



TOYOTA

Prius

2023

Owner's Manual Excerpt for Driving Support Systems

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This document contains excerpts from the vehicle's Owner's Manual for certain driving support systems.

Refer to the full Owner's Manual for detail on all vehicle systems.

All page numbers refer to the page of the Owner's Manual.

Toyota Safety Sense 3.0 software update

It is necessary to enter a connected services contract, provided by Toyota, to use these functions. For details, contact your Toyota dealer.

WARNING

■ For safe use

When the Toyota Safety Sense 3.0 software is updated, the operating methods of functions may change. Using this system without knowing the correct operating methods may lead to an accident resulting in death or serious injury.

- Make sure to read the Digital Owner's Manual which corresponds to the software version of the system, available at the Owner's Manual website, before using this system.

Content of the Toyota Safety Sense 3.0 Owner's Manual

This Owner's Manual contains information for Ver.2. For the latest information about the controls, use, warnings/precautions, etc. of each function of Toyota Safety Sense 3.0, refer to the Digital Owner's Manual at the Owner's Manual website.

If the software of this system has been updated after initial purchase of the vehicle, before

using this system, be sure to read the Owner's Manual which corresponds to the software version of the system.

■ Precautions for use

- Be aware that some functions may temporarily be disabled if a legal or safety related issue occurs.
- If a connected services contract has not been entered or has expired, software updates will not be able to be performed wirelessly.

Checking your vehicle's Toyota Safety Sense 3.0 version

If the software of this system has been updated after initial purchase of the vehicle, to access the appropriate Owner's Manual, it is necessary to check the software version of the system and then visit the Owner's Manual website.

■ Checking the version using OneApp

The software version of the system can be checked using OneApp.

■ Using your vehicle's Toyota Safety Sense 3.0 version

- 1 Access the following URL using a computer or smartphone:

► For U.S.A owners

<https://www.toyota.com/owners/resources/warranty-owners-manuals/manual?om=om47e41u.prius.2023.2212.hev.vh>



► For Canadian owners

<https://www.toyota.ca/toyota/owners/manual?om=om47e41u.prius.2023.2212.hev.vh>



environment and the content of an update, a software update may take several hours. Although an update will be suspended when the power switch is turned off, it will resume when the power switch is changed back to ON mode.

- Toyota Safety Sense 3.0 can still be used while a software update is being performed.

■ **What can be checked using the OneApp**

The following items can be checked or performed.

- Software version, update details, precautions, use methods, etc.
- Software update

- 2 Select the file which includes the previously checked system version.

Updating the software

If a software update is available, a notification will be displayed by OneApp. Follow the instructions displayed on the screen.

■ **Software update precautions**

- After a software update has been performed, it will not be possible to revert to a previous version.
- Depending on the communication

Toyota Safety Sense 3.0

The Toyota Safety Sense 3.0 consists of the driving assist systems and contributes to a safe and comfortable driving experience:

WARNING

■ Toyota Safety Sense 3.0

The Toyota Safety Sense 3.0 operates under the assumption that the driver will drive safely, and is designed to help reduce the impact to the occupants in a collision and assist the driver under normal driving conditions.

As there is a limit to the degree of recognition accuracy and control performance that this system can provide, do not overly rely on this system. The driver is solely responsible for paying attention to the vehicle's surroundings and driving safely.

■ For safe use

- Do not overly rely on this system. The driver is solely responsible for paying attention to the vehicle's surroundings and driving safely. This system may not operate in all situations and provided assistance is limited. Over-reliance on this system to drive the vehicle safely may lead to an accident resulting in death or serious injury.
- Do not attempt to test the operation of the system, as it may not operate properly, possibly leading to an accident.

- If attention is necessary while performing driving operations or a system malfunction occurs, a warning message or warning buzzer will be operated. If a warning message is displayed on the display, follow the instructions displayed.

- Depending on external noise, the volume of the audio system, etc. it may be difficult to hear the warning buzzer. Also, depending on the road conditions, it may be difficult to recognize the operation of the system.

■ When it is necessary to disable the system

In the following situations, make sure to disable the system.

Failure to do so may lead to the system not operating properly, possibly leading to an accident resulting in death or serious injury.

- When the vehicle is tilted due to being overloaded or having a flat tire
- When driving at extremely high speeds
- When towing another vehicle
- When the vehicle is being transported by a truck, ship, train, etc.
- When the vehicle is raised on a lift and the tires are allowed to rotate freely
- When inspecting the vehicle using a drum tester such as a chassis dynamometer or speedometer tester, or when using an on vehicle wheel balancer
- When the vehicle is driven in a sporty manner or off-road



WARNING

- When using an automatic car wash
- When a sensor is misaligned or deformed due to a strong impact being applied to the sensor or the area around the sensor
- When accessories which obstruct a sensor or light are temporarily installed to the vehicle
- When a compact spare tire or tire chains are installed to the vehicle or an emergency tire puncture repair kit has been used
- When the tires are excessively worn or the inflation pressure of the tires is low
- When tires other than the manufacturer specified size are installed
- When the vehicle cannot be driven stably, due to a collision, malfunction, etc.

Driving assist system

■ AHB (Automatic High Beam)

→P.202

■ PCS (Pre-Collision System)

→P.222

■ LTA (Lane Tracing Assist)

→P.234

■ LDA (Lane Departure Alert)

→P.242

■ LCA (Lane Change Assist)*

→P.239

■ FCTA (Front Cross Traffic Alert)*

→P.254

■ RSA (Road Sign Assist)*

→P.257

■ Dynamic radar cruise control

→P.259

■ Cruise control

→P.269

■ Emergency Driving Stop System*

→P.272

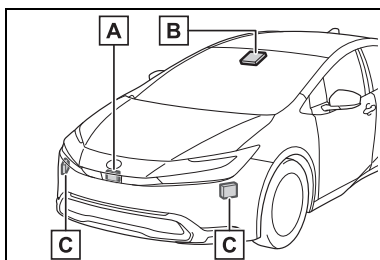
*: If equipped

Sensors used by Toyota Safety Sense 3.0

Various sensors are used to obtain the necessary information for system operation.

■ Sensors which detect the surrounding conditions

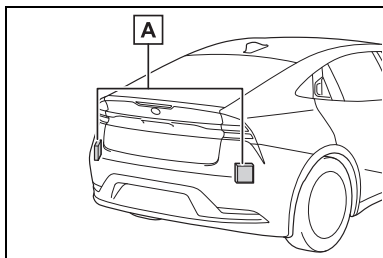
► Front



- A** Front radar sensor
- B** Front camera
- C** Front side radar sensors *

*: If equipped

► Rear



A Rear side radar sensors

WARNING

■ To prevent malfunction of the radar sensors

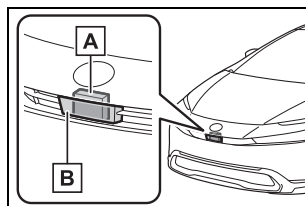
Observe the following precautions.

Failure to do so may lead to a radar sensor not operating properly, possibly leading to an accident resulting in death or serious injury.

- Keep the radar sensors and radar sensor covers clean at all times.

Clean the front of a radar sensor or the front or back of a radar sensor cover if it is dirty or covered with water droplets, snow, etc.

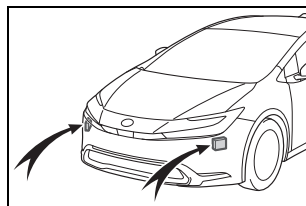
When cleaning the radar sensor and radar sensor cover, use a soft cloth to remove dirt so as to not damage them.



A Radar sensor

B Radar sensor cover

- Vehicles with front side radar sensors: Keep the surrounding area of the front side radar sensors on the front bumper clean at all times.



- Do not attach accessories, stickers (including transparent stickers), aluminum tape, etc. to a radar sensor or radar sensor cover and their surrounding area.

WARNING

- Do not subject a radar sensor or its surrounding area to impact.

If a radar sensor, the front grille, or front bumper has been subjected to a impact, have the vehicle inspected by your Toyota dealer.

- Do not disassemble the radar sensors.
- Do not modify or paint the radar sensors or radar sensor cover, or replace them with anything other than Toyota genuine parts.
- In the following situations, recalibration of the radar sensors will be necessary. For details, contact your Toyota dealer.
- When a radar sensor is removed and installed, or replaced
- When the front bumper or the front grille has been replaced

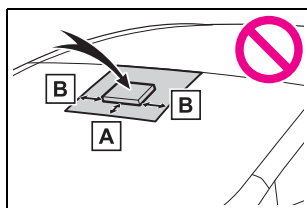
■ To prevent malfunction of the front camera

Observe the following precautions.

Failure to do so may lead to the front camera not operating properly, possibly leading to an accident resulting in death or serious injury.

- Always keep the windshield clean.
- If the windshield is dirty or covered with an oily film, water droplets, snow, etc., clean the windshield.

- Even if a glass coating agent is applied to the windshield, it will still be necessary to use the windshield wipers to remove water droplets, etc. from the area of the windshield in front of the front camera.
- If the inner side of the windshield where the front camera is installed is dirty, contact your Toyota dealer.
- Do not attach stickers (including transparent stickers) or other items to the area of the windshield in front of the front camera (shaded area in the illustration).



A Approximately 1.6 in. (4 cm)

B Approximately 1.6 in. (4 cm)

- If the part of the windshield in front of the front camera is fogged up or covered with condensation or ice, use the windshield defogger to remove the fog, condensation, or ice.
- If water droplets cannot be properly removed from the area of the windshield in front of the front camera by the windshield wipers, replace the wiper insert or wiper blade.
- Do not attach window tint to the windshield.

**WARNING**

- Replace the windshield if it is damaged or cracked.

If the windshield has been replaced, recalibration of the front camera will be necessary. For details, contact your Toyota dealer.

- Do not allow liquids to contact the front camera.
- Do not allow bright lights to shine into the front camera.
- Do not damage the lens of the front camera or allow it to become dirty.

When cleaning the inside of the windshield, do not allow glass cleaner to contact the lens of the front camera. Do not touch the lens of the front camera.

If the lens of the front camera is dirty or damaged, contact your Toyota dealer.

- Do not subject the front camera to a strong impact.
- Do not change the position or orientation of the front camera or remove it.
- Do not disassemble the front camera.
- Do not modify any parts around the front camera, such as the inside rear view mirror or ceiling.
- Do not attach accessories which may obstruct the front camera to the hood, front grille, or front bumper. For details, contact your Toyota dealer.

- If a surfboard or other long object is to be mounted on the roof, make sure that it will not obstruct the front camera.

- Do not modify or change the headlights and other lights.

■ Front camera installation area on the windshield

If the system determines that the windshield may be fogged up, it will automatically operate the heater to defog the part of the windshield around the front camera. When cleaning, etc., be careful not to touch the area around the front camera until the windshield has cooled sufficiently, as touching it may cause burns.

■ Precautions for use

Vehicles with a display audio: It is necessary to enter a connected services contract, provided by Toyota, to use these functions. For details, contact your Toyota dealer.

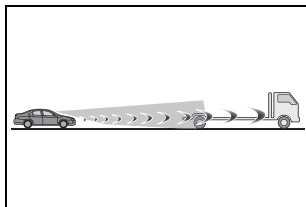
- LCA (Lane Change Assist)

→P.239

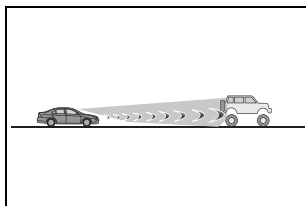
■ Situations in which the sensors may not operate properly

- When the height or inclination of the vehicle has been changed due to modifications
- When the windshield is dirty, fogged up, cracked or damaged
- When the ambient temperature is high or low
- When mud, water, snow, dead insects, foreign matter, etc., is attached to the front of the sensor
- When in inclement weather such as heavy rain, fog, snow, or a sandstorm
- When water, snow, dust, etc. is thrown up in front of the vehicle, or when driving through mist or smoke

- When the headlights are not illuminated while driving in the dark, such as at night or when in a tunnel
- When the lens of a headlight is dirty and illumination is weak
- When the headlights are misaligned
- When a headlight is malfunctioning
- When the headlights of another vehicle, sunlight, or reflected light shines directly into the front camera
- When the brightness of the surrounding area changes suddenly
- When driving near a TV tower, broadcasting station, electric power plant, radar equipped vehicles, etc., or other location where strong radio waves or electrical noise may be present
- When a wiper blade is blocking the front camera
- When in a location or near objects which strongly reflect radio waves, such as the following:
 - Tunnels
 - Truss bridges
 - Gravel roads
 - Rutted, snow-covered roads
 - Walls
 - Large trucks
 - Manhole covers
 - Guardrail
 - Metal plates
- When near a step or protrusion
- When a detectable vehicle is narrow, such as a small mobility vehicle
- When a detectable vehicle has a small front or rear end, such as an unloaded truck
- When a detectable vehicle has a low front or rear end, such as a low bed trailer



- When a detectable vehicle has extremely high ground clearance



- When a detectable vehicle is carrying a load which protrudes from its cargo area
- When a detectable vehicle has little exposed metal, such as a vehicle which is partially covered with cloth, etc.
- When a detectable vehicle is irregularly shaped, such as a tractor, sidecar, etc.
- When the distance between the vehicle and a detectable vehicle has become extremely short
- When a detectable vehicle is at an angle
- When snow, mud, etc. is attached to a detectable vehicle
- When driving on the following kinds of roads:
 - Roads with sharp curves or winding roads
 - Roads with changes in grade, such as sudden inclines or declines
 - Roads which is sloped to the left or right
 - Roads with deep ruts
 - Roads which are rough and unmaintained
 - Roads which frequently undulate or are bumpy

- When the steering wheel is being operated frequently or suddenly
- When the vehicle is not in a constant position within a lane
- When parts related to this system, the brakes, etc. are cold or extremely hot, wet, etc.
- When the wheels are misaligned
- When driving on slick road surfaces, such as when it is covered with ice, snow, gravel, etc.
- When the course of the vehicle differs from the shape of a curve
- When the vehicle speed is excessively high when entering a curve
- When entering/exiting a parking lot, garage, car elevator, etc.
- When driving in a parking lot
- When driving through an area where there are obstructions which may contact your vehicle, such as tall grass, tree branches, a curtain, etc.
- When driving in strong wind

■ **Situations in which the lane may not be detected**

- When the lane is extremely wide or narrow
- Immediately after changing lanes or passing through an intersection
- When driving in a temporary lane or lane regulated by construction
- When there are structures, patterns, shadows which are similar to lane lines in the surrounding
- When there are multiple white lines for a lane line
- When the lane lines are not clear or driving on a wet road surface
- When a lane line is on a curb
- When driving on a bright, reflective road surface, such as concrete

■ **Situations in which some or all of the functions of the system cannot operate**

- When a malfunction is detected in this system or a related system, such as the brakes, steering, etc.
- When the VSC, TRAC, or other safety related system is operating
- When the VSC, TRAC, or other safety related system is off

■ **Changes in brake operation sound and pedal response**

- When the brakes have been operated, brake operation sounds may be heard and the brake pedal response may change, but this does not indicate a malfunction.
- When the system is operating, the brake pedal may feel stiffer than expected or sink. In either situation the brake pedal can be depressed further. Further depress the brake pedal as necessary.

LTA (Lane Tracing Assist)

LTA functions

- When driving on a road with clear lane lines with the dynamic radar cruise control operating, lane lines and preceding and surrounding vehicles are detected using the front camera and radar sensor, and the steering wheel is operated to maintain the vehicle's lane position.

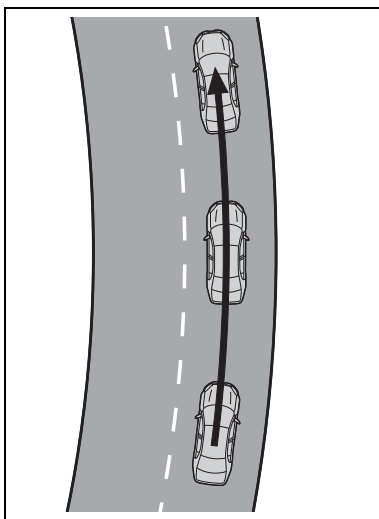
Use this function only on highways and expressways.

If the dynamic radar cruise control is not operating, the function will not operate.

In situations where the lane lines are difficult to see or are not visible, such as when in a traffic jam, support will be provided using the path of preceding and surrounding vehicles.

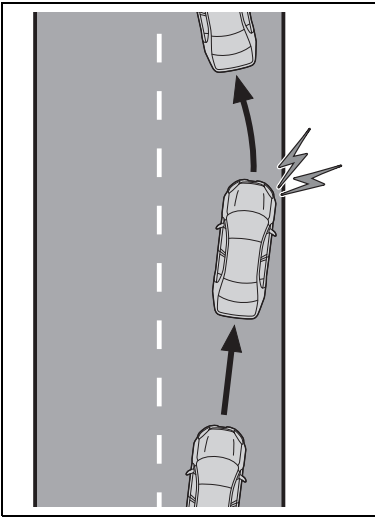
If the system determines that the steering wheel has not been operated for a certain amount of time or the steering wheel is not being firmly gripped, the driver will be alerted and this function will be temporarily canceled.

If the steering wheel is firmly gripped, the function will begin operating again.



- When the function is operating, if the vehicle is likely to depart from its lane, the driver will be alerted via a display and buzzer.

When the buzzer sounds, check the area around the vehicle and carefully operate the steering wheel to move the vehicle back to the center of the lane.



⚠ WARNING

■ Before using the LTA system

- Do not overly rely on the LTA system. The LTA system is not a system which provides automated assistance in driving and it is not a system which reduces the amount of attention necessary for safe driving. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety. Also, the driver is responsible for taking adequate breaks when fatigued, such as when driving for a long time.
- Failure to perform appropriate driving operations and pay careful attention may lead to an accident.
- When not using the LTA system, turn it off using the LTA switch.

■ Operating conditions of function

This function is operable when all of the following conditions are met:

- The LTA system detects lane lines or the path of preceding or surrounding vehicles.
- The dynamic radar cruise control is operating.
- The lane width is approximately 10 to 13 ft. (3 to 4 m).
- The turn signal lever is not being operated.
- The vehicle is not being driven around a sharp curve.
- The vehicle is not accelerating or decelerating more than a certain amount.
- The steering wheel is not being turned with a large force.
- The hands off steering wheel warning (→P.236) is not operating.
- The vehicle is being driven in the center of a lane.

■ Temporary cancelation of functions

- When the operating conditions are no longer met, a function may be temporarily canceled. However, when the operation conditions are met again, operation of the function will automatically be restored. (→P.235)
- If the operating conditions of a function are no longer met while the function is operating, a buzzer may sound to indicate that the function has been temporarily canceled.
- The steering assist operation of the function can be overridden by the steering wheel operation of the driver.

■ Lane departure warning function when the LTA is operating

- Even if the LDA warning method is changed to vibration of the steering wheel, if the vehicle deviates from the lane while the LTA is operating, the warning buzzer will sound to alert the driver.
- If steering wheel operation equivalent to that necessary for a lane change is detected, the system will determine the vehicle is not deviating from the lane and the warning will not operate.

■ Hands off steering wheel warning operation

- When the system determines the driver is not holding the steering wheel, a message urging the driver to grip the steering wheel and the icon shown in the illustration will be displayed on the multi-information display to warn the driver. If the system detects that the steering wheel is held, the warning will be canceled. When using the system, make sure to grip the steering wheel firmly, regardless of whether the warning is operating or not.



- If no operations are detected for a certain amount of time, the warning will operate and the function will be temporarily canceled. This warning may also operate if the driver only operates steering wheel a small amount continuously.
- Situations in which the hands off steering wheel warning may not operate properly
 - Depending on the condition of the

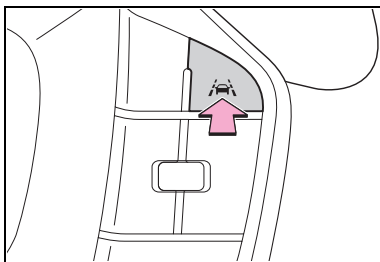
vehicle, handle control condition and road surface, the warning function may not operate.

- Vehicles with LCA: In the following situations, the system may not be able to detect when the driver's hands are off the steering wheel.
 - When a steering wheel cover is installed
 - When the driver is wearing gloves
 - When foreign matter is attached to the steering wheel
 - When the driver is gripping the wood trim, seam of the leather, spokes, or other part of the steering wheel that does not have sensors
- Vehicles with LCA: In the following situations, the hands off steering wheel warning may not operate and the LTA function may continue operating even though the driver's hands are off the steering wheel:
 - When something other than a hand is contacting the steering wheel
 - When a wide object or arms are held across the steering wheel

Enabling/disabling the system

The LTA will change between ON/OFF each time the LTA switch is pressed.

When the LTA is ON, the LTA indicator will illuminate.

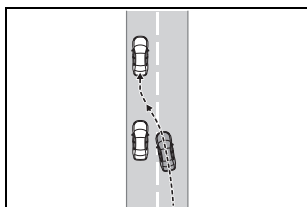


**WARNING**

■ **Situations in which the functions may not operate properly**

In the following situations, the functions may not operate properly and the vehicle may depart from its lane. Do not overly rely on these functions. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety.

- When a preceding or surrounding vehicle changes lanes (Your vehicle may follow the preceding or surrounding vehicle and also change lanes)












- When a preceding or surrounding vehicle is swaying (Your vehicle may sway accordingly and depart from the lane)

- When a preceding or surrounding vehicle departs from a lane (Your vehicle may follow the preceding or surrounding vehicle and also depart from the lane)
- When a preceding or surrounding vehicle is being driven extremely close to the left/right lane line (Your vehicle may follow the preceding or surrounding vehicle accordingly and depart from the lane)
- When there are moving objects or structures in the surrounding area (Depending on the position of the moving object or structure relative to your vehicle, your vehicle may sway)
- When the vehicle is struck by a crosswind or the turbulence of other nearby vehicles
- Situations in which the sensors may not operate properly: →P.219
- Situations in which the lane may not be detected: →P.221
- When it is necessary to disable the system: →P.215

Operation display of steering wheel operation support

The operating state of the LTA system is indicated.

Indicator	Lane display	Steering icon	Situation
 White	 Gray/White	 Gray	LTA is on standby
 Green	 Green	 Green	LTA is operating
 Orange Flashing	 Orange Flashing	 Green	The vehicle is departing the lane toward the side which the lane display is flashing

Emergency Driving Stop System *

*: If equipped

The emergency driving stop system is a system which automatically decelerates and stops the vehicle within its lane if the driver becomes unable to continue driving the vehicle, such as if they have suffered a medical emergency, etc.

During LTA (Lane Tracing Assist) control, if the system does not detect driving operations, such as if the driver is not holding the steering wheel, and determines the driver is not responsive, the vehicle will be decelerated and stopped within its current lane to help avoid a collision or reduce the impact of a collision.

WARNING

■ For safe use

- Driving safely is solely the responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving. The emergency driving stop system is designed to provide support in an emergency where it is difficult for the driver to continue driving, such as if they have had a medical emergency. It is not designed to support driving while drowsy or in poor physical health, or inattentive driving.
- Although the emergency driving stop system is designed to decelerate the vehicle within its lane to help avoid or help reduce the impact of a collision if the system determines that it is difficult for the driver to continue driving, its effectiveness may change according to various conditions. Therefore, it may not always be able to achieve the same level of performance. Also, if the operating conditions are not met, this function will not operate.
- After the emergency driving stop system operates, if driving becomes possible again, immediately begin driving again or, if necessary, park the vehicle on the shoulder of the road and set a warning reflector and flare to warn other drivers of your stopped vehicle.
- After this system operates, passengers should attend to the driver as necessary and take appropriate hazard prevention measures, such as moving to a place where safety can be ensured, such as the shoulder of the road or behind a guard-rail.

**WARNING**

- This system detects the condition of the driver through the operation of the steering wheel. This system may operate if the driver is aware but intentionally and continuously does not operate the vehicle. Also, the system may not operate if it cannot determine that the driver is not responsive, such as if they are leaning on the steering wheel.

Summary of the system

Operation of this system is separated into 4 control states. Through control state “warning phase 1” and “warning phase 2”, the system determines if the driver is aware and responsive while outputting a warning and controlling the vehicle speed. If the system determines the driver is not responsive, it will operate in control state “deceleration stop phase” and “stop hold phase” and decelerate and stop the vehicle. It will then operate continuously in “stop hold phase”.

■ Operating conditions

This system operates when all of the following conditions are met:

- When the LTA is on
- When the vehicle speed is approximately 30 mph (50 km/h) or more

■ Operation cancelation conditions

In the following situations, system operation will be canceled:

- When LTA control has been canceled (the LTA switch has been pressed, etc.)
 - When the dynamic radar cruise control has been canceled
 - When driver operations are detected (the steering wheel is held, the brake pedal, accelerator pedal, parking brake, emergency flasher switch, or turn signal lever is operated)
 - When the driving assist switch is pressed while in the stop and hold phase
 - When the power switch has been turned from ON mode to off
 - Situations in which some or all of the functions of the system cannot operate: →P.221
- LTA control when operation is canceled**

When emergency driving stop system operation is canceled, LTA control may also be canceled.

Warning phase 1

If driving operations are not detected after the hands off steering wheel warning operates, a buzzer will sound intermittently and a message will be displayed to warn the driver, and the system will judge if the driver is responsive or not. If driving operations, such as holding the steering wheel, are not performed within a certain amount of time, the system will enter warning phase 2.

Warning phase 2

After entering warning phase 2,

a buzzer will sound in short intervals and a message will be displayed to warn the driver, and the vehicle will slowly decelerate. If driving operations, such as holding the steering wheel, are not performed within a certain amount of time, the system will determine that the driver is not responsive and enter the deceleration stop phase.

The audio system will be muted until the driver becomes responsive.

When the vehicle is decelerating, the brake lights may illuminate, depending on the road conditions, etc.

Deceleration stop phase

After entering the deceleration stop phase, a buzzer will sound continuously and a message will be displayed to warn the driver, and the vehicle will slowly decelerate and stop. After the vehicle stops, the system will enter the stop and hold phase.

Stop hold phase

After the vehicle is stopped, the parking brake will be applied automatically. After entering the stop and hold phase, the buzzer will continue sounding continuously and the emergency flashers (hazard lights) will flash to warn other drivers of the emer-

gency.

■ Restricted functions after the operation is canceled

After shifting to the deceleration stop phase, the following functions will not be available until the hybrid system is re-started even though the emergency driving stop system is canceled:

- LTA
- LCA (if equipped)

**Toyota Teammate
Advanced Park***

*: If equipped

Function description

The Advanced Park is a system which assists in a safe and smooth parking or exiting from a parking space by displaying the blind spots around the vehicle and the target parking spot through a bird's eye view, delivering operation guidance through displays and buzzer operation, and changing the shift position, operating the steering wheel, accelerator pedal, and brake pedal.

Additionally, the panoramic view monitor* can display the area in front, behind, and from above the vehicle, helping confirm the condition of the area around the vehicle.

The turn signal lights will blink automatically when the parking assistance starts until the vehicle reaches the target parking spot, to notify people around the vehicle that parking is being performed.

Depending on the condition of the road surface or the vehicle, the distance between the vehicle and a parking space, etc., it may not be possible to assist in parking in the target space.

*: For details on the panoramic view monitor refer to "MULTIMEDIA OWNER'S MANUAL".

Functions

■ Perpendicular parking (forward/reverse) function

Assistance is provided from the position the vehicle is stopped near the target parking space until the vehicle is in the parking space. (→P.324)

■ Perpendicular exiting (forward/reverse) function

Assistance is provided from the parked position until the vehicle is in a position where you can easily exit from the parking space. (→P.327)

■ Parallel parking function

Assistance is provided from the position the vehicle is stopped near the target parking space until the vehicle is in the parking space. (→P.329)

■ Parallel exiting function

Assistance is provided from the parked position until the vehicle is in a position where you can easily exit from the parking space. (→P.333)

■ Memory function

Assistance is provided until the vehicle is guided into a previously registered parking space. (→P.335)



WARNING

■ Cautions regarding the use of the system

The recognition and control capabilities for this system are limited. The driver should always drive safely by always being responsible without over relying on the system and have a understanding of the surrounding situations.

- As with a normal vehicle, take care to observe your surroundings while the vehicle is moving.
- Always pay attention to the vehicle's surroundings while the system is operating and depress the brake pedal as necessary to slow or stop the vehicle.
- When parking, make sure that the vehicle can be parked in the target parking space before beginning operation.
- Depending on the condition of the road surface or the vehicle, the distance between the vehicle and a parking space, etc., it may not be possible to detect a parking space or the system may not be able to provide assistance to the point the vehicle is fully parked.
- This system will guide the vehicle to appropriate positions for changing the direction of travel, however, if you feel that the vehicle is approaching too close to an adjacent parked vehicle at any time, depress the brake pedal and change the shift position. However, if this is performed, the number of times the vehicle changes direction may increase, and the vehicle may be parked at an angle.

**WARNING**

- As following objects may not be detected, make sure to check the safety of the area around your vehicle and depress the brake pedal to stop the vehicle if it may collide with an object.
 - Wires, fences, ropes, etc.
 - Cotton, snow and other materials that absorb sound waves
 - Sharply-angled objects
 - Low objects (curb stones, parking blocks, etc.)
 - Tall objects with upper sections projecting outwards in the direction of your vehicle
 - Even if there is an object in the target parking space, it may not be detected and assistance may be performed.
 - While the system is operating, if it is likely that your vehicle will collide with a nearby vehicle, parking block, object, or person, depress the brake pedal to stop the vehicle and press the Advanced Park main switch to disable the system.
 - Never use only the Multimedia Display to view the area behind the vehicle. The image displayed may differ than the actual situation. Using only the screen when backing up may lead to an accident, such as a collision with another vehicle. When backing up, make sure to look directly or use the mirrors to check the safety of the area around your vehicle, especially behind the vehicle.
- When the ambient temperature is extremely low, the screen may appear dark or the displayed image may become unclear. Also, as moving objects may appear distorted or may not be able to be seen on the screen, make sure to directly check the safety of the area around your vehicle.
 - In the following situations, while the vehicle is stopped and held by Advanced Park, it may be canceled and the vehicle may start moving. Immediately depress the brake pedal. Failure to do so may lead to an accident.
 - When the driver's door is opened
 - When operations instructed by the system are not performed within a certain amount of time
 - When the brake pedal is depressed and the vehicle is stopped for a certain amount of time
 - When the system malfunctions
 - As the steering wheel will turn while this system is operating, pay attention to the following.
 - Be careful so that a necktie, scarf, or arm does not get caught. Keep your upper body away from the steering wheel. Also, keep children away from the steering wheel.
 - Long fingernails may be caught and when the steering wheel is rotating, leading to injury.
 - In an emergency, depress the brake pedal to stop the vehicle, and then press the Advanced Park main switch to disable the system.

**WARNING**

- Do not allow anyone to put their hands outside of a window while this system is operating.

■ To ensure correct operation of the Advanced Park

Observe the following precautions. Failing to do so may result in the vehicle being unable to be driven safely and possibly cause an accident.

- Do not use this system in situations such as the following:

- When in areas other than common parking spaces
- When the surface of the parking space is sand or gravel and is not clearly defined with parking space lines
- When the parking space is not level, such as when on a slope or has differences in height
- Mechanical parking system
- Parking lot with a device which raises to contact the bottom of the vehicle
- When the road surface is frozen, slick, or covered with snow
- When it is extremely hot and the asphalt is melting
- When there are objects around the vehicle
- When there is an object between your vehicle and the target parking spot or within the target parking spot (within the displayed blue box)
- When there is a gutter between your vehicle and the target parking space or within the target parking spot (within the displayed blue box)

- When there is a hole or gutter in the exit direction
- When in high pedestrian or vehicle traffic areas
- When the parking space is in a location that is difficult to park in (too narrow for your vehicle, etc.)
- When images are unclear due to dirt or snow attached to the camera lens, light being shined into the camera or shadows
- When tire chains or a compact spare tire is installed to the vehicle
- When the doors or back door are not completely closed
- When an arm is held outside of a window
- In inclement weather such as heavy rain or snow
- Make sure to use only standard sized tires, such as those that were installed to the vehicle when it was shipped from the factory. Otherwise, Advanced Park may not operate properly. Also, when the tires have been replaced, the displayed position of the lines or box displayed on the screen may become incorrect. When replacing the tires, contact your Toyota dealer.
- In situations such as the following, it may not be possible for the system to provide assistance to a registered parking spot:
 - When the tires are extremely worn or the tire inflation pressure is low
 - When carrying a heavy load
 - When the vehicle is tilted due to the carried load

WARNING

- When a heater is installed in the surface of the parking space (road surface freeze prevention heater)
- When the wheels are misaligned, such after a wheel has been subjected to a strong impact
- When a pedestrian or passing vehicle is detected during assistance
- When something is incorrectly detected as a parking line (light, reflections from a building, difference in height on the parking surface, a gutter, painted road lines, redrawn lines, etc.)

If the vehicle deviates greatly from the set parking space in any situation other than the above, have the vehicle inspected by your Toyota dealer.

NOTICE

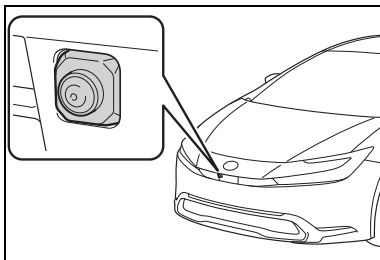
■ Precautions for use Advanced Park

If the 12-volt battery was discharged or has been removed and installed, fold and extend the outside rear view mirrors.

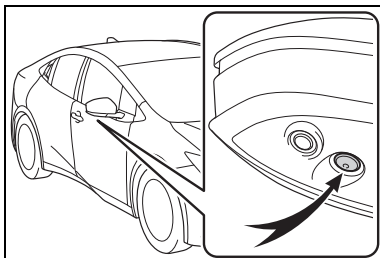
Types of cameras and sensors used for the Advanced Park

Cameras and sensors are used to detect parked vehicles, making it easier to identify parking spaces.

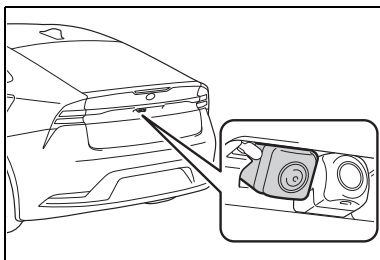
► Front camera



► Side cameras



► Rear camera



Depending on the vehicle grade and equipped options, the actual rear camera may be different from this illustration.

► Sensors

→P.284

■ Camera images

As special cameras are used, the colors in displayed images may differ from the actual color.

■ Precautions for use

For details on the following, refer to "Panoramic view monitor" of "Parking assist system" in the "MULTIMEDIA OWNER'S MANUAL".

- Displayable range of the screens
- Cameras
- Differences between displayed images and the actual road
- Differences between displayed images and the actual objects

■ Detection range of the cameras and sensors

- If a parked vehicle is behind the target parking space and the distance between it and the vehicle becomes far, it may no longer be able to be detected. Depending on shape or condition of a parked vehicle, the detection range may become short or the vehicle may not be detected.
- Objects other than parked vehicles, such as columns, walls, etc., may not be detected. Also, if they are detected, they may cause the target parking space to be misaligned.

■ Situations in which parking space lines may not be recognized properly

- In situations such as the following, parking space lines on the road surface may not be detected:
 - When the parking space does not use lines (parking space boundaries are marked with rope, blocks, etc.)
 - When the parking space lines are faded or dirty, making them unclear
 - When the road surface is bright, such as concrete, and the contrast between it and the white parking space lines is small
 - When the parking space lines are any color other than yellow or white
 - When the area surrounding the parking space is dark, such as at

night, in an underground parking lot, parking garage, etc.

- When it is raining or has rained and the road surface is wet and reflective or there are puddles
- When the sun is shining directly into a camera, such as in the early morning or evening
- When the parking space is covered with snow or de-icing agent
- When there marks from repairs or other marks on the road surface, or there is a traffic bollard, or other object on the road surface
- When the color or brightness of the road surface is uneven
- When a camera has been splashed by hot or cold water and the lens has fogged up
- When the appearance of the parking space is affected by the shadow of the vehicle or trees
- When a camera lens is dirty or covered with water droplets
- In situations such as the following, the target parking space may not be recognized correctly:
 - When there marks from repairs or other marks on the road surface, or there is a parking block, traffic bollard, or other object on the road surface
 - When it is raining or has rained and the road surface is wet and reflective or there are puddles
 - When the area around the vehicle is dark or backlit
 - When the color or brightness of the road surface is uneven
 - When the parking space is on a slope
 - When there are diagonal lines (access aisle) near the parking space
 - When the appearance of the parking space is affected by the shadow of a parked vehicle (such as shadows from the grille, side step, etc.)
 - When accessories which obstruct the view of the camera are installed
 - When the parking space lines are faded or dirty, making them

unclear

- When the appearance of the parking space is affected by the shadow of the vehicle or trees

■ Sensor detection information

→P.286

■ Objects which the sensor may not be properly detected

→P.287

■ Situations in which the sensor may not operate properly

→P.287

■ Situations in which parking assistance may not operate even if there is no possibility of a collision

→P.288

⚠ WARNING

■ Precautions for the cameras and sensors

- Due to the characteristics of the camera lens, the position of and distance to people and objects displayed on the screen may differ from the actual situation. For details, refer to "MULTIMEDIA OWNER'S MANUAL".

- Make sure to observe the precautions for using the intuitive parking assist, otherwise a sensor may not operate correctly, possibly leading to an accident. (→P.285)

- In situations such as the following, the sensors may not operate correctly, possibly leading to an accident. Proceed carefully.

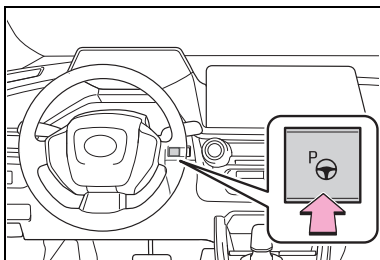
- When there is a parked vehicle next to the target parking space, if the displayed target parking space is far from the actual target parking space, a sensor may be misaligned. Have the vehicle inspected by your Toyota dealer.

- Do not install any accessories near the detection area of the sensors.

Turning the Advanced Park system on/off

Press the Advanced Park main switch.

If the switch is pressed while assistance is being performed, the assistance will be canceled.



■ Operating conditions of the Advanced Park

Assistance will begin when all of the following conditions are met:

- The brake pedal is depressed
- The vehicle is stopped
- The driver's seat belt is fastened
- The steering wheel is not being operated
- The accelerator pedal is not depressed
- All of the doors and the back door are closed
- The outside rear view mirrors are not folded
- The parking brake is not engaged
- The dynamic radar cruise control are not operating
- ABS, VSC, TRAC, PCS and PKSB are not operating
- The vehicle is not on a steep

slope

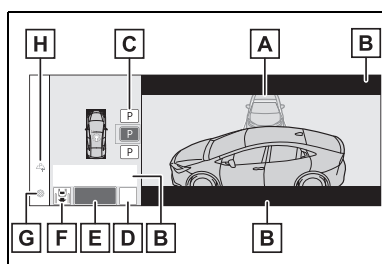
- The VSC and TRAC are not turned off

If assistance cannot be started, check the message displayed on the Multimedia Display (→P.342).

Advanced Park guidance screens

Guidance screens are displayed on the Multimedia Display.

- Guidance screen (When assistance starts)



A Target parking space box (blue)

B Advice display

C Parking type change button

If multiple buttons are displayed, depending on the condition of the button its function differs as follows.

P or **P**: Change the target to another parking space.

P or **P**: Select the current target parking space.

(P): Select to change to the parallel parking function

P: Change the perpendicular parking (forward/reverse) function

D "MODE" button

Select to change between the memory function and the perpendicular parking (forward/reverse) function and parallel parking function. (→P.337)

E "Start" button

Select to start parking assistance.

F Perpendicular parking direction change button

Select to change between the parking (forward) function and parking (reverse) function

: Change the perpendicular parking (forward) function

: Change the perpendicular parking (reverse) function

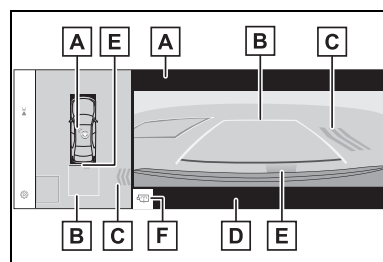
G Customize setting button

Select to display the Advanced Park setting screen. (→P.341)

H Registration button

Select to begin registering a parking space.

- Guidance screen (When reversing)



A Operation icon

Displayed when the Advanced Park is operating.

B Guide lines (yellow and red)

Display points from the center of

the edge of the front or rear bumper to the target stopping position (yellow)^{*1} and approximately 1 ft. (0.3 m) (red) from the vehicle.

C Moving object warning icon

D Emergency support brake control operation display

“BRAKE!” is displayed.

E Intuitive parking assist display

→P.284

F Rear camera washer switch^{*2} (if equipped)

Press shortly:

The rear camera washer operates for a certain period of time.

Press and hold:

The rear camera washer operates while the rear camera washer switch remains pressed.

^{*1}: The yellow lateral line is not displayed when the target stopping position is approximately 8.2 ft. (2.5 m) or more away from the vehicle.

^{*2}: Refer to “Panoramic view monitor” of “Parking assist system” in the “MULTIMEDIA OWNER’S MANUAL”.

■ Intuitive parking assist pop-up display

Regardless of whether the intuitive parking assist is off or on (→P.285), if an object is detected by the intuitive parking assist when the Advanced Park is operating, the intuitive parking assist pop up display will automatically be displayed over the guidance display.

■ Brake control operation when Advanced Park is operating

While the Advanced Park is operating, if the system determines that the possibility of collision with detected moving or stationary object is high, the hybrid system output restriction control and brake control will operate.

If brake control operates, Advanced Park operation will be suspended and a message will be displayed on the multi-information display.

■ Buzzer

Depending on surrounding sounds or sounds from other systems, it may be difficult to hear the buzzer of this system.

■ If a black screen is displayed on the Multimedia Display when the Advanced Park is operating

The system is being affected by radio waves or may be malfunctioning. If a radio antenna is installed near a camera, move it to a location as far from the cameras as possible. If a radio antenna is not installed near a camera, and the screen does not return to normal after turning the power switch off and then starting the hybrid system again, have the vehicle inspected by your Toyota dealer.

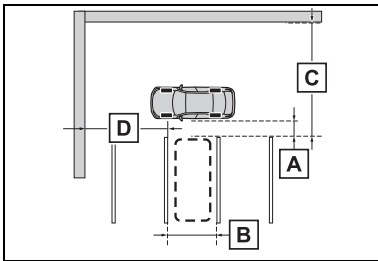
Perpendicular parking (forward/reverse) function

The perpendicular parking (forward/reverse) function can be used if the target parking space can be detected when the vehicle is stopped close and perpendicular to the center of the parking space. Also, depending on the condition of the parking space, etc., if it is necessary to change the direction of travel of

the vehicle, the shift position can be changed by assistance control.

Parking using the perpendicular parking (forward/reverse) function

- 1 Stop the vehicle at a position close and perpendicular to the center of the target parking space.
- ▶ If there are parking space lines

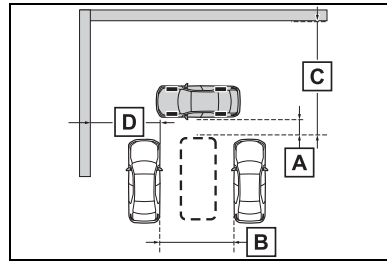


- A** Approximately 3.3 ft. (1 m)*
- B** Approximately 8.2 ft. (2.5 m)*
- C** Approximately 19.7 ft. (6 m) or more*
- D** Approximately 18.0 ft. (5.5 m) or more*

The system can operate even if there is a parking space line on only one side of the target parking space.

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

- ▶ If there is an adjacent parked vehicle



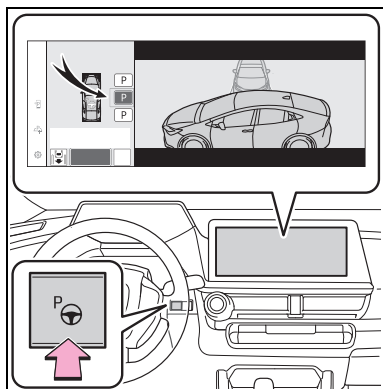
- A** Approximately 3.3 ft. (1 m)*
- B** Approximately 9.8 ft. (3 m) or more*
- C** Approximately 19.7 ft. (6 m) or more*
- D** Approximately 18.0 ft. (5.5 m) or more*

The system can operate even if there is a vehicle on only one side of the target parking space.

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

- 2 Press the Advanced Park main switch and check that a possible parking space is dis-

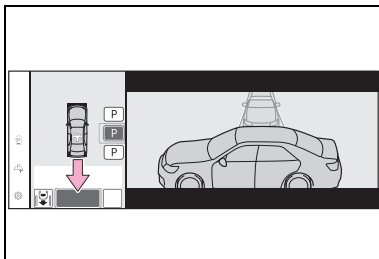
played on the Multimedia Display.



- If a space which your vehicle can be parked is detected, a target parking space box will be displayed.
- If it is possible to parallel park in the space, select the parking space, and then select **(P)** to change to the parallel parking function.
- If it is possible to change the direction which a parking space is entered, select the parking space, and then select or to change the direction.
- Depending on the surrounding environment, it may not be possible to use this function. According to the information displayed on the Multimedia Display, use the function on another parking space.

3 Select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating.



- When the brake pedal is released, "Moving Forward...", "Backing Up..." will be displayed and the vehicle will begin moving forward/reverse.

- To cancel assistance, press the Advanced Park main switch.

If assistance is canceled, "Advanced Park Canceled" will be displayed.

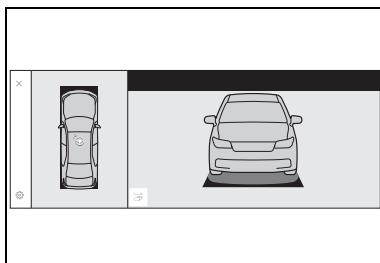
If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.327

- 4 Perform operations as indicated by the advice displays until the vehicle stops in the target parking space.

When the vehicle stops, "Advanced Park Finished" will be displayed and parking assistance will end.

If you select on the Multimedia Display, the vehicle displayed on the parking assist completion

screen will rotate.



■ **If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter**

Depress the brake pedal to stop the vehicle and then change the shift position to change the direction of travel of the vehicle. At this time, assist will be suspended. However, if the "Start" button is selected, assist will resume and the vehicle will move in the direction corresponding to the selected shift position.

■ **When the brakes have been operated**

When the brakes have been operated, brake operation sound may be heard. This does not indicate a malfunction.



NOTICE

■ **When using the perpendicular parking (forward/reverse) function**

- Make sure that there are no obstructions within the yellow guide lines and between the vehicle and target parking spot. If there are any obstructions between the vehicle and the target parking space, or between the yellow guide lines, cancel the function.

- As the target parking space will not be able to be set correctly if the surface of the parking space is on a slope or has differences in height, the vehicle may stray from the target parking space or be slanted. Therefore, do not use the function for this kind of parking spot.

- When parking in a narrow parking space, the vehicle may closely approach an adjacent parked vehicle. If a collision seems likely, depress the brake pedal to stop the vehicle.

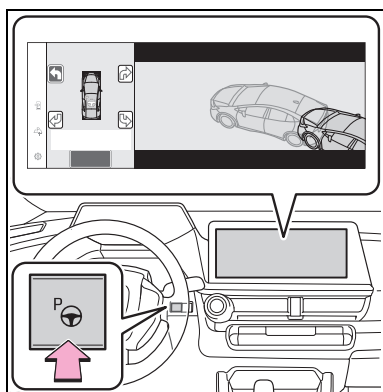
- If a detected parked vehicle is narrow or parked extremely close to the curb, the position at which assistance will park the vehicle will also be close to the curb. If it seems likely the vehicle will collide with something or drive off of the road, depress the brake pedal to stop the vehicle, and then press the Advance Park main switch to disable the system.

Advanced Park perpendicular exiting (forward/reverse) function

When exiting from a perpendicular parking space, if the system determines that exit is possible the perpendicular exiting (forward/reverse) function can be used. Also, depending on the surrounding environment, if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Leaving a parking space using the perpendicular exiting (forward/reverse) function

- 1 With the brake pedal depressed and P shift position selected, press the Advanced Park main switch and check that the exit direction selection screen is displayed on the Multimedia Display.



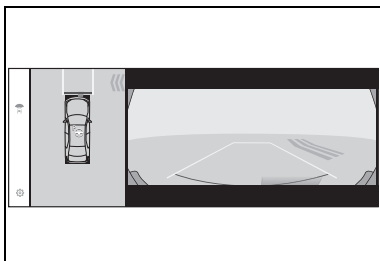
- 2 Select an arrow on the Multimedia Display to select the direction you wish to exit.

If the turn signal lever is operated, only exit to the left or right can be selected.

- 3 Depress the brake pedal and select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and

assistance will begin operating.



To cancel assistance, press the Advanced Park main switch.

If assistance is canceled, "Advanced Park Canceled" will be displayed.

If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.327

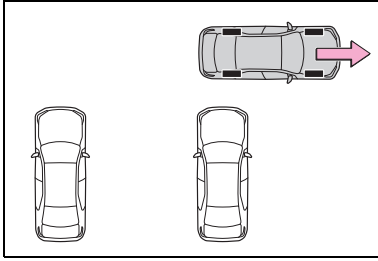
- 4 Perform operations as indicated by the advice displays until the vehicle is in a position where exit is possible.

When the vehicle reaches a position where exit is possible, "You can exit by moving the steering wheel" will be displayed. If the steering wheel is operated, "Advanced Park Finished" will be displayed and assistance will end.

As assistance will end while the vehicle is moving, grip the steering wheel and drive forward.

If the steering wheel is not operated, the vehicle will stop at the exit position. Assistance can be ended by depressing the accelerator pedal

or brake pedal.



■ If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter

→P.327

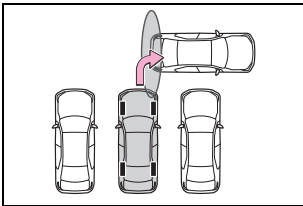
■ **Perpendicular exiting (forward/reverse) function**

Do not use exiting (forward/reverse) function in any situation other than when exiting a parallel parking spot. If assistance is started unintentionally, depress the brake pedal and stop the vehicle, then press the Advanced Park main switch to cancel assistance.

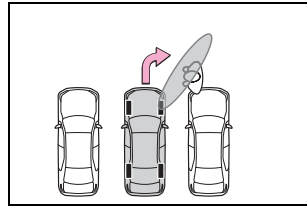
■ **Situations in which the perpendicular exiting (forward/reverse) function will not operate**

In situations such as the following, the perpendicular exiting (forward/reverse) function will not operate:

- When a vehicle which is waiting to park is in the exit direction



- When a wall, column, or person is detected as near a front or rear center or corner sensor



■ **When the brakes have been operated**

→P.327

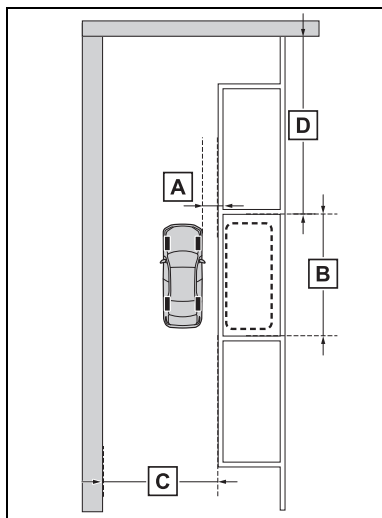
Advanced Park parallel parking function

The parallel parking function can be used if the target parking space can be detected when the vehicle is stopped close and aligned with the center of the parking space. Also, depending on the condition of the parking space, etc., if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Parking using the parallel parking function

- 1 Stop the vehicle with it aligned near the center of the target parking space.

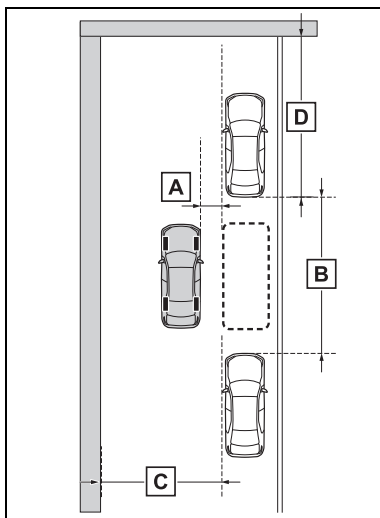
- If there are parking space lines



- A** Approximately 3.3 ft. (1 m) *
- B** Approximately 19.7 ft. (6 m) *
- C** Approximately 14.8 ft. (4.5 m) or more *
- D** Approximately 26.2 ft. (8 m) or more *

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

- If there is an adjacent parked vehicle

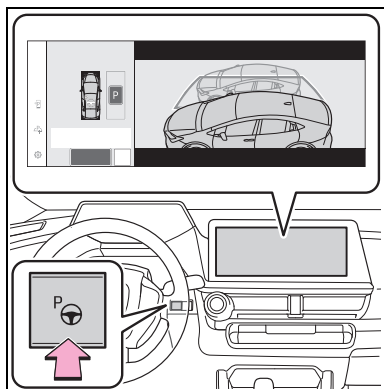



- A** Approximately 3.3 ft. (1 m) *
- B** Approximately 23.0 ft. (7 m) or more *
- C** Approximately 14.8 ft. (4.5 m) or more *
- D** Approximately 26.2 ft. (8 m) or more *

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

- 2** Press the Advanced Park main switch and check that a possible parking space is dis-

played on the Multimedia Display.

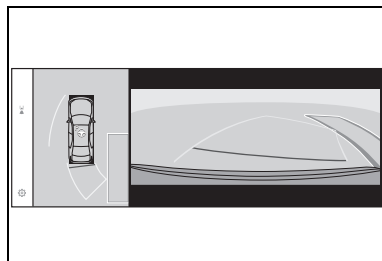


- If a space which your vehicle can be parked is detected, a target parking space box will be displayed.
- If it is possible to perpendicular parking (forward/reverse) in the space, select the parking space, and then select  to change to the perpendicular parking (forward/reverse) function.
- Depending on the surrounding environment, it may not be possible to use this function. According to the information displayed on the Multimedia Display, use the function on another parking space.

3 Select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and

assistance will begin operating.




- When the brake pedal is released, "Moving Forward..." will be displayed and the vehicle will begin moving forward.
- To cancel assistance, press the Advanced Park main switch.

If assistance is canceled, "Advanced Park Canceled" will be displayed.

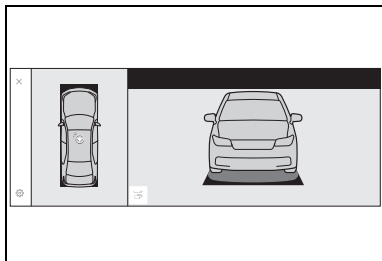
If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.327

- ### 4 Perform operations as indicated by the advice displays until the vehicle stops in the target parking space.

When the vehicle stops, "Advanced Park Finished" will be displayed and parking assistance will end.

If you select  on the Multimedia Display, the vehicle displayed on the parking assist completion

screen will rotate.

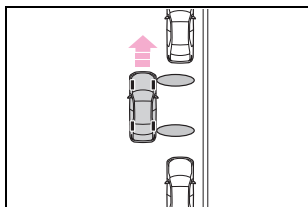


■ If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter

→P.327

■ “No available parking space” is displayed

Even if the vehicle is stopped parallel to a parking space, an adjacent parked vehicle may not be detected. In this case, if the vehicle is moved to a position that a parked vehicle can be detected, assistance can be started.



■ When the brakes have been operated

→P.327



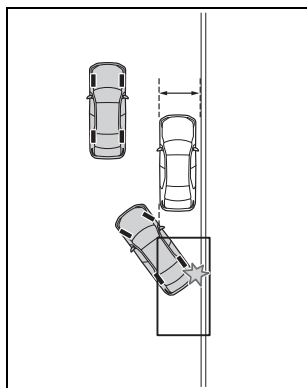
NOTICE

■ When using the parallel parking function

● Make sure that there are no obstructions within the yellow guide lines and between the vehicle and target parking spot. If any obstructions are detected within the yellow guide lines or between the vehicle and the target parking space, the parallel parking function will be cancelled or suspended.

● As the target parking space will not be able to be set correctly if the surface of the parking space is on a slope or has differences in height, the vehicle may stray from the target parking space or be slanted. Therefore, do not use the parallel parking function for this kind of parking spot.

● If an adjacent parked vehicle is narrow or parked extremely close to the curb, the position at which assistance will park the vehicle will also be close to the curb. If it seems likely the vehicle will collide with the curb or drive off of the road, depress the brake pedal to stop the vehicle, and then press the Advanced Park main switch to disable the system.



NOTICE

- If there is a wall or other barrier on the inner side of the parking space, the vehicle may stop at a position slightly outside of the set target parking space.

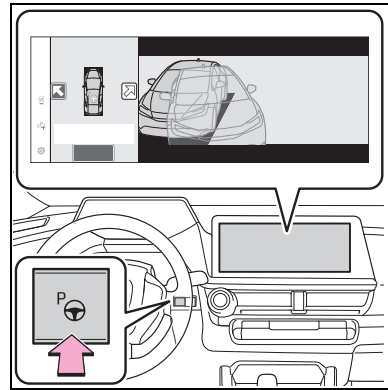
Advanced Park parallel exiting function

When exiting from a parallel parking space, if the system determines that exit is possible the parallel exiting function can be used. Also, depending on the surrounding environment, if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Leaving a parking space using the parallel exiting function

- 1 With the brake pedal depressed and P shift position selected, press the Advanced Park main switch and check that the exit direction selection screen is displayed on the Multimedia

Display.



- 2 Select an arrow on the Multimedia Display to select the direction you wish to exit.

If the turn signal lever is operated, only exit to the left or right can be selected.

- 3 Depress the brake pedal and select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating.

To cancel assistance, press the Advanced Park main switch.

If assistance is canceled, "Advanced Park Canceled" will be displayed.

If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.327

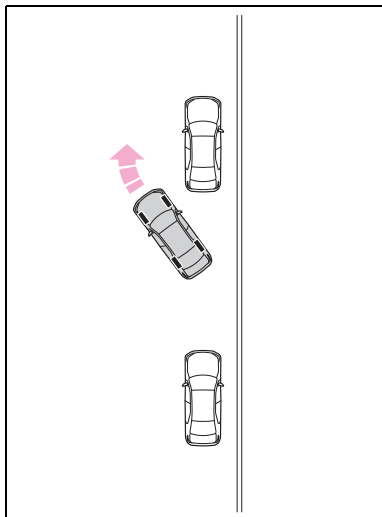
- 4 Perform operations as indicated by the advice displays until the vehicle is in a position where exit is possible.

When the vehicle reaches a position where exit is possible, "You can exit by moving the steering

wheel" will be displayed. If the steering wheel is operated, "Advanced Park Finished" will be displayed and assistance will end.

As assistance will end while the vehicle is moving, grip the steering wheel and drive forward.

If the steering wheel is not operated, the vehicle will stop at the exit position. Assistance can be ended by depressing the accelerator pedal or brake pedal.



■ If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter

→P.327

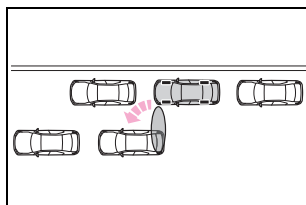
■ Parallel exiting function

Do not use parallel exiting function in any situation other than when exiting a parallel parking spot. If assistance is started unintentionally, depress the brake pedal and stop the vehicle, then press the Advanced Park main switch to cancel assistance.

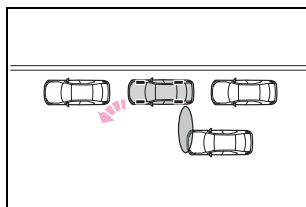
■ Situations in which the parallel exiting function will not operate

In situations such as the following, the parallel exiting function will not operate:

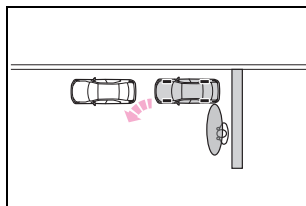
- When vehicles waiting at a traffic signal in the exit direction



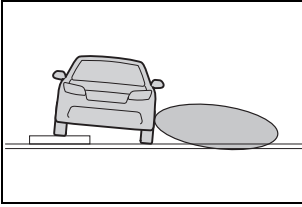
- When a vehicle is stopped in the area behind where the vehicle will exit



- When a wall, column, or person is detected as near a front or rear side sensor



- When the vehicle has been parked on a curb and a side sensor detects the road surface



- When a vehicle is not parked in front of the vehicle
- When there is excessive space between the front of the vehicle and a parked vehicle

■ When the brakes have been operated

→P.327

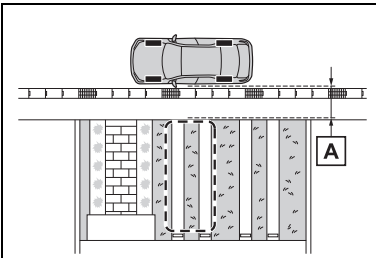
Advanced Park memory function

The memory function can be used to park in a previously registered parking space, even if there are no parking space lines or adjacent parked vehicles.


Up to 3 parking spaces can be registered.

Registering a parking space


- 1 Stop the vehicle with it aligned near the center of the target parking space.

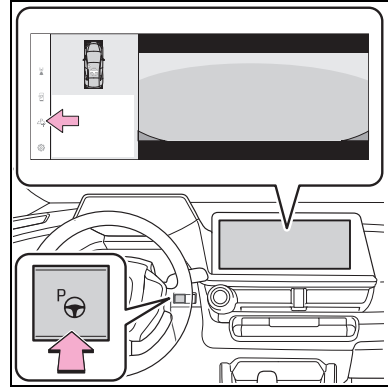


A Approximately 3.3 ft. (1 m)

- 2 Press the main switch and then select .

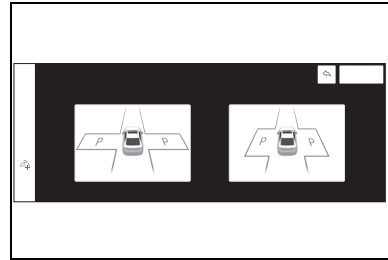
If the Advanced Park main switch is pressed at a parking space without parking lines or any adjacent parked vehicles, “No available parking space” may be displayed.

Continuously select and hold .



- 3 Select perpendicular parking (forward/reverse) function or parallel parking function.

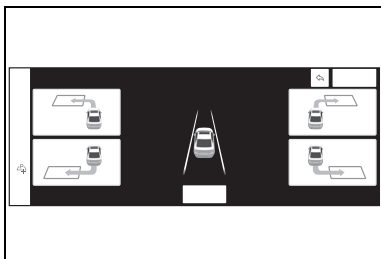
Only parking spaces for which assist can be performed are displayed.



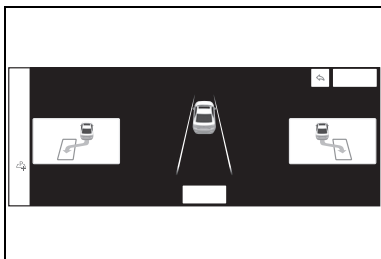
- 4 Select the parking direction.

When perpendicular parking (forward/reverse) was selected in step

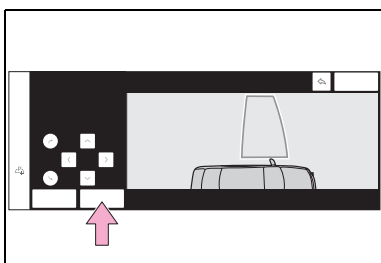
3:



When parallel parking was selected in step 3:



5 Using the arrow buttons, adjust the position of the parking space to be registered, and then select "OK" button.

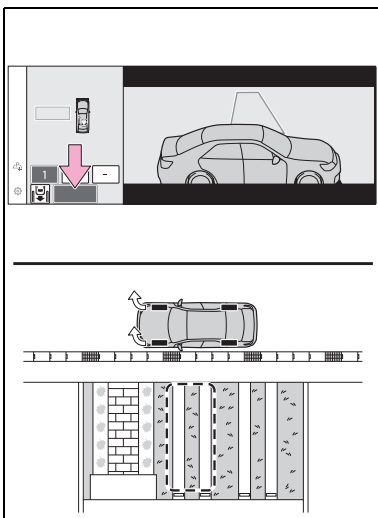


6 Select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating. When the brake pedal is released, "Moving Forward..." will be displayed and the vehicle will begin

moving forward.

If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.327

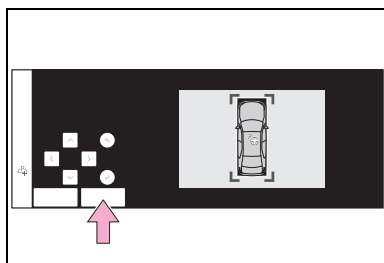


7 Perform operations as indicated by the advice displays until the vehicle stops in the target parking space.

8 Check the position that the vehicle has stopped. If necessary, adjust the position of the parking spot to be registered using the arrow buttons, and then select "Reg." button.

"Registration Completed" will be displayed on the Multimedia Dis-

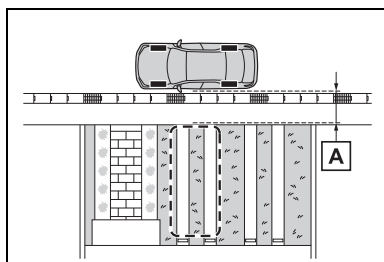
play.



- Register the parking space only if there are no obstructions within the area shown by the thick lines.
- The amount that the position of the parking spot to be registered can be adjusted is limited.

When parking in a parking space registered to the memory function

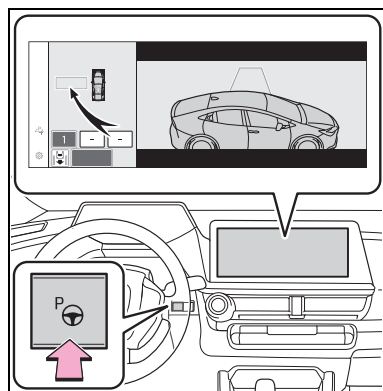
- 1 Stop the vehicle with it aligned near the center of the target parking space.



- A** Approximately 3.3 ft. (1 m)
- 2 Press the Advanced Park main switch and check that a possible parking space is dis-

played on the Multimedia Display.

If the "MODE" button is displayed, the button can be touched to change between the memory function, perpendicular parking (forward/reverse) function and parallel parking function.




- 3 Select the desired parking space, and then select "Start" button.

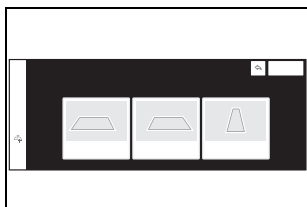
Perform the procedure for the perpendicular parking (forward/reverse) function from step 3. (→P.325)

■ If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter

→P.327

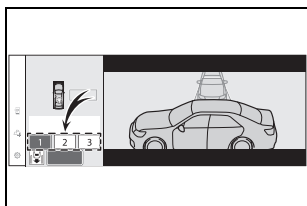
■ When overwriting a registered parking space

If the maximum number of parking spaces have been registered and  is selected, a registered parking space can be selected and then overwritten with a new parking space.



■ When multiple parking spaces are registered

Select the desired parking space, and then select "Start" button.



■ When the brakes have been operated

→P.327

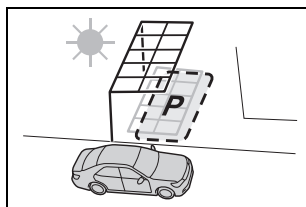


NOTICE

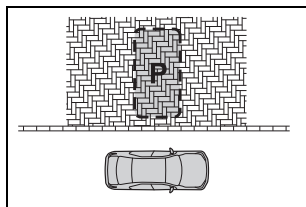
■ When using the memory function (→P.327, 332)

- The memory function is a function which provides assistance in parking in a previously registered parking space. If the condition of the road surface, vehicle, or surrounding area differs from when registration was performed, the parking space may not be able to be detected correctly or assistance may not be provided to the point that the vehicle is fully parked.
- Do not register a parking space in situations such as the following, as the set parking space may not be able to be registered or assistance may not be possible later.
 - When a camera lens is dirty or covered with water droplets

- When it is raining or snowing
- When the surrounding area is dark (at night, etc.)
- In situations such as the following, it may not be possible to register a parking space.
 - When there is insufficient space between the road and parking space
 - When the road surface around the parking space does not have any differences the system can recognize
- If a parking space has been registered in situations such as the following, assistance may not be able to be started later or assistance to the registered position may not be possible.
 - When shadows are cast on the parking space (there is a carport over the parking space, etc.)



- When there are leaves, garbage, or other objects which will likely move, in the parking space
- When the road surface around the parking space has the same repeating pattern (brick, etc.)





NOTICE

- In situations such as the following, it may not be possible for the system to provide assistance to a registered parking spot:
 - When the appearance of the parking space is affected by the shadow of the vehicle or trees
 - When an object is detected in the registered parking space
 - When a pedestrian or passing vehicle is detected during assistance
 - When the position the vehicle is stopped when assistance is started differs from the position when registration was performed
 - When the registered parking space cannot be reached due to the existence of parking blocks, etc.
 - When the road surface around the parking space has changed (road surface has degraded or been resurfaced)
 - When the sunlight conditions differ from when registration was performed (due to weather or time of day)
 - When the sun is shining directly into a camera, such as in the early morning or evening
 - When the color or brightness of the road surface is uneven
 - When a light is temporarily shined on the parking space (lights of another vehicle, security light, etc.)
 - When the road surface around the parking space has the same repeating pattern
- When there is a low protrusion on the road surface near the parking space
- When the parking space is on a slope
- When a camera has been splashed by hot or cold water and the lens has fogged up
- When a camera lens is dirty or covered with water droplets
- When accessories which obstruct the view of the camera are installed
If assistance is ended during registration, perform registration again.
- When registering a parking space to the memory function, if the road surface cannot be detected "No available parking space to register" will be displayed.
- When using the memory function, make sure to stop immediately in front of the stop position. Otherwise the parking space may not be able to be detected correctly or assistance may not be provided to the point that the vehicle is fully parked.
- Do not use the memory function if a camera has been subjected to a strong impact or images of the panoramic view monitor are misaligned.
- If a camera has been replaced, as the installation angle of the camera will have changed, it will be necessary to reregister parking spaces of the memory function.

Advanced Park cancellation/suspension

■ Assistance will be canceled when

In situations such as the following, Advanced Park operation will be canceled. Firmly hold the steering wheel and depress the brake pedal to stop the vehicle.

As system operation has been canceled, begin the operation again or continue parking manually, using the steering wheel.

- The Advanced Park main switch is pushed
- The shift position has been changed to P
- The parking brake is engaged
- A door or the back door is opened
- The driver's seat belt is unfastened
- The outside rear view mirrors are folded
- The TRAC or VSC is turned off
- The TRAC, VSC or ABS operates
- The power switch is pressed
- The system determines assistance cannot be continued in the current parking environment
- The system malfunctions
- While the vehicle was

stopped, "Cancel" was selected on the Multimedia Display

■ Assistance will be suspended when


In situations such as the following, Advanced Park operation will be suspended.

Assistance can be started again by following the directions displayed on the Multimedia Display.

Also, when assistance is suspended, if the shift position is changed twice with the brake pedal depressed, assistance will be canceled in that shift position. However, if assistance is suspended by changing the shift position, assistance will be canceled if the shift position is changed once.

- The steering wheel is operated
- The accelerator pedal is depressed
- The shift position has been changed
- A moving object or stationary object that may collide with your vehicle has been detected, resulting in the operation of the hybrid system output control/braking control.
- Camera switch is pressed

Changing the Advanced Park settings

Select  on the Multimedia Display, and then select “Advanced Park”.

■ “Speed Profile”

The vehicle speed for when assistance is performed can be set.

This setting cannot be changed when registering a parking space to the memory function.

■ “Obstacle detection range”

The distance from which obstacles will be avoided while assistance is being performed can be set.

■ “Preferred parking method”

The preferred parking direction displayed when at a parking space which perpendicular (forward/reverse) or parallel parking is possible can be set.

■ “Preferred parking direction”

The preferred parking direction displayed when it is possible to pull perpendicular forward or reverse into a parking space can be selected.

■ “Preferred exit direction (perpendicular)”

The preferred exit direction displayed when it is possible to pull forward or reverse to the left or

right out of a parking space can be selected.

■ “Preferred exit direction (parallel)”

The preferred exit direction displayed when it is possible to exit to the left or right from a parallel parking space can be selected.

■ “Camera view when parking”

The display angle of the camera image when using the perpendicular parking (forward/reverse) function or parallel parking function can be set.

■ “Camera view when exiting”

The display angle of the camera image when using the perpendicular exiting (forward/reverse) function or parallel parking exit function can be set.

■ “Parking path adjustment”

The course for when parking assistance is operating can be adjusted inward or outward.

If the tires are worn, the path of vehicle may be offset from the center of the parking space. In this case, use this setting to adjust the parking course.

■ “Road width adjustment”

When parking assistance is started, the amount of lateral movement while the vehicle is moving forward can be

adjusted.

■ “Park position adjustment (forward)”

The position at which perpendicular parking (forward) is completed can be adjusted. (Except when using the memory function.)

■ “Park position adjustment (reverse)”

The position at which perpendicular parking (reverse) is completed can be adjusted. (Except when using the memory function.)

■ “Rear accessory setting”

If an accessory, such as a trailer hitch, has been installed to the rear of the vehicle, the length of the rear of the vehicle can be adjusted to help avoid colliding with objects to the rear of the vehicle.

■ “Clear registered parking space”

The parking spaces registered to the memory function can be deleted. Parking space information cannot be deleted when assistance is being performed or when registering parking space information to the memory function.



NOTICE

- Take care when using the park position adjustment (forward) or park position adjustment (reverse) for adjusting because the vehicle may collide with parking blocks, curb stones, or other low objects.
- If it is likely that your vehicle will collide with a nearby vehicle/object, parking block, curb stone, etc., depress the brake pedal to stop the vehicle and press the Advanced Park main switch to disable the system.

Advanced Park displayed messages

The operating state, assistance operation, etc. of the Advanced Park is displayed on the Multi-media Display. If a message is displayed, respond according to the content displayed.

■ If “No available parking space” is displayed

Move the vehicle to a location where a parking space or parking lines can be detected.

■ If “Unavailable in current condition” is displayed

Move the vehicle to another location and use the system.

■ If “Not enough space to exit” is displayed

The parallel parking exit function cannot be used due to a situation such as the distance between your vehicle and vehicles parked in front of and behind your vehicle being short, the existence of an object in the exit direction, etc.

Check the conditions of the area

around your vehicle and exit from the parking space manually.

■ If **“Cannot control speed”** is displayed

The system judged that it cannot adjust the speed of the vehicle when using the system in an area with a slope or step and assistance was canceled.


Use the system in a level location.

■ If **“Obstacle detected”** is displayed

As a moving object or stationary object that may collide with your vehicle has been detected, the hybrid system output control/braking control operates to suspend Advanced Park assistance.

Check the condition of the surrounding area. To resume assistance, select the “Start” button on the Multimedia Display.

■ If **“No available parking space to register”** is displayed

This message is displayed when  is selected at a parking space that cannot be detected.

Operate the system at a parking space where differences in the road surface can be recognized.

(→P.335)