



P0DCC

Hybrid/EV Battery Cell Balancing Circuit I

P0DCC indicates that the hybrid or electric vehicle's battery management system has detected a fault in the cell balancing circuit for one or more battery cells. The computer monitors the voltage of individual cells and the operation of the balancing circuitry; when it cannot properly balance the cells or sees an unexpected voltage deviation during balancing, it sets this code.

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

Symptoms you may notice

- Illumination of the check engine light or hybrid system warning light.
- Often no symptoms besides the warning light, especially in early stages.
- Reduced electric-only range or decreased fuel economy as the system limits balancing.
- A message on the dashboard indicating a hybrid system fault or reduced power.
- In rare cases, the vehicle may enter a limp mode or refuse to start if the fault is severe.

Common causes, most likely first

- 1 Faulty cell balancing circuit wiring or connector, such as an open or short in the harness between the battery management system and the battery pack.
- 2 Failed cell balancing resistor or transistor within the battery pack's balancing circuit.
- 3 Degraded or failing battery cell that cannot hold a balanced charge, causing the balancing circuit to work outside normal parameters.
- 4 Malfunctioning battery management system (BMS) module or its internal balancing control circuitry.
- 5 Corrosion or loose connections at the battery pack terminals or within the balancing circuit.
- 6 Software glitch in the BMS that incorrectly reports a balancing fault.



How to diagnose and fix it

- 1 Use a scan tool to retrieve all stored codes and freeze-frame data, then clear the code and test-drive to see if it returns.
- 2 Visually inspect the battery pack, balancing circuit wiring, and connectors for damage, corrosion, or loose pins.
- 3 Perform a voltage measurement across individual battery cells and compare to specifications to identify any weak or unbalanced cells.
- 4 Check the resistance of the balancing resistors and continuity of the balancing circuit according to the manufacturer's service information.
- 5 If the BMS is suspect, verify power and ground supplies and communication lines to the module before replacement.
- 6 Repair or replace any faulty wiring, connectors, or balancing components as needed.
- 7 After repairs, clear codes and perform a battery pack balancing procedure or relearn drive cycle as required by the manufacturer.

Cell balancing faults often misdiagnosed

- A weak cell can trigger a balancing circuit code even when the balancing hardware is fully functional, so cell health must be verified before replacing components.
- The balancing circuit may only operate during specific conditions such as charging or key-off periods, so intermittent faults may not appear during a short test drive.
- Corrosion at the battery pack connectors is a common cause that is easily overlooked during visual inspection.
- Some vehicles require a battery pack balancing procedure after any repair to the balancing circuit, and skipping it can cause the code to return.
- The code does not always indicate a failed battery pack; simple wiring issues or a software update can be the root cause.

Can I keep driving with P0DCC?

It is generally safe to continue driving with this code if the vehicle operates normally, but avoid aggressive driving or long trips until diagnosed. If the vehicle enters limp mode or shows reduced power, seek service immediately.

Tools that help

- OBD-II scan tool with hybrid/EV capability
- Digital multimeter
- Battery pack balancing tester or cell voltage monitor
- Insulation tester (megohmmeter)
- Manufacturer service information and wiring diagrams



Reading P0DCC

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

Often seen with

P0A7F Hybrid/EV Battery Pack Deterioration · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0BBB** Hybrid/EV Battery Pack Voltage Variation Exceeded Limit · **P0DCB** Hybrid/EV Battery Cell Balancing Circuit H Range/Performance · **P0DCD** Hybrid/EV Battery Cell Balancing Circuit I Stuck On

See it working

Watch the animated explainer [How Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0dcc/>

