

FORD · POWERTRAIN

P1361

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1361 · Ford

Ignition Control IC Circuit Low Voltage

P1361 on Ford vehicles means the powertrain control module (PCM) has detected a low-voltage condition on the ignition control integrated circuit (IC) circuit, which is the communication line between the PCM and the ignition control module or coil driver. The PCM expects to see a specific voltage on this circuit when the ignition is on, and a reading below the expected threshold sets this code because the PCM cannot reliably command spark timing.

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

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Engine may crank but fail to start or start and immediately stall
- Rough running, misfiring, or a dead miss on one or more cylinders
- Loss of power or hesitation during acceleration
- Intermittent stalling while driving or at idle
- In some cases the engine may not start at all because spark is not being commanded

Common causes, most likely first

- 1 Damaged or corroded wiring in the ignition control IC circuit between the PCM and ignition module
- 2 Failed ignition control module or coil driver integrated circuit
- 3 Poor ground connection at the ignition module or engine block
- 4 Faulty powertrain control module (PCM) driver circuit
- 5 Open or shorted ignition coil primary winding affecting the IC feedback signal
- 6 Corroded or loose connector pins at the PCM or ignition module
- 7 Aftermarket alarm or remote start wiring tapped into the ignition circuit



How to diagnose and fix it

- 1 Inspect the ignition control IC circuit wiring and connectors for chafing, corrosion, or loose pins
- 2 Check and clean the ignition module and engine block ground connections
- 3 Measure voltage on the IC circuit at the ignition module connector with the key on and compare to specification
- 4 Perform a wiggle test on the harness while monitoring the IC circuit voltage to catch intermittent faults
- 5 Swap the ignition coil or module with a known-good unit if the circuit tests normal but the code persists
- 6 Check for aftermarket wiring or accessories spliced into the ignition circuit and remove or repair as needed
- 7 If all external circuits and components test good, diagnose the PCM driver circuit or replace the PCM as a last resort

What Ford techs check before replacing the PCM

- A loose or corroded ground at the ignition module is one of the most common causes of P1361 on Ford vehicles, and it is frequently overlooked because the ground looks tight until you remove the bolt and find corrosion underneath.
- The ignition control IC circuit is a low-current signal line, so a partially broken wire inside the insulation can pass a continuity test but still drop voltage under load, which is why a loaded voltage test is more reliable than a simple ohm check.
- Aftermarket remote start or alarm systems that tap into the ignition wiring are a frequent source of this code on older Ford trucks and SUVs, especially when the install was done with scotch-lok connectors.
- P1361 does not always mean the ignition module has failed; a shorted ignition coil primary can pull the IC circuit voltage low and set this code even though the module itself is good.
- On some Ford models, a failing crankshaft position sensor or camshaft position sensor can cause the PCM to shut down the IC circuit as a protective measure, setting P1361 alongside a sensor code.

Can I keep driving with P1361?

If the engine starts and runs, limit driving to short trips to a repair shop and avoid heavy acceleration or highway speeds because a sudden loss of spark can cause stalling. If the engine will not start or stalls repeatedly, do not drive the vehicle and have it towed to avoid a safety hazard.

Tools that help

- Digital multimeter
- OBD-II scan tool
- Wiring diagram for the specific Ford model
- Test light
- Socket set and wire probe kit



Reading P1361

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

Often seen with

P1351 VVT Sensor Range Performance Problem Bank 2 · **P1351** Injection Sensor Circuit · **P1352** Needle Lift Sensor · **P1351** Ignition Diagnostic Monitor Signal Lost To PCM Or Out Of Ran · **P1352** Ignition Coil A Primary Circuit · **P1351** Ignition Control Circuit Voltage High · **P1352** IC Output High Pulse Detected When Grounded Cyl 2 · **P1351** Ignition Diagnostic Monitor Circuit Input Fault · **P1352** Ignition Coil A Primary Circuit Fault · **P1351** IC Circuit High Voltage · **P1352** IC Output High Pulse Detected When Grounded Cyl 2 · **P1351** Misfire Cylinder 5 With Fuel Cut-off · **P1352** Misfire During Start Cylinder 6 · **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/ford-p1361/>

