

GENERIC · POWERTRAIN

P058D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P058D

Battery Monitor Module Voltage Monitoring Performance

P058D indicates that the battery monitor module, which is often part of the battery current sensor or battery management system, has detected a voltage monitoring performance fault. The module compares its internal voltage readings with expected values and sets this code when the correlation falls outside the manufacturer's acceptable range, pointing to a problem in the voltage sensing circuit or the module itself.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Illumination of the check engine light or battery warning light, often with no other noticeable symptoms.
- Inconsistent or erratic operation of the vehicle's electrical accessories, such as flickering lights or radio resets.
- A battery that repeatedly discharges or requires frequent jump starts despite being in good condition.
- Incorrect or fluctuating readings on the instrument cluster's voltmeter or battery gauge.
- Possible activation of a limp mode or reduced power mode in some vehicles to protect the electrical system.

Common causes, most likely first

- 1 Faulty battery monitor module or battery current sensor, often due to internal electronic failure.
- 2 Corroded, loose, or damaged wiring and connectors in the voltage sensing circuit between the module and the battery.
- 3 Poor battery terminal connections or a failing battery that cannot maintain stable voltage under load.
- 4 A defective alternator or voltage regulator causing unstable charging system voltage.
- 5 Software or calibration issues in the battery monitor module requiring a reset or reprogramming.
- 6 Water intrusion or physical damage to the module or its harness, leading to intermittent voltage signals.



How to diagnose and fix it

- 1 Perform a visual inspection of the battery, terminals, and the battery monitor module wiring for obvious damage, corrosion, or loose connections.
- 2 Use a digital multimeter to measure battery voltage at rest and while cranking, and compare with the module's reported voltage via a scan tool to verify the discrepancy.
- 3 Check the charging system output by measuring voltage at the battery with the engine running; look for stable voltage within the manufacturer's specification.
- 4 Inspect and test the voltage sensing circuit wiring for continuity, shorts, and resistance, repairing any damaged sections.
- 5 If the wiring and battery are good, test the battery monitor module according to the service information, which may involve checking reference voltage and signal outputs.
- 6 Reprogram or recalibrate the battery monitor module if the manufacturer has released updated software or if a reset procedure is required after battery replacement.
- 7 Replace the battery monitor module or battery current sensor if it is confirmed faulty, and clear the code to verify the repair.

Voltage monitoring faults often misdiagnosed

- A weak or aging battery is a frequent culprit behind P058D, as voltage fluctuations during cranking or under load can trigger the monitoring performance fault even when the module itself is healthy.
- Corroded ground connections, especially those shared with the battery monitor module, can cause voltage drop that the module interprets as a performance failure, so grounds should be cleaned and tightened before condemning parts.
- Some vehicles require a battery monitor module reset or relearn procedure after battery replacement; skipping this step can leave the code stored even though the hardware is fine.
- The code can be set by a failing alternator that produces excessive AC ripple or unstable voltage, which the module detects as a monitoring performance issue rather than a charging fault.
- In rare cases, a software glitch in the module may cause false P058D setting, and a simple software update or module reprogramming can resolve it without parts replacement.

Can I keep driving with P058D?

You can generally continue driving with P058D, but avoid long trips or heavy electrical loads until the fault is diagnosed, as a failing battery monitor module or charging system issue could lead to a dead battery or electrical system problems. If the battery warning light is on or you notice electrical symptoms, have the vehicle checked promptly.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Battery load tester
- Service information for voltage and resistance specifications
- Basic hand tools for wiring and connector inspection

Reading P058D

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
5	Vehicle speed, idle control and auxiliary inputs.
8D	The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P058A** Battery Monitor Module Performance · **P058B** Battery Monitor Module Current Monitoring Performance · **P058C** Battery Monitor Module Temperature Monitoring Performance

See it working

Watch the animated explainer [How the EVAP System Works: Fuel Vapour and Leak Test](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p058d/>

