

# OWNER'S MANUAL 2025 MAZDA MX-5

MAZDA MOTOR CORPORATION

# 

### **California Proposition 65 Warning**

Operating, servicing and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to

www.P65Warnings.ca.gov/passenger-vehicle.

#### NOTE

The following manuals are available on the website. Please read them as well (see the link on the last page).

- Mazda Connect Owner's manual
- Navigation manual

# Web Owner's Manual

You can view the Web Owner's manual using a Computer, Smartphone, or Tablet.

Feel free to use the Web Owner's manual as well.

The target country may differ depending on the vehicle specifications and the vehicle's period of manufacture.

### To Customers in U.S.A.

 Please go to the web site below, and select the desired material or model (model year). https://www.mazdausa.com/owners/ how-to-use-my-mazda

### To Customers in Puerto Rico

• Please go to the web site below. https://mazdapr.com/manual-de-propietario/



### To Customers in Canada

• Please go to the web site below, and select the desired material or model (model year).

https://www.mazda.ca/en/ owners/manuals/

### To Customers in Mexico

• Please go to the web site below.

https://www.mazda.mx/mi-mazda/manuales





### Limitations on use

- This Web Owner's manual may not display normally depending on the device being used and the contracted services available with the device.
- Communication fees may occur while connected (accessing).
- Access may not be available in poor network or communication environments.

Thank you for choosing a Mazda product. We at Mazda design and build vehicles with complete customer satisfaction in mind.

To help ensure enjoyable and trouble-free operation of your Mazda vehicle, read this manual carefully and follow its recommendations.

Regular servicing of your vehicle by an expert technician helps maintain both its roadworthiness and its resale value. A world-wide network of Authorized Mazda Dealer can help you with their professional servicing expertise. Their specially trained personnel are best qualified to service your Mazda vehicle properly and precisely to original specifications. Also, they are supported by a wide range of highly specialized tools and equipment specially developed for servicing Mazda vehicles. When maintenance or service is necessary, consult an Authorized Mazda Dealer.

We assure you that all of us at Mazda have an ongoing interest in your motoring pleasure and in your full satisfaction with your Mazda product.

#### Mazda Motor Corporation HIROSHIMA, JAPAN

#### Important Notes About This Manual

Keep this manual in the trunk as a handy reference for the safe and enjoyable use of your Mazda vehicle. Should you resell the vehicle, leave this manual with it for the next owner.

All specifications and descriptions are accurate at the time of printing. Because improvement is a constant goal at Mazda, we reserve the right to make changes in specifications at any time without notice and without obligation.

#### Air Conditioner and the Environment

Your Mazda's genuine air conditioner is filled with a refrigerant that has been found not to damage the earth's ozone layer. If the air conditioner does not operate properly, consult an Authorized Mazda Dealer.

#### Perchlorate

Certain components of this vehicle such as [air bag modules, seat belt pretensioners, lithium batteries,...] may contain Perchlorate Material--Special handling may apply for service or vehicle end of life disposal. See

www.dtsc.ca.gov/hazardouswaste/perchlorate.

Please be aware that this manual applies to all models, equipment and options. As a result, you may find some explanations for equipment not installed on your vehicle.

©2024 Mazda Motor Corporation September 2024(Print1) We want to help you get the most driving pleasure from your vehicle. Your owner's manual, when read from beginning to end, can do that in many ways.

Illustrations complement the words of the manual to best explain how to enjoy your Mazda. By reading your manual, you can find out about the features, important safety information, and driving under various road conditions.

You'll find several WARNINGs, CAUTIONs, and NOTEs in the manual.

# 

A WARNING indicates a situation in which serious injury or death could result if the warning is ignored.

# **CAUTION**

A CAUTION indicates a situation in which bodily injury or damage to your vehicle, or both, could result if the caution is ignored.

### NOTE

A NOTE provides information and sometimes suggests how to make better use of your vehicle.

The symbol below in this manual means "Do not do this" or "Do not let this happen".



The following symbol indicates the operation, such as a push or a turn.



The following symbol indicates the order of the operation, such as a push or a turn.



The following symbol indicates the location of parts.



The following symbol indicates a change of status.



The following symbol, located on some parts of the vehicle, indicates that this manual contains information related to the part.

Please refer to the manual for a detailed explanation.



**Index:** A good place to start is the Index, an alphabetical listing of all information in your manual.

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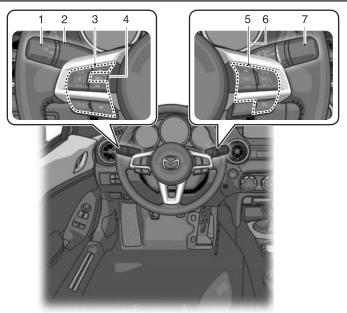


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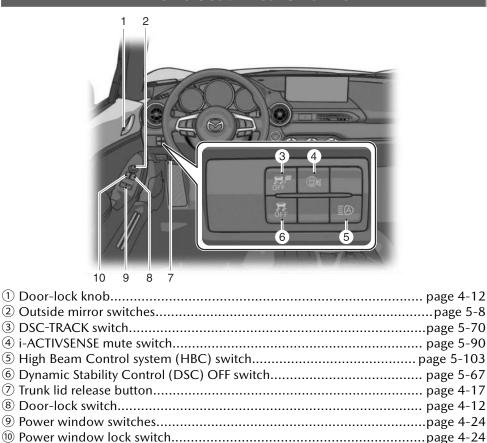
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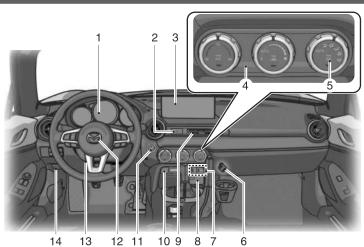


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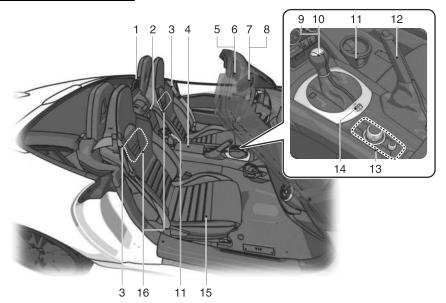


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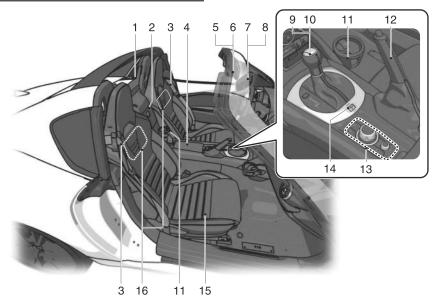
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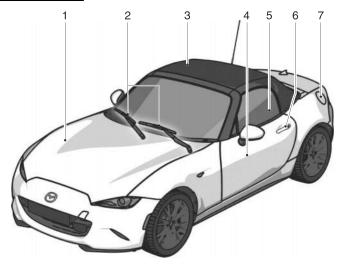
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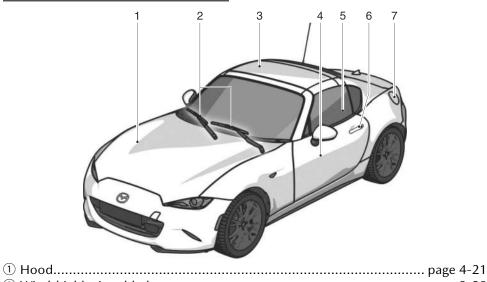
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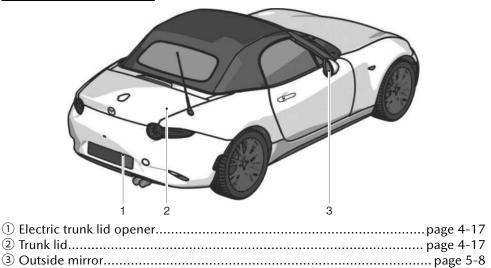
### Convertible Top (Retractable Fastback)



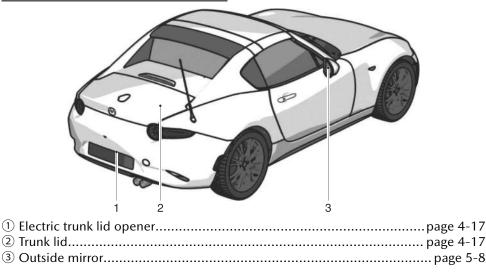
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#### Convertible Top (Retractable Fastback)



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## Things to Be Observed While Driving

# **WARNING**

# Never stop the engine when going down a hill.

Stopping the engine when going down a hill is dangerous. This causes the loss of power steering and power brake control, and may cause damage to the drivetrain. Any loss of steering or braking control could cause an accident.

# Be extremely careful if it is necessary to downshift on slippery surfaces.

Downshifting into lower gear while driving on slippery surfaces is dangerous. The sudden change in tire speed could cause the tires to skid. This could lead to loss of vehicle control and an accident.

Dry off brakes that have become wet by driving slowly, releasing the accelerator pedal and lightly applying the brakes several times until the brake performance returns to normal. Driving with wet brakes is dangerous. Increased stopping distance or the vehicle pulling to one side when braking could result in a serious accident. Light braking will indicate whether the brakes have been affected.

# **CAUTION**

Do not drive the vehicle on flooded roads as it could cause short circuiting of electrical/electronic parts, or engine damage or stalling from water absorption. If the vehicle has been immersed in water, consult an Authorized Mazda Dealer.

## Things to Be Observed When Parking or Stopping

# **WARNING**

# Never leave a child alone in the vehicle.

The temperature inside the cabin could become extremely hot which could be life-threatening.

An unattended child could operate equipment or accelerate the vehicle resulting in an accident.

# 

- Do not leave any items in the vehicle that could cause a vehicle fire if they become hot. The temperature inside the cabin could become extremely hot.
- Stop the vehicle in a place where there are no flammable objects.
- Do not leave the engine running in a poorly ventilated area, such as in a garage or in a snow-covered area. If there is a malfunction in the exhaust pipe or exhaust noise, have the vehicle inspected. There is a risk of carbon monoxide poisoning.
- Do not sleep in the vehicle with the engine running. There is a risk that the vehicle may move unintentionally.

## Event Data Recorder (EDR)

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 or near crash-like 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.

Mazda will not disclose any of the data recorded in an EDR to a third party unless:

- A written agreement from the vehicle owner or the lessee is obtained
- Officially requested by the police or other law enforcement authorities
- $\cdot$  Used as a defense for Mazda in a lawsuit, claim, or arbitration
- · Ordered by a judge or court

However, if necessary Mazda will:

- Use the data for research on Mazda vehicle performance, including safety.
- Disclose the data or the summarized data to a third party for research purposes without disclosing vehicle or owner identification information.

# A computer that records vehicle data

A computer is equipped that records data related to the vehicle control, operation, and the driving environment. This computer records information

such as the following.

- Vehicle conditions such as engine speed and vehicle speed
- Driving operation conditions such as accelerator and brake pedals, and information related to the environmental circumstances while driving the vehicle
- Malfunction diagnosis information from on-vehicle computer
- Information related to controls of other on-vehicle computers

The recorded information differs depending on the vehicle grade and the equipment.

Personal information (name, sex, age, and collision location) is not recorded.

### Data handling

Mazda and its contractors may obtain and use data recorded in EDRs and computers that record vehicle data for the purpose of vehicle malfunction diagnosis, research and development, and quality improvement. Mazda will not disclose or provide any of the obtained data to a third party unless:

- An agreement from the vehicle owner (agreements from lessor and lessee for leased vehicle) is obtained
- Officially requested by the police or other law enforcement authorities
- For statistical processing by a research institution after processing the data so that identification of the owner or the vehicle is impossible
- Used as a defense for Mazda in a lawsuit, claim, or arbitration
- Ordered by a judge or court

### **Instrument Cluster**

This product includes free/open sources. Information about the licensing and source code is available at the following URL. https://www.nippon-seiki.co.jp/ business\_ic\_meter/

# Equipment to Protect Occupants/ Pedestrians

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### SRS Air Bags

If the vehicle receives a strong impact from the front or side of the vehicle when the vehicle power is switched ON, the air bags inflate

instantaneously and lessen the impact on the head or chest of the driver or passenger.

The SRS air bag system protects occupants together with the seat belts and they are not a substitute for the seat belts.

There are 3 types of air bags. Vehicles have a sensor which detects an impending roll-over accident. The air bag supplemental restraint systems are designed to provide supplemental protection in certain situations so seat belts are always important.

Without seat belt usage, the air bags cannot provide adequate protection during an accident. Seat belt usage is necessary to:

- Keep the occupant from being thrown into an inflating air bag.
- Reduce the possibility of injuries during an accident that is not designed for air bag inflation, such as rear impact.
- Reduce the possibility of injuries in frontal, near frontal or side collisions or roll-over accidents that are not severe enough to activate the air bags.
- Reduce the possibility of being thrown from your vehicle.
- Reduce the possibility of injuries to lower body and legs during an accident because the air bags provide no protection to these parts of the body.
- Hold the driver in a position which allows better control of the vehicle.

### Driver's air bag

The driver's air bag is stored in the center of the steering wheel. When air bag crash sensors detect a frontal impact of greater than moderate force, the driver's air bag inflates quickly helping to reduce injury mainly to the driver's head or chest caused by directly hitting the steering wheel.

#### (Except Mexico)

The driver's dual-stage air bag controls air bag inflation in two energy stages. During an impact of moderate severity, the driver's air bag deploys with lesser energy, whereas during more severe impacts, it deploys with more energy.



### Passenger's air bag

The passenger's air bag is stored in the dashboard.

The inflation mechanism for the passenger air bag is the same as the driver's air bag.

In addition, the passenger air bag is designed to only deploy when the passenger occupant classification

sensor detects a passenger sitting on the passenger's seat.



### Side air bags

The side air bags are installed in the outboard sides of the seatbacks. When the air bag crash sensors detect a side impact of greater than moderate force, the system inflates the side air bag only on the side in which the vehicle was hit. The side air bag inflates quickly to reduce injury to the driver or passenger's head and chest caused by directly hitting interior parts such as a door or window.

In addition, the passenger side air bag is designed to only deploy when the passenger occupant classification sensor detects a passenger sitting on the passenger's seat.



#### In a roll-over:

In response to a vehicle roll-over, both side bags inflate.



Both side air bags will deploy after the roll-over accident is detected.

#### **Constant Monitoring**

The following components of the air bag systems are monitored by a diagnostic system:

- · Air bag sensors
- Crash sensors, and diagnostic module (SAS unit)
- · Side crash sensors
- · Air bag modules
- · Seat belt pretensioners
- Air bag/Seat belt pretensioner system warning light
- Related wiring
- Passenger occupant classification sensor
- Passenger occupant classification module
- Passenger air bag deactivation indicator light

The diagnostic module continuously monitors the system's readiness. This begins when the ignition is switched ON and continues while the vehicle is being driven.

## Warnings and Cautions for Using the SRS Air Bags

# **WARNING**

# Seat belts must be worn in air bag equipped vehicles.

Depending only on the air bags for protection during an accident is dangerous. Alone, air bags may not prevent serious injuries. The appropriate air bags can be expected to inflate only in the first accident, such as frontal, near frontal or side collisions or roll-over accidents that are at least moderate. Vehicle occupants should always wear seat belts.

#### Always make sure the passenger air bag deactivation indicator light is illuminated when using a child-restraint system:

Seating a child in a child-restraint system that is installed on the passenger seat with the passenger air bag deactivation indicator light not illuminated is extremely dangerous. In an accident, an air bag could inflate and cause serious injuries or even death to the child seated in the child-restraint system. Always make sure the passenger air bag deactivation indicator light is illuminated.

# Do not sit too close to the driver and passenger air bags.

Sitting too close to the driver and passenger air bag modules or placing hands or feet on them is extremely dangerous. The driver and passenger air bags inflate with great force and speed. Serious injuries could occur if someone is too close. The driver should always hold onto only the rim of the steering wheel. The passenger should keep both feet on the floor. Seat occupants should adjust their seats as far back as possible and always sit upright against the seatbacks with seat belts worn properly.

# Do not sit too close to a door or lean against doors in vehicles with side air bags.

Sitting too close to the side air bag modules or placing hands on them is extremely dangerous. A side air bag inflates with great force and speed directly out of the outboard shoulder of the seat and expands along the door on the side the car is hit. Serious injury could occur if someone is sitting too close to the door or leaning against a window in the seats. Furthermore, sleeping up against the door or hanging out the driver-side window while driving could block the side air bag and eliminate the advantages of supplemental protection. Give the side air bags room to work by sitting in the center of the seat while the vehicle is moving with seat belts worn properly.

# Sit in the center of the seat and wear seat belts properly.

Sitting too close to the side air bag modules or placing hands on them, or sleeping up against the door or hanging out the windows is extremely dangerous. The side air bags inflate with great force and speed directly expanding along the door on the side the car is hit. Serious injury could occur if someone is sitting too close to the door or leaning against a window. Give the side air bags room to work by sitting in the center of the seat while the vehicle is moving with seat belts worn properly.

# Do not attach objects on or around the area where air bags deploy.

Attaching objects to the air bags or placing something in the area where the air bags deploy is dangerous. In an accident, an object could interfere with air bag inflation and injure the occupants. Furthermore, the bag could be damaged causing gases to release. Always keep the deployment area of the air bag modules free of any obstructions.

For example, you should not do any of the following as it may interfere with air bag deployment.

- Do not put a covering on or lean anything against areas such as the dashboard and lower portion of the instrument panel that blocks the passenger air bag.
- Do not use seat covers on the seats.
- Do not hang any backpacks, bags or pouches that cover the sides of the seats that block the side air bags.

# Do not touch the components of the supplemental restraint system after the air bags have inflated.

Touching the components of the supplemental restraint system after the air bags have inflated is dangerous. Immediately after inflation, they are very hot. You could get burned.

# Never install any front-end equipment to your vehicle.

Installation of front-end equipment, such as frontal protection bar (kangaroo bar, bull bar, push bar, or other similar devices), snowplow, or winches, is dangerous. The air bag crash sensor system could be affected. This could cause air bags to inflate unexpectedly, or it could prevent the air bags from inflating during an accident. Occupants could be seriously injured.

#### Do not modify the suspension.

Modifying the vehicle suspension is dangerous. If the vehicle's height or the suspension is modified, the vehicle will be unable to accurately detect a collision or roll-over accident resulting in incorrect or unexpected air bag deployment and the possibility of serious injuries.

# To prevent false detection by the air bag sensor system, heed the following.

- Do not use tires or wheels other than those specified for your Mazda. Use of any tire or wheel other than those specified for your Mazda (page 10-68) is dangerous. Use of such wheels will prevent the vehicle's accident detection system from accurately detecting a collision or roll-over accident resulting in incorrect or unexpected air bag deployment and the possibility of serious injuries.
- Do not overload your vehicle: Overloading your vehicle is dangerous as it could prevent the air bag crash sensor system from accurately detecting a collision or roll-over accident resulting in incorrect or unexpected air bag deployment and the possibility of serious injuries. The gross axle weight rating (GAWR) and the gross vehicle weight rating (GVWR) for your vehicle are on the Motor Vehicle Safety Standard Label on the driver's door frame. Do not exceed these ratings.
- Do not drive the vehicle off-road. Driving your Mazda off-road is dangerous because the vehicle has not been designed to do so. Driving the vehicle off-road could prevent the air bag crash sensor system from accurately detecting a collision or roll-over accident resulting in incorrect or unexpected air bag deployment and the possibility of serious injuries.

#### Do not modify a door or leave any damage unrepaired. Always have an Authorized Mazda Dealer inspect a damaged door.

Modifying a door or leaving any damage unrepaired is dangerous. Each door has a side crash sensor as a component of the supplemental restraint system. If holes are drilled in a door, a door speaker is left removed, or a damaged door is left unrepaired, the sensor could be adversely affected causing it to not detect the pressure of an impact correctly during a side collision. If a sensor does not detect a side impact correctly, the side air bags and the seat belt pretensioner may not operate normally which could result in serious injury to occupants.

# Do not modify the supplemental restraint system.

Modifying the components or wiring of the supplemental restraint system is dangerous. You could accidentally activate it or make it inoperable. Do not make any modifications to the supplemental restraint system. This includes installing trim, badges, or anything else over the air bag modules. It also includes installing extra electrical equipment on or near system components or wiring. An Authorized Mazda Dealer can provide the special care needed in the removal and installation of seats. It is important to protect the air bag wiring and connections to assure that the bags do not accidentally deploy, and that the passenger occupant classification system and the seats retain an undamaged air bag connection.

# Do not place luggage or other objects under the seats.

Placing luggage or other objects under the seats is dangerous. The components essential to the supplemental restraint system could be damaged, and in the event of a side collision, the appropriate air bags may not deploy, which could result in death or serious injury. To prevent damage to the components essential to the supplemental restraint system, do not place luggage or other objects under the seats.

# Do not operate a vehicle with damaged air bag/seat belt pretensioner system components.

Expended or damaged air bag/seat belt pretensioner system components must be replaced after any collision which caused them to deploy or damage them. Only a trained Authorized Mazda Dealer can fully evaluate these systems to see that they will work in any subsequent accident. Driving with an expended or damaged air bag or pretensioner unit will not afford you the necessary protection in the event of any subsequent accident which could result in serious injury or death.

#### Do not remove interior air bag parts.

Removing any components such as the seats, dashboard, the steering wheel, containing air bag parts or sensors is dangerous. These parts contain essential air bag components. The air bag could accidentally activate and cause serious injuries. Always have an Authorized Mazda Dealer remove these parts.

# Properly dispose of the air bag system.

Improper disposal of an air bag or a vehicle with live air bags in it can be extremely dangerous. Unless all safety procedures are followed, injury could result. Have an Authorized Mazda Dealer safely dispose of the air bag system or scrap an air bag equipped vehicle.

## **Deployment of SRS air bags**

#### Deployment of SRS air bags

The driver's and passenger's air bags deploy when a strong impact is applied to the vehicle in a frontal collision, and the side air bags deploy in side collisions. The air bags do not always deploy even if the vehicle receives an impact.

#### Conditions in which air bags may not deploy

The air bags may not deploy under the following conditions depending on the level of the impact.

Driver's and passenger's air bags

(Impacts involving trees or poles)



(Rear-ending or running under a truck's tail gate)



(Frontal offset impact to the vehicle)



Side air bags (Frontal offset impact to the vehicle)



(Pitch end over end)



(Side impacts involving trees or poles from the vehicle side (around driver or passenger))



(Side impacts with two-wheeled vehicles)



Conditions in which air bags do not deploy

The air bags do not deploy under the following conditions.

Driver's and passenger's air bags

(Rear impact)



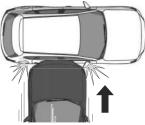
(Roll-over)



### (Pitch end over end)



(Lateral direction side impact)

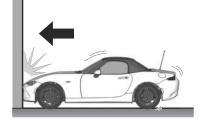


Side air bags

(Rear impact)



(Frontal impact)



#### NOTE

- If it becomes necessary to have the components or wiring system for the supplementary restraint system modified to accommodate a person with certain medical conditions in accordance with a certified physician, contact an Authorized Mazda Dealer, refer to "Customer Assistance (U.S.A.)" (page 10-4).
- When an air bag deploys, a loud inflation noise can be heard and some smoke will be released. Neither is likely to cause injury, however, the texture of the air bags may cause light skin injuries on body parts not covered with clothing through friction.
- Should you sell your Mazda, we urge you to tell the new owner of its air bag systems and that familiarization with all instructions about them, from the Owner's Manual, is important.
- $\cdot$  Vehicles with a passenger air bag have a warning label attached as shown in the following.

#### (Mexico)

This warning label reminds you not to put a rear-facing child-restraint system on the passenger seat at any time.

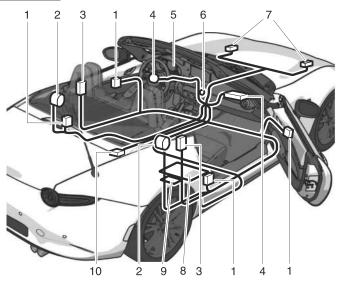


### (Except Mexico)

This warning label is displayed in compliance with regulations.



#### Air bag structural view



- 1. Side crash sensors
- 2. Seat belt pretensioners
- 3. Side inflators and air bags
- Driver passenger inflators and air bags
   Air bag/seat belt pretensioner system warning indication/warning light
   Passenger air bag deactivation indicator light
- 7. Air bag sensors
- Passenger occupant classification sensor
   Passenger occupant classification module
- 10.Roll-over sensor, crash sensors, and diagnostic module (SAS unit)

# Passenger Occupant Classification System

Your vehicle is equipped with a passenger occupant classification sensor as a part of the supplemental restraint system. This sensor is equipped in the passenger's seat cushion. This sensor measures the electrostatic capacity of the passenger's seat. The SAS unit is designed to prevent the passenger front and side air bags and seat belt pretensioner system from deploying if the passenger air bag deactivation indicator light turns on. To reduce the chance of injuries caused by deployment of the passenger air bag, the system deactivates the passenger front and side air bags and also the seat belt pretensioner system when the passenger air bag deactivation indicator light turns on.

Warnings and Cautions for Using the Passenger Occupant Classification System

# **WARNING**

Do not allow an occupant in the passenger's seat to sit with a posture which makes it difficult for the passenger occupant classification sensor to detect the occupant correctly.

Sitting in the passenger's seat with a posture which makes it difficult for the passenger occupant classification sensor to detect the occupant correctly is dangerous. If the passenger occupant classification sensor cannot detect the occupant sitting on the passenger's seat correctly, the passenger front and side air bags and pretensioner system may not operate (non-deploy) or they may operate (deploy) accidentally. The passenger will not have the supplementary protection of the air bags or the accidental operation (deployment) of the air bags could result in serious injury or death.

Under the following conditions, the passenger occupant classification sensor cannot detect a passenger sitting on the passenger's seat correctly and the deployment/non-deployment of the air bags cannot be controlled as indicated in the passenger air bag deactivation indicator light on/off condition chart. For example: A passenger is seated as shown in the following figure:







- Luggage or other items placed under the passenger seat or between the passenger seat and driver seat that push up the passenger seat bottom.
- An object, such as a seat cushion, is put on the passenger's seat or between the passenger's back and the seatback.
- A seat cover is put on the passenger's seat.
- Luggage or other items are placed on the seat with the child in the child-restraint system.
- ≻The seat is washed.
- Liquids are spilled on the seat.

- The passenger seat is moved backward, pushing into luggage or other items placed behind it.
- Luggage or other items are placed between the passenger seat and driver seat.
- An electric device is put on the passenger's seat.
- An additional electrical device, such as a seat warmer is installed to the surface of the passenger seat.

The passenger front and side air bags and seat belt pretensioner systems will deactivate if the passenger air bag deactivation indicator light turns on.

# 

- To assure proper deployment of the front air bag and to prevent damage to the sensor in the seat cushion:
  - Do not place sharp objects on the seat cushion or leave heavy luggage on them.
  - Do not spill any liquids on the seats or under the seats.
- To allow the sensors to function properly, always perform the following:
  - Adjust the seats as far back as possible and always sit upright against the seatbacks with seat belts worn properly.
  - If you place your child on the passenger seat, secure the child-restraint system properly and slide the passenger seat as far back as possible within the position in which the child-restraint system can be installed.

### How to Use the Passenger Occupant Classification System

This system shuts off the passenger front and side air bags and seat belt pretensioner system, so make sure the passenger air bag deactivation indicator light turns on according to the following table.

The air bag/seat belt pretensioner system warning light flashes and the passenger air bag deactivation indicator light illuminates if the sensors have a possible malfunction. If this happens, the passenger front and side air bags and seat belt pretensioner system will not deploy.

#### Passenger air bag deactivation indicator light

This indicator light turns on to remind you that the passenger front and side air bags and seat belt pretensioner will not deploy during a collision. **Type A** 



If the passenger occupant classification sensor is normal, the indicator light turns on when the ignition is switched ON. The light turns off after a few seconds. Then, the indicator light turns on or is off under the following conditions:

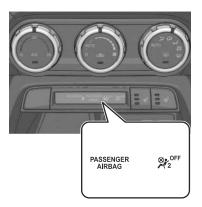
#### Passenger air bag deactivation indicator light on/off condition chart

Condition detected by the passenger occupant classifica- tion system	Passenger air bag de- activation indicator light	Passenger front and side air bags	Passenger seat belt pretensioner system
Empty (Not occupied)	On	Deactivated	Deactivated
A child is seated in a child-re- straint system <sup>*1</sup>	On	Deactivated	Deactivated
Adult <sup>*2</sup>	Off	Ready	Ready

- <sup>\*</sup>1 The occupant classification sensor may not detect a child seated on the seat, in a child-restraint system, or a junior seat depending on the child's physical size and seated posture.
- <sup>2</sup> If a smaller adult sits on the passenger seat, the sensors might detect the person as being a child depending on the person's physique.

If the passenger air bag deactivation indicator light does not turn on when the ignition is switched ON and does not turn on as indicated in the passenger air bag deactivation indicator light on/off condition chart, do not allow an occupant to sit in the passenger seat and consult an Authorized Mazda Dealer as soon as possible. The system may not work properly in an accident.

Туре В



#### Passenger air bag deactivation indicator light on/off condition chart

Condition detected by the passenger occupant classifica- tion system	Passenger air bag de- activation indicator light	Passenger front and side air bags	Passenger seat belt pretensioner system
Empty (Not occupied)	⊗•,OFF ► 2	Deactivated	Deactivated
A child is seated in a child-re- straint system <sup>*1</sup>	⊗•,OFF ► 2	Deactivated	Deactivated
Adult <sup>*2</sup>	Turns off after a short period of time.	Ready	Ready

<sup>\*1</sup> The occupant classification sensor may not detect a child seated on the seat, in a child-restraint system, or a junior seat depending on the child's physical size and seated posture.

<sup>2</sup> If a smaller adult sits on the passenger seat, the sensors might detect the person as being a child depending on the person's physique.

If both of the passenger air bag deactivation indicator lights do not turn on for a specified period of time when the ignition is switched ON or they do not turn on as indicated in the passenger air bag deactivation indicator light on/off condition chart, do not allow an occupant to sit in the passenger seat and consult an Authorized Mazda Dealer as soon as possible. The system may not work properly in an accident.

#### NOTE

- The system requires about 10 seconds to alternate between turning the passenger front and side air bags and seat belt pretensioner system on or off.
- The passenger air bag deactivation indicator light may turn on repeatedly if luggage or other items are put on the passenger seat, or if the temperature of the vehicle's interior changes suddenly.
- The passenger air bag deactivation indicator light may turn on for 10 seconds if the electrostatic capacity on the passenger seat changes.
- The air bag/seat belt pretensioner system warning light might turn on if the passenger seat receives a severe impact.
- If the passenger air bag deactivation indicator light does not turn on after installing a child-restraint system on the passenger seat, first, re-install your child-restraint system according to the procedure in this owner's manual. Then, if the passenger air bag deactivation indicator light still does not turn on, and consult an Authorized Mazda Dealer as soon as possible.
- If the passenger air bag deactivation indicator light turns on when an occupant is seated directly in the passenger seat, have the passenger re-adjust their posture by sitting with their feet on the floor, and then re-fastening the seat belt. If the passenger air bag deactivation indicator light remains turned on, slide the passenger seat as far back as possible. Consult an Authorized Mazda Dealer as soon as possible.

### Seat Belts

Seat belts help to decrease the possibility of severe injury during accidents and sudden stops. Mazda recommends that the driver and all passengers always wear seat belts. (Mexico)

All the seats have lap/shoulder belts. These belts have retractors with inertia locks that keep them out of the way when not in use. The locks allow the belts to remain comfortable on users, but they will lock in position during a collision.

#### (Except Mexico)

All of the seat belt retractors are designed to keep the lap/shoulder belts out of the way when not in use. The driver's seat belt has no provisions for child-restraint systems and has only an emergency locking mode. The driver may wear it comfortably, and it will lock during a collision. However, the passenger's seat lap/ shoulder belt retractor operates in two modes: emergency locking mode, and for child-restraint systems, automatic locking mode. If you must use the passenger seat for a child, slide the passenger seat as far back as possible and make sure any child-restraint system is secured properly.

#### **Emergency locking mode**

When the seat belt is fastened, it will always be in the emergency locking mode.

In the emergency locking mode, the belt remains comfortable on the occupant and the retractor will lock in position during a collision.

If the belt is locked and cannot be pulled out, retract the belt once, and then try pulling it out slowly. If this fails, pull the belt strongly 1 time and loosen, then pull it out again slowly. (Seat belt with automatic lock mode) When the seat belt is fastened, it will always be in the emergency locking mode until it is switched to automatic locking mode by pulling it all the way out to its full length. If the belt feels tight and hinders comfortable movement while the vehicle is stopped or in motion, it may be in the automatic locking mode because the belt has been pulled too far out. To return the belt to the more comfortable emergency locking mode, wait until the vehicle has stopped in a safe, level area, retract the belt fully to convert it back to emergency locking mode and then extend it around you again.

#### Automatic locking mode (Except Mexico)

Always use the automatic locking mode to keep the child-restraint system from shifting to an unsafe position in the event of an accident. To enable seat belt automatic locking mode, pull it all the way out and connect it as instructed on the child-restraint system. It will retract down to the child-restraint system and stay locked on it. See the section on child restraint (page 3-42).

#### Pretensioner system

If the vehicle receives a strong impact from the front or side of the vehicle, the system retracts the seat belts to increase their effect. When a collision is detected, the pretensioners deploy simultaneously with the air bags. The pretensioners deploy simultaneously with the air bags when a roll-over is also detected. The seat belt retractors remove slack quickly as the air bags are expanding. Any time the air bags and seat belt pretensioners have fired they must be replaced.

A system malfunction or operation conditions are indicated by a warning. Refer to Air Bag/Seat Belt Pretensioner System Warning Light on page 8-62. In addition, the pretensioner system for the passenger, like the front and side passenger air bag, is designed to only deploy when the passenger occupant classification sensor detects a passenger sitting on the passenger's seat.

For details, refer to the How to Use the Passenger Occupant Classification System (page 3-15).

#### Load limiting system

If the vehicle receives a strong impact from the front of the vehicle, the load limiting system operates to prevent the seat belts from applying an excessive load. By maintaining the load applied to the seat belt to a specified level, the system reduces impact to an occupant's chest.

Even if the pretensioners have not fired, the load limiting function must be checked by an Authorized Mazda Dealer.

#### NOTE

• The pretensioner system operates if the vehicle receives a strong impact from the vehicle front or side direction. The system may not operate if the impact is weak. • Some smoke might be released when the pretensioner system operates, but this does not mean there is a fire. This gas normally has no effect on occupants. However, those with sensitive skin may experience light skin irritation. If residue from the operation of the pretensioner system gets on the skin or in the eyes, wash it off as soon as possible.

# Warnings and Cautions for Using the Seat Belts

# **WARNING**

#### Always wear your seat belt and make sure all occupants are properly restrained.

Not wearing a seat belt is extremely dangerous. During a collision, occupants not wearing seat belts could hit someone or things inside the vehicle or even be thrown out of the vehicle. They could be seriously injured or even killed. In the same collision, occupants wearing seat belts would be much safer.

In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt.

#### Do not wear twisted seat belts.

Twisted seat belts are dangerous. In a collision, the full width of the belt is not available to absorb the impact. This puts more force on the bones beneath the belt, which could cause serious injury or death. So, if your seat belt is twisted, you must straighten the seat belt to remove any twists and to allow the full width of the belt to be used.

# Never use one seat belt on more than one person at a time.

Using one seat belt for more than one person at a time is dangerous. A seat belt used in this way cannot spread the impact forces properly and the two passengers could be crushed together and seriously injured or even killed. Never use one belt for more than one person at a time and always operate the vehicle with each occupant properly restrained.

# Do not operate a vehicle with a damaged seat belt.

Using a damaged seat belt is dangerous. An accident could damage the belt webbing of the seat belt in use. A damaged seat belt cannot provide adequate protection in a collision. Have an Authorized Mazda Dealer inspect all seat belt systems in use during an accident before they are used again.

Have your seat belts changed immediately if the pretensioner or load limiter has been expended. Always have an Authorized Mazda

Dealer immediately inspect the seat belt pretensioners and air bags after any collision. Like the air bags, the seat belt pretensioners and load limiters will only function once and must be replaced after any collision that caused them to deploy. A seat belt with an expended pretensioner or load limiter is still better than wearing no seat belt at all; however, if the seat belt pretensioners and load limiters are not replaced, the risk of injury in a collision will increase.

# Positioning the Shoulder Portion of the Seat Belt.

Improper positioning of the shoulder portion of the seat belt is dangerous. Always make sure the shoulder portion of the seat belt is positioned across your shoulder and near your neck, but never under your arm, on your neck, or on your upper arm.

# Positioning the Lap Portion of the Seat Belt.

The lap portion of the seat belt worn too high is dangerous. In a collision, this would concentrate the impact force directly on the abdominal area, causing serious injury. Wear the lap portion of the belt snugly and as low as possible.

# Pregnant women and persons with a medical condition should always wear seat belts.

However, ask your doctor about precautions in using a seat belt because a strong impact might be applied locally during sudden braking or a collision. The lap portion of the belt should fit the pelvis as low as possible avoiding abdominal area. In addition, the shoulder portion should be positioned on the shoulder and fitted to the chest avoiding the abdominal area.



# Wear seat belts only as recommended in this owner's manual.

Incorrect positioning of the seat belts is dangerous. Without proper positioning, the pretensioner and load limiting systems cannot provide adequate protection in an accident and this could result in serious injury. For more details about wearing seat belts, refer to "How to Use the Seat Belts" (page 3-22).

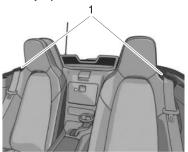
#### Do not modify the components or wiring, or use electronic testing devices on the pretensioner system. Modifying the components or wiring of the pretensioner system, including the use of electronic testing devices is dangerous. You could accidentally activate it or make it inoperable which would prevent it from activating in an accident. The occupants or person making the modification could be seriously injured.

# Properly dispose of the pretensioner system.

Improper disposal of the pretensioner system or a vehicle with non-deactivated pretensioners is dangerous. Unless all safety procedures are followed, injury could result. Have an Authorized Mazda Dealer safely dispose of the pretensioner system or scrap a pretensioner system equipped vehicle.

# Always wear the seat belt with it correctly routed in its guide.

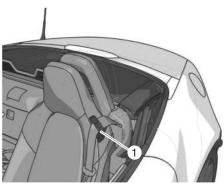
Wearing a seat belt without the seat belt routed in its guide is dangerous because the seat belt would not be able to provide adequate protection in an accident, which could result in serious injury.



1. Seat belt guide



Belt retraction may become difficult if the belts and seat belt guides are soiled, so try to keep them clean. For more details about cleaning the seat belts, refer to "Seat Belt Maintenance" (page 9-56).

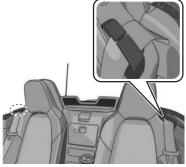


1. Seat belt guide

### How to Use the Seat Belts

#### Fastening a Seat Belt

Before fastening a seat belt, make sure that the seat belt passes through the seat belt guide correctly and it is not twisted.



- 1. Sit back in the seat with your back upright.
- 2. Hold the plate and slowly pull out the seat belt.



#### NOTE

If the belt is locked and cannot be pulled out, retract the belt once, and then try pulling it out slowly. If this fails, pull the seat belt strongly one time and loosen it, then pull it out again slowly.

3. Make sure that the belt is not twisted.

4. Insert the plate into the buckle until it clicks.

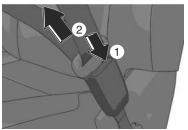


5. The belt should fit the pelvis as low as possible.



6. The belt should not touch the neck, jaw, or face and it should pass over the shoulder.

#### **Unfastening a Seat Belt**



Make sure that the seat belt is not twisted, then let the seat belt retract slowly.

### Seat Belt Extender

If your seat belt is not long enough, even when fully extended, a seat belt extender may be available to you at no charge from your Authorized Mazda Dealer.

This extender will be only for you and for the particular vehicle and seat. Even if it plugs into other seat belts, it may not hold in the critical moment of a crash.

When ordering an extender, only order one that provides the necessary additional length to fasten the seat belt properly. Please contact your Authorized Mazda Dealer for more information.

#### NOTE

When not in use, remove the seat belt extender and store it in the vehicle. If the seat belt extender is left connected, the seat belt extender might get damaged as it will not retract with the rest of the seat belt and can easily fall out of the door when not in use and be damaged. In addition, the seat belt warning light will not illuminate and function properly.

### Warnings and Cautions for Using the Seat Belt Extender

## **WARNING**

# Do not use a seat belt extender unless it is necessary.

Using a seat belt extender when not necessary is dangerous. The seat belt will be too long and not fit properly. In an accident, the seat belt will not provide adequate protection and you could be seriously injured. Only use the extender when it is required to fasten the seat belt properly.

#### Do not use an improper extender.

Using a seat belt extender that is for another person or a different vehicle or seat is dangerous. The seat belt will not provide adequate protection and the user could be seriously injured in an accident. Only use the extender provided for you and for the particular vehicle and seat. NEVER use the extender in a different vehicle or seat. If you sell your Mazda, do not leave your seat belt extender in the vehicle. It could be used accidentally by the new owner of the vehicle. After removing the seat belt extender. discard it. Never use the seat belt extender in any other vehicle you may own in the future.

# Do not use an extender that is too long.

Using an extender that is too long is dangerous. The seat belt will not fit properly. In an accident, the seat belt will not provide adequate protection and you could be seriously injured. Do not use the extender or choose one shorter in length if the distance between the extender's buckle and the center of the user's body is less than 15 cm (6 in).

# Do not leave a seat belt extender connected to the buckle.

Leaving a seat belt extender connected to the buckle without using the seat belt is dangerous. When the seat belt extender is connected to the driver's seat belt buckle (or passenger's seat belt buckle), the SRS driver's (or passenger's) air bag system will determine that the driver (or passenger) is wearing the seat belt even if the driver (or passenger) is not wearing it. This condition could cause the driver's (or passenger's) air bag to not activate correctly and result in death or serious injury in the event of collision. Always wear the seat belt with the seat belt extender.

#### Do not use the seat belt extender when installing a child-restraint system on the passenger seat.

Using a seat belt extender to fasten a child-restraint system on any seat is dangerous. Always follow the child-restraint system manufacturer's installation instructions and never use a seat belt extender.

### Warnings and Cautions for Using the Seats

# **WARNING**

#### Never allow children to adjust a seat.

Allowing children to adjust a seat is dangerous as it could result in serious injury if a child's hands or feet become caught in the seat.

# Do not drive with the seatback unlocked.

All of the seatbacks play an important role in your protection in a vehicle. Leaving the seatback unlocked is dangerous as it can allow passengers to be ejected or thrown around and baggage to strike occupants in a sudden stop or collision, resulting in severe injury. After adjusting the seatback at any time, even when there are no other passengers, rock the seatback to make sure it is locked in place.

#### Do not modify or replace the seats.

Modifying or replacing the seats such as replacing the upholstery or loosening any bolts is dangerous. The seats contain air bag components essential to the supplemental restraint system. Such modifications could damage the supplemental restraint system and result in serious injury. Consult an Authorized Mazda Dealer if there is any need to remove or reinstall the seats.

# Adjust a seat only when the vehicle is stopped.

If the seat is adjusted while the vehicle is being driven, the seating posture may become unstable and the seat could move unexpectedly resulting in injury.

#### Do not drive with damaged seats.

Driving with damaged seats, such as seat cushions torn or damaged down to the urethane, is dangerous. A collision, even one not strong enough to inflate the air bags, could damage the seats which contain essential air bag components. If there was a subsequent collision, an air bag may not deploy which could lead to injuries. Always have an Authorized Mazda Dealer inspect the seats, seat belt pretensioners and air bags after a collision.

# Do not drive with either seats reclined.

Sitting in a reclined position while the vehicle is moving is dangerous because you do not get the full protection from seat belts. During sudden braking or a collision, you can slide under the lap belt and suffer serious internal injuries. For maximum protection, sit well back and upright.

# Do not place an object such as a cushion between the seatback and your back.

Putting an object such as a cushion between the seatback and your back is dangerous because you will be unable to maintain a safe driving posture and the seat belt cannot function at its full capacity in a collision, which could result in a serious accident, injury or death.

#### Do not place objects under the seat.

The object could get stuck and cause the seat to not be fixed securely, and result in an accident.

# Do not stack cargo higher than the seatbacks.

Stacking luggage or other cargo higher than the seatbacks is dangerous. During sudden braking or a collision, objects can fly around and become projectiles that may hit and injure passengers.

# Make sure the adjustable components of a seat are locked in place.

Adjustable seats and seatbacks that are not securely locked are dangerous. In a sudden stop or collision, the seat or seatback could move, causing injury. Make sure the adjustable components of the seat are locked in place by attempting to slide the seat forward and backward and rocking the seatback.

# Make sure luggage and cargo is secured before driving.

Not securing cargo while driving is dangerous as it could move or be crushed during sudden braking or a collision and cause injury. Additionally, if the air bags deploy, the cargo may scatter which could result in serious injury or death.

# Always leave your car locked and keep the car keys safely away from children:

Leaving your car unlocked or the keys in reach of children is dangerous. Children who find their way into the trunk through an open trunk can become accidentally locked in the trunk. This could result in death or brain damage from heat prostration, particularly in the summer. Always lock the doors and the trunk.

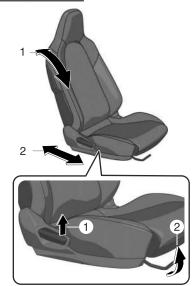
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- When operating a seat, be careful not to put your hands or fingers near the moving parts of the seat or on the side trim to prevent injury.
- When moving the seats, make sure there is no cargo in the surrounding area. If the cargo gets caught it could damage the cargo.
- When moving the seats forward and rearward or returning a rear-reclined seatback to its upright position, make sure you hold onto the seatback with your hand while operating. If the seatback is not held, the seat will move suddenly and could cause injury.
- When inserting your hand under the seat to clean the cabin or pick up something you dropped under the seat, be careful not to hurt yourself. If you contact the moving parts and surrounding parts around the seat rail, seat frame, and the bottom of the seat, it could result in injury.



- 1. Seat Slide
- Height Adjustment for Front Edge of Seat Bottom
- 3. Seat Recline

#### Passenger's seat



- Seat Recline
   Seat Slide

### Non-Adjustable Head Restraints

Your vehicle is equipped with non-adjustable head restraints on the driver's and passenger's seatbacks. The non-adjustable head restraints consist of a trimmed foam covering over the upper structure of the seatbacks and are intended to help protect you and the passenger from neck injury. Adjust the seatbacks to their upright, on-road positions so that the head restraint is positioned as close as possible to the back of your head.

### Warnings and Cautions for Non-Adjustable Head Restraints

## 

Make sure the seatbacks are properly adjusted to their upright, on-road positions before the vehicle is driven. Driving with the seatbacks not adjusted properly is dangerous. With no support behind your head, your neck could be seriously injured in a collision.

### Warnings and Cautions for Using the Steering Wheel

## 

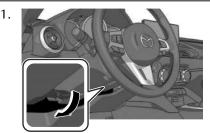
# Never adjust the steering wheel while the vehicle is moving.

Adjusting the steering wheel while the vehicle is moving is dangerous. Moving it can very easily cause the driver to abruptly turn to the left or right. This can lead to loss of control or an accident.

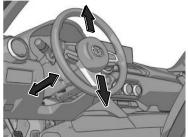
# After adjusting the steering wheel position, make sure it is securely locked by trying to move it up and down.

Driving with the steering wheel not securely locked in position is dangerous. If the steering wheel moves unexpectedly while driving, you could lose control of the steering resulting in an accident.

### How to Use the Steering Wheel



2. Adjust the steering wheel to the appropriate position.



3. Pull up the lever to securely lock the steering wheel.

### **Child-restraint Systems**

Mazda strongly urges the use of child-restraint systems for children small enough to use them. You are required by law to use a child-restraint system for children in the U.S. and Canada. Check your local and state or provincial laws for specific requirements regarding the safety of children riding in your vehicle.

Whatever child-restraint system you consider, please pick the appropriate one for the age and size of the child, obey the law and follow the instructions that come with the individual child-restraint system.

A child who has outgrown child-restraint systems should use seat belts, both lap and shoulder. If the shoulder belt crosses the neck or face, move the child closer to the center of the vehicle.

A rear-facing child-restraint system should **NEVER** be used on the passenger seat with the air bag system activated.

To reduce the chance of injuries caused by deployment of the passenger air bag, the passenger occupant classification sensor work as a part of the supplemental restraint system. This system deactivates the passenger front and side air bags and also the passenger seat belt pretensioner system when the passenger air bag deactivation indicator light illuminates.

When an infant or small child sits on the passenger seat, the system shuts off

the passenger front and side air bags and seat belt pretensioner system, so make sure the passenger air bag deactivation indicator light illuminates. For more details, refer to "How to Use the Front Passenger Occupant Classification System" (page 3-15).

### Warnings and Cautions For Child-restraint Systems

## **WARNING**

# Use the correct size child-restraint system.

For effective protection in vehicle accidents and sudden stops, a child must be properly restrained using a seat belt or child-restraint system depending on age and size. If not, the child could be seriously injured or even killed in an accident.

# Follow the manufacturer's instructions and always keep the child-restraint system buckled down.

An unsecured child-restraint system is dangerous. In a sudden stop or a collision it could move causing serious injury or death to the child or other occupants. Make sure any child-restraint system is properly secured in place according to the child-restraint system manufacturer's instructions. When not in use, remove it from the vehicle or fasten it with a seat belt.

# Always secure a child in a proper child-restraint system.

Holding a child in your arms while the vehicle is moving is extremely dangerous. No matter how strong the person may be, he or she cannot hold onto a child in a sudden stop or collision and it could result in serious injury or death to the child or other occupants. Even in a moderate accident, the child may be exposed to air bag forces that could result in serious injury or death to the child, or the child may be slammed into an adult, causing injury to both child and adult.

#### Always make sure the passenger air bag deactivation indicator light is illuminated when using a

child-restraint system. Seating a child in a child-restraint system that is installed on the passenger seat with the passenger air bag deactivation indicator light not illuminated is extremely dangerous. In an accident, an air bag could inflate and cause serious injuries or even death to the child seated in the child-restraint system. Always make sure the passenger air bag deactivation indicator light is illuminated. (Excent Mexico)

#### (Except Mexico)

Vehicles with a passenger air bag have the following warning label. The warning label is displayed in compliance with regulations.



#### (Mexico)

NEVER use a rearward facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it, DEATH or SERIOUS INJURY to the CHILD can occur.

Vehicles with a passenger air bag have the following warning label. The warning label reminds you not to put a rear-facing child-restraint system on the passenger seat at any time.



Before installing child-restraint system on the passenger seat, move the passenger seat as far back as possible. In a collision, the force of a deploying air bag could cause serious injury or death to the child.

Make sure the passenger air bag deactivation indicator light is illuminated.



Seating a child in a child-restraint system on the passenger seat is dangerous under certain conditions. Your vehicle is equipped with passenger occupant classification sensor. Even with the passenger occupant classification sensor, if you must use the passenger seat to seat a child, using a child-restraint system on the passenger seat under the following conditions increases the danger of the passenger air bag deploying and could result in serious injury or death to the child.

- The passenger air bag deactivation indicator light does not illuminate when seating a child in the child-restraint system.
- Luggage or other items are placed on the seat with the child in the child-restraint system.
- ≻The seat is washed.
- ≻ Liquids are spilled on the seat.
- The passenger seat is moved backward, pushing into luggage or other items placed behind it.
- Luggage or other items are placed between the passenger seat and driver seat.
- ➤An electric device is put on the passenger's seat.
- An additional electrical device, such as a seat warmer is installed to the surface of the passenger seat.

#### Do not allow a child or anyone to lean over to or against the side window of a vehicle with side air bags.

It is dangerous to allow anyone to lean over to or against the side window, the area of the passenger seat, the window pillars and the roof edge along both sides from which the side air bags deploy, even if a child-restraint system is used. The impact of inflation from a side air bag could cause serious injury or death to an out of position child. Furthermore, leaning over to or against the door could block the side air bags and eliminate the advantages of supplemental protection. Take special care not to allow a child to lean over to or against the side window, even if the child is seated in a child-restraint system.

# Never use one seat belt on more than one person at a time.

Using one seat belt for more than one person at a time is dangerous. A seat belt used in this way cannot spread the impact forces properly and the two passengers could be crushed together and seriously injured or even killed. Never use one belt for more than one person at a time and always operate the vehicle with each occupant properly restrained.

# Always use a child-restraint system designed for use without a tether or the ISOFIX lower anchor.

Using a child-restraint system that requires a tether or the ISOFIX lower anchor is dangerous. Your Mazda does not have a child-restraint tether or the ISOFIX lower anchor. The child-restraint system cannot be properly secured. In a collision, it could move and injure other occupants as well as result in serious injuries or death to the child.

#### Always route the tether strap between the head restraint and the seatback. Routing the tether strap on top of the head restraint is dangerous. In a collision the tether strap could slide off the head restraint and loosen the child-restraint system. The child-restraint system could move which may result in death or injury to the child.

# Always attach the tether strap to the correct tether anchor position.

Attaching the tether strap to the incorrect tether anchor position is dangerous. In a collision, the tether strap could come off and loosen the child-restraint system. If the child-restraint system moves it could result in death or injury to the child.

# Follow the manufacturer's instructions for the use of the child-restraint system.

An unsecured child-restraint system is dangerous. In a sudden stop or a collision it could move causing serious injury or death to the child or other occupants. Make sure any child-restraint system is properly secured in place according to the manufacturer's instructions.

# Make sure the child-restraint system is properly secured.

A child-restraint system that is not secured is dangerous. In a sudden stop or collision, it can become a projectile and hit someone, causing serious injury. When not in use, remove it from the vehicle, put it in the trunk or at least make sure it is securely fastened to the ISOFIX lower anchors.

#### Make sure there are no seat belts or foreign objects near or around the ISOFIX lower anchor-secured child-restraint system.

Not following the child-restraint system manufacturer's instructions when installing the child-restraint system is dangerous. If seat belts or a foreign object prevent the child-restraint system from being securely attached to the ISOFIX lower anchors and the child-restraint system is installed improperly, the child-restraint system could move in a sudden stop or collision causing serious injury or death to the child or other occupants. When installing the child-restraint system, make sure there are no seat belts or foreign objects near or around the ISOFIX lower anchors. Always follow the child-restraint system manufacturer's instructions.

#### To avoid burning yourself or a child, check them before you or your child touches them.

A seat belt or child-restraint system can become very hot in a closed vehicle during warm weather.

## 

When moving the seats forward and rearward, make sure you hold onto the seatback with your hand while operating. If the seatback is not held, the seat will move suddenly and could cause injury.

### **Types of Child-restraint Systems**

#### **Categories of Child-Restraint Systems**

#### NOTE

When purchasing, ask the manufacturer of the child-restraint system which type of child-restraint system is appropriate for your child and vehicle.

#### (Mexico)

Child-restraint systems are classified into the following 5 groups according to the UN-R 44 and UN-R 129 regulation.

Group	Age	Weight	Size Classification/ Fixture (CRF)
			ISO/L1
0	Up to about 9 months old	Up to 10 kg (up to 22 lb)	ISO/L2
			ISO/R1
	Up to about 2 years old	Up to 13 kg (up to 29 lb)	ISO/R1
0+			ISO/R2
			ISO/R3
		9 kg — 18 kg (20 lb — 40 lb)	ISO/R2
1	About 8 months to 4 years old		ISO/R3
			ISO/F2
			ISO/F2X
			ISO/F3
2	About 3 to 7 years old	15 kg — 25 kg (33 lb — 55 lb)	—
3	About 6 to 12 years old	22 kg — 36 kg (48 lb — 79 lb)	—

#### (Except Mexico)

Please comply with the legal regulations concerning the use of child-restraint systems in your country.

#### **Child-Restraint System Types**

In this owner's manual, explanation of child-restraint systems is provided for the following three types of popular child-restraint systems: infant seat, child seat, booster seat.

#### NOTE

• Installation position is determined by the type of child-restraint system. Always read the manufacturer's instructions and this owner's manual carefully. • Due to variations in the design of child-restraint systems, vehicle seats and seat belts, all child-restraint systems may not fit all seating positions. Before purchasing a child-restraint system, it should be tested in the specific vehicle seating position (or positions) where it is intended to be used. If a previously purchased child-restraint system does not fit, you may need to purchase a different one that will.

#### Infant seat

An infant seat provides restraint by bracing the infant's head, neck and back against the seating surface. Equal to Group 0 and 0+ of the UN-R 44 and UN-R 129 regulation.

#### Child seat

A child seat restrains a child's body using the harness. Equal to Group 1 of the UN-R 44 and UN-R 129 regulation.



#### **Booster seat**

A booster seat is a child restraint accessory designed to improve the fit

of the seat belt system around the child's body. Equal to Group 2 and 3 of the UN-R 44 and UN-R 129 regulation.



### Child-Restraint System Suitability for Various Seat Positions Table

#### (Mexico)

Provided information in the table shows your child-restraint system suitability for various seating position. For installation suitability of other manufacturer child-restraint system, carefully consult the manufacturer's instructions which accompany the child-restraint system.

When installing a child-restraint system, the following points must be observed:

- $\cdot$  When installing a child-restraint system to the passenger seat, adjust the seat slide position as far back as possible.
- Refer to How to Use the Seats on page 3-27.
- When it is difficult to install a child-restraint system to the passenger seat, or the seat belt cannot be secured to the child-restraint system, perform the following operations to adjust the seat holding the child-restraint system so that the seat belt can be secured completely to it.
  - · Move the seat forward or back.
  - · Move the seatback forward or back.
- An i-Size child-restraint system refers to a child-restraint system which has acquired i-Size category certification for the UN-R 129 regulation.

When installing a child-restraint system to the passenger seat, refer to the child-restraint system manufacturer's instructions.

Secting position	Passenger	
Seating position	Airbag activated	Airbag de-activated
Seating position suitable for uni- versal belted (Yes/No)	Yes (UF)	Yes (U)
i-Size seating position (Yes/No)	No	No
Largest suitable rearward facing fixture (R1)	No	No
Largest suitable rearward facing fixture (R2)	No	No
Largest suitable rearward facing fixture (R2X)	No	No
Largest suitable rearward facing fixture (R3)	No	No
Largest suitable forward facing fixture (F2)	No	Yes (IUF)
Largest suitable forward facing fixture (F2X)	No	Yes (IUF)

Costing position	Passenger	
Seating position	Airbag activated	Airbag de-activated
Largest suitable forward facing fixture (F3)	No	No
Largest suitable lateral facing fix- ture (L1)	No	No
Largest suitable lateral facing fix- ture (L2)	No	No
Largest suitable booster fixture (B2)	No	No
Largest suitable booster fixture (B3)	No	No
Non i-size compatible with a support leg (Yes/No)	No	Yes
Lower ISOFIX anchorages but without Top Tether (Yes/No)	No	No

U = Suitable for "universal" category restraints approved for use in all mass groups.

UF = Suitable for forward-facing "universal" category restraints approved for use in all mass groups.

IUF = Suitable for ISOFIX forward child restraints systems of universal category approved for use in the mass group.

L = Suitable for particular child restraints given on attached list. These restraints may be of the "specific vehicle", "restricted" or "semi-universal" categories.

IL = Suitable for particular ISOFIX child restraint systems (CRS) given in the attached list. These ISOFIX CRS are those of the "specific vehicle", "restricted" or "semi-universal" categories.

i-U = Suitable for i-Size "universal" Child Restraint Systems forward and rearward facing.

i-UF = Suitable for forward-facing i-Size "universal" Child Restraint Systems only.

Yes = Child-restraint system can be secured on the seat.

No = Child-restraint system cannot be secured on the seat, or there is no fixture.

X = Child-restraint system cannot be installed.

Regarding child-restraint systems which can be installed to your Mazda, consult an Authorized Mazda Dealer.

#### (Except Mexico)

- Regarding child-restraint systems which can be installed to your Mazda, consult an Authorized Mazda Dealer.
- Please comply with the legal regulations concerning the use of child-restraint systems in your country.
- For the CRS which do not carry the ISO/XX size class identification (A to G), for the applicable mass group, the child seat manufacturer shall indicate the vehicle specific LATCH child-restraint systems recommended for each position.

### Installing Child-Restraint Systems

The passenger lap/shoulder belt can easily be converted into the automatic locking mode, which must be done to hold the child-restraint system.

#### NOTE

- To check if your seats have side air bags:
- Mazda vehicles equipped with side air bag will have an embossed "SRS AIRBAG" marking on the outboard shoulder of the seats.
- Follow the child-restraint system manufacturer's instructions carefully. Depending on the type of child-restraint system, it may not employ seat belts which are in automatic locking mode, however if it uses an upper tether, it may not be mounted properly in this vehicle as there is no safe way to anchor the tether. Confirm whether the child-restraint system can be used with seat belts by reading the child-restraint system manufacturer's instructions.

#### Passenger's Seat Child-Restraint System Installation (Except Mexico)

- 1. Make sure the ignition is switched off.
- 2. Slide the seat as far back as possible.



- 3. Place the child-restraint system on the seat without putting your weight on the seat and secure the child-restraint system with the lap portion of the lap/shoulder belt. See the manufacturer's instructions on the child-restraint system for belt routing instructions.
- 4. To get the retractor into the automatic locking mode, pull the shoulder belt portion of the seat belt until the entire length of the belt is out of the retractor.
- 5. Push the child-restraint system firmly into the vehicle seat. Be sure the belt retracts as snugly as possible. A clicking noise from the retractor will be heard during retraction if the system is in automatic locking mode. If the belt does not lock the seat down tight, repeat the previous step and also this one.

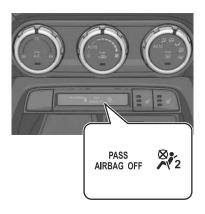
#### NOTE

- Inspect this function before each use of the child-restraint system. You should not be able to pull the shoulder belt out of the retractor while the system is in the automatic locking mode. When you remove the child-restraint system, be sure the belt fully retracts to return the system to emergency locking mode before occupants use the seat belts.
- 6. Seat your child safely in the child-restraint system and secure the child according to the instructions from the child-restraint system manufacturer.
- Switch the ignition ON and make sure the passenger air bag deactivation indicator light illuminates after installing a child-restraint system on the passenger seat. If the passenger air bag deactivation indicator light does not illuminate, remove the child-restraint system, switch the ignition to OFF, and then re-install the child-restraint system (page 3-15).

## WARNING

Do not seat a child in a child-restraint system on the passenger seat if the passenger air bag deactivation indicator light does not illuminate (Except Mexico).

Seating a child in a child-restraint system installed on the passenger seat with the passenger air bag deactivation indicator light not illuminated is dangerous. If this indicator light does not illuminate, this means that the passenger front and side air bags, and seat belt pretensioner are ready for deployment. If an accident were to deploy an air bag, a child in a child-restraint system sitting in the passenger seat could be seriously injured or killed. If the indicator light does not illuminate after seating a child in a child-restraint system on the passenger seat consult an Authorized Mazda Dealer as soon as possible.

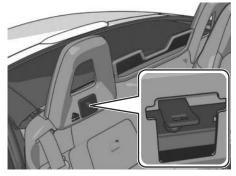


### Anchor Bracket Overview (Mexico)

Anchor brackets for securing child-restraint systems are equipped in the vehicle. Locate anchor position using the illustration. Always follow the instruction manual accompanying the child-restraint system.

#### Anchor bracket location

Use the indicated anchor bracket locations when installing a child-restraint system equipped with a tether.



### Warnings and Cautions for Using the Anchor Bracket

## **WARNING**

Always attach the tether strap to the correct tether anchor position. Attaching the tether strap to the incorrect tether anchor position is dangerous. In a collision, the tether strap could come off and loosen the child-restraint system. If the child-restraint system moves it could result in death or injury to the child.

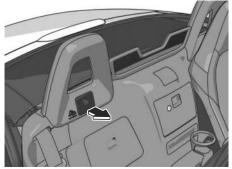
Always route the tether strap between the head restraint and the seatback. Routing the tether strap on top of the head restraint is dangerous. In a collision the tether strap could slide off the head restraint and loosen the child-restraint system. The child-restraint system could move which may result in death or injury to the child.

# Use the tether and tether anchor only for a child-restraint system.

Using the tether or tether anchor to secure anything but a child-restraint system is dangerous. This could weaken or damage the tether or tether anchor and result in injury.

### How to Use the Anchor Bracket (Mexico)

- 1. Open the convertible top.
- 2. Slide the passenger seat as far back as possible and then slide it forward about 10 notches (100 mm) so that your hand can be placed behind it (page 3-27).
- 3. Remove the cover.



- 4. Place the child-restraint on the passenger seat.
- 5. Pass the tether strap under the head restraint and install it to the tether anchor.

For the tether strap adjustment method, refer to the child-restraint seat manufacturer's instructions.



### How to Use the Seat Belt (Mexico)

When installing a child-restraint system, follow the installation instructions included with the product. Also, open the convertible top and slide the seat as far back as possible, fold down the seatback as far as possible.

When installing the child-restraint system, if the seat belt is loose and cannot be secured, adjust the forward and back/up and down positions of the seat where the child-restraint system is installed, or slide the child-restraint system to the left or right so that there is no slack in the seat belt.

### Warnings and Cautions for Using the ISOFIX Lower Anchor

## **WARNING**

# Follow the manufacturer's instructions for the use of the child-restraint system.

An unsecured child-restraint system is dangerous. In a sudden stop or a collision it could move causing serious injury or death to the child or other occupants. Make sure the child-restraint system is properly secured in place according to the child-restraint system manufacturer's instructions.

# Make sure the child-restraint system is properly secured.

An unsecured child-restraint system is dangerous. In a sudden stop or a collision it could move causing serious injury or death to the child or other occupants. Follow the child-restraint system manufacturer's instructions on belt routing to secure the seat just as you would with a child in it so that nobody is tempted to put a child in an improperly secured seat later on. When not in use, remove it from the vehicle or fasten it with a seat belt, or attach it to BOTH ISOFIX anchors for ISOFIX child-restraint systems. Make sure there are no seat belts or foreign objects near or around the ISOFIX child-restraint system. Not following the child-restraint system manufacturer's instructions when installing the child-restraint system is dangerous. If seat belts or a foreign object prevent the child-restraint system from being securely attached to the ISOFIX anchors and the child-restraint system is installed improperly, the child-restraint system could move in a sudden stop or collision causing serious injury or death to the child or other occupants. When installing the child-restraint system, make sure there are no seat belts or foreign objects near or around the ISOFIX anchors. Always follow the child-restraint system manufacturer's instructions.

### How to Use the ISOFIX Lower Anchor (Mexico)

- 1. Open the convertible top.
- 2. Make sure the ignition is switched off.
- Slide the passenger seat as far back as possible.<sup>\*1</sup> Refer to How to Use the Front Seats

on page 3-27.

- \*1 You may need to move the seat forward slightly and recline the back of the seat, in order to assist in the fitment of some child-restraint systems.
- Make sure the seatback is securely latched by pushing it back until it is fully locked.
- 5. Expand the area between the seat bottom and the seatback slightly to verify the locations of the ISOFIX lower anchor.

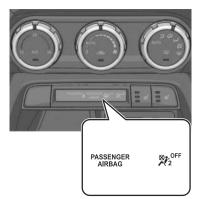


#### NOTE

The markings above the ISOFIX lower anchors indicate the locations of the ISOFIX lower anchors for the attachment of a child-restraint system.

 Secure the child-restraint system using the ISOFIX lower anchor, following the child-restraint system manufacturer's instruction.  Switch the ignition ON and make sure the passenger air bag deactivation OFF indicator light illuminates after installing a child-restraint system on the passenger seat. If the passenger air bag deactivation OFF indicator light does not illuminate, remove the child-restraint system, switch the ignition to OFF, and then re-install the child-restraint system (page

3-15).



8. If your child-restraint system came equipped with a tether, that probably means it is very important to properly secure the tether for child safety. Please carefully follow the child-restraint system manufacturer's instructions when installing tethers (page 3-41).

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# MEMO

### Key

Both doors, fuel-filler lid can be locked/unlocked by pressing the key buttons.

The key must be carried by the driver.

#### Key Code Number Plate

An auxiliary key can be ordered based on the key code number printed on the key code number plate at an Authorized Mazda Dealer.

- Store the key code number plate in a safe place (not in the vehicle).
- Do not divulge the key code number to others.



### Warnings and Cautions for Using the Key

# 

Do not leave the key in your vehicle with children and keep them in a place where your children will not find or play with them.

Leaving children in a vehicle with the key is dangerous. This could result in someone being badly injured or even killed. Children may find these keys to be an interesting toy to play with and could cause the power windows or other controls to operate, or even make the vehicle move.

# 

Radio equipment like this is governed by laws in the United States.

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

- Because the key (transmitter) uses low-intensity radio waves, it may not function correctly under the following conditions:
  - The key (transmitter) is carried with communication devices such as cellular phones.
  - The key (transmitter) contacts or is covered by a metal object.
  - The key (transmitter) is near electronic devices such as personal computers.
  - Non-Mazda genuine electronic equipment is installed in the vehicle.

- There is equipment which discharges radio waves near the vehicle.
- The key (transmitter) may consume battery power excessively if it receives high-intensity radio waves. Do not place the key (transmitter) near electronic devices such as televisions or personal computers.
- ➤ To avoid damage to the key (transmitter), DO NOT:
  - Drop the key (transmitter).
  - Get the key (transmitter) wet.
  - Disassemble the key (transmitter).
  - Expose the key (transmitter) to high temperatures on places such as the dashboard, under direct sunlight.
  - Expose the key (transmitter) to any kind of magnetic field.
  - Place heavy objects on the key (transmitter).
  - Put the key (transmitter) in an ultrasonic cleaner.
  - Put any magnetized objects close to the key (transmitter).

### How to Use the Key

When pressing the button, the operation indicator light turns on.



- 1. Operation indicator light
- 2. Lock button (🗇)
- 3. Unlock button  $(\square)$
- 4. Trunk button  $(\stackrel{\heartsuit}{H})$
- 5. Panic button (!)

### Lock button

Press the lock button while the vehicle power is switched OFF. The doors, fuel-filler lid are locked, the

hazard warning lights operate 1 time. A beep sound will be heard once.

To confirm that both the doors and the fuel-filler lid have been locked, press the lock button again within 5 seconds. If they are closed and locked, the horn will sound.

#### NOTE

- The headlights turn on/off by operating the transmitter. Refer to Convenient Ways to Use the Light Switch on page 5-51.
- When any door is open and the lock button is pressed, the closed doors can be locked. After that, any other open door can be locked by closing them.

- To prevent the key from being left in the vehicle, make sure that the driver carries the key when locking the doors with any door open.
- (With theft-deterrent system) If the lock button is pressed with both the doors and the hood are closed, the hazard warning lights will flash and the theft-deterrent system is armed.

### Unlock button 🗖

Press the unlock button while the vehicle power is switched OFF. The driver's door and the fuel-filler lid are unlocked, the hazard warning lights operate 2 times, and then a warning sound is activated 2 times.

The hazard warning lights operate and a sound is activated 2 times at the same time.

Press the unlock button again within 5 seconds and two more beep sounds will be heard.

### NOTE

The sound can be switched on/off using the Mazda Connect. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

### Trunk button (🖏

Press and hold the trunk button until the trunk lid opens.

### Panic button !!

If you witness from a distance someone attempting to break into or damage your vehicle, press and hold the panic button to activate the vehicle's alarm. Call emergency services if necessary.

### NOTE

The panic button will work whether any door or the trunk lid is open or closed.

#### Turning on the alarm

Pressing the panic button for 1 second or more will trigger the alarm for about 2 minutes and 30 seconds, and the following will occur:

- · The horn sounds intermittently.
- The hazard warning lights flash.

### Turning off the alarm

The alarm stops by pressing any button on the key.

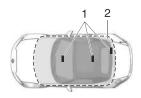
### **Operational Range**

The system operates only when the driver is in the vehicle or within operational range while the key is being carried.

### Starting the engine

### NOTE

- Starting the engine may be possible even if the key is outside of the vehicle and extremely close to a door and window, however, always start the engine from the driver's seat. If the vehicle is started and the key is not in the vehicle, the vehicle will not restart after it is shut off and the vehicle power is switched off.
- The trunk is out of the assured operational range, however, if the key (transmitter) is operable the engine will start.



- 1. Interior antenna
- 2. Operational range

### NOTE

The engine may not start if the key is placed in the following areas:

- · Around the dashboard
- In the storage compartments such as the console box

### Convenient Ways to Use the Key

### Sound function

The function that the sound notifies you of unlocking/locking can be turned on or off by changing the setting in Mazda Connect. The volume of the warning sound can also be changed.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

### Auto re-lock function

Both doors, and the fuel-filler lid are locked automatically if any of the following operations are not performed within about 60 seconds after they are unlocked by pressing the unlock button.

- · Open any door or trunk lid.
- The vehicle power is switched to any position other than off.

### NOTE

The time until the door is automatically locked can be changed. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

### Power Saving Function

By turning on the power saving function of the key, the advanced keyless entry and the function to start the engine without removing the key from a pocket or purse/case are turned off, and the battery power consumption of the key can be reduced.

The remote control function is still operational by pressing a button on the key even while the power saving function is turned on. However, the remote operation indicator light does not turn on or flash.

### Turning on the power saving function

- Press the lock button on the key 4 times within 3 seconds. The key operation indicator light turns on.
- 2. Press the lock button for 2 seconds or longer while the key operation indicator light is turned on. The hazard warning lights and a warning sound operate 1 time, and the power saving function is turned on.

### Turning off the power saving function

- Press the lock button on the key 4 times within 3 seconds. The key operation indicator light turns on.
- 2. Press the lock button for 2 seconds or longer while the key operation indicator light is turned on. The hazard warning lights and a warning sound operate 1 time, and the power saving function is turned off.

### Advanced Keyless Entry System

The advanced keyless function allows you to lock/unlock the doors and fuel-filler lid, open the trunk lid, and starting the engine while carrying the key.

### Warnings and Cautions for Using the Advanced Keyless Entry System



Radio waves from the key may affect medical devices such as pacemakers. Before using the key near people who use medical devices, ask the medical device manufacturer or your physician if radio waves from the key will affect the device.

### How to Use the Advanced Keyless Entry System

The system operates only when the driver is in the vehicle or within operational range while the key is being carried.

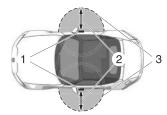
### NOTE

• The advanced keyless entry system functions can be deactivated to prevent any possible adverse effect on a user wearing a pacemaker or other medical device. If the system is deactivated, you will be unable to start the engine by carrying the key. Consult an Authorized Mazda Dealer for details. If the advanced keyless entry system has been deactivated, you can start the engine by following the procedure indicated when the key battery goes dead.

Refer to Starting the engine with a dead key battery on page 8-10.

- The advanced keyless entry system does not operate when the power saving function of the key is on. If the advanced keyless entry system does not operate, make sure that the power saving function of the key is not on. When the power saving function is on, the key operation indicator light does not turn on or flash. When the power saving function is on, turn it off.
- When the battery power is low, or in places where there are high-intensity radio waves or noise, the operational range may become narrower or the system may not operate.

### Locking/Unlocking Using Request Switch

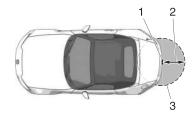


- 1. Exterior antenna
- 2. 80 cm (31 in)
- 3. Operational range

### NOTE

- The system may not operate if you are too close to the windows or door handles.
- If the key is left in the following areas and you leave the vehicle, the doors may be locked depending on the radio wave conditions even if the key is left in the vehicle.
  - · Around the dashboard
  - In the storage compartments such as the console box
  - Next to a communication device such as a mobile phone

#### Opening/Using Electric Trunk lid Opener



- 1. Exterior antenna
- 2. 80 cm (31 in)
- 3. Operational range

### Warnings and Cautions When Using the Doors

### A WARNING

### Opening/closing of the doors must be done by an adult.

If a person's hand, foot, or neck is pinched in a door, it could result in serious injury.

# Do not drive the vehicle with the door-ajar warning light/indication turned on/displayed.

Otherwise, the door may open unexpectedly and result in an accident.

# Always take all children and pets with you or leave a responsible person with them.

Leaving a child or a pet unattended in a parked vehicle is dangerous. In hot weather, temperatures inside a vehicle can become high enough to cause brain damage or even death.

#### Do not leave the key in your vehicle with children and keep them in a place where your children will not find or play with them.

Leaving children in a vehicle with the key is dangerous. This could result in someone being badly injured or even killed.

### Keep both doors locked when driving.

Unlocked doors in a moving vehicle are dangerous. Passengers can fall out if a door is accidentally opened and can more easily be thrown out in an accident.

#### Always close both the windows and convertible top, lock the doors, fuel-filler lid, and take the key with you when leaving your vehicle unattended.

Leaving your vehicle unlocked is dangerous as children could lock themselves in a hot vehicle, which could result in death. Also, a vehicle left unlocked becomes an easy target for thieves and intruders.

# After closing the doors and the trunk lid, fuel-filler lid, always verify that they are securely closed.

Doors and the trunk lid, fuel-filler lid not securely closed are dangerous, if the vehicle is driven with a door and the trunk lid, fuel-filler lid not securely closed, the door and the trunk lid, fuel-filler lid could open unexpectedly resulting in an accident.

# Always confirm the safety around the vehicle before opening a door and the trunk lid, fuel-filler lid.

Suddenly opening a door and the trunk lid, fuel-filler lid is dangerous. A passing vehicle or a pedestrian could be hit and cause an accident.

### **A** CAUTION

Always confirm the conditions around the vehicle during strong winds or when parked on an incline before opening/closing the doors. Neglecting to check the conditions around the vehicle could result in fingers getting caught in the door or a passing pedestrian being hit, resulting in an unexpected accident or injury. If the power window does not go up or down automatically because the battery is dead, slowly open/close the door while pressing the glass inward. Otherwise, the power window may contact the convertible top/roof and the door cannot be opened/closed resulting in damage to the window.

### How to Use the Door Lock

To prevent the key from being left in the vehicle, make sure that you carry the key before locking.

### Locking/Unlocking Using the Key

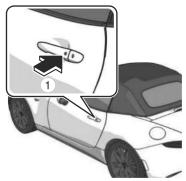
Refer to How to Use the Key on page 4-5.

#### Locking/Unlocking Using the Request Switch

### Locking

When all of the following conditions are met, press the request switch.

- · The vehicle power is switched OFF.
- $\cdot$  Both the doors are closed.
- $\cdot$  You are carrying the transmitter.



1. Request switch The following locations are locked by pressing the request switch.

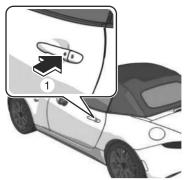
- $\cdot$  Both doors
- · Fuel-filler lid

When locking, the hazard warning lights operate one time. A beep sound operates one time.

### Unlocking

When all of the following conditions are met, press the request switch.

- · The vehicle power is switched OFF.
- $\cdot$  The driver's door is locked.
- Three seconds or longer have passed since the doors were locked.
- You are carrying the transmitter.



1. Request switch

#### (Unlocking from the driver's door)

The following locations are unlocked by pressing the request switch on the driver's door.

- $\cdot$  Driver's door
- · Fuel-filler lid

When unlocking, the hazard warning lights operate two times.

A beep sound operates two times.

### (Unlocking from the passenger's door)

The following locations are unlocked by pressing the request switch on the passenger's door.

- $\cdot$  Both doors
- Fuel-filler lid

When unlocking, the hazard warning lights operate two times.

A beep sound operates two times.

#### NOTE

• The location to be unlocked can be changed.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

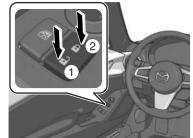
• The beep sound can be turned on/off using Mazda Connect. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

### Locking/Unlocking Using the Door-Lock Switch

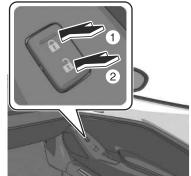
The following locations are locked/ unlocked.

- $\cdot$  Both doors
- · Fuel-filler lid

#### Driver's door



- 1. Unlocking
- 2. Locking
- Passenger's door



- 1. Locking
- 2. Unlocking

### Locking the doors from the outside using the door-lock switch

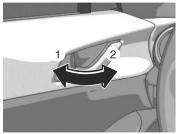
Doors can be locked from the outside of the vehicle without using the key. You can lock the doors by pressing the lock side of the door-lock switch with all of the following conditions met, and then closing both the doors.

- · The vehicle power is switched OFF.
- Either door is open.

After locking by pressing the door-lock switch, closing both the doors with the key left in the vehicle unlocks both doors, and the fuel-filler lid.

#### Locking/Unlocking Using the Door-Lock Knob

Locking/unlocking only the door where the door-lock knob is operated. The driver's door and the front passenger's door open when the door handle inside the vehicle is pulled even if the door-lock knob is on the lock side.



- 1. Unlocking
- 2. Locking

### Locking the doors from the outside using the door-lock knob

A door can be locked by turning the inside lock knob to the lock side and closing the door.

#### NOTE

In the following cases, the doors are unlocked to prevent the key from being left in the vehicle.

When the vehicle power is switched to ACC or ON, and the lock knob on the driver's door is turned to the lock side while either a door is open.
The key is left in the vehicle.

#### Locking Using the Vehicle Speed Sensing Auto Door Lock Function

- Both the doors and the fuel-filler lid are locked when the vehicle speed exceeds 20 km/h (12 mph).
- Both the doors and the fuel-filler lid are unlocked when the vehicle power is switched OFF.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

### NOTE

In the following cases, the doors are unlocked to prevent the key from being left in the vehicle.

• If the doors are unlocked by the auto lock/unlock function, it does not operate again until the doors or the trunk lid are opened/closed, or the ignition is switched OFF. The lock/ unlock timing and the setting to make this function inoperable can be changed.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

### · (Door unlock (control) system with collision detection)

This system automatically unlocks the doors and the fuel-filler lid in the event the vehicle is involved in an accident to allow passengers to get out of the vehicle immediately and prevent being trapped inside. While the ignition is switched ON and in the event the vehicle receives an impact strong enough to inflate the air bags, both the doors and the fuel-filler lid are automatically unlocked after about 6 seconds have elapsed from the time of the accident.

The doors and the fuel-filler lid may not unlock depending on how an impact is applied, the force of the impact, and other conditions of the accident.

If door-related systems or the battery is malfunctioning, the doors and the fuel-filler lid will not unlock.

#### Impact detection door-lock unlock system

This system automatically unlocks both the doors if the vehicle receives a strong impact such as from an accident. By unlocking automatically, occupants can be rescued from outside the vehicle.

If the vehicle receives a strong impact while the vehicle power is switched ON, both the doors will be unlocked automatically after about 6 seconds. The doors may not unlock depending on how an impact is applied, the force of the impact, and other conditions of the accident.

## Convenient Ways to Use the Doors

### **Proximity Type Auto Lock Function**

You can set the vehicle to lock automatically when you leave the detection area of the request switch. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer. A sound is activated one time when

closing both the doors and the fuel-filler lid while the key is being carried.

If you proceed to leave the operation range, the vehicle is locked automatically (it is locked automatically after about 30 seconds even if you do not leave the operation range).

### NOTE

However, they are not locked under the following conditions.

- · Another key is left inside the vehicle.
- The driver's door is already locked.
- You are out of the operational range before the doors and the trunk lid are completely closed.

### Auto re-lock function

The vehicle is locked automatically by the auto re-lock function if you do not perform any of the following operations within about 60 seconds after unlocking with the key or the request switch.

- $\cdot$  Open a door.
- Switch the vehicle power to a position other than OFF.

The time required until automatic locking occurs can be changed. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

# Warnings and Cautions for Using the Trunk Lid

### **WARNING**

### Do not allow people to ride in the trunk.

During sudden braking or a collision, the person in the trunk could be seriously injured or killed.

### Always drive the vehicle with the trunk lid closed.

If the trunk lid opens while driving the vehicle, the luggage may fall out and lead to an accident. In addition, If the vehicle is driven with the trunk lid open, the exhaust gas may penetrate the cabin and it could cause carbon monoxide poisoning.

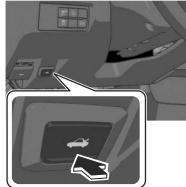
### 

- Remove snow or ice on the trunk lid before opening the trunk lid. When opening the trunk lid, it could slam shut by the weight of snow or ice, resulting in injury.
- Be careful when opening/closing the trunk lid during strong winds. Otherwise, it could close suddenly resulting in injury.
- When opening the trunk lid, fully open it and make sure that it stays open. If the trunk lid is only opened partially, it could slam shut by vibration or wind gusts resulting in injury.
- Stop the engine when loading or unloading cargo in the trunk. Otherwise, you could get burned by the heat of the exhaust gas.

### How to Use the Trunk Lid

### <u>Opening the Trunk Lid</u> Using the trunk lid release button

- 1. Stop the vehicle.
- 2. Push the trunk lid release button.

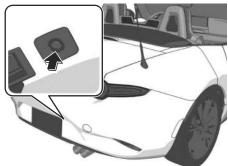


### Using the trunk button $(\overset{\mathfrak{S}}{_{\text{HOD}}})$ on the key

Refer to How to Use the Key on page 4-5.

### Using the electric trunk lid opener

- 1. Stop the vehicle.
- 2. Press the electric trunk lid opener on the rear bumper while carrying the transmitter and raise the trunk lid when the latch releases.



### <sup>Opening/closing</sup> Trunk Lid

### **Closing the Trunk Lid**

1. Use both hands to push the trunk lid down until the lock snaps shut.



2. Pull up on the trunk lid to make sure it is secure.

### Inside Trunk Release Lever<sup>\*</sup>

Your vehicle is equipped with an inside trunk release lever that provides a means of escape for children and adults in the event they become locked inside the trunk.

No matter how careful adults might be with keys and locking their cars, parents should be aware that children may be tempted to play around vehicles and use the trunk as a hiding place.

Adults are advised to familiarize themselves with the operation and location of the inside trunk release lever so that all children can be told about it in an appropriate way, keeping in mind that most vehicles do not have such levers.

### Warnings and Cautions for Using the Inside Trunk Release Lever

### WARNING

Close the trunk lid, do not allow children to play inside the trunk. Leaving the trunk lid open or leaving children in the vehicle with the keys is dangerous. Children could open the trunk lid and climb inside resulting in possible injury or death from heat exposure.

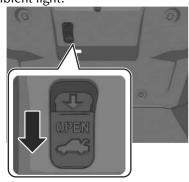
# Always keep the car from being a tempting place to play by latching the doors and the trunk, and keeping the keys where children can not play with them.

Leaving children or animals unattended in a parked vehicle is dangerous. Babies left sleeping and children who lock themselves in cars or trunks can die very quickly from heat prostration. Do not leave your children or pets alone in a car at any time. Do not leave the car or the trunk unlocked.

### How to Use the Inside Trunk Release Lever

The inside trunk release lever is located on the inside of the trunk lid. The lever is made of material that will glow for hours in the darkness of the trunk following a brief exposure to ambient light.

1.



### Warnings and Cautions for Using the Hood

### **WARNING**

### Always check that the hood is closed and securely locked

A hood that is not closed and securely locked is dangerous as it could fly open while the vehicle is moving and block the driver's vision which could result in a serious accident.

### **CAUTION**

- When closing the hood, do not push it excessively such as by applying your weight. Otherwise, the hood could be deformed.
- Hold the padded area when moving the support rod. If you do not hold the padded area, you could get burned by the heat of the engine exhaust gas.

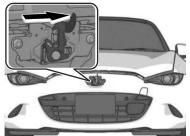
### How to Use the Hood

### **Opening the Hood**

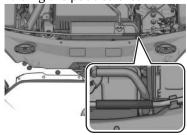
1. Pull the hood release handle. The hood will raise slightly.



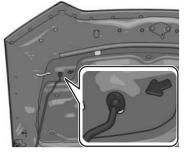
2. Insert your hands into the clearance under the hood and lift the hood while folding the lever in the direction of the arrow.



3. While maintaining the hood in place, raise the support rod by holding the padded area.

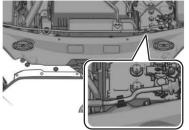


4. Align the support rod with the support rod hole position indicated by the arrow and lower the hood.



### **Closing the Hood**

- 1. Check under the hood area to make certain all filler caps are in place and all loose items (e.g. tools, oil containers, etc.) have been removed.
- 2. While supporting the hood with your hand, remove the support rod by holding the padded area.
- 3. Secure the support rod to the clip.



4. Lower the hood slowly and release it from a height of about 20 cm (7.9 in) to close it.

### **Power Windows**

### **Auto-opening Function**

The windows can be fully opened without having to continue operating the power window switch.

### Warnings and Cautions for Using the Power Windows



# When closing the windows, be careful that a passenger's hand or head does not get pinched.

Be especially careful with children. If a hand or head becomes pinched, it could cause serious injury.

### Do not let a child operate the power window switches.

If a hand or head becomes pinched, it could cause serious injury.

#### Keep the power window lock switch in the lock position when carrying a child.

If the child operates the power window switch incorrectly and a hand or head becomes pinched, it could cause serious injury.

### Do not let a child put a hand or head out of the window.

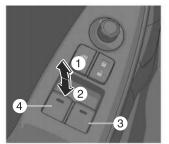
Be careful not to let a child put a hand or head out of the window while driving the vehicle. If the child's hand or head hits something outside the vehicle or sudden braking is applied, it could result in serious injury or death.

### How to Use the Power Windows

### **Opening/Closing the Windows**

- 1. Switch the vehicle power ON.
- Operate the power window switch. To fully open the window automatically, press the power window switch all the way down and then release it. To close the window, pull the

switch up until the window closes. Driver's Seat



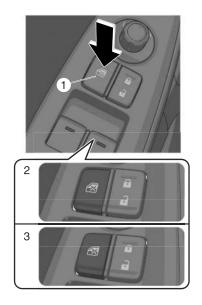
#### Passenger Seat



- 1. Close
- 2. Open
- 3. Passenger's window
- 4. Driver's window

### Locking the Passenger Windows

Switch the power window lock switch on the driver's door to the lock position. The driver's switch can be operated, however, the passenger switch is no longer operable.



- 1. Power window lock switch
- 2. Lock position
- 3. Unlock position

### Convenient Ways to Use the Power Windows

#### Operation Function After Vehicle power is Switched OFF

Both the windows can be opened and closed for approximately 40 seconds after the vehicle power is switched to ACC or OFF with both doors closed. If any door is opened, the power window will stop operating.

### Warnings and Cautions for Using the Convertible Top (Soft Top)

### **WARNING**

#### Sit in the seat with the seat belt correctly fastened when the vehicle is moving.

Standing in the vehicle, or sitting on the convertible top storage area or center console when the vehicle is moving is a dangerous way to ride. During a sudden maneuver or collision you could be seriously injured or even killed.

#### Always keep your hands and fingers away from the fastening mechanisms when moving the convertible top.

It is dangerous to place your hands or fingers near the fastening mechanisms. Your hands or fingers could be caught and injured by the mechanism.

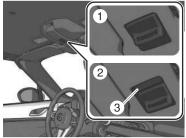
### **A** CAUTION

- Remove leaves or other matter that may accumulate on and around the convertible top. If leaves or other matter block the drain filter, water may enter the vehicle. Clean the drain filter at least once a year. Refer to Closing the roof manually on page 8-37.
- Before opening the convertible top, make sure the rear window defogger switch is turned off. Otherwise the heat generated from the defogger could damage the convertible top and the internal material.

- Before lowering or raising the convertible top, stop in a safe place off the right-of-way and park on a level surface.
- Make sure nothing is on the convertible top or near the back window when raising or lowering the convertible top. Even small objects may interfere and cause damage.
- Do not drive through an automatic car wash; it may damage the convertible top.
- Do not raise or lower the convertible top when the temperature is below 5 °C (41 °F); this will damage the convertible top material.
- Do not lower the convertible top when it's wet. If the convertible top dries while folded, it will deteriorate and mold.
- Lowering the convertible top while it's wet can also cause water to drip into the passenger compartment.
- Do not raise or lower the convertible top in a strong wind as it could damage the convertible top or cause an unexpected accident.
- Do not sit on the folded convertible top. Otherwise, the convertible top could be damaged or you may fall off and be injured.

Driving with the convertible top not fully locked could damage the convertible top.

If the red indicator is visible on the lock release button, the convertible top is not locked. After locking the convertible top, verify that the red indicator is not visible.

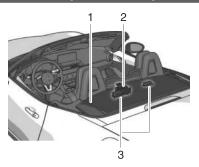


- 1. Locked position
- 2. Unlocked position
- 3. Red indicator
- Do not spray water directly near the seam of the window and convertible top when flushing away dirt on the soft top with water. Otherwise, water may enter the vehicle. Refer to Closing the roof manually

on page 8-37.

- Secure all loose objects inside before driving with the convertible top down.
- To help prevent burglary or vandalism and to ensure that the passenger compartment stays dry, close the convertible top and both windows securely and lock both doors when leaving the vehicle.

### Convertible Top (Soft Top) Overview



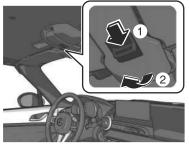
- Convertible top
   Top latch assembly
   Convertible top's handles

### Convertible Top (Soft Top)

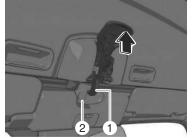
### How to Use the Convertible Top (Soft Top)

### Lowering the Convertible Top

- 1. Make sure the parking brake is applied.
- 2. If the engine is running, turn it off.
- 3. Make sure there are no objects which have been placed in the area where the convertible top is to be retracted.
- 4. With the lock release button depressed forward, pull back the top latch lever to unlock it.



- 1. Lock release button
- 2. Top latch
- 5. Remove the striker from the anchor.



- 1. Striker
- 2. Anchor

### NOTE

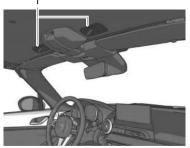
If the power windows do not go down automatically, fully open the windows or open the doors. 6. Standing outside of the vehicle, hold the convertible top along the front edge and pull it toward the vehicle rear.



1. Front edge

### NOTE

To lower the convertible top from inside the vehicle, use the convertible top's handles.



 Convertible top's handles
 Move the convertible top rearward and fold it while pressing the rear glass lightly with your hand.



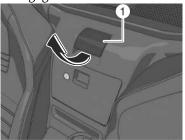
8. With the back end of the convertible top pressed, press the front end until a latch sound is heard.

 Lightly rock the retracted convertible top to make sure it is securely locked.

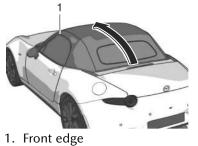


### **Raising the Convertible Top**

- 1. Make sure the parking brake is applied.
- 2. If the engine is running, turn it off.
- 3. Pull up the unlock lever to disengage the lock.

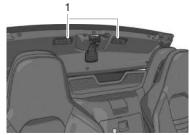


- 1. Unlock Lever
- 4. Standing outside of the vehicle, hold the convertible top along the front edge and pull it towards the vehicle front.

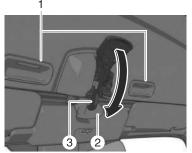


### NOTE

- If the power windows do not go down automatically, fully open the windows or open the doors.
  To raise the convertible top from
- inside the vehicle, use the convertible top from convertible top's handles.



- 1. Convertible top's handles
- Sitting in a seat, grasp the convertible top's handles, and press the convertible top against the windshield. Make sure the striker engages with the anchor, move the top latch slowly, and then push the top latch upward until a latch sound is heard.



- 1. Convertible top's handles
- 2. Anchor
- 3. Striker

### NOTE

- The convertible top may be constricted if it is left retracted for a long period. Therefore, if the top has become constricted, it may be difficult to hook the top latch striker to the anchor.
- Make sure the convertible top is securely locked by pushing up on it. If it still sounds loose (rattles) after being locked by the top latch, have it inspected at an Authorized Mazda Dealer.
- The power windows go down automatically in conjunction with the convertible top opening/closing. If the vehicle battery is disconnected for vehicle maintenance or other reasons, the power windows will not go down automatically. If the power windows do not go down, the automatic open/close mechanism for the windows must be reset.
- When lowering the convertible top, make sure objects inside the vehicle are not blown away by the wind.
- The soft top is made of high quality material and if it is not maintained correctly, the material could harden, becomes stained, or have an uneven gloss.

### Convertible Top (Retractable Fastback)

The retractable hardtop opens/closes electrically by operating switches in the vehicle. When opening/closing the roof and window glass operate together. The front roof is stored in the storage area under rear roof. Warnings and Cautions for Using the Convertible Top (Retractable Fastback)

### WARNING

# Always confirm that there are no people around the vehicle before operating the roof.

If the roof were to operate unexpectedly, it could result in an accident and serious injury from someone getting caught in the mechanism.

# Sit in the seat with the seat belt correctly fastened when the vehicle is moving.

Standing in the vehicle, or sitting on the rear roof or center console when the vehicle is moving is a dangerous way to ride. During a sudden maneuver or collision you could be seriously injured or even killed.

#### Always keep your hands and fingers away from the fastening mechanisms when moving the roof.

It is dangerous to place your hands or fingers near the fastening mechanisms. Your hands or fingers could be caught and injured by the mechanism.

### 

When getting in or out of the vehicle with the roof open, be careful not to hit your head or body on the corner of the windshield glass. It may cause an injury.

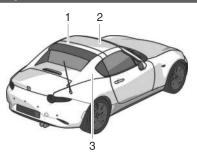
- Do not drive with the roof partially opened; this could damage the roof or cause an unexpected accident.
- Children should not be allowed to play with the retractable hardtop switch.
- Do not place objects or cargo around the rear roof, rear glass, or the front roof storage area. Even small objects may interfere and cause damage.
- Remove leaves that accumulate on and around the roof. If the leaves are not removed, they may block the water drainage outlets.
- Before opening the roof, make sure the rear window defogger switch (Defroster) is turned off. Otherwise the heat generated from the defogger could damage the roof and the internal material.
- When opening/closing the roof, verify that there is no obstruction above the roof (about 1.6 m (5 ft 2 in) from the ground) so as not to damage the roof or the obstruction.
- When opening/closing the roof, do not apply any load to the front roof or the rear roof. The opening/closing mechanism of the roof may be damaged.
- Do not spray water directly near the seam of the window and roof when washing off dirt on the roof with water. Otherwise, water may enter the cabin.

Refer to Closing the roof manually on page 8-37.

Open/close the roof with the vehicle parked on a hard, level ground in a safe place where the vehicle does not obstruct traffic. If the roof is opened/closed on a slope or bump, the opening/closing mechanism of the roof may be damaged.

- Do not drive through an automatic car wash as it may damage the roof.
- Do not open or close the roof forcefully when the ambient temperature is low and the roof or the surrounding area is frozen as it could damage the roof.
- Opening the roof while it is wet can also cause water to drip into the passenger compartment.
- Do not open or close the roof in a strong wind as it could damage the roof.
- If the vehicle speed exceeds 10 km/h (6.2 mph) during the opening/closing operation, the opening/closing operation of the roof stops midstream. If the roof stops midstream, visibility at the rear may be impaired or damage to the roof may occur which could lead to an accident. Operate the switch again with the vehicle stopped, depending on the road and traffic conditions, to complete opening/ closing operation of the roof.
- When opening the roof, make sure objects inside the vehicle are not blown away by the wind. Secure all loose objects inside before driving with the roof down.

### Convertible Top (Retractable Fastback) Overview



- 1. Middle roof
- 2. Front roof
- 3. Rear Roof

### Convertible Top (Retractable Fastback)

### How to Use the Convertible Top (Retractable Fastback)

If the following conditions have been satisfied, the roof can be opened/ closed.

- $\cdot$  The ignition is switched ON.
- Shift/selector lever is in a position other than R (reverse).
- Vehicle speed is 10 km/h (6.2 mph) or less.
- · The trunk lid is closed.
- The vehicle is tilted at an angle of 15 degrees or less.

### NOTE

If the roof cannot be closed even after the operation conditions are all met, have it checked at an Authorized Mazda Dealer.

The roof can be closed manually as an emergency measure.

Refer to Closing the roof manually on page 8-37.

### **Opening the Roof**

When opening the roof, make sure objects inside the vehicle are not blown away by the wind. Secure all loose objects inside before driving with the roof down.

- 1. Park the vehicle on level ground in a safe place where the vehicle does not obstruct traffic.
- 2. Make sure that the trunk is closed.
- 3. Start the engine.
- 4. Continue pressing the retractable hardtop switch in the open direction until the roof opening operation is completed. The operation indicator light flashes while the switch is operated. In addition, a message indicating the open status of the roof is displayed

on the multi-information display. When the opening operation is completed, a beep sound is activated and the operation indicator light turns off.





**Multi-information display** 



### NOTE

• If the windows are closed, the windows automatically open partially when the rear roof opens.

• When the roof is half-open, the front roof resumes opening after the rear roof is completely open.

### **Closing the Roof**

- 1. Park the vehicle on level ground in a safe place where the vehicle does not obstruct traffic.
- 2. Make sure that the trunk is closed.
- 3. Slightly slide the seats back if they are in the foremost position.
- 4. Start the engine.
- 5. Continue pressing the retractable hardtop switch in the close direction until the roof closing operation is completed. The operation indicator light flashes while the switch is operated. In addition, a message indicating the closed status of the roof is displayed on the multi-information display. When the closing operation is completed, a beep sound is

### activated and the operation indicator light turns off.





Multi-information display



### NOTE

If the windows are closed, the windows automatically open partially when the rear roof opens.

### Convenient Ways to Use the Convertible Top (Retractable Fastback)

#### Power Window Interlocking Operation

When opening/closing the roof, the power windows lower automatically for improved operability.

### NOTE

If the vehicle battery is disconnected for vehicle maintenance or other reasons, the power windows will not lower automatically. If the power windows do not lower, reset the power window automatic open/close function.

Refer to Power Windows on page 4-23.

### **Security System**

Mazda cannot guarantee the immobilizer and the theft-deterrent system's operation if the system has been modified or if any add-on equipment has been installed.

### Warnings and Cautions for Using the Security System

### 

To avoid damage to the vehicle, do not modify the system or install any add-on equipment to the immobilizer and the theft-deterrent systems or the vehicle.

### Immobilizer System

The immobilizer system allows the engine to start only with a key the system recognizes.

### NOTE

- The keys carry a unique electronic code. For this reason, and to assure your safety, obtaining a replacement key requires security validation, this will add some delays in supplying a replacement key. They are only available through an Authorized Mazda Dealer.
- Always keep a spare key in case one is lost. If a key is lost, consult an Authorized Mazda Dealer as soon as possible.
- If you lose a key, an Authorized Mazda Dealer will reset the electronic codes of your remaining keys and immobilizer system. Bring all the remaining keys to an Authorized Mazda Dealer to reset.

### Warnings and Cautions for Using the Immobilizer System

### **CAUTION**

Radio equipment like this is governed by laws in the United States.

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

- ➤To avoid damage to the key, do not:
  - $\triangleright$  Drop the key.
  - ≻ Get the key wet.
  - Expose the key to any kind of magnetic field.
  - Expose the key to high temperatures on places such as the dashboard, under direct sunlight.
- If the engine does not start with the correct key, and the security indicator light keeps illuminating or flashing, the system may have a malfunction. Consult an Authorized Mazda Dealer.

### How to Use the Immobilizer System

#### NOTE

- The engine may not start and security indicator light may illuminate or flash if the key is placed in an area where it is difficult for the system to detect the signal, such as on the dashboard. Move the key to a location within the signal range, switch the vehicle power off, and then restart the engine.
- Signals from a TV or radio station, or from a transceiver or mobile telephone could interfere with your immobilizer system. If you are using the proper key and the engine fails to start, check the security indicator light.

### Arming

The system is armed when the vehicle power is switched from ON to off.

The security indicator light an the instrument cluster flashes every 2 seconds until the system is disarmed.

### Disarming

The system is disarmed when the vehicle power is switched ON with the correct programmed key. The security indicator light illuminates for about 3 seconds and then turns off. If the engine does not start with the correct key, and the security indicator light remains illuminated or flashing, try the following: Make sure the key is within the operational range for signal transmission. Switch the vehicle power off, and then restart the engine. If the engine does not start after 3 or more tries, contact an Authorized Mazda Dealer.

### **Theft-Deterrent System**<sup>\*</sup>

If the theft-deterrent system detects an inappropriate entry into the vehicle, which could result in the vehicle or its contents being stolen, the alarm alerts the surrounding area of an abnormality by sounding the horn and flashing the hazard warning lights.

The system will not function unless it's properly armed. So when you leave the vehicle, follow the arming procedure correctly.

# How to Use the Theft-Deterrent System

### How to Arm the System

- 1. Close the windows and the convertible top securely.
- 2. Switch the vehicle power OFF.
- 3. Make sure the hood, the doors, and the trunk lid are closed.
- Press the lock button on the transmitter. The hazard warning lights will flash once. The following method will also arm the theft-deterrent system:

Press the door-lock switch  $\square$  while any door is open and then close both doors.

Press a request switch.

The security indicator light **f** in the instrument cluster flashes twice per second for 20 seconds.

5. After 20 seconds, the system is fully armed.

### NOTE

- The theft-deterrent system can also be armed by activating the auto relock function with both the doors, the trunk lid and the hood closed. Refer to How to Use the Key on page 4-5.
- The system will disarm if one of the following operations takes place within 20 seconds after pressing the lock button:
  - · Unlocking any door.
  - $\cdot$  Opening any door.
  - $\cdot$  Opening the hood.
  - Switching the vehicle power ON. To rearm the system, do the arming procedure again.

• When the doors are locked by pressing the lock button on the key or using the auxiliary key the theft-deterrent system is armed, the hazard warning lights will flash once to indicate that the system is armed.

#### Operation

#### Horn triggering conditions

The horn sounds intermittently and the hazard warning lights flash for about 30 seconds when the system is triggered by any one of the following:

- Unlocking a door with the auxiliary key, door lock switch, or an inside door-lock knob.
- Forcing open a door, the hood or the trunk lid.
- Opening the hood by operating the hood release handle.
- Switching the vehicle power ON without using the push button start.

If the system is triggered again, the lights and horn will activate until the driver's door or the trunk lid is unlocked with the key.

The lights and horn can also be deactivated by pressing the request switch on a door.

#### NOTE

The trunk lid does not open while the theft-deterrent system is operating.

• If the lead-acid battery goes dead while the theft-deterrent system is armed, the horn will activate and the hazard warning lights will flash when the lead-acid battery is charged or replaced.

#### To Stop the Alarm

A triggered alarm can be turned off using any one of the following methods:

- Pressing the unlock button or the trunk button on the key.
- Starting the engine with the push button start.
- · Pressing a request switch.
- Pressing the electric trunk lid opener while the key is being carried.

The hazard warning lights will flash twice.

#### To Turn Off an Armed System

An armed system can be turned off using any one of the following methods:

- Pressing the unlock button on the key.
- Starting the engine with the push button start.
- · Pressing a request switch.

The hazard warning lights will flash twice.

#### NOTE

When the doors are unlocked by pressing the unlock button on the key while the theft-deterrent system is turned off, the hazard warning lights will flash twice to indicate that the system is turned off.

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## MEMO

### Warnings and Cautions for Using the Mirrors

## **WARNING**

## Be sure to look over your shoulder before changing lanes.

Changing lanes without taking into account the actual distance of a vehicle in the convex mirror is dangerous. You could have a serious accident. What you see in the convex mirror is closer than it appears.

## Always return the outside mirrors to the driving position before you start driving.

Driving with the outside mirrors folded in is dangerous. Your rear view will be restricted, which could lead to an unexpected accident.

## Do not adjust the outside mirrors while driving the vehicle.

Adjusting the outside mirrors while driving the vehicle is dangerous as doing so could distract your attention from the road ahead and lead to an accident.

### How to Use the Outside Mirrors

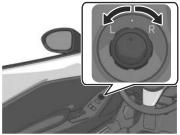
#### Folding in and out the outside mirrors

Fold the outside mirror rearward until it is flush with the vehicle.

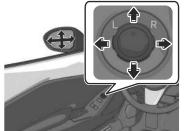


#### Adjusting the Outside Mirror Angle

- 1. Switch the vehicle power ACC or ON.
- 2. Rotate the mirror switch to the left L or right **R** to choose the left or right side mirror.



3. Press the mirror switch in the appropriate direction.



4. After adjusting the mirror, lock the control by rotating the switch in the center position.

## Convenient Ways to Use the Outside Mirrors

#### Automatic glare prevention function \*

In conjunction with the glare prevention function of the auto-type rearview mirror, only the driver's side outside mirror reduces the light from the headlights of rear on-coming vehicles.

# Warnings and Cautions for the Rearview Mirror

## WARNING

## Do not adjust the rearview mirror while driving the vehicle.

Adjusting the rearview mirror while driving the vehicle is dangerous as doing so could distract your attention from the road ahead and lead to an accident.

### How to Use the Rearview Mirror

Move and adjust the rearview mirror body.



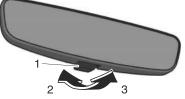
## Convenient Ways to Use the Rearview Mirror

#### **Glare prevention function**

Prevents glare from the headlights of rear on-coming vehicles.

#### Manual type

Push the day/night lever forward for day driving. Pull it back to reduce glare of headlights from vehicles at the rear.

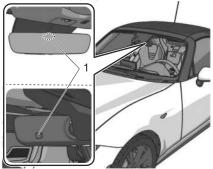


#### Automatic type

Automatically operates when the vehicle power is switched ON and the shift lever/selector lever is in a position other than R.

#### NOTE

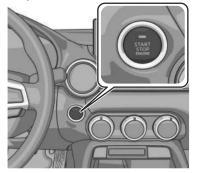
Do not cover the sensor with something such as a sticker or a cover. Otherwise, the sensor cannot detect the surrounding light correctly.



1. Light sensor

### Push Button Start

Press the push button start to start/ stop the engine or to switch the vehicle power position (OFF/ACC/ON).



#### Vehicle power position

#### OFF

All electrical accessories cannot be used.

#### ACC

Some electrical accessories such as audio can be used.

#### ON

All electrical accessories can be used.

## Warning and Cautions for Using the Push Button Start

## 

Before leaving the driver's seat, always switch the vehicle power off, set the parking brake, and make sure the selector lever is in P (automatic transmission) position or in 1st gear or R (manual transmission). Leaving the driver's seat without switching the vehicle power off, setting the parking brake, and shifting the selector lever to P (automatic transmission) position or to 1st gear or R (manual transmission) is dangerous. Unexpected vehicle movement could occur which could result in an accident. In addition, if your intention is to leave the vehicle for even a short period, it is important to switch the vehicle power position to OFF, as leaving it in another position will disable some of the vehicle's security systems and run the lead-acid battery down.

Radio waves from the key may affect medical devices such as pacemakers. Before using the key near people who use medical devices, ask the medical device manufacturer or your physician if radio waves from the key will affect the device. Other than for an emergency situation, do not attempt to stop the engine while driving the vehicle. If the engine is stopped while driving the vehicle, loss of brake power and power steering functions could occur, making it difficult to control the vehicle which could result in an accident.

## **CAUTION**

- If the KEY warning light (red) <sup>∞</sup>ℓ<sup>-</sup> is displayed, or the push button start indicator light (amber) flashes, this could indicate a problem with the engine starting system. This may prevent the engine from starting or from switching the vehicle power position to ACC or ON. Have your vehicle inspected at an Authorized Mazda Dealer as soon as possible. Refer to KEY Warning Light (Red) on page 8-62.
- Before leaving the vehicle, make sure that the vehicle power is switched OFF.

### How to Use the Push Button Start

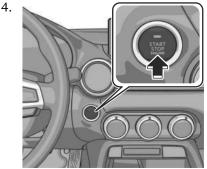
The push button start starts/stops the engine and switches the vehicle power position depending on the vehicle status and the driver's operation.

#### Starting the Engine

- 1. Make sure that the parking brake is applied.
- (Automatic transmission) Make sure that the selector lever is in the P position.
- 3. (Manual transmission) Depress the clutch pedal and brake pedal.

(Automatic transmission) Depress the brake pedal. The push button start indicator light (green) and the KEY indicator light (green) <sup>(c)</sup> (1) in the instrument

(green) and the instrument cluster turn on.



5. The engine starts and the KEY indicator light (green) <sup>∞</sup> □ in the instrument cluster turns off.

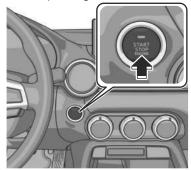
#### NOTE

- If the engine cannot start using the push button start, make sure that the power saving function of the key is not on. When the power saving function is on, the key operation indicator light does not turn on or flash. When the power saving function is on, turn it off. Refer to Convenient Ways to Use the Key on page 4-7.
- Do not use high engine speeds until reaching the operating temperature.

#### **Stopping The Engine**

- 1. Stop the vehicle.
- (Manual transmission) Shift into neutral. (Automatic transmission) Shift the selector lever to the P position.
- 3. Set the parking brake.

4.



5. The engine stops and the vehicle power is switched OFF.

#### Switching the Vehicle power Position

Press the push button start without depressing the clutch pedal (manual transmission) or brake pedal (automatic transmission). Each time the push button start is pressed, the vehicle power position is switched in the order of ACC, ON, and OFF. When the vehicle power is switched to ACC, the push button start indicator light (amber) turns on.

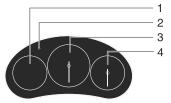
When the vehicle power is switched OFF and a door is opened/closed or locked, the push button start indicator light (amber) turns off.

#### NOTE

#### (Automatic transmission)

If you leave the vehicle power switched to ACC while the selector lever is in the P position, the vehicle power is switched OFF in about 25 minutes.

### **Instrument Cluster**



- ① Multi-information Display
- <sup>(2)</sup> Dashboard Illumination Switch
- ③ Tachometer
- 4 Speedometer

## Speedometer

The speedometer indicates the speed of the vehicle.

## Driving Instrument Cluster

### **Tachometer**

The tachometer shows engine speed in thousands of revolutions per minute (rpm).

## **A** CAUTION

Do not run the engine with the tachometer needle in the RED ZONE. This may cause severe engine damage.



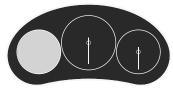
- 1. STRIPED ZONE
- 2. RED ZONE

#### NOTE

When the tachometer needle enters the STRIPED ZONE, this indicates to the driver that the gears should be shifted before entering the RED ZONE.

## **Multi-information Display**

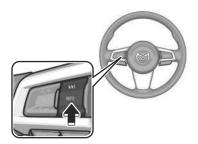
The screen display informs you of the vehicle information.

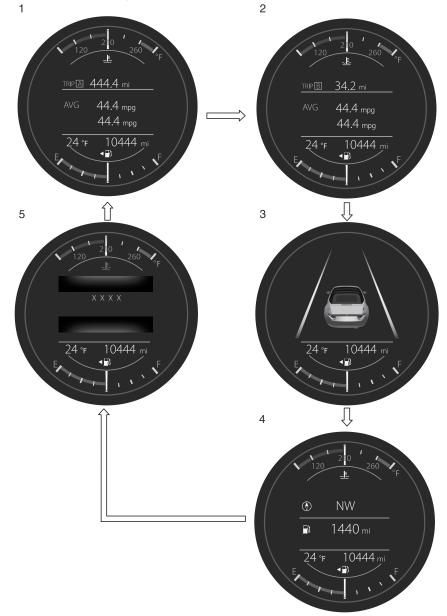


The multi-information display indicates the following information.

- · Odometer
- Trip meter
- · Engine coolant temperature gauge
- Fuel gauge
- · Outside temperature
- · Maximum driving distance
- · Average fuel economy
- · Current fuel economy
- · i-ACTIVSENSE display
- · Door-ajar/trunk lid-open warning indication<sup>\*1</sup>
- Compass Display
- · Roof Operation Display (Hardtop)
- · Message display
- <sup>\*</sup>1 Displayed when opening door/trunk lid.

## How to Use the Multi-information Display





The screen content changes each time the INFO switch is pressed.

#### Driving Instrument Cluster

- Trip B display
   i-ACTIVSENSE display
   Compass Display/Maximum driving distance display
   Message display<sup>1</sup>
- <sup>\*</sup>1 Displayed only when a warning occurs.

## Odometer/Trip Meter

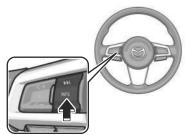
#### Odometer

The odometer records the total distance the vehicle has been driven.

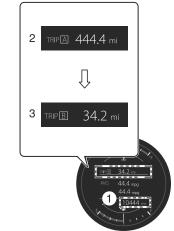
#### Trip meter

The driving distance for a specified interval is indicated. Two types (TRIP A, TRIP B) of interval distance can be measured.

## How to Use the Odometer/Trip Meter



## The display changes each time the INFO switch is pressed.



- 1. Odometer display
- 2. Trip meter A display
- 3. Trip meter B display

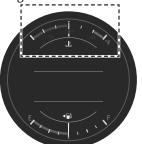
When returning the trip meter to "0", press the INFO switch for 2 seconds or longer while the trip meter is displayed.

#### NOTE

If the lead-acid battery is disconnected for vehicle maintenance or other reasons, the trip meter display returns to "0".

## Engine Coolant Temperature Gauge

Displays the engine coolant temperature. The blue range of the gauge indicates that the engine coolant temperature is low, and the red range of the gauge indicates that the engine coolant temperature is high and overheating.



The engine coolant temperature gauge can be switched to indicate only the high engine coolant temperature range by pressing the dashboard illumination switch.

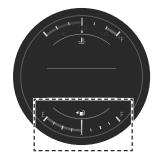
## **CAUTION**

If the engine coolant temperature gauge needle is in the red range, there is the possibility of overheating. Drive slowly to reduce engine load. Refer to Taking Action with Overheating on page 8-19.

## **Fuel Gauge**

The fuel gauge shows approximately how much fuel is remaining in the tank when the vehicle power is switched ON.

When the fuel tank is full, F (Full) is indicated, and as the level lowers the needle approaches E (Empty).



#### NOTE

- After refueling, it may require some time for the indicator to stabilize. In addition, the indicator may deviate while driving on a slope or curve since the fuel moves in the tank.
- The direction of the arrow **R** indicates that the fuel-filler lid is on the left side of the vehicle.

### **Dashboard Illumination**

#### (Without auto-light control)

When the lights are turned on with the vehicle power switched ON, the brightness of the dashboard illumination is dimmed.

### (With auto-light control)

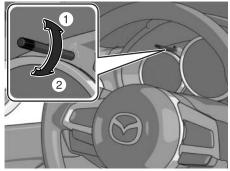
When the lights are turned on with the vehicle power switched ON, the brightness of the dashboard illumination is dimmed. However, when the light sensor detects that the surrounding area is bright such as when the lights are turned on in the daytime, the dashboard illumination does not dim.

#### NOTE

#### (With auto-light control)

When the vehicle power is switched ON in the early evening or at dusk, the dashboard illumination is dimmed for several seconds until the light sensor detects the brightness of the surrounding area, however, the dimming may cancel after the brightness is detected.

## How to Use the Dashboard Illumination



1. Dim

2. Bright

A beep sound will be heard when the knob has been rotated to the maximum dim position.

## Function for canceling illumination dimmer

The illumination dimmer can be cancelled by rotating the instrument panel illumination knob to the right until a beep sound is heard while the instrument cluster is dimmed with the vehicle power switched ON. If the instrument cluster's visibility is reduced due to glare from surrounding brightness, cancel the illumination dimmer.

### Outside Temperature Display

When the vehicle power is switched ON, the outside temperature is displayed.



#### NOTE

The outside temperature display may differ from the actual outside temperature depending on the surroundings and vehicle conditions. Drive the vehicle for awhile so that the ambient temperature sensor can adjust to the correct outside temperature.

### Maximum Driving Distance Display

The maximum driving distance is calculated and displayed based on the current remaining fuel tank level and the fuel economy. When the maximum driving distance is 50 km (30 miles) or farther, the maximum driving distance indication decreases in 10 km (10 mile) increments, and when the maximum driving distance is shorter than 50 km (30 miles), it decreases in 1 km (1 mile) increments.



#### NOTE

The maximum driving distance is just an approximate numerical value and differs from the actual driving distance. Drive the vehicle while checking the fuel gauge.

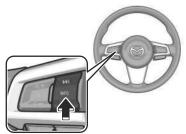
## Average Fuel Economy Display

This mode displays the average fuel economy by calculating the total traveled distance and the total fuel consumption since the vehicle was purchased or the past data was reset.



## How to Use the Average Fuel Economy Display

To reset the displayed average fuel economy data, press the INFO switch for 2 seconds or longer.



After resetting the data, - - - L/100 km (- - - mpg) is displayed until the average fuel economy is recalculated and displayed.

### Instantaneous Fuel Economy Display

This displays the current fuel economy by calculating the amount of fuel consumption and the distance traveled.



#### NOTE

Displays the 0 position when the vehicle speed decreases to a constant speed or slower.

## i-ACTIVSENSE Display

Displays the system status.



### **Compass Display**

The direction the vehicle is moving is displayed in one of eight directions while the vehicle is being driven.



## Roof Operation Display (Hardtop)

Displays the roof operation status.



## Message Display

Displays a message to notify the user of the system operation status and malfunctions or abnormalities. Follow the instructions indicated on the display. Refer to How to Use the Multi-information Display on page 5-18.

## Warning and Cautions for Using the Shift Lever

## **WARNING**

## Do not use sudden engine braking on slippery road surfaces or at high speeds.

Shifting down while driving on wet, snowy, or frozen roads, or while driving at high speeds causes sudden engine braking, which is dangerous. The sudden change in tire speed could cause the tires to skid. This could lead to loss of vehicle control and an accident.

Always leave the shift lever in 1 or R position and set the parking brake when leaving the vehicle unattended. Otherwise the vehicle could move and cause an accident.

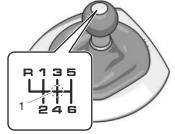
## 

- Keep your foot off the clutch pedal except when shifting gears. Also, do not use the clutch to hold the vehicle on an upgrade. Riding the clutch will cause needless clutch wear and damage.
- Do not apply any excessive lateral force to the shift lever when changing from 5th to 4th gear. This could lead to the accidental selection of 2nd gear, which could result in damage to the transmission.
- Make sure the vehicle comes to a complete stop before shifting to R. Shifting to R while the vehicle is still moving may damage the transmission.

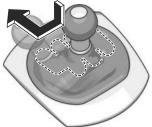
### How to Use the Shift Lever

#### **Operating the Shift Lever**

- 1. Depress the clutch pedal.
- 2. (Position other than R) Operate the shift lever.



Neutral position
 (R position)
 Operate the shift lever while pushing it down.



3. Release the clutch pedal. The Gear Shift Indicator (GSI) is displayed in the instrument cluster. Refer to Gear Shift Indicator (GSI) on page 5-41.

#### **Recommendations for Shifting**

#### Upshifting

For normal acceleration, Mazda recommends these shift points:

Gear	Vehicle speed
1 to 2	23 km/h (14 mph)
2 to 3	39 km/h (24 mph)

Gear	Vehicle speed
3 to 4	53 km/h (33 mph)
4 to 5	61 km/h (38 mph)
5 to 6	77 km/h (48 mph)

For cruising, Mazda recommends these shift points:

Gear	Vehicle speed
1 to 2	11 km/h (7 mph)
2 to 3	31 km/h (19 mph)
3 to 4	42 km/h (26 mph)
4 to 5	55 km/h (34 mph)
5 to 6	66 km/h (41 mph)

#### Downshifting

When you must slow down in heavy traffic or on a steep upgrade, downshift before the engine starts to overwork. This reduces the chance of stalling and gives better acceleration when you need more speed. On a steep downgrade, downshifting helps maintain safe speed and prolongs brake life.

## Warning and Cautions for Using the Selector Lever

## 

## Do not shift the selector lever with the accelerator pedal depressed.

Otherwise, the vehicle will suddenly accelerate which could lead to an accident.

Perform selector lever operations with the brake pedal firmly depressed and the vehicle completely stopped.

## After stopping the vehicle, make sure that you are aware of the selector lever position before re-accelerating.

If the vehicle were to move in the unintended direction, it could lead to an accident.

After stopping the vehicle, check the selector lever position with the shift indicator before depressing the accelerator pedal.

Do not allow the vehicle to move in reverse on an upslope while the selector lever is in forward drive, or move forward on a downslope while the selector lever is in reverse drive. Otherwise, the engine will stop, causing the loss of the power brake and power steering functions, and make it difficult to control the vehicle which could result in an accident. Switch the selector lever position appropriately according to the direction in which you want to move the vehicle.

# When parking the vehicle, shift the selector lever to the P position, apply the parking brake, and do not leave the engine running.

If the vehicle is parked with only the parking brake applied or with only the selector lever in the P position, the vehicle may move unexpectedly and result in an accident.

When parking the vehicle, shift the selector lever to the P position, apply the parking brake, and then stop the engine.

## **CAUTION**

- When reversing the vehicle and looking over your shoulder to check the rear, be careful and make sure the brake pedal can be firmly depressed as your driving posture will have changed.
- Do not shift the selector lever to the N position while driving. Otherwise, it could result in the loss of the engine braking power and cause an accident. In addition, it could damage the transmission.
- Completely stop the vehicle before shifting the selector lever to the P position.

If the selector lever is shifted to the P position before the vehicle is completely stopped, unnecessary force will be applied to the transmission which could cause damage.

Do not depress the accelerator pedal and the brake pedal at the same time, or stop the vehicle by depressing the accelerator pedal with the selector lever in the forward drive position on an upslope. The transmission could overheat and lead to damage.

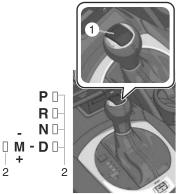
## How to Use the Selector Lever

#### **Operating the Selector Lever**

- 1. Start the engine.
- 2. Operate the selector lever.

Selector lever operation	Operation condition	
Shift from P position to R position	Depress the brake pedal and press the selector lever but- ton to operate.	
Shift from R position to N position		
Shift from N position to D position		
Shift from D position to M position	Shift the lever without pressing the selector lever button.	
Shift from M position to D position		
Shift from D position to N position		
Shift from N position to R position	Press the selector lever button to shift the lever.	
Shift from R position to P position		

The shift indicator turns on at the same position as the shift position displayed in the instrument cluster.



- 1. Selector lever button
- 2. Shift indicator

The shift position is displayed in the instrument cluster.



#### **Using Manual Shift Mode**

Shift the selector lever from the D to the M position.



The gear position can be switched manually in manual shift mode. The manual shift mode indication and the gear position are displayed in the instrument cluster.



Shifting up



## Selector Lever

#### Shifting down



#### NOTE

When fully depressing the accelerator pedal even while in manual mode, the transmission kicks down, but it does not kick down while the Traction Control System (TCS)/Dynamic Stability Control (DSC) is turned off. However, if the vehicle is continuously driven at a high rpm, the gears may automatically shift up to protect the engine.

#### **Canceling Manual Shift Mode**

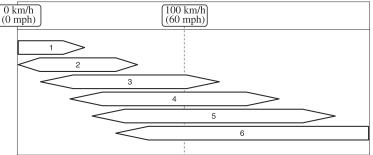
Shift the selector lever from the M to the D position.



Manual shift mode is canceled.

#### Shift gear (shifting) speed limit

The gear is shifted when the steering shift switches are operated within the speed limit ranges.



- 1. 1st gear
- 2. 2nd gear
- 3. 3rd gear
- 4. 4th gear
- 5. 5th gear
- 6. 6th gear

When shifting down is not possible depending on the vehicle speed, the gear position indication displayed in the instrument cluster flashes 2 times.

#### Using Second Gear Fixed Mode

1. Shift the selector lever from the D to the M position.



- 2. Drive the vehicle at a speed of 10 km/h (6.2 mph) or slower.
- 3. Operate the selector lever to the (+) side and shift to 2nd gear. Second gear fixed mode is activated.

#### NOTE

When using second gear fixed mode, the vehicle stops at the 2 gear position.

#### **Canceling Second Gear Fixed Mode**

Operate the selector lever to a gear other than 2nd gear. Second gear fixed mode is canceled.

### Warnings and Cautions for Using the Steering Shift Switches

### **WARNING**

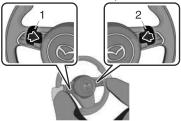
# Avoid using sudden engine braking (shift-down).

If you apply sudden engine braking (shift-down) while driving at high speed or on wet roads, snow-covered roads, or icy roads, the tires may slip and cause an unexpected accident.

### How to Use the Steering Shift Switches<sup>\*</sup>

#### **Using Direct Mode**

Pull the up switch (+/OFF) or the down switch (-) of the steering shift switches toward you when the selector lever is in the D position.



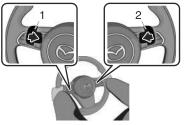
- 1. Down switch (-)
- 2. Up switch (+/OFF)

The gear position can be temporarily switched manually in direct mode. The direct mode indication and the gear position are displayed in the instrument cluster.



#### Shifting up/down

Pull the up switch (+/OFF) or the down switch (-) of the steering shift switches toward you.



Down switch (-)
 Up switch (+/OFF)
 Shifts up or down.

#### NOTE

- While the vehicle is stopped, direct mode cannot be set even if the DOWN switch (-) is pulled.
- When fully depressing the accelerator pedal even while in direct mode, the transmission kicks down, but it does not kick down while the Traction Control System (TCS) is turned off. However, if the vehicle is continuously driven at a high rpm, the gears may automatically shift up to protect the engine.

#### Canceling Direct Mode

Direct mode can be canceled by performing the following operations.

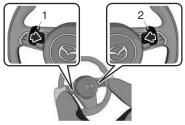
- $\cdot$  The UP switch (+/OFF) is pulled toward you for a certain period of time or longer.
- The vehicle is driven for a certain period of time or longer (time differs depending on the driving conditions while operating).
- The vehicle is stopped.
- The vehicle is driven at a low speed.

#### **Using Manual Shift Mode**

1. Shift the selector lever from the D to the M position.



2. Pull the up switch (+/OFF) or the down switch (-) of the steering shift switches toward you.



- 1. Down switch (-)
- 2. Up switch (+/OFF)

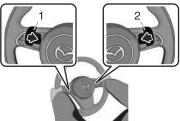
The gear position can be switched manually in manual shift mode.

The manual shift mode indication and the gear position are displayed in the instrument cluster.



#### Shifting up/down

Pull the up switch (+/OFF) or the down switch (-) of the steering shift switches toward you.



1. Down switch (-)

2. Up switch (+/OFF)

Shifts up or down.

#### NOTE

When fully depressing the accelerator pedal even while in manual mode, the transmission kicks down, but it does not kick down while the Traction Control System (TCS) is turned off. However, if the vehicle is continuously driven at a high rpm, the gears may automatically shift up to protect the engine.

#### **Canceling Manual Shift Mode**

Shift the selector lever from the M to the D position.



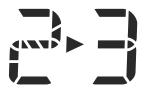
Manual shift mode is canceled.

#### Shift gear (shifting) speed limit

Refer to How to Use the Selector Lever on page 5-32.

### Gear Shift Indicator (GSI)\*

The GSI supports you to obtain optimum fuel economy and smooth driving. The current gear position and the recommended gear position corresponding to the driving condition is displayed in the instrument cluster.



#### NOTE

The GSI does not display under the following conditions.

- $\cdot$  The vehicle is stopped.
- · (Manual transmission)
  - · The vehicle is put in neutral.
  - $\cdot$  The vehicle is driven in reverse.
  - The clutch is not fully engaged when accelerating from a stop.
  - The clutch pedal remains depressed for 2 seconds or longer while driving.

• (Automatic transmission) The manual shift mode is not used.

### Warning and Cautions for Using the Gear Shift Indicator (GSI)

# 

Do not rely completely on the GSI. The actual driving situation might require shift operations different from the indication. To avoid the risk of accidents, the road and traffic conditions have to be determined correctly by the driver before shifting.

### Warning and Cautions for Using the Foot Brake

### **WARNING**

# Do not coast with the engine turned off, find a safe place to stop.

Coasting with the engine turned off is dangerous. Braking will require more effort, and the brake's power-assist could be depleted if you pump the brake. This will cause longer stopping distances or even an accident.

# Shift to a lower gear when going down steep hills.

Driving with your foot continuously on the brake pedal or steadily applying the brakes for long distances is dangerous. This causes overheated brakes, resulting in longer stopping distances or even total brake failure. This could cause loss of vehicle control and a serious accident. Avoid continuous application of the brakes.

Dry off brakes that have become wet by driving slowly, releasing the accelerator pedal and lightly applying the brakes several times until the brake performance returns to normal. Driving with wet brakes is dangerous. Increased stopping distance or the vehicle pulling to one side when braking could result in a serious accident. Light braking will indicate whether the brakes have been affected. **Do not drive with worn disc pads.** Driving with worn disc pads is dangerous. The brakes could fail and cause a serious accident. As soon as you hear a screeching noise consult an Authorized Mazda Dealer.

## **CAUTION**

- Do not drive with your foot held on the clutch pedal or brake pedal, or hold the clutch pedal depressed halfway unnecessarily. Doing so could result in the following:
  - The clutch and brake parts will wear out more quickly.
  - The brakes can overheat and adversely affect brake performance.
- Always depress the brake pedal with the right foot. Applying the brakes with the unaccustomed left foot could slow your reaction time to an emergency situation resulting in insufficient braking operation.



Wear shoes appropriate for driving in order to avoid your shoe contacting the brake pedal when depressing the accelerator pedal.

### Warning and Cautions for Using the Parking Brake

### WARNING

# Do not drive the vehicle with the parking brake applied.

If the vehicle is driven with the parking brake applied, the brake parts may generate heat and the brake system may not operate, leading to an accident.

### How to Use the Parking Brake

#### Applying the Parking Brake

1. Depress the brake pedal.



The parking brake is applied.

#### NOTE

For parking in snow, refer to Winter Driving (page 5-141) regarding parking brake use.

#### Releasing the Parking Brake

- 1. Depress the brake pedal.
- 2. Pull the lever up slightly and press the button.



3. Lower the lever with the button pressed.



The parking brake is released.

### Brake Override System

The brake override system applies the brake first for safety if the brake pedal and the accelerator pedal are depressed at the same time.

### Warning and Cautions for Using the Brake Override System

# **A** CAUTION

Do not drive with your foot held on the brake pedal. The brake override system may not operate normally.

### How to Use the Brake Override System

You can use the Mazda Connect setting to disable the brake override system warning. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

### Hill Launch Assist (HLA)

The HLA prevents the vehicle from rolling backward or forward, such as when releasing the brake pedal while on a slope.

#### NOTE

- The HLA may not operate on a gentle slope or depending on the vehicle's load.
- The HLA does not operate if the parking brake is applied or the vehicle has not stopped completely.
- When the TCS/DSC operation
- indicator light 🗟 turns on, the HLA may not operate.
- $\cdot$  The HLA does not turn off even if the TCS/DSC is turned off.

### Warning and Cautions for Using the Hill Launch Assist (HLA)

### WARNING

#### Do not rely completely on the HLA.

The HLA is designed only to assist the driver in accelerating from a stop on a slope. The HLA only operates for about 2 seconds and therefore, if the accelerator and brake pedals are not operated correctly the vehicle may move (roll) unexpectedly and cause an accident. Always confirm the safety around the vehicle before starting to drive the vehicle. Note that the vehicle may move suddenly depending on the vehicle's load or if it is towing something. In addition, for vehicles with a manual transmission, the vehicle could still roll depending on how the clutch pedal or the accelerator pedal is operated.

### **Light Switch**

Each light turns on/off when the switch is operated.

#### With Auto Light



#### Without Auto Light



### Warnings and Cautions for Using the Light Switch

## 

Do not cover the light sensor by applying stickers or labels to the windshield. Otherwise the sensor cannot detect the surrounding light correctly.



### How to Use the Light Switch

#### NOTE

Headlights which do not blind drivers approaching in the opposite direction have been adopted. Therefore, it is not necessary to adjust the optical axis of the headlights even when traveling temporarily in a country where vehicles are driven on the right-hand side of the road.

#### Using the Lights Automatically

#### Using the Auto Light<sup>\*</sup>

Make sure that the light switch is in the **AUTO** position.



The daytime running lights turn on automatically when it is bright, and the headlights, parking lights, taillights, side-marker lights, and the license plate lights turn on automatically when it is dark.

When the parking lights, taillights, side-marker lights, and the license plate lights are turned on, the parking

lights indicator light EDUE in the instrument cluster turns on.

#### NOTE

- If the surroundings remain dark for several minutes even during daytime, the light sensor determines that it is nighttime, and the lights may not turn off immediately even if the surroundings become bright.
- The illumination timing for the headlights can be changed. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

#### Using the Daytime Running Lights

The daytime running lights turn on while driving in bright surroundings such as during the day.

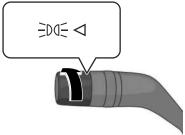
#### NOTE

(Only in regions where daytime running lights are not mandatory) The daytime running lights can be set so that they do not to turn on. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

#### Using the Lights Manually

Using the Parking lights, Taillights, Side-Marker Lights, and License Plate Lights

(The vehicle power is switched to ON)



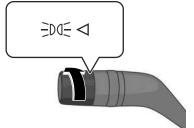
The parking lights, taillights, side-marker lights, and license plate lights turn on, and the parking lights

#### Driving Light Switch

indicator light EDCE in the instrument cluster turns on.

When the vehicle power is switched from ON to OFF, the parking lights, taillights, side-marker lights, and the license plate lights are turned on by the auto headlight off function for a certain period of time.

(The vehicle power is switched to ACC or OFF)



The parking lights, taillights,

side-marker lights, and license plate lights turn on, and the parking lights

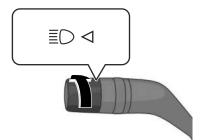
indicator light EDOE in the instrument cluster turns on.

The parking lights, taillights, side-marker lights, and the license plate lights are turned on by the auto headlight off function for a certain period of time.

#### NOTE

Do not leave the lights on while the engine is turned off. Otherwise, the lead-acid battery power could be depleted.

#### Using the Headlights



The headlights, parking lights, taillights, side-marker lights, and the license plate lights turn on, and the parking lights indicator light and in the instrument cluster turns on.

# Switching the Headlights to High Beams



The headlights are switched to high beams and the headlight high-beam indicator light  $\overline{\equiv} O$  in the instrument cluster turns on.

When the lever is returned to its original position, the headlights are switched to low beams.

#### Flash-to-pass

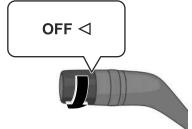


While the lever is being operated, the headlight high beams turn on and the headlight high-beam indicator light

 $\blacksquare \bigcirc$  in the instrument cluster turns on.

#### Turning off the Lights

Turn the light switch to the **OFF** position when the vehicle is stopped.



#### (With Auto Light)

The light switch returns to the **AUTO** position automatically.

All the lights that are turned on turn off, and the parking lights indicator light EDGE in the instrument cluster turns off.

#### Headlight Leveling

The number of passengers and weight of cargo in the luggage compartment change the angle of the headlights. The angle of the headlights will be automatically adjusted when turning on the headlights. A system malfunction or operation conditions are indicated by a warning. Refer to Exterior Lights Warning Light on page 8-65.

# Convenient Ways to Use the Light Switch

#### **Coming Home Light**

After the vehicle power is switched OFF, the headlights can be turned on for a while.

#### Using the coming home light

 Switch the vehicle power to ACC or OFF.



The headlights turn on, and then turn off when any of the following conditions is met.

- A certain amount of time has passed since occupants got out of the vehicle and all the doors closed.
- Three minutes have passed since the headlights turned on.
- The light switch was operated after the headlights turned on.

#### NOTE

The time until the headlights turn off can be changed.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

#### Leaving Home Light

The lights of your vehicle parked at a distance can be turned on by operating the key.

#### Driving Light Switch

#### Using the leaving home light

Press the unlock button on the key while the vehicle power is switched OFF.



When the vehicle receives a key operation signal, the headlights, parking lights, taillights, side-marker lights, and the license plate lights turn on.

The lights turn off when any of the following conditions is met.

- Thirty seconds have passed since the lights turned on.
- The light switch is set to the **OFF** position.
- The lock button on the key is pressed.



#### NOTE

The leaving home light can be set so that it does not operate. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

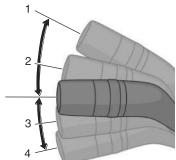
### How to Use the Turn Signal Lever

When the lever is operated, the turn signal lights flash/turn off.

#### Using the Turn Signal Lever

#### Turning left or right

Operate the lever to the 1 or 4 position.

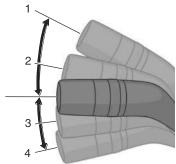


Each turn signal light flashes and the turn signal light  $\langle P \rangle$  in the instrument cluster flashes. The lever returns to its original position

in conjunction with the steering wheel operation. If it does not return, return it by hand.

#### **Changing lanes**

Operate the lever to the 2 or 3 position.



While the lever is in the 2 or 3 position, each turn signal light flashes and the turn signal light in the instrument cluster flashes. If you move the lever to the 2 or 3 position and release it immediately,

the three-flash turn signal operates and the turn signal light flashes 3 times.

#### NOTE

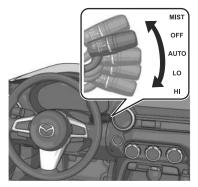
- The volume of the turn signal lever sound can be changed. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.
- The three-flash turn signal can be turned on/off.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

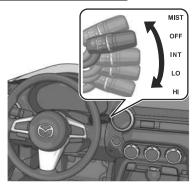
### Windshield Wiper/ Washer Switch

When the switch or lever is operated, the windshield wiper/washer operates.

#### With Auto-Wiper Control



#### With Intermittent Wiper



### Warning and Cautions for Using the Windshield Wiper/Washer Switch

### **WARNING**

In cold regions, use washer fluid containing anti-freeze. In addition, warm the windshield glass before spraying washer fluid during cold temperatures.

If washer fluid not containing anti-freeze is used during cold temperatures, it will freeze on the windshield causing reduced visibility which may lead to an accident. Before spraying washer fluid, use the defroster to make sure that the windshield is sufficiently warmed up.

### 

- When the windshield wipers are not used during freezing temperatures or for a long time, the wiper rubber may freeze to the glass. If the wipers are operated while frozen to the glass, it could damage the wiper rubber and motor.
- If the windshield wipers are operated while the windshield glass is dry, the glass could be scratched and the wiper rubber damaged. When the window glass is dry, spray washer fluid before operating the wipers.
- If the amount of washer fluid spray is insufficient, do not use the windshield washer switch. If the washer switch continues to be operated with no washer fluid being sprayed, it could lead to pump damage.

Do not cover the rain sensor by applying stickers or labels to the windshield. Otherwise, the sensor cannot detect the amount of rainfall.

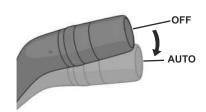


- When the vehicle power is switched ON and the wiper lever is in the AUTO position, the windshield wipers may operate automatically in the following cases:
  - The area of the windshield above the rain sensor is touched or wiped with a cloth.
  - The windshield or the rain sensor area in the cabin is hit.

When the vehicle power is switched ON and the wiper lever is in the AUTO position, do not touch the windshield or the windshield wipers Otherwise, the windshield wipers will operate automatically which could catch your fingers or damage the windshield wipers. When removing ice or snow, or cleaning the windshield, always make sure the wiper lever is in the OFF position.

### How to Use the Windshield Wiper/ Washer Switch

Using the Auto Wipers\*



The windshield wipers operate automatically according to the rainfall amount.

### 

Even if it is not raining, the windshield wipers may operate automatically in the following cases.

- The area of the windshield above the rain sensor is touched or wiped with a cloth.
- The windshield or the rain sensor area in the cabin is hit.

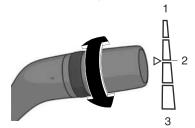
#### NOTE

• If a water repellent coating other than a genuine product is used, the rain sensor may not detect the rainfall amount correctly and the auto wipers may not operate normally. Do not use a water repellent coating other than a genuine product.

- If dirt or ice is adheres to the top of the rain sensor on the windshield and the windshield wipers cannot remove the dirt or ice even after the wipers operate several times, the auto wipers will stop operating. If the auto wipers stopped, remove the dirt and ice from the windshield.
- The auto wipers could operate from the effect of strong light sources, electromagnetic waves, or infrared light because the rain sensor uses an optical sensor. It is recommended that the auto-wiper lever be switched to the **OFF** position other than when driving the vehicle under rainy conditions.

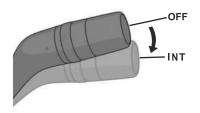
#### Changing sensitivity of auto wipers

The rain sensitivity level can be adjusted by rotating the switch.



- 1. Less sensitivity
- 2. Normal
- 3. Higher sensitivity

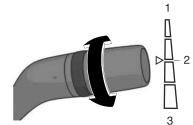
#### Using the Intermittent Wiper<sup>\*</sup>



The wipers operate intermittently.

# Changing the intermittent operation time

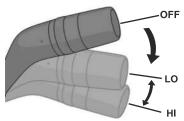
The intermittent operation time can be adjusted by turning the switch.



- 1. Slow
- 2. Normal
- 3. Fast

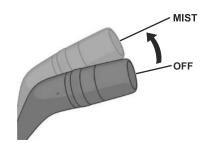
#### Using the Windshield Wipers

#### Using continuously



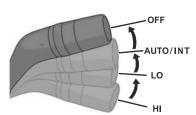
In the LO position, the windshield wipers operate at low speed. In the HI position, the wipers operate at high speed.

#### Using temporarily



The windshield wipers operate while the lever is in the MIST position. Set the lever to the MIST position and immediately release it to operate the windshield wipers only once.

#### **Stopping the Windshield Wipers**



The windshield wipers stop.

#### Using the Windshield Washer



Pull the lever toward you and hold it to spray washer fluid.

#### NOTE

If the windshield washer is turned on when the windshield wipers are not operating, the windshield wipers operate a few times.

### Rear Window Defogger Switch

The rear window defogger warms the rear window and removes fog. When the rear window defogger is operated, the following equipment operates in conjunction with it.

### Warnings and Cautions for Using the Rear Window Defogger Switch

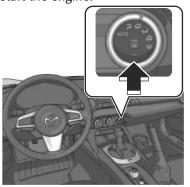
### **CAUTION**

- ➢ Be careful not to scratch the filaments when washing the rear window. The filaments are installed inside the rear window.
- Use the rear window defogger while the engine is operating. In addition, do not use the rear window defogger for a long time. Otherwise, the lead-acid battery power could be depleted.

### How to Use the Rear Window Defogger Switch

#### Using the Rear Window Defogger Switch

- 1. Start the engine.
- 2.



3. The rear window defogger operates and the switch indicator light turns on.

The rear window defogger stops automatically after it operates for about 15 minutes.

#### Stopping the Rear Window Defogger

Press the rear window defogger switch while the rear window defogger is operating.

The rear window defogger stops and the switch indicator light turns off.

### Mirror Defogger\*

The mirrors are heated using heat filaments to remove fog.

### How to Use the Mirror Defogger

The mirror defoggers operate in conjunction with the rear window defogger. For the operation method, refer to How to Use the Rear Window

Defogger on page 5-59.

### **Hazard Warning Lights**

The hazard warning light switch is used when it is necessary to park the vehicle on a roadside due to a vehicle breakdown or other emergency.

### How to Use the Hazard Warning Lights



All the turn signal lights flash and the turn signal light  $\langle D \rangle$  in the instrument cluster flashes. Press the switch again to turn off the lights.

### How to Use the Horn

The horn sounds while the center of the steering wheel is pressed.



### Antilock Brake System (ABS)

The ABS prevents the wheels from locking, caused by braking on slippery roads, and maintains driving directional stability and ensures steerability.

#### NOTE

- When depressing the brake pedal, slight vibration might be felt from the pedal. This vibration is a normal occurrence when the ABS operates.
- ABS does not operate at low speeds (about 10 km/h (6.2 mph) or slower).

### Warning and Cautions for Using the Antilock Brake System (ABS)



# Do not rely on the ABS as a substitute for safe driving.

The ABS cannot compensate for unsafe and reckless driving, excessive speed, tailgating (following another vehicle too closely), driving on ice and snow, and hydroplaning (reduced tire friction and road contact because of water on the road surface). You can still have an accident.

### **A** CAUTION

Always use tires of the specified size and type for the front and rear wheels. If a tire other than the specified size or type is installed, the ABS system may not operate normally.

### Traction Control System (TCS)

The TCS prevents drive-wheel spinning which occurs during acceleration from a stop or acceleration during cornering on slippery roads, such as wet or snow-covered roads, and assures optimum drive force and steerability.

### Warning and Cautions for Using the Traction Control System (TCS)

### 

# Do not rely on the Traction Control System (TCS) as a substitute for safe driving.

The Traction Control System (TCS) cannot compensate for unsafe and reckless driving, excessive speed, tailgating (following another vehicle too closely), and hydroplaning (reduced tire friction and road contact because of water on the road surface). You can still have an accident.

Use snow tires or tire chains and drive at reduced speeds when roads are covered with ice and/or snow. Driving without proper traction devices on snow and/or ice-covered roads is dangerous. The Traction Control System (TCS) alone cannot provide adequate traction and you could still have an accident.

### How to Use the Traction Control System (TCS)

#### **Enabling Operation of the TCS**

Switch the vehicle power ON. The TCS is operable. When the TCS operates, the TCS/DSC operation indicator light also flashes.

#### **Stopping the TCS Operation**

The TCS operation can be stopped by operating the DSC OFF switch. Refer to How to Use the Dynamic Stability Control (DSC) on page 5-67.

### Dynamic Stability Control (DSC)

The DSC automatically controls braking and engine power output in conjunction with systems such as the ABS and TCS to help control side slip when driving on slippery surfaces, or during sudden or evasive steering, which enhances vehicle stability. Also refer to Antilock Brake System (ABS) 5-63, Traction Control System (TCS) 5-64, and Kinematic Posture Control (KPC) 5-71.

### Warning and Cautions for Using the Dynamic Stability Control (DSC)

### 

#### Do not rely on the Dynamic Stability Control as a substitute for safe driving.

The Dynamic Stability Control (DSC) cannot compensate for unsafe and reckless driving, excessive speed, tailgating (following another vehicle too closely), and hydroplaning (reduced tire friction and road contact because of water on the road surface). You can still have an accident.

### **CAUTION**

- Heed the following cautions so that the DSC can operate normally.
  - Use the specified tire size and the same type of tire on all 4 wheels.
  - Do not use tires with significantly different wear patterns on the same vehicle.
- When using tires where the tire diameter is changed due to the installation of tire chains, or when installing an emergency spare tire, the DSC may not operate normally.

### How to Use the Dynamic Stability Control (DSC)

#### Enabling Operation of the DSC

Drive the vehicle at a speed of about 20 km/h (13 mph) or faster. The DSC is operable.

When the DSC operates, the TCS/DSC operation indicator light  $\Xi$  flashes.

#### Stopping Operation of the Traction Control System (TCS)/DSC/Kinematic Posture Control (KPC)

- 1. Switch the vehicle power ON.
- 2. Continue pressing the DSC OFF switch while the vehicle is stopped until a sound is activated.



Press the DSC OFF switch again to enable the TCS/DSC/KPC operation.

#### TCS/DSC/KPC Operation Condition

Switch operation	Indicator light	TCS operation condition	DSC operation condition	KPC operation condition
striten continuousiy		Operates at a vehi- cle speed of 6 km/h (3 mph) or slower	Non-operation	Non-operation
continuousi, untinu	DSC OFF indicator light 류 is on DSC-TRACK indi- cator light 🏁 is on	Operation frequen- cy is suppressed	Operation frequen- cy is suppressed	Operation

#### NOTE

• If the engine is stopped while the TCS/DSC/KPC operation is canceled, the TCS/DSC/KPC becomes operational when the engine is started the next time.

- When the TCS/DSC/KPC is on and you attempt to free the vehicle from being stuck, the TCS/DSC/KPC will activate. Depressing the accelerator will not increase engine power and freeing the vehicle from being stuck might be difficult. When this happens, turn off the TCS/DSC/KPC.
- If the TCS/DSC/KPC is canceled and the following systems are operated, the TCS/DSC/KPC becomes operational.
  - Smart Brake Support (SBS)
  - · Mazda Radar Cruise Control (MRCC)
  - $\cdot$  Cruise Control
- If the DSC OFF switch is pressed and held for 10 seconds or longer, the TCS/DSC/KPC operation can no longer be turned off even if the DSC OFF switch or DSC-TRACK switch is pressed. In this case, the DSC OFF switch or DSC-TRACK switch will operate normally when the vehicle power is switched ON again after being switched OFF.

### **DSC-TRACK**<sup>\*</sup>

DSC-TRACK is a system that reduces the operation frequency of the Traction Control System (TCS) and the Dynamic Stability Control (DSC) during sports driving on circuits, and it allows the vehicle to sideslip more than the normal DSC. When the vehicle sideslip increases significantly, the system controls brake and engine output in response to the steering wheel operation to ensure vehicle stability.

### Warning and Cautions for Using the DSC-TRACK

### 

# Do not rely on the DSC-TRACK as a substitute for safe driving.

The DSC-TRACK cannot compensate for unsafe and reckless driving, excessive speed, tailgating (following another vehicle too closely), and hydroplaning (reduced tire friction and road contact because of water on the road surface). You can still have an accident.

# Do not use DSC-TRACK on public roads.

Operating DSC-TRACK reduces the DSC operation frequency, therefore imprudent driving may lead to an unexpected accident.

### 

- Heed the following cautions so that the DSC-TRACK can operate normally.
  - Use the specified tire size and the same type of tire on all 4 wheels.
  - Do not use tires with significantly different wear patterns on the same vehicle.
- When using tires where the tire diameter is changed due to the installation of tire chains, or when installing an emergency spare tire, the DSC-TRACK may not operate normally.

### How to Use the DSC-TRACK

- 1. Switch the vehicle power ON.
- 2. Continue pressing the DSC-TRACK switch while the vehicle is stopped until a sound is activated.



Press the DSC-TRACK switch again to stop the DSC-TRACK operation. For the TCS/DSC/KPC operation condition, refer to How to Use the Dynamic Stability Control (DSC) 5-67.

#### NOTE

- If the engine is stopped with the DSC-TRACK operational, the DSC-TRACK is canceled when the engine is started the next time.
- If the DSC-TRACK switch is pressed and held for 10 seconds or longer, the DSC-TRACK operation can no longer be turned off even if the DSC-TRACK switch or DSC OFF switch is pressed. In this case, the DSC-TRACK switch or DSC OFF switch will operate normally when the vehicle power is switched ON again after being switched OFF.

### Kinematic Posture Control (KPC)

KPC is a system that stabilizes the vehicle's posture by controlling the brakes on sharp curves.

### Warning and Cautions for Using the Kinematic Posture Control (KPC)



# Do not rely on the KPC as a substitute for safe driving.

The KPC cannot compensate for unsafe and reckless driving, excessive speed, tailgating (following another vehicle too closely), and hydroplaning (reduced tire friction and road contact because of water on the road surface). You can still have an accident.

## How to Use the Kinematic Posture Control (KPC)

#### **Enabling Operation of the KPC**

Drive the vehicle at a speed of about 20 km/h (13 mph) or faster. The KPC is operable.

#### NOTE

There is no notification function of the KPC operation status.

#### **Stopping Operation of the KPC**

The KPC operation can be stopped by operating the DSC OFF switch. Refer to How to Use the Dynamic Stability Control (DSC) on page 5-67.

### **Drive Selection**<sup>\*</sup>

Drive selection is a system which switches the vehicle's drive mode to SPORT mode. When SPORT mode is selected, the vehicle response is enhanced when the accelerator pedal is depressed, resulting in powerful acceleration.

# Warning and Cautions for Using the Drive Selection

# 

Do not use the SPORT mode when driving on slippery roads such as wet or snow-covered roads. It may cause tire slipping.

### How to Use the Drive Selection



- 2. When the sport mode is selected, the select mode indicator light SPORT turns on in the instrument cluster.
- 3.



4. When SPORT mode is canceled, the select mode indicator light **SPORT** in the instrument cluster turns off.

#### NOTE

- · Depending on driving conditions when selecting SPORT mode, the vehicle may perform shift-down or accelerate slightly.
- · When SPORT mode is selected, driving the vehicle at higher engine speeds increases and fuel economy may worsen. Canceling SPORT mode during normal driving is recommended.

- SPORT mode cannot be switched in the following cases. If the mode cannot be switched to SPORT mode, the select mode indicator light **SPORT** flashes.
  - The Antilock Brake System (ABS) is operating.
  - The Traction Control System (TCS) is operating.
  - The Dynamic Stability Control (DSC) is operating.
  - The steering wheel is being operated abruptly.
  - · Mazda Radar Cruise Control (MRCC) is operating.
- · SPORT mode is canceled in the following cases.
  - The vehicle power is switched off.
  - · Mazda Radar Cruise Control (MRCC) is set.

# **Power Steering**

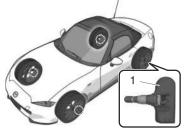
The power steering operates while the engine is operating. Even when the engine is stopped or

Even when the engine is stopped or the power steering system does not operate, steering is possible but the operation may feel heavier compared to normal.

### Tire Pressure Monitoring System (TPMS)

The TPMS monitors the air pressure of each tire and informs the driver of a decrease in the tire air pressure when it becomes lower than the specified air pressure.

For the TPMS, the air pressure data sent from the tire pressure sensors installed on each wheel via radio signal is received by the receiver unit in the vehicle to monitor the tire pressures.



1. Tire pressure sensor

### Warning and Cautions for Using the Tire Pressure Monitoring System (TPMS)

# 

#### Do not drive the vehicle at high

# speeds if the TPMS warning light (!!) is turned on or flashing.

Driving the vehicle at high speeds while the TPMS warning light is turned on or flashing is dangerous because the brake performance and the steering wheel operability will be reduced. If the vehicle is driven at high speeds or the brakes are suddenly applied, it could lead to an accident. Gradually apply the brake and reduce the vehicle speed.

#### Do not ignore the TPMS warning light

when it is turned on or flashing. Continuing to drive the vehicle while ignoring the illumination/flashing of the TPMS warning light is dangerous because a tire may burst which could lead to an accident. Take appropriate measures as soon as possible.

# **CAUTION**

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. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure 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) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale 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 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.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. 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 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 from functioning properly. Always check the TPMS 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 to continue to function properly.

To avoid false readings, the system samples for a little while before indicating a problem. As a result it will not instantaneously register a rapid tire deflation or blow out.

## How to Use the Tire Pressure Monitoring System (TPMS)

#### Check the tire pressure

The current tire pressure can be checked on the center display. Select "Information"  $\rightarrow$  "Vehicle Status Monitor"  $\rightarrow$  "Maintenance Details" on the Mazda Connect home screen, and then check the current tire pressure, or consult an Authorized Mazda Dealer.

#### Low tire pressure warning

When a tire pressure of the specified air pressure or lower is detected, the

TPMS warning light (!!) turns on.

#### Action

 Adjust the tire pressure to the appropriate pressure. Refer to the Tires on page 10-68.

# 

If the tire pressure is adjusted when the tire is warm, the tire pressure may lower below the specified pressure after cooling and the warning light may turn on. Adjust the air pressure of the tires when they are cold.

- Make sure that the TPMS warning light (!!) is turned off.
- 3. If the TPMS warning light (!) does not turn off, drive the vehicle for 3 minutes or longer at a speed of 25 km/h (16 mph) or faster.
- 4. Make sure that the TPMS warning light (!!) is turned off.

If the TPMS warning light remains on even after adjusting the tire pressure, there is a possibility that the tire is flat.

# 

When inspecting/adjusting the tire pressures, do not apply excessive force to the air valve of the tire pressure sensor. Otherwise, the tire pressure sensor could be damaged.

#### When changing tires and wheels

When changing the tires or wheels (such as installing winter tires), it will be necessary to register the ID signal code of the tire pressure sensor to the TPMS.

Have an Authorized Mazda Dealer do the registration or register the ID signal codes of the tire pressure sensors using the following procedure.

#### NOTE

The tire pressure sensors on each wheel have a unique ID signal code. For the TPMS to operate correctly, the ID signal codes of the tire pressure sensors need to be registered to the system.

- 1. Wait more than 19 minutes after changing a tire or wheel.
- 2. After more than 19 minutes have passed, drive the vehicle at a speed of 25 km/h (16 mph) or faster for 3 minutes or longer. While driving, the ID signal codes of the tire pressure sensors are automatically registered.

#### NOTE

If you drive the vehicle within 19 minutes of changing a tire or wheel,

the TPMS warning light (!) will flash because the ID signal codes for the tire pressure sensors were not registered. In this case, stop the vehicle and register the ID signal codes of the tire pressure sensors following the procedure.

#### When replacing tires and wheels

# 

- When replacing the tires and wheels, consult an Authorized Mazda Dealer Otherwise, the tire pressure sensors could be damaged when replacing them.
- Do not install non-genuine wheels. If wheels other than genuine ones are installed, it may not be possible to install the tire pressure sensors.

When replacing a tire or wheel, always install the tire pressure sensor. The following combinations of tires, wheels, or tires and wheels are possible.

- The tire pressure sensor from the old wheel is removed and it is installed to the new wheel.
- Only a tire is replaced without replacing the tire pressure sensor and wheel.
- A new tire pressure sensor is installed to a new wheel.

#### NOTE

When installing a new tire pressure sensor, the ID signal code for the tire pressure sensor needs to be registered. For details on purchasing a tire pressure sensor and registering the ID signal of the tire pressure sensor, consult an Authorized Mazda Dealer.

# Warnings and Cautions for When the Refueling

# **WARNING**

# Always heed the following when refueling.

- ≻ Turn off the engine.
- Keep sparks and flames away from the fuel-filler port.
- Wipe off any spilled fuel as soon as possible.

Otherwise, it could cause a fire or explosion because fuel or fuel vapor could ignite easily.

#### Before refueling, make sure to discharge the static electricity in your body by touching a metal object on the vehicle body.

An electrical discharge could ignite the fuel or cause serious burns.

# Always heed the following while refueling.

- Always refuel the vehicle by yourself and do not allow other people to come close to the fuel-filler port.
- Do not go back inside the cabin or touch a person or object charged with static electricity.
- Do not use any electronic devices such as a mobile phone or Smartphone.

It could ignite the fuel or cause serious burns caused by the charged static electricity in your body again.

When opening/closing the fuel-filler cap, always turn the fuel-filler cap by holding the knob of the fuel-filler cap.

An electrical discharge could ignite the fuel or cause serious burns.

# Slowly open the fuel-filler cap, wait for any hissing to stop, then open the cap.

If the fuel-filler cap is opened quickly, fuel may spray out and cause a fire. Spraying fuel can also be harmful if it gets in the eyes or on the skin.

#### Do not breath fuel vapors.

Toxic substances might be included in the fuel.

# Insert the refueling nozzle into the fuel-filler port securely.

If the nozzle is not inserted sufficiently, it may delay the auto stop when the tank is full, resulting in the fuel spilling over and a possible fire.

# Do not continue fueling after it is stopped automatically.

If you continue fueling, fuel may spill over causing a fire.

# Do not pull out the refueling nozzle immediately after the fuel is stopped automatically.

The fuel remaining in the refueling nozzle may spill out and cause a fire.

#### Securely close the fuel-filler cap.

If the fuel-filler cap is not closed securely, fuel may leak while driving the vehicle which could cause a fire.

# **CAUTION**

Follow the fueling instructions indicated at the gas station when refueling.

- Always close the door and windows when refueling. If a fire occurs with the doors or windows open, the flames may spread into cabin.
- Do not spill fuel on the vehicle while refueling. It may cause discoloration, stains, or paint damage.
- Do not use any non-genuine fuel-filler cap. Use of a non-genuine fuel-filler cap may lead to a malfunction in the fuel system or emission system.

#### (U.S.A. and Canada)

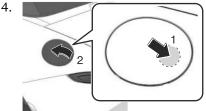
It may also cause the check engine light in the instrument cluster to illuminate.

- When using an automatic car wash or a high water pressure car wash, make sure that the fuel-filler lid is closed and lock the doors. Otherwise, the fuel-filler lid may open unexpectedly and become damaged.
- ►(U.S.A. and Canada)

If the check fuel-filler cap warning light illuminates, the fuel-filler cap may not be properly installed. If the warning light illuminates, park your vehicle safely off the right-of-way, remove the fuel-filler cap and reinstall it correctly. After the cap has been correctly installed, the fuel-filler cap warning light may continue to illuminate until a number of driving cycles have been completed. A drive cycle consists of starting the engine (after four or more hours with the engine off) and driving the vehicle on city and highway roads. Continuing to drive with the check fuel-filler cap warning light illuminated could cause the check engine light to illuminate as well.

### Refueling

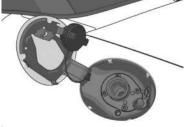
- 1. Close both the doors, windows, and the trunk lid.
- 2. Switch the vehicle power OFF.
- 3. Unlock the driver's door.



5. Slowly turn the fuel-filler cap. The fuel-filler cap opens.



6. Place the fuel-filler cap on the fuel-filler lid holder.



- Ì
- Insert the refueling nozzle all the way and begin refueling.
- 8. Turn the fuel-filler cap until a click sound is heard.
- 9. Close the fuel-filler lid.

#### NOTE

If the fuel-filler lid is closed after locking the doors, the fuel-filler lid will not be locked.

### **Fuel Requirements**

Vehicles with catalytic converters or oxygen sensors must use ONLY UNLEADED FUEL, which will reduce exhaust emissions and keep spark plug fouling to a minimum.

To achieve maximum engine performance, use the specified fuel.

Fuel	Octane Rating <sup>*1</sup> (Anti-knock index)
Premium unleaded fuel	91 [(R+M)/2 method] or above (96 RON or above)

Regular unleaded fuel with an octane rating from 87 to 90 (91 to 95 RON) can be used, but this will reduce performance slightly, such as reduced engine output, and engine knocking.

Fuel with a rating lower than 87 octane (91 RON) will negatively affect the emission control system performance and could also cause engine knocking and serious engine damage.

<sup>\*</sup>1 U.S. federal law requires that octane ratings be posted on gas station pumps.

# **CAUTION**

► USE ONLY UNLEADED FUEL.

Leaded fuel is harmful to the catalytic converter and oxygen sensors and will lead to deterioration of the emission control system and or failures.

- ➤ This vehicle can only use oxygenated fuels containing no more than 10 % ethanol by volume. Damage to the vehicle may occur when ethanol exceeds this recommendation, or if the gasoline contains any methanol. Stop using gasohol of any kind if your vehicle engine is performing poorly.
- Never add fuel system additives other than a Mazda genuine product, otherwise the emission control system could be damaged. Consult an Authorized Mazda Dealer for details.

Gasoline blended with oxygenates such as alcohol or ether compounds are generally referred to as oxygenated fuels. The common gasoline blend that can be used with your vehicle is ethanol blended at no more than 10 %. Gasoline containing alcohol, such as ethanol or methanol, may be marketed under the name "Gasohol".

Vehicle damage and drivability problems resulting from the use of the following may not be covered by the warranty.

- · Gasohol containing more than 10 % ethanol.
- · Gasoline or gasohol containing methanol.
- · Leaded fuel or leaded gasohol.

### Warnings and Cautions for Using the Fuel Requirements

# **A** CAUTION

- USE ONLY UNLEADED FUEL. Leaded fuel is harmful to the catalytic converter and oxygen sensors and will lead to deterioration of the emission control system and or failures.
- This vehicle can only use oxygenated fuels containing no more than 10 % ethanol by volume. Damage to the vehicle may occur when ethanol exceeds this recommendation, or if the gasoline contains any methanol. Stop using gasohol of any kind if your vehicle engine is performing poorly.
- Never add fuel system additives other than a Mazda genuine product, otherwise the emission control system could be damaged. Consult an Authorized Mazda Dealer for details.

### **Emission Control System**

This vehicle is equipped with an emission control system (the catalytic converter is part of this system) that enables the vehicle to comply with existing exhaust emissions requirements.

#### NOTE

- Under U.S. federal law, any modification to the original-equipment emission control system before the first sale and registration of a vehicle is subject to penalties. In some states, such modification made on a used vehicle is also subject to penalties.
- While the engine is off, the sound of a valve opening and closing can be heard at the rear of the vehicle, however this does not indicate an abnormality. The vehicle has a self-checking device and it operates while the engine is off.

### Warnings and Cautions for Using the Emission Control System

# A WARNING

# Never park over or near anything flammable.

Parking over or near anything flammable, such as dry grass, is dangerous. Even with the engine is turned off, the exhaust system remains very hot after normal use and could ignite anything flammable. A resulting fire could cause serious injury or death.

# 

Ignoring the following precautions could cause lead to accumulate on the catalyst inside the converter or cause the converter to get very hot. Either condition will damage the converter and cause poor performance.

- ► USE ONLY UNLEADED FUEL.
- Do not drive your Mazda with any sign of engine malfunction.
- Do not coast if the vehicle power is switched OFF.
- Do not descend steep grades in gear if the vehicle power is switched OFF.
- Do not operate the engine at high idle for more than 2 minutes.
- Do not tamper with the emission control system. All inspections and adjustments must be made by a qualified technician.
- Do not push-start or pull-start this vehicle.

### Warnings and Cautions for Engine Exhaust (Carbon monoxide)

# WARNING

Do not drive your vehicle if you smell exhaust gas inside the vehicle: Engine exhaust gas is dangerous. This gas contains carbon monoxide (CO), which is colorless, odorless, and poisonous. When inhaled, it can cause loss of consciousness and death. If you smell exhaust gas inside the vehicle, keep all windows fully open and contact an Authorized Mazda Dealer immediately.

# Do not run the engine when inside an enclosed area:

Running the engine inside an enclosed area, such as a garage, is dangerous. Exhaust gas, which contains poisonous carbon monoxide, could easily enter the cabin. Loss of consciousness or even death could occur.

**Open the windows or adjust the heating or cooling system to draw fresh air when idling the engine:** Exhaust gas is dangerous. When the vehicle is stopped with the windows closed and the engine running for a long time even in an open area, exhaust gas, which contains poisonous carbon monoxide, could enter the cabin. Loss of consciousness or even death could occur. Clear snow from underneath and around your vehicle, particularly the tail pipe, before starting the engine: Running the engine when a vehicle is stopped in deep snow is dangerous. The exhaust pipe could be blocked by the snow, allowing exhaust gas to enter the cabin. Because exhaust gas contains poisonous carbon monoxide, it could cause loss of consciousness or even death to occupants in the cabin.

# **i-ACTIVSENSE**

i-ACTIVSENSE is a collective term covering a series of advanced safety and driver support systems. i-ACTIVSENSE consists of two technologies, active safety and pre-crash safety technologies.

### Warnings and Cautions for Using the i-ACTIVSENSE



# Do not rely completely on the i-ACTIVSENSE system.

The i-ACTIVSENSE system is designed to assist the driver in safer driving by reducing the load on the driver and helping to avert collisions or reduce their severity.

Because each i-ACTIVSENSE system has its limitations, always drive carefully.

### Active Safety Technology

Active safety technology supports driver's safer driving and helps to prevent accidents from occurring. Active safety technology includes driver awareness support systems and driving support systems.

#### **Driver Awareness Support Systems**

Driver awareness support systems assist in the recognition of roads, signs, vehicle surroundings, and driver fatigue.

Driver awareness support systems include the following systems.

#### Nighttime visibility

Adaptive Front Lighting System (AFS).....page 5-100 High Beam Control System (HBC)...... page 5-101

#### Left/right side and rear detection

Lane Departure Warnin			
(LDWS)	page 5-104		
Blind Spot Monitoring (BSM)			
	page 5-106		

#### Road sign recognition

Traffic Sign Recognition System (TSR).....page 5-110

#### Inter-vehicle distance recognition

Distance & Speed Alert (DSA) .....page 5-113

# Rear obstruction detection when leaving a parking space

Rear Cross Traffic Alert (RCTA).....page 5-117

#### Driver fatigue detection

Driver Attention Alert (DAA) ......page 5-115

#### **Driver Support Systems**

Driver support systems assist in acceleration, deceleration, and steering operations while driving. Driver support systems include the following systems.

#### Inter-vehicle distance

Mazda Radar Cruise Control (MRCC)..... page 5-119

## Pre-crash Safety Technology

Pre-crash safety technology is designed to assist in collision avoidance in situations where it is difficult for the driver to avert it, and to reduce damage from a collision if it occurs. Pre-crash safety technology includes the following systems.

# Collision avoidance support and damage reduction

Smart Brake Support (SBS) .....

.....page 5-129

#### **Collision damage reduction**

Secondary Collision Reduction	
page 5-13	32

### i-ACTIVSENSE Status Symbol (Warning/Risk Avoidance Support System)

The i-ACTIVSENSE status symbol (Warning/risk avoidance support system) indicates the operation status.

- Lane Departure Warning System (LDWS)
- · Blind Spot Monitoring (BSM)
- Blind Spot Monitoring (BSM) Vehicle Exit Warning
- Traffic Sign Recognition System (TSR)
- · Distance & Speed Alert (DSA)
- · Rear Cross Traffic Alert (RCTA)
- Smart Brake Support (SBS) forward detection function

#### i-ACTIVSENSE status symbol (Warning/risk avoidance support system) (white) (system standby status)

If all systems do not meet the operation conditions, or if any system has stopped functioning, the i-ACTIVSENSE status symbol (Warning/risk avoidance support

system) (white) (\*1/(\*) is displayed.

#### i-ACTIVSENSE status symbol (Warning/risk avoidance support system) (green) ((system operation status)

If any system meets the operation conditions, the i-ACTIVSENSE status symbol (Warning/risk avoidance

support system) (green)  $\textcircled{}^{1}/\textcircled{}$  is displayed.

#### Driving i-ACTIVSENSE

#### NOTE

Even if the i-ACTIVSENSE status symbol (Warning/risk avoidance support system) (green) is displayed, systems which do not meet the operation conditions will not operate.

#### i-ACTIVSENSE status symbol (Warning/risk avoidance support system) (amber) () () (system malfunction status)

If any system has a malfunction, the i-ACTIVSENSE status symbol (Warning/risk avoidance support

system) (amber)  $(1/1)^{1/1}$  is displayed.

#### i-ACTIVSENSE OFF symbol (Warning/

risk avoidance support system)

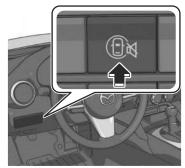
### (system stop status)

If all systems are turned off using Mazda Connect, the i-ACTIVSENSE OFF symbol (Warning/risk avoidance

support system) <sup>\*1</sup>/ <sup>\*1</sup>/ <sup>\*1</sup> is displayed.

\*1 Displays when i-ACTIVSENSE warning sound is switched off. Refer to How to Use the i-ACTIVSENSE mute switch on page 5-90.

# How to Use the i-ACTIVSENSE mute switch<sup>\*</sup>



When the i-ACTIVSENSE mute switch is pressed while the following systems are operating, the warning sound deactivates.

- Lane Departure Warning System (LDWS)
- Blind Spot Monitoring (BSM)
- Blind Spot Monitoring (BSM) Vehicle Exit Warning
- Traffic Sign Recognition System (TSR)
- Rear Cross Traffic Alert (RCTA)

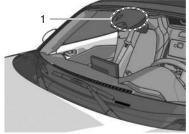
Press the i-ACTIVSENSE mute switch again to return to the previous operation status.

#### NOTE

If the vehicle power is switched OFF with each system warning sound turned off using the i-ACTIVSENSE mute switch, each system automatically turns on the next time the vehicle power is switched ON.

# Forward Sensing Camera (FSC)<sup>\*</sup>

The Forward Sensing Camera (FSC) determines the conditions ahead of the vehicle and detects the white (yellow) lines on the traffic lane.



1. Forward Sensing Camera (FSC)

The following systems utilize the Forward Sensing Camera (FSC).

- · High Beam Control System (HBC)
- Lane Departure Warning System (LDWS)
- Traffic Sign Recognition System (TSR)
- Distance & Speed Alert (DSA)
- Driver Attention Alert (DAA)
- Mazda Radar Cruise Control (MRCC)
- Smart Brake Support (SBS) forward drive detection

# **WARNING**

#### Do not modify the suspension:

If the vehicle height or inclination is changed, the system will not be able to correctly detect vehicles ahead. This will result in the system not operating normally or mistakenly operating, which could cause a serious accident.

# **CAUTION**

Heed the following cautions to operate the system correctly.

- Do not hit or apply strong force to the Forward Sensing Camera (FSC) or the area around it. If the Forward Sensing Camera (FSC) received a strong impact, stop using the following systems and consult an Authorized Mazda Dealer.
  - ≻ High Beam Control System (HBC)
  - Lane Departure Warning System (LDWS)
  - Traffic Sign Recognition System (TSR)
  - Distance & Speed Alert (DSA)
  - Driver Attention Alert (DAA)
  - Mazda Radar Cruise Control (MRCC)
  - Smart Brake Support (SBS) forward drive detection
- Do not remove the Forward Sensing Camera (FSC) cover.
- Be careful not to scratch the Forward Sensing Camera (FSC) lens or allow it to get dirty. Also, do not take the camera apart. Otherwise, it may cause a malfunction or mis-operation.
- The direction of the Forward Sensing Camera (FSC) has been finely adjusted, therefore do not change the installation position or remove the Forward Sensing Camera (FSC). Otherwise, it may cause a malfunction or mis-operation.
- Consult an Authorized Mazda Dealer regarding cleaning of the camera lens.
- Do not place objects on the dashboard which reflect light.

- Do not apply accessories, stickers, or film to the windshield near the Forward Sensing Camera (FSC). If the area in front of the Forward Sensing Camera (FSC) lens is obstructed, it will cause the system to not operate correctly even if it is transparent.
- Always keep the windshield glass around the Forward Sensing Camera (FSC) clean by removing dirt or fogging. If the windshield is fogged, press the windshield defroster switch.
- The Forward Sensing Camera (FSC) includes a function for detecting a soiled windshield and informing the driver, however, depending on the conditions, it may not detect plastic shopping bags, water or snow on the windshield. In such cases, the system cannot accurately determine a vehicle or obstruction in front and may not be able to operate normally. Always drive carefully and pay attention to the road ahead.
- When cleaning the windshield, do not allow glass cleaners or similar cleaning fluids to get on the Forward Sensing Camera (FSC) lens. In addition, do not touch the Forward Sensing Camera (FSC) lens.
- Consult an Authorized Mazda Dealer regarding cleaning the interior side of the windshield around the Forward Sensing Camera (FSC).
- If there are cracks or damage caused by flying gravel or debris on the windshield, always have the windshield replaced. Consult an Authorized Mazda Dealer before replacing the windshield.
- Consult an Authorized Mazda Dealer before doing repairs around the Forward Sensing Camera (FSC).

- When doing repairs around the rearview mirror, consult an Authorized Mazda Dealer.
- Use the specified tire size and the same type of tire on all 4 wheels. In addition, do not use tires with significantly different wear patterns or tire pressures on the same vehicle (including temporary spare tire).

#### NOTE

- If the Forward Sensing Camera (FSC) does not function normally due to fog or the vehicle being driven towards the sun, the functions related to the Forward Sensing Camera (FSC) are temporarily stopped. In this case, the following warning indications turn on. However, this does not indicate a problem.
  - · HBC warning indication
  - i-ACTIVSENSE warning indication
     SBS OFF indication
- If the Forward Sensing Camera (FSC) does not function normally due to high temperatures, the functions related to the Forward Sensing Camera (FSC) are temporarily stopped. In this case, the following warning indications turn on. However, this does not indicate a problem. Cool down the area around the Forward Sensing Camera (FSC) such as by turning on the air conditioner.
  - · HBC warning indication
  - · i-ACTIVSENSE warning indication
  - SBS OFF indication

• When the Forward Sensing Camera (FSC) detects that the windshield is dirty or foggy, the functions related to the Forward Sensing Camera (FSC) are temporarily stopped. In this case, the following warning indications turn on. However, this does not indicate a problem. Remove the dirt from the windshield or press the windshield defroster switch.

- · HBC warning indication
- · i-ACTIVSENSE warning indication
- $\cdot$  SBS OFF indication

#### **Detection of pedestrians**

The Forward Sensing Camera (FSC) detects pedestrians when all of the following conditions are met.

- The height of a pedestrian is about 1 meter (3.3 ft) to 2 meters (6.6 ft).
- The outline of a pedestrian is recognized such as the head, both shoulders, or the feet.

The Forward Sensing Camera (FSC) may not be able to detect pedestrians when any of the following conditions is met.

- · There are multiple pedestrians.
- A pedestrian is close to a separate object.
- A pedestrian is crouching, lying, or slouching.
- A pedestrian suddenly jumps into the road.
- A pedestrian is holding something (such as an open umbrella or large baggage).
- A pedestrian blends into the background (such as in a dark location at night or by wearing clothes matching the background color).

#### **Detection of objects**

When any of the following conditions is met, the Forward Sensing Camera (FSC) may not be able to detect target objects correctly, and each system may not operate normally.

- You are driving your vehicle at the same speed as the vehicle ahead.
- The headlights of your vehicle are not turned on during the night or in a tunnel.
- The target object is in the blind spot of the Forward Sensing Camera (FSC).
- A person or object bursts onto the road from the shoulder or cuts right in front of you.
- The distance between your vehicle and the target object is extremely close or extremely far.
- You change the course and approach a target object.
- The target object (vehicle ahead, white line (yellow line), sign) is dirty or worn.
- A vehicle ahead has a special shape (such as a vehicle carrier).
- A vehicle ahead is a truck with a low loading platform.
- A vehicle ahead has an extremely low or high profile.
- A vehicle ahead is outside the illumination range of the headlights.
- The illumination area of the taillights of the vehicle ahead is small.
- The taillights of a vehicle ahead are dim or turned off.
- The headlights of an on-coming vehicle are dim or turned off.
- Under bad weather conditions (rain, fog, and snow).
- Front visibility is reduced (due to a vehicle ahead casting off water, snow, or sand).

- Strong light is directed at the front of your vehicle (such as backlight and high-beam headlights).
- The surrounding area is dark (such as during the night, early evening, or early morning, or in a tunnel or indoor parking lot).
- There are light sources in the surrounding area (such as street lamps, illuminated signboards, and traffic signals).
- There are objects which reflect light (such as reflective plates and signs) in the surrounding area.
- The surrounding brightness suddenly changes (such as when entering or exiting a tunnel).
- The brightness of the headlights of your vehicle is insufficient (such as the illumination is weakened due to a dirty lens or the optical axis is deviated).
- Tires other than the specified size are used on your vehicle (such as when tire chains or temporary spare tires are used).
- The tires on your vehicle have significantly different wear.
- Foreign matter is stuck to the windshield (such as ice, fog, snow, frost, raindrops, dirt, or a piece of plastic).
- The windshield is dirty or fogged.
- The Forward Sensing Camera (FSC) is blocked by an obstruction, causing poor forward visibility (such as when roof rails are installed to the vehicle and a long object is loaded).
- · The windshield washer is being used.
- The windshield wipers are not used when it is raining.
- Your vehicle is tilted (such as when heavy luggage is in the luggage compartment or on the rear seat).

- The vehicle is making a sharp curve, or ascending or descending a steep slope.
- The vehicle is driven on a road with sharp curves or up and down (wavy) slopes.
- The vehicle is driven on uneven roads.
- The vehicle is driven next to walls with no patterning (including fences and longitudinally striped walls).
- There is a strong reflection of light from the road surface.

# Radar Sensors

### **Radar Sensors**<sup>\*</sup>

The radar sensor detects objects by sending radio waves in a specific direction and receiving the reflected waves back.

#### Vehicle front



1. Front radar sensor\*

#### Vehicle rear



1. Rear side radar sensors<sup>\*</sup>

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- Heed the following cautions so that the radar sensors can function normally.
  - > Do not modify the suspensions.
  - Use the specified tire size and the same type of tire on all 4 wheels. In addition, do not use tires with significantly different wear patterns or tire pressures on the same vehicle (including temporary spare tire).
  - Do not spray highly pressurized water against the radar sensors or rub them strongly.

- Do not apply stickers on parts near the radar sensors.
- If foreign matter adheres to parts near the radar sensors, remove it and switch the vehicle power OFF. The foreign matter detection status is reset by switching the vehicle power OFF.
- Consult an Authorized Mazda Dealer if you need to repair, replace, or paint parts near the radar sensors.
- Do not install any parts that cover the front of the radar sensors.
- Do not replace the front radar sensor cover with anything other than a genuine product.
- If strong force is applied to parts near the radar sensors, the direction of the radar sensor may become deviated and each system may not operate normally. Stop each system immediately and have the vehicle inspected by an Authorized Mazda Dealer.

#### NOTE

• The radar sensors include a function for detecting abnormalities in the sensor, soiling of the sensor's front surface, and informing the driver. If a message appears on the screen that can be addressed, follow the directions of the message.

#### Front radar sensor

The following systems utilize the front radar sensor.

- · Distance & Speed Alert (DSA)
- Mazda Radar Cruise Control (MRCC)

#### NOTE

- When driving on roads with few vehicles ahead, a message may temporarily be displayed on the screen indicating that the front radar sensor is dirty.
- When the vehicle is driven on roads in which there is an elevated road on one side, the front radar sensor function may be restricted temporarily.
- If the lead-acid battery power is weak, the front radar sensor detection function may decrease and each system may not operate normally.
- When any of the following conditions is met, the front radar sensor may not be able to detect vehicles ahead or obstructions correctly.
  - · During inclement weather.
  - · Front visibility is reduced.
  - The vehicle is driven near facilities or objects emitting strong radio waves.
  - The rear surface of a vehicle ahead does not reflect radio waves effectively.
  - A vehicle ahead has limited areas that can reflect radio waves.
  - · Your vehicle is tilted.
  - Foreign matter is adhering to parts near the front radar sensor.
- When any of the following conditions is met, the front radar sensor may detect vehicles in the adjacent lane or surrounding obstructions, or it may not be able to detect vehicles ahead or obstructions.
  - The vehicle is entering or exiting a curve.
  - The vehicle is driven on a continuously curving road.

- The vehicle is driven on roads with repeated up and downslopes.
- The vehicle is driven on roads with narrow lanes.
- The vehicle is driven on poor roads or unpaved roads.
- The vehicle ahead enters the front radar sensor's blind spot.
- The distance to the vehicle ahead is extremely close.
- The vehicle ahead is being driven in an unstable condition.
- A vehicle suddenly comes close such as by cutting into your lane.

#### Rear side radar sensors

The following systems utilize rear side radar sensors.

- · Blind Spot Monitoring (BSM)
- Blind Spot Monitoring (BSM) Vehicle Exit Warning
- Rear Cross Traffic Alert (RCTA)

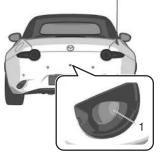
#### NOTE

- When any of the following conditions is met, the rear side radar sensors may not be able to detect target objects.
  - · During inclement weather.
  - The vehicle is driven on a sharp curve or on bumpy roads.
  - Radar sensor from an adjacent vehicle causes radio wave interference.
  - The detection range of a front side radar sensor is obstructed by an adjacent wall or vehicle, or the radar is reflected.
  - A vehicle suddenly enters the detection range from the front or side of your vehicle.
  - The target object is extremely small.
  - $\cdot$  The target object is extremely low/ high.

- A vehicle approaches while turning.
- A vehicle that has stopped suddenly starts to move.
- Multiple objects move at the same time.
- The bumper around a rear side radar sensor is deformed.
- Foreign matter is adhering to the bumper around a rear side radar sensor.
- The temperature near a rear side radar sensor is extremely hot.
- The rear side radar sensors may not detect the following target objects.
  - · Animals.
  - · Pedestrians.
  - Bicycles and small motorcycles moving at a low speed.
  - · Shopping carts.
  - Stationary objects on the road or roadside.
  - Vehicles with shapes that may not reflect radar waves.
  - A vehicle is traveling alongside your vehicle at nearly the same speed for an extended period of time.

#### Camera

The camera shoots images from the rear of the vehicle.



1. Rear camera

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- Do not disassemble, modify, or remove the camera.
- Consult an Authorized Mazda Dealer if you need to repair, replace, or paint parts near the camera.
- If strong force is applied to the camera, the camera position and the installation angle may shift. Have your vehicle inspected by an Authorized Mazda Dealer.
- Heed the following cautions so that the camera can function normally.
  - Do not modify the suspensions.
  - Always use wheels of the specified size for the front and rear wheels. Consult an Authorized Mazda Dealer for tire replacement.
- Do not apply oil film remover, organic solvents, wax or coating agents, because the camera cover is made of hard plastic. If any such agent is applied, wipe it off using a soft cloth immediately.

- Do not rub the camera cover forcefully with an abrasive or hard brush. The camera cover or lens might be scratched which might affect the images.
- If the lens of the camera is badly damaged by flying gravel, replace the camera. For the camera replacement, consult an Authorized Mazda Dealer.
- Depending on the type of target object and surrounding conditions, the distance at which the camera can detect target objects may be shortened or the target objects may not be detected. Always confirm the safety around the vehicle visually when driving.

#### NOTE

- Do not apply stickers and do not install accessories or illuminated number/character license plates to the area around the camera. Otherwise, the camera may not correctly display the surrounding conditions.
- If the camera is affected by excessive changes in temperature such as pouring hot water on the camera during cold weather, the camera may not operate normally.
- The camera includes a function for detecting abnormalities in the camera, soiling of the camera's front surface, and informing the driver. If a message appears on the screen that can be addressed, follow the directions of the message.
- If there are water droplets, snow, or mud on the camera lens, wipe it off using a soft cloth. If the camera lens is especially dirty, wash it off with mild detergent.

#### Rear camera

The following systems use the rear camera.

· Rear View Monitor

# Adaptive Front Lighting System (AFS)<sup>\*</sup>

The adaptive front lighting system (AFS) automatically adjusts the headlight beams to the left or right in conjunction with the operation of the steering wheel after the headlights have been turned on.

## How to Use the Adaptive Front Lighting System (AFS)

#### **Operating the AFS**

The AFS operates when all of the following conditions are met.

• The vehicle speed is about 2 km/h (2 mph) or higher.

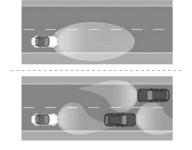
#### Turning off the AFS

The AFS can be turned off using Mazda Connect.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

# High Beam Control System (HBC)<sup>\*</sup>

The HBC determines the conditions in front of the vehicle while driving at night to automatically switch the headlights between high and low beams.



Warnings and Cautions for Using the High Beam Control System (HBC)

# **CAUTION**

- Heed the following cautions so that the HBC can operate normally.
  - $\succ$  Do not modify the suspensions.
  - Do not modify the headlight units.
  - Do not remove the Forward Sensing Camera (FSC).
- Do not rely completely on the system and switch the headlights between the high and low beams manually if necessary.

### How to Use the High Beam Control System (HBC)

#### NOTE

- The distance in which the HBC can detect objects varies depending on the surrounding conditions.
- The Forward Sensing Camera (FSC) may not be able to detect target objects correctly, and the HBC may not operate normally. Refer to Forward Sensing Camera (FSC) on page 5-91.

#### Using the HBC

When all of the following conditions are met, the HBC operates according to the surrounding conditions.

- The light switch is in the AUTO position.
- The light lever is in the neutral position (headlights are at low beams).

When the HBC operates, the HBC indicator light (green)  $\overline{\equiv} \bigcirc$  in the instrument cluster turns on.

# Switching the headlights to high beams

The HBC switches the headlights to high beams when all of the following conditions are met.

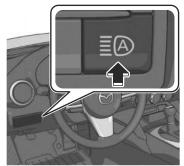
- $\cdot$  The vehicle speed is about 30 km/h (19 mph) or faster.
- The system does not detect a vehicle ahead.

# Switching the headlights to low beams

The HBC switches the headlights to low beams when any of the following conditions is met.

- $\cdot$  The vehicle speed is less than about 20 km/h (12 mph).
- When driving in areas with a continuous line of street lamps or on roads in well-lit cities and towns.
- The system detects the headlights of a vehicle ahead.

#### Canceling the HBC during operation



When the HBC is canceled, the HBC indicator light (green)  $\overline{\equiv} \bigcirc$  in the instrument cluster turns off. Press the HBC switch again to make the HBC operable.

#### NOTE

If the vehicle power is switched OFF with the HBC turned off, the HBC automatically turns on the next time the vehicle power is switched ON.

#### Turning off the HBC

The HBC can be turned off using Mazda Connect. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

# Lane Departure Warning System (LDWS)<sup>\*</sup>

The LDWS notifies the driver that the vehicle might be deviating from its lane. If there is a possibility of your vehicle deviating from the vehicle lane, a screen display and a warning sound notify the driver of the danger.

<u> </u>	\	-9

### Warnings and Cautions for Using the Lane Departure Warning System (LDWS)

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#### Do not rely completely on the LDWS.

- The LDWS has limitations. Do not rely completely on the system and always stay on course using the steering wheel.
- The LDWS is not designed to compensate for a driver's lack of caution and relying on the system could lead to an accident.

# **CAUTION**

Heed the following cautions so that the LDWS can operate normally.

- Do not modify the suspensions.
- Always use wheels of the specified size for the front and rear wheels. Consult an Authorized Mazda Dealer for tire replacement.

### How to Use the Lane Departure Warning System (LDWS)

#### LDWS operates

The LDWS operates when all of the following conditions are met and the system determines that there is a possibility that your vehicle may deviate from its lane.

- The vehicle speed is about 64 km/h (40 mph) or faster.
- The system detects white (yellow) lane lines.

When the LDWS is operating, a screen display and a warning sound (steering wheel vibration and warning sound) notify the driver of the danger.

#### Instrument cluster



#### NOTE

- The LDWS operates only on the side that detects white lines (yellow lines).
- The forward sensing camera (FSC) may not be able to detect target objects correctly, and the LDWS may not operate normally.
   Refer to Forward Sensing Camera (FSC) on page 5-91.
- The LDWS warning type can be changed using Mazda Connect.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

#### LDWS is temporarily canceled

If any of the following conditions is met, the LDWS is canceled. In addition, the LDWS is automatically enabled when the condition changes and the system is operable.

- · The turn signal lever is operated.
- The accelerator pedal is operated.
- The steering wheel is operated.
- The brake pedal is depressed.

#### Turning off the warning sound

There are 2 ways to turn off the warning sound while the LDWS is operating.

- Turn off the warning sound using Mazda Connect. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.
- Turn off the warning sound using the i-ACTIVSENSE mute switch. Refer to How to Use the i-ACTIVSENSE mute switch on page 5-90.

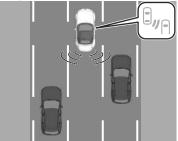
#### Turning off the LDWS

The LDWS can be turned off using the Mazda Connect. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

When the LDWS is turned off, the LDWS OFF indicator  $\frac{163}{0FF}$  turns on.

# Blind Spot Monitoring (BSM)<sup>\*</sup>

The BSM is a system that assists the driver in checking for vehicles at your rear when making a lane change. When a vehicle approaching from the rear is detected, various screen displays and warning sounds notify the driver of the danger.



#### With Vehicle Exit Warning<sup>\*</sup>

The vehicle exit warning is a system that assists the driver in checking the rear of the vehicle when exiting the vehicle. When a vehicle or bicycle approaching from the rear is detected, various screen displays and warning sounds notify the driver of the danger.

### Warnings and Cautions for Using the Blind Spot Monitoring (BSM)

# A WARNING

Always check the surrounding area visually before making a lane change. The BSM is a system to assist the driver in checking the area to the rear of the vehicle when making a lane change. Due to certain limitations with the operation of system, the BSM warning lights may not flash or it might be delayed even though a vehicle is in an adjacent lane. Always make it your responsibility as a driver to check the rear.

# Always check the surrounding area visually when getting out of the vehicle.

The vehicle exit warning is a system that assists the driver in checking the area to the rear of the vehicle when exiting the vehicle. Due to certain limitations with the operation of system, the BSM warning lights may not flash or it might be delayed even though a vehicle is in the area around your vehicle. Always make it your responsibility as a driver to check the rear.

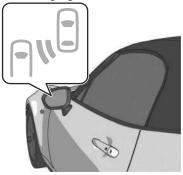
# How to Use the Blind Spot Monitoring (BSM)

#### When the BSM operates

The BSM operates when the vehicle speed is about 10 km/h (6.2 mph) or faster and the system detects an approaching vehicle.

When the BSM operates, the driver is notified of the presence of an approaching vehicle using the BSM warning lights and a screen display (white)<sup>\*1</sup>.

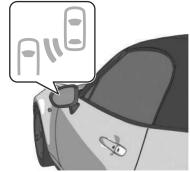
#### BSM warning light



Instrument cluster



\*1 The instrument cluster screen display (white) is displayed only when the instrument cluster is set to the i-ACTIVSENSE display. When the turn signal lever is operated in the direction in which an approaching vehicle is detected, the driver is notified of the danger by flashing of the BSM warning lights, the warning sound, and the warning indication (amber). BSM warning light



Instrument cluster



#### NOTE

- The BSM may not operate normally if any of the following conditions is met.
  - The rear side radar sensors cannot detect an object.
     Refer to Radar Sensors on page 5-95.
  - The road is on a steep slope.
  - · The road is extremely wide.

# Blind Spot Monitoring (BSM)

- You make a lane change 2 lanes or more.
- The BSM may operate with stationary objects on the road or the roadside (such as guardrails, sidewalls, parked vehicles, and outdoor air conditioner units (equipment with rotating mechanism)).
- While an accessory such as a bicycle carrier is installed to the rear of the vehicle, turn off the BSM. Otherwise, the radar's radio waves will be blocked causing the BSM to not operate normally.
- The brightness of the BSM warning lights is linked to the panel light control.

Refer to Dashboard Illumination on page 5-23.

# When the Vehicle Exit Warning operates\*

The Vehicle Exit Warning operates when all of the following conditions are met and the system detects an approaching vehicle.

- · The vehicle is stopped.
- Within 3 minutes after the vehicle power is switched OFF or the vehicle power is switched ON.

When the Vehicle Exit Warning operates, the driver is notified of the presence of an approaching vehicle using the warning lights and the instrument cluster screen display (white)<sup>\*1</sup>.

#### **BSM** warning light



#### Instrument cluster

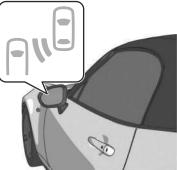


\*1 The instrument cluster screen display (white) is displayed only when the instrument cluster is set to the i-ACTIVSENSE display. However, when the vehicle power is OFF, the instrument cluster screen display (white) is not displayed.

In addition, when the door in the direction in which an approaching vehicle is detected is opened, the driver is notified of the danger by flashing of the warning lights, the warning sound, and the instrument cluster warning indication (amber).

# Blind Spot Monitoring (BSM)

#### **BSM** warning light



#### Instrument cluster



#### NOTE

- The Vehicle Exit Warning may not operate normally if any of the following conditions is met.
  - The rear side radar sensors cannot detect an object.
     Refer to Radar Sensors on page 5-95.
  - There is a parked vehicle near your vehicle.
  - · Moving objects are slow.
- A bicycle carrier is attached to the rear of the vehicle, the radar signal may be blocked and the Vehicle Exit Warning may not operate correctly.

- The Vehicle Exit Warning may operate with stationary objects on the road or the roadside (such as guardrails, sidewalls, parked vehicles, and outdoor air conditioner units (equipment with rotating mechanism)).
- The brightness of the BSM warning lights is linked to the panel light control.

Refer to Dashboard Illumination on page 5-23.

#### Turning off the warning sound

There are 2 ways to turn off the warning sound while the BSM and the Vehicle Exit Warning is operating.

- Turn off the warning sound using Mazda Connect. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.
- Turn off the warning sound using the i-ACTIVSENSE mute switch. Refer to How to Use the i-ACTIVSENSE mute switch on page 5-90.

#### Turning off the BSM and the Vehicle Exit Warning

The BSM and the Vehicle Exit Warning can be turned off using the Mazda Connect.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

## Traffic Sign Recognition System (TSR)<sup>\*</sup>

The TSR is a system to notify the driver of traffic signs by displaying traffic signs on the screen which are recognized by the vehicle while driving.

## Warnings and Cautions for Using the Traffic Sign Recognition System (TSR)

## A WARNING

# Always check the traffic signs visually while driving.

Depending on weather and traffic sign conditions, the TSR may not recognize traffic signs or it may display them differently. Always make it your responsibility as a driver to check the actual traffic signs. Otherwise, it could result in an accident.

### How to Use the Traffic Sign Recognition System (TSR)

#### NOTE

- The TSR operates even if the SD card of the navigation system is not inserted, but a traffic sign different from the actual traffic sign may be displayed.
- The TSR may not operate normally if any of the following conditions is met.
  - The Forward Sensing Camera (FSC) does not detect traffic signs correctly. Refer to Forward Sensing Camera (FSC) on page 5-91.
  - · (Vehicles with navigation system)
    - The map has not been updated to the latest version.
    - The speed limit sign included in the map is inaccurate.
    - The map does not contain a speed limit sign.
    - The vehicle position in the navigation system is deviated.
- The TSR may display signs at the same time in any of the following patterns.
  - $\cdot$  Displays only a single traffic sign at the same time.
  - Displays a speed limit sign and conditional speed sign at the same time (when the system cannot accurately determine the conditional speed sign).
  - Displays a speed limit sign and a speed sign ahead at the same time.
  - Displays a speed limit sign and either a stop/do not enter sign at the same time.

#### Update related devices

Update the map data regularly to maintain the performance of the TSR. For updating the map data, refer to the Navigation System Owner's Manual. If the Forward Sensing Camera (FSC) needs updating, consult an Authorized Mazda Dealer.

# Speed limit signs (Including auxiliary signs) are displayed

When any of the following conditions

is met, the speed limit sign 50 recognized by the system is displayed on the screen.

- The vehicle passes a recognized sign.
- The speed limit sign stored in the navigation system is read by the system while driving.

#### NOTE

- If the system cannot recognize a speed limit sign, display of the speed limit sign stops.
- If the system does not correctly recognize any conditional sign, ...
- When the speed limit sign indication changes, a notification sound is activated. This notification sound can be turned off using Mazda Connect or the i-ACTIVSENSE mute switch. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer. Refer to How to Use the i-ACTIVSENSE mute switch on page 5-90.
- If the system recognizes a conditional speed sign such as school zone, that sign is displayed.

#### A do not enter sign is displayed

If the system recognizes a do not enter

sign, the do not enter sign 🗢 is displayed on the screen.

#### NOTE

The screen display ends after a certain amount of time has passed since the vehicle passed the sign.

#### A stop sign is displayed

When your vehicle is traveling at a certain speed or slower, the stop sign

recognized by the system is displayed on the screen.

#### NOTE

The screen display ends after a certain period of time has passed since the sign was displayed on the screen.

#### Turning off the TSR

The TSR can be turned off using the Mazda Connect.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

## Convenient Ways to Use the Traffic Sign Recognition System (TSR)

You can set an excessive speed warning to be issued when your vehicle's speed exceeds the speed indicated on the speed limit sign.

Turn on the excessive speed warning using Mazda Connect. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

If your vehicle's speed exceeds the speed on the speed limit sign, the area around the display of the speed limit

sign flashes in amber<sup>50</sup> and a warning sound is activated. In addition, if the vehicle speed continues to be excessive, it stops flashing and remains on.

The warning sound can be turned off using Mazda Connect or the i-ACTIVSENSE mute switch. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer. Refer to How to Use the i-ACTIVSENSE mute switch on page 5-90.

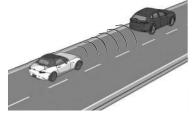
#### NOTE

The warning pattern and the warning activation timing can be changed using Mazda Connect.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

## Distance & Speed Alert (DSA)<sup>\*</sup>

The DSA is a system in which the screen display notifies the driver that the distance between your vehicle and a vehicle ahead is close.



## Warnings and Cautions for Using the Distance & Speed Alert (DSA)

# **WARNING**

Do not rely completely on the DSA. The DSA may not be able to detect a vehicle ahead depending on the type of vehicle ahead and its conditions, the weather conditions, and the road conditions. In addition, the system is not for maintaining the distance between your vehicle and a vehicle ahead. If you neglect to operate the accelerator and brake pedals correctly, it could lead to an accident. Always check the surrounding conditions and depress the brake pedal or accelerator pedal while keeping a safe distance from a vehicle ahead or a vehicle following behind you.

### How to Use the Distance & Speed Alert (DSA)

#### **Operating the DSA**

The DSA operates when the system determines that the distance between your vehicle and the vehicle ahead is close at a speed of about 30 km/h (19 mph) or faster.

When the DSA operates, the screen display notifies the driver that the distance between your vehicle and a vehicle ahead is close.



#### NOTE

- The objects which operate the DSA are four-wheeled vehicles. However, the DSA may also operate in the presence of motorcycles and bicycles.
- The DSA does not operate on stopped vehicles.
- When the speed of the vehicle ahead is extremely slow, the DSA may not operate normally.

#### Turning off the DSA

The DSA can be turned off using the Mazda Connect.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

## Driver Attention Alert (DAA)<sup>\*</sup>

The DAA is a system that can help detect driver fatigue and decreased attentiveness based on various types of vehicle information, and encourages the driver to take a rest using a screen display and warning sound.



### Warnings and Cautions for Using the Driver Attention Alert (DAA)

# WARNING

#### **Do not rely completely on the DAA.** The DAA does not prevent driver

fatigue or decreased attentiveness and over reliance on the system could lead to an accident. Drive carefully and turn the steering wheel appropriately. In addition, the system may not be able to correctly detect driver fatigue or decreased attentiveness depending on the road and driving conditions. The driver must take sufficient rest in consideration of safe driving.

### How to Use the Driver Attention Alert (DAA)

#### **Operating the DAA**

The DAA operates when all of the following conditions are met and the system detects driver fatigue or decreased attentiveness based on deviation from the learned vehicle information.

- The system detects white (yellow) lane lines.
- 60 minutes have passed since driving began.
- The vehicle speed is about 65 km/h to 140 km/h (41 mph to 86 mph) for more than 20 minutes.
- The system has completed an initial learning of vehicle information based on driving behavior during that driving session.

When the DAA is operating, the screen display and a warning sound will notify the driver that his/her attention level has decreased.

#### Instrument cluster



1. "Time for a Break"

#### NOTE

- Driver behavior information from this feature is not transmitted outside the vehicle. The DAA does not operate if any of the following conditions is met.
  - The vehicle is making a sharp turn.
  - The vehicle is changing lanes.

- The DAA may not operate normally if any of the following conditions is met.
  - The visibility of white (yellow) lane lines is poor.
  - The vehicle is jolted or swayed continuously by strong winds or rough roads.
- The DAA detects driver fatigue and decreased attentiveness based on vehicle information when driving the vehicle at a vehicle speed between about 65 km/h and about 140 km/h (41 mph to 86 mph) for about 20 minutes. The learned vehicle information is reset and driver behavior information deleted when any of the following conditions is met.
  - The vehicle is stopped for 15 minutes or longer.
  - The vehicle is driven at less than about 65 km/h (41 mph) for about 30 minutes.
  - $\cdot$  The vehicle power is switched OFF.
- After the DAA has displayed the first message encouraging rest, it does not display the next one until 60 minutes have passed.

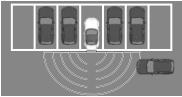
#### Turning off the DAA

Turn off the DAA using Mazda Connect.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

## Rear Cross Traffic Alert (RCTA)<sup>\*</sup>

The RCTA assists the driver in checking the area to the rear of the vehicle, such as while reversing out of a parking space. When a vehicle approaching from the rear on the left or right is detected, various screen displays and warning sounds notify the driver of the danger.



## Warnings and Cautions for Using the Rear Cross Traffic Alert (RCTA)

# WARNING

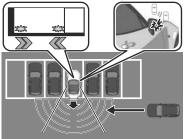
**Do not rely completely on the RCTA.** The RCTA is a system to assist the driver in checking the area to the rear of the vehicle while reversing. Due to certain limitations with the operation of the system, the BSM warning light may not flash or it might be delayed even though a vehicle is at the rear of your vehicle. Always make it your responsibility as a driver to check the rear.

### How to Use the Rear Cross Traffic Alert (RCTA)

#### **Operating the RCTA**

RCTA operates when the system detects a vehicle approaching from the rear while your vehicle is reversing.

When the RCTA operates, the driver is notified of the danger by flashing of the BSM warning lights, a warning indication, and a warning sound.



#### NOTE

- The RCTA may operate with stationary objects on the road or the roadside (such as guardrails, sidewalls, parked vehicles, and outdoor air conditioner units (equipment with rotating mechanism)).
- The RCTA may not operate normally if any of the following conditions is met.
  - The rear side radar sensors cannot detect an object.
     Refer to Radar Sensors on page 5-95.
  - The vehicle speed when reversing is about 15 km/h (9 mph) or faster.
  - A vehicle is approaching directly from the rear of your vehicle.
  - A vehicle is approaching at an angle from the rear of your vehicle.

- While an accessory such as a bicycle carrier is installed to the rear of the vehicle, turn off the RCTA. Otherwise, the radar's radio waves will be blocked causing the RCTA to not operate normally.
- The brightness of the BSM warning lights is linked to the panel light control.

Refer to Dashboard Illumination on page 5-23.

#### Turning off the warning sound

There are 2 ways to turn off the warning sound while the RCTA is operating.

- Turn off the warning sound using Mazda Connect. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.
- Turn off the warning sound using the i-ACTIVSENSE mute switch. Refer to How to Use the i-ACTIVSENSE mute switch on page 5-90.

#### Turning off the RCTA

The RCTA can be turned off using the Mazda Connect. Set using "Settings" on the Mazda

Connect home screen or consult an Authorized Mazda Dealer.

## Mazda Radar Cruise Control (MRCC)<sup>\*</sup>

MRCC is a system that reduces load on the driver through constant speed and headway control. The function performs headway control to maintain the distance with a vehicle ahead at a constant preset speed without you having to depress the accelerator or brake pedal. Warnings and Cautions for Using the Mazda Radar Cruise Control (MRCC)

## 

#### Do not rely completely on the MRCC.

The MRCC may not be able to detect a vehicle ahead depending on the type of vehicle ahead and its conditions, the weather conditions, and the road conditions. Additionally, the system might be unable to decelerate sufficiently if the vehicle ahead applies the brakes suddenly or another vehicle cuts into your lane, which could result in an accident.

Always check the surrounding conditions and depress the brake pedal or accelerator pedal while keeping a safe distance from a vehicle ahead or a vehicle following behind you.

# Do not use the MRCC under the following conditions. Otherwise, it may result in an accident.

- The vehicle is driven on roads other than highways.
- The vehicle is driven on roads with sharp curves or with heavy traffic where sufficient distances between vehicles cannot be kept.
- The vehicle is driven on roads where acceleration and deceleration are frequently repeated.
- The vehicle is exiting the main lane on an expressway to enter an interchange, a rest area, or a parking area.

- The vehicle is driven on slippery roads such as icy roads, snow-covered roads, and unpaved roads.
- The vehicle is driven on a long downslope.
- The vehicle is driven on a steep slope.
- A two-wheeled vehicle such as a motorcycle or bicycle is traveling ahead.

# Switch the MRCC off when it is not being used.

Leaving the MRCC on when it is not in use is dangerous as it could operate unexpectedly, resulting in an accident.

#### When stopping the vehicle by MRCC-controlled braking, always depress the brake pedal. (Automatic transmission vehicles only)

The MRCC follows the vehicle ahead and applies MRCC-controlled braking until the vehicle comes to a stop, however, it does not hold the vehicle stopped. Therefore, getting out of the vehicle after stopping while the stop hold control is operating is dangerous as the vehicle may move unexpectedly and result in an accident.

When stopping the vehicle using the MRCC-controlled braking, always depress the brake pedal.

# **A** CAUTION

- If the vehicle is towed or you are towing something, switch the MRCC off.
- ➤ Turn off the MRCC when the vehicle is running on a chassis roller.

### How to Use the Mazda Radar Cruise Control (MRCC)

#### MRCC operation conditions

The MRCC can be set when all of the following conditions are met.

#### (Manual transmission vehicle)

- $\cdot$  The brake pedal is not depressed.
- The vehicle speed is about 30 km/h (19 mph) to 145 km/h (90 mph).
- $\cdot$  The clutch pedal is not depressed.

#### (Automatic transmission vehicle)

- The brake pedal is not depressed.
- The vehicle speed is about 0 km/h (0 mph) to 145 km/h (90 mph).

#### Setting the MRCC

1. Press the MRCC switch to turn the system on.



When the system is on, the MRCC standby indication (white) a is displayed on the screen.

- 2. Accelerate to the desired speed.
- 3. Set the vehicle speed by pressing the RES switch up (SET+) or down (SET-).



Constant speed driving starts when the vehicle speed is set. In addition, the set speed is displayed on the screen, and the MRCC standby indication (white) and the MRCC standby indication (green)

If a vehicle ahead is detected while traveling at a constant speed, the system switches to headway control. The vehicle ahead indication is displayed on the screen while in headway control.

Driving condition	Instrument cluster display	
Driving condition	i-ACTIVSENSE display	Other than i-ACTIVSENSE display
During travel at constant speed		イムト 100-①
During travel under head- way control		<b>100</b> − <b>0</b>

#### 1. Set speed

2. Vehicle ahead indication

#### NOTE

- If there is a structure on the road or an obstruction at a low height off the ground in front of the vehicle, the system may recognize it as a vehicle ahead.
- Acceleration and deceleration by accelerator pedal operation takes priority while traveling at a constant speed or in headway control. When the accelerator pedal is released, the vehicle returns to driving at a constant speed or headway control at the set speed.
- If a vehicle ahead is traveling at an extremely low speed, the system may not detect it correctly.
- While driving using the MRCC, intended engine braking is not applied even if the selector lever/shift lever is operated.
- The brake lights turn on while the brakes are operating by the MRCC control.
- The MRCC is also turned off automatically when the vehicle power is switched OFF.

- If the distance between vehicles control is disabled using Mazda Connect, the system switches to the cruise control. At this time, the MRCC switch functions as the cruise control switch.
  - Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.
  - If the vehicle power is switched OFF while the distance between vehicles control is disabled, the distance between vehicles control is enabled automatically the next time the vehicle power is switched ON.

#### (Manual transmission vehicle)

The shift-up or shift-down request display might be displayed while the MRCC is operating. When this occurs, shift gears because the gear position is not appropriate.

#### NOTE

• The MRCC may be canceled automatically if the shift up/shift down is not done even when the shift up/shift down request display is indicated. In addition, the engine may be damaged or the engine may stall.

#### Changing the set vehicle speed

#### Changing the set vehicle speed using the RES switch

Press the RES switch up (SET+) or down (SET-) to the desired speed.

- Press and release immediately: 1 km/h (1 mph)
- Press and hold: 10 km/h (5 mph)

#### Changing the set vehicle speed using the accelerator pedal

Depress the accelerator pedal until the vehicle speed reaches the desired speed, then press the RES switch up (SET+) or down (SET-).

# Reading the set vehicle speed from the speed limit sign using the RES switch (Speed Limit Assist only)

Press the RES switch when the speed limit sign set indication **RES** turns on.

# **CAUTION**

- ➤ The function which recognizes speed limit signs has limitations. Always check the set vehicle speed that was read.
- Set the speedometer display unit to the same unit as the speed limit sign. Differing units will capture speeds not intended by the driver.

#### NOTE

 $\cdot$  The Speed Limit Assist operates only when the navigation system's SD card is inserted.

#### Driving Mazda Radar Cruise Control (MRCC)

- The Speed Limit Assist uses the Traffic Sign Recognition system (TSR). Refer to Traffic Sign Recognition System (TSR) on page 5-110.
- The Speed Limit Assist cannot read speeds of less than 30 km/h (19 mph).
- Set vehicle speeds read from speed limit signs can be adjusted. Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.
- The Speed Limit Assist can be turned off.
- Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

#### Setting the distance-between-vehicles during headway control

1. Press the CNCL switch up (longer distance) or down (shorter distance).



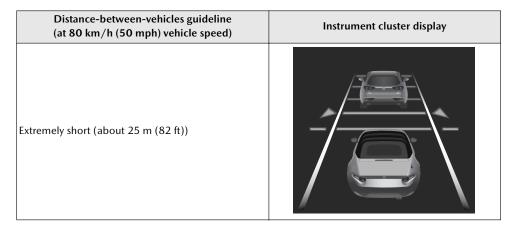
#### MRCC is not operating (white)

Distance-between-vehicles guideline (at 80 km/h (50 mph) vehicle speed)	Instrument cluster display
Long (about 50 m (164 ft))	

Distance-between-vehicles guideline (at 80 km/h (50 mph) vehicle speed)	Instrument cluster display
Medium (about 40 m (131 ft))	
Short (about 30 m (98 ft))	
Extremely short (about 25 m (82 ft))	

#### MRCC is operating (green)

Distance-between-vehicles guideline (at 80 km/h (50 mph) vehicle speed)	Instrument cluster display
Long (about 50 m (164 ft))	
Medium (about 40 m (131 ft))	
Short (about 30 m (98 ft))	



#### NOTE

- The distance-between-vehicles can be set to 4 levels: Long, medium, short, and extremely short distance.
- The distance-between-vehicles differs depending on the vehicle speed, and the slower the vehicle speed, the shorter the distance.

#### **Close proximity warning**

If your vehicle approaches a vehicle ahead while in headway control, a warning sound and a display cautions you.



#### 1. "Depress Brake Pedal"

#### NOTE

The close proximity warning may not be activated in the following cases.

- $\cdot$  The vehicle is driven at the same speed as the vehicle ahead.
- · Directly after the MRCC is set.
- Immediately after the accelerator pedal is released.
- · Another vehicle cuts into the driving lane.
- $\cdot$  Do not use the MRCC under conditions in which the close proximity warnings are frequently activated.

#### The MRCC is canceled temporarily

If any of the following conditions is met, the MRCC is canceled temporarily.

#### Driving Mazda Radar Cruise Control (MRCC)

- $\cdot$  The brake pedal is depressed.
- The CNCL switch is pressed one time.
- $\cdot$  The DSC has operated.
- The Smart Brake Support (SBS) has operated.
- The front radar sensors cannot detect target objects.
- The parking brake is applied.
- $\cdot$  Any door is opened.
- The driver's seat belt is unfastened.
- The frequency of the braking operation by the MRCC is high.
- · (Automatic transmission vehicle)
  - The vehicle is stopped by MRCC-controlled braking.
- · (Manual transmission vehicle)
  - $\cdot$  The vehicle speed decreases to less than 25 km/h (16 mph).
  - The clutch pedal is depressed for a certain period of time.
  - The shift lever is shifted to neutral (N) for a certain period of time.

If the MRCC is temporarily canceled, it will resume operation at the previously set speed by pressing the RES switch.

#### Turning off the MRCC

Press the MRCC switch.

The MRCC set indication (green) ARCC standby indication (white) at turns off, and the MRCC turns off.

## Smart Brake Support (SBS)<sup>\*</sup>

SBS is a system designed to avoid collisions and reduce damage in the event of a collision by controlling the brakes. Sensors and camera equipped on the vehicle detect objects, and operate brake control if there is a possibility of your vehicle colliding with the object.

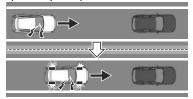
#### Forward drive detection

#### Forward detection function

The forward detection function is designed to assist the driver in avoiding collisions with objects (vehicles ahead, pedestrians, bicycles, and motorcycles) at the front and to reduce damage in the event of a collision.

If there is a possibility of your vehicle colliding with a target object at the front, you are notified of possible danger by a screen display and a warning sound. Furthermore, if the possibility of a collision increases, brake control is performed to avoid collision or reduce damage in the event of a collision.

In addition, when the driver depresses the brake pedal, the brakes are applied firmly and quickly to assist.



## Warnings and Cautions for Using the Smart Brake Support (SBS)

# WARNING

#### **Do not rely completely on the SBS.** The SBS is only designed to reduce

damage in the event of a collision. Over reliance on the system leading to the accelerator pedal or brake pedal being mistakenly operated could result in an accident.

# Heed the following cautions so that the SBS can operate normally.

- Do not modify the suspensions.
- Handle the Forward Sensing Camera (FSC) appropriately. Otherwise, the Forward Sensing Camera (FSC) may not be able to detect target objects, which could result in an accident. Refer to Forward Sensing Camera (FSC) on page 5-91.

# Always check the surrounding area visually.

The operation of the SBS has certain limitations. Always confirm the safety around the vehicle visually when driving.

# **A** CAUTION

- If any of the following conditions is met, turn the SBS off to prevent a mis-operation.
  - An accessory such as a bicycle carrier is installed to the rear of the vehicle.
  - The vehicle is driven on rough roads such as in areas where there is grass and foliage or off-road.

Use the specified tire size and the same type of tire on all 4 wheels. In addition, do not use tires with significantly different wear patterns on the same vehicle. If such improper tires are used, the SBS may not operate normally.

## How to Use the Smart Brake Support (SBS)

#### NOTE

During the SBS brake control, the brake pedal may move rearward or become stiff. The brakes are operating, but continue to depress the brake pedal.

# When the forward detection function operates

The forward detection function operates when all of the following conditions are met and the system determines that there is the possibility of your vehicle colliding with a target object at the front.

- (If an object is a vehicle ahead/ motorcycles)
  - The vehicle speed is about 4 km/h (3 mph) or faster.
- · (If an object is a bicycle/pedestrian)
  - The vehicle speed is about 10 km/h to 80 km/h (6.3 mph to 49 mph).
- · The DSC does not operate.

When the forward detection function operates, the driver is notified of the danger by the screen display and warning sound.

Additionally, if the vehicle speed is about 80 km/h (49 mph) or slower and the possibility of a collision increases, brake control is performed.

# Smart Brake Support (SBS)

#### Instrument cluster



1. "BRAKE!"

#### NOTE

- If any of the following conditions is met, the forward detection function may not operate normally.
  - The Forward Sensing Camera (FSC) cannot detect target objects. Refer to Forward Sensing Camera (FSC) on page 5-91.
  - When there is the possibility of a partial contact with a target object.
  - The driver deliberately performs driving operations (accelerator pedal operation, steering wheel operation, selector lever/shift lever operation, and turn signal lever operation).
- If any of the following conditions is met, the forward detection function may operate.
  - · An animal or object on the road is detected.
  - Passing an approaching vehicle while rounding a curve.
  - Vehicle is passing through a narrow gate or a gate with a low ceiling.
  - There is a metal object, bump, or a protruding object on the road.
- When the forward detection function performs brake control and the vehicle is stopped, the brakes are automatically released after about 2 seconds if the driver does not depress the brake pedal.
- · (Manual transmission vehicle)

When the forward detection function performs brake control and the vehicle is stopped, the engine stops if the driver does not depress the clutch pedal.

• The operation distance and volume of the collision warning can be changed.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

#### **Turning off the SBS**

The SBS can be turned off using the Mazda Connect. Set using "Settings" on the Mazda

Connect home screen or consult an Authorized Mazda Dealer.

When the SBS is turned off, the SBS OFF indicator at turns on.

## Secondary Collision Reduction<sup>\*</sup>

The Secondary Collision Reduction reduces secondary damage by decelerating the vehicle when it is damaged in a collision to the extent that the air bags are deployed while driving.

If a collision occurs to the extent that the air bags are deployed while driving, the hazard warning lights flash to alert surrounding vehicles and the brakes are controlled to reduce damage in the event of a collision with an obstruction or other object.

$\rightarrow$	ĊD	

## Warnings and Cautions for Using the Secondary Collision Reduction

## 

# Do not rely completely on the Secondary Collision Reduction.

- The Secondary Collision Reduction may not operate normally depending on various conditions such as the vehicle condition, component part damage condition, target object condition, weather conditions, or traffic conditions. Do not rely completely on the system and make it your responsibility as a driver to drive the vehicle.
- The functions of the Secondary Collision Reduction have limitations. If you neglect to operate the brake and accelerator pedals correctly, it could result in serious injury.

### How to Use the Secondary Collision Reduction

#### When the Secondary Collision Reduction operates

The Secondary Collision Reduction operates if the vehicle is damaged in a collision to the extent that the air bags are deployed while driving.

When the Secondary Collision Reduction operates, the system controls and applies the brakes until the vehicle stops. In addition, the hazard warning lights continue to flash.

#### NOTE

- The brake lights turn on while the brakes are operating by the system control.
- The settings for the Secondary Collision Reduction system differ depending on the grade/ specification-separate equipment.

# Secondary Collision Reduction is disabled

If any of the following conditions is met, the Secondary Collision Reduction is canceled.

- A certain period of time has passed since the system operated.
- After stopping the vehicle, the accelerator pedal is strongly depressed 3 times.

#### NOTE

• If the driver's brake pedal depression force is stronger than the system's brake control, the driver's brake operation takes priority.

- Flashing of the hazard warning lights by the system control is canceled when any of the following operations is performed.
  - Hazard warning light switch is pressed.
  - · Vehicle power is switched OFF.

## Cruise Control<sup>\*</sup>

Cruise control reduces the load on the driver by driving the vehicle at a constant speed. The vehicle is driven at the preset speed and maintaining a constant vehicle speed without the driver having to depress the accelerator or brake pedal.

## Warnings and Cautions for Using the Cruise Control

## WARNING

# Do not rely completely on the cruise control.

The functions of the cruise control have limitations. Always drive carefully by checking the safety of your surroundings and depressing the brake or accelerator pedal.

#### Do not use the cruise control under the following conditions. Otherwise, it may result in an accident.

- The vehicle is driven on roads other than highways.
- The vehicle is driven on roads with sharp curves or with heavy traffic where sufficient distances between vehicles cannot be kept.
- The vehicle is driven on slippery roads such as icy or snow-covered roads, and unpaved roads.
- The vehicle is driven on a long downslope.
- The vehicle is driven on a steep slope.

# Turn off the cruise control when not in use.

Leaving the cruise control turned on when it is not in use is dangerous as it could operate unexpectedly, resulting in an accident.

# 

Turn off the cruise control when being towed or when towing another vehicle. Turn off the cruise control when the vehicle is running on a chassis roller.

### How to Use the Cruise Control

#### Setting the cruise control

1. Press the cruise control switch to turn the system on.



When the system is on, the cruise control standby indication (white)

lis displayed.

- Accelerate the vehicle to the desired speed of 25 km/h (16 mph) or faster (minimum speed setting is 30 km/h (19 mph)).
- 3. Set the vehicle speed by pressing the RES switch up (SET+) or down (SET-).



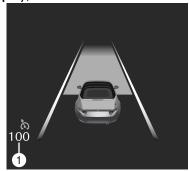
When the vehicle speed is set, the set vehicle speed is displayed on the displays and the cruise control

standby indication (white)  $\bigotimes$  changes to the cruise control set indication (green)  $\bigotimes$ .

5-135

#### Driving Cruise Control

While the cruise control is operating, the driver is notified of the operation condition by the screen display. Instrument cluster (i-ACTIVSENSE display)



1. Set speed

# Instrument cluster (Other than i-ACTIVSENSE display)



1. Set speed

#### NOTE

- The accelerator pedal operation takes priority during constant speed driving. When you release your foot from the accelerator pedal, the vehicle returns to constant speed driving at the set speed.
- (Vehicles with Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function)) If the distance between vehicles control is disabled using the Mazda Connect, the system switches to the cruise control. At this time, the MRCC switch functions as the cruise control switch.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer. If the vehicle power is switched OFF while the distance between vehicles control is disabled, the distance between vehicles control is enabled automatically the next time the vehicle power is switched ON.

- The system may not be able to maintain the set speed depending on the road conditions such as steep up or down slopes.
- When the vehicle speed is less than 20 km/h (12 mph), the cruise control is canceled. If you want to use the cruise control again, reset the cruise control.
- The brake lights turn on while the brakes are operating by the cruise control.
- (Automatic transmission vehicle) While driving the vehicle using cruise control, the cruise control will not be canceled and engine braking will not be applied even if the transmission is shifted down to a lower gear manually. If deceleration is required, lower the set vehicle speed or depress the brake pedal.

#### Changing the set vehicle speed

# Changing the set vehicle speed using the RES switch

Press the RES switch up (SET+) or down (SET-) to the desired speed.

- Press and release immediately: 1 km/h (1 mph)
- Press and hold: 10 km/h (5 mph)

# Changing the set vehicle speed using the accelerator pedal

Depress the accelerator pedal until the vehicle speed reaches the desired

speed, then press the RES switch up (SET+) or down (SET-).

# The cruise control is temporarily canceled

The cruise control is temporarily canceled when one of the following conditions is met.

- $\cdot$  The brake pedal is depressed.
- The CANCEL switch is pressed one time.
- · The DSC has operated.
- The Smart Brake Support (SBS) has operated.
- The frequency of the braking operation by the cruise control is high.
- · (Manual transmission vehicle)
  - The clutch pedal is depressed for a certain period of time.
  - The shift lever is shifted to neutral (N) for a certain period of time.

If the cruise control is temporarily canceled, it operates at the previously set speed by pressing the RES switch.

#### Turning off the cruise control

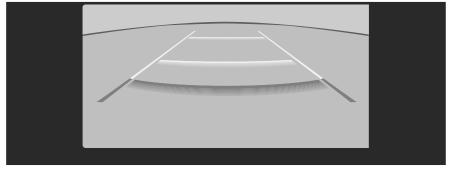
Press the cruise control switch. The cruise control standby indication

(white) 🕅 /cruise control set

indication (green) turns off and the cruise control stops.

## **Rear View Monitor**

The rear view monitor is a system which assists the driver in checking safety by displaying the conditions behind the vehicle on the center display when the vehicle is driven in reverse.



### Warnings and Cautions for Using the Rear View Monitor

# A WARNING

#### Always confirm the safety of the area around the vehicle visually when driving.

The rear view monitor is only designed to assist the driver while reversing. Images displayed on the display may differ from the actual conditions. Do not rely completely on the rear view monitor while reversing. Otherwise, the vehicle may contact an obstruction and cause an accident.

# **A** CAUTION

Do not use the rear view monitor in the following locations/situations.

- ≻ There is a bump on a road.
- The vehicle is on a road incline.
- ➤ Icy or snow-covered slippery roads.
- > Tire chains or a temporary spare tire is installed.
- The trunk lid is not fully closed.
- When the center display is cold, images may leave trails or the display might be darker than usual, making it difficult to check the vehicle surroundings. Always confirm the safety around the vehicle visually when driving.

## How to Use the Rear View Monitor

#### Displaying the rear view monitor

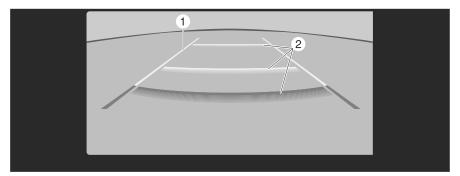
Shift the shift lever/selector lever to the R position. Images are displayed on the center display.

#### Viewing the screen

#### NOTE

- The images displayed on the center display are reversed left and right.
- Screen brightness and contrast can be adjusted.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.



	Indication	Content
1	Vehicle width guide lines (yellow)	Indicates the approximate width of the vehicle.
2	Projected vehicle path distance guide lines (red/yellow)	<ul> <li>These guide lines indicate the approximate distance to a point measured from the rear of the vehicle (from the end of the bumper).</li> <li>The red line indicates the point about 50 cm (19 in) from the rear end of the rear bumper.</li> <li>The yellow lines indicate the points about 1 m (39 in) and 2 m (78 in) from the rear end of the rear bumper.</li> </ul>

#### System problem indication

In the following cases, there might be a problem with the system. Have the vehicle inspected by an Authorized Mazda Dealer.

- "No camera signal." is displayed on the center display.
- The display on the center display does not switch to the camera image even if the selector lever is shifted to the R position.
- A portion of the display on the center display is black.

### Winter Driving

Carry emergency gear, including tire chains, window scraper, flares, a small shovel, jumper cables, and a small bag of sand or salt.

Ask an Authorized Mazda Dealer to check the following:

- Have the proper ratio of antifreeze in the radiator. Refer to Inspecting the Coolant on
- page 9-22.
- Inspect the battery and its cables. Cold reduces battery capacity.
- Use an engine oil appropriate for the lowest ambient temperatures that the vehicle will be driven in (page 9-20).
- Inspect the ignition system for damage and loose connections.
- Use washer fluid made with antifreeze—but do not use engine coolant antifreeze for washer fluid (page 9-24).

When driving on ice or in water, snow, mud, sand, or similar hazards:

- Be cautious and allow extra distance for braking.
- Avoid sudden braking and sudden maneuvering.
- Do not pump the brakes. Continue to press down on the brake pedal. Refer to Antilock Brake System (ABS) on page 5-63.
- If you get stuck, select a lower gear and accelerate slowly. Do not spin the rear wheels.
- For more traction in starting on slippery surfaces such as ice or packed snow, use sand, rock salt, chains, carpeting, or other nonslip material under the rear wheels.

#### NOTE

- Do not use the parking brake in freezing weather as it may freeze. Instead, shift to P with an automatic transmission and to 1 or R with a manual transmission. Block the rear wheels.
- Remove snow before driving. Snow left on the windshield is dangerous as it could obstruct vision. In addition, if the vehicle is driven with snow accumulated on the hood, the active hood system may not activate normally in an emergency.
- Do not open or close the soft top when the temperature is 5 °C (41 °F) or less. The material of the soft top could be damaged by freezing.
- Do not apply excessive force to a window scraper when removing ice or frozen snow on the mirror glass and windshield.
- Never use warm or hot water for removing snow or ice from windows and mirrors as it could result in the glass cracking.
- Drive slowly. Braking performance can be adversely affected if snow or ice adheres to the brake components. If this situation occurs, drive the vehicle slowly, releasing the accelerator pedal and lightly applying the brakes several times until the brake performance returns to normal.

### **Snow Tires**

## **WARNING**

#### Do Not Use Tires Other Than The Specified Size. In Addition, Do Not Mix Different Types Of Tires.

Using tires with sizes other than the specified size or mixing different tire types is dangerous. It could compromise the vehicle's driveability, resulting in an accident. In addition, it could be in violation of the law. Use the tire size indicated on the label applied to the door frame of the driver's door while the door is open. Use only the same type tires on all four wheels.

# **CAUTION**

Check local regulations before using studded tires.

#### Use snow tires on all 4 wheels

Do not go faster than 120 km/h (75 mph) while driving with snow tires. When installing winter tires, use tires of the specified size and adjust the air pressure of all the tires to the specified value. (page 10-68).

The vehicle is originally equipped with summer tires designed for optimum traction on wet and dry roads. If your vehicle is to be used on snow and ice covered roads, Mazda recommends that you replace the tires originally equipped on your vehicle with snow tires during the winter months.

### **Tire Chains**

Check local regulations before using tire chains.

# 

- Chains may affect handling.
- Do not go faster than 50 km/h (30 mph) or the chain manufacturer's recommended limit, whichever is lower.
- Drive carefully and avoid bumps, holes, and sharp turns.
- > Avoid locked-wheel braking.
- Do not use chains on a temporary spare tire; it may result in damage to the vehicle and to the tire. Your vehicle is not equipped with a factory installed temporary spare tire.
- Do not use chains on roads that are free of snow or ice. The tires and chains could be damaged.
- Chains may scratch or chip aluminum wheels.

#### NOTE

The tire pressure monitoring system may not function correctly when using tire chains.

Install the chains on the rear tires only. Do not use chains on the front tires. Please consult an Authorized Mazda Dealer.

#### Installing the chains

- 1. Secure the chains on the rear tires as tightly as possible. Always follow the chain manufacturer's instructions.
- 2. Retighten the chains after driving 1/2-1 km (1/4-1/2 mile).

# 6 Equipment to Make Cabin More Comfortable

#### Fully Automatic Climate Control

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#### **Manual Climate Control**

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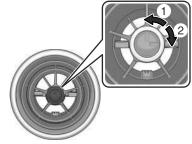
### **Air Vents**

The location and the direction airflow exits the air vents changes depending on the air vent adjustment.

# How to Use the Air Vents

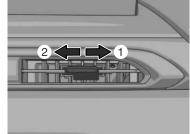
Air vent open/close Move the knob to the fully open or fully closed direction.

#### **Driver's Side Vents**



- 1. Open
- 2. Close

#### **Passenger's Side Vents**



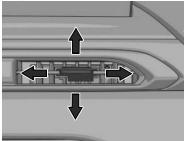
- 1. Open
- 2. Close

#### Airflow direction adjustment

#### **Driver's Side Vents**

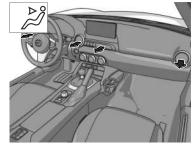


#### Passenger's Side Vents

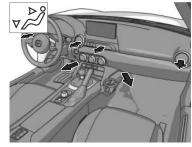


#### Airflow selection

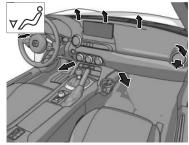
#### **Dashboard Vents**

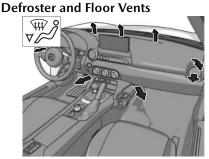


### **Dashboard and Floor Vents**

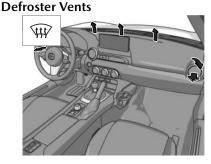








#### \_



# Fully Automatic Climate Control System<sup>\*</sup>

The following functions are automatically controlled according to the set temperature.

- · Airflow temperature control
- · Airflow amount control
- · Airflow mode switching
- · Recirculate/fresh air mode switching
- Air conditioning (cooling/ dehumidifying functions) on/off

#### NOTE

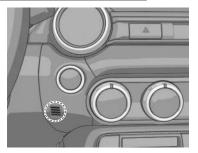
To prevent cold airflow immediately after heating starts when the engine is cold, the airflow amount is decreased.

Fully automatic climate control system uses the sunlight and interior temperature sensors to control the temperature in the cabin by measuring interior and exterior temperatures and sunlight. Do not cover the sunlight/ interior temperature sensor.

#### Sunlight sensor

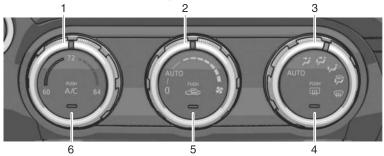


#### Interior temperature sensor



# Fully Automatic Climate Control System Overview

The switch labels may differ depending on the specification.



- Temperature control dial
   Fan control dial
- 3. Mode selector dial
- 4. Rear window defogger switch
- 5. Air intake selector switch
- 6. A/C switch

### How to Use the Fully Automatic Climate Control System

- 1. Start the engine.
- 2. Set the mode selector dial to the AUTO position.



3. Set the air intake selector to the outside air position (indicator light turned off).



4. Set the fan control dial to the AUTO position.



5. Press the A/C switch to operate the air conditioner (turn indicator light on).



- 6. Set the temperature control dial to the desired position.
- 7. To stop the operation, set the fan control dial to the 0 position.

#### Windshield Defrosting and Defogging

- 1. Start the engine.
- 2. Set the mode selector dial to the W position.



3. Turn the fan control dial to the desired speed.

In this position, the outside air position is automatically selected, and when the fan control dial is ON, the air conditioner automatically turns on. The air conditioner will directly dehumidify the air to the front windshield and side windows (page 6-2). Airflow amount will be increased.

# **WARNING**

#### Set the temperature control to the hot or warm position when defogging (\W position).

Using the  $\mathfrak{W}$  position with the temperature control set to the cold position is dangerous as it will cause the outside of the windshield to fog up. Your vision will be hampered, which could lead to a serious accident.

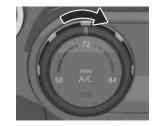
#### NOTE

Use the temperature control dial to increase the air flow temperature and defog the windshield more quickly.

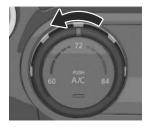
### **Operating Each Switch**

#### Temperature control dial

How to increase the set temperature



#### How to decrease the set temperature



#### Fan control dial

The airflow amount can be adjusted to 7 levels.

To turn off the system, set the dial to 0 position.

#### How to increase the airflow amount



#### How to decrease the airflow amount



#### **AUTO** position



The amount of airflow will be automatically controlled in accordance with the set temperature.

#### Mode selector dial



Turn the mode selector dial to select airflow mode (page 6-2).

#### AUTO position

The airflow mode automatically adjusts to the selected temperature.

#### NOTE

- With the airflow mode set to the position and the temperature control dial set at a medium temperature, heated air is directed to the feet and air at a comparably lower temperature will flow through the central, left and right vents.
- When the fan control dial is ON, and the mode selector dial is in the **\*** or **\*** position, the air conditioner is automatically turned on and the outside air position is automatically selected to defrost the windshield. In the **\*** or **\*** position, the outside air position cannot be changed to the recirculated air position.

#### A/C switch



The cooling/dehumidifying functions can be turned on or off by pressing the switch while the fan control dial is at a position other than 0. The indicator light turns on while the function is operating.

#### NOTE

The air conditioner may not operate when the ambient temperature falls to nearly 0  $^{\circ}$ C (32  $^{\circ}$ F) to protect the system.

#### Air intake selector switch



The mode is switched between recirculate mode and fresh air mode each time the switch is pressed.

# **WARNING**

# Do not recirculate the air in the cabin during cold or rainy weather.

Recirculating the air in the cabin during cold and rainy weather is dangerous as it will cause the windows to fog up. Your vision will be hampered, which could lead to a serious accident.

# Recirculate mode (indicator light illuminated)

Outside air is shut off. Air within the vehicle is recirculated. Use this position when going through tunnels, driving in congested traffic (high engine exhaust areas) or when quick cooling is desired.

# Fresh air mode (indicator light turned off)

Outside air is allowed to enter the cabin. Use this position for ventilation or windshield defrosting.

#### NOTE

• The recirculated air position is the default position whenever the vehicle power is switched ON, the climate control system is on, and the outside temperature exceeds about 23 °C (73 °F).

- To exit the default recirculated air position, press the air intake selector switch to select the outside air position.
- When the air intake selector switch is set to the outside air position and the outside temperature exceeds about 23 °C (73 °F), the climate control system may automatically select the recirculated air position to improve the efficiency of the climate control system.

#### Rear window defogger switch

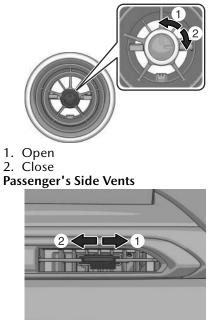
Use to defog the rear window. Refer to How to Use the Rear Window Defogger Switch on page 5-59.

### **Air Vents**

The location and the direction airflow exits the air vents changes depending on the air vent adjustment.

### How to Use the Air Vents

Air vent open/close Move the knob to the fully open or fully closed direction. Driver's Side Vents

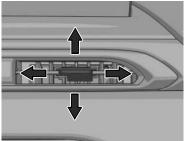


- 1. Open
- 2. Close

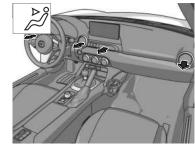
#### Airflow direction adjustment Driver's Side Vents



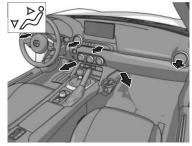
#### Passenger's Side Vents



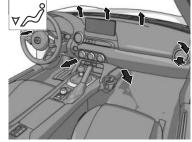
#### Airflow selection Dashboard Vents



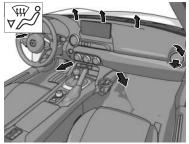
#### **Dashboard and Floor Vents**



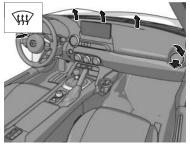
### Floor Vents



### **Defroster and Floor Vents**

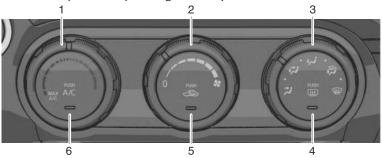


#### **Defroster Vents**



# Manual Climate Control System Overview<sup>\*</sup>

The switch labels may differ depending on the specification.



- 1. Temperature control dial
- 2. Fan control dial
- 3. Mode selector dial
- 4. Rear window defogger switch
- 5. Air intake selector switch
- 6. A/C switch

# How to Use the Manual Climate Control System

#### Heating

- 1. Start the engine.
- 2. Set the mode selector dial to the **#** position.



- 3. Set the air intake selector to the outside air position (indicator light turns off).
- 4. Set the temperature control dial to the hot position.
- 5. Set the fan control dial to the desired speed.
- 6. If dehumidified heating is desired, turn on the air conditioner.

#### NOTE

- If the windshield fogs up easily, set the mode selector dial to the ₩ position.
- If cooler air is desired at face level, set the mode selector dial at the position and adjust the temperature control dial to maintain maximum comfort.
- The air to the floor is warmer than air to the face (except when the temperature control dial is set at the extreme hot or cold position).

#### Cooling

1. Start the engine.

2. Set the mode selector dial to the *≯* position.



- 3. Set the temperature control dial to the cold position.
- 4. Set the fan control dial to the desired speed.
- 5. Turn on the air conditioner by pressing the A/C switch.
- 6. After cooling begins, adjust the fan control dial and temperature control dial as needed to maintain maximum comfort.

# **A** CAUTION

If the air conditioner is used while driving up long hills or in heavy traffic, monitor the high engine coolant temperature warning light to see if it is displayed (page 8-57). The air conditioner may cause overheating. If the warning light is displayed, turn the air conditioner off (page 8-19).

#### NOTE

- When maximum cooling is desired, set the temperature control dial to the extreme cold position and set the air intake selector to the recirculated air position, then turn the fan control dial fully clockwise.
- If warmer air is desired at floor level, set the mode selector dial at the **\*** position and adjust the temperature control dial to maintain maximum comfort.

• The air to the floor is warmer than air to the face (except when the temperature control dial is set at the extreme hot or cold position).

#### Ventilation

- 1. Start the engine.
- 2. Set the mode selector dial to the **\*** position.



- 3. Set the air intake selector to the outside air position (indicator light turns off).
- 4. Set the temperature control dial to the desired position.
- 5. Set the fan control dial to the desired speed.

#### Windshield Defrosting and Defogging

- 1. Start the engine.
- Set the mode selector dial to the ₩ position.



- 3. Set the temperature control dial to the desired position.
- 4. Set the fan control dial to the desired speed.
- 5. If dehumidified heating is desired, turn on the air conditioner.

# WARNING

Do not defog the windshield using the position with the temperature control set to the cold position. Using the W position with the temperature control set to the cold position is dangerous as it will cause the outside of the windshield to fog up. Your vision will be hampered, which could lead to a serious accident. Set the temperature control to the hot or warm position when using the W position.

#### NOTE

- For maximum defrosting, turn on the air conditioner, set the temperature control dial to the extreme hot position, and turn the fan control dial fully clockwise.
- If warm air is desired at the floor, set the mode selector dial to the **#** position.
- When the fan control dial is ON, and the mode selector dial is in the  $\ensuremath{\mathbb{P}}$  or  $\ensuremath{\mathbb{P}}$  position, the air conditioner is automatically turned on and the outside air position is automatically selected to defrost the windshield. In the  $\ensuremath{\mathbb{P}}$  or  $\ensuremath{\mathbb{P}}$  position, the outside air position cannot be changed to the recirculated air position.

#### Dehumidifying

Operate the air conditioner in cool or cold weather to help defog the windshield and side windows.

- 1. Start the engine.
- 2. Set the mode selector dial to the desired position.
- 3. Set the air intake selector to the outside air position (indicator light turns off).

- 4. Set the temperature control dial to the desired position.
- 5. Set the fan control dial to the desired speed.
- 6. Turn on the air conditioner by pressing the A/C switch.

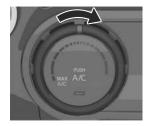
#### NOTE

One of the functions of the air conditioner is dehumidifying the air and, to use this function, the temperature does not have to be set to cold. Therefore, set the temperature control dial to the desired position (hot or cold) and turn on the air conditioner when you want to dehumidify the cabin air.

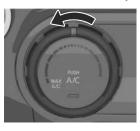
### **Operating Each Switch**

#### Temperature control dial

How to increase the set temperature



How to decrease the set temperature



#### NOTE

When the mode is set to  $\gtrsim$ ,  $\checkmark$  or a position in between them with the fan control dial in a position other than 0 and the temperature control dial in the maximum cold position, the air intake selector switches to the recirculated air position and the A/C turns on automatically.

If A/C is not desired, press the A/C switch to turn it off.

#### Fan control dial

#### How to increase the airflow amount



#### How to decrease the airflow amount



This dial allows variable fan speeds. The airflow amount can be adjusted to 7 levels.

#### Mode selector dial



The desired airflow mode can be selected.

#### NOTE

• The mode selector dial can be set at the intermediate positions (●) between each mode. Set the dial to an intermediate position if you want to split the airflow between the two modes. • For example, when the mode selector dial is at the ● position between the *i* and *i* positions, airflow from the floor vent is less than that of the *i* position.

#### A/C switch



Switches the air conditioner on and off.

The indicator light on the switch will illuminate when the fan control dial is in any position except OFF.

#### NOTE

The air conditioner may not operate when the ambient temperature falls to nearly 0  $^{\circ}$ C (32  $^{\circ}$ F) to protect the system.

#### Air intake selector switch



The mode is switched between recirculate mode and fresh air mode each time the switch is pressed.

# 

# Do not recirculate the air in the cabin during cold or rainy weather.

Recirculating the air in the cabin during cold and rainy weather is dangerous as it will cause the windows to fog up. Your vision will be hampered, which could lead to a serious accident.

# Recirculated mode (indicator light illuminated)

Outside air is shut off. Air within the vehicle is recirculated. Use this position when going through tunnels, driving in congested traffic (high engine exhaust areas), or when quick cooling is desired.

# Outside air mode (indicator light turned off)

Outside air is allowed to enter the cabin. Use this position for ventilation or windshield defrosting.

#### NOTE

- The recirculated air position is the default position whenever the ignition is switched ON, the climate control system is on, and the outside temperature exceeds about 23 °C (73 °F).
- To exit the default recirculated air position, press the air intake selector switch to select the outside air position.
- When the air intake selector switch is set to the outside air position and the outside temperature exceeds about 23 °C (73 °F), the climate control system may automatically select the recirculated air position to improve the efficiency of the climate control system.

#### Rear window defogger switch

Use to defog the rear window. Refer to How to Use the Rear Window Defogger Switch on page 5-59.

### Seat Warmer\*

The seat warmer warms the seat.

## Warnings and Cautions For Using the Seat Warmer

# **WARNING**

# Be careful when using the seat warmer.

The heat from the seat warmer may be too hot for the following people and could cause a low-temperature burn.

- Infants, small children, elderly people, and physically challenged people
- People with delicate skin
- People who are excessively fatigued
- People who are intoxicated
- People who have taken sleep-inducing medicine such as sleeping pills or cold medicine

#### Do not use the seat warmer with anything having high moisture-retention ability such as a blanket or cushion on the seat. The seat may be heated excessively and cause a low-temperature burn.

#### Do not use the seat warmer even when taking a short nap in the vehicle.

The seat may be heated excessively and cause a low-temperature burn.

#### Do not place heavy objects with sharp projections on the seat, or insert needles or pins into it.

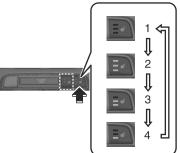
This could cause the seat to become excessively heated and result in injury from a minor burn.

# **CAUTION**

Do not use organic solvents to clean the seat. It may damage the seat surface and the heater.

### How to Use the Seat Warmer

- 1. Start the engine.
- 2. The set temperature changes each time the seat warmer switch is pressed.



- 1. OFF
- 2. High
- 3. Mid
- 4. Low

The indicator light in the seat warmer switch turns on according to the set temperature.

#### NOTE

If the vehicle power is switched off while the seat warmer is operating (High, Mid or Low) and then switched ON again, the seat warmer will automatically operate at the temperature set before switching off the vehicle power.

# MEMO

# Other Equipment

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# MEMO

### Mazda Connect

Mazda Connect is a system that allows users to use various functions such as displaying vehicle information, playing music, connecting to mobile devices and changing vehicle settings.

#### Mazda Connect home screen



This manual only indicates a part of the information for Mazda Connect. For detailed user information, refer to the Mazda Connect Owner's Manual.

#### Mazda Connect functions

Mazda Connect has the following 8 functions.

#### Information

Information stored in the vehicle can be checked.

#### Entertainment

You can listen to radio and music.

#### Notifications

Notifications from the vehicle can be checked. If a serious problem occurs, the background of the notification display turns amber or red.

#### Communication

By connecting your mobile device, such as a Smartphone, to Mazda Connect via Bluetooth<sup>®</sup>, you can use the hands-free call and short message functions.

#### Navigation/Compass

If a navigation system SD card is inserted, you can use the navigation system. If the navigation system SD card is not inserted, a compass indicating the direction the vehicle is moving is displayed.

#### Settings

You can change the settings for the Mazda Connect and the vehicle functions.

#### Apple CarPlay<sup>™</sup>

By connecting an iPhone<sup>®</sup> compatible with Apple CarPlay<sup>™</sup>, you can use Apple CarPlay<sup>™</sup>.

#### 7-4

#### Android Auto™

By connecting an Android  ${}^{\rm M}$  Smartphone compatible with Android Auto  ${}^{\rm M}$ , you can use Android Auto  ${}^{\rm M}$ .

#### NOTE

- The explanation of functions described in this manual may differ from the actual operation, and the shapes of screens and buttons and the letters and characters displayed may also differ from the actual appearance. Additionally, depending on future software updates, the content is subject to change without notice.
- Using a cellular phone or CB radio in or near the vehicle could cause noise.

# Warnings and Cautions for Using the Mazda Connect

# **WARNING**

#### Always adjust Mazda Connect while the vehicle is stopped:

Do not adjust Mazda Connect with the Commander switch while driving the vehicle. Adjusting Mazda Connect with the Commander switch while driving the vehicle is dangerous as it could distract your attention from the vehicle operation which could lead to a serious accident.

Even if the audio remote control switches are equipped on the steering wheel, learn to use the switches without looking down at them so that you can keep your maximum attention on the road while driving the vehicle.

# Do not allow the connection plug cord to get tangled with the shift lever (manual transmission)/selector lever (automatic transmission):

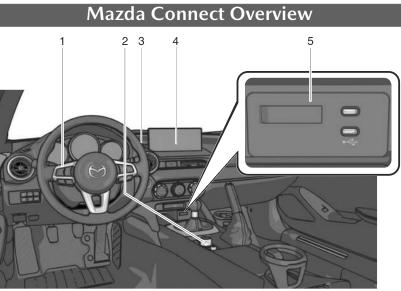
Allowing the plug cord to become tangled with the shift lever (manual transmission)/selector lever (automatic transmission) is dangerous as it could interfere with driving, resulting in an accident.

#### Do not adjust a mobile device or a similar product while driving the vehicle:

Adjusting a mobile device or a similar product while driving the vehicle is dangerous as it could distract your attention from the vehicle operation which could lead to a serious accident. Always adjust a mobile device or a similar product while the vehicle is stopped.

# **A** CAUTION

For the purposes of safe driving, adjust the audio volume to a level that allows you to hear sounds outside of the vehicle including car horns and particularly emergency vehicle sirens.



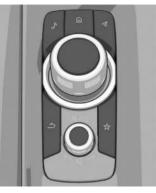
- 1. Audio remote control switch
- 2. Commander switch
- 3. Microphone
- Center display
   USB port/SD card slot<sup>\*1</sup>
- \*1 SD card slot for the navigation system. Insert an SD card (Mazda genuine) for the navigation system.

### How to Use the Mazda Connect

#### Mazda Connect operation method

You can operate Mazda Connect when the vehicle power is switched to ACC or ON. There are 4 ways to operate Mazda Connect.

#### **Commander switch operation**

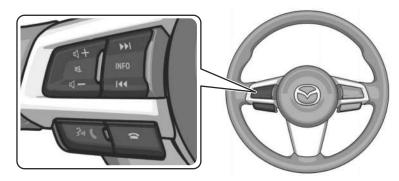


Buttons		Explanation
	Volume knob	<ul> <li>Adjusting the volume</li> <li>You can adjust the volume by turning the volume knob.</li> <li>Press and release the volume knob immediately to mute the audio. Press and release the volume knob immediately again to cancel the mute.</li> <li>Turning the power off/on</li> <li>You can turn off Mazda Connect by pressing and holding the volume knob.</li> <li>You can turn on Mazda Connect by pressing the volume</li> </ul>
Å	Entertainment button	knob again. Press the entertainment button to display the most recently played audio source screen.
	Commander knob	<ul> <li>Operating the cursor</li> <li>You can move the cursor on the screen by turning or sliding the commander knob.</li> <li>Selection</li> <li>Press the commander knob to select the function the cursor is hovering over.</li> </ul>

### Other Equipment Mazda Connect

	Buttons	Explanation
A	Map button	Press the map button to display the navigation/compass screen.
5	Back button	Press the back button to display the previous screen.
		Displaying the home screen
<b>N</b>		<ul> <li>Press and release the home button immediately to display the Home screen.</li> </ul>
	Home button	Switching between screens
		<ul> <li>Press and hold the Home button to switch between the Apple CarPlay<sup>™</sup>/Android Auto<sup>™</sup> screen and the Mazda Connect screen.</li> </ul>
		Displaying the favorites screen
		<ul> <li>Press and release the favorites button immediately to dis- play the favorites screen.</li> </ul>
Favorites button	Programming favorites	
		<ul> <li>Press and hold the favorites button to save the currently dis- played contact, broadcast station, navigation point, and others as favorites.</li> </ul>

#### Audio remote control switch operation

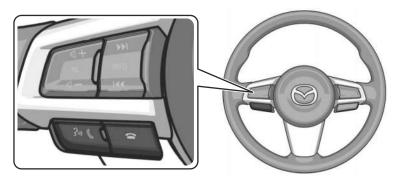


	Buttons	Explanation
日 日 日 日 日	-	You can adjust the volume by pressing the volume adjustment button.

	Buttons	Explanation
ß	Mute button	<ul> <li>Mute</li> <li>Press the mute button to mute the audio.</li> <li>Press the mute button again to cancel the mute.</li> <li>Pausing the audio</li> </ul>
		<ul> <li>Pressing the mute button while playing an audio source that can be paused will pause the audio source.</li> </ul>
M M	Seek button	Press the seek button to switch between radio stations and audio tracks. (Except SiriusXM <sup>®*</sup> )
shin &	Talk/pick-up button <sup>*1</sup>	You can answer an incoming call by pressing the button while on another call.
	Hang-up button <sup>*1</sup>	<ul> <li>Hanging up a call</li> <li>You can hang up a call by pressing the hang-up button during the call.</li> <li>Putting a call on hold</li> <li>Press the hang-up button while receiving a call to put the call on hold.</li> </ul>

<sup>\*</sup>1 You can also use the voice recognition for the talk, pick-up/hang-up button.

#### Operating the voice recognition function



	Buttons	Explanation
		Activating the voice recognition
	Talk/pick-up button	<ul> <li>Press the talk/pick-up button to activate voice recognition. In addition, the top screen of the voice recognition is dis- played.</li> </ul>
2.19		Ending the voice recognition
5111 6		<ul> <li>Press and hold the talk/pick-up button to end the voice recognition.</li> </ul>
		Skipping the voice guidance
	<ul> <li>Press the talk/pick-up button while the voice guidance is playing to skip the voice guidance.</li> </ul>	
	Hang-up button	Press the hang-up button to end the speech recognition.

Examples of effective voice commands in various categories are displayed on the voice recognition top screen.

Anything that is not a valid voice command is not recognized by the system.

#### NOTE

- Some voice commands may not be available depending on the vehicle specifications and the mobile device connection status.
- When the Talk/Pick-up button is pressed and released immediately while Apple CarPlay<sup>™</sup> or Android Auto<sup>™</sup> is connected, the Mazda Connect voice recognition/ Alexa<sup>\*</sup> is activated. In addition, when the Talk/Pick-up button is pressed and held, Siri<sup>®</sup> or Android Auto<sup>™</sup> voice recognition is activated.
- Voice commands can be spoken and operated even while voice guidance is playing (Barge-In function). However, voice commands may not be recognized correctly if the guidance volume is set to a high volume.

For the "Barge-In" setting, set it using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

- · To prevent mistaken voice recognition, be aware of the following points.
  - Do not speak more slowly than necessary. Speak at a normal speed.
  - Speaking in a slightly louder voice will improve voice recognition, but an excessively loud voice is unnecessary. Try to speak in a slightly louder voice than when talking to other passengers in the vehicle.
  - Speak clearly, without pausing between words or numbers.
  - It is not necessary to orient oneself in the direction of the microphone or approach the microphone. Speak the voice commands while maintaining your driving posture.
  - Voice commands may not be recognized correctly due to external noise or air turbulence in the car.
  - When calling a person in the mobile device's phone book, the recognition rate increases the longer the name is. Errors may occur with names that are short such as (Mama), (Home), or (wife).

#### Center display operation

Only Apple CarPlay<sup>™</sup> or Android Auto<sup>™</sup> can be operated by touching the center display.

#### Turning Mazda Connect off/on

#### Turning off

Press and hold the volume knob to turn off the Mazda Connect power.

#### Turning on

There are 2 ways to turn Mazda Connect ON.

- · Press the volume knob.
- Press the commander knob.

### **Connected Service (If applicable)**

#### Connected Service Overview (U.S.A.)

There are several types of connected services available via Mazda Connect. Some services may require you to download the MyMazda app to your smartphone and subscribe to the services, while others may require you to pair your smartphone to the vehicle via Bluetooth<sup>®</sup>. In addition, on a regular basis and unless you opt-out, your vehicle will automatically transmit certain geo-location, driving behavior data, and vehicle health information to Mazda for product quality, data analysis, research, and product development. Using the QR codes or URLs below, refer to the Connected Service Owner's Manual and Privacy Policy for more details and opt-out options.

· Connected Service Owner's Manual

https://www.mazdausa.com/static/manuals/mazda-connected-service/ index.html



#### **Connected Service Overview (Canada)**

If your vehicle is equipped for connected services, there may be several types of connected services available to you. The availability, terms and capability of connected services vary by vehicle and other factors. Some services may require you to download the MyMazda app to your compatible smartphone, purchase a subscription or be in a supported area with wireless coverage, while others may require you to pair your smartphone to the vehicle via Bluetooth<sup>®</sup>. If your vehicle is equipped for connected services, certain data may be collected and transmitted through the connected vehicle system, including, without limitation, geo-location, driving behavior data and vehicle health information. Please refer to connected services terms and privacy policy available on the Mazda Canada website for more details.

Connected Services owner's manual:

https://www.mazda.ca/en/digital-owners-manual/2021/connected-services/



#### Other Equipment Mazda Connect

#### (U.S.A. and Canada) Privacy Policy

Mazda maintains a Privacy Statement which describes how we collect, use, share, store and secure data from your vehicle equipped with connected services. We provide you with connected services by collecting and using your personal information and vehicle location, health and driving data.

To learn more about our Privacy Statement, please visit: (U.S.A.)

https://www.mazdausa.com/site/privacy-connectedservices



(Canada) https://www.mazda.ca/en/cv-privacy/



### Appendix

#### Gracenote® Database

When connecting a USB audio device or Bluetooth<sup>®</sup> audio device to this unit and playing audio, the unit searches the database stored in the vehicle for the album art. If there is a match in the vehicle's database compilation to the music being played, the album art is displayed. The database information stored in this device uses database information in the Gracenote<sup>®</sup> music recognitions service.

#### SiriusXM<sup>®</sup> Satellite Radio<sup>\*</sup>

# (((Sirius**XM**)))

Products/applications shall display "Call [Appropriate Phone Number] to Enable Services" for any unsubscribed SiriusXM Data Service(s).

This shall be shown on the same screen as the Radio ID and the service subscription status:

Contact your SiriusXM Representative for the appropriate call center phone number.

· U.S.A.: 1-877-447-0011

· Canada: 1-877-438-9677

#### SiriusXM<sup>®</sup> All Access Subscription

Hopefully, you're already loving SiriusXM in your new Mazda. But don't stop there — you can also listen on the app and online. All Access is the very best subscription package – with the most channels and the most flexibility. With All Access, you get every channel available on your vehicle, plus you can listen on the app, online, and in your home on a variety of connected devices. — so you can enjoy SiriusXM wherever you are. Here's what's included:

- Over 150 satellite channels to enjoy in your car, coast-to-coast, 24/7.
- All kinds of commercial-free music, plus every major sport, world-class news and the biggest names in talk & entertainment.
- All of our premium programming, including Howard Stern, every NFL, MLB<sup>®</sup>, and NBA game, NHL<sup>®</sup> games, every NASCAR<sup>®</sup> race, 24/7 talk channels dedicated to the biggest leagues, and much more.

All SiriusXM services require a subscription, sold separately or as a package by SiriusXM Radio Inc. (or, in Canada, SiriusXM Canada Inc.), after any trial subscription which may be included with your vehicle purchase or lease. To subscribe after your trial subscription, call 1-877-447-0011 (U.S.A.) or 1-877-438-9677 (Canada).

## **A** CAUTION

It is prohibited to copy, decompile, disassemble, reverse engineer, hack, manipulate, or otherwise make available any technology or software incorporated in receivers compatible with the SiriusXM satellite radio service or that support the SiriusXM website, the online service or any of its content. Furthermore, the AMBE<sup>®</sup> voice compression software included in this product is protected by intellectual property rights including patent rights, copyrights, and trade secrets of Digital Voice Systems, Inc. The SiriusXM Service may include traffic, weather and other content and emergency alert information and data. Such information and data is not for "safety for life", but is merely supplemental and advisory in nature and, therefore, cannot be relied upon as safety critical. Neither SiriusXM nor Mazda is responsible for any errors in accuracies in the SiriusXM data services or its use in applications. The SiriusXM content is subject to change without notice.

#### NOTE

SiriusXM Satellite Radio Service is available in the 48 contiguous United States and the District of Columbia. The service is not available in Alaska, Hawaii or Puerto Rico.

#### HD Radio<sup>™</sup>

#### What is HD Radio<sup>™</sup> Technology and how does it work?

HD Radio<sup>™</sup> Technology is the digital evolution of analog AM/FM radio. Your radio product has a special receiver which allows it to receive digital broadcasts (where available) in addition to the analog broadcasts it already receives. Digital broadcasts have better sound quality than analog broadcasts as digital broadcasts provide free, crystal clear audio.

For more information, and a guide to available radio stations and programming, please visit www.hdradio.com.

#### Benefits of HD Radio<sup>™</sup> Technology

#### (Information)

The song title, artist name, album name will appear on the screen when available by the radio station.

#### (Multicast)

On the FM radio frequency most digital stations have "multiple" or supplemental programs on each FM station.

HD Radio Technology manufactured under license from iBiquity Digital Corporation. U.S. and Foreign Patents.

For patents see http://dts.com/patents.

#### Apple CarPlay<sup>™</sup>



➤YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT USE OF APPLE CARPLAY<sup>™</sup> ("THE APPLICATION") IS AT YOUR SOLE RISK AND THAT THE ENTIRE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, ACCURACY AND EFFORT IS WITH YOU TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, AND THAT THE APPLICATION AND INFORMATION ON THE APPLICATION IS PROVIDED "AS IS" AND "AS AVAILABLE", WITH ALL FAULTS AND WITHOUT WARRANTY OF ANY KIND, AND MAZDA HEREBY DISCLAIMS ALL WARRANTIES AND CONDITIONS WITH RESPECT TO THE APPLICATION AND INFORMATION ON THE APPLICATION, EITHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY, QUIET ENJOYMENT, AND NONINFRINGEMENT OF THIRD PARTY RIGHTS.

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IN ADDITION, YOU UNDERSTAND THAT CHANGES IN THIRD PARTY TECHNOLOGY OR GOVERNMENT REGULATION MAY RENDER THE SERVICES AND/OR APPLICATIONS OBSOLETE AND/OR UNUSABLE. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT SHALL MAZDA OR ITS AFFILIATES BE LIABLE FOR PERSONAL INJURY, OR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, CORRUPTION OR LOSS OF DATA, FAILURE TO TRANSMIT OR RECEIVE ANY DATA, BUSINESS INTERRUPTION OR ANY OTHER COMMERCIAL DAMAGES OR LOSSES, ARISING OUT OF OR RELATED TO THE APPLICATION OR YOUR USE OF OR INABILITY TO USE THE APPLICATION OR INFORMATION ON THE APPLICATION.

>When using Apple CarPlay<sup>™</sup>, please avoid distraction and use Apple CarPlay<sup>™</sup> responsibly.

Stay fully aware of driving conditions and always obey applicable laws.

#### NOTE

- Apple CarPlay<sup>™</sup> is provided by Apple<sup>®</sup> and its use is subject to your agreement to the Apple CarPlay<sup>™</sup> terms of use, which are included as part of the Apple iOS terms of use.
- When using Apple CarPlay<sup>™</sup>, location, speed, and other vehicle data is transferred to your iPhone<sup>®</sup>. For further details, refer to Apple<sup>®</sup>'s Privacy Policy.

#### Android Auto™



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### Alexa

Talking to Alexa can be done in the vehicle. Alexa is hands-free and easy to use, allowing the user to control vehicle functions with verbal commands while maintaining the driving posture.

Alexa voice recognition can operate the navigation, hands-free telephone, and the audio functions, among others.

In addition, Alexa's various functions (such as weather information, news functions, shopping, and Smart Home<sup>\*1</sup>) can be used.<sup>\*2</sup>

- <sup>\*</sup>1 Certain Alexa functionality is dependent on Smart Home technology.
- <sup>\*</sup>2 Availability of Alexa Built-in depends on the country.

Alexa service is provided by Amazon and is subject to Amazon's Terms and Conditions and Privacy Policy. Mazda does not have access to your Amazon account.

## Warning and Cautions for Using Alexa

## 

When you are signed into your Amazon account, Alexa can be used by any other driver or passenger of your vehicle. To avoid unauthorized use of Alexa and your Amazon account, please sign out from your Amazon account when lending, renting, or selling your vehicle to another person. You may also perform a factory reset to sign out of your Amazon account.

### How to Use Alexa

#### Before using Alexa

- To use Alexa, communication between the vehicle and Amazon Cloud is required. Enable either one of the following functions. In order for Alexa to play streaming music, communication with the Wi-Fi client function is required.
  - · Connected Service function\*1
  - Wi-Fi client function<sup>\*2</sup>
- \*1 Refer to the Connected Service owner's manual.
- <sup>\*</sup>2 Set the communication with the Wi-Fi client function using the following procedure.
  - 1. Select "Settings" from the Mazda Connect home screen.
  - 2. Select "Connectivity Settings".
  - 3. Select "Wi-Fi Client Settings".
  - 4. Make sure that "Wi-Fi Client Mode" is enabled.
  - A Wi-Fi connection can be made with the device to be used from "Search for Available Wi-Fi Networks" or "Wi-Fi Protected Setup (WPS)".

The Wi-Fi client function communicates using the customer's mobile device, therefore communication fees are borne by the customer. If the Wi-Fi client function is enabled, the only connection method for Apple CarPlay<sup>™</sup> or Android Auto<sup>™</sup> is a USB connection.

- Set your Mazda Connect "Home Region" using the following procedure.
  - Select "Settings" from the Mazda Connect home screen.
  - 2. Select "System Settings".
  - 3. Select "Home Region".
  - 4. Select the country and region.

- Sign into your Amazon account using the following procedure.
  - 1. Select "Settings" from the Mazda Connect home screen.
  - 2. Select "Alexa Settings".
  - 3. Select "Sign In".
  - 4. Follow the Mazda Connect screen to sign in.

#### NOTE

- When Alexa is playing streaming music, noise may occur or music may be interrupted due to signal reception conditions or other factors.
- After removing or installing the lead-acid battery, Alexa is unavailable until the GPS signal is received. Move the vehicle to a location where the GPS signal can be received.

#### When using Alexa

There are two ways to use Alexa.

- · Say, "Alexa".\*1
- Press the talk/pick-up button.\*2
- \*1 Can be used when Alexa Hands-Free is enabled on "Alexa Settings" in Mazda Connect.
- <sup>\*</sup>2 Can be used when Push-to-talk is enabled on "Alexa Settings" in Mazda Connect.

The main functions that can be controlled by Alexa are as follows. Examples of these and other functions can also be confirmed on Mazda Connect.

- Navigation destination setting and canceling
- · Hands-free telephone

## When confirming examples of Alexa features

- 1. Select "Settings" from the Mazda Connect home screen.
- 2. Select "Alexa Settings".
- 3. Select "Things to Try".

## When signing out of your Amazon account

- 1. Select "Sign Out" from the "Alexa Settings" menu screen.
- 2. Follow the Mazda Connect screen to sign out.

### Private eCall<sup>\*</sup>

#### Private eCall

If the vehicle is involved in a collision that deploys the air bags or when the SOS button is pressed, an emergency vehicle can be arranged through Private eCall center.



To operate Private eCall, a contract with Connected Service is required. For details, check the Connected Service owner's manual.

# Warnings and Cautions for Using Private eCall

## 

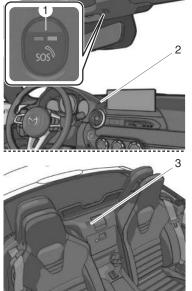
When using Connected Service, if an occupant has an implanted-type heart pacemaker or defibrillator, keep the medical device about 22 cm (8.7 in) or farther away from the vehicle's antenna.

If these medical devices come near the antenna, the operation of the medical device might be affected by radio waves.



## How to Use Private eCall

For details, check the Connected Service owner's manual.



- 1. SOS button
- 2. Microphone
- 3. Speaker

### Warning and Cautions for Using the Storage Compartments

## 

## When loading cargo, make sure that it is completely secured.

If the cargo is not completely secured, it may move or collapse while driving or during sudden braking, resulting in injury or an accident.

## 

- Always keep storage boxes closed while driving the vehicle. The covers and their contents may fly off during sudden braking or if the vehicle is involved in a collision, resulting in injury.
- Be careful when storing items in uncovered storage spaces. If an item is ejected from the storage space during sudden braking, maneuvering, or acceleration it could lead to an accident.
- Do not leave lighters or eyeglasses in the storage boxes while parked under the sun. A lighter could explode or the plastic material in eyeglasses could deform and crack from high temperature.

### Warnings and Cautions for Using the Cup Holders

## **WARNING**

#### Never use a cup holder to hold hot liquids while the vehicle is moving. Using a cup holder to hold hot liquids while the vehicle is moving is dangerous. If the contents spill, you could be scalded.

## Do not put anything other than cups or drink cans in cup holders.

Putting objects other than cups or drink cans in a cup holder is dangerous.

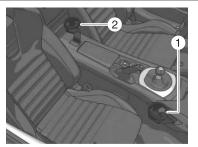
During sudden braking or maneuvering, occupants could be hit and injured, or objects could be thrown around the vehicle, causing interference with the driver and the possibility of an accident. Only use a cup holder for cups or drink cans.

## **CAUTION**

- Do not place plastic bottles without caps in the cup holders. Otherwise, the contents may spill while the vehicle is being driven.
- Do not place excessive weight on the cup holders such as by resting your hands or elbows on them. Otherwise, the cup holders could be damaged.
- If a passenger is present, install the front cup holder to the rear console. Otherwise, a knee might hit it and cause the contents to spill.

When installing a cup holder, insert it all the way into the installation hole and make sure that it is secured in place. Otherwise, the cup holder may fall off while the vehicle is being driven and cause the beverage to spill.

## How to Use the Cup Holders



- Front cup holder
   Rear cup holder

#### **Removing cup holders**

Use both hands when removing the cup holder.



### Installing cup holders



#### NOTE

• The front cup holder can be removed and installed to the rear console.



• The rear cup holder is designed for use on the rear console and cannot be installed to the front side.



## How to Use the Console Box



### Warnings and Cautions for Using the Seat Side Box

## **A** CAUTION

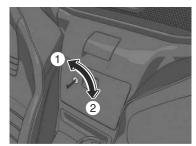
When using the rear console cup holders, remove any cups before opening the seat side box. If the seat side box is opened with cups still in them, the lid will hit the cups and cause the contents to spill.

### How to Use the Seat Side Box

To open, press the latch down to open the seat side box.



Insert the auxiliary key and turn it clockwise to lock, counterclockwise to unlock.



- 1. Unlock
- 2. Lock

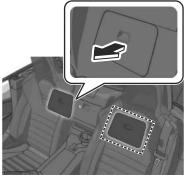
### Warnings and Cautions for Using the Back Trim Storage Box

## 

Do not forcefully push objects into the back trim storage box. Otherwise, the box could be damaged.

## How to Use the Back Trim Storage Box

- 1. Slide the seat all the way forward and fold the seatback forward.
- 2. (Soft top model)

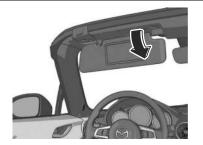


(Hardtop model)



When finished, return the seat to its original position and secure it. After returning the seat to its original position, make sure the seat is secured by attempting to lightly move it forward and backward.

## How to Use the Sunvisor



## How to Use the Vanity Mirrors

To use the vanity mirror, lower the sunvisor.

### **Illuminated Entry System**

The overhead lights turn on/off in conjunction with the opening/closing of the doors and the position of the vehicle power (ON/OFF).

## How to Use the Illuminated Entry System

The overhead lights turn on when any of the following operations is done with the overhead light switch in the DOOR position.

- The driver's door is unlocked with the vehicle power switched OFF.
- The vehicle power is switched OFF with all doors closed.

The overhead lights turns off when any of the following operations is done.

- · The driver's door is locked.
- $\cdot$  The vehicle power is switched ON.

When the vehicle power is switched OFF and the overhead lights remain on, they turn off after a certain period of time has passed.

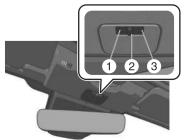
#### NOTE

• The amount of time until the illuminated entry system turns off can be changed.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

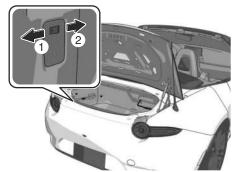
• The illuminated entry system does not operate when the overhead lights are turned on by operating the overhead light ON/OFF switch.

## How to Use the Overhead Lights



- 1. ON
- 2. DOOR
- 3. OFF
- $\cdot ON$
- Overhead light is on.
- · DOOR
  - Overhead light is on when any door is open.
  - Overhead light is on or off when the illuminated entry system is on.
- $\cdot$  OFF
  - Overhead light is off.

### How to Use the Trunk Lights



- 1. ON
- 2. OFF
- ON Trunk light is on when the trunk is open and off when it's closed.
- OFF Trunk light is off.

### **Accessory Sockets**

The accessory socket is used as a socket for accessories when the vehicle power is switched to ACC or ON. Only use accessories that have a maximum power consumption of 120 W (DC12V-10A) or below.

## Warnings and Cautions When Using the Accessory Socket

## 

- Always close the cover when it is not in use. If foreign matter or liquid penetrates the socket, it may cause a problem.
- Insert the accessory plug into the socket securely. If the plug is not inserted securely, it may heat excessively and blow the fuse.
- Do not use accessories that have a power consumption of over 120 W (DC12V-10A). Otherwise, it could cause a malfunction.
- Noise may occur on the audio playback depending on the device connected to the accessory socket.
- Do not insert a cigarette lighter into the accessory socket.
- Depending on the device connected to the accessory socket, the vehicle's electrical system might be affected, which could cause the warning light to turn on. Disconnect the connected device and make sure that the problem is resolved. If the problem is resolved, switch the vehicle power OFF after the device is disconnected from the socket. If the problem is not resolved, consult an Authorized Mazda Dealer.

## How to Use the Accessory Socket

Open the lid and insert the plug to be used.



When finished using, unplug and close the lid.

### **USB** Power Outlet

When the vehicle power is switched to ACC or ON, the USB power outlet can be used as a power supply for USB devices.

Only use USB devices with the following maximum power consumption.

#### Туре-С

- $\cdot$  18 W (DC 9 V, 2 A) or lower<sup>\*1</sup>
- 15 W (DC 5 V, 3 A) or lower
- <sup>\*</sup>1 When a USB Power Delivery-compatible device is connected.

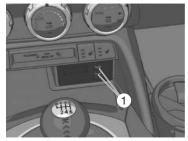
### Warnings and Cautions When Using the USB Power Outlet

## **CAUTION**

- Insert the USB plug into the USB power supply socket securely. If the USB plug is not inserted securely, it may heat excessively and blow the fuse.
- Do not use USB devices that require more than 3 A of current. Otherwise, it could cause damage.

## How to Use the USB Power Outlet

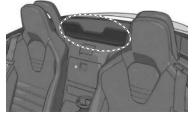
Insert the plug to be used.



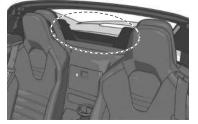
1. USB Power Outlet This socket can be used to connect to Mazda Connect. For details on how to connect to Mazda Connect, refer to the Mazda Connect owner's manual.

## How to Use the Windblocker

This windblocker reduces rear wind blast into the cabin when driving with the convertible top down. (Soft top model)



#### (Hardtop model)



## Towing

Your Mazda is not designed for towing. Never tow a trailer with your Mazda.

## HomeLink Wireless Control System<sup>\*</sup>

The HomeLink system replaces up to 3 hand-held transmitters with a single built-in component in the auto-dimming mirror. Pressing the HomeLink button on the auto-dimming mirror activates garage doors, gates and other devices surrounding your home.

#### NOTE

HomeLink and HomeLink house are registered trademarks of Gentex Corporation.

### Warning and Cautions for Using the HomeLink Wireless Control System

## **WARNING**

Do not use the HomeLink system with any garage door opener that lacks the safety stop and reverse feature. Using the HomeLink system with any garage door opener that lacks the safety stop and reverse feature as required by federal safety standards is dangerous. (This includes garage doors manufactured before April 1, 1982.) Using these garage door openers can increase the risk of serious injury or death. For further information, contact HomeLink at www.homelink.com or www.youtube.com/HomeLinkGentex or an Authorized Mazda Dealer.

Always check the areas surrounding garage doors and gates for people or obstructions before programming or during operation of the HomeLink system.

Programming or operating the HomeLink system without verifying the safety of areas surrounding garage doors and gates is dangerous and could result in an unexpected accident and serious injury if someone were to be hit.

### How to Use the HomeLink Wireless Control System

#### Programming the HomeLink System

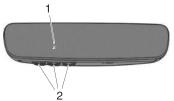
The HomeLink system provides 3 buttons which can be individually selected and programmed using the transmitters for current, on-market devices as follows:

1. Verify that there is a remote control transmitter available for the device you would like to program.

#### NOTE

It is recommended that a new battery be placed in the hand-held transmitter of the device being programmed to HomeLink for quicker training and accurate transmission of the radio-frequency signal.

 Press and release the HomeLink button you would like to program. The indicator light flashes slowly in amber when the button is pressed.



- 1. Indicator light
- 2. HomeLink button
- 3. Hold the hand-held transmitter 3 to 7 cm (1.2 to 2.7 in) away from the HomeLink button you would like to program while keeping the indicator light in view.

#### NOTE

Depending on the hand-held transmitter, it may be easier to do the programming by holding it about 20 cm (7.9 in) away from the HomeLink button.

4. Press the hand-held transmitter button continuously until the indicator light changes from amber (flashing) to green (on/flashing).

#### NOTE

Some gate operators and garage door openers may require you to replace this Programming Step 4 with procedures noted in the "Gate Operator/Canadian Programming" section.

5. Press the HomeLink button again to check if the programming has been completed.

If the indicator light remains on in green, the programming is complete and the device becomes operational.

If the indicator light flashes rapidly in green, firmly press and hold the Homelink button and release it after two seconds have passed. Repeat this process up to three times to complete the programming. The device becomes operational and programming is complete. If the device does not operate, go to the next step.

- 6. At the garage door opener receiver (motor-head unit) in the garage, locate the "learn" or "smart" button. This can usually be found where the hanging antenna wire is attached to the motor-head unit.
- 7. Firmly press and release the "learn" or "smart" button. (The name and color of the button may vary by manufacturer.)

#### NOTE

Complete the programming within 30 seconds.

8. Return to the vehicle and firmly press and hold the Homelink button, and then release it after two seconds have passed. Repeat the "press/hold/release" sequence a second time, and, depending on the brand of the garage door opener (or other rolling code equipped device), repeat this sequence a third time to complete the programming process. Press the programmed HomeLink button and make sure that the HomeLink System operates. If the status indicator arrows are flashing, refer to Programming two-way communication.



1. Indicator light For questions or comments, please contact HomeLink at www.homelink.com or www.youtube.com/ HomeLinkGentex, or the HomeLink toll-free hotline at 1-800-355-3515 (for calls placed outside of the USA, Canada, and Puerto Rico, international rates will apply and may differ based on landline or mobile phone).

#### Gate operator/Canadian Programming

Canadian radio-frequency laws require transmitter signals to "time-out" (or quit) after several seconds of transmission — which may not be long enough for HomeLink to pick up the signal during programming. Similar to this Canadian law, some U.S. gate operators are designed to "time-out" in the same manner.

If you live in Canada or are having difficulties programming a gate operator by using the programming procedures (regardless of where you live), replace Step 4 of Programming the HomeLink System with the following:

#### NOTE

If programming a garage door opener or gate operator, it is advised to unplug the device during the "cycling" process to prevent possible overheating.

While the indicator light is flashing in amber, press the button on the hand-held transmitter for 2 seconds and release it repeatedly until the indicator light changes from amber to green.

Go back to Step 5 of Programming the HomeLink System to complete the procedure.

#### **Operating the HomeLink System**

Press the programmed HomeLink button to operate a programmed device.

#### Reprogramming the HomeLink system

To program a device to HomeLink using a HomeLink button previously trained, follow these steps:

- 1. Press and hold the desired HomeLink button. Do not release the button.
- 2. After 20 seconds, the indicator light flashes in amber. After the indicator light flashes, release the HomeLink button.

3. Go back to Step 3 of Programming the HomeLink System to complete the procedure.

#### NOTE

If the programming has not been completed, the system returns to the previous programming.

#### Programming two-way communication

The garage door two-way communication is a function that communicates with the garage door opener and indicates whether the garages door is open or closed using the indicator lights in the rear view mirror. It can indicate the status of the garage door within a range up-to 250 m (820 ft).

#### NOTE

The communication range may shorten depending on obstructions.

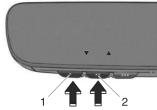
Within five seconds after programming a new HomeLink button, both of the garage door status indicator lights will flash rapidly in green indicating that the garage door two-way communication has been established. If the garage door status indicator lights flash, the two-way communication programming is complete.

If the garage door status indicator lights do not flash, the two-way communication programming is not completed. For additional HomeLink information and programming videos, refer to the following Websites:

- www.HomeLink.com
- www.youtube.com/ HomeLinkGentex

## Operating the garage door two-way communication

By pressing HomeLink buttons 1 and 2 at the same time for two seconds, the status of the garage door is indicated for about 3 seconds as follows:

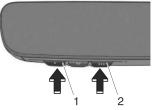


- 1. HomeLink button 1
- 2. HomeLink button 2

Garage door status	Indicator light
Closing	Amber flashes
Opening	Amber flashes
Closed	Green turns on
Opened	Green turns on

#### Erasing Programmed HomeLink Buttons

Press the two outer HomeLink buttons continuously at the same time until the indicator light flashes.



- 1. HomeLink button 1
- 2. HomeLink button 3

#### NOTE

- All of the programmed HomeLink buttons are reset. If there is programming you do not want to delete, reprogram if necessary. Refer to Programming the HomeLink System.
- Verify that the programming has been erased if you resell the vehicle.
- The programming will not be erased even if the battery is disconnected.

## Warnings and Cautions For Using the Accessories



When installing accessories using electrical or electronic components, consult an Authorized Mazda Dealer. There is a possibility of accidents due to brake or air bag mis-operation, vehicle damage or malfunctions.

## Warnings and Cautions For Using the Floor Mat

We recommend the use of Genuine Mazda floor mats.

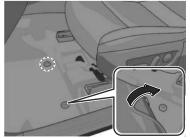
## 

Make sure the floor mats are secured with the grommets to prevent them from bunching up under the foot pedals (Driver's side).

Using a floor mat that is not secured is dangerous as it will interfere with the accelerator and brake pedal operation (driver's side), which could result in an accident.

Only use a floor mat which conforms to the shape of the floor on the driver's side and make sure it is oriented correctly.

Secure the floor mat using the grommets.



There are various ways to secure floor mats depending on the type used, therefore secure the mat according to the type.

After installing the floor mat, make sure that it does not slide from side to side or back and forth, and that there is sufficient clearance with the accelerator and brake pedals on the driver's side. After removing the floor mat for cleaning or some other reason, always securely reinstall it while paying attention to the precautions just mentioned.

Do not install two floor mats, one on top of the other, on the driver's side. Installing two floor mats, one on top of

the other, on the driver's side is dangerous as the retention pins can only keep one floor mat from sliding forward.

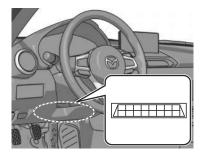
Loose floor mat(s) will interfere with the foot pedals and could result in an accident.

If using an all-weather mat for winter use always remove the original floor mat.

### Malfunction Diagnosis Connector



Do not connect any devices other than the specially designed malfunction diagnosis devices for servicing. If any device other than the malfunction diagnosis device is connected, it may affect the vehicle's electrical devices or lead to damage such as lead-acid battery depletion.



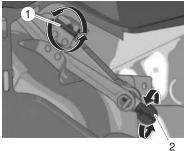
## Jack<sup>\*</sup>

#### To remove the jack

1. Remove the cover.



2. Turn the wing bolt and jack screw counterclockwise.



- 1. Wing bolt
- 2. Jack screw

#### To secure the jack

1. Insert the wing bolt into the jack with the jack screw pointing back and turn the wing bolt clockwise to temporarily tighten it. 2. Turn the jack screw clockwise.



- 1. Wing bolt
- 2. Jack screw
- 3. Turn the wing bolt completely to secure the jack.
- 4. Insert the cover tabs and install the cover.

#### Maintenance

- · Always keep the jack clean.
- Make sure the moving parts are kept free from dirt or rust.
- Make sure the screw thread is adequately lubricated.

# MEMO



# What to Do in Case of Emergency

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# MEMO

### **Dealing With an Accident**

In case of an accident, react calmly and perform as follows.

- Prevention of secondary accident Move the vehicle to a safe place (such as a shoulder or a vacant lot) where it does not obstruct traffic, and stop the engine.
- 2. Aiding injured person If there is any injured person, provide any possible first aid until an ambulance or a doctor arrives. If someone has injured his or her head, do not move the person unnecessarily. However, move the person to a safe place if there is the possibility of a secondary accident.
- 3. Call the police Provide information such as the location, conditions, and level of injury, and take directions.
- 4. Check the name and address of the other person.
- 5. Call an Authorized Mazda Dealer and insurance agency.

### Make a Private eCall\*

Connected service is available through the Private eCall center. Refer to How to Use Private eCall on page 7-26.

### Opening the fuel-filler lid from the trunk

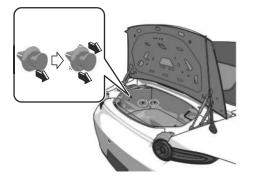
If the battery is dead, the fuel-filler lid cannot be opened.

In this case, the fuel-filler lid can be opened by taking care of the dead battery situation.

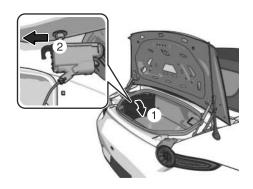
Refer to Taking Action with Depleted Lead-acid Battery on page 8-12. If the fuel-filler lid cannot be opened even if the dead battery situation has been resolved, the electrical system may have a malfunction.

In this case, the fuel-filler lid can be opened using the following procedure as an emergency measure.

- 1. Open the trunk lid. Refer to How to Use the Trunk Lid on page 4-17.
- 2. Pull the center section of the plastic fastener and remove the fasteners.



3. Partially peel back the cover inside the trunk, then pull the emergency release lever.

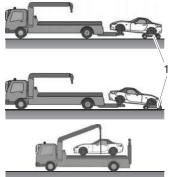


### Having the Vehicle Towed

We recommend that towing be done only by an Authorized Mazda Dealer or a commercial tow-truck service.

Proper lifting and towing are necessary to prevent damage to the vehicle. Government and local laws must be followed.

A towed RWD vehicle should have its drive wheels (rear wheels) off the ground. If excessive damage or other conditions prevent this, use wheel dollies.



1. Wheel dollies

When towing a RWD vehicle with the front wheels on the ground, release the parking brake.

# **CAUTION**

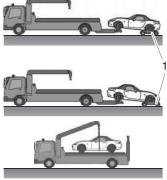
Do not tow the vehicle pointed forward with driving wheels on the ground. This may cause internal damage to the transmission.



Do not tow with sling-type equipment. This could damage your vehicle. Use wheel-lift or flatbed equipment.



If the parking brake cannot be released when towing the vehicle, transport the vehicle with all front and rear wheels raised off the ground as shown in the figure. If the vehicle is towed without raising the wheels off the ground, the brake system could be damaged.



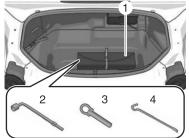
1. Wheel dollies

### Using the Tiedown Hooks<sup>\*</sup>

# **CAUTION**

Do not use the front and rear tiedown eyelets for towing the vehicle. They have been designed only for securing the vehicle to a transport vessel during shipping. Using the eyelets for any other purpose could result in the vehicle being damaged.

1. Remove the tiedown eyelet, the jack lever and the lug wrench or equivalent from the luggage compartment.

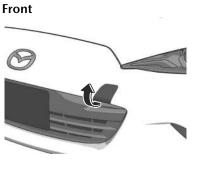


- 1. Tool bag
- 2. Lug wrench
- 3. Tiedown eyelet
- 4. Jack lever

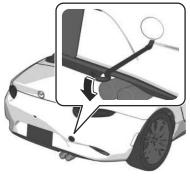
Availability and location of each tool may differ depending on the specification.

2. Wrap a flathead screwdriver or jack lever or a similar tool with a soft cloth to prevent damage to a painted bumper, and open the cap located on the front or rear bumper.

#### What to Do in Case of Emergency When Towing is Required









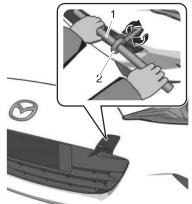
Do not use excessive force as it may damage the cap or scratch the painted bumper surface.

#### NOTE

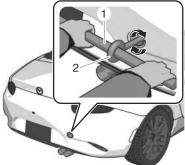
Remove the cap completely and store it so as not to lose it.

3. Securely install the tiedown eyelet using the lug wrench, the jack lever or equivalent.

#### Front



Lug wrench
 Tiedown eyelet
 Rear



- 1. Lug wrench
- 2. Tiedown eyelet
- 4. Hook the tying rope to the tiedown eyelet.

# **CAUTION**

If the tiedown eyelet is not securely tightened, it may loosen or disengage from the bumper when tying the vehicle. Make sure that the tiedown eyelet is securely tightened to the bumper.

### Canceling the Key Temporary Suspension Function

If a key is inside the vehicle, its functions might be temporarily suspended to prevent theft. In this case, press the unlock button on the suspended key in the vehicle to restore the functions.

### Unlocking Using the Auxiliary Key

1. Remove the cover while pressing the knob.



- 2. Remove the auxiliary key.
- 3. Turn the auxiliary key. Lock

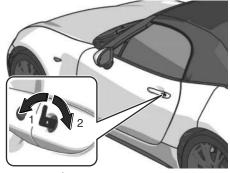
The following locations are locked.

- Both doors
- Fuel-filler lid

#### Unlock

The following location is unlocked.

 $\cdot$  Driver's door



- 1. Locking
- 2. Unlocking
- 4. Attach the auxiliary key to its original position.

5. Insert the tabs of the cover.



### Starting the Engine with a Dead Key Battery

# 

Do not allow the following conditions. Otherwise, the vehicle may not receive the correct signal from the key and the engine may not start.

Metal parts of other keys or metal objects touch the key.



Spare keys or keys for other vehicles equipped with an immobilizer system touch or come near the key.

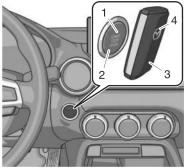


Equipment containing electronic components or cards with magnetic strips such as credit cards come near the key.

If the engine cannot be started due to a dead key battery, use the following procedure to start the engine.

- Depress the clutch pedal (Manual transmission) or brake pedal (Automatic transmission). The push button start indicator light (green) flashes.
- 2. Align the center of the key emblem with the center of the push button start.

The push button start indicator light (green) turns on.



- 1. Indicator light
- 2. Push button start
- 3. Key
- 4. Emblem
- 3. Press the push button start.

#### NOTE

 If there is a problem with the push button start function, the push button start indicator light (amber) flashes.
 In this case, it is possible to start

the engine, however, have the vehicle inspected by an Authorized Mazda Dealer as soon as possible.

• If the push button start indicator light (green) does not turn on, perform the operation from the beginning.

If it still does not turn on, have the vehicle inspected by an Authorized Mazda Dealer.

 To change the vehicle power position, release the clutch pedal (Manual transmission) or brake pedal (Automatic transmission) after the push button start indicator light (green) turns on, then press the push button start. The vehicle power position is switched in the order of ACC, ON, and OFF.

Once the vehicle power is switched OFF, the vehicle power position can no longer be changed. Therefore, to start the engine, perform the operation from the beginning.

### Taking Action with Depleted Lead-acid Battery

The lead-acid battery might be depleted if the following conditions occur.

- The engine does not start.
- $\cdot$  The horn sound is weak or it does not sound.
- The brightness of the lights is extremely low.

Using commercially available booster cables, connect the lead-acid battery of the booster vehicle's battery to the lead-acid battery of your vehicle and start the engine.

Jump-starting is dangerous if done incorrectly. Therefore, follow the procedure carefully. If you feel unsure about jump-starting, we strongly recommend that you have a competent service technician do the work.

# **WARNING**



Read the following precautions carefully before using the lead-acid battery or inspecting to ensure safe and correct handling.



Always wear eye protection when working near the lead-acid battery. Working without eye protection is dangerous. Lead-acid battery fluid contains SULFURIC ACID which could cause blindness if splashed into your eyes. Also, hydrogen gas produced during normal lead-acid battery operation, could ignite and cause the lead-acid battery to explode.



**lead-acid battery fluid.** Spilled lead-acid battery fluid is dangerous. Lead-acid battery fluid contains SULFURIC ACID which could cause serious injuries if it gets in eyes, or on the skin or clothing. If this happens, immediately flush your eyes with water for 15 minutes or wash your skin thoroughly and get medical attention.



#### Always keep lead-acid batteries out of the reach of children.

Allowing children to play near lead-acid batteries is dangerous. Lead-acid battery fluid could cause serious injuries if it gets in the eyes or on the skin.

# Keep flames and sparks away from lead-acid battery cells and do not allow metal tools to contact the positive (+) or negative (-) terminal of the lead-acid battery when working near a lead-acid battery. Do not allow the positive (+) terminal to contact the vehicle body.

Flames and sparks near lead-acid battery cells are dangerous. Hydrogen gas, produced during normal lead-acid battery operation, could ignite and cause the lead-acid battery to explode. An exploding lead-acid battery can cause serious burns and injuries. Keep all flames including cigarettes and sparks away from lead-acid battery cells.



#### Keep all flames and sparks away from lead-acid battery cells because hydrogen gas is produced from lead-acid battery cells while charging the lead-acid battery or adding lead-acid battery fluid.

Flames and sparks near lead-acid battery cells are dangerous. Hydrogen gas, produced during normal lead-acid battery operation, could ignite and cause the lead-acid battery to explode. An exploding lead-acid battery can cause serious burns and injuries. Keep all flames including cigarettes and sparks away from lead-acid battery cells.

#### Do not jump-start a frozen lead-acid battery or one with a low fluid level.

Jump-starting a frozen lead-acid battery or one with a low fluid level is dangerous. It may rupture or explode, causing serious injury.

# Connect the negative cable to a good ground point away from the lead-acid battery.

Connecting the end of the second jumper cable to the negative (–) terminal of the depleted lead-acid battery is dangerous. A spark could cause the gas around the lead-acid battery to explode and injure someone.

#### Route the jumper cables away from parts that will be moving.

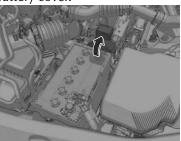
Connecting a jumper cable near or to moving part (cooling fans) is dangerous. The cable could get caught when the engine starts and cause serious injury.

# 

Use only a 12 V booster system. You can damage a 12 V starter, ignition system, and other electrical parts beyond repair with a 24 V power supply (two 12 V batteries in series).

1. Make sure that the vehicle power is switched OFF.

2. Remove the lead-acid battery cover.



3. Turn off the booster vehicle's engine and connect the jumper cables in the following order.

Make sure that the jumper cables are securely connected so that they do not disconnect due to the vibrations.

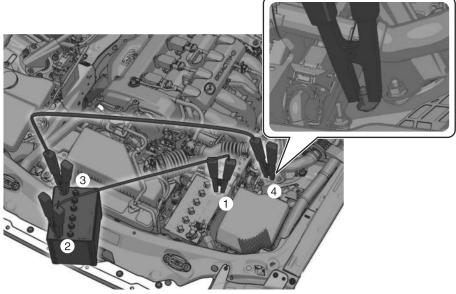
#### 1st lead

- 1. Positive (+) terminal on the depleted lead-acid battery
- 2. Positive (+) terminal on booster vehicle's battery

#### 2nd lead

3. Negative (-) terminal on booster vehicle's battery

4. Location shown in the figure (do not connect to the negative (-) terminal of the depleted lead-acid battery)



- 4. Start the booster vehicle's engine and rev the engine.
- 5. Start the engine of your vehicle.

- 6. Disconnect the booster cables in the reverse order of their connection after the engine is started.
- 7. Install the lead-acid battery cover.
- 8. Have your vehicle inspected by an Authorized Mazda Dealer as soon as possible.

#### **Push-Starting**

Do not push-start your Mazda.



#### Never tow a vehicle to start it.

Towing a vehicle to start it is dangerous. The vehicle being towed could surge forward when its engine starts, causing the 2 vehicles to collide. The occupants could be injured.

### Starting a Flooded Engine

If the engine stops unexpectedly, it may be flooded (excessive fuel in the engine).

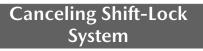
Follow this procedure:

- 1. If the engine does not start within 5 seconds on the first try, wait 10 seconds and try again.
- 2. Make sure the parking brake is on.
- 3. Depress the accelerator all the way and hold it there.
- 4. Depress the clutch pedal (manual transmission) or the brake pedal (automatic transmission), then press the push button start. If the engine starts, release the accelerator immediately because the engine will suddenly rev up.
- 5. If the engine fails to start, crank it without depressing the accelerator.

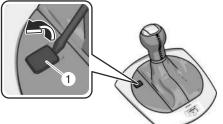
If the engine still does not start using the previous procedure, have your vehicle inspected by an Authorized Mazda Dealer.

### Forcibly Stopping the Engine

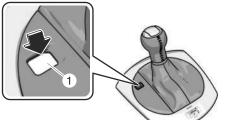
Press and hold the push button start or press it quickly and repeatedly. The engine stops and the vehicle power is switched to ACC.



1. Remove the cover using a flathead screwdriver.



- 1. Cover
- 2. Depress the brake pedal.
- 3. While pressing the shift lock-release button using a flathead screwdriver, press the selector lever button to operate the selector lever.



1. Shift lock-release button

### Taking Action with Overheating

If the engine coolant temperature gauge indicates overheating and the high engine coolant temperature

warning light  $\stackrel{\bullet}{\longrightarrow}$  is displayed, the vehicle loses power or you hear a loud knocking or pinging noise, the engine is probably too hot.

# **WARNING**

#### Do not open the hood while steam is escaping from the engine compartment.

If the hood is opened while the engine compartment is hot, steam and scalding hot coolant may shoot out and cause serious injury. In addition, even if steam is not escaping, some parts in the engine compartment may remain at high temperature. Be extremely careful when opening the hood.



**Do not touch rotating parts such** as the fan or belt when inspecting inside the engine compartment. Working near the cooling fan when it is

running is dangerous. The fan could continue running indefinitely even if the engine has stopped and the engine compartment temperature is high. You could be hit by the fan and seriously injured.



Do not remove either cooling system cap when the engine and radiator are hot. When the engine and radiator are hot, scalding coolant and steam may shoot out under pressure and cause serious injury.

- 1. Drive safely to the side of the road and park off the right-of-way.
- 2. Put a vehicle with an automatic transmission in park (P), a manual transmission in neutral.
- 3. Apply the parking brake.
- 4. Turn off the air conditioner.
- Check whether coolant or steam is escaping from the engine compartment.

# If steam is coming from the engine compartment:

Do not go near the front of the vehicle. Stop the engine. Wait until the steam dissipates, then open the hood and start the engine.

# If neither coolant nor steam is escaping:

Open the hood and idle the engine until it cools.

6. Make sure the cooling fan is operating, then turn off the engine after the temperature has decreased.

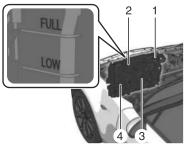


If the cooling fan does not operate while the engine is running, the engine temperature will increase. Stop the engine and call an Authorized Mazda Dealer.

7. When cool, check the coolant level. If it is low, look for coolant leaks from the radiator and hoses.

### If you find a leak or other damage, or if coolant is still leaking: Stop the engine and call an Authorized

Mazda Dealer.



- 1. Cooling system cap
- 2. Coolant reservoir
- 3. Cooling fan
- 4. Radiator

If you find no problems, the engine is cool, and no leaks are obvious: Carefully add coolant as required

(page 9-22).

# **CAUTION**

If the engine continues to overheat or frequently overheats, have the cooling system inspected. The engine could be seriously damaged unless repairs are made. Consult an Authorized Mazda Dealer.

### Using the Emergency Flat Tire Repair Kit

#### About the Emergency Flat Tire Repair <u>Kit</u>

The emergency flat tire repair kit included with your Mazda is for a temporary repair of a slightly damaged flat tire resulting from running over nails or similar sharp objects on the road surface.

Perform the emergency flat tire repair without removing the nail or similar sharp object which punctured the tire.

# **WARNING**

# Do not allow children to touch the tire sealant.

- Ingestion of tire sealant is dangerous. In the event tire sealant is accidentally swallowed, drink large amounts of water immediately and seek medical assistance.
- Tire sealant that comes into contact with the eyes and skin is dangerous. If tire sealant enters the eyes or contacts the skin, flush immediately with large amounts of water and seek medical assistance.

#### NOTE

• Your vehicle is not equipped with a spare tire. In the event of a flat tire, use the emergency flat tire repair kit to repair the tire temporarily. When doing the repair, refer to the instructions included in the emergency flat tire repair kit. If an emergency repair was performed on a flat tire using the emergency flat tire repair gat tire repair kit, have an Authorized Mazda Dealer, repair or replace the tire as soon as possible.

- The tire sealant cannot be reused. Purchase new tire sealant at an Authorized Mazda Dealer.
- The emergency flat tire repair kit cannot be used in the following cases.

Consult an Authorized Mazda Dealer.

- The period of effective use for the tire sealant has expired. (The period of effectiveness is indicated on the bottle label.)
- The tear or puncture exceeds about 4 mm (0.16 in).
- The damage has occurred to an area of the tire other than the tread.
- The vehicle has been driven with nearly no air remaining in the tire.
- The tire has come off the wheel rim.
- Damage to the wheel rim has occurred.
- $\cdot$  The tire has 2 or more punctures.

The emergency flat tire repair kit includes the following items.

#### U.S.A. and Canada



- 2. Compressor
- 3. Speed restriction sticker

- 4. Repaired tire sticker
- 5. Instructions

#### Mexico



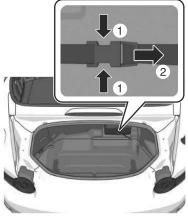
- 1. Tire sealant
- 2. Injection hose
- 3. Compressor
- 4. Spare valve core
- 5. Valve core tool
- 6. Instructions
- 7. Speed restriction sticker

#### Using the Emergency Flat Tire Repair Kit

#### U.S.A. and Canada

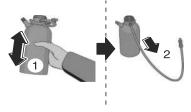
- 1. Move the vehicle off the right-of-way to a safe place on a level and hard surface where the vehicle does not obstruct traffic.
- 2. Shift the shift lever to the 1 or Reverse (R) position for a manual transmission, and shift the selector lever to the P position for an automatic transmission.

- 3. Apply the parking brake with the brake pedal depressed and turn off the engine.
- 4. If necessary, flash the hazard warning lights and set up the roadside emergency triangle.
- 5. Unload passengers and cargo and remove the emergency flat tire repair kit.



The location of the emergency flat tire repair kit may differ depending on the specification.

6. Shake the sealant bottle to mix the contents. Then extend the injection hose.



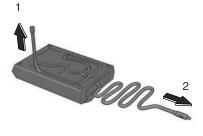
# **CAUTION**

Do not shake the bottle excessively. Otherwise, the sealant could spray out of the injection hose, and if the sealant contacts clothing or other objects, you may not be able to remove it.

#### NOTE

The sealant hardens easily and injecting it will be difficult under cold weather conditions (0 °C (32 °F) or below). Warm the sealant inside the vehicle to facilitate injection.

7. Pull out the air compressor hose and the air compressor plug from the air compressor.



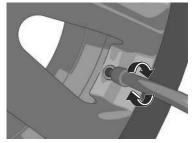
8. Install the air compressor hose which was pulled out of the air compressor to the injection valve of the bottle.



# 

Make sure that the air compressor switch is off before inserting the air compressor hose to the injection valve of the bottle. If the air compressor hose is not installed to the injection valve of the bottle securely, the sealant may leak.

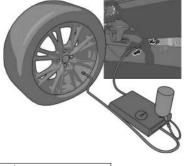
9. Remove the valve cap from the valve of the flat tire, install the injection hose to the tire valve, turn the sleeve to the right, and tighten it.



10.Install the bottle to the air compressor and press it in until the left and right tabs are engaged securely.



11.Insert the air compressor plug into the accessory socket inside the vehicle and switch the vehicle power to ACC (page 7-39).



# **CAUTION**

When inserting the air compressor plug into or removing it from the accessory socket, make sure that the air compressor switch is off. When turning the air compressor on/off, use the air compressor switch.

12. The sealant is injected into the tire when the air compressor is switched on. After the sealant is injected completely, wait until the tire inflation pressure increases to the specified tire inflation pressure.

# **WARNING**

#### Never use the air compressor above 300 kPa (3.1 kgf/cm<sup>2</sup>, 3 bar, 43.5 psi).

Using the air compressor at an inflation pressure above 300 kPa (3.1 kgf/cm<sup>2</sup>, 3 bar, 43.5 psi) continuously is dangerous. If the air compressor overheats, hot air will be exhausted and you could get burned.

#### NOTE

- The inflation pressure may increase to about 300 kPa (3.1 kgf/cm<sup>2</sup>, 3 bar, 43.5 psi) temporarily to inject the sealant through the valve. Normally, the inflation pressure decreases gradually and it reaches the actual inflation pressure after about 30 seconds.
- Check the tire inflation pressure label driver's door frame for the correct tire inflation pressure.
- Do not operate the air compressor for a continuous 10 minutes or longer because using it for long periods could cause a malfunction.
- If the tire inflation pressure does not increase, repair of the tire is not possible. If the tire does not reach the specified tire inflation pressure within 10 minutes, it may have received extensive damage. In this case, the repair using the emergency flat tire repair kit was not successful. Contact an Authorized Mazda Dealer.
- 13.Adhere the speed restriction sticker in a place where it can be viewed easily by the driver.

#### What to Do in Case of Emergency Tire is Punctured or Bursts

# A WARNING

Do not adhere the speed restriction sticker to the padded area on the steering wheel. Adhering the speed restriction sticker to the padded area on the steering wheel is dangerous because the air bag may not operate (deploy) normally resulting in serious injury. In addition, do not adhere the sticker to areas where warning lights or the speedometer cannot be viewed.

# 

- Do not apply speed restriction stickers on the instrument panel or displays. Otherwise, the instrument panel or displays could be scratched or damaged when removing the sticker.
- Remove the speed restriction sticker immediately after repair or replacement of a tire.
- 14.Adhere the repaired tire sticker to the wheel of the flat tire.



- 15.When the tire inflates to the specified tire inflation pressure, turn the air compressor switch off, turn the sleeve of the injection hose to the left, and pull it out of the tire valve.
- 16.Remove the air compressor hose from the injection valve of the bottle. After that, install the injection hose to the injection valve of the bottle to prevent leakage of any remaining sealant.



The remaining sealant in the hose may spray out when the hose is removed. Remove the hose carefully because you may not be able to remove the sealant contacting clothing or other objects.

- 17.Install the tire valve cap.
- 18.Put the emergency flat tire repair kit into the trunk.
- 19.Start driving immediately to spread the sealant in the tire.

# **CAUTION**

Carefully drive the vehicle at a speed of 80 km/h (50 mph) or less. If the vehicle is driven at a speed of 80 km/h (50 mph) or more, the vehicle may vibrate.

#### NOTE

If the tire is not properly inflated, the tire pressure monitoring system warning light (!) will illuminate (page 5-78).

20. After driving the vehicle for about 10 minutes or 5 km (3 miles), connect the air compressor to the tire using Step 9 of the procedure, and check the tire inflation pressure using the tire pressure gauge on the air compressor. If the tire inflation pressure is lower than the specified tire inflation pressure, turn the air compressor on and wait until it reaches the specified tire inflation pressure.

# 

#### If the tire inflation pressure has decreased below 130 kPa (1.3 kgf/cm<sup>2</sup> or bar, 18.9 psi), stop driving and contact an Authorized Mazda Dealer.

The repair using the emergency flat tire repair kit was not successful.

If you see a decrease in the tire inflation pressure, even if Steps 9 to 20 of the procedure are performed repeatedly, stop driving.

Contact an Authorized Mazda Dealer.

# 

Before checking the tire inflation pressure using the tire pressure gauge, turn the air compressor switch off.

21. The emergency flat tire repair is completed successfully if the tire inflation pressure does not decrease. Carefully drive the vehicle to the nearest Authorized Mazda Dealer immediately and have the flat tire replaced. Replacement with a new tire is recommended. If the tire is to be repaired or reused, consult an Authorized Mazda Dealer.

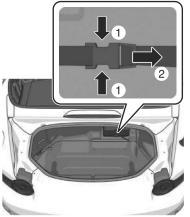
#### NOTE

- If an emergency flat tire repair has been performed using the emergency flat tire repair kit, Mazda recommends that the tire be replaced with a new one as soon as possible. If the tire is to be repaired or reused, consult an Authorized Mazda Dealer.
- The wheel can be reused if the sealant adhering to it is removed. However, replace the valve with a new one.

#### Mexico

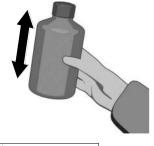
- 1. Park on a level surface off the right-of-way and set the parking brake.
- 2. Put a vehicle with an automatic transmission in Park (P), a manual transmission in Reverse (R) or 1, and turn off the engine.
- 3. Turn on the hazard warning flasher.

4. Unload passengers and luggage, and remove the emergency flat tire repair kit.



The location of the emergency flat tire repair kit may differ depending on the specification.

5. Shake the tire sealant well.



**A** CAUTION

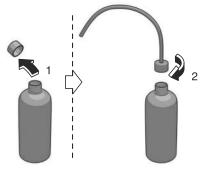
If the bottle is shaken after the injection hose is screwed on, tire sealant could spray out from the injection hose. Tire sealant contacting clothing or other objects may be impossible to remove. Shake the bottle before screwing on the injection hose.

#### NOTE

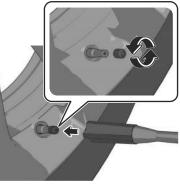
The tire sealant can be used at outside temperatures down to - 30 °C (-22 °F).

In extremely cold temperatures (0 °C (32 °F) or below), the tire sealant hardens easily and injection of the sealant will be difficult. Warm the sealant inside the vehicle before doing the injection work.

6. Remove the cap from the bottle. Screw on the injection hose with the bottle's inner cap left on to break the inner cap.



7. Remove the valve cap from the flat tire. Press the back of a valve core tool to the core of the tire valve and bleed all the remaining air.



#### What to Do in Case of Emergency Tire is Punctured or Bursts



If there is air remaining in the tire when the valve core is removed, the valve core could fly out. Remove the valve core carefully.

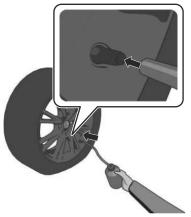
8. Turn the valve core counterclockwise with the valve core tool and remove the valve core.



#### NOTE

Store the valve core in a place where it will not get dirty.

9. Insert the injection hose into the valve.



10.Hold the bottom of the bottle upright, squeeze the bottle with your hands, and inject the entire amount of tire sealant into the tire.



11.Pull out the injection hose from the valve. Reinsert the valve core into the valve and turn it clockwise to install it.

After that, install the injection hose to the tab of the bottle to prevent leakage of any remaining sealant.



#### NOTE

Do not throw away the empty tire sealant bottle after use. Return the empty tire sealant bottle to an Authorized Mazda Dealer when replacing the tire. The empty tire sealant bottle will need to be used to extract and dispose of the used sealant from the tire.

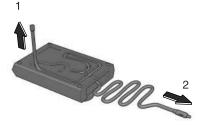
12.Adhere the speed restriction sticker in a place where it can be viewed easily by the driver.

# A WARNING

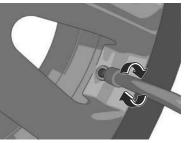
Do not adhere the speed restriction sticker to the padded area on the steering wheel. Adhering the speed restriction sticker to the padded area on the steering wheel is dangerous because the air bag may not operate (deploy) normally resulting in serious injury. In addition, do not adhere the sticker to areas where warning lights or the speedometer cannot be viewed.

# 

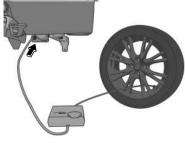
- Do not apply speed restriction stickers on the instrument panel or displays. Otherwise, the instrument panel or displays could be scratched or damaged when removing the sticker.
- Remove the speed restriction sticker immediately after repair or replacement of a tire.
- 13.Pull out the air compressor hose and the air compressor plug from the air compressor.



14.Install the compressor hose to the tire valve.



15.Insert the compressor plug into the interior accessory socket and switch the vehicle power to ACC (page 7-39).





- Before pulling out the compressor plug from the electrical socket, make sure the compressor power switch is off.
- The compressor turns on and off with the push-button switch.
- 16.Turn the compressor switch on and inflate the tire carefully to the correct inflation pressure.

# A WARNING

#### Never operate the compressor above 300 kPa (3.1 kgf/cm<sup>2</sup>, 3 bar, 43.5 psi).

Operating the compressor above 300 kPa (3.1 kgf/cm<sup>2</sup>, 3 bar, 43.5 psi) is dangerous. When the inflation pressure rises above 300 kPa (3.1 kgf/cm<sup>2</sup>, 3 bar, 43.5 psi), heated air will be exhausted from the back of the compressor and you could be burned.

#### NOTE

- Check the tire inflation pressure label (driver's door frame) for the correct tire inflation pressure.
- Do not use the compressor for longer than 10 minutes because using the compressor for long periods could damage it.
- If the tire does not inflate, repair of the tire may not be possible. If the tire does not reach the correct inflation pressure within a 10-minute period, it probably has received more extensive damage. When this happens, the emergency flat tire repair kit cannot be used to repair the tire. Contact an Authorized Mazda Dealer.
- If the tire has been over-inflated, loosen the screw cap on the compressor and bleed some of the air out.
- 17.When the tire has been inflated to the proper inflation pressure, turn the compressor switch off and remove the compressor hose from the tire valve.
- 18.Install the tire valve cap.
- 19.Put the emergency flat tire repair kit in the trunk and continue driving.

# **CAUTION**

- Drive carefully to an Authorized Mazda Dealer and keep the vehicle speed below 80 km/h (50 mph).
- If the vehicle is driven 80 km/h (50 mph) or higher, the vehicle might begin to vibrate.

#### NOTE

If the tire is not properly inflated, the tire pressure monitoring system warning light (!!) will illuminate (page 5-78).

20. After driving the vehicle for 10 minutes or 5 km (3 miles), connect the air compressor to the tire using Step 14 of the procedure, and check the tire pressure with the tire pressure gauge equipped with the compressor. If the tire pressure has fallen below the correct tire pressure, inflate the tire to the correct pressure again following the steps from number 15.

# **CAUTION**

- If the tire inflation pressure falls below 130 kPa (1.3 kgf/cm<sup>2</sup> or bar, 18.9 psi), repair cannot be done with the repair kit. Park the vehicle on a level surface off the right-of-way and contact an Authorized Mazda Dealer.
- If the tire inflation pressure continues to remain low after repeating steps 14 to 20, park the vehicle on a level surface off the right-of-way and contact an Authorized Mazda Dealer.

#### NOTE

When checking the tire inflation pressure with the tire pressure gauge on the compressor unit, make sure the compressor switch is turned off.

21.The emergency flat tire repair is completed if the tire air pressure does not decrease. Drive the vehicle carefully to the nearest Authorized Mazda Dealer promptly and have the tire replaced. Mazda recommends that the tire be replaced with a new one. If the tire is to be repaired and reused, consult an Authorized Mazda Dealer.

Peel off the speed restriction sticker after replacing the tire.

# **CAUTION**

- For a tire which has undergone an emergency flat tire repair using the emergency flat tire repair kit, Mazda recommends that the tire be replaced with a new one as soon as possible. If the tire is to be repaired and reused, consult an Authorized Mazda Dealer.
- The wheel can be reused after any sealant adhering to it is wiped off and carefully inspected. However, replace the tire valve with a new one.

#### Changing a Tire

### MARNING

# Be sure to follow the directions for changing a tire.

Changing a tire is dangerous if not done properly. The vehicle can slip off the jack and seriously injure someone.

#### No person should place any portion of their body under a vehicle that is supported by a jack.

# Never allow anyone inside a vehicle supported by a jack.

Allowing someone to remain in a vehicle supported by a jack is dangerous. The occupant could cause the vehicle to fall resulting in serious injury.

#### NOTE

Make sure the jack is well lubricated before using it.

- 1. Park on a hard, level surface off the right-of-way and firmly set the parking brake.
- 2. Put a vehicle with an automatic transmission in Park (P), a manual transmission in Reverse (R) or 1, and turn off the engine.
- 3. Turn on the hazard warning flasher.
- 4. Have passengers get out of the vehicle and away from the vehicle and traffic.
- 5. Remove any luggage, the jack (page 7-51) and tools (page 8-7).

 Block the wheel diagonally opposite the tire to be changed. When blocking a wheel, place a tire block both in front and behind the tire.



#### NOTE

When blocking a tire, use rocks or wood blocks of sufficient size if possible to hold the tire in place.

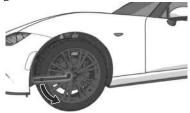
#### Removing a Tire

# **WARNING**

When jacking-up a vehicle, always shift the shift lever to the 1st or the R position (manual transmission vehicle) or shift the selector lever to the P position (automatic transmission vehicle), apply the parking brake, and place wheel blocks in the position diagonally opposed to the jack.

Changing a flat tire without using wheel blocks is dangerous because the vehicle may move and fall off the jack even if the shift lever in the 1st or the R position, or the selector lever is in the P position, which could result in an accident.

 Loosen the lug nuts by turning them counterclockwise one turn each, but do not remove any lug nuts until the tire has been raised off the ground.



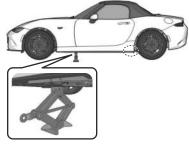
#### NOTE

If your Mazda is equipped with the optional antitheft wheel lug nuts, a special key must be used to unlock the locking lug nut for each wheel. For details, refer to "Locking Lug Nuts" below.

- 2. Place the jack on the ground.
- 3. Turn the jack screw in the direction shown in the figure and adjust the jack head so that it is close to the jack-up position.



 Place the jack under the jack-up position closest to the tire being changed with the jack head squarely under the jack-up point.



5. Continue raising the jack head gradually by rotating the screw with your hand until the jack head is inserted into the jack-up position.



# A WARNING

# Use only the front and rear jacking positions recommended in this manual.

Attempting to jack the vehicle in positions other than those recommended in this manual is dangerous. The vehicle could slip off the jack and seriously injure or even kill someone. Use only the front and rear jacking positions recommended in this manual.

Do not jack up the vehicle in a position other than the designated jack-up position or place any objects on or under the jack. Jacking up the vehicle in a position other than the designated jack-up position or placing objects on or under the jack is dangerous as it could deform the vehicle body or the vehicle could fall off the jack resulting in an accident.

# Use only the jack provided with your Mazda.

Using a jack that is not designed for your Mazda is dangerous. The vehicle could slip off the jack and seriously injure someone.

# Never place objects under the jack.

Jacking the vehicle with an object under the jack is dangerous. The jack could slip and someone could be seriously injured by the jack or the falling vehicle.

#### NOTE

When raising the jack head into the jacking position and aligning the groove in the jack head with the rail under the vehicle body, the top of the jack head contacts the vehicle's underbody without the rail contacting the bottom of the groove.

6. Insert the jack lever and attach the lug wrench to tire jack.



7. Turn the jack handle clockwise and raise the vehicle high enough so that the tire is raised off the ground and can be removed. Before removing the lug nuts, make sure your Mazda is firmly in position and that it cannot slip or move.



# A WARNING

# Do not jack up the vehicle higher than is necessary.

Jacking up the vehicle higher than is necessary is dangerous as it could destabilize the vehicle resulting in an accident.

# Do not start the engine or shake the vehicle while it is jacked up.

Starting the engine or shaking the vehicle while it is jacked up is dangerous as it could cause the vehicle to fall off the jack resulting in an accident.

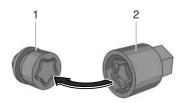
# Never go under the vehicle while it is jacked up.

Going under the vehicle while it is jacked up is dangerous as it could result in death or serious injury if the vehicle were to fall off the jack.

8. Remove the lug nuts by turning them counterclockwise; then remove the wheel.

#### Locking Lug Nuts<sup>\*</sup>

If your Mazda is equipped with the optional antitheft wheel lug nuts, a special key must be used to remove and tighten the locking lug nut for each wheel. The key is stored in the glove compartment, center console storage, storage box, or trunk. Register and/or purchase a replacement key by following the instructions on the identification card included with the locking lug nut key. Antitheft wheel lug nuts cannot be installed on a steel wheel spare tire. When installing a temporary spare tire, use one of the original lug nuts in place of the locking lug nut. The original lug nuts are stored inside your Mazda.



- 1. Antitheft lug nut
- 2. Special key

#### To remove an antitheft lug nut

- 1. Obtain the special key for the antitheft lug nut.
- 2. Place the special key on top of the antitheft lug nut, and be sure to hold the key square to it. If you hold the key at an angle, you may damage both key and nut. Do not use a power impact wrench.
- 3. Place the lug wrench on top of the key and apply pressure. Turn the wrench counterclockwise.

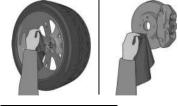
#### To install the antitheft lug nut

- 1. Place the special key on top of the nut, and be sure to hold the key square to it. If you hold the key at an angle, you may damage both key and nut. Do not use a power impact wrench.
- 2. Place the lug wrench on top of the special key, apply pressure, and turn it clockwise.

Nut tightening torque		
N·m (kgf·m, ft·lbf)	108—147 (12—14, 80—108)	

#### Mounting the Tire

1. Remove dirt and grime from the mounting surfaces of the wheel and hub, including the hub bolts, with a cloth.

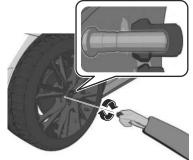




Make sure the mounting surfaces of the wheel, hub and lug nuts are clean before changing or replacing tires.

When changing or replacing a tire, not removing dirt and grime from the mounting surfaces of the wheel, hub and hub bolts is dangerous. The lug nuts could loosen while driving and cause the tire to come off, resulting in an accident.

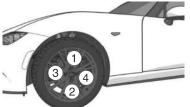
- 2. Mount the tire.
- Install the lug nuts with the beveled edge inward; tighten them by hand.



### A WARNING

Do not apply oil or grease to lug nuts and bolts and do not tighten the lug nuts beyond the recommended tightening torque. Applying oil or grease to lug nuts and bolts is dangerous. The lug nuts could loosen while driving and cause the tire to come off, resulting in an accident. In addition, lug nuts and bolts could be damaged if tightened more than necessary.

- 4. Turn the jack handle counterclockwise using the lug wrench and lower the vehicle.
- 5. Use the lug wrench to tighten the nuts in the order shown.



If you are unsure of how tight the nuts should be, have them inspected at an Authorized Mazda Dealer.

Nut tightening torque	
N·m (kgf·m, ft·lbf)	108—147 (12—14, 80—108)

## **WARNING**

# Always securely and correctly tighten the lug nuts.

Improperly or loosely tightened lug nuts are dangerous. The wheel could wobble or come off. This could result in loss of vehicle control and cause a serious accident.

#### Be sure to reinstall the same nuts you removed or replace them with metric nuts of the same configuration.

Because the wheel studs and lug nuts on your Mazda have metric threads, using a non-metric nut is dangerous. On a metric stud, it would not secure the wheel and would damage the stud, which could cause the wheel to slip off and cause an accident.

6. Remove the tire blocks and store the jack and tools.

#### NOTE

To prevent the jack and tools from rattling, store them properly.

7. Check the inflation pressure. Refer to Tires on page 10-68.



# Do not drive with any tires that have incorrect air pressure.

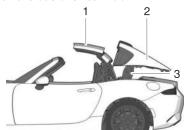
Driving on tires with incorrect air pressure is dangerous. Tires with incorrect pressure could affect handling and result in an accident. When you check the regular tires' air pressure, check the spare tire, too.

### Closing the roof manually

If the roof cannot be closed even after the operation conditions are all met, have it checked at an Authorized Mazda Dealer.

If you are unable to have the roof checked at an Authorized Mazda Dealer, the roof can be closed manually as an emergency measure. The procedure for manually closing the roof is as follows:

- 1. **Opening the rear roof** Release the locks of the rear roof and open it.
- 2. Closing the front roof Lift up the front roof and close it.
- 3. Closing the rear roof Tie the ropes to the rear roof links and close the rear roof.



- 1. Front roof
- 2. Rear roof
- 3. Rear roof link

# **CAUTION**

- Do not drive the vehicle with the roof partially open. The vehicle operation may be affected by the wind and could result in an accident.
- Do not perform the procedure in a strong wind as it could cause an unexpected accident.

- Two adults are required to perform the procedure, especially when lifting up the front roof. Do not do it alone so as not to cause injury or vehicle damage.
- Some steps in the procedure require using multiple tools at the same time and a certain level of technical expertise. In addition, holding your body extended over the car can result in muscle strains so Mazda recommends having the roof checked at an Authorized Mazda Dealer.

#### NOTE

This procedure is for manually closing the roof as an emergency measure. After closing the roof manually, electric operation is not possible until the system is restored by an Authorized Mazda Dealer.

#### Before closing manually

## **WARNING**

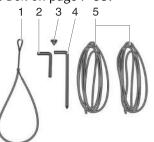
Verify that the ignition is switched off before manually operating the roof. Manually closing the roof with the ignition not switched off is dangerous as the motors could turn on suddenly and cause injury resulting from hands or fingers being pinched in the mechanism.

- 1. Park on a hard, level surface off the right-of-way and firmly set the parking brake.
- Put a vehicle with an automatic transmission in Park (P), a manual transmission in Neutral.
- 3. Switch the ignition off while depressing the brake pedal.
- 4. Turn on the hazard warning flasher if it is needed.

#### What to Do in Case of Emergency When the Roof Cannot be Closed

#### Tool preparation

Take out the five tools stored in the back trim storage box. Refer to How to Use the Back Trim Storage Box on page 7-33.



- 1. Wire
- 2. L-shaped hexagonal wrench (small)
- 3. Gear (tool kit)
- 4. L-shaped hexagonal wrench (Large)
- 5. Rope

#### Opening the rear roof

# **A**CAUTION

- When turning the bolt, cover the front roof using a cloth. The front roof may be damaged if the L-shaped hexagonal wrench contacts it.
- Because the clearance with the stored front roof is narrow, be careful not to let the L-shaped hexagonal wrench contact the roof when turning the bolt.

#### NOTE

Moving the seats as far forward as possible and folding the seatbacks forward will facilitate the procedure. Refer to How to Use the Seats on page 3-27.

1. Remove the antenna if it is installed.

2. Insert the short end of the L-shaped hexagonal wrench (Large) into the motor bracket bolt.



1. Bolt

#### NOTE

If it is difficult to see the bolt, remove the windblocker and identify the bolt from the center of the vehicle.



1. Windblocker

3. Turn the L-shaped hexagonal wrench (Large) counterclockwise to loosen the bolt slightly.



4. Remove the L-shaped hexagonal wrench (Large) once from the bolt, then insert the long end of the wrench into the bolt.

#### NOTE

The tip of the long end of the L-shaped hexagonal wrench can be used at an angle. Moving the wrench upward slightly will increase the clearance between the rear roof and the stored front roof and facilitate the procedure.

5. Turn the L-shaped hexagonal wrench (Large) counterclockwise

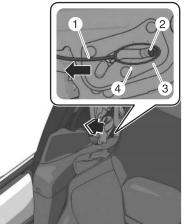
13 times or more while pressing the wrench against the bolt.



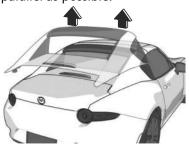
#### NOTE

- The bolt cannot be removed completely.
- If it is hard to turn the bolt, repeat Step 3 a few times.
- 6. Hook the wire to the link pin shown in the figure.

7. While one person pushes the rear roof down, another person pulls the wire until a latch sound is heard and the rear roof unlocks.



- 1. Wire
- 2. Link Pin
- 3. Lock
- 4. Unlock
- 8. Do the same procedure on the other side.
- 9. While standing on both sides of the vehicle, lift the rear roof to the position it stops while keeping the height of its left and right sides as parallel as possible.



### 

- Do not let go of the rear roof on both sides until it is fully open. The rear roof could fall if it is released too soon and cause injury.
- Do not attempt to forcefully lift the rear roof. If the rear roof is forcefully lifted without being unlocked, it could damage vehicle parts.
- Lift the rear roof with its left and right height as parallel as possible. If the rear roof is lifted with the left or right height slanted, it could deform the link mechanism.

#### Closing the front roof

# 

- Some steps in the procedure require holding your body in a strained position and if over exerted it could result in injury.
- Do the procedure being very careful not to get your hands and fingers caught while closing the front roof. Otherwise, your hands or fingers could be injured.
- Removal of the headliner is included in the procedure, however, never drive the vehicle with the headliner removed. Driving the vehicle with the headliner removed is prohibited by law. Correctly perform the procedure while following the instructions.

1. While standing on both sides of the vehicle, hold the front and rear sides of the front roof and pull the front roof upward.



2. Switch your hand on the rear side of the front roof to the front side and pull the front roof forward.



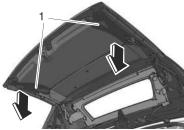
3. Stop pulling the front roof before it completely closes.



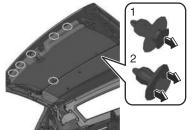
#### NOTE

The next step cannot be done if the front roof is closed completely.

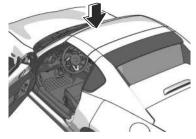
4. Remove the link covers on the left and right sides by pulling them out by hand.



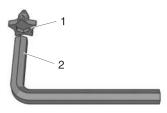
- 1. Link Cover
- 5. Remove the fasteners and the headliner.



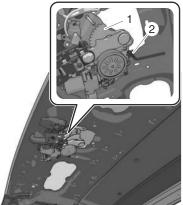
6. Lightly press the front edge of the front roof from outside of the vehicle to close the front roof completely.



7. Insert the short end of the hexagonal wrench (Small) into the gear (tool kit) and assemble.



- 1. Gear (tool kit)
- 2. L-shaped hexagonal wrench (small)
- 8. Insert the point of the gear (tool kit) into the hole beside the top lock motor gear with the hexagonal wrench inserted into the gear tool.

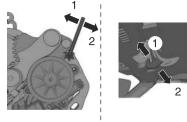


- 1. Top lock motor gear
- 2. Gear (tool kit)

### **CAUTION**

Insert the gear (tool kit) securely until it engages with the top lock motor gear. If the gear (tool kit) is not inserted securely, it may come off and be damaged.

 Rotate the hexagonal wrench and move the hook in the lock direction so that there is enough space for the opening of the headliner to be attached to the hook.

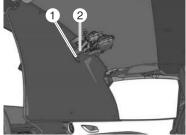


- 1. Lock
- 2. Unlock

#### NOTE

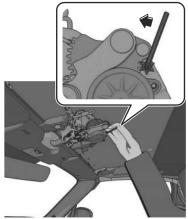
Turning the gear (tool kit) requires some effort due to motor resistance. Slowly operate the hexagonal wrench.

10.Insert the hook into the opening of the headliner.



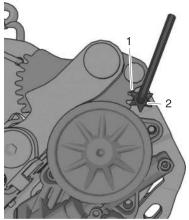
- 1. Headliner
- 2. Hook

11.Turn the hexagonal wrench (Small) and gear (tool kit) counterclockwise and engage the hook with the vehicle body side.



#### NOTE

The top lock lever completely engages with the vehicle body (locked condition) at the position where the teeth of the gear (tool kit) contact the bracket.

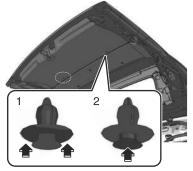


Bracket
 Gear (tool kit)

12.Lift the rear end of the headliner with it hinged on the opening of the headliner.

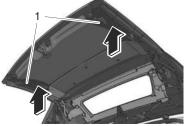


13.Install the headliner to the front roof using the fasteners at two locations.



#### NOTE

The fasteners in the five locations at the front of the headliner are not fastened. Do not lose the fasteners because they are needed for the required servicing at an Authorized Mazda Dealer. 14.Install the left and right link covers from the vehicle interior.

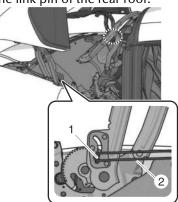


1. Link cover

Closing the rear roof



- Slowly close the rear roof. If the rear roof is closed suddenly, a hand or other body part may be pinched, leading to a serious injury.
- Do not attempt to forcefully push the rear roof. Pushing the rear roof forcefully may damage vehicle parts.
- 1. Fold the rope in half and hook it to the link pin of the rear roof.



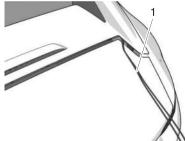
- 1. Link pin
- 2. Rope
- 2. Do the same procedure on the other side.

3. Close the rear roof uniformly on both sides using two adults, one on each side of the vehicle.

# **A** CAUTION

Close the rear roof with its left and right positions as parallel as possible. If the rear roof is closed with its left or right height slanted, it could deform the link mechanism.

4. Slowly close the rear roof while lightly pulling the rope with one hand so that the rope does not unhook.

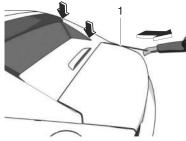


1. Rope

#### NOTE

Route the rope rearward through the clearance between the rear roof and trunk.

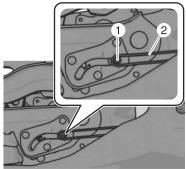
5. One person pushes the rear roof down and the other person pulls the rope strongly and straight back towards the vehicle rear until a click sound is heard.



#### 1. Rope

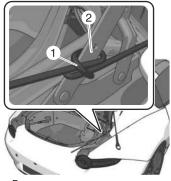
#### NOTE

• The rear roof is locked completely if the position where the rope is hooked is at the rear end of the bracket groove in the direction of the vehicle rear, as shown in the figure, when viewed from the vehicle interior.



- 1. Link pin
- 2. Rope
- If the rear roof is not locked completely, the trunk will not open even if the remote release button, the electric trunk lid opener, or the trunk button on the transmitter is operated.
- 6. Do the same procedure on the other side.

7. Open the trunk and tie the rope to the trunk hinge.



- 1. Rope
- 2. Hinge
- Tie off the other side rope the same way.
- 9. Close the trunk lid.

#### After finishing the procedure

After finishing the procedure, have the roof checked at an Authorized Mazda Dealer as soon as possible.

# 

Drive the vehicle at a speed of 40 km/h (25 mph) or lower before having the hardtop checked at an Authorized Mazda Dealer.

The front roof may open while the vehicle is being driven and cause an accident.

# Open the Trunk Lid from the luggage compartment

If the battery is dead, the trunk cannot be unlocked and opened.

In this case, the trunk can be unlocked by taking care of the dead battery situation.

Refer to Taking Action with Depleted Lead-acid Battery on page 8-12. If the trunk cannot be unlocked even if the dead battery situation has been resolved, the electrical system may have a malfunction.

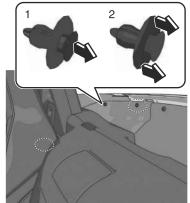
#### Soft top model

- Close the convertible top. Refer to How to Use the Convertible Top (Soft Top) on page 4-29.
- 2. Remove the windblocker.

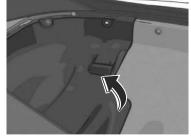


1. Windblocker

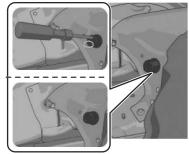
3. Remove the fasteners on the right side of the vehicle.



4. Partially peel back the cover on the right side of the vehicle.

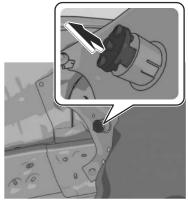


5. Turn and loosen the cap screws until the screws start to spin free.



6. Pull out the cap and open the trunk lid.

After performing this emergency measure, have the vehicle inspected at an Authorized Mazda Dealer as soon as possible.





Do not pull the screw when pulling the cap. Otherwise, the screw may fall off and become lost.

#### Hardtop model

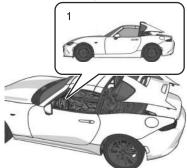


Do not touch the linkage and gears. If sharp edges and gears are touched, it could cause injury.

#### Roof operates electrically

- 1. Remove the antenna if it is installed.
- 2. Start the engine.
- 3. Continue pressing the retractable hardtop switch in the open direction until the rear roof is completely open.

Refer to How to Use the Convertible Top (Retractable Fastback) on page 4-35.

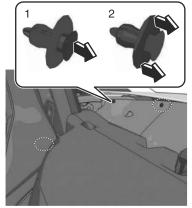


1. Multi-information display indication

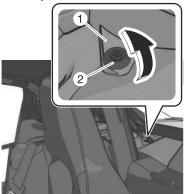
#### NOTE

Stop operating the switch before the front roof opens. If the switch is continuously pressed, the front roof opens and the following procedures cannot be performed.

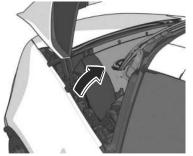
- 4. Switch the ignition OFF.
- 5. Remove the fasteners on the right side of the vehicle.



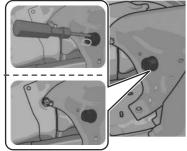
6. Push the stopper rubber through the cover on the right side of the vehicle while slightly lifting the cover up.



- 1. Cover
- 2. Stopper Rubber
- 7. Lift up the cover from the outside of the vehicle.



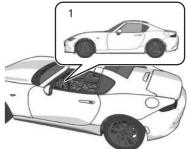
8. Insert your hand beneath the lifted cover and loosen the cap screws until they spin freely.



#### NOTE

At this point, do not pull out the cap. If the cap is pulled out, the trunk lock will release but the rear roof will not operate electrically.

- 9. Start the engine.
- 10. Continue pressing the retractable hardtop switch in the close direction until the rear roof is completely closed.Refer to How to Use the Convertible Top (Retractable Fastback) on page 4-35.



- Multi-information display indication
   Switch the ignition OFF
- 11.Switch the ignition OFF.

12.Remove the windblocker.

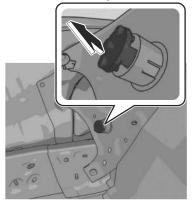


- 1. Windblocker
- 13.Partially peel back the cover on the right side from the middle of the vehicle.



14.Pull out the cap and release the trunk lock.

After performing this emergency measure, have the vehicle inspected at an Authorized Mazda Dealer as soon as possible.

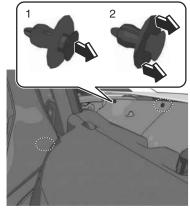


## 

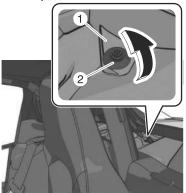
Do not pull the screw when pulling the cap. Otherwise, the screw may fall off and become lost.

#### Roof does not operate electrically

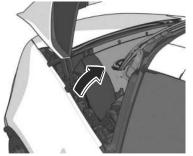
- 1. Remove the antenna if it is installed.
- Lift up the rear roof by hand. Refer to Closing the roof manually on page 8-37.
- 3. Remove the fasteners on the right side of the vehicle.



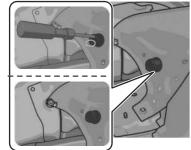
4. Push the stopper rubber through the cover on the right side of the vehicle while slightly lifting the cover up.



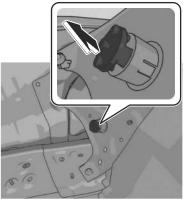
- 1. Cover
- 2. Stopper Rubber
- 5. Lift up the cover from the outside of the vehicle.



6. Insert your hand beneath the lifted cover and loosen the cap screws until they spin freely.



7. Pull out the cap and release the trunk lock.



**CAUTION** 

At this point, do not open the trunk. If the trunk is opened before the rear roof is completely closed, the trunk may contact the rear roof and cause damage and become scratched.

- 8. Close the rear roof by hand. Refer to Closing the roof manually on page 8-37.
- 9. Open the trunk lid.

After performing this emergency measure, have the vehicle inspected at an Authorized Mazda Dealer as soon as possible.

### Initializing the Power Window

To restore these functions, do the following:

- 1. Switch the vehicle power ON.
- 2. Press the power window switch to fully open the window.
- 3. Pull the power window switch and fully close the window, and continue pulling the switch for about 2 seconds.

### Have the Vehicle Inspected

The windshield wipers may operate at high speed if there is a problem with the wiper control.

If the wipers operate at high speed regardless of the wiper switch operation, have your vehicle inspected by an Authorized Mazda Dealer.

### Inspecting Washer Fluid Level

If the washer fluid is not sprayed, check the amount of fluid in the washer tank. Refer to Replenishing Windshield Washer Fluid on page 9-24. If air enters the washer pipe when refilling the empty washer tank with washer fluid, the washer fluid may not be sprayed.

Operate the wiper lever until the washer fluid is sprayed.

If the washer fluid is not sprayed even after refilling, consult an Authorized Mazda Dealer.

### Warning Lights

If any warning/indicator light turns on/flashes, take appropriate action for each light. If the warning/indicator light does not turn off, or it turns on or flashes again, consult an Authorized Mazda Dealer.

### 

If the warning light/indicator light turns on or flashes, park the vehicle in a safe place immediately and take appropriate measures.

Continuing to drive the vehicle while ignoring the illumination/flashing of the warning light/indicator light is dangerous because a problem may occur to a vehicle system, the engine may be damaged, or it could lead to an accident.

The details for some warnings can be viewed on the center display or instrument cluster.

#### **Checking Using the Center Display**

- 1. Select "Information" on the home screen.
- 2. Select "Vehicle Status Monitor".
- 3. Select the applicable warning to view the warning details.

#### Checking Using the Instrument Cluster

Press the INFO switch on the steering switch to display the warning indication screen. Refer to How to Use the Multi-information Display on page 5-18.

### Brake System Warning Light (Red)



This warning has the following functions:

# Parking brake warning/Indicator light inspection

The light illuminates when the parking brake is applied with the vehicle power switched to START or ON. It turns off when the parking brake is released.

#### When the light turns on

The light turns on continuously if any one of the following occurs:

- Insufficient brake fluid
- Brake system (electronic brake force distribution system) has a problem

Park the vehicle in a safe place immediately and contact an Authorized Mazda Dealer.

### **WARNING**

Do not drive with the brake system warning light illuminated. Contact an Authorized Mazda Dealer to have the brakes inspected as soon as possible. Driving with the brake system warning light illuminated is dangerous. It indicates that your brakes may not work at all or that they could completely fail at any time. If this light remains illuminated, after checking that the parking brake is fully released, have the brakes inspected immediately.

#### What to Do in Case of Emergency Warning/Indicator Light Turns On

If the brake system warning light and

the ABS warning light (ABS) turn on at the same time, stop the vehicle in a safe place immediately and contact an Authorized Mazda Dealer.

The rear wheels could lock more quickly in an emergency stop than under normal circumstances which could result in an accident.

# **A** CAUTION

- In addition, the effectiveness of the braking may diminish so you may need to depress the brake pedal more strongly than normal to stop the vehicle.
- The brake warning light may turn on when the engine is started. In this case, park the vehicle in a safe location and release the brake pedal. If the brake warning light remains illuminated, have the vehicle inspected by an Authorized Mazda Dealer.

### Charging System Warning Light



The light turns on if the charging system has a problem. Park the vehicle in a safe place immediately and contact an Authorized Mazda Dealer.

# WARNING

# Do not continue driving with the charging system warning light turned on.

Otherwise, the engine may stop, which could result in an accident.

### Engine Oil Warning Light



The light turns on when the engine oil pressure decreases.



Do not drive the vehicle with the engine oil warning light turned on. Driving the vehicle with decreased engine oil pressure may cause engine damage.

If the engine oil warning light turns on while driving, check the engine oil using the following procedure.

- 1. Stop the vehicle in a safe place.
- 2. Stop the engine.
- 3. Wait for 5 minutes for the engine oil to flow into the oil pan.
- Check the amount of engine oil. Refer to Inspecting Engine Oil on page 9-20. If it's low, add the appropriate amount of engine oil while being careful not to overfill.
- 5. Start the engine and check the warning light.

If the light remains illuminated even though the oil level is normal or after adding oil, stop the engine immediately and have your vehicle towed to an Authorized Mazda Dealer.

### High Engine Coolant Temperature Warning Light



The light turns on if the engine coolant temperature has increased excessively. Check the contents of the message displayed and take the necessary action.

# **CAUTION**

Do not drive the vehicle with the high engine coolant temperature warning light turned on. Driving the vehicle with the engine not cooled down may cause engine damage.

### Electric Power Steering Warning Light



The warning light turns on if the electric power steering has a malfunction.

If the warning light turns on, stop the vehicle in a safe place and switch the vehicle power OFF.

There is no problem if the warning light turns off when the engine is restarted after some time has passed.

If the warning light turns on even after the engine is restarted, contact an Authorized Mazda Dealer.

#### NOTE

- If the warning light turns on, the electric power steering will not operate normally. In this case, the steering wheel can still be operated, however, the operation may feel heavy compared to normal.
- Repeatedly jerking the steering wheel left and right while the vehicle is stopped or moving extremely slowly will cause the power steering system to go into protective mode which will make the steering feel heavy, but this does not indicate a problem. If this occurs, park the vehicle safely and do not operate the steering wheel. The system will return to normal after a few minutes.

### **ABS Warning Light**



The light remains on if the system has a problem.

Have your vehicle inspected by an Authorized Mazda Dealer.

## 

If the brake system warning light we have and the ABS warning light turn on at the same time, stop the vehicle in a safe place immediately and contact an Authorized Mazda Dealer. The rear wheels could lock more quickly in an emergency stop than under normal circumstances which could result in an accident.

### **Master Warning Light**



The light turns on if the system has a problem.

Check the contents of the message displayed on the center display or in the instrument cluster and take the necessary action.

If the light does not turn off, consult an Authorized Mazda Dealer.

### Electric Vacuum Pump Warning Light (Amber)



The light turns on if the system has a problem. Have your vehicle inspected by an Authorized Mazda Dealer.

### Check Engine Warning Light





#### Do not disconnect the battery cables when the check engine warning light is turned on/flashing.

The engine may be damaged when reconnecting the battery cables, which could result in a fire.

The light turns on if the engine has a problem while it is running. Park the vehicle in a safe place immediately and contact an Authorized Mazda Dealer. If any of the following problems occur, the check engine warning light turns on.

- There is a problem with the engine control system
- There is a problem with the emission control system
- There is a problem with the transmission control system
- The fuel tank level being very low or approaching empty
- The fuel-filler cap is missing or not tightened securely (Except Mexico)

If the check engine warning light remains turned-on/flashing, do not drive at high speed and have the vehicle inspected by an Authorized Mazda Dealer as soon as possible.

### Tire Pressure Monitoring System (TPMS) Warning Light (Flashing)<sup>\*</sup>



The light flashes if there is a malfunction in the system. Contact an Authorized Mazda Dealer.

# 

# Do not drive the vehicle at high speeds if the TPMS warning light turns on or flashes.

Driving the vehicle at high speeds while the TPMS warning light is turned on or flashing is dangerous because the brake performance and the steering wheel operability will be reduced. If the vehicle is driven at high speeds or the brakes are suddenly applied, it could lead to an accident. Gradually apply the brakes to lower the vehicle's speed.

# Do not ignore the TPMS warning light when it is turned on or flashing.

Continuing to drive the vehicle while ignoring the illumination/flashing of the TPMS warning light is dangerous because a tire may burst which could lead to an accident. Take appropriate measures as soon as possible.

### TCS/DSC Indicator Light (Turns on)



There may be a problem with the DSC, TCS, or Hill Launch Assist (HLA) under the following conditions. Have your vehicle inspected by an Authorized Mazda Dealer.

- The light does not turn on or remains on even if the vehicle power is switched ON.
- $\cdot$  It turns on while driving the vehicle.

### DSC-TRACK Indicator Light<sup>\*</sup>



A problem in the system might be indicated under the following conditions.

Have your vehicle inspected by an Authorized Mazda Dealer.

• The light turns on even though the DSC-TRACK switch is not being operated.

### Air Bag/Seat Belt Pretensioner System Warning Light



A problem in the system might be indicated under the following conditions.

Have your vehicle inspected by an Authorized Mazda Dealer.

- Does not turn on even if the vehicle power is switched ON.
- · Remains turned-on/flashing.

# **WARNING**

Never tamper with the air bag/ pretensioner systems and always have an Authorized Mazda Dealer perform all servicing and repairs.

Self-servicing or tampering with the systems is dangerous. An air bag/ pretensioner could accidentally activate or become disabled causing serious injury or death.

### KEY Warning Light (Red)



The light turns on if the system has a problem or if the key is out of the operation range.

Check the contents of the message displayed and take the necessary action.

# **A** CAUTION

If the push button start indicator light (amber) flashes at the same time, the engine may not start. Have the vehicle inspected by an Authorized Mazda Dealer as soon as possible.

### Security Indicator Light



If the security indicator light turns on/ flashes while driving, do not stop the engine (leave it operating) and have the vehicle inspected at an Authorized Mazda Dealer. If you stop the engine, you may not be able to start it again. If the engine cannot be started, switch the vehicle power OFF, place the key in another position within the operation range, and then restart the engine. Check the security indicator light and if it does not turn off, such as it remains on or flashes, switch the vehicle power OFF, wait for a while, and then restart the engine.

If the engine does not start after three attempts, a system malfunction may have occurred. Have the vehicle inspected by an Authorized Mazda Dealer.

#### NOTE

When repairing the immobilizer system, the key codes will need to be reprogrammed. Bring all the remaining keys to an Authorized Mazda Dealer.

### Retractable Hardtop Warning Light<sup>\*</sup>



The light turns on if there is a malfunction in the system. Have your vehicle inspected by an Authorized Mazda Dealer.

### High Beam Control System (HBC) Warning Light (Amber)<sup>\*</sup>



The light turns on if the system has a problem.

Have your vehicle inspected by an Authorized Mazda Dealer.

### i-ACTIVSENSE Warning Light<sup>\*</sup>



The light turns on if any i-ACTIVSENSE related system has a problem. Check the contents of the message displayed and take the necessary action.

### Exterior Lights Warning Light



The light turns on if the exterior lights (not including the license plate lights) has a problem.

Have your vehicle inspected by an Authorized Mazda Dealer.

# **A** CAUTION

Do not drive the vehicle while an exterior light has a malfunction. Poor visibility, and not being able to signal braking and turns may cause an accident. In addition, if the vehicle is driven with the lights not turned on, it may conflict with laws and regulations due to poor maintenance.

### Low Fuel Warning Light



The light turns on/flashes when the remaining fuel in the tank is near empty. When the light flashes, a warning

sound is activated. Refuel immediately.

#### NOTE

The light illumination timing may vary because fuel inside the fuel tank moves around according to the driving conditions and the vehicle posture.

### Seat Belt Warning Light



#### (Except Mexico)

The warning light flashes for about 6 seconds if the driver or passenger's seat is occupied and the seat belt is not fastened with the vehicle power switched ON.

If the driver or passenger's seat belt is unfastened (only when the driver or passenger's seat is occupied) and if the vehicle is driven at about 20 km/h (12 mph) or faster, or about 10 km/h (6 mph) or faster for a continuous 30 seconds, with the seat belt unfastened, the warning light flashes for a certain period.

After a short time, the warning light stops flashing, but remains illuminated. In addition, when the warning light flashes, a warning sound is activated. Wear the seat belt.

#### NOTE

- Placing heavy items on the driver or passenger's seat may cause the driver or passenger's seat belt warning function to operate depending on the weight of the item.
- To allow the sensor that detects an occupant to function properly, do not sit on the driver or passenger's seat with a cushion or other object on it. The sensor may not function properly because the additional seat cushion could cause sensor interference.

• If a small child is seated on the driver or passenger's seat, the warning light may not operate.

#### (Mexico)

The warning light turns on if the driver or driver or passenger's seat is occupied and the seat belt is not fastened with the vehicle power switched ON.

If the driver or driver or passenger's seat belt is unfastened (only when the driver or passenger's seat is occupied) and if the vehicle is driven at about 20 km/h (12 mph) or faster, the warning light flashes for a certain period. After a short time, the warning light stops flashing, but remains illuminated. In addition, when the warning light flashes, a warning sound is activated. Wear the seat belt.

#### NOTE

- Placing heavy items on the driver or passenger's seat may cause the driver or passenger's seat belt warning function to operate depending on the weight of the item.
- To allow the sensor that detects an occupant to function properly, do not sit on the driver or passenger's seat with a cushion or other object on it. The sensor may not function properly because the additional seat cushion could cause sensor interference.
- If a small child is seated on the driver or passenger's seat, the warning light may not operate.

### Low Washer Fluid Amount Warning Light<sup>\*</sup>



The light turns on if the amount of washer fluid is low when the vehicle power is switched ON. Add washer fluid.

### Door-ajar Warning Light/ Trunk lid-open Warning Light





The light turns on if any door/trunk lid is not closed securely. In addition, the warning sound is activated if any door/trunk lid is not closed and the vehicle is driven.

Close the door/trunk lid securely.

### KEY Indicator Light (Green) (Flashing)



The light flashes if the battery power of the key is low when the vehicle power is switched from ON to OFF. Replace the key battery.

### Wrench Indicator Light



The wrench indication/indicator light is displayed/turns on under the following conditions.

• When the preset maintenance period has arrived. Refer to the Mazda Connect "Vehicle Status Monitor".

# **CAUTION**

- > When the maintenance period arrives, have your vehicle inspected by an Authorized Mazda Dealer as soon as possible. If maintenance is neglected, a decrease in vehicle performance may occur which could cause damage. Have your vehicle inspected before the maintenance period arrives.
- If the vehicle continues to be driven after the engine oil replacement period has passed, it could cause damage to the engine. Replace the engine oil before the maintenance period arrives.

#### NOTE

- The wrench indication/indicator light may display/turn on earlier than the preset period depending on vehicle usage conditions.
- Whenever the engine oil is replaced, a reset of the vehicle engine control unit is necessary.
   Refer to the Mazda Connect "Vehicle

Refer to the Mazda Connect "Vehicle Status Monitor".

### Check Fuel Cap Warning Light



If the check fuel cap warning light illuminates while driving, the fuel-filler cap may not be installed properly. Stop the engine and reinstall the fuel-filler cap.

### **Lights-On Reminder**

If the vehicle power is switched OFF with the exterior lights turned on and the driver's door is opened, a sound is activated.

Operate the headlight switch to turn off the exterior lights.

#### NOTE

A personalized function is available to change the sound volume for the lights-on reminder.

Set using "Settings" on the Mazda Connect home screen or consult an Authorized Mazda Dealer.

### Retractable Hardtop Warning Sound<sup>\*</sup>

If there is a problem with the retractable hardtop, the warning beep is activated continuously while operating the switch. If the warning beep is activated continuously while operating the switch, have the vehicle inspected at an Authorized Mazda Dealer.

### Power Switch Not Switched OFF Reminder Warning Sound

If the driver's door is opened with the vehicle power switched to ACC, a beep will be heard continuously in the cabin to notify the driver that the vehicle power has not been switched OFF (STOP). Under this condition, the keyless entry system will not operate, the vehicle cannot be locked, and the lead-acid battery voltage will be depleted.

Switch the vehicle power OFF.

### Key Removed from Vehicle Warning Sound

If the key is taken out of the vehicle while the vehicle power is switched to ACC or ON, and all the doors are closed, a sound is activated 6 times outside of the vehicle and a sound is activated 1 time in the vehicle.

Make sure that you leave the vehicle while carrying the key, or switch the vehicle power OFF.

### Key Left-in-Vehicle Warning Sound

If all the doors and trunk are locked using another key while the key is left in the cabin, the beep which sounds outside of the vehicle will be heard for about 10 seconds to notify the driver that the key is in the cabin. In this case, take out the key by opening the door. A key taken out of the vehicle using this method may not operate because its functions have been temporarily stopped. To restore the key's functions, perform the applicable procedure (page 8-9).

## Key Left-In-Trunk Warning Sound

If the key is left in the trunk with all the doors locked and the trunk lid closed, a beep will be heard outside for about 10 seconds to notify the driver that the key is in the trunk. In this case, take out the key by pressing the electric trunk lid opener and opening the trunk lid. The key taken out of the trunk may not operate because its functions have been temporarily stopped. To restore the key's functions, perform the applicable procedure (page 8-9).

### Door Lock Inoperable Warning Sound

If the request switch is pressed with the door open or ajar, or the vehicle power is not switched OFF with a key being carried, a beep will be heard outside for about 2 seconds to notify the driver that the door or trunk cannot be locked.

### Brake System Warning Sound

A warning sound is activated if a problem with the brake system occurs and the brakes may not work as intended. Decelerate the vehicle while checking the safety of the surrounding area, and park the vehicle in a safe place. After stopping the vehicle, contact an Authorized Mazda Dealer.

## Low Lead-Acid Battery Charge Warning Sound

A warning sound is activated if the lead-acid battery charge is depleted. To charge the lead-acid battery, start the engine and keep running the engine for 5 minutes or longer.

# What to do when the vehicle is stuck



Do not spin the wheels at more than 56 km/h (35 mph), and do not allow anyone to stand behind a wheel when pushing the vehicle:

When the vehicle is stuck, spinning the wheels at high speed is dangerous. The spinning tire could overheat and explode. This could cause serious injuries.

# **A**CAUTION

Too much rocking may cause engine overheating, transmission failure, and tire damage.

If you must rock the vehicle to free it from snow, sand or mud, depress the accelerator slightly and slowly move the shift lever/selector lever from 1 (D) to R position.

C	Check Alexa setting	;s <sup>*</sup>
Symptom	Cause	Solution method
Streaming music cannot be played using Alexa.	Cannot communicate using the Wi-Fi client function.	<ul> <li>Check the communication with the Wi-Fi client function using the following procedure.</li> <li>Select "Settings" from the Mazda Connect home screen.</li> <li>Select "Connectivity Set- tings".</li> <li>Select "Wi-Fi Client Settings".</li> <li>Make sure that "Wi-Fi Client Mode" is enabled.</li> <li>A Wi-Fi connection can be made with the device to be used from "Search for Availa- ble Wi-Fi Networks" or "Wi-Fi Protected Set- up (WPS)".</li> </ul>
Alexa does not respond when the talk/pick-up button is press- ed.	You are not signed in to your Amazon account or "Push-To-Talk" is disabled.	<ul> <li>Check whether you are signed in to your Amazon account using the following procedure.</li> <li>Select "Settings" from the Mazda Connect home screen.</li> <li>Select "Alexa Settings".</li> <li>If "Sign In" does not display on the screen, you are signed in. If "Sign In" is displayed on the screen, select "Sign In" and follow the instructions on the screen to sign in.</li> <li>Make sure that "Push-To-Talk" is enabled using the following procedure.</li> <li>Select "Settings" from the Mazda Connect home screen.</li> <li>Select "Alexa Settings".</li> <li>Select "Alexa Settings".</li> <li>Make sure that "Push-To-Talk" is enabled using the following procedure.</li> <li>Select "Settings" from the Mazda Connect home screen.</li> <li>Select "Settings".</li> <li>Make sure that "Push-To-Talk" is enabled.</li> </ul>

Symptom	Cause	Solution method
Alexa does not respond when you say "Alexa".	You are not signed in to your Amazon account or "Alexa Hands-Free" is disabled.	<ul> <li>Check whether you are signed in to your Amazon account using the following procedure.</li> <li>Select "Settings" from the Mazda Connect home screen.</li> <li>Select "Alexa Settings".</li> <li>If "Sign In" does not display on the screen, you are signed in. If "Sign In" is displayed on the screen, select "Sign In" and follow the instructions on the screen to sign in.</li> <li>Make sure that "Alexa Hands-Free" is enabled using the following procedure.</li> <li>Select "Settings" from the Mazda Connect home screen.</li> <li>Select "Alexa Settings".</li> <li>Make sure that "Alexa Hands-Free" is enabled using the following procedure.</li> <li>Mazda Connect home screen.</li> <li>Select "Alexa Settings".</li> <li>Make sure that "Alexa Hands-Free" is enabled.</li> </ul>

# MEMO



# Inspection and Servicing/Cleaning

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\*Some models. 9-1

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# MEMO

### Inspection and Servicing

Be careful not to hurt yourself when inspecting your vehicle, replacing a tire, or doing some kind of maintenance such as changing the oil and filter.

In particular, wear thick work gloves such as cotton gloves when touching areas that are difficult to see while inspecting or working on your vehicle. Doing inspections or procedures with your bare hands could cause injury.

If you are unsure about any procedure this manual describes, we strongly urge you to have a reliable and qualified service shop perform the work, preferably an Authorized Mazda Dealer.

Factory-trained Mazda technicians and genuine Mazda parts are best for your vehicle. Without this expertise and the parts that have been designed and made especially for your Mazda, inadequate, incomplete, and insufficient servicing may result in problems. This could lead to vehicle damage or an accident and injuries.

For expert advice and quality service, consult an Authorized Mazda Dealer.

To continue warranty eligibility and to protect your investment, it is your responsibility to properly maintain your vehicle according to factory recommended schedules outlined in this manual. As part of this you must keep your maintenance records, receipts, repair orders and any other documents as evidence this maintenance was performed. You must present these documents, should any warranty coverage disagreement occur. Failure to do so can result in your warranty being voided either in whole or in part.

This evidence may consist of the following:

- The Mazda Scheduled Maintenance Record, refer to the Warranty Booklet, must be completely filled out showing mileage, repair order number, date for each service, and signed by a qualified automotive service technician who service vehicles.
- Original copies of repair orders or other receipts that include the mileage and date the vehicle was serviced. Each receipt should be signed by a qualified automotive service technician.
- For self maintenance, a statement that you completed the maintenance yourself, displaying mileage and the date the work was performed. Also, receipts for the replacement parts (fluid, filters, etc.) indicating the date and mileage must accompany this statement.

### NOTE

If you elect to perform maintenance yourself or have your vehicle serviced at a location other than an Authorized Mazda Dealer, Mazda requires that all fluids, parts and materials must meet Mazda standards for durability and performance as described in this manual.

Claims against the warranty resulting from lack of maintenance, as opposed to defective materials or authorized Mazda workmanship, will not be honored. Any auto repair shop using parts equivalent to your Mazda's original equipment may perform maintenance. But we recommend that it always be done by an Authorized Mazda Dealer using genuine Mazda parts. Selecting "Vehicle Status Monitor" enables the system to notify you of your vehicle's approaching inspection/ servicing period. Select "Information"  $\rightarrow$  "Vehicle Status Monitor" on the Mazda Connect home screen, and then check the maintenance period , or consult an Authorized Mazda Dealer.

# Scheduled Maintenance (U.S.A., Canada, and Puerto Rico)

Follow Schedule 1 if the vehicle is operated mainly where none of the following conditions (severe driving conditions) apply.

- · Repeated short-distance driving
- · Driving in dusty conditions
- Driving with extended use of brakes
- · Driving in areas where salt or other corrosive materials are used
- Driving on rough or muddy roads
- · Extended periods of idling or low-speed operation
- Driving for long periods in cold temperatures or extremely humid climates
- · Driving in extremely hot conditions
- Driving in mountainous conditions continually

If any do apply, follow Schedule 2. (Canada residents follow Schedule 2.) Vehicles using Engine Oil Flexible Maintenance

Engine Oil Flexible Maintenance is selected by default for U.S.A. and Puerto Rico residents.

If any following conditions do apply, follow Schedule 2 with engine oil fixed maintenance.

- Extended periods of idling or low-speed operation such as police car, taxi or driving school car
- · Driving in dusty conditions

The vehicle calculates the remaining oil life based on engine operating conditions. The vehicle lets you know when an oil change is due by illuminating the wrench indicator light in the instrument cluster. Change the oil as soon as possible within the next 1,000 km (600 mile) or 15 days. Refer to the Information section in the Mazda Connect Owner's Manual for the details.

### NOTE

- Please ensure that the Flexible Oil Maintenance Setting is reset after each Oil and Filter replacement.
- For maintenance guidelines beyond the miles/months listed, follow the maintenance intervals provided in the Scheduled Maintenance Tables.

### Schedule 1

### U.S.A. and Puerto Rico residents - Engine oil flexible maintenance interval

Use when the maintenance monitor for "Oil Change" is set to "Flexible". For the details, refer to the Information section in the Mazda Connect Owner's Manual.

	Number of	f montł	ns or kil	ometer	s (miles	s), whic	hever	comes fi	irst.				
Maintenance Interval	Months	12	24	36	48	60	72	84	96				
Maintenance Interval	×1000 km	12	24	36	48	60	72	84	96				
	×1000 miles	7.5	15	22.5	30	37.5	45	52.5	60				
Spark plugs		Replace every 120,000 km (75,000 miles).											
Air filter				R			R						
Drive belts				I			I						
Engine oil & filter <sup>*1</sup>								N. (Max ) miles))					
Engine coolant <sup>*2</sup>		Replace at first 192,000 km (120,000 miles) or 10 years; after that, every 96,000 km (60,000 miles) or 5 years.											
Fuel lines and hoses <sup>*3</sup>		I		I		I		Ι					
Hoses and tubes for emission	*3				I				Ι				
Brake lines, hoses and connec	ctions		I		I		I		Ι				
Disc brakes		I	I	I	I	I	I	I	-				
Manual transmission oil		Rep	lace ev	ery 96,0	000 km	(60,00	0 miles	) or 4 ye	ears.				
Tire (Rotation)			Rota	te every	12,00	0 km (7	,500 m	niles).					
Steering operation and linkag	es		I		I		I		-				
Front and rear suspension, ba wheel bearing axial play	ll joints and		I		I		I		L				
Driveshaft dust boots			I		I		I		Ι				
Bolts and nuts on chassis and body			Т		Т		Т		Т				
Exhaust system and heat shiel					I								
Emergency flat tire repair kit (	if equipped) <sup>*4</sup>			I	nspect	annually	y.						

#### Chart symbols:

I: Inspect: Inspect and clean, repair, adjust, fill up, or replace if necessary.

- R: Replace
- L: Lubricate
- C: Clean
- T: Tighten
- D: Drain

#### Remarks:

- <sup>\*</sup>1 The engine oil and filter must be changed at least once a year or within 12,000 km (7,500 miles) since last engine oil and filter change. Reset the engine oil data whenever replacing the engine oil regardless of the message/wrench indicator light display.
- <sup>2</sup> Use of FL-22 is recommended when replacing engine coolant. Using engine coolant other than FL-22 may cause serious damage to the engine and cooling system.
- <sup>3</sup> According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or mileage/kilometer period to ensure long-term reliability.
- <sup>\*4</sup> Check the tire repair fluid expiration date every year when performing the periodic maintenance. Replace the tire repair fluid bottle with new one before the expiration date.

### Schedule 2

### U.S.A. and Puerto Rico residents - Severe driving conditions maintenance interval

	Number of	f moi	nths o	or kil	ome	ters (	mile	s), wl	niche	ver c	ome	s firs	t.	
Maintenance Interval	Months	6	12	18	24	30	36	42	48	54	60	66	72	
Maintenance Interval	×1000 km	8	16	24	32	40	48	56	64	72	80	88	96	
	×1000 miles	5	10	15	20	25	30	35	40	45	50	55	60	
Spark plugs	Spark plugs		Replace every 120,000 km (75,000 miles).											
Air filter <sup>*1</sup>							R						R	
Drive belts					Ι				I				Ι	
Engine oil & filter		Rep	blace val					ator 000 k	0		•		ter-	
	Fixed	R	R	R	R	R	R	R	R	R	R	R	R	
Engine coolant <sup>*3</sup>			lace a er th					•			<i>'</i>		· · ·	
Engine coolant level		Ι	I	I	I	I	Ι	I	I	I	I	I	Ι	
Fuel lines and hoses <sup>*4</sup>				Ι			I			Ι			Ι	
Hoses and tubes for emission	4						I						Ι	
Function of all lights		Ι	I	Ι	Ι	I	I	I	I	Ι	I	I	Ι	
Brake lines, hoses and connec	tions			Ι			Ι			Ι			Ι	
Brake and clutch fluid level		Ι	Ι	Ι	Ι	Т	I	I	I	Ι	Т	I	Ι	
Disc brakes		Ι	I	Ι	Ι	Т	Ι	I	Ι	Ι	Т	I	Ι	
Manual transmission oil		R	eplac	e eve	ery 48	8,000	) km	(30,0	000 r	niles	) or 2	year	s.	
Tire (Rotation)			_	Rota	te ev	ery 8	3,000	) km	(5,00	0 mi	les).			
Tire inflation pressure and tire wear		Ι	I	Ι	Ι	I	I	Ι	I	Ι	Ι	I	Ι	
Steering operation and linkage	es			Ι			Ι			Ι			Ι	

	Number of months or kilometers (miles), whichever comes first.													
Maintenance Interval	Months	6	12	18	24	30	36	42	48	54	60	66	72	
	×1000 km	8	16	24	32	40	48	56	64	72	80	88	96	
	×1000 miles	5	10	15	20	25	30	35	40	45	50	55	60	
Front and rear suspension, ball joints and wheel bearing axial play				I			I			I			I	
Driveshaft dust boots				Ι			Ι			Т			Ι	
Bolts and nuts on chassis and	body			Т			Т			Т			Т	
Exhaust system and heat shield	ds							I						
All locks and hinges		L	L	L	L	L	L	L	L	L	L	L	L	
Washer fluid level		I	Т	I	Т	I	Ι	I	I	Т	Ι	Ι	Т	
Emergency flat tire repair kit (i	f equipped) <sup>*5</sup>					Insp	bect a	annu	ally.					

#### Chart symbols:

I: Inspect: Inspect and clean, repair, adjust, fill up, or replace if necessary.

- R: Replace
- L: Lubricate
- C: Clean
- T: Tighten
- D: Drain

#### Remarks:

- <sup>\*</sup>1 If the vehicle is operated in very dusty or sandy areas, clean and if necessary, replace the air filter more often than the recommended intervals.
- <sup>2</sup> Engine oil flexible maintenance is available for U.S.A. and Puerto Rico residents whose vehicle is operated mainly where none of the following conditions apply.

-Extended periods of idling or low-speed operation such as police car, taxi or driving school car -Driving in dusty conditions

If any do apply, follow fixed maintenance.

The engine oil and filter must be changed at least once a year or within 12,000 km (7,500 miles) since last engine oil and filter change. Reset the engine oil data whenever replacing the engine oil regardless of the message/wrench indicator light display.

- <sup>\*</sup>3 Use of FL-22 is recommended when replacing engine coolant. Using engine coolant other than FL-22 may cause serious damage to the engine and cooling system.
- <sup>\*4</sup> According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or mileage/kilometer period to ensure long-term reliability.
- <sup>\*5</sup> Check the tire repair fluid expiration date every year when performing the periodic maintenance. Replace the tire repair fluid bottle with new one before the expiration date.

### Inspection and Servicing/Cleaning Scheduled Maintenance

### Canada residents

	Number of	f mor	nths o	or kil	ome	ters (	mile	s), wl	hiche	ever o	ome	s first	t.	
Maintenance Interval	Months	6	12	18	24	30	36	42	48	54	60	66	72	
Maintenance Interval	×1000 km	8	16	24	32	40	48	56	64	72	80	88	96	
	×1000 miles	5	10	15	20	25	30	35	40	45	50	55	60	
Spark plugs	Spark plugs		Replace every 120,000 km (75,000 miles).											
Air filter		Ι	Ι	Ι	I	Ι	Ι	I	Ι	Ι	I	Ι	Ι	
		Replace every 56,000 km (35,000 miles) or 3 years.												
Drive belts							Ι						Ι	
Engine oil & filter		R	R	R	R	R	R	R	R	R	R	R	R	
Engine coolant <sup>*1</sup>		Replace at first 192,000 km (120,000 miles) or 10 years; after that, every 96,000 km (60,000 miles) or 5 years.												
Engine coolant level		Ι	Ι	I	I	Ι	Ι	Ι	I	Ι	Ι	Ι	Ι	
Fuel lines and hoses <sup>*2</sup>					I				I				Ι	
Hoses and tubes for emission <sup>*2</sup>									I					
Function of all lights		I	Т	I	I	Т	I	I	I	Ι	I	Ι	Ι	
Brake lines, hoses and connect	tions				I				I				Ι	
Brake and clutch fluid level		I	I	I	I	I	I	I	I	I	I	I	Ι	
Disc brakes		Inspect every 24,000 km (15,000 miles) or 1 year.											<b>.</b>	
Manual transmission oil		Replace every 48,000 km (30,000 miles) or 2 years.												
Tire (Rotation)				Rota	ate ev	ery 8	3,000	) km	(5,00	)0 mi	les).			
Tire inflation pressure and tire	wear	I	I	I	I	Т	Ι	I	I	Ι	Ι	Ι	Ι	
Steering operation and linkage	s				Т				Т				Ι	
Front and rear suspension, bal wheel bearing axial play	l joints and				I				I				I	
Driveshaft dust boots					I				I				Ι	
Bolts and nuts on chassis and body					Т				Т				Т	
Exhaust system and heat shields			nspec	t eve	ery 72	2,000	) km	(45,0	)00 n	niles)	or 5	year	s.	
All locks and hinges		L	L	L	L	L	L	L	L	L	L	L	L	
Washer fluid level		I	I	I	I	Ι	I	I	I	Ι	I	Ι	Ι	
Emergency flat tire repair kit (it	f equipped) <sup>*3</sup>					Insp	bect a	annu	ally.					

### Chart symbols:

I: Inspect: Inspect and clean, repair, adjust, fill up, or replace if necessary.

- R: Replace
- L: Lubricate
- C: Clean

T: Tighten D: Drain

#### Remarks:

- <sup>\*</sup>1 Use of FL-22 is recommended when replacing engine coolant. Using engine coolant other than FL-22 may cause serious damage to the engine and cooling system.
- <sup>\*</sup>2 According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or mileage/kilometer period to ensure long-term reliability.
- <sup>\*</sup>3 Check the tire repair fluid expiration date every year when performing the periodic maintenance. Replace the tire repair fluid bottle with new one before the expiration date.

### **Scheduled Maintenance (Mexico)**

Follow Schedule 1 if the vehicle is operated mainly where none of the following conditions (severe driving conditions) apply.

- · Repeated short-distance driving
- · Driving in dusty conditions
- · Driving with extended use of brakes
- · Driving in areas where salt or other corrosive materials are used
- · Driving on rough or muddy roads
- · Extended periods of idling or low-speed operation
- · Driving for long periods in cold temperatures or extremely humid climates
- · Driving in extremely hot conditions
- · Driving in mountainous conditions continually

If any do apply, follow Schedule 2.

### NOTE

For maintenance guidelines beyond the kilometers/months listed, follow the maintenance intervals provided in the Scheduled Maintenance Tables.

	Number o	f mo	nths	or ki	ome	ters (	mile	s), w	hiche	ever	come	es firs	t
Maintenance Interval	Months	6	12	18	24	30	36	42	48	54	60	66	72
Maintenance Interval	×1000 km	10	20	30	40	50	60	70	80	90	100	110	120
	×1000 miles	6.25	12.5	18.75	25	31.25	37.5	43.75	50	56.25	62.5	68.75	75
Drive belts					Ι				Ι				Ι
Engine oil & filter		R	R	R	R	R	R	R	R	R	R	R	R
Cooling system					Ι				Ι				Ι
Engine coolant <sup>*1</sup>		Replace at first 200,000 km (125,000 miles) or 10 years after that, every 100,000 km (62,500 miles) or 5 years											
Air filter			R		R		R		R		R		R
Fuel lines and hoses					I*2				I*2				Ι
Hoses and tubes for emission					I*2				I*2				Ι
Fuel filter			R	epla	e ev	ery 6	0,00	0 km	(37,	500 ı	niles	).	
Spark plugs		I	Ι	I	Ι	I	Ι	Ι	Ι	I	Ι	I	Ι
			Re	eplac	e eve	ery 12	20,00	00 km	n (75	,000	mile	s).	
Brake lines, hoses and connect	tions		Ι		Ι		Ι		Ι		Ι		Ι
Brake and clutch fluid level		I	Ι	Ι		Ι	Ι	Ι		I	Ι	Ι	
Brake fluid					R				R				R
Disc brakes		I	Ι	I	Ι	I	Ι	Ι	Ι	I	Ι	I	Ι

### Schedule 1

	Number o	f mo	nths	or kil	ome	ters (	mile	s), w	hich	ever	come	es firs	t
Maintenance Interval	Months	6	12	18	24	30	36	42	48	54	60	66	72
Maintenance interval	×1000 km	10	20	30	40	50	60	70	80	90	100	110	120
	×1000 miles	6.25	12.5	18.75	25	31.25	37.5	43.75	50	56.25	62.5	68.75	75
Manual transmission oil									R				
Tire (Rotation)				Rota	te ev	ery 1	0,00	0 km	(6,2	50 m	iles).		
Tire inflation pressure and tire wear		I	Т	Ι	Ι	I	Ι	Ι	Ι	I	I	I	Ι
Steering operation and linkages		I	I	Ι	Ι	I	Ι	Ι	Ι	Ι	Ι	I	Ι
Front and rear suspension, bal wheel bearing axial play	l joints and		I		I		I		I		I		I
Driveshaft dust boots			I		Ι		I		Ι		Ι		Ι
Bolts and nuts on chassis and I	body		Т		Т		Т		Т		Т		Т
Exhaust system and heat shield	ls		I		Ι		I		Ι		I		Ι
All locks and hinges		L	L	L	L	L	L	L	L	L	L	L	L
Washer fluid level		I	I	I	Ι	I	I	Ι	Ι	Ι	Ι	I	Ι
Emergency flat tire repair kit (it	f equipped) <sup>*3</sup>					Insp	bect a	annua	ally.		•	•	

#### Chart symbols:

I: Inspect: Inspect and clean, repair, adjust, fill up, or replace if necessary.

- R: Replace
- L: Lubricate
- C: Clean
- T: Tighten
- D: Drain

#### Remarks:

- <sup>\*</sup>1 Use of FL-22 is recommended when replacing engine coolant. Using engine coolant other than FL-22 may cause serious damage to the engine and cooling system.
- <sup>\*</sup>2 According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or kilometer period to ensure long-term reliability.
- <sup>\*</sup>3 Check the tire repair fluid expiration date every year when performing the periodic maintenance. Replace the tire repair fluid bottle with new one before the expiration date.

### Inspection and Servicing/Cleaning Scheduled Maintenance

### Schedule 2

	Number of months or kilometers (miles), whichever comes first													
Maintenance Interval	Months	3	6	9	12	15	18	21	24	27	30	33	36	
Maintenance Interval	×1000 km	5	10	15	20	25	30	35	40	45	50	55	60	
	×1000 miles	3.13	6.25	9.38	12.5	15.63	18.75	21.88	25	28.13	31.25	34.38	37.5	
Drive belts									I					
Engine oil & filter		R	R	R	R	R	R	R	R	R	R	R	R	
Cooling system									Ι					
Engine coolant <sup>*1</sup>								(125 n (62						
Engine coolant level		I	I	I	Ι	I	Ι	Ι	Ι	Ι	I	I	Ι	
Air filter			С		R		С		R		С		R	
Fuel lines and hoses									I*2					
Hoses and tubes for emission									I*2					
Fuel filter		Replace every 60,000 km (37,500 miles).												
Spark plugs			I		Ι		Ι		Ι		Ι		Ι	
		Replace every 120,000 km (75,000 miles).												
Function of all lights		I	Ι	Ι	Ι	Ι	I	Ι	Ι	I	Ι	I	Ι	
Brake lines, hoses and connections					Ι				Ι				Ι	
Brake and clutch fluid level			I		Ι		Ι				I		I	
Brake fluid									R					
Disc brakes			I		Ι		I		I		I		Ι	
Manual transmission oil									R					
Tire (Rotation)		Rotate every 10,000 km (6,250 miles).												
Tire inflation pressure and tire	wear		Ι		-		Ι		Ι		Ι		Ι	
Steering operation and linkages			Т		Ι		I		Ι		Т		Ι	
Front and rear suspension, ball joints and wheel bearing axial play					I				I				I	
Driveshaft dust boots					Ι				I				Ι	
Bolts and nuts on chassis and body					Т				Т				Т	
Exhaust system and heat shields					Ι				Ι				Ι	
All locks and hinges			L		L		L		L		L		L	
Washer fluid level			I		I		I		I		I		Ι	
Emergency flat tire repair kit (if equipped) <sup>*3</sup>		Inspect annually.												

#### Chart symbols:

I: Inspect: Inspect and clean, repair, adjust, fill up, or replace if necessary.

- R: Replace
- L: Lubricate
- C: Clean
- T: Tighten
- D: Drain

#### Remarks:

- <sup>\*</sup>1 Use of FL-22 is recommended when replacing engine coolant. Using engine coolant other than FL-22 may cause serious damage to the engine and cooling system.
- <sup>\*</sup>2 According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or kilometer period to ensure long-term reliability.
- \*3 Check the tire repair fluid expiration date every year when performing the periodic maintenance. Replace the tire repair fluid bottle with new one before the expiration date.

#### (Cont.)

	Number of months or kilometers (miles), whichever comes first													
Maintenance Interval	Months	39	42	45	48	51	54	57	60	63	66	69	72	
Maintenance interval	×1000 km	65	70	75	80	85	90	95	100	105	110	115	120	
	×1000 miles	40.63	43.75	46.88	50	53.13	56.25	59.38	62.5	65.63	68.75	71.88	75	
Drive belts					Ι								Ι	
Engine oil & filter		R	R	R	R	R	R	R	R	R	R	R	R	
Cooling system					Ι								Ι	
Engine coolant <sup>*1</sup>		Replace at first 200,000 km (125,000 miles) or 10 years; after that, every 100,000 km (62,500 miles) or 5 years												
Engine coolant level		I	I	Ι	Ι	I	Ι	I	Ι	I	I	I	Ι	
Air filter			С		R		С		R		С		R	
Fuel lines and hoses					I*2								Т	
Hoses and tubes for emission					I*2								Ι	
Fuel filter		Replace every 60,000 km (37,500 miles).												
Secondaria da con			I		Ι		Ι		Ι		I		Ι	
Spark plugs		Replace every 120,000 km (75,000 miles).												
Function of all lights		Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	
Brake lines, hoses and connections					Ι				Ι				Ι	
Brake and clutch fluid level			I				Ι		Ι		I			
Brake fluid					R								R	
Disc brakes			I		Ι		I		Ι		I		Ι	

### Inspection and Servicing/Cleaning Scheduled Maintenance

	Number of months or kilometers (miles), whichever comes first													
Maintenance Interval	Months	39	42	45	48	51	54	57	60	63	66	69	72	
Maintenance interval	×1000 km	65	70	75	80	85	90	95	100	105	110	115	120	
	×1000 miles	40.63	43.75	46.88	50	53.13	56.25	59.38	62.5	65.63	68.75	71.88	75	
Manual transmission oil					R								R	
Tire (Rotation)		Rotate every 10,000 km (6,250 miles).												
Tire inflation pressure and tire wear			I		Ι		Ι		I		I		Ι	
Steering operation and linkages			I		Ι		Ι		I		I		Ι	
Front and rear suspension, ball joints and wheel bearing axial play					I				I				I	
Driveshaft dust boots					Ι				I				Ι	
Bolts and nuts on chassis and body					Т				Т				Т	
Exhaust system and heat shields					Ι				I				Ι	
All locks and hinges			L		L		L		L		L		L	
Washer fluid level			I		Ι		I		I		I		Ι	
Emergency flat tire repair kit (if equipped) <sup>*3</sup>		Inspect annually.												

#### Chart symbols:

I: Inspect: Inspect and clean, repair, adjust, fill up, or replace if necessary.

- R: Replace
- L: Lubricate
- C: Clean
- T: Tighten
- D: Drain

#### Remarks:

- <sup>\*</sup>1 Use of FL-22 is recommended when replacing engine coolant. Using engine coolant other than FL-22 may cause serious damage to the engine and cooling system.
- <sup>\*</sup>2 According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or kilometer period to ensure long-term reliability.
- <sup>\*</sup>3 Check the tire repair fluid expiration date every year when performing the periodic maintenance. Replace the tire repair fluid bottle with new one before the expiration date.

### **Daily Inspection**

The owner or a qualified service technician should make these vehicle inspections at the indicated intervals to ensure safe and dependable operation.

Bring any problem to the attention of an Authorized Mazda Dealer or qualified service technician as soon as possible.

### When Refueling

- Brake and clutch fluid level (page 9-23)
- · Coolant level (page 9-22)
- Engine oil level (page 9-20)
- Washer fluid level (page 9-24)

### At Least Monthly

• Tire inflation pressures (page 9-31)

### At Least Twice a Year (For Example, Every Spring and Fall)

You can do the following scheduled maintenance items if you have some mechanical ability and a few basic tools and if you closely follow the directions in this manual.

- · Coolant (page 9-22)
- Engine oil (page 9-20)

Improper or incomplete service may result in problems. This section gives instructions only for items that are easy to perform.

As explained in the Inspection and Servicing section (page 9-4), several procedures can be done only by a qualified service technician with special tools. Improper owner maintenance during the warranty period may affect warranty coverage. Refer to the Inspection and Servicing section (page 9-4) for owner's responsibility in protecting your investment. For details, read the separate Mazda Warranty statement provided with the vehicle. If you are unsure about any servicing or maintenance procedure, have it done by an Authorized Mazda Dealer.

There are strict environmental laws regarding the disposal of waste oil and fluids. Please dispose of your waste properly and with due regard to the environment.

We recommend that you entrust the oil and fluid changes of your vehicle to an Authorized Mazda Dealer.

### Warnings and Cautions for Daily Inspection

# **WARNING**

Do not perform maintenance work if you lack sufficient knowledge and experience or the proper tools and equipment to do the work. Have maintenance work done by a qualified technician.

Performing maintenance work on a vehicle is dangerous if not done properly. You can be seriously injured while performing some maintenance procedures.

If you must run the engine while working under the hood, make certain that you remove all jewelry (especially rings, bracelets, watches, and necklaces) and all neckties, scarves, and similar loose clothing before getting near the cooling fan which may turn on unexpectedly. Working under the hood with the engine operating is dangerous. It becomes even more dangerous when you wear jewelry, loose clothing or have long hair or a long beard. Either can become entangled in moving parts and result in injury.



Pull over to a safe location, then switch the vehicle power off and make sure the fan is not running before attempting to work near the cooling fan. Working near the cooling fan when it is running is dangerous. The fan could continue running indefinitely even if the engine has stopped and the engine compartment temperature is high. You could be hit by the fan and seriously injured.

# Do not leave items in the engine compartment.

After you have finished checking or doing servicing in the engine compartment, do not forget and leave items such as tools or rags in the engine compartment. Tools or other items left in the engine compartment could cause the engine damage or a fire leading to an unexpected accident.

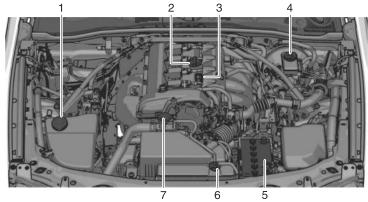
# 

When using a chassis roller, turn the following systems off to prevent them from mis-operating while the vehicle is running on the chassis roller.

- Mazda Radar Cruise Control (MRCC)
- Smart Brake Support (SBS)

## Checking the Inspection Locations and Inspection Items

The position and shape of each part may differ slightly depending on the specification.

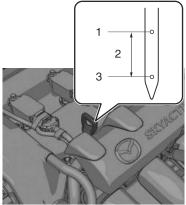


- 1. Windshield washer fluid reservoir
- 2. Engine oil-filler cap
- 3. Engine oil dipstick
- 4. Brake/Clutch fluid reservoir
- 5. Lead-acid battery
- 6. Engine coolant reservoir
- 7. Cooling system cap

### **Inspecting Engine Oil**

- 1. Be sure the vehicle is on a level surface.
- 2. Warm up the engine to normal operating temperature.
- 3. Turn it off and wait at least 5 minutes for the oil to return to the oil pan.
- Pull out the dipstick, wipe it clean, and reinsert it fully.
- 5. Pull it out again and examine the level.

The level is normal if it is between the MIN and MAX marks. If it is near or below MIN, add enough oil to bring the level to MAX.



- 1. MAX
- 2. OK
- 3. MIN

**CAUTION** 

Do not overfill the engine oil. This may cause engine damage.

6. Make sure the O-ring on the dipstick is positioned properly before reinserting the dipstick.

7. Reinsert the dipstick fully.

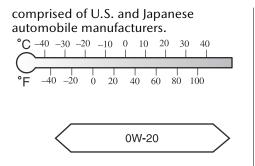
### Recommended Oil

### U.S.A., Canada

**Use SAE OW-20 engine oil.** Mazda Genuine Oil is used in your Mazda vehicle. Mazda Genuine OW-20 Oil is required to achieve optimum fuel economy. For maintenance service, Mazda recommends Genuine Mazda Parts and Genuine Mazda Premium Oil.



Only use SAE 0W-20 oil "Certified For Gasoline Engines" by the American Petroleum Institute (API). Oil with this trademark symbol conforms to the current engine and emission system protection standards and fuel economy requirements of the International Lubricant Standardization and Approval Committee (ILSAC),



### Except U.S.A., Canada

### Use SAE 5W-30 engine oil.

Oil container labels provide important information.

A chief contribution this type of oil makes to fuel economy is reducing the amount of fuel necessary to overcome engine friction.

For maintenance service, Mazda recommends Mazda Genuine Parts.

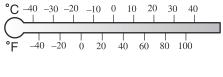


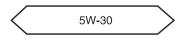
(ILSAC)

### (Mexico)

Use API SM or higher, SAE 5W-30 engine oil. If SAE 5W-30 engine oil is not available, use SAE 5W-20, SAE 0W-30 or SAE 10W-30 engine oil.

# The quality designation SM, SN or SP must be on the label.





### **Inspecting the Coolant**

## **WARNING**

#### Do not use a match or live flame in the engine compartment. DO NOT ADD COOLANT WHEN THE ENGINE IS HOT.

A hot engine is dangerous. If the engine has been running, parts of the engine compartment can become very hot. You could be burned. Carefully inspect the engine coolant in the coolant reservoir, but do not open it.



### $\stackrel{\bigtriangledown}{\sim}$ Do not touch rotating parts such as the fan or belt when inspecting inside the engine compartment.

Working near the cooling fan when it is running is dangerous. The fan could continue running indefinitely even if the engine has stopped and the engine compartment temperature is high. You could be hit by the fan and seriously injured.



# Cooling system cap when the engine and radiator are hot.

When the engine and radiator are hot, scalding coolant and steam may shoot out under pressure and cause serious injury.

### NOTE

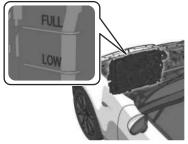
Changing the coolant should be done by an Authorized Mazda Dealer.

Inspect the antifreeze protection and coolant level in the coolant reservoir at least once a year—at the beginning of

the winter season—and before traveling where temperatures may drop below freezing.

Inspect the condition and connections of all cooling system and heater hoses. Replace any that are swollen or deteriorated.

The coolant should be at full in the radiator and between the FULL and LOW marks on the coolant reservoir when the engine is cool.



If it is at or near the LOW position, add enough coolant to the coolant reservoir to provide freezing and corrosion protection and to bring the level to FULL.

Securely tighten the coolant reservoir tank cap after adding coolant.



Radiator coolant will damage paint. Rinse it off quickly if spilled. ➢ If the "FL22" mark is shown on or near the cooling system cap, use of FL-22 is recommended when replacing engine coolant. Using engine coolant other than FL-22 may cause serious damage to the engine and cooling system.



If the coolant reservoir is empty or new coolant is required frequently, consult an Authorized Mazda Dealer.

### Inspecting the Brake/ Clutch Fluid

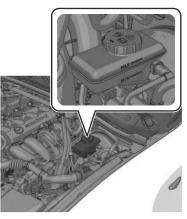
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# If the brake/clutch fluid level is low, have the brakes inspected.

A low brake/clutch fluid level is dangerous. A low level could indicate brake lining wear or a brake system leak which could cause the brakes to fail and lead to an accident.

The brakes and clutch draw fluid from the same reservoir. Inspect the fluid level in the reservoir regularly. It should be kept between the MAX and MIN lines. The level normally drops with accumulated distance, a condition associated with wear of brake and clutch linings. If it is excessively low, have the brake/clutch system inspected by an Authorized Mazda Dealer.

### Brake/Clutch fluid reservoir



### Replenishing Windshield Washer Fluid

# **WARNING**

# Use only windshield washer fluid or plain water in the reservoir.

Using radiator antifreeze as washer fluid is dangerous. If sprayed on the windshield, it will dirty the windshield, affect your visibility, and could result in an accident.

### Never Use Washer Fluid Without Anti-freeze Protection in Cold Weather.

Operating your vehicle in temperatures below 4 °C (40 °F) using washer fluid without anti-freeze protection is dangerous as it could cause impaired windshield vision and result in an accident. In cold weather, always use washer fluid with anti-freeze protection.

# **CAUTION**

Do not use soapy water or engine antifreeze in the reservoir as it could cause paint discoloration or pump damage.

### NOTE

State or local regulations may restrict the use of volatile organic compounds (VOCs), which are commonly used as anti-freeze agents in washer fluid. A washer fluid with limited VOC content should be used only if it provides adequate freeze resistance for all regions and climates in which the vehicle will be operated.

Add washer fluid under any of the following conditions.

- $\cdot$  The top of the fluid level is low.
- The Low Washer Fluid Level Warning Indication/Warning Light (if equipped) turns on.
- The top of the fluid level is lower than L (if equipped).



Use plain water if washer fluid is unavailable. But use only washer fluid in cold weather to prevent it from freezing.

### Inspecting Lead-acid Battery



Read the following precautions carefully before using the lead-acid battery or inspecting to ensure safe and correct handling.

# Always wear eye protection when working near the lead-acid battery.

Working without eye protection is dangerous. Lead-acid battery fluid contains SULFURIC ACID which could cause blindness if splashed into your eyes. Also, hydrogen gas produced during normal lead-acid battery operation, could ignite and cause the lead-acid battery to explode.



Wear eye protection and protective gloves to prevent contact with lead-acid battery fluid.

Spilled lead-acid battery fluid is dangerous. Lead-acid battery fluid contains SULFURIC ACID which could cause serious injuries if it gets in eyes, or on the skin or clothing. If this happens, immediately flush your eyes with water for 15 minutes or wash your skin thoroughly and get medical attention.



Always keep lead-acid batteries out of the reach of children. Allowing children to play near lead-acid batteries is dangerous. Lead-acid battery fluid could cause serious injuries if it gets in the eyes or on the skin.

Keep flames and sparks away from lead-acid battery cells and do not allow metal tools to contact the positive (+) or negative (-) terminal of the lead-acid battery when working near a lead-acid battery. Do not allow the positive (+) terminal to contact the vehicle body.

Flames and sparks near lead-acid battery cells are dangerous. Hydrogen gas, produced during normal lead-acid battery operation, could ignite and cause the lead-acid battery to explode. An exploding lead-acid battery can cause serious burns and injuries. Keep all flames including cigarettes and sparks away from lead-acid battery cells.



Keep all flames and sparks away from lead-acid battery cells because hydrogen gas is produced from lead-acid battery cells while charging the lead-acid battery or adding lead-acid battery fluid. Flames and sparks near lead-acid battery cells are dangerous. Hydrogen gas, produced during normal lead-acid battery operation, could ignite and cause the lead-acid battery to explode. An exploding lead-acid battery can cause serious burns and injuries. Keep all flames including cigarettes and sparks away from lead-acid battery cells.

Before performing lead-acid battery maintenance, remove the lead-acid battery cover.

### Removing the Lead-acid Battery Cover

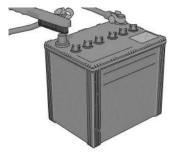


### Maintaining Lead-acid Battery

To get the best service from a lead-acid battery:

- · Keep it securely mounted.
- $\cdot$  Keep the top clean and dry.
- Keep terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.

- Rinse off spilled electrolyte immediately with a solution of water and baking soda.
- If the vehicle will not be used for an extended time, disconnect the lead-acid battery cables and charge the lead-acid battery every 6 weeks.



### Replacing lead-acid battery

Contact an Authorized Mazda Dealer for lead-acid battery replacement.

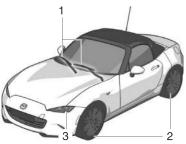
### Inspecting Body Lubrication

All moving points of the body, such as door and hood hinges and locks, should be lubricated each time the engine oil is changed. Use a non-freezing lubricant on locks during cold weather.

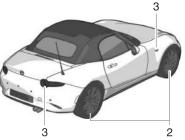
Make sure the hood's secondary latch keeps the hood from opening when the primary latch is released.

### Checking the Inspection Locations and Inspection Items

Front



Rear



- 1. Windshield wipers
- 2. Tires
- 3. Light bulbs

### Replacing Windshield Wiper Blade rubbers

# 

- Hot waxes applied by automatic car washers have been known to affect the wiper's ability to clean windows.
- An operation malfunction may occur or the wiper effectiveness may be reduced if a water-repellent coating is used.
- To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.
- When the wiper lever is in the AUTO position and the vehicle power is switched ON, the wipers may move automatically in the following cases:
  - ➢ If the windshield above the rain sensor is touched.
  - If the windshield above the rain sensor is wiped with a cloth.
  - If the windshield is struck with a hand or other object.
  - If the rain sensor is struck with a hand or other object from inside the vehicle.

Be careful not to pinch hands or fingers as it may cause injury, or damage the wipers. When washing or servicing the vehicle, make sure the wiper lever is in the OFF position.

Contamination of either the windshield or the blades with foreign matter can reduce wiper effectiveness. Common sources are insects, tree sap, and hot wax treatments used by some commercial car washes.

If the blades are not wiping properly, clean the window and blades with a

good cleaner or mild detergent; then rinse thoroughly with clean water. Repeat if necessary.

### NOTE

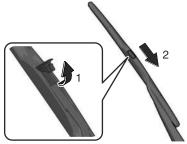
You can replace the wiper blades yourself, however you cannot replace the wiper arms.

If you want to replace the wiper arms, consult an Authorized Mazda Dealer.

### Replacing Windshield Wiper Blade rubbers

### (Type A)

- 1. Raise the wiper arm.
- 2. Open the clip and slide the blade assembly in the direction of the arrow.



3. Tilt the blade assembly and remove it from the arm.



# **A** CAUTION

To prevent damage to the windshield let the wiper arm down easily, do not let it slap down on the windshield.



5. Remove the metal stiffeners from each blade rubber and install them in the new blade.



# **A** CAUTION

- Do not bend or discard the stiffeners. You need to use them again.
- If the metal stiffeners are switched, the blade's wiping efficiency could be reduced. So do not use the driver's side metal stiffeners on the passenger's side, or vice versa.

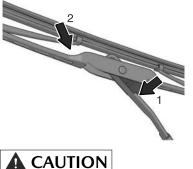
Be sure to reinstall the metal stiffeners in the new blade rubber so that the curve is the same as it was in the old blade rubber.



7. Install the blade assembly in the reverse order of removal.

## (Type B)

 Raise the wiper arm and turn the blade assembly to expose the plastic locking clip. Compress the clip and slide the assembly downward; then lift it off the arm.



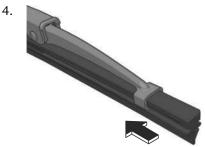
To prevent damage to the windshield let the wiper arm down easily, do not let it slap down on the windshield. 2. Hold the end of the rubber and pull until the tabs are free of the metal support.



3. Remove the metal stiffeners from each blade rubber and install them in the new blade.



- Do not bend or discard the stiffeners. You need to use them again.
- If the metal stiffeners are switched, the blade's wiping efficiency could be reduced. So do not use the driver's side metal stiffeners on the passenger's side, or vice versa.
- Be sure to reinstall the metal stiffeners in the new blade rubber so that the curve is the same as it was in the old blade rubber.



5. Install the blade assembly in the reverse order of removal.

## NOTE

Install the blade so that the tabs are toward the bottom of the wiper arm.

## **Inspecting the Tires**

## About Tires

For reasons of proper performance, safety, and better fuel economy, always maintain recommended tire inflation pressures and stay within the recommended load limits and weight distribution.



#### Do Not Use Tires Other Than The Specified Size. In Addition, Do Not Mix Different Types Of Tires.

Using tires with sizes other than the specified size or mixing different tire types is dangerous. It could compromise the vehicle's driveability, resulting in an accident. In addition, it could be in violation of the law. Use the tire size indicated on the label applied to the door frame of the driver's door while the door is open. Use only the same type tires on all four wheels.

## Inspecting Tire Inflation Pressure

# 

# Always inflate the tires to the correct pressure.

Overinflation or underinflation of tires is dangerous. Adverse handling or unexpected tire failure could result in a serious accident.

Refer to Tires on page 10-68.

# Use only a Mazda-genuine tire valve cap.

Use of a non-genuine part is dangerous as the correct tire air pressure cannot be maintained if the tire valve becomes damaged. If the vehicle is driven under this condition, the tire air pressure will decrease which could result in a serious accident. Do not use any part for the tire valve cap that is not a Mazda-genuine part.

Inspect all tire pressures monthly when the tires are cold. Maintain recommended pressures for the best ride, handling, and minimum tire wear.

Refer to the specification charts (page 10-68).

#### NOTE

· Cold inflation pressure

The cold inflation pressure is the pressure measured under ambient temperatures before the vehicle is driven.

- Maximum inflation pressure The maximum inflation pressure is the upper limit of the cold inflation pressure designated by the tire manufacturer.
- **Recommended inflation pressure** The recommended inflation pressure is the cold inflation pressure necessary for maintaining the performance of your Mazda.
- Underinflation or overinflation can cause a harsh ride, reduced fuel economy, a greater possibility of damage from road hazards, uneven and accelerated tire wear, and poor sealing of the tire bead, which will deform the wheel and cause separation of tire from rim.

• Keep your tire pressure at the correct levels. If one frequently needs inflating, have it inspected.

# **Rotating the Tires**

# **WARNING**

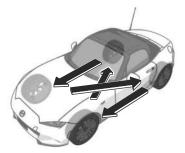
#### Rotate tires periodically.

Irregular tire wear is dangerous. To equalize tread wear for maintaining good performance in handling and braking, rotate the tires periodically or sooner if irregular wear develops. Please refer to Scheduled Maintenance for your tire rotation interval.

During rotation, inspect them for correct balance.

#### NOTE

Because your vehicle is not equipped with a spare tire, you cannot do a tire rotation safely with the jack that comes with your vehicle. Have an Authorized Mazda Dealer perform tire rotation.



Do not include (TEMPORARY USE ONLY) spare tire in rotation. Also, inspect them for uneven wear and damage. Abnormal wear is usually caused by one or a combination of the following:

- · Incorrect tire pressure
- · Improper wheel alignment
- · Out-of-balance wheel
- · Severe braking

After rotation, inflate all tire pressures to specification (page 10-68) and inspect the lug nuts for tightness.

# **CAUTION**

Rotate unidirectional tires and radial tires that have an asymmetrical tread pattern or studs only from front to rear, not from side to side. Tire performance will be reduced if rotated from side to side.

(With limited-slip differential) Do not use the following:

- ➤ Tires not of the designated size
- Tires of different sizes or types at the same time
- Tires not sufficiently inflated

If these instructions are not followed, the rotation of the left and right wheels will be different and will thus apply a constant load on the limited-slip differential.

This will cause a malfunction.

# Replacing a Tire or a Wheel

# **WARNING**

# Always use tires that are in good condition.

Driving with worn tires is dangerous. Reduced braking, steering, and traction could result in an accident.

# Replace all four tires at the same time.

Replacing just one tire is dangerous. It could cause poor handling and poor braking resulting in loss of vehicle control. Mazda strongly recommends that you replace all four tires at the same time.

# Always use wheels of the correct size on your vehicle.

Using a wrong-sized wheel is dangerous. Braking and handling could be affected, leading to loss of control and an accident.

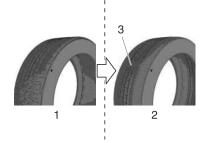


A wrong-sized wheel may adversely affect:

- ≻Tire fit
- ≻Wheel and bearing life
- ➢ Ground clearance
- Snow-chain clearance
- Speedometer calibration
- ≻ Headlight aim
- ≻ Bumper height
- ➢ Tire Pressure Monitoring System

If a tire wears evenly, a wear indicator will appear as a solid band across the tread.

Replace the tire when this happens.



- 1. New tread
- 2. Worn tread
- 3. Tread wear indicator

You should replace the tire before the band crosses the entire tread.

#### NOTE

Tires degrade over time, even when they are not being used on the road. It is recommended that tires generally be replaced when they are 6 years or older. Heat caused by hot climates or frequent high loading conditions can accelerate the aging process. The period in which the tire was manufactured (both week and year) is indicated by a 4-digit number. Refer to Tire Labeling on page 10-30.

# Inspecting the Emergency Flat Tire Repair Kit<sup>\*</sup>

Inspect the emergency flat tire repair kit at regular intervals.

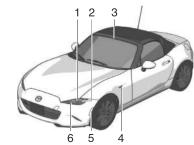
- Check the tire sealant period of effective use.
- Check the operation of the tire compressor.

### NOTE

The tire sealant has a period of effective use. Check the period of effective use indicated on the bottle label and do not use it if it has expired. Have the tire sealant replaced at an Authorized Mazda Dealer before the period of effective use has expired.

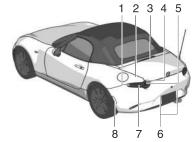
## Replacing Light Bulbs

#### Front



- 1. Headlights (High/Low beam)
- 2. Front turn signal lights/Daytime running lights/Parking lights
- 3. Overhead light
- 4. Side turn signal lights
- 5. Front side-marker lights
- 6. Daytime running lights/Parking lights

### Rear



- 1. Taillights/Brake lights
- 2. Trunk light
- 3. High-mount brake light
- 4. Taillights/Brake lights
- 5. Reverse lights
- 6. License plate lights
- 7. Rear turn signal lights
- 8. Rear side-marker lights

# **CAUTION**

When removing the lens or lamp unit using a flathead screwdriver, make sure that the flathead screwdriver does not contact the interior terminal. If the flathead screwdriver contacts the terminal, a short circuit may occur.

### NOTE

- When replacing a bulb, contact an Authorized Mazda Dealer.
- Use the protective cover and carton for the replacement bulb to dispose of the old bulb promptly and out of the reach of children.

### **Replacing Exterior Light Bulbs**

### LED type

- · Headlights
- · Daytime running lights
- · Parking lights
- Front turn signal lights
- · High-mount brake light
- Rear turn signal lights
- Brake lights
- Taillights
- · Reverse lights

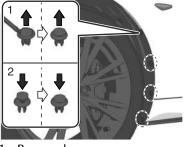
The LED bulb cannot be replaced as a single unit because it is an integrated unit.

The LED bulb has to be replaced with the unit. If a replacement is necessary, consult an Authorized Mazda Dealer.

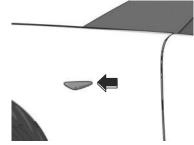
## Bulb type

#### Side turn signal lights

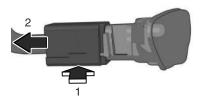
- 1. Make sure the vehicle power is switched off, and the headlight switch is off.
- 2. If you are changing the left bulb, start the engine, turn the steering wheel all the way to the left, and turn off engine. If you are changing the right bulb, turn the steering wheel to the right.
- 3. Pull the center of each plastic retainer and remove the retainers, and then partially peel back the mudguard.



- 1. Removal
- 2. Installation
- 4. Remove the unit by pressing the tab on the unit with your finger and pulling the unit forward.



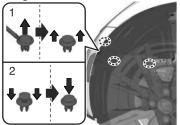
5. Detach the electrical connector from the unit by pulling it to the rear.



6. Install the new bulb in the reverse order of the removal procedure.

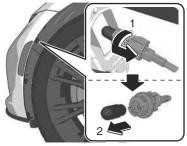
#### Front side-marker lights

- 1. Make sure the vehicle power is switched off, and the headlight switch is off.
- If you are changing the right bulb, start the engine, turn the steering wheel all the way to the right, and turn off engine. If you are changing the left bulb, turn the steering wheel to the left.
- 3. Pull the center of each plastic retainer and remove the retainers, and then partially peel back the mudguard.



- 1. Removal
- 2. Installation
- 4. Turn the socket and bulb assembly counterclockwise and remove it.

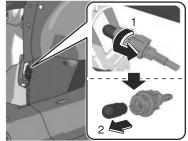
5. Disconnect the bulb from the socket.



6. Install the new bulb in the reverse order of the removal procedure.

#### Rear side-marker lights

- 1. Make sure the vehicle power is switched off, and the headlight switch is off.
- 2. Turn the socket and bulb assembly counterclockwise and remove it.
- 3. Disconnect the bulb from the socket.

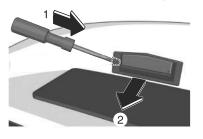


4. Install the new bulb in the reverse order of the removal procedure.

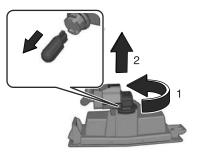
#### License plate lights

- Make sure the vehicle power is switched off, and the headlight switch is off.
- 2. Wrap a flathead screwdriver with a soft cloth to prevent damage to the light unit.

3. Insert the screwdriver from the left side (press in strongly) and move the tip of the screwdriver downward to remove the light unit.



4. Turn the socket and bulb assembly counterclockwise and remove it, then disconnect the bulb from the socket.

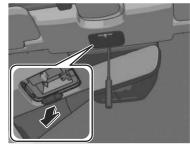


5. Install the new bulb in the reverse order of the removal procedure.

## **Replacing Interior Light Bulbs**

#### **Overhead light**

1. Wrap a small flathead screwdriver with a soft cloth to prevent damage to the lens, and then remove the lens by carefully prying on the edge of the lens with the flathead screwdriver. 2. Disconnect the bulb by pulling it out.



3. Install the new bulb in the reverse order of the removal procedure.

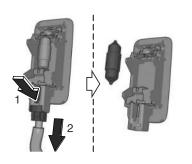
#### Trunk light

1. Wrap a small flathead screwdriver with a soft cloth to prevent damage to the lens, and then remove the lens by carefully prying on the edge of the lens with the flathead screwdriver.



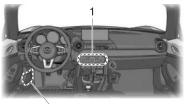
2. Disconnect the connector from the unit.

3. Disconnect the bulb by pulling it out.



4. Install the new bulb in the reverse order of the removal procedure.

# Checking the Inspection Locations and Inspection Items

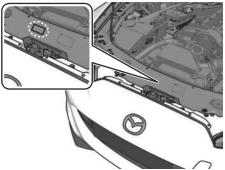


- 1. Air Conditioner
- 2. Fuses

# Air Conditioner Maintenance

#### Before Using the Air Conditioner

Lack of refrigerant may make the air conditioner less efficient. The refrigerant specifications are indicated on a label attached to the inside of the engine compartment. If the wrong type of refrigerant is used, it could result in a serious malfunction of the air conditioner. Consult a professional, government certified repairer for the inspection or repair because a special device is required for the air conditioner maintenance. For details, consult an Authorized Mazda Dealer.



## Air filter

An air filter with pollen and dust collecting function is equipped. To ensure safe and comfortable use of the air conditioner, have the air filter replaced periodically. For details, consult an Authorized Mazda Dealer.

## NOTE

• If the airflow of the climate control system significantly decreases, the air filter may be clogged. Replace the air filter. • If the vehicle is driven in areas with large amounts of dust and heavy traffic such as in large cities and cold regions, the air filter may need to be replaced more frequently.

## **Replacing the Fuses**

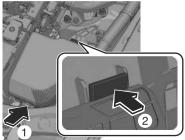
#### Fuses on the vehicle's left side

1. Open the fuse panel cover.

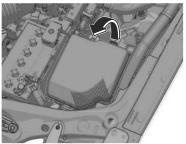


# Removing/Installing fuses on the vehicle's left side

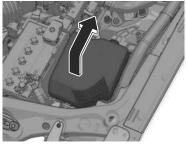
- 1. Make sure the vehicle power is switched off, and other switches are off.
- 2. Remove the fuse puller provided on the fuse block located in the engine compartment according to the following procedure.
  - 1. Open the hood. Refer to How to Use the Hood on page 4-21.
  - 2. Disengage the rear lock by pressing down on the front tab with your fingers.



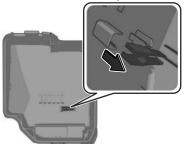
3. Remove the front tab while slightly lifting the front of the cover.



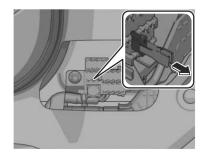
4. Remove the cover while lifting it and sliding it to the rear.



5. Remove the fuse puller



3. Pull the fuse straight out with the fuse puller.



4. Inspect the fuse and replace it if it is blown.



- 2. Blown
- 5. Insert a new fuse of the same amperage rating, and make sure it fits tightly. If it does not fit tightly, have an expert install it. Consult an Authorized Mazda Dealer. If you have no spare fuses, borrow one of the same rating from a circuit not essential to vehicle operation, such as the audio or accessory socket circuit.

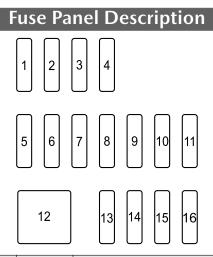
# **A**CAUTION

Always replace a fuse with a genuine Mazda fuse or equivalent of the same rating. Otherwise, you may damage the electric system.

6. Reinstall the cover and make sure that it is securely installed.

### Fuses under the hood

Contact an Authorized Mazda Dealer for replacing the fuses under the hood.



	DESCRIPTION	FUSE RAT- ING	PROTECTED COMPONENT
1	RHT R	30 A	Retractable hardtop (RH)*
2	RHT L	30 A	Retractable hardtop (LH)*
3	—	—	_
4	ENGINE6	10A	_
5	F.OUTLET	15 A	Accessory sockets
6	—	—	—
7	AT IND	7.5 A	AT shift indicator <sup>*</sup>
8	MIRROR	7.5 A	Power control mirror
9	R_DECK R	30 A	Retractable hardtop (RH) <sup>*</sup>
10	R_DECK L	30 A	Retractable hardtop (LH)*
11	F.WASHER	15 A	Windshield washer
12	P.WINDOW	30 A	Power windows
13	—	—	_
14	SRS2/ESCL	15 A	Electronic steering lock
15	SEAT WARM	20 A	Seat warmer*
16	M.DEF	7.5 A	Mirror defogger*

# Warnings and Cautions about Key Battery Replacement

# 

- Make sure the battery is installed correctly. Battery leakage could occur if it is not installed correctly.
- > When replacing the battery, be careful not to touch any of the internal circuitry and electrical terminals, bend the electrical terminals, or get dirt in the transmitter as the transmitter could be damaged.
- There is the danger of explosion if the battery is not correctly replaced.
- Dispose of used batteries according to the following instructions.
  - Insulate the plus and minus terminals of the battery using cellophane or equivalent tape.
  - ➤ Never disassemble.
  - Never throw the battery into fire or water.
  - ≻ Never deform or crush.
  - Replace only with the same type battery (CR2032 or equivalent).

## How to Replace the Key Battery

Replace with a new battery before the key becomes unusable.

The following conditions indicate that the battery power is low:

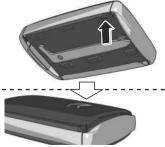
- The KEY indicator light (green) flashes in the instrument cluster.
- The system does not operate and the operation indicator light on the transmitter does not flash when the buttons are pressed.
- The system's operational range is reduced.

Incorrect battery replacement operation may damage the key. Replacing the battery at an Authorized Mazda Dealer is recommended. If replacing the battery by yourself, heed the following instructions.

1. Remove the lower cover while pressing the knob in the direction of the arrow.



2. Press in the tab to unlock the upper cover.



3. Insert a tape-wrapped flathead screwdriver into the gap and slide it.



4. Twist the flathead screwdriver and remove the upper cover.



5. Remove the cap using the tape-wrapped flathead screwdriver.

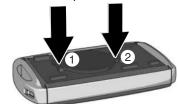


6. Remove the battery using the tape-wrapped flathead screwdriver.



7. Insert a new battery into the key so that the positive pole is facing up.

8. Install the cap.



9. Install the upper cover.



10.Attach the lower cover so that its tabs are inserted into the slots of the key.



## **Exterior Maintenance**

# **WARNING**

Dry off brakes that have become wet by driving slowly, releasing the accelerator pedal and lightly applying the brakes several times until the brake performance returns to normal. Driving with wet brakes is dangerous. Increased stopping distance or the vehicle pulling to one side when braking could result in a serious accident. Light braking will indicate whether the brakes have been affected.

# **CAUTION**

- When lowering the wipers, slowly lower the wiper arms while supporting them with your hand. Lowering the wiper arms without supporting them could damage the wiper arms and blades, and may scratch or crack the windshield.
- When the vehicle power is switched ON and the wiper lever is in the AUTO position, the windshield wipers may operate automatically in the following cases:
  - The area of the windshield above the rain sensor is touched or wiped with a cloth.
  - The windshield or the rain sensor area in the cabin is hit.

When the vehicle power is switched ON and the wiper lever is in the AUTO position, do not touch the windshield or the windshield wipers Otherwise, the windshield wipers will operate automatically which could catch your fingers or damage the windshield wipers. When removing ice or snow, or cleaning the windshield, always make sure the wiper lever is in the OFF position.

- Make sure that the fuel-filler lid is closed and lock the doors. Otherwise, the fuel-filler lid may be forcefully opened by water pressure causing damage to the vehicle or fuel-filler lid.
- Do not spray water in the engine compartment. Otherwise, it could result in engine-starting problems or damage to electrical parts.
- When washing and waxing the vehicle, be careful not to apply excessive force to any single area of the vehicle hood or the antenna. Otherwise, you could dent the vehicle or damage the antenna.
- When cleaning the window glass or mirrors, gently wipe along the thermal filaments. Use of glass cleaning products could damage the thermal filaments.
- Do not use wax containing compounds, organic solvents such as gasoline or benzene, alcohols, acidic or alkaline detergents, or bleach for cleaning.
- If organic solvents such as gasoline, oil, engine coolant, or battery fluid, get on the exterior, wipe it off immediately.
- Do not use steel wool, abrasive cleaners, or strong detergents containing highly alkaline or caustic agents on chrome-plated or anodized aluminum parts. This may damage the protective coating; also, cleaners and detergents may discolor or deteriorate the paint.
- Do not use automatic car washing machines and car washing devices using high water pressure.

# Wheel Maintenance

# **CAUTION**

- If there is seawater or anti-freezing agent on the wheels, wash it off with water as soon as possible.
- Do not use any detergent other than mild detergent. Before using any detergent, verify the ingredients. Otherwise, the product could discolor or stain the aluminum wheels.

# Convertible Top (Soft Top) Maintenance<sup>\*</sup>

# **CAUTION**

- Automatic and high-pressure car washes are harmful to a convertible top. Avoid them.
- Do not spray water directly on the area where the window glass and the convertible top meet. This would probably cause water to enter the cabin.
- Do not spray water directly on the seam area of the body and the convertible top as it could result in water penetrating the cabin and trunk.



- Some leather treatment products can ruin the convertible top's gloss. Be careful of the one you choose.
- Test on an inconspicuous, small corner of the convertible top if you are not sure.
- Do not wipe the convertible top using alcohol, chlorine bleach, or organic solvents such as thinner, benzene, or gasoline. Otherwise, they may cause discoloration or stains.
- Do not get any car wax on the convertible top. If you do, remove it with a good leather cleaner or mild detergent (about 5 % solution).

- Too much treatment on the convertible top can be as damaging as too little. Follow the manufacturer's directions. Do not overdo it.
- Let the convertible top dry completely before lowering after applying treatment or dressing.
- To prevent the soft top from deteriorating, avoid direct sunlight when parking.
- ➢ For long-term storage in a garage, provide adequate ventilation.
- If the soft top is wet, remove the excess water and dry it before using a body cover or soft top cover.

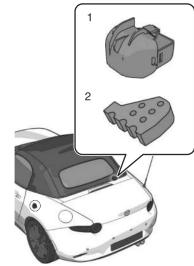
The convertible top is made of a special high-grade material, but if it's not taken good care of, hardening, staining, and loss of luster will result. Maintain it under these guidelines.

### Washing

Do not wait until the convertible top gets really dirty before cleaning it. Dirt that's there too long will cause deterioration.

- 1. Before washing, remove dust and coarse particulate with a soft brush.
- 2. Gently clean the convertible top with a synthetic neutral detergent, lots of water, and a soft brush.
- 3. Rinse it thoroughly with clean water to remove all the soap.
- 4. Wipe it as dry as soon as you can before the water dries on it.
- 5. Then allow it to dry completely before lowering it.

#### Drain filter cleaning procedure



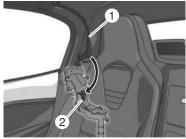
- 1. Drain filter A
- 2. Drain filter B

### NOTE

If leaves or other matter block the drain filter, water may enter the vehicle.

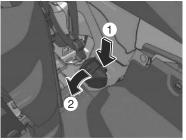
Clean the drain filter at least once a year.

1. Check the position of the drain filter A with your hand from behind the bow.



Bow
 Drain filter A

2. Remove the drain filter A while pressing the tab.



3. Remove drain filter B out of the opening after removing drain filter A.



- 4. Remove foreign matter such as leaves accumulated in drain filter A and drain filter B.
- 5. Install in the reverse order of removal.



When installing the drain filter, make sure that the drain filter is securely attached to its designated position by pushing it until the tab locks. Water may enter the vehicle if the drain filter is not secured to its designated position.

# Convertible Top (Retractable Hardtop) Maintenance<sup>\*</sup>

## Washing

To help protect the retractable hardtop's finish, use a soft cloth or sponge to wash it.

Insects, tar, tree sap, bird droppings, industrial fallout, and similar deposits can damage the finish if they are not removed immediately. When prompt washing with plain water is ineffective use a mild soap made for use on vehicles.

# 

- Do not use an automatic car wash.
- Do not spray water directly on the area where the window glass and the retractable hardtop meet. This would probably cause water to enter the cabin.
- Do not use strong soap, chemical detergents, or hot water, and do not wash the retractable hardtop in direct sunlight or when the surface is warm.

Thoroughly rinse with lukewarm or cold water. Do not allow soap to dry on the finish.

## Waxing

Wax the retractable hardtop when water no longer beads on the paint. Always wash and dry it before waxing.

# **CAUTION**

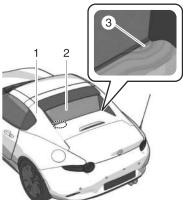
Wiping off dust or dirt with a dry cloth will scratch the finish. Do not use abrasive wax. This may damage the protective coating and discolor or deteriorate the paint.

#### NOTE

A spot remover to remove oil, tar, and similar materials will usually also take off the wax. Rewax these areas.

#### Drainage outlet cleaning procedure

There are drainage outlets on the left and right of the lower side of the rear window.



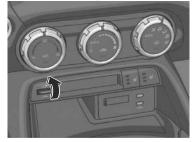
- 1. Rear roof
- 2. Rear window
- 3. Drainage outlet

#### NOTE

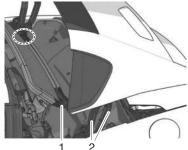
If leaves or other foreign matter block the drainage outlets, water may enter the cabin. Clean the drainage outlets at least once every 2 months.

1. Continue pressing the retractable hardtop switch in the open direction until the rear roof is raised up from the fully closed position.

Refer to How to Use the Convertible Top (Retractable Fastback) on page 4-35.



- 2. Remove your finger from the retractable hardtop switch after the rear roof is raised up.
- 3. Make sure the drainage outlets are visible.



- 1. Drainage outlet
- 2. Rear roof links
- 4. Switch the vehicle power OFF.

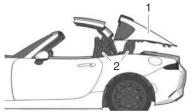


# Verify that the vehicle power is switched off:

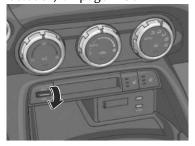
Closing the roof with the vehicle power not switched off is dangerous as the motors could turn on suddenly and cause injury resulting from hands or fingers being pinched in the mechanism. 5. Remove leaves and other foreign matter accumulated in the drainage outlet.

# **CAUTION**

When cleaning the drainage outlets, be careful not to touch the roof links or the framework of the rear roof. Otherwise, you could get injured.



- 1. Rear roof
- 2. Roof links
- 6. After cleaning the drainage outlets, continuously press the retractable hardtop switch in the close direction to close the rear roof. Refer to How to Use the Convertible Top (Retractable Fastback) on page 4-35.



 Pour about 300 ml (300 cc) of water slowly into each of the left and right drainage outlets to wash away small particles of foreign matter inside the drainage path.



**CAUTION** 

Use washer fluid instead of water in cold weather.

If water is used, the water may freeze inside the drainage path blocking the path.

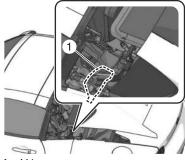
- 8. Start the engine.
- 9. Continue pressing the retractable hardtop switch in the open direction until the rear roof is raised up from the fully closed position. Refer to How to Use the Convertible Top (Retractable Fastback) on page 4-35.



10.Remove your finger from the retractable hardtop switch after the rear roof is raised up.



- 11.Check if water remains in the water trays of the drain covers through the gap between the rear roof and the body.
  - $\cdot$  If no water remains, the drain
  - hose is not clogged.If water remains, the drain hose may be clogged. Consult an Authorized Mazda Dealer.



1. Water tray

## Interior Maintenance

# **WARNING**

# Do not spray water into the vehicle cabin.

Spraying water into the vehicle cabin is dangerous as electrical devices such as the audio and switches could get wet resulting in a malfunction or vehicle fire.

# **A** CAUTION

- Do not use polishing agents. Depending on the product ingredients, they could cause discoloration, stains, cracks or peeling of the coating.
- Do not scrape or scratch the inside of the window glass. It could damage the thermal filaments.
- When washing the inside of the window glass, use a soft cloth dampened in lukewarm water, gently wiping the thermal filaments. Use of glass cleaning products could damage the thermal filaments.
- If liquid such as fragrance is spilled on the interior, wipe it off immediately.
- Do not use wax containing compounds, organic solvents such as gasoline or benzene, alcohols, acidic or alkaline solvents, or bleach for cleaning.
- Do not try to rub off the shiny surface panels and the metallic parts with a dry cloth. Otherwise, it may cause scratches.

# Instrument Panel Top Maintenance

Dashboard maintenance for areas requiring further cleaning.

- 1. Wipe the soiled area with a soft cloth soaked in a mild detergent diluted with water.
- 2. Wipe off any detergent and water remaining on the surface using a cloth soaked in water and wrung out well.

# Upholstery and Synthetic Leather Maintenance

## Fabric

- 1. Clean the soiled area by lightly dabbing it with a soft cloth soaked in a mild detergent (approx. 5 %) diluted with water.
- 2. Wipe off the remaining detergent using a cloth soaked in clean water and wrung out well.

## Synthetic leather

- 1. Remove dust and sand using a vacuum cleaner.
- Wipe the soiled area with a soft cloth soaked in a mild detergent (approx. 5 %) diluted with water.
- 3. Wipe off the remaining detergent using a cloth soaked in clean water and wrung out well.

# Leather Upholstery Maintenance

- 1. Remove dust and sand using a vacuum cleaner.
- 2. Wipe off the soiled area with a soft cloth and a suitable, special cleaner or a soft cloth soaked in a mild detergent (about 5 %) diluted with water.
- 3. Wipe off the remaining detergent using a cloth soaked in clean water and wrung out well.
- 4. Remove moisture with a dry, soft cloth and allow the leather to further dry in a well-ventilated, shaded area. If the leather gets wet such as from rain, remove the moisture and dry it as soon as possible.

### NOTE

- Because genuine leather is a natural material, its surface is not uniform and it may have natural scars, scratches, and wrinkles.
- To maintain the quality for as long as possible, periodical maintenance, about twice a year, is recommended.
- If the leather upholstery comes into contact with any of the following, clean it immediately.

Leaving it uncleaned could cause premature wear, mold, or stains.

- Sand or dirt
- $\cdot$  Grease or oil, such as hand cream
- Alcohol, such as in cosmetic or hair dressing items
- If the leather upholstery gets wet, promptly remove moisture with a dry cloth. Remaining moisture on the surface may cause deterioration such as hardening and shrinkage.

- Exposure to direct sunlight for long periods may cause deterioration and shrinkage. When parking the car under direct sunlight for long periods, shade the interior using sunshades.
- Do not leave vinyl products on the leather upholstery for long periods. They may affect the leather quality and coloring. If the cabin temperature becomes hot, the vinyl may deteriorate and adhere to the genuine leather.

# Seat Belt Maintenance

# 

injury or death.

If a seat belt appears frayed or has abrasions, have it replaced by an Authorized Mazda Dealer. If a seat belt is used under such a condition, it cannot function at its full capacity which could result in serious

# Use a mild detergent to remove soiling from a seat belt.

If organic solvents are used for cleaning the seat belts or they become stained or bleached, there is the possibility of them becoming weakened and as a result, they may not function at their full capacity which could cause serious injury or death.

# Do not disassemble, modify, or replace a seat belt.

If a seat belt is used under such a condition, it cannot function at its full capacity which could result in serious injury or death.

#### Always have your vehicle inspected by an Authorized Mazda Dealer if the vehicle has been involved in an accident.

Seat belts with the pretensioner system and the seat belts with the load-limiter system cannot be reused once they have operated (deployed).

If a seat belt is used under such a condition, it cannot function at its full capacity which could result in serious injury or death.

Always consult an Authorized Mazda Dealer when scrapping the vehicle. If the pretensioner system operates (deploys) unexpectedly, it could result in serious injury or death.

Do not repair the pretensioner system parts or wiring harnesses and do not attempt to diagnose the pretensioner system circuits using an electrical tester or similar device. Otherwise, they may not function

normally or they may operate incorrectly, which could result in serious injury or death.

Check periodically that the seat belt systems work properly and are not damaged.

#### Seat belt cleaning procedure

- 1. Lightly tap with a mild detergent to remove dirt.
- 2. Wipe with a thoroughly wrung cloth.
- 3. Allow to dry.
- 4. Make sure that the seat belt locks when it is pulled rapidly. If it is still not retracting properly, have it inspected at an Authorized Mazda Dealer.

#### NOTE

Clean seat belts diligently if they get dirty. Leaving them uncleaned will make it difficult to clean them later, and it may affect the smooth retracting of the seat belt.

# MEMO

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# MEMO

## **Customer Assistance**

Your complete and permanent satisfaction is our business. We are here to serve you. All Authorized Mazda Dealers have the knowledge and the tools to keep your Mazda vehicle in top condition. If you have any questions or recommendations for improvement regarding the service of your Mazda vehicle or servicing by Mazda Dealer personnel, we recommend that you take the following steps:

#### NOTE

If it becomes necessary to have the components or wiring system for the supplementary restraint system modified to accommodate a person with certain medical conditions in accordance with a certified physician, contact an Authorized Mazda Dealer. For more information, go to NHTSA website www.safercar.gov (VEHICLE SHOPPERS > Air Bags > Air Bag FAQs > Air Bag Deactivation).

# STEP 1: Contact Your Mazda Dealer

Discuss the matter with an Authorized Mazda Dealer. This is the quickest and best way to address the issue.

- If your concern has not been resolved by the CUSTOMER RELATIONS, SALES, SERVICE, or PARTS MANAGER, then please contact the GENERAL MANAGER of the dealership or the OWNER.
- If it becomes necessary to have the components or wiring system for the supplementary restraint system modified to accommodate a person with certain medical conditions in accordance with a certified physician, go to STEP 2.

# STEP 2: Contact Mazda North American Operations

If for any reason you feel the need for further assistance after contacting your dealership management or it becomes necessary to have the components or wiring system for the supplementary restraint system modified to accommodate a person with certain medical conditions in accordance with a certified physician, you can reach Mazda North American Operations by one of the following ways.

Log on: at www.MazdaUSA.com

Answers to many questions, including how to locate or contact a local Mazda dealership in the U.S., can be found here.

E-mail: click on "Contact Us" located on the bottom of the page at www.mazdausa.com under "Help"

By phone at: 1 (800) 222-5500

By letter at: ATTN: Customer Experience Center Mazda North American Operations 200 Spectrum Center Drive Suite 100 Irvine, California 92618 P.O. Box 19734 Irvine, CA 92623-9734

In order to serve you efficiently and effectively, please help us by providing the following information:

- 1. Your name, address, and telephone number
- 2. Year and model of vehicle
- 3. Vehicle Identification Number (17 digits, noted on your registration or

title or located on the upper driver's side corner of the dash)

- 4. Purchase date and current mileage
- 5. Your dealer's name and location
- 6. Your question(s)

If you live outside the U.S.A., please contact your nearest Mazda Distributor.

# STEP 3: Contact Better Business Bureau (BBB)

Mazda North American Operations realizes that mutual agreement on some issues may not be possible. As a final step to ensure that your concerns are being fairly considered, Mazda North American Operations has agreed to participate in a dispute settlement program administered by the Better Business Bureau (BBB) system, at no cost to you the consumer.

BBB AUTO LINE works with consumers and the manufacturer in an attempt to reach a mutually acceptable resolution of any warranty related concerns. If the BBB is not able to facilitate a settlement they will provide an informal hearing before an arbitrator.

You are required to resort to BBB AUTO LINE before exercising rights or seeking remedies under the Federal Magnuson-Moss Warranty Act, 15 U.S.C. § 2301 et seq. To the extent permitted by the applicable state "Lemon Law", you are also required to resort to BBB AUTO LINE before exercising any rights or seeking remedies under the "Lemon Law". If you choose to seek remedies that are not created by the Magnuson-Moss Warranty Act or the applicable state "Lemon Law", you are not required to first use BBB AUTO LINE.

The whole process normally takes 40 days or less. The arbitration decision is not binding on you or Mazda unless you accept the decision. For more information about BBB AUTO LINE, including current eligibility standards, please call 1-800-955-5100 or visit

the BBB website at www.bbb.org/ autoline.

Being truly committed to customer satisfaction is more than a phrase with Mazda. We hope to satisfy every customer directly, but if there is ever a question about our decision, Mazda believes in providing a fast, fair and free method such as the BBB AUTO LINE to ensure Mazda delivers on our commitment to do the right thing for our customers!

## **California Customers**

- 1. Mazda North American Operations participates in a mediation/ arbitration program administered by BBB AUTO LINE, a Division of BBB National Programs, Inc. [1676 International Drive, Suite 550 McLean, Virginia 22102] through local Better Business Bureaus. BBB AUTO LINE and Mazda have been certified by the Arbitration Certification Program of the California Department of Consumer Affairs.
- If you have a problem arising under a Mazda written warranty, we encourage you to bring it to our attention. If we are unable to resolve it, you may file a claim with BBB AUTO LINE. Claims must be filed with BBB AUTO LINE within six (6) months after the expiration of the warranty.
- 3. To file a claim with BBB AUTO LINE, call 1-800-955-5100. There is no charge for the call.
- 4. In order to file a claim with BBB AUTO LINE, you will have to provide your name and address, the brand name and vehicle identification number (VIN) of your vehicle, and a statement of the nature of your problem or complaint. You will also be asked to provide: the approximate date of your acquisition of the vehicle, the vehicle's current mileage, the approximate date and mileage at the time any problem(s) were first brought to the attention of Mazda or one of our dealers, and a statement of the relief you are seeking.
- BBB AUTO LINE staff may try to help resolve your dispute through

mediation. If mediation is not successful, or if you do not wish to participate in mediation, claims within the program's jurisdiction may be presented to an arbitrator at an informal hearing. The arbitrator's decision should ordinarily be issued within 40 days from the time your complaint is filed; there may be a delay of 7 days if you did not first contact Mazda about your problem, or a delay of up to 30 days if the arbitrator requests an inspection/ report by an impartial technical expert or further investigation and report by BBB AUTO LINE.

- 6. You are required to use BBB AUTO LINE before asserting in court any rights or remedies conferred by California Civil Code Section 1793.22. You are also required to use BBB AUTO LINE before exercising rights or seeking remedies created by Title I of the Magnuson-Moss Warranty Act, 15 U.S.C. sec. 2301 et seq. If you choose to seek redress by pursuing rights and remedies not created by California Civil Code Section 1793.22 or Title I of the Magnuson-Moss Warranty Act, resort to BBB AUTO LINE is not required by those statutes.
- 7. California Civil Code Section 1793.2 (d) requires that, if Mazda or its representative is unable to repair a new motor vehicle to conform to the vehicle's applicable express warranty after a reasonable number of attempts, Mazda may be required to replace or repurchase the vehicle. California Civil Code Section 1793.22 (b) creates a presumption that Mazda has had a reasonable number of attempts to

conform the vehicle to its applicable express warranties if, within 18 months from delivery to the buyer or 18,000 miles on the vehicle's odometer, whichever occurs first, one or more of the following occurs:

- The same nonconformity [a failure to conform to the written warranty that substantially impairs the use, value or safety of the vehicle] results in a condition that is likely to cause death or serious bodily injury if the vehicle is driven **AND** the nonconformity has been subject to repair two or more times by Mazda or its agents **AND** the buyer or lessee has directly notified Mazda of the need for the repair of the nonconformity; OR
- The same nonconformity has been subject to repair 4 or more times by Mazda or its agents
   AND the buyer has notified Mazda of the need for the repair of the nonconformity; OR
- The vehicle is out of service by reason of repair of nonconformities by Mazda or its agents for a cumulative total of more than 30 calendar days after delivery of the vehicle to the buyer.

#### NOTICE TO Mazda AS REQUIRED ABOVE SHALL BE SENT TO THE FOLLOWING ADDRESS:

Mazda North American Operations 200 Spectrum Center Drive Suite 100 Irvine, California 92618 ATTN: Customer Mediation

8. The following remedies may be

sought in BBB AUTO LINE: repairs,

reimbursement for money paid to repair a vehicle or other expenses incurred as result of a vehicle nonconformity, repurchase or replacement of your vehicle, and compensation for damages and remedies available under Mazda's written warranty or applicable law.

- 9. The following remedies may **not** be sought in BBB AUTO LINE: punitive or multiple damages, attorneys' fees, or consequential damages other than as provided in California Civil Code Section 1794 (a) and (b).
- 10. You may reject the decision issued by a BBB AUTO LINE arbitrator. If you reject the decision, you will be free to pursue further legal action. The arbitrator's decision and any findings will be admissible in a court action.
- 11.If you accept the arbitrator's decision, Mazda will be bound by the decision, and will comply with the decision within a reasonable time not to exceed 30 days after we receive notice of your acceptance of the decision.
- 12.Please call BBB AUTO LINE at 1-800-955-5100 for further details about the program.

### Satisfaction Review Process

Your complete and permanent satisfaction is of primary concern to Mazda. All Authorized Mazda Dealers have both the knowledge and tools to keep your Mazda in top condition. In our experience, any questions, problems, or complaints regarding the operation of your Mazda or any other general service transactions are most effectively resolved by your dealer. If the cause of your dissatisfaction cannot adequately be addressed by normal dealership procedures, we recommend that you take the following steps:

## STEP 1: Contact the Mazda Dealer

Discuss the matter with a member of dealership management. If the Service Manager has already reviewed your concerns, contact the owner of the dealership or its General Manager.

## STEP 2: Contact the Mazda Regional Office

If you feel that you still require assistance, ask the dealer Service Manager to arrange for you to meet the local Mazda Service Representative. If more expedient, contact Mazda Canada Inc. Regional Office nearest you for such arrangements. Regional Office address and phone numbers are shown (page 10-12).

## STEP 3: Contact the Mazda Customer Relations Department

If still not substantially satisfied, contact the Customer Relations Department, Mazda Canada Inc., 55 Vogell Road, Richmond Hill, Ontario, L4B 3K5 Canada TEL: 1 (800) 263-4680.

Provide the Department with the following information:

- 1. Your name, address and telephone number
- 2. Year and model of vehicle
- Vehicle Identification Number (VIN). Refer to the Vehicle Identification Number on page 10-58 for the location of the VIN.
- 4. Purchase date
- 5. Present odometer reading
- 6. Your dealer's name and location
- 7. The nature of your problem and/or cause of dissatisfaction

The Department, in cooperation with the local Mazda Service Representative, will review the case to determine if everything possible has been done to ensure your satisfaction.

Please recognize that the resolution of service problems in most cases requires the use of your Mazda dealer's service facilities, personnel and equipment. We urge you to follow the above three steps in sequence for most effective results.

## Mediation/Arbitration Program

Occasionally a customer concern cannot be resolved through Mazda's Customer Satisfaction Program. If after exhausting the procedures in this manual your concern is still not resolved, you have another option.

Mazda Canada Inc. participates in an arbitration program administered by the Canadian Motor Vehicle Arbitration Plan (CAMVAP). CAMVAP will advise you about how your concern may be reviewed and resolved by an independent third party through binding arbitration.

Your complete satisfaction is the goal of Mazda Canada Inc. and our dealers. Mazda's participation in CAMVAP makes a valuable contribution to our achieving that goal. There is no charge for using CAMVAP. CAMVAP results are fast, fair and final as the award is binding on both you and Mazda Canada Inc.

## Canadian Motor Vehicle Arbitration Plan (CAMVAP)

If a specific item of concern arises, where a solution cannot be reached between an owner, Mazda, and/or one of its dealers (that all parties cannot agree upon), the owner may wish to use the services offered by the Canadian Motor Vehicle Arbitration Plan (CAMVAP).

CAMVAP uses the services of Provincial Administrators to assist consumers in scheduling and preparing for their arbitration hearings. However, before you can proceed with CAMVAP you must follow your Mazda dispute resolution process as outlined previously.

CAMVAP is fully implemented in all provinces and territories. Consumers wishing to obtain further information about the Program should contact the Provincial Administrator at 1 (800) 207-0685, or by contacting the Canadian Motor Vehicle Arbitration Plan Office at:

Canadian Motor Vehicle Arbitration

235 Yorkland Boulevard, suite 300 North York, Ontario M2J 4Y8 http://camvap.ca Provincial Administrators may be reached locally:

Province/Territory	CAMVAP Number
British Columbia & Yu- kon Territories	1 (800) 207-0685
Alberta & Northwest Territories	1 (800) 207-0685

Province/Territory	CAMVAP Number
Saskatchewan	1 (800) 207-0685
Manitoba	1 (800) 207-0685
Ontario	1 (800) 207-0685
Atlantic Canada	1 (800) 207-0685
Quebec	1 (800) 207-0685

# **Regional Offices**

<b>REGIONAL OFFICES</b>	COVERING AREAS
MAZDA CANADA INC. WESTERN REGION 5011 275 STREET LANGLEY, BRITISH COLUMBIA V4W 0A8 (778) 369-2100	ALBERTA, BRITISH COLUMBIA, MANITOBA, SASKATCHEWAN, YUKON
MAZDA CANADA INC. CENTRAL REGION 55 VOGELL ROAD, RICHMOND HILL, ONTARIO, L4B 3K5 1 (800) 263-4680	ONTARIO, NEW BRUNSWICK, NOVA SCOTIA, PRINCE EDWARD IS- LAND, NEWFOUNDLAND
MAZDA CANADA INC. QUEBEC REGION 6111 ROUTE TRANS- CANADIENNE POINTE CLAIRE, QUE- BEC H9R 5A5	QUEBEC

### **Customer Assistance**

Your complete and permanent satisfaction is our business. That is why all Authorized Mazda Dealers have the knowledge and the tools to keep your Mazda vehicle in top condition. If you have any questions or recommendations for improvement regarding the service of your Mazda vehicle or servicing by Mazda Dealer personnel, we recommend that you take the following steps:

### **STEP 1**

Discuss the matter with an Authorized Mazda Dealer. This is the quickest and best way to address the issue. If your concern has not been resolved by the CUSTOMER RELATIONS, SALES, SERVICE, or PARTS MANAGER, then please contact the GENERAL MANAGER of the dealership or the OWNER.

### STEP 2

If, after following STEP 1, you feel the need for further assistance, please contact your area's Mazda representative. Refer to PUERTO RICO/U.S. Virgin Island on page 10-18.

Please help us by providing the following information:

- 1. Your name, address, and telephone number
- 2. Year and model of vehicle
- 3. Vehicle Identification Number (17 digits, noted on your registration or title or located on the upper driver's side corner of the dash)
- 4. Purchase date and current mileage
- 5. Your dealer's name and location
- 6. Your question(s)

### **Customer Assistance**

Your complete and permanent satisfaction is our business. We are here to serve you. All Authorized Mazda Dealers have the knowledge and the tools to keep your Mazda vehicle in top condition. If you have any questions or recommendations for improvement regarding the service of your Mazda vehicle or servicing by Mazda Dealer personnel, we recommend that you take the following steps:

### Contact Your Mazda Dealer

Discuss the matter with an Authorized Mazda Dealer. This is the quickest and best way to address the issue.

- If your concern has not been resolved by the CUSTOMER RELATIONS, SALES, SERVICE, or PARTS MANAGER, then please contact the GENERAL MANAGER of the dealership or the OWNER.
- If it becomes necessary to have the components or wiring system for the supplementary restraint system modified to accommodate a person with certain medical condition in accordance with a certified physician you must contact your dealership in order to avoid the potential loss of the warranty of your vehicle which may occur if some third party is hired by the customer to make any modifications to this system.

Log on: at www.mazdamexico.com.mx

Answers to many questions, including how to locate or contact a local Mazda dealership in Mexico, can be found here.

E-mail: click on "Contactanos" at the top of the page at www.mazdamexico.com.mx

By phone at: 01 800 01 MAZDA (62932)

By letter at: Attn: Customer Assistance Mazda Motor de Mexico Mario Pani 400 PB, Col. Santa Fe Cuajimalpa, Delegación Cuajimalpa de Morelos, Ciudad de México, CP 05348 Tel: Customer Assistance 01 800 01 MAZDA(62932).

In order to serve you efficiently and effectively, please help us by providing the following information:

- 1. Your name, address, and telephone number
- 2. Year and model of vehicle
- 3. Vehicle Identification Number (17 digits, noted on your registration or title or located on the upper driver's side corner of the dash)
- 4. Purchase date and current mileage
- 5. Your dealer's name and location
- 6. Your question(s)

## U.S.A.

### Mazda North American Operations

200 Spectrum Center Drive Suite 100 Irvine, California 92618 P.O. Box 19734 Irvine, CA 92623-9734 U.S.A. TEL: 1 (800) 222-5500 (in U.S.A.) (949) 727-1990 (outside U.S.A.)

## CANADA

Mazda Canada Inc. 55 Vogell Road, Richmond Hill, Ontario, L4B 3K5 Canada

## PUERTO RICO/U.S. Virgin Island

#### International Automotive Distributor Group, LLC. (Mazda de Puerto Rico) P.O. Box 191850, San Juan, Puerto Rico 00919-1850 TEL: (787) 641-1777

## MEXICO

Mazda Motor de Mexico

Mario Pani 400 PB, Col. Santa Fe Cuajimalpa, Delegación Cuajimalpa de Morelos, Ciudad de México, CP 05348

TEL: Center of Attention to Clients: 01 (800) 016 2932. in Mexico

### GUAM

#### **Triple J Motors**

157 South Marine Drive, Tamuning, GUAM 96911 USA P.O. Box 6066 Tamuning, Guam 96931 TEL: (671) 649-6555

### **SAIPAN**

Pacific International Marianas, Inc. (d.b.a. Midway Motors) P.O. Box 887 Saipan, MP 96950 TEL: (670) 234-7524

**Triple J Saipan, Inc.** (**d.b.a. Triple J Motors**) P.O. Box 500487 Saipan, MP 96950-0487 TEL: (670) 234-7133/3051

## AMERICAN SAMOA

Polynesia Motors, Inc.

P.O. Box 1120, Pago Pago, American Samoa 96799 TEL: (684) 699-9347

## Reporting Safety Defects (U.S.A.)

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 Mazda Motor Corporation or your Mazda Importer/Distributor.

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 Mazda Motor Corporation or your Mazda Importer/Distributor.

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 Avenue, SE., Washington, DC, 20590. You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

#### NOTE

If you live in the U.S.A., all correspondence to Mazda Motor Corporation should be forwarded to:

Mazda North American Operations 200 Spectrum Center Drive Suite 100 Irvine, California 92618 or P.O. Box 19734 Irvine, CA 92623-9734 Customer Experience Center or toll free at 1 (800) 222-5500

If you live outside of the U.S.A., please contact the nearest Mazda Distributor shown in this manual.

- Refer to CANADA on page 10-17.
- Refer to PUERTO RICO/U.S. Virgin Island on page 10-18.
- Refer to MEXICO on page 10-18.
- $\cdot$  Refer to GUAM on page 10-19.
- Refer to SAIPAN on page 10-19.
- Refer to AMERICAN SAMOA on page 10-20.

## **Reporting Safety Defects (Canada)**

Canadian customers who wish to report a safety-related defect and concern to Transport Canada, Defect Investigations and Recalls, may telephone the toll free hotline 1-800-333-0510, or go to the Road Safety website at: https://www.tc.gc.ca/en/services/road.html

## Warranties for Your Mazda

- · New Vehicle Limited Warranty
- · Powertrain Limited Warranty
- Safety Restraint System Limited Warranty
- · Anti-perforation Limited Warranty
- Federal Emission Control Warranty/ California Emission Control Warranty
  - · Emission Defect Warranty
  - Emission Performance Warranty
- · Emission Control Warranty
- Replacement Parts and Accessories Limited Warranty
- $\cdot$  Tire Warranty

#### NOTE

Warranty information varies depending on the country. Refer to the Warranty Booklet for detailed warranty information.

## Outside the United States/Canada

Government regulations in the United States/Canada require that automobiles meet specific emission regulations and safety standards. Therefore, vehicles built for use in the United States/Canada may differ from those sold in other countries.

The differences may make it difficult or even impossible for your vehicle to receive satisfactory servicing in other countries. We strongly recommend that you NOT take your Mazda outside the United States/Canada.

#### **United States**

However, in the event that you are moving to Canada permanently, Mazda vehicles built for use in the United States could be eligible for exportation to Canada with specific vehicle modifications to comply with the Canadian Motor Vehicle Safety Standards (CMVSS).

### Canada

However, in the event that you are moving to the United States permanently, Mazda vehicles built for use in Canada could be eligible for exportation to the United States with specific vehicle modifications to comply with the United States Federal Motor Vehicle Safety Standards (FMVSS).

### NOTE

The above is applicable for a permanent import/export situation and not related to travelers on vacation.

You may have the following problems if you do take your vehicle outside of the United States/Canada:

- Recommended fuel may be unavailable. Any kind of leaded fuel or low-octane fuel will affect vehicle performance and damage the emission controls and engine.
- Proper repair facilities, tools, testing equipment, and replacement parts may not be available.

Please refer to your Manufacturer's Warranty Booklet for more information.

## Registering Your Vehicle in A Foreign Country (Except United States and Canada)

Registering your vehicle in a foreign country may be problematic depending on whether it meets the specific emission and safety standards of the country in which the vehicle will be driven. Consequently, your vehicle may require modifications at personal expense in order to meet the regulations.

In addition, you should be aware of the following issues:

Satisfactory vehicle servicing may be difficult or impossible in another country.

The fuel specified for your vehicle may be unavailable.

Parts, servicing techniques, and tools necessary to maintain and repair your vehicle may be unavailable.

There might not be an Authorized Mazda Dealer in the country you plan to take your vehicle.

The Mazda warranty is valid only in certain countries.

## Add-On Non-Genuine Parts and Accessories

Non-genuine parts and accessories for Mazda vehicles can be found in stores. These may fit your vehicle, but they are not approved by Mazda for use with Mazda vehicles. When you install non-genuine parts or accessories, they could affect your vehicle's performance or safety systems; the Mazda warranty doesn't cover this. Before you install any non-genuine parts or accessories, consult an Authorized Mazda Dealer.

# 

#### Always consult an Authorized Mazda Dealer before you install non-genuine parts or accessories.

Improperly designed parts or accessories could seriously affect your vehicle's performance or safety systems. This could cause you to have an accident or increase your chances of injuries in an accident.

Be very careful in choosing and installing add-on electrical equipment, such as mobile telephones, two-way radios, stereo systems, and car alarm systems. Incorrectly choosing or installing improper add-on equipment or choosing an improper installer is dangerous. Essential systems could be damaged, causing engine stalling, air-bag (SRS) activation, ABS/TCS/DSC inactivation, or a fire in the vehicle.

Mazda assumes no responsibility for death, injury, or expenses that may result from the installation of add-on non-genuine parts or accessories.

## Cell Phones Warning

## **WARNING**

#### Please comply with the legal regulations concerning the use of communication equipment in vehicles in your country.

Use of any electrical devices such as cell phones, computers, portable radios, vehicle navigation or other devices by the driver while the vehicle is moving is dangerous. Dialing a number on a cell phone while driving also ties-up the driver's hands. Use of these devices will cause the driver to be distracted and could lead to a serious accident. If a passenger is unable to use the device, pull off the right-of-way to a safe area before use. If use of a cell phone is necessary despite this warning, use a hands-free system to at least leave the hands free to drive the vehicle. Never use a cell phone or other electrical devices while the vehicle is moving and, instead, concentrate on the full-time job of driving.

## Uniform Tire Quality Grading System (UTQGS)

This information relates to the tire grading system developed by the U.S. National Highway Traffic Safety Administration for grading tires by tread wear, traction, and temperature performance.

### **Tread Wear**

The tread wear 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 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, however, and may depart significantly from the norm because of 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. These grades 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 acceleration cornering (turning), hydroplaning, or peak traction characteristics.

## Temperature-A, B, C

The temperature grades A (the highest), B, and C, represent 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 temperatures can lead to sudden tire failure.

Grade C corresponds to a level of performance which all passenger vehicle 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.

# 

Keep your vehicle's tires properly inflated and not overloaded. Driving with improperly inflated or overloaded tires is dangerous. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure. The temperature grade for this tire is established for a tire that is properly inflated and not overloaded.

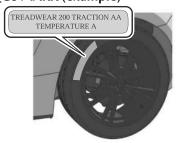
These grades will be added to the sidewalls of passenger vehicle tires over the next several years according to a schedule established by the NHTSA and the tire manufacturers. The grade of tires available as standard or optional equipment on Mazda vehicles may vary with respect to grade.

ALL PASSENGER VEHICLE TIRES MUST CONFORM TO THESE GRADES AND TO ALL OTHER FEDERAL TIRE-SAFETY REQUIREMENTS.

## UNIFORM TIRE QUALITY GRADING

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 UTQGS MARK (example)

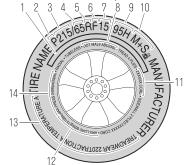


## Tire Labeling

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a tire identification number for safety standard certification and in case of a recall.

## Information on Passenger Vehicle Tires

#### Please refer to the sample below.



- 1. SAFETY WARNING
- 2. Passenger car tire
- 3. Nominal width of tire in millimeters
- 4. Ratio of height to width (aspect ratio)
- 5. Radial
- 6. Run-flat tire
- 7. Rim diameter code
- 8. TIN: U.S. DOT tire identification number
- 9. Load index & speed symbol
- 10.Severe snow conditions
- 11.Tire ply composition and materials used
- 12.Max. load rating
- 13.Tread wear, traction and temperature grades
- 14.Max. permissible inflation pressure

P215/65R15 95H is an example of a tire size and load index rating. Here is an explanation of the various components of that tire size and load index rating. Note that the tire size and load load index rating may be different from the example.

### <u>P</u>

Indicates a tire that may be installed on cars, SUVs, minivans and light trucks as designated by the Tire and Rim Association (T&RA).

#### NOTE

If your tire size does not begin with a letter this may mean it is designated by either ETRTO (European Tire and Rim Technical Organization) or JATMA (Japan Tire Manufacturing Association).

### 215

"215" is the nominal width of the tire in millimeters. This three-digit number gives the width in millimeters of the tire from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

### <u>65</u>

"65" is the aspect ratio. This two-digit number indicates the tire's ratio of height to width.

### R

"R" is the tire construction symbol. R indicates "Radial ply construction".

### 15

"15" is the wheel rim diameter in inches.

### <u>95</u>

"95" is the Load Index. This two-or three-digit number indicates how much weight each tire can support.

### <u>H</u>

"H" is the speed rating. The speed rating denotes the maximum speed for which the use of the tire is rated.

Letter Rating	Speed Rating		
Q	99 mph		
R	106 mph		
S	112 mph		
Т	118 mph		
U	124 mph		
Н	130 mph		
V	149 mph		
W	168 <sup>*</sup> mph		
Y	186 <sup>*</sup> mph		

\* For tires with a maximum speed capability over 149 mph, tire manufacturers sometimes use the letters ZR. For tires with a maximum speed capability over 186 mph, tire manufacturers always use the letters ZR.

### M+S or M/S: Mud and Snow

#### AT: All Terrain.

AS: All Season. The "M+S" or "M/S" indicates that the tire has some functional use in mud and snow.

#### U.S. DOT Tire Identification Number (TIN)

This begins with the letters "DOT" which indicates the tire meets all federal standards. The next two numbers or letters are the plant code where it was manufactured, and the last four numbers represent the week and year the tire was manufactured. For example, the numbers 457 means the 45st week of 1997. After 2000 the numbers go to four digits. For example, the number 2102 means the 21th week of 2002. The other numbers are marketing codes used at the manufacturer's discretion. This information is used to contact consumers if a tire defect requires a recall.

#### Tire Ply Composition and Materials Used

The number of plies indicates the number of layers of rubber-coated fabric in the tire. In general, the greater the number of plies, the more weight a tire can support. Tire manufacturers also must indicate the tire materials, which include steel, nylon, polyester, and other.

#### Maximum Load Rating

This number indicates the maximum load in kilograms and pounds that can be carried by the tire.

#### Maximum Permissible Inflation Pressure

This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

#### Tread Wear, Traction and Temperature Grades

**Tread wear:** The tread wear 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 one-half  $(1 \ 1/2)$  times as well on the government course as a tire graded 100.

**Traction:** The traction grades, from highest to lowest are AA, A, B, and C. The grades 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. **Temperature:** 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.

#### Snow Tires

In some heavy snow areas, local governments may require true snow tires, those with very deeply cut tread. These tires should only be used in pairs or placed on all four wheels. Make sure you purchase snow tires that are the same size and construction type as the other tires on your vehicle.

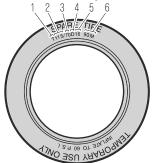
#### SAFETY WARNING

The following safety warning appears on the tire's sidewall. SERIOUS INJURY MAY RESULT FROM:

- EXPLOSION OF TIRE/RIM ASSEMBLY DUE TO IMPROPER MOUNTING-MATCH TIRE DIAMETER TO RIM DIAMETER; NEVER EXCEED 40 psi (275 kPa) TO SEAT BEADS-ONLY SPECIALLY TRAINED PERSONS SHOULD MOUNT TIRES.
- TIRE FAILURE DUE TO UNDER-INFLATION/ OVERLOADING/DAMAGE-FOLLOW OWNER'S MANUAL AND PLACARD IN VEHICLE-FREQUENTLY CHECK INFLATION PRESSURE AND INSPECT FOR DAMAGE.

## Information on Temporary Tires

Please refer to the sample below.



- 1. Temporary tires
- 2. Nominal width of tire in millimeters
- 3. Ratio of height to width (aspect ratio)
- 4. Diagonal
- 5. Rim diameter code
- 6. Load index & speed symbol

T115/70D16 90M is an example of a tire size and load index rating. Here is an explanation of the various components of that tire size and load index rating. Note that the tire size and load load index rating may be different from the example.

### Ţ

Indicates a tire that may be installed on cars, SUVs, minivans and light trucks as designated by the Tire and Rim Association (T&RA).

### 115

"115" is the nominal width of the tire in millimeters. This three-digit number gives the width in millimeters of the tire from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

### 70

"70" is the aspect ratio. This two-digit number indicates the tire's ratio of height to width.

### D

"D" is the tire construction symbol. D indicates "diagonal ply construction".

### 16

"16" is the wheel rim diameter in inches.

### <u>90</u>

"90" is the Load Index. This two-or three-digit number indicates how much weight each tire can support.

### M

"M" is the speed rating. The speed rating denotes the maximum speed for which the use of the tire is rated.

Letter Rating	Speed Rating		
М	81 mph		

## Location of the Tire Label (Placard)

You will find the tire label containing tire inflation pressure by tire size and other important information on the driver's side B-pillar or on the edge of the driver's door frame.

#### SAMPLE

10.5	SEIGNEMENT		EUS ET L	TION E CHARGEMENT	Ī
	SEATING CAPACIT	ES   IUTAL 5	FRONT AVANT	2 REAR 3	
The combined we Le poids total des c	eight of occupants occupants et du cha	and cargo should n argement ne doit jam	ais dépasser	xxx kg or xxx lbs.*	
TIRE PNEU	SIZE DIMENSIONS	COLD TIRE PR PRESSION PNEUS À F	DES	SEE OWNER'S MANUAL FOR ADDITIONAL	
FRONT AVANT	195/70R14	200 kPa, 2	9 psi	NFORMATION	
REAR ARRIÈRE	195/70R14	200 kPa, 2	9 psi	VOIR LE MANUEL DE L'USAGER	(XXXX)
SPARE DE SECOURS	T125/70D15	420 kPa, 6	0 psi	POUR PLUS DE RENSEIGNEMENTS	×

## Recommended Tire Inflation Pressure

On the tire label you will find the recommended tire inflation pressure in both kPa and psi for the tires installed as original equipment on the vehicle. It is very important that the inflation pressure of the tires on your vehicle is maintained at the recommended pressure. You should check the tire pressure regularly to insure that the proper inflation pressure is maintained. Refer to Tires on page 10-68.

### NOTE

Tire pressures listed on the vehicle placard or tire information label indicate the recommended cold tire inflation pressure, measured when the tires are cold, after the vehicle has been parked for at least 3 hours. As you drive, the temperature in the tire warms up, increasing the tire pressure.

## 

Always check the tire inflation pressures on a regular basis according to the recommended tire inflation pressure on the tire label and in conjunction with the information in this owner's manual.

Driving your vehicle with under-inflated tires is dangerous.

Under-inflation is the most common cause of failures in any kind of tire and may result in severe cracking, tread separation or "blowout", with unexpected loss of vehicle control and increased risk of injury. Under-inflation increases sidewall flexing and rolling resistance, resulting in heat buildup and internal damage to the tire. It results in unnecessary tire stress, irregular wear, loss of control and accidents. A tire can lose up to half of its air pressure and not appear to be flat!

It is impossible to determine whether or not tires are properly inflated just by looking at them.

### **Checking Tire Pressure**

- When you check the air pressure, make sure the tires are cold —meaning they are not hot from driving even a mile.
- 2. Remove the cap from the valve on one tire.
- 3. Firmly press a tire gauge onto the valve.
- 4. Add air to achieve recommended air pressure.
- 5. If you overfill the tire, release air by pushing on the metal stem in the center of the valve. Then recheck the pressure with your tire gauge.
- 6. Replace the valve cap.
- 7. Repeat with each tire, including the spare.

#### NOTE

Some spare tires require higher inflation pressure.

- 8. Visually inspect the tires to make sure there are no nails or other objects embedded that could poke a hole in the tire and cause an air leak.
- 9. Check the sidewalls to make sure there are no gouges, cuts, bulges, cracks or other irregularities.

### **Glossary of Terms**

**Tire Placard:** A label indicating the OE tire sizes, recommended inflation pressure, and the maximum weight the vehicle can carry.

**Tire Identification Number (TIN):** A number on the sidewall of each tire providing information about the tire brand and manufacturing plant, tire size, and date of manufacture.

**Inflation Pressure:** A measure of the amount of air in a tire.

**kPa:** Kilopascal, the metric unit for air pressure.

**psi:** Pounds per square inch, the English unit for air pressure.

**B-pillar:** The structural member at the side of the vehicle behind the front door.

**Original Equipment (OE):** Describes components originally equipped on the vehicle.

Vehicle Load Limit: The maximum value of the combination weight of occupants and cargo.

**Bead Area of the Tire:** Area of the tire next to the rim.

Sidewall Area of the Tire: Area between the bead area and the tread. Tread Area of the Tire: Area on the perimeter of the tire that contacts the road when it's mounted on the vehicle.

**Seating capacity** means the total allowable number of vehicle occupants. Seating capacity is described on the tire label.

**Production options weight** is the combination weight of installed regular production options weighing over 2.3 kilograms in excess of the standard items which they replace, and not previously considered in the curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim.

**Rim** is the metal support (wheel) for a tire or a tire and tube assembly upon which the tire beads are seated.

## Tire Maintenance

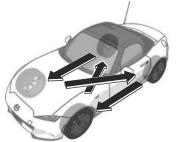
Improper or inadequate vehicle maintenance can cause tires to wear abnormally. Here are some important maintenance points:

### **Tire Inflation Pressure**

Inspect all tire pressure monthly (including the spare) when the tires are cold. Maintain recommended pressures for the best ride, top handling, and minimum tire wear. Use the pressures specified on the vehicle tire information placard or tire label for optimum service.

## Tire Rotation

To equalize tread wear, rotate the tires every 16,000 km (10,000 miles) at the latest or sooner if irregular wear develops. Mazda recommends to rotate every 8,000 km (5,000 miles) to help increase tire life and distribute wear more evenly.



Do not include (TEMPORARY USE ONLY) spare tire in rotation.

Inspect the tires for uneven wear and damage. Abnormal wear is usually caused by one or a combination of the following:

- · Incorrect tire pressure
- · Improper wheel alignment
- · Out-of-balance wheel
- Severe braking

After rotation, inflate all tire pressures to specification on page 10-68 and inspect the lug nuts for tightness.

# **A**CAUTION

Rotate unidirectional tires and radial tires that have an asymmetrical tread pattern or studs only from front to rear, not from side to side. Tire performance will be weakened if rotated from side to side.

## **Replacing a Tire**

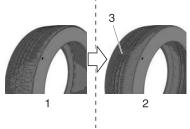
# 

# Always use tires that are in good condition.

Driving with worn tires is dangerous. Reduced braking, steering, and traction could result in an accident.

If a tire wears evenly, a wear indicator will appear as a solid band across the tread.

Replace the tire when this happens.



- 1. New tread
- 2. Worn tread
- 3. Tread wear indicator

You should replace the tire before the band crosses the entire tread.

### NOTE

Tires degrade over time, even when they are not being used on the road. It is recommended that tires generally be replaced when they are 6 years or older. Heat caused by hot climates or frequent high loading conditions can accelerate the aging process. You should replace the spare tire when you replace the other road tires due to the aging of the spare tire. The period in which the tire was manufactured (both week and year) is indicated by a 4-digit number.

Refer to Tire Labeling on page 10-30.

## **Safety Practices**

The way you drive has a great deal to do with your tire mileage and safety. So cultivate good driving habits for your own benefit.

- Observe posted speed limits and drive at speeds that are safe for the existing weather conditions
- Avoid fast starts, stops and turns
- Avoid potholes and objects on the road
- Do not run over curbs or hit the tire against the curb when parking

# 

If you feel a sudden vibration or ride disturbance while driving or you suspect your tire or vehicle has been damaged, immediately reduce your speed. Drive with caution until you can safely pull off the road. Stop and inspect the tire for damage. If the tire is under-inflated or damaged, deflate it, remove the tire and rim and replace it with your spare tire. If you cannot detect a cause, have the vehicle towed to the nearest vehicle or tire dealer to have the vehicle inspected.

## Vehicle Loading

## **WARNING**

#### Do not tow a trailer with this vehicle.

Towing a trailer with this vehicle is dangerous because it has not been designed to tow a trailer and doing so will affect the drive system which could result in vehicle damage.

This section will guide you in the proper loading of your vehicle, to keep your loaded vehicle weight within its design rating capability. Properly loading your vehicle will provide maximum return of vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, from the vehicle's Safety Certification Label and Tire and Load Information Label:

# A WARNING

#### **Overloaded Vehicle.**

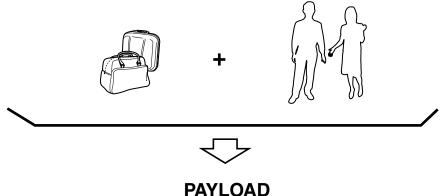
Overloading a vehicle is dangerous. The results of overloading can have serious consequences in terms of passenger safety. Too much weight on a vehicle's suspension system can cause spring or shock absorber failure, brake failure, handling or steering problems, irregular tire wear, tire failure or other damage. Overloading makes a vehicle harder to drive and control. It also increases the distance required for stopping. In cases of serious overloading, brakes can fail completely, particularly on steep grades. The load a tire will carry safely is a combination of the size of the tire, its load range, and corresponding inflation pressure.

Never overload the vehicle and always observe the vehicle's weight ratings from the vehicle's Safety Certification and Tire and Load Information labels.

Base Curb Weight is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

**Vehicle Curb Weight** is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

PAYLOAD



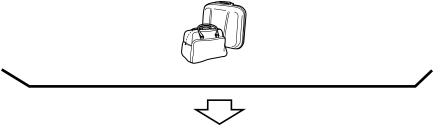
**Payload** is the combination weight of cargo and passengers that the vehicle is designed to carry. The maximum payload for your vehicle can be found on the Tire and Load Information label on the driver's door frame or door pillar. Look for "THE COMBINATION WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED XXX kg or XXX lbs" for your maximum payload. The payload listed on the tire label is the maximum payload for the vehicle as built by the assembly plant. If any aftermarket or dealer installed equipment has been installed on the vehicle, the

weight of the equipment must be subtracted from the payload listed on the tire label in order to be accurate.

#### SAMPLE

		AND LOADING IS SUR LES PN		TION .E CHARGEMENT		
	SEATING CAPACIT OMBRE DE PLAC		FRONT AVANT	2 REAR ARRIÈRE 3		
The combined we Le poids total des o	The combined weight of occupants and cargo should never exceed kg or lbs.* Le poids total des occupants et du chargement ne doit jamais dépasser xxx kg ou xxx lb.*					
TIRE PNEU	SIZE DIMENSIONS	COLD TIRE PR PRESSION PNEUS À F	DES	SEE OWNER'S MANUAL FOR ADDITIONAL		
FRONT AVANT	P195/70R14	200 kPa, 2	9 psi	INFORMATION		
REAR ARRIÈRE	P195/70R14	200 kPa, 2	9 psi	VOIR LE MANUEL DE L'USAGER	(XXXX)	
SPARE DE SECOURS	T125/70D15	420 kPa, 6	0 psi	POUR PLUS DE RENSEIGNEMENTS	×	

CARGO



CARGO

**Cargo Weight** includes all weight added to the Base Curb Weight, including cargo and optional equipment.

The cargo weight limit decreases depending on the number of vehicle occupants. The cargo weight limit can be calculated by subtracting the total weight of the vehicle occupants from the "combination weight of occupants and cargo should never exceed" value on the tire label.

Examples: Based on a single occupant weight of 68 kg (150 lbs), and a value of 385 kg (849 lbs) for the "combination weight of occupants and cargo should never exceed":

### 10-42

The cargo weight limit with one occupant is 385 kg (849 lbs) - 68 kg (150 lbs) = 317 kg (699 lbs)

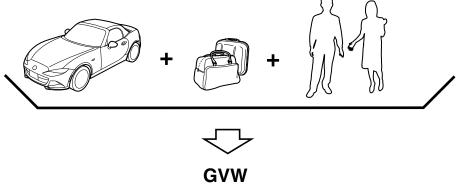
The cargo weight limit with two occupants is 385 kg (849 lbs) - (68  $\times$  2) kg ( (150  $\times$  2) lbs) = 249 kg (549 lbs)

If the weight of the occupant increases, the cargo weight limit decreases by that much.

**GAW** (**Gross Axle Weight**) is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

GAWR (Gross Axle Weight Rating) is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the Safety Compliance Certification Label located on the driver's door frame or door pillar. The total load on each axle must never exceed its GAWR.

GVW



GVW (Gross Vehicle Weight) is the Vehicle Curb Weight + cargo + passengers.

**GVWR (Gross Vehicle Weight Rating)** is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). **The GVWR** 

## is shown on the Safety Compliance Certification Label located on the driver's door frame or door pillar. The GVW must never exceed the GVWR.

### SAMPLE

		GVWR/PNBV []]] LB []	III KG
FRONT GAWR/PNBE AV	I LB 📖 KG	REAR GAWR/PNBE AR []]]	LB 🚥 KG
WITH/AVEC	□ TIRES/PNEUS	WITH/AVEC	III TIRES/PNEUS
	<b>RIMS/JANTES</b>		RIMS/JANTES
□ KPA/ □ PSI	COLD/A FROID	□ KPA/□ PS	COLD/A FROID
VIN:[]]]]]]	TYPE:		
	BAR	CODE	

## **WARNING**

### Never Exceed Axle Weight Rating Limits.

Exceeding the Safety Certification Label axle weight rating limits is dangerous and could result in death or serious injury as a result of substandard vehicle handling, performance, engine, transmission and/or structural damage, serious damage to the vehicle, or loss of control.

Always keep the vehicle within the axle weight rating limits.

GCW GCW GCW (Gross Combination Weight) is the weight of the loaded vehicle (GVW).

**GCWR (Gross Combination Weight Rating)** is the maximum allowable weight of the vehicle - including all cargo and passengers - that the vehicle can handle without risking damage. **The GCW must never exceed the GCWR.** 

## **WARNING**

### Never Exceed GVWR or GAWR Specifications.

Exceeding the GVWR or the GAWR specified on the certification label is dangerous. Exceeding any vehicle rating limitation could result in a serious accident, injury, or damage to the vehicle.

Do not use replacement tires with lower load carrying capacities than the originals because they may lower the vehicle's GVWR and GAWR limitations. Replacement tires with a higher limit than the originals do not increase the GVWR and GAWR limitations.

Never exceed the GVWR or the GAWR specified on the certification label.

### **Steps for Determining the Correct Load Limit**

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.  $(1400 750 (5 \times 150) = 650 \text{ lbs.})$
- (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.

### Keyless Entry System/Immobilizer System

#### FCC CAUTION

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

#### FCC/ISED

This device complies with part 15 of FCC Rules and Innovation, Science and Economic Development Canada's licence-exempt RSS(s). 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. Le présent appareil est conforme à la partie 15 des règles de la FCC et aux normes des CNR d'Innovation, Sciences et Développement économique 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'appareil doit accepter tout brouillage subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### FCC/ISED RF Exposure Compliance

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 2cm or more away from person's body.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles les radioélectriques (RF) de la FCC lignes directrices d'exposition et d'exposition aux fréquences radioélectriques (RF) CNR-102 de l' ISDE Cet équipement doit être installé et utilisé en gardant une distance de 2cm ou plus entre le radiateur et le corps humain.

#### (MEXICO)

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

### HomeLink Wireless Control System

FCC (USA) and ISED (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.

FCC (États-Unis) et ISED (Canada)

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 reque, 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.

#### Mexico

"La operación de este equipo está sujeta e las siguientes dos conduciones (1) es posible que este equipo o dispositivo no cauco interforencia portudicial y (2) este equipo o dispositivo debe aceptar qualquier interferencia, incluyendo la que pueda causar su operación no deseada.



### **Tire Pressure Monitoring System**

#### USA

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.

#### Canada

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.

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.

#### Mexico

La operacion de este equipo esta sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operacion no deseada.

### Front Radar Sensor System

#### -USA/Pueruto Rico/Guam/Saipan/CANADA

Model: ARS4-B

IC: 4135A-ARS4B

FCC ID: OAYARS4B

This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s). 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.

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 tonctionnement

Redictreguency radiation exposure Information:

This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 30 cm between the radiation and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement nos contrôlé. Cet équipement doit être instalé et utilisé evec un minimum de 30 cm de distance entre la source de rayonnement et votre corps.

#### FCC Notice

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

#### Mexico

Certificado de homologacion: RVLCOAR15-0008

Continental ARS 4-B

Este equipo opera a titulo secundario, consecuentemente, debe aceptar interferencias perjudiciales incluyendo equipos de la misma clase y puede no causar interferencias a sistemas operando a título primario.

## Front Side Radar Sensor System/Rear Side Radar Sensor System

	FCC ID : 2AHE9-24GMMR20
FCC	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 CAUTION Changes or modifications made to this equipment not expressly approved by (FURUKAWA AUTOMOTIVE SYSTEMS INC) may void the FCC authorization to operate this equipment.
	IC: 21140-24GMMR20
	NOTICE: This device contains licence exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence exempt RSS(s). Operation is subject to the following two conditions: 1. This device may not cause interference. 2. This device must accept any interference, including interference that may cause undesired operation of the device.
CANADA	L'émetteur / récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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'appareil doit accepter tout brouillage radioélectrique subi , même si le brouillage est susceptible d'en compromettre le fonctionnement.
	NOTICE: Changes or modifications made to this equipment not expressly approved by (FURUKAWA AUTOMOTIVE SYSTEMS INC) may void the FCC authorization to operate this equipment.
	Radiofrequency radiation exposure Information: The radiated output power of the device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized.

### **Audio System**

#### USA(FCC)

Model No. : AM1701, AM1904, AM2201

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.

**Responsible Party** 

•Name : Panasonic Corporation of North America ·Address : Two Riverfront Plaza, Newark, NJ 07102-5490 ·Support Contact : https://shop.panasonic.com/support

#### NOTE

Properly shielded and grounded cables and connectors must be used forconnection to host computers and / or peripherals in order to meet FCCemission limits.

#### Compliance with FCC requirement 15.407(c)

Data transmission is always initiated by software, which is the passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by the MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinue transmission in case of either absence of information to transmit or operational failure.

Frequency Tolerance: ±20ppm

#### **WARNING**

#### **RF** Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). [But it is desirable that it should be installed and operated keeping the radiator at least 20cm or more away from person's body.]

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

#### FCC CAUTION :

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

#### Canada NOTE

This device complies with Industry Canada's applicable 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;

 l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### CAUTION:

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

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'ISDE. Cet é quipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le radiateur et le corps humain.

Data transmission is always initiated by software, which is the passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by the MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinue transmission in case of either absence of information to transmit or operational failure.

La transmission des données est toujours initiée par le logiciel, puis les données sont transmises par l'intermé diaire du MAC, par la bande de base numérique et analogique et, enfin, à la puce RF. Plusieurs paquets spé ciaux sont initiés par le MAC. Ce sont les seuls moyens pour qu'une partie de la bande de base numérique active l'émetteur RF, puis désactive celui-ci à la fin du paquet. En conséquence, l'émetteur reste uniquement activé lors de la transmission d'un des paquets susmentionnés. En d'autres termes, ce dispositif interrompt automatiquement toute transmission en cas d'absence d'information à transmettre ou de défaillance.

#### Mexico

Model No. AM1701: IFT:RCPPAAM18-0994 Model No. AM1904: IFT:RCPPAAM20-0559 Model No. AM2201: IFT:MAPAAM23-08132

La operación de este equipo está sujeta a las siguientes dos condiciones:

(1) es posible que este equipo o dispositivo no cause interferencia perjudicial y

(2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.



### **Radio System**

#### FCC

NOTE : Properly shielded and grounded cables and connectors must be used for connection to host computers and / or peripherals in order to meet FCC emission limits.

#### CAUTION :

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

### **Data Communication System**

### U.S.A.

### 

Radio Frequency Radiation Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body in normal use position.

### **Co-location**

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

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

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

#### Canada

Contains IC: 574B-DA39

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

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

**CAUTION: Radio Frequency Radiation Exposure** 

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 20cm or more away from person's body.

Contient IC: 574B-DA39

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation,Sciences et Développement économique 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;
- L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

ATTENTION: l'exposition aux rayonnements radiofréquence

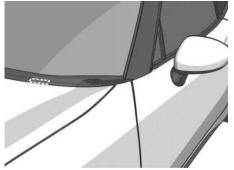
- Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC. Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le radiateur et le corps humain.

### Vehicle Identification Number

The vehicle identification number legally identifies your vehicle.

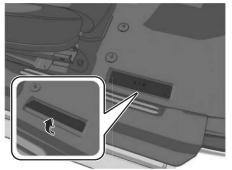
### Dashboard

The vehicle identification number is indicated on a plate attached to the dashboard.

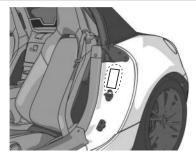


### Chassis

Open the cover shown in the figure to check the vehicle identification number.



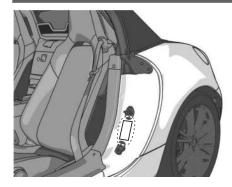
## Motor Vehicle Safety Standard Label (U.S.A. and Canada)

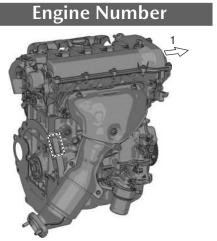


## Vehicle Emission Control Information Label (U.S.A. and Canada)



### **Tire Pressure Label**





1. Forward

Engine		
Engine	Specification	
Туре	DOHC-16V in-line, 4-cylinder	
Bore × Stroke         83.5 × 91.2 mm (3.29 × 3.59 in)		
Displacement	1,997.6 ml (1,997.6 cc)	
Compression ratio	13.0	

<b>Electrical</b>	System
-------------------	--------

Item	Specification		
Lead-acid battery <sup>*1</sup>	46B24L (S) (12V-45Ah/20HR)		
Spark-plug number	Mazda Genuine spark plug <sup>*2</sup> PE5R-18-110-A		

<sup>\*</sup>1 The lead-acid battery specification differs depending on the country or region. Check the lead-acid battery installed on the vehicle and use a lead-acid battery with an equal or higher performance. However, the performance of the lead-acid battery may vary even among the same lead-acid battery types, consult an Authorized Mazda Dealer for replacement.

<sup>2</sup> The spark plugs provide the SKYACTIV-G its optimum performance. Consult an Authorized Mazda Dealer for details.



When cleaning the iridium plugs, do not use a wire brush. The fine particulate coating on the iridium alloy and platinum tips could be damaged.

SAE J1703 or FMVSS116 DOT-3

Lubricant Quality		
Classification		
Refer to Recommended Oil on page 9-20.		
FL-22 type		
Mazda Original Long Life Gear Oil IS <sup>*1</sup>		
Mazda Genuine JWS3309		
Mazda Long Life Hypoid Gear Oil SG1		

#### \*1 Mazda Original Long Life Gear Oil IS is superior oil for optimum shift-feel. Using Mazda Original Long Life Gear Oil IS is recommended. If Mazda Original Long Life Gear Oil IS cannot be obtained, use standard oil (API Service GL-4 (SAE 75W-90)). However, shifting in very low temperatures may become difficult.

<sup>\*</sup>2 Periodic replacement is unnecessary.

Brake/Clutch fluid

<sup>\*</sup>3 Replacement is necessary when the component is submerged in water.

## Capacities

### (Approximate Quantities)

Item		Capacity
Engine oil With oil filter replacement		4.3 L (4.5 US qt, 3.8 Imp qt)
	Without oil filter replacement	4.1 L (4.3 US qt, 3.6 Imp qt)
Coolant		6.0 L (6.3 US qt, 5.3 Imp qt)
Manual transmission oil		2.0 L (2.1 US qt, 1.8 Imp qt)
Automatic transmission fluid		7.2 L (7.6 US qt, 6.3 Imp qt)
Rear differential oil		0.6 L (0.6 US qt, 0.5 Imp qt)
Fuel tank		45.0 L (11.9 US gal, 9.90 Imp gal)

Check oil and fluid levels with dipsticks or reservoir gauges.

Dimensions				
	ltem			Hardtop model
Overall length			3,915 mm (154.1 in)	
Overall width			1,735 mn	n (68.3 in)
Overall height U.S.A. and Can-	U.S.A. and Can-	16 inch wheel vehi- cle	1,235 mm (48.6 in)	_
	17 inch wheel vehi- cle	1,240 mm (48.8 in)	1,245 mm (49.0 in)	
	Mexico		1,230 mm (48.4 in)	1,235 mm (48.6 in)
Front tread		1,496 mm (58.9 in)		
Rear tread		1,503 mm (59.2 in)		
Wheelbase		2,310 mm (90.9 in)		

## Weights

### U.S.A. and Canada

ltem		Soft top model		Hardtop model	
		Manual trans- mission	Automatic trans- mission	Manual trans- mission	Automatic trans- mission
GVWR (Gross Veł Weight Rating)	nicle	1,245 kg (2,745 lbs)	1,265 kg (2,789 lbs)	1,298 kg (2,862 lbs)	1,312 kg (2,892 lbs)
GAWR (Gross Axle Weight Rat-	Front	628 kg (1,384 lbs)	642 kg (1,415 lbs)	636 kg (1,402 lbs)	644 kg (1,420 lbs)
ing)	Rear	620 kg (1,367 lbs)	626 kg (1,380 lbs)	664 kg (1,464 Ibs)	670 kg (1,477 lbs)

### Mexico

Item	Item Soft top model		Hardtop model
	Total	1,242 kg (2,738 lbs)	1,305 kg (2,877 lbs)
GVW (Gross Ve- hicle Weight)	Front	627 kg (1,382 lbs)	639 kg (1,409 lbs)
incle weight)	Rear	615 kg (1,356 lbs)	666 kg (1,468 lbs)
GAW (Permissi-	Front	630 kg (1,389 lbs)	639 kg (1,409 lbs)
ble axle load)	Rear	615 kg (1,356 lbs)	666 kg (1,468 lbs)

## Light Bulbs

The LED bulb cannot be replaced as a single unit because it is an integrated unit. The LED bulb has to be replaced with the unit. If a replacement is necessary, consult an Authorized Mazda Dealer.

### **Exterior light**

Light bulb	Wattage	UN-R <sup>*1</sup> (SAE)
Headlights	LED	— (—)
Daytime running lights	LED	— (—)
Parking lights	LED	— (—)
Front side-marker lights	5	W5W (—)
Front turn signal lights	LED	— (—)
Side turn signal lights	5*2	WY5W (—)
High-mount brake light	LED	— (—)
Rear turn signal lights	LED	— (—)
Rear side-marker lights	5	W5W (—)
Brake lights	LED	— (—)
Taillights	LED	— (—)
Reverse lights	LED	— (—)
License plate lights	5	W5W (—)

<sup>\*</sup>1 UN-R stands for United Nations Regulation.

<sup>\*</sup>2 Bulb replacement is not possible because it is built into the unit. Replace the unit.

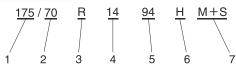
### **Interior light**

Light bulb	Wattage	UN-R <sup>*1</sup>
Overhead light	10	_
Trunk light	5	—

<sup>\*</sup>1 UN-R stands for United Nations Regulation.



#### Sample tire mark and its meaning



- 1. Nominal section width
- 2. Nominal aspect ratio in %
- 3. Construction code
- 4. Nominal rim diameter in inches
- 5. Load index (not on ZR tires)
- 6. Speed symbol
- 7. Mud and snow

#### Tire mark information

Choose the proper tires for your vehicle using the following tire mark information.

Speed symbol	Maximum permissible speed
Q	Up to 160 km/h (99 mph)
R	Up to 170 km/h (105 mph)
S	Up to 180 km/h (111 mph)
Т	Up to 190 km/h (118 mph)
U	Up to 200 km/h (124 mph)
Н	Up to 210 km/h (130 mph)
V	Up to 240 km/h (149 mph)
W	Up to 270 km/h (167 mph)
Y	Up to 300 km/h (186 mph)
ZR	Over 240 km/h (149 mph)

### Tire and inflation pressure

#### NOTE

The tires have been optimally matched with the chassis of your vehicle. When replacing tires, Mazda recommends that you replace tires of the same type originally fitted to your vehicle. For details, contact an Authorized Mazda Dealer.

Check the tire pressure label for tire size and inflation pressure. Refer to Tire Pressure Label on page 10-59.

### Standard tire

Tire size	Inflation	pressure
1110 5120	Front	Rear
195/50R16 84V	200 kPa (2.0 bar, 29 psi)	200 kPa (2.0 bar, 29 psi)
205/45R17 84W	200 kPa (2.0 bar, 29 psi)	200 kPa (2.0 bar, 29 psi)

Single occupant's weight: About 75 kg

### Lug nut tightening torque

When installing a tire, tighten the lug nut to the following torque. 108—147 N·m (12—14 kgf·m, 80—108 ft·lbf)

### Brakes

If you require information regarding the wear limit specification for the brake disc plates and the measurement method, please contact an Authorized Mazda Dealer. The information is made freely available.



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