



COMPRESSED NATURAL GAS VEHICLE FUELING

Natural gas powers about 112,000 vehicles in the United States and roughly 14.8 million vehicles worldwide. Natural gas vehicles (NGVs), which can run on compressed natural gas (CNG), are good choices for high-mileage, centrally-fueled fleets that operate within a limited area. The advantages of natural gas as a transportation fuel include its domestic availability, widespread distribution infrastructure, low cost and clean-burning qualities.

CNG is considered an alternative fuel under the [Energy Policy Act of 1992](#). The horsepower, acceleration and cruise speed of NGVs are comparable with those of equivalent conventional vehicles, and compared with conventional diesel and gasoline vehicles, NGVs can produce some [emissions](#) benefits.

Fueling a CNG vehicle is similar to fueling any other car or truck. The dispenser looks about the same, but the nozzle is different. Because natural gas is under pressure, the storage systems must be designed so that no fuel escapes when the vehicle is being fueled. Natural gas nozzles lock onto the receptacles and form a leak-free seal similar to the coupling on an air compressor nozzle. The receptacles are designed so that when the nozzle is removed, the gas is prevented from escaping.

Here are some helpful steps to remember when fueling a CNG vehicle.

1. Shut off vehicle engine.
2. Observe and follow all safety warning instructions including, but not limited to, “No Smoking.”
3. Observe and follow all operating instructions posted at the dispensing station.
4. Remove the nozzle from the dispenser.
5. Connect the nozzle to the fitting on the vehicle and lock it in place.
6. Swipe the vehicle credit card.
7. Once the card is approved, switch the dispenser lever to “on.” There will be a noticeable sound of gas flowing through the fill line.
8. Read the percentage gauge on the dispenser. Since the compressor is putting the natural gas into the vehicle under pressure, the system will cycle on and off as the system gathers information on temperature and pressure. Automated safety sensors will prevent the tank from being overfilled, and will automatically shut off when full.
9. Once the vehicle is full, disconnect the nozzle and return it to the dispenser.

****Always follow specific vehicle manufacturer guidance and posted instructions when filling a CNG vehicle.****