



P1365 · Mazda

Ignition Coil Secondary Circuit

P1365 on Mazda vehicles indicates that the powertrain control module (PCM) has detected an abnormal condition in the secondary, high-voltage side of an ignition coil circuit. The PCM monitors the coil's firing feedback and flags this code when the secondary circuit does not produce the expected ignition event, which points to a coil, plug, or wiring fault rather than a fuel or air problem.

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

Symptoms you may notice

- Check engine light illuminated, often with no other noticeable symptoms
- Rough idle or a noticeable shake at stoplights
- Engine misfire or hesitation under acceleration
- Reduced power and poor fuel economy
- A flashing check engine light in severe misfire cases
- Hard starting or stalling on some Mazda models

Common causes, most likely first

- 1 Faulty ignition coil with a failed secondary winding
- 2 Worn or fouled spark plug increasing secondary circuit resistance
- 3 Damaged or corroded coil connector and secondary wiring
- 4 Moisture or oil intrusion into the spark plug well shorting the coil
- 5 Cracked coil boot allowing spark to arc to ground
- 6 PCM driver or feedback circuit fault (less common)

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm which cylinder is affected
- 2 Inspect the coil, boot, and spark plug well for oil, moisture, or carbon tracking
- 3 Swap the suspect coil to another cylinder and recheck to see if the misfire follows
- 4 Test the coil primary and secondary resistance with a multimeter against Mazda specs
- 5 Replace the spark plugs and any damaged coil boot or connector as needed
- 6 Replace the faulty ignition coil and clear the code, then verify with a road test
- 7 If the fault persists, check the coil control and feedback wiring back to the PCM



What P1365 really points to on Mazdas

- A misfire that follows a swapped coil confirms the coil is at fault, while a misfire that stays on the same cylinder points to a plug, injector, or compression problem.
- Oil leaking past the valve cover gasket into the spark plug well is a frequent hidden cause on older Mazda engines and ruins coils quickly.
- P1365 can be set by a single failed ignition event during a cold start, so clearing the code and monitoring misfire counters is smarter than replacing parts immediately.
- A flashing check engine light with P1365 means raw fuel is reaching the catalytic converter and the vehicle should not be driven until repaired.
- Secondary ignition faults are often misdiagnosed as fuel delivery problems because the symptoms of a misfire are nearly identical.

Can I keep driving with P1365?

You can usually drive a short distance to a shop if the light is steady and the engine runs smoothly, but avoid hard acceleration and long trips. If the check engine light flashes or the engine shakes badly, stop driving to protect the catalytic converter and prevent further damage.

Tools that help

- OBD-II scan tool with live misfire data
- Digital multimeter
- Spark plug socket and torque wrench
- Coil puller or insulated pliers
- Hand tools for connector and boot removal

Reading P1365

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

Often seen with

P1364 Cylinder 4 Ignition Circuit Open · **P1364** Ignition Coil Primary Circuit · **P1364** Ignition Coil Cylinder 4 No Activation · **P1364** IC Cylinder 4 Not Toggling After Enable · **P1364** Ignition Coil Primary Circuit Fault · **P1364** IC Cylinder 4 Not Toggling After Enable · **P1364** Misfire During Start Cylinder 12 · **P0300** Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected · **P0302** Cylinder 2 Misfire Detected · **P0351** Ignition Coil A 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/mazda-p1365/>

