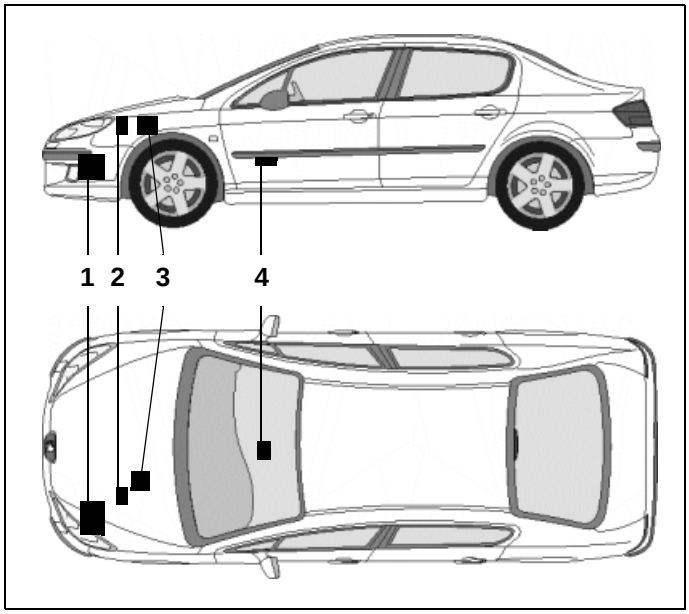
Water heater

Heater upgrade
Thermo Top V

e1
00 0018



Upgrade instructions

Peugeot 407

Diesel

From model 2004

Left-hand drive models only

Legend for Figure 1
1 Thermo Top V heater
2 Blade-type fuse holder
3 Blower and additional relay
4 Digital timer

Warning!
Danger warning:

The incorrect installation or repair of Webasto heating systems may cause a fire or the escape or fatal carbon monoxide. This may result in serious or fatal injuries.

Special company training, technical documentation, special tools and special equipment are required for the installation and repair of Webasto heating and cooling systems.

NEVER attempt to install or repair Webasto heating or cooling systems unless you have completed the company training and thus acquired the required technical skills and unless you have the technical documentation, tools and equipment available to you that are required for completing proper installation and repair work.

ALWAYS follow all Webasto installation and repair manuals and observe all the warnings.

Webasto cannot accept any liability for defects and damage caused by the system being installed by untrained personnel.

© Webasto AG

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Preparations	4	Thermo-Call option	13
Installation site for the heater	4	Concluding work	14
Fuse holder and relay	5	Operating instructions for the end customer	15
Electrical connections	6	Template for perforated strap 1	16
Upgrade circuit diagram	8	Template for perforated strap 2	17

Validity

Manufacturer	Trade name	Type	EC licence no. / General operating permit (homologation)
Peugeot	407	6*RHR*	e2*2001 / 116*029...
Peugeot	407	6*9HZ*	e2*2001 / 116*029...

Engine type	Engine type	Output in kW	Swept volume in cm³
9HZ	HDI	80	1560
RHR	HDI	100	1997

The vehicle types, engine types and equipment versions not listed in these installation instructions have not been tested.
It may nevertheless be possible to install the system using these installation instructions.

The installation site for the digital timer should be agreed with the end customer before installation.

The summer ventilation function is not possible.

Heater / Upgrade kit

Quantity	Description	Order No.
1	**Peugeot 407 TT-V upgrade kit**	**1303176A**

Foreword

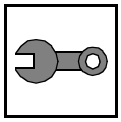
These installation instructions apply to Peugeot 407 vehicles with HDI engines featuring a standard Thermo Top V heater (see above for validity), model year 2004 and later, unless technical modifications on the vehicle influence the installation, excluding all liability claims. Depending on the version and equipment in the vehicle, changes may be required to the installation work set out in these installation instructions.

In any event, however, the directives in the “installation instructions” and “operating and servicing instructions” for the *Thermo Top V* must be followed.
The appropriate engineering conventions and any instructions from the vehicle manufacturer must be observed for the installation work.

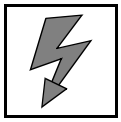
Notes on document

To give you a quick overview of the various procedures, you will find an identifier on the outside edge at the top right on the appropriate page.

Mechanical work



Electrical integration



Water connections



Special features are identified by the following symbols:



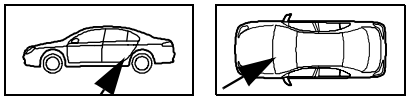
Special danger of damaging components



Reference to general installation instructions for Webasto components and to documents specific to the vehicle supplied by the manufacturer



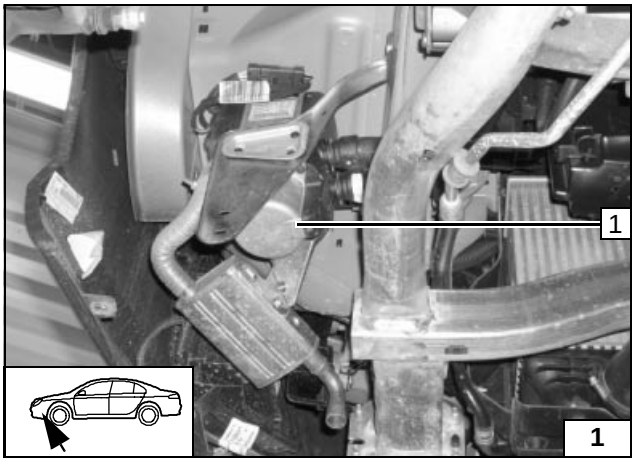
Note to a technical peculiarity



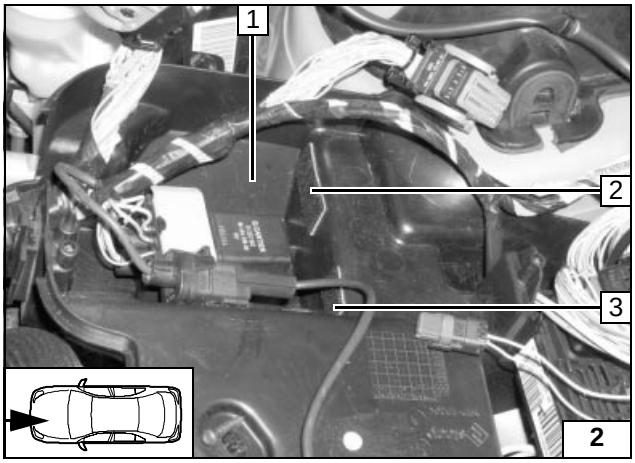
The arrow in the pictogram shows the position on the car and the viewing direction

Warning!

- Disconnect the battery
- Release the pressure from the cooling system!
- Remove the cover on the central electrical system in the engine compartment
- Remove the underride guard on the left of the underfloor
- Remove the left wheel arch trim
- Remove the dashboard trim on the left
- Remove the air-conditioning control module as instructed by the manufacturer



(**1**) Heater

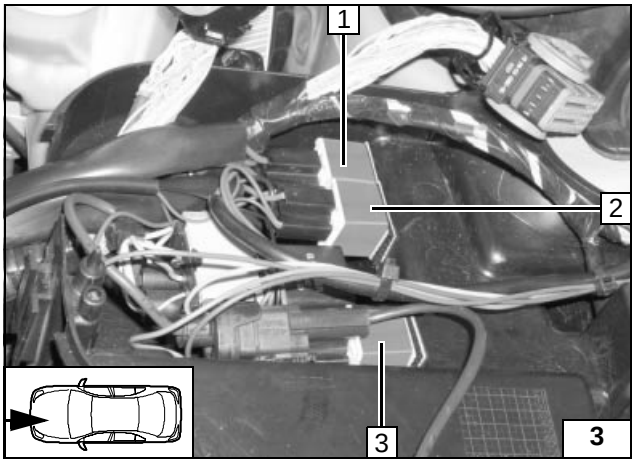


To install the fuse holder and relays [3x]
Depending on the equipment in the car, the relays [3x] in the central electrical system may be installed in two versions. Figures 2 and 3 show version 1, Figure 4 shows version 2.

Version 1: To prepare the central electrical system

Control module removed from the central electrical system. Clean and degrease the gluing surfaces on the casing. Cut the 100 mm Velcro strip into 6 equal lengths. Affix three lengths as shown in Figure 2.

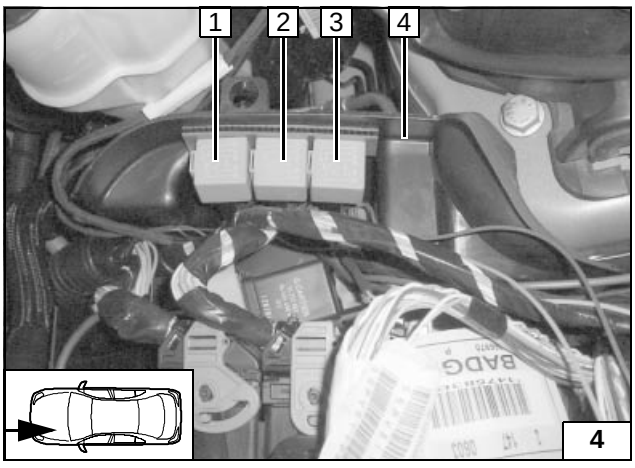
(**1**) Central electrical system casing
(**2**) Velcro strip (2 lengths)
(**3**) Velcro strip (1 length)



Version 1: To install the relays

Clean and degrease the gluing surfaces on the relays. Affix the remaining 3 lengths of the Velcro strip to the 3 relays and secure them to the central electrical system casing as shown.

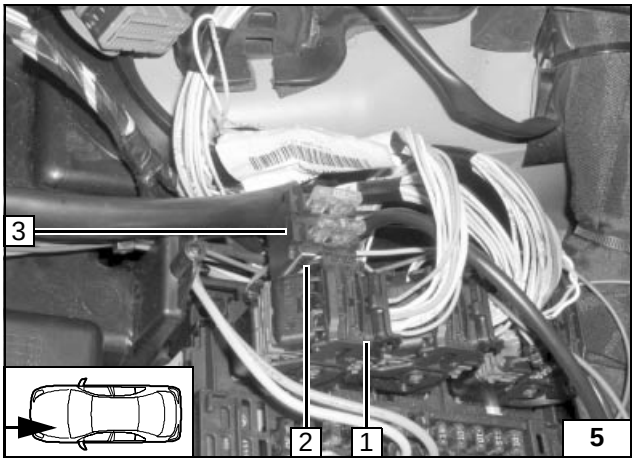
(**1**) K3 relay
(**2**) K3.1 relay
(**3**) K3.2 relay



Version 2: To install the relays

Clean and degrease the gluing surfaces on the central electrical system casing and the relays. Cut the 100 mm Velcro strip in half. Affix the relays [3x] as shown in Figure 4:

(**4**) Central electrical system casing
(**1**) K3 relay
(**2**) K3.1 relay
(**3**) K3.2 relay



To install the fuse holder

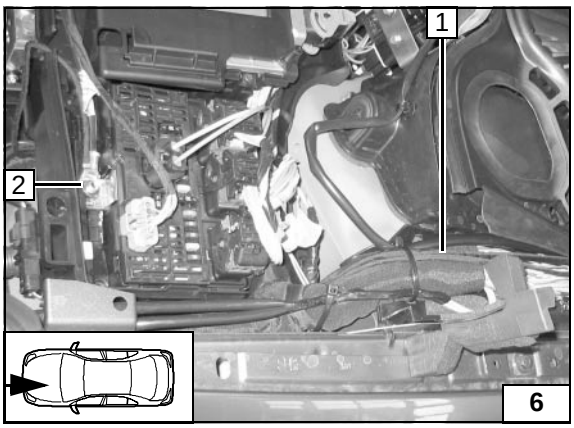
For both versions
Clean and degrease the gluing surfaces on the plug and fuse holder. Cut the 50 mm Velcro strip in half and affix half to the plug and half to the fuse holder.
Secure the fuse hold as shown.
Insert fuses F1 5 A and F2 25 A as shown on the circuit diagram.

(**1**) Plug
(**2**) Velcro strip (1 length each)
(**3**) Fuse holder

Route in accordance with general technical principles. Unless indicated otherwise in the description, secure onto the standard cables and wiring harnesses using cable ties. Fit a chafe guard over sharp edges!

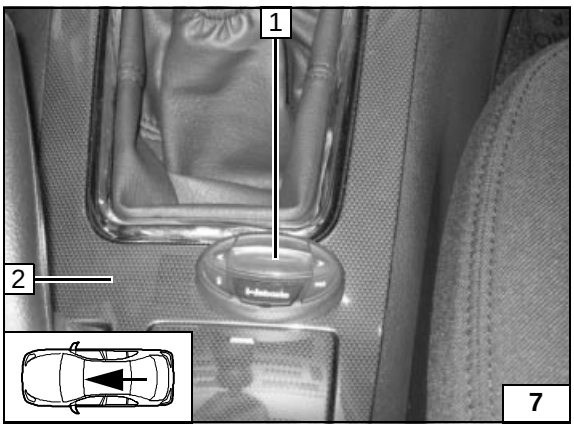
Wiring harness routing / Positive integration

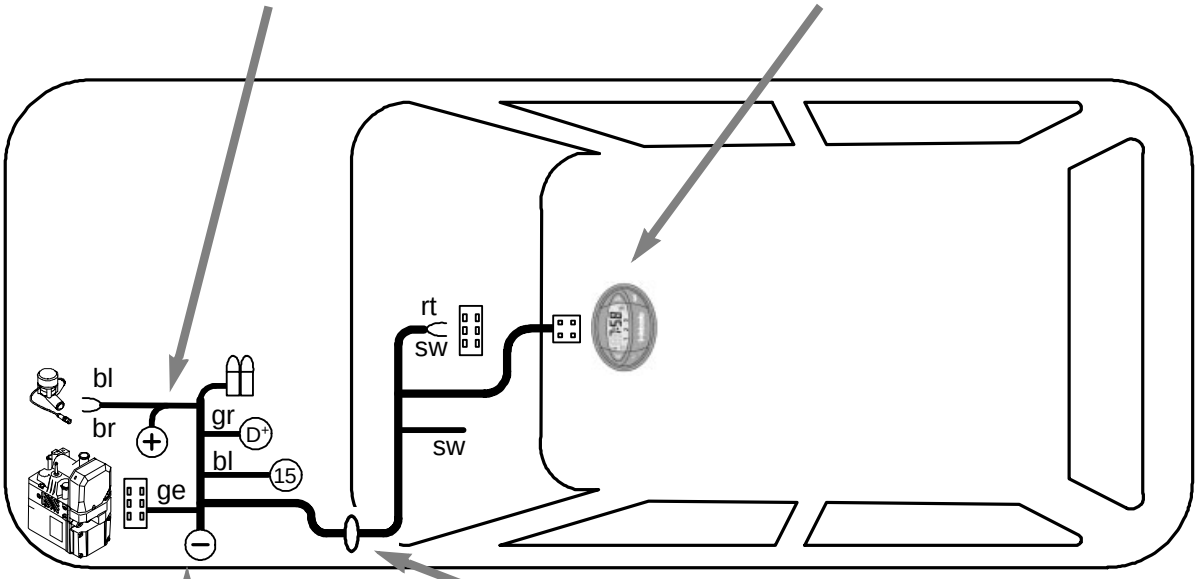
(**1**) Blower control wiring harness, digital timer wiring harness
(**2**) Positive cable to car's own positive post

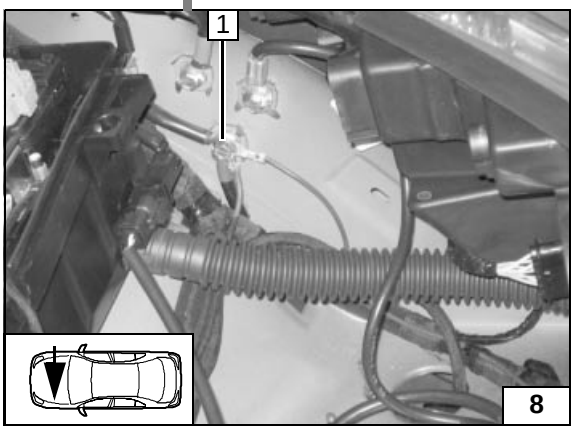


Timer

(**1**) Timer
(**2**) Centre console

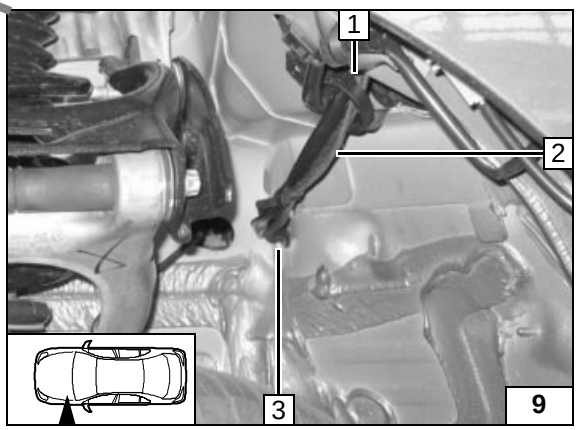






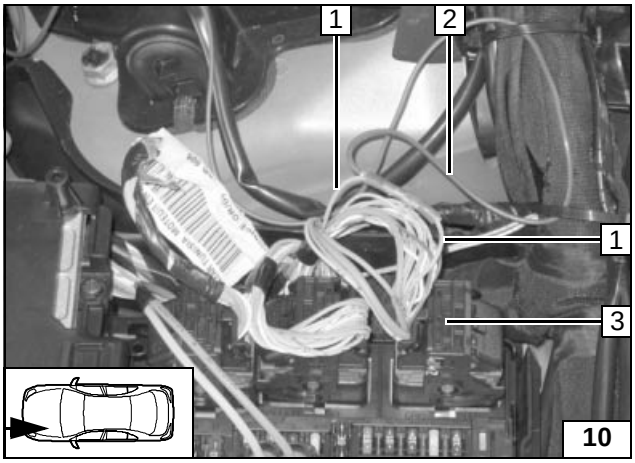
Earth integration

(**1**) Earth cable to car's own earth post



Wiring harness passage

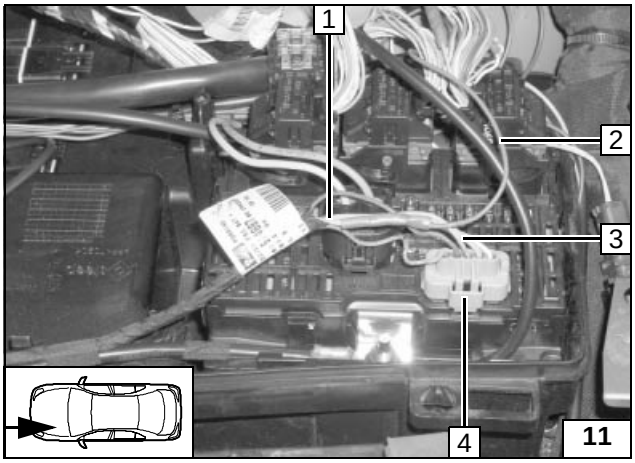
(**1**) Engine compartment cable passage
(**2**) Blower control wiring harness, digital timer wiring harness
(**3**) Interior rubber grommet



Route bl (blue) cable from K3.1/86 to the central electrical system and cut to length. Make the connections using the supplied blue butt-joint connector as shown in the circuit diagram.

(**1**) Cable bl (blue) (Code C77) [terminal 15]
(**2**) Cable bl (blue) from K3.1/86
(**3**) Central electrical system plug

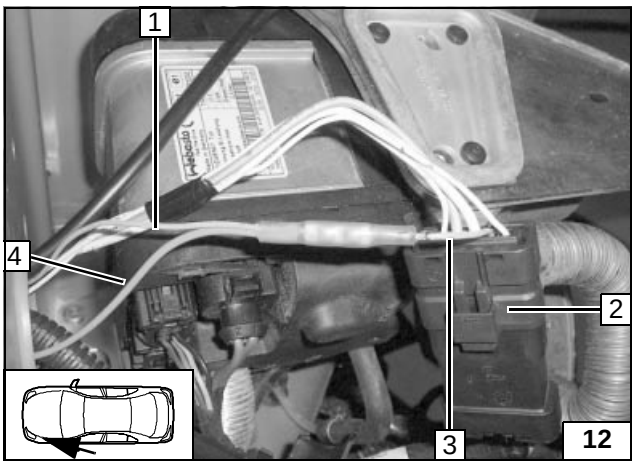
Integration of K3.1



Route the gr (grey) cable from K3.2/85 to the fuse and relay box and cut to length. Make the connections using the supplied blue butt-joint connector as shown in the circuit diagram.

(**1**) Cable ge (yellow) [D^+]
(**2**) Cable gr (grey) from K3.2/85
(**3**) Cable ge (yellow [D^+] from fuse and relay box plug
(**4**) Fuse and relay box plug

Integration of K3.2

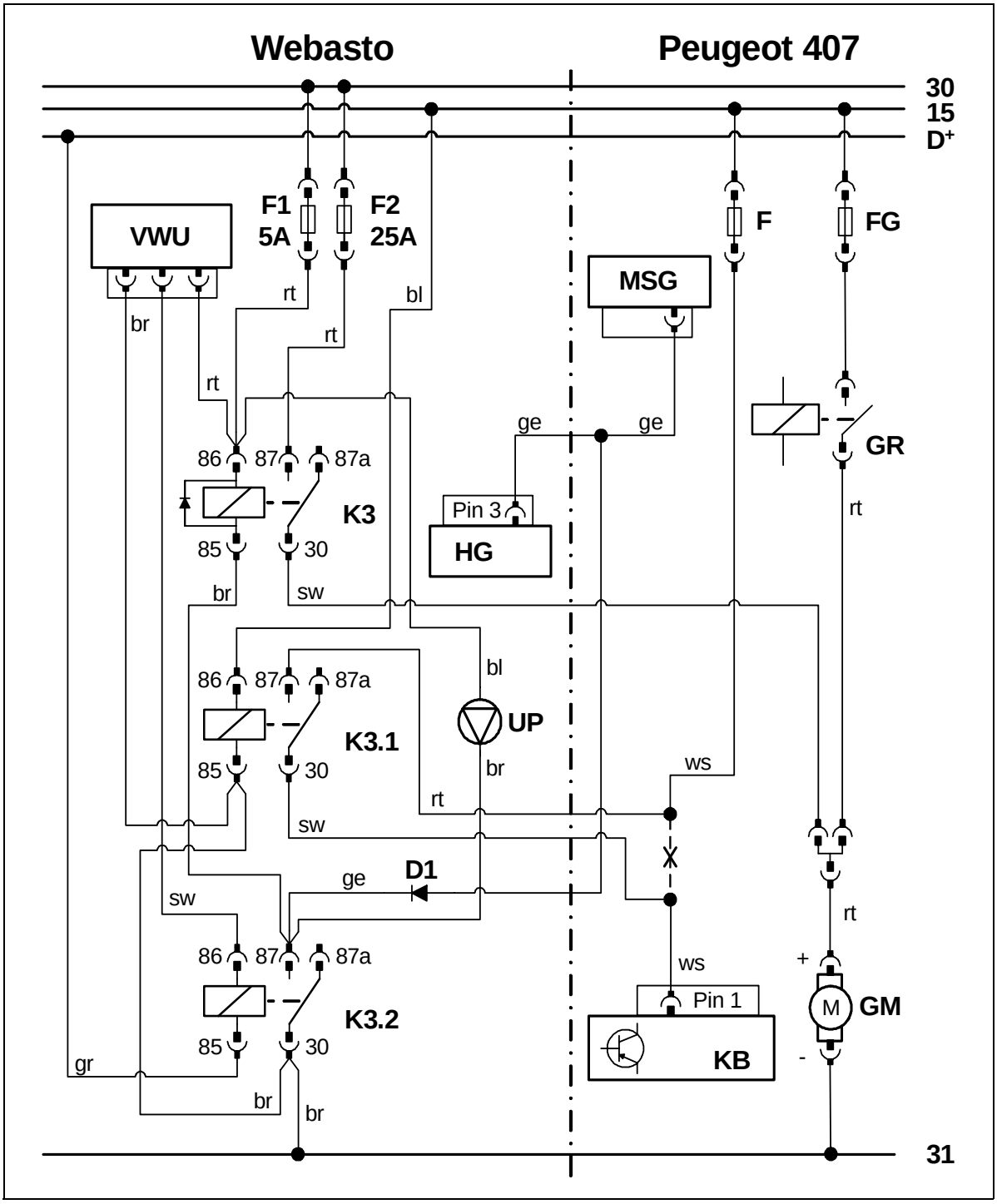


Integration to 6-pin plug from the heater, pin 3. Route cable ge (yellow) from K3/86 to the heater and cut it to length. Make the connections using blue butt-joint connectors as shown in the circuit diagram.

(**1**) Cable ge (yellow) to engine control module
(**2**) 6-pin plug from heater
(**3**) Cable ge (yellow) from heater plug pin 3
(**4**) Cable ge (yellow) from K3/86

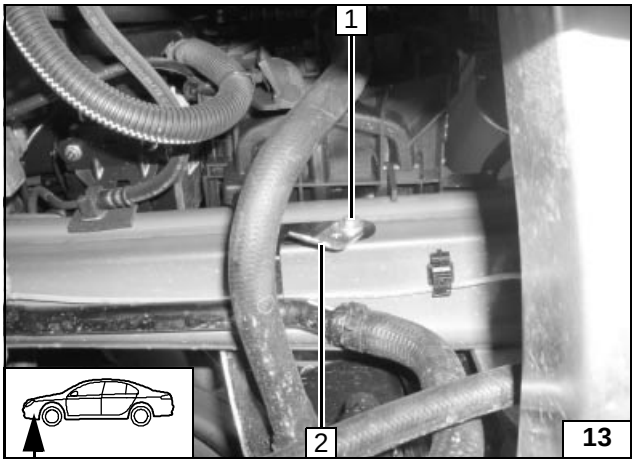
Heater activation

Upgrade circuit diagram



Webasto components		Peugeot components		Colours and symbols	
HG	Heater TT-V	GM	Blower motor	rt	red
F1	Fuse 5 A	GR	Blower relay	ws	white
F2	Fuse 20 A	MSG	Engine control module	sw	black
K3	Blower relay	KB	Air-conditioning control	br	brown
K3.1	Additional relay 1	F	Fuse	gr	grey
K3.2	Additional relay 2	FG	Fuse	bl	blue
D1	Diode 1A			ge	yellow
UP	Circulating pump				
VWU	Timer				
				X	Isolating point

Key



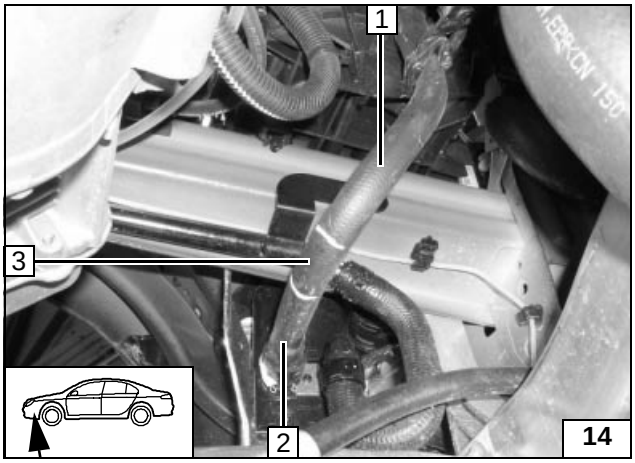
Circulating pump for version 1

The circulating pump may be installed in 2 versions depending on the equipment in the car. If the hose group shown in Figure 13 is fitted, proceed for version 1.

To install perforated strap 1

Cut the perforated strap 1 to length as per the template and bend it.

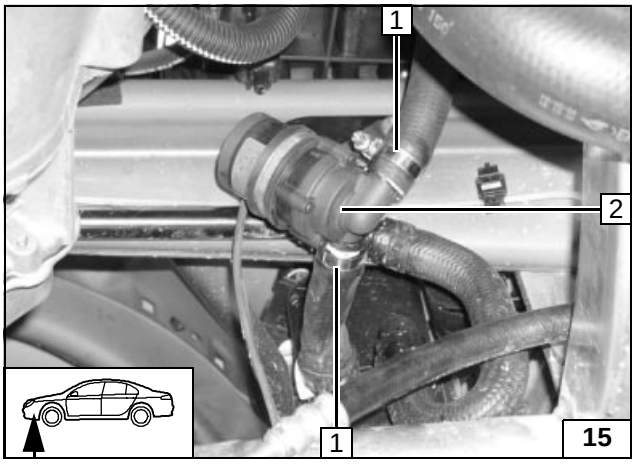
(**1**) Car's own screw
(**2**) Prepared perforated strap 1



Cut

Cut the hose from the engine output to the heater input at the markings.

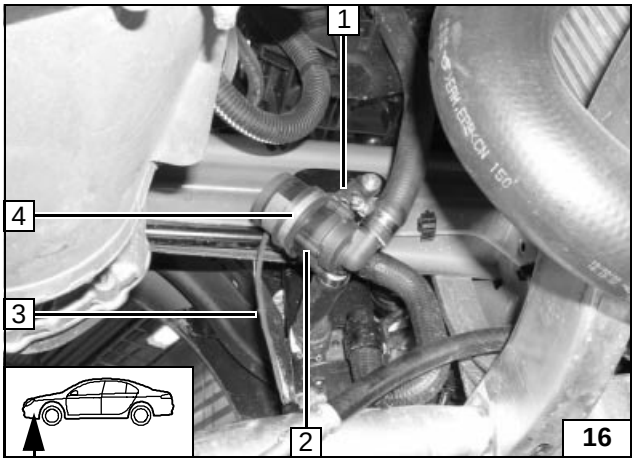
(**1**) Hose section from engine output
(**2**) Hose section to heater input
(**3**) Dispose of hose section



To install the circulation pump

Check flow direction (pressure side to heater).

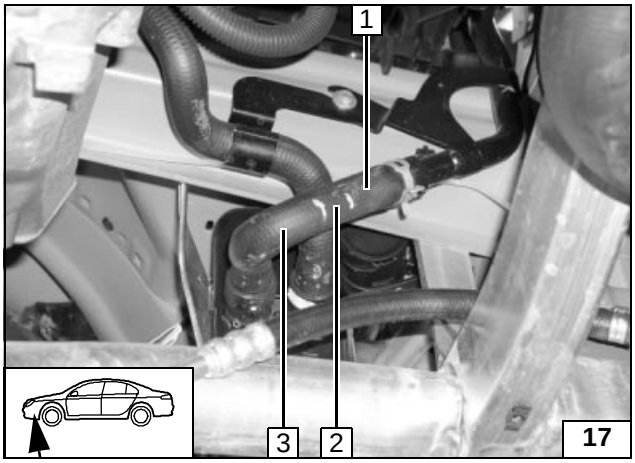
(**2**) Circulating pump
(**1**) Hose clip diameter 20-27 mm [2x]



To install the circulation pump

Route the circulating pump wiring harness upwards and connect it to the plug on the wiring harness.

(**2**) Circulating pump
(**1**Perforated strap 1
(**4**) Rubberised pipe clip, screw M6 x 20, collar nut M6
(**3**) Circulating pump wiring harness



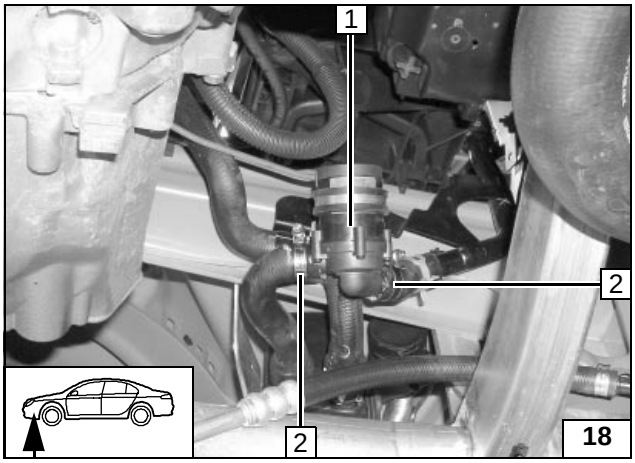
Circulating pump for version 2

The circulating pump may be installed in 2 versions depending on the equipment in the car. If the hose group shown in Figure 17 is fitted, proceed for version 2.

Cut the hose from the engine output to the heater input at the markings.

(**1**) Hose section from engine output
(**3**) Hose section to heater input
(**2**) Dispose of hose section

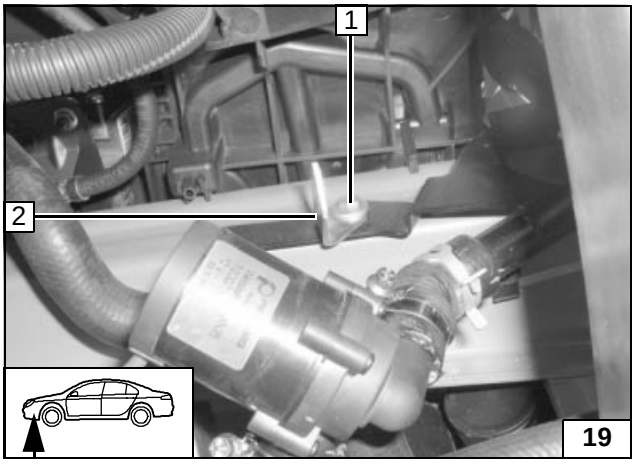
Cut



Check flow direction (pressure side to heater).

(**1**) Circulating pump
(**2**) Hose clip diameter 20-27 mm [2x]

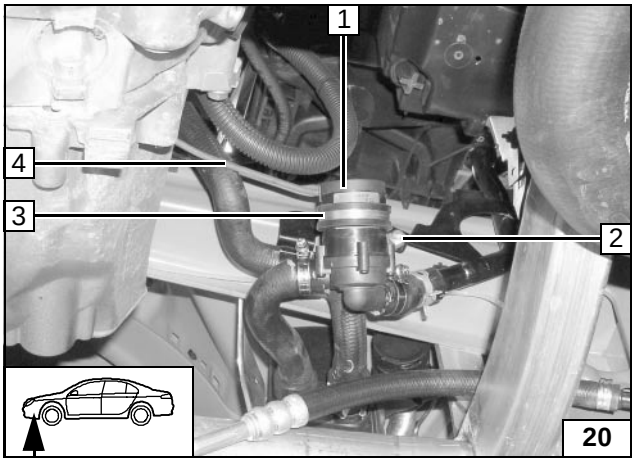
To install the circulation pump



Cut the perforated strap 2 to length as per the template and bend it.

(**1**) Car's own screw
(**2**) Prepared perforated strap 2

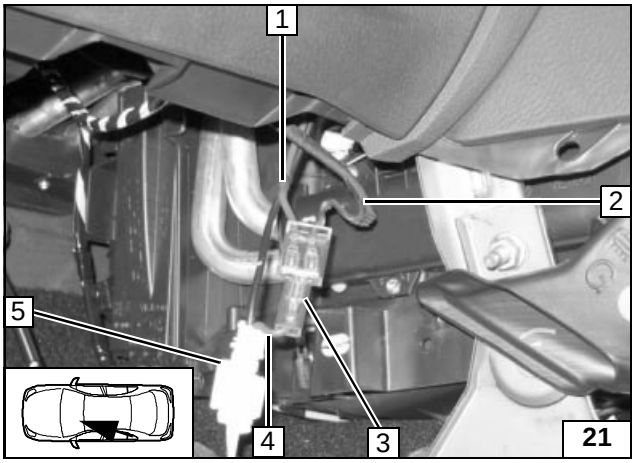
To install perforated strap 2



Route the circulating pump wiring harness upwards and connect it to the plug on the wiring harness.

(**1**) Circulating pump
(**2**) Car's own screw, perforated strap 2
(**3**) Rubberised pipe clip, screw M6 x 20, collar nut M6
(**4**) Circulating pump wiring harness

To install the circulation pump

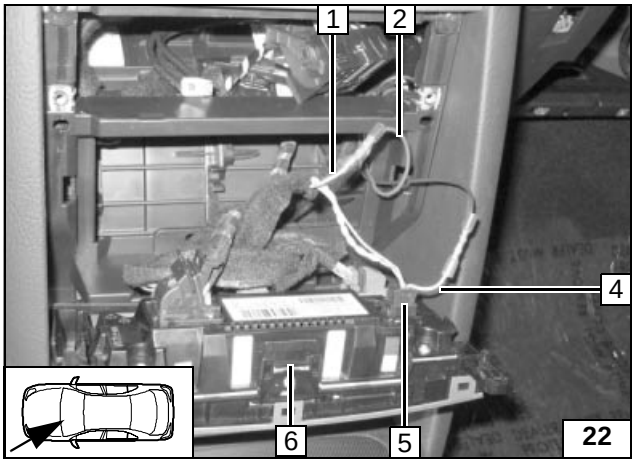


Automatic air-conditioning blower control

Connection to the 2-pin plug of the blower motor. Route the sw (black) cable from K3/30 to the blower motor and cut it to length. Make the connections using the supplied 3-way distributor as shown in the circuit diagram.

Blower motor activation

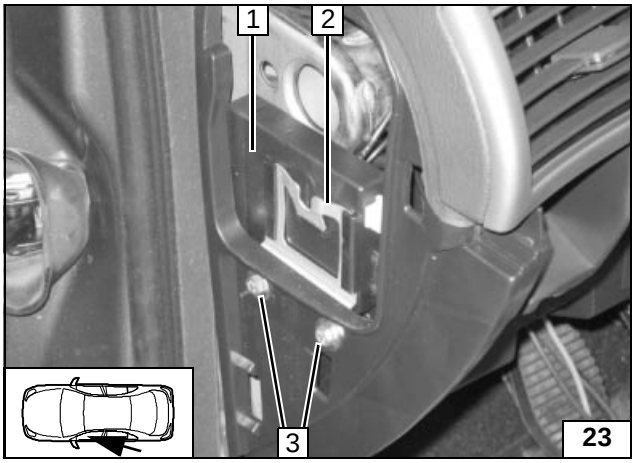
(**1**) Cable rt (red) from car's own fuse
(**2**) Cable sw (black) from K3/30
(**3**) 3-way distributor
(**4**) Cable rt (red) from 2-pin blower motor plug
(**5**) 2-pin blower motor plug



Connection to the 6-pin plug of the air-conditioning control pin 1. Route the cable to the connection site and cut it to length. Make the connections using the supplied red butt-joint connectors as shown in the circuit diagram.

Air-conditioning control activation

(**1**) Cable ws (white) (code XC2B)
(**2**) Cable rt (red) from K3.1/87
(**3**) Cable sw (black) from K3.1/30
(**4**) Cable ws (white) (code XC2B)
(**5**) 6-pin air-conditioning control plug
(**6**) Air-conditioning control

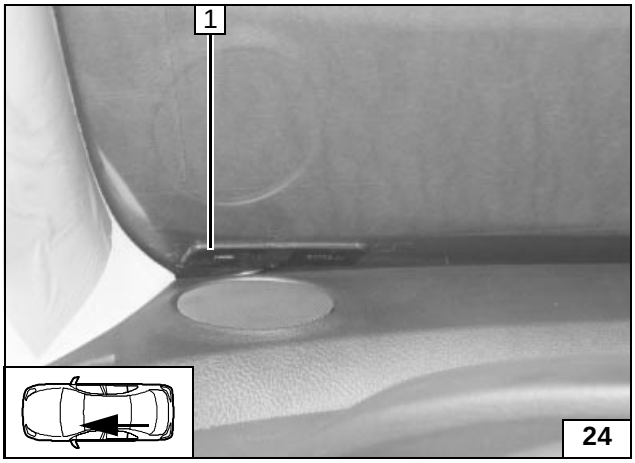


Telestart T80 option

The summer ventilation function is not possible.

(**1**) Receiver
(**2**) Holder
(**3**) 5.5 mm hole, screw M5 x 12, washer, collar nut M5 [2x each]

To install the receiver



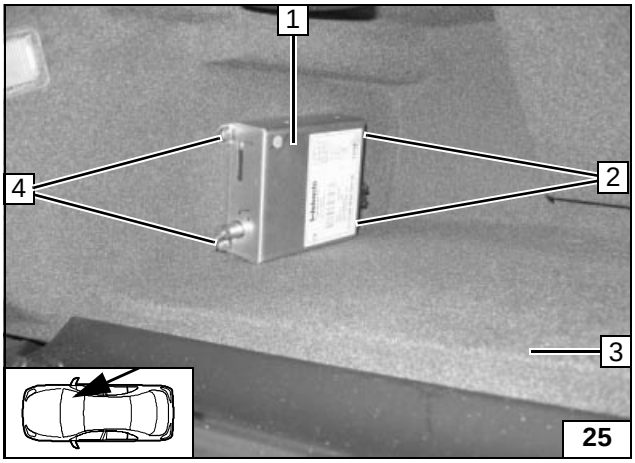
(**1**) Aerial

To install the aerial

Thermo-Call TC 1.1 option

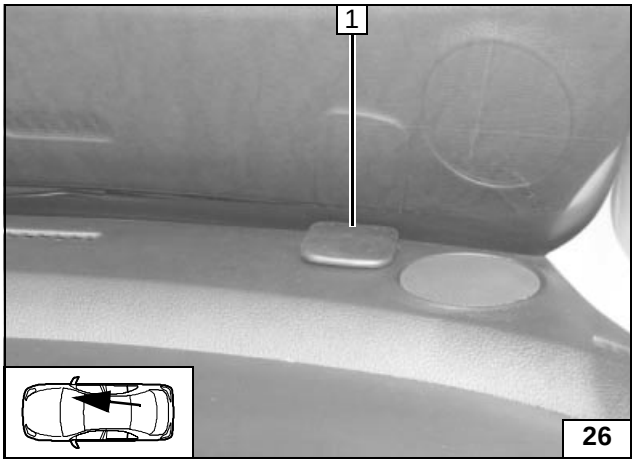
The summer ventilation function is not possible.

To install the receiver



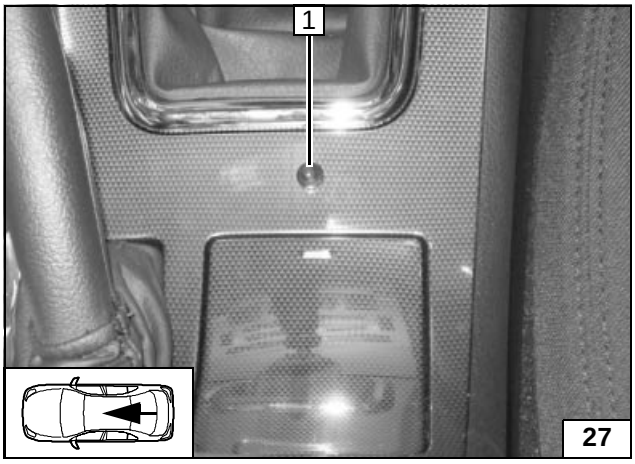
(**1**) Receiver
(**2**) Self-tapping screw 5.5 x 13 [2x]
(**3**) Glove compartment
(**4**) Self-tapping screw 5.5 x 13 [2x]

To install the aerial

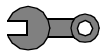


(**1**) Aerial

To install the button



(**1**) Button



IMPORTANT!
Install all the removed parts in reverse.

Check that all hose lines, hose clips and all electrical connections are secure.

Secure all loose lines and cables with cable ties.

Spray the heater components with anti-corrosive wax (Tectyl 100K, order No. 111 329).





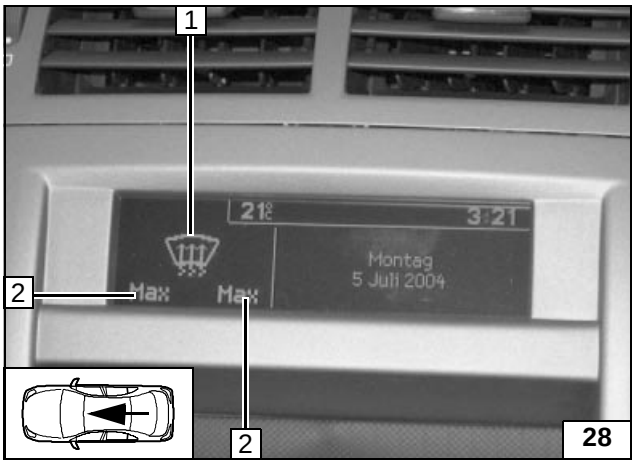
- Connect the battery
- Start the engine, bleed the water system as described in the vehicle manufacturer’s instructions, top up the coolant
- Set the digital timer
- If the vehicle has an automatic air-conditioning system set the heating system as set out in “Operating instructions for the end customer”
- Check the function of the auxiliary heating system, see owner’s manual / installation instructions

(Remove this page and insert it into the owner's manual for the vehicle.)

Operating instructions for the end customer

The summer ventilation function is not possible.

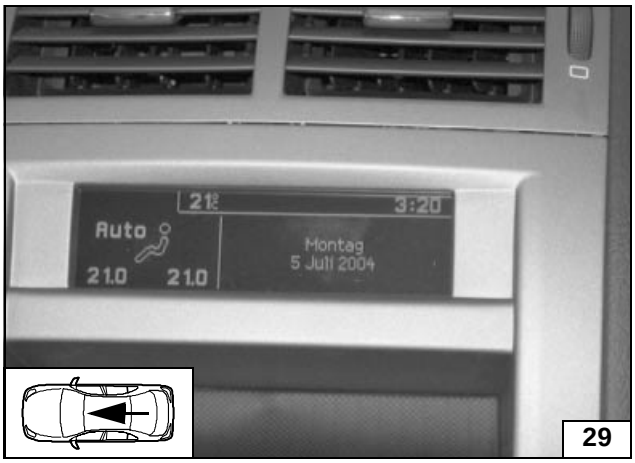
Make the following settings before you shut down the car:



After completing the adjustment it is essential that you wait for approx. 60 seconds before switching off the engine.

(**1**) Air vent to windscreen
(**2**) Temperature left and right to "max."

For cars with automatic air-conditioning system

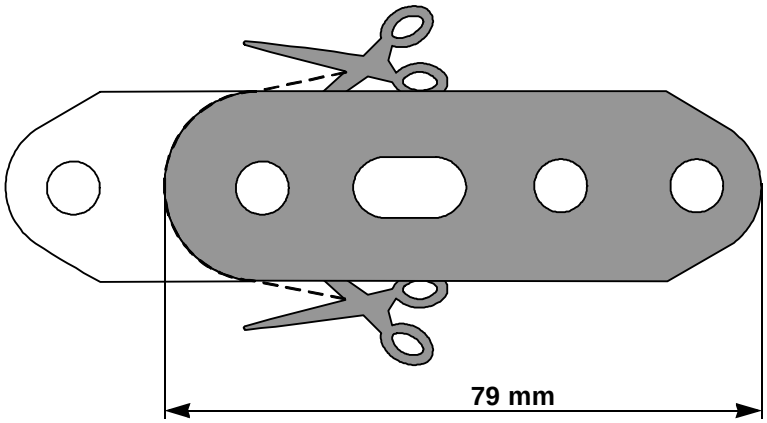


After you press the ignition switch the air-conditioning control will start in automatic mode.

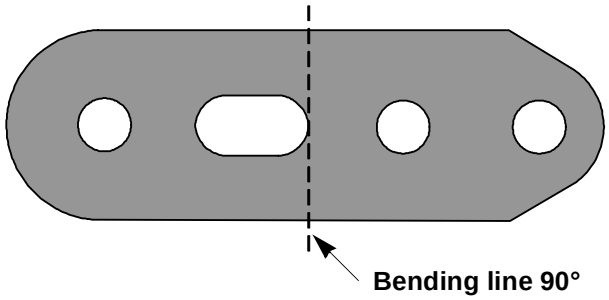
For cars with automatic air-conditioning system

Perforated strap 1 template

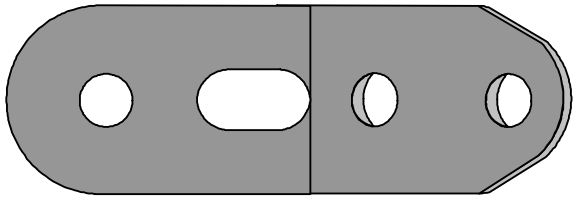
Cut to length



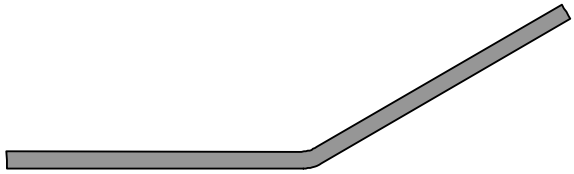
Mark bending line



Bend by approx. 30°



Plan view



Side view

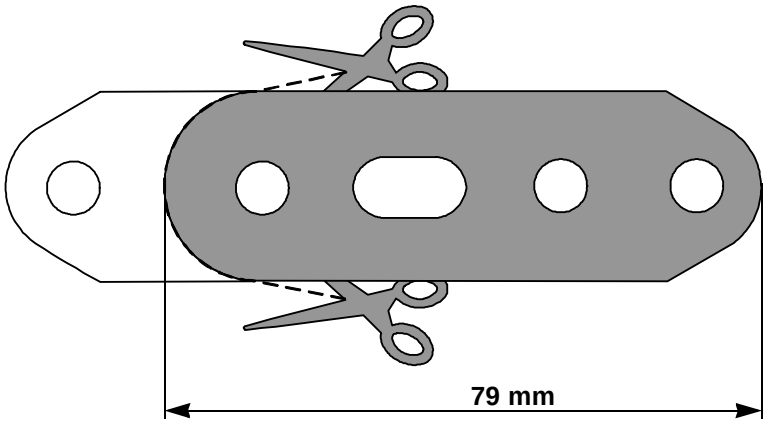
Scale 1:1

Compare the size of the hard copy with the dimension lines.
Maximum tolerance 2%.

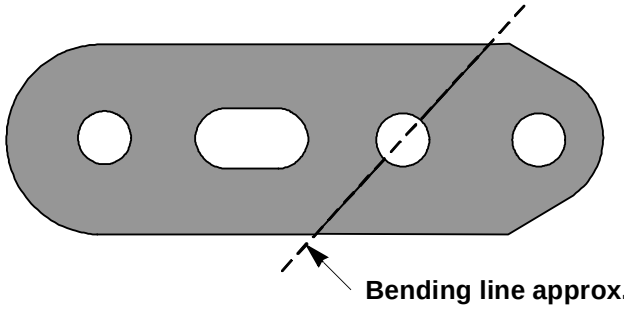
If the tolerance is larger than this correct the printer settings or request an original print.

Perforated strap 2 template

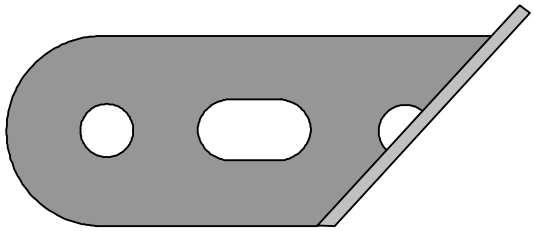
Cut to length



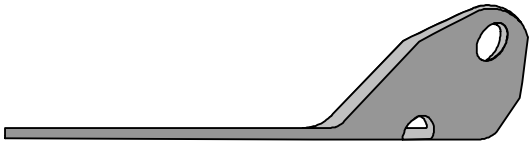
Mark bending line



Bend 90°



Plan view



Side view

100 mm

Scale 1:1

Compare the size of the hard copy with the dimension lines.
Maximum tolerance 2%.

If the tolerance is larger than this correct the printer settings or request an original print.

100 mm

0



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Printed in Germany 10/04 Printed by: Steffen