Water Heater

***Thermo Top E* Parking Heater** e1 00 0003

***Thermo Top C* Parking Heater** e1 00 0002

Installation documentation

Suzuki Splash

Petrol
from Model Year 2008
Left-hand drive vehicle
Manual air conditioning

WARNING!

Hazard warning:

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

Specialist company training, technical documentation, specialised tools and equipment are required to install and repair Webasto heating and cooling systems.
Only original Webasto parts must be used. For this, also see the catalog of air and water heater accessories from Webasto.

NEVER attempt to install or repair Webasto heating or cooling systems if you have not successfully completed the company training and thereby acquired the required technical skills, or if you do not have access to the required technical documentation, tools and equipment needed to carry out correct installation and repairs.

ALWAYS follow all Webasto installation and repair instructions and observe all warnings.

Webasto does not accept any liability for defects and damage that are attributable to installation by untrained staff.

Ident. No.: 1314128B_EN Fee Euro 10.00

Table of Contents

Validity	2	Preparing installation location	9
Heater / Installation Kit	3	Preparing heater	9
Foreword	3	Installing heater	12
General Instructions	3	Combustion air	13
Special Tools	3	Exhaust gas	14
Explanatory Notes on Document	4	Fuel	16
Preliminary Work	5	Coolant circuit	20
Heater installation location	5	Final Work	25
Electrical system	6	Operating Instructions for End Customer	26
Fan control	7		
Remote option (Telestart)	8		

Validity

Manufacturer	Model	Type	EG BE No. / ABE
Suzuki	Splash	EX	e4 * 2001/116 * 0130 * ...

Engine type	Engine model	Output in kW	Displacement in cm³
K10B	Petrol	48	996
K12B	Petrol	63	1242

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

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

Heater / Installation Kit

Quantity	Description	Order No.:
1	Suzuki-specific heater delivery scope	See Suzuki price list
1	Installation kit for Suzuki Splash Petrol	1314113A

Optional heater control either:

Description	Order No.:
Heater controls	See Suzuki price list

Heater recommended for the respective vehicle class:

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

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

Foreword

This installation documentation applies to Suzuki Splash Petrol vehicles for validity, see page 2 - from model year 2008 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 the installation documentation.

However, the stipulations in this "installation documentation" and the "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 rub protection (split-open plastic hose).
Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K, Order No. 111329).

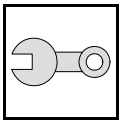
Special Tools

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

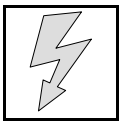
Explanatory Notes on Document

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

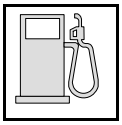


Electrical system



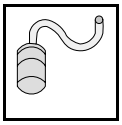
Coolant circuit

Fuel



Exhaust gas

Combustion air



Special features are highlighted using the following symbols:

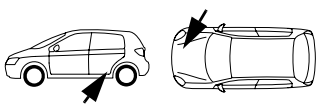
Specific risk of injury or fatal accidents.

Specific risk of damage to components.

Specific risk of fire or explosion.

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

Reference to a special technical feature.



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

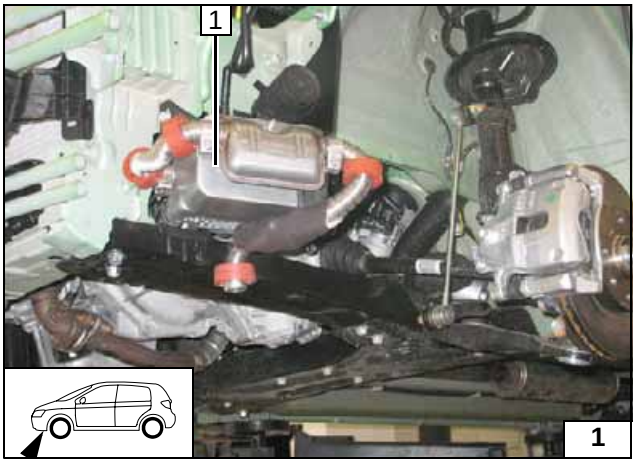
All dimensions are in mm!
Tightening torque of hose clamps = 2.0 + 0.5 Nm!
Tightening torque of Ejot screws, Ejot studs = 10 Nm!

Preliminary Work

WARNING!

- Open fuel tank cap, ventilate tank.
- Close the fuel tank cap again.
- Disconnect the battery "earth" or "ground" connection.
- Depressurise the cooling system.
- Copy the factory number from the original type label to the duplicate type label.
- Remove years that do not apply from the duplicate label.
- Attach the duplicate label (type label) in the appropriate place.
- Completely remove the battery.
- Remove the air intake resonator.
- Detach the wheel well trim on the right and left.
- Remove the bumper.
- Remove the fuel tank and the fuel-tank vent line according to the manufacturer's instructions.
- Remove the fuel-tank sending unit in accordance with manufacturer's instructions.
- Remove the lower cover of the instrument trim on the driver's side.
- Remove the upper A-pillar trim on the driver's side (only with Telestart).
- Remove the handbrake lever trim (only with digital timer).

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



Heater installation location

Photo shows vehicle with manual transmission!

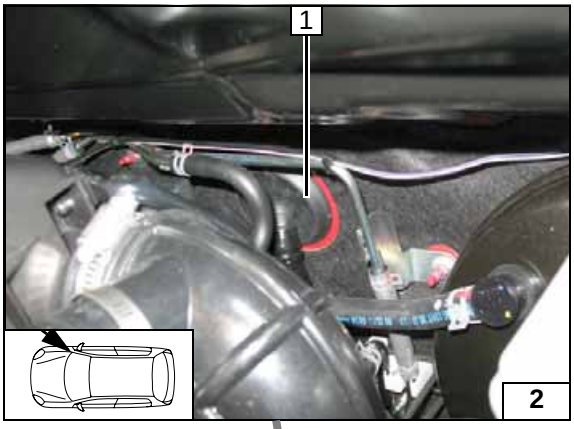
1 Heater

Installation location

Electrical system

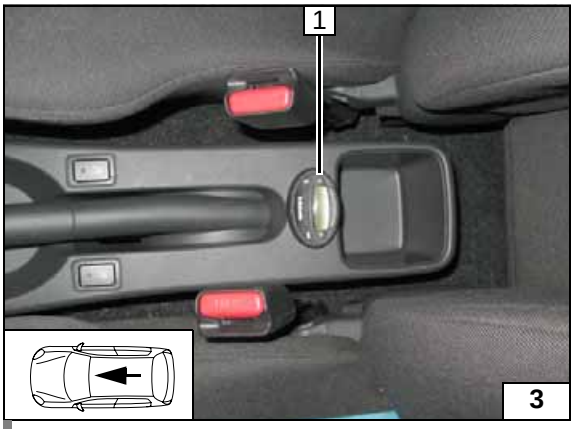
Wiring harness pass through

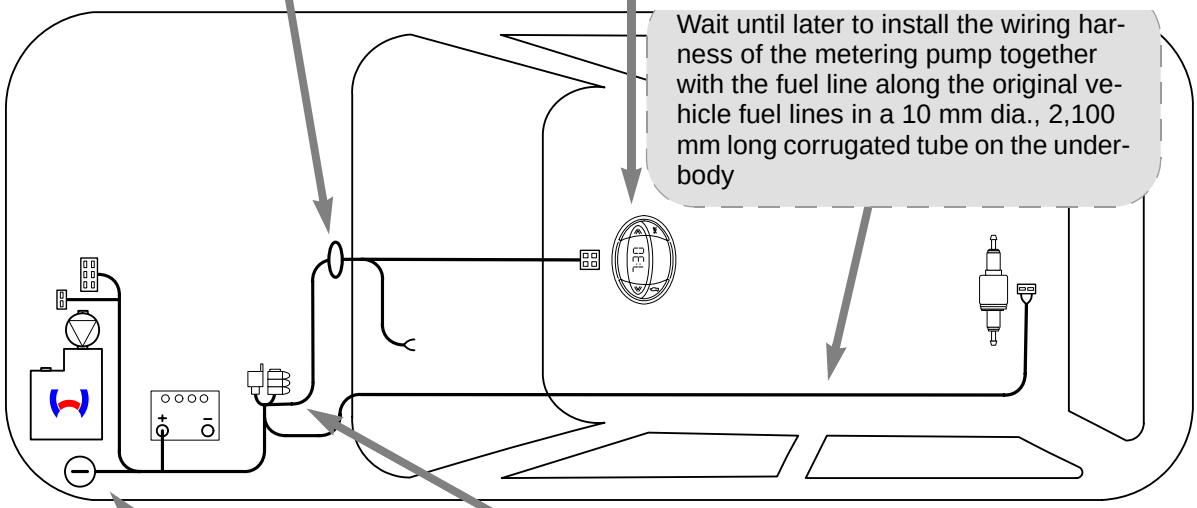
1 Protective rubber plug



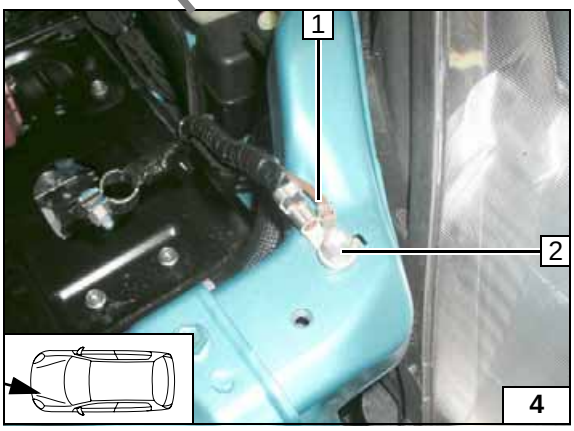
Digital timer

1 Digital timer



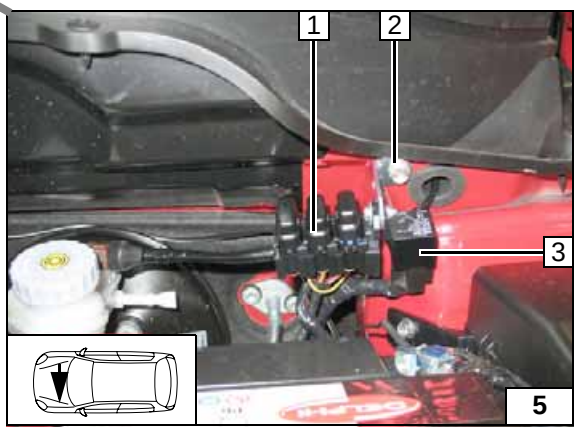


Wiring harness routing diagram



Earth point

1 Earth wire on wiring harness of heater
2 Original vehicle earth point

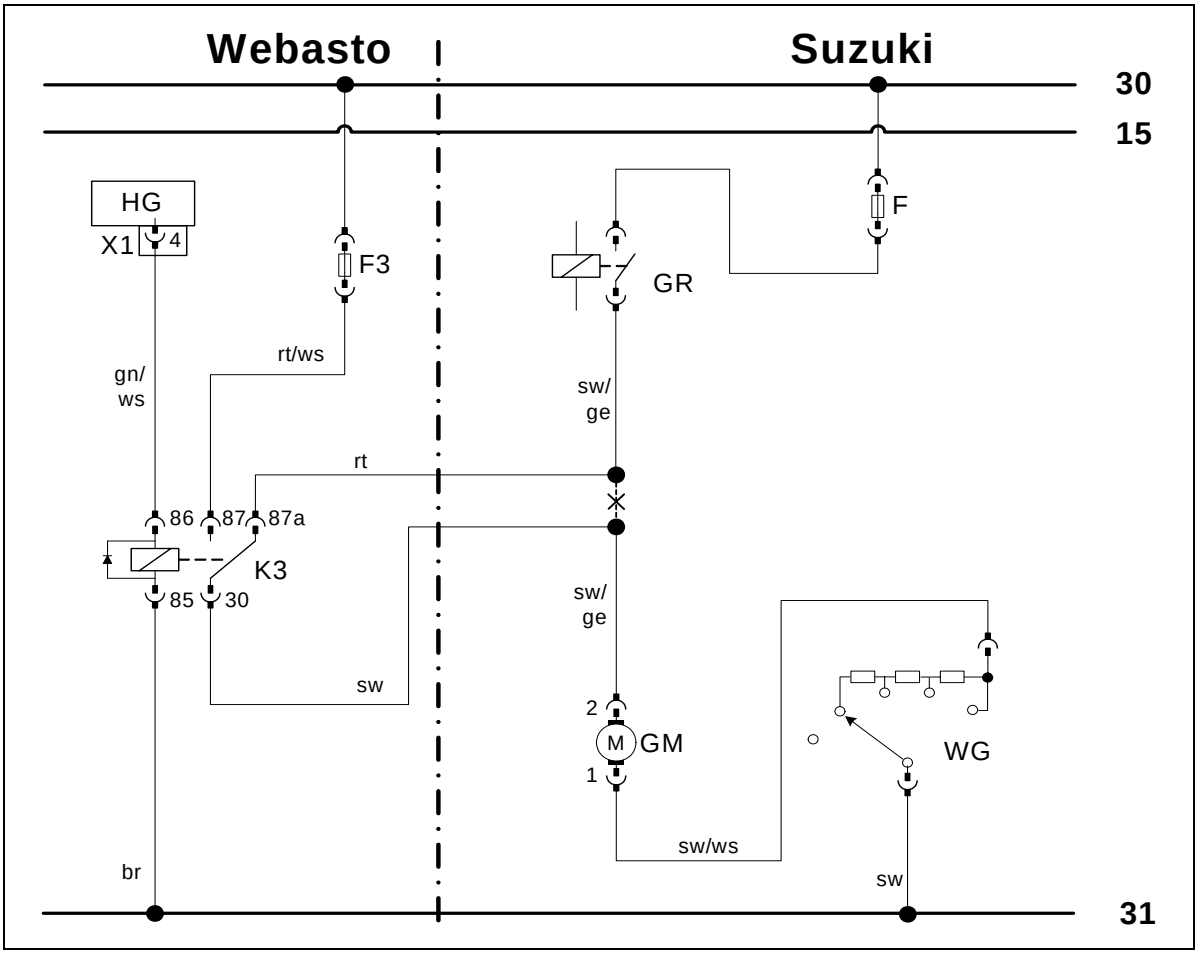


Fuse holder, K3 relay

1 Fuse holder
2 Original vehicle bolt, angle bracket
3 K3 relay, M5x16 bolt, washer, M5 nut

Fan control

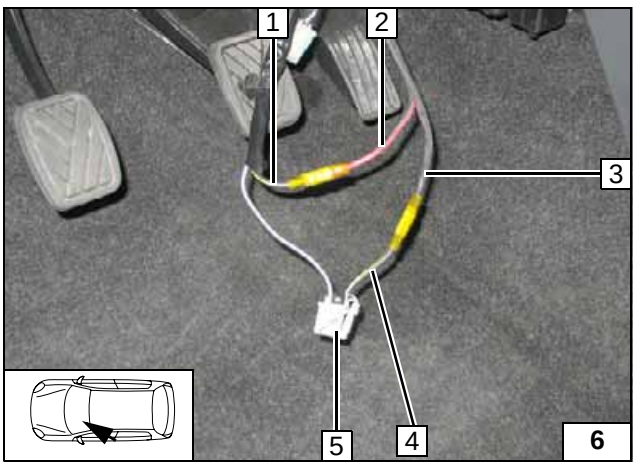
Wiring diagram



Legend

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

Connecting fan-motor

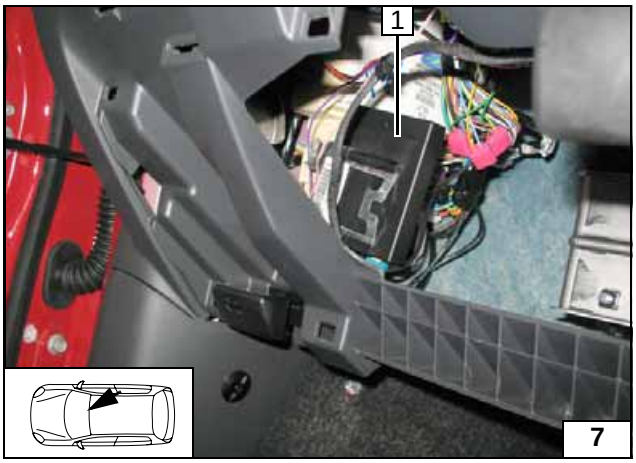


Connection to 2-pin connector **5** from the fan motor.
Produce connections as shown in wiring diagram.

1 Black/yellow (sw/ge) wire of fuse F
2 Red (rt) wire from K3/87a
3 Black (sw) wire from K3/30
4 Black/yellow (sw/ge) connector

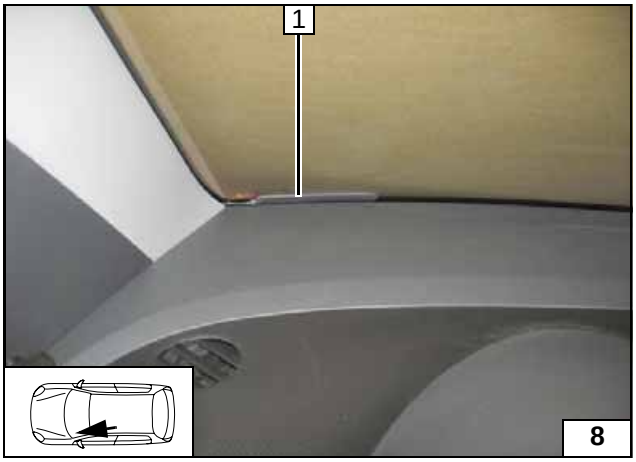
Remote option (Telestart)

Installing receiver



1 Receiver, M5x16 bolt, washer, flanged nut, original vehicle hole

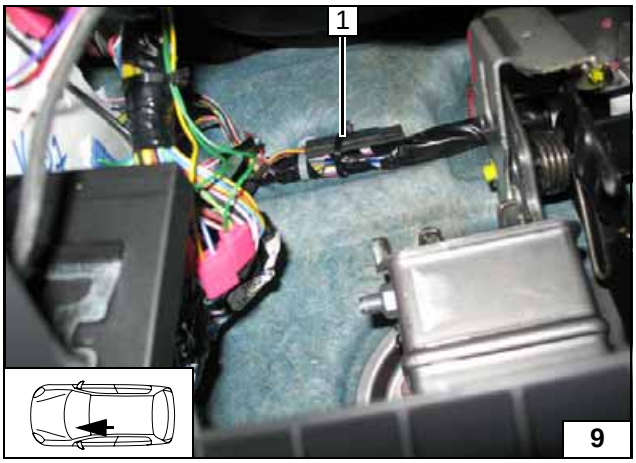
Installing antenna



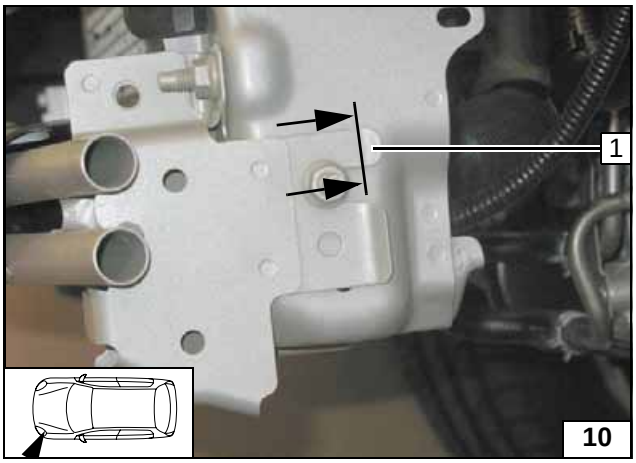
1 Antenna

Temperature sensor only for T100 HTM

Installing temperature sensor



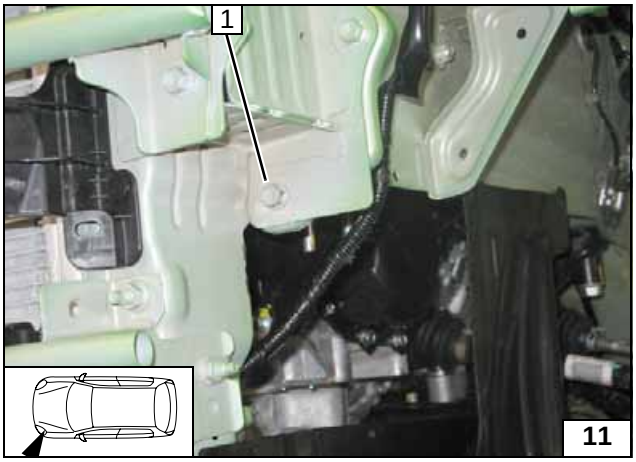
1 Fasten temperature sensor on original vehicle wiring harness with cable tie



Preparing installation location

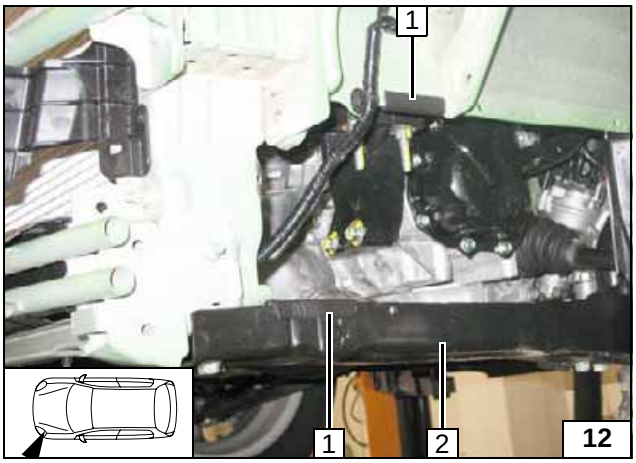
Bend tab **1** inward at markings.

Laying on tab



1 Remove original vehicle bolt (will be re-used)

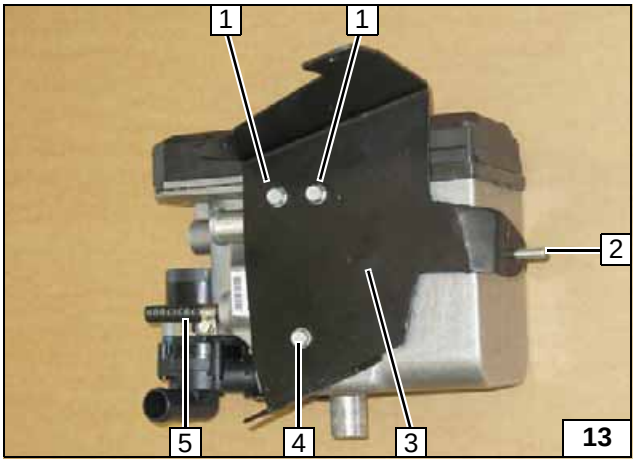
Removing bolt



Cross member**2** only present on vehicles with manual transmission

1 50 mm edge protection [2x]

Installing edge protection

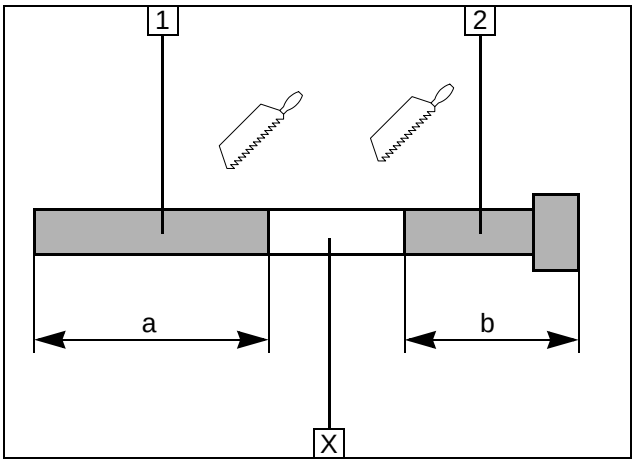


Preparing heater

Mount M6x20 bolt **2** in existing hole before installing. Insert two washers between bracket **3** and heater at position **4**.

1 Ejot screw [2x]
4 Ejot screw, washer [2x]
5 Hose section, 10 mm dia. clamp

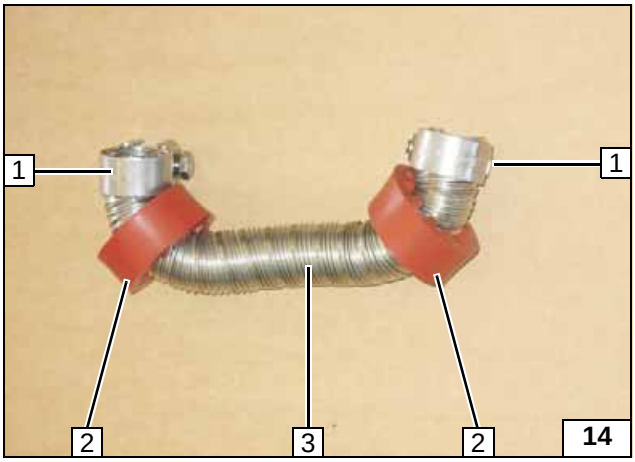
Premounting bracket



1 Exhaust pipe
a = 190
2 Exhaust end section
b = 335

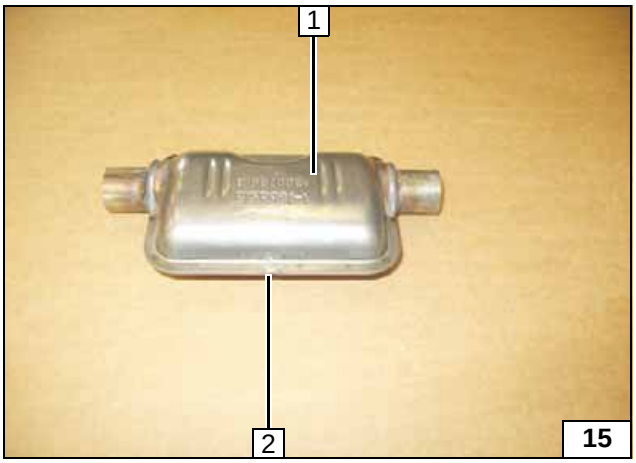
Discard section **X**

Preparing exhaust pipe



1 Loosely mount hose clamp [2x]
2 Red (rt) rubber isolator [2x]
3 Exhaust pipe

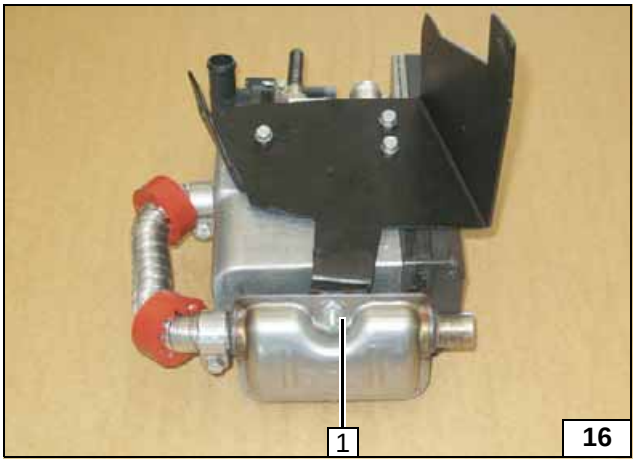
Preparing exhaust pipe



Close off condensed-water drain hole at position **2**.

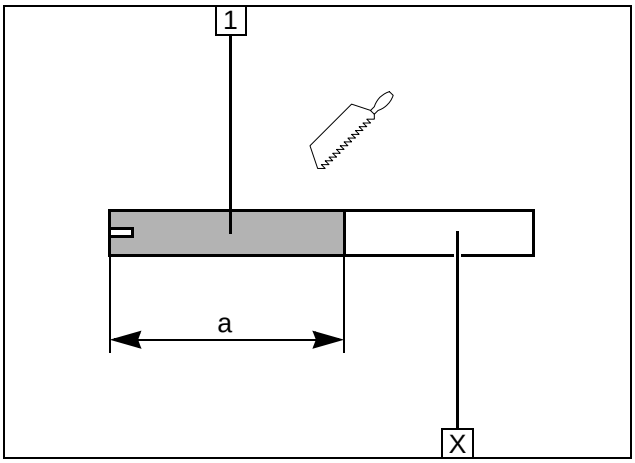
1 Exhaust silencer

Preparing silencer



1 Flanged nut

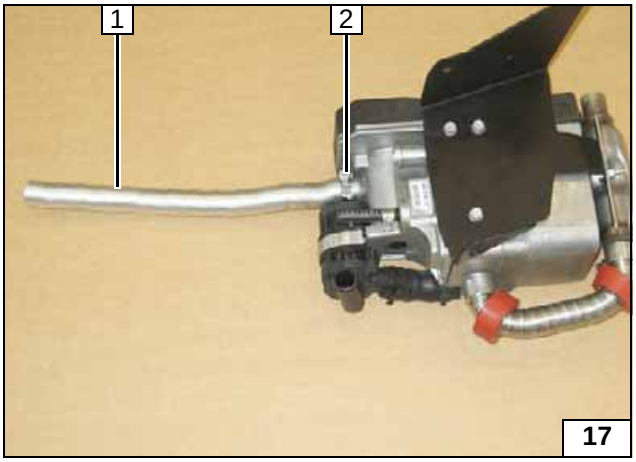
Installing silencer and exhaust pipe



1 Combustion air pipe
a = 300

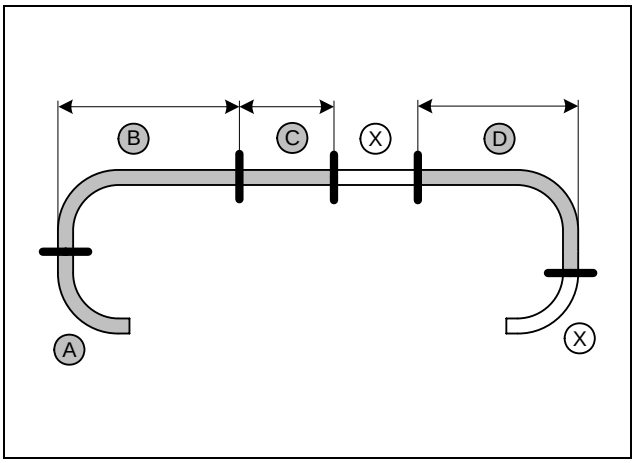
Discard section **X**

Cutting combustion air pipe to length



1 Combustion air pipe
2 27 mm dia. hose clamp

Installing combustion air pipe

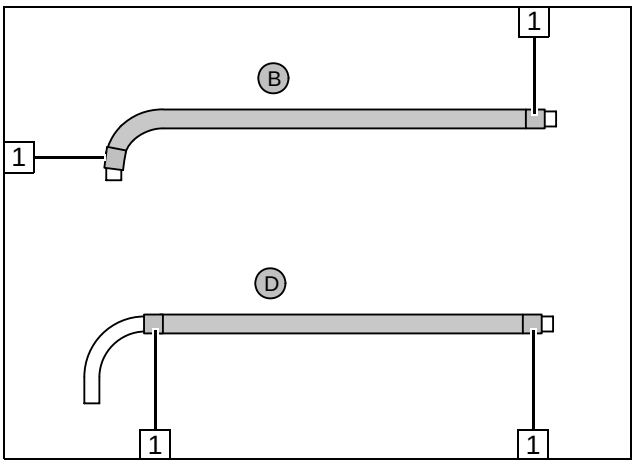


Manual transmission:

b = 390
c = 110
d = 415
Hose **D** with long 90° elbow
Discard section **X**

Automatic transmission:
b = 445
c = 110
d = 415
Hose **D** with long 90° elbow
Discard section **X**

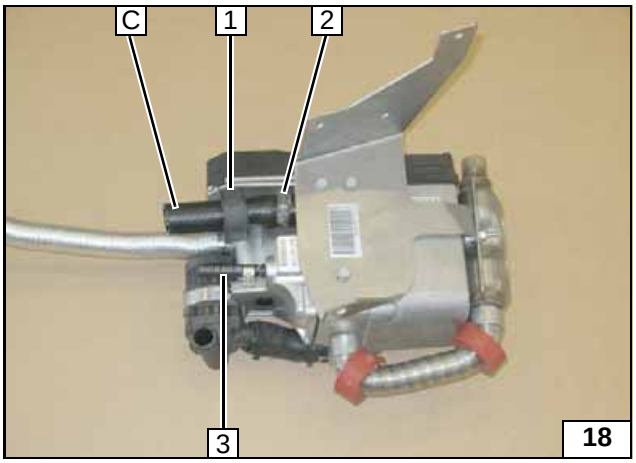
Cutting coolant hoses to length



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

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

Preparing coolant hoses

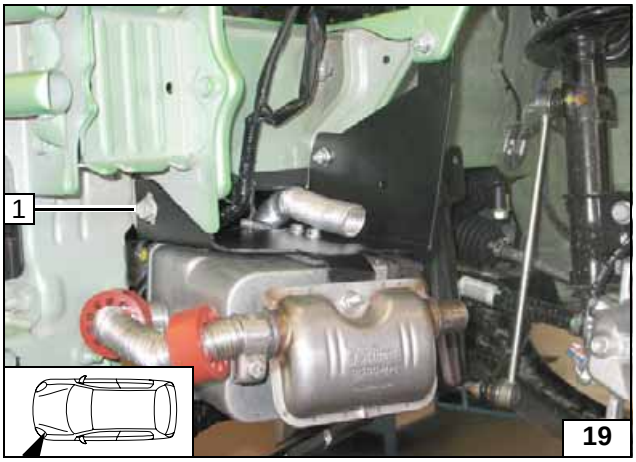


1 Black (sw) rubber isolator
2 27 mm dia. hose clamp
3 Hose section, 10 mm dia. clamp

Premounting hose C

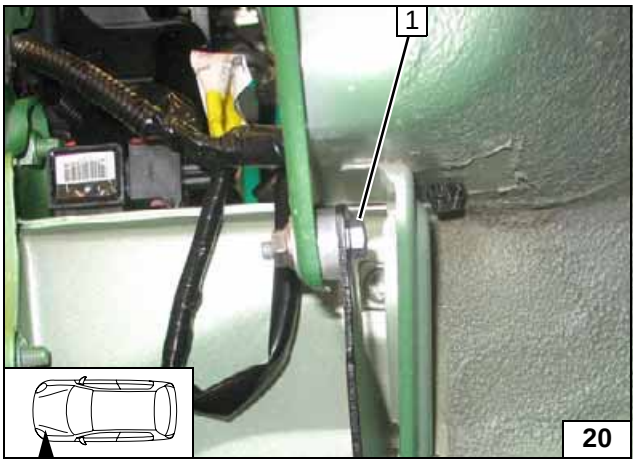
Installing heater

Align heater and unsure sufficient distance to adjacent components; correct if necessary.



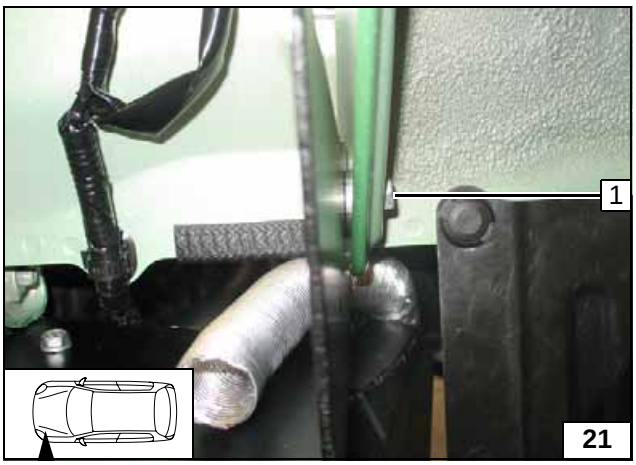
1 Original vehicle bolt

Installing heater



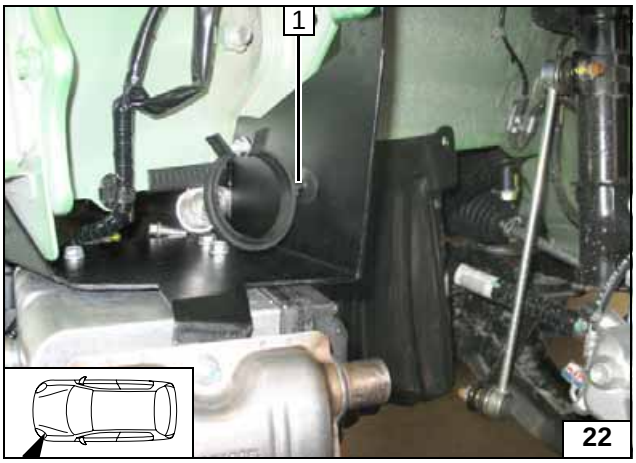
1 M6x25 bolt, 10 mm shim, large diameter washer, flanged nut

Installing heater



1 M6x25 bolt, 10 mm shim, flanged nut

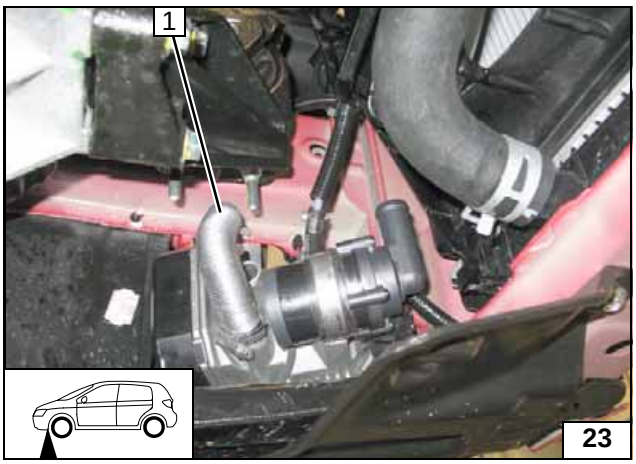
Installing heater



Combustion air

1 Retaining clip in existing hole

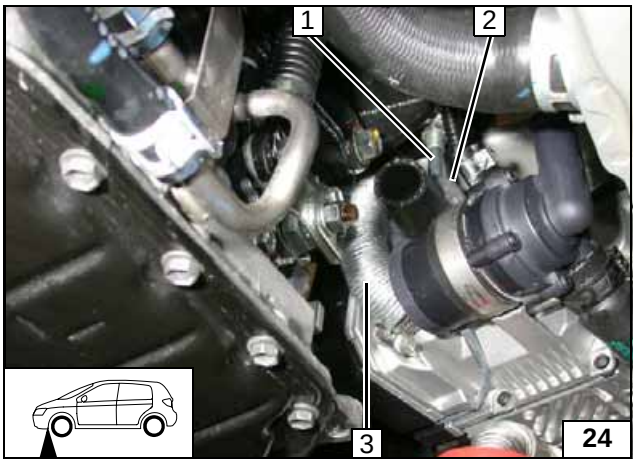
Installing retaining clip



Manual transmission

1 Combustion air pipe

Routing combustion air pipe

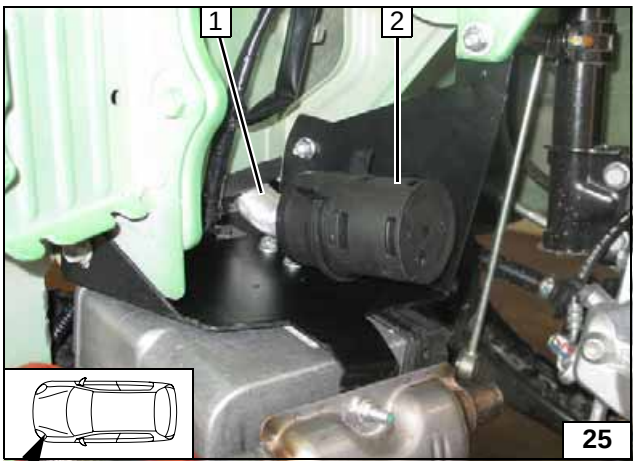


Automatic transmission

Align black (sw) rubber isolator **2** to original vehicle stud bolt 1.

3 Combustion air pipe

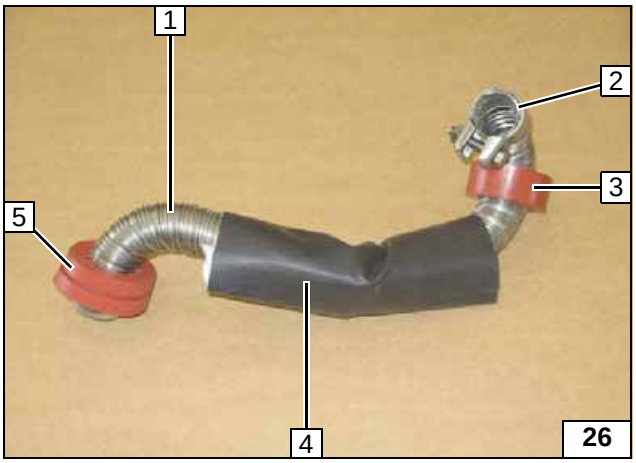
Routing combustion air pipe



All vehicles

1 Combustion air pipe
2 Silencer in retaining clip

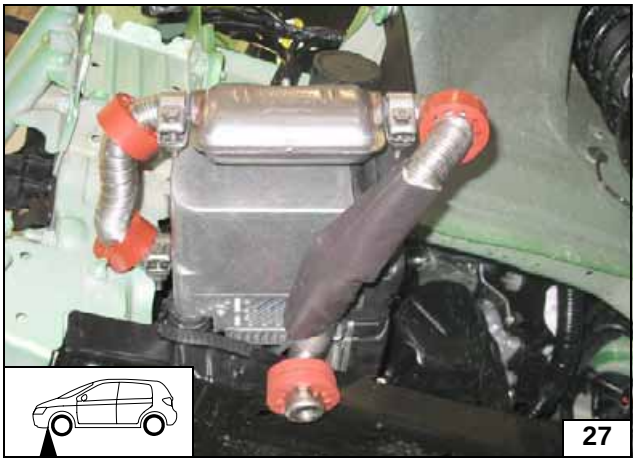
Installing silencer



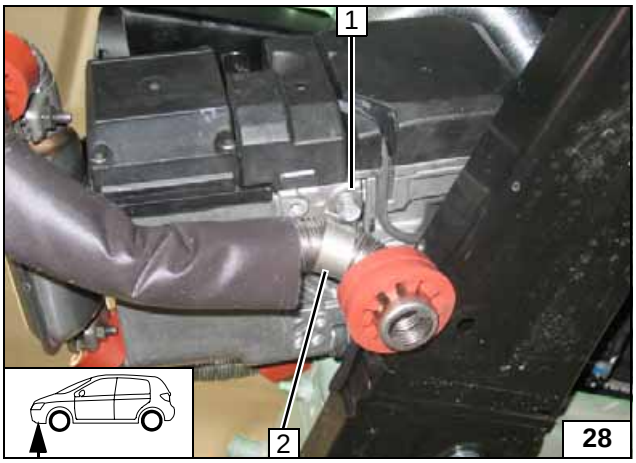
Exhaust gas

1 Exhaust end section
2 Loosely mount hose clamp
3 Red (rt) rubber isolator
4 Slide on exhaust-gas insulation
5 Red (rt) rubber isolator with groove

Preparing exhaust end section

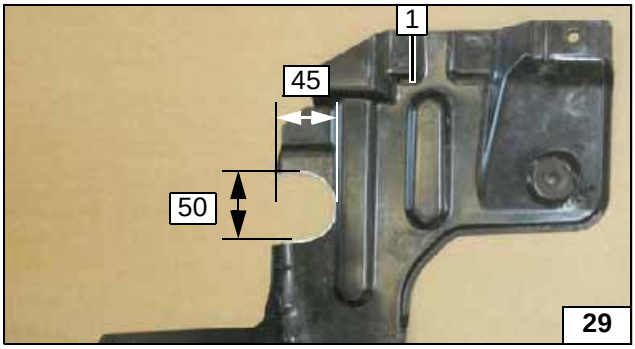


Installing exhaust end section



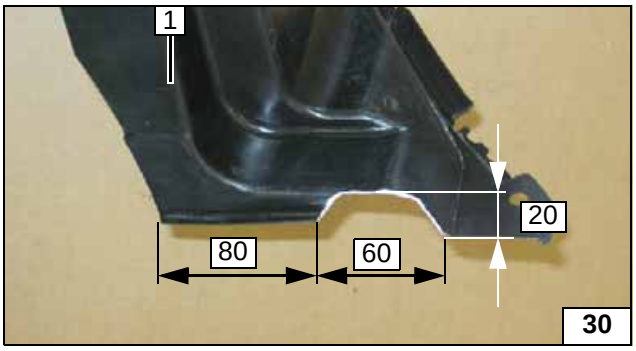
1 Ejot screw
2 P-clamp

Fastening exhaust end section



Cut out underride protection **1**.

Cutting out underride protection on left



Cut out wheel well trim **1**.

Cutting out wheel well trim on left

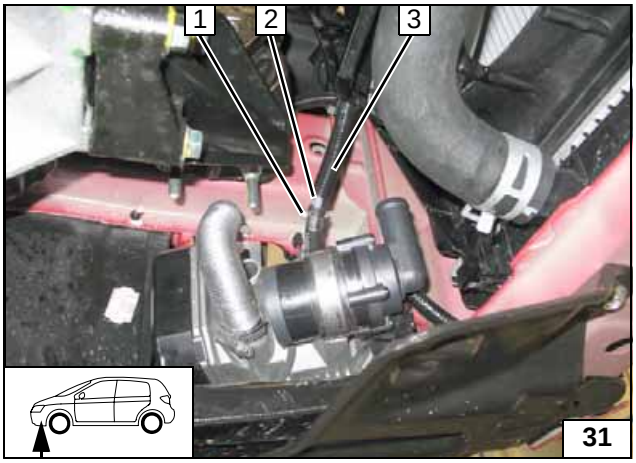
Fuel

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.

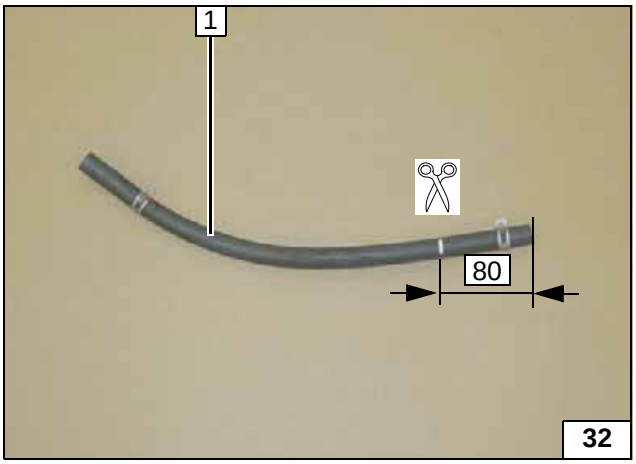
WARNING!
The fuel line and wiring harness are routed to the metering pump in as shown in the wiring harness routing diagram.



Route fuel line **2**in corrugated tube **3** to firewall and route to vehicle underbody together with wiring harness of metering pump.

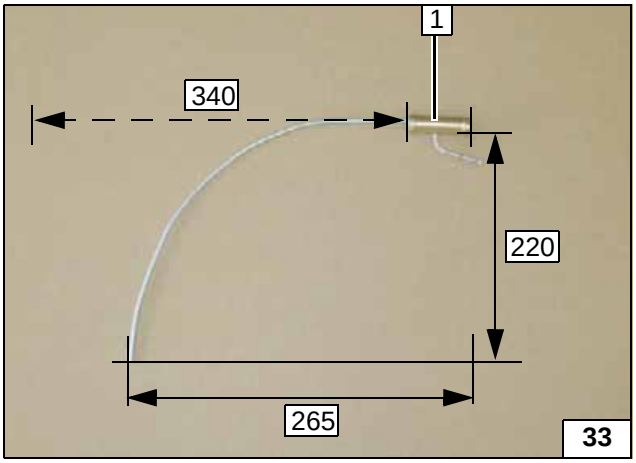
1 10 mm dia. clamp
2 Fuel line
3 10 mm dia. corrugated tube

Connecting heater



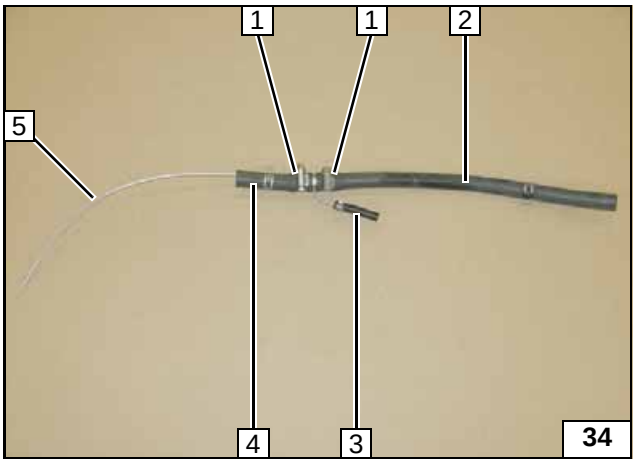
1 Fuel-tank vent line

Disconnecting fuel-tank vent line



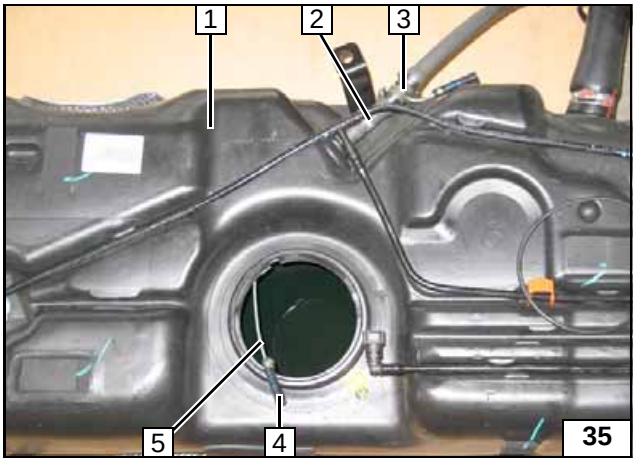
Shorten fuel standpipe **1** to 340 mm length when stretched out and mould.

Preparing fuel standpipe



1 16-24 mm dia. hose clamp [2x]
2 Fuel-tank vent line
3 Hose section, 10 mm dia. clamp
4 80 mm fuel-tank vent line
5 Fuel standpipe

Premounting fuel standpipe



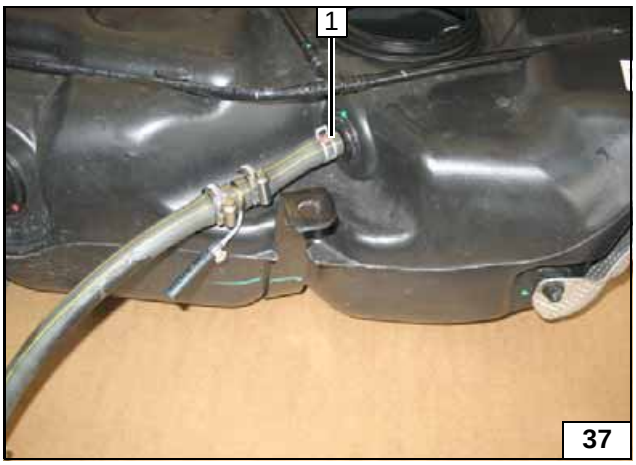
Install hose section **4** with 3.2 mm dia. and 8 mm dia. clamp on intake line of fuel standpipe**5**.

1 Fuel tank
2 Original vehicle clamp (loose)
3 Fuel standpipe

Installing fuel standpipe

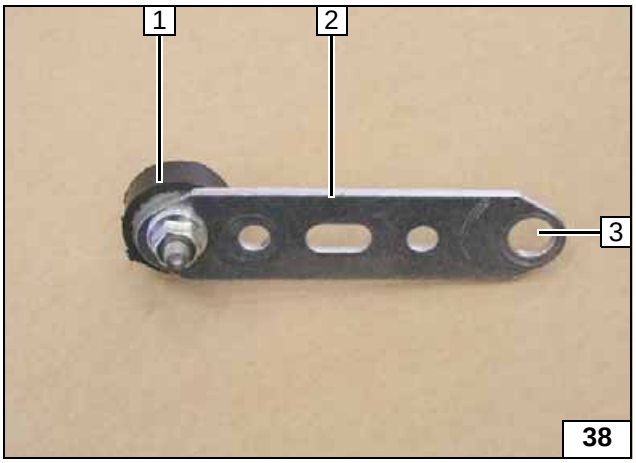
Align standpipe **1** relative to bottom of fuel tank (approx. 5 mm over bottom of fuel tank) so that freedom of movement of feed pot and fill level sensor is ensured.

Aligning standpipe in fuel tank



Install original vehicle clamp **1**, install fuel-tank sending unit and fuel tank according to manufacturer's instructions.

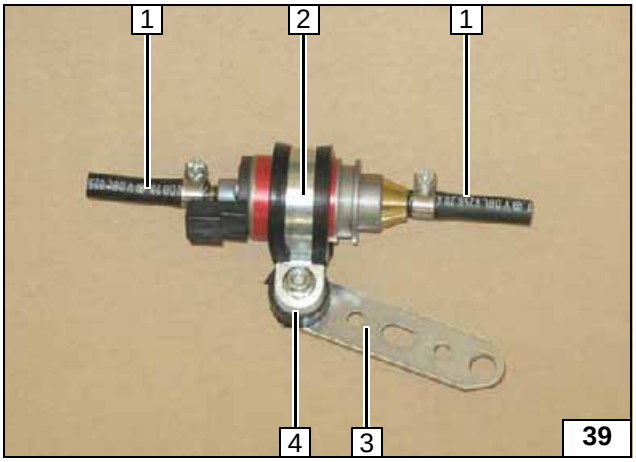
Installing fuel standpipe



Drill out perforated bracket **2** to 10 mm dia. at position **3**.

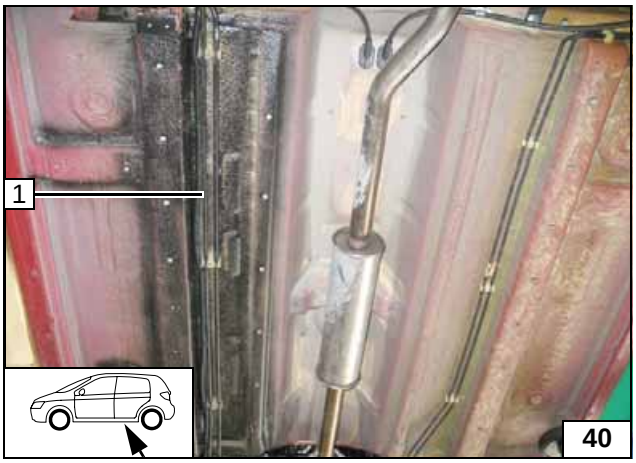
1 Silent block, flanged nut

Preparing perforated bracket



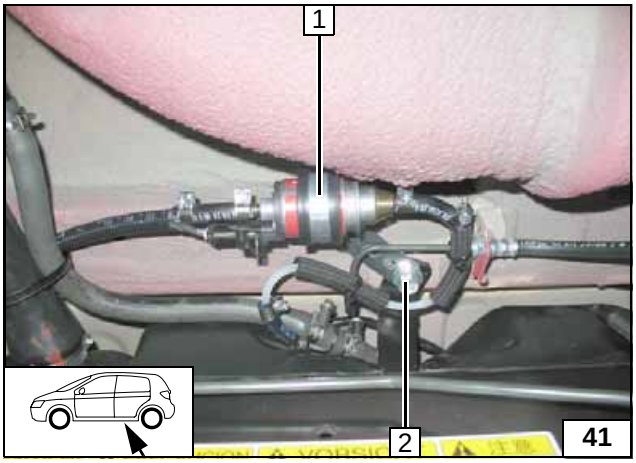
1 Hose section [2x], 10 mm dia. clamp [2x]
2 Rubber-coated p-clamp, metering pump, flanged nut
3 Perforated bracket
4 Silent block

Premounting metering pump



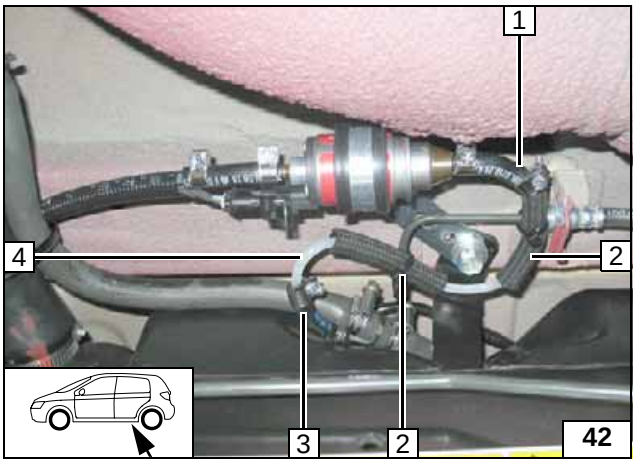
Route fuel line and wiring harness of metering pump in corrugated tube **1**along original vehicle fuel line to fuel standpipe and secure with cable ties.

Installing lines



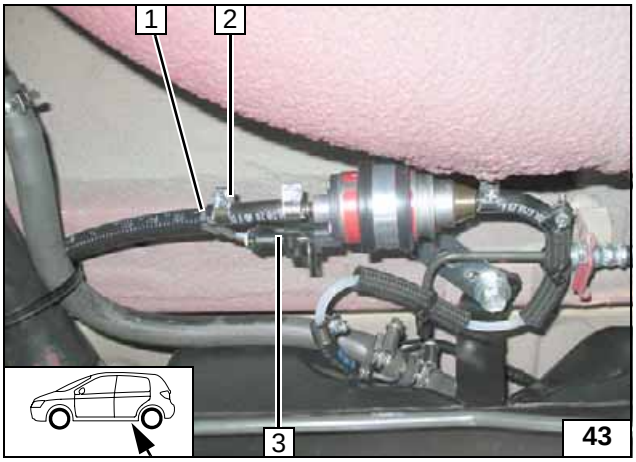
1 Metering pump
2 Original vehicle bolt

Installing metering pump



1 Hose section, 10 mm dia. clamp
2 Hose section (rub protection), cable tie [2x each]
3 Hose section, 10 mm dia. clamp
4 Fuel line

Connecting to metering pump



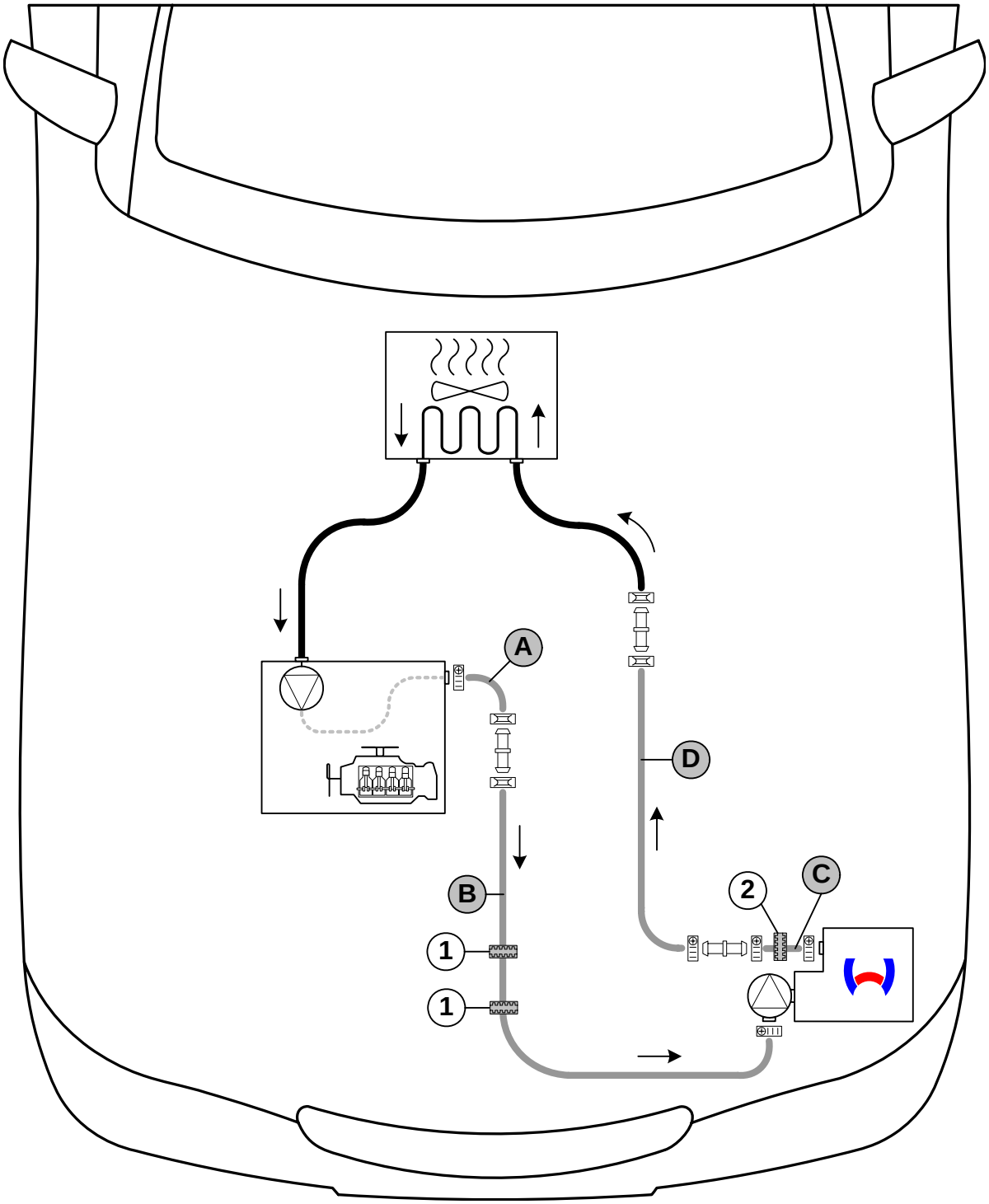
1 Fuel line in corrugated tube
2 Hose section, 10 mm dia. clamp
3 Metering pump wiring harness

Connecting to metering pump

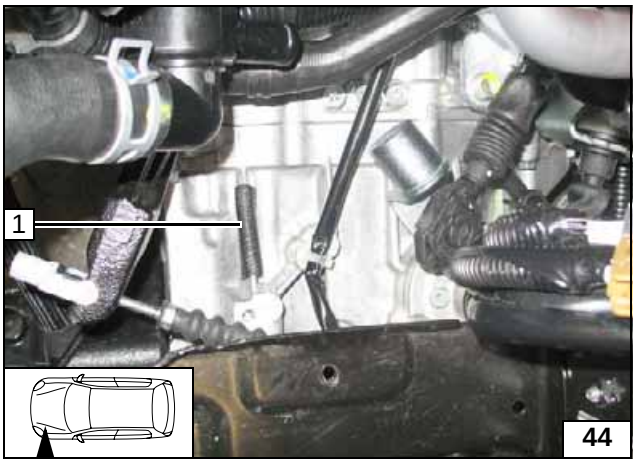
Coolant circuit

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 hoses, the heater must be filled with coolant.
The connection should be "inline" based on the following diagram:

Hose routing diagram



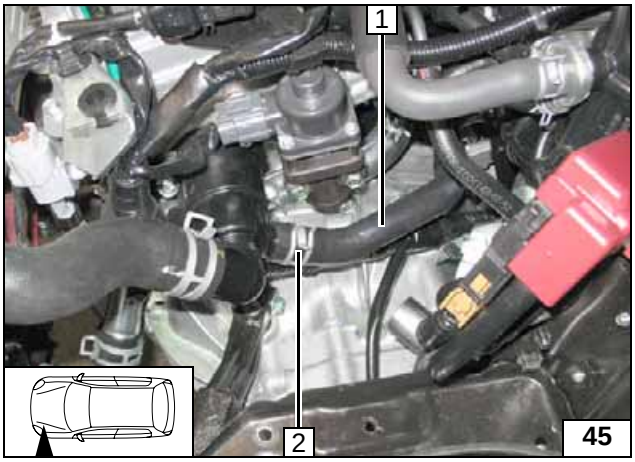
All spring clips = 27 mm dia.! All hose clamps = 20-27 mm dia.!
All connecting pipes = 20x20 mm dia.
1 = Black (sw) rubber isolator [2x with manual transmission, 1x with automatic transmission]!
2 = Black (sw) rubber isolator, all vehicles!



Manual transmission

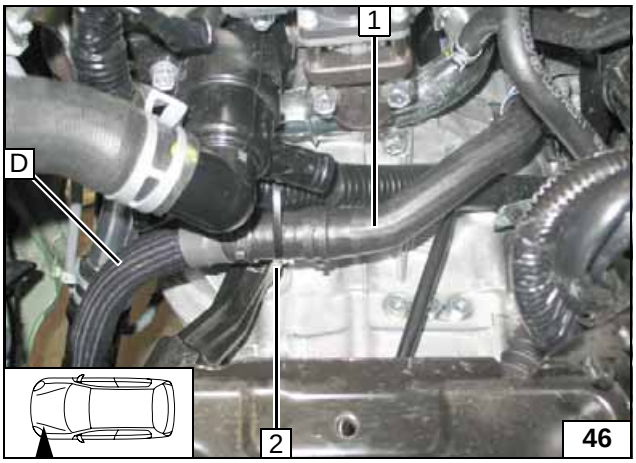
1 Edge protection 50

Installing edge protection



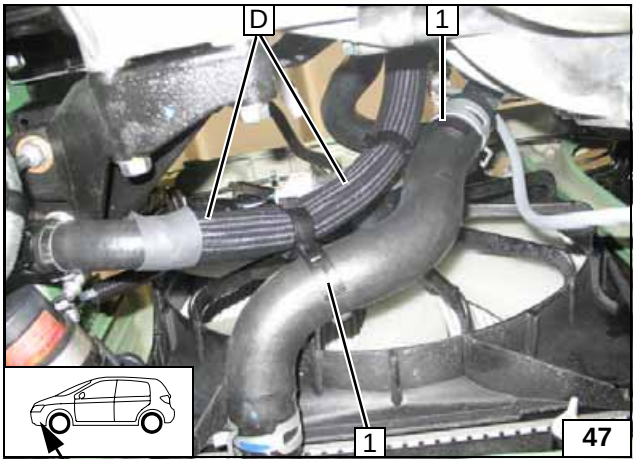
Disconnect hose to engine outlet/heat exchanger inlet **1** at connection piece of engine outlet. Spring clip **2** will not be reused.

Cutting point



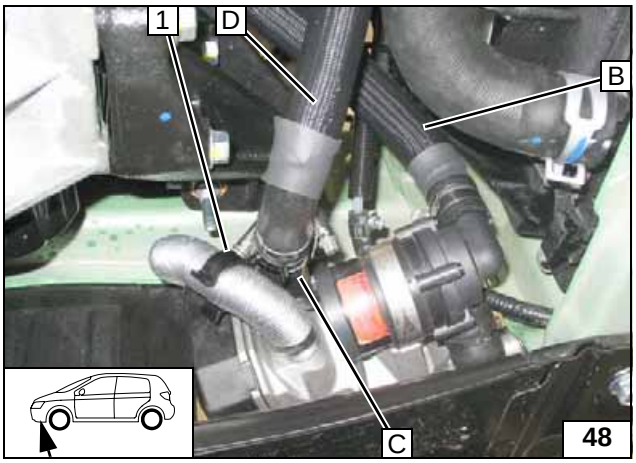
1 Hose section of heat exchanger inlet
2 Cable tie

Connecting heat exchanger inlet



1 Spacer bracket [2x]

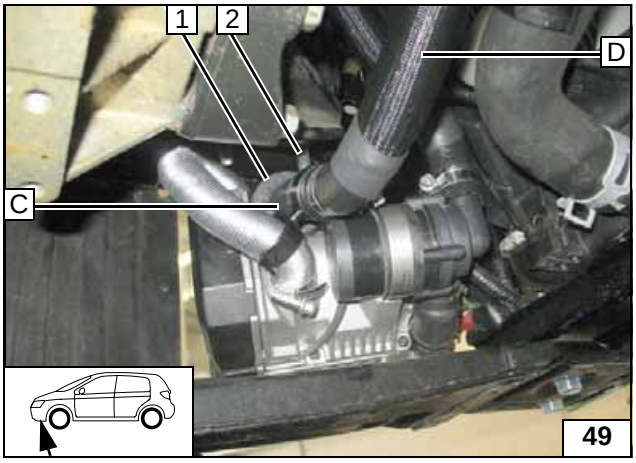
Routing in engine compartment



Connect hose **D** with 90° elbow and **C**. Connect hose **B** with 90° elbow to heater inlet.

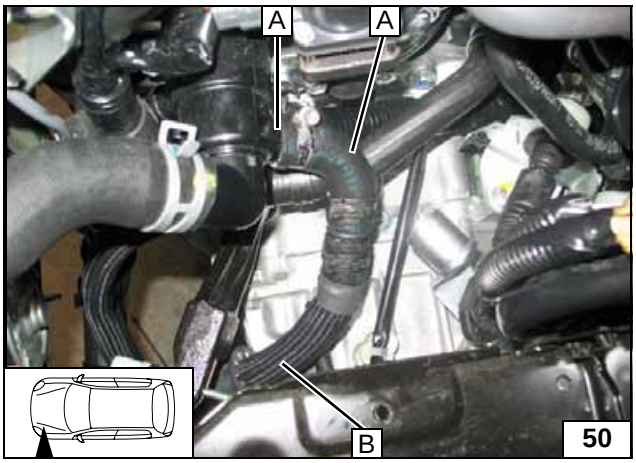
1 Spacer bracket

Connecting heater



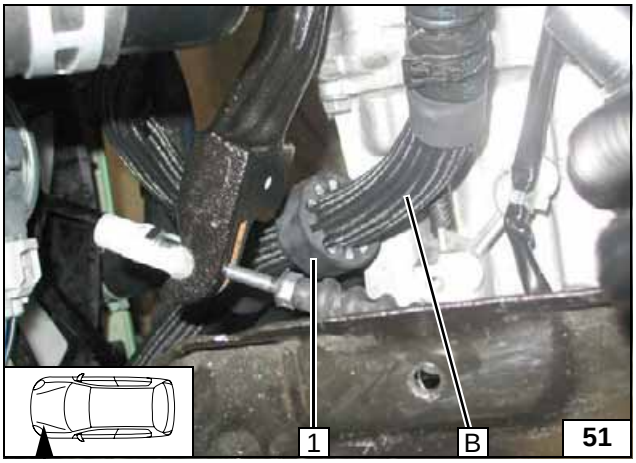
Align black (sw) rubber isolator **1** relative to original vehicle stud bolt **2** on hose **C**.

Aligning rubber isolator



1 Connection piece for engine outlet

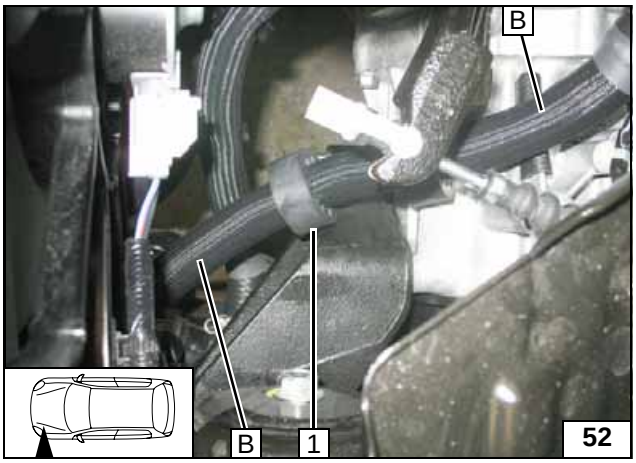
Connecting engine outlet



Ensure sufficient distance to adjacent components, and especially to clutch control mechanism.

1 Black (sw) rubber isolator

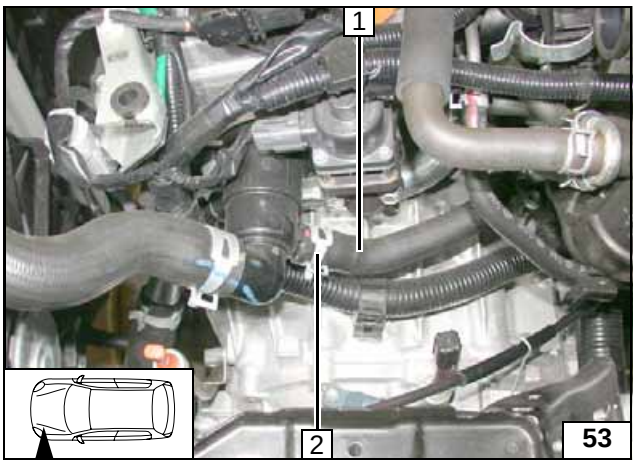
Aligning rubber isolator



Ensure sufficient distance to adjacent components, and especially to clutch control mechanism.

1 Black (sw) rubber isolator

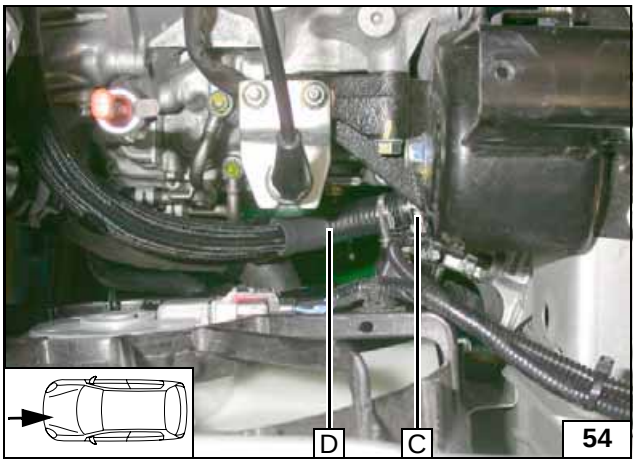
Aligning rubber isolator



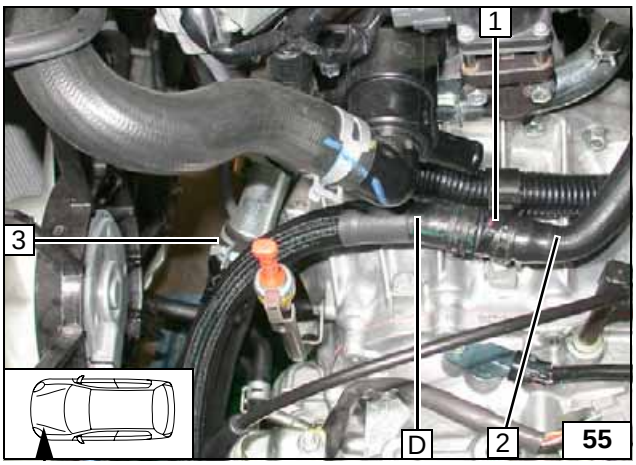
Automatic transmission

Disconnect hose to engine outlet/heat exchanger inlet **1** at connection piece of engine outlet. Spring clip **2** will not be reused.

Cutting point



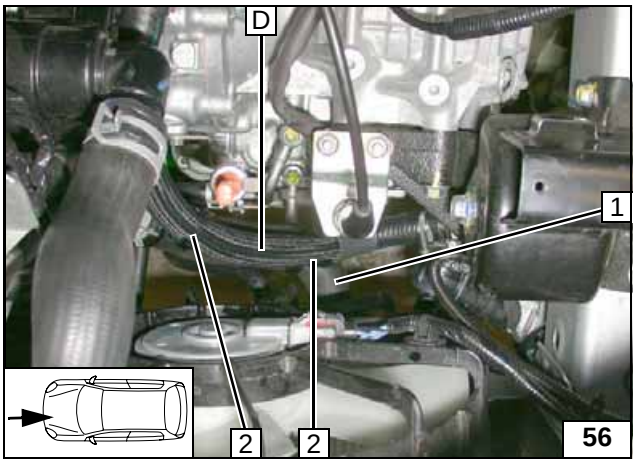
Connecting heater



Turn original vehicle hose clamp **3**

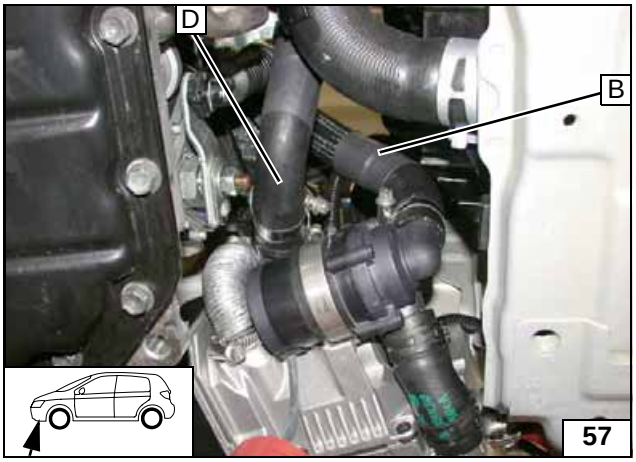
1 Cable tie
2 Hose section of heat exchanger inlet

Connecting heat exchanger inlet

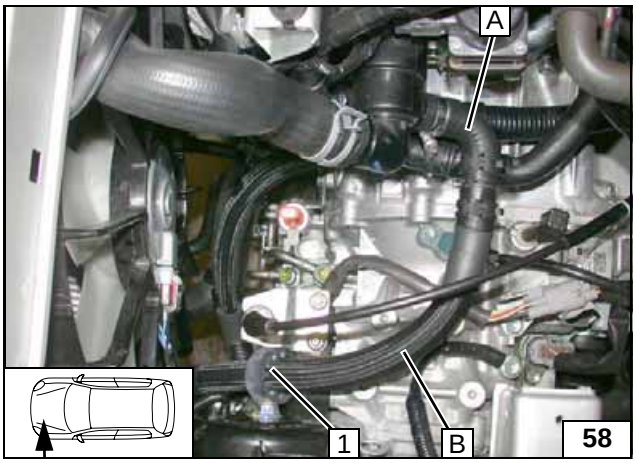


Spacer bracket **2** [2x] between original vehicle hose **1** and hose **D**!
Ensure sufficient distance to neighbouring components.

Routing in engine compartment

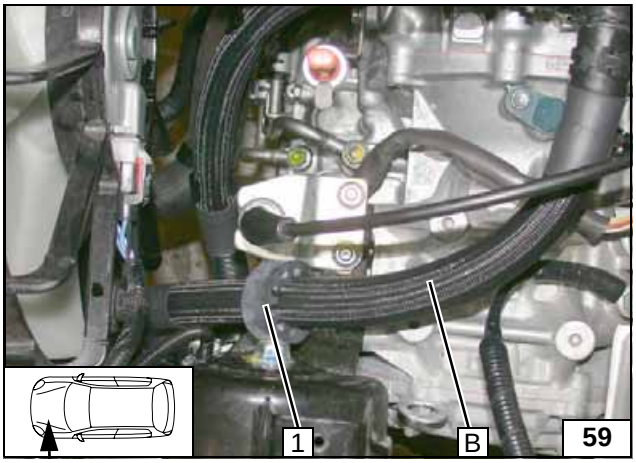


Connecting heater



1 Black (sw) rubber isolator

Connecting engine outlet



Ensure sufficient distance to neighbouring components.

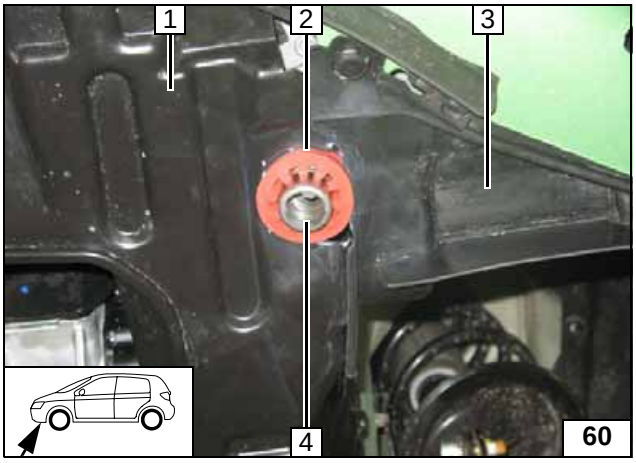
1 Black (sw) rubber isolator

Aligning rubber isolator

Final Work

WARNING!
Reassemble the disassembled components in reverse order.
Check all hoses, clamps and all electrical connections for firm seating.
Secure all loose wires using cable ties.
Only use manufacturer-approved coolant.
Spray the heater components with anti-corrosion wax (Tectyl 100K, Order No. 111329).

- Connect the battery.
- Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.
- Adjust digital timer, teach Telestart
- Make settings on A/C control panel according to the "Operating Instructions for End Customer".
- Check the proper functioning of the parking heater, see the operating instructions/installation instructions.
- Place signboard "Switch off parking heater before refilling" in the area of the filler neck



Align exhaust end section **4** flush on red (rt) rubber isolator **2**.

1 Underride protection
3 Wheel well trim

Fastening exhaust end section

Webasto AG
Postfach 80
D-82132 Stockdorf / Germany
National Hotline: 01805 93 22 78
(14 Cent aus dem deutschen Festnetz)
Hotfax: 0395 5592 353
Hotmail: hotline@webasto.de
http://www.webasto.de

Operating Instructions for End Customer

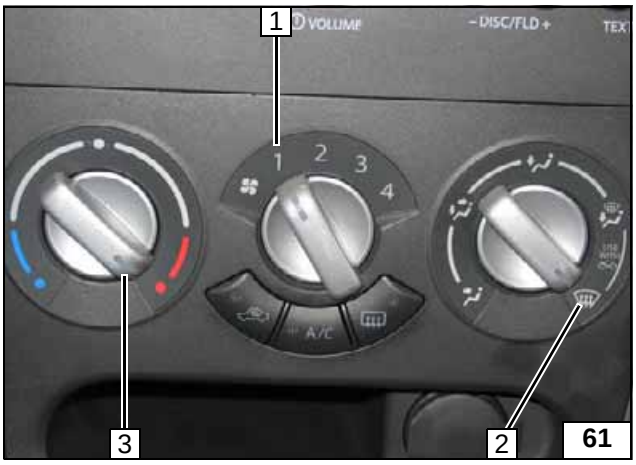
Please remove page and add to the vehicle operating instructions.

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.

In vehicles with passenger compartment monitoring it must be deactivated additionally, besides deactivating the vehicle settings for the heating operation.
Instructions on deactivation can be taken from the operating instructions of the vehicle

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

Before parking the vehicle, make the following settings:



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