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HYDRONIC B4W S in the VW Tiguan (5N)

from 2007 model

with Climatronic

with or without NSW and SRA, without DWA

with manual gearbox, 4 motion

- 1.4 l cubic capacity / TSI 4 cylinder in-line engine / 110 kW - 150 HP

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 it and this installation recommendation.

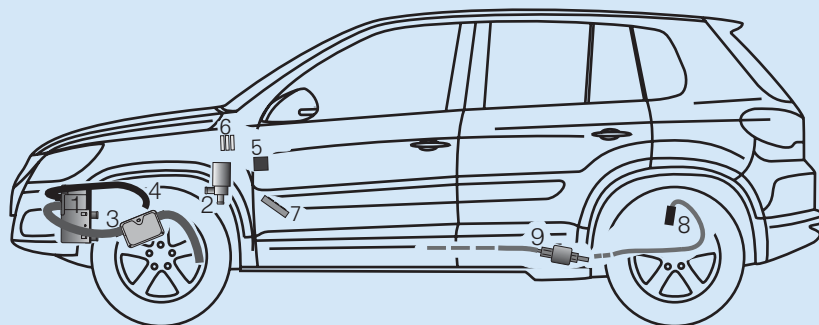
The installer must check this before installation and, if necessary, take into account the differences compared to this installation recommendation.

Installation position

The *HYDRONIC B4W S* is installed in the right-hand quarter bumper.

The water connections point to the rear, the exhaust connection points in the direction of travel.

Installation time: approx. 6 h



- | | | | |
|---|------------------------------------|---|-------------|
| 1 | HYDRONIC B4W S | 6 | Fuse holder |
| 2 | Water pump | 7 | EasyStart T |
| 3 | Exhaust pipe with exhaust silencer | 8 | Connector |
| 4 | Combustion air tube | 9 | Dosing pump |
| 5 | Fan relay or IPCU module | | |

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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 poisonous exhaust entering the inside of the vehicle.

This can cause serious and even fatal risks.

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 noted observed 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	MKB
1.4l	110 / 150	6S	BWK

6S = 6 speed 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, however, be possible.



1 Introduction

Parts required for the installation

Quantity / Designation	Order No.
1 <i>HYDRONIC</i> B4W S	20 1866 05 00 00
1 Vehicle-specific additional parts	24 8318 00 00 00

In addition, a control is required:

1 EasyStart T	22 1000 32 88 00
or	
1 EasyStart R ⁺ radio remote control	22 1000 32 80 00
or	
1 EasyStart R	22 1000 32 85 00

Order the following additional components for vehicles with Climatronic:

1 VW air conditioning kit	24 8046 00 00 00
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Special tools required

- Torque wrench (5...50 Nm)
- Pliers for spring strip clamps
- Anti-corrosion agent
- Ejector tool for plug-in contacts
- Shrinking tool for crimp-shrink connectors

Tightening torques

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

Fit all screwed connections, except those of the heater itself (M6 x 97), with a circlip (corrugated ring washer) or a split washer.

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

Preparation of the vehicle

- Disconnect the battery
- Dismantle bottom dashboard trim on the driver's side
- Remove dashboard shelf on driver's side
- Dismantle the right-hand rear seat
- Remove trim of the A pillar, driver's footwell
- Depressurise the cooling system
- Drain coolant into clean container
- Remove intake air pipe
- Remove battery and battery box
- Dismantle bottom engine panelling
- Dismantle water flow hose
- Remove right-hand wheelhouse panel

2 Installation - Heater

Prepare installation position and bracket

(see Photos 1 and 2)

Unscrew the horn from the M8 x 20 fixing screw.
The mountings of the heater bracket are located on the underside of the right-hand side member with the existing M8 stud bolt and the existing threaded hole M10.

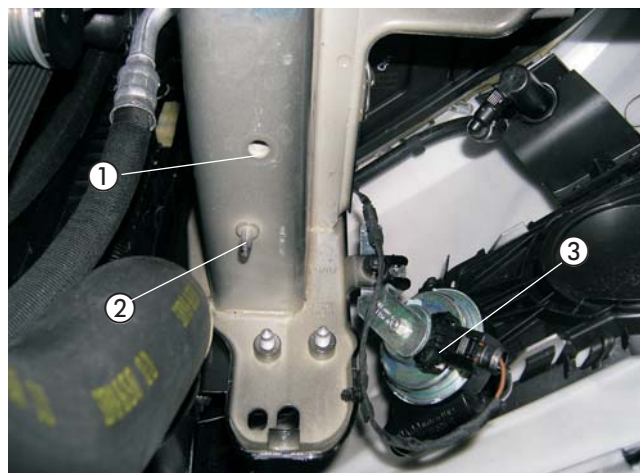


Photo 1

- ① existing threaded hole M10
- ② M8 stud bolt
- ③ existing horn

Use four M6 x 16 screws to screw the unit holder onto the heater bracket 22 9000 51 49 01 as shown in the photo.

Keep the holder, stabilisation strut 22 9000 51 49 02 ready to install too.

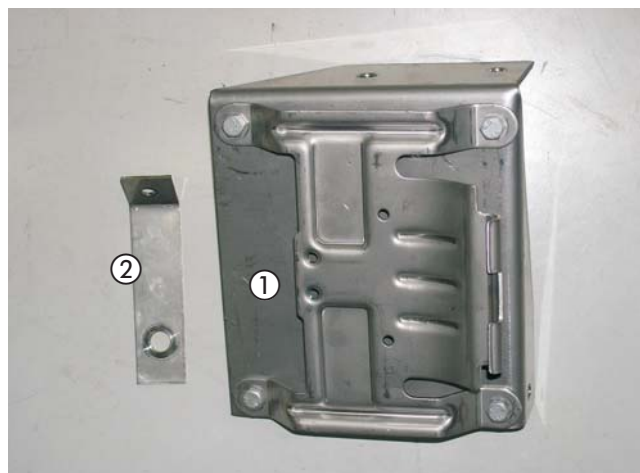


Photo 2

- ① Heater bracket 22 9000 51 49 01
- ② Holder, stabilising strut 22 9000 51 49 02

Install heater

(see Photos 3 to 7)

Screw the bracket 22 9000 50 80 03 to the front right-hand gusset of the right-hand side member in the existing \varnothing 6.5 mm hole using a M6 x 16 screw, as shown in the photo.

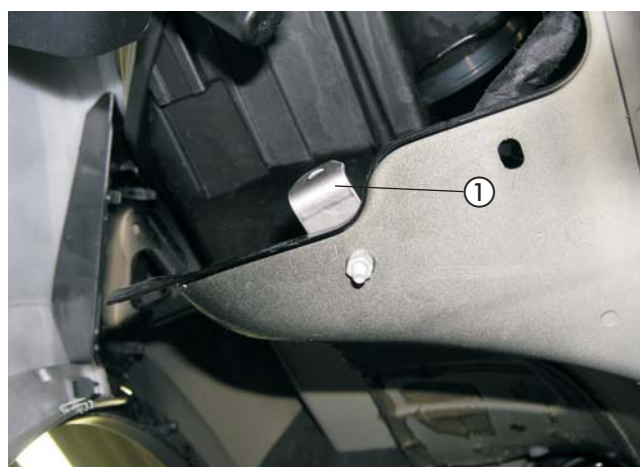


Photo 3

- ① Bracket 22 9000 50 80 03 installed

2 Installation - Heater

Guide the M10 x 20 screw through the hole in the heater bracket and push two spring lock washers 10 onto the screw shank as spacers.

Hold the heater bracket 22 9000 51 49 01 at the fixing points on the underside of the right-hand side member and screw tight with the M10 x 20 screw and an M8 nut and B8 washer.

Turn the hoop through 180° and re-install using the existing fixing screw M8 x 20.

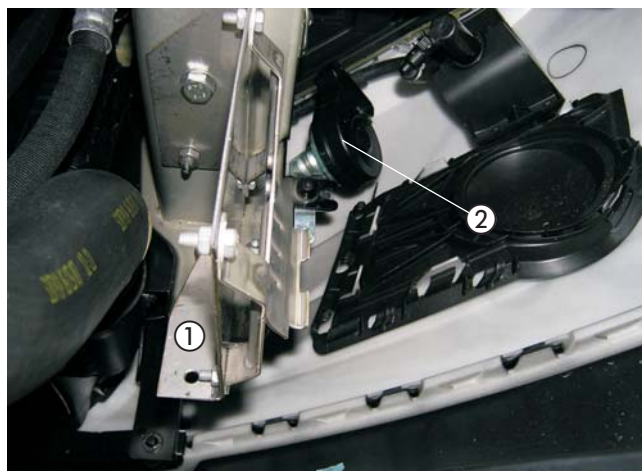


Photo 4

- ① Heater bracket installed
- ② Horn reinstalled

Screw the holder, stabilising strut 22 9000 51 49 02 in the bottom hole of the heater bracket using an M6 x 16 screw and at the top using an M10 x 20 screw in the existing threaded hole M10 of the right-hand side member strut.



Photo 5

- ① Holder, stabilising strut 22 9000 51 49 02 installed

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



Photo 6

- ① elbowed water pipe sockets installed



2 Installation - Heater

Remove the duplicate rating plate from the heater.
Deface the date Photos which are not applicable so that they are illegible.

Attach the duplicate rating plate in a suitable, clearly visible position in the engine compartment.

Insert the heater in the unit holder and fix in the bottom threaded hole using the M6 x 97 screw with $6^{+0.5}$ Nm.



Photo 7

① Heater installed

3 Exhaust and combustion air circuit

Install exhaust silencer and connect

(see Photos 8 to 11)

Screw the exhaust silencer holder 22 1000 50 14 00 with an M6 x 16 screw to the exhaust silencer as shown in the photo.

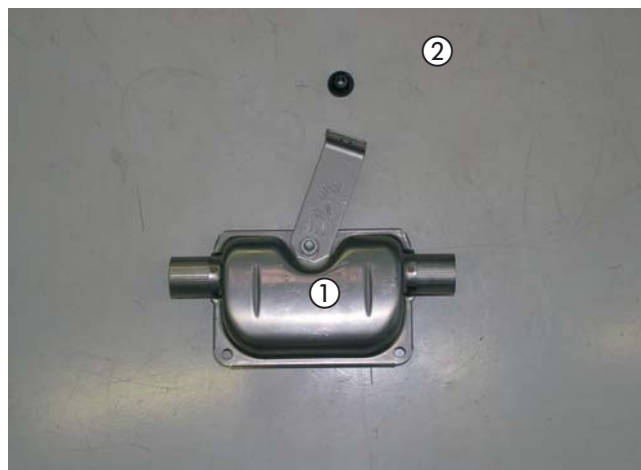


Photo 8

- ① Exhaust silencer pre-assembled
- ② Plastic nut DM5

Use a plastic nut DM6 to screw the holder with the exhaust silencer onto an existing coarse threaded bolt on the underside of the right-hand side member.

Align the exhaust silencer as shown in the photo.



Photo 9

- ① Exhaust silencer installed

Cut the exhaust pipe to a length of 395 mm, push on a spacer rubber profile and a Ø 28 mm clamp. Use a pipe clamp to connect the exhaust pipe to the exhaust outlet connection of the heater. Guide the exhaust pipe, contact-free, to the inlet connection of the exhaust silencer. Use a pipe clamp to connect the exhaust pipe to the inlet connection of the exhaust silencer. Position the spacer rubber profile at the level of the charge air pipe, use an M6 x 16 screw to screw the Ø 28 mm clamp into the top hole of the heater bracket.

Please note!

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

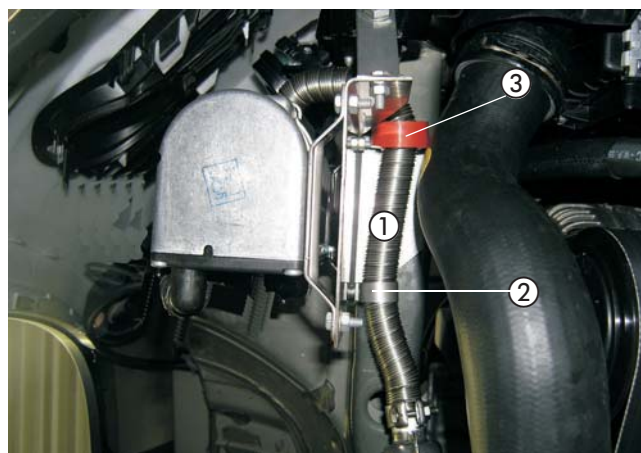


Photo 10

- ① Exhaust pipe fitted onto exhaust silencer installed
- ② Clamp Ø 28 mm
- ③ Spacer rubber profile installed



3 Exhaust and combustion air circuit

Cut the exhaust end pipe to a length of 190 mm and use a pipe clamp to connect to the exhaust connection of the exhaust silencer.

Shape the exhaust end pipe downwards as shown in the photo.



Photo 11

① Exhaust end pipe connected

Install combustion air pipe

(see Photo 12)

Use a hose clip \varnothing 16 - 25 mm to connect the combustion air pipe to the heater and lay it from the right-hand quarter bumper to the rear in the wheelhouse liner.

Make a drain hole \varnothing 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 can be drawn in through the heater.



Photo 12

① Combustion air pipe laid



4 Water circuit

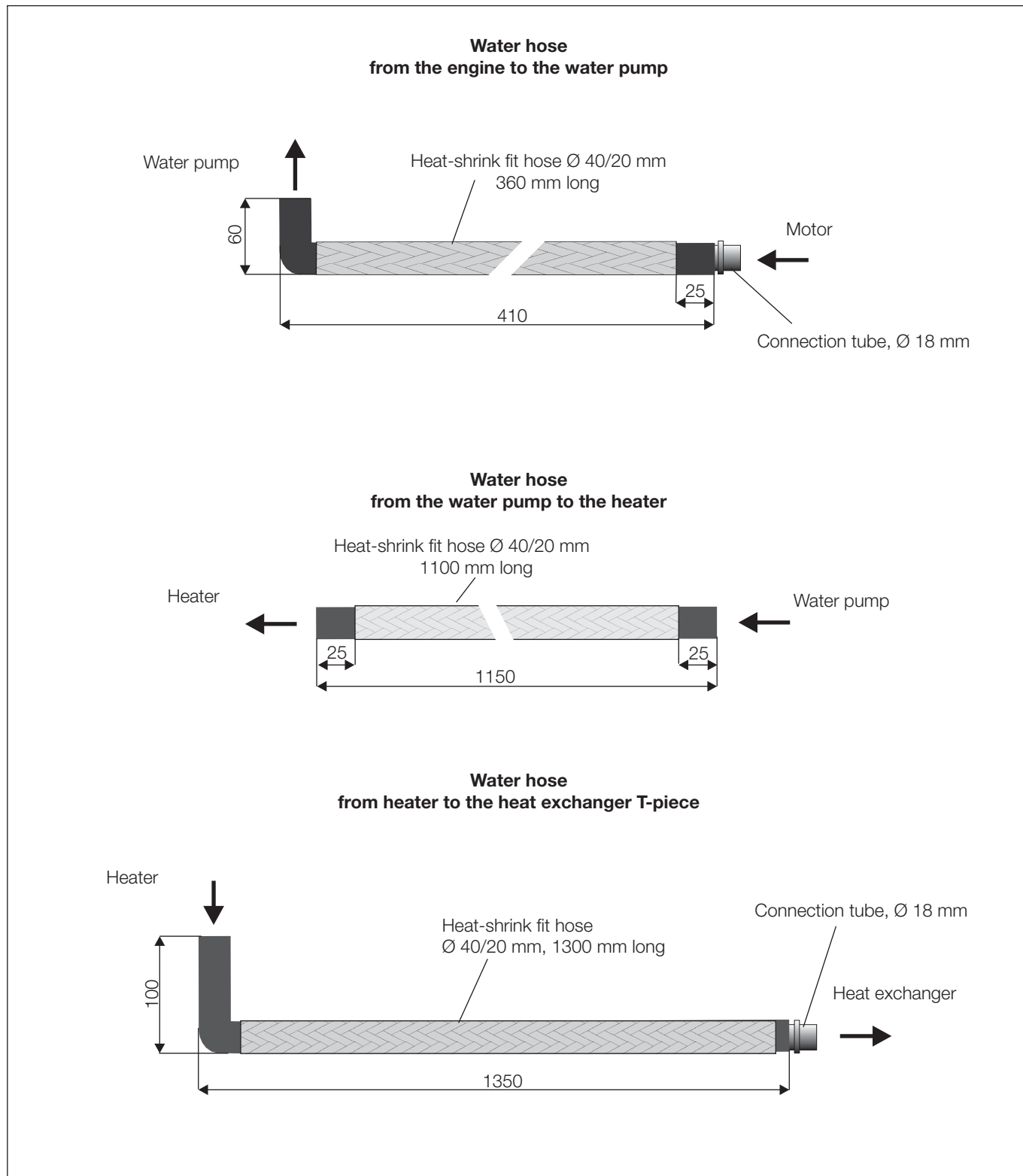
Prepare the water hoses

(see Sketch 1)

Cut the water hoses to size according to the dimensions shown in the sketch and pre-assemble with hose clips $\varnothing 20 - 32$ mm.

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.



Sketch 1

4 Water circuit

Remove water flow hose and preassemble again

(see Photo 13)

Remove the water flow hose from the engine to the heat exchanger \varnothing 18 mm (the top water hose on the heat exchanger).

Cut the \varnothing 18 mm water flow hose at the cutting point as shown by the dimensions in the photo.

Install the water hose ends as in their original positions; at the same time turn the short hose end at the heat exchanger through 180° .

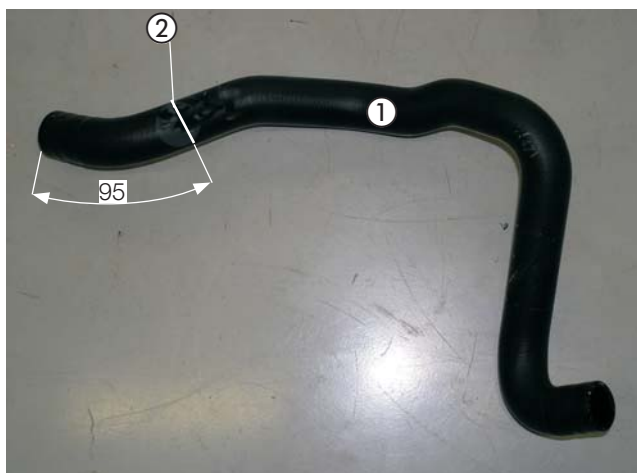


Photo 13

- ① \varnothing 18 mm water flow hose removed
- ② Water flow parting points, installation of \varnothing 18 mm T-piece

Install the water hose and water pump holders

(see Photos 14 to 15)

Use the existing M6 cap nut to screw the water hose holder 22 9000 50 15 00 to the existing M6 stud bolt on the right-hand MacPherson strut tower.

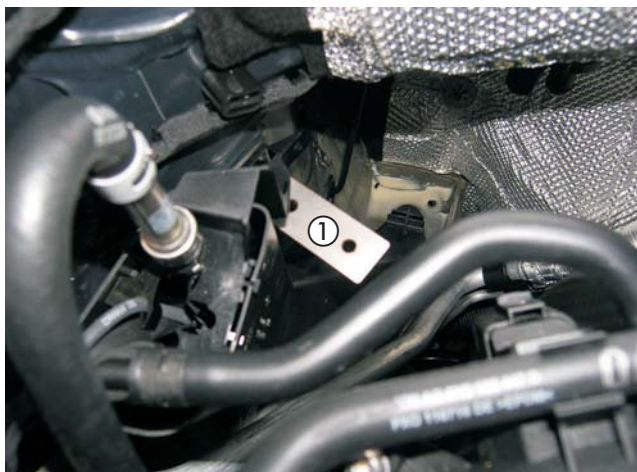


Photo 14

- ① Holder 22 9000 50 15 00 installed

Insert the water pump in the rubber holder.

Use an M6 nut to screw the rubber holder with the water pump onto the existing M6 stud bolt on the right-hand side of the engine partition panel.

The water pump intake connection faces downwards, the discharge connection faces towards the front.



Photo 15

- ① Water pump installed

4 Water circuit

Lay and connect water hoses

(see Photos 16 to 20)

Use a \varnothing 20 - 32 mm hose clip to connect the water hose from the water pump to the heater to the heater's water inlet connection.

Use a \varnothing 20 - 32 mm hose clip to connect the water hose from the heater to the heat exchanger to the water outlet connection of the heater.

Lay the water hoses towards the top and push a rubberised \varnothing 28 mm clip onto each.

Position the rubberised clips and use an M6 x 25 screw to screw onto the already mounted holder 22 9000 50 80 03 (see also Photo 3).

Lay the water hoses above the right-hand engine bearing; lay the water hose from the water pump to the heater on the right.

Push two further rubberised clips, \varnothing 28 mm, onto each of the water hoses and position at the level of the right-hand engine bearing.

Use an M6 x 25 screw to screw the \varnothing 28 mm rubberised clips into the free threaded hole M6 of the engine bearing.

Use rotatable hose holders to fix the hose to the cooling water tank and the water hose from the water pump to the heater to each other.

Push two more rubberised clips \varnothing 28 mm onto the water hoses laid and use an M6 x 25 screw to fix to the holder 22 9000 50 15 00.

Fix the water hose from the water pump to the heater to the top of the holder 22 9000 50 15 00, lay it further up to the discharge connection of the water pump and install it there with the help of a \varnothing 20 - 32 mm hose clip.

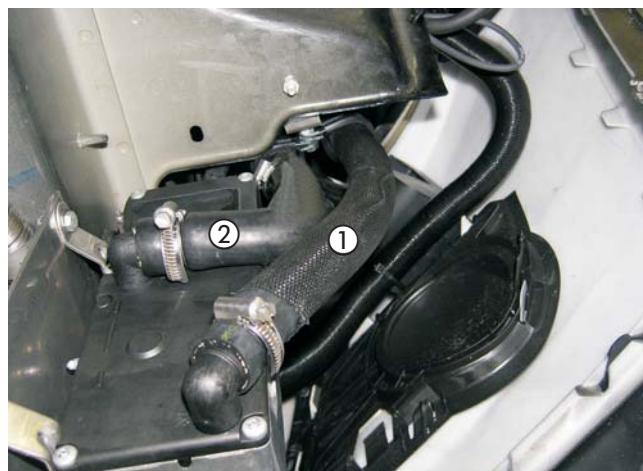


Photo 16

- ① Water hose from the water pump to the heater
- ② Water hose from the heater to the heat exchanger

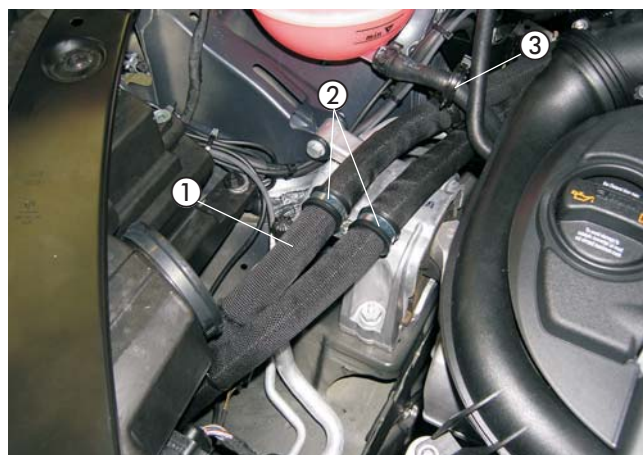


Photo 17

- ① Water hose from the water pump to the heater
- ② 2 x rubberised clips \varnothing 28 mm installed
- ③ 2 x rotatable hose holders installed

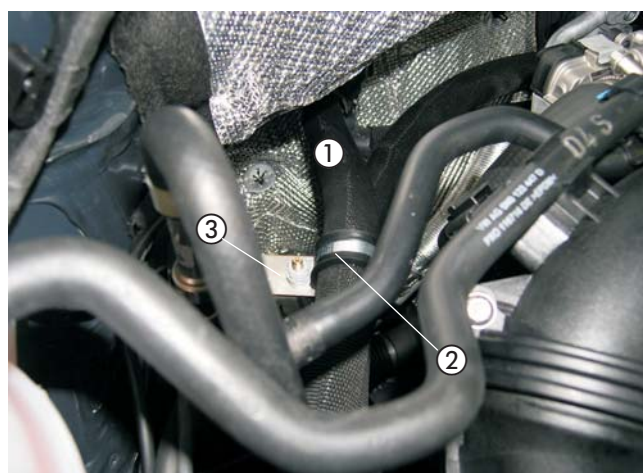


Photo 18

- ① Water hose from the water pump to the heater
- ② 2 x rubberised clips, \varnothing 28 mm
- ③ Holder 22 9000 50 15 00



4 Water circuit

Lay the water hose from the heater to the heat exchange to the left to the water flow parting point.

Use a rotatable hose holder to fix the water hose from the heater to the heat exchanger to the water hose from the engine to the water pump.

Use a $\text{\O} 20 - 32$ mm hose clip to connect the water hose from the water pump to the engine to the water inlet connection of the water pump and lay it further up to the water flow parting point.

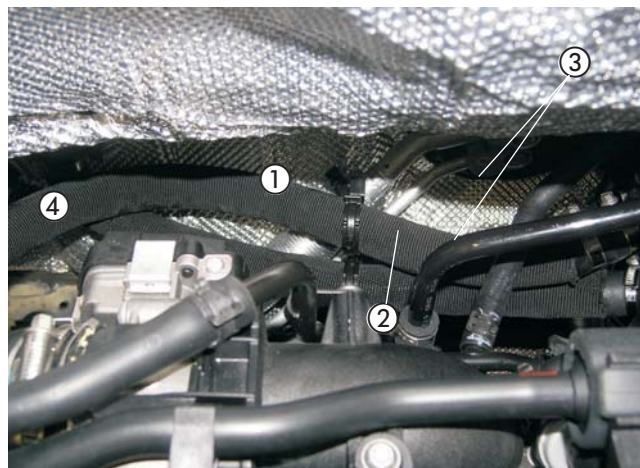


Photo 19

- ① Water hose from the heater to the heat exchanger
- ② Water hose from the engine to the water pump
- ③ 2 x rotatable hose holders installed
- ④ Water hose from the water pump to the heater

Lay the water hose from the heater to the heat exchanger up to the water flow parting point and use the $\text{\O} 18$ mm connection pipe and $\text{\O} 20 - 32$ mm hose clips to connect it to the water flow hose of the heat exchanger.

Lay the water hose from the engine to the water pump up to the water flow parting point and use the $\text{\O} 18$ mm connection pipe and $\text{\O} 20 - 32$ mm hose clips to connect it to the water flow hose of the engine.

Use the rotatable hose holders to fix the installed water hoses and the vehicle's own water hose beneath them.

Please note!

Secure all hose connections with hose clips.

Protect the water hoses against chafing and use cable ties to secure in suitable positions.

Ensure the non-return valves are installed in the correct position.



Photo 20

- ① Water hose from the heater to the heat exchanger
- ② Water hose from the engine to the water pump
- ③ 3 x rotatable hose holders installed

5 Fuel supply

Connect tank

(see Photos 21 to 23)

Cut approx. 3 mm off the straight connection in the tank fitting.

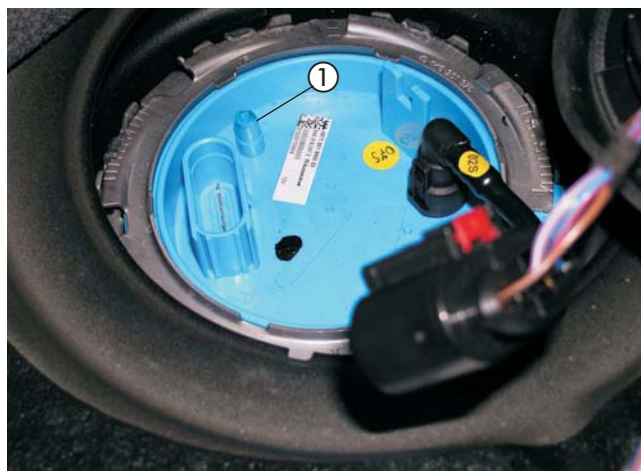


Photo 21

① opened connection at the tank fitting

Use a hot air blower to heat and straighten the fuel pipe $\varnothing 4 \times 1$ mm over a length of approx. 300 mm. Push the the $\varnothing 3.5$ mm socket of the $\varnothing 7.5/3.5$ mm adapter onto the fuel pipe $\varnothing 4 \times 1$ mm and position as shown by the dimensioning in the photo. Screw tight the $\varnothing 11$ mm clip mounted on the $\varnothing 3.5$ mm side of the adapter (top clip). Cut the end of the fuel pipe with a 45° cut.

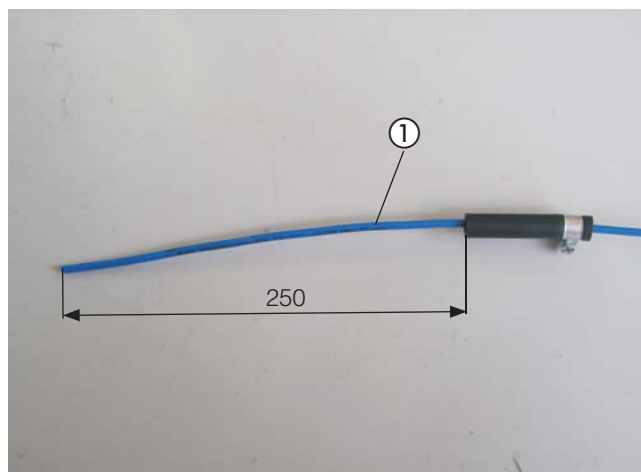


Photo 22

① Fuel pipe $\varnothing 4 \times 1$ mm, straightened, installed in the adapter $\varnothing 7.5/3.5$ mm

Guide the fuel pipe $\varnothing 4 \times 1$ mm through the connection in the tank, push the adapter $\varnothing 7.5/3.5$ mm onto the connection and tighten with the $\varnothing 11$ mm clip. Pull a sponge rubber hose over the fuel pipe $\varnothing 4 \times 1$ mm and lay up to the installation position of the metering pump on the right-hand underside of the vehicle. Refit the cover above the tank fitting.

Please note!

When opening the connection, ensure that no dirt gets into the the tank or the supply lines.



Photo 23

① Fuel pipe $\varnothing 4 \times 1$ mm connected with the adapter $\varnothing 7.5/3.5$ mm

5 Fuel supply

Install metering pump and connect

(see Photos 24 and 25)

The installation position of the metering pump is located on the right-hand side of the tank at the existing M8 fixing screw. Insert the metering pump into the rubber holder and fix the rubber holder to the 90° angle bracket using a M6 x 20 screw and a B6 body washer.

Screw tight the 90° angle bracket with the tank fixing screw M8.

The discharge connection of the metering pump points towards the front.

Ensure it is installed with at least 15° rising gradient on the discharge side.

Cut the fuel pipe $\varnothing 4 \times 1$ mm from the fuel tank extractor to the metering pump and connect to the fuel hose $\varnothing 3.5 \times 3$ mm, length 50 mm at the intake connection of the metering pump.

Connect the fuel pipe $\varnothing 4 \times 1.25$ mm with fuel hose $\varnothing 3.5 \times 3$ mm, length 50 mm, to the fuel connection of the heater and cover with sponge rubber hose.

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 metering pump cable supplied into the metering pump connection of the main cable harness.

Lay the fuel pipe $\varnothing 4 \times 1.25$ mm from the heater together with the metering pump cable through the vehicle's own cable duct on the right-hand underside of the vehicle to the metering pump.

Cut the fuel pipe $\varnothing 4 \times 1.25$ mm to the correct link, fix with cable ties or clip into the holders for fuel lines.

Connect the $\varnothing 4 \times 1.25$ mm fuel pipe with $\varnothing 3.5 \times 3$ mm fuel hose, 50 mm long to the discharge connection of the metering pump.

Latch the plug-in contacts of the metering pump cable into the mating connector without regard to polarity.

Connect the connector to the metering pump.

Please note!

The fuel pipe $\varnothing 4 \times 1$ mm can be blue or white (with red lettering).

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 24

① Metering pump installed and connected

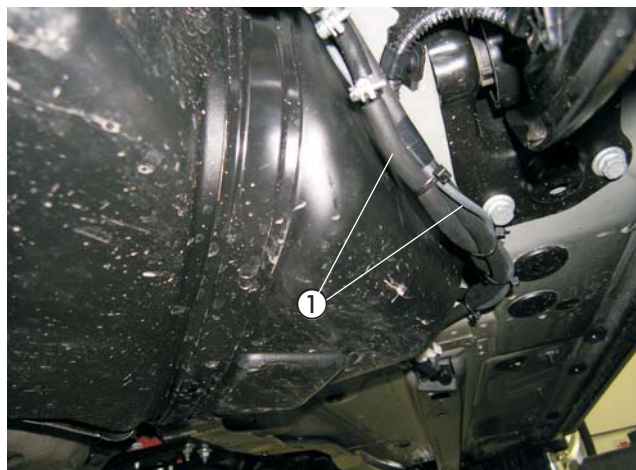


Photo 25

① $\varnothing 4 \times 1.25$ mm fuel pipe laid in sponge rubber hose and connected

6 Electrics

Install the fuses and power supply

(see Photos 26 to 28 and Sketch 2)

Prepare the holder for the fuse base as shown in the sketch and use an M6 nut to connect to the existing M6 stud bolt on the right above the braking fluid tank.

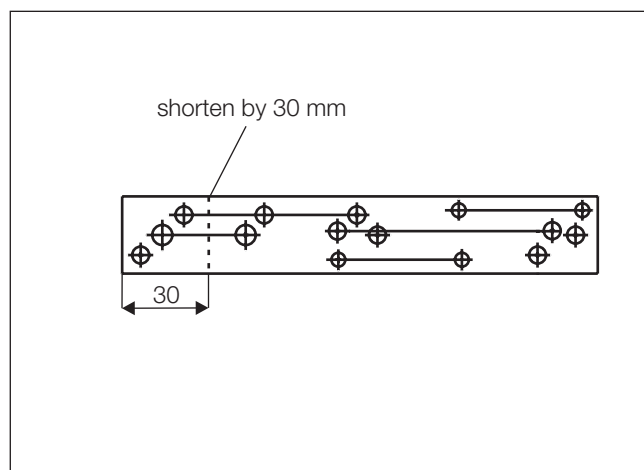
The "fan control" cable loom with the cables 4 mm² sw/vi, 4 mm sw and 4 mm² rt/ws is not needed in vehicles with Climatronic and can therefore be removed.

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

The cable loom for the "control" remains on the left-hand side of the vehicle.

In vehicles **with Climatronic**, the 25 A fuse of the vehicle fan is not needed and does not have to be connected.

Use two M4 x 12 screws to fix the fuse holder to the bracket.



Sketch 2

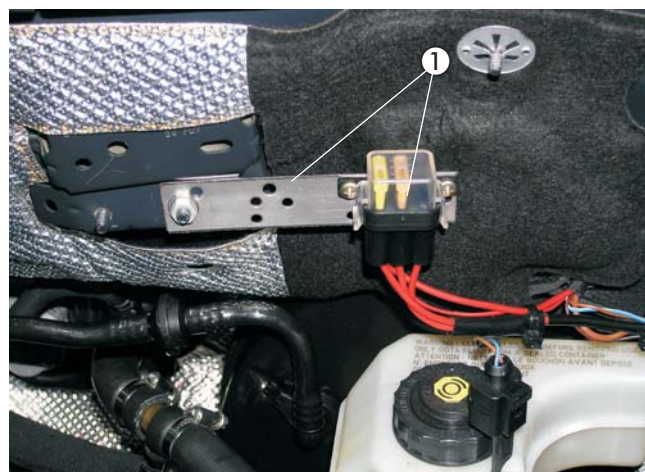


Photo 26

① Fuse holder and fuses installed

The power supply with plus cable is connected to the E box at the existing plus support point.

Lay the plus cable 4 mm² rt to the plus support point and connect it there using the A6 cable lug.

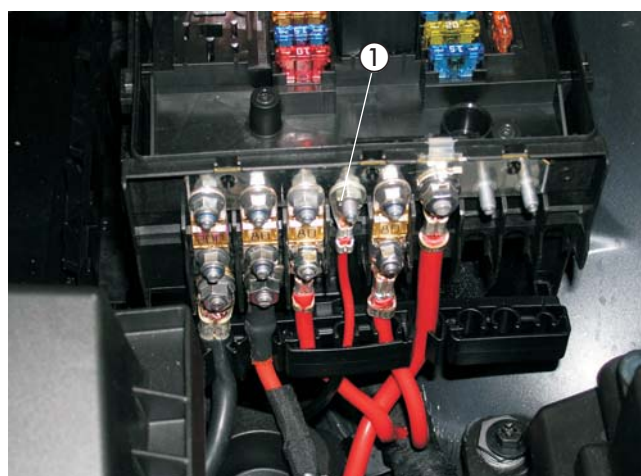


Photo 27

① Power supply plus connection at the E box

6 Electrics



Lay the ground cable 2.5 mm² br to the ground point up to the top of the left-hand MacPherson strut tower.
Attach an A8 cable lug to the 2.5 mm² br ground cable and connect to the ground support point.

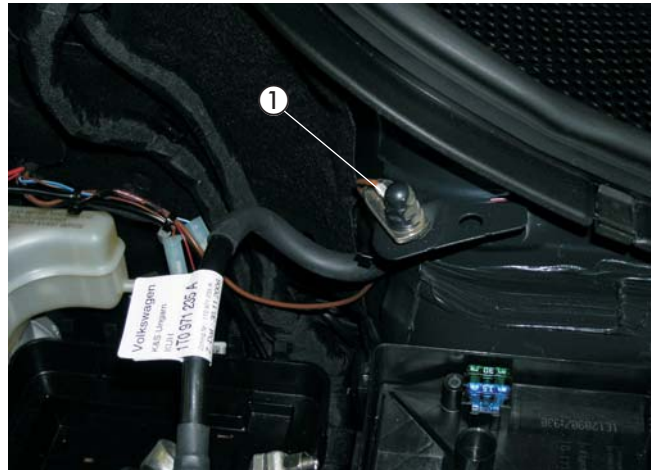


Photo 28

① 2.5 mm² br ground cable installed at the ground support point

Cable laying in vehicles with Climatronic

(see Photo 29)

Lay the "control" cable loom of the main cable harness through the existing cable penetration in the engine partition next to the left-hand MacPherson strut tower from the engine compartment into the inside of the vehicle (driver side).

Remove the push-on sleeve housing and the push-on housing at the end of the 0.5 mm² sw/rt cable of the main cable harness and strip the insulation from the end of the cable. Leave the 0.5 mm² sw/rt and 0.5 mm² br cables as well as the 0.5 mm² bl/ws cable at the installation position. The insulation can be stripped from the 0.5 mm² br cable in vehicles with Climatronic and the cable can be tied back.

In vehicles with Climatronic, lay the 1.0 mm² sw/rt cable of the IPCU base later from the inside of the vehicle through the cable grommet into the engine compartment.



Photo 29

① Vehicle's own cable penetration

Fan control in vehicles with Climatronic

(see Photos 30 to 32 and Sketch 3)

Fix the minus cable 1 mm² br from the base of the IPCU module to the bracket of the dashboard on the driver's side. Screw the cable lug A6 in the existing hole M6 using an M6 x 16 screw.

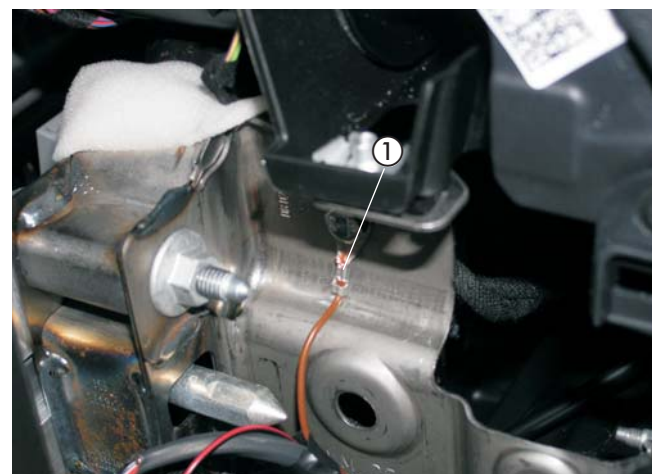


Photo 30

① Ground cable 1 mm² br connected

6 Electrics

Use the existing M5 (Torx) screw of the dashboard bracket on the driver's side as the fixing point for the socket of the IPCU module.

Mount the socket of the IPCU module using the M5 Torx screw.

Plug in the IPCU module.

Connect the 0.5 mm² sw/rt cable of the main cable harness in the engine compartment and the 1 mm² sw/rt cable from the socket of the IPCU module through the 0.5-1.5 mm² connector.

Please note!

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

Dismantle the air conditioning control of the Climatronic according to the manufacturer's instructions. Set back the insulation of the individual cables at connectors A and C.

Guide the cables 1 mm² sw, 1 mm² sw/ws and 1 mm² rt/ws from the base of the IPCU module to the air conditioning control.

Remove the brown connector C at the air conditioning control and disconnect the 0.5 mm² sw/ws cable (PIN 15).

Tie in cables 1 mm² sw and 1 mm² sw/ws with the 0.5-1.5 mm² connectors according to the circuit diagram.

Remove the black connector A at the air conditioning control and disconnect the 0.5 mm² sw/ge cable (PIN 20). Tie in the cable 1 mm² rt/ws with the help of the 0.5-1.5 mm² connector according to the circuit diagram.



Photo 31

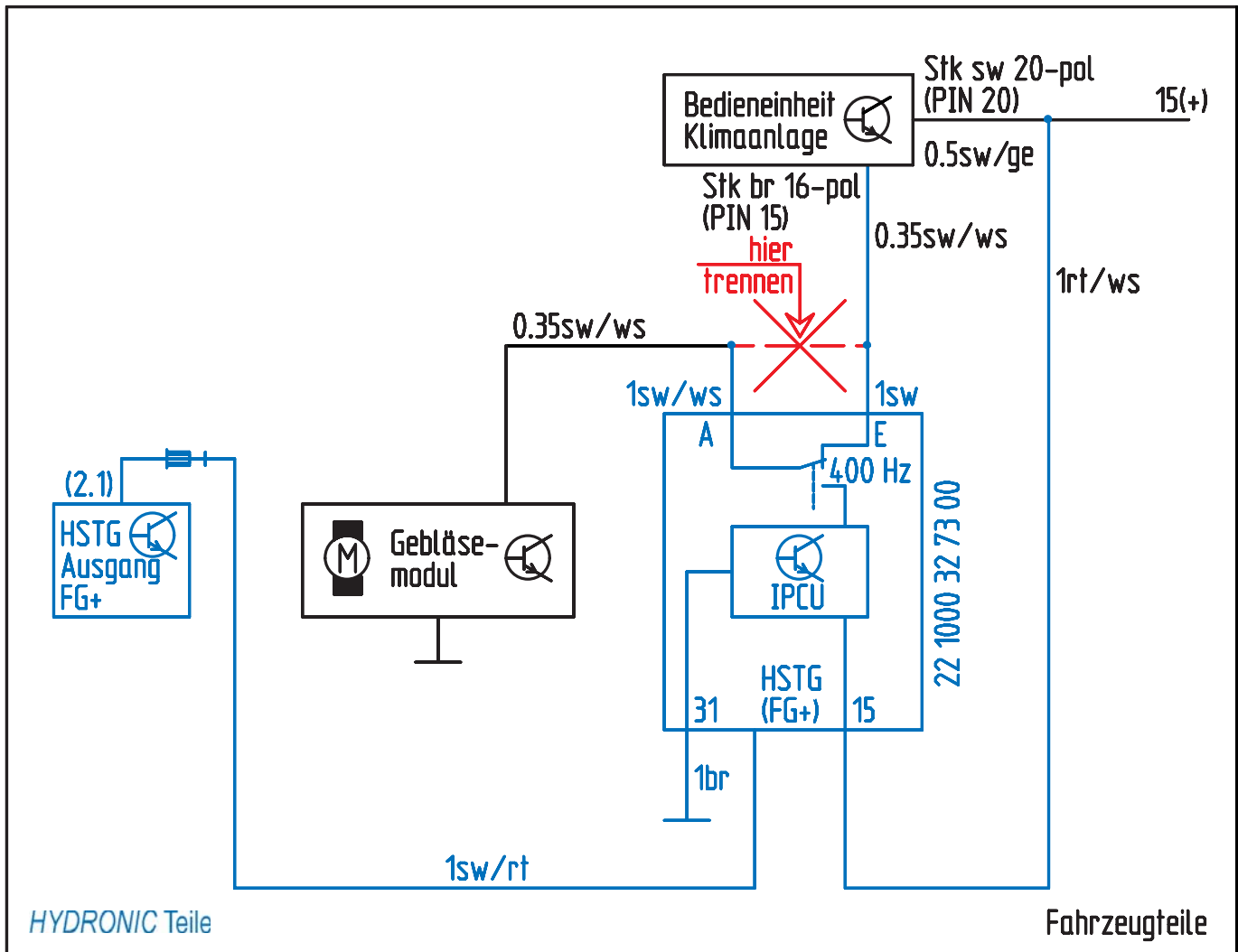
① IPCU module and IPCU module bases installed



Photo 32

① 0.5 mm² sw/ws cable (PIN 15) disconnected
 ② 1 mm² sw and 1 mm² sw/ws cables tied in
 ③ 0.5 mm² sw/ge cable disconnected and 1 mm² rt/ws cable tied in

6 Electrics



Sketch 3

6 Electrics

Install EasyStart T

(see Photo 33)

The EasyStart T is installed according to the "EasyStart T" installation instruction.

Install the EasyStart T timer in the shelf of the centre console below the Climatronic 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 \varnothing 6.5 mm and \varnothing 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 heater lead harness through the \varnothing 8 mm hole and use the expansion plug to pre-install the timer in the \varnothing 6.5 mm 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, the already installed push-on sleeves on the push-on sleeve 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 33

① EasyStart T installed

Install EasyStart R⁺ / R radio remote control (Alternative suggestion - consult with the customer)

(see Photos 34 to 35 and Sketch 4)

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 left behind the gearshift lever on the centre console.

Make a drillhole \varnothing 8 mm in the chosen position.

Insert the button in the \varnothing 8 mm hole and fix with the nut.

Attach the temperature sensor of the EasyStart R⁺ / R in a suitable position on the left in the driver's footwell.



Photo 34

① EasyStart R⁺ / R button installed



6 Electrics

Install the stationary part of the EasyStart R⁺ / R radio remote control with a holder 22 1000 51 21 00 on the M5 Torx screw of the dashboard bracket.

To do this, prepare the holder as shown in the sketch.

Use two M4 x 12 screws to fix the stationary part to the bracket.

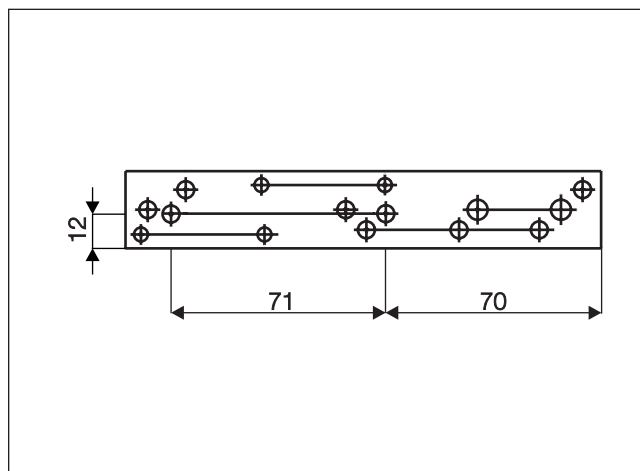
Lay the cable from the installed button and temperature sensor together with the "Control" cable loom to the installed position of the stationary part and connect to the stationary part.

Connect the antenna cable of the EasyStart R⁺ / R to the stationary part, guide under the dashboard to the left and lay 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 dashboard.



Sketch 4



Photo 35

① EasyStart R⁺ / R stationary part installed

6 Following the installation

Install grommet for exhaust pipe and install exhaust pipe

(see Photo 36)

Enlarge the existing \varnothing 8 mm hole to \varnothing 38 mm in the lower panelling of the vehicle on the rear right-hand side.
Insert a grommet for the exhaust pipe.
Re-install the lower panelling of the vehicle.
Shape the exhaust end pipe downwards through the grommet for the exhaust pipe.



Photo 36

① Grommet for exhaust pipe and exhaust end pipe installed

Installation check

- Check all components for secure fit and adequate distance from adjacent components; however, at least 15 mm!
Check hoses for leaks, laying without kinks and chafing protection!

Starting up the heater

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

Please note!

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

Complete the vehicle

- Install all removed parts in the reverse order.
- Reconnect the battery.
- Check the hoses, hose clips and pipe clamps as well as all electrical connections for secure fit.
- 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 cooling 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 Instruction together with the leaflet for the customer in the glove compartment.



8 Parts Overview

Item	Designation	Quantity	Order number
1	Vehicle-specific additional parts	1	24 8318 00 00 00
	Holder HG	1	
	Holder, supporting strut	1	
	Holder, exhaust	1	
	Holder, water	1	
	Holder, water	1	
	Holder, fuse	1	
	Sponge rubber hose 5x3 mm	6 m	
	Adapter Ø 7.5 / 3.5 mm	2	
	Rubberised hose clip, Ø 28 mm	6	
	Adapter Ø 7.5 / 3.5 mm	1	
	Water hose, Ø 18 mm	1	
	Spacer rubber profile	1	
	Heat-shrink fit hose Ø 40/20 mm	2.8 m	
	Rotatable hose holder	8	
	Grommet for exhaust pipe	1	
	Hexagon screw M10 x 20	2	
	Washer 10	4	
	Plastic nut DM6	1	
	Hexagon screw M6 x 20	1	
	Hexagon screw M6 x 25	2	
	Hexagon nut M8 DIN 934	1	
	Spring lock washer B8 DIN 137	1	
	Plastic washer B6	3	
	Fillister-head screw M4 x 10	2	
	Hexagon nut M4	2	
	Spring lock washer B4	2	
	Hexagon nut M6	3	
	Spring lock washer B6	4	
	Clip, Gemi Ø 11 mm	2	
	Connector 0.5-1.5 mm ² red	4	
	Cable lug A8	1	
	Nut M5	1	
	Spring lock washer 5	1	



Item 1

Vehicle specific additional parts

1 set

9 Leaflet for the customer

In vehicles with Climatronic

(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).
- Press the switch for the air system ② to Defrost. Maximum air directed to the front windscreen.
- The fan speed does not need to be pre-selected.



Photo 1

- ① Temperature controller
- ② Switch for the air system