

# Water Heater Unit



Feel the drive

**Thermo Top E Additional Heater**  00 0003

**Thermo Top C Additional Heater**  00 0002

**Thermo Top P Additional Heater**  00 0104

## Installation Instructions

### Renault Scenic / Grand Scenic / Megane

(international)

Diesel

from Model Year 2006

Electrical auxiliary heater

Manual transmission

Left-hand drive vehicle



#### **WARNING!**

#### **Hazard warning:**

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

**Specialist company training, technical documentation, specialized tools and equipment are required to install and repair Webasto heating and cooling systems.**

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

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

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

# Renault Scenic / Grand Scenic / Megane

## Table of Contents

Validity	2	Preparing installation location	13
Delivery scope	3	Preparing heater unit	15
Foreword	3	Installing heater unit	16
General Instructions	3	Coolant connection	17
Special Tools	3	Fuel Connection	21
Explanatory Notes on Document	4	Combustion air	23
Preliminary Work	5	Exhaust system	24
Heater unit installation location	5	Final Work	26
Preparing electrical system	6	Operating Instructions for End Customer	27
Electrical Connections	7		
Fan controller for manual air conditioning	8		
Automatic air-conditioning fan controller	10		
Remote option (Telestart)	11		
Remote option (Thermo Call)	12		

## Validity

Manufacturer	Model	Type	EG-BE No./ABE
Renault	Scenic/Grand Scenic	JM	e2 * 2001/116 * 0274

Engine type	Engine model	Output in kW	Displacement in cm <sup>3</sup>
F9Q	Diesel	96	1870

Manufacturer	Model	Type	EG-BE No./ABE
Renault	Megane	M	e2 * 98/14 * 0272

Engine type	Engine model	Output in kW	Displacement in cm <sup>3</sup>
K9K	Diesel	76	1461

Vehicle and engine types, equipment variants as well as national specifications, which are 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.

# Renault Scenic / Grand Scenic / Megane

## Delivery scope

Quantity	Description	Order No.:
1	Retail accessories with desired heater control	See Renault price list
1	International installation kit Renault Scenic / Grand Scenic / Megane from 2003 Diesel	9008865C

## 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 Renault Scenic / Grand Scenic / Megane Diesel vehicles with electric auxiliary heater - for validity, see page 2 - from model year 2006 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
- Torx E 5 3/8" nut
- Flexible socket wrench, 7 mm and 10 mm
- Center bit, 36 mm dia

## NOTE

Please ask customers to bring in the vehicle with as little fuel in the fuel tank as possible.

## 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



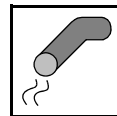
### Coolant connection



### 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.



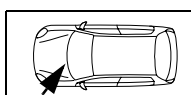
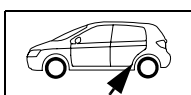
Specific risk of fire or explosion.



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



Reference to a special technical feature.

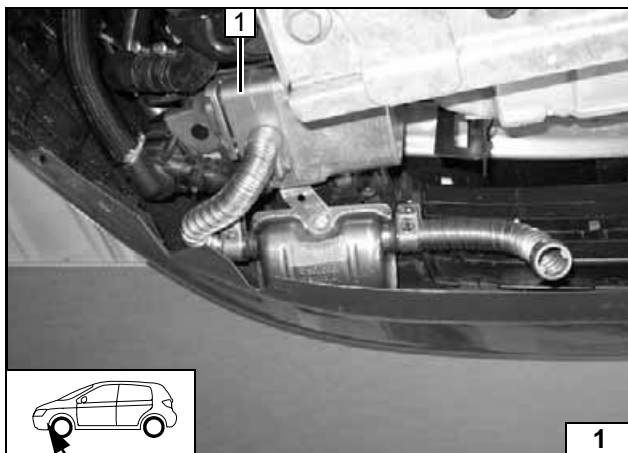


The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.

## Preliminary Work

### WARNING!

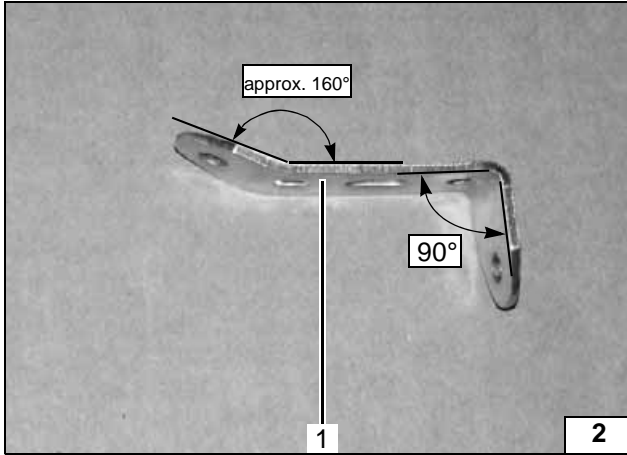
- Depressurize the cooling system.
- Copy the factory number from the original type label to the duplicate type label.
- Remove years that do not apply from the duplicate label.
- Attach the duplicate label (type label) in the appropriate place.
- Remove the battery complete with the carrier plate.
- Remove the air filter together with the intake hose.
- Open the fuel tank cap, ventilate the tank.
- Close the tank cap again.
- Detach the wheel well trim on the right and left.
- Remove the bumper.
- Remove the underride protection of the engine compartment.
- Note the radio security code.
- Remove the A/C control panel according to the manufacturer's specifications.
- Remove the side trim of the instrument panel on the driver's side (only with Telestart option).
- Remove the center console (only with Thermo-Call option).
- Please remove page 27 of the "Operating instructions for the end customer" and add this to the vehicle operating instructions.



### Heater unit installation location

- 1 Heater unit

Installation  
location

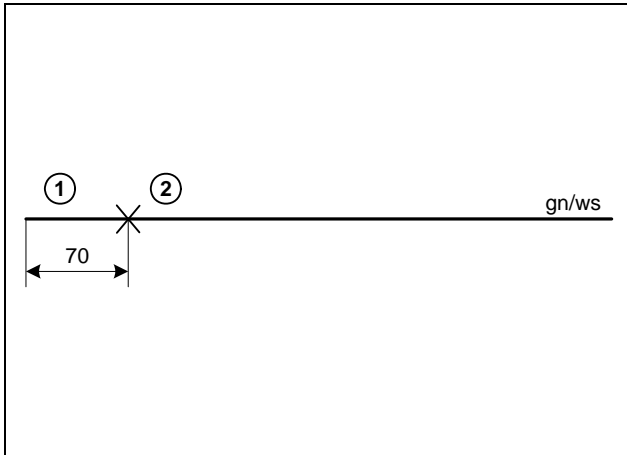


## Preparing electrical system

For all vehicles

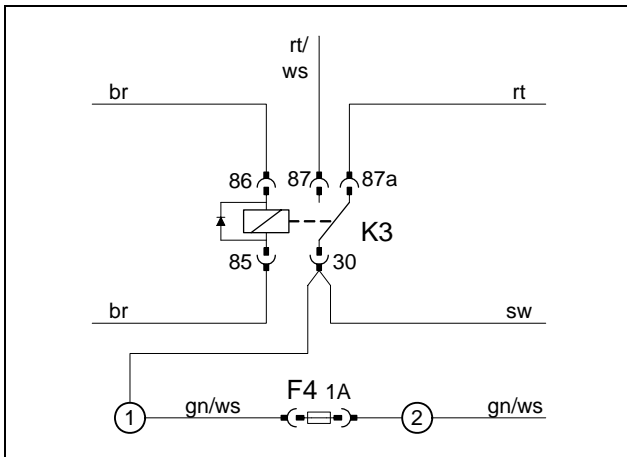
1 Perforated bracket

Bending perforated bracket



Only with automatic air-conditioning

Cutting additional green/white (gn/ws) wire to length



Complete fuse F4 1 A as shown in wiring diagram and install on fuse holder. Install cable section 2 in insulating hose provided.



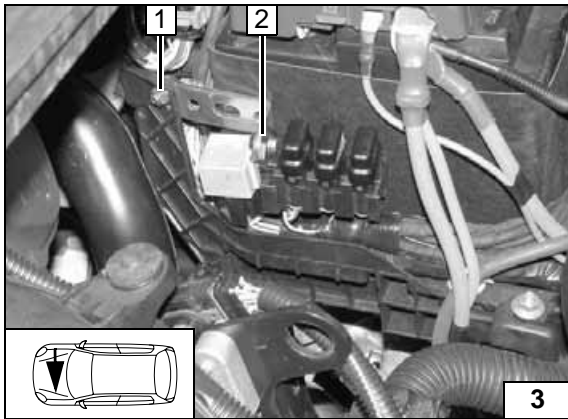
Fuse F4



## Electrical Connections

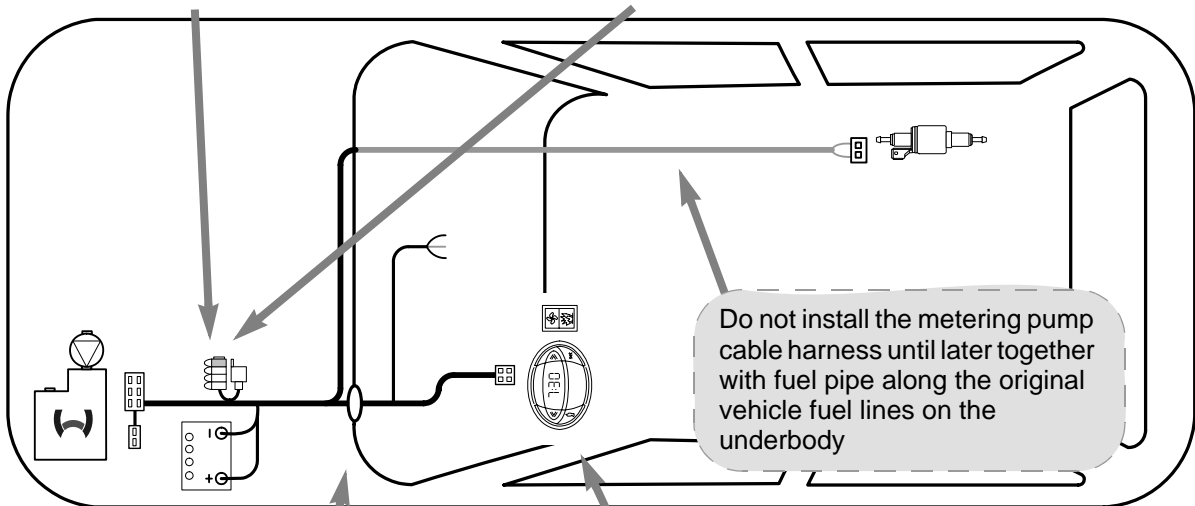
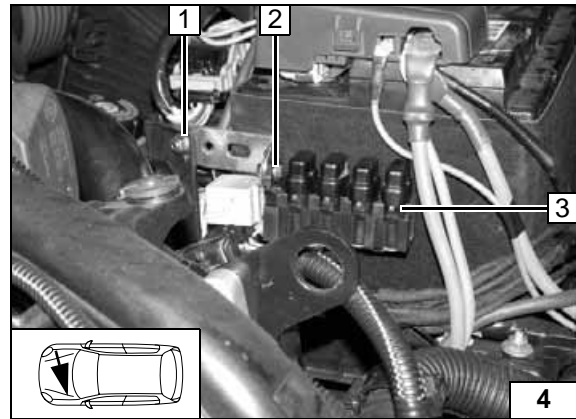
### Fuse holder, K3 relay with manual air conditioning

- 1 6.5 mm hole, perforated bracket, M6x12 bolt, flanged nut on battery trim
- 2 Retaining plate of fuse holder, K3 relay, M5x12 bolt, washers, M5 nut on perforated bracket

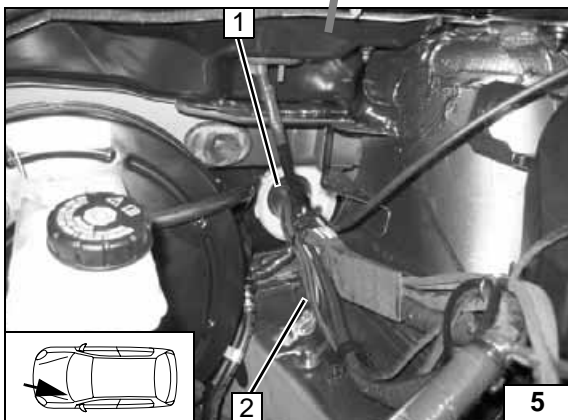


### Fuse holder, K3 relay with automatic air-conditioning

- 1 6.5 mm hole, perforated bracket, M6x12 bolt, flanged nut on battery trim
- 2 Retaining plate of fuse holder, K3 relay, M5x12 bolt, washers, M5 nut on perforated bracket
- 3 Fuse F4 1 A

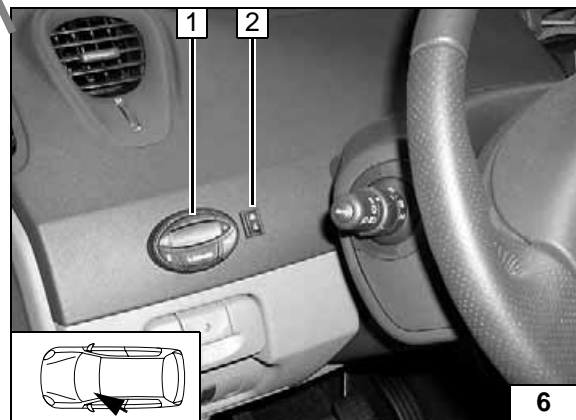


Wiring harness installation diagram



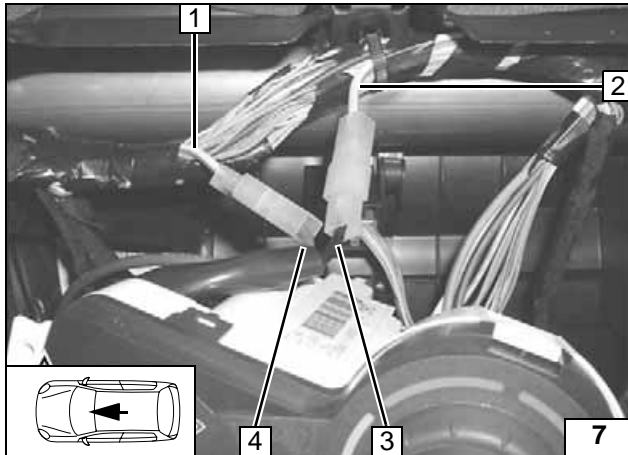
### Wiring harness pass through

- 1 Protective rubber plug
- 2 Wiring harnesses of fan controller, digital timer, additional green/white (gn/ws) wire with automatic air-conditioning



### Digital timer and summer/winter switch option

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



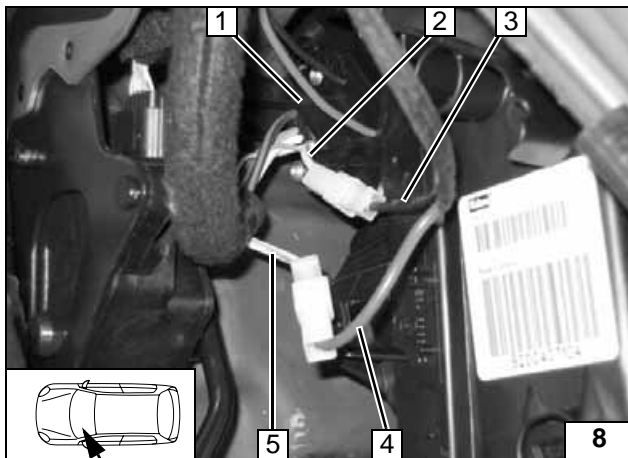
## Fan controller for manual air conditioning

**Until 02/2006**

Expose horizontally running, original vehicle wiring harness behind A/C control panel. Produce connections as shown in wiring diagram.

- 1 Yellow/brown (ge/br) wire from fuse
- 4 Red (rt) wire to K3/87a
- 2 Yellow/brown (ge/br) wire to resistor group
- 3 Black (sw) wire from K3/30

**Con-  
nection to  
resistor  
group**



**From 02/2006**

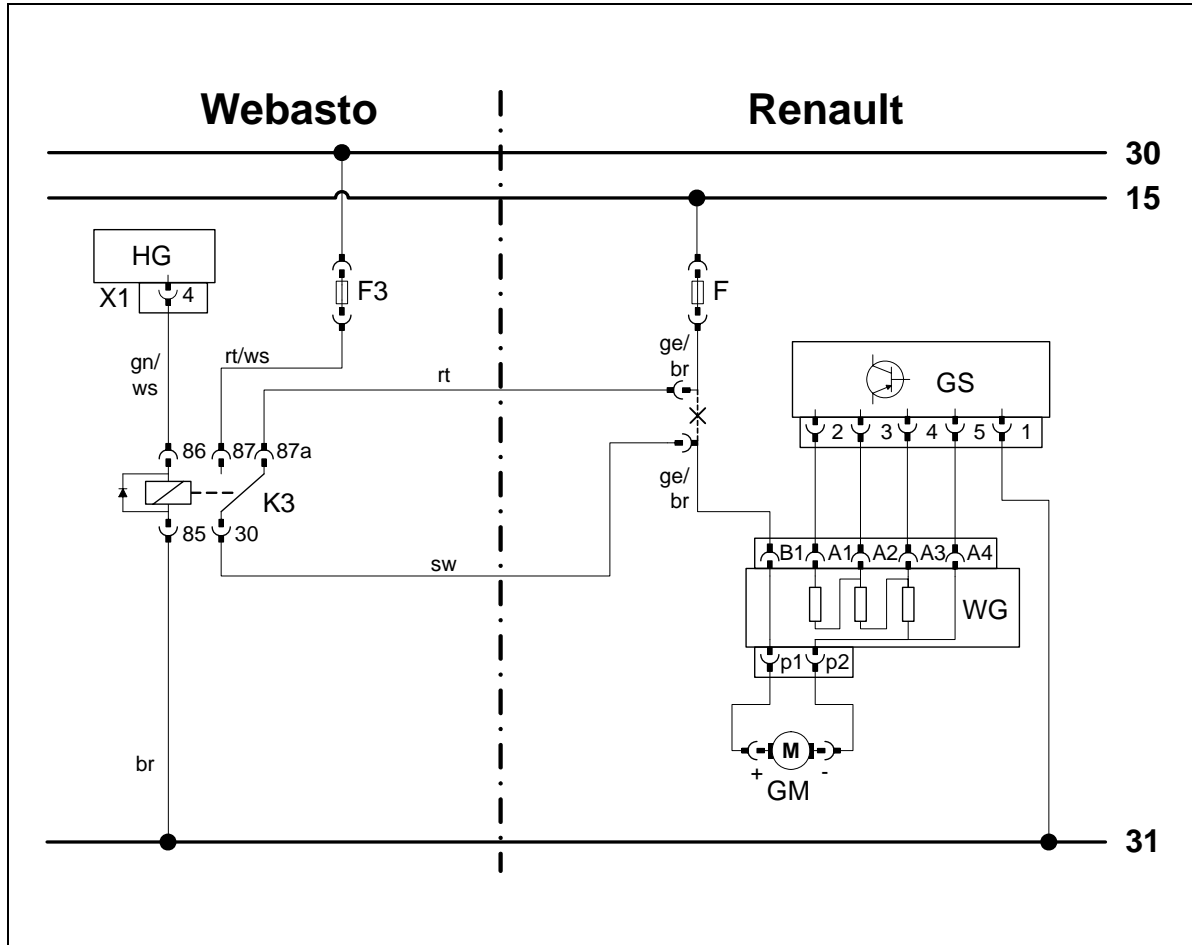
Connection to 6-pin connector 1 in left-hand footwell. Produce connections as shown in wiring diagram.

- 2 Yellow/brown (ge/br) wire to 6-pin connector
- 3 Black (sw) wire from K3/30
- 4 Red (rt) wire to K3/87a
- 5 Yellow/brown (ge/br) wire to original vehicle fuse

**Con-  
nection to  
resistor  
group**



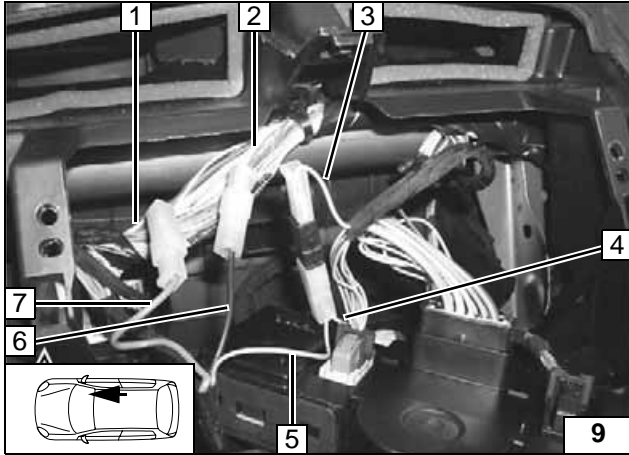




Wiring diagram for manual air conditioning

Webasto components		Renault components		Colors and symbols	
HG	Heater unit TT-C/E	GM	Fan motor	rt	red
X1	6-pin connector	F	Fuse 30A	ws	white
F3	25 A fan fuse	WG	Resistor group	sw	black
K3	Fan relay	GS	Fan switch	br	brown
				gn	green
				ge	yellow
				X	Cutting point
				Wiring colors may vary.	

Legend



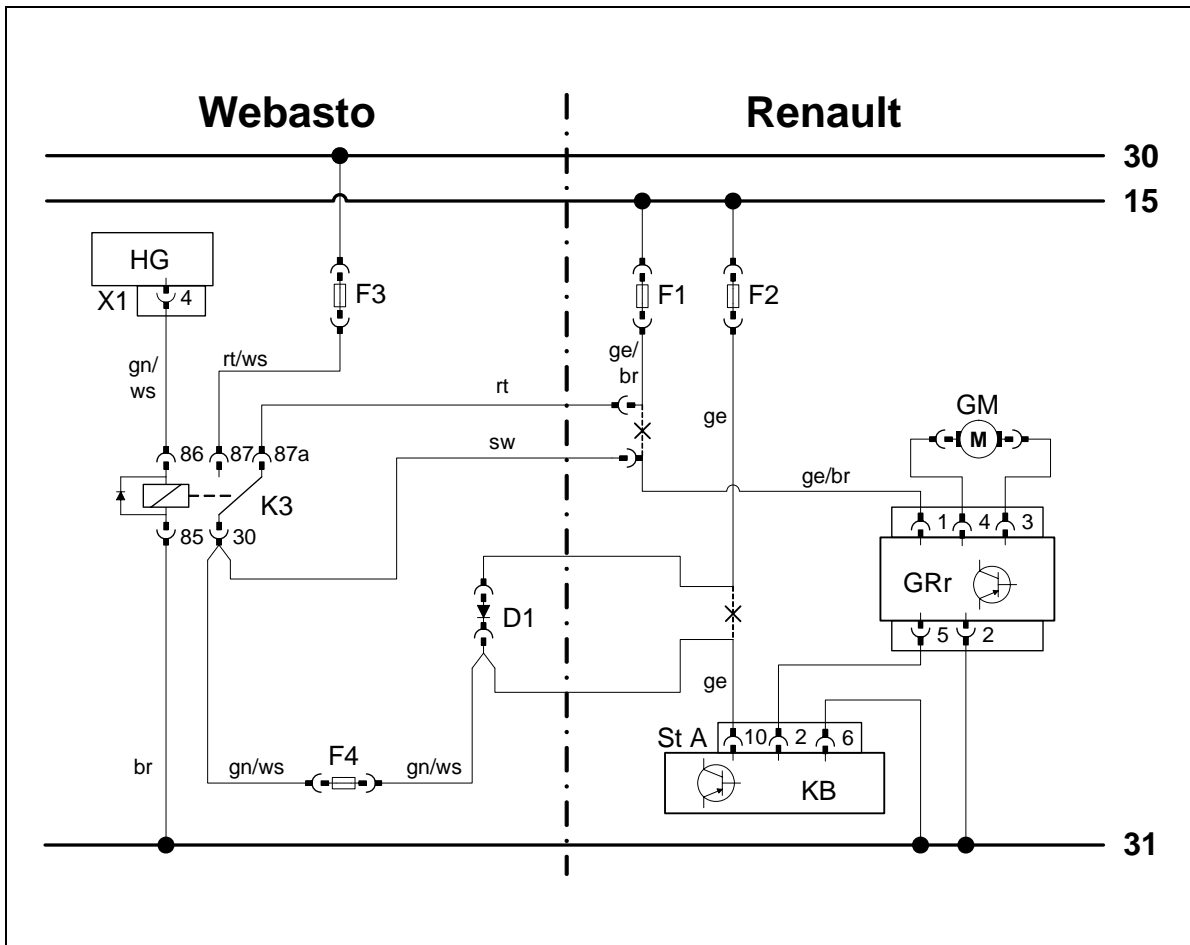
## Automatic air-conditioning fan controller

Produce connections as shown in wiring diagram. Watch direction of flow of diode.

- 1 Yellow/brown (ge/br) wire from fuse F1
- 7 Red (rt) wire to K3/87a
- 2 Yellow/brown (ge/br) wire to fan controller
- 6 Black (sw) wire from K3/30
- 3 Yellow (ge) wire from fuse F2
- 4 Yellow (ge) wire to connector A
- 5 Green/white (gn/ws) wire from fuse F4



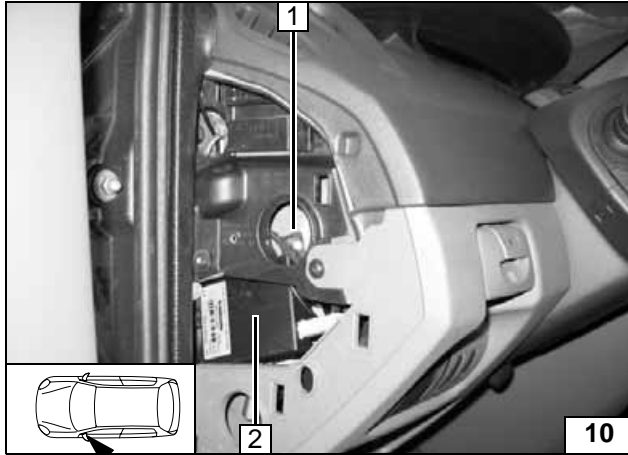
Connecting air-conditioning control element



Automatic air-conditioning circuit diagram

Webasto components		Renault components		Colors and symbols	
HG	Heater unit TT-C/E	GM	Fan motor	rt	red
X1	6-pin connector	F1	Fuse 30A	ws	white
F3	25 A fan fuse	F2	15 A fuse	sw	black
F4	1 A additional fuse	KB	Air-conditioning control element	br	brown
K3	Fan relay	GRr	Fan controller	gn	green
D1	1 A diode	St A	12-pin connector, blue	ge	yellow
				X	Cutting point
				Wiring colors may vary.	

Legend

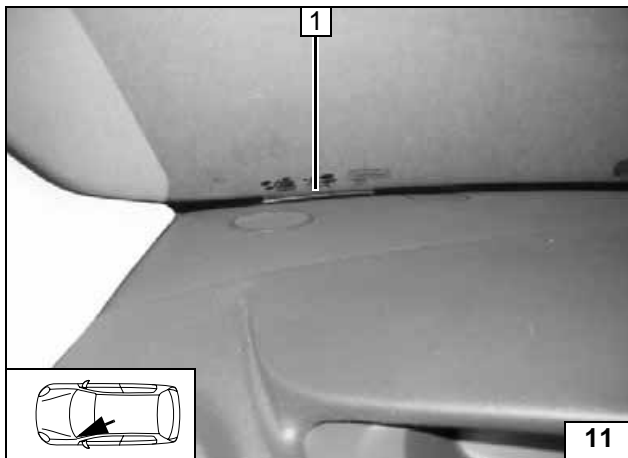


**Remote option (Telestart)**

- 2 Receiver
- 1 4.5 mm dia. hole, 5.5x13 self-tapping screw; bracket

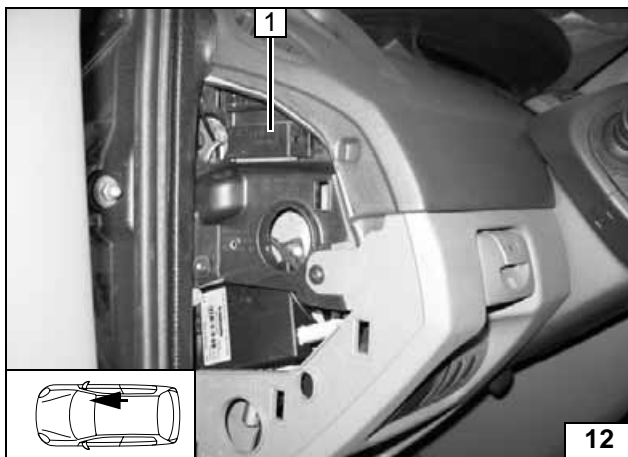


**Installing receiver**



- 1 Antenna

**Installing antenna**

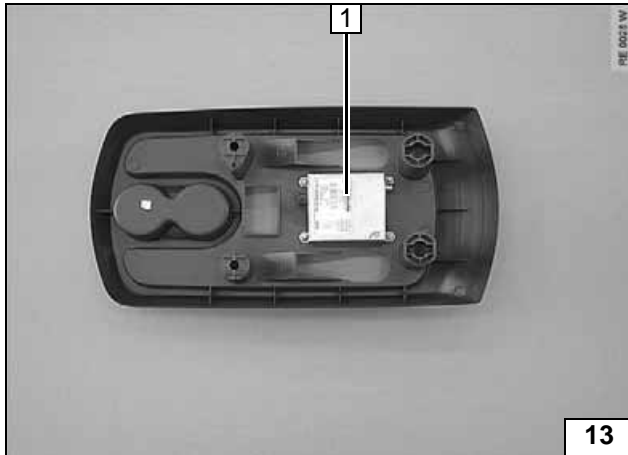


**Temperature sensor for HTM100 only**

Fasten temperature sensor with suitable means (here double-sided Velcro strip).



**Installing temperature sensor**

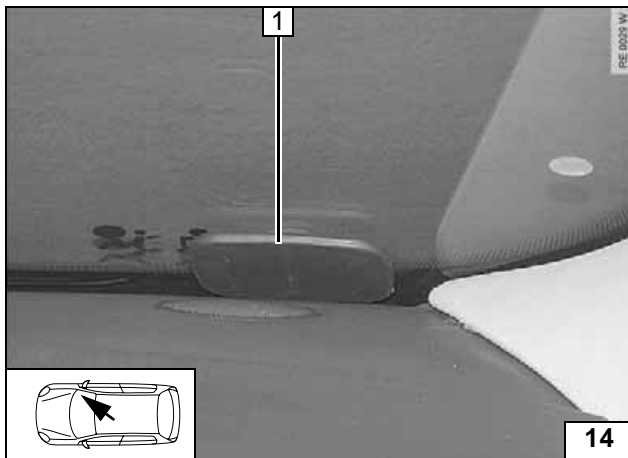


## Remote option (Thermo Call)

Installation location of Thermo Call receiver 1 is dependent on equipment. Installation location shown (here on underside of center console 2) is a recommendation. Fasten receiver 1 with suitable screws.

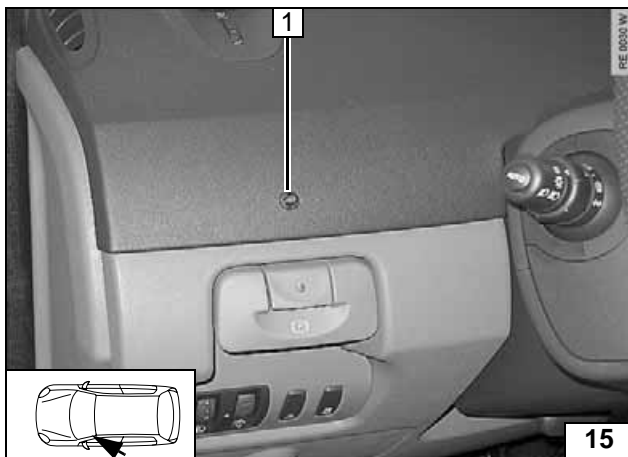


**Installing receiver**



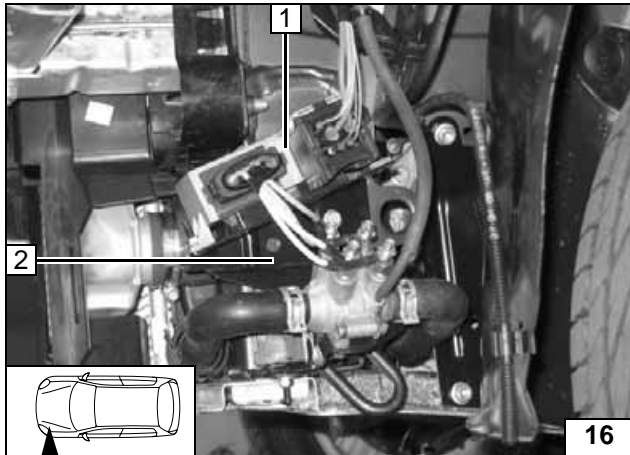
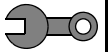
1 Antenna

**Installing antenna**



1 Pushbutton

**Installing push button**



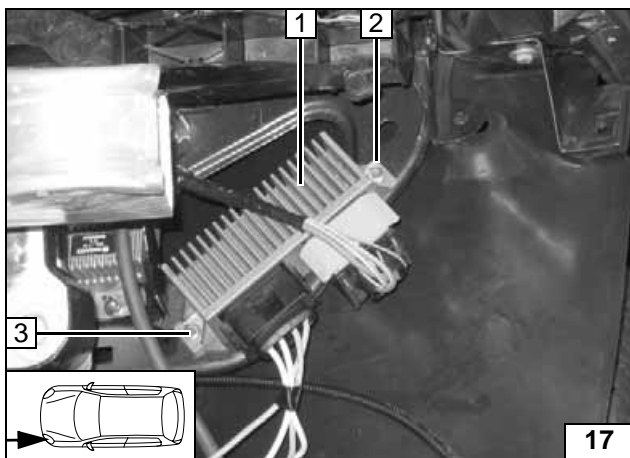
## Preparing installation location

Remove control unit for auxiliary heater **1** (will be remounted offset later); flanged nuts will be reused.  
Disconnect electrical connections on auxiliary heater [4x] and earthing strap.

**2** Remove bracket of control unit for auxiliary heater

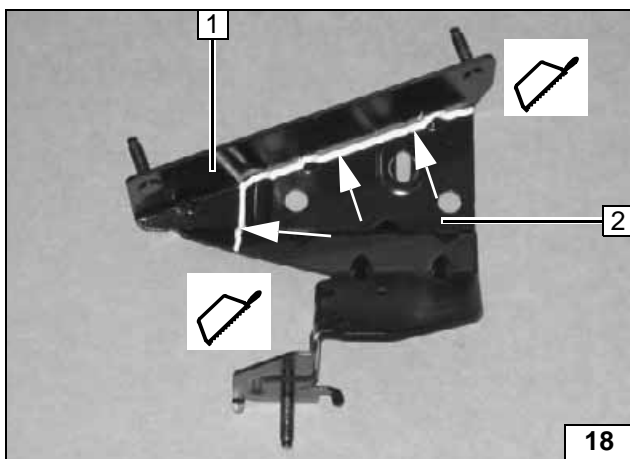


**Removing bracket**



**1** Control unit for auxiliary heater  
**3** Mount M6x20 bolt, original vehicle flanged nut in existing hole  
**2** 6.5 mm dia. hole, M6x20 bolt, original vehicle flanged nut

**Installing control unit for auxiliary heater**

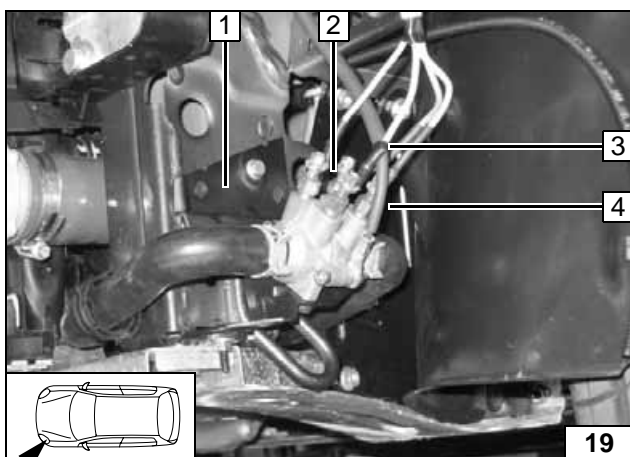


Cut off bracket **2** at markings.

**1** Discard section



**Cutting off bracket**

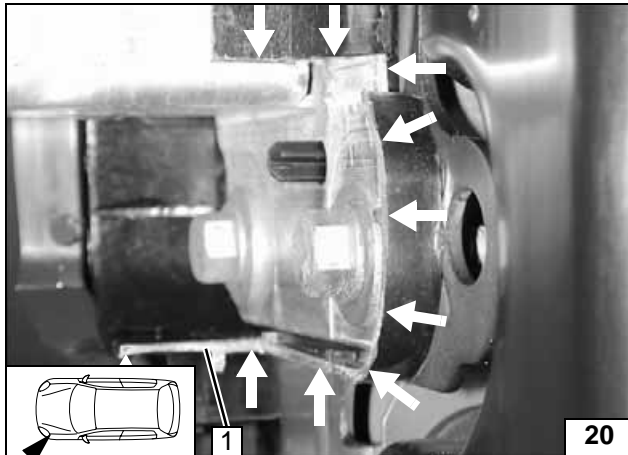
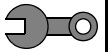


Position electrical connections on auxiliary heater **2** [4x] as shown and tighten. Position earthing strap **4** as shown, tighten and secure with cable tie **3**.

**1** Bracket of control unit for auxiliary heater



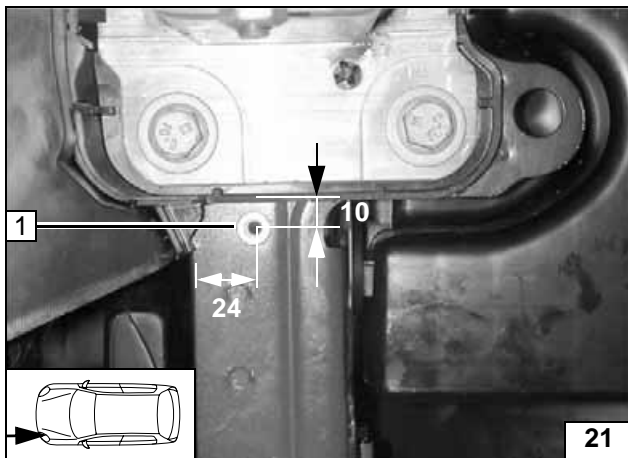
**Re-installing bracket**



Cut out plastic molded part **1** as shown (on markings).

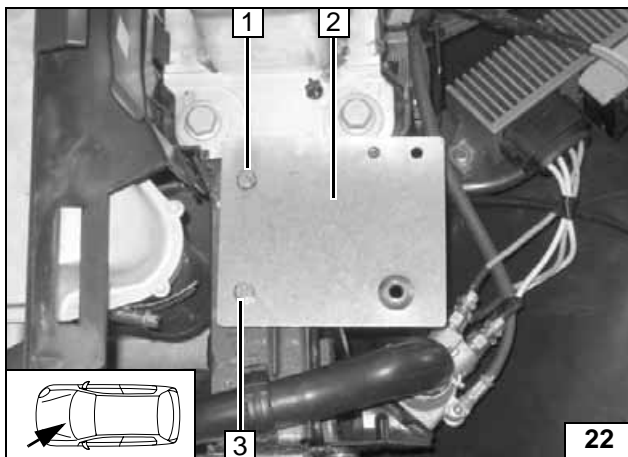


**Installing rivet nut**



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

**Installing rivet nut**

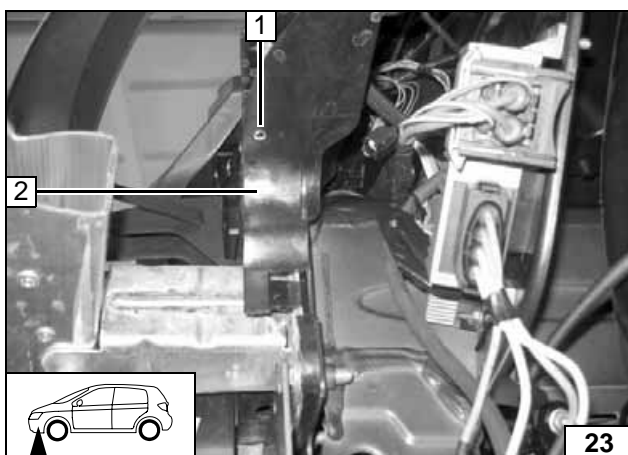


Loosely fasten retaining plate **2** with M6 bolt **1** on rivet nut and copy hole pattern to position **3** on frame side member. Remove retaining plate. Drill 9.1 mm hole in frame side member at position **3** and mount rivet nut.



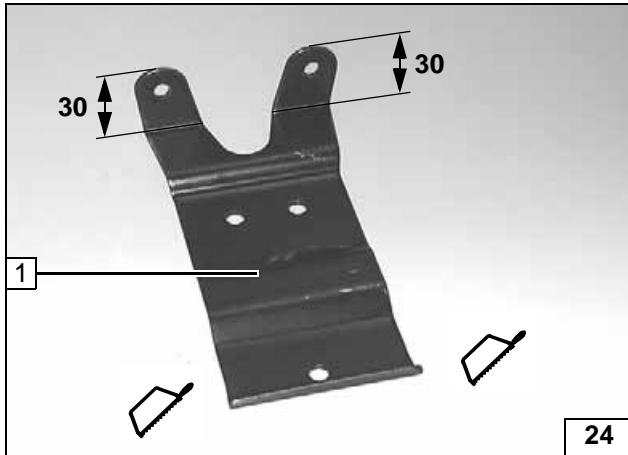
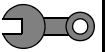
**Installing bracket**

- 2** Bracket
- 1** M6x40 bolt, spring lockwasher, 20 mm shim on rivet nut
- 3** M6x40 bolt, spring lockwasher, 20 mm shim on rivet nut



**2** Original vehicle plastic molded part  
**1** 6.2 mm dia. hole

**Hole for intake muffler**

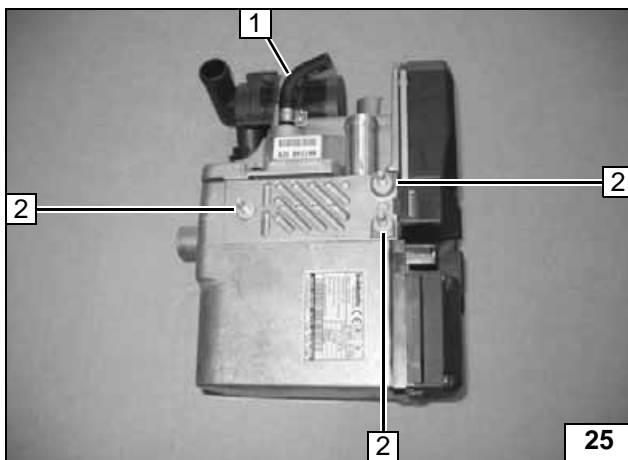


## Preparing heater unit

Saw off two long tabs on bracket 1 as shown (watch hole pattern).  
Bend remaining short tabs upward by 90° as shown.



Preparing bracket

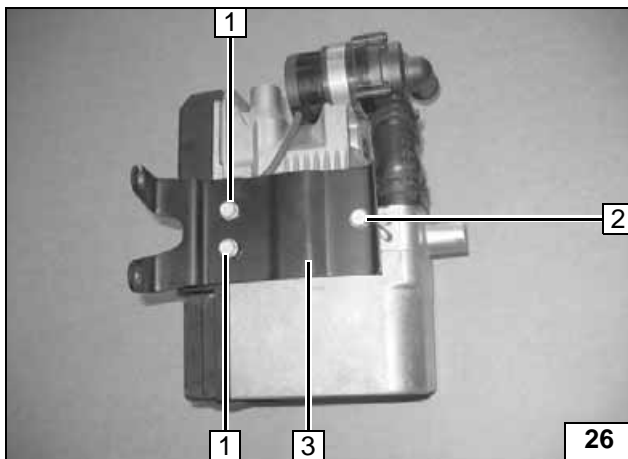


Ejot stud, tightening torque 10 Nm.

- 1 90° molded hose, 10 mm dia. hose clamp
- 2 Ejot stud [3x]



Preparing heater unit

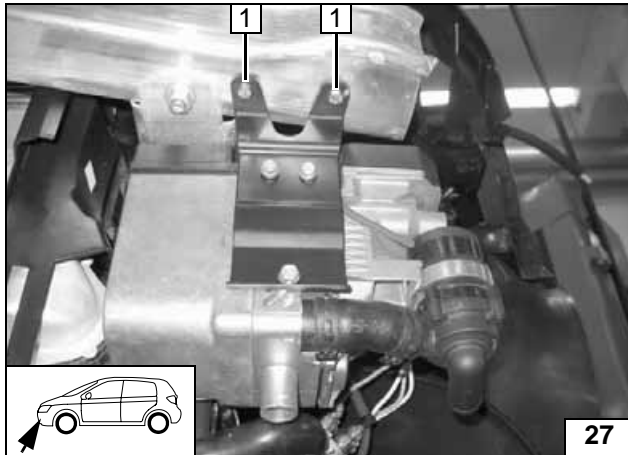
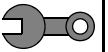


Loosely mount bracket 3 at position 2.

- 1 Ejot screw [2x]
- 3 Bracket



Installing bracket

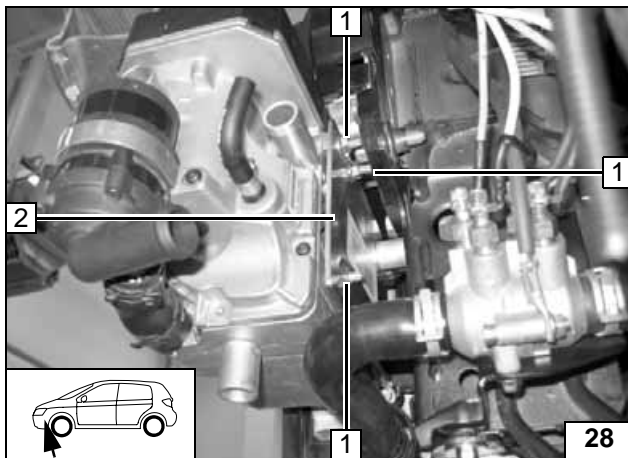


## Installing heater unit

Mount heater unit with Ejoy stud on retaining plate.  
Copy hole patterns to positions 1 on bumper mount.  
Remove heater unit. Drill 9.1 mm hole in bumper mount at position 1 and mount rivet nut.

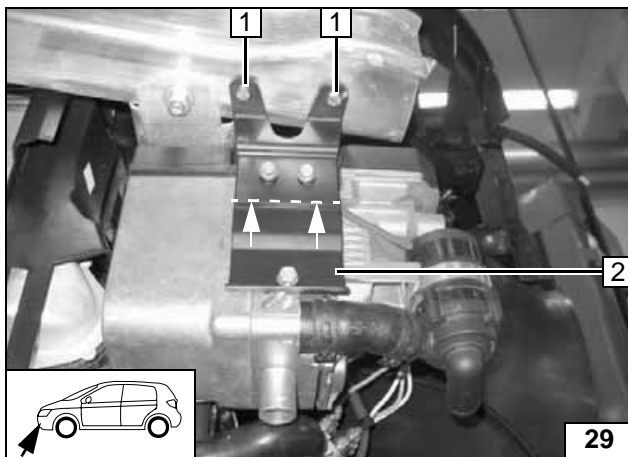


Installing heater unit



- 1 Flanged nut [3x] on stud bolt
- 2 Retaining plate

Installing heater unit



- 1 Mount M6x20 bolt, spring lockwasher [2x each] on prepared rivet nuts
- 2 Bracket

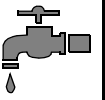
### WARNING!

On vehicles with front fog lights, position bumper and check for freedom of movement relative to bracket. If bracket makes contact, cut off at marking and discard lower section.



Installing heater unit





## Coolant connection

### WARNING!

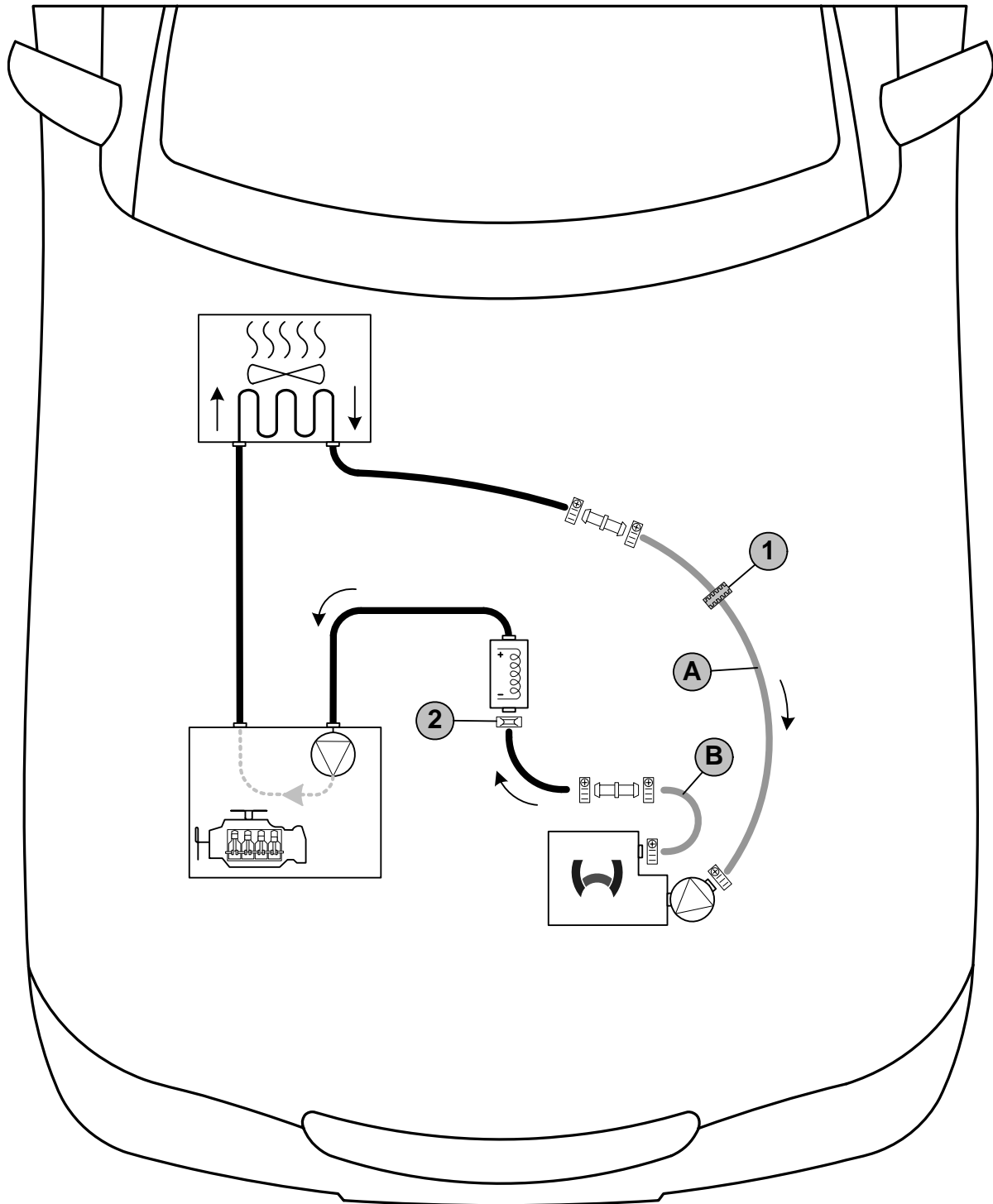
Tighten all hose clamps to 2.0 + 0.5 Nm.

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

Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties.

Position hose clamps and spring band clamps so that no other hose can be damaged.

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

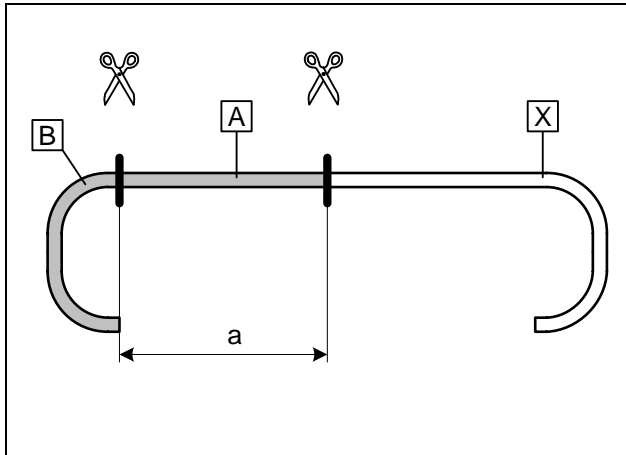


Coolant routing diagram

All connecting pipes = 20x20 dia.. All hose clamps = 20-27 mm dia.!

1 = Black (sw) rubber isolator . 2 = Original vehicle spring clip





## Scenic/Grand Scenic 1.9 dCi

a = 460 mm

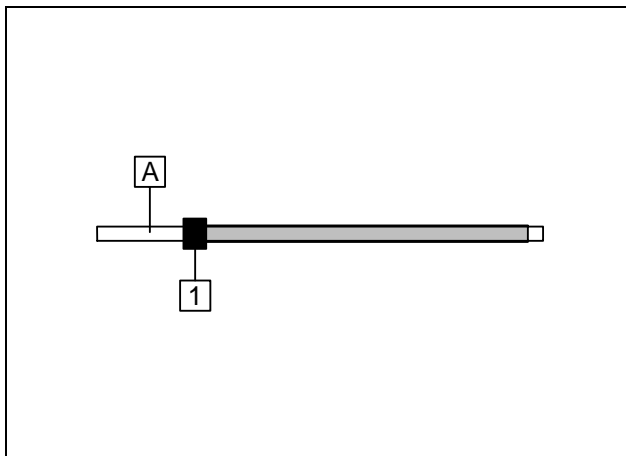
Discard section X

## Megane 1.5 dCi

a = 540 mm

Discard section X

**Cutting  
coolant  
hoses to  
length**

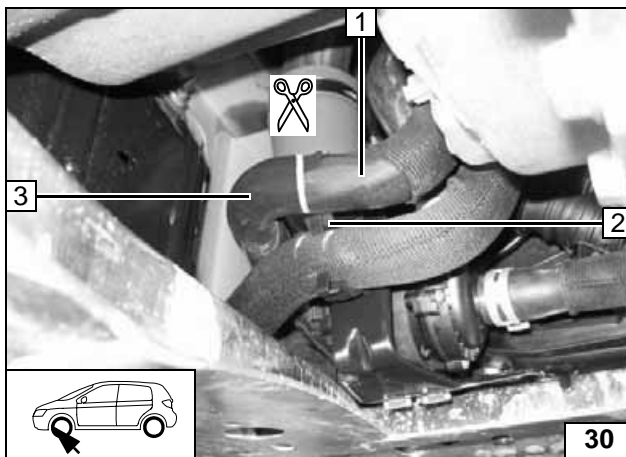


Slide braided protection hoses onto hose A and cut to length.

- 1 Push on black (sw) rubber isolator



**Preparing  
coolant  
hoses**

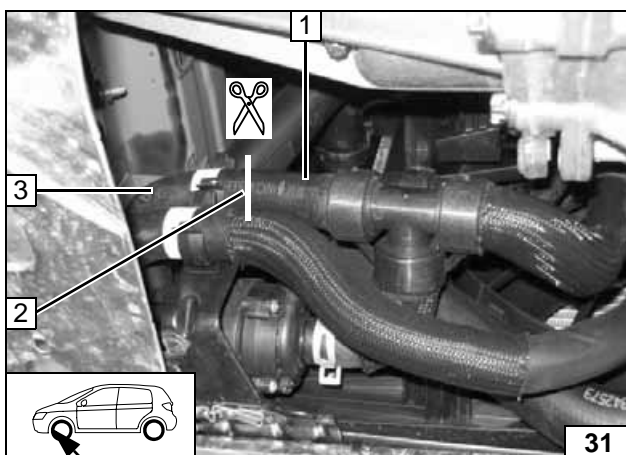


## Scenic/Grand Scenic 1.9 dCi

- 2 Detach spacer bracket
- 1 Original vehicle hose from heat exchanger outlet
- 3 Original vehicle hose to auxiliary heater inlet



**Cutting  
point**

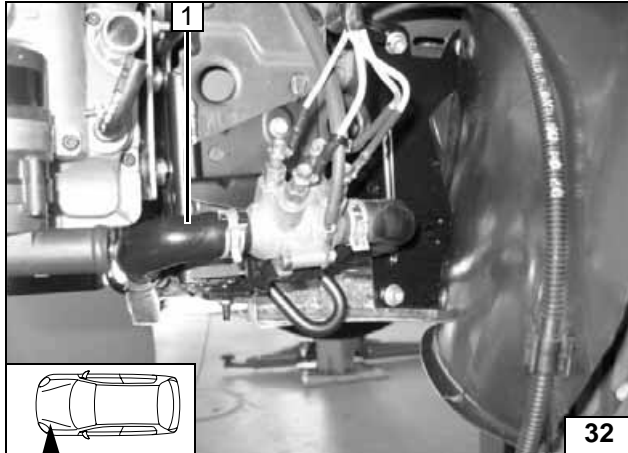


## Megane 1.5 dCi

- 1 Original vehicle hose from heat exchanger outlet
- 2 Cutting point
- 3 Original vehicle hose to auxiliary heater inlet



**Cutting  
point**

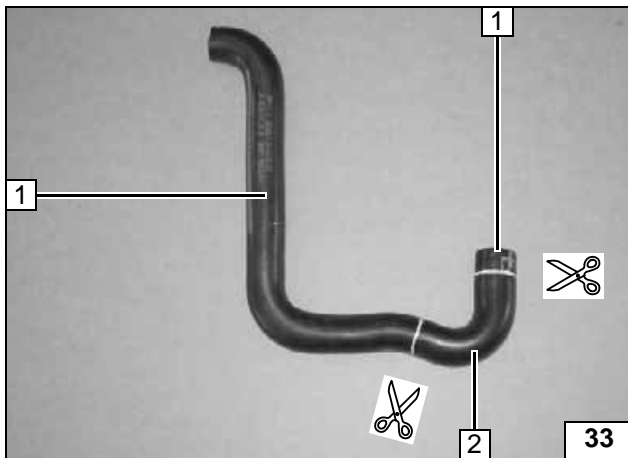


## All vehicles

Remove hose section 1 on electric auxiliary heater; spring clip will be reused.



Con-  
nection on  
heater unit

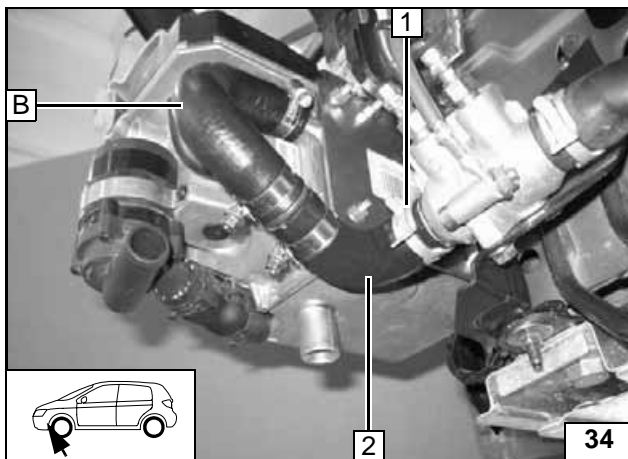


Cut off hose section 2 at marking.

1 Discard cut-off sections

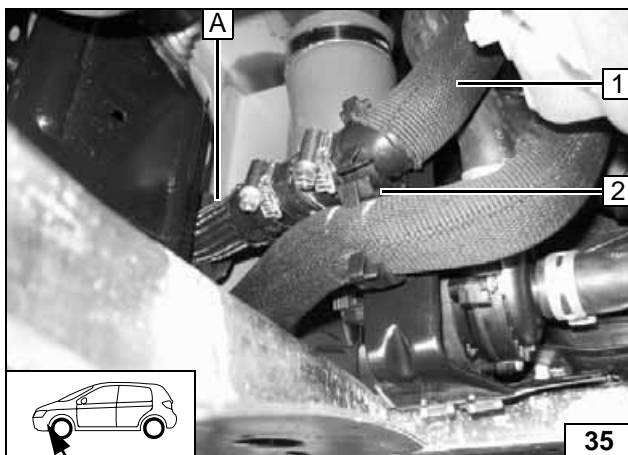


Cutting  
hose to  
length



1 Original vehicle spring clip  
2 Prepared hose section

Con-  
nection to  
heater unit  
outlet



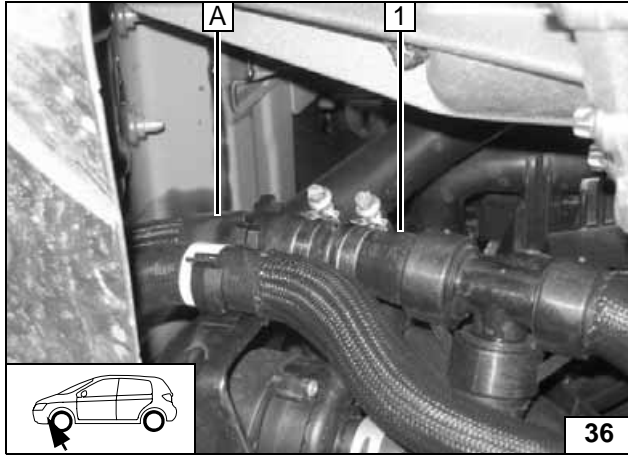
## Scenic/Grand Scenic 1.9 dCi

Route hose A through original vehicle pass through to heater unit.

1 Original vehicle hose from heater  
exchanger outlet  
2 Reinstall spacer brackets



Con-  
nection on  
heat  
exchanger  
outlet



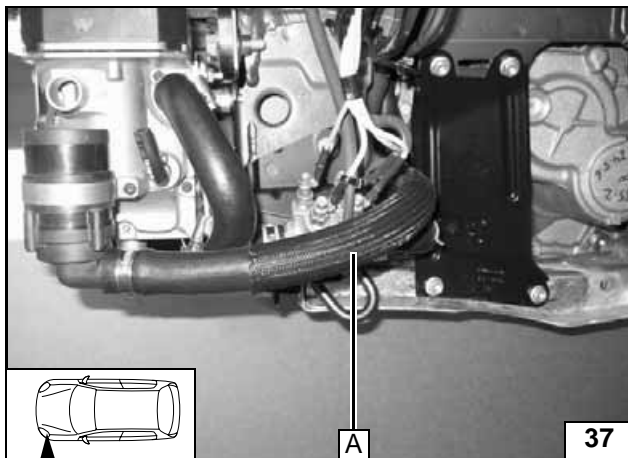
## Megane 1.5 dCi

Route hose **A** through original vehicle pass through to heater unit.

- 1 Original vehicle hose from heater exchanger outlet



**Con-  
nection on  
heat  
exchanger  
outlet**

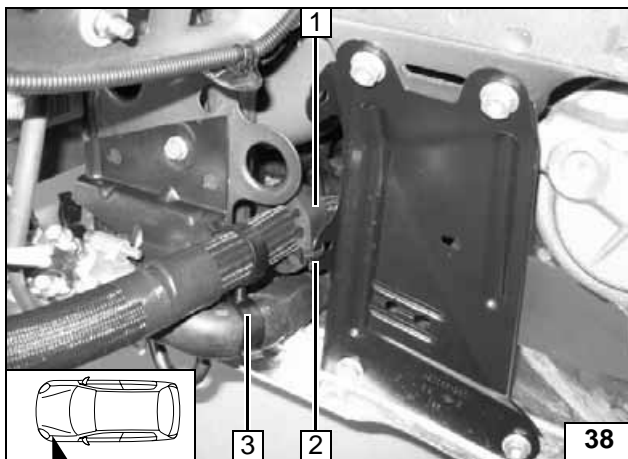


## All vehicles

Before connecting, fill the coolant hoses with coolant.



**Con-  
nection to  
heater unit  
inlet**



- 1 Position black (sw) rubber isolator
- 2 Cable tie on original vehicle hole
- 3 Insert spacer bracket

**Securing  
rubber  
isolator**



## Fuel Connection

### CAUTION!

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

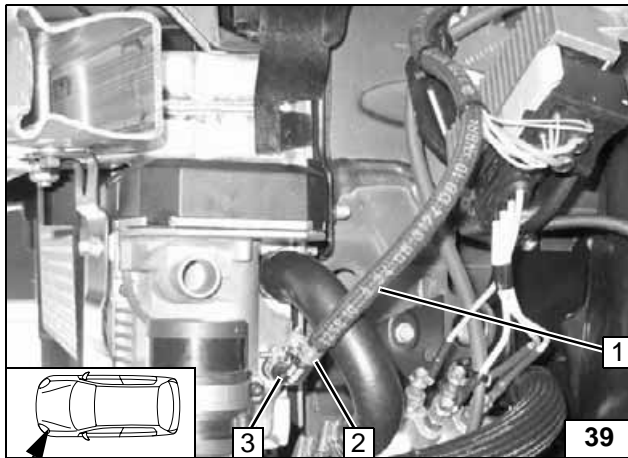
Catch any fuel running off with an appropriate container.

Install fuel line and metering-pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties.

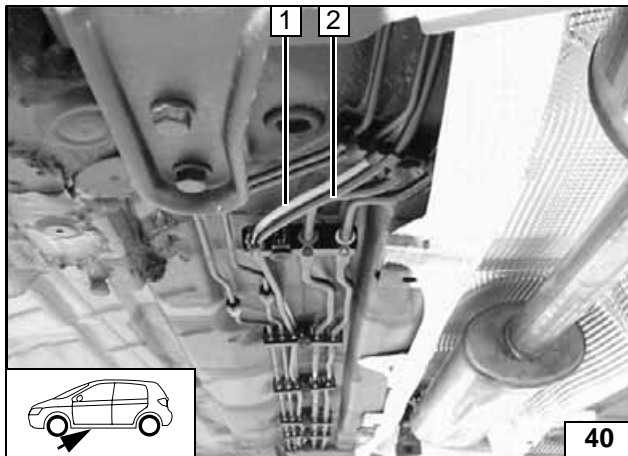
Mount the fuel line and wiring harness with rub protection on sharp edges.

### WARNING!

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

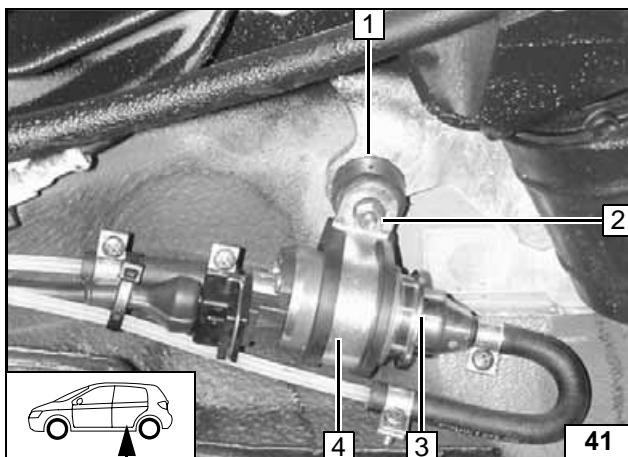


- 1 Fuel line in protective hose
- 2 10 mm dia. hose clamp
- 3 Premounted 90° molded hose



Route Mecanyl fuel line together with wiring harness of metering pump behind insulating mat to right vehicle side.

- 1 Mecanyl fuel line
- 2 Metering pump wiring harness



Ensure proper installation position of metering pump, see "Installation Instructions". Installation location on right next to vehicle fuel tank.

- 1 Silent block, large diameter washer, self-locking nut on existing hole of cross member
- 3 Metering pump
- 4 Rubber-coated pipe clamp
- 2 Flanged nut on silent block



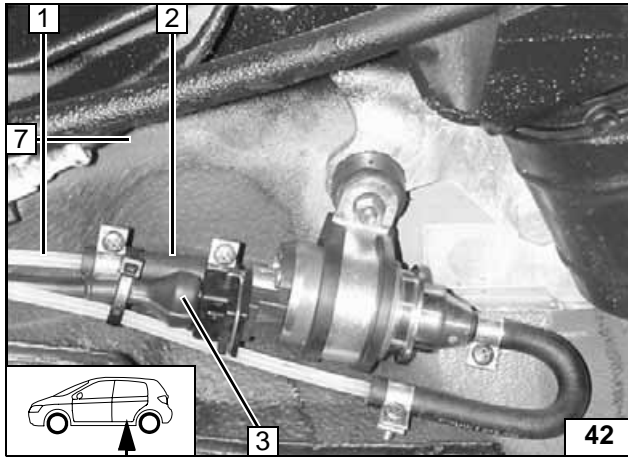
Con-  
nection on  
heater unit



Installing  
lines



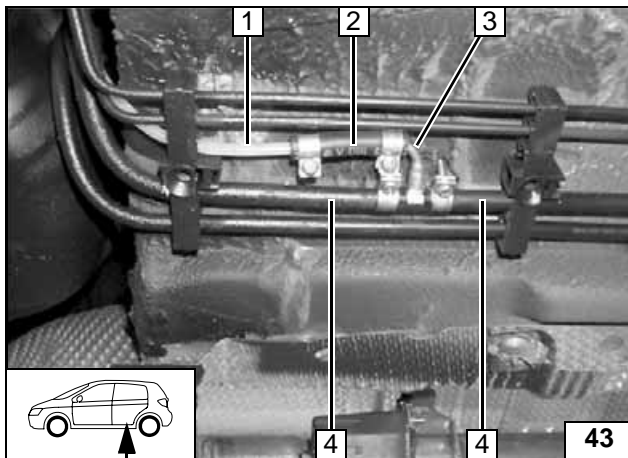
Installation  
location of  
metering  
pump



Connect fuel line from heater unit 1 to pressure side of metering pump [end with connector].

- 2 Hose section, 10 mm dia. hose clamps [2x]
- 3 Wiring harness of metering pump, single-wire seal, tab connector, connector housing

**Con-  
necting  
metering  
pump**

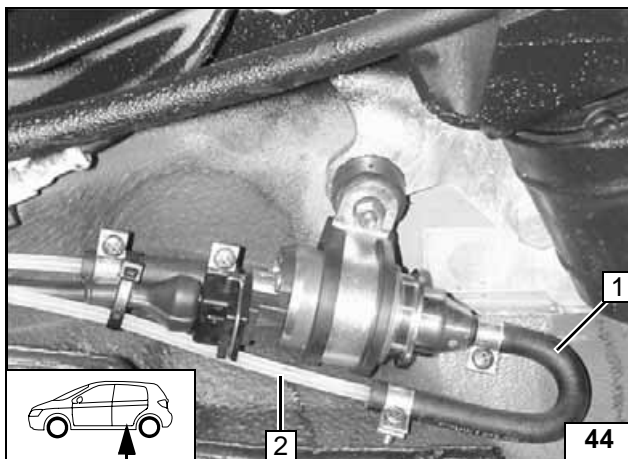


Cut off fuel supply line 4 as shown.

- 3 Fuel standpipe, 10 mm dia. hose clamp [2x]
- 2 Hose section, 10 mm dia. hose clamps [2x].
- 1 Remaining end of fuel line to metering pump



**Mounting  
fuel  
standpipe**

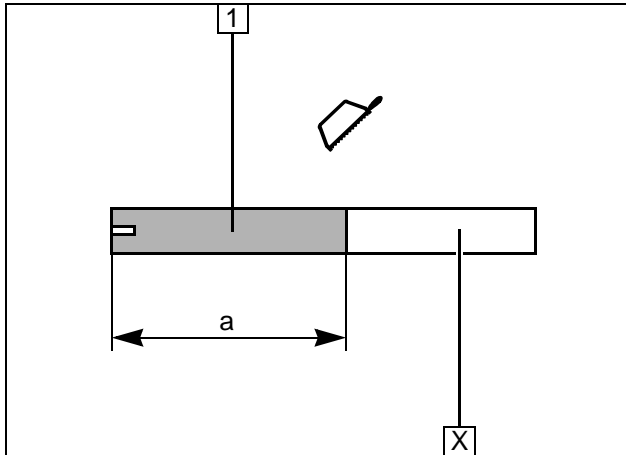
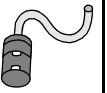


Fuel line 2 from fuel standpipe on intake side of metering pump [side without connector]. Check the position of the components; adjust if necessary. Check that they have free clearance.

- 1 180° molded hose, 10 mm dia. hose clamp [2x]



**Con-  
nection to  
metering  
pump**

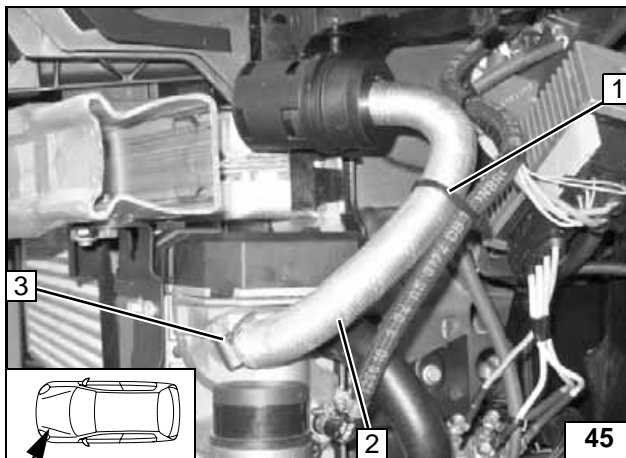


## Combustion air

- 1 Combustion air pipe  
a = 260 mm

Discard section X

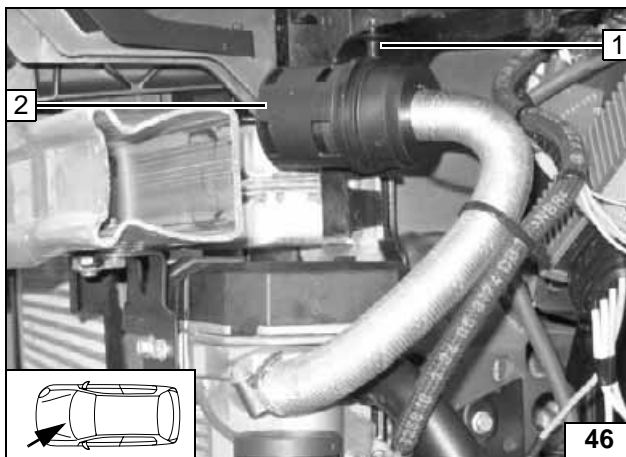
Cutting combustion air pipe to length



- 2 Combustion-air intake pipe
- 3 27 mm dia. hose clamp
- 1 Cable tie

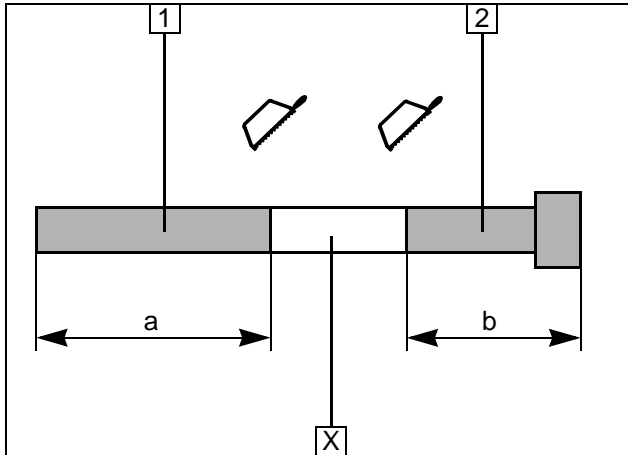


Installing intake pipe



- 1 Retaining clip in prepared hole
- 2 Combustion-air intake muffler

Installing muffler

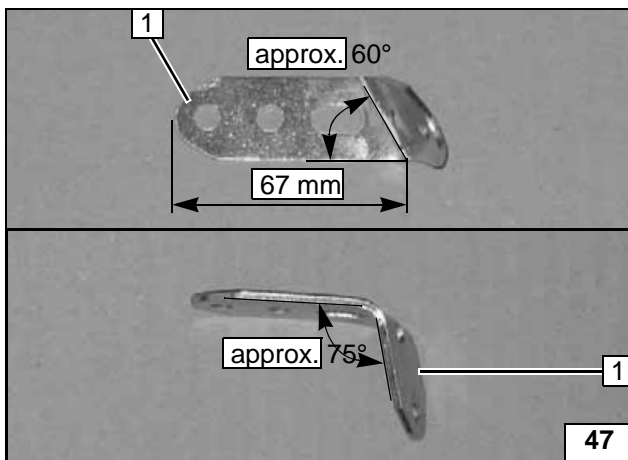


## Exhaust system

- 1 Exhaust pipe  
a = 240 mm
- 2 Exhaust end section  
b = 200 mm

Discard section X

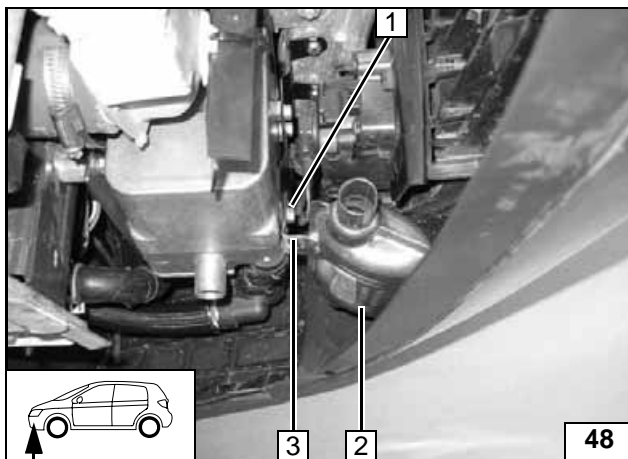
Preparing exhaust pipe



Bending perforated bracket 1!



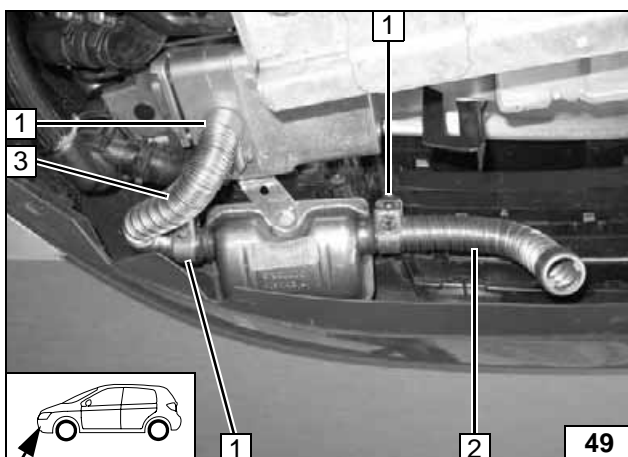
Bending perforated bracket



Fasten perforated bracket 3 to heater unit with Ejoy screw (in center hole of long leg). Align exhaust muffler 2 and fasten to perforated bracket 3 with M6x20 bolt and flanged nut.



Installing muffler



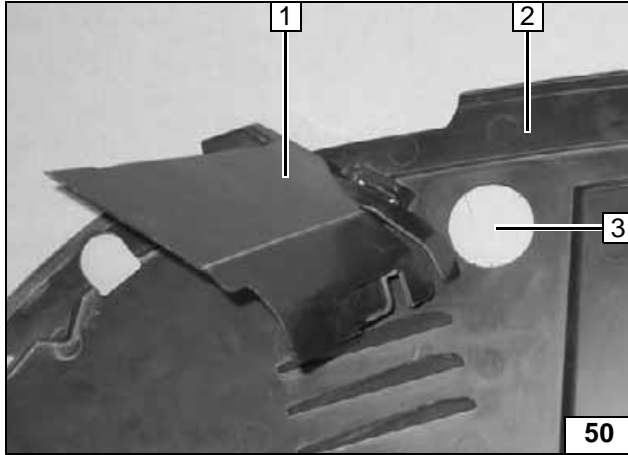
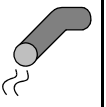
Ensure sufficient distance to adjacent components and correct if necessary. Minimum distance to plastic parts 20 mm!

- 1 Hose clamp [3x]
- 2 Exhaust pipe
- 3 Exhaust end section



Installing exhaust pipe and end section



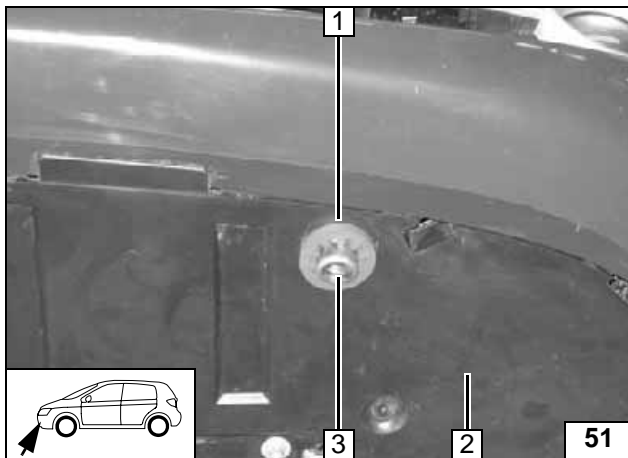


Cut off tab 1 completely and discard.

- 2 Underride protection
- 3 42 mm dia. hole



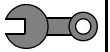
**Cutting out  
underride  
protection**



Mount underdrive protection 2. Insert exhaust end section 3 and red rubber isolator 1 in hole. Align exhaust end section 3 flush on red rubber isolator 1.



**Mounting  
rubber  
isolator**



## Final Work

### WARNING!

Reassemble the disassembled components in reverse order.

Check all hoses, hose, spring and Caillau clamps, as well as 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.
- Make settings according to the "Operating Instructions for End Customer"
- Check the proper operation of the additional heater, see the operating instructions/installation instructions.
- Attach the "Switch off additional heater before refueling" sticker to the left-hand B-pillar.



# Webasto

*Feel the drive*

Webasto AG  
Postfach 80 - 82132 Stockdorf, Germany - Hotline +49-  
(0)1805-932278  
Hotfax +49-(0)395-5592-353 - <http://www.webasto.de>

## Operating Instructions for End Customer

Please remove page and add to the vehicle operating instructions.



**Rule of thumb for operating additional heater: driving time = heating time!**

Before parking the vehicle, make the following settings:



- 1 Set fan to level "2"
- 2 Air outlet to windshield
- 3 Set temperature to "27°C"

**Automatic  
air-con-  
ditioning**