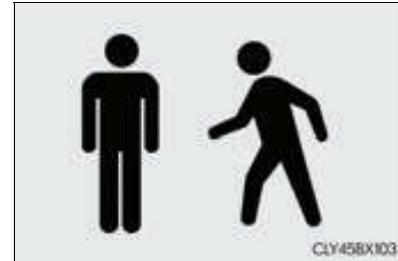


■ Pedestrian detection function ^{*4}

The pre-collision system detects pedestrians based on the size, profile, and motion of a detected object. However, a pedestrian may not be detected depending on the surrounding brightness and the motion, posture, and angle of the detected object, preventing the system from operating properly. (→P. 247)



^{*4}: Depending on the region in which the vehicle was sold, the pedestrian detection function may not be available.

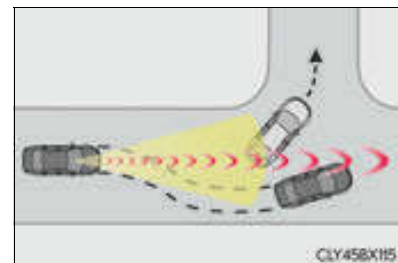
■ Cancellation of the pre-collision braking ^{*3}

- If either of the following occur while the pre-collision braking function is operating, it will be canceled:
 - The accelerator pedal is depressed strongly.
 - The steering wheel is turned sharply or abruptly.
- If the vehicle is stopped by the operation of the pre-collision braking function, the operation of the pre-collision braking function will be canceled after the vehicle has been stopped for approximately 2 seconds.

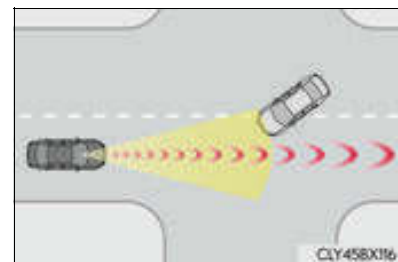
^{*3}: Depending on the region in which the vehicle was sold, the pre-collision braking function may not be available.

■ Conditions under which the system may operate even if there is no possibility of a collision

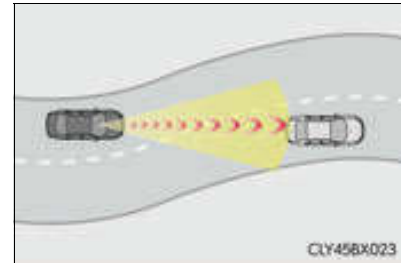
- In some situations such as the following, the system may determine that there is a possibility of a frontal collision and operate.
 - When passing a vehicle or pedestrian ^{*4}
 - When changing lanes while overtaking a preceding vehicle
 - When overtaking a preceding vehicle that is changing lanes
 - When overtaking a preceding vehicle that is making a left/right turn



- When passing a vehicle in an oncoming lane that is stopped to make a right/left turn



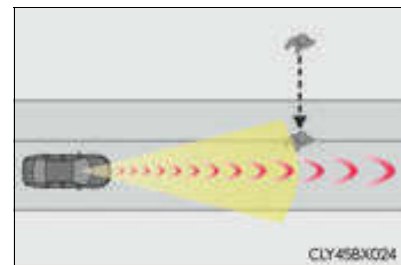
- When driving on a road where relative location to vehicle ahead in an adjacent lane may change, such as on a winding road



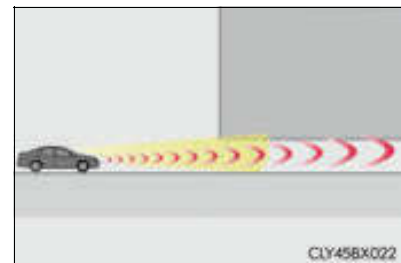
- When a preceding vehicle suddenly decelerates
- If the front of the vehicle is raised or lowered, such as when the road surface is uneven or undulating
- When approaching objects on the roadside, such as guardrails, utility poles, trees, or walls
- When there is a vehicle, pedestrian^{*4}, or object by the roadside at the entrance of a curve



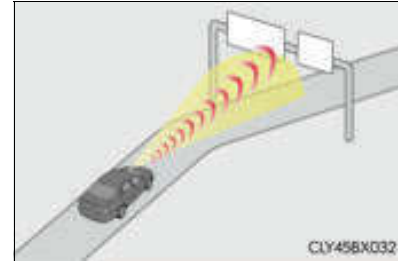
- When driving on a narrow path surrounded by a structure, such as in a tunnel or on an iron bridge
- When there is a metal object (manhole cover, steel plate, etc.), steps, or a protrusion on the road surface or roadside
- When a crossing pedestrian approaches very close to the vehicle^{*4}



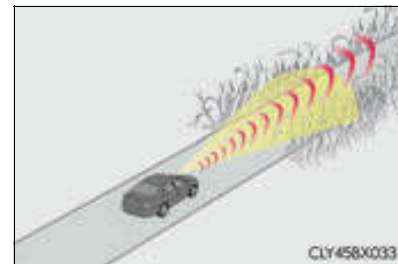
- When passing through a place with a low structure above the road (low ceiling, traffic sign, etc.)



- When passing under an object (billboard, etc.) at the top of an uphill road



- When rapidly closing on an electric toll gate barrier, parking area barrier, or other barrier that opens and closes
- When using an automatic car wash
- When driving through or under objects that may contact the vehicle, such as thick grass, tree branches, or a banner



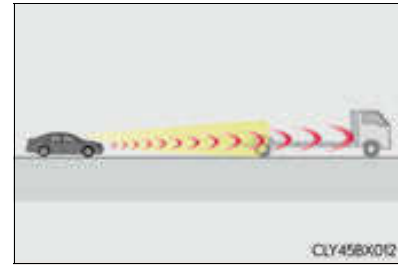
- When the vehicle is hit by water, snow, dust, etc. from a vehicle ahead
- When driving through steam or smoke
- When there are patterns or paint on the road or a wall that may be mistaken for a vehicle or pedestrian^{*4}
- When driving near an object that reflects radio waves, such as a large truck or guardrail
- When driving near a TV tower, broadcasting station, electric power plant, or other location where strong radio waves or electrical noise may be present

^{*4}: Depending on the region in which the vehicle was sold, the pedestrian detection function may not be available.

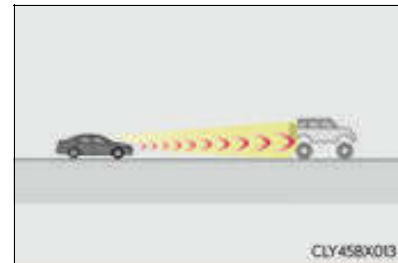
■ Situations in which the system may not operate properly

- In some situations such as the following, a vehicle may not be detected by the radar sensor and camera sensor, preventing the system from operating properly:

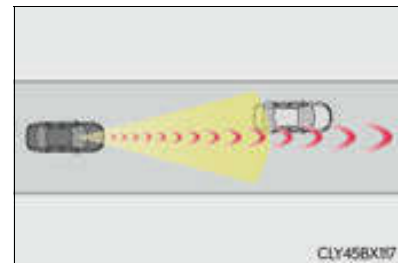
- If an oncoming vehicle is approaching your vehicle
- If a vehicle ahead is a motorcycle or bicycle
- When approaching the side or front of a vehicle
- If a preceding vehicle has a small rear end, such as an unloaded truck
- If a preceding vehicle has a low rear end, such as a low bed trailer



- If a vehicle ahead is carrying a load which protrudes past its rear bumper
- If a vehicle ahead has extremely high ground clearance



- If a vehicle ahead is irregularly shaped, such as a tractor or side car
- If the sun or other light is shining directly on a vehicle ahead
- If a vehicle cuts in front of your vehicle or emerges from beside a vehicle
- If a vehicle ahead makes an abrupt maneuver (such as sudden swerving, acceleration or deceleration)
- When suddenly cutting behind a preceding vehicle
- When a vehicle ahead is not directly in front of your vehicle



- When driving in inclement weather such as heavy rain, fog, snow or a sandstorm
- When the vehicle is hit by water, snow, dust, etc. from a vehicle ahead
- When driving through steam or smoke
- When driving in a place where the surrounding brightness changes suddenly, such as at the entrance or exit of a tunnel
- When a very bright light, such as the sun or the headlights of oncoming traffic, shines directly into the camera sensor
- When the surrounding area is dim, such as at dawn or dusk, or while at night or in a tunnel

- After the engine has started the vehicle has not been driven for a certain amount of time
 - While making a left/right turn and for a few seconds after making a left/right turn
 - While driving on a curve and for a few seconds after driving on a curve
 - If your vehicle is skidding
 - If the front of the vehicle is raised or lowered
 - If the wheels are misaligned
 - If a wiper blade is blocking the camera sensor
 - The vehicle is wobbling.
 - The vehicle is being driven at extremely high speeds.
 - When driving on a hill
 - If the radar sensor or camera sensor is misaligned
 - In some situations such as the following, sufficient braking force may not be obtained, preventing the system from performing properly:
 - If the braking functions cannot operate to their full extent, such as when the brake parts are extremely cold, extremely hot, or wet
 - If the vehicle is not properly maintained (brakes or tires are excessively worn, improper tire inflation pressure, etc.)
 - When the vehicle is being driven on a gravel road or other slippery surface
 - Some pedestrians such as the following may not be detected by the radar sensor and camera sensor, preventing the system from operating properly*4:
 - Pedestrians shorter than approximately 3.2 ft. (1 m) or taller than approximately 6.5 ft. (2 m)
 - Pedestrians wearing oversized clothing (a rain coat, long skirt, etc.), making their silhouette obscure
 - Pedestrians who are carrying large baggage, holding an umbrella, etc., hiding part of their body
 - Pedestrians who are bending forward or squatting
 - Pedestrians who are pushing a stroller, wheelchair, bicycle or other vehicle
 - Groups of pedestrians which are close together
 - Pedestrians who are wearing white and look extremely bright
 - Pedestrians in the dark, such as at night or while in a tunnel
 - Pedestrians whose clothing appears to be nearly the same color or brightness as their surroundings
 - Pedestrians near walls, fences, guardrails, or large objects
 - Pedestrians who are on a metal object (manhole cover, steel plate, etc.) on the road
 - Pedestrians who are walking fast
 - Pedestrians who are changing speed abruptly
 - Pedestrians running out from behind a vehicle or a large object
 - Pedestrians who are extremely close to the side of the vehicle (outside rear view mirror, etc.)
- *4: Depending on the region in which the vehicle was sold, the pedestrian detection function may not be available.