WML0 – Retrofitting Loudspeaker Booster (Delivery Stop)

Revision: This bulletin replaces bulletin Group 9 155/21 WML0, dated November 9, 2022.

Model Year: **As of 2021 up to 2023**

Model Line: **Cayenne (9YA/9YB)**

Equipment: BOSE Surround Sound System **(M-no. 9VL)**

Concerns: **Loudspeaker booster**

Information: **Due to worldwide semiconductor shortages experienced by some suppliers, the affected vehicles were built without a loudspeaker booster.**

Action required: Retrofit loudspeaker booster.

Information

Please note that an **incremented test** must be carried out on all **newly supplied** Bose loudspeaker boosters **after installation** from calendar week 48/2022. Detailed information is provided in the following campaign description. The time required for additional work is included in the newly created Scope 10.

Information

Please also note that the new loudspeaker boosters **must** be re-coded using the **latest PIWIS Tester software version** during the teaching process. The **minimum requirement** is version **41.550.013**.

Information

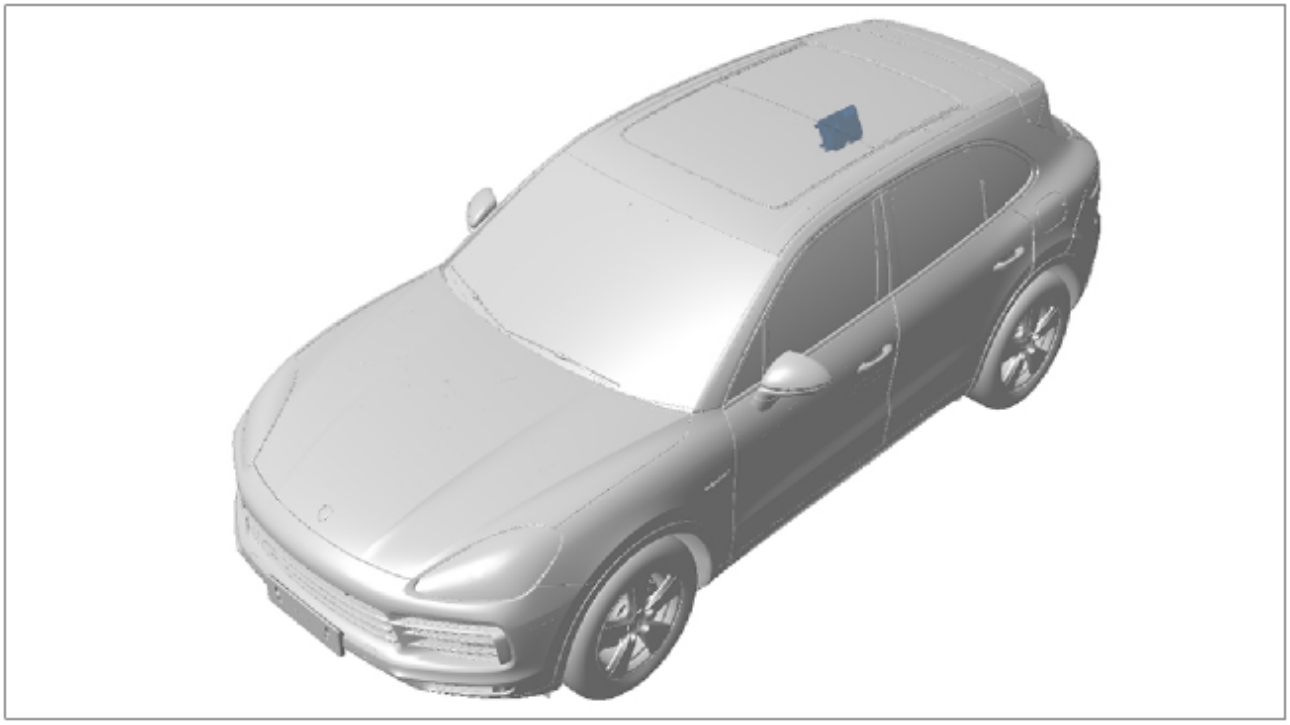
Each vehicle will now be assigned 2 Repair Scopes from CW45 onward. The new Scope 10 applies to vehicles where the original Campaign Part V04015001FE is used. Scope 8 is to be claimed if the new Campaign Part V04015009A is used. Your dealer will need to choose the correct scope when submitting the warranty claim based off the part used for each vehicle. The new part V04015009A will begin to arrive at dealers starting CW46 as well as continued allocations of the original part V04015001FE..

The two parts are identical and can be used on any Cayenne with WML0 but must be recorded properly in the Warranty system for proper billing of your dealer.

Scope 8, 10: Installing and teaching loudspeaker booster

Affected Vehicles: Only vehicles assigned to the campaign (see also PCSS Vehicle Information).

Installation Position:



Installation position

– Loudspeaker booster **(retrofit)**

Parts required

Parts Info:

Part No.	Designation	Qty.
V04015001FE	⇒ Booster	1 ea.
As of CW 46/2022: V04015009A	⇒ Booster	1 ea.
N 10442003	⇒ Self-tapping screw	4 ea.

Required tools

NOTICE

Use of a PIWIS Tester test software version that is older than the prescribed version

- **Measure is ineffective**

⇒ **Always use the specified version or a higher version of the PIWIS Tester test software for control unit programming or coding.**

Tools:

- Torque wrench, 2-10 Nm (1.5-7.5 ftlb.), e.g. **V.A.G 1783 - Torque wrench, 2-10 Nm (1.5-7.5 ftlb.)**
- Battery charger with a current rating of **at least 90 A** and - if required - **also** with a **current and voltage-controlled charge map** for lithium starter batteries, e.g. **VAS 5908 Battery charger, 90 A**
- **9900 - PIWIS Tester 3** with installed PIWIS Tester test software version **41.550.013** (or higher) installed

Installing loudspeaker booster

NOTICE

Incorrect handling of optical waveguides

- **Risk of damage to optical waveguide**

⇒ **Observe the requirements for working with and installing optical waveguides.**

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).**

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

Work Procedure:

Information

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

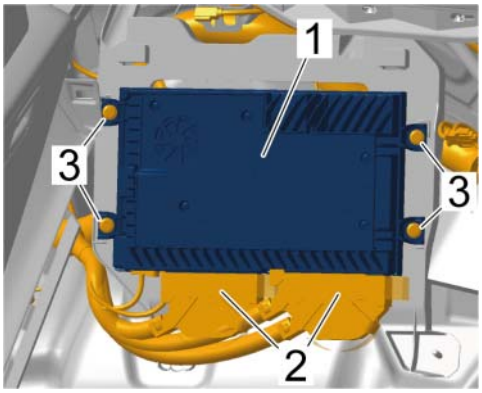
- Always wear approved work clothes and shoes when carrying out assembly work.
- Do not remove new parts from ESD (electrostatic discharge) protective packaging until shortly before installation.
- Do not touch electric pins and plug contacts.

1 Remove side trim panel for rear luggage compartment at the right. ⇒ *Workshop Manual '700319 Removing and installing side trim panel for rear luggage compartment'*

2 Position loudspeaker booster ⇒ *Loudspeaker booster* **-1-**, screw in fastening screws ⇒ *Loudspeaker booster* **-3-** and tighten to **Tightening torque 6 Nm (4.5 ftlb.)** .

Information

The number of connecting lines for the loudspeaker booster will vary depending on equipment and the connecting lines are located close to the installation position. These may be fastened in place and may have to be exposed beforehand.



Loudspeaker booster

3 Plug in and lock electric plug connections ⇒ *Loudspeaker booster* **-2-**.

4 Install side trim panel for rear luggage compartment at the right. ⇒ *Workshop Manual '700319 Removing and installing side trim panel for rear luggage compartment'*

5 After installing the loudspeaker booster, continue as follows:

Continue with ⇒ *Technical Information '700319 Warranty processing'*

End of action required -

Teaching loudspeaker booster

NOTICE

Voltage drop

- **Destruction of control unit**
- **Damage to control unit**
- **Fault entries in the control unit**
- **Coding in the control unit is aborted**
- **Malfunctions in control unit, even during programming**

⇒ **Switch off ignition before connecting the control unit.**

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

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

Work Procedure:

Information

To carry out the campaign, the PIWIS Tester must be online and logged into the Porsche Partner Network (PPN).

1 Connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable. Then connect the communication module to the vehicle and switch on the PIWIS Tester.

2 Place original remote control (hand-held transmitter) in emergency start tray. ⇒ *Emergency start tray*

Emergency start tray

3 Switch on the ignition.

4 Select the **'Booster'** control unit in the **overview**. Press • F12 “ ('Next') to continue.

5 When the question “Create Vehicle Analysis Log (VAL)?” appears, either press • F12 “ ('Yes') to create a VAL or press • F11 “ ('No') if you do not want to create a VAL.

6 Select **'Coding / programming'**.

7 Select **'Automatic coding'**. Press • F12 “ ('Next') to continue.

8 The message "Coding was completed successfully" appears. Press • F12 “ ('Next') to continue.

9 In the **overview**, press • F7 “ to switch to the **Additional menu**.

10 Select **'Commission component protection'**. Follow instructions and procedure. Press • F12 “ ('Next') to continue.

11 **Enter the PPN user name and password**. Press • F12 “ ('Next') to continue.

12 Follow the instructions on the PIWIS Tester.

13 Check the chassis number and enter the order number. Press • F12 “ ('Next') to continue.

14 Select **'Gateway'** (master) component protection in order to teach it. Press • F12 “ ('Next') to continue.

15 Allow the Tester to run the procedure.

16 The Tester displays the message: **'Component protection taught'**. Press •F12 “ ('Next') to continue.

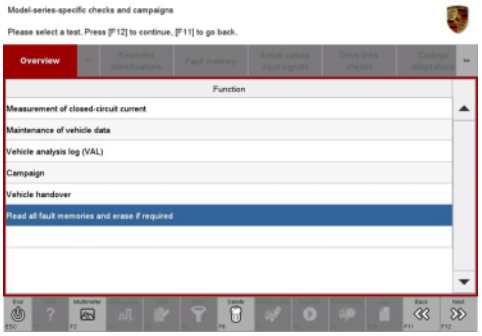
17 Go back to the overview. Press •F12 “ ('Next') to continue.

18 Read out and erase the fault memories of all control units.

18.1 Press •F7 “ in the control unit selection screen ('Overview' menu) to call up the Additional menu.

18.2 Select the function **'Read all fault memories and erase if required'**. Press •F12 “ ('Next') to continue. ⇒ *Erasing fault memories*

The fault memories of the control units are read out.



Erasing fault memories

18.3 Once you have read out the fault memories, check the fault memory entries.

Information

If control units are found to have faults that are **not** caused by control unit programming, these must first be **found** and **corrected**. This work **cannot** be invoiced under the workshop campaign number.

18.4 Press •F8 “ to delete fault memory entries.

18.5 Press •F12 “ ('Yes') in response to the question asking whether you really want to delete all fault memory entries.

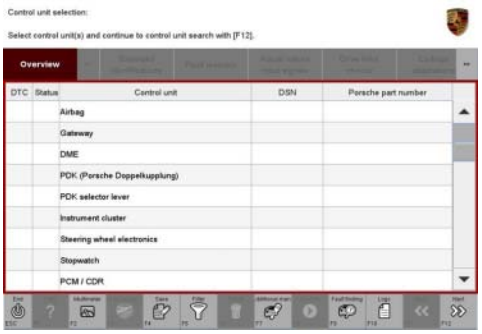
The faults stored in the fault memories of the various control units are deleted.

Information

If fault memory entries for individual control units cannot be deleted, proceed as follows:

- Switch off ignition.
- Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.
- Lock the vehicle using the driver's key.
- Wait approx. 1 minute before unlocking the vehicle again.
- Start the engine, leave it running for a short time and then stop it again.
- Switch off the ignition and wait approx. 10 seconds before switching it back on again.
- Plug the PIWIS Tester diagnostic connector into the diagnostic socket again and restore communication with the vehicle.
- Read out the fault memory again and delete any fault memory entries that are stored.

18.6 Once you have erased the fault memories, select the **'Overview'** menu to return to the control unit selection screen ⇒ *Control unit selection*.



Control unit selection

19 Exit the diagnostic application. Switch off ignition. Disconnect the Tester from the vehicle.

20 **Perform incremented function test on loud-speaker booster.**

20.1 Switch on ignition.

Information

Because no interference-free audio quality can be guaranteed in the radio, there must be no audio output **via radio** for the test, rather it **must** be played via another audio source, e.g. via a USB stick.

20.2 Select a suitable audio source.

20.3 Set playback volume to 15 clicks.

20.4 Listen to the audio for 2 minutes in the vehicle, and check for brief dropouts and/or disturbing noises (e.g. recurring creaking noises).

20.5 Switch off ignition.

20.6 Open and lock driver door.

20.7 Lock the vehicle, and wait at least 1 minute so that Porsche Communication Management (PCM) shuts down.

20.8 Unlock the vehicle, and repeat Steps 20.1 to 20.7 a additional 2 times. When restarting, the Porsche logo must be displayed on the PCM system. Otherwise, repeat from Step 20.5 onwards and wait for at least the wait time in Step 20.7.

Information

The loudspeaker booster must be replaced if dropouts and/or disturbing noises are detected. Only use the amplifiers with **campaign part numbers** when replacing. The incurred labor costs and the additional cost of parts required over and above this scope must be invoiced using a **reimbursement claim** for the original campaign claim for this campaign. In this case, the removed and faulty loudspeaker booster will be requested and must be returned for further analysis.

21 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing

Information

The working times specified below were determined specifically for carrying out this campaign and may differ from the working times published in the PCSS Labor Operation List.

Scope 1: **Dummy scope – billing not possible**

Information

Scopes 1 –8, 10 are not applicable for this vehicle type.

Scope 8: **Installing loudspeaker booster** and **teaching loudspeaker booster**

Valid for

- **Cayenne (9YA / 9YB)**
- As of CW 46/2022

Working time:

Installing loudspeaker booster — Labor time: **91 TU**

Includes:
- Removing and installing cover for (rear) lock carrier
- Removing and installing side trim panel for rear luggage compartment at the right
- Teaching loudspeaker booster
- Reading out and erasing fault memories
- Function test

Parts required:

V04015009A	Booster	1 ea.
N 10442003	Self-tapping screw	4 ea.

⇒ **Damage Code WML0 066 000 1**

Scope 10: **Installing loudspeaker booster** and **teaching loudspeaker booster**

Valid for

- **Cayenne (9YA / 9YB)** with **incremented function test**

Working time:

Installing loudspeaker booster — Labor time: **91 TU**

Includes:
- Removing and installing cover for (rear) lock carrier
- Removing and installing side trim panel for rear luggage compartment at the right
- Teaching loudspeaker booster
- Reading out and erasing fault memories
- Incremented function test

Parts required:

V04015001FE	Booster	1 ea.
N 10442003	Self-tapping screw	4 ea.

⇒ **Damage Code WML0 066 000 1**

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