

Octane rating affects car costs

A variety of factors come into play when a person is deciding which new or previously owned vehicle to purchase. While body type, model year and make all are considered, shoppers should also look into what type of fuel the vehicle needs.

Many drivers are aware of the different grades of gasoline available at the pump. Unleaded versions come in regular, plus and premium varieties, which coordinates to the octane of the gasoline. The octane rating of gasoline tells a driver how much the fuel can be compressed before it spontaneously ignites, rather than igniting normally from a spark plug

in the vehicle engine. Lower-octane gasoline can withstand less compression than higher-octane gasoline.

Gas that ignites on its own rather than from a spark from the spark plug causes knocking and pinging, which can damage the engine. Therefore it is important to use the right octane level of gasoline for a vehicle, based on the car's compression ratio for the engine. Car engines that are rated in a particular way will benefit from the correct octane in gasoline. Higher-performance engines commonly found in race cars and sporty, luxury vehicles will generally require a pre-



mium, high-octane gasoline to run at their optimal performance. Most cars on the market are built to take regular 87-octane gasoline.

A visit to the gas station clearly indicates that higher-octane fuel costs more per gallon than the lowest

octane. Over time, filling up with premium gas can be a significant factor in how much it costs to own a particular vehicle. If you are looking to save money, it is important to consider just how much of your budget will be devoted to fuel costs.

A vehicle that requires premium gasoline instead of regular gasoline may end up costing a few hundred dollars more per year based on the size of the fuel tank.

It is important to note that using a higher octane fuel in a vehicle that is not rated for it will not increase performance -- it only will end up costing you more. That's because the octane rating refers to how much energy it takes to ignite the gasoline and at what point in the compression cycle, not how much power the gasoline will put out. Premium gas will not improve gas mileage or give the vehicle more "oomph" if the engine is not

designed to accommodate a higher-octane fuel. In fact, engines that are not designed for high-octane gas may actually lose power because it burns so much slower and the ignition timing is not tuned for it.

It is always wise to consult with the owner's manual to determine the type of fuel that will offer the best performance in the car. Those shopping for a new vehicle should pay attention to octane ratings and not assume that every car they test drive is best when running on regular octane.



Spring is Tree Planting Time!

We not only sell & plant trees- we move trees.

View our nursery at www.hartingtontree.com

Call for an appointment!

Serving SE South Dakota and NE Nebraska for over 17 years

Hartington Tree Service
Kyle & Kent Hochstein • (402)254-6710



HAWKINS
Construction
Gene Hawkins, Owner

605.670.1169

- Roofing • Remodeling
- Concrete Work
- Custom Sawing
- Re-Sawing

The Neat Freaks
Professional Organizers

- Need to clean out your home or garage?
- Do you have TOO MUCH STUFF?
- Are you feeling overwhelmed?

Organizing
Downsizing
House Cleaning
Decorating Ideas/Painting
Personal Assistance - Errands/Shopping

The Neat Freaks are here to help!
We offer assistance organizing any room in your home from your attic to your basement. We can eliminate clutter, provide storage ideas and tackle paper pile-up syndrome to ultimately simplify your life.

Contact us today to set up your **FREE** personal appointment.

Phone: (605) 760-3223 or (605) 760-3224
Website: www.DiscoverNeatFreaks.com

Ansonylon Carpet and Color Selection
Made Simple!



GREEN by nature - fashionable by design™

Brunick Furniture & Flooring

Our new Ansonylon® color display makes choosing the right carpet for your home a cinch! Select from 6 different styles: loop, textures, or frieze in 48 colors. We've got berber flecks, too. These beautiful styles feature Ansonylon®.

Green by nature, fashionable by design.  Green. It's something we never forget™.

1100 W. Cherry St., VERMILLION • 624-8688
207 W. 3rd Street, YANKTON • 665-5625



- Natural Granite
- Engineered Quartz (Silestone/Ceasarstone)
- Vanity Tops, Shower Bases, Tub/Shower Surrounds (Solid Surface or Cultured Marble)

MIDWEST Custom Marble
Yankton, SD

215 Mulberry St.
668-0765 • 661-9271
www.midwestcustommarble.com

DIAMOND KOTE pre-finishing **LP SMARTSIDE** TRIM & SIDING



8"x16' Prefinished Lap Siding
One of the most durable lap siding options in the market today. Available in 29 colors.

OR

8"x16' Primed Lap Siding
And paint your own color.

Your Hometown Lumber Yard Since 1910
Mead Lumber
113 W Main, Vermillion, SD • 605-624-2655