

GENERIC · POWERTRAIN

P0681

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P0681

### Cylinder 11 Glow Plug Circuit

P0681 indicates that the engine control module (ECM) has detected an open circuit or excessive resistance in the glow plug circuit for cylinder 11, which is typically found on diesel engines with high cylinder counts. The ECM monitors the glow plug circuit for expected current flow during the glow phase and sets this code when the current is below the expected threshold or the circuit is open.

| SYSTEM     | CODE TYPE           | SEVERITY | FIX DIFFICULTY | AREA                         |
|------------|---------------------|----------|----------------|------------------------------|
| Powertrain | Generic (all makes) | Low      | Intermediate   | Computer and output circuits |

### Symptoms you may notice

- Illumination of the check engine light or glow plug warning light
- Hard starting or rough idle when the engine is cold
- Excessive white smoke from the exhaust after a cold start
- Noticeable misfire or engine stumble during warm-up
- Often no symptoms besides the warning light, especially in mild climates

### Common causes, most likely first

- 1 Failed glow plug on cylinder 11 (open heating element)
- 2 Damaged or corroded electrical connector at the cylinder 11 glow plug
- 3 Broken or chafed wire in the glow plug harness
- 4 Faulty glow plug control module (GPCM) or relay
- 5 Poor ground connection for the glow plug circuit
- 6 Internal ECM driver fault (rare)

### How to diagnose and fix it

- 1 Inspect the glow plug connector and wiring for damage or corrosion
- 2 Measure the resistance of the cylinder 11 glow plug and compare to specification
- 3 Check for power and ground at the glow plug connector during the glow phase
- 4 Test the glow plug control module output and wiring continuity
- 5 Replace the faulty glow plug if resistance is out of range
- 6 Repair or replace damaged harness or connector as needed
- 7 Clear the code and verify the repair with a cold-start test



## Glow plug circuit diagnostics for cylinder 11

- Cylinder 11 is typically found on large diesel engines such as V12 or inline-6 configurations, so confirm the engine layout before ordering parts.
- A glow plug that tests good cold can still fail when hot, so resistance checks should be done at room temperature and compared across all cylinders.
- The glow plug control module often fails in ways that affect multiple cylinders, but a single-cylinder code like P0681 usually points to that specific plug or its wiring.
- Corrosion inside the glow plug boot is a common cause that is easily overlooked during visual inspection.
- This code does not always mean the glow plug is bad; a loose connection or faulty module can set the same code.

## Can I keep driving with P0681?

You can generally continue driving with this code, but cold starting may be difficult and prolonged driving with a faulty glow plug can lead to excessive smoke and carbon buildup. Avoid heavy loads or high speeds until the issue is repaired, and address it before winter if you live in a cold climate.

## Tools that help

- OBD-II scan tool
- Digital multimeter
- Glow plug socket set
- Wiring diagram for the vehicle
- Basic hand tools

## Reading P0681

|           |                                                                      |
|-----------|----------------------------------------------------------------------|
| <b>P</b>  | Powertrain: engine, transmission and emissions.                      |
| <b>0</b>  | Generic (SAE) code: it means the same thing on every OBD-II vehicle. |
| <b>6</b>  | Computer and output circuits.                                        |
| <b>81</b> | The exact fault within that area.                                    |

## Often seen with

**P0671** Cylinder 1 Glow Plug Circuit · **P0672** Cylinder 2 Glow Plug Circuit · **P0673** Cylinder 3 Glow Plug Circuit · **P0674** Cylinder 4 Glow Plug Circuit · **P0680** Cylinder 10 Glow Plug Circuit



## See it working

Watch the animated explainer [How Variable Valve Timing Works: Cam Phaser and VVT Solenoid](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0681/>

