SECTION 4

STARTING AND DRIVING

Starting and driving

Before starting the hybrid system

1. Check the area around the vehicle before entering it.
2. Adjust seat position, seatback angle, head restraint height and steering wheel angle.
3. Adjust the inside and outside rear view mirrors.
4. Lock all doors.
5. Fasten seat belts.

When you get in the vehicle, check whether the "READY" light is on or not.

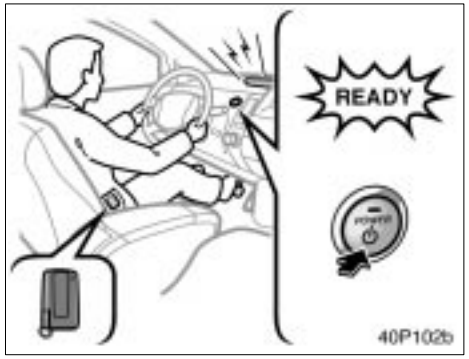
⚠ CAUTION

Your vehicle does not produce any noise or vibration when the vehicle is ready to be driven with the "READY" light on. Move your foot carefully from the brake pedal to the acceleration pedal when driving.

How to start the hybrid system— (a) Before starting the hybrid system

1. Apply the parking brake firmly.
2. Turn off unnecessary lights and accessories.
3. Depress the brake pedal and hold it to the floor until driving off.

(b) Turning on the hybrid system (Using the smart function—on some models)



Before starting the hybrid system, be sure to follow the instructions in "(a) Before starting the hybrid system".

Normal starting procedure

Carry the key and press the "POWER" switch briefly and firmly with the brake pedal depressed. The "READY" light starts blinking. After a few seconds, the blinking "READY" light remains on and two beeps sound. (If the ambient temperature is low, such as during winter driving conditions, it may take time until the "READY" light is on.)

The engine may not start even with the "READY" light on.

You may hear a motor sound in the engine compartment when the brake pedal is depressed with the hybrid system off.

When the hybrid system is started or stopped, you may hear a sound coming from the hybrid battery in the luggage compartment. However, this does not indicate any trouble.

If there is a problem somewhere in the hybrid system, the hybrid system malfunction warning light will come on in place of the “READY” light. If this happens, contact your Toyota dealer.

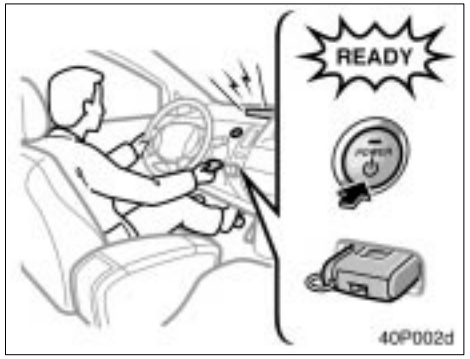
⚠ CAUTION

Never start the hybrid system from outside the vehicle, or an accident may occur. Be sure to sit on the driver seat, then start the system when driving.

NOTICE

- ***The hybrid system cannot be started when the shift position is “N”. Be sure to put it in “P” and then start the system.***
- ***If any warning light comes on (See page 125 for details.) or the 12 volt battery is disconnected, the hybrid system may not start by pushing the “POWER” switch. In that case, push it once again. If the “READY” light does not come on, contact your Toyota dealer.***
- ***When you start the hybrid system at a lowered outside temperature, it may take longer before the blinking “READY” light changes to stay on.***

(b) Turning on the hybrid system (Using the key)



Before starting the hybrid system, be sure to follow the instructions in “(a) Before starting the hybrid system”.

Normal starting procedure

Insert the key and press the “POWER” switch briefly and firmly with the brake pedal depressed. The “READY” light starts blinking. After a few seconds, the blinking “READY” light remains on and two beeps sound. (If the ambient temperature is low, such as during winter driving conditions, it may take time until the “READY” light is on.)

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Tips for driving in various conditions

- Always slow down in gusty crosswinds. This will allow you much better control.
- Drive slowly onto curbs and, if possible, at a right angle. Avoid driving onto high, sharp−edged objects and other road hazards. Failure to do so can lead to severe tire damage such as a tire burst.
  Drive slowly when passing over bumps or travelling on a bumpy road. Otherwise, the impact could cause severe damage to the tires and/or wheels.
- When parking on a hill, turn the front wheels until they touch the curb so that the vehicle will not roll. Apply the parking brake, and put the hybrid transaxle “P”. If necessary, block the wheels.
- Washing your vehicle or driving through deep water may get the brakes wet. To see whether they are wet, check that there is no traffic near you, and then press the pedal lightly. If you do not feel a normal braking force, the brakes are probably wet. To dry them, drive the vehicle cautiously while lightly pressing the brake pedal with the parking brake applied. If they still do not work safely, pull to the side of the road and call a Toyota dealer for assistance.

⚠ CAUTION

- **Before driving off, make sure the parking brake is fully released and the parking brake reminder light is off.**
- **Do not leave your vehicle unattended with the "READY" light on.**
- **Do not rest your foot on the brake pedal while driving. It can cause dangerous overheating, needless wear, and poor fuel economy.**
- **To drive down a long or steep hill, reduce your speed and downshift. Remember, if you ride the brakes excessively, they may overheat and not work properly.**
- **Be careful when accelerating or braking on a slippery surface. Sudden acceleration or engine braking, could cause the vehicle to skid or spin.**

- **Do not drive in excess of the speed limit. Even if the legal speed limit permits it, do not drive over 140 km/h (85 mph) unless your vehicle has high−speed capability tires. Driving over 140 km/h (85 mph) may result in tire failure, loss of control and possible injury. Be sure to consult a tire dealer to determine whether the tires on your vehicle are high−speed capability tires or not before driving at such speeds.**
- **Do not continue normal driving when the brakes are wet. If they are wet, your vehicle will require a longer stopping distance, and it may pull to one side when the brakes are applied. Also, the parking brake will not hold the vehicle securely.**

Driving in the rain

Driving on a slippery road surface

Drive carefully when it is raining, because visibility will be reduced, the windows may become fogged−up, and the road will be slippery.

- Drive carefully when it starts to rain, because the road surface will be especially slippery.
- Refrain from high speeds when driving on an expressway in the rain, because there may be a layer of water between the tires and the road surface, preventing the steering and brakes from operating properly.

⚠ CAUTION

- **Sudden braking, acceleration and steering when driving on a slippery road surface may cause tire slippage and reduce your ability to control the vehicle, resulting in an accident.**
- **Sudden changes in engine speed, such as sudden engine braking, may cause the vehicle to skid, resulting in an accident.**
- **After driving through a puddle, lightly depress the brake pedal to make sure that the brakes are functioning properly. Wet brake pads may prevent the brakes from functioning properly. If the brakes on only one side are wet and not functioning properly, steering control may be affected, resulting in an accident.**

When encountering flooded roads

Do not drive on a road that has flooded after heavy rain etc. Doing so may cause serious damage to the vehicle.

NOTICE

Driving on a flooded road may cause the engine to stall as well as cause serious vehicle malfunctions such as shorts in electrical components and engine damage from water immersion. In the event that you drive on a flooded road and the vehicle is flooded, be sure to have your Toyota dealer check brake function, changes in quantity and quality of engine oil, transaxle fluid for the hybrid system, etc. and lubricant condition for the bearings and suspension joints (where possible) and the function of all joints and bearings.

Winter driving tips

Make sure you have a proper freeze protection for engine coolant.

Only use “Toyota Super Long Life Coolant” or similar high quality ethylene glycol based non−silicate, non−amine, non−nitrite, and non−borate coolant with long−life hybrid organic acid technology. (Coolant with long−life hybrid organic acid technology is a combination of low phosphates and organic acids.)

See “Checking the coolant level” on page 406 for details of coolant type selection.

For the U.S.A.—“Toyota Super Long Life Coolant” is a mixture of 50% coolant and 50% deionized water. This coolant provides protection down to about −35°C (−31°F).

For Canada—“Toyota Super Long Life Coolant” is a mixture of 55% coolant and 45% deionized water. This coolant provides protection down to about −42°C (−44°F).

NOTICE

Do not use plain water alone.

Check the condition of the 12 volt battery and cables.

Cold temperatures reduce the capacity of any 12 volt battery, so it must be in top shape to provide enough power for winter starting. Section 8−3 tells you how to visually inspect the 12 volt battery. Your Toyota dealer will be pleased to check the level of charge.

Make sure the engine oil viscosity is suitable for the cold weather.

See page 405 for recommended viscosity. Leaving a heavy summer oil in your vehicle during winter months may cause harder starting. If you are not sure about which oil to use, call your Toyota dealer—they will be pleased to help.

Keep the door locks from freezing.

Squirt lock de−icer or glycerine into the locks to keep them from freezing.

Use a washer fluid containing an anti−freeze solution.

This product is available at your Toyota dealer and most auto parts stores. Follow the manufacturer's directions for how much to mix with water.

NOTICE
Do not use engine antifreeze or any other substitute because it may damage your vehicle's paint.

Do not use your parking brake when there is a possibility it could freeze.

When parking, push the "P" position switch and block the rear wheels. Do not use the parking brake, for snow or water accumulated in and around the parking brake mechanism may freeze, making it hard to release.

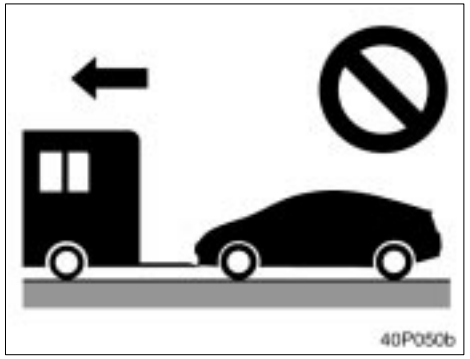
Keep ice and snow from accumulating under the fenders.

Ice and snow built up under your fenders can make steering difficult. During extreme winter driving, stop and check under the fenders occasionally.

Depending on where you are driving, we recommend you carry some emergency equipment.

Some of the things you might put in the vehicle are tire chains, window scraper, bag of sand or salt, flares, small shovel, jumper cables, etc.

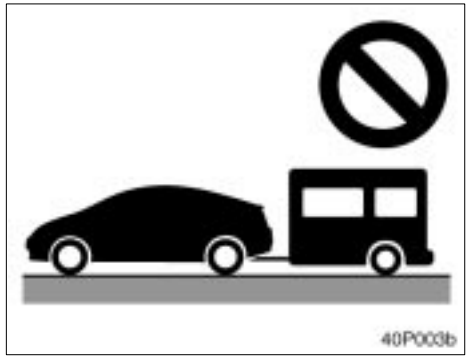
Dinghy towing



Your vehicle is not designed to be dinghy towed (with four wheels on the ground) behind a motorhome.

NOTICE
Do not tow your vehicle with four wheels on the ground. This may cause serious damage to your vehicle.

Trailer towing



Toyota does not recommend towing a trailer with your Toyota. Toyota also does not recommend the installation of a tow hitch or the use of a tow hitch carrier for a wheelchair, scooter, bicycle, etc. Your Toyota is not designed for trailer towing or for the use of tow hitch mounted carriers.

How to save fuel and make your vehicle last longer, too

Improving fuel economy is easy−just take it easy. It will help make your vehicle last longer, too. Here are some specific tips on how to save money on both fuel and repairs:

- **Keep your tires inflated at the correct pressure.** Underinflation causes tire wear and wastes fuel. See page 409 for instructions.
- **Do not carry unneeded weight in your vehicle.** Excess weight puts a heavier load on the engine, causing greater fuel consumption.
- **Accelerate slowly and smoothly.** Avoid jackrabbit starts.
- **Avoid continuous speeding up and slowing down.** Stop−and−go driving wastes power.
- **Avoid unnecessary stopping and braking.** Maintain a steady pace. Try to time the traffic signals so you only need to stop as little as possible or take advantage of through streets to avoid traffic lights. Keep a proper distance from other vehicles to avoid sudden braking. This will also reduce wear on your brakes.
- **Avoid heavy traffic or traffic jams whenever possible.**
- **Do not rest your foot on brake pedal.** This causes premature wear, overheating and poor fuel economy.
- **Maintain a moderate speed on highways.** The faster you drive, the greater the fuel consumption. By reducing your speed, you will cut down on fuel consumption.
- **Keep the front wheels in proper alignment.** Avoid hitting the curb and slow down on rough roads. Improper alignment not only causes faster tire wear but also puts an extra load on the engine, which, in turn, wastes fuel.
- **Keep the bottom of your vehicle free from mud, etc.** This not only lessens weight but also helps prevent corrosion.
- **Keep your vehicle tuned−up and in top shape**. A dirty air cleaner, improper valve clearance, dirty plugs, dirty oil and grease, brakes not adjusted, etc. all lower engine performance and contribute to poor fuel economy. For longer life of all parts and lower operating costs, keep all maintenance work on schedule, and if you often drive under severe conditions, see that your vehicle receives more frequent maintenance.

⚠ CAUTION

Never turn off the hybrid system to coast down hills. Your power steering and brake booster will not function without the hybrid system running. Also, the emission control system operates properly only when the hybrid system is running.