Preliminary work

Preliminary work for Tiptronic control module (also referred to generally as control unit below)

Remove right front seat. \rightarrow 720119 Removing and installing front seat - chapter on "removing" [997111 997121 997311 997321 997411 997421 997431 997511 997521 997611 997621] \rightarrow 720119 Removing and installing front seat - chapter on "removing" [997110 997120 997310 997320 997410 997420 997430 997510 997520 997610 997620]

Remove rear side trim panel on the right. \rightarrow 707519 Removing and installing rear side trim panel - chapter on "removing" [997310 997311 997320 997321 997610 997611 997620 997621] \rightarrow 707519 Removing and installing rear side trim panel - chapter on "removing" [997110 997111 997120 997121 997410 997411 997420 997421 997430 997431] \rightarrow 707519 21 Removing and installing rear side trim panel - chapter on "removing" [997510 997511 997520 997521]

Remove right scuff plate. → 680519 Removing and installing inner door sill trim - chapter on "removing"

General warning notes

General warning notes for control units



WARNING

Sudden voltage interruption of the power supply to the control module.

- Destruction of the control module.
- → During programming, 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.
- → Prior to disconnecting the control module, switch off the ignition and remove the ignition key.

Removing Tiptronic control unit

Removing Tiptronic control module (also referred to generally as control unit below)



WARNING

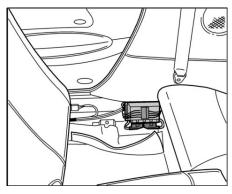
Sudden voltage interruption of the power supply to the control module.

- · Destruction of the control module.
- → During programming, 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.
- → Prior to disconnecting the control module, switch off the ignition and remove the ignition key.



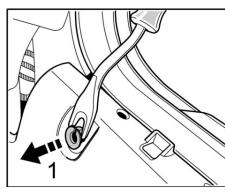
Note

- The control unit is located in the passenger compartment on the right at the B-pillar in front of the rear seat well.
- The ignition key must be removed before starting the assembly work.
- If the Tiptronic control module is replaced, observe the points under programming/coding the control unit. → 373019 25 Removing and installing transmission control module - chapter on "programming", → 373019 C1 Removing and installing transmission control module chapter on "coding"



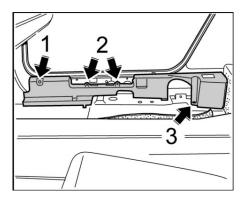
Installation position

- 1. Unscrew lower fastening screw for the seat belt.
- 2. Disengage floor covering at the support and lay it in the vehicle interior.
- 3. Unlock locating peg -1- of the support using the commercially available removal tool **Disassembly tool, universal NR.21**.



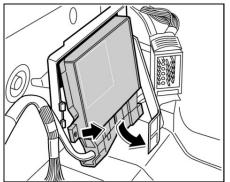
Unlocking locating peg using the removal tool

 Unscrew fastening screws -2- and nuts -3- and carefully pull the support up and out of the retaining points.

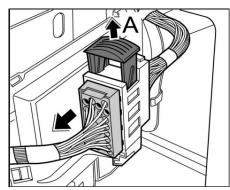


Unscrewing fastening screws

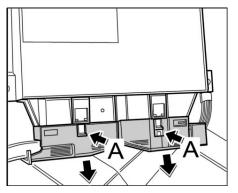
- 5. Unlock and disconnect the electrical plug connection.
- 6. Disengage retaining clip -4-.
- 7. Pull control unit out of the support and pull it down and out at an angle.
- 8. Press locking tabs -A- and disconnect plug connections from the control unit.



Disengaging retaining clip
Installing Tiptronic control unit



Releasing electrical plug connection



Releasing electrical connector

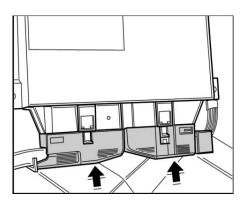
Installing Tiptronic control unit (also referred to generally as control unit below)



WARNING

Sudden voltage interruption of the power supply to the control module.

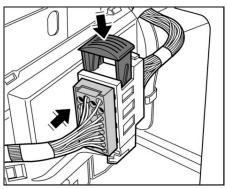
- Destruction of the control module.
- → During programming, it is essential to guarantee the power supply for the Porsche System tester. It is essential to connect a battery charger with a current rating of at least 40 A to the vehicle battery.
- → Prior to disconnecting the control module, switch off the ignition and remove the ignition key.
- Switch ignition off and remove ignition key.
- 2. Connect the electric plug connection.



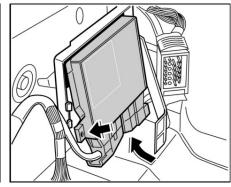
Connecting electrical plug connection

3. Insert control unit into the support and engage retaining clip.

4. Connect and lock the electric plug connection.

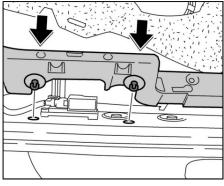


Connecting electric plug connection



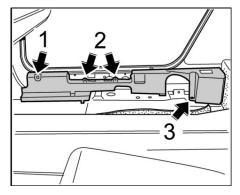
Inserting control unit into support

5. Position the support and engage in lower side member.



Engaging the support

- 6. Push in the locating peg -1- of the support and check it is seated correctly.
- 7. Tighten the fastening nut -3- and fastening screws -2- . \rightarrow Tightening torque: 5.5 ftlb.
- 8. Lay the floor covering over the support and engage.



Fastening the support

Subsequent work

Subsequent work for Tiptronic control module (also referred to generally as control unit below)

If a new control unit has been installed, it must be programmed/coded. \rightarrow 373019 25 Removing and installing transmission control unit - section on "Programming"; \rightarrow 373019 C1 Removing and installing transmission control unit - section on "Coding"

Insert scuff plate. → 680519 Removing and installing inner door sill trim - section on "Installing"

Install rear side trim panel on the right. \rightarrow 707519 Removing and installing rear side trim panel - section on "Installing" [997310 997311 997320 997321 997610 997611 997620 997621] \rightarrow 707519 Removing and installing rear side trim panel - section on "Installing" [997110 997111 997120 997121 997410 997411 997420 997421 997430 997431] \rightarrow 707519 23 Removing and installing rear side trim panel - section on "Installing" [997510 997511 997520 997521]

Install front seat. \rightarrow 720119 Removing and installing front seat - section on "Installing" [997111 997121 997311 997321 997411 997421 997431 997511 997521 997611 997621] \rightarrow 720119 Removing and installing front seat - section on "Installing" [997110 997120 997310 997320 997410 997420 997430 997510 997520 997610 997620]

Programming Tiptronic control unit

Reading out from and writing in to the Tiptronic control unit (also referred to generally as control unit below)



WARNING

Sudden voltage interruption of the power supply to the control module.

- Destruction of the control module.
- → During programming, 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.
- → Prior to disconnecting the control module, switch off the ignition and remove the ignition key.



Note

The **PIWIS tester P 9718** 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 **PIWIS tester P 9718**.

- 1. Connect the Porsche System Tester to the vehicle and start the System Tester. Switch on ignition. >> Continue.
- 2. Select vehicle type using the cursor keys.
- 3. Switch from the vehicle type to the list of control units.
- 4. Select **Tiptronic** with the cursor keys 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 >> .
- 7. The message **Codes successfully read out** appears on the screen of the Porsche System Tester. Press | >> | .
- 8. Switch off ignition and replace control module. → 373019 21 Removing and installing transmission control module chapter on "Removing"
- 9. Switch on ignition. Switch to the **Special functions** menu and perform the **vehicle handover** using the F8 key.
- 10. In the **Special functions** menu, erase **All fault memories** by pressing >> .

In the menu Write in data >> the data read-out are installed.

- 11. System Tester displays Coding write-in complete >> .
- 12. If the control module has been installed in another vehicle it will be necessary, as of tester software 8.0, to **Reset adaption values**:
- 12.1. In the menu **Tiptronic**, select the menu **Reset adaption values** and continue with >>> .
- 12.2. Confirm with F7 for Yes, F8 for No and continue with >> .
- 12.3. Follow the instructions on the tester.
- 13. Exit the menu, carry out a test drive and afterwards read out the fault memory.

Coding Tiptronic control unit

Coding Tiptronic control unit



Note

The procedure described must be applied when a control unit has to be replaced and the tester function **Control unit replacement** cannot be used.



Note

- When the transmission is renewed/replaced, the adaptation values must be reset using the **PIWIS tester P 9718**. It is expected that this function will not be implemented until tester software V8.0 is available:
- Resetting adaptation values:
- In the Tiptronic control module, select menu item Reset adaptation values and continue with >> .
- Confirm with F7 for Yes, F8 for No and continue with >> .
- Follow the instructions on the Tester.
- If a new control unit is installed, it must adapt first. Poor shifting quality can therefore be expected in the adaptation phase.
- After the test drive, let the engine run for 10 minutes at idle speed. This ensures that all adaptation values are stored in the control unit.
- The instructions of the Porsche System Tester have highest priority.
- The procedure listed has been structured generally; changes or additions may occur.



WARNING

Sudden voltage interruption of the power supply to the control module.

· Destruction of the control module.