WKE8 - Re-programming DME Control Unit (Workshop Campaign)

Vehicle Type: **911 GT3 (991)**

Model Year: **2018 - 2019**

Subject: **DME control unit**

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.

Information: **Due to a mix up in the allocation in the DME software, if there is a fault in the oxygen sensor on one cylinder bank, the fault code for the oxygen sensor on the other cylinder bank will be stored in the fault memory.**

As a result, replacing the relevant oxygen sensor will not correct the stored fault and this may result in repeat repairs.

Remedial Action: Re-program the DME control unit using the PIWIS Tester with test software version **38.300.030** (or higher) installed.

Information

The DME control unit is **re-programmed** and then **re-coded** automatically.
For vehicles with Porsche Doppelkupplung (PDK), the PDK control unit is **also** re-programmed and coded **automatically**.

The total time required for **programming and coding** is:

- Vehicles with PDK transmission (I-no. 250): **approx. 15 minutes**
- Vehicles with 6-speed GT sport manual transmission (I-no. 486): **approx. 8 minutes**

Affected Vehicles: Only the vehicles assigned to the campaign (see also PCSS Vehicle Information). This campaign affects 3,147 vehicles in North America.

Required Tools

Tools:

- **9900 - PIWIS Tester 3** with PIWIS Tester software version **38.300.030** (or higher) installed
- Battery charger with a current rating of **at least 90 A,** e.g. **VAS 5908 - Battery charger 90A**

Preparatory Work

NOTICE

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

- **Measure is ineffective**

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

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 40 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.**

Work Procedure: 1 Carry out general preliminary work for control unit programming as described in ⇒*Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*.

Information

The procedure described here is based on the PIWIS Tester 3 software version **38.300.030**.

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.

Re-programming DME Control Unit

Work Procedure: 1 **Re-program DME 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 table below.

Required PIWIS Tester software version:	**38.300.030** (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** is **re-programmed** first, then the **PDK control unit** is re-programmed. Both control units are then **re-coded automatically**. **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.):	DME control unit: **approx. 8 minutes** DME and PDK control units: **approx. 15 minutes**
Software version programmed during this campaign:	See ⇒ *Technical Information '9X00IN Overview of the programmed software versions'*.
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"'*.

Overview of the programmed software versions

Information

The **software version** and **software part number** for the **DME control unit** that are programmed during this campaign depend on the emission standard of the respective vehicle.
For vehicles with Porsche Doppelkupplung (PDK), the transmission is also re-programmed using a corresponding data record.

You will find an overview of the corresponding **data records for the DME and PDK control units** in the following table.

Overview: **911 GT3** vehicles with **PDK transmission (I-no. 250)**

Exhaust emission standard	Control unit	Software part no.	Software version
EU6 Plus (I-no. 7MM)	DME	99161865617	3668
	Porsche Doppelkupplung (PDK)	99161834303	A149
EU4 (I-no. 160)	DME	99161865817	3672
	Porsche Doppelkupplung (PDK)	99161834303	A149
EU4 EOBD (I-no. 161)	DME	99161865917	3674
	Porsche Doppelkupplung (PDK)	99161834303	A149
LEV-2 (I-no. 162)	DME	99161865717	3670
	Porsche Doppelkupplung (PDK)	99161834303	A149

Overview: **911 GT3** vehicles with **6-speed GT sport manual transmission (I-no. 486)**

Exhaust emission standard	Control unit	Software part no.	Software version
EU6 Plus (I-no. 7MM)	DME	99161869017	3669

EU4 (I-no. 160)	DME	99161869417	3673

EU4 EOBD (I-no. 161)	DME	99161869617	3675

LEV-2 (I-no. 162)	DME	99161869217	3671

Overview: **911 GT3 Touring vehicles (I-no. 032, 039)** with **6-speed GT sport manual transmission (I-no. 486)**

Exhaust emission standard	Control unit	Software part no.	Software version
EU6 Plus (I-no. 7MM)	DME	99161867717	3676

EU4 (I-no. 160)	DME	99161867817	3677

EU4 EOBD (I-no. 161)	DME	99161867917	3678

LEV-2 (I-no. 162)	DME	99161868817	3679

Concluding Work

Work Procedure:

Information

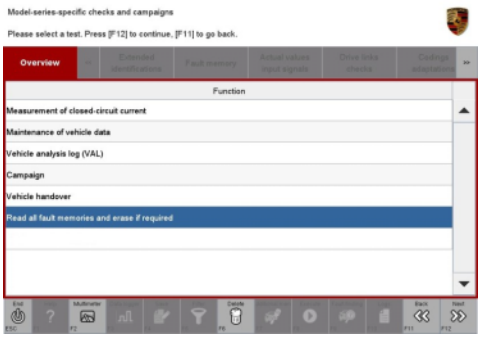
Brief breaks in communication between the control units during programming and coding can result in fault memory entries in all control units in the vehicle system, which might **not be deleted automatically**.
In addition to the automatic deletion of the fault memories during programming, the fault memories of all control units must therefore be **read out and deleted again** as described below **after each programming and coding process**.

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.



Erasing fault memories

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

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.

Information

If fault memory entries for individual control units cannot be deleted, proceed as follows:

- Switch off the 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

2 Switch off the ignition.

3 Disconnect the PIWIS Tester from the vehicle.

4 Switch off and disconnect the battery charger.

5 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing

Information

The working times specified were determined especially for the performance of this campaign and may deviate from the working times published in the catalog of operations contained in PIWIS.

Scope 1: **Re-program DME control unit**

- Vehicles with **PDK transmission** (**I-no. 250**)

Working time:

Re-programming DME control unit — Labor time: **57 TU**

Includes:
- Connecting and disconnecting battery charger
- Connecting and disconnecting PIWIS Tester
- Re-programming PDK control unit
- Reading out and erasing fault memories

⇒ **Damage Code WKE8 066 000 1**

Scope 2: **Re-program DME control unit**

- Vehicles with **6-speed GT sport manual transmission** (**I-no. 486**)

Working time:

Re-programming DME control unit		Labor time: **45 TU**
Includes:	Connecting and disconnecting battery charger	
	Connecting and disconnecting PIWIS Tester	
	Reading out and erasing fault memories	

⇒ **Damage Code WKE8 066 000 1**