

Tips & Technology

For Bosch Partners

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Tips for Diagnostics and Repair



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Experience-based repair

Experience-based repair (EBR) refers to workshop cases that occur multiple times in real life. The so-called “info units” are intended to make it easier for the workshop to locate faults. Cases that do not exhibit a fault code are most suitable for the creation of these info units. Cases with a fault code may also be covered by the SIS instructions, but only if the fault code has nothing to do with the defective components. An EBR gives to a certain degree an indication as to what is defective, but it does not necessarily give an indication for repairs. We would like to start today with a few examples from the experience-based repair and continue to make repair cases and their solutions available to you in the coming months.

Case 1: Engine

Complaints:

- The engine turns off while driving.
- The engine does not start.

Framework conditions:

- Possible fault memory entry in the engine control unit.
 - P3043 electric fuel pump - mechanical error
- The component A18.4 is used in the following design:
 - Control device software number (A): 06
 - Part number (B): 1K0 906 093 F
- Or:
 - Control device software number (A): 06
 - Part number (B): 1T0 906 093 F
- The electric fuel pump and associated cables are technically in proper condition.
- The electric fuel pump is integrated in the fuel tank installation unit.



Possible causes:

- The complaint stems from a software-related malfunction of the electric fuel pump control device.

Remedy:

- Check the electric fuel pump control device and replace if necessary.
- Replace the electric fuel pump control device with a version having the same part number, but the control device software number should be 07.

Case 2: Throttle response

Complaints:

- The engine has poor throttle response.

Framework conditions:

- No faults that are relevant for the objection are stored in the fault memory.
- The system voltage supply is technically in proper condition.
- The suction system is technically in proper condition.

Possible causes:

- Internal fault in the distributor injection pump.
- The injection start control of the distributor injection pump is defective or not available.

Remedy:

- Check the distributor injection pump and repair, if necessary.

Case 3: Oil

Complaints:

- The indication "Oil Low" appears correspondingly in the instrument cluster
- The engine oil indicator light illuminates

Framework conditions:

- No faults that are relevant for the objection are stored in the fault memory.
- The engine oil level is in order.
- The electrical lines of the engine oil level indicator are in order.

Possible causes:

- As a result of silicon residue in the plug connection of the engine oil level sensor, the instrument cluster receives wrong values about the fill level of the engine oil.

Remedy:

- Check the plug connection of the engine oil level sensor and clean, if necessary.
- Spray the plug connection of the engine oil level sensor with contact spray.
- Seal the plug connection of the engine oil level sensor with grease.