

**Fuel Capacity** Fuel capacity can vary for several reasons:

- **Temperature** - At low ambient temperatures, the resin material used for the flexible inner tank may lose some of its ability to expand during refueling. If the outside temperature is 14°F, the size of the tank is reduced by approximately 5 liters.
- **Fuel Nozzle Fit** - The bladder fuel tank uses gas pump pressure to help inflate the bladder during refueling, so the Prius fuel filler neck is equipped with a rubber seal to ensure a tight seal between the pump nozzle and the filler neck. If the gas pump nozzle is dented, scratched, or gouged the poor fit between the pump nozzle and the filler neck can reduce fuel tank capacity.

**NOTE**

Overfilling (trying to force additional fuel into the tank) pushes excess fuel into the EVAP system. This may cause EVAP DTCs and may even require the replacement of some EVAP system components.

**Energy Monitor** The Energy Monitor, which includes a historical bar graph and total trip fuel economy (MPG), is very accurate. Multiple, comparative calculations are performed by several computers.

Fuel usage and fuel economy are calculated by monitoring fuel injector duration and operating frequency. The ECU compares these values with miles traveled to calculate miles per gallon.

The battery ECU closely monitors energy consumption in Watts. By calculating the amount of energy spent, recovered, and stored, the computer can calculate the required fuel burn. Fuel required to create this amount of energy is compared against the engine ECU fuel injection calculation to insure accuracy.

Driving pattern, speed, and load characteristics are stored in the HV ECU as "Historical Data." Historical Data is used to further refine the MPG calculation. This data takes about three to six weeks to accumulate if the battery is disconnected or the HV ECU is replaced.

**Fuel Type & Octane Rating** Use only 87 Octane unleaded gasoline in the Prius. The Prius has a smaller fuel tank opening to help prevent nozzle mix-ups. At a minimum, the gasoline used should meet the specifications of ASTM D4814 in the United States. Do not use premium gasoline. It may causes starting problems with the Prius. There is no gas mileage benefit when using premium gas!