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- (F)** Consignes de montage / Montage uniquement par le concessionnaire
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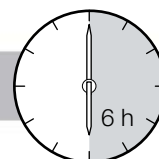




# HYDRONIC\*



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## New vehicle-specific installation kit + heater

### Hydronic II B 5 S in Opel Mokka X (J-A) Hydronic II D 5 S in Opel Mokka X (J-A)

from 2016 model

HSN: 0035

1.4 l cubic capacity / 4 cylinder in-line engine ecoFLEX (Turbo) / 103 kW - 140 HP

1.4 l cubic capacity / 4 cylinder in-line engine ecoFLEX (Turbo) / 112 kW - 152 HP

1.6 l cubic capacity / 4 cylinder in-line engine CDTI / 81 kW - 110 HP

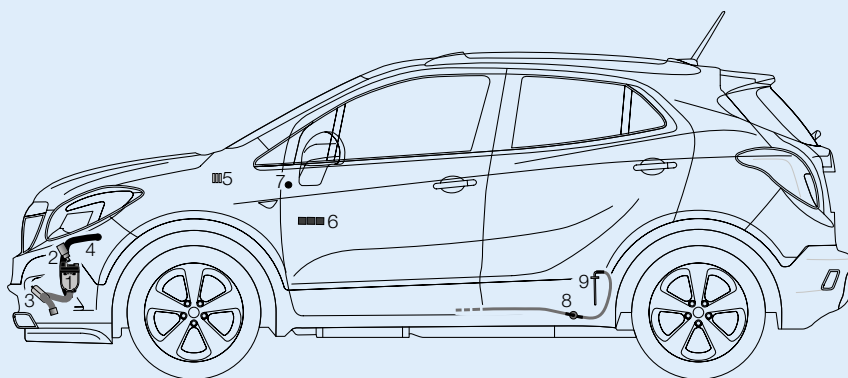
1.6 l cubic capacity / 4 cylinder in-line engine CDTI / 100 kW - 136 HP

- with manual AirCon or two-zone automatic AirCon
- with LED headlights
- with fog lamps
- with manual gearbox or 6 speed automatic gearbox
- with front-wheel drive (FWD) or four-wheel drive (AWD)
- with URREA (AD BLUE) 1,6l diesel

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.



- Hydronic II
- Water pump
- Exhaust pipe with exhaust silencer
- Combustion air tube
- Fuse holder

- Relay, stationary part Remote+ and SVM control box
- Button
- Metering pump
- Fuel tank extractor

### Contents

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2 Electrics	6	6 Fuel supply	44
3 Installation - Heater	17	7 After installation	49
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### Installation location

The Hydronic II is fitted in normal position in the right-hand corner of the engine compartment, to the outside of the right chassis beam.

The exhaust connection faces downwards and the control box upwards.

### Parts needed for installation:

- (1) Vehicle-specific installation kit
- (2) D 5 S / B 5 S
- (3) EasyStart Remote+ control unit

### Please note!

**Please deliver the vehicle with the tank 1/4 full.**

Eberspächer Climate  
Control Systems  
GmbH & Co. KG  
Eberspächerstr. 24  
D - 73730 Esslingen

Service Hotline  
03976 - 2350235  
Facsimile  
01805 - 26 26 24

[www.eberspaecher.com](http://www.eberspaecher.com)



# 1 Introduction



## Caution!

### Safety instructions for installation and repair!

Improper installation or repair of Eberspächer heaters can cause a fire or result in toxic exhaust entering the inside of the vehicle.

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 applies to the vehicle with the engine and gearbox options listed in the following.

Engine and gearbox options			
Cubic capacity	kW / HP	Gearbox	MKB
1.4 I Turbo	103 / 140	6S / 6AT	B14NET (LUJ)
1.4 I Turbo LPG	103 / 140	6S	A/B14NET (LUJ)
1.4 I Turbo	112 / 152	6AT	B14XFT (LE2)
1.6 I CDTI	81 / 110	6S	B16DTU (LWW)
1,6 I CDTI	81 / 110	6S	D16DTN (LXO)
1.6 I CDTI	100 / 136	6S / 6AT	B16DTH (LVL)

6S = 6-gear manual gearbox

6AT = 6-speed automatic gearbox

### Please note!

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

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



# 1 Introduction

## Parts required for installation

Quantity/Designation	Order No.
<b>(1) Vehicle-specific installation kit:</b>	
1 vehicle-specific installation kit *	
GM No.	39 129 311
<b>(2) Heater:</b>	
1 Hydronic II B 5 S	
GM No.	13438564
1 Hydronic II D 5 S	
GM No.	13438563

## Special tools required

- Torque wrench (5....50 Nm)
- Anti-corrosion agent
- Pliers for spring band clamps
- Tool for blind rivet nuts
- Ejector tool for plug-in contacts
- Crimping tool
- Step drill

## Preparation on the vehicle

- Disconnect the battery
- Dismantle the left and right centre tunnel trim
- Remove glove compartment
- Loosen right footwell trim
- Dismantle the cover of the diagnostic plug
- Remove cover on fuse box in engine compartment
- Detach the charge air hose at the throttle valve (not for 1.4 l LPG)
- Detach the charge air hose at the charge air cooler (all)
- Remove air filter box
- Remove middle and rear silencer
- Loosen cardan shaft (only in four-wheel version)
- Remove fuel tank according to the manufacturer's instructions
- Remove front wheels
- Remove right-hand wheelhouse panel
- Remove front bumper and lower panelling
- Disconnect hose from the headlamp cleaning system
- Disconnect fog lamps, park assist and temperature sensor
- Depressurise the cooling system
- Drain coolant into a clean container

### Please note!

Comply with the manufacturers' guidelines/instructions during dismantling.

## 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

Other tightening torques:

- Fixing screws on the heater 15 Nm
- M6 stud bolt 5 Nm
- Cardan shaft on differential flange 36 Nm
- Cardan shaft support bearing 42 Nm
- Exhaust system 17 Nm
- Silencer on holder 9 Nm
- Tank strap on body 22 Nm
- Metering pump holder on tank protector 22 Nm



## 2 Electrics

### Position of the components

(see photo 1)

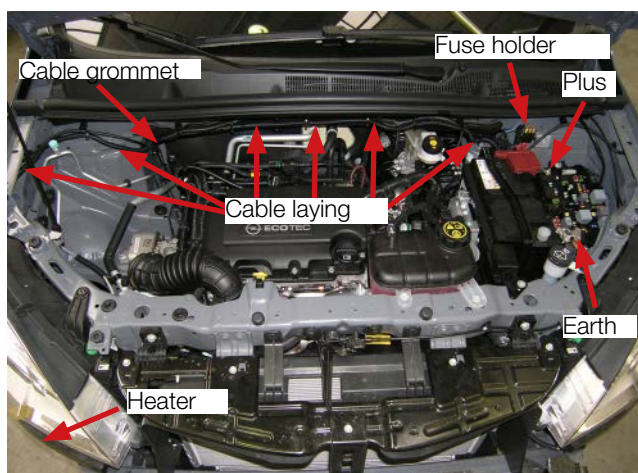


Photo 1

### Cable laying (cable loom 1)

(see photos 2 to 10 and diagram 1)

- ① Water pump cable
- ② Connection, cable loom 2
- ③ Metering pump cable with connector
- ④ Connection, heater
- ⑤ Earth cable
- ⑥ Positive cable
- ⑦ Fuses

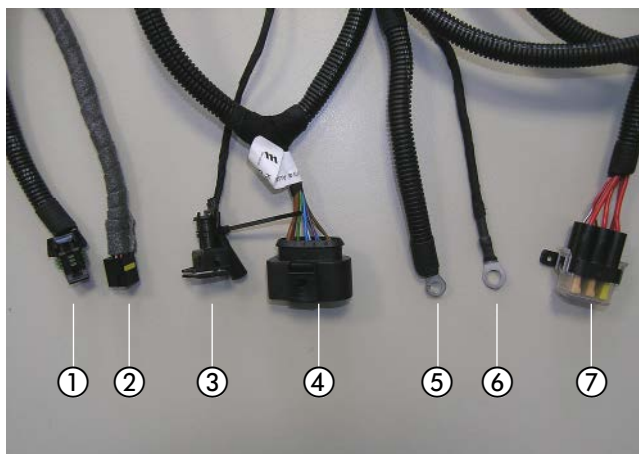


Photo 2

Connections, cable loom 1

Drill a 20 mm Ø hole on the right side of the engine partition as shown.

Cut out the insulation matting in the interior around the drilled hole.

**Please note!**

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

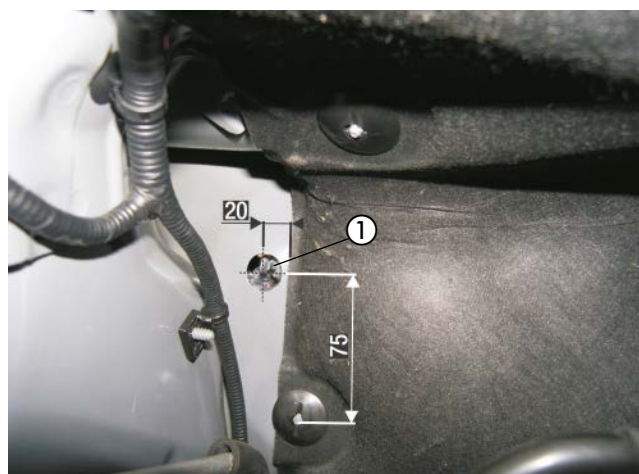


Photo 3

- ① Drill a 20 mm Ø hole for the cable leadthrough





## 2 Electrics

Lay the connection to cable loom 2 through the cable penetration made in the engine partition and into the interior of the vehicle.

Insert the cable grommet in the hole drilled in the engine partition.

Route the 10-pin connector of cable loom 1 along the vehicle's cable loom on the right inner wing to the installation position of the heater and secure with cable ties.

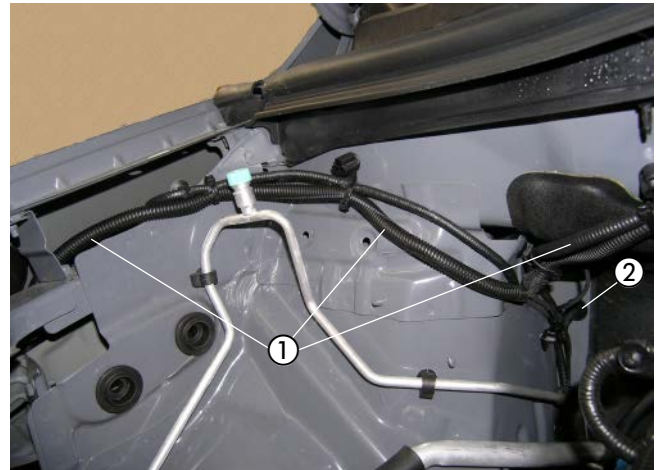


Photo 4

- ① Cable laying
- ② Insert cable grommet in the engine partition

Use body sealing compound to seal the cable grommet inserted in the engine partition as shown.



Photo 5

- ① Use body sealing compound to seal the cable grommet

Drill the existing hole on the left of the engine partition to 8.5 mm Ø.

Insert an M5 blind rivet nut into the drilled hole.

**Please note!**

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



Photo 6

- ① Drill the existing holes open to 8.5 mm Ø and insert an M5 blind rivet nut



## 2 Electrics

Fasten the fuse block to the fuse holder using two M4x10 fillister head screws as shown.

Fasten the fuse holder with an M5x13 screw to the M5 blind rivet nut and align as shown.

Fasten the diagnostic plug-in connector to the fuse block with a cable tape.

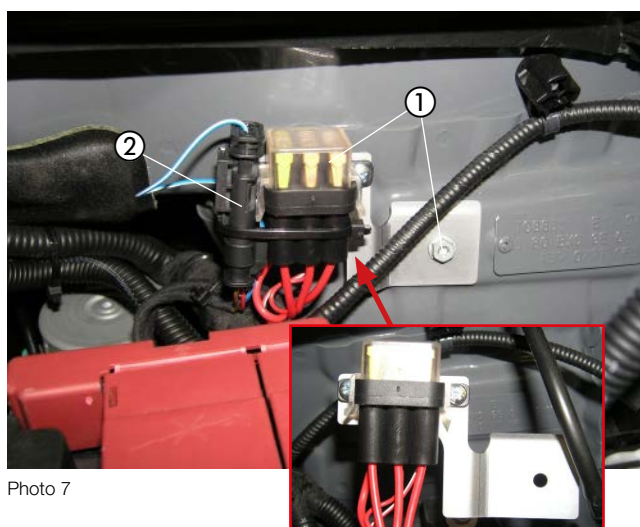


Photo 7

- ① Fuse block
- ② Diagnostic plug-in connector

Route the 4 mm<sup>2</sup> rt positive cable from cable loom 1 to the positive support point of the fuse box and connect with the A6 cable lug as shown.



Photo 8

- ① Connect positive cable 4 mm<sup>2</sup> rt

### In vehicles without start/stop system and engine LE2

Route the 2.5 mm<sup>2</sup> br earth cable from cable loom 1 to the negative terminal of the battery and connect with the A8 cable lug as shown.



Photo 9

- ① Connect 2.5 mm<sup>2</sup> br earth cable (in vehicles without start/stop system)





## 2 Electrics

### In vehicles with start/stop system and engine LE2

Route the 2.5 mm<sup>2</sup> br earth cable from cable loom 1 to the negative terminal of the battery and connect with the A8 cable lug as shown.

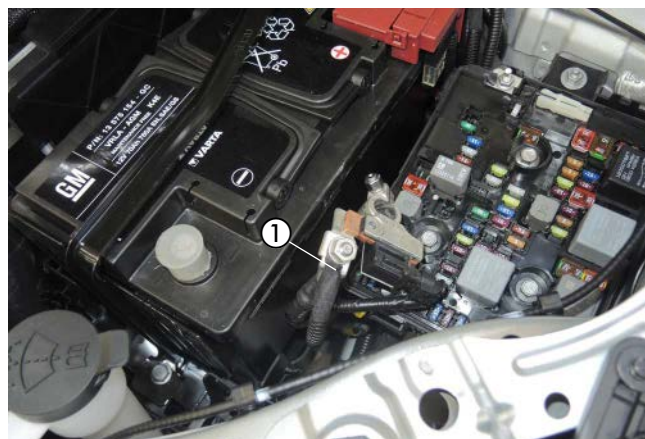


Photo 10

- ① Connect 2.5 mm<sup>2</sup> br earth cable (in vehicles with start/stop system)



## 2 Electrics

### Cable laying (cable loom 2)

(see photos 11 to 27 and diagram 1)

- ① Connection, stationary part Remote<sup>+</sup>
- ② Relay block for auxiliary heater relay and pre-ventilation
- ③ SVM control box
- ④ Connection, cable loom 1
- ⑤ Remote<sup>+</sup> temperature sensor
- ⑥ Remote<sup>+</sup> button
- ⑦ Connection, CAN bus (DLC connector)

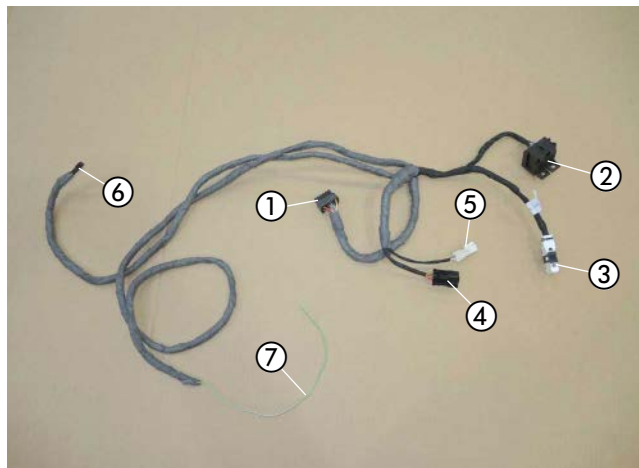


Photo 11

Connections, cable loom 2

Use two M4 nuts to fasten the EasyStart Remote<sup>+</sup> stationary part to the holder as shown.

From cable loom 2, connect the connector for the stationary part of EasyStart Remote<sup>+</sup> and the antenna cable into the stationary part of EasyStart Remote<sup>+</sup>.

Secure the cable loom with cable ties.

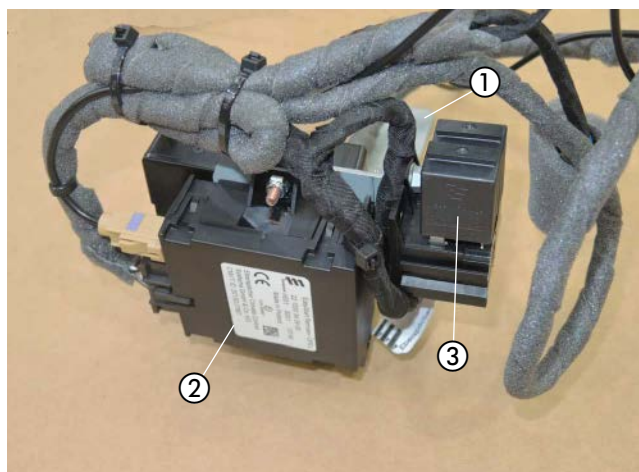


Photo 12

- ① Holder for SVM module, auxiliary heater relay and Remote<sup>+</sup> stationary part
- ② Mount the stationary part of Remote<sup>+</sup>
- ③ Auxiliary heater relay

Use two M4 nuts to fasten the SVM module to the back of the holder as shown.

Fasten the relay block of the auxiliary heater relay and the pre-ventilation relay to the holder using an M5x13 screw as shown.

Insert the pre-ventilation relay in the relay block.

Connect the connector of cable loom 2 for the SVM control box.

Secure the cable loom with cable ties.

#### Please note!

Do not use the auxiliary heater relay in vehicles with electric auxiliary heater (C 32).

The installation site for the electric auxiliary heater (C 32) is described in photo 15.

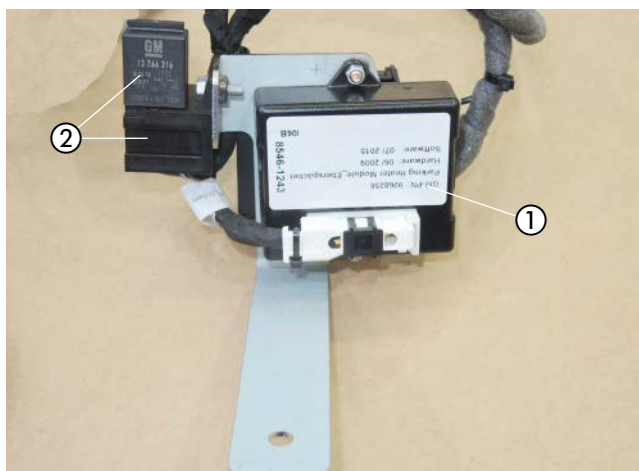


Photo 13

- ① Mount SVM module
- ② Mount relay block and pre-ventilation relay



## 2 Electrics

Cut out the insulation matting on the passenger's side around the centre console as shown.

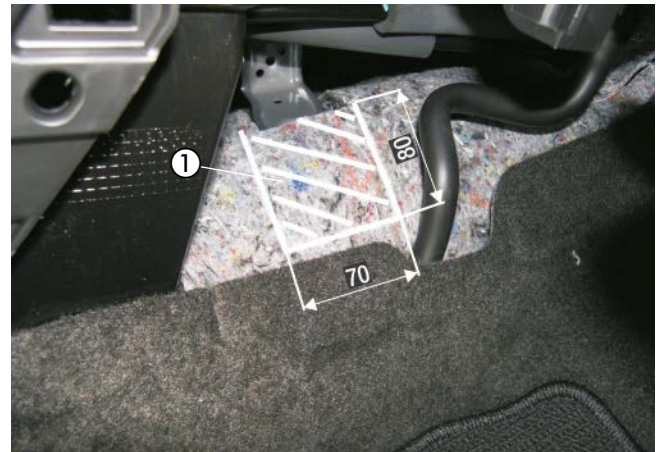


Photo 14

- ① Cut insulation matting

The electric auxiliary heater (C 32) is fitted in the air duct behind the plastic cover.

Insert the holder with the premounted control boxes in the centre console from the right as shown.

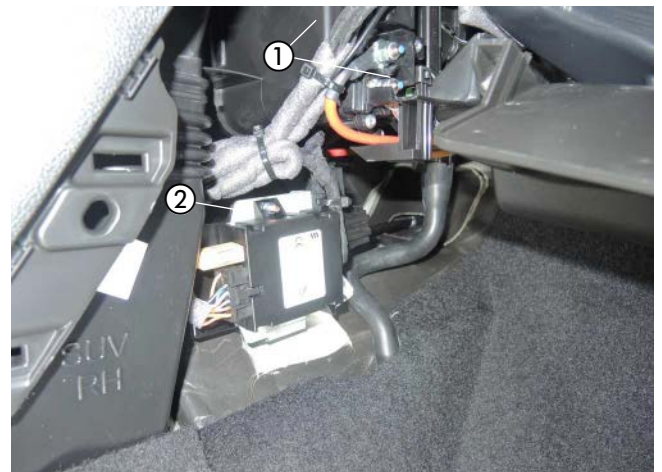


Photo 15

- ① Installation site of the electric auxiliary heater (C 32)  
② Premounted control boxes

Insert an M6x16 screw in the holder from below and mount the control box holder with an M6 nut as shown.



Photo 16

- ① Fasten control box holder



## 2 Electrics

Route the 0.5 mm<sup>2</sup> gn / ws cable to the DLC connector along the air duct on the driver's side.  
Use cable ties to secure the 0.5 mm<sup>2</sup> gn/ws cable to the air duct.

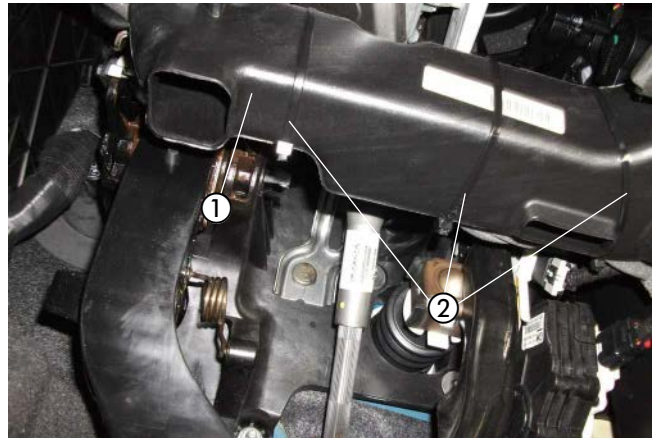


Photo 17

- ① Air duct
- ② Cable ties

Disconnect the 0.5 mm<sup>2</sup> gn cable at the 16-pin DLC connector, pin 1, and use a red butt-type connector to tie in the cable 0.5 mm<sup>2</sup> gn / ws as shown in the photo.

**Please note!**

The cable colours may vary!

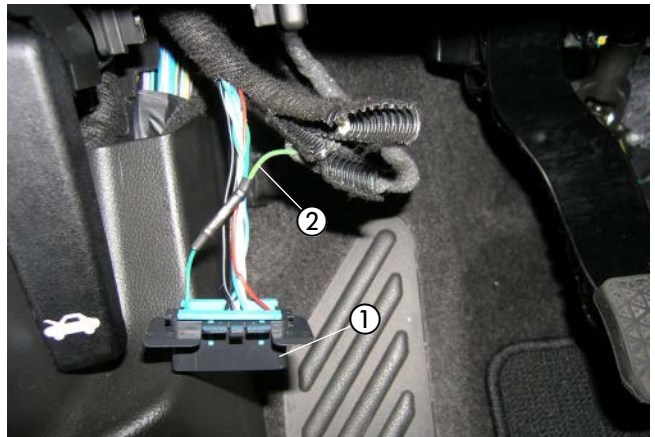


Photo 18

- ① 16-pin black DLC connector
- ② Cable 0.5 mm<sup>2</sup> gn / ws integrated

Mount the temperature sensor in the passenger footwell to the A-pillar panelling using an M2.9x25 screw as shown.

Slot the 1 mm<sup>2</sup> ws cable in pin 1 of the white 2-pin mating connector of the temperature sensor and the 1 mm<sup>2</sup> br/ws cable in pin 2, then connect with the white 2-pin connector of cable loom 2.

**Please note!**

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

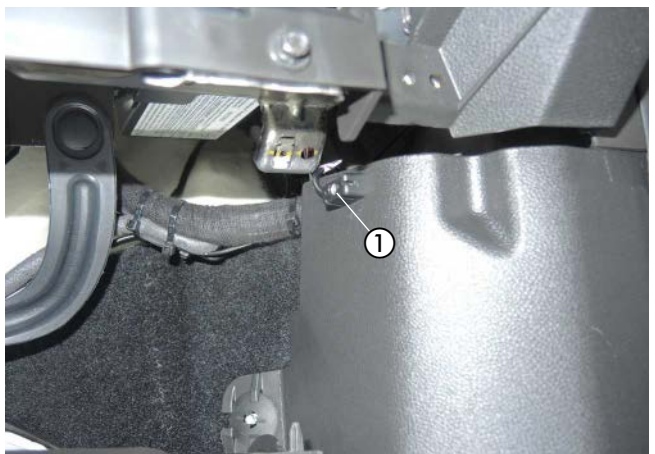


Photo 19

- ① Mount temperature sensor





## 2 Electrics

The photo shows the holder and the button for the EasyStart Remote+.

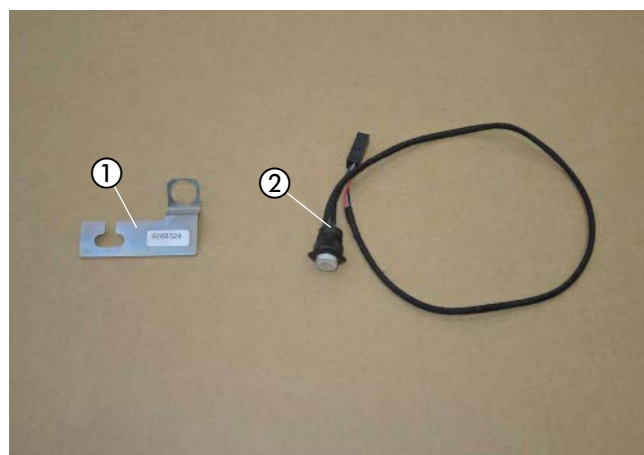


Photo 20

- ① Button holder
- ② EasyStart Remote+ button

Insert the button of the EasyStart Remote+ in the hole of the holder and fix with the nut.

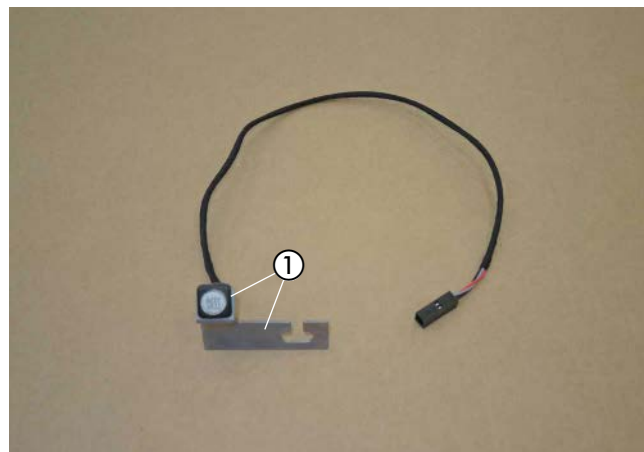


Photo 21

- ① Insert the EasyStart Remote+ button in the holder

Loosen the M6 screw from the lock striker of the glove compartment and push the holder with button under the loosened screw from below, align horizontally and fasten with the M6 screw.



Photo 22

- ① Mount the EasyStart Remote+ button with holder





## 2 Electrics

Take the antenna cable of the EasyStart Remote+ round to the right and lay it 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 23

- ① Lay the antenna cable of the EasyStart Remote+ in the rubber door seal on the passenger's side

Lay cable loom 1 above the air duct on the passenger side to the centre console.

Fasten the antenna cable, the button cable and the temperature sensor cable to cable loom 1 using cable ties.



Photo 24

- ① Route cable loom 1

Connect cable loom 1 with cable loom 2 and wind plastic strips around them as shown.

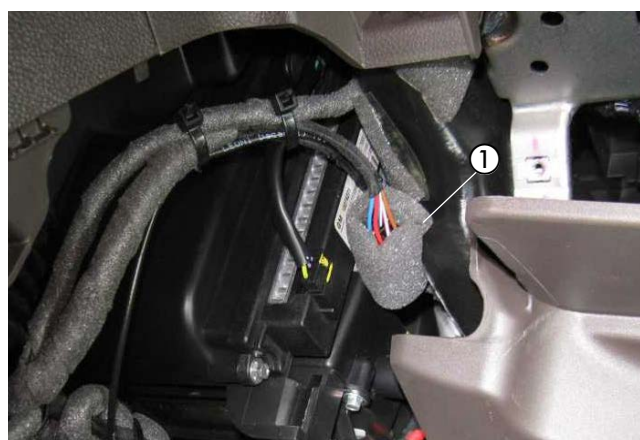


Photo 25

- ① Connect cable loom 1 with cable loom 2 and wind plastic strips round



## 2 Electrics

Connect the button cable with connector plug of cable loom 2.

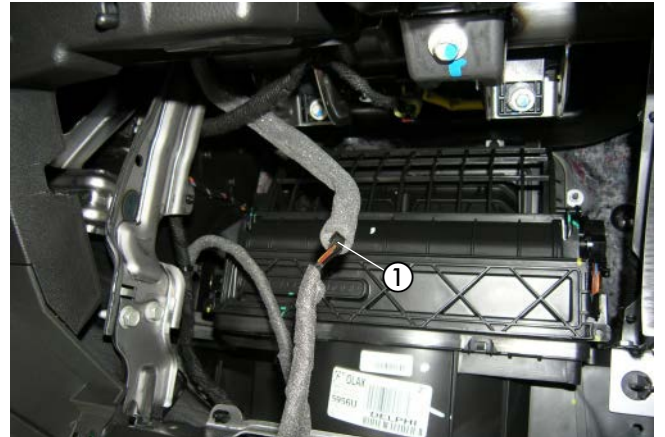


Photo 26

- ① Connect button cable with connector plug of cable loom 2

Fasten the connected cable loom to the vehicle's cable loom using a cable tie as shown.



Photo 27

- ① Fasten cable loom



## 2 Electrics

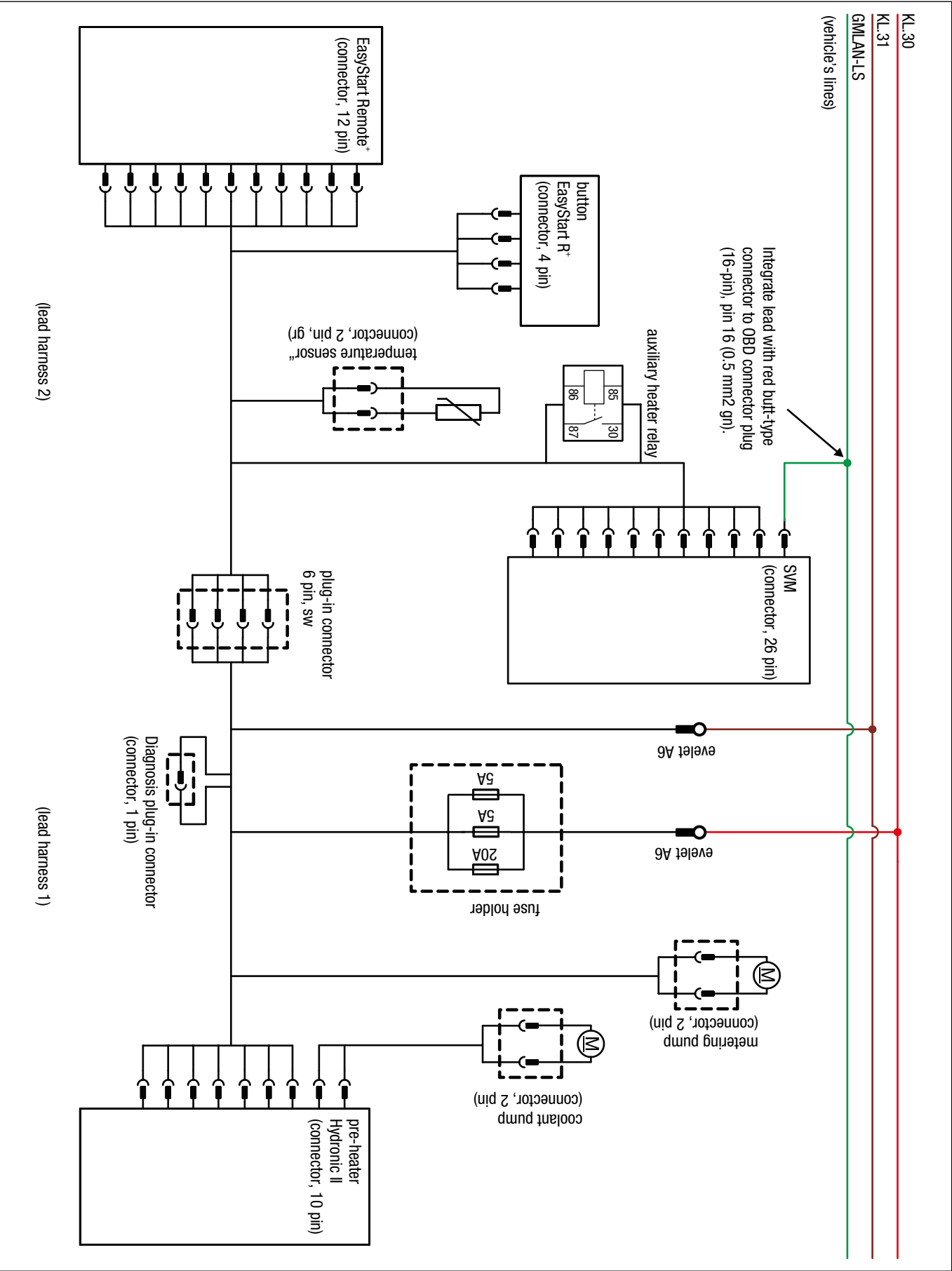


Diagram 1



### 3 Installation - Heater

#### Prepare the installation position

(see photos 28 and 29)

Hold the unit bracket at the existing M6 and M8 holes and mark the third drilling point.

Drill a 9 mm Ø hole at the marked drilling point on the outside of the right chassis beam.

#### Please note!

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

Insert an M6 blind rivet nut in the drilled hole and in the existing 9 mm Ø hole.

#### Premount heater and affix duplicate nameplate

(see photos 30 to 36)

Insert the four rubber buffers and the two spacer sleeves (note installation direction) in the unit bracket as shown.

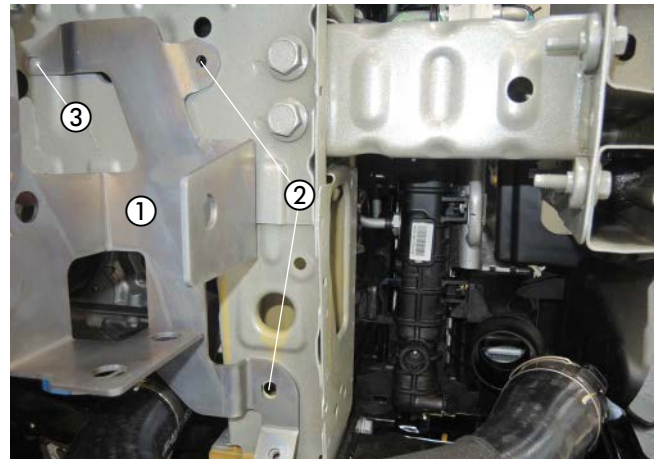


Photo 28

- ① Heater bracket
- ② Existing M6 and M8 holes
- ③ Mark drilling point and drill 9 mm Ø hole

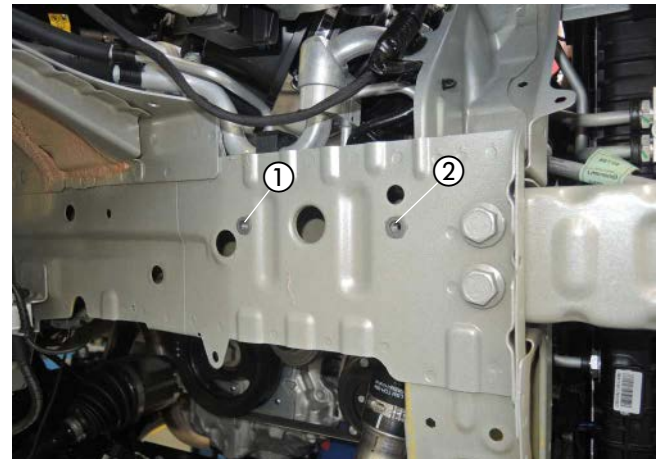


Photo 29

- ① 9 mm Ø drilled hole with M6 blind rivet nut
- ② Existing 9 mm Ø hole with M6 blind rivet nut

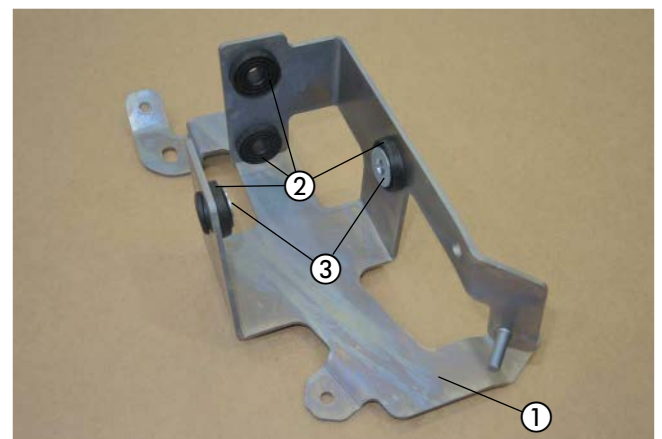


Photo 30

- ① Unit bracket
- ② Insert four rubber buffers
- ③ Insert two spacer sleeves



### 3 Installation - Heater

Remove the duplicate nameplate from the heater.

Insert the heater in the unit bracket as shown and fasten with two M6x25-10.9 torx screws.

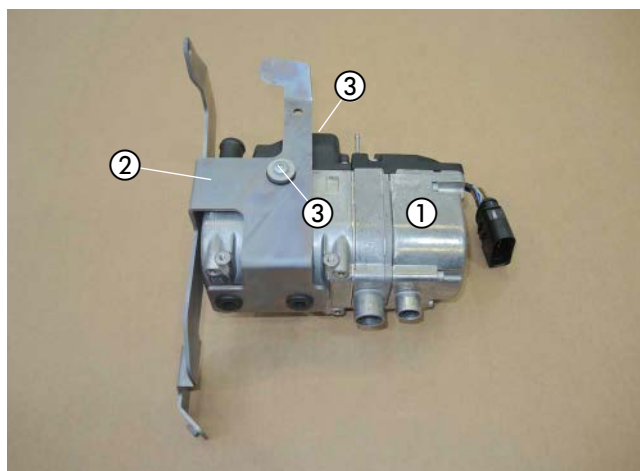


Photo 31

- ① Heater
- ② Unit holder
- ③ Two M6x25 torx screws

Insert the water pump in the rubber holder as shown and fasten to the unit bracket with an M6 nut and a B6 body washer.

Connect the short water hose to the heater's water outlet connection and to the intake connection of the water pump, using two clamps.

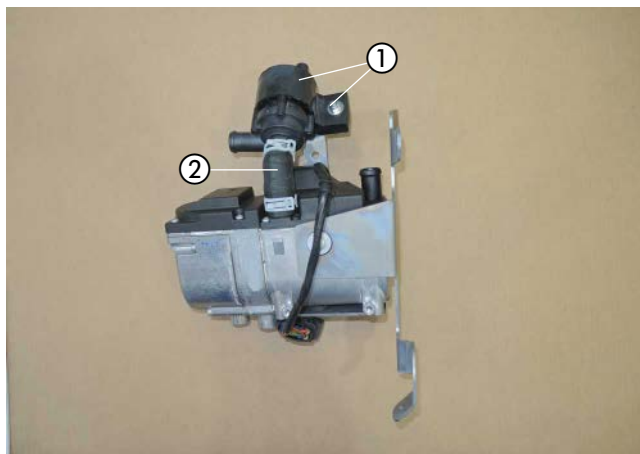


Photo 32

- ① Install water pump
- ② Connect water house

Connect the combustion air pipe with the clipped side to the heater using a 16-25 mm Ø hose clip and fasten to the heater using a 28 mm Ø pipe clip with an M6x16-8.8 torx screw as shown.

Push the end sleeve onto the inlet side of the combustion air pipe.

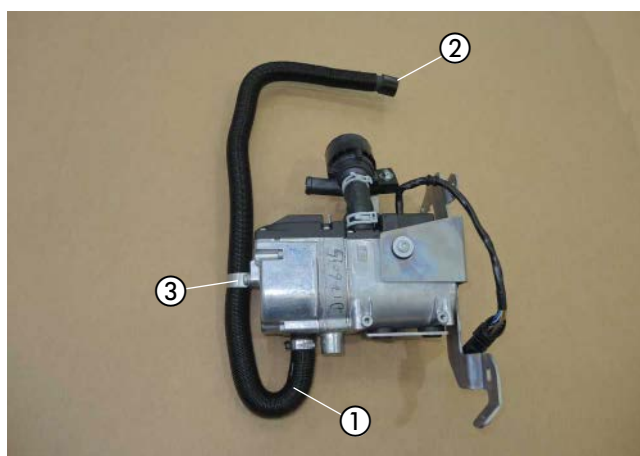


Photo 33

- ① Connect combustion air pipe
- ② Mount end sleeve
- ③ Mount 28 mm Ø clamp





### 3 Installation - Heater

Push the 105° fuel hose elbow onto the 4x1.25 mm Ø fuel pipe and fasten with a 10.5 mm Ø clamp.

Push the 105° fuel hose elbow onto the heater fuel connection and fasten with another 10.5 mm Ø clamp.

Secure the 4x1.25 mm Ø fuel pipe to the unit bracket using cable tape and a cable tape clip as shown.



Photo 34

- ① Mount 105° fuel hose elbow
- ② Cable tape and cable tape clip

Adhere the duplicate nameplate below the vehicle's nameplate on the B-pillar on the driver's side as shown.



Photo 35

- ① Fit duplicate nameplate

Slot two cable tape clips in the holder for fastening the main cable harness connector as shown.

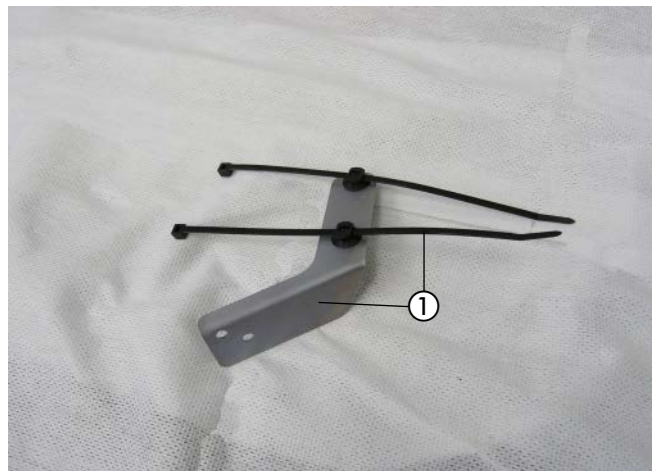


Photo 36

- ① Prepare holder with two cable tape clips



### 3 Installation - Heater

#### **Mount the heater and route the combustion air pipe** (see photos 37 to 40)

Using two M6x20 screws and two B6 body washers, mount the prepared heater with unit bracket to the M6 blind rivet nuts.

Insert an M8 x 20 screw with a B8 body washer at the lower fastening point of the heater bracket and fasten with an M8 nut through the opening on the front of the right chassis beam.

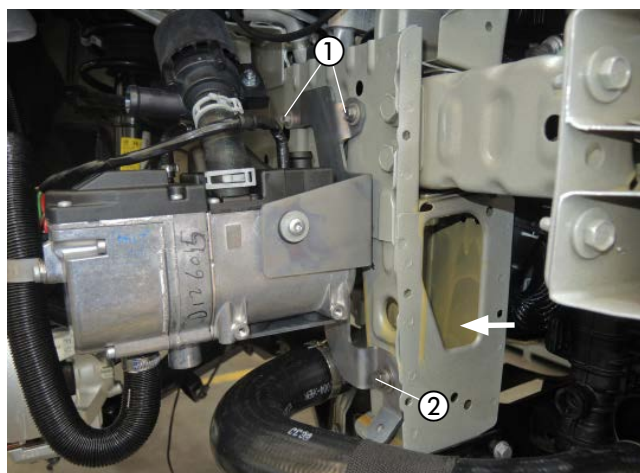


Photo 37

- ① 2 x M6x20 screw with B6 body washer
- ② M8x20 screw with B8 body washer

Lay the combustion air pipe in the protected area of the right-hand wheel arch liner.

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

#### **Please note!**

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

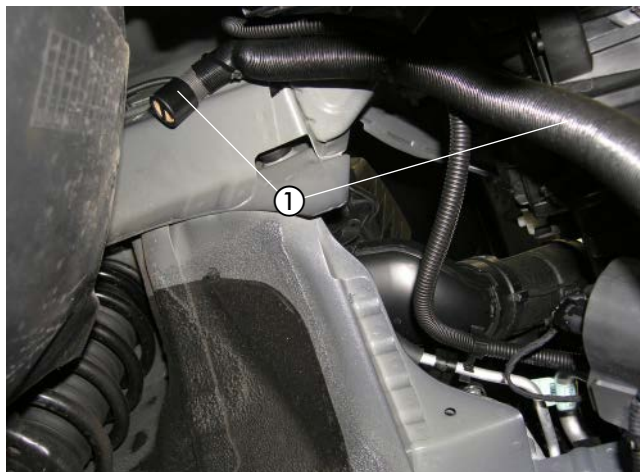


Photo 38

- ① Lay combustion air pipe

Fasten the holder for fastening the main cable harness connector to the existing hole of the cable tape clip using an M5x13 screw and an M5 collar lock nut.

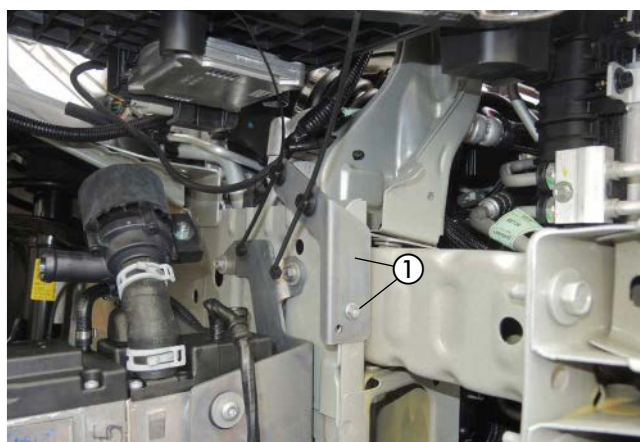


Photo 39

- ① Fasten holder with an M5x13 screw



### 3 Installation - Heater

Connect the 10-pin connector of the main cable harness with the 10-pin tab connector housing of the heater and fasten to the holder with the two cable ties.

Secure the heater cable to the lower hole in the bracket using a cable tape.

Connect the 2-pin connector to the water pump as shown.

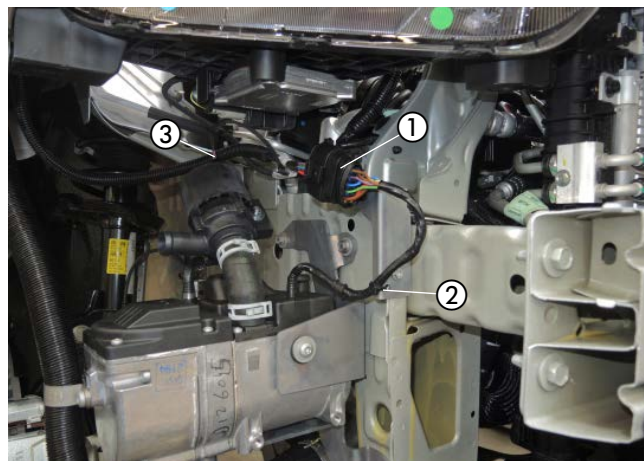


Photo 40

- ① Both connector housings fastened with the cable ties
- ② Secure the heater cable to the hole using a cable tape.
- ③ Connect 2-pin plug to the water pump

#### Premount exhaust silencer

(see photos 41 and 42)

Mount the bracket for the exhaust silencer to the exhaust silencer using an M6x20 screw and a B6 body washer.

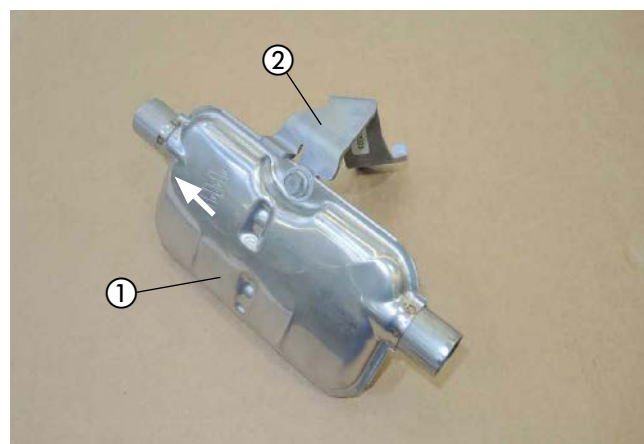


Photo 41

- ① Exhaust silencer
- ② Exhaust silencer holder

Cut the exhaust pipe to a length of 100 mm.

Fasten the exhaust pipe with a pipe clamp to the exhaust pipe elbow.

Use a pipe clamp to connect the exhaust pipe elbow to the exhaust silencer's inlet connection and align as shown.

Cut the exhaust pipe end to a length of 105 mm and shape as shown.

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

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

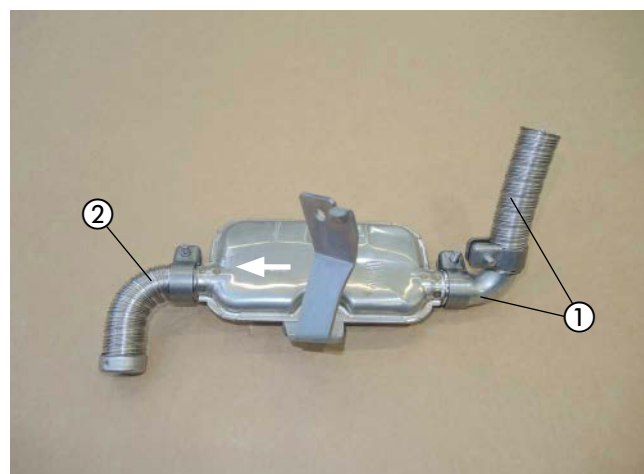


Photo 42

- ① Exhaust pipe with exhaust pipe elbow
- ② Exhaust pipe end





## 4 Exhaust system

### Mount the exhaust silencer

(see photo 43)

Mount the exhaust silencer bracket to the front tab of the unit bracket using an M6x20 screw and a B6 body washer.

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

#### Please note!

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

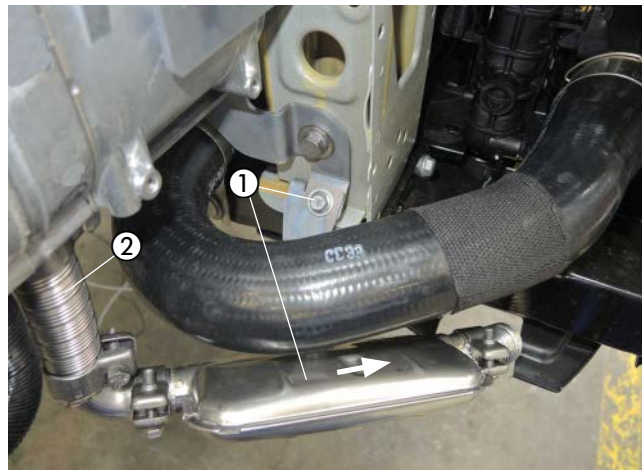


Photo 43

- ① Mount the exhaust silencer
- ② Connect the exhaust pipe

### Cut out sub-cowling

(see photo 44)

Cut out the sub-cowling using the dimensions shown.

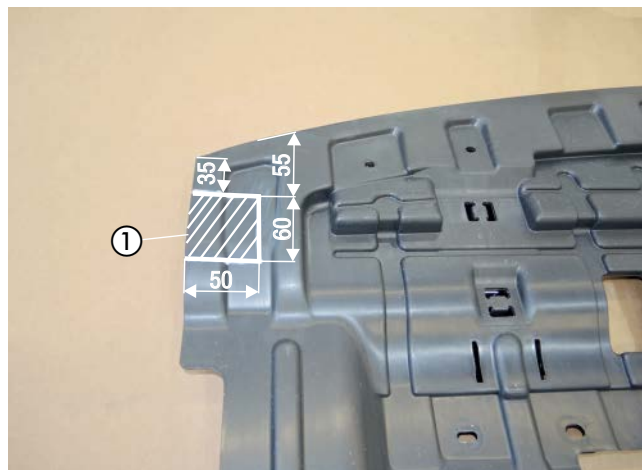


Photo 44

- ① Cut out sub-cowling

### Cut out wheel arch liner

(see photo 45)

Cut out the front right-hand wheel arch liner using the dimensions shown.

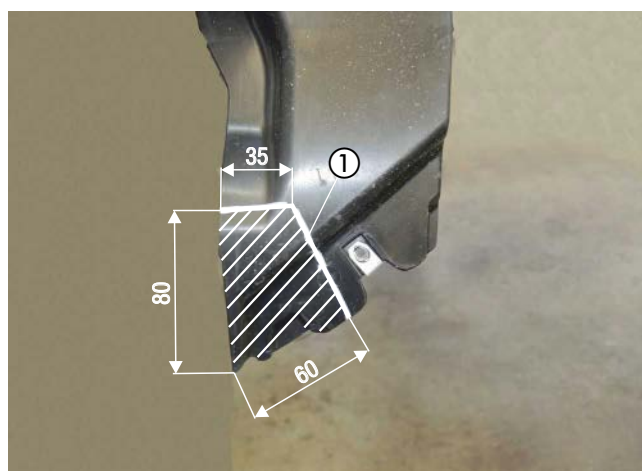


Photo 45

- ① Cut out right-hand wheel arch liner



## 4 Exhaust system

### **Cut out bumper**

(see photo 46)

Cut out the front bumper lining as shown.

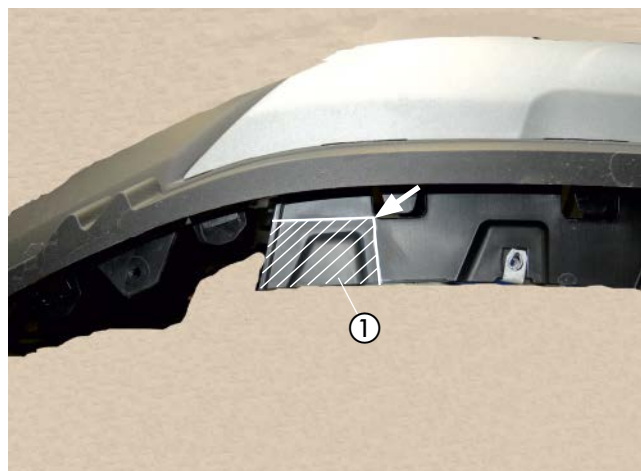


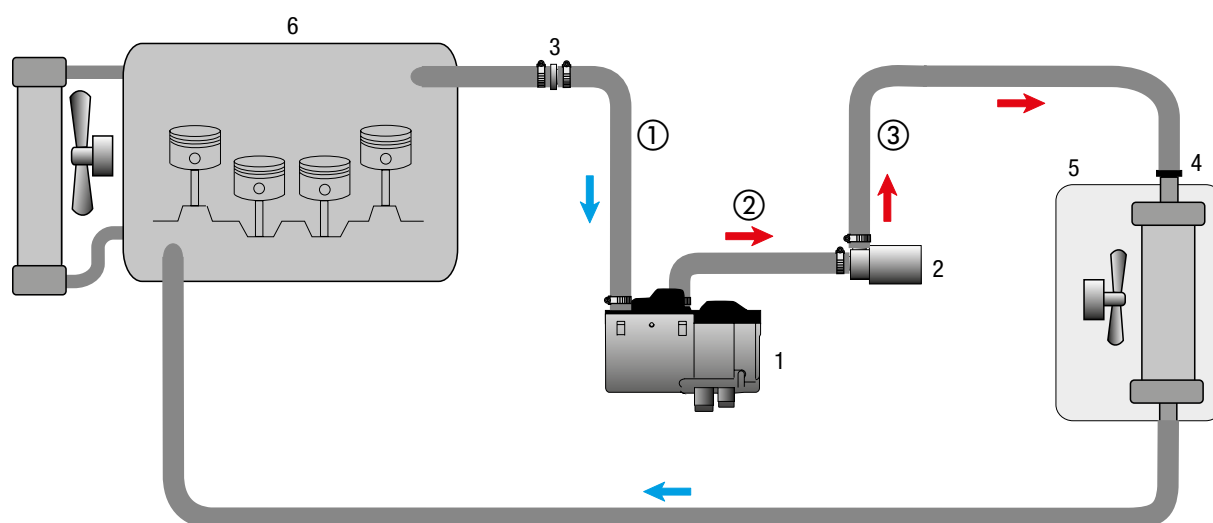
Photo 46

① Cut out front bumper lining





## 5 Water circuit




- 1 - Heater
- 2 - Water pump
- 3 - Reducer, 20/15 mm Ø (1.6 CDTI, 1.4 LPG, 1.4 I 112 kW only)
- 4 - Quick-release coupling
- 5 - Vehicle heat exchanger
- 6 - Engine
-  - Spring band clip
- ① - Water hose 1
- ② - Water hose 2
- ③ - Water hose 3

Diagram 2

### Fit edge protection

(see photo 47)

Cut the edge protection (length = 100 mm) through in the middle.

Fit the edge protection to the inside of the right chassis beam as shown.

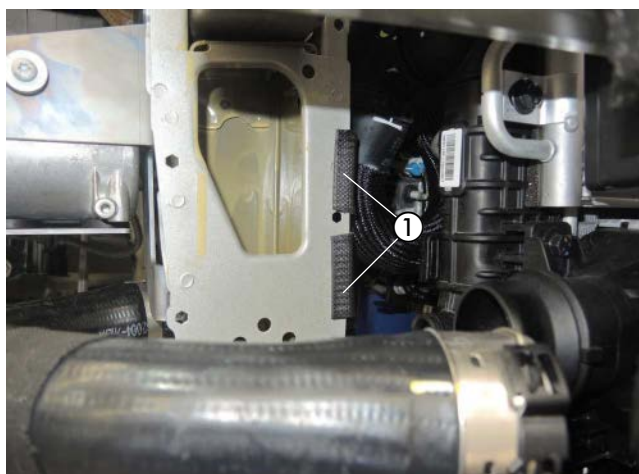


Photo 47

- ① Fit edge protection (2 x 50 mm)



## 5 Water circuit

### Drill hole

(see photo 48)

Make a 7 mm Ø hole on the outside of the right chassis beam using the dimensions shown.

#### Please note!

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

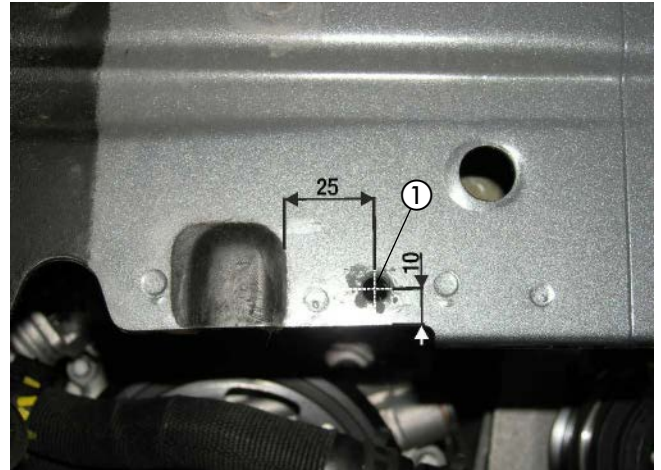


Photo 48

- ① Drill a 7 mm Ø hole

### Remove water flow hose in vehicles with 1.4 l cubic capacity 103 kW (LUJ) (see photo 49)

Remove the vehicle's water flow hose (the lower left water hose at the heat exchanger connection) by loosening the spring band clamp at the engine connection and the quick-release coupling at the heat exchanger connection.

The dismantled water hose is no longer required.

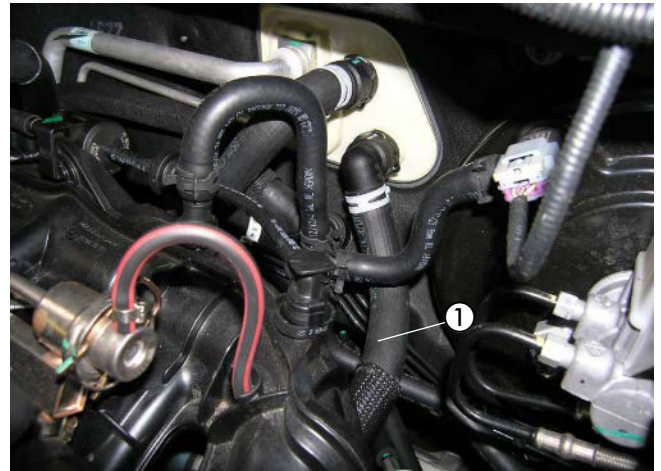


Photo 49

- ① Remove water flow hose

### Lay the water hoses and connect in vehicles with 1.4 l cubic capacity 103 kW (LUJ) (see photos 50 to 62 and diagram 2)

Route the water hose group in front of the chassis beam to the heater.

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

Connect water hose 3 "water pump - heat exchanger" to the discharge end of the water pump using a spring band clamp.

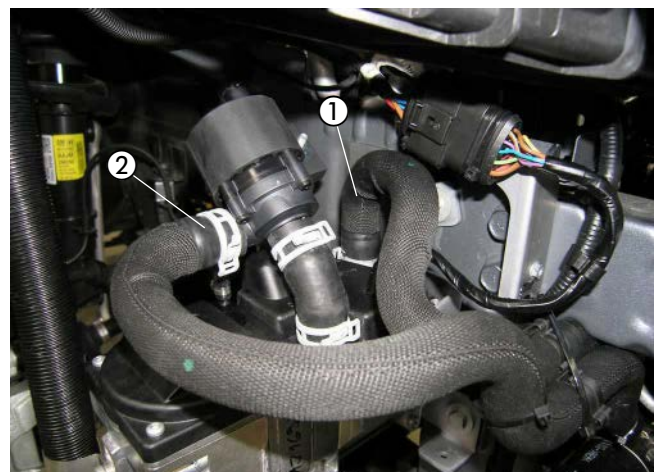


Photo 50

- ① Connect water hose 1  
② Connect water hose 3



## 5 Water circuit

Secure the upper water hose to the existing hole in the chassis beam with a cable tape.

Position the rubber spacer of the upper water hose at the inside of the front chassis beam.

Position the rubber spacer of the lower water hose between the radiator and the chassis beam.

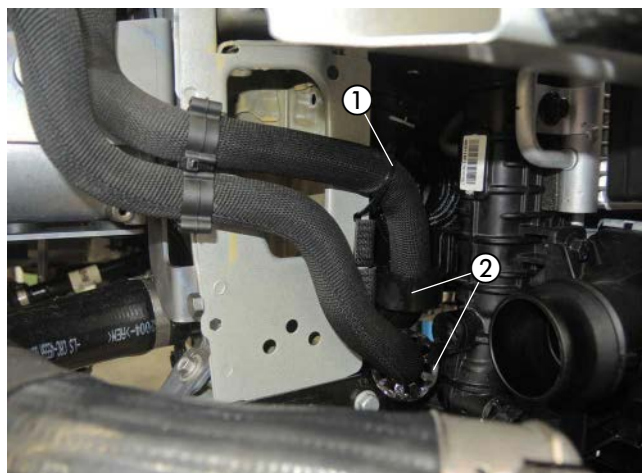


Photo 51

- ① Fix upper water hose with cable tape
- ② Position rubber spacers

Position the rubber spacer profile of the front water hose at the charge air hose.

Position the rubber spacer profile of the rear water hose on the inside of the right chassis beam and secure to the aircon pipe using an 8-22 spacer.

Use cable ties to fix the water hoses to each other.

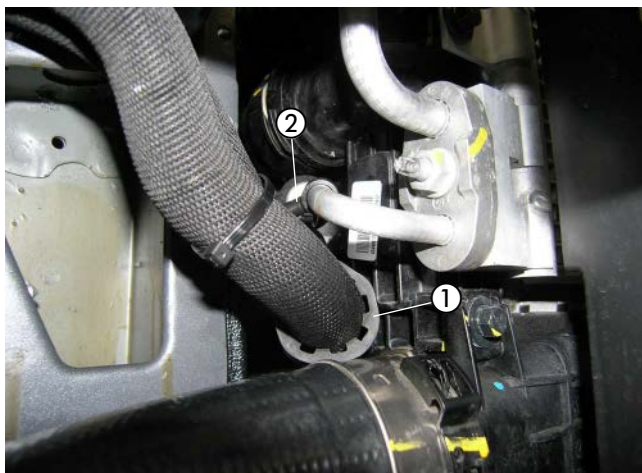


Photo 52

- ① Position rubber spacer at the charge air pipe
- ② Holder 8-22

Fasten the upper water hose of the water hose group to the using a rotatable hose holder to the power assisted steering line.



Photo 53

- ① Rotatable hose holder, mounted





## 5 Water circuit

Lay the water hose group below the right chassis beam to the cutting-off point.

Fasten the lower water hose of the water hose group to the 7 mm Ø drilled hole using a rubberised 25 mm Ø clip with an M6x50 screw, a B6 body washer, an M6x30 spacer sleeve and an M6 nut.

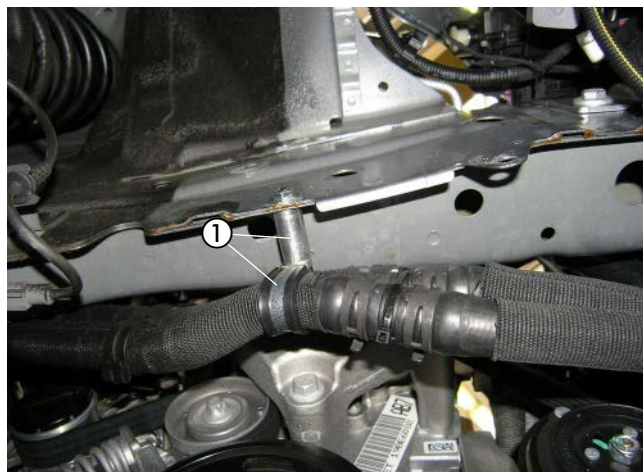


Photo 54

- ① Mount rubberised 25 mm Ø clip and spacer sleeve

Fasten the water hose group to the fuel line using a triple hose holder and to the aircon pipe using a line holder as shown.

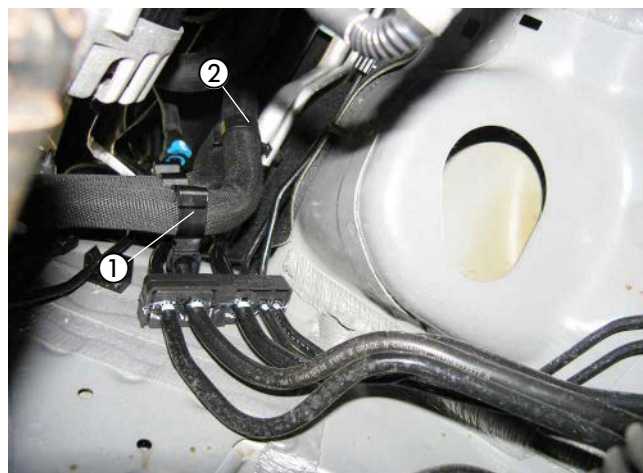


Photo 55

- ① Fasten the water hose group to the fuel line with a hose holder
- ② Fasten the water hose group to the air-con line with a line holder

Take water hose 3 "water pump - heat exchanger" along the aircon pipe to the cutting-off point and connect to the heat exchanger connection using the quick-release coupling as shown.

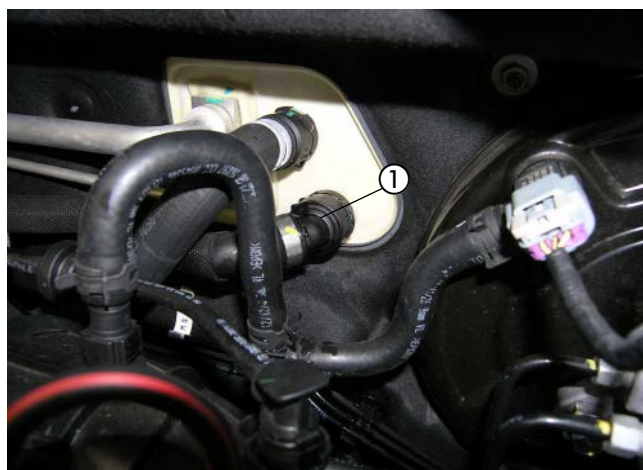


Photo 56

- ① Connect water hose 3 "water pump - heat exchanger"



## 5 Water circuit

Secure water hose 3 "water pump - heat exchanger" to the air-con line using two hose holders as shown.

### Please note!

When installing the water hoses, ensure they are at a sufficient distance from moving vehicle parts.  
Protect the water hoses against chafing and use cable ties to secure in suitable positions.

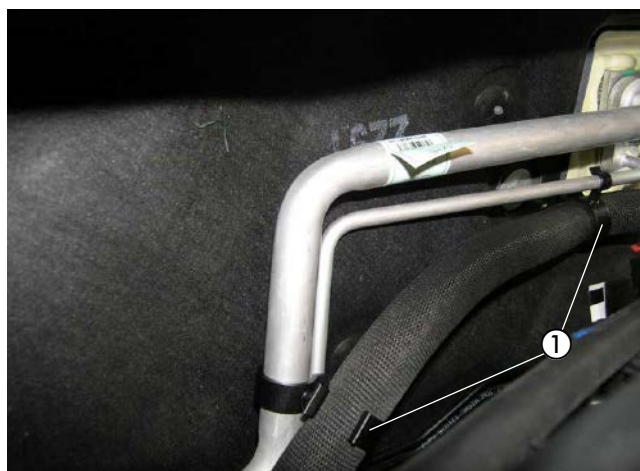


Photo 57

- ① Secure water hose 3 "water pump - heat exchanger" to the aircon pipe using two hose holders

Lay water hose 1 "engine - heater" along the brake lines to the cut-off point at the engine connection and secure to the brake line with a hose holder.



Photo 58

- ① Secure water hose 1 "engine - heater" to the brake with a hose holder

Fasten water hose 1 "engine - heater" to the vehicle's water hose using a rotatable hose holder and to the vehicle cable loom with a cable tape.

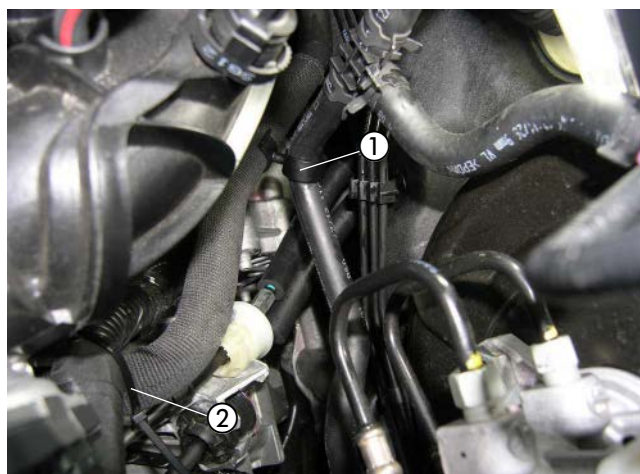


Photo 59

- ① Hose holder, rotatable
- ② Cable tape





## 5 Water circuit

Connect water hose 1 "engine - heater" to the engine connection using a spring band clamp.

### Please note!

Secure all hose connections with spring band clamps.  
Protect the water hoses against chafing and use cable ties to secure in suitable positions.  
When laying the water hoses, ensure they are at a sufficient distance from the brake lines.

### Integrating the water supply for vehicles with 1.4 l capacity and LPG installed ex works (LUJ) (see photos 61 to 68)

Push a rubber spacer over the quick-release coupling onto water hose 3 "water pump - heat exchanger" of the water hose group and position as shown.

Mark the cutting point on water hose 1 "engine - heater" using the dimensions shown and cut the water hose.  
The piece of hose that has been cut out is no longer needed.  
Remove the remaining piece of heat-shrink hose from the water hose.



Photo 60

- ① Connect water hose 1 "engine - heater" onto the engine connection socket

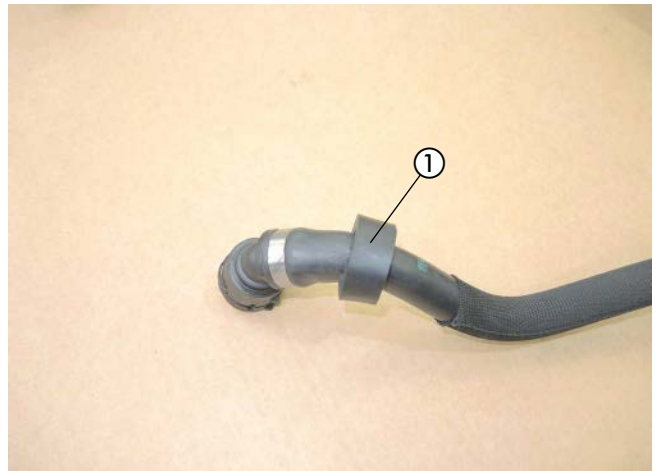


Photo 61

- ① Push on and position rubber spacer

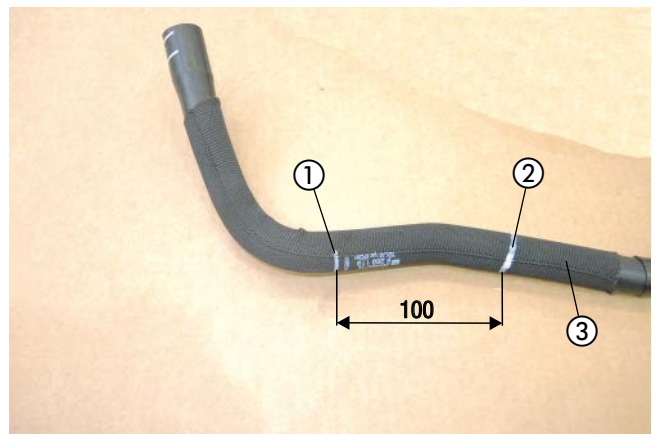


Photo 62

- ① Existing marking
- ② Cutting point
- ③ Remove heat-shrink hose from water hose



## 5 Water circuit

Insert the 20/15 mm Ø adapter in the cut-off water hose 1 "engine - heater" and secure with a spring band clamp.

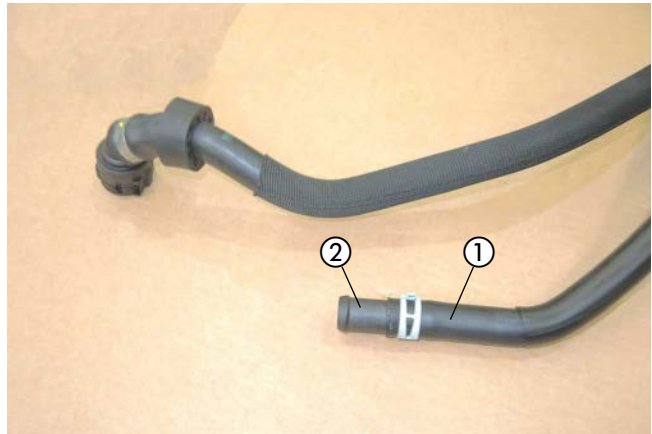


Photo 63

- ① Water hose 1 "engine - heater"
- ② Insert 20/15 mm Ø adapter and secure with a spring band clamp

Remove the vehicle water flow hose (the lower left water hose at the heat exchanger connection) by loosening the quick-release coupling at the heat exchanger connection.

Cut the piece of water hose with the quick-release coupling from the water flow hose according to the dimensions shown.

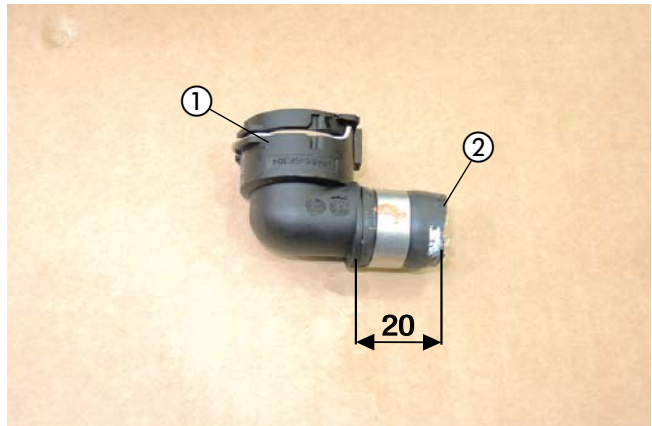


Photo 64

- ① Quick-release coupling from vehicle water flow hose
- ② Cutting point in the water flow hose

Use a cable tape to secure the water hose group to the line holder of the fuel lines.

Insert the 4.3-22 spacer between water hose 1 "engine - heater" and brake line.

### Please note!

When laying the exhaust pipes, ensure they are at a distance of at least 40 mm from the engine.

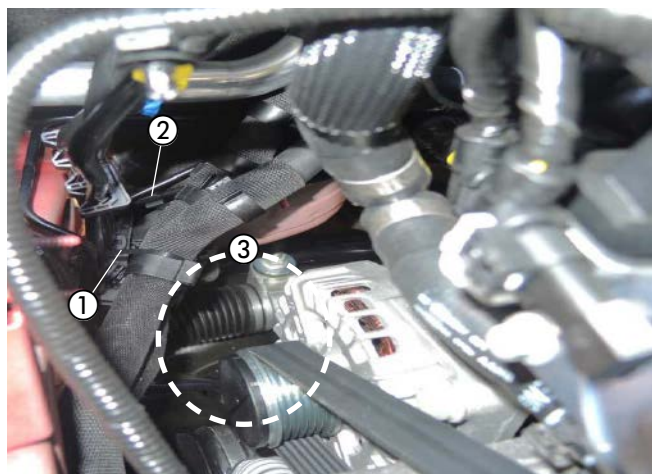


Photo 65

- ① Cable tape
- ② Spacer 4.3-22
- ③ At least 40 mm from engine



## 5 Water circuit

Connect water hose 1 "engine - heater" with the 20/15 mm Ø reducer to the disconnected water flow hose piece from the engine using a spring band clamp.



Photo 66

① Connect water hose 1 "engine - heater" to the water hose piece from the engine connection

Fix the vehicle water flow hose using 2 rotatable hose holders.

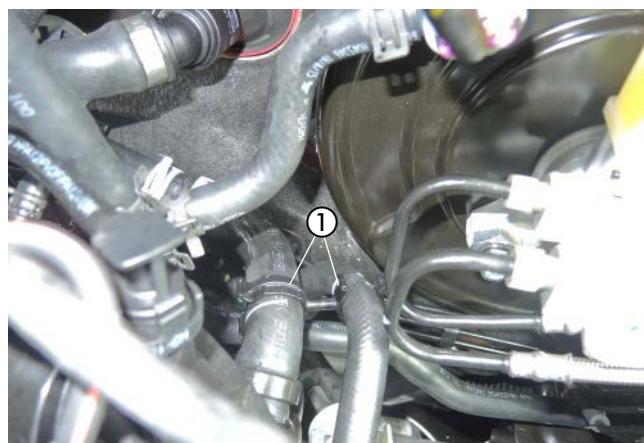


Photo 67

① Secure the vehicle water flow hose using 2 rotatable hose holders.

Take water hose 3 "water pump - heat exchanger" along the aircon pipe to the cutting-off point and connect to the heat exchanger connection using the quick-release coupling as shown.

Position the rubber spacer at the water return hose.

Secure water hose 3 "water pump - heat exchanger" to the aircon pipe using two hose holders as shown.

Continue with installation as already described for 1.4 l capacity.

### Please note!

When installing the water hoses, ensure they are at a sufficient distance from moving vehicle parts. Protect the water hoses against chafing and use cable ties to secure in suitable positions.



Photo 68

① Connect water hose 3 "water pump - heat exchanger"  
② Position rubber spacer  
③ Secure water hose 3 "water pump - heat exchanger" to the aircon pipe using two hose holders





## 5 Water circuit

### Disconnect water flow hose in vehicles with 1.4 l cubic capacity 112 kW (LE2) (see photo 69)

Remove the vehicle water flow hose (the lower left water hose at the heat exchanger connection) by loosening the quick-release coupling at the heat exchanger connection.

Cut the disconnected water flow hose with the dimensions shown in the photo.

The piece of water hose that has been cut off is no longer required.

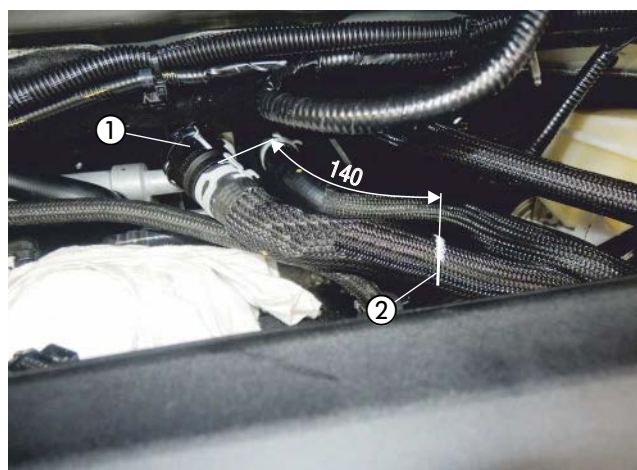


Photo 69

- ① Loosen quick-release coupling from heat exchanger connection
- ② Cutting point in the water flow hose

### Integrating the water supply in vehicles with 1.4 l cubic capacity 112 kW (LE2) (see photos 70 to 83)

Loosen the hose holder of the water hose group and push two more rubber spacers onto the water hoses, positioning them as shown.

Fasten the hose holder again.

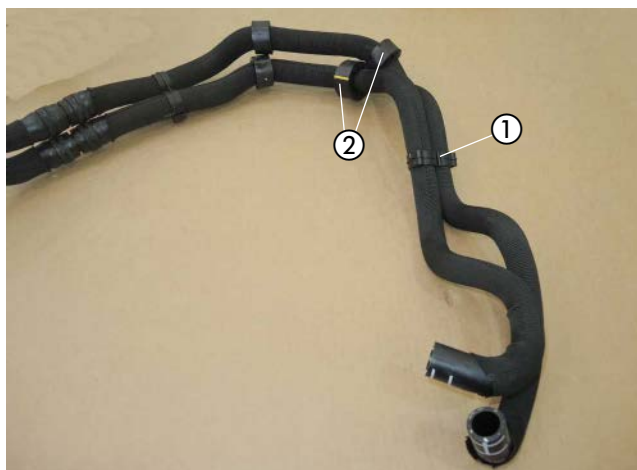


Photo 70

- ① Hose holder
- ② Push on two additional rubber spacers

Cut through the water hose 1 "engine - heater" at the existing marking.

The piece of hose that has been cut out is no longer needed.

Cut approx. 30 mm off the heat-shrink hose of water hose 1 "engine - heater".



Photo 71

- ① Water hose 1 "engine - heater"
- ② Existing marking



## 5 Water circuit

Route the water hose group in front of the chassis beam to the heater.

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

Connect water hose 3 "water pump - heat exchanger" to the discharge end of the water pump using a spring band clamp.

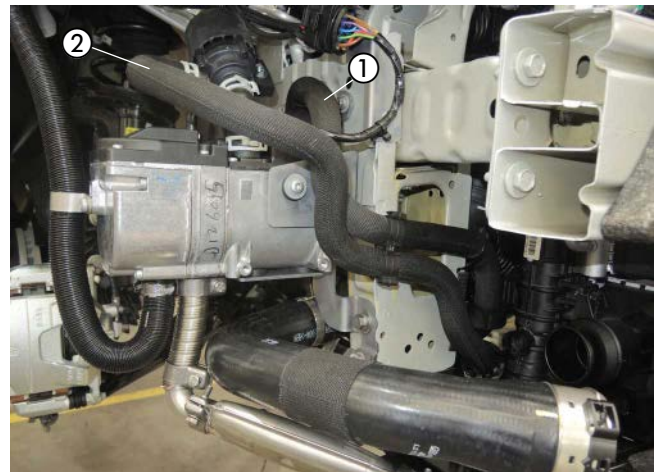


Photo 72

- ① Connect water hose 1
- ② Connect water hose 3

Secure the upper water hose to the existing hole in the chassis beam with a cable tape.

Position the rubber spacer of the upper water hose at the inside of the front chassis beam.

Position the rubber spacer of the lower water hose between the radiator and the chassis beam.

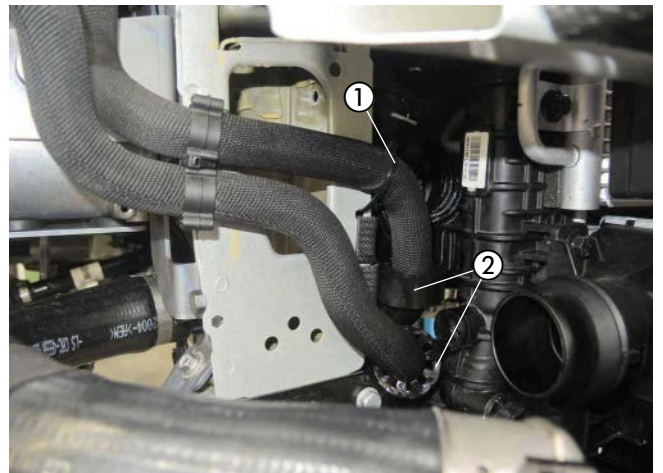


Photo 73

- ① Fix upper water hose with cable tape
- ② Position rubber spacers

Lay the water hose group below the right chassis beam to the cutting-off point.

Using a 25 mm Ø clamp, fasten the top water hose of the water hose group to the 7 mm Ø drilled hole, with an M6x50 screw, a B6 body washer, an M6x30 spacer sleeve and an M6 nut.

Use a cable tape to hold the water hoses together.

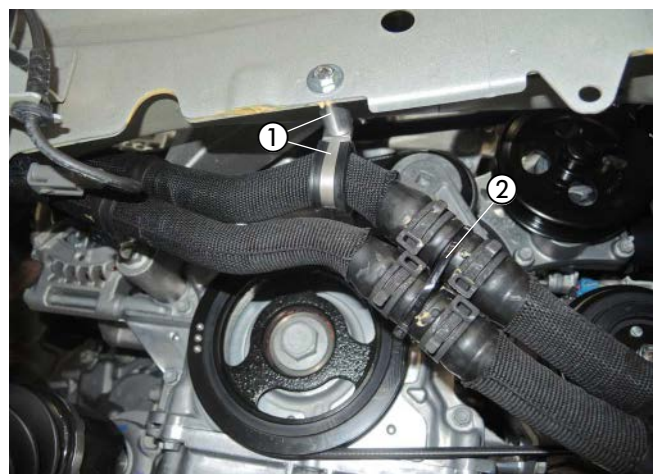


Photo 74

- ① Mount rubberised 25 mm Ø clip and spacer sleeve
- ② Cable tape





## 5 Water circuit

Take a cable tie through the rubber spacer and secure to the charge air pipe.

Use another cable tape to secure the water hose group to the holder of the charge air pipe.

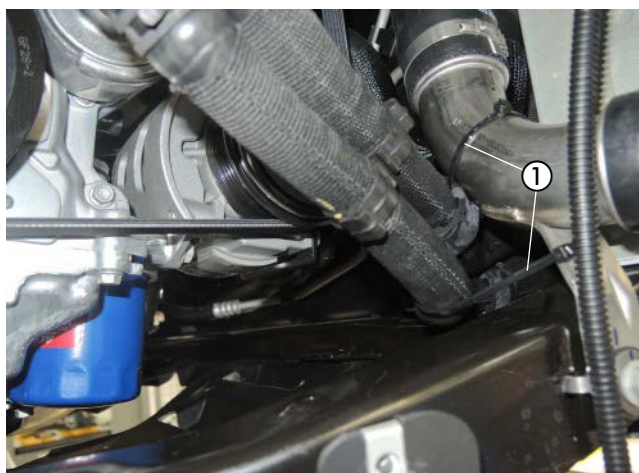


Photo 75

- ① Cable ties

Use a cable tape to secure the water hose group to the line holder of the fuel lines.

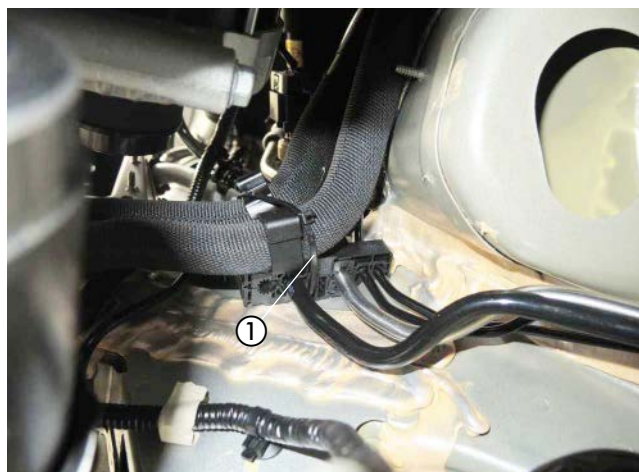


Photo 76

- ① Use a cable tape to secure the water hose group to the line holder of the fuel lines

Drill a 5 mm Ø hole in the disc clip as shown.

Feed the cable tape through the drilled hole.

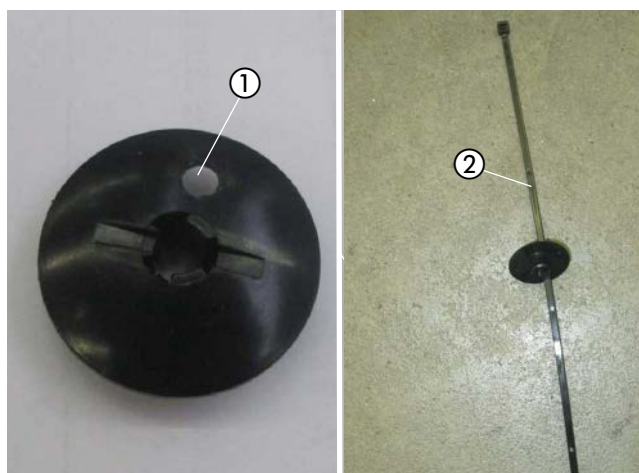


Photo 77

- ① Drill a 5 mm Ø in the disc clip  
② Feed the cable tape through the drilled hole



## 5 Water circuit

Install the disc clip with the cable tape on the stud bolt of the engine partition as shown in the photo.

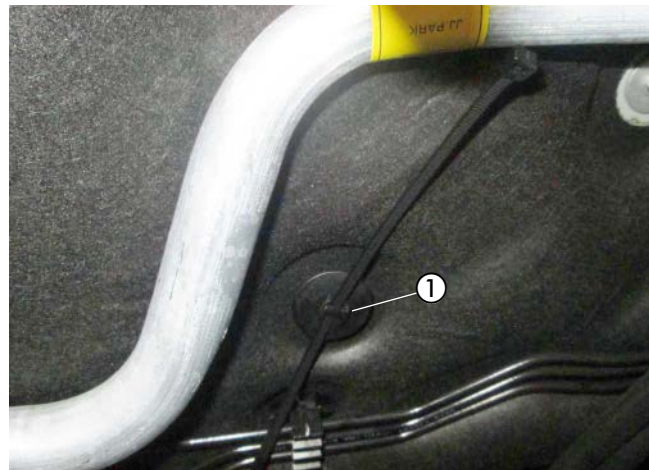


Photo 78

- ① Install disc clip with cable tape

Fasten water hose 3 "water pump - heat exchanger" to the disc clip with a cable tape.

Use a 4.3-22 holder to secure the water hose 3 "water pump - heat exchanger" to the brake line.

Use a 22-24 holder to secure the water hoses 1 and 3 to each other.

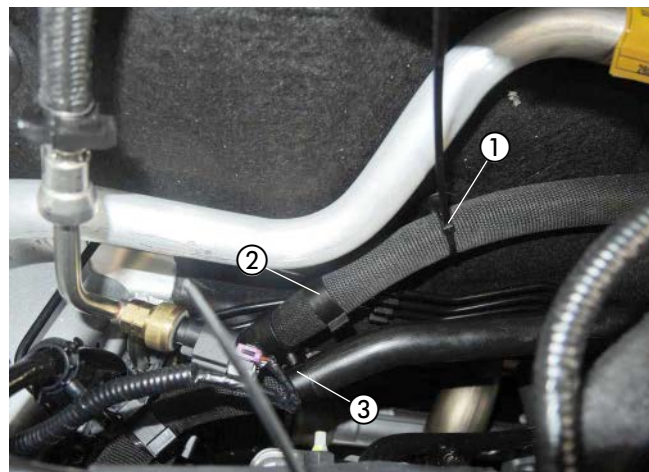


Photo 79

- ① Disc clip with cable tape  
② Holder 4.3-22  
② Holder 22-24

Use two 4.3-22 holders to secure the water hose 1 "water pump - heater" to the brake line.

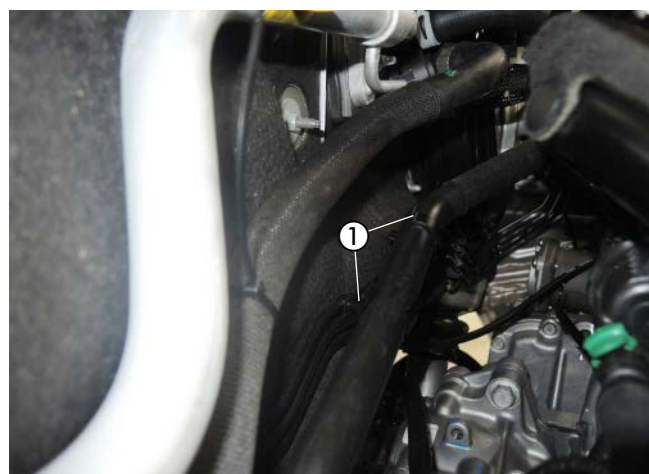


Photo 80

- ① 2 x holder 4.3-22



## 5 Water circuit

Connect water hose 3 "water pump - heat exchanger" connect to the heat exchanger as shown.



Photo 81

- ① Connect water hose 3 "water pump - heat exchanger"

Connect water hose 1 "engine - heater" with the 20/15 mm Ø reducer to the disconnected water flow hose piece from the engine using two spring band clamps.

Push a 22-24 holder onto the connection point and secure to the lead harness.

**Please note!**

When laying the water hoses, ensure they are at a sufficient distance from the brake lines.

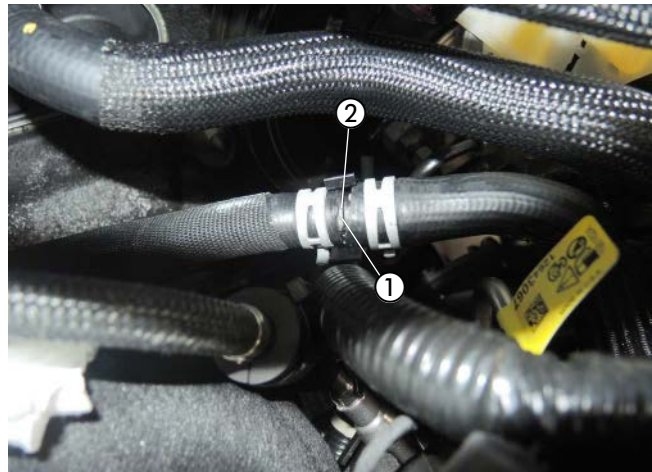


Photo 82

- ① Connect water hose 1 "engine - heater" to the water hose piece from the engine connection
- ② Holder 22-24

Use a 21.3-21.3 double holder to secure the water hoses 1 and 3 to each other as shown.

Use an 8.5-22 holder to secure the water hose 3 "water pump - heat exchanger" to the aircon pipe.

**Please note!**

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

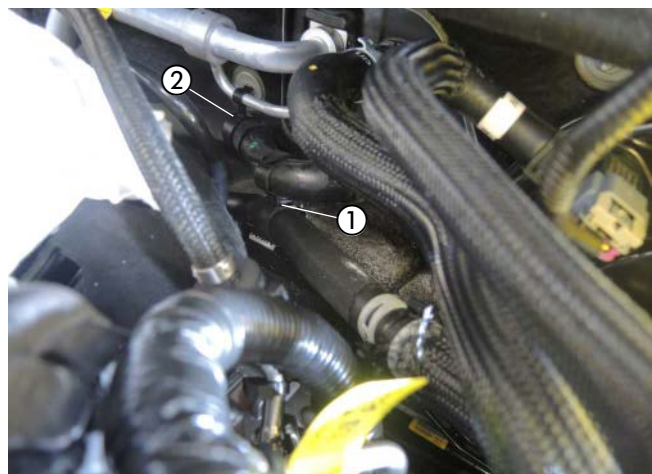


Photo 83

- ① Double holder 21.3-21.3
- ② Holder 8.5-22





## 5 Water circuit

**Disconnect water flow hose in vehicles with 1.6 l cubic capacity (LVL, LWV and L XO)**  
(see photos 84 and 85)

Remove the vehicle's water flow hose (the lower left water hose at the heat exchanger connection) by loosening the quick-release coupling at the heat exchanger connection.



Photo 84

- ① Pull the water flow hose off the heat exchanger socket by undoing the quick-release coupling.

Pull the water flow hose upwards and cut with the dimensions shown in the photo.

Push the heat shrink hose of the water flow hose downwards.

The removed piece of water hose is no longer required.

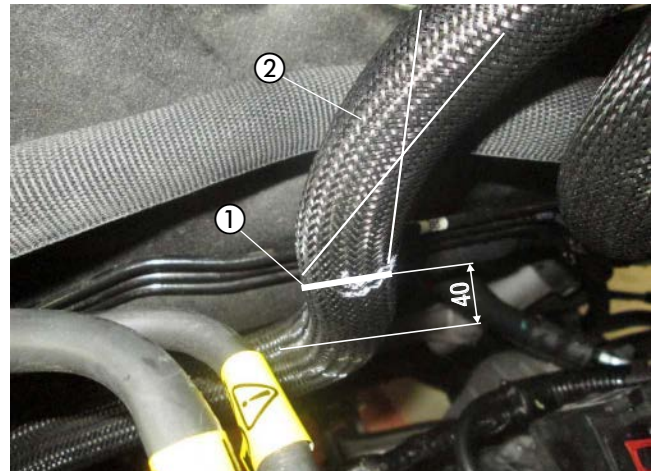


Photo 85

- ① Cutting point in the water flow hose
- ② Dismantled piece of water hose not needed

**Lay the water hoses and connect in vehicles with 1,6 l cubic capacity (LVL, LWV and L XO)**  
(see photos 86 to 95 and diagram 2)

Route the water hose group behind the chassis beam to the heater.

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

Connect water hose 3 "water pump - heat exchanger" to the discharge end of the water pump using a spring band clamp.

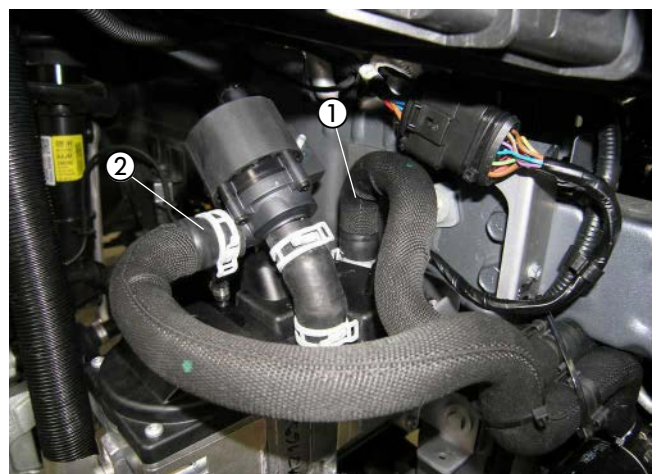


Photo 86

- ① Connect water hose 1
- ② Connect water hose 3



## 5 Water circuit

Route the water hose group in front of the chassis beam to the heater.

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

Connect water hose 3 "water pump - heat exchanger" to the discharge end of the water pump using a spring band clamp.



Photo 87

- ① Connect water hose 1
- ② Connect water hose 3

Secure the upper water hose to the existing hole in the chassis beam with a cable tape.

Position the rubber spacer of the upper water hose at the inside of the front chassis beam.

Position the rubber spacer of the lower water hose between the radiator and the chassis beam.

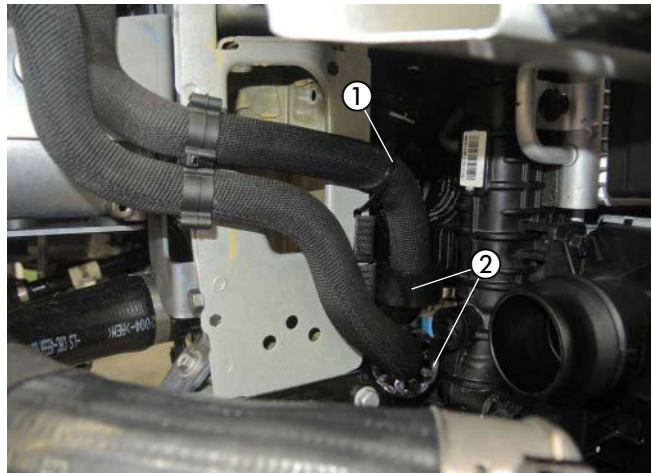


Photo 88

- ① Fix upper water hose with cable tape
- ② Position rubber spacers

Use a rotatable hose holder 13-22 to fix the top water hose of the water hose group to the aircon pipe as shown in the photo.

**Please note!**

When laying the water hose group, ensure they are at an adequate distance from the air-conditioning compressor.

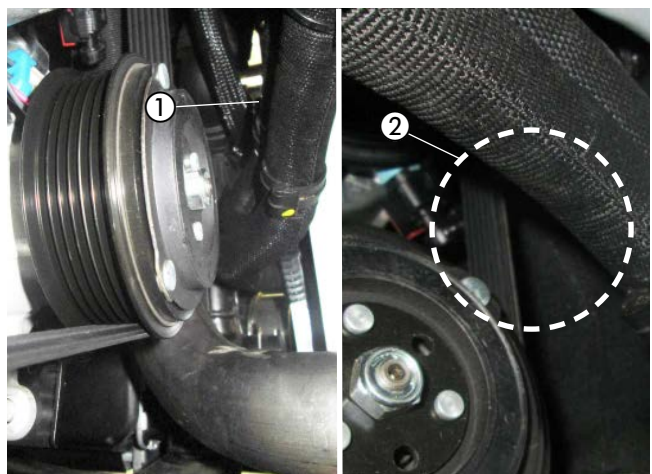


Photo 89

- ① Install the hose holder, rotatable 13-22 on the air conditioning pipe
- ② Distance from the air conditioning compressor





## 5 Water circuit

Lay the water hose group below the right chassis beam to the cutting-off point.

Using a 25 mm Ø clip, fasten the top water hose of the water hose group to the 7 mm Ø drilled hole, with an M6x30 screw, a B6 body washer, an M6x11 spacer sleeve and an M6 nut.



Photo 90

- ① Mount rubberised 25 mm Ø clip and spacer sleeve

Fasten the water hose group to the fuel line using a triple hose holder and to the aircon pipe using a line holder as shown.

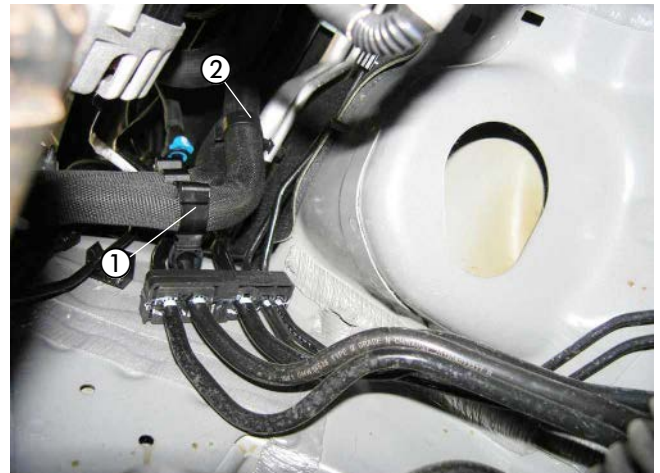


Photo 91

- ① Fasten the water hose group to the fuel line with a hose holder
- ② Fasten the water hose group to the air-con line with a line holder

Use a cable tape to fix the water hose group as shown in the photo.

### Please note!

When laying the water hose group, ensure there is adequate distance to the generator and to the cable set holder.

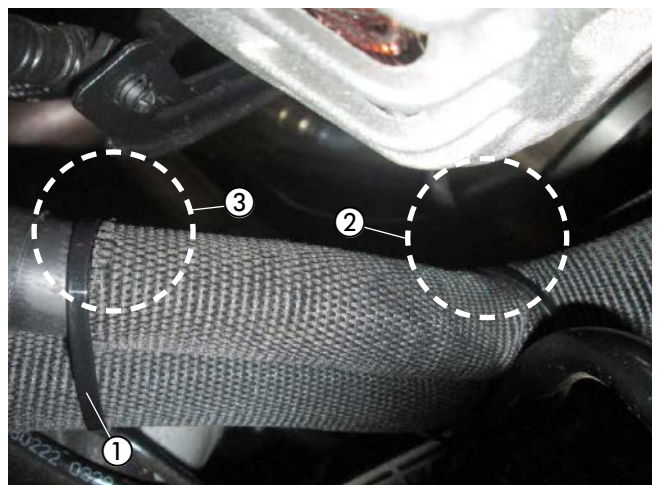


Photo 92

- ① Fix the water hose group with a cable tape
- ② Distance from the generator
- ③ Distance from the cable set holder



## 5 Water circuit

Lay water hose 3 "water pump - heat exchanger" under the air-conditioning pipe to the heat exchanger connection socket.



Photo 93

- ① Lay water hose 3 "water pump - heat exchanger" under the air-conditioning pipe

Lay water hose 3 "water pump - heat exchanger" connect to the heat exchanger using the quick-release coupling, as shown in the photo.



Photo 94

- ① Connect water hose 3 "water pump - heat exchanger"

Use a holder 8.5-20 to fix the water hose 3 "water pump - heat exchanger" to the air-conditioning pipe.



Photo 95

- ① Use a holder 8.5-20 to fix the water hose 3 "water pump - heat exchanger" to the air-conditioning pipe.



## 5 Water circuit

Cut water hose 1 "engine - heater" of the water hose group with the dimensions shown in the photo.

Cut off about 20 mm of the heat shrink hose.

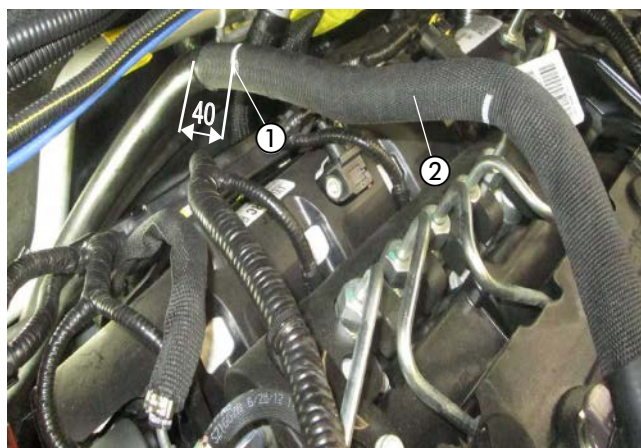


Photo 96

- ① Cutting off point at water hose 1 "engine - heater"
- ② Cut off piece of water hose not needed

Connect water hose 1 "engine - heater" with the 20/15 mm Ø reducer to the disconnected water flow hose piece from the engine using two spring band clamps.



Photo 97

- ① Connect water hose 1 "engine - heater" to the water hose piece from the engine connection

Twist the disc clip off the stud bolt of the engine partition as shown in the photo.



Photo 98

- ① Twist the disc clip off the stud bolt of the engine partition





## 5 Water circuit

Drill a 5 mm Ø hole in the disc clip as shown.

Feed the cable tape through the drilled hole.

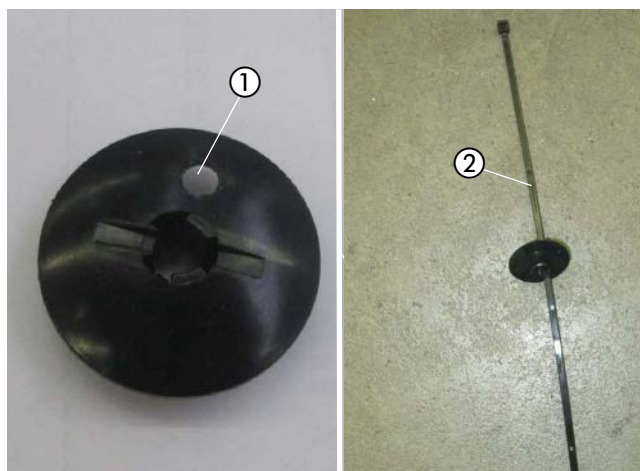


Photo 99

- ① Drill a 5 mm Ø in the disc clip
- ② Feed the cable tape through the drilled hole

Install the disc clip with the cable tape on the stud bolt of the engine partition as shown in the photo.



Photo 100

- ① Install disc clip with cable tape

Use a holder 22-24 to secure the water hose 3 "water pump - heat exchanger" to the air-conditioning pipe.

Fasten water hoses 1 and 3 together at the disc clip with a cable tape.

Use a cable tape to secure the water hoses 1 and 3 to each other.



Photo 101

- ① Holder 22-24
- ② Disc clip with cable tape
- ③ Cable tape



## 5 Water circuit

Clip water hose 1 "engine - heater" between the two clamps with a holder 4.3-22 on the top brake line.

Use a cable tape to secure the water hoses 1 and 3 to each other.

### Please note!

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



Photo 102

- ① Holder 4.3-22
- ② Cable tape





## 6 Fuel supply

### Install fuel tank extractor only engine LUJ, LWV, LVL, LXO

(see photos 103 to 108 and diagrams 3 and 4)

Prepare the riser pipe of the fuel tank extractor as shown in the diagram.

Remove the tank according to the manufacturer's instructions. At the same time, undo the plug-in connection and the fuel line at the tank connection.

Remove the tank fitting from the tank opening by undoing the locking ring.

#### Please note!

The tank fitting should not be removed for longer than 10 minutes because of expansion of the tank!

Detach the sticker from the upper part of the tank fitting and fasten it again at a suitable point on the upper part of the tank fitting.

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

#### Please note!

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

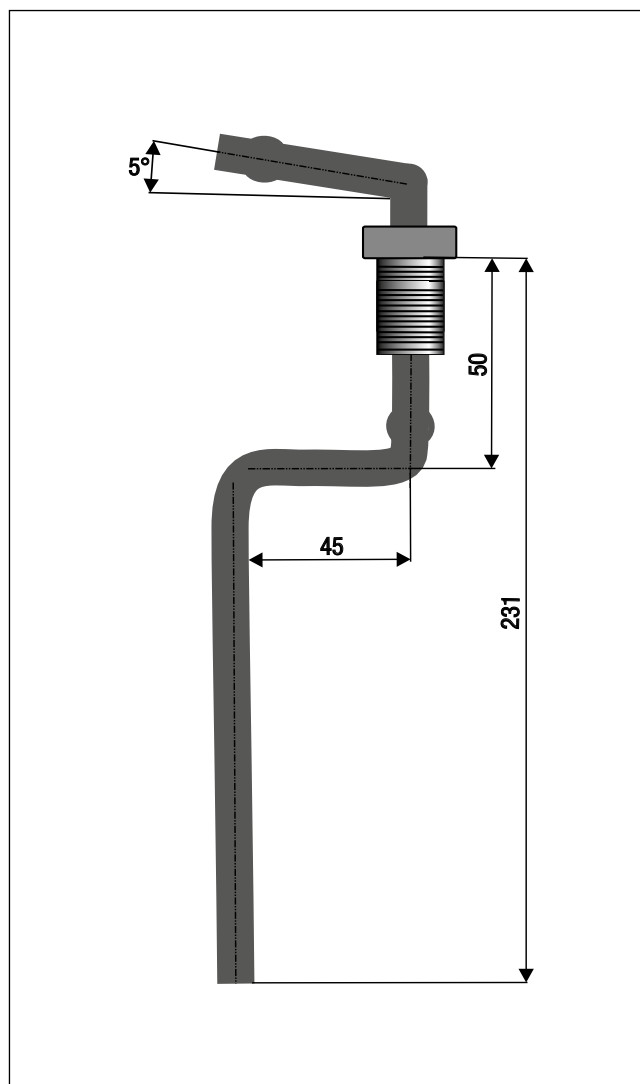


Diagram 3

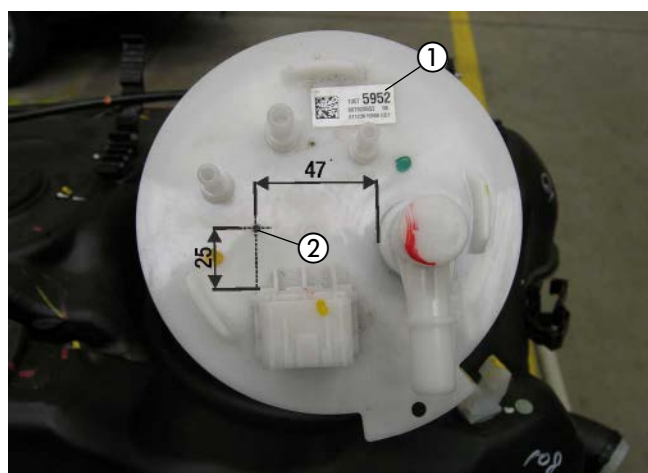


Photo 103

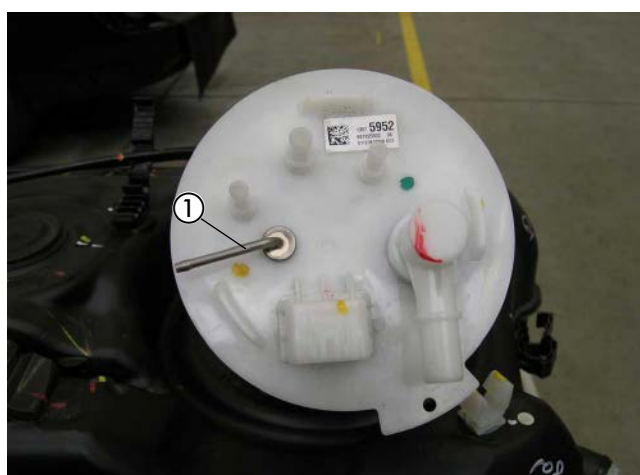


Photo 104

- ① Move sticker
- ② Drill an 8 mm Ø hole in the top part of the tank fitting

- ① Fuel tank extractor mounted



## 6 Fuel supply

### Install fuel tank extractor only engine LE2

Prepare the riser pipe of the fuel tank extractor as shown in the diagram.

Remove the tank according to the manufacturer's instructions. At the same time, undo the plug-in connection and the fuel line at the tank connection.

Remove the tank fitting from the tank opening by undoing the locking ring.

#### Please note!

The tank fitting should not be removed for longer than 10 minutes because of expansion of the tank!

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

#### Please note!

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

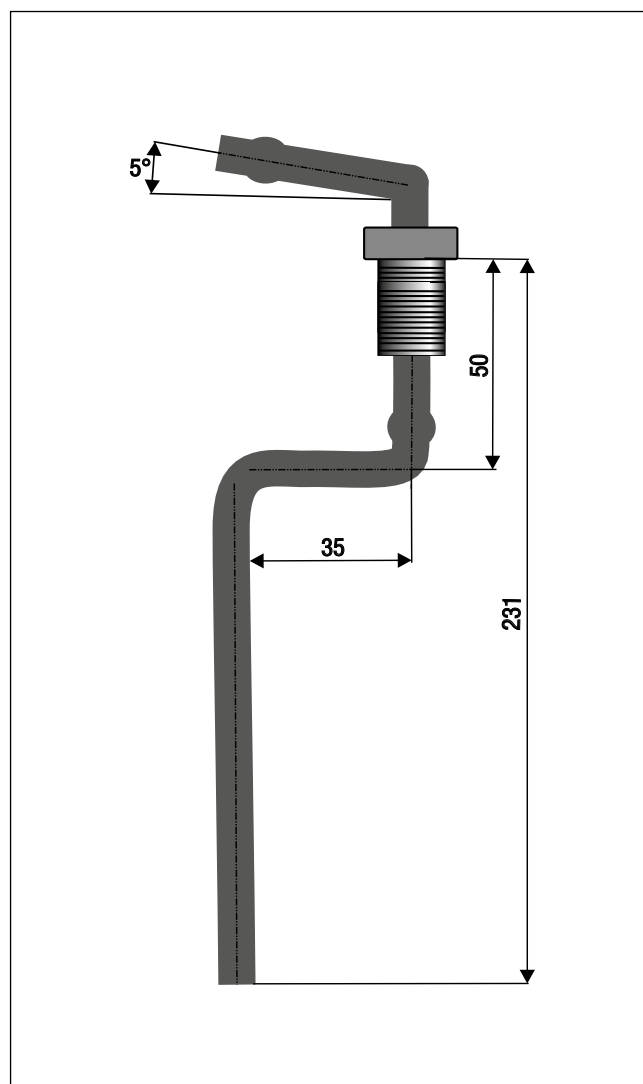


Diagram 4



Photo 105

① Drill an 8 mm Ø hole in the top part of the tank fitting



Photo 106

① Fuel tank extractor mounted



## 6 Fuel supply

Feed the fuel tank extractor through the hole made, align and screw tight with the nut M8 and body washer B8 from underneath.

Guide the tank extractor along the tank fitting as shown.



Photo 107

- ① Fasten the tank extractor with a B8 body washer and an M8 nut

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

At the intake connection of the fuel tank extractor, connect the 4 x 1 mm Ø fuel pipe with 105° fuel hose elbow and lay as shown.

Secure the connection points with 10.5 mm Ø clamps.

Install the tank again according to the manufacturer's instructions.

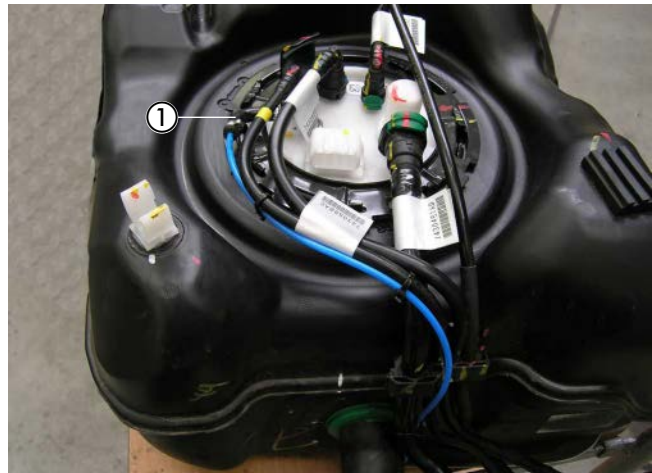


Photo 108

- ① Fuel pipe, Ø 4 x 1 mm, connected

### Lay fuel pipe with metering pump cable (see photos 109 to 111)

Secure the 4 x 1.25 mm Ø fuel pipe to the unit bracket with a cable tape clip and lay along the water hose group to the engine partition.

Use cable ties to secure the 4 x 1.25 mm Ø fuel pipe to the water hose group and to the unit bracket.

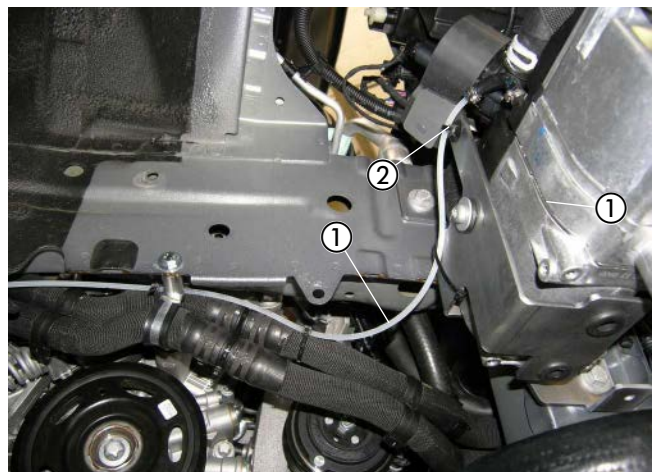


Photo 109

- ① Route 4 x 1.25 mm Ø fuel pipe
- ② Slot cable tape clip in unit bracket



## 6 Fuel supply

Lay the 4 x 1.25 mm Ø fuel pipe and the metering pump cable on to the right underbody side and fasten to the vehicle fuel line with cable ties.

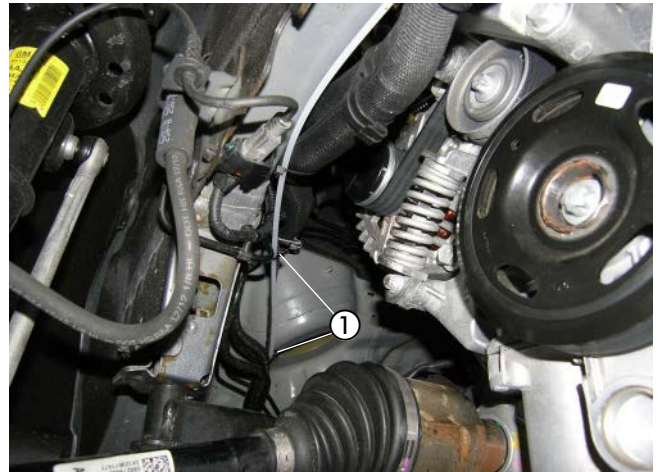


Photo 110

- ① Fasten 4 x 1.25 mm Ø fuel pipe and metering pump cable laid to the vehicle fuel line

Lay the 4 x 1.25 mm Ø fuel pipe together with the metering pump cable above the vehicle's fuel lines to the installation position of the metering pump.

Use cable ties to secure the 4 x 1.25 mm Ø fuel pipe and the metering pump cable to the vehicle fuel line.

**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.

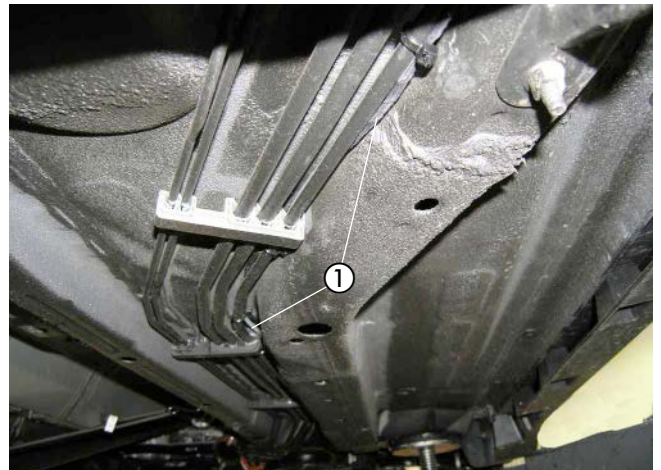


Photo 111

- ① Lay 4 x 1.25 mm Ø fuel pipe and metering pump cable along vehicle fuel line to metering pump





## 6 Fuel supply

### Install and connect the metering pump

(see photos 112 to 114)

The installation position for the metering pump is on the right next to the tank.

Insert the metering pump in the rubber holder and screw the rubber holder to the holder stud bolt using an M6 nut and B6 body washer.

Use two 10.5 mm Ø clamps to fasten the fuel hoses to the metering pump.

Unscrew the M8 nut from the tank protector.  
Fasten the prepared metering pump with the holder to the M8 nut on the tank protector as shown.  
Ensure it is installed with at least a 15° rising gradient on the pressure side.  
The discharge end of the metering pump points to the right.

#### 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.

Remove the mating connector of the metering pump connection at the metering pump cable.  
Slot the plug-in contacts of the metering pump cable into the mating connector regardless of polarity.  
Connect the connector to the metering pump.

Use cable ties to tie back and fasten the surplus length of cable.

Cut the 4 x 1 mm Ø fuel pipe from the tank extractor to the metering pump to length and connect to the intake connection of the metering pump with the fuel hose elbow, using a 10.5 mm Ø clamp.

Connect the 4 x 1.25 mm Ø fuel pipe with the fuel hose bend to the discharge end of the metering pump using a 10.5 mm Ø clamp.

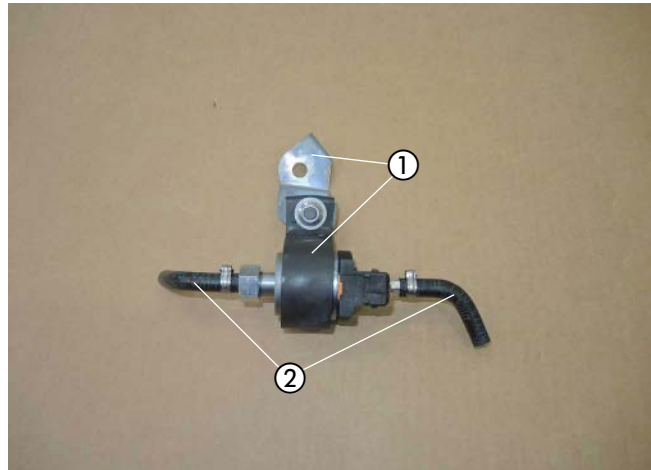


Photo 112

- ① Mount metering pump to holder
- ② Mount fuel hoses to metering pump

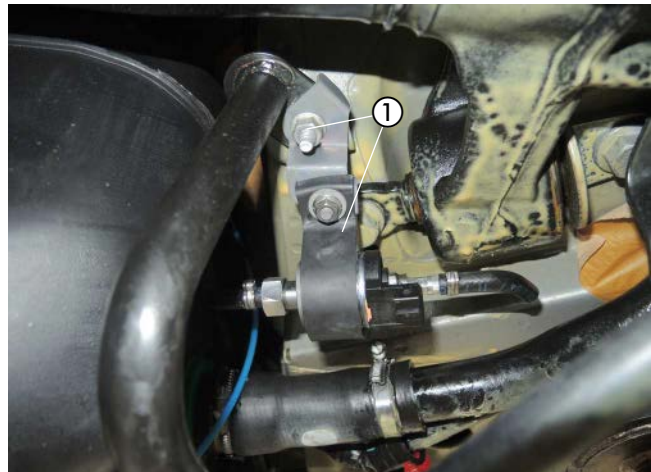


Photo 113

- ① Mount the metering pump

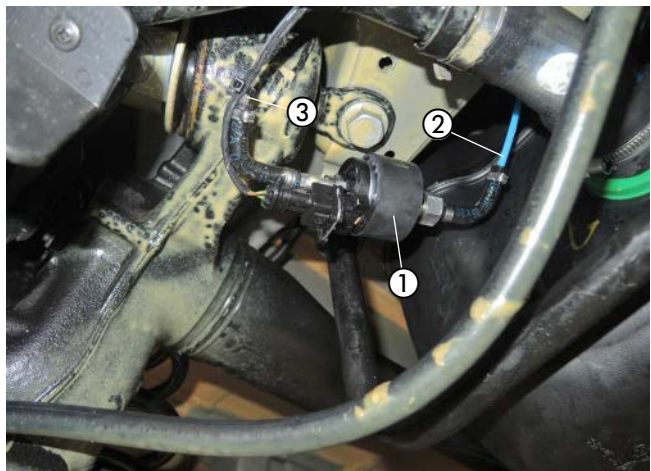


Photo 114

- ① Connect metering pump
- ② Connect fuel pipe 4 x 1 mm Ø
- ③ Connect fuel pipe 4 x 1.25 mm Ø



## 7 After installation

### Adhere the "fuel tank" sticker

(see photo 115)

Stick the "refuel" information sticker on the inside of the fuel tank flap as shown in the photo.

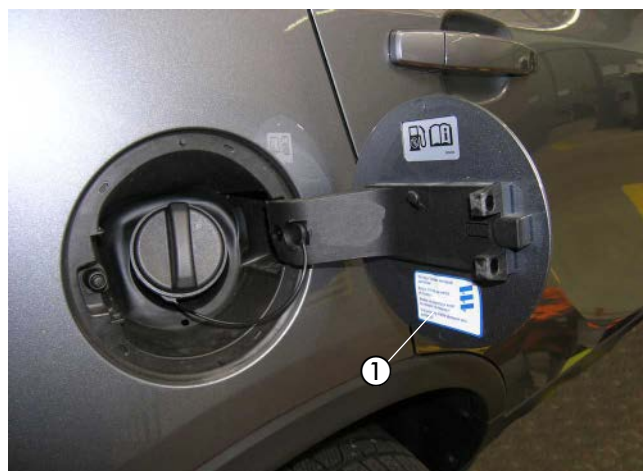


Photo 115

① Adhere the "fuel tank" sticker

### Complete the vehicle

- Comply with the manufacturers' guidelines/instructions when fitting the removed parts.
- 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).
- 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, the Technical Description and the leaflet for the customer in the glove compartment.

#### Please note!

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

### Starting up the heater

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



# Initial start-up

## CARRY OUT THE INITIAL STARTUP

For the initial startup, 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 Menu bar of the mobile unit.
- **Teaching the mobile unit**  
If the button's LED starts to flash, the mobile


### 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.


**Pair mode**  
**Add**

Confirm Add teach mode by pressing the  button.

## TEACH MOBILE UNIT – AddE TEACH MODE

Use the  or  button to select **AddE**.

**Pair mode**  
**AddE**

Confirm AddE teach mode with the  button.



## Initial start-up

AFTER CONFIRMING Add OR AddE

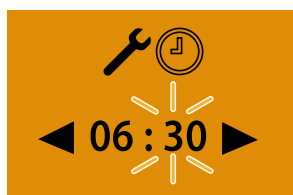
### ▪ Setting the time

Use the ◀ or ▶ button to set the hours.



Press the ◻ button to confirm the setting.

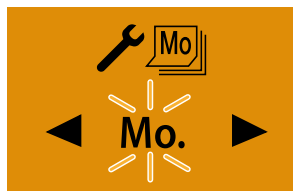
Use the ◀ or ▶ button to set the minutes.



Press the ◻ button to confirm the setting.

### ▪ Setting the weekday

Use the ◀ or ▶ button to set the weekdays.



Press the ◻ button to confirm the setting.  
The 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.

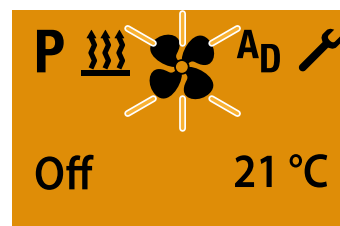
### CONFIGURING EASYSTART REMOTE+

The system must be configured according to its use.

### SET VENTILATION ON WITH SHORTPRESS

Press the ◻ or ◻ button to activate the mobile unit. Following successful data transmission the Start display appears.

Use the ◀ or ▶ button to select the 🌀 ventilation symbol in the Menu bar.



Confirm the VENTILATION menu item by pressing the ◻ button.



### PLEASE NOTE!

The following setting or confirmation is absolutely necessary.





# Diagnostics

## EASystART TIMER / REMOTE+ WORKSHOP MENU

The service functions listed in the following can be displayed, read out and / or changed via the vehicle workshop menu.

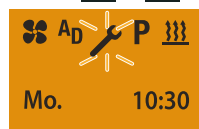
### NOTE!


- A reset (remove 5A fuse) is necessary to activate some functions. To do this, not and follow the relevant note under “Comments” of the “Service functions overview”.
- To correct the fault, refer to the heater’s repair instructions.

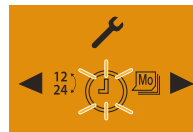
## OPENING THE VEHICLE WORKSHOP MENU


Display ON, the Start display appears.




Use the  or  button to select the  symbol in the Menu bar.




Confirm the SETTINGS menu item by pressing the  button.




Press the  LONGPRESS button for longer than 5 sec.; the Workshop menu is displayed.





Press the  or  button to select the required function, e.g. »2: Select temperature unit, °C or °F« and confirm by pressing the  button.

Use the  or  button to select the temperature units °C or °F.

Press the  button to confirm the selection.

Press the  button to exit the workshop menu.

## SERVICE FUNCTIONS OVERVIEW

Menu item	Service function	Comments
1.1.1:	Heater 1 – display current fault	The heater must be switched on to detect current faults. “no diag” is displayed if no diagnostics cable is connected.
1.1.2:	Heater 2 – display current fault	The heater must be switched on to detect current faults. “no diag” is displayed if no diagnostics cable is connected.
1.2.1:	Heater 1 – read out fault memory F1 – F5	Display fault memory F1 – F5 with error code, e.g.: F1: 12. “no diag” is displayed if no diagnostics cable is connected.
1.2.2:	Heater 2 – read out fault memory F1 – F5	Display fault memory F1 – F5 with error code, e.g.: F1: 12. “no diag” is displayed if no diagnostics cable is connected.
1.3.1:	Heater 1 – delete fault memory F1 – F5	Select the delete → function by pressing the  button, the DEL display appears, flashing, press the  button to confirm. “no diag” is displayed if no diagnostics cable is connected.
1.3.2:	Heater 2 – delete fault memory F1 – F5	Select the delete → function by pressing the  button, the DEL display appears, flashing, press the  button to confirm. “no diag” is displayed if no diagnostics cable is connected.
1.4.1:	Heater 1 – read out operating hours counter	Operating time is displayed in minutes. “no diag” is displayed if no diagnostics cable is connected.
1.4.2:	Heater 2 – read out operating hours counter	Operating time is displayed in minutes. “no diag” is displayed if no diagnostics cable is connected.



## 8 Parts overview

Item	Designation	Quantity	Order number
1	Vehicle-specific additional parts		39 129 311
	Heater bracket	1	
	Holder, metering pump	1	
	Fuse holder	1	
	Exhaust silencer bracket	1	
	Holder radio remote control	1	
	HSK button holder	1	
	Holder, connection plug	1	
	Hex screw M6 x 50 DIN931 ZN	1	
	Washer Ø 8.4x24x2 DIN9021 A2	2	
	Washer Ø 6.4x18 ISO7093 ZN	7	
	Collar nut M6	4	
	Collar nut M4	4	
	Collar nut M5	1	
	Collar nut M8	1	
	Hexagon screw M6 x 30	1	
	Hexagon screw M6 x 16	1	
	Hexagon screw M6 x 20	1	
	Hexagon screw M8 x 20	1	
	Screw, heater M6 x 25-10.9	2	
	Heater screw M6 x 16-8.8	1	
	Fillister head screw M4x10 DIN7985	2	
	Blind rivet nut M6	2	
	Countersunk fillister head screw 2.9x25 DIN7983	1	
	Rivet nut found flat head, M5 x 12	1	
	Spacer sleeve h = 30mm, 15 x 6.5 Ø aluminium	1	
	Spacer sleeve h = 11mm, 15 x 6.5 Ø aluminium	1	
	105° fuel hose elbow	4	
	Butt-type connector, red	1	
	Edge protection	1	
	Damping rubber	4	
	Spacer L = 12 mm	2	
	Screw clamp 16-25	1	
	Pipe clip Ø 28 mm	1	
	Hose clamp, 26 -28 mm Ø	3	
	Hose clip, 16 - 25 mm Ø	1	
	Pipe clip, rubberised, 25 mm Ø	1	
	Reducer 20/15 mm Ø	1	
	Holder, metering pump	1	
	Holder, water pump	1	
	Hose holder, rotatable, 22-24	4	
	Clamp 10.5 mm Ø	8	
	Exhaust pipe elbow with clamp	1	
	Cable tie 3.5x290 mm	60	
	Silencer	1	
	Exhaust pipe, double walled, with end sleeve 300 mm	1	
	Radio remote control	1	
	Fuel line blue (4x1)	0.6m	
	Fuel line transparent (4x1.25)	3.3m	
	Tank connection	1	
	Main cable set	1	
	Extension cable	1	
	Relay 20A N/O contact mini	2	
	Button (43460)	1	
	Insulation strip	1.0m	
	SVM control box	1	
	HOSE HEATER INLET	1	
	HOSE HEATER INLET AT COOLING FLOW	1	
	Seal, tank module	1	



8

Parts overview

Item	Designation	Quantity	Order number
1	Vehicle-specific additional parts		39 129 311
	Cardan shaft screw set	3	
	Holder, triple	1	
	Plastic cover cap, black, hex M6 M6 (42386)	1	
	Holder 22.6x22.6 rotatable	1	
	Hexagon socket Torx screw M5 x 13	3	
	Holder 13-22	1	
	Holder 8-22	2	
	Holder 4.3-24	4	
	Holder, cable tie Ø49 hole Ø8	3	
	Rubber stopper	2	
	Spring band clamp 23mm Ø	1	
	Spring band clamp 27mm Ø	5	
	OM pre-heater German, KTA9534_2	1	
	OM pre-heater Europe, KTA9535_2	1	
	Installation instructions JE German	1	
	Installation instructions JE English	1	





