

**Eliminating Transmission Symptoms - Longitudinal Jerking When Driving at Full Load:  
Re-programming All-wheel control (PTM) control unit (SY 07/19)**

Vehicle Type: **Cayenne (9YA)**

Model Year: **As of 2018 up to 2019**

Subject: **All-wheel control (PTM) control unit**

Symptom: Longitudinal jerking can occur at speeds of approx. 120 mph (190 km/h) under full load.

Cause:

- Longitudinal jerking can occur if control unit software is not optimally adapted.
- This symptom can be caused by tires with low road holding (winter tires).

Remedial Action: In the event of a customer complaint and if the software version in the all-wheel control (PTM) control unit is "0802", re-program the all-wheel control (PTM) control unit.

Tools:

- **9900 - PIWIS Tester 3** with software **version 38.100.030** (or higher) installed
- **Battery charger - VAS 5908** with a current rating of **at least 90 A**.

Work Procedure:

**NOTICE**

**Voltage drop**

- **Risk of irreparable damage to control unit**
- **Risk of damage to control unit**
- **Fault entries in the control unit**
- **Coding in the control unit is aborted**
- **Malfunctions in control unit, even during programming**
- ⇒ **Before disconnecting the control unit, switch off ignition and remove ignition key.**
- ⇒ **Make sure that the power supply is not interrupted during programming.**
- ⇒ **Connect battery charger/power supply - Suitable for AGM Type batteries, recommended current rating of 90A fixed voltage 13.5V to 14.5V.**

- 1 **Preliminary work:**
  - 1.1 Connect a battery charger with a current rating of **at least 90 A**.
  - 1.2 Switch on the ignition using the **original vehicle key**.

**NOTICE**

Coding will be aborted if the WLAN connection is unstable.

- An unstable WLAN connection can interrupt communication between PIWIS Tester 3 and the vehicle communication module (VCI). As a result, coding/programming may be aborted.
- ⇒ During control unit coding/programming, always connect PIWIS Tester 3 to the vehicle communication module (VCI) via the USB cable.

1.3 **9900 - PIWIS Tester 3** with software version **38.100.030** (or higher) installed must be connected to the vehicle communication module (VCI) via the **USB cable**. Then, connect the communication module to the vehicle and switch on the PIWIS Tester.

1.4 On the PIWIS Tester start screen, call up the ⇒ **'Diagnostics'** menu.

The diagnostic application is then started and the control unit selection screen is populated.

**Information**

The procedure described here is based on the **9900 - PIWIS Tester 3** software version **38.100.030**.

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.

## 2 "All-wheel control (PTM)" control unit ⇒ re-program:

Menu	⇒	Control unit/Function	⇒	Action	⇒	confirm/execute
•		Instructions/information or		•		⇒ Result/consequence of action
2.1		Control units 'Overview'		'Additional menu'		call up •F7"
2.2		⇒ Follow instructions:				•Yes" /•No" / •F12"
		• Create Vehicle Analysis Log (VAL) if necessary and				
		• carry out any campaigns that are available for the vehicle.				
2.3				'Campaign'		select •F12"
2.4		Campaign number		Value: 'G5Z8T'		enter •F12"

<p>Read and follow the <b>information and instructions on the PIWIS Tester</b> during the guided programming sequence. Then press •&gt;&gt;“ to continue.</p> <p>During the programming sequence, the control unit is re-programmed and then re-coded automatically if necessary.</p> <p><b>Do not interrupt programming and coding.</b></p> <p>Once control unit programming - and coding if necessary - is complete, you will be prompted to switch the ignition off and then back on again after a specified waiting time.</p>			
2.5	Control units 'Overview'	<b>All-wheel control (PTM)</b>	select •F12“
2.6	'Extended identifications'		select
	Software version programmed during this campaign	<b>1320</b>	
<p>If programming is not completed successfully (error message “Programming unsuccessful”), programming must be <b>repeated</b>.</p>			
2.7	<b>Maintenance/repairs</b>	<b>Commissioning</b>	select •F12“

3 Subsequent work:

- 3.1 Read out and erase all fault memories.



**Information**

If there are still fault memory entries in individual control units, 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.

- 3.2 Switch off ignition.
- 3.3 Disconnect the PIWIS Tester from the vehicle.
- 3.4 Switch off and disconnect the battery charger.

**End** of action required.

Invoicing: The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
39952550	Programming all-wheel drive electronics control unit	

For invoicing and documentation using PQIS, enter the following coding:

Location (FES5)	39780	Transfer gear servo motor
Damage type (SA4)	9739	Software update for greater customer satisfaction

**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.

© 2019 Porsche Cars North America, Inc.