



Installation Instructions

Complete Set Active Sound incl. Soundbooster

v1.3 (29.07.2019)

Contents

1	Liability Exclusion	3
2	Copyright	4
3	General notes	4
4	Safety Instructions	5
5	Requirements for the intended use	5
6	Note	5
7	How to connect a cable to another	6
8	Note Cable Inscription/Color	7
9	Assembly Instructions	8
10	Assembly Note	9
11	Disassembly covering driver's side	10
12	Connection CAN-bus / Ground	11
13	Cable routing into the engine compartment	12
14	Connection ignition plus	13
15	Assembly sound generator	14
16	Assembly sound generator / pushbutton	15
17	Software	16
18	Software	17
19	Software	18
20	Important Information Sound Booster	19

1 Liability Exclusion

Dear Customer,

Our cable sets are developed according to the connection- and circuit diagrams of the corresponding car manufacturers. Before the serial production, the cable sets will be adjusted and tested on an original vehicle. Therefore, the integration into the vehicle electronics follows the guidelines provided by the car manufacturer. Our installation instructions correspond to what is common in the vehicle electric/electronic regarding the required pre-understanding and the accuracy of the description in text and picture. They have proven its worth in practice hundreds of times.

If you should experience any difficulties while installing one of our products, we are available to provide support via phone or email. Additionally, we offer you to execute the installation in our workshop in Bad Segeberg.

Costs, arising from third parties assigned with the installation of our products, are not being covered by us. We will only compensate the proven costs of the assembly and the costs of the disassembly of the defective product, if it turns out that there is an issue with our product. We limit the reimbursement of costs up to 110 Euro gross and reserve the right to verify the claim in our workshop in Bad Segeberg. The costs for shipping will be refunded if the claim is justified.

We made the experience, that every professional workshop that is equipped with the necessary diagnostic devices, the diagnostic software and the manufacturer's circuit diagrams, is able to find any possible defects in one of our products in a short period of time. The assembly and disassembly including troubleshooting the issue should therefore only take up to 60 minutes.

We also made the experience, that many professional workshops are not able to cope with the manufacturer's circuit diagrams and can't read common wiring schemes, which results in the calculation of several hours for the simplest installations. You will understand the fact, that we can neither take the risk of finding a reliable workshop for you, nor can we finance the training of the employees of your trusted workshop.

Costs, arising from purchasing missing parts or replacements for defective parts from other suppliers, are covered by us up to the amount that the subsequent delivery would have caused (saved expenses). According to the legal warranty law, there would be no reimbursement right, if there was no deadline for the subsequent fulfilling set or the deadline for a subsequent fulfilling hasn't expired.

That being said, if you have any problems during the installation or operation of one of our products call us, write us an email, send us the product or come by our workshop in Bad Segeberg with your vehicle. We are certain, that we can find a solution for any kind of concern.

Kind regards,
Your Kufatec GmbH & Co. KG Team

2 Copyright

Our installation and operation instructions, installation plans, software and other written and/or pictured documentations are protected by copyright.

The publication or distribution of these documentations is only permitted with a written approval of Kufatec GmbH & Co. KG.

3 General notes

While developing this product, your personal safety combined with the best operating service, modern design and an up-to-date production technique was especially taken into account.

Unfortunately, despite the utmost care injuries and/or damages might occur due to improper installation and/or use.

Therefore, please read the following instruction manual fully and thoroughly and keep it!

All articles of our production line pass through a 100% check – for your safety and security.

We reserve the right to carry out technical changes which serve the improvement at any time.

Depending on each product and purpose, it might be necessary to check each country's legal regulations before installing and starting it.

In case of warranty claims, the product has to be sent back to the seller in the original packaging with the attached bill of purchase and detailed defect's description. Please, pay attention to the manufacturers return requirements (RMA). The legal warranty directions are valid.

The warranty claim as well as the operating permission becomes invalid due to:

- unauthorized changes to the device or accessories which have not been approved or carried out by the manufacturer or its partners
- opening the casing of the device
- repairing the device on one's own
- improper use/operation
- brute force to the device (drop, willful damage, accident etc.)

During the installation, please pay attention to all safety relevant and legal directions. The device should only be installed by trained personnel or similarly qualified people.

In case of installation problems or problems concerning the functionality of the device, limit the time to approx. 0,5 hours for mechanical or 1,0 hours for electrical troubleshooting.

To avoid unnecessary costs and time-loss, send in an immediate support-request, via the Kufatec-contact-form (<http://www.kufatec.de/shop/de/infocenter/>).

In case of, let us know the following:

- Car chassis number/vehicle identification number
- Five-digit part number of the device
- Exact description of the problem
- Steps you have taken to solve the problem

4 Safety Instructions

The installation should only be performed by trained personnel. Only perform installations while in a voltage-free state. For example, disconnect the battery. Please pay attention to the instructions provided by the manufacturer.

- Never use bolts or nuts from the car's safety devices for installation. If bolts or nuts from the steering wheel, brakes or other safety devices are used for installation of the device, it may cause an accident.
- Use the device with a DC 12V negative ground car. This device cannot be used in large trucks which use a DC 24V battery. If it is used with a DC 24V battery, it may cause a fire or accident.
- Avoid installing the device in places that would restrict you from driving safe or where it could damage the car's other fittings.
- This device should only be used in combination with the mentioned vehicles. Only connections described within this instructions guide are allowed or required to use for installation.
- For damages caused by faulty installation, unsuitable connections or inappropriate vehicles, Kufatec GmbH & Co. KG assumes no liability.
- We advise you that these devices process data from the MOST – protocol of the vehicle. As the supplier of this device we don't know the overall system you are working with. If your device causes damage, due to other changes made to the vehicle, Kufatec GmbH & Co. KG assumes no liability.
- Kufatec GmbH & Co. KG supplier does not guarantee the use of the product for changes within a new vehicle series.
- If the car manufacturers don't agree with the installation of our device by reason of warranty, Kufatec GmbH & Co. KG assumes no liability. Please, check conditions and warranty before you begin the installation.
- Kufatec GmbH & Co. KG reserves the right to change the device specifications without notice.
- Subject to errors and changes.

5 Requirements for the intended use

Only use this device in its intended area.

In case of unprofessional installation, improper use or modification, the permission for the operation and the warranty claim will expire.

6 Note

Make sure that there's enough space at the described position. If there is no space please cancel the installation and contact our technical support.

The use of a sound booster is not permitted without registration in the vehicle papers, in the area of the german StVZO. The noise emission of the vehicle is increased by this retrofit. The regulations of the StVZO must be observed. It is therefore recommended to ask for a specific registration option at the responsible TÜV/DEKRA office before retrofitting. Outside Germany, please observe the laws on vehicle licensing applicable in your country.

7 How to connect a cable to another

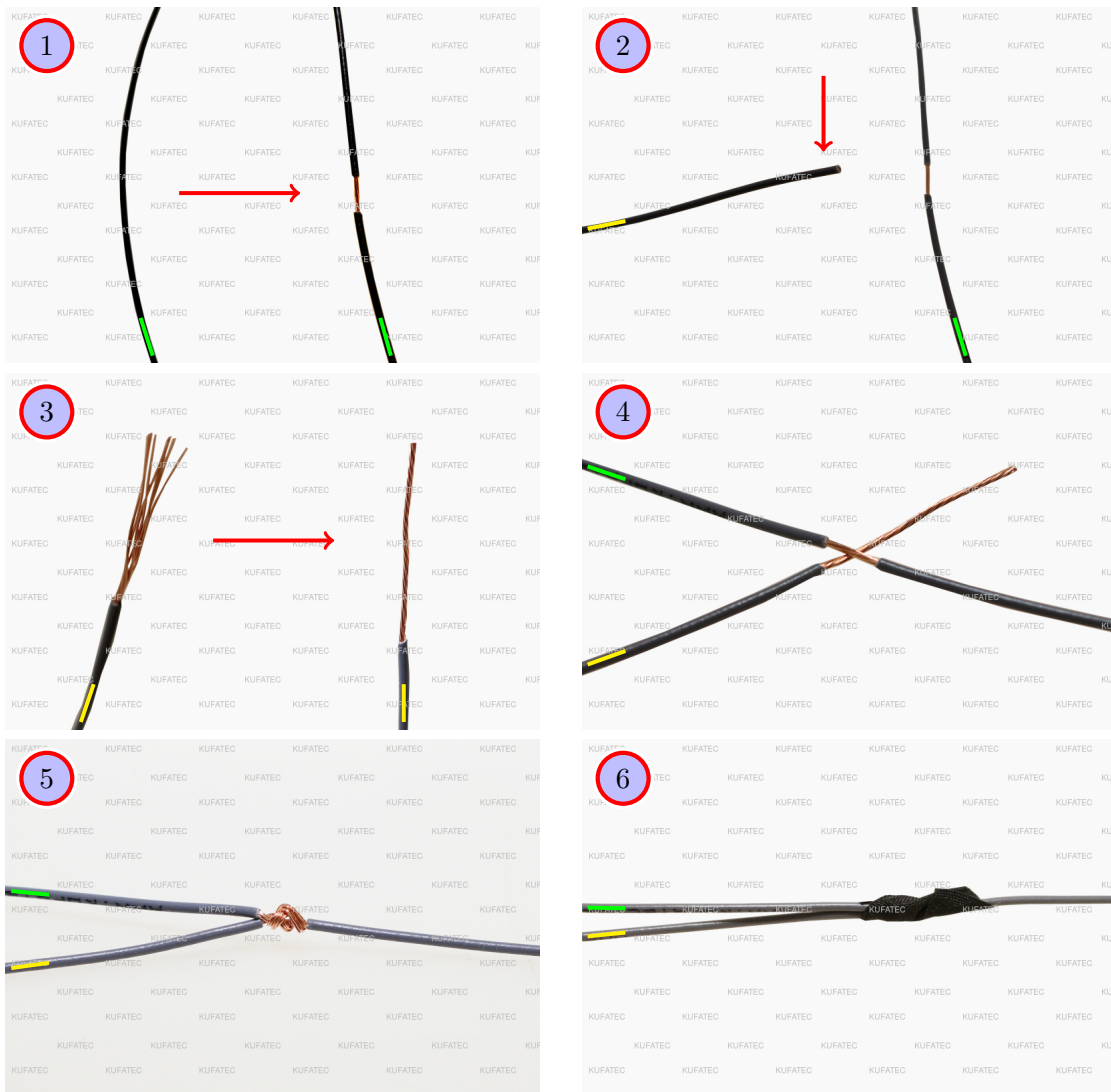


Figure 1: How to connect a cable to another

Table 1: How to connect a cable to another

No.	Work step	Note
1	Take the cable of the vehicle, to which you want to connect, (green marked here) and strip the insulation at one point with a suitable tool (cable stripper/cutter knife).	
2	Now take the cable of the cable set, which you want to connect, (yellow marked here) and strip the insulation at the end.	
3	Twirl the wires of the stripped cable together.	
4	Place the end of the cable you want to connect under the stripped point of the cable of the vehicle...	
5	... and wrap the cable you want to connect around the cable of the vehicle. Solder the connection professionally.	
6	Lastly, stick insulating tape around the connection point. Make sure that the isolation is put onto the connection professionally to prevent corrosion.	

8 Note Cable Inscription/Color

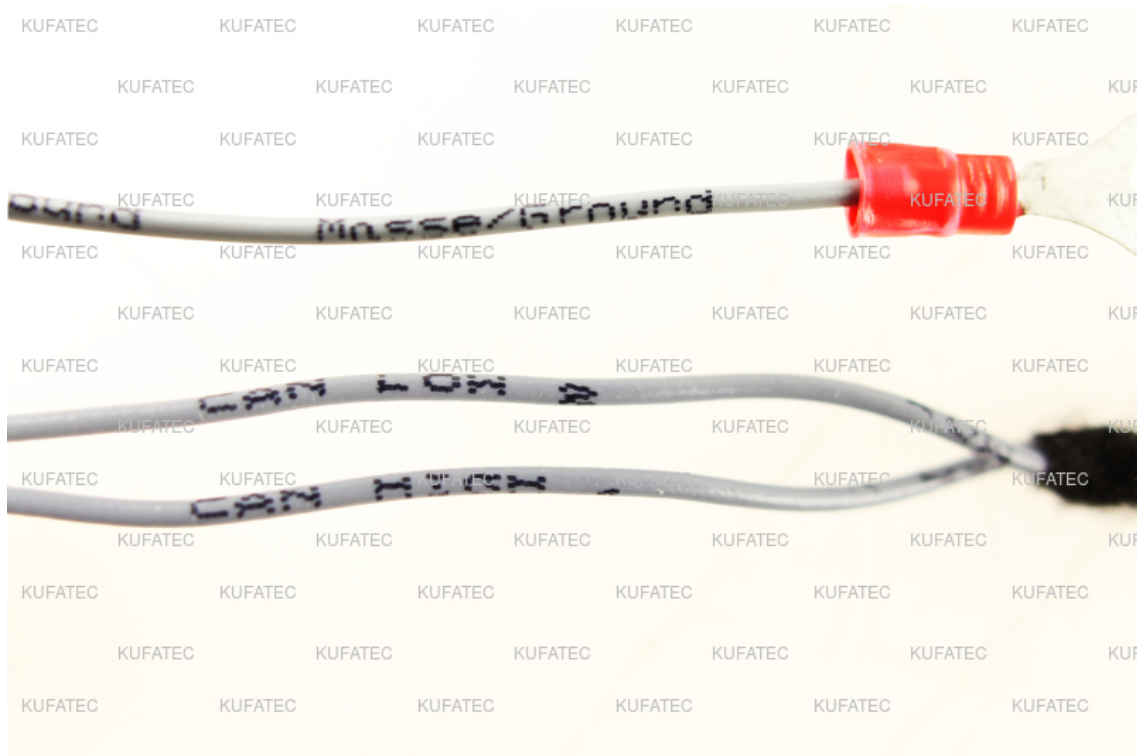


Figure 2: Cable Inscription

If the cable set consists of colored cables, connect the cables according to the color. If all cables of the cable set have the same color, connect the cables according to the cable inscription.

9 Assembly Instructions

The following illustration shows the cable routing as well as the position of the individual components.

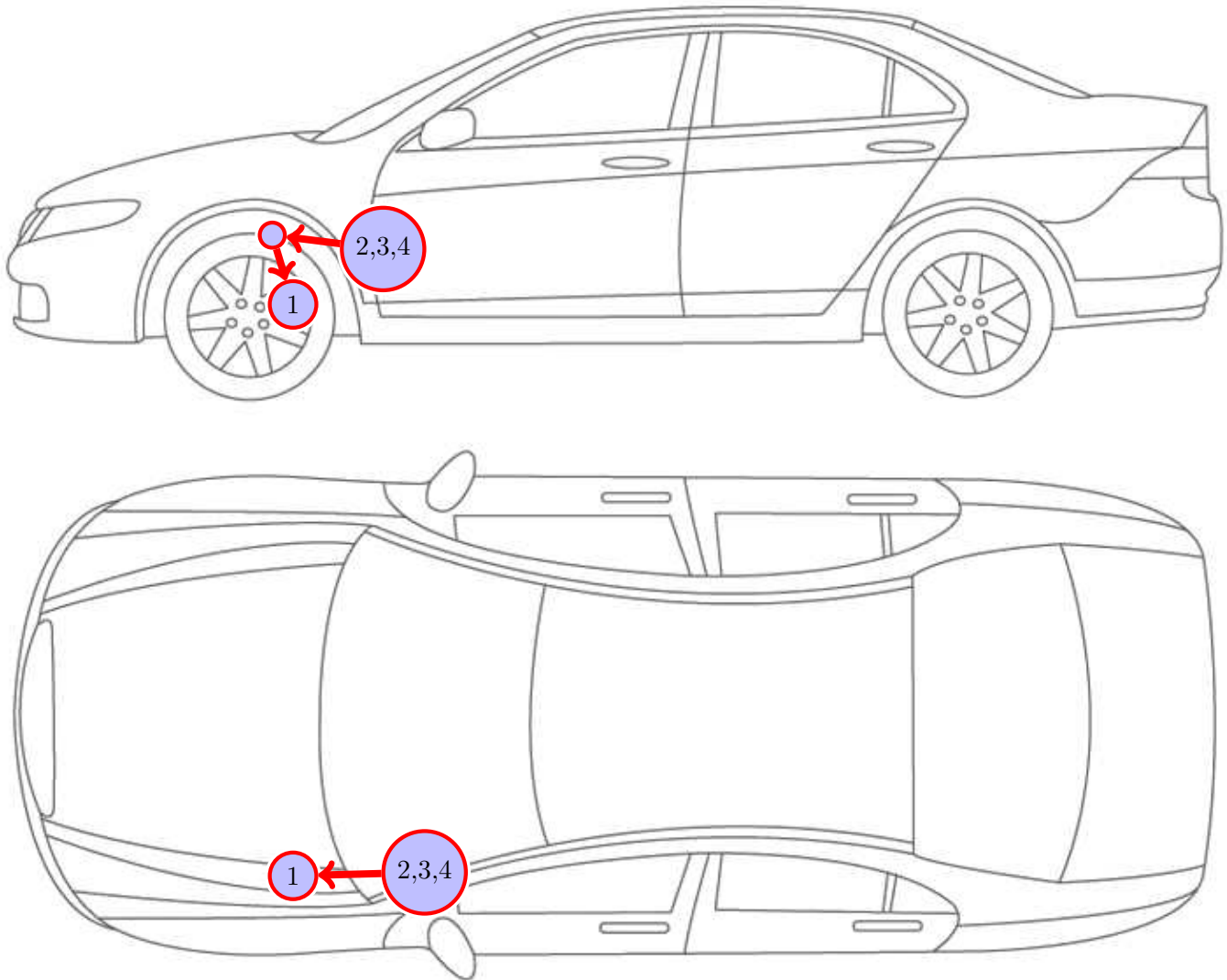


Figure 3: Vehicle Overview

- 1 External sound generator incl. mounting plate
- 2 Control unit for engine sound generation
- 3 Sound Booster Pro (module)
- 4 Pushbutton

Please be aware, that this overview is only for **illustration purposes**. Always lay the cable set in the **most convenient and shortest way** possible. For a detailed description of the cable routing, please refer to the relevant sections of the following manual.

10 Assembly Note

Important note for the assembly

- The vehicle used for the assembly instruction was a **Mercedes E-Class W213**. We would like to point out, that the disassembly of the individual parts can vary depending on the type of vehicle. Please make sure to keep that in mind.

Notes for assembling the vehicle

- **Before you start assembling the vehicle, the system must first be tested for proper function.**

11 Disassembly covering driver's side

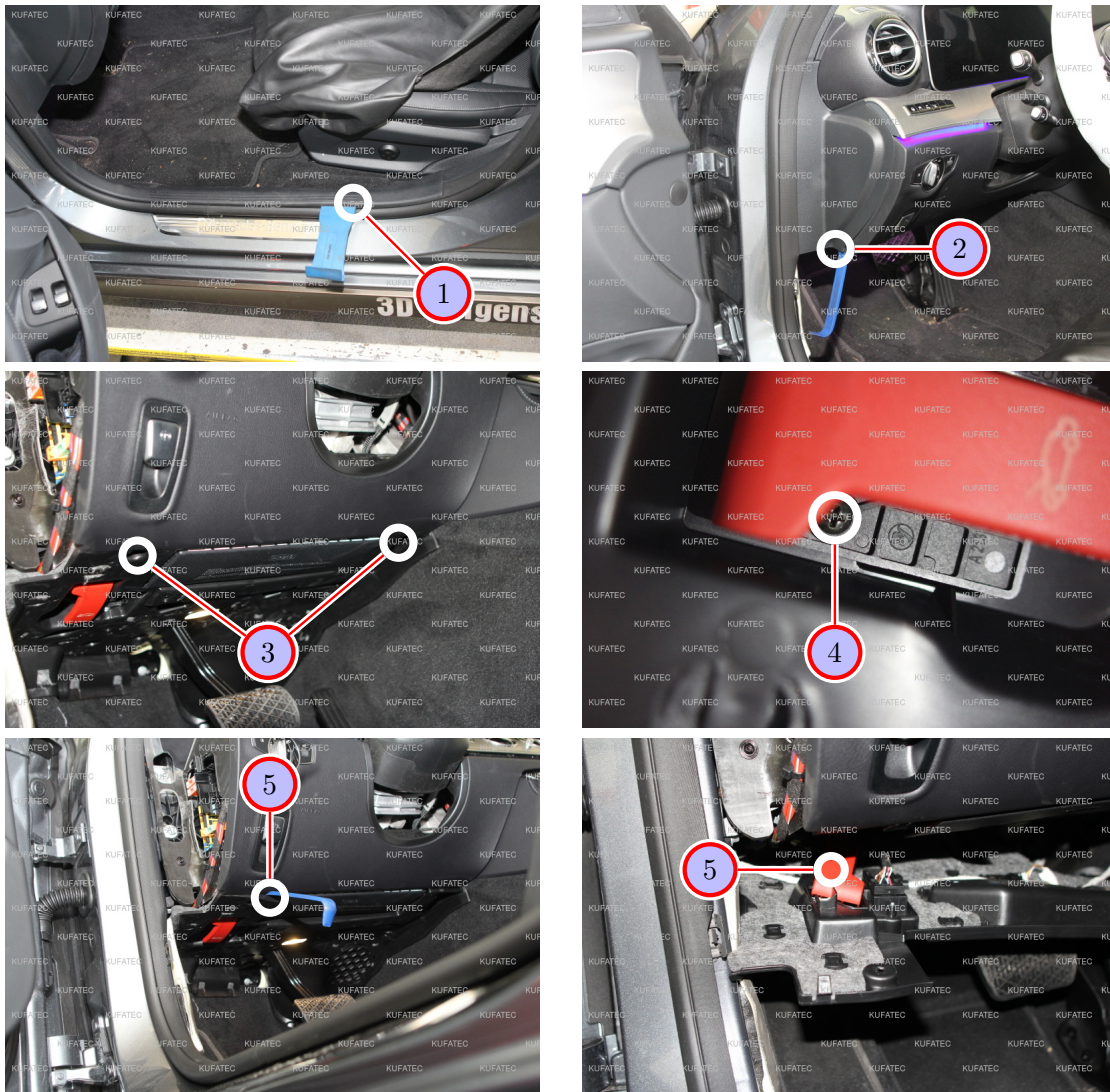


Figure 4: Disassembly covering driver's side

Table 2: Instructions to disassemble the covering on the driver's side

No.	Work step	Note
1	Remove the front sill trim on the driver's side using an assembly lever.	
2	Remove the lateral covering of the dashboard with a n assembly lever.	
3	Loosen the two marked screws of the lower dashboard covering.	2xT20
4	Loosen also the crosshead screw behind the hood release.	1xPH2
5	Now loosen the lower dashboard covering with an assembly lever and pull it down carefully. Doing this, thread the hood release up out.	

12 Connection CAN-bus / Ground

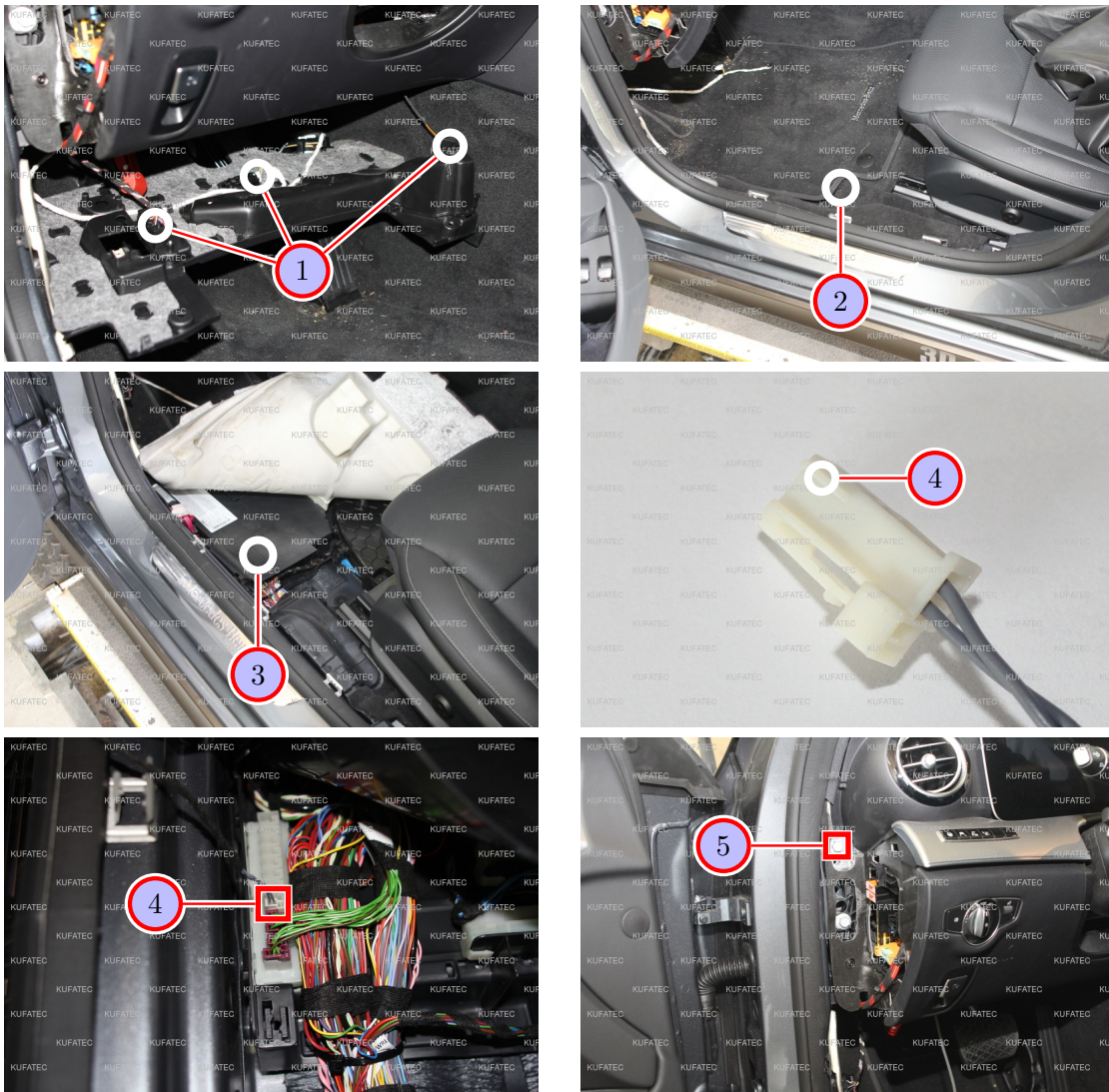


Figure 5: Connection CAN-bus / Ground

Table 3: Instructions to connect CAN-bus / Ground

No.	Work step	Note
1	Remove all plugs from the lower dashboard covering and take it out completely afterwards.	
2	Fold the carpet in front of the driver's seat up and thus, uncover the cable channel.	
3	Open the cable channel to uncover the CAN-distributor.	
4	Remove the black plug from the CAN-cables and place the cables one-to-one in the white plug. Afore, remove the marked coding of the white plug. Plug it in in the CAN-distributor afterwards. - CAN High (black/white) on green/white - CAN Low (black/yellow) on green	
5	Connect the ground cable (brown) to the marked screw top left of the dashboard.	13er socket

13 Cable routing into the engine compartment

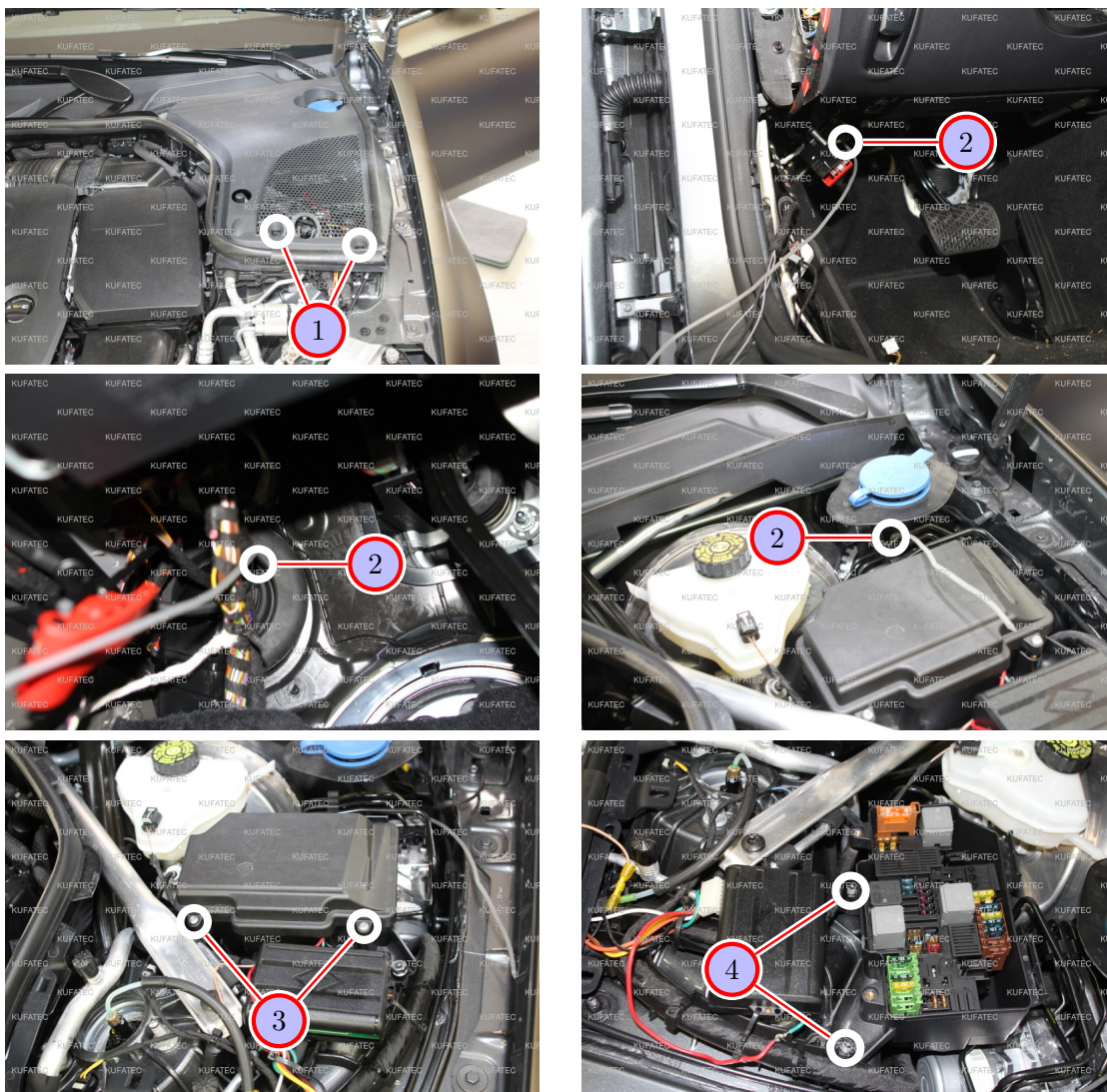


Figure 6: Cable routing into the engine compartment

Table 4: Instructions to route the cables into the engine compartment

No.	Work step	Note
1	Remove the two marked plastic screws of the covering in the engine compartment.	
2	With a pullin tool, pull the connecting cables for the sound generator as well as for ignition lead through the marked grommet in the driver's footwell in the engine compartment.	
3	Loosen the two marked screws of the fuse box and open it afterwards.	2xT20
4	Now loosen the two marked nuts of the fuse box and pull it up.	2x13er socket

14 Connection ignition plus

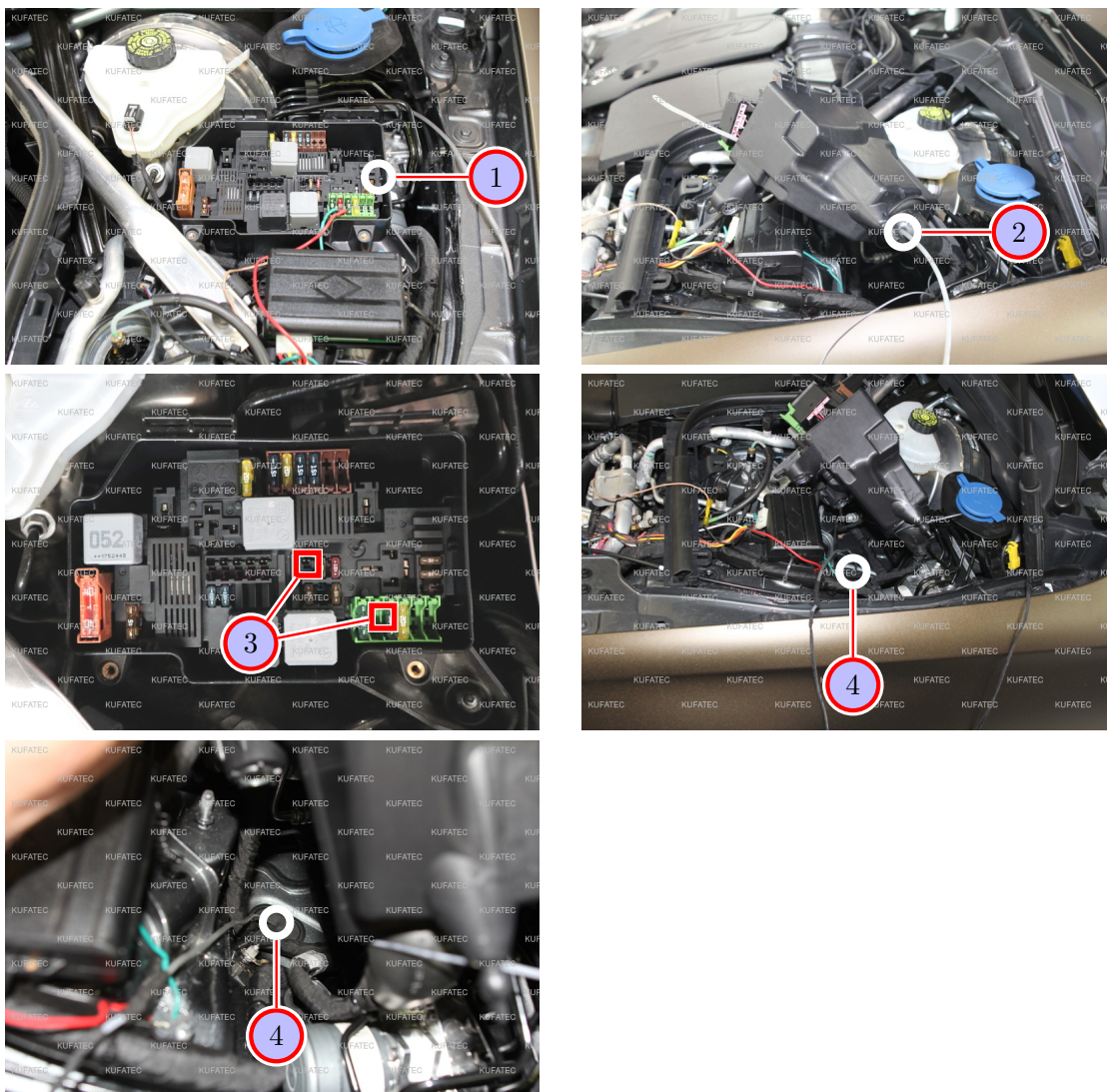


Figure 7: Connection ignition plus

Table 5: Instructions to connect ignition plus

No.	Work step	Note
1	Unlock the insert of the fuse box by loosening all snap-fits and pull it out a bit.	
2	Guide a pulling tool through the marked grommet in the fuse box and pull the cable for ignition plus (red/white) in the box.	
3	Look for a free ignition plus slot (green fuse holder or marked assembled plug insert) by using a multimeter. Pin the cable for ignition plus into the slot and secure it with a 15A-fuse afterwards.	
4	Guide the connecting cable for the sound generator through the marked grommet under the fuse box to the underbody. Afterwards the fuse box can be reinstalled.	

15 Assembly sound generator

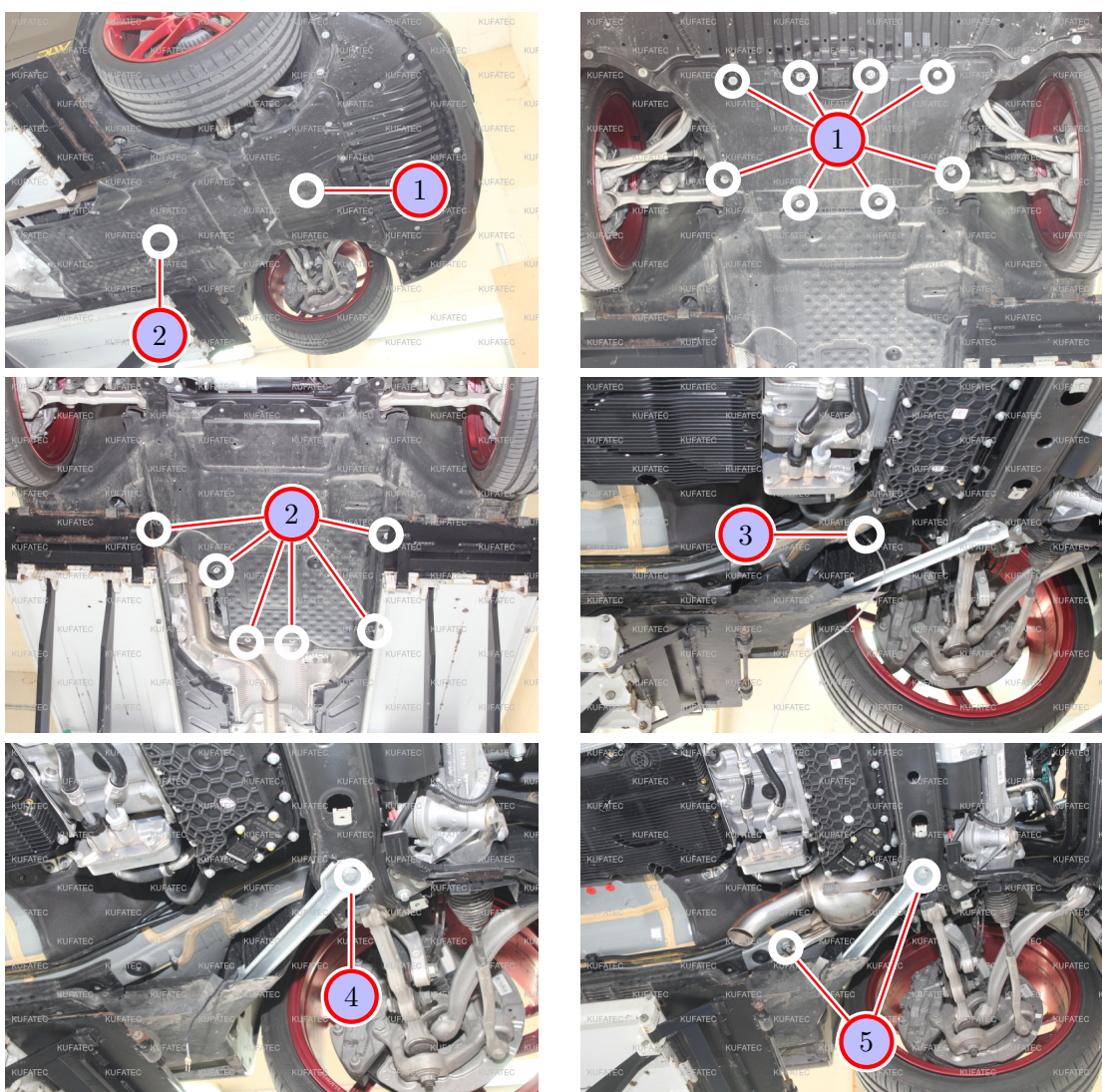


Figure 8: Assembly sound generator

Table 6: Instructions to assemble the sound generator

No.	Work step	Note
1	Remove the marked smaller covering in front at the underbody by loosening the eight marked screws.	8x8er socket
2	Loosen the six marked screws of the bigger covering at the underbody and take it out.	6x8er socket
3	Pull the connecting cable for the sound generator through at the underbody.	
4	Loosen the marked screw of the cross strut.	1x16er socket
5	Install the sound generator with the just loosened screw as well as an additional nut (not included in delivery) at the marked stay bolt.	M12

16 Assembly sound generator / pushbutton

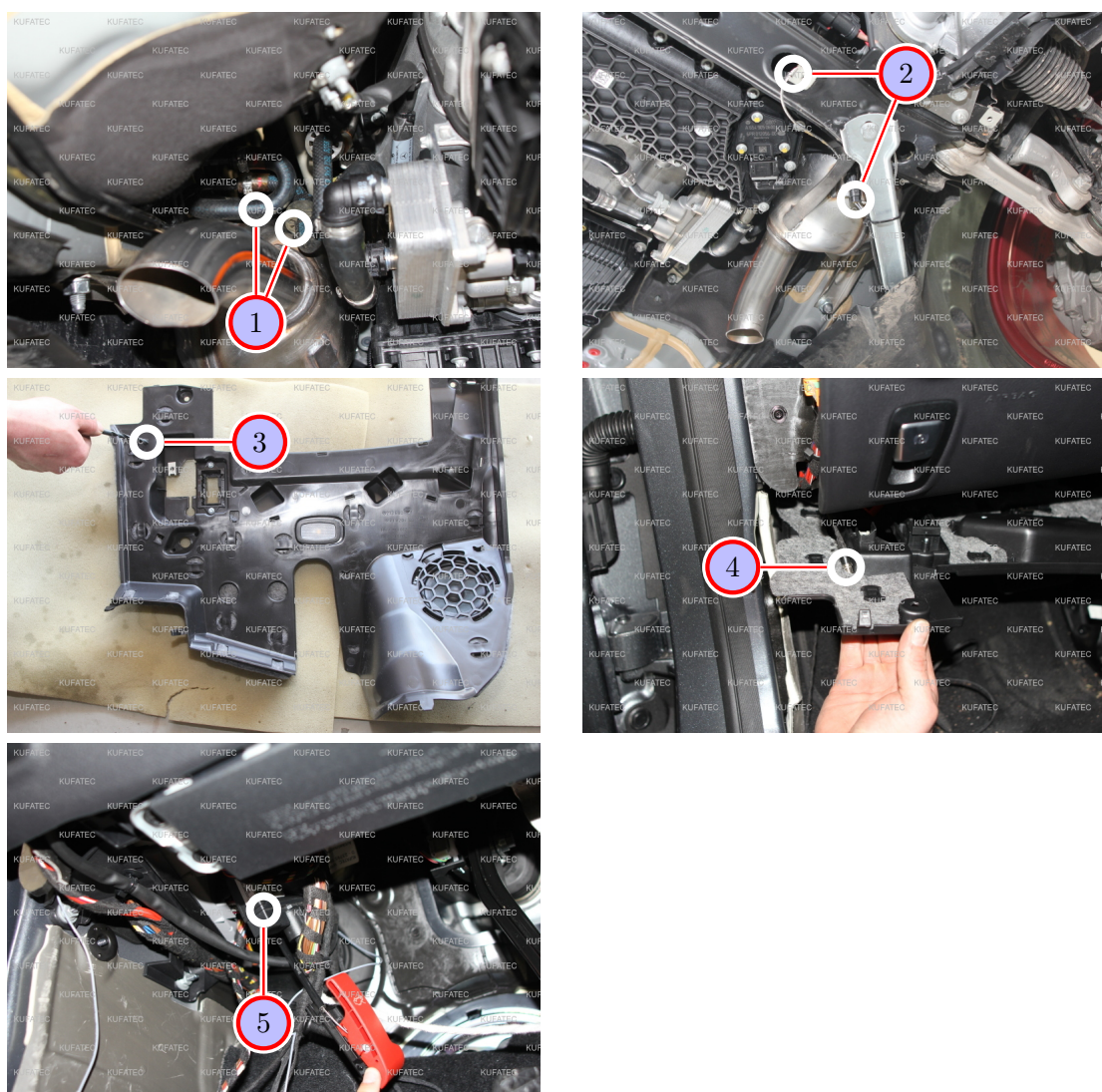


Figure 9: Assembly sound generator / pushbutton

Table 7: Instructions to assemble the sound generator / the pushbutton

No.	Work step	Note
1	Push the marked hose up a bit as well as the rubber spacer, so that the hoses can't chafe.	
2	Connect the connecting cable to the sound generator and attach the delivered steel wire rope to the sound generator as well as to a suitable place at the vehicle.	
3	Drill a hole for the pushbutton in the lower trim panel of the dashboard at the marked position.	7mm
4	Install the pushbutton afterwards.	
5	Place the control unit as well as the module behind the lower dashboard covering.	

17 Software

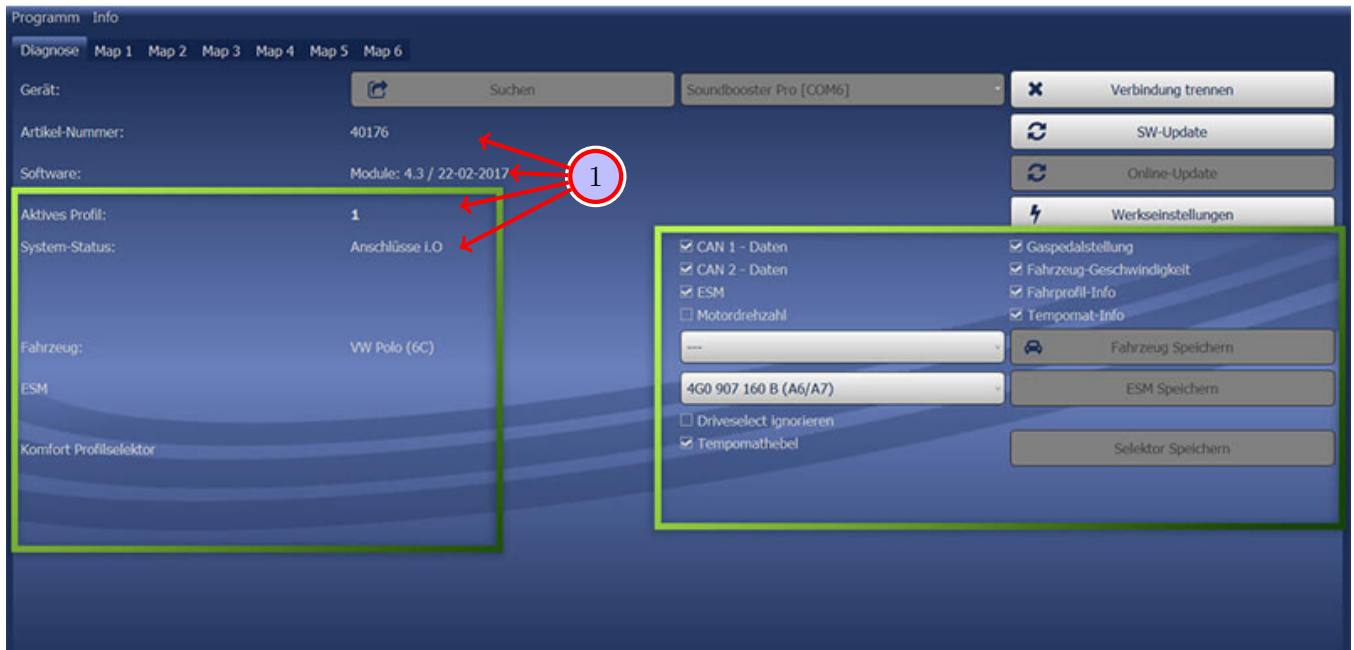


Figure 10: Software

Table 8: Notes for the software

No.	Work step	Note
1	If the system does not work after the installation, please check if the system was installed correctly by having a look on the following link: https://www.sound-booster.com/en/debugging.html . Our Sound Booster Software for PC / Mac should be used for the commissioning or further debugging:	
	Step 1: Download the appropriate software via the following link: https://www.sound-booster.com .	
	Step 2: Turn the ignition of the vehicle on and only then connect the PC / Mac with a USB-cable to our module. It is important to check beforehand if plus and minus are connected correctly. If this is not the case, it could result in a damage to the computer or to the control unit.	
	Step 3: Start the downloaded software and click on search first and then on connect. You will be automatically forwarded to the diagnosis site, on which you can see the following things at a glance:	
	Software: Software version / creation date	
	Active profile: The actually activated profile is indicated here.	
	Vehicle: The automatically identified vehicle is indicated here.	
	System status: Here you can tell, if the connections are correct.	

18 Software

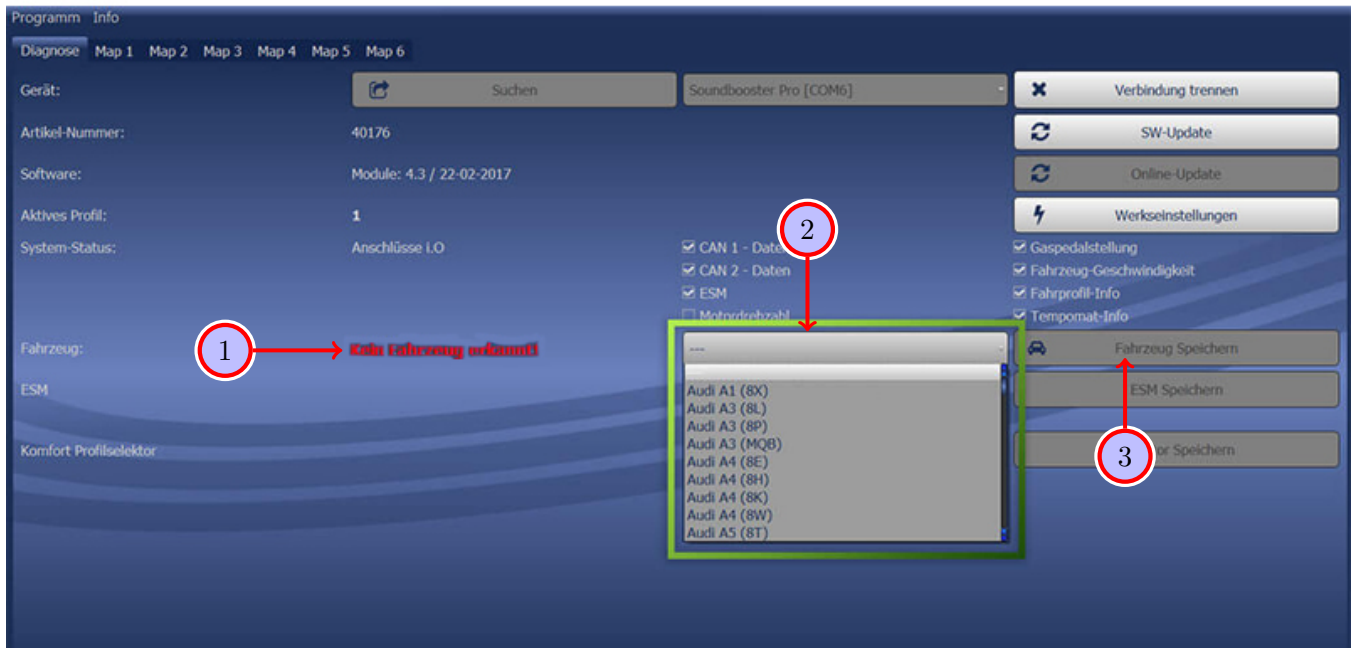


Figure 11: Software

Table 9: Notes for the software

No.	Work step	Note
1	If no current vehicle is identified, you have to select the vehicle via the manual selection as follows:	
2	Open the dropdown-menu, search for your vehicle and select it.	
3	Click on Save Car to permanently save the vehicle to the module.	
	If you don't find your vehicle in the list, it might be necessary that the software has to be adapted to your vehicle. In that case, please contact us via e-mail: info@kufatec.de or by phone: +49 (0) 4551 / 80 810 888. We will make an appointment with you, where we will adapt the software to your vehicle per Team Viewer (remote maintenance).	

19 Software

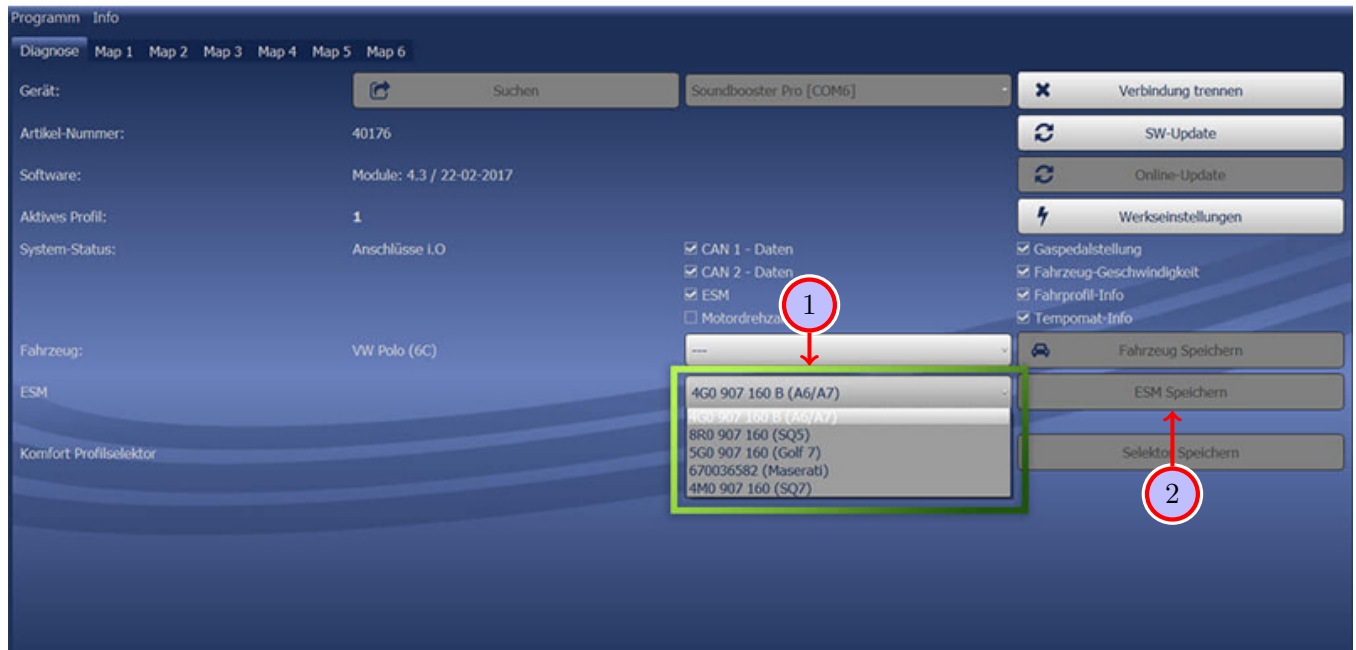


Figure 12: Software

Table 10: Notes for the software

No.	Work step	Note
1	You also need to check if the right ESM is selected in our software: Open the dropdown-menu, search for the correct ESM and select it.	
2	Click on Save ESM to permanently save the ESM to the module.	
3	For example, if you ordered a complete set with a Audi control unit you need to select the ESM 4G0 907 160 B (A6/A7) . If you installed the Maserati control unit instead of the Audi control unit you need to select the ESM 670036582 (Maserati) . If the system does not work after all please get in contact with us via e-mail: info@kufatec.de or by phone: +49 (0) 4551 / 80 810 888. We will check the issue as soon as possible.	

20 Important Information Sound Booster

Please use suitable screws that can withstand high loads of impact to attach the sound generator. In order to avoid loosening of the screws due to the vibration, please secure the screws with appropriate factory material e.g. threadlock. Please additionally check the stability of the Sound Booster regularly and if necessary retighten the screws. In case of non-compliance we do not assume liability for possible damages.

After a successful installation we recommend to cover the sound generator with a zinc spray. Make sure that you cover the opening of the sound generator so that the zinc spray can't get inside the sound generator.

As additional safety the delivered steel cable and the retaining clips have to be attached to the Sound Booster as well as at a suitable position to the car. This safety cable is an additional security should the tightening screws be released due to the vibration.

List of Figures

1	How to connect a cable to another	6
2	Cable Inscription	7
3	Vehicle Overview	8
4	Disassembly covering driver's side	10
5	Connection CAN-bus / Ground	11
6	Cable routing into the engine compartment	12
7	Connection ignition plus	13
8	Assembly sound generator	14
9	Assembly sound generator / pushbutton	15
10	Software	16
11	Software	17
12	Software	18

List of Tables

1	How to connect a cable to another	6
2	Instructions to disassemble the covering on the driver's side	10
3	Instructions to connect CAN-bus / Ground	11
4	Instructions to route the cables into the engine compartment	12
5	Instructions to connect ignition plus	13
6	Instructions to assemble the sound generator	14
7	Instructions to assemble the sound generator / the pushbutton	15
8	Notes for the software	16
9	Notes for the software	17
10	Notes for the software	18