WSL0 - Re-coding Front and Rear Door Control Units (Workshop Campaigns)

Imporatant: **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 Year: **2025**

Model Line: **Macan Electric (XAB)**

Concerns: **Front (J386) and rear (J389) door control units on left and right**

Cause: **Updated coding data is available for the front and rear door control units that affects the window pinch protection.**

Action:
- Recoding front and rear door control units on left and right using the Porsche Tester
- Additionally read out the Bluetooth identifier of Porsche Communication Management (PCM) and reset the PCM if necessary
- Minimum requirement: Release **43.600.005** (or higher)

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

Required tools

Tools:
- Porsche Tester **P90999 - Porsche Tester 4**
- Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 - 90-A battery charger**. For further information about the battery chargers to be used, see the corresponding Workshop Manual ⇒ *Workshop Manual '270689 Battery, charging vehicle electrical system'*.

Re-coding front and rear door control units

NOTICE

Sitting inside the vehicle during the update

- **Update cancelled by automatic ignition activation**

⇒ **Avoid sitting inside the vehicle during the update.**

NOTICE

The specified update process was not followed

- **Update cancellation**
- **Destruction of control units**

⇒ **Observe and follow the procedures displayed for the update and instructions for the Porsche Tester**

⇒ **Do not switch the ignition on/off without instruction from Porsche Tester**

⇒ **Repeat coding only if a failed update is displayed on the Porsche Tester**

Information

Vehicle update – general information

The entire vehicle network will be checked for a necessary update or computed to ensure fault-free functioning of the vehicle. For this purpose, the following preparations are to be made:

- Latest release on available on Porsche Tester 4 and PiUS
- Vehicle is fully built up
- VCI and Porsche Tester 4 must be connected to each other via workshop Wi-Fi
- The user must be logged into the Porsche Tester 4 in the PPN
- The vehicle must be supported with an external charger
- Seat heating and seat ventilation are not active
- Place the original hand-held transmitter in the emergency start tray (see Workshop Manual)

For this update procedure, the respective vehicle no longer needs to be in transport mode.

Procedure for new vehicles with active transport protection:
Perform **"Vehicle handover"** routine according to the Porsche Tester instructions, **to deactivate transport protection**.

Always make sure: to answer the question of "Is this a new vehicle?" asked by the Tester with **No**!
As a result, no complete vehicle commissioning is carried out and only transport protection can be deactivated.

Work Procedure: 1 Observe preconditions for control unit coding.
⇒ *Technical Information '9X10IN Basic instructions and procedure for control unit programming using the PIWIS Tester Information'*

Information

An **active** internet connection with the Porsche Tester must be ensured.

The technician **must** log in to PPN with the Porsche Tester.

The Porsche Tester must not be charged using the cigarette lighter.

Information

Before starting the diagnosis, it is essential for an ignition change to be performed on the vehicle.
Subsequently, after starting the diagnosis, the VCI will be automatically initialized and the control unit data is loaded.

For additional information on the coding procedure and when the process is aborted, see ⇒ *Technical Information '9X10IN Additional information on control unit programming and coding'*.

2 Prepare coding for front door control units (J386) and rear (J389) on the left and right.

2.1 Start new logging via P2 .

2.2 As soon as the control unit overview is displayed, call up the additional menu F7 .

An overview of all campaigns to be carried out for the respective vehicle is then displayed automatically.

2.3 Exit the overview of the campaigns to be carried out for the respective vehicle by pressing F12 .

2.4 Create Vehicle Analysis Log (VAL). Mark the created VAL with the attribute “Pre-VAL” and, after carrying out the campaign, return it using the Porsche Tester.

2.5 **Cancel** the **automatic integration test** on the Porsche Tester by pressing F11 .

3 Re-code front (J386) and rear (J389) door control units on the left and right.

In the displayed additional menu, select and confirm the **“Control unit programming and coding (campaign)”** menu item.
The required codings are then displayed.
Start the update with F8 and carry out as per menu instructions.

After the update has been completed, a corresponding confirmation is displayed on the Porsche Tester. All affected control units should now be successfully coded or checked in the results view showing the control units and their status.

Information

If a deviation in the integration test is still indicated despite coding being carried out, coding must be repeated. If the deviation persists, contact Technical Support.

Information

The entire **update process** for this action takes **approx. 2 minutes** depending on the equipment.
However, the download speed of the update package depends on the performance of the local network and can vary accordingly.

Information

During the update process, all displays in the vehicle (instrument cluster, central display and passenger display) are occasionally switched off. However if coding is ongoing, **the ignition must not be switched on/off**, as this can result in the destruction of the control units.

If Wi-Fi coverage is insufficient, the connection between the Porsche Tester and VCI can be interrupted (battery charge indicator at the top right inactive on the Tester display). The vehicle will, however, continue coding **independently**. Whilst this is ongoing it is not possible to make any entries on the Porsche Tester or restart the process. In this case, the update progress can still be checked in the vehicle on the diagnostic tester or in the front display and control panel (R238) by going to the **"Messages" (RPC+)** tile.

Update progress on central display

For specific information on coding of control units during this campaign, see the table below.

Required Porsche Tester software release:	**43.600.005** (or higher)
Type of control unit update:	Control unit coding via the **"Control unit programming and coding (campaign)"** function.
Campaign to be carried out: **WSL0**	
Coding sequence:	Read and follow the **information and instructions on the Porsche Tester** during the guided procedure. **Do not interrupt the coding process.** After coding, a re-documentation of the new coding data starts.
Coding duration (up to):	**2 minutes**

Procedure in the event of error messages appearing during the coding sequence:	⇒ *Technical Information '9X10IN Basic instructions and procedure for control unit programming using the PIWIS Tester Information'*
Procedure in the event of abnormal termination of control unit coding:	**Continue the campaign sequence to the end and, once it is completed, perform the integration test again and restart coding.** Specific information on how to proceed if aborted: ⇒ *Technical Information '9X10IN Additional information on control unit programming and coding'*

4 After the software update is complete, perform a vehicle bus idle.

Information
A bus idle is essentially always required upon completion of a software update.
The duration of the required bus idle, however, depends on the number and type of control units previously updated.
Therefore, please always note the information on the duration of the required bus idle in this Technical Information.

4.1 Return to the control unit overview by pressing F11 .

4.2 End vehicle's readiness for operation (ignition off). Central computer (PCM) screen switches off.

4.3 Wait **1 minute** with the driver's door open.

4.4 Restore readiness for operation (ignition on).

5 Review readiness for driving the vehicle.

5.1 Operate the footbrake and keep it pressed.

5.2 Use the selector lever to successively engage driving gears D and R. The selected gear must be displayed in the gear indicator on the instrument cluster.

5.3 Activate the parking lock via button P.

6 End readiness for operation (ignition off) and restore it after waiting approx. 30 seconds (ignition on).

7 Standardize the side windows (pulling and holding all four switches).

8 Read out and delete the fault memory.

Information

Due to the vehicle diagnosis and programming status (new vehicles), fault memory entries that do not indicate an actual fault in the vehicle may be stored.
These fault memory entries, for the most part, can be deleted after vehicle handover has been completed and a test drive.

The following fault memory entry is always stored as part of a vehicle diagnosis with the Porsche Tester and does not represent an actual fault.

Control unit	Fault code	Description
Various control units	B184C00	Protection of vehicle diagnostics, actuation active
Main control unit for gateway HCP5 (J1273)	U17A000	Diagnostic filter, access protection deactivated
Drive and chassis main control unit HCP1 (J1312)	C140DF0	Vehicle Protected Environment (VPE), vehicle protection activated

For further valid fault codes, see ⇒ *Technical Information '9X10IN Valid fault codes after coding the door control units'*.

8.1 Press F7 to call up the additional menu on the Porsche Tester.

8.2 Select and confirm the menu item **"Read/delete all fault memories"** and confirm.

8.3 Press F8 to delete the displayed fault memory entries.

9 **Only for vehicles with no handover inspection being carried out to date:** Commission the vehicle; to do this, carry out the **"Vehicle handover"** routine in full according to Porsche Tester instructions.

10 Create a Vehicle Analysis Log (VAL) using the Porsche Tester. To do this, press F7 to access the additional menu and select the creation of the protocol.
Mark the created vehicle analysis log with the attribute "'Post-VAL" and, after carrying out the campaign, return it using the Porsche Tester

11 End the diagnostic application and disconnect the Porsche Tester from the vehicle.

12 Check the Bluetooth identifier of Porsche Communication Management (PCM) and reset the PCM if necessary.

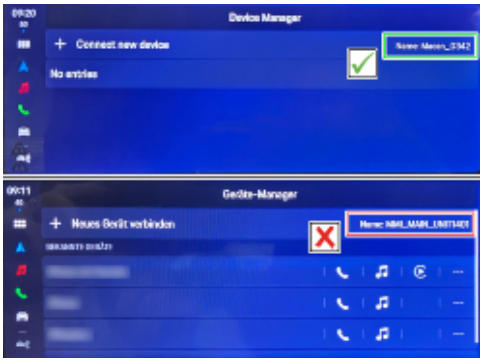
12.1 Select the “Devices” tile on the PCM home screen, then the Device Manager opens.

12.2 Read the Bluetooth identifier of the PCM in the top right corner of the PCM device manager.

- The identifier is **“Macan_xxxx”**: If no **further action is required**, continue with action step 13.

PCM home screen - Devices

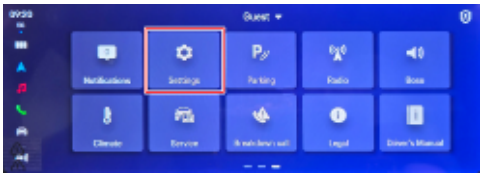
- **“MMI_MAIN_UNITxxxx”** is displayed as an identifier: PCM must be **reset** before the vehicle is handed over to the customer.



PCM device manager - Bluetooth identifier

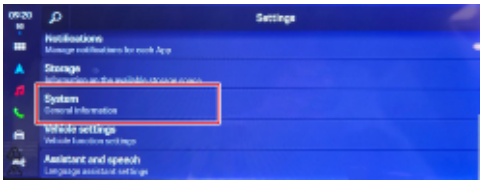
12.3 Reset Porsche Communication Management (PCM).

12.3.1 Select the “Settings” tile in the PCM home screen.



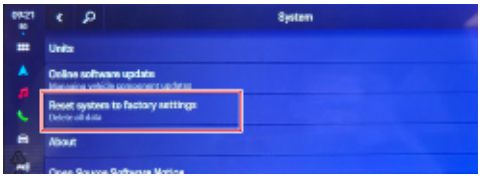
PCM - Settings

12.3.2 Select the menu entry “System” in settings.



PCM settings - System

12.3.3 Select the “Reset to factory settings” function and confirm the reset on the following displays in the PCM.



PCM - resetting system to factory defaults

As soon as the reset has been confirmed, **the PCM switches off and the screen goes dark**. PCM then restarts and the factory settings are reloaded.
No ignition change may be carried out in the process.

12.3.4 As soon as the Porsche Communication Management (PCM) has been **fully** started, call up the Device Manager again and check the Bluetooth identifier.
The identifier must now be **“Macan_xxxx”**. If this is not the case, the reset process must be repeated.

13 Switch off ignition.

14 Switch off and disconnect the battery charger.

15 Enter the campaign in the Warranty and Maintenance Logbook.

Warranty processing

Information
The specified labor time was determined specifically for carrying out this campaign and includes all necessary preliminary and rework. The labor times may differ from the labor times published in the Working Positions Catalogue List in PCSS.

Scope 1: **Re-coding front (J386) and rear (J389) door control units on the left and right**

Labor time:

Re-code front (J386) and rear (J389) door control units on the left and right — Labor time: **40 TU**

Includes:
- Connect and disconnect the battery charger
- Connect and disconnect Porsche Tester
- Standardize the side windows
- Check readiness for driving
- Read out and delete the fault memory
- Read out the Bluetooth identifier of the PCM and reset PCM if necessary
- Create Vehicle Analysis Log (VAL) before and after campaign

⇒ **Damage Number WSL0 066 000 1**

Additional information on control unit programming and coding

Information

If programming or coding and rework procedures could not be carried out correctly, please refer to the Workshop Manual for the basic procedure for control unit programming with the PIWIS Tester ⇒ *Technical Information '9X10IN Basic information and procedure for control unit programming with the PIWIS Tester Information'*. :

In the event of a fault, a log of the entire diagnostic process must **always** be created using P2 using the PIWIS Tester.

Work Procedure:

General:			
Fault indication	**Cause**	**Source of fault**	**Remedial action**
After the first update cycle, one or more control units with **coding are required** or **programming is required**	The affected control unit was not successfully programmed or coded	Vehicle	▪ Restart update with F8 ▪ After successful implementation, continue with work step 5

Before the update:			
Fault indication	**Cause**	**Source of fault**	**Remedial action**
Diagnostic application crashes or the VCI connection has been aborted (the diagnosis has no information on battery voltage – see the battery symbol at the top right on the Tester display)		VCI has poor Wi-Fi connection	▪ Restart Tester, connect VCI with cable and try again ▪ or: ensure that Wi-Fi connection is stable, moving vehicle to a suitable position in workshop if necessary

During the update:			
Fault indication	**Cause**	**Source of fault**	**Remedial action**
Diagnostic application crashes or the VCI connection has been aborted (the diagnosis has no information on battery voltage – see the battery symbol at the top right on the Tester display)		Diagnostic application	▪ Checking the update progress in the vehicle is mandatory ▪ **No ignition change during update** ▪ Do not restart the Tester until **the update** has been completed in the vehicle (tile "Messages" --> Installation "successful") ▪ When the update is concluded in the vehicle, verify that the update is complete. To do this, restart the **"Programming and coding control units (campaign)"** function on the additional menu in the Porsche Tester
Implementation of vehicle update immediately after starting not successful, **Vehicle update failed** error message	Date/time in vehicle after disconnecting/re-connecting 12-V battery (terminal 30) incorrect. As a result, no software update can be performed	Vehicle	Correct the date/time in the vehicle: ▪ Open **"Control unit overview"** ▪ Access **"Gateway HCP5"** main control unit ▪ Open **"Service / Maintenance"** menu ▪ Select and execute **"Set time"** menu item

Valid fault codes after coding the door control units

Control unit	Fault code	Description	Remedy
Brake electronics (J104)	C13F7F1	Bedding-in function, active	▪ Valid fault memory entry after vehicle handover
Front camera (R242)	B200FF2	Implausible signal	▪ After the test drive: Fault memory entry passive
Front camera (R242)	U12EF00	Front camera for driver assistance systems, implausible signal	▪ After the test drive: Fault memory entry passive
Front camera (R242)	U147C00	External communication (J949), implausible signal	▪ After the test drive: Fault memory entry passive
Front camera (R242)	U198C00	Road graph, received fault value	▪ After the test drive: Fault memory entry passive
Drive and chassis main control unit HCP1 (J1312)	U045D00	Driver assistance main control unit HCP2 (J1274), ETHERNET data bus driver assistance, implausible signal	▪ After the test drive: Fault memory entry passive
Driver assistance main control unit HCP2 (J1274)	B200FF2	Road graph, received fault value	▪ After the test drive: Fault memory entry passive