

MAZDA · POWERTRAIN

P1195

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1195 · Mazda

EGR Boost Sensor Circuit

P1195 on Mazda vehicles means the powertrain control module has detected a fault in the electrical circuit for the EGR (exhaust gas recirculation) boost sensor, which monitors pressure in the EGR system. The computer compares the sensor signal against expected values and flags the code when the voltage or pressure reading falls outside the normal range.

SYSTEM

Powertrain

CODE TYPE

Mazda specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air
metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or stumbling when the engine is cold
- Slight hesitation or surge during light acceleration
- Poor fuel economy in some cases
- Failed emissions test due to incomplete EGR monitor
- In rare cases, a noticeable loss of power or engine ping under load

Common causes, most likely first

- 1 Failed EGR boost sensor (pressure sensor) itself
- 2 Damaged or disconnected electrical connector at the boost sensor
- 3 Cracked, clogged, or disconnected vacuum hose between the sensor and the EGR system
- 4 Wiring harness damage such as chafed wires or corroded terminals
- 5 Carbon buildup blocking the pressure port or passage to the sensor
- 6 Faulty EGR valve or solenoid affecting the pressure signal
- 7 Rarely, a PCM (powertrain control module) internal fault

How to diagnose and fix it

- 1 Inspect the EGR boost sensor connector and wiring for looseness, corrosion, or damage
- 2 Check all vacuum hoses connected to the sensor for cracks, clogs, or disconnection
- 3 Test the sensor's reference voltage and signal voltage with a multimeter and compare to Mazda specifications
- 4 Remove and clean the sensor's pressure port and passage of carbon deposits
- 5 Replace the EGR boost sensor if electrical tests confirm it is out of range
- 6 Clear the code and perform a drive cycle to verify the repair
- 7 If the code persists, diagnose the EGR valve and related circuits



What Mazda techs check before replacing the sensor

- A clogged EGR passage or carbon-fouled pressure port often mimics a failed boost sensor, so clean the port before condemning the sensor.
- The boost sensor on many Mazdas is mounted on the firewall or intake and its vacuum hose can crack invisibly, causing a signal that looks like sensor failure.
- P1195 can set intermittently due to a loose connector that only loses contact during engine vibration, so wiggle-test the harness while watching live data.
- A faulty EGR solenoid or stuck EGR valve can skew the pressure reading and set P1195 even when the sensor itself is good.
- Do not overlook a weak battery or charging system, as low voltage can cause false sensor codes on Mazda PCMs.

Can I keep driving with P1195?

You can usually continue driving with P1195 because it rarely causes immediate drivability or safety issues, but avoid long-term neglect since it can affect emissions and fuel economy. Have the fault diagnosed soon, especially if you notice rough running or hesitation.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Hand vacuum pump
- Socket and wrench set
- Carburetor or throttle body cleaner
- Inspection mirror and flashlight

Reading P1195

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Mazda): its meaning depends on the make.
1	Fuel and air metering.
95	The exact fault within that area.



Often seen with

P1196 Oxygen Sensor Heater Circuit Bank 1 Sensor 1 Electrical Malf · **P1196** Ignition Switch Start Circuit · **P1196** Ignition Switch Start Circuit Fault · **P1196** O2 Sensor Heater Circuit Low Resistance Fault 2 · **P1196** O2 Sensor 2/1 (Bank 2 Sensor 1) Slow During Catalyst Monitor · **P1196** Key Off Voltage High · **P1196** O2 Sensor 2/1 (Bank 2 Sensor 1) Slow During Catalyst Monitor · **P0106** MAP/Barometric Pressure Circuit Range/Performance · **P0171** System Too Lean (Bank 1) · **P0401** EGR Flow Insufficient Detected · **P0402** EGR Flow Excessive Detected

See it working

Watch the animated explainer [Turbocharger Trainer: Boost, Wastegate and Intercooler](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/mazda-p1195/>

