

TOYOTA · POWERTRAIN

P1305

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1305 · Toyota

Igniter Circuit Malfunction No 2

P1305 on a Toyota means the engine control module (ECM) has detected a fault in the ignition circuit for cylinder number 2, specifically the igniter (ignition coil) circuit. The ECM monitors the feedback signal from the igniter and sets this code when the expected confirmation pulse is missing or incorrect during engine operation.

SYSTEM

Powertrain

CODE TYPE

Toyota specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system
and misfire

Symptoms you may notice

- Check Engine Light illuminated, often with no other noticeable symptoms
- Engine misfire or rough running, especially under load or acceleration
- Reduced engine power or limp mode in some models
- Difficulty starting or intermittent no-start condition
- Slight decrease in fuel economy due to incomplete combustion

Common causes, most likely first

- 1 Faulty ignition coil (igniter) for cylinder 2
- 2 Damaged or corroded wiring or connector at the cylinder 2 ignition coil
- 3 Open or short circuit in the igniter feedback signal wire between the coil and ECM
- 4 Failed spark plug or excessive spark plug gap causing coil stress
- 5 ECM internal fault (rare, but possible after other causes are ruled out)
- 6 Poor ground connection for the ignition coil circuit
- 7 Aftermarket or incorrect ignition coil installed previously



How to diagnose and fix it

- 1 Inspect the cylinder 2 ignition coil connector for corrosion, loose pins, or damage and repair as needed
- 2 Swap the cylinder 2 ignition coil with a known-good coil from another cylinder and see if the misfire or code moves
- 3 Check the spark plug condition and gap, replace if worn or fouled
- 4 Use a multimeter to check resistance of the ignition coil primary and secondary windings against factory specifications
- 5 Test the feedback signal wire from the coil to the ECM for continuity and short to ground or power
- 6 Verify power and ground at the ignition coil connector with the key on and during cranking
- 7 If all external circuits and components test good, suspect the ECM and perform further diagnostics before replacement

Igniter circuit checks beyond the coil

- A swapped coil that does not move the misfire often points to a wiring fault in the feedback circuit rather than the coil itself.
- The igniter feedback signal is a low-voltage pulse that a basic test light cannot verify; an oscilloscope or a capable scan tool with graphing is needed to see it.
- Corrosion inside the coil boot or at the connector pins can cause intermittent P1305 without any visible damage to the coil body.
- On some Toyota engines, a failing spark plug can stress the coil and trigger P1305 before the coil completely fails.
- P1305 is often stored alongside misfire codes for cylinder 2, but the presence of only P1305 suggests the ECM is seeing a circuit fault rather than a combustion misfire.

Can I keep driving with P1305?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or sustained high speeds because a misfiring cylinder can overheat the catalytic converter. If the engine runs very rough or loses power, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data and graphing capability
- Digital multimeter
- Oscilloscope (for feedback signal analysis)
- Socket set and spark plug socket
- Wire terminal pick and electrical contact cleaner



Reading P1305

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

Often seen with

P1300 Misfire Detected Fuel Level Too Low · **P1300** Igniter Circuit Malfunction No 1 · **P1301** Fire Due To Increased Exhaust Temperature · **P1302** Cylinder 2 Misfire · **P1301** Cylinder 1 Misfire · **P1300** Random Misfire · **P1300** Ignition Timing Adjustment Circuit · **P1300** Random Misfire · **P1301** Cylinder 1 Misfire · **P1302** Cylinder 2 Misfire · **P1300** Ignition Coil 1 Primary Feedback Circuit · **P1300** Boost Calibration Fault · **P1301** Boost Calibration High · **P1302** Boost Calibration Low · **P1300** Ignitor Circuit · **P0352** Ignition Coil B Primary/Secondary Circuit Malfunction · **P0302** Cylinder 2 Misfire Detected

See it working

Watch the animated explainer [How a Knock Sensor Works: Spark Timing and Octane](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/toyota-p1305/>

