

Vehicle Drivability and Engine Noise (79/13)

Vehicle Type: **Panamera S (970)/Panamera 4S (970)/Panamera GTS (970)**
Cayenne S (92A)/Cayenne GTS (92A)

Model Year: **As of 2010**

Country/Market:



Information

- The remedial action described here applies **only to vehicles in the State of California (emission standard ULEV2)**.
- The remedial action described here applies to **model year A vehicles with I-no. 750 only**.

Equipment: Emission standard ULEV2 (I-no. 7GB for 970 or I-no. 164 for 92A)

Concerns: **Poor vehicle drivability and/or engine noise at low revs (up to approx. 1,500 rpm).**

Information: **Re-programming DME control unit due to different quality fuel and poor vehicle drivability**

- Low-quality fuel can cause increased combustion noise (rattling noises).
- If the vehicle is filled alternately with fuel of different quality (high quality, low quality), this can briefly cause increased combustion noise. In order to respond to the changed conditions, the DME control unit re-adapts each time a different fuel quality is used.

Action Required: In the event of a complaint, select M number '738 Bad fuel region' and re-program the DME control unit using the PIWIS Tester with software version 13.300 (or higher) installed.



Information

Combustion noise is reduced in most cases by the automatic adaptation of the DME control unit while driving.

For successful adaptation, the vehicle must be driven constantly for a few seconds in the driving state (engine speed, gear selection, load range, etc.) in which increased combustion noise occurs.

⇒ **Please also inform the customer about this issue:**

Filling the vehicle with fuel of different quality requires an "adaptation phase" for the engine control system. As a result, increased combustion noise can occur briefly in certain driving states.

If the vehicle is filled alternately with fuel of different quality (high quality, low quality), this can briefly cause increased combustion noise. In order to respond to the changed conditions, the DME control unit re-adapts each time a different fuel quality is used.

- Tools:
- **9818 - PIWIS Tester II** with software version 13.300 (or higher) installed
 - **WE1353 - Battery charger HFL 65** (charging current of at least 40 A).

Work
Procedure:

Preliminary work

- 1 Disconnect electric plug connection for the fan blower to prevent the fan from coming on during control unit programming.
Operation of the fan and the resulting increased current draw can cause a voltage drop, which can cause control unit programming to be aborted.
- 2 Connect a battery charger with a current rating of **at least 40 A** to the jump-start terminals in the engine compartment.
- 3 Switch on the ignition using the **original driver's key**. On vehicles with "Porsche Entry & Drive", do this by replacing the control panel in the ignition lock with the original driver's key if necessary.
- 4 Connect the PIWIS Tester II with software version **13.300** (or higher) to the vehicle communication module (VCI) using the **USB cable**. Then connect the communication module to the vehicle and switch on the PIWIS Tester.
- 5 On the PIWIS Tester start screen, call up the ⇒ **'Diagnostics'** menu and select the relevant vehicle type ⇒ **'Panamera' ⇒ '970 as of MY 2010'** or **'Cayenne' ⇒ '92A as of MY 2011'**.
The diagnostic application is then started and the control unit selection screen is populated.

Maintenance of vehicle data



CAUTION

Malfunction in headlight control unit or damage to headlight control unit.

- If programming is interrupted, this could cause malfunctions in the control unit or the control unit could be damaged.
- ⇒ Before commencing work, connect a suitable battery charger with a current rating of at least 40 A to the jump-start terminals in the engine compartment.
- ⇒ For vehicles with Porsche Entry & Drive, remove the control panel from the ignition lock and instead of the control panel insert the original vehicle key into the ignition lock. Keep the control panel in a safe place.
- ⇒ Switch on the ignition using the original vehicle key for the duration of the work, otherwise the ignition will be switched off automatically after 10 minutes and control unit programming will be interrupted.

NOTICE

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

- An unstable Internet 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 PIWIS Tester II to the vehicle communication module (VCI) via the USB cable.**



Information

The procedure described here is based on the PIWIS Tester II software version **13.300**.

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 In the ⇒ '**Control unit overview**' menu, press •F7" to select the Additional menu.
- 2 When prompted, press •F12" ('Yes') to confirm that you wish to create a vehicle analysis log (VAL).
- 3 Press •F12" to acknowledge the message informing you that campaigns for the vehicle are stored in the PIWIS information system.
- 4 Select '**Maintenance of vehicle data**' and press •F12" to confirm your selection.
 - 4.1 Skip the display containing vehicle description details by pressing •F12" .
 - 4.2 Skip the display containing information about colours and materials by pressing •F12" .
 - 4.3 Skip the first display containing PR numbers by pressing •F12" .
 - 4.4 In the second display containing PR numbers, code the coding value ⇒ '**738 Bad fuel region**'.

Once coding is complete, a tick appears in the '**Installed**' field.
- 5 Press •F8" to save your selection.
- 6 Press •F12" to continue and save the changes again (•F8").
- 7 Press •F11" to return to the overview.

Re-programming DME control unit

- 1 Select the **DME** control unit and confirm by pressing •F12" .
- 2 Once the DME control unit has been found, select the menu ⇒ '**Programming**'.
 - 2.1 Select ⇒ '**Automatic programming**' and confirm by pressing •F12" .
 - 2.2 Press •F8" ("Execute") to start programming.

When programming is complete, the message "Programming was completed successfully" will be displayed.

- 3 Once programming is completed successfully, press •F12" to continue.
- 4 Select the menu ⇒ **'Overview'** and press •F12" to return.
- 5 Switch off ignition.
- 6 Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.
- 7 Lock the vehicle with the driver's key and wait for approx. 1 minute.
In the meantime, connect the electric plug connection for the fan blower.
- 8 Unlock the vehicle and insert the PIWIS Tester diagnostic connector into the diagnostic socket.
- 9 Switch on the ignition and restore communication between the PIWIS Tester and the vehicle.

Re-coding DME control unit

- 1 Select the **'DME'** control unit in the control unit selection screen (⇒ 'Overview' menu) and press •>>" to confirm your selection.
- 2 Once the DME control unit has been found and is displayed in the list, select the ⇒ **'Coding/adaptation'** menu.
- 3 Select ⇒ **'Automatic coding'** and press •>>" to start coding.
Once coding is completed successfully, the message "Coding has been completed successfully" is displayed and a tick appears in the 'Status' box.
If coding is not completed successfully (error message "Coding was not completed successfully"), coding must be **repeated**.
- 4 Once coding is completed successfully, press •>>" to continue.

Performing throttle valve adaptation

- 1 Call up the ⇒ **'Maintenance/repairs'** menu and press •>>" to confirm.
- 2 Select menu item ⇒ **'Adaptations'** and confirm your selection by pressing •>>" .
- 3 Check that the displayed preconditions (engine off, ignition on, accelerator pedal not pressed) are met and confirm by pressing •>>" .
- 4 Select ⇒ **'Throttle valve adaptation'** so that the corresponding text line turns blue and press •F8" to start throttle valve adaptation.
- 5 Follow the instructions on the PIWIS Tester while throttle valve adaptation is being performed.
Once throttle valve adaptation is complete, a tick will appear in the "Value" field on the PIWIS Tester display.

If throttle valve adaptation is **not** completed successfully, the adaptation must be **repeated**.

- 6 Press •F8" ("Stop") to end throttle valve adaptation.
- 7 Press •<<" to return to the start page of the ⇒ 'Maintenance/repairs' menu.
- 8 Select the ⇒ '**Overview**' menu and press •<<" to return to the control unit selection screen.

Reading out and erasing fault memory

- 1 In the control unit selection screen (⇒ 'Overview' menu), press •F7" to call up the Additional menu.
- 2 Select the function ⇒ '**Read all fault memories and erase if required**' and press •>>" to confirm.

The fault memories of the control units are read out.

- 3 Once you have read out the fault memories, erase the fault memory entries by pressing •F8" .
- 4 Press •F12" ("Yes") in response to the question as to whether you really want to erase all fault memory entries.

The faults stored in the fault memories of the various control units are deleted.



Information

If the fault memories of individual control units (e.g. fault memory of the DME control unit, Adaptive Cruise Control (ACC) control unit, etc.) cannot be erased, switch off the ignition, disconnect the PIWIS Tester diagnostic connector from the diagnostic socket and lock the vehicle using the vehicle key. Wait for approx. 1 minute and then read out the fault memories of these control units again and erase the fault memories separately.

If control units are found to have faults, which cannot be erased and are not caused by control unit programming, these faults must be located and corrected.

- 5 Once you have erased the fault memories, select the ⇒ '**Overview**' menu and press •<<" to return to the control unit selection screen.

Subsequent work

- 1 Switch off ignition.
- 2 Disconnect the PIWIS Tester from the vehicle.
- 3 On vehicles with Porsche "Entry & Drive", replace the original driver's key in the ignition lock with the control panel again.
- 4 Switch off and disconnect the battery charger.

Invoicing: The work required is invoiced under the labor operation:

- **24702500: Reworking DME control unit**

For invoicing and documentation using PQIS, specify **"10010" as the fault location (FES5)** and **"2014" as the damage category (SA4)**.

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