

FORD · POWERTRAIN

P1537

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1537 · Ford

Intake Manifold Runner Control Stuck Open

P1537 on Ford vehicles means the powertrain control module has commanded the intake manifold runner control (IMRC) to close the runner flaps but the monitor circuit still reports the flaps as open. The computer detects a mismatch between the commanded state and the actual position of the IMRC actuator, which is used to change intake runner length for low-speed torque and high-speed power.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Intermediate	Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Often no symptoms besides the warning light, especially during gentle driving
- A noticeable flat spot or hesitation around 2,000–3,000 rpm where the runners should be closed
- Reduced low-end torque and sluggish acceleration from a stop
- Poor fuel economy on steady-speed driving
- Rough idle or unstable idle quality on some engines
- A slight rattle or click from the intake manifold area when the engine is revved

Common causes, most likely first

- 1 IMRC actuator vacuum diaphragm ruptured or stuck, preventing the linkage from moving
- 2 Carbon buildup or mechanical binding in the runner flap linkage or shaft
- 3 Broken or disconnected vacuum supply line to the IMRC actuator
- 4 Failed IMRC solenoid or vacuum control valve that will not vent or apply vacuum
- 5 Wiring fault, corrosion, or loose connector at the IMRC position sensor or solenoid
- 6 Stuck-open runner flaps due to a broken return spring or damaged linkage clip
- 7 PCM software calibration issue or faulty PCM driver on rare occasions



How to diagnose and fix it

- 1 Verify the stored code and check for any related IMRC or vacuum codes with a scan tool before touching parts
- 2 Inspect the vacuum hoses and connections between the intake, IMRC solenoid, and actuator for cracks or disconnection
- 3 Command the IMRC on and off with a bidirectional scan tool and watch the actuator rod and position sensor reading
- 4 Manually move the runner linkage to confirm it is free and not carboned up or mechanically bound
- 5 Test the IMRC solenoid with a vacuum gauge and ohmmeter, and check the actuator diaphragm with a hand vacuum pump
- 6 Check the position sensor signal and wiring for opens, shorts, or corrosion at the connector
- 7 Clean or replace the intake manifold runner assembly if the linkage or flaps are physically stuck, then clear the code and verify the monitor runs

What Ford techs check before replacing the IMRC

- A ruptured vacuum diaphragm in the IMRC actuator is far more common than a failed solenoid, and it will hold vacuum at first but leak down under heat and load.
- Carbon buildup on the runner flaps can make them stick open even when the actuator and solenoid test good, so always move the linkage by hand before condemning electrical parts.
- The IMRC position sensor on many Ford engines is a simple potentiometer that wears a dead spot, causing the code to set intermittently without any driveability complaint.
- A disconnected or cracked vacuum reservoir line elsewhere on the engine can starve the IMRC actuator and set P1537 without any obvious IMRC component failure.
- On some Ford applications the PCM must relearn the IMRC closed and open positions after repair, so clearing the code without a relearn can make the code return immediately.

Can I keep driving with P1537?

You can usually drive the vehicle to a shop, but avoid heavy acceleration and towing because the stuck-open runners reduce low-speed torque and can make merging unpredictable. If the engine runs rough or stalls, stop driving and have it diagnosed promptly.

Tools that help

- OBD-II scan tool with bidirectional controls
- Hand vacuum pump with gauge
- Digital multimeter
- Socket and wrench set
- Carburetor or intake cleaner
- Inspection mirror and flashlight



Reading P1537

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Ford): its meaning depends on the make.
- 5** Vehicle speed, idle control and auxiliary inputs.
- 37** The exact fault within that area.

Often seen with

P1538 Engine Shutoff Solenoid Open Short To Ground · **P1538** A/C Request Circuit Voltage High · **P1538** Intake Manifold Runner Control Stuck Open · **P1538** A/C Request Circuit High Voltage · **P0171** System Too Lean (Bank 1) · **P0174** System Too Lean (Bank 2) · **P2004** Intake Manifold Runner Control Stuck Open (Bank 1) · **P2008** Intake Manifold Runner Control Circuit/Open (Bank 1)

See it working

Watch the animated explainer [Fuel Trims Explained: Short-Term and Long-Term](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1537/>

