



# Emergency Response Guide



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TOYOTA MOTOR CORPORATION

# Foreword

- This guide provides precautions for emergency responders when handling TOYOTA/LEXUS vehicles during an incident.
- It is important to read this guide thoroughly and understand the structure and features of TOYOTA/LEXUS vehicles to ensure safety.
- The illustrations used in this guide are representative examples. Refer to the Quick Reference Sheet (QRS) for each model for model specific information such as key identification points, component locations, etc.

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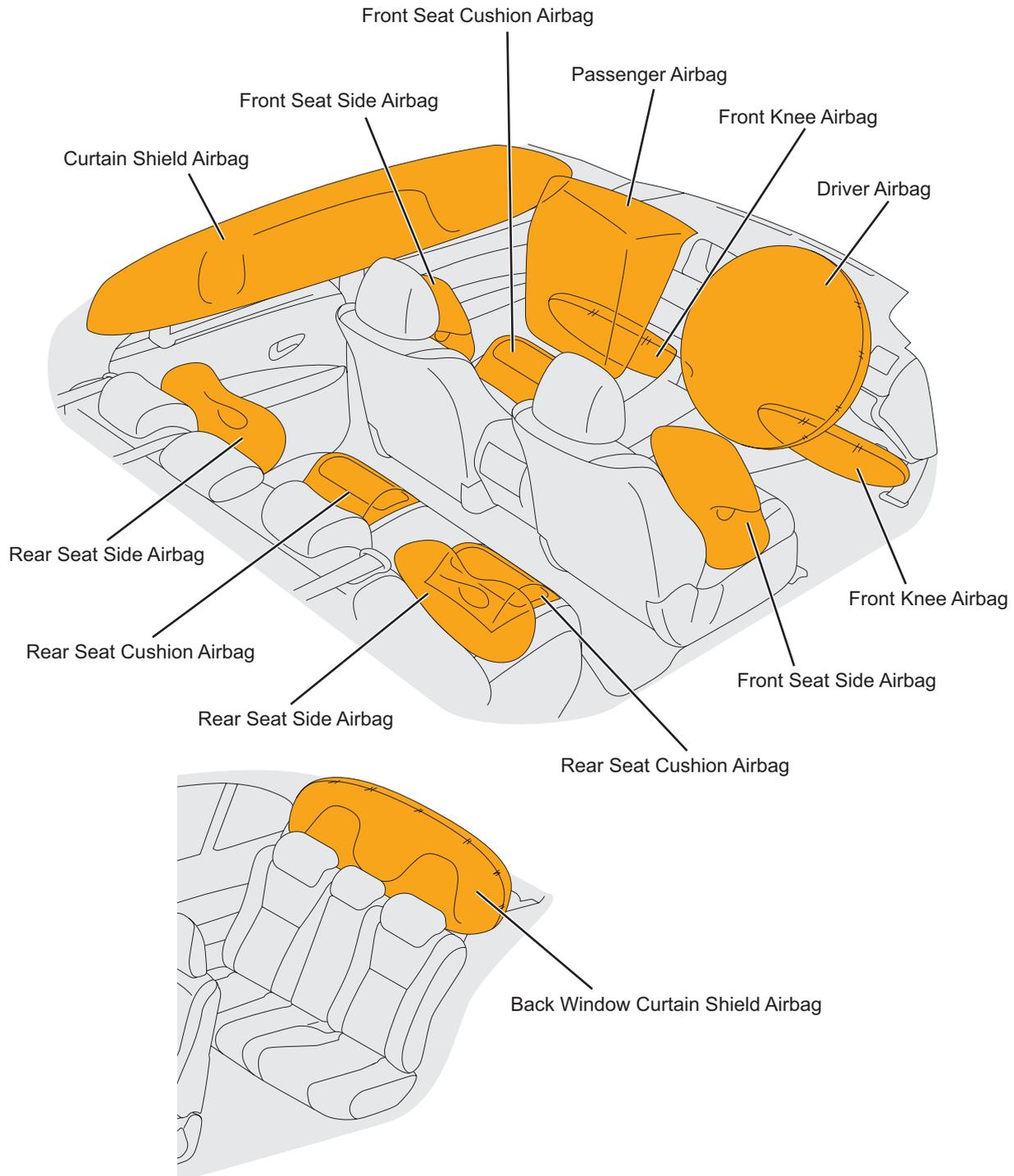
# Components Requiring Special Attention

- The construction and functions of components requiring special attention during emergency response are described in this section.



# SRS Airbags

- When a vehicle receives a strong impact that can cause serious injury to the occupants, the SRS airbags deploy and the seatbelts restrain the occupants to reduce impact to the body. Refer to the QRS for each model for the type and location of each SRS airbag.



- The SRS airbags consist of an inflator (explosive), a bag and other components and are non-serviceable.
- When an airbag sensor detects a strong impact, an ignition signal is sent to an inflator. When the inflator is ignited, gas is generated to inflate a bag, reducing the impact to an occupant.

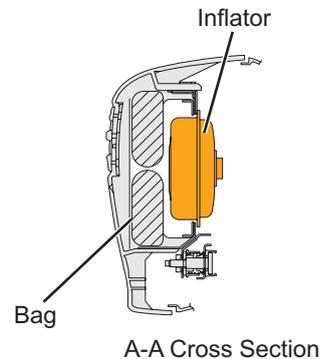
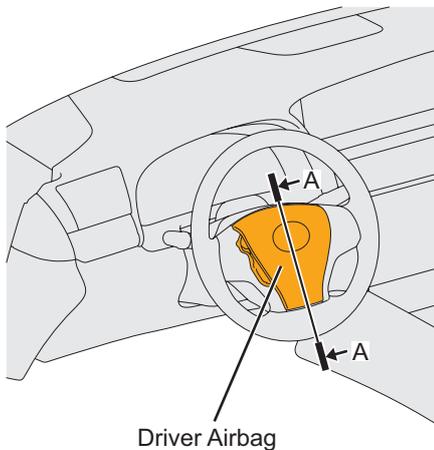


WARNING

- The SRS may remain powered for up to 90 seconds after the vehicle is shut off and disabled (see page 51). Wait at least 90 seconds before starting any operation. Failure to shut off and disable the vehicle before emergency response procedures are performed may result in serious injury or death from unintentional deployment of the SRS.
- Depending on the circumstances surrounding a collision, such as vehicle speed, point of impact, occupant detection etc., airbags will not always be deployed. If an inflator of the undeployed SRS airbag is cut, the powder inside the inflator may ignite, causing an explosion. To prevent serious injury or death from unintentional SRS deployment, avoid breaching the inflators.
- Immediately after an SRS airbag is deployed, the components are extremely hot and may cause burns if touched.
- If an SRS airbag deploys with all doors and windows closed, inflation gas may cause breathing difficulty.
- If residue that is produced during SRS deployment comes in contact with skin, rinse it off immediately to prevent skin irritation.

## Driver Airbag

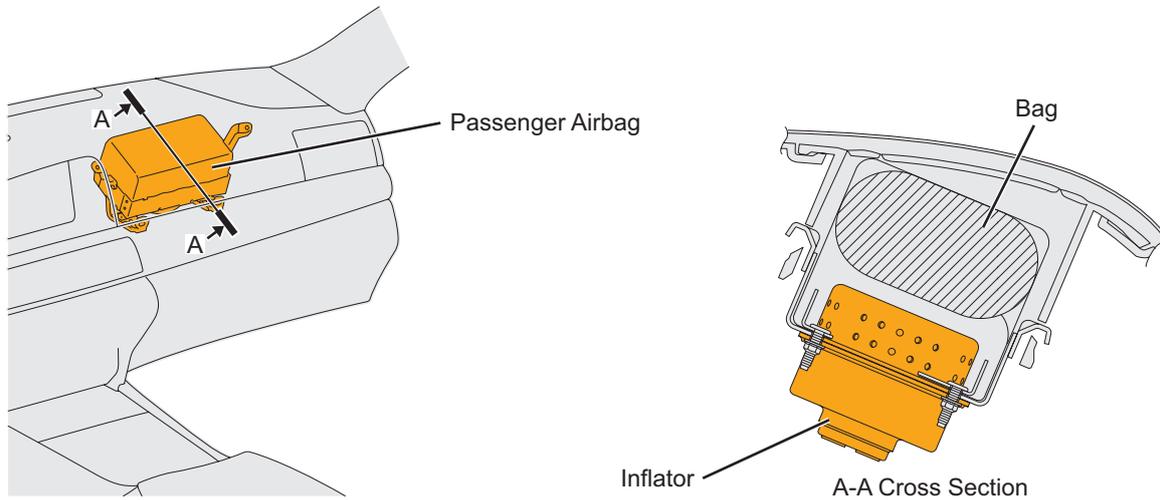
- A driver airbag is mounted in the steering wheel pad and activated in the event of a frontal collision.





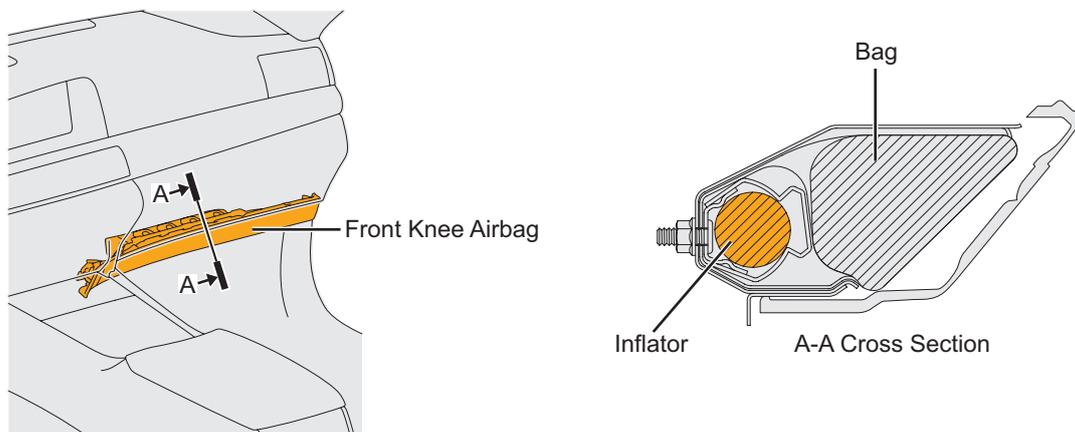
## Passenger Airbag

- A passenger airbag is mounted in the upper portion of the passenger side instrument panel and activated in the event of a frontal collision.



## Front Knee Airbag

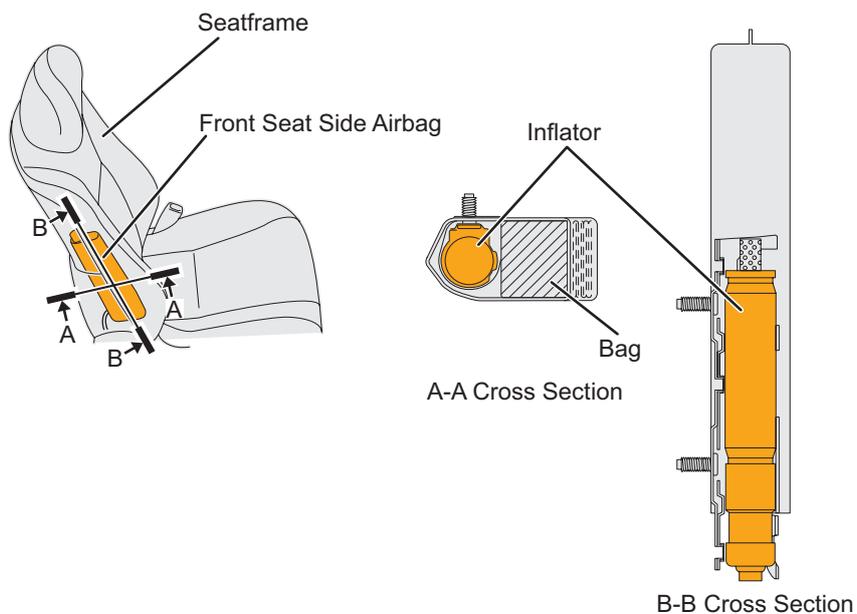
- Front knee airbags are mounted in the lower portion of the instrument panel on the driver side and the front passenger side, and activated in the event of a frontal collision.





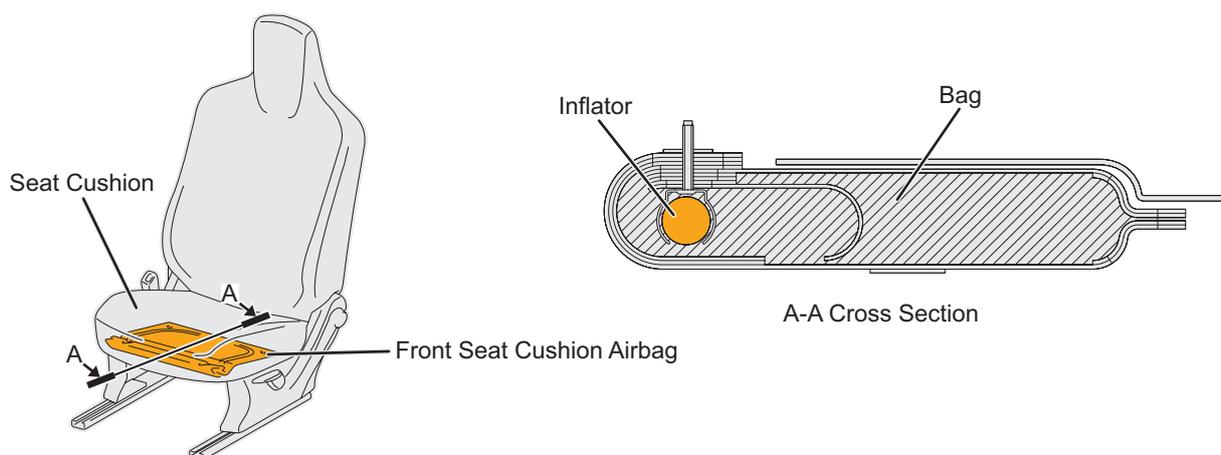
## Front Seat Side Airbag

- Front seat side airbags are mounted in the seatframe of the driver seat and the front passenger seat, and activated in the event of a side collision.
- In some vehicles, front seat side airbags are also activated in the event of a frontal collision.



## Front Seat Cushion Airbag

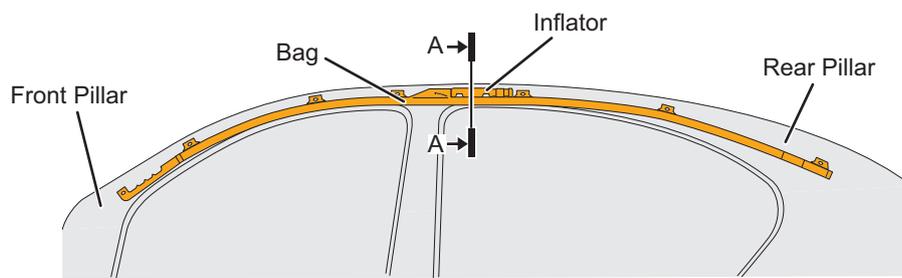
- Front seat cushion airbags are mounted in the seat cushion of the driver seat and the front passenger seat, and activated in the event of a frontal collision.



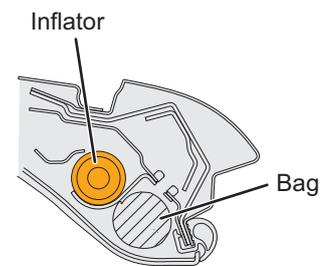


## Curtain Shield Airbag

- Curtain shield airbags are mounted in the area between the front pillar and rear pillar on the driver side and the front passenger side, and activated in the event of a side collision.
- In some vehicles, curtain shield airbags are also activated in the event of a frontal collision.



Curtain Shield Airbag

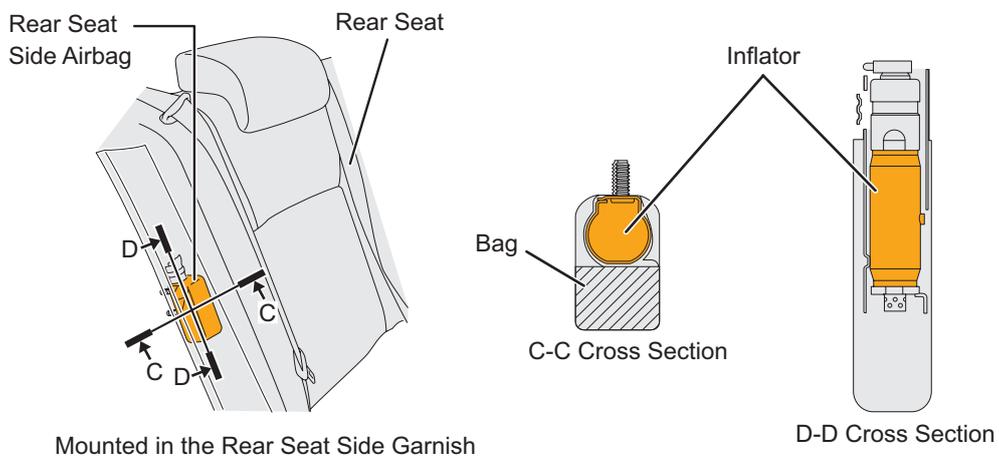
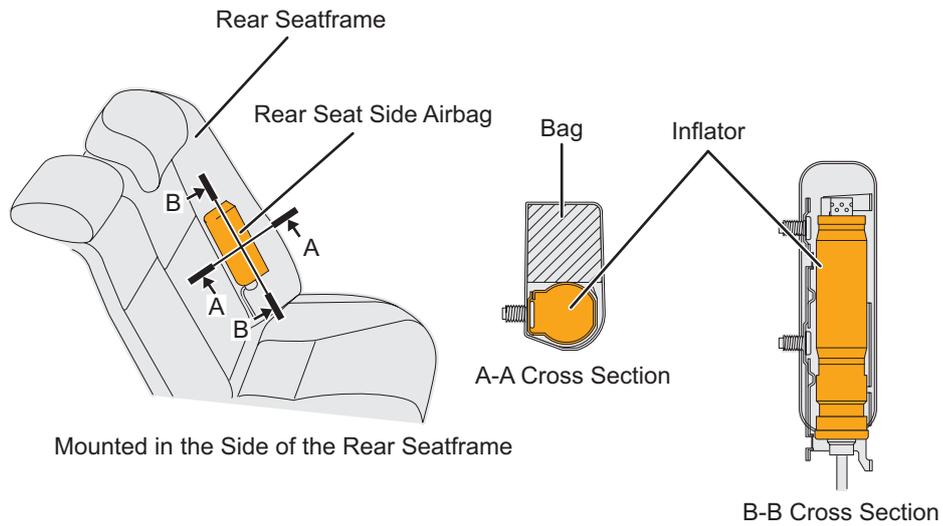


A-A Cross Section



## Rear Seat Side Airbag

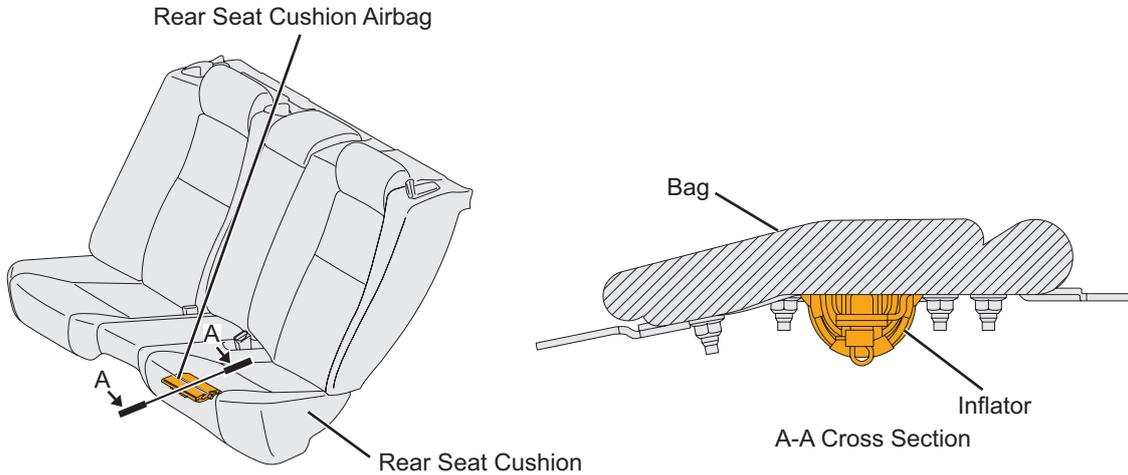
- Rear seat side airbags are mounted in the sides of the rear seatframe or rear seat side garnish and activated in the event of a side collision.
- In some vehicles, rear seat side airbags are also activated in the event of a frontal collision.





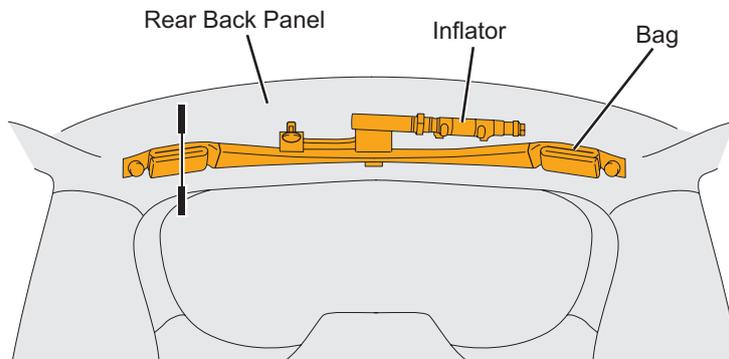
## Rear Seat Cushion Airbag

- Rear seat cushion airbags are mounted in the rear seat cushions and activated in the event of a frontal collision.



## Back Window Curtain Shield Airbag

- A back window curtain shield airbag is mounted in the upper portion of the rear back panel (back door mounting section) and activated in the event of a rear collision.

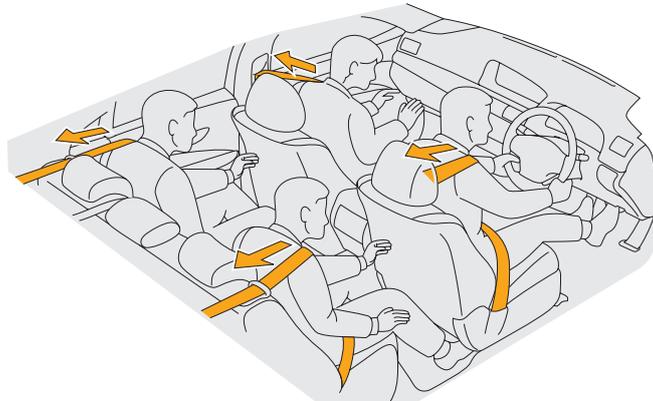


Back Window Curtain Shield Airbag

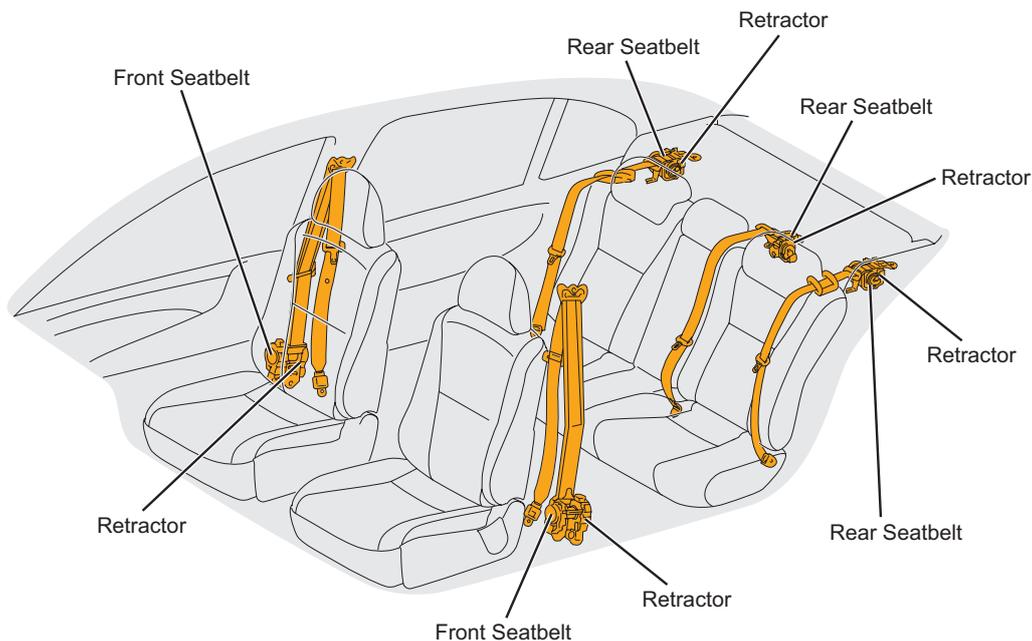


# Seatbelt Pretensioner

- When the vehicle receives a strong impact from the front, the seatbelts are retracted to optimally restrain the occupants.



- A pretensioner mechanism is built into the retractor of each of the front seatbelts. Some models have a seatbelt pretensioner mechanism in the rear seatbelts.
- The pretensioner mechanism consists of a gas generator, a piston and a pinion gear.
- When an airbag sensor detects a strong impact, an ignition signal is sent to a gas generator. When the gas generator is ignited, gas is generated and its pressure rotates a gear that retracts the seatbelt.



- Refer to the QRS for each model for locations of the seatbelt pretensioners.

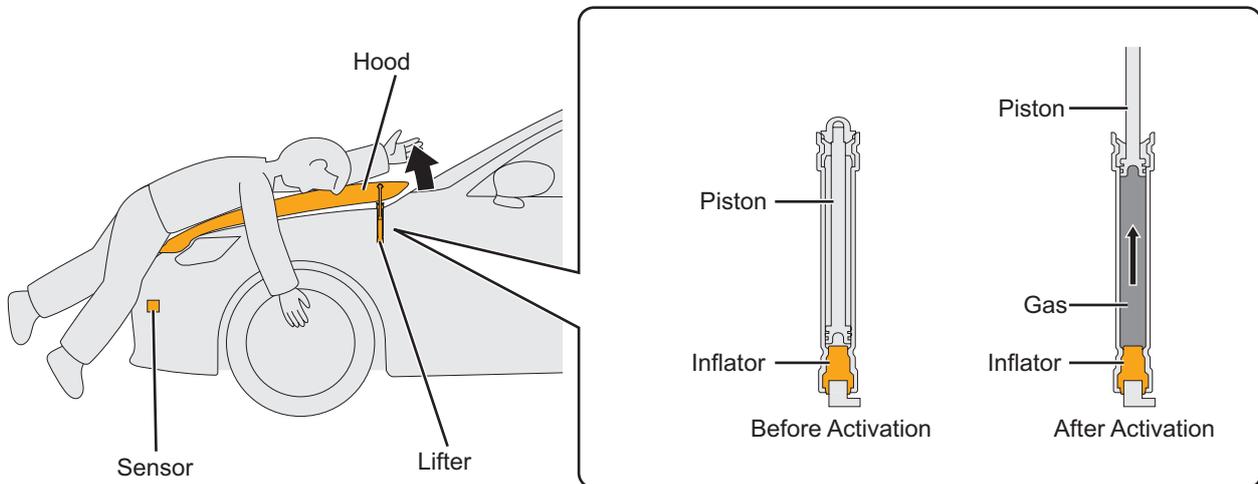


- The seatbelt pretensioners may remain powered for up to 90 seconds after the vehicle is shut off and disabled (see page 51). Wait at least 90 seconds before starting any operation. Failure to shut off and disable the vehicle before emergency response procedures are performed may result in serious injury or death from unintentional actuation of the seatbelt pretensioner.
- To prevent serious injury or death from unintentional seatbelt pretensioners actuation, avoid breaching the seatbelt pretensioners.



# Pop Up Hood

- A pop up hood lifts the rear of the hood in the event of a frontal collision to increase the space underneath the hood and absorb impact to the pedestrian's head.
- When the sensor inside the front bumper detects a strong impact, an ignition signal is sent to the inflator. When the inflator is ignited, the piston inside the lifter is pushed up, lifting the hood.



- The pop up hood may remain powered for up to 90 seconds after the vehicle is shut off and disabled (see page 51). Wait at least 90 seconds before starting any operation. Failure to shut off and disable the vehicle before emergency response procedures are performed may result in serious injury or death from unintentional actuation of the pop up hood.
- If a lifter is cut, the powder inside the inflator may ignite, causing an explosion. To prevent serious injury or death from unintentional pop up hood actuation, avoid breaching the lifters.
- If the hood release lever is pulled after the pop up hood is activated, the hood may rise more, possibly resulting in an injury.
- After the pop up hood is activated, the hood cannot be lowered by hand. If the hood is pushed down excessively, it may be deformed, possibly resulting in an injury.
- Immediately after the pop up hood is activated, the lifters are very hot and may cause burns if touched.



## Gas-filled Damper

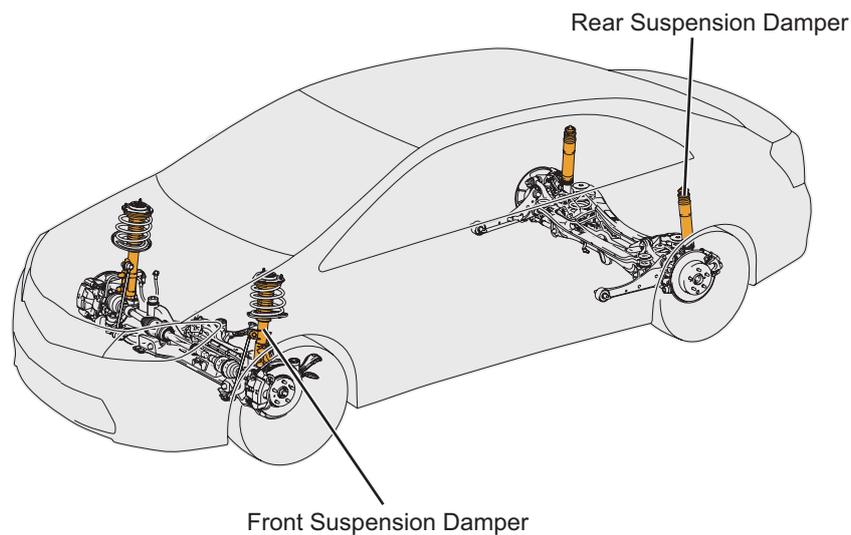
- Gas-filled dampers are used in various components, such as in the suspension (shock absorbers), engine hood stays, and for other various purposes. Nitrogen (N<sub>2</sub>) gas is used in these dampers.
- Nitrogen (N<sub>2</sub>) gas is colorless, odorless and harmless.
- Refer to the QRS for each model for the location of these gas-filled dampers.



- If a gas-filled damper is heated in an event of a vehicle fire, the damper may explode due to expanded nitrogen (N<sub>2</sub>) gas, possibly causing an injury.
- If a gas-filled damper is cut, nitrogen (N<sub>2</sub>) gas may cause metal shavings from the cut to scatter. Wear appropriate safety gear such as safety glasses when cutting a gas-filled damper.

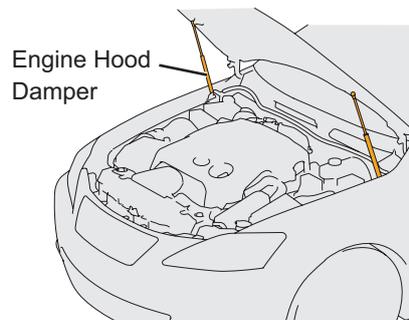
## Front and Rear Suspension Dampers

- Suspension dampers are installed in the front and the rear suspension.



## Engine Hood Damper

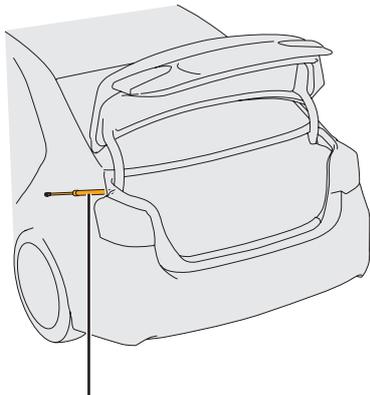
- Gas-filled dampers are installed as the stays for the engine hood.



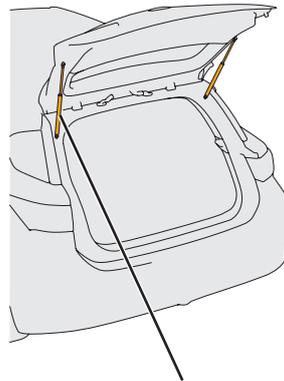


## Luggage Compartment, Hatchback Door, Back Door Dampers

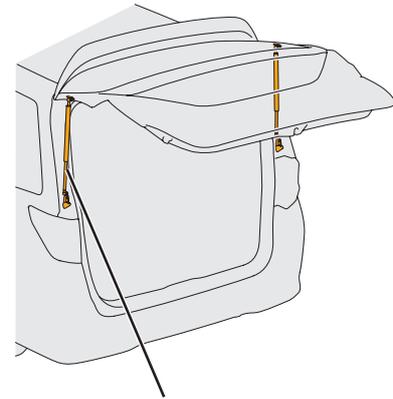
- Gas-filled dampers are installed as the stays for the luggage compartment, the hatchback door and the back door.



Luggage Compartment Damper



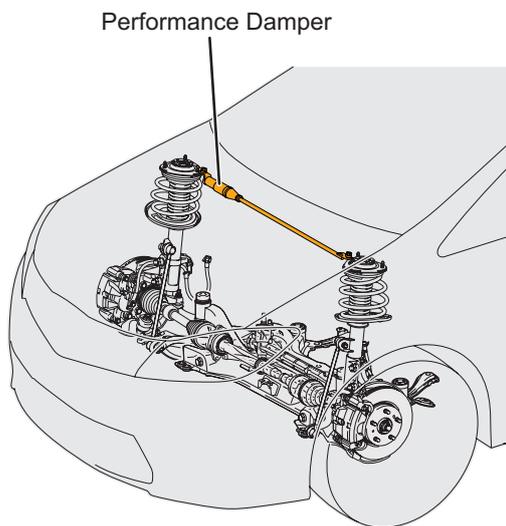
Hatchback Door Damper



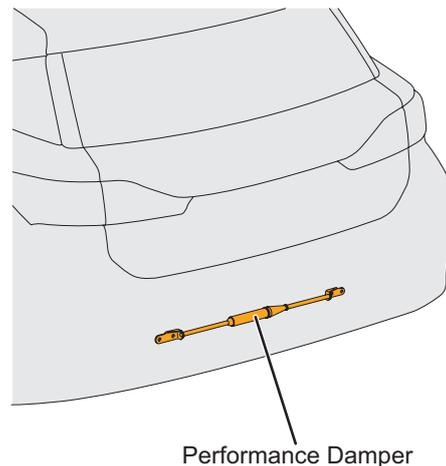
Back Door Damper

## Performance Damper

- Performance dampers are installed across the front and the rear suspension towers and between the right and left sides of the rear lower structural frame (near the rear bumper).



Performance Damper

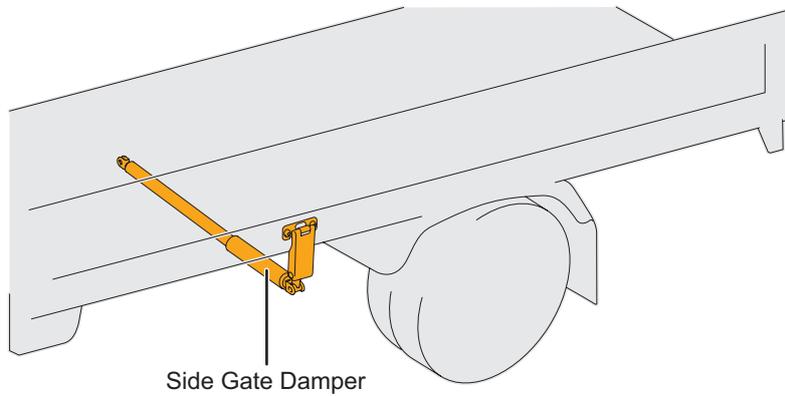
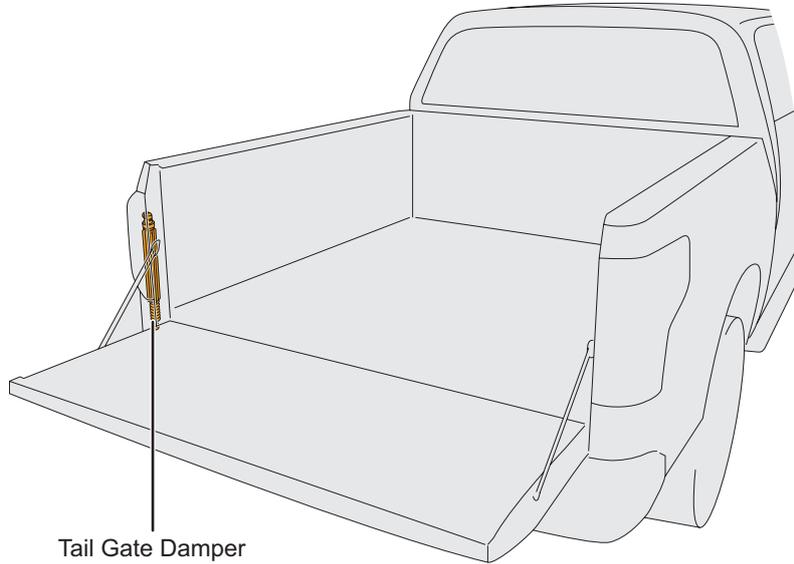


Performance Damper



## Tail Gate Damper, Side Gate Damper

- Gas-filled dampers are installed as the stays for the tail gate and side gate.





# High Voltage System

- Hybrid vehicles (HV), plug-in hybrid vehicles (PHV) and electric vehicles (EV) use a motor driven by high voltage electricity (over 200 V) to generate driving torque. These vehicles are equipped with high voltage electrical components such as a high voltage battery, inverter/converter, transmission/transaxle (electric motor), A/C compressor, charger and voltage inverter, and high voltage power cables.
- A case/cover is installed on high voltage electrical components to identify them. High voltage power cables are wrapped in an orange cover.
- The cases/covers of the high voltage electrical components are insulated from the high voltage conductors inside the components. The vehicle body is insulated from the high voltage electrical components, and is safe to touch during normal conditions.
- The high voltage system is deactivated when the ignition switch or power switch is turned OFF. If an impact is detected (SRS is activated) or if a decrease in insulation resistance of the high voltage system is detected, the high voltage system is automatically deactivated.
- Refer to the QRS for each model for the locations of the high voltage electrical components.



- The high voltage system may remain powered for up to 10 minutes after the vehicle is shut off and disabled (see page 51). Failure to shut off and disable the vehicle before emergency response procedures are performed may result in serious injury or death from severe burns and electric shock from the high voltage electrical system.
- To prevent serious injury or death from severe burns or electric shock, avoid touching, cutting, or breaching any orange high voltage power cable or high voltage component. Wear appropriate protective equipment such as insulated gloves when there is a risk of touching high voltage power cables or high voltage components.
- When the person(s) in charge of handling the damaged vehicle is away from the vehicle, other person(s) may accidentally touch the vehicle and be electrocuted, resulting in severe injury or death. To avoid this danger, display a "HIGH-VOLTAGE DO NOT TOUCH" sign to warn others (print and use page 19 of this guide).



Person in charge:

**CAUTION:**  
**HIGH-VOLTAGE**  
**DO NOT TOUCH.**

**CAUTION:**  
**HIGH-VOLTAGE**  
**DO NOT TOUCH.**

Person in charge:

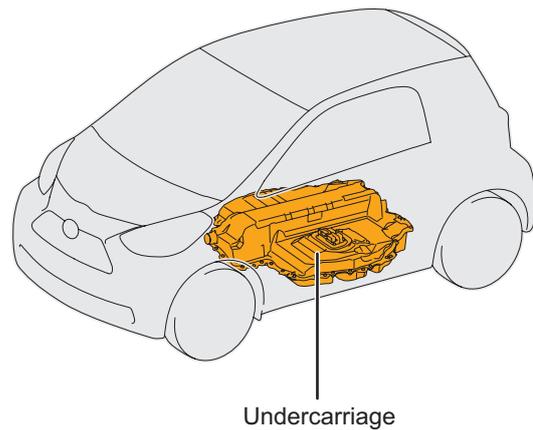
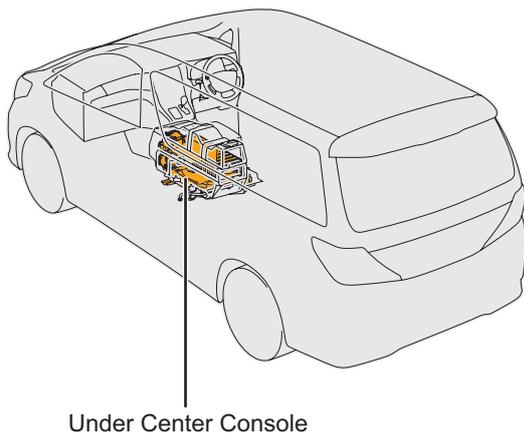
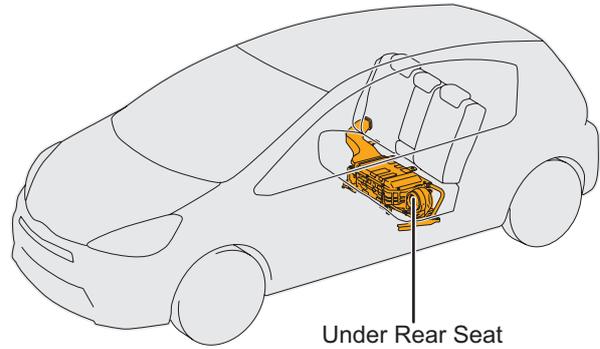
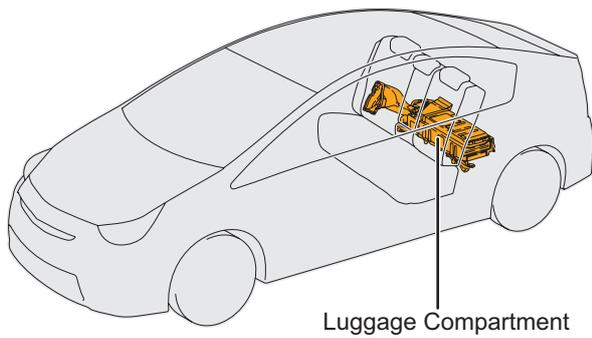
When performing work on the HV system, fold this sign and put it on the roof of the vehicle.

High Voltage System



## High Voltage Battery

- The high voltage battery for the motor stores high voltage electricity at over 200 V. Depending on the model the battery is installed in the luggage compartment, under the rear seats, under the center console or under the floor.

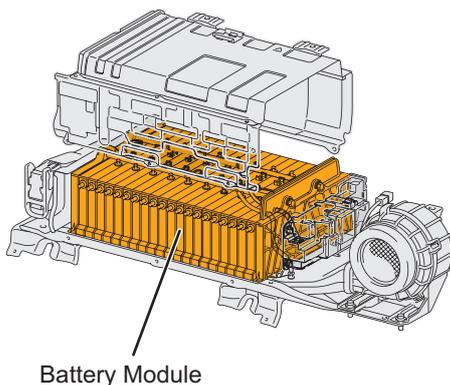




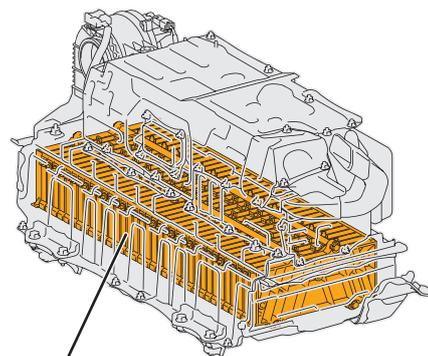
■ A Nickel-metal hydride (Ni-MH) battery or lithium ion (Li-ion) battery is used as the high voltage battery.

1. Nickel-metal hydride (Ni-MH) battery

- Ni-MH batteries consist of 20 to 40 modules, each consisting of six 1.2 V cells, connected in series to obtain high voltage (144 to 288 V).
- The battery modules are contained within a metal case and accessibility is limited.
- A catastrophic crash that would breach both the metal battery pack case and a metal battery module would be a rare occurrence.
- The Ni-MH battery electrolyte is a caustic alkaline (pH 13.5) that is damaging to human tissues. The electrolyte, however, is absorbed in the cell plates and will not normally spill or leak out even if a battery module is cracked.
- Electrolyte leakage from the HV battery pack is unlikely due to its construction and the amount of available electrolyte contained within the Ni-MH modules. Any spillage would not warrant a declaration as a hazardous material incident.



Battery Module



Battery Module



- To avoid injury by coming in contact with the electrolyte, wear appropriate protective equipment such as rubber gloves and safety goggles when there is a risk of touching electrolyte.



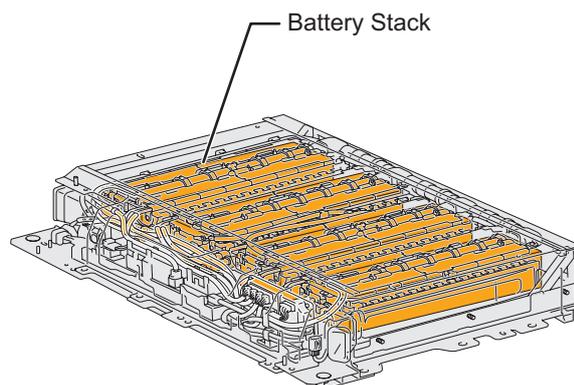
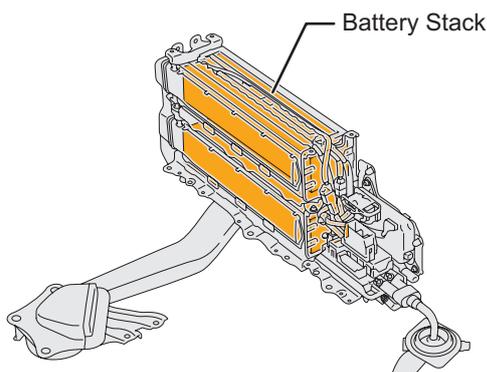
Electrical Shock Risk



Leakage Risk

## 2. Lithium ion (Li-ion) battery

- Li-ion batteries consist of multiple stacks, each stack consisting of 14 to 28 cells. Two to four battery stacks are connected in series to obtain high voltage (201.6 to 207.2 V).
- The battery cells are contained within a case and accessibility is limited.
- A catastrophic crash that would breach both the metal battery stack case or battery frame and a metal battery cells would be a rare occurrence.
- The Li-ion battery electrolyte is a flammable organic electrolyte that is damaging to human tissues. The electrolyte is absorbed into the battery cell separators, even if the battery cells are crushed or cracked, it is unlikely that liquid electrolyte will leak.
- Only a small amount may leak from the batteries which may irritate the eyes, nose, throat, and skin.
- Any liquid electrolyte that leaks from a Li-ion battery cell quickly evaporates. Contact with the vapor produces by the electrolyte may irritate the nose and throat. Burning batteries may also irritate the eyes, nose, and throat.



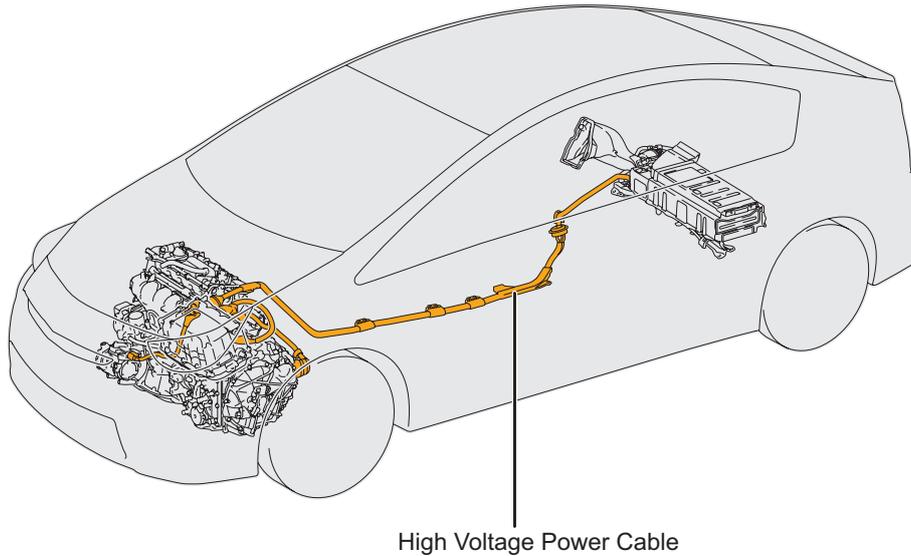
WARNING

- To avoid injury by coming in contact with the electrolyte or vapor, wear appropriate protective equipment such as rubber gloves, safety goggles, protective mask or SCBA when there is a risk of touching electrolyte.
- If the electrolyte spills, keep it away from fire and ensure the area is well ventilated. Absorb the electrolyte with a waste cloth or equivalent absorbing material and keep it in an airtight container until disposed of.



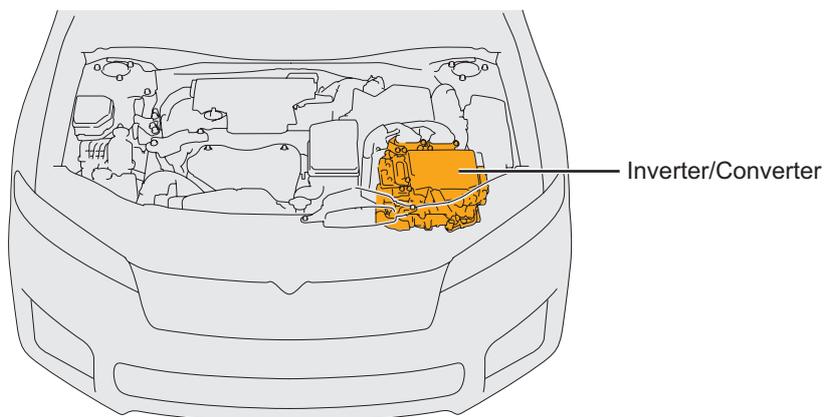
## High Voltage Power Cable

- High voltage power cables are wrapped in an orange cover and are used to connect high voltage electrical components such as the high voltage battery inverter/converter, electric motor, A/C compressor and charger.
- The high voltage power cables are installed in the engine/motor compartment, motor compartment and in the center of the vehicle (routed through the center tunnel).



## Inverter/Converter

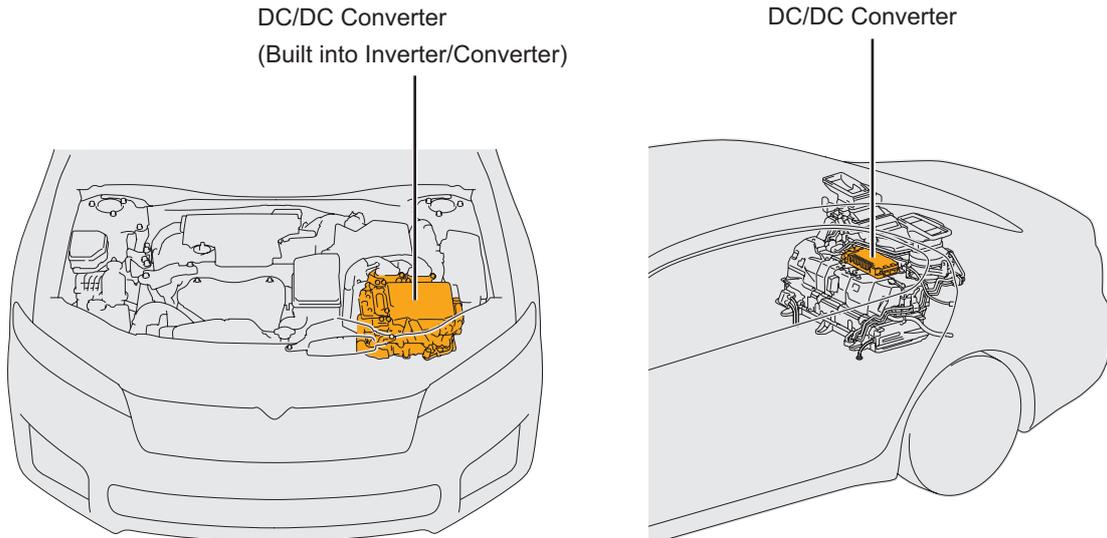
- The inverter/converter is installed in the engine/motor compartment and boosts and inverts the DC electricity from the high voltage battery to 3-phase AC electricity that drives the electric motor.





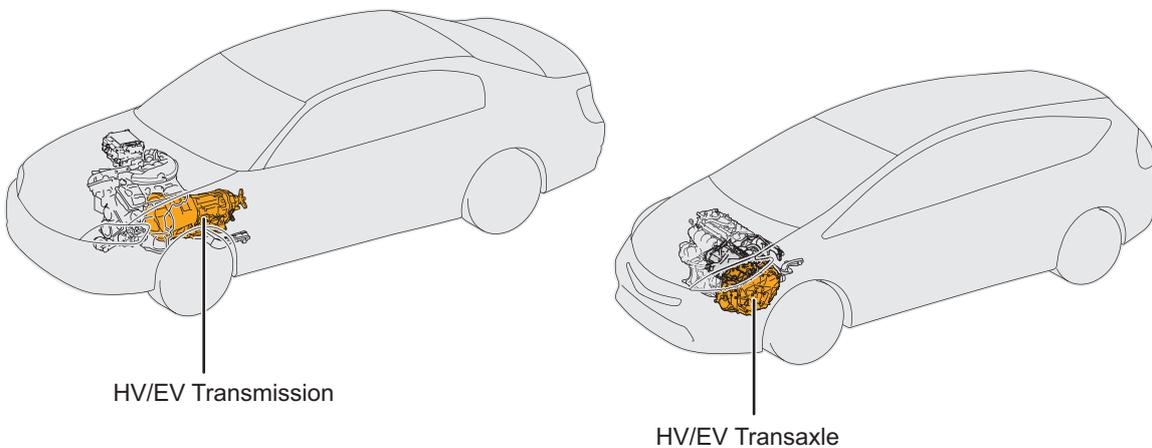
## DC/DC Converter

- The DC/DC converter lowers the DC electricity from the high voltage battery to supply it to electric accessories such as the headlights and power windows, and to charge the 12 V battery.
- The DC/DC converter is built into the inverter/converter or installed in the area near the high voltage battery on some models.



## HV/EV Transmission HV/EV Transaxle

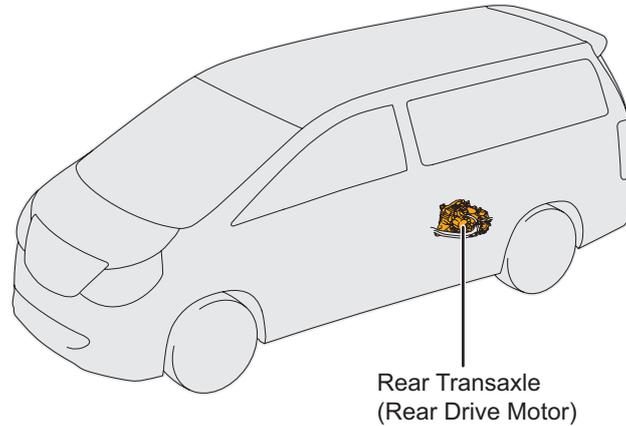
- The HV/EV transmission/transaxle contains an electric motor/generator that is powered by output voltage (up to 650 V) from the inverter/converter, and charges the high voltage battery.
- The HV/EV transmission/transaxle is installed in the engine compartment or motor compartment. Location varies depending on layout.





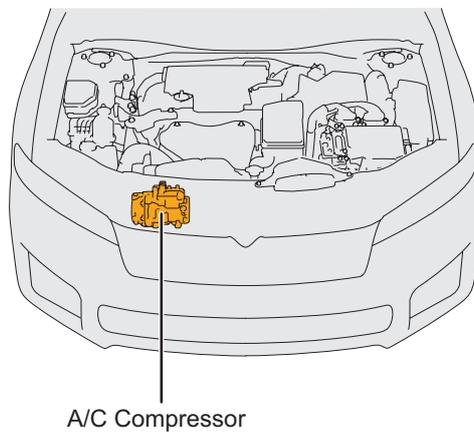
## Rear Drive Motor

- The rear drive motor is powered by output voltage (up to 650 V) from the inverter/converter.
- It is built into the rear transaxle and located above the rear driveshafts.



## A/C Compressor

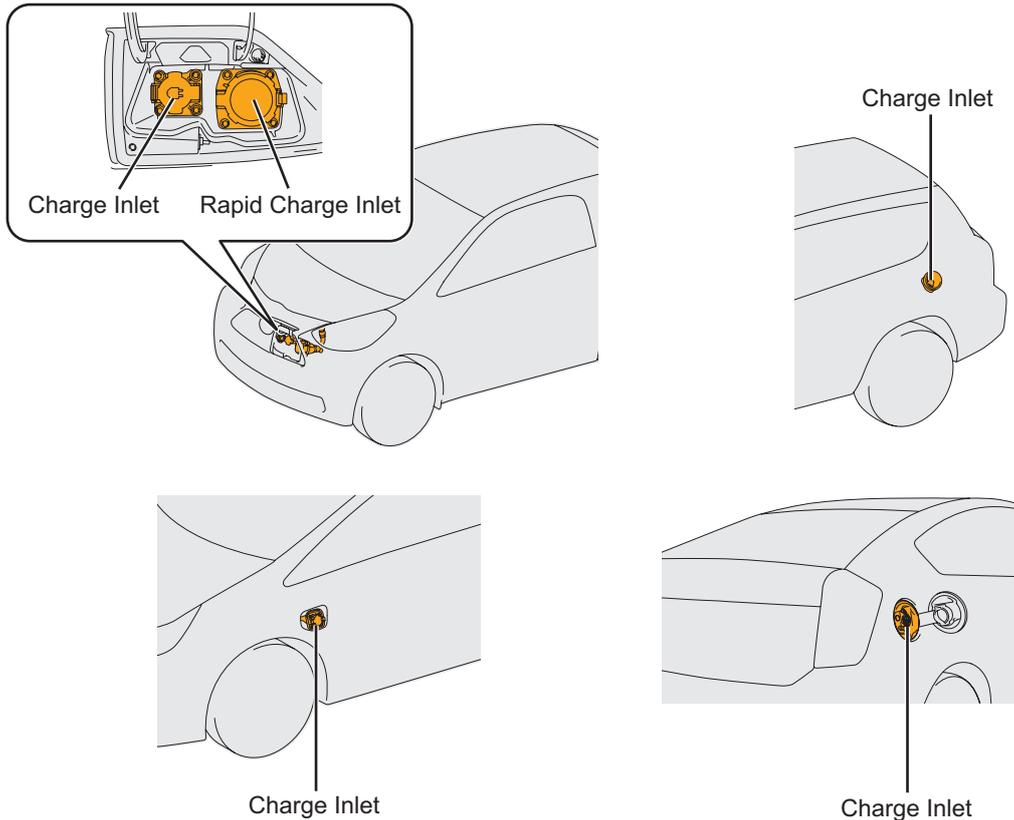
- The A/C compressor used on hybrid vehicles (HV) and electric vehicles (EV) contains an electric motor that is powered by electricity from the high voltage battery. It is installed in the engine/motor compartment.





## Charging Inlet

- Plug-in hybrid vehicles (PHV) and electric vehicles (EV) are equipped with a charging inlet to charge the high voltage battery using an external power source. Some EVs are equipped with a quick charging inlet for quick charging (DC 500 V) as well.
- The PHV and EV have orange charging inlet power cables that are energized during charging.



- To prevent serious injury or death from severe burns or electric shock, shut off the utility circuit supplying power to the charge cable before disconnecting it if the vehicle, charge cable or charger is submerged in water.

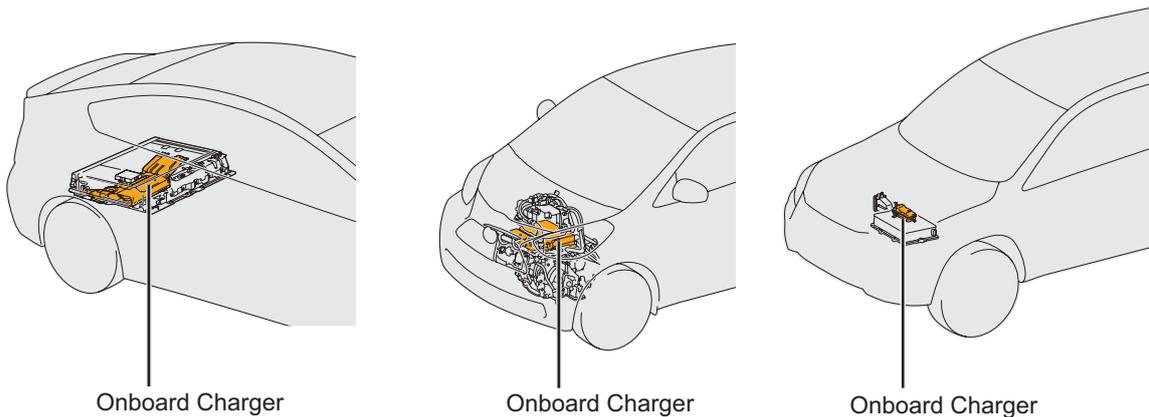


- If the lock of the charge cable assembly connector cannot be released, turn OFF or unplug the external charger, or turn its main breaker OFF.
- The lock of the charge cable assembly connector cannot be released during quick charging. If charging does not stop even when the charger is turned OFF, turn its main breaker OFF.



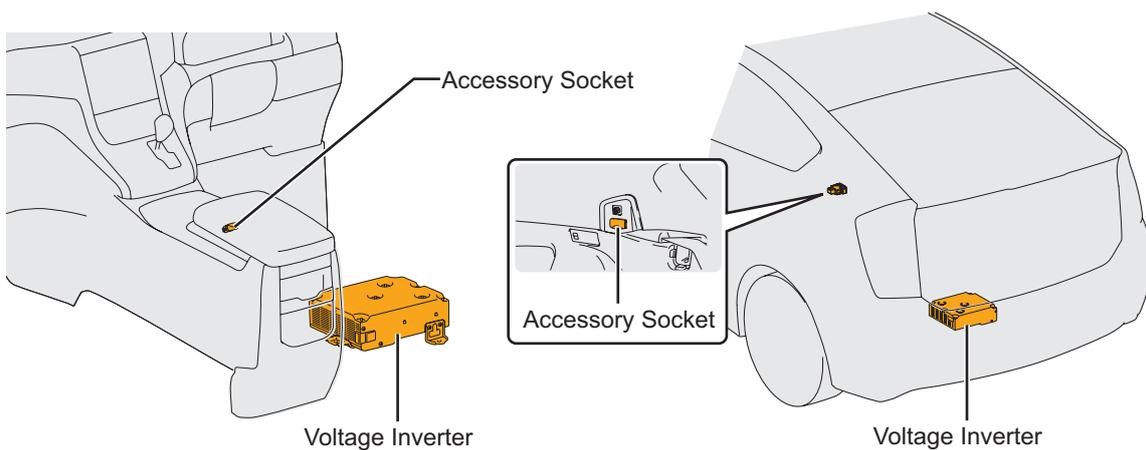
## Onboard Charger

- Plug-in hybrid vehicles (PHV) and electric vehicles (EV) are equipped with an onboard charger to charge the high voltage battery.
- AC power supplied from an external power source is converted to DC, boosted, and then used to charge the high voltage battery.



## Accessory Socket (AC 100 V/1500 W)

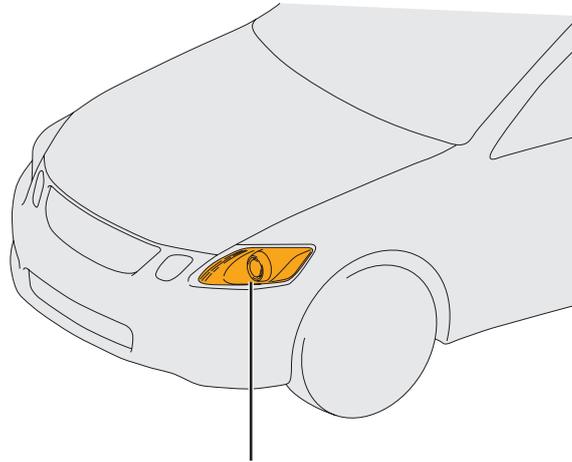
- Hybrid vehicles (HV) and plug-in hybrid vehicles (PHV) are equipped with an accessory socket.
- Using an inverter that is separate from the high voltage inverter/converter, it converts DC voltage from the high voltage battery to AC voltage that can supply power to electronic devices (AC 100 V/1500 W).





## High Intensity Discharge (HID) Headlights

- Headlights use High Intensity Discharge (HID) bulbs, which emit light by creating an electric discharge between electrodes inside the bulbs.
- When the HID headlights are turned on, high voltage of approximately 20,000 to 30,000 V is generated instantaneously.



Discharge Headlights

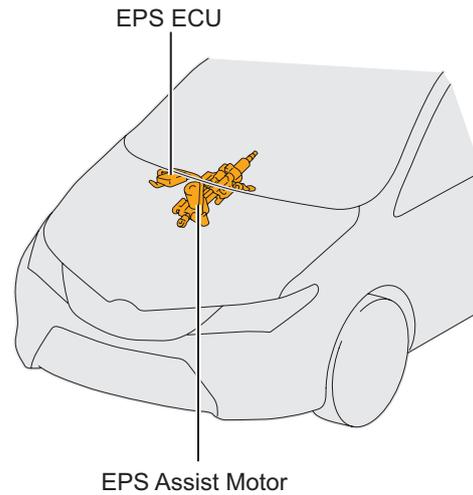
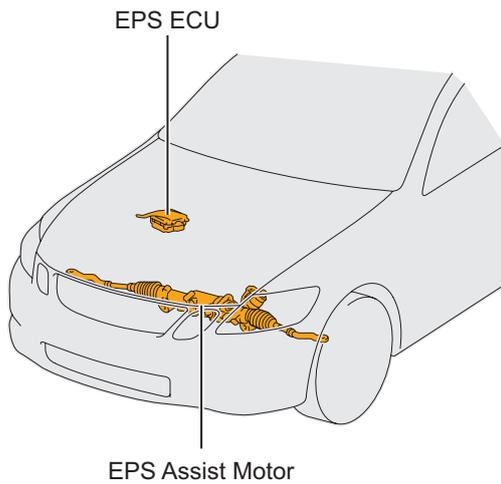


- To prevent serious injury or death from electric shock, avoid touching, cutting, or breaching the bulb, socket, electric circuit and components of the headlights.
- To prevent burns, avoid touching the metal parts on the back of the headlights and the high-voltage sockets while the discharge headlights are turned on or immediately after they are turned off.



# Electric Power Steering (EPS)

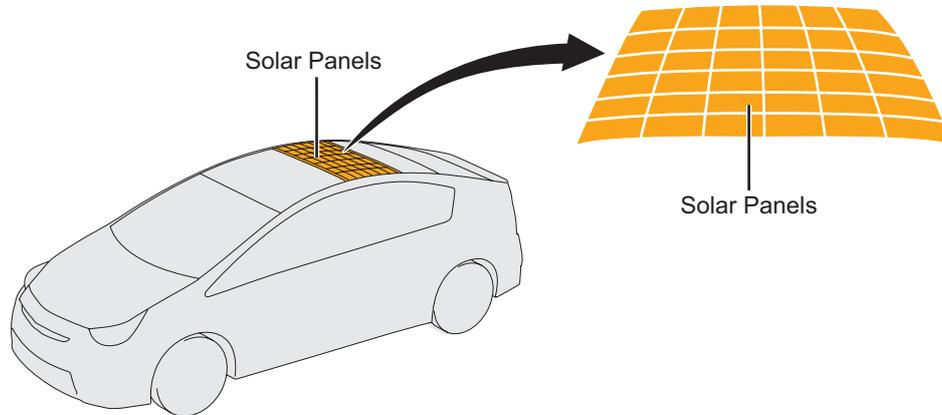
- The Electric Power Steering (EPS) system uses 12 V voltage which has been boosted to up to 46 V by the EPS ECU to drive an EPS assist motor.
- The EPS assist motor is built into the steering gear box or steering column.
- Some hybrid models use voltage from the high-voltage battery to drive the EPS assist motor by lowering it to up to 46 V using an EPS the DC/DC converter.
- A wire which transmits up to 46 V connects the EPS ECU in the engine compartment or the instrument panel to the EPS assist motor.





# Solar Powered Ventilation System

- The solar powered ventilation system uses solar panels on the vehicle roof to generate up to 27 V of electricity. This electricity is used to power an electric fan which ventilates the cabin while the vehicle is parked in the hot sun.

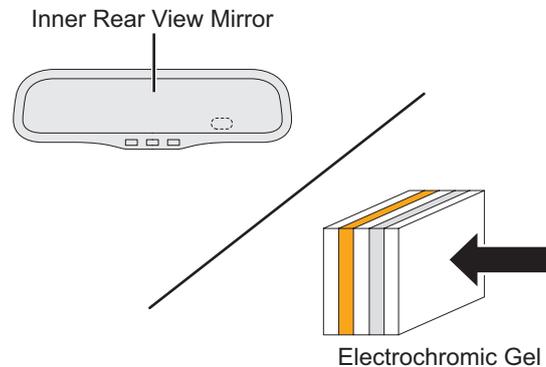


- The solar panels generate electricity with even a small amount of sunlight. To stop generation of electricity, cover the solar panels completely with a material that will block sunlight.



## EC Mirror

- The inner rear view mirror has an auto glare-resistance function, which automatically changes the reflection rate of the mirror. This is done by controlling voltage applied to an electrochromic gel inside the mirror, according to the brightness sensed by a light sensor.



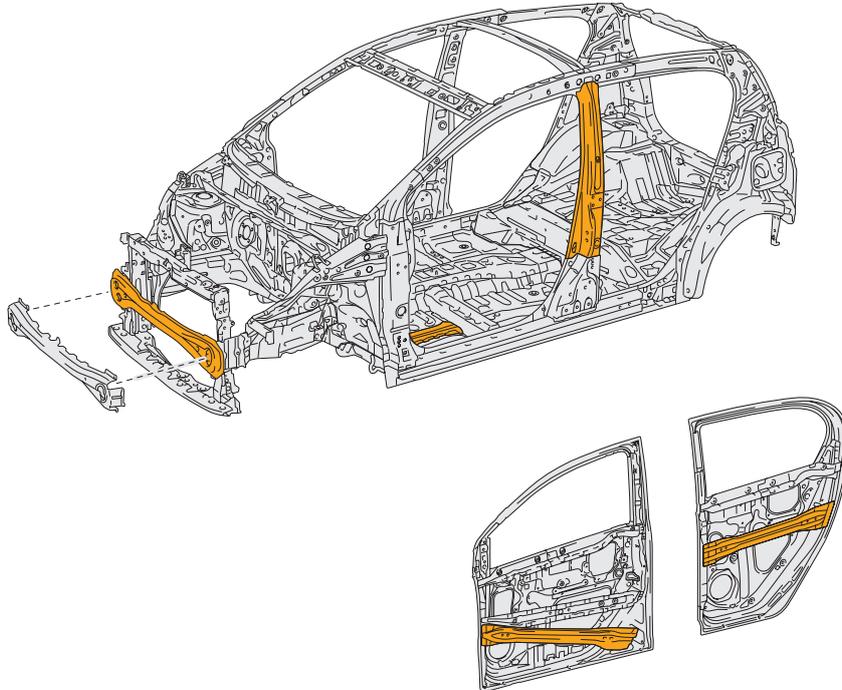
- The electrochromic gel contains organic solvents.



- Organic solvents may cause irritation of the skin if contacted. Wear appropriate protective equipment such as rubber gloves and safety goggles when there is a risk of touching electrochromic gel.

# Ultra High Tensile Strength Sheet Steel

- Ultra high tensile strength sheet steel, which is approximately 1.3 times higher strength (over 1 GPa class) than standard high tensile strength sheet steel (under 1 GPa class), is used for some body structural components on certain models.
- Refer to ERG or QRS of each vehicle for locations of the parts made from ultra high tensile strength sheet steel.



 Ultra High Tensile Strength Sheet Steel

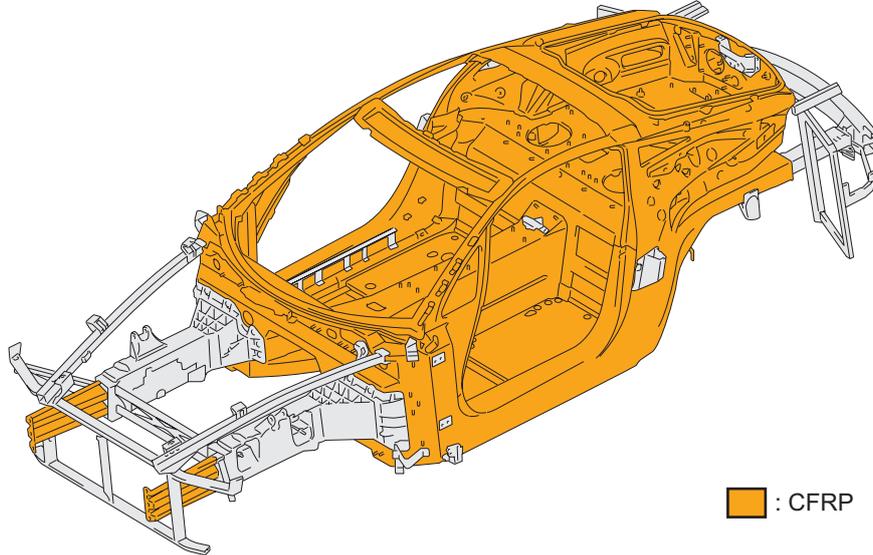


NOTICE

- Because the strength of ultra high tensile strength sheet steel is higher than sheet steel and high tensile strength sheet steel, it is difficult to cut through ultra high tensile strength sheet steel with conventional cutters. Avoid parts made from ultra high tensile strength sheet steel when cutting a vehicle.

# Carbon Fiber Reinforced Plastic (CFRP)

- Lightweight and highly rigid Carbon Fiber Reinforced Plastic (CFRP) is used for some body structural parts of certain models.
- CFRP can be cut and deformed using cutters for rescue operations.



WARNING

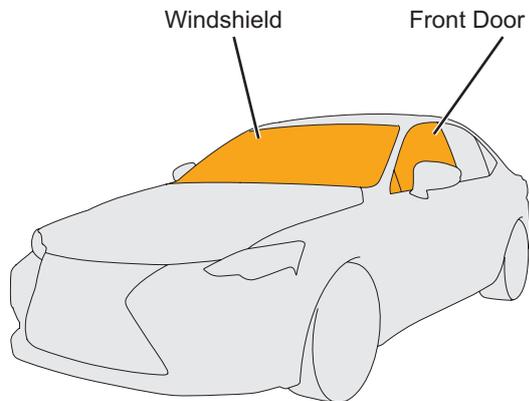
- Cutting CFRP using a grinder or a saw will create carbon fiber dust. Wear appropriate protective equipment such as a dust mask and safety gloves when cutting CFRP.
- CFRP is conductive. If carbon fiber dust attaches to an electrical circuit, a short circuit may result. Keep electrical circuits free from carbon fiber dust when cutting CFRP.

# Window Glass

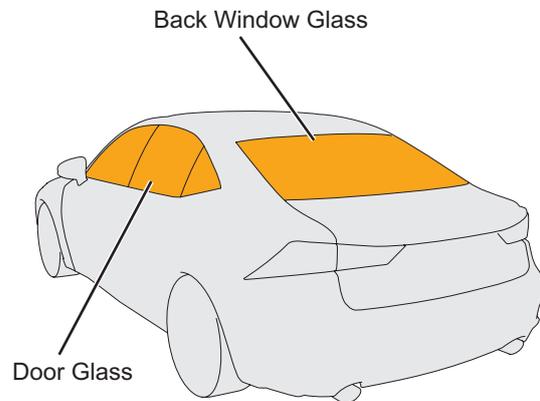
- Laminated glass and tempered glass are widely used for vehicle windows.

\* Laminated glass is mainly used for the windshield. It is also used for the front door glass on some vehicles.

- Tempered glass is mainly used for the door glass, the roof glass and the back window glass.

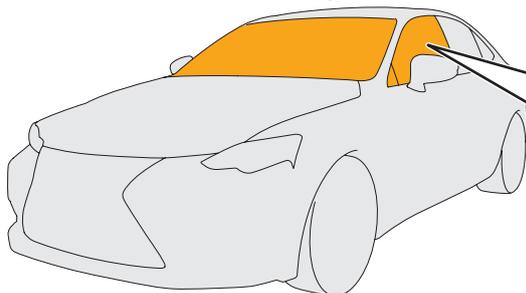


Laminated Glass Applications



Tempered Glass Applications

- Laminated glass and tempered glass are indicated respectively by “LAMISAFE” or “TEMPERLITE” printed on glass.

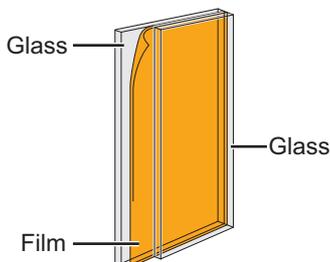


 <b>LAMISAFE</b> LP  <b>ASAHI</b> M 375 ASI DOT-20	 <b>TEMPERLITE</b> TP  <b>ASAHI</b> M2L3 S AS3 DOT-20
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Laminated Glass

- Laminated glass consists of 2 layers of glass with a film in-between. Objects that strike the glass are less like to penetrate the glass and glass shards tend to remain adhered to the film.

< LAMISAFE Structure >



< Broken Laminated Glass >



## Tempered Glass

- Tempered glass is heated to near softening temperature, then rapidly cooled down to make it 3 to 5 times stronger than normal glass. When tempered glass is broken, it will break into very small pieces.

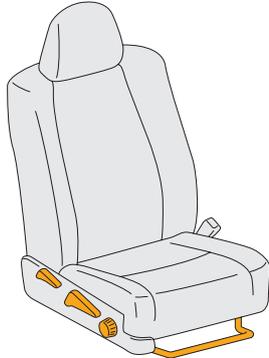


NOTICE

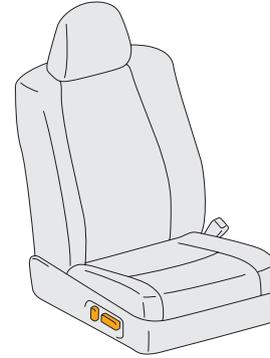
- Laminated glass consists of 2 layers of glass bonded together with a film. It does not break easily even when struck by an object.

# Front Seat

- Two types of front seats, a manual seat and a power seat, are available. When adjusting the seat position, a lever or a knob is operated for the manual seat and a switch is operated for the power seat.



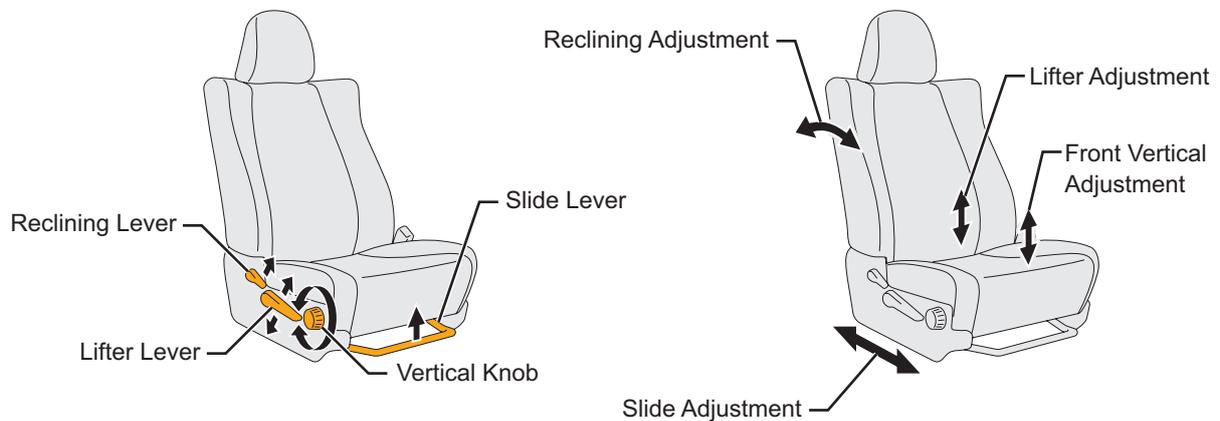
Manual Seat



Power Seat

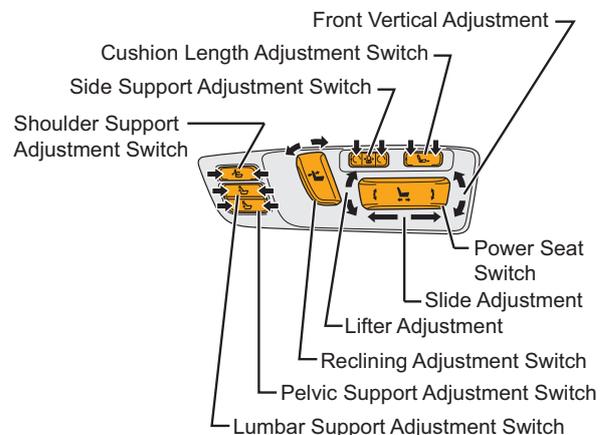
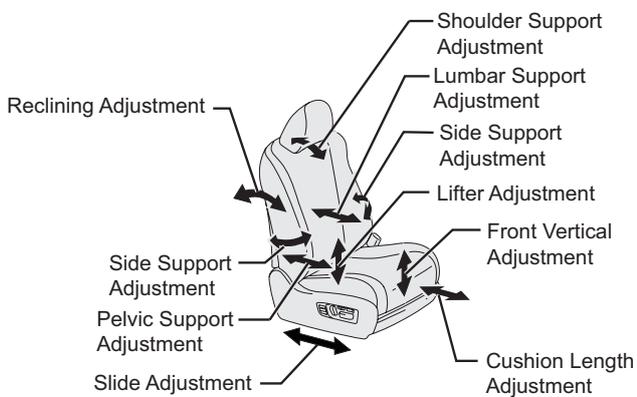
## Manual Seat

- The seat can be moved forward/backward by lifting the slide lever (slide adjustment).
- The seatback can be tilted forward/backward by lifting the reclining lever (reclining adjustment).
- The seat cushion can be raised/lowered by repeatedly pulling up/pushing down on the lever (lifter adjustment).
- The front end of the seat cushion can be raised/lowered by turning the vertical knob (front vertical adjustment).



## Power Seat

- The seat can be moved forward/backward using the slide function of the power seat switch (slide adjustment).
- The entire seat cushion can be raised/lowered using the lifter function of the power seat switch (lifter adjustment).
- The front end of the seat cushion can be raised/lowered using the front vertical function of the power seat switch (front vertical adjustment).
- The seatback can be tilted forward/backward by operating the reclining adjustment switch (reclining adjustment).
- The lumbar support position can be moved forward/backward by operating the lumbar support adjustment switch (lumbar support adjustment).
- The side support position can be moved right/left by operating the side support position adjustment switch (side support adjustment).
- The pelvic support position can be moved forward/backward by operating the pelvic support position adjustment switch (pelvic support adjustment).
- The shoulder support position can be moved forward/backward by operating the shoulder support position adjustment switch (shoulder support adjustment).
- The length of the seat cushion can be adjusted by operating the cushion length adjustment switch (cushion length adjustment).

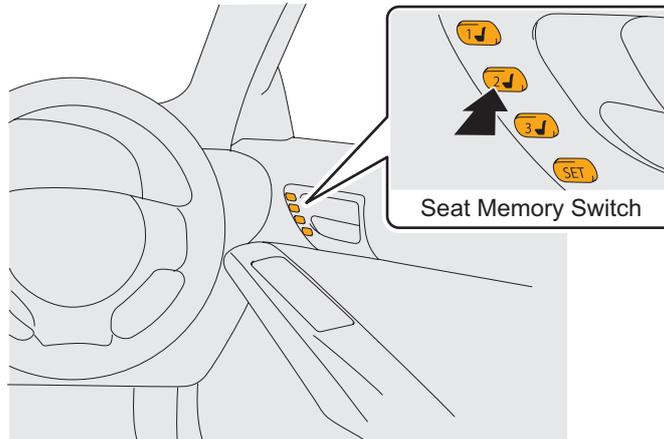


NOTICE

- The seat position adjustment functions of a power seat will be disabled when the 12 V battery is disconnected.

## Front Seat

- When a vehicle is equipped with the driving position memory function, the driver seat automatically moves backward when the power switch is turned off (auto away function) and moves forward when the power switch is turned on (IG) (auto return function). Whether or not the vehicle is equipped with the driving position memory function can be confirmed by the existence of memory switches in the upper door trim.

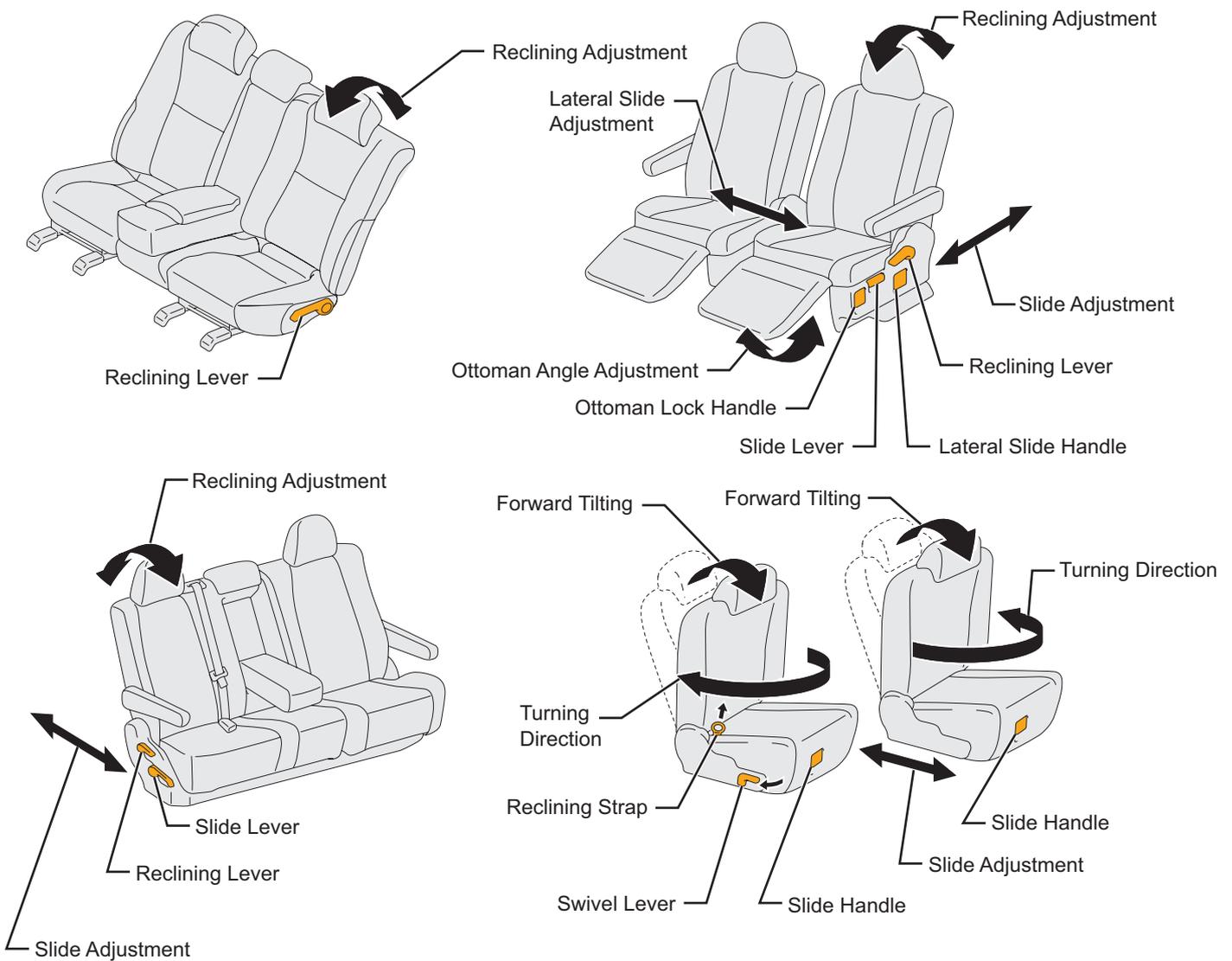


# Rear Seat

- Two types of rear seats, a manual seat and a power seat, are available. When adjusting the seat position, a lever or a knob is operated for the manual seat and a switch is operated for the power seat.

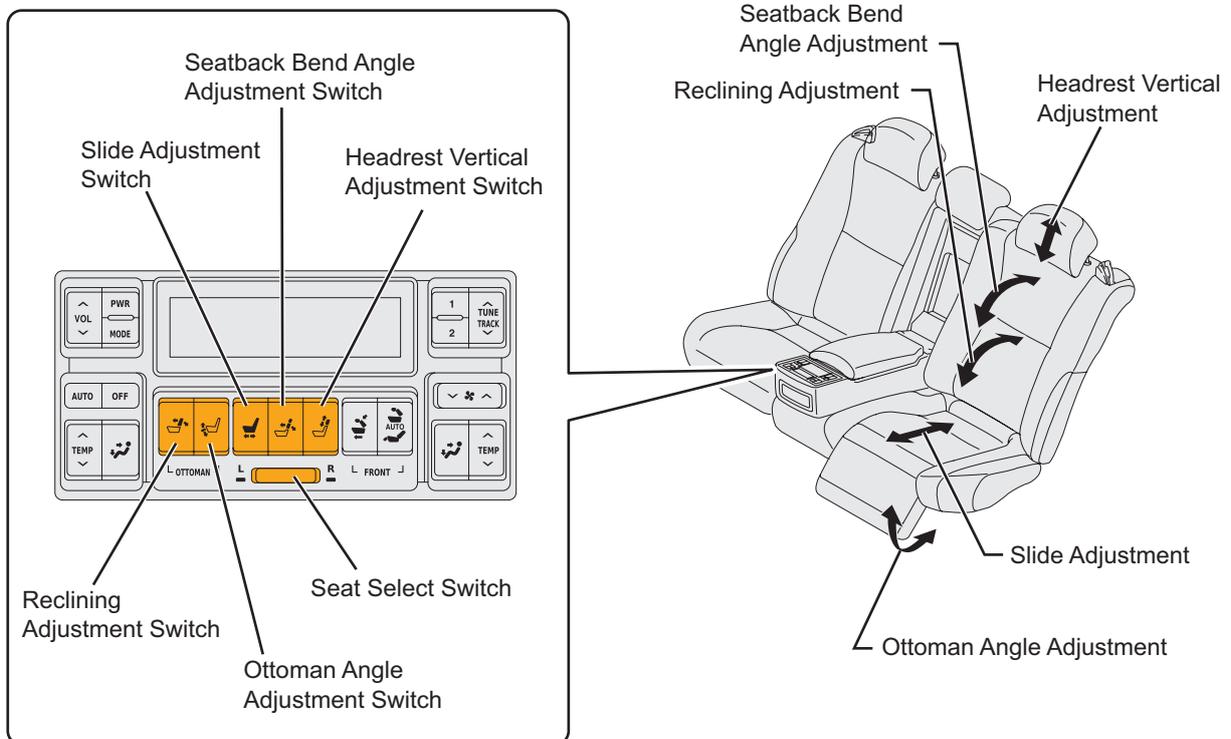
## Manual Seat

- The seat can be moved forward/backward by lifting the slide lever (slide adjustment).
- The seatback can be tilted forward/backward by lifting the reclining lever (reclining adjustment).
- The seat can be tilted forward by pulling the reclining strap.
- The seat can be moved leftward/rightward by lifting the lateral slide handle (lateral slide adjustment).
- The ottoman can be raised/lowered by lifting the ottoman lock handle (ottoman angle adjustment).
- The seat can be turned around by operating the swivel lever.



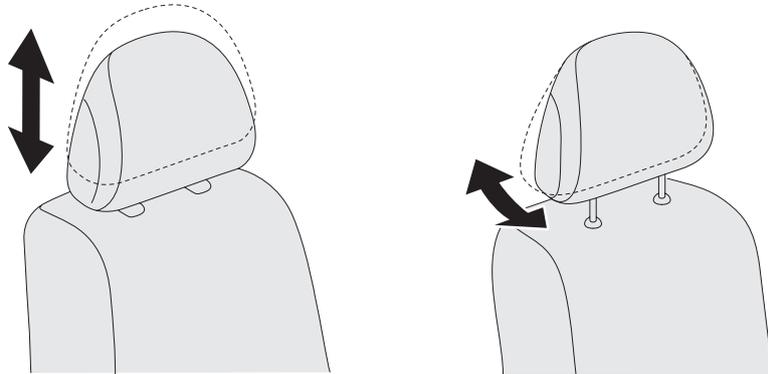
## Power Seat

- The seat can be moved forward/backward by operating the slide adjustment switch (slide adjustment).
- The seatback can be tilted forward/backward by operating the reclining adjustment switch (reclining adjustment).
- The ottoman can be raised/lowered by operating the ottoman angle switch (ottoman angle adjustment).
- The angle of the upper seatback can be adjusted vertically by operating the seatback bend angle switch (seatback bend angle adjustment).
- The headrest can be raised/lowered by operating the headrest vertical adjustment switch (headrest vertical adjustment).



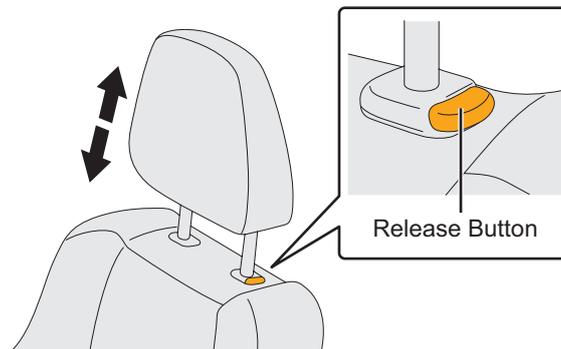
# Headrest

- The position of the headrests can be adjusted vertically and horizontally.
- Two types of headrests, a manual headrest and a power headrest, are available. Vertical adjustment of the headrest is performed by hand on manual headrests or by operating a switch on power headrests. Horizontal adjustment can be performed by hand only.



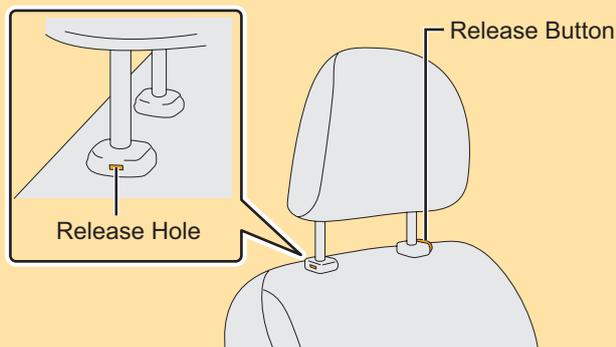
## Manual Headrest

- When raising a manual headrest, pull up the headrest by hand. When lowering, push down the headrest while pushing the release button. To remove the headrest, pull out the headrest while pushing the release button.



NOTICE

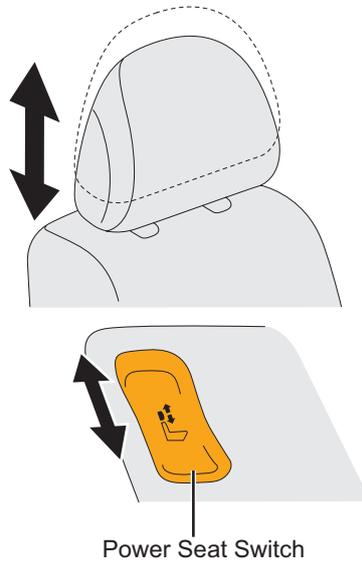
- If the headrest cannot be removed by pushing the release button, insert a screwdriver into the release hole provided on the opposite side of the headrest from the release button to release the lock and pull out the headrest.



Headrest

## Power Headrest

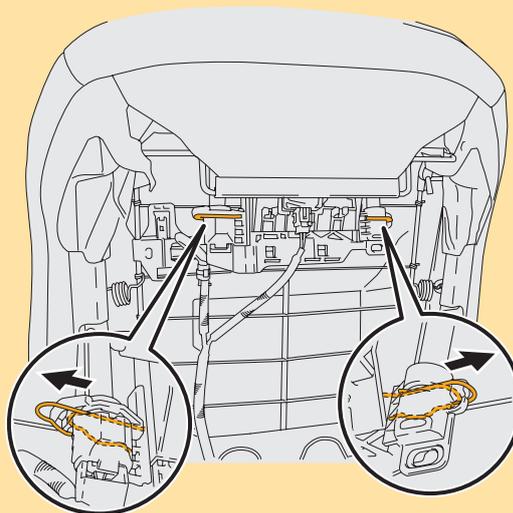
- When raising a power headrest, raise/lower the headrest by operating the power seat switch located on the side of the seat.



NOTICE

- To remove the headrest, disengage the pins located inside the seatback and pull out the headrest.

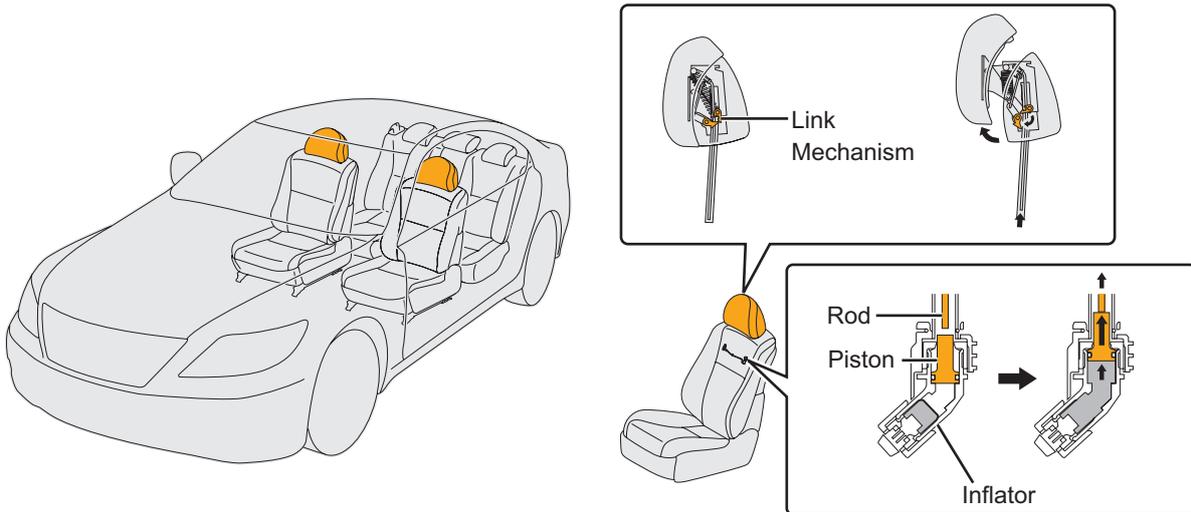
Back of the Seatback





# Active Headrest System

- The active headrest system is built into the front headrests.
- The active headrest system consists of an inflator, a rod and a link mechanism.
- When the airbag sensor detects a rear impact, an ignition signal is sent to the inflators to activate the active headrest system. When an inflator is ignited, pressure inside the inflator rises, pushing up a piston. As the piston rises, the rod in the headrest stay is pushed up, a lock is released via the link mechanism and the headrest is pushed forward by a spring, helping reduce the possibility of whiplash injuries.



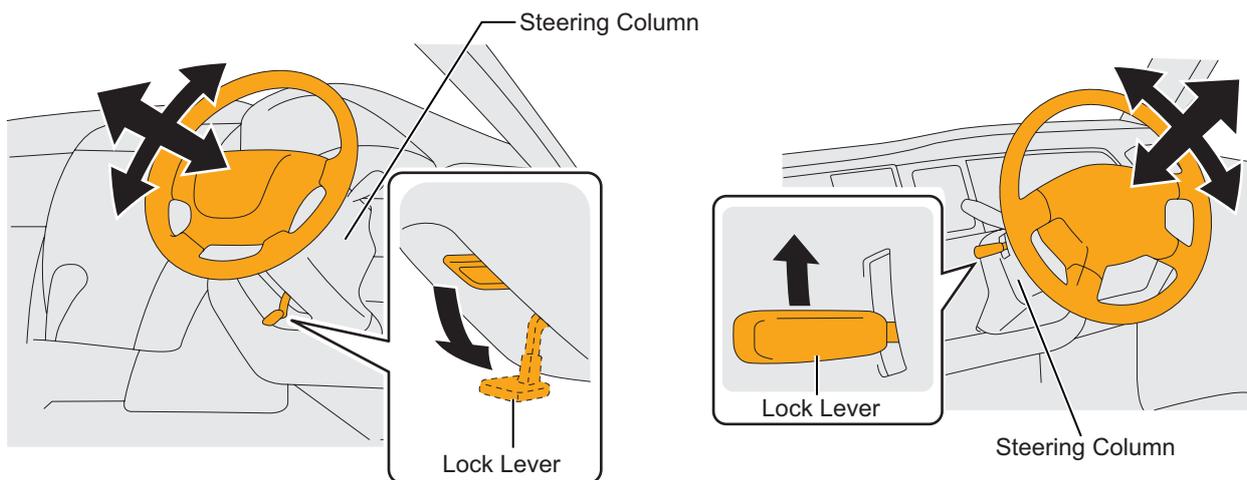
- The active headrest system may remain powered for up to 90 seconds after the vehicle is shut off and disabled (see page 51). Wait at least 90 seconds before starting any operation. Failure to shut off and disable the vehicle before emergency response procedures are performed may result in serious injury or death from unintentional actuation of the active headrest.
- If an inflator is cut, the powder inside the inflator may ignite, causing an explosion. To prevent serious injury or death from unintentional active headrest actuation, avoid breaching the inflators.

## Tilt & Telescopic Steering

- The steering column has a tilt mechanism, which enables vertical adjustment of the steering wheel position, and a telescopic mechanism, which enables horizontal adjustment of the steering wheel position.
- Two types of tilt & telescopic steering, manual tilt & telescopic steering and power tilt & telescopic steering, are available. When adjusting the position of the steering wheel, a lever is operated for the manual tilt and telescopic mechanisms and a switch is operated for the power tilt and telescopic mechanisms.
- Some vehicles have only tilt or telescopic mechanism, not both. Also, some vehicles have a fixed type steering column (not equipped with tilt & telescopic mechanism), and some vehicles power mechanism is only for tilt or telescopic function.

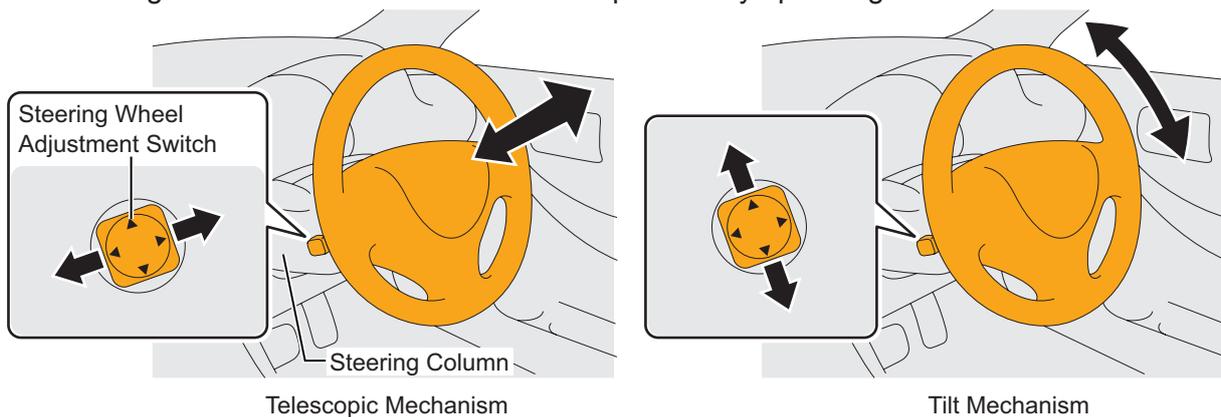
### Manual Tilt & Telescopic

- The manual tilt & telescopic steering is provided with a lock lever under or side of steering column for releasing the lock when adjusting the steering wheel position.
- When the lock lever is operated, the lock is released, allowing adjustment of the steering wheel position. After adjustment, the steering wheel can be locked in the desired position by returning the lock lever.



### Power Tilt & Telescopic

- The power tilt & telescopic steering is provided with a switch on the steering column for adjusting the steering wheel position.
- The steering wheel can be moved to a desired position by operating the switch.

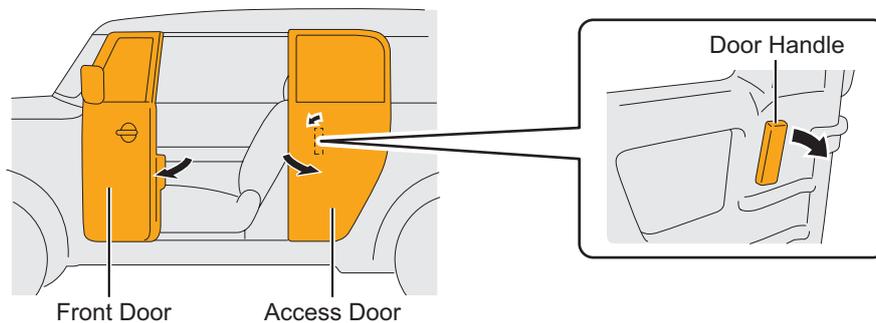


# Doors

- The door is opened by operating the handle on the door.
- Some models are equipped with an access door (double door), which is opened using the inner door handle, or a back door, which is opened by using the back door handle after lowering the back window glass.

## Access Door (Double door)

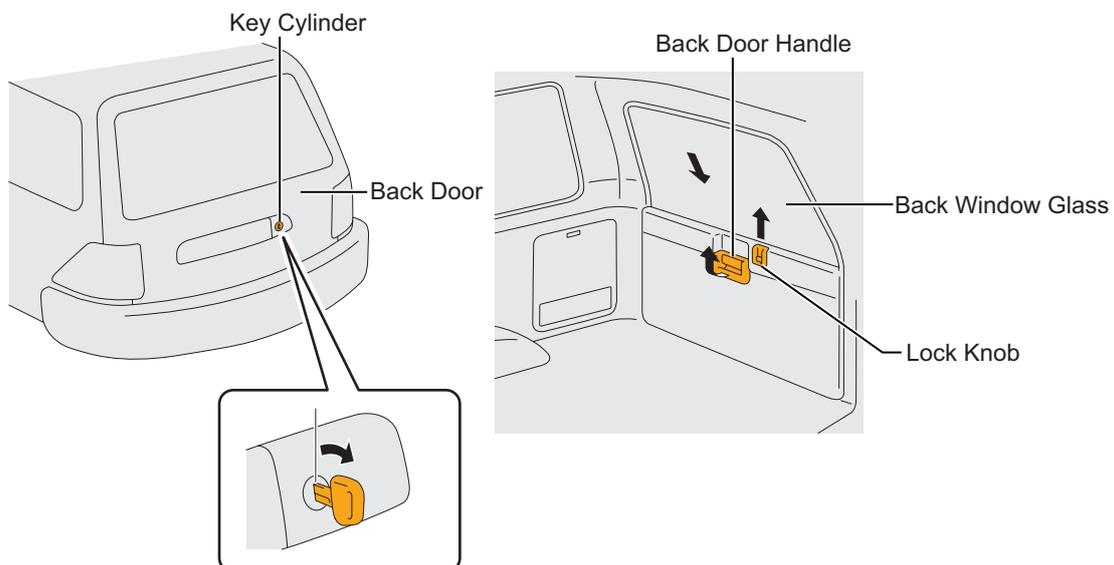
1. Open the front door as much as possible.
2. Pull the door handle on the access door forward.
3. Open the access door.



- Before opening either access doors, make sure the front seatbelt is unfastened. If the access door is opened with the front seatbelt fastened, the seatbelt may be locked and squeeze the front occupant, resulting in a serious injury.

## Back Door

1. Insert a key into the key cylinder in the back door then turn the key clockwise to lower the back window glass.
2. Pull up the lock knob on the back door to release the lock.
3. Pull up the back door handle to open the back door.



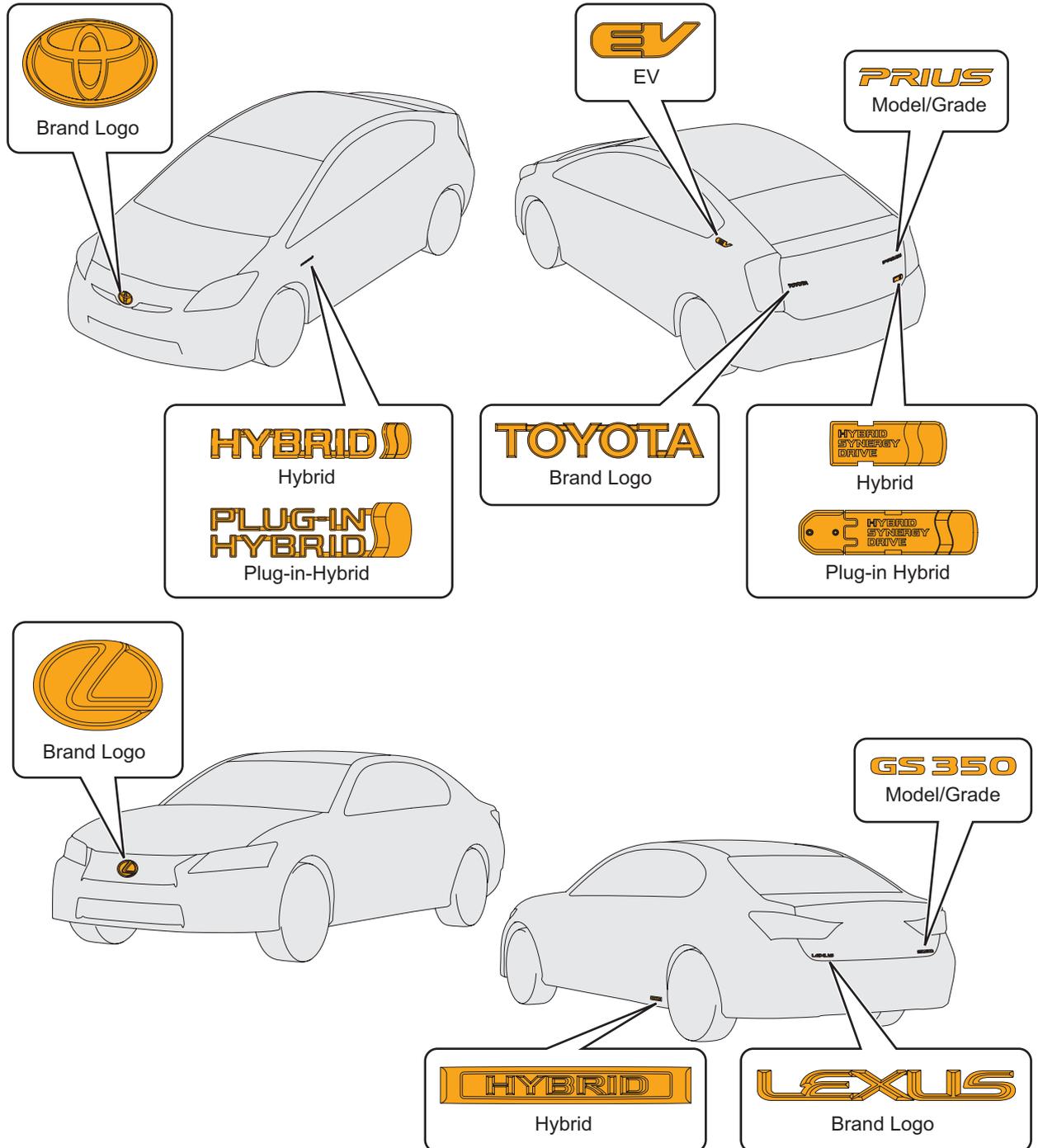
## Emergency Response Key Points

- Procedures and points to be noted when handling TOYOTA/LEXUS vehicles during emergency response are provided in this section.
- Refer to the Quick Reference Sheet (QRS) for each model for model specific information such as vehicle identification points, component locations, etc.

# Vehicle Identification

## Appearance and Logos

- Identify the vehicle type based on exterior features and logos on the body.
- Logo marks represent the make, model, grade, and the vehicle type (hybrid/electric) if it uses a high voltage electrical system.
- Logo marks are attached to the trunk lid, back door/hatch, rocker panels, front grill and fender.

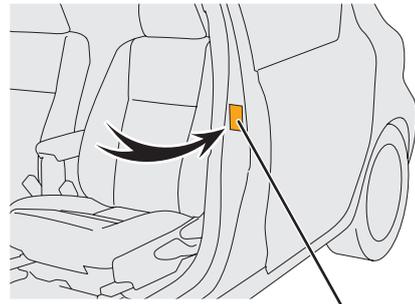
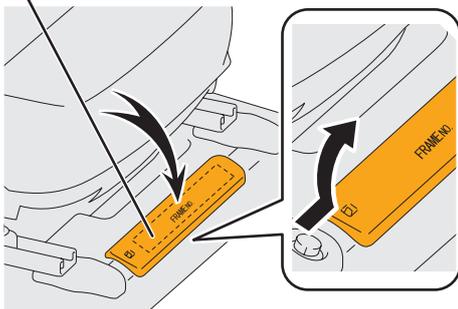


## Vehicle Identification

## Frame Number

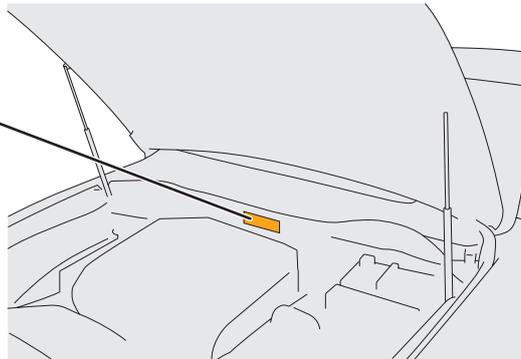
- A frame number is stamped on the name plate attached to the engine compartment and front passenger door pillar.
- Characters before a hyphen (e.g.: ○○○○ for the frame number ○○○○-△△△△) represent the vehicle model.
- When a cover is installed under the driver seat, a frame number is stamped on the frame underneath the cover.

Frame No.



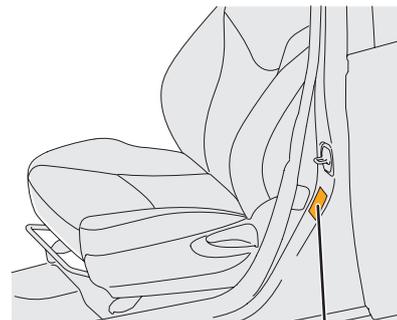
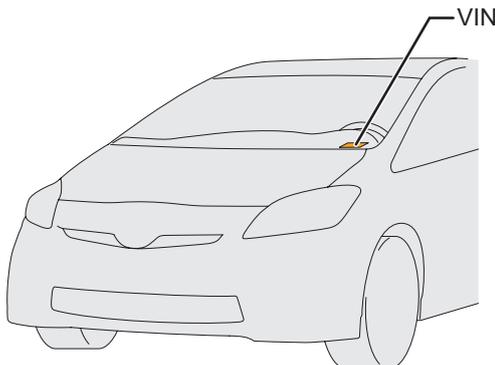
Name Plate

Frame No.



## Vehicle Identification Number (VIN)

- The VIN is stamped on the name plate attached to the windshield cowl and driver door pillar.
- The vehicle model can be identified by the VIN.



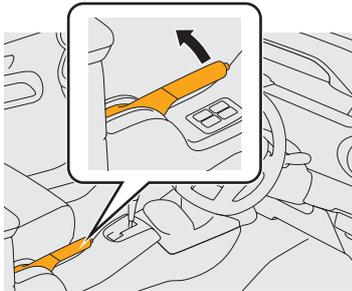
VIN

# Immobilize Vehicle

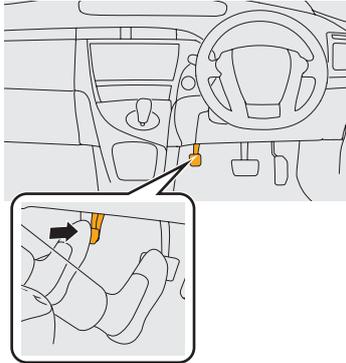
- On arrival, completely immobilize the vehicle by following procedures 1, 2 and 3 to ensure safe emergency response operations.

## 1. Chock wheels and set the parking brake.

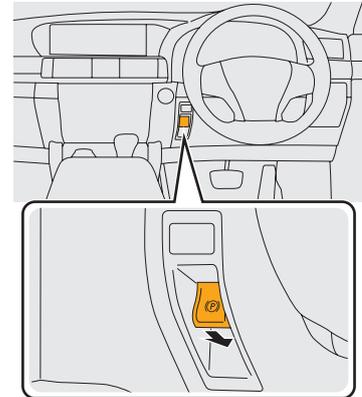
- The following types of parking brakes are available. Operate the parking brake accordingly.



Lever Type



Foot Pedal Type



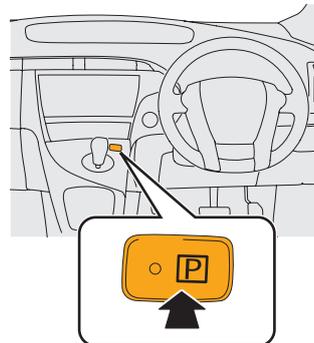
Switch Type

- ## 2. For automatic vehicles, move the shift lever to the park (P) position. For manual vehicles, shut off the vehicle (see page 51), then move the shift lever to the 1st or reverse (R).

- Park (P) can be selected by the following methods. Operate the vehicle accordingly.



Shift Lever Type



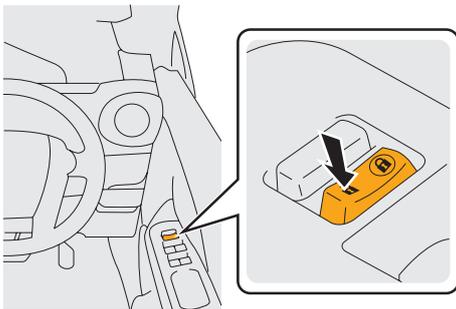
P Position Switch Type

## Immobilize Vehicle

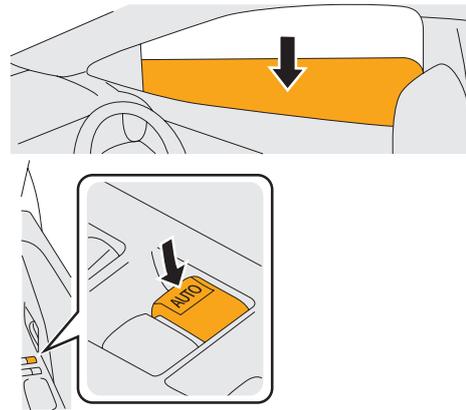
3. To facilitate emergency response operations, lower the windows, open the back door, unlock the doors and take other necessary actions before shutting off the vehicle.

■ The following systems are powered by the 12 V battery. Operate them as required before disconnecting the battery.

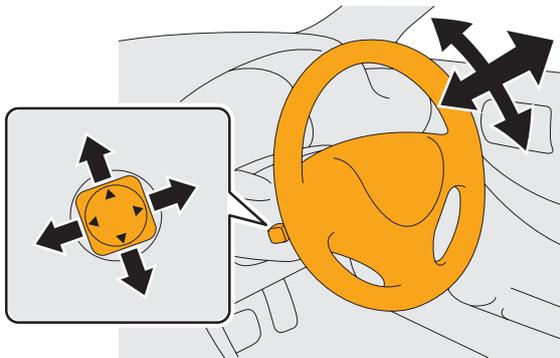
- Power door lock
- Power window
- Power tilt and telescopic steering
- Power seat



Door Unlock



Power Window Adjustment



Steering Wheel Adjustment



Seat Adjustment



NOTICE

■ Once the 12 V battery is disconnected (see page 51), power controls will not operate.

## Immobilize Vehicle

## Vehicle with High Voltage Battery

- Hybrid vehicles (HV), plug-in hybrid vehicles (PHV) and electric vehicles (EV) are equipped with a high voltage electrical system (over 200 V).



WARNING

- To prevent serious injury or death from severe burns or electric shock, avoid touching, cutting, or breaching any orange high voltage power cable or high voltage component. Wear appropriate protective equipment such as insulated gloves when there is a risk of touching high voltage power cables or high voltage components.

# Disable Vehicle

- To ensure safe emergency response operations, the vehicle must be completely shut off.
- Confirm the vehicle status. If **any of the following conditions exist**, the vehicle may not shut off.

- Engine is running.
- Ignition switch is in ACC, ON or START position.
- Meters are illuminated.
- Air conditioning is operating.
- Audio system is operating.
- Wipers are operating.
- Navigation or other displays are turned on.



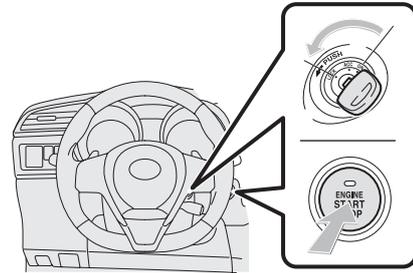
- NEVER assume the vehicle is shut off simply because it is silent. If the vehicle is equipped with an idling stop system, or the vehicle is a hybrid vehicle (HV) or plug-in hybrid vehicle (PHV), the engine is silent while the vehicle is on. Make sure none of the above conditions exist.
- Failure to shut off and disable the vehicle before emergency response procedures are performed may result in serious injury or death from unintentional deployment of the SRS or unintentional actuation of the seatbelt pretensioners, pop up hood, or active headrests.

- Completely shut off the vehicle by following procedures 1 or 2.

Disable Vehicle

Procedure 1

1. Turn the ignition switch to the LOCK (OFF) position or push the engine/power switch once to shut off the vehicle.



■ If the vehicle is equipped with an engine/power switch the vehicle is shut off when **ALL of the following conditions are met**. With all of the following conditions met, do not push the engine/power switch as the vehicle will start.

- Engine is not running.
- Meters are not illuminated.
- Air conditioning is not operating.
- Audio system is not operating.
- Wipers are not operating.
- Navigation and other displays are turned off.

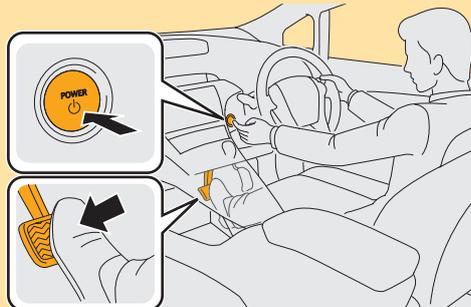


■ The engine/power switch operates as follows.  
 With the brake pedal (for automatic vehicles) or the clutch pedal (for manual vehicles) depressed:  
 Vehicle Start → Stop → Start ... is repeated every time the switch is pushed.

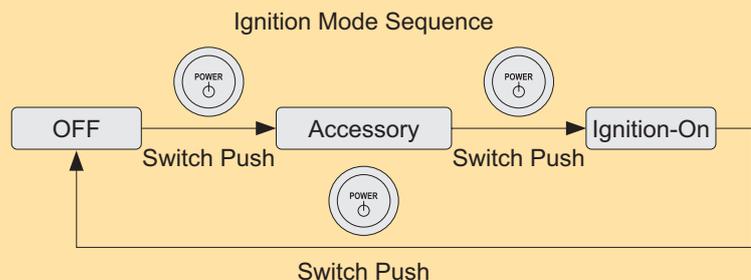
With the brake pedal (for automatic vehicles) or the clutch pedal (for manual vehicles) released:

Accessory → Ignition-On → Off → Accessory... is repeated.

- When in "Accessory" mode, the radio and other accessory components are operational.
- When in "Ignition-On" mode, the power windows, wipers, heater/air conditioner fan and other components including SRS system are operational.
- The vehicle will not start if the brake pedal (for automatic vehicles) or the clutch pedal (for manual vehicles) is not depressed, even if the switch is pushed.



Brake Pedal Depressed



Brake Pedal Released

## Disable Vehicle

- When the vehicle is equipped with an engine/power switch, keep the electrical key transmitter 5 meters or more away from the vehicle.

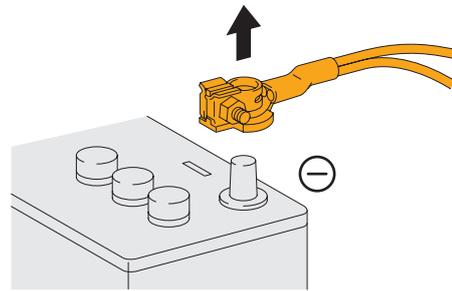


NOTICE

- If the electrical key transmitter is in the cabin or near the vehicle, the vehicle may start depending on what operations are performed. For example, if the engine/power switch is pushed.
- To prevent unexpected starting of the vehicle, place the electrical key transmitter outside of the detection area.

- Disconnect the negative (-) terminal of the 12 V battery.

- The 12 V battery is installed in the engine compartment, in the luggage compartment or under the rear seat.
- Refer to the Quick Reference Sheet (QRS) for each model for the location of the 12 V battery.



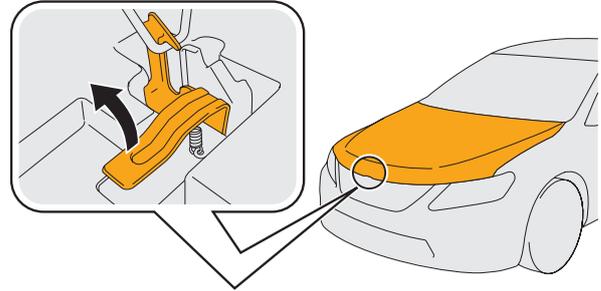
NOTICE

- Shut off the power to the electrical system to prevent electrical fires and to keep the vehicle from starting.

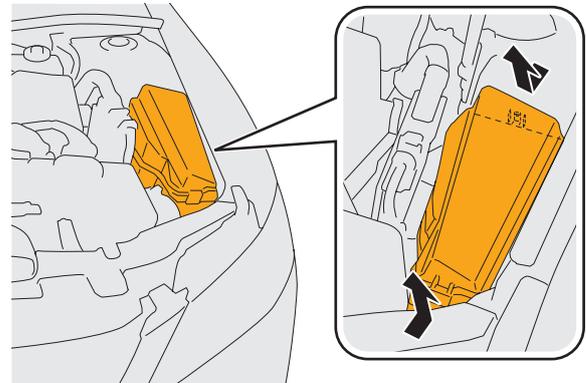
## Disable Vehicle

## Procedure 2 (Alternate if the ignition switch or power switch is inoperative)

1. Open the hood. Remove the engine room covers, if any are present.

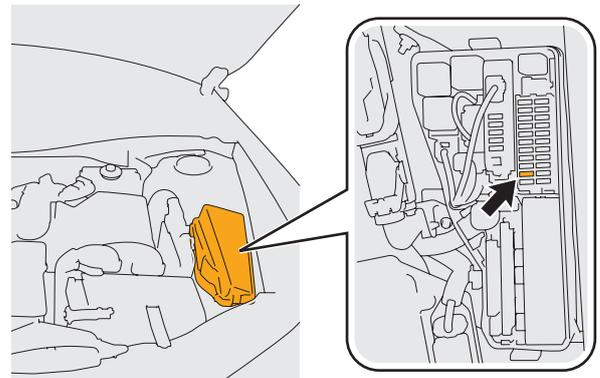


2. Remove the engine compartment fuse box cover.



3. Remove the appropriate fuse.

- Refer to the Quick Reference Sheet (QRS) for each model for the fuse to be removed.



NOTICE

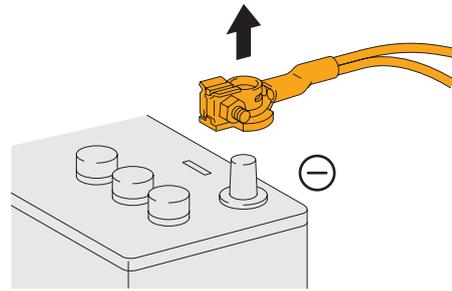
- If the correct fuse cannot be identified, pull **ALL** fuses in the fuse box **until all of the following conditions are met.**

- Engine is not running.
- Meters are turned off.
- Air conditioning is turned off.
- Audio system is turned off.
- Wipers are turned off.
- Navigation and other displays are turned off.

## Disable Vehicle

#### 4. Disconnect the negative (-) terminal of the 12 V battery.

- The 12 V battery is installed in the engine compartment, in the luggage compartment or under the rear seat.
- Refer to the Quick Reference Sheet (QRS) for each model for the location of the 12 V battery.



NOTICE

- Shut off the electrical system to prevent electrical fires and to keep the vehicle from starting.

## Vehicle with High Voltage Battery

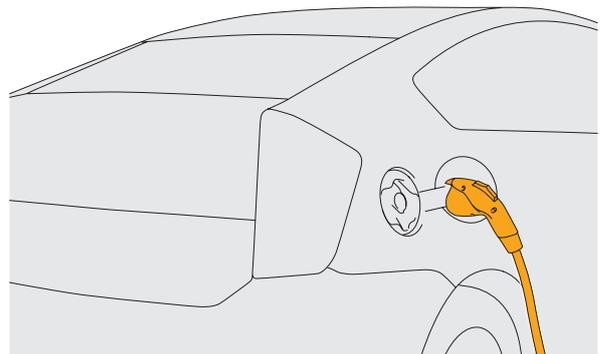
- Hybrid vehicles (HV), plug-in hybrid vehicles (PHV) and electric vehicles (EV) are equipped with a high voltage electrical system (over 200 V).



- The high voltage system may remain powered for up to 10 minutes after the vehicle is shut off and disabled (see page 51). Failure to shut off and disable the vehicle before emergency response procedures are performed may result in serious injury or death from severe burns and electric shock from the high voltage electrical system.
- To prevent serious injury or death from severe burns or electric shock, avoid touching, cutting, or breaching any orange high voltage power cable or high voltage component. Wear appropriate protective equipment such as insulated gloves when there is a risk of touching high voltage power cables or high voltage components.
- NEVER assume the hybrid vehicle (HV), plug-in hybrid vehicle (PHV) or electric vehicle (EV) is shut off simply because it is silent. Always observe the instrument cluster for the **READY** indicator status to verify whether the high voltage system is on or shut off. The high voltage system is shut off when the **READY** indicator is off.
- When the vehicle is equipped with a remote air conditioning system and the meters are illuminated, high voltage may be applied to the air conditioning system even though the **READY** indicator is off. Shut off and disable vehicle and ensure the meters are turned off.

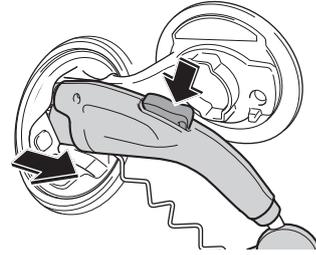
## Vehicle with Plug-in Charge System

- Plug-in hybrid vehicles (PHV) and electric vehicles (EV) are equipped with a system to charge the high voltage battery using power from an external power source.
- If a charge cable is connected to the charging inlet of the vehicle, disconnect the charge cable as follows to stop charging.



## Disable Vehicle

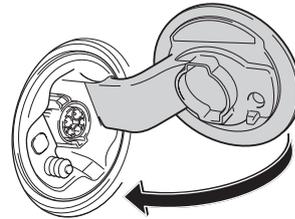
1. Push the latch release button on the top of the charge cable connector and pull it away from the charging inlet of the vehicle.



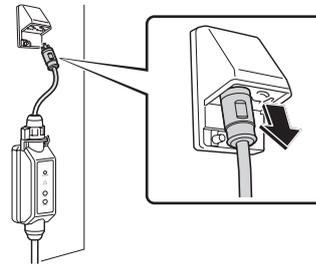
NOTICE

- If the lock of the charge cable assembly connector cannot be released, turn off the external charger.
- If the lock is still not released, stop charging by unplugging the external charger or turning the charger main breaker off. Then disconnect the charge cable assembly from the charge inlet.

2. Close the charging inlet cap and charging port lid.



3. Turn off the external charger by unplugging it or turning its main circuit breaker off.



WARNING

- To prevent serious injury or death from severe burns or electric shock, shut off the utility circuit supplying power to the charge cable before disconnecting it if the vehicle, charge cable or external charger is submerged in water.

## Access Patients

- Make sure that the vehicle is immobilized and disabled (see page 51), then open or remove windows and doors to access patients.
- Secure the necessary space for performing operations by adjusting the position of the steering wheel and seats and removing the head rests.
- Refer to “Components Requiring Special Attention” for details of adjustment and removal of components.



WARNING

- The SRS, seatbelt pretensioners, pop up hood and active headrests may remain powered for up to 90 seconds after the vehicle is shut off and disabled (see page 51). Wait at least 90 seconds before starting any operation. Failure to shut off and disable the vehicle before emergency response procedures are performed may result in serious injury or death from unintentional deployment of the SRS or unintentional actuation of the seatbelt pretensioners, pop up hood or active headrests.
- Depending on the circumstances surrounding a collision, such as vehicle speed, point of impact, occupant detection etc., the SRS airbags, seatbelt pretensioners, pop up hood or active headrests will not always be activated and may remain active. If an unactivated inflator of these systems is cut, the powder inside the inflator may ignite, causing an explosion. To prevent serious injury or death from unintentional SRS deployment or unintentional actuation of the seatbelt pretensioners, pop up hood or active headrests, avoid breaching the inflators.
- Immediately after an SRS airbag is deployed or a seatbelt pretensioner, the pop up hood or an active headrest is actuated, the components are extremely hot and may cause burns if touched.
- If an SRS airbag deploys with all doors and windows closed, inflation gas may cause breathing difficulty.
- If residue that is produced during the operation of SRS airbags, seatbelt pretensioners, pop up hood or active headrests comes in contact with skin, rinse it off immediately to prevent skin irritation.

## Vehicle with High Voltage Battery

- Hybrid vehicles (HV), plug-in hybrid vehicles (PHV) and electric vehicles (EV) are equipped with a high voltage electrical system (over 200 V).



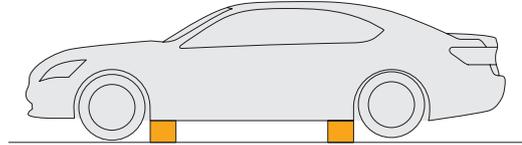
WARNING

- The high voltage system may remain powered for up to 10 minutes after the vehicle is shut off and disabled (see page 51). Failure to shut off and disable the vehicle before emergency response procedures are performed may result in serious injury or death from severe burns and electric shock from the high voltage electrical system.
- To prevent serious injury or death from severe burns or electric shock, avoid touching, cutting, or breaching any orange high voltage power cable or high voltage component. Wear appropriate protective equipment such as insulated gloves when there is a risk of touching high voltage power cables or high voltage components.

## Access Patients

## Stabilize Vehicle

- Crib at four points directly under the front and rear pillars using wooden blocks or equivalent objects.



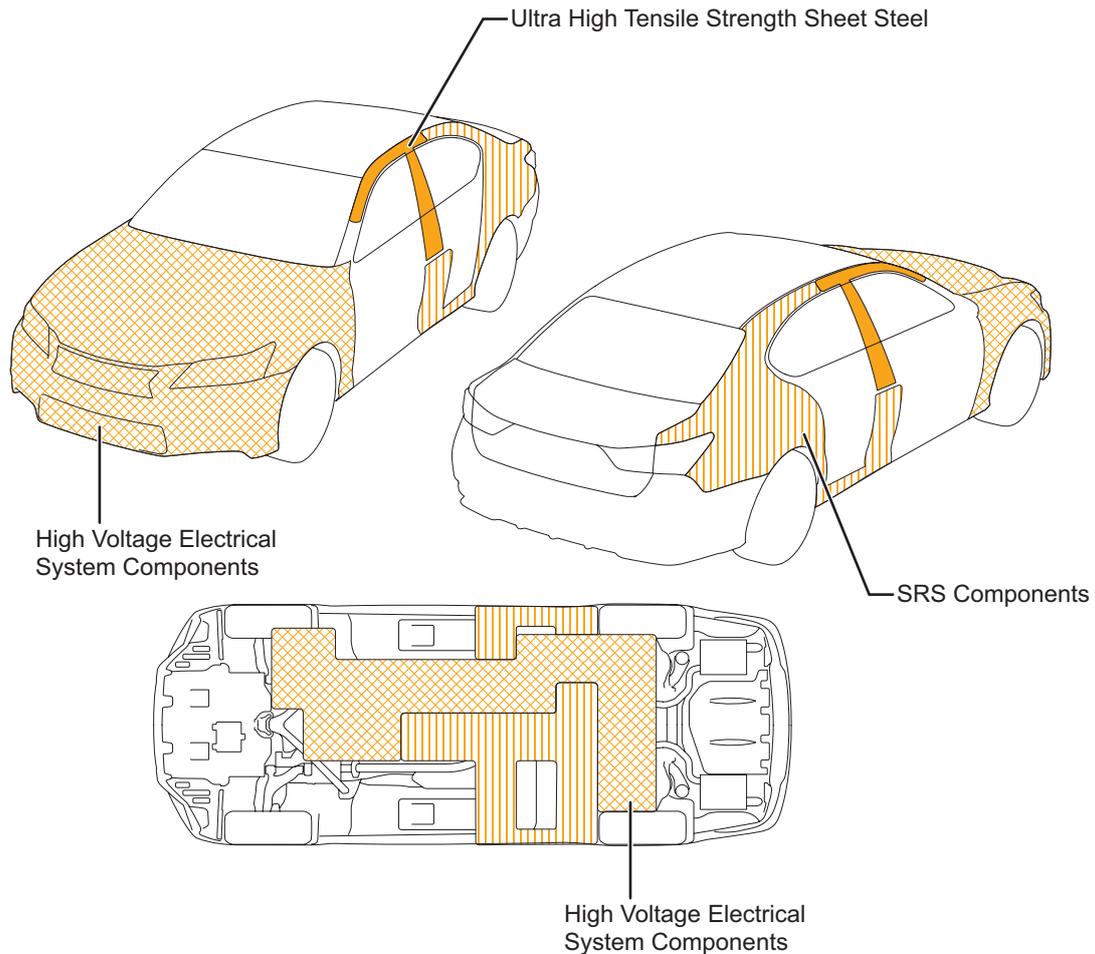
WARNING

- Do not place cribbing such as wooden blocks or rescue air lifting bags under the exhaust system, fuel system, high voltage battery or high voltage power cables. Failure to do so may cause heat generation, bursting of the air lifting bags or damage to the high voltage power cables, resulting in a vehicle fire, crushing accident or electrical shock, possibly leading to serious injury or death.

## Access Patients

## Cut Vehicle

- Pay special attention to the location of ultra high tensile strength sheet steel, fuel system, SRS and high voltage electrical system components when cutting a vehicle.
- Refer to the Quick Reference Sheet (QRS) for each model for model specific information such as component locations, etc.



WARNING

- To prevent serious injury from a fire caused by sparks, use a hydraulic cutter or other tools that do not generate sparks when cutting the vehicle.



NOTE

- If the SRS airbag, seatbelt pretensioner, pop up hood or active headrest has already been activated, the inflator can be cut.

# Fire

- During the initial attack on a fire, extinguish the fire with copious amounts of water. This will also cool down the vehicle.



- Plastic and other components will generate toxic gases when they melt. Wear appropriate protective equipment such as a protective mask when extinguishing a fire.

## Fire Extinguisher

- Water has been proven to be a suitable extinguishing agent.
- Also use a fire extinguisher suitable for flammable liquid fires (burning of gasoline, grease, oil, etc.) and electrical fires (burning of electrical wiring, electric devices, etc.) as well as general fires (burning of solid objects, etc.).

## Vehicle with High Voltage Battery

- Hybrid vehicles (HV), plug-in hybrid vehicles (PHV) and electric vehicles (EV) are equipped with a high voltage battery.
- Extinguish the fire with copious amounts of water to cool down the high voltage battery.
- Some of the vehicles have a high voltage battery that is difficult to access. Refer to the Quick Reference Sheet (QRS) for each model for the high voltage battery location.



- To avoid serious injury or death from severe burns or electric shock, never breach or remove the high voltage battery assembly cover under any circumstances, including fire.
- If only a small amount of water is used to extinguish a fire, a short circuit may occur in the high voltage battery, causing the fire to reignite.



- It is recommended to allow the high voltage battery to burn itself out if it is judged that it is difficult to apply copious amounts of water to the high voltage battery.

## Vehicle with Lithium ion (Li-ion) Battery



- Burning Li-ion batteries may irritate the eyes, nose, and throat. Contact with the vapor produced by the electrolyte may also irritate the nose and throat. To avoid injury by coming in contact with the electrolyte or vapor, wear appropriate protective equipment such as rubber gloves, safety goggles, protective mask or SCBA when there is a risk of touching electrolyte.

# Submersion

- Pull the vehicle out of water as much as possible. Immobilize the vehicle (see page 48) and disable the vehicle (see page 51) before starting any operation.



- A short circuit due to electrical corrosion (wiring and circuit boards become corroded due to an electrochemical reaction with water) may cause a vehicle fire after some time has elapsed.
- To prevent a vehicle fire, avoid turning the ignition switch or power switch of a submerged vehicle to ACC or ON.

## Vehicle with High Voltage Battery

- A partially or fully submerged hybrid vehicle (HV), plug-in hybrid vehicles (PHV) or electric vehicle (EV) does not have high voltage potential on the metal vehicle body, and is safe to touch.
- It is safe to enter the water as the vehicle and water have the same electrical potential.



- Touching exposed orange high voltage power cables or high voltage components such as the high voltage battery may cause electrical shock due to a change in electrical potential.
- To prevent serious injury or death from severe burns or electric shock, avoid touching, cutting, or breaching any orange high voltage power cable or high voltage component. Wear appropriate protective equipment such as insulated gloves when there is a risk of touching high voltage power cables or a high voltage components.

# Spills

- Vehicles contain various fluids such as gasoline, coolant, engine oil, transmission oil, brake fluid, power steering fluid, window washer fluid and 12 V battery electrolyte.

## Coolant

- Long Life Coolant (LLC) that is used to cool the engine and inverter contains ethylene glycol for freezing temperature control and anticorrosion additives for preventing metal components from corroding.

## Lubrication Oil

- Engine oil, transmission oil and gear oil are used for lubrication and contain mineral oils and synthetic oils.

## Brake Fluid

- Brake fluid contains several types of glycol-ether and anticorrosion additives for preventing metal components from corroding.



NOTICE

- Brake fluid contains ingredients that damage painted surfaces. If any comes in contact with the vehicle body, the paint may come off.

## Power Steering Fluid

- Power steering fluid contain mineral oils and synthetic oils.

## Window Washer Fluid

- Window washer fluid contains alcohol for freezing temperature control.

## 12 V Battery Electrolyte

- 12 V battery electrolyte contains dilute sulfuric acid.



WARNING

- Dilute sulfuric acid may cause irritation of the skin if contacted. Wear appropriate protective equipment such as rubber gloves and safety goggles when there is a risk of touching electrolyte.



NOTICE

- 12 V battery electrolyte contains ingredients that damage painted surfaces. If any comes in contact with the vehicle body, discoloration or other damage may occur.

## Vehicle with High Voltage Battery

### 1. Nickel-metal hydride (Ni-MH) battery

- The Ni-MH battery electrolyte is a caustic alkaline (pH 13.5) that is damaging to human tissues. The electrolyte, however, is absorbed in the cell plates and will not normally spill or leak out even if a battery module is cracked.
- Electrolyte leakage from the HV battery pack is unlikely due to its construction and the amount of available electrolyte contained within the Ni-MH modules.
- Any spillage would not warrant a declaration as a hazardous material incident.



- To avoid injury by coming in contact with the electrolyte, wear appropriate protective equipment such as rubber gloves and safety goggles when there is a risk of touching electrolyte.

### 2. Lithium ion (Li-ion) battery

- The Li-ion battery electrolyte is a flammable organic electrolyte that is damaging to human tissues. The electrolyte is absorbed into the battery cell separators, even if the battery cells are crushed or cracked, it is unlikely that liquid electrolyte will leak.
- Any liquid electrolyte that leaks from a Li-ion battery cell quickly evaporates.
- Only a small amount may leak from the batteries which may irritate the eyes, nose, throat, and skin.
- Contact with the vapor produced by the electrolyte may irritate the nose and throat.



- To avoid injury caused by coming in contact with the electrolyte or vapor, wear appropriate protective equipment such as rubber gloves, safety goggles, protective mask or SCBA when there is a risk of touching electrolyte.
- If the electrolyte spills, keep it away from fire and ensure the area is well ventilated. Absorb the electrolyte with a waste cloth or equivalent absorbing material, and keep it in an airtight container until disposed of.

# Damaged Vehicle Handling Key Points

■ Points to be noted when handling damaged vehicles are provided in this section.

## Towing Damaged Vehicle

- Loading a vehicle onto a car carrier (flat bed trailer) is the preferred method of towing.
- Only the FF (Front-engine Front-wheel drive) vehicles are available to tow with rear wheels on the ground.
- If towing the vehicle with all four wheels on the ground is unavoidable, release the parking lock, move the shift lever to neutral (N), and unlock the steering wheel first. The vehicle can then be towed at a low speed (below 30 km/h) for a distance of up to 80 km in a forward direction. (\*Except vehicles with a high voltage battery. See page 67 for details.)
- Refer to the illustrations on the following page for correct and incorrect methods of towing FF (Front-engine Front-wheel drive), FR (Front-engine Rear-wheel drive), MR (Mid-engine Rear-wheel drive) and 4WD (Four Wheel Drive) vehicles.



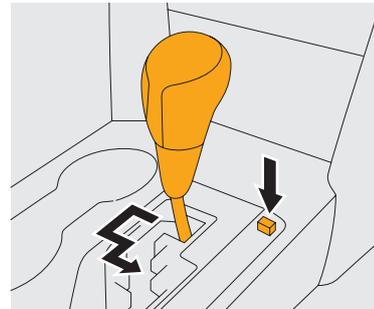
- When towing a vehicle with all four wheels on the ground, make sure the vehicle is in “Ignition-On” mode. If in “Off” mode, the steering wheel may lock, making the steering inoperative.



- Exceeding the towing distance or speed limit when towing a vehicle with all four wheels on the ground or towing a vehicle with the vehicle facing backwards, may damage the transmission or transaxle.
- When the vehicle is equipped with a stop and start system, towing the vehicle with all four wheels on the ground may damage the system.

## Parking Lock

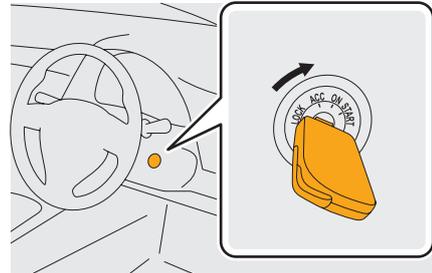
- The parking lock can be released by moving the shift lever from park (P) to neutral (N) while pushing and holding the “lock release button” on the shift gate.



- For hybrid vehicle (HV), plug-in hybrid vehicles (PHV) or electric vehicle (EV) that are equipped with an electronic shift switch (P position switch), the parking lock cannot be released if the negative (-) terminal of the 12 V battery is disconnected. Use wheel dollies or similar equipment when moving the vehicle.

## Steering Wheel Lock

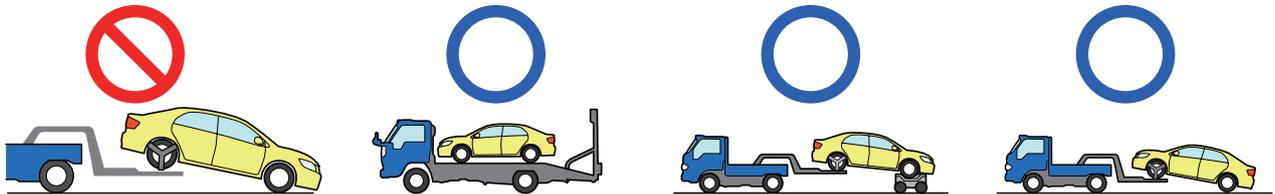
- The steering wheel can be unlocked by pushing the engine/power switch until in “Ignition-On” mode, or turning the ignition switch to any position other than “LOCK”.
- When it is difficult to release the lock, turn the steering wheel in either direction while pushing the engine/power switch or turning the key.



- When a vehicle is equipped with the electrical key transmitter system, the steering wheel cannot be unlocked if the negative (-) terminal of the 12 V battery is disconnected. Use wheel dollies or similar equipment when moving the vehicle.

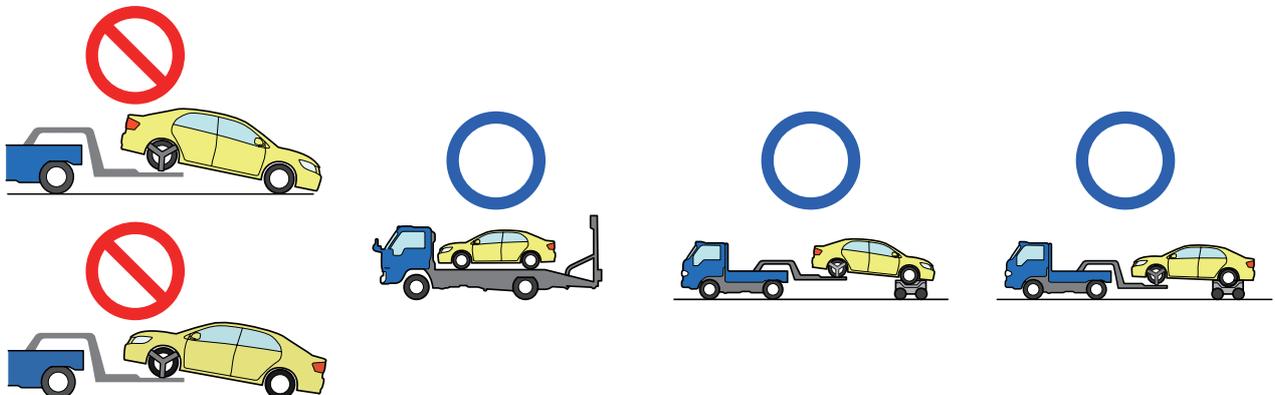
## Precautions for FF (Front-engine Front-wheel drive) vehicle

- Tow the vehicle with the front wheels or all four wheels off the ground.



## Precautions for FR (Front-engine Rear-wheel drive), MR (Mid-engine Rear-wheel drive) and 4WD (Four Wheel Drive) vehicles

- Tow the vehicle with all four wheels off the ground.



## Vehicle with High Voltage Battery

- Make sure the negative (-) terminal of the 12 V battery is disconnected, then load the vehicle onto a car carrier (flat bed trailer).
- If towing the vehicle with all four wheels on the ground is unavoidable, only tow it for a short distance (such as to a car carrier (flat bed trailer)) in a forward direction at a low speed (below 30 km/h).
- Refer to the above illustrations for correct and incorrect methods of towing FF, FR and 4WD vehicles.



- Hybrid vehicles (HV), plug-in hybrid vehicles (PHV) and electric vehicles (EV) are equipped with a high voltage electrical system (over 200 V).
- To prevent serious injury or death from severe burns or electric shock, avoid touching, cutting, or breaching any orange high voltage power cable or high voltage component. Wear appropriate protective equipment such as insulated gloves when there is a risk of touching high voltage power cables or high voltage components.



- When a vehicle is equipped with a high voltage battery, towing the vehicle with the drive wheels on the ground may damage the high voltage electrical system.

## Storing a Damaged Vehicle

- Drain the gasoline and oils, and disconnect the negative (-) terminal of the 12 V battery before storing a damaged vehicle.

### Submerged Vehicle

- In addition to general procedures, remove the water from the vehicle.



NOTICE

- A short circuit due to electrical corrosion (wiring and circuit boards become corroded due to an electrochemical reaction with water) may cause a vehicle fire after some time has elapsed. Store submerged vehicles in a well ventilated area, at least 15 meters away from other objects.
- To prevent a vehicle fire, avoid turning the ignition switch or power switch of a submerged vehicle to ACC or ON.

### Vehicle with High Voltage Battery

- In addition to general procedures, remove the service plug from the high voltage battery.



WARNING

- The service plug is a high voltage component. Touching it without appropriate protective equipment may result in serious injury or death from severe burns and electric shock from the high voltage electrical system. Wear appropriate protective equipment such as insulated gloves when touching the service plug.
- High voltage electricity is stored in the high voltage battery even after the vehicle is shut off, disabled (see page 51) and the service plug is removed from the high voltage battery.
- To prevent serious injury or death from severe burns or electric shock, avoid touching, cutting, or breaching any orange high voltage power cable or high voltage component. Wear appropriate protective equipment such as insulated gloves when there is a risk of touching high voltage power cables or high voltage components.



NOTICE

- A short circuit due to impact or electrical corrosion in the high voltage battery may cause a fire after some time has elapsed. Store vehicles equipped with a high voltage battery in a well ventilated area, at least 15 meters away from other objects.

