Adaptive Cruise Control (ACC)*

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

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



➢Adaptive Cruise Control (ACC)*

Improper use of ACC can lead to a crash.

Use ACC only when driving on expressways or freeways and in good road and weather conditions.

ACC has limited braking capability. When your vehicle speed drops below 22 mph (35 km/h), ACC will automatically cancel and no longer will apply your vehicle's brakes. Always be prepared to apply the brake pedal when conditions require.

Important Reminder

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

How to activate the system



➢Adaptive Cruise Control (ACC)*

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

Front Wide View Camera P. 598

ACC may not work properly under certain conditions. ACC Conditions and Limitations P. 550

When the engine speed slows down, try to downshift. When the engine speed goes up, try to upshift. You can maintain the set speed if you change gear within five seconds.

When not using ACC: Turn off adaptive cruise by pressing the R button.

Do not use ACC under the following conditions:

- On roads with frequent lane change or continuous stop and go traffic, ACC cannot keep an appropriate distance between your vehicle and the vehicle ahead of you.
- On roads with sharp turns.
- On roads with toll collection facilities or other objects between lanes of traffic, or in parking areas, or facilities with drive through access.
- On roads with bad weather (rain, fog, snow, etc.), ACC may not detect the distance between your vehicle and the vehicle ahead of you properly.
- On roads with slippery or icy surfaces. The wheels may spin out and your vehicle may lose the control on the condition.
- On roads with steep uphill or steep downhill slopes.
- On roads with undulating slopes.

To Set the Vehicle Speed



Take your foot off the pedal and press the **RES/+/SET/-** switch up or down when you reach the desired speed. The moment you release the button, the set speed is fixed, and ACC begins.

When ACC starts operating, the vehicle icon, distance bars and set speed appear on the gauge.

To Set the Vehicle Speed

The Vehicle Stability AssistTM (VSA®) system, Vehicle Stability AssistTM (VSA®) **OFF**, Adaptive Cruise Control (ACC), 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.

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

- Settings P. 129
- Speed/Distance Units P. 128, 154
- **Customized Features** P. 374

*1: Models with A-type meter

*2: Models with B-type meter

* Not available on all models



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

Discrete Change Following-interval P. 555



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.





Control target vehicle: White and outlined in green Outside of control target vehicle: Gray 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

Even if the interval between your vehicle and the vehicle detected ahead is short, ACC 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 detecting range. A vehicle detect beep on and off can be selected.

Settings P. 129

Customized Features P. 374

Limitations

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

ACC Conditions and Limitations P. 550

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 accelerates your vehicle to the set speed, and then maintains it.

On steep downhill during ACC, it brakes to inhibit excessive acceleration for maintaining the set speed. However the vehicle speed may become faster than the set speed.

When in Operation

 ACC may temporarily control the interval between your vehicle and the vehicle in adjacent lane or surroundings of your vehicle depending on the road conditions (e.g. curves) or vehicle conditions (e.g. operating the steering wheel or the vehicle location in the lane).



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 range.

ACC 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 the vehicle ahead of you moves away, such as when entering an interchange or rest area, ACC may continue to maintain the set following-interval for a short time.

ACC Conditions and Limitations

The system may automatically shut off under certain conditions. Some examples of these conditions are listed below. Other conditions may reduce some of the ACC functions.

Front Wide View Camera P. 598

Environmental conditions

- Driving in bad weather (rain, fog, snow, etc.).
- Sudden changes between light and dark, such as the entrance or exit of a tunnel or the shadows of trees, buildings, etc.
- Strong light is reflected onto vehicles or road surfaces.
- Water is sprayed by or snow blown from a vehicle ahead.
- Driving at night or in a dark place such as a tunnel (due to low-light conditions, the whole vehicle may not be illuminated).
- Driving into low sunlight (e.g., at dawn or dusk).

Roadway conditions

• Driving on curvy, winding, undulating, or sloping roads.



- Driving on rutted roads (snowy or unpaved roads, etc.).
- Puddles or a film of water is on the road surface.
- Your vehicle is strongly shaken on uneven road surfaces.

Vehicle conditions

- The vehicle is tilted due to heavy load in the cargo area or rear seats.
- Tire chains are installed.
- The front of the camera is covered by dirt, fog, rain, mud, wet snow, seals, accessories, stickers, or film of the windshield.
- 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.
- When lighting is weak due to dirt covering the headlight lenses, or there is poor visibility in a dark place due to the headlights being improperly adjusted.
- An abnormal tire or wheel condition (incorrect sizes, varied sizes or construction, improperly inflated, compact spare tire, etc.).
- The suspension has been modified.

Examples of conditions under which the camera may not correctly detect the vehicle ahead of you

- A vehicle suddenly crosses in front of you.
- The interval between your vehicle and the vehicle ahead of you is too short.
- When the vehicle ahead of you blends in with the background, preventing the system from recognizing it.
- The headlights of the vehicle ahead of you are lit on one side or not lit on either side in a dark place.

Examples of conditions under which the system may not work properly

- A vehicle ahead of you stops and the speed difference between your vehicle and the vehicle ahead of you is significantly large.
- When the vehicle ahead of you slows suddenly.
- When the vehicle ahead of you is a 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 your vehicle or the vehicle ahead of you is driving on the edge of the lane.
- When the vehicle ahead of you is a narrow vehicle such as a motorcycle.
- When the minimum ground clearance of a vehicle ahead of you is extremely high.
- When the camera cannot correctly identify the shape of the vehicle ahead of you.

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 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 following-interval.

Each time you press the button, the followinginterval (the interval behind a vehicle detected ahead of you) setting cycles through furthest, far, mid, and nearest 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 nearest, mid, far or furthest 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)
Nearest		87.3 feet 26.6 meters 1.2 sec	110.6 feet 33.7 meters 1.2 sec
Mid	*1 *2	113.4 feet 34.6 meters 1.6 sec	147.2 feet 44.9 meters 1.6 sec
Far		144.2 feet 44.0 meters 2.0 sec	187.3 feet 57.1 meters 2.0 sec
Furthest		175.9 feet 53.6 meters 2.4 sec	229.6 feet 70.0 meters 2.4 sec

*1: Models with A-type meter

*2: Models with B-type meter

To Cancel



To cancel ACC, 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).
- Depress the clutch pedal for five seconds or more.
 - ► The 🛃 indicator (green) on the gauge changes to the 🛃 indicator (white).

To Cancel

Resuming the prior set speed: After you have canceled ACC, you can activate the ACC with the prior set speed displayed on the gauge (in gray) by pressing the **RES/+/SET/–** switch up.

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

When pressing the **RES/+/SET/–** switch up, the ACC is activated with displayed speed.

If the signal indicator (white) is displayed and you press the **RES/+/SET/–** switch up, but no prior set speed (in gray) is displayed, the speed will be set to your vehicle's current speed.

Automatic cancellation

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

- Bad weather (rain, fog, snow, etc.)
- 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[™], or Low Speed Braking Control^{*} is activated.
- When the VSA® system indicator comes on.
- When you manually apply the parking brake.
- When vehicle speed is less than 22 mph (35 km/h).
- Water is sprayed by or snow blown from a vehicle ahead.
- Driving into low sunlight (e.g., at dawn or dusk).
- When the detected vehicle within the ACC range is too close to your vehicle.
- When accelerating rapidly.
- The front of the camera is covered by dirt, fog, rain, mud, wet snow, seals, accessories, stickers, or film on the windshield.
- The engine is turned off.
- The vehicle is loaded heavy load in the cargo area or rear seats.
- When passing through a dark place, such as tunnel.
- When the parking brake and brake system indicator (amber) comes on.
- The vehicle has repeatedly applied the brakes to maintain the set speed (for example, you are descending a long slope).
- When the system doesn't detect any driving actions from the driver for a certain amount of time while the LKAS is also activated.
- Ignoring shift down indication shown in the gauge will cancel the ACC after about 10 seconds.



To Cancel

The set speed cannot be set or resumed when ACC has been turned off using the $\boxed{\textcircled{m}}$ button. Press the $\boxed{\textcircled{m}}$ button to activate the system, then set the desired speed.

If the vehicle speed is less than 25 mph (40 km/h) you cannot resume.

Driving

* Not available on all models

- The engine speed goes into the tachometer's red zone.
- The engine speed goes to below 1,000 rpm.
- You shift into neutral temporarily when shifting into a higher or lower gear.
- When the transmission is put into **N** without depressing the clutch pedal.

To Switch ACC 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 🕥 indicator comes on.

- Green: The system is on.
- White: The system is standby. To switch back to ACC, press and hold the Interval button again for one second.

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 up or 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 color of indicator changes from white to green.

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 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 cannot switch ACC to Cruise Control in the following situations:

- When the vehicle speed is set.
- When ACC is not activated.

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

- Settings P. 129
- Speed/Distance Units P. 128, 154
- Customized Features P. 374

* Not available on all models

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 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 Cancel

To cancel cruise control, do any of the following:

- Press the **CANCEL** button.
 - ► The 🕅 indicator (green) on the gauge changes to the 🕅 indicator (white).
- Press the 🛃 button.
 - The indicator (green) goes off.
- Depress the brake pedal.
 - ► The 🛐 indicator (green) on the gauge changes to the 🋐 indicator (white).
- Depress the clutch pedal for five seconds or more.

► The 🕅 indicator (green) on the gauge changes to the 🕅 indicator (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 (in gray) by pressing the **RES/+/SET/–** switch up 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 gray. When pressing the **RES/+/SET/–** switch up, the cruise control is activated with displayed speed. If the final indicator (white) is displayed and you press the **RES/+/SET/–** switch up, but no prior set speed (in gray) is displayed, the speed will be set to your vehicle's current speed.



The set speed cannot be set or resumed when ACC has been turned off using the $\boxed{\textcircled{}}$ button. Press the $\boxed{\textcircled{}}$ button to activate the system, then set the desired speed.

If the vehicle speed is less than 25 mph (40 km/h) you cannot resume.