

HONDA · POWERTRAIN

P1253

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1253 · Honda

VTEC System Circuit Fault

P1253 on a Honda means the powertrain control module (PCM) has detected an electrical fault in the VTEC (Variable Valve Timing and Lift Electronic Control) system circuit, typically an open or short in the VTEC oil pressure switch or solenoid wiring. The PCM commands VTEC engagement and then checks the oil pressure switch signal to confirm the system responded, so this code sets when the expected electrical change does not occur.

SYSTEM

Powertrain

CODE TYPE

Honda specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering (injector circuits)

Symptoms you may notice

- Check Engine Light illuminated, often with no other symptoms
- Reduced engine power at higher RPM because VTEC does not engage
- Rough idle or stumbling if the fault affects the VTEC oil pressure switch signal
- Poor fuel economy during spirited driving due to lost high-lift cam profile
- Intermittent warning light that comes and goes with vibration or temperature changes

Common causes, most likely first

- 1 Faulty VTEC oil pressure switch (internal failure or clogged screen)
- 2 Damaged or corroded VTEC solenoid connector or pins
- 3 Open or short in the VTEC solenoid-to-PCM wiring harness
- 4 Failed VTEC solenoid (coil open or mechanically stuck)
- 5 Low engine oil level or low oil pressure preventing VTEC engagement
- 6 Clogged VTEC oil strainer or sludge in the VTEC oil passage
- 7 PCM internal driver fault (rare, but possible after other causes are ruled out)



How to diagnose and fix it

- 1 Check engine oil level and condition; top off or change oil if low or dirty
- 2 Inspect the VTEC solenoid and oil pressure switch connectors for corrosion, loose pins, or damaged wires
- 3 Measure resistance of the VTEC solenoid coil and compare to Honda specification
- 4 Test the VTEC oil pressure switch signal with a scan tool while commanding VTEC on, or verify switch continuity changes with oil pressure
- 5 Check for continuity and short-to-ground on the VTEC solenoid and switch circuits between the component and PCM
- 6 Remove and clean the VTEC solenoid screen and oil strainer, then retest
- 7 If all electrical and oil checks pass, substitute a known-good VTEC solenoid or switch, and only then consider PCM replacement

What most technicians miss on P1253

- A clogged VTEC oil strainer or low oil level can set P1253 even when the solenoid and switch test perfectly, so always verify oil pressure and screen condition before replacing electrical parts.
- The VTEC oil pressure switch is a simple on/off switch, not a variable sensor, so a scan tool may show only a yes/no state; testing it with a multimeter while cranking or running is more reliable than trusting live data alone.
- Intermittent P1253 that appears only when the engine is hot often points to a failing solenoid coil that opens when warm, not to a wiring fault, so perform resistance tests both cold and hot.
- Aftermarket VTEC solenoids and switches have a high failure rate out of the box; a new part that does not fix the code does not prove the circuit is good, so bench-test the replacement before installing it.
- P1253 can be set by a mechanical VTEC spool valve that is stuck due to sludge, which mimics an electrical fault because the oil pressure switch never sees the expected pressure change.

Can I keep driving with P1253?

You can usually drive the car gently to a repair shop, but avoid hard acceleration and high RPM because VTEC will not engage and the engine may feel flat or hesitate. If the check engine light is flashing or you notice knocking, stop driving and have the vehicle towed.

Tools that help

- OBD-II scan tool with Honda-specific live data
- Digital multimeter
- Socket set and ratchet
- Oil pressure gauge
- Wire piercing probes or back-probe kit
- Service manual for VTEC circuit specifications



Reading P1253

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

Often seen with

P1259 Engine Coolant System Valve Short To Ground · **P1259** VTEC System Malfunction Rear Bank 1 · **P0010** 'A' Camshaft Position Actuator Circuit (Bank 1) · **P0011** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P2646** 'A' Rocker Arm Actuator System Performance or Stuck Off (Ban · **P2647** 'A' Rocker Arm Actuator System Stuck On (Bank 1)

See it working

Watch the animated explainer [How Crank and Cam Position Sensors Work](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/honda-p1253/>

