

Warning Message "Engine Control System Fault"/Fault Memory Entry for Fuel High Pressure (P008700/P01C800) in DME Control Unit (151/21)

Vehicle Type: **911 Carrera 4 (992) / 911 Carrera 4S (992) / 911 Targa 4 (992) / 911 Targa 4S (992) / 911 Turbo (992)/911 Turbo S (992)**

Model Year: **As of 2020 up to 2021**

Concerns: **Engine electronics (DME) control unit**

Information: The warning '**Engine control system fault**' is displayed in the instrument cluster. The customer complains sporadically about engine problems.

One of the following fault memory entries is stored in the fault memory of the DME control unit:

- **P008700 – Fuel high-pressure, bank 1 – pressure too low' along with fault 000B16**
- **P01C800 – Fuel high-pressure, bank 2 – pressure too low' along with fault 00403E**

This is caused by insufficient fuel delivery from the fuel low-pressure pump. The fault frequently occurs in conjunction with winter fuel.

Action required: In the event of a customer complaint, re-program the DME control unit using PIWIS Tester software version **40.350.050** or a higher version.



Information

The remedial action described here only applies if one or both mentioned fault memory entries occur alone. If this occurs in combination with other fault memory entries, the fault must be located and corrected separately.



Information

The total time required for control unit programming is **approx. 12 minutes**.

Required tools



Information

The new 911 (992) is equipped with either a **lithium starter battery** (M-no. J2A) or an **AGM starter battery** (M-no. JOV, J4K) as standard.

This depends on the following:

- Country version
- Model type
- Vehicle equipment

Lithium starter batteries must only be charged using a **suitable battery charger** that has a current and voltage-controlled charge map.

For further information about the battery chargers to be used, see ⇒ *Workshop Manual '270689 Charging battery/vehicle electrical system'*.

Tool:

- Battery charger with a current rating of **at least 90 A** and, if required, **also with a current and voltage-controlled charge map** for lithium starter batteries, e.g. **VAS 5908 battery charger, 90A**
- **9900 - PIWIS Tester 3** with PIWIS Tester software version **40.350.050** (or higher) installed

Preparatory work



WARNING

Electrically moved side windows and rear spoiler

- Danger of limbs being trapped or severed
- Risk of damage to components

⇒ Do not reach into the danger area.

⇒ Keep third parties away from the danger area.

⇒ Do not move components or tools into the danger area.

⇒ Retract roll-up sun blinds on the rear side windows before starting programming or coding.

NOTICE

Fault entry in the fault memory and control unit programming aborted due to undervoltage.

- Increased current draw during diagnosis 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 getting started, 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 WiFi connection is unstable.

- An unstable Wi-Fi connection can interrupt communication between PIWIS Tester II and the vehicle communication module (VCI). As a result, control unit 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 Perform preliminary work for programming the relevant control units according to ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming - section on "Preliminary work"*.

Re-program DME control unit

NOTICE

Use of a PIWIS Tester software version that is older than the prescribed version

- Measure is ineffective
- ⇒ Always use the prescribed version or a higher version of the PIWIS Tester software for control unit programming and coding.

Work Procedure: 1 The basic procedure for control unit programming 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:	40.350.050 (or higher)
Type of control unit programming:	Control unit programming using the ' Automatic programming ' function of the DME control unit: ' Engine electronics (DME) ' control unit – ' Coding/programming ' menu – ' Automatic programming ' function.

Programming sequence:	<p>Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence.</p> <p>During the programming sequence, the DME control unit is re-programmed and then re-coded automatically.</p> <p>Do not interrupt programming and coding.</p> <p>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.</p> <p>Backup documentation of the new software versions is then performed.</p>
Programming time (approx):	12 minutes
Data record (software part number and software version) programmed for the DME control unit during programming:	<p>see section ⇒ <i>Technical Information '9X00IN Overview of the programmed DME software versions'</i>.</p> <p>The software part number and software version of the programmed data record are based on the specified PIWIS Tester software version. Please note that this may be different in a higher version.</p>
Procedure in the event of abnormal termination of control unit programming:	<ul style="list-style-type: none"> • Switch ignition off and then on again. • Read out and erase the fault memory . ⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"</i> • Repeat control unit programming by restarting programming.
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 "Fault finding"</i> .

Overview of the programmed DME software versions



Information

The software part number and software version of the programmed data record are based on the specified PIWIS Tester software version. Please note that this may be different in a higher version.

Overview: **911 Carrera 4 / 911 Targa 4**

Emission standard	Equipment	Software Part No.	Software version
EU6W (M No. 7GH) (M No. 7MJ) (M No. 7MM)	PDK	992906021BC	0001
C6b (M No. 7CM)	PDK	992906021BD	0001
LEV3/Tier3 (M No. 7CE)	PDK	992906021BB	0001
EU6 AP (M No. 4BI)	PDK	992906021BE	0001

911 Carrera 4S / 911 Targa 4S

Emission standard	Control unit	Software Part No.	Software version
EU6W (M No. 7GH) (M No. 7MJ) (M No. 7MM)	PDK	992906020BS	0001
C6b (M No. 7CM)	PDK	992906020BT	0001
LEV3/Tier3 (M No. 7CE)	PDK	992906020BQ	0001
EU6 AP (M No. 4BI)	PDK	992906020CA	0001
LEV3/Tier3 (M No. 7CE)	Manual transmission	992906020BR	0001
EU6 AP (M No. 4BI)	Manual transmission	992906020CB	0001

911 Turbo

Emission standard	Equipment	Software Part No.	Software version
EU6W (M No. 7GH) (M No. 7MJ) (M No. 7MM)	PDK	992906027T	0001

LEV3/Tier3 (M No. 7CE)	PDK	992906027S	0001
EU6 AP (M No. 4BI)	PDK	992906027R	0001

911 Turbo S

Emission standard	Equipment	Software Part No.	Software version
EU6W (M No. 7GH) (M No. 7MJ) (M No. 7MM)	PDK	992906026T	0001
C6b (M No. 4BD)	PDK	992906026AA	0001
LEV3/Tier3 (M No. 7CE)	PDK	992906026S	0001
EU6 AP (M No. 4BI)	PDK	992906026R	0001

Concluding work

Work Procedure: 1 General subsequent work for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"*.

Invoicing

For documentation and warranty invoicing, enter the labor operations required depending on the required scope of labor as well as the specified PQIS code in the warranty claim:

APOS	Labor operation	I No.
24702540	Programming control units	

PQIS coding:

Location (FES5)	10010	Engine
Damage type (SA4)	1618	dies

References: ⇒ *Workshop Manual '270689 Charging battery/vehicle electrical system'*

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

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