HYDRONIC

Installation Recommendations

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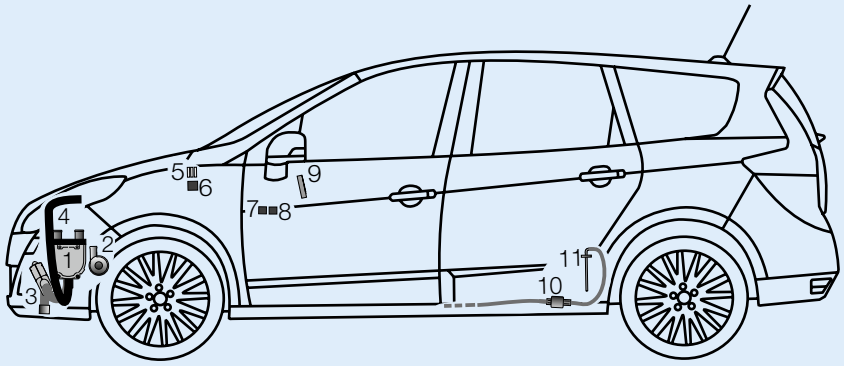
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New vehicle-specific installation kit + heater

HYDRONIC D4W S in Renault Scénic III (JZ)
HYDRONIC D4W S in Renault Grand Scénic III (JZ)

from 2009 model
with gearbox
with fog lamps
with manual AirCon or 2-zone automatic AirCon
• 1.5 l cubic capacity / 4 cylinder in-line engine / 78 kW - 106 HP (dCi 110 FAP)

This installation recommendation is valid for the vehicle described above and is exempt from any liability claims whatsoever.
Depending on the version or modification status of the vehicle, differences can result between the vehicle and this installation recommendation.
The installer must check this before installation and, if necessary, take into account the differences compared to this installation recommendation.



1	*HYDRONIC* D4W S	7	IPCU module
2	Water pump	8	Additional relay
3	Exhaust pipe with exhaust silencer	9	EasyStart T
4	Combustion air tube	10	Metering pump
5	Fuse holder	11	Fuel tank extractor
6	Fan relay		

Installation location
HYDRONIC D4W S is fastened to the inner side of the left chassis beam. The exhaust connection faces downwards and the control box to the right.

Parts needed for installation:
(1) Vehicle-specific installation kit
(2) Heater *HYDRONIC* D4W S
(3) EasyStart control unit as chosen

Installation time: approx. 8 h

Please note!

Please deliver the vehicle with an empty tank!

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1 Introduction

Important!
Safety instructions for installation and repair!

Improper installation or repair of Eberspächer heaters can cause a fire or result in poisonous exhaust fumes entering the vehicle interior.
This can pose a serious risk to life and limb.

The heater may only be installed according to the specifications in the technical documents and repaired using original spare parts by authorised and trained persons. Installation and repairs by unauthorised and untrained persons, repairs using non-original spare parts and without the technical documents required for installation and repair are dangerous and therefore are not permitted.

Please note!

Installation according to this installation recommendation may only be carried out in conjunction with the respective unit type-related technical description, installation instructions, operating instructions and maintenance instructions.
This document must be carefully read through before / during installation and followed throughout.
Particular attention is to be paid to the safety instructions and the general information.
The relevant rules of sound engineering practice and any information provided by the vehicle manufacturer are to be heeded during the installation.
Eberspächer does not accept any liability for defects and damage due to installation by unauthorised and untrained persons.

Accident prevention

General accident prevention regulations / health and safety regulations and the corresponding workshop, company and operating safety instructions are to be observed.

Installation recommendation validity

The installation recommendation is valid for the vehicle with the engine and gearbox options listed in the following.

Engine and gearbox options		
Cubic capacity	kW / HP	Gearbox
1.5 l dCi	78 / 106	6S

6S = 6-gear manual gearbox

Please note!

The installation recommendation is not valid for right-hand drive vehicles.

Vehicle types, engine types and feature options not listed in this installation recommendation have not been tested. Installation according to this installation recommendation can still be possible.

1 Introduction

Parts required for installation

Quantity/Designation	Order No.
(1) Vehicle-specific installation kit	
1 Vehicle-specific installation kit *	24 8457 00 00 00
(2) Heater	
1 *HYDRONIC* D4W S	25 2355 05 00 00
(3) EasyStart control unit as chosen	
1 EasyStart T	22 1000 32 88 00
or	
1 EasyStart R+ radio remote control	22 1000 32 80 00
or	
1 EasyStart R radio remote control	22 1000 32 85 00

In addition, to be ordered from Renault

1 Locking ring	Renault No. 77.01.207.449

**** Important:*** *The new vehicle-specific installation kit contains* ***all*** *parts needed for installation.*

Special tools required

- Torque wrench (5....50 Nm)
- Anti-corrosion agent
- Crimping tool
- Step drill
- Pliers for spring band clamps
- Blind rivet nut insertion tool
- Spanner for union nut of the tank fitting

Tightening torques

If no tightening torques are specified, tighten the screw connections (hexagon screw and hexagon nut) according to the following table.

Screwed connections	Tightening torques
M6	10 Nm
M8	20 Nm
M10	45 Nm

Preparation on the vehicle

- Remove battery and battery casing
- Remove rear seat
- Remove bottom instrument panel covering on the left
- Remove AirCon control as specified by the manufacturer
- Remove lower cowling
- Depressurise the cooling system
- Drain coolant into a clean container

2 Installation - Heater

Prepare the installation position
(see photo 1)

Make 3x 9 mm Ø holes on the inside of the left chassis beam according to the dimensions shown in the photo.

Pull three M6 blind rivet nuts into the 9 Ø mm holes.

Please note!

Deburr all finished holes and treat with anti-corrosion agent.

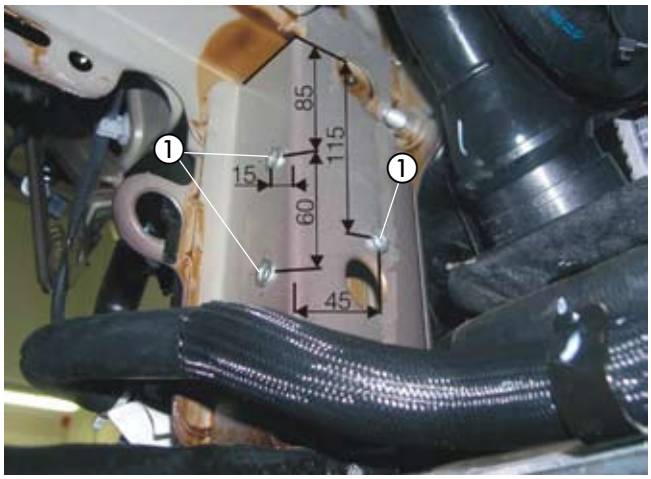


Photo 1

① 3x 9 mm Ø holes drilled and M6 blind rivet nuts inserted

Prepare and install unit holder
(see photos 2 to 4)

Prepare holder 93 02 according to the photo.

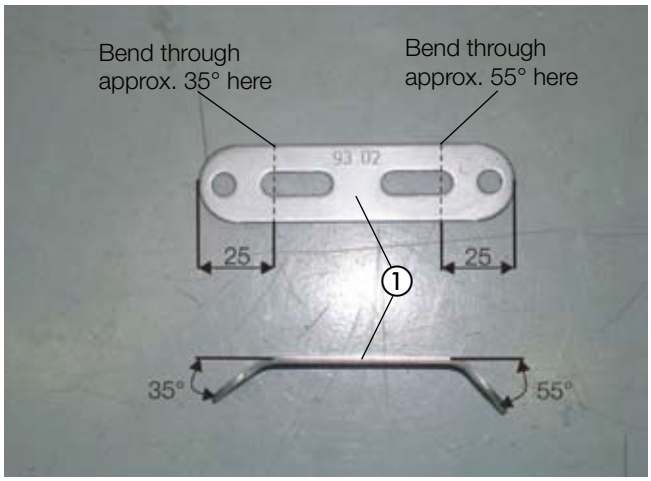


Photo 2

① Holder 93 02, prepared

Fit the prepared holder 93 02 to the unit holder with an M6 x 16 screw as shown in the photo.

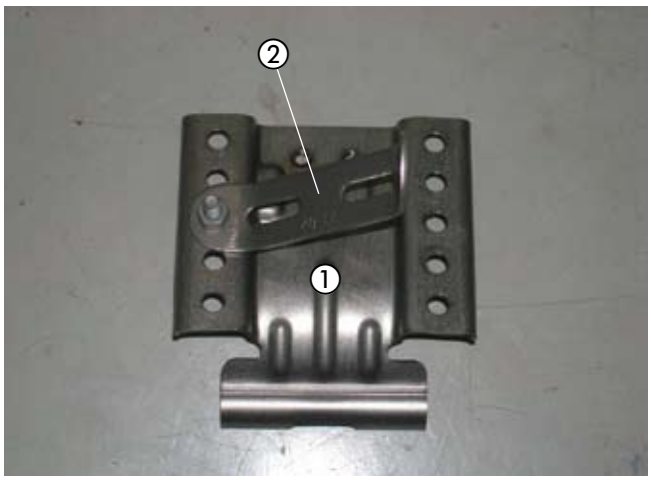


Photo 3

① Unit holder
② Holder 93 02, installed

2 Installation - Heater

Screw the unit holder to the ready mounted M6 blind rivet nuts using three M6 x 16 screws.

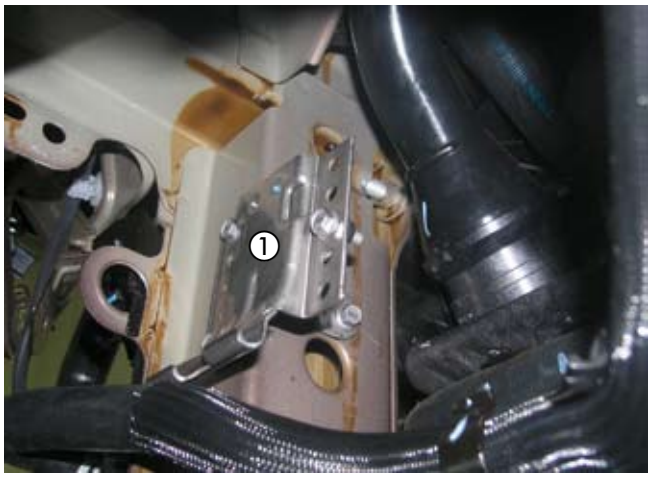


Photo 4

① Unit holder 22 1000 51 36 00, installed

Premount the heater
(see photos 5 to 8 and diagram 1)

Install the elbowed water pipe socket of the heater as shown in the photo, see Technical Description, "Installation" chapter, "Installation of the elbowed water pipe sockets" section.



Photo 5

① Elbowed water pipe sockets, installed

Insert the water pump in the rubber holder.

Mount the holder 93 02 to the rubber holder of the water pump using an M6 x 30 screw and a B6 body washer as shown in the photo.

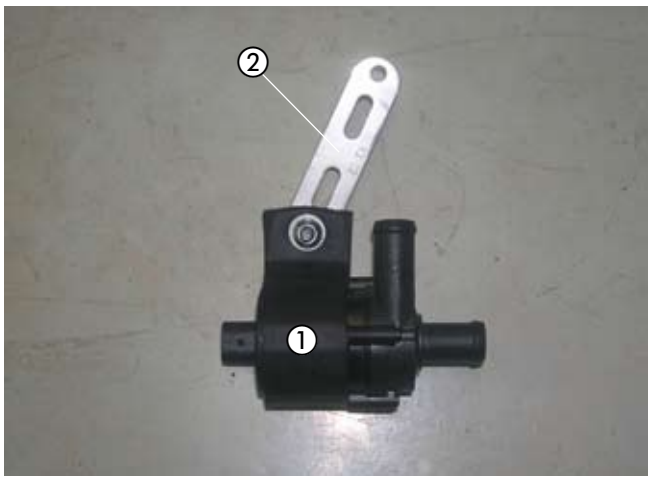


Photo 6

① Water pump with rubber holder
② Holder 93 02, mounted

2 Installation - Heater

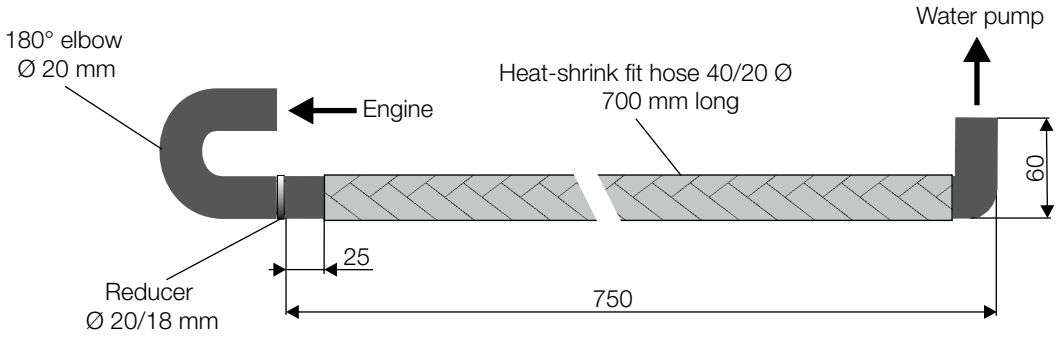
Prepare the water hoses
(see Sketch 1)

Cut the water hoses according to the dimensions in the sketch and prepare.

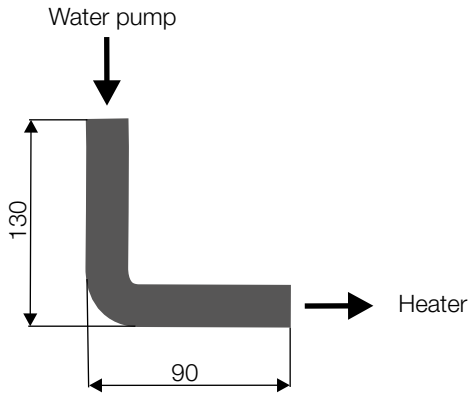
Please note!

The water hoses are connected to the water circuit "inline", refer to the Technical Description, "Installation" chapter, "Connection to the Cooling Water Circuit" section.

Water hose ①
from the engine to the water pump



Water hose ②
from the water pump to the heater



Water hose ③
from the heater to the heat exchanger

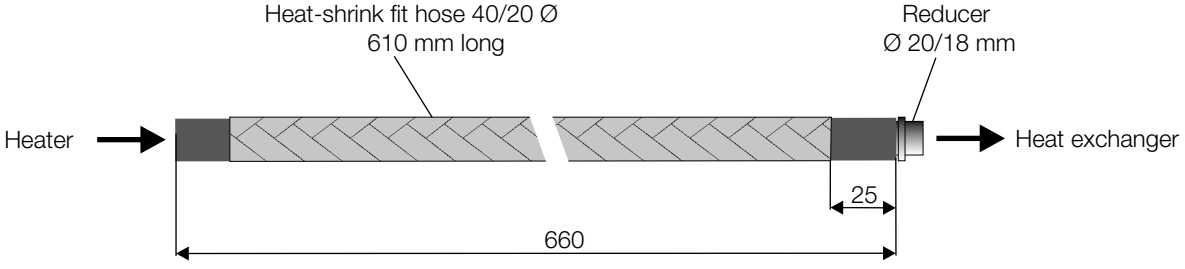


Diagram 1

2 Installation - Heater

Position the prepared water pump on the heater using the M6 x 95 screw as shown in the photo.

Connect the water hose ① to the intake connection of the water pump.

Connect the water hose ② to the heater's water inlet connection and to the discharge connection of the water pump.

Connect the water hose ③ to the heater's water outlet connection.

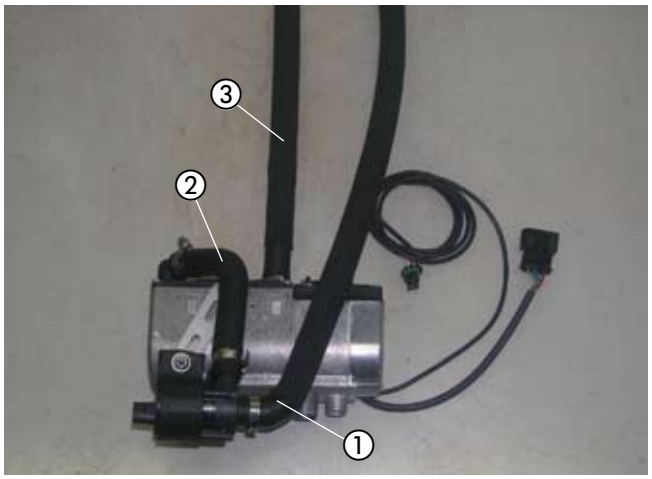


Photo 7

① Water hose ①
② Water hose ②
③ Water hose ③

Remove the duplicate nameplate from the heater.
Deface the inapplicable dates to make them illegible.
Attach the duplicate nameplate in a suitable, clearly visible position in the engine compartment.

Fasten the metering pump cable to the 4 x 1.25 mm Ø fuel pipe with insulating tape.
Connect the 4 x 1.25 Ø fuel pipe with the 3.5 x 3 mm Ø fuel hose, length 50 mm, to the fuel connection of the heater.

Using a 16-25 mm Ø hose clip, connect the combustion air pipe to the heater and shape as shown in the photo.

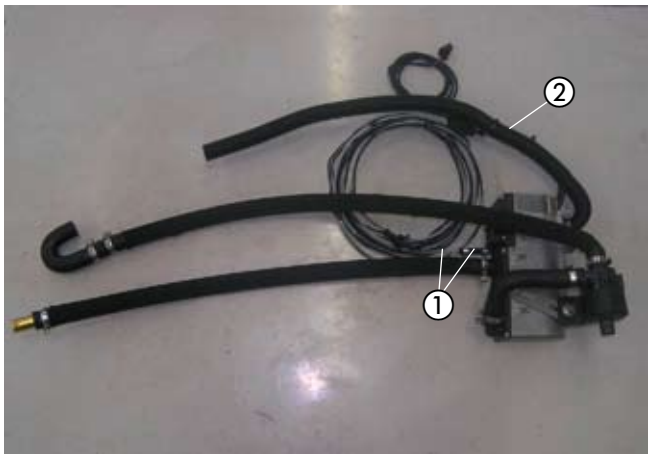


Photo 8

① Fuel pipe, 4 x 1.25 mm Ø, premounted to the heater
① Combustion air pipe, connected

Install heater
(see photo 9)

Insert the premounted heater in the unit holder and fix in the right threaded hole using the M6 x 95 screw with $6^{+0.5}$ Nm.

Take the combustion air pipe upward in the elbow and lay in the protected section of the front middle part.

Use cable ties to fix the combustion air pipe in suitable places.

Make a drain hole Ø 2 mm for condensation in the deepest point of the combustion air pipe laid.

Please note!

Lay the combustion air pipe so that only clean, dry combustion air is drawn in through the heater.

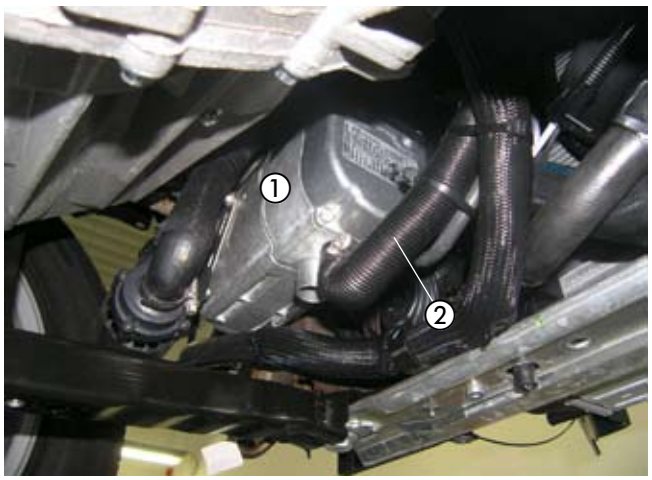
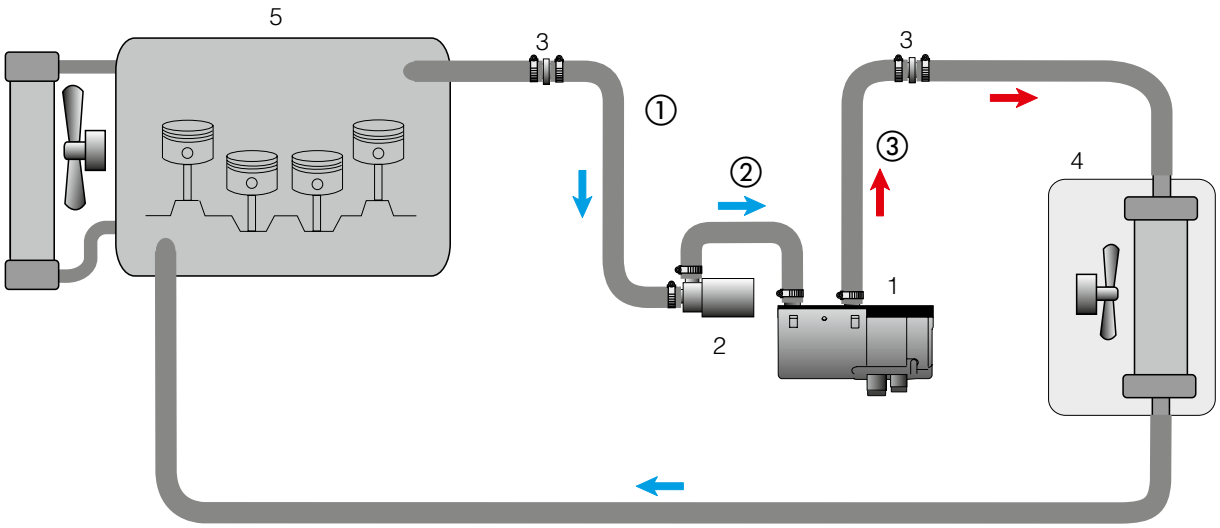


Photo 9

① Heater, installed
② Combustion air pipe, laid

3 Water circuit



1 - Heater
2 - Water pump
3 - Reducer Ø 20/18 mm
4 - Vehicle heat exchanger
5 - Engine
- Hose clip, Ø 20 – 32 mm

Diagram 2

Cut water flow hose
(see photo 10)

Disconnect the water flow hose from the engine to the heat exchanger (the right lower hose at the heat exchanger) at the engine connection.



Photo 10

① Water flow hose

3 Water circuit

Lay and connect water hoses
(see photos 11 to 12 and diagram 2)

Lay the water hoses ① and ③ to the disconnection point of the water flow hose.

Use cable ties to secure the water hoses ① and ③ to each other and to the the vehicle's radiator hose.

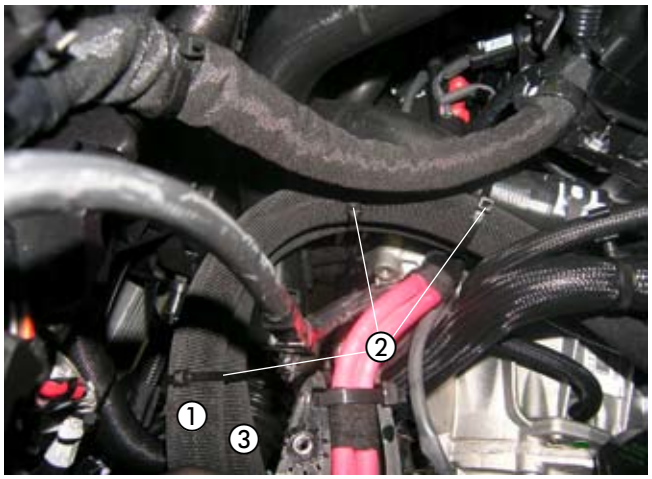


Photo 11

① Water hose ①
② Cable ties
③ Water hose ③

Connect the water hose ① to the engine connection using the 180° elbow.

Connect the water hose ③ with the 20/18 mm Ø reducer at the water flow hose to the heat exchanger.

Use two rotatable hose holders to secure the water hose ③ to the vehicle water hose.

When laying the water hoses, make sure there is sufficient spacing to the gearshift weight and to the gearshift cables.

Please note!

Secure all hose connections with hose clips.
Protect the water hoses against chafing and use cable ties to secure in suitable positions.



Photo 12

① Water hose ①
② Two rotatable hose holders
③ Water hose ③

Install exhaust silencer and connect
(see photos 13 to 16 and diagrams 3 and 4)

Prepare holder 93 02 according to the diagram.

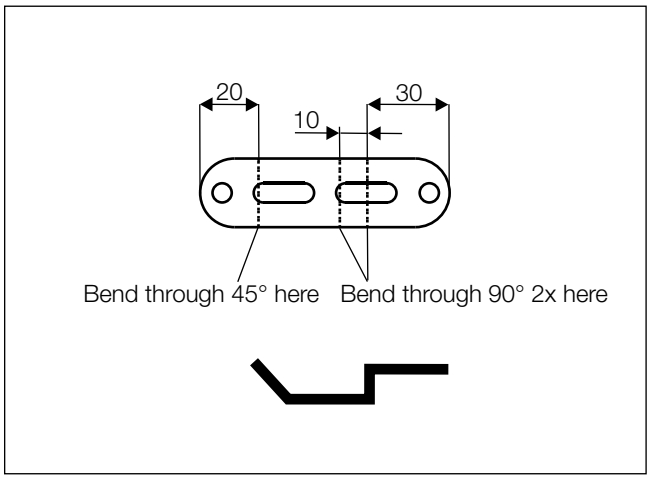


Diagram 3

Mount the prepared holder 93 02 to the exhaust silencer using an M6 x 16 screw and a body washer B6.

Cut the exhaust pipe to a length of 560 mm and push on a spacer rubber profile.

Shape the exhaust pipe as shown in the photo and connect to the exhaust silencer inlet connection with a pipe clamp.

Cut the exhaust pipe end to a length of 130 mm.

Shape the exhaust pipe end as shown in the photo and connect to the exhaust silencer outlet connection with a pipe clamp.

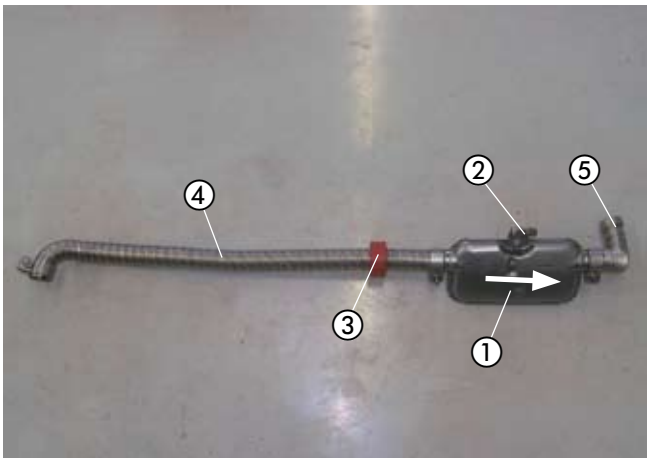


Photo 13

① Exhaust silencer 22 1000 40 09 00
② Holder 93 02, mounted
③ Spacer rubber profile
④ Exhaust pipe, connected
⑤ Exhaust end pipe, connected

Drill a 7 mm Ø hole in the middle section of the lower radiator crossbeam according to the dimensions shown in the photo.

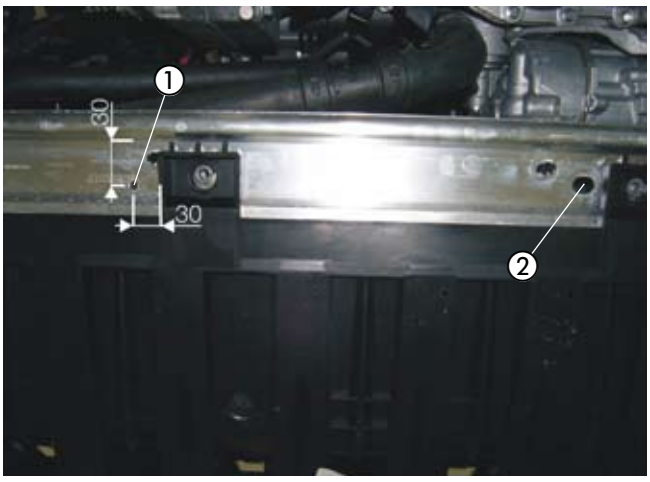


Photo 14

① 7 mm Ø hole, drilled
② Fastening point for the exhaust silencer

Please note!

Deburr all finished holes and treat with anti-corrosion agent.

Prepare holder 93 03 according to the diagram.

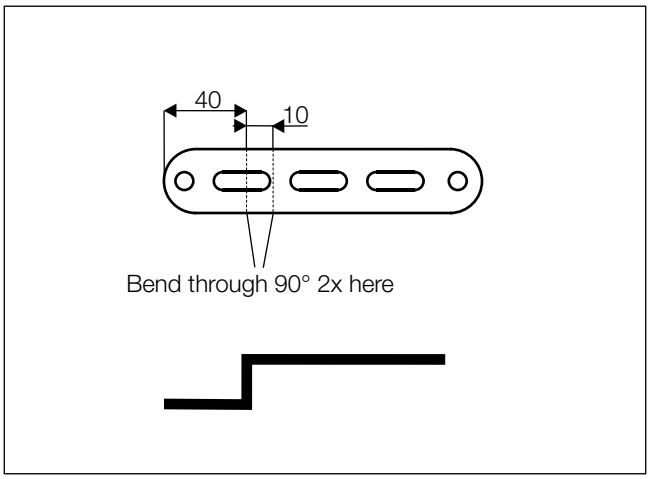


Diagram 4

Mount the prepared holder 93 03 to the 7 mm Ø hole drilled in the lower radiator crossbeam with an M6 x 16 screw.

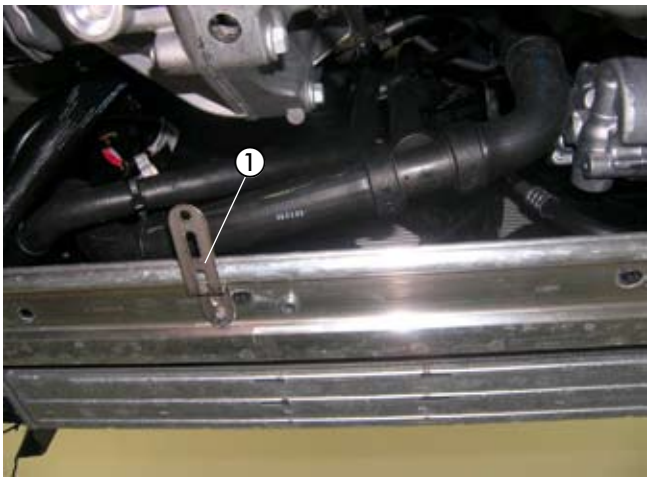


Photo 15

① Holder 93 03, mounted

Mount the premounted exhaust silencer to the hole in the lower radiator crossbeam with an M6 x 16 screw and a B6 body washer.

Use a pipe clamp to connect the exhaust pipe to the inlet connection of the exhaust silencer.

Push a 28 mm Ø pipe clamp onto the exhaust pipe and fasten to holder 93 03 with an M6 x 16 screw.

Position the spacer rubber profile on the lower radiator hose as shown in the photo.

The arrow on the exhaust silencer for the direction of flow points to the right.

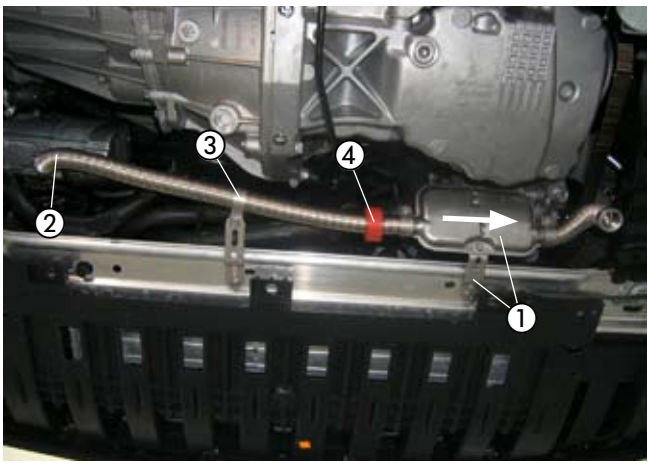


Photo 16

① Exhaust silencer, installed
② Exhaust pipe connected to heater
③ Pipe clamp 28 mm Ø fastened to holder 93 03
④ Spacer rubber profile, positioned

Please note!

When laying the exhaust pipes, ensure they are at a sufficient distance from adjacent body components.

Install fuel tank extractor
(see photos 17 to 19 and diagram 5)

Prepare the riser pipe of the fuel tank extractor as shown in the diagram.
Cut off the lower end of the fuel tank extractor at an angle of 45°.

Loosen the plug-in connection and the fuel lines at the tank connection.
Remove the tank fitting by loosening the union nut.

Please note!

The tank fitting should not be removed for longer than 10 minutes because of expansion of the tank!
When drilling, ensure that no dirt gets into the the tank or supply lines.

Make an 8 mm Ø hole in the top part of the tank fitting with the dimensions shown in the photo.
Take the fuel tank extractor from above through the prepared hole in the tank fitting and screw tight with the M8 nut from below, aligning as shown in the photo.

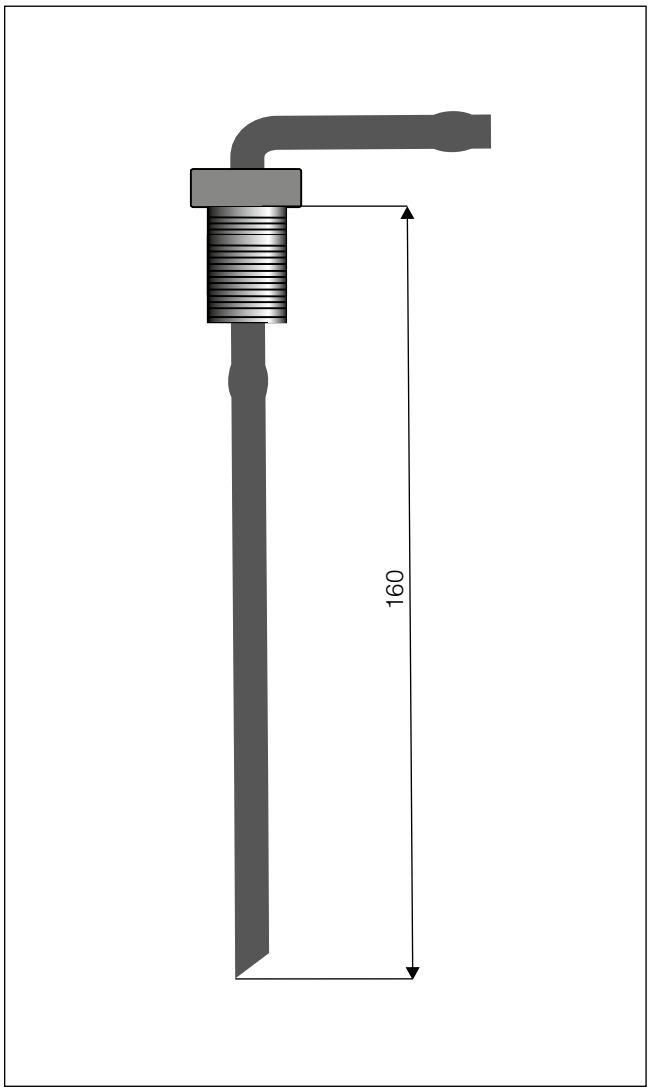


Diagram 5

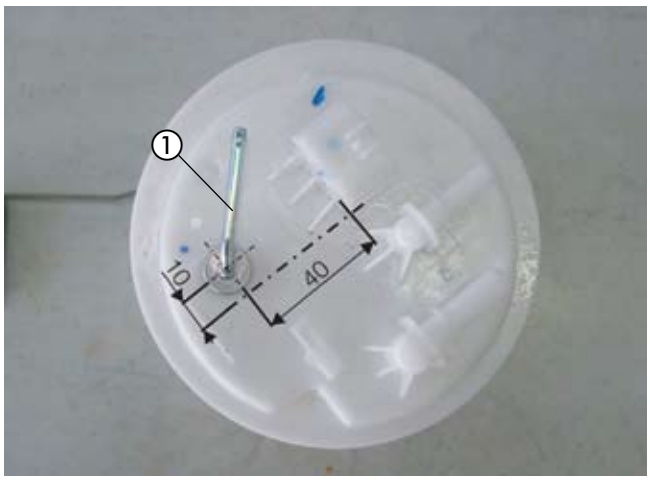


Photo 17

① Fuel tank extractor, installed

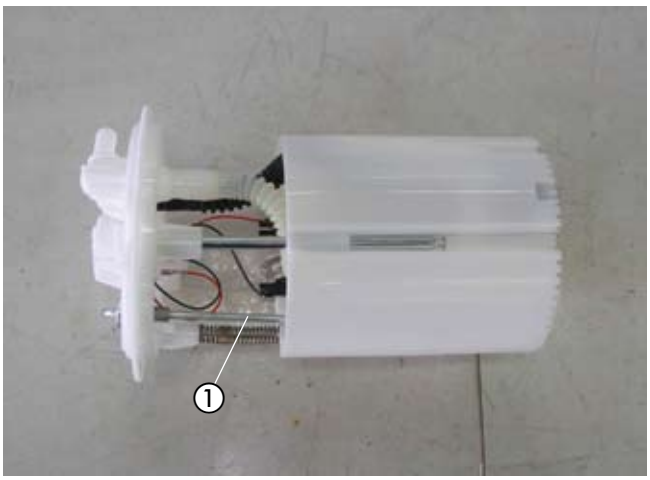


Photo 18

① Fuel tank extractor, installed

5 Fuel supply

Insert the tank fitting with a new seal and fasten with the locking ring; ensure the seal fits properly.

At the intake connection of the fuel tank extractor, connect the 4 x 1 mm Ø fuel pipe with a 3.5 x 3 mm Ø fuel hose, 50 mm long.

Take the 4 x 1 mm Ø fuel pipe to the installation position of the metering pump next to the tank on the right.

Connect the plug-in connection and the fuel line to the upper part of the tank fitting.

Please note!

Secure all connection points with 9 mm Ø clips.

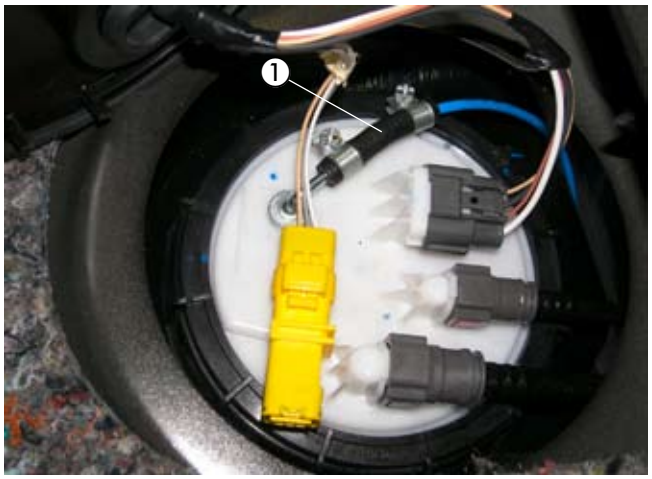


Photo 19

① Fuel tank extractor, connected

Install and connect the metering pump
(see photos 20 and 21)

Insert the metering pump in the rubber holder and fit the holder (90° bracket) 20 1348 03 00 02 using the M6 x 20 screw and a B6 body washer.
Fasten the premounted metering pump to the free hole in the right rear axle holder next to the tank as shown in the photo, using an M6 x 16 screw and a B6 body washer.
Ensure it is installed with at least 15° rising gradient on the discharge side.
The discharge connection of the metering pump points towards the front.
Cut the fuel pipe 4 x 1 mm Ø to the correct length coming from the fuel tank extractor to the metering pump and connect to the fuel hose 3.5 x 3 mm Ø, length 50 mm at the intake connection of the metering pump.
Remove the mating connector of the metering pump connection at the main cable harness.
Remove the dummy plugs from the mating connector.
Plug the connector of the supplied metering pump cable into the metering pump connection of the main cable harness.

Lay the 4 x 1.25 mm Ø fuel pipe from the heater together with the metering pump cable along the vehicle's brake line to the left vehicle underbody to the metering pump and slot in the holders on the vehicle underbody.
Cut the 4 x 1.25 mm Ø fuel pipe to size and connect with 3.5 x 3 mm Ø fuel hose, length 50 mm, to the discharge connection of the metering pump.
Slot the plug-in contacts of the metering pump cable into the mating connector without noting the polarity and connect the mating connector to the metering pump.

Please note!

Use a sharp knife to cut the fuel pipe to length.
Secure all hose connections with hose clips.
When laying fuel lines, always ensure they are at an adequate distance from hot vehicle and heater parts.

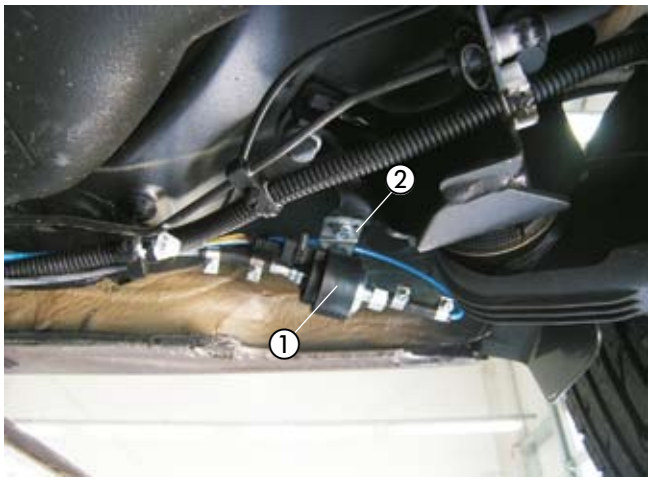


Photo 20

① Metering pump with rubber holder, installed
② Holder (90° bracket) 20 1348 03 00 02

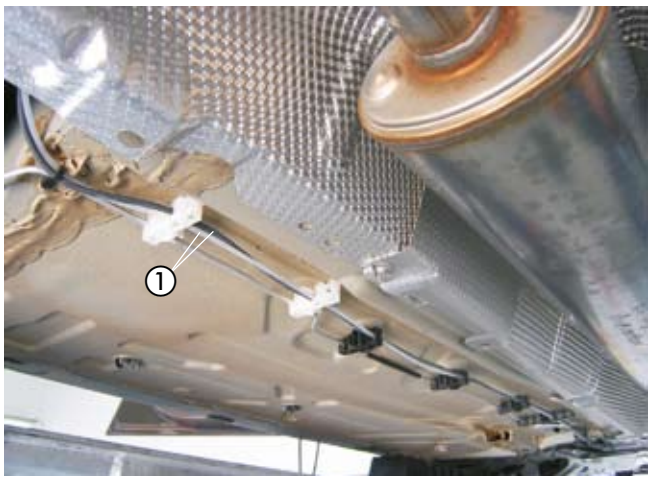


Photo 21

① Fuel pipe, 4 x 1.25 mm Ø, and cable loom, laid

Install fuses and fan relay
(see photo 22 and diagram 6)

Fasten the fuse holder with two M4 x 16 screws and the relay block of relay 2.5.7 with an M5 x 10 screw to the holder for the fuse and relay block.

Mount the holder for the fuse and relay block to the existing stud bolt M6 on the left side of the engine partition using an M6 nut.

Connect the 8 pin connector of the main cable harness with the 8 pin flat connector housing of the heater's cable loom.

Insert the 4 mm² rt/ws cable from the relay block of relay 2.5.7 into the still free slot of the fuse block.

Insert the 0.5 mm² br cable of the main cable harness in slot 85 of the relay block.

Lay the 1 mm² sw/rt cable from the prefabricated IPCU block from the interior through the existing cable grommet into the engine compartment as shown in photo 23.

Disconnect the bushing connector from the 0.5 mm² sw/rt cable of the main cable harness.

Fit the 1 mm² sw/rt cables from the prefabricated IPCU and additional relay block and the 0.5 mm² sw/rt cable from the main cable harness together in a new bushing connector and insert in slot 86 of the relay block.

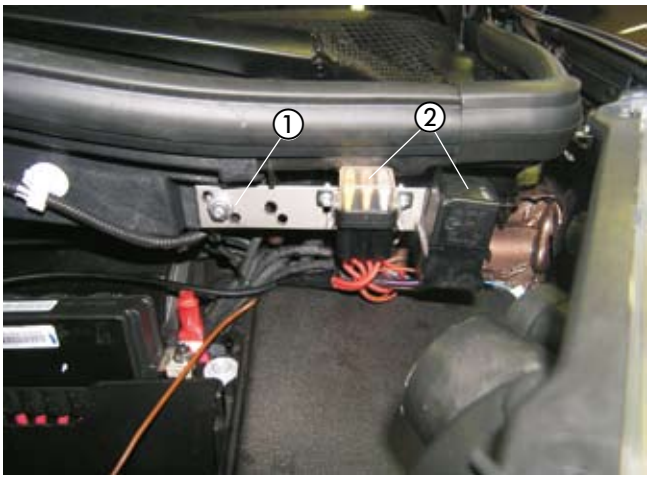


Photo 22

① Holder for fuse and relay block, installed
② Fuses and fan relay, installed

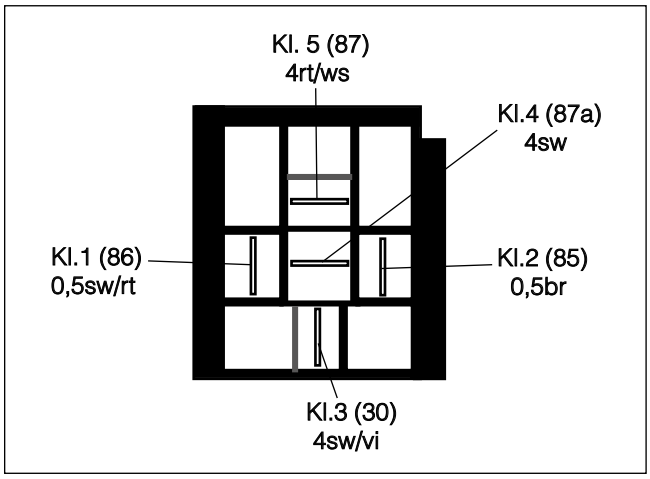


Diagram 6

View of the relay base from the cable inlet side

Cable laying
(see photo 23)

Lay the "control unit" and "fan control" cable loom through the existing cable grommet on the left side of the engine partition into the interior.

Please note!

When laying the cable looms, ensure they are at an adequate distance from hot vehicle and heater parts.
Use cable ties to fix the cable looms in suitable places.



Photo 23

① Existing cable grommet

Fan control
(see photos 24 to 29 and diagram 7)

Drill a 5.5 mm Ø hole in the instrument panel support on the left side of the vehicle, as shown in the photo.

Fit the prefabricated IPCU and additional relay block to the 5.5 mm Ø hole with an M5 x 10 screw.

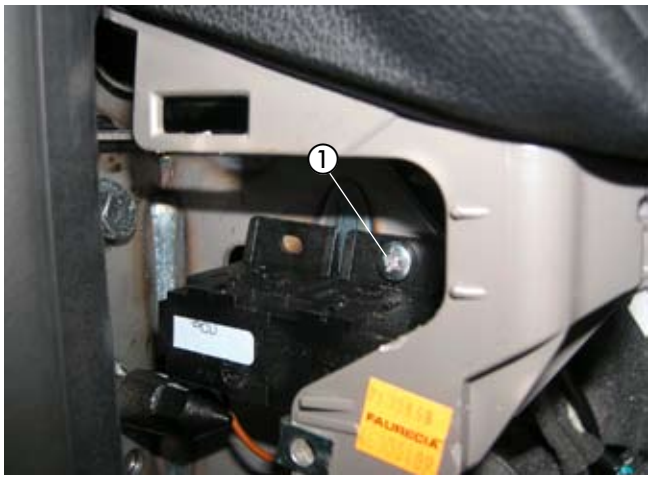


Photo 24

① Prefabricated IPCU and additional relay block, installed

Insert the additional relay and the IPCU in the corresponding block.

Fasten the 1 mm² br cable from the additional relay block to the left lower screwed connection of the instrument panel support.

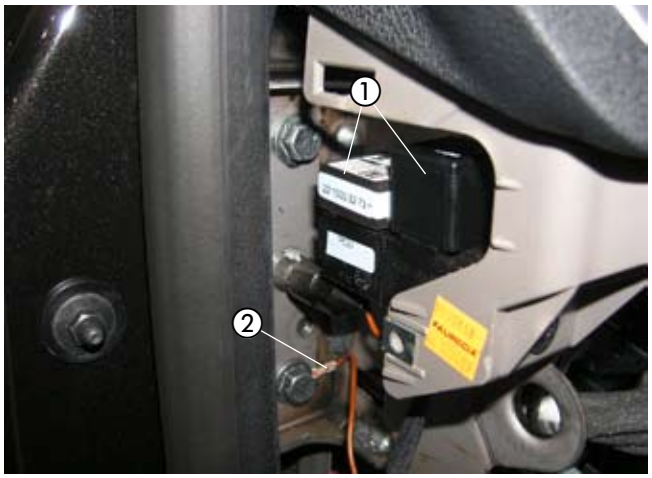


Photo 25

① IPCU module and additional relay, installed
② Cable 1 mm² br connected

At the 4-pin black plug at the brake light switch, disconnect the 0.5 mm² ge PIN 2 cable and integrate the 1 mm² rt/ws cable from the additional relay block with a 0.5 - 1.5 mm² butt-type connector.

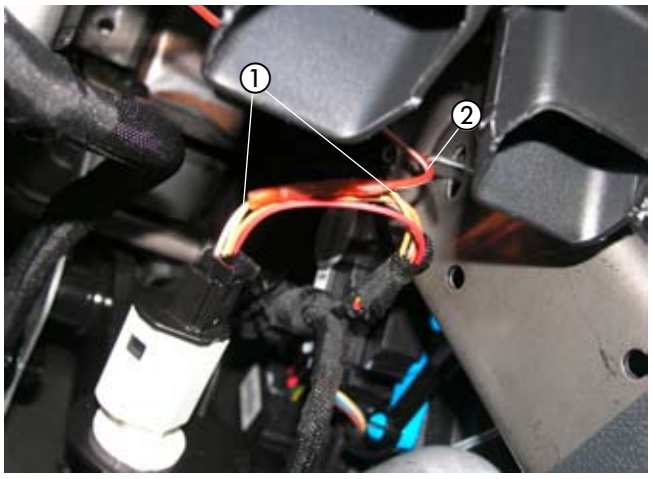


Photo 26

① 0.5 mm² ge cable, disconnected
② Cable 1 mm² rt/ws, integrated

Lay the "Fan control" cable loom to the relay and fuse box in the driver's footwell.

Disconnect the 4 mm² rt cable at the outlet of the F40/40A fuse and integrate the 4 mm² sw and 4 mm² sw/vi cables with two 4 - 6 mm² butt-type connectors as shown in the circuit diagram.

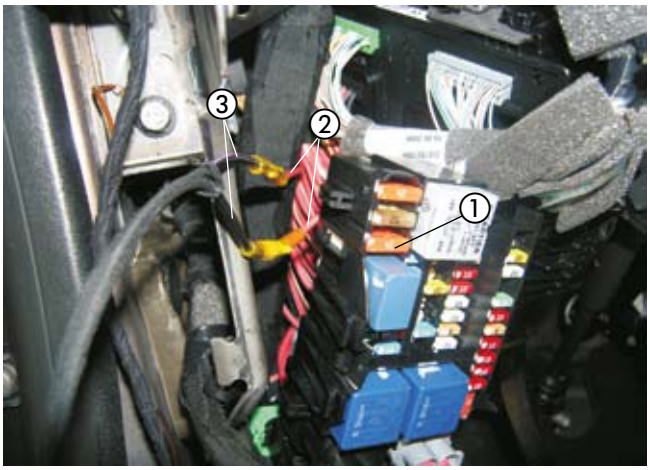


Photo 27

① Fuse F40/40A
② 4 mm² rt cable, disconnected
③ 4 mm² sw and 4 mm² sw/vi cables, integrated

in vehicles with manual AirCon

Remove the manual AirCon control as specified by the manufacturer.

At the 6-pin black plug of the manual AirCon control, disconnect the cable in chamber 5 and integrate the 1 mm² sw/ws cable from the additional relay block with an 0.5 - 1.5 mm² butt-type connector.

Please note!

Make sure that the battery is disconnected before disconnecting the cable at the manual AirCon control.

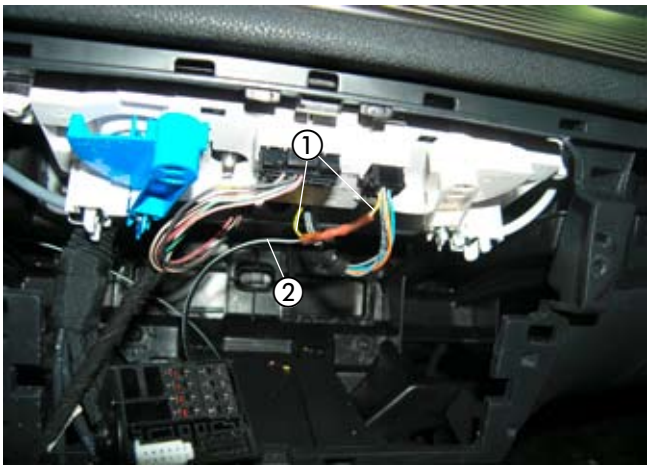


Photo 28

① Cable in chamber 5, disconnected
② Cable 1 mm² sw/ws, integrated

in vehicles with automatic 2-zone AirCon

Remove the automatic AirCon control as specified by the manufacturer.

At the 40-pin grey plug of the automatic AirCon control, disconnect the cable in chamber 19 and integrate the 1 mm² sw/ws cable from the additional relay block with an 0.5 - 1.5 mm² butt-type connector.

Please note!

Make sure that the battery is disconnected before disconnecting the cable at the 2-zone automatic AirCon control.

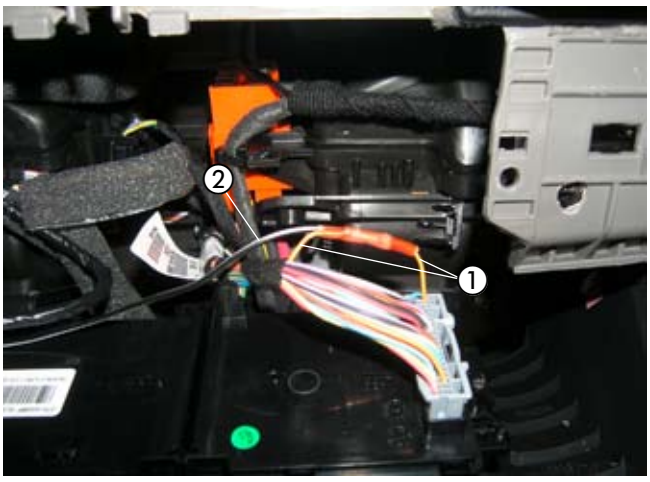


Photo 29

① Cable in chamber 19, disconnected
② Cable 1 mm² sw/ws, integrated

Power supply
(see photo 30)

Take the 4 mm² rt plus cable to the positive terminal post of the battery and connect it there with the A6 cable lug.

Take the 2.5 mm² br earth cable to the negative terminal post of the battery and connect it there with the A6 cable lug.

Please note!

When laying the cable looms, ensure they are at an adequate distance from hot vehicle and heater parts.
Use cable ties to fix the cable looms in suitable places.

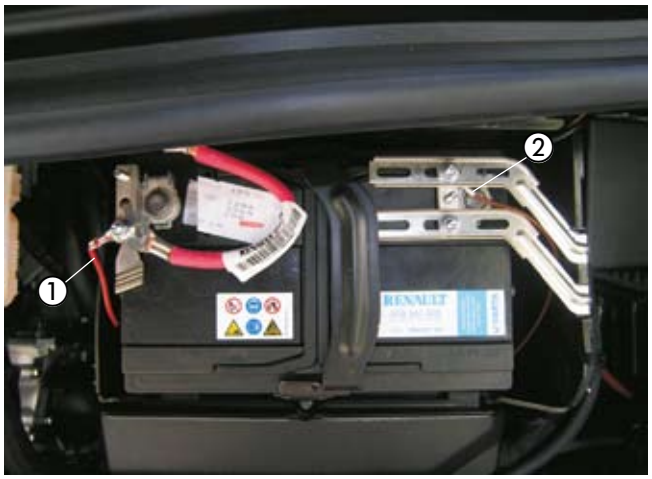
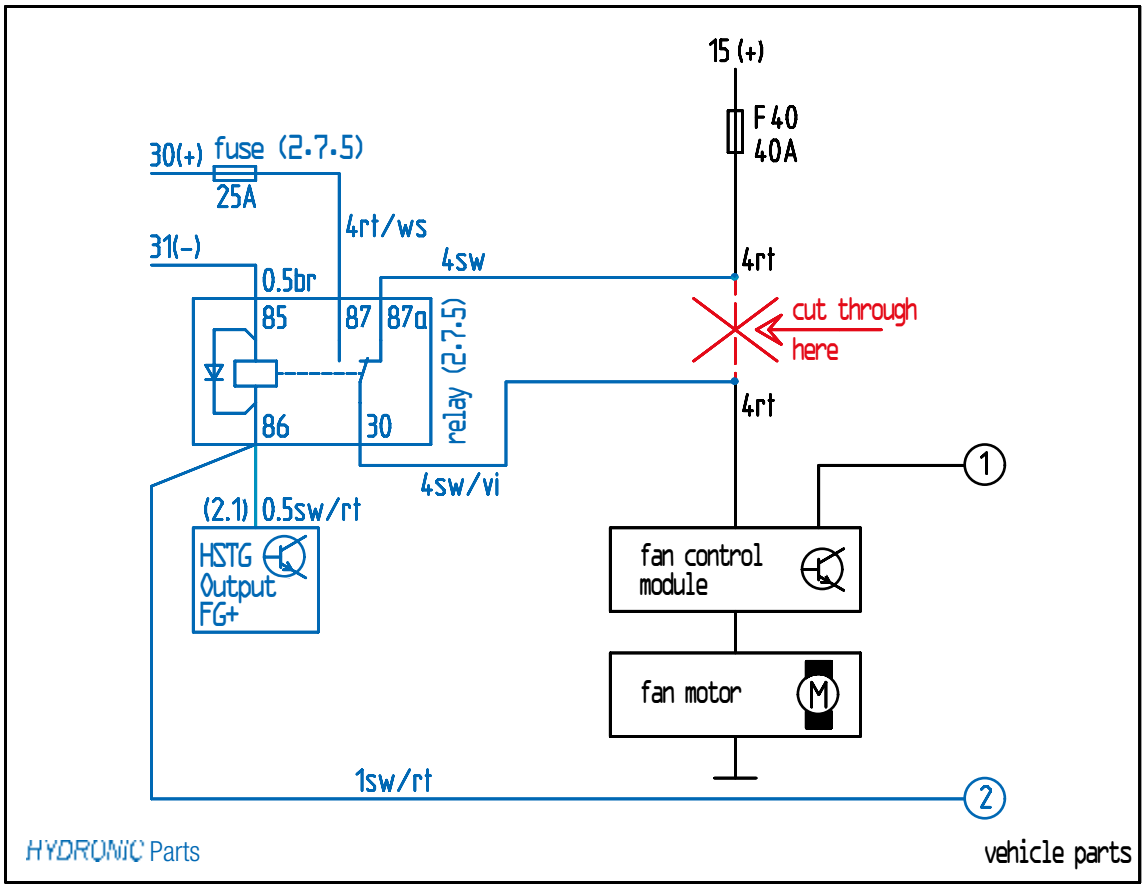


Photo 30

① Positive cable 4 mm² rt, connected
② Earth cable 2.5 mm² br, connected


15 (+)
F 40
40A
30(+) fuse (2.7.5)
25A
4rt/ws
31(-)
0.5br
4sw
4rt
85
87
87a
cut through
here
relay (2.7.5)
86
30
4rt
4sw/vi
1
(2.1) 0.5sw/rt
HSTG
Output
FG+
fan control
module
fan motor
M
1sw/rt
2
HYDRONIC Parts
vehicle parts

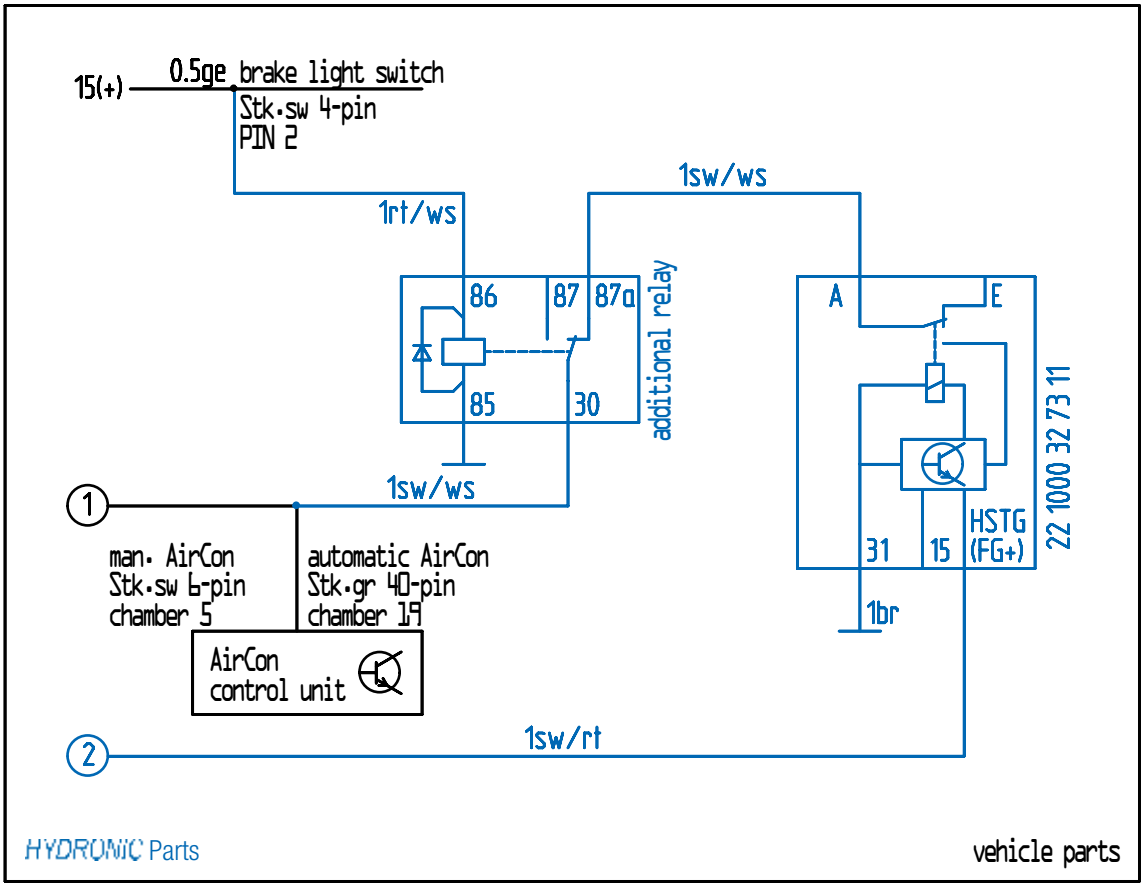

15(+)
0.5ge brake light switch
Stk.sw 4-pin
PIN 2
1sw/ws
1rt/ws
86
87
87a
85
30
additional relay
A
E
1sw/ws
1
man. AirCon
Stk.sw 6-pin
chamber 5
automatic AirCon
Stk.gr 40-pin
chamber 19
AirCon
control unit
31
15
HSTG
(FG+)
1br
22 1000 32 73 11
2
1sw/rt
HYDRONIC Parts
vehicle parts

Diagram 7

Install EasyStart T timer
(see photo 31)

The EasyStart T timer is installed according to the "EasyStart T" installation instruction.
Mount the EasyStart T timer on the instrument panel covering to the left next to the AirCon control.
Use the self-adhesive drilling template supplied to position and drill the holes for fixing the timer and the heater lead harness.
Make the Ø 6.5 mm and Ø 8 mm holes.
Remove the drilling template after making the holes.
If necessary, the foam template can be used to level out the unevenness.
To do this, pull off the protective film and stick the base onto the timer.
Guide the timer lead harness through the 8 mm Ø hole and use the expansion plug to premount the timer in the 6.5 mm Ø hole.
If the foam film is used, pull off the second protective film too.
Push or screw the fixing screw into the expansion plug and use it to fix the timer.
Attach the flat connector from the timer lead harness at the 9 pin flat connector housing and the already installed bushing connectors on the bushing connector housing.
Push the fuse clasp into the flat connector housing.
Pull off the protective film of the cover cap and glue in the cover cap.



Photo 31

① EasyStart T, installed

Please note!

Do not decide on the installed location of the timer until after consulting the customer.

Install EasyStart R/R+ radio remote control
(Alternative suggestion - consult with the customer)
(see photos 32 to 33 and diagram 8)

The EasyStart R/R+ is installed according to the Technical Description for the EasyStart R/R+ Radio Remote Control; see the "Installation Instruction" section.
Install the EasyStart R/R+ button on the covering of the instrument panel above the switch unit.
To this end, drill an 8 mm Ø hole in the panelling and insert the button in the 8 mm Ø hole.



Photo 32

① EasyStart R/R+ button, installed

6 Electrics

Prepare the holder for the stationary part of the EasyStart R/R+ as shown in the diagram.

Fix the stationary part of the EasyStart R/R+ to the holder using two M4 x 16 screws.

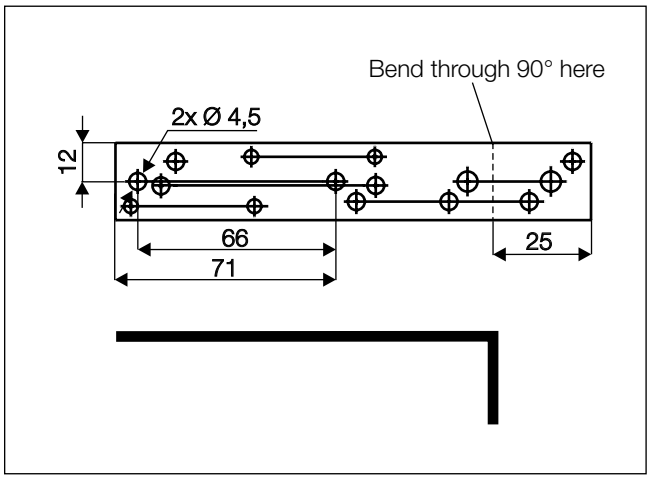


Diagram 8

Mount the stationary part of the EasyStart R/R+ with the holder to the inside of the instrument panel support to the prefabricated IPCU and additional relay block using the existing M5 x 10 screw as shown in the photo.

Attach the temperature sensor of the EasyStart R/R+ to the panelling on the A-pillar in the driver's footwell.

Lay the cables from the installed button and temperature sensor together with the "Control" cable loom to the installed position of the stationary part and connect to the stationary part.

Connect the antenna cable of the EasyStart R+ to the stationary part, take it to the left and lay it in the rubber door seal on the driver's side.

Please note!

Avoid contact with metal parts at the uninsulated end of the antenna cable.
Use cable ties to fix any excessive length of antenna cable underneath the instrument panel.



Photo 33

① Stationary part of the EasyStart R/R+, installed with holder

7 After installation

Mount grommet for exhaust end pipe
(see photos 34 and 35)

Make a 38 mm Ø hole in the removed engine cowelling according to the dimensions shown in the photo.

Fit the 41 mm Ø grommet in the hole.

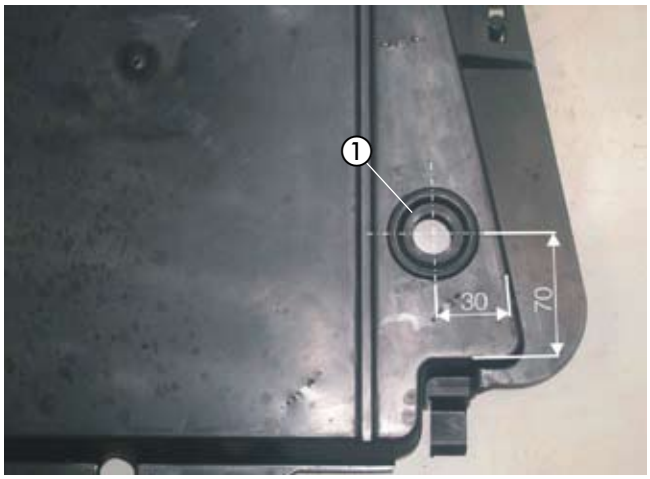


Photo 34

① Grommet for exhaust pipe end, installed

Mount the lower cowling and take the exhaust pipe end through the grommet.



Photo 35

① Exhaust pipe end taken through the 41 mm Ø grommet

Complete the vehicle

- Install all removed parts in the reverse order.
- Reconnect the battery.
- Check that the hoses, hose clips and pipe clamps as well as all electrical connections are fitted securely.
- Use cable ties to secure all loose cables, lines, etc.
- Set the clock time.
- If necessary, enter the radio code.
- Start the engine, vent the cooling system and check for leaks, top up any missing coolant liquid up to the marking (arrow).
- Please also note and follow the vehicle manufacturer's information on filling and venting the cooling system.
- Read and observe all official regulations and safety instructions in the Technical Description.
- Program the control and place the Operating Instructions together with the leaflet for the customer in the glove compartment.

Please note!

Fill the cooling system only with the coolant liquid specified by the vehicle manufacturer.

Starting up the heater

- Switch on the heater at the control.
  See Operating Instructions - Control.

8 Parts Overview

No.	Designation	Quantity	Order number
1	Vehicle-specific installation kit		24 8457 00 00 00
	Heater holder, new	1	
	Hexagon screw M6 x 95	1	
	Lead harness, heater	1	
	Holder, fuse	1	
	Exhaust silencer	1	
	Exhaust pipe, L = 300 mm	1	
	Holder, water pump	1	
	Hose, shaped, 18 mm Ø	1	
	Hose clip, 16 - 25 mm Ø	1	
	Hose clip, 20 - 32 mm Ø	6	
	Pipe clamp, 26 - 28 mm Ø	3	
	Holder, metering pump	1	
	Lead harness, metering pump	1	
	Fuel hose, 3.5 x 3 mm Ø, L = 50 mm	3	
	Hose clip, one-piece with clamping jaws	6	
	Fuel pipe, 4 x 1 mm Ø	2 m	
	Fuel pipe, 4 x 1.25 mm Ø	5 m	
	Cable tape, 2.5 x 100 mm	10	
	Cable tape, 5.0 x 200 mm	20	
	Cable tie with internal toothing	5	
	Hexagon screw M4 x 16	2	
	Hexagon nut M4	2	
	Hexagon screw M5 x 10	1	
	Hexagon nut M5	1	
	Hexagon screw M6 x 16	5	
	Hexagon screw M6 x 20	1	
	Hexagon screw M6 x 30	1	
	Hexagon nut M6	7	
	Holder (22 9000 50 93 02)	3	
	Holder (22 9000 50 93 03)	1	
	Holder (90° bracket)	1	
	Holder R+	1	
	Blind rivet nut M6	3	
	Hexagon screw M6 x 16	3	
	Hexagon nut M6	2	
	Body washer B6	5	
	Screw M5 x 10	1	
	Hexagon nut M5	1	
	Screw M4 x 16	2	
	Hexagon nut M4	2	
	Clamp Ø 28 mm	1	
	Spacer rubber profile	1	
	41 mm Ø exhaust grommet	1	
	Water hose elbow 180°, 20 mm Ø	1	
	Reducer 20/18 mm Ø	2	
	Hose clip, 20 - 32 mm Ø	3	
	Line bracket, rotatable	2	
	Fuel tank extractor	1	
	Clamp Ø 9 mm	2	
	Angled neck	1	
	Fan cable loom	1	
	Relay 12V	2	
	Cable loom with IPCU and changeover relay	1	
	IPCU module	1	
	Butt-type connector, yellow	2	
	Butt-type connector, red	2	
	Bushing connector	1	
	Exhaust pipe	0.7 m	
	Hose Ø 3.5 x 3 mm	0.05 m	
	Heat-shrink fit hose Ø 40/20 mm	1.4 m	

9 Leaflet for the customer

Before switching on
in vehicles with manual AirCon
(see photo 1)

- Before switching on or pre-programming heating mode with the ignition switched on, set the vehicle's temperature controller ① to "Hot" (maximum setting).
- Set the controller for the air system ② to maximum air flow for the windscreen.
- The fan speed does not need to be pre-selected.



Photo 1

① Temperature controller
② Air system controller

Before switching on
in vehicles with automatic 2-zone AirCon
(see photo 2)

- Before switching on or pre-programming heating mode with the ignition switched on, set the vehicle's temperature controller ① to "Hot" ("HI" in the display).
- Set the button for the air system ② to maximum air flow for the windscreen.
- The fan speed does not need to be pre-selected.



Photo 2

① Temperature controller
② Button for the air system