Braking

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 ignition switch*1 is in.

Pull the electric parking brake switch up gently and securely.

- ▶ The indicator in the switch comes on.
- ► The parking brake and brake system indicator (red) comes on.

■ To release

The vehicle must be ON III *1 in order to release the electric parking brake.

- 1. Depress the brake pedal.
- 2. Press the electric parking brake switch.
 - ▶ The indicator in the switch goes off.
 - ► 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

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

^{*1:} Models with the smart entry system have an **ENGINE START/STOP** button instead of an ignition switch.

■ To release automatically

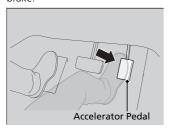
Use the accelerator pedal to release the parking brake when you are starting the vehicle facing uphill, or in a traffic jam.

Continuously variable transmission models

Depressing the accelerator pedal releases the parking brake.

Manual transmission models

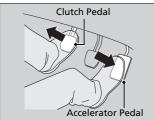
Depress the accelerator pedal while releasing the clutch pedal releases the parking brake.



Continuously variable transmission models

Gently depress the accelerator pedal.

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



Manual transmission models

Gently depress the accelerator pedal and release the clutch pedal.

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

▶ Parking Brake

In the following situations, the parking brake automatically operates.

- 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 automatic brake hold is applied.
- When the engine is turned off while automatic brake hold is applied.
- When there is a problem with the Automatic Brake Hold System while automatic brake hold is applied.

Models with ACC with Low Speed Follow

- 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 while ACC with Low Speed Follow is activated.

Manual transmission models

 When there is a problem with the electric parking brake switch, after you turn the ignition switch to LOCK 01^{*1}.

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

The parking brake automatically releases as you depress the accelerator pedal when:

- You are wearing the driver's seat belt.
- The engine is running.

Continuously variable transmission models

• The transmission is not in **P** or **N**.

Manual transmission models

• The transmission is not in **N**.

▶ Parking Brake

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 (red)
- VSA® system indicator
- ABS indicator
- Supplemental restraint system indicator

Manual transmission models

The clutch pedal is fully depressed before gently depress the accelerator pedal and release the clutch pedal.

^{*} Not available on all models

■ Foot Brake

Your vehicle is equipped with disc brakes at all four wheels. A vacuum power assist helps to reduce the effort needed on the brake pedal. 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.

2.0 L engine models

■ Brake squeal

To satisfy the performance under a wide range of driving conditions, a high-performance braking system is equipped on your vehicle. You may hear the brake squeal under certain conditions, such as vehicle speed, deceleration, humidity, and so on. This is not a malfunction.

∑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/speed position. With manual transmission use a lower gear for greater engine braking.

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.

Automatic Brake Hold

Continuously variable transmission models

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.



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

■ Canceling the system



Depress the brake pedal to come to a complete stop. The shift lever must not be in P or R.

- 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.

Depress the accelerator pedal while the shift lever is in a position other than P or N. The system is canceled and the vehicle starts to move.

• The automatic brake hold indicator goes off. The system continues to be on. > Automatic Brake Hold

AWARNING

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.

Continuously variable transmission models

AWARNING

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.

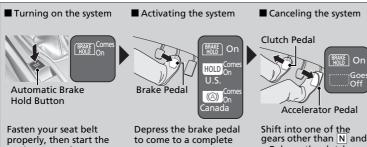
Never leave the vehicle when braking is temporarily kept by automatic brake hold and always park the vehicle by putting the transmission in P and applying the parking brake.

Manual transmission models

Keeps the brake applied after releasing the brake pedal until you shift into one of the gears other than **N** and:

- Release the clutch pedal on a level road or when facing downhill.
- Release the clutch pedal and depress the accelerator pedal when facing uphill.

You can use this system while the vehicle is temporarily stopped, like at traffic lights and in heavy traffic.



engine. Press the automatic brake hold button.

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

stop.

- 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.

gears other than N and:

- Release the clutch pedal on a level road or when facing downhill
- Release the clutch pedal and depress the accelerator pedal when facing uphill.

The system is canceled and the vehicle starts to move.

• The automatic brake hold indicator goes off. The system continues to be on.

■ The system automatically cancels when:

• You engage the parking brake.

Continuously variable transmission models

• You depress the brake pedal and move the shift lever to [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.
- There is a problem with automatic brake hold system.

Manual transmission models

· The engine stalls.

■ Turning off the automatic brake hold system



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.

MAutomatic 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.

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

Manual transmission models

The system turns off if the engine stalls while automatic brake hold is active or the system is on.

∑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.

Manti-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 be 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 tire 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.

Driving

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.

Parking Your Vehicle

When Stopped

- 1. Depress the brake pedal firmly.
- With the brake pedal depressed, pull up the electric parking brake switch slowly, but fully.

Continuously variable transmission models

3. Change the shift position to **P**.

Manual transmission models

3. Move the shift lever to \boxed{R} or $\boxed{1}$.

All models

- **4.** Turn off the engine.
 - ▶ The parking brake and brake system indicator (red) goes off in about 15 seconds.

▶ Parking Your Vehicle

Continuously variable transmission models

AWARNING

The vehicle can roll away if left unattended without confirming that Park is engaged.

A vehicle that rolls away could cause a crash resulting in serious injury or death.

Always keep your foot on the brake pedal until you have confirmed that P is shown on the shift lever position indicator.

Do not park your vehicle near flammable objects, such as dry grass, oil, or timber.

Heat from the exhaust can cause a fire.

NOTICE

Continuously variable transmission models

The following can damage the transmission:

- Depressing the accelerator and brake pedals simultaneously.
- Holding the vehicle in place when facing uphill by depressing the accelerator pedal.
- Moving the shift lever into P before the vehicle stops completely.

Always confirm the electric parking brake is set, in particular if you are parked on an incline.

In extremely cold temperatures, the parking brake may freeze up if applied. If such temperatures are expected, do not apply the parking brake but, if parking on a slope, either turn the front wheels so they will contact the curb if the vehicle rolls down the slope or block the wheels to keep the vehicle from moving. If you do not take either precaution, the vehicle may roll unexpectedly, leading to a crash.