

GENERIC · POWERTRAIN

P0066

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0066

Air Assisted Injector Control Circuit or Circuit Low

P0066 indicates that the powertrain control module has detected an abnormally low voltage or a general circuit fault in the control circuit for an air-assisted fuel injector. This circuit typically controls a solenoid that uses compressed air to improve fuel atomization during cold starts or low-load conditions, and the code means the commanded current or voltage did not match expectations.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or misfire during cold engine operation
- Hesitation or stumble on acceleration when the engine is cold
- Increased fuel consumption due to poor fuel atomization
- In rare cases, a no-start condition if the air-assisted injector circuit fails completely

Common causes, most likely first

- 1 Open or shorted wiring in the air-assisted injector control circuit
- 2 Failed air-assisted injector solenoid or its internal coil
- 3 Corroded or loose electrical connector at the injector or PCM
- 4 Blown fuse or faulty relay supplying power to the air-assisted injector circuit
- 5 Faulty powertrain control module driver for that circuit (less common)
- 6 Mechanical binding or contamination in the air-assisted injector preventing proper solenoid operation



How to diagnose and fix it

- 1 Verify battery voltage and inspect the air-assisted injector circuit fuse and relay
- 2 Disconnect the injector connector and check for corrosion, tightness, and clean terminals
- 3 Measure resistance of the air-assisted injector solenoid and compare to manufacturer specification
- 4 Backprobe the control circuit at the injector and at the PCM to check for opens, shorts to ground, or shorts to voltage
- 5 Command the air-assisted injector on with a scan tool and listen for an audible click, or use a noid light to confirm the control signal
- 6 If the circuit and injector test good, substitute a known-good injector or test the PCM driver with a lab scope
- 7 Repair or replace the faulty wiring, connector, injector, or PCM as indicated by the tests

Air-assisted injector circuit checks that save time

- A low-voltage code for this circuit often results from a poor ground connection at the injector body or engine block rather than a failed injector itself.
Some vehicles use a dedicated air pump or compressor for the air-assisted injectors, and a fault in that system can indirectly set P0066 if the injector control circuit is affected.
- The PCM may set P0066 intermittently if the injector coil resistance drifts with temperature, so testing should include both cold and hot resistance checks.
- Do not overlook the possibility of a chafed wire harness near hot exhaust components or sharp brackets, which can cause an intermittent short to ground.
A scan tool that can read live injector pulse width and control circuit voltage is more useful than a simple code reader for confirming this fault.

Can I keep driving with P0066?

You can usually drive the vehicle with P0066, but expect rough running or misfires during cold starts and slightly higher fuel consumption. Avoid heavy acceleration or towing until the fault is repaired, and have it diagnosed soon to prevent potential catalytic converter damage from unburned fuel.

Tools that help

- Digital multimeter
- Scan tool with bidirectional control
- Noid light or injector test light
- Automotive stethoscope
- Wire repair kit with crimpers and heat shrink



Reading P0066

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 0** Fuel and air metering and auxiliary emission controls.
- 66** The exact fault within that area.

Often seen with

P0065 Air Assisted Injector Control Range/Performance · **P0067** Air Assisted Injector Control Circuit High · **P0201** Injector Circuit Malfunction - Cylinder 1 · **P0202** Injector Circuit Malfunction - Cylinder 2 · **P0300** Random/Multiple Cylinder Misfire Detected

See it working

Watch the animated explainer [How a Turbocharger Works, Step by Step](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0066/>

