PORSCHE®

WLL0 - Re-Programming DME Control Unit (Workshop Campaign)

Revision:	This bulletin replaces bulletin Group 2 175/20 WLL0, dated October 20, 2022.
Model Year:	**As of 2019 up to 2020**
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.
Vehicle Type:	**Macan (95B)**
Country/Market:	USA (C02), Canada (C36)
Concerns:	**DME control unit**
Information:	**New DME control unit software that optimizes engine control and exhaust gas post-treatment is available for the Macan.**
	In order to implement this optimization retrospectively for vehicles manufactured before the modified software was introduced as standard, the DME control unit must be re-programmed on the affected vehicles.
Action required:	Re-program DME control unit.
	Carry out control unit programming using the PIWIS Tester with software version **41.150.030** (or a higher software version) installed.

> **ℹ Information**
>
> When the DME control unit is programmed, the PDK control unit is also **re-programmed automatically**.
> **Both** control units are then **coded automatically**.
> The total time required for **programming and coding** both control units is **approx. 13 minutes**.

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

Required tools

Tool: •   **9900 - PIWIS Tester 3** with PIWIS Tester software version **41.150.030** (or higher) installed
          •   Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 battery charger 90A**

Preparatory work

> **NOTICE**
>
> **Fault entry in the fault memory and control unit programming aborted due to low voltage.**
>
> •   **Increased current draw during diagnosis or control unit programming can cause a drop in voltage, which can result in one or more fault entries and the abnormal termination of the programming process.**
>
> ⇒   **Before starting control unit programming, connect a suitable battery charger with a current rating of at least 90 A to the vehicle.**

> **NOTICE**
>
> **Control unit programming will be aborted if the Wi-Fi connection is unstable.**
>
> •   **An unstable Wi-Fi connection can interrupt communication between PIWIS Tester II and the vehicle communication module (VCI). As a result, control unit programming may be aborted.**
>
> ⇒   **During control unit programming, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.**

> **NOTICE**
>
> **Control unit programming will be aborted if the driver's key is not detected**
>
> •   **If the driver's key is not detected in the vehicle, programming cannot be started or will be interrupted.**
>
> ⇒   **Place the driver's key with the back facing down into the front left storage compartment in the center console to ensure a continuous radio link between the vehicle and the driver's key.**

Work Procedure: 1   Connect a battery charger with a current rating of **at least 90 A** (e.g. **VAS 5908 Battery charger 90A**) to the jump-start terminals in the engine compartment and switch it on.

2   Place the driver's key with the back facing down in the front left storage compartment in the center console.
This will guarantee an uninterrupted radio link between the vehicle and the driver's key.

3   Connect **9900 - PIWIS Tester 3** to the vehicle communication interface module (VCI) via the **USB cable**. Connect communication module to the vehicle and switch on PIWIS Tester.

4   On the PIWIS Tester start screen, call up the **'Diagnostics'** application. The vehicle type is then selected, the diagnostic application is started and the control unit selection screen is populated.

Re-programming DME control unit

NOTICE

Use of a PIWIS Tester software version that is older than the specified version

- **Measure is ineffective**

⇒ **Always use the specified version or a higher version of the PIWIS Tester software for control unit programming or coding.**

ℹ️ Information

The procedure described here is based on the PIWIS Tester 3 software version **41.150.030**.

The PIWIS Tester instructions take precedence and in the event of a discrepancy, these are the instructions that must be followed.
Deviations may occur with later software versions, for example.

It is imperative that the PIWIS Tester remains online during control unit programming so that backup documentation of the software versions installed on the control units **before and after programming** is sent to the Porsche After Sales systems.

Work Procedure: 1   **Re-program DME control unit**.

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 version:	**41.150.030** (or higher)
Type of control unit programming:	Control unit programming using the **'Automatic programming'** function for the DME control unit. **DME 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 **DME control unit** as well as the **PDK control unit** is re-**programmed** and then **re-codedautomatically**. **Do not interrupt programming and coding.** Once the control units have been programmed and coded, you will be prompted to switch the ignition off and then back on again after a certain waiting time. Backup documentation of the new software versions is then performed.
Programming time (approx):	**13 minutes**
Software version programmed during this campaign:	DME control unit, **model year 2019:** • Software version: **0003** (or higher) • Software Part No.: **95B906259AA** (or higher) DME control unit, **model year 2020:** • Software version: **0007** (or higher) • Software Part No.: **95B906259H** (or higher) Following control unit programming, the software part number and version of the programmed data record can be read out of the DME control unit in the ⇒ 'Extended identification' menu using the PIWIS Tester.
Procedure in the event of abnormal termination of control unit programming:	Repeat control unit programming by restarting programming.
Procedure in the event of error messages appearing during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Troubleshooting"'.*

Selecting and erasing fault memories

Work Procedure: 1   In the control unit selection screen (**'Overview'** menu), press •F7" to call up the **'Additional menu'**.

2   Select the function **'Read all fault memories and erase if required'** and press •F12" ('Next') to confirm your selection ⇒ *Erase fault memory*.
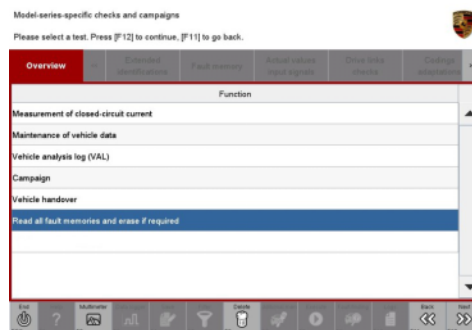
The fault memories of the control units are selected.

3   Once you have selected the fault memories, check the fault memory entries.

i   **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.

Erase fault memory

4   Press •F8" to delete fault memory entries.

5   Press •F12" ('Yes') in response to the question as to whether you really want to delete all fault memory entries.

The faults stored in the fault memories of the various control units are deleted.

i   **Information**

If the fault memories of individual control units cannot be erased, proceed as follows:

- Switch off ignition.

- Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.

- Lock the vehicle using the driver's key.

- Wait approx. 1 minute before unlocking the vehicle again.

- Plug the PIWIS Tester diagnostic connector into the diagnostic socket again and restore communication with the vehicle.

- Select the fault memories of these control units again and erase the fault memories separately.

6   Once you have erased the fault memories, select the **'Overview'** menu to return to the control unit selection screen ⇒ *Control unit selection*.


Control unit selection

Perform throttle valve adaptation

Work Procedure: 1   Select the **'DME'** control unit in the control unit selection screen ('Overview' menu) and press •F12" ('Next') to confirm your selection.
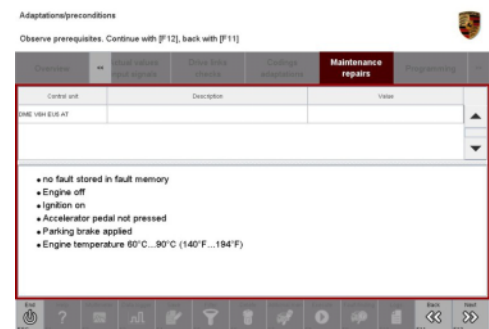
2   Once the DME control unit has been found and is displayed in the overview, select the **'Maintenance/repairs'** menu.

3   Select menu item ⇒ **'Adaptations'** and confirm your selection by pressing •F12" ('Next') ⇒ *DME adaptations*.
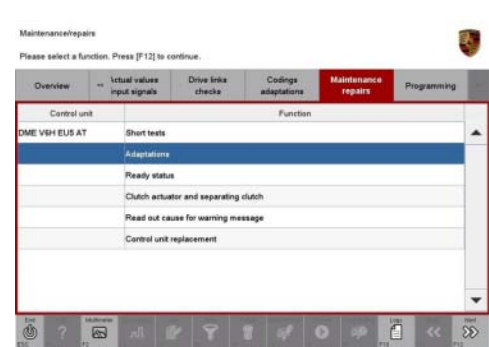
DME adaptations

4   Comply with the displayed preconditions and press •F12" ('Next') to confirm ⇒ *Adaptation preconditions*.

Adaptation preconditions

5   Select the ⇒ **'Throttle valve adaptation'** function so that the corresponding text line turns blue and press •F8" ('Start') to start throttle valve adaptation ⇒ *Throttle valve adaptation*.

6   Follow the instructions on the PIWIS Tester while throttle valve adaptation is being performed.

Once throttle valve adaptation is complete, a tick will appear in the "Value" field on the PIWIS Tester display.

If throttle valve adaptation is **not** completed successfully, adaptation must be **repeated**.

Throttle valve adaptation

7   Press •F8" ('Stop') to end throttle valve adaptation.

AfterSales

Perform radiator shutter adaptation

Work Procedure: 1   Select the ⇒ **'Radiator shutter adaptation'** function so that the corresponding text line turns blue and then press • F8 " ('Start') to start radiator shutter adaptation ⇒ *Radiator shutter adaptation*.

Radiator shutter adaptation

2   Follow the instructions on the PIWIS Tester while radiator shutter adaptation is being performed ⇒ *PIWIS instructions*.

Once adaptation is complete, a tick will appear in the "Value" field on the PIWIS Tester display.

If radiator shutter adaptation is **not** completed successfully, the **adaptation** must be repeated.

3   End radiator shutter adaptation by pressing • F8 " ('Stop').

4   Press • F11 " ('Back') to return to the start page of the ⇒ **'Maintenance/repairs'** menu.

PIWIS instructions

5   Select the ⇒ **'Overview'** menu to return to the control unit selection screen ⇒ *Control unit selection*.
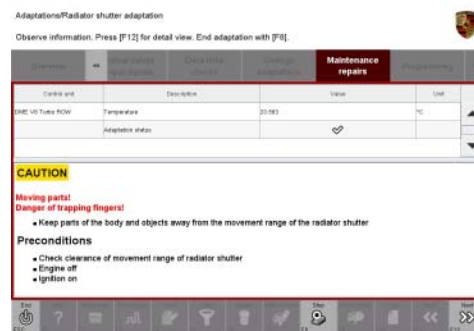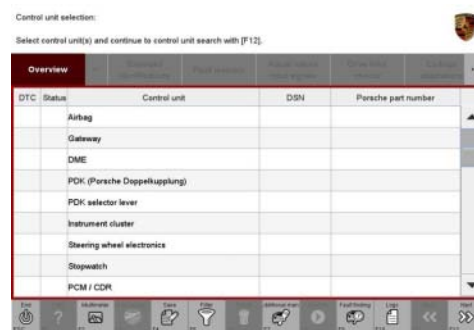
Control unit selection

Concluding work

Work Procedure: 1   Switch off ignition.

2   Disconnect the PIWIS Tester from the vehicle.

3   Switch off and disconnect the battery charger.

4 Attach **Recall Proof of Completion label** to the front lid **(California dealers only)**.
Instructions for attaching labels

- Surfaces on which you intend to attach the label must be clean, dry and free from grease and oil residues.
- Before attaching the label, clean the surfaces using a suitable cleaning agent and a clean, grease-free and lint-free cloth.
- This label must not be affixed over existing label.
- Attach label only at the specified positions.

4.1 Fill out the Recall Proof of Completion label ⇒ *Recall Proof of Completion Label* fully and correctly. This includes the recall code "**WLL0**", your dealer code and the repair date.

4.2 Clean the surface in the lower area on the front lid at the left-hand side in direction of travel at which the Recall Proof of Completion label must be attached ⇒ *Proof of Completion Label: specified position (Exemplary illustration — Macan (95B) position accordingly)* **-arrow-** using a suitable cleaning agent and a clean, grease-free and lint-free cloth.

4.3   Affix Recall Proof of Completion label in the lower area of the front lid at the lefthand side in direction of travel ⇒ *Proof of Completion Label: specified position (Exemplary illustration — Macan (95B) position accordingly)* **-arrow-**.

Exemplary illustration — Macan (95B) position accordingly

4.4 Close front lid.

5 Enter the campaign in the Warranty and Maintenance booklet.

A template of the proof of correction can be downloaded from PPN: https://ppn.porsche.com/portal/docs/DOC-427025

Recall Proof of Completion Label

Proof of Completion Label: specified position (Exemplary illustration — Macan (95B) position accordingly)

Warranty processing

Scope 1:

Labor time:		
Re-programming DME control unit		Labor time: **71 TU**
Includes:	Connecting and disconnecting battery charger	
	Connect and disconnect PIWIS Tester	
	Selecting and erasing fault memories	
	Perform throttle valve adaptation	
	Perform radiator shutter adaptation	
	Attach Recall Proof of Completion label and provide signed	
	proof of correction to customer (California dealers only)	

Required parts:		
PNA EMI 000 00	Label – Recall Proof of Completion	1 ea.
PNA 999 100 235	Certificate - Recall Proof of Correction	1 ea.

* **California dealers only:**

- For warranty processing, enter the Part No. **PNA EMI 000 00** with the designation "label" as a **local part** at US$ 0.34 in the warranty claim.
- For warranty processing, enter the Part No. **PNA 999 100 235** with the designation "certificate" as a **local part** at US$ 0.01 in the warranty claim.

: ⇒ **Damage Code WLL0 066 000 1**