

FORD · POWERTRAIN

P1354

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1354 · Ford

Ignition Coil C Primary Circuit Fault

P1354 on Ford vehicles means the powertrain control module (PCM) detected an abnormal condition in the primary circuit of ignition coil C, which is the low-voltage side that the PCM uses to trigger the coil. The PCM monitors the coil driver circuit for expected voltage changes when the coil is commanded on and off, and it sets this code when the feedback does not match what the software expects.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Check engine light or service engine soon light illuminated, often with no other symptoms besides the warning light
- Engine misfire or rough running, especially under load or at idle, if the coil is not firing consistently
- Noticeable loss of power or hesitation during acceleration when the affected cylinder drops out
- Shaking or vibration felt through the steering wheel or seat that follows engine speed
- A flashing check engine light in severe cases where the misfire could damage the catalytic converter
- Slightly rough idle that smooths out at higher engine speeds if the coil is marginal rather than dead

Common causes, most likely first

- 1 Faulty ignition coil C with an open or shorted primary winding, which is the most common cause on Ford engines
- 2 Damaged or corroded electrical connector at coil C, including backed-out terminals or water intrusion
- 3 Chafed, broken, or shorted wire in the coil C primary circuit between the PCM and the coil
- 4 Failed PCM driver for that specific coil circuit, though this is less common than coil or wiring faults
- 5 Poor ground connection for the coil or engine block that raises primary circuit resistance
- 6 Aftermarket coil or spark plug of incorrect specification causing abnormal primary current draw
- 7 Oil or coolant contamination reaching the coil primary connector and degrading the circuit



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P1354, then check for related misfire codes to confirm which cylinder coil C serves on this Ford engine
- 2 Inspect the coil C electrical connector and primary wiring for corrosion, chafing, or loose terminals, and repair any damage found
- 3 Swap coil C with a known-good coil from another cylinder and clear the code to see whether the fault follows the coil or stays with the circuit
- 4 Measure primary winding resistance of coil C with a multimeter and compare it to the specification for your engine
- 5 Backprobe the coil C primary control wire at the PCM and at the coil to check for continuity and to confirm the PCM is commanding the coil on and off
- 6 Check coil and engine ground connections for voltage drop under load, cleaning and tightening any suspect grounds
- 7 Replace the ignition coil if testing confirms a faulty primary winding, then clear codes and verify the repair with a road test that includes load

What Ford coil C faults really mean

- On many Ford engines coil C does not correspond to cylinder 3, so always confirm the coil lettering or cylinder mapping in the service information before replacing a coil.
- A P1354 can be set by a marginal coil that still fires at idle but breaks down under load, so a simple resistance check may pass while the coil is still faulty.
- The PCM driver for coil C can be damaged by a shorted coil primary, so replacing a coil without checking the control wire can lead to a repeat failure.
- Water intrusion into the coil connector or spark plug well is a common Ford-specific cause that is missed when only the coil itself is inspected.
- A loose or corroded ground strap between the engine and chassis can set coil primary circuit codes on multiple coils and mimic a failed PCM.

Can I keep driving with P1354?

You can usually drive a Ford with P1354 if the engine runs smoothly and the light is steady, but avoid heavy acceleration and long trips until it is diagnosed. If the check engine light flashes or the engine misfires badly, stop driving because raw fuel can overheat and destroy the catalytic converter.



Tools that help

- OBD-II scan tool with manufacturer-specific Ford code support and freeze-frame data
- Digital multimeter with resistance and voltage-drop capability
- Backprobe pins or breakout leads for testing PCM and coil connectors
- Service information for coil lettering, cylinder mapping, and primary resistance specifications
- Basic hand tools for coil removal and connector inspection
- Test light or noid light for verifying PCM coil trigger signals

Reading P1354

P Powertrain: engine, transmission and emissions.

1 Manufacturer-specific code (Ford): its meaning depends on the make.

3 Ignition system and misfire.

54 The exact fault within that area.

Often seen with

P1351 VVT Sensor Range Performance Problem Bank 2 · **P1351** Injection Sensor Circuit · **P1352** Needle Lift Sensor · **P1353** Ignition Coil B Primary Circuit · **P1351** Ignition Diagnostic Monitor Signal Lost To PCM Or Out Of Ran · **P1352** Ignition Coil A Primary Circuit · **P1353** IC Output High Pulse Detected When Grounded Cyl 3 · **P1351** Ignition Control Circuit Voltage High · **P1352** IC Output High Pulse Detected When Grounded Cyl 2 · **P1353** Ignition Coil B Primary Circuit Fault · **P1351** Ignition Diagnostic Monitor Circuit Input Fault · **P1352** Ignition Coil A Primary Circuit Fault · **P1352** IC Output High Pulse Detected When Grounded Cyl 2 · **P1353** IC Output High Pulse Detected When Grounded Cyl 3 · **P1351** IC Circuit High Voltage · **P1353** Misfire Cylinder 6 With Fuel Cut-off · **P1352** Misfire During Start Cylinder 6 · **P1351** Misfire Cylinder 5 With Fuel Cut-off · **P0303** Cylinder 3 Misfire Detected · **P0353** Ignition Coil C 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/ford-p1354/>

