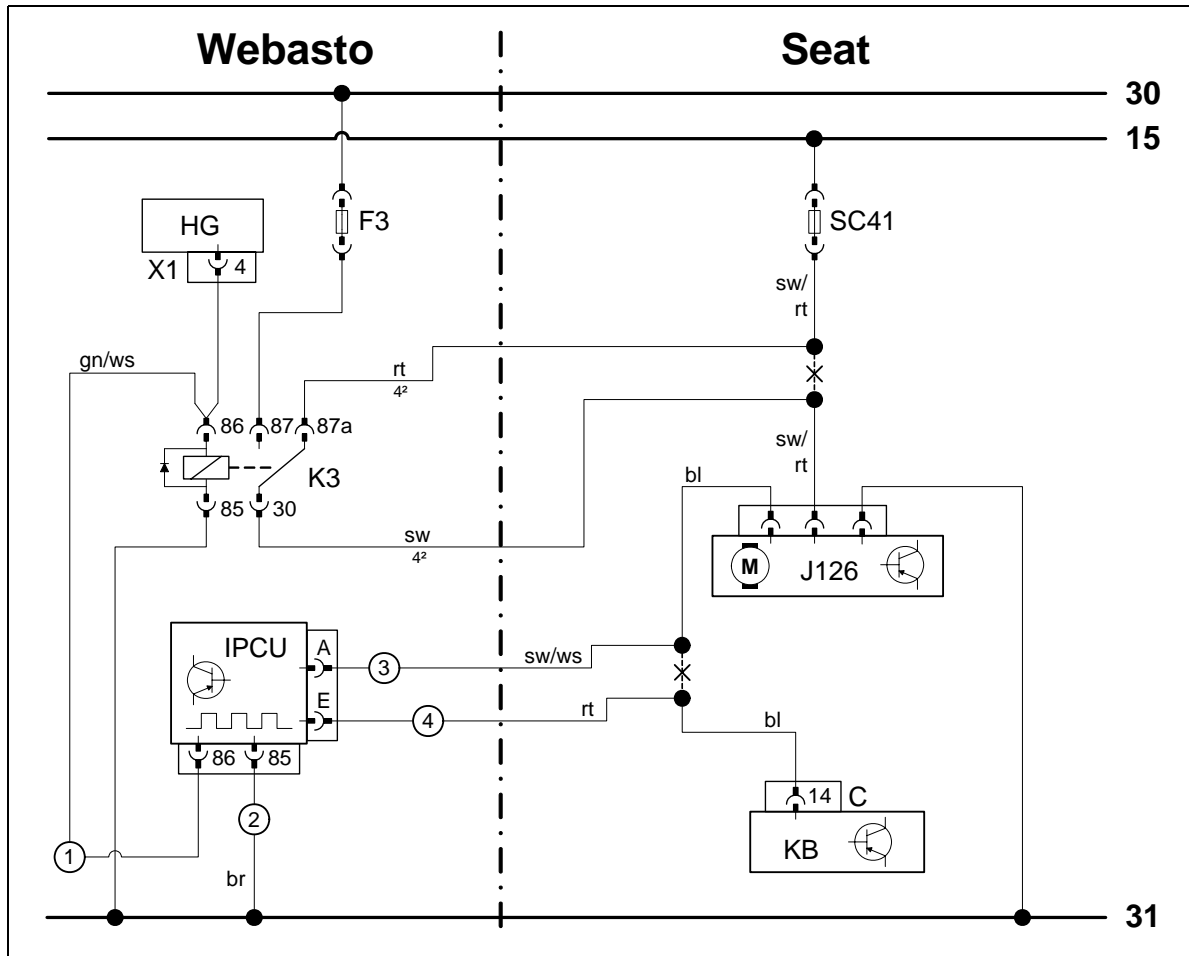
- 1 Black (sw) wire from K3/30
- 2 Black/red (sw/rt) wire of connector/switch unit
- 4 Black/red (sw/rt) wire of fuse SC41
- 5 Red (rt) wire from K3/87a



Connection to central electrical box



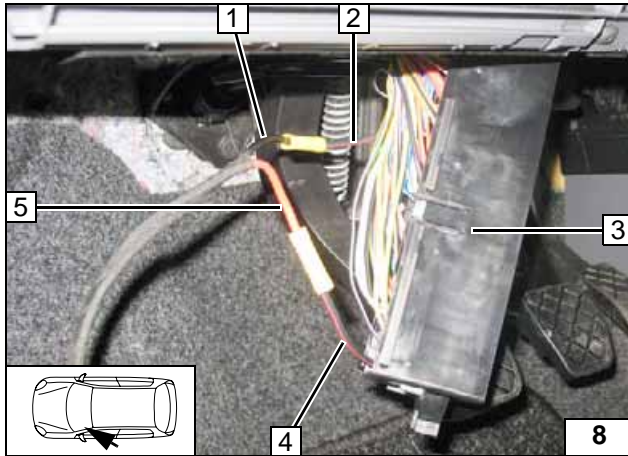
Climatronic fan controller



Climatronic wiring diagram

Webasto components		Vehicle components		Colors and symbols	
HG	Heater unit TT-C/E	J126	Fan control unit	rt	red
X1	6-pin heater unit connector	KB	Air-conditioning control panel	ws	white
F3	25 A fuse	SC41	25 A fuse	sw	black
K3	Fan relay			br	brown
IPCU	Pulse width modulator			gn	green
				bl	blue
IPCU adjustment values:					
Duty cycle: 100 %					
Frequency: 14 kHz					
Voltage: 3.5 V					
Function: High-side					
				X	Cutting point
Wiring colors may vary.					

Legend

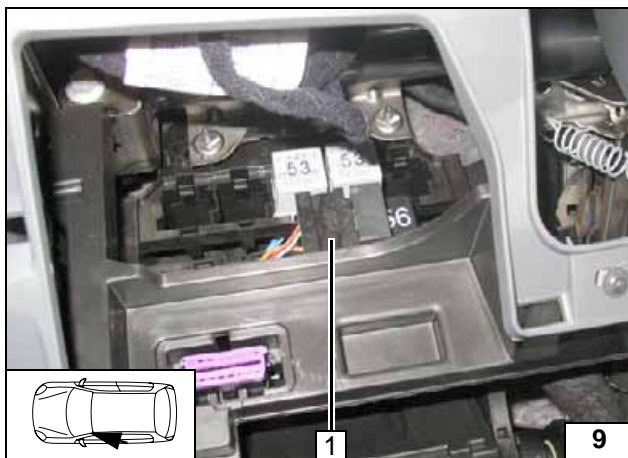


Connection to central electrical box 3. Produce connections as shown in wiring diagram.

- 1 Black (sw) wire from K3/30
- 2 Black/red (sw/rt) to fan control unit
- 4 Black/red (sw/rt) wire of fuse SC41
- 5 Red (rt) wire from K3/87a



**Connec-
tion to cen-
tral
electrical
box**



Fasten IPCU socket 1 with double-sided adhesive tape. Program IPCU and mount.

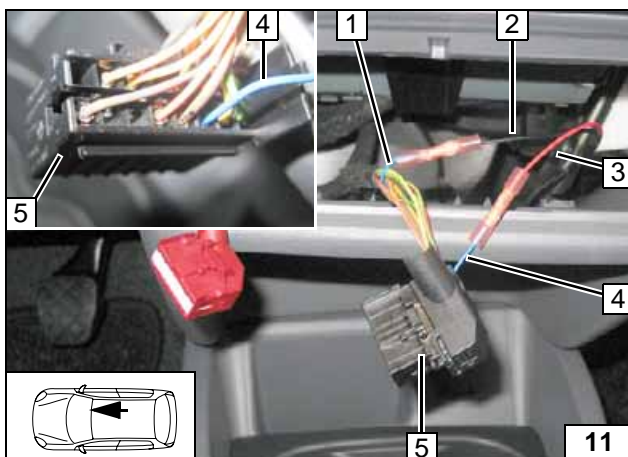


**Installing
IPCU**



- 1 Brown (br) wire of IPCU/85, cable lug
- 2 Existing hole, 5.5x9.5 self-tapping screw

**Ground
connec-
tion of
IPCU**



Connection to 16-pin black (sw) connector C 5 from A/C control element. Produce connections as shown in wiring diagram.

- 1 Blue (bl) wire of fan unit
- 2 Black/white (sw/ws) wire from IPCU/A
- 3 Red (rt) wire of IPCU/E
- 4 Blue (bl) wire of connector C, Pin 14, disconnected



**Connect-
ing A/C
control
panel**

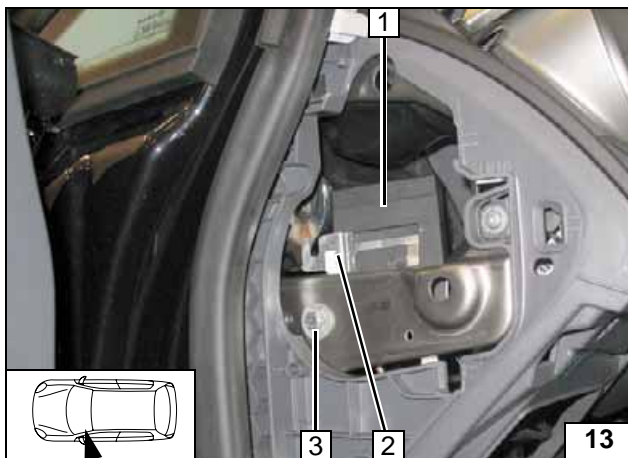


Digital timer

- 1 Digital timer



Installing digital timer



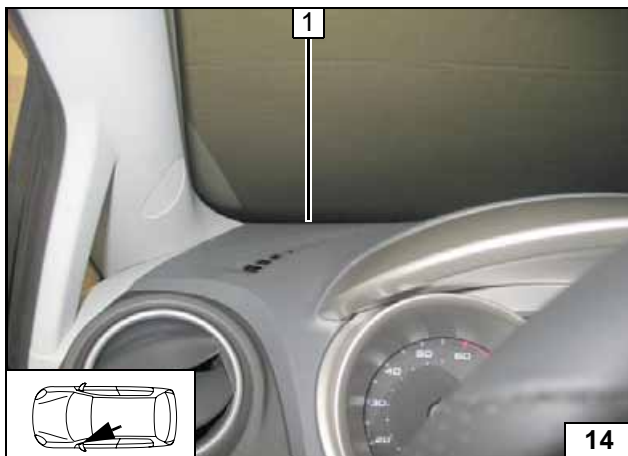
Remote option (Telestart)

Drill out bracket 2 to 6.5 mm dia. at position 3

- 1 Receiver
- 3 Existing hole, M6x20 bolt, large diameter washer, flanged nut

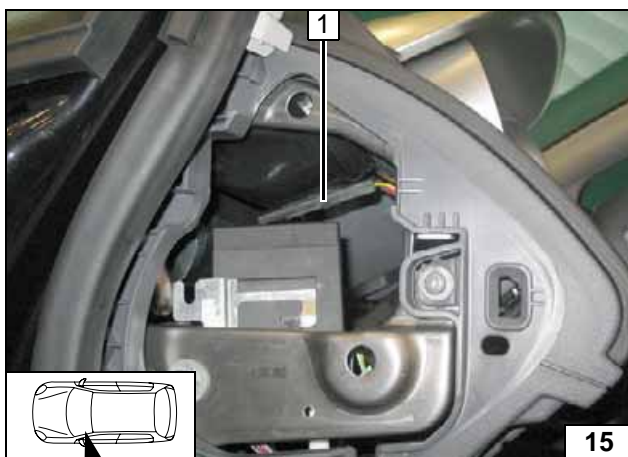


Installing receiver



- 1 Antenna

Installing antenna

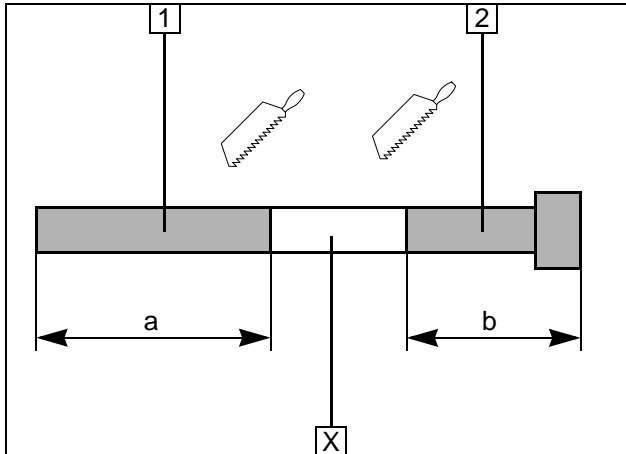
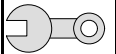


Temperature sensor HTM100

Fasten temperature sensor 1 with adhesive tape.



Installing temperature sensor

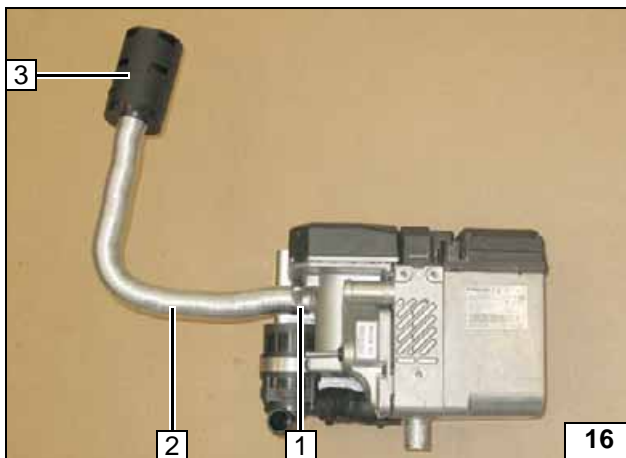


Preparing heater unit

- 1 Exhaust pipe
a = 350
- 2 Exhaust end section
b = 105

Discard section X

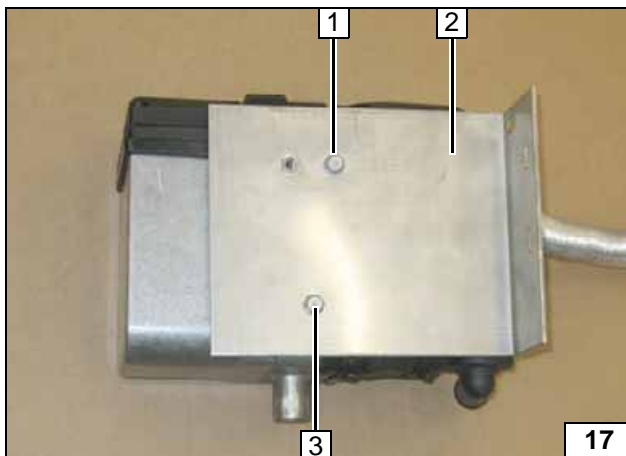
Preparing exhaust pipe



- 1 27 mm dia. clamp
- 2 Combustion air pipe
- 3 Muffler



Preassembling muffler

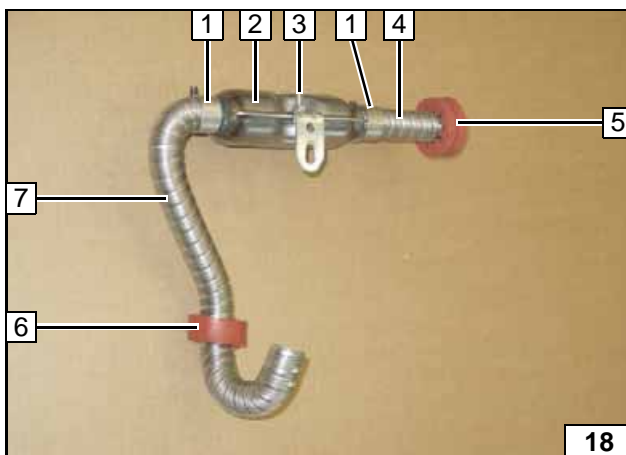


Insert two washers between heater unit and bracket 1 at position 3.

- 1 Eject screw
- 2 Bracket
- 3 Eject screw, washer [2x]

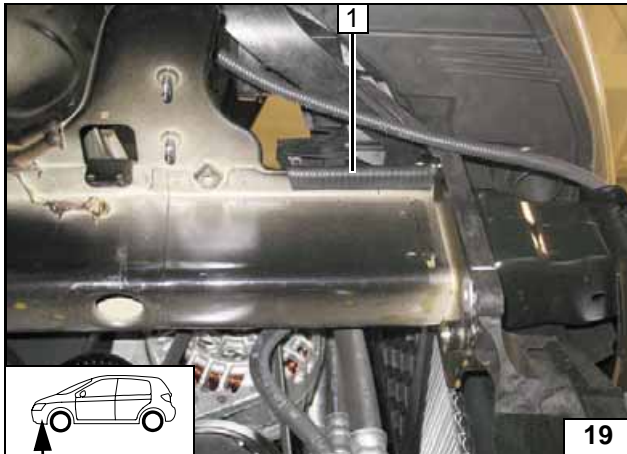
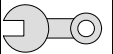


Preassembling bracket on heater unit



- 1 Hose clamp [2x]
- 2 Exhaust muffler
- 3 M6x20 bolt, flanged nut, angle bracket
- 4 Exhaust end section
- 5 Red (rt) rubber isolator with groove
- 6 Red (rt) rubber isolator
- 7 Exhaust pipe

Preamounting exhaust system



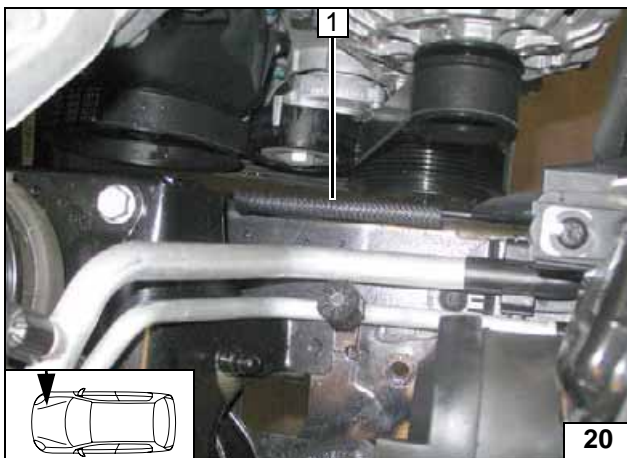
Preparing installation location

Cut 200 mm long edge protection in center.

- 1 100 mm edge protection

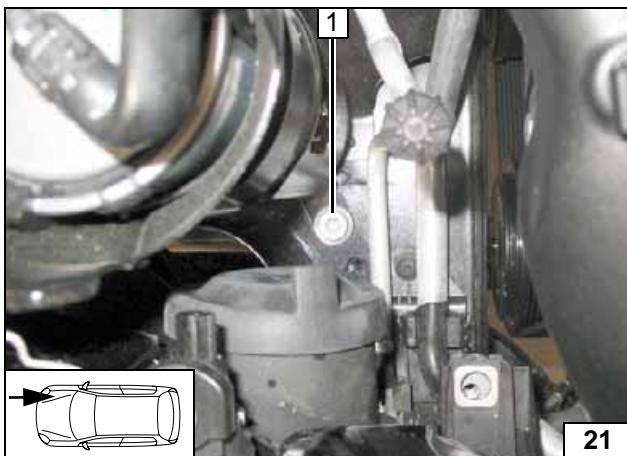


Installing edge protection



- 1 100 mm edge protection

Installing edge protection

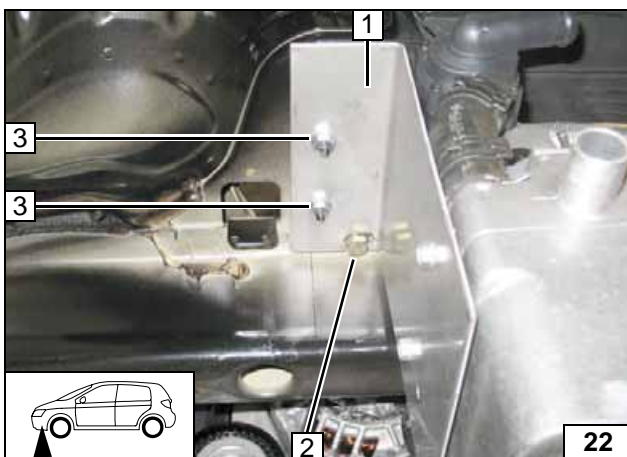


Diesel

Remove bolt 1 and discard.



Removing screw



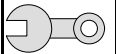
Installing heater unit

Connect wiring harness for heater unit before installation. Insert one 5 mm shim each between bracket 1 and body at position 3 (see following figure).

- 1 Bracket
- 2 Existing M8 threaded insert, M8x30 bolt, spring lockwasher, flanged nut
- 3 5 mm shim, flanged nut [2x each]



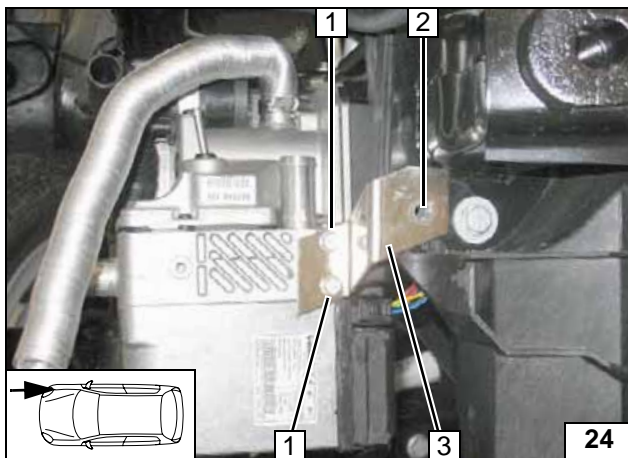
Installing heater unit



Diesel

- 1 Flanged nut
- 2 Original vehicle bracket

Installing heater unit



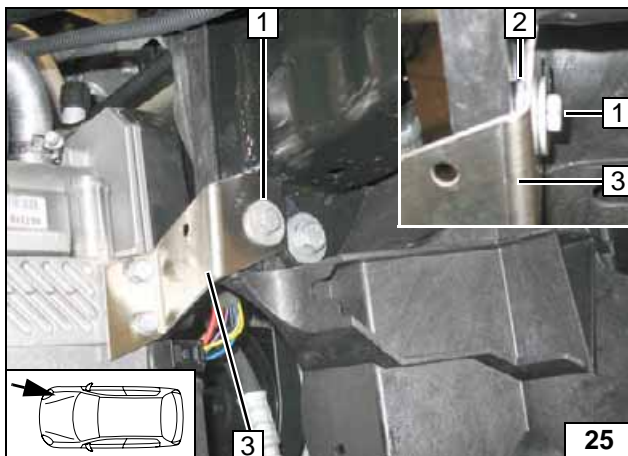
All vehicles

Remove angle bracket 3 for drilling.

- 1 E-jot screw [2x]
- 2 Copy hole pattern, 7 mm dia. hole



Loosely mounting angle bracket

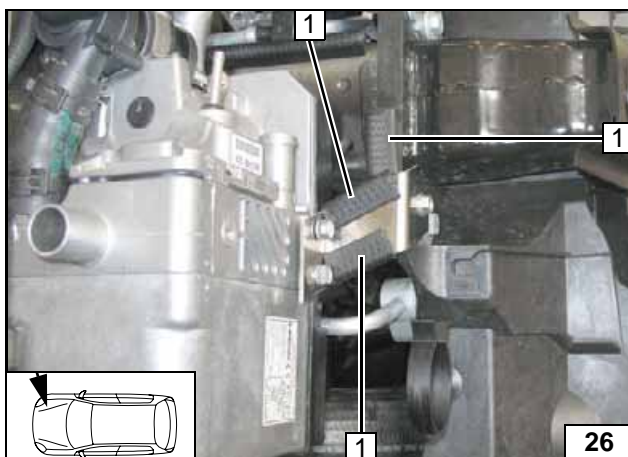


Insert 5 mm shim between angle bracket 3 and body at position 2.

- 1 M6x35 bolt, large diameter washer, 5 mm shim, flanged nut



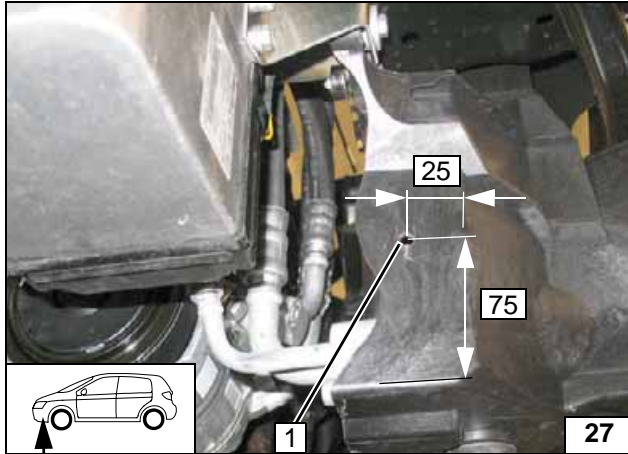
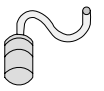
Installing angle bracket



Diesel

- 1 40 mm edge protection [3x]

Installing edge protection



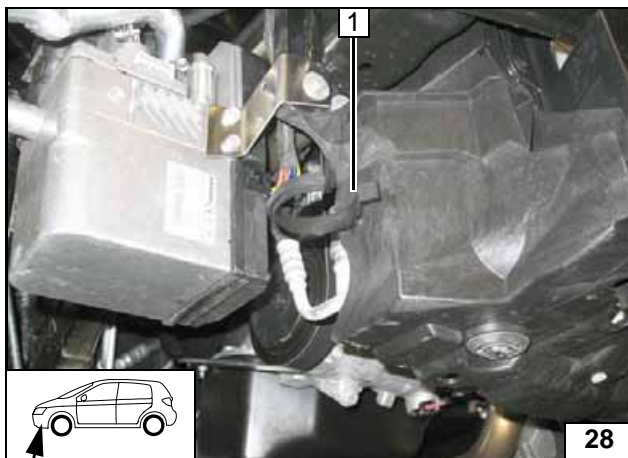
Combustion air

When drilling, watch components located behind!

- 1 6.2 mm dia. hole

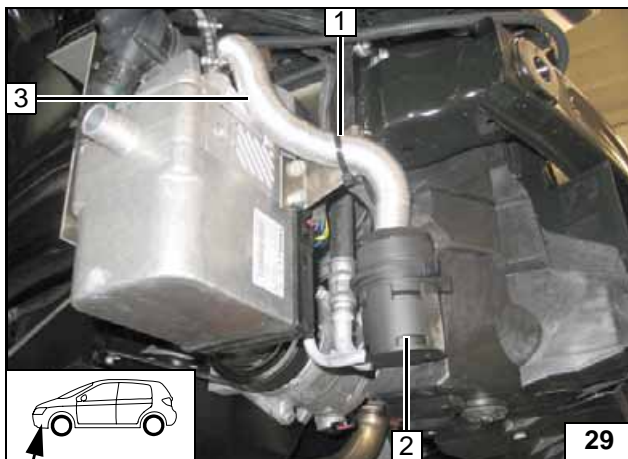


Hole for retaining clip



- 1 Retaining clip in hole

Inserting retaining clip

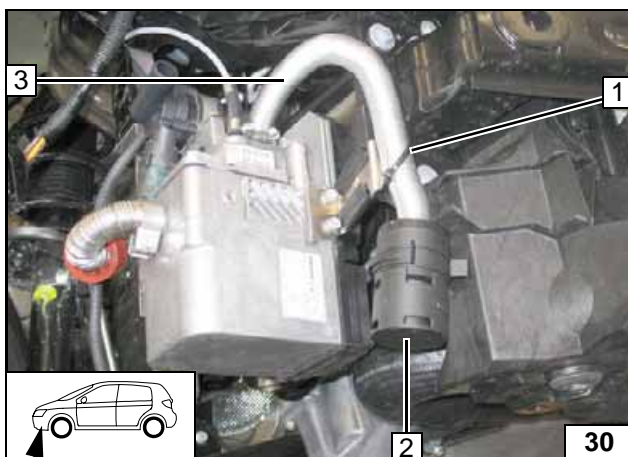


Gasoline

- 1 Cable tie
- 2 Muffler in retaining clip
- 3 Combustion air pipe



Installing muffler

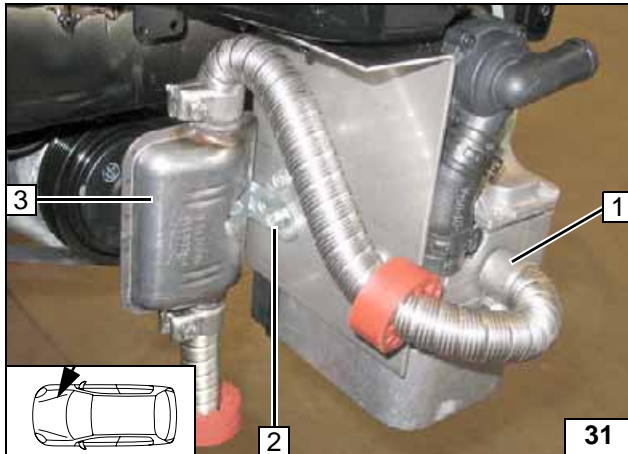
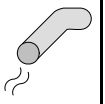


Diesel

- 1 Cable tie
- 2 Muffler in retaining clip
- 3 Combustion air pipe



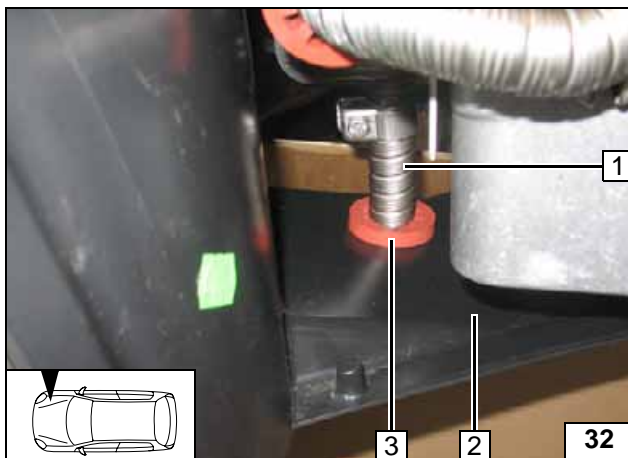
Installing muffler



Exhaust gas

- 1 Hose clamp
- 2 E-jot screw
- 3 Premounted exhaust system

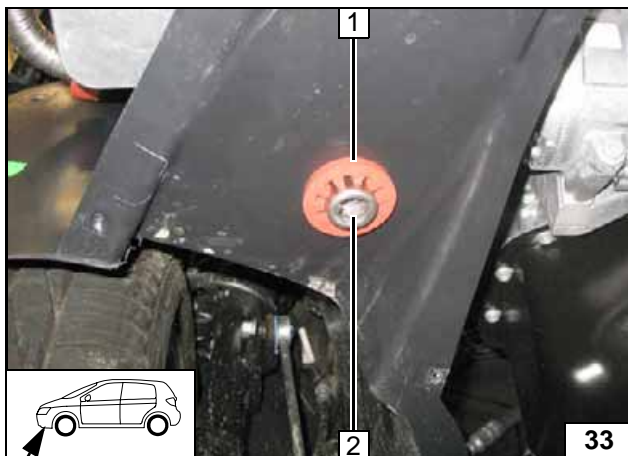
Installing muffler



42 mm dia. hole at Position 2 in wheel-well inner panel. Ensure sufficient distance to neighboring components.

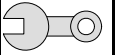
- 1 Exhaust end section
- 2 Wheel-well inner panel
- 3 Red (rt) rubber isolator with groove

Mounting rubber isolator



Align exhaust end section 2 flush on red (rt) rubber isolator with groove 1 as shown.

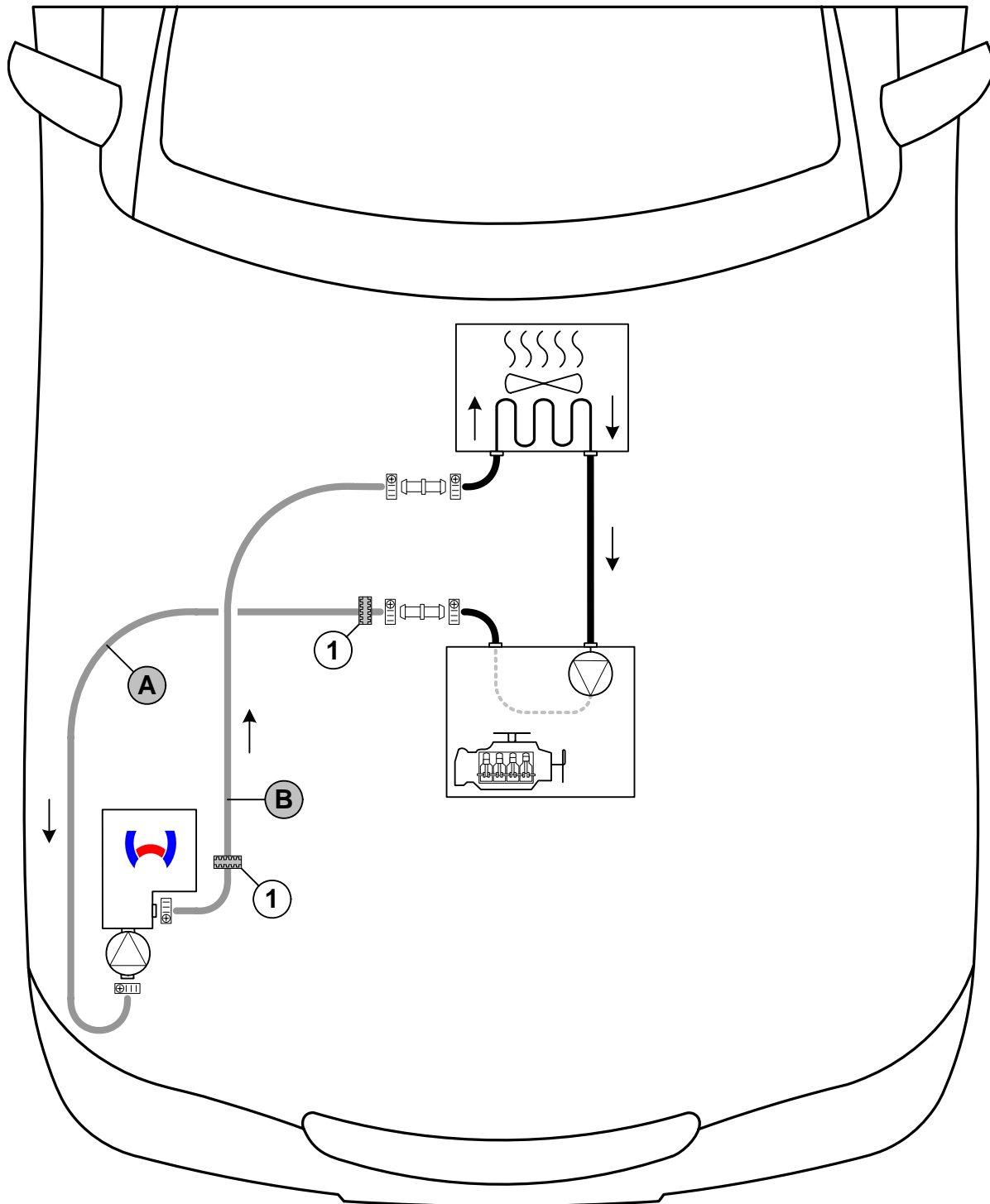
Aligning rubber isolator






Coolant for gasoline engine

WARNING!

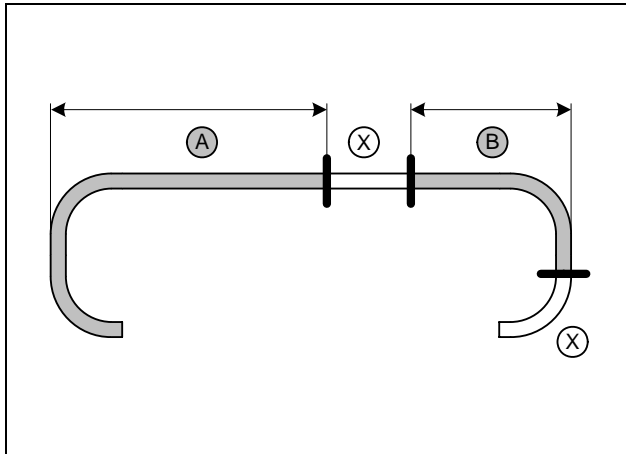
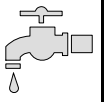
Any coolant running off should be collected using an appropriate container. Install coolant hoses kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that no other hose can be damaged! When installing the coolant hose, the heater unit must be filled with coolant.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



Coolant routing diagram

All connecting pipes  = 18x20 mm dia. All hose clamps  = 20-27 mm dia.
 1 = Black (sw) rubber isolator  [2x]!





Discard section **X**.
Hose **B** with long 90° elbow.

1.2 Gasoline

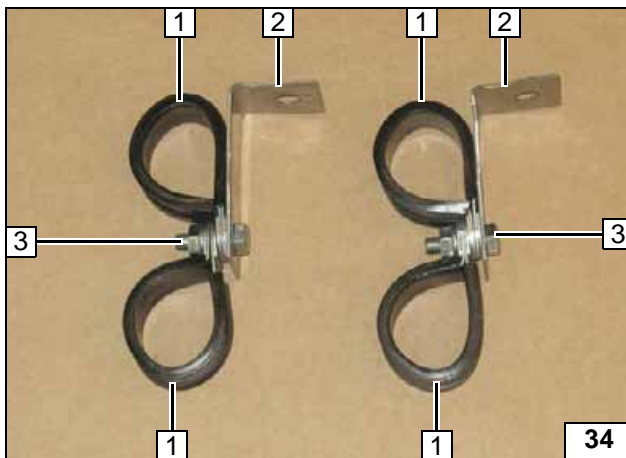
a = 980
b = 970

1.4 Gasoline

a = 1010
b = 870

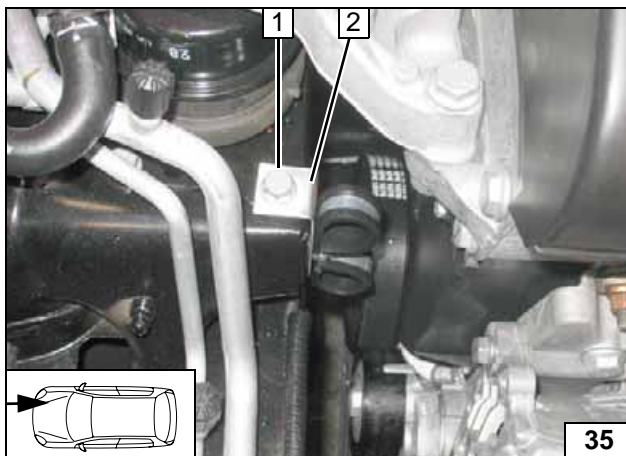


Cutting coolant hoses to length



- 1 29 mm dia. rubber-coated p-clamp [4x]
- 2 Hose bracket [2x]
- 3 M6x20 bolt, flanged nut [2x each]

Preparing hose bracket

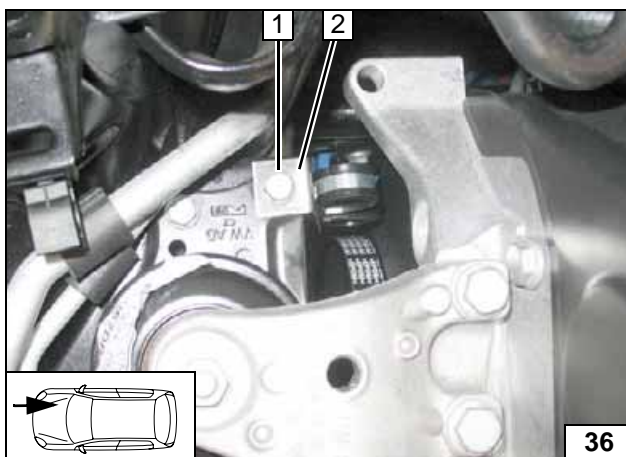


Observe tightening torque for original vehicle bolt of engine mount according to manufacturer's instructions.

- 1 Original vehicle bolt for engine mount
- 2 Premount hose bracket



Installing hose bracket 1

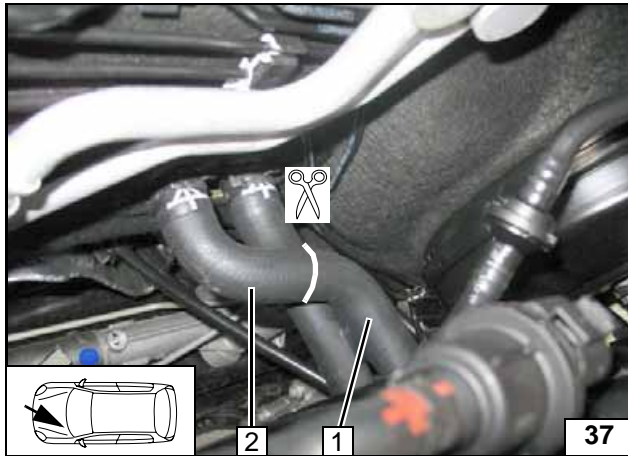


Observe tightening torque for original vehicle bolt of engine mount according to manufacturer's instructions.

- Check that they have free clearance.
- 1 Original vehicle bolt for engine mount
 - 2 Premount hose bracket

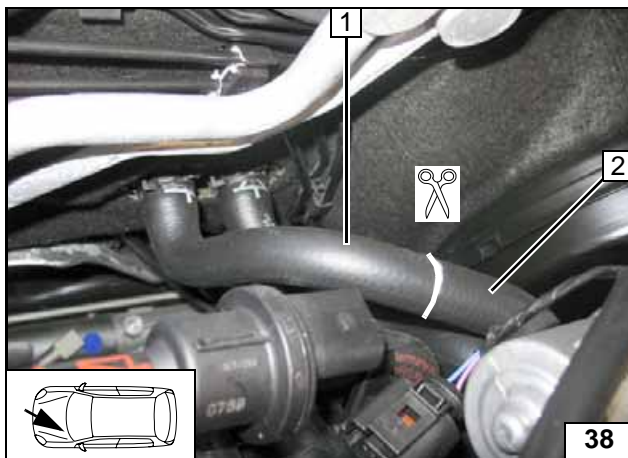


Installing hose bracket 2



- 1 Engine-outlet hose section
- 2 Hose section of heat exchanger inlet

Cutting point on 1.2 liter gasoline engine



- 1 Hose section of heat exchanger inlet
- 2 Engine outlet hose section

Cutting point on 1.4 liter gasoline engine

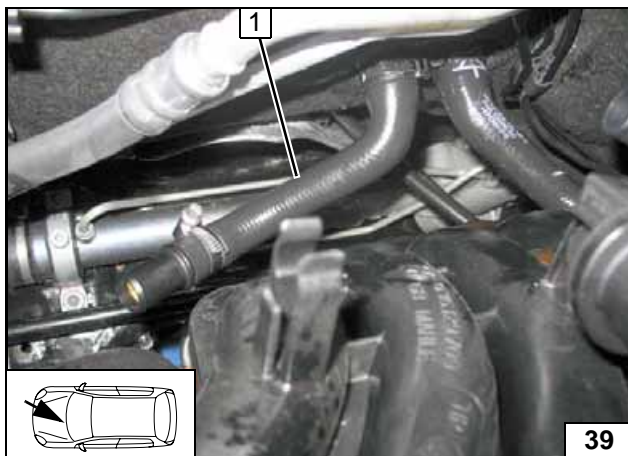
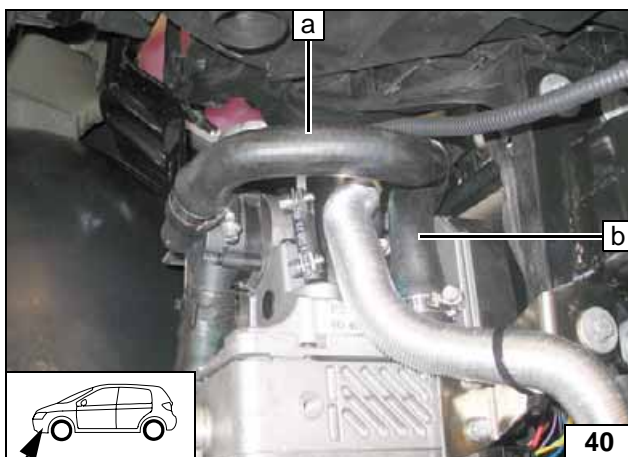


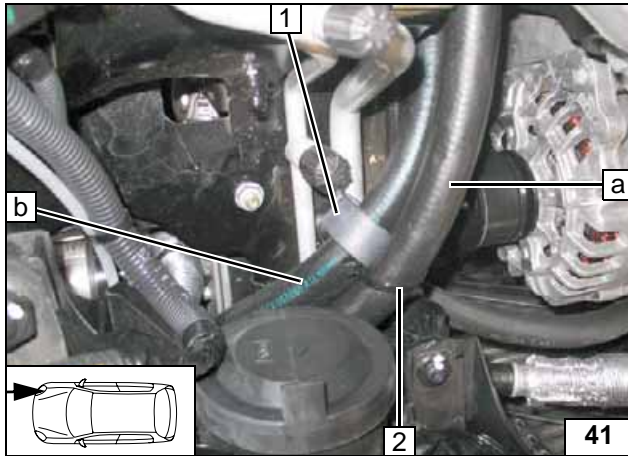
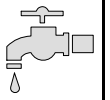
Figure shows 1.4 liter gasoline engine!
Turn hose on heat exchanger inlet 1 to right.



Turning hose on heat exchanger inlet



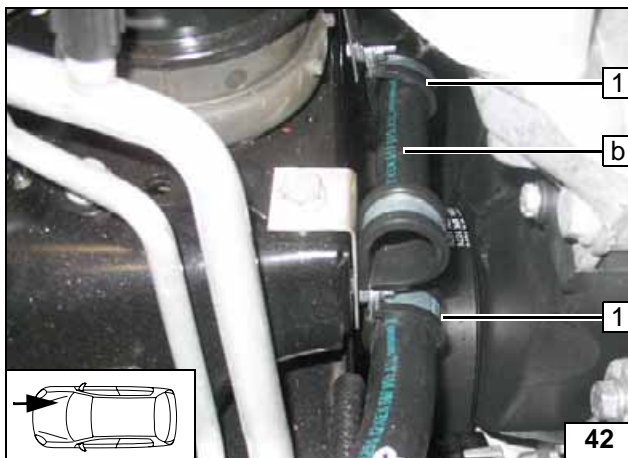
Connecting heater unit



Position rubber isolator **1** from hose **B** on A/C line and fasten to hose **A** with cable tie **2**.



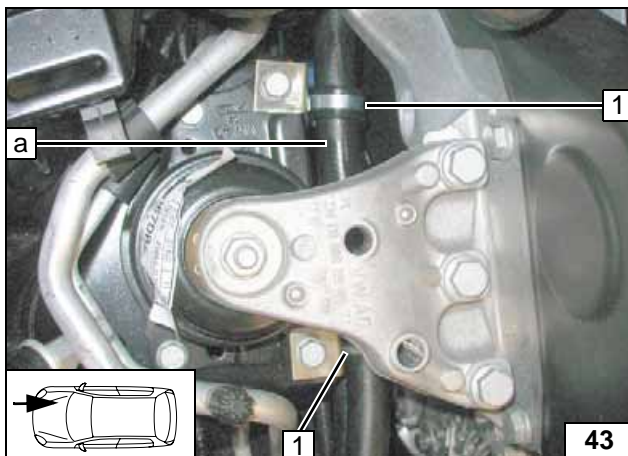
Routing in engine compartment



Route hose **B** through lower p-clamps **1** [2x].



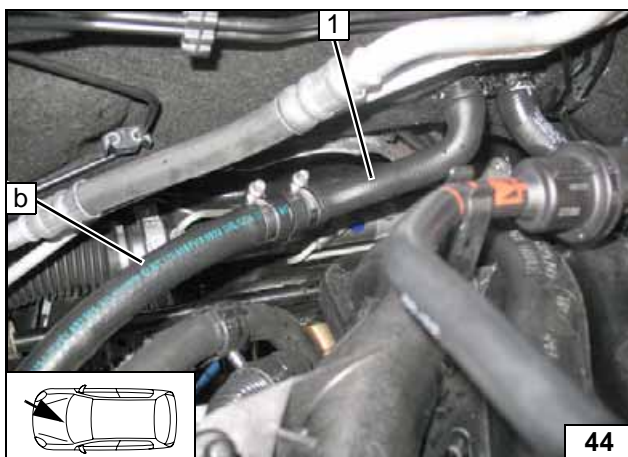
Routing in engine compartment



Route hose **A** through upper p-clamps **1** [2x].

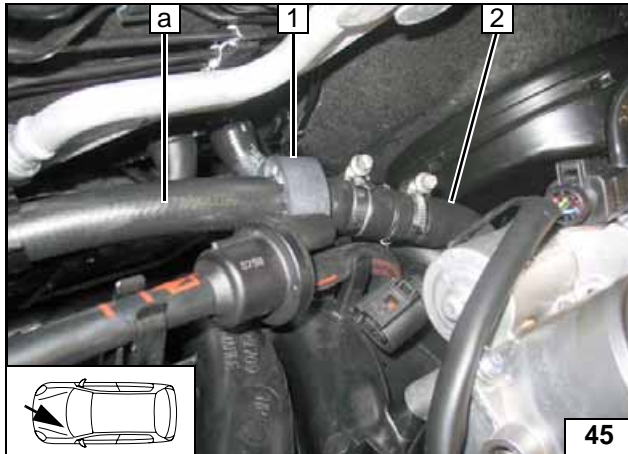


Routing in engine compartment



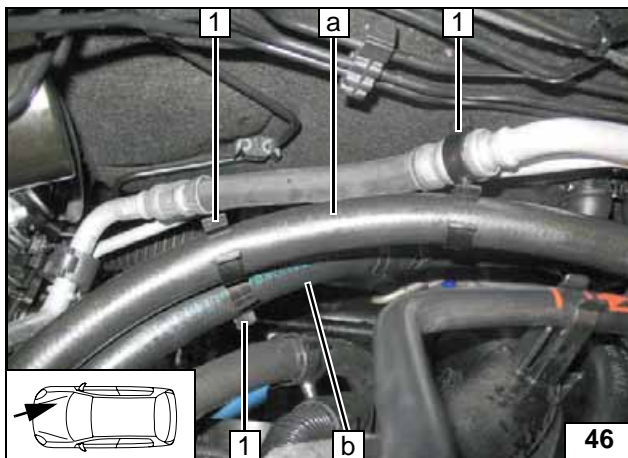
1 Hose on heat exchanger inlet

Connecting heat exchanger inlet



- 1 Black (sw) rubber isolator
- 2 Hose of engine outlet

Connect-
ing engine
outlet



Ensure sufficient distance to neighboring components.

- 1 Spacer bracket [2x]



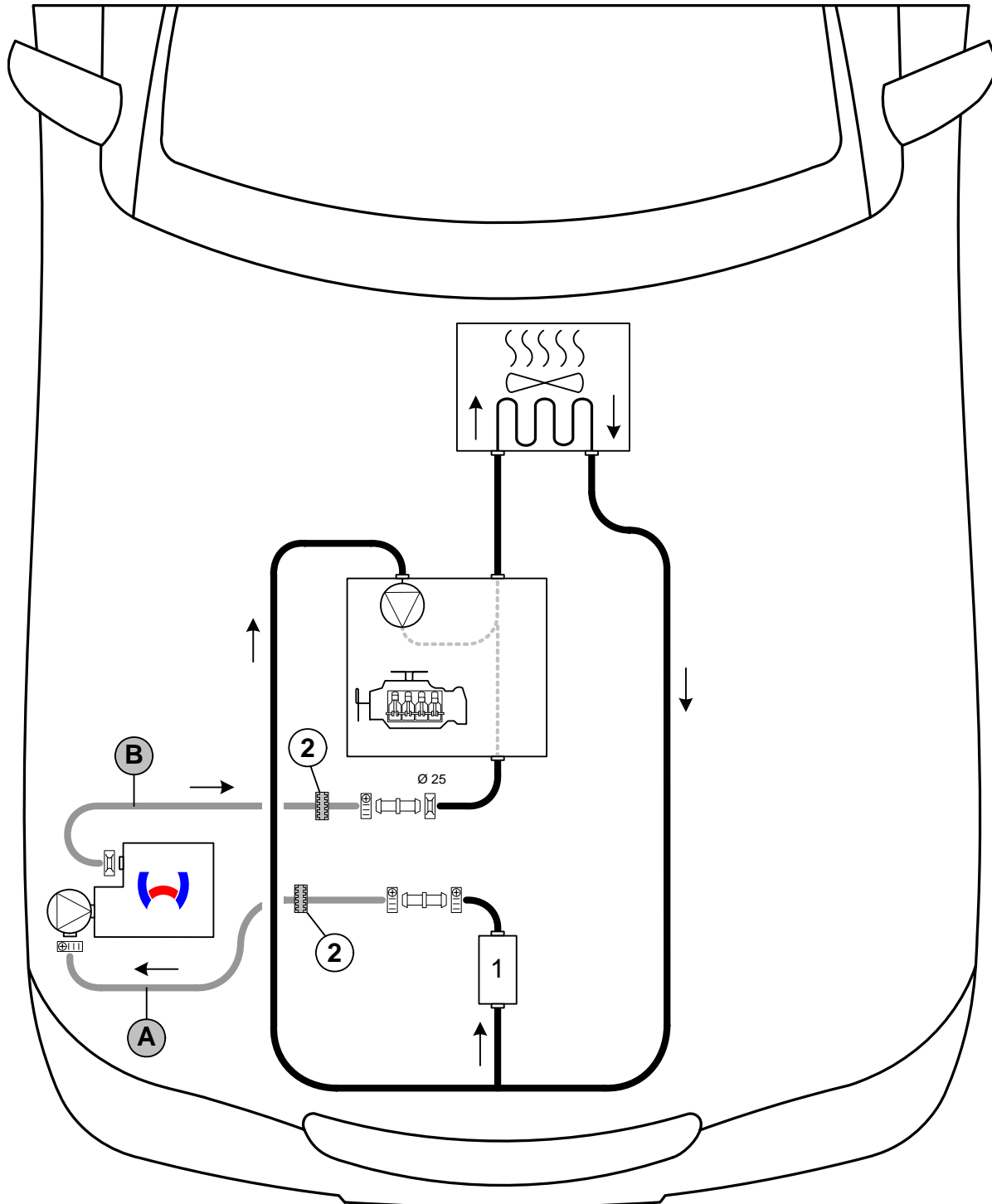
Routing in
engine
compartment



Coolant for diesel engine

WARNING!

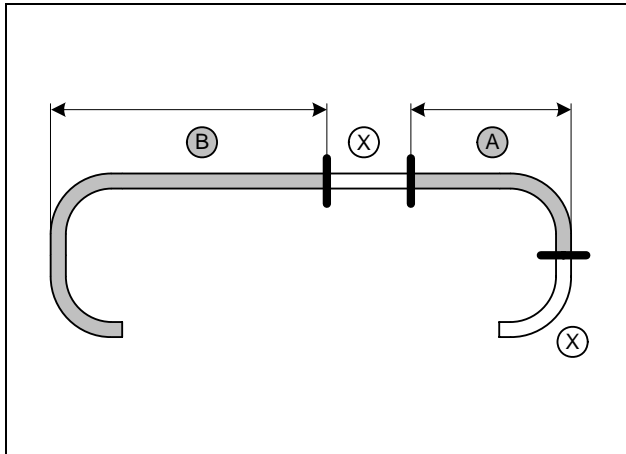
Any coolant running off should be collected using an appropriate container. Install coolant hoses kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that no other hose can be damaged! When installing the coolant hose, the heater unit must be filled with coolant. The connection should be "inline" based on the following diagram: The coolant connection which differs from the standard for routing-related reasons!



Coolant routing diagram

All connecting pipes = 18x20 mm dia. All hose clamps = 20-27 mm dia. 1 = Oil cooler! Non-designated spring clip = 27 mm dia. 2 = Black (sw) rubber isolator [2x]!





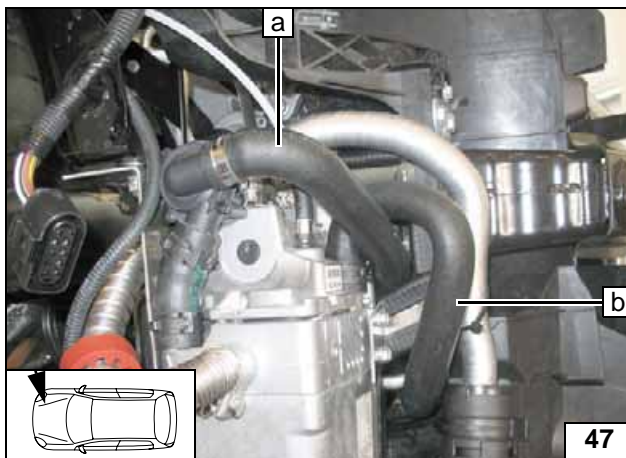
Discard section **X**

a = 760

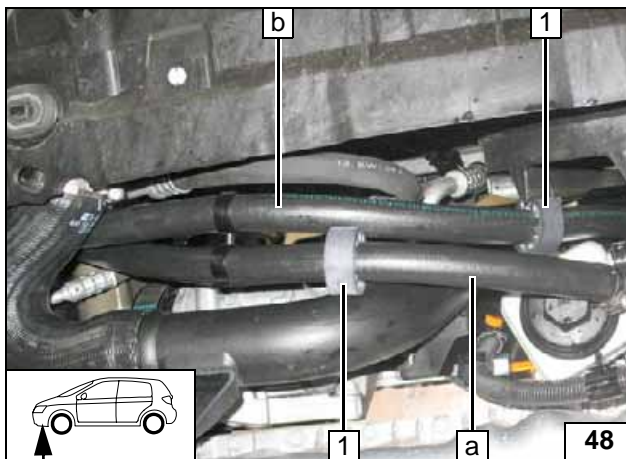
b = 880



Cutting coolant hoses to length



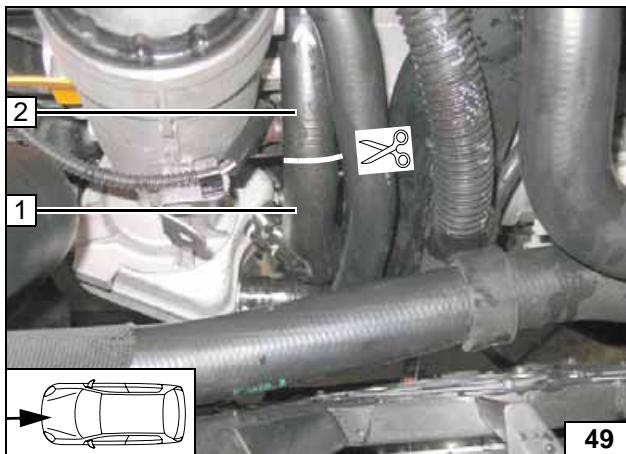
Connecting heater unit



Slide one black (sw) rubber isolator **1** each onto hose **A** and **B**.



Routing in engine compartment

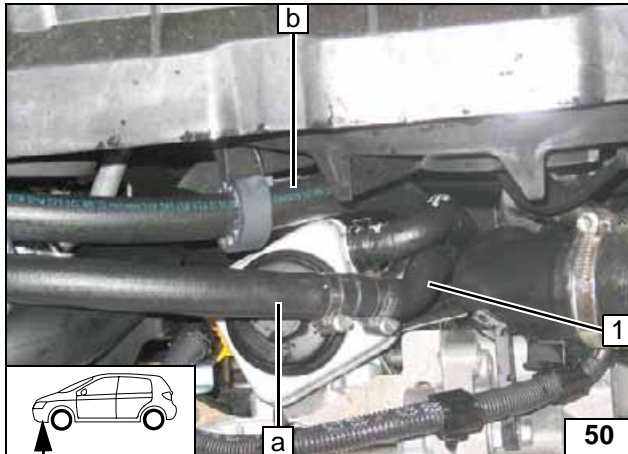


Turn hose section of oil cooler outlet **1** downward on connection piece.

2 Hose section on engine inlet



Cutting point



Push through hose **B** upward.

- 1 Hose section on oil cooler output

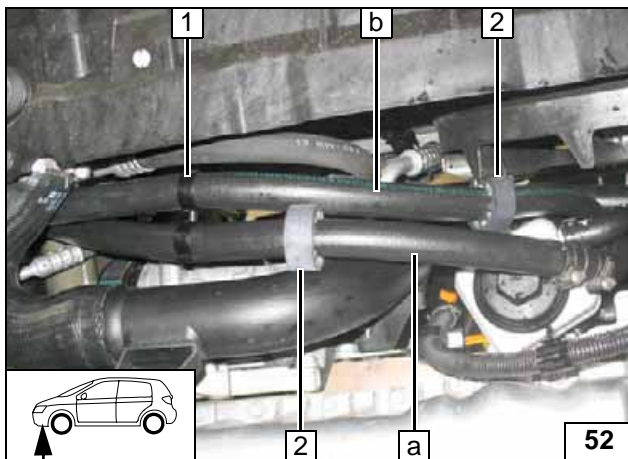


Conne-
ction to oil
cooler out-
put



- 1 Hose on engine inlet

Conne-
ction on en-
gine inlet



Ensure sufficient distance to neighboring components.

- 1 Spacer bracket
- 2 Position black (sw) rubber isolator [2x]



Aligning
hoses



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.



These and following figures show gasoline vehicle!

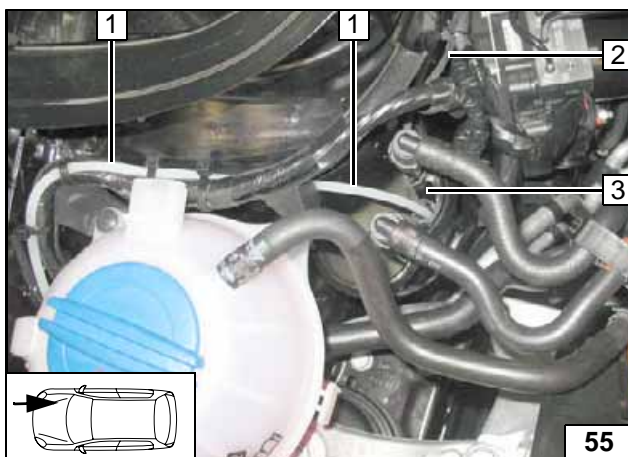
- 1 Fuel line
- 2 Hose section, 10 mm dia. clamp [2x]

**Connect-
ing heater
unit**



- 1 Fuel line

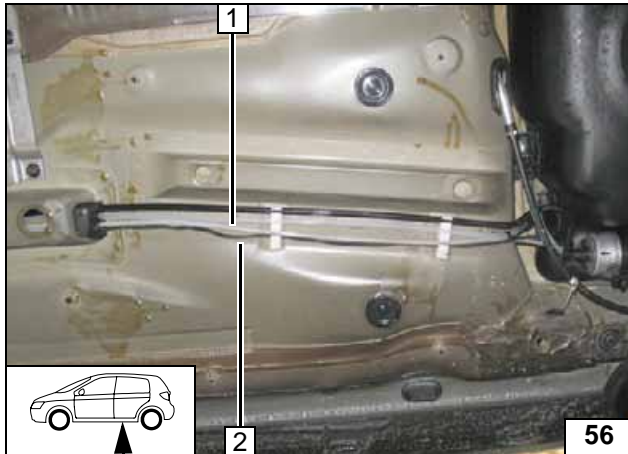
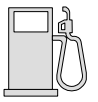
**Routing in
engine
compartment**



Route fuel line 1 and wiring harness of metering pump 2 through original vehicle line duct 3 to underbody.



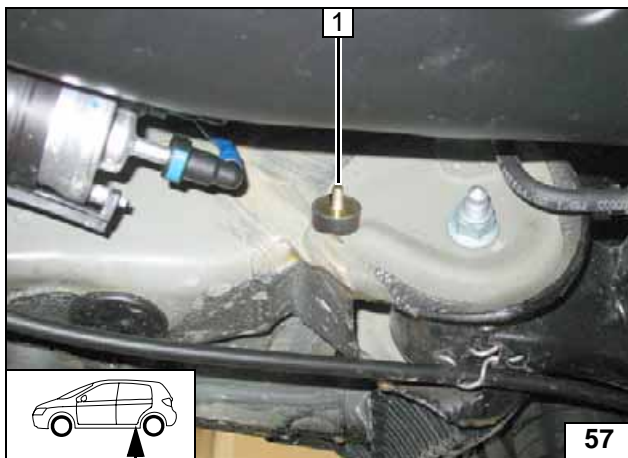
**Routing in
engine
compartment**



Route fuel line 1 and wiring harness of metering pump 2 along original vehicle lines to installation location of metering pump.



Routing on underbody

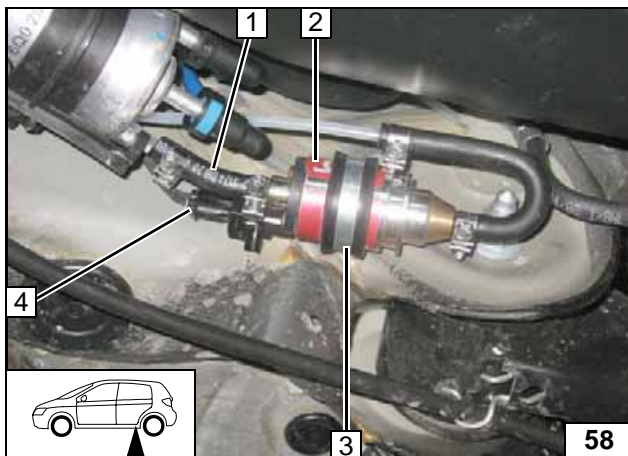


Remove underbody protection in area of fastening if necessary.



Preparing installation location of metering pump

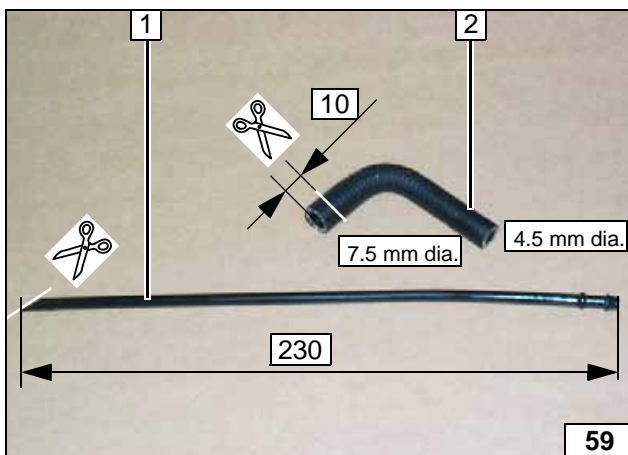
- 1 Existing hole, silent block, large diameter washer, flanged nut



- 1 Fuel line, hose section, 10 mm dia. clamp [2x]
- 2 Metering pump
- 3 Rubber-coated p-clamp, flanged nut
- 4 Wiring harness of metering pump, connector mounted

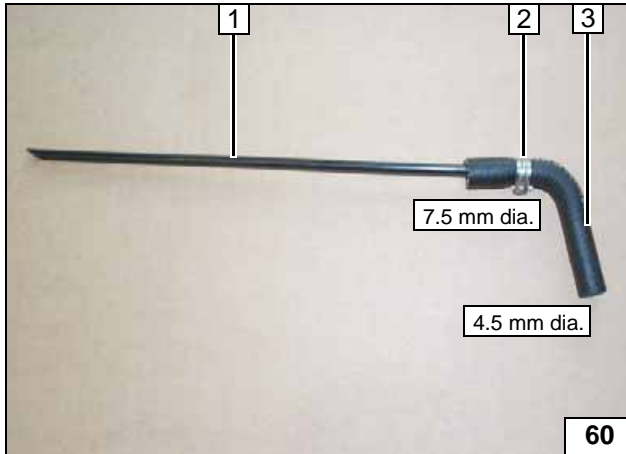
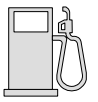


Installing metering pump



- 1 Standpipe
- 2 Molded hose

Cutting standpipe and molded hose to length

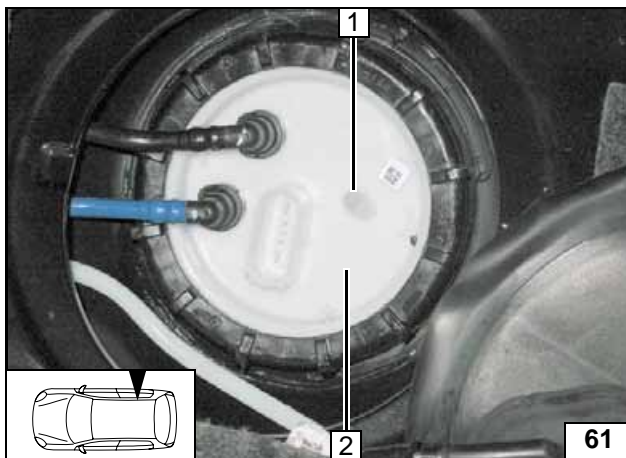


10 mm dia. Caillau clamp **2** in center between beads on end of standpipe.

- 1 Standpipe
- 3 Molded hose



Premounting fuel standpipe

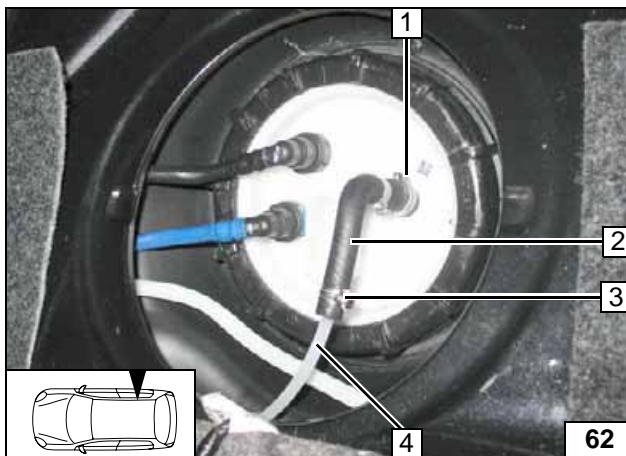


Gasoline

- Cut 3 mm off blind plug **1**.
- 2** Fuel-tank sending unit

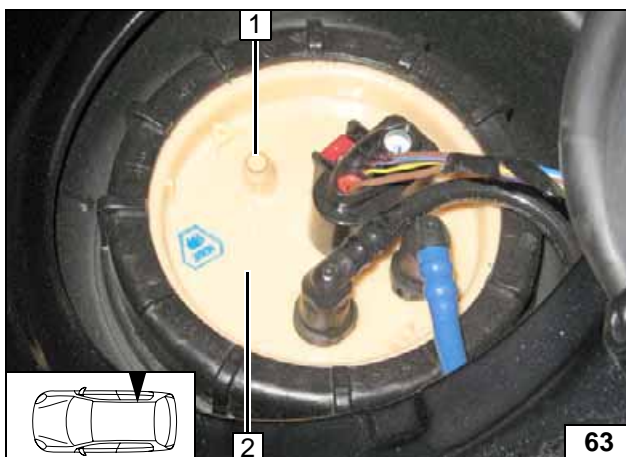


Cutting off blind plug



- 1** 13.5 mm dia. Caillau clamp
- 2** Premounted fuel standpipe
- 3** 10 mm dia. Caillau clamp
- 4** Fuel line

Connection to fuel-tank sending unit

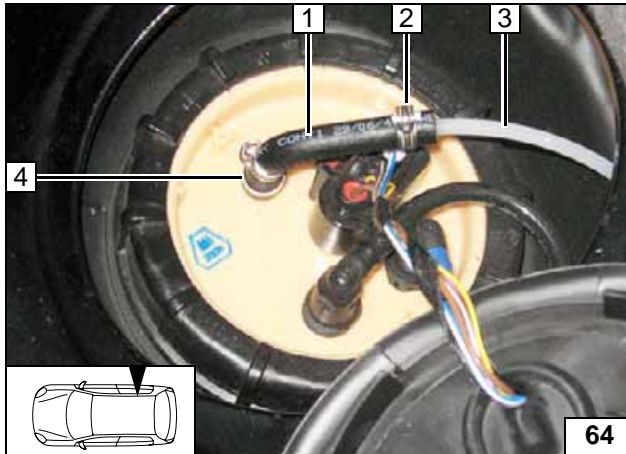


Diesel

- Cut 3 mm off blind plug **1**.
- 2** Fuel-tank sending unit

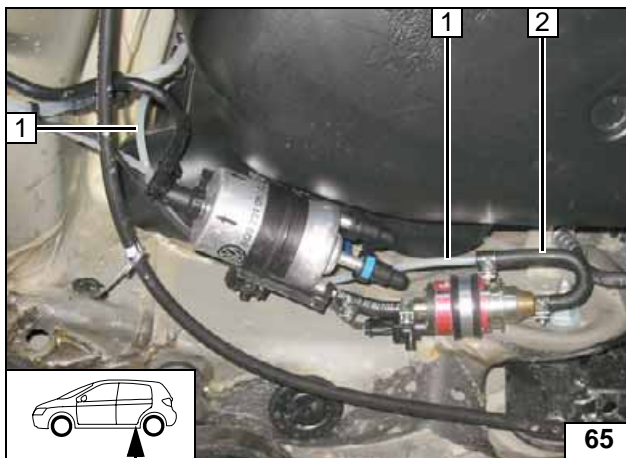


Cutting off blind plug



- 1 Premounted fuel standpipe
- 2 10 mm dia. Caillau clamp
- 3 Fuel line
- 4 13.5 mm dia. Caillau clamp

Con-
nec-
tion to fuel-
tank send-
ing unit



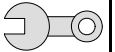
All vehicles

Photo shows gasoline vehicle!
Check the position of the components; adjust if necessary. Check that they have free clearance.

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



Connect-
ing meter-
ing pump



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 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.



Webasto AG
Postfach 80 - 82132 Stockdorf
Hotline 01805 / 932278 - Hotfax 0395 / 5592-353
<http://www.webasto.de>

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:

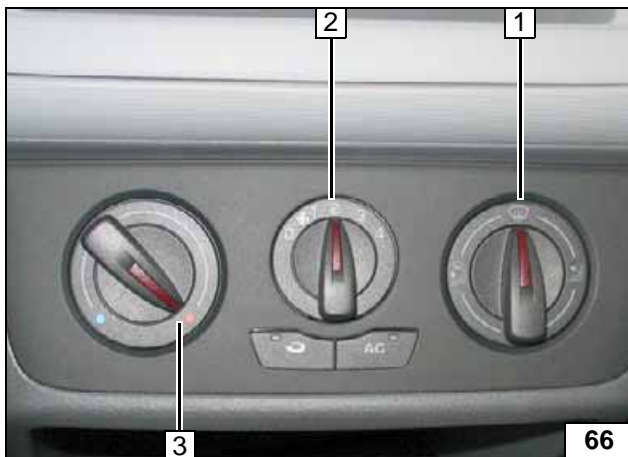
For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.

On vehicles with passenger compartment monitoring, this must be deactivated during heating!

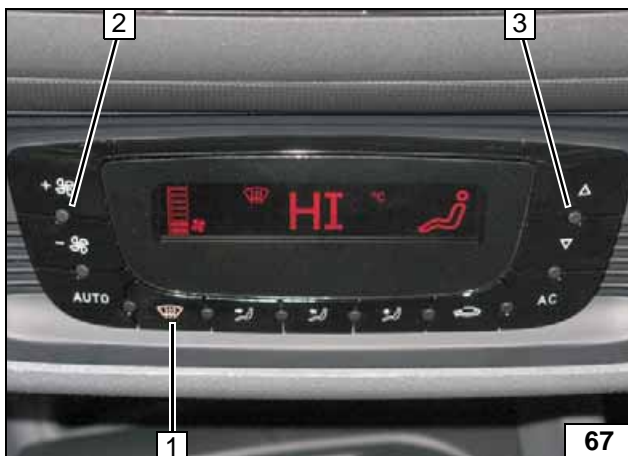
WARNING!

To ensure a proper additional heating mode, the fuel tank may not have reached the - Reserve - fill level!

Before parking the vehicle, make the following settings:



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



- 1 Air outlet to windshield
- 2 Set fan to level "2"
- 3 Set temperature to "HI"



Climat-ic/without air conditioning

Climatron-ic