

Technical Information

Service

119/21 ENU

wmgo Z

WMG0 – Retrofitting Tire Pressure Monitoring (TPM) Control Unit (Stop Delivery)

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: As of 2021 up to 2022 Model Line: Taycan (Y1A/Y1B) Concerns: Tire Pressure Monitoring (TPM) control unit Information: Due to worldwide semiconductor shortages experienced by some suppliers, the affected vehicles were built without the control unit for the Tire Pressure Monitoring (TPM) system. The Tire Pressure Monitoring (TPM) system is therefore not available on these vehicles. Action required: Retrofit Tire Pressure Monitoring (TPM) control unit. Only vehicles assigned to the campaign (see also PCSS Vehicle Information).

Affected Vehicles:

Installation

Position:



Installation position of TPM control unit – Tire Pressure Monitoring (TPM) control unit (**retrofit**)

Parts required

Only valid for 911 (992) / Taycan (Y1A/Y1B)

Parts Info:

Part No.DesignationQty.V04015001DA⇒ Control unit for Tire Pressure Monitoring (TPM)1 ea.

Required tools

Tools:

Information

The Taycan (Y1A) is equipped as standard with a lithium starter battery.

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 \Rightarrow Workshop Manual '270689 Charging battery/vehicle electrical system'.

Technical Information	Service		Л
	119/21 ENU	WMGO	4

- 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 software version 40.300.020 (or higher) installed
- VAS 6494 Torque screwdriver, 1.5-3 Nm (1-2 ftlb.)

Retrofitting Tire Pressure Monitoring (TPM) control unit

Work Procedure: 1 Raise the vehicle on a lifting platform. ⇒ Workshop Manual '4X00IN Lifting the vehicle'

- 2 Remove rear underbody cover. ⇒ Workshop Manual '519419 Removing and installing cover for rear underbody'
- 3 Install Tire Pressure Monitoring (TPM) control unit. ⇒ Workshop Manual '443419 Removing and installing Tyre Pressure Monitoring (TPM) control unit'
- Install rear underbody cover.
 ⇒ Workshop Manual '519419 Removing and installing rear underbody cover'
- 5 Lower the vehicle.

Teaching the Tire Pressure Monitoring (TPM) control unit

NOTICE

Fault entry in the fault memory and/or control unit coding aborted due to undervoltage.

- Increased current draw during diagnosis or control unit coding can cause a drop in voltage, which can result in one or more fault entries and the abnormal termination of the coding process.
- ⇒ Before starting control unit coding, connect a suitable battery charger with a current rating of at least 90 A to the vehicle.

NOTICE

Coding will be aborted if the WiFi connection is unstable.

- An unstable WiFi connection can interrupt communication between the PIWIS Tester and the vehicle communication module (VCI). As a result, coding may be aborted.
- ⇒ During control unit coding, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.

NOTICE

Control unit coding will be aborted if the driver's key is not recognized

• If the driver's key is not recognized in the vehicle, coding 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 **40.300.020**.

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 (front) and switch it on.

	i
--	---

Information

To prevent any excessive and potentially noticeable heating of the charging clamp of the negative cable while charging the 12-volt vehicle electrical system battery using an external battery charger, always check the following points:

- Always connect the charging clamp of the negative cable vertically from above to the ground point for the external power connection. Make sure that the charging clamp cable is routed loosely to prevent the charging clamp from tilting sideways at the ground point.
- When connecting the charging clamp, make sure that it is a sufficient distance away from peripheral parts (e.g. pneumatic supply line for air-spring strut).
- Before raising the vehicle using a lifting platform, always disconnect the battery charger completely from the vehicle to prevent the connecting line of the charging clamp from becoming taut and prevent the charging clamp from tilting sideways at the ground point.
- 2 Position the **driver's key** with the back facing forward upright between the holding struts in the rear cupholder (**emergency start tray**) to guarantee a permanent radio link between the vehicle and remote control ⇒ *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 Establish operational readiness (switch on ignition).

Emergency start tray

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.

6 **Re-code Tire Pressure Monitoring (TPM) control unit automatically.**

Required PIWIS Tester software version:	40.300.020 (or higher)	
Type of control unit coding:	Control unit coding using the 'Automatic coding' function for the control unit:	
	 'Tire pressure monitoring' control unit – 'Coding/programming' menu – 'Automatic coding' function. 	
Coding sequence:	Read and follow the information and instructions on the PIWIS Tester during the guided procedure.	
	Do not interrupt coding.	
	When coding is complete, the message "Coding has been completed successfully" is displayed and a tick appears in the 'Status' box.	
Procedure if control unit coding is not successful:	Repeat control unit coding.	

Teach wheel electronics (wheel IDs).

- 7 Teach wheel electronics (wheel IDs).
 - 7.1 Select 'Tire pressure monitoring' control unit.
 - 7.2 Select the 'Maintenance/repairs' menu.
 - 7.3 Select 'Teach wheel IDs' and press F12" ('Next') to confirm.

Follow the instructions on the PIWIS Tester during the menu-guided procedure.



Information

You will then be prompted to relieve the tire pressure on all tires one after the other for approx. 5 seconds.

7.4 Adapt tire pressure according to specifications.

8 Read out and erase the fault memories of all control units.

8.1 Press • F7[#] in the control unit selection screen ('Overview' menu) to call up the Additional menu.

Technical Information

8.2 Select the function "Read all fault memories and erase if required" and press • F12" ('Next') to confirm \Rightarrow *Erasing fault memories*.

> The fault memories of the control units are read out.

8.3 Once you have read out 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 coding, these Erasing fault memories

8.4 Press • F8" to delete fault memory entries.

Press • F12" ('Yes') in response to the question as to whether you really want to delete all 8.5 fault memory entries.

must first be found and corrected. This work cannot be invoiced under the workshop

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



campaign number.

Information

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

- End operational readiness (switch off ignition).
- Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.
- Lock the vehicle using the driver's key and remove the driver's key from the proximity of the vehicle (approx. 10 metres).
- Unlock the vehicle again after waiting for at least 15 minutes.
- Restore operational readiness (switch on ignition).
- 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.

Technical Information

- Service 119/21 ENU **WMGO**

- 8.6 Once you have erased the fault memories, select the 'Overview' menu to return to the control unit selection screen \Rightarrow Control unit selection.
- 9 Switch off ignition.
- Disconnect the PIWIS Tester from the vehicle. 10
- 11 Switch off and disconnect the battery charger.
- 12 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing

Information

Scope 1 is a dummy scope that was posted to each vehicle. The campaign **cannot** be invoiced via this scope.

- Retrofitting Tire Pressure Monitoring (TPM) control unit Scope 2:
 - Valid for Taycan (Y1A/Y1B)

Working time:					
Includes: Installing Tire Pressure Monitoring (TPM) control unit Connecting and disconnecting battery charger Connecting and disconnecting PIWIS Tester Coding control unit Teaching wheel electronics		Labor time: 163 TU			
Parts requi	Reading out and erasing fault memories ired:				
V04015001	1DA Control unit for Tire Pressure Monitoring (TPM)	1 ea.			
⇒ Damage Code WMG0 066 000 1					

Important Notice: Technical Bulletins issued by Porsche Cars North America, Inc. are intended only for use by professional automotive technicians who have attended Porsche service training courses. They are written to inform those technicians of conditions that may occur on some Porsche vehicles, or to provide information that could assist in the proper servicing of a vehicle. Porsche special tools may be necessary in order to perform certain operations identified in these bulletins. Use of tools and procedures other than those Porsche recommends in these bulletins may be detrimental to the safe operation of your vehicle, and may endanger the people working on it. Properly trained Porsche technicians have the equipment, tools, safety instructions, and know-how to do the job properly and safely. Part numbers listed in these bulletins are for reference only. The work procedures updated electronically in the Porsche PIWIS diagnostic and testing device take precedence and, in the event of a discrepancy, the work procedures in the PIWIS Tester are the ones that must be followed.

© 2021 Porsche Cars North America, Inc.



Control unit selection