

GENERIC · POWERTRAIN

P036D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P036D

Ignition H Control Signal Circuit/Open

P036D indicates that the powertrain control module (PCM) has detected an open circuit or loss of control signal on the ignition coil H control circuit, which is the dedicated ground-side driver wire for that coil. The PCM commands each coil to fire by pulling this circuit to ground, and when it sees no expected voltage change or current flow, it flags the circuit as open.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or misfire felt as shaking or stumbling, especially when the engine is cold
- Reduced engine power or limp mode if the fault is severe enough to affect multiple coils
- A noticeable decrease in fuel economy due to incomplete combustion
- Occasional hard starting or extended cranking before the engine catches

Common causes, most likely first

- 1 Broken or chafed wire in the ignition coil H control circuit, often near a connector or where the harness bends
- 2 Corroded or loose electrical connector at the ignition coil or at the PCM
- 3 Failed ignition coil with an open internal primary winding
- 4 Faulty PCM driver for that specific coil control circuit, though this is less common
- 5 Rodent damage or water intrusion affecting the coil harness
- 6 Poor ground connection for the ignition coil or engine block



How to diagnose and fix it

- 1 Inspect the ignition coil H connector and harness for obvious damage, corrosion, or loose pins, and clean or repair as needed
- 2 Swap the ignition coil from cylinder H with a known-good coil from another cylinder and see if the misfire or code moves, confirming coil failure
- 3 Use a digital multimeter to check resistance of the ignition coil primary winding and compare to specification
- 4 Check for continuity and short-to-ground on the control circuit between the coil connector and the PCM connector, repairing any open or shorted wire
- 5 Verify that the PCM is providing a proper ground pulse on the control circuit using a noid light or oscilloscope while cranking
- 6 If the circuit and coil test good, suspect a faulty PCM driver and perform further diagnostics before replacement
- 7 Clear the code and perform a road test to confirm the repair, monitoring live misfire data if available

Why coil H codes often mislead

- A P036D can be set by a coil that still fires under some conditions but has an intermittent open in its primary winding, so a simple resistance check at room temperature may not reveal the fault.
- The PCM may set this code without ever illuminating the check engine light if the fault is not severe enough to cause a measurable misfire, leading owners to ignore it until drivability worsens.
- Technicians sometimes replace the ignition coil only to find the connector terminal has backed out of the plastic housing, creating an open circuit that a visual inspection of the coil itself would miss.
- On some vehicles, the ignition coil H control circuit is shared with other coils in a wasted-spark system, so a fault in one coil's circuit can affect two cylinders and confuse misfire diagnosis.
- A weak or failing battery or charging system can cause voltage spikes that damage coil drivers, so always check system voltage before condemning the PCM.

Can I keep driving with P036D?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or sustained high-speed driving because a persistent misfire can overheat the catalytic converter and cause costly damage. If the check engine light is flashing, stop driving and have the vehicle towed.

Tools that help

- OBD-II scan tool with live data and misfire monitoring
- Digital multimeter with resistance and continuity functions
- Noid light or oscilloscope for checking control signals
- Basic hand tools for coil and connector access
- Wire repair kit with crimpers and heat shrink



Reading P036D

- 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.
- 6D** The exact fault within that area.

Often seen with

P0300 Random/Multiple Cylinder Misfire Detected · **P0351** Ignition Coil A Primary/Secondary Circuit Malfunction · **P0352** Ignition Coil B Primary/Secondary Circuit Malfunction · **P0353** Ignition Coil C Primary/Secondary Circuit Malfunction · **P0365** Camshaft Position Sensor 'B' Circuit (Bank 1)

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/p036d/>

