

HONDA · POWERTRAIN

P1206

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1206 · Honda

Cylinder 6 Misfire

P1206 on a Honda indicates that the powertrain control module (PCM) has detected a misfire specifically on cylinder 6, typically by monitoring crankshaft speed fluctuations that occur when that cylinder fails to contribute power. The code is set when the misfire count exceeds a calibrated threshold, often within a specific engine speed and load window, and it may be accompanied by a flashing check engine light if the misfire is severe enough to damage the catalytic converter.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Honda specific	High	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- A steady or flashing check engine light, with the flashing condition indicating a severe misfire that can damage the catalytic converter
- Noticeable engine shaking or vibration at idle, especially when the engine is cold or under light load
- Rough running or hesitation during acceleration, often described as a stumble or surge
- A distinct loss of power and reduced fuel economy because the affected cylinder is not producing work
- A raw fuel smell from the exhaust if unburned fuel is passing through the engine
- Often no symptoms besides the warning light when the misfire is intermittent or only occurs under specific conditions

Common causes, most likely first

- 1 Worn or fouled spark plug on cylinder 6, including incorrect gap or a plug that has been damaged during installation
- 2 Failed ignition coil or coil-on-plug boot for cylinder 6, which is a common failure on Honda V6 engines
- 3 Faulty fuel injector for cylinder 6, such as a clogged nozzle, internal leak, or electrical open circuit
- 4 Mechanical issue specific to cylinder 6, such as low compression from worn rings, a burned valve, or a faulty valve adjustment
- 5 Vacuum leak or intake manifold gasket leak near cylinder 6 that leans out that cylinder disproportionately
- 6 Engine wiring harness damage or corroded connector at the cylinder 6 coil or injector, often caused by heat and oil exposure
- 7 Contaminated fuel or a failing fuel pump that delivers insufficient volume under load, though this usually affects multiple cylinders



How to diagnose and fix it

- 1 Scan all stored and pending codes and record freeze-frame data to confirm the misfire is isolated to cylinder 6 and note the conditions under which it occurs
- 2 Perform a visual inspection of the cylinder 6 ignition coil, spark plug, and injector connector for oil fouling, corrosion, or physical damage
- 3 Swap the cylinder 6 ignition coil with a known-good coil from another cylinder and recheck misfire counters to see if the fault moves
- 4 Remove and inspect the cylinder 6 spark plug for wear, gap, or deposits, and replace it if suspect, then recheck misfire data
- 5 Run a compression test and, if compression is low, perform a cylinder leak-down test to identify valve or ring sealing problems
- 6 Test the cylinder 6 fuel injector for resistance, pulse signal, and spray pattern, and check fuel pressure under load
- 7 If ignition and fuel checks pass, perform a relative compression test or use a lab scope to evaluate crankshaft speed variations and pinpoint mechanical faults

Honda V6 misfire traps to check first

- On Honda V6 engines, a P1206 is frequently caused by a failing ignition coil that has not yet set a coil-specific code, so swapping coils before replacing parts is the fastest diagnostic step.
- A misfire that only appears when the engine is cold often points to a valve adjustment issue on the affected cylinder rather than an ignition fault, especially on higher-mileage Honda engines.
- Oil leaking into the spark plug tube from a worn valve cover gasket can foul the cylinder 6 plug and coil boot, causing a misfire that returns shortly after a tune-up if the leak is not fixed.
- The PCM may set P1206 without illuminating the check engine light if the misfire is intermittent and below the threshold for a steady light, so a scan tool with misfire counter data is essential.
- A vacuum leak at the intake manifold runner for cylinder 6 can lean out that cylinder and set a misfire code that mimics a bad injector, so smoke testing the intake is a worthwhile early check.

Can I keep driving with P1206?

If the check engine light is flashing, stop driving immediately and have the vehicle towed, because a severe misfire can overheat and destroy the catalytic converter within minutes. If the light is steady and the engine runs smoothly, you can drive cautiously to a repair shop, but avoid heavy acceleration and prolonged driving until the misfire is diagnosed.



Tools that help

- OBD-II scan tool with live misfire counter and freeze-frame data capability
- Compression gauge and cylinder leak-down tester
- Spark tester or known-good ignition coil for swap testing
- Fuel pressure gauge and injector pulse tester
- Basic hand tools including a spark plug socket and torque wrench
- Smoke machine for intake leak testing

Reading P1206

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Honda): its meaning depends on the make.
2	Fuel and air metering (injector circuits).
06	The exact fault within that area.

Often seen with

P1203 Cylinder 3 Fuel Injector Circuit Electrical Malfunction · **P1201** Cylinder 1 Fuel Injector Circuit Electrical Malfunction · **P1202** Cylinder 2 Fuel Injector Circuit Electrical Malfunction · **P1203** Cylinder 3 Misfire · **P1201** Cylinder 1 Misfire · **P1202** Cylinder 2 Misfire · **P1203** Cylinder 3 Injector Circuit Open/Shorted · **P1201** Cylinder 1 Injector Circuit Open/Shorted · **P1202** Cylinder 2 Injector Circuit Open/Shorted · **P1202** Cylinder 2 Misfire · **P1203** Cylinder 3 Misfire · **P1201** Cylinder 1 Misfire · **P1202** Alternative Fuel Gas Mass Sensor Circuit Low Frequency · **P1203** Alternative Fuel Gas Mass Sensor Circuit High Frequency · **P1201** Alternative Fuel Gas Mass Sensor Circuit Range Performance · **P1202** (Alternative Fuel) Gas Mass Sensor Circuit Low Frequency · **P1203** (Alternative Fuel) Gas Mass Sensor Circuit High Frequency · **P1201** (Alternative Fuel) Gas Mass Sensor Circuit Range/Performance · **P0300** Random/Multiple Cylinder Misfire Detected · **P0306** Cylinder 6 Misfire Detected

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/honda-p1206/>

