

FORD · POWERTRAIN

P1363

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1363 · Ford

Ignition Coil D Secondary Circuit Malfunction

P1363 on a Ford vehicle means the powertrain control module (PCM) has detected a fault in the secondary circuit of ignition coil D, which is the coil responsible for firing one specific cylinder. The PCM monitors the coil's secondary winding through feedback and flags this code when the voltage or current signature falls outside the expected range during engine operation.

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

Symptoms you may notice

- Engine misfire that is often most noticeable at idle or under light acceleration
- Rough running or a noticeable shake that worsens as engine load increases
- Flashing or steady check engine light, sometimes accompanied by a traction control light
- Reduced fuel economy and a faint raw fuel smell from the exhaust
- Often no symptoms besides the warning light if the misfire is intermittent or only occurs under specific conditions

Common causes, most likely first

- 1 Failed ignition coil D, typically an open or shorted secondary winding
- 2 Worn or fouled spark plug on the affected cylinder increasing secondary circuit resistance
- 3 Damaged or corroded coil connector or chafed secondary circuit wiring
- 4 Faulty PCM driver circuit for coil D, though this is less common
- 5 Moisture intrusion into the coil boot or spark plug well causing secondary voltage tracking
- 6 Aftermarket coil with incorrect resistance characteristics installed previously



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the misfire count and operating conditions when P1363 set
- 2 Inspect the coil D connector, boot, and spark plug well for corrosion, moisture, or carbon tracking
- 3 Swap coil D with a known-good coil from another cylinder and see if the misfire follows the coil
- 4 Remove and inspect the spark plug on the affected cylinder for wear, gap, or fouling, and replace if needed
- 5 Measure secondary resistance of coil D with a multimeter and compare it to the manufacturer's specification
- 6 Check the secondary circuit wiring for continuity and shorts between the coil and PCM, repairing any damage
- 7 Replace ignition coil D with a quality part and clear the code, then verify the misfire is gone during a road test

Why coil D misfires are often misdiagnosed

- A swapped coil that does not move the misfire often points to a spark plug, injector, or compression problem on that cylinder rather than the coil itself.
- Ford coil-on-plug boots can develop pinhole carbon tracks that only arc under high cylinder pressure, so a visual inspection alone will miss the fault.
- P1363 can set from a secondary circuit fault that does not produce a steady misfire, so technicians who only look for a dead cylinder may overlook a coil that is breaking down under load.
- Corroded pins in the coil connector are a frequent cause on older Ford engines, and cleaning or repinning the connector often cures the code without replacing the coil.
- A failing spark plug with an excessive gap raises secondary voltage demand and can trigger P1363 on a coil that is otherwise healthy, so always inspect the plug before condemning the coil.

Can I keep driving with P1363?

You can drive short distances to a repair shop, but avoid heavy acceleration and prolonged driving with a flashing check engine light because unburned fuel can damage the catalytic converter. If the engine is running very rough or the light is flashing, stop driving and arrange a tow.

Tools that help

- OBD-II scan tool with misfire and freeze-frame capability
- Digital multimeter with resistance and continuity functions
- Spark plug socket and torque wrench
- Coil boot puller or insulated pliers
- Wire brush and electrical contact cleaner



Reading P1363

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Ford): its meaning depends on the make.
- 3** Ignition system and misfire.
- 63** The exact fault within that area.

Often seen with

P1365 Cylinder 4 Ignition Circuit Short To B+ · **P1364** Cylinder 4 Ignition Circuit Open · **P1364** Ignition Coil Primary Circuit · **P1365** Ignition Coil Secondary Circuit · **P1364** Ignition Coil Cylinder 4 No Activation · **P1365** Ignition Coil Cylinder 5 No Activation · **P1364** IC Cylinder 4 Not Toggling After Enable · **P1365** IC Cylinder 5 Not Toggling After Enable · **P1364** Ignition Coil Primary Circuit Fault · **P1365** Ignition Coil Secondary Circuit Failure · **P1364** IC Cylinder 4 Not Toggling After Enable · **P1365** IC Cylinder 5 Not Toggling After Enable · **P1364** Misfire During Start Cylinder 12 · **P1365** Misfire Cylinder 12 With Fuel Cut-off · **P0300** Random/Multiple Cylinder Misfire Detected · **P0354** Ignition Coil D Primary/Secondary Circuit Malfunction · **P0304** Cylinder 4 Misfire Detected

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-p1363/>

