

BMW · POWERTRAIN

P1632

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1632 · BMW

Throttle Valve Adaptation Condition Not Met

P1632 on a BMW means the engine control module (DME) commanded a throttle valve adaptation routine but the conditions required to run it were not met, so the learned throttle stop positions and spring characteristics were never stored. The DME sets this code when it sees the adaptation request blocked by an unmet prerequisite such as engine temperature, battery voltage, or a stored fault in a related system.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	BMW specific	Medium	Intermediate	Computer and output circuits

Symptoms you may notice

- Illumination of the check engine light with no other obvious driveability complaint
- Rough or erratic idle that does not respond to normal throttle adaptation
- Slightly delayed or uneven throttle response when pulling away from a stop
- Limp-home mode with reduced engine power on some models if the fault repeats
- Intermittent idle flare or dip after battery disconnect or DME reprogramming
- Often no symptoms besides the warning light when the adaptation was simply blocked once

Common causes, most likely first

- 1 Low battery voltage or a weak battery that drops below the DME's adaptation threshold during the routine
- 2 Engine coolant temperature outside the narrow window the DME requires for throttle adaptation
- 3 A stored fault in the throttle valve (electronic throttle control) circuit or in the accelerator pedal sensor circuit
- 4 Dirty or carbon-fouled throttle valve causing the adaptation limits to be exceeded before the routine can complete
- 5 Interrupted or failed adaptation attempt after DME coding, battery replacement, or throttle valve replacement
- 6 Wiring or connector issue at the throttle valve actuator or pedal module that intermittently blocks the enable conditions
- 7 Aging DME software with known adaptation enable-condition bugs on certain BMW engine management versions



How to diagnose and fix it

- 1 Scan all modules with a BMW-capable diagnostic tool and record every stored and pending fault before clearing anything
- 2 Check battery state of charge and charging system output; recharge or replace the battery if it is below specification
- 3 Verify engine coolant temperature is within the DME's adaptation window using live data, and repair any thermostat or sensor fault first
- 4 Inspect the throttle valve for carbon buildup and clean it only if the manufacturer procedure allows, then clear faults
- 5 Run the throttle valve adaptation routine with the diagnostic tool while monitoring battery voltage and coolant temperature
- 6 Check the throttle valve and accelerator pedal connectors and wiring for corrosion, chafing, or loose pins
- 7 If adaptation still will not complete, update the DME software to the latest level and repeat the routine

Why throttle adaptation keeps failing on BMWs

- This code is frequently a symptom of a weak battery rather than a failed throttle valve, because the DME aborts adaptation when supply voltage sags during the routine.
- A coolant thermostat that runs the engine too cool will silently block adaptation on many BMW engines, so check live coolant temperature before condemning the throttle body.
- Clearing P1632 without running the adaptation routine leaves the DME without learned throttle stops, which can cause a poor idle that mimics a vacuum leak.
- On some BMW models the adaptation enable conditions include a minimum idle time and no active fault in the pedal module, so a pending pedal sensor code can set P1632 without ever lighting the pedal fault.
- Replacing the throttle valve without performing the adaptation procedure with a capable scan tool will almost always set P1632 again on the first key cycle.

Can I keep driving with P1632?

The car is generally safe to drive to a workshop because the throttle valve remains under DME control, but avoid aggressive acceleration and long trips until the adaptation is completed. If the engine enters limp-home mode with reduced power, drive only to the nearest safe location and arrange diagnosis.

Tools that help

- BMW-capable diagnostic scan tool with adaptation and live-data functions
- Digital multimeter for battery and wiring checks
- Battery charger or power supply to maintain voltage during adaptation
- Basic hand tools for throttle valve and connector access
- Throttle body cleaner and lint-free shop towels if cleaning is permitted



Reading P1632

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (BMW): its meaning depends on the make.
- 6** Computer and output circuits.
- 32** The exact fault within that area.

Often seen with

P1633 Accelerator Pedal Position Sensor 2 Signal Too Low · **P1633** ECM · **P1633** Battery Overcharge Fault · **P1633** Battery Overcharge · **P1633** Ignition Power Circuit Low Voltage · **P1633** Throttle Valve Adaptation Limp Home Position · **P0121** Throttle Position Sensor A Circuit Range/Performance · **P0222** Throttle Position Sensor B Circuit Low Input · **P0507** Idle Control System RPM Higher Than Expected · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

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/bmw-p1632/>

