

PCM2.1 Navigation Update

Vehicle Type: **911 Carrera (997)/911 Carrera S (997)**

Model Year: **2005 (5)**

Concern: **Updating the software version for PCM2.1** (Only vehicles with PCM2.1)
 > Update of existing Model Level A to Update of existing Model Level B.

Information: There has been a new network release (Update of existing Model Level B) introduced as standard in the PCM2.1 system network since the middle of April 2005. As of the introduction date stated above, only PCM2.1 control parts and navigation modules with "Update of existing Model Level B" are installed at the factory. For after sales replacement requirements, there will continue to be devices with "Update of existing Model Level A" available.

The network release of "Update of existing Model Level B" contains a new software version for PCM2.1 and navigation. The following are a few of the new features which will be used with the new PCM2.1 navigation software:

- New navigation database for the USA, with an expansion of the digitalized roads from 3 million miles to 5 million miles. Partially attributed roads are also now displayed, especially outside of metropolitan areas.
- Optional integration of electronic driving book in the PCM2.1 possible
- Optional Off-road navigation: Using the selection item "Drive trace" ("Trace" means a plot of points during the trip) there is the option of driving to or back to one of the 5 plotted traces

Additional new features can be found in the Owner's Manual or Quick Reference Guide for the PCM2.1 as of model year 2006.

In order to use the navigation DVD (label 04.2005 or higher), valid as of the "Update of existing Model Level B", in devices with an "Update of existing Model Level A" software version, it is necessary to perform a software update of the PCM2.1 system network using the update CD "PCM2.1 update CD Update of existing Model Level B" (software version 05024xxx). After the update of the PCM2.1 system network to "Update of existing Model Level B" software is complete, only the new navigation DVD (label 04.2005 or higher) can be used.



Please observe the terms of the license. Opening of the DVD package and inserting the navigation DVD implies acceptance of the terms of the license. In order to ensure that the PCM2.1 system network and the navigation software has been updated properly, the updates are only to be performed by an authorized Porsche dealer.

Parts Information:	Part Number	Description
	000.044.900.89	1 x USA navigation update set

Overview – Part numbers/software versions of the PCM2.1

Part Number	Date of Introduction *	Software Version	Update Version
997.642.101.0x	Up to CW 42/04	04035xxx	Standard production status
997.642.103.0x	Up to CW 42/04	04035xxx	Standard production status
997.642.131.0x	Up to CW 42/04	04035xxx	Standard production status
997.642.133.0x	Up to CW 42/04	04035xxx	Standard production status
997.642.101.1x	As of CW 42/04	04202xxx	Update of existing Model Level A
997.642.103.1x	As of CW 42/04	04202xxx	Update of existing Model Level A
997.642.141.0x	As of CW 16/05	05024xxx	Update of existing Model Level B
997.642.143.0x	As of CW 16/05	05024xxx	Update of existing Model Level B

* CW = Calendar Week



Note!

The current software version can be displayed in the PCM2.1 display - see work step 2.

Tools: Battery charger



Attention!

Malfunctions in the PCM2.1 system network due to open circuit when loading data.

- > If an open circuit occurs due to power loss while loading data, malfunctions can occur in the PCM2.1 system network.
- > Connect battery charger or run the engine.

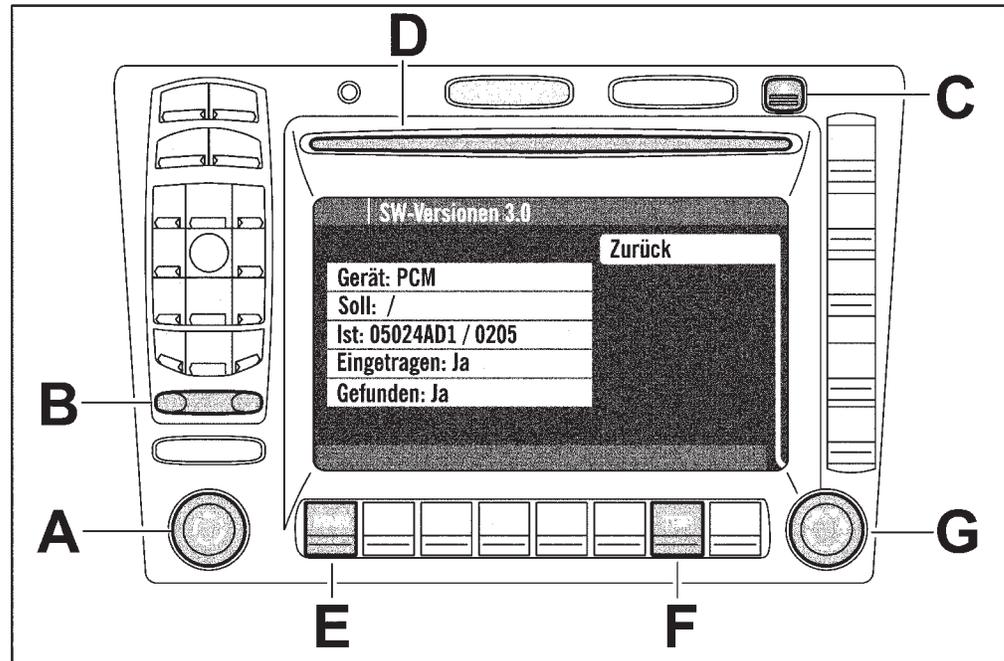


Warning!

Danger of poisoning from working with the engine running.

- > Only run the engine if the exhaust extraction system is switched on.

Work Procedure:



1. Preparatory work.

- 1.1 Connect battery charger. See Workshop Manual '270601 Battery trickle charging'
- 1.2 Switch on ignition.
- 1.3 Switch on the PCM2.1 by pressing the "On/Off" switch, Figure 1 item A.
- 1.4 Open the telephone card drawer, Figure 1, item B, remove the telephone card if present, and close drawer again.
- 1.5 Press the Eject button, Figure 1, item C and remove CD from the CD slot, Figure 1, item D, if one was inserted.

2. Display current software version of the PCM2.1 in the display.

- 2.1 Press "MAIN" and "TRIP button", Figure 1, items E and F simultaneously to see the display "SW versions".
- 2.2 Select "PCM" menu item by turning the rotary knob, Figure 1, item G and confirm by pressing.

Work Procedure:
(cont'd)

2.2.1 The respective software version is displayed in the display of the PCM2.1:

Standard production status: 04035xxx
Update of existing Model Level A: 04202xxx
Update of existing Model Level B: 05024xxx

If the display corresponds to the standard production status (04035xxx), the PCM2.1 must be updated to Update of existing Model Level A software (04202xxx), see Technical Information bulletin, Group 9, #7/04 - Spare parts requirements PCM2.1 and/or BOSE amplifier', work step "Update PCM2.1 using update CD to software version 04202xxx".

3. Update PCM2.1 to Update of existing Model Level B software (software version 05024xxx).

3.1 Switch on ignition. If a battery charger is not connected, **run the engine.**

3.2 Insert PCM2.1 update CD Update of existing Model Level B (part No. 000.043.205.46.002) in the CD slot, Figure 1, item D. The software update starts automatically.

3.3 In the PCM2.1 display there appears:
"Update software to version Update of existing Model Level B" press rotary knob, Figure 1, item G, to confirm the selection "Yes".

3.4 The following message appears in the PCM2.1 display:
"Important! After this update, a new navigation DVD will be necessary. Do you want to update?"
Press the rotary knob to confirm the selection "Yes" and to start the update.



Note!

A progress bar indicating the progress of the loading operation is displayed for each update step.

3.5 Depending on the vehicle equipment and the telephone, the following appears in the PCM2.1 display (Steps 3.5.1 & 3.5.2).

3.5.1 For vehicles without telephone module:

"Updating the system software."
"Device 1 of 2."
"Updating to version R51."
"Status OK."
"Updating PCM."
"Device 2 of 2."
"Updating to version R02."
"Status OK."

Work Procedure: (cont'd) **3.5.2** For vehicles with a telephone module:

- "Updating system software."
- "Device 1 of 3."
- "Updating to version V5.03.4."
- "Status OK."
- "Updating system software."
- "Device 2 of 3."
- "Updating to version R51."
- "Updating PCM."
- "Device 3 of 3."
- "Updating to version R02."
- "Status OK."



Note!

A brief message appears indicating a successful update, then the PCM2.1 switches off and on again automatically.

- 3.6** If the PCM2.1 does not switch on again automatically, switch on the PCM2.1 again by pressing the On/Off switch, Figure 1, item A.
- 3.7** Press the Eject button, Figure 1, item C and remove the update CD from the CD slot, Figure 1, item D.



Note!

After the update of the PCM2.1 system network to "Update of existing Model Level B" software is complete, only the new navigation DVD (label 04.2005 or higher) can be used.

4. Updating navigation module.

- 4.1** Remove the previously used navigation DVD from the navigation module in the luggage compartment.
- 4.2** Insert the new navigation DVD (label 04.2005 or higher) in the navigation module.
- 4.3** Switch off the PCM2.1 by pressing the "On/Off" switch, Figure 1, item A.
- 4.4** Switch off the ignition for approx. 2 minutes.
- 4.5** **Switch on ignition.** If a battery charger is not connected, **run the engine.**

Work Procedure:
(cont'd)

- 4.6** Switch on PCM2.1 and confirm the PCM2.1 display by pressing the rotary knob, Figure 1, item G.



Note!

If the menu item is cancelled unintentionally, remove the navigation DVD and insert it again. The PCM2.1 automatically returns to the Update menu.

- 4.7** The following message appears in the PCM2.1 display:
"Update navigation software?" Turn the rotary knob to change, Figure 1, item G from the selection "No" to "Yes".



Note!

Observe warning note.

- 4.8** Press the rotary knob to confirm the selection "Yes" and to start the update. The software update is ended automatically.

5. Concluding work.

- 5.1** Insert the audio CD in the CD slot of the PCM2.1 control part again.
5.2 Insert the telephone card in the drawer of the PCM2.1 control part again.
5.3 Switch off the ignition.
5.4 Disconnect battery charger. See Workshop Manual '270601 Battery trickle charging'

Working time:

Labor Operation	Description	Time Units
91 10 25 44	This includes: Updating PCM2.1 and navigation	70

References:

- Workshop Manual
> '270601 Battery trickle charging'
Technical Information Bulletin
> Group 9, #7/04 - Spare parts requirements PCM2.1 and/or BOSE amplifier'

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