



# **Installation Instructions**

Complete set active Sound incl. Soundbooster  $\mathop{\rm Audi}_{\rm v1.5~(01.08.2018)} {\rm Soundbooster}$ 



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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

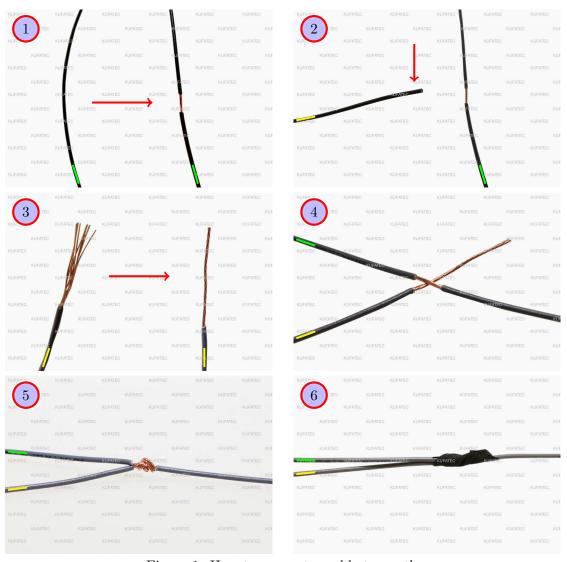


Figure 1: How to connect a cable to another

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 Assembly Instructions

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

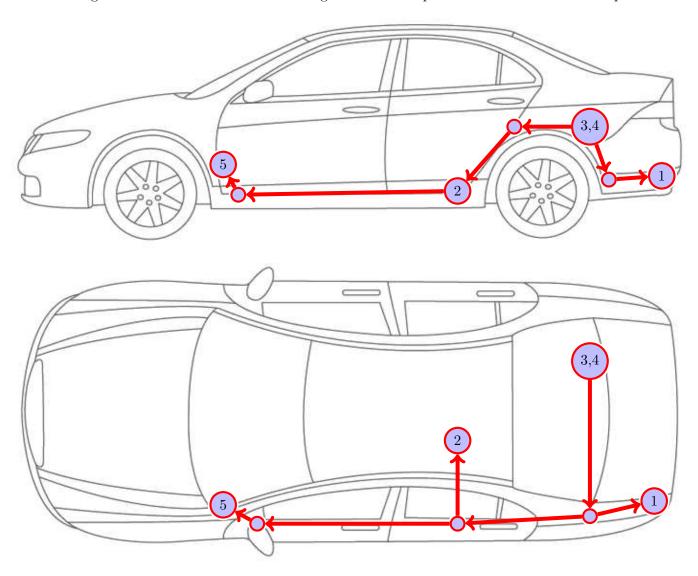


Figure 3: Vehicle overview

- 1 External sound generator incl. bracket (4.2 TDI version)
- 2 External sound generator incl. bracket (3.0 TDI version)
- 3 Control unit for engine sound generation
- 4 Sound Booster Pro (module)
- 5 Pushbutton



## 10 Removing front trim panels and back seats

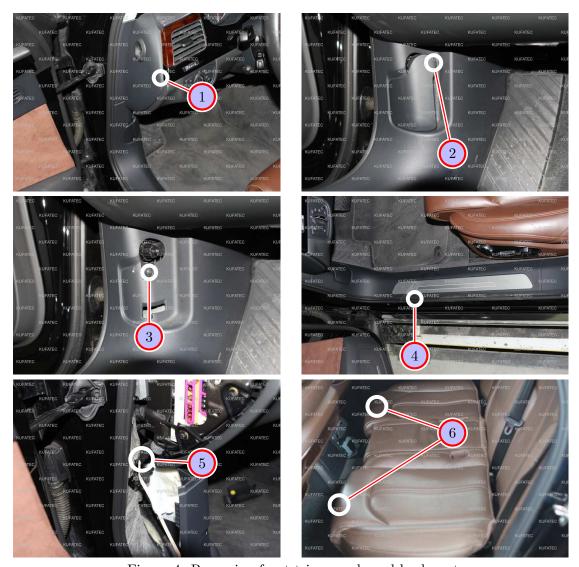


Figure 4: Removing front trim panels and back seats

Table 2: Removing front trim panels and back seats - instructions

No.	Work step	Note
1	Remove the left trim panel of the instrument panel with a trim tool.	
2	Remove the hood release. For this pull it. Afterwards you can remove the interlock	
	from behind at the marked position with a flat-blade screwdriver. Move the lever	
	off in the direction of the footwell.	
3	Loosen the marked screw, which is located behind the hood release.	T20
4	Remove the front sill trim on the driver's side with a trim tool.	
5	Move the plug for the lighting of the sill trim off.	
6	Grab under the back seats at the marked spots. Pull now the back seats up and	
	out. Remove all plug connections of the back seats afterwards.	



#### 11 Removing rear trim panels

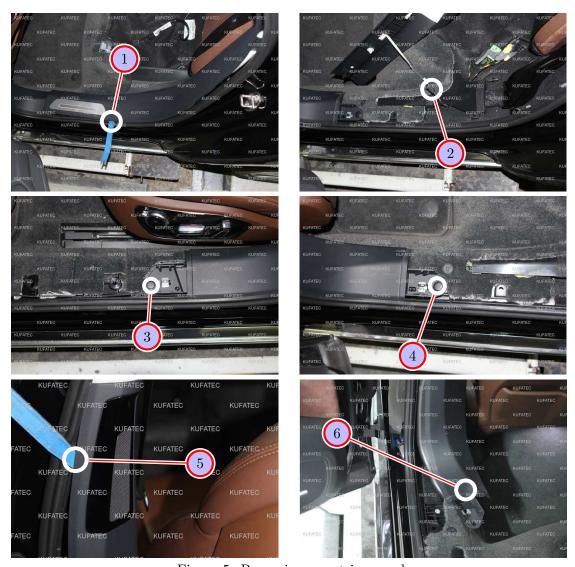


Figure 5: Removing rear trim panels  $\frac{1}{2}$ 

Table 3: Removing rear trim panels - instructions

No.	Work step	Note
1	Remove the back trim panel of the c-pillar on the driver's side with a trim tool.	
2	Move the plug for the lighting of the back trim panel of the c-pillar off.	
3	Loosen the lower left clip of the trim panel of the b-pillar at the same level as the	
	driver's seat.	
4	Remove the lower right clip of the trim panel of the b-pillar on the sill trim of the	
	back seats.	
5	With a trim tool, lever the trim panel of the b-pillar at the same level as the rear	
	loudspeaker forward off carefully. Afterwards move the plug for the loudspeaker off.	
6	Pull now the trim panel of the b-pillar in the lower field slightly in the interior of	
	the vehicle.	



## 12 Connection ground and uncover Can-Bus distributor

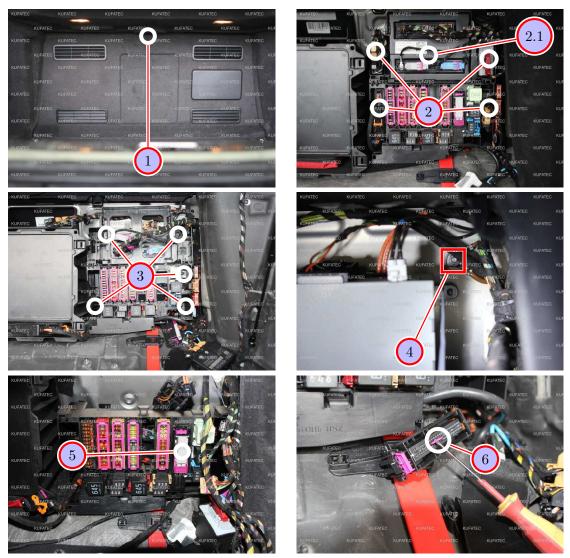


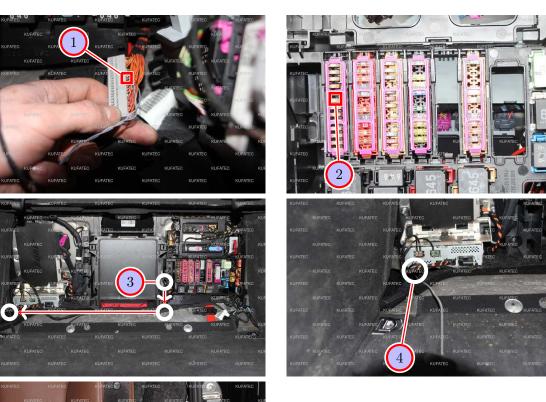
Figure 6: Connection ground and uncover Can-Bus distributor

Table 4: Connection ground and uncover Can-Bus distributor - instructions

No.	Work step	Note
1	Remove the retral trim panel of the back seats in the trunk, by pulling it forward	
	at the marked position.	
2	Remove the marked control units out of the fuse console.	
2.1	Move all plugs from the comfort control unit off. Afterwards remove the comfort	
	control unit.	
3	Loosen the marked nuts of the fuse console and then pull it forward as far as possible.	10er
	Remove also the upper black bracket of the comfort control unit.	socket
4	The marking shows the ground spot above the fuse console next to the headunit	10er
	from the point of view of the trunk. Connect the ground cable (brown) there.	socket
5	Remove the Can distributor and remove the grey Can distributor jumper.	
	With a flat-blade screwdriver pull the violet interlock out.	



## 13 Connection Can-Bus and ignition lead / cable routing



RUFATEC RUFATE

Figure 7: Connection Can-Bus and ignition lead / cable routing

Table 5: Connection Can-Bus and ignition lead / cable routing - instructions

No.	Work step	Note
1	Pull the grey plug unit out of the black housing of the Can distributor and place	
	Can High and Can Low as follows:	
	Can High (black/white) - Pin 10 H	
	Can Low (black/yellow) - Pin 10 L	
2	Connection ignition lead:	
	The marking shows the black fuse carrier (fuse carrier 1). If a fuse spot that carries	
	ignition lead is free on this fuse carrier, the cable with the inscription (ignition	
	lead) (red/white) is placed there and protected with 7,5 ampere. If no fuse spot	
	is free, the cable for ignition lead is connected on the back to a cable that carries	
	ignition lead.	
3	Place the control unit for engine sound generation and the Sound Booster Pro (mod-	
	ule) to the left of the fuse console. Route now the cable for the pushbutton in the	
	direction of the driver's side to the lower left cable feedthrough.	
4	At the marked place pull the cable through with a pull through aid, until it comes	
	out between the c-pillar and the back seats picture 4.1.	



## 14 Installation pushbutton

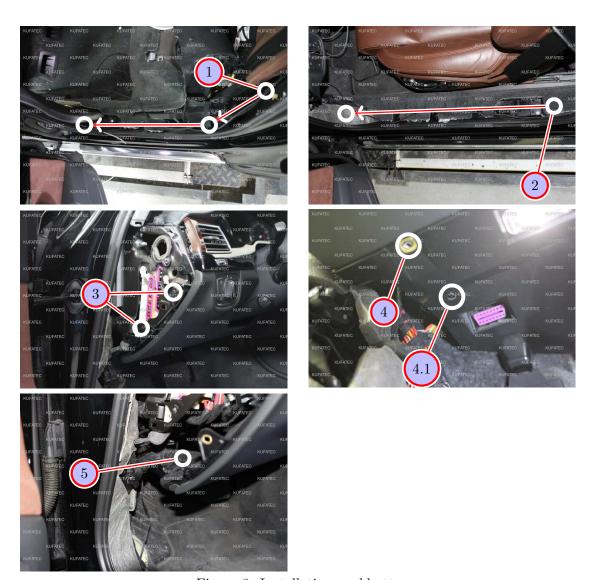


Figure 8: Installation pushbutton

Table 6: Installation pushbutton - instructions

No.	Work step	Note
1	The pushbutton is routed further along the original wiring harness of the sill trims	
	on the driver's side to the b-pillar.	
2	Pull the pushbutton behind the trim panel of the b-pillar along with a pull through	
	aid and route it further along the original wiring harness of the sill trim to the	
	a-pillar of the driver's side.	
3	Loosen the marked screws of the lower trim panel of the steering column and after-	10er
	wards pull it slightly forward.	socket
4	Loosen also the lower marked screw of the lower trim panel in the driver's footwell.	10er
		socket
4.1	Drill a hole of 7mm diameter for the pushbutton at the marked place in front of the	
	OBD power outlet.	
5	Pull the trim panel slightly forward and plunge the pushbutton from inside through	10er
	the hole. The pushbutton is now screwed from outside in place with the washer and	socket
	the union nut.	



#### 15 Note

- When installing the sound generator in an Audi A8 4H with 4.2 motor, please skip the page 15 and proceed the work steps from page 17.
- When installing the sound generator in an Audi A8 4H with 3.0 TDI motor, please skip the work steps from page 16 until the coding.



## 16 Installation / Connection sound generator 3.0 TDI version

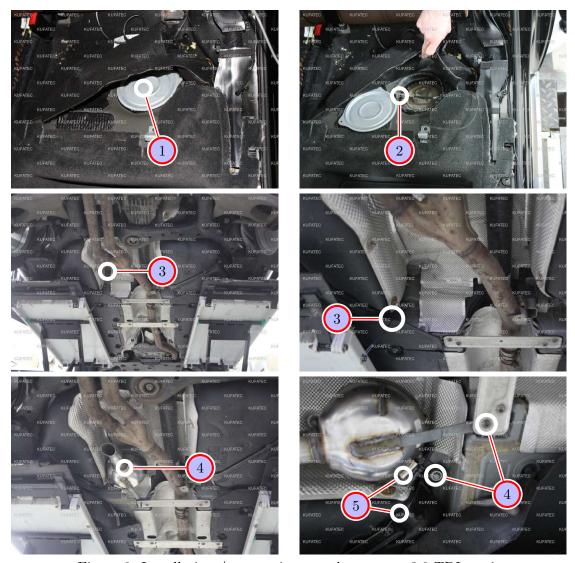


Figure 9: Installation / connection sound generator  $3.0~\mathrm{TDI}$  version

Table 7: Instructions for installation / connection sound generator 3.0 TDI version

No.	Work step	Note
1	Loosen the marked covering of the tank mounting underneath the backseat at	
	driver's side.	
2	Please route the connection cable for the sound generator aside the tank downwards	
	to the underbody, as seen at the marked position.	
3	Pull the connection cable through behind the tank.	
4	Install the sound generator at the marked position by loosening the marked screws	1x13er
	and fix the sound generator with it afterwards.	socket,
		1x10er
		socket
5	Afterwards fix the delivered steel cable at the sound generator as well as at the	
	marked position in the vehicle.	



## 17 Removing side trim panel trunk

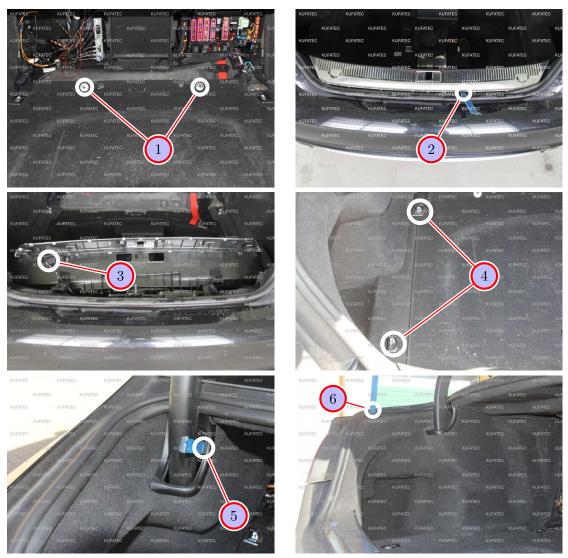


Figure 10: Removing side trim panel trunk

Table 8: Removing side trim panel trunk - instructions

No.	Work step	Note
1	Loosen the marked screw joints and take the trunk floor out afterwards.	
2	Lever the trunk sill covering up and out with a trim tool.	
3	Move the plug of the trunk lighting in the trunk sill covering off.	
4	Remove the two luggage hooks on the left side in the trunk.	4xT30
5	Open the hinge guidance in the left side trim panel of the trunk with a trim tool.	
6	Now remove the left trunk trim panel with a trim tool. Afterwards take the insert	
	of the left oddments tray out.	



## 18 Removing bumper

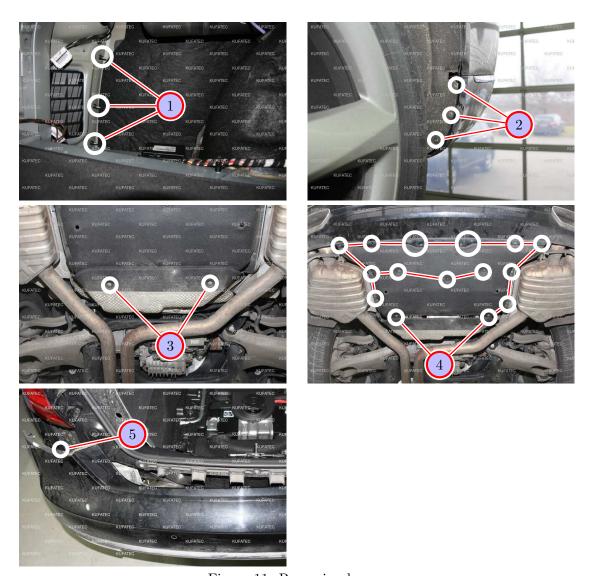


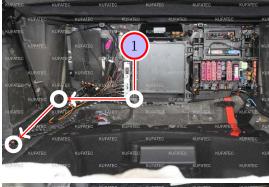
Figure 11: Removing bumper

Table 9: Removing bumper - instructions

No.	Work step	Note
1	Loosen the marked screws of the rear bumper on the driver's side.	3x10er
		socket
2	Loosen the marked screws of the rear bumper in the wheel housing.	3xT20
3	Loosen the marked screws of the front trim panel of the underbody.	2x10er
		socket
4	Now remove the underbody protection, by loosening the marked screws.	17xT25
5	Move the bumper on the driver's side a bit off carefully.	



## 19 Cable routing to the underbody









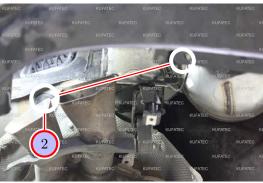


Figure 12: Cable routing to the underbody

Table 10: Cable routing to the underbody - instructions

No.	Work step	Note
1	Now route the wire for the sound generator along the marking rearwards to the	
	marked grommet. Afterwards guide the wire with a pull through aid through the	
	grommet outwards.	
2	Pull the wire out from over the silencer and route it behind the heat protection plate	
	to the impact absorber.	



## 20 Installation sound generator

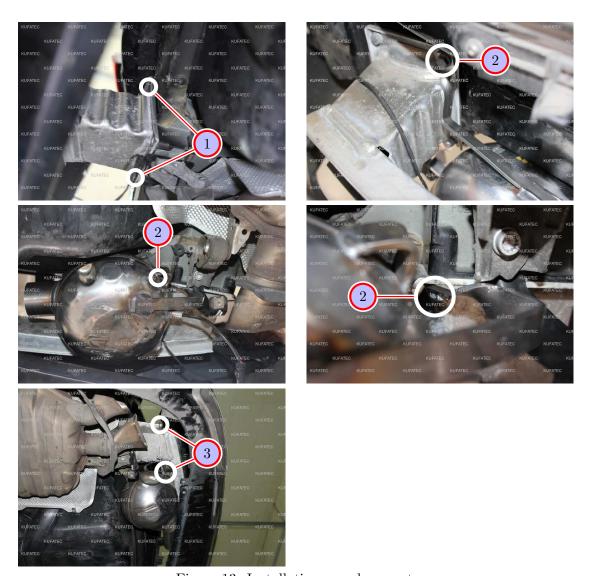


Figure 13: Installation sound generator

Table 11: Installation sound generator - instructions

No.	Work step	Note
1	Loosen the two marked screws of the impact absorber on the driver's side.	2x13er
		socket
2	Now attach the sound generator with the just loosened screws to the vehicle.	2x13er
		socket
3	Connect the wire to the sound generator and attach also the delivered steel wire	
	rope to the vehicle as well as to the sound generator.	



## 21 Coding of the MMI

Execute the following codings:

 $\bullet$  Address: 19 installation list: add C0

• Address: 09 Byte 11 Bit 6 to 1



#### 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.



#### 23 Software



Figure 14: Software

Table 12: 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.	



#### 24 Software

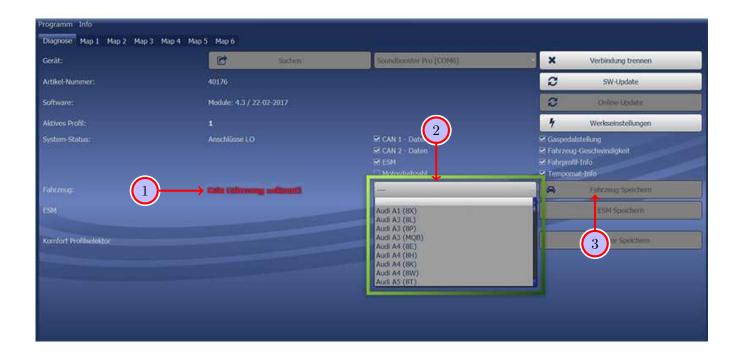


Figure 15: Software

Table 13: 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).	



#### 25 Software

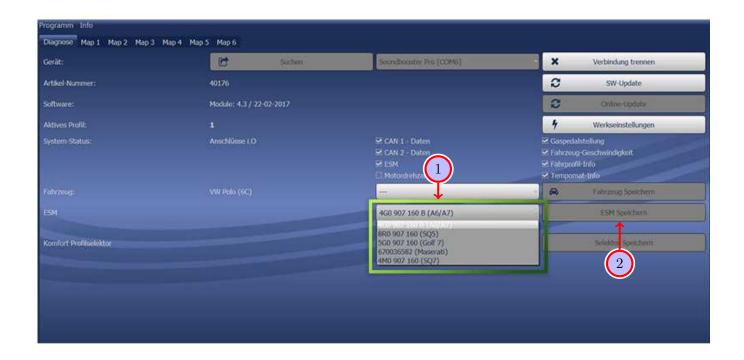


Figure 16: Software

Table 14: 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.	



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