

Wheels: William of Beavercreek writes, “As winter approaches, I anticipate the return of a problem that first occurred the winter before last and worsened last winter. On cold mornings, I would start my car, a 1997 Nissan Maxima now with 120,000 miles, and everything worked normally. The starter turned the motor, ignition caught, and the RPMs would zoom up to idle speed but then would come back down to zero and the engine would die. At first it would do this only on really cold mornings, below freezing after sitting all night. But last winter it would do it at 40 degrees ambient, a few times at 50, and then when it had been sitting in the parking lot at work for 3 to 4 hours until lunch. The only way to start it was to pump, or slightly depress, the accelerator for a couple of seconds to keep the RPMs up after starting. The error codes only return the knock sensor malfunction. I changed spark plugs and the fuel filter to no effect. I tried several different gas stations to see if it was bad gas and although one station’s fuel seemed to cure the problem, even that stopped having an effect. I tried using higher octane fuel to no avail. I’ve added fuel injector cleaners which seemed to work until the next tank of fuel. If the knock sensor had anything to do with the problem, I wouldn’t think it would get worse, or that going to different gas stations would have an effect. What do you think?”

Halderman: From your very detailed explanation of the problem, I think the cause is carbon on the intake valves. The carbon will absorb the fuel and prevent it from getting into the cylinder. The fix is to have the intake system cleaned (decarbonized). In the past, this meant engine disassembly but now it can be done using chemicals. Most shops can handle this service for about \$100.

