

# **Technical Information**

225/20enu WI

Service

wlpo 3

## WLPO - Re-Programming PDK Control Unit (Workshop Campaign)

Important:	<b>CRITICAL WARNING</b> - 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:	718 Boxster (982)/718 Cayman (982)
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 <b>39.900.040</b> (or higher). Information In addition to the PDK control unit, the DME control unit is also re-programmed automatically. It takes approx. <b>15 minutes</b> in total to program both control units.
Affected Vehicles:	Only vehicles assigned to the campaign (see also PCSS Vehicle Information).

## **Required tools**

- Tools:
- 9900 PIWIS Tester 3 with PIWIS Tester test software version 39.900.040 (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 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 getting started, connect a suitable battery charger with a current rating of at least 90 A to the jump-start terminals in the engine compartment.

## 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 vehicles with Porsche Entry & Drive, programming cannot be started or will be interrupted.
- $\Rightarrow$  Switch on the ignition using the original driver's key. To do this, replace the control unit in the ignition lock with the original driver's key if necessary.

Work Procedure: 1 Carry out general preliminary work for control unit programming as described in  $\Rightarrow$  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 **39.900.040**.

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 PDK control unit**

Work Procedure: 1 Re-program PDK control unit.

> The basic procedure for control unit programming is described in the Workshop Manual  $\Rightarrow$ 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:	<b>39.900.040</b> (or higher)

	1			
Type of control unit programming:	Control unit programming using the <b>'Automatic</b> <b>programming'</b> function for the PDK control unit:			
	'Transmission electronics (PDK)' control unit – 'Coding/programming' menu – 'Automatic programming' function.			
Programming sequence:	Read and follow the <b>information and instructions</b> <b>on the PIWIS Tester</b> during the guided programming sequence. During the programming sequence, the <b>DME</b> <b>control unit</b> is <b>re-programmed</b> first, then the <b>transmission control unit</b> is re-programmed.			
	Both control units are then <b>re-codedautomat-</b> ically.			
	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	Transmission control unit			
this campaign:	Software version:			
	• A134 (or higher)			
	Software Part No.:			
	718 Boxster (982) / 718 Cayman (982)			
	<ul><li>981.618.354.08</li></ul>			
	718 Boxster S (982) / 718 Cayman S (982)			
	• 981.618.356.08			
	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 <b>abnormal</b> <b>termination</b> of control unit programming:	<ul> <li>Switch ignition off and then on again.</li> <li>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".</li> <li>Repeat control unit programming by restarting programming.</li> </ul>
Procedure in the event of <b>other error</b>	⇒ Workshop Manual '9X00IN Basic instructions and
<b>messages</b> appearing during the	procedure for control unit programming using the
programming sequence:	PIWIS Tester - section on "Fault finding"'.

## **Concluding work**



#### Information

The values for the Tire Pressure Monitoring (TPM) system may be lost during re-coding of the DME and PDK control units.

If the Tire Pressure Monitoring (TPM) system is reset, the wheel electronics must be re-taught and adapted to the system.

#### Preconditions and procedure for teaching the wheel electronics units:

- Vehicle is stationary for at least 5 minutes.
- Select the type of tires installed (type and size) in the TPM menu in the instrument cluster. The message "No monitoring. System is learning from 25 km/h or 15 mph" then appears in the multi-function display.
- Drive at a speed of more than 25 km/h (15 mph) ideally without stopping until the tire pressure values are displayed (learning time: less than 2 minutes).

The system learns the wheel electronics only while driving. Intermediate stops and deviations from the described teaching procedure can result in a much longer learning time.

Teaching can be carried out during the test drive.

- Work Procedure: 1 Read out and erase the fault memory.
  - 1.1 In the control unit selection screen ('Overview' menu), press F7" 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  $\Rightarrow$  *Erasing fault memories*.

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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.



## 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.

Overview	St. Commission						100
			Fanctori		-		
Maintenance of vehicle data							2
Campaign							
Vehicle analy	sis log (VAL)						
Read all fout	memories and araba	ifrequired					
Clear OBD fa	ult memory						
Rolling test re	ode						
Immabilizer o	grinciaairuru						
Component p	rotection commission	ing .					
Function relea	996						
Vehicle hand	num.						$\sim$

Erasing fault memories

- 1.4 Press • F8" to delete fault memory entries.
- Press F12" ('Yes') in response to the question as to whether you really want to delete all 1.5 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 ignition. ٠
- Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.
- Lock the vehicle using the driver's key. ٠
- Wait approx. 1 minute before unlocking the vehicle again. •
- Start the engine, leave it running for a short time and then stop it again. ٠
- 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.
- 2 Switch off ignition.
- On vehicles with Porsche Entry & Drive, replace the original driver's key in the ignition lock with the 3 control unit again.
- Disconnect the PIWIS Tester from the vehicle. 4

## 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.

- Switch off and disconnect the battery charger. 5
- Enter the campaign in the Warranty and Maintenance booklet. 6

## Warranty processing

#### Scope 1: Not relevant for this vehicle type

Scope 2:

#### Working time:

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

Labor time: 57 TU

⇒ Damage Code WLP0 066 000 1

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