WSA4 – Re-Programming Gateway Control Unit (Battery Sensor) (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 2019 up to 2024**

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

911 (992)

Concerns: **Gateway control unit (battery sensor)**

Cause: **Due to a software error of the battery sensor of the 12-volt vehicle electrical system battery, it is possible that the battery data of the affected vehicles is calculated incorrectly.**
Depending on the usage behavior, this can lead to a premature recommendation to replace the 12-volt vehicle electrical system battery.

Action: Re-program the battery sensor using the **latest** PIWIS Tester software version.
Minimum requirement: Release **43.200.041** (or higher)

- Re-programming gateway control unit (battery sensor) **Vehicles with scope 1** ⇒ *Technical Information 'Gateway control unit (re-programming battery sensor) only valid for Cayenne (9YA/ 9YB) up to model year 22'*
- Re-programming Gateway control unit (battery sensor) **Vehicles with scope 2 and scope 3** ⇒ *Technical Information 'Gateway control unit (re-programming battery sensor) only valid for vehicles from model year 2022'* onwards

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

Required tools

Tools:

- **P90999 - PIWIS Tester 4** with PIWIS Tester test software version **43.200.041** (or higher) installed
- Battery charger with a current rating of **at least 90 A** and a **current and voltage-controlled charge map** for lithium starter batteries, e.g., **VAS 5908 battery charger 90 A**

Re-programming gateway control unit (battery sensor) only valid for vehicles with scope 1

Work Procedure: 1 The basic procedure for programming a control unit is described in the Workshop Manual ⇒*Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester – section on "Programming"'*.

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

Required PIWIS Tester software release:	**43.200.041** (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:	**E3B4T**
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. During the programming sequence, the **battery sensor** is **re-programmed** and then **automaticallyre-coded**. **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 (approx.):	**13 minutes**
Software release programmed during this campaign:	▪ Gateway control unit (battery sensor): **2,000** Following control unit programming, the software version can be read out of the instrument cluster control unit in the ⇒ 'Extended identifications' menu from the gateway control unit using the PIWIS Tester. The software part number and software version of the programmed data record are based on the specified PIWIS Tester test software release. Please note that this may be different in a later release.

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.

2 Read out and delete all control unit fault memories.

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

2.2 Select the function "Read all error memories and delete if necessary" and press F12 ('Next') to confirm.

Information

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

3 Enter the campaign in the Warranty and Maintenance Logbook.

Continue with warranty processing **Scope 1** ⇒ *Technical Information '9X00IN Warranty processing'*

Re-programming gateway control unit (battery sensor) only valid for vehicles with scope 2 and scope 3

Work Procedure: 1 The basic procedure for programming a control unit is described in the Workshop Manual ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester – section on "Programming"'*.

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

Required PIWIS Tester software release:	**43.200.041** (or higher)
Type of control unit programming:	Control unit programming using the **'Automatic programming'** function of the gateway control unit: **'Gateway'** control unit – **'Coding/programming'** menu – **'Automatic programming'** function

Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. During the programming sequence, the **battery sensor** is **re-programmed** and then **automaticallyre-coded**. **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 (approx.):	**15 minutes**
Software release programmed during this campaign:	▪ Gateway control unit (battery sensor): **2,000** Following control unit programming, the software version can be read out of the instrument cluster control unit in the ⇒ 'Extended identifications' menu from the gateway control unit using the PIWIS Tester. The software part number and software version of the programmed data record are based on the specified PIWIS Tester test software release. Please note that this may be different in a later release.
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.

2 Read out and delete all control unit fault memories.

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

2.2 Select the function "Read all fault memories and delete if necessary" and press F12 ('Next') to confirm.

Information

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

3 Enter the campaign in the Warranty and Maintenance Logbook.

Continue with warranty processing Scope 2 and Scope 3 ⇒ *Technical Information '9X00IN Warranty processing'*

Warranty processing

Scope 1: **Programming gateway control unit**

- valid for **Cayenne (9YA / 9YB)**
- **up to model year 2022** (< MY 2022)

Labor time:

Programming gateway control unit — Labor time: **48 TU**
Includes: Connecting and disconnecting battery charger
Connecting and disconnecting PIWIS Tester
Read out and delete fault memories

⇒ **Damage number WSA4 066 000 1**

Scope 2: **Programming gateway control unit**

- valid for **Cayenne (9YA / 9YB)**
- **from model year 2022** (>= MY 2022)

Labor time:

Programming gateway control unit — Labor time: **52 TU**
Includes: Connecting and disconnecting battery charger
Connecting and disconnecting PIWIS Tester
Read out and delete fault memories

⇒ **Damage number WSA4 066 000 1**

Scope 3: **Programming gateway control unit**

- valid for **911 (992)**

Labor time:

Programming gateway control unit — Labor time: **55 TU**

Includes: Connecting and disconnecting battery charger
Connecting and disconnecting PIWIS Tester
Read out and delete fault memories

⇒ **Damage number WSA4 066 000 1**