

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

Nissan Qashqai

1,5l Diesel

from Model Year 2007

For left-hand drive vehicles only

Manual transmission only



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
Nissan	Qashqai	J10	e11 * 2001/116 * 0295 * ...

Engine type	Engine model	Output in kW	Displacement in cm ³
K9K	Diesel	78	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 Unit/Installation Kit

Quantity	Description	Order No.:
1	Nissan-specific delivery scope	See Nissan price list
1	Installation kit for Nissan Qashqai Diesel	1311965A
Also required:		
1	Heater control according to Nissan price list	See Nissan price list

Heater unit recommended for the respective vehicle class:

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

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

Foreword

These installation instructions apply to Nissan Qashqai 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).

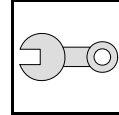
Special Tools

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

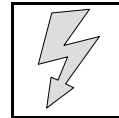
Explanatory Notes on Document

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.

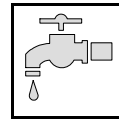
Mechanical system



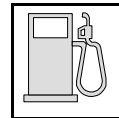
Electrical system



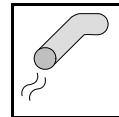
Coolant connection



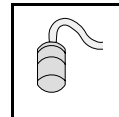
Fuel connection



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.



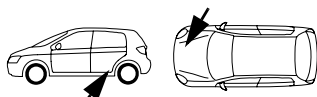
Specific risk of fire or explosion.



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 air filter together with the intake hose
- Remove the engine design cover
- Remove the lower engine cover
- Detach the lower left wheel well trim
- Remove the rear seat cushion.
- Open the tank-fitting 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 Teleshart)
- Remove the A/C control panel (only with automatic air-conditioning)

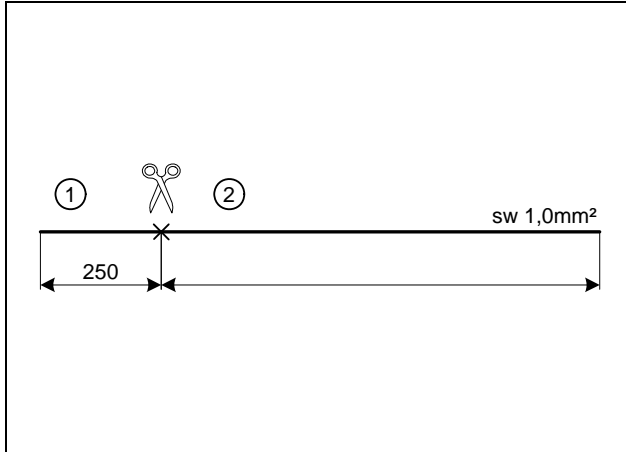
Remove page 24 "Operating Instructions for End Customer" and add to the vehicle operating instructions.



Heater unit installation location

- 1 Heater unit

Installation
location

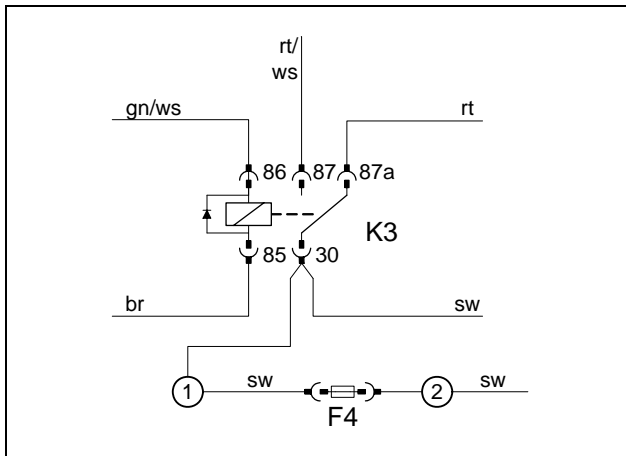


Preparing electrical system

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.



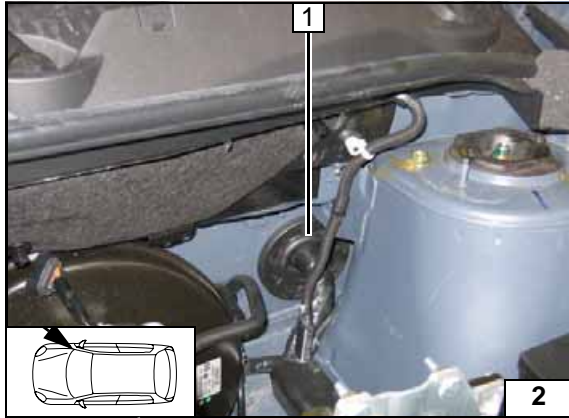
Preparing fuse F4



Electrical Connections

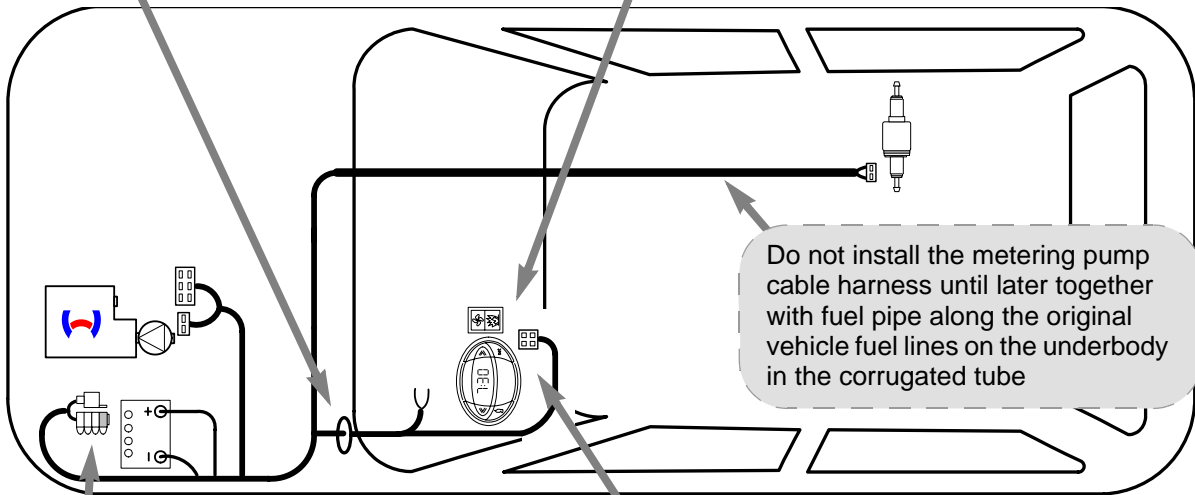
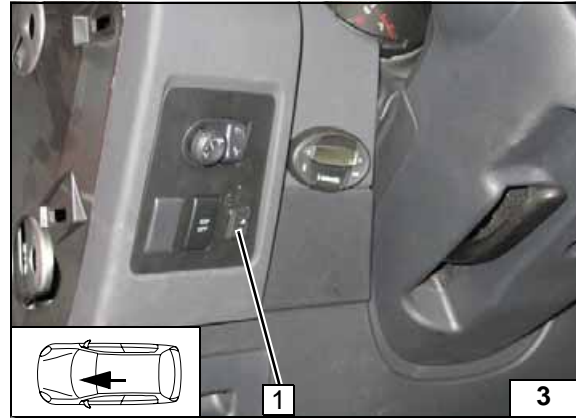
Wiring harness pass through

- 1 Protective rubber plug

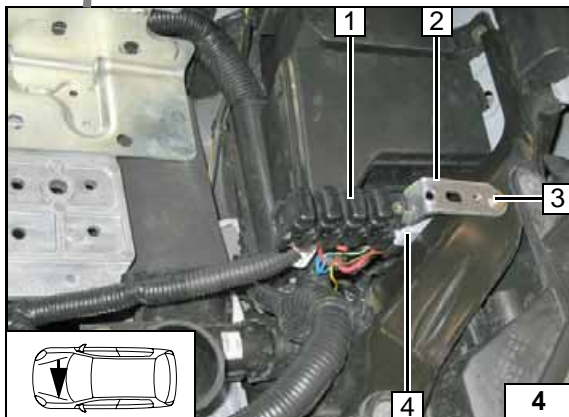


Summer/winter switch option

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

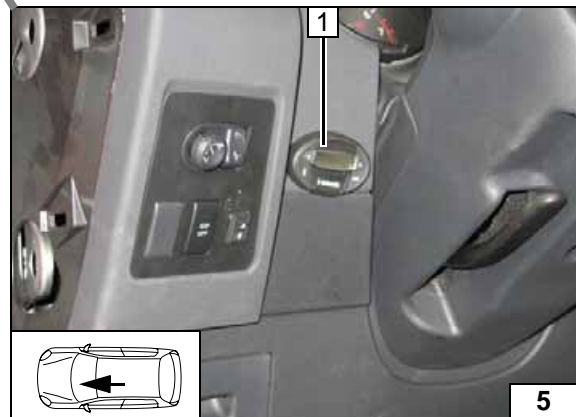


Wiring harness installation diagram



Fuse holder, relay K3

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

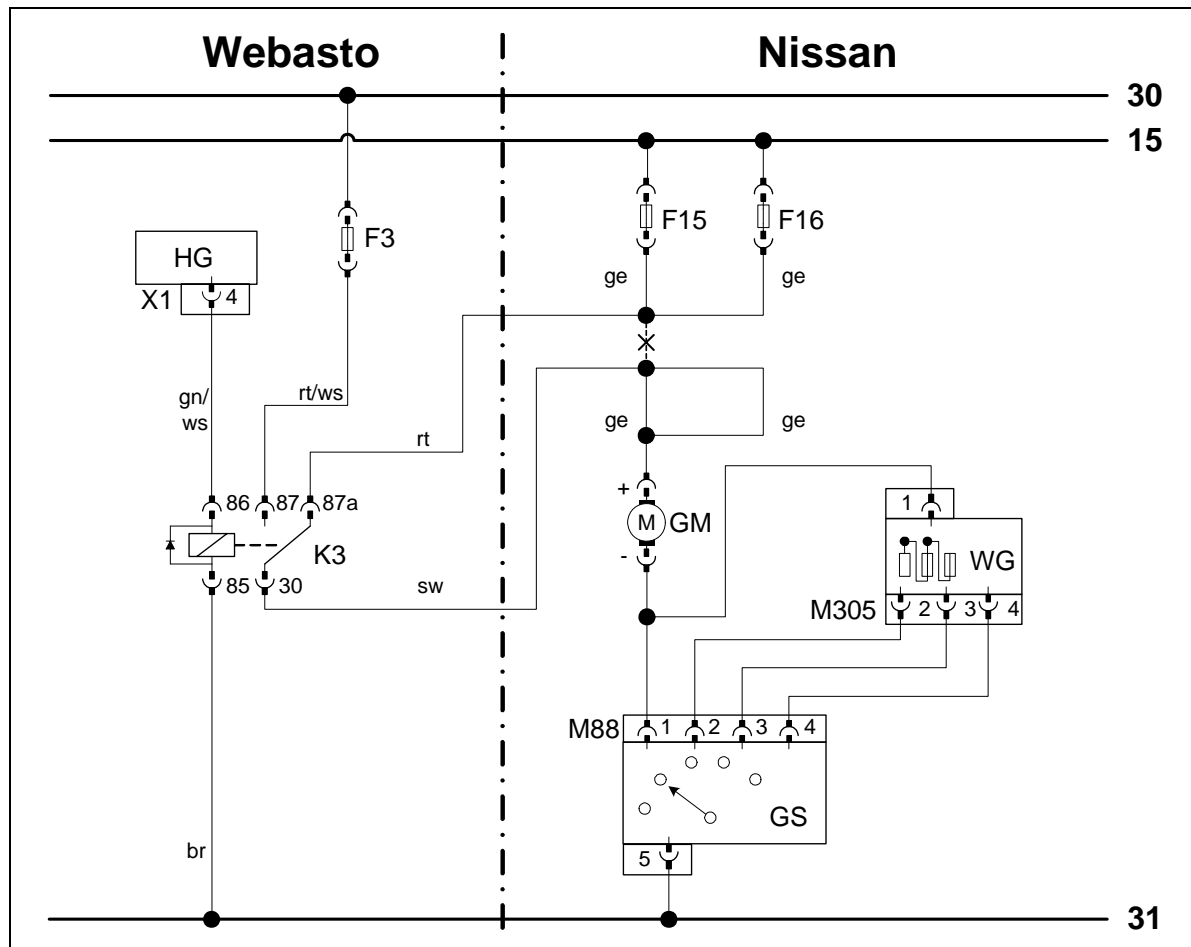


Digital timer

- 1 Digital timer



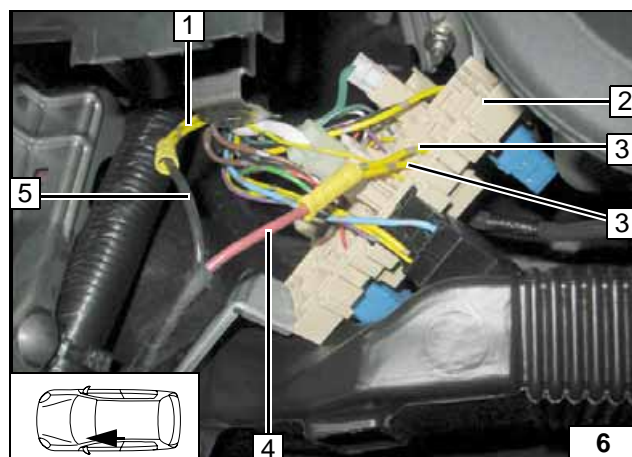
Fan controller for manual air conditioning




Wiring diagram

Webasto components		Vehicle components		Colors and symbols	
HG	Heater unit TT-C/E	GM	Fan motor	rt	red
X1	6-pin connector	GS	Fan switch	ws	white
F3	Fuse, 25 A	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 colors 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 to K3/87a
- 5 Black (sw) wire from K3/30



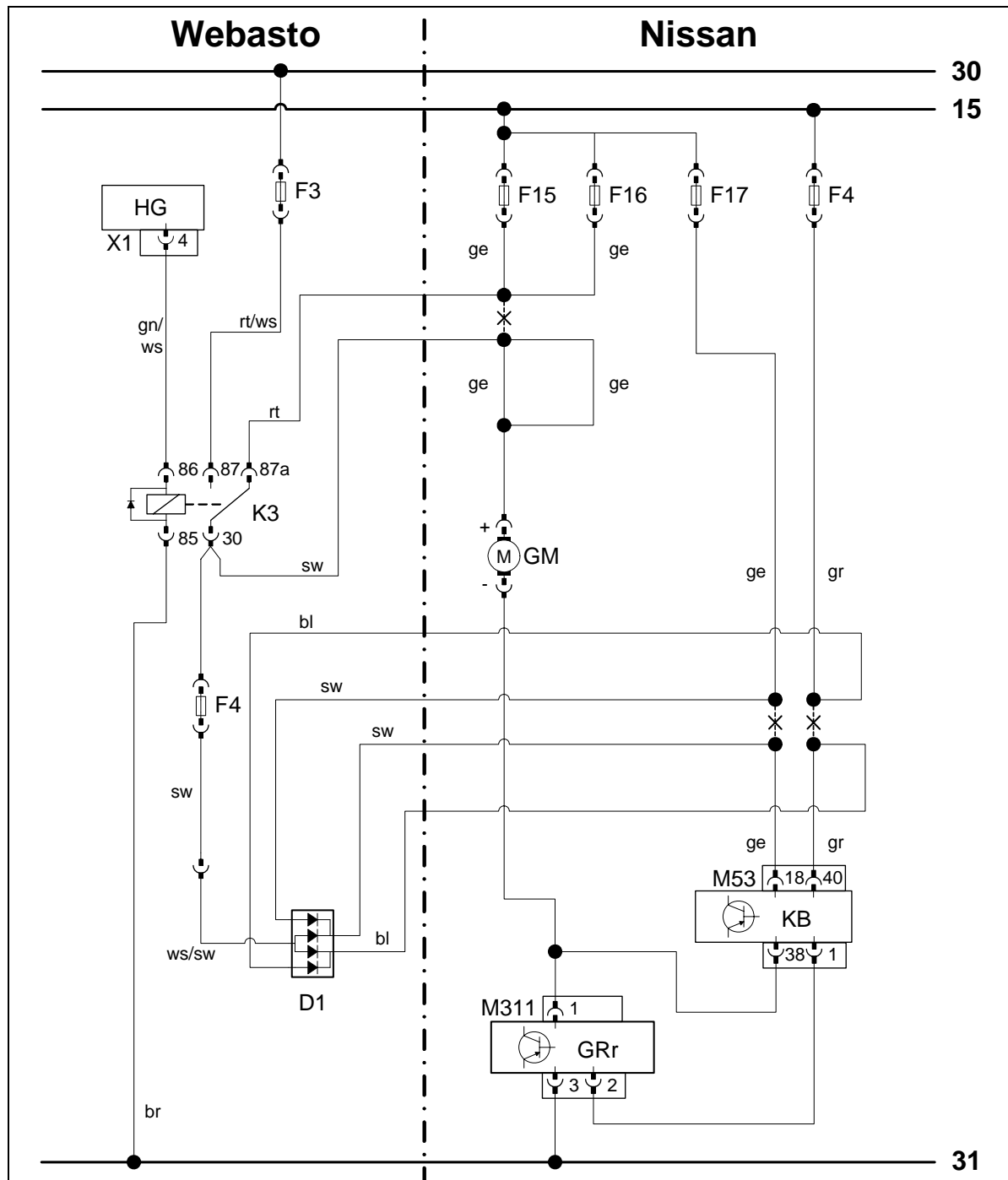
Con-
nection for
fan-motor



Automatic air-conditioning fan controller

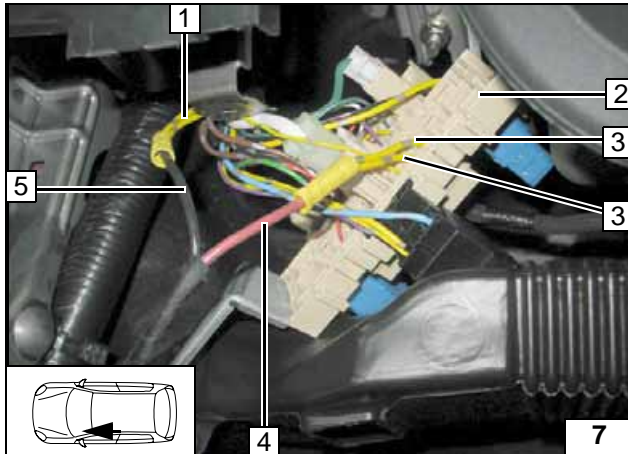


Wiring diagram



Webasto components		Vehicle components		Colors and symbols	
HG	Heater unit TT-C/E	GM	Fan motor	rt	red
X1	6-pin connector	KB	Air-conditioning control element	ws	white
F3	Fuse	GRr	Fan controller	sw	black
K3	Fan relay	F8	Fuse	br	brown
D1	Diode group	F15	Fuse	gn	green
F4	Fuse 10A	F16	Fuse	bl	blue
		F17	Fuse	ge	yellow
		M53	40-pin connector	gr	gray
		M311	4-pin connector		
				X	Cutting point
				Wiring colors may vary.	

Legend

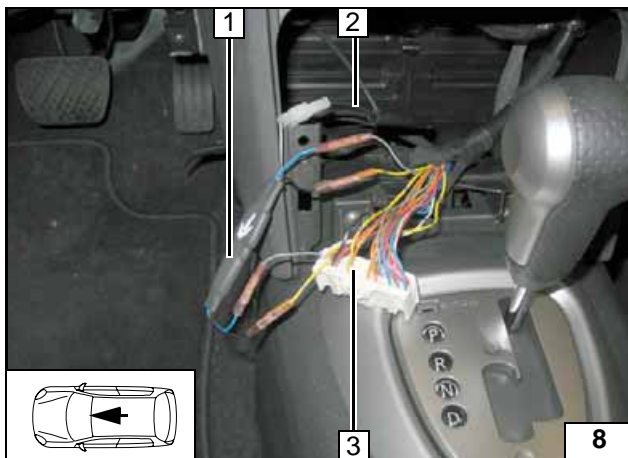


Connection on central electrical box **2** on driver's side.
Produce connections as shown in wiring diagram.

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



**Con-
nection for
fan motor**

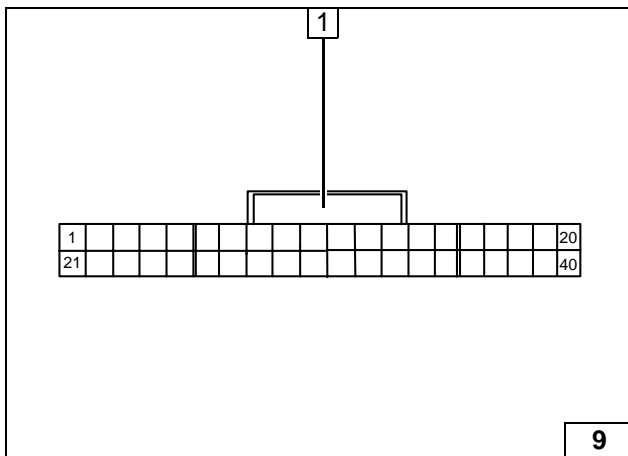


Connection on 40-pin connector M53 **3** from A/C control panel.
Produce connections as shown in wiring diagram.

- 1 Diode group
- 2 Black (sw) wire from F4



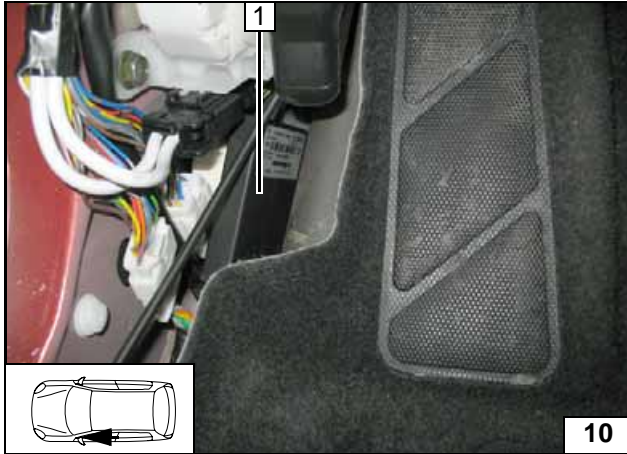
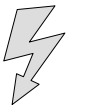
**Con-
necting
A/C control
panel**



- 1 Connector M53 on cable side



**View of
connector
M53**

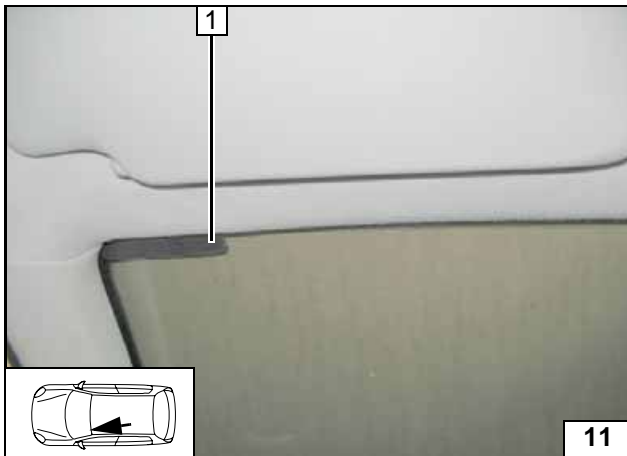


Remote option (Telestart)

Fasten receiver 1 with suitable means.

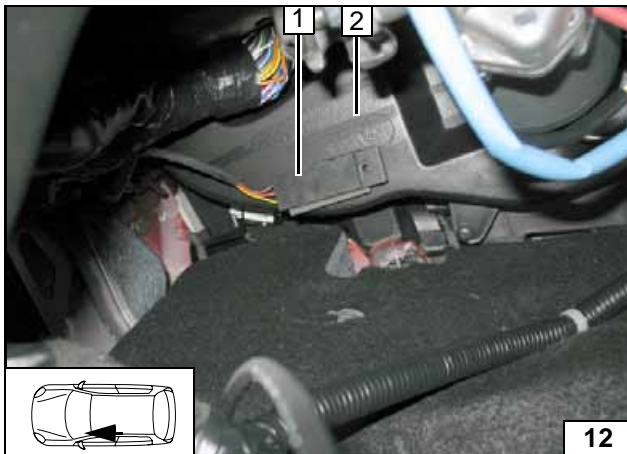


Installing receiver



1 Antenna

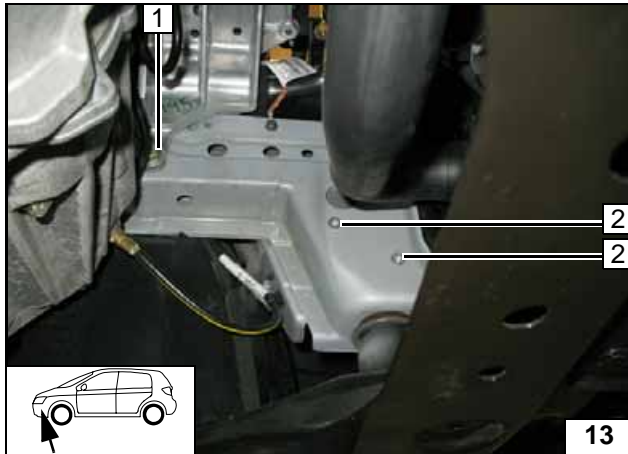
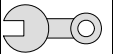
Installing antenna



Temperature sensor for HTM100 only

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

Installing temperature sensor



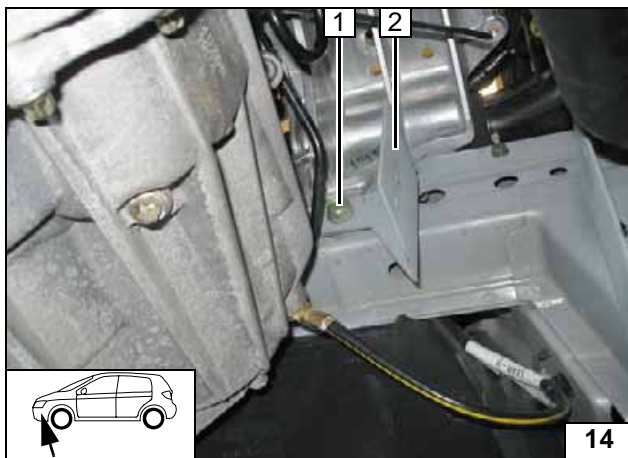
Preparing installation location

Remove original vehicle bolt 1; will be reused later.

2 Original vehicle hole [2x], rivet nut M6 [2x]

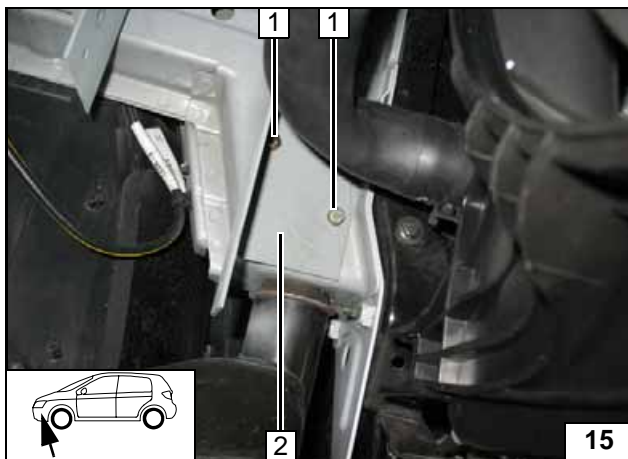


Installing rivet nut



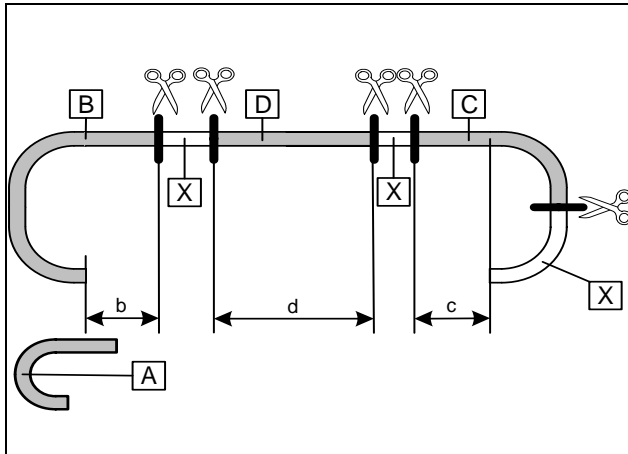
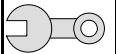
1 Original vehicle bolt
2 Bracket

Installing bracket



1 M6 rivet nut [2x], M6x20 bolt [2x], spring lockwasher [2x]
2 Bracket

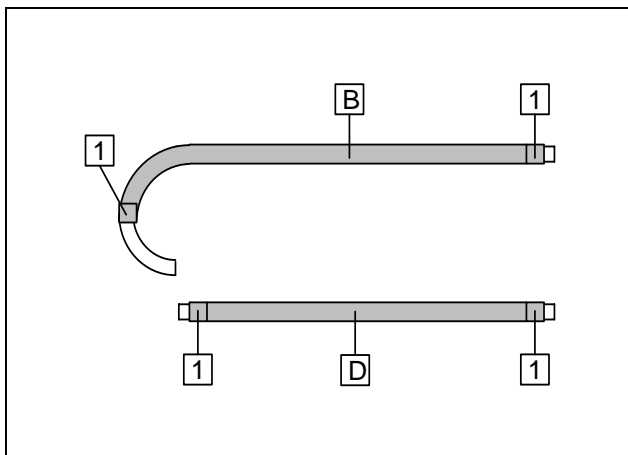
Installing bracket



Preparing heater unit

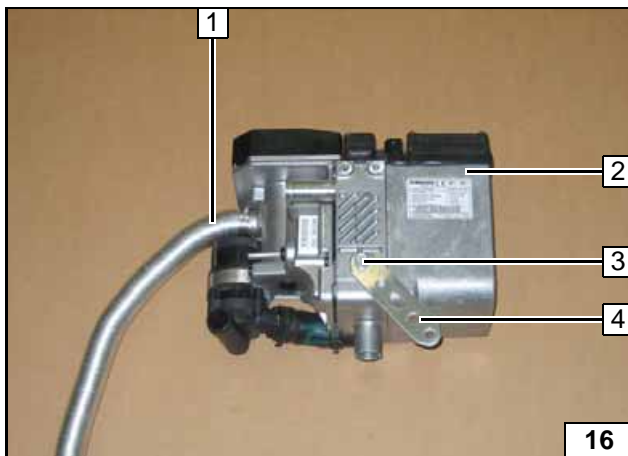
a = mm
b = mm
c = mm

Discard section **X**
Compress heat protection hose and slide onto hose **A**.
Cut braided protection hoses to length and push onto hose **A** and **B**.



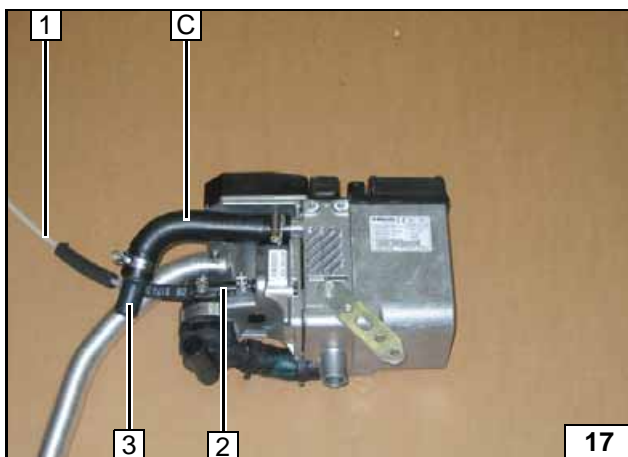
Cut braided protection hose in middle and, push onto hose **B** and **D** and cut to length.
Cut heat shrink plastic tubing to length.

1 25 mm heat shrink plastic tubing [4x]



Ejot screw bolt **3**, tightening torque 10 Nm.

- 1** Combustion-air intake pipe, 27 mm dia. hose clamp
- 2** Heater unit
- 4** Perforated plate



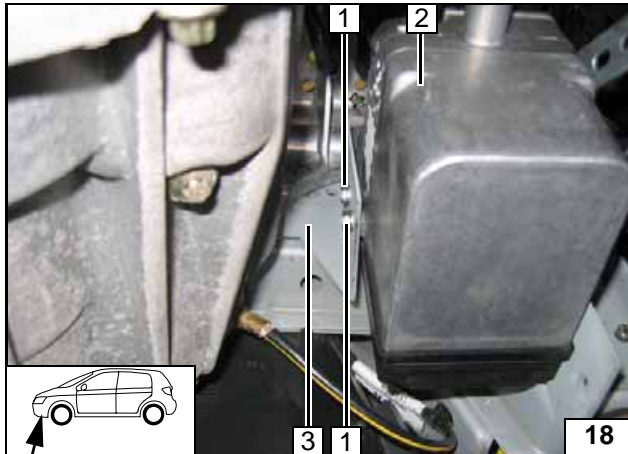
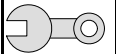
- 1** Fuel line, 8x12 hose section [2x]
- 2** Hose section, 10 mm dia. hose clamps [2x].
- 3** 20/20 connecting pipe, 27 mm dia. hose clamp

Cutting coolant hoses to length

Preparing coolant hoses

Preassembling heater unit

Preassembling heater unit



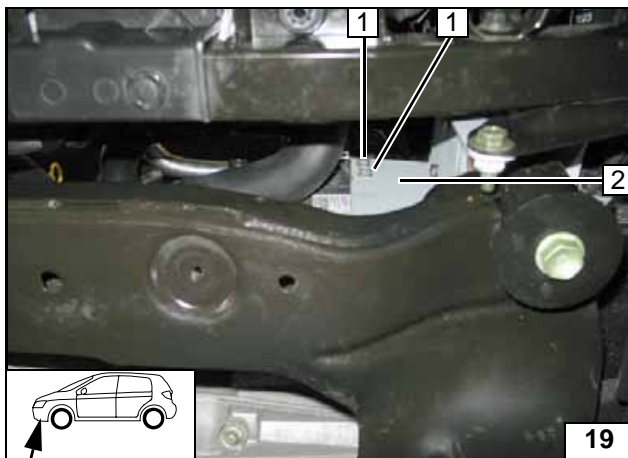
Installing heater unit

Ejot screws 1 [2x], tightening torque 10 Nm!

- 2 Heater unit
- 3 Bracket



Installing heater unit

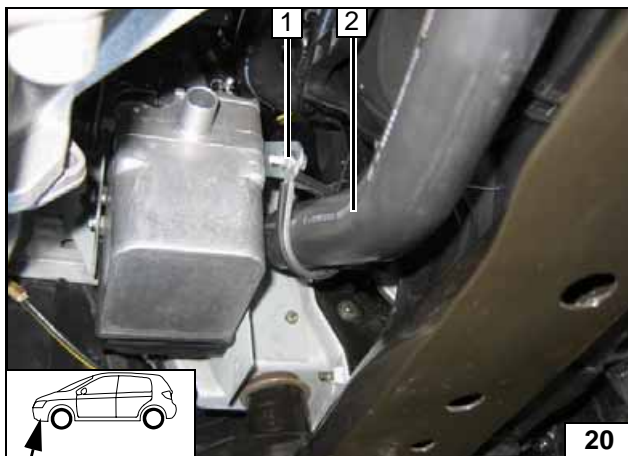


Ejot screws 1 [2x], tightening torque 10 Nm!

- 2 Bracket



Installing heater unit



- 1 Premounted perforated plate, 48 dia. rubber-coated p-clamp, M6x20 bolt, flanged nut
- 2 Original vehicle hose

Fastening coolant hose



Coolant connection for diesel engine

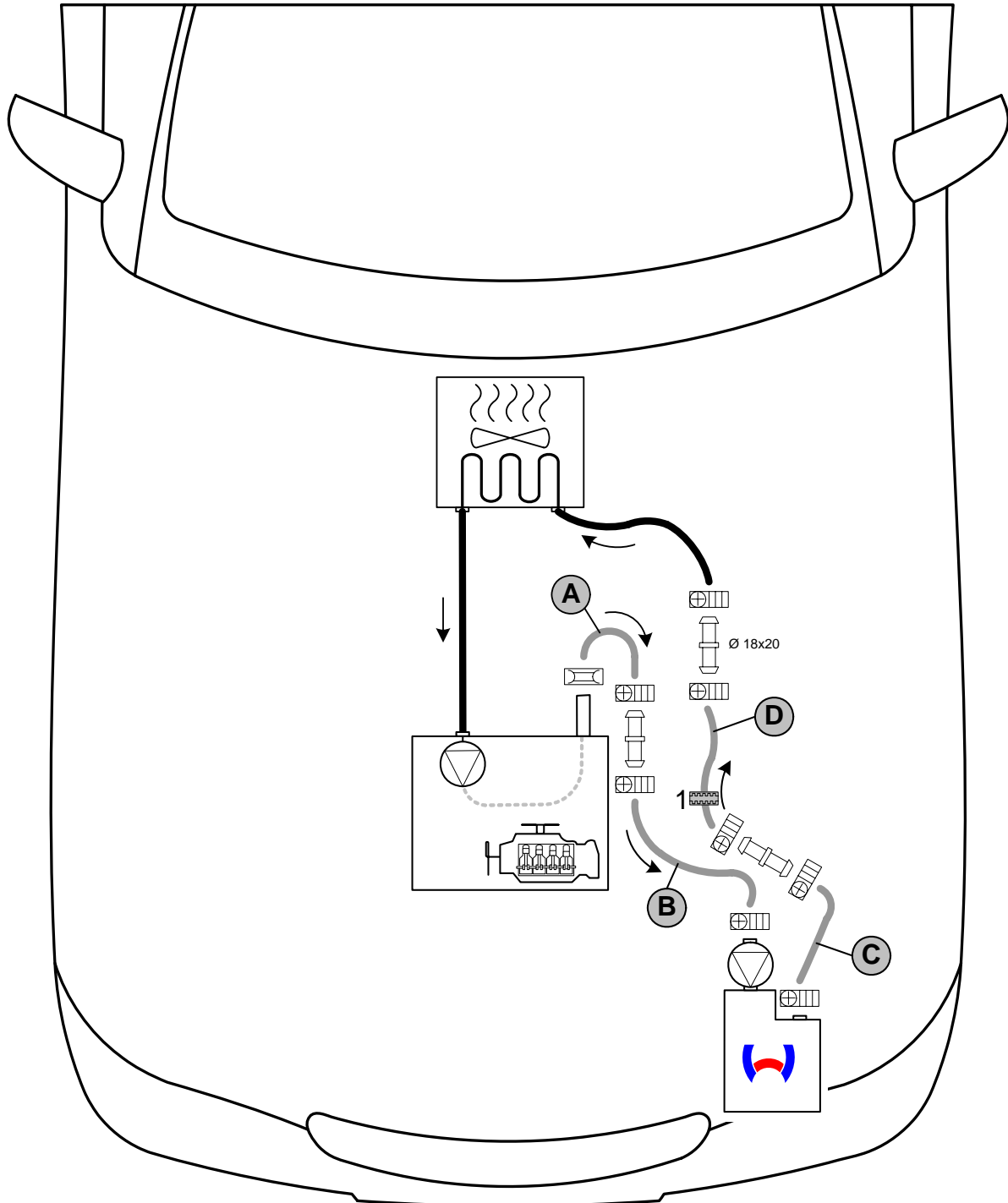
WARNING!

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:



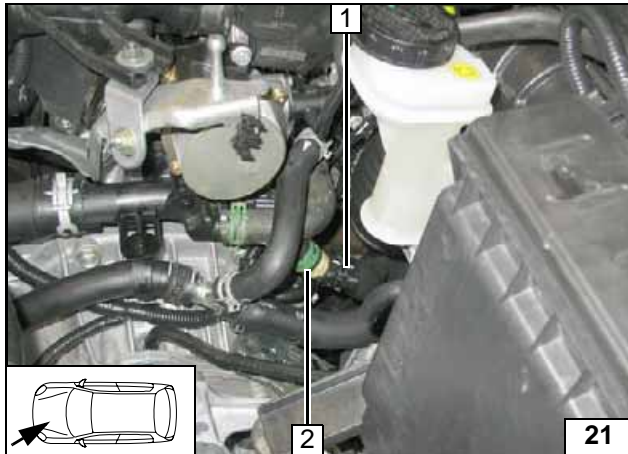
Coolant routing diagram

Original vehicle spring clip  = 27 mm dia.

All connecting pipes without a specific designation = dia. 20x20.

All hose clamps without a specific designation  = 20-27 mm dia 1 = Black (sw) rubber isolator 

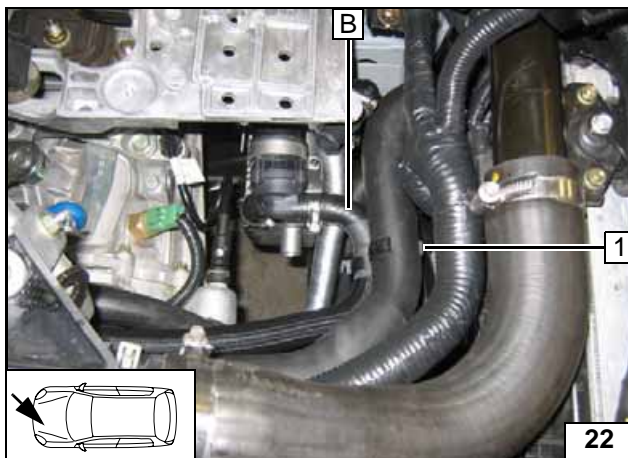




Pull hose of engine outlet **1** off hose connection piece **2**; original vehicle spring clip will be reused!

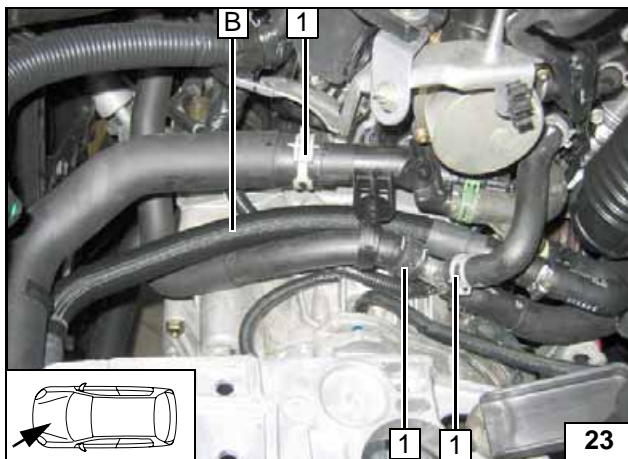


Cutting point



1 Hose bracket

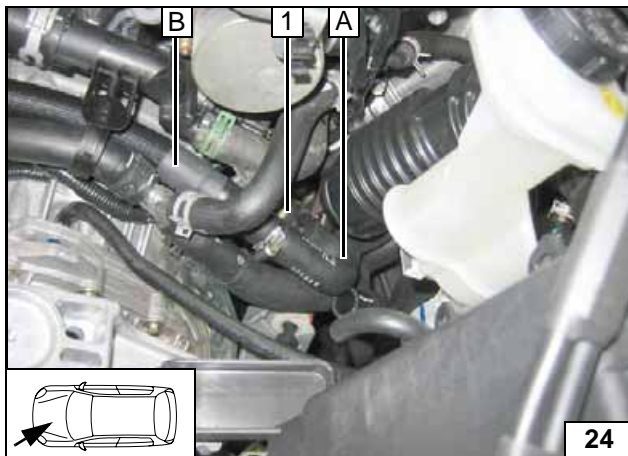
**Con-
nection to
heater unit**



Position original vehicle spring clips **1** so that hose **B** cannot be damaged.

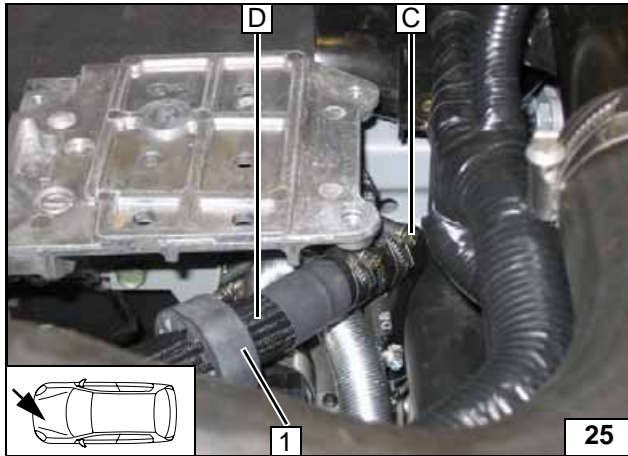


**Routing in
engine
compart-
ment**



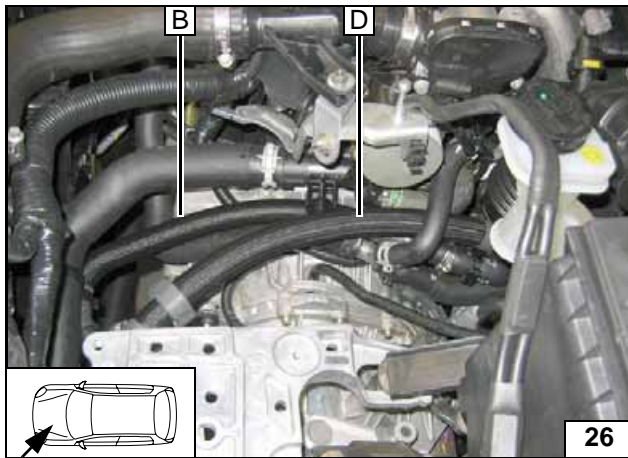
1 Hose connection piece on engine outlet

**Con-
nection on
engine
outlet**

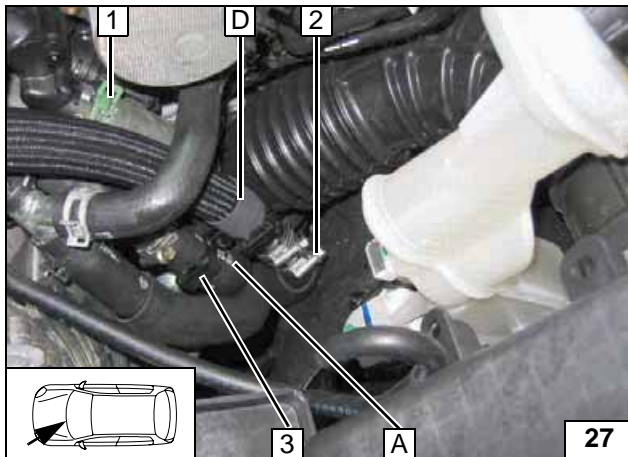


1 Black (sw) rubber isolator

Con-
nection to
heater unit



Routing in
engine
compart-
ment



Position original vehicle spring clips 1 so that hose **D** cannot be damaged.
Before connecting, fill the coolant hoses with coolant.



2 Hose on heat exchanger inlet
3 Hose bracket

Con-
nection to
heat
exchanger
inlet



Fuel Connection

CAUTION!

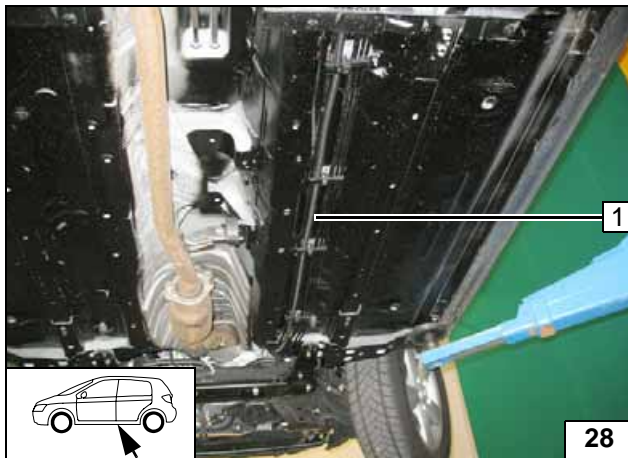
Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

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.

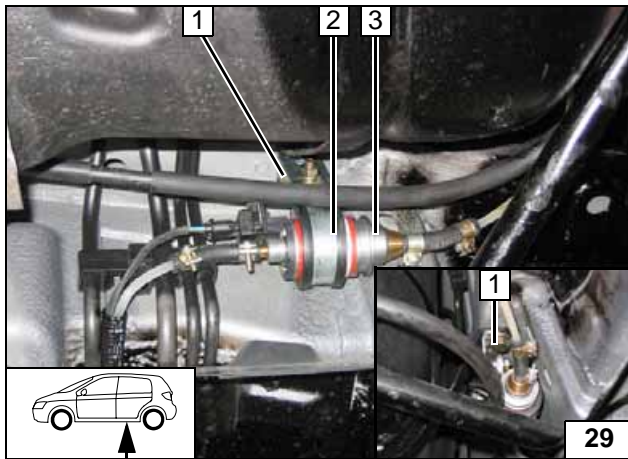
WARNING!

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 unit 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, angle bracket drilled out to 10.5 mm dia.
- 2 Rubber-coated p-clamp, silent block, flanged nut [2x]
- 3 Metering pump



Installation location of metering pump



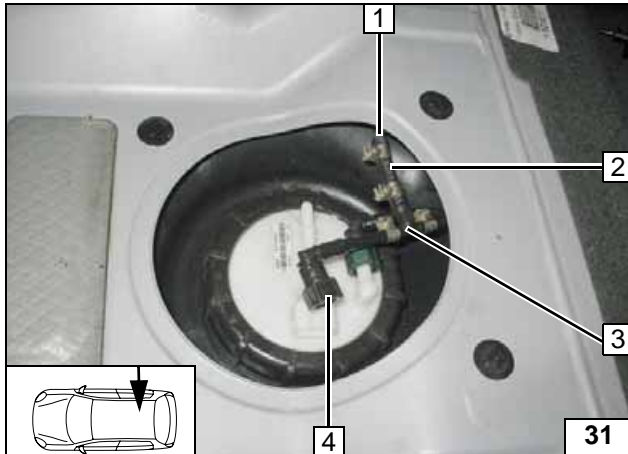
Connect fuel line **3** from heater unit on pressure side of metering pump **1** [side with connector].

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

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



Connecting to metering pump

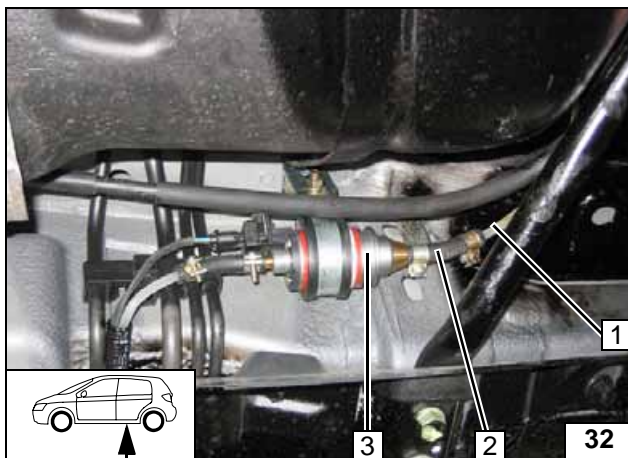


Separate fuel return line **4** approx. 50 mm before coupling.

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



Removing fuel

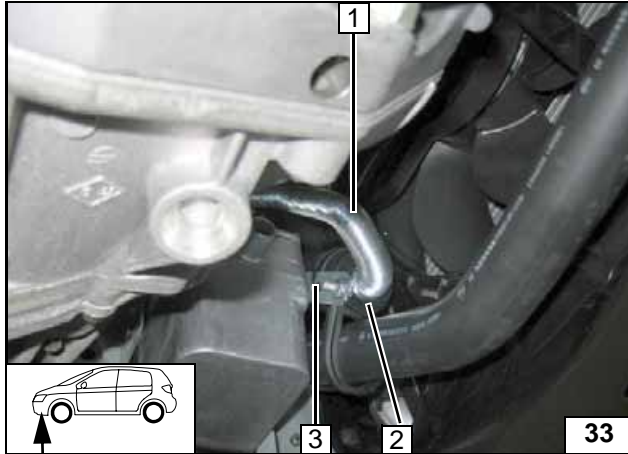


Fuel line **1** from fuel standpipe cut to length on intake side of metering pump **3** [side without connector].
Check the position of the components; adjust if necessary. Check that they have free clearance.

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



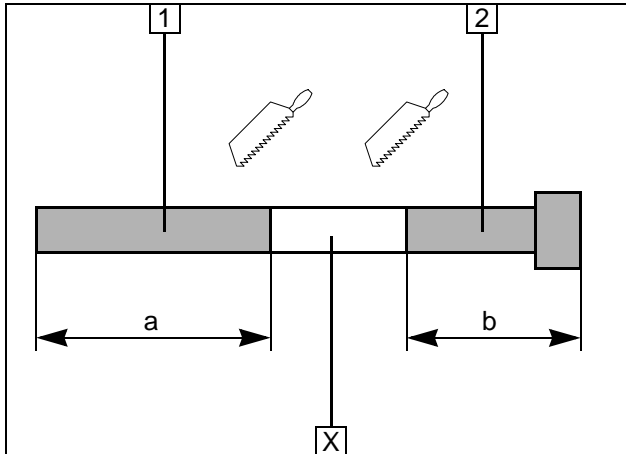
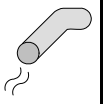
Connecting to metering pump



Combustion air

- 1 Combustion-air intake pipe
- 2 Combustion-air intake muffler
- 3 Cable tie, perforated plate

**Installing
muffler**

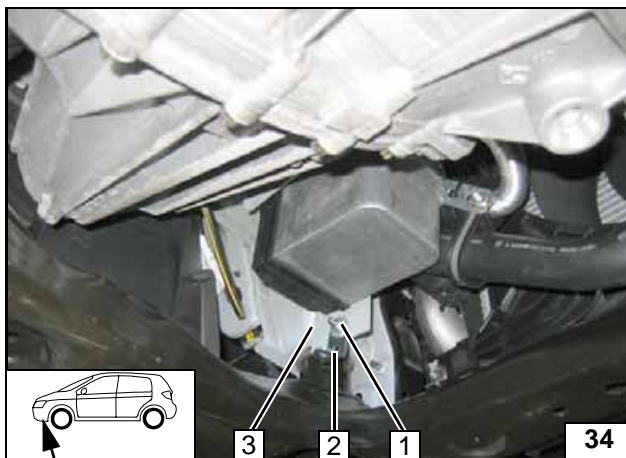


Exhaust system

- 1 Exhaust pipe
a = 280 mm
- 2 Exhaust end section
b = 220 mm

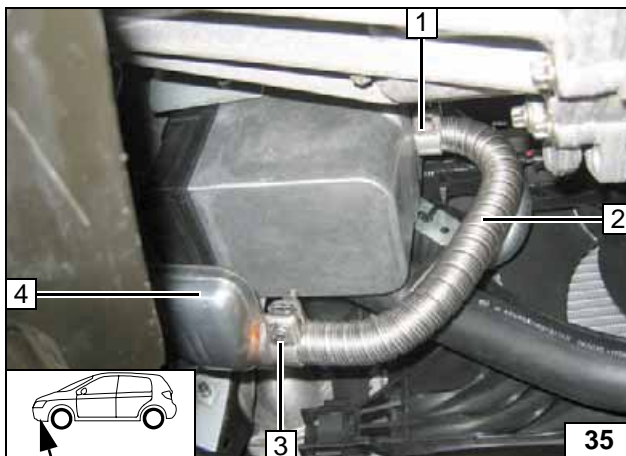
Discard section X

Preparing exhaust pipe



- 1 M6x20 bolt, large diameter washer, flanged nut
- 2 Angle bracket
- 3 Bracket

Preparing muffer for installation

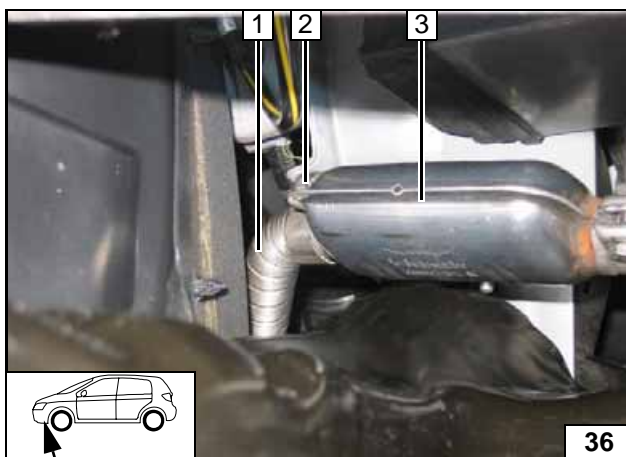


Ensure sufficient distance to neighboring components.

- 1 Hose clamp
- 2 280 mm exhaust pipe
- 3 Hose clamp
- 4 Exhaust muffer, M6x20 bolt, flanged nut



Installing muffer

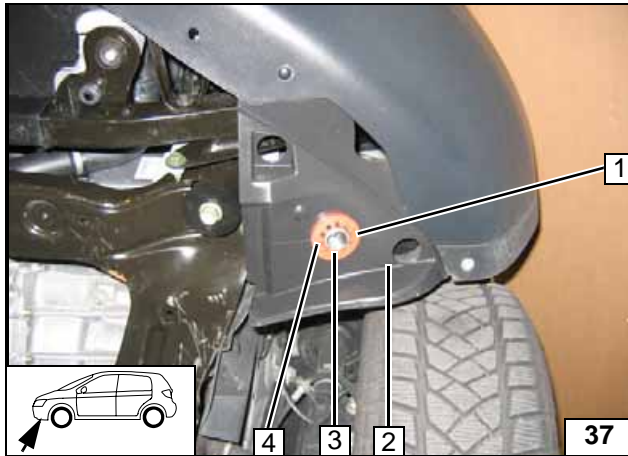
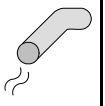


Ensure sufficient distance to neighboring components.

- 1 Exhaust end section
- 2 Hose clamp
- 3 Exhaust muffer



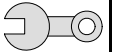
Installing exhaust end section



Drill 42 mm dia. hole **1** in wheel well trim **2**.
Insert exhaust end section **3** flush on red (rt)
rubber isolator **4** and align.



**Installing
exhaust
end
section**



Final Work

WARNING!

Reassemble the disassembled components in reverse order.

Check all hoses, clamps and all electrical connections for firm seating.

Secure all loose cables using cable ties.

Only use manufacturer-approved coolant.

Spray the heater unit components with anti-corrosion wax (Tectyl 100K, Order No. 111329).

- Connect the battery
- Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.
- Set the digital timer.
- 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.



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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 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:



3 Direct air outlet toward windshield

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

2 Set temperature to "HI"

For
vehicles
with
automatic
air con-
ditioning