


HYBRID INFORMATION

Normal Hybrid Vehicle Operation

STARTING

Your hybrid starts just like a conventional vehicle. However, when you turn the ignition on, your engine may not 'start' as your hybrid vehicle is equipped with Silent Key Start (SKS).

This fuel saving feature allows your vehicle to be ready to drive without requiring your gas engine to be running. The gas engine may or may not start depending on environmental conditions. The 'ready to drive' indicator light  will illuminate when your vehicle is ready to drive. This light illuminates and stays on when the vehicle has been successfully started, indicating the vehicle is ready to drive (even if you don't hear the gasoline engine running).

DRIVING

The gas engine automatically starts and stops to provide power when it's needed and to save fuel when it's not. While driving at low speeds, coming to a stop or idling, the gas engine normally shuts down and the vehicle operates in Electric Vehicle (EV) mode. For a complete list of conditions that may cause your gas engine to start or remain running, refer to your Owner's Guide.

STOPPING

The gas engine may turn off as you come to a stop to conserve fuel. You do not need to restart your vehicle. Simply step down on the accelerator when you are ready to drive.

TRANSMISSION OPERATION

Due to the technologically advanced, electronically controlled Continuously Variable Transaxle (eCVT), you will not feel shift changes like those of a non-hybrid vehicle. Your hybrid's transmission is designed to do its work seamlessly. However, you may feel the transition when the system changes from Electric Vehicle (EV) mode to gas mode. This is normal. Since your engine speed is controlled by the transmission, it may seem elevated at times. This is also normal hybrid operation as it helps deliver fuel efficiency and performance.

NEUTRAL (N)

It is not recommended to idle the vehicle in (N) Neutral for extended periods of time because this will discharge your high voltage battery and decrease the fuel economy. Also, the engine cannot provide power to the hybrid system in Neutral.

LOW GEAR (L)

Low gear is designed to mimic the enhanced engine braking available in non-hybrid vehicles. Low gear may result in high engine speeds to provide necessary engine braking. This is normal and will not damage your vehicle. Your response during acceleration should be the same as in Drive (D). In Low (L), the gas engine will remain on more often than in Drive (D).

Unique Hybrid Operating Characteristics

HIGH VOLTAGE BATTERY

This battery provides power to the vehicle's electric motor. The 'charge' level is shown in the instrument cluster and also on the Navigation system HEV screen (if equipped) and will increase and decrease during normal operation. Located behind the rear seat of the vehicle, the battery is cooled when needed by cabin air drawn from vent holes below the rear seat cushions. Ensure that you do not place objects at the vent holes, as doing so would block airflow. In addition, you may hear air movement coming from the trunk area as the battery fan operates. The fan may continue to operate for a short duration after the vehicle has been turned off. Your hybrid high voltage battery may periodically recondition itself to ensure maximum efficiency. When this happens, you may hear a series of clicks from the cargo area when you first turn the key in the ignition. This sound is the high voltage contactors closing to allow you to start your hybrid. You may notice slight changes in drivability during this process, but it's an important part of your hybrid's high voltage battery optimization features.

ENGINE

The engine speed in your hybrid is not directly tied to your vehicle speed. Your vehicle's engine and transmission are designed to deliver the power you need at the most efficient engine speed. During heavy accelerations, your hybrid may reach high engine speeds (up to 6000 RPM). This is a characteristic of the Atkinson cycle engine technology and helps to maximize your hybrid's fuel economy. In prolonged mountainous driving, you may notice changes in engine speed without your input. This is by design and maintains the battery charge level. You may also notice during extended downhill driving that your engine continues to run instead of shutting off. During this "engine braking," the engine stays on, but it's not using any fuel. You may also hear a slight whine or whistle when operating your vehicle. This is the normal operation of the electric generator in the hybrid system.


ELECTRIC MOTOR

The electric motor is activated automatically and powered by the engine/generator and the high voltage battery. Depending on your instrument cluster and/or navigation settings (if equipped), your gauges may indicate when you are in Electric Vehicle (EV) mode.


REGENERATIVE BRAKING

Your hybrid vehicle is equipped with standard hydraulic braking and also regenerative braking. The use of hydraulic braking and regenerative braking is automatically controlled as you bring your vehicle to a stop. Regenerative braking is performed by the powertrain/transmission system and it captures brake energy and stores it in the high voltage battery. In conventional vehicles, when you brake, the energy is lost as heat. With regenerative braking, the electric motor captures this energy and sends it back to the high voltage battery for later use. So whenever you apply your brakes, you are essentially recharging the high voltage battery.

STOP SAFELY


HAZARD WARNING LIGHT 
Indicates a hybrid component fault/failure that will cause the vehicle to shutdown, fail to start or enter into a limited operating mode.

THROTTLE CONTROL POWERTRAIN MALFUNCTION



Illuminates when a powertrain fault has been detected which may cause the vehicle to enter into a limited operating mode.

CHARGING SYSTEM WARNING LIGHT



Illuminates when the low-voltage battery is not charging properly. If this stays on while the vehicle is running ('Ready to Drive Indicator' is illuminated), there may be a malfunction with the charging system. Contact your authorized dealer as soon as possible.

Your new hybrid combines the power of a gasoline engine with the efficiency of an electric motor to minimize fuel consumption and maximize performance. These components work together to automatically adjust to changing driving conditions. For example, your gasoline engine will start when needed to provide power and also stop at times when it is able to save energy, such as when your vehicle comes to a stop or is coasting. In addition, your instrument cluster is also specifically designed to help optimize fuel economy and performance, by providing information such as instantaneous fuel economy and efficiency information. Your hybrid requires no special fuels and never has to be plugged in. All you have to do is get in and drive, now more efficiently than ever and in an environmentally conscious manner.

In order to help you fully understand and appreciate the features and unique characteristics of your new vehicle, we invite you to explore this easy-to-use Quick Reference Guide.

Please also refer to your Owner's Guide for more information.

Use extreme caution when using any device or feature that may take your attention off the road. Your primary responsibility is the safe operation of the vehicle. Use only non-essential features and devices when it is safe to do so.

ESSENTIAL INFORMATION

EASY FUEL™ 'NO CAP' FUEL SYSTEM

With this system, you simply open the fuel filler door, insert the nozzle and begin fueling. Wait five seconds from the time the refueling nozzle is shut-off until the nozzle is pulled back out of the fill pipe to allow residual fuel in the nozzle to drain into the tank. It is self-sealing and therefore protected against dust, dirt, water, snow and ice. To use a portable fuel container, slowly insert the fuel funnel (attached to the underside of the spare tire cover or included with the tire changing tools), and pour the fuel into the funnel. When done, clean the funnel or properly dispose of it. Extra funnels can be purchased from your authorized dealer. **Do not** use aftermarket funnels as they will not work with the Easy Fuel™ system and may cause damage.

FUEL TANK CAPACITY/FUEL INFO

Your vehicle has a fuel tank capacity of 17.3 gallons (66.2L). Use only Regular unleaded gasoline with an octane rating of 87. Do not use E85 fuels because your vehicle was not designed to run on fuels with more than 10% ethanol.

LOCATION OF SPARE TIRE AND TOOLS

Your spare tire and tools are located in the trunk, under the floor panel. The spare tire is designed for emergency use only and should be replaced as soon as possible. For complete details on how to change your tire, refer to the Roadside Emergencies chapter in your Owner's Guide.


TIRE PRESSURE

Check your tire pressure at least once a month and before long trips (including spare, if equipped). The recommended specifications are on the Safety Compliance Certification Label or Tire Label located on the B-Pillar or the edge of the driver's door. As an added safety feature, your vehicle has been equipped with a **Tire Pressure Monitoring System (TPMS)** that illuminates a low tire pressure warning light when one or more of your tires is significantly under-inflated. Refer to the Tires, Wheels and Loading chapter in your Owner's Guide for more information.

ROADSIDE ASSISTANCE

Your new hybrid comes with the assurance and support of 24-hour emergency roadside assistance. Roadside assistance includes such services as: lockout assistance, limited fuel delivery, battery jump starts, changing a flat tire, towing, and winch out. To receive roadside assistance in the United States, call 1 (800) 241-3673. In Canada, call 1 (800) 665-2006.

SOS POST-CRASH ALERT SYSTEM™

This system provides audible and visual alarms when a crash causes the deployment of airbags or the activation of the safety belt pretensioners. The turn signals will flash and the horn will sound. To deactivate, press the hazard flasher control, or  on your remote transmitter.



Ways to Optimize Your Fuel Economy

Your fuel economy should improve throughout your hybrid's break-in period. As with any vehicle, fuel economy can be significantly impacted by your driving habits and accessory usage. For best results, keep in mind these tips:

DRIVING HABITS

In general, better fuel economy is achieved with mild to moderate acceleration and braking, since aggressive driving increases the energy required to move your vehicle. Moderate braking allows you to capture the most energy with the regenerative braking system. Keeping a safe following distance and anticipating the traffic ahead can also make smooth driving much easier. Highway fuel economy can be improved by lowering your speed and driving with a steady foot on the accelerator pedal (or using cruise control on flat terrain). A warm engine is more efficient, so combining several short trips back-to-back will help to increase your average fuel economy for the entire outing.

Note: Your hybrid vehicle is designed to use the most efficient energy source (gasoline or electric energy) at all times. It is not an indication of inefficiency if the gasoline engine is running.

CLIMATE CONTROL

Your hybrid is equipped with an electrically driven A/C compressor that provides cooling regardless of whether the gasoline engine is running or not. Like other accessories, the A/C compressor uses electrical energy and reduces fuel economy. With the Smart Dual Zone feature, the passenger side air temperature will default to the driver side setting if the passenger seat is not occupied. In A/C mode, using AUTO and/or choosing a higher temperature setting will improve fuel economy. Keeping your vehicle from becoming very hot or cold by parking in a garage or in a shaded location can also help reduce climate control energy usage.

DRIVER INFORMATION

Your hybrid vehicle is equipped with several levels of driver information in the instrument cluster. Instantaneous and average fuel economy are available on every level. One way to optimize fuel economy is to notice what fuel economy you achieve and how it changes under different conditions. Then you can begin to understand how you can increase your fuel economy.

ADDITIONAL TIPS

Keep tires properly inflated and use only the recommended size and specification. The tires supplied on your vehicle are low rolling resistance tires. Do not carry extra loads. Minimize use of accessories that use electrical energy and reduce fuel economy. Be mindful of adding external accessories that may increase aerodynamic drag. Perform all scheduled maintenance. There is no need to wait for your engine to "warm up." The vehicle is ready to drive immediately after starting.

Refer to the Instrument Cluster and Maintenance and Specifications sections of the Owner's Guide for more information about optimizing fuel economy.