

HONDA · POWERTRAIN

P1242

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1242 · Honda

Throttle Vent Control Motor Circuit 2 Malfunction

P1242 on Honda vehicles indicates that the powertrain control module (PCM) has detected an electrical fault in the throttle vent control motor circuit, specifically circuit 2. The PCM monitors the current and voltage on this circuit and sets the code when the signal falls outside the expected range, often due to an open, short, or excessive resistance in the wiring or motor.

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

Symptoms you may notice

- Illumination of the check engine light or malfunction indicator lamp (MIL).
- Often no symptoms besides the warning light, especially if the vent motor is not critical for normal driving.
- Rough idle or unstable engine speed due to improper throttle venting.
- Reduced engine performance or limp mode in some cases.
- A buzzing or clicking noise from the throttle body area after engine shutdown.
- Poor fuel economy or hesitation during acceleration.

Common causes, most likely first

- 1 Faulty throttle vent control motor (winding open or shorted).
- 2 Damaged or corroded wiring harness in the throttle vent control motor circuit 2.
- 3 Loose or corroded electrical connector at the throttle body or PCM.
- 4 Failed throttle body assembly due to internal wear or contamination.
- 5 PCM internal driver failure for circuit 2 (rare but possible).
- 6 Aftermarket or incorrect throttle body installation causing signal mismatch.
- 7 Carbon buildup or mechanical binding in the throttle vent mechanism.



How to diagnose and fix it

- 1 Inspect the throttle body connector and wiring for corrosion, chafing, or loose pins; clean and secure as needed.
- 2 Measure resistance of the throttle vent control motor circuit 2 at the motor terminals and compare to Honda specifications.
- 3 Check for continuity and short-to-ground or short-to-power on the circuit 2 wiring between the throttle body and PCM.
- 4 Test the throttle vent control motor by applying battery voltage briefly to confirm operation (if accessible and safe).
- 5 Replace the throttle body assembly if the motor or internal circuit is faulty, then perform a PCM idle relearn or throttle body calibration.
- 6 If wiring and motor test good, diagnose the PCM driver circuit and replace PCM only after confirming all other possibilities.
- 7 Clear the code and verify repair by performing a road test and monitoring live data for the throttle vent control motor circuit.

Common Misdiagnosis Traps for P1242

- A dirty throttle body often causes P1242 because carbon buildup restricts the vent motor, leading to excessive current draw that the PCM interprets as a circuit fault.
- Many technicians replace the throttle body unnecessarily when the real issue is a corroded connector pin or a chafed wire in the harness near the intake manifold.
- P1242 can be set by a weak battery or charging system issue that causes voltage spikes, so always check battery health and ground connections first.
- On some Honda models, a faulty PCM relay or poor ground can mimic a circuit 2 failure, so verify power and ground at the PCM before condemning the module.
- After replacing the throttle body, failing to perform the idle relearn procedure can cause the code to reappear immediately, leading to a false comeback.

Can I keep driving with P1242?

You can usually drive the vehicle with P1242, but avoid aggressive acceleration and prolonged idling until repaired. If the engine enters limp mode or runs poorly, seek service promptly to prevent further damage.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter (DMM)
- Honda service manual or wiring diagram
- Socket set and Torx bits for throttle body removal
- Contact cleaner and dielectric grease
- Vacuum gauge or smoke machine for intake leak testing

Reading P1242

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

Often seen with

P1241 Cylinder 5 Injector Circuit Open Circuit · **P1243** Cylinder 7 Injector Circuit Open Circuit · **P1241** Throttle Vent Control Motor Circuit 1 Malfunction · **P1243** Throttle Position Insufficient · **P1241** Sensor Power Supply Low Input · **P1243** Analog Ground · **P1241** Throttle Vent Control Motor Circuit 1 Malfunction · **P1243** Throttle Position Insufficient · **P1243** Injector Circuit Cylinder 8 Intermittent · **P1243** Second Fuel Pump Faulty or Ground Fault · **P1243** Open Or Shorted Condition Detected In The Turbocharger Surge · **P0121** Throttle Position Sensor A Circuit Range/Performance · **P0507** Idle Control System RPM Higher Than Expected · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

See it working

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

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/honda-p1242/>

