

The Great Gasoline Debate – Regular Gasoline or Premium Gasoline (SmokinVette.com)

<http://www.smokinvette.com/corvette/articles/the-great-gasoline-debate-%E2%80%93-regular-gasoline-or-premium-gasoline/>

Everywhere you go it seems you hear the question, “Do I really need to spend the extra money for premium gasoline?” The short answer is it all depends.

Typically when you go to a gas station here in the US you will have the choice of three different gasoline grades; regular, midgrade, and premium. What differentiates the three is the amount of octane that is contained and this is the number that can be seen on the pump. More time than not, the regular gasoline will have 87 octane, the mid grade will have 89 octane, and the premium will have either 91 or 92 octane.

Many people think that more must be better and that by buying the premium gasoline with more octane that they are doing their car a favor and will increase the car’s performance. However, this misconception is simply not true.

What higher octane does generally mean is a less likelihood of the fuel making your engine ping or knock. Pings and knocks will occur in your engine when one of the cylinders spontaneously ignites due to fuel and air mixture. Instead of what would amount to a controlled burn, you get an explosion so to speak and this is a ping or knock. Not so good for the engine. On this knowledge it would seem that everyone should use the good stuff right?

The absolute best thing to when determining what to fill your vehicle with at the pump is to look at your owner’s manual first. If it says to use premium or mid grade then use it. If it says to use regular then use regular. If your manual calls for regular and you decide to put in the more expensive gasoline, you will not be doing anything but spending more money as there will be no increase in performance or mileage. However, if your manual calls for premium and you put in regular then you can expect a decrease in both the performance of your vehicle as well as the fuel mileage.

This is due to the fact that high performance cars are installed with sensors that will automatically detect any pings and knocks and will compensate automatically with less spark production. The end result is a faster burning of the fuel and a loss of peak performance for the vehicle. Bottom line; you bought a high performance vehicle so don’t get cheap now.

Another popular theory is that premium gasoline is better because it contains special detergents that will help keep the engine’s vital parts clean. Once again this is incorrect and actually the Government stipulates that all grades must contain detergents. This misconception has been sensationalized by some gasoline companies that advertise that their gasoline has more detergents than the other brands. While that may be true, it more than likely will not make a difference.

Really it all comes down to a personal preference. To answer the question of whether or not you need to buck up and pay the extra for the high test stuff, the answer is yes if your owner’s manual calls for it. If your owner’s manual does not call for premium then you may or may not want to use the more expensive fuel, but it will simply be a personal preference.