



P05C7

Economy Mode Switch Circuit/Open

P05C7 indicates that the powertrain control module (PCM) has detected an open circuit in the economy mode switch circuit, meaning the switch or its wiring is not completing the electrical path as expected. The PCM monitors this circuit to determine when the driver requests economy mode, and an open circuit prevents that signal from being received.

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 check engine light or service vehicle soon message illuminates on the dashboard.
- The economy mode indicator may fail to light up when the switch is pressed.
- The vehicle may remain in normal or performance mode regardless of switch position.
- Fuel economy may be lower than expected because the economy mode cannot be activated.
- Often no symptoms besides the warning light, especially if the default mode is acceptable to the driver.
- The switch may feel loose or unresponsive if the open circuit is due to a faulty switch or connector.

Common causes, most likely first

- 1 Broken or disconnected wire in the economy mode switch circuit.
- 2 Corroded or loose electrical connector at the switch or PCM.
- 3 Failed economy mode switch (internal open circuit).
- 4 Open circuit inside the wiring harness due to chafing or damage.
- 5 Poor ground connection for the switch circuit.
- 6 PCM internal fault (rare but possible).

How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in other modules.
- 2 Inspect the economy mode switch and its connector for physical damage, corrosion, or loose pins.
- 3 Test the switch continuity with a multimeter while operating it; replace if no continuity when pressed.
- 4 Check wiring continuity from the switch to the PCM using a wiring diagram and multimeter, repairing any open circuits.
- 5 Inspect and clean ground connections associated with the switch circuit.
- 6 Clear the code and test-drive the vehicle to confirm the repair; if the code returns, perform further diagnostics on the PCM and harness.



Before you replace the economy mode switch

- A common oversight is assuming the switch itself is faulty when the real problem is a corroded connector or a broken wire hidden under the dashboard or along the steering column.
- The economy mode switch circuit often shares a ground with other dashboard switches, so a bad ground can cause multiple switch-related codes or intermittent operation.
- Some vehicles use a momentary switch that sends a signal to the PCM, and the PCM may default to a specific mode if the circuit is open, leading drivers to think the switch is working when it is not.
- Aftermarket accessories or remote starters tapped into the switch wiring can introduce an open circuit or interference that sets this code.
- The code can be set by a low battery or poor charging system voltage, so always check battery health and connections before condemning the switch.

Can I keep driving with P05C7?

The vehicle remains safe to drive because the economy mode is a convenience feature and does not affect engine operation or safety systems. Avoid toggling the switch repeatedly until the fault is repaired, as this may cause further damage to the circuit.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Wiring diagram for the specific vehicle
- Trim removal tools
- Electrical contact cleaner

Reading P05C7

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.
C7	The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P05C6** Engine Coolant Pressure Sensor Circuit Intermittent/Erratic · **P05C8** Economy Mode Switch Circuit Range/Performance · **U0100** Lost Communication With ECM/PCM A



See it working

Watch the animated explainer [How a Turbocharger Works, Step by Step](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p05c7/>

