WMQ3 – Retrofitting Loudspeaker Booster (Stop Delivery)

Important: **CRITICAL WARNING** : This campaign includes steps where control unit(s) in the vehicle will be programmed with the PIWIS Tester. The vehicle voltage must be maintained between 13.5 volts and 14.5 volts during this programming. Failure to maintain this voltage could result in damaged control unit(s). Damage caused by inadequate voltage during programming is not a warrantable defect. The technician must verify the actual vehicle voltage in the PIWIS Tester before starting the campaign and also document the actual voltage on the repair order.

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

Model Year: **2022**

Equipment: Burmester Surround Sound System **(M-no. 9VJ)**

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.

ℹ️ Information
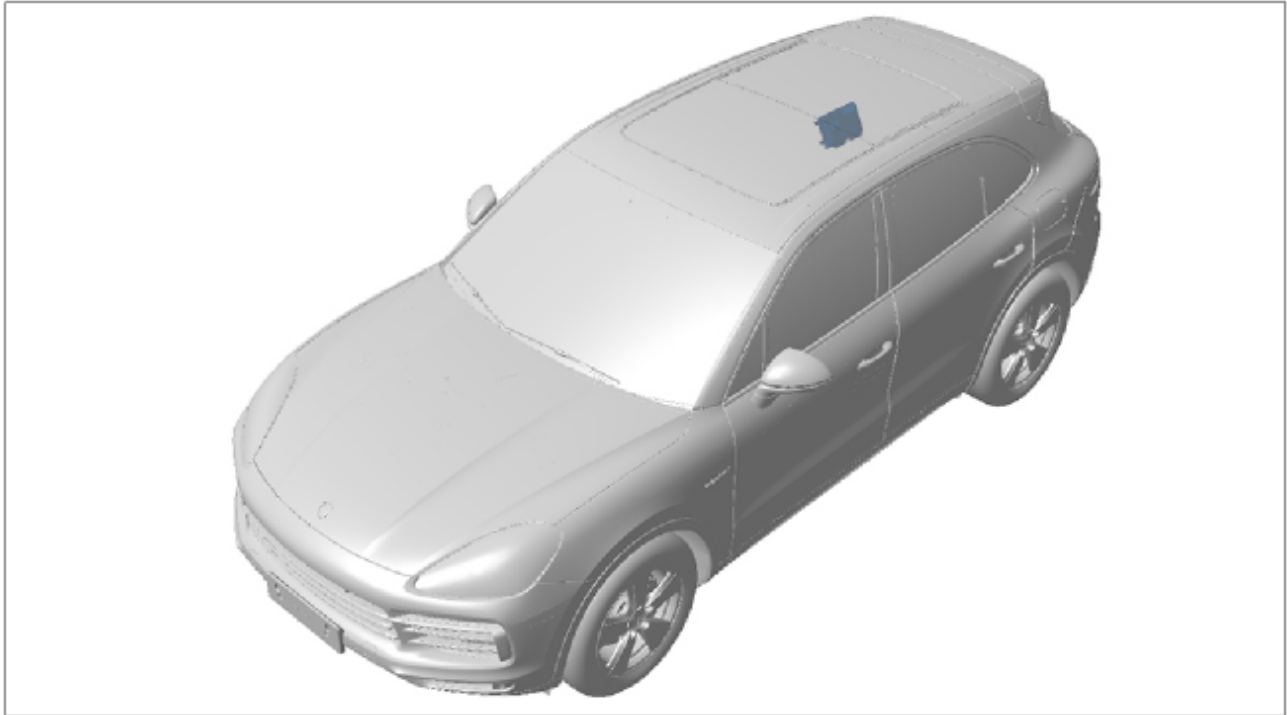
Every vehicle is assigned just one campaign scope.

⇒ To find out which scope is assigned to the relevant vehicle, see PCSS Vehicle Information.

Scope 1: Installing and teaching loudspeaker booster

Scope 2: Not applicable for the US market

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

Installation
Position:

Installation position

– **(Retrofitting)** loudspeaker booster

Model Line: **Panamera (971)**

Equipment: Burmester Surround Sound System **(M-no. 9VJ)**

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

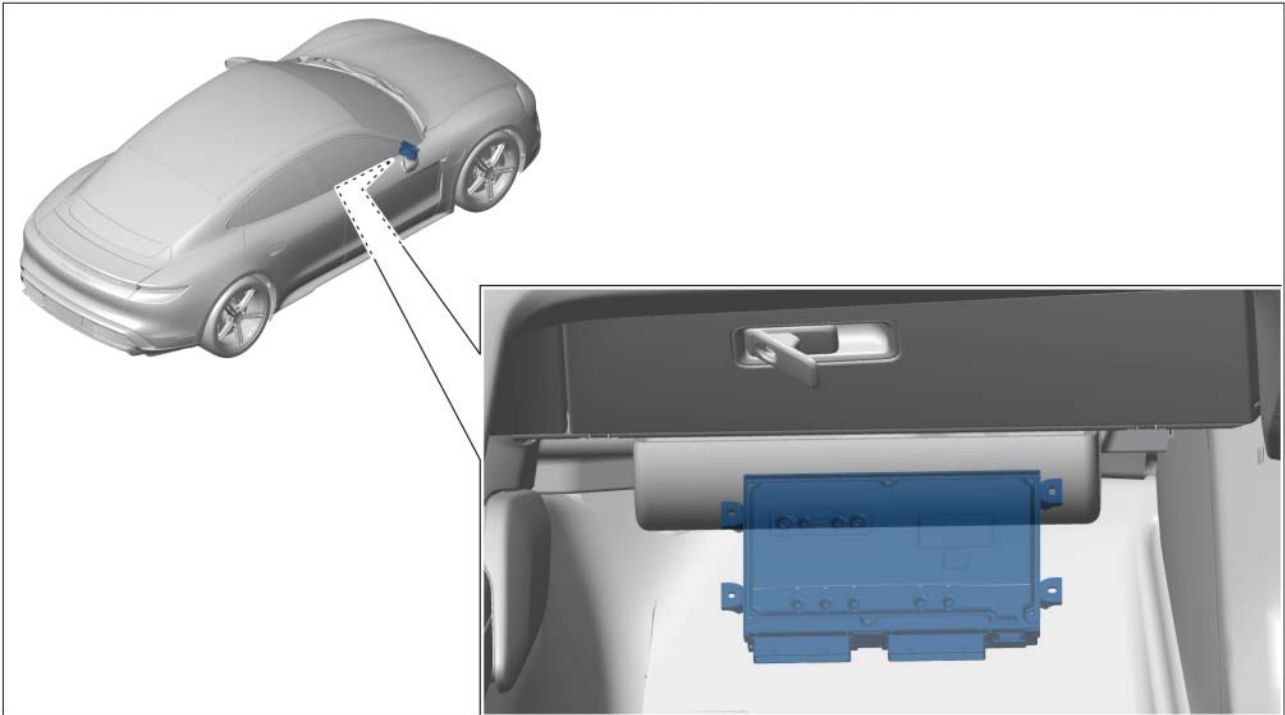**Every vehicle is assigned just one campaign scope**.

⇒ To find out which scope is assigned to the relevant vehicle, see PCSS Vehicle Information.

Scope 3: Installing and teaching loudspeaker booster

Scope 4: Not applicable for the US market

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

Installation Position:

Installation position (shown on the Taycan)

– **(Retrofitting)** loudspeaker booster

Model Line: **Taycan (Y1A/Y1B)**

Equipment: Burmester Surround Sound System **(M-no. 9VJ)**

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.

ℹ️ Information

Every vehicle is assigned just one campaign scope.

⇒ To find out which scope is assigned to the relevant vehicle, see PCSS Vehicle Information.
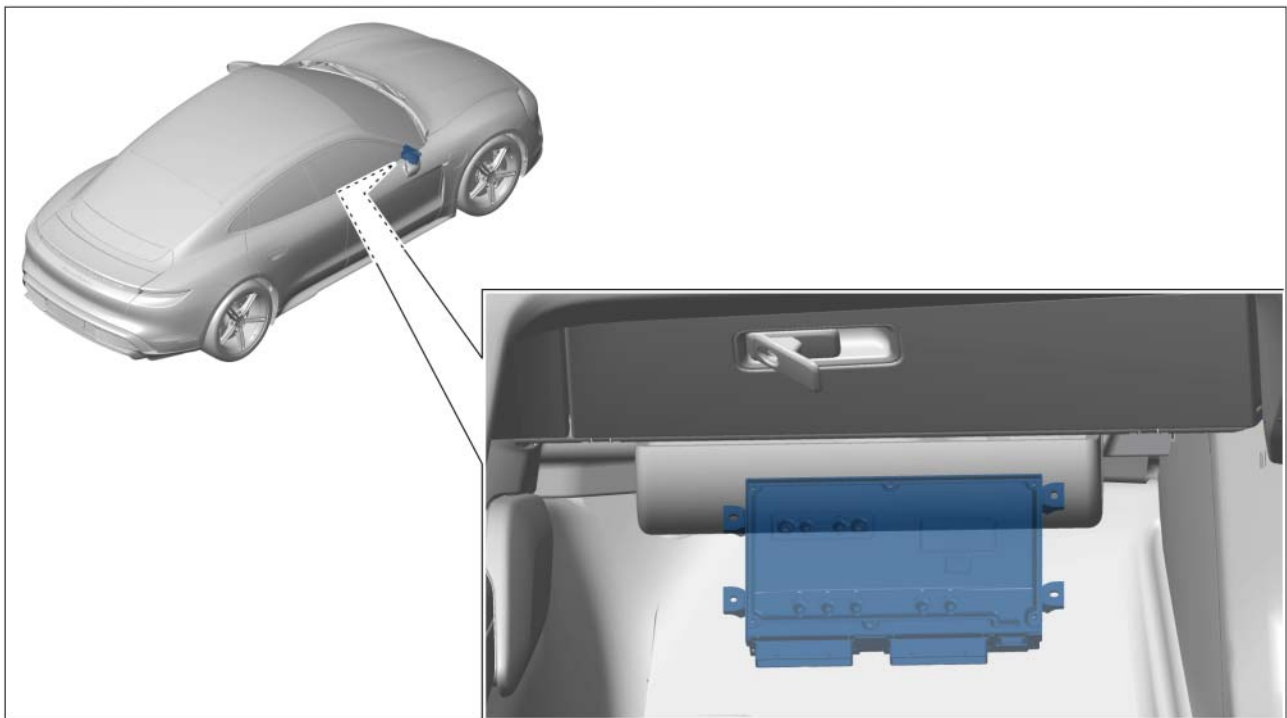
Scope 5: Installing and teaching loudspeaker booster

Scope 6: Not applicable for the US market

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

Installation Position:

Installation position

– **(Retrofitting)** loudspeaker booster

Parts required - Cayenne (9YA/ 9YB)

Parts Info:	Part No.	Designation	Number
	V04015001GP	⇒ Loudspeaker booster	1 ea.

Information

The required fastening screws (4 ea., Part No. N10442003) are already screwed into the loud-speaker booster bracket and must be used again.

Parts required - **Panamera (971)**

Parts Info:

Part No.	Designation	Number
V04015001GQ	⇒ Loudspeaker booster	1 ea.

Information

The required fastening screws (4 ea., Part No. N 90974701) are already supplied with the loud-speaker booster bracket.

Parts required - **Taycan (Y1A/ Y1B)**

Parts Info:

Part No.	Designation	Number
V04015001GN	⇒ Loudspeaker booster	1 ea.
N 90817003	⇒ Internal hexagon round tapping screw	4 ea.

Required 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** **90 A battery charger**
- **9900 - PIWIS Tester 3**

Installing loudspeaker booster - **Cayenne (9YA/ 9YB)**

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 meter/ 16.4 ft).**

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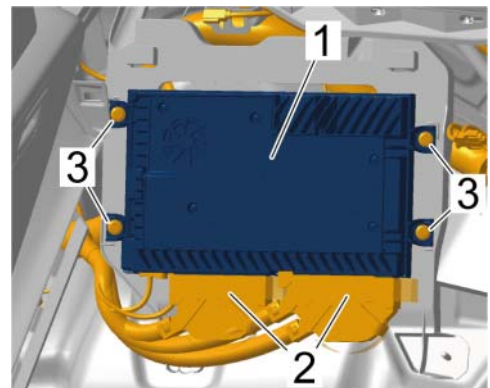
Work
Procedure:

🛈 Information

Always comply with the regulations for handling ESD-sensitive (electrostatic discharge sensitive) components!

- Always wear approved work clothes and shoes when carrying out assembly work.

- Do not remove new parts from ESD 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 Unscrew existing fastening screws ⇒ *Loudspeaker booster* **-3-** and set them aside.

3 Position loudspeaker booster ⇒ *Loudspeaker booster* **-1-**, screw in fastening screws ⇒ *Loudspeaker booster* **-3-** and secure **Tightening torque 6 Nm (4.4 ftlb.)**.

🛈 Information

The number of connecting lines for the loudspeaker booster will vary depending on equipment and are located near the installation position. They are fixed if necessary and must be exposed beforehand.

Loudspeaker booster

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

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

6 After installing the loudspeaker booster, proceed as follows:

For vehicles with **scope 1**, continue with ⇒ *Technical Information '700319 Teaching loudspeaker booster'*

For vehicles with **scope 2**, enter the campaign in the Warranty and Maintenance booklet.

– End of action –
Continue with ⇒ *Technical Information '700319 Warranty processing'*

Installing loudspeaker booster **(Panamera (971)**

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 meter/ 16.4 ft).**

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

Work Procedure:

i **Information**

Always comply with the regulations for handling ESD-sensitive (electrostatic discharge sensitive) components!

- Always wear approved work clothes and shoes when carrying out assembly work.

- Do not remove new parts from ESD protective packaging until shortly before installation.

- Do not touch electric pins and plug contacts.

1 Fold over carpet on the front passenger side until the footrest is accessible. ⇒ *Workshop Manual '704119 Removing and installing carpet'*

2 Remove footrest ⇒ *Footrest* **-4-**.

    2.1 Unscrew and remove fastening nuts ⇒ *Footrest* **-2-**.

    2.2 Unscrew fastening screws ⇒ *Footrest* **-3-**.

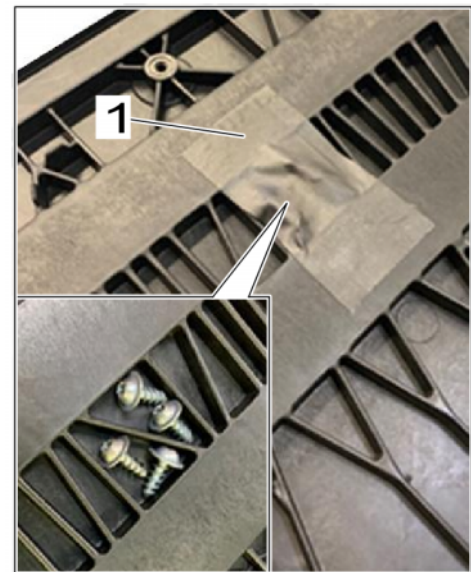   2.3 Guide footrest ⇒ *Footrest* **-4-** out of the footwell.

Footrest

3 Pull adhesive strip off the ⇒ *Adhesive strip on footrest* **-1-** footrest, remove fastening screws ⇒ *Adhesive strip on footrest* and set them aside.

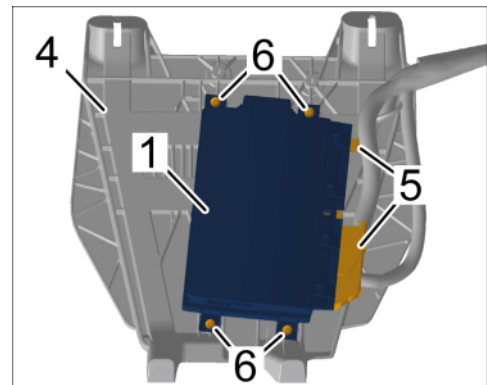4 Install loudspeaker booster ⇒ *Loudspeaker booster* **-4-**.

> ### ℹ️ Information
>
> The number of connecting lines for the loudspeaker booster will vary depending on equipment and are located near the installation position. They are fixed if necessary and must be exposed beforehand.

Adhesive strip on footrest

    4.1 Position loudspeaker booster ⇒ *Loudspeaker booster* **-1-** on the back of the footrest ⇒ *Loudspeaker booster* **-4-**, screw in fastening screws ⇒ *Loudspeaker booster* **-6-** and tighten **Tightening torque 2.5 Nm (1.8 ftlb.)**.

    4.2 Position footrest in the footwell.

    4.3 Plug in and lock electric plug connections ⇒ *Loudspeaker booster* **-5-**.

Loudspeaker booster

5 Secure the footrest ⇒ *Footrest* **-4-**.

    5.1 Screw in fastening screws ⇒ *Footrest* **-3-** and tighten with **Tightening torque 8 Nm (5.9 ftlb.)**.

    5.2 Screw in fastening nuts ⇒ *Footrest* **-2-** and tighten with **Tightening torque 2.5 Nm (1.8 ftlb.)**.

Footrest

6 Install floor covering on passenger's side. ⇒ *Workshop Manual '704119 Removing and instal-ling carpet'*

7 After installing the loudspeaker booster, proceed as follows:

For vehicles with **scope 3**, continue with ⇒ *Technical Information '704119 Teaching loud-speaker booster'.*

For vehicles with **scope 4**, enter the campaign in the Warranty and Maintenance booklet.

– End of action –
Continue with ⇒ *Technical Information '704119 Warranty processing'*

Installing loudspeaker booster - **Taycan (Y1A/ Y1B)**

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 meter/ 16.4 ft).**

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

Work
Procedure:

Information

Always comply with the regulations for handling ESD-sensitive (electrostatic discharge sensitive) components!

- Always wear approved work clothes and shoes when carrying out assembly work.

- Do not remove new parts from ESD protective packaging until shortly before installation.

- Do not touch electric pins and plug contacts.

1   Fold over carpet in the front passenger footwell until the footrest is accessible. ⇒ *Workshop Manual '70411902 Removing and fitting carpet on passenger's side'*

2   Remove footrest ⇒ *Footrest* **-2-**.
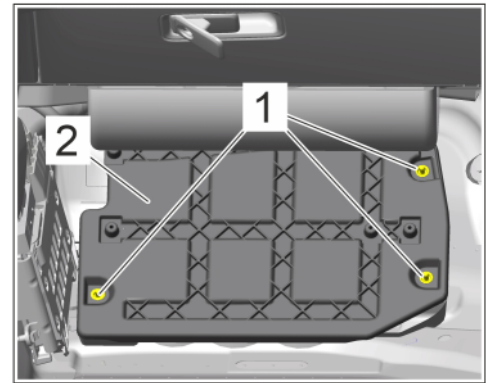
    2.1   Unscrew fastening screws ⇒ *Footrest* **-1-**.

    2.2   Guide footrest ⇒ *Footrest* **-2-** out of the footwell.

3   Install loudspeaker booster ⇒ *Loudspeaker booster* **-3-**.

Information

The number of connecting lines for the loudspeaker booster will vary depending on equipment and are located near the installation position. They are fixed if necessary and must be exposed beforehand.
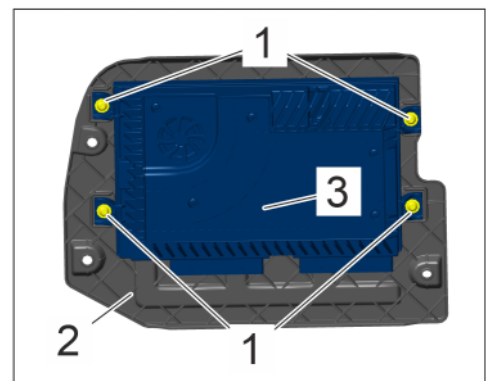

Footrest

    3.1   Position loudspeaker booster ⇒ *Loudspeaker booster* **-1-** on the back of the footrest ⇒ *Loudspeaker booster* **-2-**, screw in fastening screws ⇒ *Loudspeaker booster* **-1-** and tighten with **Tightening torque 4 Nm (3 ftlb.)**.

    3.2   Position footrest in the footwell.

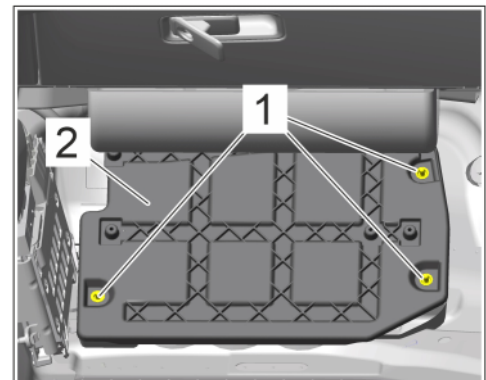   3.3   Plug in and lock electric plug connections.

Loudspeaker booster

4 Screw in fastening screws ⇒ *Footrest* **-1-** and tighten **Tightening torque 8 Nm (5.9 ftlb.)**.

5 Install floor covering on passenger's side. ⇒ *Workshop Manual '70411902 Removing and fitting carpet on passenger's side'*

6 After installing the loudspeaker booster, proceed as follows:

For vehicles with **scope 5**, continue with ⇒ *Technical Information '70411902 Teaching loudspeaker booster'*.

Footrest

For vehicles with **scope 6**, enter the campaign in the Warranty and Maintenance booklet.

– End of action –
Continue with ⇒ *Technical Information '70411902 Warranty processing'*

Teaching loudspeaker booster - **Cayenne (9YA/ 9YB)**

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/coding**

⇒ **Switch off the ignition before connecting the Tester.**

⇒ **Make sure that the power supply is not interrupted during programming/coding.**

⇒ **Battery charger with at least Connect current 90 A to the vehicle battery.**

Work Procedure:

ℹ 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 in emergency start tray. ⇒ *Emergency start tray*

3 Switch on ignition.

4 Select the **Amplifier** 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 Once coding is completed successfully, the corresponding message Coding has been 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 Observe information in the PIWIS Tester.

13 Check the chassis number and enter 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.

Emergency start tray

18.2 **Read out all fault memories and erase them if necessary** must now be selected. Press •F12" ('Next') to continue. ⇒ *Erase fault memory*
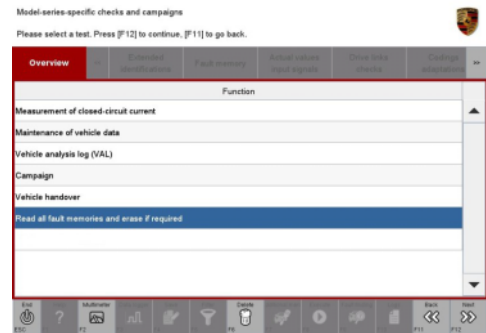
The fault memories of the control units are read out.

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

Erase fault memory

ℹ️ 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.

ℹ️ 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*.

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

20 Perform function test on loudspeaker booster and check whether audio output is available.

21 Enter the campaign in the Warranty and Maintenance booklet.

Control unit selection

Teaching loudspeaker booster - Panamera (971)

NOTICE

Voltage drop

• **Irreparable damage to 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/coding**

⇒ **Switch off the ignition before connecting the Tester.**

⇒ **Make sure that the power supply is not interrupted during programming/coding.**

⇒ **Connect a battery charger with at least Current 90 A to the vehicle battery.**
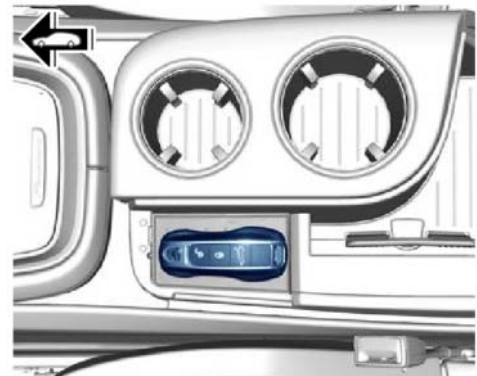
Work
Procedure:

i **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 in emergency start tray. ⇒ *Emergency start tray*

3   Switch on ignition.

4   Select the vehicle type if necessary.

5   In the **Overview**, press •F7" to switch to the **Additional menu**.

6   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.

Emergency start tray

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

8   Once component protection has been commissioned successfully, return to the **Overview**.

9   Select the **Amplifier** control unit in the **Overview**. Press •F12" ('Next') to continue.

10   Select **Coding/programming**.

11   Select **Automatic coding**. Press •F12" ('Next') to continue.

12   Once coding is completed successfully, the corresponding message Coding has been completed successfully appears. Press •F12" ('Next') to continue.

13   Go back to the **Overview**.

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

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

   14.2   **Read out all fault memories and erase them if necessary** must now be selected. Press •F12" ('Next') to continue. ⇒ *Erase fault memory*
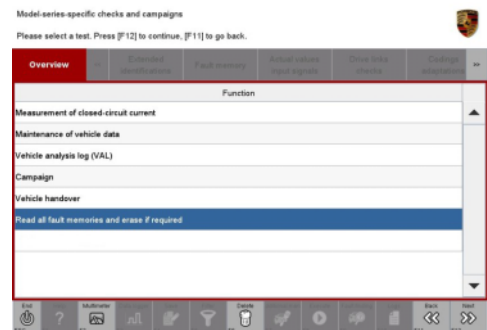
   The fault memories of the control units are read out.

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

Erase fault memory

   ℹ️ **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.

14.4   Press •F8" to delete fault memory entries.

14.5   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.

ℹ️ 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.

14.6   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

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

16   Perform function test on loudspeaker booster and check whether audio output is available.

17   Enter the campaign in the Warranty and Maintenance booklet.

Teaching loudspeaker booster - **Taycan (Y1A/ Y1B)**

NOTICE

Voltage drop

- **Irreparable damage to 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/coding**

⇒ **Switch off the ignition before connecting the Tester.**

⇒ **Make sure that the power supply is not interrupted during programming/coding.**

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

Work
Procedure:

i **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 in emergency start tray. ⇒ *Emergency start tray*

3 Establish operational readiness.

4 Select the vehicle type if necessary.

5 Select the **Amplifier** control unit in the **Overview**. Press •F12" ('Next') to continue.

6 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.

Emergency start tray

7 Select **Coding/programming**.

8 Select **Automatic coding**. Press •F12" ('Next') to continue.

9 Once coding is completed successfully, the corresponding message Coding has been completed successfully appears. Press •F12" ('Next') to continue.

10 Go back to the **Overview**.

11 In the **Overview**, press •F7" to switch to the **Additional menu**.

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

13 Once component protection has been commissioned successfully, return to the **Overview**.

14 Teach combination sensor.

    14.1 Select the **Airbag** control unit in the **Overview**.

    14.2 Select **Maintenance/repairs**.

14.3 Select **Teach combination sensor**. Follow instructions and procedure. Press •F12" ('Next') to continue.

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

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

15.2 **Read out all fault memories and erase them if necessary** must now be selected. Press •F12" ('Next') to continue. ⇒ *Erase fault memory*
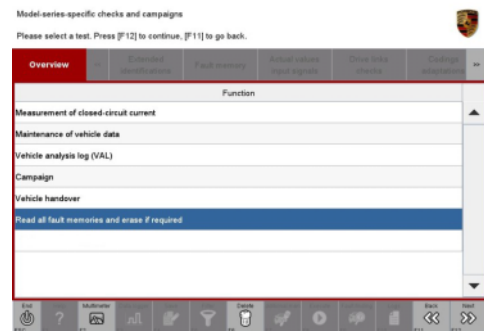
The fault memories of the control units are read out.

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

Erase fault memory

ℹ️ 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.

15.4 Press •F8" to delete fault memory entries.

15.5 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.

ℹ️ Information

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

• End operational readiness.

• 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.

• Establish driving readiness briefly and end it again.

• End operational readiness and restore it after a waiting time of approx. 10 seconds.

• 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.

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

16 Exit the diagnostic application. End operational readiness. Disconnect the Tester from the vehicle.

17 Perform function test on loudspeaker booster and check whether audio output is available.

Control unit selection

18 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: **Installing loudspeaker booster** and **teaching loudspeaker booster**

Valid for

• **Cayenne (9YA/9YB)**

Labor time:	
Installing and teaching loudspeaker booster	Labor time: **68 TU**
Includes: Removing and installing cover for (rear) lock support Removing and installing side trim panel for rear luggage compartment on the right Connecting and disconnecting battery charger Connecting and disconnecting PIWIS Tester Reading out and erasing fault memories Function test	
Parts required:	
V04015001GP Loudspeaker booster	1 ea.
Damage code WMQ3 066 000 1	

Warranty processing

ℹ️ 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 1-2:   Not relevant for this vehicle type.

Scope 3:   **Installing loudspeaker booster** and **teaching loudspeaker booster**

Valid for

•   **Panamera (971)**

Labor time:	
Installing and teaching loudspeaker booster	Labor time: **104 TU**

Includes: Folding the carpet
         Removing and installing footrest
         Connecting and disconnecting battery charger
         Connecting and disconnecting PIWIS Tester
         Reading out and erasing fault memories
         Function test	

Parts required:	
V04015001GQ Loudspeaker booster	1 ea.
Damage code WMQ3 066 000 1	

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 1-4:   Not relevant for this vehicle type.

Scope 5:   **Installing loudspeaker booster** and **teaching loudspeaker booster**

Valid for

- **Taycan (Y1A/Y1B)**

Labor time:	
Installing and teaching loudspeaker booster	Labor time: **74 TU**

Includes: Folding the carpet
            Removing and installing footrest
            Connecting and disconnecting battery charger
            Connecting and disconnecting PIWIS Tester
            Reading out and erasing fault memories
            Function test	

Parts required:	
V04015001GN Loudspeaker booster	1 ea.
N 90817003 Internal hexagon round tapping screw	4 ea.
Damage code WMQ3 066 000 1	