



P030C

Ignition A Control Signal Circuit High

P030C indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the ignition coil A control circuit, which is the primary trigger wire for one of the ignition coils. The PCM commands the coil to fire by pulling this circuit to ground, and a high-voltage condition means the circuit is not being pulled low as expected, so the coil may not fire at all.

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

Symptoms you may notice

- The check engine light is illuminated, often with no other noticeable symptoms.
- Engine misfire that may be felt as rough idle, hesitation, or a stumble during acceleration.
- Reduced engine power or a limp-home mode if the misfire is severe enough to trigger protection strategies.
- A flashing check engine light in cases where the misfire could damage the catalytic converter.
- Poor fuel economy or an increase in exhaust emissions due to unburned fuel.
- In rare cases, a no-start condition if the affected coil is the only one supplying spark at that moment.

Common causes, most likely first

- 1 An open circuit in the ignition coil control wire between the PCM and the coil, such as a broken wire or a disconnected connector.
- 2 A faulty ignition coil whose internal primary winding or driver circuit has failed open.
- 3 Corroded, loose, or damaged pins at the ignition coil connector or at the PCM connector.
- 4 A short to voltage on the control circuit, often caused by chafed wiring touching a power wire.
- 5 A failed PCM driver for that specific ignition coil control circuit, though this is less common.
- 6 Aftermarket alarm or remote start wiring that has been spliced into the ignition coil control circuit incorrectly.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related misfire codes to confirm which cylinder or coil is affected.
- 2 Inspect the ignition coil connector and the PCM connector for corrosion, loose pins, or pushed-out terminals, and repair as needed.
- 3 Perform a resistance check on the ignition coil control wire from the PCM to the coil, looking for an open circuit or excessive resistance.
- 4 Check for a short to voltage on the control wire by measuring voltage with the key on and the PCM disconnected; any voltage present indicates a short.
- 5 Swap the ignition coil with a known-good coil from another cylinder and see if the code moves, which confirms a faulty coil.
- 6 If the wiring and coil test good, use a lab scope to verify the PCM is actually pulling the control circuit low; if not, the PCM may need replacement or reprogramming.
- 7 Clear the code and test-drive the vehicle to confirm the repair, monitoring live misfire data to ensure the fault is resolved.

What a high-voltage coil code really means

- A high-voltage reading on the control circuit does not always mean the coil is bad; an open control wire or a poor connection at the coil connector will produce the same code and is far cheaper to fix.
- Many technicians replace the ignition coil first and then discover the real problem is a chafed wire in the harness near the coil mounting bracket, so always inspect the wiring before condemning the coil.
- This code can be set intermittently by water intrusion into the coil connector, especially after engine washing or in vehicles with a leaking cowl seal, so check for signs of moisture or corrosion.
- A failed PCM driver for the ignition coil control circuit is rare but possible, and it should only be suspected after all wiring and coil tests have passed; misdiagnosing it leads to an expensive PCM replacement that does not fix the problem.
- Some aftermarket ignition coils have a different internal resistance that can cause the PCM to set this code even though the coil still fires, so using OEM-quality coils is important when replacing.

Can I keep driving with P030C?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or sustained high-speed driving because a persistent misfire can overheat and damage the catalytic converter. If the check engine light is flashing, stop driving as soon as it is safe and have the vehicle towed.



Tools that help

- OBD-II scan tool with live data and misfire monitoring capability
- Digital multimeter for voltage and resistance checks
- Lab scope for verifying the PCM control signal
- Wire piercing probes and back-probe pins
- Basic hand tools for connector and coil removal
- Service information with wiring diagrams for the specific vehicle

Reading P030C

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.
0C	The exact fault within that area.

Often seen with

P0300 Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected · **P0302** Cylinder 2 Misfire Detected · **P0351** Ignition Coil A Primary/Secondary Circuit Malfunction · **P0352** Ignition Coil B Primary/Secondary Circuit Malfunction

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/p030c/>

