



Installation Instructions

Complete Set active Sound including Soundbooster

Mercedes ML W166

v1.3 (07.12.2017)

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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

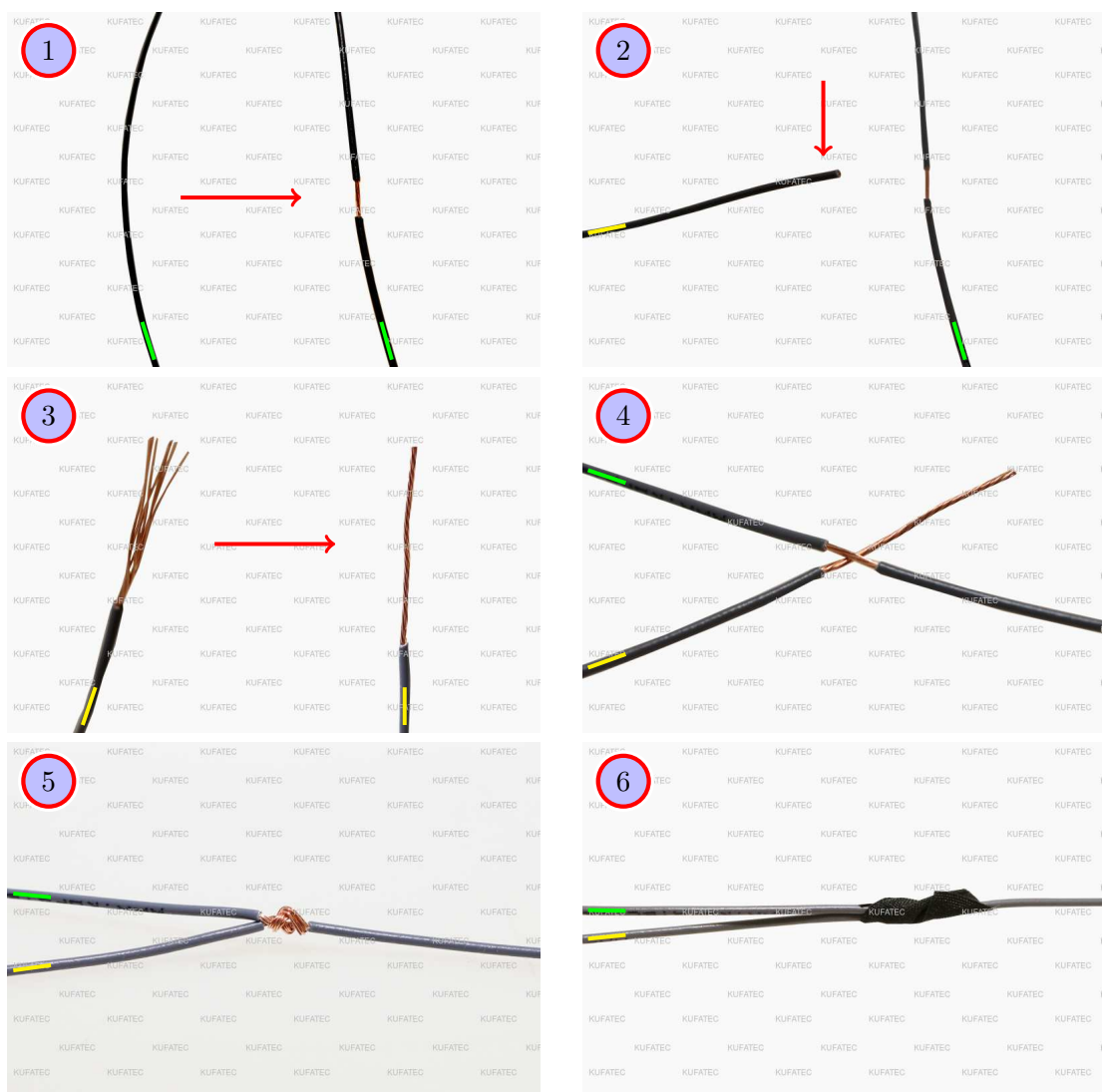


Figure 1: How to connect a cable to another

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 description shows the Cable Routing as well as the position of the single components.

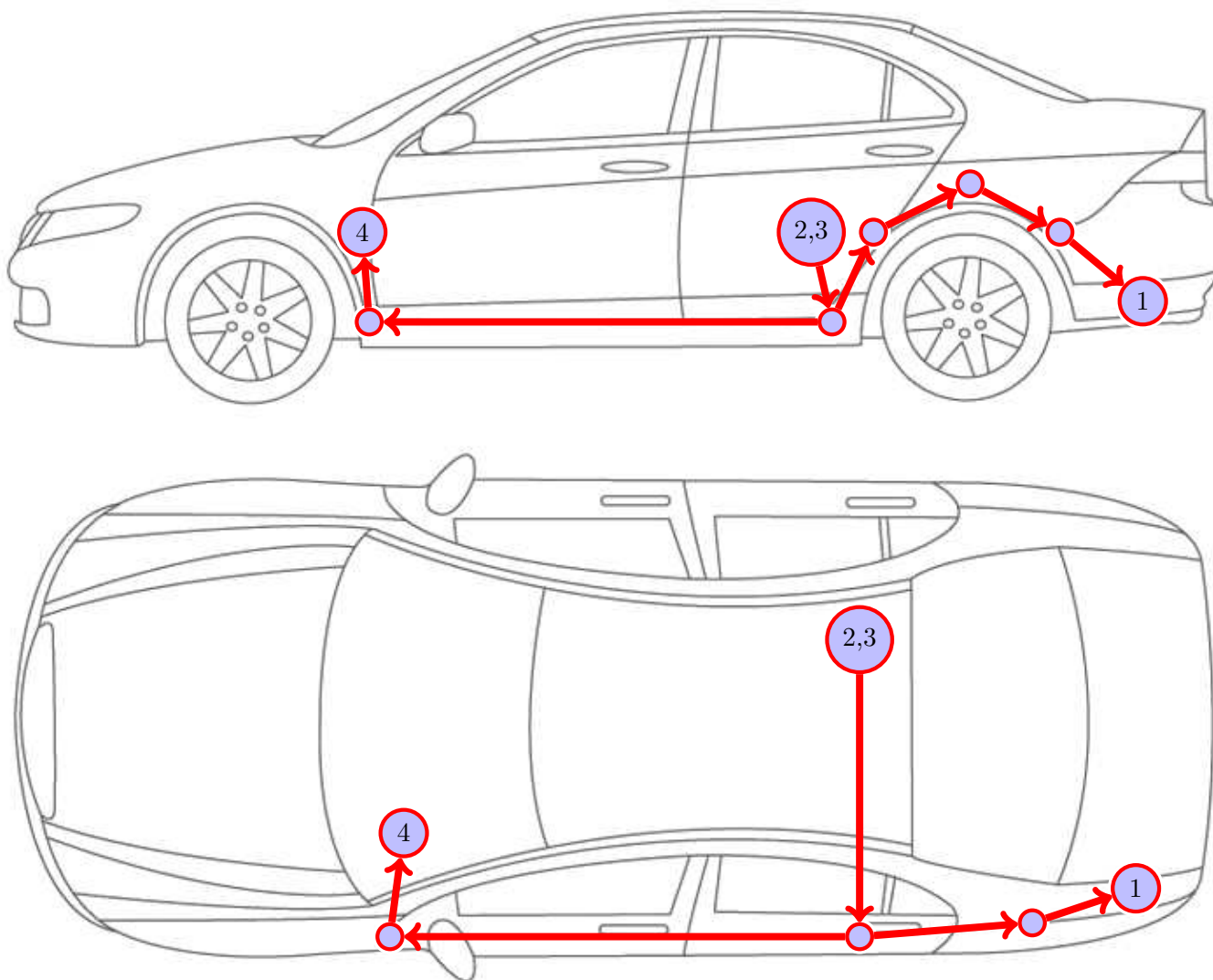


Figure 3: Car Overview

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

10 Connecting Cable Set

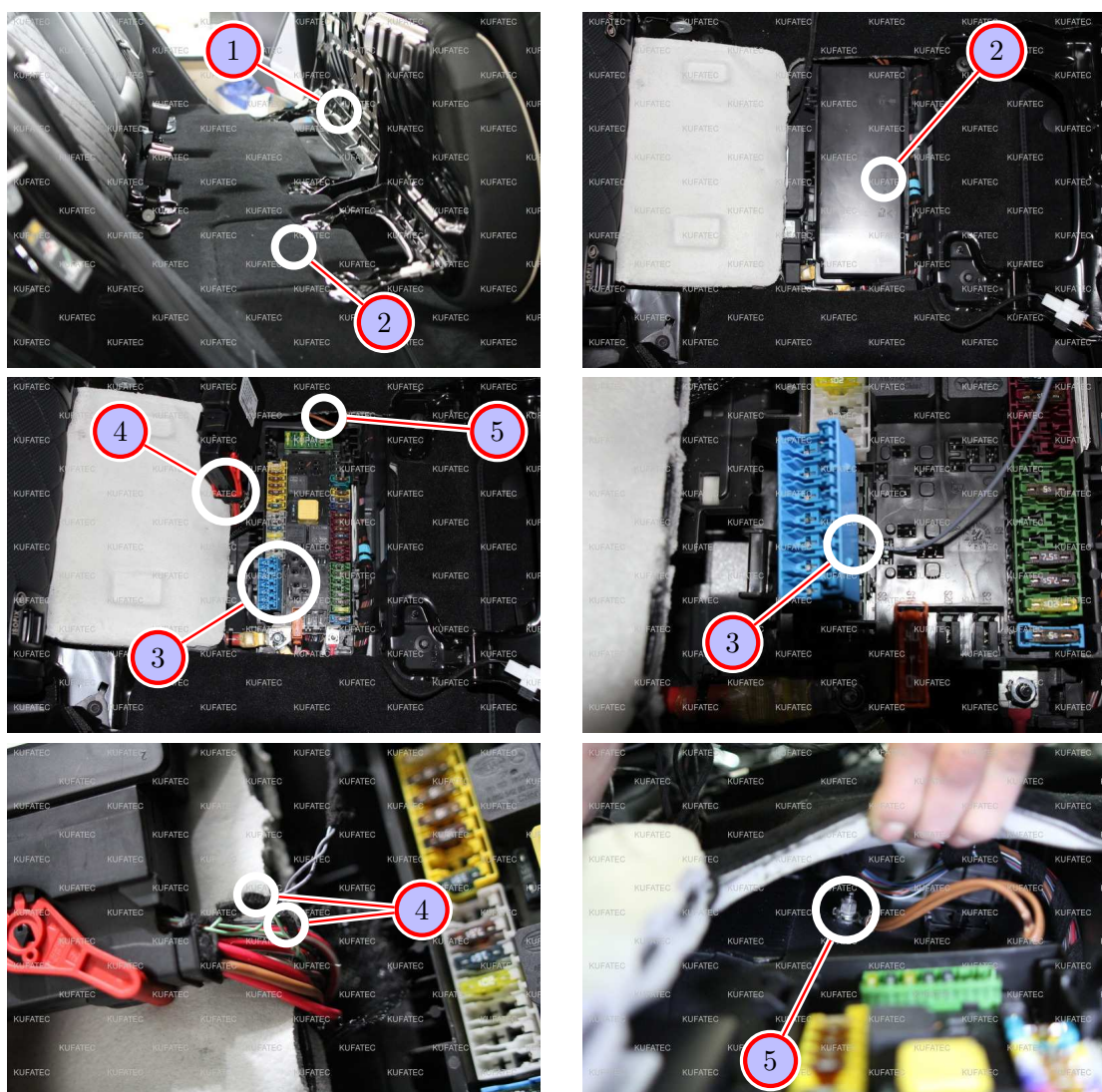


Figure 4: Pictures Connecting Cable Set

Table 2: Instructions for Connecting the Cable Set

Nr.	Procedure	Note
1	Flip the back seats upwards.	
2	Underneath the back seat fold the carpet aside to uncover the fuse case. Now remove the covering of the fuse box.	
3	Remove the fuses from the blue fuse holder as well as the relays beside it. Please note from which plug-in position you have removed which fuse or relay. Now unlock the blue fuse holder and pin the Ignition Plus Cable (red/white) from behind into a free plug-in area. Afterwards protect the spot with a 7,5 Ampere fuse.	
4	Pull the control unit out from under the carpet and connect CAN High/Low as follows (green/white and green twisted cables). CAN High (black/white) at green/white (cable colour at plug) CAN Low (black/yellow) at green (cable colour at plug)	
5	Lift the carpet at the indicated position carefully and connect the ground cable (brown) to the ground spot located underneath.	

11 Laying Sensing Device Cable

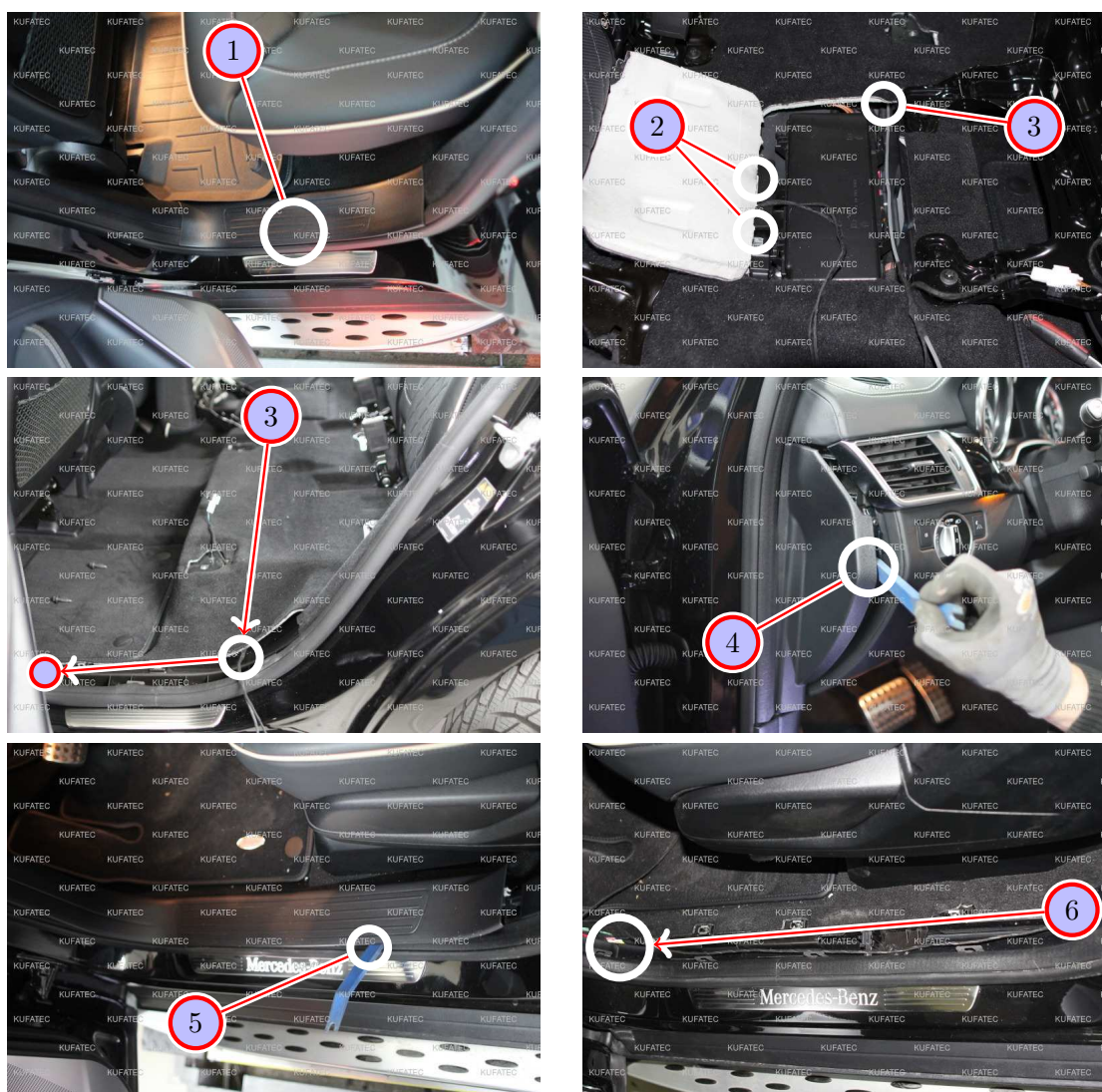


Figure 5: Pictures Laying Sensing Device Cable

Table 3: Instructions for Laying the Sensing Device Cable

Nr.	Instructions	Note
1	Remove the rear door sill trim at the driver's side by using a trim tool.	
2	Connect the Control Unit and the Sound Module with the cable set and store it at the marked position.	
3	Use a pull through aid to pull the sensing device cable underneath the carpet along the driver's side to the back and afterwards up to the B-pillar.	
4	Remove the lateral covering on the car dashboard by using a trim tool.	
5	Remove the front door sill trim at the driver's side by using a trim tool.	
6	Now continue to route the sensing device cable underneath the covering of the B-pillar to the footwell on the driver's side.	

12 Installation Sensing Device / Laying Sound Booster Cable

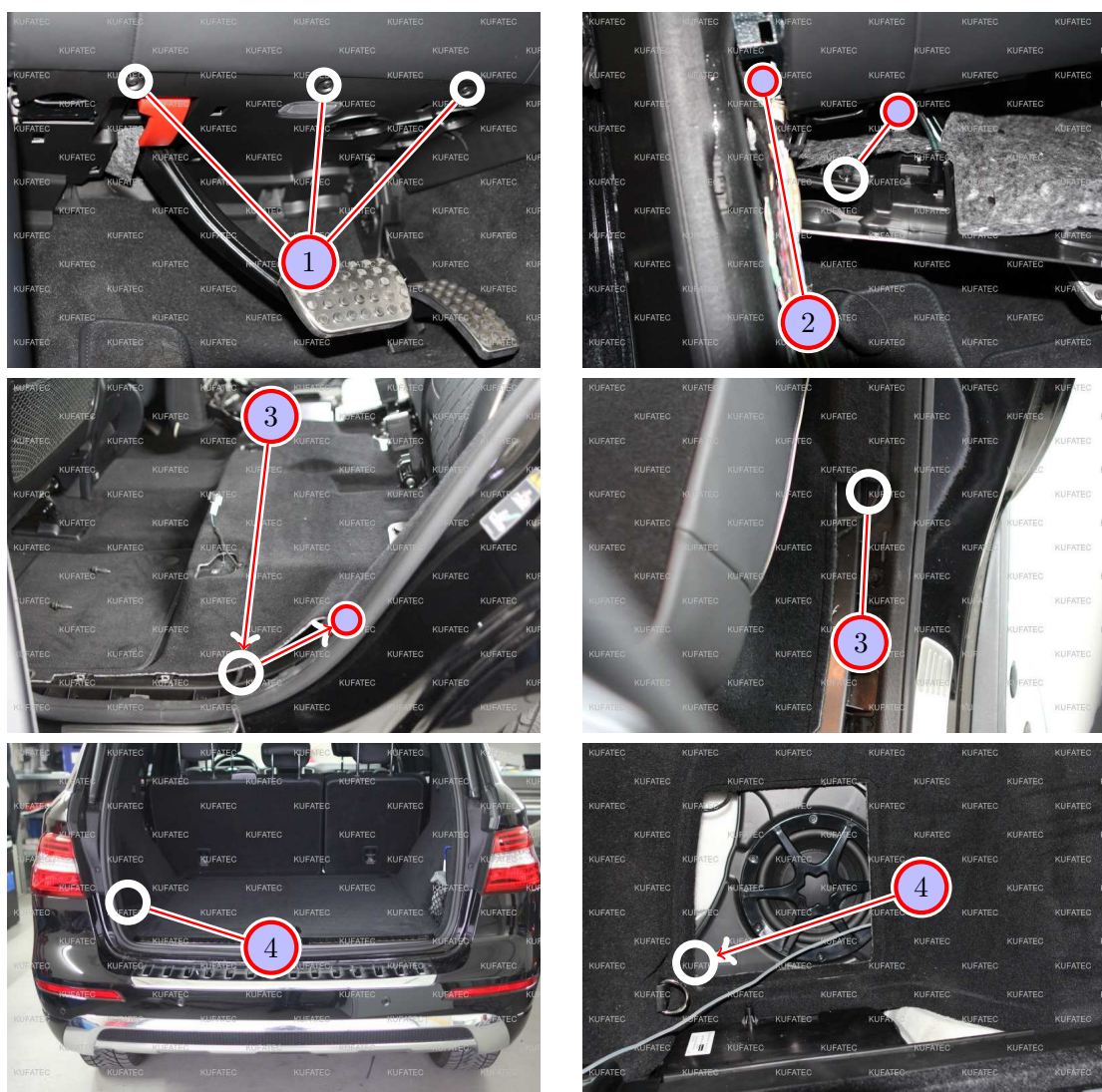


Figure 6: Pictures Installation Sensing Device / Laying Sound Booster Cable

Table 4: Installation Sensing Device / Laying Sound Booster Cable - instructions

Nr.	Procedure	Note
1	Remove the lower dashboard cover by loosen the marked screws.	
2	Route the sensing device cable upwards to the car dashboard and drill a hole for the sensing device at the marked position. Afterwards the sensing device can be installed.	
3	Use a pull through aid to pull the connecting cable for the Sound Booster underneath the carpet towards the driver's side and continue routing it behind the side covering into the trunk.	
4	Remove the lateral trunk covering at the driver's side and continue to route the connecting cable. Afterwards route the cable through the car protective sleeve down to the underbody.	

13 Installation Sound Booster

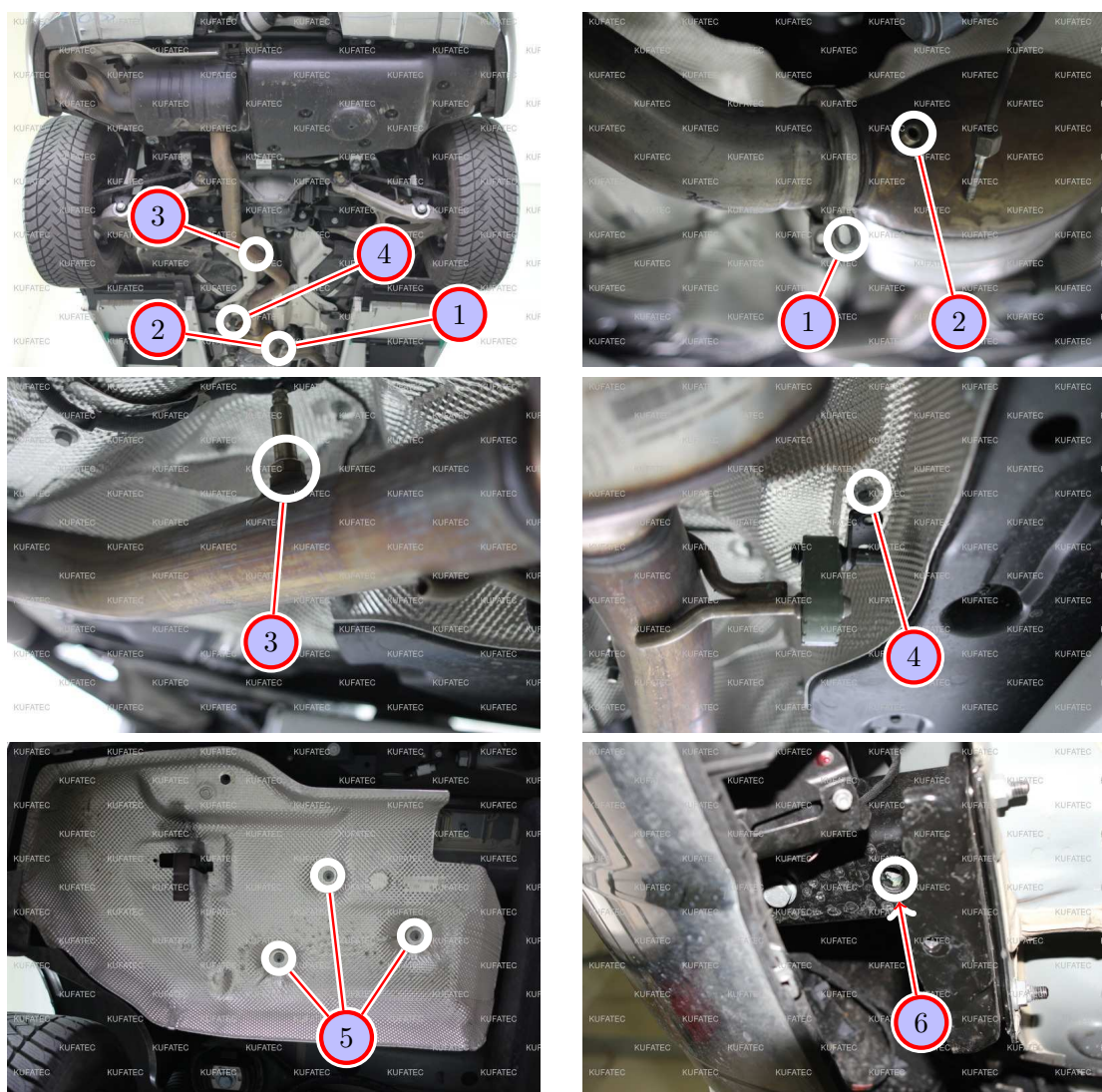


Figure 7: Pictures Installation Sound Booster

Table 5: Instructions for Installation of the Sound Booster

Nr.	Procedure	Note
1	Release the screw of the clamp at the marked position.	E14 Star Key
2	Release the sensor of the middle sound absorber.	17er
3	Remove the sensor of the exhaust pipe between end sound absorber and middle sound absorber.	20er
4	Release and remove the screws for the exhaust mounting. Afterwards the exhaust pipe can be removed.	13er Nut
5	Remove the heat protection plate by loosen the indicated screws.	8er Nut
6	Loosen the marked screw at the crash protection.	19er Nut

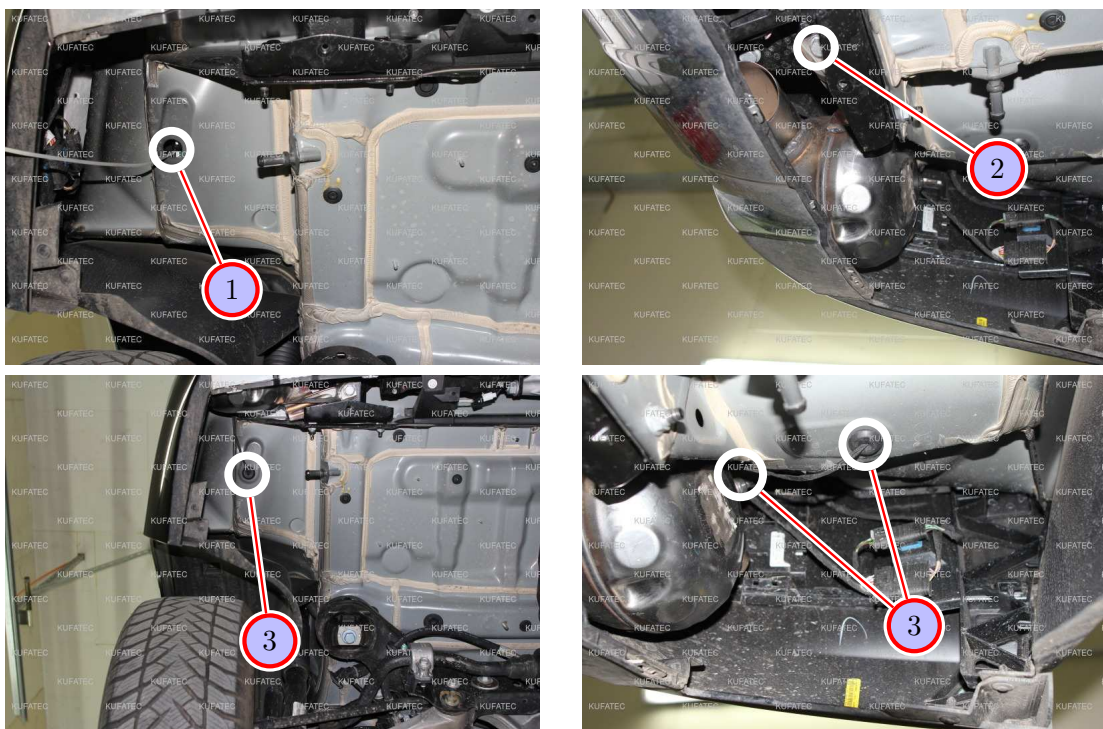


Figure 8: Pictures Installation Sound Booster Part 2

Table 6: Instructions for the Installation of the Sound Booster Part 2

Nr.	Procedure	Note
1	Remove the marked rubber grommet and pull the connecting cable for the sound booster through it.	
2	Now install the sound booster with the screw you removed before.	19er Nut
3	Afterwards close the crash protection with the rubber grommet and waterproof it additionally.	

14 Software

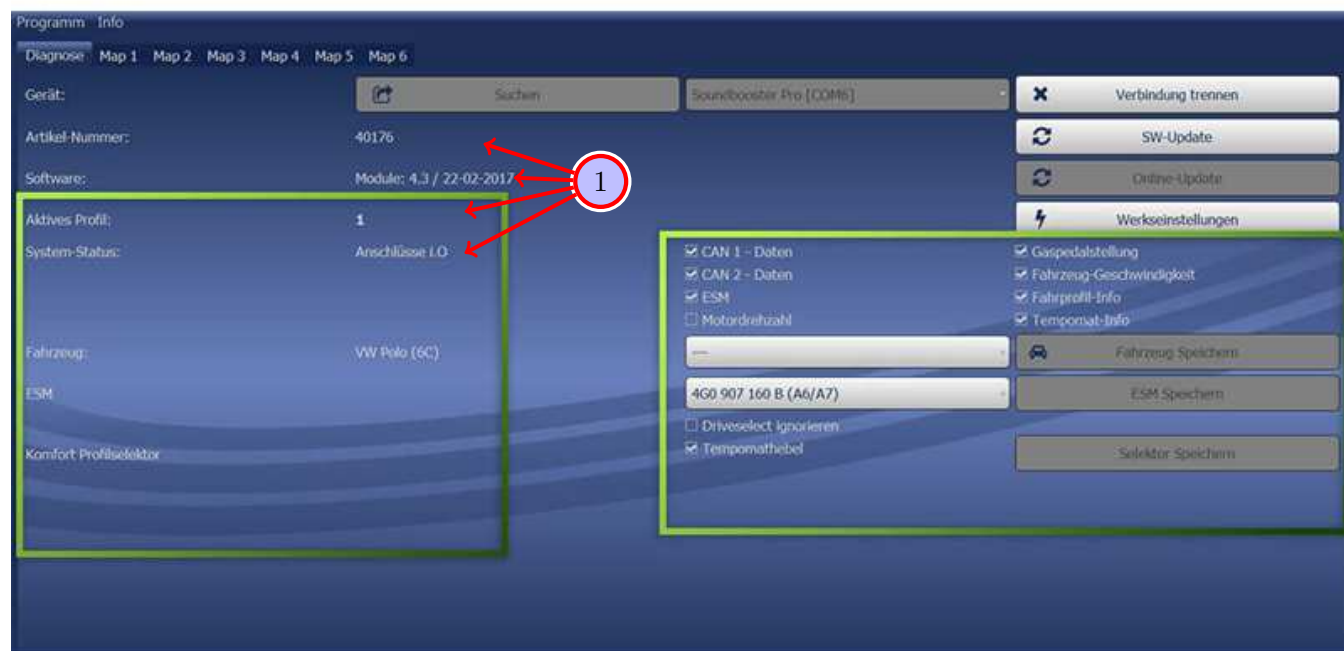


Figure 9: Software

Table 7: 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.	

15 Software

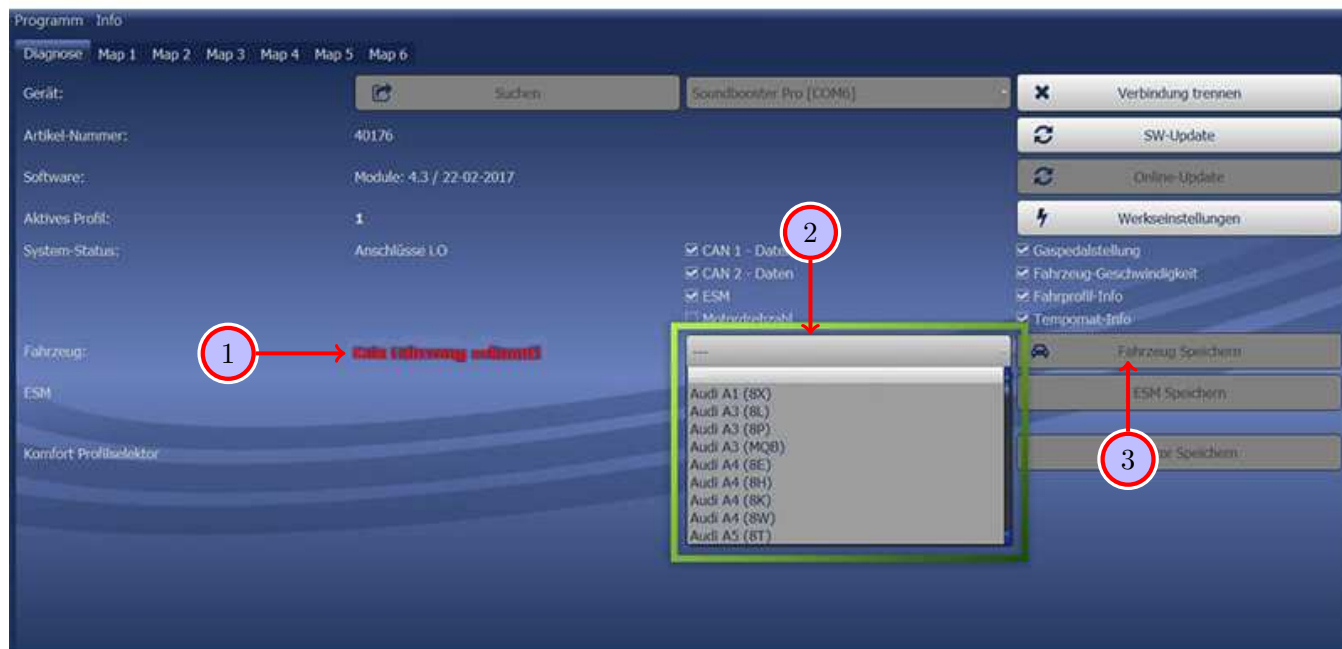


Figure 10: Software

Table 8: 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).	

16 Software

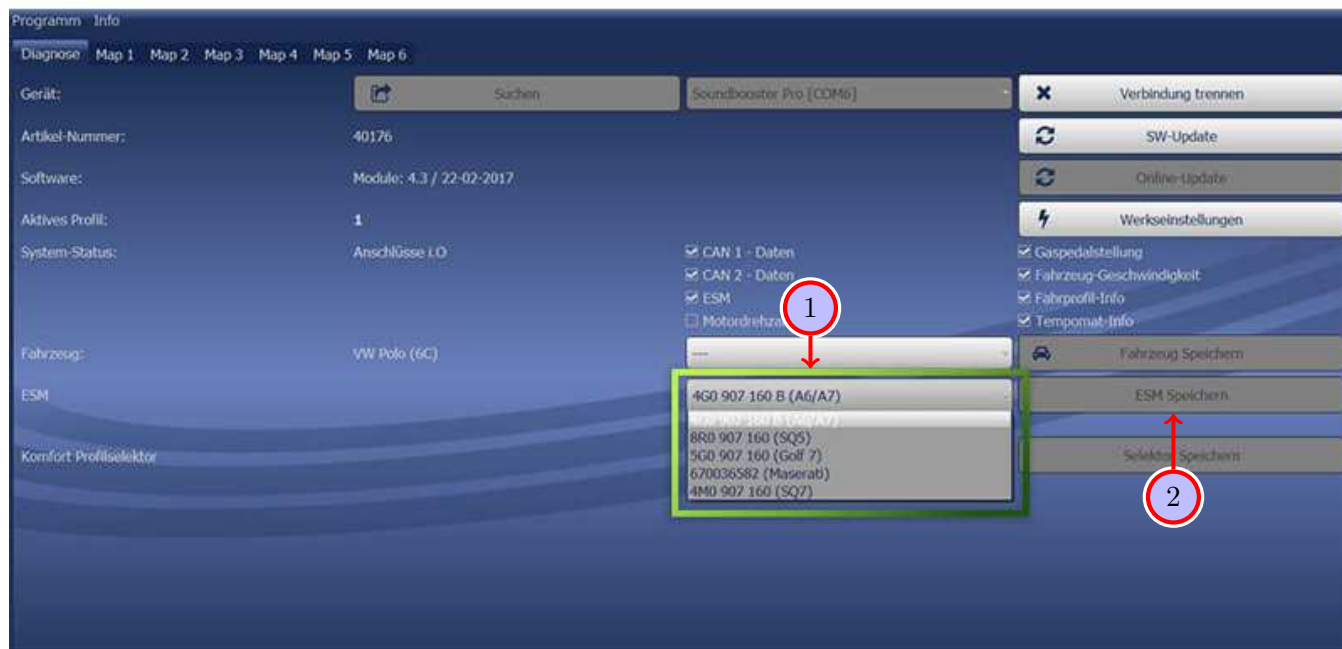


Figure 11: Software

Table 9: 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 4G0 907 160 B (A6/A7) . If you install the Maserati Control unit you need to choose 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.	

17 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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