

Collision Mitigation Braking System™ (CMBS™)

The system can assist you when it determines there is a possibility of your vehicle colliding with a vehicle (including motorcycles) ahead from behind, an oncoming vehicle in front, a pedestrian, or someone riding a bicycle (moving bicycle). The CMBS™ is designed to alert you when the potential for a collision is determined, as well as assist in reducing speed, avoiding collisions, and reducing collision severity.

⚠ Collision Mitigation Braking System™ (CMBS™)

Important Safety Reminder

The CMBS™ is designed to reduce the severity of an unavoidable collision. It does not prevent collisions nor stop the vehicle automatically. It is still your responsibility to operate the brake pedal and steering wheel appropriately according to the driving conditions.

The CMBS™ may not activate or may not detect a vehicle in front of your vehicle under certain conditions:

➤ **CMBS™ Conditions and Limitations** P. 484

For directions on the proper handling of the radar sensor, refer to the following page.

➤ **Radar Sensor** P. 554

You can read about handling information for the camera equipped with this system.

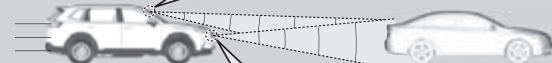
➤ **Front Sensor Camera** P. 552

Continued

■ How the system works

When to use

A front sensor camera is located behind the rearview mirror.



The radar sensor is behind the Honda emblem on the front grille.

The system starts monitoring the roadway ahead when your vehicle speed is about 3 mph (5 km/h) or above and will search for a vehicle, pedestrian, or moving bicycle in front of you.

The CMBS™ activates when:

- The speed difference between your vehicle and a vehicle, pedestrian, or moving bicycle detected in front of you becomes about 3 mph (5 km/h) and over with a chance of a collision.
- Your vehicle drives at about 18 mph (30 km/h) or less and there is a chance of in frontal collision with a detected oncoming vehicle when you turn left at an intersection.
- Your vehicle speed is about 62 mph (100 km/h) or less and the system determines there is a chance of a collision with:
 - An oncoming or stationary vehicle detected in front of you.
 - A pedestrian or moving bicycle detected in front of you.

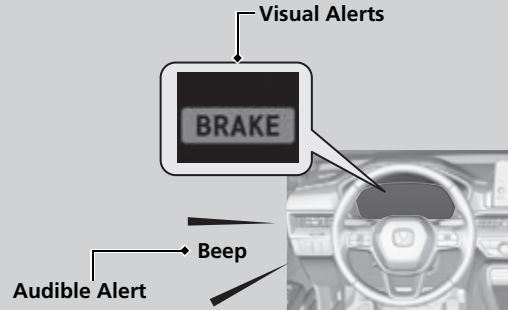
The CMBS™ will be canceled when your vehicle stops or the system determines there no longer is the potential for a collision.

The CMBS™ may also be canceled when a driver operates the steering wheel and the brake or accelerator pedal to avoid a collision.

■ When the system activates

The system provides visual and audible alerts of a possible collision, and stops if the collision is avoided.

- ▶ Take appropriate action to prevent a collision (apply the brakes, change lanes, etc.).



You can change the distance (**Long/Normal/Short**) between vehicles at which the system's earliest collision alert will come on.

- **Settings*** P. 129
- **Customized Features** P. 362

* Not available on all models

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▶▶ When the system activates

The camera in the CMBS™ is also designed to detect pedestrians.

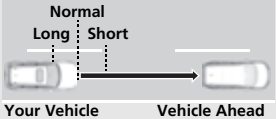
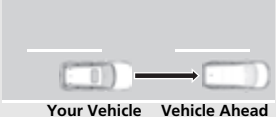
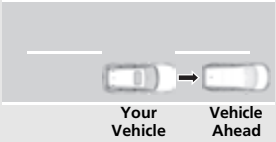
However, this pedestrian detection feature may not activate or may not detect a pedestrian in front of your vehicle under certain conditions.

Refer to the ones indicating the pedestrian detection limitations from the list.

- **CMBS™ Conditions and Limitations** P. 484

■ Collision Alert Stages

The system has three alert stages for a possible collision. However, depending on circumstances, the CMBS™ may not go through all of the stages before initiating the last stage.

Distance between vehicles		CMBS™		
		The radar sensor detects a vehicle	Audible & Visual WARNINGS	Braking
Stage one		There is a risk of a collision with the vehicle ahead of you.	When in Long , visual and audible alerts come on at a longer distance from a vehicle ahead than in Normal setting, and in Short , at a shorter distance than in Normal .	—
Stage two		The risk of a collision has increased, time to respond is reduced.	Visual and audible alerts.	Lightly applied
Stage three		The CMBS™ determines that a collision is unavoidable.		Forcefully applied

■ CMBS™ On and Off

You can turn the system on and off using the driver information interface.

📖 **Safety Support** P. 124

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

📖 CMBS™ On and Off

You cannot turn the CMBS™ off while driving.

The CMBS™ may automatically shut off, and the safety support indicator (amber) will come and stay on under certain conditions:

📖 **CMBS™ Conditions and Limitations** P. 484

When the CMBS™ is activated, it will continue to operate even if the accelerator pedal is partially depressed. However, it will be canceled if the accelerator pedal is fully depressed.

The Vehicle Stability Assist™ (VSA®) system, brake system (Amber), Adaptive Cruise Control (ACC) with Low Speed Follow, low tire pressure/TPMS* and safety support indicators may come on in amber along with a message in the gauge when you set the power mode to ON after reconnecting the battery. Drive a short distance at more than 12 mph (20 km/h). Each indicator should go off. If any do not, have your vehicle checked by a dealer.

* Not available on all models

■ CMBS™ Conditions and Limitations

In the following situations, the radar sensor or camera may be unable to correctly detect vehicles, pedestrians, moving bicycles, or road conditions, potentially causing the CMBS™ to operate improperly.

➤ **Front Sensor Camera** P. 552

➤ **Radar Sensor** P. 554

■ Environmental conditions

- Driving in bad weather (rain, fog, snow, etc.).
- Sudden changes between light and dark, such as an entrance or exit of a tunnel.
- There is little contrast between objects and the background.
- Driving into low sunlight (e.g., at dawn or dusk).
- Strong light is reflected onto the pedestrians, moving bicycles or roadway.
- Driving in the shadows of trees, buildings, etc.
- Roadway objects or structures are misinterpreted as vehicles and pedestrians.
- Reflections on the interior of the windshield.
- Driving at night or in a dark place such as a tunnel (due to low-light conditions, pedestrians, moving bicycles or other vehicles may not be detected).

■ Roadway conditions

- Driving on a snowy or wet roadway (obscured lane marking, vehicle tracks, reflected lights, road spray, high contrast).
- Driving on curvy, winding, or undulating roads.
- The road is hilly or the vehicle is approaching the crest of a hill.
- Driving through an area where there are objects that strongly reflect radio waves onto vehicles, pedestrians, or moving bicycles.
- Your vehicle is strongly shaken on uneven road surfaces.

⚠ Collision Mitigation Braking System™ (CMBS™)

Have your vehicle checked by a dealer if you find any unusual behavior of the system (e.g., the warning message appears too frequently).

■ Vehicle conditions

- Headlight lenses are dirty or the headlights are not properly adjusted.
- The outside of the windshield is blocked by dirt, mud, leaves, wet snow, etc.
- The inside of the windshield is fogged.
- An abnormal tire or wheel condition (incorrect sizes, varied sizes or construction, improperly inflated, compact spare tire, etc.).
- When tire chains are installed.
- The vehicle is tilted due to a heavy load or suspension modifications.
- The camera temperature gets too high.
- Driving with the parking brake applied.
- When the radar sensor behind the Honda emblem on the front grille gets dirty.
- The vehicle is towing a trailer.
- Driving at night or in a dark place (e.g., a tunnel) with the headlights off.
- There is residue on the windshield from the windshield wipers.

■ **Examples of limitations on the correct detection of the camera due to the condition of the vehicle ahead of you, oncoming vehicles, pedestrians, or moving bicycles**

- The distance between your vehicle and the vehicle ahead of you, oncoming vehicle, pedestrian, or moving bicycle ahead of you is too short.
- The vehicle ahead of you, oncoming vehicle, pedestrian, or moving bicycle suddenly cuts in front of or jumps out in front of you.
- The bicycle is stopped.
- The oncoming vehicle or vehicle ahead of you is sideways or facing diagonally.
- When the vehicle ahead of you, oncoming vehicle, pedestrian, or moving bicycle blends in with the background, preventing the system from recognizing them.
- When several pedestrians are moving ahead of you in a group.
- When several bicycles are moving ahead of you in a group.
- When a pedestrian or moving bicycle crosses the road too quickly.
- A pedestrian or moving bicycle approaches from the opposite direction.
- The headlights of the vehicle ahead of you or oncoming vehicle are lit on one side or not lit on either side in a dark place.
- When part of a pedestrian (heads, limbs, etc.) is hidden by load.
- When a pedestrian is bent over or squatting, when their hands are raised, or they are running.
- When the pedestrian is shorter than about 3.3 feet (1 meter) or taller than about 6.6 feet (2 meters) in height.
- When the pedestrian is pushing a stroller or bicycle.

▣ Collision Mitigation Braking System™ (CMBS™)

Make sure that all the tires are of the same specified size, type and brand, and that they are evenly worn. If you use tires of different sizes, types, brands, or degree of wear, the system may not work properly.

Do not modify the suspension. Altering the height of the vehicle may prevent the system from working properly.

■ Examples of other limitations on detection or system operation

- When the vehicle ahead of you is a small motorcycle, motorcycle with a sidecar, wheelchair, or other specially shaped vehicle.
- When a vehicle is lower in the rear than the front such as trucks that are not carrying a load, or a narrow vehicle.
- When the vehicle ahead of you, oncoming vehicle, pedestrian or moving bicycle is not in front of the vehicle.
- The speed difference between your vehicle and the vehicle ahead of you, oncoming vehicle, pedestrian or moving bicycle is significantly large.
- When the vehicle or moving bicycle in front of you slows suddenly.
- When the driver operates the brake pedal and steering wheel to avoid a collision.
- When you approach the vehicle ahead of you, oncoming vehicle, pedestrians or moving bicycles while accelerating rapidly or operating the steering wheel (except when turning left at an intersection, etc.)*¹
- When the moving bicycle is a child-sized bicycle, folding bicycle, three-wheeler or other bicycle with small tires, or a long bicycle like a tandem bicycle.
- When the radar and camera cannot correctly identify the shape of the vehicle ahead of you, oncoming vehicle, pedestrian, or moving bicycle.
- When the minimum ground clearance of a vehicle ahead of you is extremely high.
- When turning left or right and your turn signal is not activated in the same direction you are turning.

*1: When there is a possibility of a frontal collision with the oncoming vehicle while turning left, the CMBS™ is activated. However, it may not be activated if you suddenly turn the steering wheel.

■ Automatic shutoff

The CMBS™ may automatically shut itself off and the safety support indicator (amber) comes and stays on when:

- You drive off-road or on a mountain road, or curved and winding road for an extended period.
- Driving in bad weather (rain, fog, snow, etc.).
- Driving with the parking brake applied.
- The camera temperature gets too high.
- The front of the camera or radar sensor behind the Honda emblem is covered by dirt, fog, rain, mud, wet snow, seals, accessories, stickers, or film on the windshield.
- An abnormal tire condition is detected (incorrect tire size, flat tire, etc.).

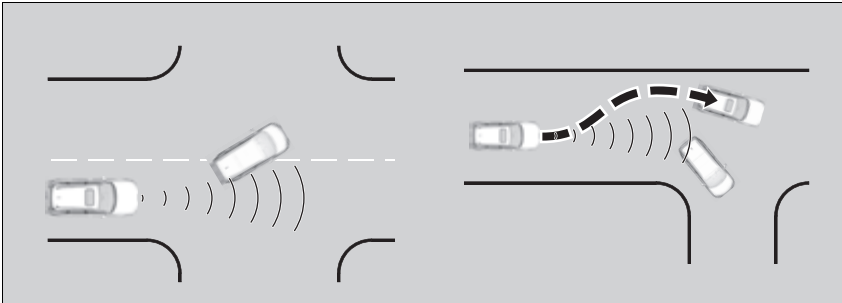
Once the conditions that caused the CMBS™ to shut off improve or are addressed (e.g., cleaning), the system comes back on.

■ With Little Chance of a Collision

Even if there is little chance of a collision, the CMBS™ may activate under the following conditions.

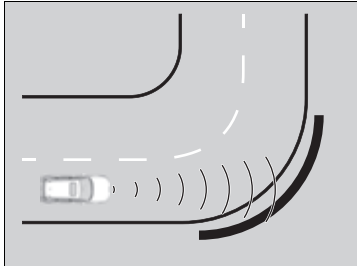
Also, the system may activate if it detects a possibility of collision with pedestrians, moving bicycles, or vehicles.

- Your vehicle approaches or passes another vehicle that is making a left or right turn.
- Your vehicle approaches another vehicle ahead of you and you change lanes to pass.

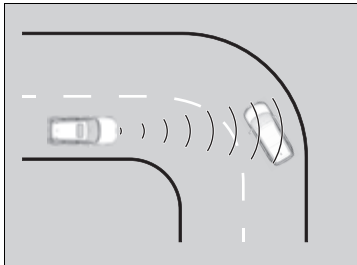


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- When your vehicle approaches vehicles, pedestrians, or moving bicycles.
- When vehicles, pedestrians, or moving bicycles are passing in front of you.
- When you drive under a low structure or through a narrow gate at high speed.
- When there are traffic signs or structures such as guard rails beside the road along a curve.



- When driving through curves, your vehicle comes to a point where the oncoming vehicle is right in front of you.



- When approaching stationary vehicles or walls, such as when parking.