

Wheels: Jim in Miamisburg writes, “I have a 1990 Ford Tempo with 126,000 miles that will run ‘lean’ when accelerating from a ‘dead’ stop. It sometimes will completely stall and other times just choke-up on you. It doesn’t seem to matter if the car is warmed up or not. I took the vehicle to my mechanic and he performed a complete tune-up replacing plugs, distributor, rotor and cap, plug wires, PCV valve, fuel and air filters, oxygen sensor, PFE sensor and hose. (The computer had trouble codes 33 and 44.)

After having completed this work, the problem still persisted. My mechanic then checked and temporarily replaced other sensors (TPS, MAP), the pickup coil module and the ignition coil. None of this helped so he replaced the original parts so I would not pay for those parts and still have the problem. He is at a loss. He hated for me to spend additional money when he isn’t totally sure that they are the problem. Any suggestions?”

Haldeman: Thanks for writing. The diagnostic trouble codes do give me a little insight but more testing will be necessary to find the root cause. The code 33 means that the EGR valve opening has not been detected. This can mean that the EGR passages are clogged. The EGR valve has been replaced but you didn’t state whether or not this code appeared again. Code 44 is related to the AIR or air injection reaction system. This system usually does not affect driveability but a leak in the exhaust manifold could cause the oxygen sensor to sense outside air instead of exhaust gases, thereby incorrectly signaling the computer to enrich the mixture too much, which could cause the problem. To diagnose this vehicle, I would monitor the oxygen sensor and look at the exhaust gases to determine what the air-fuel mixture is doing when the problem occurs. Possible causes include:

1. A cracked exhaust manifold
2. A defective AIR check valve allowing exhaust gases to flow in the intake system
3. A poor oxygen sensor ground connection (located on the end of the cylinder head)
4. A defective fuel pump
5. A defective fuel pressure regulator

