Engine Symptoms - Engine Running Faults, Check Engine Warning Light Lights Up: Perform Adaptation Drive (SY 25/20)

Revision: This bulletin replaces bulletin Group 2 SY 25/20, dated June 7, 2021.

Model Year: **As of 2019 up to 2020**

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

Country/Market: **USA (C02)**
Canada (C36)

Equipment: **Emissions concept LEV3 (I-no. 7MU)**

Subject: **DME control unit**

Symptom: Engine problems occur and the check engine warning light lights up in the instrument cluster.
At least two of the following entries are stored in the fault memory of the DME control unit:

Fault code	Description
P030000	Misfire detected (0027DB)
P030100	Cylinder 1 Misfire Detected (00295F)
P030200	Cylinder 2 Misfire Detected (002960)
P030300	Cylinder 3 Misfire Detected (002961)
P030400	Cylinder 4 Misfire Detected (002962)
P030500	Cylinder 5 Misfire Detected (002963)
P030600	Cylinder 6 Misfire Detected (002964)
P036300	Misfire detected, injection blocked (00842B)

Cause: The crankshaft sensor wheel was not adapted.

Remedial Action: Perform adaptation drive using PIWIS Tester software **version 39.300.000** (or higher).

Performing adaptation drive

WARNING

Driver steers off course during adaptation drive

- **Increased risk of accidents**

- **Danger to other people on the roads**

⇒ **Get another person to accompany the driver and give him the relevant instructions for carrying out the adaptation drive.**

⇒ **Only drive the vehicle to achieve the rpm ranges required for the adaptation drive in accordance with road traffic regulations and if the road, weather and traffic conditions are conducive to such driving.**

Work Procedure:

1 Check adaptation status.

1.1 Connect the **PIWIS Tester** to the vehicle and switch on the **PIWIS Tester**.

1.2 Start the engine, selector lever in position M.

1.3 Start diagnostics.

1.4 Select the **"DME"** control unit.

1.5 Select the **"Actual values for input signals"** tab.

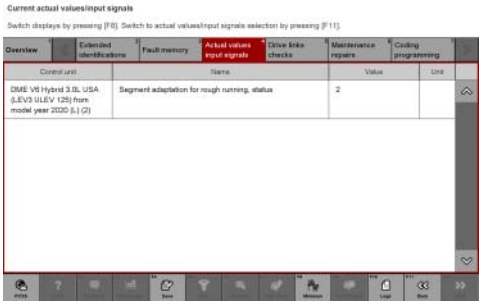
1.6 Select **"All"** in the menu and press •F12 " to continue.

1.7 Select **the measured value "Segment adaptation for rough running, status"** and continue with •F12 " .

1.8 Check adaptation status ⇒*Display adaptation status*.

0 = No sensor wheel adaptation required. Continue with step 4.
2 = Sensor wheel adaptation required. Continue with step 2.

Please Note: Engine must be running to conduct adaptation status check!



Display adaptation status

2 Perform adaptation drive.

Information

The following conditions must be met for the adaptation drive:

- Flat road without gradient/slope
- E-Power mode activated
- Selector lever in position M.
- Cooling water temperature at least 90 ° C
- State of charge of the high-voltage battery at least 30%

2.1 Warm up the vehicle.

2.2 Maintain a constant engine speed of **1500-2500 RPM in 5th gear** with very minimal variations in engine speed. Maintain this condition for a minimum of 15 minutes or until the adaptation status displays as '0'.

3 End adaptation drive.

4 Turn off engine.

5 **Disconnect the PIWIS Tester** from the vehicle.

Please note: Clearing a fault entry in the DME can reset this previously completed adaption. After deleting existing faults in the DME, it is imperative to check the adaption values again with the combustion engine running. If the adaption is not set as described above, be sure to complete the prescribed adaptation drive.

Please ensure the "Segment adaptation for rough running, status" value reads “0” before returning vehicle to customer.

Invoicing

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

APOS	Labour operation	I No.
24702505	Programming DME control unit	

PQIS coding:

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