E Sound Generator J1PA

Vehicle Type: **Taycan, Taycan 4, Taycan 4S, Taycan Turbo, Taycan 4 CUV, Taycan 4S CUV, Taycan Turbo CUV, Taycan Sport Turismo, Taycan 4S Sport Turismo, Taycan Turbo Sport Turismo**

Model Year: **As of 2024**

Cause: **Retrofitting**

Restriction: - Only vehicles with Bose sound system (9VL) or Burmester sound system (9VJ)

- Taycan Turbo, Turbo CUV and Turbo Sport Turismo up to MY's —> standard equipment from MY'T

Information

Please pass all this information on to the customer.

Also give the customer a copy of the first pages of these Installation and Conversion Instructions, including the legal regulations.

Figure 1

The e-Sound generator retrofit consists of an external loudspeaker box at the rear of the vehicle. Together with the speakers in the passenger compartment, the loudspeaker box enhances the sound of the vehicle.

Parts Info: **9J1.044.900.21** ⇒ E-Sound package

Figure 2

9J1.035.465.C	1 x	E-Sound 2 control unit⇒*Figure 2* **-5-**
9J1.970.502.AY	1 x	Wiring harness for vehicle e-Sound⇒*Figure 2* **-2-**
999.513.076.40	20 x	Tie-wrap, large⇒*Figure 2* **-3-**
N__.106.478.01	20x	Tie-wrap, small⇒*Figure 2* **-4-**
9J1.035.243.AB	1 x	SG e-Sound holder⇒*Figure 2* **-9-**
PAF.015.082	4x	6KT flange nut M6⇒*Figure 2* **-7-**
N__.911.585.01	1 x	Expanding rivet BD-6.5X12.3⇒*Figure 2* **-6-**
PAD.035.915.A	1 x	Outer loudspeaker box ⇒*Figure 2* **-1-**
9J1.971.737.Y	1 x	Wiring harness for rear speaker ⇒*Figure 2* **-8-**

NOTICE

Voltage peaks

- **Risk of damage to electrical load or to the control unit**

⇒ **Switch off ignition and keep transmitter key outside of the transmission range (at least 5 m / 16.5 feet).**

⇒ **Switch off electrical loads before disconnecting or removing them.**

Information

Always comply with the regulations for handling ESD-sensitive components!

- Assembly work may only be carried out if the mechanic is wearing the working clothes and shoes approved by Porsche.
- The new part must only be removed from the ESD (electrostatic discharge) protective packaging just before installation and at the position at which the part is to be installed.
- Never touch the electric pins and plug contacts.

Tool: **PIWIS Tester (VCI)**

Work Procedure:

WARNING

Incorrect handling of high-voltage components

- **Electric shock**
- **Short circuit**
- **Fire**
- **Explosion**

⇒ **Only appropriately trained and authorized persons are permitted to work on high-voltage vehicles and components.**

⇒ **Required qualification: High voltage technician or high voltage expert.**

⇒ **Observe national requirements and legislation for this work.**

⇒ **Always use insulated tools, e.g. VAS 6883 Insulated Tool Set when working on these components.**

⇒ **Observe general warning notes for working on the high-voltage system. ⇒*Workshop Manual '2X00IN General warning notes for working on the high-voltage system'***

1

Preparatory work

1.1 Drive the vehicle onto the lifting platform (⇒*Workshop Manual '4X00IN Lifting the vehicle'*).

1.2 Connect a battery charger (⇒*Workshop Manual '2X00IN trickle charging 12-volt lithium-ion battery'*).

1.3 Remove the rear bumper. ⇒*Workshop Manual '2X00IN Removing and installing rear bumper'*

1.4 Remove luggage compartment linings. ⇒*Workshop Manual '2X00IN Removing and installing trim panel for (centre) luggage compartment cover'*

1.5 Remove trim panel for luggage compartment at the sides. ⇒*Workshop Manual '2X00IN Remove and install (side) luggage compartment trim panel'*

1.6 Remove rear lock support panel. ⇒*Workshop Manual '2X00IN Remove and install rear lock carrier cover'*

1.7 Remove the rear seat. ⇒*Workshop Manual '2X00IN Removing and installing rear seat'*

1.8 Remove rear backrest frame. ⇒*Workshop Manual '2X00IN Removing and installing the rear backrest frame'*

1.9 Remove rear door sill trim. ⇒*Workshop Manual '2X00IN Removing and installing (rear) inner door sill trim'*

1.10 Remove front door sill trim. ⇒*Workshop Manual '2X00IN Removing and installing (front) door sill trim inner'*

1.11 Remove passenger seat. ⇒*Workshop Manual '2X00IN Removing and installing front seat'*

1.12 Remove floor covering on passenger side. ⇒*Workshop Manual '2X00IN Removing and installing floor covering on passenger side'*

2 Install e-Sound system.

Information

Some of the repair illustrations show only one side of the vehicle. Naturally, some steps also have to be performed on the opposite side of the vehicle as well. These must be carried out as a mirror image of the steps shown.

Information

The number of electric plug connections and clips will vary depending on equipment.

2.1 Overview of wiring harness.

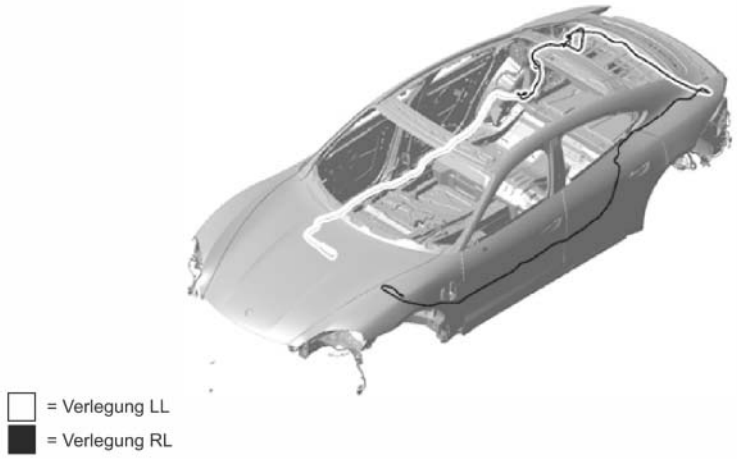

Figure 3

The cable routing / fastenings using tie-wraps can be selected as required, but always make sure that no chafing points or noises can occur while driving. Route excess cable lengths correctly.

2.2 Remove side trim panel at the ⇒*Figure 4* **-1-** right. Loosen screws ⇒*Figure 4* **-2-**and remove trim panel.

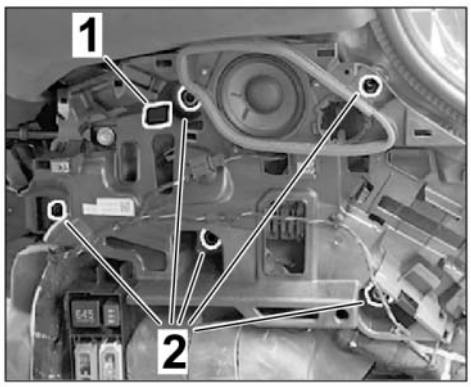

Figure 4

2.3 Cable duct cover ⇒*Figure 5* **-1-** remove the rear right in the entrance area. Open retaining lugs ⇒*Figure 5* **-2-**and remove cover.

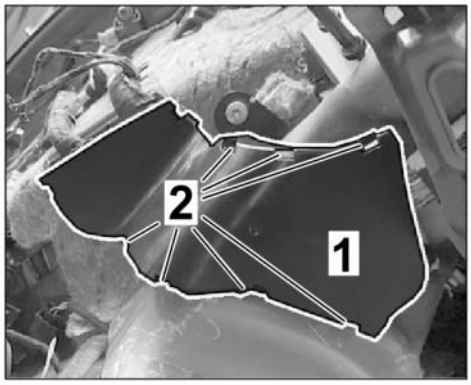

Figure 5

2.4 Install main wiring harness in the cable duct in the Y-shaped plug connection area ⇒ *Figure 6* **-1-**. The Y-shaped plug connection is located in the cable duct and the connector for the Y-piece is located in a piece of foam at the side of the vehicle ⇒*Figure 6* **-1-**.

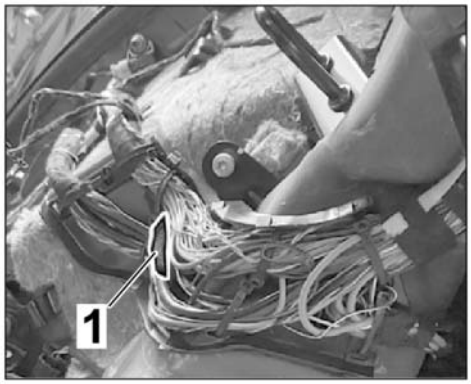

Figure 6

2.5 Connect Y-shaped plug connection ⇒ *Figure 7* **-1-**. Lay wiring harness ⇒*Figure 7* **-2-**further forward towards passenger footwell along the original wiring harness.

2.6 Remove control device for digital sound package.

2.7 Check sound system variant (PR number). For PR number (9VL), the retrofit plug (white) is required. For PR number (9VJ), the wire harness must be pinned into the large plug of the control unit for the digital sound package.

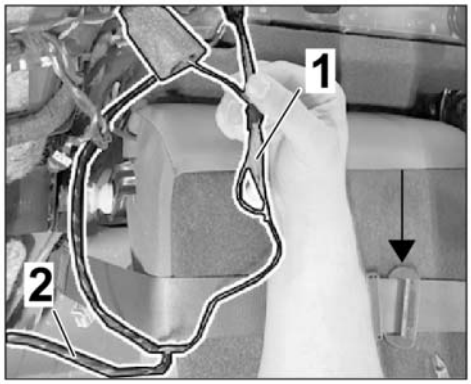

Figure 7

2.8 In the left-hand drive version, the cable in the passenger footwell must be shortened to the required length.

2.9 **Insert variant PR number 9VL** wiring harness into retrofit connector. Release connector. White pin 3 plug: Cable color white. White pin 4 plug: Cable color black. Then plug it into the control unit for the digital sound package.

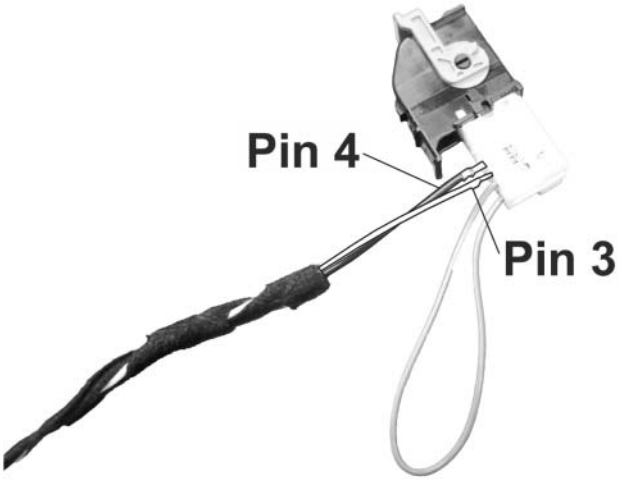

Figure 8

2.10 **PR number 9VJ variant** Insert wiring harness into large plug from control unit for digital sound package. Release connector. Large pin 31 plug: Cable color white. Large pin 23 plug: Cable color black.

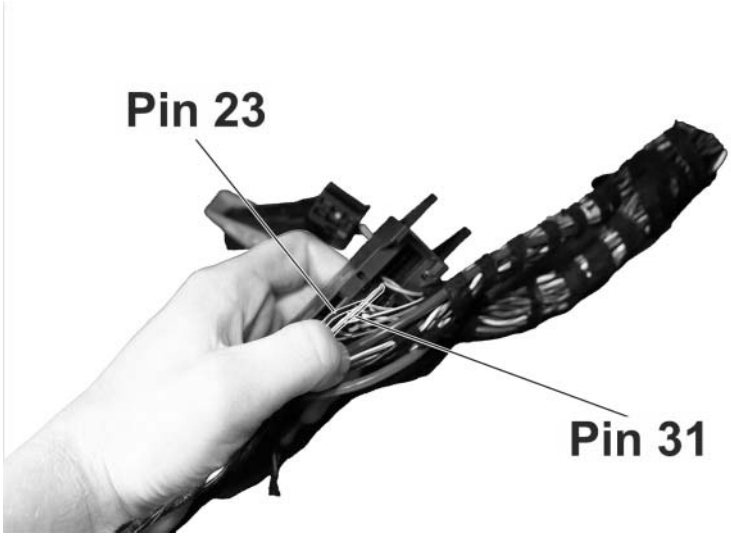

Figure 9

2.11 Install control unit for digital sound package.

2.12 Cable routing at rear right. Remove fuse box at the rear right ⇒*Figure 10* **-1-**, remove lock and unclip white fuse strip by pulling it back ⇒*Figure 10* **-2-**.

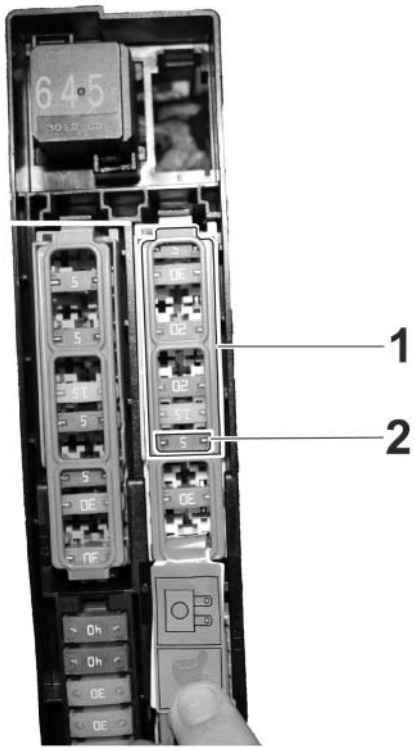

Figure 10

2.13 Lay the line ⇒*Figure 11* **-2-**behind the fuse box and pin it into socket A5⇒*Figure 11* **-1-**. Insert fuse (5A) in socket A5. Clip white fuse strip into the fuse box and lock it using the locking clip. Install fuse box.

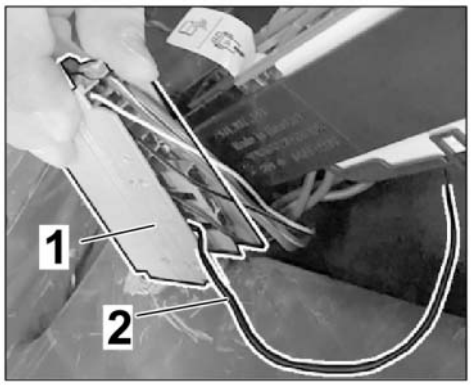

Figure 11

2.14 Install holder for control unit at the rear right.

2.15 Install control unit ⇒*Figure 13* **-1-**on holder ⇒*Figure 13* **-2-**using two cylinder screws N.104.592.02. Install control unit with retaining frame on the vehicle and connect the control unit. Route wiring harness as far as the centre of the luggage compartment towards the left side of the vehicle.

Figure 12

Important: If the holder is not installed, please use the holder from the kit.

2.16 Install outside speaker ⇒*Figure 14* **-2-**in rear centre of vehicle at the bottom. Push speaker with two bolts into the assembly holes provided for this purpose⇒*Figure 14* **-3-** and secure to the body with two nuts PAF.015.082 ⇒*Figure 14* **-1-**. Tighten two screws ⇒*Figure 14* **-3-** in the lower area as well.

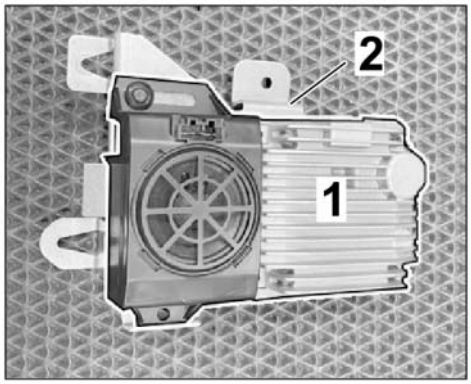

Figure 13

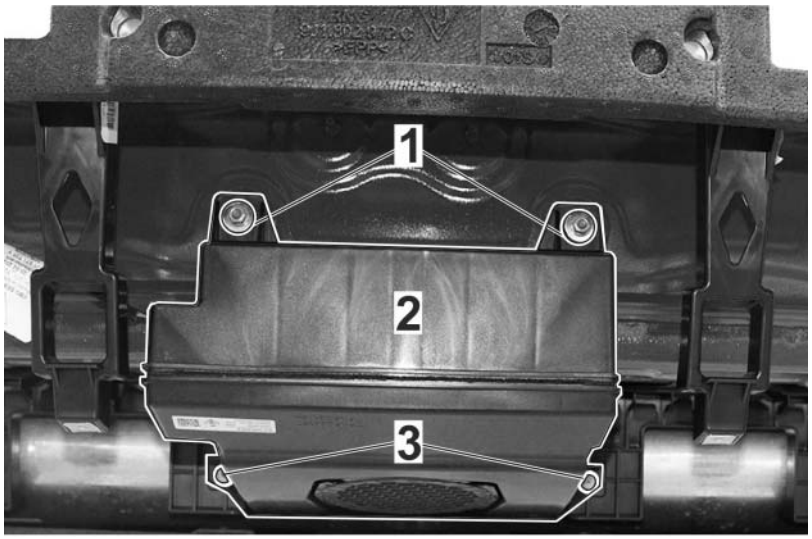

Figure 14

2.17 Remove the rubber sleeve installed on the vehicle ⇒*Figure 15* **-1-**. Remove adhesive residue. Install wiring harness for rear speaker 9J1.971.737.Y on the speaker ⇒ *Figure 15* **-2-**and route it in the passenger compartment through the bore in the body. Route wiring harness behind the holder ⇒ *Figure 15* **-3-**. Make sure that the rubber sleeve on the wiring harness is positioned cleanly in the bore on the body and is well sealed. Remove luggage compartment liner foam and route speaker wiring towards the left side of the vehicle.

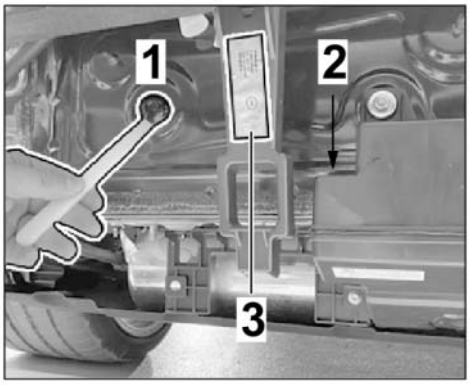

Figure 15

2.18 Disconnect connector ⇒*Figure 16* **-1-**on control unit ⇒*Figure 16* **-2-**for acoustic simulator at the left.

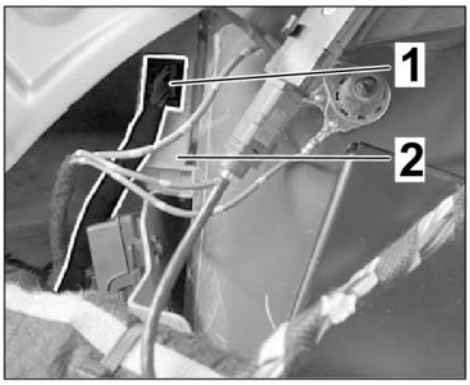

Figure 16

2.19 Route wiring harness from outside speaker and connect it to the acoustic simulator control unit. Release connector ⇒*Figure 17* **-1-**using a small screwdriver ⇒*Figure 17* **-2-**. **Plug pin with green cable into chamber 5 of the connector. Plug pin with green / black cable into chamber 6 of the connector.** Lock the connector again and insert it into control unit for acoustic simulator.

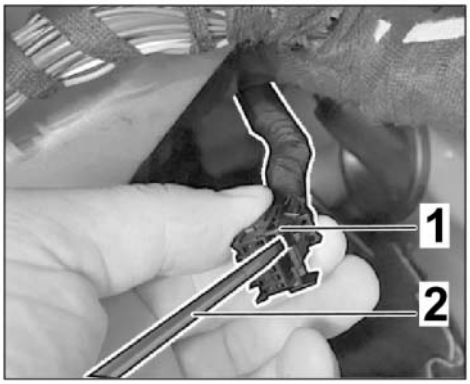

Figure 17

3 Complete the vehicle.

3.1 Install front floor covering on passenger's side. ⇒*Workshop Manual '2X00IN Removing and installing front floor covering'*

3.2 Install passenger seat ⇒*Workshop Manual '2X00IN Removing and installing front seat'*

3.3 Install front door sill trim. ⇒*Workshop Manual '2X00IN Removing and installing (front) door sill trim inner'*

3.4 Install rear inner door sill trim. ⇒*Workshop Manual '2X00IN Removing and installing (rear) inner door sill trim'*

3.5 Install rear backrest frame. ⇒*Workshop Manual '2X00IN Removing and installing the rear backrest frame'*

3.6 Install the rear seat. ⇒*Workshop Manual '2X00IN Removing and installing rear seat'*

3.7 Install rear lock support panel. ⇒*Workshop Manual '2X00IN Removing and installing rear lock carrier cover'*

3.8 Install trim panel for luggage compartment at the sides. ⇒*Workshop Manual '2X00IN Removing and installing (side) luggage compartment trim panel'*

3.9 Install linings for luggage compartment. ⇒*Workshop Manual '2X00IN Removing and installing trim panel for (centre) luggage compartment cover'*

3.10 Install the rear bumper. ⇒*Workshop Manual '2X00IN Removing and installing rear bumper'*

3.11 Calibrate reversing camera (if installed). ⇒*Workshop Manual '2X00IN Calibrating reversing camera control unit'*

Coding: 4 Coding / programming E-Sound Generator J1PA

NOTICE

Voltage drop

- **Risk of irreparable damage to control unit**
- **Risk of damage to control unit**
- **Fault entries in the control unit**
- **Coding in the control unit is aborted**
- **Malfunctions in control unit, even during programming**

⇒ **Prior to disconnecting the control unit, switch off ignition and remove ignition key.**

⇒ **Ensure that the power supply is not interrupted during programming.**

⇒ **Connect a battery charger with a current rating of at least 90 A to the vehicle battery.**

4.1 Preparatory work – Coding

NOTICE

Control unit programming will be aborted if the WLAN connection is unstable.

- **An unstable WiFi connection can interrupt communication between the PIWIS Tester and the vehicle communication module (VCI). As a result, control unit programming may be aborted.**

⇒ **During control unit programming, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.**

4.1.1 Connect **PIWIS Tester** to the vehicle and switch it on.

4.1.2 Switch on ignition **AND** hazard warning lights on the vehicle.

Information

The **PIWIS Tester** instructions take precedence since the description may be different with later Tester releases.

The procedure described here has been structured in general terms. Different text or additional information may appear on the **PIWIS Tester**.

4.1.3 Select the “Diagnostics” menu item on the PIWIS Tester.

4.1.4 If **PIWIS Tester** is connected correctly, a connection to the vehicle will be established: The “Taycan” series is recognized and an overview of the control unit is created.

4.1.5 Press •F12 “ to go to the control unit search screen.

4.1.6 •F8 “ for additional menu. Question: “Should an FAP be created?” If “Yes”, press •F12 “ to confirm.

4.1.7 After the FAP has been created, a message may appear that there are still open service actions for the connected vehicle. You can do this with •F12 “ . This is followed by the back documentation of the vehicle and the vehicle network test.

Information

The function is **ONLY** available when the Tester is online!

4.2 Enter the new vehicle equipment in the vehicle data using “PIWIS Online”.

4.2.1 Select the “Maintain vehicle data with PIWIS-ONLINE” function in the “Additional menu” menu item.

A message appears informing you that the “Actual” (vehicle) data and “Required” (PIWIS Online) data will be compared.

Press •F12 “ to continue.

4.2.2 Confirm the message “The vehicle data was compared with PIWIS Online. Significant differences were found” with •F12 “ .

4.2.3 Look for the “Exterior-Sound” option in the “Family” column.

Select the option “GM3” in the “Value” column in the drop-down menu. Press •F12 “ to continue.

4.2.4 A table containing the coding value and the columns “new value” and “old value” is displayed in the overview. Press •F8 “ to continue.

4.2.5 Data is then written / saved. The following messages appear one after the other:

- Transferring vehicle data to PIWIS Online.
- Writing and transferring vehicle data to the vehicle.
- Vehicle order was written successfully.
- A check was performed in order to check whether control units have to be coded as a result of the changes that were made.

4.2.6 Confirm the table containing a list of control units that must be coded by pressing •F12 “ .

4.2.7 Individual data records will be loaded, depending on the number of control units to be coded.

Wait until messages “Creating backup documentation.” Please wait…” and “Coding was completed successfully.” are displayed. Press •F12 “ to continue.

Repeat the process for other control units if necessary.

4.2.8 Wait for the “Adaptation of the control units is complete.” message and check the coding status of the control units in the displayed table.

Continue by pressing •F12 “ to return to the control unit overview.

4.3 Program the interior acoustics control unit (e-Sound).

4.3.1 In the overview, select the interior acoustics control unit (e-Sound). Press •F12 “ to continue.

4.3.2 Select Coding/programming.

4.3.3 Automatic programming must now be selected. Press •F12 “ to continue.

4.3.4 Tester displays the message: Code successfully performed.

4.4 Remove the **PIWIS tester** from the vehicle.

4.4.1 Lock the vehicle.

4.4.2 Establish bus idle for **at least** 10 minutes.

4.4.3 Re-connect the PIWIS Tester after bus idle.

4.5 Read out the fault memory of all systems, work through any existing faults and erase the fault memory. ⇒*Workshop Manual '0335IN Diagnostics maintenance: Diagnostic system and maintenance inter...'*

4.6 Before handing over the vehicle to the customer, check whether the function is displayed under (vehicle drive). See figure

Figure 18

5 Follow-up actions

5.1 Switch off ignition and disconnect the **PIWIS Tester**.

5.2 Drive the vehicle off the lifting platform.

26 02 49 40: E-Sound installed Labor time: **710 TU**