

Wheels: Lee of Dayton has a question about a problem with the “check engine” light on his 1993 Lincoln Town Car. Several service technicians have replaced some “emission valves” but the problem of the dash board warning light still remains. According to Lee, the engine seems to operate correctly and still gets good gas mileage (19-21 MPG). Do you have any ideas?

Halderman: The 1993 Lincoln Town Car uses the 4.6 overhead camshaft V-8 engine. According to technicians throughout the country on the Internet (www.iatn.net), the exhaust gas recirculation (EGR) passages can become partially clogged with carbon thereby restricting the flow of exhaust gases back into the intake manifold. The diagnostic trouble code (DTC) will set when the computer senses that the flow of exhaust is not sufficient. This can explain the “emission problem” designation for the DTC as reported to you by the service technician. Most of the technicians reported that parts of the intake manifold have to be removed to gain access to the passages that can become clogged.

Wheels: Is there any gasoline or oil additive that can be used to help clean out these deposits?

Halderman: Sorry, no. These deposits form naturally as part of the combustion process. The only way to clean these deposits out of the passages is to disassemble the components and use a reaming tool to physically remove the carbon. Nothing actually dissolves carbon. Carbon can be loosened by using chemicals but it has to be physically removed.

Regular oil changes are important in helping to prevent carbon deposits from forming. Also try to drive your vehicle at highway speeds for 20 miles or more every week to allow the engine to reach and maintain normal operation temperature where all engines perform better and exhaust emissions are lowest.

