

VOLKSWAGEN · POWERTRAIN

P1560

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1560 · Volkswagen

Maximum Engine Speed Exceeded

P1560 on Volkswagen vehicles means the engine control module (ECM) has recorded that the engine exceeded its maximum programmed speed limit, typically around 6,500 to 7,000 RPM depending on the model. The ECM sets this code when it sees the crankshaft position sensor signal indicate an engine speed above the calibrated threshold, often during a missed shift or a mechanical over-rev. It is a stored fault that flags an event rather than a continuous sensor failure.

SYSTEM

Powertrain

CODE TYPE

**Volkswagen
specific**

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

**Vehicle speed,
idle control and
auxiliary inputs**

Symptoms you may notice

- Often no symptoms besides the warning light, because the over-rev event was brief and the engine now runs normally.
- A momentary loss of power or fuel cut felt during aggressive acceleration or a downshift that selected too low a gear.
- The engine may enter limp mode or limit RPM after the event until the code is cleared.
- Rough running or misfire if the over-rev caused valve float or timing chain stress.
- Unusual engine noise such as ticking or knocking after a severe over-rev, indicating mechanical damage.
- The tachometer may have briefly swept past the redline during the event that stored the code.

Common causes, most likely first

- 1 Driver error such as a missed shift or downshifting into a gear that is too low for the vehicle speed.
- 2 A faulty crankshaft position sensor or damaged reluctor wheel producing a false high-RPM signal.
- 3 Electrical interference or a poor ground on the crankshaft sensor circuit causing erratic RPM readings.
- 4 An engine control module (ECM) calibration issue or software glitch that misinterprets the RPM signal.
- 5 Mechanical over-rev from a stuck throttle or cruise control actuator holding the throttle open.
- 6 Aftermarket tuning or a modified rev limiter that allows the engine to exceed the factory maximum speed.
- 7 Wiring harness damage between the crankshaft sensor and the ECM causing intermittent signal spikes.



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data to see the engine speed and conditions at the time P1560 set.
- 2 Inspect the crankshaft position sensor and its reluctor wheel for debris, damage, or loose mounting, and check the sensor connector for corrosion.
- 3 Perform a resistance and scope test on the crankshaft position sensor circuit to confirm a clean signal without spikes or dropouts.
- 4 Check the engine ground straps and battery connections for corrosion or looseness that could introduce electrical noise.
- 5 Verify the ECM software is at the latest calibration and reflash if a known false-setting issue exists for the model.
- 6 Clear the code and road test with a scan tool monitoring live RPM data to confirm the signal is stable and the code does not return.
- 7 If the code persists after electrical checks, perform a mechanical inspection for valve damage or timing chain stretch caused by the over-rev event.

What a P1560 really tells you

- P1560 is an event code, not a live sensor fault, so the engine may run perfectly now even though the over-rev was severe enough to cause internal damage.
- A false P1560 is common on older Volkswagens with a failing crankshaft position sensor, so replace the sensor before condemning the ECM.
- The code can set from a single missed downshift on a manual transmission, so check with the driver about recent driving events before starting electrical diagnosis.
- Aftermarket rev-limiter changes or a tuned ECM often raise the threshold and can cause P1560 to appear during normal spirited driving.
- Do not clear P1560 without checking freeze-frame data, because the recorded RPM and vehicle speed help distinguish a driver error from a sensor glitch.

Can I keep driving with P1560?

You can usually drive the vehicle normally after a brief over-rev if there are no unusual noises or performance issues, but avoid aggressive acceleration and high RPM until the cause is confirmed. If the engine is noisy, misfiring, or in limp mode, stop driving and have it inspected to prevent further mechanical damage.



Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter for circuit resistance and voltage checks
- Oscilloscope for crankshaft position sensor signal analysis
- Basic hand tools for sensor and connector inspection
- Feeler gauge or inspection mirror for reluctor wheel check

Reading P1560

- P** Powertrain: engine, transmission and emissions.
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- 1** Manufacturer-specific code (Volkswagen): its meaning depends on the make.
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- 5** Vehicle speed, idle control and auxiliary inputs.
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- 60** The exact fault within that area.

Often seen with

P1300 Misfire Detected Fuel Level Too Low · **P1300** Igniter Circuit Malfunction No 1 · **P1300** Random Misfire · **P1300** Ignition Timing Adjustment Circuit · **P1300** Random Misfire · **P1300** Ignition Coil 1 Primary Feedback Circuit · **P1300** Boost Calibration Fault · **P1300** Ignitor Circuit · **P0321** Ignition/Distributor Engine Speed Input Circuit Range/Perfor · **P0322** Ignition/Distributor Engine Speed Input Circuit No Signal · **P0335** Crankshaft Position Sensor A Circuit Malfunction · **P0336** Crankshaft Position Sensor A Circuit Range/Performance

See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1560/>

