

GENERIC · POWERTRAIN

P06DB

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P06DB

Engine Oil Pressure Control Circuit Low

P06DB indicates that the powertrain control module (PCM) has detected an abnormally low voltage or current on the engine oil pressure control circuit, which typically controls a solenoid that varies oil pump output. The PCM sets this code when the circuit's electrical signal falls below the expected range for a calibrated time, indicating a short to ground, open circuit, or faulty component.

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

Symptoms you may notice

- Illumination of the oil pressure warning light or check engine light, often with no other noticeable symptoms.
- Low oil pressure indicated on the dashboard gauge or a warning message on the driver information center.
- Reduced engine performance or limp mode in some vehicles as a protective measure.
- Audible ticking or knocking from the engine if oil pressure is genuinely low, though this is less common with an electrical fault.
- Inconsistent oil pressure readings that fluctuate with engine speed or temperature.

Common causes, most likely first

- 1 Faulty oil pressure control solenoid, which may be stuck closed or have an internal short.
- 2 Damaged or corroded wiring in the oil pressure control circuit, such as a short to ground or an open circuit.
- 3 Poor electrical connection at the solenoid or PCM connector, often due to water intrusion or loose pins.
- 4 Failed oil pressure sensor sending erroneous signals to the PCM, leading to incorrect control.
- 5 Low engine oil level or degraded oil causing actual low pressure that triggers the code indirectly.
- 6 PCM software glitch or internal fault, though this is rare and usually requires reprogramming or replacement.



How to diagnose and fix it

- 1 Check the engine oil level and condition; top off or change oil if necessary, as low oil can cause low pressure and set this code.
- 2 Perform a visual inspection of the oil pressure control solenoid and its wiring for obvious damage, corrosion, or loose connections.
- 3 Use a scan tool to command the oil pressure control solenoid on and off and observe if the circuit responds, checking for voltage and ground signals.
- 4 Measure resistance and voltage on the control circuit at the solenoid and PCM to identify opens or shorts; compare to manufacturer specifications.
- 5 Test the oil pressure control solenoid with a multimeter for resistance and function; replace if out of spec.
- 6 If the solenoid and wiring test good, verify actual oil pressure with a mechanical gauge to rule out mechanical oil pump or engine wear issues.
- 7 Repair or replace faulty wiring, connectors, or the PCM as needed, then clear the code and verify the repair with a test drive.

Don't Replace the Oil Pump Yet

- A common misdiagnosis is replacing the oil pump when the actual fault is a \$50 solenoid or a chafed wire; always test the circuit before condemning mechanical parts.
- The oil pressure control solenoid is often part of the variable displacement oil pump system, and a failure can cause the pump to default to low pressure or high pressure, affecting fuel economy and engine protection.
- On many vehicles, the oil pressure sensor and oil pressure control solenoid share a common ground or reference voltage, so a fault in one can set codes for both; check related codes like P06DD or P06DE.
- Debris or sludge in the oil can clog the solenoid screen, causing it to stick and set this code; regular oil changes with the correct viscosity are critical to prevent recurrence.
- In some cases, a weak battery or charging system issue can cause low voltage on the control circuit and set P06DB; always check battery voltage and connections before deep circuit testing.

Can I keep driving with P06DB?

If the oil pressure warning light is on or the gauge reads low, stop driving immediately and have the vehicle towed to avoid catastrophic engine damage. If only the check engine light is on and oil pressure appears normal, you can drive cautiously to a repair shop, but avoid heavy loads and high speeds.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Mechanical oil pressure gauge
- Wire piercing probes or back probe pins
- Service manual or wiring diagram for the specific vehicle



Reading P06DB

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.
DB	The exact fault within that area.

Often seen with

P0520 Engine Oil Pressure Sensor/Switch Circuit Malfunction · **P0521** Engine Oil Pressure Sensor/Switch Circuit Range/Performance · **P0524** Engine Oil Pressure Too Low · **P06DD** Engine Oil Pressure Control Circuit Performance/Stuck Off · **P06DE** Engine Oil Pressure Control Circuit Stuck On

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/p06db/>

