

GENERIC · POWERTRAIN

P035A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P035A

Ignition E Control Signal Circuit/Open

P035A indicates that the powertrain control module (PCM) has detected an open circuit or abnormal condition on the ignition control signal circuit for ignition coil E. This circuit is responsible for triggering the coil to fire the spark plug for its assigned cylinder, and an open or shorted signal path prevents the PCM from properly controlling ignition timing and coil dwell.

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 sensation, especially noticeable at idle or low speeds
- Engine hesitation or stumble during acceleration
- Reduced engine power or limp mode in some vehicles
- Increased fuel consumption due to incomplete combustion
- Possible flashing check engine light if the misfire is severe enough to damage the catalytic converter

Common causes, most likely first

- 1 Open or damaged wire in the ignition coil E control circuit (broken, corroded, or chafed conductor)
- 2 Faulty ignition coil E (internal open circuit or short in the primary winding)
- 3 Poor electrical connection at the ignition coil E connector (loose, corroded, or backed-out terminal)
- 4 PCM driver circuit failure for coil E (less common but possible)
- 5 Damage to the wiring harness from heat, rodents, or mechanical abrasion
- 6 Water intrusion into the coil connector or PCM connector causing corrosion



How to diagnose and fix it

- 1 Perform a visual inspection of ignition coil E, its connector, and the associated wiring for obvious damage, corrosion, or loose terminals
- 2 Use a scan tool to check for other codes and verify that P035A is current or history; clear codes and test-drive to see if it returns
- 3 Measure resistance of ignition coil E primary and secondary windings and compare to factory specifications
- 4 Check for battery voltage at the coil E connector with the key on, and inspect the ground circuit for integrity
- 5 Perform a wiggle test on the harness while monitoring coil control signal with a lab scope or noid light to detect intermittent opens
- 6 If the coil and wiring test good, check the PCM control signal with an oscilloscope; if the signal is missing, diagnose the PCM driver circuit
- 7 Repair or replace the faulty component: replace coil E if defective, repair wiring as needed, or replace the PCM if the driver is confirmed failed

Don't overlook the coil E connector

- A loose or corroded connector at coil E is a frequent cause of this code, and simply reseating or cleaning the terminals often resolves the issue without parts replacement.
- The code can be set by a faulty ignition coil even when the coil still fires intermittently, so resistance testing alone may not reveal the problem; a scope test of the control signal is more reliable.
- P035A is specific to coil E, but many vehicles use the same coil design across cylinders, so swapping coil E with another cylinder can help confirm a coil fault before replacing it.
- Wiring harness damage from heat or vibration is common near the coil packs, and a thorough visual inspection with the harness flexed can expose hidden breaks.
- A failed PCM driver for coil E is rare, but if all other tests pass and the signal is absent at the PCM pin, the PCM may need replacement or reprogramming.

Can I keep driving with P035A?

It is generally safe to drive with P035A if the engine runs smoothly and the check engine light is steady, but avoid heavy acceleration or towing until the fault is repaired. If the check engine light flashes or the engine misfires severely, stop driving to prevent catalytic converter damage.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Oscilloscope or lab scope
- Noid light or coil test light
- Wire repair kit (soldering iron, heat shrink, terminals)



Reading P035A

- 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.
- 5A** The exact fault within that area.

Often seen with

P0300 Random/Multiple Cylinder Misfire Detected · **P0350** Ignition Coil Primary/Secondary Circuit · **P0351** Ignition Coil A Primary/Secondary Circuit Malfunction · **P0352** Ignition Coil B Primary/Secondary Circuit Malfunction · **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/p035a/>

