

Water Heater



Thermo Top E Parking Heater


00 0003

Thermo Top C Parking Heater


00 0002

Installation documentation

Renault Clio / Clio Grandtour

International

Petrol

from Model Year 2005

For left-hand drive vehicles only

Manual transmission, quick shift transmission, automatic transmission, Xenon light

Combination of automatic transmission with Xenon lights not tested!



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.

The initial startup is to be executed with the Webasto Thermo Test Diagnosis.

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

Renault Clio / Clio Grandtour

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Validity

Manufacturer	Model	Type	EG-BE No./ABE
Renault	Clio / Clio Grandtour	R	e2 * 2001/116 * 0327 * ...

Engine type	Engine model	Output in kW	Displacement in cm ³
D4F	Petrol	55	1149
D4F	Petrol	58	1149
D4F	Petrol	74	1149
K4M	Petrol	65	1598
K4M	Petrol	82	1598

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

The installation location of a digital timer and summer/winter switch should be confirmed with the end customer before installation.

Renault Clio / Clio Grandtour

Heater/Installation Kit

Quantity	Description	Order No.:
1	Retail accessories for <i>Thermo Top E / C</i>	See price list
1	Installation Kit for Renault Clio / Clio Grandtour Petrol (Int.)	1310518C
1	Heater control	See price list

Heater recommended for the respective vehicle class:

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

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



Foreword

This installation documentation applies to Renault Clio / Clio Grandtour vehicles with Petrol engine - For the validity, see page 2 - from model year 2005 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 this installation documentation.

However, the stipulations in this "installation documentation", "operating instructions" and the "installation instructions" for the *Thermo Top C/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).

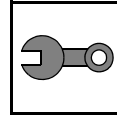
Special Tools

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

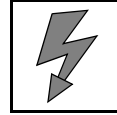
Explanatory Notes on Document

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.

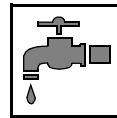
Mechanical system



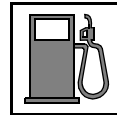
Electrical system



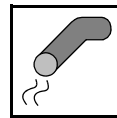
Coolant circuit



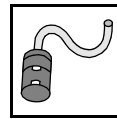
Fuel



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.



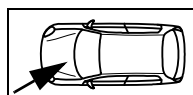
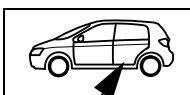
Specific risk of fire or explosion.



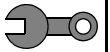
Reference to general installation instructions of Webasto components or to the manufacturer's vehicle-specific documents.



Reference to a special technical feature.



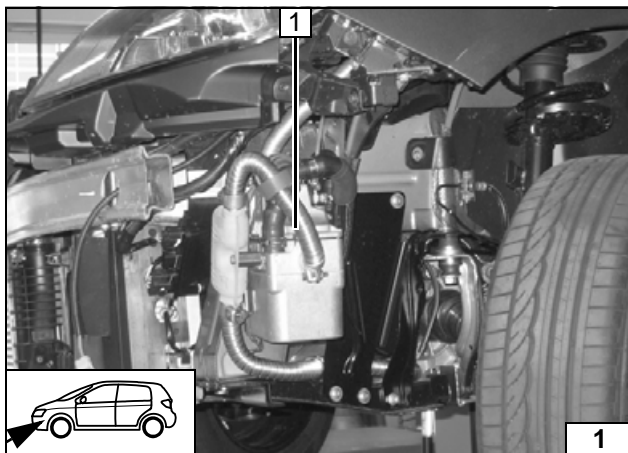
The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.



Preliminary Work

WARNING!

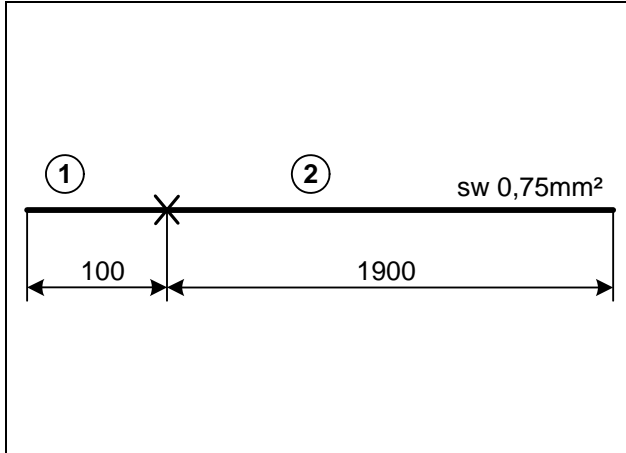
- Disconnect the battery "earth" or "ground" connection.
- Depressurise the cooling system.
- Copy the factory number from the original type label to the duplicate type label.
- Remove years that do not apply from the duplicate label.
- Attach the duplicate label (type label) in the appropriate place.
- Remove the battery completely.
- Remove the air filter together with the intake hose.
- Open the fuel tank cap and vent the fuel tank.
- Close the fuel tank cap again.
- Remove the left wheel well trim.
- Remove the underride protection (if present).
- Remove the bumper.
- Detach the exhaust system.
- Remove the heat shield plate from the fuel tank.
- Remove fuel tank according to manufacturer's instructions.
- Remove the fuel-tank sending unit in accordance with manufacturer's instructions.
- Remove the glove compartment.
- Remove the left-hand instrument panel trim.



Heater installation location

(1) Heater

Installation location

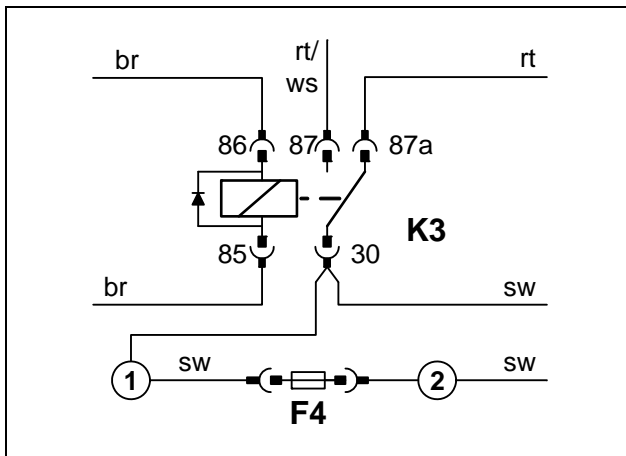


Preparing electrical system

Automatic air conditioning

Wire section 1 will be required later for connection of fuse F4 and wire section 2 for connection of A/C control panel.

Cutting wires to length



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

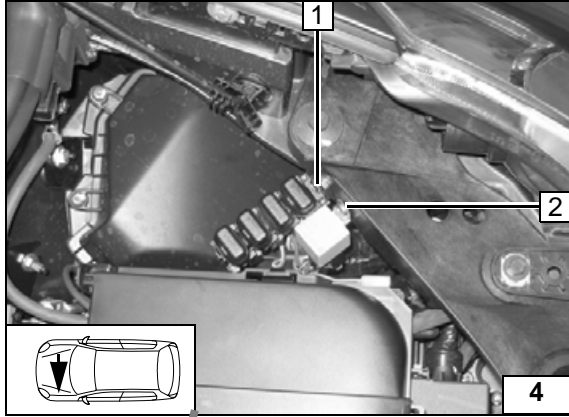
Premounting fuse F4



Electrical system

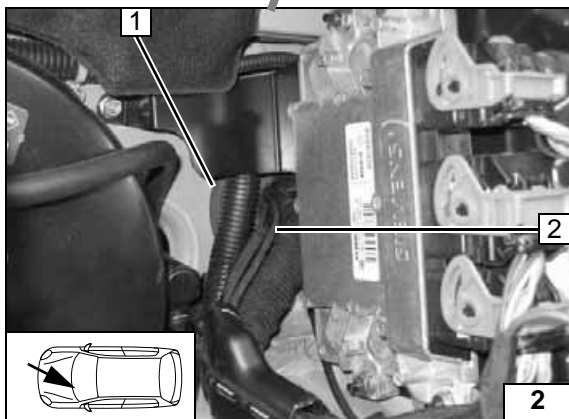
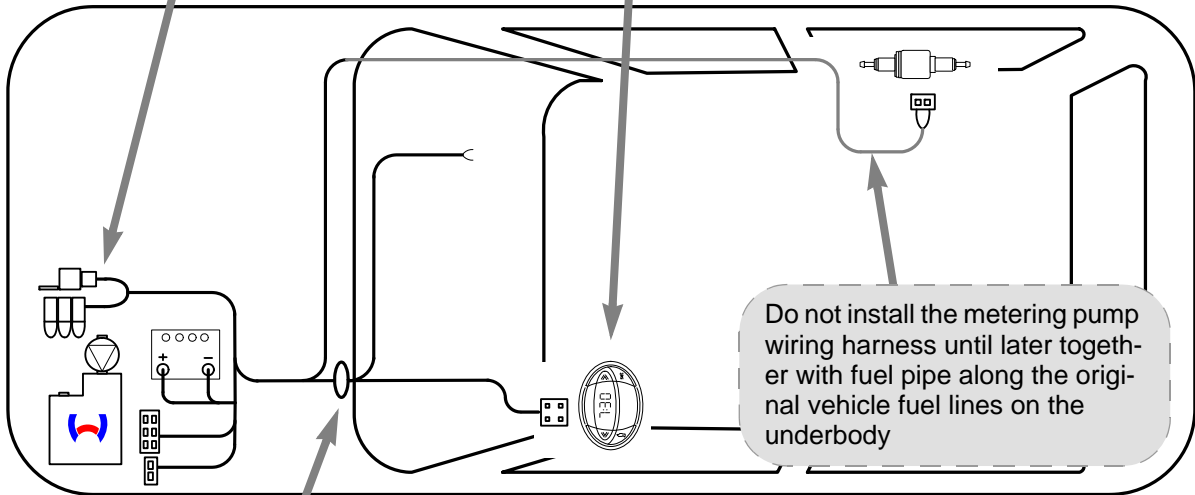
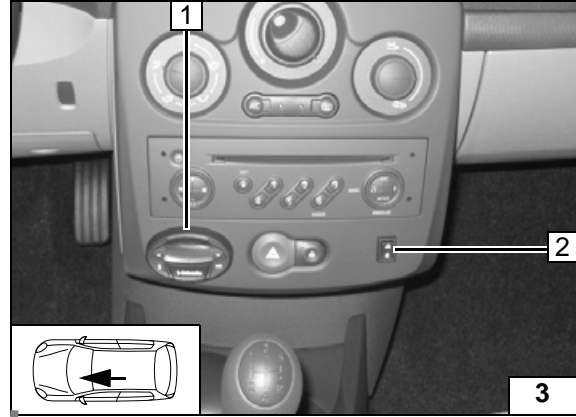
Fuse holder, K3 relay

- (1) Retaining plate for fuse holder, bolt M5.5x9.5
- (2) K3 relay, M5.5x9.5 bolt



Digital timer / optional Summer/winter switch option

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

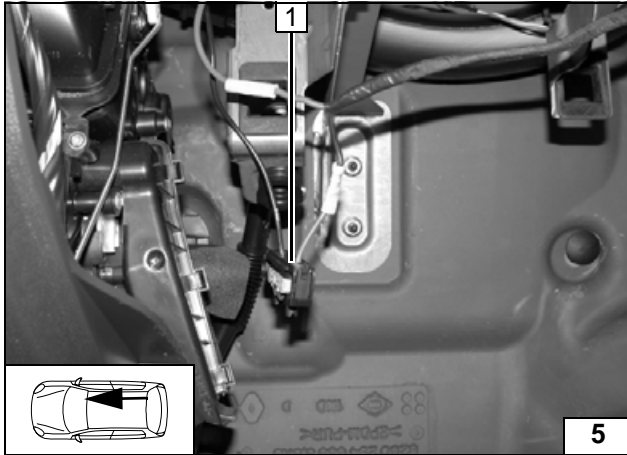


Wiring harness pass through

- (1) Protective rubber plug
- (2) Wiring harness of fan controller and Digital timer



Wiring harness routing diagram



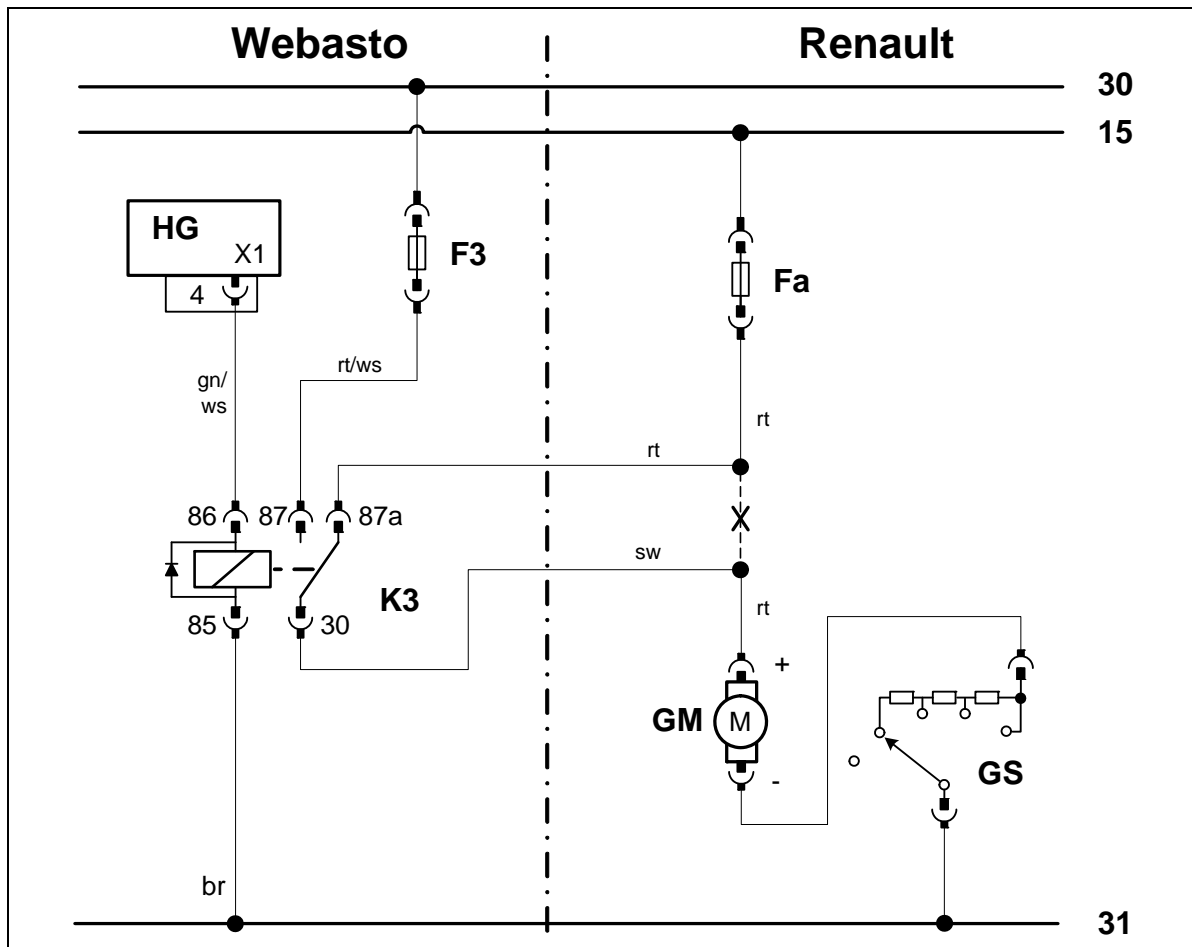
Fan controller for manual air conditioning

Connection to 2-pin connector from fan motor. Make connections as shown in the wiring diagram with the connectors provided.

(1) Fan motor connector



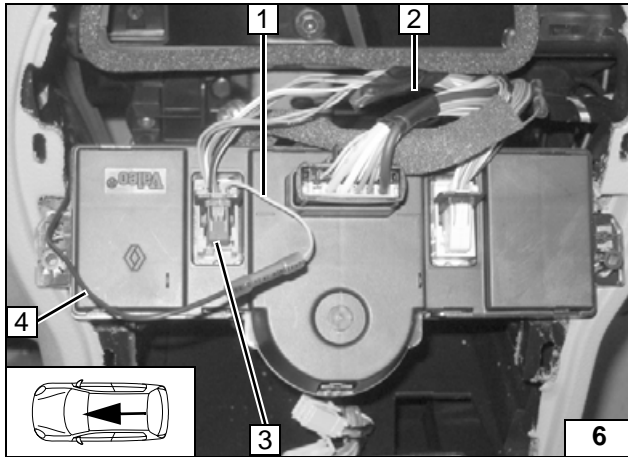
Fan controller



Wiring diagram for manual air conditioning

Webasto components		Renault components		Colours and symbols	
HG	Heater TT-C/E	GM	Fan motor	rt	red
X1	6-pin heater connector	GS	Fan switch	ws	white
F3	25A fuse	Fa	Fan fuse	sw	black
K3	Fan relay			br	brown
				gn	green
				X	Cutting point

Legend



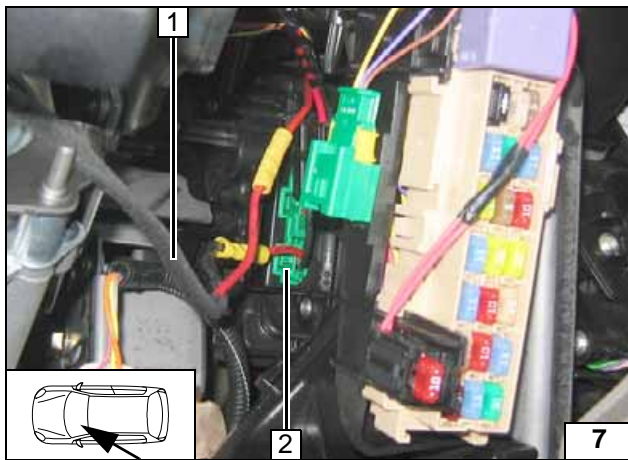
Fan controller for automatic air conditioning

Connection to 12-pin blue (bl) connector from the A/C control panel. Make connections as shown in the wiring diagram with the connectors provided.

- (1) Yellow (ge) wire to blue (bl) connector, Pin 10
- (2) Yellow (ge) wire from fuse F12, insulate and tie back
- (3) 12-pin blue (bl) connector
- (4) Black (sw) wire from fuse F4



**Control-
ling A/C
control
panel**



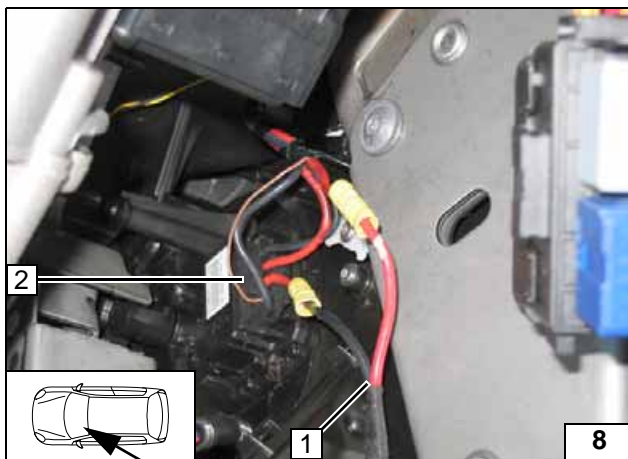
Version 1

Connection to green (gn) 2-pin connector Pin 1 on fan controller. Make connections as shown in the wiring diagram with the connectors provided.

- (1) Wiring harness of fan controller
- (2) Green (gn) 2-pin connector Pin 1 on fan controller



**Control-
ling fan
controller**



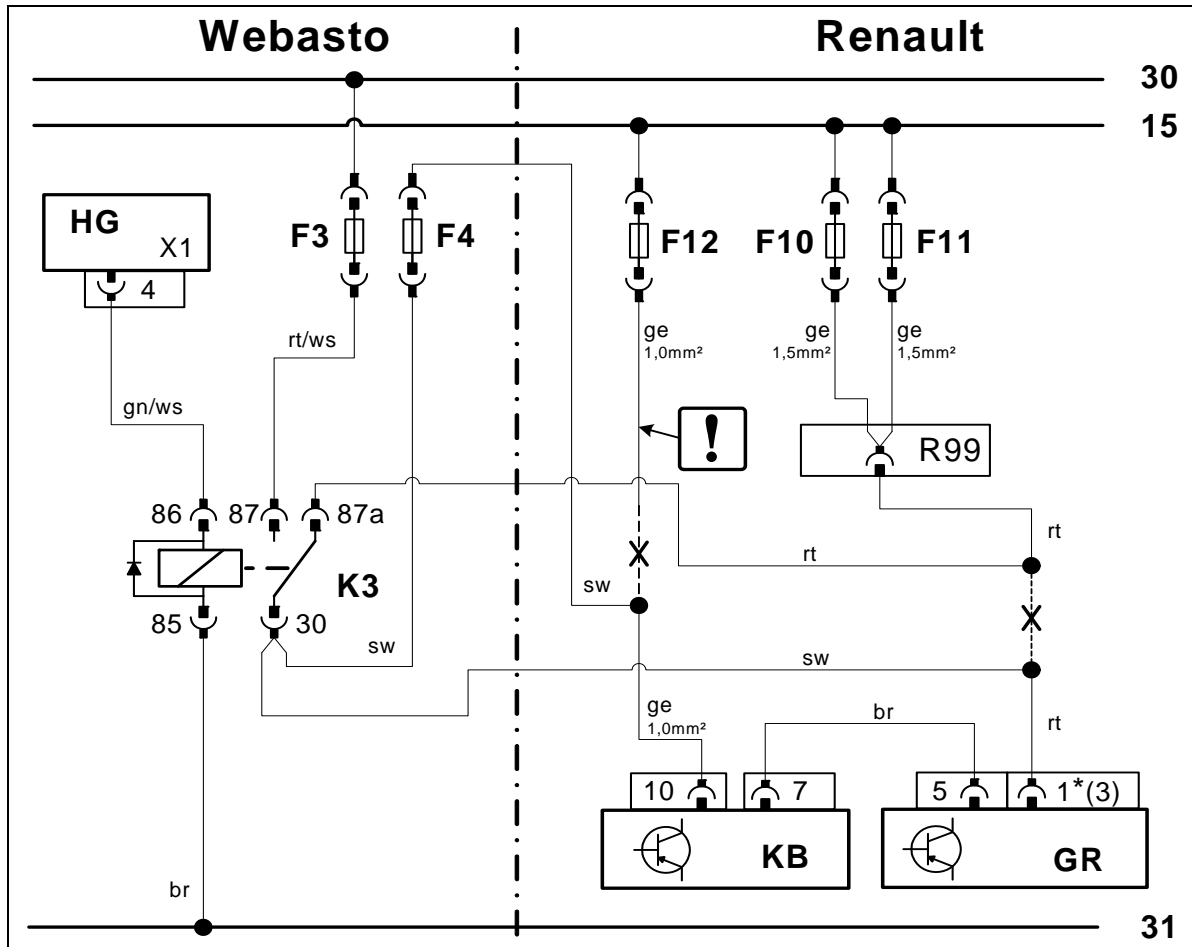
Version 2

Connection to black (sw) 6-pin connector Pin 3 on fan controller. Make connections as shown in the wiring diagram with the connectors provided.

- (1) Wiring harness of fan controller
- (2) Black (sw) 6-pin connector Pin 3 on fan controller



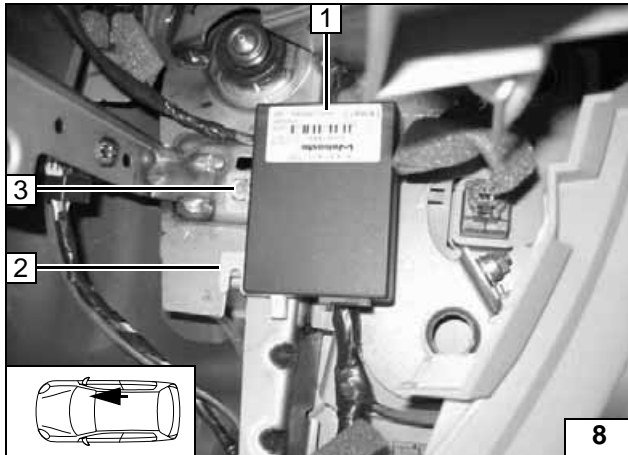
**Control-
ling fan
controller**



Automatic air-conditioning wiring diagram

Webasto components		Renault components		Colours and symbols	
HG	Heater TT-C/E	GR	Fan controller	rt	red
X1	6-pin heater connector	R99	Connector	ws	white
F3	25A fuse	F10	10A fuse	sw	black
F4	5A fuse	F11	20A fuse	br	brown
K3	Fan relay	F14	15 A fuse	gn	green
		KB	A/C control panel	ge	yellow
				*	Green (gn) 2-pin connector Pin1 or black (sw) 6-pin connector Pin 3.
					Insulate wire end and tie back
				X	Cutting point

Legend

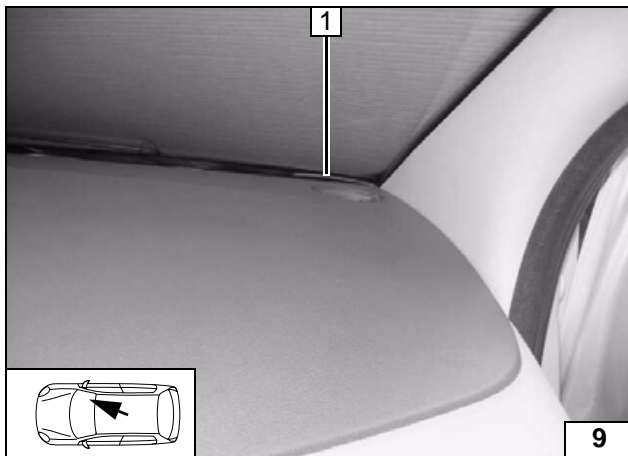


Remote option Telestart

- (1) Receiver
- (2) Bracket
- (3) 5.5x13 self-tapping screw

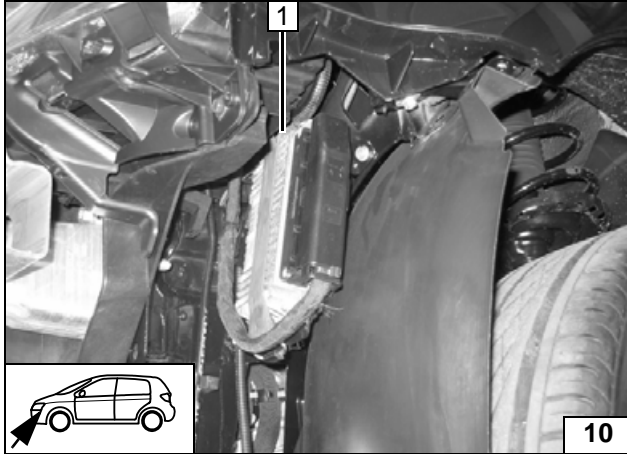
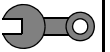


Installing receiver



- (1) Antenna

Installing antenna



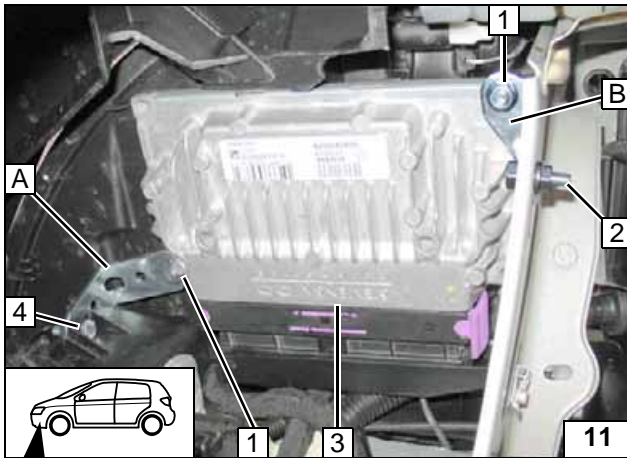
Preparing installation location

Vehicles with automatic transmission

Remove control unit for automatic transmission (1), discard bracket.



Preparing installation location



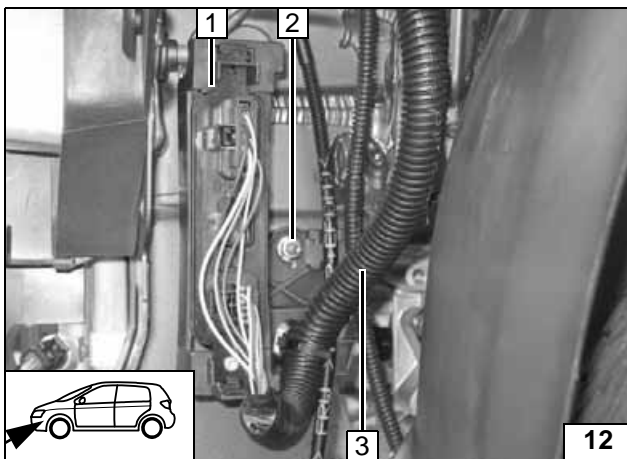
Combination with Xenon lights not tested.

Cut perforated brackets **A** and **B** to length and bend in accordance with template. Install control unit for automatic transmission (3) below left-hand headlight with perforated brackets **A** and **B**. Remove clip from original vehicle wiring harness at position (4).

- (1) M6x20 bolt, flanged nut [2x each]
- (2) M6x20 bolt, large diameter washer [2x], flanged nut in original hole
- (4) M6x20 bolt, flanged nut on existing hole



Preparing installation location

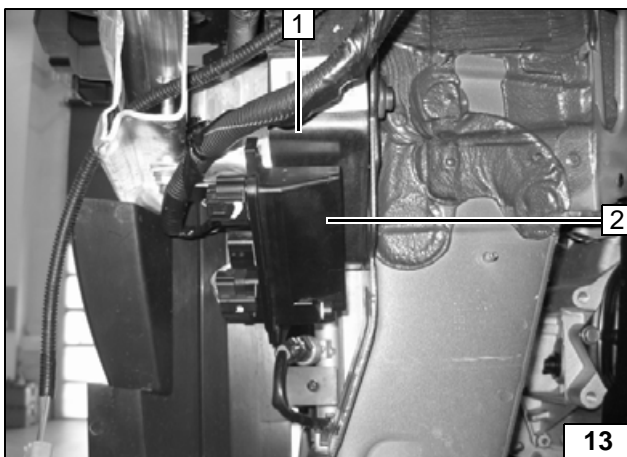


Vehicle with cornering light

- (1) Remove control unit
- (2) Original vehicle M6 nut



Preparing installation location

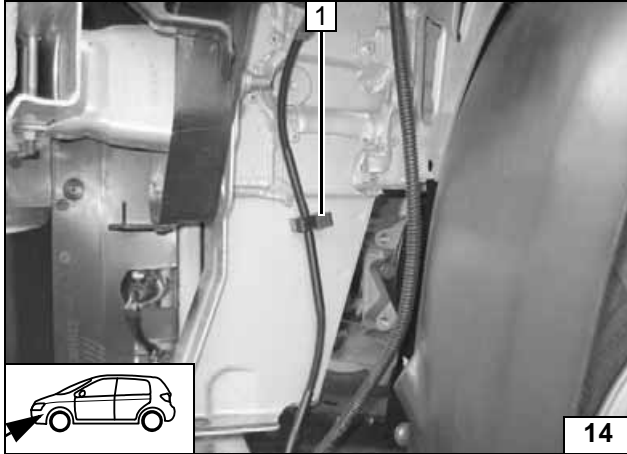
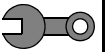


Remove control unit from frame and fasten with Velcro strip [2x]. Clean bonding surfaces beforehand. Discard frame.

- (1) Plastic trim
- (2) Control unit without frame



Preparing headlight

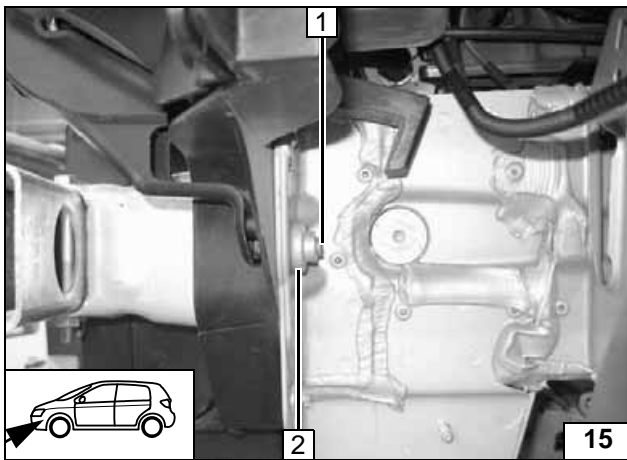


All vehicles

- (1) Discard retaining clip

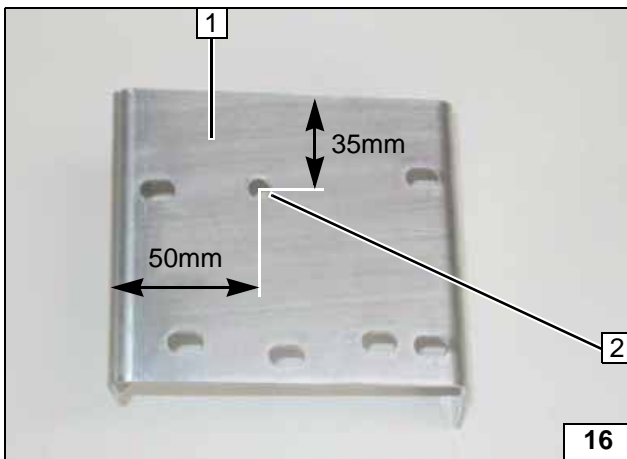


Preparing installation location



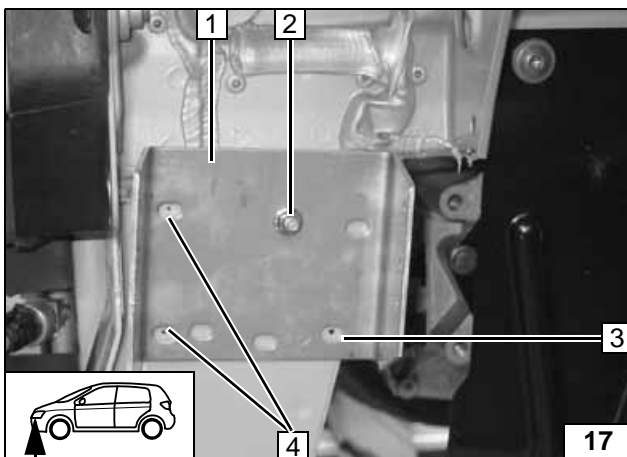
- (1) Shorten original vehicle bolt up to threaded sleeve
- (2) Threaded sleeve

Preparing installation location



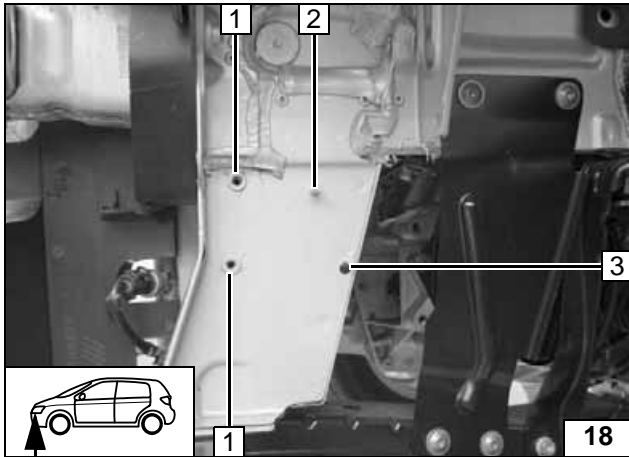
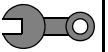
- (1) Bracket
- (2) 7 mm dia. hole

Preparing bracket



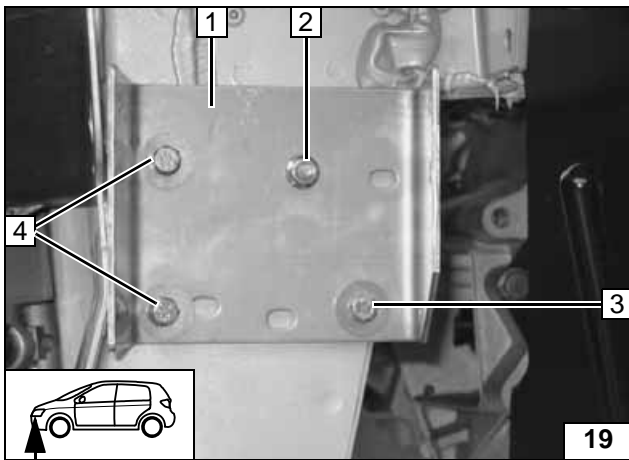
- (1) Loosely mount bracket
- (2) Original vehicle stud bolt, M6 flanged nut
- (3) 7 mm dia. hole
- (4) 9mm dia. hole

Preparing installation location



- (1) M6 rivet nut [2x]
- (2) Original vehicle stud bolt
- (3) 7 mm dia. hole

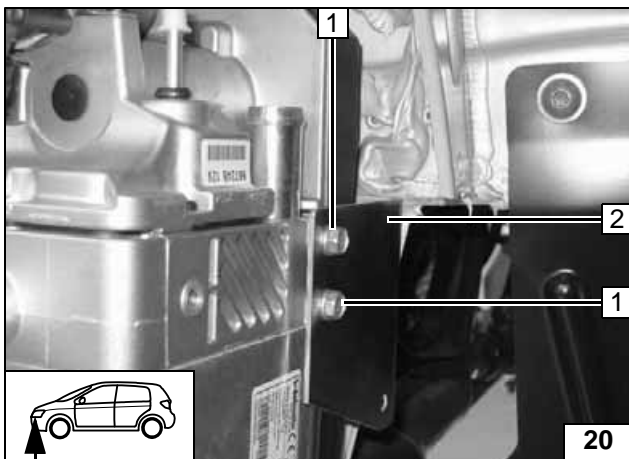
Preparing installation location



Insert 5 mm shim between bracket and vehicle at all four fastening points.

- (1) Bracket
- (2) M6 flanged nut
- (3) M6x20 bolt, large diameter washer, M6 flanged nut
- (4) M6x30 bolt, spring lockwasher, large diameter washer [2x each]

Installing bracket

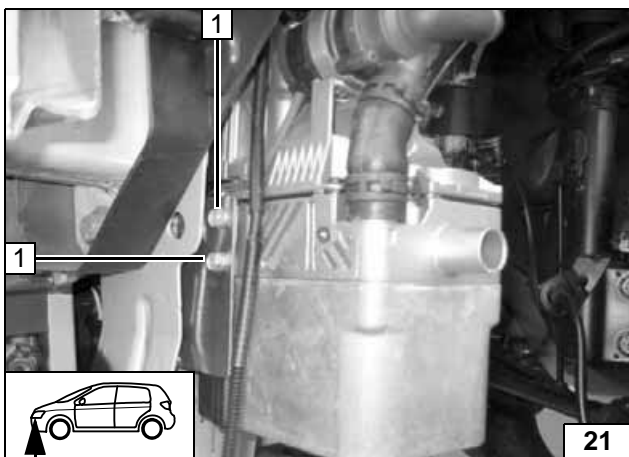


Installing heater

Tighten E-JOT screws to 10 Nm!

- (1) E-jot screw [2x]
- (2) Bracket

Installing heater



- (1) E-jot screw [2x]

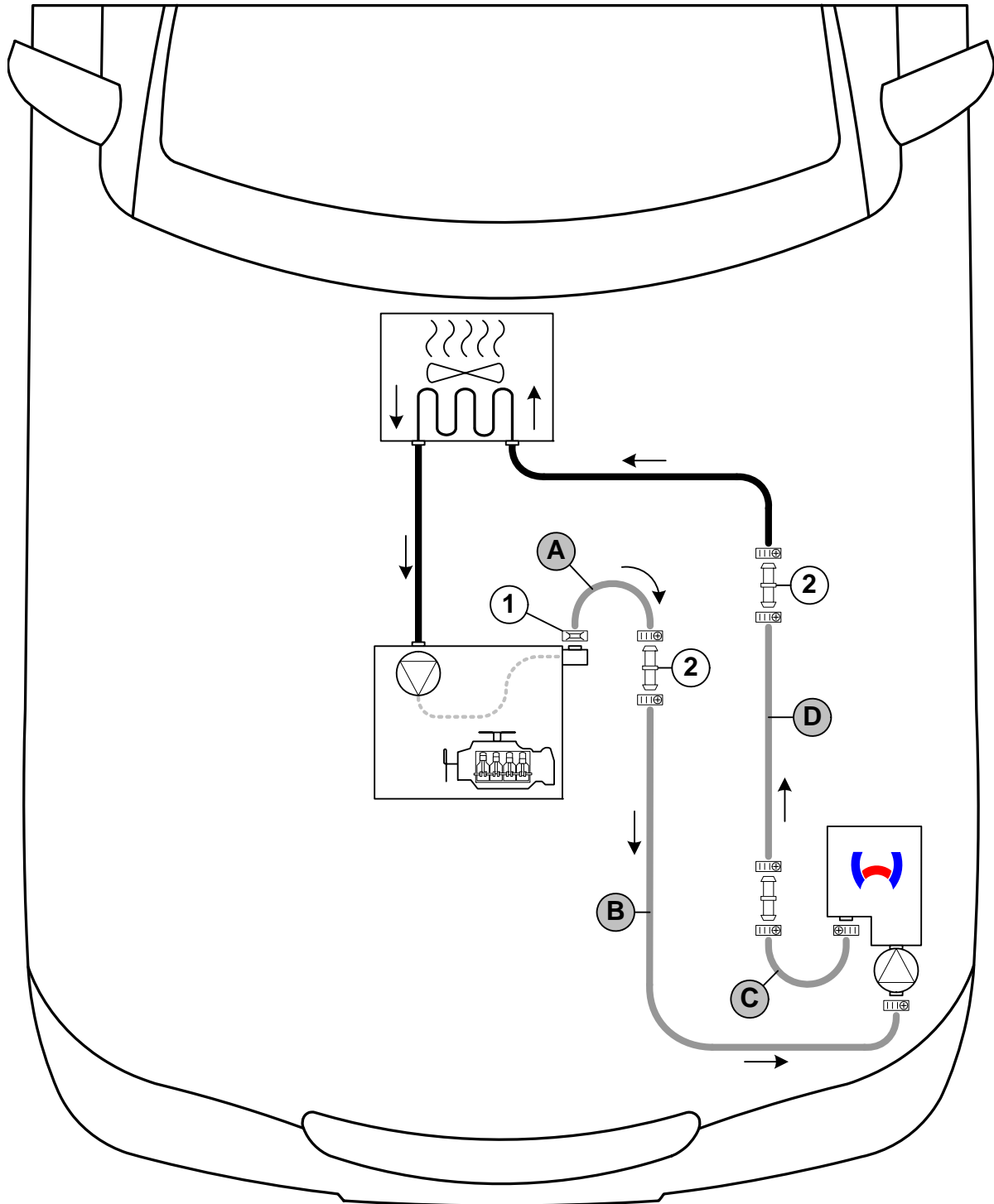
Installing heater



Coolant circuit



WARNING!



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



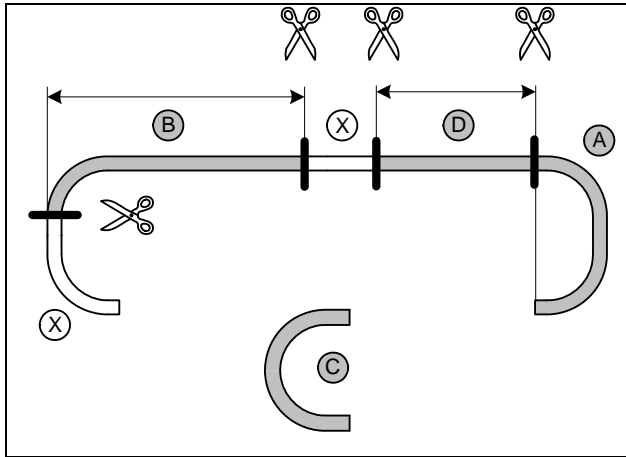
Hose routing diagram

All hose clamps  = 20-27 mm dia.! All hose clamps = 20-27 mm dia.!

1 = Original vehicle spring clip . All not designated connecting pipes  = 20x20mm dia.

2 = connecting pipe  = 20x20mm dia., 1.2 litre petrol 2 = connecting pipe  = 18x20mm dia., 1.6l petrol

Hose A = 180°, moulded hose 1.2l petrol Hose A = 90°, moulded hose 1.6l petrol

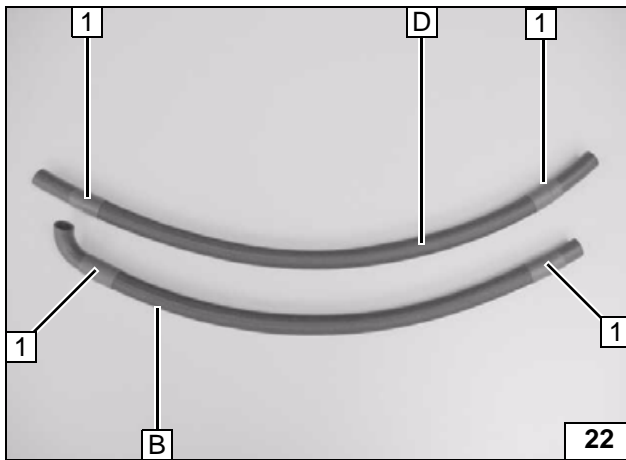


1.2 Petrol

Cut off hose **B** shortly after elbow.
Hose **C** = 180° moulded hose
Discard section **X**

B = 750mm
D = 740mm

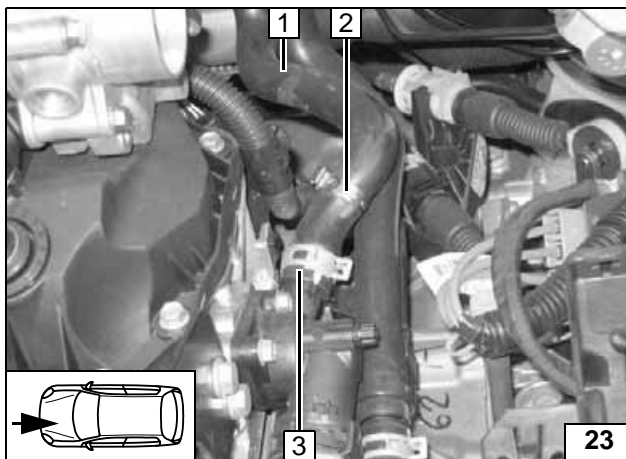
Cutting hoses to length



Cut braided protection hoses to length and slide onto hose **B** and **D**.

(1) Cut heat shrink plastic tubing in middle, slide on and shrink

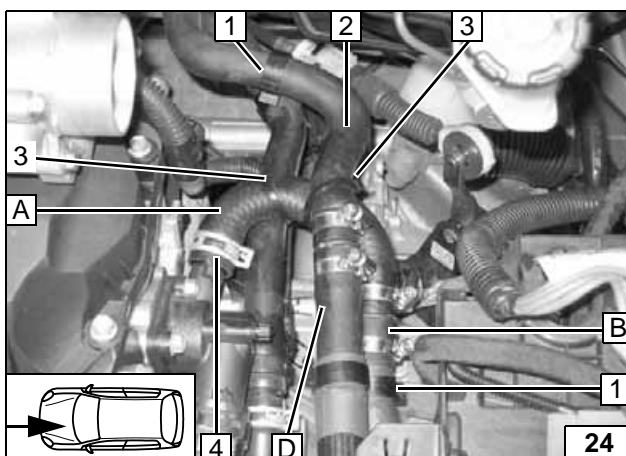
Preparing hoses



Original vehicle clamp (**3**) and hose
Pull off heat exchanger inlet. Original vehicle clamp will be reused!

(1) Hose on heat exchanger inlet
(2) Remove clamp and throttle installed in hose and discard

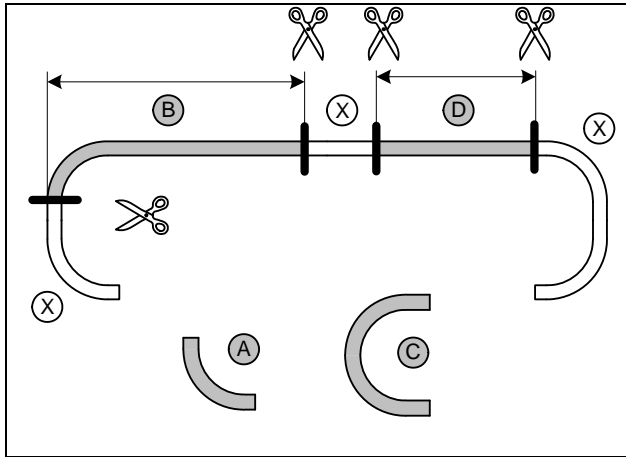
Cutting point



Before connecting, fill the water hoses with coolant.

(1) Hose bracket
(2) Original vehicle hose to heat exchanger inlet
(3) Cable tie
(4) Engine outlet with original vehicle hose clamp

Connection on engine outlet and heat exchanger inlet



1.6 Petrol

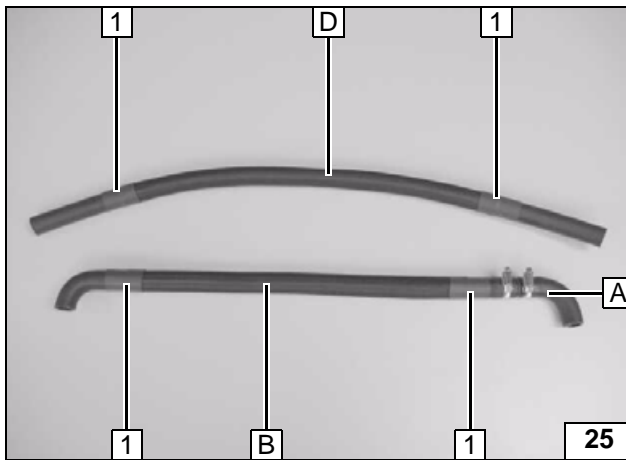
Cut off hose **B** shortly after elbow.
Hose **A** = 90°, 18mm dia. moulded hose
Hose **C** = 180° moulded hose

Discard section **X**

B = 720mm
D = 650mm



Cutting hoses to length

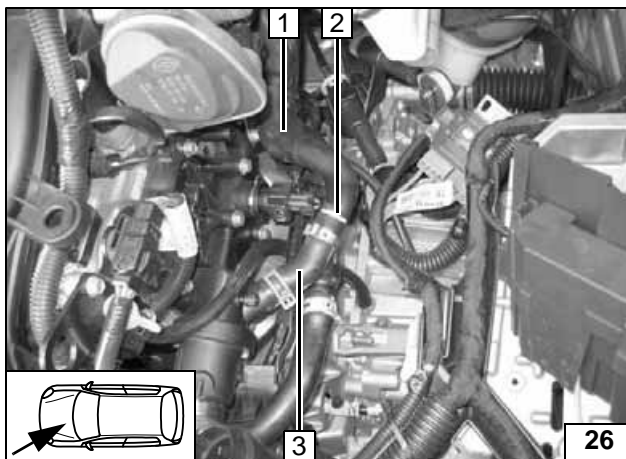


Cut braided protection hoses to length and slide onto hose **B** and **D**. Install included moulded hose **A** according to diagram.

(1) Cut heat shrink plastic tubing in middle, slide on and shrink



Preparing hoses

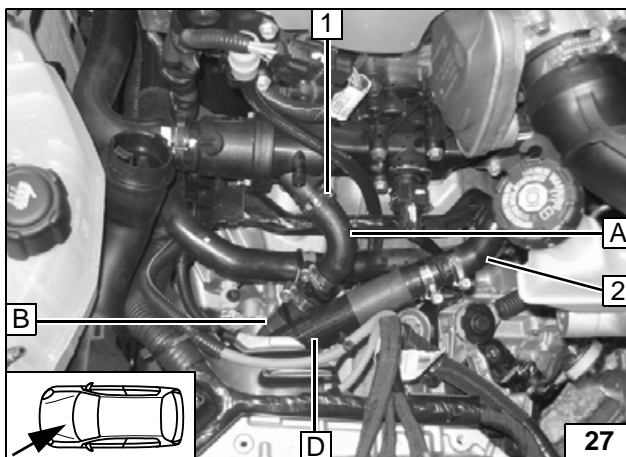


Discard original vehicle clamp (**3**) and hose section.

(1) Hose on heat exchanger inlet
(2) Cutting point



Cutting point

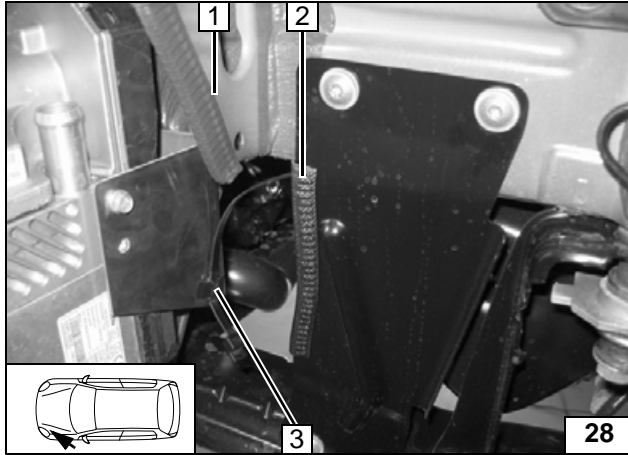


Before connecting, fill the water hoses with coolant.

(1) Included 25 mm spring clip
(A) Included 18x18 moulded hose on engine outlet
(2) Hose on heat exchanger inlet



Connection on engine outlet and heat exchanger inlet

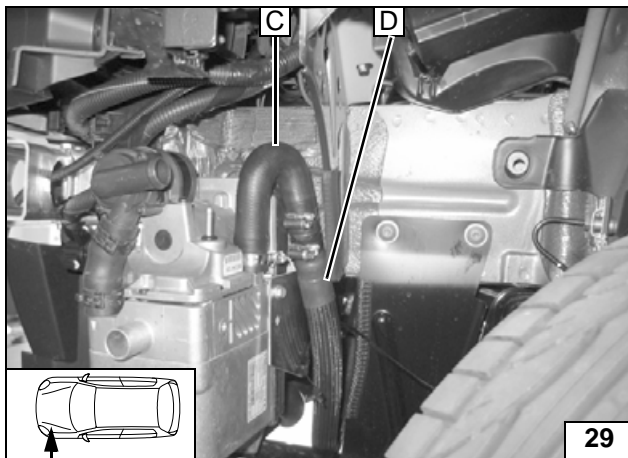


All vehicles

- (1) Edge protection 100 mm long
- (2) Edge protection 200 mm long
- (3) Included clip with cable tie in existing hole



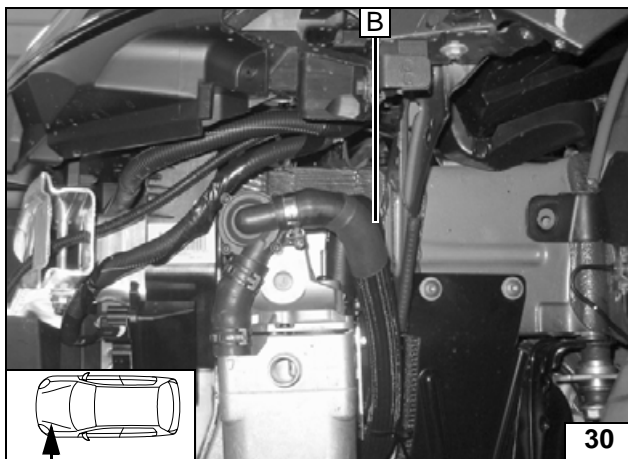
Installing clip and edge protection



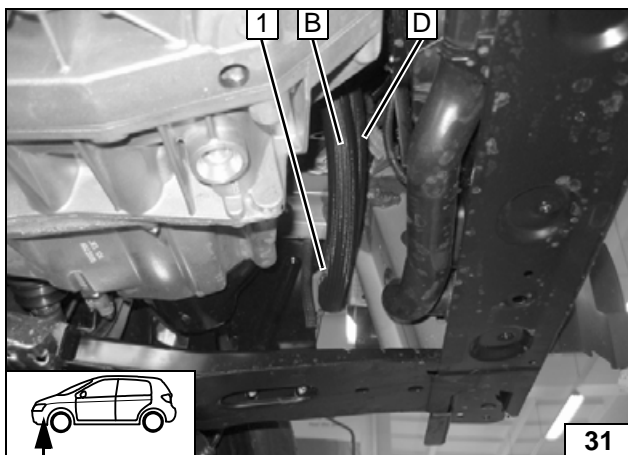
Before connecting, fill the water hoses with coolant.



Connection on heater

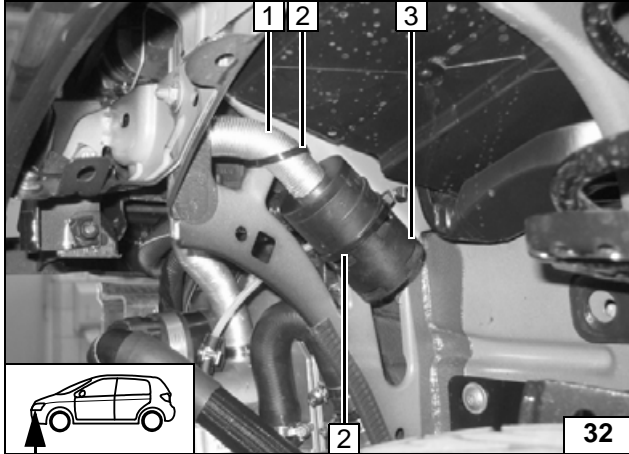


Connection on heater



- (1) Clip with cable tie

Routing in engine compartment



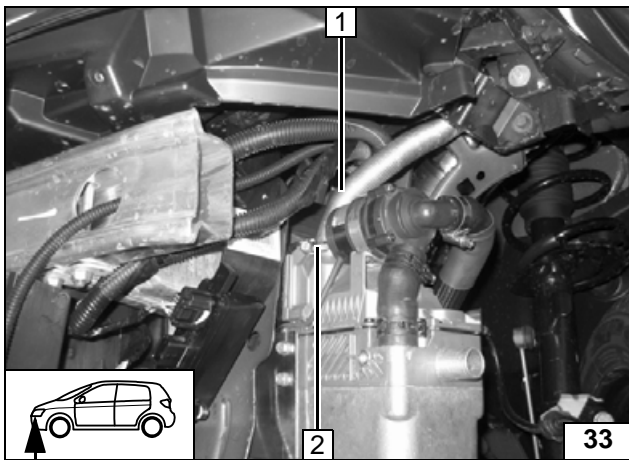
Combustion air

Ensure proper installation position of intake silencer, see "Installation Instructions". Shorten intake pipe by 60 mm.

- (1) Combustion air pipe
- (2) Cable tie [2x]
- (3) Silencer



Installing silencer



- (1) Combustion air pipe
- (2) 27 mm dia. hose clamp



Installing combustion air pipe



Fuel

CAUTION!

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

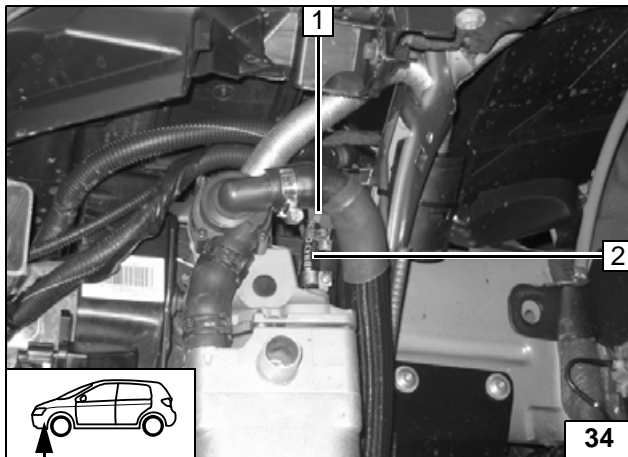
Catch any fuel running off with an appropriate container.

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

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

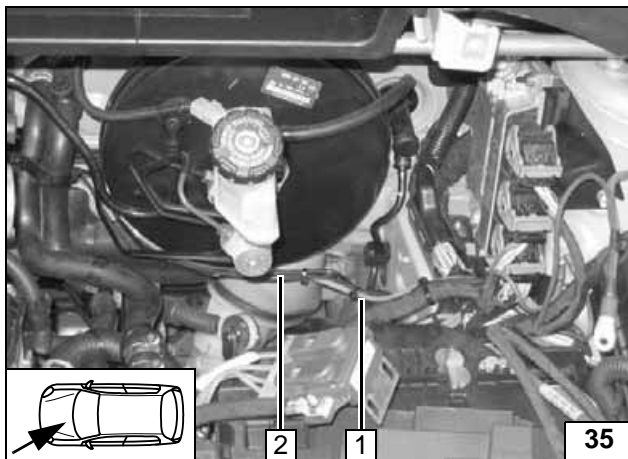
WARNING!

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



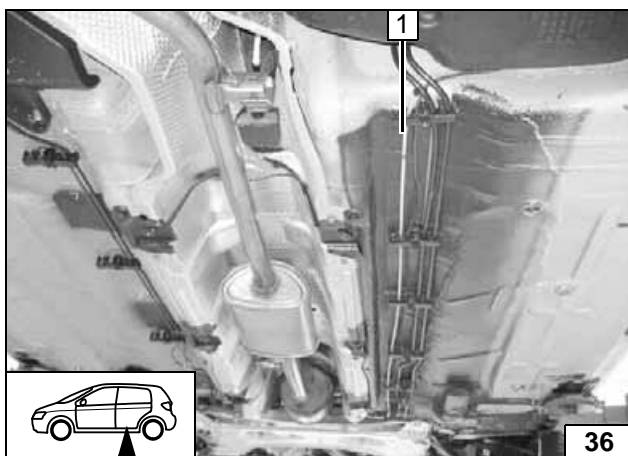
- (1) Mecanyl fuel line
- (2) Hose section, 10 mm dia. hose clamp [2x]

Conne-
tion on
heater



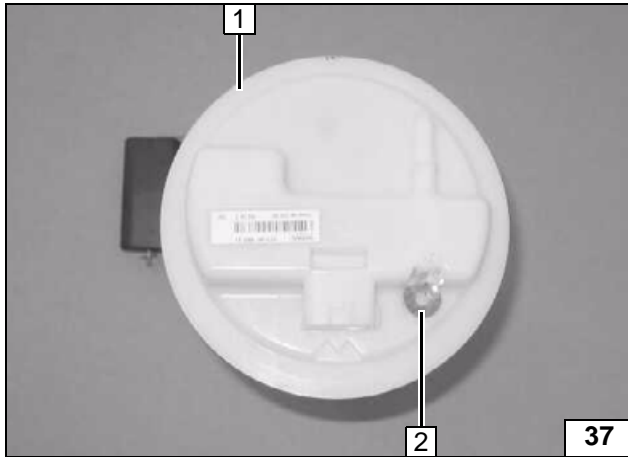
- (1) Mecanyl fuel line
- (2) Metering pump wiring harness

Install-
ing
lines



- (1) Wiring harness of metering pump, fuel line from heater

Install-
ing
lines

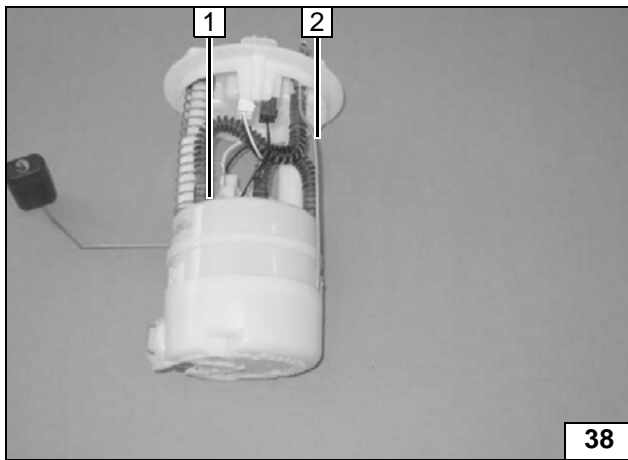


Remove fuel tank and fuel-tank sending unit according to manufacturer's instructions. Copy hole pattern as shown and drill 6 mm dia. hole.

- (1) Fuel-tank sending unit
- (2) 5 mm dia. large diameter washer



Preparing fuel-tank sending unit

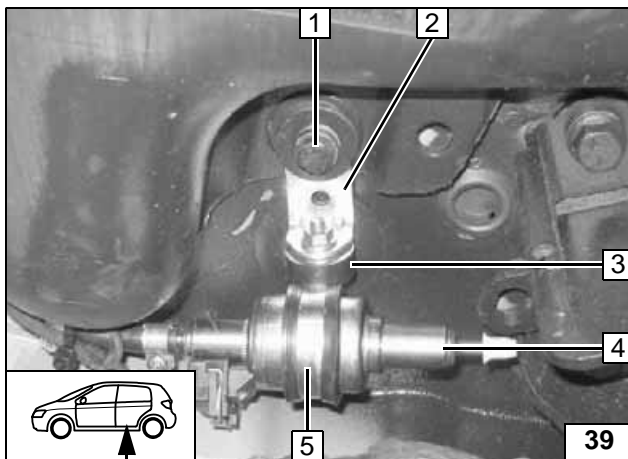


Shape fuel standpipe according to template, cut to length and install, see "installation instructions".

- (1) Fuel tank sending unit
- (2) Fuel standpipe



Installing fuel standpipe

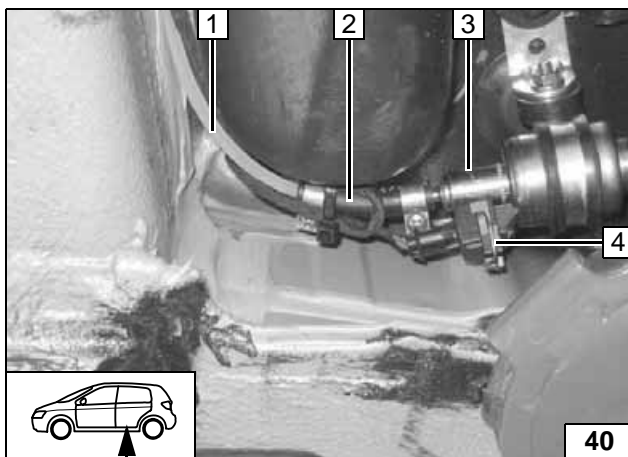


Install tank and fuel-tank sending unit according to manufacturer's specifications.

- (1) Original vehicle bolt
- (2) Angle bracket
- (3) Silent block, M6 flanged nut [2x]
- (4) Metering pump
- (5) Rubber-coated p-clamp

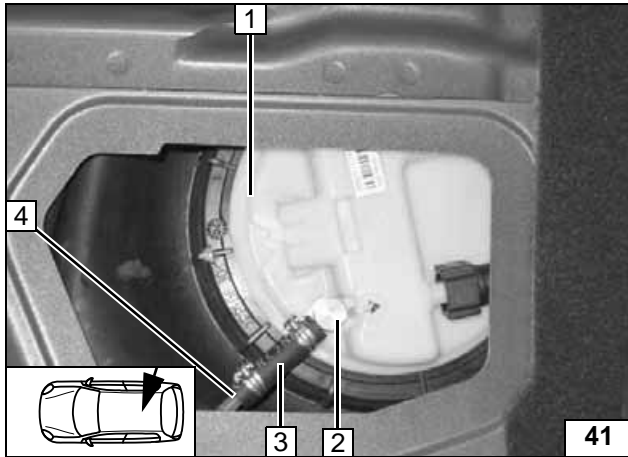


Installing metering pump



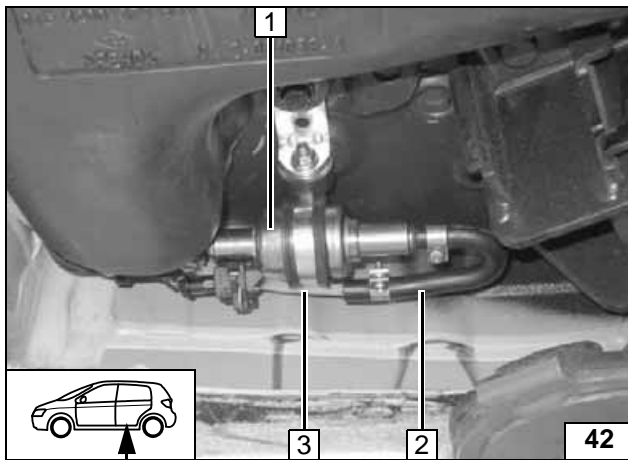
- (1) Fuel line
- (2) Hose section, 10 mm dia. hose clamp [2x]
- (3) Metering pump
- (4) Wiring harness of metering pump with connector

Connection to metering pump



- (1) Fuel-tank sending unit
- (2) Fuel standpipe
- (3) Hose section, 10 mm dia. Caillau clamp [2x]
- (4) Remaining section of fuel line

**Connect-
ing fuel
line**

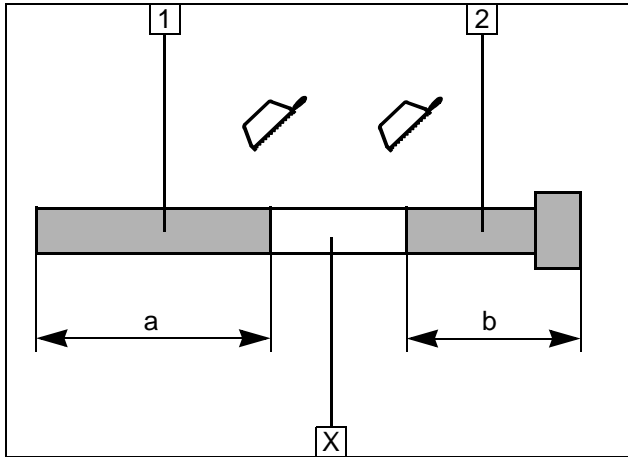
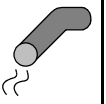


Fuel line from fuel standpipe on intake side of metering pump [side without connector]. Check the position of the components; adjust if necessary. Check that they have freedom of movement.

- (1) Metering pump
- (2) 180° elbow of moulded hose, 10mm dia. clamp [2x]
- (3) Remaining section of fuel line



**Conne-
ction to me-
tering
pump**

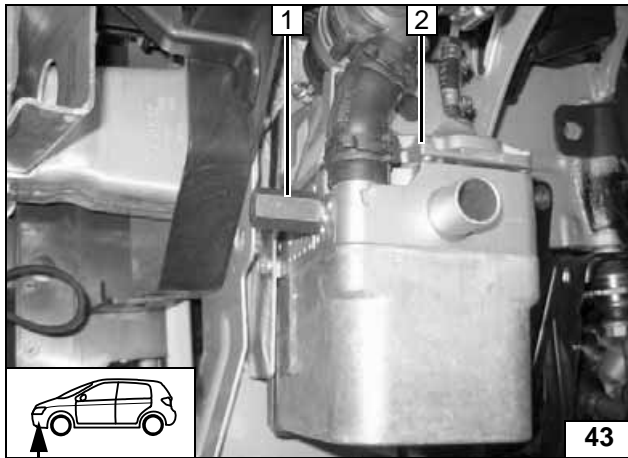


Exhaust gas

- (1) Exhaust pipe
a = 280mm
- (2) Exhaust end section
b = 520mm

Discard section X

Preparing
exhaust
pipe

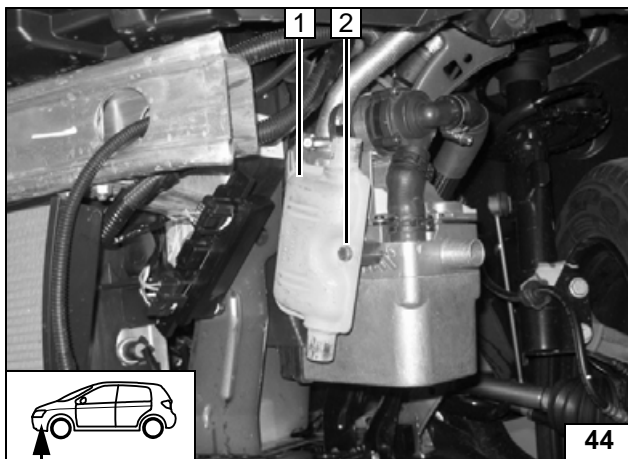


Ejot stud, tightening torque 10 Nm.

- (1) Ejot stud, M6x30 spacer bolt
- (2) Heater

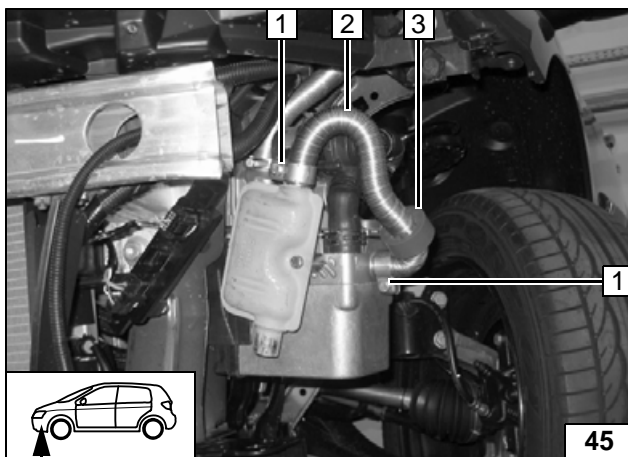


Installing
spacer
bolt



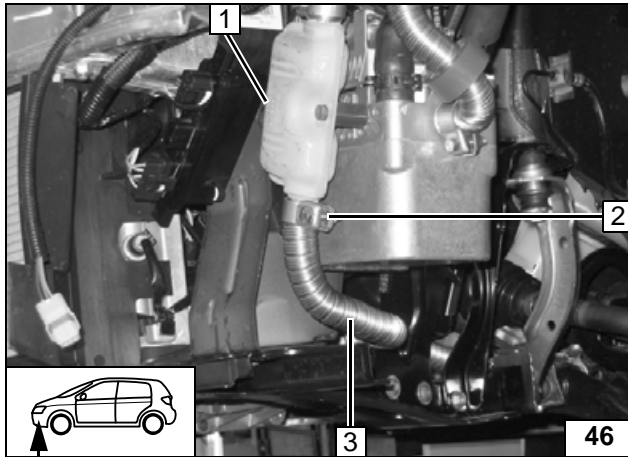
- (1) Silencer
- (2) M6x12 bolt, spring lockwasher

Installing
silencer



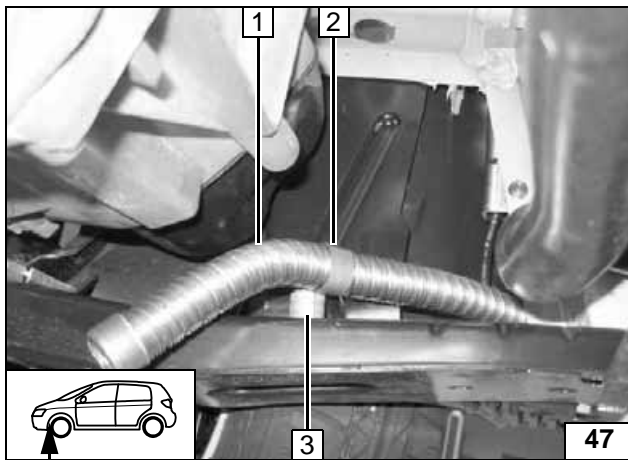
- (1) Hose clamp [2x]
- (2) Exhaust pipe
- (3) Position red (rt) rubber isolator

Installing
exhaust
pipe



- (1) Exhaust silencer
- (2) Hose clamp
- (3) Exhaust end section

Installing exhaust end section

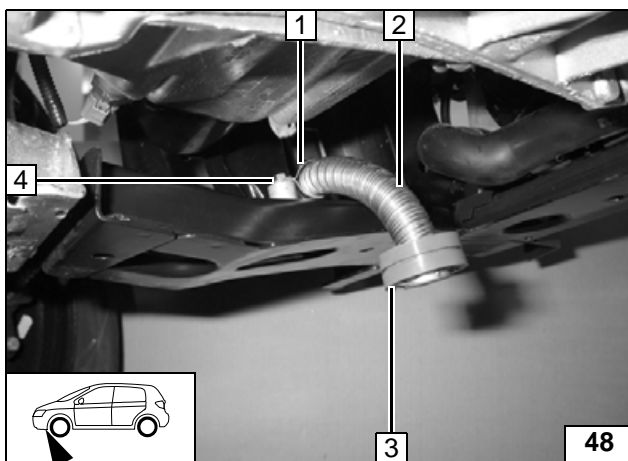


Vehicles without underride protection

Ensure sufficient distance from neighbouring components.

- (1) Exhaust end section
- (2) P-clamp
- (3) M6x40 bolt, 20 mm long spacer sleeve, M6 flanged nut on existing hole

Installing exhaust end section

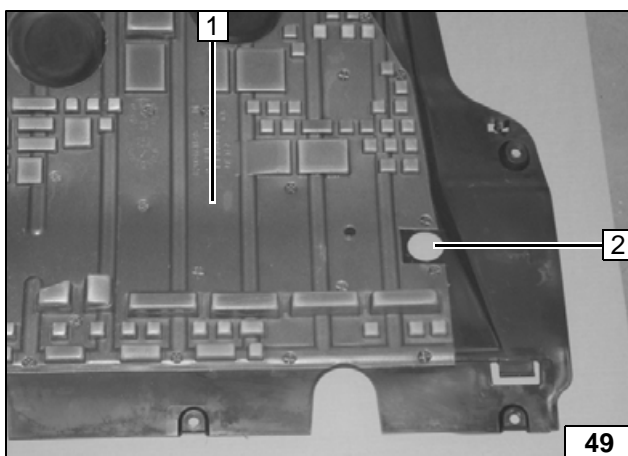


Vehicles with underride protection

Ensure sufficient distance from neighbouring components.

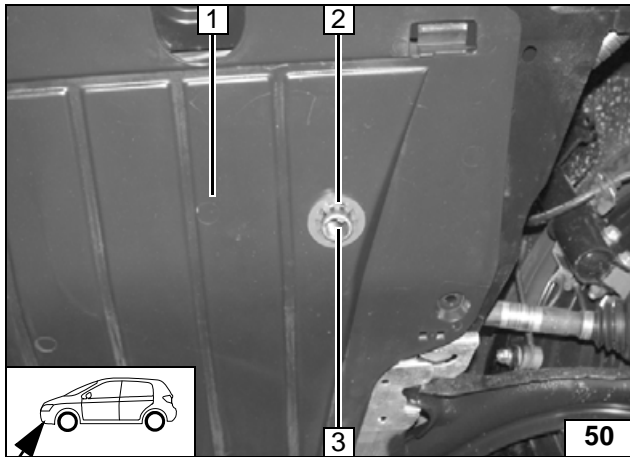
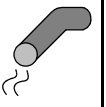
- (1) P-clamp
- (2) Exhaust end section
- (3) Red (rt) rubber isolator
- (4) M6x40 bolt, 20 mm long spacer sleeve, large diameter washer, M6 flanged nut on existing hole

Installing exhaust end section



42 mm dia. hole (2) in underride protection (1).

Cutting out under-ride protection

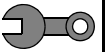


Align exhaust end section (3) flush on red (rt) rubber isolator (2).

(1) Underride protection



**Mounting
underride
protection**



Final Work

WARNING!

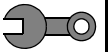
Mount removed parts in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate and tie back all loose lines.

Only use manufacturer-approved coolant. Spray 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.**
- **Set digital timer, teach telestart transmitter**
- **Make settings on A/C control panel according to the "Operating Instructions for End Customer".**
- **Place the "Switch off parking heater before refuelling" signboard in the area of the filler neck**
- **See installation instructions for initial start-up and function test**

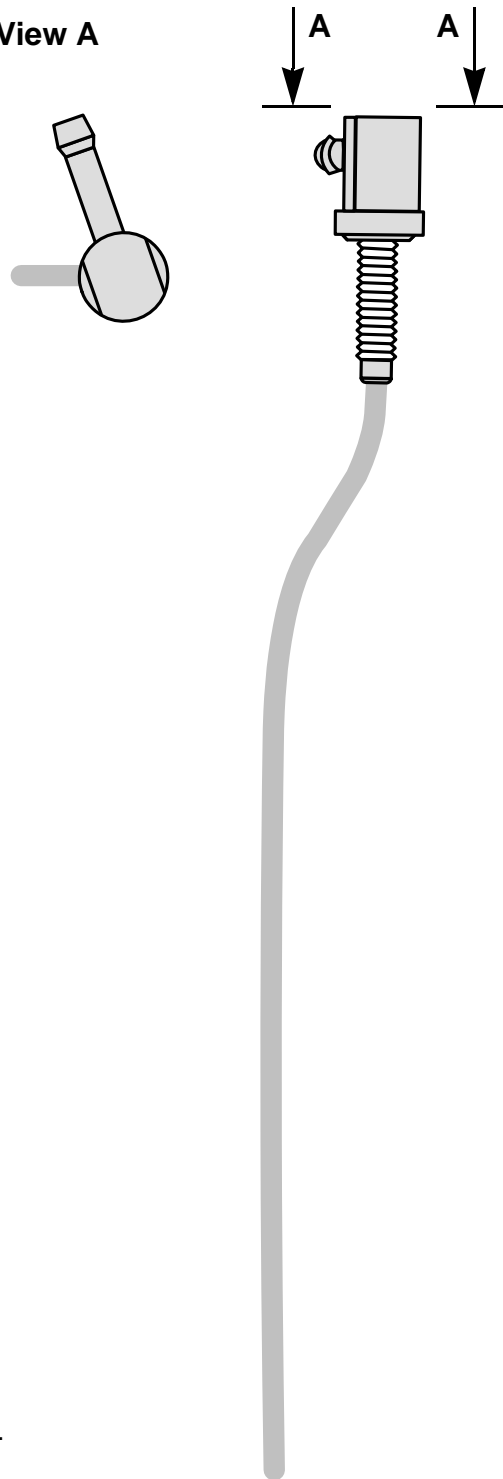


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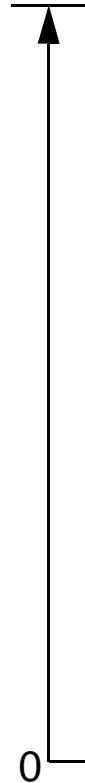


Template for Fuel Standpipe

View A



100mm



Scale 1:1

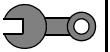
Compare size of the printed version with dimension lines.
Allowed tolerance 2%.

Correct pressure settings appropriately in case of major deviations or request original printout.

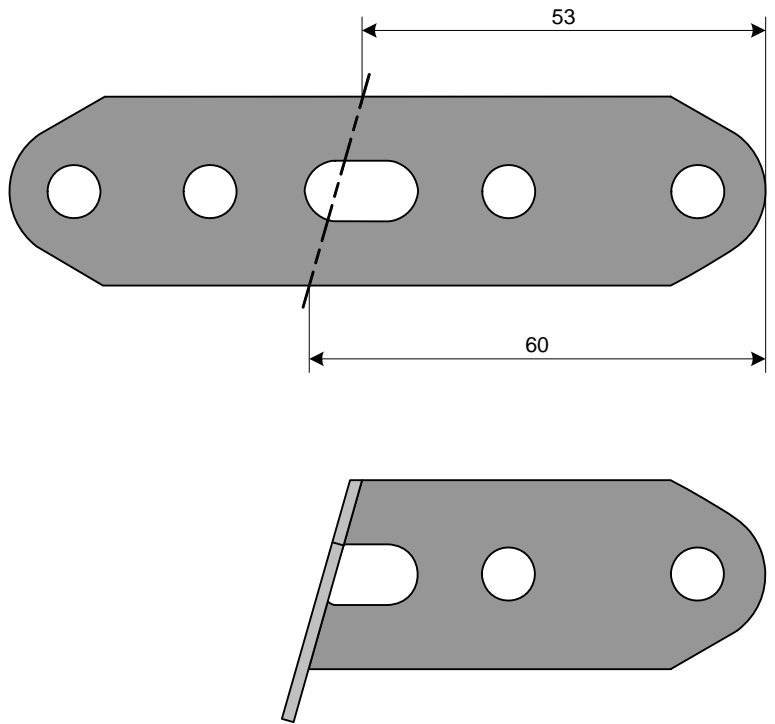
100mm

0

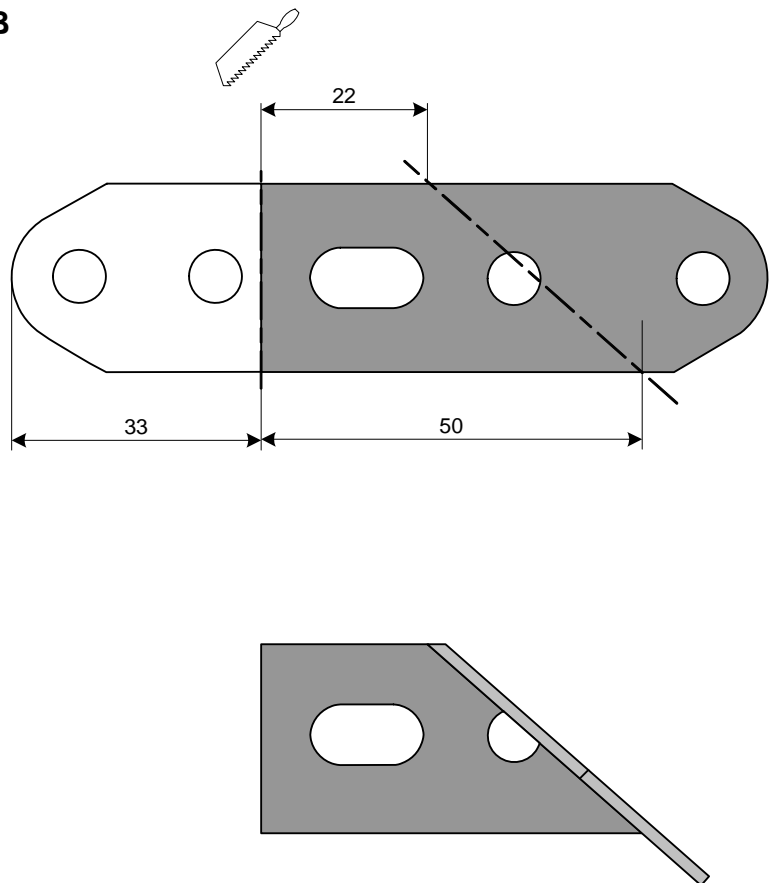




Template for Perforated Bracket A



Template for Perforated Bracket B



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.

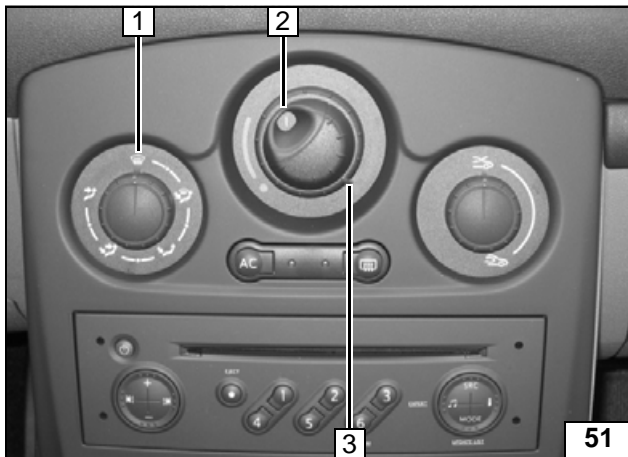
Heating time = driving time

Example:

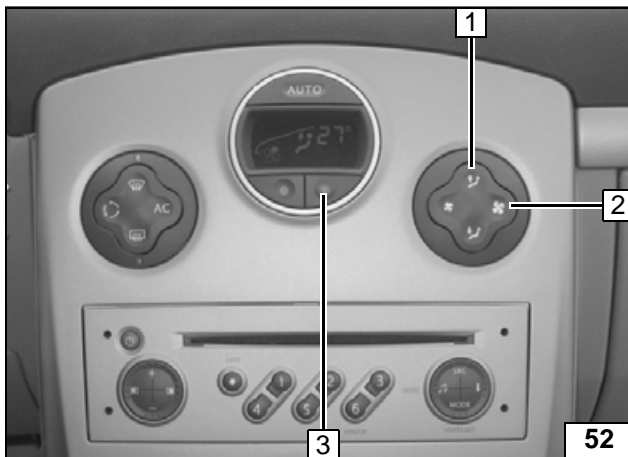
For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.

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

Before parking the vehicle, make the following settings:



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



- (1) Air outlet to "upward"
- (2) Set fan to level "2", or possibly "3"
- (3) Set temperature to "27°C"



Manual air conditioning



Automatic air conditioning