

GENERIC · POWERTRAIN

P05F9

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P05F9

Stop-Start Status Signal Circuit

P05F9 indicates that the powertrain control module (PCM) has detected a fault in the stop-start status signal circuit, which is used to monitor the readiness of the automatic engine stop-start system. The PCM expects a specific voltage or signal pattern from the stop-start status sensor or switch, and when the signal is out of range, intermittent, or missing, it sets this code and may disable the stop-start feature.

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 disabled, so the engine no longer shuts off at traffic lights or when idling.
- A warning light or message on the dashboard indicating stop-start is unavailable.
- The engine may hesitate or stumble when restarting from a stop, or the restart may be delayed.
- In some cases, the vehicle may stall when coming to a stop if the stop-start system engages unexpectedly.
- Often no symptoms besides the warning light, as the vehicle remains driveable without stop-start functionality.

Common causes, most likely first

- Faulty stop-start status sensor or switch, such as a worn or contaminated switch in the center console or dashboard.
- Damaged or corroded wiring harness or connector at the stop-start status sensor or PCM.
- Low or weak battery voltage, which can cause the stop-start system to set a status signal fault.
- Failed or failing stop-start auxiliary battery (if equipped) that cannot maintain proper voltage during engine-off events.
- Software glitch or outdated PCM calibration affecting stop-start signal processing.
- PCM internal fault, though this is less common and should be diagnosed last.



How to diagnose and fix it

- 1 Verify battery condition and state of charge, including the auxiliary battery if equipped, and recharge or replace as needed.
- 2 Inspect the stop-start status sensor and its connector for physical damage, corrosion, or loose pins; clean or repair as necessary.
- 3 Check wiring continuity and voltage drop between the stop-start status sensor and the PCM, looking for opens, shorts, or high resistance.
- 4 Use a scan tool to monitor live data for the stop-start status signal while operating the switch to confirm proper signal changes.
- 5 If the sensor is suspect, test it according to the manufacturer's procedure and replace it if it fails the test.
- 6 Check for technical service bulletins (TSBs) or software updates for the PCM related to stop-start system faults and reprogram if applicable.
- 7 If all external circuits and components test good, follow the diagnostic flow chart for PCM replacement or repair, ensuring proper relearn procedures are performed.

Stop-Start Signal Faults You Might Overlook

- A weak or aging battery is a leading cause of stop-start status signal codes, even when the engine starts normally, because the system requires stable voltage during engine-off periods.
- The stop-start status signal may be derived from a simple switch or a more complex sensor integrated into the brake pedal or shifter, so misdiagnosis often occurs by replacing the wrong component.
- Intermittent faults can be caused by a chafed wire that only shorts when the steering wheel is turned or the console is bumped, so wiggle tests are essential.
- Some vehicles use a separate stop-start auxiliary battery that can fail independently of the main battery, and a failing auxiliary battery may not illuminate a traditional battery light.
- The PCM may set P05F9 as a consequence of another fault, such as a crankshaft position sensor or throttle body issue, so always check for related codes before replacing parts.

Can I keep driving with P05F9?

The vehicle remains safe to drive because the stop-start system is a fuel-saving feature and its failure does not affect normal braking or steering. However, avoid relying on the stop-start function, and address the fault promptly to prevent battery drain or unexpected stalling in traffic.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the stop-start system
- Battery tester and charger
- Trim removal tools for accessing switches and connectors



Reading P05F9

- 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.
- F9** The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P05F8** Reductant Heater Control Module Performance · **P05FA** Stop-Start Status Signal Circuit Low · **P0A0D** High Voltage System Interlock Circuit A High

See it working

Watch the animated explainer [Excavator Simulator: Hydraulics You Can Operate](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p05f9/>

