

Water Heater



Thermo Top E Parking Heater


00 0003

Thermo Top C Parking Heater


00 0002

Thermo Top P Parking Heater


00 0104

Installation instructions

Nissan Qashqai / Qashqai +2

1.5l Diesel / DPF

from Model Year 2009

Left-hand drive vehicle

Gear box



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.

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Validity

Manufacturer	Model	Type	EG-BE No./ABE
Nissan	Qashqai / Qashqai +2	J10	e11 * 2001/116 * 0295 * ...

Engine type	Engine model	Output in kW	Displacement in cm ³
K9K	Diesel/DPF	76	1461

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/Installation Kit

Quantity	Description	Order No.:
1	Nissan-specific delivery scope	See Nissan price list
1	Installation kit for Nissan Qashqai / Qashqai +2 1.5 l Diesel	1311965B
1	Heater control	See Nissan price list

Heater recommended for the respective vehicle class:

Vehicle	Heater
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 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 vehicles Nissan Qashqai / Qashqai +2 1.5l Diesel / DPF - 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 must be provided with rub protection (cut-open fuel hose)!

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

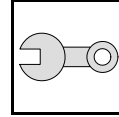
Special Tools

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

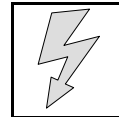
Explanatory Notes on Document

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.

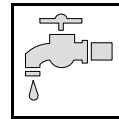
Mechanical system



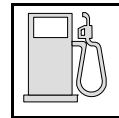
Electrical system



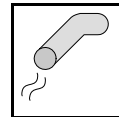
Coolant circuit



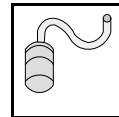
Fuel



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 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 battery completely.
- Remove the air filter together with the intake hose
- Remove the engine design cover.
- Remove retaining plate of control units
- Remove the lower engine cover.
- Detach the lower left wheel well trim
- Remove the rear seat cushion.
- Open the fuel sender service lid.
- Remove the lower cover of the instrument panel in the footwell on the left
- Remove the side cover of the instrument panel on the left
- Remove the lower cover of the instrument panel on the left
- Detach the fuse carrier on the left in the passenger compartment
- Remove the lower A-pillar trim in the footwell on the left (only with Telestart)
- Remove the A/C control panel (only with automatic air-conditioning).

Remove page 25 "Operating Instructions for End Customer" and add to the vehicle operating instructions.



Heater installation location

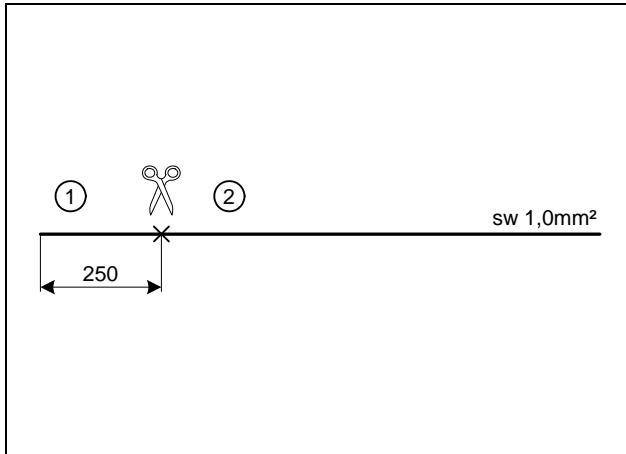
1 Heater

Installation location

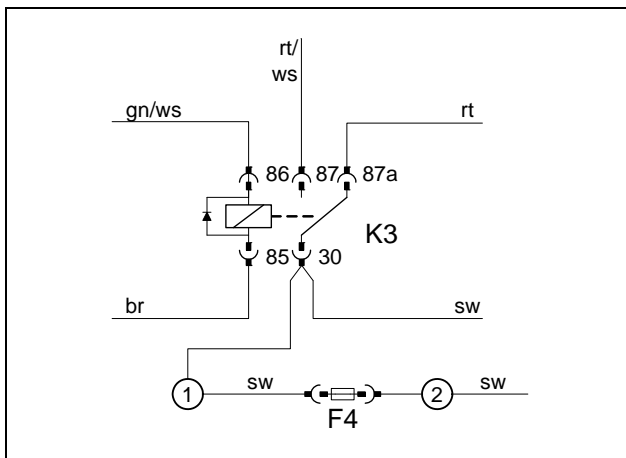


Preparing electrical system

Only with automatic air-conditioning



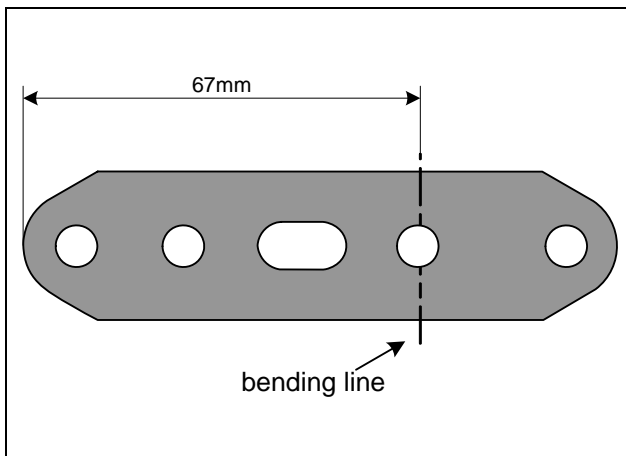
Cutting wires to length



Produce connections as shown in wiring diagram. Install wire section 2 in the protective sleeving provided.



Preparing fuse F4



Angle down perforated bracket by 90°.



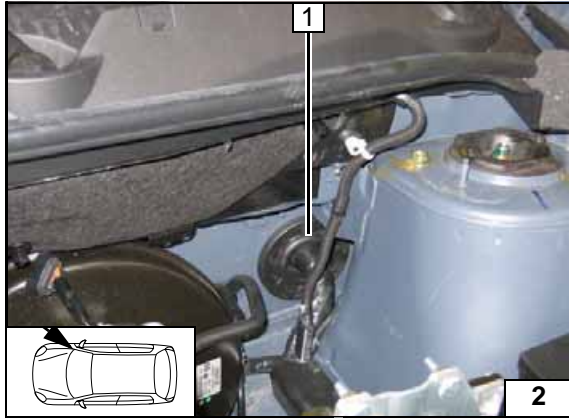
Preparing perforated bracket



Electrical Connections

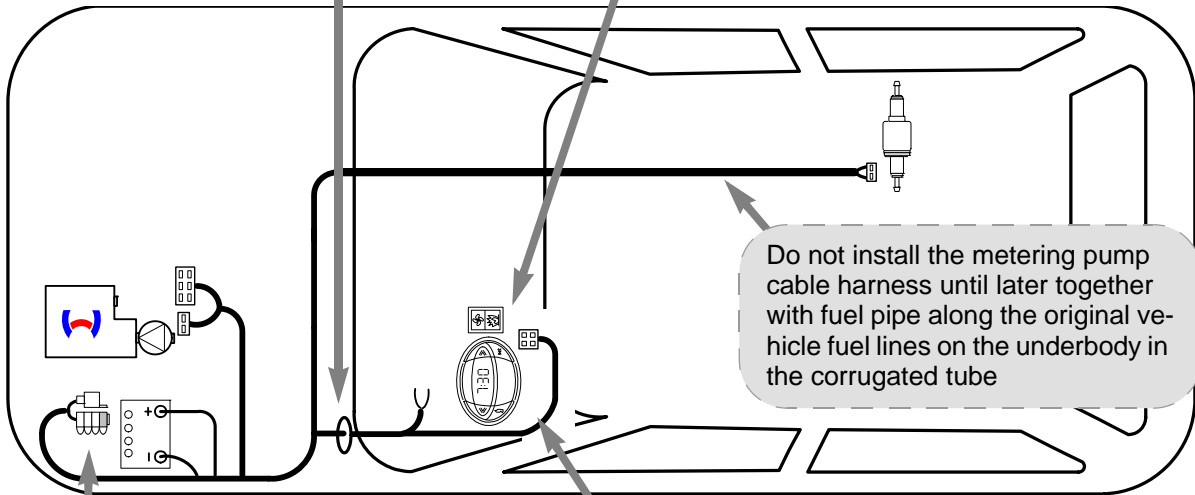
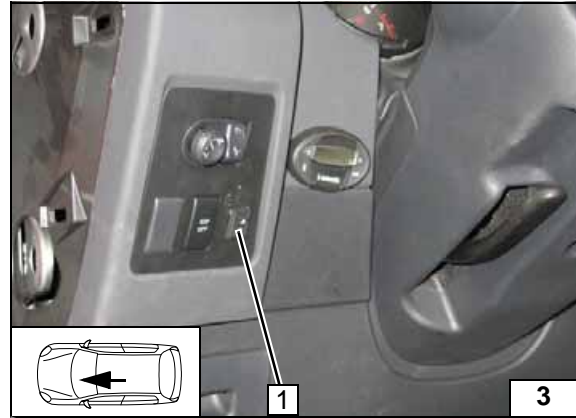
Wiring harness pass through

- 1 Protective rubber plug

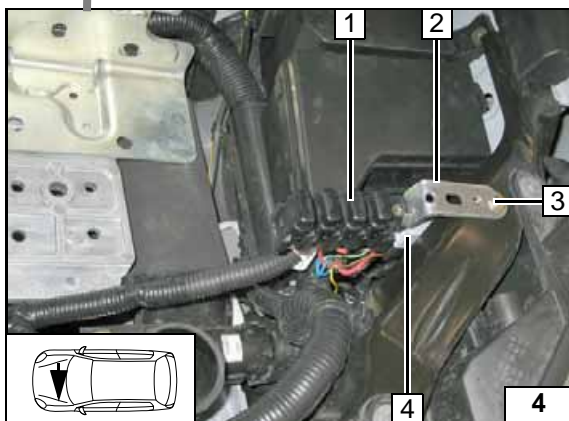


Summer/winter switch option

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

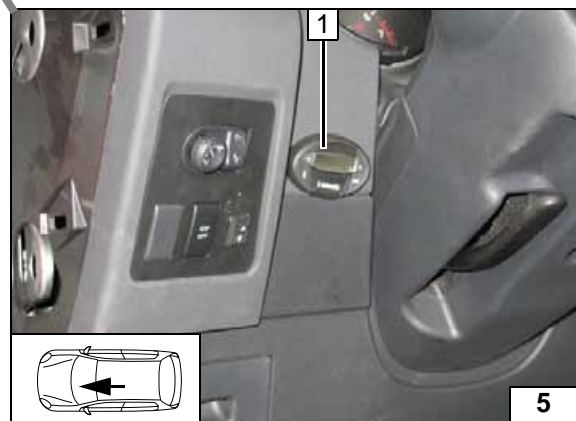


Wiring harness installation diagram



Fuse holder, K3 relay

- 1 Fuse holder retaining plate, M5x20 bolt, washers, M5 nut
- 2 Perforated bracket angled down
- 3 M6x20 bolt, washer, M6 flanged nut, original vehicle hole
- 4 Fan relay K3

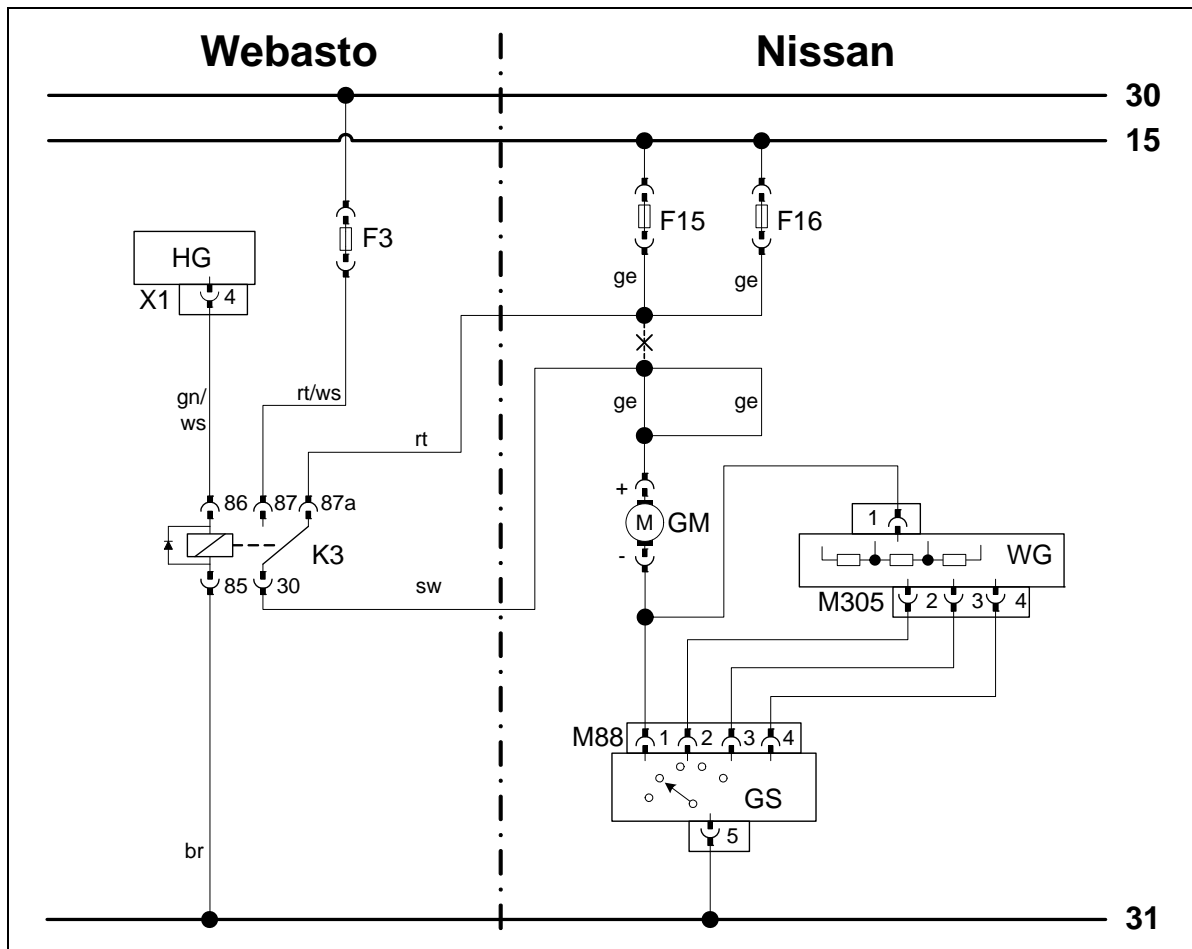


Digital timer

- 1 Digital timer



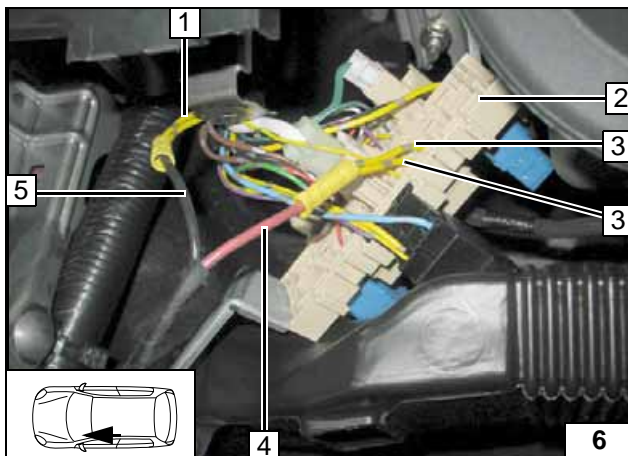
Fan controller for manual air conditioning



Wiring diagram

Webasto components		Vehicle components		Colours and symbols	
HG	Heater TT-C/E	GM	Fan motor	rt	red
X1	6-pin connector	GS	Fan switch	ws	white
F3	25 A fuse	WG	Resistor group	sw	black
K3	Fan relay	F15	15 A fuse	gn	green
		F16	15 A fuse	ge	yellow
		M88	8-pin connector		
		M305	4-pin connector	X	Cutting point
				Wiring colours may vary.	

Legend



Connection on central electrical box **2** on driver's side.
Produce connections as shown in wiring diagram.

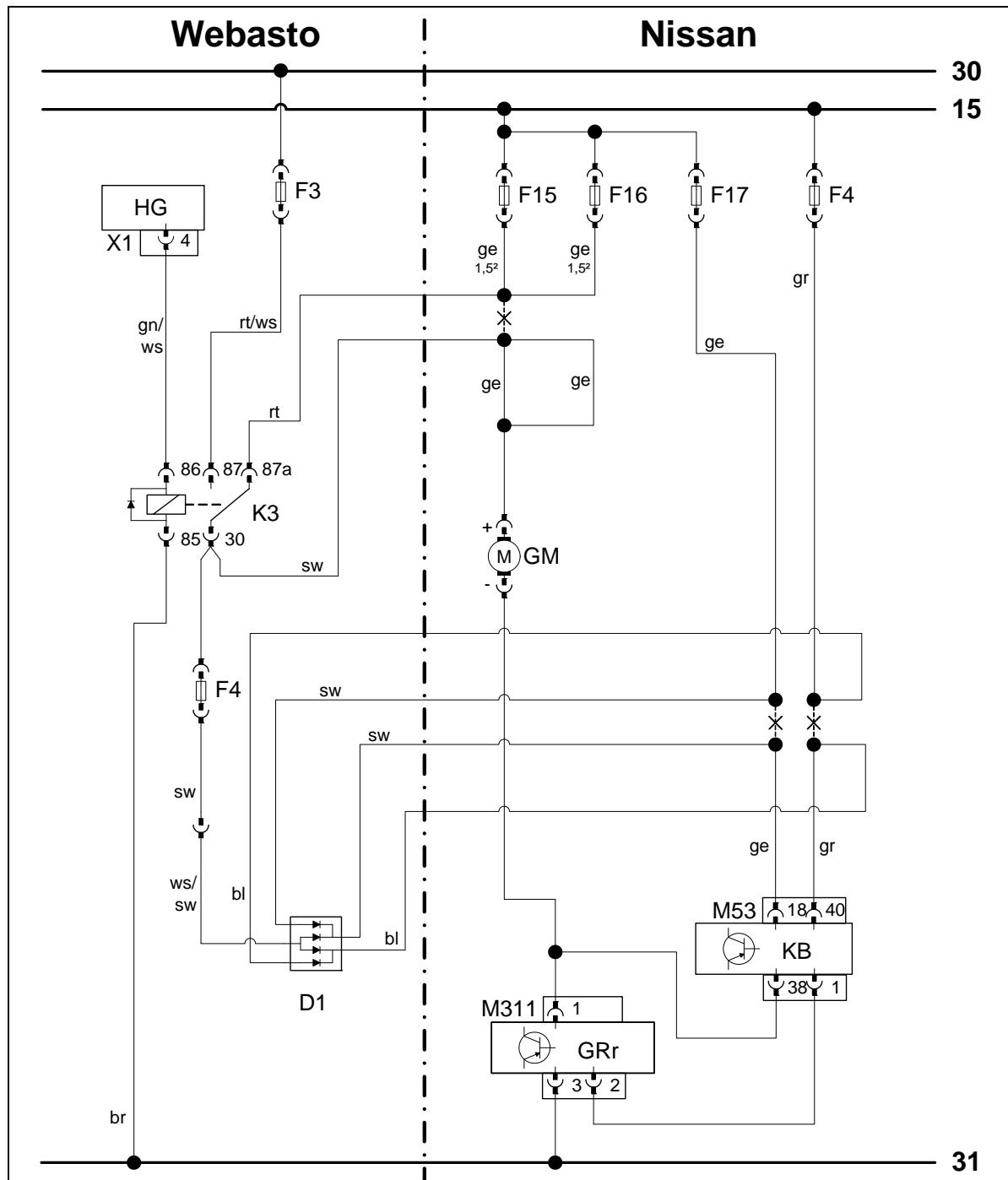
- 1 Yellow (ge) wire [2x] to fan motor
- 3 Yellow (ge) wire [2x] for fuse F15 and F16
- 4 Red (rt) wire from K3/87a
- 5 Black (sw) wire from K3/30



Connecting fan motor



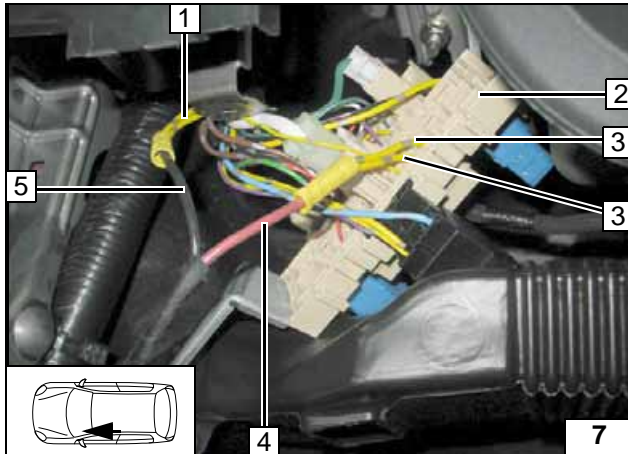
Automatic air-conditioning fan controller



Wiring diagram

Webasto components		Vehicle components		Colours and symbols	
HG	Heater TT-C/E	GM	Fan motor	rt	red
X1	6-pin connector	KB	A/C control panel	ws	white
F3	25 A fuse	GRr	Fan controller	sw	black
K3	Fan relay	F8	Fuse	br	brown
D1	Diode group	F15	Fuse	gn	green
F4	1 A fuse	F16	Fuse	bl	blue
		F17	Fuse	ge	yellow
		M53	40-pin connector KB	gr	gray
		M311	4-pin connector, GRr		
				X	Cutting point
				Wiring colours may vary.	

Legend

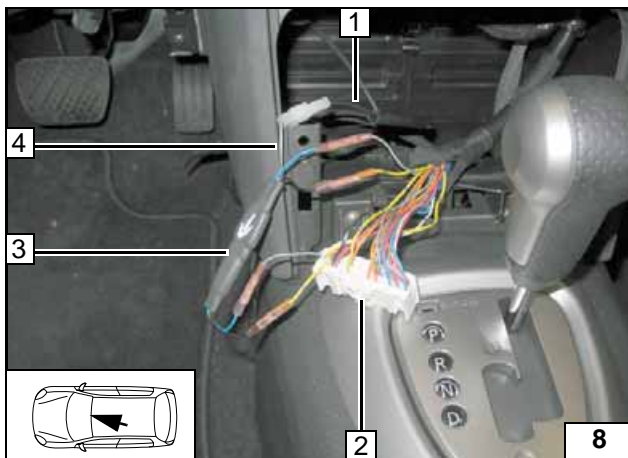


Connection on central electrical box **2** on driver's side.
Produce connections as shown in wiring diagram.

- 1 Yellow (ge) wire [2x] to fan motor
- 3 Yellow (ge) wire [2x] for fuse F15 and F16
- 4 Red (rt) wire from K3/87a
- 5 Black (sw) wire from K3/30



**Connec-
tion for fan
motor**

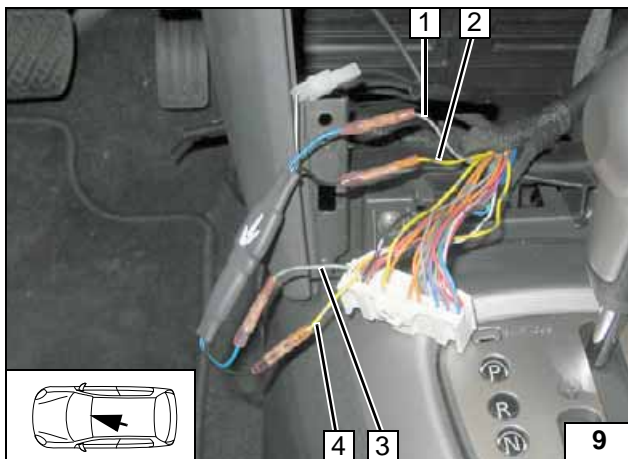


Connection to 40-pin connector M53 **2** from A/C control panel.
Produce connections as shown in wiring diagram.
Watch direction of flow of diode group D1 **3**.

- 1 Black (sw) wire of F4
- 4 White/black (ws/sw) of D1



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

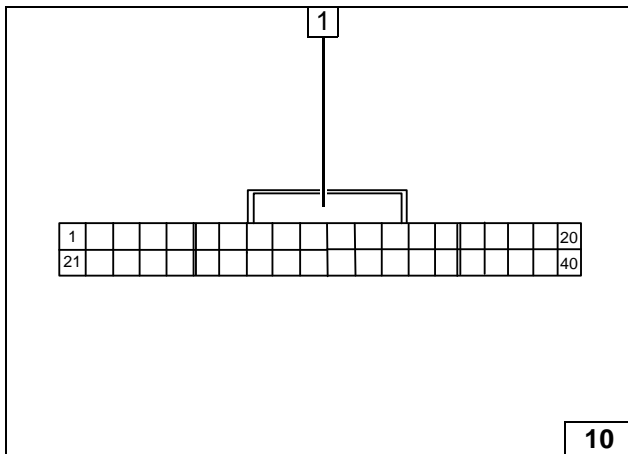


Produce connections as shown in wiring diagram.

- 1 Gray (gr) wire of F4
- 2 Yellow (ge) wire of F17
- 3 Gray (gr) wire of connector M53/40 KB
- 4 Yellow (ge) wire of connector M53/18 KB



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

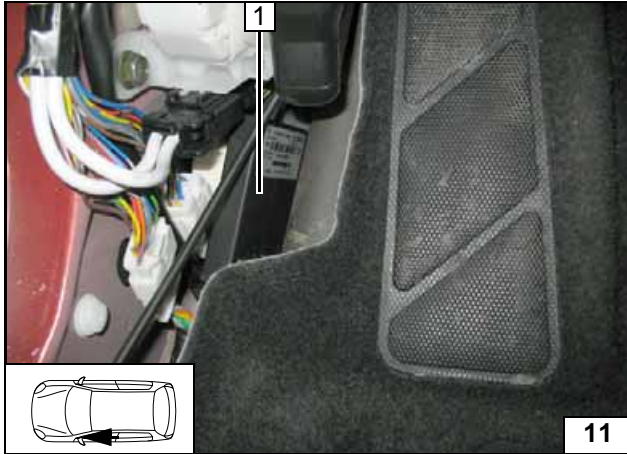


Connector imprint may differ from wiring diagram!

- 1 Connector M53 on line side



**View of
connector
M53**

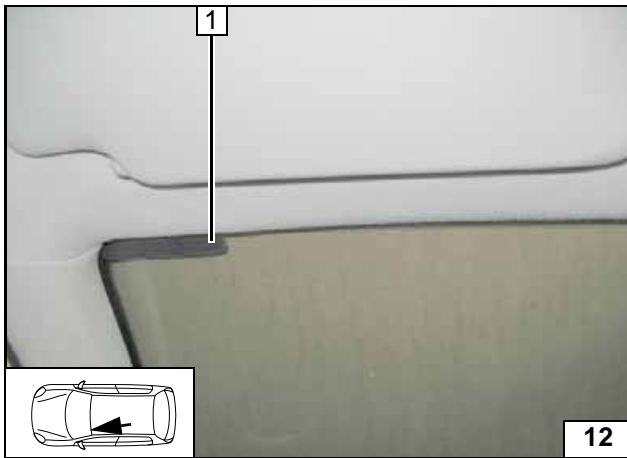


Remote option (Telestart)

Fasten receiver 1 with suitable means.

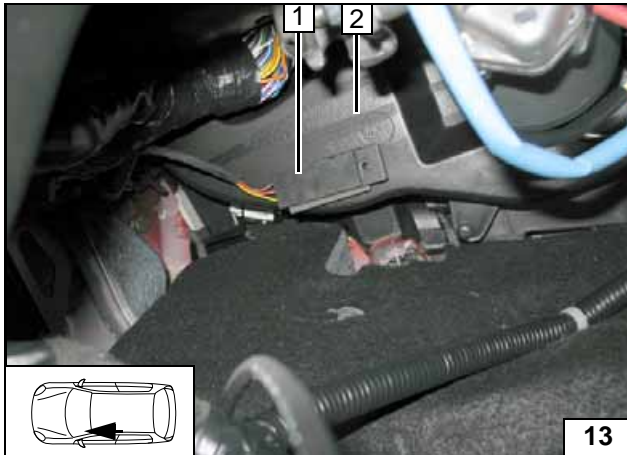


Installing receiver



1 Antenna

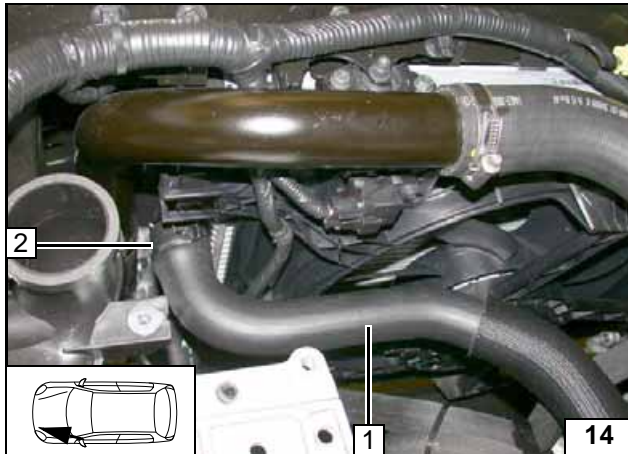
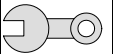
Installing antenna



Temperature sensor for HTM100 only

- 1 Fasten temperature sensor with suitable means
- 2 Air duct on driver's side

Installing temperature sensor

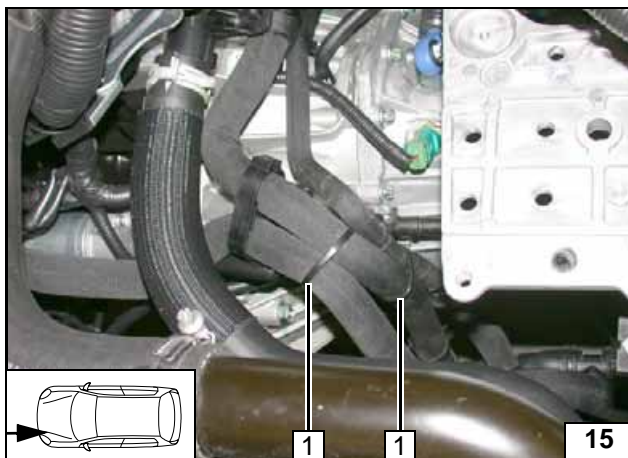


Preparing installation location

Detach original vehicle spring clamp **2**. Shorten radiator hose **1** by 10 mm and reinstall!



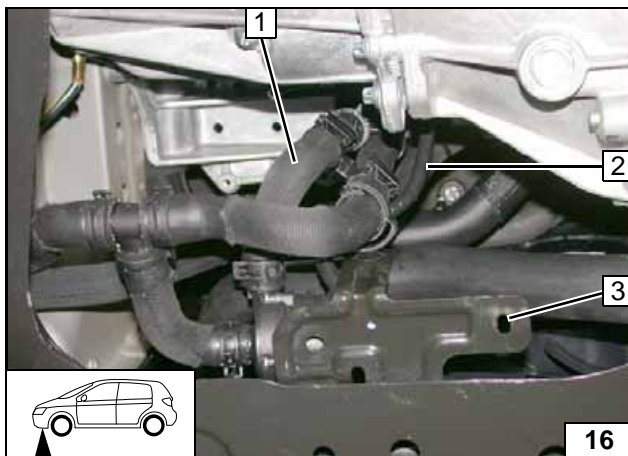
Shortening radiator hose



Fix original vehicle hoses with cable tie **1** !



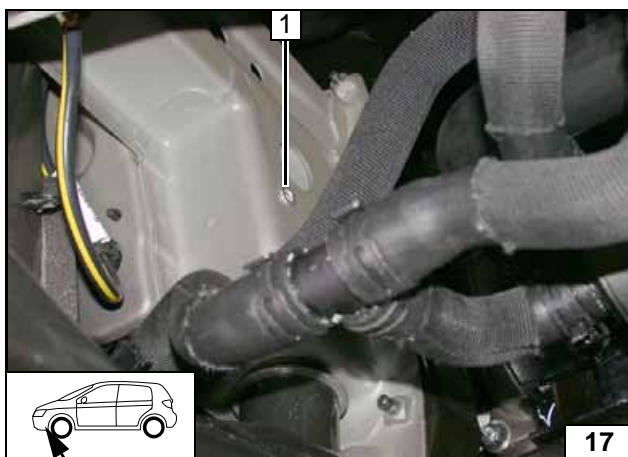
Fixing hoses



Remove original vehicle hose **1** and reinstall on the opposite side. Detach retaining clip of original vehicle wiring harness **2** at Position **3**!

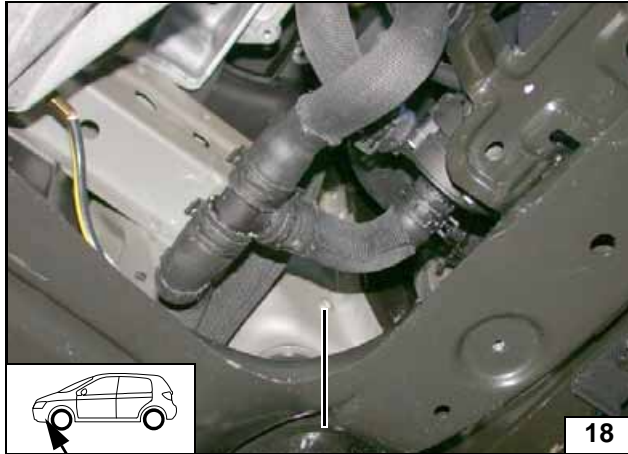
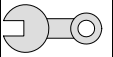


Turning hose



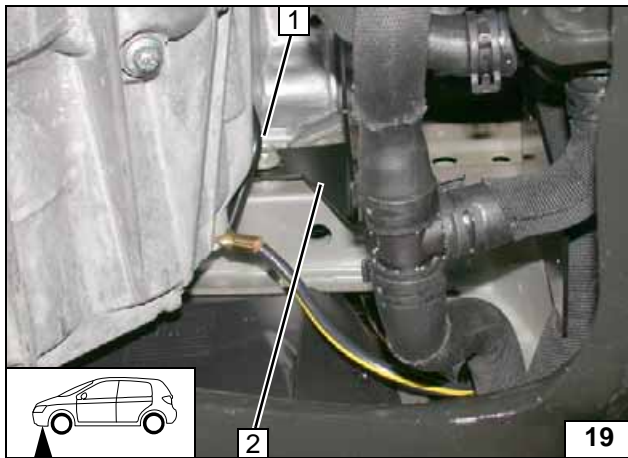
1 M6 rivet nut, existing hole

Installing rivet nut



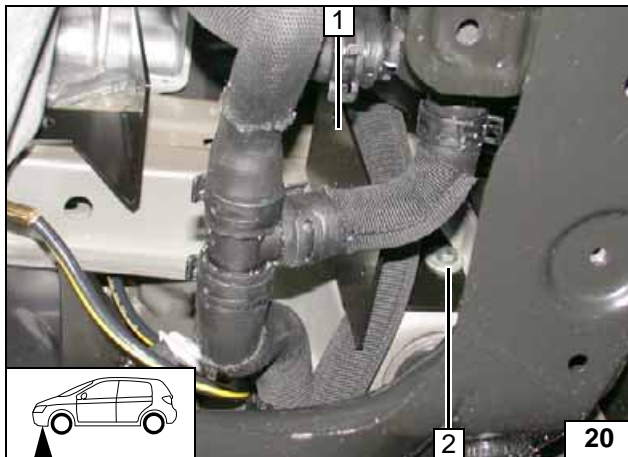
- 1 M6 rivet nut, existing hole

Installing rivet nut



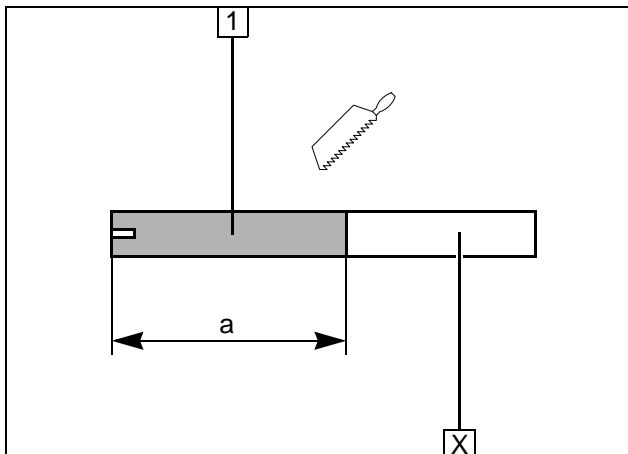
- 1 Original vehicle bolt
- 2 Bracket Part A

Mount bracket Part A loosely



- 1 Bracket Part B
- 2 M6x20 bolt, spring lockwasher, large diameter washer

Mount bracket Part B loosely



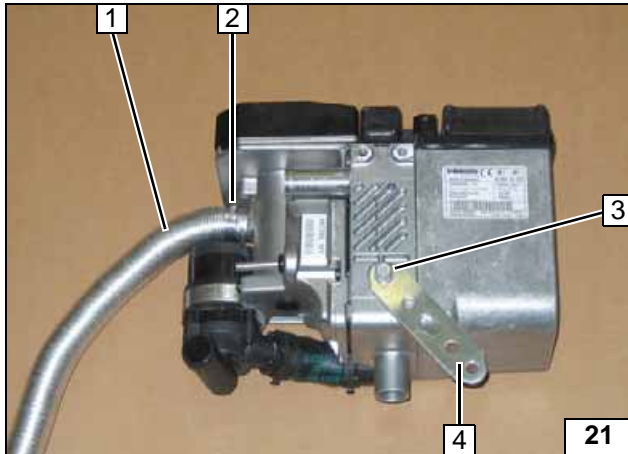
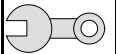
Preparing heater

Discard section X

- 1 Combustion air pipe
a = 250

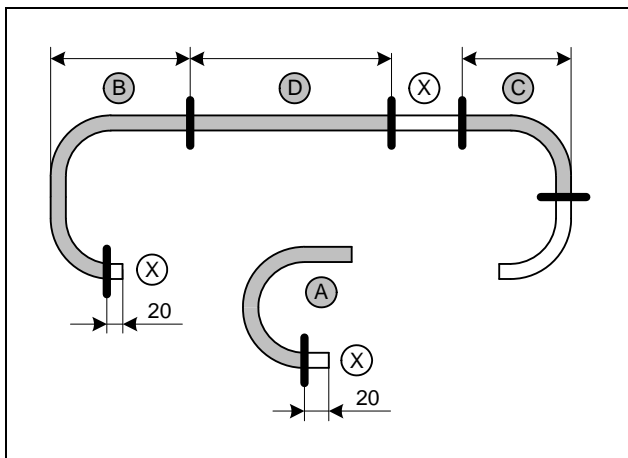


Cutting combustion air pipe to length



- 1 Combustion air pipe
- 2 27 mm dia. clamp
- 3 E-jot screw
- 4 Perforated bracket

Premounting heater

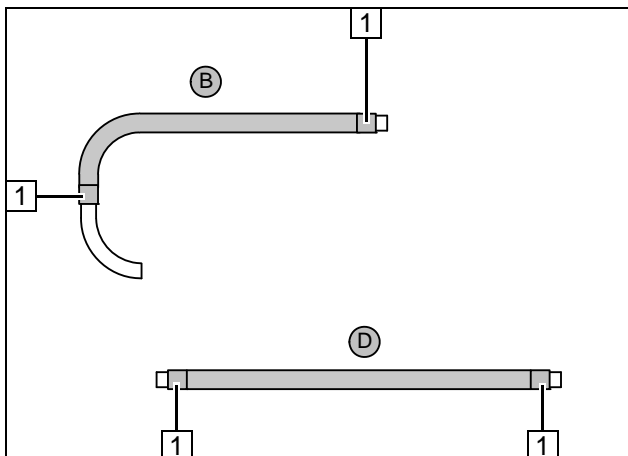


Shorten hose **A** = 180°, moulded hose
Discard section **X**

- B** = 380
- C** = 110
- D** = 435



Cutting hoses to length

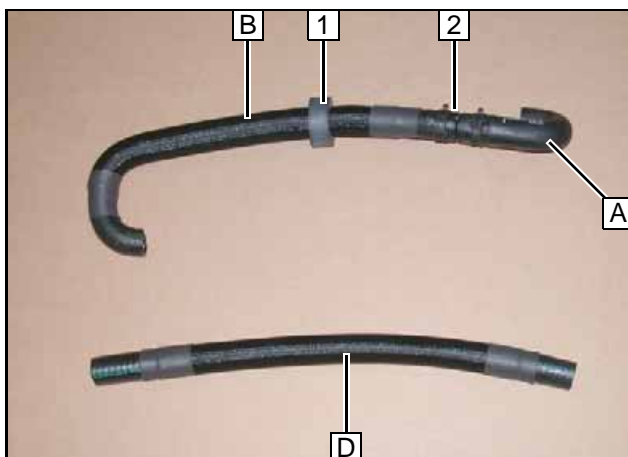


Push braided protection hose onto hose **B** and **D** and cut to length.
Cut heat shrink plastic tubing to length.

- 1 50 mm heat shrink plastic tubing [4x]



Preparing hoses

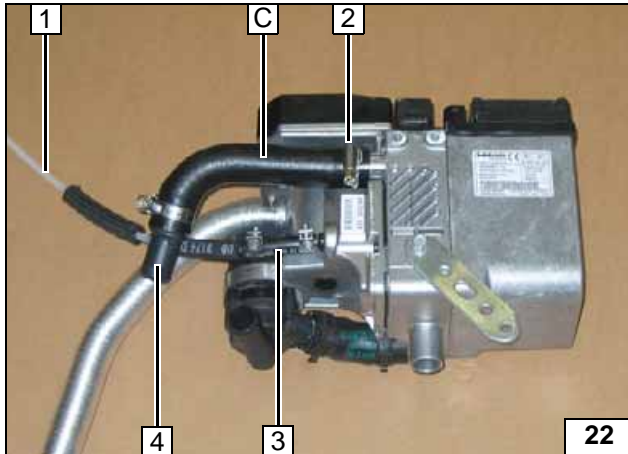
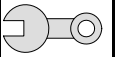


Push braided protection hose onto hose **B** and **D** and cut to length.
Cut heat shrink plastic tubing to length.

- 1 Slide on black (sw) rubber isolator
- 2 20x20mm connecting pipe, 27 mm dia. spring clips

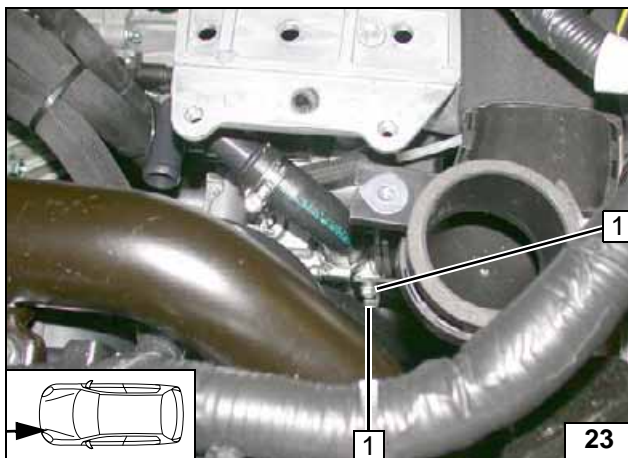


Preparing hoses



- 1 Fuel line, 8x12 hose section [2x]
- 2 27 mm dia. clamp
- 3 Hose section, 10 mm dia. clamp [2x]
- 4 20x20mm connecting pipe, 27mm dia. clamp

Premounting heater



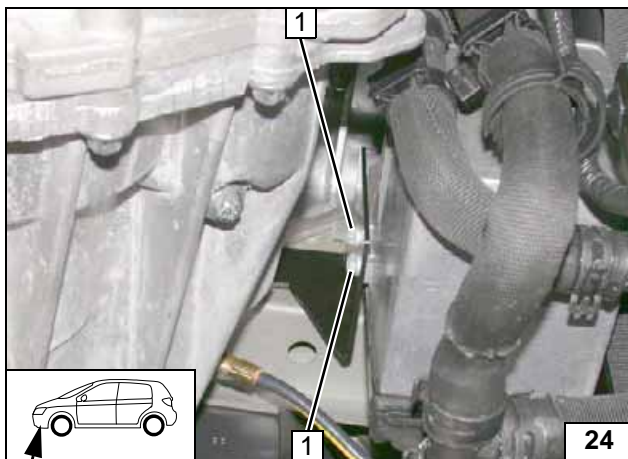
Installing heater

Mount wiring harness on heater before installation.

- 1 E-jot screw [2x]



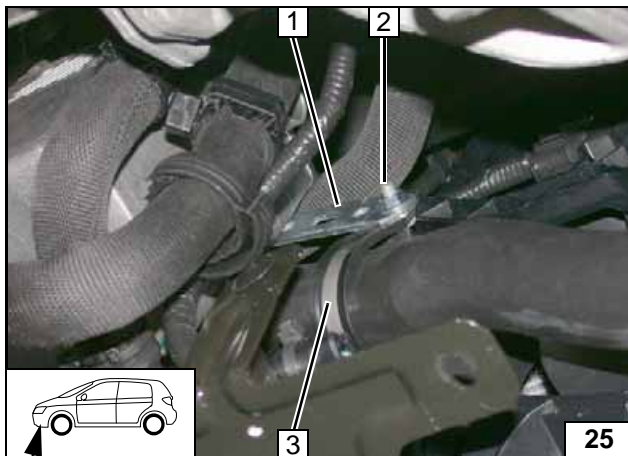
Installing heater



- 1 E-jot screw [2x]



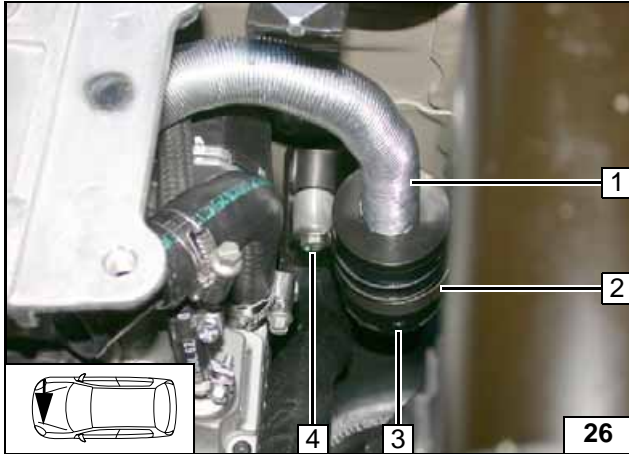
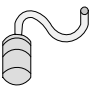
Installing heater



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



Installing pipe clamp



Combustion air

Tighten all loose screw joints (bracket **A** and **B**)!

- 1 Combustion air pipe
- 2 48 mm dia. clamp
- 3 Muffler
- 4 M6x35 bolt, spring lockwasher, 20 mm shim



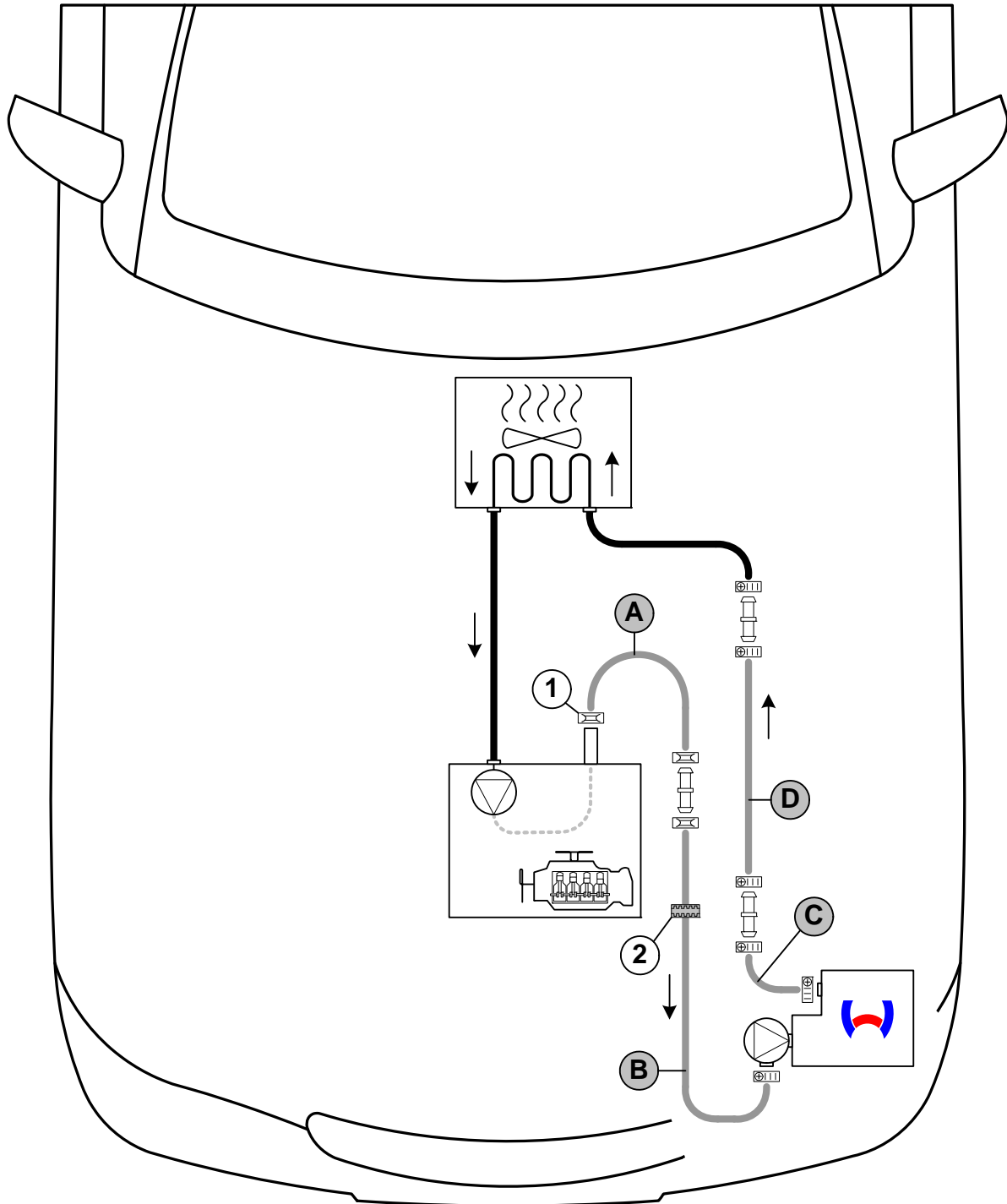
**Installing
muffler**



Coolant circuit

WARNING!

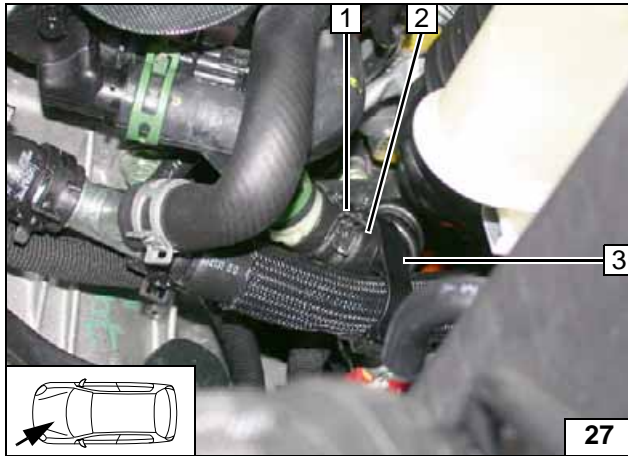
Any coolant running off should be collected using an appropriate container! Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that no other hose can be damaged! When installing the coolant hose, the heater must be filled with coolant.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



Hose routing diagram

1 = Original vehicle spring clip ! All connecting pipes = dia. 20x20.
All hose clamps without a specific designation = 20-27 mm dia 2 = Black (sw) rubber isolator

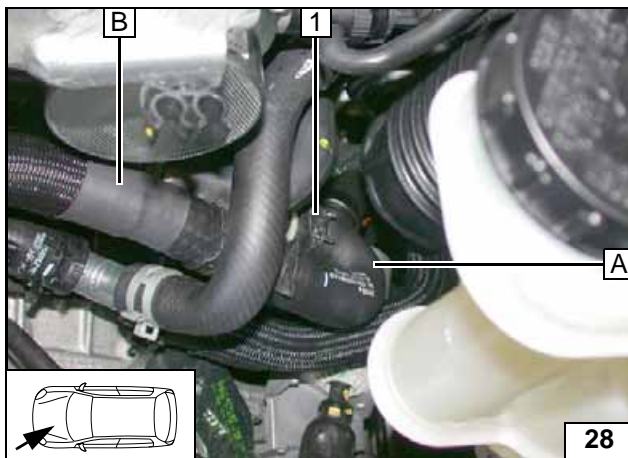




Pull hose of engine outlet 2 off connection piece. Original vehicle spring clamp will be re-used. Remove original vehicle spacer bracket 3, will be reused!

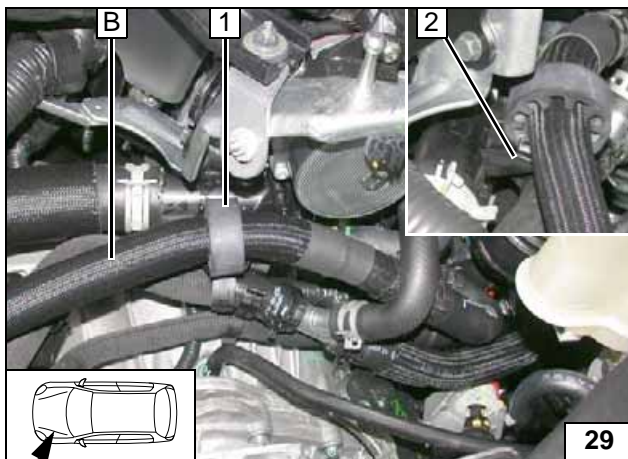


Cutting point



1 Original vehicle spring clip

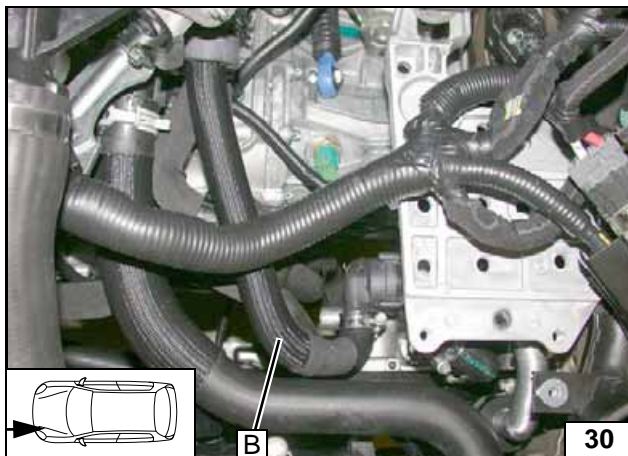
**Connect-
ing engine
outlet**



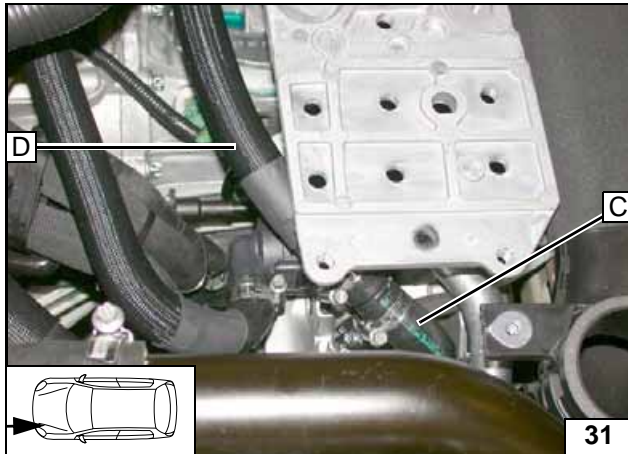
Fasten black (sw) rubber isolator 1 with cable tie 2 on the original vehicle bracket!



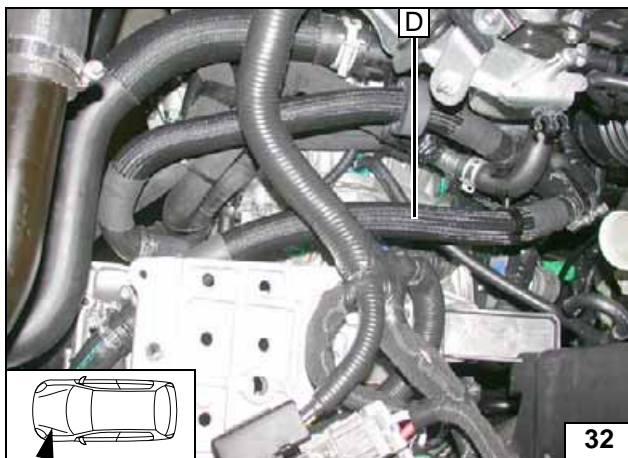
**Routing in
engine
compart-
ment**



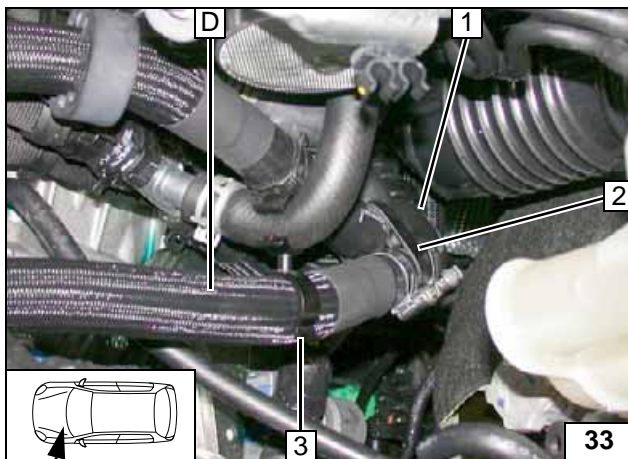
**Connect-
ing heater
inlet**



Connect-
ing heater
outlet

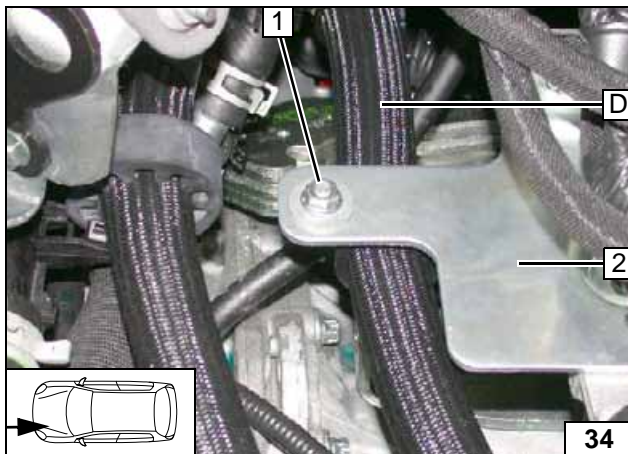


Routing in
engine
compart-
ment



- 1 Hose on heat exchanger inlet
- 2 Original vehicle spacer bracket
- 3 Spacer bracket

Connect-
ing heat
exchanger
inlet



Ensure sufficient distance from neighbouring components, correct if necessary!

- 1 M6x20 bolt, large diameter washer, rubber-coated 29mm dia., pipe clamp, flanged nut, existing hole
- 2 Retaining plate of control units



Fastening
hose D



Fuel Connection

CAUTION!

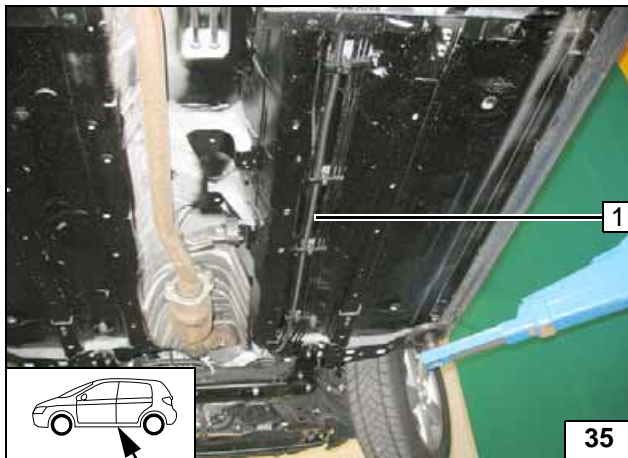
Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

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.

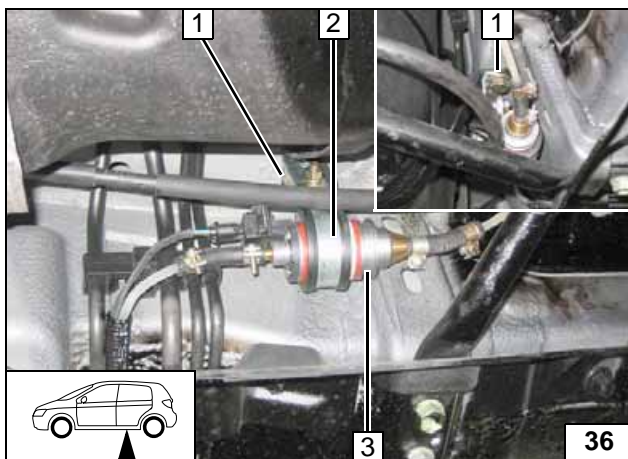
WARNING!

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



Route fuel line from heater and wiring harness of metering pump in corrugated tube 1 as shown and secure with cable ties.

Installing lines



Check the position of the components; adjust if necessary. Check that they have free clearance.

- 1 Original vehicle bolt for fastening fuel tank, angle bracket on short leg drilled out to 10.5 mm dia
- 2 Rubber-coated p-clamp, silent block, flanged nut [2x]
- 3 Metering pump



Installing metering pump



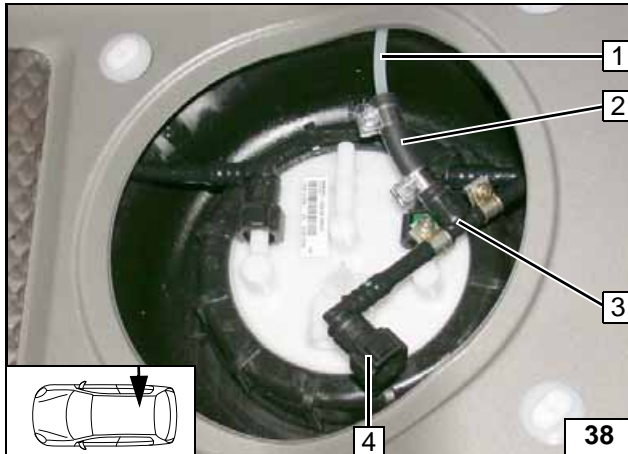
Connect fuel line 3 from heater on pressure side of metering pump 1 [side with connector].

Check the position of the components; adjust if necessary. Check that they have free clearance.

- 2 Hose section, 10 mm dia. clamp [2x]
- 4 Wiring harness of metering pump, connector mounted



Connecting to metering pump

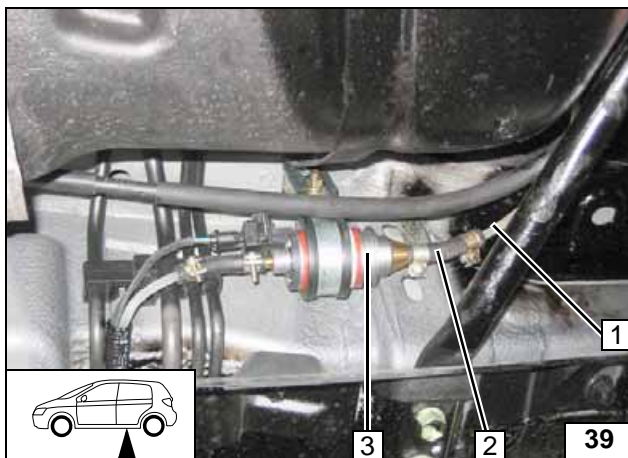


Separate fuel return line **4** approx. 50 mm before coupling.

- 1** Fuel line
- 2** Hose section, 10 mm dia. clamp [2x]
- 3** 6x5x6 fuel standpipe, 8 mm dia. clamp [2x]



Removing fuel

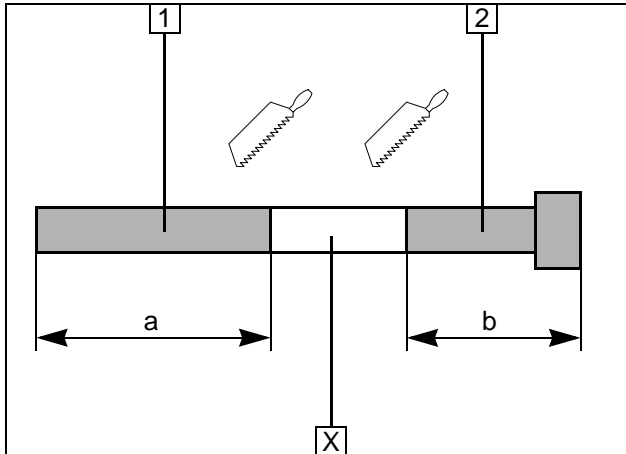
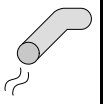


Fuel line **1** from fuel standpipe on intake side of metering pump **3**.
Check the position of the components; adjust if necessary. Check that they have free clearance.

- 2** Hose section, 10 mm dia. hose clamps [2x]



Connecting to metering pump

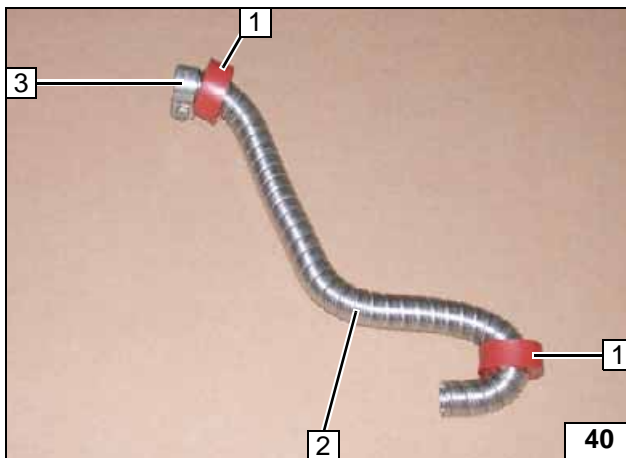


Exhaust system

- 1 Exhaust pipe
a = 430
- 2 Exhaust end section
b = 100

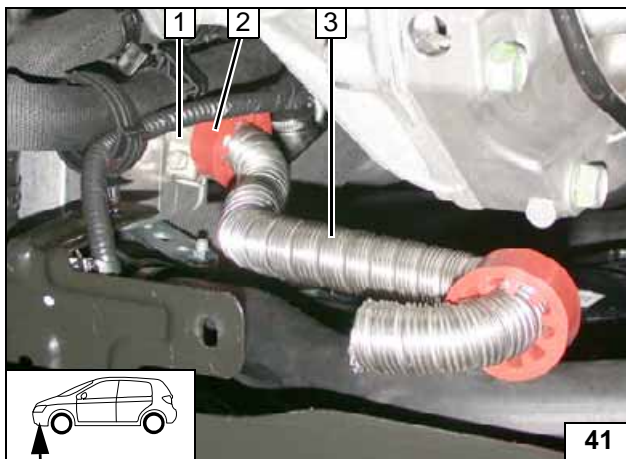
Discard section X

Preparing exhaust pipe



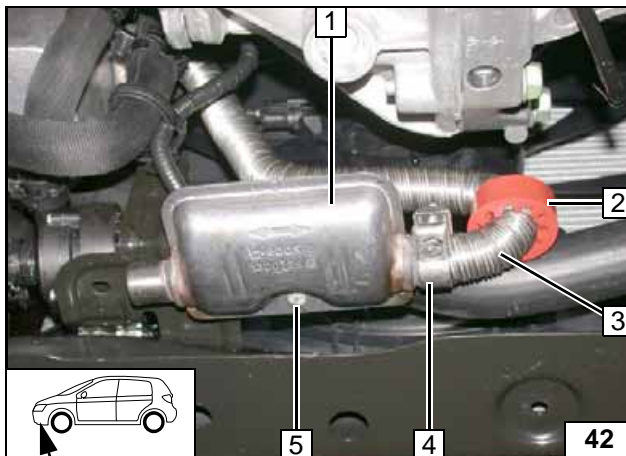
- 1 Push on red (rt) rubber isolator [2x]
- 2 Exhaust pipe
- 3 Hose clamp

Preparing exhaust pipe



- 1 Tighten hose clamp
- 2 Align red (rt) rubber isolator
- 3 Align exhaust pipe

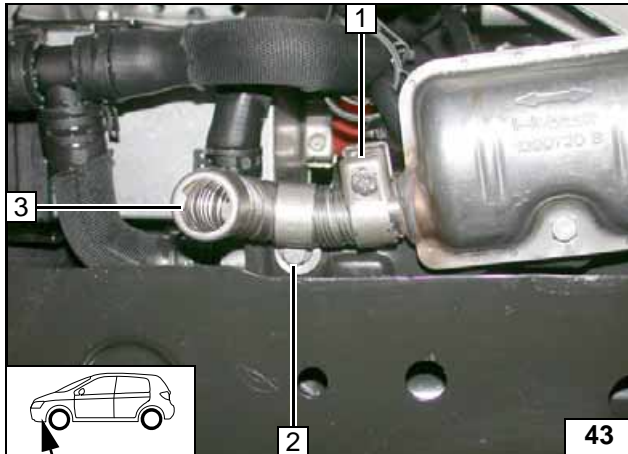
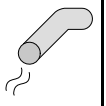
Installing exhaust pipe



Insert 20 mm shim between exhaust muffler 1 and cross member!

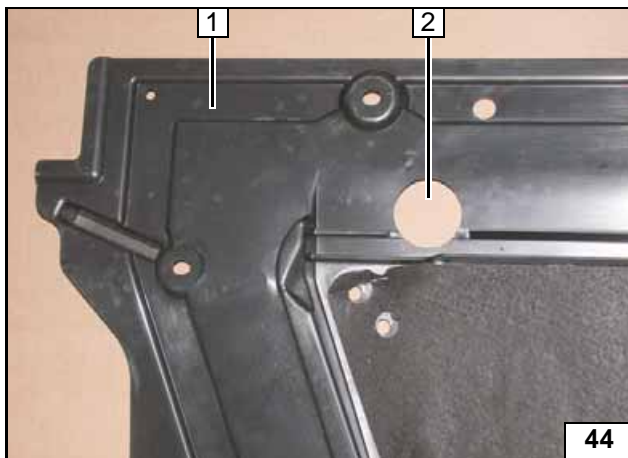
- 2 Align red (rt) rubber isolator
- 3 Exhaust pipe
- 4 Hose clamp
- 5 M6x35 bolt, spring lockwasher, 20 mm shim, flanged nut, existing hole

Installing muffler



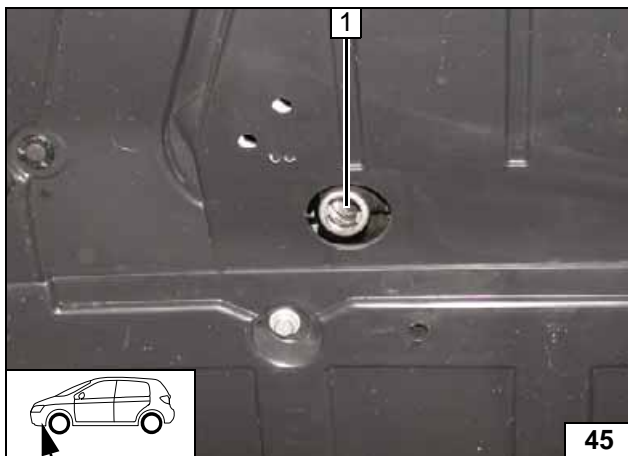
- 1 Hose clamp
- 2 M6x20 bolt, spring lockwasher, 5 mm shim, flanged nut, existing hole
- 3 Exhaust end section

Installing exhaust end section



- 1 Underride protection
- 2 50 mm dia. hole

Cutting out underride protection



Position exhaust end section **3** at centre of hole and align with underride protection. Ensure sufficient distance from neighbouring components, correct if necessary!



Installing exhaust end section



Final Work

WARNING!

Mount removed parts 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 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, try out Telestart
- Make settings on A/C control panel according to the "Operating Instructions for End Customer".
- Check the proper operation of the parking heater, see the operating instructions/installation instructions.
- Apply the label "Switch off parking heater before refilling" in the area of the filling neck



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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 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 temperature to "max."
- 3 Set fan to level "1" or max. "2"

Manual air conditioning



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

Automatic air-conditioning