



Gas Station Fueling Facts



Safety Tips

Petroleum products and gasoline are extremely flammable. Static electricity can cause explosions and fires. Follow these tips to protect yourself:

- Shut off the vehicle's engine before refueling.
- Do NOT smoke when pumping gas into your vehicle.
- To carry small amounts of fuel, use only approved fuel containers. Do not use plastic or glass containers, which are too fragile and not approved as fuel containers.
- Place portable fuel containers on the ground while you are filling them with gasoline. This assures grounding of the container and reduces danger of static electric spark.
- NEVER fill portable containers while they are inside a vehicle. Static electricity may ignite gasoline fumes. Filling an ungrounded container placed on the plastic bed liner of a pickup truck creates extreme hazards.

What you can do at the pump

Many factors draw a motorist to a gas station, and price is near the top of the list. To be sure that you are being charged the correct amount based on the posted price, do the following:

- Keep in mind that vehicle tank capacity in the owner's manual is only an estimate. It may hold more or less than the stated capacity.
- Check the prices posted on the station sign. Verify the price is the same as the price per gallon on the dispenser face for the grade, type of fuel, type of service and method of payment you select. Carefully note any qualifications or conditions required to obtain the discount for the cash/credit price.
- Verify the numbers on the face of the dispenser for SALE and GALLONS are set to ZERO before you begin pumping gas. If the previous sale still appears on the dispenser when you start pumping gas, you can become the victim of an "inflated" purchase.
- Multiply the indicated gallons delivered by the price per gallon to assure that the dispenser is correctly computing the price.
- If you make a credit card purchase, check to be sure you have been charged the correct amount and take your receipt with you.
- At full-service stations, observe attendants as they fill your tank or add liquids such as oil, transmission fluid, engine coolant to be sure they add the entire product. Ask the price of these products before the attendant opens the containers.

The role of weights and measures officials

- Inspect newly-installed gasoline dispensers and test them on a regular basis to check for accuracy of the product delivered.
- Verify price computations at the dispenser and the readouts inside the gas station are accurate and agree.
- Check fuel quality and octane rating.





What is an octane rating and why is it important?

An octane number is a measure of gasoline's antiknock performance - its ability to resist knocking (a metallic pinging sound) as it burns in a vehicle's engine. When you compare gasoline prices among stations, be careful to compare prices for the same octane. Check your vehicle owner's manual to see which octane the manufacturer recommends.

What are "oxygenated" and "reformulated" gasolines?

Oxygenated gasoline is conventional gasoline to which chemicals that are rich in oxygen have been added. This increases the octane and/or meets clean air regulations to help reduce carbon monoxide exhaust emissions. Oxygenated gasoline is required during winter months in those metropolitan areas that do not meet the Federal air quality standard for carbon monoxide. The most common oxygenates used are methyl tertiary-butyl ether (MTBE) and ethanol (alcohol). Oxygenated gasoline performs as well as conventional gasoline in most vehicles.

Reformulated gasoline (RFG) is gasoline that is blended to reduce potentially harmful emissions from vehicles. The Federal Government issues regulations that specify the characteristics of the gasoline. Federal RFG is required in those metropolitan areas that do not meet the Federal air quality standard for ozone. If you have questions about the use of oxygenated gasoline (and RFG), in your vehicle, consult the owner's manual.

Service station owners are required to keep their dispensers in good working order; however, equipment sometimes fails and mistakes do happen. If you have a problem involving incorrect pricing, short measure, or incorrect octane posting, contact your local weights and measures office. Your weights and measures authority can be located at www.ncwm.net/resource/state-directors.