

GENERIC · POWERTRAIN

P3440

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P3440

Cylinder 5 Exhaust Valve Control Circuit High

P3440 indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the control circuit for the cylinder 5 exhaust valve actuator. This typically means the circuit is open, shorted to voltage, or the actuator itself has failed, preventing the PCM from properly commanding the exhaust valve to open and close.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or misfire-like shudder, especially when the engine is cold
- Reduced engine performance and poor fuel economy due to improper cylinder breathing
- Increased emissions, which may cause a state inspection failure
- In some cases, a noticeable ticking or tapping noise from the valve cover area

Common causes, most likely first

- 1 Open circuit in the exhaust valve control wiring, such as a broken wire or disconnected connector
- 2 Short to voltage on the control circuit, often from chafed wiring contacting a power source
- 3 Failed cylinder 5 exhaust valve actuator solenoid
- 4 Corroded or damaged electrical connector at the actuator or PCM
- 5 Internal PCM driver failure for the cylinder 5 exhaust valve control circuit
- 6 Mechanical binding of the exhaust valve mechanism, overloading the actuator and causing a high-current condition

How to diagnose and fix it

- 1 Inspect the exhaust valve actuator connector and wiring for damage, corrosion, or loose pins
- 2 Measure resistance of the exhaust valve actuator solenoid and compare to specification
- 3 Check for short to voltage on the control circuit with a multimeter while wiggling the harness
- 4 Verify continuity of the control circuit from the PCM to the actuator
- 5 Test the PCM output signal with an oscilloscope or a noid light designed for the circuit
- 6 If the actuator is faulty, replace it and clear the code
- 7 If the PCM driver is confirmed faulty, replace or reprogram the PCM as needed



High Voltage Does Not Always Mean a Bad Actuator

- A high voltage code often results from an open circuit rather than a short, because the PCM pulls the circuit high when it cannot detect the expected load.
- Wiring harness damage near hot exhaust components is a common cause that is frequently overlooked during diagnosis.
- The same code can be set by a mechanically stuck exhaust valve that overloads the actuator, so always check for free movement of the valve mechanism.
- After repairs, the PCM may require a relearn procedure or several drive cycles before the code clears permanently.

Can I keep driving with P3440?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or towing because the engine may enter limp mode. Prolonged driving with this code can damage the catalytic converter and increase repair costs.

Tools that help

- OBD-II scanner
- Digital multimeter
- Oscilloscope
- Test light
- Wire repair kit
- Factory service information

Reading P3440

- P** Powertrain: engine, transmission and emissions.
- 3** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Auxiliary emission controls.
- 40** The exact fault within that area.

Often seen with

P0305 Cylinder 5 Misfire Detected · **P3400** Cylinder Deactivation System (Bank 1) · **P3441** Cylinder 6 Deactivation/Intake Valve Control Circuit/Open · **P3442** Cylinder 6 Deactivation/Intake Valve Control Performance · **P3443** Cylinder 6 Deactivation/Intake Valve Control Circuit Low



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/p3440/>

