

GENERIC · POWERTRAIN

P2658

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2658

'A' Rocker Arm Actuator Control Circuit Low (Bank 2)

P2658 indicates that the powertrain control module (PCM) has detected a low-voltage condition on the control circuit for the 'A' rocker arm actuator on bank 2 of the engine. The PCM commands the actuator to change valve lift or timing, but the circuit feedback shows voltage below the expected threshold, so the system cannot reliably operate the actuator.

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

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or misfire, especially noticeable at low engine speeds
- Reduced engine power or sluggish acceleration due to improper valve lift
- Poor fuel economy as the engine cannot optimize valve timing
- Intermittent engine stumble or hesitation during light-throttle cruising
- In some cases, the engine may enter limp mode to protect the valvetrain

Common causes, most likely first

- 1 Faulty rocker arm actuator solenoid or its internal coil on bank 2
- 2 Damaged or chafed wiring in the actuator control circuit, causing a short to ground
- 3 Corroded or loose electrical connector at the actuator or PCM
- 4 Failed PCM driver for the actuator control circuit (rare but possible)
- 5 Oil sludge or debris blocking the actuator oil passage, leading to low circuit feedback
- 6 Aftermarket or incorrect actuator installed previously
- 7 Poor engine ground causing voltage drop on the control circuit



How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm P2658 is active and not
- 2 Visually inspect the bank 2 rocker arm actuator connector and wiring for damage, corrosion, or loose pins
- 3 Measure resistance of the actuator solenoid and compare to manufacturer specification
- 4 Check for short to ground on the control circuit using a multimeter with the PCM disconnected
- 5 Verify oil condition and pressure, as contaminated oil can affect actuator operation
- 6 If wiring and actuator test good, perform a PCM driver test with a bidirectional scan tool
- 7 Replace the faulty actuator or repair wiring as needed, then clear codes and verify repair with a road test

What a low circuit code really means

- A low circuit code does not automatically condemn the actuator; a shorted wire or poor ground often mimics a failed solenoid.
- Oil sludge or low oil pressure can cause the actuator to draw excessive current, setting a low-voltage code without any electrical fault.
- Some vehicles use the same actuator for multiple cylinders, so a single failed actuator can affect several misfire counters.
- After replacing an actuator, always perform a valve lift relearn procedure if required by the manufacturer, or the code may return.
- Intermittent wiring faults often appear only when the engine is hot or vibrating, so wiggle-test the harness during diagnosis.

Can I keep driving with P2658?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or sustained high speeds because improper valve lift can cause misfires and potential engine damage. If the check engine light flashes or the engine runs very rough, stop driving and seek immediate service.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket set and torx bits for actuator removal
- Oil pressure gauge
- Insulation piercing probes or back-probe kit



Reading P2658

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 6** Computer and output circuits.
- 58** The exact fault within that area.

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0302** Cylinder 2 Misfire Detected · **P2657** 'A' Rocker Arm Actuator System Stuck On (Bank 2) · **P2659** 'A' Rocker Arm Actuator Control Circuit High (Bank 2) · **P2660** 'B' Rocker Arm Actuator Control Circuit/Open (Bank 2)

See it working

Watch the animated explainer [How a Gyroscope Works: Gimbals and Precession](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2658/>

