

SUBARU · POWERTRAIN

P1325

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1325 · Subaru

Knock Sensor Circuit Low Input

P1325 on a Subaru means the engine control module (ECM) has detected an abnormally low voltage signal on the knock sensor circuit, which it interprets as a sensor or wiring fault rather than normal knock activity. The ECM expects the knock sensor to produce a small alternating current (AC) signal that rises and falls with engine vibration, and a low input tells the computer the circuit is shorted to ground or the sensor has failed.

SYSTEM

Powertrain

CODE TYPE

Subaru specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system and misfire

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Reduced engine performance or power because the ECM may default to a conservative ignition timing map
- Poor fuel economy as the computer retards timing to protect the engine
- Occasional engine hesitation or sluggish acceleration under load
- Rough idle or misfire-like behavior in some cases, especially if the low signal is intermittent
- A stored pending or history code that returns after clearing if the fault is wiring-related

Common causes, most likely first

- 1 Failed knock sensor internally shorted or damaged
- 2 Damaged or chafed knock sensor signal wire shorting to ground
- 3 Corroded or loose knock sensor connector terminals
- 4 Open or high-resistance ground circuit for the knock sensor shield or return
- 5 Engine mechanical noise or vibration mimicking a sensor fault, though less common for a low input code
- 6 ECM internal fault on the knock sensor input circuit, rare but possible after other causes are ruled out



How to diagnose and fix it

- 1 Connect a scan tool and verify P1325 is current, then check freeze-frame data for engine speed and load to understand when the fault sets
- 2 Visually inspect the knock sensor and its wiring harness for chafing, corrosion, or loose connectors, especially around the intake manifold and cylinder block
- 3 Measure resistance of the knock sensor with a multimeter and compare to Subaru specifications for your engine; replace if out of range
- 4 Check the signal wire for continuity to ground with the sensor disconnected; repair any short to ground found in the harness
- 5 Verify the sensor ground circuit has low resistance to the ECM and repair any open or high-resistance ground
- 6 If wiring and sensor test good, substitute a known-good knock sensor and clear the code to see if it returns
- 7 As a last step, diagnose the ECM input circuit or replace the ECM only after all other causes are eliminated

Knock sensor low input traps on Subaru engines

- A low input code often points to a shorted signal wire rather than a failed sensor, so always check the harness before replacing the sensor.
- Subaru knock sensors are sensitive to incorrect torque during installation; an over-tightened or loose sensor can produce erratic signals that mimic a circuit fault.
- Aftermarket knock sensors and pigtail connectors are a common source of repeat P1325 codes because the signal characteristics may not match the ECM's expected profile.
- Engine noise from a failing accessory drive belt tensioner or loose heat shield can create vibration that the ECM interprets as abnormal knock, though this more often sets a high input code.
- Clearing the code without repairing the underlying wiring issue will usually result in the code returning within a few drive cycles, especially under load.

Can I keep driving with P1325?

You can usually drive the vehicle with P1325 set, but avoid heavy acceleration or towing until the fault is repaired because the ECM may be running reduced ignition timing and the engine is less protected from knock. If the check engine light flashes or you notice severe power loss, stop driving and have the vehicle diagnosed promptly.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with resistance and continuity modes
- Factory service information for Subaru knock sensor specifications and torque values
- Socket set and torque wrench for sensor replacement
- Wire repair kit with crimp connectors and heat shrink



Reading P1325

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Subaru): its meaning depends on the make.
- 3** Ignition system and misfire.
- 25** The exact fault within that area.

Often seen with

P1326 Cylinder 2 Knock Control Limit Attained · **P0325** Knock Sensor 1 Circuit Malfunction (Bank 1) · **P0327** Knock Sensor 1 Circuit Low Input (Bank 1) · **P0328** Knock Sensor 1 Circuit High Input (Bank 1) · **P0330** Knock Sensor 2 Circuit

See it working

Watch the animated explainer [How a Supercharger Works: Roots Blower in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/subaru-p1325/>

