

GENERIC · CHASSIS

C0840

OBD-II TROUBLE CODE

C0840

Air Suspension Solenoid Valve Circuit

C0840 indicates that the air suspension control module has detected an electrical fault in one of the solenoid valve circuits that controls airflow to the air springs or exhaust valve. The module monitors the circuit for open, short-to-ground, short-to-power, or excessive current draw and sets this code when the expected voltage or current signature is not present.

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

Symptoms you may notice

- The air suspension warning light illuminates on the dashboard, often accompanied by a chime.
- The vehicle may sit lower than normal on one or more corners, or the ride height may be uneven.
- The air compressor may run continuously or not at all, depending on which valve circuit is faulty.
- The suspension may fail to raise or lower when the driver selects a different ride height mode.
- A message such as 'Suspension Fault' or 'Air Suspension Inactive' may appear in the driver information center.
- Often no symptoms besides the warning light, especially if the fault is intermittent or affects a valve that is not currently needed.

Common causes, most likely first

- A damaged or corroded solenoid valve connector, including bent pins or water intrusion.
- A broken, chafed, or shorted wire in the harness between the control module and the valve block.
- A failed solenoid valve coil inside the valve block, either open-circuit or shorted.
- A faulty air suspension control module with an internal driver failure.
- A poor ground connection for the valve block or control module.
- An intermittent fault caused by vibration or temperature extremes affecting a marginal connection.



How to diagnose and fix it

- 1 Inspect the solenoid valve connectors and harness for corrosion, damage, or loose pins, and clean or repair as needed.
- 2 Measure resistance across the suspect solenoid valve coil and compare to the manufacturer's specification to check for an open or shorted coil.
- 3 Check for battery voltage and ground at the valve connector with the key on and the system commanded to activate, using a scan tool or jumper wires as appropriate.
- 4 Perform a wiggle test on the harness while monitoring live data for the valve circuit to reveal intermittent faults.
- 5 If the circuit tests good but the valve does not actuate, substitute a known-good valve or valve block to confirm the fault.
- 6 Verify the control module's ground and power feeds, and check for technical service bulletins (TSBs) or software updates for the air suspension module.
- 7 Clear the code and perform a calibration or relearn procedure if required after repairs, then test the system through several raise and lower cycles.

What the valve circuit code really tells you

- A C0840 can be set by a valve that is mechanically stuck or clogged with debris, even when the electrical circuit tests perfectly, because the module may infer a circuit fault from unexpected pressure changes.
- Water intrusion into the valve block connector or the valve block itself is a common cause that visual inspection alone may miss if the connector looks dry from the outside.
- The code often appears after suspension work where the valve block was unplugged and the key was turned on, setting a history code that does not indicate a real failure.
- A weak battery or low charging voltage can cause the module to misreport solenoid circuit faults, so always verify battery condition before condemning a valve.
- Some vehicles use a single valve block with multiple solenoids, and a fault in one solenoid can affect the operation of others, leading to misleading symptoms.

Can I keep driving with C0840?

You can usually drive the vehicle with this code, but the suspension may be at an incorrect height or stiffness, which can affect handling and tire wear. Avoid high-speed driving and heavy loads until the fault is repaired, and do not repeatedly cycle the suspension, as this can overwork the compressor.

Tools that help

- OBD-II scan tool with air suspension live data capability
- Digital multimeter
- Wire piercing probes or back-probe kit
- Manufacturer service information for circuit specifications
- Basic hand tools for trim and connector access



Reading C0840

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

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c0840/>

