# Low Speed Braking Control\*

Using sonar sensors located on the front and rear bumpers, this system detects if there is danger of a potential collision with a wall or other obstacle during normal driving or when the accelerator pedal is depressed with too much force. The system then assists in avoiding collisions and reducing damage from impact through assistive braking and/or assistive driving power suppression.

■Low Speed Braking Control\*

## **AWARNING**

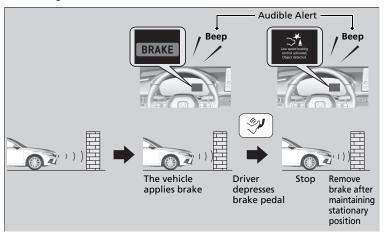
The Low Speed Braking Control System cannot avoid all collisions and may not reduce damage in each situation where the accelerator is mistakenly or aggressively pressed. Overreliance on the system may result in a collision with serious injury or death. Always check your surroundings, your shift position, and your pedal use. Driver remains responsible for safely operating the vehicle.

If the Low Speed Braking Control activates in a situation where you do not want automatic brake application (such as when the vehicle is between two railroad crossing gates), simply press the brake pedal to deactivate the system and then continue to drive as intended

## ■ How the System Works

### ■ Assistive braking

Assistive braking provides a visual and audible alert when the vehicle is moving between approximately 1 and 6 mph (2 and 10 km/h) and there is the possibility of a collision with a detected wall or other obstacles, as well as providing assistance with braking.



If the only rear sensors are turned off using the parking sensor system, the assistive braking is not working when reversing.

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#### ∑Low Speed Braking Control\*

For directions on the proper handling of the sonar sensors, please refer to the following page.

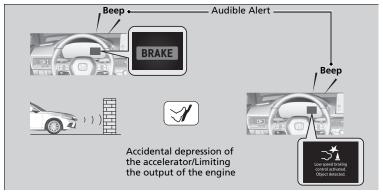
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The vehicle will release the brake and start moving a few seconds after the system is activated. To keep the vehicle stopped, keep the brake pedal depressed or put the transmission into [P].

In order to prevent the system from activating when not needed, always turn it off during vehicle maintenance, when loading on ships, trucks, and so on, or when using a chassis dynamometer, free rollers for inspection or when washing the car in conveyor type car wash machine.

### ■ Assistive driving power suppression

When the vehicle is stopped or moving at less than 6 mph (10 km/h) and there is an obstacle such as a wall detected near the front of or back of the vehicle, if the accelerator pedal is depressed more than necessary, the system will inform you with a visual and audible alert. At the same time, the system will prevent sudden forward or backwards movement by limiting the output of the engine, then assistive braking will activate nearby the obstacle.



Assistive driving power suppression will not activate in the following situations. When moving forward:

When on a steep slope or the shift position is in  $\boxed{P}$ ,  $\boxed{R}$ , or  $\boxed{N}$ . When reversing:

When on a steep slope or the shift position is in a position other than R.

If the only rear sensors are turned off using the parking sensor system, the assistive driving power suppression is not working when reversing.

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## ■ System On and Off



When you turn the system on and off, do the following.

- **1.** Press the safety support switch.
- 2. Roll the right selector wheel to the symbol and push it.
  - A message appears on the driver information interface when the system turns on or off.
  - A check mark appears in the box and the color of the symbol changes to green when the system is on. The check mark disappears and the color of the symbol changes to gray when the system is off.

The system is turned on every time you start the engine, even if you turned it off the last time you drove the vehicle.

#### System On and Off

You can also select safety support content from the driver information interface.

- Driver Information Interface P. 113
- Driver Information Interface (Right Side Area) P. 138

The system may temporarily turn off after reconnecting the battery.

The system will automatically turn ON after the vehicle has been moving at over 12 mph (20 km/h) for some time.

If the system does not turn on, have your vehicle checked by a dealer.

### ■ Conditions for Cancellation

Conditions for assistive driving power suppression.

- When the accelerator is no longer depressed.
- When the accelerator is depressed for approximately four seconds.
- When the brake pedal is depressed.
- When the steering wheel is turned and a collision avoided.

Conditions for assistive braking cancellation.

• A certain amount of time has passed since activation.

# ■ Low Speed Braking Control System Conditions and Limitations

The system may not operate correctly in the following conditions:

### **■** Examples of obstacles the sonar sensor cannot detect

- Obstacles that do not reflect sound waves well, such as people, snow, cloth, sponges, etc.
- Thin obstacles such as fences, bicycles, sign posts, etc.
- Short or small obstacles.
- Obstacles immediately in front of the bumper.
- Moving objects or obstacles that suddenly enter the road.
- Obstacles that are not perpendicular to the ground.

#### ○ Conditions for Cancellation

After Low Speed Braking Control has activated once, it will not activate again for the same obstacle. They can be activated again after driving for a certain distance after last activation.

Low Speed Braking Control activates separately when moving forward and reversing. (For example, if it activates when moving forward, it can be activated again immediately if reversing.)

However, if assistive braking has been activated, in order to activate assistive driving power suppression again, it is necessary to drive for a certain distance to reset the system.

### **■** Examples of situations where the sonar sensor cannot detect obstacles

- The sonar sensor is dirty (covered by snow, water, mud, etc.).
- The vehicle is too hot or cold.
- The steering wheel is turned sharply when approaching the obstacle at an angle.

### ■ Examples of other cases where the system may not work correctly

- The vehicle is tilted due to heavy load or suspension modifications.
- An abnormal tire or wheel condition (incorrect sizes, varied sizes or construction, improperly inflated, compact spare tire, etc.).
- Bad weather conditions such as heavy rain, fog, snow, sandstorms, etc.
- The ambient temperature/humidity is too high or low.
- When going down a very steep slope.
- When close to other vehicles with sonar sensors or other objects that emit ultrasonic waves.

### ■ Situations where the system may activate even without risk of a collision

- When passing through short or narrow gates.
- When driving on uneven surfaces, grassy areas, or places with steps.
- When a sloped pillar or wall is protruding from a high position.
- When there are obstacles next to the road
- When driving toward flags, curtains, tree branches, railroad crossing bars, etc.
- When driving on flooded roads.