

GENERIC · POWERTRAIN

P058E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P058E

Battery Monitor Module Temperature Too High

P058E indicates that the battery monitor module has reported an internal temperature that exceeds its safe operating limit, which the control module interprets as an overheating condition. The computer detects this through a temperature sensor or calculated value inside the battery monitoring system, and it sets the code to protect the module and the battery from heat-related damage.

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 a generic check engine light on the dashboard.
- Often no symptoms besides the warning light, especially in cool weather or during short trips.
- Reduced or disabled battery charging functions, such as start-stop or regenerative braking, if the module limits operation to cool down.
- In rare cases, a no-start condition if the battery monitor module shuts down and prevents proper charging system communication.
- Intermittent electrical glitches or voltage fluctuations noticed as dimming lights or slow cranking.
- A burning or hot plastic smell near the battery or module location in severe overheating cases.

Common causes, most likely first

- 1 A faulty battery monitor module temperature sensor that reports an artificially high reading.
- 2 Poor electrical connection or corrosion at the battery monitor module connector, causing resistance and heat buildup.
- 3 A battery that is failing or has a high internal resistance, generating excess heat that the module senses.
- 4 Overcharging from a faulty alternator or voltage regulator, which heats the battery and surrounding components.
- 5 A battery monitor module that is internally damaged or has a software calibration error causing false temperature readings.
- 6 Blocked or restricted airflow around the battery monitor module, often due to debris or aftermarket covers.
- 7 High ambient temperatures combined with heavy electrical load, pushing the module beyond its designed thermal limit.



How to diagnose and fix it

- 1 Inspect the battery monitor module and its wiring for signs of heat damage, corrosion, or loose connections, and clean or repair as needed.
- 2 Check the battery state of health and charging voltage with a digital multimeter or battery tester to rule out a failing battery or overcharging alternator.
- 3 Use a scan tool to read live temperature data from the battery monitor module and compare it with actual ambient and battery temperatures to verify the sensor reading.
- 4 Test the module's temperature sensor circuit for resistance and continuity according to the manufacturer's specifications, replacing the sensor if it is out of range.
- 5 Ensure the module is properly mounted and that airflow around it is not obstructed by debris or modifications.
- 6 If all external factors are ruled out, replace the battery monitor module and perform any required relearn or initialization procedure with a scan tool.

Why battery monitor modules overheat

- A common misdiagnosis is replacing the battery monitor module when the real problem is a failing battery that heats up under load, so always load-test the battery first.
- The code can be set by a poor ground connection at the module, which creates resistance and local heat that the temperature sensor picks up.
- Some vehicles use the battery monitor module to calculate temperature from voltage and current rather than a dedicated sensor, so charging system faults can mimic a module overheating.
- After replacing the module, many vehicles require a battery registration or adaptation reset, and skipping this step can cause the new module to set the same code.
- High underhood temperatures from a missing heat shield or a modified exhaust can cause this code even when the electrical system is healthy.

Can I keep driving with P058E?

It is generally safe to drive a short distance to a repair shop, but avoid heavy electrical loads and long trips until the fault is diagnosed. If the battery warning light is on or you notice electrical problems, stop driving and have the vehicle towed to prevent damage to the battery and charging system.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Battery load tester
- Infrared thermometer
- Basic hand tools for connector and module access



Reading P058E

- 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.
- 8E** 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

See it working

Watch the animated explainer [How Push-Button Start Works: Keyless Ignition](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p058e/>

