

GENERIC · POWERTRAIN

P06E8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P06E8

Sensor Power Supply C Circuit High

P06E8 indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the power supply circuit for a specific sensor, designated as circuit C. The PCM monitors the voltage feed to this sensor and sets the code when the signal exceeds the expected range, typically because the circuit is shorted to voltage or the sensor's internal resistance has changed.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Computer and output circuits

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Intermittent or erratic readings from the affected sensor, leading to poor engine performance
- Reduced fuel economy or rough running if the sensor is critical to air/fuel metering
- Possible limp mode or reduced power if the fault affects a sensor used for load calculation
- Other sensor-related codes stored simultaneously if the power supply is shared

Common causes, most likely first

- 1 Short to voltage on the sensor power supply circuit, such as a chafed wire contacting a 12-volt source
- 2 Faulty sensor with an internal short that pulls the supply voltage high
- 3 Corroded or damaged connector pins causing intermittent high resistance or voltage spikes
- 4 PCM internal fault driving the supply voltage above specification
- 5 Aftermarket accessories or improper wiring repairs that backfeed voltage into the circuit

How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes that might indicate a shared power supply issue
- 2 Inspect the sensor connector and harness for signs of corrosion, chafing, or loose pins, and repair as needed
- 3 Measure the voltage on the sensor power supply circuit with a digital multimeter (DMM) with the key on and engine off, comparing to the manufacturer's specification
- 4 Disconnect the sensor and recheck the supply voltage to determine if the sensor or the wiring is causing the high voltage
- 5 If voltage remains high with the sensor disconnected, trace the circuit for a short to voltage and repair the harness
- 6 If voltage returns to normal with the sensor disconnected, replace the sensor
- 7 Clear the code and perform a road test to confirm the repair, monitoring live data for the affected sensor



When a High Voltage Code Isn't the Sensor

- A short to voltage on a shared reference circuit can affect multiple sensors, so always check for other codes that might point to a common power feed.
- The sensor itself may be fine; a backfed voltage from an aftermarket accessory or a faulty alternator can raise the supply voltage above normal.
- Intermittent high voltage can be caused by a loose ground connection at the sensor or PCM, which raises the reference voltage seen by the PCM.
- Do not overlook the possibility of a faulty PCM, especially if the high voltage is present with the sensor and its wiring disconnected.
- A high voltage code can set without any driveability symptoms if the sensor is not critical to immediate engine operation, so don't assume the car is safe to drive indefinitely.

Can I keep driving with P06E8?

If the check engine light is on but the vehicle runs normally, you can drive cautiously to a repair shop, but avoid sustained high speeds or heavy loads. If the engine runs poorly or enters limp mode, stop driving and have the vehicle towed to prevent damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter (DMM)
- Wiring diagram for the specific vehicle
- Basic hand tools for connector and harness inspection

Reading P06E8

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
6	Computer and output circuits.
E8	The exact fault within that area.

Often seen with

P0641 Sensor Reference Voltage 'A' Circuit/Open · **P0651** Sensor Reference Voltage 'B' Circuit/Open · **P06E7** Sensor Power Supply C Circuit Low · **P06E9** Engine Starter Performance · **P06EA** NOx Sensor Processor Performance Bank 1 Sensor 1



See it working

Watch the animated explainer [How an EGR Valve Works: Exhaust Gas Recirculation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p06e8/>

