

GENERIC · POWERTRAIN

P226E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P226E

Particulate Filter Deteriorated/Missing Substrate (Bank 2)

P226E indicates that the powertrain control module has determined the bank 2 particulate filter substrate is either physically deteriorated or missing entirely, based on abnormal pressure or temperature sensor readings across the filter. The computer expects a specific restriction and thermal response from the filter, and when those signals fall outside the calibrated range, it flags the substrate as failed or absent.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Fuel and air metering (injector circuits)

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Reduced engine performance or limp mode in some vehicles
- Excessive black smoke or soot from the tailpipe under acceleration
- Frequent active regeneration cycles or a regeneration warning message
- A pungent diesel exhaust odor that is stronger than normal
- Failed emissions inspection due to visible smoke or monitor readiness

Common causes, most likely first

- 1 Physical damage or cracking of the particulate filter substrate from thermal shock or impact
- 2 Filter substrate removed or hollowed out by a previous owner or shop
- 3 Severe ash loading or uncontrolled regeneration that melted the substrate
- 4 Failed differential pressure sensor or clogged pressure lines giving false readings
- 5 Exhaust temperature sensor fault causing the module to misjudge filter condition
- 6 Exhaust leaks upstream or downstream of the filter affecting pressure signals
- 7 Software calibration issue or corrupted module adaptation values



How to diagnose and fix it

- 1 Connect a scan tool and verify the code is current, then check freeze-frame data for differential pressure and exhaust temperature values
- 2 Inspect the particulate filter housing for physical damage, cracks, or signs of tampering
- 3 Compare live differential pressure readings at idle and during a snap throttle to specification
- 4 Test the differential pressure sensor and its hoses for blockage, leaks, or incorrect routing
- 5 Check exhaust temperature sensors for plausible readings during warm-up and regeneration
- 6 Perform a manufacturer-specific particulate filter test or forced regeneration to confirm substrate condition
- 7 If sensor and wiring checks pass, remove and inspect the filter substrate, replacing it if deteriorated or missing

When the filter is not actually missing

- A skewed differential pressure sensor or a pinched pressure hose can mimic a missing substrate perfectly, so always compare sensor readings against a known-good mechanical gauge before condemning the filter.
- Some vehicles set P226E after a failed regeneration attempt that left the filter partially melted, even though the substrate is still physically present and the code description sounds like total absence.
- An exhaust leak between the filter and the pressure sensor tap can drop differential pressure to near zero, which the module interprets as a missing substrate rather than a leak.
- After replacing a particulate filter, many modules require a learned value reset or adaptation procedure; skipping this step can cause the new filter to set the same code immediately.
- Bank 2 designation on a V-configuration engine means the filter on that specific bank, so a good filter on bank 1 does not rule out a problem on bank 2.

Can I keep driving with P226E?

Do not continue driving with this code because a deteriorated or missing particulate filter allows excessive soot emissions and can lead to turbocharger or engine damage over time. Limit driving to moving the vehicle to a safe location or directly to a repair facility, and avoid heavy acceleration or long trips.

Tools that help

- OBD-II scan tool with live data and bidirectional control
- Digital multimeter for sensor and wiring checks
- Exhaust backpressure gauge or differential pressure gauge
- Infrared thermometer for exhaust temperature verification
- Inspection mirror and flashlight for housing inspection



Reading P226E

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 2** Fuel and air metering (injector circuits).
- 6E** The exact fault within that area.

Often seen with

P2002 Particulate Trap Efficiency Below Threshold (Bank 1) · **P226C** Turbocharger Boost Control A Slow Response · **P226D** Particulate Filter Deteriorated/Missing Substrate (Bank 1) · **P2453** Diesel Particulate Filter Pressure Sensor Circuit Range/Perf · **P2463** Diesel Particulate Filter Restriction - Soot Accumulation

See it working

Watch the animated explainer [How a Radiator Fan Relay Circuit Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p226e/>

