

Wheels: *Joe E. of Centerville writes by e-mail: "I am an industrial maintenance mechanic and supervisor for 40 years and I try to do my own maintenance on my vehicles. I drive a 2001 Chevy Impala 3.8 that has 160,000 highway miles and the motor is in excellent condition. My problem has been ongoing for about three years. It started on a vacation trip as I was driving on the highway and the engine just shut off, no jerking, no sputtering, coughing, or anything except that the tachometer showed no RPM. I put the car in neutral and restarted the engine with no trouble. This has been ongoing and increasing in occurrences for three years. About six months for the second time and then more frequently getting progressively worse until now it does this about two times every tank full of gas. Since the beginning I keep seeing a code (P0336 Crankshaft position sensor). This is completely random and intermittent. The engine always will start back up right away and runs good. I am afraid to keep driving this car since it could shut down without my realizing it for a few seconds and lose my steering or braking. Do you think it is worth a shot to change the crank position sensor that the dealer said is not the problem? If so, is it necessary to take it back and have the dealer do the relearning sequence for the sensor after a new installation? Any advice that you give would be helpful and very appreciated".*

Halderman: The condition means that a major (called a high-authority) sensor is affecting the engine operation. There are two: the crankshaft position (CKP) sensor and the mass airflow (MAF) sensor. I have fixed several with this condition. I was lazy. It was easy to unplug the MAF sensor to see if the engine stalled, and it did not, so the MAF was replaced and the fault did not occur again. I know this is not the correct way to diagnose as I should have checked the output of the sensor over time using the movie mode of a scan tool or a scope. If you do unplug the MAF sensor, it will set a code so be prepared to clear it using a scan tool. The CKP could also be the cause and maybe more likely due to the high miles. The front bearing can wear on these 3800 engines causing the crankshaft reluctor rings to contact the sensor. The fix for this condition is to replace the main engine bearings. You can check this by checking for play at the crankshaft, most easily done through the right front wheel well.

