Complaint - Battery, Vehicle Electrical System Has Low Battery Voltage: Follow special instructions (66/18)

Model Line: **Cayenne (9YA)**

Model Year: **As of 2018**

Subject: **Battery, vehicle electrical system**

Information:

ℹ Information

In the event of a complaint about **low battery voltage in the vehicle electrical system** and/or if the **vehicle cannot be started or unlocked**, **the following instructions must be followed before doing any other work**.

Read out the **hardware version from the instrument cluster and life cycle data from the gateway as described below** (under 'Conditions'):

⇒ If the **hardware version that is read out = "011"** and the **life cycle data value is "20" at least once**,

•   a **Vehicle Analysis Log (VAL)** must be created and attached to the **PQIS claim** and

•   the work described under **'Action required'** must be carried out.

ℹ Information

If the **instrument cluster is de-energised at a later time** (e.g. battery is disconnected; battery voltage is too low or connector is disconnected from the instrument cluster), this **measure must be repeated**.

Conditions: **Read out values from the instrument cluster and gateway**:

1.0	Control units '*Overview*'	'**Instrument cluster**'	select	•F12"
1.1	'**Extended identification**'	Read off the value: '**Hardware version**'	If value = '**011**' **AND**	
1.2	Control units '*Overview*'	'**Gateway**'	select	•F12"
1.3	'**Actual values**'	'**Life cycle data**'	select	•F12"

1.4	'Select All' (or only History data_68_ECU relevant)	select	•F12"

1.5	Read off values:
	
	• History
	  data_68_ECU_1
	• History
	  data_68_ECU_2
	• History
	  data_68_ECU_3
	• History
	  data_68_ECU_4
	• History
	  data_68_ECU_5
		If the **value** = **'20' at least once**:
		
		⇒ **Carry out the described measure**.	

Tools:
- **9900 - PIWIS Tester 3** with software **version 37.600.010** (or higher) installed
- **Battery charger** with a current rating of **at least 90 A**. We recommend **VAS 5908 - battery charger 90A**, for example

Remedial Action: 1   **Preliminary work:**

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.**

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.**

ℹ Information

The procedure described here is based on the **9900 - PIWIS Tester 3** software version **37.600.010**.

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.

1.1 Connect a battery charger with a current rating of **at least 90 A**.

1.2 Switch on the ignition using the **original driver's key**. On vehicles with "Porsche Entry & Drive", do this by replacing the control unit in the ignition lock with the original driver's key if necessary.

1.3 **9900 - PIWIS Tester 3** with software version **37.600.010** (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.

Carry out required measure:

	Menu ⇒	Control unit/Function ⇒	Action ⇒	confirm/execute
	• **Instructions/information** or		• ⇒ **Result/consequence** of action	
2.0	Control units '**Overview**'	'**Additional menu**'	call up	•F7"
2.1	⇒ **Follow instructions:** • Create Vehicle Analysis Log (VAL) if necessary and • carry out any campaigns that are available for the vehicle.			•Yes" /•No" / •F12"
2.2		'**Maintenance of vehicle data**'	select	•F12"
2.3	Auxiliary heating	Value: from 9M0 to '**9M9**'	change	•F12" •F12" Press •F8" to save

2.4	Control units 'Overview'	'Air conditioning and PCM5.0'	select	•F12"
2.5	'Coding/progra-mming'	'Automatic coding'	select	•F12"
	If coding is not completed successfully (error message "Coding was not completed successfully"), coding must be **repeated**.			

3 ⇒ Once coding is completed successfully, **a new submenu "Heating" will appear in the "Air conditioning" menu on the PCM5.0 display**:

   3.1 **Select the "Heating" menu** and

   3.2 set **"Timer 1"** to '**Active**'.

   This **completes the measure** and the **vehicle must be restored to its original status**:

4.0	Control units 'Overview'	'Additional menu'	call up	•F7"
4.1		'Maintenance of vehicle data'	select	•F12"
4.2	Auxiliary heating	Value: from 9M9 back to '**9M0**'	change	•F12" •F12" Press •F8" to save
4.3	Control units 'Overview'	'Air conditioning and PCM5.0'	select	•F12"
4.4	'Coding/progra-mming'	'Automatic coding'	select	•F12"
	If coding is not completed successfully (error message "Coding was not completed successfully"), coding must be **repeated**.			

3 **Subsequent work:**

   3.1 Read out and erase all fault memories.

   3.2 Switch off the ignition.

   3.3 Disconnect the PIWIS Tester from the vehicle.

   3.4 For vehicles with Porsche "Entry & Drive", replace the original vehicle key in the ignition lock with the control panel again.

   3.5 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.
27062500	Programming vehicle electrical system batteries	

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

Location (FES5)	27060	Vehicle electrical system battery
Damage type (SA4)	4053	Loss of power/voltage drop