

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

Vehicle Type: **718 Cayman GTS 4.0 (982) / 718 Boxster GTS 4.0 (982) / 718 Boxster 25 years (982) / 718 Spyder (982) / 718 Cayman GT4 (982)**

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:	42.300.050 (or higher)
Type of control unit programming:	Control unit programming using the "Automatic programming" function of the DME control unit. "Motor 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 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 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

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).

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: **718 Cayman GTS 4.0 / 718 Boxster GTS 4.0 / 718 Boxster 25 years**

- 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	982906034AS	0001

718 Cayman GTS 4.0 / 718 Boxster GTS 4.0 / 718 Boxster 25 years

- 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	X	982906034BB	0001

718 Cayman GT4 / 718 Spyder

- 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	982906034BE	0001

718 Cayman GT4 / 718 Spyder

- 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	X	982906034BH	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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