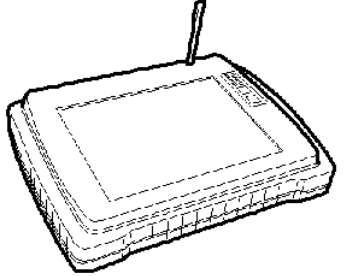The present document was valid at the time of print. A later version may be available online

WM 902519 Removing and installing instrument cluster

Tools

Designation	Type	Number	Description	
PIWIS Tester	Special tool	9718		03 9718　　000 721 971 80

Technical values

Location	Description	Type	Basic value	Tolerance 1	Tolerance 2
Current rating		Nominal value	40 A		
Fastening screw for instrument cluster to dashboard	1	Tightening torque	1.7 ftlb.		

Preliminary work

Preliminary work for instrument cluster

Remove trim for steering column.→ *481319 Removing and installing trim - Removing*
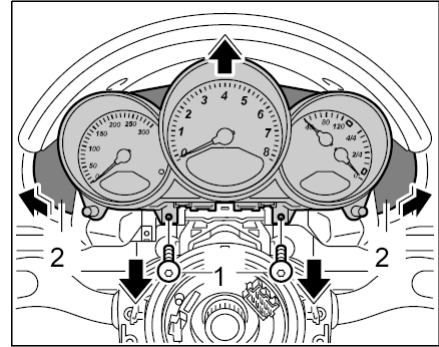
Removing instrument cluster

Removing instrument cluster

> **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 a battery charger with a current rating of at least → **Nominal value: 40 A** to the vehicle battery.

1. If a new instrument cluster should be installed, read out the values from the instrument cluster if possible.
    → *902519 Removing and installing instrument cluster - section on "Programming"*

2. Loosen the steering wheel adjustment, put the steering wheel in the front-most and lowest position and lock the steering wheel adjustment.

3. Unscrew the two fastening screws **-1-** .

Unscrewing fastening screws

4. Pull instrument cluster forward, push side covers **-2-** aside.
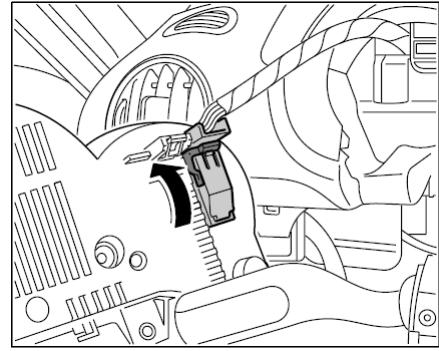
5. Release electric connector **-A-** and unplug it.
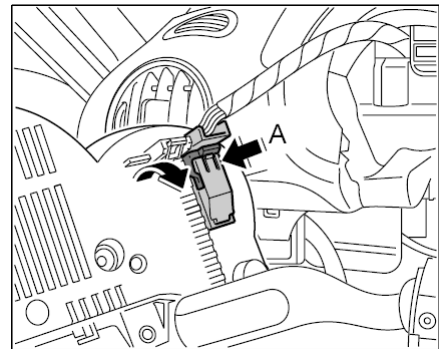
Releasing and unplugging electric connector
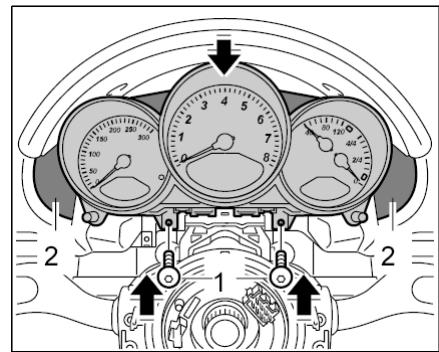
Installing instrument cluster

Installing instrument cluster

1. Position the instrument cluster, connect the electrical plug and lock.

*Plugging in the electrical connector
and locking it*

2. Screw down instrument cluster with both fastening screws **-1-** . → **Tightening torque: 1.7 ftlb.**

Tightening instrument cluster

3. If a new instrument cluster was installed, → *902519 Removing and installing instrument cluster -
    "Programming" section*

Subsequent work

Reworking instrument cluster

Install trim for steering column.→ *481319 Removing and installing trim - Installing*

Programming instrument cluster

Reading and printing values

i   **Information**

Tank calibration is necessary after replacement of the fuel tank, fuel-level sensor or instrument cluster. Calibrate
the fuel-level sensor system - after replacing the instrument cluster - only if the function **Read out values** cannot
be performed.

If the instrument cluster is replaced or exchanged, the instrument cluster must be programmed and coded using
the **PIWIS Tester 9718**. This is done to adapt the instrument cluster to the vehicle and equipment.

If possible, before the instrument cluster is removed and replaced, a read-out of the vehicle data should be obtained using the Porsche System Tester.

During coding, it is essential to guarantee the power supply for the Porsche System Tester. It is essential to connect a battery charger with a current rating of at least 40 A to the vehicle battery.

The Porsche System 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 Porsche System Tester.

1.   Connect the Porsche System Tester to the vehicle and start the System Tester. Switch on ignition. >> Continue.

2.   Select vehicle type >> .

3.   Switch from the vehicle type to the list of control units.

4.   Select **Instrument cluster** and press the >> key.

5.   Select **Control unit replacement** with the cursor keys and press the >> key.

6.   Select **Read out values** (codings) with the cursor keys and press the >> key.

7.   The message Coding read-out complete will appear on the screen of the Porsche System Tester >> .

8.   Switch off ignition and replace instrument cluster. → *902519 Removing and installing instrument cluster - section on "Removing"*

9.   Switch on ignition. After replacement of the control unit, the vehicle data is installed under the menu **Write in data** (see Point 6) > > .

10.   System Tester displays Coding write-in complete . Press the >> key.

11.   Go to the **Special functions** menu and start the **Vehicle handover** also; follow the instructions on the Tester.

12.   **Erase all fault memories**.

13.   Go to the **Instrument clusterCoding** menu again and check the coding in accordance with the vehicle equipment.

14.   Carry out a test drive and read out fault memory again.

Programming the instrument cluster

🛈   **Information**

If the instrument cluster is replaced or exchanged, the instrument cluster must be programmed and coded using the **PIWIS Tester 9718**. This is done to adapt the instrument cluster to the vehicle and equipment.

During coding, it is essential to guarantee the power supply for the Porsche System Tester. It is essential to connect a battery charger with a current rating of at least 40 A to the vehicle battery.

The Porsche System 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 Porsche System Tester.

If the **Control unit replacement** function cannot be performed, proceed according to this variant.

1. Connect the Porsche System Tester to the vehicle and start the System Tester. Switch on ignition. >> Continue.

2. Select the vehicle type and press >> .

3. Switch to the **Special functions** menu and start **Vehicle handover**; follow the instructions on the Tester.

4. Erase **all fault memories**.

5. Perform an automatic control unit search and switch to the **Instrument cluster** menu, then press >> .

6. Select **Control unit replacement** with the cursor keys and press the >> key.

7. Select the **Write in data** menu and press >> .

8. Select the **Coding** menu and press >> .

9. Enter the **Vehicle ID No.** if required and code the other codes according to the vehicle equipment.

10. Switch to the **Special functions** menu and enter **total mileage** in accordance with the specifications on the Tester.

11. Select the type of **oil level measurement**.

12. Disconnect Tester from vehicle.

13. Carry out a test drive and read out the fault memory again.

987110, 987111, 987120, 987121, 987310, 987311, 987320, 987321, 987140, 987141, 987330, 987340, 987360, 987361, 987371, 987381, 987160, 987161, 987720, 987721, 987740, 987741, 987130, 987180, 987181, 987350, 987760, 987761, 987780, 987781

Model year as of 2005
C00, C02, C05, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C32, C33, C34, C35, C36, C37, C38, C39, C45, C46, C98, C99