'E-Power not Available' Message, Misfires or Jerking, Poor Throttle Response During Catalytic Converter Heating Phase: Re-Programming DME Control Unit (156/22)

Revision: This bulletin replaces bulletin Group 2 156/22, dated September 23, 2022.

Model Year: **As of 2021 up to 2022**

Vehicle Type: **Cayenne E-Hybrid (9YA)**
Cayenne E-Hybrid Coupé (9YB)

Equipment: **Emissions concept LEV3 / TIER3 70 (M No. 7CE)**

Concerns: **Engine electronics (DME) control unit**

Information: **Optimized software for the engine electronics (DME) control unit is available in the USA, Canada and Korea markets. This software corrects the following problems.**

"E-Power not available" message in the instrument cluster together with the fault memory entry "P103A00 - Engine oil, fuel content too high" in the engine electronics (DME) control unit.

- The message is caused by fault memory entry "P103A00", which sets a stop ban on the combustion engine. As a result, the message "E-Power not available" is activated. With the optimized DME software, both the stop ban and the message "E-Power not available" are omitted in the instrument cluster.

Jerking, poor acceleration during the catalytic converter heating phase and, in rare cases, an activated engine indicator light together with fault memory entries "P030000 - Misfire detected" to "P03600 - Misfire cylinder 6".

- This is caused by misfiring as the result of triple injection into the combustion chamber in "Charge Mode" during the catalytic converter heating phase. A sporty and dynamic driving style can cause this fault pattern. The optimized DME software raises the engine speed / load threshold during triple injection in the catalytic converter heating phase and when the engine is at operating temperature.

Action required: In the event of the above complaints, re-program the engine electronics (DME) control unit using the PIWIS Tester with PIWIS Tester software version **41.350.020** (or higher) installed.

Required tools

Tool:

- Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 battery charger 90A**. For further information about the battery chargers to be used, see the corresponding Workshop Manual. *⇒ Workshop Manual '270689 Charging vehicle electrical system battery'*
- **9900 - PIWIS Tester 3** with PIWIS Tester software version **41.350.020** (or higher) installed

Preparatory work

NOTICE

Fault entry in the fault memory and control unit programming aborted due to undervoltage.

- **Increased current draw during diagnosis or control unit programming can cause a drop in voltage, which can result in one or more fault entries and the abnormal termination of the programming process.**

⇒ **Before commencing work, connect a suitable battery charger with a charging current of at least 90 A to the jump-start terminals in the engine compartment.**

NOTICE

Control unit programming will be aborted if the Wi-Fi connection is unstable.

- **An unstable Wi-Fi connection can interrupt communication between PIWIS Tester II and the vehicle communication module (VCI). As a result, control unit programming may be aborted.**

⇒ **During control unit programming, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.**

NOTICE

Control unit programming will be aborted if the driver's key is not detected.

- **If the driver's key is not detected in the vehicle, programming cannot be started or will be interrupted.**

⇒ **Place the driver's key with the back facing down into the front left storage compartment in the center console to ensure a continuous radio link between the vehicle and the driver's key.**

Work Procedure: 1 Carry out general preliminary work for control unit programming as described in ⇒*Workshop Manual '9X00IN Basic instructions and procedure for control unit programming – section on "Preliminary work"'*.

Re-program engine electronics (DME) control unit

Information

The procedure described here is based on the PIWIS Tester 3 software version **40.785.090** .

The PIWIS Tester instructions take precedence and in the event of a discrepancy, these are the instructions that must be followed.
Deviations may occur with later software versions, for example.

Work Procedure: 1 The basic procedure for programming a control unit is described in the Workshop Manual ⇒*Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Programming"'*.

Specific information on control unit programming in the context of this Technical Information:

Required PIWIS Tester software version:	**41.350.020** (or higher)
Type of control unit programming:	Control unit programming using the **'Automatic programming'** function of the DME control unit: **'Engine electronics (DME)'** control unit – **'Coding / programming'** menu – **'Automatic programming'** function.
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. During the programming sequence, the **DME control unit** is **re-programmed** and then **automaticallyre-coded**. **Do not interrupt programming and coding.** Once the control units have been programmed and coded, you will be prompted to switch the ignition off and then back on again after a certain waiting time. Backup documentation of the new software versions is then performed.
Programming time (approx):	**13 minutes**
Data record (software part number and software version) programmed for the DME control unit during programming:	Software part number: **9Y0.907.559.AB** Software version: **0004** The software part number and software version of the programmed data record are based on the specified PIWIS Tester software version. Please note that this may be different in a higher version.
Procedure in the event of a termination in the control unit programming:	• Switch ignition off and then on again. • Selecting and erasing fault memories. ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Rework"'* • Repeat control unit programming by restarting programming.
Procedure in the event of error messages appearing during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Fault finding"'*.

Concluding work

Work Procedure: 1 Carry out general rework for control unit programming as described in ⇒*Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Rework"'*.

Invoicing

For documentation and warranty invoicing, enter the working position and PCSS encryption specified below in the warranty claim:

APOS	Labor operation	I No.
24702540	Re-programming DME control unit	

PCSS encryption:

Location (FES5)	24700	DME control unit
Damage type (SA4)	1134	Programming error

References: ⇒*Workshop Manual '270689 Charging vehicle electrical system battery'*

⇒*Workshop Manual '9X00IN Basic instructions and procedure for control unit programming'*