Wheels: Jim of Harrison Township asks if he could replace the main engine bearing in his 3.8 liter, V-6 Ford Thunderbird himself. He states that ever since the intake manifold gasket was replaced, the engine will idle rough and almost stall at times. A service technician said that if coolant (antifreeze) gets into the engine oil that it can cause damage to the bearings.

Halderman: Replacing engine bearings is not a do-it-yourself activity. While I agree that coolant can cause engine bearing damage, I doubt it is the cause of the rough idle and stalling. If coolant gets into the engine due to an intake manifold leak, the bearings could be damaged because the coolant can start corrosion as well as prevent the bearings from being properly lubricated. However, this process would take some time to occur and from your statements, it appears that the intake manifold gasket was repaired as soon as a problem was detected and the oil changed after the repair. Besides if the bearing was worn, I think it would be worn less than 0.001 inch. Considering that a typical human hair is about 0.002 inch in diameter, you can visualize that the wear, while it is important, does not involve much material loss.

Wheels: If the engine bearings were worn, what would Jim notice while driving?

Halderman: If the bearing were worn, the engine would make a knocking noise when it is started and then stop as the oil fills in between the crankshaft and the bearings. In severe cases, the noise does not go away. If the knocking noise continues, then the engine could "throw a rod" meaning that one or more of the connecting rods breaks and parts can create a hole in the engine block.

Wheels: If the engine bearings are OK, what could be the cause of the rough idle and stalling?

Halderman: Because the problem started immediately after the intake manifold gasket was replaced, I would suspect that the gasket might have shifted during installation causing a vacuum leak. I would ask the service technician to check for both an internal as well as an external gasket leak. It is also possible that a hose to the MAP sensor could be pinched causing the sensor to supply the vehicle with incorrect data regarding the engine operation.