



P1193 · Ford

EGR Drive Overcurrent

P1193 on Ford vehicles means the powertrain control module (PCM) has detected excessive current draw on the exhaust gas recirculation (EGR) drive circuit, typically when commanding the EGR valve to move. The PCM monitors the current through the EGR actuator and sets this code when the measured current exceeds the expected threshold for the commanded duty cycle.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or stalling after the engine warms up
- Hesitation or stumble during light acceleration
- Poor fuel economy or increased emissions
- A noticeable decrease in engine performance, especially at part throttle
- In some cases, the engine may enter limp mode or exhibit reduced power

Common causes, most likely first

- 1 Faulty EGR valve actuator (short circuit or seized motor) drawing too much current
- 2 Damaged or chafed wiring in the EGR drive circuit causing a short to ground or power
- 3 Corroded or loose electrical connectors at the EGR valve or PCM
- 4 Internal PCM driver circuit failure (less common but possible)
- 5 Carbon buildup or mechanical binding in the EGR valve causing the actuator to work harder than normal
- 6 Aftermarket or incorrect EGR valve installed that does not match the vehicle's electrical specifications

How to diagnose and fix it

- 1 Inspect the EGR valve and its electrical connector for corrosion, damage, or loose pins; clean or repair as needed
- 2 Check the EGR drive circuit wiring for shorts to ground or power using a multimeter and wiring diagram
- 3 Measure the resistance of the EGR valve actuator and compare to the manufacturer's specification
- 4 Command the EGR valve with a scan tool and observe current draw and valve movement to confirm the fault
- 5 If the valve is binding or the actuator is faulty, replace the EGR valve with a quality OEM or equivalent part
- 6 If wiring and valve are good, test the PCM driver circuit; replace or reprogram the PCM only after confirming all other possibilities



Common Missteps When Diagnosing P1193

- A sticking EGR valve due to carbon buildup can cause the actuator to draw excessive current, so cleaning or replacing the valve often resolves the code without any wiring issues.
- The code can be set by a short in the wiring harness that only occurs when the engine is hot or vibrating, so a thorough wiggle test of the harness while monitoring current is essential.
- Some technicians replace the EGR valve only to find the connector pins are spread or corroded, creating high resistance that mimics a faulty valve; always inspect connectors first.
- P1193 can be triggered by a failing PCM driver, but this is rare; misdiagnosing it as a PCM fault leads to unnecessary replacement, so follow the diagnostic flow chart carefully.
- Aftermarket EGR valves with incorrect electrical characteristics are a common cause of recurring P1193, so insist on OEM or known-good replacements.

Can I keep driving with P1193?

You can generally drive the vehicle with P1193, but avoid aggressive acceleration and long trips until diagnosed, as the fault may cause poor performance or increased emissions. If the engine runs rough or stalls, seek repair promptly to prevent further damage.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter
- Wiring diagram for the specific Ford model
- Socket set and torx bits for EGR valve removal
- Electrical contact cleaner and dielectric grease

Reading P1193

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



Often seen with

P1401 EGR Valve Power Stage Short To Ground · **P1400** EGR Valve Circuit Electrical Malfunction · **P1401** Sub-Throttle Position Sensor Range Performance Problem · **P1400** Sub-Throttle Position Sensor · **P1401** Fuel Tank Pressure Control System Performance · **P1400** Fuel Tank Pressure Control Solenoid Low Input · **P1400** EGRC Solenoid Valve · **P1401** EGR Temperature Sensor · **P1400** Manifold Differential Pressure Sensor Circuit · **P1401** EGR Lifting Sender B283 · **P1400** DPFE Sensor Circuit Low Input · **P1195** EGR Boost Sensor Circuit · **P1401** DPFE Sensor Circuit High Input · **P1195** EGR Boost Or Pressure Sensor Circuit Fault · **P1401** EGR Control Solenoid Circuit Signal Low · **P1400** Exhaust Gas Recirculation Valve Position Control · **P1195** O2 Sensor Heater Circuit Low Resistance Fault 1 · **P1401** Exhaust Gas Recirculation Valve Position Circuit · **P1195** O2 Sensor 1/1 (Bank 1 Sensor 1) Slow During Catalyst Monitor · **P1400** Differential Pressure Feedback Electronic Sensor Circuit Low · **P1195** SCP HBCC Failed To Initialize · **P1401** Differential Pressure Feedback Electronic Sensor Circuit High · **P1195** O2 Sensor 1/1 (Bank 1 Sensor 1) Slow During Catalyst Monitor · **P1401** Heated Catalyst Current Too High During Heating Bank 1 · **P1400** Heated Catalyst Battery Voltage or Current Too Low During He · **P0401** EGR Flow Insufficient Detected · **P0402** EGR Flow Excessive Detected

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/ford-p1193/>

