

### **Technical Information**

155/21 ENU WMLO

Service

9

### WMLO - Retrofitting Loudspeaker Booster (Delivery Stop)

Revision: This bulletin replaces bulletin Group 9 155/21 WML0, dated August 26, 2022.

- Model Year: As of 2021 up to 2023
- Model Line: Macan (95B)
- Equipment: BOSE Surround Sound System (M-no. 9VL)

Concerns: Loudspeaker booster

- Information: Due to worldwide semiconductor shortages experienced by some suppliers, the affected vehicles were built without a loudspeaker booster.
- Action required: Retrofit loudspeaker booster.



#### Information

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



### Information

Each vehicle will now be assigned 2 Repair Scopes from CW45 onward. The original Scope 4 applies to vehicles where the original Campaign Part V04015001FG is used. The new Scope 9 is to be claimed if the new Campaign Part V04015009B is used. Your dealer will need to choose the correct scope when submitting the warranty claim based off the part used for each vehicle. The new part V04015009B will begin to arrive at dealers starting CW46 as well as continued allocations of the original part V04015001FG.

The two parts are identical and can be used on any Macan with WMLO but must be recorded properly in the Warranty system for proper billing of your dealer.

Scope 4, 9: Installing and teaching loudspeaker booster

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

Installation

Position:



Installation position

- Loudspeaker booster (retrofit)

### Parts required

Parts Info:	Part No.	Designation	Qty.	
	V04015001FG	$\Rightarrow$ Booster	1 ea.	
	As of CW 46/2022:	$\Rightarrow$ Booster	1 ea.	
	V04015009B N			
	90974701	$\Rightarrow$ Internal hexagon round tapping screw	4 ea.	
Required too	bls			
Tools:	<ul> <li>Torque wrench, 2-10 Nm (1.5-7.5 ftlb.), e.g. V.A.G 1783 - Torque wrench, 2-10 Nm (1.5-ftlb.)</li> <li>Battery charger with a current rating of at least 90 A and - if required - also with a current a voltage-controlled charge map for lithium starter batteries, e.g. VAS 5908 Battery charge 0 A</li> <li>9900 - PIWIS Tester 3</li> </ul>			
Nov 9, 2022 Page 2 of 8		AfterSales		

### Installing loudspeaker booster

### NOTICE

Incorrect handling of optical waveguides

- Risk of damage to optical waveguide
- $\Rightarrow$  Observe the requirements for working with and installing optical waveguides.

### NOTICE

Voltage peaks

- · Risk of damage to electrical load or to the control unit
- $\Rightarrow$  Switch off ignition and keep transmitter key outside of the transmission range (at least 5 m).
- $\Rightarrow$  Switch off electrical loads before disconnecting or removing them.

#### Work Procedure:

### Information

Always comply with the regulations for handling ESD-sensitive components!

- Always wear approved work clothes and shoes when carrying out assembly work.
- Do not remove new parts from ESD (electrostatic discharge) protective packaging until shortly before installation.
- Do not touch electric pins and plug contacts.
- 1 Remove side trim panel for rear luggage compartment at the left.  $\Rightarrow$  Workshop Manual '700319 Removing and installing side trim panel for rear luggage compartment'

2 Position loudspeaker booster ⇒ Loudspeaker booster-1-, screw in fastening screws ⇒ Loudspeaker booster-2- and tighten to Tightening torque 6 Nm (4.5ftlb.)

# i Information

The number of connecting lines for the loudspeaker booster will vary depending on equipment and the connecting lines are located close to the installation position. These may be fastened in place and may have to be exposed beforehand.

- 3 Plug in and lock electric plug connections  $\Rightarrow$  Loudspeaker booster -3-.
- 4 Install side trim panel for rear luggage compartment at the left. ⇒ Workshop Manual '700319 Removing and installing side trim panel for rear luggage compartment'



Loudspeaker booster

5 After installing the loudspeaker booster, continue as follows:

For vehicles with **Scope 4**, continue with  $\Rightarrow$  *Technical Information '700319 Teaching loudspeaker booster'* 

For vehicles with **Scope 5**, enter the campaign in the Warranty and Maintenance booklet.

End of action required -Continue with  $\Rightarrow$  Technical Information '700319 Warranty processing'

### Teaching loudspeaker booster

### NOTICE

### Voltage drop

- Destruction of control unit
- Damage to control unit
- Fault entries in the control unit
- Coding in the control unit is aborted
- Malfunctions in control unit, even during programming
- $\Rightarrow$  Switch off ignition before connecting the control unit.
- $\Rightarrow$  Ensure that the power supply is not interrupted during programming.

## **AfterSales**

### $\Rightarrow$ Connect a battery charger with a current rating of at least Current 90 A to the vehicle battery.

Work Procedure:

### Information

To carry out the campaign, the PIWIS Tester must be online and logged into the Porsche Partner Network (PPN).

- 1 Connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable. Then connect the communication module to the vehicle and switch on the PIWIS Tester.
- 2 Switch on the ignition.
- 3 Select the vehicle type if necessary.
- 4 In the **overview**, press F7<sup>#</sup> to switch to the **Additional menu**. Press F11<sup>#</sup> ('Next') to continue.
- 5 When the question "Create Vehicle Analysis Log (VAL)?" appears, either press F12" ('Yes') to create a VAL or press F11" ('No') if you do not want to create a VAL.
- 6 Select 'Commission component protection'. Follow instructions and procedure. Press F12" ('Next') to continue.
- 7 Enter the PPN user name and password. Press F12" ('Next') to continue.
- 8 Allow the Tester to run the procedure.
- 9 Check the chassis number and enter the order number. Press F12<sup>"</sup> ('Next') to continue.
- 10 Allow the Tester to run the procedure. Press F12" ('Next') to continue.
- 11 The 'Commission component protection' message appears. Press F12" ('Next') to continue.
- 12 Once the teaching process is completed successfully, the following status is displayed:

Gateway: Component protection taught

PCM 4.0: Component protection taught

Booster: Component protection taught

Press • F12" ('Next') to continue.

- 13 The message "Component protection commissioning was successful" appears. Press F12" ('Next') to continue.
- 14 Go back to the overview. Press F11" ('Next') to continue.

- 15 Select the **'External booster'** control unit in the **overview**. Press F12<sup>"</sup> ('Next') to continue.
- 16 Select 'Coding/adaptation'.
- 17 Select 'Automatic coding'. Press F12" ('Next') to continue.
- 18 The message "Coding was completed successfully" appears. Press F12" ('Next') to continue.
- 19 Read out and erase the fault memories of all control units.
  - 19.1 Press F7" in the control unit selection screen ('Overview' menu) to call up the Additional menu.
  - 19.2 Select the function 'Read all fault memories and erase if required'. Press
    •F12<sup>#</sup> ('Next') to continue. ⇒ Erasing fault memories

The fault memories of the control units are read out.

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

Information

Overview	-				Codings adaptations
			Function	 	
Measurement of	closed-ci	rcuit current			
Maintenance of v	ehicle da	rta			
/ehicle analysis	iog (VAL	)			
Campaign					
/ehicle handover					
Read all fault me	mories a	nd erase if required			

Erasing fault memories



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.

- 19.4 Press F8" to delete fault memory entries.
- 19.5 Press F12" ('Yes') in response to the question asking 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 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.

### **AfterSales**

### **Technical Information**

- 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.
- 19.6 Once you have erased the fault memories, select the **'Overview'** menu to return to the control unit selection screen  $\Rightarrow$  *Control unit selection*.
- 20 Exit the diagnostic application. Switch off ignition. Disconnect the Tester from the vehicle.
- 21 Carry out a function test on the loudspeaker booster and check for audio output.
- 22 Enter the campaign in the Warranty and Maintenance booklet.

Ove	Interv	Contraction of the				
otc	Ratur	Centrol unit	 DSN	Perache part r	umber	T
		Airbag				
		Gataway				
		DME				
		POK (Porsche Doppelkupplung)				
		PDK selector lever				1
		Instrument cluster				1
		Steering wheel electronics				1
		Stopwatch				1
		PCM / CDR				

Control unit selection

### Warranty processing

### Information

The working times specified below were determined specifically for carrying out this campaign and may differ from the working times published in the PCSS Labor Operation List.

Scope 1: Dummy scope – billing not possible



### Information

Scopes 2 and 3 are not valid for this vehicle type.

#### Scope 4: Installing loudspeaker booster and teaching loudspeaker booster

Valid for

• Macan (95B)

Working time:				
Installing loudspea Includes:	Labor time: 43 TU			
Rem com Teac Read Func	Removing and installing side trim panel for rear luggage compartment at the left Teaching loudspeaker booster Reading out and erasing fault memories Function test			
Parts required:				
V04015001FG	Booster	1 ea.		
N 90974701	Internal hexagon round tapping screw	4 ea.		
$\Rightarrow$ Damage Code	e WML0 066 000 1			

#### Scope 9: Installing loudspeaker booster and teaching loudspeaker booster

Valid for

- Macan (95B)
- As of CW 46/2022

Working time:				
Installing loudspear Includes:	aker booster	Labor time: 43 TU		
Ren con Tea Rea Fun	Removing and installing side trim panel for rear luggage compartment at the left Teaching loudspeaker booster Reading out and erasing fault memories Function test			
Parts required:				
V04015009B	Booster	1 ea.		
N 90974701	Internal hexagon round tapping screw	4 ea.		
$\Rightarrow$ Damage Cod	e WML0 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.

© 2022 Porsche Cars North America, Inc.

### **AfterSales**