

Complaint: Error Message “Engine Control System Fault” When Brake Pedal is Pressed Slightly - Vehicle Can Still be Moved Normally (126/20)

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

Model Year: **As of 2019 up to 2023**

Equipment: **Emissions concept ULEV70**
Emissions concept ULEV125

Concerns: **DME control unit**

Information: **The error message “Engine control system fault” appears in the instrument cluster and the fault memory entry “P057200 - Brake light switch – short circuit to ground” is stored in the fault memory of the DME control unit.**

Cause: When the brake pedal is pressed slightly, disparate braking information may be supplied, which will result in an error message. The distance sensor in the brake booster detects that the brake is pressed, while the brake light switch indicates that the brake is not pressed.

Action required: In the event of a customer complaint and if the fault memory entry “P057200 - Brake light switch – short circuit to ground” is stored, re-program the ‘engine electronics (DME)’ control unit.



Information

The total time required for control unit programming is **approx. 12 minutes**.

Required tools

- Tool:
- **9900 - PIWIS Tester 3/ 4** with PIWIS Tester test software version **41.600.020** (or higher) installed
 - **Battery charger** with a current rating of **at least 90 A**, e.g. **VAS 5908 battery charger 90A**.

Preparatory work

NOTICE

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

- **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 diagnostic process.**

⇒ **Before starting control unit programming, connect a suitable battery charger with a current rating of at least 90 A to the vehicle.**

NOTICE

Control unit programming will be aborted if the WLAN connection is unstable.

- An unstable WiFi connection can interrupt communication between the PIWIS Tester 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 recognized

- If the driver's key is not recognized in the vehicle, control unit programming cannot be started or will be interrupted.
- ⇒ Position the driver's key in the rear area of the left cupholder in the center console between the holding struts (emergency start tray) in order to guarantee a permanent radio link between the vehicle and driver's key.

NOTICE

Use of a PIWIS Tester test software version that is older than the prescribed version

- Measure is ineffective
- ⇒ Always use the prescribed version or a higher version of the PIWIS Tester test software for control unit programming and coding.

- Work Procedure: 1 Position the driver key in the rear area of the left cupholder in the centre console between the holding struts (emergency start tray) in order to guarantee a permanent radio link between the vehicle and driver key ⇒ *Emergency start tray*.
- 2 Carry out general preliminary work for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Preliminary work"*.



Emergency start tray

Re-program DME control unit

- 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:	41.600.020 (or higher)
Type of control unit programming:	Control unit programming using the 'Automatic programming' function for 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 automatically re-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.
The programming sequence takes (approx.):	12 minutes
Data record (software part number and software version) programmed for the DME control unit during programming:	See ⇒ <i>Technical Information '9X00IN Overview of the programmed software versions'</i> .
Procedure in the event of abnormal termination of control unit programming:	<ul style="list-style-type: none"> • Switch ignition off and then on again. • Read out and erase the fault memory ⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - "Rework" section'</i>. • Repeat control unit programming by restarting programming.
Procedure in the event of other error messages appearing during the programming sequence:	⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Troubleshooting"'</i> .

Overview of the programmed software versions



Information

The software part number and software version of the programmed data record are based on the specified PIWIS Tester test software version. Please note that these may have changed in a higher version.

Exhaust emission standard	Model year					Control unit	Software part no.	Software version
	2019 (K)	2020 (L)	2021 (M)	2022 (N)	2023 (P)			
ULEV70	-	-	x	x	x	DME	9Y0907 559AB	0006
ULEV125	-	x	-	-	-	DME	9Y0907 559R	0001

Concluding work

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

Invoicing

Invoicing: For documentation and warranty invoicing, enter the labor operations and PQIS coding specified below in the warranty claim:

APOS	Labour operation	I No.
24702507	Re-programming DME control unit	

PQIS coding:

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

References: ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*

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