HYDRONIC

Installation Recommendations

Eberspächer

J. Eberspächer
GmbH & Co. KG
Eberspächerstr. 24
D - 73730 Esslingen

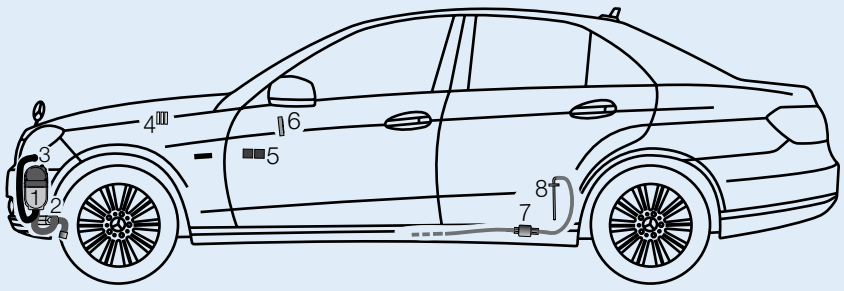
Service Hotline
01805 - 26 26 26
Facsimile
01805 - 26 26 24

New vehicle-specific installation kit + heater

Hydronic B 5 W SC in Mercedes E-Class (212) Saloon W212 / estate S212

from 2009 model
1.8 l cubic capacity / 4 cylinder in-line engine / 135 kW - 184 hp
1.8 l cubic capacity / 4 cylinder in-line engine CGI / 150 kW - 204 hp (BHG)
3.5 l capacity / 6-cylinder V-engine CGI / 200 kW - 272 hp
3.5 l capacity / 6-cylinder V-engine CGI / 215 kW - 292 hp (BGZ)
- with Thermatic or with Thermotronic
- with or without xenon headlamps
- with or without fog lamps
- with or without 4MATIC four-wheel drive
- with residual heat pump
- with manual or automatic transmission

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
2 Exhaust pipe with exhaust silencer
3 Combustion air tube
4 Fuse holder
5 IPCU / cut-off relay
6 EasyStart T
7 Metering pump
8 Fuel tank extractor

Installation location
The Hydronic is fastened horizontall in the front right corner of the engine compartment.
The exhaust connection faces downwards, the water connection to the right.

Parts needed for installation:
(1) Vehicle-specific installation kit
(2) B 5 W SC
(3) Control unit EasyStart T or 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
1.8 l CGI	135 / 184	6S
1.8 l CGI	150 / 204	5A
3.5 l CGI	200 / 272	7G
3.5 l CGI	215 / 292	7G

6S = 6-gear manual transmission
5A = 5-gear automatic transmission
7G = 7G-TRONIC automatic transmission

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 8487 00 00 00
(2) Heater	
1 Hydronic B 5 W SC	20 1820 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

**** Caution:*** *the new vehicle-specific installation kit contains **all** parts needed for installation.*

Special tools required

- Torque wrench (5....50 Nm)
- Anti-corrosion agent
- Pliers for spring band clamps
- Crimping tool
- Withdrawal hook for AirCon control unit (140 589 02 33 00)
- Tool for undoing 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

2 Preparation of the vehicle

- Disconnect the battery
- Remove glove compartment
- Remove lower cover of the instrument panel
- Remove ashtray and cupholder
- Remove rear seat bench
- Remove the AirCon control
- Completely remove windscreen wipers and windscreen wiper motor
- Remove water tank cover
- Remove battery and battery holder
- Remove top cowling
- Remove sub-cowling
- Remove right front wheel
- Remove right front wheel arch liner
- Remove left suspension cross-brace
- Remove battery controller
- Remove right underbody panelling
- Depressurise the cooling system
- Drain coolant into a clean container

Information for removing the rear seat bench
(see photo 1)

Unlatch the rear seat bench from the front plastic holders (pull upwards) and then take the rear seat bench out to the front.

Take away the insulation matting from under the right rear seat bench and remove the cover over the right tank fitting.



Photo 1

① and ② Remove rear seat bench

Information for removing the AirCon control unit
(see photos 2 to 4)

The withdrawal hooks (Mercedes part No. 140 589 02 33 00) are needed to remove the AirCon control unit.

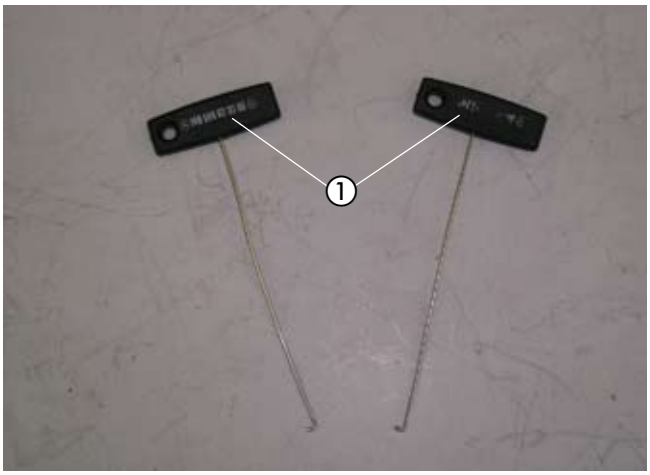


Photo 2

① Withdrawal hooks (Mercedes part No. 140 589 02 33 00)

2 Preparation of the vehicle

Unclip and remove the cover of the switch unit using the withdrawal hooks (Mercedes part No. 140 589 02 33 00).

Position the withdrawal hooks at the lower part of the AirCon control unit (arrows) and pull up to unlock.



Photo 3

① Remove the cover of the switch unit
② Unlock the AirCon control unit

Unscrew the 2 Torx screws at the AirCon control unit and take the AirCon control unit out of the installation slot.

Disconnect the electrical plug connection from the Aircon control unit.



Photo 4

① Unscrew 2 Torx screws at the AirCon control unit

3 Pre-mounting

Prepare unit holders
(see photo 5 and diagrams 1 to 4)

Prepare the bracket 93 01 as shown in the diagram.

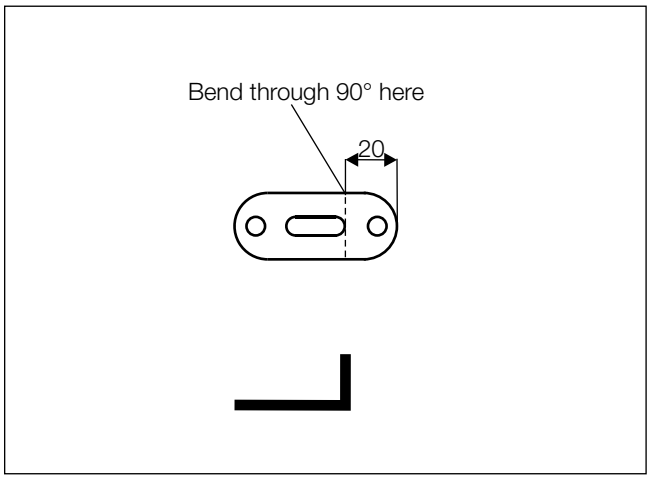


Diagram 1

Prepare the bracket 93 02 as shown in the diagram.

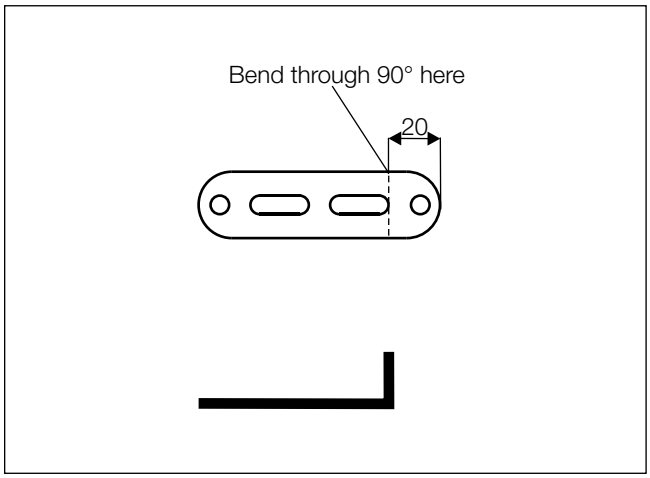


Diagram 2

Prepare the bracket 93 03 as shown in the diagram.

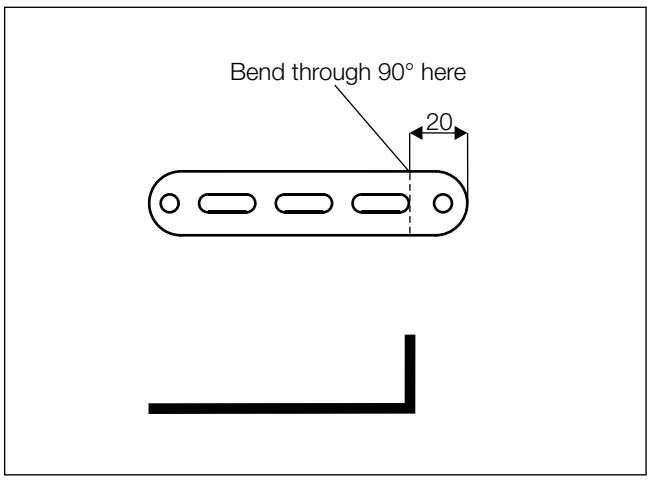


Diagram 3

3 Pre-mounting

Prepare the bracket 93 04 as shown in the diagram.

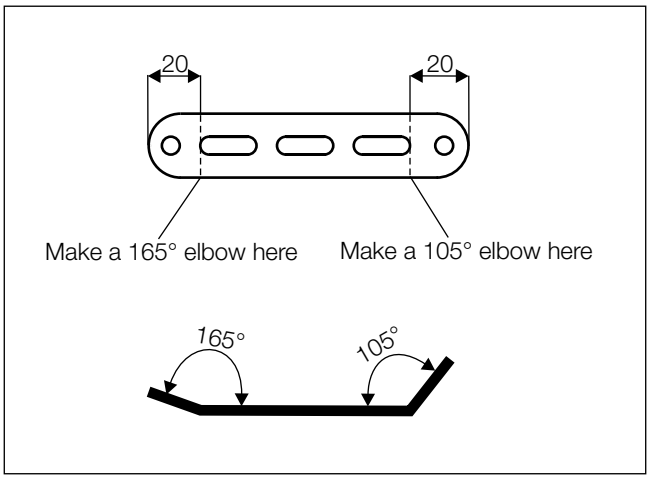


Diagram 4

Fasten bracket 93 01 and bracket 93 02 to the unit holder with an M6 x 16 screw as shown.

Fasten the prepared bracket 93 03 to the unit holder with 2 M6 x 16 screws as shown.

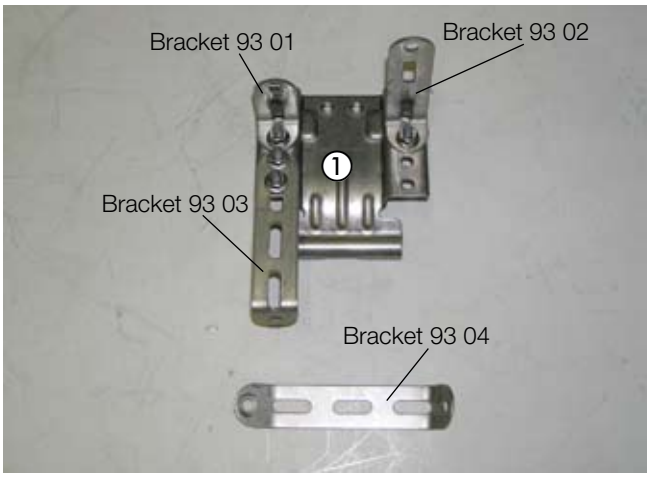


Photo 5

① Pre-mounted unit holder

Prepare exhaust silencer and exhaust pipes
(see photos 6 and 7)

Cut the exhaust pipe to a length of 210 mm and shape as shown.

Cut the exhaust pipe end to a length of 150 mm and shape as shown.

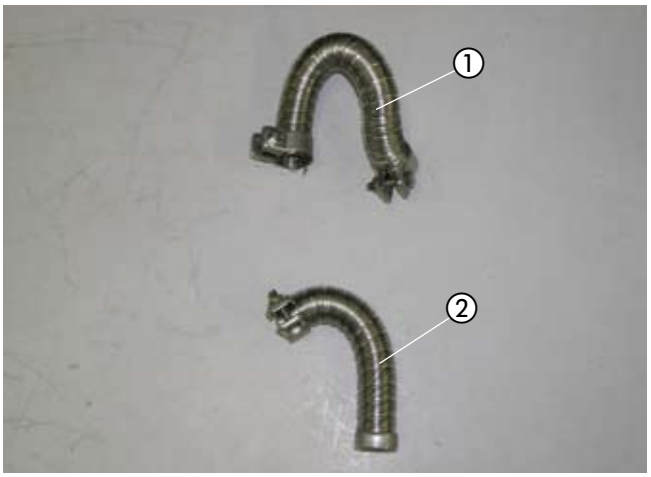


Photo 6

① Exhaust pipe
② Exhaust end pipe

3 Pre-mounting

Connect the exhaust pipe to the inlet connection of the exhaust silencer using a pipe clip.

Connect the exhaust pipe end to the outlet connection of the exhaust silencer using a pipe clip.

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



Photo 7

① Exhaust pipe, connected
② Exhaust pipe end, connected

Heater, premounted
(see photo 8)

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.

Connect the combustion air pipe to the heater with a 16-25 mm Ø hose clip and shape as shown.

Fasten the metering pump cable to the 4 x 1.25 mm Ø fuel pipe with insulating tape.

Connect the 4 x 1.25 mm Ø fuel pipe with 3.5 x 3 mm Ø fuel hose, length 50 mm, to the fuel connection of the heater using a 9 mm Ø hose clip.

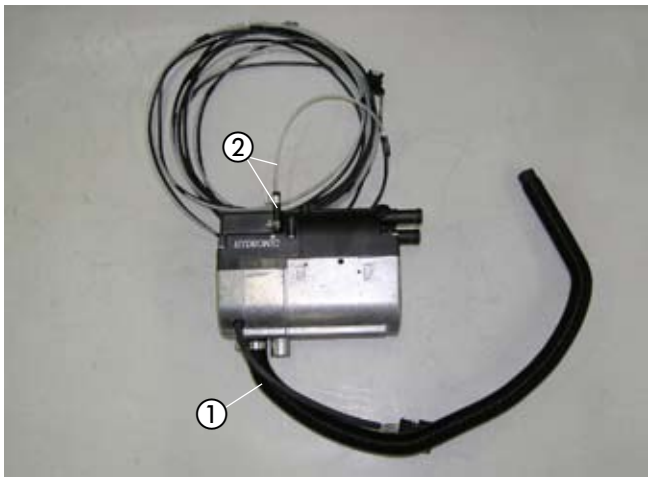


Photo 8

① Combustion air pipe, connected to the heater
② 4 x 1.25 mm Ø fuel pipe with 3.5 x 3 mm Ø fuel hose, length 50 mm, fitted

3 Pre-mounting

Remove and prepare water feed hose
(see photos 9 to 11 and diagram 5)

Remove the water feed hose from the engine to the heat exchanger (upper water hose at the heat exchanger) by loosening the clips at the connection fitting to the wiper pan and at the heat exchanger connection.



Photo 9

① Remove vehicle water feed hose

Cut through the removed water feed hose with the dimensions shown.

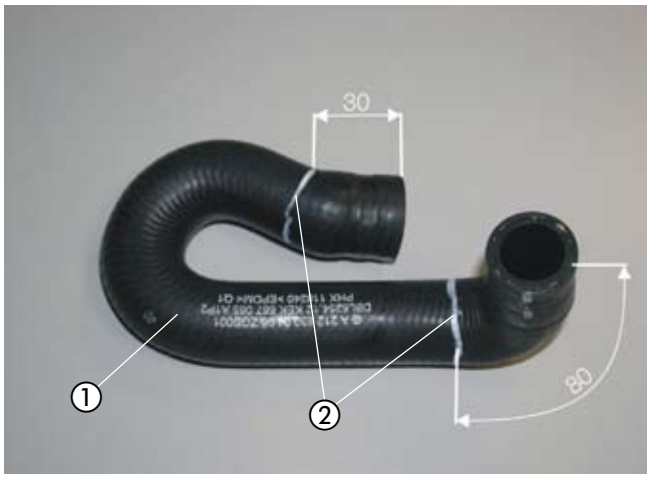


Photo 10

① Water feed hose
① Cutting points in the water feed hose

Premount the water hose ③ as shown (see also diagram 5), heeding the direction offlow at the non-return valve.

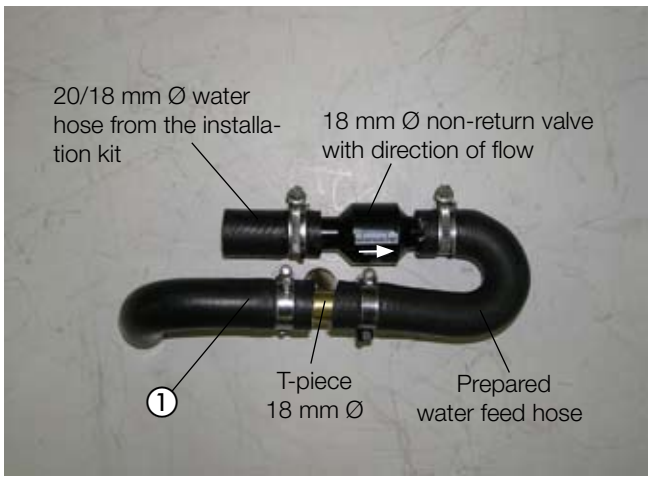


Photo 11

① Water hose ③ pre-mounted

3 Pre-mounting

Prepare the water hoses
(see diagram 5)

Cut the water hoses according to the dimensions in the diagram 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.

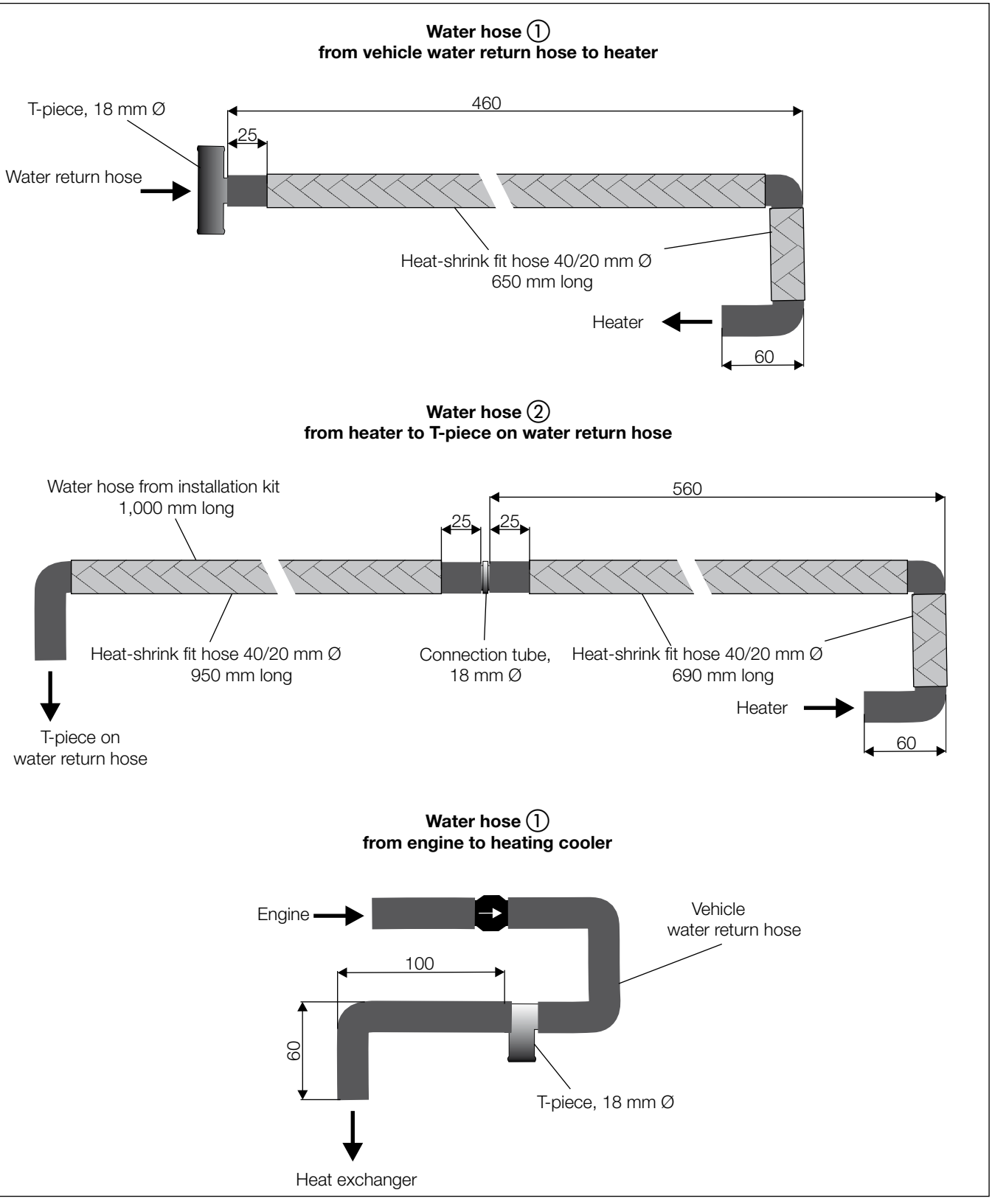


Diagram 5

Premount fuel tank extractor in vehicles with 4-cylinder engines
(see photo 12)

Cut the 4 x 1 mm Ø fuel pipe to a length of 135 mm, and heat and straighten with a hot air blower.

Premount the fuel tank extractor as shown.

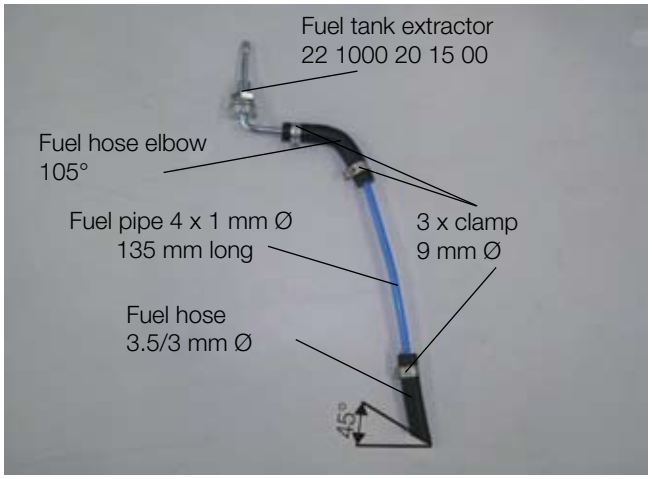


Photo 12

① Fuel tank extractor, premounted

Premount fuel tank extractor for vehicles with 6-cylinder engines
(see photo 13)

Cut the 4 x 1 mm Ø fuel pipe to a length of 170 mm, and heat and straighten with a hot air blower.

Premount the fuel tank extractor as shown.

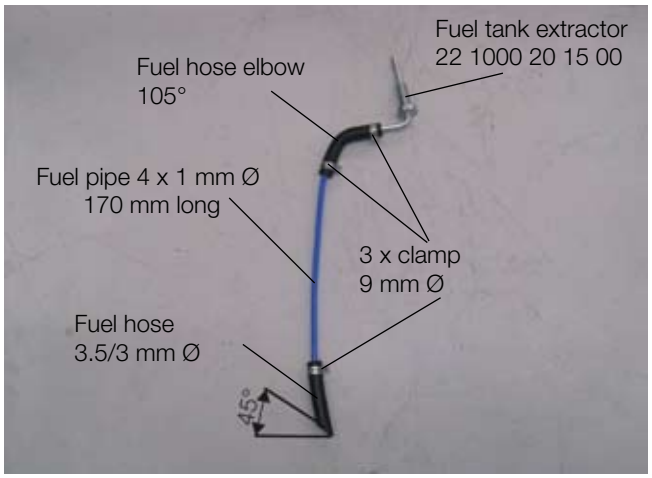


Photo 13

① Fuel tank extractor, premounted

3 Pre-mounting

Premount metering pump
(see photo 14 and diagram 6)

Prepare the bracket 93 01 as shown in the diagram.

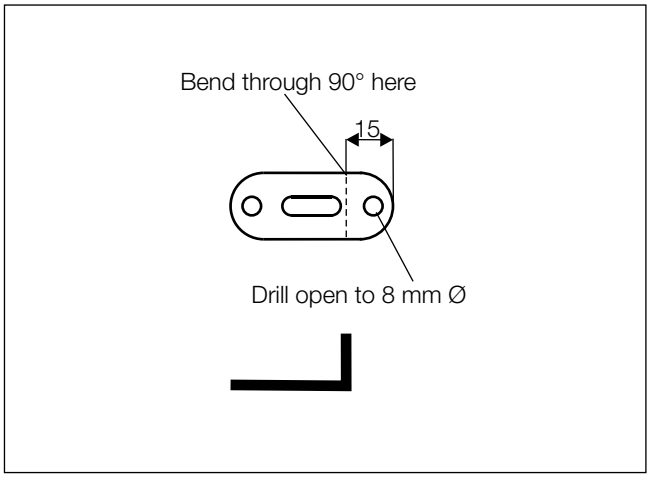


Diagram 6

Insert the metering pump in the rubber holder.

Fasten the prepared bracket 93 01 with an M6 x 20 screw and a B6 body washer to the rubber holder of the metering pump as shown.



Photo 14

① Metering pump in rubber holder
② Bracket 93 01, fitted

3 Pre-mounting

Prepare bracket for fuse block and fit fuses
(see photo 15 and diagram 7)

Prepare the holder for the fuse block as shown in the diagram.

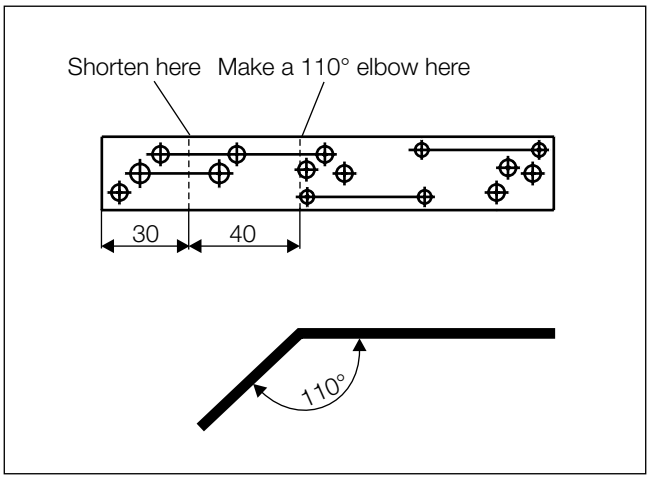


Diagram 7

Use two M4 x 16 screws to fix the fuse holder to the bracket for the fuse block.

Remove the 25A fuse from the fuse holder.

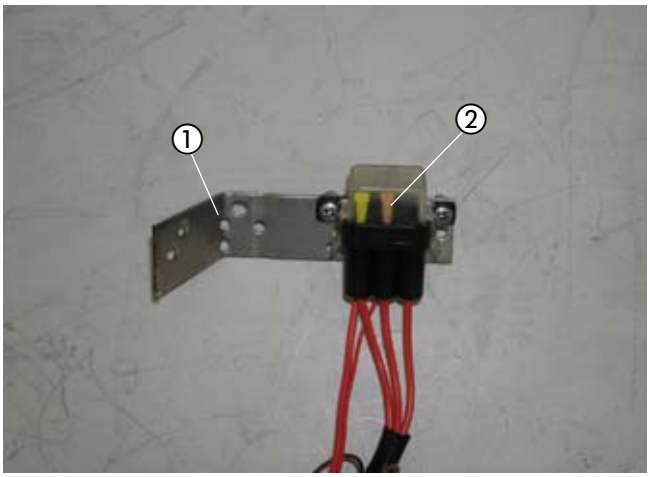


Photo 15

① Bracket for fuse block
② Fuses, fitted

Premount stationary part of the EasyStart R/R+, IPCU and cut-off relay
(see photo 16)

Mount the stationary part of the EasyStart R/R+ and the prefabricated IPCU and cut-off relay block to the bracket using two M4 x 16 screws as shown.

Insert the IPCU and the cut-off relay in the corresponding block.

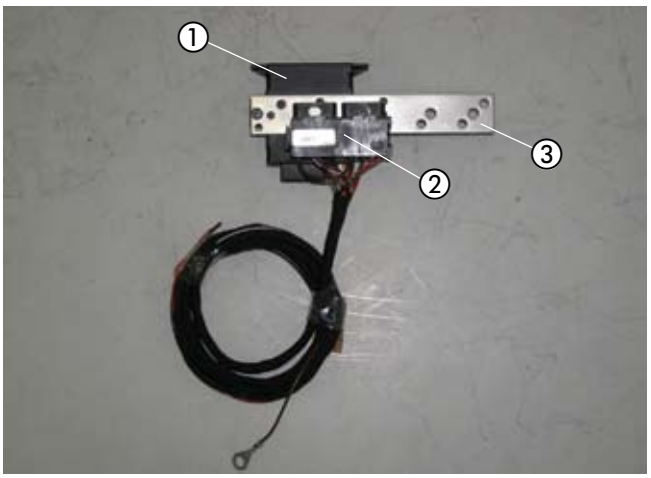


Photo 16

① EasyStart R+ stationary part
② Prefabricated IPCU and cut-off relay block
③ Holder for the stationary part of the EasyStart R/R+

4 Installation

Prepare the installation position
(see photo 17)

Insert an M6 x 16 screw with B6 body washer in the existing M8 hole in the front crossrail.

Insert an M6 x 16 screw in the existing M6 hole in the gusset plate of the right chassis beam.

The inserted M6 x 16 screws and the existing M6 screw act as fastening points for the unit holder.

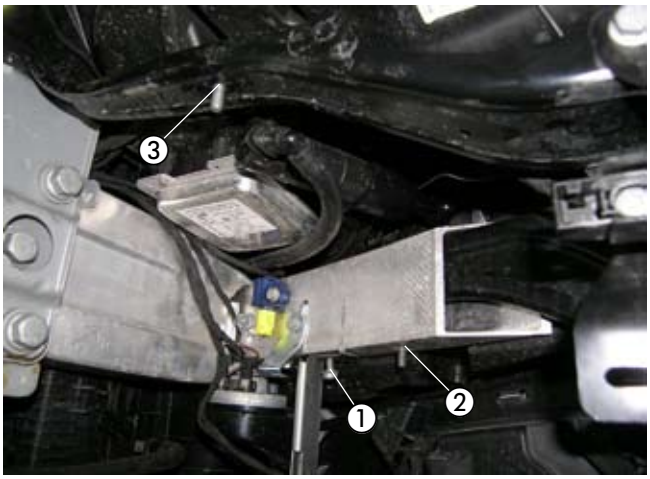


Photo 17

① Existing M6 screw in existing crossrail
② Existing M8 hole in existing crossrail
③ Existing M6 hole in gusset plate

Mount unit holder
(see photo 18)

Fasten the premounted unit holder to the fastening points of the front crossrail using the existing M6 screw and an M6 nut.

Mount the prepared 93 04 bracket with an M6 nut to the gusset plate of the right chassis beam and align as shown.

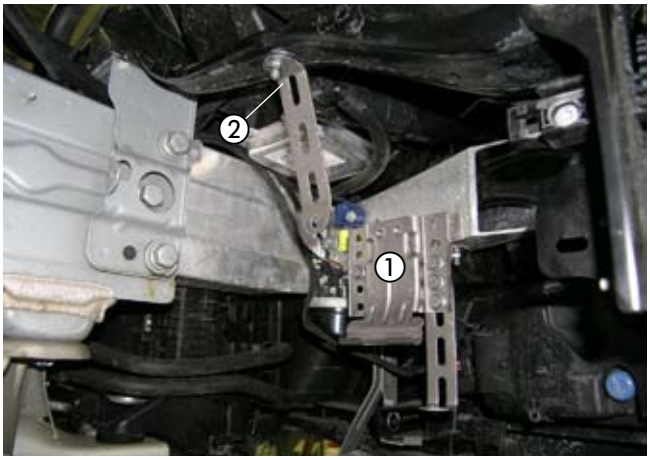


Photo 18

① Unit holder, installed
② Bracket 93 04, fitted

Install heater
(see photo 19)

Insert the premounted heater in the unit holder and fix together with the bracket 93 04 in the right threaded hole using the M6 x 95 screw with $6^{+0.5}$ Nm.

Take the combustion air pipe upwards in the elbow and route it in the protected section under the right headlamp.
Use cable ties to fix the combustion air pipe in suitable places.
Make a 2 mm Ø drain hole for condensation in the lowest point of the laid combustion air pipe.

Please note!

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



Photo 19

① Heater, installed
② Combustion air pipe, laid

Install exhaust silencer and connect
(see photo 20)

Fit the premounted exhaust silencer with an M6 x 16 screw and a B6 body washer to bracket 93 03 of the unit holder as shown.

Connect the exhaust pipe to the outlet connection of the heater using a pipe clip.

Please note!

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

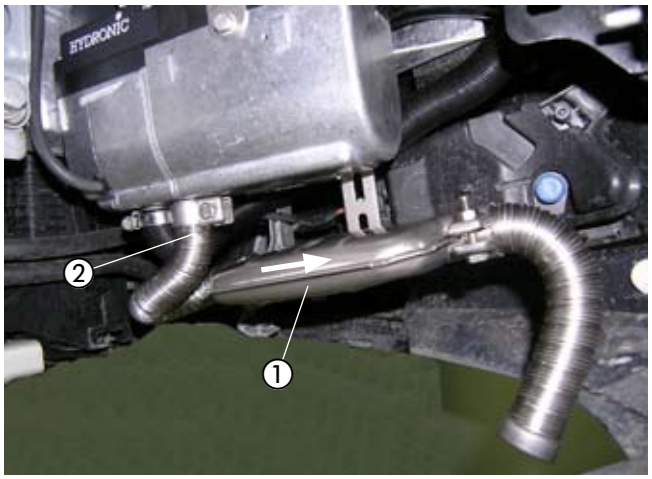


Photo 20

① Exhaust silencer, installed
② Exhaust pipe connected to heater

Cut water return hose
(see photo 21)

Cut through the vehicle water return hose from the heat exchanger in the dimensions shown.



Photo 21

① Cutting point in the water return hose

Lay and connect water hoses
(see photos 22 to 26 and diagram 8)

Connect the water hose ① to the heater's water inlet connection.

Connect the water hose ② to the heater's water outlet connection.

Route the water hose ① to the separation point at the vehicle's water return hose.

Secure the water hoses ① and ② with each other and with bracket 93 04 using cable ties.

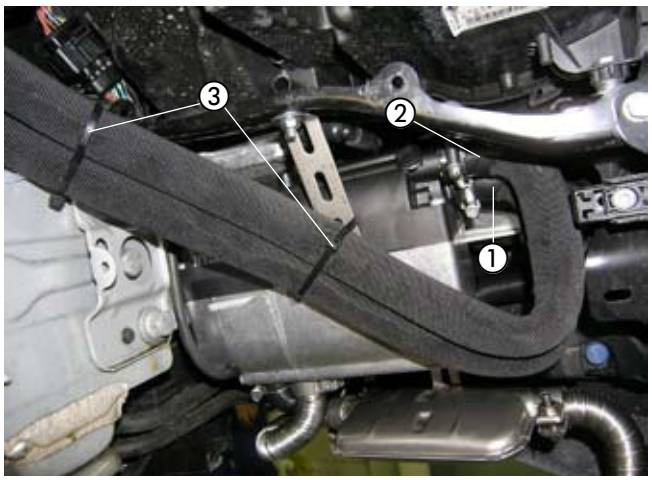


Photo 22

① Water hose ①
② Water hose ②
③ Cable ties

4 Installation

Insert the 18 mm Ø T-piece of water hose ① in the separation point of the water return hose and secure with two 20-32 mm Ø hose clips.

Route water hose ② along the vehicle water return pipe to the wiper pan.



Photo 23

① Water hose ①
② Water hose ②

Remove the plastic cover from the rubber grommet of the wiper pan.

The plastic cover is no longer required.

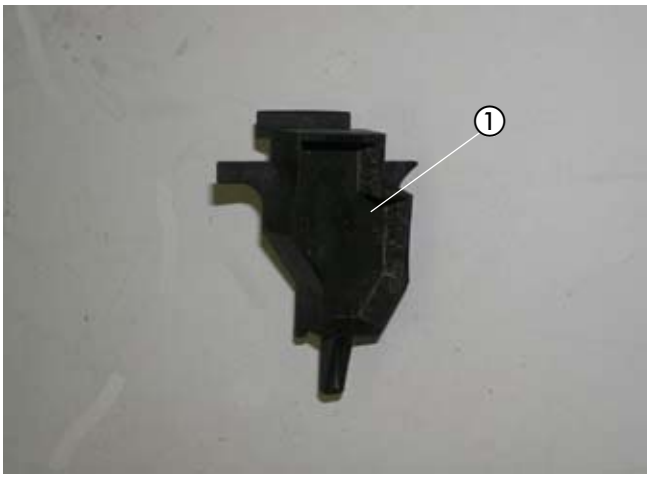


Photo 24

① Plastic cover removed from the rubber grommet of the wiper pan

Route water hose ② through the rubber grommet of the wiper pan to the heat exchanger and secure at suitable points with cable ties.

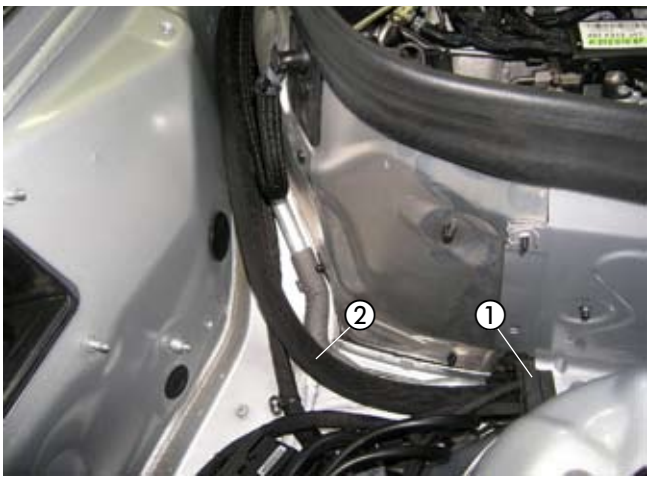


Photo 25

① Rubber grommet of the wiper pan
② Water hose ②

4 Installation

Connect water hose ② to the T-piece of premounted water hose ③ .

Connect water hose ③ to the connection fitting of the water return hose and the heat exchanger connection.

Please note!

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

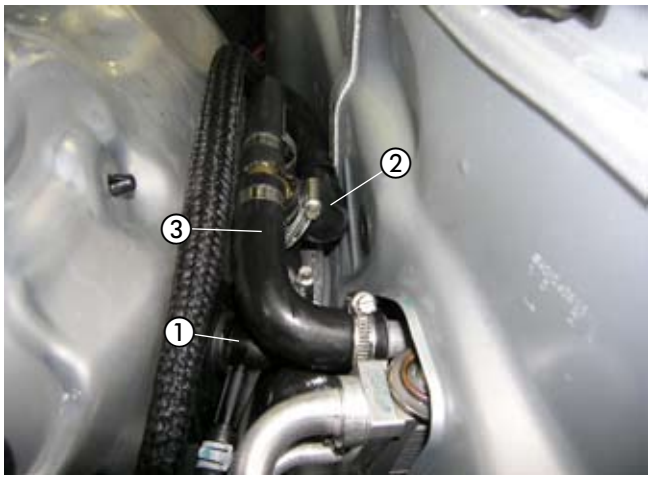
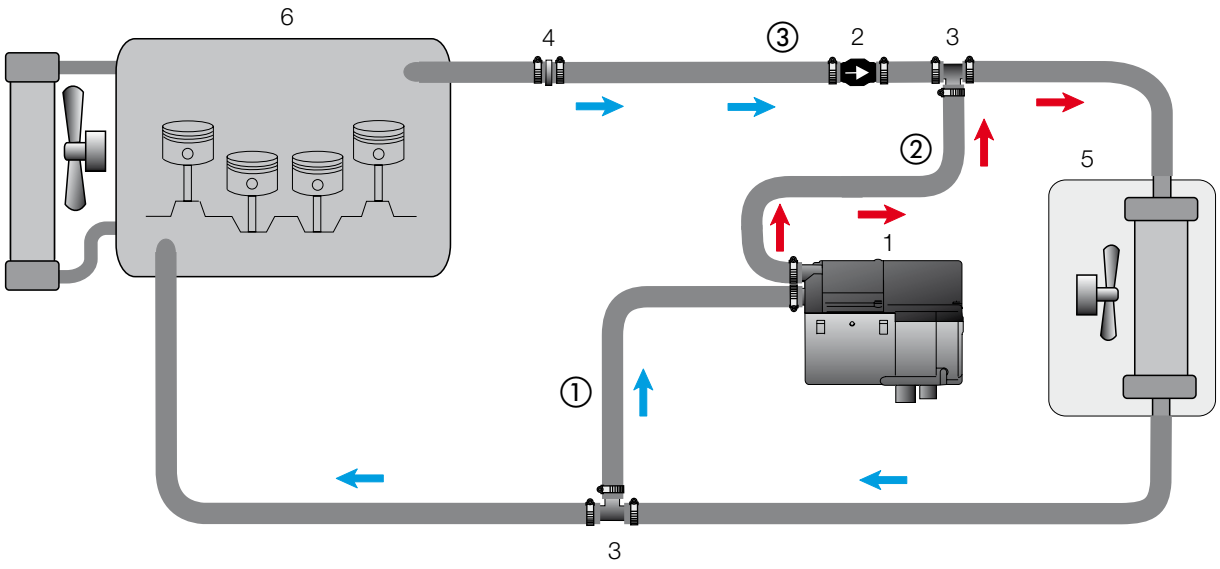


Photo 26

① Connection fitting of the water feed hose
② Water hose ②
③ Water hose ③



1 - Heater
2 - Non-return valve
3 - T-piece
4 - Vehicle adapter
5 - Vehicle heat exchanger
6 - Engine
- Hose clip, Ø 20 – 32 mm

Diagram 8

Install fuel tank extractor
for vehicles with 4-cylinder engines
(see photos 27 and 28)

Remove the upper part of the right tank fitting according to the manufacturer's instructions.

Make an 8 mm Ø hole in the top part of the tank fitting with the dimensions shown in the photo.

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.

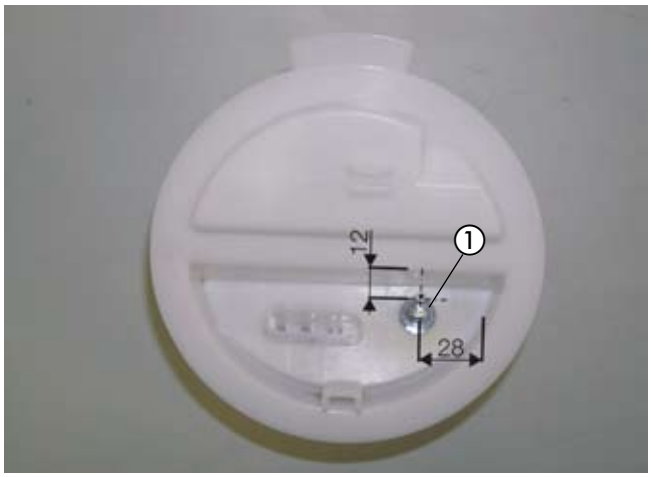


Photo 27

① 8 mm Ø hole drilled in the upper part of the tank fitting

Take the premounted fuel tank extractor from below through the prepared hole in the tank fitting, align and screw tight with the M8 nut from above.

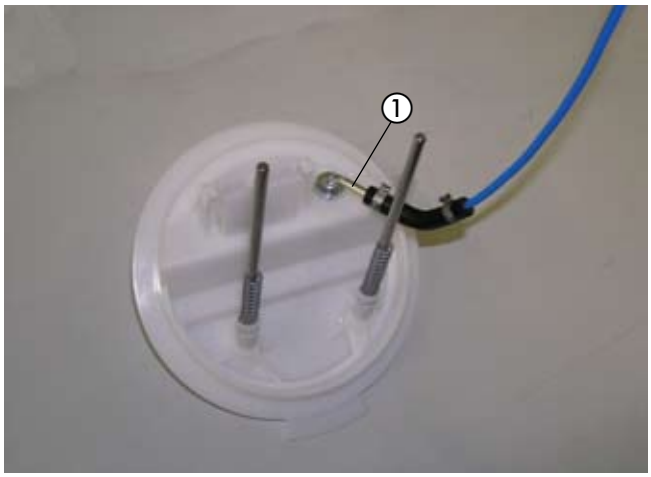


Photo 28

① Fuel tank extractor, installed

Install fuel tank extractor
for vehicles with 6-cylinder engines
(see photos 29 and 30)

Remove the upper part of the right tank fitting according to the manufacturer's instructions.

Drill an 8 mm Ø hole in the pre-marked spot in the upper section of the tank fitting as shown.

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.



Photo 29

① Premarked spot on the upper part of the tank fitting

Take the premounted fuel tank extractor from below through the prepared hole in the tank fitting, align and screw tight with the M8 nut from above.

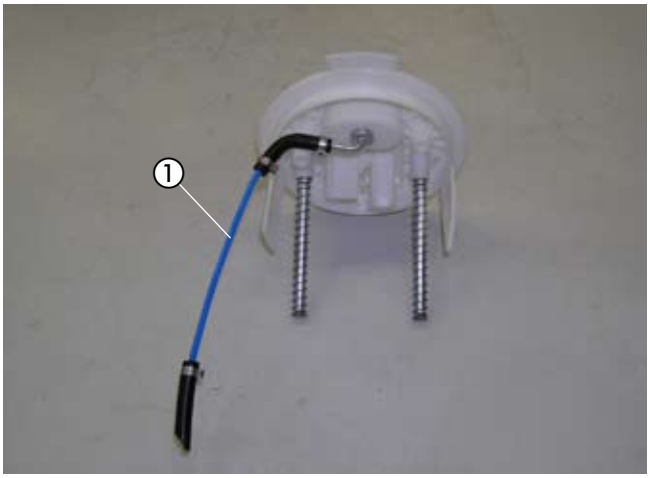


Photo 30

① Fuel tank extractor, installed

Connect fuel tank extractor
(see photo 31)

Insert the tank fitting in the tank again and fasten with the locking ring; ensure the seal fits properly.

Connect the 4 x 1 mm Ø fuel pipe to the intake connection of the fuel tank extractor using the 105° fuel hose elbow.

Connect the plug connector to the upper part of the fuel tank extractor.

Route the 4 x 1 mm Ø fuel pipe to the installation position of the metering pump on the right vehicle underbody.

Refit the cover above the tank fitting.

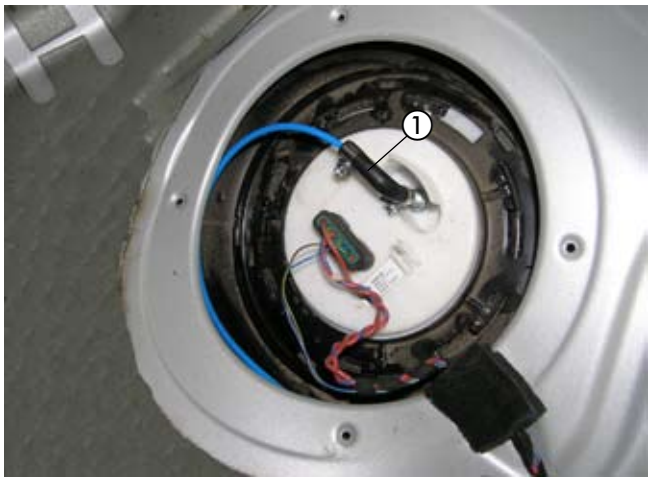


Photo 31

① Fuel pipe, 4 x 1 mm Ø, connected to the fuel tank extractor with fuel hose elbow 105°

Please note!

Secure all connection points with 9 mm Ø clips.

Install and connect the metering pump
(see photos 32 to 34)

Fit the prepared metering pump to the right rear axle holder using the existing M8 Torx screw.
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 4 x 1 mm Ø fuel pipe to size and connect with the 3.5 x 3 mm Ø fuel hose, length 50 mm, to the intake connection of the metering pump.



Photo 32

① Prepared metering pump, mounted

Fit six line brackets to the existing stud bolts on the right underbody side as shown.

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 33

① 6 x line brackets, fitted in three places

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 through the right underbody side to the metering pump.
Cut the 4 x 1.25 mm Ø fuel pipe to size and clip into the line holders.
Connect the 4 x 1.25 mm Ø fuel pipe 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 regardless of polarity.
Connect the connector to the metering pump.



Photo 34

① 4 x 1.25 mm Ø fuel pipe, and metering pump cable, laid

Install fuses
(see photos 35 and 36)

Remove the plastic plug of the wiper pan as shown.

The plastic plug is no longer required.



Photo 35

① Plastic plug, removed

Strip and insulate the 0.5 mm² br cable.
Leave the 0.5 mm² sw/rt cable at the installation site.

Fit the fuse block bracket with an M6 x 16 screw and a B6 body washer in the existing hole in the wiper pan.

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

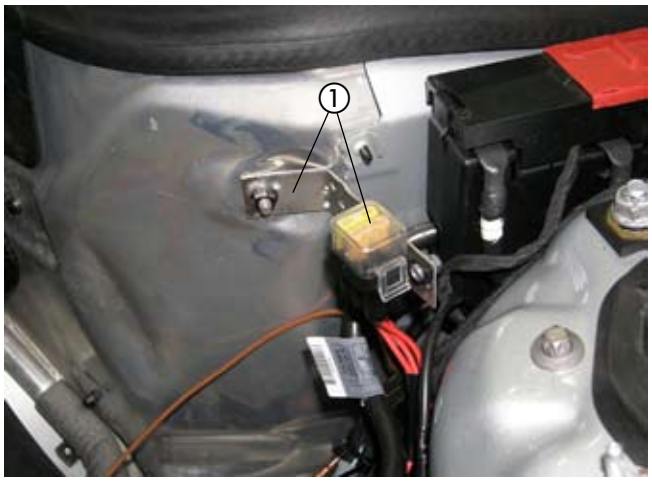


Photo 36

① Prepared fuse bracket, mounted

Cable laying
(see photo 37)

Take the "Control unit" cable room through the vehicle's rubber grommet in the engine partition into the interior.

Take the 1 mm² sw/rt cable from the IPCU module block (is fitted later) from the vehicle interior through the rubber grommet to the fuse bracket.



Photo 37

① Vehicle rubber grommet in the engine partition

Power supply
(see photo 38)

Route the 4 mm² rt positive cable to the terminal connector of the battery and connect with the A6 cable lug to the positive terminal.

Take the 2.5 mm² br earth cable to the earth point on the right shock absorber dome, replace the A6 cable lub with an A8 cable lug and connect to the earth point.



Photo 38

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

Fan control
(see photos 39 to 42 and diagram 9)

Mount the prepared bracket for the IPCU and cut-off relay block together with the 1 mm² br cable to the existing hole in the A-pillar on the passenger's side, using an M6 x 16 screw and a B6 body washer, as shown.

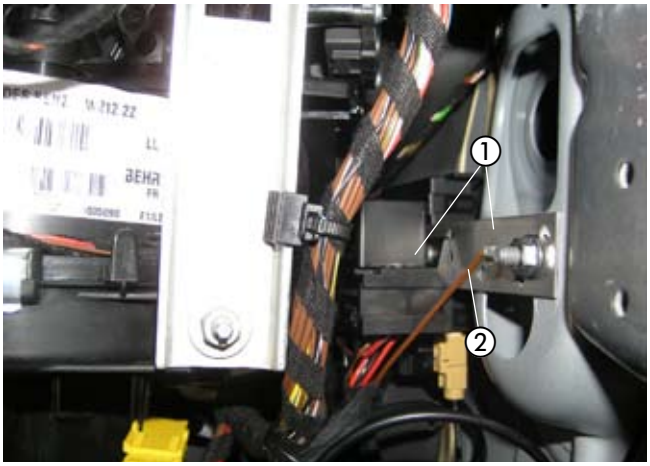


Photo 39

① Prefabricated IPCU and cut-off relay block, mounted
② 1 mm² br cable from cut-off relay, connected

Take the 1 mm² sw and 1 mm² sw/ws cables from the connector block of the IPCU module to the AirCon control unit.

Disconnect the 0.5 mm² ws cable (PIN 4 at the 4-pin black connector) at the AirCon control unit.

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

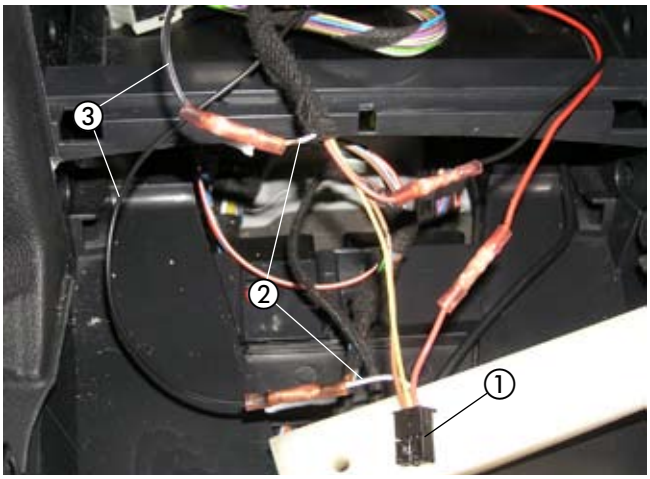


Photo 40

① 4-pin black connector at AirCon control unit
② 0.5 mm² ws cable (PIN 4 at the 4-pin black connector), disconnected
③ 1 mm² sw/ws and 1 mm² sw cables, integrated

4 Installation

Take the 1 mm² rt and 1 mm² sw cables from the connector block of the cut-off relay to the AirCon control unit.

Disconnect the 0.5 mm² rt cable (PIN 3 at the 4-pin black connector) at the AirCon control unit.

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

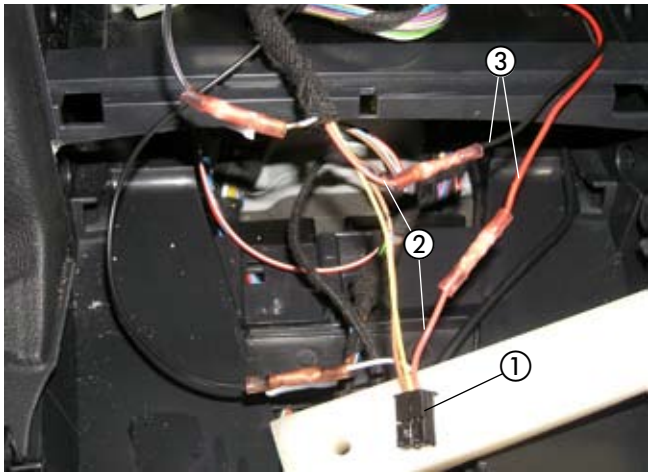


Photo 41

① 4-pin black connector at AirCon control unit
② 0.5 mm² rt cable (PIN 3 at the 4-pin black connector), disconnected
③ 1 mm² rt and 1 mm² sw cables, integrated

Disconnect the 1.5 mm² gn/sw cable at the 3-pin connector of the cigarette lighter and integrate the 1 mm² rt/ws cable from the connector block of the cut-off relay using a 1.5 - 2.5 mm² butt-type connector.

Connect the 0.5 mm² sw/rt of the main cable harness in the engine compartment and the 1 mm² sw/rt cable from the connector block of the IPCU module using a 1.5 - 2.5 mm² butt-type connector.

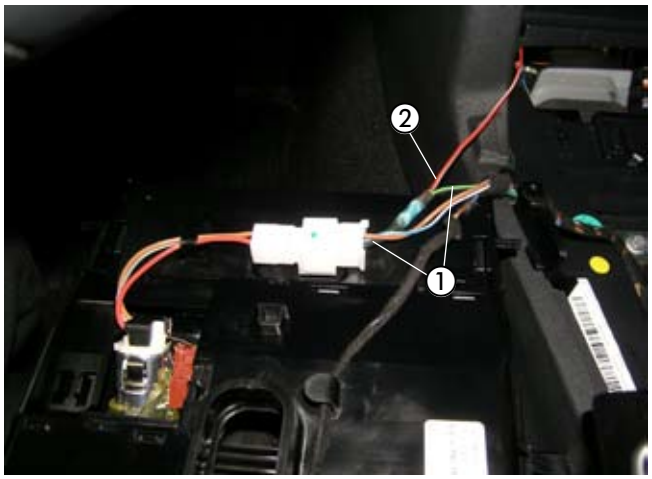


Photo 42

① 1.5 mm² gn/sw cable, disconnected
② Cable 1 mm² rt/ws, integrated

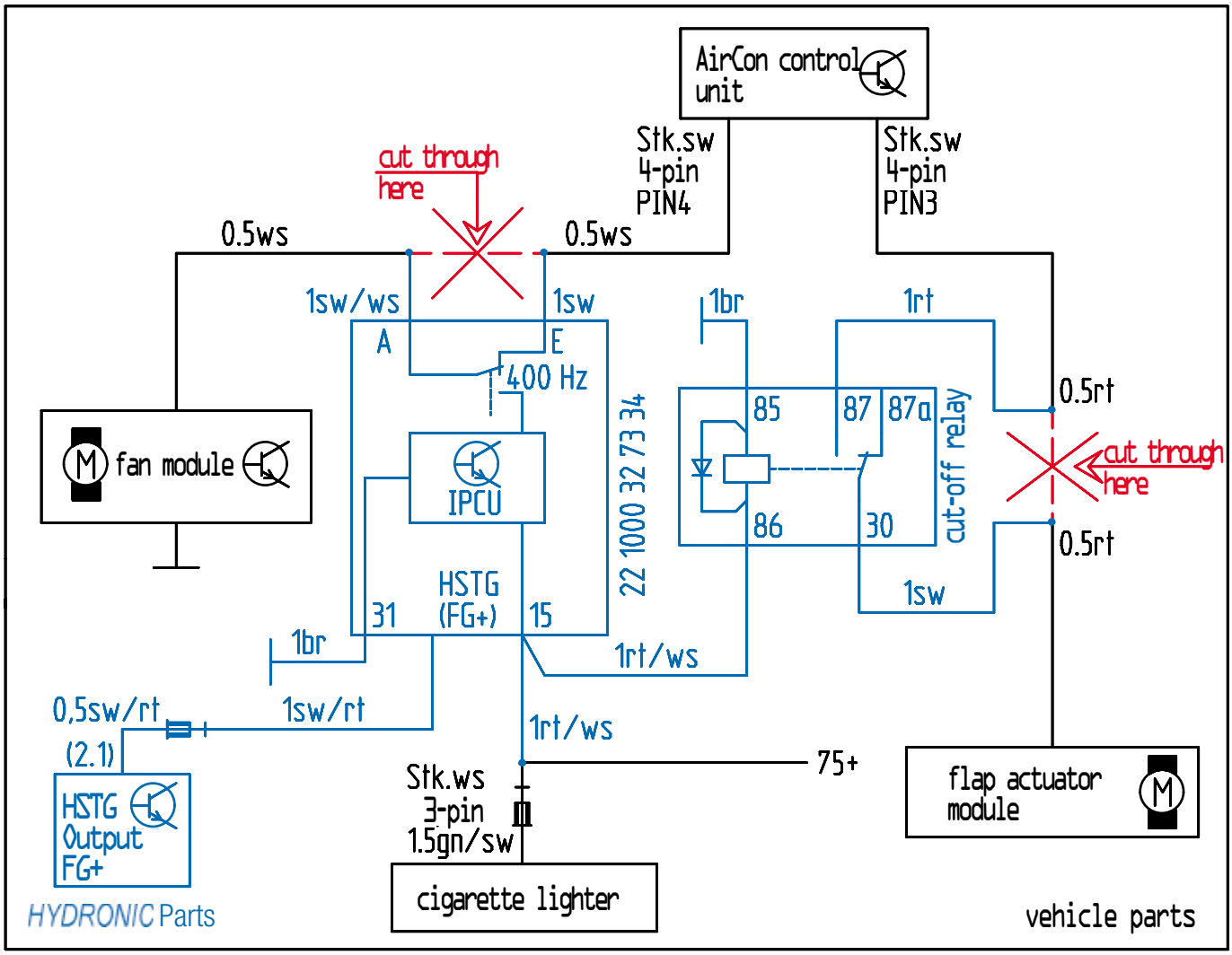

AirCon control unit
Stk.sw 4-pin PIN4
Stk.sw 4-pin PIN3
cut through here
0.5ws
0.5ws
1sw/ws
1sw
A
E
400 Hz
IPCU
fan module
22 1000 32 73 34
1br
1rt
85
87
87a
86
30
cut-off relay
0.5rt
cut through here
0.5rt
1sw
HSTG (FG+)
31
15
1br
1rt/ws
0,5sw/rt
1sw/rt
(2.1)
HSTG Output FG+
1rt/ws
75+
Stk.ws 3-pin 1.5gn/sw
cigarette lighter
flap actuator module
HYDRONIC Parts
vehicle parts

Diagram 9

Install EasyStart T
(see photo 43)

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

Mount the EasyStart T timer to the covering of the instrument panel on the right next to the light switch.

Use the supplied self-adhesive drilling template to position and drill the holes for fixing the timer and the heater lead harness.
Drill the 6.5 mm Ø and 8 mm Ø holes.
Remove the drilling template after drilling 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.
Press or screw the fastening screw into the expansion plug to fasten 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 adhere the cover cap in position.

Please note!

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



Photo 43

① EasyStart T, installed

Install EasyStart R/R+ radio remote control (Alternative suggestion - consult with the customer)
(see photos 44 to 46)

The EasyStart R/R+ is installed according to the Technical Description for the EasyStart R/R+ Radio Remote Control; see the "Installation Instruction" section.

Mount the EasyStart R/R+ button to the switch unit of the central console as shown.

To do so, drill an 8 mm Ø hol in the cover of the switch unit and insert the button in the drilled hole.



Photo 44

① EasyStart R/R+ button, installed

4 Installation

Lay the cables from the installed button and temperature sensor together with the "Control" cable loom to the already mounted stationary part of the EasyStart R/R+ and connect to the stationary part.

Connect the antenna cable of the EasyStart R/R+ to the stationary part, take it to the right and lay in the rubber door seal on the passenger 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.

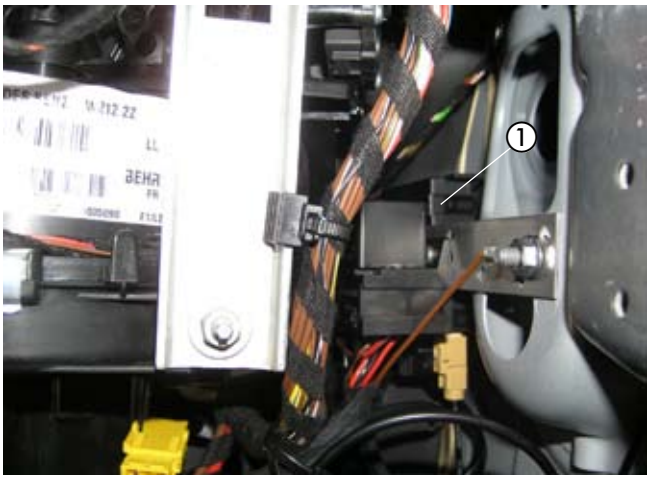


Photo 45

① EasyStart R+ stationary part

Fit the EasyStart R+ temperature sensor to the cover of the A-pillar in the passenger footwell.

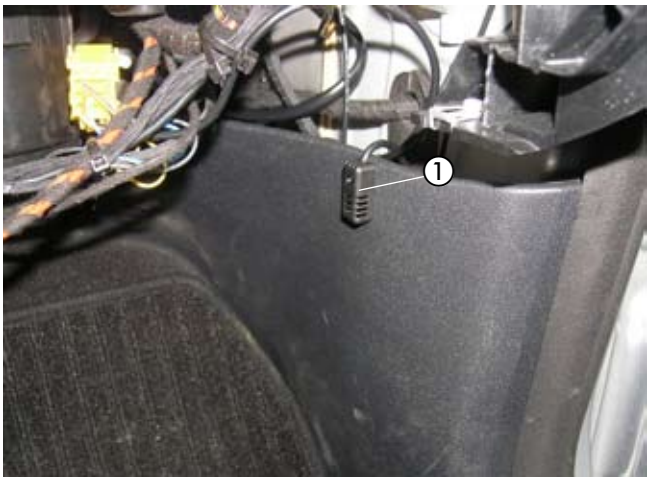


Photo 46

① EasyStart R+ temperature sensor, installed

5 After installation

Mount grommet for exhaust pipe end
(see photos 47 and 48)

Insert the 41 mm Ø grommet in the existing 38 mm Ø hole in the lower part of the right wheel arch housing.



Photo 47

① Exhaust pipe end grommet, mounted

Mount the right wheel arch housing, taking the exhaust pipe end through the grommet.



Photo 48

① Exhaust pipe end, mounted

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.
- Restore all the vehicle's programmed settings (radio, window lift, etc.).
- Fill the cooling system, start the engine, vent the cooling system and check for leaks, top up any missing cooling liquid up to the marking (arrow).
- Adhere the "Refuel" sticker in the fuel tank flap.
- 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 unit and place the operating instructions 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.

6 Parts Overview

No.	Designation	Quantity	Order number
1	Vehicle-specific installation kit		24 8487 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	
	Hose shape 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 nut M6	6	
	Bracket 93 01	2	
	Bracket 93 02	1	
	Bracket 93 03	1	
	Bracket 93 04	1	
	R+ holder	1	
	Hexagon screw M6 x 16	4	
	Hexagon nut M6	4	
	Body washer B6	5	
	Screw M4 x 16	2	
	Hexagon nut M4	2	
	Exhaust grommet 41 mm Ø	1	
	Adapter 20 / 18 mm Ø	1	
	T-piece, 18 mm Ø	2	
	Water hose 18 mm Ø	2	
	Non-return valve	1	
	Clip, 20 - 32 mm Ø	8	
	Fuel tank extractor	1	
	Fuel hose elbow 105°	2	
	Hose clip Ø 9 mm	2	
	Clamp, 9 mm Ø	3	
	IPCU and cut-off relay cable harness	1	
	Connection tube, 18 mm Ø	1	
	Triple line holder	6	
	Butt-type connector blue	1	
	Butt-type connector, red	1	
	Relay 12V	1	
	IPCU module	1	
	Cable lug A8	1	
	Exhaust pipe	0.3 m	
	Heat-shrink fit hose 40/20 mm Ø	2.5 m	
	Fuel hose 3.5 x 3 mm	0.05 m	

Before switching on
(see photo 1)

- Before switching on or pre-programming the heating mode with the ignition switched on, set the vehicle's temperature controllers ① to "HI" (maximum setting).
- Switch the button for the air system ② to Defroster. Maximum air directed to the front windscreen.
- The fan speed does not need to be pre-selected.



Photo 1

① Temperature controller
② Button for the air system