

TOYOTA · POWERTRAIN

P1128

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1128 · Toyota

Throttle Control Motor Lock

P1128 on Toyota vehicles means the engine control module (ECM) has commanded the electronic throttle control motor to move the throttle plate, but the motor did not reach the commanded position within the expected time or current limits. The ECM detects this as a throttle control motor lock condition, indicating the motor circuit or the motor itself is not responding as designed.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Toyota specific	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light and often the vehicle stability control (VSC) or traction control warning light
- Reduced engine power or limp mode, where the throttle responds sluggishly or only partially
- A throttle pedal that feels unresponsive or requires excessive travel to accelerate
- Rough or erratic idle, sometimes stalling when coming to a stop
- A noticeable lack of acceleration when merging or climbing a hill
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Carbon buildup or mechanical binding on the throttle plate or throttle body bore, preventing the motor from moving the plate freely
- 2 A faulty throttle control motor (the electric motor inside the throttle body assembly) with worn brushes or an open winding
- 3 Damaged or corroded wiring in the throttle motor circuit, including the motor power and ground wires
- 4 A poor electrical connection at the throttle body connector, such as loose pins or water intrusion
- 5 A failing engine control module (ECM) that cannot deliver the correct drive current to the motor, though this is less common
- 6 A throttle position sensor (TPS) or accelerator pedal position sensor (APP) that is misreporting, causing the ECM to command an impossible motor position
- 7 A low or weak battery or charging system fault that causes voltage drops during throttle motor operation



How to diagnose and fix it

- 1 Inspect the throttle body bore and throttle plate for carbon deposits or physical obstruction, and clean them with throttle body cleaner if dirty
- 2 Check the throttle body connector and motor circuit wiring for corrosion, loose pins, or chafed wires, and repair as needed
- 3 Measure the resistance of the throttle control motor windings with a multimeter and compare to the manufacturer's specification to rule out an open or shorted motor
- 4 Perform a throttle body initialization or relearn procedure with a scan tool after cleaning or replacement, as Toyota ECMs require this to set the closed and open limits
- 5 Use a scan tool to command the throttle motor through its range while watching throttle position sensor feedback to confirm smooth operation and identify binding
- 6 If the motor or throttle body assembly is faulty, replace the throttle body with a known-good unit and perform the relearn procedure
- 7 Verify battery voltage and charging system performance, as low voltage can cause the ECM to set this code intermittently

Why cleaning the throttle body often fixes P1128

- A throttle body that looks clean can still have carbon buildup on the back side of the plate or in the bore where the plate seats, causing the motor to stall before reaching its commanded position and setting P1128.
- Many technicians replace the throttle body only to find the code returns because they skipped the throttle body initialization procedure, which Toyota ECMs require to learn the new closed and open stops.
- A weak battery or a failing alternator can cause voltage drops during throttle motor operation, making the ECM misinterpret the motor response as a lock and set P1128 even though the motor is mechanically fine.
- The throttle control motor is not a stepper motor on most Toyota systems; it is a DC motor with a position sensor, so testing it with a simple power and ground pulse can damage it and should be avoided.
- P1128 can be set by a misreporting accelerator pedal position sensor even when the throttle body is working perfectly, because the ECM compares commanded and actual throttle positions and flags a lock when the signals disagree.

Can I keep driving with P1128?

You can usually drive the vehicle to a repair shop, but expect reduced engine power and avoid highways or situations that require quick acceleration. If the throttle becomes completely unresponsive or the engine stalls repeatedly, stop driving and have the vehicle towed.



Tools that help

- OBD-II scan tool with Toyota-specific live data and bidirectional control capability
- Digital multimeter for checking motor resistance and circuit voltage
- Throttle body cleaner and a soft brush or lint-free cloth
- Basic hand tools such as a socket set and screwdrivers for removing the intake duct
- Factory service information or a repair database for wiring diagrams and relearn procedures

Reading P1128

P Powertrain: engine, transmission and emissions.

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

1 Fuel and air metering.

28 The exact fault within that area.

Often seen with

P1129 Long Term Fuel Trim Bank 2 System Too Rich · **P1129** Electric Throttle Control System · **P1129** MAP Higher Than Expected · **P1129** Downstream HO2S Sensors Swapped · **P1129** MAP Higher Than Expected · **P1129** Downstream Heated Oxygen Sensor Signals Reversed · **P2101** Throttle Actuator Control Motor Circuit Range/Performance · **P2111** Throttle Actuator Control System - Unable to Open · **P2112** Throttle Actuator Control System - Unable to Close · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

See it working

Watch the animated explainer [EV Powertrain Trainer: How an Electric Car Drives](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/toyota-p1128/>

