



P1213 · Kia

Fuel Injector 1 Circuit High Voltage

P1213 on a Kia indicates that the engine control module (ECM) has detected an abnormally high voltage on the control circuit for fuel injector number 1. The ECM commands the injector to open by pulling the circuit to ground, and a high voltage reading means the circuit is not being pulled low as expected, often due to an open circuit or a short to voltage.

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

Symptoms you may notice

- Illuminated check engine light (malfunction indicator lamp) on the dashboard
- Engine misfire or rough running, especially noticeable at idle
- Reduced engine power or hesitation during acceleration
- Poor fuel economy due to incomplete combustion
- Often no symptoms besides the warning light, especially if the injector still operates intermittently

Common causes, most likely first

- 1 Open or damaged wire in the injector 1 control circuit (broken wire, corroded connector)
- 2 Faulty fuel injector 1 (internal open coil or short to voltage)
- 3 Poor electrical connection at the injector 1 harness connector (loose pins, corrosion)
- 4 Short to voltage on the injector 1 control wire (chafed wire contacting a power source)
- 5 Failed engine control module (ECM) driver for injector 1 (rare but possible)
- 6 Aftermarket alarm or remote start wiring improperly tapped into the injector circuit

How to diagnose and fix it

- 1 Inspect the injector 1 harness connector for corrosion, loose pins, or damage and clean or repair as needed
- 2 Measure the resistance of fuel injector 1 with a multimeter and compare to the manufacturer's specification (typically 12–16 ohms)
- 3 Check for continuity and short to voltage on the injector 1 control wire between the ECM and the injector
- 4 Swap fuel injector 1 with a known-good injector from another cylinder to see if the code follows the injector
- 5 Inspect the ECM connector for corrosion or loose terminals and verify the control signal with a noid light or oscilloscope
- 6 If all wiring and the injector test good, diagnose the ECM driver circuit or replace the ECM as a last resort



Before you replace the fuel injector

- A high voltage code on an injector circuit often results from a simple open circuit, such as a broken wire or corroded connector, rather than a failed injector itself.
- Kia injectors are typically batch-fired or sequential; a high voltage code may not always cause a noticeable misfire if the injector still opens intermittently.
- Aftermarket accessories like alarm systems or remote starters that tap into injector wiring are a common overlooked cause of this code.
- The ECM driver for the injector can fail, but this is rare; always rule out wiring and injector faults before condemning the ECM.
- This code is specific to Kia and may not have the same meaning on other manufacturers' vehicles, so always use Kia-specific diagnostic information.

Can I keep driving with P1213?

You can drive the vehicle short distances to a repair shop, but avoid heavy acceleration or towing because a misfiring cylinder can overheat the catalytic converter. If the engine runs very rough or flashes the check engine light, stop driving and have it towed.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Noid light
- Oscilloscope (optional)
- Wire repair kit (soldering iron, heat shrink, crimpers)

Reading P1213

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

Often seen with

P1214 Cylinder 2 Fuel Injector Circuit Short To B+ · **P1215** Cylinder 3 Fuel Injector Circuit Short To B+ · **P1214** Fuel Injector 2 Circuit High Voltage · **P1215** Fuel Injector 3 Circuit High Voltage · **P1214** Injection Pump Timing Offset · **P1215** Ground Fault Detection Indicated · **P1214** Pedal Position Sensor B Circuit Intermittent · **P1215** Pedal Position Sensor C Circuit Low Input · **P1214** Injection Pump Timing Offset · **P1215** Ground Fault Detection Indicated · **P0201** Injector Circuit Malfunction - Cylinder 1 · **P0261** Cylinder 1 Injector Circuit Low · **P0301** Cylinder 1 Misfire Detected



See it working

Watch the animated explainer [How a Helicopter Flies: Rotor and Tail in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/kia-p1213/>

