

WSJO – Update to Software Network VR28.13 (Workshop Campaign)

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 Year: As of 2024 up to 2025

Change Overview:

Revision	Date	Change
0	11/04/2025	<ul style="list-style-type: none"> First publication
1	11/05/2025	<ul style="list-style-type: none"> Addition of reference to Note attached on PPN page for this Campaign Update to Note attached on PPN page for this Campaign Update to 'Notice' under Work Procedure Step 3
2	11/06/2025	<ul style="list-style-type: none"> Addition of 'Checklist' section as a separate attachment on PPN
3	11/12/2025	<ul style="list-style-type: none"> Update to Checklist: Addition of step 17 & modification of step 19
4	12/19/2025	<ul style="list-style-type: none"> Update to minimum required Porsche Tester software release Addition of step 17 within Work Procedure section Addition of step 23 in Checklist
5	02/09/2026	<ul style="list-style-type: none"> Update to minimum required Porsche Tester software release Update to "Update to software network VR28.13", work procedure step 2, and step 3 Update to "Additional information on control unit programming and coding", work procedure Update to "Checklist", step 10
6	03/02/2026	<ul style="list-style-type: none"> Update to work procedure "During the update", "HCP2 driver assistance main control unit (J1274)", and "Main control unit for gateway HCP5 (J1273)"
7	04/30/2026	<p>"Update to software package VR28.03 SQ4" implemented</p> <ul style="list-style-type: none"> Minimum requirement for Porsche Tester software release changed Action revised (updating Owner's Manual in the PCM for scope 3 and 4 added, teaching rear lid (work step 8) added, adding service intervals (work step 9) added) Required tools added

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| | | <ul style="list-style-type: none"> ▪ Overview of the new features of the software update added ▪ Checklist revised |
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Model Line: **Macan Electric (XAB)**

Concerns: **Software update (software network VR28.13 SQ4)**

Information: **Software optimizations are available for various control units for the Macan Electric.**

An overview of the improvements that will be integrated with this software update can be found in the appendix under ⇒ *Technical Information 'Overview of new features of the software update'*

Action:

- Perform reprogramming of the affected vehicle using the Porsche Tester on software network VR28.13 SQ4
- Update Owner's Manual in the PCM – **only valid for vehicles with the allocated scope 3 and scope 4**
- Minimum requirement: Release **44.100.010** (or higher)

Checklist: Due to the high number of programming steps **incorrectly** carried out as part of the last software update, a checklist was created to improve the overview of the work to be carried out. This can be used as a tool at the start and for support during the update.
The checklist **must be** completed, signed and attached to the PQIS quality line in the PCSS.
For the checklist, see ⇒ *Technical Information 'Checklist'*

Supporting Videos: For a better overview of the work to be carried out, several supporting videos have been created for individual work steps.
NOTE: Some videos have German language voiceover.
The supporting videos are available in PCSS: ⇒ *Workshop Manual '9X00IN10 Electrical system – general information (implementation of a software network update)'*

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 Charge battery and vehicle electrical system'*
- Only valid for vehicles with assigned scope 3 and scope 4 – **USB storage medium Type-C (for updating onboard Owner's Manual)**

Update to software network VR28.13 SQ4

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 the programming 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
- **To prevent potential faults due to insufficient data transfer, carry out the software update using a cable (between VCI and Porsche Tester). Only if sufficient WLAN availability is ensured in the workshop can a wireless update be performed**
- 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.

A NOTE ON CAMPAIGN PROGRAMMING FOR MULTIPLE VEHICLES AT THE SAME TIME: PCNA will make an exception to warranty policy regarding the necessary time keeping procedures when performing campaigns with an Integration test. Though warranty policy guidelines state that no technician may be punched on more than one R.O. at the same time, an exception will be made for these campaigns. Due to the extensive programming time necessary, a technician may perform multiple integration test campaigns at one time, as long as there is a separate identifiable punch for each on the respective repair order and the total number of campaigns being performed at one time does not exceed 3 vehicles. The exception will be made so that full "active participation time" does not need to be documented for these 3 campaigns only. Please refer to the Campaign FAQ document on PPN for more information.

- Work Procedure: 1 Observe preconditions for control unit programming.
⇒ *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 programming procedure and when the process is aborted, see ⇒ *Technical Information '9X10IN Additional information on control unit programming and coding'*.

- 2 Prepare an update of the various control units on software network VR28.13 SQ4.

- 2.1 Start new logging via **(P2)** .

- 2.2 Press **(F3)** to start the integration test in the control unit overview.

Create a 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.

The required updates are then automatically displayed for the respective vehicle in accordance with the integration test.



Information

Due to overload of the onboard tester, an interruption may occur intermittently in the step "Onboard tester downloads update".

In this case, the Porsche Tester will automatically restart the entire update process.

No intervention by the user is required!

- 3 Update the software of various control units on software network VR28.13 SQ4.

Start the software update with 'Campaign' **(F5)** (if not available, start the 'Repair' function with **(F8)**) and program it according to the menu guidance.

After the update has been completed, a corresponding confirmation is displayed on the Porsche Tester. All affected control units should now be successfully programmed 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 the programming carried out, this must be repeated. If the deviation persists, contact Technical Support.



Information

The entire **update process** for this action takes **approx. 120 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.

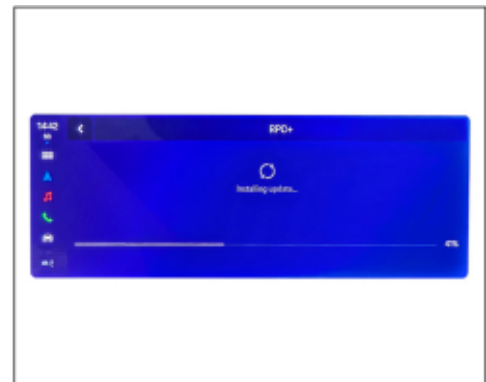


Information

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

During the update, a buzzing of the acoustic simulator will sound several times. This noise is normal and indicates an ongoing update of the HCP1 drive and chassis main control unit (J1312).

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, nevertheless, continue programming **independently**. In the meantime, no entry may be made on the Porsche Tester, and the programming must not be restarted. In this case, the update progress can still be checked in the vehicle in the front display and control panel (R238) by going to the **"Messages" (RPC+)** tile.



Update progress on central display

NOTICE

Switch ignition on/off in the event of faults in the HCP4 body electronics main control unit (J519)

- **Destruction of control units**
- ⇒ **Do not switch the ignition on/off after completing the update if faulty HCP4 (J519) programming and coding is displayed.**

If the main HCP4 body electronics control unit (J519) has a programming and coding error in the results view after programming is completed, follow the corresponding procedure in the section ⇒ *Technical Information '9X10IN Additional information on control unit programming and coding'*.

For specific information on control unit programming during this campaign, see the table below.

Required Porsche Tester software release:	44.100.010 (or higher)
Type of control unit programming:	Start control unit programming in the integration test using the 'Campaign' function (F5) on the Porsche Tester (if not available, start the 'Repair' function with (F8))
Campaign to be carried out: WSJO	

Programming sequence:	Read and follow the information and instructions on the Porsche Tester during the guided programming sequence. Do not interrupt the programming and coding process. A backup documentation process for the re-programmed software releases starts after programming and coding.
Programming time (up to):	120 minutes
Control units programmed as part of this campaign:	See ⇒ <i>Technical Information '9X10IN Overview of the new features of the software update'</i> .
Procedure if error messages appear during the programming sequence:	⇒ <i>Technical Information '9X10IN Basic instructions and procedure for control unit programming using the PIWIS Tester Information'</i>
Procedure in the event of a termination in the control unit programming:	Continue the campaign sequence to the end and, once it is completed, perform the integration test again and restart the programming. Specific information on the procedure in the event of cancellation: ⇒ <i>Technical Information '9X10IN Additional information on control unit programming and coding'</i>

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



Information

A bus idle is 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 Go back to the control unit overview by pressing **F11** .
- 4.2 End the readiness for operation of the vehicle (ignition off). Central computer (PCM) screen switches off.
- 4.3 Wait for **10 minutes** with the driver's door open.

- 5 **Valid only for scope 3 or scope 4** Update the Driver's Manual in the PCM. For more information, see ⇒ *Workshop Manual '9X10IN Diagnostic system: Perform vehicle handover'* (Install Onboard Driver's Manual section)
- 6 Check readiness for driving the vehicle.
 - 6.1 Restore readiness for operation (ignition on).
 - 6.2 Operate the footbrake and keep it pressed.
 - 6.3 Use the selector lever to engage driving gears D and R one after the other. The selected gear must be displayed in the gear indicator on the instrument cluster.
 - 6.4 Activate the parking lock via button P.
- 7 End readiness for operation (ignition off) and restore it after waiting for approx. 30 seconds (ignition on).
- 8 Re-teaching the rear lid:
 - 8.1 Select control unit for rear-end electronics (J393).
 - 8.2 Open "**Service/Maintenance**" menu.
 - 8.3 Select the menu item "**Teach rear lid**" and execute it, following the Tester instructions.
 - 8.4 If the teaching of the rear lid fails, close the rear lid again and repeat teaching by pressing **F8**.



Information

After teaching the rear lid, the opening height of the rear lid individually set by the customer is reset. The original customer setting must be restored after performing the software update. Once this update has been carried out, the corresponding customers must be informed that the learning values have been reset. To do this, use the prepared supplementary sheet (available in PPN).

- 9 Adding service interval
 - 9.1 Determine the date and mileage/km (total distance) of the last maintenance from the vehicle history in the Porsche Central Service System (PCSS) documentation. If no service has yet been carried out, determine the dates of the vehicle handover.
 - 9.2 Select Main HCP3 Infotainment control unit (**J794**) – instrument cluster from the control unit overview.
 - 9.3 Open "**Maintenance repairs**" menu.
 - 9.4 Select menu item **Adding maintenance interval** and carry it out. State the date of the last service and the total distance as previously determined. For vehicles without previous service, enter the vehicle handover dates. Then follow the additional instructions in the Tester.

- 10 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 other valid fault codes, see ⇒ *Technical Information '9X10IN Valid fault codes after update to the incremented software network VR28.13'*

- 10.1 Press **F7** to call up the additional menu on the Porsche Tester.
- 10.2 Select and confirm the menu item **"Read/delete all fault memories"** and confirm.
- 10.3 Press **F8** to delete the displayed fault memory entries.
- 11 **For new vehicles only** – commission the vehicle; for this, carry out the **"Vehicle handover"** routine in full according to the Porsche Tester instructions.
- 12 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 return it using the Porsche Tester after the campaign has been carried out.
- 13 Carry out a plausibility check of the battery capacity according to the instructions of the Porsche Tester.
- 13.1 Open high-voltage battery control unit **(J1120)**.
- 13.2 Open **"Maintenance repairs"** menu.
- 13.3 Select the menu item **"Plausibility check of battery capacity"** and carry it out.
- If **no** abnormalities were detected during the plausibility check of the battery capacity, end the procedure with **F12** and continue with **work step 13**.

- If the plausibility check of the battery capacity results in a deviation, repeat the test as described and follow the guided Tester procedure. If it was not possible to re-initialize the calculation of the battery capacity, it is not necessary to create the Vehicle Analysis Log at this point; ignore the corresponding instructions of the Tester.

**Information**

If the plausibility check of the battery capacity has resulted in a deviation and the Tester procedure has been carried out to reset the battery capacity learning values, **scope 2** of this campaign will then need to be invoiced.

In addition, the customer must be informed about the temporary deviation of the range display based on the FAQs for this campaign when returning the vehicle.

- 14 Read out the fault memory again and erase it.

For other valid fault codes, see ⇒ *Technical Information '9X10IN Valid fault codes after update to the incremented software network VR28.13'*

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

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

14.3 Press **F8** to delete the displayed fault memory entries.

- 15 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

- 16 End the diagnostic application. Switch off the ignition. Disconnect the Tester from the vehicle.

- 17 Switch off and disconnect the battery charger.

**Information**

During the test drive, the GPS is reconnected, and the tire settings must be checked and, if necessary, adjusted again.

After the test drive, individual customer settings must be restored.

The activities performed during the test drive and after the test drive do **not** have to be carried out by the technician.

- 18 Carry out the test drive, then restore the customer settings.

- 19 Check that all four doors are locked correctly:

19.1 Lock the vehicle using the hand-held transmitter

19.2 Remove hand-held transmitter from the proximity of the vehicle (> 10m)

- 19.3 Check that all four doors are locked properly by pulling the door handle
- 20 Attach the completed checklist to the PQIS process line. ⇒ *Technical Information '9X10IN Checklist'*
- 21 Enter the campaign in the Warranty and Maintenance logbook.

Warranty processing



Information

The specified labor times were determined specifically for carrying out this campaign and include all necessary preliminary and subsequent rework. The labor times may differ from those published in the Labor Operation List in the PCSS.

Scope 1: Carry out update to software network VR28.13 SQ4

Labor time:

Carry out update to software network VR28.13 SQ4 Labor time: **197 TU**

Includes:

- Connect and disconnect the battery charger
- Connect and disconnect Porsche Tester
- Teaching the rear lid
- Adding service interval
- Check readiness for driving
- Perform a plausibility check of battery capacity
- Read out and delete the fault memory
- Create the Vehicle Analysis Log (VAL) before and after the campaign

⇒ **Damage number WSJO 066 000 1**

Scope 2: Run an update on software network VR28.13 SQ4 and re-initialize the calculation of the battery capacity

Labor time:

Carry out update to software network VR28.13 SQ4 Labor time: **231 TU**

Includes:

- Connect and disconnect the battery charger
- Connect and disconnect Porsche Tester
- Teaching the rear lid
- Adding service interval
- Check readiness for driving
- Carry out the plausibility check of the battery capacity and reset the values
- Read out and delete the fault memory

Create the Vehicle Analysis Log (VAL) before and after the campaign
Re-initialize the calculation of the battery capacity

⇒ **Damage number WSJO 066 000 1**

Scope 3:

Carry out update to software network VR28.13 SQ4 and update the Owner's Manual in the PCM – Only valid for vehicles in the USA (C02)

Labor time:

Carry out update to software network VR28.13 SQ4

Labor time: **217 TU**

Includes:

- Connect and disconnect the battery charger
- Connect and disconnect Porsche Tester
- Teaching the rear lid
- Adding service interval
- Check readiness for driving
- Perform a plausibility check of battery capacity
- Read out and delete the fault memory
- Create the Vehicle Analysis Log (VAL) before and after the campaign

⇒ **Damage number WSJO 066 000 1**

Scope 4:

Carry out update to software network VR28.13, re-initialize the battery capacity calculation and update the Owner's Manual in the PCM – Only valid for vehicles in the USA (C02)

Labor time:

Update to software network VR28.13

Labor time: **251 TU**

Includes:

- Connect and disconnect the battery charger
- Connect and disconnect Porsche Tester
- Teaching the rear lid
- Adding service interval
- Check readiness for driving
- Carry out the plausibility check of the battery capacity and reset the values
- Read out and delete the fault memory
- Create the Vehicle Analysis Log (VAL) before and after the campaign
- Re-initialize the calculation of the battery capacity

⇒ **Damage number WSJO 066 000 1**

Overview of the new features of the software update

Overview:

Function	Description
Drive and chassis	<ul style="list-style-type: none"> ▪ Optimization of vehicle starting behavior ▪ Improvement in air suspension adjustment speed ▪ Optimization of the e-sound display to avoid unintentional warning messages
Battery charge	<ul style="list-style-type: none"> ▪ Improvement of preconditioning availability ▪ Increased robustness of charging behavior ▪ Improved Plug & Charge: Increased reliability when starting the charging process automatically at compatible charging pedestals
Infotainment system	<ul style="list-style-type: none"> ▪ Numerous stability, robustness and comfort improvements. Optimization of passenger display touch input ▪ Optimization of the passenger display for an improved display when using third-party apps ▪ Increased robustness of Bluetooth connectivity ▪ Improvement of the microphone function for voice messages through Apple CarPlay and Android Auto. Improved contacts synchronization between vehicle and mobile device ▪ Reliable availability of the central display: Improved system robustness ensures that the touch function of the central display is available without interruption after starting the vehicle
My Porsche app	<ul style="list-style-type: none"> ▪ New function for opening and locking the charge port door directly from the app ▪ Improvement of data transmission for a more accurate display of the remaining range in the My Porsche app
Driver assistance systems	<ul style="list-style-type: none"> ▪ Numerous stability, robustness and comfort improvements. Increased system stability to avoid unintended white and yellow warning messages, e.g. for fatigue warning, "Assistance systems not available" warning message, "Clean sensor" warning message ▪ Optimization of traffic sign recognition ▪ Expansion of the Porsche voice assistant to include Google Search for more convenient and quicker information retrieval while driving ▪ Adjustment of the wheel tilt function in the intelligent ParkAssist: The "wheel tilt" special function was removed to ensure consistent and reliable system behavior regardless of the gradient of the respective parking space. The digital Owner's Manual has been adapted accordingly

	<ul style="list-style-type: none"> ▪ Reduced warning and information messages: Adjustments reduce unnecessary or intermittent messages so that relevant warning and information messages can be perceived more clearly ▪ More stable behavior of ParkAssist: System improvements ensure a more reliable function of the ParkAssist
Navigation system	<ul style="list-style-type: none"> ▪ Improved 5G connectivity
Comfort systems	<ul style="list-style-type: none"> ▪ Optimization of vehicle key recognition ▪ Improved ParkAssist stability ▪ Improved smartphone charging: The wireless charging function supports smartphones – even with a protective case – more reliable and reduces charging interruptions ▪ Adjustments to the tailgate function: Ensures uniform opening and locking of the rear lid ▪ Harmonized side window control: More reliable and consistent behavior of the automatic side window functions in everyday driving, including the prevention of unintentional window movements
Air-conditioning system	<ul style="list-style-type: none"> ▪ Optimization of the dehumidification function to more effectively prevent misted windows
High-voltage system	<ul style="list-style-type: none"> ▪ Numerous stability and robustness improvements
Acoustics and indications	<ul style="list-style-type: none"> ▪ Optimization of the calculation logic for dynamic service intervals
High-voltage system	<ul style="list-style-type: none"> ▪ Numerous stability and robustness improvements

Back to introduction ⇒ *Technical Information '9X10IN Introduction'* ⇒ *Technical Information '9X10IN Introduction'*

Additional information on control unit programming and coding



Information

If individual programming or 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, **always** create a log with the PIWIS tester during programming with **P2**.

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	<ul style="list-style-type: none"> Restart update by pressing F8 After successful implementation, continue with work step 5

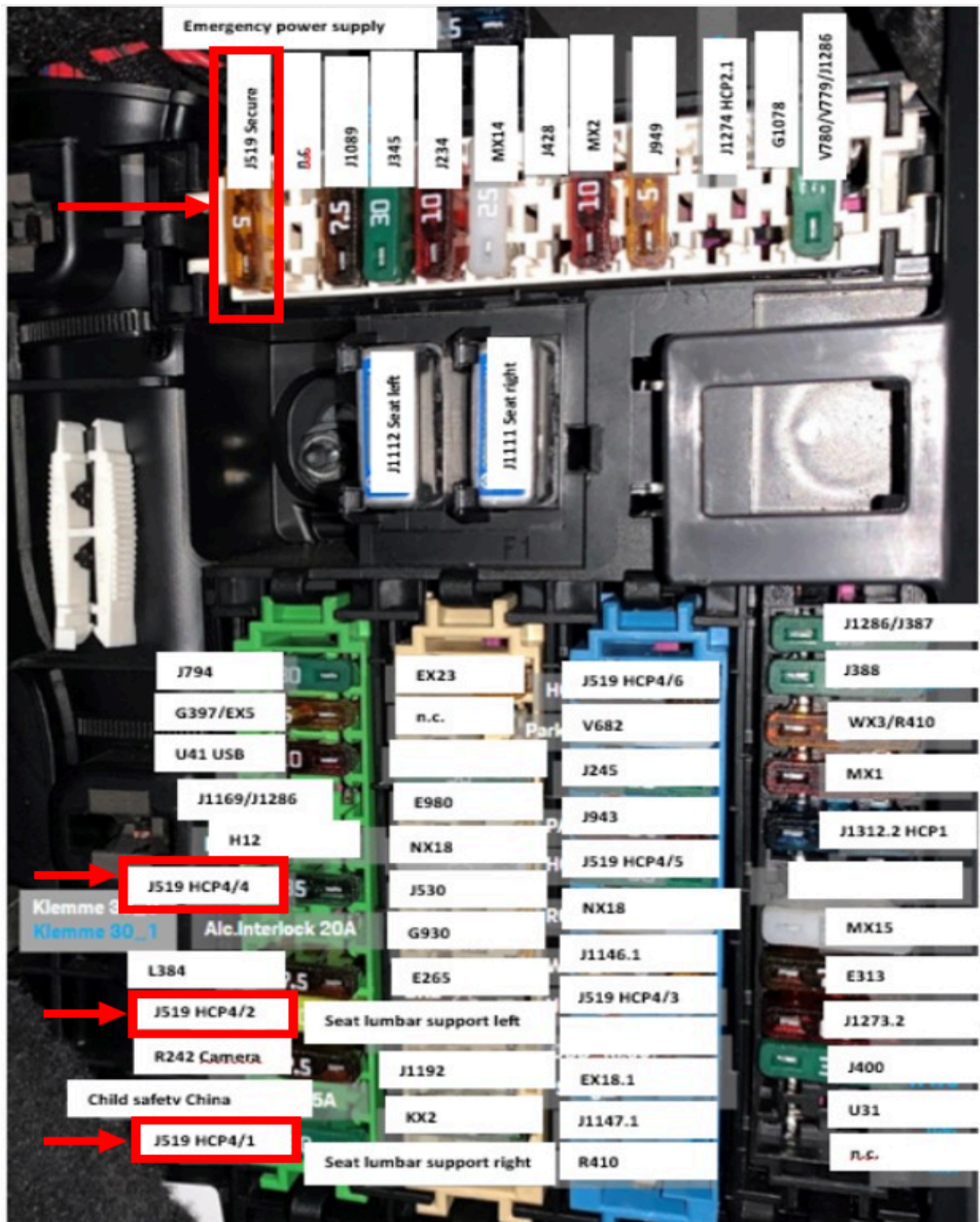
Before the update:			
Fault indication	Cause	Source of fault	Remedial action
Diagnostic application crashes or the VCI connection has been aborted (the diagnosis has no information on battery voltage – see the battery symbol at the top right on the Tester display)		VCI has poor Wi-Fi connection	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. For this purpose, start control

			unit programming in the integration test using the 'Campaign' function (F5) on the Porsche Tester (if not available, start the 'Repair' function with (F8))
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	<p>Correct the date/time in the vehicle:</p> <ul style="list-style-type: none"> ▪ Open "Control unit overview" ▪ Open "Gateway HCP5" main control unit ▪ Open "Service/Maintenance" menu ▪ Select and execute "Set time" menu item
HCP2 driver assistance main control unit (J1274) reports a "Code signing fault" and a communication error for the Sub System Driver Assistance control unit in the results view	The affected control unit was not successfully programmed	Vehicle	<ul style="list-style-type: none"> ▪ End the integration test with (F12) ▪ Open "Control unit overview" ▪ Open main control "Driver assistance HCP2" ▪ Open "Coding" menu ▪ Menu item "Driver assistance main control unit HCP2 (J1274): Programming control unit individually (without coding) after faulty update" ▪ After successful programming of the control unit in the integration test, re-start using the 'Campaign' function (F5) (if not available, start the 'Repair' function with (F8)) ▪ After this has been performed successfully, continue with work step 4

<p>The Main control unit for gateway HCP5 (J1273) logs into the programming checksum calculation with a hardware check and the value "NEGRES P"</p>	<p>Affected control unit was not successfully programmed, programming aborted after 20%-30%</p>	<p>Vehicle</p>	<ul style="list-style-type: none"> ▪ End the integration test with (F12) ▪ Open "Control unit overview" ▪ Open "Gateway HCP5" main control unit ▪ Open "Coding" menu ▪ Menu item "Control unit for gateway HCP5 (J1273): Programming control unit individually (without coding) after faulty update" ▪ After successful programming of the control unit in the integration test, re-start using the 'Campaign' function (F5) (if not available, start the 'Repair' function with (F8)) ▪ After this has been performed successfully, continue with work step 4
<p>The progress of the vehicle update is shown on the Porsche Tester only from approx. 30% completion. This can be up to 30 minutes after the download</p>	<p>Diagnostic service (RPC+) will not forward the progress of the update to the Tester until it is approx. 30% complete</p>	<p>Vehicle</p>	<ul style="list-style-type: none"> ▪ Correct behavior, no intervention necessary ▪ Wait until the progress is displayed
<p>HCP4 body electronics main control device (J519) reports programming and coding errors in the results view</p>	<p>The affected control unit was not successfully programmed and coded</p>	<p>Vehicle</p>	<p>Do not perform an ignition change! This results in the destruction of the control unit.</p> <p>Fuses</p> <ul style="list-style-type: none"> ▪ J519 HCP4/1 ▪ J519 HCP4/2 ▪ J519 HCP4/4 ▪ J519 Secure <p>Pull, wait 30 seconds and plug it back in correctly.</p> <p>The fuses have different parameters and must be reinserted at exactly the same</p>

		<p>location; for the correct fuse positions, see: ⇒ <i>Fuse positions</i></p> <p>Select "Special function" in the additional menu</p> <p>Enter campaign code: HCP4_ERROR_KD2 and follow the Tester instructions</p> <ul style="list-style-type: none">▪ Please note! HCP4 is therefore programmed, but not coded – do not perform an ignition change!▪ After successful programming of the control unit in the integration test, re-start using the 'Campaign' function (F5) (if not available, start the 'Repair' function with (F8))▪ After this has been performed successfully, continue with work step 4
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HCP4 body electronics main control unit (J519) - front-end electronics	B1303F1	Rear lid proximity sensor (J938), not taught	<ul style="list-style-type: none"> Disconnect and reconnect the plug at the rear disconnection point for the proximity sensor Then read out and delete the fault memory again
Charging communication 2 (J1246)	U19B200	Motor drive flap power supply 2 (VX87), received error value	<ul style="list-style-type: none"> Move the charge port doors by hand twice Then read out and delete the fault memory again
HCP4 body electronics main control unit (J519) - front-end electronics	U206200.	Intelligent ParkAssist High, function restriction	<ul style="list-style-type: none"> Implement bus idle for 15 min Then read out and delete the fault memory again
Drive and chassis main control unit HCP1 (J1312)	C147596 P1DBD00	For C147596 – oil pump control internal fault For P1DBD00 – rear axle oil pump, engine speed deviation	<ul style="list-style-type: none"> Implement bus idle for 15 minutes. Then read out and delete the fault memory again
Only for vehicles with the following equipment: Lane Change Assist (M-No. 7Y8):		Fault: Lane Change Assist (M-No. 7Y8) not functioning after programming	<p>Reinitialize Lane Change Assist.</p> <ul style="list-style-type: none"> Implement bus idle for 10 minutes. Switch on ignition. Fold out and fold in side mirrors. Carry out a test drive at over 60 km/h and check Lane Change Assist. <p>If Lane Change Assist is faulty or not working, repeat the process.</p>

Valid fault codes after the incremented software network VR28.13 SQ4

Control unit	Fault code	Description	Remedy:
Brake electronics (J104)	C13F7F1	Bedding-in function, active	<ul style="list-style-type: none"> Valid fault memory entry after vehicle handover
Front camera (R242)	B200FF2	Implausible signal	<ul style="list-style-type: none"> After the test drive: Fault memory entry passive
Front camera (R242)	U12EF00	Front camera for driver assistance systems, implausible signal	<ul style="list-style-type: none"> After the test drive: Fault memory entry passive
Front camera (R242)	U147C00	External communication (J949), implausible signal	<ul style="list-style-type: none"> After the test drive: Fault memory entry passive
Front camera (R242)	U198C00	Road graph, received fault value	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> After the test drive: Fault memory entry passive
Driver assistance main control unit HCP2 (J1274)	B200FF2	Road graph, received fault value	<ul style="list-style-type: none"> After the test drive: Fault memory entry passive

Checklist

Checklist:

Work step:	Scope:	Completed:
The checklist only refers to campaign WSJO . A different checklist from another campaign must not be used.		
1. Battery charger set to charging mode and charging process on charger activated?	All	
2. Ignition switched off and on again?	All	
3. VCI and Porsche Tester 4 connected to one other (with cable or Wi-Fi with good network quality)?	All	
4. Has the user logged into PPN on the Porsche Tester?	All	
5. Seat heating and seat ventilation not active?	All	
6. Original remote control (hand-held transmitter) in emergency start tray (position noted)?	All	
7. Logging in the diagnostic tester started?	All	
8. Vehicle Analysis Log (Pre-VAL) created?	All	
9. Only for new vehicles: Vehicle handover performed in part as described in section "Update on software network VR28.13 SQ4" in order to deactivate transport protection?	New vehicles	
10. In the control unit overview, F3 pressed to start the integration test and then F5 pressed to select the 'Campaign' function?	All	
11. Update Owner's Manual in PCM	Scope 3 and scope 4	
12. Bus idle performed for 10 minutes?	All	
13. Vehicle's readiness for driving checked?	All	
14. Fault memory read out and erased?	All	
15. Rear lid taugt?	All	
16. Only for new vehicles: Vehicle handover completed?	New vehicles	
17. Adding service interval?	All	
18. Vehicle analysis log (first Post-VAL) created?	All	
19. Plausibility check of the battery capacity performed?	All	
20. Vehicle analysis log (second Post-VAL) created?	All	
21. All four doors checked for correct locking?		
22. Campaign entered in the Warranty and Maintenance logbook?	All	

23. During the test drive: 23.1 GPS reconnected? 23.2 Tire settings checked and adjusted if necessary?	All
24. Customer informed that the original customer setting for the rear lid opening height has been reset and must be restored (service advisor)?	All
25. Were abnormalities detected during the plausibility check of the battery capacity, and was the calculation of the range reset to the initial values? Information is provided through the guided procedure with the Porsche Tester. Inform the customer about FAQs (Service Advisor)!	Scope 2 and Scope 4
26. Does the vehicle have the Sport Chrono package (M-number 8LH or 8LU), and is the vehicle also operated by a secondary user? Inform the customer about FAQs (Service Advisor)!	All
VIN:	
Porsche Center number:	

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