

Power Transmission Symptom - Manual Upshifting from First to Second Gear not Possible: Re-Programming PDK Control Unit (SY 24/23)

Vehicle Type: **911 Turbo (992) / Turbo S (992)**

Model Year: **As of 2020 up to 2022**

Equipment: **8-speed Porsche Double-Clutch transmission (PDC) M No. G1G**

Concerns: **Porsche Doppelkupplung (PDK)**

Symptom: Customers complain that shifting from first to second gear via the shift paddle on the steering wheel in manual shift mode (M mode) is not effected, or only after the accelerator pedal is released and the shift paddle is activated again. The behavior occurs particularly when driving off with low load and early upshifting. In automatic shifting mode (operating mode D), shifting occurs normally.

Cause: Due to the previous PDC control unit software design, manual shifting from first to second gear may be prevented after the vehicle is driven off if shifting is attempted before the PDC control unit has switched internally from "Drive-off" mode to "Driving" mode due to low load. This occurs when the vehicle is mainly operated in manual shifting mode. This behavior may potentially affect vehicles manufactured before the implementation date of the modified PDC software specified below.

Date of Introduction: **Implementation date for modified PDC software**

Vehicle type	PDC software part number (new)	Software version (new)	Use from
911 Turbo (992)	992927110AA	0580	Week 36/2022 (North America, Brazil) Week 48/2021 (worldwide)
911 Turbo S (992)	992927109AB	0580	Week 36/2022 (North America, Brazil) Week 48/2021 (worldwide)

Remedial Action: In the event of a customer complaint, re-program the PDC control unit using the PIWIS Tester with PIWIS Tester software version **41.700.020** (or higher) installed.

Remedial action available for the following vehicles:

Vehicle type	PDC software part number (previous)	Software version (previous)	Use from
911 Turbo (992)	992927110R	0540	Week 48/2021 (worldwide)
911 Turbo S (992)	992927109R	0540	Week 48/2021 (worldwide)



Information

An **update solution for vehicles manufactured before week 48/2021** which do not have the above-mentioned software versions **is currently being developed** (availability expected mid-2023). Please inform customers with a vehicle for which the required software update is not yet available in the event of a corresponding complaint about this issue. Instruct them either to operate the vehicle in automatic shifting mode (operating mode D) or only switch to manual shifting mode after second gear has been engaged in automatic shifting mode until the software update is available.

Required tools

- Tool:
- **Battery charger**, e.g.: **VAS 5908 - Battery Charger, 90 A**
 - **9900 - PIWIS Tester 3/4** with PIWIS Tester software version **41.700.020** (or higher) installed

Preparatory work

NOTICE

Fault entry in the fault memory or control unit programming aborted, as the case may be, due to under-voltage.

- **Increased current draw during diagnostics or control unit programming can cause a drop in voltage, which can result in one or more fault entries and the abnormal termination of the programming process.**
- ⇒ **Before starting work, connect a suitable battery charger with a current rating of at least 90 A to the jump-start terminals.**

NOTICE

Control unit programming will be aborted if the Wi-Fi connection is unstable.

- **An unstable Wi-Fi connection can interrupt communication between the PIWIS Tester III and the vehicle communication module (VCI). As a result, programming may be aborted.**
- ⇒ **During control unit programming, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.**

NOTICE

Control unit programming will be aborted if the driver's key is not recognized

- If the driver's key is not recognized in the vehicle, programming cannot be started or will be interrupted.
- ⇒ Place the driver's key with the back facing down in front of the lock opening for the center console cover to guarantee a permanent radio link between the vehicle and driver's key.

Work Procedure: 1 Carry out general preliminary work for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming - "Preliminary Work" section*.

Re-programming PDK control unit

Work Procedure: 1 The basic work procedure for programming a control unit is described in the Workshop Manual ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Programming"*.

Specific information on control unit programming in the context of this Technical Information:

Required PIWIS Tester software version:	41.700.020 (or higher)
Type of control unit programming:	Control unit programming using the ' Automatic programming ' function of the PDK control unit. 'PDK' control unit – ' Coding/programming ' menu – ' Automatic programming ' function.
Programming sequence:	Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence. During programming, the Porsche Double-Clutch transmission (PDK) is re-programmed and then automatically re-coded . Do not interrupt programming and coding. Once the control units have been programmed and coded, you will be prompted to switch the ignition off and then back on again after a certain waiting time. Backup documentation of the new software versions is then performed.
Programming time (approx.):	Programming takes up to 15 minutes , depending on equipment.

Data set for the digital engine electronics (DME) programmed as part of this programming:	Software version: 0580 Software part number 911 Turbo (992): 992927110AA Software part number 911 Turbo S (992): 992927109AB
Procedure in the event of error messages appearing during the programming sequence:	⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Troubleshooting"</i> .
Procedure in the event of a termination in the control unit programming:	Repeat control unit programming by restarting programming.

Concluding work

Work Procedure: 1 Carry out general reworking for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and work procedure for control unit programming using the PIWIS Tester - "Reworking" section*.

Invoicing

For documentation and warranty invoicing, enter the labor position and PCSS encryption specified below in the warranty claim:

APOS	Labor operation	I No.
37302599	Programming transmission electronics control unit	

PCSS encryption:

Location (FES5)	37180	Rocker switch
Damage type (SA4)	1127	does not switch

References: ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*

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