

**Message “Engine Control Fault” in Instrument Cluster/Fault Memory Entries for Fuel Injectors in DME Control Unit (201/23)**

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

Model Year: **As of 2020 up to 2023**

Concerns: **DME control unit**

Cause: **The message “Engine control system fault” is displayed in the instrument cluster.**  
Two or more of the following fault memory entries are stored in the DME control unit fault memory:

- P020100 - Cylinder 1 fuel injector, electrical fault (009C42)
- P020200 - Cylinder 2 fuel injector, electrical fault (009C43)
- P020300 - Cylinder 3 fuel injector, electrical fault (009C45)
- P020400 - Cylinder 4 fuel injector, electrical fault (009C47)
- P020500 - Cylinder 5 fuel injector, electrical fault (009C4A)
- P020600 - Cylinder 6 fuel injector, electrical fault (009C4B)



**Information**

It is essential to ensure that the fault memory entries always only affect **two fuel injectors opposite to each other**.

- Cylinder 1 **and** cylinder 4
- Cylinder 2 **and** cylinder 5
- Cylinder 3 **and** cylinder 6

If this is **not** the case, this TI cannot be used as a remedy for the complaint; the cause of the error is not corrected by this programming.

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



**Information**

The minimum programming requirement is the PIWIS Tester software release: **42.300.050**



### Information

In the event that the software update does not provide a remedy, proceed as follows:

- Check the affected injector line for chafing points and, if there is damage, repair the wire harness.
- If the injector wire harness is normal, perform fault diagnosis on the DME control unit (DME control unit may have an internal defect).

### Required tools

- Tools:
- **P90999 - PIWIS Tester 4**
  - Battery charger with a current rating of **at least 90 A**, e.g., **VAS 5908 90-A battery charger**. For further information about the battery chargers to be used, see the corresponding Workshop Manual. ⇒ *Workshop Manual '270689 Charging vehicle electrical system and battery'*

### Re-programming DME control unit

- 1 The basic work 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 as part of this Technical Information:

Required PIWIS Tester software release:	<b>42.300.050</b> (or higher)
Type of control unit programming:	Control unit programming using the <b>"Automatic programming"</b> function of the DME control unit. <b>"Motor electronics (DME)"</b> control unit – <b>"Coding/programming"</b> menu – <b>"Automatic programming"</b> function.
Programming sequence:	Read and follow the <b>information and instructions on the PIWIS Tester</b> during the guided programming sequence. During the programming sequence, the <b>DME control unit is re-programmed</b> and then <b>automatically re-coded</b> . <b>Do not interrupt programming and coding.</b> 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 <b>15 minutes</b> , depending on equipment.
Data set for the motor electronics (DME) programmed as part of this programming:	See section: ⇒ <i>Technical Information '9X00IN Overview of programmed DME data records'</i> .
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'</i> .
Procedure in the event of a termination in the control unit programming:	Repeat control unit programming by restarting programming.

- 2 Read out and delete all control unit fault memories.
  - 2.1 Press •F7" in the control unit selection screen ("Overview" menu) to call up the Additional menu.
  - 2.2 Select the "Read all error memories and delete if necessary" and press •F12" ('Next') to confirm.
- 3 Exit the diagnostic application. Switch off ignition. Disconnect Tester from vehicle.
- 4 Switch off and disconnect the battery charger.



**Information**

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- Check the affected injector line for chafing points and, if there is damage, repair the wire harness.
- If the injector wire harness is normal, perform fault diagnosis on the DME control unit (DME control unit may have an internal defect).

**Overview of programmed DME data records**



**Information**

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

Overview: **911 Carrera (992) / 911 Carrera 4 (992) / 911 Carrera T (992) / 911 Targa 4 (992)**

- with Porsche Doppelkupplung (PDK)

Exhaust emission standard	Model year				Porsche part number (software)	Software release
	2020 (L)	2021 (M)	2022 (N)	2023 (P)		
ULEV 70 gr. Cat	-	X	X	X	992906021CA	0001

**911 Carrera T (992)**

- with manual transmission

Exhaust emission standard	Model year				Porsche part number (software)	Software release
	2020 (L)	2021 (M)	2022 (N)	2023 (P)		
ULEV 70 gr. Cat	-	-	-	X	992906021CE	0001

**911 Carrera S (992) / 911 Carrera 4S (992) / 911 Targa 4S (992)**

- with Porsche Doppelkupplung (PDK)

Exhaust emission standard	Model year				Porsche part number (software)	Software release
	2020 (L)	2021 (M)	2022 (N)	2023 (P)		
ULEV 70 gr. Cat	-	X	X	X	992906020CM	0001

**911 Carrera S (992) / 911 Carrera 4S (992) / 911 Targa 4S (992)**

- with manual transmission

Exhaust emission standard	Model year				Porsche part number (software)	Software release
	2020 (L)	2021 (M)	2022 (N)	2023 (P)		
ULEV 70 gr. Cat	-	X	X	X	992906020CQ	0001

**911 Carrera GTS (992) / 911 Carrera 4 GTS (992) / 911 Targa 4 GTS (992)**

- with Porsche Doppelkupplung (PDK)

Exhaust emission standard	Model year				Porsche part number (software)	Software release
	2020 (L)	2021 (M)	2022 (N)	2023 (P)		
ULEV 70	-	-	X	X	992906022AJ	0001

**911 Carrera GTS (992) / 911 Carrera 4 GTS (992) / 911 Targa 4 GTS (992)**

- with manual transmission

Exhaust emission standard	Model year				Porsche part number (software)	Software release
	2020 (L)	2021 (M)	2022 (N)	2023 (P)		
ULEV 70	-	-	X	X	992906022AM	0001

**911 Dakar (992)**

- with Porsche Doppelkupplung (PDK)

Exhaust emission standard	Model year				Porsche part number (software)	Software release
	2020 (L)	2021 (M)	2022 (N)	2023 (P)		
ULEV 70	-	-	-	X	992906023J	0001

**911 Turbo (992)**

- with Porsche Doppelkupplung (PDK)

Exhaust emission standard	Model year				Porsche part number (software)	Software release
	2020 (L)	2021 (M)	2022 (N)	2023 (P)		
ULEV 70	-	X	X	X	992906027AF	0001

**911 Turbo S (992)**

- with Porsche Doppelkupplung (PDK)

Exhaust emission standard	Model year				Porsche part number (software)	Software release
	2020 (L)	2021 (M)	2022 (N)	2023 (P)		
ULEV 70	-	X	X	X	992906026AJ	0001

**Labor position and PCSS encryption**

Labor position:

APOS	Labor operation	I No.
24702590	Programming DME control unit	

PCSS encryption:

Location (FES5)	24700	DME control unit
Damage type (SA4)	1614	Function not as specified

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