

GENERIC · POWERTRAIN

P03FC

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P03FC

Ignition K Control Signal Circuit High

P03FC indicates that the powertrain control module has detected an abnormally high voltage on the ignition coil control circuit for the cylinder or coil designated as 'K'. The circuit is commanded to ground by the module to fire the coil, and a high voltage reading means the module sees the circuit stuck at or near battery voltage when it should be pulled low.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Engine misfire or rough running, especially under load or acceleration
- Reduced engine power or limp mode in some vehicles
- Shaking or vibration from the engine bay
- Worsened fuel economy due to incomplete combustion
- Difficulty starting or intermittent stalling in severe cases

Common causes, most likely first

- 1 Open or damaged wire in the ignition coil control circuit between the module and coil
- 2 Failed ignition coil with an open primary winding
- 3 Corroded, loose, or backed-out terminal at the coil or module connector
- 4 Short to voltage on the control circuit caused by chafed wiring
- 5 Faulty powertrain control module driver for that ignition circuit
- 6 Aftermarket alarm or remote start wiring tapped into the ignition circuit

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm when the high voltage is detected
- 2 Inspect the ignition coil connector and module connector for corrosion, loose pins, or pushed-out terminals
- 3 Measure resistance of the ignition coil primary winding and compare to specification
- 4 Back-probe the control circuit at the coil and watch voltage while cranking or running to see if the module pulls it low
- 5 Check continuity and resistance of the control wire from the module to the coil, flexing the harness to reveal intermittent opens
- 6 Test for unwanted voltage on the control wire with the module disconnected to rule out a short to power
- 7 If the circuit and coil test good, substitute a known-good coil and recheck before condemning the module

What a high coil control reading really means

- A high voltage on the control circuit often means the module cannot pull the circuit low because the coil primary is open, so the coil is the more common failure than the module.
- Technicians sometimes replace the powertrain control module when a simple chafed wire or corroded terminal is the real cause, so always load-test the circuit before condemning the module.
- The code can set intermittently from vibration or heat, and a coil that tests fine cold may fail when hot, so wiggle-test the harness and coil while monitoring the circuit.
- Aftermarket accessories such as remote starters or alarms that splice into ignition wiring are a frequent hidden cause of this code on otherwise healthy vehicles.
- A high control signal does not always mean the coil is not firing; the module may still fire the coil but flag the circuit because the feedback voltage is out of range, so confirm with a misfire counter before replacing parts.

Can I keep driving with P03FC?

You can usually drive the vehicle to a repair shop if the only symptom is the warning light, but avoid heavy acceleration and long trips because a persistent misfire can overheat the catalytic converter. If the engine is running rough or flashing the check engine light, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data and misfire counters
- Digital multimeter with back-probe pins
- Test light or noid light
- Wiring diagram for the ignition circuit
- Hand tools for connector and coil removal

Reading P03FC

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
3	Ignition system and misfire.
FC	The exact fault within that area.

Often seen with

P0300 Random/Multiple Cylinder Misfire Detected · **P0350** Ignition Coil Primary/Secondary Circuit · **P0351** Ignition Coil A Primary/Secondary Circuit Malfunction · **P03FB** Ignition K Control Signal Circuit Low · **P03FD** Ignition L Control Signal Circuit/Open



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/p03fc/>

