

GENERIC · POWERTRAIN

P0D58

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D58

Proximity Detection Circuit A Low

P0D58 indicates that the powertrain control module has detected a low voltage condition on the proximity detection circuit designated as 'A', which is typically used by the passive entry or push-button start system to sense a key fob or smart key near the vehicle. The circuit is monitored for expected voltage or signal levels, and a low reading tells the module that the detection circuit is shorted to ground, open, or otherwise not producing the required signal.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Hybrid propulsion

Symptoms you may notice

- The keyless entry or push-button start system may not recognize the key fob when it is near the vehicle.
- The vehicle may fail to start with a 'key not detected' message even when the fob is inside the cabin.
- Intermittent operation of the proximity sensors, such as the doors not unlocking when the handle is touched.
- A warning light on the dashboard, often the security or key system indicator, may illuminate.
- Often no symptoms besides the warning light, especially if the fault is in a secondary proximity antenna.
- Remote start or walk-away locking features may become inoperative.

Common causes, most likely first

- 1 A faulty proximity sensor or antenna that has failed internally and is pulling the circuit low.
- 2 Damaged or chafed wiring in the proximity detection circuit, often at door hinge areas or under trim panels.
- 3 Corroded or loose electrical connectors at the sensor, module, or inline harness connectors.
- 4 A short to ground in the signal or power wire of the proximity circuit.
- 5 A failed or failing body control module or smart key control module that is misreading the circuit.
- 6 Water intrusion into a sensor or connector, causing corrosion and low signal voltage.
- 7 Aftermarket accessories or improper previous repairs that tapped into the proximity circuit.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in the body control or smart key modules.
- 2 Inspect the proximity sensors and their connectors for physical damage, corrosion, or water intrusion.
- 3 Perform a visual inspection of the wiring harness along its routing, especially at flex points like door hinges.
- 4 Use a multimeter to check for voltage and resistance on the proximity circuit at the sensor and at the module, comparing to manufacturer specifications.
- 5 Disconnect the sensor and see if the low voltage condition changes, which can isolate a shorted sensor.
- 6 Check for continuity to ground on the signal wire to identify a short to ground.
- 7 If wiring and sensors test good, follow the manufacturer's diagnostic flow to test the control module and replace if necessary.

Proximity circuit faults often misdiagnosed

- A low voltage on a proximity detection circuit is frequently caused by a shorted sensor rather than a wiring problem, so unplugging sensors one at a time can quickly isolate the culprit.
Water intrusion into door handles or bumper-mounted antennas is a common hidden cause, especially on vehicles that have been through car washes or heavy rain.
- The code can set intermittently due to a loose connector that only loses contact when the vehicle is driven over rough roads, so wiggle tests are essential.
- A weak or failing key fob battery can sometimes cause the module to report a proximity circuit fault because the expected signal is not returned, so always test with a known-good fob first.
Aftermarket alarm or remote start installations often splice into proximity circuits and create low-voltage faults that are not present in factory wiring.

Can I keep driving with P0D58?

The vehicle may still start and drive normally if the fault is in a non-critical proximity antenna, but you should avoid relying on keyless entry and be prepared for a no-start condition. Have the fault diagnosed soon to prevent being stranded, especially if the push-button start system is affected.

Tools that help

- OBD-II scan tool with body control module capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Trim removal tools
- Test light



Reading P0D58

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

Often seen with

P0D59 Proximity Detection Circuit A High · **P0D5A** Proximity Detection Circuit A Intermittent/Erratic · **P0D5B** Battery Charger 14 Volt Output Power Performance · **U0140** Lost Communication With Instrument Panel Cluster

See it working

Watch the animated explainer [Car Won't Start? Step-by-Step No-Start Diagnosis](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d58/>

