



FUEL SAVERS?

With the rise in fuel prices consumers are looking for ways to increase the fuel economy of their vehicles. Over the years there have been many different types of devices that have appeared on the market that have claimed to improve fuel economy and power. These miracle inventions have ranged from “catalyst pills” in the fuel tank, fuel heating devices, air intake vortex devices, liquid fuel additives, modified engine oils and the list goes on and on. The degree of success of these devices basically fell into the gimmick category and only paid dividends to the marketers. During the last few years we have seen the increase in the use of “increased flow” air filters and modified air induction systems that claim to improve engine performance and increase fuel economy. While these devices may make some improvements on certain vehicles they can also contribute to new problems.

The installation of high performance air flow systems combined with ethanol blended fuels have caused some vehicles to display driveability problems. Installing performance type air filter systems which can allow up to 35% more air flow into your engine sounds like a good thing at first glance. This may be considered a simple modification to increase engine performance but it can result in a lean fuel condition that the ECU (engine computer) compensates for by increasing the amount of fuel injected thereby reducing fuel mileage. When you combine this with fuels that are blended with 5% to 10% Ethanol, you are altering the engines calibration specifications from the factory settings which will create a greater lean condition to the degree that the ECU cannot adjust the fuel amount sufficiently to satisfy the needs of your engine. Now, poorer fuel mileage and lower engine power may be noted. To restore some of the lost performance of your vehicle, you may now need to use high octane fuel. What you think you’ve saved using less fuel has been lost on the higher cost for premium fuel.

Another result of this extreme lean condition is that platinum spark plug electrode tabs have also been known to fall off due to constant higher combustion chamber temperatures. This is very common in vehicles operating under “severe use” conditions such as, vehicles towing trailers, delivery vehicles, police and taxi vehicles high kilometre vehicles and, vehicles with modified engines. A recent bulletin from NGK a manufacturer of spark plugs claims that by changing to a different heat range of spark plug and altering the firing gap they can restore the engine performance to a more optimum condition. At this time we have not proven the authenticity of this bulletin but are looking into its possibility of being a valid fix.

Yet another issue we have experienced with some vehicles using these modified air induction systems is no start, hard start and stalling conditions in extremely cold weather, due to the volume of “cold” air entering the engine.

Other simple effective means of reducing fuel costs are driving the posted speed limit, keep your tires properly inflated, avoid unnecessary idling and practice regular maintenance.

Please feel free to call with any questions regarding this topic or any other vehicle concerns.

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