

PCM incl. Navigation Module with Standard Audio Interface + DVD Autochanger

Revision: This bulletin replaces bulletin Group 9 24/13, dated September 12, 2013.

Model Year: **As of 2013**

Information: Retrofitting

Restriction

- **Only** together with Sound Package Plus (I-no. 490) or Bose® Surround Sound System (I-no. 680) or Burmester® High-End Surround Sound System (I-no. 682).



Note: The PCM3.1 Navigation/DVD Auto Changer retrofit is currently not for cars with XM Satellite Radio. If the PCM3.1 Navigation/DVD Auto Changer is retrofitted in these cases, the customer will permanently lose their XM Satellite Radio functionality. In addition, when the PCM3.1 Navigation/DVD Auto Changer retrofit is installed in a Cayenne which previously did not have the navigation option (either CDR31 or PCM3.1 without navigation), the map display screen will not be shown on the cluster TFT, as compared to PCM3.1 Navigation units configured from the factory. This is due to a difference in instrument clusters between factory navigation and non-navigation vehicles.

Information: PCM incl. navigation module with standard audio interface + DVD autochanger has the following equipment and functions:

- Central multimedia system with 7-inch TFT color display (touchscreen).
- Radio with RDS diversity function.
- Integrated 6-slot CD/DVD autochanger for audio playback of audio/video DVDs and MP3 music.

- Navigation module with hard drive and map data for the respective countries, map display with greater perspective, automatic route tracing and subsequent reverse route navigation as well as navigation in non-digitalized regions using a compass and GPS.
- USB connection for various iPod® and iPhone® models, USB memory sticks with MP3 music and MP3 players. Functions can be operated via PCM, the optional multi-function steering wheel or optional voice control.
- AUX interface for connecting other external audio sources, allowing operation directly on the connected device.
- MP3 files can be stored and played on the PCM-internal hard drive "Jukebox".
- Digital Audio Broadcasting (DAB) reception is retained following retrofitting (only vehicles with audio system CDR Plus).

For more information on operation and the various functions available, refer to the "PCM 3.1" operating instructions.

Important: Limitations of retrofitting PCM incl. navigation module with standard audio interface + DVD autochanger:

- No navigation maps displayed in the multi-function display (instrument cluster).
- The operating instructions are **not** included and must be ordered separately in the required language.

Only for vehicles with CDR 31:

- Reduced antenna diversity.
- The mobile phone preparation option (I-no. 619) can only be used after retrofitting PCM incl. navigation module with standard audio interface + DVD autochanger if two microphones and the microphone wire harness are also installed. For details of required parts, see "Part Nos.". For installation instructions, see ⇒ *Installation and Conversion Instructions '918700 PCM3.1 - Mobile phone preparation'*.

If the vehicle is equipped with the audio system CDR Plus, it is only a matter of routing the GPS antenna line, installing the GPS antenna, coding PCM and loading the navigation data (Steps 1 – 3 and 6 – 9).

The following steps are not required:

- Converting audio interface
- Installing antenna control unit

Enabling code: Various enabling codes are required for retrofitting the system.

1 Enabling codes for **PCM Navigation and PCM UAS (standard audio interface), PCM Bluetooth, PCM Sport Chrono MMI and DAB**

These components require a VIN-specific enabling code and will not function without it. To get the enabling code, order the applicable kit via your normal parts channels (POLARIS). You must then submit a Parts Technical Assistance Request (PTAR) in the PTEC system with the correct VIN, Part Number and PCNA order number to PCNA Parts Support. The PTAR will be returned to you in 1+ working days, advising you that the code is now displayed in the PIWIS System. Consult Parts Bulletin GR13D90 for additional ordering details.

2 Enabling code for **PCM navigation map material**

You can generate the enabling code in the PIWIS information system yourself using the supplied license key (see section 1.1).

You can then load the country database (PCM 3.0/PCM 3.1 navigation database) and the relevant workshop DVD onto the PCM 3.1 hard drive.

Part Nos.: **991.044.901.91** ⇒ PCM incl. navigation module with standard audio interface + DVD autochanger, set, America

Also order the PCM 3.1 operating instructions in the required language.

WKD 952 021 13 ⇒ US English

WKD 952 031 13 ⇒ French-Canadian

Also order only for vehicles with mobile phone preparation (I-no. 619).

991.044.900.37 1 x Microphone wire harness

991.646.309.01 1 x Hands-free microphone/sound microphone

991.646.313.01 1 x Hands-free microphone

Parts List:




Figure 3

---	1 x	PCM 3.1 ⇒ Figure 3-1-
7PP.035.504.A	1 x	GPS antenna ⇒ Figure 3-2-
991.612.022.50	1 x	GPS antenna line ⇒ Figure 3-3-
991.044.900.98	1 x	Antenna connector, white ⇒ Figure 3-4-
991.044.900.99	1 x	Antenna connector, grey ⇒ Figure 3-5-
991.612.016.00	1 x	Antenna line (PCM 3.1 to antenna control unit) ⇒ Figure 3-6-

— — —	1 x	Power supply wire harness (antenna control unit) ⇒ <i>Figure 3-7-</i>
991.642.122.01	1 x	USB line ⇒ <i>Figure 3-8-</i>
991.612.033.00	1 x	Antenna lines (antenna control unit to antenna amplifier) ⇒ <i>Figure 3-9-</i>
991.618.122.00	1 x	Antenna control unit ⇒ <i>Figure 3-10-</i>
991.647.318.00	2 x	Fastening parts (antenna control unit) ⇒ <i>Figure 3-11-</i>
7PP.035.724.D	1 x	Adapter ⇒ <i>Figure 3-12-</i>
999.513.076.40	20 x	Tie-wrap (not shown)
955.606.838.00	5 x	Tie-wrap with fixing clip (not shown)
999.507.195.40	1 x	Expanding spring, 10.7 x 26.4 (not shown)
999.591.143.40	2 x	Clamp, 12.0 x 2.0 (not shown)
955.612.931.00	1 x	Cable clip (not shown)
— — — ¹	1 x	License key, America/South America (not shown)

¹ Only contained in respective parts kit.

Tools:
9818 - PIWIS Tester II
T10118 - Assembly tool

Block diagram: 

Information

For a better understanding of the system layout, see system diagram , Figure 3.

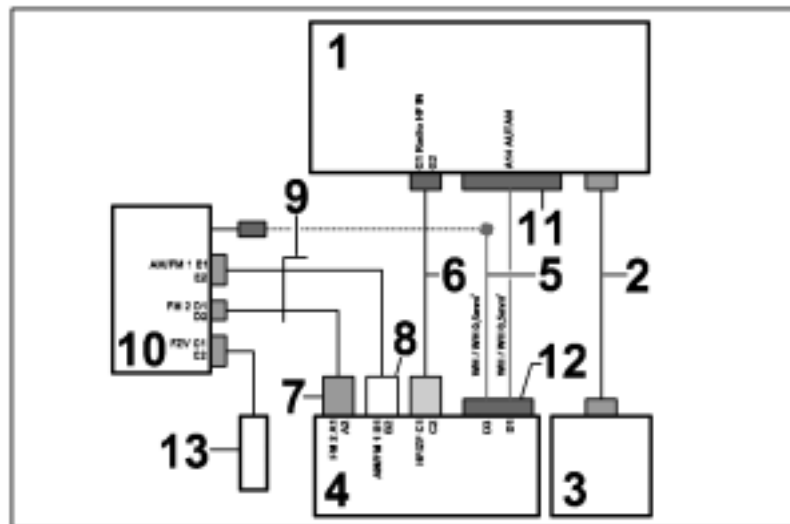


Figure 4

- 1 – PCM
- 2 – GPS antenna line

- 3 – GPS antenna
- 4 – Antenna control unit
- 5 – Power supply wire harness (antenna control unit)
- 6 – Antenna line (antenna control unit to PCM)
- 7 – Antenna connector, grey
- 8 – Antenna connector, white
- 9 – Antenna lines (antenna control unit to antenna amplifier)
- 10 – Antenna amplifier
- 11 – PCM central connector
- 12 – 3-pin connector
- 13 – BCM control unit, front

Work Procedure: 1 Preparatory work.

1.1 Generate the **PCM navigation map material** enabling code in the PIWIS information system. Select the following windows one after the other:

1.1.1 Vehicle identification → Identification via VIN

Enter the chassis number in the **Identification via VIN** field and then select Vehicle code information.

1.1.2 Enter the license key.

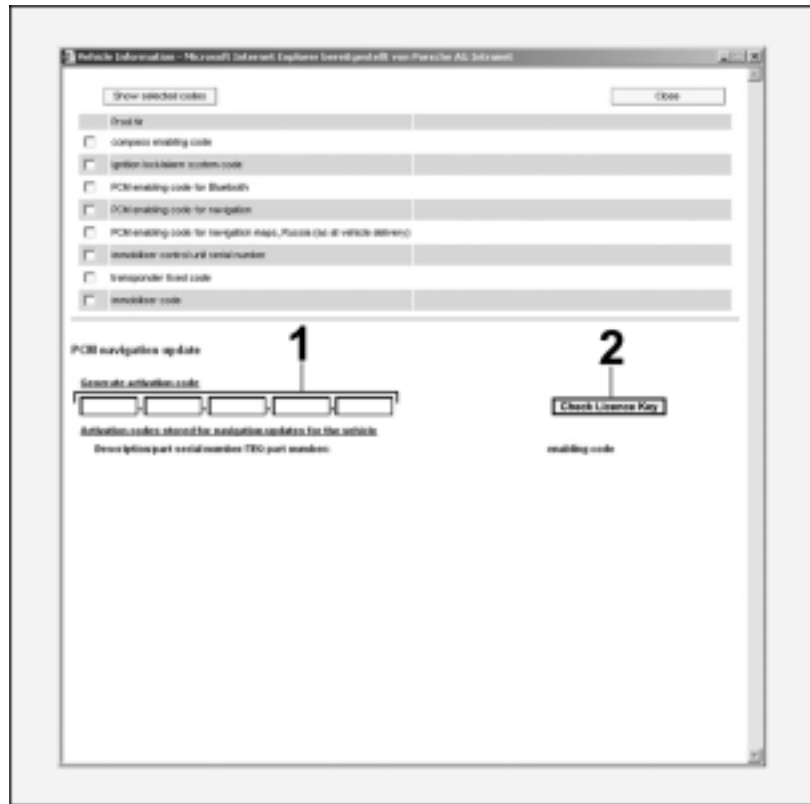


Figure 5

Enter the license key in the input field **Generate enabling code** ⇒ *Figure 5 -1-*.

Activate the Check license key field ⇒ *Figure 5 -2-* by clicking with the mouse.

1.1.3 Generate PCM code.

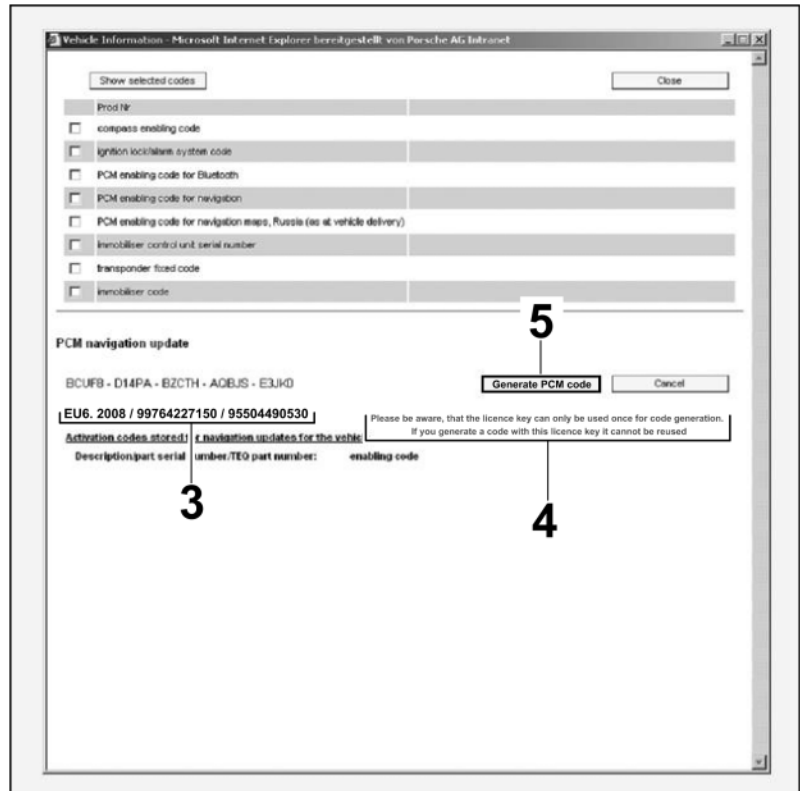


Figure 6

After checking the license key, the related **map material/standard part number/TEQ part number** ⇒ *Figure 6 -3-* will appear.

A message also appears informing you that the licence key can only be used once and is then unusable ⇒ *Figure 6 -4-*.

Activate the field **Generate PCM code** ⇒ *Figure 6 -5-* by clicking with the mouse.

- 1.1.4 Take note of the displayed **enabling code** ⇒ *Figure 7 -6-*.



Figure 7

- 1.1.5 Select and take note of the enabling codes for **PCM Navigation, PCM UAS (standard audio interface) and PCM Bluetooth, PCM Sport Chrono MMI and DAB** if necessary.
- 1.2 Connect a battery charger. ⇒ *Workshop Manual '2X00IN Battery trickle charging'*
- 1.3 Remove audio system CDR 31/CDR Plus. ⇒ *Workshop Manual '912419 Removing and installing "CD player" car radio'*
- 1.4 Remove glove compartment. ⇒ *Workshop Manual '681519 Removing and installing glove compartment'*

- 1.5 Remove covers ⇒ *Figure 8-B-* over the interior rear-view mirror. ⇒ *Workshop Manual '682719 Removing and installing interior rear-view mirror'*
- 1.6 Remove right sun visor. ⇒ *Workshop Manual '682319 Removing and installing sun visor'*
- 1.7 Remove holder for sun visor at the left and right.

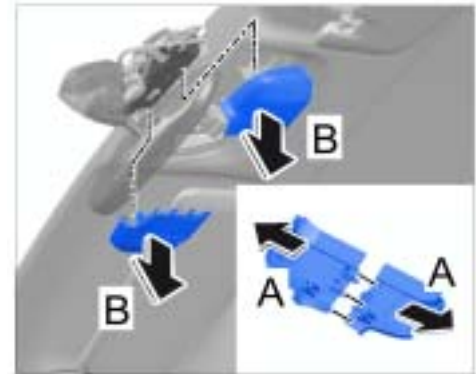


Figure 8

- 1.7.1 Open cover for sun visor holder ⇒ *Figure 9-arrow-*.

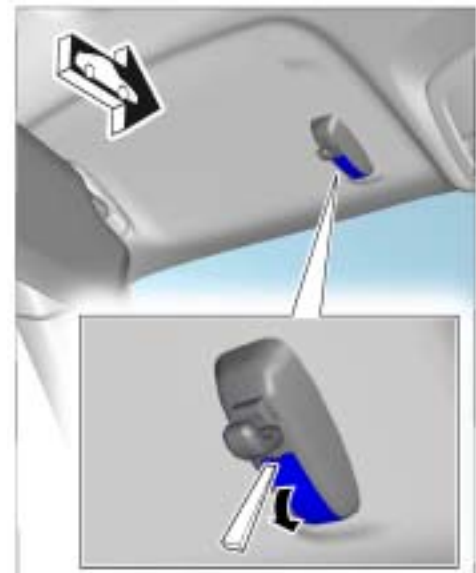


Figure 9

- 1.7.2 Unscrew fastening screw securing sun visor holder ⇒ *Figure 10 -arrow-*.
- 1.8 Remove centre roof trim panel. ⇒ *Workshop Manual '708319 Removing and installing front roof trim panel'*
- 1.9 Remove A-pillar trim panel on the right. ⇒ *Workshop Manual '705719 Removing and installing A-pillar trim panel'*

**Information**

Make sure that the roof cover does not buckle.

- 1.10 Detach the headliner.

- 1.10.1 Unscrew and remove fastening screws close to the roof console ⇒ *Figure 11 -arrows-*.

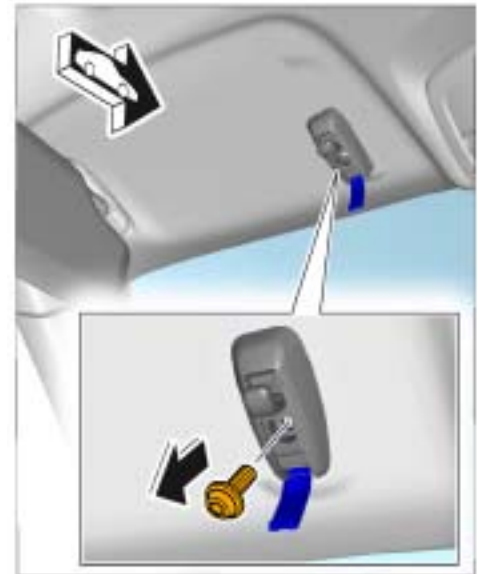


Figure 10

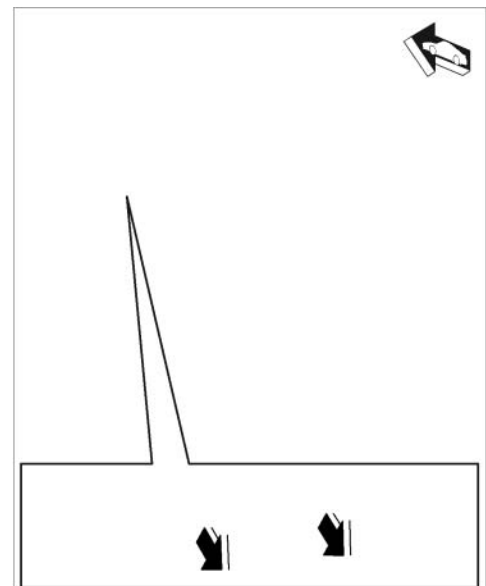


Figure 11

1.10.2 Carefully pull the headliner ⇒ *Figure 12-1-* down ⇒ *Figure 12-arrow-*.

2 Install GPS antenna.

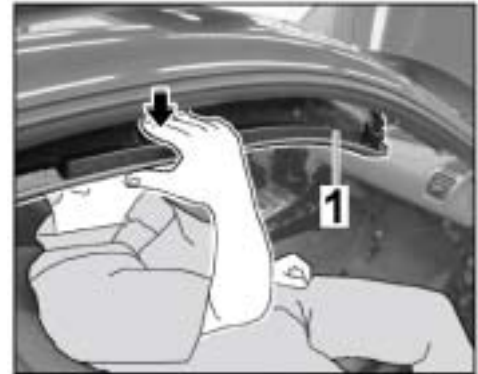


Figure 12

2.1 Attach angled antenna connector ⇒ *Figure 13-1-* to the GPS antenna ⇒ *Figure 13-2-* until the antenna connector engages securely.

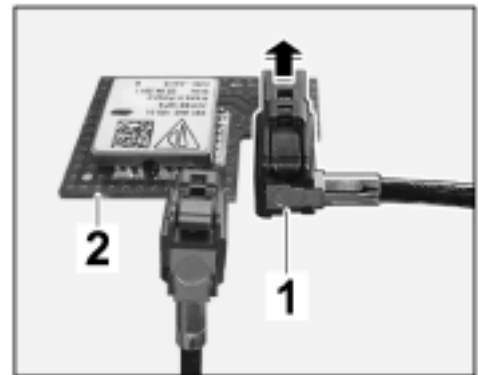


Figure 13

2.2 Insert GPS antenna ⇒ *Figure 14-1-* into the mounting ⇒ *Figure 14-arrow a-* and clip it in ⇒ *Figure 14-arrows b-*.

3 Route GPS antenna line as follows:
Front roof trim panel → along wire harness for sun visor → A-pillar → along wire harness for dashboard (glove compartment) → PCM installation slot

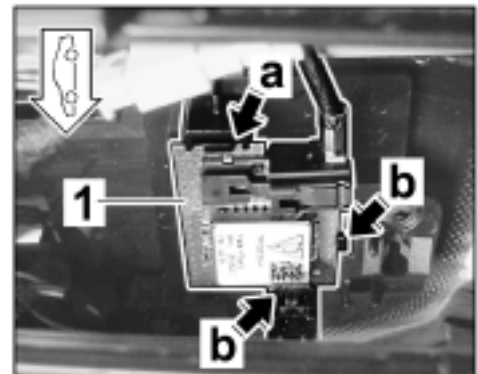


Figure 14

**Information**

Make sure that the roof cover does not buckle.

- 3.1 Carefully pull down the headliner and route antenna line ⇒ *Figure 15-1*- along the standard wire harness for the sun visor and A-pillar.

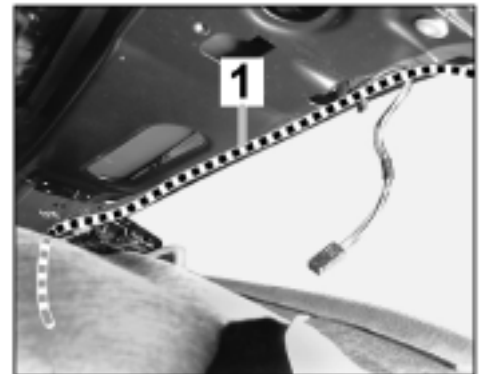


Figure 15

If there is no standard wire harness, secure the antenna line ⇒ *Figure 16-1*- to the roof using a tie-wrap and punched-hole clip ⇒ *Figure 16-2*-.

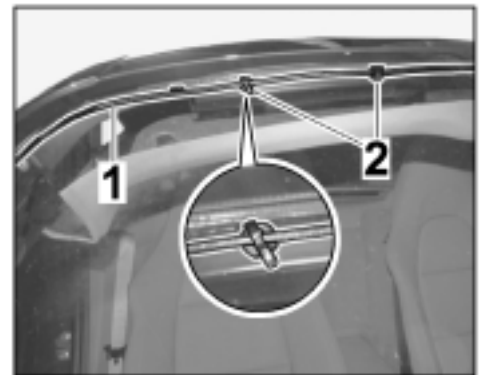


Figure 16

- 3.2 Route GPS antenna line ⇒ *Figure 17-1*- along the wire harness for the dashboard (glove compartment).

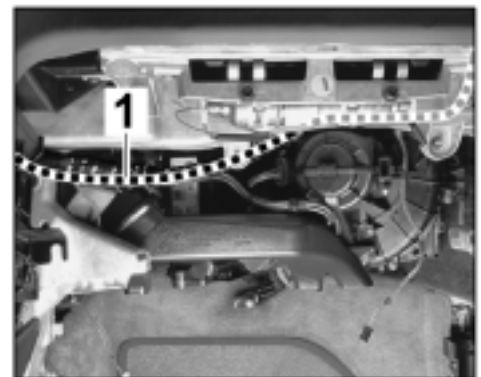


Figure 17

- 3.3 Route GPS antenna line ⇒ *Figure 18-1*- to the PCM central connector.

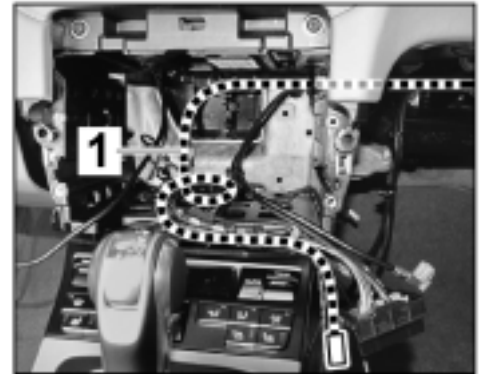


Figure 18

The GPS antenna line ⇒ *Figure 19-1*- must protrude approx. 7 cm beyond the PCM central connector ⇒ *Figure 19-2*-.

X – 7 cm

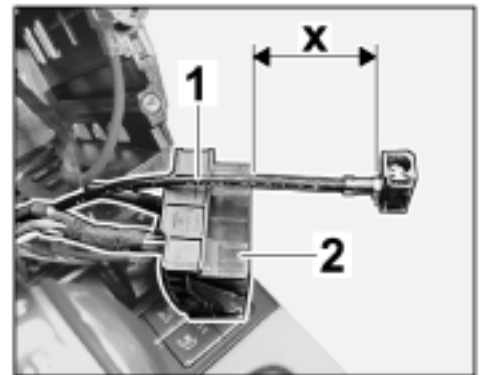


Figure 19

- 3.4 Clip three clip-on tie-wraps ⇒ *Figure 20-2*- into the A-pillar.
- 3.5 Pull GPS antenna line ⇒ *Figure 20-1*- back and fold it to form a loop close to the A-pillar. Secure GPS antenna line with the two upper tie-wraps.

- 4 **Only** for vehicles with CDR 31:
Convert audio interface.



Figure 20

- 4.1 Route USB line ⇒ *Figure 21 -1-* along the standard AUX line ⇒ *Figure 21 -2-* and secure it with a tie-wrap.
- 4.2 Convert adapter for audio interface.

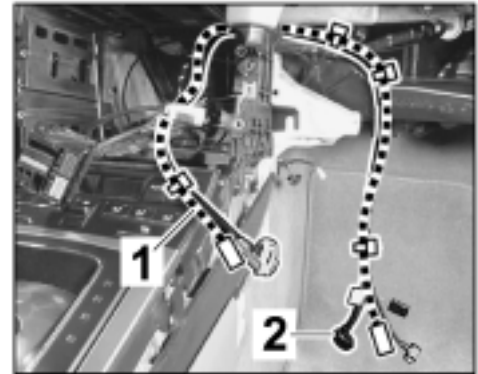


Figure 21

- 4.2.1 Release adapter close to the catches ⇒ *Figure 22 -1-* and remove adapter.

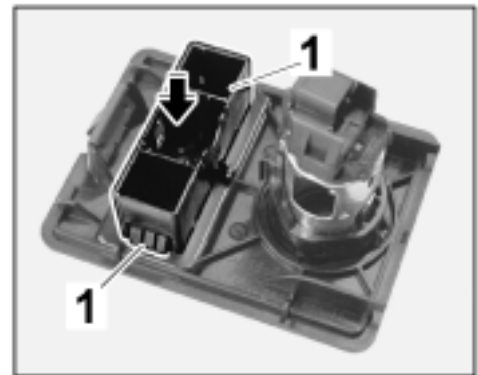


Figure 22

- 4.2.2 Clip adapter ⇒ *Figure 23 -1-* into audio interface ⇒ *Figure 23 -2-*.

- 5 **Only** for vehicles with CDR 31:
Install antenna control unit.

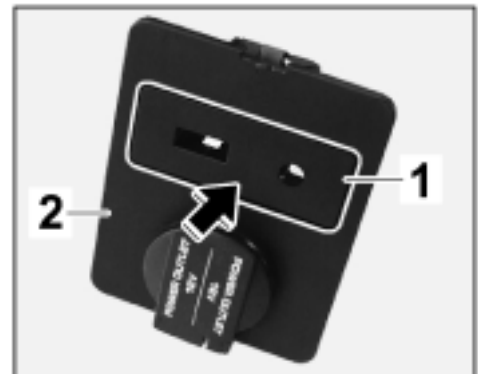


Figure 23

- 5.1 Fit fastening part ⇒ *Figure 24-1-* on short bar of the antenna control unit ⇒ *Figure 24-2-*.

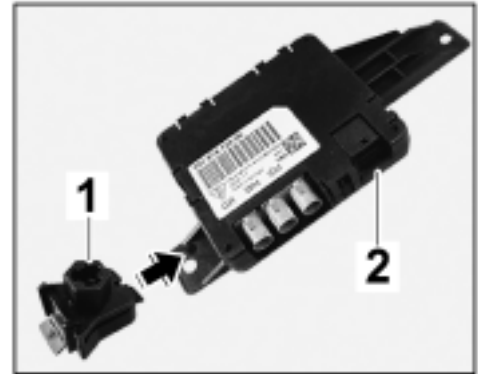


Figure 24

- 5.2 Convert antenna lines (antenna control unit to antenna amplifier).



Figure 25

- 5.2.1 Release secondary lock ⇒ *Figure 26-1-* on both sides of the antenna connector ⇒ *Figure 26-2-* and push it up.

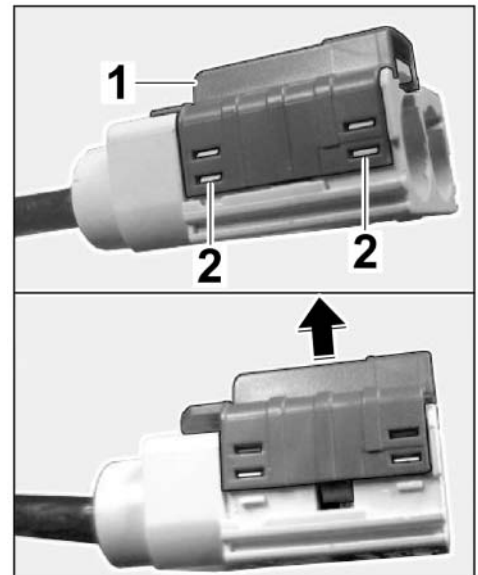


Figure 26

- 5.2.2 Lift up the locking mechanism ⇒ *Figure 27-1-* and carefully pull the antenna line (thinner line) out of chamber 2 ⇒ *Figure 27-arrow-*.

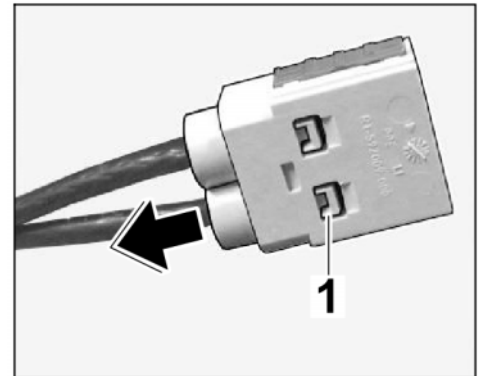


Figure 27

- 5.2.3 Insert the antenna line you pulled out into the grey antenna connector and press down the locking mechanism ⇒ *Figure 28-1-*.

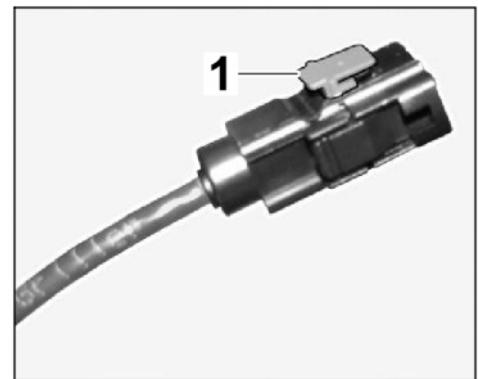


Figure 28

- 5.2.4 Lift up the locking mechanism ⇒ *Figure 29-1-* and carefully pull the antenna line out of chamber 1 ⇒ *Figure 29-arrow-*.

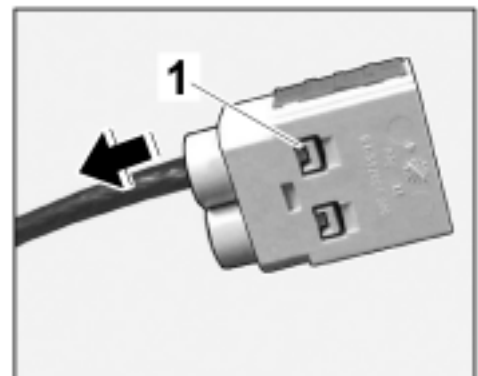


Figure 29

- 5.2.5 Insert the antenna line you pulled out into the white antenna connector ⇒ *Figure 30-1* - and press down the locking mechanism.

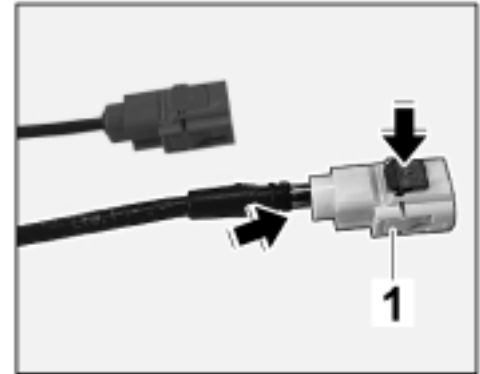


Figure 30

- 5.3 Connect antenna lines (according to colour coding) and power supply line to the antenna control unit.

- 1 – Antenna lines (antenna control unit to antenna amplifier)
- 2 – Antenna line (PCM to antenna control unit)
- 3 – Power supply line
- 4 – 3-pin connector
- 5 – Antenna connector, curly
- 6 – Antenna connector, white
- 7 – Antenna connector, grey

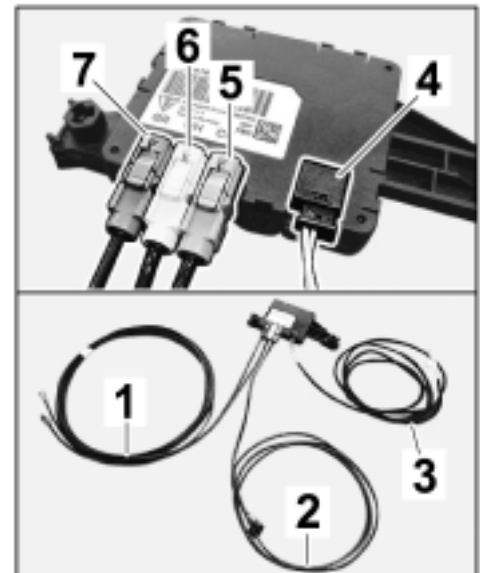


Figure 31

- 5.4 Disconnect battery ground strap. ⇒ *Workshop Manual '2X00IN Work instructions after disconnecting the battery'*

⚠ WARNING

Risk of short circuit and fire

- due to work on the vehicle electrical system.
- ⇒ When working on the electrical system, the battery must always be disconnected and covered.
- ⇒ Always route the electrical wires without tension and so that no chafing occurs and secure to existing wires/components with tie-wraps/electrical tape.

- 5.5 Loosen right fuse box holder.

- 5.5.1 Disconnect plug connections on loudspeaker amplifier. ⇒ *Workshop Manual '914419 Removing and installing additional amplifier for loudspeaker'*

- 5.5.2 Disconnect plug connections for door connection point ⇒ *Figure 32 -1-* and plug connections for wire harness for dashboard ⇒ *Figure 32 -2-*.

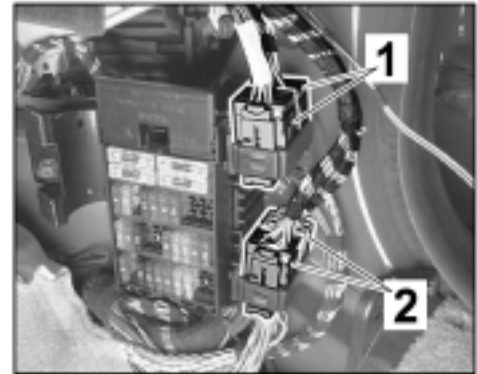


Figure 32

Release plug connection ⇒ *Figure 33 -arrow a-* and pull off connector ⇒ *Figure 33 -arrow C-*.

Release plug connection holder ⇒ *Figure 33 -arrow A-* and pull it out of the fuse box holder ⇒ *Figure 33 -arrow B-*.

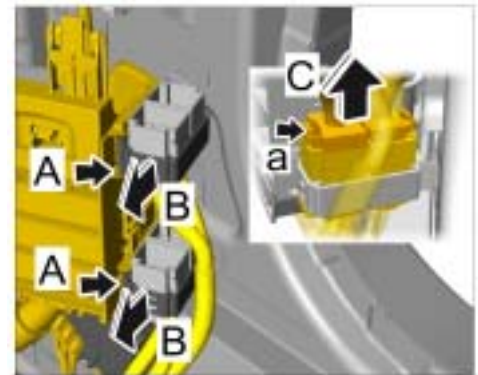


Figure 33

- 5.5.3 Unscrew and remove fastening nut ⇒ *Figure 34 -1-*.
- Remove fuse box holder ⇒ *Figure 34 -arrow-* and set it aside.

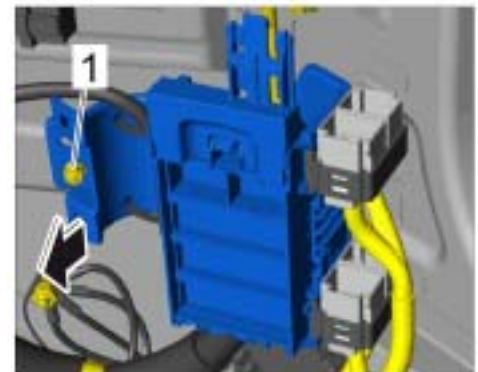


Figure 34

NOTICE

Incorrect line routing

- Risk of damage to lines and hoses
- Malfunction and fault memory entry on control unit

- ⇒ Avoid small bending radii when routing lines.
- ⇒ File down edges and burrs in the routing area or mask them with adhesive tape.
- ⇒ Maintain a sufficient distance from components exposed to high temperatures while driving.

5.6 Install antenna control unit.

5.6.1 Pull fixing clip ⇒ *Figure 36 -arrow-* for the standard wire harness off the threaded bolts.

5.6.2 Position antenna control unit ⇒ *Figure 35 -1-* at the bottom of the A-pillar (threaded bolts) and fit fastening part ⇒ *Figure 35 -2-*.

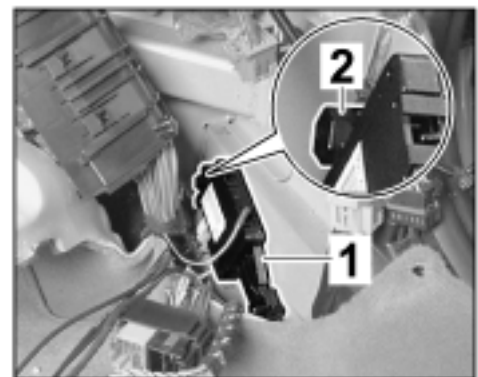


Figure 35

Fit fixing clip ⇒ *Figure 36 -arrow-* for the standard wire harness on the threaded bolts.

5.7 Secure the fuse box holder.

5.7.1 Guide in the fuse box holder.

5.7.2 Tighten fastening nut. **Tightening torque 9.7 Nm (7.5 ftlb.)**

5.8 Route antenna lines and power supply line.

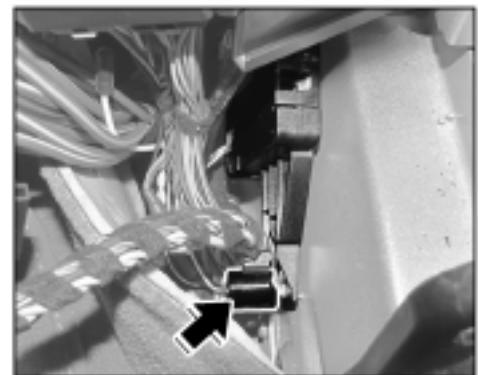


Figure 36

- 5.8.1 Release the fuse box ⇒ *Figure 37* -**arrows**- and pull it forward ⇒ *Figure 37* -**arrow a**- to remove it.

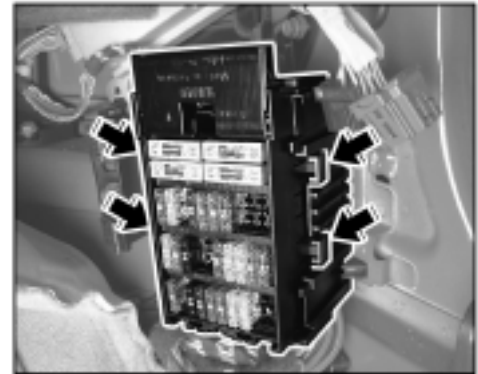


Figure 37

- 5.8.2 Route antenna line (antenna control unit to PCM) and power supply wire harness (antenna control unit) ⇒ *Figure 38-1* to the PCM installation slot.
Antenna control unit → fuse box → wire harness for dashboard (glove compartment) → PCM installation slot



Figure 38

Route antenna line/power supply wire harness ⇒ *Figure 39-1* along wire harness for dashboard (glove compartment).

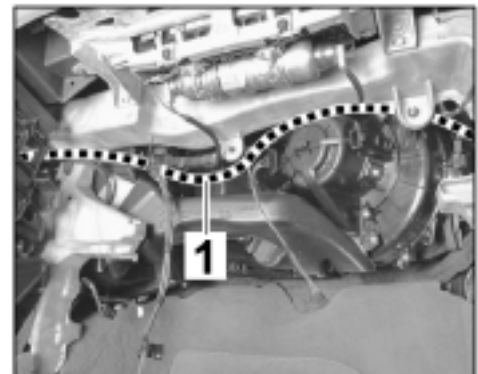


Figure 39

Route antenna line and power supply wire harness to the PCM central connector.

- 1 – Antenna line (antenna control unit to PCM)
- 2 – Power supply line (antenna control unit)

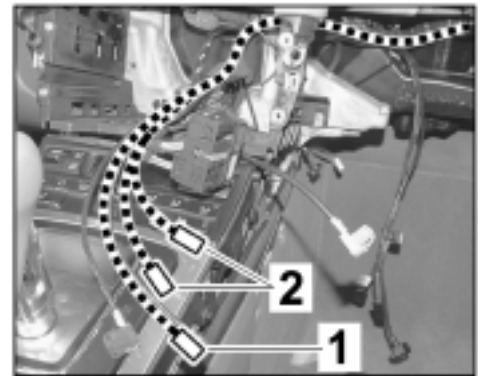


Figure 40

5.8.3 Pull standard antenna lines off the antenna amplifier.

- 1 – FM2 antenna line (gold)
- 2 – AM/FM1 antenna line (silver)

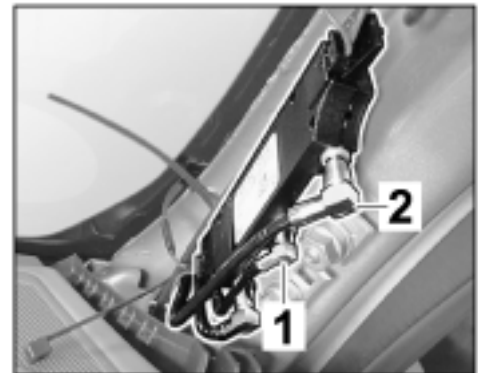


Figure 41

5.8.4 Route antenna lines ⇒ *Figure 42*
-1- (antenna control unit to antenna amplifier).
Antenna control unit → A-pillar → antenna amplifier



Figure 42

Plug in electric plug connection until it engages securely.

- 2 - FM2 connector (gold)
- 3 - AM/FM1 connector (silver)

Wind wrapping tape around the standard antenna lines ⇒ *Figure 43-1*- and secure with a tie-wrap.

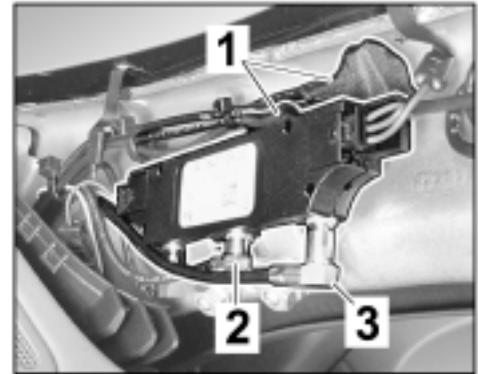


Figure 43

- 5.8.5 Fold antenna lines and power supply line together to form a loop close to the fuse box. Secure the lines to the standard antenna line ⇒ *Figure 44* -**arrow**- with a tie-wrap.



Figure 44

- 5.9 Join WH line from the power supply wire harness for the antenna control unit to the line from chamber A14 ⇒ *Figure 45-1*- of the PCM central connector.

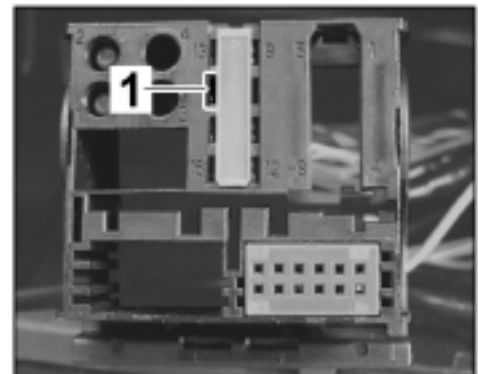


Figure 45

- 5.9.1 Release secondary lock ⇒ *Figure 46-1-* on the PCM central connector ⇒ *Figure 46-2-* (⇒ *Figure 46-arrow A-*) and pull it out ⇒ *Figure 46-arrow B-*.

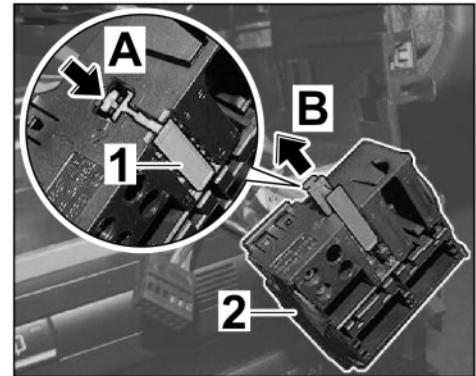


Figure 46

- 5.9.2 Press socket contact of WH line out of chamber A14 of the PCM central connector using press-out tool 89090 and disconnect it.

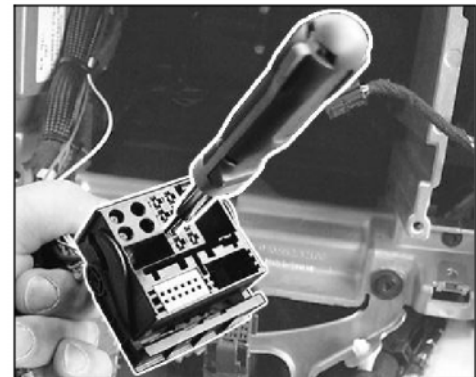


Figure 47

Crimp standard WH line to line ⇒ *Figure 48-1-* (power supply).



Information

Ensure socket contact is seated securely.

- 5.9.3 Insert socket contact ⇒ *Figure 48-arrow-* into chamber A14 of the PCM central connector.

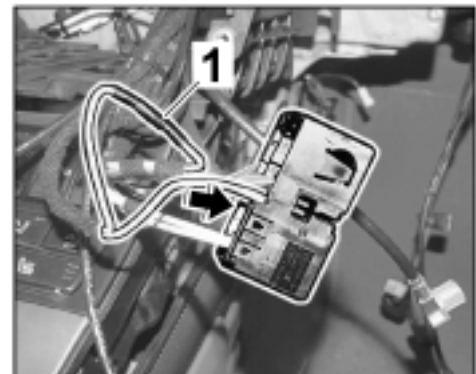


Figure 48

- 5.9.4 Insert secondary lock into the PCM central connector ⇒ *Figure 49* **-arrow-**.

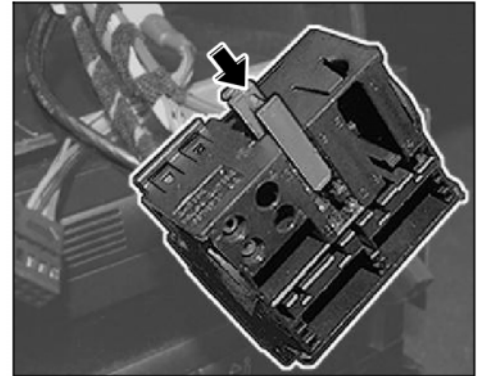


Figure 49

- 5.10 Secure the standard double connector ⇒ *Figure 50-1-* to the PCM wire harness ⇒ *Figure 50-2-* with wrapping tape.

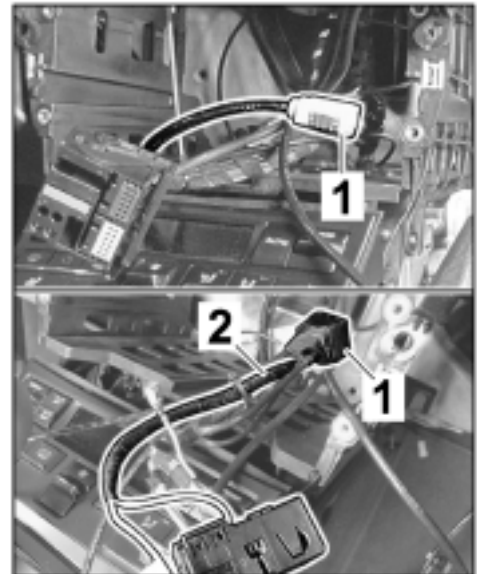


Figure 50

- 5.11 Insert fuse box into the guide on the holder ⇒ *Figure 51 -arrows-* and push it in ⇒ *Figure 51 -arrow a-* until the fuse box engages securely.

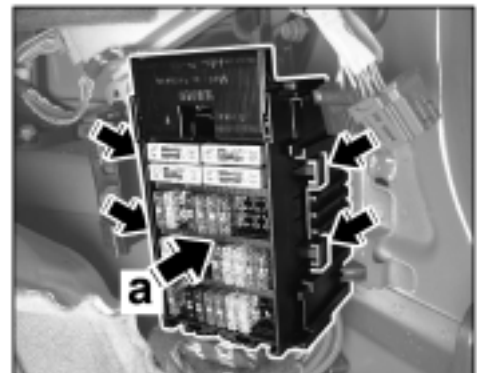


Figure 51

5.12 Connect plug connections for door connection point ⇒ *Figure 52-1-* and plug connections for wire harness for dashboard ⇒ *Figure 52-2-*.

5.12.1 Insert plug connection holder into the guide on the fuse box holder and push it in until the plug connection holder engages securely.

5.12.2 Connect plug connection.

5.13 Connect battery ground strap. ⇒ *Workshop Manual '2X00IN Work instructions after disconnecting the battery'*

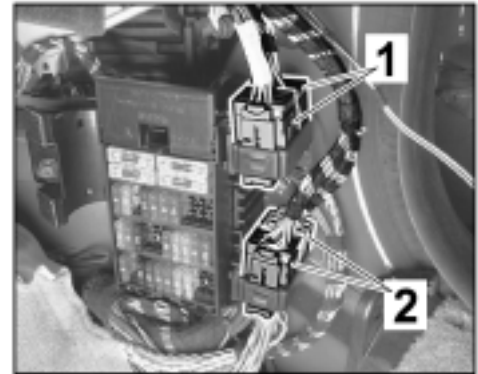


Figure 52

6 Concluding work.

6.1 Screw in fastening screws close to the roof console ⇒ *Figure 53 -arrows-*.

6.2 Install A-pillar trim panel on the right. ⇒ *Workshop Manual '705719 Removing and installing A-pillar trim panel'*

6.3 Install center roof trim panel. ⇒ *Workshop Manual '708319 Removing and installing front roof trim panel'*

6.4 Install right sun visor. ⇒ *Workshop Manual '682319 Removing and installing sun visor'*

6.5 Install sun visor holder at the left and right.

6.6 Install covers over interior rear-view mirror. ⇒ *Workshop Manual '682719 Removing and installing interior rear-view mirror'*

6.7 Install glove compartment. ⇒ *Workshop Manual '681519 Removing and installing glove compartment'*

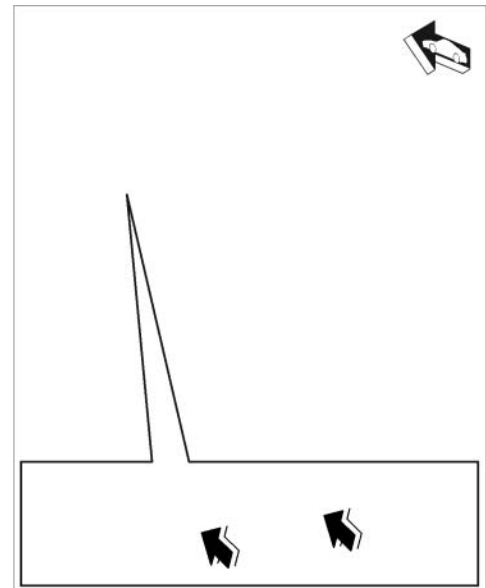


Figure 53



Information

It is more difficult to push the PCM system into the installation slot due to the additional antenna lines.

6.8 Install PCM. ⇒ *Workshop Manual '911019 Removing and installing PCM display and operator control unit'*

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
- ⇒ Prior to disconnecting the control unit, switch off the ignition and remove the ignition key.
- ⇒ Ensure that the power supply is not interrupted during programming.
- ⇒ Connect battery charger/power supply suitable for AGM Type batteries, recommended current rating of 90A fixed voltage 13.5V to 14.5V, tool number VAS 5908.

**Information**

The **9900 - PIWIS Tester III** instructions take precedence since the description may be different with later Tester releases.

The procedure described here has been structured in general terms; different text or additional information may be displayed.

- 7 Code control units.
 - 7.1 **9818 - PIWIS Tester II** must now be connected and ignition switched on.
 - 7.2 Select the required vehicle type. PIWIS Tester II Diagnostics starts.
 - 7.3 Cancel production mode.
 - 7.3.1 **Additional menu** must now be selected by pressing **•F7"** . Press **•F11"** to confirm the question "Create vehicle analysis log (VAL)?".
 - 7.3.2 Select the **Vehicle handover** function and follow the instructions on the Tester. Once the vehicle handover log has been created, press **•F11"** to return to the list of control units.
 - 7.4 Write basic coding from PCM.
 - 7.4.1 Select the **PCM/CDR** control unit and switch to the **Maintenance/repairs** menu.
 - 7.4.2 Select **Control unit replacement**. Press **•F12"** to continue.
 - 7.4.3 Select **Write data** mode. Press **•F12"** to continue. Press **•F8"** to write basic information. Wait until the message **Coding has been written successfully** appears. Press **•F12"** to continue.

- 7.4.4 Press **•F11** to go back. Switch to the **Overview** menu.
- 7.5 Maintenance of vehicle data
- 7.5.1 **Additional menu** must now be selected by pressing **•F7** .
- 7.5.2 Select the **Maintenance of vehicle data** function. Press **•F12** until **M numbers** appears in the Value group column.
- 7.5.3 **Only** for vehicles with CDR 31:
Select coding value **440 - Scan antenna diversity**. When you touch the Installed cell, a tick appears.
- Select coding value, e.g. **615 - Navigation software "North America package"**. When you touch the Installed cell, a tick appears.
- Select coding value **639 - Sport Chrono Package** if necessary. When you touch the Installed cell, the tick disappears.
- Select coding value **640 - Sport Chrono Package Plus** if necessary. When you touch the Installed cell, a tick appears.
- Select coding value **665 - PCM3 Basic module (incl. radio)**. When you touch the Installed cell, a tick appears.
- Select coding value **672 - PCM3 Ext. navigation (off-road)**. When you touch the Installed cell, a tick appears.
- Select coding value **692 - Integrated autochanger (CD)** if necessary. When you touch the Installed cell, the tick disappears.
- Select coding value **693 - Integrated autochanger (DVD)**. When you touch the Installed cell, a tick appears.
- Select coding value **696 - CD radio "Porsche CDR 31" WW**. When you touch the Installed cell, the tick disappears.
- 7.5.4 **Only** for vehicles with audio system CDR Plus:
Select coding value, e.g. **615 - Navigation software "North America package"**. When you touch the Installed cell, a tick appears.
- Select coding value **639 - Sport Chrono Package** if necessary. When you touch the Installed cell, the tick disappears.
- Select coding value **640 - Sport Chrono Package Plus** if necessary. When you touch the Installed cell, a tick appears.
- Select coding value **672 - PCM3 Ext. navigation (off-road)**. When you touch the Installed cell, a tick appears.
- Select coding value **693 - Integrated autochanger (DVD)**. When you touch the Installed cell, a tick appears.
- 7.5.5 Press **•F12** until **•F8** can be activated.

- 7.5.6 Press **•F8** to write values. Wait until the message **Generation of vehicle data is complete** appears.
- 7.5.7 Press **•F12** to switch to Log management.
- Press **•F10** to open the log and check that the vehicle equipment selected earlier is entered.
- 640 - Sport Chrono Package Plus**
 - 615 - Navigation software "North America package", for example**
 - 672 - PCM3 Ext. navigation (off-road)**
 - 693 - Integrated autochanger (DVD)**
- Also for vehicles with CDR 31:
- 440 - Scan antenna diversity**
 - 665 - PCM3 Basic module (incl. radio)**
- Close the log.
- 7.6 Adapt coding.
- 7.6.1 Press **•F11** to return to the list of control units.
- Select all control units by pressing **•Ctrl A**.
- 7.6.2 Switch to the **Codings/adaptations** menu.
- Select **Automatic coding** mode. Press **•F12** to continue.
- Wait until the message **Coding has been completed successfully** appears. Press **•F12** to continue.
- 7.7 Check the chassis number in the PCM control unit.
- 7.7.1 Switch to the **Extended identification** menu. Check the chassis number and change it if necessary.
- 7.8 Enable functions.
- 7.8.1 Switch to the **Overview** menu.
- 7.8.2 Select **PCM/CDR** control unit.
- 7.8.3 Switch to the **Maintenance/repairs** menu. Select the **Function enable** function.
- 7.8.4 Enable the **Navigation software** function.
Enter the enabling code (xxxxxx) and confirm by touching the Status cell.
- 7.8.5 **Only** for vehicles with Sport Chrono (I-no. 640): Enable the **Sport Chrono** function.
Enter the enabling code (xxxxx) and confirm by touching the Status cell.
- 7.8.6 Enable the **UMS (USB connection, iPod)** function.
Enter the enabling code (xxxxx) and confirm by touching the Status cell.

- 7.8.7 **Only** for vehicles with mobile phone preparation (I-no. 619):
Enable **Mobile phone preparation** function.
Enter the enabling code (xxxxx) and confirm by touching the Status cell.
 - 7.8.8 **Only** for vehicles with audio system CDR Plus:
Enable **DAB** function.
Enter the enabling code (xxxxx) and confirm by touching the Status cell.
 - 7.8.9 Enable the **Map data, e.g. North America** function.
Enter the enabling code (xxxxxx) and confirm by touching the Status cell.
 - 7.8.10 Press **•F8** to execute. Wait until the message **Enable was successful** appears.
Press **•F12** to continue.
- 7.9 Read out the fault memories of all systems, work through any existing faults and erase the fault memories. ⇒ *Workshop Manual '033500 Fault memory for on-board diagnosis'*



Information

It can take up to 100 minutes to store the country database (DVD containing navigation database) and the relevant workshop DVD onto the PCM hard drive.

- 8 Save navigation data to the PCM hard drive.
 - 8.1 Switch on ignition and insert the "PCM 3.0/PCM 3.1 Navigation Database XYZ" DVD in the CD/DVD slot.
 - 8.2 Confirm the message: "Avoid interrupting the update process. Interrupting the update can result in malfunctions in the PCM system." in the display.
 - 8.3 Touch the "Yes" field on the touchscreen to confirm the question "Perform update of version (e.g. X.X.X North America)?".
 - 8.4 Confirm the message: "System updated successfully to version XYZ." at the end of the update and take the "PCM 3.0/PCM 3.1 Navigation Database XYZ" DVD out of the CD/DVD slot.
- 9 Switch off ignition and disconnect the battery charger. ⇒ *Workshop Manual '2X00IN Battery trickle charging'*

Working time: 91102341 Installing PCM 3.1 incl. navigation module with standard audio interface + DVD autochanger

Labor time: **350 TU**

Includes: Removing CDR 31, installing PCM 3.1, installing GPS antenna and antenna control unit, installing microphone wire harness and microphones, coding using PIWIS Tester.

Without: Loading Navigation Database DVD on PCM hard drive.

91102345 Installing PCM 3.1 incl. navigation module with standard audio interface + DVD autochanger

Labor time: **210 TU**

Includes: LHD vehicles:
Removing audio system CDR Plus, installing PCM 3.1,
installing GPS antenna, coding using PIWIS Tester.

Without: Loading Navigation Database DVD on PCM hard drive.

Important Notice: Technical Bulletins issued by Porsche Cars North America, Inc. are intended only for use by professional automotive technicians who have attended Porsche service training courses. They are written to inform those technicians of conditions that may occur on some Porsche vehicles, or to provide information that could assist in the proper servicing of a vehicle. Porsche special tools may be necessary in order to perform certain operations identified in these bulletins. Use of tools and procedures other than those Porsche recommends in these bulletins may be detrimental to the safe operation of your vehicle, and may endanger the people working on it. Properly trained Porsche technicians have the equipment, tools, safety instructions, and know-how to do the job properly and safely. Part numbers listed in these bulletins are for reference only. The work procedures updated electronically in the Porsche PIWIS diagnostic and testing device take precedence and, in the event of a discrepancy, the work procedures in the PIWIS Tester are the ones that must be followed.

© 2022 Porsche Cars North America, Inc.