

MAZDA · POWERTRAIN

P1359

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1359 · Mazda

SPOUT Signal Lost To Powertrain Control Module Or Out Of Range

P1359 on Mazda vehicles means the powertrain control module (PCM) has lost the SPOUT signal from the ignition control module, or the signal voltage has moved outside the expected range. The PCM uses this signal to command ignition timing, so when it disappears the computer can no longer synchronize spark delivery and sets the code.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Mazda specific	High	Professional	Ignition system and misfire

Symptoms you may notice

- Check engine light illuminated, often with no other noticeable symptoms
- Engine may crank but fail to start, or start and immediately stall
- Rough running, misfiring, or a noticeable loss of power under load
- Unstable or erratic idle quality
- Reduced fuel economy or poor throttle response
- In some cases the engine may run in a limp or fixed-timing mode

Common causes, most likely first

- 1 Damaged, chafed, or disconnected SPOUT signal wire between the ignition control module and the PCM
- 2 Faulty ignition control module (igniter) not generating or passing the SPOUT signal
- 3 Corroded or loose electrical connector pins at the PCM, ignition module, or distributor
- 4 Failed crankshaft position sensor or camshaft position sensor preventing the PCM from establishing timing reference
- 5 PCM internal fault on the SPOUT input circuit
- 6 Aftermarket alarm or remote start wiring tapped into the ignition signal circuit
- 7 Ignition coil or distributor internal failure affecting the SPOUT circuit



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data to confirm when P1359 set
- 2 Inspect the SPOUT wire and connectors between the ignition control module and PCM for chafing, corrosion, or loose pins
- 3 Check for a clean, strong spark at each cylinder and verify the ignition coil and distributor are functioning
- 4 Test the crankshaft and camshaft position sensors for proper signal and resistance
- 5 Back-probe the SPOUT circuit at the PCM and at the ignition module with a scope or meter to confirm signal presence and voltage range
- 6 Substitute a known-good ignition control module or PCM only after wiring and sensor tests pass
- 7 Clear the code and perform a road test to confirm the repair, then recheck for pending codes

SPOUT signal faults that fool good technicians

- A missing SPOUT signal often produces a no-start condition that looks like a failed fuel pump or crank sensor, so always verify spark and injector pulse before replacing parts.
The SPOUT wire can be damaged inside the harness loom where it rubs against the engine block or exhaust shield, and a visual inspection of the outside of the loom will not reveal it.
- Aftermarket remote start or alarm systems that splice into ignition wiring are a frequent hidden cause of P1359 on older Mazdas, especially when the fault appeared after electrical work.
- A weak or failing ignition coil can back-feed noise into the SPOUT circuit and set P1359 without any hard wiring fault, so coil testing belongs in the diagnostic sequence.

P1359 does not always mean the ignition module is dead; a poor ground at the engine block or PCM can corrupt the SPOUT signal reference and trigger the code.

Can I keep driving with P1359?

Do not continue driving with P1359 because the engine may stall without warning or fail to restart, creating a safety risk. Have the vehicle towed to a repair shop if it is running poorly or will not start reliably.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter
- Oscilloscope for signal waveform analysis
- Wiring diagram for the specific Mazda model
- Back-probe kit and terminal pick tools
- Spark tester



Reading P1359

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Mazda): its meaning depends on the make.
- 3** Ignition system and misfire.
- 59** 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 · **P0300** Random/Multiple Cylinder Misfire Detected · **P0335** Crankshaft Position Sensor A Circuit Malfunction · **P0340** Camshaft Position Sensor A Circuit Malfunction (Bank 1)

See it working

Watch the animated explainer [How Misfire Detection Works: Crankshaft Speed](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/mazda-p1359/>

