

GENERIC · BODY

B0540

OBD-II TROUBLE CODE

B0540

Driver Door Ajar Switch Circuit

B0540 indicates that the body control module (BCM) has detected an unexpected signal from the driver's door ajar switch circuit, meaning the voltage on the circuit does not match the expected value for the door's open or closed state. The BCM monitors this circuit to determine if the driver's door is open, and when the voltage falls outside the normal range, it sets this code and may trigger a warning light or message.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Body	Generic (all makes)	Low	Intermediate	Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- A door ajar warning light or message on the dashboard, often showing the driver's door as open when it is actually closed.
- The interior dome light may stay on or not turn on when the driver's door is opened, depending on the failure mode.
- The vehicle may not respond to the door opening for features like seat belt chime or radio shut-off, or these features may activate incorrectly.
- The key-in-ignition warning chime may sound when the door is closed, or fail to sound when the door is open.
- Often no symptoms besides the warning light, especially if the circuit fails in a way that only affects the BCM's internal logic without affecting other functions.
- In some cases, the vehicle may not lock or unlock properly with the key fob or door switch, if the BCM uses the door ajar status for those functions.

Common causes, most likely first

- Faulty driver's door ajar switch, which is often integrated into the door latch assembly and can wear out or become contaminated.
- Damaged or chafed wiring in the door jamb boot, where the wires flex every time the door is opened and closed.
- Corroded or loose electrical connector at the door ajar switch or at the BCM.
- A short to ground or short to voltage in the door ajar switch circuit, often caused by pinched wires or water intrusion.
- Failed body control module (BCM) or a software issue in the BCM, though this is less common.
- Aftermarket accessories or improper previous repairs that tapped into the door ajar circuit and altered its resistance or voltage.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related body codes, then clear the code and test-drive to see if it returns.
- 2 Inspect the driver's door jamb wiring boot for chafed, broken, or corroded wires, and repair as needed.
- 3 Test the door ajar switch operation using a multimeter to check for continuity or voltage changes when the door is opened and closed, following the manufacturer's specifications.
- 4 Check the electrical connector at the door latch/switch for corrosion or loose pins, and clean or repair as necessary.
- 5 If the switch is faulty, replace the door latch assembly or the separate switch if it is serviceable, then clear the code and verify the fix.
- 6 If the circuit and switch test good, check the BCM for proper power and ground, and inspect for any signs of water damage or internal faults.
- 7 As a last resort, reprogram or replace the BCM if all other components are verified good and the code persists.

Before you replace the door latch assembly

- The driver's door ajar switch is often part of the door latch assembly, so a faulty switch may require replacing the entire latch, but always test the wiring first because a chafed wire in the jamb boot is a common and cheaper fix.
- A door ajar code can be set by a weak or failing battery, as low voltage can cause the BCM to misinterpret sensor signals, so check battery health and charging system before condemning parts.
- Water intrusion into the door or the BCM connector can cause intermittent door ajar codes, especially after rain or a car wash, so look for signs of moisture or corrosion.
- The BCM may set this code if the door ajar circuit resistance is out of range, but the door may still function normally otherwise, leading some to ignore the warning light until other issues arise.
- Aftermarket remote start or alarm systems that interface with the door ajar circuit can cause this code if not installed properly, so check for non-factory wiring modifications.

Can I keep driving with B0540?

The vehicle is safe to drive with this code because it does not affect engine, transmission, or braking systems, but you should avoid relying on the door ajar warning for security and address the issue promptly to prevent battery drain from interior lights staying on. If the interior lights stay on, monitor the battery or remove the bulb until repaired.



Tools that help

- OBD-II scan tool with body code capability
- Digital multimeter
- Trim removal tools
- Wiring diagram for the specific vehicle
- Torx or Phillips screwdrivers

Reading B0540

- B** Body: airbags, seats, doors, lights and comfort systems.
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- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
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- 5** Airbags, seats, doors, lights and comfort systems.
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- 40** The exact fault within that area.

Often seen with

B0560 Driver Power Seat Forward/Back Circuit

See it working

Watch the animated explainer [How a Car Clutch Works: Diaphragm Clutch Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0540/>

