



C052E

ABS Pump Motor Control Circuit Low

C052E means the antilock braking system (ABS) control module has detected an abnormally low voltage or current on the electrical circuit that powers the ABS pump motor. The module monitors the pump motor feed and ground circuits and sets this code when the signal falls below the expected threshold, indicating a short to ground, high resistance, or a failing pump motor.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Chassis	Generic (all makes)	Medium	Intermediate	Brakes, steering and suspension

Symptoms you may notice

- The ABS warning light illuminates steadily on the dashboard.
- The traction control and stability control warning lights may also turn on because those systems share the ABS pump.
- The ABS pump motor may not run during a self-test, leaving the brake pedal feeling normal but ABS disabled.
- A whining or grinding noise from the ABS pump area may be absent when the system commands the pump to run.
- Often no symptoms besides the warning light, especially during normal dry-road driving.

Common causes, most likely first

- 1 A short to ground or damaged wire in the pump motor power feed circuit.
- 2 Corroded, loose, or disconnected ground connection for the ABS pump motor.
- 3 High resistance in the pump motor relay or fuse holder due to corrosion or poor contact.
- 4 A failed ABS pump motor relay that does not close or has burned contacts.
- 5 An internally shorted or worn ABS pump motor drawing excessive current or failing to spin.
- 6 A faulty ABS control module driver circuit that incorrectly reports low current.
- 7 Water intrusion or road salt corrosion at the pump motor connector pins.



How to diagnose and fix it

- 1 Inspect the ABS pump motor fuse and relay, checking for corrosion, tightness, and correct operation with a known-good relay.
- 2 Disconnect the pump motor connector and inspect pins for corrosion, water intrusion, or loose terminals; clean and reseat as needed.
- 3 Measure resistance and voltage drop on the pump motor power feed and ground circuits with a digital multimeter, comparing to manufacturer specifications.
- 4 Command the ABS pump motor on with a scan tool and listen for operation while monitoring current draw with a clamp meter.
- 5 Check the ground connection at the chassis and engine block for cleanliness and tightness, repairing any high-resistance points.
- 6 If the motor draws excessive current or fails to run when commanded, replace the ABS pump motor or assembly as required by the vehicle design.
- 7 Clear the code and perform a road test to verify the repair, ensuring the ABS warning light stays off and the pump activates during self-test.

Before you replace the ABS pump motor

- A weak or failing battery or charging system can cause low voltage at the pump motor during startup, setting C052E even though the motor itself is healthy.
- Corrosion inside the pump motor connector is a frequent culprit that is easily missed when only the fuse and relay are checked.
- The ABS control module may set this code intermittently if the pump motor is only commanded during low-traction events, so a stored code without a current fault can point to an intermittent wiring issue.
- Replacing the pump motor without checking the ground circuit often leads to a repeat failure because a bad ground increases current draw and damages the new motor.
- Some vehicles require programming or calibration of the ABS module after pump motor replacement, and skipping that step can leave the warning light on despite a correct repair.

Can I keep driving with C052E?

You can usually drive the vehicle with C052E set because the base brakes remain functional, but the antilock braking system is disabled and will not prevent wheel lockup during hard braking or on slippery surfaces. Avoid emergency stops and wet or icy roads until the fault is repaired, and have the system diagnosed promptly.



Tools that help

- OBD-II scan tool with ABS and bidirectional control capability
- Digital multimeter with voltage drop and resistance functions
- Clamp meter for measuring pump motor current draw
- Basic hand tools for fuse, relay, and connector access
- Manufacturer service information for wiring diagrams and specifications

Reading C052E

- C** Chassis: brakes, steering and suspension.
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- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
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- 5** Brakes, steering and suspension.
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- 2E** The exact fault within that area.

Often seen with

C0035 Left Front Wheel Speed Sensor Circuit Range/Performance · **C0040** Left Rear Wheel Speed Sensor Circuit · **C0110** ABS Pump Motor Circuit Malfunction · **C052D** ABS Pump Motor Control Circuit High · **C052F** ABS Pump Motor Supply Voltage Circuit/Open

See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c052e/>

