

WPKO - Re-Programming PSM Control Unit (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.

Change overview:

Release	Date	Change
1	04/08/2024	• First publication
2	04/23/2024	• Correction of Action steps under 1.4
3	05/17/2024	• Correction of contact information under 1.4
4	08/09/2024	• Added information about ARBO campaign • Update of Work Instructions

Model Year: **As of 2020 up to 2024**

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

Concerns: **Porsche Stability Management (PSM)**

Cause: **An optimized software is available for the Porsche Stability Management (PSM) control unit. This update optimizes the brake pedal feel on recuperative and hydraulic braking.**

Action: Check hydraulic unit and re-program PSM control unit using an updated data record.



Information

Please note that all WPKO vehicles are also affected by the ARBO campaign. This **technical information was therefore adapted as part of the ARBO-campaign publication.**

It is also **absolutely necessary** that **the ARBO** campaign is carried out first and **then the WPKO** campaign. In the event that the ARBO campaign is carried out at a later point in time and the WPKO is still open, the implementation of the WPKO campaign should also be postponed until the planned date. If the WPKO campaign has already been completed, it does not have to be carried out again.

The following must be observed for vehicles on which the ARBO campaign has already been carried out in the past and the present WPKO campaign is still open:

- The ARBO campaign was carried out max. **one month** ago (≤ 1 month): In addition to programming the PSM control unit, the brake system must also be bled using the **Porsche Stability Management (PSM)** bleeding routine (Scope 5 invoicing).
- The ARBO campaign was carried out **more than** one month ago (> 1 month): In addition to programming the PSM control unit, the brake system must **first** be ventilated using the ventilation routine for **electric brake boosters (eBKV)** and **then** using the **Porsche Stability Management (PSM)** ventilation routine (calculation scope 6).

In principle, the implementation of the "Functional testing of the hydraulic unit" is omitted.

Minimum requirement: Release **42.400.050**

Affected
Vehicles:

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

Required materials

Material: **Required materials** (usually already available in the Porsche Center or locally sourced):

Part No.	Designation	Quantity
00004321086	⇒ Brake fluid, 30 liter/ 7.9 gal container container	Quantity as required (approx. 2.5 liter/ 0.66 gal required per vehicle)

Required tools

Tool:

- **P90999 - P90999 - PIWIS Tester 4**
- 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 90A**
- Torque wrench, 6 – 50 Nm (4.5 – 37 ftlb.), e.g. **VAG 1331A Torque wrench, 6-50 Nm (4.5-37 ftlb.)**
- Torque wrench, 150 – 800 Nm (111 – 592 ftlb.), e.g. **VAG 1601 Torque wrench, 150 - 800 Nm (111 - 592 ftlb.)**
- Suitable bleeding device for brake fluid, e.g., **VAS 6860 - Brake filling and bleeding equipment**

Re-program the PSM control unit and bleed the brake system (PSM)

Work
Procedure:



Information

For vehicles on which the ARBO campaign has already been carried out, the following must be observed:

- The ARBO campaign was carried out max. **one month** ago (</= 1 month): Carry out campaign action according to the description and continue with work step 1 (scope 5 invoicing).
- The ARBO campaign was carried out **more than** one month ago (> 1 month): **First**, bleed the brake system with the bleeding routine for **electric brake booster (EBB)**. **Then** carry out campaign action according to the description and continue with work step 1 (scope 6 invoicing).

In principle, the implementation of the "Functional testing of the hydraulic unit" is omitted.

- 1 Bleed the brake system with the bleeding routine **Porsche Stability Management (PSM)**.
⇒ *Workshop Manual '470107 Bleeding brake system'*
- 2 The basic procedure for control unit programming is described in the Workshop Manual ⇒ *Workshop Manual '9X00IN Basic Instructions and Procedure for Control Unit Programming Using the PIWIS Tester'*.

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

Required PIWIS Tester software release:	42.400.050 (or higher)
Integration test procedure:	<ul style="list-style-type: none"> • The integration test shows a green result independently of the necessary campaign • The WPKO campaign must still be carried out
Type of control unit programming:	Control unit programming using the "Automatic programming" function in the PSM control unit.
Programming sequence:	<p>Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence.</p> <p>Do not interrupt programming and coding.</p> <p>A backup documentation process for the re-programmed software releases starts as soon as programming and coding is complete.</p>

Programming time (approx.):	12 minutes
Software release programmed during this campaign:	<ul style="list-style-type: none"> PSM control unit: 0190 <p>Following control unit programming, the software release can be read out from the relevant control unit using the PIWIS Tester in the menu ⇒ "Incremented identifications".</p>
Procedure in the event of error messages appearing during the programming sequence:	⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'</i>
Procedure in the event of a termination in the control unit programming:	Repeat control unit programming by restarting programming.

- 3 Read out and delete all control unit fault memories.
 - 3.1 In the control unit selection ("Overview menu") press •F7" to call up the Additional menu.
 - 3.2 Select the function "Read all fault memories and erase 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, these must first be **found** and **corrected**. This work **cannot** be invoiced under the workshop campaign number.

- 4 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.

- 5 Exit the diagnostic application. Switch off ignition.
- 6 Switch off and disconnect the battery charger.
- 7 Enter the campaign in the Warranty and Maintenance logbook.

Warranty processing

Scope 1-4: Not valid.

Scope 5: Re-programming the PSM control unit – Bleeding the brake system with bleeding routine **PSM**

Labor time:

Re-programming PSM control unit Labor time: **141 TU**

Includes: Connecting and disconnecting battery charger
 Connecting and disconnecting PIWIS Tester
 Removing and installing wheels
 Bleeding brake system (PSM)
 Reading out and deleting fault memories

Required materials:

00004321086	Brake fluid, 30 liter/ 7.9 gal container container	0.09 pieces (approx. 2.5 liter/ 0.66 gal)
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⇒ **Damage Number WPKO 066 000 1**

Scope 6: **Only to be invoiced if the ARB0 campaign was carried out more than one month ago (> 1 month):**

Re-programming the PSM control unit – Bleeding the brake system with bleeding routines **EBB** and **PSM**

Labor time:

Re-programming PSM control unit Labor time: **161 TU**

Includes: Connecting and disconnecting battery charger
 Connecting and disconnecting PIWIS Tester
 Removing and installing wheels
 Bleeding brake system (EBB and PSM)
 Reading out and deleting fault memories

Required materials:

00004321086	Brake fluid, 30 liter/ 7.9 gal container container	0.14 pieces (approx. 4 liter/ 1.05 gal)
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⇒ **Damage Number WPKO 066 000 1**

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