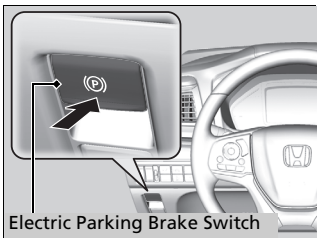
Brake System

■ Parking Brake

Use the parking brake to keep the vehicle stationary when parked. When the parking brake is applied, you can manually or automatically release it.



■ To apply

The electric parking brake can be applied any time the vehicle has battery, no matter which position the power mode is in.

Press the electric parking brake switch gently and securely.

▶ The parking brake and brake system indicator (red) comes on.

Brake System

When you depress the brake pedal, you may hear a whirling sound from the engine compartment. This is because the brake system is in operation, and it is normal.

Parking Brake

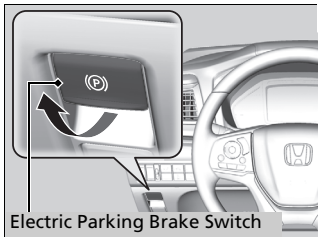
You may hear the electric parking brake system motor operating from the rear wheel area when you apply or release the parking brake. This is normal.

The brake pedal may slightly move due to the electric parking brake system operation when you apply or release the parking brake. This is normal.

You cannot apply or release the parking brake if the battery goes dead.

If the Battery Is Dead P. 735

If you press and hold the electric parking brake switch while driving, the brakes on all four wheels are applied by the VSA® system until the vehicle comes to a stop. The electric parking brake then applies, and the switch should be released.



■ To release

The power mode must be in ON in order to release the electric parking brake.

1. Depress the brake pedal fully.

2. Pull the electric parking brake switch up gently and securely.

▶ The parking brake and brake system indicator (red) goes off.

Manually releasing the parking brake using the switch helps your vehicle start slowly and smoothly when facing down hill on steep hills.

Parking Brake

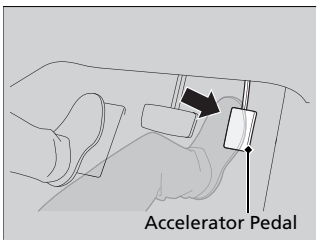
In the following situations, the parking brake automatically operates.

- When the vehicle stops more than 10 minutes while ACC with Low Speed Follow is activated.
- When the driver's seat belt is unfastened while your vehicle is stopped automatically by ACC with Low Speed Follow.
- When the engine is turned off, except by Auto Idle Stop system, while ACC with Low Speed Follow is activated.
- When the vehicle stops with the automatic brake hold system activated for more than 10 minutes.
- When the driver's seat belt is unfastened while your vehicle is stopped and brake hold is applied.
- When the engine is turned off, except by Auto Idle Stop system, while brake hold system is applied.
- When there is a problem with the brake hold system while brake hold is applied.

Continued

■ To release automatically

Depressing the accelerator pedal releases the parking brake.
Use the accelerator pedal to release the brake when you are starting the vehicle facing uphill, or in a traffic jam.


Accelerator Pedal

Gently depress the accelerator pedal. When on a hill, it may require more accelerator input to release.

▶ The parking brake and brake system indicator (red) goes off.

You can release the parking brake automatically when:

- You are wearing the driver's seat belt.
- The engine is running.
- The transmission is not in P or N.

Parking Brake

If the parking brake cannot be released automatically, release it manually.

When the vehicle is traveling uphill, the accelerator pedal may need to be pressed farther to automatically release the electric parking brake.

The parking brake cannot be released automatically while the following indicators are on:

- Malfunction indicator lamp
- Transmission system indicator

The parking brake may not be released automatically while the following indicators are on:

- Parking brake and brake system indicator (amber)
- VSA® system indicator
- **ABS** indicator
- Supplemental restraint system indicator

Foot Brake

Your vehicle is equipped with disc brakes at all four wheels. The brake assist system increases the stopping force when you depress the brake pedal hard in an emergency situation. The anti-lock brake system (ABS) helps you retain steering control when braking very hard.

Brake Assist System P. 645
Anti-lock Brake System (ABS) P. 644

Foot Brake

Check the brakes after driving through deep water, or if there is a buildup of road surface water. If necessary, dry the brakes by lightly depressing the pedal several times.

If you hear a continuous metallic friction sound when applying the brakes, this is caused by the brake wear indicator rubbing on the brake rotor and indicates that the brake pads need to be replaced. Have the vehicle checked by a dealer. If you hear only an occasional squeak or squeal when you initially apply the brake pedal, this may be normal and caused by high frequency vibration of the brake pads against the rotating brake disc.

Constantly using the brake pedal while going down a long hill builds up heat, which reduces the brake effectiveness. Apply engine braking by taking your foot off the accelerator pedal and downshifting to a lower gear.

Do not rest your foot on the brake pedal while driving, as it will lightly apply the brakes and cause them to lose effectiveness over time and reduce pad life. It will also confuse drivers behind you.

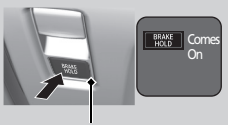
Whenever the brakes are activated by CMBS™ or another system that automatically controls braking, the brake pedal is depressed and released in accordance with braking function.

Continued

■ Automatic Brake Hold

Keeps the brake applied after releasing the brake pedal until the accelerator pedal is pressed. You can use this system while the vehicle is temporarily stopped, like at traffic lights and in heavy traffic.

■ Turning on the system

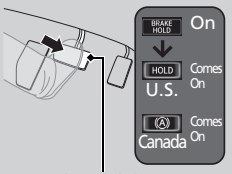


Automatic Brake Hold Button

Fasten your seat belt properly, then start the engine. Press the automatic brake hold button.

- The automatic brake hold system indicator comes on. The system is turned on.

■ Activating the system

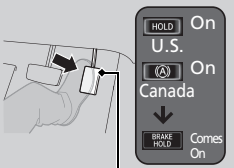


Brake Pedal

Depress the brake pedal to come to a complete stop. The transmission must be in D or N.

- The automatic brake hold indicator comes on. Braking is kept for up to 10 minutes.
- Release the brake pedal after the automatic brake hold indicator comes on.

■ Canceling the system



Accelerator Pedal

Depress the accelerator pedal while the transmission is in D. The system is canceled and the vehicle starts to move.

- The automatic brake hold system indicator comes on. The system continues to be on.

Automatic Brake Hold

⚠WARNING

Activating the automatic brake hold system on steep hills or slippery roads may still allow the vehicle to move if you remove your foot from the brake pedal.

If a vehicle unexpectedly moves, it may cause a crash resulting in serious injury or death.

Never activate the automatic brake hold system or rely on it to keep a vehicle from moving when stopped on a steep hill or slippery roads.

⚠WARNING

Using the automatic brake hold system to park the vehicle may result in the vehicle unexpectedly moving.

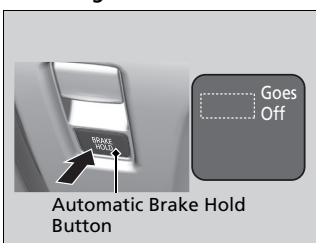
If a vehicle moves unexpectedly, it may cause a crash, resulting in serious injury or death.

Never leave the vehicle when braking is temporarily kept by automatic brake hold and always park the vehicle by putting the transmission in P and applying the parking brake.

■ **The system automatically cancels when:**
- You engage the parking brake.
- You depress the brake pedal and put the transmission into P or R.

■ **The system automatically cancels and the parking brake is applied when:**
- Braking is kept for more than 10 minutes.
- The driver's seat belt is unfastened.
- The engine is turned off.
- **Brake Hold System Problem** appears on the driver information interface.
- There is a problem with automatic brake hold system.

■ **Turning off the automatic brake hold system**



Automatic Brake Hold Button

While the system is on, press the automatic brake hold button again.

▶ The automatic brake hold system indicator goes off.

If you want to turn off automatic brake hold while the system is in operation, press the automatic brake hold button with the brake pedal depressed.

Automatic Brake Hold

While the system is activated, you can turn off the engine or park the vehicle through the same procedure as you normally do.

➔ **When Stopped** P. 646

Whether the system is on, or the system is activated, the automatic brake hold turns off once the engine is off.

Turning off the automatic brake hold system

Make sure to turn off the automatic brake hold system before using an automated car wash.

You may hear an operating noise if the vehicle moves while the automatic brake hold system is in operation.

Anti-lock Brake System (ABS)

■ ABS

Helps prevent the wheels from locking up, and helps you retain steering control by pumping the brakes rapidly, much faster than you can.

The electronic brake distribution (EBD) system, which is part of the ABS, also balances the front-to-rear braking distribution according to vehicle loading.

You should never pump the brake pedal. Let the ABS work for you by always keeping firm, steady pressure on the brake pedal. This is sometimes referred to as "stomp and steer."

■ ABS operation

The brake pedal may pulsate slightly when the ABS is working. Depress the brake pedal and keep holding the pedal firmly down. On dry pavement, you will need to press on the brake pedal very hard before the ABS activates. However, you may feel the ABS activate immediately if you are trying to stop on snow or ice.

ABS may activate when you depress the brake pedal when driving on:
- Wet or snow covered roads.
- Roads paved with stone.
- Roads with uneven surfaces, such as potholes, cracks, manholes, etc.

When the vehicle speed goes under 6 mph (10 km/h), the ABS stops.

Anti-lock Brake System (ABS)

NOTICE

The ABS may not function correctly if you use a tire of the wrong size or type.

If the **ABS** indicator comes on while driving, there may be a problem with the system. While normal braking will not be affected, there is a possibility that the ABS will not operating. Have your vehicle checked by a dealer immediately.

The ABS is not designed for the purpose of reducing the time or distance it takes for a vehicle to stop: It is designed to limit brake lockup which can lead to skidding and loss of steering control.

In the following cases, your vehicle may need more distance to stop than a vehicle without the ABS:
- You are driving on rough or uneven road surfaces, such as gravel or snow.
- The tires are equipped with snow chains.

The following may be observed with the ABS system:
- Motor sounds coming from the engine compartment when the brakes are applied, or when system checks are being performed after the engine has been started and while the vehicle accelerates.
- Brake pedal and/or the vehicle body vibration when ABS activates.

These vibrations and sounds are normal to ABS systems and are no cause for concern.

Brake Assist System

Designed to assist the driver by generating greater braking force when you depress the brake pedal hard during emergency braking.

■ Brake assist system operation

Press the brake pedal firmly for more powerful braking.

When brake assist operates, the pedal may wiggle slightly and an operating noise may be heard. This is normal. Keep holding the brake pedal firmly down.