

Wheels: Johnny of Dayton writes, “I have a 1997 Chevrolet SportVan/Van (Conversion Van), 350 HP, V-8, “Vortec” 5700, VIN Code R. I bought it used in February, 2000, with 17,000 miles on it. I have 78,000 miles on it now. Since I have had it I have had to have four O2 sensors put on in the last two years. It has cost me over \$600.00. The Chevrolet dealer does not know why the O2 sensor keeps going out and the “service engine soon” light comes on.

I called the Chevrolet Motor Division Customer Assistance Center in Troy, Michigan, recently to see if there had been a “recall” on this problem; they had no record of any recall on this particular problem. I just had another O2 sensor put on a couple of months ago, however, the “service engine soon” light keeps coming on periodically and going back out. It appears to me that it happens whenever I have the vehicle washed or whenever there is water on the roads. Also the message comes on when my gas hand gets down to a quarter tank of gas.

The mechanic who has put the last two O2 sensors on said his analyzer could not identify a problem with the computer or the last O2 sensor he put on. He adjusted the computer so it would not be so sensitive, and it worked for a while, but the “service engine soon” light has been periodically coming on and going back off for about six months.

I am at my wits end, hope you can help.”

Halderman: First, the comment regarding the technician “adjusted the computer” is not something that can be done by a technician. Maybe the service technician replaced the computer with an updated version, but this usually is done to correct misfire codes from being set too easily. Regarding your concerns, I have several ideas, but no real answers including:

- The fact that the light comes on when the vehicle is being driven in wet weather indicates that the water spray is getting into the wiring of the oxygen sensor or the ignition wires, which can cause the oxygen sensor to read incorrectly.
- A cracked exhaust manifold can cause the oxygen sensor to read incorrectly and could be affected by water spray.
- The “service engine soon” light can be activated by up to 1599 reasons (diagnostic trouble codes) so it is possible that a loose gas cap could be the cause of the light coming on and then going out at times.
- The oxygen sensor itself may not be the reason for an oxygen sensor-related code. Often the code indicates a mixture too lean or too rich for too long as “reported” by the oxygen sensor. This could mean that the root cause could be a leaking fuel pressure regulator or weak fuel pump, both of which are pattern failures for this vehicle.

I think further diagnostic tests by a qualified service technician should be performed to find the root cause or causes of the concern.

