



P1356 · Ford

Loss of Ignition Diagnostic Module Input to PCM

P1356 on Ford vehicles means the powertrain control module (PCM) has lost the input signal from the ignition diagnostic module (IDM), which is the module that monitors and reports ignition coil activity. The PCM sets this code when it stops receiving the expected diagnostic feedback from the IDM, so it cannot confirm that the ignition system is firing correctly.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Professional	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 with difficulty
- Rough running or misfiring under load if the IDM signal is intermittent
- Reduced engine power or limp mode in some Ford models
- Intermittent stalling or sudden engine shutoff while driving

Common causes, most likely first

- 1 Failed ignition diagnostic module (IDM) or its internal circuitry
- 2 Damaged or corroded wiring between the IDM and the PCM
- 3 Loose, backed-out, or corroded connector pins at the IDM or PCM
- 4 Open or shorted ignition diagnostic input circuit
- 5 Poor ground connection for the IDM or PCM
- 6 Failed PCM driver circuit for the IDM input (less common)
- 7 Aftermarket ignition components causing signal interference

How to diagnose and fix it

- 1 Scan all modules for related codes and record freeze-frame data to confirm the fault condition
- 2 Inspect the IDM and PCM connectors for corrosion, loose pins, or water intrusion and repair as needed
- 3 Check the IDM input circuit for continuity and short-to-ground using a wiring diagram and multimeter
- 4 Verify the IDM ground and power supply are clean and within specification
- 5 Swap the IDM with a known-good unit only after circuit tests pass, then clear codes and retest
- 6 If the IDM is good and wiring is intact, test the PCM input circuit and replace the PCM only as a last resort
- 7 After repair, clear codes and perform a road test to confirm the IDM signal is present and the code does not return



Why the IDM signal loss fools many technicians

- A weak or failing ignition coil can back-feed noise into the IDM circuit and cause P1356 without the IDM itself being faulty.
- Corroded pins at the IDM connector are a common cause on older Ford trucks and SUVs, especially where road salt is used.
- P1356 can be set by a momentary glitch during engine cranking, so always check for a stored history code before condemning parts.
- Aftermarket alarm or remote-start wiring tapped into the ignition circuit can disturb the IDM signal and set this code.
- Some Ford models require the IDM to be initialized or programmed after replacement, so a used module may not communicate correctly.

Can I keep driving with P1356?

If the engine runs normally and only the light is on, you can drive cautiously to a repair shop, but avoid heavy load or long trips. If the engine misfires, stalls, or fails to start, stop driving and have the vehicle towed to prevent further ignition system damage.

Tools that help

- OBD-II scan tool with Ford-specific software
- Digital multimeter
- Wiring diagram for the specific Ford model
- Terminal pick and connector release tools
- Known-good IDM for swap testing

Reading P1356

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



Often seen with

P1355 Cylinder 1 Ignition Circuit Open · **P1354** Modulation Piston Displacement Sensor Circuit Malfunction · **P1354** VVT System Malfunction Bank 2 · **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 · **P1354** Ignition Coil C Primary Circuit · **P1353** Ignition Coil B Primary Circuit · **P1351** Ignition Control Circuit Voltage High · **P1355** IC Output High Pulse Detected When Grounded Cyl 5 · **P1352** IC Output High Pulse Detected When Grounded Cyl 2 · **P1354** IC Output High Pulse Detected When Grounded Cyl 4 · **P1353** IC Output High Pulse Detected When Grounded Cyl 3 · **P1355** Ignition Coil D Primary Circuit Fault · **P1353** Ignition Coil B Primary Circuit Fault · **P1354** Ignition Coil C Primary Circuit Fault · **P1352** Ignition Coil A Primary Circuit Fault · **P1351** Ignition Diagnostic Monitor Circuit Input Fault · **P1354** IC Output High Pulse Detected When Grounded Cyl 4 · **P1353** IC Output High Pulse Detected When Grounded Cyl 3 · **P1352** IC Output High Pulse Detected When Grounded Cyl 2 · **P1355** IC Output High Pulse Detected When Grounded Cyl 5 · **P1351** IC Circuit High Voltage · **P1354** Misfire During Start Cylinder 7 · **P1351** Misfire Cylinder 5 With Fuel Cut-off · **P1353** Misfire Cylinder 6 With Fuel Cut-off · **P1355** Misfire Cylinder 7 With Fuel Cut-off · **P1352** Misfire During Start Cylinder 6

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-p1356/>

