

MITSUBISHI · POWERTRAIN

P1101

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1101 · Mitsubishi

Traction Control Vacuum Solenoid Circuit Fault

P1101 on Mitsubishi vehicles indicates that the powertrain control module (PCM) has detected an electrical fault in the traction control vacuum solenoid circuit, which is used to modulate vacuum to the traction control system. The PCM monitors the solenoid's command wire for expected voltage changes and sets the code when the circuit is open, shorted to ground, or shorted to power.

SYSTEM

Powertrain

CODE TYPE

Mitsubishi
specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air
metering

Symptoms you may notice

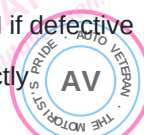
- Traction control warning light or stability control light illuminated on the dashboard
- Traction control system disabled, with the PCM possibly limiting engine power or applying brakes unexpectedly
- Often no symptoms besides the warning light, especially if the fault is intermittent
- In rare cases, the vehicle may enter limp mode or exhibit reduced engine performance
- ABS or brake warning light may also illuminate if the fault affects shared circuits

Common causes, most likely first

- 1 Failed traction control vacuum solenoid (open or shorted coil)
- 2 Damaged, corroded, or disconnected wiring or connector at the solenoid
- 3 Vacuum hose leak or blockage affecting solenoid operation
- 4 Faulty powertrain control module (PCM) driver circuit
- 5 Corroded or damaged ground connection for the solenoid circuit
- 6 Aftermarket accessories or poor previous repairs interfering with the circuit

How to diagnose and fix it

- 1 Connect a scan tool and verify P1101 is current; record freeze-frame data and check for other codes
- 2 Inspect the solenoid connector and wiring for corrosion, damage, or loose pins; repair as needed
- 3 Measure solenoid resistance with a multimeter and compare to specification; replace solenoid if out of range
- 4 Check vacuum hoses for cracks, leaks, or blockage; repair or replace hoses
- 5 Test the command wire from the PCM for continuity and short to ground/power; repair wiring if faulty
- 6 If all external checks pass, test the PCM driver circuit with a noid light or oscilloscope; replace PCM if defective
- 7 Clear codes and perform a road test to verify the repair and ensure traction control operates correctly



Don't overlook the simple vacuum leak

- A cracked or disconnected vacuum hose can cause P1101 even when the solenoid and wiring test good, so always inspect hoses before condemning the solenoid.
- Intermittent P1101 codes often stem from a poor connection at the solenoid connector that only acts up with engine vibration or temperature changes.
- The traction control vacuum solenoid shares circuits with the ABS system on some models, so a P1101 may be accompanied by ABS codes that point to a common ground or power issue.
- A faulty PCM is rare; misdiagnosis often occurs when technicians replace the solenoid without checking the command wire for a short to ground.
- After replacing the solenoid, verify that the vacuum lines are routed correctly; reversed hoses can cause traction control performance issues without setting a code immediately.

Can I keep driving with P1101?

You can usually drive the vehicle with P1101 set, but traction control and stability control will be disabled, which reduces safety in slippery conditions. Avoid aggressive driving or towing, and have the fault diagnosed promptly to restore full system function.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Hand vacuum pump
- Wire repair kit
- Service manual for wiring diagrams

Reading P1101

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Mitsubishi): its meaning depends on the make.
1	Fuel and air metering.
01	The exact fault within that area.

Often seen with

P1102 Oxygen Sensor Heating Circuit Bank 1 Sensor 1 Voltage Too Lo · **P1100** BARO Sensor Circuit · **P1100** Starter Switch Circuit Malfunction · **P1102** Pressure Sources Solenoid Valve Circuit Malfunction · **P1100** Induction Control Motor Position Sensor Fault · **P1102** Traction Control Ventilation Solenoid Circuit Fault · **P1100** Mass Air Flow Sensor Circuit Intermittent · **P1102** Mass Air Flow Sensor Signal Inconsistent With Throttle Posit · **P1102** HO2S11 Heater Circuit High Voltage · **P1100** Mass Air Flow Sensor Intermittent · **P0500** Vehicle Speed Sensor Malfunction



See it working

Watch the animated explainer [How a Knock Sensor Works: Spark Timing and Octane](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/mitsubishi-p1101/>

