



# **Installation Instructions**

Complete set Active Sound incl. Soundbooster Audi Q5 8R  $_{\rm v1.4~(03.01.2019)}$ 



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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

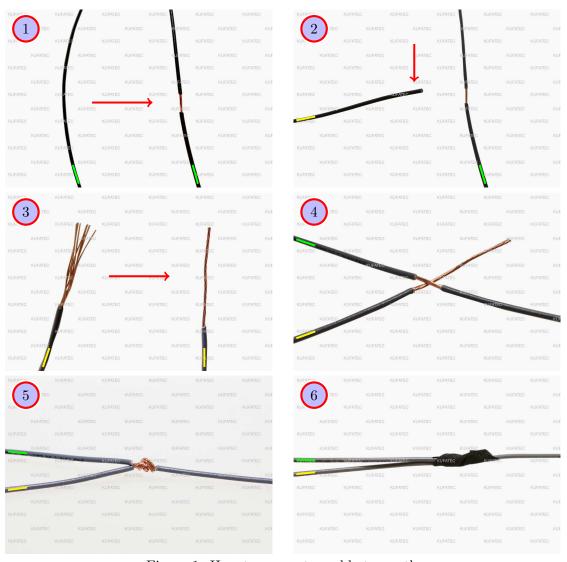


Figure 1: How to connect a cable to another

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. Solder	
	the connection professionally.	
6	Lastly, stick insulating tape around the connection point. Make sure that the isola-	
	tion is put onto the connection professionally to prevent corrosion.	



### 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 Assembly Instructions

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

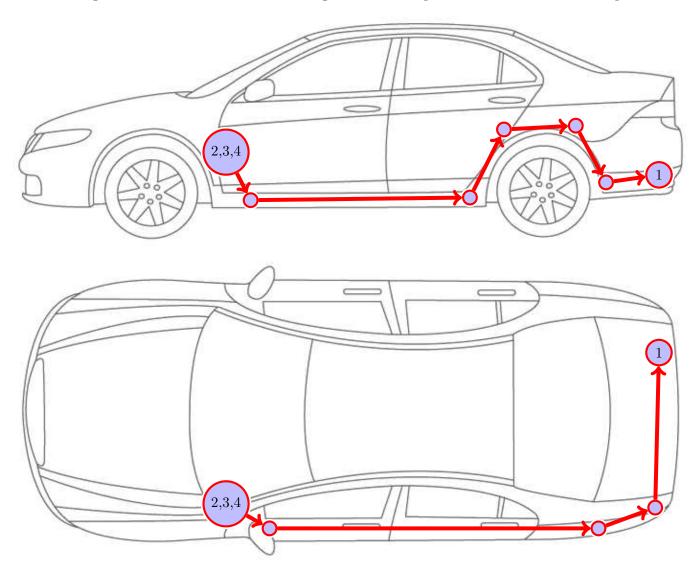


Figure 3: Vehicle overview

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



## 10 Removing trim panel driver's side front

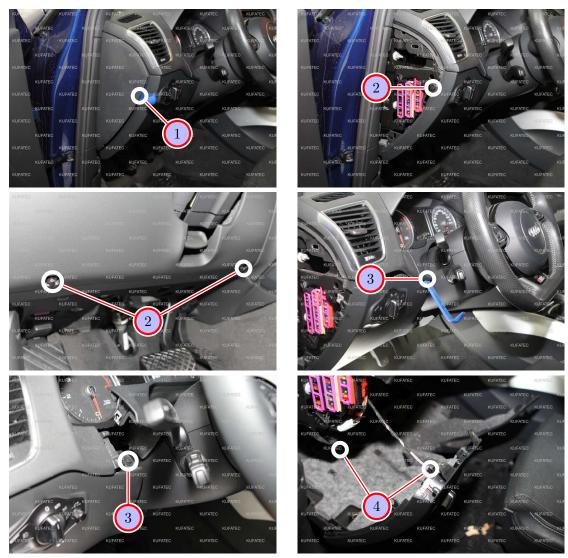


Figure 4: Removing trim panel driver's side front

Table 2: Removing trim panel driver's side front - instructions

No.	Work step	Note
1	Remove the lateral trim panel of the dashboard using a trim tool.	
2	Loosen the marked screw behind the lateral covering as well as two others at the	3x8er
	bottom of the front trim panel of the dashboard.	socket
3	Loosen the covering over the steering wheel and remove the screw that is located	1x8er
	behind.	socket
4	Pull the front trim panel of the dashboard down and remove the two plugs. After-	
	wards the trim panel can be taken out completely.	



## 11 Removing front & rear sill trim driver's side

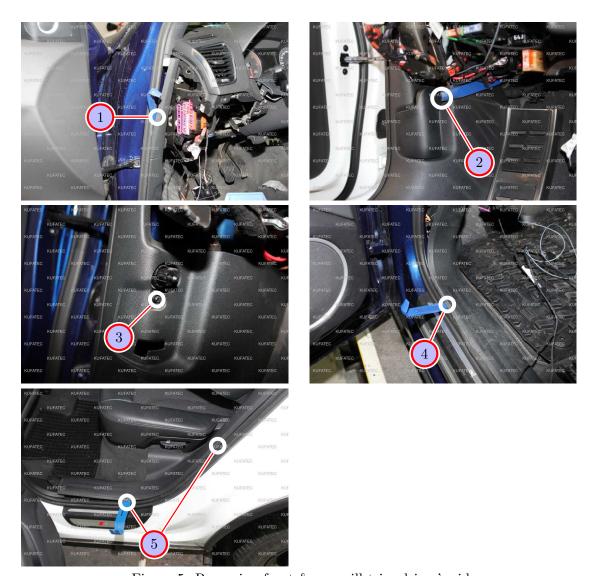


Figure 5: Removing front & rear sill trim driver's side

Table 3: Removing front & rear sill trim driver's side - instructions

No.	Work step	Note
1	Remove the upper trim panel of the a-pillar using a trim tool.	
2	Remove the lever for the hood release by removing the locking clip with a suitable	
	tool and moving off the lever for the hood release afterwards.	
3	Loosen the marked screw behind the lever of the hood release.	1xT25
4	Loosen and remove the front sill trim on the driver's side using a trim tool.	
5	Loosen the sill trim incl. the side trim panel using a trim tool at the marked points.	



## 12 Connection CAN High & CAN Low / ignition lead / ground

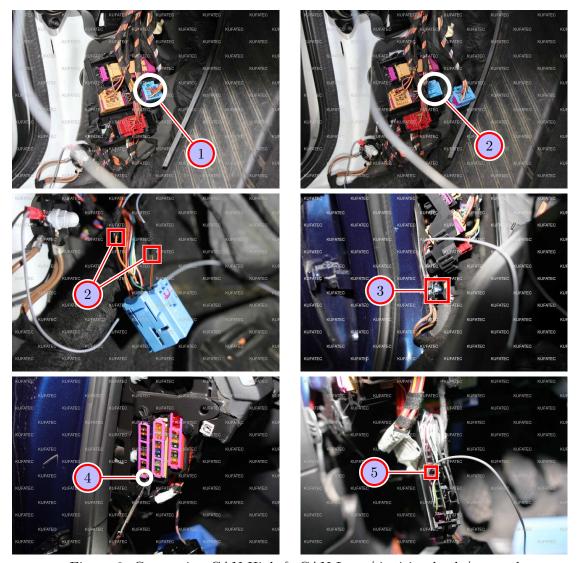


Figure 6: Connection CAN High & CAN Low / ignition lead / ground

Table 4: Connection CAN High & CAN Low / ignition lead / ground - instructions

No.	Work step	Note
1	Loosen the marked blue plug at the bottom at the a-pillar on the driver's side.	
2	Remove the opposite side of the blue plug out of the bracket and connect CAN High	
	& Low as follows:	
	- CAN High (black/white) to PIN 8 (colour of the cable at the plug = orange/black)	
	- CAN Low (black/yellow) to PIN 7 (colour of the cable at the plug = orange/brown)	
3	Connect the ground cable (brown) to the marked ground spot behind the lower trim	1x10er
	panel of the a-pillar.	socket
4	Pull the left fuse carrier out rearwards, press the snap-fit at the bottom for this.	
5	Place the cable for ignition lead (red/white) in a free fuse spot which carries ignition	
	lead and protect the spot with a 10 ampere fuse.	



## 13 Installation control unit / module & pushbutton

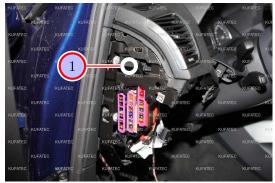






Figure 7: Installation control unit / module & pushbutton

Table 5: Installation control unit / module & pushbutton - instructions

No.	Work step	Note
1	Place the module at the marked position at the side of the dashboard as well as the	
	control unit behind the front trim panel of the dashboard.	
2	During our test installation, no pushbutton was installed. Choose a suitable position	$7\mathrm{mm}$
	in the front trim panel of the dashboard, drill an appropriate hole and install the	drill
	pushbutton afterwards.	



## 14 Cable routing to the sound generator

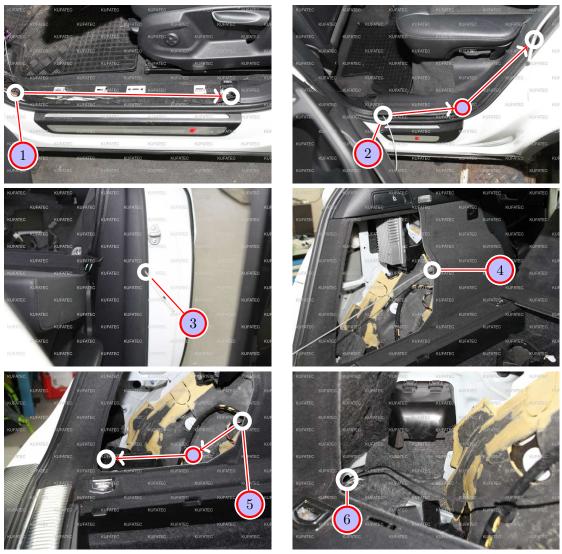


Figure 8: Cable routing to the sound generator

Table 6: Cable routing to the sound generator - instructions

No.	Work step	Note
1	Route the wire for the sound generator along the front sill trim to the trim panel of	
	the b-pillar.	
2	Pull the wire out from behind the trim panel of the b-pillar and route it under the	
	side trim panel up to the marking.	
3	Guide the wire rearwards into the trunk using a pull through aid.	
4	Pull the wire out from behind the side trim panel in the trunk.	
5	Route the wire along the marking down to the grommet.	
6	Guide the wire with a pull through aid through the marked opening outwards.	



## 15 Removing covering underbody

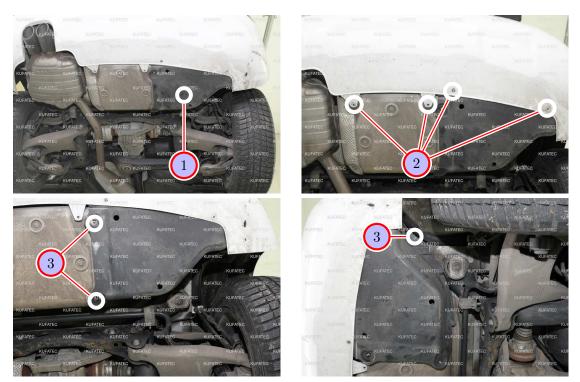


Figure 9: Removing covering underbody

Table 7: Removing covering underbody - instructions

No.	Work step	Note
1	Remove the marked covering at the underbody and proceed as follows to do this.	
2	Loosen the marked screws of the rear bumper.	4xT25
3	Now loosen the marked screws of the black covering and take it out afterwards.	3x10er
		socket



## 16 Installation sound generator

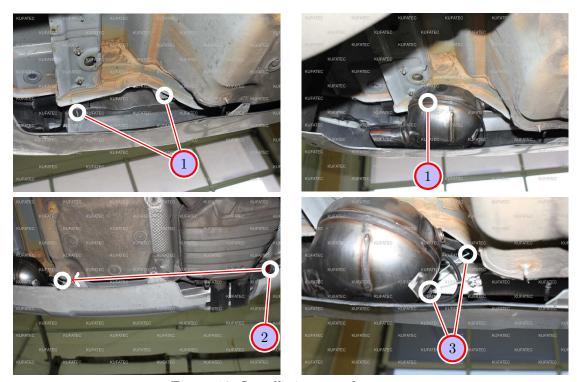


Figure 10: Installation sound generator

Table 8: Installation sound generator - instructions

Work step	Note
Loosen the left marked nut. Afterwards install the sound generator with this nut as	2x10er
well as another M8x25 screw (not included in delivery) at the right marked position.	socket
Now pull the connecting cable out from over the silencer and route it along the	
marking to the sound generator. Doing this, pay attention that the wire is routed	
behind the heat protection plate.	
Connect the wire to the sound generator and attach the delivered steel wire rope to	
the sound generator as well as to the vehicle.	
	Loosen the left marked nut. Afterwards install the sound generator with this nut as well as another M8x25 screw (not included in delivery) at the right marked position.  Now pull the connecting cable out from over the silencer and route it along the marking to the sound generator. Doing this, pay attention that the wire is routed behind the heat protection plate.  Connect the wire to the sound generator and attach the delivered steel wire rope to



### 17 Variant with trailer hitch: Cable laying to the sound generator



Figure 11: Variant with trailer hitch: Cable laying to the sound generator

Table 9: Variant with trailer hitch: Instructions for laying cables to the sound generator

No.	Work step	Note
1	Lay the cable for the sound generator along the front sill strip to the B pillar trim.	
2	Pull out the cable behind the B-pillar trim and lay it under the side trim up to the	
	mark.	
3	Guide the cable back into the boot with the help of a pull-through aid.	
4	Pull out the cable behind the side trim in the boot.	
5	Lay the cable along the marking down to the rear of the vehicle.	
6	Lay the cable under the bumper protection from the driver side to the passenger	
	side.	







Figure 12: Variant with trailer hitch: Cable laying to the sound generator

Table 10: Variant with trailer hitch: Instructions for laying cables to the sound generator

No.	Work step	Note
1	Pull the cable from the sill protection into the side panel on the passenger side.	
	There is rubber grommet behind it.	
2	Guide the cable through the marked rubber grommet to the underbody with a pull-	
	through aid.	



### 18 Variant with trailer hitch: mounting sound generator

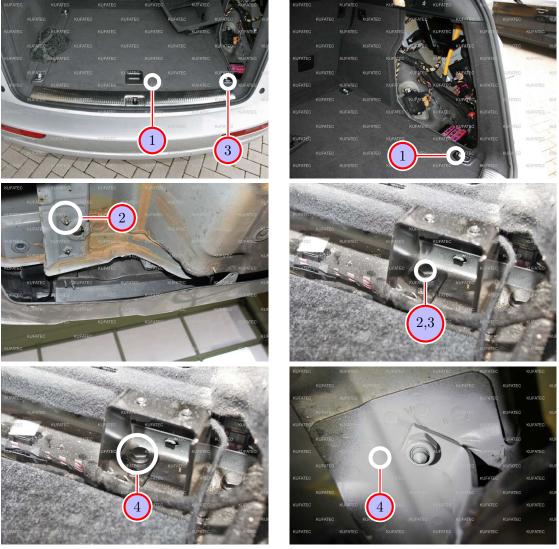


Figure 13: Variant with trailer hitch: mounting sound generator

Table 11: ariant with trailer hitch: Instructions for mounting the sound generator

No.	Work step	Note
1	Remove the trunk floor and the sill protection from the vehicle. Loosen the lashing	1xT30
	eyes on the passenger side.	per
		eyelet
2	Remove the marked screw on the underbody on the passenger side. Then remove	
	the nut on the underbody. This is strongly connected to the vehicle. Use suitable	
	workshop material for this.	
3	Insert a suitable screw from above into the opening. This is located under the	
	retaining plate of the lashing eye (passenger side).	
4	Screw the bracket to a suitable nut. Then seal the processed underbody properly.	



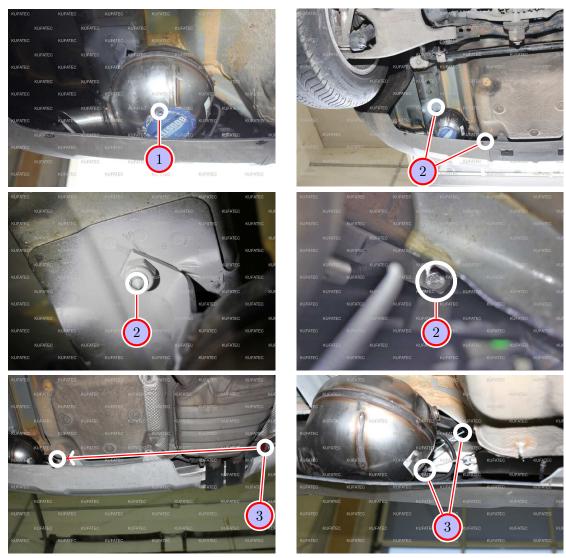


Figure 14: Variant with trailer hitch: mounting sound generator

Table 12: Variant with trailer hitch: Instructions for mounting the sound generator

No.	Work step	Note
1	Insert the sound generator into the vehicle as shown.	
2	Attach the sound generator to the new bolt and to the trailer hitch.	1xSW17
		1xSW13
3	Now pull out the connecting cable above the silencer and lay it along the marking	
	to the sound generator. Make sure that the cable is laid behind the heat protection	
	plate.	
4	Connect the cable to the sound generator and attach the supplied wire rope to the	
	sound generator as well as to the vehicle.	



#### 19 Software



Figure 15: Software

Table 13: 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: https://www.sound-booster.com/en/	
	debugging.html if everything is correct as described. For the further commissioning	
	or debugging, our Sound Booster Software for PC / Mac should be used:	
	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 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.	
	Step 3: 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:	
	Software: Software version / creation date	
	Active profile: The actually activated profile is indicated here.	
	Vehicle: The automatically identified vehicle is indicated here.	
	System Status: You can see here, if the connections are correct.	



#### 20 Software

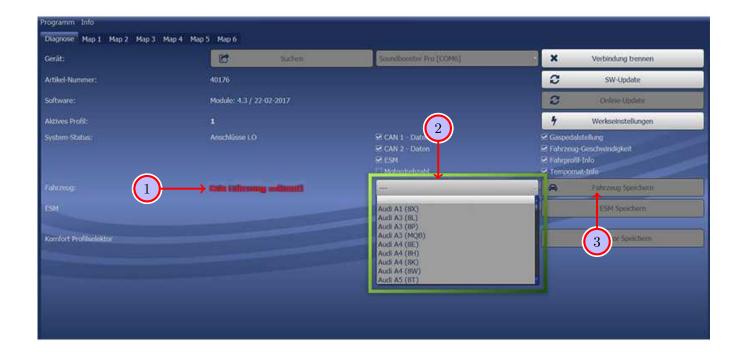


Figure 16: Software

Table 14: 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: info@kufatec.de	
	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).	



#### 21 Software

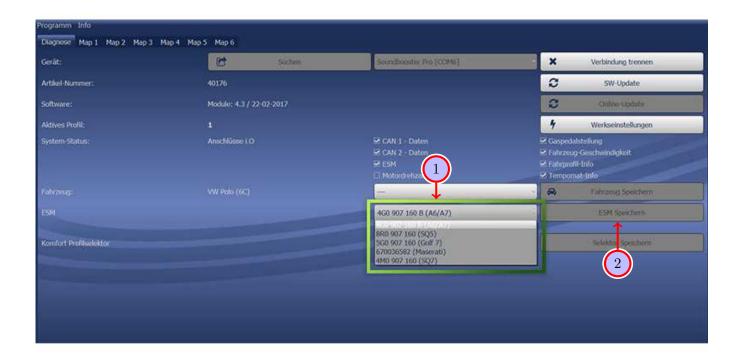


Figure 17: Software

Table 15: 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: info@kufatec.de or by phone: $+49$ (0) $4551$ / $80$ 810 888. We will check the issue as soon as possible.	



#### 22 Important Information Sound Booster

Please use for the fixation of the Sound Booster suitable high tensile screws. In order to avoid losening 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.

#### Notes for assembling the vehicle

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

#### 23 Bus rest

#### Final work / bus rest

- Important note: After the coding has been completed, you need to wait for the the bus rest.
- Proceed as follows:
  - Switch off ignition and close all doors.
  - Close up the the car by remote control.
  - Leave the car for about 10 minutes.

Important: Make sure that they key is not inside or nearby the car if it is equipped with keyless go system.



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