

GENERIC · POWERTRAIN

P08EC

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P08EC

Drive Motor A Clutch Pawl Position Circuit High

P08EC indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the circuit that monitors the position of the clutch pawl for drive motor A, which is part of a hybrid or electric vehicle's transmission park-lock system. The PCM expects a voltage within a specific range as the pawl moves between engaged and disengaged positions, and a reading above that range signals a short to power, an open ground, or a faulty position sensor.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Professional	Transmission

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message
- Inability to shift the transmission into or out of Park, or a delay in engagement
- A warning message indicating a transmission or parking lock fault
- The vehicle may refuse to start or may not move after selecting a gear
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Damaged or chafed wiring in the clutch pawl position sensor circuit, causing a short to voltage
- 2 Failed clutch pawl position sensor or actuator assembly
- 3 Corroded or loose electrical connector at the sensor or PCM
- 4 Internal short within the sensor or its integrated circuitry
- 5 Faulty PCM driver or internal circuit for the sensor reference voltage
- 6 Water intrusion or contamination in the connector or sensor housing



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes, then clear codes and test-drive to see if P08EC returns
- 2 Visually inspect the clutch pawl position sensor, its connector, and the wiring harness for damage, corrosion, or loose pins
- 3 Measure reference voltage and ground at the sensor connector with a digital multimeter and compare to manufacturer specifications
- 4 Backprobe the signal wire at the PCM and check for a short to voltage while wiggling the harness
- 5 If wiring and connectors are good, test the sensor with a known-good unit or follow the manufacturer's resistance/voltage test procedure
- 6 Replace the clutch pawl position sensor or actuator if it fails testing, then clear codes and verify the repair
- 7 If the fault persists after sensor replacement, diagnose the PCM and its internal circuits per service information

What the pawl position circuit really tests

- A high voltage reading often comes from a short to power in the harness where it rubs against a sharp edge or heat source, not from a failed sensor.
- The clutch pawl position sensor is sometimes integrated into the actuator assembly, so a sensor fault may require replacing the entire unit.
- Intermittent P08EC codes can be caused by a poor ground connection at the transmission case, which raises the signal voltage reference.
- A weak or failing 12-volt battery can cause erratic sensor readings and set this code without any actual circuit fault.
- After any repair, the pawl position must be relearned or calibrated with a scan tool, or the code may reset immediately.

Can I keep driving with P08EC?

If the vehicle drives and shifts normally, you can drive it to a repair shop, but avoid using the parking lock repeatedly or forcing the shifter. If the vehicle will not engage Park or move, do not drive it and have it towed to prevent transmission damage or a rollaway risk.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter (DMM)
- Backprobe pins or breakout box
- Service information for circuit diagrams and sensor specifications
- Basic hand tools for connector and sensor access



Reading P08EC

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

Often seen with

P08E8 Drive Motor A Clutch Enable Circuit Low · **P08E9** Drive Motor A Clutch Enable Circuit High · **P08EA** Drive Motor A Clutch Pawl Position Circuit · **P08EB** Drive Motor A Clutch Pawl Position Circuit Low · **P08ED** Drive Motor A Clutch Pawl Position Performance

See it working

Watch the animated explainer [Manual Car Driving Simulator: Learn Clutch Control](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p08ec/>

