

MITSUBISHI · POWERTRAIN

P1300

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1300 · Mitsubishi

Ignition Timing Adjustment Circuit

P1300 on Mitsubishi vehicles indicates the engine control module (ECM) has detected a fault in the ignition timing adjustment circuit, which is responsible for fine-tuning ignition timing based on signals from the camshaft and crankshaft position sensors. The ECM sets this code when the actual timing adjustment does not match the commanded value or when the circuit's electrical signal is out of range.

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

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or unstable engine speed
- Engine misfire or hesitation during acceleration
- Reduced engine performance and poor fuel economy
- Difficulty starting or stalling after start-up
- In rare cases, the engine may enter limp mode

Common causes, most likely first

- 1 Faulty camshaft position sensor or crankshaft position sensor
- 2 Wiring damage (open, short, or corrosion) in the ignition timing adjustment circuit
- 3 Poor electrical connection at the sensor or ECM connectors
- 4 Failed ignition coil or spark plug causing timing feedback issues
- 5 Defective ECM (less common)
- 6 Timing belt or chain skipped a tooth, affecting mechanical timing

How to diagnose and fix it

- 1 Connect an OBD-II scanner and check for stored and pending codes, including manufacturer-specific data for P1300
- 2 Inspect the camshaft and crankshaft position sensors for physical damage, debris, or loose mounting
- 3 Check the wiring harness and connectors between the sensors and ECM for continuity, shorts, and corrosion
- 4 Test the sensors with a multimeter or oscilloscope to verify signal output
- 5 Verify base engine timing marks align correctly, especially if the timing belt or chain has been serviced
- 6 Replace faulty sensors or repair wiring as needed, then clear codes and perform a road test to confirm the repair



Common Misdiagnosis Traps for P1300

- A skipped timing belt or chain is frequently overlooked because the code points to an electrical circuit, but mechanical timing errors can trigger P1300 on Mitsubishi engines.
- The camshaft position sensor on some Mitsubishi models is prone to heat-related intermittent failures that do not show up in static tests, so a wiggle test while the engine is running can be revealing.
- After replacing a sensor or repairing wiring, the ECM may require a relearn procedure or a drive cycle before the code clears permanently, leading some to believe the repair was unsuccessful.
- Corroded ground connections at the engine block or chassis can cause voltage drops that mimic sensor failures, so always verify grounds before condemning components.
- P1300 can be set by a failing ignition coil that creates electrical noise interfering with the timing signal, even though the coil itself is not part of the adjustment circuit.

Can I keep driving with P1300?

You can usually drive the vehicle with P1300, but avoid aggressive acceleration or heavy loads until the fault is repaired, as timing errors can lead to misfires and potential catalytic converter damage. If the engine runs very poorly or stalls frequently, seek professional diagnosis promptly.

Tools that help

- OBD-II scanner with manufacturer-specific capabilities
- Digital multimeter
- Oscilloscope (for signal analysis)
- Basic hand tools (wrenches, sockets, screwdrivers)
- Service manual for Mitsubishi vehicle

Reading P1300

P Powertrain: engine, transmission and emissions.

1 Manufacturer-specific code (Mitsubishi): its meaning depends on the make.

3 Ignition system and misfire.

00 The exact fault within that area.

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0016** Crankshaft/Camshaft Position Correlation (Bank 1 Sensor A) · **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 **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/mitsubishi-p1300/>

