



P0607

Control Module Performance

P0607 means the engine control module (ECM) has detected an internal performance fault, typically a failure in its own processing, memory, or watchdog circuitry. The ECM runs self-checks and monitors its central processor; when a check fails or a watchdog timer expires, it stores this code and usually illuminates the check engine light.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	High	Professional	Computer and output circuits

Symptoms you may notice

- Check engine light illuminated, often with no other noticeable symptoms
- Engine may stall intermittently or fail to start
- Rough running or misfire-like behavior under load
- Transmission may shift erratically or enter limp mode
- Reduced engine power or throttle response
- Other unrelated trouble codes stored simultaneously

Common causes, most likely first

- 1 Failing or internally faulty engine control module (ECM)
- 2 Poor electrical connections at the ECM harness or ground points
- 3 Low battery voltage or charging system problems causing module resets
- 4 Corroded or damaged wiring in the ECM power or ground circuits
- 5 Aftermarket electronic accessories causing electrical interference
- 6 Software corruption in the ECM requiring reflash or replacement

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P0607 is active and not a ghost code
- 2 Perform a thorough battery and charging system test, including load test and voltage drop checks
- 3 Inspect ECM connectors, pins, and ground straps for corrosion, looseness, or damage
- 4 Check for technical service bulletins (TSBs) or software updates applicable to the vehicle
- 5 Verify power and ground integrity at the ECM with a multimeter under load
- 6 If all external checks pass, replace and reprogram the ECM as the final step



Why P0607 is often a power supply problem

- A weak battery or failing alternator can cause the ECM to reset mid-operation, setting P0607 even though the module itself is healthy.
- Corroded ground connections, especially those shared with the engine block or chassis, are a frequent hidden cause of internal module performance codes.
- Aftermarket alarms, remote starters, or stereo equipment tapped into the ECM harness can introduce voltage spikes that trigger this code.
- P0607 is sometimes stored alongside communication codes (U-codes) when the real issue is a CAN bus fault rather than the ECM itself.
- Replacing the ECM without first verifying power and ground circuits often leads to a repeat failure and unnecessary expense.

Can I keep driving with P0607?

If the engine runs normally and the light is steady, you may drive cautiously to a repair shop, but avoid long trips or heavy load. If the engine stalls, runs poorly, or the light flashes, stop driving and have the vehicle towed to prevent damage or unsafe conditions.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter for voltage and resistance checks
- Battery load tester and charging system analyzer
- Wiring diagram and connector pinout for the ECM
- Socket set and terminal removal tools for ECM connector service

Reading P0607

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
6	Computer and output circuits.
07	The exact fault within that area.

Often seen with

P0600 Serial Communication Link Malfunction · **P0601** Internal Control Module Memory Checksum Error · **P0602** Control Module Programming Error · **P0606** PCM Processor Fault · **U0100** Lost Communication With ECM/PCM A



See it working

Watch the animated explainer [How a Helicopter Flies: Rotor and Tail in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0607/>

