INSTALLATION RECOMMENDATION HYDRONIC S3 – B 5 E IN THE FORD FOCUS



THIS INSTALLATION RECOMMENDATION APPLIES TO VEHICLES FROM MODEL YEAR 2018 WITH THE FOLLOWING MOTORISATION:

1.0 l cubic capacity / 3 cylinder in-line engine / 92 kW - 125 HP (HSN: 8566 / TSN: BPO)

Eberspächer

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This installation recommendation documents the installation of the Hydronic S3 heater in a vehicle from model year 2018 with the following equipment:

- **with 2-zone automatic AirCon**
- **with fog lamps**
- **with LED daytime running lights**
- **with xenon headlights**
- **with manual transmission**

PLEASE NOTE!

This installation recommendation is valid for the above mentioned vehicle to the exclusion of all liability claims.
Deviating model years and/or deviating equipment may result in modifications to this installation recommendation.
It is therefore mandatory to check the feasibility of installing the heater in the vehicle before starting work.
All liability claims resulting from modifications to the vehicle are excluded.

Installation time: approx. 8 hours

1 INTRODUCTION

SPECIAL TEXT FORMATS, PRESENTATIONS AND PICTURE SYMBOLS

In this installation recommendation, special text formats and picture symbols are used to emphasise different contents. Please refer to the following examples for their meanings and appropriate action.

SPECIAL TEXT FORMATS AND PRESENTATIONS

- This dot (▪) denotes a list, which is started by a heading.
  - If an indented dash (–) follows a “dot”, this list is a sub-section of the black dot.

PICTURE SYMBOLS

DANGER!

This information points out a potential serious or fatal danger. Ignoring this information can result in severe injuries.

➔ This arrow indicates the appropriate precaution to take to avert the danger.

CAUTION!

This information points out a dangerous situation for a person and / or the product. Ignoring this information can result in injuries to people and / or damage to equipment.

➔ This arrow indicates the appropriate precaution to take to avert the danger.

PLEASE NOTE!

These remarks contain recommendations for use and useful tips for the operation, installation and repair of the heater.

SAFETY INSTRUCTIONS FOR INSTALLATION AND REPAIR

DANGER!

Improper installation or repair of Eberspächer heaters can cause a fire or result toxic exhaust entering the inside of the vehicle.
This can cause serious and even fatal risks.

➔ Only authorised and trained persons may install the heater according to the specifications in the technical documents or repair it using original spare parts.

➔ 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.

➔ Installation according to this installation recommendation may only be carried out in conjunction with the respective unit-related technical description, installation instructions, operating instructions and maintenance instructions.
This document must be carefully read through before / during installation and repair and followed throughout. Particular attention is to be paid to the official regulations, the safety instructions and the general information.

PLEASE NOTE!

- The relevant rules of sound engineering practice and any information provided by the vehicle manufacturer are to be observed during the installation and repair.
- When carrying out electric welding on the vehicle, the positive cable at the battery should be disconnected and earthed to protect the control box.

LIABILITY CLAIM / WARRANTY

Eberspächer does not accept any liability for defects and damage, which are due to installation or repair by unauthorised and untrained persons.
Compliance with the official regulations and the safety instructions is prerequisite for liability claims.
Failure to comply with the official regulations and safety instructions leads to exclusion of any liability of the heater manufacturer.

ACCIDENT PREVENTION

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

1 INTRODUCTION

ADDITIONAL INFORMATION ON THE VALIDITY OF THE INSTALLATION RECOMMENDATION

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
1.0 l	92 / 125	6S / 6AT

6AT = 6-gear automatic transmission
6S = 6-gear manual transmission

PLEASE NOTE!

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

INITIAL STARTUP OF THE HEATER OR FUNCTIONAL TEST

- After installation or carrying out a repair on the heater, the coolant circuit and the whole fuel supply system must be carefully vented. Comply with the instructions issued by the vehicle manufacturer.
- Open all heating circuits before the trial run (set the temperature controller to “hot”).
- During the heater trial run, all water and fuel connections must be checked for leaks and secure, tight fit.
- If faults occur while the heater is running, use a diagnostic unit to correct the cause of the fault.

PARTS REQUIRED FOR INSTALLATION

QUANTITY	DESIGNATION	ORDER NO.
1	Hydronic S3 - B 5 E	
1	Vehicle-specific installation kit	24 8000 35 00 45

EasyStart control unit as chosen:

1	EasyStart Web	
1	EasyStart Remote+	
1	Easy Start Remote	

SPECIAL TOOLS REQUIRED

- Necessary torque wrench
- Blind rivet nut insertion tool
- Anti-corrosion agent
- Crimping tool
- Pliers for spring band clamps

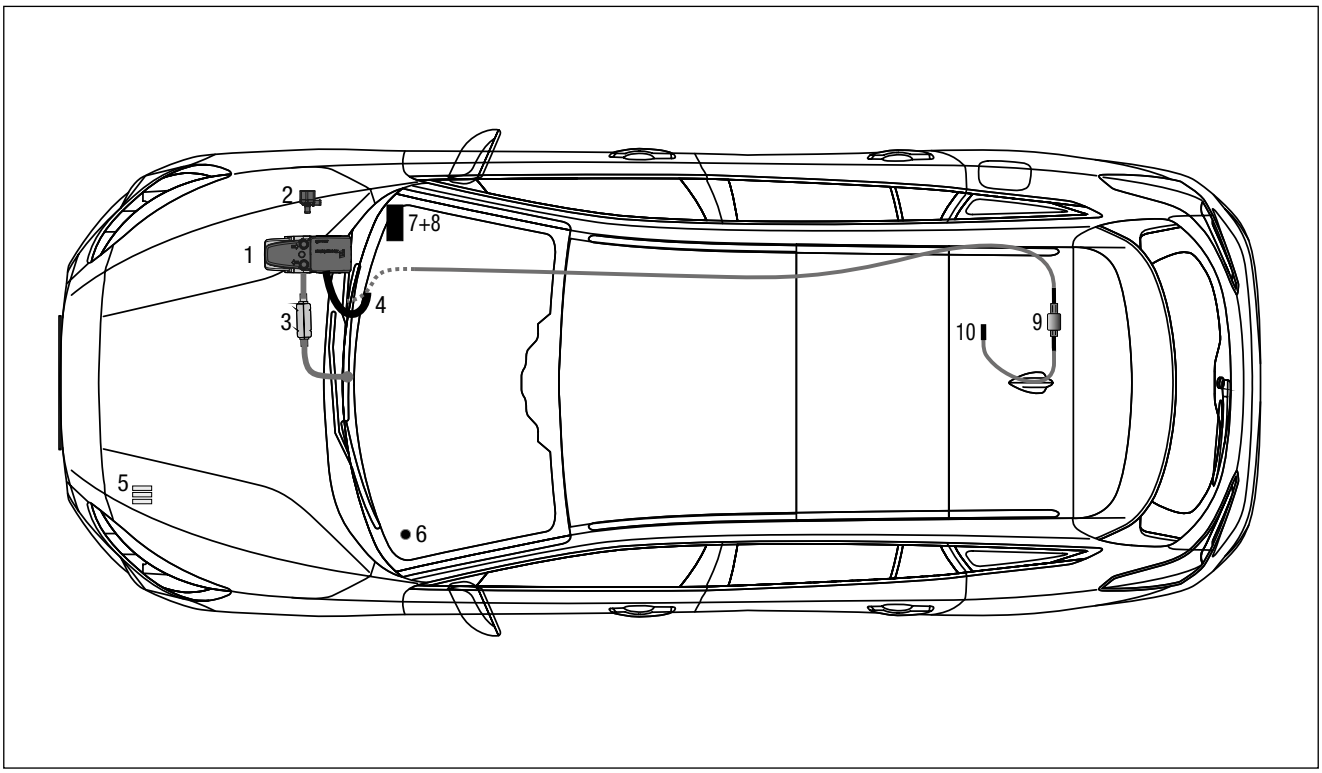
TIGHTENING TORQUES

If no tightening torques are specified, tighten the screw connections according to the following table:

Part name	Tightening torques
Hex screw M6	10 $^{+1}$ Nm
Hex screw M8	20 $^{+2}$ Nm
Hex screw M10	45 $^{+2}$ Nm
Self-tapping M6 x 16 Torx screw	11 $^{+1}$ Nm
Screw M4	3 $^{+0.5}$ Nm
Screw M5 x 10	5 $^{+0.5}$ Nm
Screw M5 x 18	6.5 $^{+0.5}$ Nm
Pipe clip for exhaust pipe	7 $^{+1}$ Nm
Hose clip for water hose	3 $^{+0.5}$ Nm
Hose clip for combustion air pipe	5 $^{+0.5}$ Nm
Hose clip for fuel pipe	1 $^{+0.2}$ Nm

1 INTRODUCTION

INSTALLATION DRAWING



1 Heater Hydronic S3
2 Water pump
3 Exhaust pipe with exhaust silencer
4 Combustion air tube
5 Fuse holder
6 Button, EasyStart Remote / Remote+ / Web
7 Stationary unit, EasyStart Remote / Remote+ / Web
8 Fan control box “EasyFan”
9 Metering pump
10 Tank extractor

2 PRELIMINARY ASSEMBLY

PREPARATORY WORK ON THE VEHICLE

- Disconnect the battery
- Remove glove compartment
- Remove rear seat bench
- Remove sub-cowling
- Remove air filter box
- Remove vehicle sub-cowling on the brake and fuel lines
- Depressurise the cooling system
- Drain coolant into a clean container

PREPARE HEATER
(see Figs. 1 and 2)

Mount the angled water connection socket to the heater as shown, see “Assembly Steps”.

Remove the duplicate nameplate from the heater.

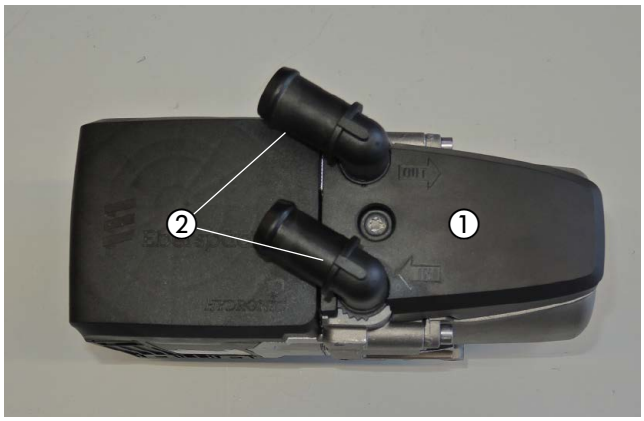


Fig. 1
① Heater
② Mount elbow connection

Installation steps

- Grease the O-ring (5) and insert in the groove at the connection socket.
- Fit the connection socket (3 or 4) in the cut-outs of the sensor cover (2). The collar of the connection socket is above the cover.
- Position the connection socket with the gearing in the sensor cover and fix accordingly.
- Fit the sensor cover on the heater with the connection socket pointing forwards.
- Press the connection socket completely into the corresponding holes on the heat exchanger.
- Adjust the direction for the angled connection socket:
  – Raise the sensor cover up to the collar of the connection socket
  – Turn the connection socket in the required direction
  – Push the sensor cover down and readjust the position of the connection socket so that the toothed edges engage again
- Fasten sensor cover with M5 x 18 (1) screw
  (tightening torque $6.5^{+0.5}$ Nm).

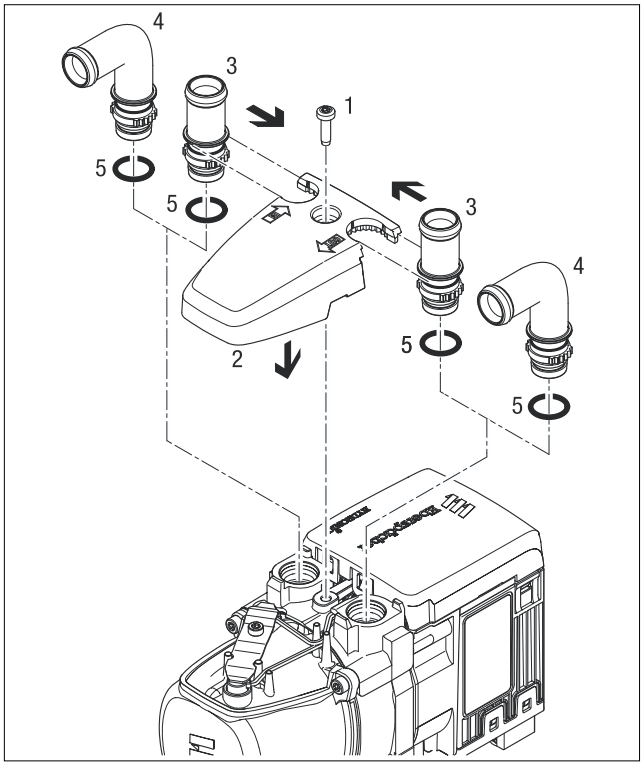


Fig. 2

1 M5 x 18 screw
2 Sensor cover
3 Connection socket, straight
4 Angled connection socket
5 O-ring

2 PRELIMINARY ASSEMBLY

ADHERE DUPLICATE NAMEPLATE
(see Fig. 3)

Fit the duplicate nameplate on the B-pillar on the driver's side as shown.



Fig. 3
① Fit duplicate nameplate

PREPARE HEATER BRACKET
(see Fig. 4)

Prepare the holder as shown.

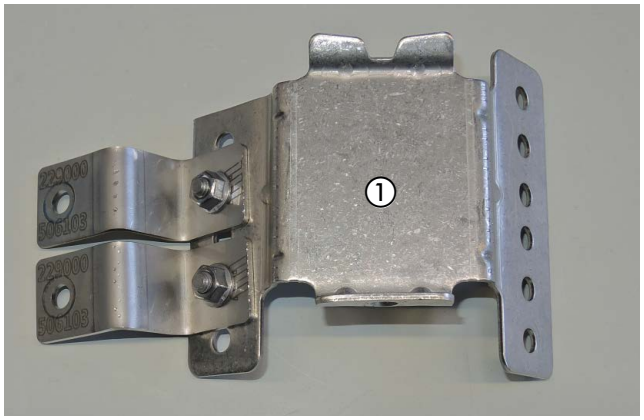


Fig. 4
① Heater holder

2 PRELIMINARY ASSEMBLY

PREMOUNT WATER PUMP
(see Fig. 5)

Mount the water pump holder and the holder (22 1000 50 6700) with an M6 x 12 screw and a nut as shown.
Insert the water pump in the prepared water pump holder.

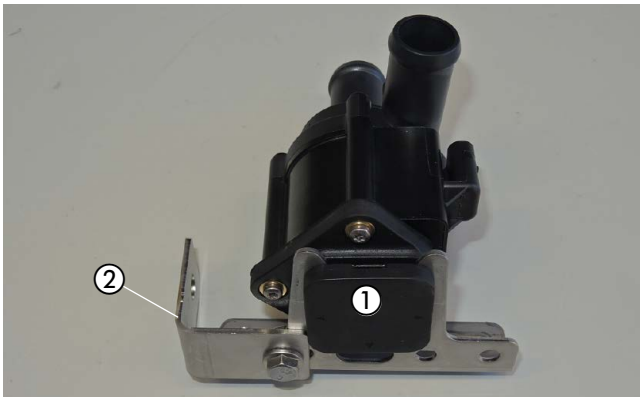


Fig. 5
① Water pump
② Premounted water pump holder

PREPARE EXHAUST SILENCER
(see Fig. 6)

Prepare the already premounted exhaust silencer for subsequent installation.

Shape the exhaust pipes as shown.

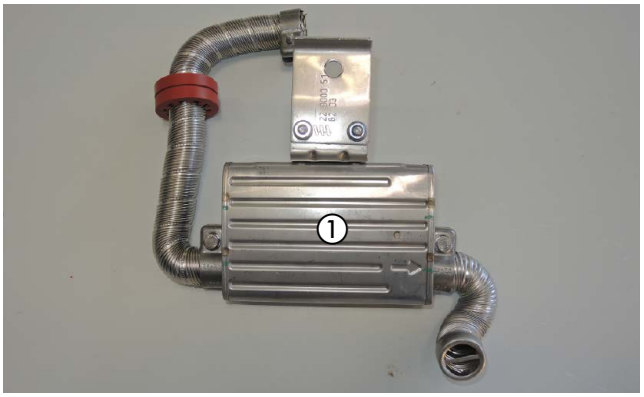


Fig. 6
① Exhaust silencer with holder and exhaust pipes

PREMOUNT METERING PUMP
(see Fig. 7)

Insert the metering pump in the rubber bracket as shown.

Fasten the 90° bracket (22 9000 50 65 00) with an M6 x 25 screw and a B6 body washer to the rubber holder of the metering pump and align as shown.

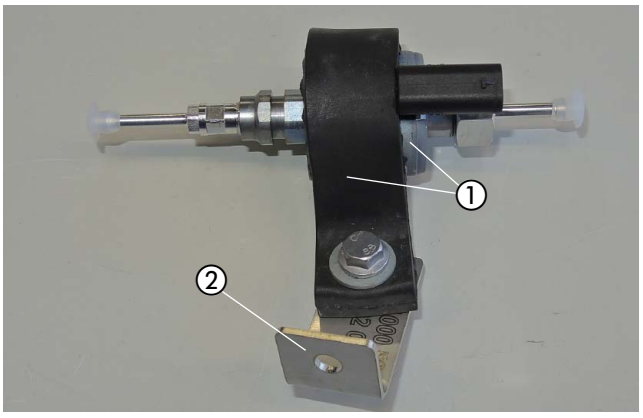


Fig. 7
① Insert metering pump in rubber bracket
② Mount 90° bracket

2 PRELIMINARY ASSEMBLY

PREPARE WATER HOSES
(see Figs. 8 and 9)

The water hoses are already prepared as shown.

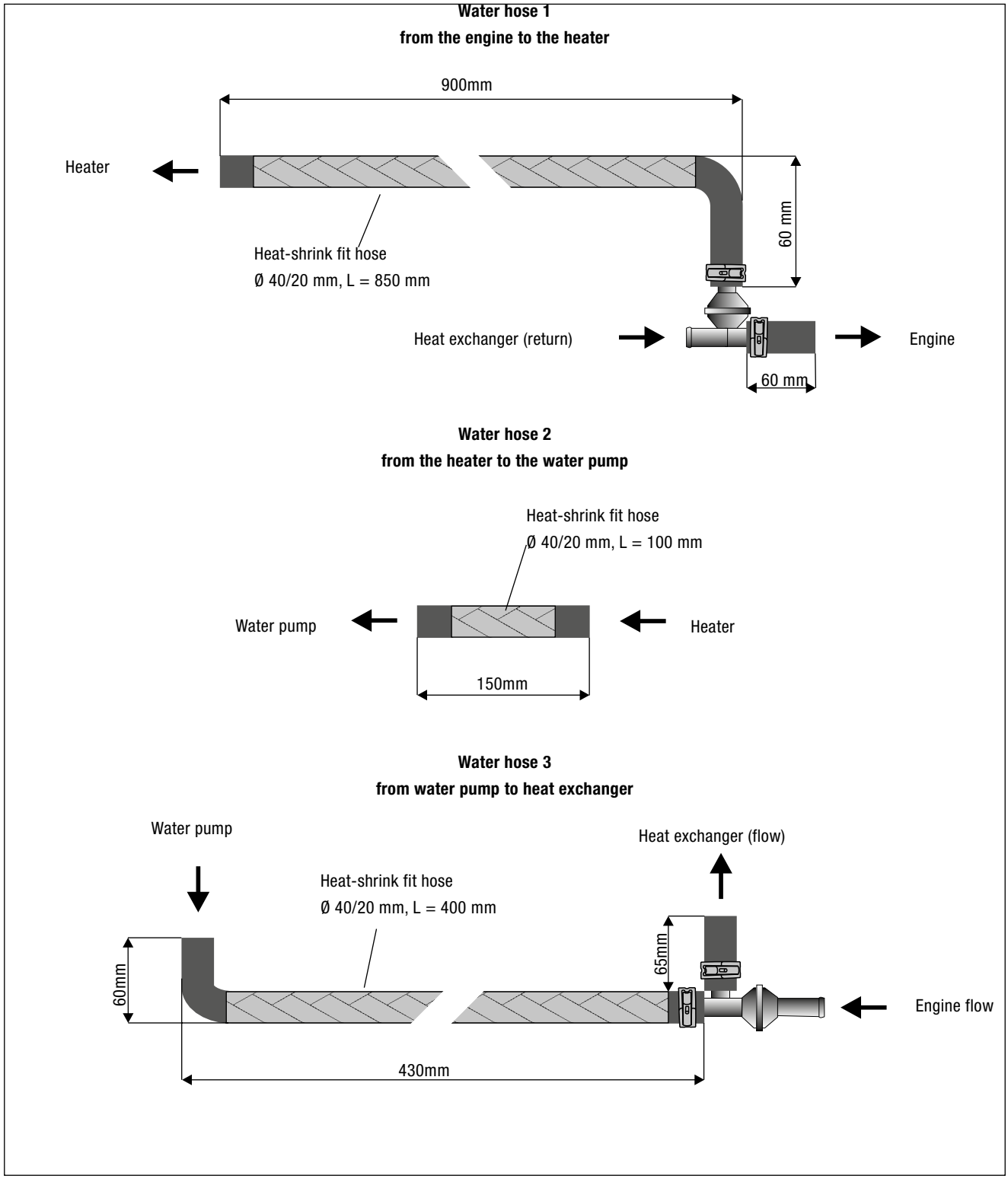


Fig. 8

2 PRELIMINARY ASSEMBLY

Water hoses 1 to 3 in the installation kit are prepared as shown in Figures 8 and 9.

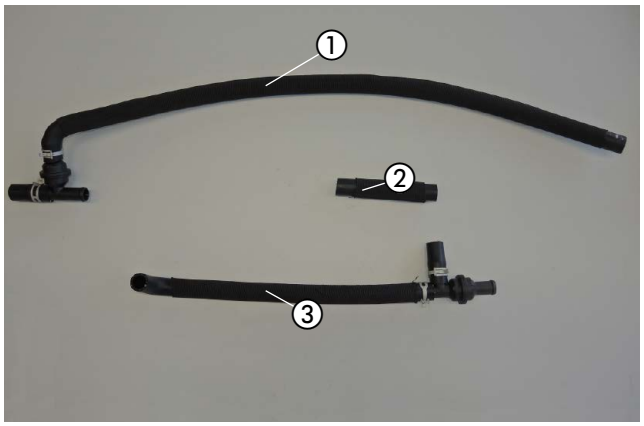


Fig. 9
① Water hose 1
② Water hose 2
③ Water hose 3

PREPARE FUEL PIPE (SUCTION LINE)
(see Fig. 10)

Keep the premounted fuel pipe (suction line) ready for later installation.

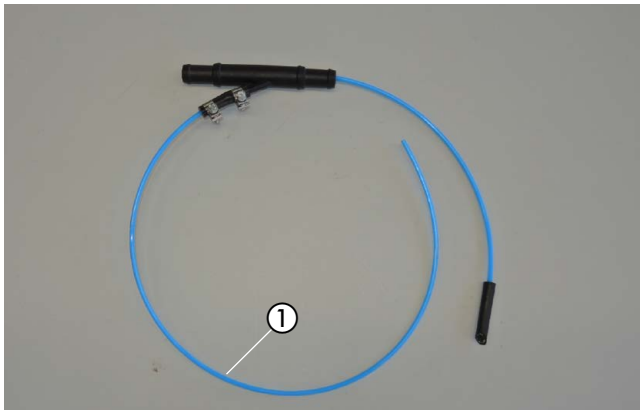


Fig. 10
① Fuel pipe (suction line)

PREPARE FUEL PIPE (PRESSURE LINE)
(see Fig. 11)

Fasten the metering pump cable from the main cable loom to the fuel pipe (pressure line) length = 3.5 m using insulating tape.

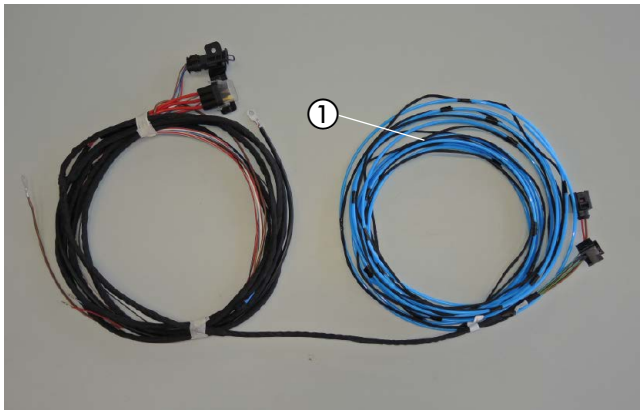


Fig. 11
① Fuel pipe (pressure line) with metering pump cable

2 PRELIMINARY ASSEMBLY

PREPARE FUSE BLOCK
(see Fig. 12)

Prepare the premounted holder with fuse block and diagnostic connector for subsequent installation.

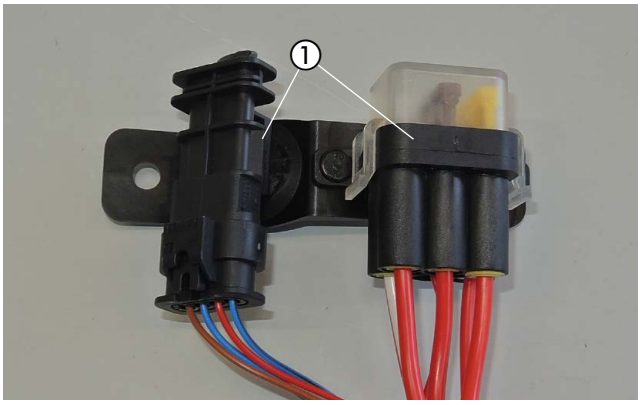


Fig. 12
① Fuse block and plug holder with diagnostic connector already premounted to holder

PREMOUNT STATIONARY PART OF THE EASYSTART REMOTE+
(see Fig. 13)

Mount the stationary part of the EasyStart Remote/Remote+ together with the EasyFan fan control box to the holder for the stationary part (22 9000 52 0069) using two M4 x 10 screws as shown.

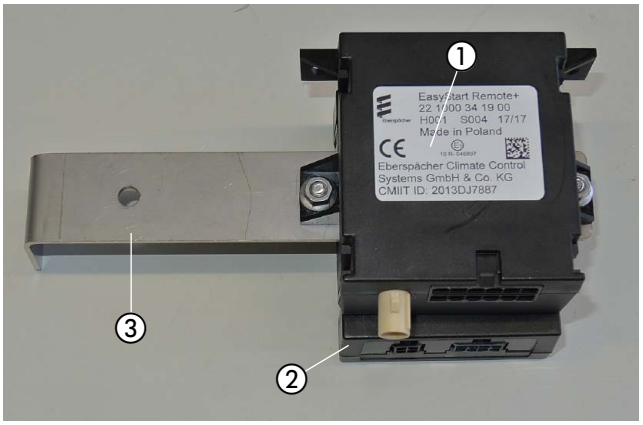


Fig. 13
① Stationary part EasyStart Remote/Remote+
② Fan control box “EasyFan”
③ Holder for stationary part of EasyStart Remote/Remote+

PREASSEMBLE STATIONARY PART OF EASYSTART WEB
(see Fig. 14)

Mount the stationary part of the EasyStart Web together with the EasyFan fan control box to the holder for the stationary part (22 9000 52 0069) using two M4 x 10 screws as shown.

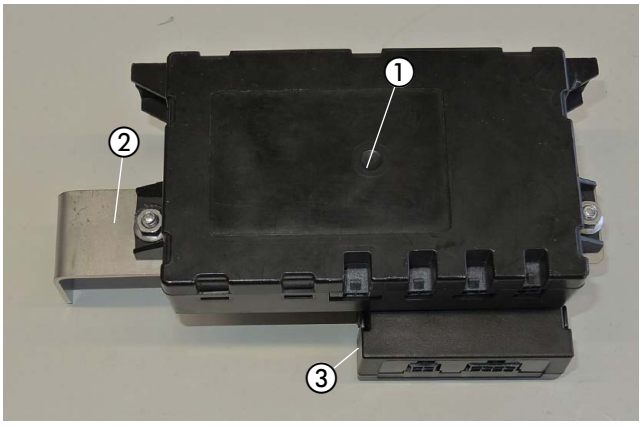


Fig. 14
① Stationary part EasyStart Web
② Fan control box “EasyFan”
③ Prepare holder for the stationary part of the EasyStart Web

2 PRELIMINARY ASSEMBLY

MOUNT EXHAUST GROMMET
(see Fig. 15)

Drill a 38 mm Ø hole at the indicated place in the sub-cowling as shown.

Insert the 41 mm Ø grommet in the drilled hole.

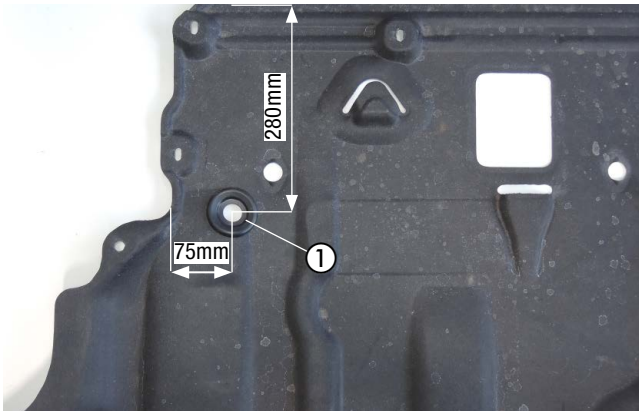


Fig. 15
① Insert 41 mm Ø grommet

3 INSTALLATION

PREPARE THE INSTALLATION POSITION
(see Figs. 16 and 17)

Unclip the vehicle cable loom and fasten at a suitable point with cable ties.

Cut an M6 thread in the existing hole on the steering gearbox.

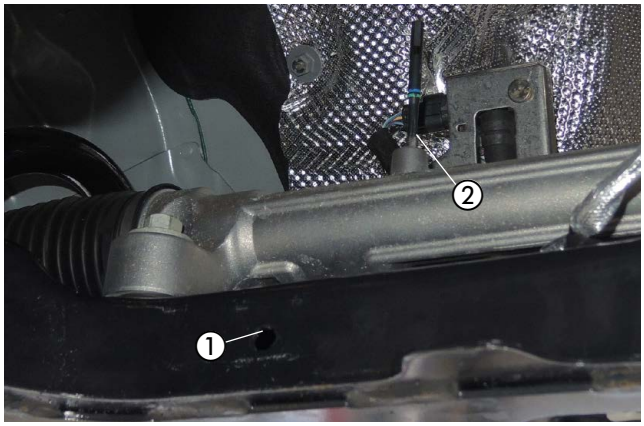


Fig. 16
① Unclip vehicle cable loom
② Existing hole on steering gearbox

The installation position is on the right at the axle frame when viewed in the direction of travel.

Insert the M6 blind rivet nut in the upper hole and the M8 blind rivet nut in the lower hole.

The M8 blind rivet nut is needed as fastening point for the exhaust silencer.

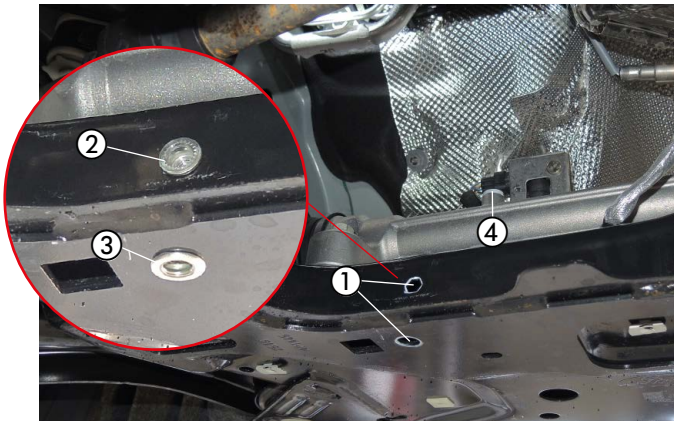


Fig. 17
① Vehicle holes
② M6 blind rivet nut for unit bracket
③ M8 blind rivet nut for exhaust silencer
④ M6 thread cut in steering gearbox

MOUNT UNIT BRACKET
(see Figs. 18 to 19)

Fasten the unit bracket to the steering gearbox and to the axle frame with an M6 x 12 screw in each case.

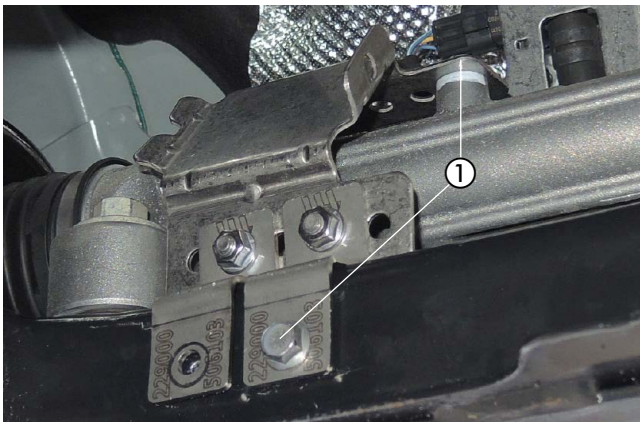


Fig. 18
① Fasten unit bracket with M6 x 12 screw

3 INSTALLATION

For the 3rd fastening point, use the ready mounted bracket as drilling template and drill a 3mm Ø hole as shown.
Fasten the unit bracket with a self-tapping M6 x 19 screw.

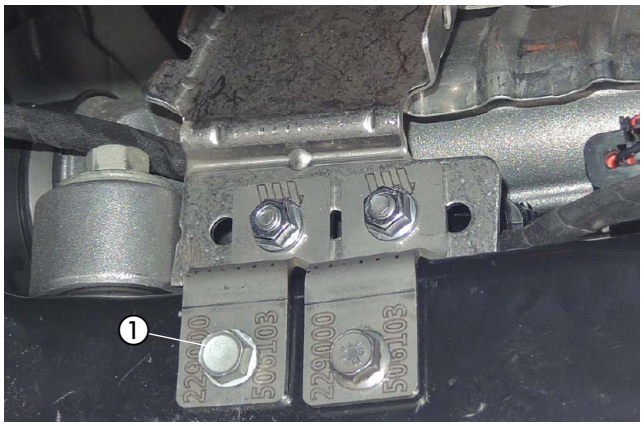


Fig. 19
① Self-tapping M6 x 19 screw

INSTALL HEATER
(see Fig. 20)

Insert the prepared heater in the unit bracket and fasten with a self-threading M6 x 16 Torx screw to the unit bracket.

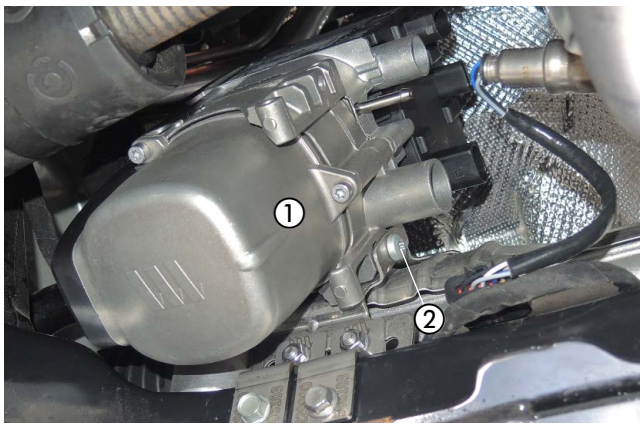


Fig. 20
① Heater
② Self-tapping M6 x 16 Torx screw

CONNECT AND LAY COMBUSTION AIR PIPE
(see Figs. 21 and 22)

Connect the combustion air pipe to the heater using a 16 - 25 mm Ø hose clip.

Secure the combustion air pipe at a suitable point with two rotatable line holders.

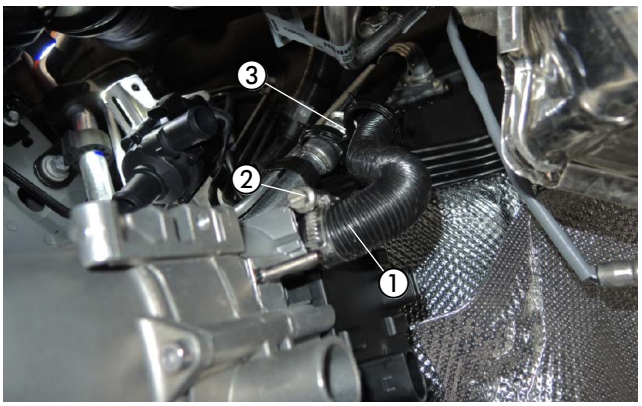


Fig. 21
① Connect combustion air pipe
② Hose clip 16 - 25 mm Ø
③ Two rotatable line holders

3 INSTALLATION

Route the combustion air pipe up along the vehicle aircon pipes.

Use cable ties to secure the combustion air pipe at a suitable point.

⚠ CAUTION!
Lay the combustion air silencer so that only clean, dry combustion air can be drawn in through the heater.

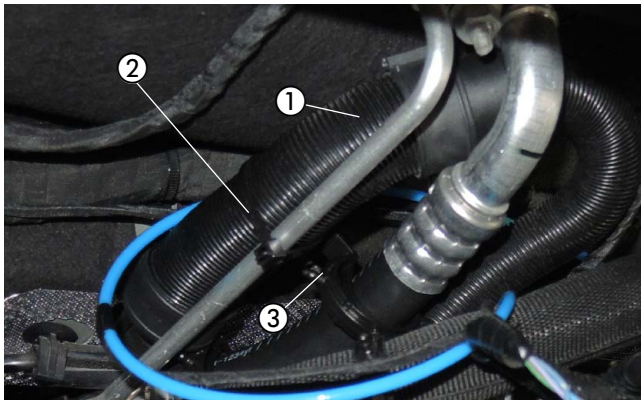


Fig. 22
① Lay combustion air pipe
② Cable ties
③ Line holder, rotatable

MOUNT EXHAUST SYSTEM
(see Fig. 23)

Mount the prepared exhaust silencer to the blind rivet nut on the axle frame with an M8 x 16 hex screw.

Use a clip to connect the exhaust pipe to the exhaust connection of the heater.

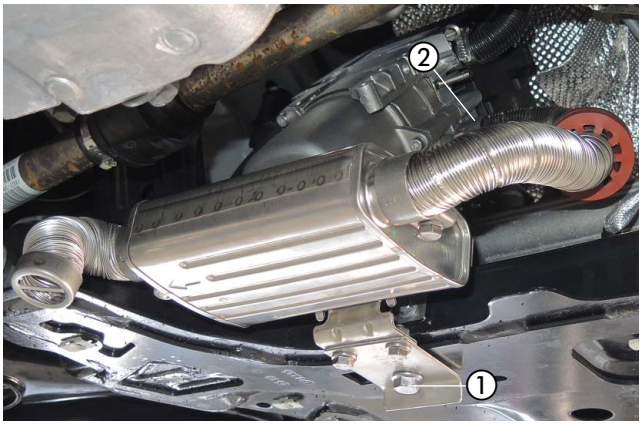


Fig. 23
① Mount the prepared exhaust silencer bracket with an M8 x 16 hex screw
② Connect the exhaust pipe

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

INSTALL WATER PUMP
(see Fig. 24)

Mount the prepared water pump to the existing stud bolt with an M8 nut screw as shown.

The discharge end faces to the left and the intake end faces downwards.

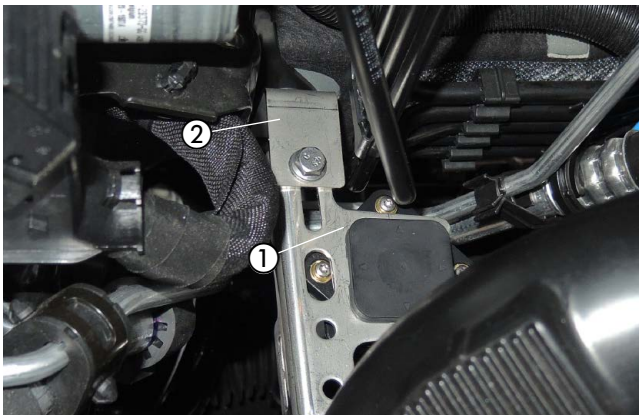


Fig. 24
① Install prepared water pump
② Vehicle's M8 stud bolt (concealed)

3 INSTALLATION

DISMANTLE WATER FLOW HOSE
(see Fig. 25)

Disconnect the water flow hose (lower right-hand water hose at the heat exchanger) from the pipe connection socket by loosening the spring band clamp.

Pull the water return hose at the engine connection socket from the pipe connection socket by loosening the spring band clamp.

The vehicle's water hoses do not need to be shortened.



Fig. 25
① Disconnect the water flow hose from the heat exchanger connection
② Disconnect the water return hose from the engine connection

CONNECT AND LAY WATER HOSES
(see Figs. 26 to 29)

Connect water hose 2 to the heater's water outlet connection and to the intake connection of the water pump with a spring band clamp in each case.

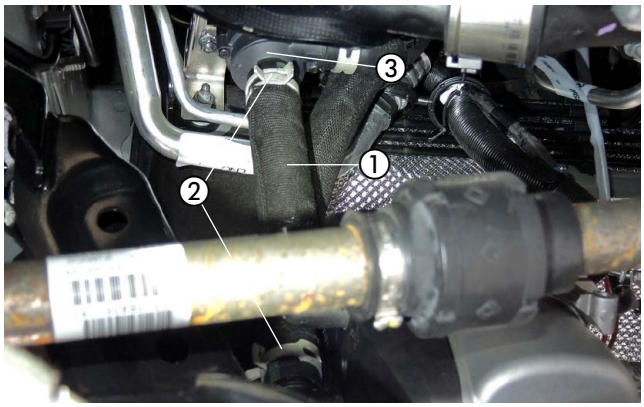


Fig. 26
① Water hose 2
② Spring band clamps
③ Water pump

Connect water hose 3 to the discharge end of the water pump with a spring band clamp and to the flow connection of the heat exchanger with a 20-32mm Ø hose clip.

Connect the vehicle's water flow hose with water hose 3 and a 20-32mm Ø hose clip.

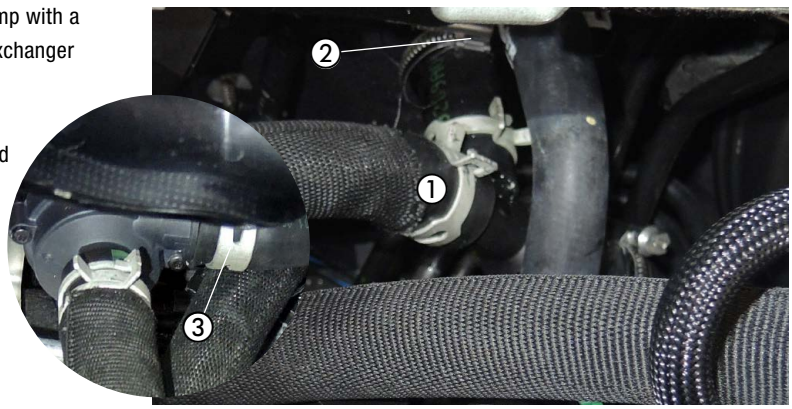


Fig. 27
① Connect water hose 3
② Hose clip
③ Water pump discharge end

3 INSTALLATION

Connect water hose 1 to the water inlet connection of the heater using a spring band clamp.

Connect water hose 1 to the engine connection with a 20-32mm Ø hose clip.
Connect the vehicle's water return hose to the non-return valve of water hose 1 with a 20-32mm Ø mm hose clip.

Use cable ties to secure the water hoses at a suitable point.

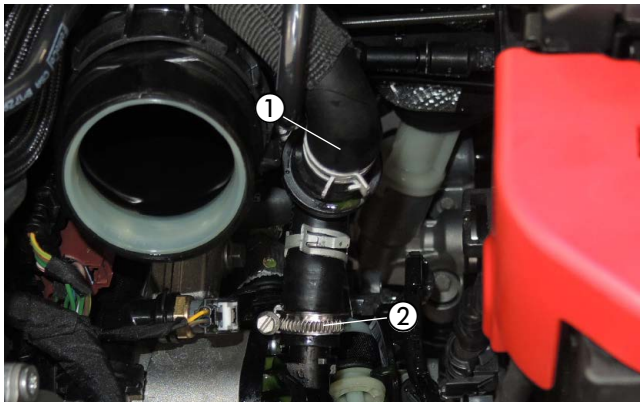
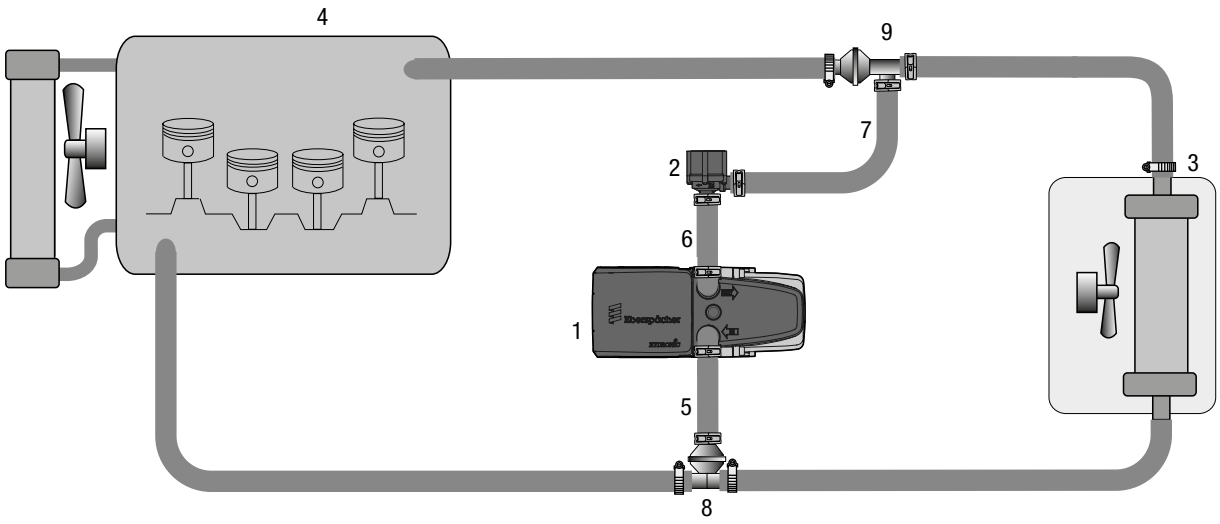


Fig. 28
① Connect water hose 1
② Hose clip

3 INSTALLATION



1 – Heater Hydronic S3
2 – Water pump
3 – Vehicle heat exchanger
4 – Engine
5 – Water hose 1
6– Water hose 2
7– Water hose 3
8– Non-return valve T 20/20/20 mm
9– Non-return valve Y 20/20/20 mm
– Spring band clip 26 mm Ø
– Hose clip, 20 – 32 mm Ø

Fig. 29

3 INSTALLATION

MAKE TANK CONNECTION
(see Figs. 30 to 31)

Cut out approx. 75 mm from the tank ventilation hose as shown.

CAUTION!
Make sure no impurities enter the tank when cutting the hose.

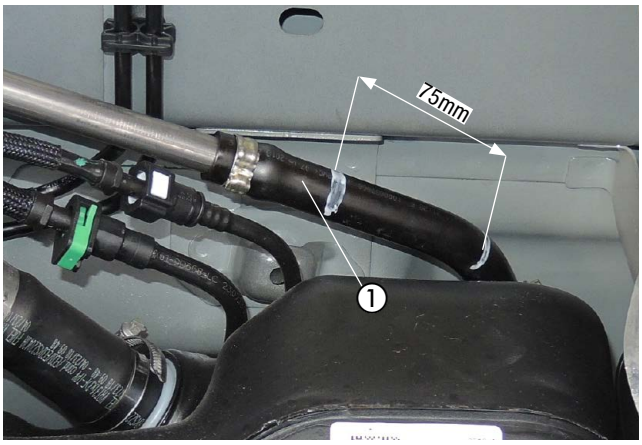


Fig. 30
① Tank ventilation line

Insert the tank extractor in the tank, fit the adapter in the line and mount with two 16 - 25 mm Ø hose clips.



Fig. 31
① Mount tank extractor

PLEASE NOTE!
Secure all connection points with clamps.

3 INSTALLATION

LAYING THE FUEL PIPE
(see Figs. 32 to 33)

Connect the 4.5/3.5 mm Ø adapter with the fuel pipe (pressure line) using a 9 mm Ø hose clip and connect to the fuel connection of the heater with a 10 mm Ø hose clip.

Connect the water pump cable to the water pump and heater.

Plug in the connector of the main cable harness and the power supply cable loom to the heater.

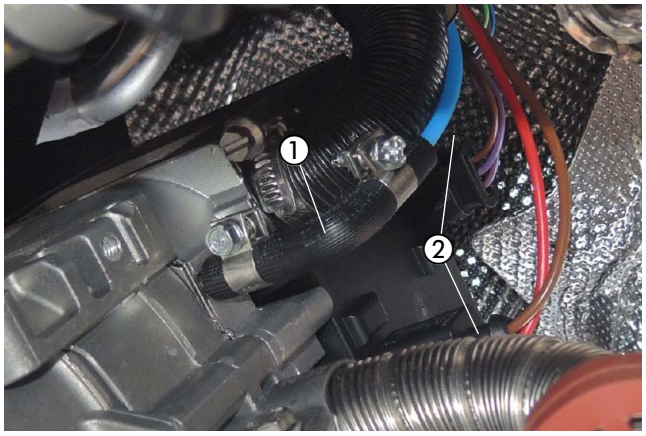


Fig. 32
① Mount fuel pipe (discharge line) with 4.5/3.5 mm Ø adapter
② Plug in electrical connections at heater

Take the fuel pipe (pressure line) together with the metering pump cable from the engine compartment along the vehicle's fuel line to the installation position of the metering pump at the left vehicle underbody when viewed in the direction of travel.

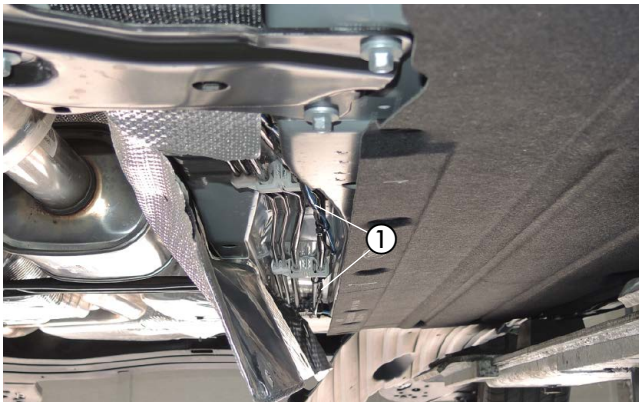


Fig. 33
① Lay fuel pipe (pressure line) to the left underbody

⚠ CAUTION!
When laying fuel lines, always ensure they are at an adequate distance from hot vehicle and heater parts.

3 INSTALLATION

INSTALL AND CONNECT THE METERING PUMP
(see Fig. 34)

Using a Dm 5 plastic nut, install the premounted metering pump to an existing stud bolt in the underbody behind the fuel tank.
Ensure it is installed with at least a 15° rising gradient on the pressure side.
Route the fuel pipe (suction line) from the tank extractor to the metering pump and connect with the 3.5 x 3 mm Ø fuel hose to the intake connection of the metering pump, using two 9 mm Ø hose clips.

Connect the fuel pipe (pressure line) from the heater to the 3.5 x 3 mm Ø fuel hose at the discharge end of the metering pump, using two 9 mm Ø hose clips.
Slot the plug-in contacts of the metering pump cable into the mating connector regardless of polarity.
Connect the connector to the metering pump.

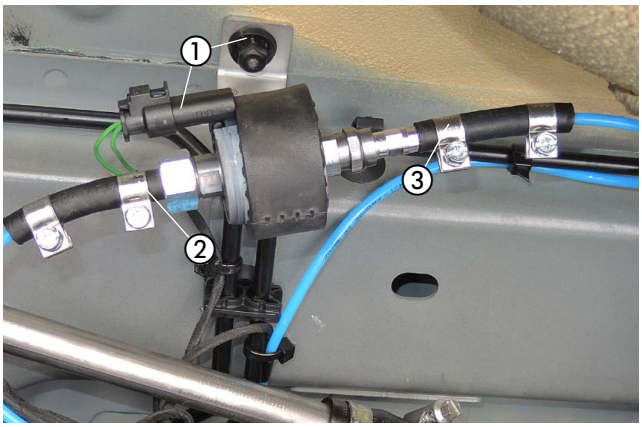


Fig. 34
① Install and connect the metering pump
② Metering pump intake end
③ Metering pump discharge end

⚠ CAUTION!
Secure all hose connections with hose clips.

INSTALL FUSE HOLDER
(see Fig. 35)

Install the premounted holder with fuse block to a vehicle screwed union between the left headlight and the radiator as shown.

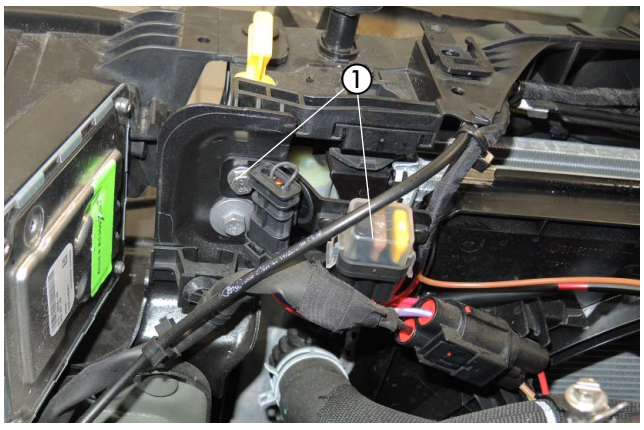


Fig. 35
① Install the premounted bracket with fuse holder

3 INSTALLATION

CABLE LAYING
(see Fig. 36)

Take the vehicle interior cable loom consisting of:
- 4 mm² ws/rt and 1 mm² sw/rt cable
- 3-wire control unit cable loom
- 4-pin fan control box cable loom

through the vehicle cable grommet on the right side of the engine partition into the interior of the vehicle when viewed in the direction of travel.



Fig. 36
① Vehicle cable grommet

POWER SUPPLY
(see Figs. 37 and 38)

Take the positive cable 4 mm² rt to the battery on the left-hand side in the engine compartment and connect to the positive terminal lug with the A6 cable lug as shown.



Fig. 37
① Relay and fuse box
② Connect positive cable 4 mm² rt

Take the 2.5 mm² br earth cable to the earthing point on the left chassis beam in front of the battery and connect with the A6 cable lug.

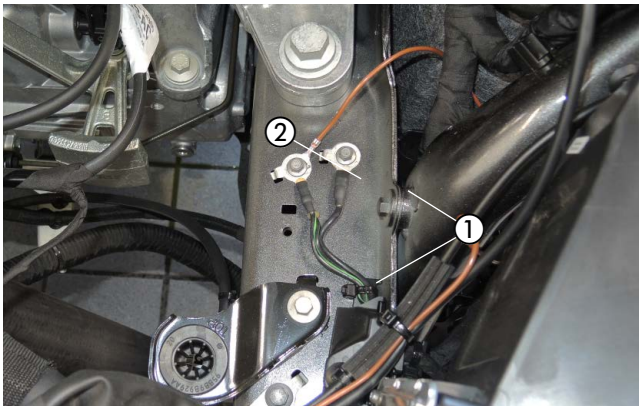


Fig. 38
① Earthing point on the left chassis beam
② Connect 2.5 mm² br earth cable

⚠ CAUTION!
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.

3 INSTALLATION

INSTALL EASYSTART REMOTE/REMOTE⁺ RADIO REMOTE CONTROL
(Alternative suggestion - consult with the customer)
(see Figs. 39 to 41)

The EasyStart Remote/Remote⁺ is installed according to the Technical Description for the EasyStart Remote/Remote⁺ Radio Remote Control, refer to the “Installation Instructions” section.

Mount the button of the EasyStart Remote/Remote⁺ to the trim moulding of the instrument panel on the right next to the light switch unit as shown.
To do so, drill a 10 mm Ø hole and insert the button in the hole.



Fig. 39
① Mount button of the EasyStart Remote/Remote⁺

Attach the temperature sensor of the EasyStart Remote⁺ to the trim moulding on the A-pillar in the passenger footwell.

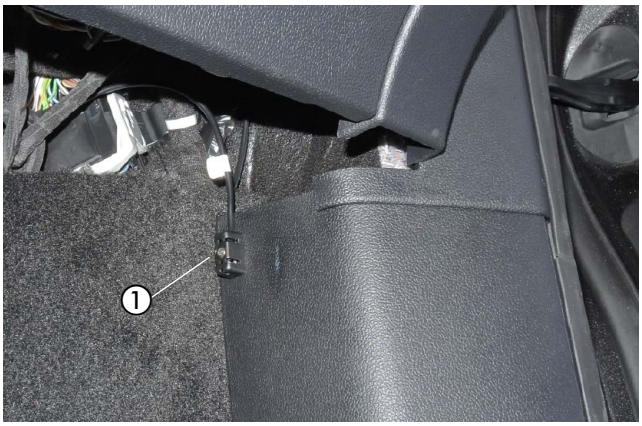


Fig. 40
① Mount the temperature sensor of the EasyStart Remote⁺

Fasten the premounted stationary part of the EasyStart Remote/Remote⁺ to the right-hand support of the instrument panel using an M6 x 12 screw and a M6 nut.

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

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

⚠ CAUTION!
Use cable ties to fix any excessive length of antenna cable underneath the instrument panel.

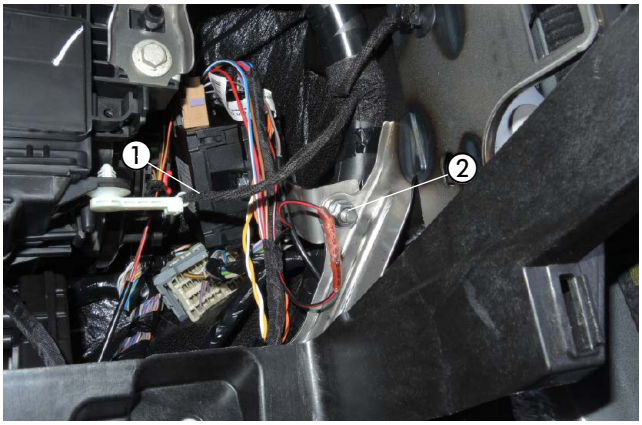


Fig. 41
① Fasten premounted stationary part of the EasyStart Remote/Remote⁺ to the instrument panel support
② Fastening point of the stationary part holder

3 INSTALLATION

INSTALLING EASYSTART WEB
(Alternative suggestion - consult with the customer)
(see Figs. 42 to 44)

The EasyStart Web is installed according to the EasyStart Web installation instructions.

Mount the button of the EasyStart Web to the trim moulding of the instrument panel on the right next to the light switch unit as shown. To do so, drill a 10 mm Ø hole and insert the button in the hole.



Fig. 42
① Install EasyStart Web button

Attach the temperature sensor of the EasyStart Web to the trim moulding on the A-pillar in the passenger footwell.



Fig. 43
① Install temperature sensor of the EasyStart Web

Fasten the premounted stationary part of the EasyStart Web to the left-hand support of the instrument panel using an M6 x 12 screw and a M6 nut.

Connect the antenna cable of the EasyStart Web to the stationary part, take it to the left and lay it in the rubber door seal on the passenger side.

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

⚠ CAUTION!
Use cable ties to fix any excessive length of antenna cable underneath the instrument panel.

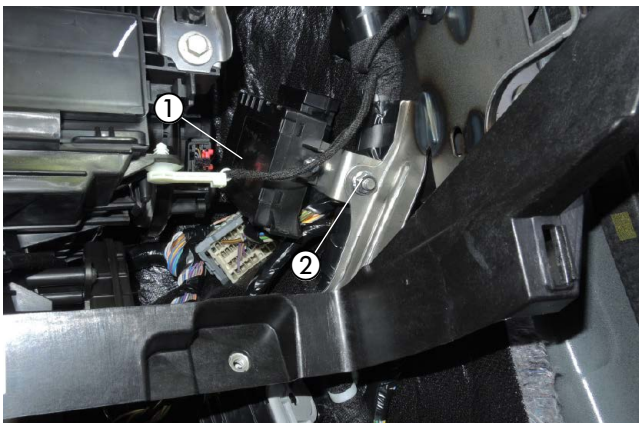


Fig. 44
① Fasten premounted stationary part of the EasyStart Web to the instrument panel support
② Fastening point of the stationary part holder

3 INSTALLATION

FAN CONTROL
(see Figs. 45 to 47)

Insulate the 4 mm² ws/rt cable and tie it back, it is no longer needed.

Take the 1 mm² sw/rt cable from the passenger interior cable loom to the fan control box, cut to length and connect with the 1mm² sw/rt cable from the fan control box cable loom using a red butt-type connector.

Take the twisted 0.5 mm² or/gn, or/bn, ge and ws cables to the aircon control and cut to length.

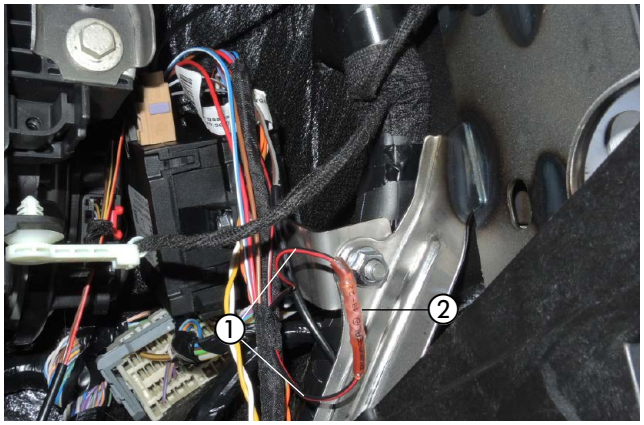


Fig. 45
① Connect 1mm² sw/rt cable with 1 mm² sw/rt cable
② Butt-type connector

Disconnect the 0.5 mm² gr/or cable (pin 17) from the 26-pin black connector of the aircon control and connect the 0.5 mm² ge and 0.5 mm² or/gn cables using a red 0.5 - 1.5 mm² butt-type connector in each case, as shown in the circuit diagram.

Disconnect the 0.5 mm² vi/or cable (pin 18) from the 26-pin black connector of the aircon control and connect the 0.5 mm² ws and 0.5 mm² or/br cables using an 0.5 - 1.5 mm² butt-type connector in each case, as shown in the circuit diagram.

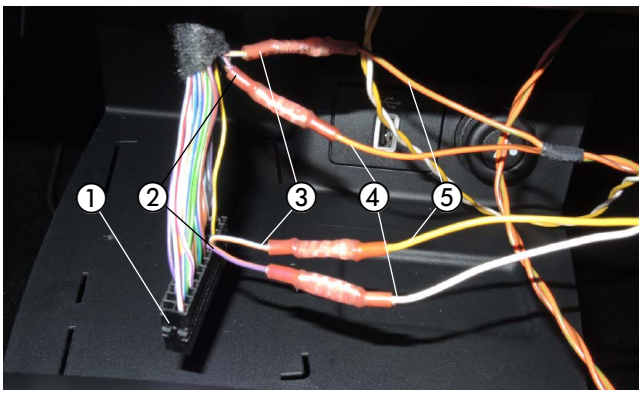


Fig. 46
① 26-pin black connector
② Disconnect 0.5 mm² cable vi/or (pin 18)
③ Disconnect 0.5 mm² cable gr/or (pin 17)
④ Insert 0.5 mm² ws cable and 0.5 mm² or/br cable
⑤ Insert 0.5 mm² ge cable and 0.5 mm² or/gn cable

PLEASE NOTE!
The cable colours may vary!

3 INSTALLATION

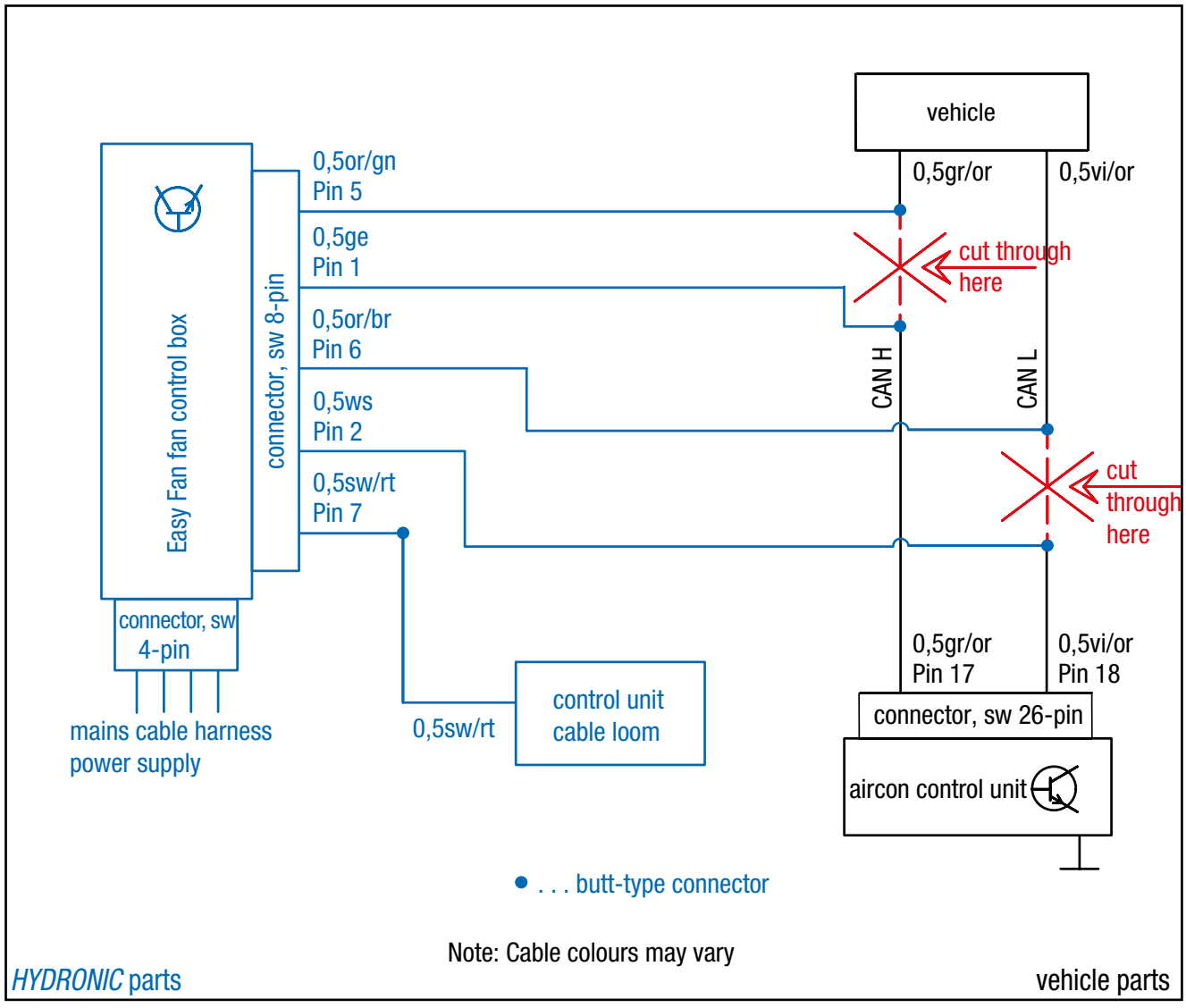


Fig. 47

	white	black	red	green	brown	yellow	grey	orange
D	ws	sw	rt	gn	bn	ge	gr	or
GB	wh	bk	rd	gn	bn	ye	gy	og

4 FOLLOWING INSTALLATION

ADHERE THE “REFUEL” LABEL
(see Fig. 48)

Adhere the “Refuel” label inside the fuel tank flap as shown.



Fig. 48
① Adhere the “Refuel” label

MOUNT THE SUB-COWLING
(see Fig. 49)

Mount the sub-cowling and take the exhaust pipe end through the grommet.



Fig. 49
① Pass the exhaust pipe end through the grommet

4 FOLLOWING INSTALLATION

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 coolant liquid up to the marking (arrow).
- Adhere the duplicate nameplate in a clearly visible position near the heater or at a suitable point on the B-pillar.
- Adhere the “Refuel” label in the fuel tank flap or at a suitable point on the B-pillar.
- 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.
- Place the leaflet for the customer in the glove compartment or hand over personally to the customer.

⚠ CAUTION!
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.

5 PARTS OVERVIEW

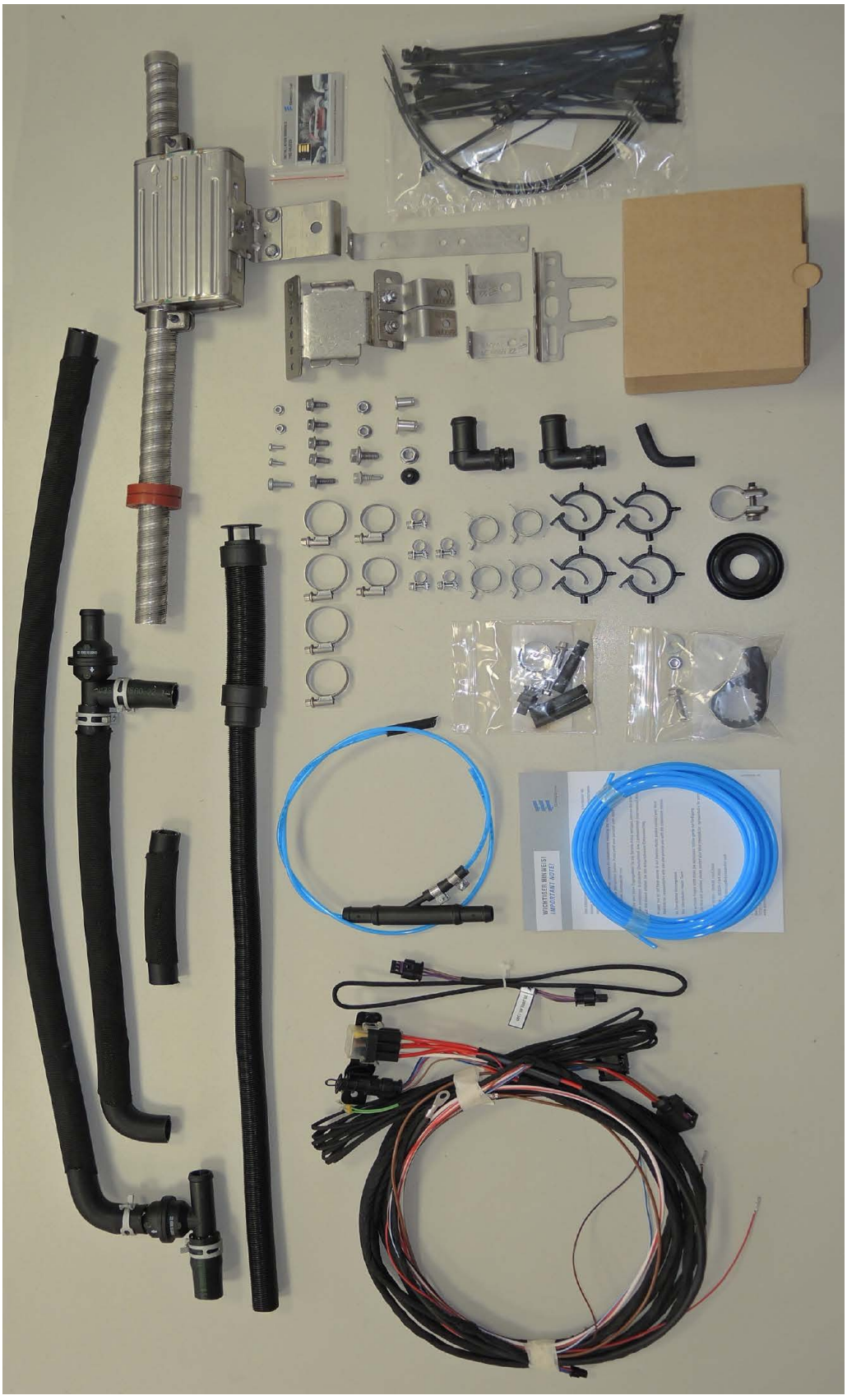


Fig. 50

6 INITIAL COMMISSIONING (EASYSTART REMOTE)

CARRY OUT INITIAL COMMISSIONING

For initial commissioning, the following steps must be carried out one after the other.

- **Insert the battery into the mobile unit**
  Insert the battery supplied in the mobile unit, as described in the EasyStart Remote operating instructions, in the “Maintenance / Replacing the Battery” chapter. Do not activate the mobile unit yet.

- **Applying the operating voltage**
  The operating voltage is applied by inserting the fuse into the fuse holder.
  Automatic detection
  Five seconds after applying the operating voltage the button's LED starts to light up. The radio remote control now checks which heater is connected and configures the user prompting of the mobile unit.

- **Teaching the mobile unit**
  If the button's LED starts to flash, the mobile unit can be taught.

Note on the Add teaching mode
The **Add** function can be used to teach up to 4 mobile units to one stationary unit; but only one mobile unit can make contact with the stationary unit

Notes on the AddE teaching mode
The **AddE** is only used to teach the current mobile unit. All previously taught mobile units are deleted.

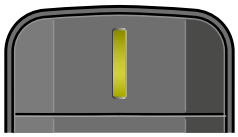
PLEASE NOTE!

If the mobile unit is not taught within 30 seconds, the button's LED indicator goes out.
Press the button until the LED starts to flash. Then teach the mobile unit.

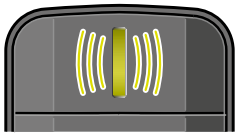
Teach mobile unit - **ADD** teach mode

Press the button or .

If the connection has been set up between the mobile unit and the stationary unit, then the LED indicator begins to flicker. The mobile unit is in **Add** teach mode.

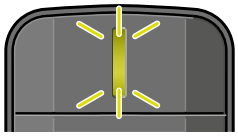


Data transmission
LED: lights up green



LED: flickers green

Confirm Add teach mode by pressing the button while the LED indicator is flickering green.



LED: flashes 2x green

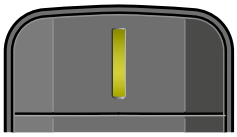
The mobile unit is taught.

6 INITIAL COMMISSIONING (EASYSTART REMOTE)

TEACH MOBILE UNIT - ADDE TEACH MODE

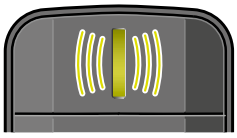
Press the  button or .

If the connection has been set up between the mobile unit and the stationary unit, then the LED indicator begins to flicker. The mobile unit is in **Add** teach mode.



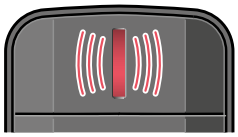
Data transmission
LED: lights up green





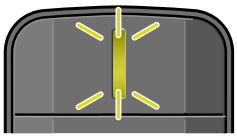
LED: flickers green

Press the  button while the green LED is flickering.



LED: flickers red

Confirm **AddE** teach mode by pressing the  button while the LED indicator is flickering green.



LED: flashes 2x green

The mobile unit is taught.

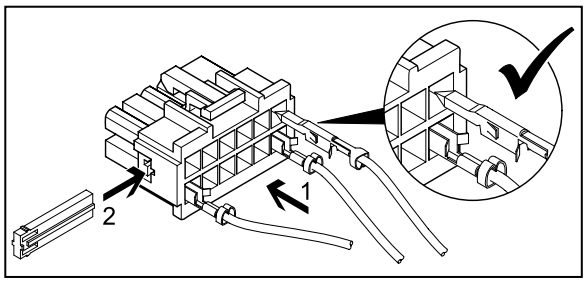
TEACH AN ADDITIONAL MOBILE UNIT

- Press the button installed in the vehicle until the button's LED starts to flash.
- While the button's LED is flashing, activate the mobile unit as described under “Teaching the mobile unit”.

6 PIN CONFIGURATION (EASYSTART REMOTE)

CONNECTING THE CONNECTOR HOUSING TO THE STATIONARY UNIT

Attach the tab connector to the control unit lead harness.
Clip the control unit lead harness and the button lead harness into 12-pin connector housing. (Connector housing pin assignment)
Push the contact locking device into the connector housing.
Connect the 12-pin connector housing to the stationary part.



PLEASE NOTE!

- When installing the connector, ensure that the locking tongues always face the middle of the connector. Only in this position do the tongues latch into the housing (see sketch).

PIN ASSIGNMENT AT THE STATIONARY PART

PIN	SIGNAL	CABLE COLOUR
1	Terminal 30 (plus)	red
2	-	
3	Terminal 31 (earth)	brown
4	JE diagnostics / DAT cable	blue / white / vi
5	-	
6	Button LED (+)	red / yellow
7	Button (+)	brown / yellow
8	Button (-)	brown
9	-	
10	-	
11	-	
12	-	

Connector housing chamber assignment -XB12 (assignment seen from the cable inlet side)

6 INITIAL COMMISSIONING (EASYSTART REMOTE+)

CARRY OUT INITIAL COMMISSIONING
For initial commissioning, the following steps must be carried out one after the other.

INSERT THE BATTERY INTO THE MOBILE UNIT
Insert the supplied battery in the mobile unit, as described in the EasyStart Remote+ operating instructions, in the “Maintenance / Replacing the Battery” chapter. Do not activate the mobile unit yet.

APPLYING THE OPERATING VOLTAGE
The operating voltage is applied by inserting the fuse into the fuse holder.

AUTOMATIC DETECTION
Five seconds after applying the operating voltage the button's LED starts to light up. The radio remote control now checks which heater is connected and configures the user prompting of the mobile unit.

TEACHING THE MOBILE UNIT
If the button's LED starts to flash, the mobile unit can be taught.

NOTE ON THE ADD TEACHING MODE
The **Add** function can be used to teach up to 4 mobile units to one stationary unit; but only one mobile unit can make contact with the stationary unit

Notes on the AddE teaching mode
The **AddE** is only used to teach the current mobile unit. All previously taught mobile units are deleted.

PLEASE NOTE!

If the mobile unit is not taught within 30 seconds, the button's LED indicator goes out.
Press the button until the LED starts to flash.
Then teach the mobile unit.

TEACH MOBILE UNIT - ADD TEACH MODE

Press the  or  button, Add is displayed.



Confirm Add teach mode by pressing the  button.

Teach mobile unit - AddE teach mode
Use the  or  button to select **AddE**.

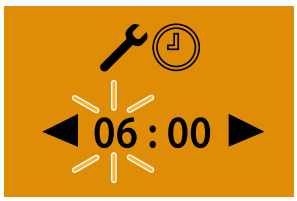


Confirm AddE teach mode with the  button.

6 INITIAL COMMISSIONING (EASYSTART REMOTE+)

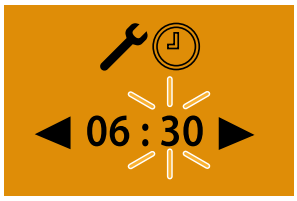
AFTER CONFIRMING ADD OR ADDE

SET THE TIME
Use the ◄ or ► button to set the hours

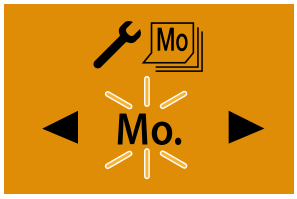


Press the ▭ button to confirm the setting

Use the ◄ or ► button to set the minutes



- Press the ▭ button to confirm the setting
- Set weekday: Use the ◄ or ► button to set the weekdays



Press the ▭ button to confirm the setting. Then configure the EasyStart Remote+.

Teach an additional mobile unit

Press the button installed in the vehicle until the button's LED starts to flash.
Press the ▭ or ▭ button on the mobile unit, **Add** is displayed.

Confirm teach mode with the ▭ button.



The additional mobile unit is taught.

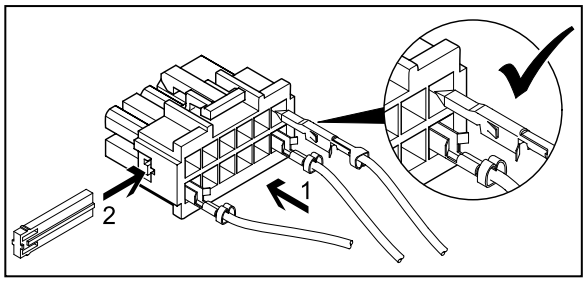
CONFIGURE EASYSTART REMOTE+

The system must be configured according to its use.

6 PIN CONFIGURATION (EASYSTART REMOTE+)

CONNECTING THE CONNECTOR HOUSING TO THE STATIONARY UNIT

Attach the tab connector to the control unit lead harness.
Clip the control unit lead harness and the button lead harness into 12-pin connector housing.
(Connector housing pin assignment)
Push the contact locking device into the connector housing.
Connect the 12-pin connector housing to the stationary part.



Please note!

- When installing the connector, ensure that the locking tongues always face the middle of the connector. Only in this position do the tongues latch into the housing (see sketch).

PIN ASSIGNMENT AT THE STATIONARY PART

PIN	SIGNAL	CABLE COLOUR
1	Terminal 30 (plus)	red
2	-	
3	Terminal 31 (earth)	brown
4	JE diagnostics / DAT cable	blue / white / vi
5	-	
6	Button LED (+)	red / yellow
7	Button (+)	brown / yellow
8	Button (-)	brown
9	-	
10	-	
11	-	
12	-	

Connector housing chamber assignment -XB12 (assignment seen from the cable inlet side)

LEAFLET FOR THE CUSTOMER

BEFORE SWITCHING ON
(see Fig.)

- Presettings are not necessary

When the vehicle is unlocked (during pre-heater mode), the fan control is already disabled by the pre-heater.
The original functionalities are available when the ignition is switched on.
After locking the vehicle, it takes a few minutes for the pre-heater to activate the fan control box.



① Temperature controller
② Button for the air flow

RECOMMENDATION!

- Switch the pre-heater on at least once a month for about 10 minutes, also in the summer months!
  This will ensure that it works properly during the season!
- We recommend adjusting the heating time to the driving time: Driving time > heating time.

RECOMMENDATION!

In vehicles with interior monitoring, this must be disabled for the heating process.
Please refer to the vehicle operating instructions for disabling instructions.

Headquarters:
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