

GENERIC · POWERTRAIN

P05BF

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P05BF

Stop-Start Mode Switch Circuit High

P05BF indicates that the engine control module has detected an abnormally high voltage on the stop-start mode switch circuit, which is the driver-operated input that enables or disables the automatic engine stop-start function. The computer expects a specific voltage range on the signal circuit and interprets a sustained high reading as a fault, typically an open circuit, a short to voltage, or a failed switch.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Low	Intermediate	Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- The stop-start system may be completely inoperative, with the engine never shutting off at traffic lights.
- The stop-start disable indicator light may stay illuminated or fail to respond when the button is pressed.
- A generic check engine light or a dedicated stop-start warning message may appear on the dashboard.
- The switch may feel normal to the touch but produce no change in system behavior when toggled.
- Often no symptoms besides the warning light, especially if the driver never uses the stop-start feature.
- In some vehicles, the stop-start system may default to the off position after each restart.

Common causes, most likely first

- A faulty stop-start mode switch that has failed internally and holds the signal circuit at a high voltage.
- An open circuit in the signal wire between the switch and the control module, causing the module to read a pulled-up high voltage.
- A short to battery voltage on the signal circuit, often from chafed wiring near the center console or dashboard.
- Corroded or loose electrical connectors at the switch or at the control module, introducing unwanted resistance or an open.
- A defective stop-start control module or body control module that misinterprets a normal switch signal.
- Water intrusion or debris in the switch assembly causing intermittent high-voltage readings.
- Aftermarket accessories or improper wiring repairs that backfeed voltage onto the stop-start switch circuit.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related stop-start system codes before proceeding.
- 2 Inspect the stop-start mode switch and its connector for physical damage, corrosion, or loose pins.
- 3 Measure the voltage on the signal circuit at the switch connector with the key on and compare it to the manufacturer's specification.
- 4 Perform a continuity and resistance test on the switch in both the pressed and released positions to confirm it changes state.
- 5 Check the signal wire for an open or short to voltage by wiggle-testing the harness while monitoring the scan tool data parameter.
- 6 If the switch and wiring test good, substitute a known-good switch or module only after confirming power and ground at the module.
- 7 Clear the code and road-test the vehicle to confirm the stop-start system operates correctly and the code does not return.

Stop-start switch faults that fool technicians

- A stop-start mode switch that reads high voltage can be caused by a simple unplugged connector that a previous repair left loose, so always check connector seating before condemning parts.
- Many stop-start systems disable themselves when battery voltage is low or the battery sensor is faulty, and that can set a high-voltage switch code as a secondary effect rather than a true switch failure.
- The switch is often a momentary contact that the module expects to see pull low when pressed, so a stuck-open switch or a broken ground reference will mimic a short to voltage.
- Aftermarket remote starters or dash cameras tapped into the center console wiring frequently backfeed voltage onto the stop-start switch circuit and set this code.
- Do not replace the stop-start switch based solely on the code; verify the signal voltage at the module connector, because a shorted harness can produce the same high-voltage reading.

Can I keep driving with P05BF?

The vehicle remains safe to drive because the stop-start feature is a convenience function and does not affect engine power, braking, or steering. You can continue driving, but the automatic stop-start will likely remain disabled until the fault is repaired, and you should avoid pressing the switch repeatedly in an attempt to force it to work.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Back probe pins or breakout leads
- Trim removal tools for center console access
- Wiring diagram for the stop-start circuit



Reading P05BF

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
5	Vehicle speed, idle control and auxiliary inputs.
BF	The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P05BE** Stop-Start Mode Switch Circuit Low · **P05C0** Active Grille Air Shutter Module A Over Temperature · **P05C1** Active Grille Air Shutter Module B Over Temperature · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How a Fuel Injector Works: Pulse Width and Spray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p05bf/>

