

PCM3.0 – Navigation Update (data status: model year 2016)

Concern: **New maps with data status: model year 2016 (G)**

Model Year: **As of 2009 up to 2012**

Requirements: The following are necessary in order to store the new navigation data to the PCM3.0 hard drive:

- System version **2.24** on PCM3.0. If not: Update PCM3.0 using system software PCM3.0 V2.24 Multimedia Update Disk (supplied)¹.
- License key (supplied) in order to generate the enabling code in the PIWIS information system.
- The relevant workshop DVD (for Parts Info., see Workshop DVD).

¹ It is not possible to update system version 2.22 and lower system versions directly to system version **2.24**. Depending on the software version, a number of different system software updates may have to be performed one after the other.

Software version (old)	System software update	Software version (new)
≤2.22	PCM3.0 V2.23 Multimedia Update CD 000.044.901.52	2.23
2.23	PCM3.0 V2.24 Multimedia Update Disk 000.044.902.53	2.24

Notes: The following additional functions can be used on PCM3.0 after updating the system software to system version **2.24**, depending on vehicle equipment:

- Navigation:
- Adaptation of the map display according to personal requirements (e.g. 3D map setting/display and hide traffic messages, etc.) and display of these features as a symbol on the map. Selection of these features by “touching” a symbol on the screen.
 - When displaying the list of cities containing cities with identical names, the “Details” button can be used to show an additional map with more information. This makes it easier to select the destination you want.
 - Additional display of set route options (toll, highway, etc.) as symbols in the Navigation main menu.
 - When the detour query function is activated, a traffic message is displayed (approx. 10 minutes before reaching a traffic jam). You can then choose to “Detour”/“Ignore” the traffic jam or request further “Details”.
- Bluetooth
- The internal telephone (only for telephone module [I-no. 9W1]) switches automatically to Handsfree Profile (HFP) mode if the mobile phone does not support the SIM Access Profile (similar to SIM card inserted in PCM). Vehicle does not have to be re-coded in the workshop.
 - Synchronization of call lists on mobile phone/PCM.

- | | |
|----------------------------------|---|
| Voice control (I-no. 671): | • Increased recognition rate due to additional street queries. A “Best Match” is thus shown and alternatives are ruled out immediately. |
| Universal audio interface (870): | • Full-text search for USB media (searches the entire database for any text).
• New music search, starting from the track that is currently playing. |
| Sport Chrono (639/640): | • Graphic display of the recorded route. |

Customer information:

The customer can select the navigation database for PCM3.0 as follows:
Navi → Options → Set Navi → Download database → Change database → Select database → Confirmation (yes) → PCM is reset automatically (⇒ *Figure 1*).

**Information**

The data in the electronic logbook (I-no. 641, if installed) will be overwritten when you update the system software to system version 2.24. Customers should therefore read out the data or copy it to their PC via USB or Bluetooth® (before starting the update!).

Please pass this information on to the customer!



Figure 1

Ordering process:

ONLY for saving an additional navigation database:

If additional navigation data (e.g. America) is to be saved instead of the standard navigation data (e.g. Europe = I-no. 610), the relevant additional equipment number (e.g. I-no. 615 = Navigation Software North America) must be assigned to the vehicle.

You can get Porsche to assign this number by providing the following data:

- Part number of retrofit kit
- Vehicle identification number (VIN) of the vehicle to be converted
- Order number used for ordering parts

IMPORTANT:

If you do not have the necessary data or if the data you have is incorrect, you **CANNOT** generate the PCM navigation map material enabling code yourself using the supplied license key.

Once the order is confirmed, the additional equipment number can be found in the vehicle information for the vehicle to be converted in the PIWIS information system in the Porsche Partner Network (PPN).



Information

Opening the package and saving the navigation data to PCM implies acceptance of the terms and conditions of the license.

Parts Info: **997.044.908.61** ⇒ License key for PCM3.0 navigation map material MY 16 – America

Workshop DVD: **ONLY** order at the same time (for the relevant country/region/market) if not yet available in the workshop.

997.642.273.58 PCM 3.x Navigation Database – America

Tools: **9818 - PIWIS Tester II**

Work Procedure: 1 Preparatory work:

1.1 Generate the “PCM navigation map material enabling code” in the “PIWIS Information System”. To do this, select the following windows one after the other:

1.1.1 Vehicle identification

Enter the vehicle identification number in the “Identification via VIN” field and then select “Vehicle code information”.

1.1.2 Enter the license key.

- 1 – License key input field
- 2 – “Check license key” field

Enter the license key in the input field (⇒ *Figure 2-1*).

Activate the “Check license key” field (⇒ *Figure 2-2*) by clicking with the mouse.

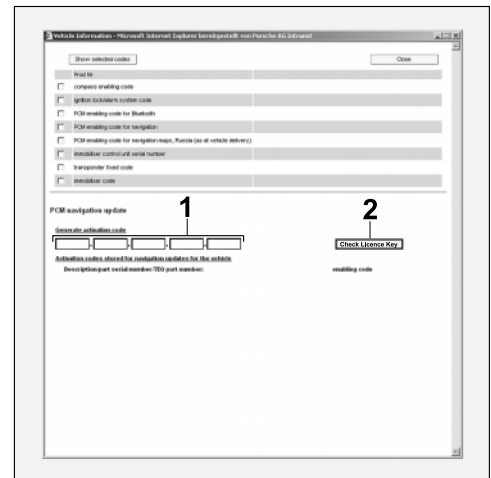


Figure 2

1.1.3 Generate PCM code.

- 3 (2)** – Map material/standard part number/TEQUIPMENT part number
- 4 (3)** – Information: License key can be used only once
- 5 (3.5)** – “Generate PCM code” field

After checking the license key, the related map material/standard part number/TEQUIPMENT part number (⇒ *Figure 3-3*) appears.

A message also appears informing you that the license key can ONLY be used once and is then unusable (⇒ *Figure 3-4*).

Activate the “Generate PCM code” field by clicking with the mouse (⇒ *Figure 3-5*).

1.1.4 Take note of the enabling code.

- 6 (4.5)** – “Enabling code” field

Take note of the displayed enabling code (⇒ *Figure 4-6*).

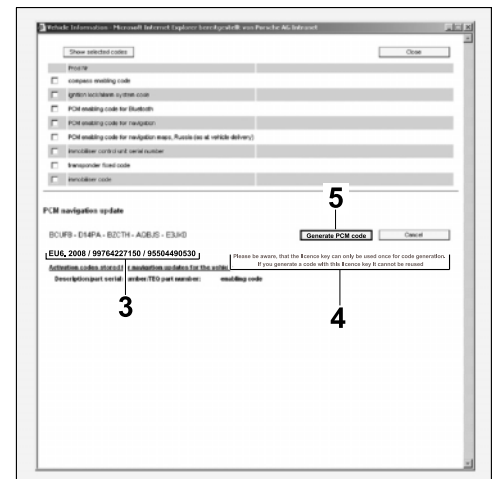
1.2 Connect battery charger (⇒ *Workshop Manual '2X001N03 Battery trickle charging*).

Figure 3

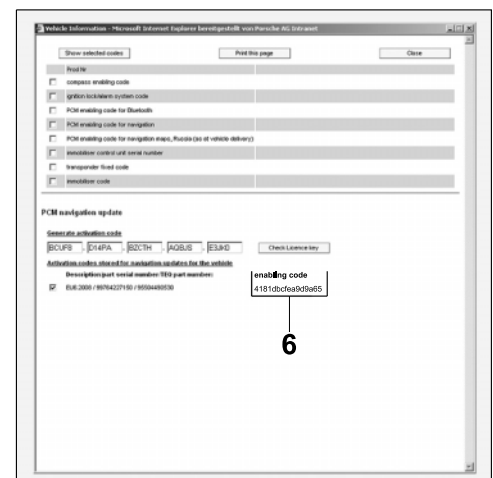


Figure 4

NOTICE**Voltage drop**

- Risk of irreparable damage to control unit
- Risk of damage to control unit
- Fault entries in the control unit
- Coding in the control unit is aborted
- Malfunctions in control unit, even during programming

- ⇒ **Switch off the ignition and remove the ignition key before disconnecting the control unit.**
- ⇒ **Ensure that the power supply is not interrupted during programming.**
- ⇒ **Connect a battery charger with a current rating of at least Nominal value 70 A to the vehicle battery.**

1.3 Check that system version **2.24** (or higher) is installed in PCM3.0.

1.3.1 Switch on ignition and PCM3.0.

1.3.2 Press the "INFO" and "SOURCE" buttons at the same time. Is system version 2.24 displayed after a short time?

Yes: Activate the navigation software; continue with Step 2.

No: Update PCM3.0 to system version 2.24; continue with Step 1.4.



Information

It is not possible to update system version 2.22 and lower system versions directly to system version 2.24. The following applies for PCM3.0 with system version 2.22 and lower system versions:

First update PCM3.0 using system software PCM3.0 2.23 Multimedia Update CD (supplied). The procedure is identical.



Information

Additional coding values/settings must be checked and NEW coding values/settings may have to be set after updating the system software, depending on vehicle equipment!

These include:

- Average consumption according to vehicle
- Some additional equipment (rear wipers, rain sensor, microphones ...)
- Personal audio settings (fader, bass ...), if these were checked and noted beforehand.

1.4 Update PCM3.0 to system version 2.24 and update it first to system version 2.23 **if necessary.**

NOTICE

Equipment/media on PCM

- **Problems or error messages during software update**
- ⇒ **Disconnect any equipment/media (iPod, USB player, etc.) connected to PCM before starting the update.**

1.4.1 Press the PCM3.0 Eject button and remove the CD/DVD from the CD/DVD slot, if one was inserted.

- 1.4.2 Insert PCM3.0 V2.24 Multimedia Update Disk (supplied) into the CD/DVD slot.
- 1.4.3 Acknowledge the message "Avoid interrupting the update process. Interrupting the update can result in malfunctions in the PCM system" in the display.
- 1.4.4 Touch the "Yes" field on the touchscreen to confirm the question "Perform update of version PCM3.0_V224?".
- 1.4.5 Start software update of PCM3.0 to system version 2.24.
- 1.4.6 Confirm the message: "System updated successfully to version PCM3.0_V224." when the update is complete.



Information

The **9718 - 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.

The procedure described here has been structured in general terms; different text or additions may appear in the **9718 - PIWIS Tester**.

- 2 Activate navigation software.
 - 2.1 **9818 - PIWIS Tester II** must be connected and switched on.
 - 2.2 Select the required vehicle type under "Diagnostics". PIWIS Tester II Diagnostics starts.
 - 2.3 Code navigation software.
 - 2.3.1 Select "PCM" control unit in the "Overview" menu and press •F12" to continue. Press •F11" to confirm the question "Create vehicle analysis log (VAL)?".
 - 2.3.2 Once the control unit and Porsche part number are displayed, select "Codings/adaptations" in the menu.

Then select "PCM3: Enabling code" under coding mode. Press •F12" to continue.
 - 2.3.3 Select the option "Function" in the "Parameters" column. A drop-down list appears containing the options "Europe navigation system map data", "North America navigation system map data", "South Africa and Africa navigation system map data", "Middle East navigation system map data", etc.

Select "North America" map data from this list.
 - 2.3.4 Three options (installed/enabled/functional) for the current status ("Yes" or "No") are displayed for the selected map data on the next page.

The status is "No" for "enabled". If not: Press •F8" to deactivate the "Yes" status. Otherwise, no "activation code" can be entered!
 - 2.3.5 Enter the enabling code under "Activation code" and press •F8" to activate.

2.3.6 Once coding is completed successfully, the message "Coding has been written successfully" appears in the header.

The status for "enabled" changes from "No" to "Yes". Press •F11" to continue.

2.4 Read out the fault memories of all systems, work through any existing faults and erase the fault memories.

2.5 Switch off ignition and disconnect **9818 - PIWIS Tester II**.



Information

After updating the PCM3.0 integrated system to V2.24, **ONLY** the navigation update from data status: model year 2014 (E) can be used.

3 Save new navigation data to the PCM hard drive.

3.1 Switch on ignition and insert the "PCM3.x Navigation Database XYZ" DVD in the CD/DVD slot.

ONLY for vehicles with CD autochanger: Select Disc 1.



Information

It can take up to 45 minutes to store the country database (DVD containing navigation database) and the relevant workshop DVD onto the PCM hard drive.

3.2 Acknowledge the message "Avoid interrupting the update process. Interrupting the update can result in malfunctions in the PCM system" in the display.

3.3 Touch the "Yes" field on the touchscreen to confirm the question "Perform update of version (e.g. 6.0.4 America)?".

3.4 Confirm the message: "System successfully updated to version XYZ" at the end of the update and take the "PCM3.x Navigation Database XYZ" DVD out of the CD/DVD slot.

4 Concluding work:

4.1 Switch off PCM3.0 and ignition.

4.2 Disconnect battery charger (⇒ *Workshop Manual '2X00IN03 Battery trickle charging*).

91 10 25 44: Performing PCM3.0 navigation update Labor time: **70 TU**
 Includes: Updating PCM3.0 software version and enabling navigation software.
 Without: Generating code for navigation data.

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