



Installation Instructions

Complete set active Sound incl. Soundbooster
v1.7 (05.07.2019)

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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 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

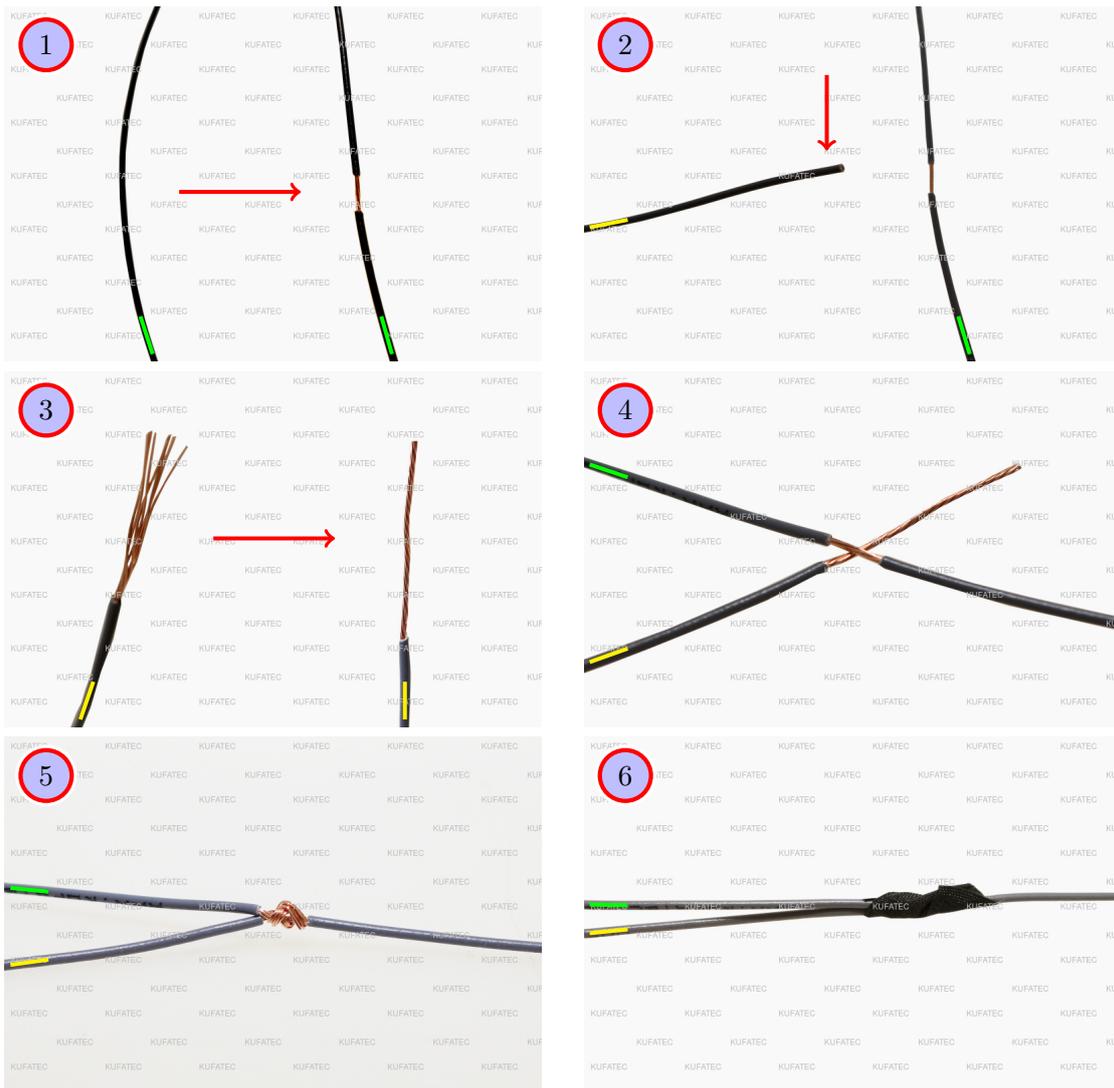


Figure 1: How to connect a cable to another

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.

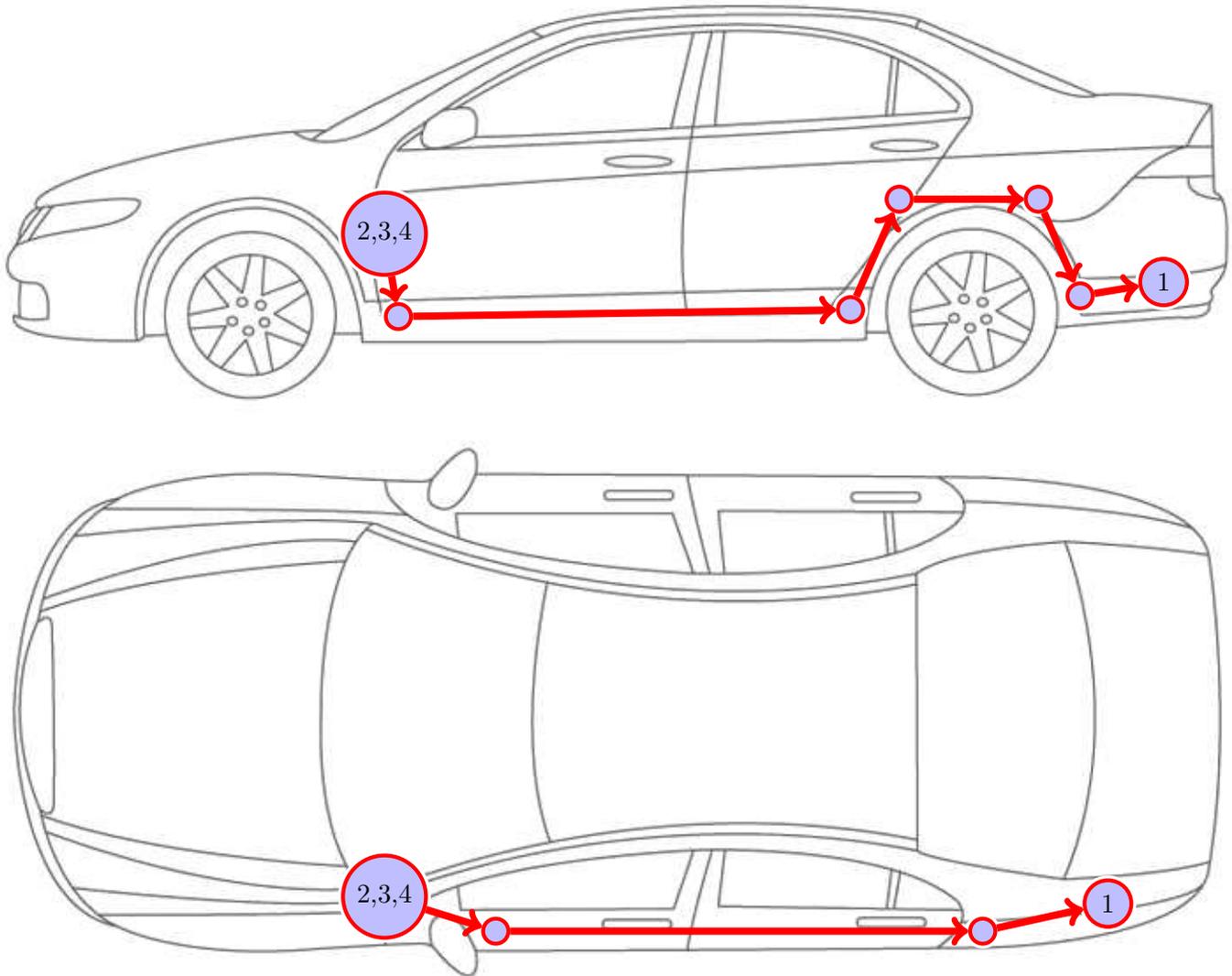


Figure 3: Vehicle overview

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

10 Assembly Note

Important note for the assembly

- The vehicle used for the assembly instruction was a **Audi Q7 4M**. 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 Removing trim panel driver's side

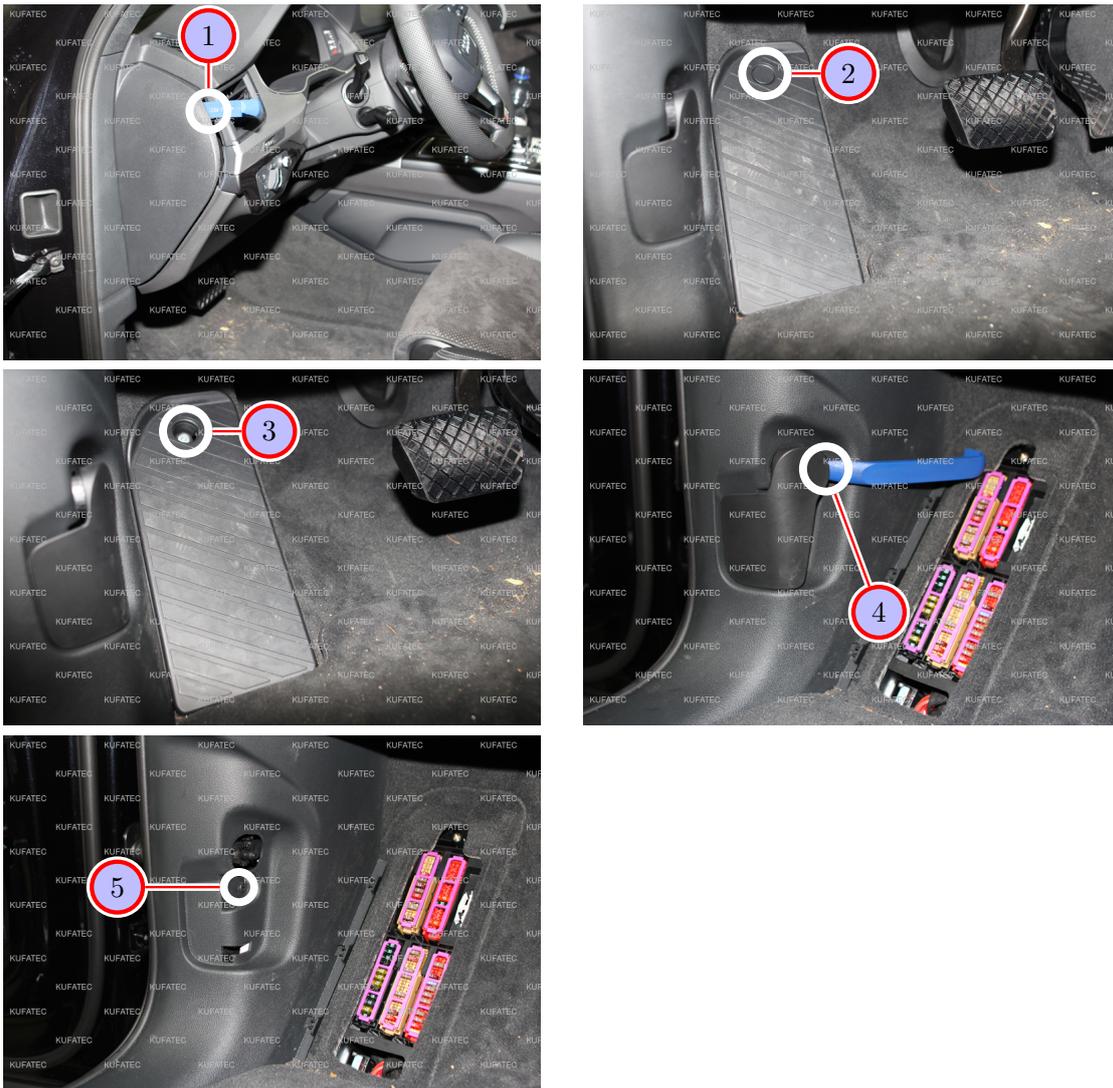


Figure 4: Removing trim panel driver's side

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

No.	Work step	Note
1	Remove the lateral trim panel of the dashboard using a trim tool.	
2	Loosen the screw cap of the footrest.	
3	Loosen the marked screw and take the footrest out.	1xT25
4	Remove the locking clip of the hood release and move the hood release off afterwards.	
5	Loosen the marked screw of the lower trim panel of the a-pillar.	1xT20



Figure 5: Removing trim panel driver's side

Table 3: Removing trim panel driver's side - instructions

No.	Work step	Note
1	Loosen the front sill trim with a trim tool.	
2	Loosen the rear sill trim and take it out afterwards.	
3	Remove the lower trim panel of the a-pillar with a trim tool.	

12 Connection Can High & Low / Ground

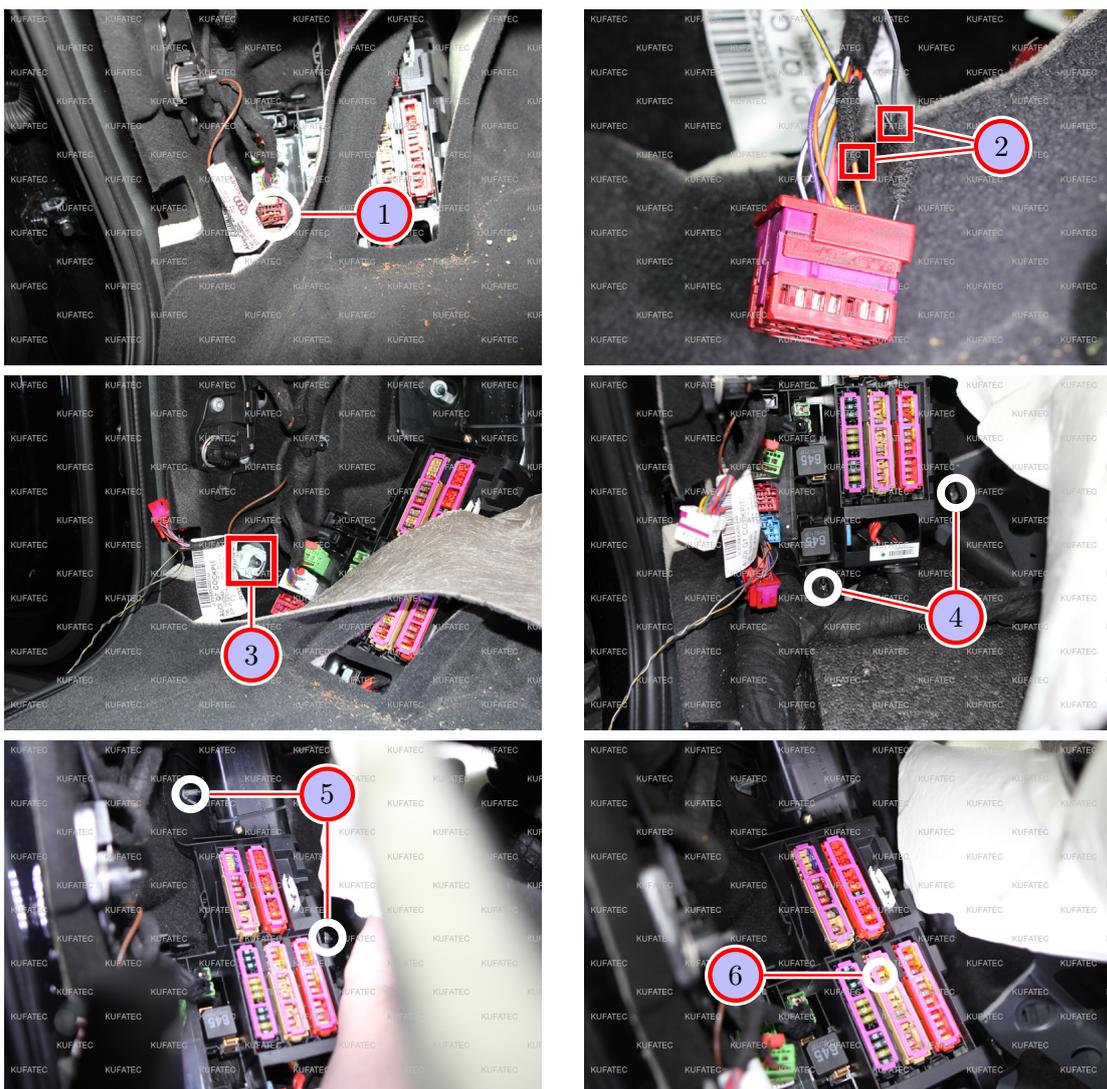


Figure 6: Connection Can High & Low / Ground

Table 4: Connection Can High & Low / Ground - instructions

Nr.	Work step	Note
1	Remove the red plug out of the cut-off point and pull it down.	
2	Connect Can High & Low to the red plug as follows: Can High (black/white) to Pin 1 (black) Can Low (black/yellow) to Pin 2 (orange/brown) If our cable set consists exclusively of grey wires, connect the wires according to the cable inscription at the end of the wires.	
3	Connect the ground cable (brown) to the marked ground spot.	1x10er socket
4	Loosen the marked screws at the bottom of the fuse box.	2x10er socket
5	Loosen the marked screws at the top of the fuse box.	2x10er socket
6	Pull the fuse box up as far as possible and remove the marked fuse carrier.	

13 Connection ignition lead / installation pushbutton

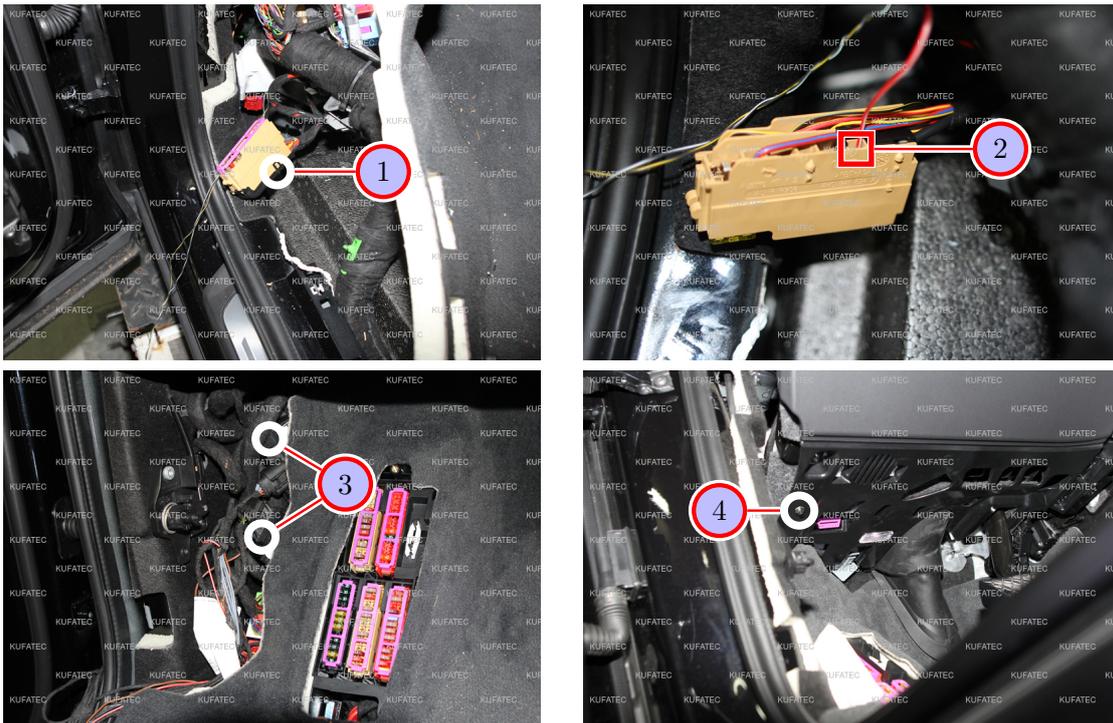


Figure 7: Connection ignition lead / installation pushbutton

Table 5: Connection ignition lead / installation pushbutton - instructions

Nr.	Work step	Note
1	Loosen the covering of the fuse carrier.	
2	Place the cable for ignition lead (red/white) in a free fuse spot and afterwards protect the spot with a 7,5 ampere fuse. For this measure with a multimeter which fuse spot carries ignition lead.	
3	Connect the control unit as well as the module to the cable set and place it at the marked place under the carpet.	
4	Drill a hole for the pushbutton at the marked place and mount the pushbutton there afterwards.	7mm

14 Removing left side trim panel trunk

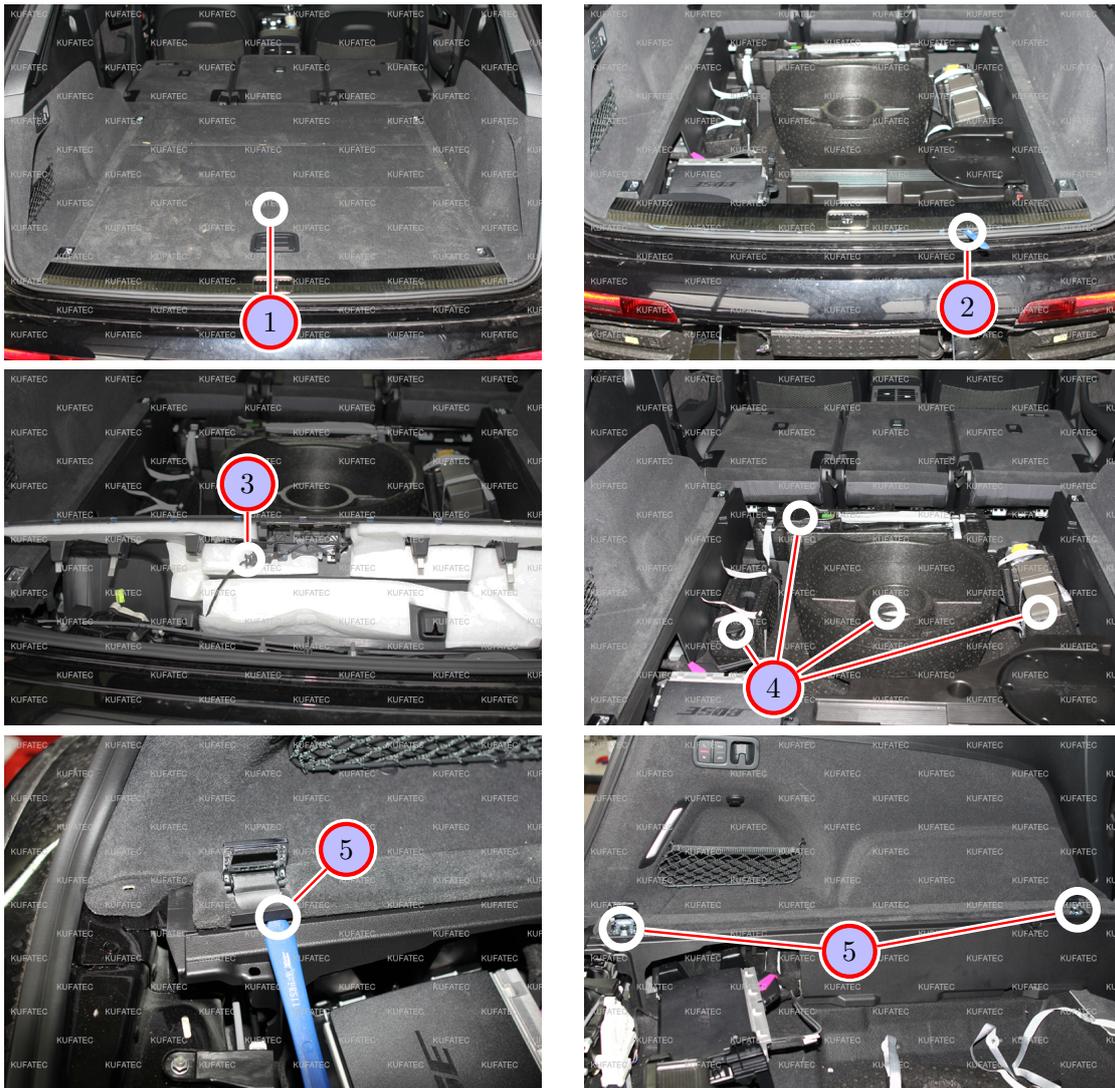


Figure 8: Removing left side trim panel trunk

Table 6: Removing left side trim panel trunk - instructions

No.	Work step	Note
1	Remove the trunk floor.	
2	Loosen the trunk sill protection with a trim tool and pull it up carefully.	
3	Remove the marked plug and take the trunk sill protection out completely afterwards.	
4	Take all foam inserts out of the trunk.	
5	Loosen the screw caps of the lashing eyes as well as the screws that are located behind. Afterwards the lashing eyes can be taken out.	2xVZ8

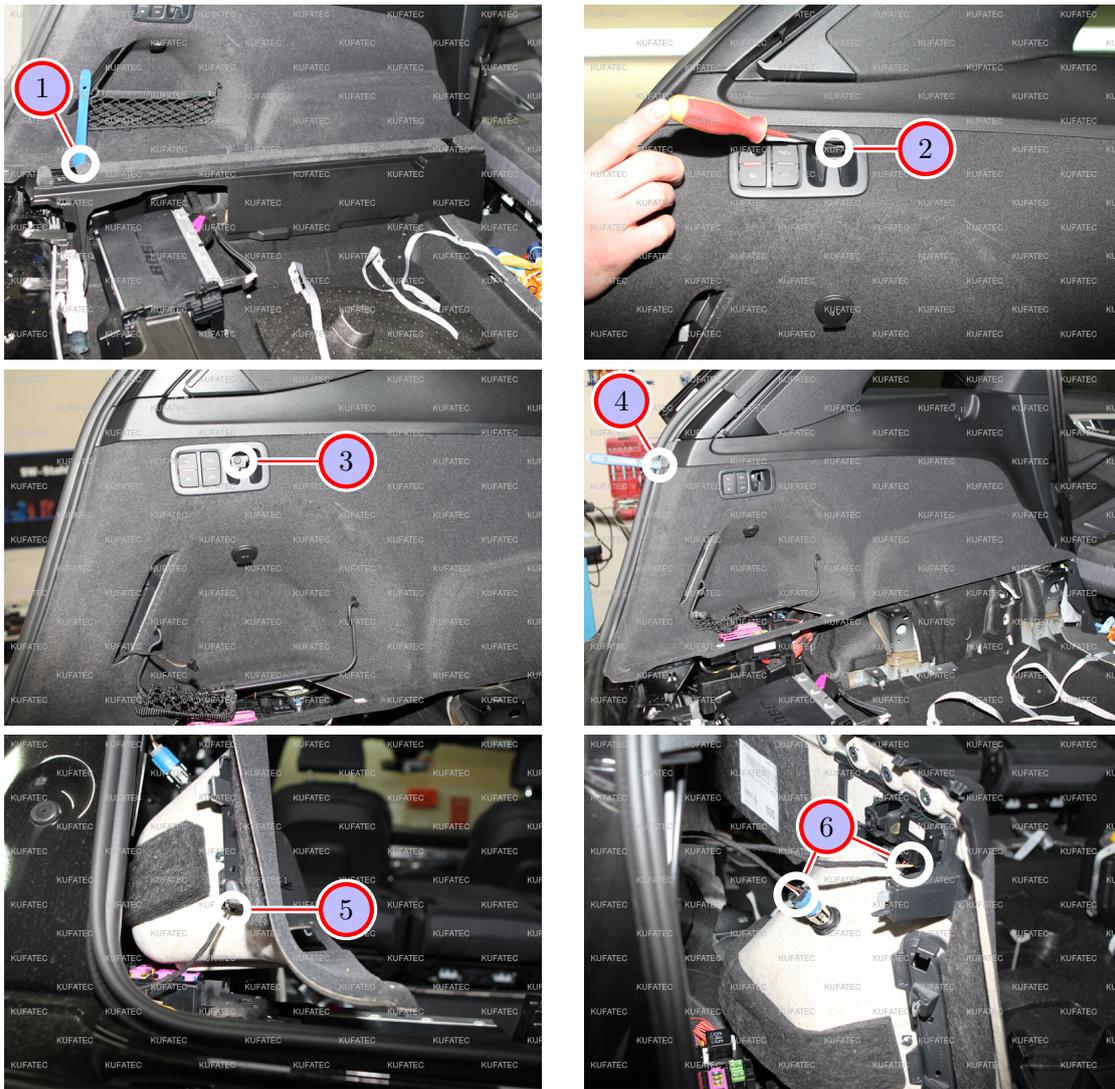


Figure 9: Removing left side trim panel trunk

Table 7: Removing left side trim panel trunk - instructions

No.	Work step	Note
1	Remove the lower covering of the side trim panel by loosening it behind with a trim tool and taking it out forward. Pay attention that snap-fits are located in front (behind the back seats), that can be loosened by pulling them slightly up.	
2	Loosen the screw cap behind the lashing eye.	
3	Loosen now the screw that is located behind.	1xT20
4	Loosen the lateral trim panel with a trim tool and move it off carefully.	
5	Remove the plug of the trunk light.	
6	Remove the two other plugs and afterwards take the side trim panel out.	

15 Removing fuse box trunk / cable routing

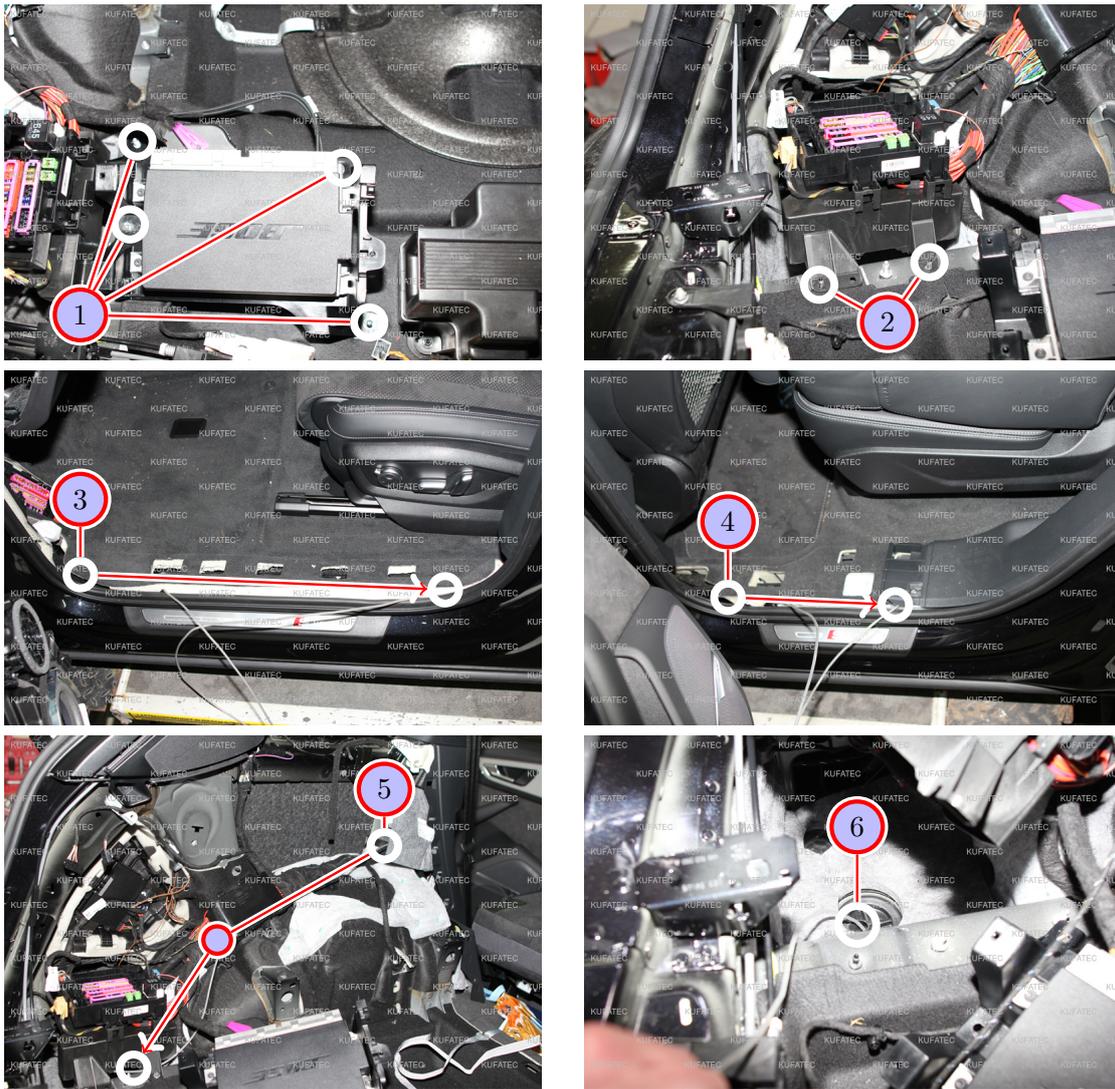


Figure 10: Removing fuse box trunk / cable routing

Table 8: Removing fuse box trunk / cable routing - instructions

Nr.	Work step	Note
1	Loosen the marked screws of the Bose amplifier (if installed) and pull it sideward.	4x13 socket
2	Afterwards loosen the marked screws of the fuse box.	2x10er socket
3	Route the connecting cable along the front sill trim to the b-pillar.	
4	Route now the connecting cable along the rear sill trim and guide it behind the trim panel in the trunk.	
5	Pull the connecting cable further through and route it along the original wiring harness to the fuse carrier.	
6	Pull now the fuse carrier up and guide the connecting cable through the marked grommet to the underbody.	

16 Installation sound generator

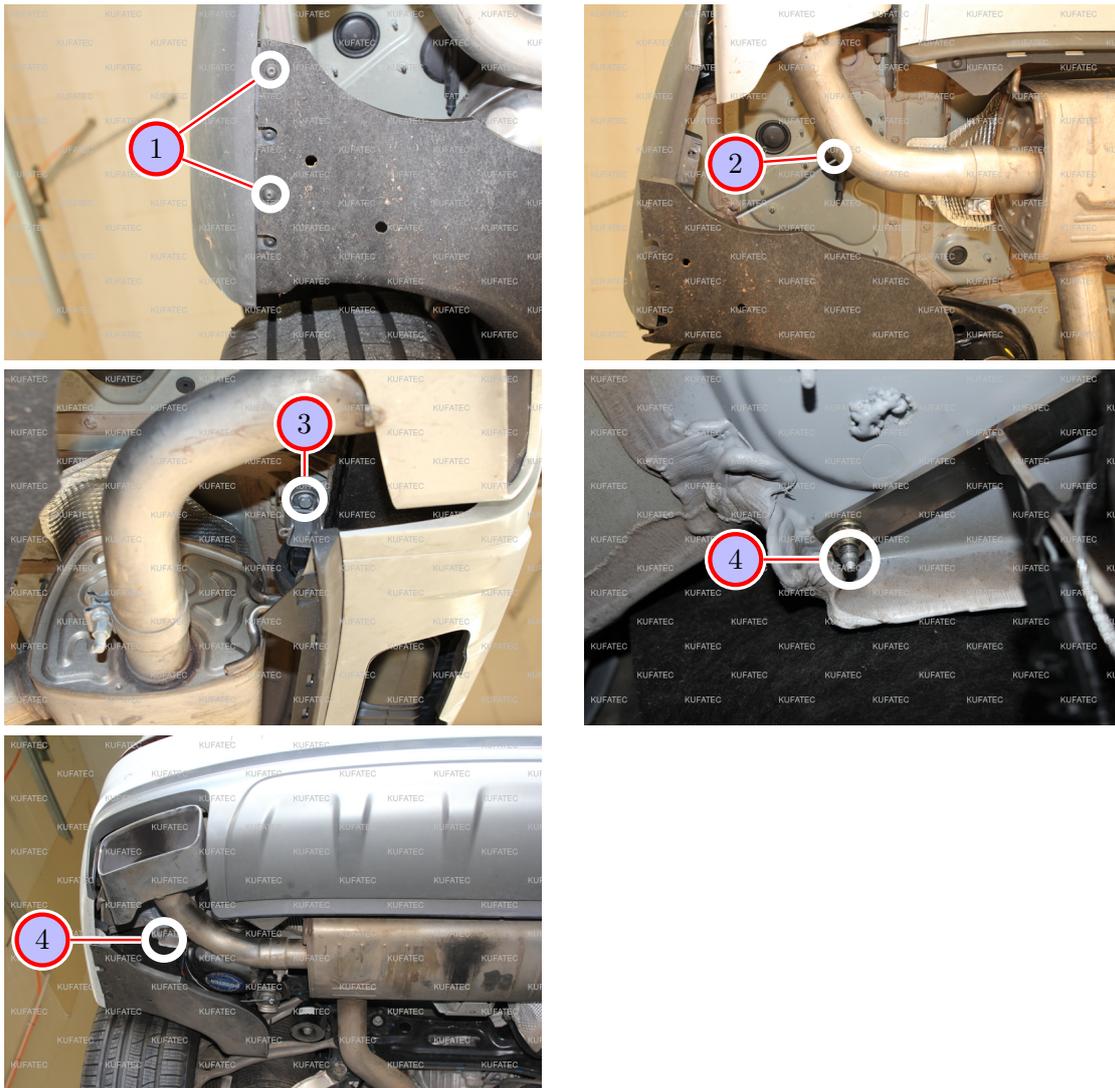


Figure 11: Installation sound generator

Table 9: Installation sound generator - instructions

Nr.	Work step	Note
1	Loosen the two marked screws of the covering at the underbody.	2xT20
2	Pull the connecting wire through the grommet.	
3	Loosen the marked screw of the exhaust bracket.	1x13er socket
4	Attach now the sound generator with the just loosened screws at the underbody and connect the connecting cable. The third mounting point is at the marked position on the underbody.	1x10er socket

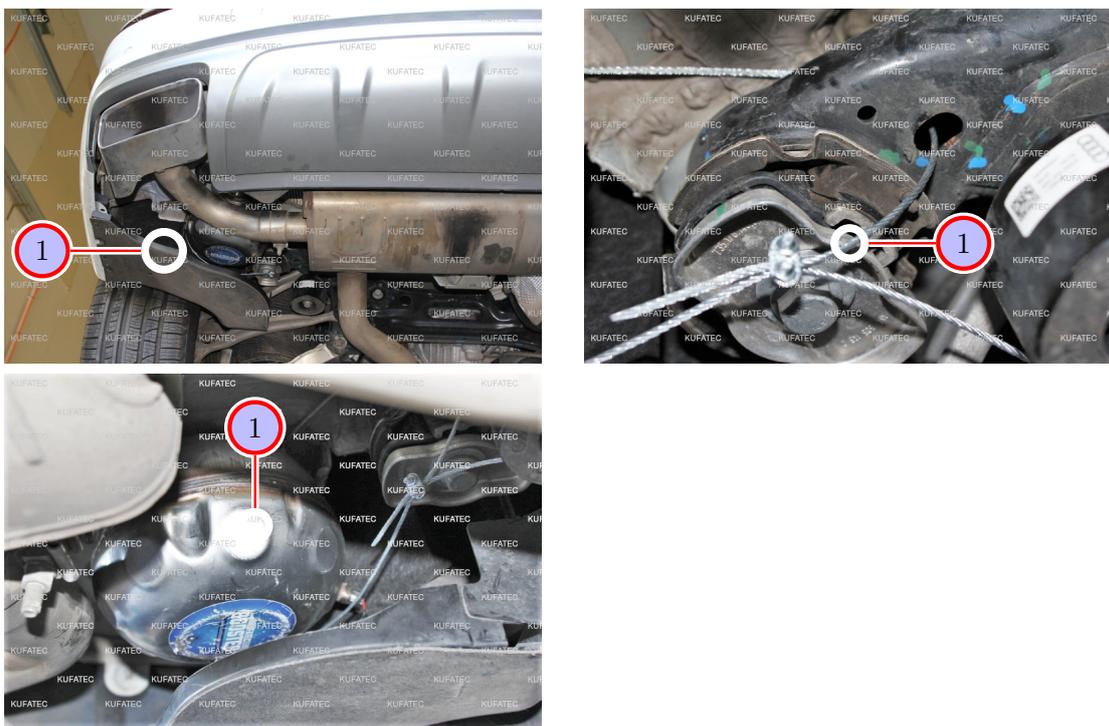


Figure 12: Installation sound generator

Table 10: Installation sound generator - instructions

Nr.	Work step	Note
1	Also attach the delivered steel wire to the sound generator and to a suitable spot on the vehicles underbody.	

17 Installation sound generator - e-tron variant

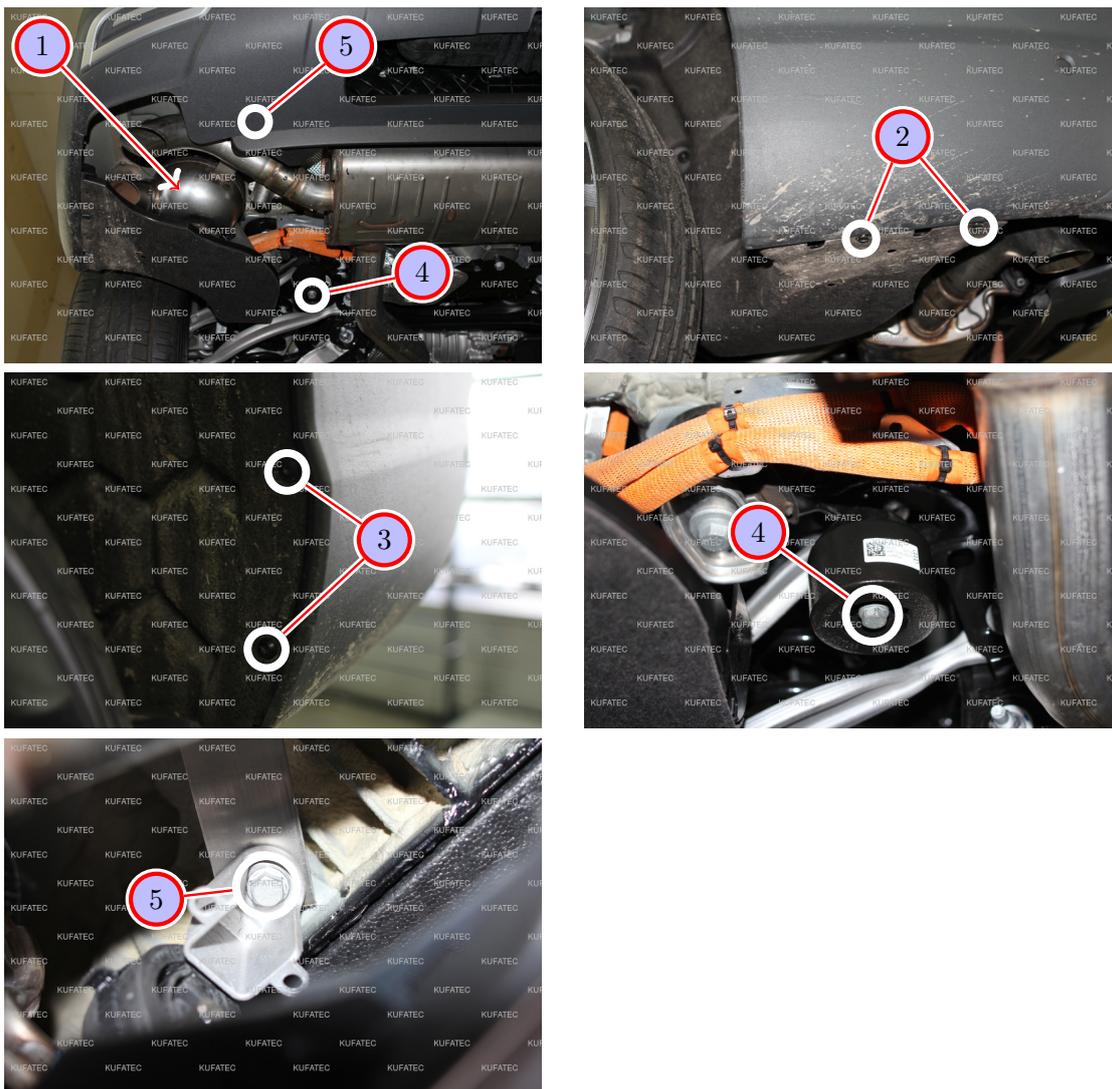


Figure 13: Installation sound generator

Table 11: Installation sound generator - instructions for e-tron variant

Nr.	Arbeitsschritt	Hinweis
1	The sound generator is mounted in the rear of the vehicle on the underbody at the driver's side. To do this, you need to remove the underbody protection at this spot.	
2	Loosen and remove the marked screws of the underbody protection at the driver's side.	2xT25
3	Also loosen and remove the marked screws in the rear wheel housing on the driver's side. Remove the underbody protection afterwards.	2xT25
4	Loosen the marked screw.	1x16er Nut
5	Loosen the screw at the marked position. Attach the sound generator to this screw and to the one you've loosened before in step 4. Also attach the delivered steel wire to the sound generator and to a suitable spot on the vehicles underbody.	1x13er Nut

18 LED Status Display / Troubleshooting

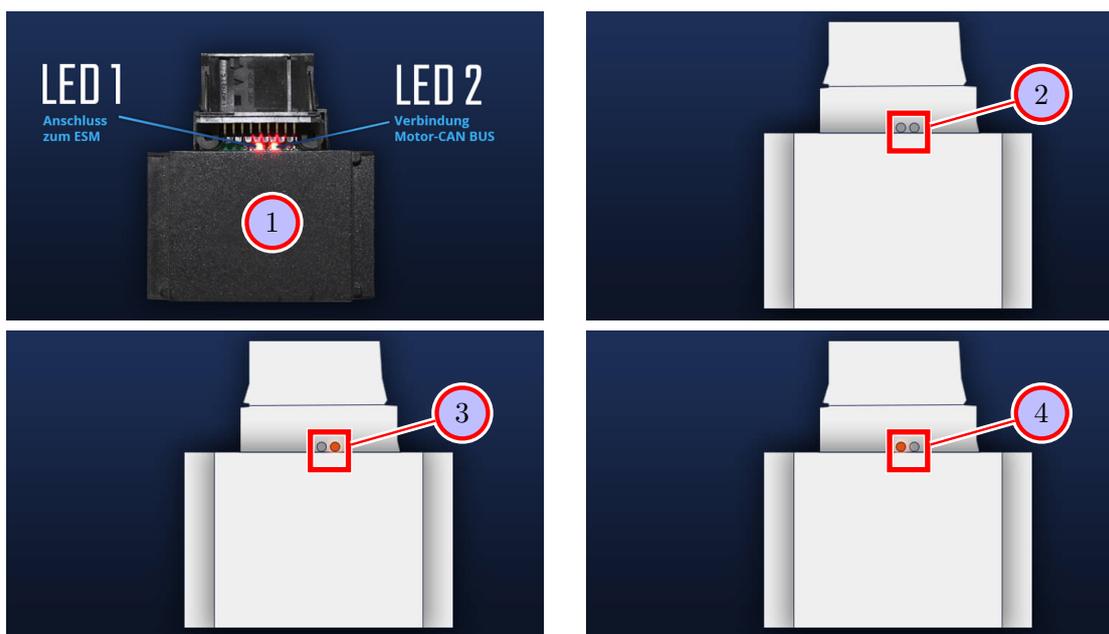


Figure 14: LED Status Display / Troubleshooting

Table 12: Instructions for the LED Status Display / Troubleshooting

No.	Work step	Note
1	If the system has been installed as described, the ignition can be turned on. After turning on the ignition, the LED 1 flashes every second and the LED 2 flickers very fast. If that is the case, the system is ready to be used.	
2	If no LED shines on our module, please proceed as follows: Cause 1: Check the connection of the power supply (ignition plus, ground, fuse). Cause 2: The module has been damaged during the installation. If that is the case, reach out to us via email info@kufatec.de using the invoice number and providing a short error description.	
3	If LED 1 doesn't flash, please proceed as follows: Step 1: Check the connection to the ESM (External Sound Module). It is possible, that the plug isn't properly snapped in. Step 2: Check the connection of the power supply (ignition plus, ground, fuse).	
3	If LED 2 doesn't shine, please proceed as follows: Step 1: Check the connection to the ESM (External Sound Module). It is possible, that the plug isn't properly snapped in. Step 2: Check the connection of CAN High & Low.	

19 Assembling the vehicle

Notes for assembling the vehicle

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

20 Software

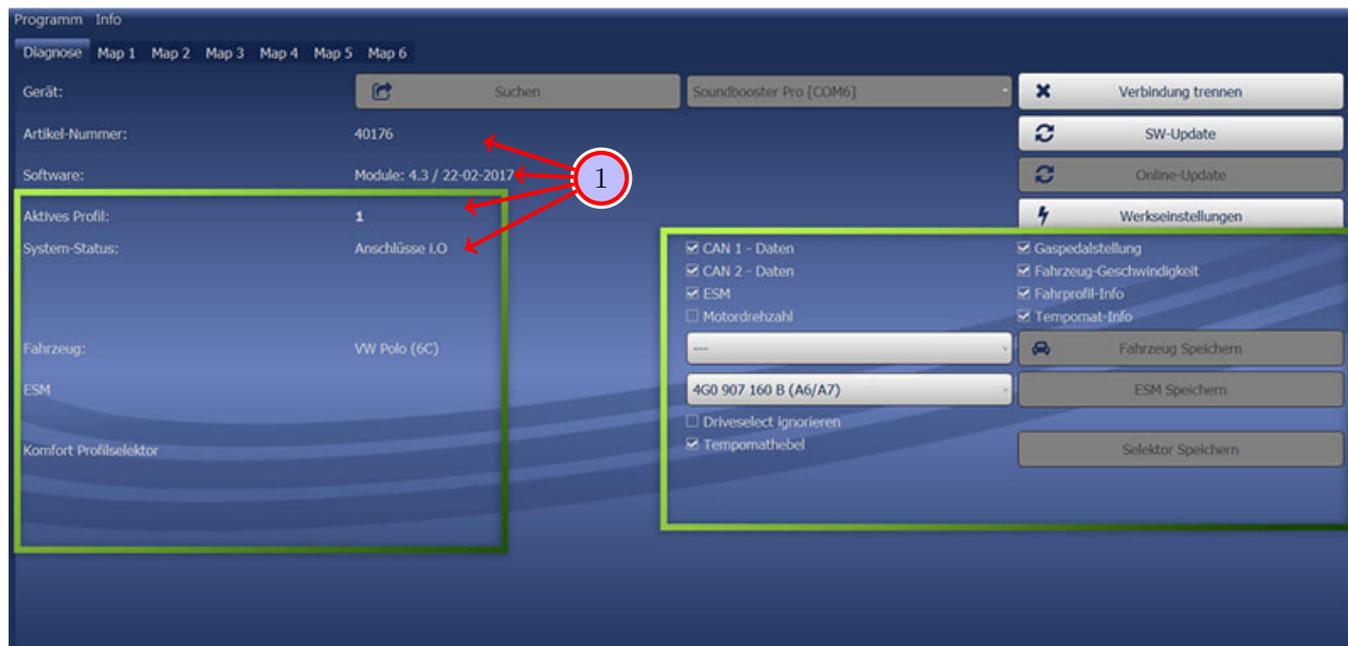


Figure 15: Software

Table 13: 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.	

21 Software

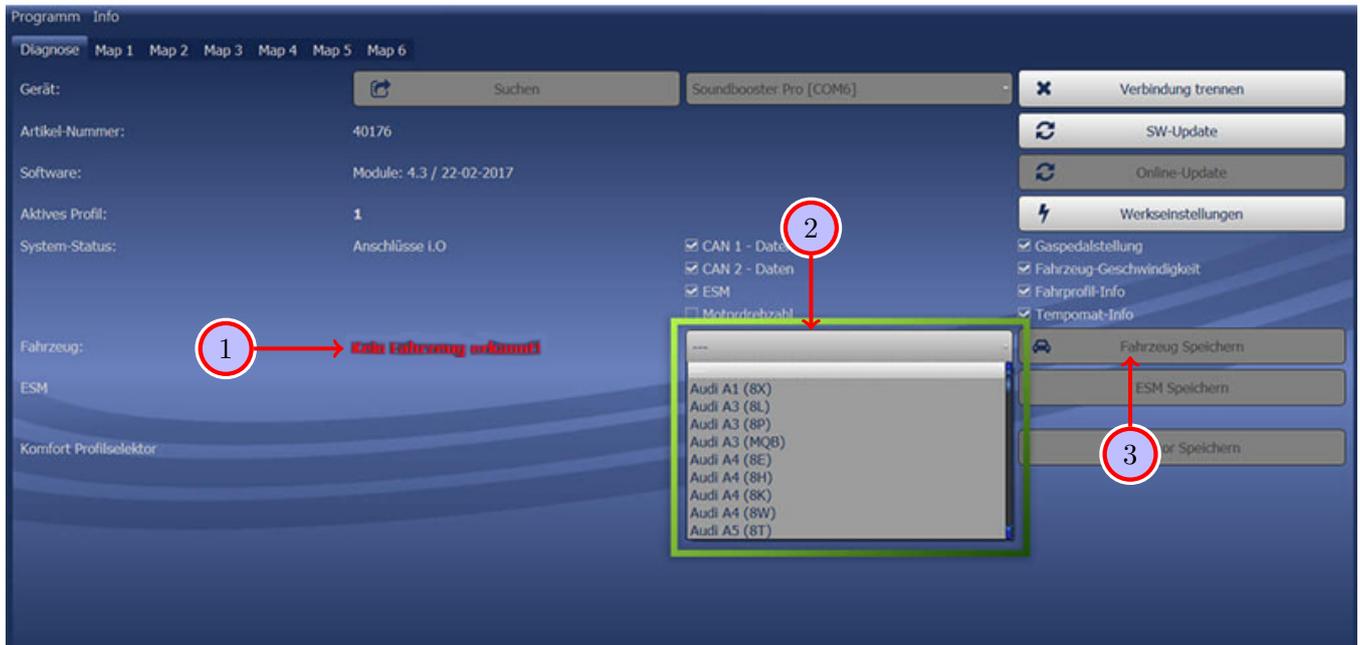


Figure 16: Software

Table 14: 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).	

22 Software

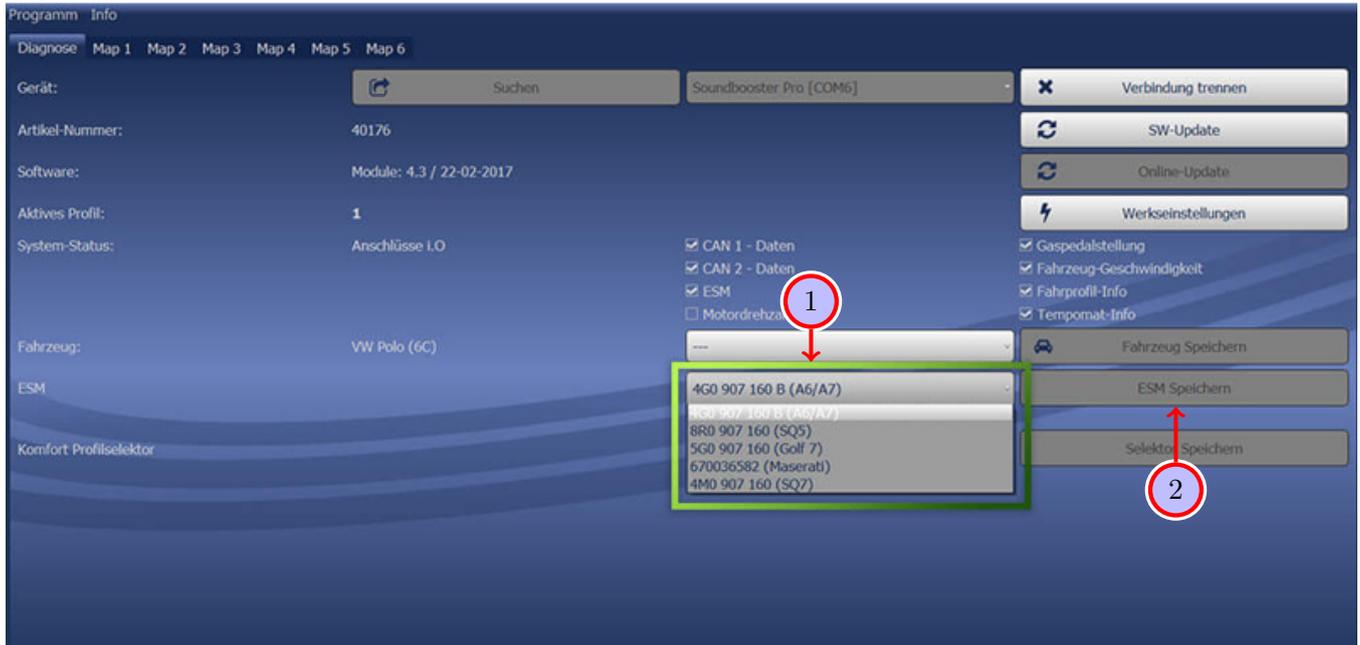


Figure 17: Software

Table 15: 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.	

23 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.

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