

GENERIC · POWERTRAIN

P038C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P038C

Ignition I Control Signal Circuit High

P038C indicates that the powertrain control module detected an abnormally high voltage on the ignition control circuit for the 'I' coil or ignition driver, which is typically a dedicated circuit for one ignition coil or a specific ignition output. The circuit is monitored for expected voltage behavior, and a sustained high reading tells the module that the control wire is likely shorted to voltage or the driver inside the module has failed.

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 or service engine soon 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
- Hard starting or a no-start condition if the affected ignition circuit is critical
- Slight decrease in fuel economy due to incomplete combustion
- In rare cases, a noticeable hesitation or stumble when accelerating

Common causes, most likely first

- 1 Short to voltage on the ignition control signal wire between the PCM and the ignition coil or igniter
- 2 Faulty ignition coil or igniter assembly with an internal short to voltage
- 3 Damaged or chafed wiring harness causing the control wire to contact a power source
- 4 Failed powertrain control module ignition driver output
- 5 Corroded or loose connector pins at the coil or PCM creating intermittent high voltage
- 6 Aftermarket electrical accessories improperly tapped into the ignition circuit



How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm P038C is active and not a history code
- 2 Visually inspect the ignition coil, harness, and connectors for chafing, corrosion, or loose pins
- 3 Use a digital multimeter to check for voltage on the control wire with the key on and engine off, looking for an unexpected high voltage
- 4 Disconnect the ignition coil and recheck the control circuit voltage to isolate whether the short is in the coil or the harness
- 5 Perform a wiggle test on the harness while monitoring the control signal with a multimeter or oscilloscope to catch intermittent shorts
- 6 If the circuit checks good, substitute a known-good ignition coil and clear the code to see if it returns
- 7 If the fault persists after coil and wiring checks, test the PCM driver output with a noid light or oscilloscope and replace the PCM only as a last resort

High voltage on an ignition control wire

- A short to voltage on the ignition control wire can be caused by a nearby power wire that has rubbed through its insulation, so inspect the entire harness route, not just the coil connector.
- The code can set intermittently due to vibration or heat, and a coil that tests fine when cold may short internally when hot, so always test the circuit when the fault is present.
- Some vehicles use a single ignition module that drives multiple coils, and a fault in one output can affect others, so don't assume the code points to a single coil without checking the module.
- A failed PCM driver is rare but possible, and replacing the PCM without first ruling out a shorted coil or harness is a costly misdiagnosis trap.
- Aftermarket alarm or remote start installations often tap into ignition wires and can introduce a short to voltage that sets this code.

Can I keep driving with P038C?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or towing because the misfire can overheat the catalytic converter and cause further damage. If the engine runs very poorly or stalls, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (optional but helpful for signal analysis)
- Noid light or test light
- Wire piercing probes and back-probe pins
- Service information for wiring diagrams and pinouts



Reading P038C

- 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.
- 8C** The exact fault within that area.

Often seen with

P0351 Ignition Coil A Primary/Secondary Circuit Malfunction · **P0352** Ignition Coil B Primary/Secondary Circuit Malfunction · **P0353** Ignition Coil C Primary/Secondary Circuit Malfunction · **P0354** Ignition Coil D Primary/Secondary Circuit Malfunction · **P0355** Ignition Coil 'E' Primary/Secondary Circuit

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/p038c/>

