

**WJ20 - Replacing PASM Control Unit (Workshop Campaign)**

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 2017 up to 2018**

Model line: **Panamera (971)**

Subject: **Control unit for Porsche Active Suspension Management (PASM)**

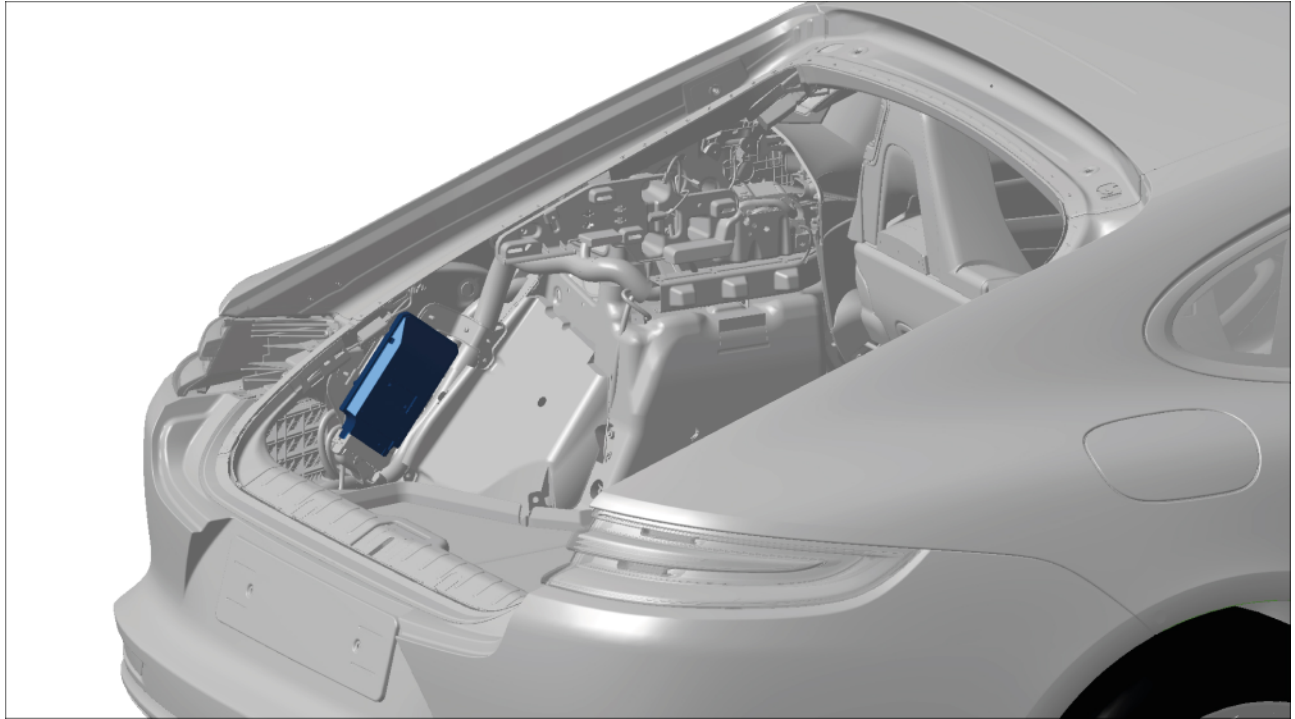
Information: **The PASM control unit can stop working on the affected vehicles after several years of driving. This is caused by a defective soldered joint.**

As a result, the function of the chassis may be impaired and a corresponding warning will be displayed in the instrument cluster.

Remedial Action: Replace PASM control unit.

Affected Vehicles: Only the vehicles assigned to the campaign (see also PIWIS Vehicle information). This campaign affects 2,385 vehicles in North America.

Installation  
position:



*Installation position of PASM control unit*

### Parts required

Part No.:	Part No.	Designation – Use	Qty.
	00004399031	⇒ PASM control unit – Vehicles with <b>air suspension (I-no. 1BK)</b>	1 ea.
	<b>or</b>		
	00004399032	⇒ PASM control unit – Vehicles with <b>steel springs (I-no. 1BH)</b>	1 ea.
	<b>Also required</b> for all vehicles <b>except</b> vehicles with equipment combination fixed luggage compartment cover ( <b>I-no. 3U7</b> ) and without sun blind ( <b>I-no. 3Y0</b> ):		
	9A700794200	⇒ Bearing pin	1 ea.

## Parts required

Part No.:	Part No.	Designation	Qty.
	00004399033	⇒ PASM control unit	1 ea.
	<b>Also required</b> for all vehicles <b>except</b> vehicles with equipment combination fixed luggage compartment cover ( <b>I-no. 3U7</b> ) and without sun blind ( <b>I-no. 3Y0</b> ):		
	9A700794200	⇒ Bearing pin	1 ea.

## Required tools

- Tools:
- **9900 - PIWIS Tester 3**
  - Battery charger with a current rating of **at least 90 A**, e.g. **Battery Charger, 90 A**

## Replacing PASM control unit

- Work Procedure:
- 1 Observe warning notes for working on the high-voltage vehicle electrical system ⇒ *Workshop Manual 'General warning notes for working on the high-voltage vehicle electrical system'*.
  - 2 Isolate the high-voltage system from the power supply ⇒ *Workshop Manual 'Isolating high-voltage system from power supply/Starting high-voltage system'*.
  - 3 Complete the relevant documentation ⇒ *Workshop Manual 'Test log: Verifying absence of electric charge'*.
  - 4 Remove side trim panel for rear luggage compartment at the left ⇒ *Workshop Manual 'Removing and installing side trim panel for rear luggage compartment'*.
  - 5 **Only for vehicles with subwoofer (I-no. 9VJ or 9VL):**  
Remove subwoofer ⇒ *Workshop Manual 'Removing and installing subwoofer'*.
  - 6 Disconnect high-voltage charger with coolant lines connected and set it aside.

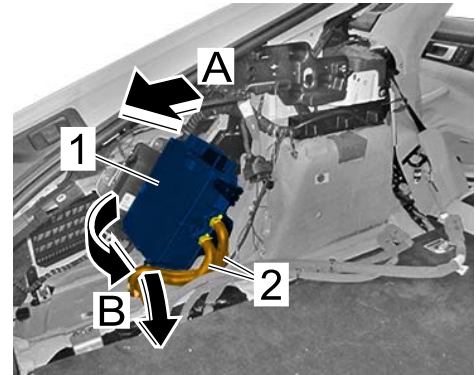
### NOTICE

#### Coolant hoses kinked or pulled too tightly

- If the coolant hoses are kinked or pulled too tightly, this can cause lasting damage and leaks in the cooling system.
- ⇒ Remove and install the high-voltage charger carefully without kinking the coolant hoses or pulling them too tightly.

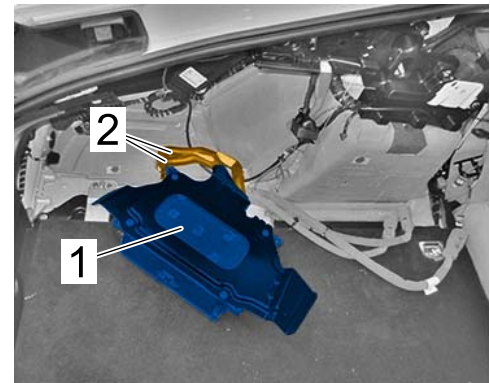
- 6.1 Disconnect all electric plug connections on the high-voltage charger and unscrew fastening screws and nuts. Do **not** drain the coolant in the low-temperature system and do **not** disconnect the coolant hoses while doing this.  
For instructions, see ⇒ *Workshop Manual 'Removing and installing high-voltage charger'*, **ignoring** steps **9** and **10**.

- 6.2 First, tilt the high-voltage charger with holder ⇒ *Removing high-voltage charger with holder -1-* and with coolant hoses connected ⇒ *Removing high-voltage charger with holder -2-* to the rear ⇒ *Removing high-voltage charger with holder -arrow A-* and then set it down carefully with the front side on the carpeted floor of the luggage compartment ⇒ *Removing high-voltage charger with holder -arrows B-*.



*Removing high-voltage charger with holder*

Set the high-voltage charger ⇒ *Setting down high-voltage charger with holder -1-* down on the carpeted floor in such a way that the coolant hoses ⇒ *Setting down high-voltage charger with holder -2-* are not strained.

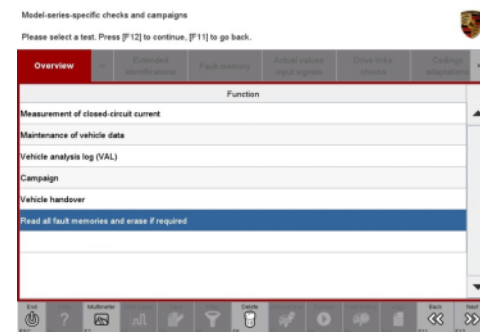


*Setting down high-voltage charger with holder*

- 7 Replace PASM control unit.  
For instructions, see:  
⇒ *Workshop Manual 'Removing and installing PASM control unit'*  
⇒ *Workshop Manual 'Replacing PASM control unit'*
- 8 Install high-voltage charger ⇒ *Workshop Manual 'Removing and installing high-voltage charger'*.
- 9 Install subwoofer, if you removed it earlier ⇒ *Workshop Manual 'Removing and installing subwoofer'*.
- 10 Install side trim panel for rear luggage compartment at the left ⇒ *Workshop Manual 'Removing and installing side trim panel for rear luggage compartment'*.
- 11 Start the high-voltage system ⇒ *Workshop Manual 'Isolating high-voltage electrical system from power supply/Starting high-voltage electrical system'*.
- 12 Complete the relevant documentation on commissioning ⇒ *Workshop Manual 'Test log: Commissioning the high-voltage system'*.
- 13 Commission the PASM control unit ⇒ *Workshop Manual 'Replacing PASM control unit'*.

- 14 Calibrate the levelling system ⇒ *Workshop Manual 'Calibrating the levelling system'*.
- 15 Read out and erase the fault memories of all control units.
  - 15.1 Press •F7" in the control unit selection screen ('Overview' menu) to call up the Additional menu.

- 15.2 Select the function "Read all fault memories and erase if required" and press •F12" ('Next') to confirm your selection ⇒ *Erasing fault memories*.



*Erasing fault memories*



**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.

- 15.3 Once you have read out the fault memories, check the fault memory entries.
- 15.4 Press •F8" to delete fault memory entries.
- 15.5 Press •F12" ('Yes') in response to the question as to 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 the 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.
- 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.

- 15.6 Once you have erased the fault memories, select the **'Overview'** menu to return to the control unit selection screen ⇒ *Control unit selection*.
- 16 Enter the campaign in the Warranty and Maintenance booklet.



Control unit selection

### Replacing PASM control unit

- 1 Replace PASM control unit and commission it.  
For instructions, see:  
⇒ *Workshop Manual 'Removing and installing PASM control unit'*  
⇒ *Workshop Manual 'Replacing PASM control unit'*
- 2 Calibrate the levelling system ⇒ *Workshop Manual 'Calibrating the levelling system'*.
- 3 Enter the campaign in the Warranty and Maintenance booklet.

### Warranty processing



#### Information

The specified working times were determined specifically for carrying out this campaign and include all required preliminary and subsequent work.  
The working times may differ from the working times published in the Labor Operation List in PIWIS.

- Scope 1:
- Vehicles with **air suspension (I-no. 1BK)**

#### Working time:

Replacing PASM control unit

Labor time: **174 TU**

Includes: Connecting and disconnecting battery charger  
Connecting and disconnecting PIWIS Tester  
Calibrating the levelling system

#### Parts required:

00004399031 PASM control unit 1 ea.

**Also required** for all vehicles **except** vehicles with equipment combination fixed luggage compartment cover (**I-no. 3U7**) and without sun blind (**I-no. 3Y0**):

9A700794200	Bearing pin	1 ea.
⇒ <b>Damage Code WJ20 066 000</b>		

Scope 2: • Vehicles with **steel springs (I-no. 1BH)**

<b>Working time:</b>		
Replacing PASM control unit		Labor time: <b>174 TU</b>
Includes:	Connecting and disconnecting battery charger Connecting and disconnecting PIWIS Tester Calibrating the levelling system	
<b>Parts required:</b>		
00004399032	PASM control unit	1 ea.
<b>Also required</b> for all vehicles <b>except</b> vehicles with equipment combination fixed luggage compartment cover ( <b>I-no. 3U7</b> ) and without sun blind ( <b>I-no. 3Y0</b> ):		
9A700794200	Bearing pin	1 ea.
⇒ <b>Damage Code WJ20 066 000 2</b>		

**Warranty processing**



**Information**

The specified working times were determined specifically for carrying out this campaign and include all required preliminary and subsequent work.

The working times may differ from the working times published in the Labor Operation List in PIWIS.

Information: Scopes 1 and 2 are not relevant for this vehicle type.

Scope 3: • Vehicles with **air suspension (I-no. 1BK)** and **without** subwoofer

<b>Working time:</b>		
Replacing PASM control unit		Labor time: <b>174 TU</b>
Includes:	Connecting and disconnecting battery charger Connecting and disconnecting PIWIS Tester Calibrating the levelling system	
<b>Parts required:</b>		

00004399031	PASM control unit	1 ea.
<b>Also required</b> for all vehicles <b>except</b> vehicles with equipment combination fixed luggage compartment cover ( <b>I-no. 3U7</b> ) and without sun blind ( <b>I-no. 3Y0</b> ):		
9A700794200	Bearing pin	1 ea.
⇒ <b>Damage Code WJ20 066 000 2</b>		

- Scope 4:
- Vehicles with **steel springs (I-no. 1BH)** and **without** subwoofer

<b>Working time:</b>		
Replacing PASM control unit		Labor time: <b>174 TU</b>
Includes:	Connecting and disconnecting battery charger Connecting and disconnecting PIWIS Tester Calibrating the levelling system	
<b>Parts required:</b>		
00004399032	PASM control unit	1 ea.
<b>Also required</b> for all vehicles <b>except</b> vehicles with equipment combination fixed luggage compartment cover ( <b>I-no. 3U7</b> ) and without sun blind ( <b>I-no. 3Y0</b> ):		
9A700794200	Bearing pin	1 ea.
⇒ <b>Damage Code WJ20 066 000 2</b>		

- Scope 5:
- Vehicles with **air suspension (I-no. 1BK)** and **subwoofer (I-no. 9VJ or 9VL)**

<b>Working time:</b>		
Replacing PASM control unit		Labor time: <b>190 TU</b>
Includes:	Connecting and disconnecting battery charger Connecting and disconnecting PIWIS Tester Removing and installing subwoofer Calibrating the levelling system	
<b>Parts required:</b>		
00004399031	PASM control unit	1 ea.
<b>Also required</b> for all vehicles <b>except</b> vehicles with equipment combination fixed luggage compartment cover ( <b>I-no. 3U7</b> ) and without sun blind ( <b>I-no. 3Y0</b> ):		
9A700794200	Bearing pin	1 ea.



⇒ Damage Code WJ20 066 000 2

- Scope 6:
- Vehicles with **steel springs (I-no. 1BH)** and **subwoofer (I-no. 9VJ or 9VL)**

**Working time:**

Replacing PASM control unit Labor time: **190 TU**

Includes: Connecting and disconnecting battery charger  
 Connecting and disconnecting PIWIS Tester  
 Removing and installing subwoofer  
 Calibrating the levelling system

**Parts required:**

00004399032	PASM control unit	1 ea.
-------------	-------------------	-------

**Also required** for all vehicles **except** vehicles with equipment combination fixed luggage compartment cover (**I-no. 3U7**) and without sun blind (**I-no. 3Y0**):

9A700794200	Bearing pin	1 ea.
-------------	-------------	-------

⇒ Damage Code WJ20 66 000 2

**Warranty processing**



**Information**

The specified working times were determined specifically for carrying out this campaign and include all required preliminary and subsequent work.  
 The working times may differ from the working times published in the Labour Operation List in PIWIS.

Information: Scopes 1 to 6 are not relevant for this vehicle type.

- Scope 7:
- Vehicles **without** subwoofer

**Working time:**

Replacing PASM control unit Labor time: **231 TU**

Includes: Connecting and disconnecting battery charger  
 Connecting and disconnecting PIWIS Tester  
 Loosening and securing high-voltage charger  
 Calibrating the levelling system

**Parts required:**

00004399031 PASM control unit 1 ea.

**Also required** for all vehicles **except** vehicles with equipment combination fixed luggage compartment cover (**I-no. 3U7**) and without sun blind (**I-no. 3Y0**):

9A700794200 Bearing pin 1 ea.

⇒ **Damage Code WJ20 066 000 2**Scope 8: • Vehicles with **subwoofer (I-no. 9VJ or 9VL)****Working time:**

Replacing PASM control unit

Labor time: **247 TU**Includes: Connecting and disconnecting battery charger  
Connecting and disconnecting PIWIS Tester  
Removing and installing subwoofer  
Loosening and securing high-voltage charger  
Calibrating the levelling system**Parts required:**

00004399031 PASM control unit 1 ea.

**Also required** for all vehicles **except** vehicles with equipment combination fixed luggage compartment cover (**I-no. 3U7**) and without sun blind (**I-no. 3Y0**):

9A700794200 Bearing pin 1 ea.

⇒ **Damage Code WJ20 066 000 2****Warranty processing****Information**

The specified working time was determined specifically for carrying out this campaign and includes all required preliminary and subsequent work.

The working time may differ from the working times published in the Labour Operation List in PIWIS.

Information: Scopes 1 to 8 are not relevant for this vehicle type.

Scope 9: • Vehicles with **air suspension (I-no. 1BK)** and **subwoofer (I-no. 9VJ or 9VL)**

**Working time:**

Replacing PASM control unit

Labor time: **247 TU**

Includes: Connecting and disconnecting battery charger  
Connecting and disconnecting PIWIS Tester  
Removing and installing subwoofer  
Loosening and securing high-voltage charger  
Calibrating the levelling system

**Parts required:**

00004399033 PASM control unit 1 ea.

**Also required** for all vehicles **except** vehicles with equipment combination fixed luggage compartment cover (**I-no. 3U7**) and without sun blind (**I-no. 3Y0**):

9A700794200 Bearing pin 1 ea.

⇒ **Damage Code WJ20 066 000 2**

**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.

© 2020 Porsche Cars North America, Inc.