982 – Radiator Fans Intermittently Inoperative

Vehicles Affected

Models	Model Year	Model Type	VIN Range	Vehicle-Specific Equipment
718	2022	Cayman GTS 4.0 (982140)	N/A	N/A
718	2022	Boxster GTS 4.0 (982340)	N/A	N/A
718	2022	Boxster 25 Years (982370)	N/A	N/A
718	2022	Spyder (982510)	N/A	N/A
718	2022	Cayman GT4 (982810)	N/A	N/A

Revision History

Revision	Release Date	Changes
0	March 7, 2022	Original document
1	August 18, 2022	Update of content

Condition

The customer complains of a check engine light, or a lack of cold Air Conditioning, or possibly both. The workshop finds the following fault codes stored in the DME:

- P2D8900 – Radiator fan 1 (left), power supply
- P2D8C00 – Radiator fan 2 (right), power supply

The fault codes may be stored simultaneously.

Technical Background

Under certain conditions, the presence of these fault codes is a known software issue that Porsche are actively investigating.

It is possible that the aforementioned fault codes set by rapidly starting the engine upon entering the vehicle (i.e., quick switch from key off --> engine on).

Service Information

If a check engine light is present or intermittently present, please perform the following steps to determine the root cause:

1. Connect the vehicle to a suitable battery charger and complete a VAL.
2. Open the VAL in PCSS and verify that no other faults are present in the DME.
3. Open the detailed fault information for the above mentioned fault codes.
4. Check the three indicated values in Figure 1 below:

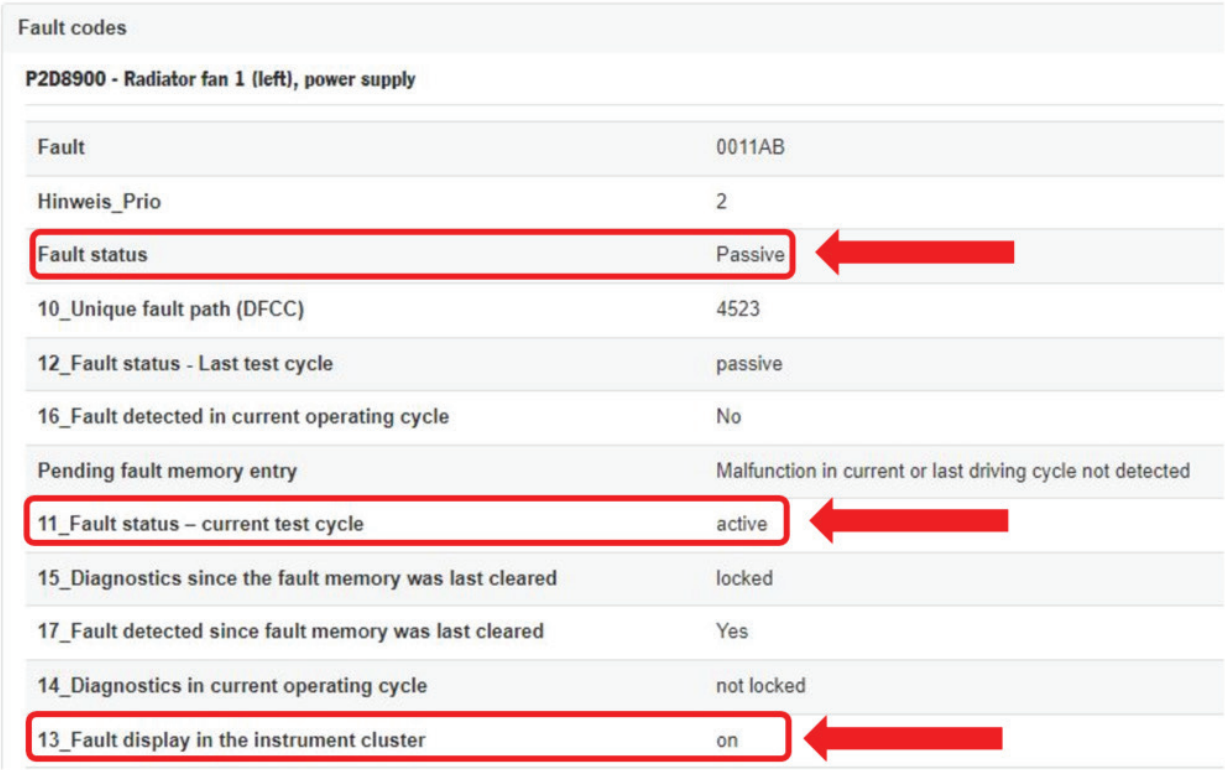

Figure 1 - Detailed Fault Information

- Is **Fault Status** active or passive?
  - Active: The radiator fan(s) may be faulty. Please skip to Step 6 and verify via checks for electrical faults.
  - Passive: Continue to next check

- Is **11_Fault status – current test cycle** active or passive?
  - Active: Continue to next check
  - Passive: The radiator fan(s) are not the cause of the check engine light. Please continue with other diagnosis.

- Is **13_Fault display in the instrument cluster** on or off?
  - On: The faults were detected in two consecutive drive cycles and are the cause of the check engine light. This condition is included in the software bug being investigated.
  - Off: The faults were not detected in the last two consecutive drive cycles, but were detected at least once in previous drive cycles. If this value remains "off" but the fault occurrence is greater than 1, these faults may have previously caused a check engine light. Please investigate all other faults before determining these faults to be the cause of a previous check engine light.

Additionally, the following steps may be performed to ensure proper operation of the radiator fans and Air Conditioning system:

5. Please verify there are no mechanical faults with the radiator fans.
   - Check for dirt, rocks, or other foreign objects that could block the operation of the radiator fans.
   - Operate the radiator fans via the Drive links functions in the PIWIS Tester.
     - *Engine electronics (DME) → Drive links checks → Drive links → Radiator fan 1 (left)/Radiator fan 2 (right)*
6. Please verify there are no electrical faults with the radiator fans.

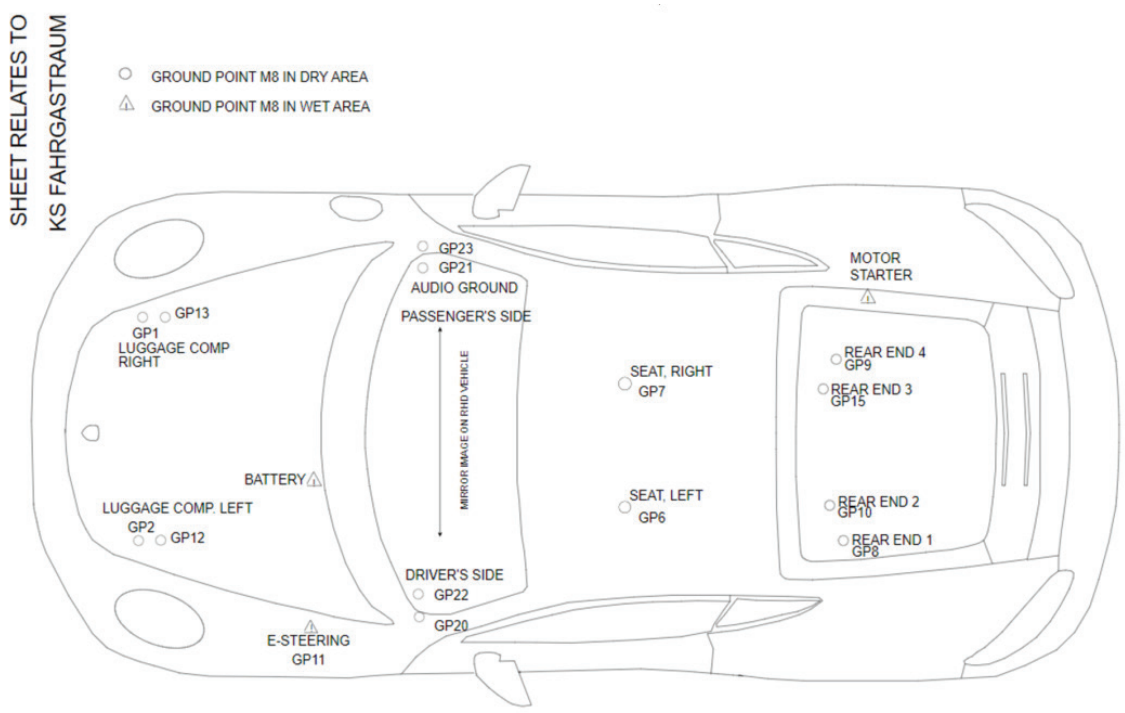

Figure 2 - Ground Point Locations

- Visually inspect and clean ground point 20 (driver's side lower kick panel area). This is the ground point for terminal 85 at the fan relays.
- Verify proper power and ground supply to the radiator fans.
- Inspect the fuse for the radiator fan relays in the driver's side fuse box (row D, fuse 6).
- Verify proper tension in the PWM signal wire (Pin 3 at fan connectors).

7. Please verify the proper amount of refrigerant exists in the A/C system and inspect for leaks.

8. If no electrical or mechanical faults are found with the radiator fans, please ensure your PIWIS Tester is updated to version 41.100.030 or later and perform automatic programming and coding of the DME.

NOTE: Due to the current semiconductor shortage, please do not replace the radiator fans, the DME, the A/C control unit, or the A/C switch panel unless the parts are faulty.

Warranty

As always, be sure to document the repair completely in PCSS.

For this repair, please code the "cause" as follows:

Cause location:	19080	Electric fan
Cause symptom:	1111	Adjustment fault

Use the following troubleshooting labor operation:

03350053	On board diagnostic (Composite) VAL
24702550	DME control unit program

Additional labor operations may be claimed **only as needed** for replacing parts or for accessing ground points, fuses, and connectors during diagnosis.

Search Items

Cayman, Boxster, GTS 4.0, radiator, fans, GT4, Spyder, 718, air conditioning, A/C, 25 year edition

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