

GENERIC · POWERTRAIN

P0353

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0353

Ignition Coil C Primary/Secondary Circuit Malfunction

P0353 indicates that the engine control module (ECM) has detected an abnormal condition in the primary or secondary circuit of ignition coil C, which is typically the coil for cylinder 3. The ECM monitors the coil's electrical circuit and sets this code when the current or voltage falls outside the expected range during operation.

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, especially under load or acceleration
- Rough idle or shaking felt through the steering wheel and seats
- Reduced engine power and poor fuel economy
- Difficulty starting or stalling shortly after startup
- A flashing check engine light if the misfire is severe enough to damage the catalytic converter

Common causes, most likely first

- 1 Faulty ignition coil C (primary or secondary winding failure)
- 2 Worn or damaged spark plug or spark plug boot
- 3 Damaged wiring or connector at the coil harness (corrosion, chafing, or loose pins)
- 4 Open or short circuit in the coil primary circuit wiring
- 5 Failed ignition control module or driver circuit inside the ECM (less common)
- 6 Poor engine ground connection affecting coil operation

How to diagnose and fix it

- 1 Inspect the coil connector and wiring for corrosion, loose pins, or physical damage; repair as needed
- 2 Swap ignition coil C with a known-good coil from another cylinder and see if the misfire moves (if it does, replace the coil)
- 3 Remove and inspect the spark plug for wear, fouling, or incorrect gap; replace if necessary
- 4 Check the coil primary and secondary resistance with a multimeter and compare to specifications
- 5 Perform a spark test to confirm whether the coil is firing
- 6 Test the coil driver circuit with a noid light or oscilloscope to verify the ECM is commanding the coil
- 7 If all electrical checks pass, diagnose the ECM driver circuit or replace the ECM as a last resort



Don't Replace the Coil Until You Check These

- A misfire code P0353 often appears alongside P0303 (cylinder 3 misfire), but the coil may not be the culprit; a bad spark plug or injector can cause similar symptoms.
- Swapping coils between cylinders is a quick and free diagnostic step that many DIYers skip, yet it reliably identifies a faulty coil without any tools.
- Corroded or oil-soaked coil connectors are a common cause of P0353, especially on engines with valve cover gasket leaks, so inspect the harness before condemning the coil.
- The ECM driver circuit for the coil can fail due to a shorted coil, so always check the coil's resistance before installing a new one to avoid repeat failures.
- On some vehicles, a weak battery or charging system issue can cause intermittent coil circuit codes, so verify battery voltage and ground integrity first.

Can I keep driving with P0353?

You can drive cautiously to a repair shop if the check engine light is steady and the engine runs smoothly, but avoid heavy acceleration or towing. If the light is flashing or the engine misfires severely, stop driving to prevent catalytic converter damage.

Tools that help

- OBD-II scanner
- Digital multimeter
- Spark tester
- Noid light or oscilloscope
- Basic socket set and spark plug socket

Reading P0353

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.
53	The exact fault within that area.

Often seen with

P0171 System Too Lean (Bank 1) · **P0300** Random/Multiple Cylinder Misfire Detected · **P0303** Cylinder 3 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/p0353/>

