



Installation Instructions

Complete set active Sound incl. Soundbooster

Volvo XC60

v1.0 (02.09.2016)

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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.

7 Assembly Instructions

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

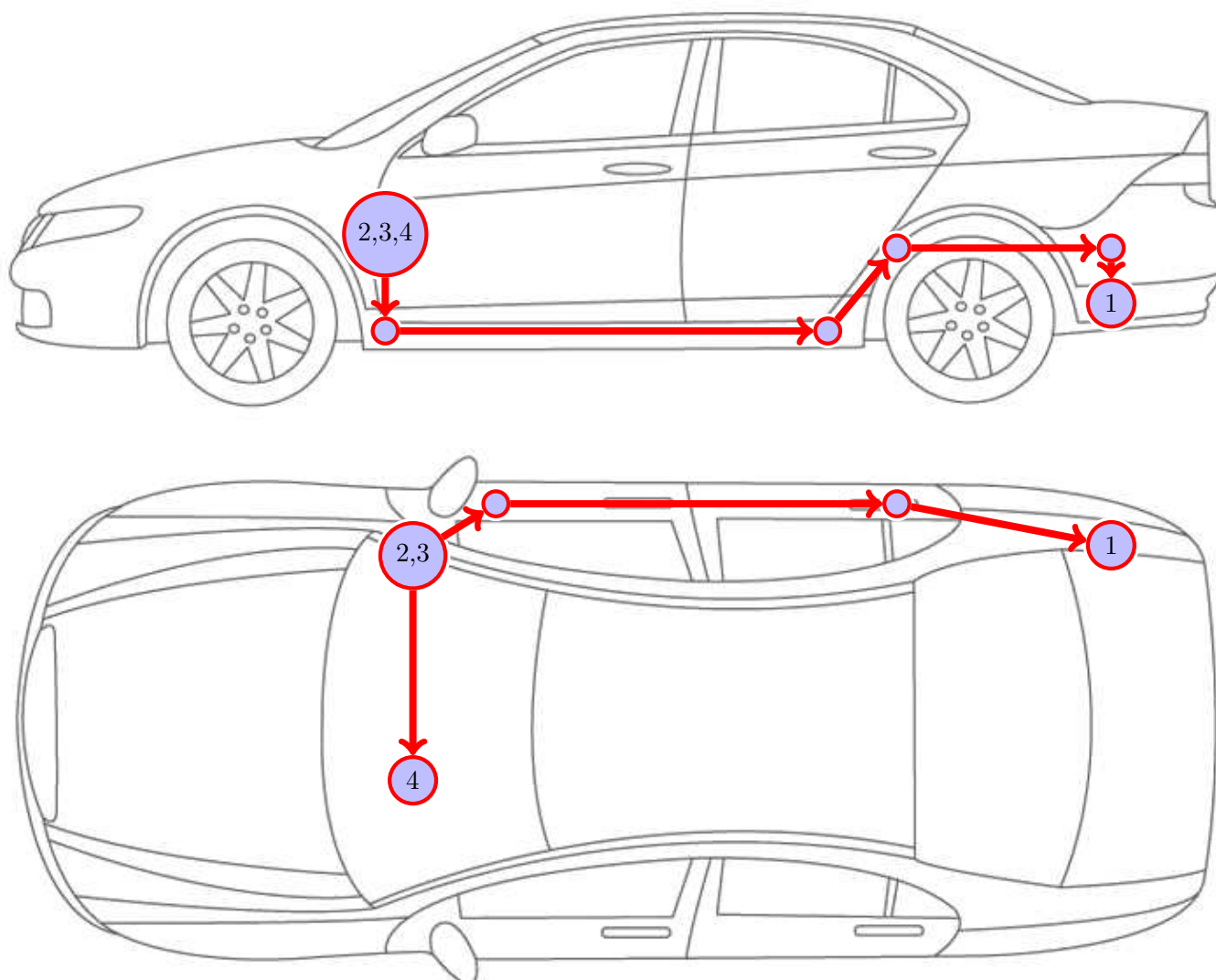


Figure 1: Vehicle overview

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

8 Removing glove compartment

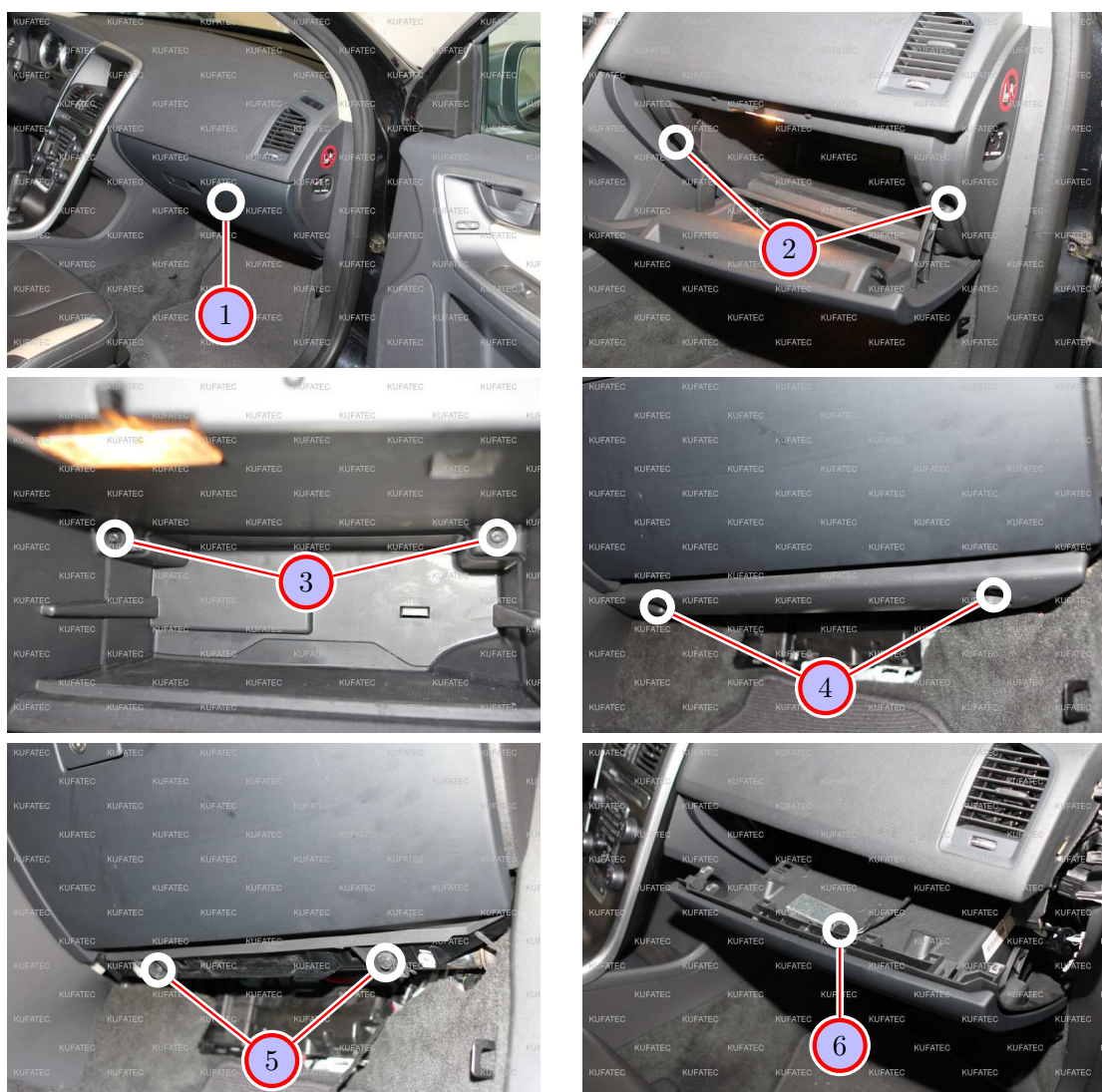


Figure 2: Removing glove compartment

Table 1: Removing glove compartment - instructions

| Nr. | Work step | Note |
|-----|---|--------------|
| 1 | Open the glove compartment. | |
| 2 | Loosen the two marked screws on the right and on the left of the glove compartment. | 2xT25 |
| 3 | Loosen also the two marked screws in the interior of the glove compartment. | 2xT25 |
| 4 | Now remove the trim panel under the glove compartment by loosening the two marked screws and folding the trim panel down. | 2xT25 |
| 5 | Remove the two marked screws under the covering and pull the glove compartment out from behind carefully. | 2x8er socket |
| 6 | Loosen the marked plug and take the glove compartment out completely afterwards. | |

9 Connection ground / ignition lead / CAN High & Low

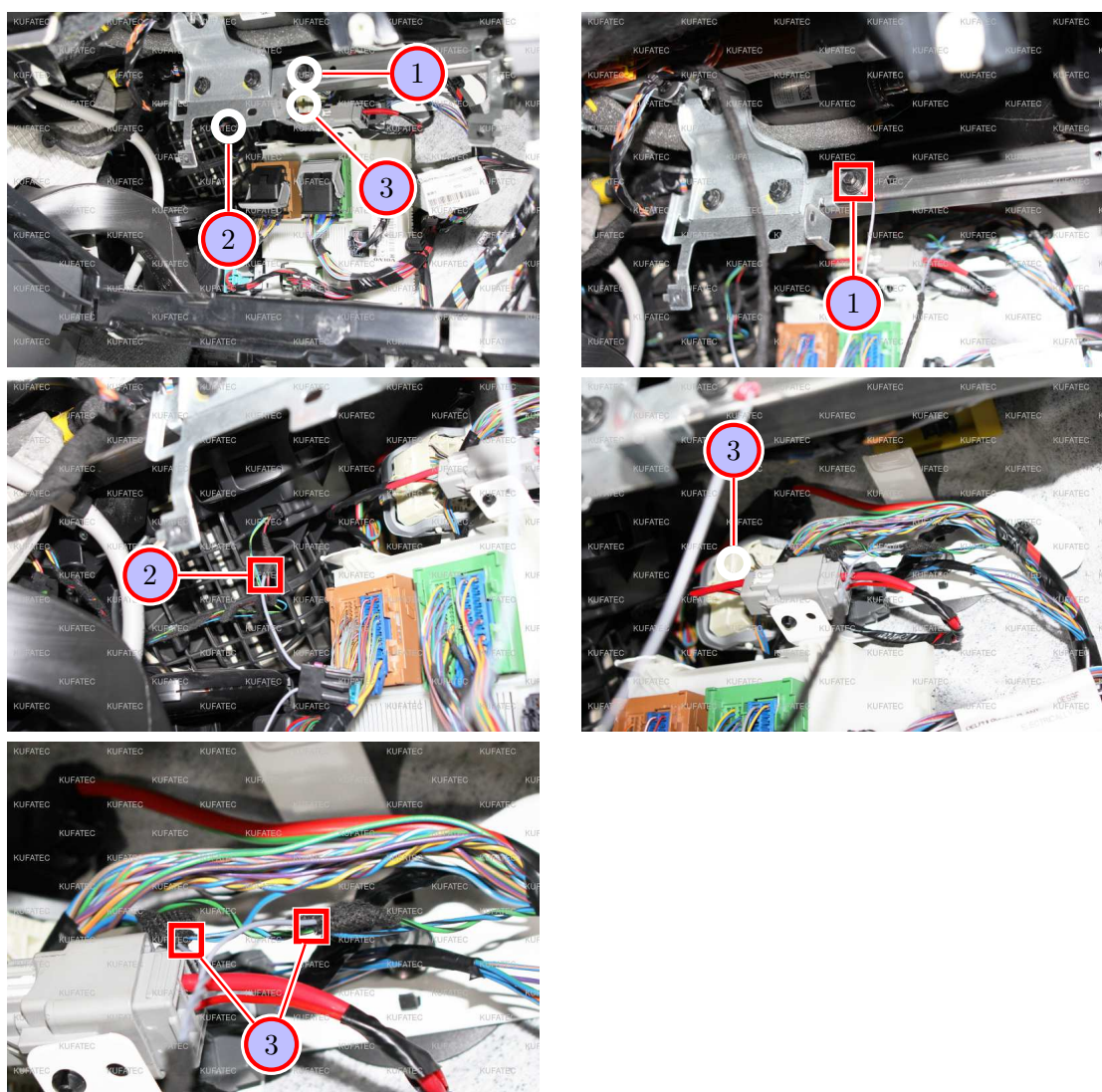


Figure 3: Connection ground / ignition lead / CAN High & Low

Table 2: Connection ground / ignition lead / CAN High & Low - instructions

| Nr. | Work step | Note |
|-----|---|------------|
| 1 | Connect the ground cable to the marked screw behind the glove compartment. | 8er socket |
| 2 | Connect the cable for ignition lead also to the black plug of the servomotor of the heater blower to PIN 1 (colour of the cable at the plug = red). | |
| 3 | Connect CAN High & Low also to the marked white plug with the grey locking handle as follows: | |
| | - CAN High to PIN 44 (colour of the cable at the plug = blue/black) | |
| | - CAN Low to PIN 45 (colour of the cable at the plug = green/black) | |

10 Routing connecting cable sound generator

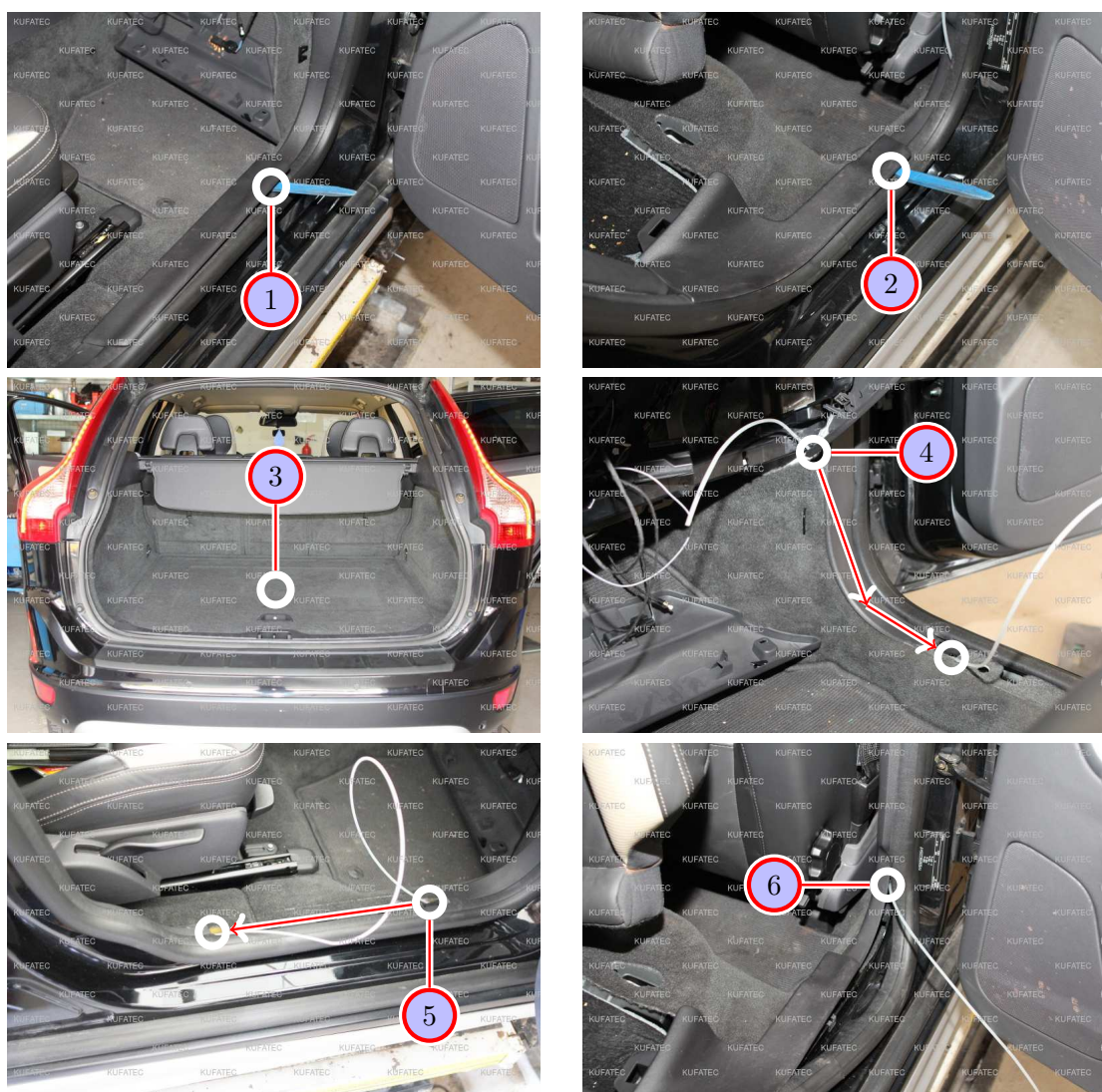


Figure 4: Routing connecting cable sound generator

Table 3: Routing connecting cable sound generator - instructions

| Nr. | Work step | Note |
|-----|---|------|
| 1 | Remove the front sill trim on the passenger's side using a trim tool. | |
| 2 | Loosen the rear sill trim on the passenger's side with a trim tool. | |
| 3 | Fold the trunk floor up. | |
| 4 | Now guide the connecting cable for the sound generator with a pull through aid from the glove compartment behind the trim panel to the sill trim. | |
| 5 | Route the cable further along the front sill trim. | |
| 6 | Pull the connecting cable with the pull through aid behind the trim panel of the B-pillar rearwards. | |

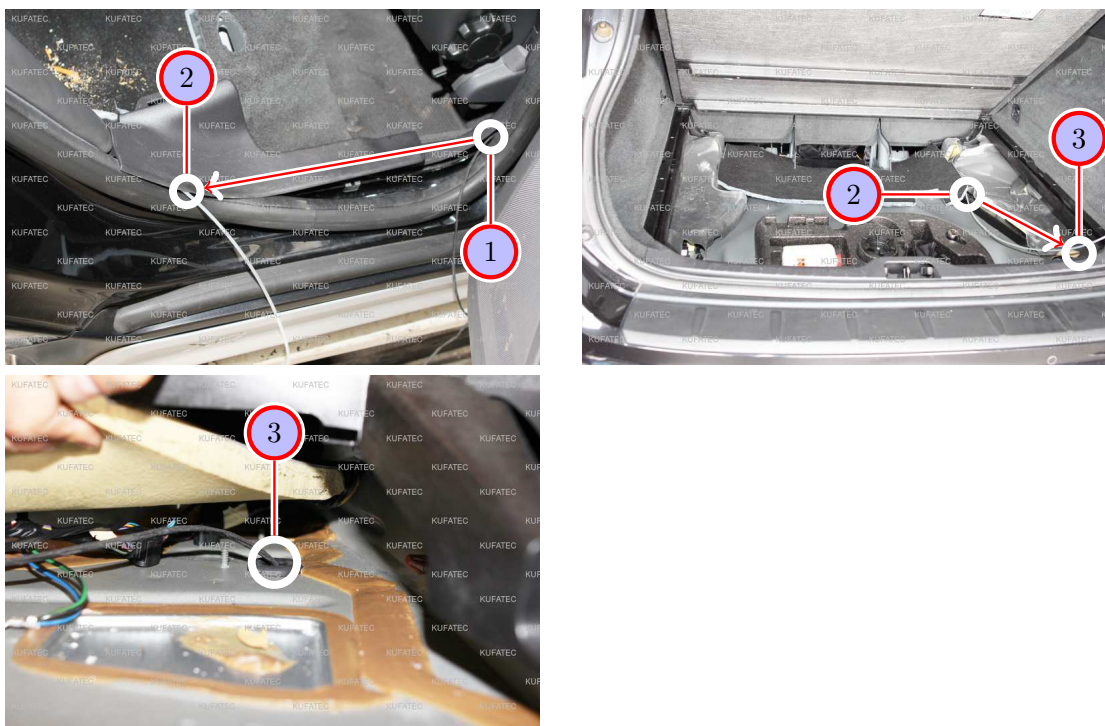


Figure 5: Routing connecting cable sound generator

Table 4: Routing connecting cable sound generator - instructions

| Nr. | Work step | Note |
|-----|---|------|
| 1 | Now route the connecting cable for the sound generator along the rear sill trim. | |
| 2 | Pull the cable with a pull through aid behind the trim panel into the trunk. | |
| 3 | Afterwards guide the cable to the marked grommet on the right side in the trunk and through the grommet to the underbody. | |

11 Installation sound generator

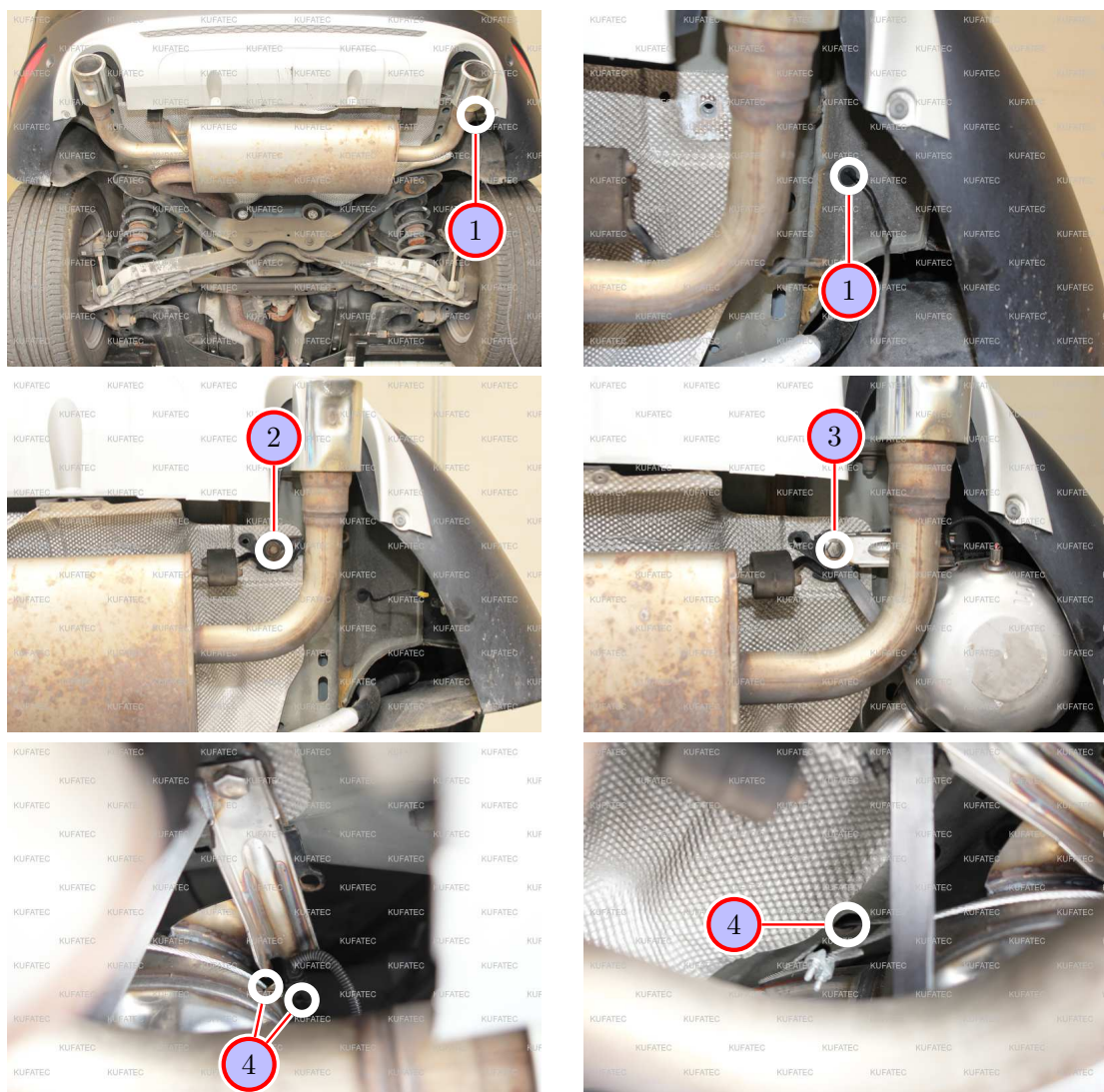


Figure 6: Installation sound generator

Table 5: Installation sound generator - instructions

| Nr. | Work step | Note |
|-----|--|---------------|
| 1 | Pull the connecting cable for the sound generator through at the underbody. | |
| 2 | Loosen the marked screw of the exhaust bracket. | 1x13er socket |
| 3 | Replace the just loosened screw with a M10x35mm (not included in delivery) and attach the sound generator with it. | |
| 4 | Connect the connecting cable to the sound generator and attach the delivered steel wire rope to the sound generator as well as to a suitable point at the vehicle. | |

12 Installation pushbutton

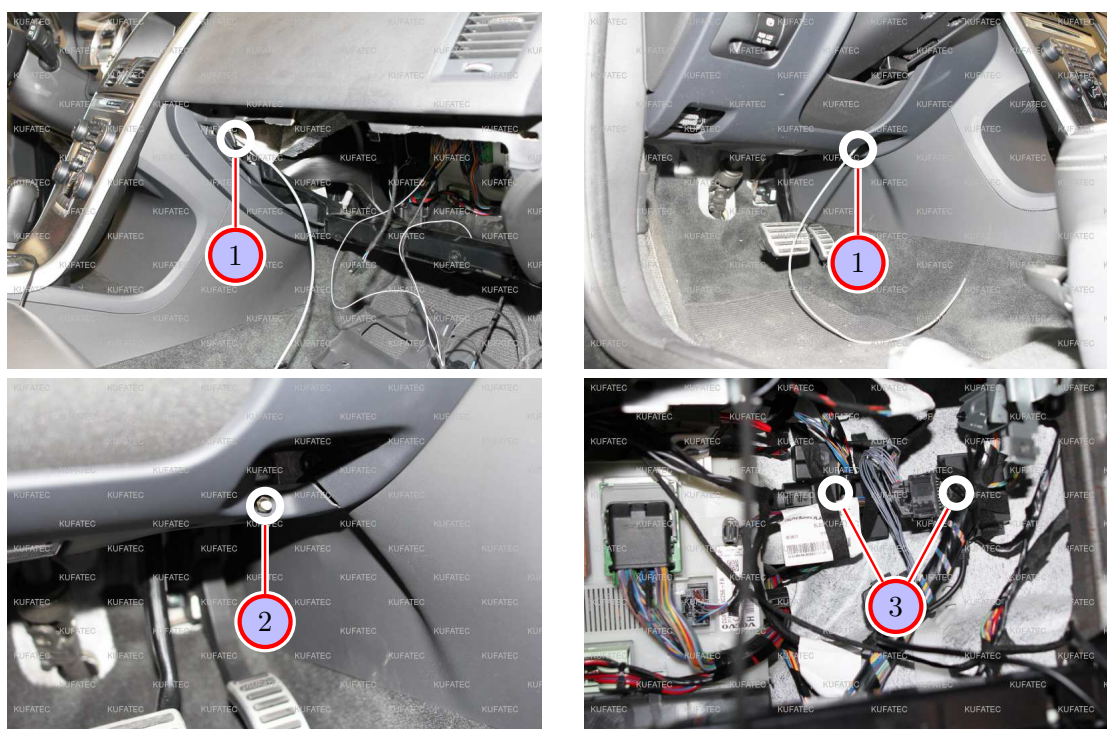


Figure 7: Installation pushbutton

Table 6: Installation pushbutton - instructions

| Nr. | Work step | Note |
|-----|--|-----------|
| 1 | With a pull through aid, pull the cable for the pushbutton behind the trim panel of the dashboard to the driver's side. | |
| 2 | Drill a hole for the pushbutton into the lower trim panel of the dashboard at the marked position and install the pushbutton afterwards. | 7mm drill |
| 3 | Place the control unit as well as the module behind the glove compartment and attach them with cable ties. | |

13 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.

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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