

Spare Parts Requirements for DME Control Unit: Observing Special Procedure When Replacing Component (03 / 24)

Vehicle Type: **Cayenne Diesel (92AAY1)**

Model Year: **As of 2015 up to 2016**

Country /
Market: USA (C02)

Concerns: **DME control unit**

Cause: **New control units are delivered from the warehouse with a pre-installed software that corresponds to the AEM-C status (Approved Emissions Modification Correction). This corresponds to the status that was introduced as part of the AKB6 campaign.**

Parts Info:

Part No.	Designation	Quantity
00004399027	⇒ DME control unit	1 piece

Information: According to the agreement, the customer can choose between the pre-installed AEM-C status and the predecessor version AEM, which was introduced as part of the AG01 campaign.

Overview of DME software releases:

Porsche part number	Software release	corresponds to status from campaign	corresponds to status
7P5907401Q	0007	AG01	AEM
	0010	AKB6	AEM-C

Action:



Information

The actions in this TI may only be applied if the AG01 campaign (emission conformity recall) has been carried out.

If this is not the case, contact the respective customer with the question of whether the AG01 campaign **and** the actions may be carried out together.

Before installing a new DME control unit, first check the software version present on the current control unit (if this is possible). If this is not possible, the test can be carried out based on the implementation status of the AKB6 and AG01 campaigns.

Depending on the software version currently present on the DME control unit or the campaign status of the vehicle agree with the customer, which software version is desired.



Information

The AEM-C status includes the following updates:

- It will correct an issue that is causing the malfunction indicator light (MIL) to come on incorrectly under certain driving conditions and which has resulted in the replacement of the diesel oxidation catalyst (DOC) for certain customers.
- It will reduce the likelihood of experiencing an engine shudder that could occur during certain warm-up driving conditions.
- It will improve OBD monitoring of the vehicle emissions system and also improve other engine software used in the affected vehicles.



Information

The minimum programming requirement is the PIWIS Tester software release: **42.400.051**

Determine current DME control unit software status and coordinate further work procedure

- Work Procedure:
- 1 Connect and switch on the battery charger.
 - 2 Connect tester to the vehicle and start it. Switch on the ignition.
 - 3 Determine current software status.
 - 3.1 On the PIWIS Tester start screen, call up the **“Diagnostics”** application. The vehicle type is then read out, the diagnostic application is started and the control unit selection screen is populated.
 - 3.2 Select the **‘DME’** control unit in the control unit selection screen (**‘Overview’** menu) and press **•F12 “** (‘Next’) to confirm your selection.
 - 3.3 Once the DME control unit has been found and is displayed in the overview, select the **“Incremented identifications”** menu and determine the software release.
 - 4 Further work procedure depending on the determined software release.

Software release	Information / Work procedure
0010	Existing software version already corresponds to the AEM-C status. Replace DME control unit. ⇒ <i>Workshop Manual '247055 Replacing DME control unit'</i> End of action.
0007	Existing software version corresponds to the AEM status. Ask customers whether they would like to continue with this status or whether the AEM-C status is desired. Previous AEM status still desired: Replace DME control unit and then re-program. Programming code: M5B7P AEM-C status desired: Replace DME control unit. End of the action, no separate programming is required. Note: If the AKB6 campaign is open on the respective vehicle, it can be closed in this case by means of a recall update with the indication "Modification of the corresponding component".

Re-program DME control unit to the AEM status (software release 0007) at customer request

Work Procedure: 1 Re-program the DME control unit.

The basic work procedure for control unit programming 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 as part of this Technical Information:

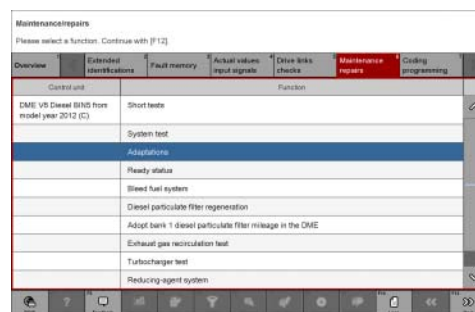
Required PIWIS Tester software release:	42.400.051 (or higher)
Type of control unit programming:	Control unit programming using the ' Campaign ' function in the additional menu on the PIWIS Tester by entering a programming code.
Programming code:	M5B7P

Programming sequence:	Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence. Do not interrupt programming and coding. A backup documentation process for the re-programmed software releases starts after the programming and coding is complete.
Programming time (approx.):	13 minutes
Software programmed during this action:	• DME control unit software release: 0007 Following control unit programming, the software release can be read out from the relevant control unit using the PIWIS Tester in the menu ⇒ “Incremented identifications”.
Procedure in the event of 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> .
Procedure in the event of a termination in the control unit programming:	Repeat control unit programming by restarting programming.

- 2 Read out and delete DME control unit fault memories.
- 3 Perform kickdown switch adaptation.
 - 3.1 Select the ‘**DME**’ control unit in the control unit selection screen (‘Overview’ menu) and press **•F12** “ (‘Next’) to confirm your selection.
 - 3.2 Once the DME control unit has been found and is displayed in the overview, select the “**Service / repairs**” menu.

3.3 Select menu item **“Adaptations”** and confirm your selection by pressing •F12 “(Next)”
⇒ *DME - adaptations*.

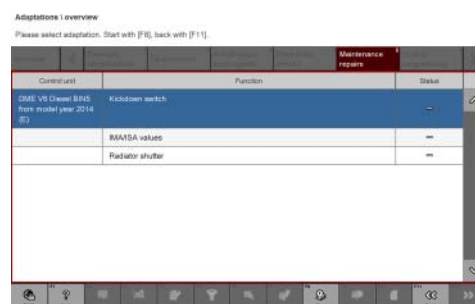
3.4 Comply with the displayed preconditions and press •F12 “(Next)” to confirm.



DME - adaptations

3.5 Select the **‘Kickdown switch’** function so that the corresponding text line turns blue and press •F8 “ ” to start kickdown switch adaptation ⇒ *Kickdown switch adaptation*.

3.6 To perform kickdown switch adaptation, press the accelerator pedal down fully when instructed by the PIWIS Tester and hold it down until the adaptation is complete. Once kickdown switch adaptation is complete, a tick will appear in the “Value” field on the PIWIS Tester display.



Kickdown switch adaptation

If kickdown switch adaptation is **not** completed successfully, the adaptation must be **repeated**.

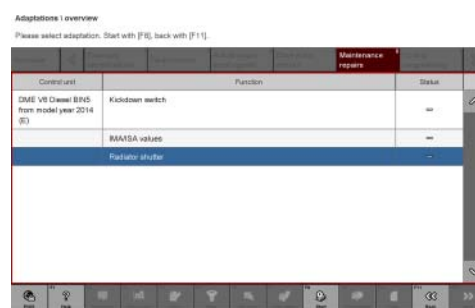
3.7 End kickdown switch adaptation by pressing •F8 “(Stop)”.

4 Perform radiator shutter adaptation.

4.1 Select the **“Radiator shutter”** function in the adaptations overview so that the corresponding text line turns blue and press •F8 “ ” to start radiator shutter adaptation ⇒ *Radiator shutter adaptation*.

4.2 Read and follow the instructions on the PIWIS Tester during radiator shutter adaptation.

4.3 Once radiator shutter adaptation is complete, a tick will appear in the “Value” field on the PIWIS Tester display.



Radiator shutter adaptation

If radiator shutter adaptation is **not** completed successfully, the **adaptation** must be repeated.

4.4 End radiator shutter adaptation by pressing •F8 “(Stop)”.

4.5 Press •F11 “(Back)” to return to the start page of the ⇒ **“Service / repairs”** menu.

- 4.6 Select the **“Overview”** menu and press •F11 “ (Back”) to return to the control unit selection screen.
- 5 Exit the diagnostic application. Switch off the ignition. Disconnect Tester from vehicle.
- 6 Switch off and disconnect the battery charger.

Labor position and PCSS encryption

Labor position:

APOS	Labor operation	I No.
24705510	Replacing DME control unit	
24705511	Replacing DME control unit (theft protection)	
24705540	Replacing DME control unit (including repro- gramming AEM status)	
24705541	Replacing DME control unit (including AEM status and theft protection)	

PCSS encryption:

Location (FES5)	24700	DME control unit
Damage type (SA4)	9735	Repair in accordance with PAG instructions

References: ⇒ *Workshop Manual '247055 Replacing DME control unit'*
 ⇒ *Workshop Manual '247019 Removing and installing DME control unit'*

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