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2	**Fuel cell system**	Fuel cell vehicle characteristics, precautions, etc.
3	**Instrument cluster**	How to read the gauges and meters, the variety of warning lights and indicators, etc.
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10	**For owners**	Reporting safety defects for U.S. owners, and seat belt and SRS airbag instructions for Canadian owners
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- Navigation system
- Audio system
- Rear view monitor system
- Hands-free system (for cellular phone)

For your information

Main Owner's Manual

Please note that this manual applies to all models and explains all equipment, including options. Therefore, you may find some explanations for equipment not installed on your vehicle.

All specifications provided in this manual are current at the time of printing. However, because of the Toyota policy of continual product improvement, we reserve the right to make changes at any time without notice.

Depending on specifications, the vehicle shown in the illustrations may differ from your vehicle in terms of color and equipment.

Accessories, spare parts and modification of your Toyota

A wide variety of non-genuine spare parts and accessories for Toyota vehicles are currently available in the market. You should know that Toyota does not warrant these products and is not responsible for their performance, repair, or replacement, or for any damage they may cause to, or adverse effect they may have on, your Toyota vehicle.

This vehicle should not be modified with non-genuine Toyota products. Modification with non-genuine Toyota products could affect its performance, safety or durability, and may even violate governmental regulations. In addition, damage or performance problems resulting from the modification may not be covered under warranty.

Installation of a mobile two-way radio system

The installation of a mobile two-way radio system in your vehicle could affect electronic systems such as:

- Fuel cell system
- Anti-lock brake system
- SRS airbag system
- Seat belt pretensioner system
- Toyota Safety Sense 2.0

Be sure to check with your Toyota dealer for precautionary measures or special instructions regarding installation of a mobile two-way radio system.

High voltage parts and cables on the fuel cell vehicles emit approximately the same amount of electromagnetic waves as the conventional gasoline powered vehicles or home electronic appliances despite of their electromagnetic shielding.

Unwanted noise may occur in the reception of the mobile two-way radio.

Vehicle data recording

The vehicle is equipped with sophisticated computers that will record certain data, such as:

The recorded data varies according to the vehicle grade level and options with which it is equipped. These computers do not record conversations or sounds, and only record images outside of the vehicle in certain situations.

- Engine speed /Electric motor speed (traction motor speed)
- Accelerator status
- Brake status
- Vehicle speed
- Operation status of the driving assist systems, such as the ABS and pre-collision system
- Images from the front camera (available only when certain safety systems are activated, which varies depending on the vehicle specifications).

● Data Transmission

Your vehicle may transmit the data recorded in these computers to Toyota without notification to you.

● Data usage

Toyota may use the data recorded in this computer to diagnose malfunctions, conduct research and development, and improve quality.

Toyota will not disclose the recorded data to a third party except:

- With the consent of the vehicle owner or with the consent of the lessee if the vehicle is leased
- In response to an official request by the police, a court of law or a government agency
- For use by Toyota in a lawsuit
- For research purposes where the data is not tied to a specific vehicle or vehicle owner

● Recorded image information can be erased by your Toyota dealer.

The image recording function can be disabled. However, if the function is disabled, data from when the pre-collision system operates will not be available.

● To learn more about the vehicle data collected, used and shared by Toyota, please visit www.toyota.com/privacyvts/.

Usage of data collected through Safety Connect (U.S.mainland only)

If your Toyota has Safety Connect and if you have subscribed to those services, please refer to the Safety Connect Telematics Subscription Service Agreement for information on data collected and its usage.

● To learn more about the vehicle data collected, used and shared by Toyota, please visit www.toyota.com/privacyvts/.

Event data recorder

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less.

The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

NOTE: EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.
To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

● Disclosure of the EDR data

Toyota will not disclose the data recorded in an EDR to a third party except when:

- An agreement from the vehicle's owner (or the lessee for a leased vehicle) is obtained
- In response to an official request by the police, a court of law or a government agency
- For use by Toyota in a lawsuit

However, if necessary, Toyota may:

- Use the data for research on vehicle safety performance
- Disclose the data to a third party for research purposes without disclosing information about the specific vehicle or vehicle owner

Scrapping of your Toyota

The SRS airbag and seat belt pretensioner devices in your Toyota contain explosive chemicals. If the vehicle is scrapped with the airbags and seat belt pretensioners left as they are, this may cause an accident such as fire. Be sure to have the systems of the SRS airbag and seat belt pretensioner removed and disposed of by a qualified service shop or by your Toyota dealer before you scrap your vehicle.

Perchlorate Material

Special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate.

Your vehicle has components that may contain perchlorate. These components may include airbag, seat belt pretensioners, and wireless remote control batteries.

WARNING

General precautions while driving

Driving under the influence: Never drive your vehicle when under the influence of alcohol or drugs that have impaired your ability to operate your vehicle. Alcohol and certain drugs delay reaction time, impair judgment and reduce coordination, which could lead to an accident that could result in death or serious injury.

Defensive driving: Always drive defensively. Anticipate mistakes that other drivers or pedestrians might make and be ready to avoid accidents.

Driver distraction: Always give your full attention to driving. Anything that distracts the driver, such as adjusting controls, talking on a cellular phone or reading can result in a collision with resulting death or serious injury to you, your occupants or others.

General precaution regarding children's safety

Never leave children unattended in the vehicle, and never allow children to have or use the key.

Children may be able to start the vehicle or shift the vehicle into neutral. There is also a danger that children may injure themselves by playing with the windows, the moon roof, or other features of the vehicle. In addition, heat build-up or extremely cold temperatures inside the vehicle can be fatal to children.

Reading this manual

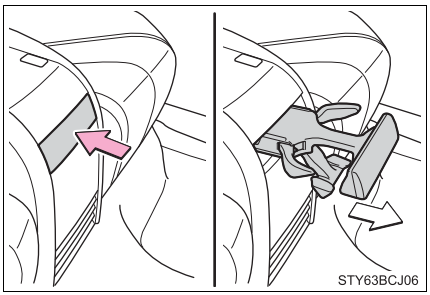
WARNING:
Explains something that, if not obeyed, could cause death or serious injury to people.

NOTICE:
Explains something that, if not obeyed, could cause damage to or a malfunction in the vehicle or its equipment.

1 2 3 ··· Indicates operating or working procedures. Follow the steps in numerical order.

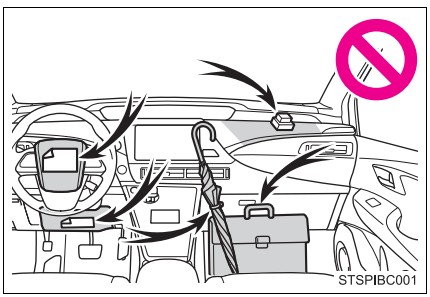
Indicates the action (pushing, turning, etc.) used to operate switches and other devices.

Indicates the outcome of an operation (e.g. a lid opens).



Indicates the component or position being explained.

Means “Do not”, “Do not do this”, or “Do not let this happen”.



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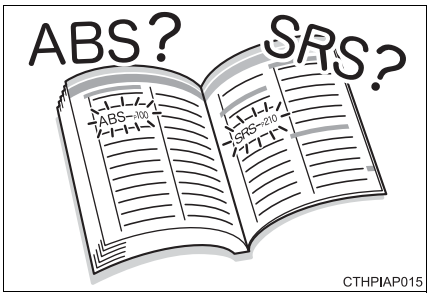

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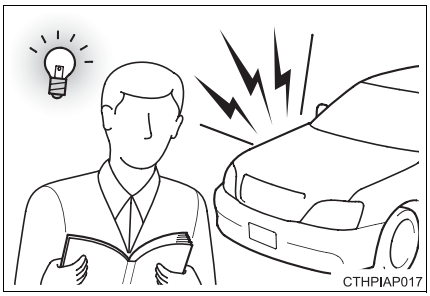

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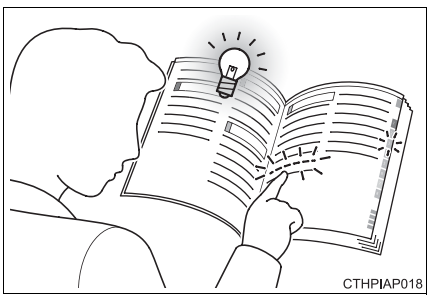

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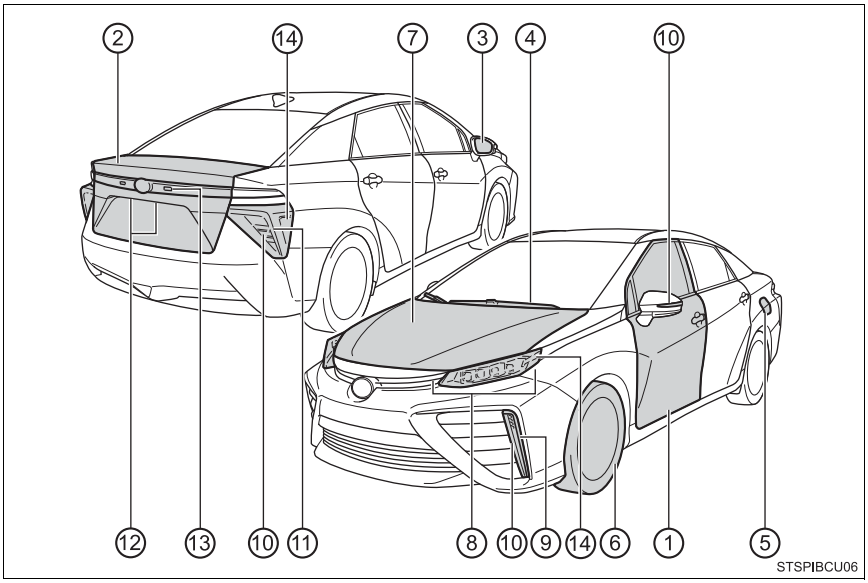

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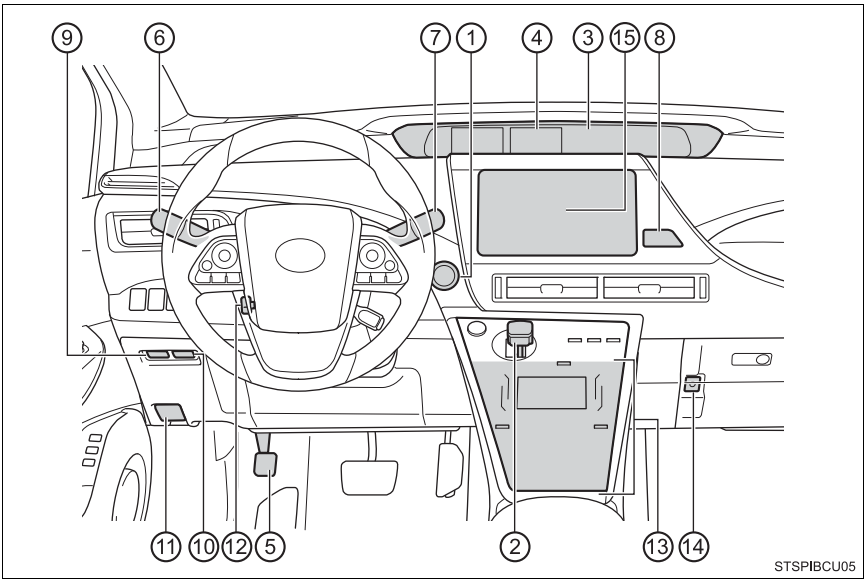

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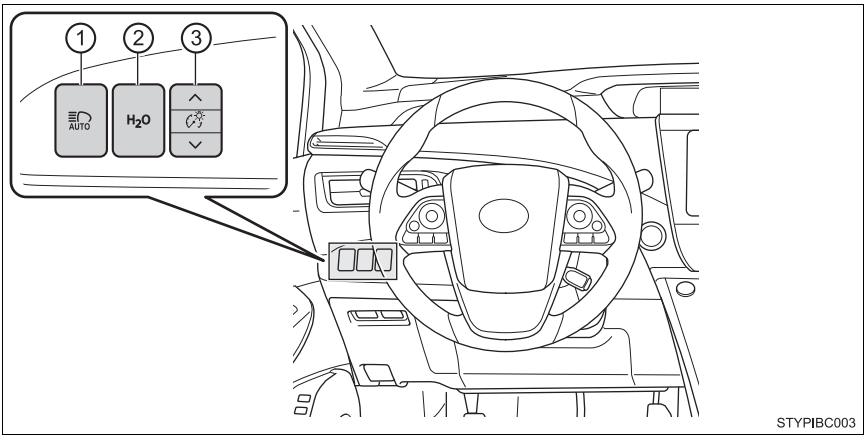

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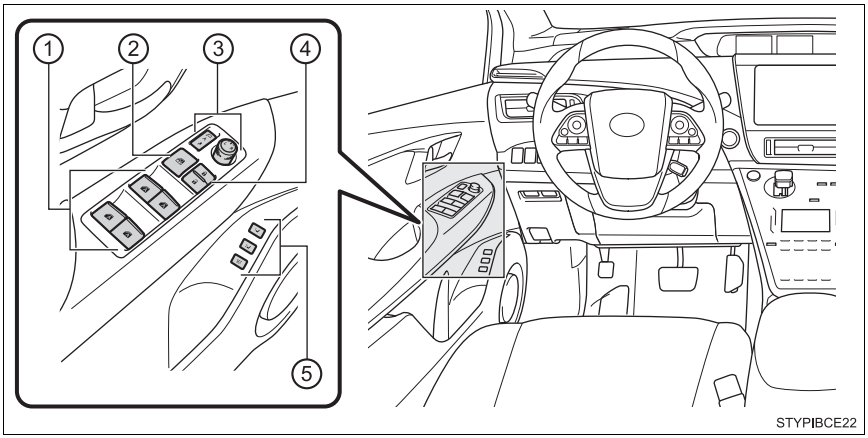

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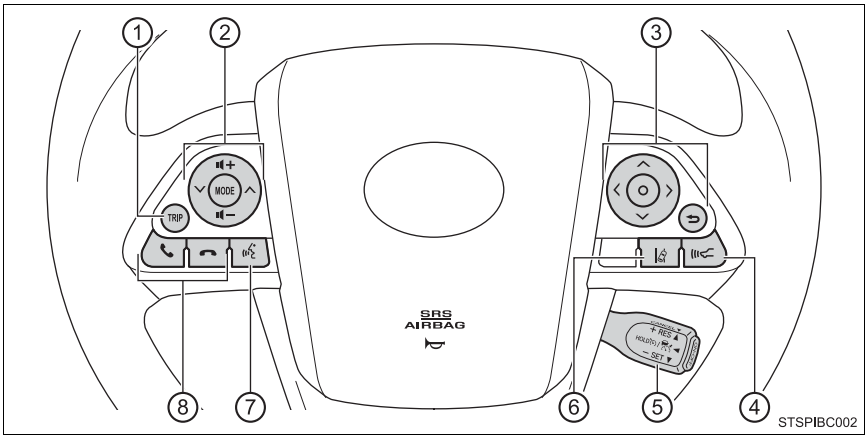

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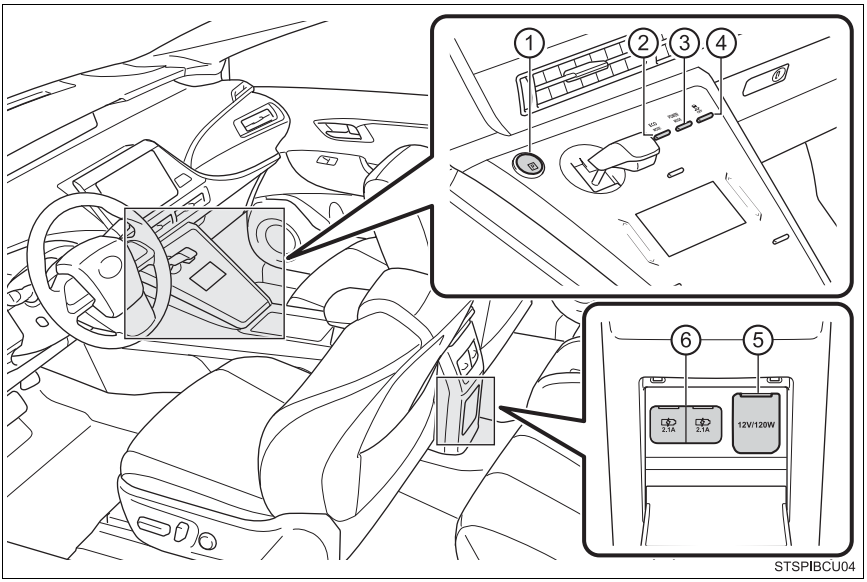

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*: Refer to the “NAVIGATION SYSTEM OWNER’S MANUAL”.

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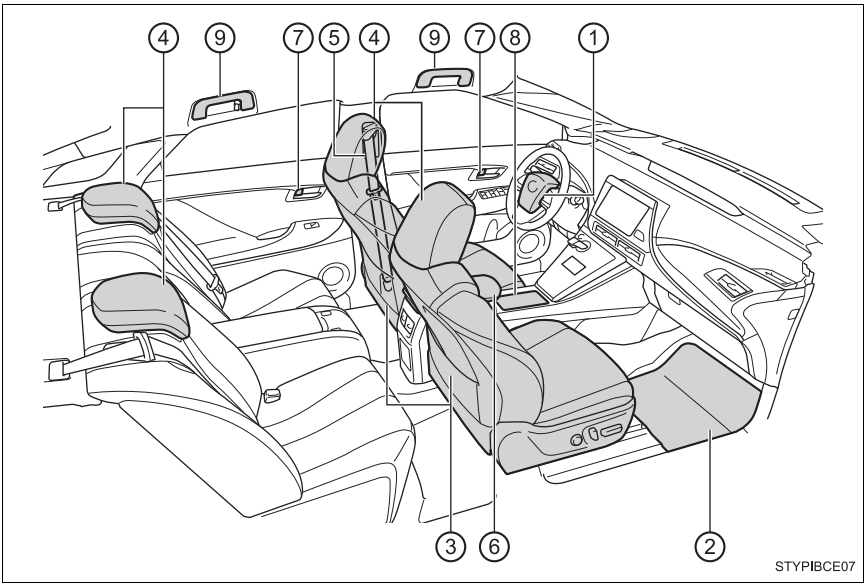

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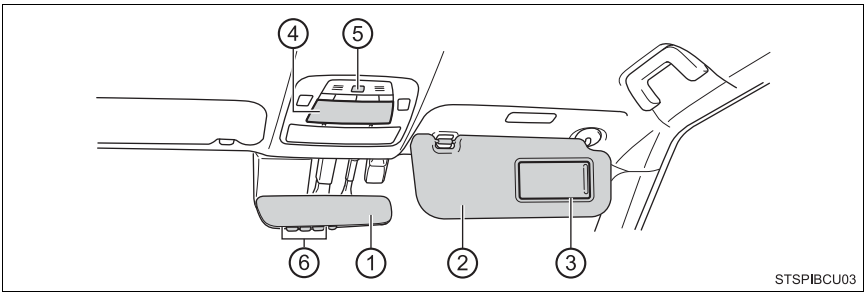

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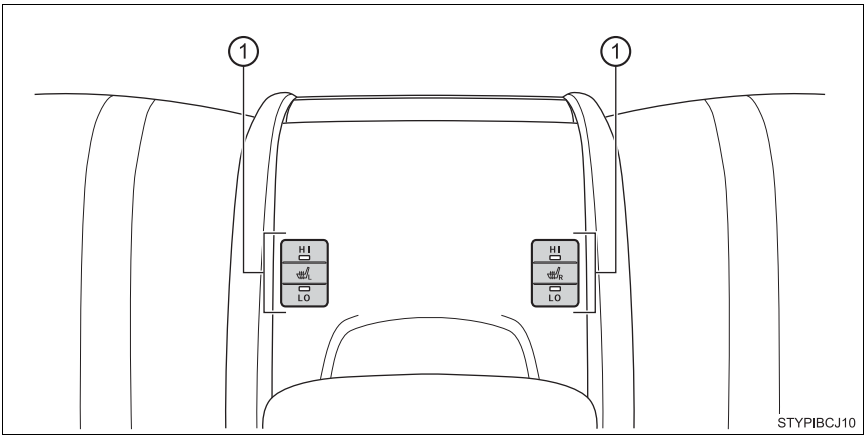
*: The illustration shows the front, but they are also equipped in the rear.

Rear interior



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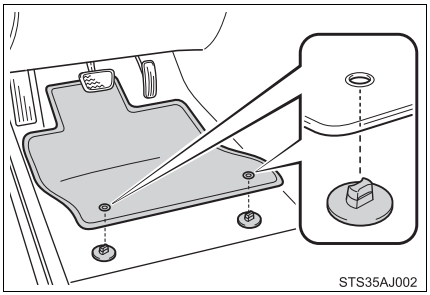
Before driving

Floor mat

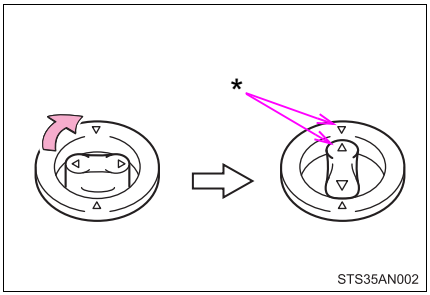
Use only floor mats designed specifically for vehicles of the same model and model year as your vehicle. Fix them securely in place onto the carpet.

1 Insert the retaining hooks (clips) into the floor mat eyelets.



2 Turn the upper knob of each retaining hook (clip) to secure the floor mats in place.

*: Always align the △ marks.



The shape of the retaining hooks (clips) may differ from that shown in the illustration.

WARNING

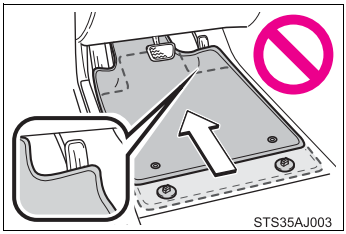
Observe the following precautions.
Failure to do so may cause the driver's floor mat to slip, possibly interfering with the pedals while driving. An unexpectedly high speed may result or it may become difficult to stop the vehicle. This could lead to an accident, resulting in death or serious injury.

■When installing the driver's floor mat

- Do not use floor mats designed for other models or different model year vehicles, even if they are Toyota Genuine floor mats.
- Only use floor mats designed for the driver's seat.
- Always install the floor mat securely using the retaining hooks (clips) provided.
- Do not use two or more floor mats on top of each other.
- Do not place the floor mat bottom-side up or upside-down.

■Before driving

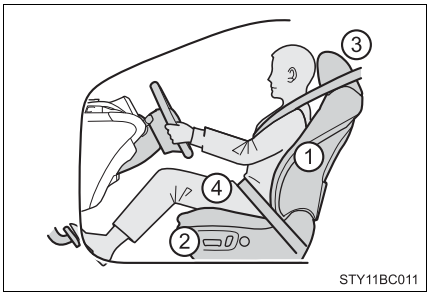
- Check that the floor mat is securely fixed in the correct place with all the provided retaining hooks (clips). Be especially careful to perform this check after cleaning the floor.
- With the fuel cell system stopped and the shift position in P, fully depress each pedal to the floor to make sure it does not interfere with the floor mat.



For safe driving

For safe driving, adjust the seat and mirror to an appropriate position before driving.

Correct driving posture



① Adjust the angle of the seat-back so that you are sitting straight up and so that you do not have to lean forward to steer. (→P. 151)

② Adjust the seat so that you can depress the pedals fully and so that your arms bend slightly at the elbow when gripping the steering wheel. (→P. 151, 160)

③ Lock the head restraint in place with the center of the head restraint closest to the top of your ears. (→P. 158)

④ Wear the seat belt correctly. (→P. 30)

Correct use of the seat belts

Make sure that all occupants are wearing their seat belts before driving the vehicle. (→P. 30)
Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belt. (→P. 56)

Adjusting the mirrors

Make sure that you can see the rear of the vehicle clearly, by adjusting the inside and outside rear view mirrors properly. (→P. 162, 164)

WARNING

Observe the following precautions.
Failure to do so may result in death or serious injury.

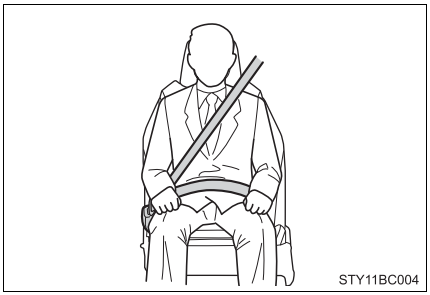
- Do not adjust the position of the driver's seat while driving.
  Doing so could cause the driver to lose control of the vehicle.
- Do not place a cushion between the driver or passenger and the seatback.
  A cushion may prevent correct posture from being achieved, and reduce the effectiveness of the seat belt and head restraint.
- Do not place anything under the front seats.
  Objects placed under the front seats may become jammed in the seat tracks and stop the seat from locking in place. This may lead to an accident and the adjustment mechanism may also be damaged.
- Always observe the legal speed limit when driving on public roads.
- When driving over long distances, take regular breaks before you start to feel tired.
  Also, if you feel tired or sleepy while driving, do not force yourself to continue driving and take a break immediately.

Seat belts

Make sure that all occupants are wearing their seat belts before driving the vehicle.

Correct use of the seat belts

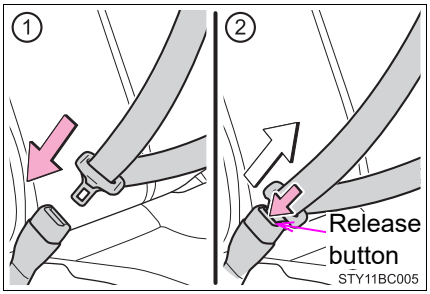
- Extend the shoulder belt so that it comes fully over the shoulder, but does not come into contact with the neck or slide off the shoulder.
- Position the lap belt as low as possible over the hips.
- Adjust the position of the seat-back. Sit up straight and well back in the seat.
- Do not twist the seat belt.



Fastening and releasing the seat belt

① To fasten the seat belt, push the plate into the buckle until a click sound is heard.

② To release the seat belt, press the release button.

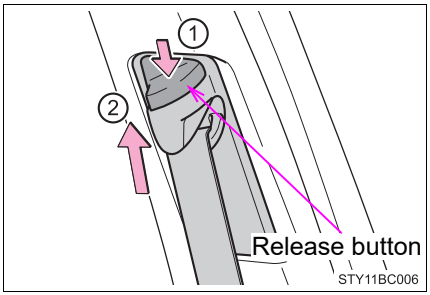


Adjusting the seat belt shoulder anchor height (front seats)

① Push the seat belt shoulder anchor down while pressing the release button.

② Push the seat belt shoulder anchor up.

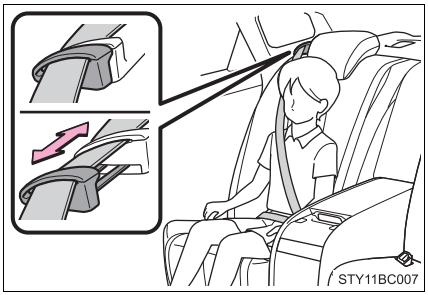
Move the height adjuster up and down as needed until you hear a click.



Seat belt comfort guide (rear seats)

For children or smaller-than-average people, slide the seat belt comfort guide forward so that the shoulder belt does not sit close to the person's neck.

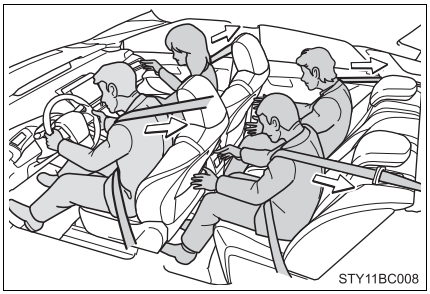
Return the seat belt by hand, after it has been used, and check that the belt is stored properly.
Return the comfort guide to its original position.



Seat belt pretensioners

The pretensioners help the seat belts to quickly restrain the occupants by retracting the seat belts when the vehicle is subjected to certain types of severe frontal collision or a vehicle rollover.

The front seat belt pretensioners also activate when the vehicle is subjected to certain types of severe side collision.



The pretensioners do not activate in the event of a minor frontal impact, a minor side impact or a rear impact.

Emergency locking retractor (ELR)

The retractor will lock the belt during a sudden stop or on impact. It may also lock if you lean forward too quickly. A slow, easy motion will allow the belt to extend so that you can move around fully.

Automatic locking retractor (ALR)

When a passenger's shoulder belt is completely extended and then retracted even slightly, the belt is locked in that position and cannot be extended. This feature is used to hold the child restraint system (CRS) firmly. To free the belt again, fully retract the belt and then pull the belt out once more.

Child seat belt usage

The seat belts of your vehicle were principally designed for persons of adult size.

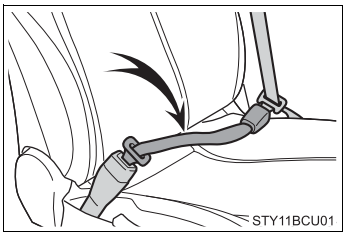
- Use a child restraint system appropriate for the child, until the child becomes large enough to properly wear the vehicle's seat belt. (→P. 56)
- When the child becomes large enough to properly wear the vehicle's seat belt, follow the instructions regarding seat belt usage. (→P. 30)

Replacing the belt after the pretensioner has been activated

If the vehicle is involved in multiple collisions, the pretensioner will activate for the first collision, but will not activate for the second or subsequent collisions.

Seat belt extender

If your seat belts cannot be fastened securely because they are not long enough, a personalized seat belt extender is available from your Toyota dealer free of charge.



WARNING

Observe the following precautions to reduce the risk of injury in the event of sudden braking, sudden swerving or an accident.
Failure to do so may cause death or serious injury.

■ Wearing a seat belt

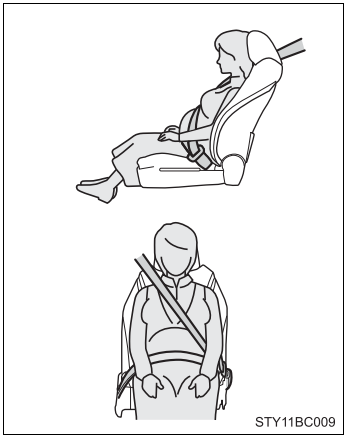
- Ensure that all passengers wear a seat belt.
- Always wear a seat belt properly.
- Each seat belt should be used by one person only. Do not use a seat belt for more than one person at once, including children.
- Toyota recommends that children be seated in the rear seat and always use a seat belt and/or an appropriate child restraint system.
- To achieve a proper seating position, do not recline the seat more than necessary. The seat belt is most effective when the occupants are sitting up straight and well back in the seats.
- Do not wear the shoulder belt under your arm.
- Always wear your seat belt low and snug across your hips.

■ Pregnant women

Obtain medical advice and wear the seat belt in the proper way. (→P. 30)

Women who are pregnant should position the lap belt as low as possible over the hips in the same manner as other occupants, extending the shoulder belt completely over the shoulder and avoiding belt contact with the rounding of the abdominal area.

If the seat belt is not worn properly, not only the pregnant woman, but also the fetus could suffer death or serious injury as a result of sudden braking or a collision.



■ People suffering illness

Obtain medical advice and wear the seat belt in the proper way. (→P. 30)

WARNING

■ **When children are in the vehicle**

Do not allow children to play with the seat belt. If the seat belt becomes twisted around a child's neck, it may lead to choking or other serious injuries that could result in death.
If this occurs and the buckle cannot be unfastened, scissors should be used to cut the belt.

■ **Seat belt pretensioners**

- Do not place anything, such as a cushion, on the front passenger's seat. Doing so will disperse the passenger's weight, which prevents the sensor from detecting the passenger's weight properly. As a result, the seat belt pretensioner for the front passenger's seat may not activate in the event of a collision.
- If the pretensioner has activated, the SRS warning light will come on. In that case, the seat belt cannot be used again and must be replaced at your Toyota dealer.

■ **Adjustable shoulder anchor (front seats)**

Always make sure the shoulder belt is positioned across the center of your shoulder. The belt should be kept away from your neck, but not falling off your shoulder. Failure to do so could reduce the amount of protection in an accident and cause death or serious injuries in the event of a sudden stop, sudden swerve or accident. (→P. 31)

■ **Seat belt damage and wear**

- Do not damage the seat belts by allowing the belt, plate, or buckle to be jammed in the door.
- Inspect the seat belt system periodically. Check for cuts, fraying, and loose parts. Do not use a damaged seat belt until it is replaced. Damaged seat belts cannot protect an occupant from death or serious injury.
- Ensure that the belt and plate are locked and the belt is not twisted.
  If the seat belt does not function correctly, immediately contact your Toyota dealer.
- Replace the seat assembly, including the belts, if your vehicle has been involved in a serious accident, even if there is no obvious damage.
- Do not attempt to install, remove, modify, disassemble or dispose of the seat belts. Have any necessary repairs carried out by your Toyota dealer. Inappropriate handling may lead to incorrect operation.

WARNING

Using a seat belt extender

- Do not wear the seat belt extender if you can fasten the seat belt without the extender.
- Do not use the seat belt extender when installing a child restraint system because the belt will not securely hold the child restraint system, increasing the risk of death or serious injury in the event of an accident.
- The personalized extender may not be safe on another vehicle, when used by another person, or at a different seating position other than the one originally intended.

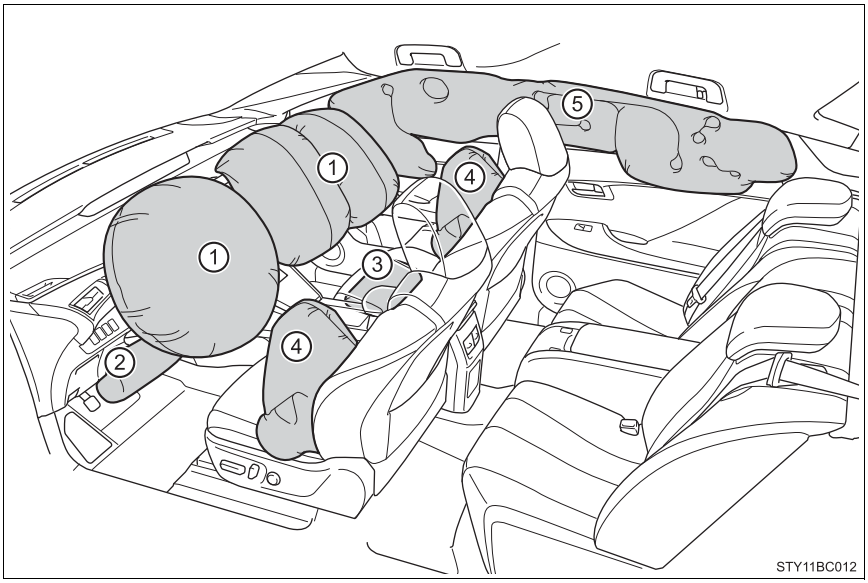
NOTICE

When using a seat belt extender

When releasing the seat belt, press on the buckle release button on the extender, not on the seat belt.
This helps prevent damage to the vehicle interior and the extender itself.

SRS airbags

The SRS airbags inflate when the vehicle is subjected to certain types of severe impacts that may cause significant injury to the occupants. They work together with the seat belts to help reduce the risk of death or serious injury.



◆ SRS front airbags

① SRS driver airbag/front passenger airbag
Can help protect the head and chest of the driver and front passenger from impact with interior components

② SRS knee airbag
Can help provide driver protection

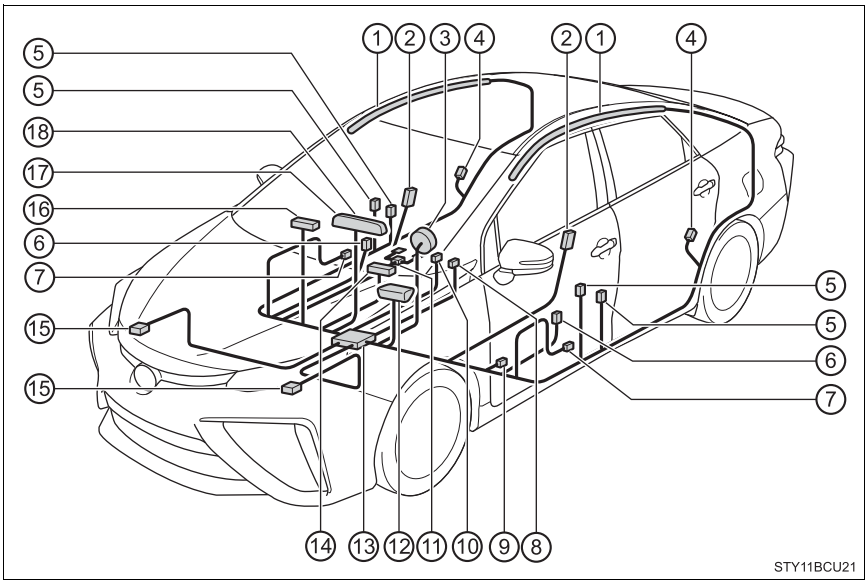
③ SRS seat cushion airbag
Can help restrain the front passenger

◆ SRS side and curtain shield airbags

④ SRS side airbags
Can help protect the torso and pelvis of the front seat occupants

⑤ SRS curtain shield airbags
- Can help protect primarily the head of occupants
- Can help prevent the occupants from being thrown from the vehicle in the event of vehicle rollover

SRS airbag system components



① Curtain shield airbags
② Side airbags
③ Driver airbag
④ Side impact sensors (rear)
⑤ Side impact sensors (front)
⑥ Seat belt pretensioners and force limiters
⑦ Side impact sensors (front doors)
⑧ Driver's seat belt buckle switch
⑨ Driver's seat position sensor
⑩ Front passenger's seat belt buckle switch
⑪ Front passenger occupant classification system (ECU and sensors)
⑫ Knee airbag
⑬ Airbag sensor assembly
⑭ Passenger seat cushion airbag
⑮ Front impact sensors
⑯ Front passenger airbag
⑰ SRS warning light
⑱ "AIR BAG ON" and "AIR BAG OFF" indicator lights

Your vehicle is equipped with ADVANCED AIRBAGS designed based on the US motor vehicle safety standards (FMVSS208). The airbag sensor assembly (ECU) controls airbag deployment based on information obtained from the sensors etc. shown in the system components diagram above. This information includes crash severity and occupant information. As the airbags deploy, a chemical reaction in the inflators quickly fills the airbags with non-toxic gas to help restrain the motion of the occupants.

WARNING

■SRS airbag precautions

Observe the following precautions regarding the SRS airbags.
Failure to do so may cause death or serious injury.

- The driver and all passengers in the vehicle must wear their seat belts properly.
  The SRS airbags are supplemental devices to be used with the seat belts.
- The SRS driver airbag deploys with considerable force, and can cause death or serious injury especially if the driver is very close to the airbag. The National Highway Traffic Safety Administration (NHTSA) advises:

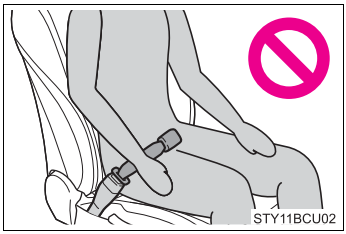
  Since the risk zone for the driver's airbag is the first 2 - 3 in. (50 - 75 mm) of inflation, placing yourself 10 in. (250 mm) from your driver airbag provides you with a clear margin of safety. This distance is measured from the center of the steering wheel to your breastbone. If you sit less than 10 in. (250 mm) away now, you can change your driving position in several ways:

  - Move your seat to the rear as far as you can while still reaching the pedals comfortably.
  - Slightly recline the back of the seat.
    Although vehicle designs vary, many drivers can achieve the 10 in. (250 mm) distance, even with the driver seat all the way forward, simply by reclining the back of the seat somewhat. If reclining the back of your seat makes it hard to see the road, raise yourself by using a firm, non-slippery cushion, or raise the seat if your vehicle has that feature.
  - If your steering wheel is adjustable, tilt it downward. This points the airbag toward your chest instead of your head and neck.

  The seat should be adjusted as recommended by NHTSA above, while still maintaining control of the foot pedals, steering wheel, and your view of the instrument panel controls.

WARNING

■ **SRS airbag precautions**

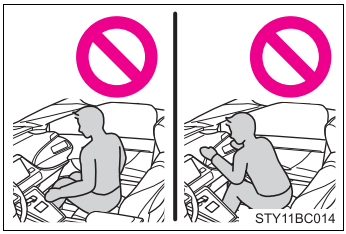


- If the seat belt extender has been connected to the front seat belt buckles but the seat belt extender has not also been fastened to the latch plate of the seat belt, the SRS front airbags will judge that the driver and front passenger are wearing the seat belt even though the seat belt has not been connected. In this case, the SRS front airbags may not activate correctly in a collision, resulting in death or serious injury in the event of a collision. Be sure to wear the seat belt with the seat belt extender.
- The SRS front passenger airbag also deploys with considerable force, and can cause death or serious injury especially if the front passenger is very close to the airbag. The front passenger seat should be as far from the airbag as possible with the seatback adjusted, so the front passenger sits upright.
- Improperly seated and/or restrained infants and children can be killed or seriously injured by a deploying airbag. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Toyota strongly recommends that all infants and children be placed in the rear seats of the vehicle and properly restrained. The rear seats are safer for infants and children than the front passenger seat. (→P. 56)

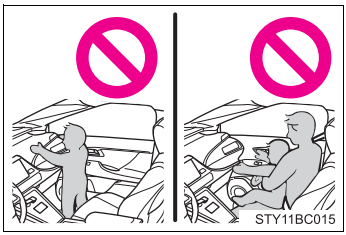
WARNING

SRS airbag precautions

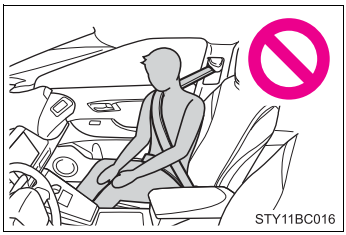
- Do not sit on the edge of the seat or lean against the dashboard.



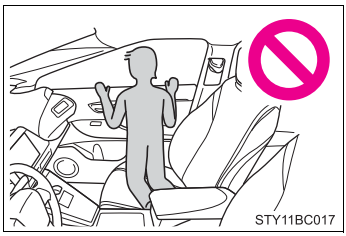
- Do not allow a child to stand in front of the SRS front passenger airbag unit or sit on the knees of a front passenger.
- Do not allow the front seat occupants to hold items on their knees.



- Do not lean against the door, the roof side rail or the front, side and rear pillars.



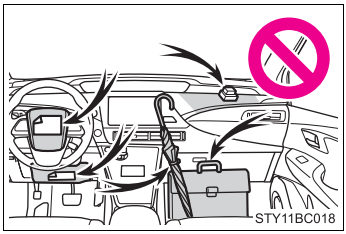
- Do not allow anyone to kneel on the passenger seat toward the door or put their head or hands outside the vehicle.



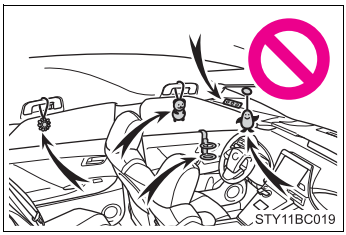
WARNING

■ **SRS airbag precautions**

- Do not attach anything to or lean anything against areas such as the dashboard, steering wheel pad and lower portion of the instrument panel.
  These items can become projectiles when the SRS driver, front passenger and knee airbags deploy.



- Do not attach anything to areas such as a door, windshield, side windows, front or rear pillar, roof side rail and assist grip.
  (Except for the speed limit sticker →P. 435, 438)



- Do not hang coat hangers or other hard objects on the coat hooks. All of these items could become projectiles and may cause death or serious injury, should the SRS curtain shield airbags deploy.
- If a vinyl cover is put on the area where the SRS knee airbag will deploy, be sure to remove it.
- Do not use seat accessories which cover the parts where the SRS side airbags and SRS seat cushion airbag inflate as they may interfere with inflation of the SRS airbags. Such accessories may prevent the side airbags and SRS seat cushion airbag from activating correctly, disable the system or cause the side airbags and SRS seat cushion airbag to inflate accidentally, resulting in death or serious injury.

WARNING

■ **SRS airbag precautions**

- Do not strike or apply significant levels of force to the area of the SRS airbag components.
  Doing so can cause the SRS airbags to malfunction.
- Do not touch any of the component parts immediately after the SRS airbags have deployed (inflated) as they may be hot.
- If breathing becomes difficult after the SRS airbags have deployed, open a door or window to allow fresh air in, or leave the vehicle if it is safe to do so. Wash off any residue as soon as possible to prevent skin irritation.
- If the areas where the SRS airbags are stored, such as the steering wheel pad and front and rear pillars garnishes, are damaged or cracked, have them replaced by your Toyota dealer.
- Do not place anything, such as a cushion, on the front passenger's seat. Doing so will disperse the passenger's weight, which prevents the sensor from detecting the passenger's weight properly. As a result, the SRS front airbags for the front passenger may not deploy in the event of a collision.

■ **Modification and disposal of SRS airbag system components**

Do not dispose of your vehicle or perform any of the following modifications without consulting your Toyota dealer. The SRS airbags may malfunction or deploy (inflate) accidentally, causing death or serious injury.

- Installation, removal, disassembly and repair of the SRS airbags
- Repairs, modifications, removal or replacement of the steering wheel, instrument panel, dashboard, seats or seat upholstery, front, side and rear pillars or roof side rails
- Repairs or modifications of the front fender, front bumper, or side of the occupant compartment
- Installation of a grille guard (bull bars, kangaroo bar, etc.), snow plows, winches, or roof luggage carrier
- Modifications to the vehicle's suspension system
- Installation of electronic devices such as mobile two-way radios and CD players
- Modifications to your vehicle for a person with a physical disability

■ If the SRS airbags deploy (inflate)

- Slight abrasions, burns, bruising, etc., may be sustained from SRS airbags, due to the extremely high speed deployment (inflation) by hot gases.
- A loud noise and white powder will be emitted.
- Parts of the airbag module (steering wheel hub, airbag cover and inflator) as well as the front seats, parts of the front and rear pillars, and roof side rails, may be hot for several minutes. The airbag itself may also be hot.
- The windshield may crack.
- For Safety Connect subscribers, if the SRS airbags deploy or in the event of a severe rear-end collision, the system is designed to send an emergency call to the response center, notifying them of the vehicle's location (without needing to push the "SOS" button) and an agent will attempt to speak with the occupants to ascertain the level of emergency and assistance required. If the occupants are unable to communicate, the agent automatically treats the call as an emergency and helps to dispatch the necessary emergency services. (→P. 72)

■ SRS airbag deployment conditions (SRS front airbags)

- The SRS front airbags will deploy in the event of an impact that exceeds the set threshold level (the level of force corresponding to an approximately 12 - 18 mph [20 - 30 km/h] frontal collision with a fixed wall that does not move or deform).

  However, this threshold velocity will be considerably higher in the following situations:

  - If the vehicle strikes an object, such as a parked vehicle or sign pole, which can move or deform on impact
  - If the vehicle is involved in an underride collision, such as a collision in which the front of the vehicle "underrides", or goes under, the bed of a truck
- Depending on the type of collision, it is possible that only the seat belt pre-tensioners will activate.
- The SRS front airbags for the front passenger will not activate if there is no passenger sitting in the front passenger seat. However, the SRS front airbags for the front passenger may deploy if luggage is put in the seat, even if the seat is unoccupied.
- The SRS seat cushion airbag on the front passenger seat will not operate if the occupant is not wearing a seat belt.

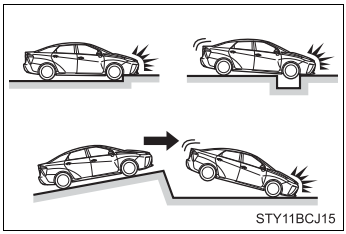
■ SRS airbag deployment conditions (SRS side and curtain shield airbags)

- The SRS side and curtain shield airbags will deploy in the event of an impact that exceeds the set threshold level (the level of force corresponding to the impact force produced by an approximately 3300 lb. [1500 kg] vehicle colliding with the vehicle cabin from a direction perpendicular to the vehicle orientation at an approximate speed of 12 - 18 mph [20 - 30 km/h]).
- The SRS curtain shield airbags will deploy in the event of vehicle rollover.
- The SRS side and curtain shield airbags may also deploy in the event of a severe frontal collision.

■ Conditions under which the SRS airbags may deploy (inflate), other than a collision

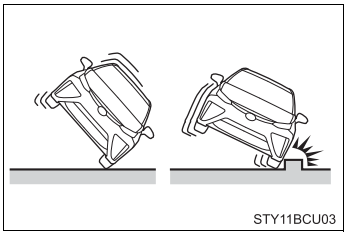
The SRS front airbags and SRS side and curtain shield airbags may also deploy if a serious impact occurs to the underside of your vehicle. Some examples are shown in the illustration.

- Hitting a curb, edge of pavement or hard surface
- Falling into or jumping over a deep hole
- Landing hard or falling



The SRS curtain shield airbags may also deploy under the situations shown in the illustration.

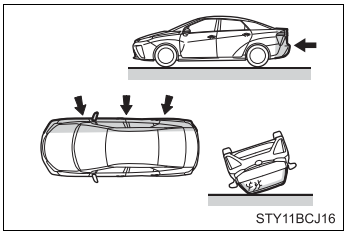
- The angle of vehicle tip-up is marginal.
- The vehicle skids and hits a curb stone.



Types of collisions that may not deploy the SRS airbags (SRS front airbags)

The SRS front airbags do not generally inflate if the vehicle is involved in a side or rear collision, if it rolls over, or if it is involved in a low-speed frontal collision. But, whenever a collision of any type causes sufficient forward deceleration of the vehicle, deployment of the SRS front airbags may occur.

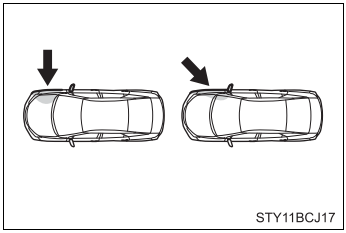
- Collision from the side
- Collision from the rear
- Vehicle rollover



Types of collisions that may not deploy the SRS airbags (SRS side and curtain shield airbags)

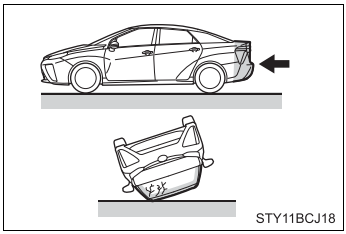
The SRS side and curtain shield airbags may not activate if the vehicle is subjected to a collision from the side at certain angles, or a collision to the side of the vehicle body other than the passenger compartment.

- Collision from the side to the vehicle body other than the passenger compartment
- Collision from the side at an angle



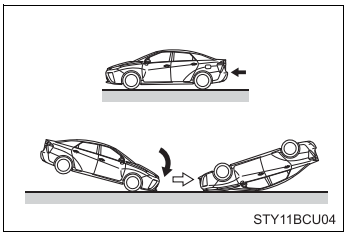
The SRS side airbags do not generally inflate if the vehicle is involved in a rear collision, if it rolls over, or if it is involved in a low-speed side or low-speed frontal collision.

- Collision from the rear
- Vehicle rollover



The SRS curtain shield airbags do not generally inflate if the vehicle is involved in a rear collision, if it pitches end over end, or if it is involved in a low-speed side or low-speed frontal collision.

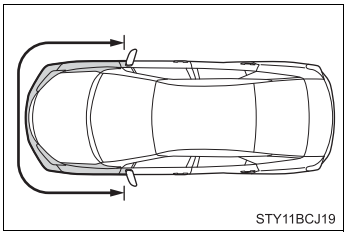
- Collision from the rear
- Pitching end over end



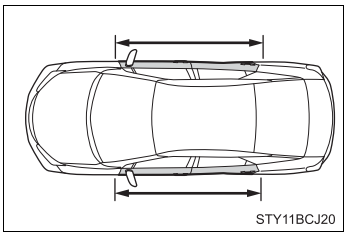
When to contact your Toyota dealer

In the following cases, the vehicle will require inspection and/or repair. Contact your Toyota dealer as soon as possible.

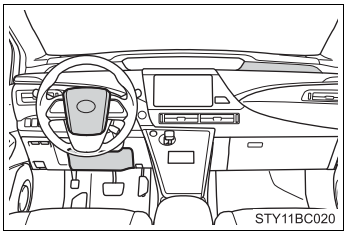
- Any of the SRS airbags have been inflated.
- The front of the vehicle is damaged or deformed, or was involved in an accident that was not severe enough to cause the SRS front airbags to inflate.



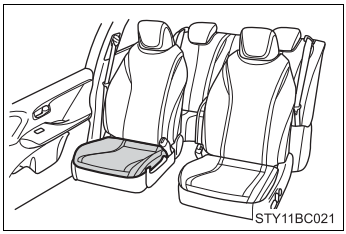
- A portion of a door or its surrounding area is damaged or deformed, or the vehicle was involved in an accident that was not severe enough to cause the SRS side and curtain shield airbags to inflate.



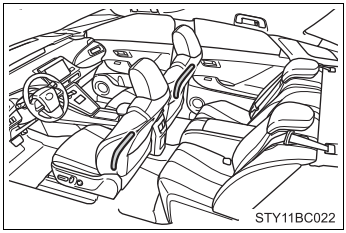
- The pad section of the steering wheel, dashboard near the front passenger airbag or lower portion of the instrument panel is scratched, cracked, or otherwise damaged.



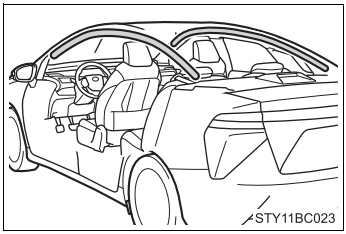
- The front passenger's seat cushion surface is scratched, cracked, or otherwise damaged.



- The surface of the seats with the side airbag is scratched, cracked, or otherwise damaged.

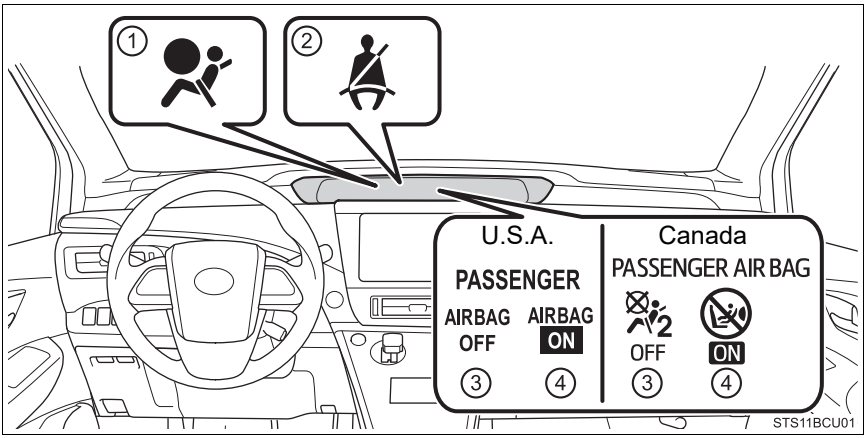


- The portion of the front pillars, rear pillars or roof side rail garnishes (padding), containing the curtain shield airbags inside, is scratched, cracked, or otherwise damaged.



Front passenger occupant classification system

Your vehicle is equipped with a front passenger occupant classification system. This system detects the conditions of the front passenger seat and activates or deactivates the devices for the front passenger.



① SRS warning light

② Seat belt reminder light

③ “AIR BAG OFF” indicator light

④ “AIR BAG ON” indicator light

Conditions and operations in the front passenger occupant classification system

■ Adult*1

Indicator/ warning light	“AIR BAG ON” and “AIR BAG OFF” indicator lights	“AIR BAG ON”
	SRS warning light	Off
	Seat belt reminder light	Off*2 or flashing*3
Devices	Front passenger airbag	Activated
	Side airbag on the front passenger seat	
	Curtain shield airbag in the front passenger side	
	Front passenger seat cushion airbag	Activated*2 or deactivated*3
	Front passenger’s seat belt pretensioner and force limiter	Activated

■ Child*4

Indicator/ warning light	“AIR BAG ON” and “AIR BAG OFF” indicator lights	“AIR BAG OFF” or “AIR BAG ON”*4
	SRS warning light	Off
	Seat belt reminder light	Off*2 or flashing*3
Devices	Front passenger airbag	Deactivated or activated*4
	Side airbag on the front passenger seat	Activated
	Curtain shield airbag in the front passenger side	
	Front passenger seat cushion airbag	Deactivated or activated*2, 4
	Front passenger’s seat belt pretensioner and force limiter	Activated

■ Child restraint system with infant*5

Indicator/ warning light	“AIR BAG ON” and “AIR BAG OFF” indicator lights	“AIR BAG OFF”*6
	SRS warning light	Off
	Seat belt reminder light	Off*2 or flashing*3
Devices	Front passenger airbag	Deactivated
	Side airbag on the front passenger seat	Activated
	Curtain shield airbag in the front passenger side	
	Front passenger seat cushion airbag	Deactivated
	Front passenger’s seat belt pretensioner and force limiter	Activated

■ Unoccupied

Indicator/ warning light	“AIR BAG ON” and “AIR BAG OFF” indicator lights	“AIR BAG OFF”
	SRS warning light	Off
	Seat belt reminder light	
Devices	Front passenger airbag	Deactivated
	Side airbag on the front passenger seat	Activated
	Curtain shield airbag in the front passenger side	
	Front passenger seat cushion airbag	Deactivated
	Front passenger’s seat belt pretensioner and force limiter	Activated

■ There is a malfunction in the system

Indicator/ warning light	“AIR BAG ON” and “AIR BAG OFF” indicator lights	“AIR BAG OFF”
	SRS warning light	On
	Seat belt reminder light	Off
Devices	Front passenger airbag	Deactivated
	Side airbag on the front passenger seats	Activated
	Curtain shield airbag in the front passenger side	
	Front passenger seat cushion airbag	Deactivated
	Front passenger’s seat belt pretensioner and force limiter	Activated

*1: The system judges a person of adult size as an adult. When a smaller adult sits in the front passenger seat, the system may not recognize him/her as an adult depending on his/her physique and posture.

*2: In the event the front passenger is wearing a seat belt.

*3: In the event the front passenger does not wear a seat belt.

*4: For some children, child in seat, child in booster seat or child in convertible seat, the system may not recognize him/her as a child. Factors which may affect this can be the physique or posture.

*5: Never install a rear-facing child restraint system on the front passenger seat. A forward-facing child restraint system should only be installed on the front passenger seat when it is unavoidable. (→P. 59)

*6: In case the indicator light is not illuminated, consult this manual on how to install the child restraint system properly. (→P. 58)

WARNING

■ Front passenger occupant classification system precautions

Observe the following precautions regarding the front passenger occupant classification system.
Failure to do so may cause death or serious injury.

- Wear the seat belt properly.
- Make sure the front passenger's seat belt plate has not been left inserted into the buckle before someone sits in the front passenger seat.
- Make sure the "AIR BAG OFF" indicator light is not illuminated when using the seat belt extender for the front passenger seat. If the "AIR BAG OFF" indicator light is illuminated, disconnect the extender tongue from the seat belt buckle, and reconnect the seat belt. Reconnect the seat belt extender after making sure the "AIR BAG ON" indicator light is illuminated. If you use the seat belt extender while the "AIR BAG OFF" indicator light is illuminated, the SRS airbags for the front passenger will not activate, which could cause death or serious injury in the event of a collision.
- Do not apply a heavy load to the front passenger seat or equipment (e.g. seatback pocket).
- Do not put weight on the front passenger seat by putting your hands or feet on the front passenger seat seatback from the rear passenger seat.
- Do not let a rear passenger lift the front passenger seat with their feet or press on the seatback with their legs.
- Do not put objects under the front passenger seat.

WARNING

Front passenger occupant classification system precautions

- Do not recline the front passenger seatback so far that it touches a rear seat. This may cause the “AIR BAG OFF” indicator light to be illuminated, which indicates that the SRS airbags for the front passenger will not activate in the event of a severe accident. If the seatback touches the rear seat, return the seatback to a position where it does not touch the rear seat. Keep the front passenger seatback as upright as possible when the vehicle is moving. Reclining the seatback excessively may lessen the effectiveness of the seat belt system.
- If an adult sits in the front passenger seat, the “AIR BAG ON” indicator light is illuminated. If the “AIR BAG OFF” indicator is illuminated, ask the passenger to sit up straight, well back in the seat, feet on the floor, and with the seat belt worn correctly. If the “AIR BAG OFF” indicator still remains illuminated, either ask the passenger to move to the rear seat, or if that is not possible, move the front passenger seat fully rearward.
- When it is unavoidable to install a forward-facing child restraint system on the front passenger seat, install the child restraint system on the front passenger seat in the proper order. (→P. 59)
- Do not modify or remove the front seats.
- Do not kick the front passenger seat or subject it to severe impact. Otherwise, the SRS warning light may come on to indicate a malfunction of the front passenger occupant classification system. In this case, contact your Toyota dealer immediately.
- Child restraint systems installed on the rear seat should not contact the front seatbacks.
- Do not use a seat accessory, such as a cushion and seat cover, that covers the seat cushion surface.
- Do not modify or replace the upholstery of the front seat.

Safety information for children

Observe the following precautions when children are in the vehicle.
Use a child restraint system appropriate for the child, until the child becomes large enough to properly wear the vehicle's seat belt.

- It is recommended that children sit in the rear seats to avoid accidental contact with the shift lever, wiper switch, etc.
- Use the rear door child-protector lock or the window lock switch to avoid children opening the door while driving or operating the power window accidentally. (→P. 135, 167)
- Do not let small children operate equipment which may catch or pinch body parts, such as the power window, hood, trunk, seats, etc.

WARNING

Never leave children unattended in the vehicle, and never allow children to have or use the key.

Children may be able to start the vehicle or shift the vehicle into neutral. There is also a danger that children may injure themselves by playing with the windows or other features of the vehicle. In addition, heat build-up or extremely cold temperatures inside the vehicle can be fatal to children.

Child restraint systems

Before installing a child restraint system in the vehicle, there are precautions that need to be observed, different types of child restraint systems, as well as installation methods, etc., written in this manual.

Use a child restraint system when riding with a small child that cannot properly use a seat belt. For the child's safety, install the child restraint system to a rear seat. Be sure to follow the installation method that is in the operation manual enclosed with the restraint system.

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Fixed with a seat belt ..... P. 62
Fixed with a child restraint LATCH anchors ..... P. 67
Using an anchor bracket (for top tether strap) ..... P. 69

Points to remember

The laws of all 50 states of the U.S.A. as well as Canada now require the use of child restraint systems.

- Prioritize and observe the warnings, as well as the laws and regulations for child restraint systems.
- Choose a child restraint system that suits your vehicle and is appropriate to the age and size of the child.
- Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belt.

WARNING

■ **When a child is riding**

Observe the following precautions.
Failure to do so may result in death or serious injury.

- For effective protection in automobile accidents and sudden stops, a child must be properly restrained, using a seat belt or child restraint system depending on the age and size of the child.
- Toyota strongly urges the use of a proper child restraint system that conforms to the size of the child, installed on the rear seat. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.
- Holding a child in your or someone else's arms is not a substitute for a child restraint system. In an accident, the child can be crushed against the windshield or between the holder and the interior of the vehicle.
- Place one child to a child restraint system and then secure the child with the harness of the child restraint system.

■ **Handling the child restraint system**

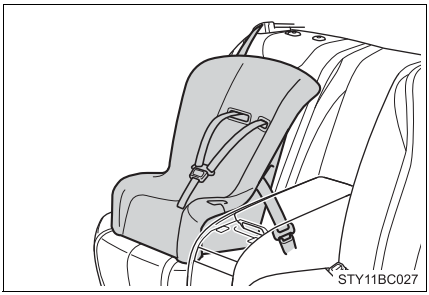
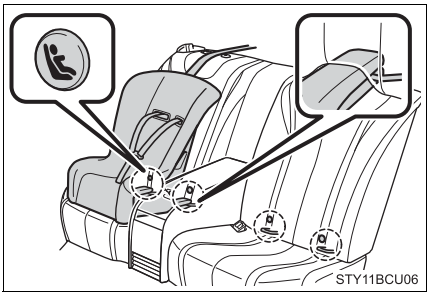
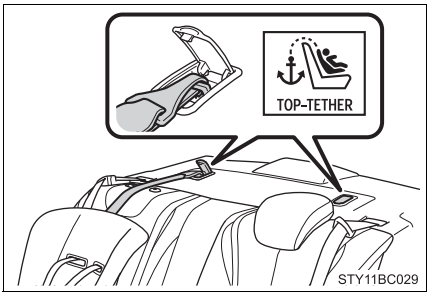
If the child restraint system is not properly fixed in place, the child or other passengers may be seriously injured or even killed in the event of sudden braking, sudden swerving, or an accident.

- If the vehicle were to receive a strong impact from an accident, etc., it is possible that the child restraint system has damage that is not readily visible. In such cases, do not reuse the restraint system.
- Make sure you have complied with all installation instructions provided with the child restraint system manufacturer and that the system is properly secured.
- Keep the child restraint system properly secured on the seat even if it is not in use. Do not store the child restraint system unsecured in the passenger compartment.
- If it is necessary to detach the child restraint system, remove it from the vehicle or store it securely in the trunk.

Child restraint system

■ Types of child restraint system installation methods

Confirm with the operation manual enclosed with the child restraint system about the installation of the child restraint system.

Installation method		Page
Seat belt attachment		P. 62
Child restraint LATCH anchors attachment		P. 67
Anchor brackets (for top tether strap) attachment		P. 69

When using a child restraint system on a passenger seat

■ When installing a child restraint system to a passenger seat

For the safety of a child, install child restraint systems to a rear seats.

When installing child restraint system to a front passenger seat is unavoidable, adjust the passenger seat as follows and install the child restraint system.

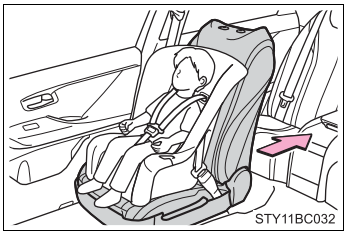
- Raise the seatback to the most upright position
- Move the seat to the rear-most position
- Raise the seat to the upper most position
- Lower the seat belt height to the lowest position
- If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint

WARNING

When installing a child restraint system

Observe the following when installing child restraint system to the front passenger seat if it is unavoidable. The front passenger SRS airbag inflates with considerable speed and force that if not observed may lead to death or serious injury to the child.

- Never install a rear-facing child restraint system on the front passenger seat even if the “AIR BAG OFF” indicator light is illuminated. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear-facing child restraint system is installed on the front passenger seat.
- A forward-facing child restraint system may be installed on the front passenger seat only when it is unavoidable. A child restraint system that requires a top tether strap should not be used in the front passenger seat since there is no top tether strap anchor for the front passenger seat.
- A forward-facing child restraint system may be installed on the front passenger seat only when it is unavoidable. When installing a forward-facing child restraint system on the front passenger seat, move the seat as far back as possible, and raise the seat to the upper most position, even if the “AIR BAG OFF” indicator light is illuminated.



  If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint.
- Do not allow the child to lean his/her head or any part of his/her body against the door or the area of the seat, front pillars or roof side rails from which the SRS side airbags or SRS curtain shield airbags deploy even if the child is seated in the child restraint system. It is dangerous if the SRS side and curtain shield airbags inflate, and the impact could cause death or serious injury to the child.
- When a booster seat is installed, always ensure that the shoulder belt is positioned across the center of the child’s shoulder. The belt should be kept away from the child’s neck, but not so that it could fall off the child’s shoulder.

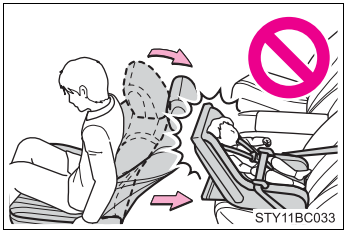
When using a child restraint system on a rear seat

WARNING

■When installing a child restraint system

Observe the following precautions.
Failure to do so may result in death or serious injury.

- Use child restraint system suitable to the age and size of the child and install it to the rear seat.
- If the driver's seat interferes with the child restraint system and prevents it from being attached correctly, attach the child restraint system to the right-hand rear seat.
- Adjust the front passenger seat so that it does not interfere with the child restraint system.



- Do not allow the child to lean his/her head or any part of his/her body against the door or the area of the seat, rear pillars or roof side rails from which the SRS curtain shield airbag deploys even if the child is seated in the child restraint system. It is dangerous if the SRS curtain shield airbag inflates, and the impact could cause death or serious injury to the child.

Child restraint system fixed with a seat belt

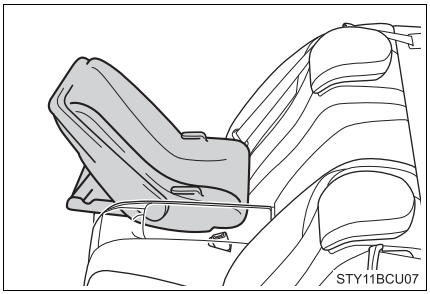
A child restraint system for a small child or baby must itself be properly restrained on the seat with the lap portion of the lap/shoulder belt.

◆ Installing child restraint system using a seat belt (child restraint lock function belt)

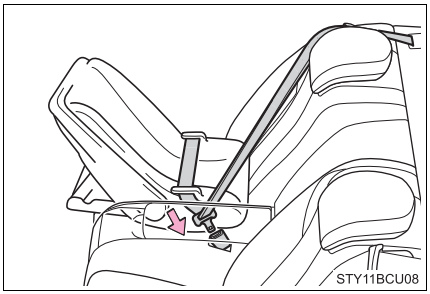
Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

■ Rear-facing — Infant seat/convertible seat

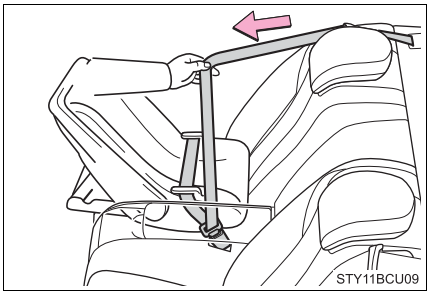
1 Place the child restraint system on the rear seat facing the rear of the vehicle.



2 Run the seat belt through the child restraint system and insert the plate into the buckle. Make sure that the belt is not twisted.

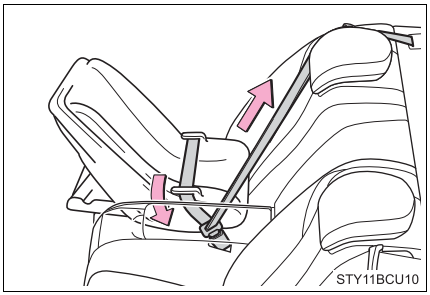


3 Fully extend the shoulder belt and allow it to retract to put it in lock mode. In lock mode, the belt cannot be extended.



4 While pushing the child restraint system down into the rear seat, allow the shoulder belt to retract until the child restraint system is securely in place.

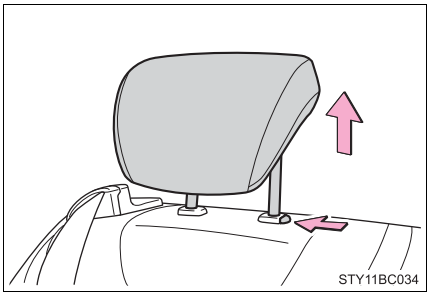
After the shoulder belt has retracted to a point where there is no slack in the belt, pull the belt to check that it cannot be extended.



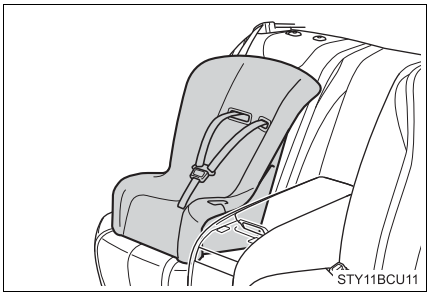
5 After installing the child restraint system, rock it back and forth to ensure that it is installed securely.

■ Forward-facing — Convertible seat

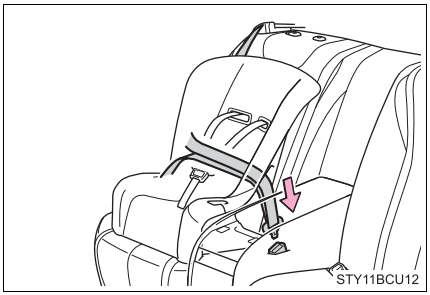
1 If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint. (→P. 158)



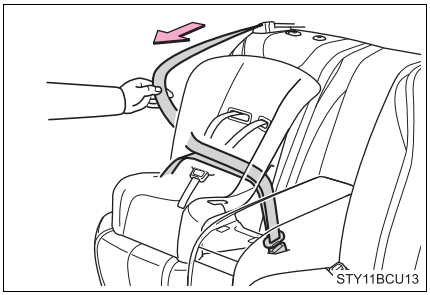
2 Place the child restraint system on the seat facing the front of the vehicle.



3 Run the seat belt through the child restraint system and insert the plate into the buckle. Make sure that the belt is not twisted.

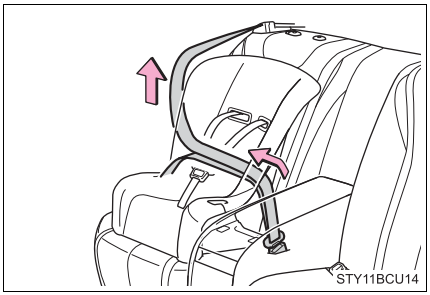


4 Fully extend the shoulder belt and allow it to retract to put it in lock mode. In lock mode, the belt cannot be extended.



5 While pushing the child restraint system into the rear seat, allow the shoulder belt to retract until the child restraint system is securely in place.

After the shoulder belt has retracted to a point where there is no slack in the belt, pull the belt to check that it cannot be extended.

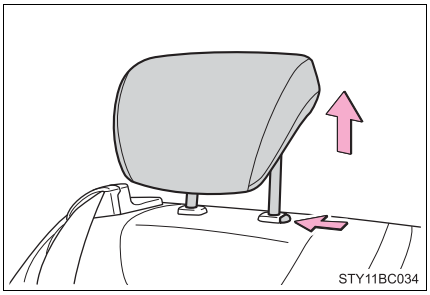


6 If the child restraint has a top tether strap, follow the child restraint manufacturer's operation manual regarding the installation, using the top tether strap to latch onto the top tether strap anchor. (→P. 69)

7 After installing the child restraint system, rock it back and forth to ensure that it is installed securely.

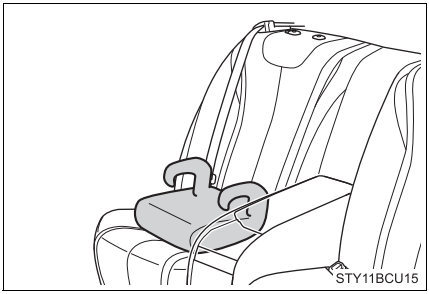
■ Booster seat

1 High back type: If the head restraint interferes with your child restraint system, and the head restraint can be removed, remove the head restraint. (→P. 158)



2 Place the child restraint system on the seat facing the front of the vehicle.

▶ Booster type



▶ High back type

3 Sit the child in the child restraint system. Fit the seat belt to the child restraint system according to the manufacturer's instructions and insert the plate into the buckle. Make sure that the belt is not twisted.

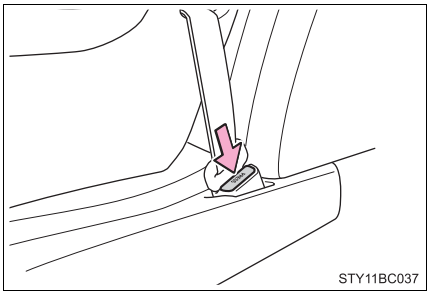
Check that the shoulder belt is correctly positioned over the child's shoulder and that the lap belt is as low as possible. (→P. 31)

◆ Removing a child restraint system installed with a seat belt

Press the buckle release button and fully retract the seat belt.

When releasing the buckle, the child restraint system may spring up due to the rebound of the seat cushion. Release the buckle while holding down the child restraint system.

Since the seat belt automatically reels itself, slowly return it to the stowing position.



WARNING

■When installing a child restraint system

Observe the following precautions.
Failure to do so may result in death or serious injury.

- Do not allow children to play with the seat belt. If the seat belt becomes twisted around a child's neck, it may lead to choking or other serious injuries that could result in death.
  If this occurs and the buckle cannot be unfastened, scissors should be used to cut the belt.
- Ensure that the belt and plate are securely locked and the seat belt is not twisted.
- Shake the child restraint system left and right, and forward and backward to ensure that it has been securely installed.
- After securing a child restraint system, never adjust the seat.
- When a booster seat is installed, always ensure that the shoulder belt is positioned across the center of the child's shoulder. The belt should be kept away from the child's neck, but not so that it could fall off the child's shoulder.
- Follow all installation instructions provided by the child restraint system manufacturer.

■When installing a booster seat

To prevent the belt from going into ALR lock mode, do not fully extend the shoulder belt. ALR mode causes the belt to tighten only. This could cause injury or discomfort to the child. (→P. 32)

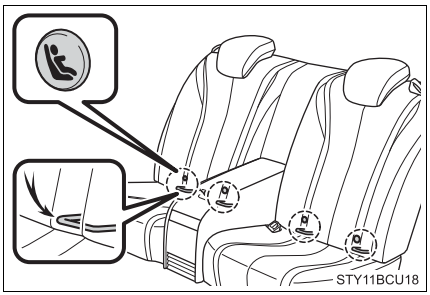
■Do not use a seat belt extender

If a seat belt extender is used when installing a child restraint system, the seat belt will not securely hold the child restraint system, which could cause death or serious injury to the child or other passengers in the event of sudden braking, sudden swerving or an accident.

Child restraint system fixed with a child restraint LATCH anchors

■ Child restraint LATCH anchors

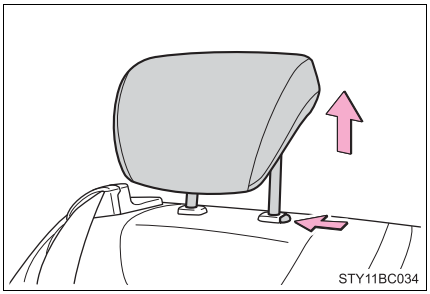
LATCH anchors are provided for each rear seats. (Buttons displaying the location of the anchors are attached to the seats.)



■ Installation with LATCH system

Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

1 If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint. (→P. 158)



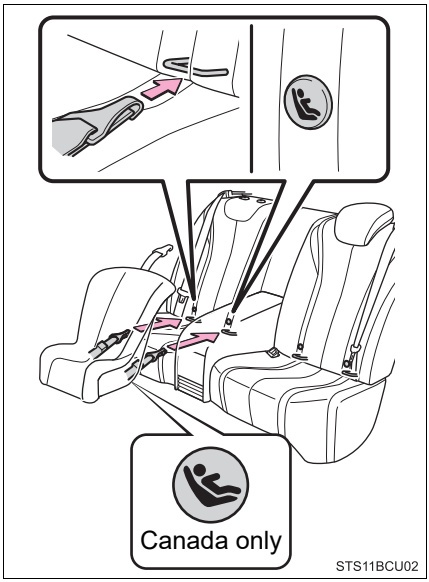
2 Widen the gap between the seat cushion and seatback slightly.

▶ Type A

3 Latch the hooks of the lower straps onto the LATCH anchors.

For owners in Canada:

The symbol on a child restraint system indicates the presence of a lower connector system.

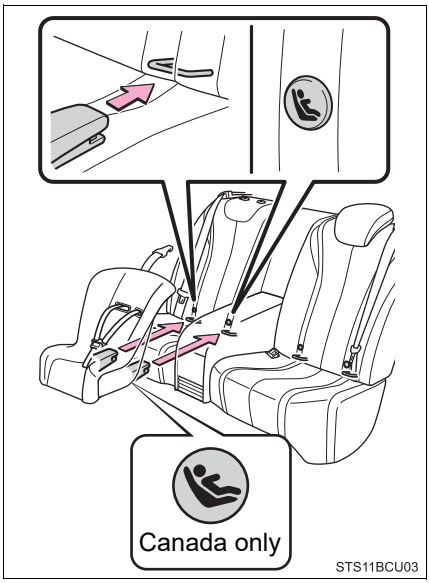


▶ Type B

3 Latch the buckles onto the LATCH anchors.

For owners in Canada:

The symbol on a child restraint system indicates the presence of a lower connector system.



4 If the child restraint has a top tether strap, follow the child restraint manufacturer's operation manual regarding the installation, using the top tether strap to latch onto the top tether strap anchor. (→P. 69)

5 After installing the child restraint system, rock it back and forth to ensure that it is installed securely.

Laws and regulations pertaining to anchors

The LATCH system conforms to FMVSS225 or CMVSS210.2.
Child restraint systems conforming to FMVSS213 or CMVSS213 specifications can be used.
This vehicle is designed to conform to SAE J1819.

WARNING

When installing a child restraint system

Observe the following precautions.
Failure to do so may result in death or serious injury.

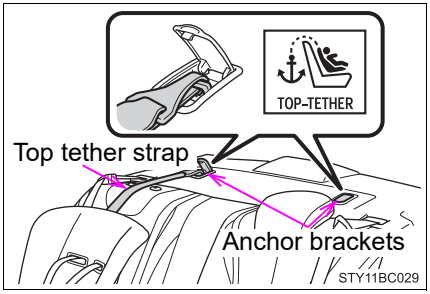
- Shake the child restraint system left and right, and forward and backward to ensure that it has been securely installed.
- When using the LATCH anchors, be sure that there are no foreign objects around the anchors and that the seat belt is not caught behind the child restraint system.
- Follow all installation instructions provided by the child restraint system manufacturer.

Using an anchor bracket (for top tether strap)

Anchor brackets (for top tether strap)

Anchor brackets are provided for each rear seat.

Use anchor brackets when fixing the top tether strap.

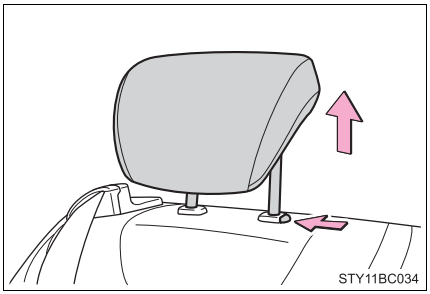


■ Fixing the top tether strap to the anchor bracket

Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

1 Adjust the head restraint to the upmost position.

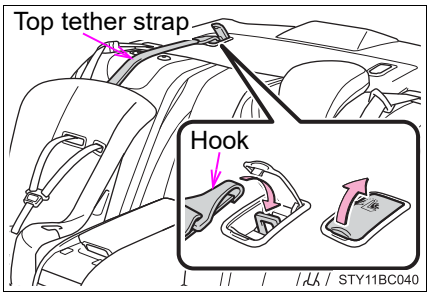
If the head restraint interferes with the child restraint system or top tether strap installation and the head restraint can be removed, remove the head restraint. (→P. 158)



2 Open the anchor bracket cover, latch the hook onto the anchor bracket and tighten the top tether strap.

Make sure the top tether strap is securely latched.

When installing the child restraint system with the head restraint being raised, be sure to have the top tether strap pass underneath the head restraint.



■ Laws and regulations pertaining to anchors

The LATCH system conforms to FMVSS225 or CMVSS210.2.
Child restraint systems conforming to FMVSS213 or CMVSS213 specifications can be used.
This vehicle is designed to conform to SAE J1819.

WARNING

When installing a child restraint system

Observe the following precautions.
Failure to do so may result in death or serious injury.

- Firmly attach the top tether strap and make sure that the belt is not twisted.
- Do not attach the top tether strap to anything other than the anchor bracket.
- Shake the child restraint system left and right, and forward and backward to ensure that it has been securely installed.
- Follow all installation instructions provided by the child restraint system manufacturer.
- When installing the child restraint system with the head restraint being raised, after the head restraint has been raised and then the anchor bracket has been fixed, do not lower the head restraint.

NOTICE

Anchor brackets (for top tether strap)

When not in use, make certain to close the lid. If it remains open, the lid may be damaged.

Safety Connect

Safety Connect is a subscription-based telematics service that uses Global Positioning System (GPS) data and embedded cellular technology to provide safety and security features to subscribers. Safety Connect is supported by Toyota's designated response center, which operates 24 hours per day, 7 days per week.

Safety Connect service is available by subscription on select, telematics hardware-equipped vehicles.

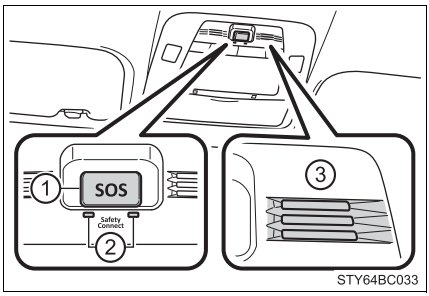
By using the Safety Connect service, you are agreeing to be bound by the Telematics Subscription Service Agreement and its Terms and Conditions, as in effect and amended from time to time, a current copy of which is available at Toyota.com in the United States, Toyotapr.com in Puerto Rico and Toyota.ca in Canada. All use of the Safety Connect service is subject to such then-applicable Terms and Conditions.

■ System components

① "SOS" button

② LED light indicators

③ Microphone



■ Services

Subscribers have the following Safety Connect services available:

● Automatic Collision Notification*
Helps drivers receive necessary response from emergency service providers. (→P. 75)

*: U.S. Patent No. 7,508,298 B2

● Stolen Vehicle Location
Helps drivers in the event of vehicle theft. (→P. 75)

● Emergency Assistance Button (SOS)
Connects drivers to response-center support. (→P. 75)

● Enhanced Roadside Assistance
Provides drivers various on-road assistance. (→P. 76)

■ Subscription

After you have signed the Telematics Subscription Service Agreement and are enrolled, you can begin receiving services.
A variety of subscription terms are available for purchase. Contact your Toyota dealer, call the following appropriate Safety Connect response center or push the “SOS” button in your vehicle for further subscription details.

- The United States
  1-855-405-6500
- Canada
  1-888-869-6828
- Puerto Rico
  1-877-855-8377

■ **Safety Connect Services Information**

- Phone calls using the vehicle's Bluetooth® technology will not be possible during Safety Connect.
- Safety Connect is available beginning Fall 2009 on select Toyota models (in the contiguous United States only). Contact with the Safety Connect response center is dependent upon the telematics device being in operative condition, cellular connection availability, and GPS satellite signal reception, which can limit the ability to reach the response center or receive emergency service support. Enrollment and Telematics Subscription Service Agreement are required. A variety of subscription terms are available; charges vary by subscription term selected and location.
- Automatic Collision Notification, Emergency Assistance and Stolen Vehicle Location are available in the United States, including Hawaii and Alaska, Puerto Rico and Canada, and Enhanced Roadside Assistance are available in the United States, Puerto Rico and Canada.
- Automatic Collision Notification, Emergency Assistance, Stolen Vehicle and Enhanced Road Assistance are not available in the U.S. Virgin Islands.
  For vehicles first sold in the U.S. Virgin Islands, no Safety Connect services will function in or outside the U.S. Virgin Islands.
- Safety Connect services are not subject to section 255 of the Telecommunications Act and the device is not TTY compatible.

■ **Languages**

The Safety Connect response center will offer support in multiple languages. The Safety Connect system will offer voice prompts in English, Spanish, and French. Please indicate your language of choice when enrolling.

■ **When contacting the response center**

You may be unable to contact the response center if the network is busy.

Safety Connect LED light Indicators

When the power switch is turned to ON mode, the red indicator light comes on for 2 seconds then turns off. Afterward, the green indicator light comes on, indicating that the service is active.

The following indicator light patterns indicate specific system usage conditions:

- Green indicator light on = Active service
- Green indicator light flashing = Safety Connect call in process
- Red indicator light (except at vehicle start-up) = System malfunction (contact your Toyota dealer)
- No indicator light (off) = Safety Connect service not active

Safety Connect services

■ Automatic Collision Notification

In case of either airbag deployment or severe rear-end collision, the system is designed to automatically call the response center. The responding agent receives the vehicle's location and attempts to speak with the vehicle occupants to assess the level of emergency. If the occupants are unable to communicate, the agent automatically treats the call as an emergency, contacts the nearest emergency services provider to describe the situation, and requests that assistance be sent to the location.

■ Stolen Vehicle Location

If your vehicle is stolen, Safety Connect can work with local authorities to assist them in locating and recovering the vehicle. After filing a police report, call the Safety Connect response center at 1-855-405-6500 in the United States, 1-877-855-8377 in Puerto Rico or 1-888-869-6828 in Canada, and follow the prompts for Safety Connect to initiate this service.
In addition to assisting law enforcement with recovery of a stolen vehicle, Safety-Connect-equipped vehicle location data may, under certain circumstances, be shared with third parties to locate your vehicle. Further information is available at Toyota.com in the United States, Toyotapr.com in Puerto Rico and Toyota.ca in Canada.

■ Emergency Assistance Button ("SOS")

In the event of an emergency on the road, push the "SOS" button to reach the Safety Connect response center. The answering agent will determine your vehicle's location, assess the emergency, and dispatch the necessary assistance required.

If you accidentally press the "SOS" button, tell the response-center agent that you are not experiencing an emergency.

Enhanced Roadside Assistance

Enhanced Roadside Assistance adds GPS data to the already included warranty-based Toyota roadside service.

Subscribers can press the “SOS” button to reach a Safety Connect response-center agent, who can help with a wide range of needs, such as: towing, flat tire, fuel delivery, etc. For a description of the Enhanced Roadside Assistance services and their limitations, please see the Safety Connect Terms and Conditions, which are available at Toyota.com in the United States, Toyotapr.com in Puerto Rico and Toyota.ca in Canada.

Safety information for Safety Connect

Important! Read this information before using Safety Connect.

Exposure to radio frequency signals

The Safety Connect system installed in your vehicle is a low-power radio transmitter and receiver. It receives and also sends out radio frequency (RF) signals.

In August 1996, the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for mobile wireless phones. Those guidelines are consistent with the safety standards previously set by the following U.S. and international standards bodies.

- ANSI (American National Standards Institute) C95.1 [1992]
- NCRP (National Council on Radiation Protection and Measurement) Report 86 [1986]
- ICNIRP (International Commission on Non-Ionizing Radiation Protection) [1996]

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. Over 120 scientists, engineers, and physicians from universities, and government health agencies and industries reviewed the available body of research to develop the ANSI Standard (C95.1).

The design of Safety Connect complies with the FCC guidelines in addition to those standards.

Certification for Safety Connect

FCC ID: JOYJ79
IC: 574B-J79

FCC/IC WARNING:
Changes or modifications not expressly approved by the manufacture could void the user's authority to operate the equipment.
This device complies with Part 15 of the FCC Rules and Industry Canada license-exempt RSS standards. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.
This equipment complies with IC RSS-102 radiation exposure limits set forth for uncontrolled environment.
The antennas used for this transmitter must be installed to provide a separation distance of least 20cm from all persons.

FCC/IC AVERTISSEMENT:
L'utilisateur est averti que les changements ou modifications non express ément approuvés par le fabricant pourraient annuler l'autorité de l'utilisateur à utiliser l'équipement.
Ce appareil est compatible avec la Partie 15 du règlement FCC et de la Licence de l'industrie canadienne et des normes exemptes de RSS. Opé ration soumise aux deux conditions suivantes :
(1) ce appareil ne doit pas causer des interférences nuisibles, et
(2) cet appareil doit accepté toutes les interférences, y compris les interférences qui peuvent entraîner un fonctionnement indésirable de l'appareil.
Cet appareil est compatible aux limites d'exposition aux radiation IC RSS-102 définies pour un environnement non contrôlé.
Les antennes utilisées pour cet émetteur doivent être installées à une distance d'au moins 20 cm de toutes les personnes.

Immobilizer system

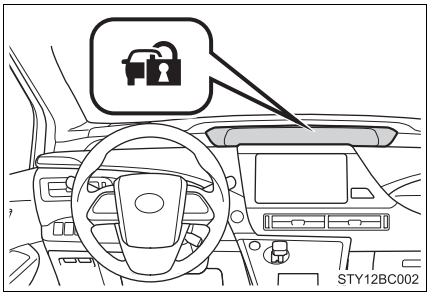
The vehicle's keys have built-in transponder chips that prevent the fuel cell system from starting if a key has not been previously registered in the vehicle's on-board computer.

Never leave the keys inside the vehicle when you leave the vehicle.

This system is designed to help prevent vehicle theft but does not guarantee absolute security against all vehicle thefts.

The indicator flashes after the power switch has been turned off to indicate that the system is operating.

The indicator stops flashing after the power switch has been turned to ACCESSORY or ON mode to indicate that the system has been canceled.



■ **System maintenance**

The vehicle has a maintenance-free type immobilizer system.

■ **Conditions that may cause the system to malfunction**

- If the grip portion of the key is in contact with a metallic object
- If the key is in close proximity to or touching a key registered to the security system (key with a built-in transponder chip) of another vehicle

■ **Certification for the immobilizer system**

▶ For U.S.A.

FCC ID:NI4TMIMB-3

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID:NI4TMLF12-6

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

▶ For Canada

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : 1) l'appareil ne doit pas produire de brouillage; 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : 1) l'appareil ne doit pas produire de brouillage; 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

WARNING

■ Certifications for the immobilizer system

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTICE

■ To ensure the system operates correctly

Do not modify or remove the system. If modified or removed, the proper operation of the system cannot be guaranteed.

Alarm

The alarm

The alarm uses light and sound to give an alert when an intrusion is detected.

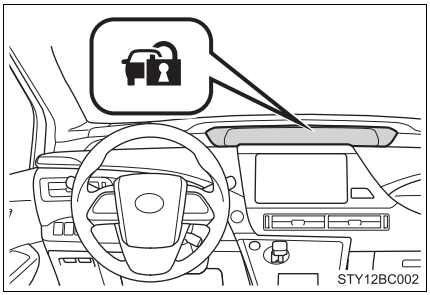
The alarm is triggered in the following situations when the alarm is set:

- A locked door or trunk is unlocked or opened in any way other than using the entry function, wireless remote control or mechanical key. (The doors will lock again automatically.)
- The hood is opened.

Setting the alarm system

Close the doors, trunk and hood, and lock all the doors. The system will be set automatically after 30 seconds.

The indicator changes from being on to flashing when the system is set.



Deactivating or stopping the alarm

Do one of the following to deactivate or stop the alarm:

- Unlock the doors or open the trunk.
- Turn the power switch to ACCESSORY or ON mode, or start the fuel cell system. (The alarm will be deactivated or stopped after a few seconds.)

System maintenance

The vehicle has a maintenance-free type alarm system.

Items to check before locking the vehicle

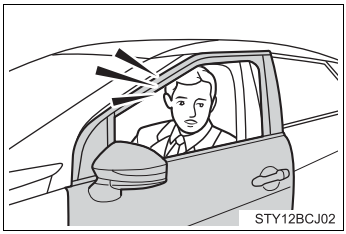
To prevent unexpected triggering of the alarm and vehicle theft, make sure of the following:

- Nobody is in the vehicle.
- The windows are closed before the alarm is set.
- No valuables or other personal items are left in the vehicle.

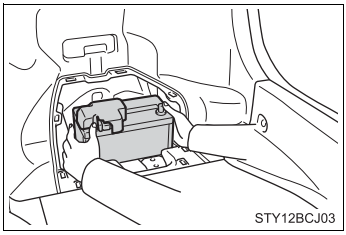
Triggering of the alarm

The alarm may be triggered in the following situations:
(Stopping the alarm deactivates the alarm system.)

- A person inside the vehicle opens a door, the trunk or hood, or unlocks the vehicle using an inside lock button.



- The 12-volt battery is recharged or replaced when the vehicle is locked. (→P. 454)



Alarm-operated door lock

In the following cases, depending on the situation, the door may automatically lock to prevent improper entry into the vehicle:

- When a person remaining in the vehicle unlocks the door and the alarm is activated.
- While the alarm is activated, a person remaining in the vehicle unlocks the door.
- When recharging or replacing the 12-volt battery

NOTICE

To ensure the system operates correctly

Do not modify or remove the system. If modified or removed, the proper operation of the system cannot be guaranteed.

Theft prevention labels

These labels are attached to the vehicle to reduce vehicle theft by facilitating the tracing and recovery of parts from stolen vehicles. Do not remove under penalty of law

STS16ANU01

Fuel cell system

2

2. Fuel cell vehicle

Fuel cell vehicle characteristics 86

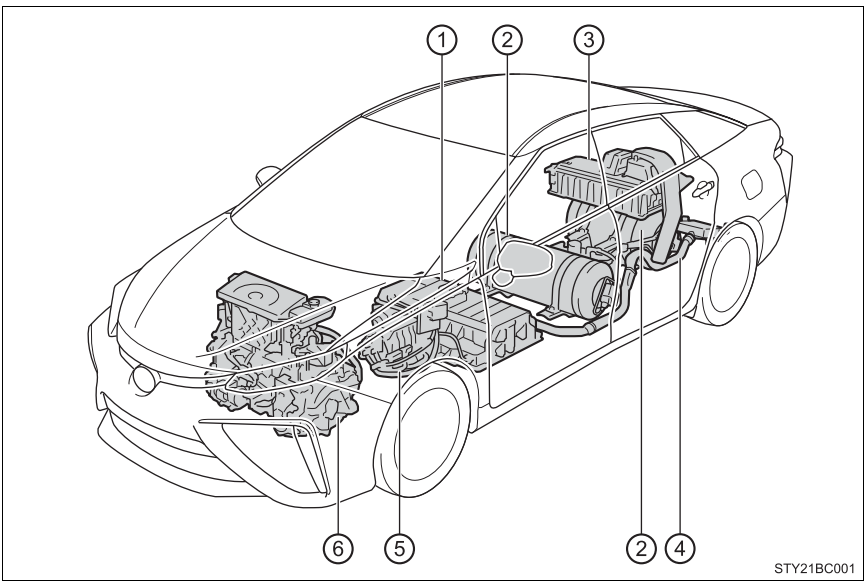
Fuel cell vehicle precautions 90

Advice for driving fuel cell vehicles 102

Fuel cell vehicle characteristics

Fuel cell vehicles efficiently use electricity, which is generated by a chemical reaction between hydrogen and oxygen in a fuel cell stack, and electricity charged in a traction battery to drive the electric motor (traction motor).
The fuel is H_2 (compressed hydrogen gas), so the exhaust is only water and water vapor. As they do not release emissions such as CO_2 (Carbon Dioxide) and NOx (Nitrogen Oxides), fuel cell vehicles are environmentally friendly vehicles.

Fuel cell vehicle components



This diagram is for illustrative purposes only and may differ from the actual vehicle.

1. Fuel cell stack
2. Hydrogen tanks
3. Traction battery
4. Tailpipe
5. Fuel cell converter
6. Electric motor (traction motor)

Driving the vehicle

The electric motor (traction motor) allows smooth, powerful takeoff and acceleration. This vehicle drives similarly to a gasoline vehicle without any special actions by the driver. (→P. 172) As there are no engine sounds and the vehicle is quiet, operation noises unique to fuel cell vehicle components may be heard. (→P. 88)

Fuel cell system

The system may behave differently on cold days. It is performing a special cold-start process to improve start-up performance. (→P. 189) Operation noises (→P. 88), purge process (→P. 189), etc., differ from usual. However, this is not a malfunction.

Fuel filling

Compressed hydrogen gas fuel can be filled at hydrogen stations.

Opening the fuel door (→P. 213)

Sounds unique to the fuel cell vehicle

Due to the design of your fuel cell vehicle, there are various relays, valves and pumps which under normal driving conditions will produce sounds. This is a normal characteristic of the vehicle and does not indicate a malfunction.

Furthermore, way of hearing may differ based on usage environment or condition.

Noticeable sounds	Source of the sounds
Clunking, clicking and clacking	Operation of relays and hydrogen tank valves Sounds may come from under the floor or behind the rear seats. (Sounds may be heard when starting the fuel cell system.)
Knocking	The parking lock is engaged Sounds may come from the motor compartment. (Sounds may be heard when press the P position switch or stopping the fuel cell system.)
Whooshing, squealing	Gas is flowing through the nozzle and valves Sounds may come from behind the rear seats, or from the dispenser hose/nozzle. (Sounds may be heard when filling the fuel.)
• High pitch sound • Gurgle sound • Pulsing sound	Operation of the pumps Sounds may come from the motor compartment or under the front seats. (In particular, sounds may be heard when starting the fuel cell system, accelerating from a stop, or press the H_2O switch. The sound may be louder when in Br mode or when the vehicle decelerates during dynamic radar cruise control.)
Humming sound	Operation of the pumps are speeding up Sounds may come from the motor compartment or under the front seats. (In particular, sounds may be heard when accelerating or decelerating.)
Whooshing sound	Operation of the hydrogen injector Sounds may come from under the front seats or behind the rear seats. (In particular, sounds may be heard when starting the fuel cell system, driving at low speeds, or charging the traction battery.)

Noticeable sounds	Source of the sounds
• Humming sound • High pitch sound	Operation of the motor Sounds may come from the motor compartment. (In particular, sounds may be heard when accelerating or decelerating.)
Blowing and draining sound	Exhaust water or air is being purged Sounds may come from the rear of the vehicle. May also occur periodically while parked when it is cold to prevent freezing. (Sounds may be heard when vehicle is stopped, fuel cell system is stopped, parking.)

■ Regenerative braking

In the following situations, the vehicle generates electricity from the deceleration of the vehicle while driving.

- The accelerator pedal is released while driving with the shift position in D.
- The brake pedal is depressed while driving with the shift position in D.

■ Charging the traction battery

Because electricity generated by the fuel cell stack and regenerative braking charges the traction battery, the battery does not need to be charged from an outside source. However, if the vehicle is left parked for a long time, the traction battery will slowly discharge. For this reason, be sure to drive the vehicle at least once every few months for at least 30 minutes or 10 miles (16 km).
If the traction battery becomes fully discharged and you are unable to start the fuel cell system, contact your Toyota dealer.

■ Charging the 12-volt battery

→P. 454

■ Parking

Because there is no engine sound or vibration, it is easy to mistake the fuel cell vehicle for being off when it is actually still running, as indicated by the “READY” indicator being illuminated. For safety, make sure to always shift the shift position to P and apply the parking brake when parked.

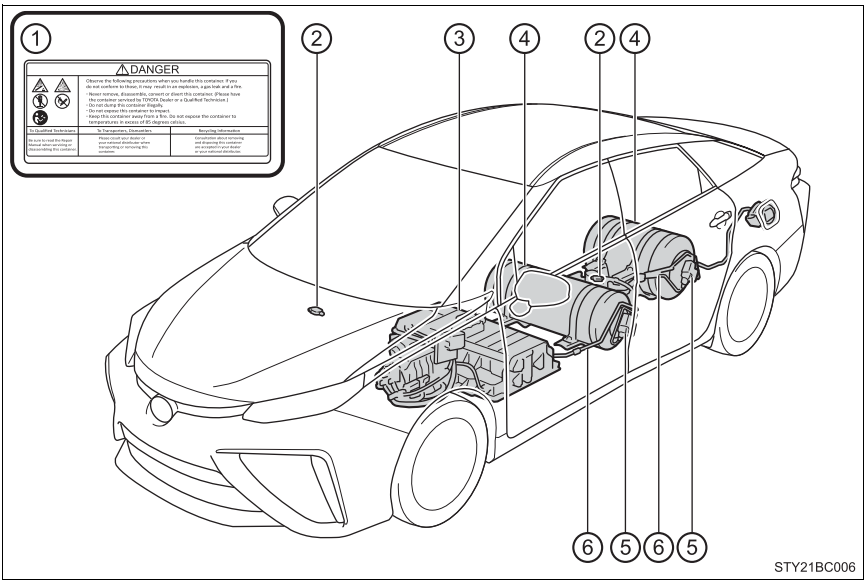
■ Maintenance, repair, recycling, and disposal

Contact your Toyota dealer regarding maintenance, repair, recycling, and disposal. Do not dispose of the vehicle or any of its components yourself.

Fuel cell vehicle precautions

Hydrogen-related components

The fuel cell vehicle has hydrogen tanks (10150 psi [70 MPa, 714 kgf/cm^2, 700 bar]), fuel cell stack, and hydrogen pipelines as hydrogen-related components. Pay attention to all warning labels attached to the vehicle.

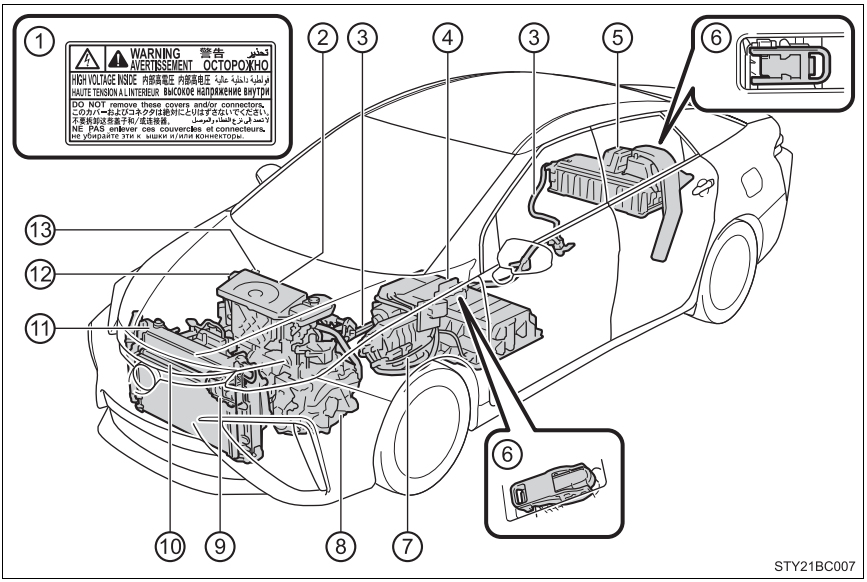


This diagram is for illustrative purposes only and may differ from the actual vehicle.

① Warning label
② Hydrogen detectors
③ Fuel cell stack
④ Hydrogen tanks
⑤ Hydrogen tank valves
⑥ Hydrogen pipelines

High-voltage and high-temperature components

The fuel cell vehicle has high-voltage components (about 650 V maximum) such as a fuel cell stack, traction battery, power control unit, high-voltage cables (which are distinguished from low-voltage cables by their orange covers), electric motor (traction motor), etc., and high-temperature parts such as the radiator for cooling. Pay attention to all warning labels attached to the vehicle.



This diagram is for illustrative purposes only and may differ from the actual vehicle.

1. Warning label
2. Power control unit
3. High-voltage cables (orange)
4. Fuel cell stack
5. Traction battery
6. Service plug
7. Fuel cell converter
8. Electric motor (traction motor)
9. Air conditioning compressor
10. Radiator for inverter cooling
11. Radiator for fuel cell stack cooling
12. Auxiliary inverter
13. Cabin coolant heater

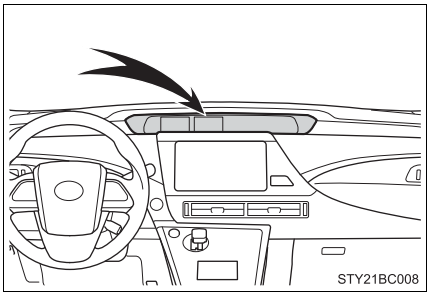
Emergency shut off system

When a certain level of impact from an accident is detected, the fuel cell system is shut down and the system shuts out the high voltage. Also, the fuel supply is stopped from the hydrogen tank valves. If the emergency shut off system activates, your vehicle will not restart. To restart the fuel cell system, contact your Toyota dealer.

Fuel cell warning message

A message is automatically displayed when a malfunction occurs in the fuel cell system or an improper operation is attempted.

If a warning message is shown on the multi-information display, read the message and follow the instructions. (→P. 426)

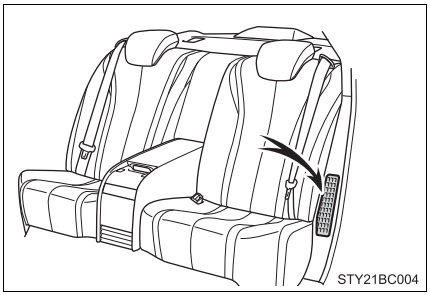


Vehicle proximity notification system

Fuel cell vehicles do not have engine sounds like gasoline vehicles. Therefore, it makes an artificial noise at low speeds to notify pedestrians and nearby vehicles that it is approaching. The sound varies with speed and will stop when the vehicle exceeds approximately 15 mph (25 km/h).

Traction battery air intake vent

There is an air intake vent beside the rear left seat for the purpose of cooling the traction battery. If the air intake vent is blocked, it could lead to a reduction in traction battery output.



■ If a warning light comes on, a warning message is displayed, or the 12-volt battery connection is disconnected

The fuel cell system may not be able to restart.
If the “READY” indicator does not come on, even when the start procedure is repeated, contact your Toyota dealer.

■ If “Hydrogen Leakage Detected Visit Your Dealer” is displayed on the multi-information display

A small amount of hydrogen gas may be leaking. Have the vehicle inspected immediately at the nearest Toyota dealer.

■ If “FC System Shutdown due to Hydrogen Leakage Stop Your Vehicle in a Safe Place and Contact Your Dealer” is displayed on the multi-information display

- Hydrogen gas may be leaking.
  When hydrogen gas is leaking or some other malfunction is detected:
  →P. 98
- The air conditioning system will shut off automatically.

■ Running out of fuel

When the vehicle has run out of fuel and the fuel cell system cannot be started, refuel the vehicle until the low fuel level warning light (→P. 420) turns off before trying to restart. It may not be able to restart if the refueled amount is too low (less than about 2.7 lb. [1.2 kg]).

Fuel cell stack

- Depending on the usage environment, the fuel cell power output may decline over the life of the vehicle. However, this will have almost no effect on driving performance.
- In the following situations, the fuel cell power output may decline faster than normal driving:
  - Extended use in areas with high amounts of dust
  - Extended use in areas with high levels of sulfur (such as volcanoes or hot springs).
  - Extended use in areas with high concentrations of the following substances:
    -Organic solvents, such as paint and thinner
    -Amine-related materials such as ammonia
    -Chlorinated substances such as salt air and snow-melting agent

  However, upon returning to normal environment, the fuel cell power output will recover over time.
  - Salt water gets into the air cleaner filter
    It is recommended to replace the air cleaner filter and clean the surrounding components. Have the vehicle inspected at your Toyota dealer
  - The number of times the fuel cell system is started and stopped is excessively high
  - Extended use in freezing temperatures

Hydrogen tanks

- The hydrogen tanks are the high-pressure storage containers that are filled with compressed hydrogen gas. The vehicle can be refueled at hydrogen stations.
- The hydrogen tanks have an expiration date. Vehicles with expired hydrogen tanks must not be driven or refueled until the hydrogen tanks are replaced. The expiration date is written on the inside of the fuel door. Consult your Toyota dealer.
- When disposing of the hydrogen tanks or the hydrogen tank valves, consult your Toyota dealer for details.

Fuel cell stack coolant

- Fuel cell stack coolant uses a specifically-designed fluid with high electrical insulation properties, in order to safely cool the high-voltage fuel cell stack.
- Never add water or other coolants to the fuel cell stack cooling system, as they will cause permanent damage.
- Consult your Toyota dealer for replenishing or changing the fuel cell stack coolant.

Ion filter

- An ion filter is installed in the coolant lines for the fuel cell stack, in order to maintain the normal insulation properties of the coolant.
- It is necessary to periodically change the ion filter. (→P. 428) Contact your Toyota dealer for this periodic maintenance.

Tailpipe

- When the power switch is turned off and the fuel cell system is stopped (→P. 187) after driving, exhaust water is discharged. Be careful when standing behind the vehicle to avoid dripping or spraying.
- It is possible to manually purge the exhaust. This may be desirable, for instance, before parking in a garage. This is done by pressing the H_2O switch. (→P. 187)
- On cold days, water vapor in the exhaust may appear as a white mist emitted from the tailpipe. This is not a malfunction.
- If the tailpipe is blocked, the fuel cell system will stop.

Hydrogen detectors

When the power switch is turned to ON mode, the hydrogen detectors are activated.

Power output restriction

When the power output is restricted, the vehicle may fail to accelerate or even decelerate, even though the accelerator pedal is depressed. If a safe driving speed cannot be maintained, stop the vehicle in a safe place away from the traffic. This may be caused by the following conditions:

- The coolant temperature may be too high. This can be caused by driving conditions such as repeated sudden acceleration and deceleration, continuous driving on an incline, continuous driving at high altitudes with a high load, etc. In such situations, the power output restriction indicator (amber) is displayed on the main display, “High FC Temperature Reduced Power” is displayed on the multi-information display, and the power output is restricted. Once the coolant returns to normal temperature, the power output will return to normal. (→P. 428)
- The remaining fuel may be low. After the low fuel warning indicator comes on, the output power will be gradually restricted in order to extend the possible driving distance. Once getting to this point, the remaining driving distance possible is short. Immediately refill the vehicle with hydrogen.
- On cold days, the low fuel warning indicator comes on faster than usual and the output power is restricted.

Vehicle proximity notification system

In the following cases, the vehicle proximity notification system may be difficult to hear for people around.

- In very noisy areas
- In wind or rain

Also, because the vehicle proximity notification system is located in the front of the vehicle, it may be more difficult to hear from the rear of the vehicle compared to the front.

Electromagnetic waves (EMF)

- High-voltage parts and cables in fuel cell vehicles have an electromagnetic shielding configuration, and therefore emit approximately the same amount of electromagnetic waves as conventional gasoline-powered vehicles or home electronic appliances.
- Your vehicle may cause sound interference in some third party-produced radio parts.

Traction battery

The traction battery has a limited service life. The lifespan of the traction battery can change according to driving style and driving conditions.

Hydrogen Gas Characteristics

- Hydrogen gas ignites more easily than gasoline. However, it is lighter than air and disperses quickly. So even if hydrogen were to leak from the system, it would quickly dilute until it is no longer flammable.
- As with gasoline and natural gas, hydrogen gas is not dangerous if it is handled properly. Thoroughly read and understand the characteristics shown in the table below.

	Hydrogen gas	LPG (Liquid Petroleum Gas)	Gasoline
Normal state	Gaseous (Lighter than air)	Gaseous (Heavier than air)	Volatile liquid (evaporates easily) (Heavier than air)
Ease of ignition	Easier than gasoline	At the same level as gasoline	—
Ease of accumulation	• Disperses upward and is diluted to safe concentrations in open air • Does not adhere to clothing	• Spreads on the ground or floor • Does not adhere to clothing	• Spreads on the ground or floor • Adheres to clothing
Detectability	• Due to its colorless and odorless state, difficult to detect by sight or smell • Vehicle hydrogen detectors will display a warning on the multi-information display	• Detectable by odor and gas leaking noise	• Detectable by color and odor

Basic concepts of hydrogen safety

- Prevent leakage

  The pipe joints of the hydrogen pipelines are designed to prevent leaks. The joints are checked for gas leakage at every official vehicle inspection.

- Detect to stop leakage
  - The vehicle is equipped with hydrogen detectors. If the hydrogen detectors detect a leak, the hydrogen tank valves automatically close to prevent more hydrogen from escaping.
  - The vehicle is equipped with a collision sensor. If the collision sensor detects a collision, the hydrogen tank valves automatically close to prevent hydrogen gas from leaking from any damaged components.

- Disperse the leaked hydrogen gas

  The hydrogen tanks and pipelines are located outside of the passenger compartment, so any leaked gas will disperse into the atmosphere by design.

- Eliminate sources of fire

  No source of fire is located near the hydrogen pipelines by design.

WARNING

Hydrogen-related components

- Never alter, customize, or disassemble any hydrogen-related parts.
- The hydrogen tanks, fuel cell stack, hydrogen pipelines, and connecting components are filled with hydrogen gas. Do not remove or disassemble these parts. Doing so can cause a hydrogen gas leak, resulting in fire or explosion of the vehicle, which may result in death or serious injury.

When hydrogen gas leak or other malfunction is detected

- If a large amount of hydrogen gas leaking is noticed, turn off the power switch, exit the vehicle, and stay far away from it. Display warning signs and keep sources of fire away from the vehicle. If possible, get assistance. When the above is done, immediately contact your Toyota dealer.
- If you notice gas leaking or any other malfunction, immediately stop the vehicle in a safe and well-ventilated place, exit the vehicle, and stay far away from it.
- If a warning message is shown on the multi-information display, immediately stop the vehicle in a safe, well-ventilated place.

WARNING

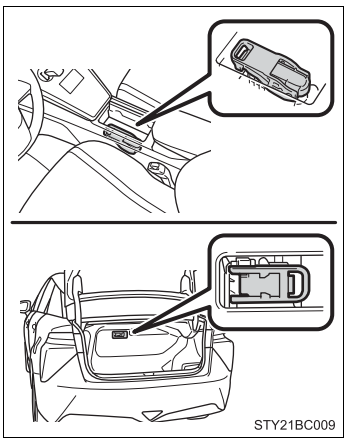
■ **Tailpipe**

- Do not directly touch the water or steam coming out of the tailpipe. Doing so may cause low-temperature burns.
- The fuel cell vehicle generates water during power generation. The generated water discharged from the tailpipe is not suitable for drinking. Never drink the water coming out of the tailpipe.
- You may notice a strange odor from the tailpipe for a while after the purchase of a new vehicle or after an extended period of non-use, but this is not a malfunction. Also, the odor is harmless but it may be unpleasant, so do not breathe in the exhaust.

■ **High-voltage and high-temperature precautions**

This vehicle is equipped with a high-voltage system. Follow the instructions below as high-voltages can cause severe burns and electric shock that may result in death or serious injury.

- Never touch, disassemble, remove, or replace the high-voltage parts, cables (orange), or connectors.
- The components inside the motor compartment will become hot during operation. Be careful of both the high-voltage and high-temperature, and always obey the warning labels on the vehicle.
- Never touch the service plugs that are installed on the fuel cell stack and the traction battery. The service plugs are used to block high-voltages from the fuel cell stack and the traction battery during maintenance or repair at your Toyota dealer.



WARNING

Precautions in case of an accident

In the event of an accident, observe the following precautions. Failure to do so can cause fire or electric shocks, resulting in death or serious injury.

- Stop the vehicle in a safe place to prevent subsequent accidents. Shift the shift position to P and apply the parking brake.
- Check for hydrogen gas leakage.
  Hydrogen leaks will cause a warning message to be shown on the multi-information display. Larger leaks may also be audible.
- If a large amount of hydrogen gas leaking is noticed, turn off the power switch, exit the vehicle, and stay far away from it. Display warning signs and keep sources of fire away from the vehicle. If possible, get assistance. When the above is done, immediately contact your Toyota dealer.
- Do not touch the high-voltage parts, cables (orange), or connectors.
- If electric wires are exposed inside or outside your vehicle, an electric shock may occur. Never touch exposed electric wires.
- If a fluid leak occurs, do not touch the fluid as it may be the strong alkaline electrolyte from the traction battery. If it comes into contact with your skin or eyes, wash it off immediately with a large amount of water, and seek immediate medical attention.
- In case of a vehicle fire, the hydrogen gas in the hydrogen tanks is released via the hydrogen tank valves toward the rear of the vehicle angled downward, in order to reduce the damage to the hydrogen tanks. Keep away from the vehicle.
- If a vehicle fire occurs, it can be extinguished with a Class A, B, or C fire extinguisher. If using water, apply a large amount from a hydrant.
- If your vehicle needs to be towed, do so with the front wheels lifted. If the wheels are touching the ground, the electric motor (traction motor) may continue to generate electricity. This may cause a fire.

WARNING

■ **Traction battery**

- Never resell, transfer, or modify the traction battery. To prevent accidents, traction batteries that have been removed from disposed vehicle are collected through Toyota dealers. Do not dispose of the traction battery yourself.
  If the traction battery is not properly collected, the following may occur, resulting in death or serious injury:
  - The traction battery may be illegally disposed or dumped, and it is hazardous to the environment. Additionally, someone may touch a high-voltage part, resulting in an electric shock.
  - The traction battery is intended to be used exclusively with your fuel cell vehicle. If the traction battery is used outside of your vehicle or modified in any way, accidents, such as electric shock, heat generation, smoke generation, ignition, explosion and electrolyte leakage may occur.

  In particular, reselling or transferring the traction battery exposes the receiving party to risks of accidents as they may not be aware of these dangers. Make sure to inform them of the contents of this Owner's Manual.
- If your vehicle is disposed without the traction battery having been removed, there is a danger of serious electric shock in case high-voltage parts, cables, or their connectors are touched. When disposing of your vehicle, the traction battery must be disposed by your Toyota dealer, or a qualified service shop. If the traction battery is not disposed of properly, it may cause electric shock that can result in death or serious injury.

NOTICE

■ **Traction battery air intake vent**

- If the traction battery output decreases due to the entry of dust or debris, foreign material, a warning message is shown on the multi-information display. Have the vehicle inspected at your Toyota dealer.
- Do not place objects where the air intake vent will be obstructed. This may lead to a reduction in traction battery power output and damage.
- Clean the air intake vent regularly to prevent clogging.
- Do not allow water or objects to enter the air intake vent, as this may damage the traction battery.

■ **Traction Battery**

Do not spill a large amount of water near the traction battery in the vehicle. If water spills onto the traction battery, have the vehicle inspected at your Toyota dealer.

Advice for driving fuel cell vehicles

To maximize fuel economy and range, pay attention to the following:

◆ Fuel cell system indicator usage

Maintaining the fuel cell system indicator to Eco area on the multi-information display can extend your driving range. (→P. 120)

◆ Accelerator pedal/brake pedal operation

Drive the vehicle smoothly. Avoid abrupt acceleration and deceleration.

Mild acceleration and deceleration can help curb wasteful fuel consumption.

◆ When braking

Make sure to depress the brake gently and allow for a long stopping distance. This enables collection of more electrical energy generated during deceleration.

◆ Heavy traffic

Repeated acceleration and deceleration as well as long stops at traffic lights, will decrease fuel economy. Check traffic reports ahead of time and avoid traffic jams as much as possible. If caught in a traffic jam, gently release the brake pedal to allow the vehicle to move forward slowly while avoiding overuse of the accelerator pedal to help curb wasteful fuel consumption.

◆ Driving with high power output

Similar to an electric vehicle, a fuel cell vehicle uses the most fuel in high output driving such as driving on a steep uphill or at high speeds. Moderate the vehicle speed and maintain a steady speed.

◆ Using Eco drive mode

Using Eco drive mode (→P. 195) makes torque generation less aggressive than normal when stepping on the accelerator pedal, leading to improvement in fuel economy.

Also, ECO is displayed on the air conditioning screen, indicating the switch to ECO HEAT/COOL mode (→P. 308).

◆ Air conditioning system on/off

- Turn off the air conditioning system operation switch A/C except when necessary to help curb fuel consumption.

  In summer: When the ambient temperature is high, use the recirculated air mode. This decreases the load on the air conditioning system.

  In winter: Avoid excess heating. Use the seat heater to minimize the need for cabin heating (→P. 316).
- By pushing ECO HEAT/COOL , ECO HEAT/COOL mode is turned on. This helps curb fuel consumption even with the air conditioning system turned on.

◆ Checking tire inflation pressure

Make sure to check the tire inflation pressure frequently. Improper tire inflation pressure can cause poor fuel economy.
Additionally, snow tires have more rolling friction and their use on dry roads lead to poor fuel economy. Use tires that are appropriate for the season.

◆ Luggage

Avoid carrying unnecessary luggage and unload excess weight in order avoid poor fuel economy. Installing a large roof rack will also reduce fuel economy.

Instrument cluster

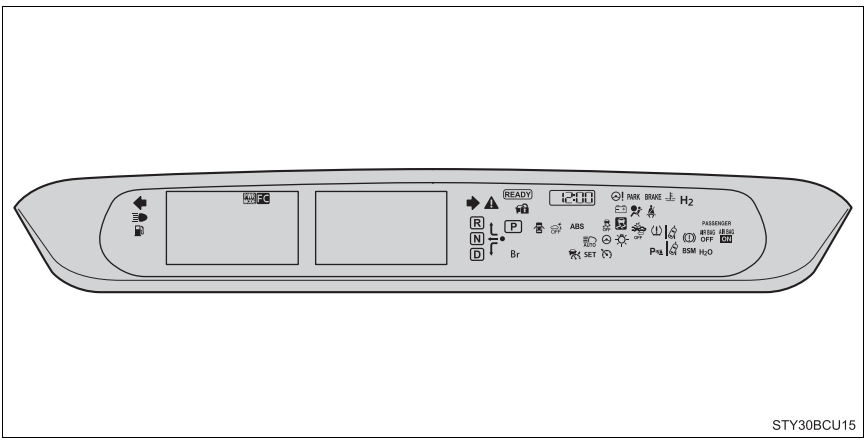
3

3. Instrument cluster
Warning lights and indicators 106
Gauges and meters 111
Multi-information display ... 117

Warning lights and indicators

The warning lights and indicators inform the driver of the status of the vehicle's various systems.

For the purpose of explanation, the following illustration displays all warning lights and indicators illuminated.



STY30BCU15

The units used on the meters and some indicators may differ depending on the target region.

Warning lights

Warning lights inform the driver of malfunctions in the indicated vehicle's systems.

*1 Hydrogen leak warning light (→P. 418)

*1 Electric power steering system warning light (→P. 419)
(Red/Yellow)

*1 Brake system warning light (→P. 418)
(U.S.A.)

LDA indicator (→P. 419)
(Yellow)

*1 Brake system warning light (→P. 418)
(Red)
(Canada)

*1 PKSB OFF indicator (→P. 419)
(Flashes)

Charging system warning light (→P. 418)

*1 PCS warning light (→P. 420)
(Flashes or illuminates)

*1 High coolant temperature warning light (→P. 418)

*1, 2 Slip indicator (→P. 420)

*1 Brake system warning light (→P. 418)
(Yellow)

Parking brake warning light (→P. 420)
(U.S.A.)

*1 SRS warning light (→P. 419)

Parking brake warning light (→P. 420)
(Canada)

*1 ABS warning light (→P. 419)
(U.S.A.)

Open door warning light (→P. 420)

*1 ABS warning light (→P. 419)
(Canada)

Low fuel level warning light (→P. 420)

Driver's and front passenger's seat belt reminder light (→P. 421)

*1

Master warning light (→P. 421)

*1

Tire pressure warning light (→P. 421)

*3

Brake Override System/Drive-Start Control/Parking Support Brake function (for static objects) (if equipped) (→P. 421)

*4

(Blue)

Power restriction indicator (→P. 111)

*4

(Yellow)

Power restriction indicator (→P. 111, 428)

*1: These lights turn on when the power switch is turned to ON mode to indicate that a system check is being performed. They will turn off after the fuel cell system is on, or after a few seconds. There may be a malfunction in a system if a light does not come on, or turn off. Have the vehicle inspected by your Toyota dealer.

*2: The light comes on to indicate a malfunction.

*3: This light illuminates on the multi-information display.

*4: This light illuminates on the main display.

Indicators

The indicators inform the driver of the operating state of the vehicle's various systems.

Turn signal indicator (→P. 199)

Headlight indicator (→P. 201) (U.S.A.)

Tail light indicator (→P. 201) (Canada)

Headlight high beam indicator (→P. 203)

Automatic High Beam indicator (→P. 205)

"READY" indicator (→P. 186)

Dynamic radar cruise control indicator (→P. 253)

Cruise control "SET" indicator (→P. 253)

Cruise control indicator (→P. 253)

*1 LDA indicator (→P. 244) (Green)

*1 Steering control indicator (→P. 244)

*2, 3 PKSB OFF indicator (→P. 276)

Intuitive parking assist indicator (→P. 266)

*3, 4 Slip indicator (→P. 296)

*2, 3 VSC OFF indicator (→P. 297)

*2, 3 PCS warning light (→P. 230)

BSM indicators (→P. 287)

*5, 6 BSM outside rear view mirror indicators (→P. 286)

Security indicator (→P. 78, 81)

Shift position indicator (→P. 193)

*7 ECO MODE indicator (→P. 195)

*7 POWER MODE indicator (→P. 195)

Br	Br mode indicator (→P. 195)	*3 PASSENGER AIRBAG OFF AIRBAG ON (U.S.A.)	“AIR BAG ON/OFF” indicator (→P. 49)
H_2O	H_2O indicator (→P. 187)	*3 PASSENGER AIR BAG OFF ON (Canada)	“AIR BAG ON/OFF” indicator (→P. 49)

*1: Depending on the operating condition, the color and illuminating state of the light change.

*2: The light turns on when the system is off.

*3: These lights turn on when the power switch is turned to ON mode to indicate that a system check is being performed. They will turn off after the fuel cell system is on, or after a few seconds. There may be a malfunction in a system if a light does not come on, or turn off. Have the vehicle inspected by your Toyota dealer.

*4: The light flashes to indicate that the system is operating.

*5: In order to confirm operation, the BSM outside rear view mirror indicators illuminate in the following situations:

- When the power switch is turned to ON mode while the BSM settings are set to ON.
- When the BSM settings are set to ON while the power switch is in ON mode.

If the system is functioning correctly, the BSM outside rear view mirror indicators will turn off after a few seconds.

If the BSM outside rear view mirror indicators do not illuminate or do not turn off, there may be a malfunction in the system.

If this occurs, have the vehicle inspected by your Toyota dealer.

*6: This light illuminates on the outside rear view mirrors.

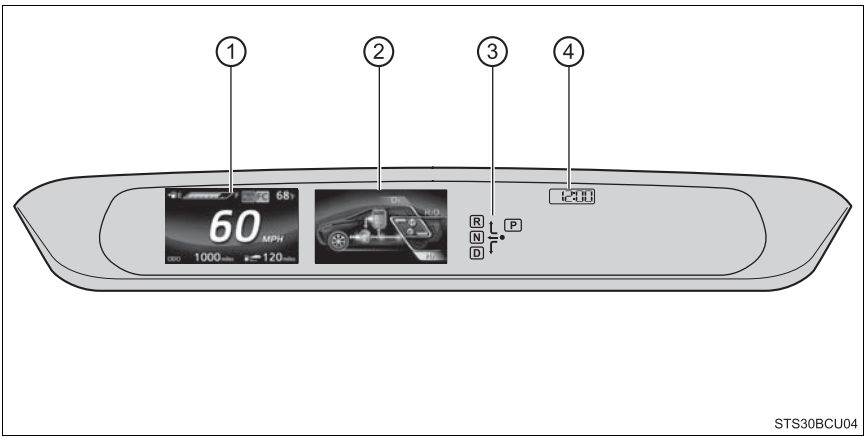
*7: This light illuminates on the main display.

WARNING

■ If a safety system warning light does not come on

Should a safety system light such as the ABS and SRS warning lights not come on when you start the fuel cell system, this could mean that these systems are not available to help protect you in an accident, which could result in death or serious injury. Have the vehicle inspected by your Toyota dealer immediately if this occurs.

Gauges and meters



STS30BCU04

① Main display

Displays the speedometer, fuel gauge, etc. (→P. 111)

② Multi-information display

Presents the driver with a variety of vehicle data.

Displays warning messages in case of a malfunction. (→P. 426)

③ Shift position indicator

Displays the selected shift position. (→P. 193)

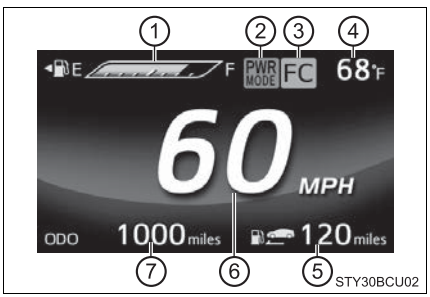
④ Clock

→P. 328

Main display

① Fuel gauge

Displays the quantity of fuel remaining in the hydrogen tanks.



STY30BCU02

② ECO MODE indicator and POWER MODE indicator

Displays the selected driving mode. (→P. 195)

③ Power restriction indicator

Blue: The fuel cell system output power is restricted, because the coolant temperature is low.

Amber: The fuel cell system output power is restricted, because the coolant temperature is high.

④ Outside temperature

Displays the outside temperature within the range of -40°F (-40°C) to 122°F (50°C).

Low outside temperature indicator flashes when the ambient temperature is 37°F (3°C) or lower.

⑤ Driving range distance

Displays the estimated maximum distance that can be driven with the quantity of fuel remaining.

- Displays the possible driving distance computed from the fuel consumption studied from the driving history and the current remaining amount of fuel. The actual possible driving distance may differ as fuel consumption changes, depending on driving environment (weather, traffic, etc.) and conditions (sudden acceleration, air conditioning, etc.).
- When only a small amount of fuel is added to the hydrogen tanks, the display may not be updated.

⑥ Speedometer

Displays the vehicle speed.

⑦ Odometer and trip meter

Odometer:
Displays the total distance the vehicle has been driven.

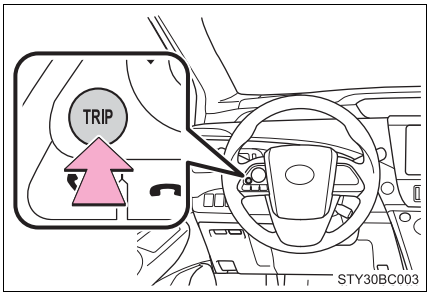
Trip meter:
Displays the distance the vehicle has been driven since the meter was last reset.
Trip meters “A” and “B” can be used to record and display different distances independently.

Distance after start:
Displays the distance driven after the fuel cell system was started.

Blank:
A blank is displayed.

Changing the display

Switches between odometer and trip meter displays. When the trip meter is displayed, pressing and holding the button will reset the trip meter.

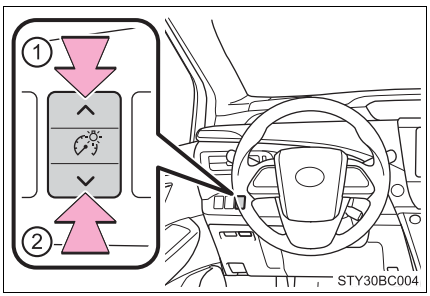


Instrument panel light control

The brightness of the Instrument panel lights can be adjusted.

① Brighter

② Darker



Setting split screen on the main display

▶ Vehicles with RSA (Road Sign Assist)

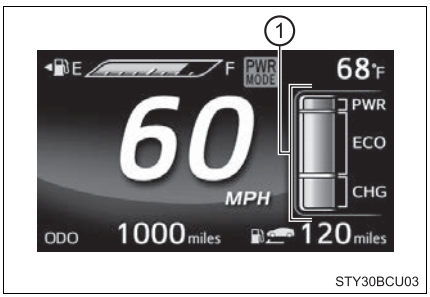
For split screen on the main display, turn off the RSA function. (→P. 251)

▶ Vehicles without RSA (Road Sign Assist)

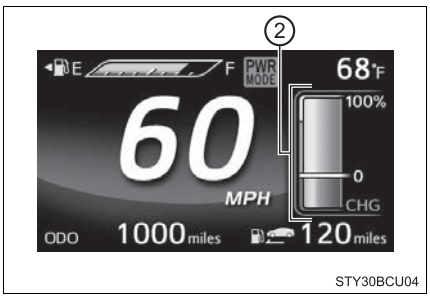
For split screen on the main display, change the settings on the [Meter settings]. (→P. 124)

To toggle through the items, while in split screen, press 〈 or 〉 of the meter control switches (→P. 118), select *i* on the main display, and press ∧ or ∨.

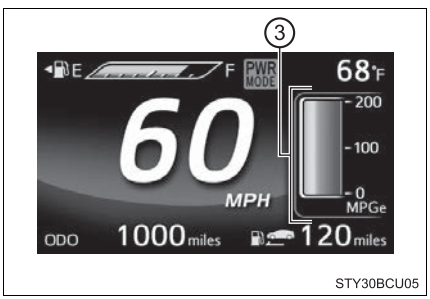
① Fuel cell system indicator



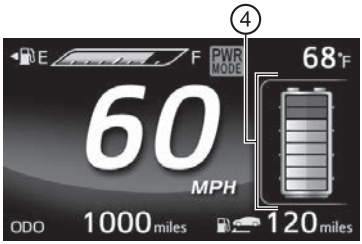
② Power meter



③ Current fuel consumption



④ Traction battery status



STY30BCU06

■ **The meters and display illuminate when**

The power switch is in ON mode.

■ **Instrument panel brightness adjustment**

The instrument panel brightness levels when the tail lights are on and off can be adjusted individually. However, when the surroundings are bright (daytime, etc.), turning on the tail lights will not change the instrument panel brightness. At this time, any adjustments made to the instrument panel brightness levels will be applied to both settings at once.

■ **Outside temperature display**

● In the following situations, the correct outside temperature may not be displayed, or the display may take longer than normal to change.

- When stopped, or driving at low speeds (less than 16 mph [25 km/h])
- When the outside temperature has changed suddenly (at the entrance/exit of a garage, tunnel, etc.)

● When “--” or “E” is displayed, the system may be malfunctioning. Take your vehicle to your Toyota dealer.

■ **Liquid crystal display**

Small spots or light spots may appear on the display. This phenomenon is characteristic of liquid crystal displays, and there is no problem continuing to use the display.

■ **Customization**

The meter display can be customized on the multi-information display. (Customizable features: →P. 490)

NOTICE

To prevent damage to the fuel cell system and its components

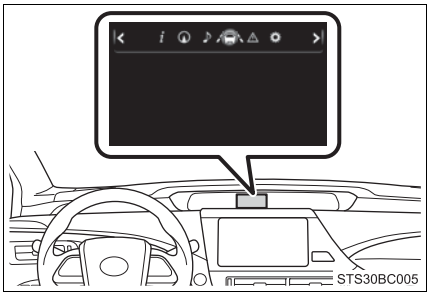
This vehicle is equipped with high coolant temperature warning light (→P. 418), instead of, coolant temperature gauge.
The fuel cell system may be overheating if the high coolant temperature warning light flashes or comes on. In this case, immediately stop the vehicle in a safe place, and check the fuel cell system after it has cooled completely.

Multi-information display

The multi-information display presents the driver with a variety of vehicle data.

Displays the following information when an icon is selected. (→P. 118)

Some of the information may be displayed automatically depending on the situation.



Drive information

Select to display various drive data. (→P. 118)

Navigation system-linked display

Select to display the following navigation system-linked information.
- Route guidance
- Compass display (north-up display/heading-up display)

Audio system-linked display

Select to enable selection of an audio source or track on the display using the meter control switches.

Driving assist systems display

Displays when each driving assistance system is used.
- Dynamic radar cruise control (→P. 253)
- LDA (Lane Departure Alert with steering control) (→P. 238)

Warning message display

Select to display warning messages and measures to be taken if a malfunction is detected. (→P. 426)

Settings display

Select to change the meter display settings and the operation settings of some vehicle functions. (→P. 124)

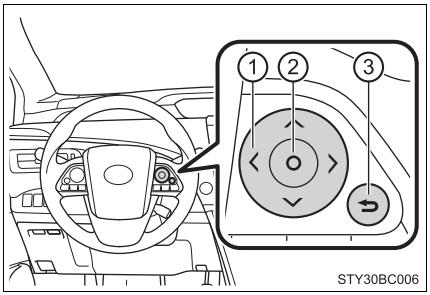
Operating the meter control switches

The multi-information display is operated using the meter control switches.

① Select an item/change pages

② Enter/Set

③ Return to the previous screen

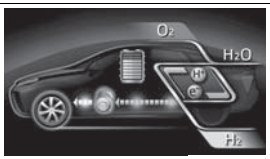
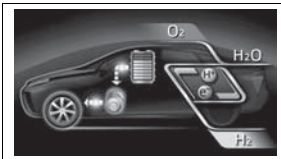
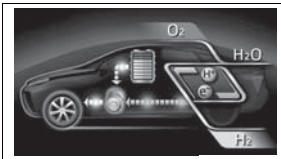


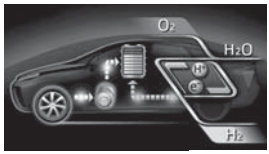
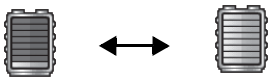
Drive information

To toggle through the items, press ＜ or ＞ of the meter control switches (→P. 118), select [drive information] on the multi-information display, and press ∧ or ∨.

■ Energy monitor

Displays fuel cell system status.

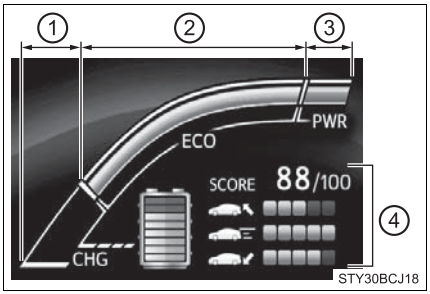
When the vehicle is powered by the fuel cell stack	 STY30BCJ11
When the vehicle is powered by the traction battery	 STY30BCJ12
When the vehicle is powered by the fuel cell stack and traction battery	 STY30BCJ13

When the vehicle is charging the traction battery	 STY30BCJ14
When there is no energy flow	STY30BCJ15
Traction battery status	 Low Full

These images are examples only, and may vary slightly from actual conditions.

■ Fuel cell system indicator and ECO Score

The output power of the fuel cell system, regeneration level display, and the ECO driving is scored and displayed.



① Charge area

Shows that energy is being recovered via the regenerative brake.

② Eco area

Shows that the vehicle is being driven in an Eco-friendly manner.

③ Power area

Shows that an Eco-friendly driving range is being exceeded.

④ ECO Score

Displays the driving conditions in 5 stages, which are separated in the 3 patterns of ECO Start, ECO Cruise and ECO Stop. Also, each time the vehicle is stopped, that number is displayed. (The number for each take off is reset and not counted)

- By maintaining the indicator display in the ECO area or Charge area, Eco-friendly driving is possible.
- Charge area indicates regeneration* status. Regenerated energy will be used to charge the traction battery.

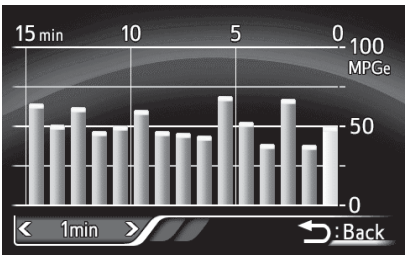
*: When used in this manual, “regeneration” refers to the conversion of energy created by the movement of the vehicle into electrical energy.

■ Fuel consumption record

To toggle through the items, press ◎ on the meter control switches (→P. 118) to select the tab and then press either 〈 or 〉.

▶ 1-minute fuel consumption

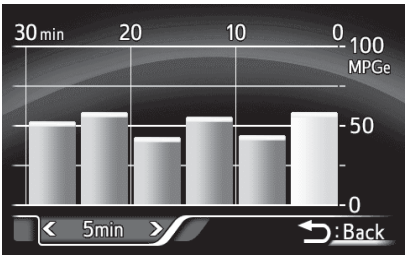
Average fuel consumption in the past 15 minutes, displayed in 1-minute intervals



STY30BCU07

▶ 5-minute fuel consumption

Average fuel consumption in the past 30 minutes, displayed in 5-minute intervals



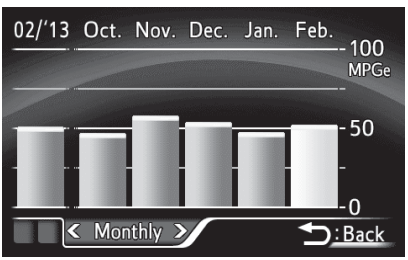
STY30BCU08

▶ Monthly fuel consumption

Average fuel consumption over the past 6 months

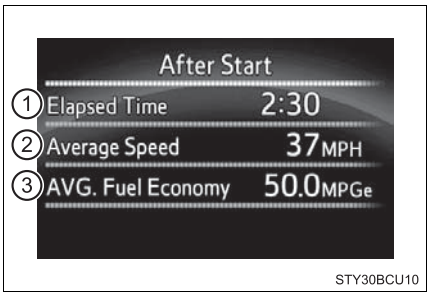
The scale of the vertical axis can be changed by pressing ∧ or ∨ of the meter control switches.

Press ⮌ on the meter control switches (→P. 118) to return.



STY30BCU09

■ Drive monitor



① Driving time

Displays the amount of time since starting*1 the fuel cell system or resetting*2.

② Average vehicle speed

Displays the average vehicle speed since starting*1 the fuel cell system or resetting*2.

③ Average fuel consumption

Displays the average fuel consumption since starting*1 the fuel cell system or resetting*2.

*1: When the odometer, traveled distance since starting, or blank is displayed in the odometer and trip meter of the main display

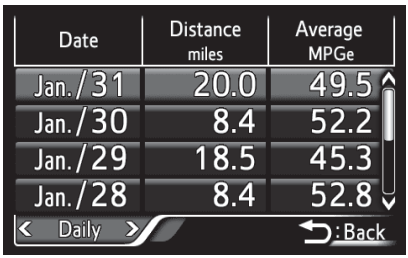
*2: When trip meter A or trip meter B is displayed in the odometer and trip meter of the main display

■ ECO diary

To toggle through the items, press ◎ on the meter control switches (→P. 118) to select the tab and then press either ＜ or ＞.

▶ Daily history

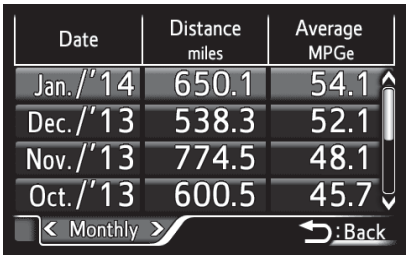
Press either ∧ or ∨ of the meter control switches to scroll through the days displayed.



STY30BCU11

▶ Monthly history

Press either ∧ or ∨ of the meter control switches to scroll through the months displayed.

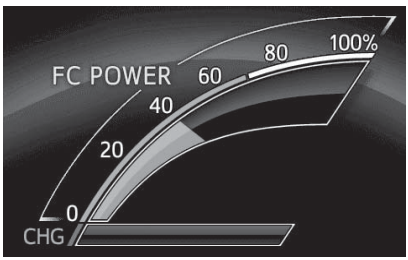


STY30BCU12

Press ⮌ on the meter control switches (→P. 118) to return.

■ Power meter

Displays the output power and regeneration level of the fuel cell system.



STY30BCJ25

Setting display

The settings of the following items can be changed, refer to P. 484.

For functions that can be enabled or disabled, the function switches between on and off each time ⊙ is pressed.

- Clock (→P. 328)
  - Rounds to the nearest hour
  - Time adjustment
- LDA (Lane Departure Alert with steering control) (→P. 238)

  Select to set up the following items.
  - Steering assist function
  - Alert sensitivity
  - Vehicle sway warning function
  - Sway sensitivity
- PCS (Pre-Collision System) (→P. 226)

  Select to set up the following items.
  - PCS on/off
  - PCS sensitivity
- BSM (Blind Spot Monitor) (→P. 286)

  Select to set up the BSM and RCTA function on/off.
- RSA (Road Sign Assist) (if equipped) (→P. 248)

  Select to set up RSA (Road Sign Assist) on/off.
- Parking Support Brake function (for static objects) (if equipped) (→P. 274)

  Select to set up the Parking Support Brake function (for static objects) on/off.
- Intuitive parking assist (→P. 265)

  Select to set up the following items.
  - Intuitive parking assist on/off
  - Intuitive parking assist buzzer volume

● km/h MPH Units

Select to change the unit.

● Meter settings

Select the menu to set up the following items (→P. 490)

- RSA notification method (if equipped)

  Select to change the RSA notification method.
- RSA notification level (if equipped)

  Select to change the RSA notification level.
- Time for exchanging the ion filter

  Select to initialize the time for exchanging the ion filter.
- Language

  Select to change the language on the display.
- Interruption display

  Select to set the Interruption displays (navigation system route guidance, Instrument panel brightness adjustment), which may appear in some situations, on/off.
- Return to initial settings

  Registered or changed meter settings will be deleted or returned to their default setting.
- Main display split screen (if equipped)

  Select to change the main display to split screen.
- Monthly history of fuel economy history

  Select to clear the history.
- Daily history of ECO log

  Select to clear the log.
- Monthly history of ECO log

  Select to clear the log.
- Calendar date

  Select to set the date.
- Erase screen

  Select to display a blank screen.

■ **Setting items**

- [Meter settings] items are not selectable while driving and cannot be operated.
  Also, the settings screen is temporarily canceled in the following situations.
  - A warning message is displayed.
  - The vehicle starts off.
- Settings for functions not equipped to the vehicle are not displayed.
- When a function is turned off, the related settings for that function are not selectable.

■ **When the 12-volt battery terminal is disconnected and reconnected**

The following data is reset when the 12-volt battery terminal is disconnected and reconnected.

- 1-minute fuel consumption
- 5-minute fuel consumption
- Driving time
- Average vehicle speed
- Average fuel consumption

■ **Liquid crystal display**

→P. 115

NOTICE

■ **During setting up the display**

To prevent 12-volt battery discharge, ensure that the fuel cell system is operating while setting up the display features.

Operation of each component

4

4-1. Key information
Keys 128
4-2. Opening, closing and locking the doors
Doors 132
Trunk 138
Smart key system 143
4-3. Adjusting the seats
Front seats 151
Driving position memory ... 153
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4-4. Adjusting the steering wheel and mirrors
Steering wheel 160
Inside rear view mirror 162
Outside rear view mirrors 164
4-5. Opening and closing the windows
Power windows 167

Keys

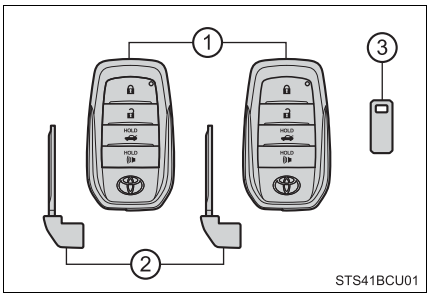
The keys

The following keys are provided with the vehicle.

① Electronic keys
- Operating the smart key system (→P. 143)
- Operating the wireless remote control function

② Mechanical keys

③ Key number plate



Wireless remote control

① Locks all the doors (→P. 132)

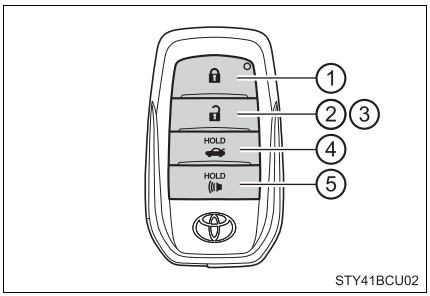
② Unlocks all the doors (→P. 132)

Pressing the button unlocks the driver's door. Pressing the button again within 5 seconds unlocks the other doors.

③ Opens the windows (→P. 132)*

④ Opens the trunk (→P. 138)

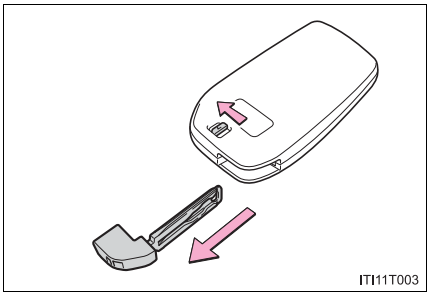
⑤ Sounds the alarm (→P. 129)



*: This setting must be customized at your Toyota dealer.

Using the mechanical key

To take out the mechanical key, slide the release lever and take the key out.



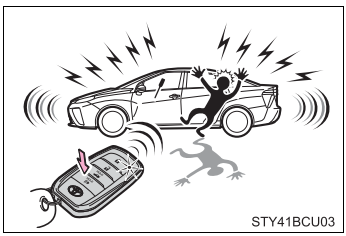
The mechanical key can only be inserted in one direction, as the key only has grooves on one side. If the key cannot be inserted in a lock cylinder, turn it over and re-attempt to insert it.

After using the mechanical key, store it in the electronic key. Carry the mechanical key together with the electronic key. If the electronic key battery is depleted or the entry function does not operate properly, you will need the mechanical key. (→P. 449)

Panic mode

When is pressed for longer than about 1 second, an alarm will sound intermittently and the vehicle lights will flash to deter any person from trying to break into or damage your vehicle.

To stop the alarm, press any button on the electronic key.



When required to leave the vehicle's key with a parking attendant

Set the luggage security system (→P. 139) on and lock the glove box (→P. 321) as circumstances demand.

Remove the mechanical key for your own use and provide the attendant with the electronic key only.

If you lose your mechanical keys

New genuine mechanical keys can be made by your Toyota dealer using the other mechanical key and the key number stamped on your key number plate. Keep the plate in a safe place such as your wallet, not in the vehicle.

When riding in an aircraft

When bringing an electronic key onto an aircraft, make sure you do not press any button on the electronic key while inside the aircraft cabin. If you are carrying an electronic key in your bag, etc., ensure that the buttons are not likely to be pressed accidentally. Pressing a button may cause the electronic key to emit radio waves that could interfere with the operation of the aircraft.

■ **Electronic key battery depletion**

- The standard battery life is 1 to 2 years.
- If the battery becomes low, an alarm will sound in the cabin when the fuel cell system stops. (→P. 426)
- As the electronic key always receives radio waves, the battery will become depleted even if the electronic key is not used. The following symptoms indicate that the electronic key battery may be depleted. Replace the battery when necessary. (→P. 400)
  - The smart key system or the wireless remote control does not operate.
  - The detection area becomes smaller.
  - The LED indicator on the key surface does not turn on.
- To avoid serious deterioration, do not leave the electronic key within 3 ft. (1 m) of the following electrical appliances that produce a magnetic field:
  - TVs
  - Personal computers
  - Cellular phones, cordless phones and battery chargers
  - Recharging cellular phones or cordless phones
  - Table lamps
  - Induction cookers

■ **Replacing the battery**

→P. 400

■ **Confirmation of the registered key number**

The number of keys already registered to the vehicle can be confirmed. Ask your Toyota dealer for details.

■ **If a wrong key is used**

The key cylinder rotates freely to isolate inside mechanism.

NOTICE

■ **To prevent key damage**

- Do not drop the keys, subject them to strong shocks or bend them.
- Do not expose the keys to high temperatures for long periods of time.
- Do not get the keys wet or wash them in an ultrasonic washer, etc.
- Do not attach metallic or magnetic materials to the keys or place the keys close to such materials.
- Do not disassemble the keys.
- Do not attach a sticker or anything else to the surface of the electronic key.
- Do not place the keys near objects that produce magnetic fields, such as TVs, audio systems and induction cookers, or medical electrical equipment, such as low-frequency therapy equipment.

■ **Carrying the electronic key on your person**

Carry the electronic key 3.9 in. (10 cm) or more away from electric appliances that are turned on. Radio waves emitted from electric appliances within 3.9 in. (10 cm) of the electronic key may interfere with the key, causing the key to not function properly.

■ **In case of a smart key system malfunction or other key-related problems**

Take your vehicle with all the electronic keys provided with your vehicle to your Toyota dealer.

■ **When an electronic key is lost**

If the electronic key remains lost, the risk of vehicle theft increases significantly. Visit your Toyota dealer immediately with all remaining electronic keys that were provided with your vehicle.

Doors

The vehicle can be locked and unlocked using the entry function, wireless remote control or door lock switch.

Unlocking and locking the doors from the outside

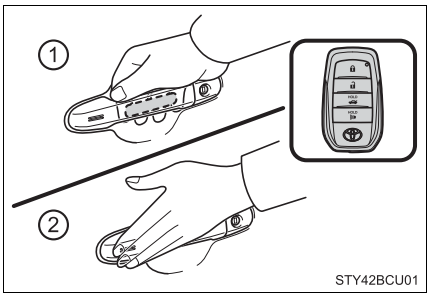
◆ Smart key system

Carry the electronic key to enable this function.

① Grip the driver's door handle to unlock the door. Grip the front passenger's door handle to unlock all the doors.*

Make sure to touch the sensor on the back of the handle.

The doors cannot be unlocked for 3 seconds after the doors are locked.



*: The door unlock settings can be changed. (→P. 136)

② Touch the lock sensor (the indentation on the surface of the door handle) to lock the doors.

Check that the door is securely locked.

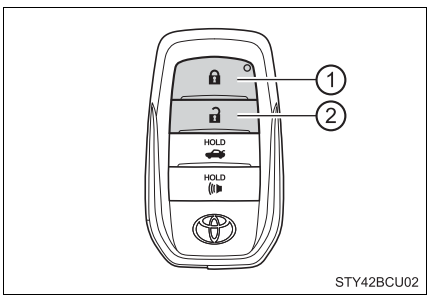
◆ Wireless remote control

① Locks all the doors

Check that the door is securely locked.

② Unlocks all the doors

Pressing the button unlocks the driver's door. Pressing the button again within 3 seconds unlocks the other doors.
Press and hold to open the windows.*



*: This setting must be customized at your Toyota dealer.

■ **Operation signals**

Doors:
A buzzer sounds and the emergency flashers flash to indicate that the doors have been locked/unlocked. (Locked: Once; Unlocked: Twice)

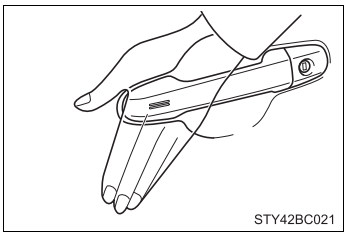
Windows:
A buzzer sounds to indicate that the windows are opening.

■ **Security feature**

If a door is not opened within approximately 60 seconds after the vehicle is unlocked, the security feature automatically locks the vehicle again.

■ **When the door cannot be locked by the lock sensor on the surface of the door handle**

When the door cannot be locked even if the lock sensor on the surface of the door handle is touched by a finger, touch the lock sensor with the palm.
When gloves are being worn, remove the gloves.



■ **Door lock buzzer**

If an attempt to lock the doors is made when a door is not fully closed, a buzzer sounds continuously for 5 seconds. Fully close the door to stop the buzzer, and lock the doors once more.

■ **Setting the alarm**

Locking the doors will set the alarm system. (→P. 81)

■ **If the smart key system or the wireless remote control does not operate properly**

Use the mechanical key to lock and unlock the doors. (→P. 449)

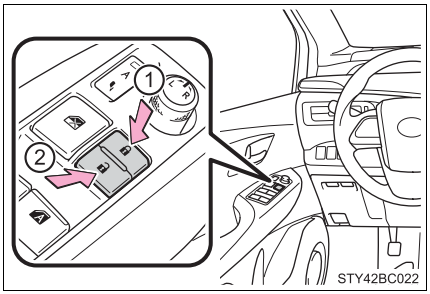
Replace the key battery with a new one if it is depleted. (→P. 400)

Unlocking and locking the doors from the inside

◆ Door lock switches

① Locks all the doors

② Unlocks all the doors

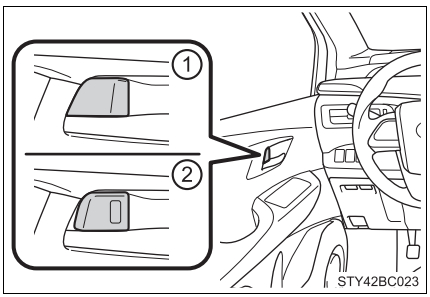


◆ Inside lock buttons

① Locks the door

② Unlocks the door

The front doors can be opened by pulling the inside handle even if the lock buttons are in the lock position.



Locking the doors from the outside without a key

1 Move the inside lock button to the lock position.

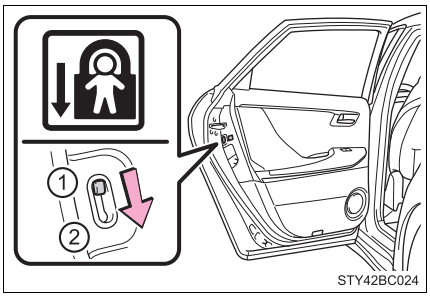
2 Close the door.

The door cannot be locked if the power switch is in ACCESSORY or ON mode, or the electronic key is left inside the vehicle.

If the key is not detected correctly, the door may be locked.

Rear door child-protector lock

The door cannot be opened from inside the vehicle when the lock is set.



① Unlock

② Lock

These locks can be set to prevent children from opening the rear doors. Push down on each rear door switch to lock both rear doors.

Automatic door locking and unlocking systems

The following functions can be set or canceled:

For instructions on customizing, refer to P. 485.

Function	Operation
Speed linked door locking function	All the doors are automatically locked when the vehicle speed is approximately 12 mph (20 km/h) or higher.
Shift position linked door locking function	All the doors are automatically locked when shifting the shift position to any positions other than P.
Shift position linked door unlocking function	All the doors are automatically unlocked when shifting the shift position to P.
Driver’s door linked door unlocking function	All the doors are automatically unlocked when the driver’s door is opened.

Switching the door unlock function

It is possible to set which doors the entry function unlocks using the wireless remote control.

1 Turn the power switch off.

2 When the indicator light on the key surface is not on, press and hold , or for approximately 5 seconds while pressing and holding .

The setting changes each time an operation is performed, as shown below. (When changing the setting continuously, release the buttons, wait for at least 5 seconds, and repeat step 2.)

Multi-information display	Unlocking function	Beep
	Holding the driver's door handle unlocks only the driver's door.	Exterior: Beeps 3 times Interior: Pings once
	Holding the front passenger's door handle unlocks all the doors.	
	Holding either front door handle unlocks all the doors.	Exterior: Beeps twice Interior: Pings once

To prevent unintended triggering of the alarm, unlock the doors using the wireless remote control and open and close a door once after the settings have been changed. (If a door is not opened within 60 seconds after is pressed, the doors will be locked again and the alarm will automatically be set.)
In case that the alarm is triggered, immediately stop the alarm. (→P. 81)

Impact detection door lock release system

In the event that the vehicle is subject to a strong impact, all the doors are unlocked. Depending on the force of the impact or the type of accident, however, the system may not operate.

Using the mechanical key

The doors can also be locked and unlocked with the mechanical key.
(→P. 449)

Open door warning buzzer

If the vehicle speed reaches 3 mph (5 km/h), the master warning light flashes and a buzzer sounds to indicate that door(s) or the hood is not fully closed. The open door(s) or hood is displayed on the multi-information display.

Conditions affecting the operation of the smart key system or wireless remote control

→P. 146

Customization

Settings (e.g. unlocking function using a key) can be changed.
(Customizable features: →P. 485)

WARNING

To prevent an accident

Observe the following precautions while driving the vehicle.
Failure to do so may result in a door opening and an occupant falling out, resulting in death or serious injury.

- Ensure that all doors are properly closed and locked.
- Do not pull the inside handle of the doors while driving.

  Be especially careful for the front doors, as the doors may be opened even if the inside lock buttons are in locked position.
- Set the rear door child-protector locks when children are seated in the rear seats.

When opening or closing a door

Check the surroundings of the vehicle such as whether the vehicle is on an incline, whether there is enough space for a door to open and whether a strong wind is blowing.
When opening or closing the door, hold the door handle tightly to prepare for any unpredictable movement.

When using the wireless remote control and operating the power windows

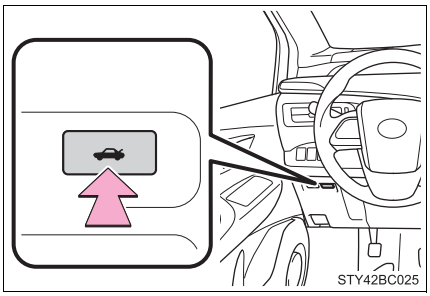
Operate the power window after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the window. Also, do not allow children to operate the wireless remote control. It is possible for children and other passengers to get caught in the power window.

Trunk

The trunk can be opened using the trunk opener, entry function or wireless remote control.

Opening the trunk from inside the vehicle

Press the trunk opener switch.

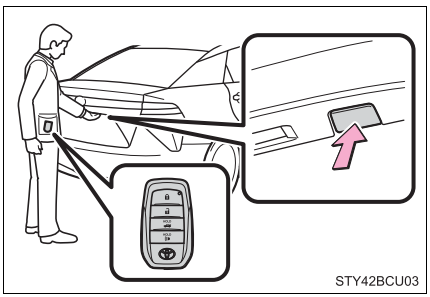


Opening the trunk from outside the vehicle

◆ Smart key system

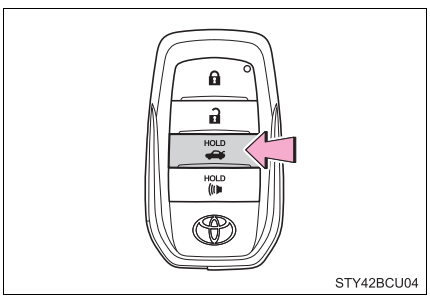
While carrying the electronic key, press the button on the trunk lid.

When all the doors are unlocked with the power door lock system, the trunk can be opened without carrying the electronic key.



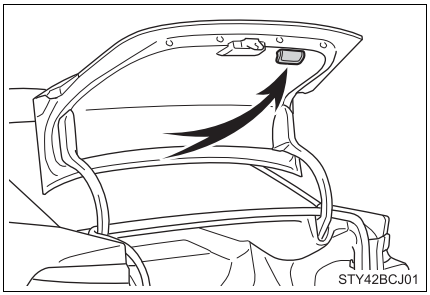
◆ Wireless remote control

Press and hold the switch.



When closing the trunk

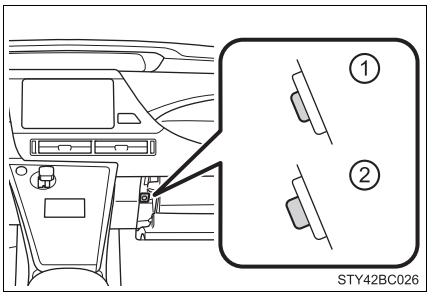
Using the trunk grip, lower the trunk without applying force to the side and push the trunk down from the outside to close it.



Luggage security system

To protect luggage stored in the trunk against theft, the luggage security system can be set to on.

To disable the trunk opener switch, turn the main switch in the glove box off.



① On

② Off

When the main switch is off, the trunk lid cannot be opened even with the wireless remote control or the entry function.

■ **Trunk light**

The trunk light turns on when the trunk is opened.

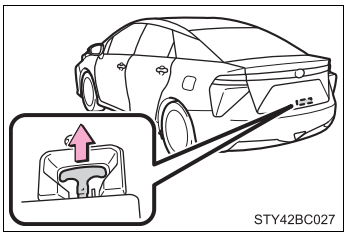
■ **Function to prevent the trunk being locked with the electronic key inside**

- When all doors are locked, closing the trunk lid with the electronic key left inside the trunk will sound an alarm.
  In this case, the trunk lid can be opened by pressing the trunk release button on the trunk lid.
- If the spare electronic key is put in the trunk with all the doors locked, the key confinement prevention function is activated so the trunk can be opened. In order to prevent theft, take all electronic keys with you when leaving the vehicle.
- If the electronic key is put in the trunk with all the doors locked, the key may not be detected depending on the location of the key and the surrounding radio wave conditions. In this case, the key confinement prevention function cannot be activated, causing the doors to lock when the trunk is closed. Make sure to check where the key is before closing the trunk.
- The key confinement prevention function cannot be activated if any one of the doors is unlocked. In this case, open the trunk using the trunk opener switch.

■ **Internal trunk release lever**

The trunk lid can be opened by pulling the glow-in-the-dark lever located on the inside of the trunk lid upward.

The lever will continue to glow for some time after the trunk lid is closed.



■ **Using the mechanical key**

The trunk can be also opened using the mechanical key. (→P. 449)

■ **Open trunk warning buzzer**

If the vehicle speed reaches 3 mph (5 km/h), the master warning light flashes and a buzzer sounds to indicate that the trunk is not fully closed.

■ **If the smart key system or the wireless remote control does not operate properly**

Use the mechanical key to unlock the trunk. (→P. 449)
Replace the key battery with a new one if it is depleted. (→P. 400)

■ **When leaving a key to the vehicle with a parking attendant**

→P. 129

■ **Customization**

The trunk unlocking operation can be changed.
(Customizable features: →P. 487)

WARNING

Observe the following precautions.
Failure to do so may result in death or serious injury.

■ Before driving

- Make sure that the trunk lid is fully closed. If the trunk lid is not fully closed, it may open unexpectedly while driving and hit near-by objects or luggage in the trunk may be thrown out, causing an accident.
- Do not allow children to play in the trunk.
  If a child is accidentally locked in the trunk, they could suffer from heat exhaustion, suffocation or other injuries.
- Do not allow a child to open or close the trunk lid.
  Doing so may cause the trunk lid to open unexpectedly, or cause the child's hands, head, or neck to be caught by the closing trunk lid.

■ Important points while driving

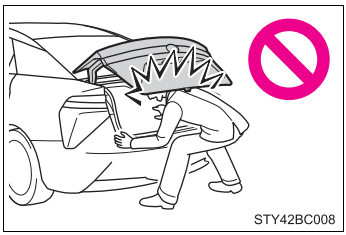
Never let anyone sit in the trunk. In the event of sudden braking or a collision, they are susceptible to death or serious injury.

WARNING

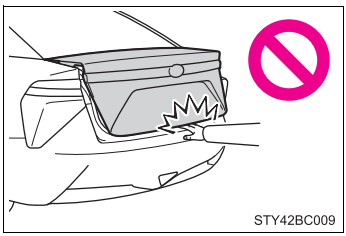
■ **Using the trunk**

Observe the following precautions.
Failure to do so may cause parts of the body to be caught, resulting in serious injury.

- Remove any heavy loads, such as snow and ice, from the trunk lid before opening it. Failure to do so may cause the trunk lid to suddenly shut again after it is opened.
- When opening or closing the trunk lid, thoroughly check to make sure the surrounding area is safe.
- If anyone is in the vicinity, make sure they are safe and let them know that the trunk is about to open or close.
- Use caution when opening or closing the trunk lid in windy weather as it may move abruptly in strong wind.
- The trunk lid may suddenly shut if it is not opened fully. It is more difficult to open or close the trunk lid on an incline than on a level surface, so beware of the trunk lid unexpectedly opening or closing by itself. Make sure that the trunk lid is fully open and secure before using the trunk.


STY42BC008

- When closing the trunk lid, take extra care to prevent your fingers, etc., from being caught.
- When closing the trunk lid, make sure to press it lightly on its outer surface. If the trunk handle is used to fully close the trunk lid, it may result in hands or arms being caught.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- Do not attach any accessories other than genuine Toyota parts to the trunk lid. Such additional weight on the trunk lid may cause the lid to suddenly shut again after it is opened.

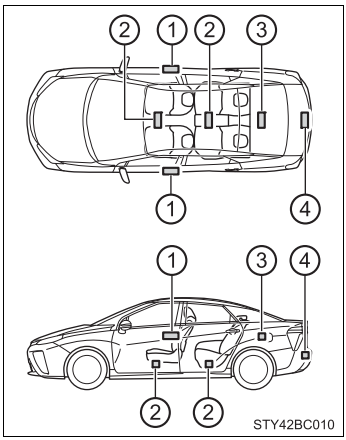
Smart key system

The following operations can be performed simply by carrying the electronic key on your person, for example in your pocket. The driver should always carry the electronic key.

- Locks and unlocks the doors (→P. 132)
- Opens the trunk (→P. 138)
- Starts and stops the fuel cell system (→P. 186)

Antenna location

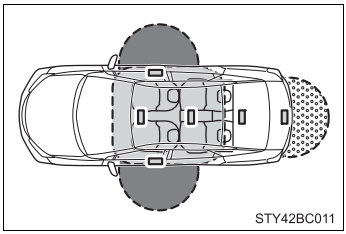
① Antennas outside the cabin
② Antennas inside the cabin
③ Antenna inside the trunk
④ Antenna outside the trunk



■ **Effective range (areas within which the electronic key is detected)**

When locking or unlocking the doors

The system can be operated when the electronic key is within about 2.3 ft. (0.7 m) of an outside door handle. (Only the doors detecting the key can be operated.)



When opening the trunk

The system can be operated when the electronic key is within about 2.3 ft. (0.7 m) of the trunk release button.

When starting the fuel cell system or changing power switch modes

The system can be operated when the electronic key is inside the vehicle.

■ **Alarms and warning indicators**

A combination of exterior and interior alarms as well as warning messages shown on the multi-information display are used to prevent theft of the vehicle and accidents resulting from erroneous operation. Take appropriate measures in response to any warning message on the multi-information display. (→P. 426)

The following table describes circumstances and correction procedures when only alarms are sounded.

Alarm	Situation	Correction procedure
Exterior alarm sounds once for 5 seconds	The trunk was closed while the electronic key was still inside the trunk and all the doors were locked.	Retrieve the electronic key from the trunk and close the trunk lid.
	An attempt was made to lock the vehicle while a door was open.	Close all of the doors and lock the doors again.
Interior alarm sounds continuously	The power switch was turned to ACCESSORY mode while the driver's door was open (or the driver's door was opened while the power switch was in ACCESSORY mode).	Turn the power switch off and close the driver's door.

■ **When “Smart Key System Malfunction See Owner’s Manual” will be displayed on the multi-information display**

The system may be malfunctioning. Have the vehicle inspected by your Toyota dealer immediately.

■ **Battery-saving function**

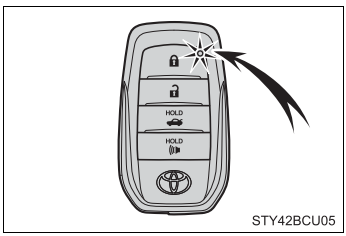
The battery-saving function will be activated in order to prevent the electronic key battery and the 12-volt battery from being discharged while the vehicle is not in operation for a long time.

- In the following situations, the smart key system may take some time to unlock the doors.
  - The electronic key has been left in an area of approximately 6 ft. (2 m) of the outside of the vehicle for 10 minutes or longer.
  - The smart key system has not been used for 5 days or longer.
- If the smart key system has not been used for 14 days or longer, the doors cannot be unlocked at any doors except the driver’s door. In this case, take hold of the driver’s door handle, or use the wireless remote control or the mechanical key, to unlock the doors.

■ **Electronic Key battery-Saving Function**

When battery-saving mode is set, battery depletion is minimized by stopping the electronic key from receiving radio waves.

Press 🔓 twice while pressing and holding 🔒. Confirm that the electronic key indicator flashes 4 times.
While the battery-saving mode is set, the smart key system cannot be used. To cancel the function, press any of the electronic key buttons.



Conditions affecting operation

The smart key system uses weak radio waves. In the following situations, the communication between the electronic key and the vehicle may be affected, preventing the smart key system, wireless remote control and immobilizer system from operating properly. (Ways of coping: →P. 449)

- When the electronic key battery is depleted
- Near a TV tower, electric power plant, gas station, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
- When the electronic key is in contact with, or is covered by the following metallic objects
  - Cards to which aluminum foil is attached
  - Cigarette boxes that have aluminum foil inside
  - Metallic wallets or bags
  - Coins
  - Hand warmers made of metal
  - Media such as CDs and DVDs
- When other wireless keys (that emit radio waves) are being used nearby
- When carrying the electronic key together with the following devices that emit radio waves
  - Portable radio, cellular phone, cordless phone or other wireless communication devices
  - Another vehicle's electronic key or a wireless key that emits radio waves
  - Personal computers or personal digital assistants (PDAs)
  - Digital audio players
  - Portable game systems
- If window tint with a metallic content or metallic objects are attached to the rear window
- When the electronic key is placed near a battery charger or electronic devices

Note for the entry function

- Even when the electronic key is within the effective range (detection areas), the system may not operate properly in the following cases:
  - The electronic key is too close to the window or outside door handle, near the ground, or in a high place when the doors are locked or unlocked.
  - The electronic key is near the ground or in a high place, or too close to the rear bumper center when the trunk is opened.
  - The electronic key is on the instrument panel, rear package tray or floor, or in the door pockets or glove box when the fuel cell system is started or power switch modes are changed.
- Do not leave the electronic key on top of the instrument panel or near the door pockets when exiting the vehicle. Depending on the radio wave reception conditions, it may be detected by the antenna outside the cabin and the door will become lockable from the outside, possibly trapping the electronic key inside the vehicle.
- As long as the electronic key is within the effective range, the doors may be locked or unlocked by anyone. However, only the doors detecting the electronic key can be used to unlock the vehicle.
- Even if the electronic key is not inside the vehicle, it may be possible to start the fuel cell system if the electronic key is near the window.
- The doors may unlock or lock if a large amount of water splashes on the door handle, such as in the rain or in a car wash when the electronic key is within the effective range. (The doors will automatically be locked after approximately 60 seconds if the doors are not opened and closed.)
- If the wireless remote control is used to lock the doors when the electronic key is near the vehicle, there is a possibility that the door may not be unlocked by the entry function. (Use the wireless remote control to unlock the doors.)
- Touching the door lock or unlock sensor while wearing gloves may prevent lock or unlock operation.
- When the lock operation is performed using the lock sensor, recognition signals will be shown up to two consecutive times. After this, no recognition signals will be given.
- If the door handle becomes wet while the electronic key is within the effective range, the door may lock and unlock repeatedly. In this case, follow the following correction procedures to wash the vehicle:
  - Place the electronic key in a location 6 ft. (2 m) or more away from the vehicle. (Take care to ensure that the key is not stolen.)
  - Set the electronic key to battery-saving mode to disable the smart key system. (→P. 145)
- If the electronic key is inside the vehicle and a door handle becomes wet during a car wash, a message may be shown on the multi-information display and a buzzer will sound outside the vehicle. To turn off the alarm, lock all the doors.

- The lock sensor may not work properly if it comes into contact with ice, snow, mud, etc. Clean the lock sensor and attempt to operate it again.
- A sudden approach to the effective range or door handle may prevent the doors from being unlocked. In this case, return the door handle to the original position and check that the doors unlock before pulling the door handle again.
- If there is another electronic key in the detection area, it may take slightly longer to unlock the doors after the door handle is gripped.

When the vehicle is not driven for extended periods

- To prevent theft of the vehicle, do not leave the electronic key within 6 ft. (2 m) of the vehicle.
- The smart key system can be deactivated in advance. (→P. 486)

To operate the system properly

- Make sure to carry the electronic key when operating the system. Do not get the electronic key too close to the vehicle when operating the system from the outside of the vehicle.
  Depending on the position and holding condition of the electronic key, the key may not be detected correctly and the system may not operate properly. (The alarm may go off accidentally, or the door lock prevention function may not operate.)
- Do not leave the electronic key inside the trunk.
  The key confinement prevention function may not operate, depending on the location of the key (close to the emergency tire puncture repair kit, the inside edge of the trunk), conditions (inside a metal bag, close to metallic objects) and the radio waves in the surrounding area. (→P. 140)

If the smart key system does not operate properly

- Locking and unlocking the doors and opening the trunk:
  Use the mechanical key. (→P. 449)
- Starting the fuel cell system: →P. 450

Customization

Settings (e. g. smart key system) can be changed.
(Customizable features: →P. 486)

If the smart key system has been deactivated in a customized setting

- Locking and unlocking the doors and opening the trunk:
  Use the wireless remote control or mechanical key. (→P. 132, 138, 449)
- Starting the fuel cell system and changing power switch modes: →P. 450
- Stopping the fuel cell system: →P. 187

Certification for the smart key system

▶ For U.S.A.

FCC ID: HYQ23AAB

FCC ID: HYQ14FBA

NOTE:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

▶ For Canada

NOTE:
This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

NOTE:
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage;
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

WARNING

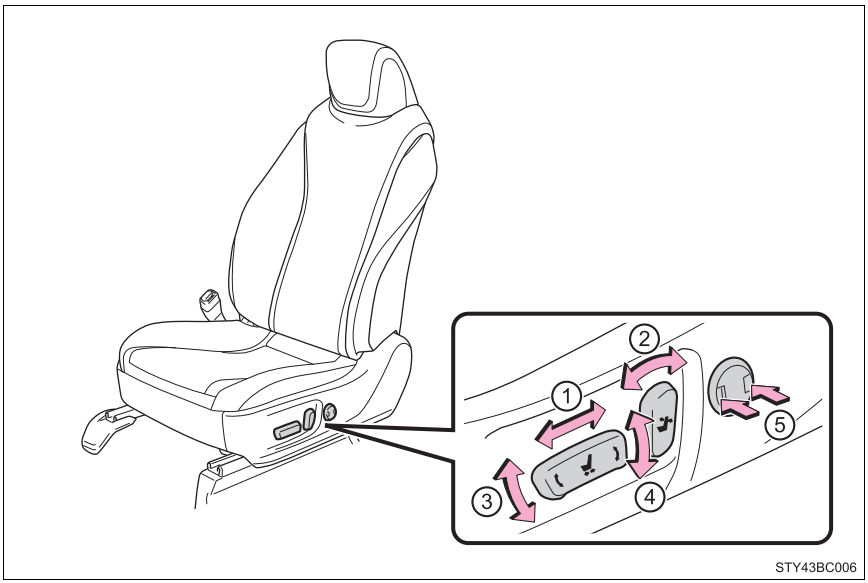
■ **Caution regarding interference with electronic devices**

- People with implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should keep away from the smart key system antennas. (→P. 144)
  The radio waves may affect the operation of such devices. If necessary, the entry function can be disabled. Ask your Toyota dealer for details, such as the frequency of radio waves and timing of the emitted radio waves. Then, consult your doctor to see if you should disable the entry function.
- User of any electrical medical device other than implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should consult the manufacturer of the device for information about its operation under the influence of radio waves.
  Radio waves could have unexpected effects on the operation of such medical devices.

Ask your Toyota dealer for details for disabling the entry function.

Front seats

Adjustment procedure



① Seat position adjustment
② Seatback angle adjustment
③ Seat cushion (front) angle adjustment
④ Vertical height adjustment
⑤ Lumbar support adjustment

Power easy access system

The driver's seat and steering wheel move in accordance with power switch mode and the driver's seat belt condition. (→P. 153)

Adjusting the seat

Be careful to not allow the head restraint to touch the ceiling.

WARNING

■ **When adjusting the seat position**

- Take care when adjusting the seat position to ensure that other passengers are not injured by the moving seat.
- Do not put your hands under the seat or near the moving parts to avoid injury.
  Fingers or hands may become jammed in the seat mechanism.
- Make sure to leave enough space around the feet so they do not get stuck.

■ **Seat adjustment**

To reduce the risk of sliding under the lap belt during a collision, do not recline the seat more than necessary.
If the seat is too reclined, the lap belt may slide past the hips and apply restraint forces directly to the abdomen, or your neck may contact the shoulder belt, increasing the risk of death or serious injury in the event of an accident.
Adjustments should not be made while driving as the seat may unexpectedly move and cause the driver to lose control of the vehicle.

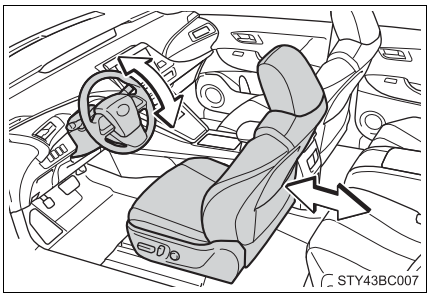
Driving position memory

This feature automatically adjusts the front seats, steering wheel and outside rear view mirrors to make entering and exiting the vehicle easier or to suit your preferences.

Power easy access system

The seat and steering wheel are automatically adjusted to allow the driver to enter and exit the vehicle easily.

When all of the following have been performed, the driver's seat and steering wheel are automatically adjusted to a position that allows driver to enter and exit the vehicle easily.



- The power switch has been turned off.
- The driver's seat belt has been unfastened.

When any of the following has been performed, the driver's seat and steering wheel automatically return to their original positions.

- The power switch has been turned to ACCESSORY mode or ON mode.
- The driver's seat belt has been fastened.

■ Operation of the power easy access system

When exiting the vehicle, the power easy access system may not operate if the seat is already close to the rearmost position, etc.

■ Customization

The seat movement amount settings of the power easy access system can be customized.
(Customizable features: →P. 487)

Driving position memory

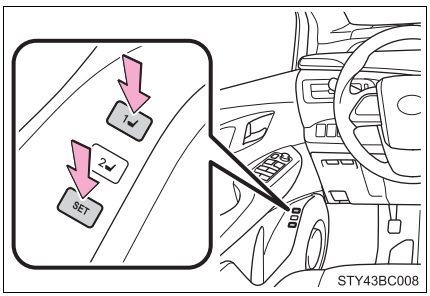
Your preferred driving position (the position of the driver's seat, steering wheel and outside rear view mirrors) can be recorded and recalled by pressing a button.

Two different driving positions can be recorded into memory.

■ Recording procedure

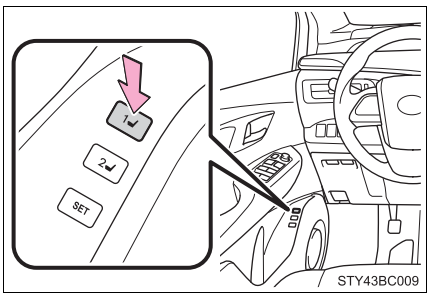
1. Turn the power switch to ON mode.
2. Check that the shift position is in P.
3. Adjust the driver's seat, steering wheel and outside rear view mirrors to the desired positions.
4. While pressing the "SET" button, or within 3 seconds after the "SET" button is pressed, press button "1" or "2" until the buzzer sounds.

   If the selected button has already been preset, the previously recorded position will be overwritten.



■ Recall procedure

1. Turn the power switch to ON mode.
2. Check that the shift position is in P.
3. Press one of the buttons for the driving position you want to recall until the buzzer sounds.



■ **To stop the position recall operation part-way through**

Perform any of the following:

- Press the “SET” button.
- Press button “1” or “2”.
- Operate any of the seat adjustment switches (only cancels seat position recall).
- Operate the tilt and telescopic steering control switch (only cancels steering wheel position recall).

■ **Seat positions that can be memorized (→P. 151)**

The adjusted positions other than the position adjusted by lumbar support switch can be recorded.

■ **Operating the driving position memory after turning the power switch off**

Recorded seat positions can be activated up to 180 seconds after the driver’s door is opened and another 60 seconds after it is closed again.

■ **In order to correctly use the driving position memory function**

If a seat position is already in the furthest possible position and the seat is operated in the same direction, the recorded position may be slightly different when it is recalled.

Memory recall function

Each electronic key can be registered to recall your preferred driving position.

■ Registering procedure

Record your driving position to button “1” or “2” before performing the following:

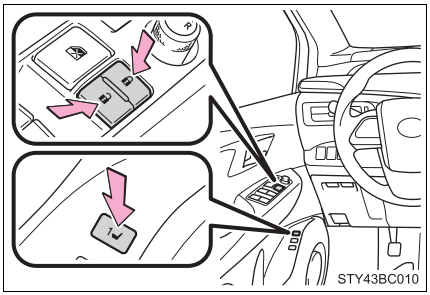
Carry only the key you want to register, and then close the driver’s door.

If 2 or more keys are in the vehicle, the driving position cannot be recorded properly.

1. Turn the power switch to ON mode.
2. Check that the shift position is in P.
3. Recall the driving position that you want to record.

4 While pressing the recalled button, press and hold the door lock switch (either lock or unlock) until the buzzer sounds.

If the button could not be registered, the buzzer sounds continuously for approximately 3 seconds.



Recall procedure

1 Make sure that the doors are locked before recalling the driving position. Carry the electronic key that has been registered to the driving position, and then unlock and open the driver's door using the smart key system or wireless remote control.

The driving position will move to the recorded position (not including the steering wheel). However, the seat will move to a position slightly behind the recorded position in order to make entering the vehicle easier.
If the driving position is in a position that has already been recorded, the seat and outside rear view mirrors will not move.

2 Turn the power switch to ACCESSORY mode or ON mode, or fasten a seat belt.

The seat and steering wheel will move to the recorded position.

Cancelation procedure

Carry only the key you want to cancel and then close the driver's door.
If 2 or more keys are in the vehicle, the driving position cannot be canceled properly.

1 Turn the power switch to ON mode.

2 While pressing the "SET" button, press and hold the door lock switch (either lock or unlock) until the buzzer sounds twice.

If it could not be canceled, the buzzer sounds continuously for approximately 3 seconds.

Recalling the driving position using the memory recall function

- Different driving positions can be registered for each electronic key. Therefore, the driving position that is recalled may be different depending on the key being carried.
- If a door other than the driver's door is unlocked with the smart key system, the driving position cannot be recalled. In this case, press the driving position button which has been set.

Customization

The unlock door settings of the memory recall function can be customized. (Customizable features: →P. 487)

WARNING

Seat adjustment caution

Take care during seat adjustment so that the seat does not strike the rear passenger or squeeze your body against the steering wheel.

Head restraints

Head restraints are provided for all seats.

Front seats

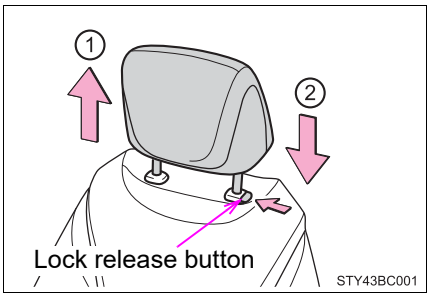
▶ Vertical adjustment

① Up

Pull the head restraint up.

② Down

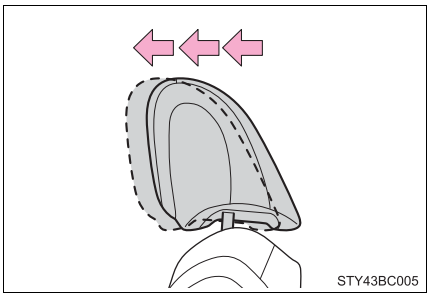
Push the head restraint down while pressing the lock release button.



▶ Horizontal adjustment

The position of the head restraint can be adjusted forward in 4 stages.

If the head restraint is pulled forward from the foremost position, it will return to the rearmost position.



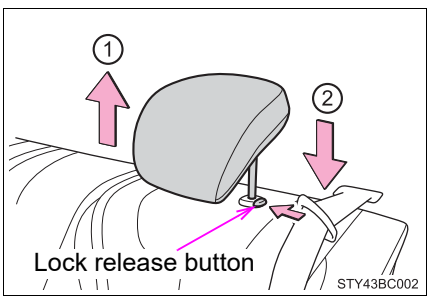
Rear seats

① Up

Pull the head restraint up.

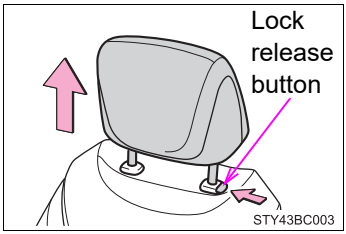
② Down

Push the head restraint down while pressing the lock release button.



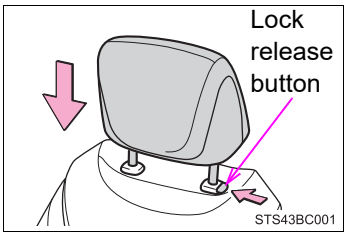
Removing the head restraints

Pull the head restraint up while pressing the lock release button.
If the head restraint touches the ceiling, making the removal difficult, change the seat height or angle. (→P. 151)



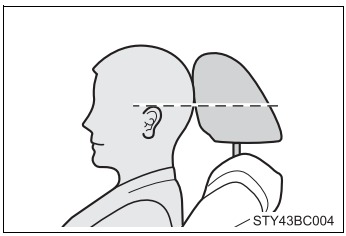
Installing the head restraints

Align the head restraint with the installation holes and push it down to the lock position.
Press and hold the lock release button when lowering the head restraint.



Adjusting the height of the head restraints (front seats)

Make sure that the head restraints are adjusted so that the center of the head restraint is closest to the top of your ears.



Adjusting the rear seat head restraint

Always raise the head restraint from the stowed position when using.

WARNING

Head restraint precautions

Observe the following precautions regarding the head restraints.
Failure to do so may result in death or serious injury.

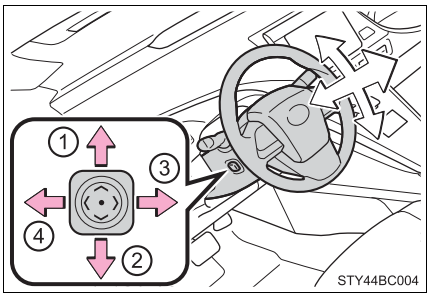
- Use the head restraints designed for each respective seat.
- Adjust the head restraints to the correct position at all times.
- After adjusting the head restraints, push down on them and make sure they are locked in position.
- Do not drive with the head restraints removed.

Steering wheel

Adjustment procedure

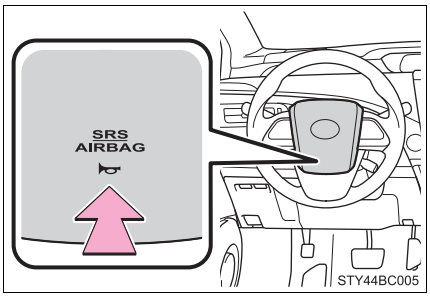
Operating the switch moves the steering wheel in the following directions:

① Up
② Down
③ Toward the driver
④ Away from the driver



Horn

To sound the horn, press on or close to the mark.



The steering wheel can be adjusted when

The power switch is in ACCESSORY or ON mode*.

*: If the driver's seat belt is fastened, the steering wheel can be adjusted regardless of power switch mode.

Automatic adjustment of the steering wheel position

A desired steering wheel position can be entered to memory and recalled automatically by the driving position memory system. (→P. 154)

Power easy access system

The steering wheel and driver's seat move in accordance with power switch mode and the driver's seat belt condition. (→P. 153)

WARNING

Do not adjust the steering wheel while driving.
Doing so may cause the driver to mishandle the vehicle and cause an accident, resulting in death or serious injury.

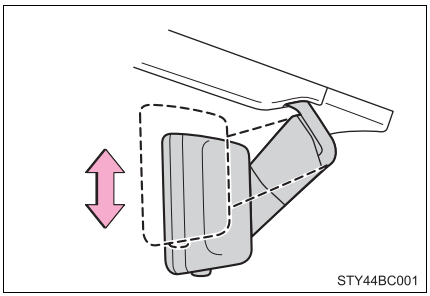
Inside rear view mirror

The rear view mirror's position can be adjusted to enable sufficient confirmation of the rear view.

Adjusting the height of rear view mirror

The height of the rear view mirror can be adjusted to suit your driving posture.

Adjust the height of the rear view mirror by moving it up and down.



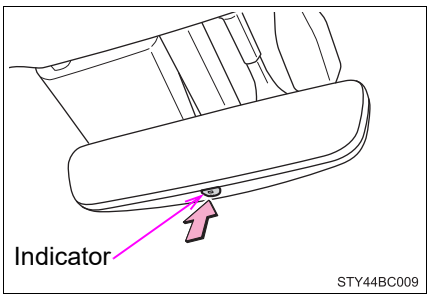
Anti-glare function

Responding to the level of brightness of the headlights of vehicles behind, the reflected light is automatically reduced.

Changing automatic anti-glare function mode

ON/OFF

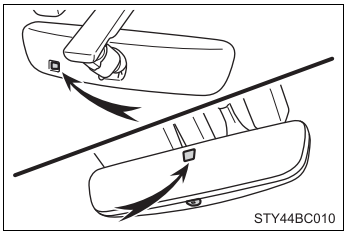
When the automatic anti-glare function is in ON mode, the indicator illuminates.
The function will set to ON mode each time the power switch is turned to ON mode.



Pressing the button turns the function to OFF mode. (The indicator also turns off.)

To prevent sensor error

To ensure that the sensors operate properly, do not touch or cover them.



WARNING

Do not adjust the position of the mirror while driving.
Doing so may lead to mishandling of the vehicle and cause an accident, resulting in death or serious injury.

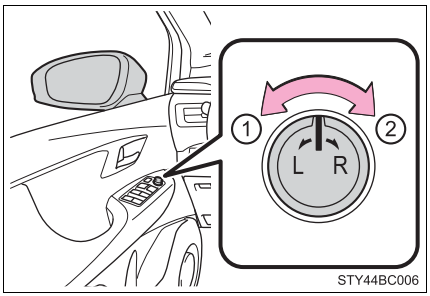
Outside rear view mirrors

Adjustment procedure

1 To select a mirror to adjust, turn the switch.

① Left

② Right



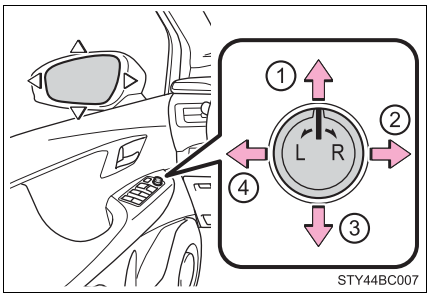
2 To adjust the mirror, operate the switch.

① Up

② Right

③ Down

④ Left

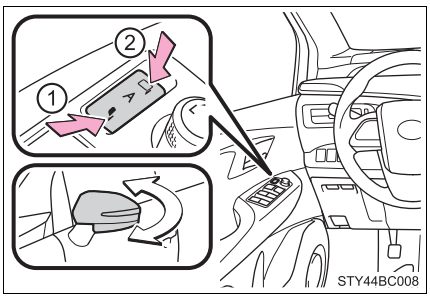


Folding and extending the mirrors

① Folds the mirrors

② Extends the mirrors

Putting the outside rear view mirror folding switch in the neutral position sets the mirrors to automatic mode. Automatic mode allows the folding or extending of the mirrors to be linked to locking/unlocking of the doors.



Linked mirror function when reversing

When the mirror select switch is in the “L” or “R” position, the outside rear view mirrors will automatically angle downwards when the vehicle is reversing in order to give a better view of the ground.
To disable this function, move the mirror select switch to the neutral position (between “L” or “R”)

■ Adjusting the mirror angle when the vehicle is reversing

With the shift position in R, adjust the mirror angle at a desired position.
The adjusted angle will be memorized and the mirror will automatically tilt to the memorized angle whenever the shift position is shifted to R from next time.

The memorized downward tilt position of the mirror is linked to the normal position (angle adjusted with the shift position in other than R). Therefore, if the normal position is changed after adjustment, the tilt position will also change.
When the normal position is changed, readjust the angle in reversing.

■ Mirror angle can be adjusted when

The power switch is in ACCESSORY or ON mode.

■ Rain clearing mirrors

The coating on the mirror has the rain clearing (hydrophilic) effect to make the rear view clearer in raining. When water droplets collect on the mirror surface, this effect causes the droplets to be spread out into a film.

- The rain clearing effect will be reduced temporarily, when the dirt is adhered to the mirror or after your vehicle is parked for a long time in underground or indoor parking lots, etc., where there is no direct sunlight.
  However, the effect will gradually recover after 1- or 2-day exposure to direct sunlight.
- If you want to restore the rain clearing effect immediately, conduct the restoration work. (→P. 353)

■ When the mirrors are fogged up

The outside rear view mirrors can be cleared using the mirror defoggers. Turn on the rear window defogger to turn on the outside rear view mirror defoggers. (→P. 309)

■ Automatic adjustment of the mirror angle

A desired mirror face angle can be entered to memory and recalled automatically by the driving position memory. (→P. 154)

Using automatic mode in cold weather

When automatic mode is used in cold weather, the door mirror could freeze up and automatic stowing and return may not be possible. In this event, remove any ice and snow from the door mirror, then either operate the mirror using manual mode or move the mirror by hand.

Customization

The automatic mirror folding and extending operation can be changed. (Customizable features: →P. 488)

WARNING

Important points while driving

Observe the following precautions while driving.
Failure to do so may result in loss of control of the vehicle and cause an accident, resulting in death or serious injury.

- Do not adjust the mirrors while driving.
- Do not drive with the mirrors folded.
- Both the driver and passenger side mirrors must be extended and properly adjusted before driving.

When a mirror is moving

To avoid personal injury and mirror malfunction, be careful not to get your hand caught by the moving mirror.

When the mirror defoggers are operating

Do not touch the rear view mirror surfaces, as they can become very hot and burn you.

NOTICE

Handling the rain clearing mirror

The rain clearing effect is finite. Observe the following precautions in order to retain the rain-clearing properties of the mirrors:

- When using water repellent, oil film remover, wax, or any other car maintenance product that contains silicone, pay full attention not to adhere it to the mirror surface.
- Do not wipe the mirror surface by using any cloth smeared with sand, oil film remover, abrasive agent, or any other thing that may scratch the mirror surface.
- When the mirrors become iced up, remove the ice by applying warm water, or operating the outside rear view mirror defoggers.
  But, do not attempt to scrape the ice off by using the plastic plate, etc.
- When washing your vehicle using car shampoo with water repellent effect, rinse the mirror surface with a lot of water, and remove the water drops by using a clean and soft cloth.

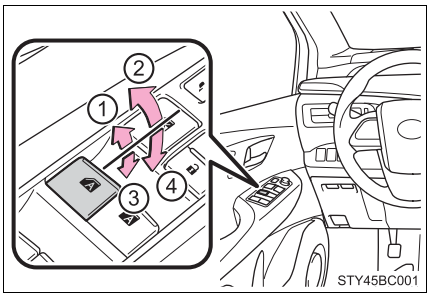
Power windows

Opening and closing procedures

The power windows can be opened and closed using the switches. Operating the switch moves the windows as follows:

① Closing
② One-touch closing*
③ Opening
④ One-touch opening*

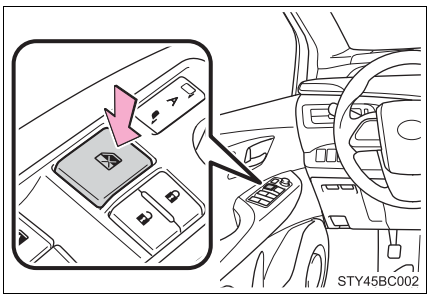
*: To stop the window partway, operate the switch in the opposite direction.



Window lock switch

Press the switch to lock the passenger window switches.

Use this switch to prevent children from accidentally opening or closing a passenger window.



The power windows can be operated when

The power switch is in ON mode.

Operating the power windows after turning the fuel cell system off

The power windows can be operated for approximately 45 seconds even after the power switch is turned to ACCESSORY mode or turned off. They cannot, however, be operated once either front door is opened.

Jam protection function

If an object becomes jammed between the window and the window frame while the window is closing, window movement is stopped and the window is opened slightly.

Catch protection function

If an object becomes caught between the door and window while the window is opening, window movement is stopped.

When the window cannot be opened or closed

When the jam protection function or catch protection function operates unusually and the door window cannot be opened or closed, perform the following operations with the power window switch of that door.

- Stop the vehicle. With the power switch in ON mode, within 4 seconds of the jam protection function or catch protection function activating, continuously operate the power window switch in the one-touch closing direction or one-touch opening direction so that the door window can be opened and closed.
- If the door window cannot be opened and closed even when performing the above operations, perform the following procedure for function initialization.

1. Turn the power switch to ON mode.
2. Pull and hold the power window switch in the one-touch closing direction and completely close the door window.
3. Release the power window switch for a moment, resume pulling the switch in the one-touch closing direction, and hold it there for approximately 6 seconds or more.
4. Press and hold the power window switch in the one-touch opening direction. After the door window is completely opened, continue holding the switch for an additional 1 second or more.
5. Release the power window switch for a moment, resume pushing the switch in the one-touch opening direction, and hold it there for approximately 4 seconds or more.
6. Pull and hold the power window switch in the one-touch closing direction again. After the door window is completely closed, continue holding the switch for a further 1 second or more.

If you release the switch while the window is moving, start again from the beginning. If the window reverses and cannot be fully closed or opened, have the vehicle inspected by your Toyota dealer.

Door lock linked window operation

- The power windows can be opened using the mechanical key.* (→P. 450)
- The power windows can be opened using the wireless remote control.* (→P. 132)

*: These settings must be customized at your Toyota dealer.

Power windows open warning buzzer

The buzzer sounds and a message is shown on the multi-information display in the instrument cluster when the power switch is turned off and the driver's door is opened with the power windows open.

Customization

Settings (e.g. key linked operation) can be changed.
(Customizable features: →P. 488)

WARNING

Observe the following precautions.
Failure to do so may result in death or serious injury.

■ Closing the windows

- The driver is responsible for all the power window operations, including the operation for the passengers. In order to prevent accidental operation, especially by a child, do not let a child operate the power windows. It is possible for children and other passengers to have body parts caught in the power window. Also, when riding with a child, it is recommended to use the window lock switch. (→P. 167)
- Check to make sure that all passengers do not have any part of their body in a position where it could be caught when a window is being operated.
- When using the wireless remote control or mechanical key and operating the power windows, operate the power window after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the window. Also do not let a child operate window by the wireless remote control or mechanical key. It is possible for children and other passengers to get caught in the power window.
- When exiting the vehicle, turn the power switch off, carry the key and exit the vehicle along with the child. There may be accidental operation, due to mischief, etc., that may possibly lead to an accident.

■ Jam protection function

- Never use any part of your body to intentionally activate the jam protection function.
- The jam protection function may not work if something gets jammed just before the window is fully closed. Be careful not to get any part of your body jammed in the window.

■ Catch protection function

- Never use any part of your body or clothing to intentionally activate the catch protection function.
- The catch protection function may not work if something gets caught just before the window is fully opened. Be careful not to get any part of your body or clothing caught in the window.

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Driving the vehicle

The following procedures should be observed to ensure safe driving:

Starting the fuel cell system

→P. 186

Driving

1. With the brake pedal depressed, shift the shift position to D. (→P. 193)

   Check that the shift position indicator shows D.
2. Release the parking brake. (→P. 200)
3. Gradually release the brake pedal and gently depress the accelerator pedal to accelerate the vehicle.

Stopping

1. With the shift position in D, depress the brake pedal.
2. If necessary, set the parking brake.

   If the vehicle is to be stopped for an extended period of time, shift the shift position to P. (→P. 194)

Parking the vehicle

1. With the shift position in D, depress the brake pedal.
2. Set the parking brake. (→P. 200)
3. Shift the shift position to P. (→P. 194)

   Check that the shift position indicator shows P.
4. Press the power switch to stop the fuel cell system.
5. Lock the door, making sure that you have the key on your person.

   If parking on a hill, block the wheels as needed.

Starting off on a steep uphill

1. Firmly set the parking brake and then shift the shift position to D.
2. Gently depress the accelerator pedal.
3. Release the parking brake.

■ **When starting off on an uphill**

The hill-start assist control will activate. (→P. 295)

■ **For fuel-efficient driving**

Keep in mind that fuel cell vehicles are similar to conventional vehicles, and it is necessary to refrain from activities such as sudden acceleration. (→P. 102)

■ **Driving in the rain**

- Drive carefully when it is raining, because visibility will be reduced, the windows may become fogged-up, and the road will be slippery.
- Drive carefully when it starts to rain, because the road surface will be especially slippery.
- Refrain from high speeds when driving on an expressway in the rain, because there may be a layer of water between the tires and the road surface, preventing the steering and brakes from operating properly.

■ **Restraining the fuel cell system output (Brake Override System)**

- When the accelerator and brake pedals are depressed at the same time, the fuel cell system output may be restrained.
- A warning message is displayed on the multi-information display while the system is operating. If a warning message is shown on the multi-information display, read the message and follow the instructions.

■ **Restraining sudden start (Drive-Start Control)**

- When the following unusual operation is performed, the fuel cell system output may be restrained.
  - When the shift lever is shifted from R to D, D to R, N to R, P to D, or P to R with the accelerator pedal depressed, a warning message appears on the multi-information display. If a warning message is shown on the multi-information display, read the message and follow the instructions.
  - When the accelerator pedal is depressed too while the vehicle is in reverse.
- While Drive-Start Control is being activated, your vehicle may have trouble escaping from the mud or fresh snow. In such case, deactivate TRAC (→P. 296) to cancel Drive-Start Control so that the vehicle may become able to escape from the mud or fresh snow.

Breaking in your new Toyota

To extend the life of the vehicle, observing the following precautions is recommended:

- For the first 200 miles (300 km):
  Avoid sudden stops.
- For the first 1000 miles (1600 km):
  - Do not drive at extremely high speeds.
  - Avoid sudden acceleration.
  - Do not drive at a constant speed for extended periods.

Drum-in-disc type parking brake system

Your vehicle has a drum-in-disc type parking brake system. This type of brake system needs bedding-down of the brake shoes periodically or whenever the parking brake shoes and/or drum are replaced. Have your Toyota dealer perform the bedding down operation.

Operating your vehicle in a foreign country

Comply with the relevant vehicle registration laws and confirm the availability of the correct fuel. (→P. 468)

WARNING

Observe the following precautions.
Failure to do so may result in death or serious injury.

When starting the vehicle

Always keep your foot on the brake pedal while stopped with the “READY” indicator is illuminated. This prevents the vehicle from creeping.

When driving the vehicle

- Do not drive if you are unfamiliar with the location of the brake and accelerator pedals to avoid depressing the wrong pedal.
  - Accidentally depressing the accelerator pedal instead of the brake pedal will result in sudden acceleration that may lead to an accident.
  - When backing up, you may twist your body around, leading to difficulty in operating the pedals. Make sure to operate the pedals properly.
  - Make sure to keep a correct driving posture even when moving the vehicle only slightly. This allows you to depress the brake and accelerator pedals properly.
  - Depress the brake pedal using your right foot. Depressing the brake pedal using your left foot may delay response in an emergency, resulting in an accident.
- The driver should pay extra attention to pedestrians when the fuel cell system is on. As there are no engine sounds, pedestrians may misjudge the vehicle’s movement.
- During normal driving, do not turn off the fuel cell system. Turning the fuel cell system off while driving will not cause loss of steering or braking control, however, power assist to the steering will be lost. This will make it more difficult to steer smoothly, so you should pull over and stop the vehicle as soon as it is safe to do so.
  In the event of an emergency, such as if it becomes impossible to stop the vehicle in the normal way: →P. 409
- Do not adjust the positions of the steering wheel, the seat, or the inside or outside rear view mirrors while driving.
  Doing so may result in a loss of vehicle control.
- Always check that all passengers’ arms, heads or other parts of their body are not outside the vehicle.

WARNING

Observe the following precautions.
Failure to do so may result in death or serious injury.

When driving the vehicle

- Do not drive in excess of the speed limit. Even if the legal speed limit permits it, do not drive over 85 mph (140 km/h) unless your vehicle has high-speed capability tires. Driving over 85 mph (140 km/h) may result in tire failure, loss of control and possible injury. Be sure to consult a tire dealer to determine whether the tires on your vehicle are high-speed capability tires or not before driving at such speeds.

When driving on slippery road surfaces

- Sudden braking, acceleration and steering may cause tire slippage and reduce your ability to control the vehicle.
- Sudden acceleration or regenerative braking due to shifting could cause the vehicle to skid.
- After driving through a puddle, lightly depress the brake pedal to make sure that the brakes are functioning properly. Wet brake pads may prevent the brakes from functioning properly. If the brakes on only one side are wet and not functioning properly, steering control may be affected.

When changing the shift position

- Do not let the vehicle roll backward while a forward driving position is selected, or roll forward while the shift position is in R.
  Doing so may result in an accident or damage to the vehicle.
- Do not shift the shift position to P while the vehicle is moving.
  Doing so can damage the transmission and may result in a loss of vehicle control.
- Do not shift the shift position to R while the vehicle is moving forward.
  Doing so can damage the transmission and may result in a loss of vehicle control.
- Do not shift the shift position to a driving position while the vehicle is moving backward.
  Doing so can damage the transmission and may result in a loss of vehicle control.
- Shifting the shift position to N while the vehicle is moving will disengage the fuel cell system. Regenerative braking is not available with the fuel cell system disengaged.
- Be careful not to shift the shift position with the accelerator pedal depressed. Shifting the shift position to any position other than P or N may lead to unexpected rapid acceleration of the vehicle that may cause an accident and result in death or serious injury.
  After shifting the shift position, make sure to check the current shift position using the shift position indicator. (→P. 193)

WARNING

Observe the following precautions.
Failure to do so may result in death or serious injury.

■ If you hear a squealing or scraping noise (brake pad wear limit indicators)

Have the brake pads checked and replaced by your Toyota dealer as soon as possible.
Rotor damage may result if the pads are not replaced when needed.

It is dangerous to drive the vehicle when the wear limits of the brake pads and/or those of the brake discs are exceeded.

■ When the vehicle is stopped

- Do not depress the accelerator pedal unnecessarily.
  If the shift position is in any position other than P or N, the vehicle may accelerate suddenly and unexpectedly, causing an accident.
- In order to prevent accidents due to the vehicle rolling away, always keep depressing the brake pedal while stopped with the “READY” indicator is illuminated, and apply the parking brake as necessary.
- If the vehicle is stopped on an incline, in order to prevent accidents caused by the vehicle rolling forward or backward, always depress the brake pedal and securely apply the parking brake as needed.

■ When the vehicle is parked

- Do not leave glasses, cigarette lighters, spray cans, or soft drink cans in the vehicle when it is in the sun.
  Doing so may result in the following:
  - Gas may leak from a cigarette lighter or spray can, and may lead to a fire.
  - The temperature inside the vehicle may cause the plastic lenses and plastic material of glasses to deform or crack.
  - Soft drink cans may rupture, causing the contents to spray over the interior of the vehicle, and may also cause a short circuit in the vehicle’s electrical components.
- Do not leave cigarette lighters in the vehicle. If a cigarette lighter is in a place such as the glove box or on the floor, it may be lit accidentally when luggage is loaded or the seat is adjusted, causing a fire.
- Do not attach adhesive discs to the windshield or windows. Do not place containers such as air fresheners on the instrument panel or dashboard. Adhesive discs or containers may act as lenses, causing a fire in the vehicle.

WARNING

Observe the following precautions.
Failure to do so may result in death or serious injury.

When the vehicle is parked

- Do not leave a door or window open if the curved glass is coated with a metallized film such as a silver-colored one. Reflected sunlight may cause the glass to act as a lens, causing a fire.
- Always apply the parking brake, shift the shift position to P, stop the fuel cell system and lock the vehicle.
  Do not leave the vehicle unattended while the “READY” indicator is illuminated.
  If the vehicle is parked with the shift position in P but the parking brake is not set, the vehicle may start to move, possibly leading to an accident.

When taking a nap in the vehicle

Always turn the fuel cell system off. Otherwise, if you accidentally move the shift lever or depress the accelerator pedal, causing the vehicle to unintentionally move, which can lead to an accident, resulting in death or serious injury.

When braking

- When the brakes are wet, drive more cautiously.
  Braking distance increases when the brakes are wet, and this may cause one side of the vehicle to brake differently than the other side. Also, the parking brake may not securely hold the vehicle.
- If the electronically controlled brake system does not operate, do not follow other vehicles closely and avoid hills or sharp turns that require braking.
  In this case, braking is still possible, but the brake pedal should be depressed more firmly than usual. Also, the braking distance will increase. Have your brakes fixed immediately.
- The brake system consists of 2 or more individual hydraulic systems; if one of the systems fails, the other(s) will still operate. In this case, the brake pedal should be depressed more firmly than usual and the braking distance will increase. Have your brakes fixed immediately.

NOTICE

When driving the vehicle

- Do not depress the accelerator and brake pedals at the same time during driving, as this may restrain the fuel cell system output.
- Do not use the accelerator pedal or depress the accelerator and brake pedals at the same time to hold the vehicle on a hill.

When parking the vehicle

Always set the parking brake, and shift the shift position to P. Failure to do so may cause the vehicle to move or the vehicle may accelerate suddenly if the accelerator pedal is accidentally depressed.

NOTICE

Avoiding damage to vehicle parts

- Do not turn the steering wheel fully in either direction and hold it there for an extended period of time.
  Doing so may damage the power steering motor.
- When driving over bumps in the road, drive as slowly as possible to avoid damaging the wheels, underside of the vehicle, etc.

If you get a flat tire while driving

A flat or damaged tire may cause the following situations. Hold the steering wheel firmly and gradually depress the brake pedal to slow down the vehicle.

- It may be difficult to control your vehicle.
- The vehicle will make abnormal sounds or vibrations.
- The vehicle will lean abnormally.

Information on what to do in case of a flat tire (→P. 432)

When encountering flooded roads

Do not drive on a road that has flooded after heavy rain, etc. Doing so may cause the following serious damage to the vehicle:

- Fuel cell system stalling
- Short in electrical components
- Fuel cell system damage caused by water immersion

In the event that you drive on a flooded road and the vehicle is flooded, be sure to have your Toyota dealer check the following:

- Fuel cell system
- Brake function
- Changes in quantity and quality of transmission fluid, etc.
- Lubricant condition for the bearings and suspension joints (where possible), and the function of all joints, bearings, etc.

If the shift control system is damaged by flooding, it may not be possible to shift the shift position to P, or from P to other positions. When the shift position cannot be changed from P to any other position, the front wheels will lock, and you will be unable to tow the vehicle with the front wheels on the ground, as the front wheels may be locked. In this case, transport the vehicle with both front wheels or all four wheels lifted.

If the vehicle will not shift out of the P position

There is a possibility that the 12-volt battery is discharged. Check the 12-volt battery in this situation.

Cargo and luggage

Take notice of the following information about storage precautions, cargo capacity and load.

Capacity and distribution

Cargo capacity depends on the total weight of the occupants.

(Cargo capacity) = (Total load capacity) — (Total weight of occupants)

Steps for Determining Correct Load Limit —

(1) Locate the statement “The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs.” on your vehicle’s placard.

(2) Determine the combined weight of the driver and passengers that will be riding in your vehicle.

(3) Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.

(4) The resulting figure equals the available amount of cargo and luggage load capacity.

For example, if the “XXX” amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400 – 750 (5 × 150) = 650 lbs.)

(5) Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

(6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

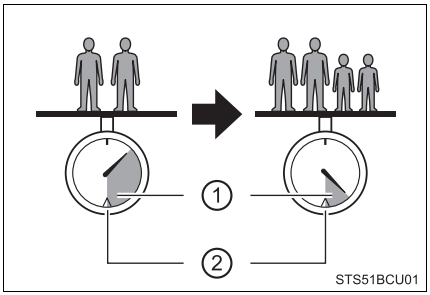
(→P. 183)

Toyota does not recommend towing a trailer with your vehicle. Your vehicle is not designed for trailer towing.

Calculation formula for your vehicle

① Cargo capacity

② Total load capacity (vehicle capacity weight) (→P. 466)



When 2 people with the combined weight of A lb. (kg) are riding in your vehicle, which has a total load capacity (vehicle capacity weight) of B lb. (kg), the available amount of cargo and luggage load capacity will be C lb. (kg) as follows:

B*2 lb. (kg) - A*1 lb. (kg) = C*3 lb. (kg)

*1: A =Weight of people

*2: B =Total load capacity

*3: C =Available cargo and luggage load

In this condition, if 3 more passengers with the combined weight of D lb. (kg) get on, the available cargo and luggage load will be reduced E lb. (kg) as follows:

C lb. (kg) - D*4 lb. (kg) = E*5 lb. (kg)

*4: D =Additional weight of people

*5: E =Available cargo and luggage load

As shown in the example above, if the number of occupants increases, the cargo and luggage load will be reduced by an amount that equals the increased weight due to the additional occupants. In other words, if an increase in the number of occupants causes an excess of the total load capacity (combined weight of occupants plus cargo and luggage load), you must reduce the cargo and luggage on your vehicle.

WARNING

■ **Things that must not be carried in the trunk**

The following things may cause a fire if loaded in the trunk:

- Vehicle receptacle containing gasoline
- Aerosol cans

■ **Storage precautions**

Observe the following precautions.
Failure to do so may prevent the pedals from being depressed properly, may block the driver's vision, or may result in items hitting the driver or passengers, possibly causing an accident.

- Stow cargo and luggage in the trunk whenever possible.
- Do not place cargo or luggage in or on the following locations.
  - At the feet of the driver
  - On the front passenger or rear seats (when stacking items)
  - On the package tray
  - On the instrument panel
  - On the dashboard
- Secure all items in the occupant compartment.

■ **Capacity and distribution**

- Do not exceed the maximum axle weight rating or the total vehicle weight rating.
- Even if the total load of occupant's weight and the cargo load is less than the total load capacity, do not apply the load unevenly. Improper loading may cause deterioration of steering or braking control which may cause death or serious injury.

Vehicle load limits

Vehicle load limits include total load capacity, seating capacity, towing capacity and cargo capacity.

◆ Total load capacity (vehicle capacity weight): (→P. 466)

Total load capacity means the combined weight of occupants, cargo and luggage.

◆ Seating capacity: 4 occupants (Front 2, Rear 2)

Seating capacity means the maximum number of occupants whose estimated average weight is 150 lb. (68 kg) per person.

◆ Towing capacity

Toyota does not recommend towing a trailer with your vehicle.

◆ Cargo capacity

Cargo capacity may increase or decrease depending on the weight and the number of occupants.

■ Total load capacity and seating capacity

These details are also described on the tire and loading information label. (→P. 393)

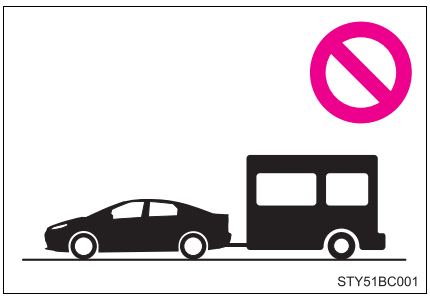
⚠ WARNING

■ Overloading the vehicle

Do not overload the vehicle.
It may not only cause damage to the tires, but also degrade steering and braking ability, resulting in an accident.

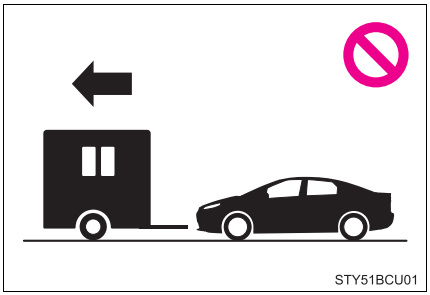
Trailer towing

Toyota does not recommend towing a trailer with your vehicle. Toyota also does not recommend the installation of a tow hitch or the use of a tow hitch carrier for a wheelchair, scooter, bicycle, etc. Your vehicle is not designed for trailer towing or for the use of tow hitch mounted carriers.



Dinghy towing

Your vehicle is not designed to be dinghy towed (with 4 wheels on the ground) behind a motor home.



NOTICE

■ **To avoid serious damage to your vehicle**

Do not tow your vehicle with four wheels on the ground.

Power switch

Performing the following operations when carrying the electronic key on your person starts the fuel cell system or changes power switch modes.

Starting the fuel cell system

1 Check that the parking brake is set.

2 Firmly depress the brake pedal.

will be displayed on the multi-information display.

If it is not displayed, the fuel cell system cannot be started.
When shift position N is selected, the fuel cell system cannot start. Select the P position when starting the fuel cell system. (→P. 194)

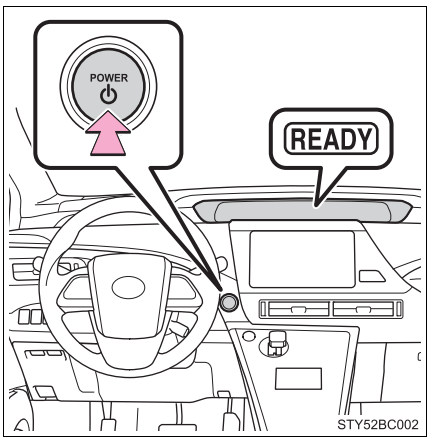
3 Press the power switch shortly and firmly.

When operating the power switch, one short, firm press is enough.
It is not necessary to press and hold the switch.

If the “READY” indicator turns on, the fuel cell system will operate normally.

Continue depressing the brake pedal until the “READY” indicator is illuminated.

The fuel cell system can be started from any power switch mode.



4 Check that the “READY” indicator is illuminated.

The vehicle will not move when the “READY” indicator is off.

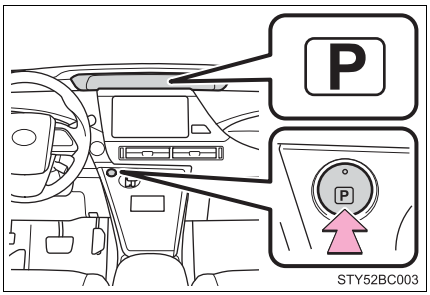
Stopping the fuel cell system

1 Stop the vehicle completely.

2 Set the parking brake. (→P. 200)

3 Press the P position switch. (→P. 194)

Check that the shift position indicator shows P. (→P. 193)



4 Press the power switch.

The meter display will turn off, indicating the fuel cell system has stopped. (The shift position indicator is displayed for several seconds)
The H_2O indicator will illuminate, indicating exhaust water is being purged.

5 Release the brake pedal and check that the meter display is off.

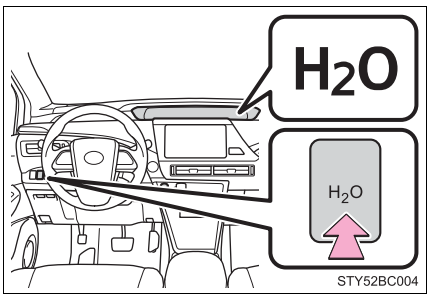
Water release (H_2O switch)

When the fuel cell system is stopped, water is automatically purged from the tailpipe. To minimize water accumulation at parking garages, etc., purge can be done manually before parking.

While the “READY” indicator is on, press the H_2O switch.

The H_2O indicator on the meter turns on.

Press the switch again to stop the purge.
Remember that water is being generated as long as the fuel cell system is operating. So a small amount of water will be generated after manual purging and before parking.



Changing power switch modes

Modes can be changed by pressing the power switch with brake pedal released. (The mode changes each time the switch is pressed.)

① Off

The emergency flashers can be used.

② ACCESSORY mode

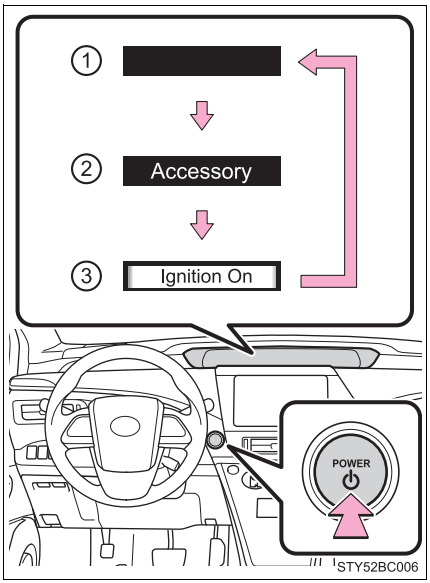
Some electrical components such as the audio system can be used.

“Accessory” will be displayed on the main display.

③ ON mode

All electrical components can be used.

“Ignition On” will be displayed on the main display.



■ Auto power off function

If the vehicle is left in ACCESSORY mode for more than 20 minutes or ON mode (the fuel cell system is not operating) for more than an hour with the shift position in P, the power switch will automatically turn off. However, this function cannot entirely prevent 12-volt battery discharge. Do not leave the vehicle with the power switch in ACCESSORY or ON mode for long periods of time when the fuel cell system is not operating.

■ Sounds and vibrations specific to a fuel cell vehicle

→P. 88

■ Electronic key battery depletion

→P. 130

■ **Starting the fuel cell system in cold temperatures**

- When the power switch is pressed and the fuel cell system starts (→P. 186) during cold temperatures, the fuel cell stack is quickly warmed up using the waste heat during power generation.
- When the temperatures is cold, it may take some time until the “READY” indicator turns on.
- In extremely cold temperatures, the “READY” indicator may take more than 10 seconds to illuminate. In this case, the status progression of the fuel cell system startup is displayed on the multi-information display.

STY52BC001

- When starting the fuel cell system during cold weather, “FC System Shut-down due to Freezing conditions Stop Your Vehicle in a Safe Place and Contact Your Dealer” may be displayed in the multi-information display.
  The fuel cell system is frozen and can not be started. Contact a Toyota dealer.
- The power output will be temporarily limited until the fuel cell system reaches full operating temperature.
- The fuel cell system noises may become louder when the temperature is cold. This is the normal warm-up operation and is not a malfunction. In some cases, operation noises may continue for a some time even after the “READY” indicator has turned on. (→P. 88)

■ **Stopping the fuel cell system in cold temperatures**

- When the power switch is pressed and the fuel cell system is stopped (→P. 187) during cold temperatures, the time for water purge from the tail-pipe may be longer than usual to prevent liquid in the fuel cell stack from freezing.
- The water purge time may also be long if the system is stopped before fuel cell system warm-up is completed.
- It is normal to hear hissing and other sounds during purge. (→P. 88)
- The H_2O indicator on the meter will illuminate during purge.

Parking the vehicle during cold weather

- Water may automatically purge from the tailpipe, even when the fuel cell system is off, in order to prevent liquid in the fuel cell stack, hydrogen pipelines, etc., from freezing.
- It is normal to hear hissing and other sounds during purge. (→P. 88)
- The H_2O indicator on the meter will illuminate during purge.

Water release function during cold weather

In the following cases, the fuel cell system automatic drainage may not operate. It may not be possible to start the fuel cell system due to the fuel cell stack, hydrogen pipes, etc, being frozen.

- When transporting or towing the vehicle in frozen areas
- When the 12-volt battery terminals are disconnected and remain as such in frozen areas

Operate the water release function with the following procedure beforehand to prevent water from freezing in the system.

1. Turn the power switch to ON mode and press the H_2O switch.
   Check that the H_2O indicator on the meter turns on.
2. While depressing the brake, press the power switch to start the fuel cell system.
   Check that the “READY” indicator turns on.
3. Press the power switch to stop the fuel cell system.
   The water release is automatically performed. During water purge, the H_2O indicator turns on. (Longer than normal water purge)

Conditions affecting operation

→P. 146

Notes for the entry function

→P. 147

If the fuel cell system does not start

- The immobilizer system may not have been deactivated. (→P. 78)
  Contact your Toyota dealer.
- Check that the shift position is P. (→P. 193)
  The fuel cell system cannot be started when the shift position is N.
  If P position is not selected, “Shift to P position to start” will be displayed on the multi-information display.
- Check that the fuel door is closed.
  When the fuel door is open, the fuel cell system cannot be started.
  Close the fuel door before starting the system. (→P. 216)

■ **If “Smart Key System Malfunction See Owner’s Manual” is displayed on the multi-information display**

The system may be malfunctioning. Have the vehicle inspected by your Toyota dealer immediately.

■ **If the “READY” indicator does not come on**

In the event that the “READY” indicator does not come on even after performing the proper procedures for starting the vehicle, contact your Toyota dealer immediately.

■ **If the fuel cell system is malfunctioning**

→P. 426

■ **If the electronic key battery is depleted**

→P. 400

■ **Operation of the power switch**

If the switch is not pressed shortly and firmly, the power switch mode may not change or the fuel cell system may not start.

■ **Automatic P position selection function**

- When the shift position is other than P, pressing the power switch with the vehicle stopped completely will cause the shift position to change to P automatically, and then the power switch will turn off.
- When turning the power switch off with the shift position other than P, firmly depress the brake pedal and confirm that the shift position* has changed to P before slowly releasing the brake pedal.

  *: Even after the instrument panel display has been turned off, the shift position indicator will continue to be displayed for several seconds.

■ **If the shift control system malfunctions**

The power switch will not be able to be turned off. In this occurs, the switch can be turned off by applying the parking brake.
If the system malfunctions, have your vehicle serviced by your Toyota dealer immediately.

■ **If the smart key system has been deactivated in a customized setting**

→P. 486

WARNING

When starting the fuel cell system

Always start the fuel cell system while sitting in the driver's seat. Do not depress the accelerator pedal while starting the fuel cell system under any circumstances.
Doing so may cause an accident resulting in death or serious injury.

Stopping the fuel cell system in an emergency

If you want to stop the fuel cell system in an emergency while driving the vehicle, press and hold the power switch for more than 2 seconds, or press it briefly 3 times or more in succession. (→P. 409)

However, do not touch the power switch while driving except in an emergency. Turning the fuel cell system off while driving will not cause loss of steering or braking control, however, power assist to the steering will be lost. This will make it more difficult to steer smoothly, so you should pull over and stop the vehicle as soon as it is safe to do so.

NOTICE

To prevent 12-volt battery discharge

Do not leave the power switch in ACCESSORY or ON mode for long periods if the fuel cell system is off.

When starting the fuel cell system

If the fuel cell system becomes difficult to start, have your vehicle checked by your Toyota dealer immediately.

Symptoms indicating a malfunction with the power switch

If the power switch seems to be operating somewhat differently than usual, such as the switch sticking slightly, there may be a malfunction. Contact your Toyota dealer immediately.

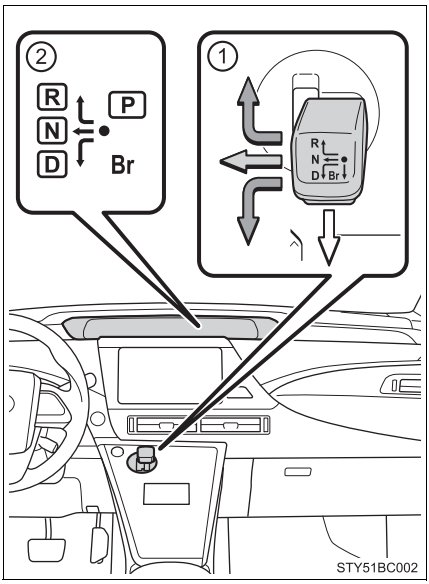
Transmission

Shifting the shift lever

① Shift lever

Operate the shift lever gently and ensure correct shifting operation.

Release the shift lever after each shifting operation to allow it return to the ● position.



When shifting to the D or R positions, move the shift lever along the shift gate.

To shift to the N position, slide the shift lever to the left and hold it. The shift position will change to N.

To shift to the Br mode, pull the shift lever to the rear along the shift gate. Shifting to Br mode is only possible when the shift position D is selected.

When shifting from P to N, D or R, from D to R, or from R to D, ensure that the brake pedal is being depressed and that the vehicle is stationary.

② Shift position indicator

When selecting a shift position, make sure that the shift position has been changed to the desired position by checking the shift position indicator provided on the instrument panel.

Shift position purpose

Shift position	Objective or function
P	Parking the vehicle/starting the fuel cell system
R	Reversing
N	Neutral
D	Normal driving

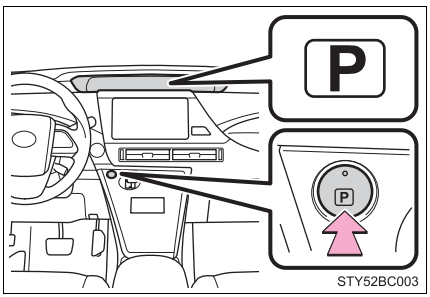
P position switch

The shift position can be changed to P through the use of the P position switch.

Fully stop the vehicle and keep depressing the brake pedal, and then press the P position switch.

When the shift position is changed to P, the switch indicator comes on.

Check that the P position indicator is illuminated on the shift position indicator.



■ Shifting the shift position from P to other positions

While depressing the brake pedal firmly, operate the shift lever. If the shift lever is operated without depressing the brake pedal, a buzzer will sound and the shifting operation will be disabled.

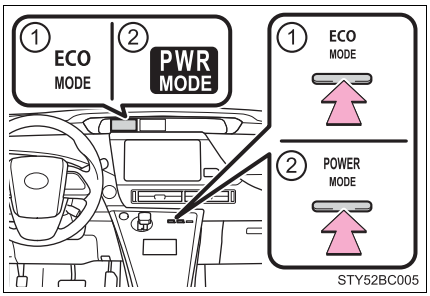
Selecting a drive mode

The following modes can be selected to suit driving conditions.

■ Eco drive mode/Power mode

① Eco drive mode

Suitable for improving the fuel economy, because the torque corresponding to the accelerator pedal depression amount can be generated more smoothly than it is in normal conditions.



ECO is displayed on the air conditioning screen and the system goes into ECO HEAT/COOL mode. (→P. 308)

When the “ECO MODE” switch is pressed, the “ECO MODE” indicator will illuminate on the main display.

To cancel Eco drive mode, press the “ECO MODE” switch again.

At this time, the ECO HEAT/COOL mode is canceled.

② Power mode

Use when high levels of response and feeling are desirable, such as when driving in mountainous regions or when overtaking.

When the “POWER MODE” switch is pressed, the POWER MODE indicator will illuminate on the main display.

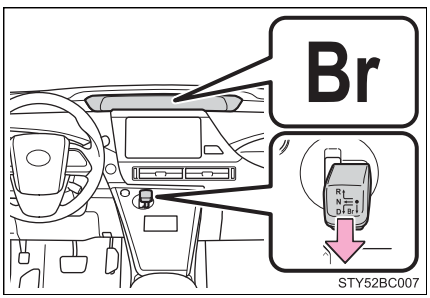
To cancel power mode, press the “POWER MODE” switch again.

■ Br mode

Suitable for driving that requires strong regenerative braking, such as down-hill driving, etc.

To select Br mode, shift the shift lever down. (→P. 193)

The Br mode indicator will illuminate on the meter.



To return to normal driving mode, depress the accelerator pedal or select the D position again with the shift lever.

For the shift positions

- When the power switch is off, the shift position cannot be changed.
- When the power switch is in ON mode (the fuel cell system is not operating), the shift position can only be changed to N. The shift position will be changed to N even if the shift position is shifted to D or R and held in that position.
- When the “READY” indicator is on, the shift position can be changed from P to D, N or R.
- When the “READY” indicator is flashing, the shift position cannot be changed from P to another position even if the shift lever is operated.
  Wait until the “READY” indicator changes from a flashing to a solid light, and then operate the shift lever again.

In addition, if an attempt is made to change the shift position by moving the shift lever or by pressing the P position switch in any of the following situations, a buzzer will sound and the shifting operation will be disabled or the shift position will automatically change to N. When this happens, select an appropriate shift position.

- When attempting to change the shift position from P without depressing the brake pedal, the shift position change is invalidated.
- Situations where the shift position will automatically change to N:
  - When the P position switch is pressed while the vehicle is running.*1
  - When an attempt is made to select the R position by moving the shift lever when the vehicle is moving forward.*2
  - When an attempt is made to select the D position by moving the shift lever when the vehicle is moving in reverse.*3
  - When an attempt is made to change the shift position from R to Br mode by moving the shift lever.

*1: Shift position may be changed to P when driving at extremely low speeds.

*2: Shift position may be changed to R when driving at low speeds.

*3: Shift position may be changed to D when driving at low speeds.

Br mode

Depending on the condition of the traction battery, Br mode may not be available.
In that case, a message is displayed on the multi-information display.

Sounds when in Br mode

→P. 88

Restraining sudden start (Drive-Start Control)

→P. 173

Reverse warning buzzer

When shifting into R, a buzzer will sound to inform the driver that the shift position is in R.

Regenerative Braking

When the shift position is in D, regenerative braking is engaged when the foot is released from the accelerator pedal.

ECO HEAT/COOL mode operation for Eco drive mode

- When the “ECO MODE” switch is pressed, the system switches over to ECO HEAT/COOL mode. (→P. 311) During the use of Eco drive mode, only the ECO HEAT/COOL mode can be canceled.
- When it is desired to improve the effectiveness of the air conditioning system, perform the following operations.
  - Adjust the temperature settings and airflow mode.
  - Press ECO HEAT/COOL of the air conditioning operation panel (→P. 306) and cancel the ECO HEAT/COOL mode, or cancel Eco drive mode.

Power mode automatic deactivation

Power mode is automatically deactivated if the power switch is turned off after driving in power mode.

Shifting from P on a slope

When changing to another position from P when parked on a slope in the P position, vibrations may be felt.

WARNING

When driving on slippery road surfaces

Do not accelerate or shift the shift position suddenly.
Sudden changes in regenerative braking may cause the vehicle to spin or skid, resulting in an accident.

For the shift lever

Do not remove the shift lever knob or use anything but a genuine Toyota shift lever knob. Also, do not hang anything on the shift lever.
Doing so could prevent the shift lever from returning to position, causing unexpected accidents to occur when the vehicle is in motion.

P position switch

Do not press the P position switch while the vehicle is moving.
If the P position switch is pressed when driving at very low speeds (for example, directly before stopping the vehicle), the vehicle may stop suddenly when the shift position switches to P, which could lead to an accident.

NOTICE

Situations where shift control system malfunctions are possible

If any of the following situations occurs, shift control system malfunctions are possible.
Immediately stop the vehicle in a safe place on level ground, apply the parking brake, and then contact your Toyota dealer.

- When a warning message indicating malfunction appears on the multi-information display. (→P. 426)
- When the shift position indicator remains off.

If the vehicle cannot be shifted out of P

There is a possibility that the 12-volt battery is discharged. Check the 12-volt battery in this situation.

Notes regarding shift lever and P position switch operation

Avoid repeatedly operating the shift lever and P position switch in quick succession.
The system protection function may activate and it will not be temporarily possible to shift the shift position other than P. If this happens, please wait for a while before attempting to change the shift position again.

Turn signal lever

Operating instructions

① Right turn

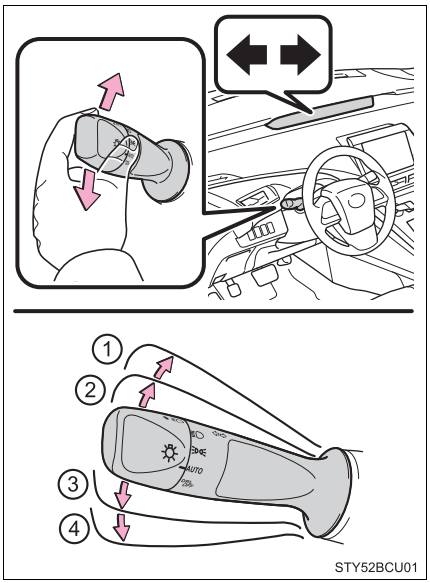
② Lane change to the right (move the lever partway and release it)

The right hand signals will flash 3 times.

③ Lane change to the left (move the lever partway and release it)

The left hand signals will flash 3 times.

④ Left turn



■ **Turn signals can be operated when**

The power switch is in ON mode.

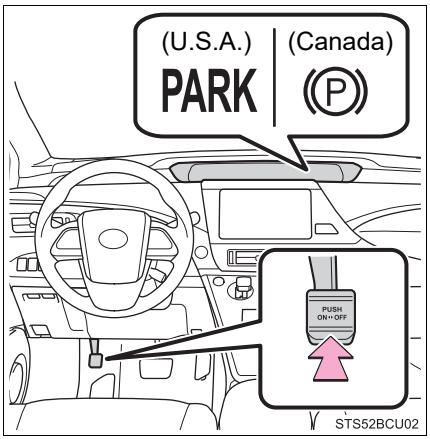
■ **If the indicator flashes faster than usual**

Check that a light bulb in the front or rear turn signal lights has not burned out.

Parking brake

Operating instructions

To set the parking brake, fully depress the parking brake pedal with your left foot while depressing the brake pedal with your right foot.
(Depressing the pedal again releases the parking brake.)



Parking the vehicle

→P. 172

Parking brake engaged warning buzzer

A buzzer will sound if the vehicle is driven with the parking brake engaged. “Release Parking Brake” is displayed on the multi-information display.

Warning messages and buzzers

Warning messages and buzzers are used to indicate a system malfunction or to inform the driver of the need for caution. If a warning message is shown on the multi-information display, read the message and follow the instructions.

If the brake system warning light comes on

→P. 418

Usage in winter time

→P. 302

NOTICE

When parking the vehicle

Before you leave the vehicle, shift the shift position to P, set the parking brake and make sure that the vehicle does not move.

Before driving

Fully release the parking brake.
Driving the vehicle with the parking brake set will lead to brake components overheating, which may affect braking performance and increase brake wear.

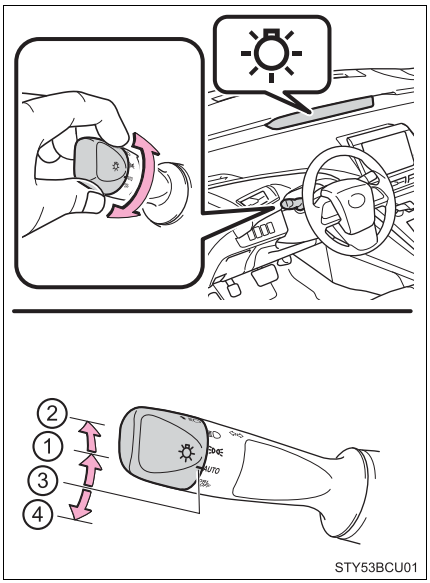
Headlight switch

The headlights can be operated manually or automatically.

Operating instructions

Operating the switch turns on the lights as follows:

▶ For U.S.A.



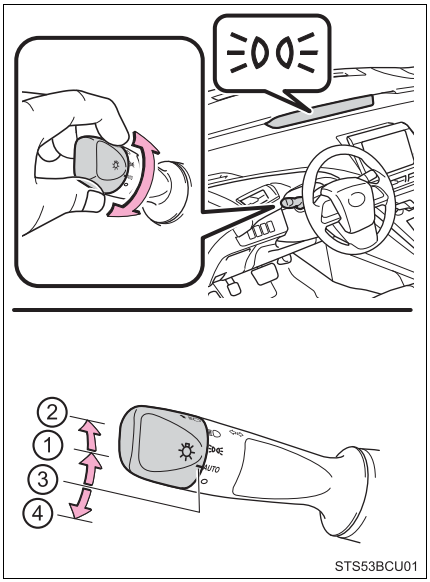
① The side marker, parking, tail, license plate, instrument panel lights, and daytime running lights (→P. 203) turn on.

② The headlights and all lights listed above (except daytime running lights) turn on.

③ AUTO The headlights, parking, daytime running lights (→P. 203) and all the lights listed above turn on and off automatically (when the power switch is in ON mode).

④ DRL OFF The daytime running lights turn off. (→P. 203)

▶ For Canada



① The side marker, parking, tail, license plate, instrument panel lights, and daytime running lights (→P. 203) turn on.

② The headlights and all lights listed above (except daytime running lights) turn on.

③ AUTO The headlights, parking, daytime running lights (→P. 203) and all the lights listed above turn on and off automatically (when the power switch is in ON mode).

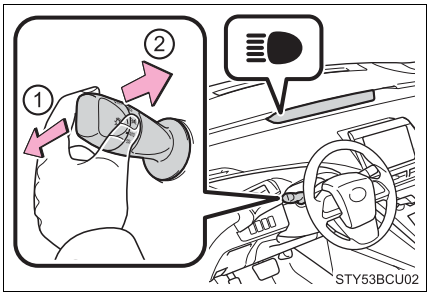
④ The daytime running lights turn on. (→P. 203)

Turning on the high beam headlights

① With the headlights on, push the lever away from you to turn on the high beams.

Pull the lever toward you to the center position to turn the high beams off.

② Pull the lever toward you and release it to flash the high beams once.



You can flash the high beams with the headlights on or off.

Daytime running light system

- The daytime running lights illuminate using the same lights as the parking lights and illuminate brighter than the parking lights.
- To make your vehicle more visible to other drivers during daytime driving, the daytime running lights turn on automatically when all of the following conditions are met. (The daytime running lights are not designed for use at night.)
  - The fuel cell system is operating
  - The parking brake is released
  - The headlight switch is in the O (Canada only), ≣DC or AUTO* position

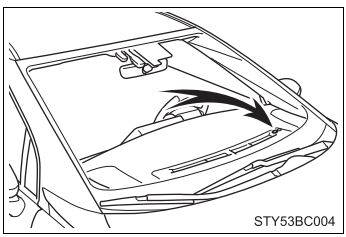
*: When the surroundings are bright

The daytime running lights remain on after they illuminate, even if the parking brake is set again.

- For the U.S.A.: Daytime running lights can be turned off by operating the switch.
- Compared to turning on the headlights, the daytime running light system offers greater durability and consumes less electricity, so it can help improve fuel economy.

Headlight control sensor

The sensor may not function properly if an object is placed on the sensor, or anything that blocks the sensor is affixed to the windshield.
Doing so interferes with the sensor detecting the level of ambient light and may cause the automatic headlight system to malfunction.



Automatic light off system

- When the headlights are on: The headlights and tail lights turn off 30 seconds after a door is opened and closed if the power switch is turned to ACCESSORY mode or turned off. (The lights turn off immediately if 🔒 on the key is pressed after all the doors are locked.)
- When only the tail lights are on: The tail lights turn off automatically if the power switch is turned to ACCESSORY mode or turned off and the driver's door is opened.

To turn the lights on again, turn the power switch to ON mode, or turn the light switch O or AUTO once and then back to ≡DC or ≡D .

If any of the doors or trunk lid is kept open, the lights automatically turn off after 20 minutes.

Automatic headlight leveling system

The level of the headlights is automatically adjusted according to the number of passengers and the loading condition of the vehicle to ensure that the headlights do not interfere with other road users.

Light reminder buzzer

A buzzer sounds when the power switch is turned off or turned to ACCESSORY mode and the driver's door is opened while the lights are turned on.

12-volt battery-saving function

In order to prevent the 12-volt battery of the vehicle from discharging, if the headlights and/or tail lights are on when the power switch is turned off the 12-volt battery saving function will operate and automatically turn off all the lights after approximately 20 minutes. When the power switch is turned to ON mode, the 12-volt battery-saving function will be disabled.

When any of the following are performed, the 12-volt battery-saving function is canceled once and then reactivated. All the lights will turn off automatically 20 minutes after the 12-volt battery-saving function has been reactivated:

- When the headlight switch is operated
- When a door is opened or closed

Customization

Settings (e.g. light sensor sensitivity) can be changed.
(Customizable features: →P. 488)

⚠ NOTICE

To prevent 12-volt battery discharge

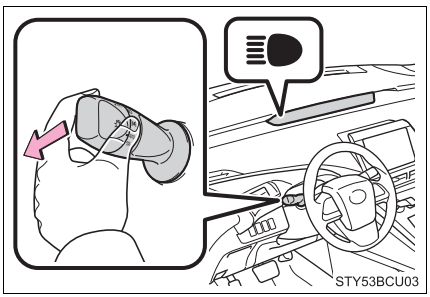
Do not leave the lights on longer than necessary when the fuel cell system is off.

Automatic High Beam

The Automatic High Beam uses an in-vehicle camera sensor to assess the brightness of streetlights, the lights of oncoming and preceding vehicles, etc., and automatically turns high beam on or off as necessary.

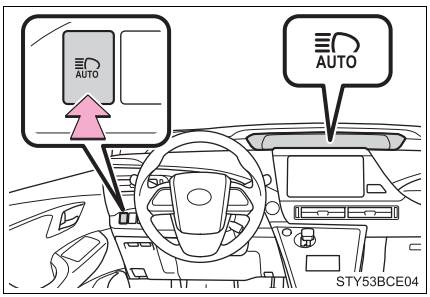
Activating the Automatic High Beam system

1 Push the lever away from you with the headlight switch in AUTO or position.



2 Press the Automatic High Beam switch.

The Automatic High Beam indicator will come on when the headlights are turned on automatically to indicate that the system is active.



High beam automatic turning on or off conditions

When all of the following conditions are fulfilled, high beam will be automatically turned on:

- Vehicle speed is above approximately 21 mph (34 km/h).
- The area ahead of the vehicle is dark.
- There are no oncoming or preceding vehicles with headlights or tail lights turned on.
- There are few streetlights on the road ahead.

If any of the following conditions are fulfilled, high beam will be automatically turned off:

- Vehicle speed drops below approximately 17 mph (27 km/h).
- The area ahead of the vehicle is not dark.
- Oncoming or preceding vehicles have headlights or tail lights turned on.
- There are many streetlights on the road ahead.

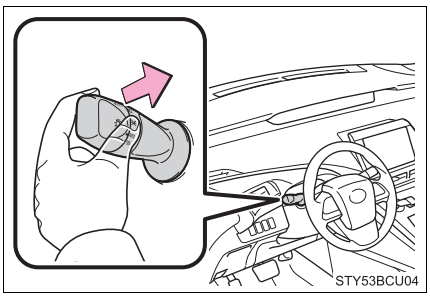
Turning the high beam on/off manually

■ Switching to low beam

Pull the lever to the original position.

The Automatic High Beam indicator will turn off.

Push the lever away from you to activate the Automatic High Beam system again.

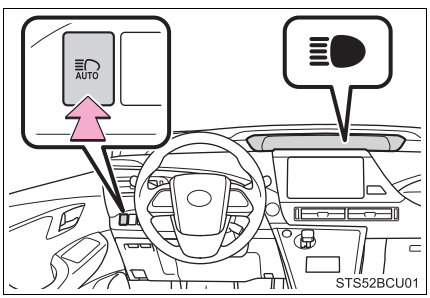


■ Switching to high beam

Press the Automatic High Beam switch.

The Automatic High Beam indicator will turn off and the high beam indicator will turn on.

Press the switch to activate the Automatic High Beam system again.



■ **The Automatic High Beam can be operated when**

The power switch is in ON mode.

■ **Camera sensor detection information**

● High beam may not be automatically turned off in the following situations:

- When oncoming vehicles suddenly appear from a curve
- When the vehicle is cut in front of by another
- When oncoming or preceding vehicles are hidden from sight due to repeated curves, road dividers or roadside trees

● High beam may be turned off if an oncoming vehicle that is using fog lights without using the headlights is detected.

● House lights, street lights, red traffic signals, and illuminated billboards or signs may cause the high beam to turn off.

● The following factors may affect the amount of time taken to turn high beam on or off:

- The brightness of headlights, fog lights, and tail lights of oncoming and preceding vehicles
- The movement and direction of oncoming and preceding vehicles
- When an oncoming or preceding vehicle only has operational lights on one side
- When an oncoming or preceding vehicle is a two-wheeled vehicle
- The condition of the road (gradient, curve, condition of the road surface, etc.)
- The number of passengers and amount of luggage

● High beam may be turned on or off when unexpected by the driver.

- In the situations below, the system may not be able to correctly detect the surrounding brightness levels, and may flash or expose nearby pedestrians to the high beam. Therefore, you should consider turning the high beams on or off manually rather than relying on the Automatic High Beam system.
  - In bad weather (rain, snow, fog, sandstorms, etc.).
  - The windshield is obscured by fog, mist, ice, dirt, etc.
  - The windshield is cracked or damaged.
  - The camera sensor is deformed or dirty.
  - The camera sensor temperature is extremely high.
  - Surrounding brightness levels are equal to those of headlights, tail lights or fog lights.
  - Vehicles ahead have headlights that are either switched off, dirty, are changing color, or are not aimed properly.
  - When driving through an area of intermittently changing brightness and darkness.
  - When frequently and repeatedly driving ascending/descending roads, or roads with rough, bumpy or uneven surfaces (such as stone-paved roads, gravel tracks, etc.).
  - When frequently and repeatedly taking curves or driving on a winding road.
  - There is a highly reflective object ahead of the vehicle, such as a sign or a mirror.
  - The back of a vehicle ahead is highly reflective, such as a container on a truck.
  - The vehicle's headlights are damaged or dirty.
  - The vehicle is listing or tilting, due to a flat tire, a trailer being towed, etc.
  - The driver believes that the high beam may be causing problems or distress to other drivers or pedestrians nearby.

WARNING

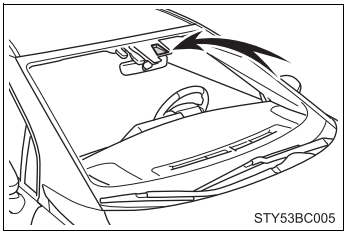
Limitations of the Automatic High Beam

Do not rely on the Automatic High Beam. Always drive safely, taking care to observe your surroundings and turning high beam on or off manually if necessary.

NOTICE

Notes when using the Automatic High Beam system

Observe the following to ensure that the Automatic High Beam functions correctly.



- Do not touch the camera sensor.
- Do not subject the camera sensor to a strong impact.
- Do not disassemble the camera sensor.
- Do not spill liquid onto the camera sensor.
- Do not apply window tinting or stickers to the camera sensor or the area of windshield near the camera sensor.
- Do not place items on the dashboard. There is a possibility that the camera sensor will mistake items reflected in the windshield for streetlights, the headlights of other vehicles, etc.
- Do not install a parking tag or any other accessories near or around the camera sensor.
- Do not overload the vehicle.
- Do not modify the vehicle.
- If the windshield needs to be replaced, contact your Toyota dealer.

Windshield wipers and washer

Operating the wiper lever

Operating the lever operates the wipers or washer as follows.

When “AUTO” is selected, the wipers will operate automatically when the sensor detects falling rain. The system automatically adjusts wiper timing in accordance with rain volume and vehicle speed.

① OFF *1 or O *2

Off

② AUTO

Rain-sensing operation

③ LO *1 or ▼ *2

Low speed operation

④ HI *1 or ▼▼ *2

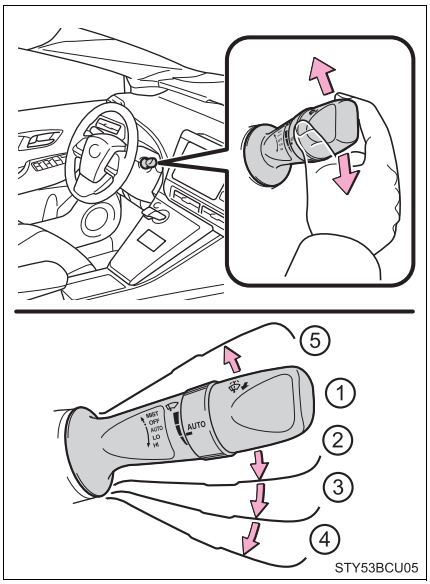
High speed operation

⑤ MIST *1 or △ *2

Temporary operation

*1: For U.S.A.

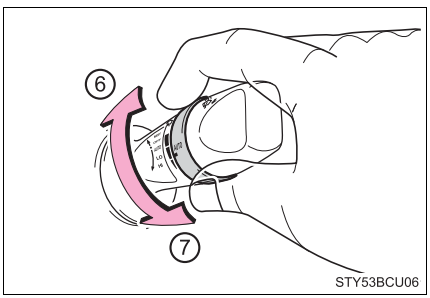
*2: For Canada



The sensor sensitivity can be adjusted when “AUTO” is selected.

⑥ Increases the sensitivity

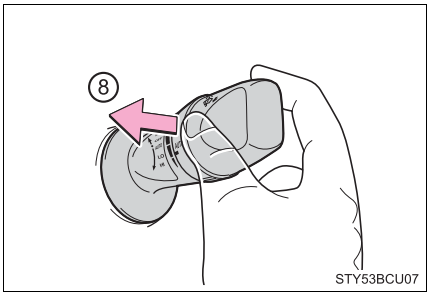
⑦ Decreases the sensitivity



⑧ Washer/wiper dual operation

Pulling the lever operates the wipers and washer.

Wipers will automatically operate a couple of times after the washer squirts.



■ **The windshield wipers and washers can be operated when**

The power switch is in ON mode.

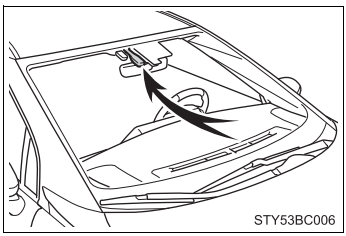
■ **Effects of vehicle speed on wiper operation**

Vehicle speed affects the Intermittent wiper interval.

■ **Raindrop sensor**

- The raindrop sensor judges the amount of raindrops.

  An optical sensor is adopted. It may not operate properly when sunlight from the rising or setting of the sun intermittently strikes the windshield, or if bugs, etc., are present on the windshield.



- If the wiper switch is turned to the “AUTO” position while the power switch is in ON mode, the wipers will operate once to show that “AUTO” mode is activated.
- If the temperature of the raindrop sensor is 194°F (90°C) or higher, or 5°F (-15°C) or lower, automatic operation may not occur. In this case, operate the wipers in any mode other than “AUTO” mode.

■ **If no windshield washer fluid sprays**

Check that the washer nozzles are not blocked, if there is washer fluid in the windshield washer fluid reservoir.

⚠ WARNING

■ **Caution regarding the use of windshield wipers in “AUTO” mode**

The windshield wipers may operate unexpectedly if the sensor is touched or the windshield is subject to vibration in “AUTO” mode. Take care that your fingers, etc., do not become caught in the windshield wipers.

■ **Caution regarding the use of washer fluid**

When it is cold, do not use the washer fluid until the windshield becomes warm. The fluid may freeze on the windshield and cause low visibility. This may lead to an accident, resulting in death or serious injury.

NOTICE

■ **When the windshield is dry**

Do not use the wipers, as they may damage the windshield.

■ **When the washer fluid tank is empty**

Do not operate the switch continually as the washer fluid pump may overheat.

■ **When a nozzle becomes blocked**

In this case, contact your Toyota dealer.
Do not try to clear it with a pin or other object. The nozzle will be damaged.

■ **To prevent 12-volt battery discharge**

Do not leave the wipers on longer than necessary when the fuel cell system is off.

Opening the fuel door

- Fuel with compressed hydrogen gas only at hydrogen stations.
- Fuel at hydrogen stations conforming with the Society of Automotive Engineers (SAE) J2601 fueling protocol or laws that may supersede such SAE protocols.
- Refer to the Mirai Station Finder Application in Entune, www.toyota.com (for U.S. owners) or www.toyota.ca (for Canadian owners), or call 1-800-331-4331 (for U.S. owners) or 1-888-869-6828 (for Canadian owners).
- Observe any notices or instructions shown at hydrogen stations.
- The filling time and amount of fuel may depend on outside temperature and the equipment at that hydrogen station.
- Vehicles with expired hydrogen tanks must not be used. (→P. 94) Consult your Toyota dealer.

Before filling

- Close the all the doors and windows.
- Set the parking brake.
- Shift the shift position to P.
- Turn the power switch off.
- Turn off the headlights.

Fuel Type

Compressed hydrogen gas

Notes on fueling

- Fueling will not be possible if the pressure inside the vehicle's hydrogen tanks is higher than the supply pressure of the hydrogen station. If the hydrogen tanks are more than half full, the vehicle will be unable to fuel at a H35 dispenser.
  A hydrogen station with a H70 dispenser (supply pressure of 10150 psi [70 MPa, 714 kgf/cm^2, 700 bar] is necessary to completely fill hydrogen tanks.
- If the fueling cannot be completed due to trouble with the station equipment, call the number indicated on the equipment.

WARNING

When filling

Observe the following precautions while fueling the vehicle.
Failure to do so may result in death or serious injury.

- Turn the power switch off before fueling.
- Ensure the hydrogen gas nozzle is locked onto the vehicle receptacle before filling. This can be done by pulling on the hydrogen gas nozzle to check that it cannot be pulled off.
  Failure to do so may result in injury or damage to the hydrogen gas nozzle or vehicle.
- Do not smoke while fueling.
- Because the fuel is cold, the hydrogen gas nozzle and vehicle receptacle surface will become cold, and frost may develop. After fueling is completed, remove the hydrogen gas nozzle by the plastic handle only. Do not touch any other parts of the hydrogen gas nozzle or vehicle receptacle with bare hands immediately after fueling, as frostbite may occur.

NOTICE

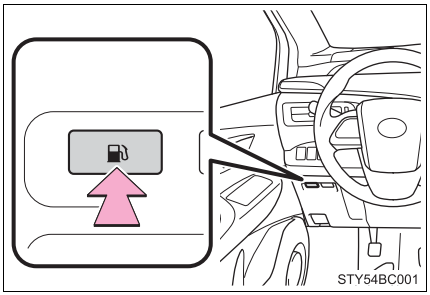
When filling

- Fuel only with compressed hydrogen gas at stations compliant with the Society of Automotive Engineers (SAE) J2601 fueling protocol or laws that may supersede such SAE protocols.
  If improper fuels are used, the fuel cell stack will be damaged.
- Do not swing or drop the hydrogen gas nozzle, or subject it to a large amount of force. Doing so may cause damage.
- If the hydrogen gas nozzle cannot be removed after fueling, it may be frozen to the vehicle receptacle. Wait for the hydrogen gas nozzle to thaw before attempting to remove. Do not pull or rotate the hydrogen gas nozzle forcibly. Failure to follow these precautions may cause damage.
- Be sure to replace the cap after filling. If foreign material gets in the vehicle receptacle, it may cause damage.
- Do not put anything sharp, such as a screwdriver, blade, or any foreign object into the mouth of the vehicle receptacle. If the vehicle receptacle is damaged, hydrogen gas may leak during fueling.
- If you notice anything unusual about the vehicle receptacle, please notify your Toyota dealer.
- If you notice anything unusual with the hydrogen dispenser or hydrogen gas nozzle, please notify the hydrogen station operator. Contact information is usually displayed on the dispenser.

Opening the fuel door

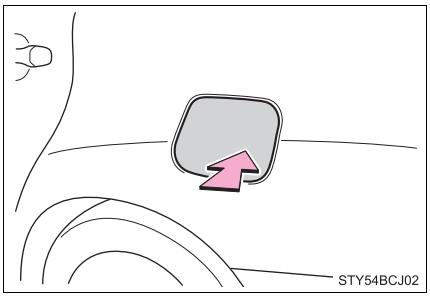
1 Press the fuel door opener switch to release the lock.

If the “READY” indicator is on or the power switch is in ON mode, the fuel door will not be unlocked.



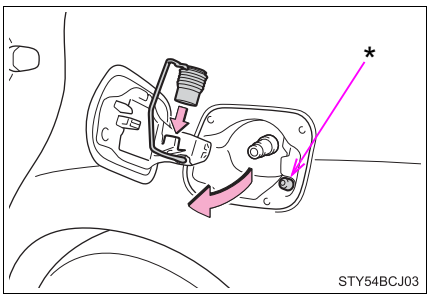
2 Press the center part of the rear edge of the fuel door.

Push inward, then release. The fuel door will slightly open. It can now be opened completely by pulling on the fuel door.



3 Remove the cap and attach it to the holder.

*: Do not press the interlock button. The fuel door sensor may malfunction.



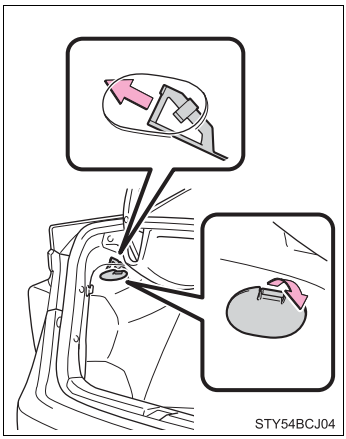
■ If “Open H2 Filler Door in a Safe Place when Vehicle is Powered OFF” is displayed on the multi-information display

Stop the vehicle in a safe place and press the fuel door opener switch once more with the following procedure:

1. Shift the shift position to P.
2. Turn the power switch off.
3. Press the fuel door opener switch.

■ If the fuel door lock cannot be released (i.e., if it is damaged)

Turn the power switch off, remove the trunk inner cover, and release the lock for the fuel door by pulling the lever.

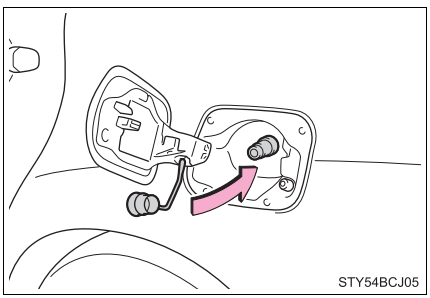


■ Sounds during filling

When fueling with compressed hydrogen gas, noises from gas flowing through the hydrogen gas nozzle and hydrogen tank valves can sometimes be heard. (→P. 88)

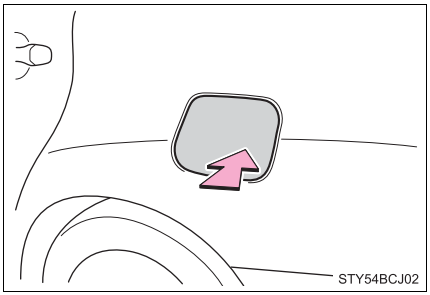
Closing the fuel door

1. Replace the cap.



2 Press the center part of the rear edge of the fuel door, closing the fuel door, until it clicks.

Confirm the fuel door is completely closed by checking that the fuel door is flush with the body.



■ **Safety features**

When the fuel door is open, the fuel cell system will not start. When the “READY” indicator is on, the fuel door will not open.

■ **If “H2 Filler Door is open. Park Your Vehicle in a Safe Place and Close H2 Filler Door” is displayed on the multi-information display**

The fuel door is open. Stop the vehicle in a safe place and close the fuel door.

■ **If “Close H2 Filler Door and Restart Your Vehicle” is displayed on the multi-information display**

The fuel door is open and the fuel cell system cannot be started. Shift the shift position to P and, turn the power switch off, then:

1 Check whether the cap has been reinstalled.

2 Close the fuel door by pressing the center part of the rear edge of the fuel door, until it clicks.

If the warning message on the multi-information display turns off at this time, there is no malfunction. However, if the display continues to show, the sensor may be damaged. Have the vehicle inspected by your Toyota dealer.

Toyota Safety Sense 2.0

The Toyota Safety Sense 2.0 consists of the following drive assist systems and contributes to a safe and comfortable driving experience:

Driving assist system

■ **PCS (Pre-Collision System)**

→P. 226

■ **LDA (Lane Departure Alert with steering control)**

→P. 238

■ **Automatic High Beam**

→P. 205

■ **RSA (Road Sign Assist) (if equipped)**

→P. 248

■ **Dynamic radar cruise control**

→P. 253

WARNING

■ **Toyota Safety Sense 2.0**

The Toyota Safety Sense 2.0 is designed to operate under the assumption that the driver will drive safely, and is designed to help reduce the impact to the occupants and the vehicle in the case of a collision or assist the driver in normal driving conditions.

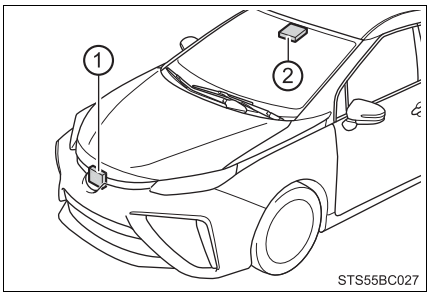
As there is a limit to the degree of recognition accuracy and control performance that this system can provide, do not overly rely on this system. The driver is always responsible for paying attention to the vehicle's surroundings and driving safely.

Sensors

Two types of sensors, located behind the front grille and windshield, detect information necessary to operate the drive assist systems.

① Radar sensor

② Front camera



WARNING

■ **To avoid malfunction of the radar sensor**

Observe the following precautions.

Otherwise, the radar sensor may not operate properly, possibly leading to an accident resulting in death or serious injury.

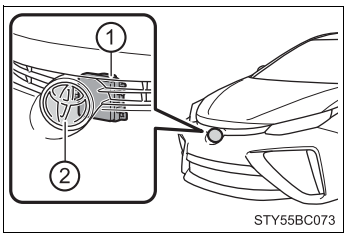
● Keep the radar sensor and the grille cover clean at all times.

① Radar sensor

② Grille cover

If the front of the radar sensor or the front or back of the grille cover is dirty or covered with water droplets, snow, etc., clean it.

Clean the radar sensor and grille cover with a soft cloth to avoid damaging them.



WARNING

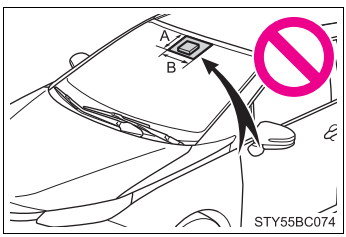
- Do not attach accessories, stickers (including transparent stickers) or other items to the radar sensor, grille cover or surrounding area.
- Do not subject the radar sensor or its surrounding area to a strong impact. If the radar sensor, front grille, or front bumper has been subjected to a strong impact, have the vehicle inspected by your Toyota dealer.
- Do not disassemble the radar sensor.
- Do not modify or paint the radar sensor or grille cover.
- If the radar sensor, front grille, or front bumper needs to be removed and installed, or replaced, contact your Toyota dealer.

To avoid malfunction of the front camera

Observe the following precautions.

Otherwise, the front camera may not operate properly, possibly leading to an accident resulting in death or serious injury.

- Keep the windshield clean at all times.
  - If the windshield is dirty or covered with an oily film, water droplets, snow, etc., clean the windshield.
  - 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 objects, such as stickers, transparent stickers, etc., to the outer side of the windshield in front of the front camera (shaded area in the illustration).



A: From the top of the windshield to approximately 0.4 in. (1 cm) below the bottom of the front camera

B: Approximately 7.9 in. (20 cm) (Approximately 4.0 in. [10 cm] to the right and left from the center of the front camera)

WARNING

- 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. (→P. 309)
- 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.
  If the wiper inserts or wiper blades need to be replaced, contact your Toyota dealer.
- Do not attach window tint to the windshield.
- Replace the windshield if it is damaged or cracked.
  If the windshield needs to be replaced, 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 dirty or damage the front camera.
  When cleaning the inside of the windshield, do not allow glass cleaner to contact the lens of the front camera. Also, do not touch the lens.
  If the lens is dirty or damaged, contact your Toyota dealer.
- Do not subject the front camera to a strong impact.
- Do not change the installation position or direction of the front camera or remove it.
- Do not disassemble the front camera.
- Do not modify any components of the vehicle around the front camera (inside rear view mirror, etc.) or ceiling.
- Do not attach any accessories to the hood, front grille or front bumper that may obstruct the front camera. Contact your Toyota dealer for details.
- 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 the headlights or other lights.

Certification for Toyota Safety Sense 2.0

▶ For U.S.A.

FCC ID: HYQDNMWR009

NOTE:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Radiofrequency radiation exposure Information:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator (antenna) and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

▶ For Canada

NOTE:
This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from person's body.

NOTE:
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage; (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC. Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le dispositif rayonnant et le corps.

■ If a warning message is displayed on the multi-information display

A system may be temporarily unavailable or there may be a malfunction in the system.

● In the following situations, perform the actions specified in the table. When the normal operating conditions are detected, the message will disappear and the system will become operational.

If the message does not disappear, contact your Toyota dealer.

Situation	Actions
When the area around a sensor is covered with dirt, moisture (fogged up, covered with condensation, ice, etc.), or other foreign matter	To clean the part of the windshield in front of the front camera, use the windshield wipers or the windshield defogger of the air conditioning system (→P. 309)
When the temperature around the front camera is outside of the operational range, such as when the vehicle is in the sun or in an extremely cold environment	If the front camera is hot, such as after the vehicle had been parked in the sun, use the air conditioning system to decrease the temperature around the front camera. If a sunshade was used when the vehicle was parked, depending on its type, the sunlight reflected from the surface of the sunshade may cause the temperature of the front camera to become excessively high.
	If the front camera is cold, such after the vehicle is parked in an extremely cold environment, use the air conditioning system to increase the temperature around the front camera.
The area in front of the front camera is obstructed, such as when the hood is open or a sticker is attached to the part of the windshield in front of the front camera.	Close the hood, remove the sticker, etc. to clear the obstruction.

- In the following situations, if the situation has changed (or the vehicle has been driven for some time) and the normal operating conditions are detected, the message will disappear and the system will become operational.

  If the message does not disappear, contact your Toyota dealer.

  - When the temperature around the radar sensor is outside of the operational range, such as when the vehicle is in the sun or in an extremely cold environment
  - When the front camera cannot detect objects in front of the vehicle, such as when driving in the dark, snow, or fog, or when bright lights are shining into the front camera

PCS (Pre-Collision system)

The pre-collision system uses a radar sensor and front camera to detect objects (→P. 226) in front of the vehicle. When the system determines that the possibility of a frontal collision with an object is high, a warning operates to urge the driver to take evasive action and the potential brake pressure is increased to help the driver avoid the collision. If the system determines that the possibility of a frontal collision with an object is extremely high, the brakes are automatically applied to help avoid the collision or help reduce the impact of the collision.

The pre-collision system can be disabled/enabled and the warning timing can be changed. (→P. 230)

Detectable objects

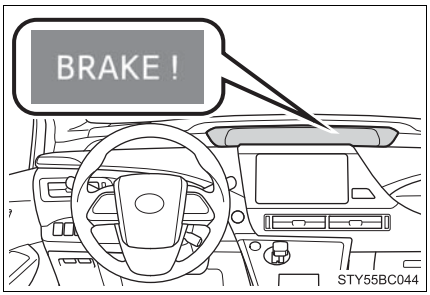
The system can detect the following:

- Vehicles
- Bicyclists
- Pedestrians

System functions

Pre-collision warning

When the system determines that the possibility of a frontal collision is high, a buzzer will sound and a warning message will be displayed on the multi-information display to urge the driver to take evasive action.



Pre-collision brake assist

When the system determines that the possibility of a frontal collision is high, the system applies greater braking force in relation to how strongly the brake pedal is depressed.

Pre-collision braking

If the system determines that the possibility of a frontal collision is extremely high, the brakes are automatically applied to help avoid the collision or reduce the impact of the collision.

WARNING

■ **Limitations of the pre-collision system**

- The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings. Do not use the pre-collision system instead of normal braking operations under any circumstances. This system will not prevent collisions or lessen collision damage or injury in every situation. Do not overly rely on this system. Failure to do so may lead to an accident, resulting in death or serious injury.
- Although this system is designed to help avoid a collision or help reduce the impact of the collision, its effectiveness may change according to various conditions, therefore the system may not always be able to achieve the same level of performance.
  Read the following conditions carefully. Do not overly rely on this system and always drive carefully.
  - Conditions under which the system may operate even if there is no possibility of a collision: →P. 233
  - Conditions under which the system may not operate properly: →P. 235
- Do not attempt to test the operation of the pre-collision system yourself. Depending on the objects used for testing (dummies, cardboard objects imitating detectable objects, etc.), the system may not operate properly, possibly leading to an accident.

■ **Pre-collision braking**

- When the pre-collision braking function is operating, a large amount of braking force will be applied.
- If the vehicle is stopped by the operation of the pre-collision braking function, the pre-collision braking function operation will be canceled after approximately 2 seconds.
  Depress the brake pedal as necessary.
- The pre-collision braking function may not operate if certain operations are performed by the driver. If the accelerator pedal is being depressed strongly or the steering wheel is being turned, the system may determine that the driver is taking evasive action and possibly prevent the pre-collision braking function from operating.
- In some situations, while the pre-collision braking function is operating, operation of the function may be canceled if the accelerator pedal is depressed strongly or the steering wheel is turned and the system determines that the driver is taking evasive action.
- If the brake pedal is being depressed, the system may determine that the driver is taking evasive action and possibly delay the operation timing of the pre-collision braking function.

WARNING

When to disable the pre-collision system

In the following situations, disable the system, as it may not operate properly, possibly leading to an accident resulting in death or serious injury:

- When the vehicle is being towed
- When your vehicle is towing another vehicle
- When transporting the vehicle via truck, boat, train or similar means of transportation
- When the vehicle is raised on a lift with the fuel cell system on 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 a strong impact is applied to the front bumper or front grille, due to an accident or other reasons
- If the vehicle cannot be driven in a stable manner, such as when the vehicle has been in an accident or is malfunctioning
- When the vehicle is driven in a sporty manner or off-road
- When the tires are not properly inflated
- When the tires are very worn
- When tires of a size other than specified are installed
- When tire chains are installed
- When a compact spare tire or an emergency tire puncture repair kit is used
- If equipment (snow plow, etc.) that may obstruct the radar sensor or front camera is temporarily installed to the vehicle

Changing settings of the pre-collision system

■ Enabling/disabling the pre-collision system

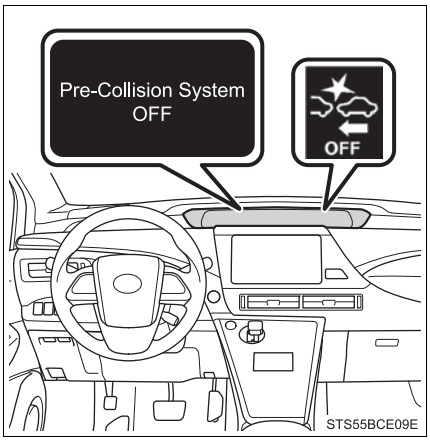
The pre-collision system can be enabled/disabled on (→P. 124) of the multi-information display.

The system is automatically enabled each time the power switch is turned to ON mode.

1 Press ＜ or ＞ of the meter control switches (→P. 118) and select .

2 Press ∧ or ∨ of the meter control switches, select and press ◦ to select the desired setting (on/off).

If the system is disabled, the PCS warning light will turn on and a message will be displayed on the multi-information display.



■ Changing the pre-collision warning timing

The pre-collision warning timing can be changed on (→P. 124) of the multi-information display.

1 Press ＜ or ＞ of the meter control switches (→P. 118) and select .

2 Press ∧ or ∨ of the meter control switches, select and press ◦ to select the desired setting.

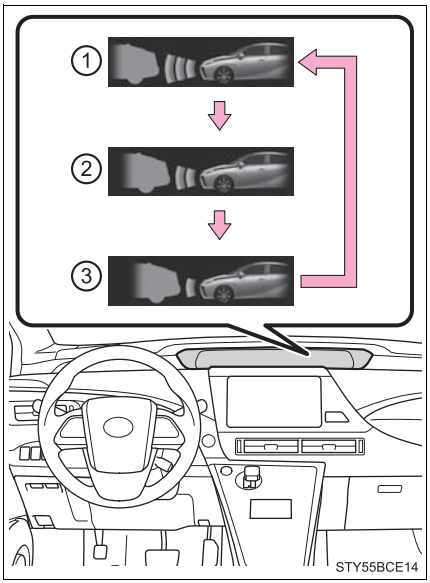
① Early

② Middle

This is the default setting.

③ Late

The warning timing setting is retained when the power switch is turned off. However, if the pre-collision system is disabled and re-enabled, the operation timing will return to the default setting (middle).



Operational conditions

The pre-collision system is enabled and the system determines that the possibility of a frontal collision with a detected object is high.

Each function is operational at the following speed

● Pre-collision warning

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Vehicles	Approx. 7 to 110 mph (10 to 180 km/h)	Approx. 7 to 110 mph (10 to 180 km/h)
Bicyclists and pedestrians	Approx. 7 to 50 mph (10 to 80 km/h)	Approx. 7 to 50 mph (10 to 80 km/h)

● Pre-collision brake assist

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Vehicles	Approx. 20 to 110 mph (30 to 180 km/h)	Approx. 20 to 110 mph (30 to 180 km/h)
Bicyclists and pedestrians	Approx. 20 to 50 mph (30 to 80 km/h)	Approx. 20 to 50 mph (30 to 80 km/h)

● Pre-collision braking

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Vehicles	Approx. 7 to 110 mph (10 to 180 km/h)	Approx. 7 to 110 mph (10 to 180 km/h)
Bicyclists and pedestrians	Approx. 7 to 50 mph (10 to 80 km/h)	Approx. 7 to 50 mph (10 to 80 km/h)

The system may not operate in the following situations:

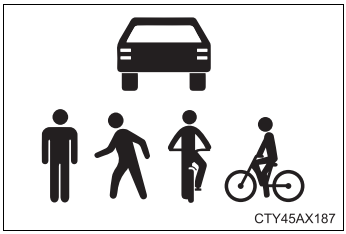
● If a 12-volt battery terminal has been disconnected and reconnected and then the vehicle has not been driven for a certain amount of time

● If the shift position is in R

● When the VSC OFF indicator is illuminated (only the pre-collision warning function will be operational)

Object detection function

The system detects objects based on their size, profile, motion, etc. However, an object 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. 235) The illustration shows an image of detectable objects.



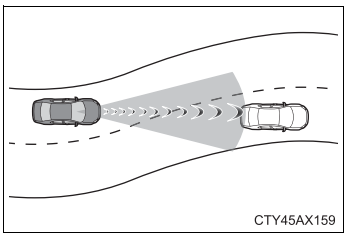
Cancelation of the pre-collision braking

If either of the following occur while the pre-collision braking function is operating, it will be canceled:

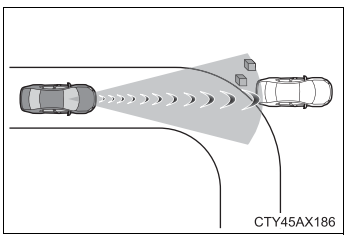
- The accelerator pedal is depressed strongly.
- The steering wheel is turned sharply or abruptly.

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

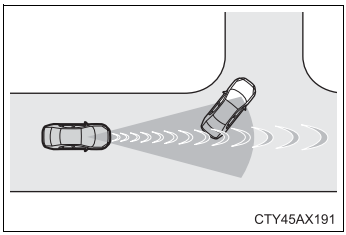
- In some situations such as the following, the system may determine that there is a possibility of a frontal collision and operate.
  - When passing a detectable object, etc.
  - When changing lanes while overtaking a detectable object, etc.
  - When approaching a detectable object in an adjacent lane or on the roadside, such as when changing the course of travel or driving on a winding road



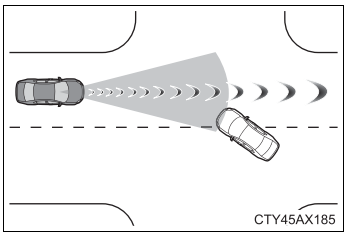
  - When rapidly closing on a detectable object, etc.
  - When approaching objects on the roadside, such as detectable objects, guardrails, utility poles, trees, or walls
  - When there is a detectable object or other object by the roadside at the entrance of a curve



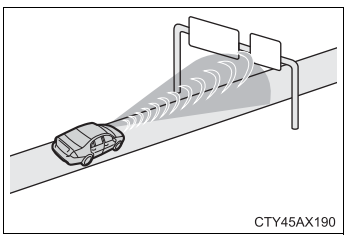
- When there are patterns or paint in front of your vehicle that may be mistaken for a detectable object
- When the front of your vehicle is hit by water, snow, dust, etc.
- When overtaking a detectable object that is changing lanes or making a right/left turn


CTY45AX191

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

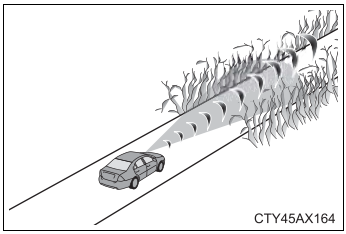

CTY45AX185

- When a detectable object approaches very close and then stops before entering the path of your vehicle
- If the front of your vehicle is raised or lowered, such as when on an uneven or undulating road surface
- When driving on a road 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 in front of your vehicle
- When passing under an object (road sign, billboard, etc.)


CTY45AX190

- When approaching 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 your vehicle, such as thick grass, tree branches, or a banner

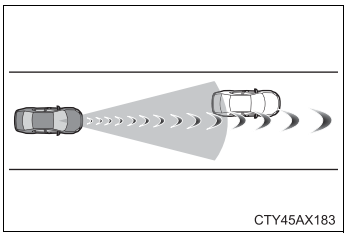


- When driving through steam or smoke
- When driving near an object that reflects radio waves, such as a large truck or guardrail
- When driving near a TV tower, broadcasting station, electric power plant, or other location where strong radio waves or electrical noise may be present

■ Situations in which the system may not operate properly

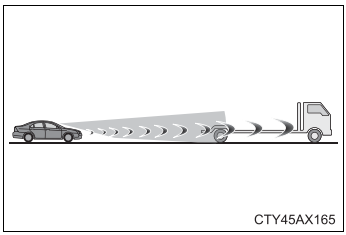
● In some situations such as the following, an object may not be detected by the radar sensor and front camera, preventing the system from operating properly:

- When a detectable object is approaching your vehicle
- When your vehicle or a detectable object is wobbling
- If a detectable object makes an abrupt maneuver (such as sudden swerving, acceleration or deceleration)
- When your vehicle approaches a detectable object rapidly
- When a detectable object is not directly in front of your vehicle

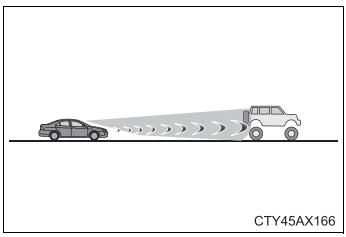


- When a detectable object is near a wall, fence, guardrail, manhole cover, vehicle, steel plate on the road, etc.
- When a detectable object is under a structure
- When part of a detectable object is hidden by an object, such as large baggage, an umbrella, or guardrail
- When multiple detectable objects are close together
- If the sun or other light is shining directly on a detectable object
- When a detectable object is a shade of white and looks extremely bright

- When a detectable object appears to be nearly the same color or brightness as its surroundings
- If a detectable object cuts or suddenly emerges in front of your vehicle
- When the front of your vehicle is hit by water, snow, dust, etc.
- When a very bright light ahead, such as the sun or the headlights of oncoming traffic, shines directly into the front camera
- When approaching the side or front of a vehicle ahead
- If a vehicle ahead is a motorcycle
- If a vehicle ahead is narrow, such as a personal mobility 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

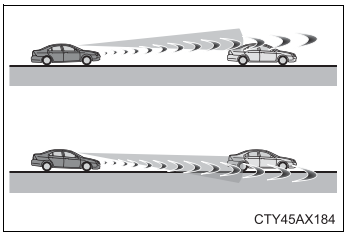

CTY45AX165

- If a vehicle ahead has extremely high ground clearance


CTY45AX166

- If a vehicle ahead is carrying a load which protrudes past its rear bumper
- If a vehicle ahead is irregularly shaped, such as a tractor or side car
- If a vehicle ahead is a child sized bicycle, a bicycle that is carrying a large load, a bicycle ridden by more than one person, or a uniquely shaped bicycle (bicycle with a child seat, tandem bicycle, etc.)
- If a pedestrian/or the riding height of a bicyclist ahead is shorter than approximately 3.2 ft. (1 m) or taller than approximately 6.5 ft. (2 m)
- If a pedestrian/bicyclist is wearing oversized clothing (a rain coat, long skirt, etc.), making their silhouette obscure
- If a pedestrian is bending forward or squatting or bicyclist is bending forward
- If a pedestrian/bicyclist is moving fast
- If a pedestrian is pushing a stroller, wheelchair, bicycle or other vehicle
- When driving in inclement weather such as heavy rain, fog, snow or a sandstorm

- When driving through steam or smoke
- When the surrounding area is dim, such as at dawn or dusk, or while at night or in a tunnel, making a detectable object appear to be nearly the same color as its surroundings
- When driving in a place where the surrounding brightness changes suddenly, such as at the entrance or exit of a tunnel
- After the fuel cell system 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 front camera
- The vehicle is being driven at extremely high speeds
- When driving on a hill
- If the radar sensor or front camera 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

■ If VSC is disabled

● If VSC is disabled (→P. 297), the pre-collision brake assist and pre-collision braking functions are also disabled.

● The PCS warning light will turn on and “VSC Turned Off Pre-Collision Brake System Unavailable” will be displayed on the multi-information display.

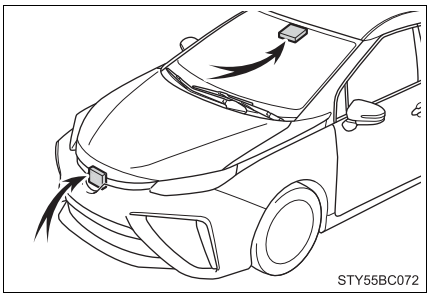
LDA (Lane Departure Alert with steering control)

Summary of functions

When driving on highways and freeways with white (yellow) lane lines, this function alerts the driver when the vehicle might depart from its lane or course* and provides assistance by operating the steering wheel to keep the vehicle in its lane or course*.

The LDA system recognizes white (yellow) lane lines or a course* using the front camera. Additionally, it detects preceding vehicles using the front camera and radar.

*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb



WARNING

■ Before using LDA system

- Do not rely solely upon the LDA system. The LDA system does not automatically drive the vehicle or reduce the amount of attention that must be paid to the area in front of the vehicle. The driver must always assume full responsibility for driving safely by paying careful attention to the surrounding conditions and operating the steering wheel to correct the path of the vehicle. Also, the driver must take adequate breaks when fatigued, such as from driving for a long period of time.
- Failure to perform appropriate driving operations and pay careful attention may lead to an accident, resulting in death or serious injury.
- When not using the LDA system, use the LDA switch to turn the system off.

■ Situations unsuitable for LDA system

In the following situations, use the LDA switch to turn the system off. Failure to do so may lead to an accident, resulting in death or serious injury.

- Vehicle is driven on a road surface which is slippery due to rainy weather, fallen snow, freezing, etc.
- Vehicle is driven on a snow-covered road.
- White (yellow) lines are difficult to see due to rain, snow, fog, dust, etc.
- A spare tire, tire chains, etc. are equipped.

WARNING

- When the tires have been excessively worn, or when the tire inflation pressure is low.
- When tires of a size other than specified are installed.
- Vehicle is driven in traffic lanes other than that highways and freeways.
- During emergency towing

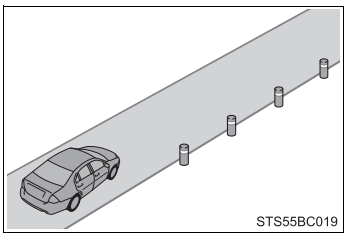
Preventing LDA system malfunctions and operations performed by mistake

- Do not modify the headlights or place stickers, etc. on the surface of the lights.
- Do not modify the suspension etc. If the suspension etc. needs to be replaced, contact your Toyota dealer.
- Do not install or place anything on the hood or grille. Also, do not install a grille guard (bull bars, kangaroo bar, etc.).
- If your windshield needs repairs, contact your Toyota dealer.

Conditions in which functions may not operate properly

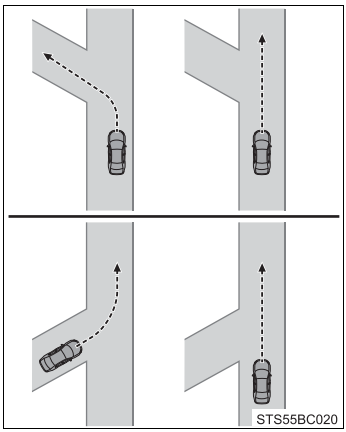
In the following situations, the functions may not operate properly and the vehicle may depart from its lane. Drive safely by always paying careful attention to your surroundings and operate the steering wheel to correct the path of the vehicle without relying solely on the functions.

- Vehicle is being driven around a sharp curve.
- Objects or patterns that could be mistaken for white (yellow) lines are present on the side of the road (guardrails, reflective poles, etc.).

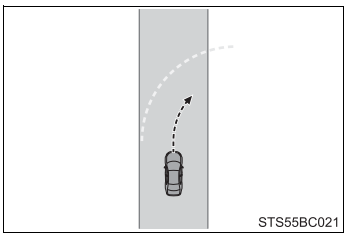


WARNING

- Vehicle is driven where the road diverges, merges, etc.



- Repair marks of asphalt, white (yellow) lines, etc. are present due to road repair.



- There are shadows on the road that run parallel with, or cover, the white (yellow) lines.
- The vehicle is driven in an area without white (yellow) lines, such as in front of a tollgate or checkpoint, or at an intersection, etc.
- The white (yellow) lines are cracked, “Botts’ dots”, “Raised pavement marker” or stones are present.
- The white (yellow) lines cannot be seen or are difficult to see due to sand, etc.
- The vehicle is driven on a road surface that is wet due to rain, puddles, etc.
- The traffic lines are yellow (which may be more difficult to recognize than lines that are white).
- The white (yellow) lines cross over a curb, etc.
- The vehicle is driven on a bright surface, such as concrete.
- If the edge of the road is not clear or straight.
- The vehicle is driven on a surface that is bright due to reflected light, etc.
- The vehicle is driven in an area where the brightness changes suddenly, such as at the entrances and exits of tunnels, etc.

WARNING

- Light from the headlights of an oncoming vehicle, the sun, etc. enters the camera.
- The vehicle is driven on a slope.
- The vehicle is driven on a road which tilts left or right, or a winding road.
- The vehicle is driven on an unpaved or rough road.
- The traffic lane is excessively narrow or wide.
- The vehicle is extremely tilted due to carrying heavy luggage or having improper tire pressure.
- The distance to the preceding vehicle is extremely short.
- The vehicle is moving up and down a large amount due to road conditions during driving (poor roads or road seams).
- When driving in a tunnel or at night with the headlights off or when a headlight is dim due to its lens being dirty or it being misaligned.
- The vehicle is struck by a crosswind.
- The vehicle has just changed lanes or crossed an intersection.
- Tires which differ by structure, manufacturer, brand or tread pattern are used.
- Snow tires, etc. are equipped.

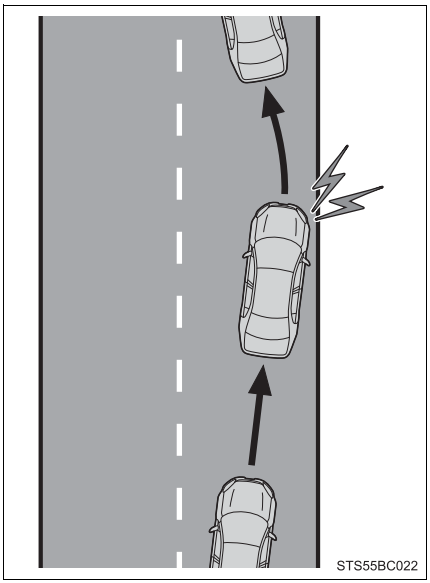
Functions included in LDA system

Lane departure alert function

When the system determines that the vehicle might depart from its lane or course*, a warning is displayed on the multi-information display, and a warning buzzer will sound to alert the driver.

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

*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

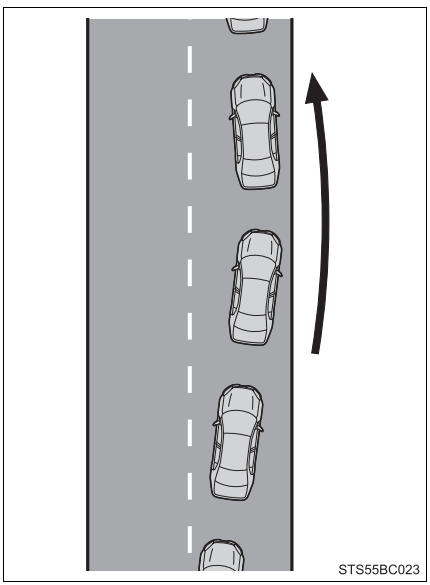


Steering assist function

When the system determines that the vehicle might depart from its lane or course*, the system provides assistance as necessary by operating the steering wheel in small amounts for a short period of time to keep the vehicle in its lane.

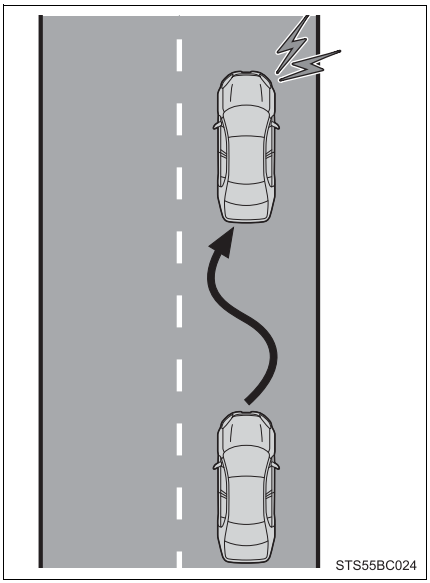
If the system detects that the steering wheel has not been operated for a fixed amount of time or the steering wheel is not being firmly gripped, a warning is displayed on the multi-information display and the function is temporarily canceled.

*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb



Vehicle sway warning function

When the vehicle is swaying within a lane, the warning buzzer will sound and a message will be displayed on the multi-information display to alert the driver.



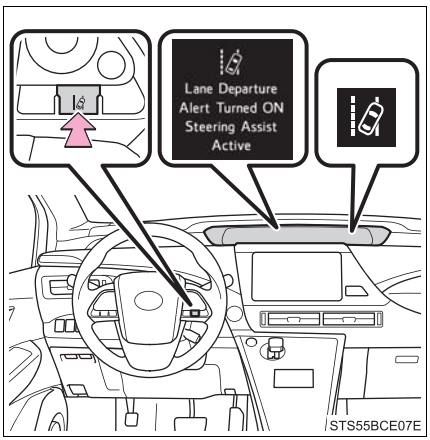
Turning LDA system on

Press the LDA switch to turn the LDA system on.

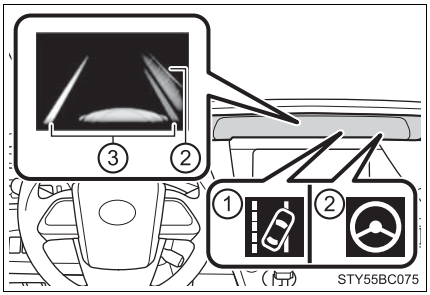
The LDA indicator illuminates and a message is displayed on the multi-information display.

Press the LDA switch again to turn the LDA system off.

When the LDA system is turned on or off, operation of the LDA system continues in the same condition the next time the fuel cell system is started.



Indications on multi-information display



① LDA indicator

The illumination condition of the indicator informs the driver of the system operation status.

Illuminated in green: LDA system is operating.

Flashing in yellow: Lane departure alert function is operating.

② Steering control indicator and operation display of steering wheel operation support

When that steering wheel assistance of the steering assist function is operating, the indicator illuminates and the operation display on the multi-information display is turned on.

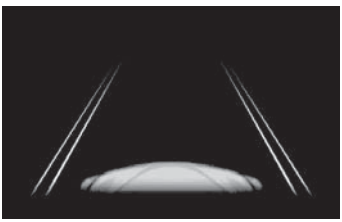
③ Lane departure alert function display

Displayed when the multi-information display is switched to the driving assist systems display.

▶ Inside of displayed lines is white

Indicates that the system is recognizing white (yellow) lines or a course*. When the vehicle departs from its lane, the white line displayed on the side the vehicle departs from flashes orange.

▶ Inside of displayed lines is black



Indicates that the system is not able to recognize white (yellow) lines or a course* or is temporarily canceled.

*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

■Operation conditions of each function

●Lane departure alert function

This function operates when all of the following conditions are met.

- LDA is turned on.
- Vehicle speed is approximately 32 mph (50 km/h) or more.
- System recognizes white (yellow) lane lines or a course*. (When a white [yellow] line or course* is recognized on only one side, the system will operate only for the recognized side.)
- Width of traffic lane is approximately 9.8 ft. (3 m) or more.
- Turn signal lever is not operated.
- Vehicle is not being driven around a sharp curve.
- No system malfunctions are detected. (→P. 247)

*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

●Steering assist function

This function operates when all of the following conditions are met in addition to the operation conditions for the lane departure alert function.

- Setting for “LDA Steering Assist Mode” in on the multi-information display (→P. 117) is set to “ON”.

1 Press 〈 or 〉 of the meter control switches (→P. 118) and select .

2 Press ∧ or ∨ of the meter control switches, select and press ◎ to select the “ON”.

- Vehicle is not accelerated or decelerated by a fixed amount or more.
- Steering wheel is not operated with a steering force level suitable for changing lanes.
- ABS, VSC, TRAC and PCS are not operating.
- TRAC or VSC is not turned off.
- Hands off steering wheel warning is not displayed. (→P. 246)

●Vehicle sway warning function

This function operates when all of the following conditions are met.

- Setting for “Lane Sway Warning Status” in on the multi-information display (→P. 117) is set to “On”.

1 Press 〈 or 〉 of the meter control switches (→P. 118) and select .

2 Press ∧ or ∨ of the meter control switches, select and press ◎ to select the “ON”.

- Vehicle speed is approximately 32 mph (50 km/h) or more.
- Width of traffic lane is approximately 9.8 ft. (3 m) or more.
- No system malfunctions are detected. (→P. 247)

Temporary cancelation of functions

When operation conditions are no longer met, a function may be temporarily canceled. However, when the operation conditions are met again, operation of the function is automatically restored. (→P. 245)

Steering assist function

- Depending on the vehicle speed, lane departure situation, road conditions, etc., the driver may not feel the function is operating or the function may not operate at all.
- The steering control of the function is overridden by the driver's steering wheel operation.
- Do not attempt to test the operation of the steering assist function.

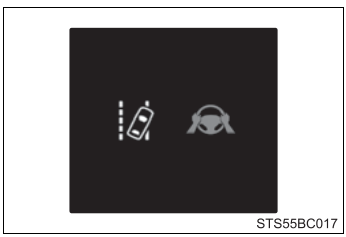
Lane departure alert function

- The warning buzzer may be difficult to hear due to external noise, audio playback, etc.
- If the edge of the course* is not clear or straight, the lane departure alert function may not operate.
- Do not attempt to test the operation of the lane departure alert function.

*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

Hands off steering wheel warning

In the following situations, a warning message urging the driver to hold the steering wheel and the symbol shown in the illustration are displayed on the multi-information display to warn the driver. The warning stops when the system determines that the driver holds the steering wheel.
Always keep your hands on the steering wheel when using this system, regardless of warnings.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- When the system determines that the driver is driving without holding the steering wheel while the system is operating

  If the driver continues to keep their hands off of the steering wheel, the buzzer sounds, the driver is warned and the function is temporarily canceled.
  This warning also operates in the same way when the driver continuously operates the steering wheel only a small amount.

- When the system determines that the vehicle may not turn and instead depart from its lane while driving around a curve

  Depending on the vehicle condition and road conditions, the warning may not operate. Also, if the system determines that the vehicle is driving around a curve, warnings will occur earlier than during straight-lane driving.

- When the system determines that the driver is driving without holding the steering wheel while the steering wheel assist of the steering assist function is operating.

  If the driver continues to keep their hands off of the steering wheel and the steering wheel assist is operating, the buzzer sounds and the driver is warned. Each time the buzzer sounds, the continuing time of the buzzer becomes longer.

Vehicle sway warning function

When the system determines that the vehicle is swaying while the vehicle sway warning function is operating, a buzzer sounds and a warning message urging the driver to rest and the symbol shown in the illustration are simultaneously displayed on the multi-information display.

Depending on the vehicle and road conditions, the warning may not operate.

Warning message

If the following warning message is displayed on the multi-information display and the LDA indicator illuminates in yellow, follow the appropriate troubleshooting procedure. Also, if a different warning message is displayed, follow the instructions displayed on the screen.

- “Lane Departure Alert Malfunction Visit Your Dealer”

  The system may not be operating properly. Have the vehicle inspected by your Toyota dealer.

- “Lane Departure Alert Unavailable”

  The system is temporarily canceled due to a malfunction in a sensor other than the front camera. Turn the LDA system off, wait for a little while, and then turn the LDA system back on.

- ”Lane Departure Alert Unavailable at Current Speed”

  The function cannot be used as the vehicle speed exceeds the LDA operation range. Drive slower.

- “Lane Departure Alert Unavailable Below Approx 32MPH”

  The LDA system cannot be used as the vehicle speed is less than approximately 32 mph (50 km/h). Drive the vehicle at approximately 32 mph (50 km/h) or more.

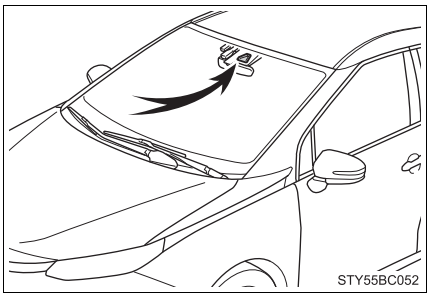
Customization

Function settings can be changed.
(Customizable features: →P. 484)

RSA (Road Sign Assist)*

Summary of function

The RSA system recognizes specific road signs using the front camera to provide information to the driver via the display.



If the system judges that the vehicle is being driven over the speed limit, performing prohibited actions, etc., in relation to the recognized road signs, it alerts the driver using a warning display and warning buzzer.

WARNING

Before using the RSA

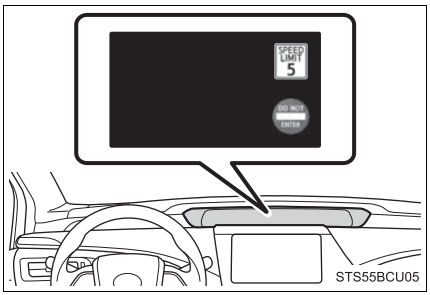
Do not rely solely upon the RSA system. RSA is a system which supports the driver by providing information, but it is not a replacement for a driver's own vision and awareness. Drive safely by always paying careful attention to the traffic rules.

*: If equipped

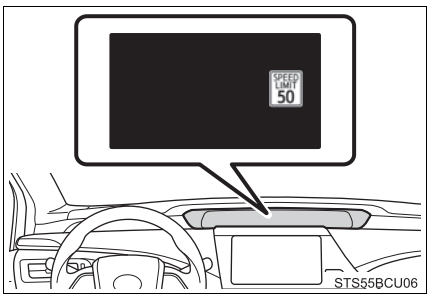
Indication on the multi-information display

When the front camera recognizes a sign, the sign will be displayed on the multi-information display.

- When the driving assist systems display is selected, a maximum of 2 signs can be displayed. (→ P. 117)



- When a tab other than the driving assist systems display is selected, only a recognized speed limit sign or do not enter sign (when notification is necessary) will be displayed. (→P. 117)



If signs other than speed limit signs are recognized, they will be displayed in an overlapping stack under the current speed limit sign.

Supported types of road signs

The following types of road signs are recognized.

A non-official or a recently introduced traffic sign may not be recognized.

Speed limit

Do Not Enter

Stop

Yield

Warning display

In the following situations, the RSA system will alert the driver.

- When the vehicle speed exceeds the speed warning threshold of the speed limit sign displayed, the sign display will be emphasized and a buzzer will sound.
- When the RSA system recognizes a do not enter sign and determines that your vehicle has entered a no-entry area, the displayed sign will flash and a buzzer will sound.

Depending on the situation, traffic environment (traffic direction, speed unit) may be detected incorrectly and a warning display may not operate properly.

■ **Setting procedure**

RSA can be enabled/disabled on the multi-information display (→P. 117).

1 Press ＜ or ＞ of the meter control switches (→P. 118) and select ⚙.

2 Press ∧ or ∨ of the meter control switches, select and press ⊙ to select the desired setting (on/off).

■ **Automatic turn-off of RSA sign display**

In the following situations, a displayed speed limit sign will stop being displayed automatically:

- A new sign is not recognized for a certain distance.
- The road changes due to a left or right turn, etc.

In the following situations, do not enter, stop and yield signs will stop being displayed automatically:

- The system determines that your vehicle has passed the sign.
- The road changes due to a left or right turn, etc.

■ **Conditions in which the function may not operate or detect correctly**

In the following situations, RSA does not operate normally and may not recognize signs, display the incorrect sign, etc. However, this does not indicate a malfunction.

- The front camera is misaligned due to a strong impact being applied to the sensor, etc.
- Dirt, snow, stickers, etc. are on the windshield near the front camera.
- In inclement weather such as heavy rain, fog, snow or sand storms
- Light from an oncoming vehicle, the sun, etc. enters the front camera.
- The sign is dirty, faded, tilted or bent.
- All or part of the sign is hidden by the leaves of a tree, a pole, etc.
- The sign is only visible to the front camera for a short amount of time.
- The driving scene (turning, lane change, etc.) is judged incorrectly.
- Even if it is a sign not appropriate for the currently traveled lane, such a sign exists directly after a freeway branches, or in an adjacent lane just before merging.
- Stickers are attached to the rear of the preceding vehicle.
- A sign resembling a system compatible sign is recognized.
- Side road speed signs may be detected and displayed (if positioned in sight of the front camera) while the vehicle is traveling on the main road.

- Roundabout exit road speed signs may be detected and displayed (if positioned in sight of the front camera) while traveling on a roundabout.
- The front of the vehicle is raised or lowered due to the carried load.
- The surrounding brightness is not sufficient or changes suddenly.
- When a sign intended for trucks, etc. is recognized.

Speed limit sign display

If the power switch was last turned off while a speed limit sign was displayed on the multi-information display, the same sign displays again when the power switch is turned to ON mode.

If “RSA Malfunction Visit Your Dealer” is shown

The system may be malfunctioning. Have the vehicle inspected by your Toyota dealer.

Customization

Some functions can be customized.
(Customizable features: →P. 484)

Dynamic radar cruise control

Summary of functions

In vehicle-to-vehicle distance control mode, the vehicle automatically accelerates and decelerates to match the speed changes of the preceding vehicle even if the accelerator pedal is not depressed. In constant speed control mode, the vehicle runs at a fixed speed.

Use the dynamic radar cruise control on freeways and highways.

- Vehicle-to-vehicle distance control mode (→P. 256)
- Constant speed control mode (→P. 261)

System Components

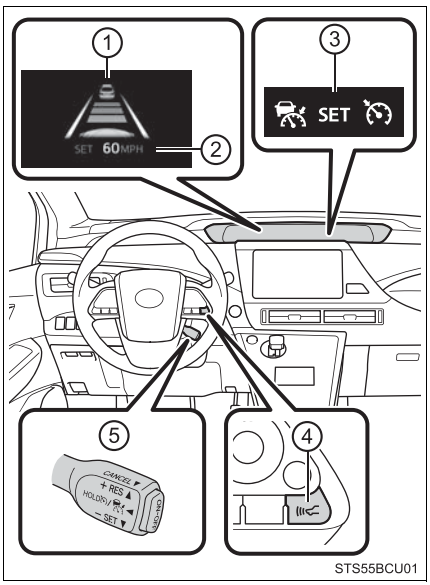
① Multi-information display

② Set speed

③ Indicators

④ Vehicle-to-vehicle distance switch

⑤ Cruise control switch



WARNING

■ **Before using dynamic radar cruise control**

- Driving safely is the sole responsibility of the driver. Do not rely solely on the system, and drive safely by always paying careful attention to your surroundings.
- The dynamic radar cruise control provides driving assistance to reduce the driver's burden. However, there are limitations to the assistance provided. Read the following conditions carefully. Do not overly rely on this system and always drive carefully.
  - When the sensor may not be correctly detecting the vehicle ahead: →P. 263
  - Conditions under which the vehicle-to-vehicle distance control mode may not function correctly: →P. 264
- Set the speed appropriately depending on the speed limit, traffic flow, road conditions, weather conditions, etc. The driver is responsible for checking the set speed.
- Even when the system is functioning normally, the condition of the preceding vehicle as detected by the system may differ from the condition observed by the driver. Therefore, the driver must always remain alert, assess the danger of each situation and drive safely. Relying solely on this system or assuming the system ensures safety while driving can lead to an accident, resulting in death or serious injury.
- Switch the dynamic radar cruise control setting to off, using the "ON-OFF" button when not in use.

■ **Cautions regarding the driving assist systems**

Observe the following precautions, as there are limitations to the assistance provided by the system. Failure to do so may cause an accident resulting in death or serious injury.

- Assisting the driver to measure following distance

  The dynamic radar cruise control is only intended to help the driver in determining the following distance between the driver's own vehicle and a designated vehicle traveling ahead. It is not a mechanism that allows careless or inattentive driving, and it is not a system that can assist the driver in low-visibility conditions.

  It is still necessary for driver to pay close attention to the vehicle's surroundings.

WARNING

- Assisting the driver to judge proper following distance

  The dynamic radar cruise control determines whether the following distance between the driver's own vehicle and a designated vehicle traveling ahead is within a set range. It is not capable of making any other type of judgement.Therefore, it is absolutely necessary for the driver to remain vigilant and to determine whether or not there is a possibility of danger in any given situation.

- Assisting the driver to operate the vehicle

  The dynamic radar cruise control does not include functions which will prevent or avoid collisions with vehicles ahead of your vehicle. Therefore, if there is ever any possibility of danger, the driver must take immediate and direct control of the vehicle and act appropriately in order to ensure the safety of all involved.

■ Situations unsuitable for dynamic radar cruise control

Do not use dynamic radar cruise control in any of the following situations.

Doing so may result in inappropriate speed control and could cause an accident resulting in death or serious injury.

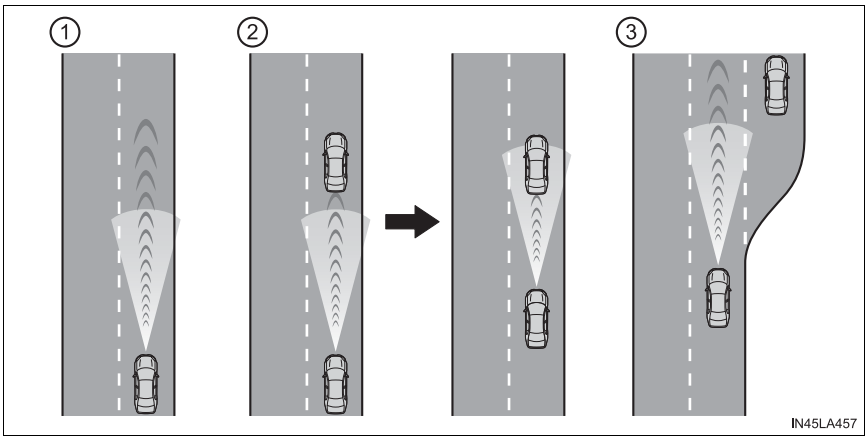
- Roads where there are pedestrians, cyclists, etc.
- In heavy traffic
- On roads with sharp bends
- On winding roads
- On slippery roads, such as those covered with rain, ice or snow
- On steep downhills, or where there are sudden changes between sharp up and down gradients

  Vehicle speed may exceed the set speed when driving down a steep hill.
- At entrances to freeways and highways
- When weather conditions are bad enough that they may prevent the sensors from detecting correctly (fog, snow, sandstorm, heavy rain, etc.)
- When there is rain, snow, etc. on the front surface of the radar or front camera
- In traffic conditions that require frequent repeated acceleration and deceleration
- During emergency towing
- When an approach warning buzzer is heard often

Driving in vehicle-to-vehicle distance control mode

This mode employs a radar to detect the presence of vehicles up to approximately 328 ft. (100 m) ahead, determines the current vehicle-to-vehicle following distance, and operates to maintain a suitable following distance from the vehicle ahead. The desired vehicle-to-vehicle distance can also be set by operating the vehicle-to-vehicle distance switch.

When driving on downhill slopes, the vehicle-to-vehicle distance may become shorter.



① Example of constant speed cruising
When there are no vehicles ahead

The vehicle travels at the speed set by the driver.

② Example of deceleration cruising and follow-up cruising
When a preceding vehicle driving slower than the set speed appears

When a vehicle is detected running ahead of you, the system automatically decelerates your vehicle. When a greater reduction in vehicle speed is necessary, the system applies the brakes (the stop lights will come on at this time).
The system will respond to changes in the speed of the vehicle ahead in order to maintain the vehicle-to-vehicle distance set by the driver. Approach warning warns you when the system cannot decelerate sufficiently to prevent your vehicle from closing in on the vehicle ahead.

When the turn signal lever is operated and your vehicle moves to a left lane while driving at 50 mph (80 km/h) or more, the vehicle will quickly accelerate to help to overtake a passing vehicle.

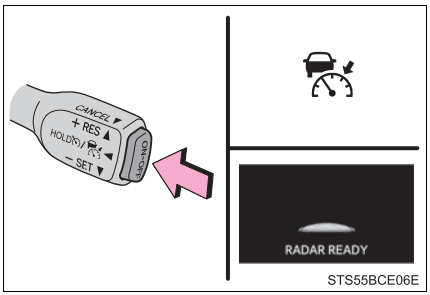
③ Example of acceleration

When there are no longer any preceding vehicles driving slower than the set speed

The system accelerates until the set speed is reached. The system then returns to constant speed cruising.

Setting the vehicle speed (vehicle-to-vehicle distance control mode)

1 Press the “ON-OFF” button to activate the cruise control.

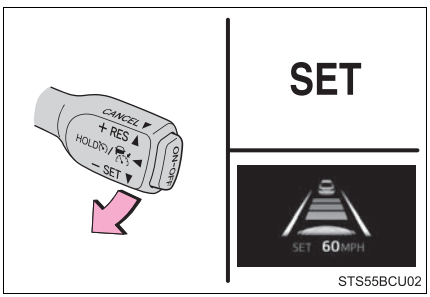


STS55BCE06E

Dynamic radar cruise control indicator will come on and a message will be displayed on the multi-information display. Press the button again to deactivate the cruise control.

If the “ON-OFF” button is pressed and held for 1.5 seconds or more, the system turns on in constant speed control mode. (→P. 261)

2 Accelerate or decelerate, with accelerator pedal operation, to the desired vehicle speed (at or above approximately 20 mph [30 km/h]) and push the lever down to set the speed.



STS55BCU02

Cruise control “SET” indicator will come on.

The vehicle speed at the moment the lever is released becomes the set speed.

Adjusting the set speed

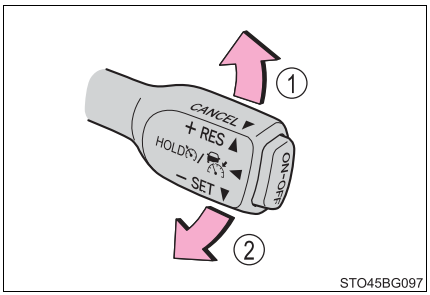
To change the set speed, operate the lever until the desired set speed is displayed.

① Increases the speed

② Decreases the speed

Fine adjustment: Momentarily move the lever in the desired direction.

Large adjustment: Hold the lever up or down to change the speed, and release when the desired speed is reached.



In the vehicle-to-vehicle distance control mode, the set speed will be increased or decreased as follows:

▶ For U.S.A.

Fine adjustment: By 1 mph (1.6 km/h)*1 or 1 km/h (0.6 mph)*2 each time the lever is operated

Large adjustment: Increases or decreases in 1 mph (1.6 km/h)*1 or 1 km/h (0.6 mph)*2 increments for as long as the lever is held

▶ For Canada

Fine adjustment: By 1 mph (1.6 km/h)*1 or 1 km/h (0.6 mph)*2 each time the lever is operated

Large adjustment: Increases or decreases in 5 mph (8 km/h)*1 or 5 km/h (3.1 mph)*2 increments for as long as the lever is held

In the constant speed control mode (→P. 257), the set speed will be increased or decreased as follows:

Fine adjustment: By 1 mph (1.6 km/h)*1 or 1 km/h (0.6 mph)*2 each time the lever is operated

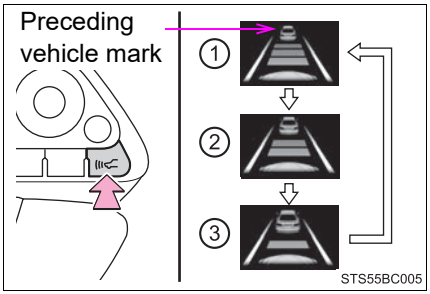
Large adjustment: The speed will continue to change while the lever is held.

*1: When the set speed is shown in “MPH”

*2: When the set speed is shown in “km/h”

Changing the vehicle-to-vehicle distance (vehicle-to-vehicle distance control mode)

Pressing the switch changes the vehicle-to-vehicle distance as follows:



① Long

② Medium

③ Short

The vehicle-to-vehicle distance is set automatically to long mode when the power switch is turned to ON mode.

Vehicle-to-vehicle distance settings (vehicle-to-vehicle distance control mode)

Select a distance from the table below. Note that the distances shown correspond to a vehicle speed of 50 mph (80 km/h). Vehicle-to-vehicle distance increases/decreases in accordance with vehicle speed.

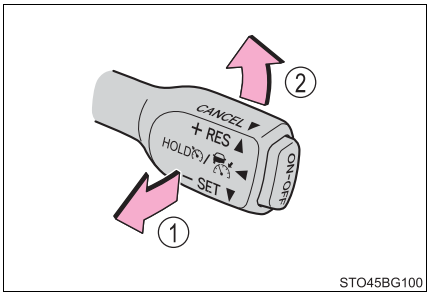
Distance options	Vehicle-to-vehicle distance
Long	Approximately 160 ft. (50 m)
Medium	Approximately 130 ft. (40 m)
Short	Approximately 100 ft. (30 m)

Canceling and resuming the speed control

① Pulling the lever toward you cancels the speed control.

The speed control is also canceled when the brake pedal is depressed.

② Pushing the lever up resumes the cruise control and returns vehicle speed to the set speed.

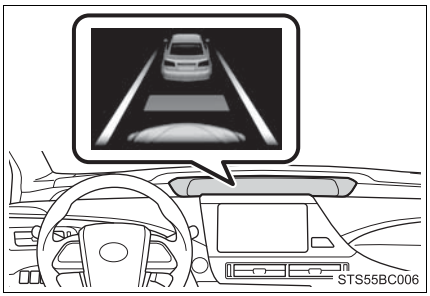


STO45BG100

However, cruise control does not resume when the vehicle speed is approximately 16 mph (25 km/h) or less.

Approach warning (vehicle-to-vehicle distance control mode)

When your vehicle is too close to a vehicle ahead, and sufficient automatic deceleration via the cruise control is not possible, the display will flash and the buzzer will sound to alert the driver. An example of this would be if another driver cuts in front of you while you are following a vehicle.


STS55BC006

Depress the brake pedal to ensure an appropriate vehicle-to-vehicle distance.

■ Warnings may not occur when

In the following instances, warnings may not occur even when the vehicle-to-vehicle distance is small.

- When the speed of the preceding vehicle matches or exceeds your vehicle speed
- When the preceding vehicle is traveling at an extremely slow speed
- Immediately after the cruise control speed was set
- When depressing the accelerator pedal

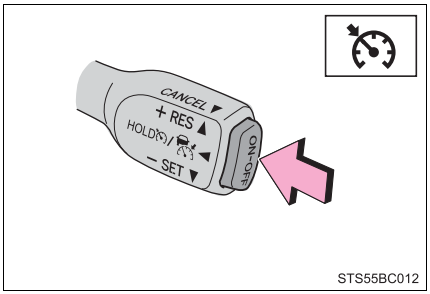
Selecting constant speed control mode

When constant speed control mode is selected, your vehicle will maintain a set speed without controlling the vehicle-to-vehicle distance. Select this mode only when vehicle-to-vehicle distance control mode does not function correctly due to a dirty radar, etc.

1 With the cruise control off, press and hold the “ON-OFF” button for 1.5 seconds or more.

Immediately after the “ON-OFF” button is pressed, the dynamic radar cruise control indicator will come on. Afterwards, it switches to the cruise control indicator.

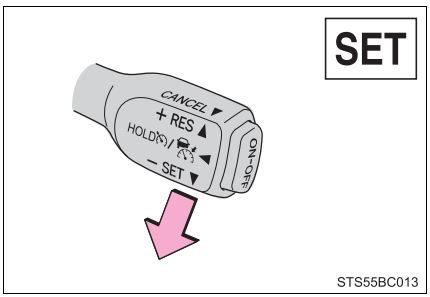
Switching to constant speed control mode is only possible when operating the lever with the cruise control off.



STS55BC012

2 Accelerate or decelerate, with accelerator pedal operation, to the desired vehicle speed (at or above approximately 20 mph [30km/h]) and push the lever down to set the speed.

Cruise control “SET” indicator will come on.



STS55BC013

The vehicle speed at the moment the lever is released becomes the set speed.

Adjusting the speed setting: →P. 258

Canceling and resuming the speed setting: →P. 260

Dynamic radar cruise control can be set when

- The shift position is in D.
- Depending on the control mode, this item can be set at the following speeds.
  - Vehicle-to-vehicle distance control mode: Approximately 20 mph (30 km/h) or more
  - Constant speed control mode: Approximately 20 mph (30 km/h) or more

Accelerating after setting the vehicle speed

The vehicle can accelerate by operating the accelerator pedal. After accelerating, the set speed resumes. However, during vehicle-to-vehicle distance control mode, the vehicle speed may decrease below the set speed in order to maintain the distance to the preceding vehicle.

Automatic cancelation of vehicle-to-vehicle distance control mode

Vehicle-to-vehicle distance control mode is automatically canceled in the following situations.

- Actual vehicle speed falls below approximately 16 mph (25 km/h).
- VSC is activated.
- TRAC is activated for a period of time.
- When the VSC or TRAC system is turned off.
- The sensor cannot detect correctly because it is covered in some way.
- Pre-collision braking is activated.

If vehicle-to-vehicle distance control mode is automatically canceled for any reasons other than the above, there may be a malfunction in the system. Contact your Toyota dealer.

Automatic cancelation of constant speed control mode

Constant speed control mode is automatically canceled in the following situations:

- Actual vehicle speed is more than approximately 10 mph (16 km/h) below the set vehicle speed.
- Actual vehicle speed falls below approximately 20 mph (30 km/h).
- VSC is activated.
- TRAC is activated for a period of time.
- When the VSC or TRAC system is turned off.
- Pre-collision braking is activated.

If constant speed control mode is automatically canceled for any reasons other than the above, there may be a malfunction in the system. Contact your Toyota dealer.

Brake operation

A brake operation sound may be heard and the brake pedal response may change, but these are not malfunctions.

Warning messages and buzzers for dynamic radar cruise control

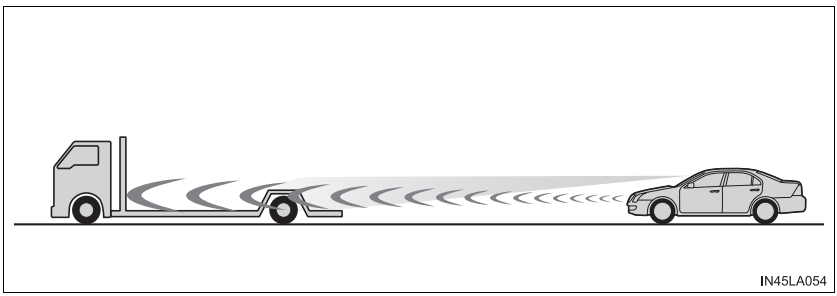
Warning messages and buzzers are used to indicate a system malfunction or to inform the driver of the need for caution while driving. If a warning message is shown on the multi-information display, read the message and follow the instructions. (→P. 224, 426)

When the sensor may not be correctly detecting the vehicle ahead

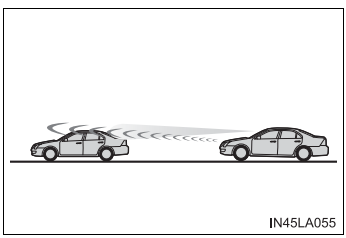
In the case of the following and depending on the conditions, operate the brake pedal when deceleration of the system is insufficient or operate the accelerator pedal when acceleration is required.

As the sensor may not be able to correctly detect these types of vehicles, the approach warning (→P. 260) may not be activated.

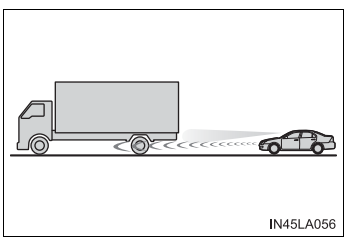
- Vehicles that cut in suddenly
- Vehicles traveling at low speeds
- Vehicles that are not moving in the same lane
- Vehicles with small rear ends (trailers with no load on board, etc.)



- Motorcycles traveling in the same lane
- When water or snow thrown up by the surrounding vehicles hinders the detecting of the sensor
- When your vehicle is pointing upwards (caused by a heavy load in the luggage compartment, etc.)



- Preceding vehicle has an extremely high ground clearance

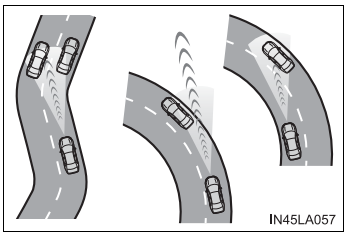


Conditions under which the vehicle-to-vehicle distance control mode may not function correctly

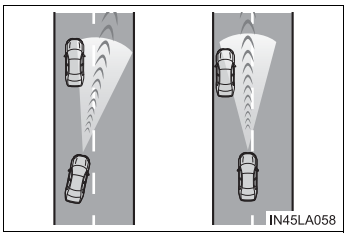
In the case of the following conditions, operate the brake pedal (or accelerator pedal, depending on the situation) as necessary.

As the sensor may not be able to correctly detect vehicles ahead, the system may not operate properly.

- When the road curves or when the lanes are narrow



- When steering wheel operation or your position in the lane is unstable



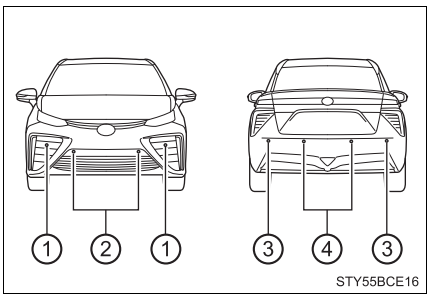
- When the vehicle ahead of you decelerates suddenly
- When driving on a road surrounded by a structure, such as in a tunnel or on a bridge
- While the vehicle speed is decreasing to the set speed after the vehicle accelerates by depressing the accelerator pedal

Intuitive parking assist

The distance from your vehicle to nearby obstacles when parallel parking or maneuvering into a garage is measured by the sensors and communicated via the displays and a buzzer. Always check the surrounding area when using this system.

Types of sensors

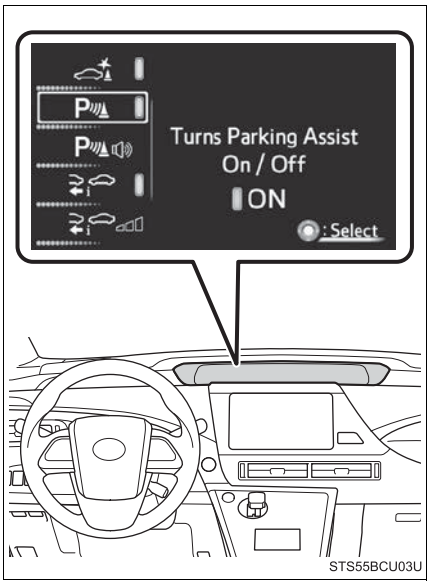
① Front corner sensors
② Front center sensors
③ Rear corner sensors
④ Rear center sensors



Turning the intuitive parking assist system on

ON (activate)/OFF (deactivate) can be changed by the for the Multi-information Display (→P. 117)

1 Press either ∧ or ∨ on the meter control switches (→P. 118) and select .

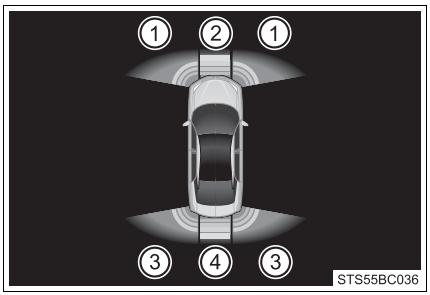


2 Each press of ⊙ of the meter control switches, changes ON and OFF. When ON is selected, the intuitive parking assist indicator turns on.

Display

When the sensors detect an obstacle, the following displays inform the driver of the position and distance to the obstacle.

① Front corner sensor operation
② Front center sensor operation
③ Rear corner sensor operation
④ Rear center sensor operation



Sensor detection display, obstacle distance

■ Distance display

Sensors that detect an obstacle will illuminate continuously or blink.

Display*	Approximate distance to obstacle	
	Front corner sensor/ front center sensor	Rear corner sensor/rear center sensor
(continuous)	Front center sensor only: 3.2 ft. (100 cm) to 2.0 ft. (60 cm)	Rear center sensor only: 4.9 ft. (150 cm) to 2.0 ft. (60 cm)
(continuous)	2.0 ft. (60 cm) to 1.5 ft. (45 cm)	2.0 ft. (60 cm) to 1.5 ft. (45 cm)
(continuous)	1.5 ft. (45 cm) to 1.2 ft. (35 cm)	1.5 ft. (45 cm) to 1.2 ft. (35 cm)
(blinking)	Less than 1.2 ft. (35 cm)	Less than 1.2 ft. (35 cm)

*: The images may differ from that shown in the illustrations. (→P. 267)

■ Buzzer operation and distance to an obstacle

A buzzer sounds when the sensors are operating.

- The buzzer sounds faster as the vehicle approaches an obstacle. When the vehicle comes within the approximately 1.2 ft. (35 cm) of the obstacle, the buzzer sounds continuously.
- When 2 or more obstacles are detected simultaneously, the buzzer system responds to the nearest obstacle. If one or both come within the above distances, the beep will repeat a long tone, followed by fast beeps.

Detection range of the sensors

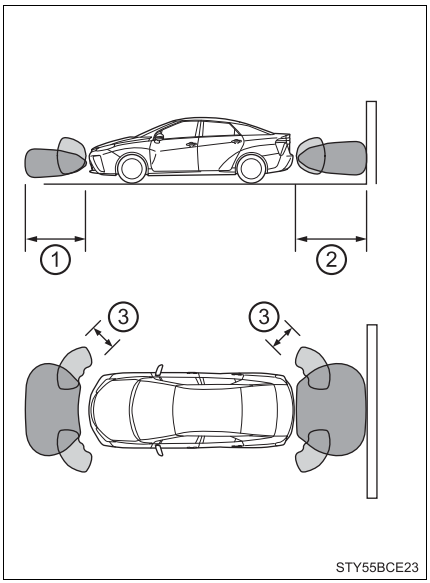
① Approximately 3.2 ft. (100 cm)

② Approximately 4.9 ft. (150 cm)

③ Approximately 2.0 ft. (60 cm)

The diagram shows the detection range of the sensors. Note that the sensors cannot detect obstacles that are extremely close to the vehicle.

The range of the sensors may change depending on the shape of the object, etc.



■ The intuitive parking assist can be operated when

- The power switch is in ON mode
- Intuitive parking assist system is on
- The vehicle speed is less than about 6 mph (10 km/h)
- The shift position is following positions.
  - Front corner sensors: The shift position is in other than P
  - Front center sensors: The shift position is in other than P or R
  - Rear corner and rear center sensors: The shift position is in R

Sensor detection information

- The sensor's detection areas are limited to the areas around the vehicle's bumper.
- Certain vehicle conditions and the surrounding environment may affect the ability of a sensor to correctly detect an obstacle. Particular instances where this may occur are listed below.
  - There is dirt, snow or ice on the sensor. (Wiping the sensors will resolve this problem.)
  - The sensor is frozen. (Thawing the area will resolve this problem.)
    In especially cold weather, if a sensor is frozen the screen may show an abnormal display, or obstacles may not be detected.
  - The sensor is covered in any way.
  - The vehicle is leaning considerably to one side.
  - On an extremely bumpy road, on an incline, on gravel, or on grass.
  - The vicinity of the vehicle is noisy due to vehicle horns, motorcycle engines, air brakes of large vehicles, or other loud noises producing ultrasonic waves.
  - There is another vehicle equipped with parking assist sensors in the vicinity.
  - The sensor is coated with a sheet of spray or heavy rain.
  - The vehicle is equipped with a fender pole or wireless antenna.
  - Towing eyelets are installed.
  - The bumper or sensor receives a strong impact.
  - A backlit license plate, license plate holder, etc., are installed.
  - The vehicle is approaching a tall or curved curb.
  - In harsh sunlight or intense cold weather.
  - The area directly under the bumpers is not detected.
  - If obstacles draw too close to the sensor.
  - A non-genuine Toyota suspension (lowered suspension etc.) is installed.
  - People may not be detected if they are wearing certain types of clothing.

  In addition to the examples above, there are instances in which, because of their shape, signs and other objects may be judged by a sensor to be closer than they are.
- The shape of the obstacle may prevent a sensor from detecting it. Pay particular attention to the following obstacles:
  - Wires, fences, ropes, etc.
  - Cotton, snow and other materials that absorb sound waves
  - Sharply-angled objects
  - Low obstacles
  - Tall obstacles with upper sections projecting outwards in the direction of your vehicle

● The following situations may occur during use.

- Depending on the shape of the obstacle and other factors, the detection distance may shorten, or detection may be impossible.
- Obstacles may not be detected if they are too close to the sensor.
- There will be a short delay between obstacle detection and display. Even at slow speeds, there is a possibility that the obstacle will come within the sensor's detection areas before the display is shown and the buzzer sounds.
- Thin posts or objects lower than the sensor may not be detected when approached, even if they have been detected once.
- It might be difficult to hear beeps due to the volume of audio system or air flow noise of the air conditioning system.

■ Muting the buzzer sound

● To mute the buzzer sound

The buzzer can be temporarily muted by pressing ⊙ of the meter control switches while an obstacle detection display is shown on the multi-information display.

● To cancel the mute

Mute will be automatically canceled in the following situations.

- When the shift position is changed
- When the vehicle speed has reached or exceeded approximately 6 mph (10 km/h)
- When the intuitive parking assist is turned off once and turned on again
- When the power switch is turned off once and turned to ON mode again
- When a sensor is malfunctioning

■ If "Parking Assist Unavailable Clean Parking Assist Sensor" is displayed on the multi-information display

A sensor may be dirty or covered with snow or ice. In such cases, if it is removed from the sensor, the system should return to normal.
Also, due to the sensor being frozen at low temperatures, a malfunction display may appear or an obstacle may not be detected. If the sensor thaws out, the system should return to normal.

■ If "Parking Assist Malfunction Visit Your Dealer" is displayed on the multi-information display

Depending on the malfunction of the sensor, the device may not be working normally.
Have the vehicle inspected by your Toyota dealer.

■ Customization

Some functions can be customized.
(Customizable features: →P. 492)

Certification for the intuitive parking assist

▶ For U.S.A.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

▶ For Canada

This ISM device complies with Canadian ICES-001.

Cet appareil ISM est conforme a la norme NMB-001 du Canada.

WARNING

When using the intuitive parking assist

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 the sensor at speeds in excess of 6 mph (10 km/h).
- The sensors' detection areas and reaction times are limited. When moving forward or reversing, check the areas surrounding the vehicle (especially the sides of the vehicle) for safety, and drive slowly, using the brake to control the vehicle's speed.
- Do not install accessories within the sensors' detection areas.

NOTICE

When using intuitive parking assist

In the following situations, the system may not function correctly due to a sensor malfunction, etc. Have the vehicle checked by your Toyota dealer.

- The intuitive parking assist operation display flashes, and a buzzer sounds when no obstacles are detected.
- If the area around a sensor collides with something, or is subjected to strong impact.
- If the bumper collides with something.
- If the display shows continuously without beeping, except when the buzzer mute switch has been turned on.
- If a display error occurs, first check the sensor.
  If the error occurs even if there is no ice, snow or mud on the sensor, it is likely that the sensor is malfunctioning.

Notes when washing the vehicle

Do not apply intensive bursts of water or steam to the sensor area.

Doing so may result in the sensor malfunctioning.

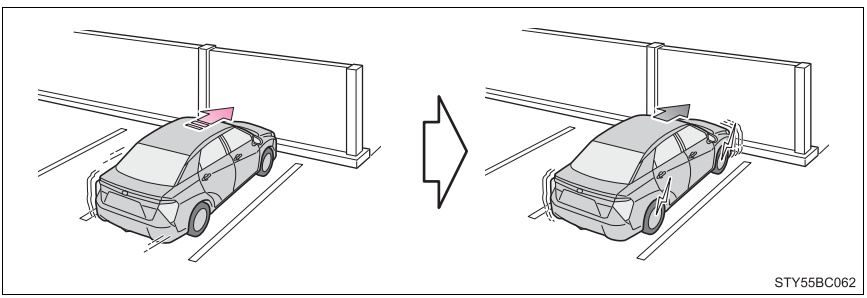
Parking Support Brake function (for static objects)*

When a collision may occur with an obstacle while parking or traveling at low speeds, when the vehicle suddenly moves forward due to mistaken accelerator pedal operation, or when the vehicle moves due to the wrong shift position being selected, the sensors detect obstacles to the front or rear in the traveling direction of the vehicle, and the system operates to lessen impact with obstacles such as walls, and reduce resulting damage.

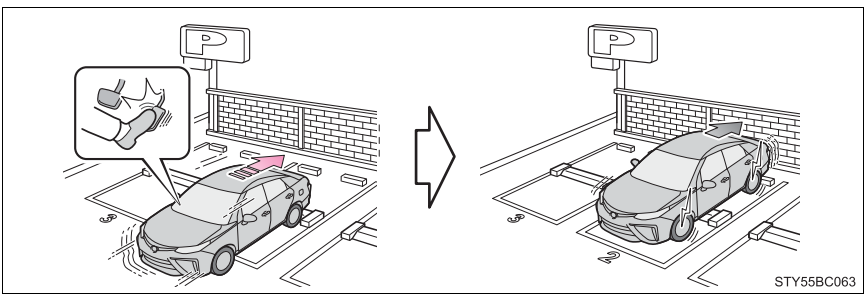
Examples of system operation

The system operates in the following situations when a stationary obstacle is detected in the traveling direction of the vehicle.

◆ The vehicle is driven at low speeds and the brake pedal is not depressed, or is depressed too late

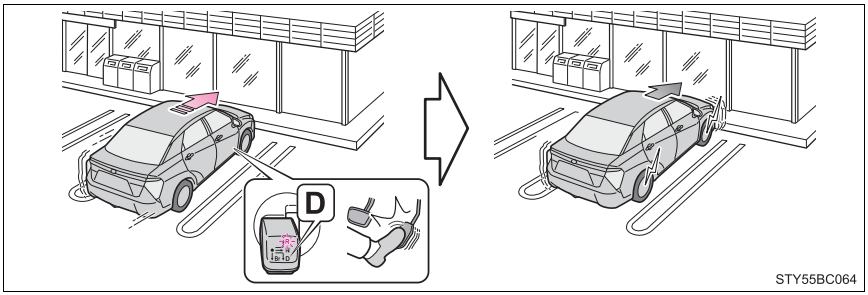


◆ The accelerator pedal is depressed too far



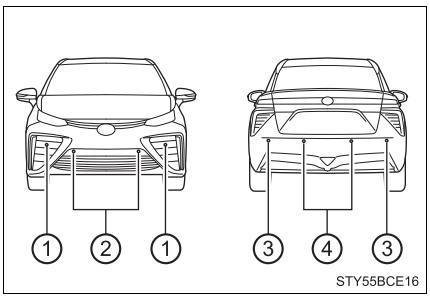
*: If equipped

◆ The vehicle moves due to the wrong shift position being selected



Types of sensors

① Front corner sensors
② Front center sensors
③ Rear corner sensors
④ Rear center sensors



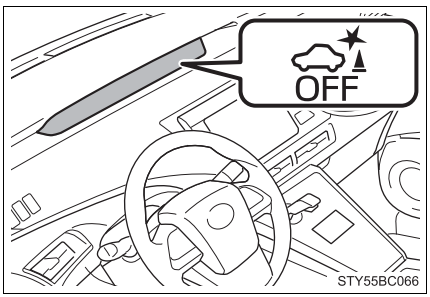
Changing the setting for Parking Support Brake function (for static objects)

The Parking Support Brake function (for static objects) can be changed on the multi-information display (→P. 117).

1 Press ＜ or ＞ of the meter control switches (→P. 118), select .

2 Press ∧ or ∨ of the meter control switches, select and press ◦ to select the desired setting (on/off).

When the Parking Support Brake function (for static objects) is OFF (disabled), the PKSB OFF indicator illuminates.

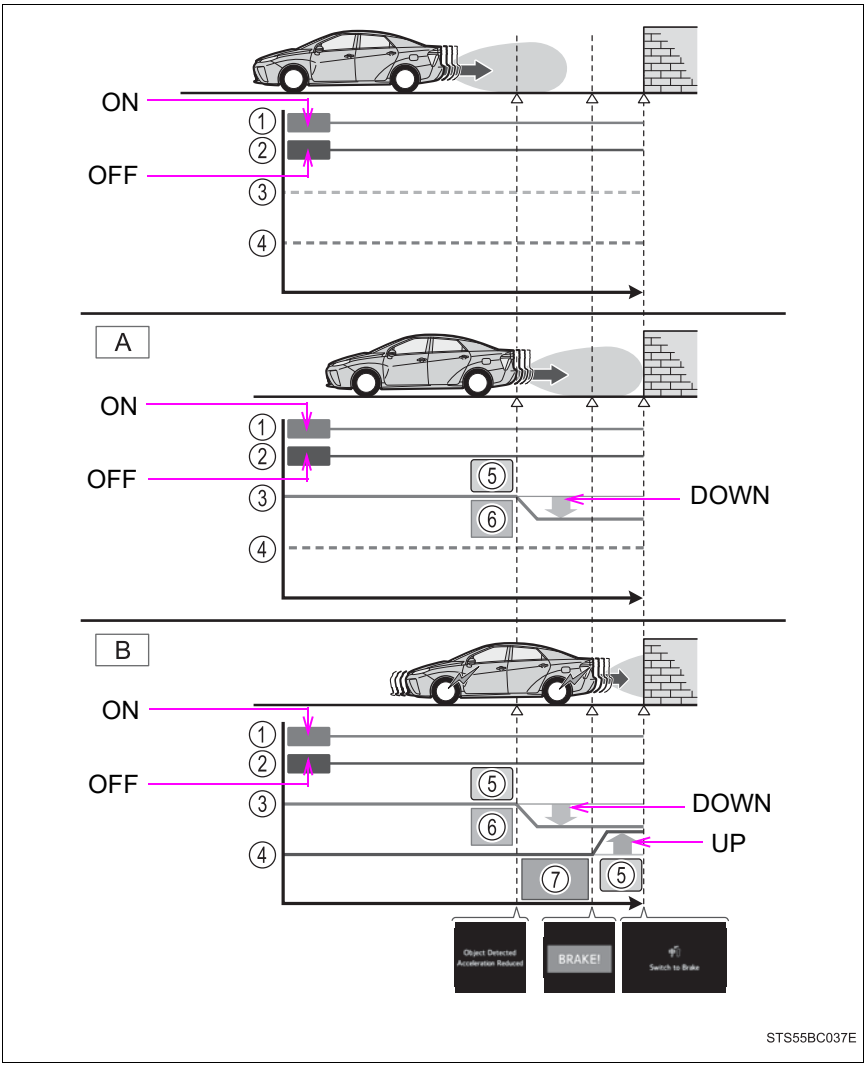


When switched OFF (disable) and the Parking Support Brake function (for static objects) is suspended, system operations do not resume until the function is switched ON (enable) through the settings screen on the multi-information display. (System operation does not resume by operating the power switch.)

Operation

When the Parking Support Brake function (for static objects) detects an static obstacle with a probability of collision, the fuel cell system output is restricted to restrain an increase in vehicle speed. (fuel cell system output restriction control: A)

Furthermore, when the accelerator pedal continues to be depressed, the brakes are applied to reduce the vehicle speed. (Brake Control: B)



① Accelerator pedal
② Brake pedal
③ Fuel cell system output
④ Braking force
⑤ Control starts
⑥ Collision is possible
⑦ Collision possibility extremely high

Operation conditions

Operation starting conditions

When the PKSB OFF indicator is not illuminated or flashing (→P. 283, 419) and all of the following conditions are met, the system operates.

▶ Fuel cell system output restriction control

- The Parking Support Brake function (for static objects) is ON (enabled).
- The vehicle speed is 10 mph (15 km/h) or less.
- There is a static obstacle in the traveling direction of the vehicle (6 to 13 ft. [2 to 4 m] ahead).
- The system determined that a stronger-than-normal brake operation was necessary to avoid a collision.

▶ Brake control

- Fuel cell system output restriction control is being performed.
- The system determined that an emergency brake operation was necessary to avoid a collision.

Operation ending conditions

In any of the following conditions, the system stops operating.

▶ Fuel cell system output restriction control

- The Parking Support Brake function (for static objects) has been turned OFF (disabled).
- The collision became avoidable with normal brake operation.
- The static object is no longer in the traveling direction of the vehicle (6 to 13 ft. [2 to 4 m] ahead).

▶ Brake control

- The Parking Support Brake function (for static objects) has been turned OFF (disabled).
- Approximately 2 seconds elapsed after the vehicle was stopped by brake control.
- The brake control was depressed after the vehicle was stopped by brake control.
- The static obstacle is no longer in the traveling direction of the vehicle (6 to 13 ft. [2 to 4 m] ahead).

Display and buzzer for fuel cell system output restriction control and brake control

When the fuel cell system output restriction control or brake control operates, the buzzer sounds and a message is displayed on the multi-information display to alert the driver.

Depending on the situation, output restriction control operates to either limit acceleration or restrict output as much as possible.

Control	Situation	Multi-information display	PKSB OFF indicator	Buzzer
Fuel cell system output restriction control is operating (acceleration limitation control)	Acceleration at a certain speed or higher is not possible.	Object Detected Acceleration Reduced	Not illuminated	No sound
Fuel cell system output restriction control is operating (control to restrict output as much as possible)	A stronger-than-normal brake operation is necessary	BRAKE!	Not illuminated	Short beep
Brake control is operating	Emergency braking is necessary			
The vehicle is stopped by system operation	The vehicle is stopped after brake control operation	Switch to Brake	Illuminated	

Sensor detection range

The detection range of the Parking Support Brake function (for static objects) differs from the detection range of the intuitive parking assist (→P. 269).

Therefore, even if the intuitive parking assist detects and provides a warning for an approaching obstacle, the Parking Support Brake function (for static objects) may not start operating.

System operation

When the vehicle is stopped by system operation, the Parking Support Brake function (for static objects) stops and the PKSB OFF indicator illuminates. Even if operated, the brake control is released after 2 seconds, so the vehicle can start moving in that state. Also, depressing the brake pedal releases the brake control, so if the accelerator pedal is depressed again, the vehicle can start moving.

System recovery

When the Parking Support Brake function (for static objects) is stopped by the system operation and you would like to resume operation, turn the Parking Support Brake function (for static objects) ON again and resume operation (→P. 276), or after briefly turning the power switch OFF turn it ON again.

Furthermore, when the vehicle moves with an obstacle no longer in the traveling direction of the vehicle, or when the traveling direction of the vehicle changes (such as when switching from moving forward to reverse, and vice versa), the system operation automatically resumes.

Obstacles not detected by the sensors

The following obstacles may not be detected by the sensors.

- Objects such as people, cloth and snow, that are difficult for sonic waves to reflect off of. (In particular, people may also not be detected depending on the type of clothing they are wearing.)
- Objects not perpendicular with the ground, objects not at a right angle to the traveling direction of the vehicle, uneven objects or waving objects
- Low objects
- Thin objects such as wires, fences, ropes and signposts
- Objects that are extremely close to the bumper
- Non-static obstacles

Intuitive parking assist buzzer

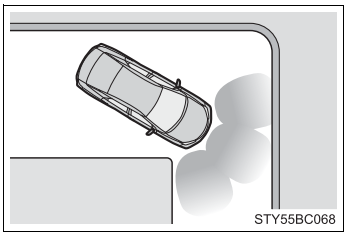
Regardless of whether the intuitive parking assist is on or off (→P. 266), if the Parking Support Brake function (for static objects) is not stopped (→P. 276), when the front or rear sensors detect an obstacle and brake control is performed, the intuitive parking assist buzzer sounds and a notification of the approximate distance to the object is provided.

Situations when the system may operate even though there is no possibility of a collision

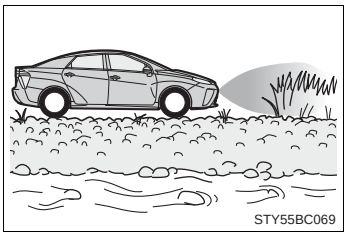
In the following situations, the system may operate even though there is no possibility of a collision.

● Environmental influence

- The vehicle is driven on a narrow road



- The vehicle is driven on a gravel road or in an area with tall grass



- The vehicle is driven toward a banner or flag, a low-hanging branch or a boom barrier (such as those used at railroad crossings, toll gates and parking lots).
- There is an obstacle on the shoulder of the road (when the vehicle is driven in a narrow tunnel, on a narrow bridge or on a narrow road)
- The vehicle is being parallel parked
- There is a rut or hole in the surface of the road
- When the vehicle is driven on a metal cover (grating), such as those used for drainage ditches
- The vehicle is driven on a steep slope
- The sensor is covered by water on a flooded road

● Influence from the weather

- Ice, snow, dirt, etc., has adhered to the sensor (if removed, the system returns to normal)
- Heavy rain or water strikes the vehicle
- In severe weather such as fog, snow or a sand storm

● Influence from other sonic waves

- An ultrasonic wave source is nearby, such as the horn or parking assist system of another vehicle, a vehicle detector, a motorcycle engine or the air brake of a large vehicle
- Electronic components (such as a backlit license plate (especially fluorescent types), fog lights, a fender pole or a wireless antenna) are installed near the sensors

● Changes in the vehicle

- The vehicle is tilted a large amount
- The height of the vehicle has drastically changed due to the carried load (the nose tilts up or down)
- The direction of the sensor has deviated due to a collision or other impact

■ **In the unlikely event that the Parking Support Brake function (for static objects) mistakenly operates at a crossing or elsewhere**

Even in the unlikely event that the Parking Support Brake function (for static objects) mistakenly operates at a crossing or elsewhere, brake control is canceled after approximately 2 seconds, allowing you to proceed forward and leave the area. Furthermore, brake control is also canceled when the brake pedal is depressed. Depressing the accelerator pedal again allows you to proceed forward and leave the area.

■ **Situations in which the system may not operate normally**

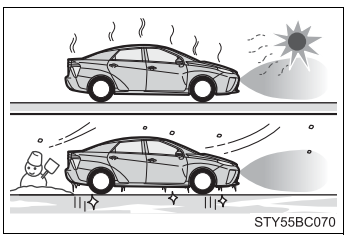
In the following situations, the system may not operate normally.

● Environmental influence

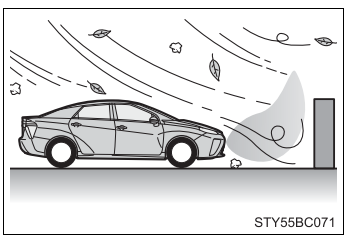
- There is an obstacle that cannot be detected between the vehicle and another obstacle that can be detected
- An obstacle such as another vehicle, a motorcycle, a bicycle or a pedestrian cuts in front of the vehicle or jumps out from the side.

● Influence from the weather

- The area around the sensor is extremely hot or cold


STY55BC070

- The wind is strong


STY55BC071

- Ice, snow, dirt, etc., has adhered to the sensor (if removed, the system returns to normal)
- Heavy rain or water strikes the vehicle
- In severe weather such as fog, snow or a sand storm

- Influence from other sonic waves
  - An ultrasonic wave source is nearby, such as the horn or parking assist system of another vehicle, a vehicle detector, a motorcycle engine or the air brake of a large vehicle
  - Electronic components (such as a backlit license plate [especially fluorescent types], fog lights, a fender pole or a wireless antenna) are installed near the sensors
- Changes in the vehicle
  - The vehicle is tilted a large amount
  - The height of the vehicle has drastically changed due to the carried load (the nose tilts up or down)
  - The direction of the sensor has deviated due to a collision or other impact

When removing and installing the 12-volt battery

The system needs to be initialized.

The system can be initialized by driving the vehicle straight ahead for 5 seconds or more at a speed of approximately 22 mph (35 km/h) or higher.

When “PKSB Unavailable” is displayed on the multi-information display and the PKSB OFF indicator flashes

- Ice, snow, dirt, etc., may have adhered to the sensor. If this occurs, remove the ice, snow, dirt, etc., from the sensor to return the system to normal.
  Also, a warning message may be displayed at low temperatures due to ice forming on the sensor, and the sensor may not detect obstacles. Once the ice melts, the system will return to normal.
- If this message is shown even after removing dirt from the sensor, or shown when the sensor was not dirty to begin with, have the vehicle inspected at your Toyota dealer.
- System initialization may not have been performed after removal and installation of the 12-volt battery. Perform system initialization.

When “PKSB Malfunction Visit Your Dealer” is displayed on the multi-information display, the PKSB OFF indicator flashes and the buzzer sounds

The system may not be operating properly. Have the vehicle inspected at your Toyota dealer.

WARNING

For safe use

Do not rely solely upon the system. Relying solely upon the system may lead to an unexpected accident.

- Driving safely is the sole responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving. The Parking Support Brake function (for static objects) can provide support to lessen the severity of collisions. However, it may not operate depending on the situation.
- The Parking Support Brake function (for static objects) is not a system designed to completely stop the vehicle. Furthermore, even if the brake control is able to stop the vehicle, brake control is canceled after approximately 2 seconds, so depress the brake pedal immediately.

In order for the system to operate properly

Make sure to observe the following precautions regarding the sensors (→P. 265). Failure to observe these precautions may cause the sensors not to operate properly, and may result in an unexpected accident.

- Do not perform work such as modification, disassembly or painting
- Only perform replacements using genuine parts
- Do not subject the area around the sensors to any impacts
- Do not damage the sensors, and always keep them clean

Handling the suspension

Do not modify the suspension, as changes to the height or incline of the vehicle may prevent the sensors from correctly detecting obstacles, may cause the system not operate, or may cause the system to operate unnecessarily.

NOTICE

Preventing sensor malfunctions

- If the area around a sensor is subjected to an impact, equipment may not operate properly due to a sensor malfunction. Have the vehicle inspected at your Toyota dealer.
- When using a high-pressure washer to wash the vehicle, do not spray water directly on the sensors. The sensors may not function properly if subjected to an impact from strong water pressure.
- When using steam to wash the vehicle, do not direct steam too close to the sensors. The sensors may not function properly if subjected to steam.

Preventing unnecessary operation

In the following situations, turn the Parking Support Brake function (for static objects) off. The system may operate even though there is no possibility of a collision.

- A chassis roller, chassis dynamo, free roller or similar equipment is being used for an inspection, etc.
- The vehicle is being loaded onto a ship, truck or other transport vessel
- The suspension has been lowered or tires that have a different size than the genuine tires are equipped
- The height of the vehicle has drastically changed due to the carried load (the nose tilts up or down).
- A towing eyelet is installed
- When using an automatic car wash

BSM (Blind Spot Monitor)

Summary of the Blind Spot Monitor

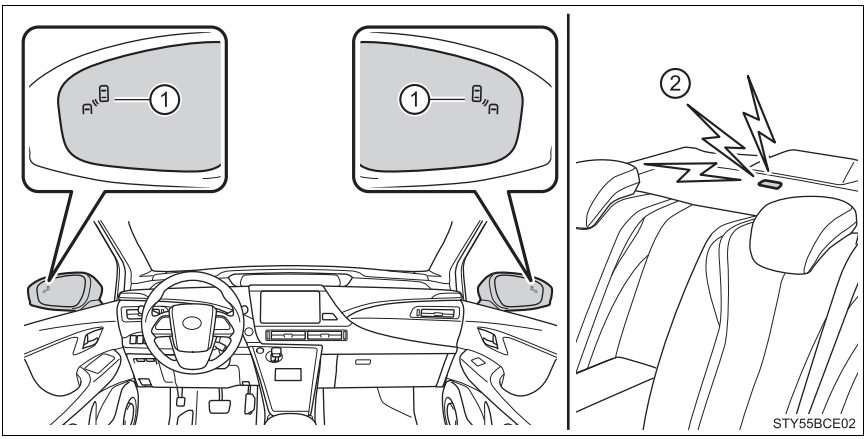
The Blind Spot Monitor is a system that has 2 functions;

- The Blind Spot Monitor function

  Assists the driver in making the decision when changing lanes
- The Rear Cross Traffic Alert function

  Assists the driver when backing up

These functions use same sensors.



① BSM outside rear view mirror indicators

Blind Spot Monitor function:
When a vehicle is detected in the blind spot, the BSM outside rear view mirror indicator on the detected side illuminates. If the turn signal lever is operated when a vehicle is in the blind spot, the BSM outside rear view mirror indicator flashes.

Rear Cross Traffic Alert function:
When a vehicle approaching from the right or left rear of the vehicle is detected, the BSM outside rear view mirror indicators flash.

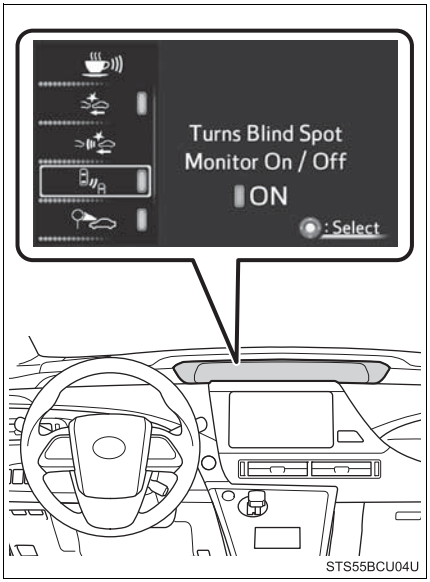
② Rear Cross Traffic Alert buzzer (Rear Cross Traffic Alert function only)

When a vehicle approaching from the right or left rear of the vehicle is detected, a buzzer sounds from behind the rear seat.

Turning the Blind Spot Monitor system on

ON (activate)/OFF (deactivate) can be changed by the for the Multi-information Display (→P. 117)

1 Press either ∧ or ∨ on the meter control switches (→P. 118) and select .



2 Each press of ⊙ of the meter control switches, changes ON and OFF. When ON is selected, the BSM indicator turns on.

■ **The BSM outside rear view mirror indicators visibility**

When under strong sunlight, the BSM outside rear view mirror indicator may be difficult to see.

■ **Rear Cross Traffic Alert buzzer hearing**

Rear Cross Traffic Alert function may be difficult to hear over loud noises such as high audio volume.

■ **When "Blind Spot Monitor Unavailable" is displayed on the multi-information display**

Water, snow, mud, etc., may be built up in the vicinity of the sensor area of bumper.(→P. 289) Removing the water, snow, mud, etc., from the vicinity of the sensor area bumper should return it to normal. Also, the sensor may not function normally when used in extremely hot or cold weather.

■ **When "Blind Spot Monitor System Malfunction Visit Your Dealer" is displayed on the multi-information display**

There may be a sensor malfunction or voltage abnormality. Have the vehicle inspected at your Toyota dealer.

Certification for the Blind Spot Monitor system

▶ For U.S.A.

FCC ID: OAYSRR2A
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Warning
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

▶ For Canada

Applicable law : Canada 310

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Frequency bands : 24.05 - 24.25GHz
Output power : less than 20 milliwatts

Droit applicable : Canada 310

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

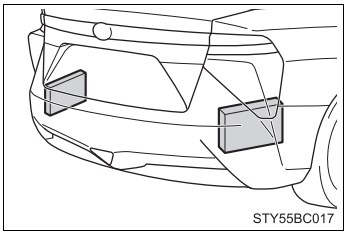
Bandes de fréquences : 24.05 - 24.25GHz
Puissance émise : Moins de 20 milliwatts

WARNING

Handling the radar sensor

One Blind Spot Monitor sensor is installed inside the left and right side of the vehicle rear bumper respectively. Observe the following to ensure the Blind Spot Monitor system can function correctly.

- Keep the sensor and its surrounding area on the bumper clean at all times.



- Do not subject the sensor or surrounding area on the bumper to a strong impact. If the sensor moves even slightly off position, the system may malfunction and vehicles that enter the detection area may not be detected. If the sensor or surrounding area is subject to a strong impact, always have the area inspected by your Toyota dealer.
- Do not disassemble the sensor.
- Do not attach accessories or stickers to the sensor or surrounding area on the bumper.
- Do not modify the sensor or surrounding area on the bumper.
- Do not paint the rear bumper any color other than an official Toyota color.

The Blind Spot Monitor function

The Blind Spot Monitor function uses radar sensors to detect vehicles that are traveling in an adjacent lane in the area that is not reflected in the outside rear view mirror (the blind spot), and advises the driver of the vehicles existence via the BSM outside rear view mirror indicator.

The Blind Spot Monitor function detection areas

The areas that vehicles can be detected in are outlined below.

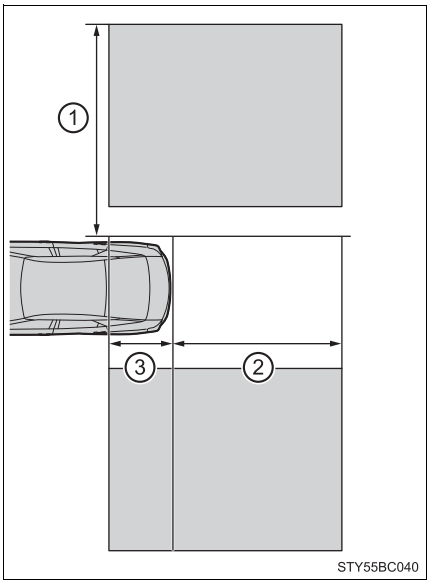
The range of the detection area extends to:

① Approximately 11.5 ft. (3.5 m) from the side of the vehicle

The first 1.6 ft. (0.5 m) from the side of the vehicle is not in the detection area

② Approximately 9.8 ft. (3 m) from the rear bumper

③ Approximately 3.3 ft. (1 m) forward of the rear bumper



WARNING

■ Cautions regarding the use of the system

The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.

The Blind Spot Monitor function is a supplementary function which alerts the driver that a vehicle is present in the blind spot. Do not overly rely on the Blind Spot Monitor function. The function cannot judge if it is safe to change lanes, therefore over reliance could cause an accident resulting in death or serious injury.

According to conditions, the system may not function correctly. Therefore the driver's own visual confirmation of safety is necessary.

■ The Blind Spot Monitor function is operational when

- The Blind Spot Monitor system is on
- Vehicle speed is greater than approximately 10 mph (16 km/h).

■ The Blind Spot Monitor function will detect a vehicle when

- A vehicle in an adjacent lane overtakes your vehicle.
- Another vehicle enters the detection area when it changes lanes.

Conditions under which the Blind Spot Monitor function will not detect a vehicle

The Blind Spot Monitor function is not designed to detect the following types of vehicles and/or objects:

- Small motorcycles, bicycles, pedestrians, etc.*
- Vehicles traveling in the opposite direction
- Guardrails, walls, signs, parked vehicles and similar stationary objects*
- Following vehicles that are in the same lane*
- Vehicles driving 2 lanes across from your vehicle*

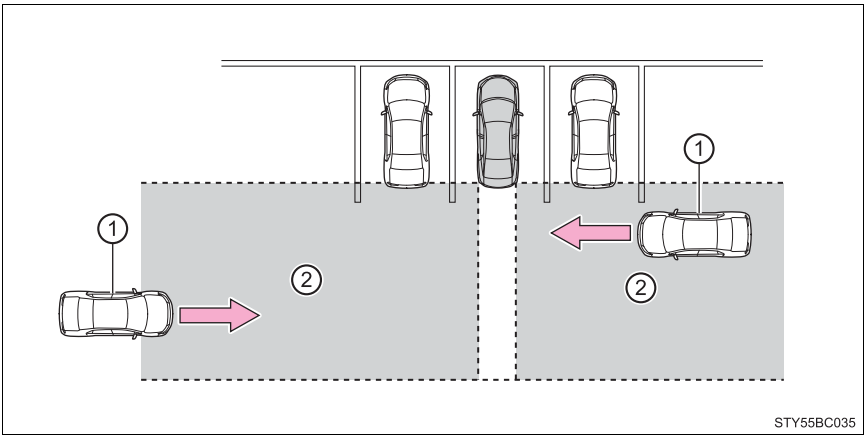
*: Depending on conditions, detection of a vehicle and/or object may occur.

Conditions under which the Blind Spot Monitor function may not function correctly

- The Blind Spot Monitor function may not detect vehicles correctly in the following conditions:
  - During bad weather such as heavy rain, fog, snow, etc.
  - When ice or mud, etc., is attached to the rear bumper
  - When driving on a road surface that is wet due to rain, standing water, etc.
  - When there is a significant difference in speed between your vehicle and the vehicle that enters the detection area
  - When a vehicle is in the detection area from a stop and remains in the detection area as your vehicle accelerates
  - When driving up or down consecutive steep inclines, such as hills, a dip in the road, etc.
  - When multiple vehicles approach with only a small gap between each vehicle
  - When vehicle lanes are wide, and the vehicle in the next lane is too far away from your vehicle
  - When the vehicle that enters the detection area is traveling at about the same speed as your vehicle
  - When there is a significant difference in height between your vehicle and the vehicle that enters the detection area
  - Directly after the Blind Spot Monitor system is on
- Instances of the Blind Spot Monitor function unnecessarily detecting a vehicle and/or object may increase under the following conditions:
  - When there is only a short distance between your vehicle and a guardrail, wall, etc.
  - When there is only a short distance between your vehicle and a following vehicle
  - When vehicle lanes are narrow and a vehicle driving 2 lanes across from your vehicle enters the detection area
  - When items such as a bicycle carrier are installed on the rear of the vehicle

The Rear Cross Traffic Alert function

The Rear Cross Traffic Alert function operates when your vehicle is in reverse. It can detect other vehicles approaching from the right or left rear of the vehicle. It uses radar sensors to alert the driver of the other vehicle's existence through flashing the BSM outside rear view mirror indicators and sounding a buzzer.



① Approaching vehicles ② Detection areas

WARNING

■ Cautions regarding the use of the system

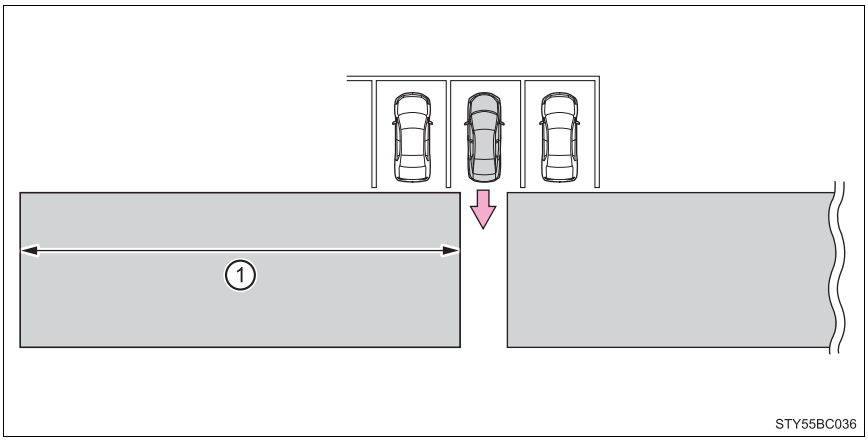
The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.

The Rear Cross Traffic Alert function is only an assist and is not a replacement for careful driving. Driver must be careful when backing up, even when using Rear Cross Traffic Alert function. The driver's own visual confirmation of behind you and your vehicle is necessary and be sure there are no pedestrians, other vehicles, etc., before backing up. Failure to do so could cause death or serious injury.

According to conditions, the system may not function correctly. Therefore the driver's own visual confirmation of safety is necessary.

The Rear Cross Traffic Alert function detection areas

The areas that vehicles can be detected in are outlined below.



To give the driver a more consistent time to react, the buzzer can alert for faster vehicles from farther away.

Example:

Approaching vehicle	Speed	① Approximate alert distance
Fast	18 mph (28 km/h)	65 ft. (20 m)
Slow	5 mph (8 km/h)	18 ft. (5.5 m)

The Rear Cross Traffic Alert function is operational when

- The Blind Spot Monitor system is on.
- The shift position is in R.
- Vehicle speed is less than approximately 5 mph (8 km/h).
- Approaching vehicle speed is between approximately 5 mph (8 km/h) and 18 mph (28 km/h).

Conditions under which the Rear Cross Traffic Alert function will not detect a vehicle

The Rear Cross Traffic Alert function is not designed to detect the following types of vehicles and/or objects.

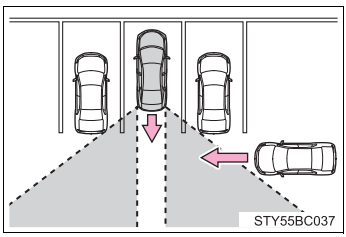
- Small motorcycles, bicycles, pedestrians, etc.*
- Vehicles approaching from directly behind
- Guardrails, walls, signs, parked vehicles and similar stationary objects*
- Vehicles moving away from your vehicle
- Vehicles approaching from the parking spaces next to your vehicle*
- Vehicles backing up in the parking space next to your vehicle*

*: Depending on conditions, detection of a vehicle and/or object may occur.

■ **Conditions under which the Rear Cross Traffic Alert function may not function correctly**

The Rear Cross Traffic Alert function may not detect vehicles correctly in the following conditions:

- During bad weather such as heavy rain, fog, snow, etc.
- When ice or mud, etc., is attached to the rear bumper
- When multiple vehicles approach continuously
- Shallow angle parking
- When a vehicle is approaching at high speed
- When parking on a steep incline, such as hills, a dip in the road, etc.
- Directly after the Blind Spot Monitor system is on
- Directly after the fuel cell system is started with the Blind Spot Monitor system is on
- Vehicles that the sensors cannot detect because of obstacles



Driving assist systems

To help enhance driving safety and performance, the following systems operate automatically in response to various driving situations. Be aware, however, that these systems are supplementary and should not be relied upon too heavily when operating the vehicle.

◆ ECB (Electronically Controlled Brake System)

The electronically controlled system generates braking force corresponding to the brake operation

◆ ABS (Anti-lock Brake System)

Helps to prevent wheel lock when the brakes are applied suddenly, or if the brakes are applied while driving on a slippery road surface

◆ Brake assist

Generates an increased level of braking force after the brake pedal is depressed when the system detects a panic stop situation

◆ VSC (Vehicle Stability Control)

Helps the driver to control skidding when swerving suddenly or turning on slippery road surfaces

◆ Enhanced VSC (Enhanced Vehicle Stability Control)

Provides cooperative control of the ABS, TRAC, VSC and EPS. Helps to maintain directional stability when swerving on slippery road surfaces by controlling steering performance.

◆ TRAC (Traction Control)

Helps to maintain drive power and prevent the drive wheels from spinning when starting the vehicle or accelerating on slippery roads

◆ Hill-start assist control

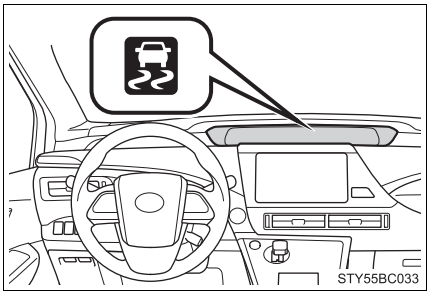
Helps to prevent the vehicle from rolling backward when starting on an incline.

◆ EPS (Electric Power Steering)

Employs an electric motor to reduce the amount of effort needed to turn the steering wheel

When the TRAC/VSC/ABS systems are operating

The slip indicator will flash while the TRAC/VSC/ABS systems are operating.



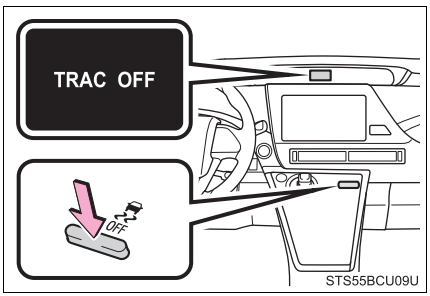
Disabling the TRAC system

If the vehicle gets stuck in mud, dirt or snow, the TRAC system may reduce power from the fuel cell system to the wheels. Pressing OFF to turn the system off may make it easier for you to rock the vehicle in order to free it.

To turn the TRAC system off, quickly press and release OFF.

The “TRAC OFF” is displayed on the multi-information display.

Press OFF again to turn the system back on.



Turning off both TRAC and VSC systems

To turn the TRAC and VSC systems off, press and hold OFF for more than 3 seconds while the vehicle is stopped.

The VSC OFF indicator will come on and the “TRAC OFF” is displayed on the multi-information display.

Press OFF again to turn the systems back on.

Pre-collision brake assist and pre-collision braking will also be disabled. The PCS warning light will come on and the message is shown on the multi-information display. (→P. 237)

When the message is displayed on the multi-information display showing that TRAC has been disabled even if OFF has not been pressed

TRAC and hill-start assist control cannot be operated. Contact your Toyota dealer.

Sounds and vibrations caused by the ABS, brake assist, VSC, TRAC and hill-start assist control systems

Any of the following conditions may occur when the above systems are operating. None of these indicates that a malfunction has occurred.

- Vibrations may be felt through the vehicle body and steering.
- A motor sound may be heard after the vehicle comes to a stop.
- The brake pedal may pulsate slightly after the ABS is activated.
- The brake pedal may move down slightly after the ABS is activated.

ECB operating sound

ECB operating sound may be heard in the following cases, but it does not indicate that a malfunction has occurred.

- Operating sound heard from motor compartment when the brake pedal is operated.
- Motor sound of the brake system heard from the front part of the vehicle when the driver’s door is opened.
- Operating sound heard from the motor compartment when 1 or 2 minutes passed after the stop of the fuel cell system.

EPS operation sound

When the steering wheel is operated, a motor sound (whirring sound) may be heard. This does not indicate a malfunction.

Reduced effectiveness of the EPS system

The effectiveness of the EPS system is reduced to prevent the system from overheating when there is frequent steering input over an extended period of time. The steering wheel may feel heavy as a result. Should this occur, refrain from excessive steering input or stop the vehicle and turn the fuel cell system off. The EPS system should return to normal within 10 minutes.

Automatic reactivation of TRAC and VSC systems

After turning the TRAC and VSC systems off, the systems will be automatically re-enabled in the following situations:

- When the power switch is turned off
- If only the TRAC system is turned off, the TRAC will turn on when vehicle speed increases
  If both the TRAC and VSC systems are turned off, automatic re-enabling will not occur when vehicle speed increases

Operating conditions of hill-start assist control

When the following four conditions are met, the hill-start assist control will operate:

- The shift position is in a position other than P or N (when starting off forward/backward on an upward incline).
- The vehicle is stopped.
- The accelerator pedal is not depressed.
- The parking brake is not engaged.

Automatic system cancelation of hill-start assist control

The hill-start assist control will turn off in any of the following situations:

- Shift the shift position to P or N.
- The accelerator pedal is depressed.
- The parking brake is engaged.
- Approximately 2 seconds elapse after the brake pedal is released.

WARNING

■ **The ABS does not operate effectively when**

- The limits of tire gripping performance have been exceeded (such as excessively worn tires on a snow covered road).
- The vehicle hydroplanes while driving at high speed on wet or slick roads.

■ **Stopping distance when the ABS is operating may exceed that of normal conditions**

The ABS is not designed to shorten the vehicle's stopping distance. Always maintain a safe distance from the vehicle in front of you, especially in the following situations:

- When driving on dirt, gravel or snow-covered roads
- When driving with tire chains
- When driving over bumps in the road
- When driving over roads with potholes or uneven surfaces

■ **TRAC may not operate effectively when**

Directional control and power may not be achievable while driving on slippery road surfaces, even if the TRAC system is operating.
Drive the vehicle carefully in conditions where stability and power may be lost.

■ **Hill- start assist control does not operate effectively when**

- Do not overly rely on the hill-start assist control. The hill-start assist control may not operate effectively on steep inclines and roads covered with ice.
- Unlike the parking brake, hill-start assist control is not intended to hold the vehicle stationary for an extended period of time. Do not attempt to use hill-start assist control to hold the vehicle on an incline, as doing so may lead to an accident.

■ **When the TRAC, VSC and/or ABS is activated**

The slip indicator flashes. Always drive carefully. Reckless driving may cause an accident. Exercise particular care when the indicator flashes.

■ **When the TRAC/VSC systems are turned off**

Be especially careful and drive at a speed appropriate to the road conditions. As these are the systems to help ensure vehicle stability and driving force, do not turn the TRAC/VSC systems off unless necessary.

WARNING

Replacing tires

Make sure that all tires are of the specified size, brand, tread pattern and total load capacity. In addition, make sure that the tires are inflated to the recommended tire inflation pressure level.

The ABS, TRAC and VSC systems will not function correctly if different tires are installed on the vehicle.
Contact your Toyota dealer for further information when replacing tires or wheels.

Handling of tires and the suspension

Using tires with any kind of problem or modifying the suspension will affect the driving assist systems, and may cause a system to malfunction.

Winter driving tips

Carry out the necessary preparations and inspections before driving the vehicle in winter. Always drive the vehicle in a manner appropriate to the prevailing weather conditions.

Preparation for winter

- Use washer fluid that are appropriate to the prevailing outside temperatures.
- Have a service technician inspect the condition of the 12-volt battery.
- Have the vehicle fitted with four snow tires or purchase a set of tire chains for the front tires.

  Ensure that all tires are the specified size and brand, and that chains match the size of the tires.

Before driving the vehicle

Perform the following according to the driving conditions:

- Do not try to forcibly open a window or move a wiper that is frozen. Pour warm water over the frozen area to melt the ice. Wipe away the water immediately to prevent it from freezing.
- To ensure proper operation of the climate control system fan, remove any snow that has accumulated on the air inlet vents in front of the windshield.
- Check for and remove any excess ice or snow that may have accumulated on the exterior lights, vehicle’s roof, chassis, around the tires or on the brakes.
- Remove any snow or mud from the bottom of your shoes before getting in the vehicle.

When driving the vehicle

Accelerate the vehicle slowly, keep a safe distance between you and the vehicle ahead, and drive at a reduced speed suitable to road conditions.

When parking the vehicle

Park the vehicle and shift the shift position to P without setting the parking brake. The parking brake may freeze up, preventing it from being released. If the vehicle is parked without setting the parking brake, make sure to block the wheels.
Failure to do so may be dangerous because it may cause the vehicle to move unexpectedly, possibly leading to an accident.

Selecting tire chains

Use the correct tire chain size when mounting the tire chains.
Chain size is regulated for each tire size.

Side chain:

① 0.12 in. (3 mm) in diameter

② 0.39 in. (10 mm) in width

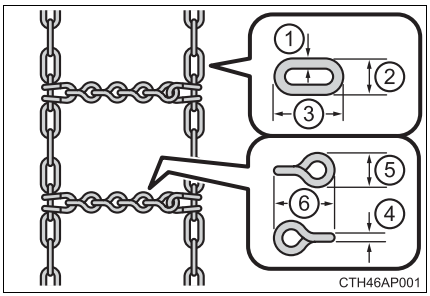
③ 1.18 in. (30 mm) in length

Cross chain:

④ 0.16 in. (4 mm) in diameter

⑤ 0.55 in. (14 mm) in width

⑥ 0.98 in. (25 mm) in length



Regulations on the use of tire chains

Regulations regarding the use of tire chains vary depending on location and type of road. Always check local regulations before installing chains.

Tire chain installation

Observe the following precautions when installing and removing chains:

- Install and remove tire chains in a safe location.
- Install tire chains on the front tires only. Do not install tire chains on the rear tires.
- Install tire chains on front tires as tightly as possible. Retighten chains after driving 1/4 — 1/2 mile (0.5 — 1.0 km).
- Install tire chains following the instructions provided with the tire chains.

WARNING

Driving with snow tires

Observe the following precautions to reduce the risk of accidents.
Failure to do so may result in a loss of vehicle control and cause death or serious injury.

- Use tires of the specified size.
- Maintain the recommended level of air pressure.
- Do not drive in excess of 75 mph (120 km/h), regardless of the type of snow tires being used.
- Use snow tires on all, not just some wheels.

Driving with tire chains

Observe the following precautions to reduce the risk of accidents.
Failure to do so may result in the vehicle being unable to be driven safely, and may cause death or serious injury.

- Do not drive in excess of the speed limit specified for the tire chains being used, or 30 mph (50 km/h), whichever is lower.
- Avoid driving on bumpy road surfaces or over potholes.
- Avoid sudden acceleration, abrupt steering, sudden braking and shifting operations that cause sudden regenerative braking.
- Slow down sufficiently before entering a curve to ensure that vehicle control is maintained.
- Do not use LDA (Lane Departure Alert with steering control) system.

NOTICE

Repairing or replacing snow tires

Request repairs or replacement of snow tires from Toyota dealers or legitimate tire retailers.
This is because the removal and attachment of snow tires affects the operation of the tire pressure warning valves and transmitters.

Fitting tire chains

The tire pressure warning valves and transmitters may not function correctly when tire chains are fitted.

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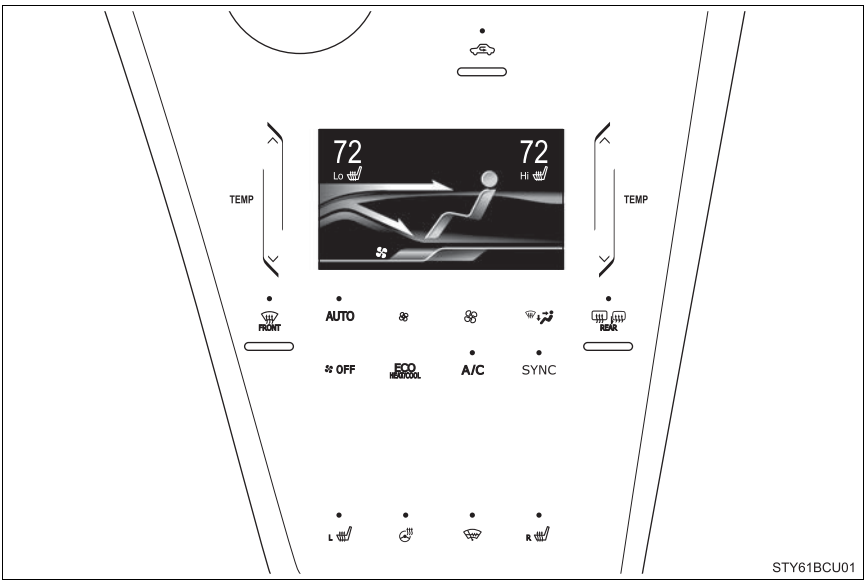
Automatic air conditioning system

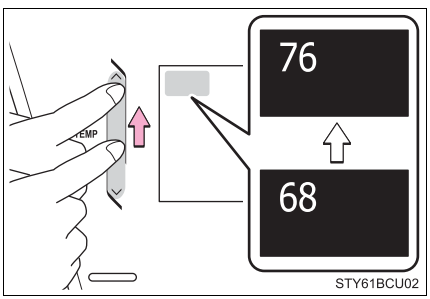
Air outlets and fan speed are automatically adjusted according to the temperature setting.

Air conditioning controls



Adjusting the temperature setting

To adjust the temperature setting, touch and slide your finger up or down on the sensor.



The temperature setting can also be adjusted by touching on the sensor.
When the temperature setting is changed, a buzzer sounds.
If the AUTO indicator is turned off, the system will blow ambient temperature air or heated air.

The temperature for the driver's and front passenger's can be adjusted separately when:

- The front passenger's side temperature setting is touched.
- The air conditioning system switches between individual and synchronized modes each time SYNC is touched.

■ Fan speed setting

Touch (increase) to increase the fan speed and (decrease) to decrease the fan speed.

Touch OFF to turn the fan off.

■ Change the airflow mode

To change the airflow mode, touch .

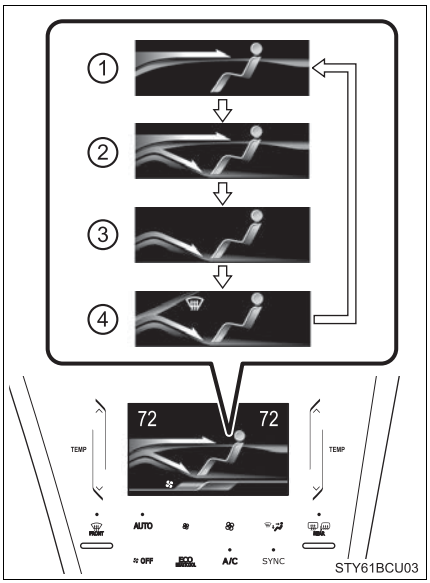
The air outlets used are switched each time the button is touched.

① Air flows to the upper body

② Air flows to the upper body and feet

③ Air flows to the feet

④ Air flows to the feet and the windshield defogger operates



■ Other functions

- Switching between outside air and recirculated air modes (→P. 308)
- Defogging the windshield (→P. 309)
- Defogging the rear window and outside rear view mirrors (→P. 309)

Using the automatic air conditioning system

1 Touch AUTO .

The dehumidification function begins to operate. Air outlets and fan speed are automatically adjusted according to the temperature setting.

2 Adjust the temperature setting.

3 Touch A/C .

The cooling and dehumidification function switches between on and off each time A/C is touched.

4 To stop the operation, touch OFF .

■ Automatic mode indicator

If the fan speed setting or air flow modes are operated, the automatic mode indicator goes off. However, automatic mode for functions other than that operated are maintained.

Other functions

■ Switching between outside air and recirculated air modes

Press .

The mode switches between outside air mode (indicator off) and recirculated air mode (indicator on) each time is pressed.

■ Using the ECO HEAT/COOL mode

Touch ECO HEAT/COOL .

ECO is displayed on the air conditioning screen, and the air conditioning is controlled with low fuel consumption prioritized. When ECO HEAT/COOL is touched and held, ECO HI is displayed on the screen, and the air conditioning is controlled, even more, with low fuel consumption prioritized. (The air conditioning will have more reserved operation.)

When canceling ECO HEAT/COOL mode, touch the ECO HEAT/COOL again.

ECO HI may be canceled when other air conditioning operation switches are touched.

Defogging the windshield

Defoggers are used to defog the windshield and front side windows.

Press FRONT.

Set the outside/recirculated air mode button to the outside air mode if the recirculated air mode is used. (It may switch automatically.)
To defog the windshield and the side windows early, turn the air flow and temperature up.

To return to the previous mode, press FRONT again when the windshield is defogged.

Defogging the rear window and outside rear view mirrors

Defoggers are used to defog the rear window, and to remove raindrops, dew and frost from the outside rear view mirrors.

Press REAR.

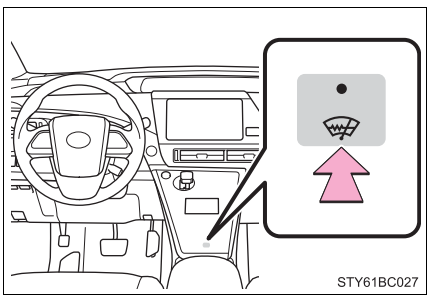
The indicator comes on when the defogging the rear window and outside rear view mirrors is on.
The defoggers will automatically turn off after a period of time.

Windshield wiper de-icer

This feature is used to prevent ice from building up on the windshield and wiper blades.

Press .

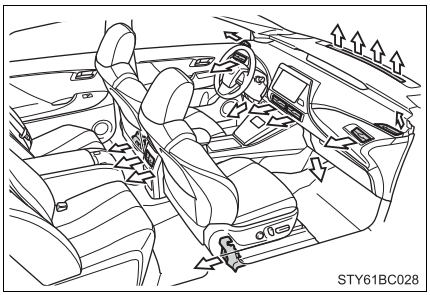
The indicator comes on when the windshield wiper de-icer is on.
The windshield de-icer will automatically turn off after a period of time.



Air outlets

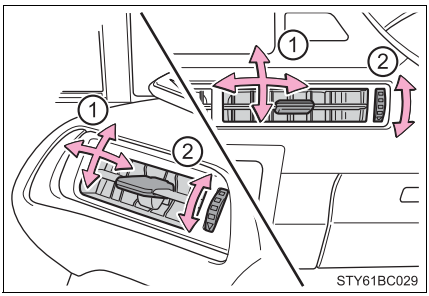
■ Location of air outlets

The air outlets and air volume change according to the selected airflow mode.

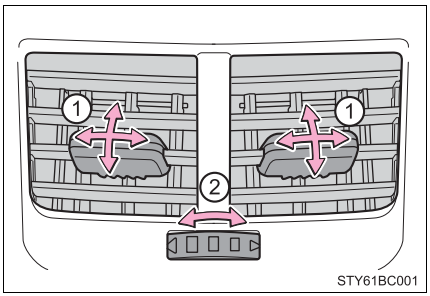


■ Adjusting the position of and opening and closing the air outlets

▶ Front



▶ Rear



① Direct air flow to the left or right, up or down.

② Turn the knob to open or close the vent.

■ Using automatic mode

Fan speed is adjusted automatically according to the temperature setting and the ambient conditions.

Therefore, the fan may stop for a while until warm or cool air is ready to flow immediately after AUTO is pressed.

■ **Fogging up of the windows**

- The windows will easily fog up when the humidity in the vehicle is high. Turning A/C on will dehumidify the air from the outlets and defog the windshield effectively.
- If you turn A/C off, the windows may fog up more easily.
- The windows may fog up if the recirculated air mode is used.

■ **Windshield fog detection function**

When automatic mode is set, the humidity sensor (→P. 314) detects fog on the windshield and controls the air conditioning system to prevent fog.

■ **Outside/recirculated air mode**

- When driving on dusty roads such as tunnels or in heavy traffic, set the outside/recirculated air mode button to recirculated air mode. This is effective in preventing outside air from entering the vehicle interior. During cooling operation, setting the recirculated air mode will also cool the vehicle interior effectively.
- Outside/recirculated air mode may automatically switch depending on the temperature setting or the inside temperature.

■ **Operation of the air conditioning system in ECO HEAT/COOL mode**

- In ECO HEAT/COOL mode, the air conditioning system is controlled as follows to prioritize fuel efficiency:
  - Fluid (heating) heater and compressor operation controlled to restrict heating/cooling capacity
  - Fan speed restricted when automatic mode is selected
- To improve air conditioning performance, perform the following operations:
  - Adjust the temperature settings and fan speed
  - Touch ECO HEAT/COOL while in ECO HI, and ECO is set
  - Touch ECO HEAT/COOL while in ECO, and ECO HEAT/COOL mode is canceled

■ **Operation of the air conditioning system in Eco drive mode**

When “ECO MODE” switch is pressed, operations switch over to ECO HEAT/COOL mode. (→P. 197)

■ **When the outside temperature exceeds 75°F (24°C) and the air conditioning system is on**

- In order to reduce the air conditioning power consumption, the air conditioning system may switch to recirculated air mode automatically. This may also reduce fuel consumption.
- Recirculated air mode is selected as a default mode when the power switch is turned to ON mode.
- It is possible to switch to outside air mode at any time by pressing .

■ **When the outside temperature is low**

The dehumidification function may not operate even when A/C is pressed.

■ **Ventilation and air conditioning odors**

- To let fresh air in, set the air conditioning system to the outside air mode.
- During use, various odors from inside and outside the vehicle may enter into and accumulate in the air conditioning system. This may then cause odor to be emitted from the vents.
- To reduce potential odors from occurring:
  - It is recommended that the air conditioning system be set to outside air mode prior to turning the vehicle off.
  - The start timing of the blower may be delayed for a short period of time immediately after the air conditioning system is started in automatic mode.

■ **Air conditioning filter**

→P. 398

■ **Changing the response of the switch for the air conditioning operation panel**

The reaction time, from when the switch is touched, can be changed by the following operations.

The air conditioning cannot be operated during following operation.

1 Touch (decrease) and SYNC for about 3 seconds.
"01" ~ "05" is displayed in the monitor of the passenger side temperature.

2 Each time REAR is touched, the reaction time switches over as follows.
01 (about 0.06 sec.) → 02 (about 0.08 sec.) → 03 (about 0.10 sec.) → 04 (about 0.12 sec.) → 05 (about 0.14 sec.)
With the desired setting displayed, without switching over the screen by performing touch operations for about 5 seconds, when the power switch is turned off the configuration is complete.

Turning ON/OFF the switch operation sound for the air conditioning operation panel

The operation sounds, when the switch is touched, can be turned ON/OFF by the following operations.

The air conditioning cannot be operated during following operation.

1. Touch AUTO and SYNC for about 3 seconds.
   "ON" or "OFF" is displayed in the monitor of the passenger side temperature.
2. Each time REAR is touched, the monitor switches over between ON/OFF.
   With "ON" or "OFF" displayed, without switching over the screen by performing touch operations for about 5 seconds, when the power switch is turned off the configuration is complete.

Turning ON/OFF the pop-up display when operating the switch for air conditioning operation panel

The pop-up displays, when the switch is touched, can be turned ON/OFF by the following operations.

The air conditioning cannot be operated during following operation.

1. Touch ECO HEAT/COOL and SYNC for about 3 seconds.
   "ON" or "OFF" is displayed in the monitor of the passenger side temperature.
2. Each time REAR is touched, the monitor switches over between ON/OFF.
   With "ON" or "OFF" displayed, without switching over the screen by performing touch operations for about 5 seconds, when the power switch is turned off the configuration is complete.

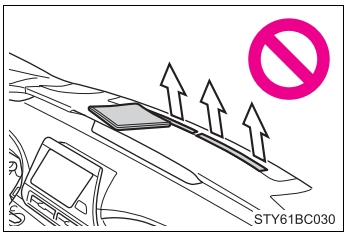
Customization

Settings (e.g. A/C automatic mode switch operation) can be changed.
(Customizable features →P. 489)

WARNING

■ **To prevent the windshield from fogging up**

- Do not use FRONT during cool air operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield can cause the outer surface of the windshield to fog up, blocking your vision.
- Do not place anything on the instrument panel which may cover the air outlets. Otherwise, air flow may be obstructed, preventing the windshield defoggers from defogging.



■ **To prevent burns**

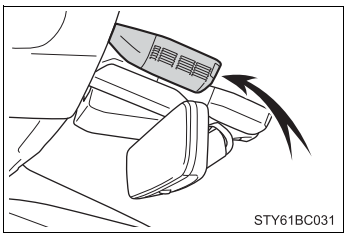
- Do not touch the rear view mirror surfaces when the outside rear view mirror defoggers are on.
- Do not touch the glass at lower part of the windshield or to the side of the front pillars when the windshield wiper de-icer is on.

NOTICE

■ **Humidity sensor**

In order to detect fog on the windshield, a sensor which monitors the temperature of the windshield, the surround humidity, etc., is installed. (→P. 311)
Follow these points to avoid damaging the sensor:

- Do not disassemble the sensor
- Do not spray the glass cleaner on the sensor or subject it to strong impacts
- Do not stick anything on the sensor



■ **To prevent 12-volt battery discharge**

Do not leave the air conditioning system on longer than necessary when the fuel cell system is off.

Heated steering wheel/seat heaters

Heated steering wheel and seat heaters heat the side grips of the steering wheel and seats, respectively.

WARNING

- Care should be taken to prevent injury if anyone in the following categories comes in contact with the steering wheel and seats when the heater is on:
  - Babies, small children, the elderly, the sick and the physically challenged
  - Persons with sensitive skin
  - Persons who are fatigued
  - Persons who have taken alcohol or drugs that induce sleep (sleeping drugs, cold remedies, etc.)
- Observe the following precautions to prevent minor burns or overheating,
  - Do not use seat heater more than necessary.
  - Do not cover the seat with a blanket or cushion when using the seat heater.

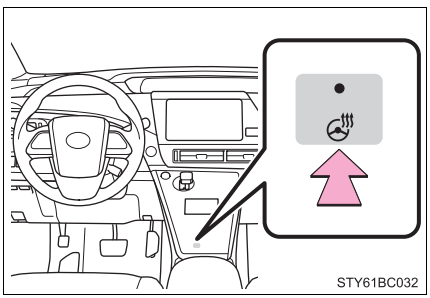
NOTICE

- Do not put heavy objects that have an uneven surface on the seat and do not stick sharp objects (needles, nails, etc.) into the seat.
- To prevent 12-volt battery discharge, do not use the functions when the fuel cell system is off.

Heated steering wheel

Turn the heated steering wheel on/off

The indicator light comes on when the heated steering wheel is operating.



■ **Operation condition**

The heated steering wheel can be used when the power switch is in ON mode.

■ **Timer**

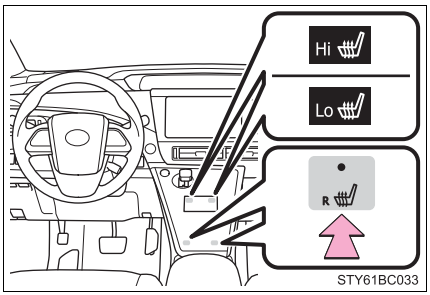
The heated steering wheel will automatically turn off after about 30 minutes.

Seat heaters

■ Front seats

Each time the switch is touched, the intensity of the seat heater changes:
Hi (strong) → Lo (weak) → Off

During operations, the operation conditions are displayed.



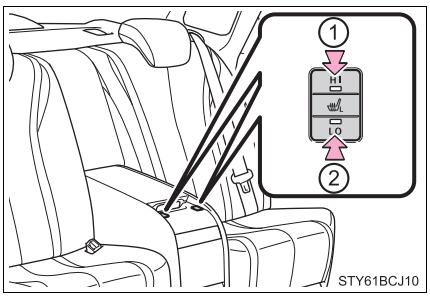
■ Rear seats

① HI: Strong

The indicator light comes on.

② Low: Weak

The indicator light comes on.



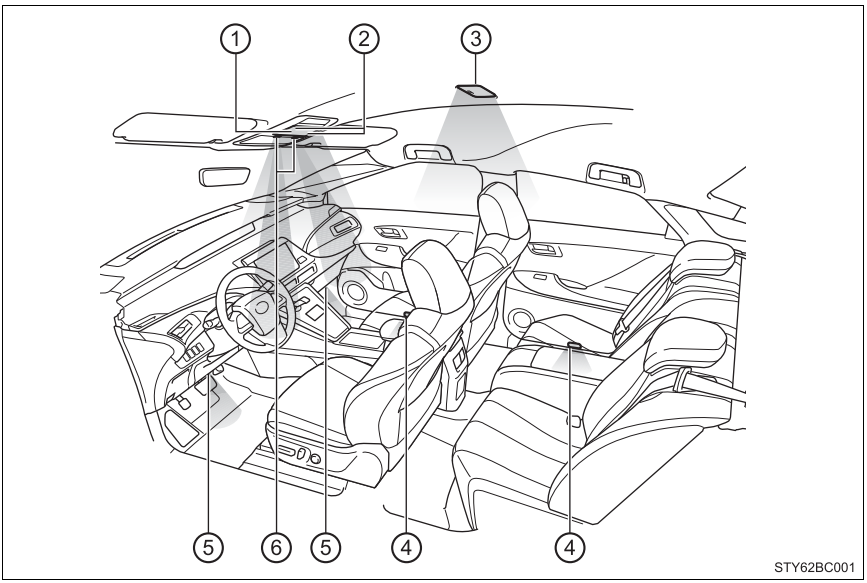
■ **Operating condition**

The seat heaters can be used when the power switch is in ON mode.

■ **When not in use (rear seats)**

Turn the seat heater off by returning the switch to its level position.
The indicator light turns off.

Interior lights list



① Front interior light (→P. 318)
② Personal lights (→P. 318)
③ Rear interior light (→P. 318)
④ Door courtesy lights
⑤ Footwell lights*1, 2
⑥ Shift lever lights

*1: When the power switch is in ON mode, the footwell lights will turn on. However, if the instrument panel light control switch is turned to minimum, the footwell lights will turn off. (→P. 113)

*2: When shifting the shift position is in a position other than P, the brightness of the footwell light will reduce intensity.

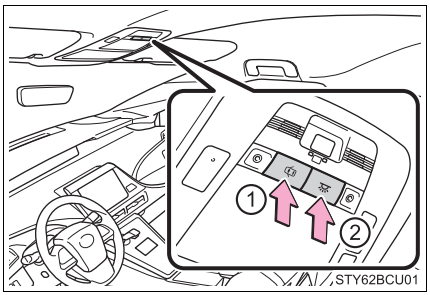
Interior lights

■ Front

① When the switch is pressed to the fully pushed in position, the lights becomes linked to the doors

The light will turn on and off due to the opening and closing of a door.

② When the button is pressed, the light will turn on



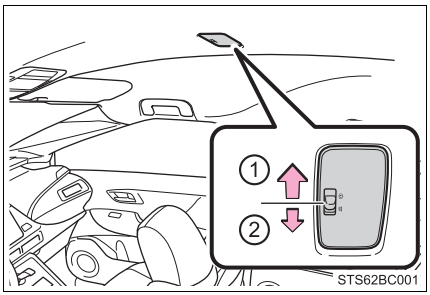
When the switch is pressed again, the light will turn off.

■ Rear

① Links to the doors

When the front interior lights is linked to the doors, the lights will turn on and off due to the opening and closing of the rear door.

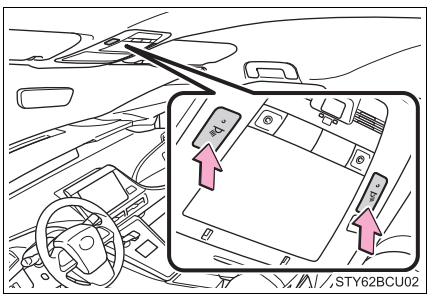
② Turns the light on



Personal lights

Turns the lights on/off

Push the switch, and when the it is in the pushed in position the light comes on.



Illuminated entry system

The lights automatically turn on/off according to power switch mode, the presence of the electronic key, whether the doors are locked/unlocked, and whether the doors are opened/closed.

To prevent 12-volt battery discharge

If the following lights remain on when the power switch is turned off, the lights will go off automatically after 20 minutes:

- Front interior lights
- Rear interior lights
- Personal lights
- Door courtesy lights
- Vanity lights
- Trunk light

Customization

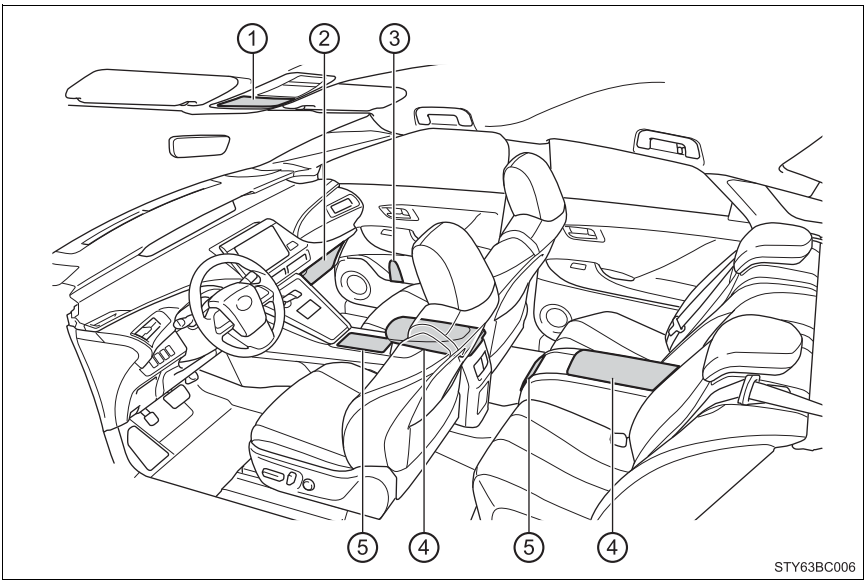
Setting (e.g. the time elapsed before lights turn off) can be changed. (Customizable features: →P. 489)

NOTICE

To prevent 12-volt battery discharge

Do not leave the lights on longer than necessary when the fuel cell system is off.

List of storage features



① Auxiliary box	(→P. 324)	④ Console boxes	(→P. 321)
② Glove box	(→P. 321)	⑤ Cup holders	(→P. 322)
③ Bottle holders	(→P. 324)		

WARNING

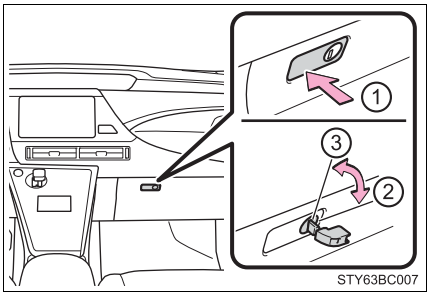
- Do not leave glasses, lighters or spray cans in the storage spaces, as this may result in the following when cabin temperature becomes high:
  - Glasses may be deformed by heat or cracked if they come into contact with other stored items.
  - Lighters or spray cans may explode. If they come into contact with other stored items, the lighter may catch fire or the spray can may release gas, causing a fire hazard.
- When driving or when the storage compartments are not in use, keep the lids closed.
  In the event of sudden braking or sudden swerving, an accident may occur due to an occupant being struck by an open lid or the items stored inside.

Glove box

① Open (press the button)

② Lock with the mechanical key

③ Unlock with the mechanical key

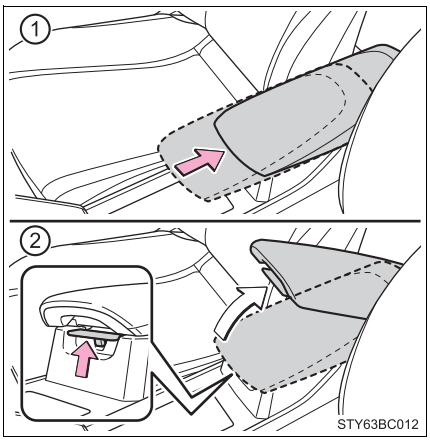


Console box

■ Front

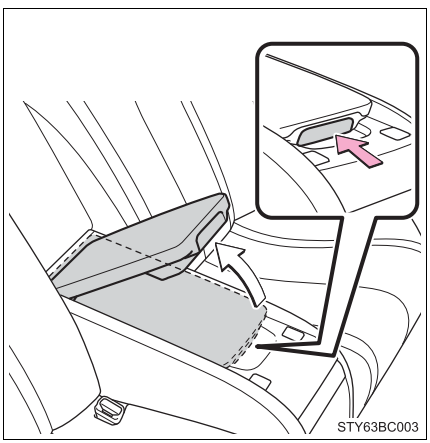
① Slide the armrest to the rear most position.

② Lift the lid while pulling up the lever to release the lock.



■ Rear

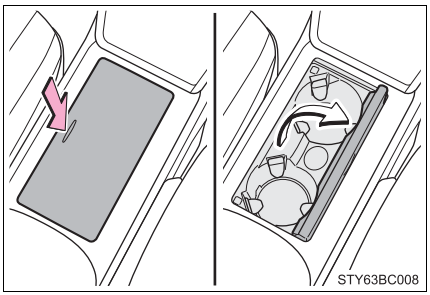
Lift the lid while pushing the button to release the lock.



Cup holders

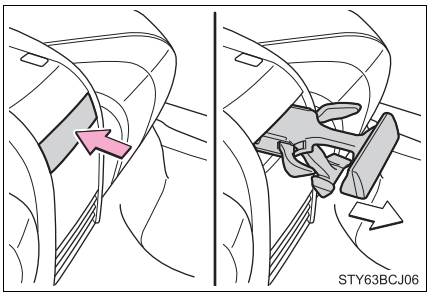
■ Front

Push in the lid.



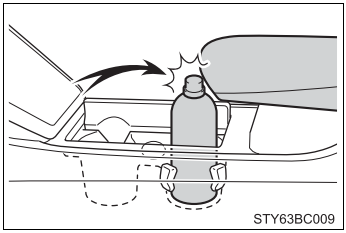
■ Rear

Push in and release the cup holder.



When stowing bottles (front cup holder)

When bottles are stowed in the cup holder of the armrest side, when sliding the armrest, the bottles interfere and may prevent movement of the armrest.

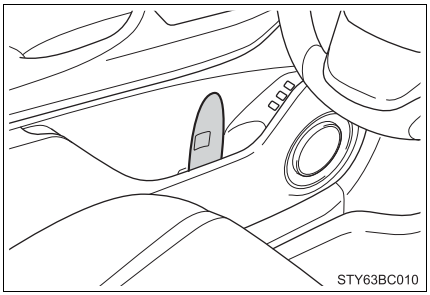


WARNING

Items unsuitable for the cup holders

- Do not place anything other than cups or aluminum cans in the cup holders.
  Other items may be thrown out of the holders in the event of an accident or sudden braking, causing injury.
- To prevent burns, cover hot drinks when placed in the cup holders.

Bottle holders



- When storing a bottle, close the cap.
- The bottle may not be stored depending on its size or shape.

WARNING

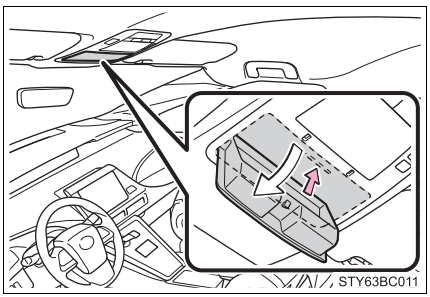
Do not place anything other than a bottle in the bottle holders.
Other items may be thrown out of the holders in the event of an accident or sudden braking and cause injury.

NOTICE

Put the cap on before stowing a bottle. Do not place open bottles in the bottle holders, or glass or paper cups containing liquid. The contents may spill and glass cups may break.

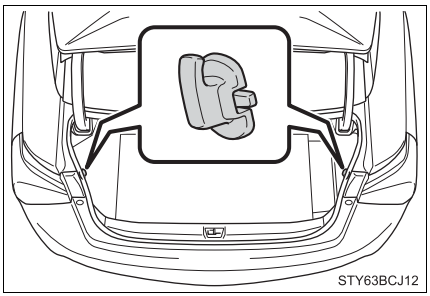
Auxiliary box

Push the lid.



Trunk features

Grocery bag hooks

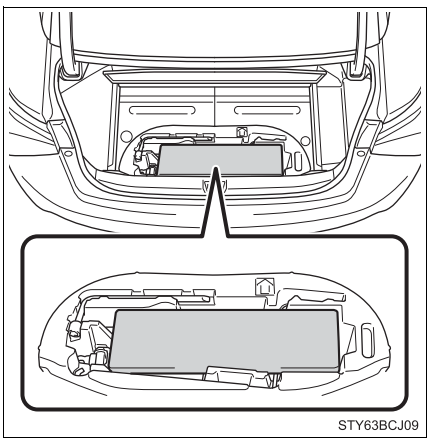


NOTICE

To prevent damage to the hooks, do not apply too much load to the hooks.

Warning reflector storage space

The warning reflector can be stowed underneath the luggage mat.



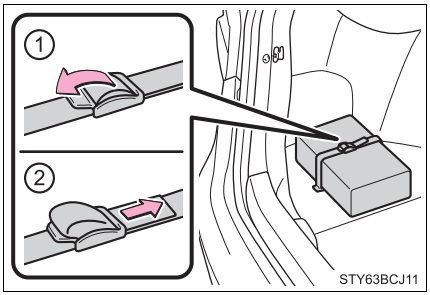
Stowing the warning reflector

Due to the size and shape of the warning reflector case, it may not be able to be stowed.

First-aid kit storage belt

① Loosen the belt

② Tighten the belt



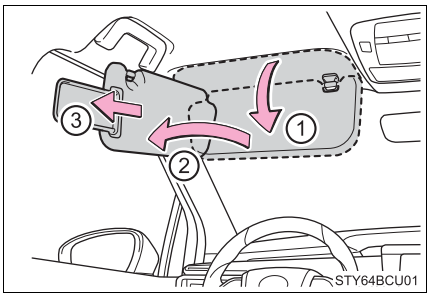
Other interior features

Sun visors

① To set the visor in the forward position, flip it down.

② To set the visor in the side position, flip down, unhook, and swing it to the side.

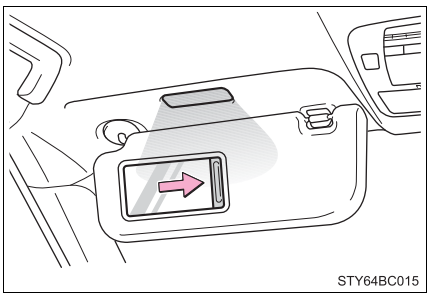
③ To use the side extender, place the visor in the side position, then slide it backward.



Vanity mirrors

Slide the cover to open.

The light turns on when the cover is opened.



NOTICE

To prevent 12-volt battery discharge, do not leave the vanity lights on for extended periods while the fuel cell system is off.

Clock

The time can be adjusted through the ☼ for the multi-information display (→P. 117)

◆ Round to the nearest hour

Press ∧ or ∨ of the meter control switches (→P. 118), select 🕘:00 and press ⊙.

The minute section of the clock goes to 00.*

*: e.g.1:00 to 1:29 → 1:00

1:30 to 1:59 → 2:00

◆ Time adjustment

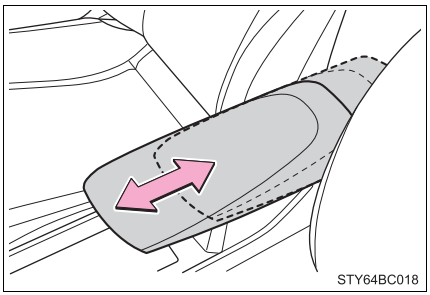
1. Press ∧ or ∨ of the meter control switches (→P. 118), select 🕘 and press ⊙.
2. Press < or > on the meter control switches, select hours, minutes, or 12/24-hour clock, press ∧ or ∨ of the meter operation switches to adjust.
3. When the adjustments are finished, press ↩ and check the time.

The clock is displayed when the power switch is in ON mode.

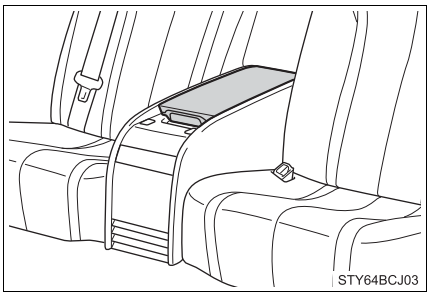
Armrest

Front

Slide the armrest.



Rear

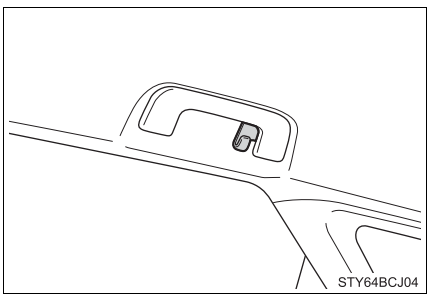


NOTICE

To prevent damage to the armrest, do not apply too much load on the armrest.

Coat hooks

The coat hooks are provided with the rear assist grips.



WARNING

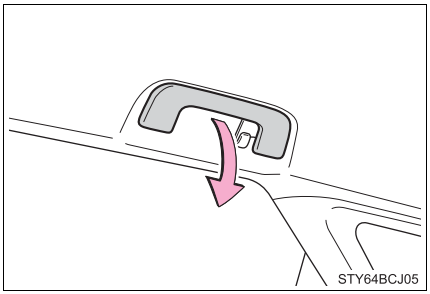
Do not hang coat hangers or other hard or sharp objects on the hook. If the SRS curtain shield airbags deploy, these items may become projectiles, causing death or serious injury.

NOTICE

To prevent damage to the coat hook, do not put a heavy load on the coat hook.

Assist grips

An assist grip installed on the ceiling can be used to support your body while sitting on the seat.



WARNING

Do not use the assist grip when getting in or out of the vehicle or rising from your seat.

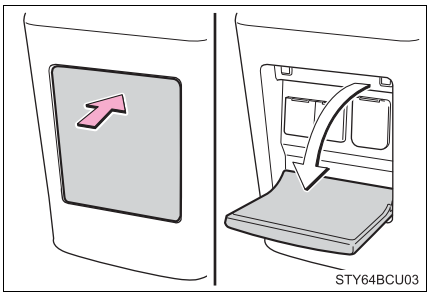
NOTICE

To prevent damage to the assist grip, do not hang any heavy object or put a heavy load on the assist grip.

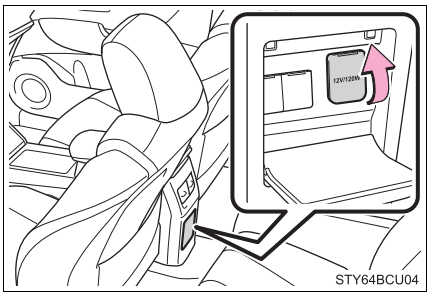
Power outlet

Please use a power supply for electronic goods that use less than 12 VDC/10 A (power consumption of 120 W).

1 Push the cover of the console box to open.



2 Open the lid.



The power outlet can be used when the power switch is in ACCESSORY or ON mode.

NOTICE

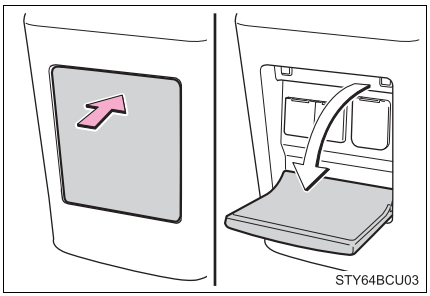
- To avoid the damaging the power outlet, close the power outlet lid when the power outlet is not in use. Foreign objects or liquids that enter the power outlet may cause a short circuit.
- To prevent 12-volt battery discharge, do not use the power outlet longer than necessary when the fuel cell system is off.

USB charging ports

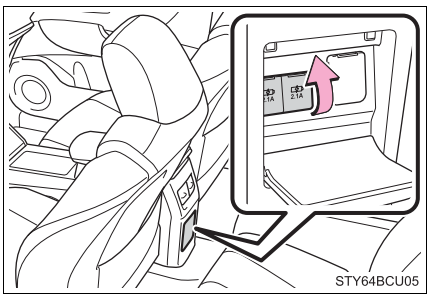
The USB charging ports are used to supply 2.1 A of electricity at 5 V to external devices.
The USB charging ports are for charging only. They are not designed for data transfer or other purposes.
Depending on the external device, it may not charge properly. Refer to the manual included with the device before using a USB charging port.

■ Using the USB charging ports

1 Push the cover of the console box to open.



2 Open the lid.



■ **The USB charging ports can be used when**

The power switch is in ACCESSORY or ON mode.

■ **Situations in which the USB charging ports may not operate correctly**

- If a device which consumes more than 2.1 A at 5 V is connected
- If a device designed to communicate with a personal computer, such as a USB memory device, is connected
- If the connected external device is turned off (depending on device)
- If the temperature inside the vehicle is high, such as after the vehicle has been parked in the sun

■ **About connected external devices**

Depending on the connected external device, charging may occasionally be suspended and then start again. This is not a malfunction.

NOTICE

■ **To prevent damage to the USB charging ports**

- Do not insert foreign objects into the ports.
- Do not spill water or other liquids into the ports.
- When the USB charging ports are not in use, close the lids. If a foreign object or liquid enters a port may cause a short circuit.
- Do not apply excessive force to or impact the USB charging ports.
- Do not disassemble or modify the USB charging ports.

■ **To prevent damage to external devices**

- Do not leave external devices in the vehicle. The temperature inside the vehicle may become high, resulting in damage to an external device.
- Do not push down on or apply unnecessary force to an external device or the cable of an external device while it is connected.

■ **To prevent 12-volt battery discharge**

Do not use the USB charging ports for a long period of time with the fuel cell system stopped.

Wireless charger

A portable device can be charged by just placing Qi standard wireless charge compatible portable devices according to the Wireless Power Consortium, such as smart phones and mobile batteries, etc., on the charge area.

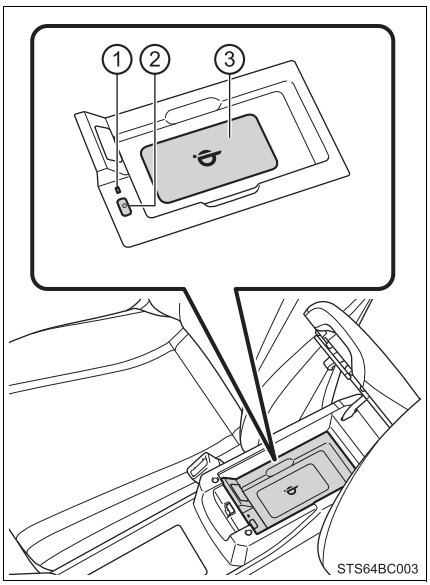
This function cannot be used with portable devices that are larger than the charging area. Also, depending on the portable device, it may not operate as normal. Please read the operation manual for portable devices to be used.

■ The “Qi” symbol

The “Qi” symbol is a trademark of the Wireless Power Consortium.

■ Name for all parts

① Operation indicator light
② Power supply switch
③ Charge area



Using the wireless charger

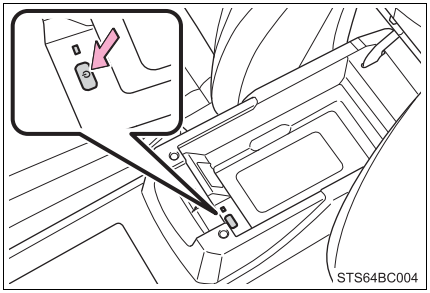
1 Open the console box. (→P. 321).

2 Press the power supply switch of the wireless charger.

Switches on and off with each press of the power supply switch.

When turned on, the operation indicator light (green) comes on.

Even with the fuel cell system off, the on/off state of the power supply switch is memorized.

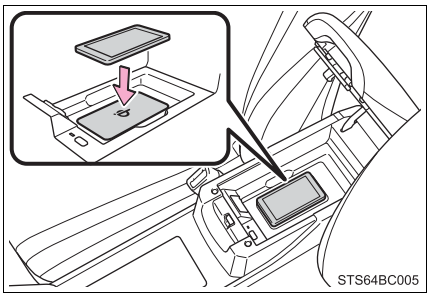


3 Place the charging side of the portable device down.

When charging, the operation indicator light (orange) comes on.

If charging is not occurring, try placing the portable device as close to the center of the charging area as possible.

When charging is complete, the operation indicator light (green) comes on.



● Recharging function

- When charging is complete and after a fixed time in the charge suspension state, charging restarts.
- When the portable device is moved, charging is stopped for a moment and then it restarts.

■ Lighting conditions of operation indicator light

Operation indicator light	Conditions
Turning off	When the Wireless charger power supply is off
Green (comes on)	On Standby (charging possible state)
	When charging is complete*
Orange (comes on)	When placing the portable device on the charging area (detecting the portable device)
	Charging

*: Depending on the portable device, there are cases where the operation indicator light will continue being lit up orange even after the charging is complete.

● When the operation indicator light flashes

When an error occurs, the operation indicator light flashes an orange color. Handle the error based on the following table.

Operation indicator light	Suspected causes	Handling method
Flashing repeatedly once every second (Orange)	Vehicle to charger communication failure.	Contact your Toyota dealer.
Repeatedly flashes 3 times continuously (Orange)	A foreign substance is between the portable device and charge area.	Remove the foreign substance from between portable device and the charge area.
	The portable device is out of sync due to the device being shifted from its position.	Place the portable device near the center of the charge area.
Repeatedly flashes 4 times continuously (Orange)	Temperature rising within the wireless charger.	Stop charging at once and start charging again after for a while.

■ **The wireless charger can be operated when**

The power switch is in ACCESSORY or ON mode.

■ **Usable portable devices**

Qi standard wireless charge standard can be used on compatible devices. However, not all Qi standard devices and compatibility are guaranteed.

Starting with mobile phones and smart phones, it is aimed for low power electrically supplied portable devices of no more than 5 W.

■ **When covers and accessories are attached to portable devices**

Do not charge in situations where cover and accessories not able to handle Qi are attached to the portable device. Depending on the type of cover and accessory, it may not be possible to charge. When charging is not performed even with the portable device placed on the charge area, remove the cover and accessories.

■ **While charging, noise enters the AM radio**

Turn off the wireless charger and confirm that the noise has decreased. If the noise decreases, continuously pushing the power supply switch of the wireless charger for 2 seconds, the frequency of the charger can be changed and the noise can be reduced.
Also, on that occasion, the operation indicator light will flash orange 2 times.

■ **Important points of the wireless charger**

- If the electronic key cannot be detected within the vehicle interior, charging cannot be done. When the door is opened and closed, charging may be temporarily suspended.
- When charging, the wireless charging device and portable device will get warmer, however this is not a malfunction.
  When a portable device gets warm while charging, charging may stop due to the protection function on the portable device side. In this case, when the temperature of the portable device drops significantly, charge again.

■ **Operation sounds**

When the power supply is turned on, while searching for the portable device a sound will be produced, however this is not a malfunction.

■ **Cleaning**

→P. 357

Certification for the wireless charger (For U.S.A. only)

FCC Provided Information:
This equipment has been tested and found to comply with Part 18 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
This device complies with Part 18 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Declaration of Conformity

Trade Name:	Panasonic
Model Numbers:	AT1701 contains CA-QS03J1AJ
Responsible Party:	Panasonic Corporation of North America Two Riverfront Plaza, Newark, NJ 07102-5490
Support Contact:	http://www.panasonic.com/support/

Panasonic

PRODUCT SAFETY AND COMPLIANCE DEPARTMENT . PANASONIC CORPORATION OF NORTH AMERICA . TWO RIVERFRONT PLAZA, 8TH FLOOR, NEWARK, NJ 07102-5490

FCC Declaration of Conformity Summary

Product Name	In-Vehicle Wireless Charger	
Model Number	AT1701	
Brand Name	Panasonic	
Size and Mass	• 245mm (w), 136mm (l) and 48mm (h) and mass is 515grams	
Purpose Updated DoC	Added similarity variant model / AT1701 contains CA-QS03J1AJ	
Compliance Information	• 47 CFR, FCC Part 18, Subpart C for ISM Equipment FCC's KDB 680106 D01 RF Exposure Wireless Charging Apps v02 • Industry Canada RSS-216, Issue 1, dated August 2014 For Wireless Power Transfer Devices (Wireless Chargers)	
Responsible Applicant	Panasonic Corporation Automotive & Industrial Systems Company Automotive Infotainment Systems Business Division 4261, Ikonobe-cho, Tsuzuki-ku, Yokohama-shi, 224-8520, Japan	
Responsible Factories	• Panasonic Corporation, Automotive & Industrial Systems Company Automotive Infotainment / Systems Business Division Global Manufacturing Innovation Center, Matsumoto Factory 5652 Sasaga, Matsumoto city, Nagano 399-8730, Japan • Panasonic Automotive Systems Czech, s.r.o. U Panasonicu 266, 530 06 Pardubice-Stare Civice, Czech Republic • Panasonic Automotive Systems Asia Pacific (Thailand) Co.,Ltd. 101 Moo 2 Teparak Road, T.Bangsaothong Ging A.Bangsaothong Samutprakarn 10540 Thailand • Panasonic Automotive Systems Dalian Co., Ltd. No.300, HongGang Road, GanJingZi District, Dalian, Liaoning Province, 116033 China	
Responsible Sales Company	Panasonic Consumer Electronics Company Division of Panasonic Corporation of North America Two Riverfront Plaza, Newark, NJ 07102-5490 General Contact: http://shop.panasonic.com/support	
Special Conditions For Compliance	In-Vehicle Wireless Charger will be installed and used exclusively within transportation vehicle and as such, it is exempt from the following requirements: (1) Part 15 digital device technical rules in accordance with §15.103(a); and (2) §15.105(b) full text information to user to appear in User Manual in accordance with §18.213.	
EMI Test Report	TCB	UL Japan
	Test Report	10120384-R2
	Model Tested	AT1701 contains CA-QS03J1AJ
	Date Issued	12/14/2015
	Methodology	FCC-OET MP-4

PSCD

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PRODUCT SAFETY AND COMPLIANCE DEPARTMENT . PANASONIC CORPORATION OF NORTH AMERICA . TWO RIVERFRONT PLAZA, 8TH FLOOR, NEWARK, NJ 07102-5490

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PRODUCT SAFETY AND COMPLIANCE DEPARTMENT . PANASONIC CORPORATION OF NORTH AMERICA . TWO RIVERFRONT PLAZA, 8TH FLOOR, NEWARK, NJ 07102-5490

FCC Declaration of Conformity

Summary

RF Exposure Evaluation	TCB	UL Japan
	MPE Test Report	10197157S-E-R1
	Model Tested	AT1701 contains CA-QS03J1AJ
	Date Issued	12/14/2015
	Methodology	KDB 680106 D01 RF Exposure Wireless Charging Apps v02
Importation	The subject In-Vehicle Wireless Charger can be imported on behalf of Panasonic affiliated sales companies by PNA's Logistics Import Customs, or their authored brokers, by electrically filing FCC Form 740 while declaring Box 2 with no reference to any FCC ID.	

This DoC is granted for the subject In-Vehicle Wireless Charger on the basis of the manufacturer's attested compliance with the above described conditions and in accordance with FCC Part 18 and FCC's KDB 0680106 D01 RF Exposure Wireless Charging Apps v02.

Richard Mullen

Certificate Number: DoC 2014-008C
Applicant Ref No.: PAS-16-F001

Issued by: Richard Mullen
Issue Date: January 14, 2016

PRODUCT SAFETY AND COMPLIANCE DEPARTMENT . PANASONIC CORPORATION OF NORTH AMERICA . TWO RIVERFRONT PLAZA, 8TH FLOOR, NEWARK, NJ 07102-5490

WARNING

■ **Caution while driving**

- When charging a portable device, for safety reasons, the driver should not operate the main part of the portable device while driving.
- Make sure to close the console box lid while driving. When sudden braking, etc., occurs, the open lid could hit body parts, the portable device could go flying, leading to an unexpected accident.

■ **Caution regarding interference with electronic devices**

People with implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators, as well as any other electrical medical device, should consult their physician about the usage of the wireless charger. The operations of the wireless charger may have an affect on medical devices.

■ **To prevent damage or burns**

Observe the following precautions.
Failure to do so may result in a possibility of equipment failure and damage, catch fire, burns due to overheat.

- Do not insert any metallic objects between the charging area and the portable device while charging
- Do not attach stickers, metallic objects, etc., to the charger area or portable device
- Do not cover with cloth, etc., and charge
- Do not charge portable devices other than designated
- Do not bring magnetized items nearby
- Do not charge items with the charging area covered in dust.
- When not in use close the console box lid in order to keep foreign substances from getting in the wireless charging area as well as drinks, etc., from being spilled on it.
- Do not attempt to dismantle for disassembly or modifications
- Do not hit or apply a strong force

NOTICE

■ Conditions in which the function may not operate correctly

In the following conditions, it may not operate correctly

- The portable device is fully charged
- There is foreign matter between the charge area and portable device
- The temperature of the portable device gets higher from charging
- The charging surface of the portable device is facing up
- The placement of the portable device is out of alignment with the charge area
- Near a TV tower, electric power plant, gas station, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
- When the electronic key is in contact with, or is covered by the following metallic objects
  - Cards to which aluminum foil is attached
  - Cigarette boxes that have aluminum foil inside
  - Metallic wallets or bags
  - Coins
  - Hand warmers made of metal
  - Media such as CDs and DVDs
- When other wireless keys (that emit radio waves) are being used nearby

In addition, excluding the above-mentioned, when the charger does not perform normally or the operation display lamp is flashing continuously, it is considered that the wireless charger is malfunctioning. Contact your Toyota dealer.

■ To prevent failure or damage to data

- Do not bring magnetic cards, such as credit cards, or magnetic recording media, etc., close to the charger while charging, otherwise, data may disappear under the influence of magnetism. Also, do not bring precision instruments such as wrist watches, etc., close to the charger, as such objects may break.
- Do not leave portable devices in the cabin. The temperature inside the cabin may become high, when under the sun, and cause damage to the device.

■ To prevent 12-volt battery discharge

When the fuel cell system is stopped, do not use the wireless charger for a long time.

Garage door opener

The garage door opener can be programmed to operate garage doors, gates, entry doors, door locks, home lighting systems, security systems, and other devices.

Programming the HomeLink®

The HomeLink® wireless control system in your vehicle has 3 buttons which can be programmed to operate 3 different devices. Refer to the programming methods on the following pages to determine the method which is appropriate for the device.

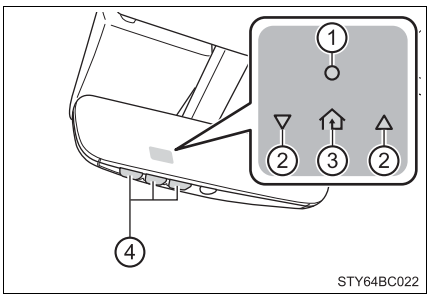
① HomeLink® indicator light

② Garage door operation indicators

③ HomeLink® icon

Illuminates while HomeLink® is operating.

④ Buttons



■ Before programming HomeLink®

- During programming, it is possible that garage doors, gates, or other devices may operate. For this reason, make sure that people and objects are clear of the garage door or other devices to prevent injury or other potential harm.
- It is recommended that a new battery be placed in the remote control transmitter for more accurate programming.
- Garage door opener motors manufactured after 1995 may be equipped with rolling code protection. If this is the case, you may need a stepladder or other sturdy, safe device to reach the “Learn” or “Smart” button on the garage door opener motor.

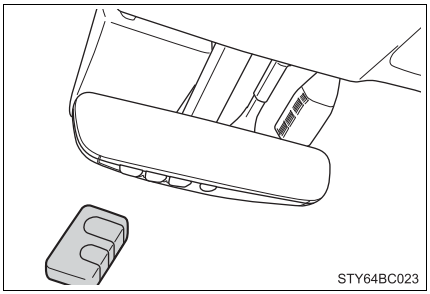
■ Programming HomeLink®

Steps 1 through 3 must be performed within 60 seconds, otherwise the indicator light will stop flashing and programming will not be able to be completed.

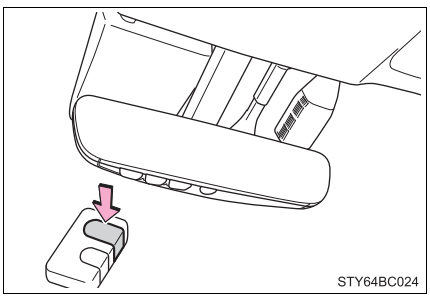
1 Press and release the HomeLink® button you want to program and check that the HomeLink® indicator light flashes (orange).

2 Point the remote control transmitter for the device at the rear view mirror, 1 to 3 in. (25 to 75 mm) from the HomeLink® buttons.

Keep the HomeLink® indicator light in view while programming.



3 Program a device.



▶ Programming a device other than an entry gate (for U.S.A. owners)

Press and hold the handheld transmitter button until the HomeLink® indicator light changes from slowly flashing orange to rapidly flashing green (rolling code) or continuously lit green (fixed code), then release the button.

▶ Programming an entry gate (for U.S.A. owners)/Programming a device in the Canadian market

Press and release the remote control transmitter button at 2 second intervals, repeatedly, until the HomeLink® indicator light changes from slowly flashing (orange) to rapidly flashing (green) (rolling code) or continuously lit (green) (fixed code).

4 Test the HomeLink® operation by pressing the newly programmed button and observing the indicator light:

- Indicator light illuminates: Programming of a fixed code device has completed. The garage door or other device should operate when a HomeLink® button is pressed and released.
- Indicator light flashes rapidly: The garage door opener motor or other device is equipped with a rolling code. To complete programming, firmly press and hold the HomeLink® button for 2 seconds then release it.
- If the garage door or other device does not operate, proceed to “Programming a rolling code system”.

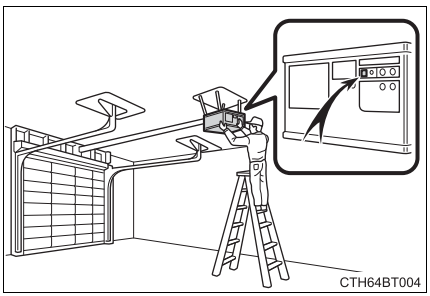
5 Repeat the steps above to program another device for any of the remaining HomeLink® buttons.

■ Programming a rolling code system

2 or more people may be necessary to complete rolling code programming.

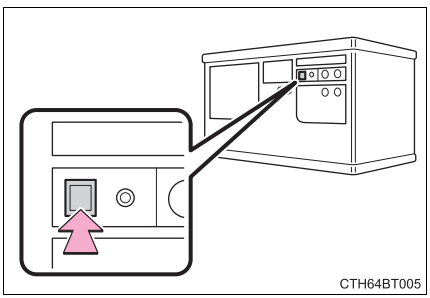
1 Locate the “Learn” or “Smart” button on the garage door opener motor in the garage.

This button can usually be found where the hanging antenna wire is attached to the unit. The name and color of the button may vary by manufacturer. Refer to the owner’s manual supplied with the garage door opener motor for details.

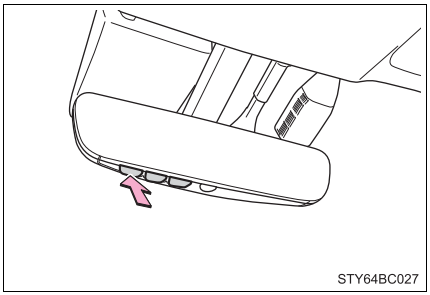


2 Press and release “Learn” or “Smart” button.

Perform 3 within 30 seconds after performing 2.



3 Press and hold the desired HomeLink® button (inside the vehicle) for 2 seconds and release it. Repeat this sequence (press/hold/release) up to 3 times to complete programming.
If the garage door opener motor operates when the HomeLink® button is pressed, the garage door opener motor recognizes the HomeLink® signal.



■ **Enabling 2-way communication with a garage door (only available for compatible devices)**

When enabled, 2-way communication allows you to check the status of the opening and closing of a garage door through indicators in your vehicle.
2-way communication is only available if the garage door opener motor used is a compatible device. (To check device compatibility, refer to www.HomeLink.com.)

1 Within 5 seconds after programming the garage door opener has been completed, if the garage door opener motor is trained to HomeLink®, both garage door operation indicators will flash rapidly (green) and the light on the garage door opener motor will blink twice, indicating that 2-way communication is enabled.

If the indicators do not flash, perform 2 and 3 within the first 10 presses of the HomeLink® button after programming has been completed.

2 Press a programmed HomeLink® button to operate a garage door.

3 Within 1 minute of pressing the HomeLink® button, after the garage door operation has stopped, press the “Learn” or “Smart” button on the garage door opener motor. Within 5 seconds of the establishment of 2-way communication with the garage door opener, both garage door operation indicators in the vehicle will flash rapidly (green) and the light on the garage door opener motor will blink twice, indicating that 2-way communication is enabled.

Reprogramming a single HomeLink® button

When the following procedure is performed, buttons which already have devices registered to them can be overwritten:

1. With one hand, press and hold the desired HomeLink® button.
2. When the HomeLink® indicator starts flashing (orange), continue to hold the HomeLink® button and perform “Programming HomeLink®” 1 (it takes 20 seconds for the HomeLink® indicator to start flashing).

Operating HomeLink®

Press the appropriate HomeLink® button. The HomeLink® indicator light should turn on.

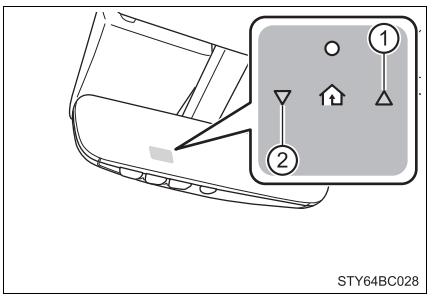
Garage door operation indicators

The status of the opening and closing of a garage door is shown by the indicators.

① Opening

② Closing

This function is only available if the garage door opener motor used is a compatible device. (To check device compatibility, refer to www.HomeLink.com.)



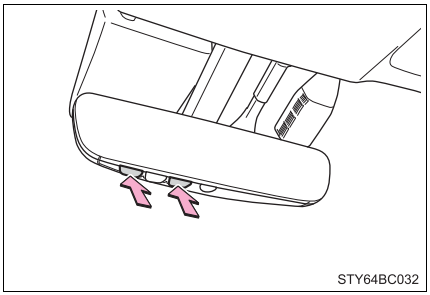
Color	Status
Orange (flashing)	Currently opening/closing
Green	Opening/closing has completed
Red (flashing)	Feedback signals cannot be received

The indicators can operate within approximately 820 ft. (250 m) of the garage door. However, if there are obstructions between the garage door and the vehicle, such as houses and trees, feedback signals from the garage door may not be received.

To recall the previous door operation status, press and release either HomeLink® buttons and or and simultaneously. The last recorded status will be displayed for 3 seconds.

Erasing the entire HomeLink® memory (all three codes)

Press and hold the 2 outside buttons for 10 seconds until the HomeLink® indicator light changes from continuously lit (orange) to rapidly flashing (green).



If you sell your vehicle, be sure to erase the programs stored in the HomeLink® memory.

■ Codes stored in the HomeLink® memory

- The registered codes are not erased even if the battery cable is disconnected.
- If learning failed when registering a different code to a HomeLink® button that already has a code registered to it, the already registered code will not be erased.

■ Before programming

- Install a new battery in the transmitter.
- The battery side of the transmitter must be pointed away from the HomeLink®.

■ When support is necessary

Visit on the web at www.homelink.com/toyota or call 1-800-355-3515.

Certification for the garage door opener

▶ For U.S.A.

This device complies with FCC rules part 15 and Innovation, Science, and Economic Development Canada RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference that may be received including interference that may cause undesired operation. WARNING: The transmitter has been tested and complies with FCC and ISED rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

▶ For Canada

This device complies with FCC rules part 15 and Innovation, Science, and Economic Development Canada RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference that may be received including interference that may cause undesired operation. WARNING: The transmitter has been tested and complies with FCC and ISED rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet appareil est conforme aux règlements de la FCC, section 15, et au CNR-210 d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est assujetti aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférences nuisibles et (2) cet appareil doit accepter toute interférence reçue, y compris celle qui pourrait entraîner un dysfonctionnement. MISE EN GARDE : L'émetteur a subi des tests et est conforme aux règlements de la FCC et d'ISDE. Les changements ou modifications non approuvés explicitement par la partie responsable de la conformité pourraient rendre caduque l'autorisation de l'utilisateur de se servir du dispositif.

Cet appareil est conforme aux limites d'exposition aux radiations de la FCC et d'ISDE établies pour un environnement non contrôlé. Les utilisateurs finaux doivent respecter les instructions d'utilisation spécifiques pour satisfaire aux exigences de conformité aux expositions de RF. L'émetteur doit se trouver à 20 cm au minimum de l'utilisateur et ne doit pas être situé au même endroit que tout autre émetteur ou antenne ni fonctionner avec un autre émetteur ou antenne.

⚠ WARNING

When programming a garage door or other remote control devices

The garage door or other devices may operate, so ensure people and objects are out of danger to prevent potential harm.

Conforming to federal safety standards

Do not use the HomeLink® compatible transceiver with any garage door opener or device that lacks safety stop and reverse features as required by federal safety standards.
This includes any garage door that cannot detect an interfering object. A door or device without these features increases the risk of death or serious injury.

When operating or programming HomeLink®

Never allow a child to operate or play with the HomeLink® buttons.

Maintenance and care

7

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Cleaning and protecting the vehicle exterior

Perform the following to protect the vehicle and maintain it in prime condition:

- Working from top to bottom, liberally apply water to the vehicle body, wheel wells and underside of the vehicle to remove any dirt and dust.
- Wash the vehicle body using a sponge or soft cloth, such as a chamois.
- For hard-to-remove marks, use car wash soap and rinse thoroughly with water.
- Wipe away any water.
- Wax the vehicle when the waterproof coating deteriorates.

  If water does not bead on a clean surface, apply wax when the vehicle body is cool.

■ **Automatic car washes**

- Fold the mirrors before washing the vehicle. Start washing from the front of the vehicle. Make sure to extend the mirrors before driving.
- Brushes used in automatic car washes may scratch the vehicle surface and harm your vehicle's paint.

■ **High pressure car washes**

- As water may enter the cabin, do not bring the nozzle tip near the gaps around the doors or perimeter of the windows, or spray these areas continuously.
- Turn the power switch off.

When using a car wash

If the door handle becomes wet while the electronic key is within the effective range, the door may lock and unlock repeatedly. In that case, follow the following correction procedures to wash the vehicle:

- Place the key in a position 6 ft. (2 m) or more separate from the vehicle while the vehicle is being washed. (Take care to ensure that the key is not stolen.)
- Set the electronic key to battery-saving mode to disable the smart key system. (→P. 145)

Aluminum wheels

- Remove any dirt immediately by using a neutral detergent.
- Wash detergent off with water immediately after use.
- To protect the paint from damage, make sure to observe the following precautions.
  - Do not use acidic, alkaline or abrasive detergent
  - Do not use hard brushes
  - Do not use detergent on the wheels when they are hot, such as after driving or parking in hot weather

Bumpers

Do not scrub with abrasive cleaners.

Front side windows water-repellent coating

- The following precautions can extend the effectiveness of the water-repellent coating.
  - Remove any dirt, etc., from the front side windows regularly.
  - Do not allow dirt and dust to accumulate on the windows for a long period.
    Clean the windows with a soft, damp cloth as soon as possible.
  - Do not use wax or glass cleaners that contain abrasives when cleaning the windows.
  - Do not use any metallic objects to remove condensation build up.
- When the water-repellent performance has become insufficient, the coating can be repaired. Contact your Toyota dealer.

Restoration work for rain clearing effect of the rain clearing mirror

The rain clearing effect on the mirror surface will gradually recover after exposure to sunlight (→P. 165). However, if you want to restore the effect immediately, conduct the following procedures:

1. Apply water to the mirror surface to wash the dirt away from it.
2. Remove the dirt by using a clean, soft and wet cloth.
3. Clean the mirror surface with glass cleaner or detergent. When detergent is used, rinse the mirror surface with a lot of water.
4. Wipe water on the mirror surface by using a clean and soft cloth, etc.
5. Park your vehicle outdoors to expose the mirror surface to sunlight for about 5 hours. (The restoration time differs depending on the amount and type of dirt.)

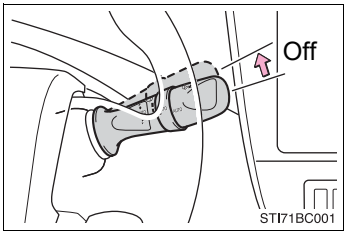
WARNING

■**When washing the vehicle**

Do not apply water to the inside of the motor compartment. Doing so may cause the electrical components, etc., to catch fire.

■**When cleaning the windshield**

Set the wiper switch to off. (→P. 210)
If the wiper switch is in “AUTO”, the wipers may operate unexpectedly in the following situations, and may result in hands being caught or other serious injuries and cause damage to the wiper blades.



- When the upper part of the windshield where the raindrop sensor is located is touched by hand
- When a wet rag or similar is held close to the raindrop sensor
- If something bumps against the windshield
- If you directly touch the raindrop sensor body or if something bumps into the raindrop sensor

■**Precaution regarding the rear bumper with Blind Spot Monitor**

If the paint of the rear bumper is chipped or scratched, the system may malfunction. If this occurs, consult your Toyota dealer.

NOTICE

■**To prevent paint deterioration and corrosion on the body and components (aluminum wheels, etc.)**

- Wash the vehicle immediately in the following cases:
  - After driving near the sea coast
  - After driving on salted roads
  - If coal tar or tree sap is present on the paint surface
  - If dead insects, insect droppings or bird droppings are present on the paint surface
  - After driving in an area contaminated with soot, oily smoke, mine dust, iron powder or chemical substances
  - If the vehicle becomes heavily soiled with dust or mud
  - If liquids such as benzene and gasoline are spilled on the paint surface
- If the paint is chipped or scratched, have it repaired immediately.
- To prevent the wheels from corroding, remove any dirt and store in a place with low humidity when storing the wheels.

NOTICE

■ **Cleaning the exterior lights**

- Wash carefully. Do not use organic substances or scrub with a hard brush. This may damage the surfaces of the lights.
- Do not apply wax to the surfaces of the lights. Wax may cause damage to the lenses.

■ **When washing the car**

Do not remove the vehicle receptacle cap and directly pour water over the vehicle receptacle. If water enters the vehicle receptacle, damage may occur.

■ **When using an automatic car wash**

Set the wiper switch to the off position. (→P. 210)
If the wiper switch is in “AUTO” the wipers may operate and the wiper blades may be damaged.

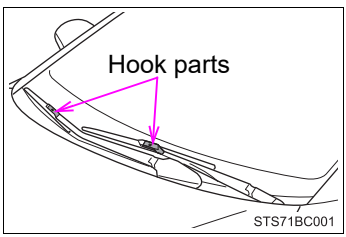
■ **When using a high pressure car wash**

- When washing the vehicle, do not let water of the high pressure washer hit directly or the vicinity of the camera. Due to the shock from the high pressure water, it is possible the device may not operate as normal.
- Do not bring the nozzle tip close to boots (rubber or resin manufactured cover), connectors or the following parts. The parts may be damaged if they come into contact with high-pressure water.
  - Fuel cell stack
  - Traction related parts
  - Steering parts
  - Suspension parts
  - Brake parts
- Keep the cleaning nozzle at least 11.9 in. (30 cm) away from the vehicle body. Otherwise resin section, such as moldings and bumpers, may be deformed and damaged. Also, do not continuously hold the nozzle in the same place.
- Do not spray the lower part of the windshield continuously. If water enters the air conditioning system intake located near the lower part of the windshield, the air conditioning system may not operate correctly.

■ **When raising the windshield wiper arms**

Make sure to hold the hook parts of the wiper arms to raise them.

Do not hold only the wiper blades when raising them, or it may cause deformation of the wiper blades.



Cleaning and protecting the vehicle interior

The following procedures will help protect your vehicle's interior and keep it in top condition:

Protecting the vehicle interior

- Remove dirt and dust using a vacuum cleaner. Wipe dirty surfaces with a cloth dampened with lukewarm water.
- If dirt cannot be removed, wipe it off with a soft cloth dampened with neutral detergent diluted to approximately 1%.
  Wring out any excess water from the cloth and thoroughly wipe off remaining traces of detergent and water.

Cleaning the leather areas

- Remove dirt and dust using a vacuum cleaner.
- Wipe off any excess dirt and dust with a soft cloth dampened with diluted detergent.

  Use a diluted water solution of approximately 5% neutral wool detergent.
- Wring out any excess water from the cloth and thoroughly wipe off all remaining traces of detergent.
- Wipe the surface with a dry, soft cloth to remove any remaining moisture. Allow the leather to dry in a shaded and ventilated area.

Cleaning the synthetic leather areas

- Remove dirt and dust using a vacuum cleaner.
- Wipe it off with a soft cloth dampened with neutral detergent diluted to approximately 1%.
- Wring out any excess water from the cloth and thoroughly wipe off remaining traces of detergent and water.

Caring for leather areas

Toyota recommends cleaning the interior of the vehicle at least twice a year to maintain the quality of the vehicle's interior.

Shampooing the carpets

There are several commercial foaming-type cleaners available. Use a sponge or brush to apply the foam. Rub in overlapping circles. Do not use water. Wipe dirty surfaces and let them dry. Excellent results are obtained by keeping the carpet as dry as possible.

Seat belts

Clean with mild soap and lukewarm water using a cloth or sponge. Also check the belts periodically for excessive wear, fraying or cuts.

When cleaning the carpeted portions of the glove box, console box, etc.

If a strong adhesive tape is used, there is a possibility that the surface of the carpet could be damaged.

WARNING

Water in the vehicle

- Do not splash or spill liquid in the vehicle, such as on the floor, in the traction battery air intake vent, and in the trunk.
  Doing so may cause the traction battery, electrical components, etc., to malfunction or catch fire.
- Do not get any of the SRS components or wiring in the vehicle interior wet. (→P. 38)
  An electrical malfunction may cause the airbags to deploy or not function properly, resulting in death or serious injury.
- Do not let the wireless charger (→P. 334) get wet. Failure to do so may cause the charger to become hot and cause burns or could cause electric shock resulting in death or serious injury.

Cleaning the interior (especially instrument panel)

Do not use a polish wax or polish cleaner. The instrument panel may reflect off the windshield, obstructing the driver's view and leading to an accident, resulting in death or serious injury.

NOTICE

■ **Cleaning detergents**

- Do not use the following types of detergent, as they may discolor the vehicle interior or cause streaks or damage to painted surfaces:
  - Non-seat portions: Organic substances such as benzene or gasoline, alkaline or acidic solutions, dye, and bleach
  - Seats: Alkaline or acidic solutions, such as thinner, benzene, and alcohol
- Do not use a polish wax or polish cleaner. The instrument panel's or other interior part's painted surface may be damaged.

■ **Preventing damage to leather surfaces**

Observe the following precautions to avoid damage to and deterioration of leather surfaces:

- Remove any dust or dirt from leather surfaces immediately.
- Do not expose the vehicle to direct sunlight for extended periods of time. Park the vehicle in the shade, especially during summer.
- Do not place items made of vinyl, plastic, or containing wax on the upholstery, as they may stick to the leather surface if the vehicle interior heats up significantly.

■ **Water on the floor**

Do not wash the vehicle floor with water.
Vehicle systems such as the audio system may be damaged if water comes into contact with electrical components such as the audio system above or under the floor of the vehicle. Water may also cause the body to rust.

■ **When cleaning the inside of the windshield**

Do not allow glass cleaner to contact the lens. Also, do not touch the lens. (→P. 219)

■ **Cleaning the inside of the rear window**

- Do not use glass cleaner to clean the rear window, as this may cause damage to the rear window defogger heater wires or antenna. Use a cloth dampened with lukewarm water to gently wipe the window clean. Wipe the window in strokes running parallel to the heater wires or antenna.
- Be careful not to scratch or damage the heater wires or antenna.

Maintenance requirements

To ensure safe and economical driving, day-to-day care and regular maintenance are essential. It is the owner's responsibility to perform regular checks. Toyota recommends the following maintenance:

General maintenance

General maintenance should be performed on a daily basis. This can be done by yourself or by a Toyota dealer.

Scheduled maintenance

Scheduled maintenance should be performed at specified intervals according to the maintenance schedule.

For details about maintenance items and schedules, refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".

Do-it-yourself maintenance

You can perform some maintenance procedures by yourself.
Please be aware that do-it-yourself maintenance may affect warranty coverage.

The use of Toyota Repair Manuals is recommended.

For details about warranty coverage, refer to the separate "Owner's Warranty Information Booklet" or "Owner's Manual Supplement".

Repair and replacement

It is recommended that genuine Toyota parts be used for repairs to ensure performance of each system. If non-Toyota parts are used in replacement or if a repair shop other than a Toyota dealer performs repairs, confirm the warranty coverage.

Allow inspection and repairs to be performed by a Toyota dealer

- Toyota technicians are well-trained specialists and are kept up to date with the latest service information. They are well informed about the operations of all systems on your vehicle.
- Keep a copy of the repair order. It proves that the maintenance that has been performed is under warranty coverage. If any problem should arise while your vehicle is under warranty, your Toyota dealer will promptly take care of it.

WARNING

If your vehicle is not properly maintained

Improper maintenance could result in serious damage to the vehicle and possible death or serious injury.

Handling of the 12-volt battery

- Fluids contained in vehicles as well as waste produced by component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Avoid exposure and wash any affected area immediately.
- 12-volt battery posts, terminals and related accessories contain lead and lead compounds which are known to cause brain damage. Wash your hands after handling. (→P. 374)

General maintenance

Listed below are the general maintenance items that should be performed at the intervals specified in the “Owner’s Warranty Information Booklet” or “Owner’s Manual Supplement/Scheduled Maintenance Guide”. It is recommended that any problem you notice should be brought to the attention of your Toyota dealer or qualified service shop for advice.

Motor compartment

Items	Check points
Brake fluid	Is the brake fluid at the correct level? (→P. 372)
Coolant	Is the coolant at the correct level? (→P. 370)
Radiator/condenser	The radiator and condenser should be free from foreign objects. (→P. 371)
Washer fluid	Is there sufficient washer fluid? (→P. 373)

Trunk

Items	Check points
12-volt battery	Check the connections. (→P. 374)

Vehicle interior

Items	Check points
Accelerator pedal	• The accelerator pedal should move smoothly (without uneven pedal effort or catching).
Transmission “Park” mechanism	• When parked on a slope and the shift position is in P, is the vehicle securely stopped?
Brake pedal	• Does the brake pedal move smoothly? • Does the brake pedal have appropriate clearance from the floor? (→P. 470) • Does the brake pedal have the correct amount of free play? (→P. 470)
Brakes	• The vehicle should not pull to one side when the brakes are applied. • The brakes should work effectively. • The brake pedal should not feel spongy. • The brake pedal should not get too close to the floor when the brakes are applied.
Head restraints	• Do the head restraints move smoothly and lock securely?
Indicators/buzzers	• Do the indicators and buzzers function properly?
Lights	• Do all the lights come on?
Parking brake	• Does the parking brake pedal move smoothly? • When parked on a slope and the parking brake is on, is the vehicle securely stopped?

Items	Check points
Seat belts	• Do the seat belts operate smoothly? • The seat belts should not be damaged.
Seats	• Do the seat controls operate properly?
Steering wheel	• Does the steering wheel rotate smoothly? • Does the steering wheel have the correct amount of free play? • There should not be any strange sounds coming from the steering wheel.

Vehicle exterior

Items	Check points
Doors/trunk	• Do the doors/trunk operate smoothly?
Hood	• Does the hood lock system work properly?
Fluid leaks	• There should not be any signs of fluid leakage after the vehicle has been parked.
Tires	• Is the tire inflation pressure correct? • The tires should not be damaged or excessively worn. • Have the tires been rotated according to the maintenance schedule? • The wheel nuts should not be loose.
Windshield wipers	• The wiper blades should not show any signs of cracking, splitting, wear, contamination or deformation. • The wiper blades should clear the windshield without streaking or skipping.

Do-it-yourself service precautions

If you perform maintenance by yourself, be sure to follow the correct procedure as given in these sections.

Items	Parts and tools
12-volt battery condition (→P. 374)	• Grease • Conventional wrench (for terminal clamp bolts)
Brake fluid level (→P. 372)	• FMVSS No.116 DOT 3 or SAE J1703 brake fluid, or FMVSS No.116 DOT 4 or SAE J1704 brake fluid • Rag or paper towel • Funnel (used only for adding brake fluid)
Inverter coolant level (→P. 370)	• “Toyota Super Long Life Coolant” or a similar high quality ethylene glycol-based non-silicate, non-amine, non-nitrite and non-borate coolant with long-life hybrid organic acid technology. For the U.S.A.: “Toyota Super Long Life Coolant” is pre-mixed with 50% coolant and 50% deionized water. For Canada: “Toyota Super Long Life Coolant” is pre-mixed with 55% coolant and 45% deionized water. • Funnel (used only for adding coolant)
Fuses (→P. 402)	• Fuse with same amperage rating as original
Light bulbs (→P. 405)	—
Radiator and condenser (→P. 371)	—
Tire inflation pressure (→P. 393)	• Tire pressure gauge • Compressed air source
Washer fluid (→P. 373)	• Water or washer fluid containing antifreeze (for winter use) • Funnel (used only for adding water or washer fluid)

WARNING

The motor compartment contains many mechanisms and fluids that may move suddenly, become hot, or become electrically energized. To avoid death or serious injury, observe the following precautions.

When working on the motor compartment

- Be careful not to touch the high-voltage parts or hydrogen-related parts.
- Make sure that the “READY” indicator is off.
- Keep hands, clothing and tools away from the moving fans.
- Be careful not to touch the motor, inverter, radiator, etc., right after driving as they may be hot. Coolant and other fluids may also be hot.
- Do not leave anything that may burn easily, such as paper and rags, in the motor compartment.
- Do not smoke, cause sparks or expose an open flame to the 12-volt battery. 12-volt battery fumes are flammable.
- Be extremely cautious when working on the 12-volt battery. It contains poisonous and corrosive sulfuric acid.
- Never touch, disassemble, remove or replace the high-voltage parts, cables and their connectors. It can cause severe burns or electric shock that may result in death or serious injury.

When working near the electric cooling fans or radiator grille

Be sure the power switch is off.
With the power switch in ON mode, the electric cooling fans may automatically start to run if the air conditioning is on and/or the coolant temperature is high. (→P. 371)

Safety glasses

Wear safety glasses to prevent flying or falling material, fluid spray, etc., from getting in your eyes.

NOTICE

If you remove the air cleaner filter

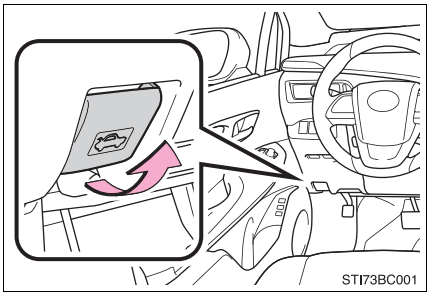
Driving with the air cleaner filter removed may cause excessive motor wear due to dirt in the air.

Hood

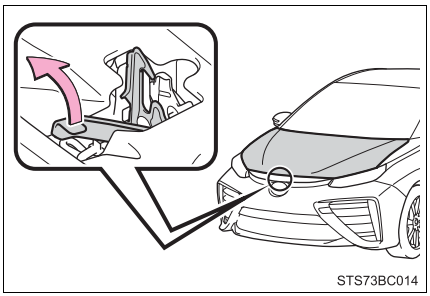
Release the lock from the inside of the vehicle to open the hood.

1 Pull the hood lock release lever.

The hood will pop up slightly.



2 Pull up the auxiliary catch lever and lift the hood.



WARNING

■ **Pre-driving check**

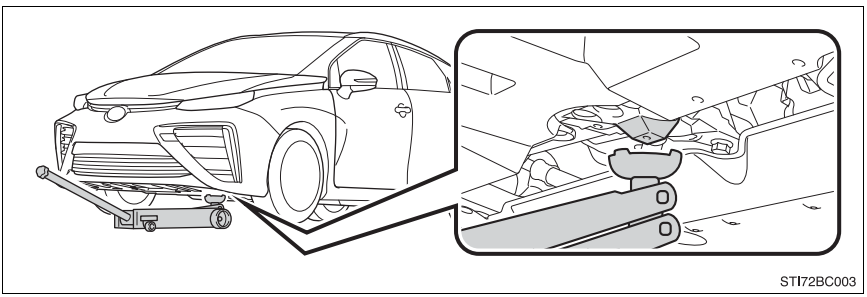
Check that the hood is fully closed and locked.
If the hood is not locked properly, it may open while the vehicle is in motion and cause an accident, which may result in death or serious injury.

Positioning a floor jack

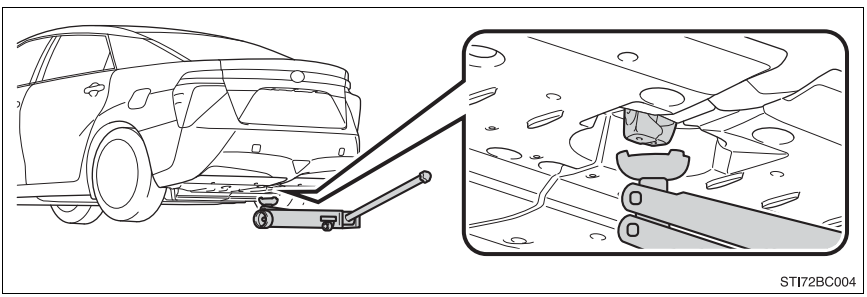
When using a floor jack, follow the instructions in the manual provided with the jack and perform the operation safely.

When raising your vehicle with a floor jack, position the jack correctly. Improper placement may damage your vehicle or cause injury.

◆ Front



◆ Rear

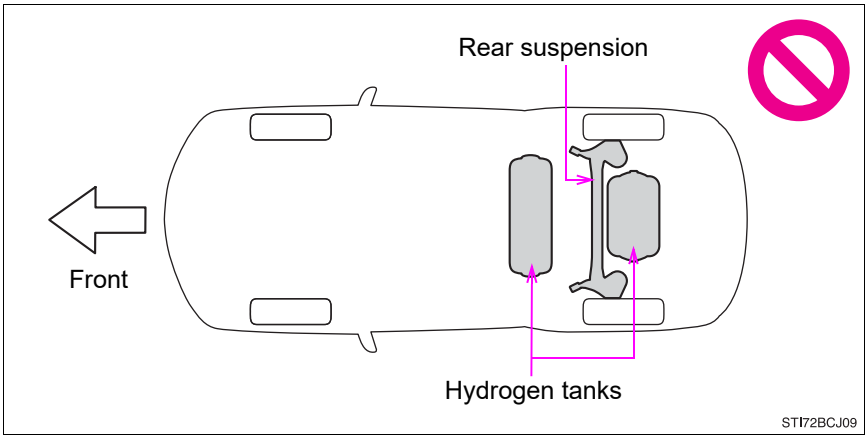


WARNING

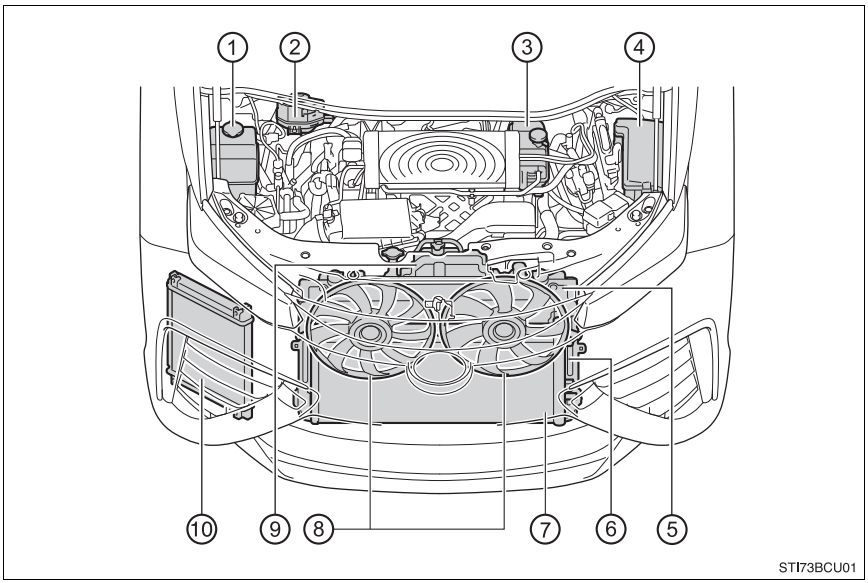
When raising your vehicle

Make sure to observe the following precautions to reduce the possibility of death or serious injury:

- Make sure to set the floor jack properly at the jack point.
  Raising the vehicle with an improperly positioned floor jack will damage the vehicle and may cause the vehicle to fall off the floor jack.
- Do not jack up on the hydrogen tanks nor the rear suspension.



Motor compartment



① Washer fluid tank (→P. 373)

② Brake fluid reservoir (→P. 372)

③ Inverter coolant reservoir (→P. 370)

④ Fuse box (→P. 402)

⑤ Fuel cell stack coolant radiator (→P. 371)

⑥ Inverter coolant radiator (→P. 371)

⑦ Condenser (→P. 371)

⑧ Electric cooling fans

⑨ Fuel cell stack coolant reservoir (→P. 370)

⑩ Fuel cell stack coolant sub radiator (→P. 371)

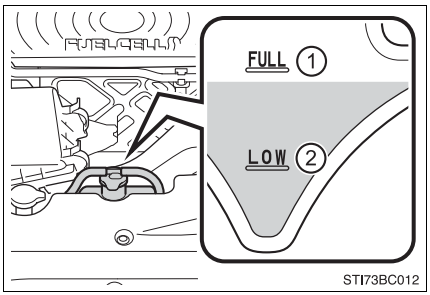
Fuel cell stack coolant

The coolant level is satisfactory if it is between the “FULL” and “LOW” lines on the reservoir when the fuel cell system is cold.

① “FULL” line

② “LOW” line

If the level is on or below the “LOW” line, contact your Toyota dealer.



NOTICE

Fuel cell stack coolant

An exclusive coolant for the fuel cell system is filled in the fuel cell stack coolant reservoir. Do not use any substitute. It may damage your vehicle.

Inverter coolant

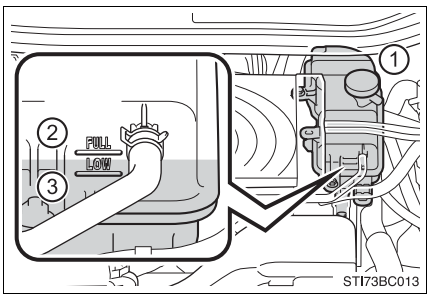
The coolant level is satisfactory if it is between the “FULL” and “LOW” lines on the reservoir when the fuel cell system is cold.

① Inverter coolant reservoir cap

② “FULL” line

③ “LOW” line

If the level is on or below the “LOW” line, add coolant up to the “FULL” line.



Inverter coolant selection

Only use “Toyota Super Long Life Coolant” or a similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology.

For the U.S.A.: “Toyota Super Long Life Coolant” is a mixture of 50% coolant and 50% deionized water. (Minimum temperature: -31°F [-35°C])

For Canada: “Toyota Super Long Life Coolant” is a mixture of 55% coolant and 45% deionized water. (Minimum temperature: -44°F [-42°C])

For more details about inverter coolant, contact your Toyota dealer.

If the inverter coolant level drops within a short time of replenishing

Visually check the radiators, hoses, inverter coolant reservoir cap, drain cock and water pump.
If you cannot find a leak, have your Toyota dealer test the cap and check for leaks in the cooling system.

WARNING

When the fuel cell system is hot

Do not remove the coolant reservoir caps.
The cooling system may be under pressure and may spray hot coolant if the cap is removed, causing serious injuries, such as burns.

NOTICE

When adding coolant

Coolant is neither plain water nor straight antifreeze. The correct mixture of water and antifreeze must be used to provide proper lubrication, corrosion protection and cooling. Be sure to read the antifreeze or coolant label.

If you spill coolant

Be sure to wash it off with water to prevent it from damaging parts or paint.

Radiator and condenser

Check the radiator and condenser and clear away any foreign objects.

If either of the above parts is extremely dirty or you are not sure of their condition, have your vehicle inspected by your Toyota dealer.

WARNING

When the fuel cell system is hot

Do not touch the radiator or condenser as they may be hot and cause serious injuries, such as burns.

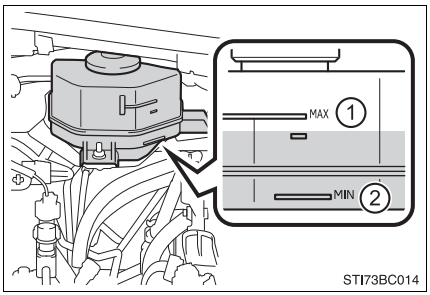
Brake fluid

Checking fluid level

The brake fluid level should be between the “MAX” and “MIN” lines on the tank.

① “MAX”

② “MIN”



Adding fluid

Make sure to check the fluid type and prepare the necessary item.

Fluid type	FMVSS No.116 DOT 3 or SAE J1703 brake fluid, or FMVSS No.116 DOT 4 or SAE J1704 brake fluid
Item	Clean funnel

Brake fluid can absorb moisture from the air

Excess moisture in the brake fluid can cause a dangerous loss of braking efficiency. Use only newly opened brake fluid.

WARNING

When filling the reservoir

Take care as brake fluid can harm your hands and eyes and damage painted surfaces.
If fluid gets on your hands or in your eyes, flush the affected area with clean water immediately.

If you still experience discomfort, see a doctor.

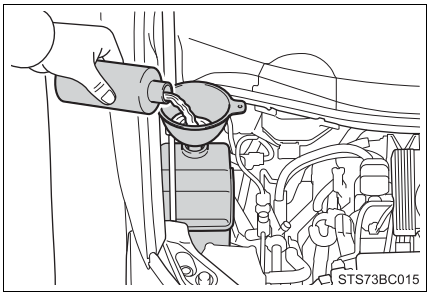
NOTICE

If the fluid level is low or high

It is normal for the brake fluid level to go down slightly as the brake pads wear out or when the fluid level in the accumulator is high.
If the reservoir needs frequent refilling, there may be a serious problem.

Washer fluid

If none of the washer do not work or the warning message appears on the multi-information display, the washer tank may be empty. Add washer fluid. (→P. 426)



WARNING

When adding washer fluid

Do not add washer fluid when the fuel cell system is hot or operating, as washer fluid contains alcohol and may catch fire if spilled on the fuel cell system, etc.

NOTICE

Do not use any fluid other than washer fluid

Do not use soapy water or antifreeze instead of washer fluid.
Doing so may cause streaking on the vehicle's painted surfaces, as well as damaging the pump leading to problems of the washer fluid not spraying.

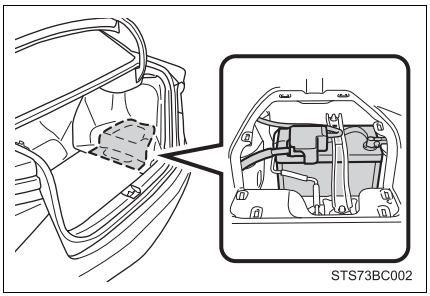
Diluting washer fluid

Dilute washer fluid with water as necessary.
Refer to the freezing temperatures listed on the label of the washer fluid bottle.

12-volt battery

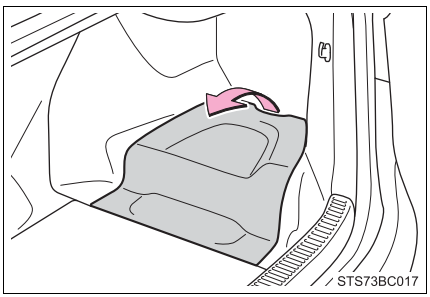
Location

The 12-volt battery is located in the right-hand side of the trunk.



Removing the 12-volt battery cover

Remove the 12-volt battery cover.

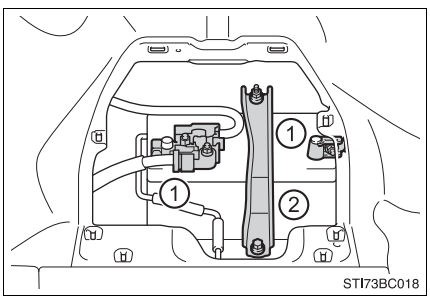


Exterior

Make sure that the 12-volt battery terminals are not corroded and that there are no loose connections, cracks, or loose clamps.

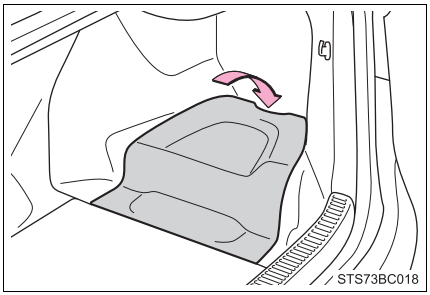
① Terminals

② Hold-down clamp



Installing the 12-volt battery cover

Install the 12-volt battery cover.



Before recharging

When recharging, the 12-volt battery produces hydrogen gas which is flammable and explosive. Therefore, observe the following precautions before recharging:

- If recharging with the 12-volt battery installed on the vehicle, be sure to disconnect the ground cable.
- Make sure the power switch on the charger is off when connecting and disconnecting the charger cables to the 12-volt battery.

After recharging/reconnecting the 12-volt battery

- Unlocking the doors using the smart key system may not be possible immediately after reconnecting the 12-volt battery. If this happens, use the wireless remote control or the mechanical key to lock/unlock the doors.
- Start the fuel cell system with the power switch in ACCESSORY mode. The fuel cell system may not start with the power switch turned off. However, the fuel cell system will operate normally from the second attempt.
- The power switch mode is recorded by the vehicle. If the 12-volt battery is reconnected, the vehicle will return the power switch mode to the status it was in before the 12-volt battery was disconnected. Make sure to turn off the power before disconnect the 12-volt battery. Take extra care when connecting the 12-volt battery if the power switch mode prior to discharge is unknown.
- When the 12-volt battery is reconnected, start the fuel cell system, depress the brake pedal, and confirm that it is possible to shift into each shift position.

If the system will not start even after multiple attempts at all methods above, contact your Toyota dealer.

WARNING

Chemicals in the 12-volt battery

The 12-volt battery contains poisonous and corrosive sulfuric acid and may produce hydrogen gas which is flammable and explosive. To reduce the risk of death or serious injury, take the following precautions while working on or near the 12-volt battery:

- Do not cause sparks by touching the 12-volt battery terminals with tools.
- Do not smoke or light a match near the 12-volt battery.
- Avoid contact with eyes, skin and clothes.
- Never inhale or swallow electrolyte.
- Wear protective safety glasses when working near the 12-volt battery.
- Keep children away from the 12-volt battery.

Where to safely charge the 12-volt battery

Always charge the 12-volt battery in an open area. Do not charge the 12-volt battery in a garage or closed room where there is insufficient ventilation.

How to recharge the 12-volt battery

Only perform a slow charge (5 A or less). The 12-volt battery may explode if charged at a quicker rate.

Emergency measures regarding electrolyte

- If electrolyte gets in your eyes
  Flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while traveling to the nearest medical facility.
- If electrolyte gets on your skin
  Wash the affected area thoroughly. If you feel pain or burning, get medical attention immediately.
- If electrolyte gets on your clothes
  It can soak through clothing on to your skin. Immediately take off the clothing and follow the procedure above if necessary.
- If you accidentally swallow electrolyte
  Drink a large quantity of water or milk. Get emergency medical attention immediately.

When replacing the 12-volt battery

Use a 12-volt battery designed for this vehicle. Failure to do so may cause gas (hydrogen) to enter the passenger compartment, causing a fire or explosion.

For replacement of the 12-volt battery, contact your Toyota dealer.

NOTICE

When recharging the 12-volt battery

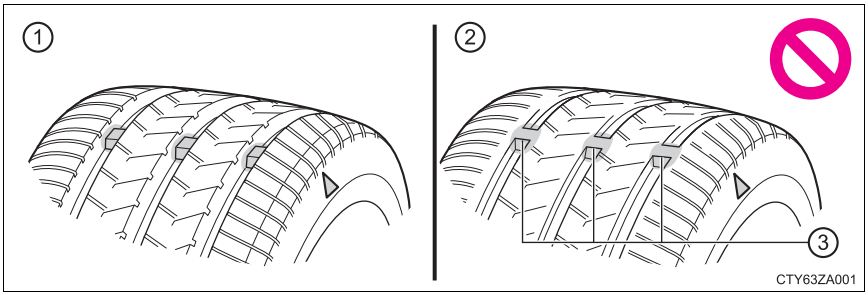
Never recharge the 12-volt battery while the fuel cell system is operating. Also, be sure all accessories are turned off.

Tires

Replace or rotate tires in accordance with maintenance schedules and treadwear.

Checking tires

Check if the treadwear indicators are showing on the tires. Also check the tires for uneven wear, such as excessive wear on one side of the tread.
Check the spare tire condition and pressure if not rotated.



① New tread

② Worn tread

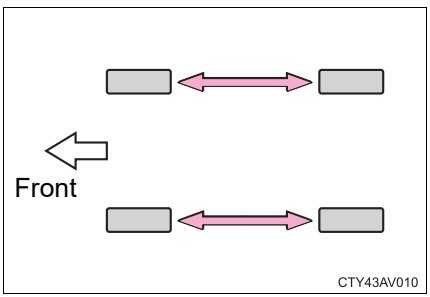
③ Treadwear indicator

The location of treadwear indicators is shown by a “TWI” or “Δ” mark, etc., molded into the sidewall of each tire.
Replace the tires if the treadwear indicators are showing on a tire.

Tire rotation

Rotate the tires in the order shown.

To equalize tire wear and extend tire life, Toyota recommends that tire rotation is carried out at the same interval as tire inspection.



Tire pressure warning system

Your vehicle is equipped with a tire pressure warning system that uses tire pressure warning valves and transmitters to detect low tire inflation pressure before serious problems arise.
If the tire pressure drops below a predetermined level, the driver is warned by a warning light. (→P. 421)

◆ Installing tire pressure warning valves and transmitters

When replacing tires or wheels, tire pressure warning valves and transmitters must also be installed.

When new tire pressure warning valves and transmitters are installed, new ID codes must be registered in the tire pressure warning computer and the tire pressure warning system must be initialized. Have tire pressure warning valves and transmitter ID codes registered by your Toyota dealer. (→P. 379)

◆ Registering ID codes

The tire pressure warning valve and transmitter is equipped with a unique ID code. When replacing a tire pressure warning valve and transmitter, it is necessary to register the ID code. Have the ID code registered by your Toyota dealer.

When to replace your vehicle's tires

Tires should be replaced if:

- The treadwear indicators are showing on a tire.
- You have tire damage such as cuts, splits, cracks deep enough to expose the fabric, and bulges indicating internal damage
- A tire goes flat repeatedly or cannot be properly repaired due to the size or location of a cut or other damage

If you are not sure, consult with your Toyota dealer.

Replacing tires and wheels

If the ID code of the tire pressure warning valve and transmitter is not registered, the tire pressure warning system will not work properly. After driving for about 20 minutes, the tire pressure warning light blinks for 1 minute and stays on to indicate a system malfunction.

Tire life

Any tire over 6 years old must be checked by a qualified technician even if it has seldom or never been used or damage is not obvious.

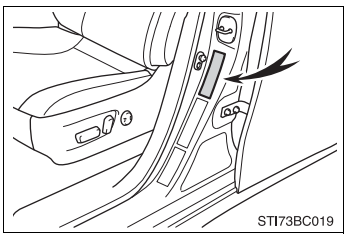
Routine tire inflation pressure checks

The tire pressure warning system does not replace routine tire inflation pressure checks. Make sure to check tire inflation pressure as part of your routine of daily vehicle checks.

Maximum load of tire

Check that the maximum load of the replacement tire is greater than 1/2 of the Gross Axle Weight Ratings (GAWR) of either the front axle or the rear axle, whichever is greater.

For the GAWR, see the Certification Label. For the maximum load of the tire, see the load limit at maximum cold tire inflation pressure mentioned on the sidewall of the tire. (→P. 472)



Tire types

- Summer tires

  Summer tires are high-speed performance tires best suited to highway driving under dry conditions. Since summer tires do not have the same traction performance as snow tires, summer tires are inadequate for driving on snow-covered or icy roads. For driving on snow-covered roads or icy roads, the use of snow tires is recommended. When installing snow tires, be sure to replace all four tires.

- All season tires

  All season tires are designed to provide better traction in snow and to be adequate for driving in most winter conditions as well as for use year-round. All season tires, however, do not have adequate traction performance compared with snow tires in heavy or loose snow. Also, all season tires fall short in acceleration and handling performance compared with summer tires in highway driving.

- Snow tires

  For driving on snow-covered roads or icy roads, we recommend using snow tires. If you need snow tires, select tires of the same size, construction and load capacity as the originally installed tires. Since your vehicle has radial tires as original equipment, make sure your snow tires also have radial construction. Do not install studded tires without first checking local regulations for possible restrictions. Snow tires should be installed on all wheels. (→P. 301)

If the tread on snow tires wears down below 0.16 in. (4 mm)

The effectiveness of the tires as snow tires is lost.

Situations in which the tire pressure warning system may not operate properly

- In the following cases, the tire pressure warning system may not operate properly.
  - If non-genuine Toyota wheels are used.
  - A tire has been replaced with a tire that is not an OE (Original Equipment) tire.
  - A tire has been replaced with a tire that is not of the specified size.
  - Tire chains, etc., are equipped.
  - An auxiliary-supported run-flat tire is equipped.
  - If a window tint that affects the radio wave signals is installed.
  - If there is a lot of snow or ice on the vehicle, particularly around the wheels or wheel housings.
  - If the tire inflation pressure is extremely higher than the specified level.
  - If wheels without the tire pressure warning valves and transmitters are used.
  - If the ID code on the tire pressure warning valves and transmitters is not registered in the tire pressure warning computer.
- Performance may be affected in the following situations.
  - Near a TV tower, electric power plant, gas station, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
  - When carrying a portable radio, cellular phone, cordless phone or other wireless communication device
- When the vehicle is parked, the time taken for the warning to start or go off could be extended.
- When tire inflation pressure declines rapidly for example when a tire has burst, the warning may not function.

■Certification for the tire pressure warning system

▶For U.S.A.

FCC ID: PAXPMVC010

NOTE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

▶For Canada

NOTE

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

NOTE

L'utilisation de ce dispositif est autorisée seulement aux deux conditions suivantes : (1) il ne doit pas produire de brouillage, et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

WARNING

When inspecting or replacing tires

Observe the following precautions to prevent accidents.
Failure to do so may cause damage to parts of the drivetrain as well as dangerous handling characteristics, which may lead to an accident resulting in death or serious injury.

- Do not mix tires of different makes, models or tread patterns.
  Also, do not mix tires of remarkably different treadwear.
- Do not use tire sizes other than those recommended by Toyota.
- Do not mix differently constructed tires (radial, bias-belted or bias-ply tires).
- Do not mix summer, all season and snow tires.
- Do not use tires that have been used on another vehicle.
  Do not use tires if you do not know how they were used previously.

NOTICE

■ **Repairing or replacing tires, wheels, tire pressure warning valves, transmitters and tire valve caps**

- When removing or fitting the wheels, tires or the tire pressure warning valves and transmitters, contact your Toyota dealer as the tire pressure warning valves and transmitters may be damaged if not handled correctly.
- Make sure to install the tire valve caps. If the tire valve caps are not installed, water could enter the tire pressure warning valves and the tire pressure warning valves could be bound.
- When replacing tire valve caps, do not use tire valve caps other than those specified. The cap may become stuck.

■ **To avoid damage to the tire pressure warning valves and transmitters**

When a tire is repaired with liquid sealants, the tire pressure warning valve and transmitter may not operate properly. If a liquid sealant is used, contact your Toyota dealer or other qualified service shop as soon as possible. After use of liquid sealant, make sure to replace the tire pressure warning valve and transmitter when replacing the tire.
(→P. 379)

■ **Driving on rough roads**

Take particular care when driving on roads with loose surfaces or potholes.
These conditions may cause losses in tire inflation pressure, reducing the cushioning ability of the tires. In addition, driving on rough roads may cause damage to the tires themselves, as well as the vehicle's wheels and body.

■ **If tire inflation pressure of each tire becomes low while driving**

Do not continue driving, or your tires and/or wheels may be ruined.

Replacing the tire

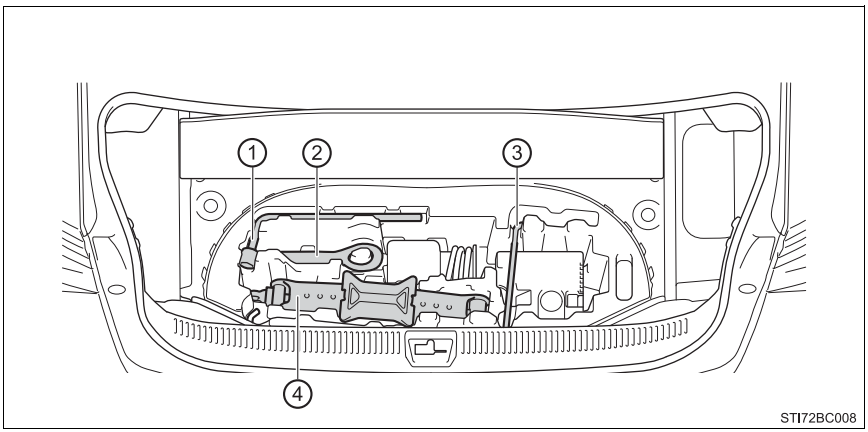
When raising your vehicle with a jack, position the jack correctly. Improper placement may damage your vehicle or cause injury.

If necessary tire replacement seems difficult to perform, contact your Toyota dealer.

Before jacking up the vehicle

- Stop the vehicle on a hard, flat surface.
- Set the parking brake.
- Shift the shift position to P.
- Stop the fuel cell system.

Location of the tools and jack



① Wheel nut wrench
② Towing eyelet
③ Jack handle
④ Jack

WARNING

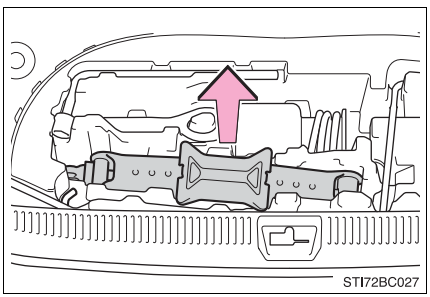
Using the tire jack

Observe the following precautions.
Improper use of the tire jack may cause the vehicle to suddenly fall off the jack, leading to death or serious injury.

- Do not use the tire jack for any purpose other than replacing tires or installing and removing tire chains.
- Only use the tire jack that comes with this vehicle for replacing a tire. Do not use it on other vehicles, and do not use other tire jacks for replacing tires on this vehicle.
- Always check that the tire jack is securely set to the jack point.
- Do not put any part of your body under the vehicle while it is supported by the jack.
- Do not operate the fuel cell system or drive the vehicle while the vehicle is supported by the jack.
- Do not raise the vehicle while someone is inside.
- When raising the vehicle, do not put an object on or under the jack.
- Do not raise the vehicle to a height greater than that required to replace the tire.
- Use a jack stand if it is necessary to get under the vehicle.
- When lowering the vehicle, make sure that there is no-one near the vehicle. If there are people nearby, warn them vocally before lowering.

Taking out the jack

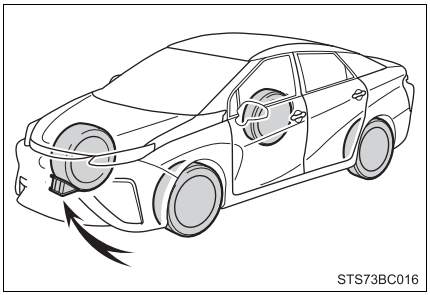
1. Remove the luggage mat.
2. Take out the jack.



Replacing a tire

1 Chock* the tires.

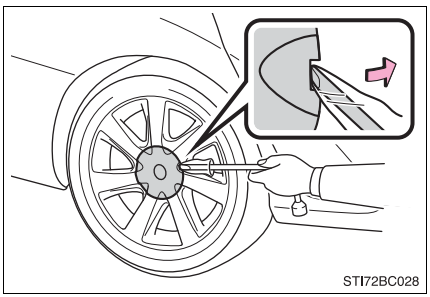
*: Chock can be purchased at your Toyota dealer.



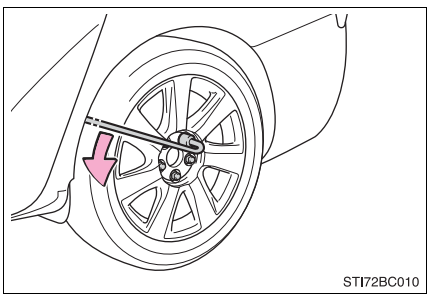
Tire position		Wheel chock positions
Front	Left-hand side	Behind the rear right-hand side tire
	Right-hand side	Behind the rear left-hand side tire
Rear	Left-hand side	In front of the front right-hand side tire
	Right-hand side	In front of the front left-hand side tire

2 Remove the wheel ornament using the wrench.

To protect the wheel ornament, place a rag between the wrench and the wheel ornament.

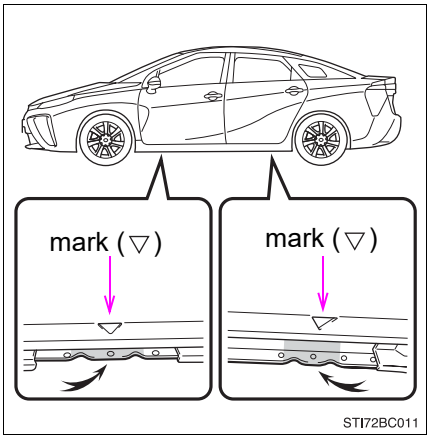


3 Slightly loosen the wheel nuts (one turn).



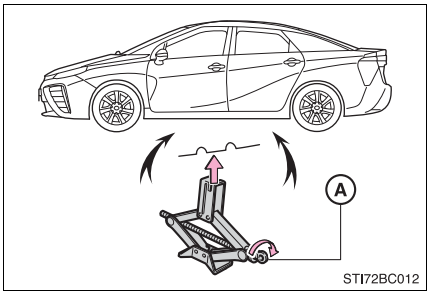
4 Check the jack point.

The mark (▽) displaying the jack set position is attached to the under side of the side mud guard.

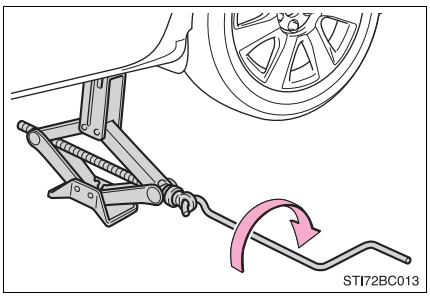


5 Turn the tire jack portion “A” by hand until the notch of the jack is in contact with the jack point.

When it is difficult to insert the jack, turn it sideways and then insert.

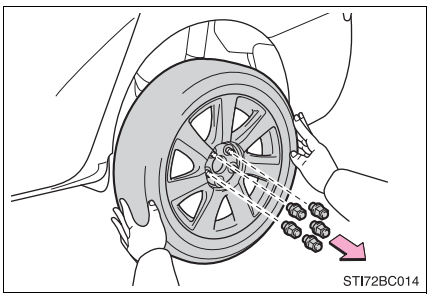


6 Raise the vehicle until the tire is slightly raised off the ground.



7 Remove all the wheel nuts and the tire.

When resting the tire on the ground, place the tire so that the wheel design faces up to avoid scratching the wheel surface.



WARNING

■ **Replacing a tire**

● Observe the following precautions.
Failure to do so may result in serious injury:

Do not touch the disc wheels or the area around the brakes immediately after the vehicle has been driven.
After the vehicle has been driven the disc wheels and the area around the brakes will be extremely hot. Touching these areas with hands, feet or other body parts while changing a tire, etc., may result in burns.

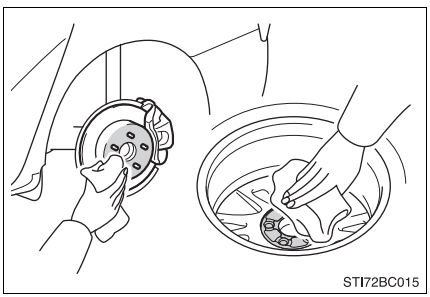
● Failure to follow these precautions could cause the wheel nuts to loosen and the tire to fall off, resulting in death or serious injury.

- Have the wheel nuts tightened with a torque wrench to 76 ft·lbf (103 N·m, 10.5 kgf·m) as soon as possible after changing wheels.
- When installing a tire, only use wheel nuts that have been specifically designed for that wheel.
- If there are any cracks or deformations in the bolt screws, nut threads or bolt holes of the wheel, have the vehicle inspected by your Toyota dealer.
- When installing the wheel nuts, be sure to install the wheel nuts with the tapered ends facing inward. (→P. 397)

Installing the tire

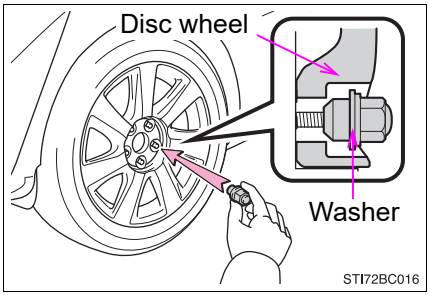
1 Remove any dirt or foreign matter from the wheel contact surface.

If foreign matter is on the wheel contact surface, the wheel nuts may loosen while the vehicle is in motion, causing the tire to come off.

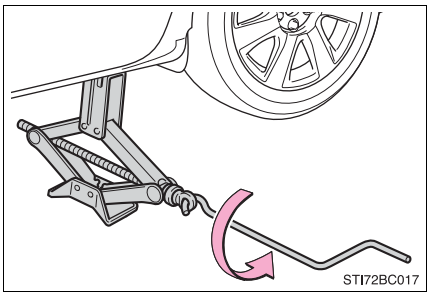


2 Install the tire and loosely tighten each wheel nut by hand by approximately the same amount.

Turn the wheel nuts until the washers come into contact with the disc wheel.

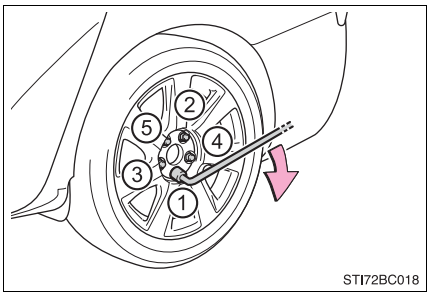


3 Lower the vehicle.



4 Firmly tighten each wheel nut two or three times in the order shown in the illustration.

Tightening torque:
76 ft·lbf (103 N·m, 10.5 kgf·m)



5 Reinstall the wheel ornament.

6 Stow the tire jack and all tools.

WARNING

After using the tools and jack

Before driving, make sure all the tools and jack are securely in place in their storage location to reduce the possibility of personal injury during a collision or sudden braking.

NOTICE

When replacing the tires

When removing or fitting the wheels, tires or the tire pressure warning valve and transmitter, contact your Toyota dealer as the tire pressure warning valve and transmitter may be damaged if not handled correctly.

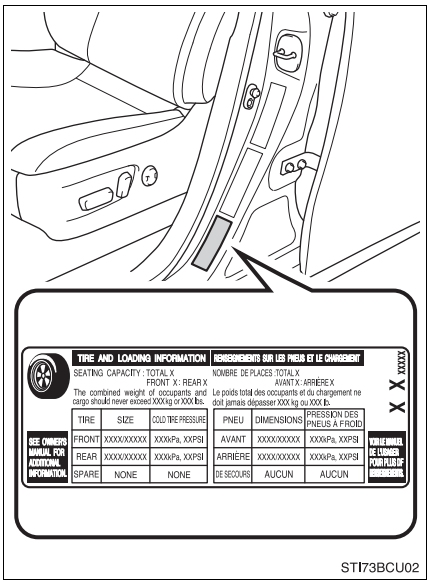
To avoid damage to the tire pressure warning valves and transmitters

When a tire is repaired with liquid sealants, the tire pressure warning valve and transmitter may not operate properly. If a liquid sealant is used, contact your Toyota dealer or other qualified service shop as soon as possible. Make sure to replace the tire pressure warning valve and transmitter when replacing the tire. (→P. 379)

Tire inflation pressure

Tire inflation pressure

The recommended cold tire inflation pressure and tire size are displayed on the tire and loading information label. (→P. 471)



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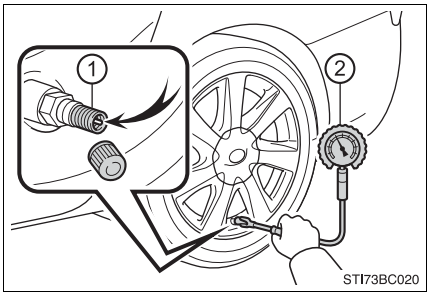
Inspection and adjustment procedure

① Tire valve

② Tire pressure gauge



1 Remove the tire valve cap.

2 Press the tip of the tire pressure gauge onto the tire valve.

3 Read the pressure using the gauge gradations.

4 If the tire inflation pressure is not at the recommended level, adjust the pressure.
If you add too much air, press the center of the valve to deflate.

5 After completing the tire inflation pressure measurement and adjustment, apply soapy water to the valve and check for leakage.

6 Put the tire valve cap back on.

■ Tire inflation pressure check interval

You should check tire inflation pressure every two weeks, or at least once a month.
Do not forget to check the spare.

■ Effects of incorrect tire inflation pressure

Driving with incorrect tire inflation pressure may result in the following:

- Reduced fuel economy
- Reduced driving comfort and poor handling
- Reduced tire life due to wear
- Reduced safety
- Damage to the drivetrain

If a tire needs frequent inflating, have it checked by your Toyota dealer.

Instructions for checking tire inflation pressure

When checking tire inflation pressure, observe the following:

- Check only when the tires are cold.
  If your vehicle has been parked for at least 3 hours or has not been driven for more than 1 mile or 1.5 km, you will get an accurate cold tire inflation pressure reading.
- Always use a tire pressure gauge.
  It is difficult to judge if a tire is properly inflated based only on its appearance.
- It is normal for the tire inflation pressure to be higher after driving as heat is generated in the tire. Do not reduce tire inflation pressure after driving.
- Never exceed the vehicle capacity weight.
  Passengers and luggage weight should be placed so that the vehicle is balanced.

WARNING

Proper inflation is critical to save tire performance

Keep your tires properly inflated.
If the tires are not properly inflated, the following conditions may occur which could lead to an accident resulting in death or serious injury:

- Excessive wear
- Uneven wear
- Poor handling
- Possibility of blowouts resulting from overheated tires
- Air leaking from between tire and wheel
- Wheel deformation and/or tire damage
- Greater possibility of tire damage while driving (due to road hazards, expansion joints, sharp edges in the road, etc.)

NOTICE

When inspecting and adjusting tire inflation pressure

Be sure to put the tire valve caps back on.
If a valve cap is not installed, dirt or moisture may get into the valve and cause an air leak, resulting in decreased tire inflation pressure.

Wheels

If a wheel is bent, cracked or heavily corroded, it should be replaced. Otherwise, the tire may separate from the wheel or cause a loss of handling control.

Wheel selection

When replacing wheels, care should be taken to ensure that they are equivalent to those removed in load capacity, diameter, rim width and inset*.
Replacement wheels are available at your Toyota dealer.

*: Conventionally referred to as “offset”.

Toyota does not recommend using the following:

- Wheels of different sizes or types
- Used wheels
- Bent wheels that have been straightened

Aluminum wheel precautions

- Use only Toyota wheel nuts and wrenches designed for use with your aluminum wheels.
- When rotating, repairing or changing your tires, check that the wheel nuts are still tight after driving 1000 miles (1600 km).
- Be careful not to damage the aluminum wheels when using tire chains.
- Use only Toyota genuine balance weights or equivalent and a plastic or rubber hammer when balancing your wheels.

When replacing wheels

The wheels of your vehicle are equipped with tire pressure warning valves and transmitters that allow the tire pressure warning system to provide advance warning in the event of a loss in tire inflation pressure. Whenever wheels are replaced, tire pressure warning valves and transmitters must be installed. (→P. 379)

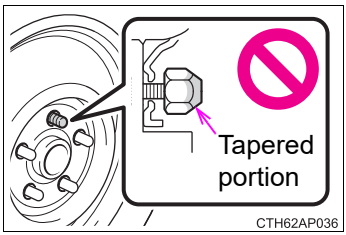
WARNING

■ **When replacing wheels**

- Do not use wheels that are a different size from those recommended in the Owner's Manual, as this may result in a loss of handling control.
- Never use an inner tube in a leaking wheel which is designed for a tubeless tire. Doing so may result in an accident, causing death or serious injury.

■ **When installing the wheel nuts**

- Be sure to install the wheel nuts with the tapered ends facing inward. Installing the nuts with the tapered ends facing outward can cause the wheel to break and eventually cause the wheel to come off while driving, which could lead to an accident resulting in death or serious injury.



- Never use oil or grease on the wheel bolts or wheel nuts.
  Oil and grease may cause the wheel nuts to be excessively tightened, leading to bolt or disc wheel damage. In addition, the oil or grease can cause the wheel nuts to loosen and the wheel may fall off, causing an accident and resulting in death or serious injury. Remove any oil or grease from the wheel bolts or wheel nuts.

■ **Use of defective wheels prohibited**

Do not use cracked or deformed wheels.
Doing so could cause the tire to leak air during driving, possibly causing an accident.

NOTICE

■ **Replacing tire pressure warning valves and transmitters**

- Because tire repair or replacement may affect the tire pressure warning valves and transmitters, make sure to have tires serviced by your Toyota dealer or other qualified service shop. In addition, make sure to purchase your tire pressure warning valves and transmitters at your Toyota dealer.
- Ensure that only genuine Toyota wheels are used on your vehicle.
  Tire pressure warning valves and transmitters may not work properly with non-genuine wheels.

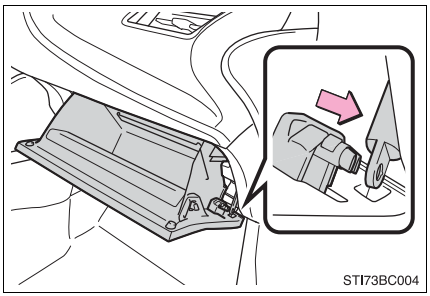
Air conditioning filter

The air conditioning filter must be changed regularly to maintain air conditioning efficiency.

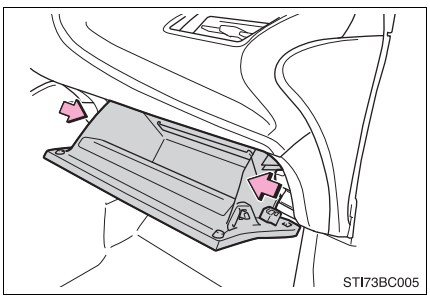
Removal method

1 Turn the power switch off.

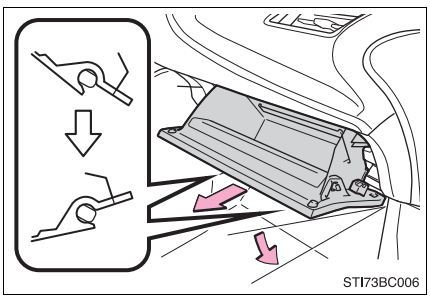
2 Open the glove box. Slide off the damper.



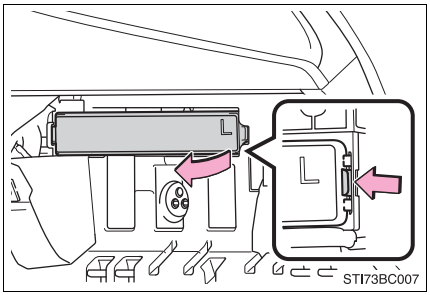
3 Push the surface on the left side of the glove box inward, undo the upper left claw, then push the surface on the right side of the glove box inward and undo the upper right claw.



4 Lower the glove box from the completely open position, undo the lower claws, and then remove the glove box.

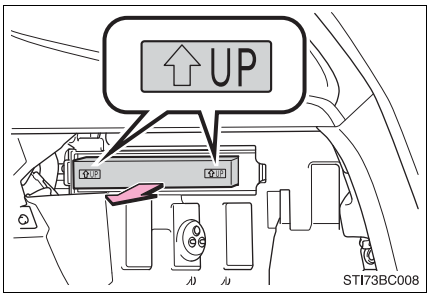


5 Remove the filter cover.



6 Remove the air conditioning filter and replace it with a new one.

The "↑UP" marks shown on the filter should be pointing up.



■ **Checking interval**

Inspect and replace the air conditioning filter according to the maintenance schedule. In dusty areas or areas with heavy traffic flow, early replacement may be required. (For scheduled maintenance information, please refer to the "Schedule Maintenance Guide" or "Owner's Manual Supplement".)

■ **If air flow from the vents decreases dramatically**

The filter may be clogged. Check the filter and replace if necessary.

NOTICE

■ **When using the air conditioning system**

Make sure that a filter is always installed.
Using the air conditioning system without a filter may cause damage to the system.

Electronic key battery

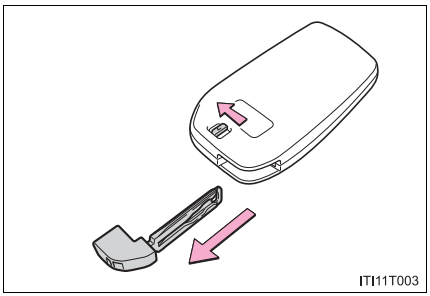
Replace the battery with a new one if it is depleted.

You will need the following items:

- Flathead screwdriver
- Small flathead screwdriver
- Lithium battery CR2032

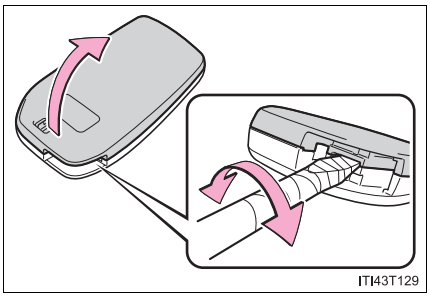
Replacing the battery

1 Take out the mechanical key. (→P. 129)



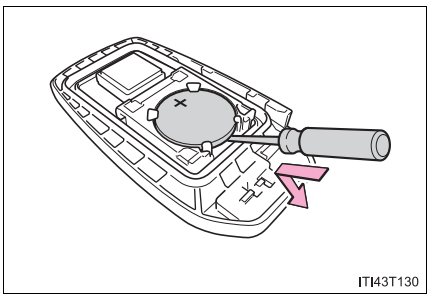
2 Remove the cover.

To prevent damage to the key, cover the tip of the flathead screwdriver with a rag.



3 Remove the depleted battery.

Insert a new battery with the “+” terminal facing up.



Use a CR2032 lithium battery

- Batteries can be purchased at your Toyota dealer, local electrical appliance shops or camera stores.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to local laws.

If the electronic key battery is depleted

The following symptoms may occur:

- The smart key system and wireless remote control will not function properly.
- The operational range will be reduced.

WARNING

Removed battery and other parts

These parts are small and if swallowed by a child, they can cause choking. Keep away from children. Failure to do so could result in death or serious injury.

NOTICE

For normal operation after replacing the battery

Observe the following precautions to prevent accidents:

- Always work with dry hands.
  Moisture may cause the battery to rust.
- Do not touch or move any other component inside the remote control.
- Do not bend either of the battery terminals.

Checking and replacing fuses

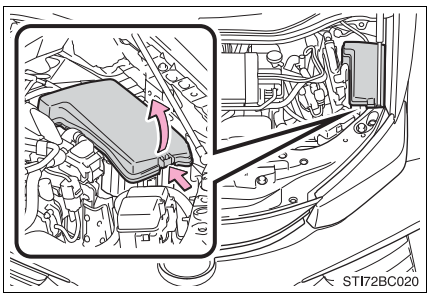
If any of the electrical components do not operate, a fuse may have blown. If this happens, check and replace the fuses as necessary.

1 Turn the power switch off.

2 Open the fuse box cover.

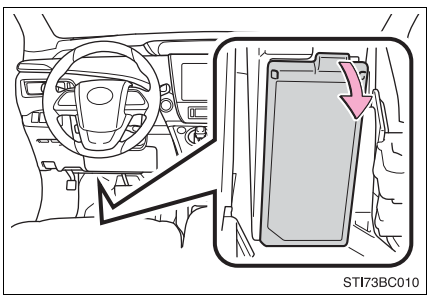
▶ Motor compartment

Push the tab in and lift the lid off.



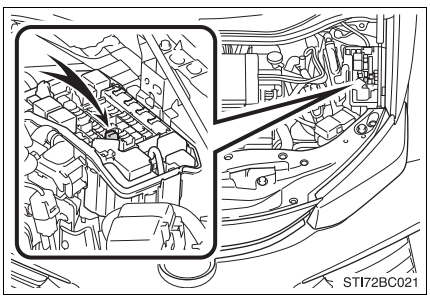
▶ Driver's side instrument panel

Remove the lid.



3 Remove the fuse with the pull-out tool.

Only type A fuses can be removed using the pullout tool.



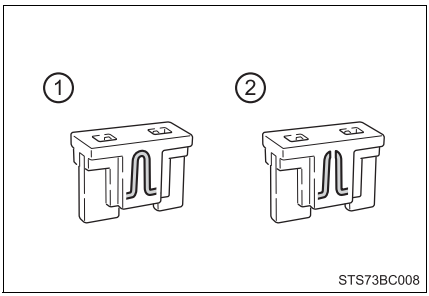
4 Check if the fuse is blown.

① Normal fuse

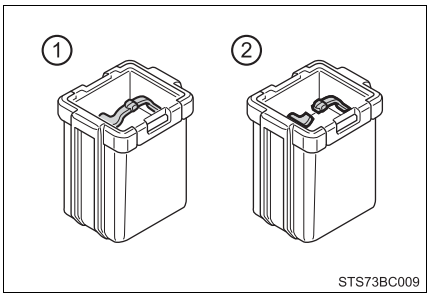
② Blown fuse

Replace the blown fuse with a new fuse of an appropriate amperage rating. The amperage rating can be found on the fuse box lid.

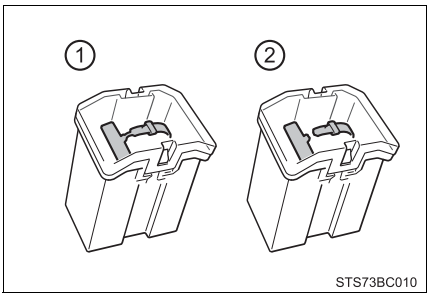
▶ Type A



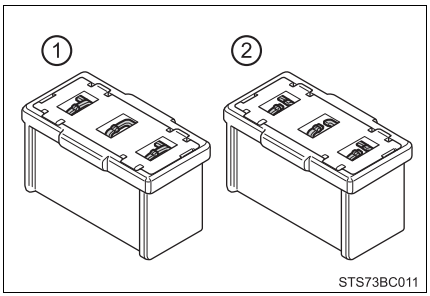
▶ Type B



▶ Type C



▶ Type D



After a fuse is replaced

- If the lights do not turn on even after the fuse has been replaced, a bulb may need replacement. (→P. 405)
- If the replaced fuse blows again, have the vehicle inspected by your Toyota dealer.

If there is an overload in a circuit

The fuses are designed to blow, protecting the wiring harness from damage.

WARNING

To prevent system breakdowns and vehicle fire

Observe the following precautions.
Failure to do so may cause damage to the vehicle, and possibly a fire or injury.

- Never use a fuse of a higher amperage rating than that indicated, or use any other object in place of a fuse.
- Always use a genuine Toyota fuse or equivalent.
  Never replace a fuse with a wire, even as a temporary fix.
- Do not modify the fuses or fuse boxes.

NOTICE

Before replacing fuses

Have the cause of electrical overload determined and repaired by your Toyota dealer as soon as possible.

Light bulbs

If any lights burn out, have it replaced by your Toyota dealer:

LED light bulbs

The following lights consist of a number of LEDs. If any of the LEDs burn out, take your vehicle to your Toyota dealer to have the light replaced.

- Headlight low beams
- Headlight high beams
- Parking lights and daytime running lights
- Front side marker lights
- Front turn signal lights
- Side turn signal lights
- Tail lights
- Stop lights
- Rear side marker lights
- Rear turn signal lights
- High mounted stop lights
- License plate lights
- Back-up lights

Condensation build-up on the inside of the lens

Temporary condensation build-up on the inside of the headlight lens does not indicate a malfunction.
Contact your Toyota dealer for more information in the following situations:

- Large drops of water have built up on the inside of the lens.
- Water has built up inside the headlight.

WARNING

Handling lights

Do not touch the lights while they are on or immediately after they have been turned off. Doing so may result in burns.

When trouble arises

8

8-1. Essential information

Emergency flashers 408

If your vehicle has to be stopped in an emergency 409

If the vehicle is trapped in rising water..... 410

8-2. Steps to take in an emergency

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If your vehicle overheats 457

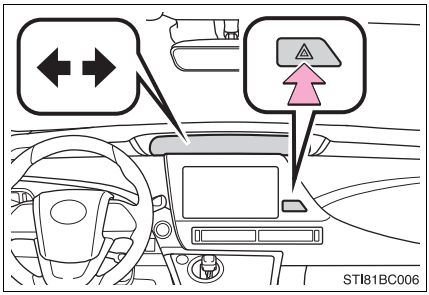
If the vehicle becomes stuck 463

Emergency flashers

The emergency flashers are used to warn other drivers when the vehicle has to be stopped in the road due to a breakdown, etc.

Press the switch.

All the turn signal lights will flash. To turn them off, press the switch once again.



Emergency flashers

If the emergency flashers are used for a long time while the fuel cell system is not operating (while the “READY” indicator is not illuminated), the 12-volt battery may discharge.

If your vehicle has to be stopped in an emergency

Only in an emergency, such as if it becomes impossible to stop the vehicle in the normal way, stop the vehicle using the following procedure:

1 Steadily step on the brake pedal with both feet and firmly depress it.

Do not pump the brake pedal repeatedly as this will increase the effort required to slow the vehicle.

2 Shift the shift position to N.

▶ If the shift position is shifted to N

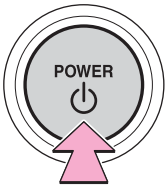
3 After slowing down, stop the vehicle in a safe place by the road.

4 Stop the fuel cell system.

▶ If the shift position cannot be shifted to N

3 Keep depressing the brake pedal with both feet to reduce vehicle speed as much as possible.

4 To stop the fuel cell system, press and hold the power switch for 2 consecutive seconds or more, or press it briefly 3 times or more in succession.



Press and hold for 2 seconds or more, or press briefly 3 times or more

STS81BC001

5 Stop the vehicle in a safe place by the road.

WARNING

■ **If the fuel cell system has to be turned off while driving**

Power assist for the steering wheel will be lost, making the steering wheel heavier to turn. Decelerate as much as possible before turning off the fuel cell system.

If the vehicle is trapped in rising water

In the event the vehicle is submerged in water, remain calm and perform the following.

- Remove the seat belt first.
- If the door can be opened, open the door and exit the vehicle.
- If the door can not be opened, open the window using the power window switch and exit the vehicle through the window.
- If the window can not be opened using the power window switch, remain calm, wait until the water level inside the vehicle rises to the point that the water pressure inside of the vehicle equals the water pressure outside of the vehicle, and then open the door and exit the vehicle.

WARNING

■Using an emergency hammer* for emergency escape

The rear window of this vehicle can be shattered by an emergency hammer* used for emergency escape, however, since the windshield, front side windows and rear side windows are laminated glass they can not be shattered by an emergency hammer*.

*: Contact your Toyota dealer or aftermarket accessory manufacturer for further information about an emergency hammer.

■Escaping the vehicle from the window

There are cases where escaping the vehicle from the window is not possible due to seating position, passenger body type, etc.
When using an emergency hammer, consider your seat location and the size of the window opening to ensure that the opening is accessible and large enough to escape.

If your vehicle needs to be towed

If towing is necessary, we recommend having your vehicle towed by your Toyota dealer or commercial towing service, using a wheel-lift type truck or flatbed truck.
Use a safety chain system for all towing, and abide by all state/provincial and local laws.

Situations when it is not possible to be towed by another vehicle

In the following situations, it is not possible to be towed by another vehicle using cables or chains, as the front wheels may be locked due to the parking lock. Contact your Toyota dealer or commercial towing service.

- There is a malfunction in the shift control system. (→P. 428)
- There is a malfunction in the immobilizer system. (→P. 78)
- There is a malfunction in the smart key system. (→P. 449)
- The 12-volt battery is discharged. (→P. 452)

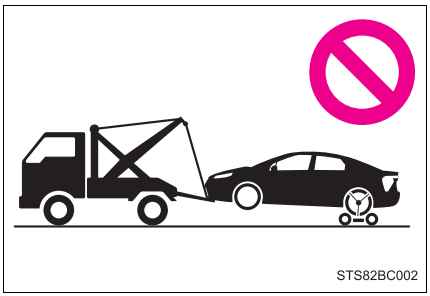
Situations when it is necessary to contact dealers before towing

The following may indicate a problem with your transmission. Contact your Toyota dealer or commercial towing service before towing.

- The fuel cell system warning message shows on the multi-information display and the vehicle does not move.
- The vehicle makes an abnormal sound.

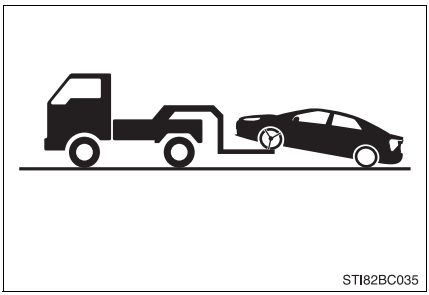
Towing with a sling-type truck

Do not tow with a sling-type truck to prevent body damage.



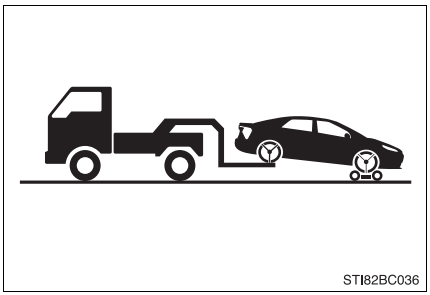
Towing with a wheel-lift type truck

▶ From the front



Release the parking brake.

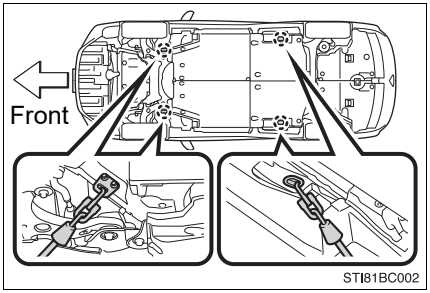
▶ From the rear



Use a towing dolly under the front wheels.

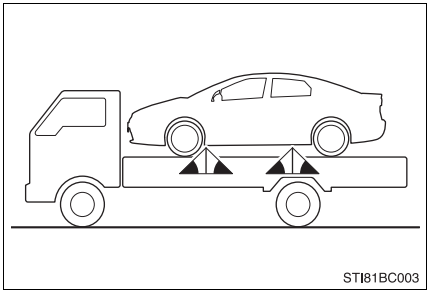
Using a flatbed truck

If your vehicle is transported by a flatbed truck, it should be tied down at the locations shown in the illustration.



If you use chains or cables to tie down your vehicle, the angles shaded in black must be 45°.

Do not overly tighten the tie downs or the vehicle may be damaged.



Emergency towing

If a tow truck is not available in an emergency, your vehicle may be temporarily towed using cables or chains secured to the emergency towing eyelets. This should only be attempted on hard surfaced roads for a short distance at under 18 mph (30 km/h).

A driver must be in the vehicle to steer and operate the brakes. The vehicle's wheels, drivetrain, axles, steering and brakes must be in good condition.

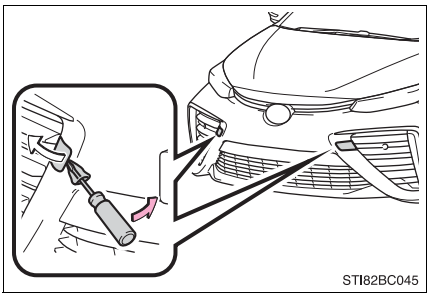
Emergency towing procedure

1 Take out the towing eyelet. (→P. 386,434)

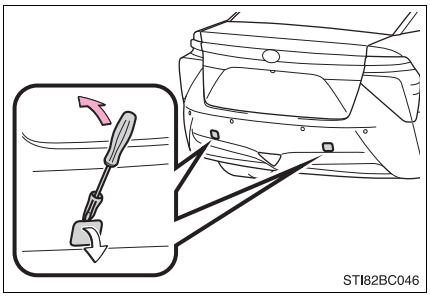
2 Remove the eyelet cover using a flathead screwdriver.

To protect the bodywork, place a rag between the screwdriver and the vehicle body as shown in the illustration.

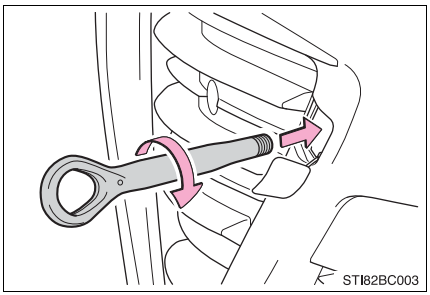
▶ Front



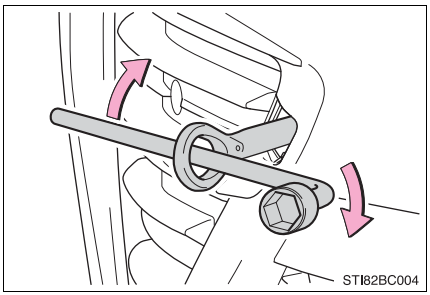
▶ Rear



3 Insert the towing eyelet into the hole and tighten partially by hand.



4 Tighten down the towing eyelet securely using a wheel nut wrench or hard metal bar.



5 Securely attach cables or chains to the towing eyelet.

Take care not to damage the vehicle body.

6 Enter the vehicle being towed and start the fuel cell system.

If the fuel cell system does not start, turn the power switch to ON mode.
Turn off the Parking Support Brake function (for static objects) (if equipped).: →P. 276

7 Shift the shift position to N and release the parking brake.

■ **While towing**

If the fuel cell system is off, the power assist for the brakes and steering will not function, making steering and braking more difficult.

■ **Wheel nut wrench**

Wheel nut wrench is installed in trunk. (→P. 386, 434)

■ **Before transporting or towing in frozen areas**

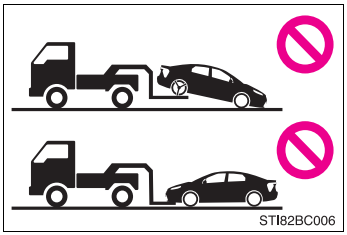
Operate the water release function. Otherwise, the fuel cell system may freeze and the vehicle may not be able to be started. (→P. 190)

WARNING

Observe the following precautions.
Failure to do so may result in death or serious injury.

■ **When towing the vehicle**

Be sure to transport the vehicle with the front wheels raised or with all four wheels raised off the ground. If the vehicle is towed with the front wheels contacting the ground, the drivetrain and related parts may be damaged or electricity generated by the operation of the motor may cause a fire to occur depending on the nature of the damage or malfunction.



■ **While towing**

- When towing using cables or chains, avoid sudden starts, etc., which place excessive stress on the towing eyelets, cables or chains. The towing eyelets, cables or chains may become damaged, broken debris may hit people, and cause serious damage.
- Do not turn the power switch off.
  This may lead to an accident as the front wheels will be locked by the parking lock.

■ **Installing towing eyelets to the vehicle**

Make sure that towing eyelets are installed securely.
If not securely installed, towing eyelets may come loose during towing.

NOTICE

■ **To prevent damage to the vehicle when towing using a wheel-lift type truck**

When raising the vehicle, ensure adequate ground clearance for towing at the opposite end of the raised vehicle. Without adequate clearance, the vehicle could be damaged while being towed.

■ **To prevent damage to the vehicle when towing with a sling-type truck**

Do not tow with a sling-type truck, either from the front or rear.

■ **To prevent damage to the vehicle during emergency towing**

Do not secure cables or chains to the suspension components.

If you think something is wrong

If you notice any of the following symptoms, your vehicle probably needs adjustment or repair. Contact your Toyota dealer as soon as possible.

Visible symptoms

- Fluid leaks under the vehicle.
  (Water dripping from the air conditioning after use is normal.)
- Flat-looking tires or uneven tire wear
- The high coolant temperature warning light flashes or comes on

Audible symptoms

- Excessive tire squeal when cornering
- Strange noises related to the suspension system
- Pinging or other noises related to the fuel cell system

Operational symptoms

- Stumbling or running roughly
- Appreciable loss of power
- Vehicle pulls heavily to one side when braking
- Vehicle pulls heavily to one side when driving on a level road
- Loss of brake effectiveness, spongy feeling, pedal almost touches the floor

If a warning light turns on or a warning buzzer sounds

Calmly perform the following actions if any of the warning lights comes on or flashes. If a light comes on or flashes, but then goes off, this does not necessarily indicate a malfunction in the system. However, if this continues to occur, have the vehicle inspected by your Toyota dealer.

Warning light and warning buzzer list

Warning light	Warning light/Details/Actions
H2	**Hydrogen leak warning light (warning buzzer)** When a hydrogen gas leak is detected, a buzzer sounds, a light comes on, and a warning message is displayed on the multi-information display. → **P. 93**
BRAKE (U.S.A.) (Red) (Canada)	**Brake system warning light (warning buzzer)*1** Indicates that: • The brake fluid level is low; or • The brake system is malfunctioning → **Immediately stop the vehicle in a safe place and contact your Toyota dealer. Continuing to drive the vehicle may be dangerous.**
	Charging system warning light Indicates a malfunction in the vehicle's charging system → **Immediately stop the vehicle in a safe place and contact your Toyota dealer.**
	High coolant temperature warning light Indicates that the coolant temperature is abnormal →P. 457 → **Immediately stop the vehicle in a safe place and contact your Toyota dealer.**
(Yellow)	**Brake system warning light** Indicates a malfunction in: • The regenerative braking system; or • The electronically controlled brake system → **Have the vehicle inspected by your Toyota dealer immediately.**

Warning light	Warning light/Details/Actions
	SRS warning light Indicates a malfunction in: • The SRS airbag system; • The front passenger occupant classification system; or • The seat belt pretensioner system → **Have the vehicle inspected by your Toyota dealer immediately.**
ABS (U.S.A.) (Canada)	**ABS warning light** Indicates a malfunction in: • The ABS; or • The brake assist system → **Have the vehicle inspected by your Toyota dealer immediately.**
(Red/Yellow)	**Electric power steering system warning light (warning buzzer)** Indicates a malfunction in the EPS (Electric Power Steering) system → **Have the vehicle inspected by your Toyota dealer immediately.**
(Yellow)	**LDA indicator (warning buzzer)** Indicates a malfunction in the LDA (Lane Departure Alert) → **Follow the instructions displayed on the multi-information display. (→P. 247)**
OFF (Flashes)	**PKSB OFF indicator (warning buzzer)** When a buzzer sounds: Indicates a malfunction in the Parking Support Brake function (for static objects) → **Have the vehicle inspected by your Toyota dealer immediately.** When a buzzer does not sound: Indicates that the system is temporarily unavailable, possibly due to a sensor being dirty or covered with ice, etc. → **Clear the dirt, etc.** When removing and installing the 12-volt battery, the system needs to be initialized. → **P. 283**

Warning light	Warning light/Details/Actions
OFF (Flashes or illuminates)	**PCS warning light** When a buzzer sounds simultaneously: Indicates a malfunction has occurred in the PCS (Pre-Collision System). → **Have the vehicle inspected by your Toyota dealer immediately.** When a buzzer does not sound: The PCS (Pre-Collision System) has become temporarily unavailable, corrective action may be necessary. → **Follow the instructions displayed on the multi-information display. (→P. 224, 426)** If the PCS (Pre-Collision System) or VSC (Vehicle Stability Control) system is disabled, the PCS warning light will illuminate. → **P. 237**
	Slip indicator Indicates a malfunction in: • The VSC system; • The TRAC system; or • The hill-start assist control system The light will flash when the ABS, VSC or TRAC system is operating. → **Have the vehicle inspected by your Toyota dealer immediately.**
PARK (U.S.A.) (P) (Canada)	**Parking brake warning light (warning buzzer)*2** Parking brake has not been fully released → **Operate the parking brake once again.** If the light turns off after the parking brake is fully released, the system is operating normally.
	Open door warning light (warning buzzer)*3 Indicates that a door or the trunk is not fully closed → **Check that all the doors and the trunk are closed.**
	Low fuel level warning light Indicates that remaining fuel is approximately 2.4 lb. (1.1 kg) or less → **Refuel the vehicle.**

Warning light	Warning light/Details/Actions
	Driver's and front passenger's seat belt reminder light (warning buzzer)*4 Warns the driver and/or front passenger to fasten their seat belts → **Fasten the seat belt.** **If the front passenger's seat is occupied, the front passenger's seat belt also needs to be fastened to make the warning light (warning buzzer) turn off.**
	Master warning light A buzzer sounds and the warning light comes on and flashes to indicate that the master warning system has detected a malfunction. → **P. 426**
	Tire pressure warning light Indicates low tire pressure due to one of the following: • Flat tire • Natural causes • The tire pressure warning system is malfunctioning → **Immediately stop the vehicle in a safe place. Handling method (→P. 423)**
	Brake Override System/Drive-Start Control/Parking Support Brake function (for static objects) (if equipped)*5 Indicates that: • The Brake Override System is operating; • The Brake Override System is malfunctioning (with warning buzzer); • The Drive-Start Control is operating (with warning buzzer); • The Drive-Start Control is malfunctioning (with warning buzzer); or • The Parking Support Brake function (for static objects) (if equipped) is operating (with warning buzzer) (→P. 279) → **Follow the instruction that are displayed on the multi-information display.**

*1: Brake warning buzzer:
When there is a malfunction that leads to a decline in the brake effectiveness, a buzzer sounds while at the same time a warning light comes on.

*2: Parking brake engaged warning buzzer:
→P. 200

*3: Open door warning buzzer:

A buzzer will sound if the vehicle reaches a speed of 3 mph (5 km/h) or more with any door open.

*4: Driver's and front passenger's seat belt warning buzzer:

The driver's seat belt warning buzzer sounds to alert the driver that his or her seat belt is not fastened. Once the power switch is turned to ON mode, the buzzer sounds for 6 seconds. If the vehicle reaches a speed of 12 mph (20 km/h), the buzzer sounds once. If the seat belt is still unfastened after 24 seconds, the buzzer will sound intermittently for 10 seconds. Then, if the seat belt is still unfastened, the buzzer will sound in a different tone for 20 more seconds.

The front passenger's seat belt warning buzzer sounds to alert the front passenger that his or her seat belt is not fastened. The buzzer sounds once if the vehicle reaches a speed of 12 mph (20 km/h). If the seat belt is still unfastened after 24 seconds, the buzzer will sound intermittently for 10 seconds. Then, if the seat belt is still unfastened, the buzzer will sound in a different tone for 20 more seconds.

*5: This light illuminates on the multi-information display.

■ **SRS warning light**

This warning light system monitors the airbag sensor assembly, front impact sensors, side impact sensors (front door), side impact sensors (front), side impact sensors (rear), driver's seat position sensor, driver's seat belt buckle switch, front passenger occupant classification system (ECU and sensors), "AIR BAG ON" indicator light, "AIR BAG OFF" indicator light, front passenger's seat belt buckle switch, seat belt pretensioners, airbags, interconnecting wiring and power sources. (→P. 38)

■ **Front passenger detection sensor, seat belt reminder and warning buzzer**

- If luggage is placed on the front passenger seat, the front passenger detection sensor may cause the warning light to flash and the warning buzzer to sound even if a passenger is not sitting in the seat.
- If a cushion is placed on the seat, the sensor may not detect a passenger, and the warning light may not operate properly.

■ **Electric power steering system warning light (warning buzzer)**

When the 12-volt battery charge becomes insufficient or the voltage temporarily drops, the electric power steering system warning light may come on and the warning buzzer may sound.

■ **When the tire pressure warning light comes on**

Inspect the appearance of the tire to check that the tire is not punctured.
If the tire is punctured: →P. 432
If the tire is not punctured:

After turning the power switch to off, turn it to ON mode again and make sure the tire pressure warning light comes on or blinks.

▶ The tire pressure warning light comes on

1 After the temperature of the tires have lowered sufficiently, check the tire inflation pressure and adjust it to the specified level.

2 If the warning light does not go out even after several minutes, check that the tire inflation pressure is at the specified level.

If the warning light does not go out even after several minutes, have the vehicle inspected by your Toyota dealer immediately.

▶ The tire pressure warning light is blinking for 1 minute, and then comes on

Malfunction in the tire pressure warning system. Have the system checked by your Toyota dealer immediately.

■ **The tire pressure warning light may come on due to natural causes**

The tire pressure warning light may come on due to natural causes such as natural air leaks and tire inflation pressure changes caused by temperature. In this case, adjusting the tire inflation pressure will turn off the warning light (after a few minutes).

■ **Conditions that the tire pressure warning system may not function properly**

→P. 382

Warning buzzer

In some cases, the buzzer may not be heard due to being in a noisy location or audio sound.

WARNING

If both the ABS and the brake system warning lights remain on

Stop your vehicle in a safe place immediately and contact your Toyota dealer. The vehicle will become extremely unstable during braking, and the ABS system may fail, which could cause an accident resulting in death or serious injury.

When the electric power steering system warning light comes on

When the light comes on yellow, the assist to the power steering is restricted. When the light comes on red, the assist to the power steering is lost and handling operations of the steering wheel become extremely heavy. When steering wheel operations are heavier than usual, grip the steering wheel firmly and operate it using more force than usual.

If the tire pressure warning light comes on

Handling method (→P. 423)

Be sure to observe the following precautions. Failure to do so could cause a loss of vehicle control and result in death or serious injury.

- Stop your vehicle in a safe place as soon as possible. Adjust the tire inflation pressure immediately.
- If the tire pressure warning light comes on even after tire inflation pressure adjustment, it is probable that you have a flat tire. Check the tires. If a tire is flat, repair the flat tire by using emergency tire puncture repair kit.
- Avoid abrupt maneuvering and braking. If the vehicle tires deteriorate, you could lose control of the steering wheel or the brakes.

If a blowout or sudden air leakage should occur

The tire pressure warning system may not activate immediately.

WARNING

Maintenance of the tires

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label (tire and load information label). (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label [tire and load information label], you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS-tire pressure warning system) that illuminates a low tire pressure telltale (tire pressure warning light) when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale (tire pressure warning light) illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS (tire pressure warning system) is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale (tire pressure warning light).

Your vehicle has also been equipped with a TPMS (tire pressure warning system) malfunction indicator to indicate when the system is not operating properly. The TPMS (tire pressure warning system) malfunction indicator is combined with the low tire pressure telltale (tire pressure warning light). When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended.

TPMS (tire pressure warning system) malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS (tire pressure warning system) from functioning properly. Always check the TPMS (tire pressure warning system) malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS (tire pressure warning system) to continue to function properly.

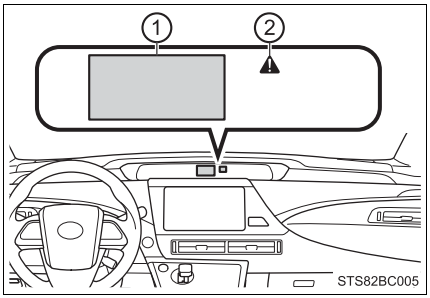
If a warning message is displayed

The multi-information display shows warnings of system malfunctions, incorrectly performed operations, and messages that indicate a need for maintenance. When a message is shown, perform the correction procedure appropriate to the message.

① Multi-information display

② Master warning light

The master warning light also comes on or flashes in order to indicate that a message is currently being displayed on the multi-information display.



If any of the warning messages are shown again after the following actions have been performed, contact your Toyota dealer.

Messages and warnings

The warning lights and warning buzzers operate as follows depending on the content of the message. If a message indicates the need for inspection by a dealer, have the vehicle inspected by your Toyota dealer immediately.

	System warning light	Warning buzzer*	Warning
Comes on	—	Sounds	Indicates an important situation, such as when a system related to driving is malfunctioning or that danger may result if the correction procedure is not performed
—	Comes on or flashes	Sounds	Indicates an important situation, such as when the systems shown on the multi-information display may be malfunctioning
Flashes	—	Sounds	Indicates a situation, such as when damage to the vehicle or danger may result

	System warning light	Warning buzzer*	Warning
Comes on	—	Does not sound	Indicates a condition, such as malfunction of electrical components, their condition, or indicates the need for maintenance
Flashes	—	Does not sound	Indicates a situation, such as when an operation has been performed incorrectly, or indicates how to perform an operation correctly

*: A buzzer sounds the first time a message is shown on the multi-information display.

■ If “Visit Your Dealer” is shown

The system or part shown on the multi-information display is malfunctioning. Have the vehicle inspected by your Toyota dealer.

■ If a message about an operation is shown

- If a message about an operation of the accelerator pedal or brake pedal is shown
  A warning message about an operation of the brake pedal may be shown while the driving assist systems such as PCS (Pre-Collision System) or the dynamic radar cruise control is operating. If a warning message is shown, be sure to decelerate the vehicle or follow an instruction shown on the multi-information display.
- A warning message is shown when Drive-Start Control, Brake Override System or Parking Support Brake function (for static objects) (if equipped) operates (→P. 173, 279). Follow the instructions on the multi-information display.
- If a message about an operation of the power switch is shown
  An instruction for operation of the power switch is shown when the incorrect procedure for starting the fuel cell system is performed or the power switch is operated incorrectly. Follow the instructions shown on the multi-information display to operate the power switch again.
- If a message about a shift operation is shown
  To prevent the shift position from being selected incorrectly or the vehicle from moving unexpectedly, the shift position may be changed automatically (→P. 196) or operating the shift lever or P position switch may be required.
  In this case, change the shift position following the instructions on the multi-information display.
- If a message or image about an open/close state of a part or replenishment of a consumable is shown
  Confirm the part indicated by the multi-information display or a warning light, and then perform the coping method such as closing the open door or replenishing a consumable.

■ **If “High FC Temperature Reduced Power” is displayed**

1 Lower the speed while check the safety, and run the vehicle like this for several minutes.

2 If the message goes off, the vehicle can be driven as is, since it temporarily overheated.
This message may be displayed when driving under severe operating conditions.
(For example, when driving up a long steep hill.)

■ **If “FC System Shutdown due to Freezing conditions Stop Your Vehicle in a Safe Place and Contact Your Dealer” is displayed.**

→P. 189

■ **If “Maintenance Required for Hybrid Battery Cooling Parts at Your Dealer” is displayed**

The filter may be clogged, the air intake vent may be blocked or there may be a gap in the duct. Have maintenance performed on the traction battery cooling component at your Toyota dealer.

■ **If “Shift to P Before Exiting Vehicle” is displayed**

Message is displayed when the driver’s door is opened without turning the power switch to off with the shift position in any position other than P.
Shift the shift position to P.

■ **If “Shift is in N Release Accelerator Before Shifting” is displayed**

Message is displayed when the accelerator pedal has been depressed and the shift position is in N. Release the accelerator pedal and shift the shift position to D or R.

■ **If “Press Brake When Vehicle is Stopped FC System may Overheat” is displayed**

Message is displayed when the accelerator pedal is depressed to maintain the vehicle position when stopped on an upward slope, etc.
If this continues, the fuel cell system may overheat.
Release the accelerator pedal and depress the brake pedal.

■ **If “Accelerator Pedal is Pressed Check The Accelerator Pedal” is displayed**

The accelerator pedal may be stuck.
If the message does not disappear even when the foot has been removed from the accelerator pedal, check that the accelerator pedal is not stuck.

■ **If “Ion Filter Maintenance Required Visit Your Dealer” is displayed**

Ion filter replacement is necessary. Contact your Toyota dealer.

■ **If “Shift System Malfunction Stop Your Vehicle in a Safe Place then See Owner’s Manual” is displayed**

The shift position may not be able to be shifted. Stop the vehicle in a safe place.
Contact your Toyota dealer immediately.

■ If “Shift System Malfunction Shifting Unavailable See Owner’s Manual” is displayed

The shift position may not be able to be shifted from P to a position other than P.
Contact your Toyota dealer immediately.

■ If “Shift System Malfunction When Parking, Apply Parking Brake Securely then See Owner’s Manual” is displayed

- The parking lock mechanism may not operate.
- The automatically P position selection function (→P. 191) may not operate.
- The power switch may not turn off. In that case, engage the parking brake and the switch can be turned to off.
- The fuel cell system may not be able to be started.

When parking, choose a flat surface and be sure to engage the parking brake.
Have the vehicle inspected by your Toyota dealer immediately.

■ If “[P] Switch Malfunction When Parking, Apply Parking Brake Securely then See Owner’s Manual” is displayed

The shift position may not switch to P even though the P position switch is pressed.
When parking, choose a flat surface and be sure to engage the parking brake.
Have the vehicle inspected by your Toyota dealer immediately.

■ If “Shift System Malfunction See Owner’s Manual” is displayed

If left as is, the system may not operate properly and an unexpected hazard or damage may occur.
Have the vehicle inspected by your Toyota dealer immediately.

■ If “Insufficient Aux Battery Charge When Parking, Apply Parking Brake Securely then See Owner’s Manual” is displayed

- The parking lock mechanism may not operate.
- The power switch may not turn off. In that case, engage the parking brake and the switch can be turned to off.
- Even after charging the 12-volt battery, the warning message may continue to be displayed until the shift position is shifted from P to a position other than P.
- The fuel cell system may not be able to be started.

When parking, choose a flat surface and be sure to engage the parking brake.
Have the 12-volt battery charged or replaced.

■ **If “Insufficient Aux Battery Charge Shift is Unavailable See Owner’s Manual” is displayed**

Due to the voltage of the 12-volt battery being in a declined condition, when trying to shift the shift position the warning message is displayed.
Have the 12-volt battery charged or replaced.

■ **If “Shifting Temporarily Unavailable Wait a Moment and Try Again” is displayed**

A warning message is displayed when the shift lever and P position switch are repeatedly operated over a short period of time.
Shift the shift position after waiting for short amount of time.

■ **If “Shifting to [Br] Mode Unavailable Shift to [D] once, then Shift to [Br]” is displayed**

When the shift position is in P or N, a warning message is displayed when trying to shift to Br mode.
Shift to Br mode after the shift position had been set to D.

■ **If “Shifted to [N] Position Shift to [D] once, then Shift to [Br]” is displayed**

When the shift position is in R, a warning message is displayed when trying to shift to Br mode.
The shift position is changed to N.
Shift to Br Mode after the shift position has been set to D.

■ **If “Shifting to [D] or [R] Position Unavailable Try to Shift after FC System has Started” is displayed**

When the power switch is in ON mode (“READY” indicator switched off), a warning message is displayed when trying to shift the shift position to R or D, or shift to Br mode.
After starting the fuel cell system, shift the shift position to R or D, or shift to Br mode.

■ **If “Shifting Unavailable Press Brake Pedal before Shifting” is displayed**

A warning message is displayed when attempting to shift the shift position without depressing the brake pedal.
Depress the brake pedal and shift the shift position when changing it from P.

■ **If “Shifted to [N] Position Stop Your Vehicle before Shifting to [D]” is displayed**

While the vehicle is moving backward, a warning message is displayed when attempting to shift the shift position to D.
The shift position is changed to N.
Shift the shift position after stopping the vehicle.

■ **If “Shifted to [N] Position Stop Your Vehicle before Shifting to [R]” is displayed**

When the vehicle is moving forward, a warning message is displayed when attempting to shift the shift position to R.
The shift position is changed to N.
Shift the shift position after stopping the vehicle.

■ **If “Shifted to [N] Position To Shift to [P], Stop Your Vehicle and Press [P] Switch” is displayed**

When the vehicle is moving, a warning message is displayed when the P position switch is operated and attempting to shift the shift position to P.
The shift position is changed to N.
Operate the P position switch after the vehicle has been brought to a complete stop.

■ **If “Smart Key System Malfunction See Owner’s Manual” is displayed**

→P. 145

■ **If “Front Camera Unavailable” or “Front Camera Unavailable See Owner’s Manual” is displayed**

The following systems may be suspended until the problem shown in the message is resolved. (→P. 224)

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert with steering control)
- Automatic High Beam
- RSA (Road Sign Assist) (if equipped)
- Dynamic radar cruise control

■ **If “Radar Cruise Control Unavailable See Owner's Manual” is shown**

The dynamic radar cruise control system is suspended temporarily or until the problem shown in the message is resolved. (causes and coping methods: →P. 224)

■ **If “Radar Cruise Control Unavailable” is shown**

The dynamic radar cruise control system cannot be used temporarily. Use the system when it becomes available again.

■ **If the shift position cannot be changed or the power switch is turned to ACCESSORY mode even if trying to turn the power switch off when a warning message is shown**

If the 12-volt battery is discharged or the shift control system is malfunctioning, the followings may occur.

- The shift position may not be changed to P.
  When parking, stop the vehicle on level ground and apply the parking brake firmly.
- The fuel cell system may not start.
- The power switch may be turned to ACCESSORY mode even if trying to turn the power switch off.
  In this case, the power switch may be turned off after applying the parking brake.
- The automatic P position selection function (→P. 191) may not operate.
  Before turning the power switch off, be sure to press the P position switch and check that the shift position is in P by the shift position indicator or P position switch indicator.

■ **Warning buzzer**

→P. 424

If you have a flat tire

Your vehicle is not equipped with a spare tire, but instead is equipped with an emergency tire puncture repair kit.
A puncture caused by a nail or screw passing through the tire tread can be repaired temporarily using the emergency tire puncture repair kit. (The kit contains a bottle of sealant. The sealant can be used only once to temporarily repair one tire without removing the nail or screw from the tire.)
After temporarily repairing the tire with the repair kit, have the tire repaired or replaced by your Toyota dealer.

WARNING

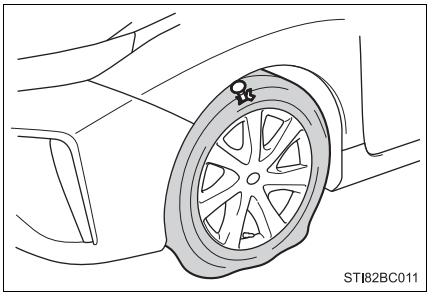
■ **If you have a flat tire**

Do not continue driving with a flat tire.
Driving, even a short distance, with a flat tire can damage the tire, the wheel, and other parts beyond repair, which could result in an accident.

Before repairing the tire

- Stop the vehicle in a safe place on a hard, flat surface.
- Set the parking brake.
- Shift the shift position to P.
- Stop the fuel cell system.
- Turn on the emergency flashers. (→P. 408)
- Check the degree of the tire damage.

A tire should only be repaired with the emergency tire puncture repair kit if the damage is caused by a nail or screw passing through the tire tread.



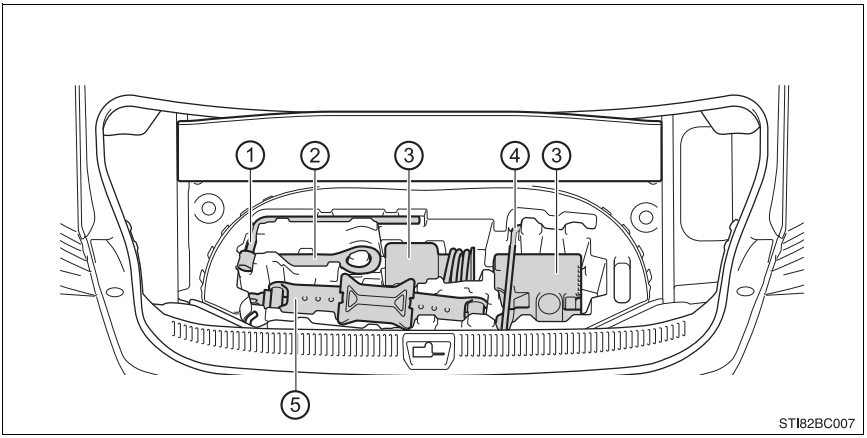
- Do not remove the nail or screw from the tire. Removing the object may widen the opening and disenable emergency repair with the repair kit.
- To avoid sealant leakage, move the vehicle until the area of the puncture, if known, is positioned at the top of the tire.

■A flat tire that cannot be repaired with the emergency tire puncture repair kit

In the following cases, the tire cannot be repaired with the emergency tire puncture repair kit. Contact your Toyota dealer.

- When the tire is damaged due to driving without sufficient air pressure
- When there are any cracks or damage at any location on the tire, such as on the side wall, except the tread
- When the tire is visibly separated from the wheel
- When the cut or damage to the tread is 0.16 in. (4 mm) long or more
- When the wheel is damaged
- When two or more tires have been punctured
- When more than two sharp objects such as nails or screws have passed through the tread on a single tire
- When the sealant has expired

Location of the emergency tire puncture repair kit, tools and jack



① Wheel nut wrench

② Towing eyelet

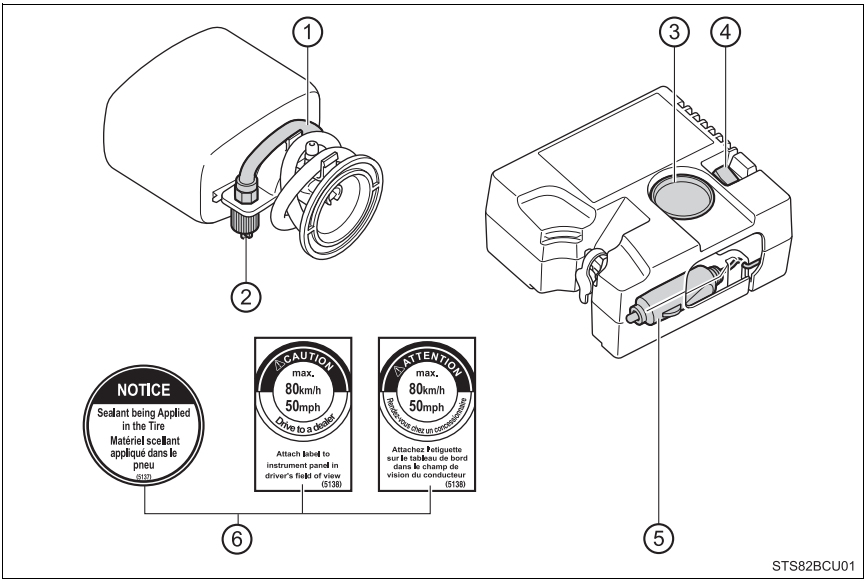
③ Emergency tire puncture repair kit

④ Jack handle

⑤ Jack*

*: Use of the jack (→P. 388)

Emergency tire puncture repair kit components



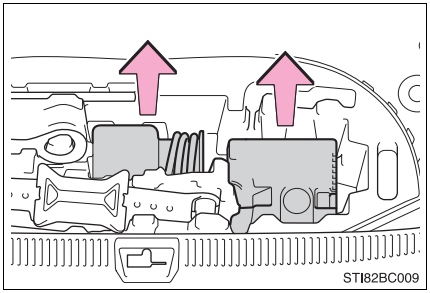
① Hose
② Air release cap
③ Air pressure gauge
④ Compressor switch
⑤ Power plug
⑥ Stickers

Taking out the emergency tire puncture repair kit

1 Remove the luggage mat.

2 Remove the jack handle.

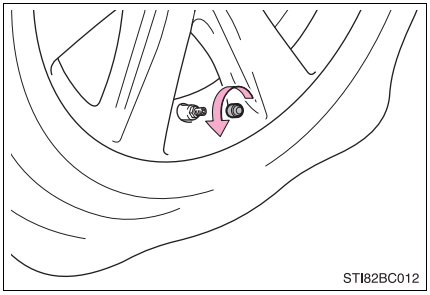
3 Take out the emergency tire puncture repair kit.



Emergency repair method

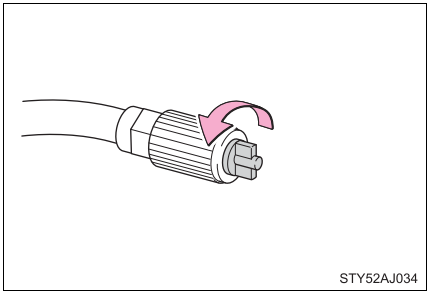
1 Take out the repair kit from the plastic bag.

2 Remove the valve cap from the valve of the punctured tire.



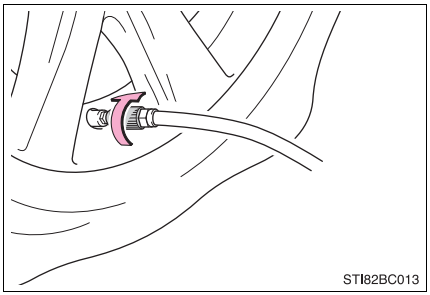
3 Remove the air release cap from the hose.

You will use the air release cap again. Therefore keep it in a safe place.

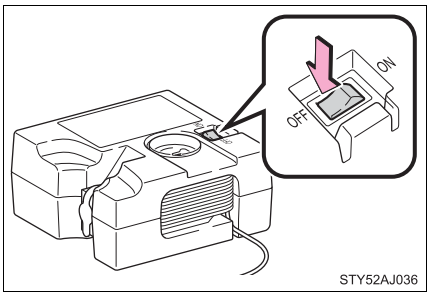


4 Connect the hose to the valve.

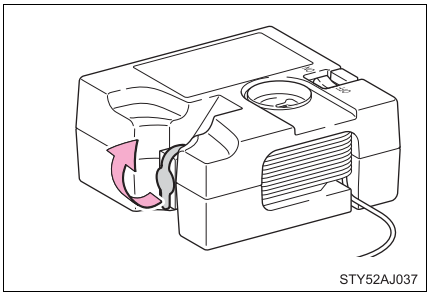
Screw the end of the hose clockwise as far as possible.



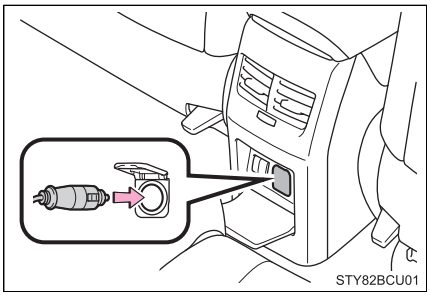
5 Make sure that the compressor switch is off.



6 Remove the rubber stopper from the compressor.

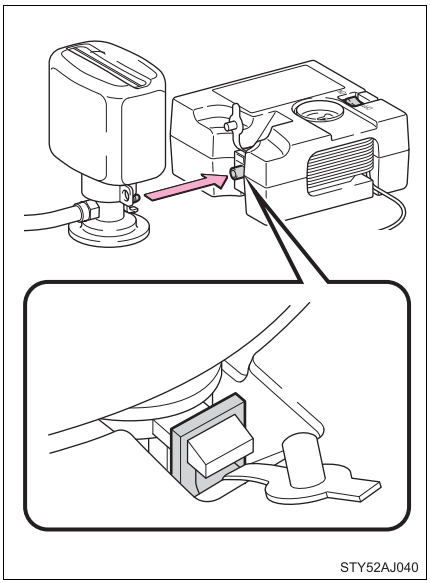


7 Connect the power plug to the power outlet socket. (→P. 331)



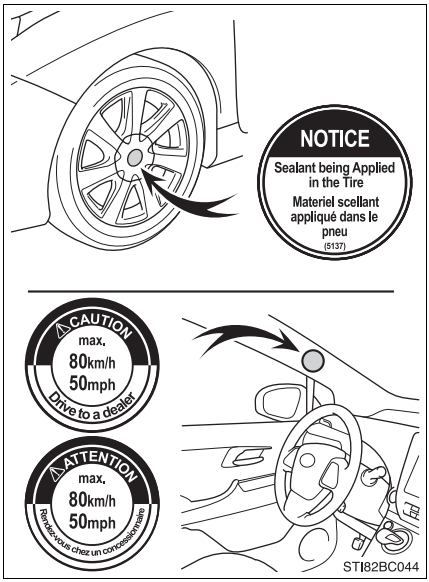
8 Connect the bottle to the compressor.

Make sure that the bottle is securely connected.



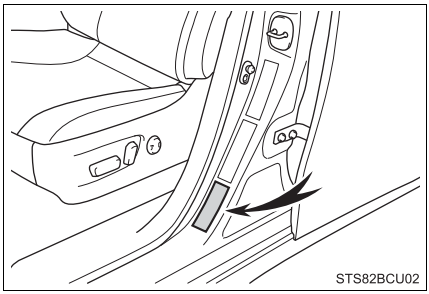
9 Attach the 2 stickers as shown.

Remove any dirt and moisture from the wheel before attaching the sticker.



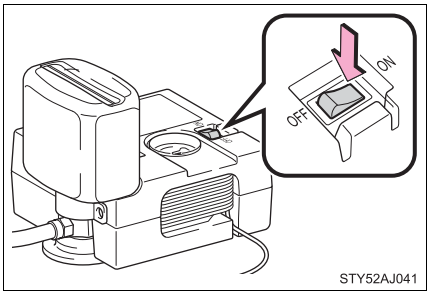
10 Check the specified tire inflation pressure.

Tire inflation pressure is specified on the label as shown. (→P. 471)



11 Start the fuel cell system. (→P. 186)

12 To inject the sealant and inflate the tire, turn the compressor switch on.



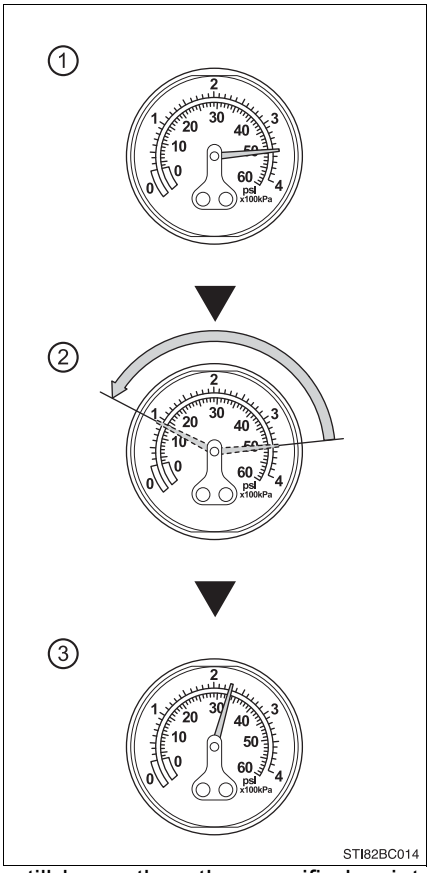
13 Inflate the tire until the specified air pressure is reached.

① The sealant will be injected and the pressure will spike to 44 psi (300 kPa, 3.1 kgf/cm^2 or bar) or 58 psi (400 kPa, 4.1 kgf/cm^2 or bar), and then gradually decrease.

② The air pressure gauge will display the actual tire inflation pressure about 1 minute (15 minutes at low temperature) after the switch is turned on.

③ Inject to specified air pressure.

- Turn the compressor switch off and then check the tire inflation pressure. Being careful not to over inflate, check and repeat the inflation procedure until the specified tire inflation pressure is reached.



- If the tire inflation pressure is still lower than the specified point after inflation for 10 minutes (40 minutes at low temperature) with the switch on, the tire is too damaged to be repaired. Turn the compressor switch off and contact your Toyota dealer.
- If the tire inflation pressure exceeds the specified air pressure, let out some air to adjust the tire inflation pressure. (→P. 471)

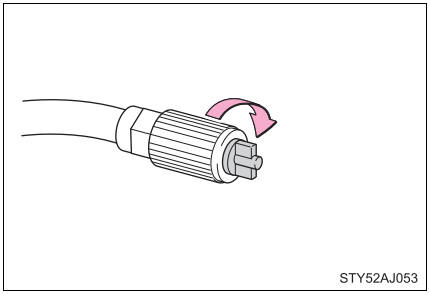
14 With the compressor switch off, disconnect the hose from the valve on the tire and then pull out the power plug from the power outlet socket.

Some sealant may leak when the hose is removed.

15 Install the valve cap onto the valve of the emergency repaired tire.

16 Attach the air release cap to the end of the hose.

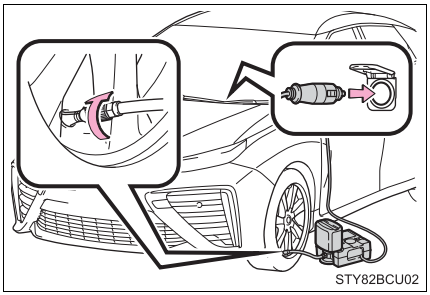
If the air release cap is not attached, the sealant may leak and the vehicle may get dirty.



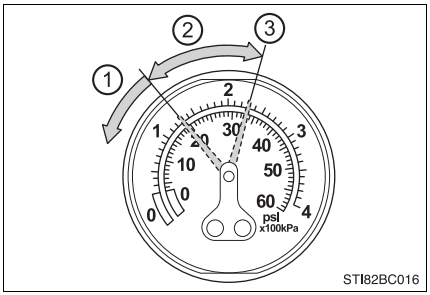
17 Temporarily store the bottle in the trunk while it is connected to the compressor.

18 To spread the liquid sealant evenly within the tire, immediately drive safely for about 3 miles (5 km) below 50 mph (80 km/h).

19 After driving for about 3 miles (5 km), stop your vehicle in a safe place on a hard, flat surface and remove the air release cap from the hose before reconnecting the repair kit.



20 Turn the compressor switch on and wait for several seconds, and then turn it off. Check the tire inflation pressure.



① If the tire inflation pressure is under 19 psi (130 kPa, 1.3 kgf/cm^2 or bar): The puncture cannot be repaired. Contact your Toyota dealer.

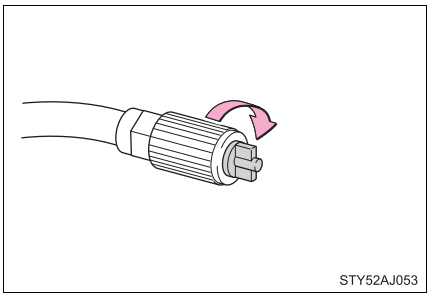
② If the tire inflation pressure is 19 psi (130 kPa, 1.3 kgf/cm^2 or bar) or higher, but less than the specified air pressure: Proceed to step 21.

③ If the tire inflation pressure is the specified air pressure: Proceed to step 22.

21 Turn the compressor switch on to inflate the tire until the specified air pressure is reached. Drive for about 3 miles (5 km) and then perform step 19.

22 Attach the air release cap to the end of the hose.

If the air release cap is not attached, the sealant may leak and the vehicle may get dirty.



23 Store the bottle in the trunk while it is connected to the compressor.

24 Taking precautions to avoid sudden braking, sudden acceleration and sharp turns, drive carefully at under 50 mph (80 km/h) to the nearest Toyota dealer tire repair or replacement.

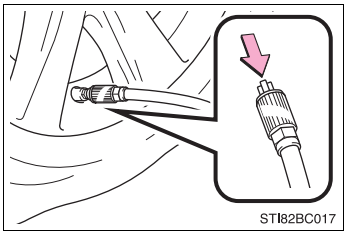
Emergency tire puncture repair kit

- The sealant stored in the emergency tire puncture repair kit can be used only once to temporarily repair a single tire. If the sealant has been used and needs to be replaced, purchase a new bottle at your Toyota dealer. The compressor is reusable.
- The sealant can be used when the outside temperature is from -40 °F (-40 °C) to 140 °F (60 °C).
- The repair kit is exclusively designed for size and type of tires originally installed on your vehicle. Do not use it for tires that a different size than the original ones, or for any other purposes.
- The sealant has a limited lifespan. The expiry date is shown on the bottle. The sealant should be replaced before the expiry date. Purchase a new bottle at your Toyota dealer for replacement.
- If the sealant gets on your clothes, it may stain.
- If the sealant adheres to a wheel or the surface of the vehicle body, the stain may not be removable if it is not cleaned at once. Immediately wipe away the sealant with a wet cloth.
- During operation of the repair kit, a loud operation noise is produced. This does not indicate a malfunction.
- Do not use to check or to adjust the tire pressure.

■ If the tire is inflated to more than the specified air pressure

1 Disconnect the hose from the valve.

2 Install the air release cap to the end of the hose and push the protrusion on the air release cap into the tire valve to let some air out.



3 Disconnect the hose from the valve, remove the air release cap from the hose and then reconnect the hose.

4 Turn the compressor switch on and wait for several seconds, then turn it off. Check that the air pressure indicator shows the specified air pressure. (→P. 471)
If the air pressure is under the designated pressure, turn the compressor switch on again and repeat the inflation procedure until the specified air pressure is reached.

■ After a tire is repaired with the emergency tire puncture repair kit

- The tire pressure warning valve and transmitter should be replaced.
- Even if the tire inflation pressure is at the recommended level, the tire pressure warning light may come on/flash.

■ Note for checking the emergency tire puncture repair kit

Check the sealant expiry date occasionally.
The expiry date is shown on the bottle. Do not use sealant whose expiry date has already passed. Otherwise, repairs conducted using the emergency tire puncture repair kit may not be performed properly.

WARNING

■ Caution while driving

- Store the repair kit in the trunk.
  Otherwise, the repair kit may fly out and break in events such as sudden braking, and may cause an accident.
- The repair kit is exclusively only for your vehicle.
  Do not use repair kit on other vehicles, which could lead to an accident causing death or serious injury.
- Do not use repair kit for tires that are different size than the original ones, or for any other purpose. If the tires have not been completely repaired, it could lead to an accident causing death or serious injury.

WARNING

■ **Precautions for use of the sealant**

- Ingesting the sealant is hazardous to your health. If you ingest sealant, consume as much water as possible, and then immediately consult a doctor.
- If sealant gets in eyes or adheres to skin, immediately wash it off with water. If discomfort persists, consult a doctor.

■ **When fixing the flat tire**

- Stop your vehicle in a safe and flat area.
- Do not touch the wheels or the area around the brakes immediately after the vehicle has been driven.
  After the vehicle has been driven, the wheels and the area around the brakes may be extremely hot. Touching these areas with hands, feet or other body parts may result in burns.
- Connect the valve and hose securely with the tire installed on the vehicle.
- If the hose is not properly connected to the valve, air leakage may occur or sealant may be sprayed out.
- Follow the operation procedure to repair the tire. If the procedures are not followed, the sealant may spray out.
- If the hose comes off the valve while inflating the tire, there is a risk that the hose will move abruptly due to air pressure.
- After inflation of the tire has completed, the sealant may splatter when the hose is disconnected or some air is let out of the tire.
- Keep back from the tire while it is being repaired, as there is a chance of it bursting while the repair operation is being performed. If you notice any cracks or deformation of the tire, turn off the compressor switch and stop the repair operation immediately.
- The repair kit may overheat if operated for a long period of time. Do not operate the repair kit continuously for more than 40 minutes.
- Parts of the repair kit become hot during operation. Be careful handling the repair kit during and after operation. Do not touch the metal part connecting the bottle and the compressor. It will be extremely hot.
- Do not attach the vehicle speed warning sticker to an area other than the one indicated. If the sticker is attached to an area where an SRS airbag is located, such as the pad of the steering wheel, it may prevent the SRS airbag from operating properly.

WARNING

■ Driving to spread the liquid sealant evenly

Observe the following precautions to reduce the risk of accidents. Failure to do so may result in a loss of vehicle control and cause death or serious injury.

- Drive the vehicle carefully at a low speed. Be especially careful when turning and cornering.
- If the vehicle does not drive straight or you feel a pull through the steering wheel, stop the vehicle and check the following:
  - Tire condition. The tire may have separated from the wheel.
  - Tire inflation pressure. If tire inflation pressure is 19 psi (130 kPa, 1.3 kgf/cm^2 or bar) or less, this may indicate severe tire damage.

NOTICE

■ **When performing an emergency repair**

- A tire should only be repaired with the emergency tire puncture repair kit if the damage is caused by a sharp object such as nail or screw passing through the tire tread.
  Do not remove the sharp object from the tire. Removing the object may widen the opening and disenable emergency repair with the repair kit.
- The repair kit is not waterproof. Make sure that the repair kit is not exposed to water, such as when it is being used in the rain.
- Do not put the repair kit directly onto dusty ground such as sand at the side of the road. If the repair kit vacuums up dust etc., a malfunction may occur.

■ **Handling the emergency tire puncture repair kit**

- The repair kit power source should be 12 V DC suitable for vehicle use. Do not connect the repair kit to any other source.
- If organic substances such as benzene or gasoline splatters on the repair kit, the repair kit may deteriorate. Take care not to allow organic substances to contact it.
- Place the repair kit in a storage to prevent it from being exposed to dirt or water.
- Store the repair kit in the assigned place out of reach of children.
- Do not disassemble or modify the repair kit. Do not subject parts such as the air pressure indicator to impacts. This may cause a malfunction.

■ **To avoid damage to the tire pressure warning valves and transmitters**

When a tire is repaired with liquid sealants, the tire pressure warning valve and transmitter may not operate properly. If a liquid sealant is used, contact your Toyota dealer as soon as possible. After use of liquid sealant, make sure to replace the tire pressure warning valve and transmitter when repairing or replacing the tire. (→P. 379)

If the fuel cell system will not start

Reasons for the fuel cell system not starting vary depending on the situation. Check the following and perform the appropriate procedure:

The fuel cell system will not start even though the correct starting procedure is being followed. (→P. 186)

One of the following may be the cause of the problem:

- The electronic key may not be functioning properly. (→P. 449)
- There may not be sufficient fuel in the vehicle's tank.
  Refuel the vehicle.
- The fuel door may be open. (→P. 216)
- There may be a malfunction in the immobilizer system. (→P. 78)
- There may be a malfunction in the shift control system.* (→P. 429)
- The fuel cell system may be malfunctioning due to an electrical problem such as electronic key battery depletion or a blown fuse. However, depending on the type of malfunction, an interim measure is available to start the fuel cell system. (→P. 191, 448)
- The electronic key may be in battery-saving mode. (→P. 145)

*: It may not be possible to shift the shift position from P to another position.

The interior lights and headlights are dim, or the horn does not sound or sounds at a low volume.

One of the following may be the cause of the problem:

- The 12-volt battery may be discharged. (→P. 452)
- The 12-volt battery terminal connections may be loose or corroded. (→P. 374)

The interior lights and headlights do not turn on, or the horn does not sound.

One of the following may be the cause of the problem:

- The 12-volt battery may be discharged. (→P. 452)
- One or both of the 12-volt battery terminals may be disconnected.

Contact your Toyota dealer if the problem cannot be repaired, or if repair procedures are unknown.

Emergency start function

When the fuel cell system does not start, the following steps can be used as an interim measure to start the fuel cell system if the power switch is functioning normally.

Do not use this starting procedure except in case of emergency.

1. Set the parking brake.
2. Turn the power switch to ACCESSORY mode.
3. Press and hold the power switch for about 15 seconds while depressing the brake pedal firmly.

Even if the fuel cell system can be started using the above steps, the system may be malfunctioning. Have the vehicle inspected by your Toyota dealer.

If the electronic key does not operate properly

If communication between the electronic key and vehicle is interrupted (→P. 146) or the electronic key cannot be used because the battery is depleted, the smart key system and wireless remote control cannot be used. In such cases, the doors can be opened and the fuel cell system can be started by following the procedure below.

Locking and unlocking the doors

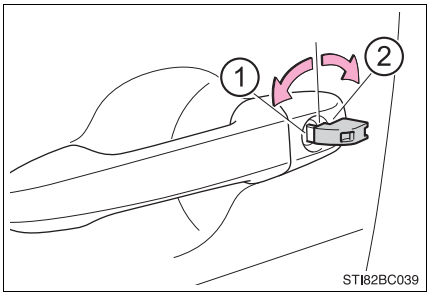
■ Doors

Use the mechanical key (→P. 129) in order to perform the following operations (driver's door only):

① Locks all doors

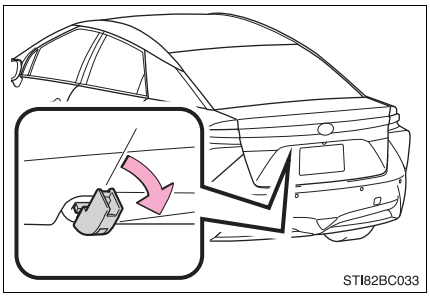
② Unlocks the door

Turning the key rearward unlocks the driver's door. Turning the key once again unlocks the other doors.



■ Trunk

Turn the mechanical key clockwise to open.

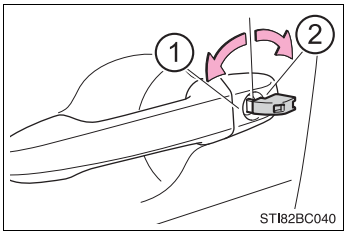


■ **Key linked functions**

① Closes the windows* (turn and hold)

② Opens the windows* (turn and hold)

*: These settings must be customized at your Toyota dealer. (→P. 487)



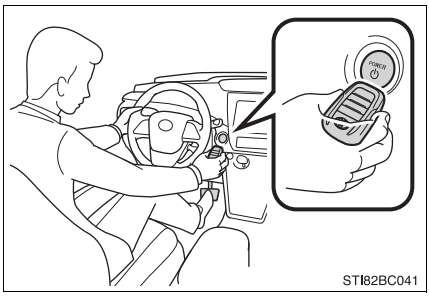
Starting the fuel cell system

1 Depress the brake pedal.

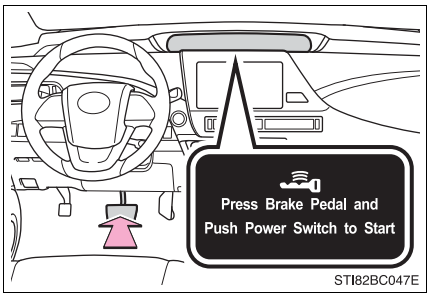
2 Touch the power switch with the Toyota emblem side of the electronic key facing away from the switch.

When the electronic key is detected, a buzzer sounds and the power switch will turn to ON mode.

When the smart key system is deactivated in customization setting, the power switch will turn to ACCESSORY mode.



3 Firmly depress the brake pedal and check that message is displayed on the multi-information display.



4 Press the power switch.

In the event that the fuel cell system still cannot be started, contact your Toyota dealer.

Stopping the fuel cell system

Shift the shift position to P and press the power switch as you normally do when stopping the fuel cell system.

Replacing the key battery

As the above procedure is a temporary measure, it is recommended that the electronic key battery be replaced immediately when the battery is depleted. (→P. 400)

Alarm

Using the mechanical key to lock the doors will not set the alarm system.
If a door is unlocked using the mechanical key when the alarm system is set, the alarm may be triggered. (→P. 82)

When the electronic key does not work properly

- Make sure that the smart key system has not been deactivated in the customization setting. If it is off, turn the function on.
  (Customizable features →P. 486)
- Check if battery-saving mode is set. If it is set, cancel the function.
  (→P. 145)

Changing power switch modes

Release the brake pedal and press the power switch in step 3 above.
The fuel cell system does not start and modes will be changed each time the switch is pressed. (→P. 188)

WARNING

When using the mechanical key and operating the power windows

Operate the power window after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the window.
Also, do not allow children to operate the mechanical key. It is possible for children and other passengers to get caught in the power window.

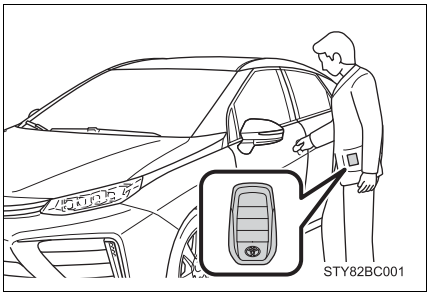
If the 12-volt battery is discharged

The following procedures may be used to start the fuel cell system if the 12-volt battery is discharged.
You can also call your Toyota dealer or a qualified repair shop.

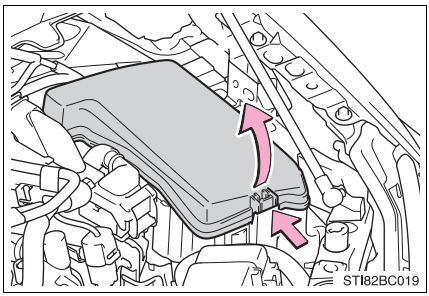
If you have a set of jumper (or booster) cables and a second vehicle with a 12-volt battery, you can jump start your vehicle by following the steps below.

1 Confirm that the electronic key is being carried.

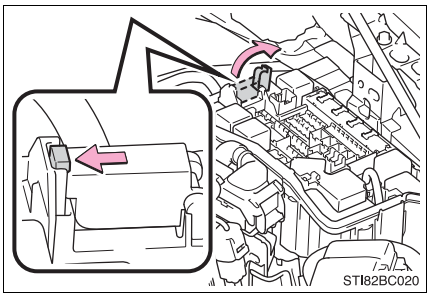
When connecting the jumper (or booster) cables, depending on the situation, the alarm may activate and the doors may lock. (→P. 82)



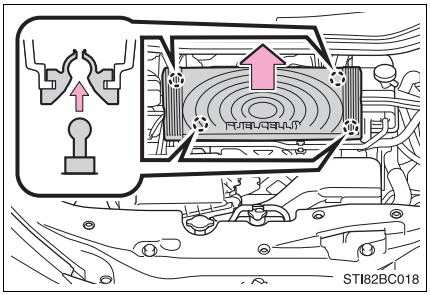
2 Open the hood (→P. 366) and fuse box cover.



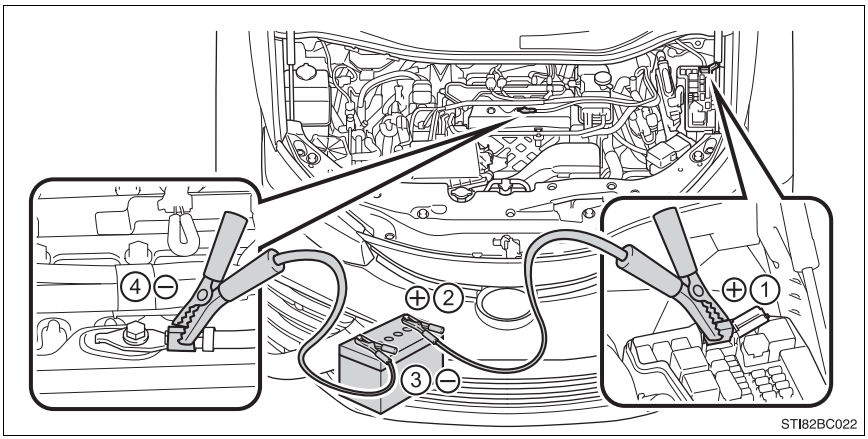
3 Open the exclusive jump starting terminal cover.



4 Remove the motor cover.



5 Connect the jumper cables according to the following procedure:



① Connect a positive jumper cable clamp to the exclusive jump starting terminal on your vehicle.

② Connect the clamp on the other end of the positive cable to the positive (+) battery terminal on the second vehicle.

③ Connect a negative cable clamp to the negative (-) battery terminal on the second vehicle.

④ Connect the clamp at the other end of the negative cable to a solid, stationary, unpainted metallic point away from the exclusive jump starting terminal and any moving parts, as shown in the illustration.

6 Start the engine of the second vehicle. Increase the engine speed slightly and maintain at that level for approximately 5 minutes to recharge the 12-volt battery of your vehicle.

7 Maintain the engine speed of the second vehicle and start the fuel cell system of your vehicle by turning the power switch to ON mode.

8 Make sure the “READY” indicator comes on. If the indicator does not come on, contact your Toyota dealer.

9 Once the fuel cell system has started, remove the jumper cables in the exact reverse order from which they were connected.

10 Close the exclusive jump starting terminal cover, reinstall the motor cover and the fuse box cover to its original position.

Once the fuel cell system starts, have the vehicle inspected at your Toyota dealer as soon as possible.

■ **Starting the fuel cell system when the 12-volt battery is discharged**

The fuel cell system cannot be started by push-starting.

■ **To prevent 12-volt battery discharge**

- Turn off the headlights and the audio system while the fuel cell system is off.
- Turn off any unnecessary electrical components when the vehicle is running at a low speed for an extended period, such as in heavy traffic.

■ **Charging the 12-volt battery**

The electricity stored in the 12-volt battery will discharge gradually even when the vehicle is not in use, due to natural discharge and the draining effects of certain electrical appliances. If the vehicle is left for a long time, the 12-volt battery may discharge, and the fuel cell system may be unable to start. (The 12-volt battery recharges automatically while the fuel cell system is operating.)

■ **When the 12-volt battery is removed or discharged**

- In some cases, it may not be possible to unlock the doors using the smart key system when the 12-volt battery is discharged. Use the wireless remote control or the mechanical key to lock or unlock the doors.
- The fuel cell system may not start on the first attempt after the 12-volt battery has recharged but will start normally after the second attempt. This is not a malfunction.
- The power switch mode is memorized by the vehicle. When the 12-volt battery is reconnected, the system will return to the mode it was in before the 12-volt battery was discharged. Before disconnecting the 12-volt battery, turn the power switch off.
  If you are unsure what mode the power switch was in before the 12-volt battery discharged, be especially careful when reconnecting the 12-volt battery.
- If the 12-volt battery is depleted with the shift position in P, it will not be possible to shift the shift position other than P. In this case, the vehicle cannot be towed without lifting both front wheels because the front wheels are locked by the parking lock. (→P. 412)

- When the 12-volt battery is reconnected, start the fuel cell system, depress the brake pedal, and confirm that it is possible to shift into each shift position.
- If the battery is removed or the terminals disconnected without operating the water release function during cold weather, the vehicle may not start due to the fuel cell system being frozen. To prevent this, operate the water release function before removing the battery or disconnecting the terminals. (→P. 190)

When exchanging the 12-volt battery

Use a Central Degassing type 12-volt battery (Japanese Industrial Standards). Also, use 12-volt batteries with case sizes similar to one prior the exchange and an equivalent 20 hour rate capacity (20HR) or greater.

- If the sizes differ, the 12-volt battery cannot be properly secured.
- If the 20 hour rate capacity is low, even if the time period where the vehicle is not used is a short time, the 12-volt battery may discharge and fuel cell system may not be able to start.

For details, consult your Toyota dealer.

WARNING

Avoiding 12-volt battery fires or explosions

Observe the following precautions to prevent accidentally igniting the flammable gas that may be emitted from the 12-volt battery:

- Make sure each jumper cable is connected to the correct terminal and that it is not unintentionally in contact with any other than the intended terminal.
- Do not allow the other end of the jumper cable connected to the “+” terminal to come into contact with any other parts or metal surfaces in the area, such as brackets or unpainted metal.
- Do not allow the + and - clamps of the jumper cables to come into contact with each other.
- Do not smoke, use matches, cigarette lighters or allow open flame near the 12-volt battery.

WARNING

■12-volt battery precautions

The 12-volt battery contains poisonous and corrosive acidic electrolyte, while related parts contain lead and lead compounds. Observe the following precautions when handling the 12-volt battery:

- When working with the 12-volt battery, always wear safety glasses and take care not to allow any 12-volt battery fluids (acid) to come into contact with skin, clothing or the vehicle body.
- Do not lean over the 12-volt battery.
- In the event that 12-volt battery fluid comes into contact with the skin or eyes, immediately wash the affected area with water and seek medical attention.
  Place a wet sponge or cloth over the affected area until medical attention can be received.
- Always wash your hands after handling the 12-volt battery support, terminals, and other battery-related parts.
- Do not allow children near the 12-volt battery.

■After recharging the 12-volt battery

Have the 12-volt battery inspected at your Toyota dealer as soon as possible.
If the 12-volt battery is deteriorating, continued use may cause the 12-volt battery to emit a malodorous gas, which may be detrimental to the health of passengers.

■When exchanging the 12-volt battery

After exchanging, securely attach the exhaust hose and exhaust hole plug to the exhaust hole of the exchanged 12-volt battery. If not properly installed, gases (hydrogen) may leak into the vehicle interior, and there is the possible danger of the gas igniting and exploding.

■When replacing the 12-volt battery

→P. 376

NOTICE

■To prevent damaging the vehicle

The exclusive jump starting terminal is to be used when charging the 12-volt battery from another vehicle in an emergency. It cannot be used to jump start another vehicle.

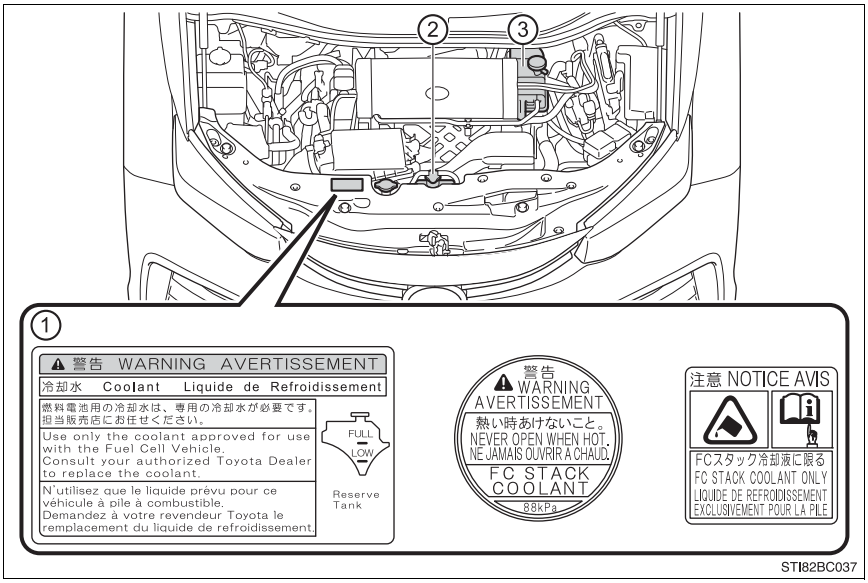
■When handling jumper cables

When connecting the jumper cables, ensure that they do not become entangled in the cooling fans.

If your vehicle overheats

The following may indicate that your vehicle is overheating.

- The high coolant temperature warning light (→P. 418) comes on or flashes, or a loss of fuel cell system power is experienced. (For example, the vehicle speed does not increase.)
- “FC System Overheat Output Power is Limited” (→P. 426) is displayed on the multi-information display
- Steam comes out from under the hood.



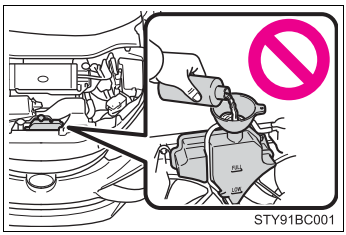
① Label

② Fuel cell stack coolant reservoir

③ Inverter coolant reservoir

NOTICE

The fuel cell stack coolant is exclusive for fuel cell stack usage. Damage may occur when water or any other type of coolant is used, so never use any other fluid.
If the fuel cell stack coolant is low, immediately contact your Toyota dealer.



Correction procedures

■ If the high coolant temperature warning light comes on or flashes

1 Stop the vehicle in a safe place and turn off the air conditioning system, and then stop the fuel cell system.

2 If you see steam or coolant leaks:
Carefully lift the hood after the steam subsides.

If you do not see steam or coolant leaks:
Carefully lift the hood.

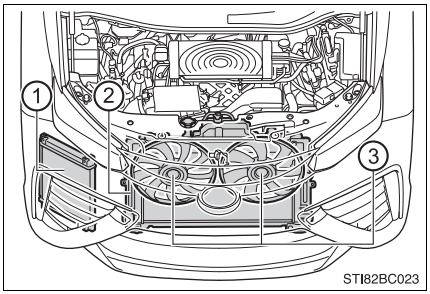
3 After the fuel cell system has cooled down sufficiently, inspect the hoses and radiator core (radiator) for any leaks.

① Fuel cell stack coolant sub radiator

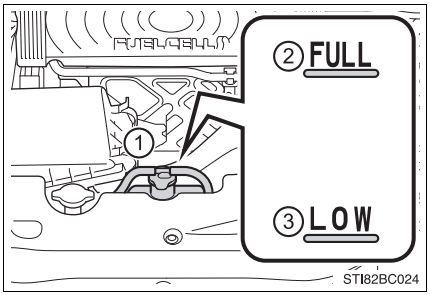
② Fuel cell stack coolant radiator

③ Electric cooling fans

If a large amount of coolant leaks, immediately contact your Toyota dealer.



4 The fuel cell stack coolant level is satisfactory if it is between the “FULL” and “LOW” lines on the reservoir.



① Fuel cell stack coolant reservoir

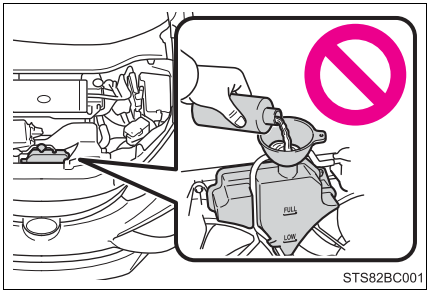
② “FULL” line

③ “LOW” line

If the amount of fuel cell stack coolant is low:
Immediately contact your Toyota dealer.

If the amount of fuel cell stack coolant is not low:
Have the vehicle inspected at the nearest Toyota dealer.

Even if the fuel cell stack coolant is low, do not refill it.



■ If “FC System Overheat Output Power is Limited” is displayed on the multi-information display

1 Stop the vehicle in a safe place and turn off the air conditioning system, and then stop the fuel cell system.

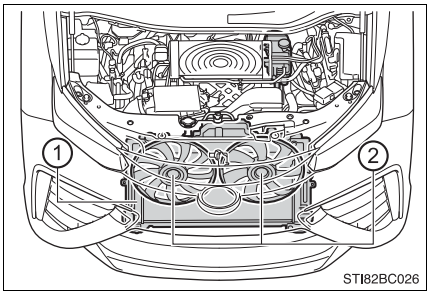
2 If you see steam or coolant leaks:
Carefully lift the hood after the steam subsides.
If you do not see steam or coolant leaks:
Carefully lift the hood.

3 After the fuel cell system has cooled down, inspect the hoses and radiator core (radiator) for any leaks.

① Inverter coolant radiator

② Electric cooling fans

If a large amount of coolant leaks, immediately contact your Toyota dealer.

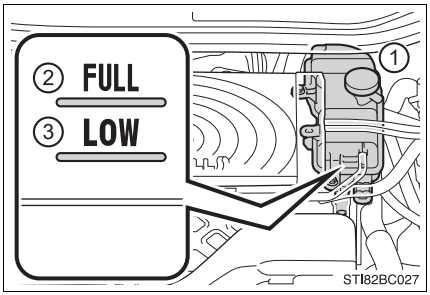


4 The inverter coolant level is satisfactory if it is between the “FULL” and “LOW” lines on the reservoir.

① Inverter coolant reservoir

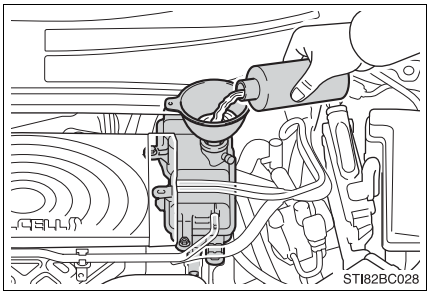
② “FULL”

③ “LOW”



5 Add inverter coolant if necessary.

Water can be used in an emergency if inverter coolant is unavailable.



6 Start the fuel cell system and turn the air conditioning system on to check that the radiator cooling fans operate and to check for coolant leaks from the radiator or hoses.

The fans operate when the air conditioning system is turned on immediately after a cold start. Confirm that the fans are operating by checking the fan sound and air flow. If it is difficult to check these, turn the air conditioning system on and off repeatedly.
(The fans may not operate in freezing temperatures.)

7 If the fans are not operating:
Stop the fuel cell system immediately and contact your Toyota dealer.
If the fans are operating:
Have the vehicle inspected at the nearest Toyota dealer.

WARNING

When inspecting under the hood of your vehicle

Observe the following precautions.
Failure to do so may result in serious injury such as burns.

- If steam is seen coming from under the hood, do not open the hood until the steam has subsided. The motor compartment may be very hot.
- After the fuel cell system has been turned off, check that the “READY” indicator is off.
  When the fuel cell system is operating, the cooling fans may suddenly operate even if the fuel cell system stops. Do not touch or approach rotating parts such as the fans, which may lead to fingers or clothing (especially a tie, a scarf or a muffler) getting caught, resulting in serious injury.
- Do not loosen the coolant reservoir caps or radiator cap, while the fuel cell system and radiator are hot.
  High temperature steam or coolant could spray out.

NOTICE

When adding inverter coolant

Add coolant slowly after the fuel cell system has cooled down sufficiently. Adding inverter cool coolant to a hot fuel cell system too quickly can cause damage to the fuel cell system.

To prevent damage to the cooling system

Observe the following precautions:

- Avoid contaminating the coolant with foreign matter (such as sand or dust etc.).
- Do not use any coolant additive with inverter coolant.
- For replacement of the fuel cell stack coolant, contact your Toyota dealer.
- Do not use water or any other coolant when refilling the fuel cell stack coolant. Also, do not use any additive agents for the coolant.

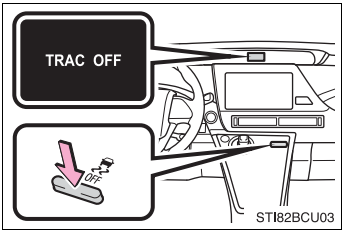
If the vehicle becomes stuck

Carry out the following procedures if the tires spin or the vehicle becomes stuck in mud, dirt or snow:

1. Set the parking brake and stop the fuel cell system.
2. Remove the mud, snow or sand from around the front wheels.
3. Place wood, stones or some other material under the front wheels to help provide traction.
4. Restart the fuel cell system.
5. Shift the shift position to D or R and release the parking brake. Then, while exercising caution, depress the accelerator pedal.

■ When it is difficult to free the vehicle

Press to turn off TRAC.



⚠ WARNING

■ When attempting to free a stuck vehicle

If you choose to push the vehicle back and forth to free it, make sure the surrounding area is clear to avoid striking other vehicles, objects or people. The vehicle may also lunge forward or lunge back suddenly as it becomes free. Use extreme caution.

■ When shifting the shift position

Be careful not to shift the shift position with the accelerator pedal depressed.
This may lead to unexpected rapid acceleration of the vehicle that may cause an accident resulting in death or serious injury.

NOTICE

To avoid damaging the transmission and other components

- Avoid spinning the front wheels and depressing the accelerator pedal more than necessary.
- If the vehicle remains stuck even after these procedures are performed, the vehicle may require towing to be freed.

Vehicle specifications 9

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Items to initialize 494

Maintenance data (fuel, fluid level, etc.)

Dimensions and weight

Overall length		192.5 in. (4890 mm)
Overall width		71.5 in. (1815 mm)
Overall height*		60.5 in. (1535 mm)
Wheelbase		109.5 in. (2780 mm)
Tread	Front	60.5 in. (1535 mm)
	Rear	61.0 in. (1545 mm)
Vehicle capacity weight (occupants + luggage)		690 lb. (315 kg)

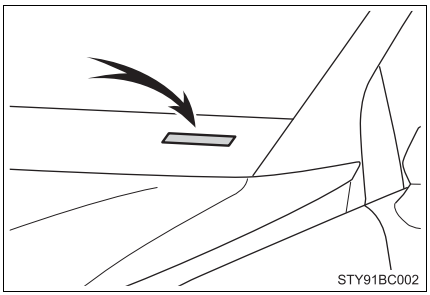
*: Unladen vehicles

Vehicle identification

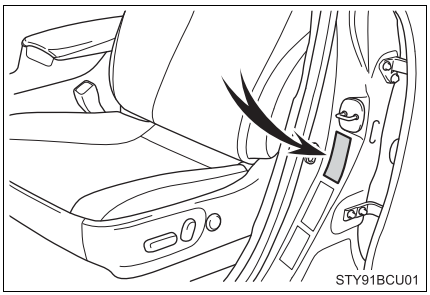
Vehicle identification number

The vehicle identification number (VIN) is the legal identifier for your vehicle. This is the primary identification number for your Toyota. It is used in registering the ownership of your vehicle.

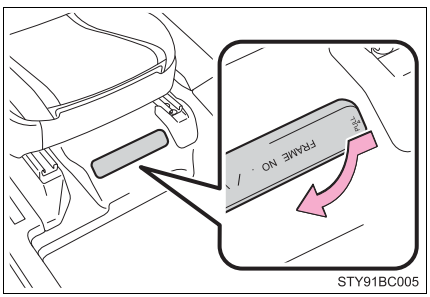
This number is stamped on the top left of the instrument panel.



This number is also on the Certification Label.



This number is also stamped under the right-hand front seat.



Fuel

Fuel type	Compressed hydrogen gas
Nominal working pressure	10150 psi (70 MPa, 714 kgf/cm^2, 700 bar)
Hydrogen tanks' fuel capacity (Reference)	32.3 gal. (122.4 L, 26.9 Imp.gal.) (Approximately 11.0 lb. [5 kg]*)

*: This is the maximum possible fill amount. The actual fuel amount achieved at hydrogen stations may be lower due to station capacity or station settings.

Electric motor (traction motor)

Type	Permanent magnet synchronous motor
Maximum output	113 kW
Maximum torque	247 ft•lbf (335 N•m, 34.2 kgf•m)

Traction battery

Type	Nickel-metal hydride battery
Voltage	7.2 V/module
Capacity	6.5 Ah (3HR)
Quantity	34 modules
Overall voltage	244.8 V

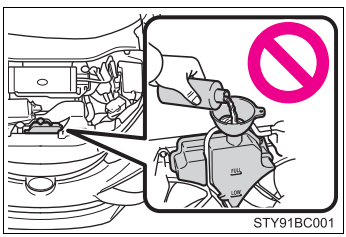
Cooling system

Capacity*	Fuel cell stack	20.7 qt. (19.6 L, 17.2 Imp.qt.)
	Inverter	5.0 qt. (4.7 L, 4.1 Imp.qt.)
Coolant type	Fuel cell stack	“Toyota Genuine FC Stack Coolant” • In order to safely cool the fuel cell stack, which is at high voltages, the fuel cell stack coolant is an exclusive high insulation product. • Never use water or other kinds of coolants as they will cause damage. • Coolant changes are unnecessary. • Do not reuse coolant that has been removed from the radiator. • Coolant is colorless. • Consult your Toyota dealer about replenishing or changing the fuel cell stack coolant.
	Inverter	Use either of the following: • “Toyota Super Long Life Coolant” • A similar high-quality ethylene glycol-based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology Do not use plain water alone.

*: The fluid capacity is a reference quantity.
If replacement is necessary, contact your Toyota dealer.

NOTICE

The fuel cell stack coolant is exclusive for fuel cell stack usage. Damage may occur when water or any other type of coolant is used, so never use any other fluid.
If the fuel cell stack coolant is low, immediately contact your Toyota dealer.



Electrical system

12-volt battery Open voltage at 68°F (20°C):	12.6 — 12.8 V Fully charged 12.2 — 12.4 V Half charged 11.8 — 12.0 V Discharged (Voltage checked 20 minutes after the fuel cell system and all lights are turned off)
Charging rates	5 A max.

Transmission

Fluid capacity*	4.4 qt. (4.2 L, 3.7 Imp.qt.)
Fluid type	Toyota Genuine ATF WS

*: The fluid capacity is a reference quantity.
If replacement is necessary, contact your Toyota dealer.

NOTICE

Transmission fluid type

Using transmission fluid other than “Toyota Genuine ATF WS” may ultimately damage the transmission of your vehicle.

Brakes

Pedal clearance*1	2.95 in. (75 mm) Min.
Pedal free play	0.04 — 0.24 in. (1 — 6 mm)
Brake pad wear limit	0.04 in. (1.0 mm)
Parking brake lining wear limit	0.04 in. (1.0 mm)
Parking brake pedal travel*2	7 — 10 clicks
Fluid type	SAE J1703 or FMVSS No.116 DOT 3, or SAE J1704 or FMVSS No.116 DOT 4

*1: Minimum pedal clearance when depressed with a force of 44.1 lbf (196 N, 20.0 kgf) while the fuel cell system is operating

*2: Parking brake pedal travel when depressed with a force of 67.5 lbf (300 N, 31.0 kgf).

Steering

Free play	Less than 1.2 in. (30 mm)

Tires and wheels

Tire size	P215/55R17 93V
Tire inflation pressure (Recommended cold tire inflation pressure)	▶ Front 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) ▶ Rear 36 psi (250 kPa, 2.5 kgf/cm^2 or bar)
Wheel size	17 × 7 J
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)

Light bulbs*

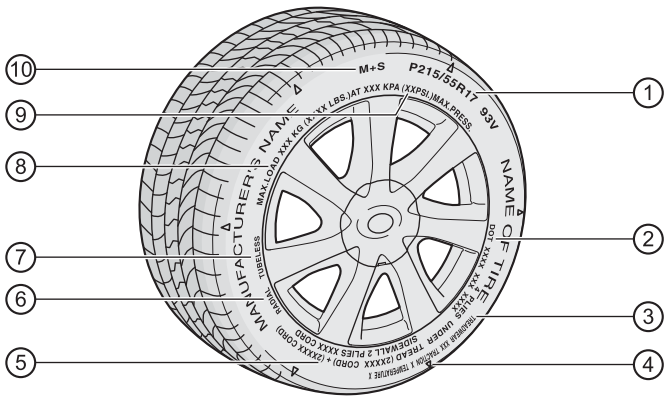
	Light bulbs	Bulb No.	W	Type
Interior	Vanity lights	—	8	A
	Front interior/ personal lights	—	8	A
	Rear interior light	—	8	B
	Door courtesy lights	168	5	A
	Trunk light	—	5	A

A: Wedge base bulbs (clear) B: Double end bulbs

*: Light bulbs not listed in this table are LED bulbs.

Tire information

Typical tire symbols



STY91BCU02

① Tire size (→P. 474)

② DOT and Tire Identification Number (TIN) (→P. 473)

③ Uniform tire quality grading

For details, see “Uniform Tire Quality Grading” that follows.

④ Location of treadwear indicators (→P. 378)

⑤ Tire ply composition and materials

Plies are layers of rubber-coated parallel cords. Cords are the strands which form the plies in a tire.

⑥ Radial tires or bias-ply tires

A radial tire has “RADIAL” on the sidewall. A tire not marked “RADIAL” is a bias-ply tire.

⑦ TUBELESS or TUBE TYPE

A tubeless tire does not have a tube and air is directly put into the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.

⑧ Load limit at maximum cold tire inflation pressure (→P. 478)

⑨ Maximum cold tire inflation pressure (→P. 478)

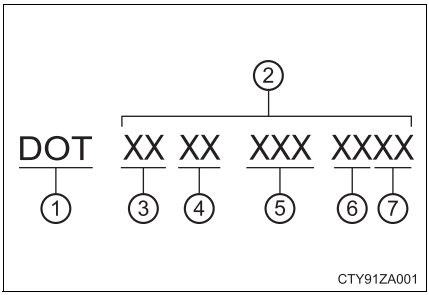
This means the pressure to which a tire may be inflated.

⑩ Summer tires or all season tires (→P. 381)

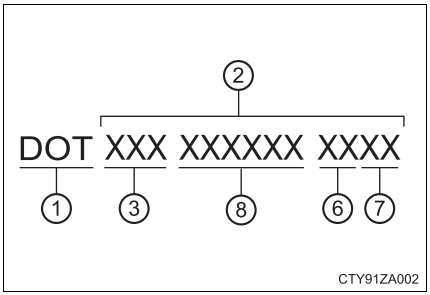
An all season tire has “M+S” on the sidewall. A tire not marked “M+S” is a summer tire.

Typical DOT and Tire Identification Number (TIN)

▶ Type A



▶ Type B



① DOT symbol*

② Tire Identification Number (TIN)

③ Tire manufacturer's identification mark

④ Tire size code

⑤ Manufacturer's optional tire type code (3 or 4 letters)

⑥ Manufacturing week

⑦ Manufacturing year

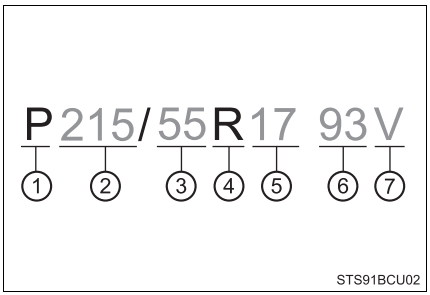
⑧ Manufacturer's code

*: The DOT symbol certifies that the tire conforms to applicable Federal Motor Vehicle Safety Standards.

Tire size

■ Typical tire size information

The illustration indicates typical tire size.



① Tire use
(P = Passenger car,
T = Temporary use)

② Section width (millimeters)

③ Aspect ratio
(tire height to section width)

④ Tire construction code
(R = Radial, D = Diagonal)

⑤ Wheel diameter (inches)

⑥ Load index
(2 digits or 3 digits)

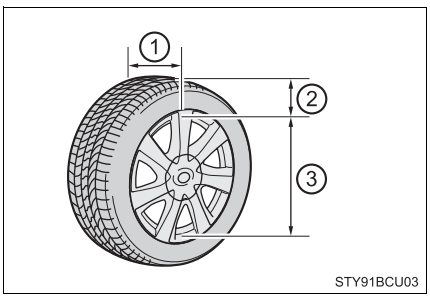
⑦ Speed symbol
(alphabet with one letter)

■ Tire dimensions

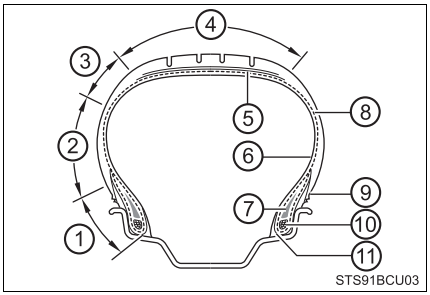
① Section width

② Tire height

③ Wheel diameter



Tire section names



① Bead
② Sidewall
③ Shoulder
④ Tread
⑤ Belt
⑥ Inner liner
⑦ Reinforcing rubber
⑧ Carcass
⑨ Rim lines
⑩ Bead wires
⑪ Chafer

Uniform Tire Quality Grading

This information has been prepared in accordance with regulations issued by the National Highway Traffic Safety Administration of the U.S. Department of Transportation.
It provides the purchasers and/or prospective purchasers of Toyota vehicles with information on uniform tire quality grading.

Your Toyota dealer will help answer any questions you may have as you read this information.

DOT quality grades

All passenger vehicle tires must conform to Federal Safety Requirements in addition to these grades. Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

For example: Treadwear 200 Traction AA Temperature A

Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course.

For example, a tire graded 150 would wear one and a half (1 - 1/2) times as well on the government course as a tire graded 100.
The relative performance of tires depends upon the actual conditions of their use. Performance may differ significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction AA, A, B, C

The traction grades, from highest to lowest, are AA, A, B and C, and they represent the tire’s ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete.

A tire marked C may have poor traction performance.

Warning: The traction grade assigned to this tire is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

Temperature A, B, C

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

Grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109.

Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Warning: The temperature grades of a tire assume that it is properly inflated and not overloaded.
Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

Glossary of tire terminology

Tire related term	Meaning
Cold tire inflation pressure	Tire pressure when the vehicle has been parked for three hours or more, or has not been driven more than 1 mile or 1.5 km under that condition
Maximum inflation pressure	The maximum cold inflated pressure to which a tire may be inflated, shown on the sidewall of the tire
Recommended inflation pressure	Cold tire inflation pressure recommended by a manufacturer
Accessory weight	The combined weight (in excess of those standard items which may be replaced) of transmission, power steering, power brakes, power windows, power seats, radio and heater, to the extent that these items are available as factory-installed equipment (whether installed or not)
Curb weight	The weight of a motor vehicle with standard equipment, including the maximum capacity of fuel, oil and coolant, and if so equipped, air conditioning and additional weight optional engine
Maximum loaded vehicle weight	The sum of: (a) Curb weight (b) Accessory weight (c) Vehicle capacity weight (d) Production options weight
Normal occupant weight	150 lb. (68 kg) times the number of occupants specified in the second column of Table 1* that follows
Occupant distribution	Distribution of occupants in a vehicle as specified in the third column of Table 1* below

Tire related term	Meaning
Production options weight	The combined weight of installed regular production options weighing over 5 lb. (2.3 kg) in excess of the standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty 12-volt battery, and special trim
Rim	A metal support for a tire or a tire and tube assembly upon which the tire beads are seated
Rim diameter (Wheel diameter)	Nominal diameter of the bead seat
Rim size designation	Rim diameter and width
Rim type designation	The industry manufacturer's designation for a rim by style or code
Rim width	Nominal distance between rim flanges
Vehicle capacity weight (Total load capacity)	The rated cargo and luggage load plus 150 lb. (68 kg) times the vehicle's designated seating capacity
Vehicle maximum load on the tire	The load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight, and dividing by two
Vehicle normal load on the tire	The load on an individual tire that is determined by distributing to each axle its share of curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table 1* below), and dividing by two
Weather side	The surface area of the rim not covered by the inflated tire
Bead	The part of the tire that is made of steel wires, wrapped or reinforced by ply cords and that is shaped to fit the rim
Bead separation	A breakdown of the bond between components in the bead

Tire related term	Meaning
Bias ply tire	A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the centerline of the tread
Carcass	The tire structure, except tread and sidewall rubber which, when inflated, bears the load
Chunking	The breaking away of pieces of the tread or sidewall
Cord	The strands forming the plies in the tire
Cord separation	The parting of cords from adjacent rubber compounds
Cracking	Any parting within the tread, sidewall, or inner-liner of the tire extending to cord material
CT	A pneumatic tire with an inverted flange tire and rim system in which the rim is designed with rim flanges pointed radially inward and the tire is designed to fit on the underside of the rim in a manner that encloses the rim flanges inside the air cavity of the tire
Extra load tire	A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire
Groove	The space between two adjacent tread ribs
Innerliner	The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire
Innerliner separation	The parting of the innerliner from cord material in the carcass
Intended outboard sidewall	(a) The sidewall that contains a whitewall, bears white lettering, or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire, or (b) The outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle

Tire related term	Meaning
Light truck (LT) tire	A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles
Load rating	The maximum load that a tire is rated to carry for a given inflation pressure
Maximum load rating	The load rating for a tire at the maximum permissible inflation pressure for that tire
Maximum permissible inflation pressure	The maximum cold inflation pressure to which a tire may be inflated
Measuring rim	The rim on which a tire is fitted for physical dimension requirements
Open splice	Any parting at any junction of tread, sidewall, or innerliner that extends to cord material
Outer diameter	The overall diameter of an inflated new tire
Overall width	The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs
Passenger car tire	A tire intended for use on passenger cars, multipurpose passenger vehicles, and trucks, that have a gross vehicle weight rating (GVWR) of 10,000 lb. or less.
Ply	A layer of rubber-coated parallel cords
Ply separation	A parting of rubber compound between adjacent plies
Pneumatic tire	A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load
Radial ply tire	A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the centerline of the tread
Reinforced tire	A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire

Tire related term	Meaning
Section width	The linear distance between the exteriors of the sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands
Sidewall	That portion of a tire between the tread and bead
Sidewall separation	The parting of the rubber compound from the cord material in the sidewall
Snow tire	A tire that attains a traction index equal to or greater than 110, compared to the ASTM E-1136 Standard Reference Test Tire, when using the snow traction test as described in ASTM F-1805-00, Standard Test Method for Single Wheel Driving Traction in a Straight Line on Snow-and Ice-Covered Surfaces, and which is marked with an Alpine Symbol ( ) on at least one sidewall
Test rim	The rim on which a tire is fitted for testing, and may be any rim listed as appropriate for use with that tire
Tread	That portion of a tire that comes into contact with the road
Tread rib	A tread section running circumferentially around a tire
Tread separation	Pulling away of the tread from the tire carcass
Treadwear indicators (TWI)	The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread
Wheel-holding fixture	The fixture used to hold the wheel and tire assembly securely during testing

*: Table 1 — Occupant loading and distribution for vehicle normal load for various designated seating capacities

Designated seating capacity, Number of occupants	Vehicle normal load, Number of occupants	Occupant distribution in a normally loaded vehicle
2 through 4	2	2 in front
5 through 10	3	2 in front, 1 in second seat
11 through 15	5	2 in front, 1 in second seat, 1 in third seat, 1 in fourth seat
16 through 20	7	2 in front, 2 in second seat, 2 in third seat, 1 in fourth seat

Customizable features

Your vehicle includes a variety of electronic features that can be personalized to suit your preferences. The settings of these features can be changed by using the navigation system, the multi-information display, or at your Toyota dealer.

Customizing vehicle features

When customizing vehicle features, ensure that the vehicle is parked in a safe place with the shift position in P and the parking brake set.

■ Changing by using the navigation system

1. Press “MENU” button.
2. Select “Setup” on the “MENU” screen and select “Vehicle”.
3. Select “Vehicle Customization”.

Various setting can be changed. Refer to the list of settings that can be changed for details.

■ Changing by using the multi-information display

1. Press 〈 or 〉 of the meter control switches (→P. 118), select ⚙ (→P. 117).
2. Press ∧ or ∨ of the meter control switches, select the item, and then press ◎.

To go back to the previous screen or exit the customize mode, press ⮌.

Customizable features

Some function settings are changed simultaneously with other functions being customized. Contact your Toyota dealer for further details.

① Settings that can be changed by the navigation system

② Settings that can be changed by the multi-information display

③ Settings that can be changed by the vehicle switch

④ Settings that can be changed by your Toyota dealer

Definition of symbols: O = Available, — = Not available

■ Door lock (→P. 132, 449)

Function	Default setting	Customized setting	①	②	③	④
Unlocking using a mechanical key	Driver's door unlocked in first step, all doors unlocked in second step	All doors unlocked in first step	—	—	—	O
Automatic door locking function	Shift position linked door locking operation	Off	O	—	—	O
		Speed linked door locking operation				
Automatic door unlocking function	Shift position linked door unlocking operation	Off	O	—	—	O
		Driver's door linked door unlocking operation				

■ Smart key system and wireless remote control (→P. 132, 143)

Function	Default setting	Customized setting	①	②	③	④
Operation signal (emergency flashers)	On	Off	O	—	—	O
Operation buzzer volume	Level 5	Off	O	—	—	O
		Level 1 to 7				
Time elapsed before the automatic door lock function is activated if a door is not opened after being unlocked	30 seconds	Off	O	—	—	O
		60 seconds				
		120 seconds				
Open door reminder buzzer	On	Off	—	—	—	O

■ Smart key system (→P. 143)

Function	Default setting	Customized setting	①	②	③	④
Smart key system	On	Off	—	—	—	O
Smart door unlocking	Driver’s door	All the doors	O	—	O	O
Number of consecutive door lock operations	2 times	As many as desired	—	—	—	O

■ Wireless remote control (→P. 132, 138)

Function	Default setting	Customized setting	①	②	③	④
Wireless remote control	On	Off	—	—	—	O
Unlocking operation	Driver's door unlocked in first step, all doors unlocked in second step	All doors unlocked in first step	O	—	—	O
Trunk unlocking operation	Press and hold (short)	One short press	—	—	—	O
		Push twice				
		Press and hold (long)				
		Off				
Panic function	On	Off	—	—	—	O

■ Power windows (→P. 167)

Function	Default setting	Customized setting	①	②	③	④
Mechanical key linked operation	Off	On	—	—	—	O
Wireless remote control linked open operation	Off	On	—	—	—	O
Open window reminder buzzer	On	Off	—	—	—	O

■ Driving position memory (→P. 153)

Function	Default setting	Customized setting	①	②	③	④
Driver's seat movement when exiting the vehicle	Full	Off	O	—	—	O
		Partial				
Selection the door linking driving position memory with door unlock operation	Driver's door	All doors	—	—	—	O

■ Outside rear view mirrors (→P. 164)

Function	Default setting	Customized setting	①	②	③	④
Automatic folding/extending operation	Linked to locking/ unlocking of the doors	Off	—	—	—	O
		Linked to power switch operation				
Linked mirror function when reversing	On	Off	—	—	—	O

■ Automatic light control system (→P. 201)

Function	Default setting	Customized setting	①	②	③	④
Light sensor sensitivity	Level 3	Level 1 to 5	O	—	—	O
Time elapsed before the headlights turn off	60 seconds	Off	O	—	—	O
		30 seconds				
		90 seconds				
Daytime running lights (except for Canada)	On	Off	O	—	—	O

■ Illumination (→P. 317)

Function	Default setting	Customized setting	①	②	③	④
Time elapsed before the interior lights turn off	15 seconds	Off	O	—	—	O
		7.5 seconds				
		30 seconds				
Operation after the power switch is turned off	On	Off	—	—	—	O
Operation when the doors are unlocked	On	Off	—	—	—	O
Operation when you approach the vehicle with the electronic key on your person	On	Off	—	—	—	O
Footwell lighting	On	Off	—	—	—	O
Shift lever lighting	On	Off	—	—	—	O

■ Automatic air conditioning system (→P. 306)

Function	Default setting	Customized setting	①	②	③	④
Reaction when the A/C switch is pressed	05 (Slow)	01 (Fast) to 05 (Slow)	—	—	O	—
Operation noise when the A/C switch is pressed	On	Off	—	—	O	—
Display popup when the A/C switch is pressed	On	Off	—	—	O	—
A/C auto switch operation	On	Off	O	—	—	O

■ Multi-information display (→P. 111)

Function		Default setting	Customized setting	①	②	③	④
Units*1		miles (MPGe)	km (kg/100km)	—	O	—	—
Language		English	French	—	O	—	—
Time for exchanging the ion filter		—	Initialize	—	O	—	—
Interruption display	Navigation system route guidance	On	Off	—	O	—	—
	Instrument panel brightness adjustment	On	Off	—	O	—	—
Return to initial settings		—	Yes	—	O	—	—
Main display split screen*2		Simple	Split	—	O	—	—
Monthly history of fuel economy history		—	Clear	—	O	—	—
Daily history of ECO log		—	Clear	—	O	—	—
Monthly history of ECO log		—	Clear	—	O	—	—
Calendar date		—	Set	—	O	—	—
Erase screen		—	Erase*3	—	O	—	—

*1: The default setting varies according to country.

*2: If equipped

*3: When the meter control switches (→P. 118) of the ⊙ is pressed, a return to screen display message is displayed on the multi-information display.

■ Vehicle Proximity Notification System (→P. 92)

Function	Default setting	Customized setting	①	②	③	④
The volume of Vehicle Proximity Notification System sound	Level 1	Off	—	—	—	O
		Level 2				

■ LDA (Lane Departure Alert with steering control) (→P. 238)

Function	Default setting	Customized setting	①	②	③	④
Steering assist	On	Off	—	O	—	—
Alert sensitivity	High	Standard	—	O	—	—
Vehicle sway warning	On	Off	—	O	—	—
Vehicle sway warning sensitivity	Standard	Low	—	O	—	—
		High				

■ PCS (Pre-Collision System) (→P. 226)

Function	Default setting	Customized setting	①	②	③	④
Pre-collision system	On	Off	—	O	—	—
Warning timing	Middle	Early	—	O	—	—
		Late				

■ RSA (Road Sign Assist) (if equipped) (→P. 248)

Function	Default setting	Customized setting	①	②	③	④
Road Sign Assist	On	Off	—	O	—	—
RSA notification method (excess speed)	Display only	No notification	—	O	—	—
		Display and buzzer				
RSA notification method (others)	Display only	No notification	—	O	—	—
		Display and buzzer				
RSA notification level	1mph/h (2km/h)	3mph (5km/h)	—	O	—	—
		5mph (10km/h)				

■ Parking Support Brake function (for static objects) (if equipped) (→P. 274)

Function	Default setting	Customized setting	①	②	③	④
Parking Support Brake function (for static objects)	On	Off	—	O	—	—

■ Intuitive parking assist (→P. 265)

Function	Default setting	Customized setting	①	②	③	④
Intuitive parking assist	On	Off	—	O	—	—
Detection distance of the rear center sensor	Long	Short	—	—	—	O
Buzzer volume	Level 2	Level 1 to 3	—	O	—	—

■ Seat belt reminder (→P. 421)

Function	Default setting	Customized setting	①	②	③	④
Vehicle speed linked seat belt reminder buzzer	On	Off	—	—	—	O

■ **Vehicle customization**

- When the speed linked door locking function and shift position linked door locking function are both on, the door lock operates as follows.
  - When shifting the shift position to any position other than P, all the doors will be locked.
  - If the vehicle is started with all the doors locked, the speed linked door locking function would not operate.
  - If the vehicle is started with any door unlocked, the speed linked door locking function will operate.
- When the smart key system is off, smart door unlocking cannot be customized.
- When the doors remain closed after unlocking the doors and the automatic door lock function is activated, the signals will be generated in accordance with the operation signal (buzzer) and the operation signal (emergency flashers) settings.

■ **In the following situations, customize mode in which the settings can be changed through the multi-information display will automatically be turned off.**

- A warning message appears after the customize mode screen is displayed.
- The vehicle begins to move while the customize mode screen is displayed.

NOTICE

■ **During customization**

To prevent 12-volt battery discharge, ensure that the fuel cell system is operating while customizing features.

Items to initialize

The following items must be initialized for normal system operation after such cases as the 12-volt battery being reconnected, or maintenance being performed on the vehicle:

Item	When to initialize	Reference
Power window	When functioning abnormally	P. 168
Ion filter	After changing the ion filter	P. 490
Parking Support Brake function (for static objects)	After reconnecting or changing the 12-volt battery	P. 283

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Reporting safety defects for U.S. owners

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Toyota Motor Sales, U.S.A., Inc. (Toll-free: 1-800-331-4331).

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Toyota Motor Sales, U.S.A., Inc.

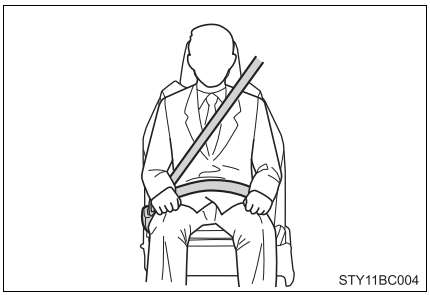
To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to *http://www.safercar.gov* ; or write to: Administrator, NHTSA, 1200 New Jersey Ave. SE., Washington, DC 20590. You can also obtain other information about motor vehicle safety from *http://www.safercar.gov*.

Seat belt instructions for Canadian owners (in French)

The following is a French explanation of seat belt instructions extracted from the seat belt section in this manual.

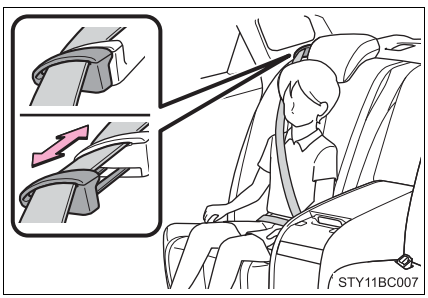
See the seat belt section for more detailed seat belt instructions in English.

Utilisation correcte des ceintures de sécurité



- Déroulez la sangle diagonale de telle sorte qu'elle passe bien sur l'épaule, sans pour autant être en contact avec le cou ou glisser de l'épaule.
- Placez la sangle abdominale le plus bas possible sur les hanches.
- Réglez la position du dossier de siège. Asseyez-vous le dos le plus droit possible et calez-vous bien dans le siège.
- Ne pas vriller la ceinture de sécurité.

Guide confort de ceinture de sécurité (sièges arrière)



Pour les enfants ou les personnes adultes plus petites que la moyenne, avancez le guide confort sur la ceinture de sécurité afin d'écarter cette dernière du cou de la personne.

Accompagnez de la main l'enroulement de la ceinture, après vous en être servi, et assurez-vous qu'elle est convenablement rangée.
Remettez le guide confort dans sa position initiale.

Entretien et soin

Ceintures de sécurité

Nettoyez avec un chiffon ou une éponge humectée d'eau savonneuse tiède. Par ailleurs, vérifiez régulièrement que les ceintures ne sont pas effilochées, entaillées, ou ne paraissent pas exagérément usées.

AVERTISSEMENT

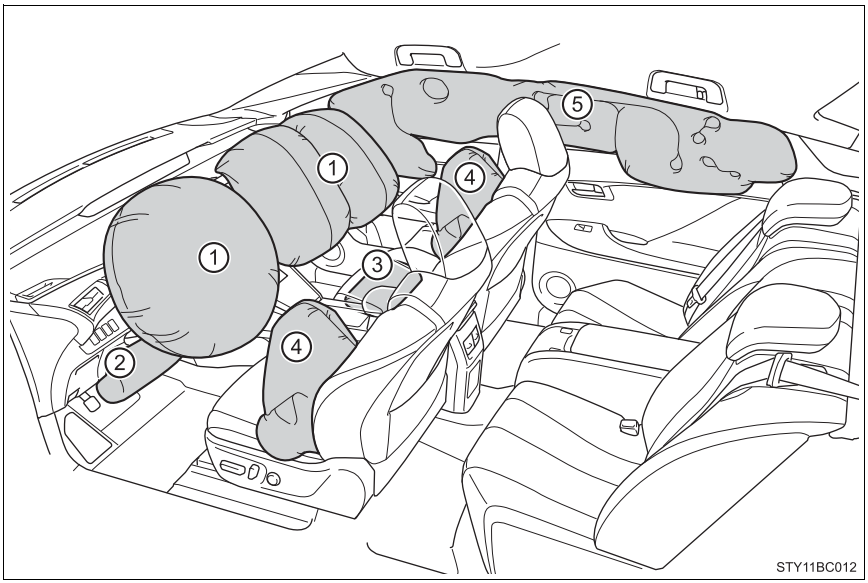
État et usure des ceintures de sécurité

Inspectez les ceintures de sécurité périodiquement. Contrôlez qu'elles ne sont pas entaillées, effilochées, et que leurs ancrages ne sont pas desserrés. Ne pas utiliser une ceinture de sécurité défectueuse avant qu'elle ne soit remplacée. Une ceinture de sécurité défectueuse n'apporte aucune garantie de protection de l'occupant contre des blessures graves, voire mortelles.

SRS airbag instructions for Canadian owners (in French)

The following is a French explanation of SRS airbag instructions extracted from the SRS airbag section in this manual.

See the SRS airbag section for more detailed SRS airbag instructions in English.



◆ Coussins gonflables SRS frontaux

① Coussin gonflable SRS conducteur/coussin gonflable passager avant
Participent à la protection de la tête et du thorax du conducteur et du passager avant contre les chocs avec les éléments de l'habitacle

② Coussin gonflable SRS de genoux
Participe à la protection du conducteur

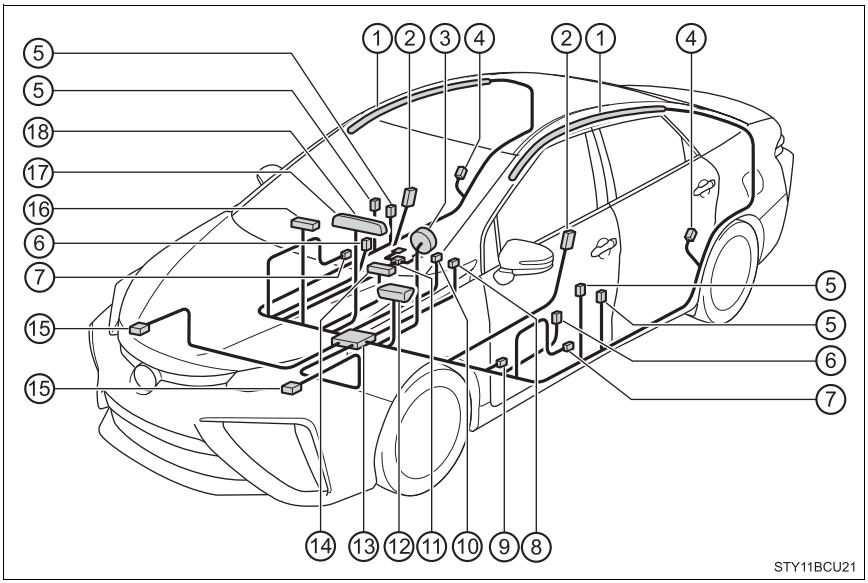
③ Coussin gonflable SRS d'assise de siège
Participe à retenir le passager avant

◆ Coussins gonflables SRS latéraux et rideau

④ Coussins gonflables SRS latéraux
Participent à la protection du haut du corps et du bassin des occupants des sièges avant

⑤ Coussins gonflables SRS rideau
- Participent principalement à la protection de la tête des occupants
- Participent à empêcher les occupants d'être éjectés du véhicule en cas de retournement de celui-ci

Composition du système de coussins gonflables SRS



① Coussins gonflables rideau

② Coussins gonflables latéraux

③ Coussin gonflable conducteur

④ Capteurs d'impact latéral (arrière)

⑤ Capteurs d'impact latéral (avant)

⑥ Prétensionneurs et limiteurs d'effort de ceinture de sécurité

⑦ Capteurs d'impact latéral (portes avant)

⑧ Contacteur de boucle de ceinture de sécurité conducteur

⑨ Capteur de position du siège conducteur

⑩ Contacteur de boucle de ceinture de sécurité passager avant

⑪ Système de classification d'occupant du siège passager avant (ECU et capteurs)

⑫ Coussin gonflable de genoux

⑬ Boîtier électronique de coussins gonflables

⑭ Coussin gonflable d'assise de siège passager

⑮ Capteurs d'impact avant

⑯ Coussin gonflable passager avant

⑰ Témoin d'alerte SRS

⑱ Témoins indicateurs "AIR BAG ON" et "AIR BAG OFF"

Votre véhicule est équipé de COUSSINS GONFLABLES INTELLIGENTS (ADVANCED AIRBAGS) conçus selon les normes de sécurité américaines applicables aux véhicules à moteur (FMVSS208). Le boîtier électronique de coussins gonflables (ECU) utilise les informations reçues des capteurs, etc. détaillés dans le schéma ci-dessus de composition du système pour commander le déploiement des coussins gonflables. Ces informations comprennent des informations sur la gravité de la collision et les occupants. Le déploiement rapide des coussins gonflables est obtenu au moyen d'une réaction chimique dans les dispositifs pyrotechniques, qui produit un gaz inoffensif permettant d'amortir le mouvement des occupants.

AVERTISSEMENT

Précautions avec les coussins gonflables SRS

Respectez les précautions suivantes concernant les coussins gonflables SRS.
À défaut, des blessures graves, voire mortelles, pourraient s'ensuivre.

- Le conducteur et tous les passagers à bord du véhicule doivent porter leur ceinture de sécurité correctement.
  Les coussins gonflables SRS sont des dispositifs de protection complémentaires aux ceintures de sécurité.
- Le coussin gonflable SRS conducteur se déploie avec une puissance considérable et peut occasionner des blessures graves, voire mortelles, notamment lorsque le conducteur se trouve très près du coussin gonflable. L'autorité fédérale chargée de la sécurité routière aux États-Unis, la NHTSA (National Highway Traffic Safety Administration) conseille:

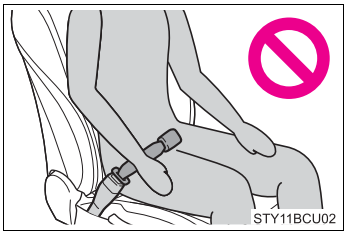
  Sachant que la zone de danger pour le coussin gonflable conducteur se trouve dans les premiers 2 à 3 in. (50 à 75 mm) du déploiement, placez-vous à 10 in. (250 mm) du coussin gonflable conducteur pour garantir une marge de sécurité suffisante. Cette distance est à mesurer entre le moyeu du volant de direction et le sternum. Si vous êtes assis à moins de 10 in. (250 mm), vous pouvez changer votre position de conduite de plusieurs façons:

  - Reculez votre siège le plus possible, tout en continuant à pouvoir atteindre confortablement les pédales.
  - Inclinez légèrement le dossier du siège.
    Bien que la conception des véhicules varie, de nombreux conducteurs peuvent atteindre la distance de 10 in. (250 mm), même avec le siège du conducteur tout en avant, simplement en inclinant légèrement le dossier du siège. Si vous avez des difficultés à voir la route après avoir incliné votre siège, utilisez un coussin ferme et antidérapant pour vous rehausser ou, si votre véhicule est équipé du réglage en hauteur du siège, remontez-le.
  - Si votre volant de direction est réglable, inclinez-le vers le bas. Cela vous permet d'orienter le coussin gonflable vers votre buste plutôt que vers la tête et le cou.

  Le siège doit être réglé selon les recommandations de la NHTSA ci-dessus, tout en conservant le contrôle des pédales et du volant, et la vue des commandes au tableau de bord.

AVERTISSEMENT

Précautions avec les coussins gonflables SRS

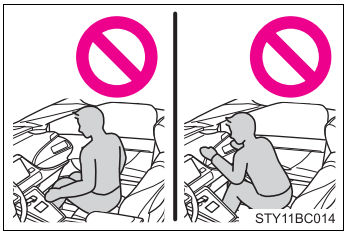


- Si vous attachez une rallonge de ceinture de sécurité aux boucles des ceintures de sièges avant, mais pas au pêne de la ceinture de sécurité proprement dite, les coussins gonflables SRS frontaux déterminent que le conducteur et le passager avant portent leur ceinture de sécurité, alors même qu'elle n'est pas attachée. Dans ce cas, les coussins gonflables SRS frontaux risquent de ne pas se déployer correctement en cas de collision, causant des blessures graves, voire mortelles. Veillez à porter la ceinture de sécurité avec la rallonge de ceinture de sécurité.
- Le coussin gonflable SRS passager avant se déploie également avec une puissance considérable et peut occasionner des blessures graves, voire mortelles, notamment lorsque le passager avant se trouve très près du coussin gonflable. Le siège du passager avant doit se trouver le plus loin possible du coussin gonflable et le dossier doit être réglé de manière à ce que le passager avant soit assis bien droit.
- Le déploiement d'un coussin gonflable peut infliger des blessures graves, voire mortelles, aux nourrissons et aux enfants mal assis et/ou mal attachés. Installez dans un siège de sécurité enfant les enfants trop jeunes pour pouvoir utiliser la ceinture de sécurité. Toyota recommande vivement que tous les nourrissons et enfants soient installés dans les sièges arrière du véhicule et convenablement attachés. Les sièges arrière sont plus sûrs pour les nourrissons et les enfants que le siège passager avant.
- N'installez jamais un siège de sécurité enfant type dos à la route sur le siège passager avant, même si le témoin indicateur "AIR BAG OFF" est allumé. En cas d'accident, la force exercée par le déploiement rapide du coussin gonflable passager avant peut causer des blessures graves, voire mortelles à un enfant, si le siège de sécurité enfant type dos à la route est installé sur le siège passager avant.

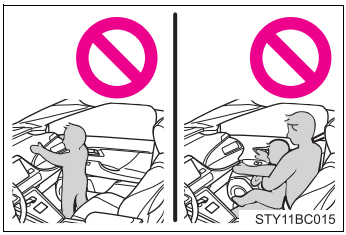
AVERTISSEMENT

Précautions avec les coussins gonflables SRS

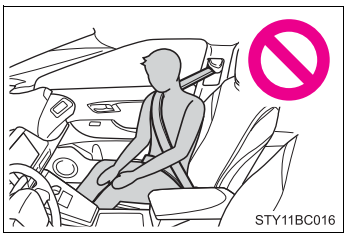
- Ne pas s'asseoir sur le bord du siège et ne pas s'appuyer contre la planche de bord.



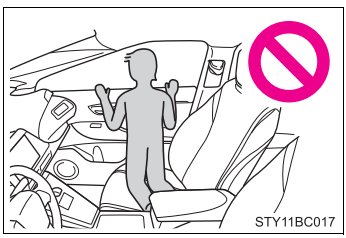
- Ne pas laisser un enfant rester debout devant le coussin gonflable SRS passager avant ni assis sur les genoux du passager avant.
- Ne pas laisser les occupants des sièges avant voyager avec un objet sur les genoux.



- Ne pas s'appuyer contre la porte, contre le rail latéral de toit ou contre les montants avant, latéraux et arrière.



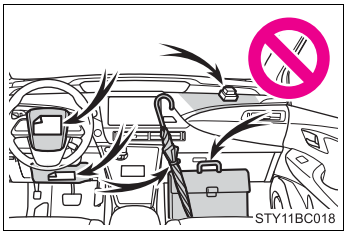
- Interdisez à quiconque de s'agenouiller sur le siège passager en appui contre la porte ou de sortir la tête ou les mains à l'extérieur du véhicule.



AVERTISSEMENT

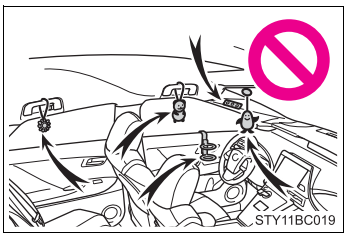
Précautions avec les coussins gonflables SRS

- Ne rien fixer ou disposer sur la planche de bord, la garniture centrale du moyeu de volant de direction et la partie inférieure du tableau de bord.
  Lors du déploiement des coussins gonflables SRS conducteur, passager avant et de genoux, tout objet risque de se transformer en projectile.



- Ne rien fixer sur les parties telles que les portes, la vitre de pare-brise, les vitres latérales, les montants avant et arrière, les rails latéraux de toit et les poignées de maintien.

  (Sauf l'autocollant de limitation de vitesse)



- Ne pas suspendre aux crochets à vêtements un cintre nu ni aucun objet dur ou tranchant. En cas de déploiement des coussins gonflables SRS rideau, tous ces objets pourraient se transformer en projectiles et causer des blessures graves, voire mortelles.
- Si une housse en vinyle recouvre la partie où le coussins gonflable SRS de genoux se déploie, veillez à l'enlever.
- N'utilisez pour les sièges aucun accessoire venant recouvrir les parties où se déploient les coussins gonflables SRS latéraux et le coussin gonflable SRS d'assise de siège, car il risquerait de gêner le déploiement des coussins gonflables SRS. De tels accessoires peuvent empêcher les coussins gonflables SRS latéraux et d'assise de siège de s'activer correctement, neutraliser le système ou provoquer le déploiement accidentel des coussins gonflables SRS latéraux et d'assise de siège, provoquant ainsi des blessures graves, voire mortelles.

AVERTISSEMENT

Précautions avec les coussins gonflables SRS

- Évitez de faire subir des chocs ou des pressions excessives aux parties renfermant les composants des coussins gonflables SRS.
  En effet, cela pourrait entraîner un mauvais fonctionnement des coussins gonflables SRS.
- Ne touchez aucun composant du système immédiatement après le déclenchement (déploiement) des coussins gonflables SRS, car ils sont alors encore très chauds.
- Si vous avez des difficultés à respirer après le déploiement des coussins gonflables SRS, ouvrez une porte ou une vitre pour faire entrer de l'air frais, ou bien descendez du véhicule si cela ne présente pas de danger. Retirez tout résidu dès que possible afin d'éviter d'éventuelles irritations de la peau.
- Si les parties renfermant les coussins gonflables SRS, telles que la garniture centrale du volant de direction et les garnitures de montants avant et arrière, apparaissent abîmées ou craquelées, faites-les remplacer par votre concessionnaire Toyota.
- Ne rien poser sur le siège du passager avant, comme un coussin par exemple. Cela a pour conséquence de répartir le poids du passager sur toute la surface du siège, ce qui empêche le capteur de détecter normalement le poids du passager. En conséquence, les coussins gonflables SRS frontaux du passager avant peuvent ne pas se déployer en cas de collision.

AVERTISSEMENT

Modification et élimination en fin de vie des éléments du système de coussins gonflables SRS

Ne mettez pas à la casse votre véhicule et ne lui apportez aucune des modifications suivantes sans consulter votre concessionnaire Toyota. Les coussins gonflables SRS peuvent ne pas fonctionner correctement ou se déployer (se gonfler) accidentellement, provoquant ainsi des blessures graves, voire mortelles.

- Installation, dépose, démontage et réparations des coussins gonflables SRS
- Réparations, modifications, démontage ou remplacement du volant, du tableau de bord, de la planche de bord, des sièges ou de leur garnissage, des montants avant, latéraux et arrière ou des rails latéraux de toit
- Réparation ou modification des ailes avant, du bouclier avant, ou des flancs de l'habitacle
- Installation d'un équipement de protection sur la calandre (pare-buffle, pare-kangourou, etc.), d'un chasse-neige, de treuils ou d'une galerie de toit
- Modification des suspensions du véhicule
- Installation d'appareils électroniques, tels qu'un émetteur/récepteur radio ou lecteur de CD
- Aménagements du véhicule visant à permettre sa conduite par une personne atteinte d'un handicap physique

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For information regarding the equipment listed below, refer to the “NAVIGATION SYSTEM OWNER’S MANUAL”.

- Navigation system
- Rear view monitor system
- Audio system
- Hands-free system (for cellular phone)

What to do if... (Troubleshooting)

If you have a problem, check the following before contacting your Toyota dealer.

The doors cannot be locked, unlocked, opened or closed

You lose your keys

- If you lose your mechanical keys, new genuine mechanical keys can be made by your Toyota dealer. (→P. 129)
- If you lose your electronic keys, the risk of vehicle theft increases significantly. Contact your Toyota dealer immediately. (→P. 131)

The doors cannot be locked or unlocked

- Is the key battery weak or depleted? (→P. 400)
- Is the power switch in ON mode?
  When locking the doors, turn the power switch off. (→P. 188)
- Is the electronic key left inside the vehicle?
  When locking the doors, make sure that you have the electronic key on your person.
- The function may not operate properly due to the condition of the radio wave. (→P. 146)

The rear door cannot be opened

- Is the child-protector lock set?
  The rear door cannot be opened from inside the vehicle when the lock is set. Open the rear door from outside and then unlock the child-protector lock. (→P. 135)

The trunk lid is closed with the electronic key left inside

- The function to prevent the electronic key from being left inside the trunk will operate and you can open the trunk as usual. Take the key out from the trunk. (→P. 140)

If you think something is wrong

The fuel cell system does not start

- Did you press the power switch while firmly depressing the brake pedal? (→P. 186)
- Is the shift position in P? (→P. 194)
- Is the electronic key anywhere detectable inside the vehicle? (→P. 144)
- Is the electronic key battery weak or depleted?
  In this case, the fuel cell system can be started in a temporary way. (→P. 450)
- Is the 12-volt battery discharged? (→P. 452)

The windows do not open or close by operating the power window switches

- Is the window lock switch pressed?
  The power window except for the one at the driver's seat cannot be operated if the window lock switch is pressed. (→P. 167)

The power switch is turned off automatically

- The auto power off function will be operated if the vehicle is left in ACCESSORY or ON mode (the fuel cell system is not operating) for a period of time. (→P. 188)

A warning buzzer sounds during driving

- The seat belt reminder light is flashing
  Are the driver and the front passenger wearing the seat belts? (→P. 421)
- The brake system warning light is on
  Is the parking brake released? (→P. 200)

Depending on the situation, other types of warning buzzer may also sound. (→P. 418, 426)

A warning buzzer sounds when leaving the vehicle

- Did anyone inside the vehicle open a door during setting the alarm?
  The sensor detects it and the alarm sounds. (→P. 81)

To stop the alarm, turn the power switch to ON mode or start the fuel cell system.

An alarm is activated and the horn sounds

- Is the electronic key left inside the vehicle?
  Check the message on the multi-information display. (→P. 426)

A warning light turns on or a warning message or indicator is displayed

- When a warning light turns on or a warning message or indicator is displayed, refer to P. 418, 426.

When a problem has occurred

If you have a flat tire

- Stop the vehicle in a safe place and replace the flat tire with the spare tire. (→P. 432)

The vehicle becomes stuck

- Try the procedure for when the vehicle becomes stuck in mud, dirt, or snow. (→P. 463)

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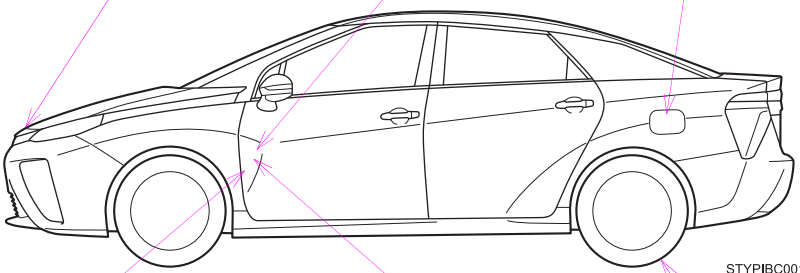
HYDROGEN STATION INFORMATION

Auxiliary catch lever	Trunk opener	Fuel door
P. 366	P. 138	P. 215



Hood lock release lever	Fuel door opener	Tire inflation pressure
P. 366	P. 215	P. 471

Hydrogen tanks' fuel capacity (Reference)	32.3 gal. (122.4 L, 26.9 Imp.gal.) (Approximately 11.0 lb. [5 kg]*) *: This is the maximum possible fill amount. The actual fuel amount achieved at hydrogen stations may be lower due to station capacity or station settings.
Fuel type	Compressed hydrogen gas P. 213, 468
Cold tire inflation pressure	P. 471