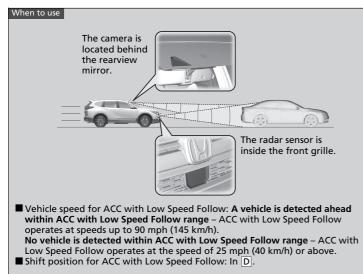
# Adaptive Cruise Control (ACC) with Low Speed Follow

Helps maintain a constant vehicle speed and a set following-interval behind a vehicle detected ahead of yours and, if the detected vehicle comes to a stop, can decelerate and stop your vehicle, without you having to keep your foot on the brake or the accelerator.

When ACC with Low Speed Follow slows your vehicle by applying the brakes, your vehicle's brake lights will illuminate.



Maptive Cruise Control (ACC) with Low Speed Follow

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Improper use of ACC with Low Speed Follow can lead to a crash.

Use ACC with Low Speed Follow only when driving on expressways or freeways and in good weather conditions.

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ACC with Low Speed Follow has limited braking capability and may not stop your vehicle in time to avoid a collision with a vehicle that quickly stops in front of you.

Always be prepared to apply the brake pedal if the conditions require.

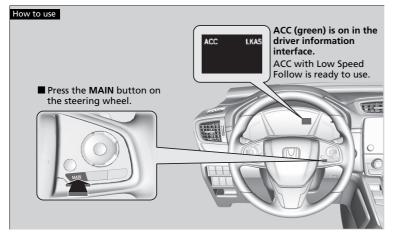
#### Important Reminder

As with any system, there are limits to ACC with Low Speed Follow. Use the brake pedal whenever necessary, and always keep a safe interval between your vehicle and other vehicles.

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

Radar Sensor

## How to activate the system



#### Maptive Cruise Control (ACC) with Low Speed Follow

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

#### Front Sensor Camera

When the **MAIN** button is pressed, both ACC with Low Speed Follow and the Lane Keeping Assist System (LKAS) are either turned on or off.

ACC with Low Speed Follow may not work properly under certain conditions.

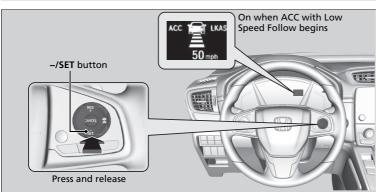
#### ACC with Low Speed Follow Conditions and Limitations

When not using ACC with Low Speed Follow: Turn off adaptive cruise by pressing the **MAIN** button. This also will turn off the Lane Keeping Assist System (LKAS).

Do not use ACC with Low Speed Follow under the following conditions:

- On roads with heavy traffic or while driving in continuous stop and go traffic.
- On roads with sharp turns.
- On roads with steep downhill sections, as the set vehicle speed can be exceeded by coasting. In such cases, ACC with Low Speed Follow will not apply the brakes to maintain the set speed.
- On roads with toll collection facilities or other objects between lanes of traffic, or in parking areas, or facilities with drive through access.

# To Set the Vehicle Speed



When driving at about 25 mph (40 km/h) or above: Take your foot off the pedal and press the -/SET button when you reach the desired speed. The moment you release the button, the set speed is fixed, and ACC with Low Speed Follow begins.

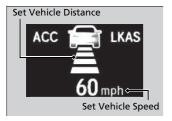
When driving slower than about 25 mph (40 km/h): If the vehicle is moving and the brake pedal is not depressed, pressing the button fixes the set speed to about 25 mph (40 km/h) regardless of current vehicle speed. If the vehicle is stationary, you can set the vehicle speed even with the brake pedal depressed.

#### Adaptive Cruise Control (ACC) with Low Speed Follow

The indicators for the Adaptive Cruise Control (ACC) with Low Speed Follow, Road Departure Mitigation (RDM), Vehicle Stability Assist<sup>™</sup> (VSA®) system, Vehicle Stability Assist<sup>™</sup> (VSA®) OFF, low tire pressure/TPMS, Collision Mitigation Braking System<sup>™</sup> (CMBS<sup>™</sup>), and Parking Brake and Brake System (Amber) may come on along with a message in the Driver Information Interface after reconnecting the 12V-battery. Drive a short distance at more than 12 mph (20 km/h). The indicator should go off. If it does not, have your vehicle checked by a dealer.

#### ■To Set the Vehicle Speed

You can switch the displayed set speed measurements on the driver information interface<sup>\*</sup> or audio/information screen<sup>\*</sup> between mph and km/h.



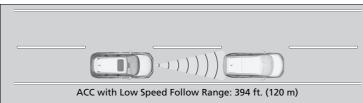
When ACC with Low Speed Follow starts operating, the vehicle icon, distance bars and set speed appear on the driver information interface.

When you use ACC with Low Speed Follow, Straight Driving Assist (a feature of the Electric Power Steering system) is activated. By enabling the steering system to automatically compensate for natural steering pull, Straight Driving Assist makes it easier for you to keep your vehicle in a straight line.

# When in Operation

#### There is a vehicle ahead

ACC with Low Speed Follow monitors if a vehicle ahead of you enters the ACC with Low Speed Follow range. If a vehicle is detected doing so, the ACC with Low Speed Follow system maintains or decelerates your vehicle's set speed in order to keep the vehicle's set following-interval from the vehicle ahead.



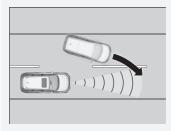
Driving



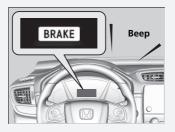
When a vehicle whose speed is slower than your set speed is detected in front of you, your vehicle starts to slow down.

#### ≫When in Operation

If the vehicle ahead of you slows down abruptly, or if another vehicle cuts in front of you, a beeper sounds, a message appears on the driver information interface.



Depress the brake pedal, and keep an appropriate interval from the vehicle ahead.



# There is no vehicle ahead



A vehicle icon with dotted-line contour appears on the driver information interface

Your vehicle maintains the set speed without having to keep your foot on the brake or accelerator pedal.

If there previously was a vehicle detected ahead that kept your vehicle from traveling at the set speed, ACC with Low Speed Follow accelerates your vehicle to the set speed, and then maintains it.

## When you depress the accelerator pedal

You can temporarily increase the vehicle speed. In this case, there is no audible or visual alert even if a vehicle is in the ACC with Low Speed Follow range. ACC with Low Speed Follow stays on unless you cancel it. Once you release the accelerator pedal, the system resumes an appropriate speed for keeping the following-interval while a vehicle ahead is within the ACC with Low Speed Follow range.

#### When in Operation

Even if the distance between your vehicle and the vehicle ahead is short, ACC with Low Speed Follow may start accelerating your vehicle under the following circumstances:

- The vehicle ahead of you is going at almost the same speed as, or faster than, your vehicle.
- A vehicle that cuts in front of you is going faster than your vehicle, gradually increasing the interval between the vehicles.

You can also set the system to beep when a vehicle in front of you comes in and goes out of the ACC with Low Speed Follow detecting range. Change the **ACC** Forward Vehicle Detect Beep setting.

#### Limitations

You may need to use the brake to maintain a safe interval when using ACC with Low Speed Follow. Additionally, ACC with Low Speed Follow may not work properly under certain conditions.

ACC with Low Speed Follow Conditions and Limitations

## A vehicle detected ahead is within ACC with Low Speed Follow range and slows to a stop



Stopped			

Your vehicle also stops, automatically. The **Stopped** message appears on the driver information interface.

When the vehicle ahead of you starts again, the vehicle icon on the driver information interface blinks. If you press the **RES/+** or **-/ SET** button, or depress the accelerator pedal, ACC with Low Speed Follow operates again within the prior set speed.

If no vehicle is ahead of you before you resume driving, depressing the accelerator pedal will resume operation of ACC with Low Speed Follow within the prior set speed. ■ A vehicle detected ahead is within ACC with Low Speed Follow range and slows to a stop

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Exiting a vehicle that has been stopped while the ACC with Low Speed Follow system is operating can result in the vehicle moving without operator control.

A vehicle that moves without operator control can cause a crash, resulting in serious injury or death.

Never exit a vehicle when the vehicle is stopped by ACC with Low Speed Follow.

# ACC with Low Speed Follow Conditions and Limitations

The system may automatically shut off and the **ACC** indicator will come on under certain conditions. Some examples of these conditions are listed below. Other conditions may reduce some of the ACC functions.

Front Sensor Camera

Radar Sensor

#### Environmental conditions

• Driving in bad weather (rain, fog, snow, etc.).

#### ■ Roadway conditions

• Driving on a snowy or wet roadway (obscured lane marking, vehicle tracks, reflected lights, road spray, high contrast).

# Vehicle conditions

- The outside of the windshield is blocked by dirt, mud, leaves, wet snow, etc.
- An abnormal tire or wheel condition (Wrong size, varied size or construction, improperly inflated, etc.).
- The camera temperature gets too high.
- The parking brake is applied.
- When the front grille is dirty.
- The vehicle is tilted due to a heavy load or suspension modifications.
- When tire chains are installed.

MACC with Low Speed Follow Conditions and Limitations

The radar sensor for ACC with Low Speed Follow is shared with the collision mitigation braking system<sup>TM</sup> (CMBS<sup>TM</sup>).

#### Collision Mitigation Braking System<sup>™</sup> (CMBS<sup>™</sup>)

If you need the radar sensor to be repaired, or removed, or the radar sensor cover is strongly impacted, turn off the system by pressing the **MAIN** button and take your vehicle to a dealer.

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

If the front of the vehicle is impacted in any of the following situations, the radar sensor may not work properly. Have your vehicle checked by a dealer:

- The vehicle mounted onto a bump, curb, chock, embankment, etc.
- You drive the vehicle where the water is deep.
- Your vehicle has a frontal collision.

# Detection limitations

- A vehicle or pedestrian suddenly crosses in front of you.
- The interval between your vehicle and the vehicle or pedestrian ahead of you is too short.
- A vehicle cuts in front of you at a slow speed, and it brakes suddenly.
- When you accelerate rapidly and approach the vehicle or pedestrian ahead of you at high speed.
- The vehicle ahead of you is a motorcycle, bicycle, mobility scooter, or other small vehicle.
- When there are animals in front of your vehicle.
- When you drive on a curved or winding or undulating road that makes it difficult for the sensor to properly detect a vehicle or a pedestrian in front of you.

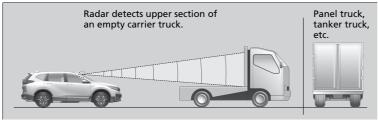


- The speed difference between your vehicle and a vehicle or pedestrian in front of you is significantly large.
- An oncoming vehicle suddenly comes in front of you.
- Your vehicle abruptly crosses over in front of an oncoming vehicle.

• When driving through a narrow iron bridge.



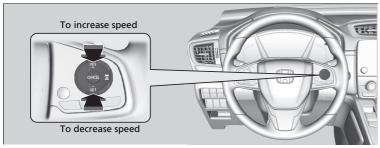
- When the vehicle ahead of you brakes suddenly.
- When the vehicle ahead of you has a unique shape.



• When your vehicle or the vehicle ahead of you is driving on one edge of the lane.

# To Adjust the Vehicle Speed

Increase or decrease the vehicle speed using the  $\ensuremath{\text{RES/+}}$  or  $-/\ensuremath{\text{SET}}$  button on the steering wheel.



- Each time you press the RES/+ or -/SET button, the vehicle speed is increased or decreased by about 1 mph or 1 km/h accordingly.
  - If you keep pressing the RES/+ or -/SET button, the vehicle speed increases or decreases by about 5 mph or 5 km/h accordingly.

#### To Adjust the Vehicle Speed

If a vehicle detected ahead is going at a speed slower than your increased set speed, ACC with Low Speed Follow may not accelerate your vehicle. This is to maintain the set interval between your vehicle and the vehicle ahead.

You can switch the displayed set speed measurements on the driver information interface\* or audio/information screen\* between mph and km/h.

When you depress the accelerator pedal and then push and release the **-/SET** button, the current speed of the vehicle is set.

\* Not available on all models

# To Set or Change Following-Interval



Press the 🖹 (Interval) button to change the ACC with Low Speed Follow followinginterval. Each time you press the button, the following-

interval (the interval behind a vehicle detected ahead of you) setting cycles through extra long, long, middle, and short followinginterval.

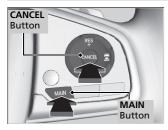
Determine the most appropriate followinginterval setting based on your specific driving conditions. Be sure to adhere to any following-interval requirements set by local regulation. The higher your vehicle's following-speed is, the longer the short, middle, long or extra long following-interval becomes. See the following examples for your reference.

Following-Interval		When the Set Speed is:	
		50 mph (80 km/h)	65 mph (104 km/h)
Short		81.0 feet 24.7 meters 1.1 sec	103.3 feet 31.5 meters 1.1 sec
Middle		112.2 feet 34.2 meters 1.5 sec	142.4 feet 43.4 meters 1.5 sec
Long		153.5 feet 46.8 meters 2.1 sec	199.4 feet 60.8 meters 2.1 sec
Extra Long		208.3 feet 63.5 meters 2.9 sec	273.6 feet 83.4 meters 2.9 sec

When your vehicle stops automatically because a vehicle detected ahead of you has stopped, the interval between the two vehicles will vary based on the ACC with Low Speed Follow interval setting.

Driving

# To Cancel



To cancel ACC with Low Speed Follow, do any of the following:

- Press the CANCEL button.
- Press the MAIN button.
- ACC with Low Speed Follow indicator goes off.
- Depress the brake pedal while the vehicle is moving forward.

#### ≫To Cancel

Resuming the prior set speed: After you have canceled ACC with Low Speed Follow, you can resume the prior set speed while it is still displayed. Press the **RES/+** button.

The set speed cannot be set or resumed when ACC with Low Speed Follow has been turned off using the **MAIN** button. Press the **MAIN** button to activate the system, then set the desired speed.

## Automatic cancellation

The beeper sounds and a message appears on the driver information interface when ACC with Low Speed Follow is automatically canceled. Any of these conditions may cause the ACC with Low Speed Follow to automatically cancel:

- Bad weather (rain, fog, snow, etc.)
- When the radar sensor in the front grille gets dirty.
- The vehicle ahead of you cannot be detected.
- An abnormal tire condition is detected, or the tires are skidding.
- Driving on a mountainous road, or driving off road for extended periods.
- · Abrupt steering wheel movement.
- When the ABS, VSA<sup>®</sup> or CMBS<sup>™</sup> is activated.
- When the ABS or VSA® system indicator comes on.
- When the vehicle is stopped on a very steep slope.
- When you manually apply the parking brake.
- When the detected vehicle within the ACC with Low Speed Follow range is too close to your vehicle.
- The camera behind the rearview mirror, or the area around the camera, including the windshield, gets dirty.
- When the Maximum Load Limit is exceeded.
- When passing through an enclosed space, such as tunnel.

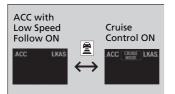
The ACC with Low Speed Follow automatic cancellation can be also triggered by the following causes. In these cases, the parking brake will be automatically applied.

- The driver's seat belt is unfastened when the vehicle is stationary.
- The vehicle stops for more than 10 minutes.
- The power system is turned off.

#### ➢Automatic cancellation

Even though ACC with Low Speed Follow has been automatically canceled, you can still resume the prior set speed. Wait until the condition that caused ACC with Low Speed Follow to cancel improves, then press the **-/SET** button.

# To Switch ACC with Low Speed Follow to Cruise Control



Press and hold the 🖹 (interval) button for one second. **Cruise Mode Selected** appears on the driver information interface for two seconds, and then the mode switches to Cruise.

To switch back to ACC with Low Speed Follow, press and hold the 🖺 button again for one second.

#### To Switch ACC with Low Speed Follow to Cruise Control

Always be aware which mode you are in. When you are driving in Cruise mode, the system will not assist you to maintain a following-interval from a vehicle ahead of you.

You can switch the displayed set speed measurements on the driver information interface\* or audio/information screen\* between mph and km/h.

#### When to use

Desired speed in a range above roughly 25 mph (40 km/h) ~.

# To Set the Vehicle Speed

Take your foot off the pedal and press the **-/SET** button when you reach the desired speed.

The moment you release the **-/SET** button, the set speed is fixed, and cruise control begins. The **CRUISE CONTROL** indicator comes on.

When you use cruise control, Straight Driving Assist (a feature of the Electric Power Steering system) is activated.

By enabling the steering system to automatically compensate for natural steering pull, Straight Driving Assist makes it easier for you to keep your vehicle in a straight line

# To Adjust the Vehicle Speed

- Each time you press the **RES/+** or **-/SET** button, the vehicle speed is increased or decreased by about 1 mph or 1 km/h accordingly.
- If you keep pressing the RES/+ or -/SET button, the vehicle speed increases or decreases by about 5 mph or 5 km/h accordingly.

# To Cancel

To cancel cruise control, do any of the following:

- Press the **CANCEL** button.
- Press the MAIN button.
- Depress the brake pedal.

The CRUISE CONTROL indicator goes off.

#### ≫To Cancel

Resuming the prior set speed: After cruise control has been canceled, you can still resume the prior set speed by pressing the **RES/+** button while driving at a speed of at least 25 mph (40 km/h) or more.

You cannot set or resume in the following situations:

- When vehicle speed is less than 25 mph (40 km/h)
- When the **MAIN** button is turned off.

At vehicle speeds of 22 mph (35 km/h) or less, cruise control canceled automatically.