Version 1.06

(25.10.2019)

Installation Instructions
Complete set Active Sound incl. Sound Booster

Item no. 40222, 40222-1, 40222-2

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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 fullfilling 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

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.

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:

a) unauthorized changes to the device or accessories which have not been approved or carried out by the manufacturer or its partners

b) opening the device's frame

c) repairing the device on one's own

d) improper use/operation

e) 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/) to our support team.

In case of, let us know the following:

- Vehicle-Identification-Number
- Five-digit part number of the device
- Precise error report
- Steps you have taken to solve the problem

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 form the car's safety devices for installation. If bolts or nuts form 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 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 assumes no liability.

• Kufatec GmbH 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 assumes no liability. Please, check conditions and warranty before you begin the installation.

• Kufatec GmbH supplier reserves the right to change the device specifications without notice.

• Subject to errors and changes

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.

Notes

Important note for the assembly

The vehicle used for the assembly instruction was a **Audi A6 / A7 4G**. We would like to point out, that the disassembly of the individual parts can vary depending on the type of the 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.

Note Cable Inscription/Color

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

Scope of delivery

- Control unit for engine sound generation
- Exhaust system incl. external sound generator
- Sound Booster Pro (module)
- Cable set

Sound Booster Notes

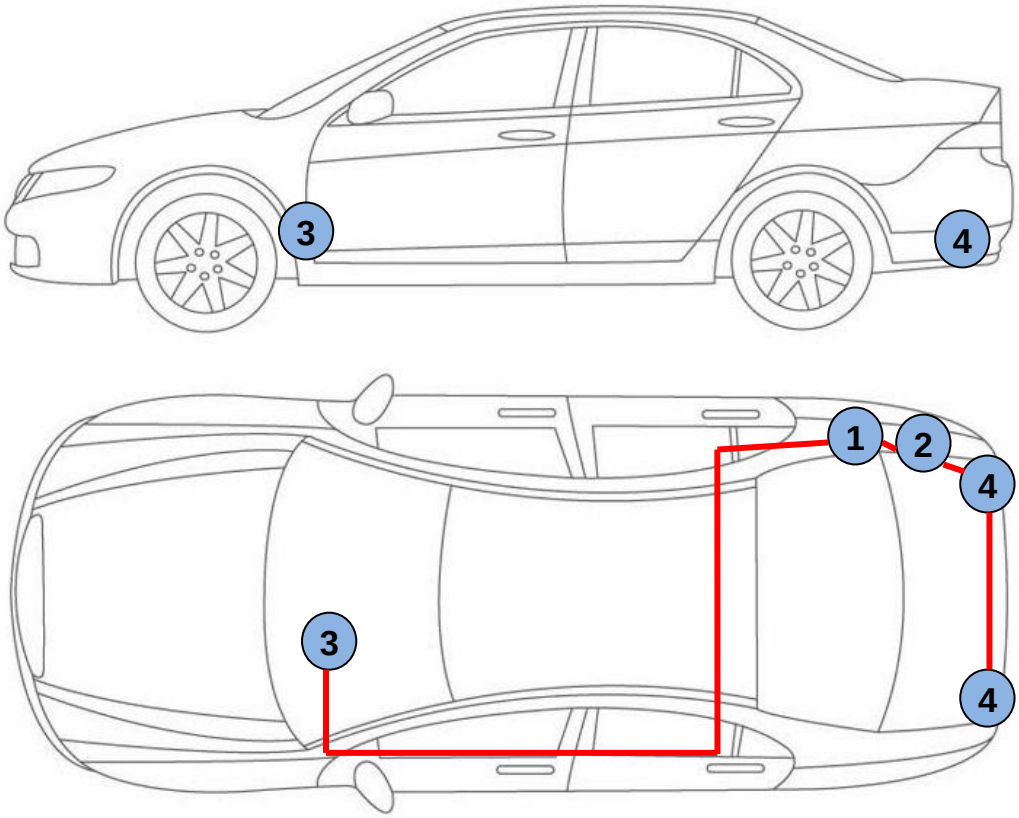
NOTE: The use of a sound booster is not permitted without registration in the vehicle papers, in the area of the German StVZO. The noise emission of the vehicle is increased by this retrofit. The regulations of the StVZO must be observed. It is therefore recommended to ask for a specific registration option at the responsible TÜV/DEKRA office before retrofitting. Outside Germany, please observe the laws on vehicle licensing applicable in your country.

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.

NOTE: For the installation of the mufflers, we recommend fixing the connection clamps each with one weld spot per tube and side.

Assembly Instructions

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



Vehicle Overview

1 – Sound Booster Pro module

2 – Control unit

3 – Push-button

4 – External sound generator

Remove the coverings at the dashboard according to Fig. 1. In the next step, remove the sill trims front and rear that are attached with clips, Fig. 2 and 3.

Fig. 1

Fig. 2

Fig. 3

Remove the back seats and the left and right lateral padding of the back seat rest afterwards, Fig. 4, as well as the trunk sill protection, Fig. 5, and the coverings in the trunk on the right and left, Fig. 6.

Fig. 4

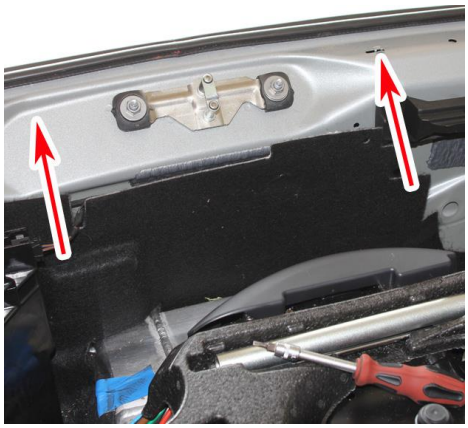


Fig. 5

Fig. 6

Assemble the control units in the trunk on the right and connect the ground cable (brown) to the ground pin, Fig. 7.

Fig. 7

Route the connection cable to the right external sound generator, Fig. 8 and 9.

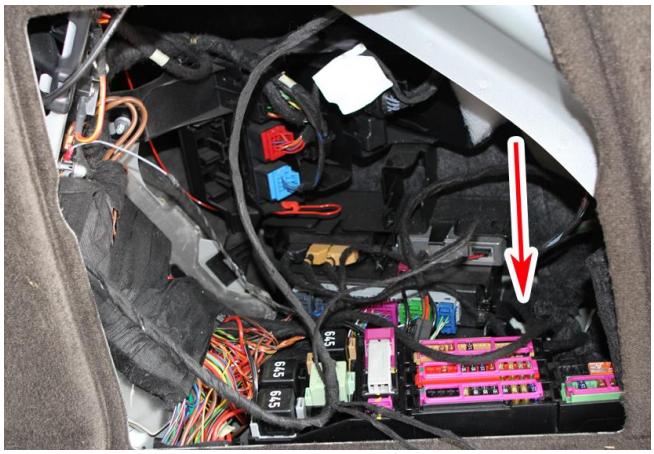


Fig. 8

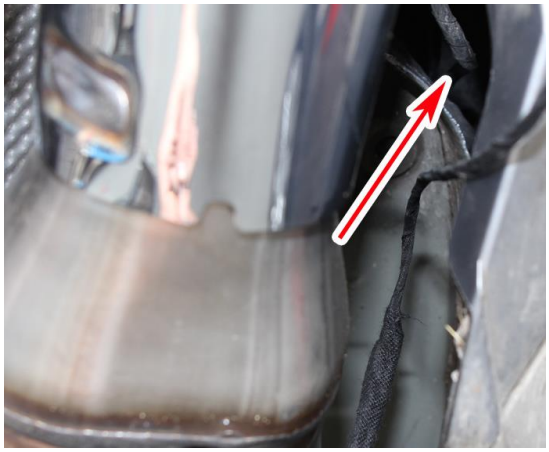


Fig. 9

You can see the cable routing to the left sound generator in Fig. 10 and 11.

Fig. 10

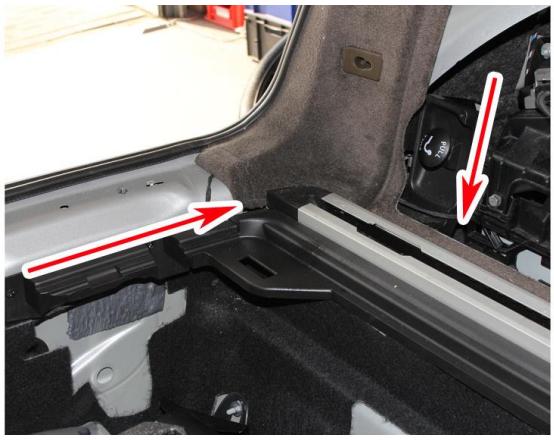


Fig. 11

Afterwards route the cables from the right side of the trunk (Fig. 7) forward, Fig. 12, and from there below the damping mat to the left side of the vehicle, Fig. 13.

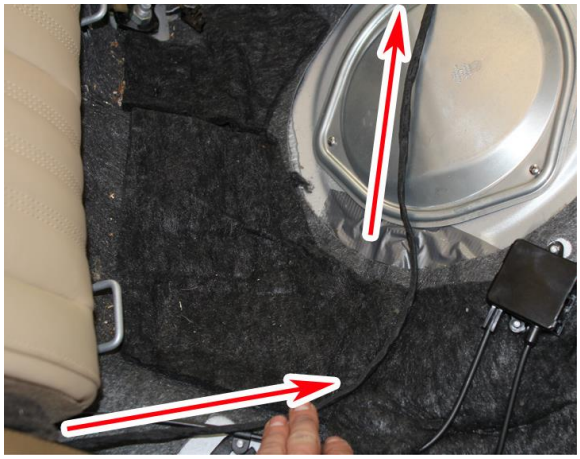


Fig. 12

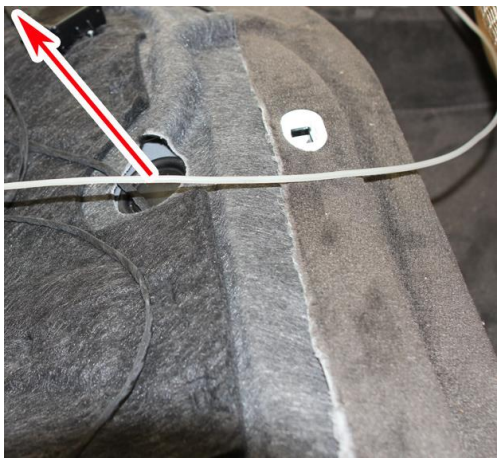


Fig. 13

Route the cables to the driver's footwell under the sill trims, Fig. 14 and 15.

Fig. 14

Fig. 15

Connect the Can cables to the multiplier, plug E (grey/long), according to the cable colors named below. The multiplier is located at the bottom of the A-column, Fig. 16, 16.1
Choose 2 free (1x High, 1x Low) connections. Pay attention that the free connections belong to the drive Can (orange/black).

Can High (black/white)	**-**	**12H (orange/black)**
Can Low (black/yellow)	**-**	**12L (orange/brown)**

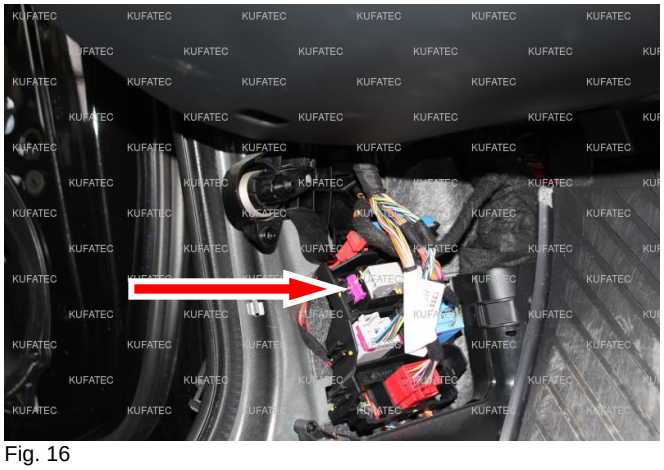


Fig. 16

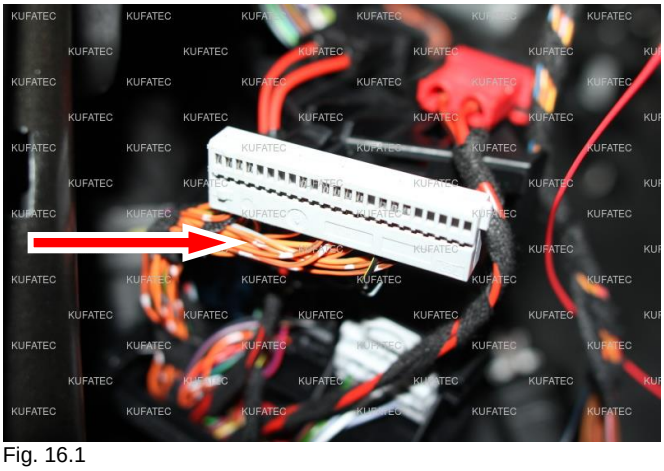


Fig. 16.1

Install the push-button (Fig. 17) for the switch of the sound profiles in the area of the lower dashboard covering.

Attention: A 7mm drill is necessary for the drilling!

Fig. 17

Finally, connect the cable for ignition plus (red/white), Fig. 18, with the third fuse from the **top** of the right fuse carrier in the dashboard on the driver's side (see arrow). Protect the wire with 10A. Check the correct connection to ignition plus with a voltmeter!

Fig. 18

Now cut the muffler, Fig. 19.

Fig. 19

On the driver's side, measure 15cm from the weld. Cut the muffler off the exhaust system, Fig. 20. On the passenger's side, measure 10cm from the weld. Cut the muffler off the exhaust pipe, Fig. 21.

Fig. 20

Fig. 21

Loosen and remove one screw each (1xSW13) at the exhaust pipe rubber on both sides at the marked position, Fig. 22 and 23. **Note: The rubber will be reused.** Loosen the exhaust with the help of another person. Remove the back part of the exhaust system afterwards.

Fig. 22

Fig. 23

Assemble the clamps with 2 screws each (2xSW13), Fig. 24 and 25. **Note: Make sure that the clamps are assembled up to half on both sides.**

Fig. 24

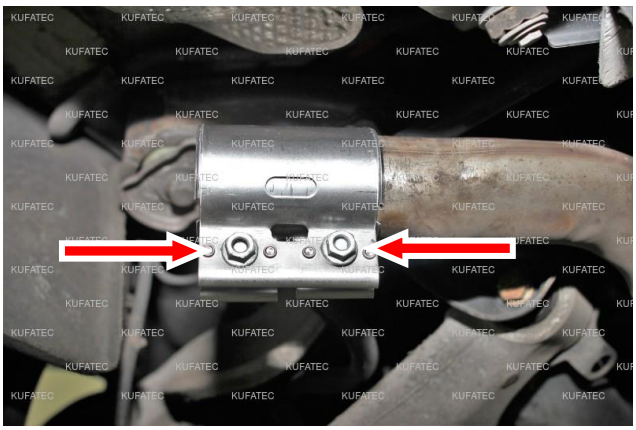


Fig. 25

Assemble the new Sound Booster/back exhaust system by connecting the system with the clamps first. Attach the exhaust system back to the marked exhaust pipe rubber. Use the previously removed screw (1xSW13), to do so, Fig. 26. Repeat this on the other side of the vehicle as well.

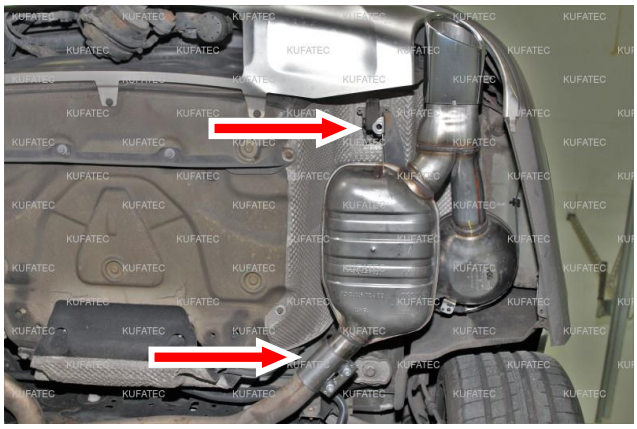


Fig. 26

Note: Adjust the new exhaust system on both sides. They have to be horizontal and on the same height. Establish a plug connection to the sound generators on the driver's and passenger's side, Fig. 27.

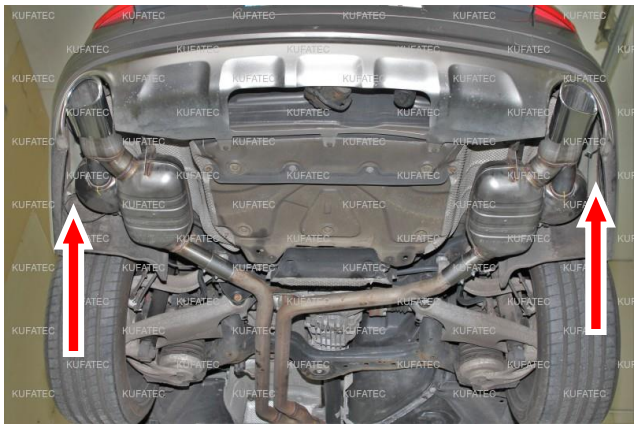


Fig. 27

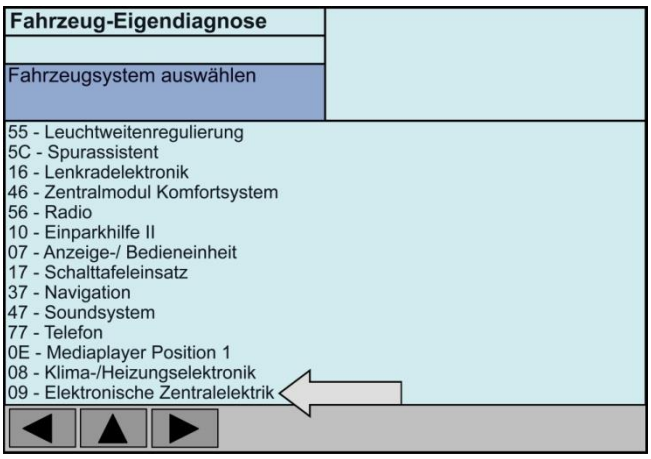
Coding VAS – MMI-menu for engine sound

For the coding of the vehicle, please contact an Audi contractual partner.

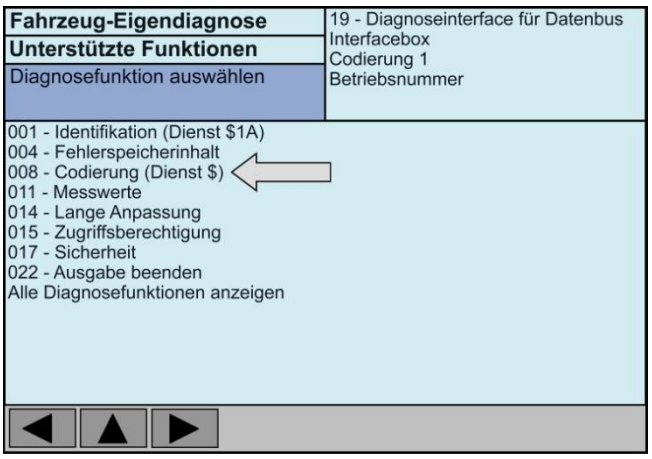
Establish connection with the diagnosis device – select self-diagnosis. Please execute the coding step by step according to the following figures.

Address 09 code the following **BIN** value:

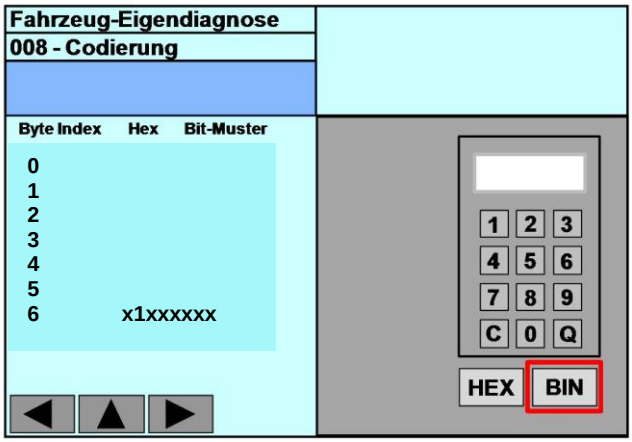
Byte 11 - set bit 6 to 1 x1xxxxxx



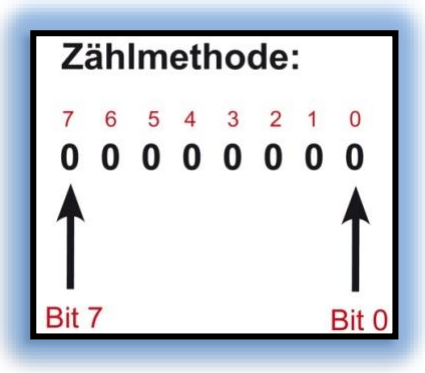
Address 09 central electrics



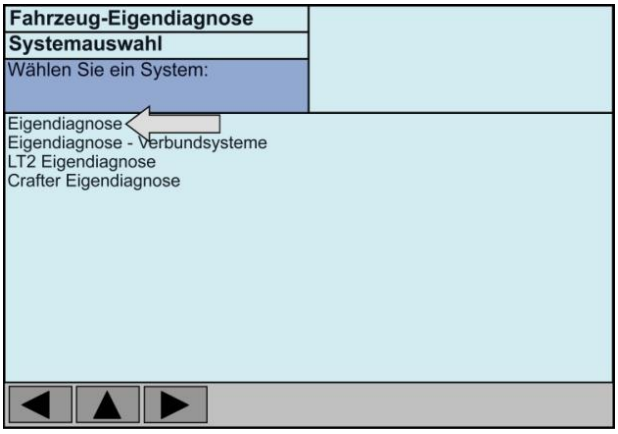
Coding Master



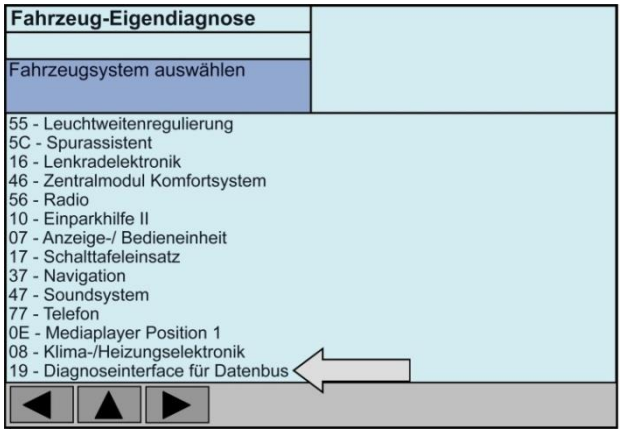
select BIN type on coding value + confirm



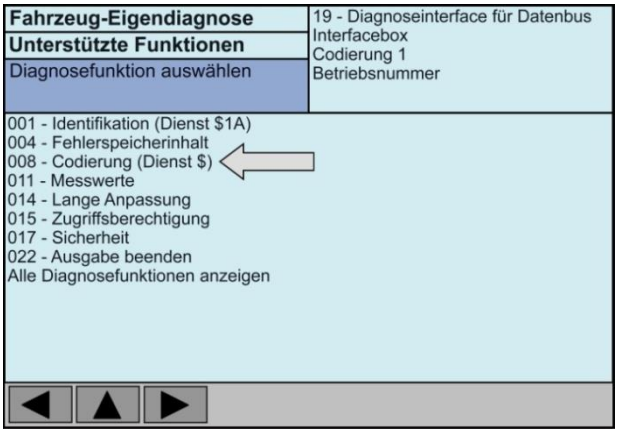
Address 19 – installation list –



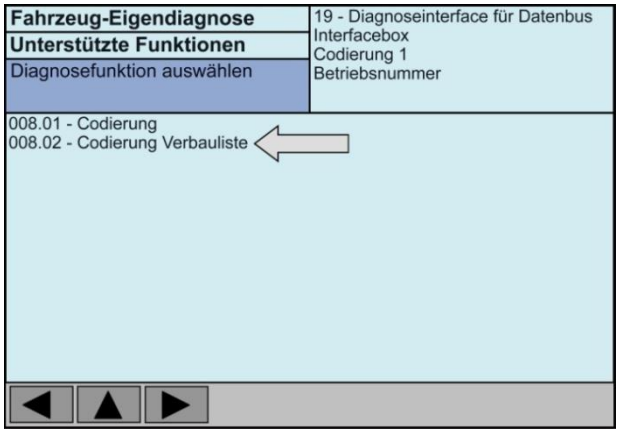
Self-diagnosis



Address 19 Diagnosis interface for the data bus



Coding



Installation list

Register control unit for engine sound generation – STG C0

After the coding, the “Soundboost” is activated if you start the engine in the dynamic mode of the *Audi drive s*elect or can be activated in the individual mode if the adjustments for *Engine/Gear* **and** *Engine sound* are set to *dynamic*, Fig. 19.

Fig. 19

Please note that the “Soundboost” isn’t effected by the Start/Stop-function, but exclusively by restarting the vehicle!

The reassembly is made in reversed order, thereafter the installation is completed.

You can switch the sound profiles with the pushbutton. You can choose between 6 sound profiles. In profile 1-3 you hear a restrained sound, in profile 4-6 it’s a powerful V6/V8 sound.

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 by using factory materials e.g. thread lock. Please additionally check the stability of the Sound Booster on a regular basis and retighten the screws if necessary. In case of non-compliance we do not assume liability for possible damages.

After a successful installation, we recommend covering 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 provided steel cable and the retaining clips must be attached to the Sound Booster as well as at a convenient position to the vehicle. This safety cable is an additional security should the tightening screws be released due to the vibration.

Notes for assembling the vehicle

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

Final work / bus rest

Important note: After the coding has been completed, you need to wait for the bus rest.

Proceed as follows:
- Switch off the ignition on the vehicle and close all doors.
- Close up the car by remote control.
- Then leave the vehicle for about 10 minutes.

Important: On vehicles equipped with Kessy, the key must not be in or in the near area of the vehicle.