

GENERIC · POWERTRAIN

P05BE

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P05BE

Stop-Start Mode Switch Circuit Low

P05BE means the engine control module (ECM) has detected a low-voltage condition on the stop-start mode switch circuit, which is the driver-operated button that enables or disables the automatic engine stop-start feature. The ECM expects to see a specific voltage on the signal circuit when the switch is at rest or pressed, and a continuous low reading tells the module the circuit is shorted to ground or the switch is stuck closed.

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 does not engage and the engine never shuts off at traffic lights or in stop-and-go traffic.
- A yellow or amber warning light illuminates on the dashboard, often accompanied by a message such as 'Stop-Start System Fault' or 'Auto Start-Stop Unavailable'.
- The stop-start disable button on the dash may feel unresponsive or fail to toggle the system on and off.
- The engine may restart immediately after an automatic stop, or the system may default to the off position every time the vehicle is started.
- Often no symptoms besides the warning light, because the vehicle remains fully drivable and the stop-start feature is simply disabled.
- In some vehicles, other driver-assist or fuel-saving features that share the stop-start enable logic may also become unavailable.

Common causes, most likely first

- A faulty stop-start mode switch that is internally shorted to ground, keeping the signal circuit pulled low at all times.
- A chafed or pinched signal wire between the switch and the ECM that has rubbed through its insulation and is contacting chassis ground.
- Corrosion or water intrusion at the switch connector or in the harness connector at the ECM, creating a low-resistance path to ground.
- A loose or damaged ground strap or ground connection shared by the switch circuit, causing a reference voltage to be pulled low.
- A defective ECM driver or internal pull-up resistor on the stop-start switch input, though this is far less common than wiring or switch faults.
- Aftermarket accessories or remote-start modules improperly tapped into the stop-start switch wiring, introducing an unintended ground.



How to diagnose and fix it

- 1 Connect a scan tool and read all stored and pending codes, then clear P05BE and verify whether it returns immediately or only after the switch is operated.
- 2 Inspect the stop-start mode switch connector and the ECM connector for corrosion, water intrusion, bent pins, or loose terminals, and repair as needed.
- 3 Disconnect the switch and measure resistance across the switch terminals in both the rest and pressed positions, comparing to the manufacturer's specification to confirm the switch is not stuck closed.
- 4 With the switch disconnected and the ignition on, back-probe the signal circuit at the ECM and verify the voltage is at the expected pull-up level (typically near 5 volts or battery voltage, depending on design) rather than near zero.
- 5 Isolate the signal wire by disconnecting both ends and measuring resistance from the signal wire to chassis ground; any reading below a few ohms indicates a short that must be traced and repaired.
- 6 If the wiring and switch test good, substitute a known-good switch or use a scan tool to monitor the stop-start switch input parameter while pressing the button to confirm the ECM is seeing the state change.
- 7 Only after all circuit and switch tests pass should the ECM be suspected; check for technical service bulletins and software updates before replacing the module.

What a low stop-start switch circuit really means

- A low signal on this circuit does not automatically mean the switch is bad; a rubbed-through wire behind the dashboard or near a seat track is a frequent culprit that technicians overlook when they replace the switch first.
Many stop-start systems disable themselves when battery state of charge is low or when the hood is open, so verify the battery and hood switch are healthy before chasing P05BE as a hard fault.
- The stop-start mode switch often shares a ground or signal return with other dash switches, so a single corroded ground point can set P05BE alongside unrelated-looking codes.
- Aftermarket remote starters and dash cameras tapped into the stop-start button wiring are a common cause of a persistent low signal that only appears after the accessory is installed.
- On some vehicles the stop-start switch is a momentary button that the ECM reads through a resistor ladder, so a shorted out-of-spec resistor inside the switch can pull the entire ladder low and set this code without any visible damage.

Can I keep driving with P05BE?

The vehicle remains safe to drive because the stop-start feature is disabled and the engine will not shut off unexpectedly, but you should avoid relying on the system and have the circuit inspected soon to prevent a dead battery from repeated failed restart attempts. Do not attempt to bypass or jumper the switch, as that can create a permanent low signal and mask a wiring fault.



Tools that help

- OBD-II scan tool with live data and bidirectional control capability
- Digital multimeter with back-probe pins
- Wiring diagram for the stop-start switch circuit
- Trim removal tools for accessing dash-mounted switches
- Test light or jumper wire with fused leads

Reading P05BE

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.
BE	The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P05B8** Restraint Deployment Signal Circuit/Open · **P05B9** Restraint Deployment Signal Circuit Low · **P05BF** Stop-Start Mode Switch Circuit High · **P0A0D** High Voltage System Interlock Circuit A High

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/p05be/>

