



P058C

Battery Monitor Module Temperature Monitoring Performance

P058C indicates that the battery monitor module has detected a performance fault in its internal temperature monitoring circuit, meaning the module cannot reliably report its own operating temperature. The control module compares temperature sensor readings against expected values and sets this code when the signal is out of range, erratic, or implausible for the current operating conditions.

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 battery warning light or service vehicle soon message on the dashboard
- Often no symptoms besides the warning light, with the vehicle starting and running normally
- Inaccurate or missing battery state-of-charge information on vehicles with a battery monitoring display
- Intermittent electrical gremlins such as flickering interior lights or unexplained module communication faults
- Reduced or disabled automatic start-stop function on vehicles equipped with that feature
- Possible charging system warning if the battery monitor module shares data with the charging control strategy

Common causes, most likely first

- 1 Faulty temperature sensor inside the battery monitor module
- 2 Damaged or corroded wiring harness or connector at the battery monitor module
- 3 Poor ground connection for the battery monitor module causing reference voltage drift
- 4 Internal failure of the battery monitor module electronics
- 5 Software or calibration issue in the battery monitor module requiring reprogramming
- 6 Extreme underhood or battery compartment temperatures exceeding the sensor's valid range
- 7 Voltage supply issues to the module from a weak battery or charging system fault



How to diagnose and fix it

- 1 Verify battery state of charge and charging system output, as low voltage can corrupt module temperature readings
- 2 Inspect the battery monitor module connector and wiring for corrosion, chafing, or loose pins
- 3 Check module ground connections for cleanliness and tightness using a voltage drop test
- 4 Retrieve freeze-frame data and compare temperature readings to ambient and battery temperature with a scan tool
- 5 Perform a module self-test or bidirectional temperature sensor test if the scan tool supports it
- 6 Reprogram or update the battery monitor module software per manufacturer service information
- 7 Replace the battery monitor module if sensor or internal circuit faults are confirmed

What the battery monitor module really watches

- The temperature sensor is often integrated into the battery monitor module and cannot be replaced separately, so a confirmed sensor fault usually means module replacement.
A weak or failing battery can cause implausible temperature readings because the module's reference voltage becomes unstable during cranking and charging events.
- This code can be set by a brief voltage spike during jump-starting or battery replacement if the module is not properly reinitialized afterward.
- Technicians sometimes replace the module only to find the real fault is a corroded ground strap that also affects other body modules.
The battery monitor module often shares a communication bus with the charging system, so a P058C may appear alongside communication or voltage codes that point to the root cause.

Can I keep driving with P058C?

The vehicle is generally safe to drive with this code because it does not directly affect engine operation, but avoid relying on battery monitoring features and address the fault promptly to prevent misdiagnosis of charging system issues. If the battery warning light is accompanied by dimming lights or slow cranking, have the charging system checked before continuing to drive.

Tools that help

- OBD-II scan tool with live data and bidirectional control capability
- Digital multimeter with voltage drop and temperature probe functions
- Manufacturer service information for wiring diagrams and module reset procedures
- Socket and ratchet set for battery terminal and module fastener access
- Contact cleaner and dielectric grease for connector service



Reading P058C

- 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.
- 8C** The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P058D** Battery Monitor Module Voltage Monitoring Performance · **P0AFA** Hybrid/EV Battery System Voltage Low · **U0111** Lost Communication With Battery Energy Control Module 'A'

See it working

Watch the animated explainer [How a Rotary Engine Works: Wankel in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p058c/>

