WE02 - Re-programming Instrument Cluster (Workshop Campaign)

Revision: **Revision 1:** July 9, 2014
1. This campaign is amended to include changes and additional information added to end of table under “Carrying out control unit programming”.
2. This campaign is amended to add an additional "Information" paragraph under "Reading out and erasing fault memories".

Model Year: **As of 2012 up to 2014**

Important Note: **CRITICAL WARNING** - THIS CAMPAIGN INCLUDES STEPS WHERE SEVERAL CONTROL UNITS IN THE VEHICLE WILL BE PROGRAMMED WITH THE PIWIS TESTER. IT IS CRITICAL THAT THE VEHICLE VOLTAGE BE BETWEEN 13.5 VOLTS AND 14.5 VOLTS DURING THIS PROGRAMMING. OTHERWISE, THE PROGRAMMING COULD FAIL RESULTING IN DAMAGED CONTROL UNITS. CONTROL UNITS DAMAGED BY INADEQUATE VOLTAGE WILL NOT BE COVERED UNDER WARRANTY. THE TECHNICIAN MUST VERIFY THE ACTUAL VEHICLE VOLTAGE IN THE INSTRUMENT CLUSTER OR IN THE PIWIS TESTER BEFORE STARTING THE CAMPAIGN AND ALSO DOCUMENT THE ACTUAL VOLTAGE ON THE REPAIR ORDER. IT IS ALSO ADVISABLE TO MONITOR THE VEHICLE VOLTAGE DURING THE PROGRAMMING VIA THE INSTRUMENT CLUSTER. PLEASE REFER TO EQUIPMENT INFORMATION EQ-1105 FOR A LIST OF SUITABLE BATTERY CHARGERS/POWER SUPPLIES WHICH SHOULD BE USED TO MAINTAIN VEHICLE VOLTAGE.

Model Line: **Boxster (981)**
Cayman (981)
911 (991)

Concerns: **Instrument cluster**

Information: This is to inform you of a voluntary Workshop Campaign on the above-mentioned vehicles. **The following fault symptoms can occur on the affected vehicles due to a software error in the instrument cluster:**

- Failure of the display on the multi-function display: The display on the multi-function display in the instrument cluster can stop working at times under certain conditions. The display starts working again after a certain time.
- Implausible service reminder indicator display: The driver is informed that a service (maintenance, intermediate maintenance or oil service) is due although the mileage and date for a required service have not yet been reached.

Action Required:

Re-program the instrument cluster.

Information

It takes **about 20 minutes** to **program and code** the instrument cluster.

Information

When the instrument cluster is re-coded, the **individual settings** implemented in the instrument cluster by the customer will be **lost** and are reset to the **default values** of the **country version** that applies to the vehicle.

After carrying out the campaign, therefore, please inform your customers that personal settings they have implemented in the instrument cluster will have to be **set again** and provide them with any **help and support** they need for setting the relevant options.

This affects the following settings in the Vehicle menu, for example:

- Lowering of exterior mirror on passenger's side during parking manouvers
- Locking settings
- Light & Visibility settings
- Units (kilometers/miles, Celsius/Fahrenheit, ...)
- Language

Affected Vehicles:

The VIN(s) can be checked by using PIWIS Vehicle Information link to verify if the campaign affects the vehicle. This campaign is scope specific to the VIN! Failure to verify in PIWIS may result in an improper repair. This campaign affects 36,963 vehicles in North America.

Tools:

- **9818 - PIWIS Tester II** with software version **13.500** (or higher) installed
- Battery Charger/Power Supply - Suitable for AGM Type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V. Refer to Equipment Information EQ-1105.

Work Procedure:

See Attachment "A".

Claim Submission:

See Attachment "B".

Attachment "A"

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 battery charger or power supply, suitable for AGM type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V.**

NOTICE

Control unit programming will be aborted if the Internet connection is unstable.

- **An unstable Internet 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 PIWIS Tester II to the vehicle communication module (VCI) via the USB cable.**

NOTICE

Control unit programming will be aborted if the vehicle key is not recognized

- **If the vehicle key is not recognized in vehicles with Porsche Entry & Drive, programming cannot be started or will be interrupted.**

⇒ **Switch on the ignition using the original vehicle key. To do this, replace the original vehicle key in the ignition lock with the plastic key fob if it was previously removed at the start of this procedure.**

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 - section on "Preliminary work"'*.

Carrying out control unit programming

Work Procedure: 1 Re-program the instrument cluster.

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"'*.

Specific information on control unit programming during this campaign:

Required PIWIS Tester software version:	**13.500** (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:	**C8K6B**

Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. During the programming sequence, the instrument cluster is **re-programmed** and then **re-codedautomatically**. The display in the instrument cluster is switched off during programming. "bLF" appears on the digital speedometer display. The ignition is still active in the background. **Never switch the ignition off and then on again because if you do, programming will be interrupted and will then have to be restarted.** The display in the instrument cluster will be switched on again automatically as soon as programming is complete.
Time required for programming and coding (approx.):	**20 minutes**
Software version programmed during this campaign:	**0373** Following control unit programming, the software version can be read out of the instrument cluster in the ⇒ 'Extended identification' menu using the PIWIS Tester.
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"'*.
Procedure in the event of abnormal termination of control unit programming:	• End the guided programming sequence and disconnect the PIWIS Tester from the vehicle. • Switch off ignition and lock the vehicle. • Wait for at least 5 minutes before unlocking the vehicle again and switching on the ignition. • Connect the PIWIS Tester to the vehicle and repeat control unit programming by entering the programming code again.
Procedure in the event of other malfunctions **following** control unit	• Switch off ignition and lock the vehicle.

programming (e.g. analog speedometer does not work):	• Wait for at least 5 minutes before unlocking the vehicle again and switching on the ignition. • Check to see if the problem persists.

Once the instrument cluster has been programmed successfully, carry out the following tasks in the specified sequence.

Reading out and erasing fault memories

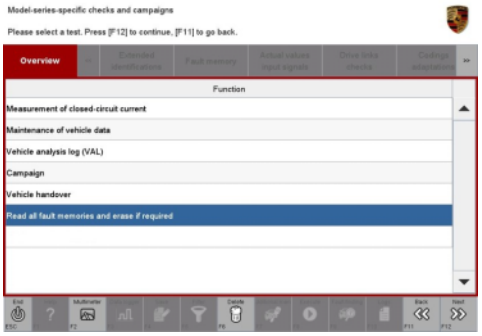
Work Procedure: 1 In the control unit selection screen (⇒ **'Overview'** menu), press •F7 “ to call up the Additional menu.

2 Select the function “Read all fault memories and erase if required” and press •>> “ to confirm ⇒*Erasing fault memories*.

The fault memories of the control units are read out.

3 Once you have read out the fault memories, delete the fault memory entries by pressing •F8 “ .

4 Press •F12 “ (“Yes”) in response to the question as to whether you really want to erase all fault memory entries.



Erasing fault memories

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

Information

If the fault memories of individual control units (e.g. DME, PDK, etc.) cannot be erased, start the engine briefly and then switch it off again. Wait for approx. 10 seconds before switching the ignition on again and re-establish the connection between the PIWIS Tester and the vehicle. Then read out and erase the fault memories of the affected control units again separately.

If the fault memory entries are still present, proceed as follows:

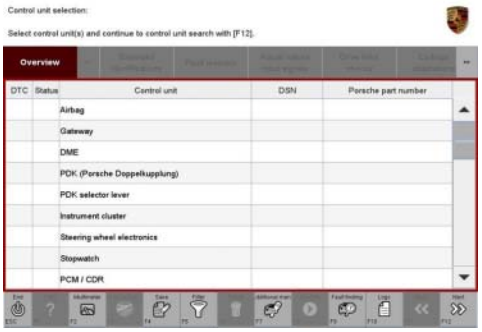
- Switch off ignition.
- Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.
- Lock the vehicle using the driver's key.
- Wait for approx. 1 minute before unlocking the vehicle again and then read out the fault memories of the control units again and erase them.

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

Information

If the fault memory entry "**01001C: Operator and display Log - No communication**" is stored in the instrument cluster, please **ignore** this. This fault memory entry is caused by a communication problem between the control units during programming.

5 Once you have erased the fault memories, select the ⇒ **'Overview'** menu and press •<< " to return to the control unit selection screen ⇒ *Control unit selection*.



Control unit selection

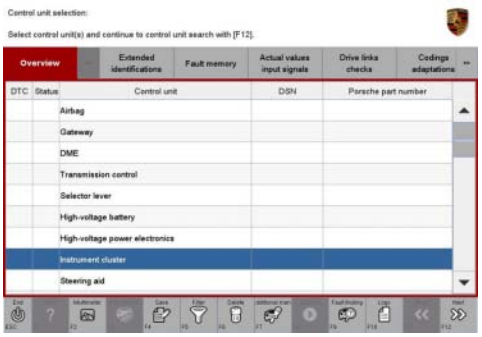
Resetting instrument cluster to factory settings

Work Procedure:

Note: Vehicle voltage must remain between 13.5 and 14.5 volts during entire work procedure.

1 Select ⇒ **'Instrument cluster'** in the control unit selection screen (⇒ **'Overview'** menu) and press •>> " to confirm your selection ⇒ *Control unit selection – Instrument cluster*.

2 Once the instrument cluster has been found and is displayed in the overview, select the ⇒ **'Codings / adaptations'** menu.

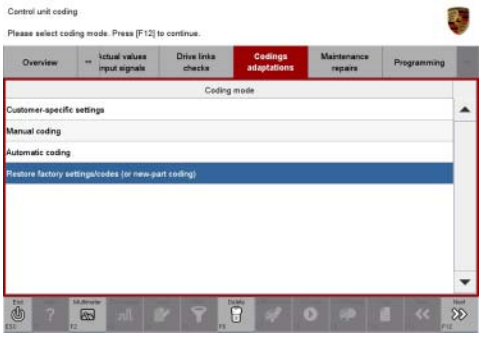


Control unit selection – Instrument cluster

3 Select ⇒ **'Restore factory settings / codes'** and press •>> " to start the process ⇒ *Resetting instrument cluster to factory settings*.

4 Once the settings have been reset successfully, press •>> " to continue.

5 Select the ⇒ **'Overview'** menu and press •<< " to return to the control unit selection screen.



Resetting instrument cluster to factory settings

Checking service reminder indicator on the multi-function display in the instrument cluster

Work Procedure:

Note: Vehicle voltage must remain between 13.5 and 14.5 volts during entire work procedure.

1 Check the plausibility of the service reminder indicator displays for the various service events (maintenance, intermediate maintenance and oil service) under "Info" >> "Service intervals" in the "Vehicle" main menu on the multi-function display in the instrument cluster.

Information

If the messages "Service now", "Intermediate maintenance now" and / or "Oil service now" are displayed on the multi-function display although the mileage and date for the next service have not yet been reached (implausible service reminder indicator display), the service interval must be reset using the PIWIS Tester so that the messages will no longer be displayed in the instrument cluster.

In this case, carry out the steps described in the next section ⇒ *Technical Information 'WE0200 Resetting service reminder indicator and re-writing service interval'*.
If this is **not** the case, continue with the section ⇒ *Technical Information 'WE0200 Subsequent work'*.

Resetting service reminder indicator and re-writing service interval

Information

If the service intervals are reset without first carrying out maintenance, intermediate maintenance or an oil service, the original values for the date and mileage of the last service events that are stored in the instrument cluster must then be restored. This ensures that future service intervals will be calculated correctly.

For this reason, the currently stored values for the date and mileage of the last service events must first be read out of the instrument cluster and noted.

Work Procedure:

Note: Vehicle voltage must remain between 13.5 and 14.5 volts during entire work procedure.

1 **Read out the values stored for the mileage and date of the last customer service in the instrument cluster using the PIWIS Tester and take note of them**.

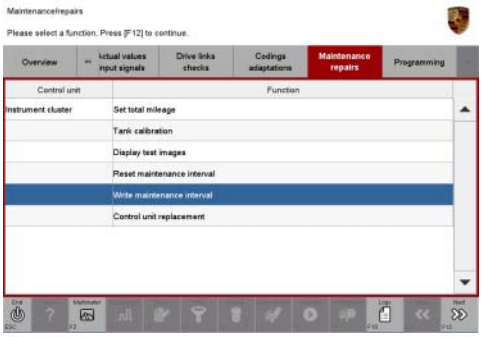
1.1 Select ⇒ **'Instrument cluster'** in the control unit selection screen (⇒ **'Overview'** menu) and press •>> “ to confirm your selection.

1.2 Once the instrument cluster has been found and is displayed in the overview, select the ⇒ **'Maintenance / repairs'** menu.

1.3 Select the function ⇒ **'Write service interval'** and press •>> “ to confirm your selection ⇒ *“Write service interval” function*.

1.4 Press •>> “ to confirm the message “This procedure is used to write service intervals, e.g. when installing a new instrument cluster”.

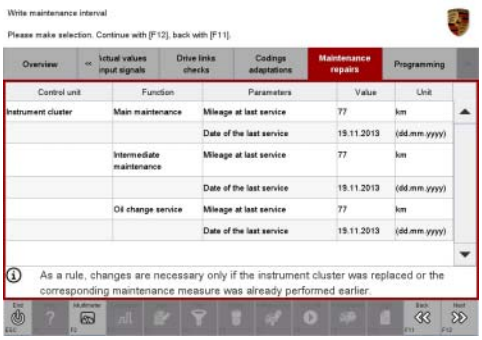
1.5 Check the value entered for the country in which the vehicle is operated and correct it if necessary.
Then press •>> “ to continue.



“Write service interval” function

1.6 Take note of the values entered for "**Mileage of last customer service**" and "**Date of last customer service**" under "Major maintenance", "Intermediate maintenance" and "Oil change service" ⇒ *Values for service intervals*.

1.7 Press •<< “ to return to the start page of the ⇒ **'Maintenance / repairs'** menu.



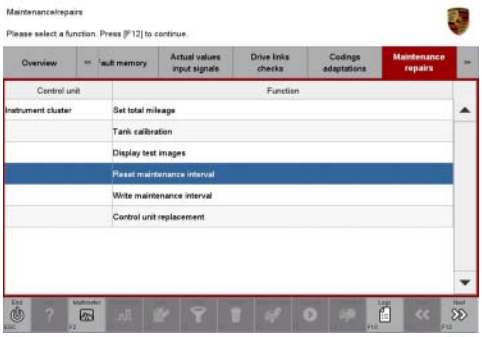
Values for service intervals

2 **Reset service interval**.

2.1 Select the function ⇒ **'Reset service interval'** on the start page of the ⇒ **'Maintenance / repairs'** menu and press •>> “ to confirm your selection ⇒ *"Reset service interval" function*.

2.2 Enter a tick in the "Value" field for the phases

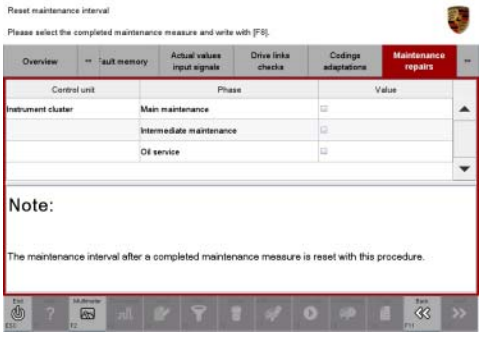
- "Major maintenance"
- "Intermediate maintenance"
- "Oil service"



"Reset service interval" function

and press •F8 “ ("Execute") to confirm in order to reset the service intervals ⇒ *Resetting service interval*.

2.3 Once the service intervals have been reset, the message “Service interval was reset successfully” will appear.
Press •>> “ to continue.
The service intervals must then be re-written.

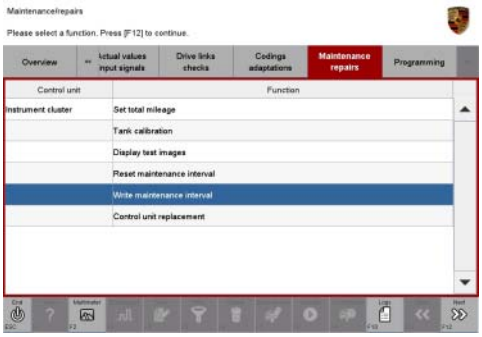


Resetting service interval

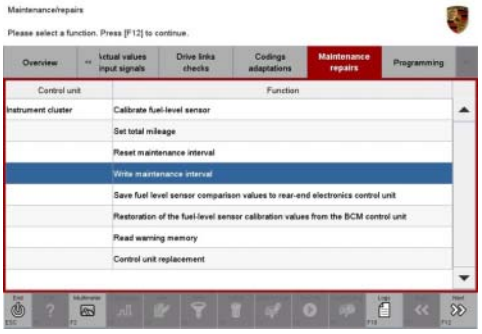
3 **Re-write service intervals**.

3.1 Select the function ⇒ **'Write service interval'** on the start page of the ⇒ **'Maintenance / repairs'** menu and press •>> “ to confirm your selection ⇒ *“Write service interval” function*.

3.2 Press •>> “ to confirm the message “This procedure is used to write service intervals, e.g. when installing a new instrument cluster”.



3.3 Check the value entered for the country in which the vehicle is operated and correct it if necessary.
Then press •>> “ to continue.

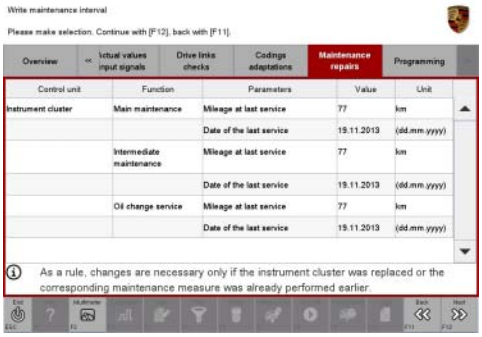


“Write service interval” function

3.4 Overwrite the current value for the parameters “**Mileage of last customer service**” and “**Date of last customer service**” under “Major maintenance”, "Intermediate maintenance" and "Oil change service" and enter the values for the mileage and date of the last customer service, which you read out and noted in **Step 1.6** for the service events

- Maintenance
- Intermediate maintenance
- Oil service

instead ⇒ *Changing values for service intervals*.



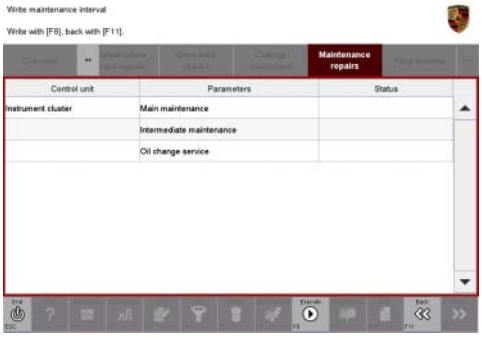
Changing values for service intervals

3.5 Confirm the values you have entered by pressing •>> “ .

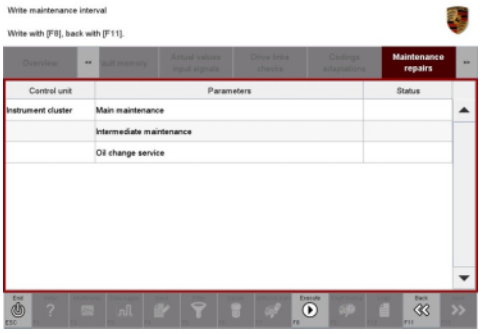
3.6 Press •F8 “ (“Execute”) to write the service interval ⇒ *Writing service interval*.

3.7 Once the service interval has been written, a tick will appear in the “Status” box.

3.8 The message “Service interval was written successfully” is then displayed.
Press •>> “ to continue.



3.9 Select the ⇒ **'Overview'** menu and press •<< " to return to the control unit selection screen.



Writing service interval

Subsequent work

Work Procedure: 1 Switch off ignition.

2 Disconnect the PIWIS Tester from the vehicle.

3 Switch off and disconnect the battery charger.

Information

The values for the Tire Pressure Monitoring (TPM) system may be lost during re-coding of the instrument cluster.

If the Tire Pressure Monitoring (TPM) system is reset, you must select **Main menu** > **Tire pressure** > **Settings** in the instrument cluster to reset the **tire type** and **tire size**. The wheel position values will then be re-taught in the control unit during the **test drive** (at a speed of over **15 mph** or**25 km/h**).

To set the tire type and tire size, see ⇒ Owner's Manual, chapter Instrument Panel and Multi-Function Display - 'Tire Pressure Monitoring, TPM'.

4 On vehicles with Porsche Entry & Drive, replace the original driver's key in the ignition lock with the control panel again.

5 Enter the workshop campaign in the Warranty and Maintenance booklet.

Attachment "B"

Claim Submission - Workshop Campaign WE02
Warranty claims should be submitted via WWS/PQIS.
Open campaigns may be checked by using either the PIWIS Vehicle Information system or through PQIS Job Creation.

Labor, parts, and sublet will be automatically inserted when Technician is selected in WWS/PQIS. If necessary, the required part numbers will need to be manually entered into warranty system by the dealer administrator.

Scope 1: **Re-programming instrument cluster**

Information

Scope 1 must be invoiced if **no implausible service intervals are displayed in the instrument cluster** when the campaign is carried out and as a result, the intervals do **not** have to be reset and re-written.

Working time:

Re-programming instrument cluster		Labor time: **51 TU**
Includes:	Connecting and disconnecting battery charger	
	Connecting and disconnecting PIWIS Tester	
	Reading out and erasing fault memories	
	Resetting instrument cluster to factory settings	

⇒ **Damage code WE02 066 000 1**

Scope 2: **Re-programming instrument cluster and re-writing service interval**

Information

Scope 2 must be invoiced if **implausible service intervals are displayed in the instrument cluster** when the campaign is carried out and as a result, the **intervals also have to be reset and then re-written**.

Working time:

Re-programming instrument cluster and re-writing service interval		Labor time: **56 TU**
Includes:	Connecting and disconnecting battery charger	
	Connecting and disconnecting PIWIS Tester	
	Reading out and erasing fault memories	
	Resetting instrument cluster to factory settings	
	Resetting service interval	

⇒ **Damage code WE02 066 000 1**

References: ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*

Dealership	Service Manager	_____	Shop Foreman	_____	Service Technician	_____	_____	_____	_____
Distribution									
Routing	Asst. Manager	_____	Warranty Admin.	_____	Service Technician	_____	_____	_____	_____