

# 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

### Opel Corsa

Diesel  
from Model Year 2007  
Left-hand drive vehicle  
Manual transmission



#### **WARNING!**

Hazard warning:

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

Specialist company training, technical documentation, 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
Opel	Corsa	S-D	e1 * 2001 / 116 * 0379 * ...

Engine type	Engine model	Output in kW	Displacement in cm <sup>3</sup>
Z13DTJ	Diesel	55	1248
Z13DTJ	Diesel	66	1248

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	Retail accessories with desired heater control	See price list
	For installation parts, see Webasto calculation program	

**Foreword**

These installation instructions apply to Opel Corsa Diesel 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).

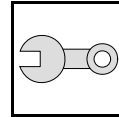
**Special Tools**

- Torque wrench for 2.0 - 10 Nm
- Hose clamping pliers
- Metric Thread-Setter Kit

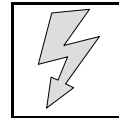
**Explanatory Notes on Document**

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.

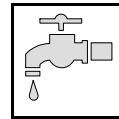
**Mechanical system**



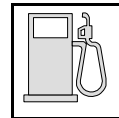
**Electrical system**



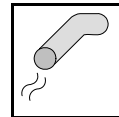
**Coolant connection**



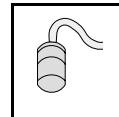
**Fuel connection**



**Exhaust system**



**Combustion air**



Special features are highlighted using the following symbols:



Specific risk of injury or fatal accidents.



Specific risk of damage to components.



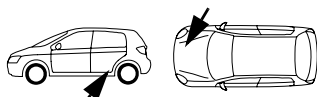
Specific risk of fire or explosion.



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



Reference to a special technical feature.



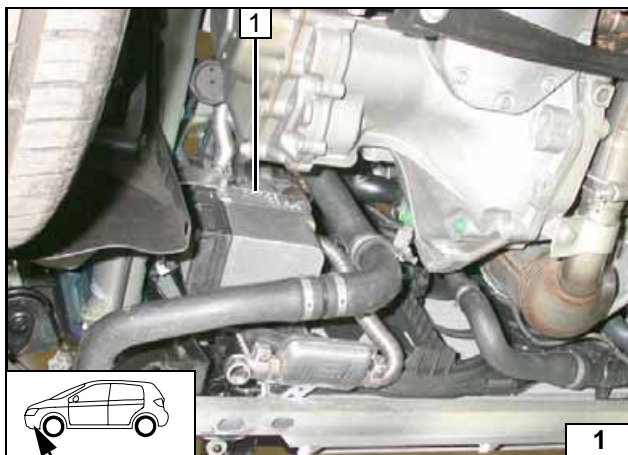
The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.

## Preliminary Work

### WARNING!

- 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.
- Completely remove the battery
- Remove the wiper arms
- Remove the coolant reservoir cap.
- Expose the fuse and relay box in the engine compartment
- Remove the rear bench seat
- Open the right-hand fuel sender service lid
- Remove the fuel-tank sending unit in accordance with the manufacturers specifications
- Remove the footwell trim on the driver's side

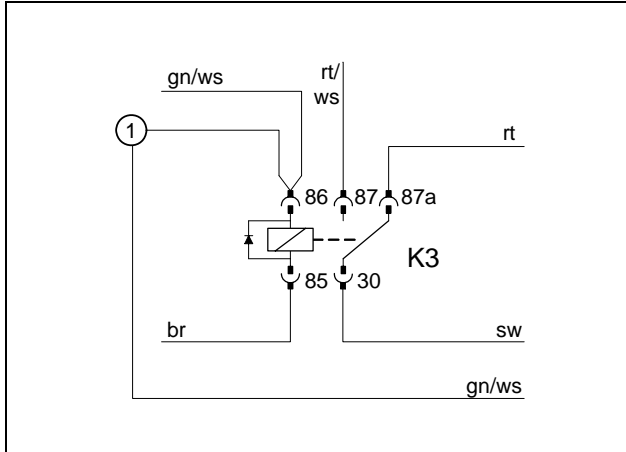
Remove page 24 "Operating Instructions for End Customer" and insert with vehicle operating instructions.



### Heater unit installation location

1 Heater unit

Installation location



## Preparing electrical system

### Only with automatic air-conditioning

Produce connection as shown in wiring diagram with tab receptacle. Pull line section 1 (2,000 mm long, 0.75 mm<sup>2</sup>) into protective sleeving and install in passenger compartment together with wiring harness for digital timer and fan controller. This will be required later for connection of the A/C control panel.



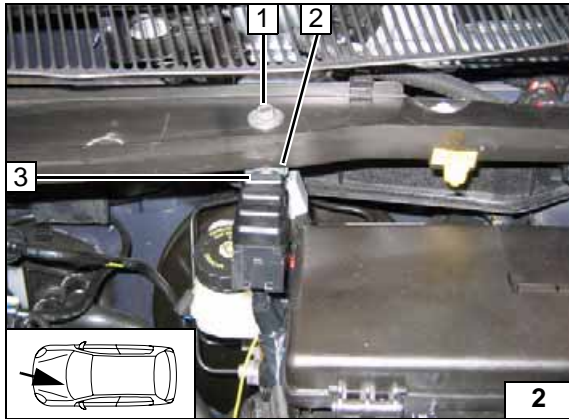
**Cutting wires to length**



### Electrical Connections

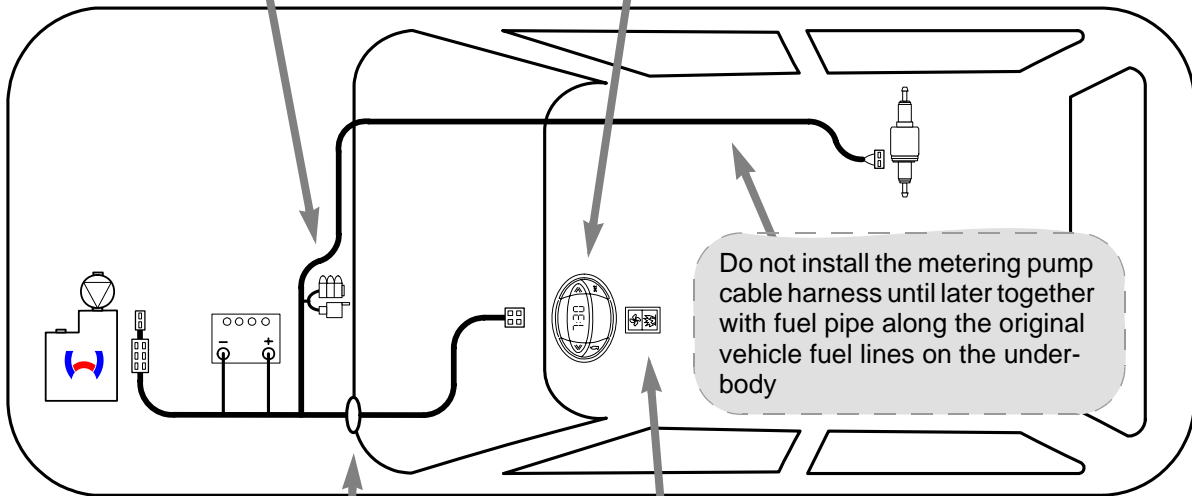
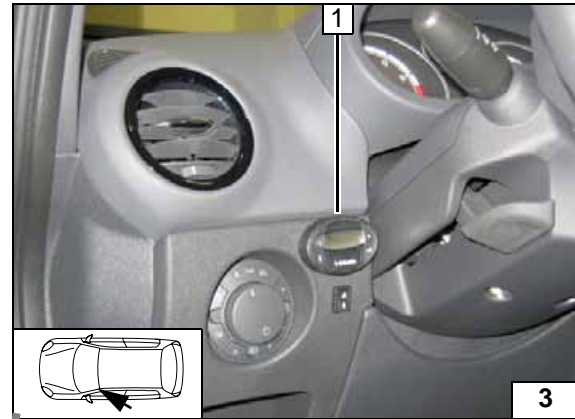
#### Fuse holder, K3 relay with manual air conditioning

- 1 7 mm dia. hole, M6x20 bolt, large diameter washer, flanged nut
- 2 Angle bracket
- 3 Retaining plate for fuse holder, M5x16 bolt, large diameter washer, K3 relay, flanged nut on angle bracket

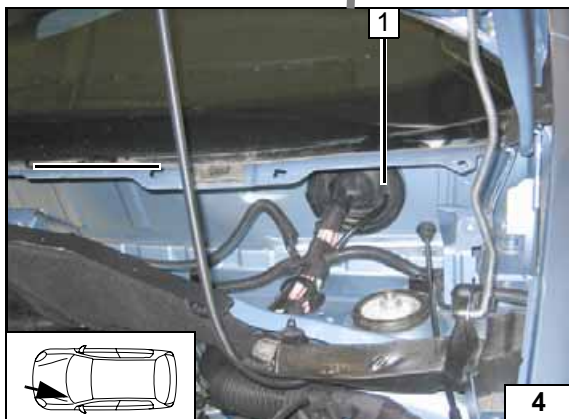


#### Digital timer

- 1 Digital timer

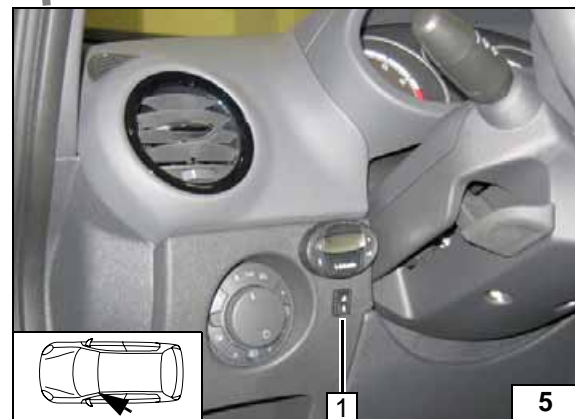


Wiring harness installation diagram



#### Wiring harness pass through

- 1 Protective rubber plug

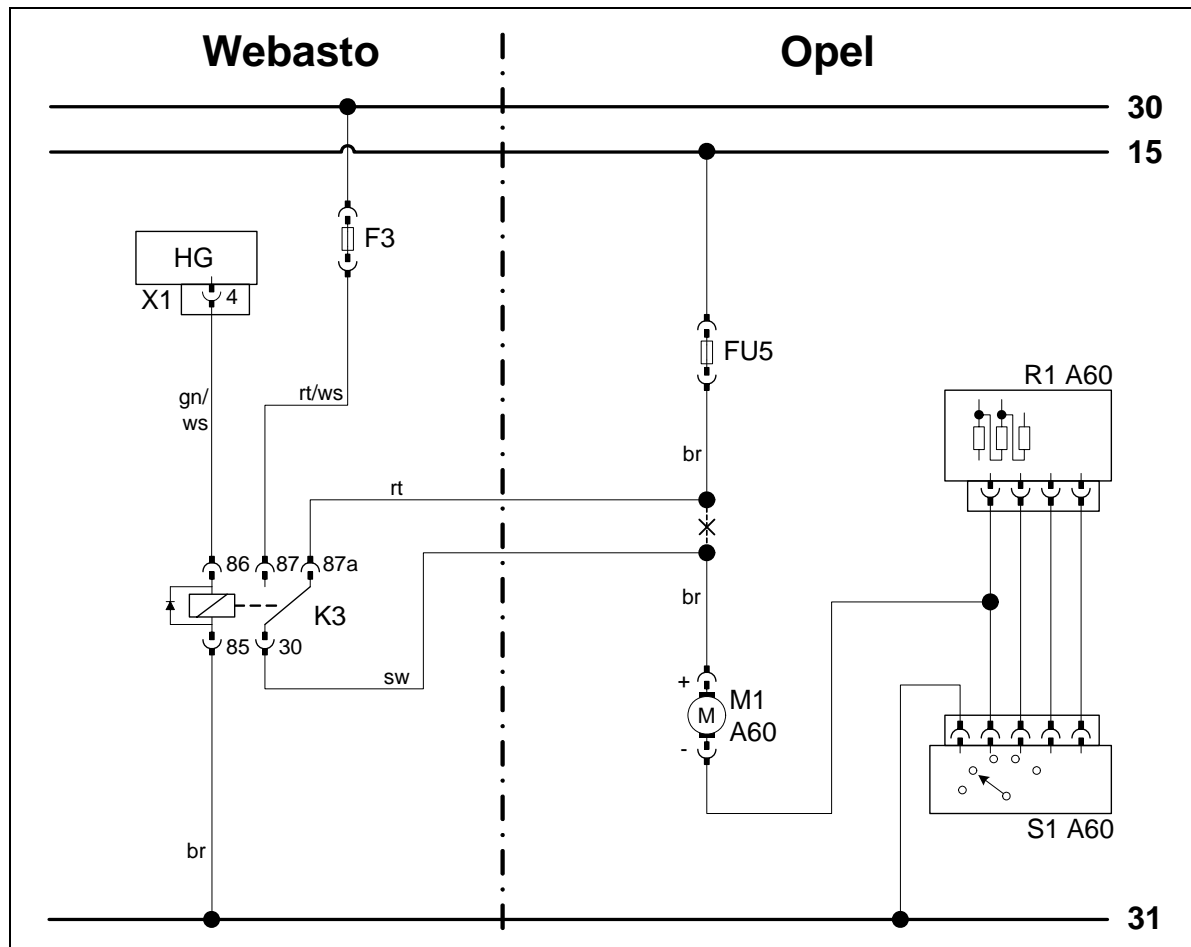


#### Summer/winter switch option

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



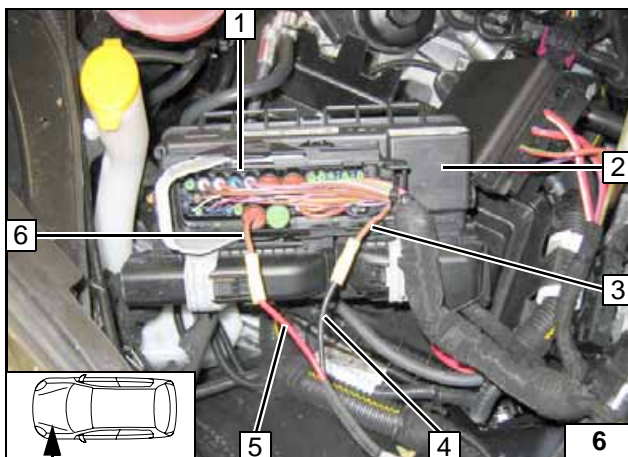
Fan controller for manual air conditioning



Wiring diagram

Webasto components		Vehicle components		Colors and symbols	
HG	Heater unit TT-C/E	M1 A60	Fan motor	rt	red
X1	6-pin connector	FU5	Fuse 40A	ws	white
F3	Fuse, 25 A	R1 A60	Resistor group	sw	black
K3	Fan relay	S1 A60	Fan switch	br	brown
				gn	green
				X	Cutting point
				Wiring colors may vary.	

Legend



Connection to connector 1 of fuse and relay box 2.  
Produce connections as shown in wiring diagram.

- 3 Brown (br) wire to fan motor
- 4 Black (sw) wire from K3/30
- 5 Red (rt) wire to K3/87a
- 6 Brown (br) wire from fuse FU5



Connecting fan-motor

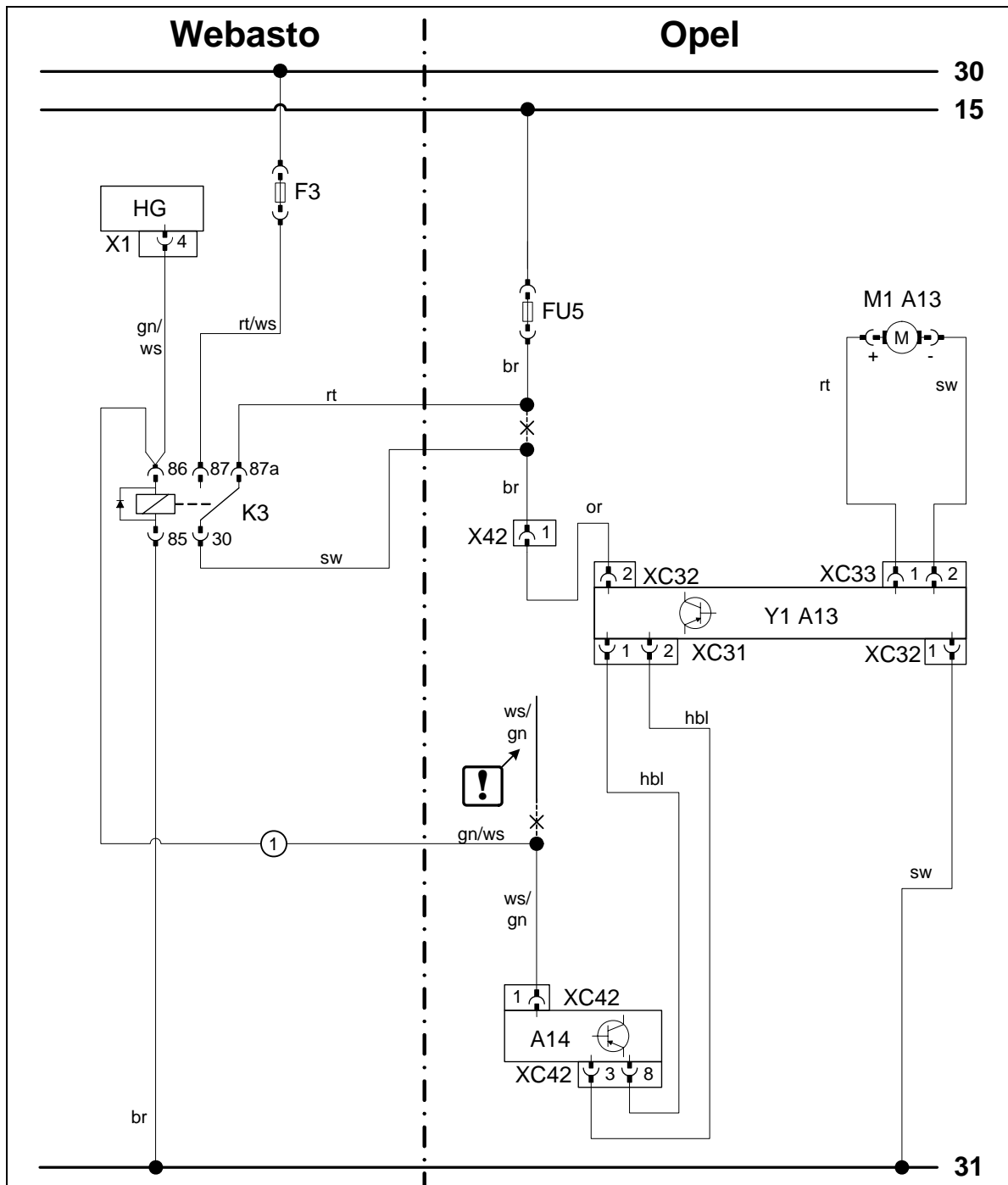




Automatic air-conditioning fan controller

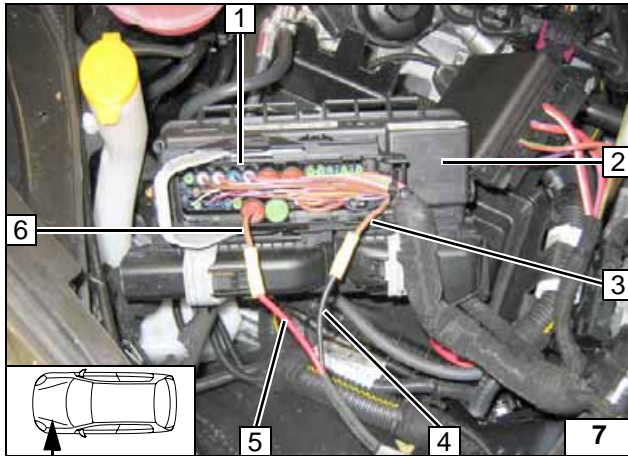


Wiring diagram



Webasto components		Vehicle components		Colors and symbols	
HG	Heater unit TT-C/E	M1 A13	Fan motor	rt	red
X1	6-pin heater unit connector	FU5	Fuse 40A	ws	white
F3	Fuse, 25 A	Y1 A13	Fan controller	sw	black
K3	Fan relay	A14	Air-cond. control element	br	brown
		XC.....	Connector designations	gn	green
		X.....	Connector designations	hbl	light blue
				or	orange
					Insulate wire ends and tie back
				X	Cutting point
				Wiring colors may vary.	

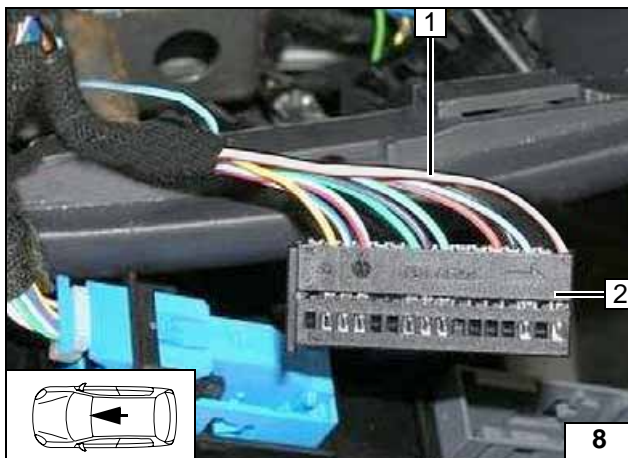
Legend



Connection to connector **1** of fuse and relay box **2**.  
Produce connections as shown in wiring diagram.

- 3** Brown (br) wire to fan controller Y1 A13
- 4** Black (sw) wire from K3/30
- 5** Red (rt) wire to K3/87a
- 6** Brown (br) wire from fuse FU5

**Connect-  
ing fan-mo-  
tor**



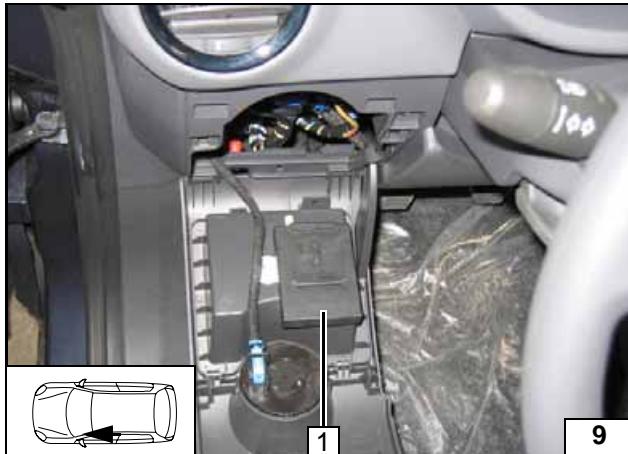
Connection to gray 32-pin connector **2** from the air conditioning control.  
Disconnect white/green (ws/gn) wire **1** and produce connection as shown in wiring diagram with connector.

**WARNING!**

If no white/green (ws/gn) wire is connected to Pin 1, the green/white (gn/ws) wire from K3/86 is connected there with a suitable plug-in contact.

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



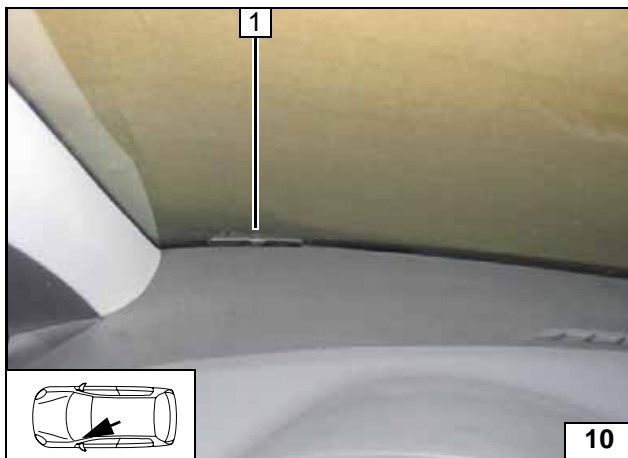


**Remote option (Telestart)**

Fasten receiver 1 with suitable means (double-sided adhesive tape).

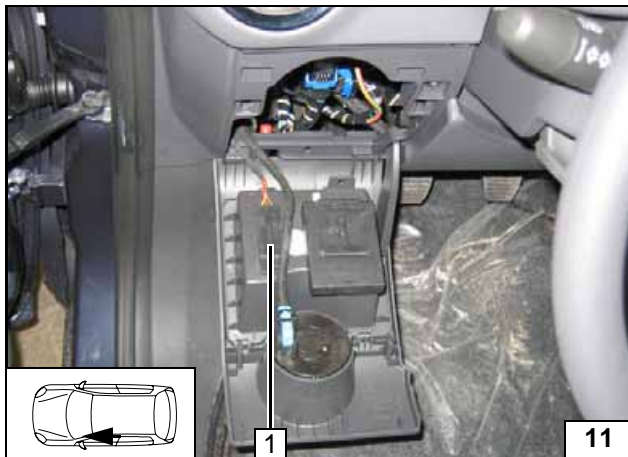


**Installing receiver**



1 Antenna

**Installing antenna**

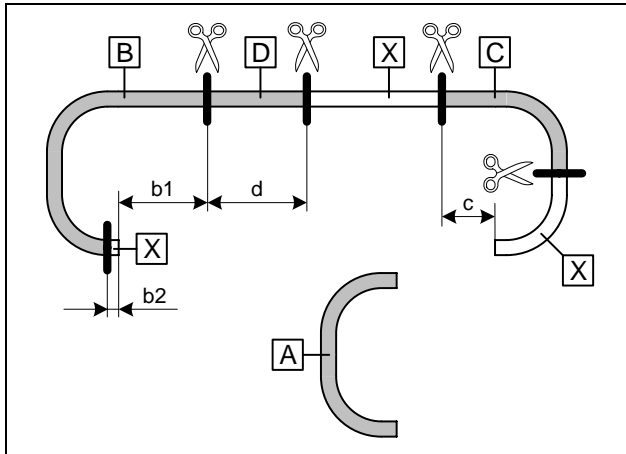
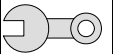


**Temperature sensor for HTM100 only**

Fasten temperature sensor 1 with suitable means (double-sided adhesive tape).



**Installing temperature sensor**



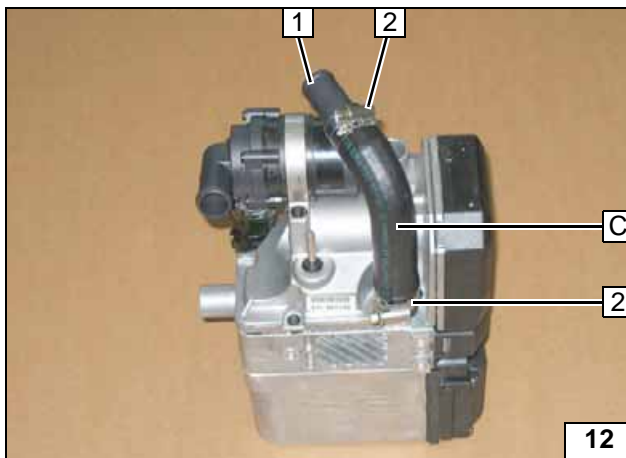
**Preparing heater unit**

- b1 = 250 mm
- b2 = 20 mm
- c = 80 mm
- d = 330 mm

Discard section X

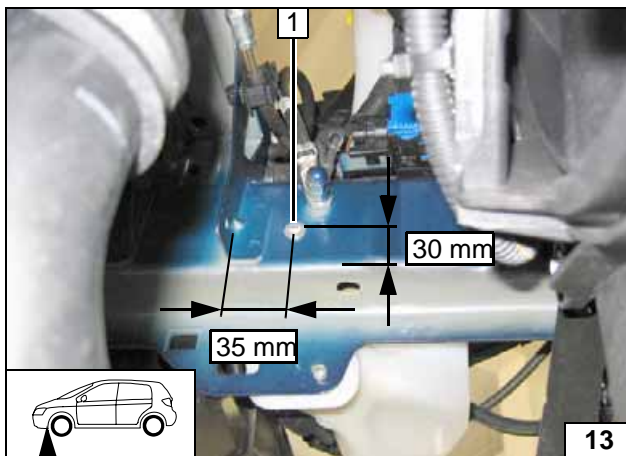


**Cutting coolant hoses to length**



- 1 20x20 connecting pipe
- 2 27 mm dia. hose clamp [2x]

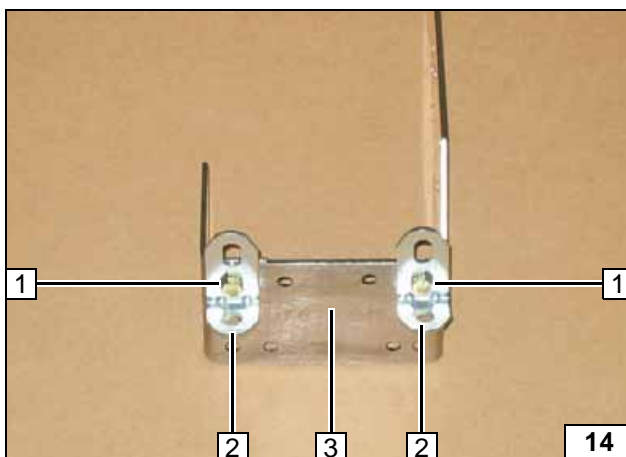
**Preassembling hose C on heater unit**



**Preparing installation location**

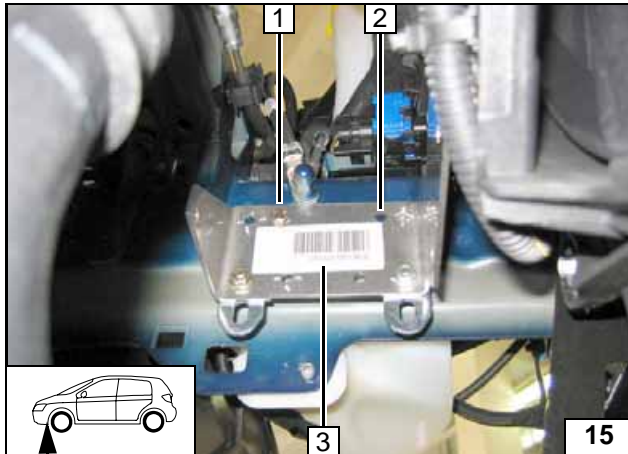
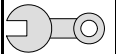
- 1 Drill 9.1 mm dia. hole; install rivet nut

**Installing rivet nut**



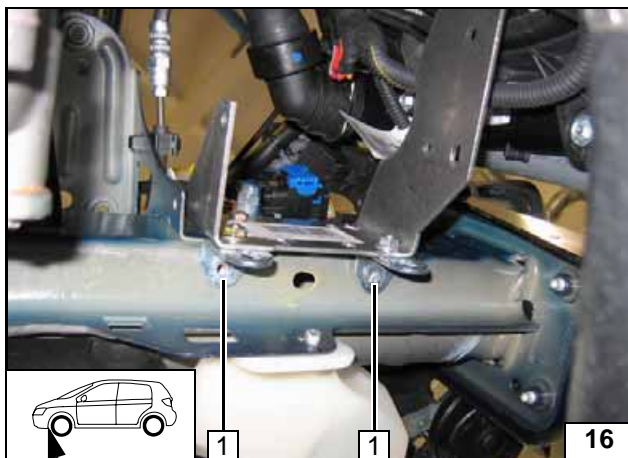
- 1 M6x12 bolt, flanged nut [2x each]
- 2 Angle bracket [2x]
- 3 Bracket

**Preassembling bracket**



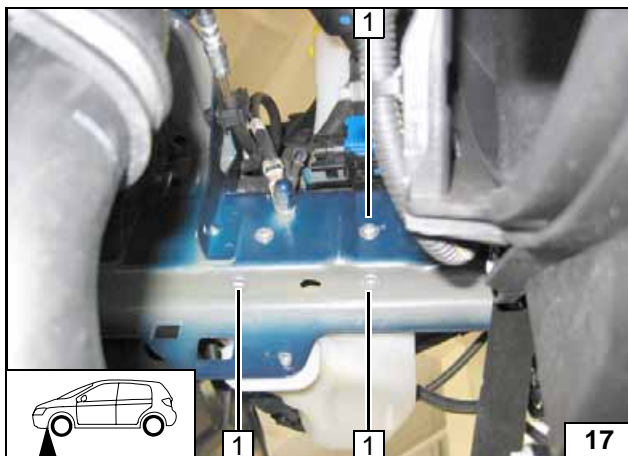
- 1 Loosely screw M6x30 bolt into rivet nut
- 2 Copy hole pattern
- 3 Bracket

Copying hole pattern



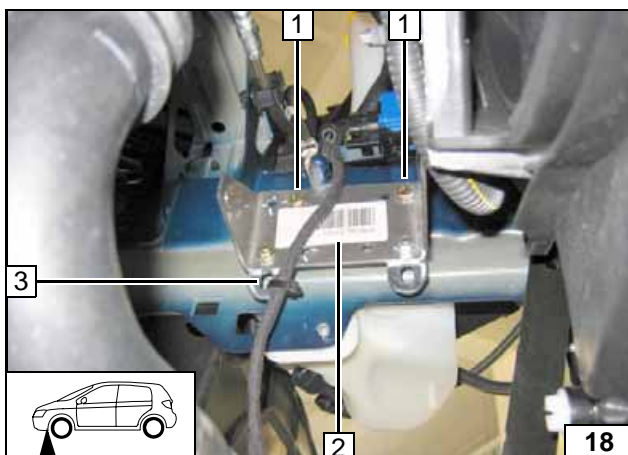
- 1 Copy hole pattern [2x], remove bracket

Copying hole pattern



- 1 Drill 9.1 mm hole; install rivet nut [3x each]

Installing rivet nut

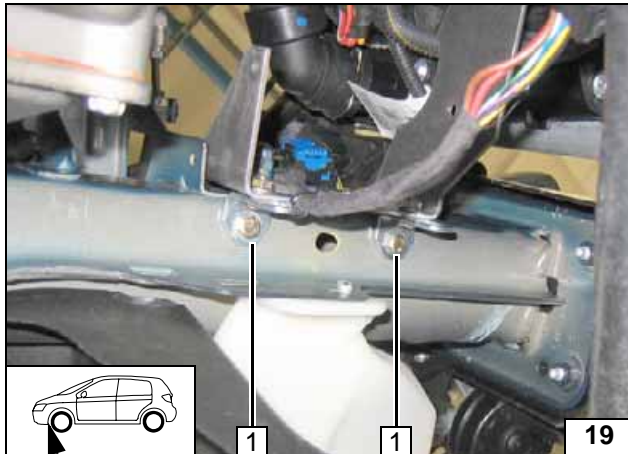
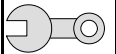


Insert one 5 mm shim each between bracket 2 and frame side member at position 1.

- 1 Mount M6x30 bolt, spring lockwasher, 5 mm shim on rivet nut [2x each]
- 3 Wiring harness of heater unit, cable tie on angle bracket

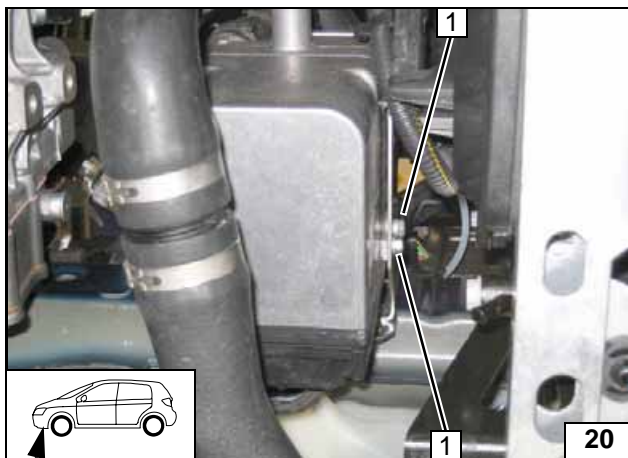
Installing bracket





1 Mount M6x20 bolt, spring lockwasher on rivet nut [2x each]

Installing bracket



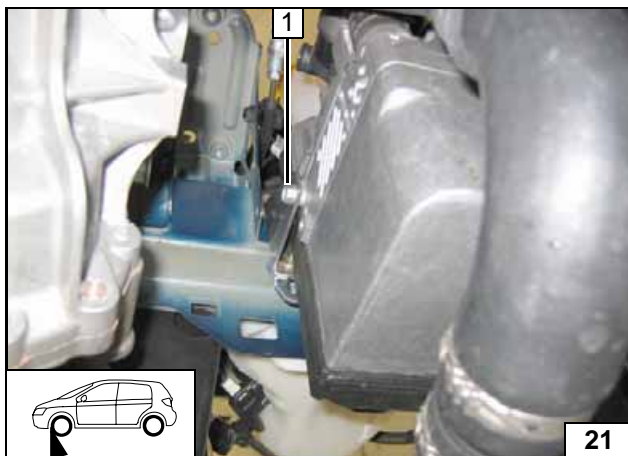
**Installing heater unit**

Ejot screw bolt, tightening torque 10 Nm!

1 Ejot screw [2x]



Installing heater unit

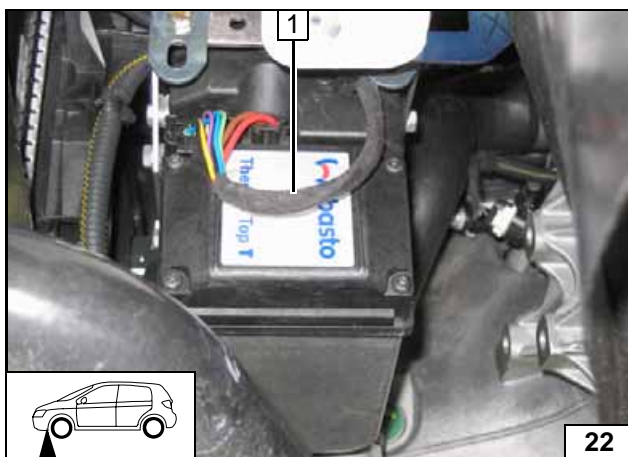


Ejot screw bolt, tightening torque 10 Nm!

1 Ejot screw

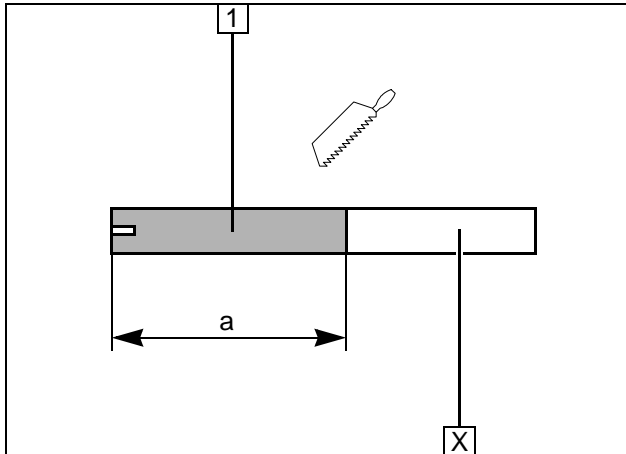


Installing heater unit



1 Wiring harness of heater unit

Connecting wiring harness



**Combustion air**

- 1 Combustion air pipe  
a = 250 mm

Discard section X

**Cutting combustion air pipe to length**

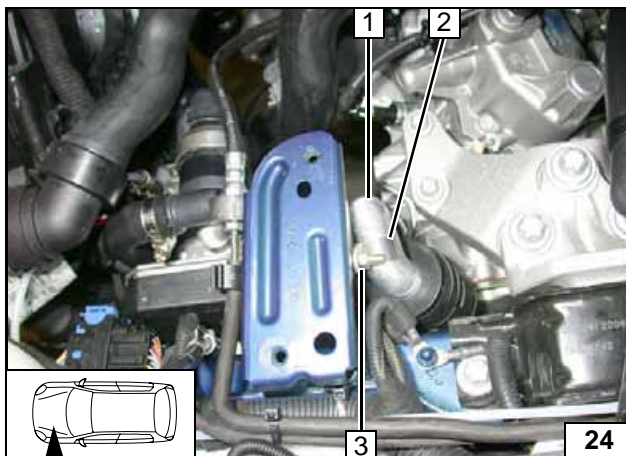


Route combustion-air intake pipe 1 under battery carrier

- 2 Combustion-air intake muffler
- 3 27 mm dia. hose clamp

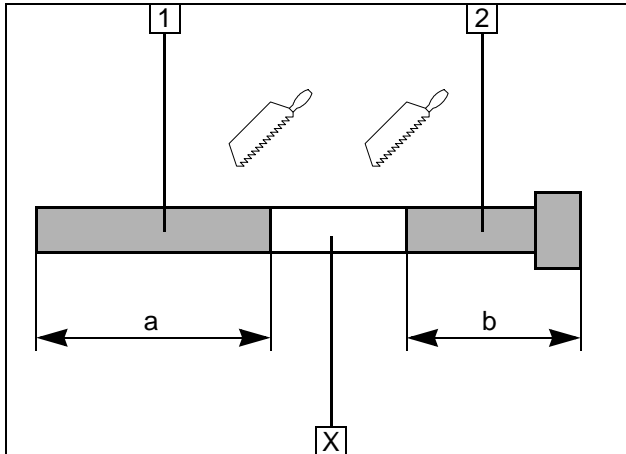
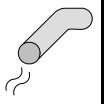


**Installing intake pipe and muffler**



- 1 Combustion-air intake pipe
- 2 P-clamp
- 3 Mount M6x20 bolt, flanged nut in existing hole

**Fastening intake pipe**

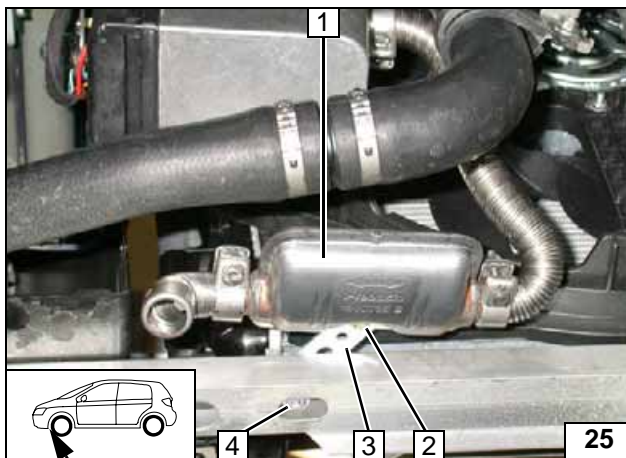


### Exhaust system

- 1 Exhaust pipe  
a = 280 mm
- 2 Exhaust end section  
b = 80 mm

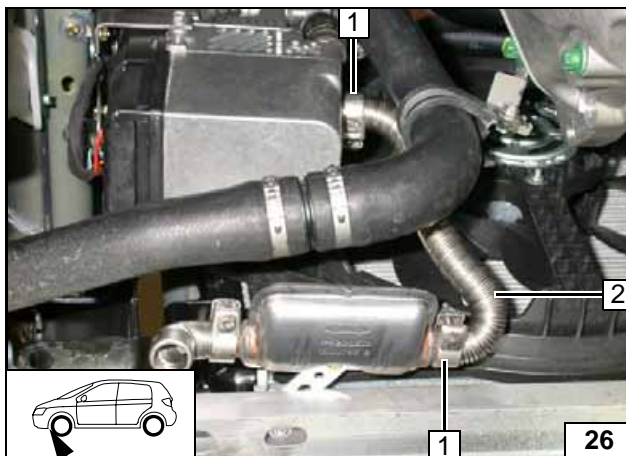
Discard section X

Preparing exhaust pipe



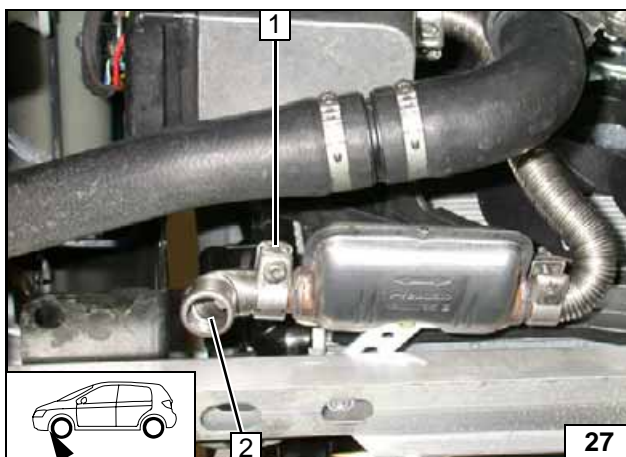
- 1 Muffler
- 2 M6x20 bolt, flanged nut
- 3 Perforated bracket
- 4 Mount M6x20 bolt, large diameter washer, flanged nut in existing hole

Installing muffler



- 1 Hose clamp [2x]
- 2 Exhaust pipe

Installing exhaust pipe



- 1 Hose clamp
- 2 Exhaust end section

Installing end section





### Coolant connection

**WARNING!**

Tighten all hose clamps to 2.0 + 0.5 Nm.

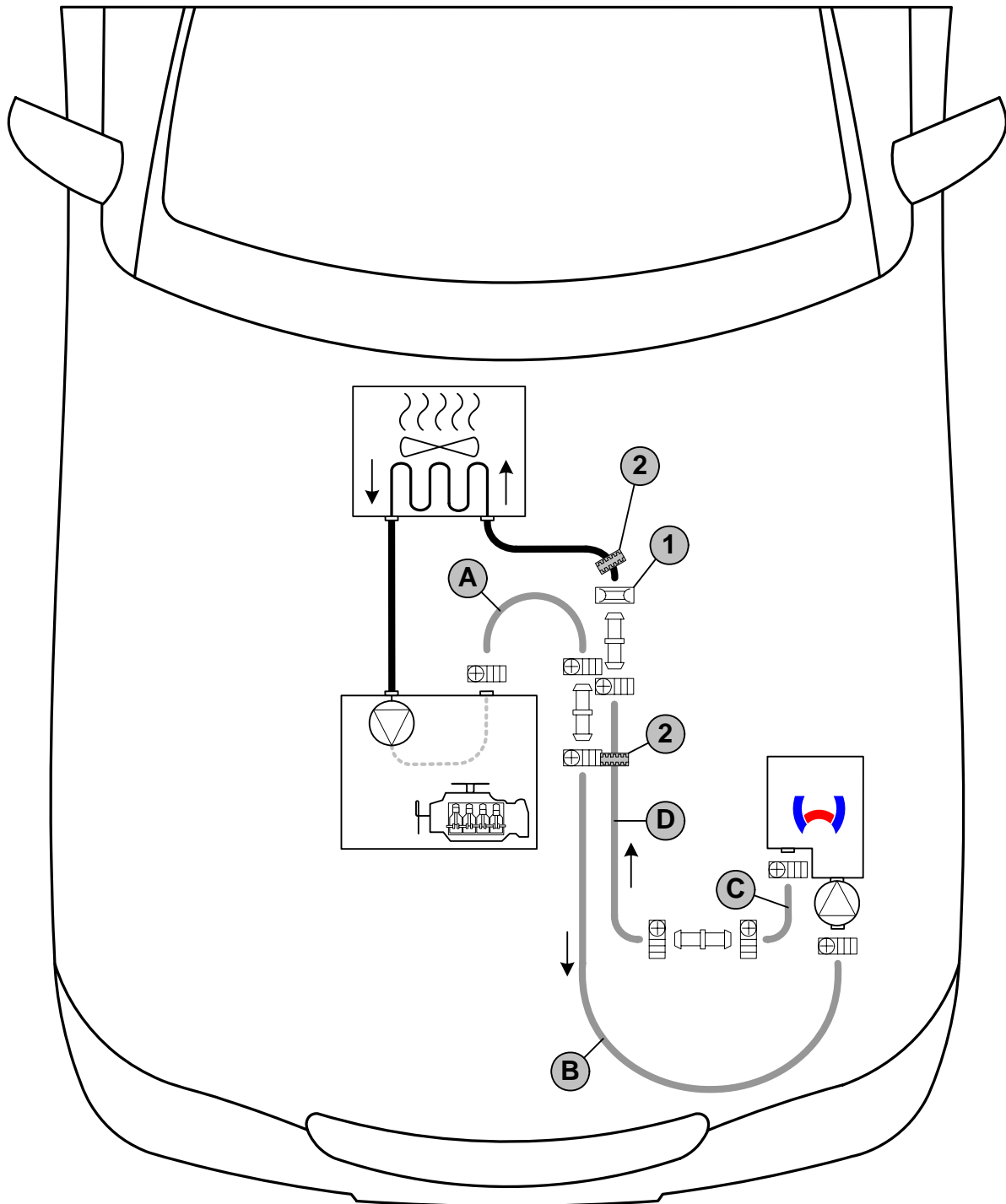
Any coolant running off should be collected using an appropriate container.


Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position hose clamps and spring band clamps so that no other hose can be damaged.



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



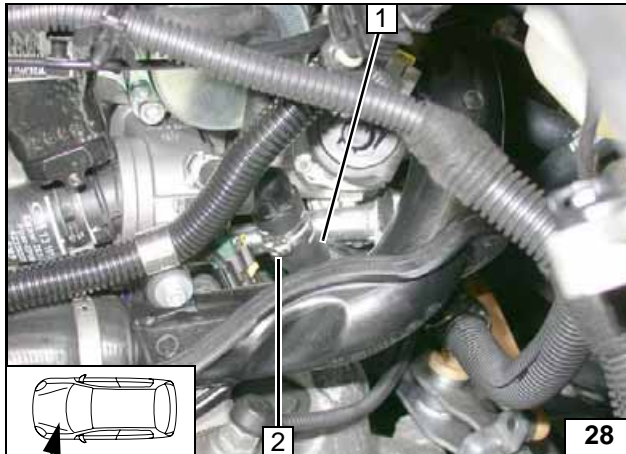
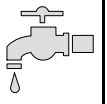
Coolant routing diagram



All connecting pipes = dia. 20x20. 1 = Original vehicle spring clip  .

All hose clamps without a specific designation  = 20-27 mm dia 2 = Black (sw) rubber isolator 

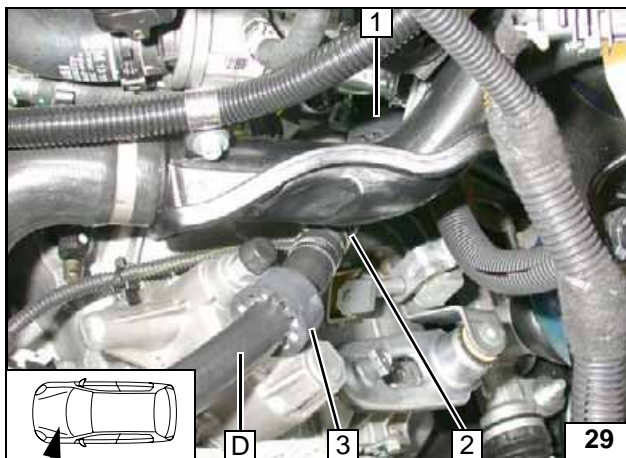




Disconnect hose to heat exchanger inlet 1 on connection piece of engine outlet. Discard spring clip 2.



**Cutting point**

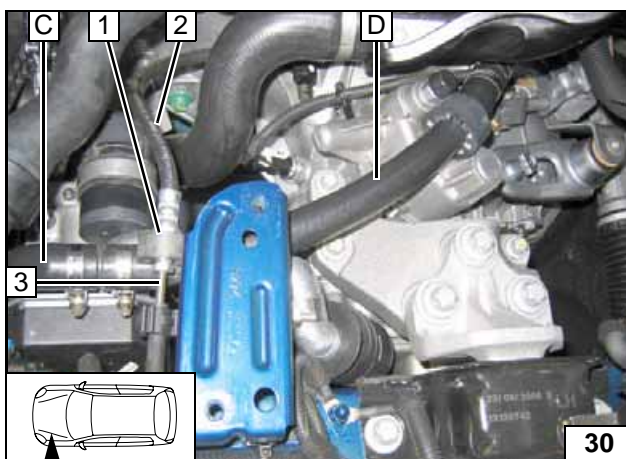


Slide black (sw) rubber isolator 1 onto original vehicle hose to heat exchanger inlet 2 and position.



3 Slide black (sw) rubber isolator onto hose D and position

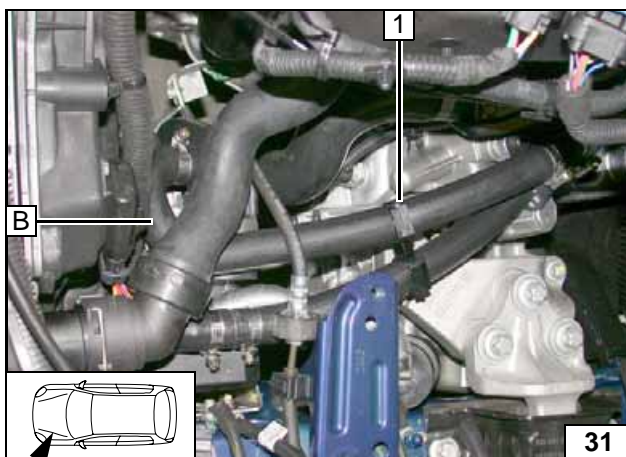
**Connecting heat exchanger inlet**



Disconnect connection between line 2 and line 3; catch clutch fluid running out. Position black (sw) rubber isolator 1. Refill clutch fluid and bleed.



**Connecting heater unit outlet**

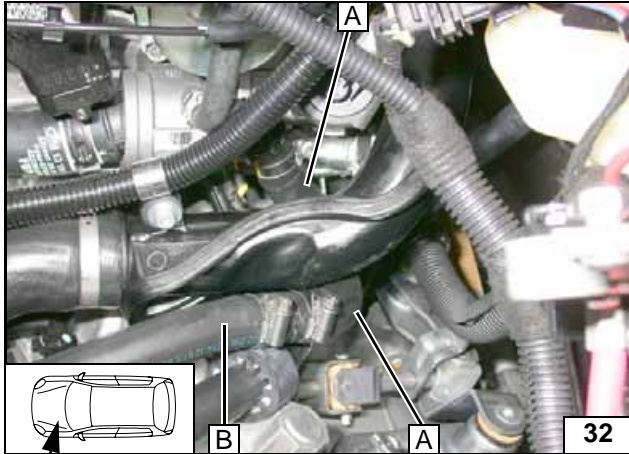
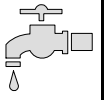


Connect hose B with 180° elbow to circulating pump.



1 Spacer bracket

**Connecting heater unit inlet**



Connect hose A and B.



Connect-  
ing engine  
outlet



## Fuel Connection

### CAUTION!

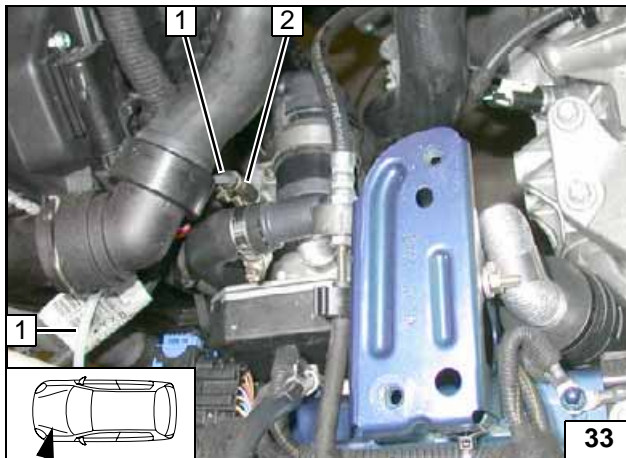
Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

Catch any fuel running off with an appropriate container.

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

### WARNING!

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



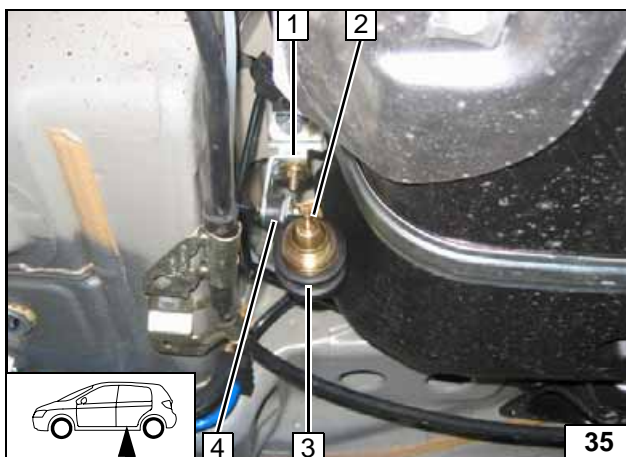
- 1 Fuel line
- 2 Hose section, 10 mm dia. hose clamp [2x]

Connect-  
ing heater  
unit



- 1 Connect fuel line, wiring harness of metering pump to original vehicle lines

Installing  
lines



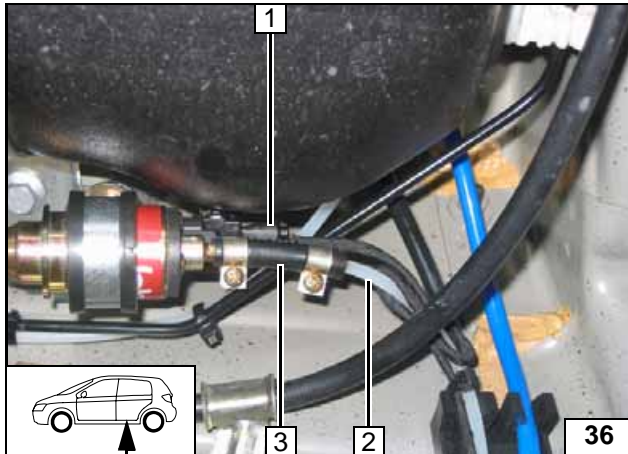
Ensure proper installation position of metering pump 2, see "Installation Instructions". Installation location in front of vehicle fuel tank!

- 1 Mount M6x20 bolt, angle bracket, large diameter washer, flanged nut in original vehicle hole
- 3 Rubber-coated pipe clamp
- 4 Silent block, flanged nut [2x]



Install-  
ation loca-  
tion of  
metering  
pump

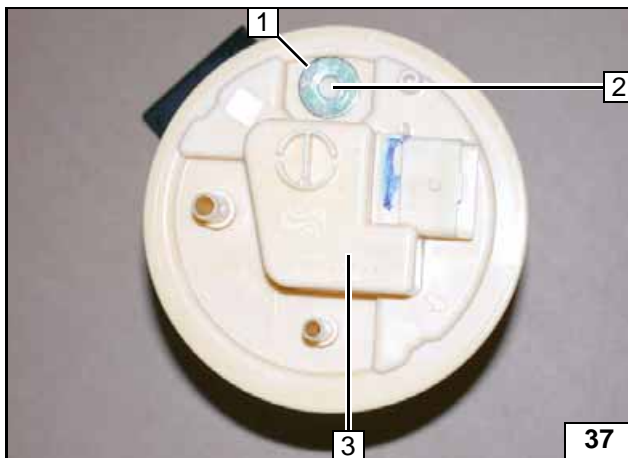




Connect fuel line 2 from heater unit to pressure side of metering pump [side with connector].

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

**Connecting metering pump**

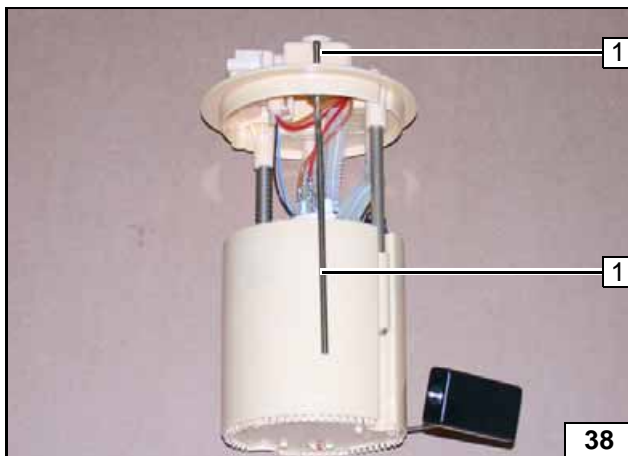


Remove fuel-tank sending unit 3 in accordance with manufacturer's specifications.

- 1 22 mm dia. large diameter washer
- 2 Copy hole pattern, drill 6 mm dia. hole



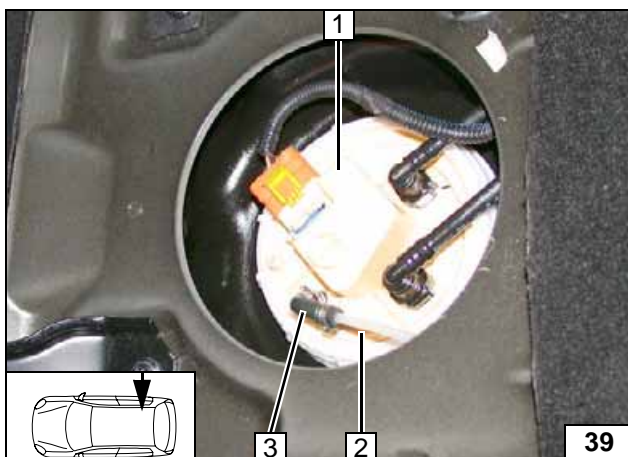
**Removing fuel**



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



**Installing fuel standpipe**

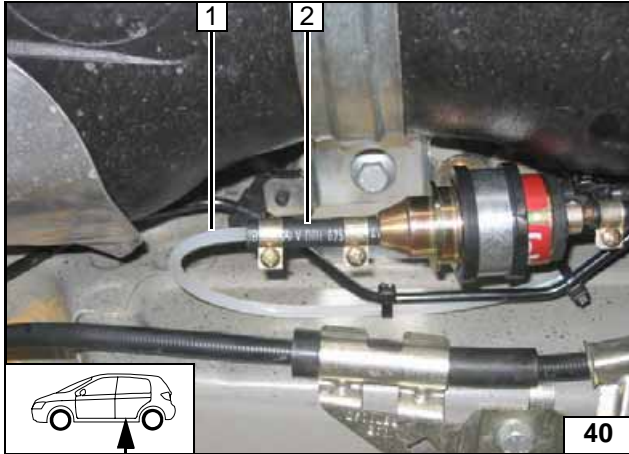


Install fuel-tank sending unit 1 in accordance with manufacturer's specifications.

- 2 Fuel line
- 3 Molded hose, 10 mm dia. Caillau clamp [2x]



**Connecting fuel line**



Fuel line **1** 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 free clearance.

**2** Hose section, 10 mm dia. hose 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.

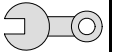
Secure all loose cables using cable ties.

Only use manufacturer-approved coolant.

Spray 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.
- Set the manual air conditioning or automatic air conditioning according to the "operating instructions for the 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.

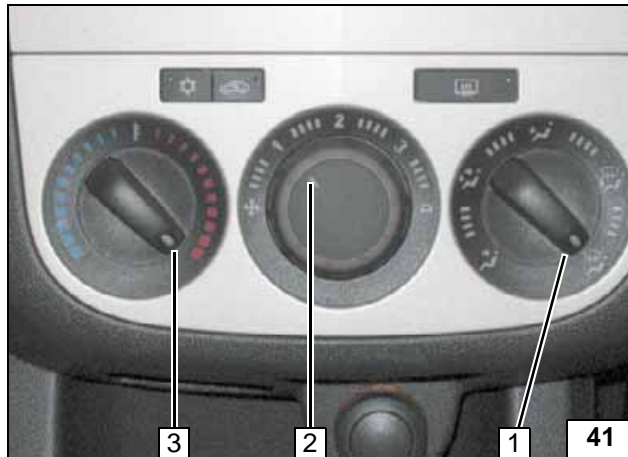
Heating time = driving time

### 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:



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



- 1 Set temperature to "max."
- 2 Air outlet to windshield



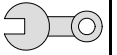
Manual air conditioning

Automatic air-conditioning

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### Template for Fuel Standpipe



100 mm



Scale 1:1

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

Set the printer settings to "no margin" or "minimize margins" and 100% of the normal size.

100 mm

0