## Regular fuel system cleaning



Ralph Seekins

I was talking to a friend about scheduled vehicle maintenance and was a little surprised when he scoffed at an interval I suggested for fuel and induction system cleaning.

"That's just a scam" he blurted. "Today's fuels all contain injector cleaning agents." About an hour and a lot of discussion later, he allowed as how maybe there was some validity to my opinion that regular fuel system cleaning just may be a good idea. So, let's go over the reasons why a regular fuel system cleaning isn't a scam.

Simply stated, carbon is a byproduct of unburned fuel. For a number of reasons it can build up in fuel system components like intake manifolds, engine valves and fuel injectors. Depending on the grade of fuel you put in your vehicle, the way you drive and the driving conditions you experience, carbon deposits can form at different speeds. And not every gas station sells fuel with effective cleaning agents. Then, things like just quickly letting off on the accelerator can promote carbon formation. And, running rich because of cold startups and long periods of idling or a steady diet of stop and go driving like so many of us in Interior Alaska experience can also cause a more rapid carbon build-up.

Today's engines are designed to deliver maximum fuel mileage and minimum emissions. To do that the clearances in fuel system components like injectors are precisely measured in mere microns. These tiny microscopic clearances – a small as half the width of a human hair - can't stand very much restriction before your engine's performance begins to suffer. A decrease in fuel mileage, slower acceleration, hesitation and engine knock are all symptoms of restricted fuel flow. And, believe me, we see lots of vehicles with these symptoms.

So, how can you keep your fuel system cleaned up? We recommend a multi-step fuel system cleaning about every 15,000 miles or at least once a year. The first step is targeted at removing carbon buildup in the upper engine (intake and intake valves) and the compression system. Then a fuel tank additive is generally added that helps clean the fuel lines, fuel pump and injectors. One expert on fuel system additives claims that "a fuel system cleaning every 15,000 miles can pay for itself in improved fuel economy." We believe that is a pretty reasonable statement.

We have a few "experts" of our

own in our technician population here at the dealership. And, to them, adding a bottle of Chevron Techron (a polyether amine (PEA) based additive designed to clean fuel system components which, by the way, is contained in all Chevron and Texaco gasoline) on an occasional basis seems to be a very popular procedure. And, frankly, Techron is regularly added to the fuel system in the Expedition the Boss (my wife) drives. It's extremely important that her vehicle runs efficiently and safely.

We don't recommend anyone use any of the available off-theshelf cleaners that contain alcohol, methanol, acetone, ketones or kerosene. These are highly flammable and caustic products. They can present significant safety issues and may damage the fuel system components they are alleged to clean.

So the next time you have your gasoline powered vehicle in for its regularly scheduled service, we recommend you consider asking your provider to complete a professional fuel system cleaning. It will pay for itself in performance, fuel economy and safety.

Ralph Seekins has more than 42 years' experience in the automotive industry. He started as a mechanic, worked in sales, and for the past 35 years, has been the owner of Seekins Ford Lincoln.