WLP0 - Re-Programming PDK 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.
Model Year:	**2021**
Model Line:	**911 (992)**
Concerns:	**PDK control unit**
Information:	**Updated software for the PDK control unit is available for the affected vehicles.**
Action Required:	Re-program the PDK control unit using the PIWIS Tester with installed test software version **39.900.030** (or higher).

ℹ️ Information

In addition to the **PDK control unit**, the **DME control unit** is also re-programmed automatically. It takes **approx. 15 minutes** in total to **program** both control units.

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

Required tools

Tools:

ℹ️ Information

The current 911 (992) is equipped with either a **lithium starter battery** (I-no. J2A) **or** an **AGM starter battery** (I-no. J0V, J4K) as standard.
This depends on the following:

- Country version
- Model type
- Vehicle equipment

Lithium starter batteries must only be charged using a **suitable battery charger** that has a current and voltage-controlled charge map.

For further information about the battery chargers to be used, see ⇒ *Workshop Manual '270689 Charging battery/vehicle electrical system'.*

- Battery charger with a current rating of **at least 90 A** and, if required, **also** with a **current and voltage-controlled charge map** for lithium starter batteries, e.g. **VAS 5908 battery charger 90A**
- **9900 - PIWIS Tester 3** with PIWIS Tester test software version **39.900.030** (or higher) installed

Preparatory work

NOTICE

Fault entry in the fault memory and control unit programming aborted due to undervoltage.

- **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 WLAN connection is unstable

- **An unstable WiFi connection can interrupt communication between the PIWIS Tester 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 recognized

- **If the driver's key is not recognized in the vehicle, programming cannot be started or will be interrupted.**

⇒ **Place the driver's key with the back facing down in the area in front of the storage compartment under the armrest (emergency start tray) in order to guarantee a permanent radio link between the vehicle and driver's key.**

Information

The procedure described here is based on the PIWIS Tester 3 software version **39.900.030**.

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

Work Procedure: 1   Connect a suitable battery charger, e.g. **Battery charger 90A**, to the jump-start terminals in the luggage compartment and switch it on.

2   Place the driver's key with the back facing down in the area in front of the storage compartment under the armrest (emergency start tray) in order to guarantee a permanent radio link between the vehicle and driver's key ⇒ *Emergency start tray*.

Emergency start tray

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

4   Switch on ignition.

5   On the PIWIS Tester start screen, call up the **'Diagnostics'** application.

The vehicle type is then read out, the diagnostic application is started and the control unit selection screen is populated.

Re-programming PDK control unit

⚠ **WARNING**

Electrically moved side windows and rear spoiler

• **Danger of limbs being trapped or severed**

• **Risk of damage to components**

⇒ **Do not reach into the danger area.**

⇒ **Keep third parties away from the danger area.**

⇒ **Do not move components or tools into the danger area.**

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

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:

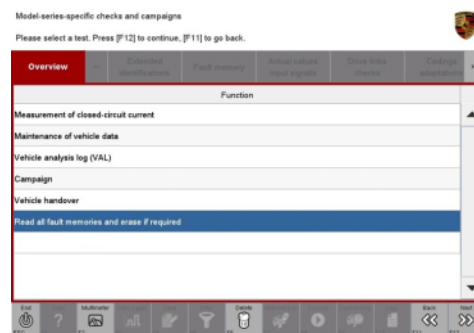| Required PIWIS Tester software version:	**39.900.030** (or higher)

Type of control unit programming:	Control unit programming using the **'Automatic programming'** function for the PDK control unit: **'Transmission electronics (PDK II)'** 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** is **re-programmed** first, then the **transmission control unit** is re-programmed. Both control units are 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.
The programming sequence takes (approx.):	**15 minutes**
Software versions programmed during this campaign:	**Transmission control unit** Software version: • **0534** (or higher) Software Part No.: • **992.927.156.AE** (911 Carrera) • **992.927.153.BF** (911 Carrera S) • **992.927.110.Q** (911 Turbo) • **992.927.109.Q** (911 Turbo S) Following control unit programming, the software version and software part number can be read out of the PDK control unit in the 'Extended identifications' menu using the PIWIS Tester.

Procedure in the event of **abnormal termination** of control unit programming:	• Switch ignition off and then on again. • Read out and erase fault memories ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"'.* • Repeat control unit programming by restarting programming.
Procedure in the event of **other error messages** appearing during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Fault finding"'.*

Concluding work

Work Procedure: 1   Read out and erase the fault memories of all control units.

1.1   Press •F7" in the control unit selection screen ('Overview' menu) to call up the Additional menu.

1.2   Select the function "Read all fault memories and erase if required" and press •F12" ('Next') to confirm your selection ⇒ *Erasing fault memories.*

The fault memories of the control units are read out.

1.3   Once you have read out the fault memories, check the fault memory entries.

Erasing fault memories

 🛈   **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.

1.4   Press •F8" to delete fault memory entries.

1.5   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.

ℹ️ **Information**

If fault memory entries for individual control units cannot be deleted, 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.

- Start the engine, leave it running for a short time and then stop it again.

- Switch off the ignition and wait approx. 10 seconds before switching it back on again.

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

- Read out the fault memory again and delete any fault memory entries that are stored.

1.6 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

⚠️ **WARNING**

Electrically moved rear spoiler

- **Danger of limbs being trapped or severed**

- **Risk of damage to components**

⟹ **Do not reach into the danger area.**

⟹ **Keep third parties away from the danger area.**

⟹ **Do not move components or tools into the danger area.**

2 Manually retract the rear spoiler, which extended automatically during programming.
To do this, select the **'CAR'** – **'DRIVE'** menu in the PCM and then select the **'Spoiler'** function and **press and hold** the spoiler button until the rear spoiler is **fully retracted**.

3 Switch off ignition.

4   Disconnect the PIWIS Tester from the vehicle.

> **ℹ️ Information**
>
> Connect the PIWIS Tester to a network as soon as possible and log into the PPN in order to transfer the backup documentation created during this campaign to the PAG systems.

5   Switch off and disconnect the battery charger.

6   Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing

Scope 1:

Working time:	
Re-programming PDK control unit	Labor time: **57 TU**
Includes: Connecting and disconnecting battery charger	
Connecting and disconnecting PIWIS Tester	
Reading out and erasing fault memories	
⇒ **Damage Code WLP0 066 000 1**	