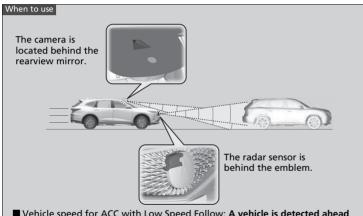
# Adaptive Cruise Control (ACC) with Low Speed Follow

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.



- Vehicle speed for ACC with Low Speed Follow: A vehicle is detected ahead within ACC with Low Speed Follow range ACC with Low Speed Follow operates at speeds up to 90 mph (145 km/h).
- No vehicle is detected within ACC with Low Speed Follow range ACC with Low Speed Follow operates at the speed of about 25 mph (40 km/h) or above.
- Shift position for ACC with Low Speed Follow: In D or S.

## **AWARNING**

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 road and weather conditions.

## **AWARNING**

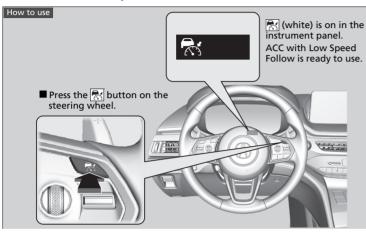
ACC with Low Speed Follow has limited braking capability and may not stop your vehicle in time to avoid a collision with a vehicle that quickly stops in front of you.

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.

## ■ How to activate the system



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

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

Radar Sensor P. 549

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

Front Sensor Camera P. 547

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

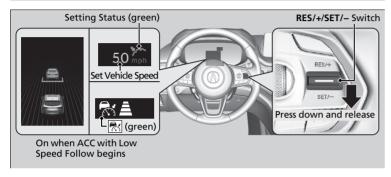
ACC with Low Speed Follow Conditions and Limitations P. 503

When not using ACC with Low Speed Follow: Turn off adaptive cruise by pressing the 🔣 button.

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

- 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 down the RES/+/SET/– switch when you reach the desired speed. The moment you release the switch, the set speed is fixed, and ACC with Low Speed Follow begins.

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

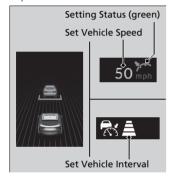
The vehicle stability assist™ (VSA®) system, adaptive cruise control (ACC) with low speed follow, safety support and low tire pressure/TPMS indicators may come on in amber along with a message in the driver information interface when you set the power mode to ON after reconnecting the battery. Drive 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.

## ∑To Set the Vehicle Speed

You can switch the displayed set speed measurements on the gauge between mph and km/h.

- **B** Gauge Settings P. 113
- **Customized Features** P. 345

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



When ACC with Low Speed Follow starts operating, the vehicle icon, interval bars and set speed appear on the gauge.

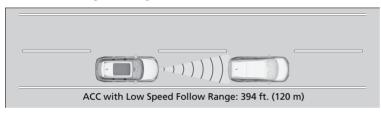
When you use ACC with Low Speed Follow, Straight Driving Assist (a feature of the Electric Power Steering system) is activated. By enabling the steering system to automatically compensate for natural steering pull, Straight Driving Assist makes it easier for you to keep your vehicle in a straight line.

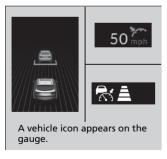
## ■ When in Operation

#### ■ 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.

## To Set or Change Following-interval P. 507

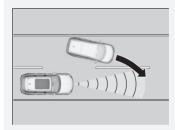




When a vehicle whose speed is slower than your set speed is detected in front of you, your vehicle starts to slow down.

## When in Operation

If the vehicle detected ahead of you slows down abruptly, or if another vehicle is detected cutting in front of you, a beeper sounds and a message appears on the driver information interface, and the head-up warning lights\* come on.



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



#### ■ There is no vehicle ahead



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 the set speed.

There are times when the vehicle speed will decrease when the accelerator pedal is lightly applied.

## >> When in Operation

Even if the interval between your vehicle and the vehicle detected 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.

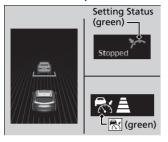
**Customized Features** P. 345

## Limitations

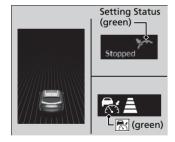
You may need to use the brake to maintain a safe interval when using ACC with Low Speed Follow. Additionally, ACC with Low Speed Follow may not work properly under certain conditions.

ACC with Low Speed Follow Conditions and Limitations P. 503

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



Your vehicle also stops, automatically. The **Stopped** message appears on the gauge. When the vehicle ahead of you starts again, the vehicle icon on the gauge blinks. If you press the **RES/+/SET/-** switch up or down, 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

## **AWARNING**

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 similar indicator will come on under certain conditions. Some examples of these conditions are listed below. Other conditions may reduce some of the ACC with Low Speed Follow functions.

Front Sensor Camera P. 547

Radar Sensor P. 549

## **■** Environmental conditions

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

## ■ Roadway conditions

Driving on a roadway with reduced traction or obscured lane markings, vehicle tracks, reflected lights, road spray, or 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, compact spare tire\*, etc.).
- The camera temperature gets too high.
- The parking brake is applied.
- The front grille is dirty.
- The vehicle is tilted due to a heavy load or suspension modifications.
- · Tire chains are installed.
- The vehicle is towing a trailer.

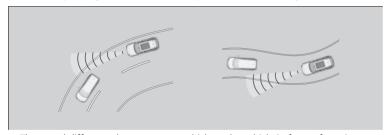
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The radar sensor for ACC with Low Speed Follow is shared with the Collision Mitigation Braking System $^{TM}$  (CMBS $^{TM}$ ).

Collision Mitigation Braking System™ (CMBS™) P. 479

#### ■ 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.
- 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.
- There are animals in front of your vehicle.
- 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 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.

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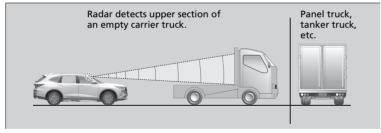
If you need the radar sensor to be repaired, or removed, or the radar sensor cover is strongly impacted, turn off the system by pressing the button and take your vehicle to a dealer.

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

• Driving through a narrow metal bridge.



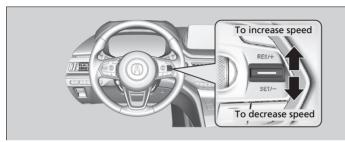
- The vehicle ahead of you brakes suddenly.
- The vehicle ahead of you has a unique shape.



• 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 **RES/+/SET/-** switch on the steering wheel.



- Each time you press the **RES/+/SET/** switch up or down, the vehicle speed is increased or decreased by about 1 mph or 1 km/h accordingly.
- If you keep the RES/+/SET/- switch pressed up or down, 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.

When you depress the accelerator pedal and then press down and release the **RES/+/SET/-** switch, the current speed of the vehicle is set.

## ■ To Set or Change Following-interval



Press the interval button to change the ACC with Low Speed Follow following-interval. Each time you press the button, the following-interval (the interval behind a vehicle detected ahead of you) setting cycles through short, middle, long, and extra long following-intervals.

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		83 feet 25 meters 1.1 sec	100 feet 31 meters 1.1 sec
Middle	Ē	110 feet 33 meters 1.5 sec	137 feet 42 meters 1.5 sec
Long	A	154 feet 47 meters 2.1 sec	200 feet 61 meters 2.1 sec
Extra Long		213 feet 65 meters 2.9 sec	282 feet 86 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.

## ■ To Cancel



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

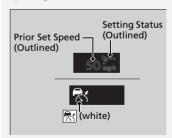
- Press the CANCEL button.
  - ► The 🔣 indicator (green) on the gauge changes to the 🔣 indicator (white).
- Press the 🔂 button.
- indicator (green) goes off.
- Depress the brake pedal while the vehicle is moving forward.
  - ► The 🔣 indicator (green) on the gauge changes to the 🛃 indicator (white).

#### ▼To Cancel

Resuming the prior set speed: After you have canceled ACC with Low Speed Follow, you can activate the ACC with Low Speed Follow with the prior set speed displayed on the gauge (Outlined) by pressing the RES/H/SET/– switch up or down even if the vehicle is stopped.

When you turn the ACC with Low Speed Follow off by pressing the **CANCEL** button or depressing the brake pedal, the prior set speed is displayed on the gauge (Outlined).

When pressing the RES/+/SET/- switch, the ACC with Low Speed Follow is activated with displayed speed. Then, when the indicator (white) is displayed and you press the RES/+/SET/- switch during the prior set speed (Outlined) is not displayed, the current vehicle speed is set as same as the condition of operating the RES/+/SET/- switch.



The set speed cannot be set or resumed when ACC with Low Speed Follow has been turned off using the button. Press the 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 behind the emblem 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®, CMBS<sup>TM</sup> or Low Speed Braking Control 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 vehicle has repeatedly applied the brakes to maintain the set speed (for example, you are descending a long slope).

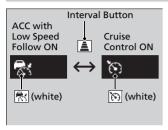
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Even though ACC with Low Speed Follow has been automatically canceled, you can still resume the prior set speed. Wait until the condition that caused ACC with Low Speed Follow to cancel improves, then press the **RES/+/SET/**– switch up or down.

The ACC with Low Speed Follow automatic cancellation can be also triggered by the following causes. In these cases, the electric 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 engine is turned off.

## ■ 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.

The 👸 comes on.

- White: The system is standby.
- Green: The system is on.

To switch back to ACC with Low Speed Follow, press and hold the interval button again for one second. **ACC mode selected** appears on the driver information interface for two seconds.

## ■ 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 **RES/+/SET/-** switch down when you reach the desired speed.

The moment you release the **RES/+/SET/-** switch, the set speed is fixed, and cruise control begins. The indicator (green) 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 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 gauge or audio/information screen between mph and km/h.

■ Gauge Settings P. 113

Customized Features P. 345

## ■ To Adjust the Vehicle Speed

Each time you press the **RES/+/SET/-** switch up or down, the vehicle speed is increased or decreased by about 1 mph (1 km/h).

If you keep the **RES/+/SET/–** switch pressed up or down, 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.
  - ▶ The 📆 indicator (green) on the gauge change to the 📆 indicator (white).
- Press the button.
  - indicator (green) goes off.
- Depress the brake pedal.
  - ▶ The nindicator (green) on the gauge change to the nindicator (white).

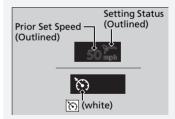
#### ∑To Cancel

Resuming the prior set speed:

After you have canceled cruise control, you can activate the cruise control with the prior set speed displayed on the gauge (Outlined) by pressing the RES/+/SET/-switch up or down while driving at a speed of at least 25 mph (40 km/h) or more.

When you turn the cruise control off by pressing the **CANCEL** button or depressing the brake pedal, the prior set speed is displayed on the gauge in contour line.

When pressing the RES/+/SET/– switch up or down, the cruise control is activated with displayed speed. Then, when the indicator is displayed and you press the RES/+/SET/– switch up during the prior set speed (Outlined) is not displayed, the current vehicle speed is set as same as the condition of operating the RES/+/SET/– switch down.



You cannot set or resume in the following situations:

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

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