WRX1 - Update to Software Network VR14 (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: **2024**

Change Overview:

Release	Date	Change
0	01/17/2025	▪ First publication
1	01/24/2025	▪ Update of required tester release
2	04/01/2025	▪ Addition of Scopes ▪ Update of Information for Work Procedure: Update on software network VR14 - all scopes ▪ Update of Work Procedure: Update on software network VR14 - all scopes (5., 9., 16) ▪ Update of Work Procedure: Additional instructions if programming is aborted
3	02/03/2026	▪ Update of (Additional instructions if programming is aborted) — High-voltage battery control unit (BECM)

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

Concerns: **Software update (software network VR14)**

Cause: **Software optimizations are available for various control units for the Cayenne.**
An overview of the new features that will be implemented with the software update can be found in the enclosure under ⇒ *Technical Information 'Overview of new features of the software update'*

Measures:
- Re-program the control units with the **latest** PIWIS Tester software release.
- Minimum requirement: Release **43.200.040** (or higher)
- Replace the Owner's Manual in the on-board folder in the vehicle with an updated status

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. The checklist **must be** completed in the PQIS quality line attached in the PCSS.
For checklist, see ⇒ *Technical Information 'Checklist'*

Affected Vehicles: Only vehicles assigned to the campaign (see also PCSS Vehicle Information)
- Scope 1: Change vehicle order in instrument cluster and update to software network VR14
- Scope 2: Change vehicle order in instrument cluster and update to VR14 software network (only valid for vehicles with Burmester® 3D High-End Surround Sound System **(M-No. 9VJ)** with hardware release HW5)
- Scope 3: Update to software network VR14
- Scope 4: Update to VR14 software network (only valid for vehicles with Burmester® 3D High-End Surround Sound System **(M-No. 9VJ)** with hardware release HW5)
- Scope 5: Not applicable for NAR
- Scope 6: Re-program external acoustics (eSound) control unit and update to VR14 software network
- Scope 7: Create PRMS ticket (indicate “WRX1, scope 7” in the short description)

Required tools

Tools:
- Battery charger with a current rating of **at least 90 A**, e.g., **VAS 5908 battery charger 90 A**
- **P90999 - P90999 - PIWIS Tester 4**
- **USB storage medium Type A+C 32 GB (for PCM update)**
- **USB storage medium, Type C (for on-board Owner's Manual update)**

Update on software network VR14 - all scopes

Information
As soon as an **interaction** is required during programming, this is indicated by activation of the **hazard warning lights** (except USA and Canada). The hazard warning lights must be deactivated manually following interaction.

Information
Before programming sequence 1, start logging with P2 .
In the event of a fault, this logging should always be

Logging is ended automatically after approx. 1 hour.

Work Procedure: 1 The basic procedure for control unit programming is described in the Workshop Manual ⇒ *Workshop Manual 'Basic Instructions and Procedure for Control Unit Programming Using the PIWIS Tester'*.

Information

Before starting programming, the battery charger must **necessarily** be:

- Switched off and on once; the battery charger display **must** be off before starting it again, because the battery charger automatically switches to trickle charging after 5 hours (default setting in the charger).
- Operate in **charging mode**.
- The vehicle must be on a level surface.
- Air suspension must be at normal level.
- Switching off air-conditioning system.
- Vehicles with a PVTS contract must have Service mode activated.
- An **active** Internet connection with the PIWIS Tester must be maintained.
- To log in using the PIWIS Tester, the technician is **required**.
- **Place the original remote control in the emergency start tray (note the position)!**
- **The PIWIS Tester must not be charged using the cigarette lighter!**

2 After the backup documentation process, the integration test is started automatically. The result is initially to be **ignored**.

3 Create Vehicle Analysis Log (VAL) using the PIWIS Tester. Mark the vehicle analysis log you have just created with the attribute **"Pre-VAL"** and after carrying out the campaign, return it using the PIWIS Tester.

4 Change vehicle order. **(Only valid for vehicles with Scope 1 and 2)**

4.1 In the control unit selection (**'Overview'** menu) press F7 to call up the Additional menu.

4.2 Select **'Vehicle data care with PIWIS ONLINE'** and press F12 ('Next') to confirm.
The guided Tester procedure starts and the vehicle data is compared between the vehicle and PIWIS ONLINE.

4.3 Save the changes by pressing F8 .

5 Re-program external acoustics control unit (eSound) **(only valid for vehicles with scope 6)**

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

Required PIWIS Tester software release:	**43.200.040** (or higher)
Type of control unit programming:	Control unit programming using the **'Campaign' function in the additional menu** on the PIWIS Tester by entering a programming code.

Programming code:	**E3E3S**
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. **Do not interrupt the programming and coding process.** **After programming has been carried out, the result of the programming is to be checked and, in the event of deviations, the corresponding control unit is to be re-programmed or re-coded.** A backup documentation process for the re-programmed software releases starts once programming and coding is complete.
Programming time (up to):	▪ **18 minutes**
Control units programmed as part of this campaign:	▪ Control unit for exterior acoustics (eSound)
Procedure if error messages appear during programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester – Section on "Troubleshooting"'*
Procedure in the event of a termination in the control unit programming:	**Continue campaign sequence to the end. Perform the integration test again after completion and start programming from the integration test.** Create a screenshot of the overview menu at the end of programming if one or more control units have not been successfully programmed or coded. Additional instructions for aborted programming ⇒ *Technical Information '9X00IN Additional instructions if programming is aborted'*

6 Update software of various control units **(Sequence 1)**. **(Valid for all scopes)**

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

Information

Please inform the customer that the set values are lost after updating the instrument cluster.

Required PIWIS Tester software release:	**43.200.040** (or higher)
Type of control unit programming:	Control unit programming using the **'Campaign' function in the additional menu** on the PIWIS Tester by entering a programming code.
Programming code:	**E3C2P**
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. **Do not interrupt the programming and coding process.** **After programming has been carried out, the result of the programming must be checked and, in the event of deviations from individual control units, the corresponding control unit must be re-programmed or re-coded.** A backup documentation process for the re-programmed software releases starts once programming and coding is complete.
Programming time (up to):	▪ **305 minutes** ▪ The duration of the programming the control units depends on the build status and can differ from the specified time.
Control units programmed as part of this campaign:	▪ ⇒ *Technical Information '9X00IN Overview of VR14 control units'*
Procedure if error messages appear during programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester – Section on "Troubleshooting"'*
Procedure in the event of a termination in the control unit programming:	**Continue campaign sequence to the end. Perform the integration test again after completion and start programming from the integration test.** Create a screenshot of the overview menu at the end of programming if one or more control units have not been successfully programmed or coded.

	Additional instructions for aborted programming ⇒ *Technical Information '9X00IN Additional instructions if programming is aborted'*

7 When programming is complete, backup documentation including the integration test is done again. The result is initially to be **ignored** because this sometimes displays control units that are displayed as faulty despite programming.

To check this, the integration test **must** be started again on the start page by pressing the F3 button. This process is to be repeated up to three times.

If this results in a discrepancy here, the relevant control unit **must** be re-programmed. The central computer (PCM) control unit is **not** to be programmed initially because this is programmed in sequence 2.

Sequence 2 may **only** be started after successful completion of sequence 1.

For vehicles with **Scope 5**, continue with **work step 11**.

8 Re-program central computer (PCM) **(sequence 2)** – **only valid for vehicles with scopes 1 to 4 and scope 6**

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

Preparing USB stick with the **required** software (depending on country version)

Overview of the software to be used for the central computer (PCM): ⇒ *Technical Information '9X00IN Overview of PCM update'*

The battery charger **must be** switched off and on once **before** sequence 2 **completely** due to the automatic switchover (trickle charging).

9 Select the Guest account from the central display (PCM) and activate **Privacy mode** (available in some countries).

Information

If Privacy mode is not active, programming may be aborted, resulting in a defect in the central computer (PCM). Central computers that are replaced as part of the workshop campaign are checked by Porsche AG; if private mode was not set in the central computer before starting programming, the costs will be re-debited.

Required PIWIS Tester software release:	**43.200.040** (or higher)
Type of control unit programming:	In the control unit selection (**'Overview'** menu), select the **PCM central computer** control unit and select the **'Service / repairs'** menu. Select the **'Install software update'** function and press F12 ('Next') to perform the software update.
Programming code:	**E3M1B**
Programming sequence:	Read and follow the **information and instructions on the PIWIS 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 once programming and coding is complete.
Programming time (up to):	**30 minutes**
Control unit programmed in this campaign:	▪ ⇒ *Technical Information '9X00IN Overview of VR14 control units'*
Procedure if error messages appear during programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester – section on "Troubleshooting"'*.
Procedure in the event of a termination in the control unit programming:	Repeat control unit programming by restarting programming. Additional instructions for aborted programming ⇒ *Technical Information '9X00IN Additional instructions if programming is aborted'*

10 Re-program Burmester control unit. **Sequence 3** - **only valid for vehicles with Scope 2 or 4**

Prepare USB stick with the **required** software for the loudspeaker amplifier (Burmester) control unit:

Part No.	Designation
9Y0909001	USB storage medium for PCM update

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

Required PIWIS Tester software release:	**43.200.040** (or higher)
Type of control unit programming:	In the control unit selection (**'Overview'** menu), select the **PCM central computer** control unit and select the **'Service / repairs'** menu. Select the **'Install software update'** function and press F12 ('Next') to perform the software update.
Programming code:	**E3M2B**
Programming sequence:	Read and follow the **information and instructions on the PIWIS 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 once programming and coding is complete.
Programming time (up to):	**15 minutes**
Control unit programmed in this campaign:	▪ ⇒ *Technical Information '9X00IN Overview of VR14 control units'*
Procedure if error messages appear during programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester – section on "Troubleshooting"'*.
Procedure in the event of a termination in the control unit programming:	Repeat control unit programming by restarting programming. Additional instructions for aborted programming ⇒ *Technical Information '9X00IN Additional instructions if programming is aborted'*

11 **Not** valid for vehicles with scope 5 – update Owner's Manual in the PCM. For more information, see ⇒ *Workshop Manual '9X00IN Diagnostic system: Perform vehicle handover'*(Install Onboard Owner's Manual section)

Information

The display of the electronic Owner's Manual can take up to 15 minutes after updating the central computer. During the test drive, check whether the electronic Owner's Manual is displayed on the central computer.

12 Teach front sliding roof (panoramic roof) again. (Only valid for vehicles with panoramic roof system, **M-no. 3FU**)

12.1 In the control unit selection (Menu **'Overview'**), select the **front sliding roof (Panoramic roof)** control unit

12.2 Select the **"Service / repairs"** menu.

12.3 Select **the "Teach panoramic roof"** function and execute the guided procedure.

13 Carry out PSM position detection, operating the brake and P-button and shifting gears from P to R to N and back to P.

14 Standardize side windows, and readjust wheel electronics.

Information

The side windows can be standardized and rear spoiler retracted as part of the test drive.
The wheel electronics must be taught **again** during the test drive, while ensuring that the wheel / tire combination is correct.
The activities must be carried out during the test drive and do **not** need to be carried out by the technician.

15 **Only valid for vehicles with scope 1 or scope 2:** Deactivate flight mode ⇒*Workshop Manual '9X00IN Deactivate flight mode'*

16 Carry out bus idle on the vehicle.

16.1 End the readiness for operation of the vehicle (ignition off).

16.2 Remove the **PIWIS Tester (VCI)** from the vehicle.

16.3 Lock the vehicle.

16.4 Establish bus idle for **at least** 5 minutes.

16.5 Re-connect the PIWIS Tester (VCI).

16.6 Establish readiness for operation (ignition on).

17 Read out **fault memory**. If necessary, work through existing faults and delete them.

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 Press F3 to start the integration test in the control unit selection.
All affected control units should now be successfully re-programmed or checked in the control unit overview and their status.

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

19 Create Vehicle Analysis Log (VAL) using the PIWIS Tester.
Mark the Vehicle Analysis Log you have created with the attribute **"Post-VAL"** and, after carrying out the campaign, return it using the PIWIS Tester.

20 Exit the diagnostic application. Switch off the ignition.

21 Switch off and disconnect the battery charger.

22 Replace Owner's Manual in the vehicle .
For an overview of the Owner's Manuals, see: ⇒ *Technical Information '9X00IN Overview of Order Numbers for Driver's Manual'*

Information
The vehicle may **only** be handed over to the customer with the new Owner's Manual.

23 Attach the completed checklist to the PQIS process line. ⇒ *Technical Information '9X00IN Checklist'*

24 Enter the campaign in the warranty and maintenance logbook.

Warranty processing

Scope 1: **Change vehicle order in instrument cluster and update to software network VR14**

Labor time:

Update software for various control units		Labor time: **185 TU**
Includes:	Connect and disconnect battery charger	
	Connect and disconnect PIWIS Tester	
	Adapt vehicle order	
	Update various control units to software release VR14 (Sequence 1)	
	Update software for the central computer (PCM) (sequence 2)	
	Install Owner's Manual in PCM	
	Carry out rework	
	Replace Owner's Manual	
	Read out and delete fault memories	

Create Vehicle Analysis Log (VALs) before and after campaign

Required material:

WRX10000001	Owner's Manual*	1 piece(s)
WRX10000002	Shipping costs**	1 piece(s)

* The cost of one Owner's Manual will be covered **for each vehicle**. For warranty invoicing, enter the Part No. **WRX10000001** with the designation "**Owner's Manual**" as **accessories**, amount **$ 0.01**.

** **If** you incur **shipping costs** when ordering the Owner's Manual, please invoice these costs under the Part No. **WRX10000002**, with the designation "**Shipping costs**" as an additional part, maximum amount **$ 5.40**. Please document a copy of the invoice for this in the warranty claim.

Invoicing: ⇒ Damage number WRX1 66 000, repair code 1

Scope 2: **Change vehicle order in instrument cluster and update to software network VR14**

Only valid for vehicles with Burmester® 3D High-End Surround Sound System **M-No. 9VJ** with hardware release HW5

Labor time:

Update software for various control units — Labor time: **191 TU**

Includes:
- Connect and disconnect battery charger
- Connect and disconnect PIWIS Tester
- Adapt vehicle order
- Update various control units to software release VR14 (Sequence 1)
- Update software for the central computer (PCM) (sequence 2)
- Program the loudspeaker amplifier (Burmester) control unit (sequence 3)
- Install Owner's Manual in PCM
- Carry out rework
- Replace Owner's Manual
- Read out and delete fault memories
- Create Vehicle Analysis Log (VALs) before and after campaign

Required material:

WRX10000001	Owner's Manual*	1 piece(s)
WRX10000002	Shipping costs**	1 piece(s)

* The cost of one Owner's Manual will be covered **for each vehicle**. For warranty invoicing, enter the Part No. **WRX10000001** with the designation "**Owner's Manual**" as **accessories**, amount **$ 0.01**.

** **If** you incur **shipping costs** when ordering the Owner's Manual, please invoice these costs under the Part No. **WRX10000002**, with the designation "**Shipping costs**" as an additional part, maximum amount **$ 5.40**. Please document a copy of the invoice for this in the warranty claim.

Invoicing: ⇒ Damage number WRX1 66 000, repair code 1

Scope 3: **Update to software network VR14**

Labor time:

Update software for various control units — Labor time: **175 TU**

Includes:
- Connect and disconnect battery charger
- Connect and disconnect PIWIS Tester
- Update various control units to software release VR14 (Sequence 1)
- Update software for the central computer (PCM) (sequence 2)
- Install Owner's Manual in PCM
- Carry out rework
- Replace Owner's Manual
- Read out and delete fault memories
- Create Vehicle Analysis Log (VALs) before and after campaign

Required material:

WRX10000001	Owner's Manual*	1 piece(s)
WRX10000002	Shipping costs**	1 piece(s)

* The cost of one Owner's Manual will be covered **for each vehicle**. For warranty invoicing, enter the Part No. **WRX10000001** with the designation "**Owner's Manual**" as **accessories**, amount **$ 0.01**.

** **If** you incur **shipping costs** when ordering the Owner's Manual, please invoice these costs under the Part No. **WRX10000002**, with the designation "**Shipping costs**" as an additional part, maximum amount **$ 5.40**. Please document a copy of the invoice for this in the warranty claim.

Invoicing: ⇒ Damage number WRX1 66 000, repair code 1

Scope 4: **Update to software network VR14**

Only valid for vehicles with Burmester® 3D High-End Surround Sound System **M-No. 9VJ** with hardware release HW5

Labor time:

Update software for various control units — Labor time: **181 TU**

Includes:
- Connect and disconnect battery charger
- Connect and disconnect PIWIS Tester
- Update various control units to software release VR14 (Sequence 1)
- Update software for the central computer (PCM) (sequence 2)
- Program the loudspeaker amplifier (Burmester) control unit (sequence 3)
- Install Owner's Manual in PCM
- Carry out rework
- Replace Owner's Manual
- Read out and delete fault memories
- Create Vehicle Analysis Log (VALs) before and after campaign

Required material:

WRX10000001	Owner's Manual*	1 piece(s)
WRX10000002	Shipping costs**	1 piece(s)

* The cost of one Owner's Manual will be covered **for each vehicle**. For warranty invoicing, enter the Part No. **WRX10000001** with the designation "**Owner's Manual**" as **accessories**, amount **$ 0.01**.

** **If** you incur **shipping costs** when ordering the Owner's Manual, please invoice these costs under the Part No. **WRX10000002**, with the designation "**Shipping costs**" as an additional part, maximum amount **$ 5.40**. Please document a copy of the invoice for this in the warranty claim.

Invoicing: ⇒ Damage number WRX1 66 000, repair code 1

Scope 5: **Not applicable for NAR**

Scope 6: **Re-program external acoustics (eSound) control unit and update to VR14 software network**

Labor time:

Update software for various control units — Labor time: **175 TU**

Includes:
- Connect and disconnect battery charger
- Connect and disconnect PIWIS Tester
- Re-program external acoustics control unit (eSound)
- Update various control units to software release VR14 (Sequence 1)
- Update software for the central computer (PCM) (sequence 2)
- Install Owner's Manual in PCM

Carry out rework
Replace Owner's Manual
Read out and delete fault memories
Create Vehicle Analysis Log (VALs) before and after campaign

Required material:

WRX10000001	Owner's Manual*	1 piece(s)
WRX10000002	Shipping costs**	1 piece(s)

* The cost of one Owner's Manual will be covered **for each vehicle**. For warranty invoicing, enter the Part No. **WRX10000001** with the designation "**Owner's Manual**" as **accessories**, amount **$ 0.01**.

** **If** you incur **shipping costs** when ordering the Owner's Manual, please invoice these costs under the Part No. **WRX10000002**, with the designation "**Shipping costs**" as an additional part, maximum amount **$ 5.40**. Please document a copy of the invoice for this in the warranty claim.

Invoicing: ⇒ Damage number WRX1 66 000, repair code 1

Overview of VR14 control units

Overview:

Overview of VR14 control units to be programmed	
Control unit	**Programming time, including coding of all control units** The number of control units to be programmed depends on the build status and may differ.
Sequence 1: Combined software update of various control units (Update via PIWIS Tester) **Includes:**	Up to 305 minutes
Instrument cluster	up to 25 minutes
Head-up display	up to 28 minutes
Motor electronics (DME) and transmission electronics (Tiptronic)	up to 9 minutes
Gateway	up to 6 minutes
Connect	up to 25 minutes
Central headlights	up to 20 minutes
Rear end electronics	up to 3 minutes

Assistance systems	Up to 108 minutes
High-voltage power electronics (PWR)	up to 3 minutes
Brake electronics (PSM incl. parking brake)	up to 11 minutes
All-wheel drive electronics	up to 2 minutes
Chassis control (PASM)	up to 10 minutes
Capacitive steering wheel	Up to 10 minutes
High-voltage battery (BECM) and high-voltage E-box (BJB)	Up to 10 minutes
Transverse lock	up to 1 minute
External acoustics (eSound)	up to 18 minutes
High-voltage charger (OBC)	up to 5 minutes
Automatic coding of all control units	up to 23 minutes
Sequence 2: PCM update (Update via PIWIS Tester and USB storage medium)	up to 30 minutes
Sequence 3: Update loudspeaker amplifier (Burmester) (Update via PIWIS Tester and USB storage medium)	up to 15 minutes

Overview of the new features of the software update

Overview:

Function	**Description** The increased robustness **depends on** the country and vehicle equipment	**Cluster**
Instrument cluster	▪ Change of presentation to avoid potential unauthorized representation of other vehicles ▪ More harmonious warning tone when speed limit is exceeded ▪ Improved Navigation Plus - On multi-lane roads, the road to be selected is displayed, e.g. when turning (Lane Level View), loading a Point of Interest (POI) filter on the map ▪ Display of manoeuvres for navigation with Apple Maps and Google Maps in the right tube of the instrument cluster during utilization of Apple CarPlay and Android Auto (Apple: Apple Maps | Android Auto: Google Maps) ▪ New exclusive colors (speed dial) ▪ Enhanced performance	Optimization

Head-up display	▪ Visual enhancements to Apple CarPlay and Android Auto in the navigation - When using the primary manufacturer app (Apple: Apple Maps | Android Auto: GoogleMaps), manoeuvre actions for navigation are displayed in the Head-Up Display (HUD)	Optimization
Motor electronics (DME) and transmission electronics (Tiptronic)	▪ Various robustness increases and comfort improvements	Bug fix
Gateway	▪ Avoidance of unauthorized gateway resets	Bug fix
Connect	▪ Avoid connection errors when utilizing Apple Car Play ▪ Robustness measure for 5G Wi-Fi faults due to 5G mobile phone frequencies ▪ Improving the availability of Connect services (weather forecast for upcoming days incl. detailed view) ▪ Extended overviews in the Porsche Performance app	Optimization
Central headlights	▪ Optimization of the image in the form of an improved cut-out graphic during the end glare of the preceding and oncoming traffic (softer edges of the end glare cut-outs) ▪ Enlargement of the cut-out graphic to reduce possible glare of oncoming traffic in highly dynamic driving situations	Optimization
Rear end electronics	▪ Change of rear lid operating logic	Optimization
Assistance systems	▪ When unlocking the vehicle via the central locking functions of the rear lid (radio remote control and Comfort Access), doors can now also be opened (individually configurable) ▪ Optimization of traffic sign recognition with regard to speed limit display	Optimization
High-voltage power electronics (PWR)	▪ Increased robustness when driving off on a gradient ▪ Avoidance of possible communication loss of the control unit	Bug fix
Brake electronics (PSM incl. parking brake)	▪ Improved brake pedal feel ▪ Optimization of the vehicle operation of the automatic speed control system with regard to acoustic noises ▪ Various stability and robustness and comfort improvements	Bug fix
All-wheel drive electronics	▪ Various increases in robustness	Bug fix
Chassis control (PASM)	▪ Various increases in robustness	Bug fix

Capacitive steering wheel	▪ Optimization of the sensitivity of the touch-sensitive (capacitive) steering wheel. This is mandatory, among other things, in conjunction with Lane Keep Assist ("Driver transfer required" - warning message).	Optimization
High-voltage battery (BECM) and high-voltage E-box (BJB)	▪ Optimization of starting behavior ▪ Avoidance of unauthorized fault memory entries	Bug fix
Transverse lock	▪ Various increases in robustness	Bug fix
External acoustics (eSound)	▪ Improvement of diagnosis	Bug fix
High-voltage charger (OBC)	▪ Avoiding cyclical waking up of the control unit	Bug fix
Porsche Communication Management (PCM)	▪ Performance increase, e.g. better scrolling behavior ▪ Turn by turn display (display navigation arrows from Apple Maps in instrument cluster) ▪ Bluetooth headset: A separate headset can be connected for in-car video. Audio sources can thus be disconnected by the driver and passenger. This means that, for example, independent utilization of music by for the driver and of video audio by the passenger through the headset is possible ▪ Expansion of interior lighting colors (ambient lighting) ▪ Optimization of the Air Quality Screen in the Car Menu ▪ Video streaming via passenger's Bluetooth headphones	Optimization

Overview of PCM update

Information

The central computer (PCM) software update is performed using a USB storage medium. The software release that is specific to each region must be **downloaded** using the **PiUS** (Porsche integrated Update Service) software tool and must be **installed** on a blank USB storage medium.

Pay particular **attention** to the following:

- For this PCM software update, a USB storage medium USB Type A+C 32 GB must be used.
- To use the software tool, **one** blank or re-writable USB storage medium is required for **each** individual software.
- The software available in PiUS must **only** be used in accordance with the instructions provided in a Technical Information published for this purpose.

The software mentioned here must **only** be used on the **vehicles assigned to the campaign**. Damage to the central computer cannot be ruled out if the software is used on other vehicles.

You will find further information on installation and use for the PiUS software tool in the PPN portal under *__PiUS (Porsche integrated Update Service) goes live__*.

Overview:

Part No.	Designation – Region	Vehicle allocation
976909000C	USB storage medium for PCM update – North America – Mexico	I-no. ER3 / ER4

Overview of Order Numbers for Owner's Manual

Information

Owner's Manuals with order numbers that are still in place (y = market code A, B, C, D, E or F; xx = language code, e.g., 10, 20, 30, etc.) WKD 9Y0 y xx **24** may neither be supplied with new vehicles nor used as replacements when needed. Owner's Manuals with these order numbers still in stock must be disposed of.

Effective immediately for the **vehicles assigned to the campaign**, with immediate effect **only** use Owner's Manuals with order number WKD 9Y0 **00** y xx **25** (markets that receive a complete Owner's Manual) **or** with order number WKD 9Y0 **01** y xx **25** (markets that receive a reduced release of the Owner's Manual "Safety Booklet"). These reflect the technical status of the vehicles following the software update.

The order numbers for the various language versions of the updated Owner's Manual are provided in the following table. You can order the Owner's Manual in the quantity you need using the standard ordering process.

All markets except Germany were automatically supplied with the new Owner's Manual in advance.

The Owner's Manuals or safety booklets are delivered to the storage- / distribution locations to which they are also delivered for the new cars.

Information

A blank or re-writable USB storage medium is additionally required for installation of the onboard Owner's Manual.

Parts Info:

Order No.	Designation - Language	Ordering via		Onboard Owner's Manual
		PROS (Arvato)	Importer	
WKD9Y001B2125	Owner's Manual - **English US**		■	■
WKD9Y001B3125	Owner's Manual - **French (Canada)**		■	■

Additional instructions if programming is aborted

Information

If individual programming steps or reworking could not be carried out correctly, see Workshop Manual for the basic procedure for control unit programming using the PIWIS Tester ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester – section on "Troubleshooting"'*

In the event of a fault, **always** create a log with the PIWIS tester during programming with P2 .

As a general rule, if programming is **aborted** during programming, programming must be continued. The entire sequence can be started again at any time using the campaign code. The control unit that has already been programmed is skipped, or programming is started via the integration test. Starting to use the integration test is faster.
You will also find further information and instructions specifically for the **VR14 update** in the table below:

Work Procedure:

Control unit:	**Situation:**	**Action:**
General cancellations	Control units cannot be programmed or coded for different vehicles	▪ A PRMS ticket is to be created if there are abnormalities in programming or coding that occur repeatedly on different vehicles. PAG cannot improve without this information
Cancelling individual control units:	One or more control units cannot be programmed or coded or can no longer be accessed	▪ Check whether the control unit can be reached using the PIWIS Tester. If not, a bus idle must be carried out ▪ Control unit still not accessible –> Remove fuse for control unit –> Ignition on –> Ignition off –> Re-insert fuse ▪ Control unit still not accessible –> Disconnect battery overnight

		▪ Check whether the control unit is accessible ▪ Carry out programming individually using the integration test (F3 in the control unit overview)
Error message DoIP switchover:	There is no DoIP switchover	▪ Switch off VCI and try again **(do not operate VCI via WiFi)** ▪ Use a different VCI ▪ Use another PIWIS Tester ▪ Check the PINs on OBD socket ▪ Checking fuses of OBD socket ▪ Check Ethernet lines between OBD socket and gateway (resistance measurement)
Rear end electronics	An error message appears on the PIWIS Tester when programming the rear end electronics	▪ There can only be **one** remote control in the vehicle; this must be at the position as described in the ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'* in the Workshop Manual ▪ If the sequence still stops: Check whether the remote control battery has sufficient voltage
Central computer (PCM)	The central computer freezes while loading	▪ Start sequence 2 again ▪ Perform PCM factory reset using the guided PIWIS Tester procedure
Central computer (PCM)	The central computer control unit cannot be accessed	▪ Pulling out fuse for central computer control unit –> Removing fuse for control unit –> Ignition on –> Ignition off –> Re-insert fuse

Central computer (PCM)	No start of programming	▪ Programming was started via the additional menu and not in the central computer (PCM) control unit under **Service / Repairs** as described in the TI
Central computer (PCM)	Programming is not started or programming is interrupted	▪ For other topics that are not listed in the TI, a PRMS ticket must be created before replacing the PCM system
Log in to PPN	Electronic Owner's Manual cannot be installed due to a faulty Internet connection	▪ Always proceed as described in the work procedure!
Connect control unit	Connect control unit can no longer be reached after programming	▪ Remove Connect control unit battery and wait for 30 minutes ▪ Re-programming control unit
All control units	Coding is not written successfully	▪ Re-do automatic coding of the control unit
Control unit for exterior acoustics (eSound)	Coding cannot be carried out because the External sound control unit can no longer be accessed after programming – error message "No connection to the External sound control unit"	▪ Perform bus idle for at least 10 minutes; subsequently perform automatic coding of the control unit ▪ If the initial programming was successful, **do not** reprogram as this can cause the control unit to fail
Control unit for exterior acoustics (eSound)	Control unit cannot be reached after the first successfully performed programming or **"Checksum incorrect"** is displayed	▪ Perform bus idle for at least 10 minutes ▪ If the initial programming was successful, **do not** reprogram as this can cause the control unit to fail ▪ If the message **"Checksum incorrect"** is still displayed even after bus idle, create PRMS ticket
Instrument cluster	Programming is cancelled at 3%, and no VIN is stored in the instrument cluster control unit	▪ Deactivate protection of the vehicle diagnostic and then deactivate the diagnostic access protection

Instrument cluster	Programming cannot be carried out successfully	▪ If the control unit is still accessible, programming must be performed at least for five more times
Ignition	Ignition can no longer be switched on	▪ Remove Connect control unit battery and wait for 30 minutes
Control units BMCe and BJB	After creating a vehicle analysis log, the BMCe or BJBr control units are visible in the control unit overview, but they are not found when trying to select them. The integration test shows a communication error.	▪ Perform bus idle for at least 5 minutes ▪ in the **additional menu**, carry out the procedure "Automatic deactivation" ▪ Disconnect 12-volt battery for at least 5 minutes ▪ Carry out integration test if there is still no communication - -> Create PRMS ticket
High-voltage battery control unit (BECM)	Communication error in E-box is displayed	▪ Perform programming of the **High-voltage battery (BECM)** control unit using the **"Campaign" function in the Additional menu** by entering the programming code **E3B3C** ▪ Select **'High-voltage battery (BECM)'** in the control units overview, then **'Drive links/check'** and continue by pressing F12 to enter **'High-voltage E-box, activate communication'**. In 'Model Identification', the value 'High-voltage E-box' should already be selected. If not, set the value "High-voltage E-box" and press F8 to perform the test ▪ Check the **Software release of the highvoltage E-box control unit** in the pre-VAL ▪ High-voltage E-box has software release **0030**,

		then perform control unit programming using the **'Campaign' function in the additional menu** by entering the programming code **B0J1B** ▪ for software release **0091** –> Use programming code **B1J2B** ▪ for software release **higher than or equal to 0200** –> Use programming code **B2J3B** ▪ Pull off the Tester and remove the charger ▪ Perform bus idle for at least 10 minutes ▪ Perform a reset of terminal 30 and bus idle for at least 5 min ▪ Reconnect the Tester to the vehicle, start diagnosis ▪ Select the **'High-voltage battery (BECM)'** control unit in the control unit overview and perform by pressing F12 ▪ Erase high-voltage battery fault memory ▪ Re-start automatic programming of the **High-voltage battery (BECM)**. Programming of the high-voltage E-box is performed to target status ▪ If the **High-voltage E-box** control unit is still not able to communicate, create a PRMS ticket and attach the extended logging of the process. Please note: the extended logging includes **two logging files** in this case!

High-voltage - Control units	Programming aborted	▪ in the **additional menu**, carry out the procedure "Automatic deactivation" ▪ Terminal 30 reset ▪ Restart programming with open Service Disconnect
Gateway control unit	Cancelling programming, gateway control unit cannot be reached	in the Porsche Car Update Cockpit (PCUC), check whether the control unit has software version 0025 and bootloader 0112; if yes: ▪ Carry out control unit programming using the **"Campaign" function in the Additional menu** on the PIWIS Tester by entering programming code **E3G1W**
Gateway control unit	Cancelling programming, gateway control unit cannot be reached	▪ Carry out control unit programming using the **"Campaign" function in the Additional menu** on the PIWIS Tester by entering programming code **GATEWAY_E3_CAN**
Instrument cluster	Service is displayed, service interval cannot be reset	▪ Select settings in the PCM ▪ Select the step "System" in the settings ▪ Select the time and date ▪ De-select the checkmark for automatic date and time selection ▪ Setting current date ▪ Switch ignition off and on (service should no longer be displayed) ▪ Re-select the checkmark for automatic date and time selection

Checklist

Checklist:

Work step: The checklist only refers to campaign **WRX1**. A different checklist or another campaign must **not** be used.	**Scope:**	**Completed:**
1. Battery charger set to charging mode?	All	
2. Original remote control in emergency start tray **(position noted)**?	All	
3. Internet connection for PIWIS Tester active?	All	
4. Vehicle Analysis Log created?	All	
5. PR number matched?	**1 and 2**	
6. Sequence 1 performed?	All	
7. Battery charger switched off and on before sequence 2?	**1 to 4 and 6**	
8. Select Guest account from the central display (PCM) and activate Privacy mode?	**1 to 4 and 6**	
9. Sequence 2 performed?	**1 to 4 and 6**	
10. Sequence 3 performed?	**2 and 4**	
11. Front sliding roof (panaromic roof retaught)?	**2 and 4**	
12. Bus idle performed for 5 minutes?	All	
13. Fault memory deleted?	All	
14. Integration test performed (at least 3 times in case of a deviation)?	All	
15. Result of the integration test fault-free?	All	
16. Vehicle Analysis Log created?	All	
17. Owner's Manual replaced?	**1 to 4 and 6**	
18. Campaign entered in the Warranty and Maintenance logbook?	All	
VIN:		
Porsche Center number:		