

KIA · POWERTRAIN

P1216

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1216 · Kia

Fuel Injector 4 Circuit High Voltage

P1216 on a Kia indicates that the engine control module (ECM) has detected an abnormally high voltage on the control circuit for fuel injector number 4. This typically means the circuit is open, shorted to power, or the injector coil has failed, preventing the ECM from properly energizing the injector.

SYSTEM

Powertrain

CODE TYPE

Kia specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air
metering (injector
circuits)

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Engine misfire or rough running, especially under load or at idle
- Reduced engine power or hesitation during acceleration
- Poor fuel economy due to incomplete combustion
- Possible shaking or vibration from the engine bay

Common causes, most likely first

- 1 Open or damaged wiring in the injector 4 control circuit (broken wire, corroded connector)
- 2 Failed fuel injector 4 (open internal coil)
- 3 Short to voltage on the injector 4 control circuit
- 4 Faulty engine control module (ECM) driver for injector 4
- 5 Poor electrical connection at the injector 4 harness connector
- 6 Damaged or corroded pins in the ECM connector

How to diagnose and fix it

- 1 Perform a visual inspection of the injector 4 wiring and connector for damage or corrosion
- 2 Check for technical service bulletins (TSBs) related to P1216 for your specific Kia model
- 3 Measure the resistance of fuel injector 4 and compare to specification
- 4 Test the injector 4 control circuit for continuity and short to voltage
- 5 Swap injector 4 with a known-good injector (e.g., from another cylinder) to see if the code moves
- 6 Inspect the ECM connector and pins for damage or corrosion
- 7 If all else checks out, diagnose or replace the ECM as a last resort



Before you replace the fuel injector

- A high voltage code often results from an open circuit rather than a shorted injector, so check wiring continuity before condemning the injector.
- Corrosion at the injector connector is a common cause on older Kia models, especially in areas with road salt exposure.
- Swapping the injector with another cylinder is a quick way to verify if the fault follows the injector or stays with the circuit.
- The ECM driver for the injector can fail, but this is rare; ensure all other possibilities are ruled out first.
- A loose or damaged ground connection for the engine can cause erratic injector operation and set false high voltage codes.

Can I keep driving with P1216?

Driving with P1216 is possible but not recommended because a misfiring cylinder can damage the catalytic converter over time. Avoid heavy acceleration and have the vehicle inspected promptly.

Tools that help

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

Reading P1216

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

Often seen with

P1215 Cylinder 3 Fuel Injector Circuit Short To B+ · **P1217** Cylinder 5 Fuel Injector Circuit Short To B+ · **P1217** Engine Over Temperature Overheat · **P1215** Fuel Injector 3 Circuit High Voltage · **P1215** Ground Fault Detection Indicated · **P1217** Fuel Solenoid Response Time Too Long · **P1215** Pedal Position Sensor C Circuit Low Input · **P1217** Pedal Position Sensor C Circuit Intermittent · **P1215** Ground Fault Detection Indicated · **P1217** Fuel Solenoid Response Time Too Long · **P0204** Injector Circuit Malfunction - Cylinder 4 · **P0304** Cylinder 4 Misfire Detected



See it working

Watch the animated explainer [Four-Stroke Engine Notebook: The Otto Cycle Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/kia-p1216/>

