

GENERIC · POWERTRAIN

P2614

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2614

Camshaft Position Signal Output Circuit/Open

P2614 indicates that the powertrain control module (PCM) has detected an open circuit or abnormal voltage on the camshaft position signal output circuit, which is used to report camshaft position to other modules or systems. The PCM monitors this output circuit and sets the code when the signal line is open, shorted, or not responding as expected.

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
- Rough idle or engine misfire due to inaccurate camshaft position reporting
- Reduced engine performance or power, especially during acceleration
- Intermittent stalling or difficulty starting
- Poor fuel economy or increased emissions
- Other driver-assist or powertrain systems may be disabled if the camshaft signal is shared

Common causes, most likely first

- 1 Open or damaged wire in the camshaft position signal output circuit
- 2 Corroded or loose electrical connector at the camshaft sensor or PCM
- 3 Failed camshaft position sensor
- 4 Faulty powertrain control module (PCM) output driver
- 5 Short to ground or short to voltage on the signal output wire
- 6 Aftermarket accessories or poor previous repairs tapping into the circuit



How to diagnose and fix it

- 1 Inspect the camshaft position sensor connector and wiring for obvious damage, corrosion, or looseness
- 2 Check for continuity and resistance on the signal output circuit between the sensor and PCM, looking for opens or shorts
- 3 Verify the sensor receives proper power and ground, and test the sensor output signal with a multimeter or oscilloscope
- 4 Check for technical service bulletins (TSBs) or known issues for the specific vehicle make and model
- 5 Replace the camshaft position sensor if testing indicates it is faulty
- 6 Repair or replace damaged wiring or connectors in the signal output circuit
- 7 If all else checks out, diagnose or replace the PCM as a last resort

Camshaft Signal Output Circuit Pitfalls

- P2614 is often misdiagnosed as a simple camshaft sensor failure, but the code specifically refers to the output circuit, which may be a separate wire from the sensor to other modules, so testing the entire path is essential. Some vehicles use the camshaft position output signal for variable valve timing or cylinder deactivation, so an open circuit can cause drivability issues beyond a simple check engine light.
 - A faulty PCM driver is rare but possible; technicians sometimes overlook it after replacing the sensor and wiring, leading to repeat repairs.
 - Aftermarket electrical accessories or remote starters improperly tapped into the camshaft signal wire can introduce opens or interference that set this code.
- The code can be intermittent, so wiggle-testing the harness while monitoring live data or a scope is crucial to catch a marginal connection.

Can I keep driving with P2614?

You can usually drive with P2614, but if the engine runs rough, stalls, or loses power, avoid sustained high-speed driving or heavy loads and have it diagnosed promptly to prevent further damage or safety risk.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (for signal analysis)
- Wiring diagram for the specific vehicle
- Electrical connector cleaning kit
- Basic hand tools (screwdrivers, socket set)



Reading P2614

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

Often seen with

P0340 Camshaft Position Sensor A Circuit Malfunction (Bank 1) · **P0341** Camshaft Position Sensor A Circuit Range/Performance · **P0342** Camshaft Position Sensor A Circuit Low Input · **P0343** Camshaft Position Sensor A Circuit High Input · **P2615** Camshaft Position Signal Output Circuit Low

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2614/>

