PORSCHE®

Complaint - Warning Messages in the Instrument Cluster/Fault Memory Entries in the DME Control Unit: Re-Programming DME Control Unit (06/21)

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

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

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

Information: New software available for the engine electronics (DME) control unit. The new software will correct the following fault symptoms:

- The yellow warning **'Engine control system fault – Driving permitted'** is displayed together with the white error message **'ACC not available'** in the instrument cluster. The message can appear at speeds above 170 km/h (106 mph) or can occur sporadically when the button on the control stalk for activating ACC is pressed briefly.

- The warning **'Engine control system fault'** is displayed in the instrument cluster. The message appears when the brake pedal is pressed and the convertible top or front axle lift system is activated at the same time. The fault memory entry **'P070300 – Brake light switch – electrical fault'** is stored in the fault memory of the DME control unit.

- The fault memory entries **'P1BFC00 – Radiator shutter 1 (left) – position implausible'** and **'P1BFD00 – Radiator shutter 2 (right) – position implausible'** are stored in the fault memory of the DME control unit. This is caused by different position detection of the radiator shutter control unit and DME control unit.

Action required: In the event of a customer complaint, re-program the DME control unit.

i **Information**

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

Required tools

i **Information**

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'*.

Tools:
- 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. **VAS5908 battery charger, 90A**
- **9900 - PIWIS Tester 3** with PIWIS Tester software version **39.900.015** (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 WiFi connection can interrupt communication between the PIWIS Tester 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 Connect a battery charger with a current rating of **at least 90 A**, e.g. **battery charger, 90A**, to the jump-start terminals in the luggage compartment and switch it on. $\Rightarrow$ *Workshop Manual '270689 Charging battery/vehicle electrical system'*

2 Place remote control (hand-held transmitter) in the emergency start tray.

Emergency start tray

3 Connect **9900 - PIWIS Tester 3** to the vehicle communication module (VCI) via the **USB cable**. Then connect the communication module to the vehicle and switch on the PIWIS Tester.

4 Switch on ignition.

Re-programming DME control unit

| NOTICE |

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

• **Measure is ineffective**

$\Rightarrow$ **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 programming a control unit is described in the Workshop Manual $\Rightarrow$ *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:	**39.900.015** (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:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. During the programming sequence, the **DME control unit** is **re-programmed** and then **re-coded automatically**. **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.):	**12 minutes**
Data record (software part number and software version) programmed for the DME control unit during programming:	See ⇒ *Technical Information '9X00IN Overview of the programmed software versions'*. The software part number and software version of the programmed data record are based on the specified PIWIS Tester software version. Please note that these may have changed in a higher version.
Procedure in the event of abnormal termination of control unit programming:	• Switch ignition off and then on again. • Read out and erase fault memories ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"'*. • Repeat control unit programming by restarting programming.
Procedure in the event of error messages appearing during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Fault finding"'*.

Overview of the programmed software versions

Overview: **911 Carrera**

Exhaust emission standard	Control unit	Software Part No. *	Software version*
LEV3/Tier3 (I-no. 7CA) (I-no. 7CE) (I-no. 7MU)	DME	992906021AQ	0001

911 Carrera S

Exhaust emission standard	Control unit	Software Part No. *	Software version*
LEV3/Tier3 (I-no. 7CA) (I-no. 7CE) (I-no. 7MU)	DME	992906020BJ	0001

* The software part number and software version of the programmed data record are based on the specified PIWIS Tester software version. Please note that these may have changed in a higher version.

Performing radiator shutter adaptation

Work Procedure:

ℹ️ Information

Only necessary if the following fault memory entries were stored:

- **'P1BFC00 – Radiator shutter 1 (left) – position implausible'**

- **'P1BFD00 – Radiator shutter 2 (right) – position implausible'**

1   Select **'Maintenance/repairs'** menu.

2   Select the **'Radiator shutter adaptation'** function so that the corresponding text line turns blue and then press •F8" ('Start') to start radiator shutter adaptation ⇒ *Radiator shutter adaptation*.

3   Follow the instructions on the PIWIS Tester while radiator shutter adaptation is being performed ⇒ *PIWIS instructions*.

   Once adaptation is complete, a tick will appear in the 'Value' field on the PIWIS Tester display.

Radiator shutter adaptation

If radiator shutter adaptation is **not** completed successfully, the adaptation must be **repeated**.

4   End radiator shutter adaptation by pressing •F8" ('Stop').

5   Press •F11" ('Back') to return to the start page of the **'Maintenance/repairs'** menu.

PIWIS instructions

6   Select the **'Overview'** menu to return to the control unit selection screen ⇒ *Control unit selection*.
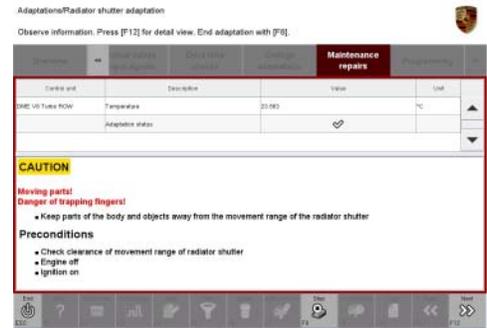
Control unit selection

Concluding work

Work Procedure: 1   Carry out 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 invoicing in the event of a warranty claim, enter the labor operations and PQIS coding specified below in the warranty claim, depending on the required scope of the measures to be performed:

APOS	Labor operation	I No.
24702540	Programming DME control unit	
24702541	Programming DME control unit/Radiator shutter adaptation	

PQIS coding:

Location (FES5)	24700	DME control unit
Damage type (SA4)	1200	Incorrect/missing part

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

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