

GENERIC · CHASSIS

C0110

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0110

ABS Pump Motor Circuit Malfunction

C0110 indicates that the anti-lock braking system (ABS) control module has detected a fault in the electrical circuit that powers the ABS pump motor. The module monitors voltage and current on the pump motor circuit and sets this code when the expected electrical behavior is not present during self-test or operation.

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

Symptoms you may notice

- The ABS warning light is illuminated on the dashboard.
- The traction control system (TCS) or stability control (ESC) light may also be on, since these systems share the ABS pump.
- The ABS system is disabled, so the wheels can lock during hard braking.
- A humming or whirring noise from the ABS pump motor may be absent when it should run during a self-test.
- In some vehicles, the brake pedal may feel different or the pedal may pulsate unexpectedly.
- Often no symptoms besides the warning light, and the brakes otherwise feel normal under light use.

Common causes, most likely first

- A failed ABS pump motor, often due to worn brushes or internal electrical failure.
- Corroded, loose, or damaged wiring or connectors at the ABS pump motor or control module.
- A blown fuse or failed relay that supplies power to the ABS pump motor.
- A faulty ABS control module that is unable to properly drive or monitor the pump motor circuit.
- High resistance or an open circuit in the ground connection for the pump motor.
- A short circuit in the pump motor wiring, which may cause the module to disable the circuit.



How to diagnose and fix it

- 1 Check the ABS fuses and relays related to the pump motor circuit, and replace any that are blown or faulty.
- 2 Inspect the wiring harness and connectors at the ABS pump motor and control module for corrosion, looseness, or damage; clean and repair as needed.
- 3 Measure resistance and voltage on the pump motor circuit to check for opens, shorts, or excessive resistance; compare with manufacturer specifications.
- 4 Command the ABS pump motor on with a scan tool and listen for operation; if it does not run, test the motor directly with power and ground.
- 5 If the motor fails direct testing, replace the ABS pump motor or the complete ABS pump assembly as required.
- 6 If the motor and wiring test good, suspect the ABS control module; check for technical service bulletins (TSBs) or known issues before replacement.
- 7 After repairs, clear the code and perform a road test to verify the ABS system operates correctly and the light stays off.

What the ABS pump motor code really means

- A weak or failing battery or charging system can cause low voltage that triggers C0110, so always check battery health and charging voltage before condemning the pump motor.
- The ABS pump motor may only run during self-test or under specific conditions, so a fault can be intermittent and not present during a quick inspection.
- Corrosion inside the pump motor connector is a common cause that is often overlooked, especially on vehicles in salt-belt regions.
- Some vehicles require programming or coding of a replacement ABS module, so a simple swap may not work without proper scan tool procedures.
- C0110 can be set by a faulty ground connection at the chassis, not just at the pump itself, so inspect all related grounds.

Can I keep driving with C0110?

Because the ABS system is disabled, the vehicle may not stop as safely in an emergency or on slippery surfaces. You can drive cautiously to a repair shop, but avoid hard braking and wet or icy roads until the fault is fixed.

Tools that help

- OBD-II scan tool with ABS capabilities
- Digital multimeter
- Test light
- Wiring diagram for the ABS system
- Socket and wrench set
- Brake bleeder kit (if pump replacement is needed)



Reading C0110

- C** Chassis: brakes, steering and suspension.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 1** Brakes, steering and suspension.
- 10** 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 · **C0050** Right Rear Wheel Speed Sensor Circuit Malfunction · **C0111** ABS Activation Excessively Long · **C0121** Valve Relay Circuit Malfunction

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/c0110/>

