



## **Installation Notes**

Complete Set active Sound incl. Soundbooster Porsche

Panamera

v1.5 (08.12.2017)

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# 1 Liability Exclusion

Dear Customer

Our cable sets are developed according to the connection- and circuit diagrams of the corresponding car manufacturer. Before the original production the cable sets will be tested on an original car. Therefore, the integration into the car electronics will be executed according to the instructions of the manufacturer. Regarding the necessary pre-understanding and the accuracy of the presentation of texts and pictures our mounting guidelines correspond to the usual ones in car technology and car electronics. Practically, they have been proved one's worth a hundred times.

However, should there be any difficulties during the installation of our products we will be at your disposal any time for support by phone or by mail. Moreover, we offer you to execute the installation at our works in Bad Segeberg.

Costs which may arise because a third person will execute the installation of our products will not be supported by us in any case. Only if there is a mistake caused by our product we will pay the proved costs of the installation as well as the costs of the removal of the defective product. The refund of expenses will be limited to gross EUR 110,- ; we reserve the right to check the described mistake in our works in Bad Segeberg. In case of a proved reclamation the costs for dispatch for the check in our factory will be transferred to you.

According to our experience each specific factory which has the necessary diagnostic device, diagnostic software and the circuit diagrams of the manufacturer can find possible mistakes at our products within a short time. So the installation and removal including diagnostic inspection can be realised in at most 60 minutes.

We also made the experience that many specific factories cannot work with the circuit diagrams of the manufacturer, and that they cannot read usual wiring diagrams. Therefore, very easy installation works will take many hours. You will understand that we neither take the risk to find a reliable specific factory nor the financing of the training of the staff of your favoured factory.

Costs which will arise because you buy missing parts or spare parts at other suppliers will be refunded by us up to the amount of the costs which had been arisen by additional supply (saved expenses). In this case, there would be no right for refund according to the legal guarantee right as long as we have no deadline for supplementary performance or a deadline for supplementary performance has not expired.

So if you have any problems with the installation or operation of one of our products please call us, send us an email, send us the product or take your car to our factory in Bad Segeberg. We are sure to find an appropriate solution for each concern.

With best regards

Your Kufatec GmbH & Co. KG Team

## 2 Copy Right

Our installation- and removal instructions, installation plans, software and other documentation with texts or pictures are protected by copy right.

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

## 3 General Notes

Regarding the development there has especially been paid attention to your personal safety together with the most possible operating comfort, modern design and actual product technologies.

Despite most possible accuracy in case of incorrect installation or use or in case of incorrect operating, it is possible that injuries or damages of property may arise.

Therefore, please read the operating instructions you have received carefully and completely, and keep it with you.

All articles of our production will be checked at 100% — for your safety.

We reserve the right to make technical changes which serve the progress at any time.

Before the installation or startup it may be necessary, depending on the article and purpose of use, to check the legal instructions of each country.

In case of warranty claim the device has to be sent to the seller originally packed together with the sales receipt and a detailed description of the mistake. Please consider the manufacturer's instructions for return (RMA). The legal warranty instructions are valid.

The warranty claim and also the permission for startup will expire in case of:

- unauthorised changes on the device or the accessories which have not been executed or approved by the manufacturer or its partners
- opening of the box
- repair of the device on your own
- incorrect use / no normal use / startup
- influence of force on the device (falling down, wilful damage, accident, etc.)

During the installation please consider all safety and legal instructions. The device may only be installed by trained qualified personnel or persons who are similar qualified.

**In case of installation- or function problems please reduce the search of the mistake to approx. 0,5 hours for mechanical works or 1,0 hours for electronic works.**

To avoid unnecessary additional work and expenses, please send immediately an inquiry to our technical support with the Kufatec contact form (<http://www.kufatec.de/shop/de/infocenter/>)

Please absolutely mention the following:

- car chassis number
- part number of the add-on kit
- exact description of the problem
- work steps already made

## 4 Safety instructions

The installation may only be executed by trained qualified personnel. Please execute the installations only in a condition of dead voltage. Here please separate for example the battery from the main power supply and consider the instructions of the car manufacturer.

- In order to not endanger your own driving safety please never use security relevant screws, bolts or other fixation pieces at steering, brake system or other components.
- Connect the device only at 12V wiring system voltage with ground connection to the autobody. This assembly is not allowed for the use in trucks or other cars with 24V wiring system voltage.
- Please avoid the installation of the device at positions where the driving safety or the functional efficiency of other subassembly integrated in the car are restricted.
- This module may only be used together with the following mentioned car types and models; the installation may be executed exclusively by use of the circuit points mentioned in the assembly instructions.
- Kufatec GmbH & Co. KG does not assume liability for damages which are caused by incorrect installation, the use of inapplicable circuit points or the installation into car types and -modules which are not foreseen.
- We would like to draw your attention to the fact that the module processes the data of the MOST-protocol of the car mentioned below. Therefore, during the installation of the module it will be used a model-specific complete system which we as the manufacturer of the mentioned construction line only know partly.
- Especially in case of changes within the same model line and the same year we therefore cannot guarantee the applicability of our construction line in each case. Kufatec GmbH & Co. KG does not assume liability for the applicability of our construction line with changes made by the manufacturer.
- Kufatec GmbH & Co. KG does not assume liability that the installation of the here described component has been permitted according to the guarantee instructions of particular car manufacturers. Therefore, please consider the guidelines for installation and guarantee conditions of your car manufacturer before installation.
- The manufacturer reserves the right to change components without giving reasons.
- Subject to errors and changes

## 5 Requirements for the determinable operation

Please use the device only in its the corresponding area.

In case of unprofessional and untypical use, installation or modification the permission for 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

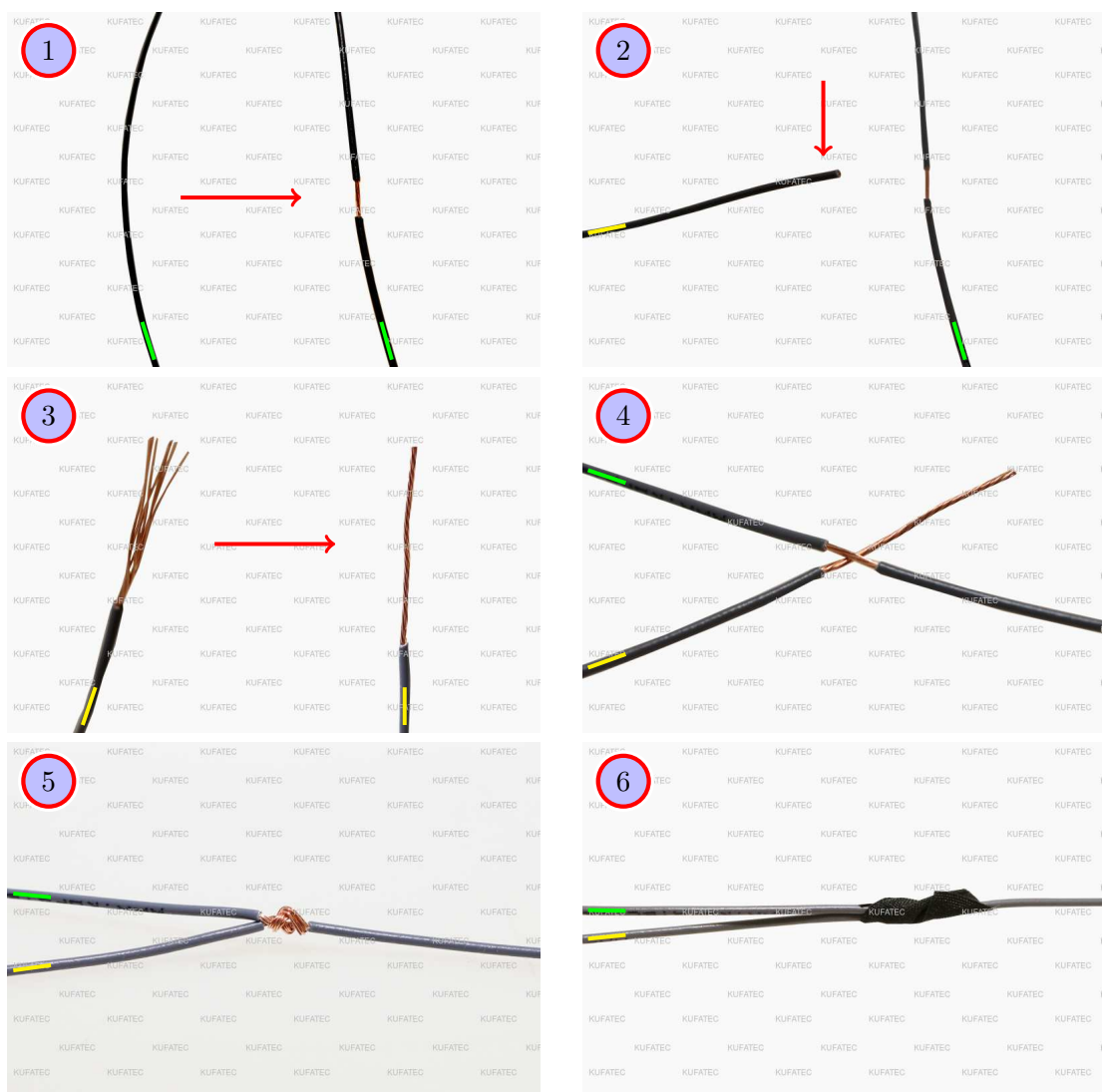


Figure 1: How to connect a cable to another

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.	
6	Lastly, stick insulating tape around the connection point.	

## 8 Note Cable Inscription/Color



Figure 2: Cable Inscription

**If our cable set consists exclusively of grey wires, connect the wires according to the cable inscription.**

## 9 Installation Instruction

The following presentation shows the laying of the cables as well as the position of the single components.

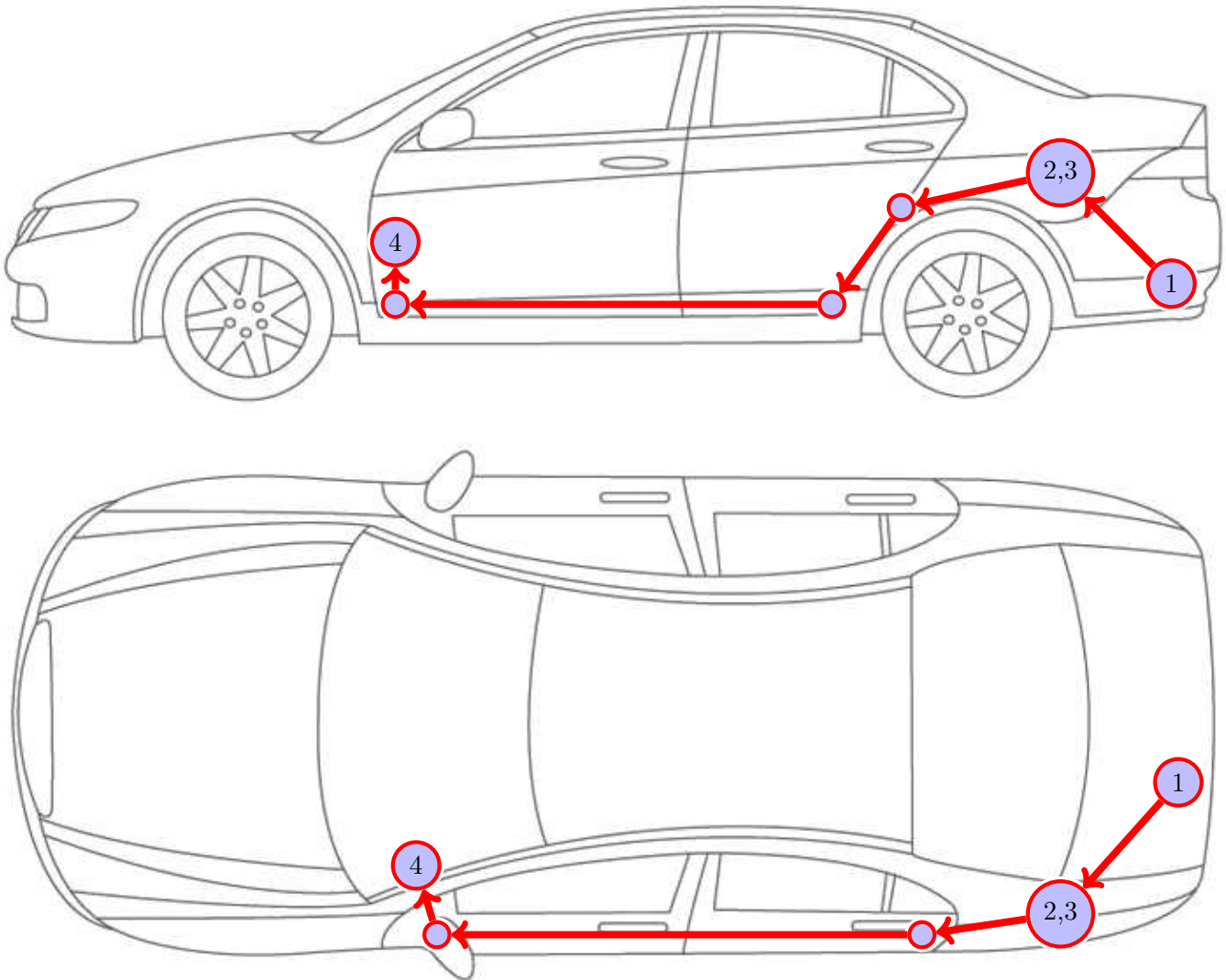


Figure 3: Car Overview

- 1 External Sound Booster including Holder
- 2 Control Unit for Motor Sound Booster
- 3 Sound Booster Pro (Module)
- 4 Sensing Device



## 10 Installation external Sound Booster

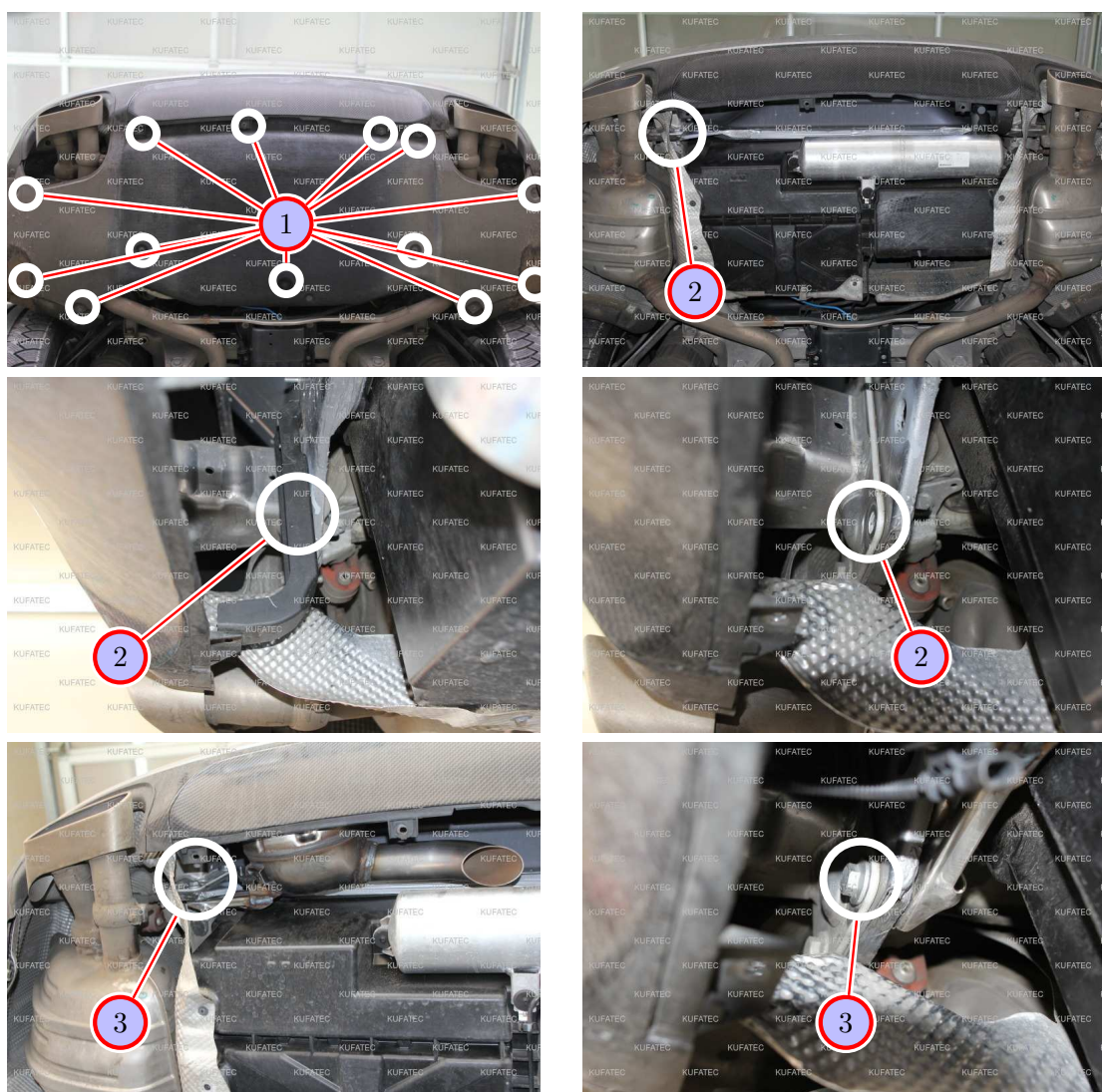


Figure 4: Pictures Installation of the external Sound Booster

Table 2: Instructions for Installation of the external Sound Booster

Nr.	Procedure	Note
1	Release all the indicated screws and afterwards release the underride guard	
2	Release the strut section for the rear valance and afterwards release the screws which are behind this from the crash protection	
3	Now place the external Sound Booster directly behind the rear valance and fix this with just the release screw	
	On vehicles where the hexagon nut is firmly connected to the vehicle, you need to replace the loosen screw against a longer screw and then you need to install the Sound Generator with the longer screw as well as with an additional hexagon nut. Therefore you need to adapt the mounting of the Sound Generator by using suitable workshop equipment that the Sound Generator can be installed at the marked position.	

## 11 Removal of Side Cladding in Luggage Space

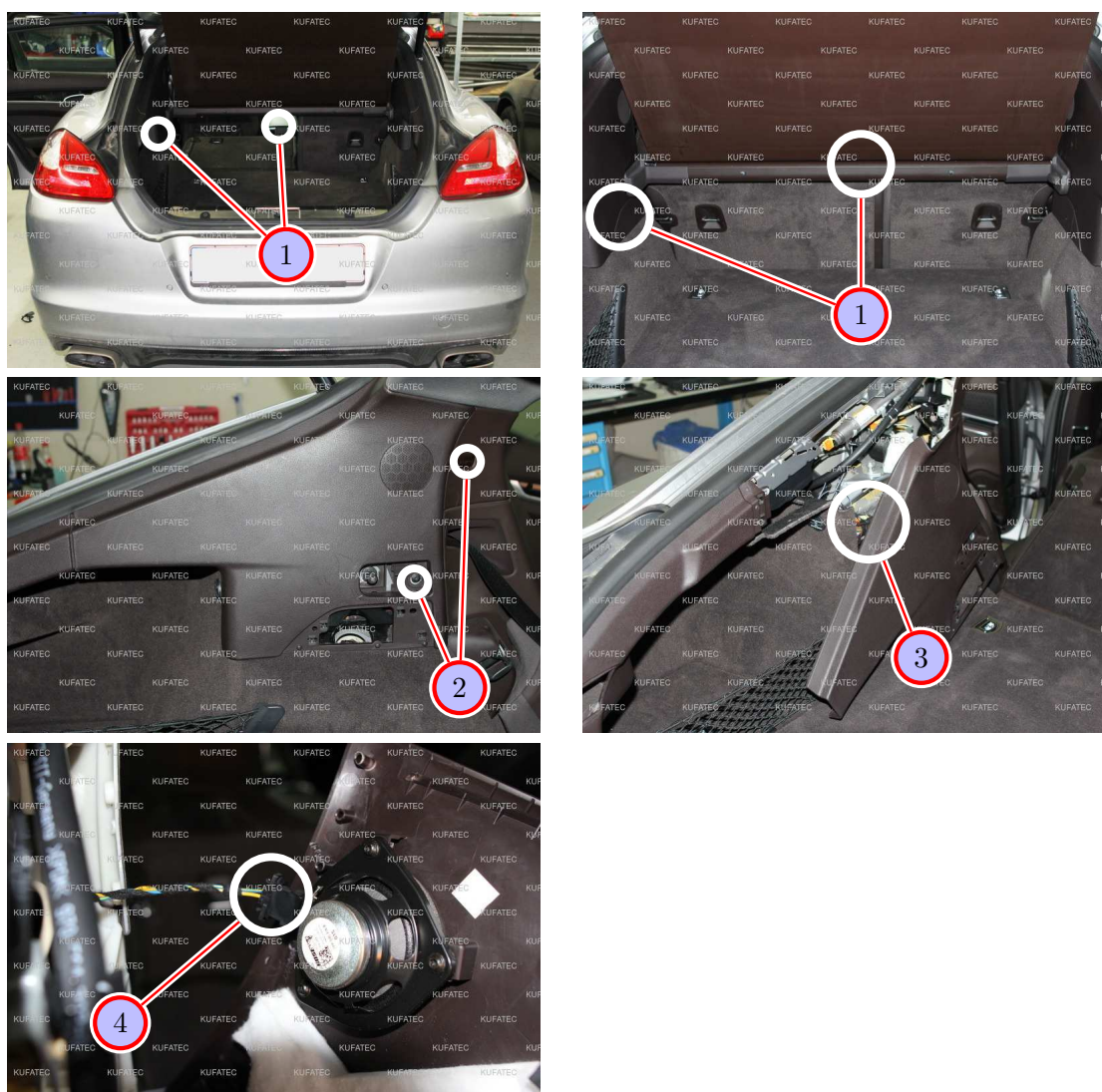


Figure 5: Pictures Removal of the Side Cladding in Luggage Space

Table 3: Instructions for the Removal of Side Cladding in Luggage Space

Nr.	Procedure	Note
1	Take the luggage space covering and additionally remove the covering at the left side cladding with a plastic installation lever.	
2	Remove the indicated screws. The screw above the side cladding is behind the shield airbag. This shield can be simply removed with an installation lever.	
3	Now the complete side cladding can be released with an installation lever.	
4	Remove the plug-in connection from the speaker. Now the side cladding can be completely removed.	



## 12 Installation Line Set

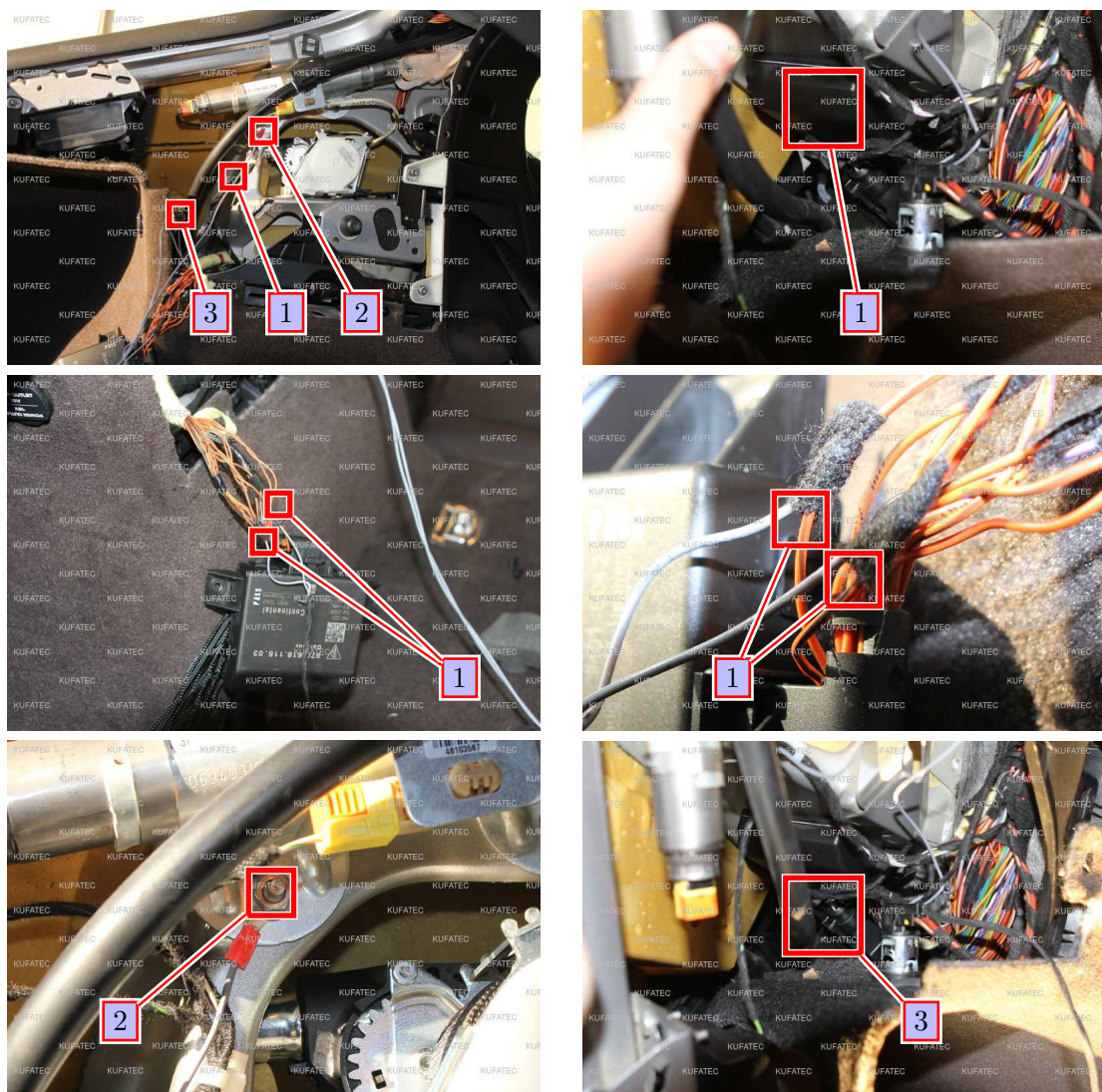


Figure 6: Pictures Installation Line Set

Table 4: Instructions for the Installation Line Set

Nr.	Procedure	Note
1	Take the CAN Gateway and connect CAN High/Low as follows. CAN High (black/white) at PIN 16 (cable color: orange/black) CAN Low (black/yellow) at PIN 6 (cable color: orange/brown)	
2	Release the indicated screws and afterwards install the mass cable (brown) at this position.	
3	Now connect the delivered module and control unit with the cable set and stow it at the indicated position below the CAN Gateway.	

## 13 Laying Ignition Plus / Sound Booster

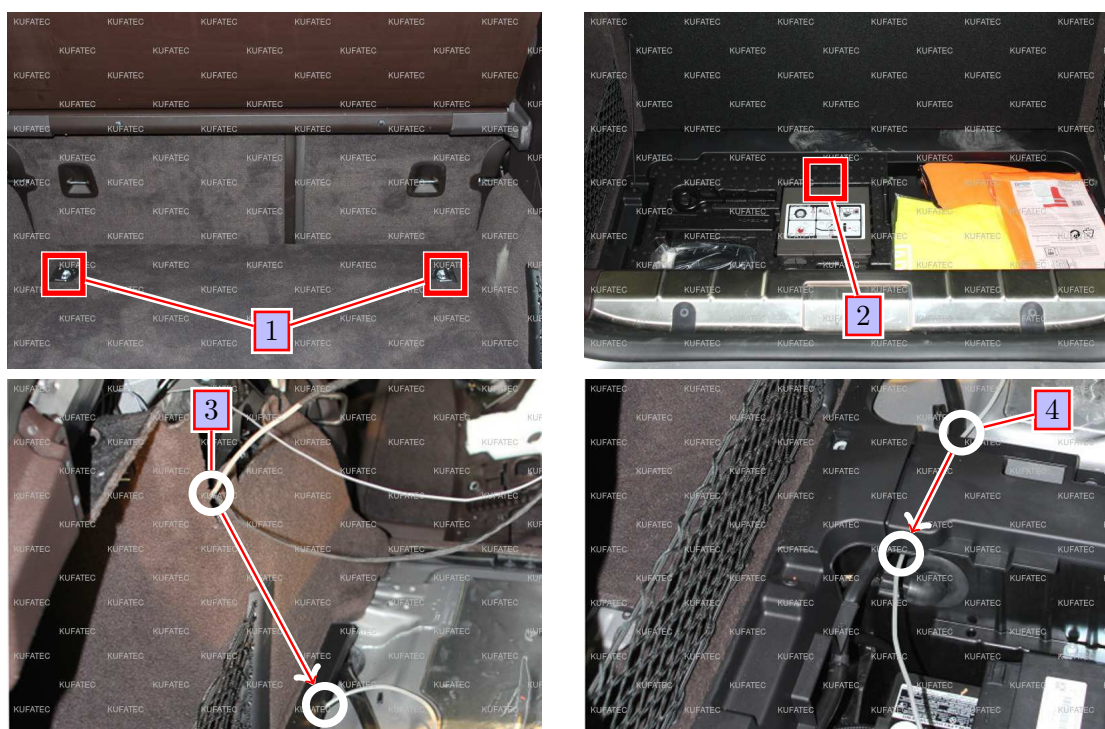


Figure 7: Pictures Laying Ignition Plus / Sound Booster

Table 5: Instructions Laying Ignition Plus / Sound Booster

Nr.	Procedure	Note
1	Remove the indicated tie-down loops and afterwards remove the complete luggage space covering.	
2	Remove the styrofoam storing box and so uncover the battery case as well as the fuse box.	
3	Pull the cable for the Ignition Plus (red/white) and for the Sound Booster with a pull-through assistance behind the carpet to the bottom.	
4	Pull the cable below the plastic covering towards the battery- and the fuse box.	



## 14 Connection of Ignition Plus / Sound Booster

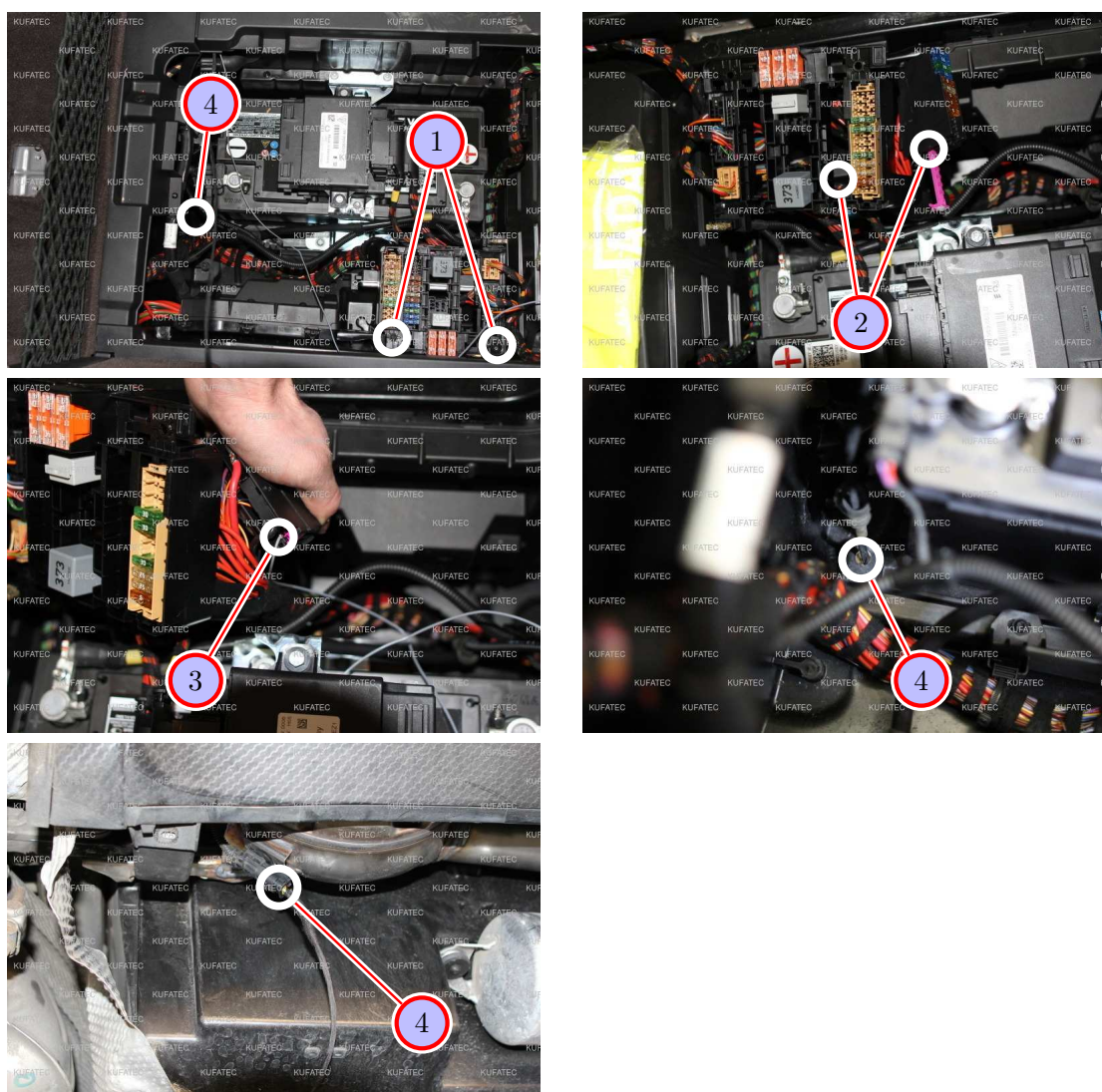


Figure 8: Pictures for Connection of Ignition Plus / Sound Booster

Table 6: Instructions for Connection Ignition Plus / Sound Booster

Nr.	Procedure	Note
1	Release the indicated screws and pull the fuse box to the top.	
2	Press the second safety bolt to the bottom and open the locking.	
3	Plug the Ignition Plus cable (red/white) into a free fuse place. Afterwards please push back the pink locking. Now safe the plugging area with a 7,5 Ampere fuse. The fuse box can be installed now. First please ensure with a measuring tool that here touches Ignition Plus.	
4	Lead the cable for the Sound Booster through the body aperture to the bottom and connect the Sound Booster.	

## 15 Laying the Sensing Device Cable to the front

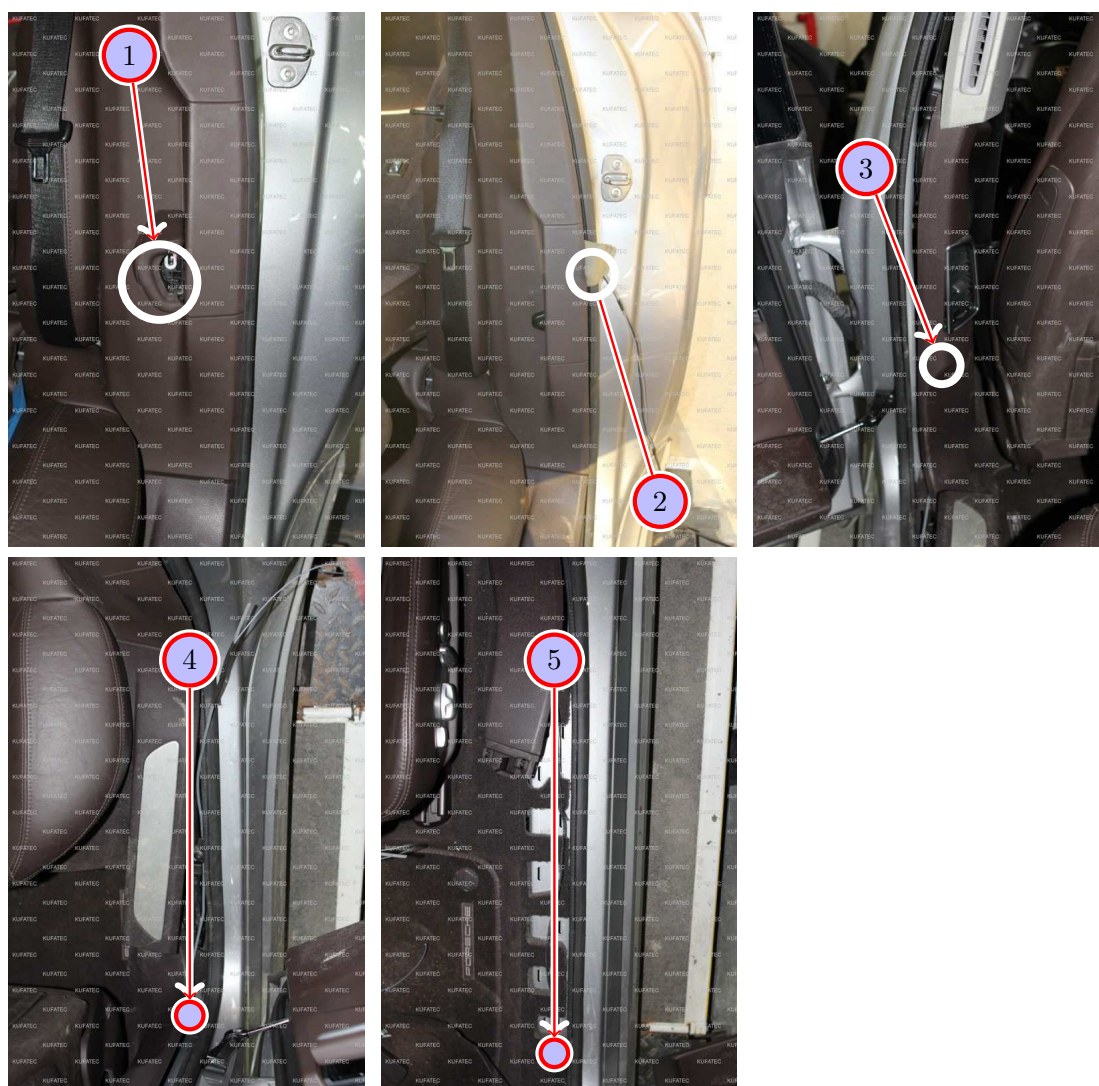


Figure 9: Pictures for Laying the Sensing Device Cable to the front

Table 7: Instructions for Laying the Sensing Device Cable to the front

Nr.	Procedure	Note
1	Remove the elbow rail by releasing the covering with an installation lever and by removing the screws existing behind.	
2	Release the side cladding in the back with an installation lever and pull the sensing device cable with the pull-through assistance out of the luggage space over the wheel case to the front.	
3	Release the B-column covering with the plastic installation lever.	
4	Release the entering guide rail with the installation lever and continue to pull the cable up to the B-column covering.	
5	Now release the entering guide rail to the front and pull the cable up to the leg area on the driver's side.	

## 16 Placing of the Sensing Device(Installation Proposal)

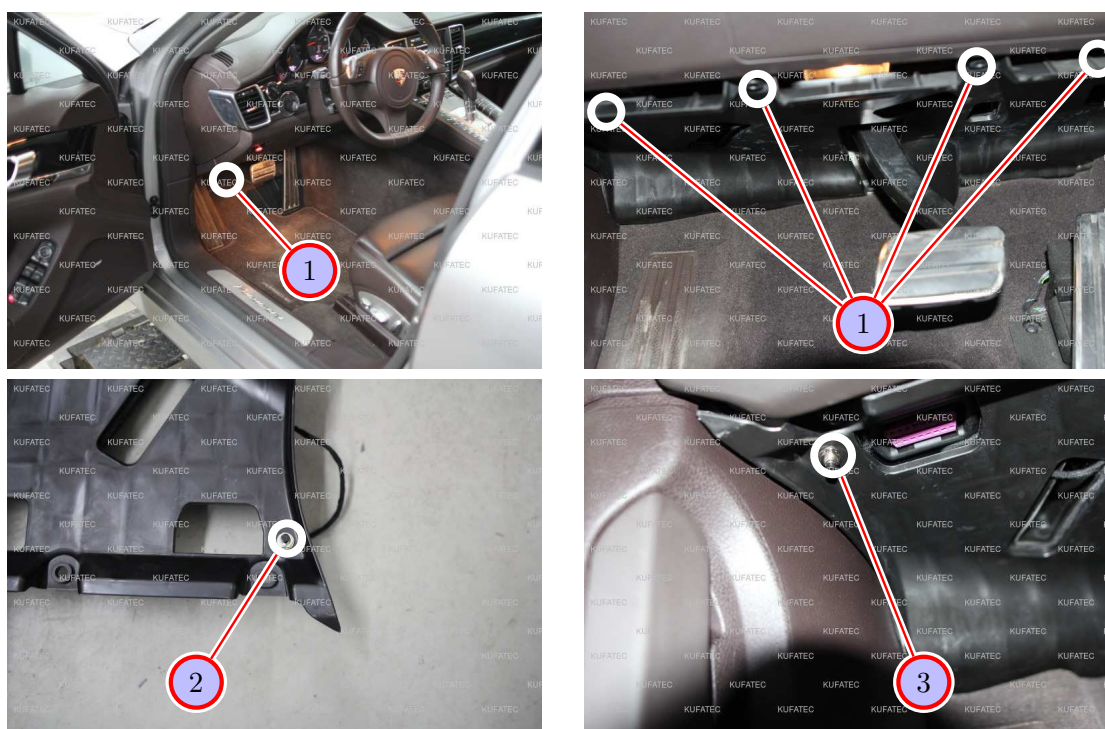


Figure 10: Pictures of the Sensing Device

Table 8: Instructions for Placing the Sensing Device

Nr.	Procedure	Note
1	Release the black covering below the the car dashboard by releasing the 4 indicated screws.	
2	Drill a hole for the Sensing Device and afterwards install it.	7mm Drill
3	Now install the covering at the car dashboard again.	



## 17 Software

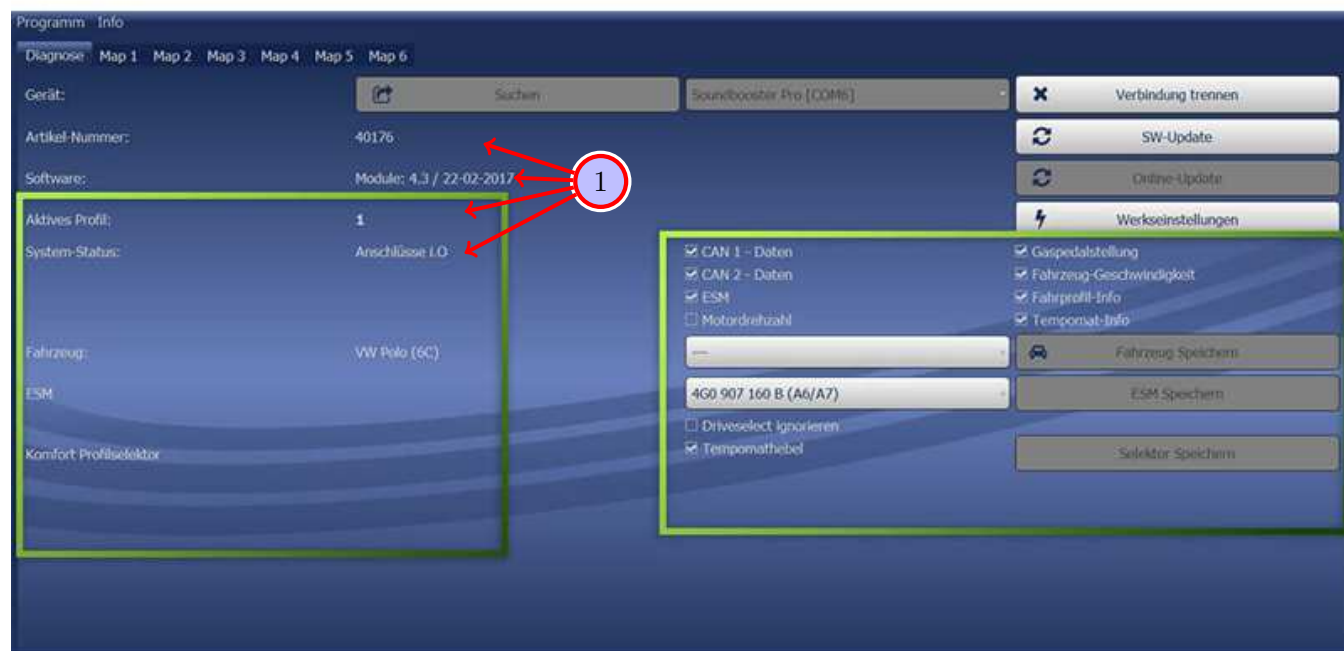


Figure 11: Software

Table 9: Notes for the software

Nr.	Work step	Note
1	If the system does not work after you have installed everything, please check by having a look on to the following Link: <a href="https://www.sound-booster.com/en/debugging.html">https://www.sound-booster.com/en/debugging.html</a> if everything is correct as described. For the further commissioning or debugging, our Sound Booster Software for PC / Mac should be used:	
	<b>Step 1:</b> Download the appropriate software via the following link: <a href="https://www.sound-booster.com">https://www.sound-booster.com</a> .	
	<b>Step 2:</b> Turn the ignition of the vehicle on and only then connect the PC / Mac with a USB-cable with our module. It is important here to make sure previously that plus and minus are connected correctly. If this is not the case, a damage at the computer or at the control unit can result.	
	<b>Step 3:</b> Start the downloaded software and first click on search and afterwards on connect.	
	You will be forwarded automatically to the diagnosis side, on which you can see the following things at a glance:	
	<b>Software:</b> Software version / creation date	
	<b>Active profile:</b> The actually activated profile is indicated here.	
	<b>Vehicle:</b> The automatically identified vehicle is indicated here.	
	<b>System Status:</b> You can see here, if the connections are correct.	



## 18 Software

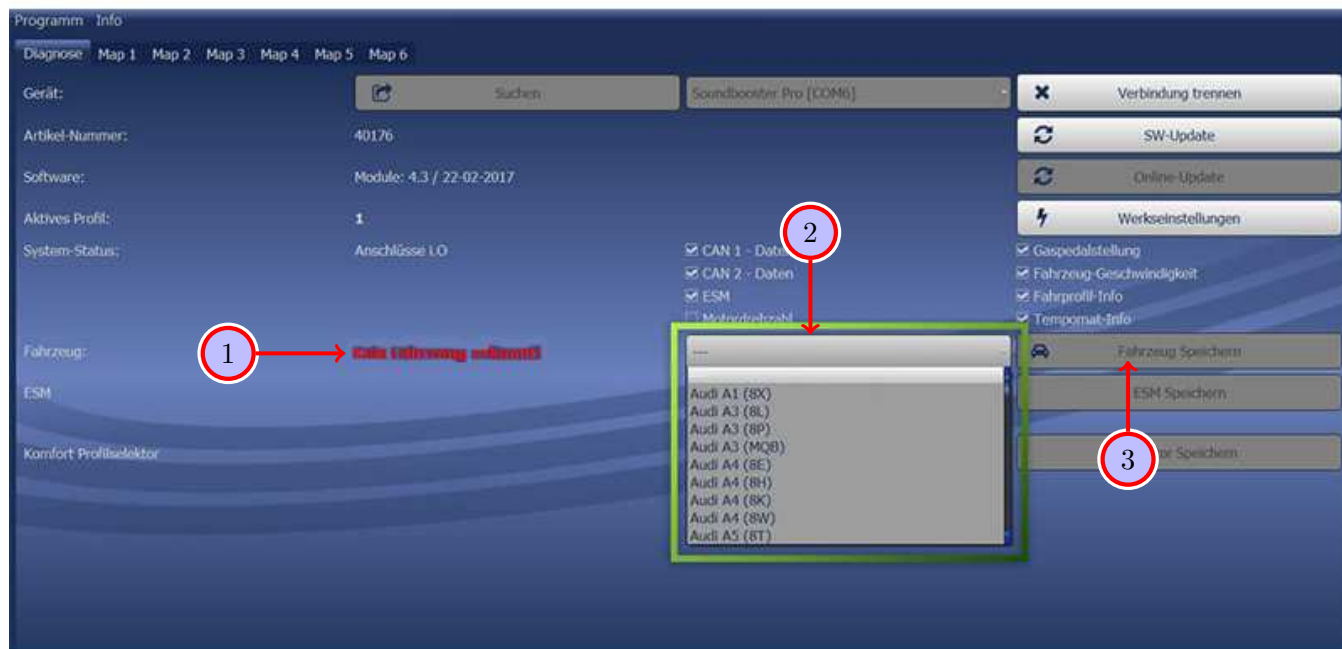


Figure 12: Software

Table 10: Notes for the software

Nr.	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 save the vehicle on the module permanently.	
	If you don't find your vehicle in this list, it is possibly necessary that the software has to be adapted to your vehicle. For this, please contact us via e-mail: <a href="mailto:info@kufatec.de">info@kufatec.de</a> or by phone: +49 (0) 4551 / 80 810 888. We will make an appointment with you, at which we will adapt the software to your vehicle per Team Viewer (telemaintenance).	

## 19 Software

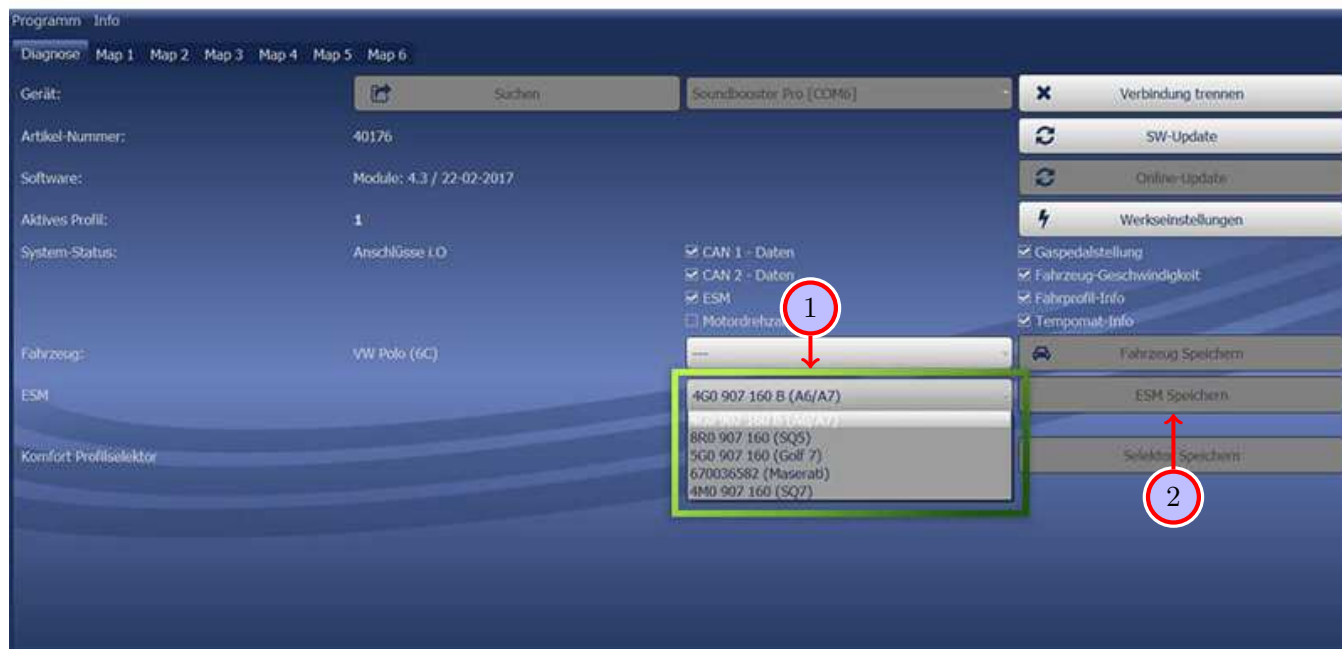


Figure 13: Software

Table 11: Notes for the software

Nr.	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 save the ESM on the module permanently.	
3	If you, for example, has ordered a complete set with Audi control unit you need to choose as ESM <b>4G0 907 160 B (A6/A7)</b> . If you install the Maserati Control unit you need to choose the ESM <b>670036582 (Maserati)</b> If the system does not work after all please get in contact with us via e-mail: <a href="mailto:info@kufatec.de">info@kufatec.de</a> 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 for the fixation of the Sound Booster suitable high tensile screws. In order to avoid loosening of the screws by vibration please make the screws safe 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 no consideration we do not assume liability for possible damages. After 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 no zinc spray can't get inside the sound generator.

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

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