

# A Word to Mazda Owners

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

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

Regular servicing of your vehicle by an expert repairer helps maintain both its roadworthiness and its resale value. A world-wide network of Authorized Mazda Repairers can help you with their professional servicing expertise.

Their specially trained personnel are best qualified to service your Mazda vehicle properly and exactly. 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 we recommend an Authorized Mazda Repairer.

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 glove compartment as a handy reference for the safe and enjoyable use of your Mazda. 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.

**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.**

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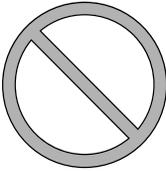
# How to Use This Manual

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We want to help you get the most driving pleasure from your vehicle. Your owner's manual, when read from cover to cover, 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.

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



References to left hand and right hand are made as if facing in the same direction the vehicle faces. Although this manual explains a left-hand-drive model, it also applies to right-hand-drive models.

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

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.*



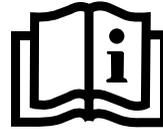
*A CAUTION indicates a situation in which bodily injury or damage to your vehicle, or both, could result if the caution is ignored.*

## **NOTE**

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

The 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.



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# 1

## Pictorial Index

Interior, exterior views and part identification of your Mazda.

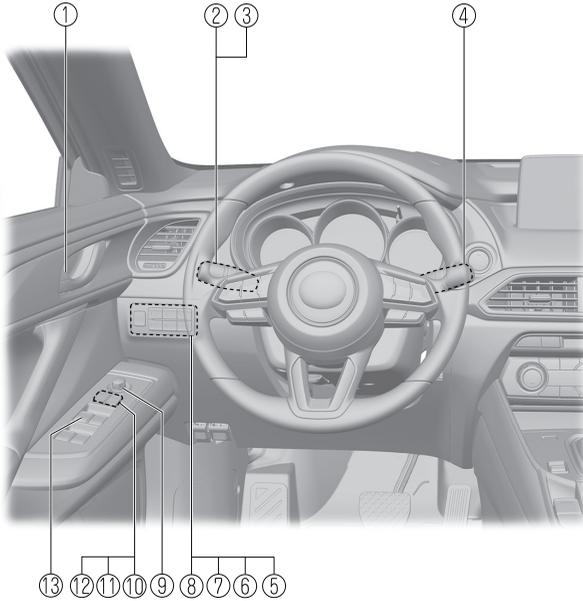
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# Interior Overview (Left-Hand Drive Model)

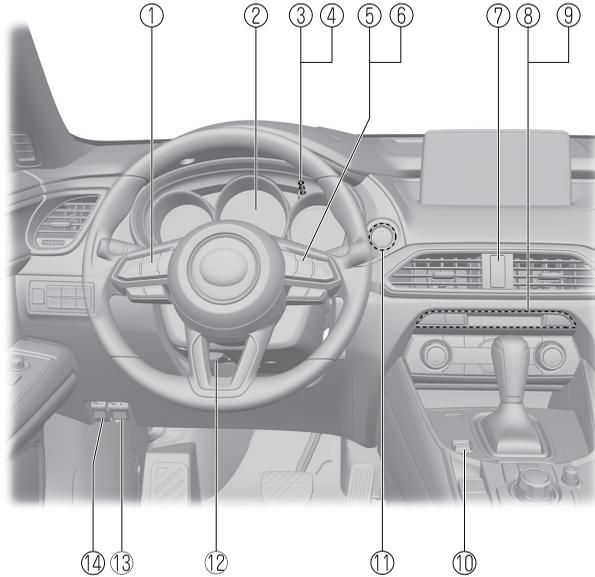
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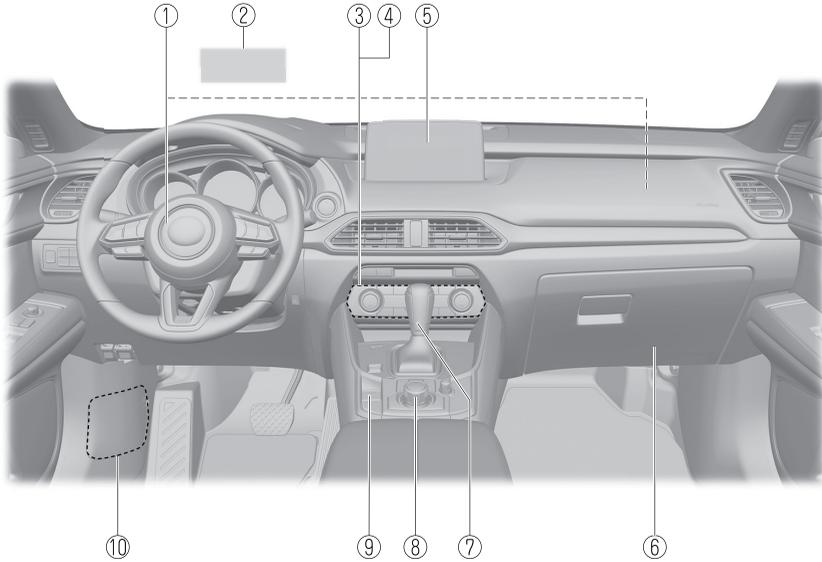
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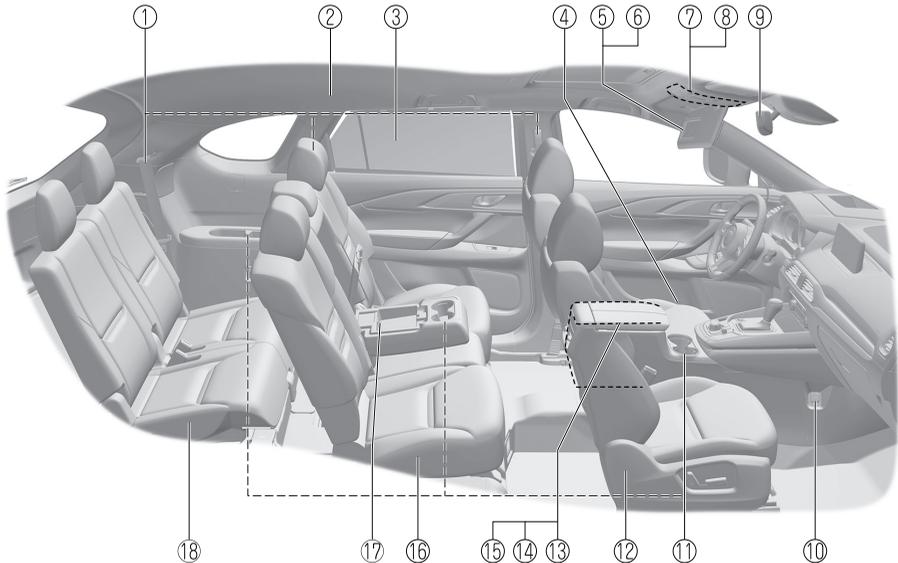
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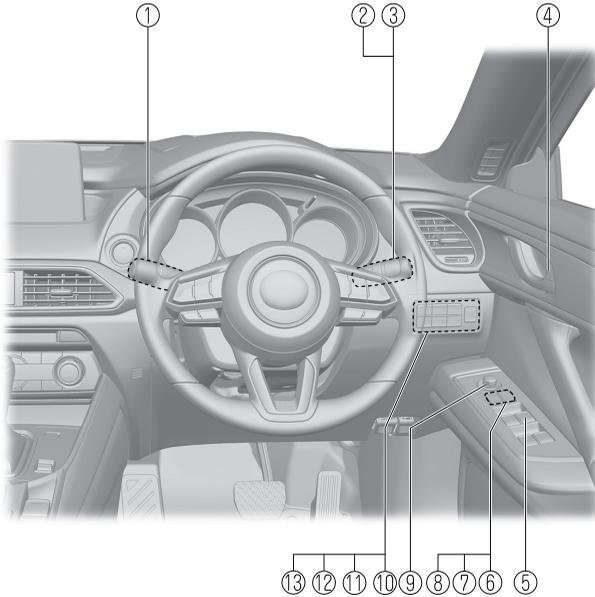
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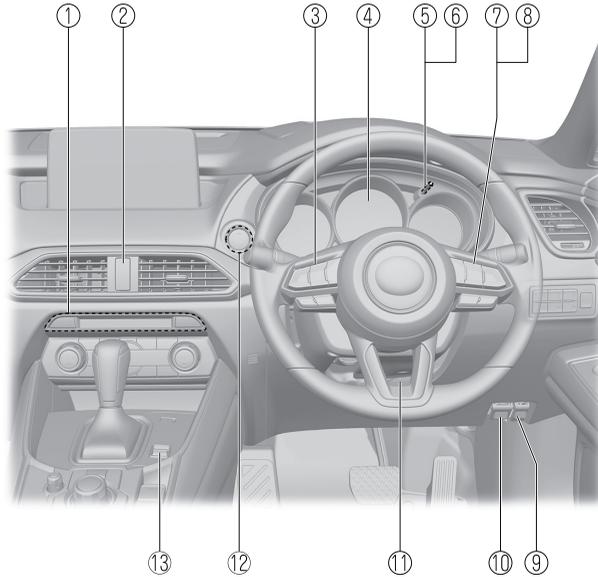
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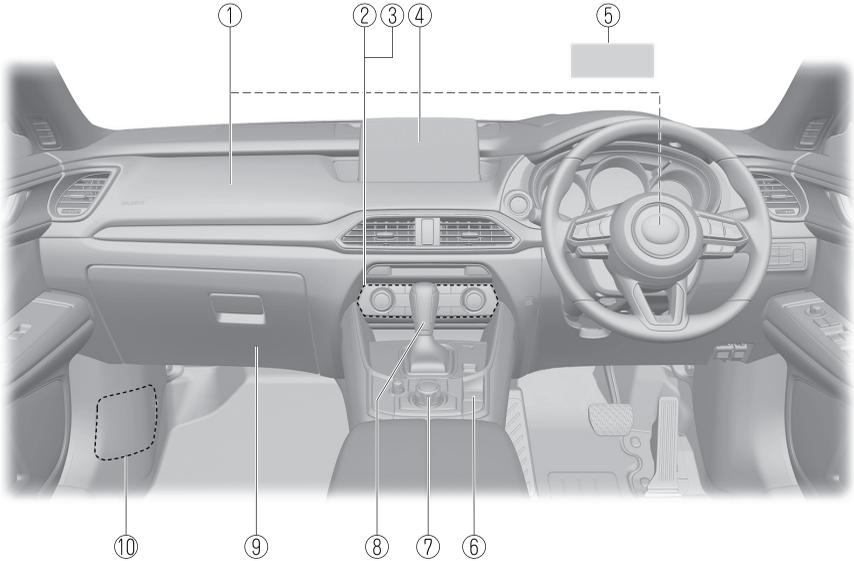
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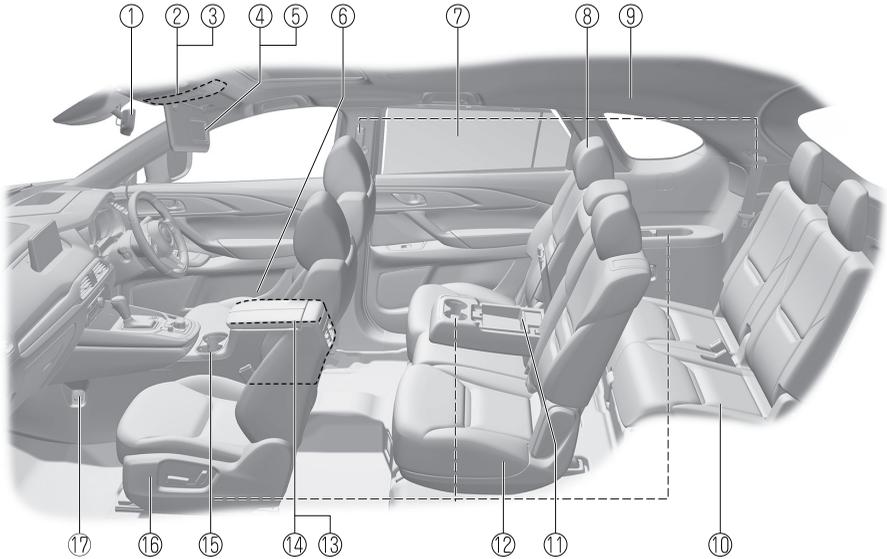
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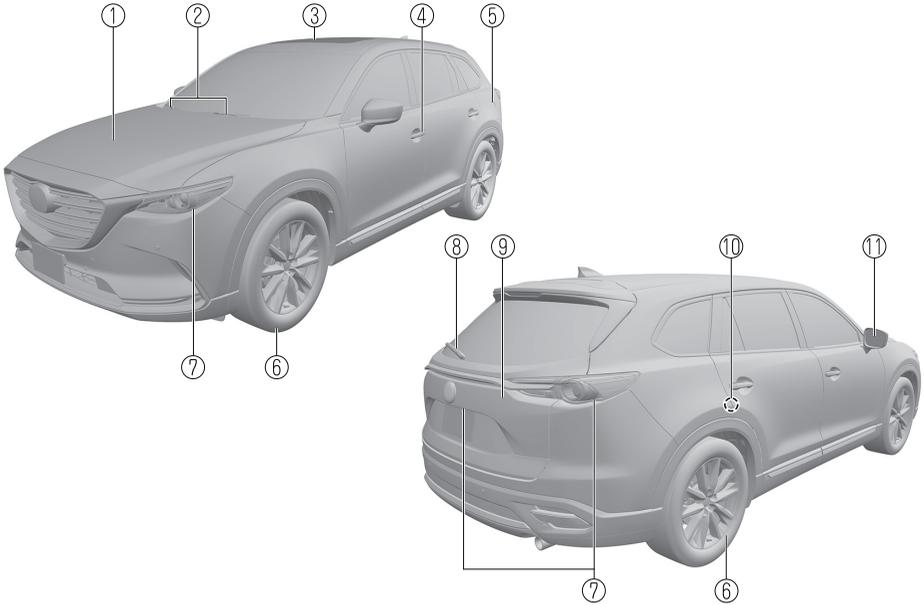
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## Essential Safety Equipment

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## Seat Precautions

### **WARNING**

#### **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.*

#### **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.*

#### **Adjust the driver's seat only when the vehicle is stopped:**

*Adjusting the driver's seat while the vehicle is moving is dangerous. The driver could lose control of the vehicle and have an accident.*

#### **Do not modify or replace the front seats:**

*Modifying or replacing the front seats such as replacing the upholstery or loosening any bolts is dangerous. The front 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 Repairer if there is any need to remove or reinstall the front seats.*

#### **Do not drive with damaged front seats:**

*Driving with damaged front 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 front 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 Repairer inspect the front seats, front seat belt pretensioners and air bags after a collision.*

**Do not drive with either front 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 recline a second-row seatback when the third-row seat is occupied:**

*Reclining the second-row seatback when the third-row seat is occupied is dangerous. Because the clearance in the third-row seat is limited, occupants in the third-row seat could be hurt seriously on a reclined second-row seatback.*

**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 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.*

**Never allow a passenger to sit or stand on the folded seatback while the vehicle is moving:**

*Driving with a passenger on the folded seatback is dangerous. Allowing a child to sit up on the folded seatback while the vehicle is moving is particularly dangerous. In a sudden stop or even a minor collision, a child not in a proper seat or child-restraint system and seat belt could be thrown forward, back or even out of the vehicle resulting in serious injuries or death. The child in the baggage area could be thrown into other occupants and cause serious injury.*

# Seats

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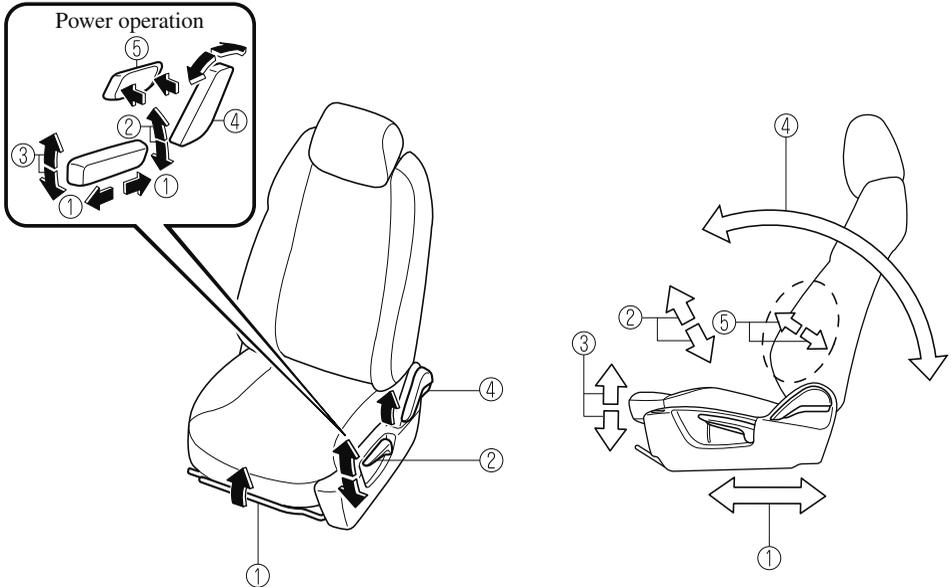
- *When operating a seat, be careful not to put your hands or fingers near the moving parts of the seat or on the side trim to prevent injury.*
- *When moving the seats, make sure there is no cargo in the surrounding area. If the cargo gets caught it could damage the cargo.*
- **(Manual Seat)**  
*When 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.*

## **NOTE**

- *When returning a rear seat to its original position, place the seat belt in its normal position. Verify that the seat belt pulls out and retracts.*
- **(Power Seat)**  
*The seat-bottom power adjustment is operated by motors. Avoid extended operation because excessive use can damage the motors.*
  - *To prevent the battery from running down, avoid using the power adjustment when the engine is stopped. The adjuster uses a large amount of electrical power.*
  - *Do not use the switch to make more than one adjustment at a time.*

## Front Seat

### ▼ Seat Operation



#### ① Seat Slide

(Manual Seat)

To move a seat forward or backward, raise the lever and slide the seat to the desired position and release the lever.

Make sure the lever returns to its original position and the seat is locked in place by attempting to push it forward and backward.

(Power Seat)

To slide the seat, move the slide lifter switch on the outside of the seat to the front or back and hold it. Release the switch at the desired position.

#### ② Height Adjustment\*

(Manual Seat)

To adjust the seat height, move the lever up or down.

(Power Seat)

To adjust the seat height, move the switch up or down.

#### ③ Height Adjustment for Front Edge of Seat Bottom (Driver's Power Seat)\*

To adjust the front height of the seat bottom, raise or lower the front of the slide lifter switch.

# Seats

## ④ Seat Recline

(Manual Seat)

To change the seatback angle, lean forward slightly while raising the lever. Then lean back to the desired position and release the lever.

Make sure the lever returns to its original position and the seatback is locked in place by attempting to push it forward and backward.

(Power Seat)

To change the seatback angle, press the front or rear side of the reclining switch. Release the switch at the desired position.

## ⑤ Lumbar Support Adjustment (Driver's Power Seat)

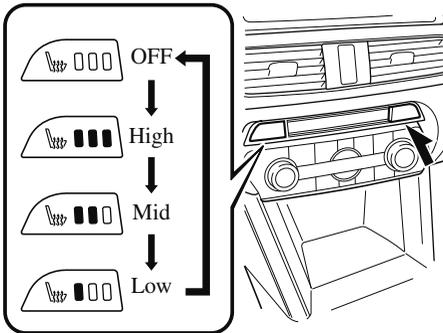
To increase the seat firmness, press and hold the front part of the switch to the desired position, then release it.

Press the rear part of the switch to decrease firmness.

## ▼ Seat Warmer\*

The front seats are electrically heated. The ignition must be switched ON.

Press the seat warmer switch while the ignition is switched ON to operate the seat warmer. The indicator lights turn on to indicate that the seat warmer is operating. The mode changes as follows each time the seat warmer switch is pressed.



## ⚠ WARNING

### **Be careful when using the seat warmer:**

*The heat from the seat warmer may be too hot for some people, as indicated as follows, 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.

**NOTE**

- If the ignition 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 ignition.
- Use the seat warmer when the engine is running. Leaving the seat warmer on for long periods with the engine not running could cause the battery power to be depleted.
- The temperature of the seat warmer cannot be adjusted beyond High, Mid and Low because the seat warmer is controlled by a thermostat.

**▼ Driving Position Memory\***

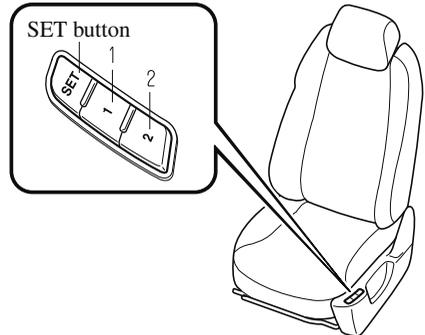
The desired driving position can be called up after programming the position. The following driving positions can be programmed.

- Driver's seat position (seat slide, height adjustment, front edge of seat bottom, seat recline)  
Refer to Seat Operation on page 2-5.

- Active driving display (display position, brightness level, display information)  
Refer to Active Driving Display on page 4-29.

**CAUTION**

Do not place fingers or hands around the bottom of the seat while the seat memory function is operating. The seat moves automatically while the seat memory function is operating and fingers or hands could get pinched and injured.



A driving position can be programmed or operated using the buttons on the side of the seat or the key.

**NOTE**

- Lumbar support adjustment cannot be programmed.
- A driving position can be programmed to the buttons on the side of the seat and the key in use for driving the vehicle.
- If the vehicle has been serviced and the battery cables disconnected, the programmed seat positions will have been erased. Re-program the seat positions.

# Seats

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## Programming

1. Make sure the parking brake is on.
2. Make sure the selector lever is in the P position.
3. Start the engine.
4. Adjust the seat and the active driving display to the desired driving position.
5. Press the SET button on the seat until a beep sound is heard one time.
6. Perform one of the following settings within 5 seconds of completing step 5 above:

- **Programming using a button on the side of the seat**

Press the button you want to program, either button 1 or 2, until a beep sound is heard one time.

- **Programming using the key**

Press the key  button until a beep sound is heard one time.

### **NOTE**

*If a beep sound is heard three times, the operation is canceled.*

## To move the driving position to a programmed position

### **(Using a button on the side of the seat)**

1. Make sure the parking brake is on.
2. Make sure the selector lever is in the P position.
3. Start the engine.
4. Press the programming button for the driving position you want to call up (button 1 or 2).
5. A beep sound is heard when the driving position adjustment is completed.

### **NOTE**

- *If the driving position movement is not changed, only the beep sounds.*
- *A seat position can be called up even with the engine not running.*
- *The driving position adjustment is canceled in the following cases:*
  - *Any of the seat adjustment switches is operated.*
  - *The SET button is pressed.*
  - *Programming button 1 or 2 is pressed.*
  - *The key  button or  button is operated.*
  - *The vehicle starts moving.*
  - *The active driving display is adjusted.*

### **(Using a programmed key)**

1. Unlock the doors by pressing a request switch or the key  button.
2. After unlocking the doors, the seat position adjustment begins within 40 seconds of opening the driver's door, and a beep sounds when the operation is finished.
3. Make sure the parking brake is on.
4. Make sure the selector lever is in the P position.
5. Start the engine.
6. The active driving display adjustment begins.

**NOTE**

- If there is no driving position movement, a beep is not heard.
- The driving position adjustment is canceled in the following cases:
  - Any of the seat adjustment switches is operated.
  - The SET button is pressed.
  - Programming button 1 or 2 is pressed.
  - The key  button or  button is operated.
  - The vehicle starts moving.
  - The active driving display is adjusted.

**Erasing programmed driving positions****(Erasing the driving positions programmed to the key)**

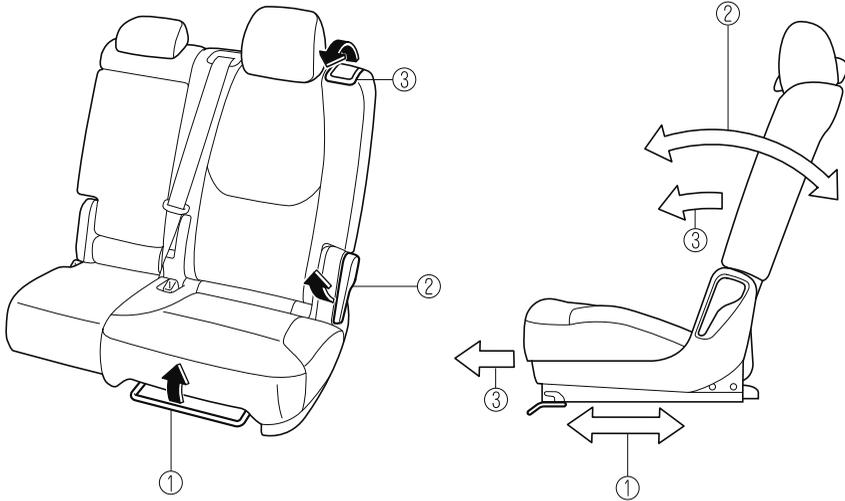
1. Switch the ignition OFF.
2. Press the SET button on the side of the seat until a beep sound is heard one time.
3. After the beep sounds, press the key  button within 5 seconds until a beep sound is heard one time.

**NOTE**

*If a beep sound is heard three times, the operation is canceled.*

## Second-Row Seat

### ▼ Seat Operation



#### ① Seat Slide (Forward-back adjustment)

To move a seat forward or backward, raise the lever and slide the seat to the desired position and release the lever.

Make sure the lever returns to its original position and the seat is locked in place by attempting to push it forward and backward.

#### ② Seat Recline

To change the seatback angle, lean forward slightly while raising the lever. Then lean back to the desired position and release the lever.

The lever can also be used when flattening down the seats.

Refer to How to Split Folding the Second-Row Seats on page 2-14.

Make sure the lever returns to its original position and the seatback is locked in place by attempting to push it forward and backward.

#### ③ Third-Row Seat Access

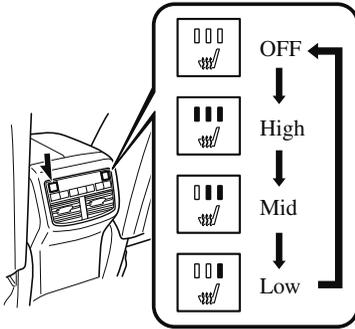
To access to the third-row seats, pull up the lever on the side of the head restraint to fold the seatback and slide the seat forward.

Refer to How to Third-Row Seat Access on page 2-12.

Make sure the lever returns to its original position and the seatback is locked in place by attempting to push it forward and backward.

### ▼ Seat Warmer\*

The rear seats are electrically heated. The ignition must be switched ON. Press the seat warmer switch while the ignition is switched ON to operate the seat warmer. The indicator lights turn on to indicate that the seat warmer is operating. The mode changes as follows each time the seat warmer switch is pressed.



### ⚠ WARNING

#### **Be careful when using the seat warmer:**

The heat from the seat warmer may be too hot for some people, as indicated as follows, 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

- Before folding a rear seatback, make sure that the rear seat warmer switch is off. If a rear seatback is folded while the rear seat warmer is in operation, it may heat the seat excessively and damage the seat surface.
- Do not use organic solvents to clean the seat. It may damage the seat surface and the heater.

### NOTE

- Use the seat warmer when the engine is running. Leaving the seat warmer on for long periods with the engine not running could cause the battery power to be depleted.

## Seats

- *When the engine is stopped while the seat warmers are operating and then the ignition is switched ON, the seat warmers will not turn back on automatically. In addition, the seat warmer operation stops automatically after the seat warmers have operated for about 90 minutes.*

*To turn the seat warmer back on, press the switch.*

- *The temperature of the seat warmer cannot be adjusted beyond High, Mid and Low because the seat warmer is controlled by a thermostat.*

### ▼ Armrest

The armrest in the center of the second-row seatback can be used (no occupant in the center seat) or placed upright.



### ! WARNING

**Never put your hands and fingers around the moving parts of the seat and armrest:**

*Putting your hands and fingers around the moving parts of the seat and armrest is dangerous as they could get injured.*

### ! CAUTION

*When storing the armrest, make sure that any cables connected to the USB power outlets in the armrest box are stored away in the armrest box.*

*If the cables are not stored away in the armrest box, the cables and connection devices may become damaged when storing the armrest.*

### ▼ Third-Row Seat Access

Occupants can get into and out of the third-row seats easily by sliding the second-row seats forward.

### ! WARNING

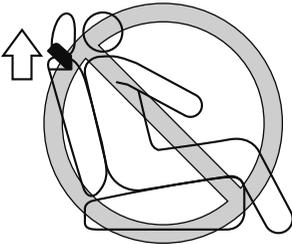
***Make sure there is nobody in the second-row seat area before operating the levers:***

*Not checking the second-row seat area for persons before folding the seatbacks with the levers is dangerous. The second-row seat area is difficult to see from the rear of the vehicle. Operating the levers without checking could cause injury to a person when a seatback suddenly flips forward.*

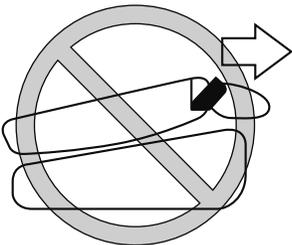
***Do not operate the lever on the side of the head restraint under the following conditions:***

*Operating the lever on the side of the head restraint under the following conditions is dangerous as the seat may move unexpectedly and cause an injury such as a foot getting pinched between the seat and floor.*

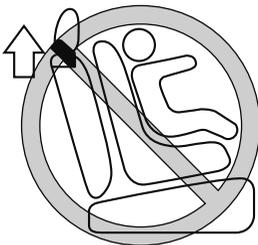
- *Occupant is seated in second-row seat*



- *Second-row seatback is folded forward*

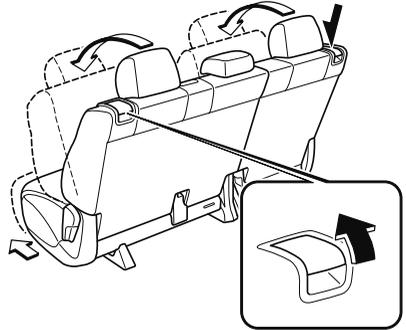


- *Child is seated on child restraint in second-row seat*



### **Entering/exiting the third-row seat area**

Pull up the lever on the side of the head restraint to fold the seatback and slide the seat forward.



### **⚠ CAUTION**

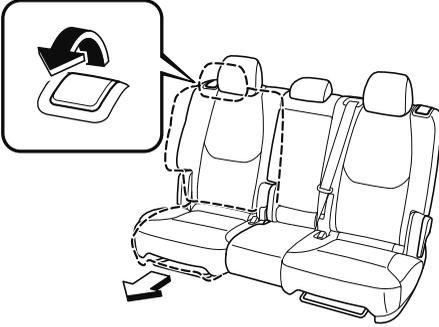
- *Do not operate the lever on the side of a second-row seat while the seatback is folded down and the seat is slid forward. If the lever is forcefully operated, it could damage the lever.*
- *After entering/exiting the third-row seat area, return the second-row seatback to its upright position and lock it after sliding it rearward. Make sure it is locked by attempting to lightly move it back and forth. Otherwise, it could move unexpectedly and cause injury.*

### **Entering/exiting the third-row seat area with child-restraint system installed (Right-side seat only)\*<sup>1</sup>**

Access to the third-row seats is possible even when a child-restraint system is installed to the second-row seat. Pull up the lever on the side of the head restraint to lower the front side of the seat and slide the seat forward.

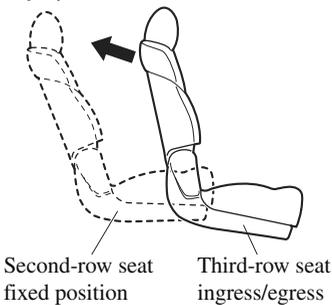
# Seats

\*1 For left-hand drive models. Only for the left-side seat for right-hand drive models.



## CAUTION

After entering/exiting the third-row seat area, lock the seat after sliding it rearward. Make sure it is locked by attempting to lightly move it back and forth. Otherwise, it could move unexpectedly and cause injury.



## NOTE

The second-row seat cannot be moved forward while the seat belt is securing the child-restraint system.

## ▼ Split folding the Second-Row Seats

To create a flat luggage compartment space, fold the seatbacks forward.

### Folding the seatbacks

## WARNING

**Make sure the adjustable components of a second-row seat are locked after folding down the seatback:**

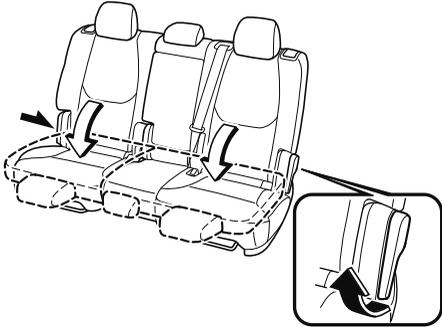
A second-row seat that is not securely locked is dangerous. In a sudden stop or collision, the second-row seat could move, causing injury.

After folding down the seatback of a second-row seat, make sure the adjustable components of the seat are locked in place by attempting to slide the seat forward and backward.

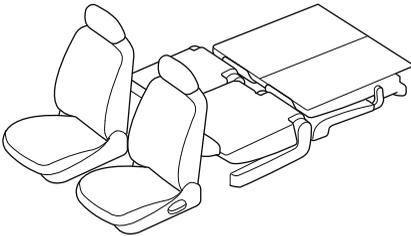
## CAUTION

- When folding the seatback forward, always support the seatback with your hand. If it is not supported by a hand, fingers or the hand raising the lever could be injured.
- Check the position of a front seat before folding a second-row seatback. Depending on the position of a front seat, it may not be possible to fold a second-row seatback all the way down because it may hit the seatback of the front seat which could scratch or damage the front seat or its pocket. Remove the head restraint on the second-row outboard seat if necessary.

1. Lower the head restraint all the way down.  
Refer to Head Restraints on page 2-17.
2. Raise the lever on the side of the second-row seat to fold down the seatback.

**NOTE**

To create a flat luggage compartment space from the rear of the vehicle to the back of the front seats, fold the second-row and third-row seats (page 2-16).

**To return the seatback to its upright position:****⚠ WARNING**

**When returning a seatback to its upright position, make sure the 3-point seat belt is not caught in the seatback and the 3-point seat belt is not twisted:**

*If the seat belt is used while it is twisted and caught in the seatback, the seat belt cannot function at its full capacity, which could cause serious injury or death.*

1. Make sure that the seat belt is not stuck in the second-row seat and it is not twisted, then raise the seatback while preventing the seat belt from being caught in the seatback.
2. Press the seatback rearward and lock it in place. After returning the seatback to its upright position, make sure it is securely locked.

# Seats

## Third-Row Seat

### ▼ Split folding the Third-Row Seats

To create a flat luggage compartment space, fold the seatbacks forward.

### CAUTION

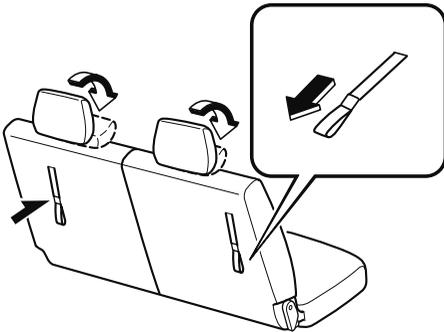
*Do not apply load to the head restraint with it in the upright position and the seatback folded down. Otherwise, it could cause damage to the head restraint.*

### NOTE

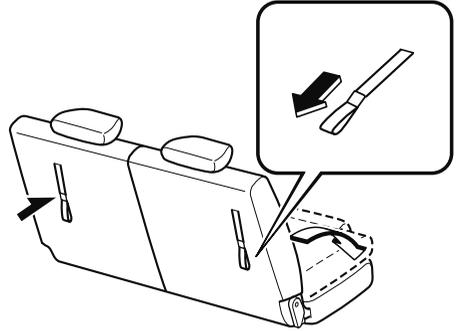
*When folding the seatbacks forward, fold them in two steps.*

### Folding the seatbacks (With strap)

1. Slide the second-row seat all the way forward.
2. Pull the strap to fold down the head restraint.

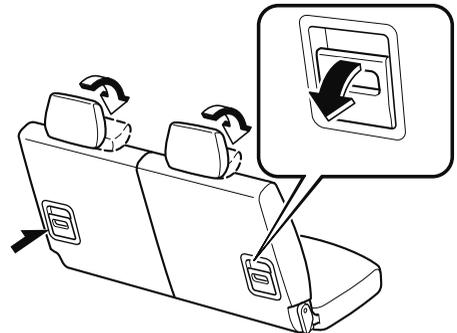


3. Pull the strap further to fold the third-row seat forward.

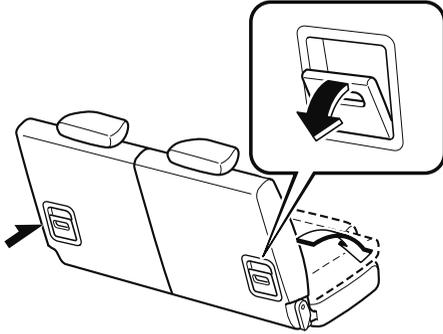


### Folding the seatbacks (With lever)

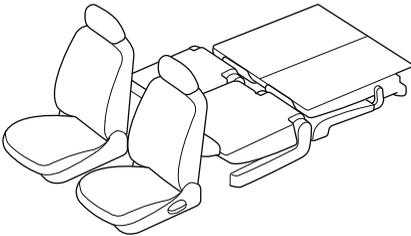
1. Slide the second-row seat all the way forward.
2. Lower the lever to fold down the head restraint.



3. Lower the lever further to fold the third-row seat forward.

**NOTE**

To create a flat luggage compartment space from the rear of the vehicle to the back of the front seats, fold the second-row and third-row seats (page 2-14).

**To return third-row seat to its original position**

1. Return the seatback to its original position by pulling the strap/lever on the back of the seatback. Make sure the seatback is secured by attempting to lightly move it forward and back.
2. Lift the head restraint upward to its upright position.

**Head Restraints**

Your vehicle is equipped with head restraints on all outboard seats and the second-row center seat. The head restraints are intended to help protect you and the passengers from neck injury.

**⚠ WARNING**

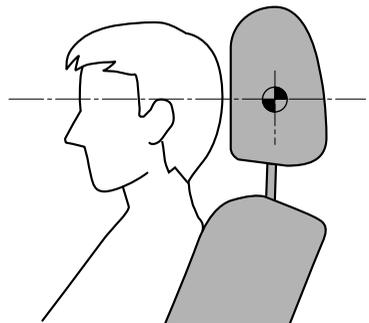
**Always drive with the head restraints installed when seats are being used and make sure they are properly adjusted. In addition, always raise the head restraints on all rear seat when they are being used:** Driving with the head restraints adjusted too low or removed is dangerous. With no support behind your head, your neck could be seriously injured in a collision.

**NOTE****(Third-row seat)**

The head restraints are non-adjustable.

**▼ Height Adjustment**

Adjust the head restraint so that the center is even with the top of the passenger's ears.

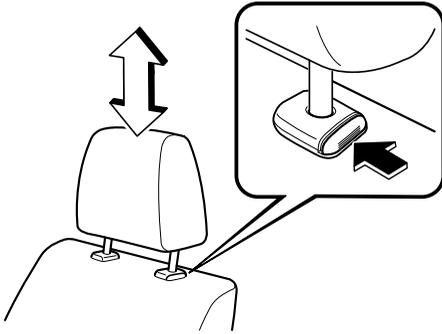


# Seats

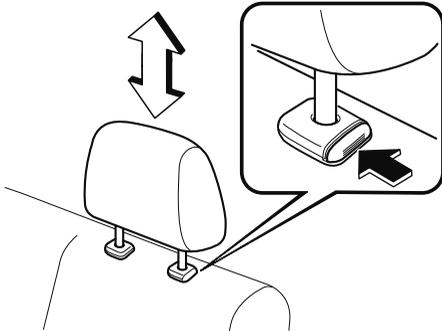
To raise a head restraint, pull it up to the desired position.

To lower the head restraint, press the stop-catch release, then push the head restraint down.

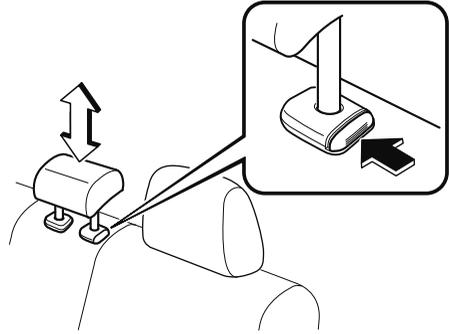
## Front outboard seat



## Second-row outboard seat



## Second-row center seat



### ▼ Removal/Installation (Second-row seat)

To remove the head restraint, pull it up while pressing the stop-catch.

To install the head restraint, insert the legs into the holes while pressing the stop-catch.

### **⚠ WARNING**

***Always drive with the head restraints installed when seats are being used and make sure they are properly installed:***

*Driving with the head restraints not installed is dangerous. With no support behind your head, your neck could be seriously injured in a collision.*

***After installing a head restraint, try lifting it to make sure that it does not pull out:***

*Driving with an unsecured head restraint is dangerous as the effectiveness of the head restraint will be compromised which could cause it to unexpectedly detach from the seat.*

## ⚠ CAUTION

- When installing a head restraint, make sure that it is installed correctly with the front of the head restraint facing forward. If the head restraint is installed incorrectly, it could detach from the seat during a collision and result in injury.
- The head restraints on each of the front and rear seats are specialized to each seat. Do not switch around the head restraint positions. If a head restraint is not installed to its correct seat position, the effectiveness of the head restraint during a collision will be compromised which could cause injury.

### ▼ Foldable Head Restraints (Third-row seat)

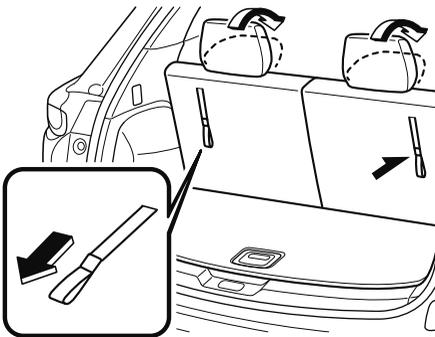
The third-row seats are equipped with foldable head restraints.

#### NOTE

The foldable head restraints cannot be adjusted or removed.

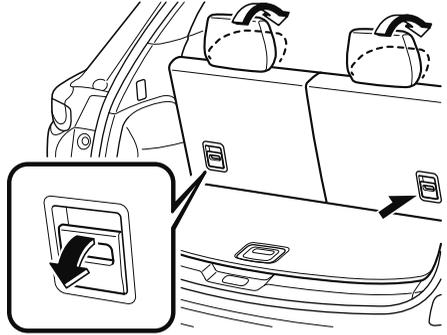
#### (With strap)

To fold the head restraint, pull the strap and fold the head restraint downward.



#### (With lever)

To fold the head restraint, lower the lever down.



To return the head restraint to its upright position, lift it upward.

## ⚠ WARNING

**Always drive with the head restraints in their upright positions when the third-row seats are occupied, and make sure they are securely locked in place:**

Driving with the head restraints folded down is dangerous. With no support behind your head, your neck could be seriously injured in a collision.

# Seat Belt Systems

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## Seat Belt Precautions

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.

All the seats have lap/shoulder belts. These belts also 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.



***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.*

***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 expert repairer, we recommend an Authorized Mazda Repairer 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 expert repairer, we recommend an Authorized Mazda Repairer 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. 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.*

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

***Instructions for Use of Seat Belt Assemblies:***

*Seatbelts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.*

*Seatbelts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.*

*Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.*

*It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.*

*Belts should not be worn with straps twisted.*

*Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.*

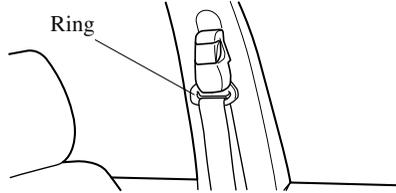
*No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.*

# Seat Belt Systems

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## CAUTION

*Belt retraction may become difficult if the belts and rings are soiled, so try to keep them clean. For more details about cleaning the seat belts, refer to "Seat Belt Maintenance" (page 6-61).*



### ▼ Pregnant Women and Persons with Serious Medical Conditions

Pregnant women should always wear seat belts. Ask your doctor for specific recommendations.

The lap belt should be worn **SNUGLY AND AS LOW AS POSSIBLE OVER THE HIPS**.

The shoulder belt should be worn across your shoulder properly, but never across the stomach area.

Persons with serious medical conditions also should wear seat belts. Check with your doctor for any special instructions regarding specific medical conditions.



### ▼ Emergency Locking Mode

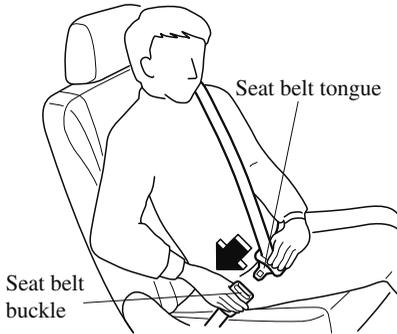
When the seat belt is fastened, it will always be in the emergency locking mode.

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

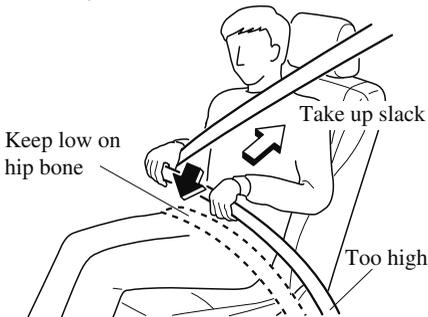
If the belt is locked and cannot be pulled out, retract the belt once, and then try pulling it out slowly. If this fails, pull the belt strongly one time and loosen, then pull it out again slowly.

## Seat Belt

### ▼ Fastening the Seat Belt

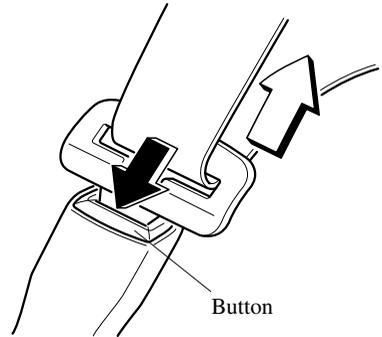


Position the lap belt as low as possible, not on the abdominal area, then adjust the shoulder belt so that it fits snugly against your body.



### ▼ Unfastening the Seat Belt

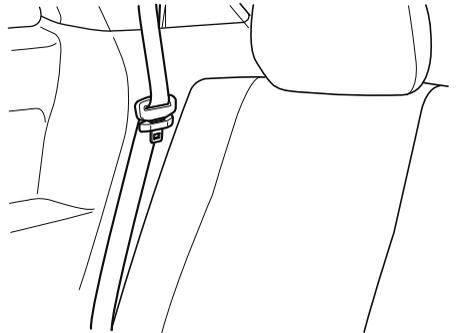
Depress the button on the seat belt buckle. If the belt does not fully retract, pull it out and check for kinks or twists. Then make sure it remains untwisted as it retracts.



#### **NOTE**

*If a belt does not fully retract, inspect it for kinks and twists. If it is still not retracting properly, have it inspected at an expert repairer; we recommend an Authorized Mazda Repairer.*

To secure the outboard-third row seat belts when not in use, insert the belts into their seat belt retainers.

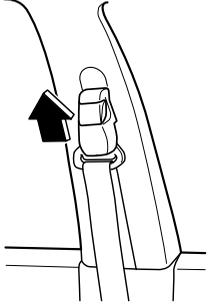


# Seat Belt Systems

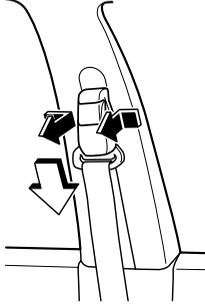
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## ▼ Front Shoulder Belt Adjuster

To raise



To lower



Make sure the adjuster is locked.

## Seat Belt Warning Systems

If it detects that the occupant seat belt is unfastened, the warning light or beep alerts the occupant.

Refer to Warning/Indicator Lights on page 4-32.

Refer to Seat Belt Warning Beep on page 7-55.

## Front Seat Belt Pretensioner and Load Limiting Systems

For optimum protection, the driver and front passenger seat belts are equipped with pretensioner and load limiting systems. For both these systems to work properly you must wear the seat belt properly.

### Pretensioners:

When a collision is detected, the pretensioners deploy simultaneously with the air bags.

#### (European models)

The pretensioners deploy simultaneously with the air bags when a roll-over is also detected.

For deployment details, refer to the SRS Air Bag Deployment Criteria (page 2-55).

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 Warning/Indicator Lights on page 4-32.

Refer to Air Bag/Front Seat Belt Pretensioner System Warning Beep on page 7-55.

### Load limiter:

The load limiting system releases belt webbing in a controlled manner to reduce belt force on the occupant's chest. While the most severe load on a seat belt occurs in frontal collisions, the load limiter has an automatic mechanical function and can activate in any accident mode with sufficient occupant movement.

Even if the pretensioners have not fired, the load limiting function must be checked by an expert repairer, we recommend an Authorized Mazda Repairer.



### ***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 "Fastening the Seat Belt" (page 2-23).*

### ***Have your seat belts changed immediately if the pretensioner or load limiter has been expended:***

*Always have an expert repairer, we recommend an Authorized Mazda Repairer 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. If the seat belt pretensioners and load limiters are not replaced, the risk of injury in a collision will increase.*

## Seat Belt Systems

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***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 repairers 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 expert repairer, we recommend an Authorized Mazda Repairer safely dispose of the pretensioner system or scrap a pretensioner system equipped vehicle.*

***NOTE***

- The pretensioner system may not operate depending on the type of the collision. For details, refer to the SRS Air Bag Deployment Criteria (page 2-55).*
- Some smoke (non-toxic gas) will be released when the air bags and pretensioners deploy. This does not indicate a fire. This gas normally has no effect on occupants, however, those with sensitive skin may experience light skin irritation. If residue from the deployment of the air bags or the pretensioner system gets on the skin or in the eyes, wash it off as soon as possible.*

## Child-Restraint Precautions

Mazda strongly urges the use of child-restraint systems for children small enough to use them.

Mazda recommends use of a Mazda genuine child-restraint system or one that complies with the UNECE\*<sup>1</sup> 44 regulation. If you would like to purchase a Mazda genuine child-restraint system, please contact an Authorized Mazda Dealer.

Check your local and state or provincial laws for specific requirements regarding the safety of children riding in your vehicle.

\*1 UNECE stands for United Nations Economic Commission for Europe.

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 sit in the rear and use seat belts.

The child-restraint system should be installed on the rear seat.

Statistics confirm that the rear seat is the best place for all children up to 12 years of age—the more so with a supplemental restraint system (air bags).

A rear-facing child-restraint system should **NEVER** be used in the front passenger seat with the air bag system activated. The front passenger's seat is also the least preferred seat for other child-restraint systems.



**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, or latch it down to BOTH ISOFIX anchors, and attach the corresponding tether anchor.*

# Child Restraint

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**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.

**Extreme Hazard! Never use a rear-facing child-restraint system on the front passenger seat with an air bag that could deploy:**

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

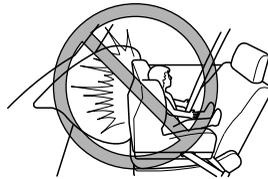
(Except Taiwan)



(Taiwan)



Even in a moderate collision, the child-restraint system can be hit by a deploying air bag and moved violently backward resulting in serious injury or death to the child.



(Taiwan, except front passenger seat, if equipped with the following label)

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.



**Do not install a front-facing child-restraint system on the front passenger seat unless it is unavoidable:**

In a collision, the force of a deploying air bag could cause serious injury or death to the child. If installing a front-facing child-restraint system on the front passenger seat is unavoidable, move the front passenger seat as far back as possible and adjust the seat bottom (height adjustable seat bottom) to the highest position at which the seat belt fastening the child-restraint system is securely tightened.



**Do not allow a child or anyone to lean over or against the side window of a vehicle with side and curtain air bags:**

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

## Child Restraint

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**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.*

**Use the tether and tether anchor only for a child-restraint system:**

*Child-restraint system anchorages are designed to withstand only those loads imposed by correctly installed child-restraint systems. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.*

**Always remove the head restraint and install child-restraint system (except when installing a booster seat) (Second-row seat):**

*Installing a child-restraint system without removing the head restraint is dangerous. The child-restraint system cannot be installed correctly which may result in death or injury to the child in a collision.*



*A seat belt or child-restraint system can become very hot in a closed vehicle during warm weather. To avoid burning yourself or a child, check them before you or your child touches them.*

**NOTE**

*Your Mazda is equipped with ISOFIX anchors for attachment of ISOFIX child-restraint systems on the second-row seats. When using these anchors to secure a child-restraint system, refer to “Using ISOFIX Anchor” (page 2-41).*

## Child-Restraint System Installation

### ▼ 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.*

#### **(Europe and countries conforming to the UNECE 44 regulation)**

Child-restraint systems are classified into the following 5 groups according to the UNECE 44 regulation.

Group	Age	Weight
0	Up to about 9 months old	Up to 10 kg (up to 22 lb)
0+	Up to about 2 years old	Up to 13 kg (up to 29 lb)
1	About 8 months to 4 years old	9 kg — 18 kg (20 lb — 40 lb)
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)

#### **(Other countries)**

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

### ▼ Child-Restraint System Types

#### **(Europe and countries conforming to the UNECE 44 regulation)**

In this owner's manual, explanation of child-restraint systems secured with seat belts is provided for the following three types of popular child-restraint systems: baby seat, child seat, junior seat.

#### **NOTE**

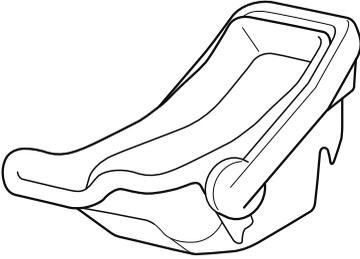
- *Installation position is determined by the type of child-restraint system. Always read the manufacturer's instructions and this owner's manual carefully.*
- *Due to variations in the design of child-restraint systems, vehicle seats and seat belts, all child-restraint systems may not fit all seating 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.*

# Child Restraint

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## Baby seat

Equal to Group 0 and 0+ of the UNECE 44 regulation.



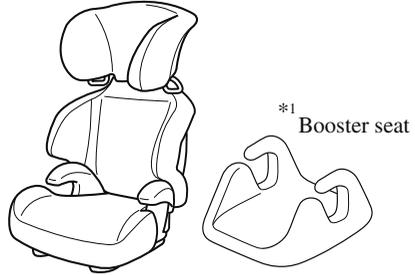
## Child seat

Equal to Group 1 of the UNECE 44 regulation.



## Junior seat

Equal to Group 2 and 3 of the UNECE 44 regulation.



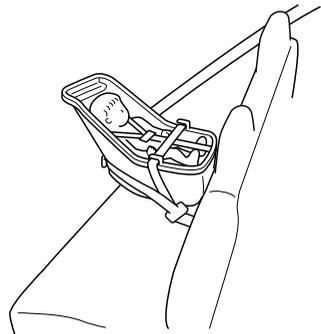
\*1 When using a booster seat, always install the vehicle head restraint to the seat where the booster seat is installed.

## (Other countries)

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

## ▼ Baby Seat Installation Position

A baby seat is used in the rear-facing position only.



Refer to the table, “Child-Restraint System Suitability for Various Seat Positions” for baby seat installation position (page 2-36).

**⚠ WARNING**

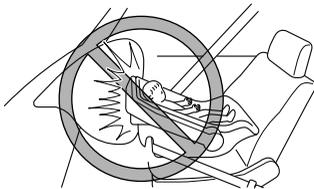
**Always install a baby seat in the correct seat position:**

*Installing a baby seat without first consulting the table “Child-Restraint System Suitability for Various Seat Positions” is dangerous. A baby seat installed on the wrong seat position cannot be properly secured. In a collision, the child could hit something or someone in the vehicle and be seriously injured or even killed.*

**Never use a rear-facing child-restraint system on the front passenger seat protected by an air bag:**

*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.*

*The child-restraint system can be hit by the deploying air bag and knocked out of position. A child in the child-restraint system could be seriously injured or killed.*



**▼ Child Seat Installation Position**

A child seat is used in front-facing and rear-facing positions depending on the age and size of the child. When installing, follow the manufacturer's instructions in accordance with the appropriate age and size of the child as well as the directions for installing the child-restraint system. Refer to the table, “Child-Restraint System Suitability for Various Seat Positions” for child seat installation position (page 2-36).

**Rear-facing type**

**⚠ WARNING**

**Always install a rear-facing child seat in the correct seat position:**

*Installing a rear-facing child seat without first consulting the table “Child-Restraint System Suitability for Various Seat Positions” is dangerous. A rear-facing child seat installed on the wrong seat position cannot be properly secured. In a collision, the child could hit something or someone in the vehicle and be seriously injured or even killed.*

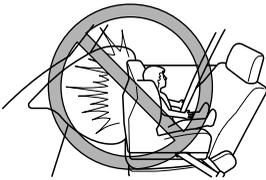
# Child Restraint

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**Never use a rear-facing child-restraint system on the front passenger seat protected by an air bag:**

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.

The child-restraint system can be hit by the deploying air bag and knocked out of position. A child in the child-restraint system could be seriously injured or killed.



**Front-facing type**



**Never install a front-facing child seat in the wrong seat position:**

Installing a front-facing child seat without first consulting the table "Child-Restraint System Suitability for Various Seat Positions" is dangerous. A front-facing child seat installed in the wrong seat position cannot be properly secured. In a collision, the child could hit something or someone in the vehicle and be seriously injured or even killed.

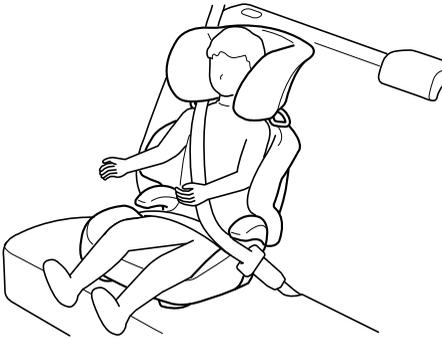
**Do not install a front-facing child-restraint system on the front passenger seat unless it is unavoidable:**

In a collision, the force of a deploying air bag could cause serious injury or death to the child. If installing a front-facing child-restraint system on the front passenger seat is unavoidable, move the front passenger seat as far back as possible and adjust the seat bottom (height adjustable seat bottom) to the highest position at which the seat belt fastening the child-restraint system is securely tightened.



### ▼ Junior Seat Installation Position

A junior seat is used in the front-facing position only.



Refer to the table, “Child-Restraint System Suitability for Various Seat Positions” for junior seat installation position (page 2-36).

### **! WARNING**

#### **Always install a junior seat in the correct seat position:**

*Installing a junior seat without first consulting the table “Child-Restraint System Suitability for Various Seat Positions” is dangerous. A junior seat installed on the wrong seat position cannot be properly secured. In a collision, the child could hit something or someone in the vehicle and be seriously injured or even killed.*

#### **Do not install a front-facing child-restraint system on the front passenger seat unless it is unavoidable:**

*In a collision, the force of a deploying air bag could cause serious injury or death to the child. If installing a front-facing child-restraint system on the front passenger seat is unavoidable, move the front passenger seat as far back as possible and adjust the seat bottom (height adjustable seat bottom) to the highest position at which the seat belt fastening the child-restraint system is securely tightened.*



# Child Restraint

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

### (Europe and countries conforming to the UNECE 16 regulation)

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:

- If the child-restraint system does not fit into the seatback because of the head restraint, adjust the head restraint or remove the head restraint so that the child-restraint system fits into the seatback. However, when installing a booster seat, always install the vehicle head restraint to the seat where the booster seat is installed.  
Refer to Head Restraints on page 2-17.
- When installing a child-restraint system to the rear seat, adjust the front seat position so that the front seat does not contact the child-restraint system.  
Refer to Seat Operation on page 2-5.
- When installing a child-restraint system came equipped with a tether, remove the head restraint.  
Refer to Head Restraints on page 2-17.

### ISOFIX anchor-secured child-restraint systems

When installing a child-restraint system to the rear seat, refer to the child-restraint system manufacturer's instructions and the Using ISOFIX Anchor on page 2-41.

Mass group	Size Class	Fixture	Vehicle ISOFIX positions
			Second-row seat (Outboard)
Carrycot	F	ISO/L1	X
	G	ISO/L2	X
		(1)	X
GROUP 0 Up to 10 kg (up to 22 lb)	E	ISO/R1	IL
		(1)	X
GROUP 0+ Up to 13 kg (up to 29 lb)	E	ISO/R1	IL
	D	ISO/R2	IL
	C	ISO/R3	IL
		(1)	X

Mass group	Size Class	Fixture	Vehicle ISOFIX positions
			Second-row seat (Outboard)
GROUP 1 9 kg — 18 kg (20 lb — 40 lb)	D	ISO/R2	IL
	C	ISO/R3	IL
	B	ISO/F2	IUF
	B1	ISO/F2X	IUF
	A	ISO/F3	IUF
		(1)	X
GROUP 2 15 kg — 25 kg (33 lb — 55 lb)		(1)	X
GROUP 3 22 kg — 36 kg (48 lb — 79 lb)		(1)	X

(1) For the CRS which do not carry the ISO/XX size class identification (A to G), for the applicable mass group, the car manufacturer shall indicate the vehicle specific ISOFIX child-restraint system(s) recommended for each position.

Key of letters to be inserted in the above table:

IUF = suitable for ISOFIX forward child-restraints systems of universal category approved for use in this mass group.

IL = suitable for particular ISOFIX child-restraint systems (CRS).

These ISOFIX CRS are those of the “specific vehicle”, “restricted” or “semi-universal” categories.

X = ISOFIX position not suitable for ISOFIX child-restraint systems in this mass group and/or this size class.

**NOTE**

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

- *Always remove the head restraint before installing a child-restraint system. However, when installing a booster seat, always install the vehicle head restraint to the seat where the booster seat is installed. In addition, always use a tether strap and attach it securely. Refer to Head Restraints on page 2-17.*
- *When installing a child-restraint system to the second-row seat, adjust the front seat position so that the front seat does not contact the child-restraint system. Refer to Seat Operation on page 2-5.*

# Child Restraint

## i-Size child-restraint systems

An i-Size child-restraint system can be installed to the specified seat as follows:

	Front passenger seat	Rear seat (outboard)	Rear seat (center)
i-Size child-restraint systems	X	X	X

Key of letters to be inserted in the above table:

X = Seating position not suitable for i-Size “universal” child-restraint systems.

### **NOTE**

*An i-Size child-restraint system refers to a child-restraint system which has acquired i-Size category certification for the UNECE 129 regulation.*

## Seat belt-secured child-restraint systems

System group	Age group	Weight group	Child-restraint system type	Front passenger seat	Second-row seat (outboard)	Second-row seat (center)	Third-row seat (outboard)
GROU P 0	Up to about 9 months old	Up to 10 kg (up to 22 lb)	Baby seat	X	U	U*2	U
GROU P 0+	Up to about 2 years old	Up to 13 kg (up to 29 lb)	Baby seat	X	U	U*2	U
GROU P 1	About 8 months to 4 years old	9 kg — 18 kg (20 lb — 40 lb)	Child seat	L*1	U	U*2	U
GROU P 2	About 3 to 7 years old	15 kg — 25 kg (33 lb — 55 lb)	Junior seat	L*1	U	U*2	U
GROU P 3	About 6 to 12 years old	22 kg — 36 kg (48 lb — 79 lb)	Junior seat	L*1	U	U*2	U

Key of letters to be inserted in the above table:

U = Suitable for “universal” category restraints approved for use in this mass group.

L = For the child restraint systems categorized in this weight group, consult an Authorized Mazda Dealer.

Regarding child restraint systems which can be installed, refer to the accessories catalog.

X = Seat position not suitable for children in this mass group.

\*1 A Mazda genuine child restraint system can be installed in the forward-facing position.

\*2 When a child-restraint system is installed to the rear center seat, do not seat occupants in the rear left outboard seat position.

**NOTE**

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

· **(Second-row seat)**

*Always remove the head restraint before installing a child-restraint system. However, when installing a booster seat, always install the vehicle head restraint to the seat where the booster seat is installed. In addition, always use a tether strap and attach it securely. Refer to Head Restraints on page 2-17.*

· *When installing a child-restraint system to the second-row seat, adjust the front seat position so that the front seat does not contact the child-restraint system. Refer to Seat Operation on page 2-5.*

· *When installing a child-restraint system to the third-row seat, adjust the second-row seat position so that the second-row seat does not contact the child-restraint system. Refer to Seat Operation on page 2-5.*

**(Other countries)**

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

# Child Restraint

## Installing Child-Restraint Systems

### ▼ Anchor Bracket

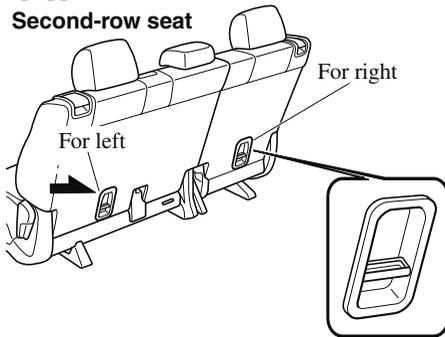
Anchor brackets for securing child-restraint systems are equipped in the vehicle. Locate each anchor position using the illustration.

To install a child-restraint system, remove the head restraint. 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.

#### Second-row seat



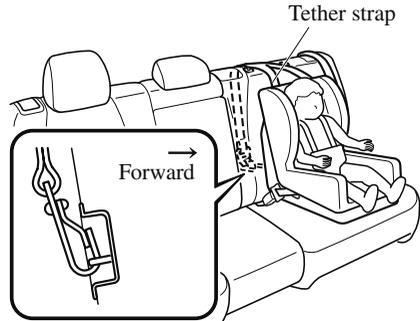
### ⚠ WARNING

#### **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 remove the head restraint and install child-restraint system:**

Installing a child-restraint system without removing the head restraint is dangerous. The child-restraint system cannot be installed correctly which may result in death or injury to the child in a collision.



#### **Always install the head restraint and adjust it to the appropriate position after removing the child-restraint system:**

Driving with the head restraint removed is dangerous as impact to the occupant's head cannot be prevented during emergency braking or in a collision, which could result in a serious accident, injury or death.

Refer to Head Restraints on page 2-17.

### ▼ Using the Seat Belt

When installing a child-restraint system, follow the installation instructions included with the product.

In addition, remove the head restraint (except third-row seat). However, when installing a booster seat, always install the vehicle head restraint to the seat where the booster seat is installed.

▼ Using ISOFIX Anchor (Second-Row Seats)

**⚠ 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 any child-restraint system is properly secured in place according to the manufacturer's instructions.

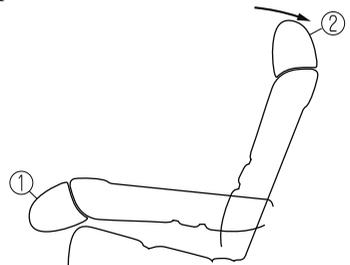
**Make sure the child-restraint system is properly secured:**

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 luggage compartment or at least make sure it is securely fastened to the ISOFIX anchors.

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

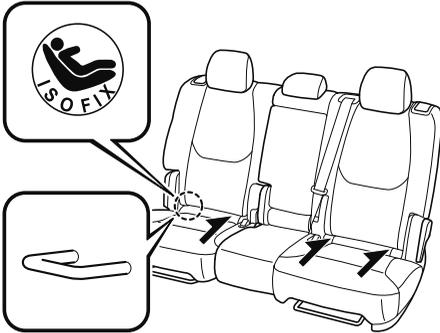
Not following the child-restraint system manufacturer's instructions when installing the child-restraint system is dangerous. If seat belts or a foreign object prevent the child-restraint system from being securely attached to the ISOFIX anchors and the child-restraint system is installed improperly, 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.

1. First, adjust the front seat to allow clearance between the child-restraint system and the front seat (page 2-5).
2. Adjust the second-row seat position using the following procedure.
  - ① Fold the second-row seatback forward.
  - ② Raise the second-row seatback until a click sound is heard and it is locked in place.



## Child Restraint

3. Make sure the seatback is securely latched by pushing it back until it is fully locked.
4. Expand the area between the seat bottom and the seatback slightly to verify the locations of the ISOFIX anchor.



### **NOTE**

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

5. Remove the head restraint. However, when installing a booster seat, always install the vehicle head restraint to the seat where the booster seat is installed. Refer to Head Restraints on page 2-17.
6. Secure the child-restraint system using the ISOFIX anchor, following the child-restraint system manufacturer's instruction.

7. 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 2-40).

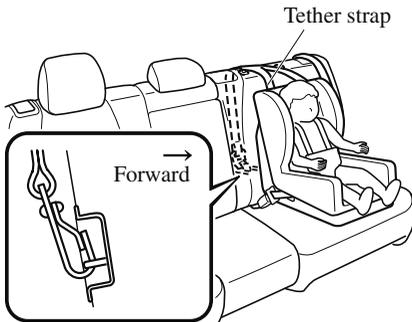
### **WARNING**

#### ***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 remove the head restraint and install child-restraint system (except when installing a booster seat):***

*Installing a child-restraint system without removing the head restraint is dangerous. The child-restraint system cannot be installed correctly which may result in death or injury to the child in a collision.*



***Always install the head restraint and adjust it to the appropriate position after removing the child-restraint system:***

*Driving with the head restraint removed is dangerous as impact to the occupant's head cannot be prevented during emergency braking or in a collision, which could result in a serious accident, injury or death.*

*Refer to Head Restraints on page 2-17.*

### Supplemental Restraint System (SRS) Precautions

The front and side supplemental restraint systems (SRS) include different types of air bags. **Please verify the different types of air bags which are equipped on your vehicle by locating the “SRS AIRBAG” location indicators.** These indicators are visible in the area where the air bags are installed.

The air bags are installed in the following locations:

- The steering wheel hub (driver air bag)
- The front passenger dashboard (front passenger air bag)
- The outboard sides of the front seatbacks (side air bags)
- The front and rear window pillars, and the roof edge along both sides (curtain air bags)

Vehicles for Europe 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 in the following ways:

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.

A child who is too small to use a seat belt must be properly secured using a child-restraint system (page 2-27).

Carefully consider which child-restraint system is necessary for your child and follow the installation directions in this Owner's Manual as well as the child-restraint system manufacturer's instructions.

**⚠ 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.

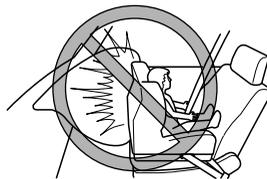
**Children should not ride in the front passenger seat:**

Placing a child, 12 years or under, in the front seat is dangerous. The child could be hit by a deploying air bag and be seriously injured or even killed. A sleeping child is more likely to lean against the door and be hit by the side air bag in moderate collision to the front-passenger side of the vehicle. Whenever possible, always secure a child 12 years and under on the rear seats with an appropriate child-restraint system for the child's age and size.

**Extreme Hazard! Never use a rear-facing child-restraint system on the front passenger seat with an air bag that could deploy:**

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.

Even in a moderate collision, the child-restraint system can be hit by a deploying air bag and moved violently backward resulting in serious injury or death to the child.

**Do not sit too close to the driver and front passenger air bags:**

Sitting too close to the driver and front passenger air bag modules or placing hands or feet on them is extremely dangerous. The driver and front 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 front seat passenger should keep both feet on the floor. Front seat occupants should adjust their seats as far back as possible and always sit upright against the seatbacks with seat belts worn properly.

## SRS Air Bags

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**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 and curtain 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, or if rear seat occupants grab the sides of the front seatbacks. Give the side and curtain 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 driver and front passenger air bags deploy:**

*Attaching an object to the driver and front passenger air bag modules or placing something in front of them is dangerous. In an accident, an object could interfere with air bag inflation and injure the occupants.*

**Do not attach objects on or around the area where a side air bag deploys:**

*Attaching objects to the front seat in such a way as to cover the outboard side of the seat in any way is dangerous. In an accident the object could interfere with the side air bag, which inflates from the outboard side of the front seats, impeding the added protection of the side air bag system or redirecting the air bag in a way that is dangerous. Furthermore, the bag could be cut open releasing the gas.*

*Do not hang net bags, map pouches or backpacks with side straps on the front seats. Never use seat covers on the front seats. Always keep the side air bag modules in your front seats free to deploy in the event of a side collision.*

**Do not attach objects on or around the area where a curtain air bag deploys:**

*Attaching objects to the areas where the curtain air bag activates such as on the windshield glass, side door glass, front and rear window pillars and along the roof edge and assist grips is dangerous. In an accident the object could interfere with the curtain air bag, which inflates from the front and rear window pillars and along the roof edge, impeding the added protection of the curtain air bag system or redirecting the air bag in a way that is dangerous. Furthermore, the bag could be cut open releasing the gas.*

*Do not place hangers or any other objects on the assist grips. When hanging clothes, hang them on the coat hook directly. Always keep the curtain air bag modules free to deploy in the event of a side collision or roll-over accident.*

**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. Front 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 9-7) is dangerous. Use of such wheels will prevent the vehicle's accident detections 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 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 expert repairer, we recommend an Authorized Mazda Repairer can provide the special care needed in the removal and installation of front seats. It is important to protect the air bag wiring and connections to assure that the bags do not accidentally deploy and the seats retain an undamaged air bag connection.

## SRS Air Bags

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**Do not place luggage or other objects under the front seats:**

Placing luggage or other objects under the front 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 front seats.

**Do not operate a vehicle with damaged air bag/seat belt pretensioner system components:**

Expende d 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 expert repairer, we recommend an Authorized Mazda Repairer 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 front seats, front dashboard, the steering wheel or parts on the front and rear window pillars and along the roof edge, 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 Repairer 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 expert repairer, we recommend an Authorized Mazda Repairer safely dispose of the air bag system or scrap an air bag equipped vehicle.

**NOTE**

- 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.

· This highly-visible label warns against the use of a rear-facing child-restraint system on the front passenger seat.

**(Except Taiwan)**



**(Taiwan)**

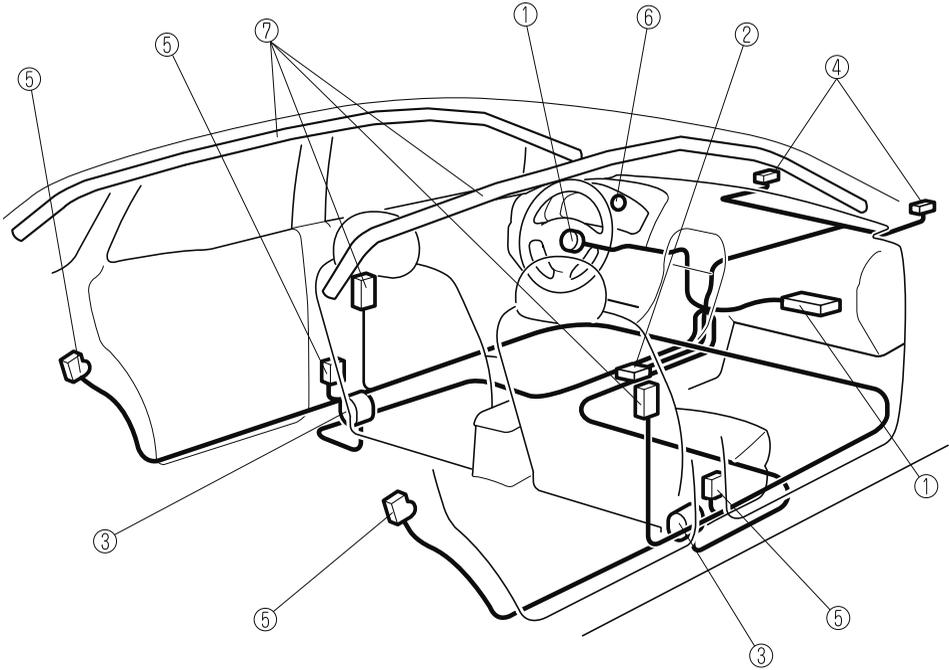


**(Taiwan, except front passenger seat, if equipped with the following label)**

The highly-visible labels warn against the use of a rear-facing child-restraint system on the seat protected by an air bag.



## Supplemental Restraint System Components



- ① Driver/Front passenger inflators and air bags
- ② Roll-over sensor\*, crash sensors, and diagnostic module (SAS unit)
- ③ Seat belt pretensioners (page 2-25)
- ④ Front air bag sensors
- ⑤ Side crash sensors
- ⑥ Air bag/front seat belt pretensioner system warning light (page 4-33)
- ⑦ Side and curtain inflators and air bags

## How the SRS Air Bags Work

Your Mazda is equipped with the following types of SRS air bags. SRS air bags are designed to work together with the seat belts to help to reduce injuries during an accident. The SRS air bags are designed to provide further protection for passengers in addition to the seat belt functions. Be sure to wear seat belts properly.

### ▼ Front Seat Belt Pretensioners

The front seat belt pretensioners are designed to deploy in moderate or severe frontal, near frontal collisions.

In addition, the pretensioners operate when a side collision (only on the side in which the collision occurs) or a roll-over accident is detected. The pretensioners operate differently depending on what types of air bags are equipped. For more details about seat belt pretensioner operation, refer to the SRS Air Bag Deployment Criteria (page 2-55).

### ▼ Driver Air Bag

The driver's air bag is mounted in 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.

For more details about air bag deployment, refer to "SRS Air Bag Deployment Criteria" (page 2-55).



# SRS Air Bags

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## ▼ Front Passenger Air Bag

The front passenger air bag is mounted in the front passenger dashboard.

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

For more details about air bag deployment, refer to "SRS Air Bag Deployment Criteria" (page 2-55).

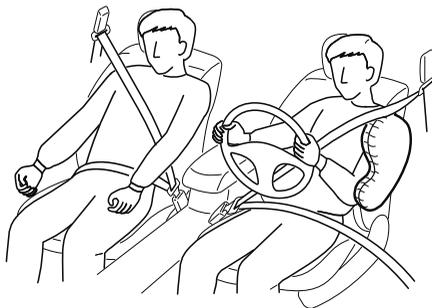


## ▼ Side Air Bags

The side air bags are mounted in the outboard sides of the front 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 front passenger's chest caused by directly hitting interior parts such as a door or window.

For more details about air bag deployment, refer to "SRS Air Bag Deployment Criteria" (page 2-55).



**▼ Curtain Air Bags**

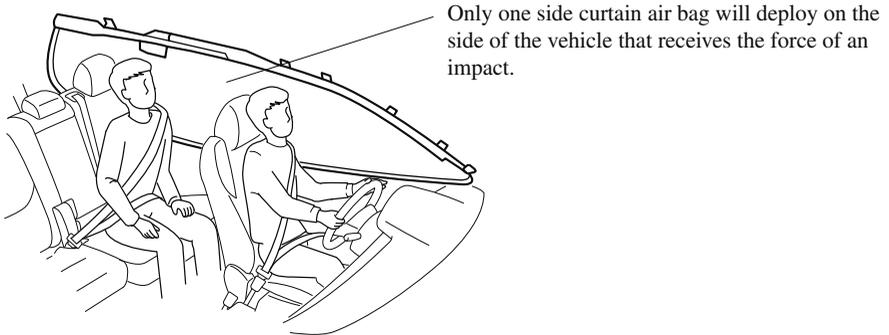
The curtain air bags are mounted in the front and rear window pillars, and the roof edge along both sides.

When the air bag crash sensors detect a side impact of greater than moderate force, the curtain air bag inflates quickly and helps to reduce injury mainly to the rear outboard passenger's head caused by directly hitting interior parts such as a door or window.

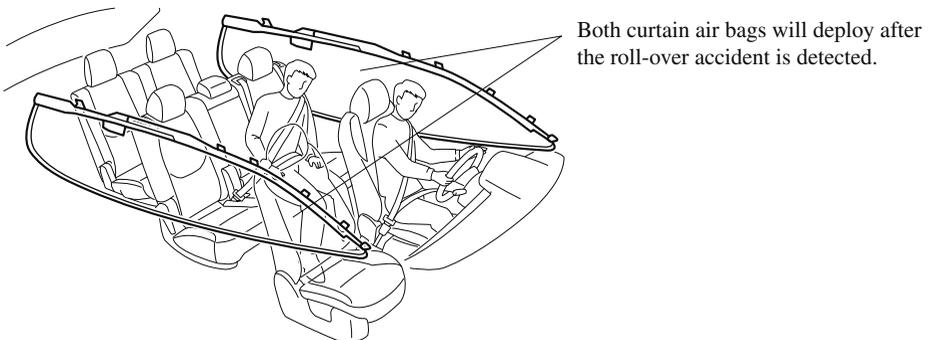
For more details about air bag deployment, refer to "SRS Air Bag Deployment Criteria" (page 2-55).

**In a side impact:**

Greater than moderate impact to one side of the vehicle will cause the curtain air bag on that side only to inflate.

**(European models)****In a roll-over:**

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



## **SRS Air Bags**

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### **▼ Warning Light/Beep**

A system malfunction or operation conditions are indicated by a warning.

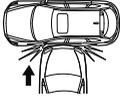
Refer to Warning/Indicator Lights on page 4-32.

Refer to Warning Sound is Activated on page 7-55.

## SRS Air Bag Deployment Criteria

This chart indicates the applicable SRS equipment that will deploy depending on the type of collision.

(The illustrations are the representative cases of collisions.)

	Types of collision			
	A severe frontal/near frontal collision	A severe side collision*1	A roll-over/near roll-over*2	A rear collision
SRS equipment			 	
Front seat belt pretensioner	X (both sides)	X (impact side only)	X (both sides)	No air bag and front seat belt pretensioner will be activated in a rear collision.
Driver air bag	X			
Front passenger air bag	X			
Side air bag		X (impact side only)		
Curtain air bag		X (impact side only)	X (both sides)	

X: The SRS air bag equipment is designed to deploy in a collision.

\*1 In a side collision, the seat belt pretensioners and the side/curtain air bags deploy (only on the side in which the collision occurs).

\*2 **(European models)**

In a roll-over accident, the seat belt pretensioners and the curtain air bags deploy.

**NOTE**

*In a frontal offset collision, the equipped air bags and pretensioners may all deploy depending on the direction, angle, and rate of impact.*

# SRS Air Bags

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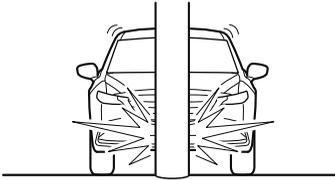
## Limitations to SRS Air Bag

In severe collisions such as those described previously in "SRS Air Bag Deployment Criteria", the applicable SRS air bag equipment will deploy. However, in some accidents, the equipment may not deploy depending on the type of collision and its severity.

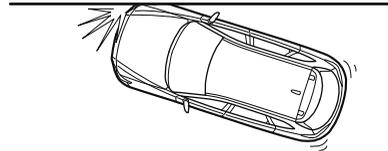
### Limitations to front/near front collision detection:

The following illustrations are examples of front/near front collisions that may not be detected as severe enough to deploy the SRS air bag equipment.

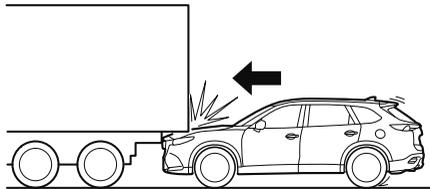
Impacts involving trees or poles



Frontal offset impact to the vehicle



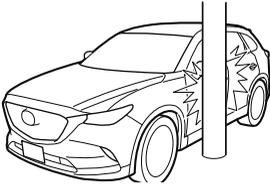
Rear-ending or running under a truck's tail gate



**Limitations to side collision detection:**

The following illustrations are examples of side collisions that may not be detected as severe enough to deploy the SRS air bag equipment.

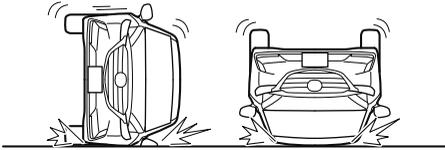
Side impacts involving trees or poles



Side impacts with two-wheeled vehicles



Roll-over (Except European models)

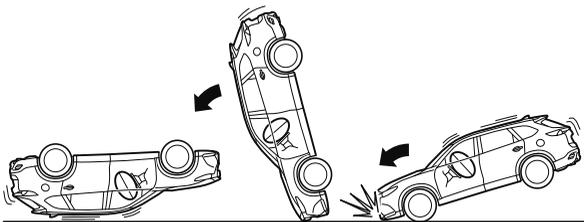


**(European models)**

**Limitations to roll-over detection:**

The following illustration is an example of an accident that may not be detected as a roll-over accident. Therefore, the front seat belt pretensioners and curtain air bags may not deploy.

Pitch end over end



## Constant Monitoring

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

- Front air bag sensors
- Crash sensors, and diagnostic module (SAS unit)
- Side crash sensors
- Air bag modules
- Front seat belt pretensioners
- Air bag/Front seat belt pretensioner system warning light
- Related wiring

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.

# 3

## Before Driving

Use of various features, including keys, doors, mirrors and windows.

<b>Keys.....</b>	<b>3-2</b>	<b>Windows.....</b>	<b>3-36</b>
Keys.....	3-2	Power Windows.....	3-36
Keyless Entry System.....	3-3	Sunroof* .....	3-39
<b>Advanced Keyless Entry System.....</b>	<b>3-8</b>	<b>Security System.....</b>	<b>3-42</b>
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Operational Range.....	3-9	Immobilizer System.....	3-42
<b>Doors and Locks.....</b>	<b>3-10</b>	Theft-Deterrent System* .....	3-44
Door Locks.....	3-10	<b>Driving Tips.....</b>	<b>3-48</b>
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<b>Fuel and Emission.....</b>	<b>3-26</b>	Saving Fuel and Protection of Environment.....	3-48
Fuel and Engine Exhaust Precautions.....	3-26	Hazardous Driving.....	3-49
Fuel-Filler Lid and Cap.....	3-29	Floor Mat.....	3-50
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<b>Mirrors.....</b>	<b>3-32</b>	Driving In Flooded Area.....	3-54
Mirrors.....	3-32	Turbocharger Information.....	3-55
		<b>Towing.....</b>	<b>3-56</b>
		Towing Caravans and Trailers (Russia).....	3-56

# Keys

## Keys

### WARNING

**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.

### CAUTION

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

- To avoid damage to the key (transmitter), DO NOT:
  - Drop the key.
  - Get the key wet.
  - Disassemble the key.
  - Expose the key to high temperatures on places such as the dashboard or hood, under direct sunlight.
  - Expose the key to any kind of magnetic field.
  - Place heavy objects on the key.
  - Put the key in an ultrasonic cleaner.
  - Put any magnetized objects close to the key.

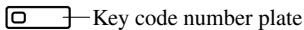
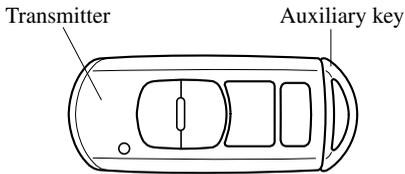
A code number is stamped on the plate attached to the key set; detach this plate and store it in a safe place (not in the vehicle) for use if you need to make a replacement key (auxiliary key).

Also write down the code number and keep it in a separate safe and convenient place, but not in the vehicle.

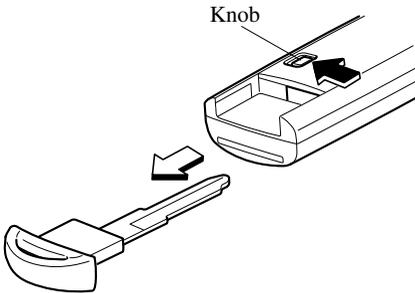
If your key (auxiliary key) is lost, consult your Authorized Mazda Repairer and have your code number ready.

**NOTE**

The driver must carry the key to ensure the system functions properly.



To use the auxiliary key, pull out the auxiliary key from the transmitter while pressing the knob.



## Keyless Entry System

This system uses the key buttons to remotely lock and unlock the doors and the liftgate, and opens/closes the liftgate. The system can start the engine without having to take the key out of your purse or pocket.

Operating the theft-deterrent system is also possible on theft-deterrent system-equipped vehicles.

System malfunctions or warnings are indicated by the following warning lights or beeps.

For vehicles with the type A instrument cluster, check the displayed message for more information and, if necessary, have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer, according to the indication.

- KEY Warning Light (Red)  
Refer to Warning/Indicator Lights on page 4-32.
- Ignition Not Switched Off (STOP) Warning Beep  
Refer to Ignition Not Switched Off (STOP) Warning Beep on page 7-56.
- Key Removed from Vehicle Warning Beep  
Refer to Key Removed from Vehicle Warning Beep on page 7-56.

If you have a problem with the key, consult an expert repairer, we recommend an Authorized Mazda Repairer.

If your key is lost or stolen, consult an Authorized Mazda Repairer as soon as possible for a replacement and to make the lost or stolen key inoperative.

# Keys

## CAUTION

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

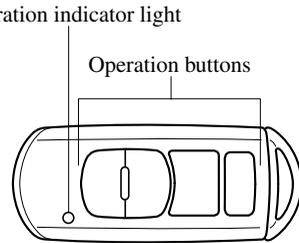
### NOTE

- The keyless entry system operation may vary due to local conditions.
- The keyless entry system is fully operational (door/liftgate lock/unlock) when the ignition is switched off. The system does not operate if the ignition is switched to any position other than off.
- If the key does not operate when pressing a button or the operational range becomes too small, the battery may be weak. To install a new battery, refer to Key Battery Replacement (page 6-33).
- Battery life is about one year. Replace the battery with a new one if the KEY indicator light (green) flashes in the instrument cluster (for vehicles with a type A instrument cluster (page 4-32), messages are displayed in the instrument cluster). Replacing the battery about once a year is recommended because the KEY warning light/indicator light may not illuminate or flash depending on the rate of battery depletion.



- Additional keys can be obtained at an Authorized Mazda Repairer. Up to 6 keys can be used with the keyless functions per vehicle. Bring all keys to an Authorized Mazda Repairer when additional keys are required.

### ▼ Transmitter



### NOTE

- The headlights turn on/off by operating the transmitter. Refer to Leaving Home Light on page 4-53.
- **(With theft-deterrent system)**  
The hazard warning lights flash when the theft-deterrent system is armed or turned off.  
Refer to Theft-Deterrent System on page 3-44.
- **(With the advanced keyless function (European models))**  
The setting can be changed so that a beep sound is heard for confirmation when the doors and the liftgate are locked/unlocked using the key.

***(With the advanced keyless function  
(Except European models))***

*A beep sound can be heard for confirmation when the doors and the liftgate are locked/unlocked using the key. If you prefer, the beep sound can be turned off.*

*The volume of the beep sound can also be changed.*

*Refer to Personalization Features on page 9-10.*

*Use the following procedure to change the setting.*

- 1. Switch the ignition off and close all of the doors and the liftgate.*
- 2. Open the driver's door.*
- 3. Within 30 seconds of opening the driver's door, press and hold the LOCK button on the key for 5 seconds or longer.*

*The beep sound activates at the currently set volume. The setting changes each time the LOCK button on the key is pressed and the beep sound activates at the set volume. (If the beep sound has been set to not activate, it will not activate.)*

- 4. The setting change is completed by doing any one of the following:*
  - Switching the ignition to ACC or ON.*
  - Closing the driver's door.*
  - Opening the liftgate.*
  - Not operating the key for ten seconds.*
  - Pressing any button except the LOCK button on the key.*
  - Pressing a request switch.*

The operation indicator light flashes when the buttons are pressed.

**Lock button**

To lock the doors and the liftgate, press the lock button and the hazard warning lights will flash once.

***(With the advanced keyless function  
(Except European models))***

A beep sound will be heard once.

**NOTE*****• (European models)***

*The doors and the liftgate cannot be locked by pressing the lock button while any other door is open. The hazard warning lights will also not flash.*

***(Except European models)***

*The doors and the liftgate cannot be locked by pressing the lock button while any other door or the liftgate is open.*

*The hazard warning lights will also not flash.*

- Make sure all doors and the liftgate are locked after pressing the button.*

***• (With theft-deterrent system)***

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

# Keys

## Unlock button

To unlock the doors and the liftgate, press the unlock button and the hazard warning lights will flash twice.

**(With the advanced keyless function (Except European models))**

A beep sound will be heard twice.



### **NOTE**

· **(Auto re-lock function)**

*After unlocking with the key, all doors and the liftgate will automatically lock if any of the following operations are not performed within about 30 seconds. If your vehicle has a theft-deterrent system, the hazard warning lights will flash for confirmation.*

*The time required for the doors to lock automatically can be changed.*

*Refer to Personalization Features on page 9-10.*

- A door or the liftgate is opened.
- The ignition is switched to any position other than off.

· **(With theft-deterrent system)**

*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.*

## Power liftgate button\*

To open/close the liftgate, press the power liftgate button for one second or more with the liftgate in the fully closed/open position.

The hazard warning lights flash twice and the liftgate opens/closes after the beep sounds.

Type A



Type B



**HOLD**

## Intrusion sensor cancel button\*

To cancel the intrusion sensor (part of the theft-deterrent system), press the intrusion sensor cancel button within 20 seconds after pressing the lock button and the hazard warning lights will flash three times.

Refer to Theft-Deterrent System on page 3-44.



### ▼ **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

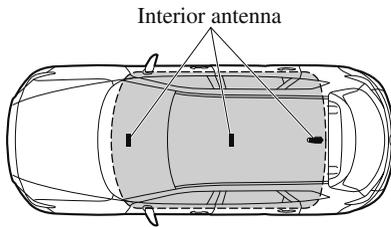
### **NOTE**

- *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 ignition is switched to off.*

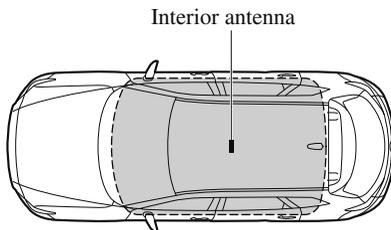
- *The luggage compartment is out of the assured operational range, however, if the key (transmitter) is operable the engine will start.*

### With the advanced keyless function



Operational range

### Without the advanced keyless function



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 glove compartment or the center console*

### ▼ Key Suspend Function

If a key is left in the vehicle, the functions of the key left in the vehicle are temporarily suspended to prevent theft of the vehicle.

To restore the functions, press the unlock button on the functions-suspended key in the vehicle.

# Advanced Keyless Entry System

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## Advanced Keyless Entry System\*

### WARNING

**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.

The advanced keyless function allows you to lock/unlock the door and the liftgate, or open the liftgate while carrying the key.

System malfunctions or warnings are indicated by the following warning beeps.

- Request switch Inoperable Warning Beep  
Refer to Request Switch Inoperable Warning Beep (With the advanced keyless function) on page 7-56.
- Key Left-in-luggage Compartment Warning Beep  
Refer to Key Left-in-luggage Compartment Warning Beep (With the advanced keyless function) on page 7-57.
- Key Left-in-vehicle Warning Beep  
Refer to Key Left-in-vehicle Warning Beep (With the advanced keyless function) on page 7-57.

### 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 expert repairer; we recommend an Authorized Mazda Repairer 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 Engine Start Function When Key Battery is Dead on page 4-9.*

# Advanced Keyless Entry System

## Operational Range

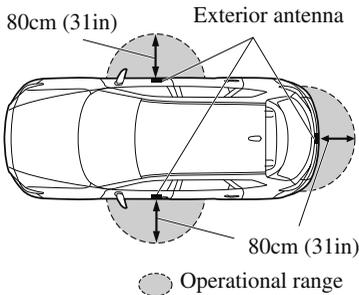
The system operates only when the driver is in the vehicle or within operational range while the key is being carried.

### NOTE

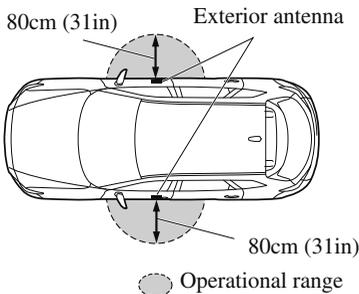
When the battery power is low, or in places where there are high-intensity radio waves or noise, the operational range may become narrower or the system may not operate. For determining battery replacement, Refer to Keyless Entry System on page 3-3.

### ▼ Locking, Unlocking the Doors and the Liftgate

#### Lock



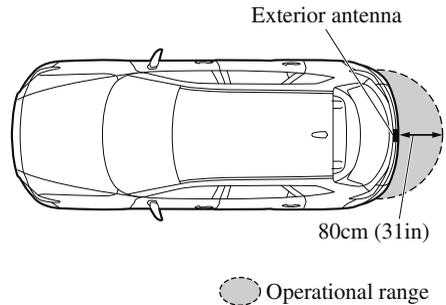
#### Unlock



### NOTE

- The system may not operate if you are too close to the windows or door handles, or liftgate.
- 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 glove compartment or the center console
  - Next to a communication device such as a mobile phone

### ▼ Opening the Liftgate



# Doors and Locks

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## Door Locks

### **WARNING**

**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 all 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 all the windows and sunroof, lock the doors and the liftgate 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 liftgate, always verify that they are securely closed:**

*Doors and the liftgate not securely closed are dangerous, if the vehicle is driven with a door and the liftgate not securely closed, the door and the liftgate could open unexpectedly resulting in an accident.*

**Always confirm the safety around the vehicle before opening a door and the liftgate:**

*Suddenly opening a door and the liftgate is dangerous. A passing vehicle or a pedestrian could be hit and cause an accident.*

### **CAUTION**

➤ *Always confirm the conditions around the vehicle before opening/closing the doors and the liftgate and use caution during strong winds or when parked on an incline. Not being aware of the conditions around the vehicle is dangerous because fingers could get caught in the door and the liftgate or a passing pedestrian could be hit, resulting in an unexpected accident or injury.*

**NOTE**

- Always stop the engine and lock the doors. In addition, to prevent theft of valuables, do not leave them inside the cabin.
- 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 glove compartment or the center console
  - Next to a communication device such as a mobile phone
- The vehicle lock-out prevention feature prevents you from locking yourself out of the vehicle.

**(European models)**

All doors and the liftgate will automatically unlock if they are locked using the power door locks with any door open.

If all the doors are closed even though the liftgate is open, all the doors will lock.

**(Except European models)**

All doors and the liftgate will automatically unlock if they are locked using the power door locks with any door or the liftgate open.

- **(Door unlock (control) system with collision detection)\***

This system automatically unlocks the doors and the liftgate 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, all the doors and the liftgate are automatically unlocked after about 6 seconds have elapsed from the time of the accident.

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

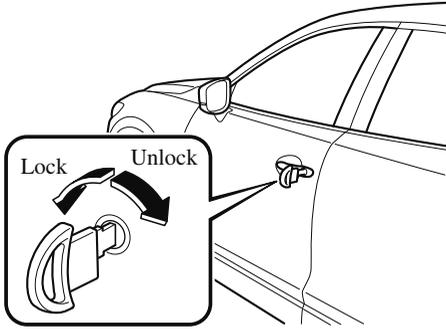
If door-related systems or the battery is malfunctioning, the doors and the liftgate will not unlock.

## Doors and Locks

### ▼ Locking, Unlocking with Auxiliary Key

All doors and the liftgate lock automatically when the driver's door is locked using the auxiliary key. They all unlock when the driver's door is unlocked using the auxiliary key.

Turn the auxiliary key toward the front to lock, toward the back to unlock.

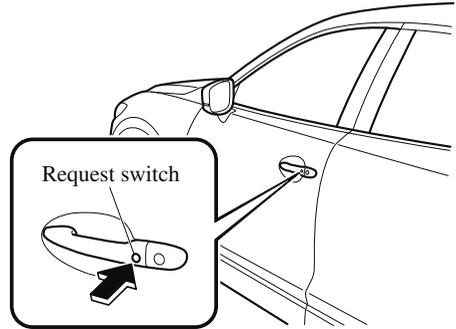


### ▼ Locking, Unlocking with Request Switch (With the advanced keyless function)

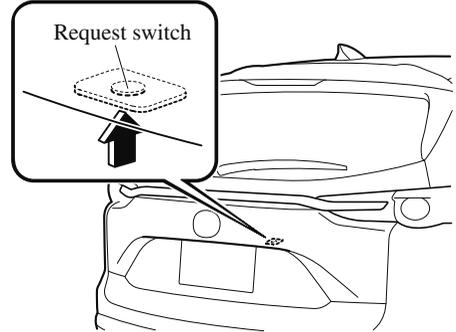
All doors and the liftgate can be locked/unlocked by pressing the request switch on the front doors while the key is being carried.

The request switch on the liftgate can only be used to lock all doors and the liftgate.

### Front doors



### Liftgate (Lock only)



### To lock

To lock the doors and the liftgate, press the request switch and the hazard warning lights will flash once.

**(Except European models)**

A beep sound will be heard once.

### To unlock

To unlock the doors and the liftgate, press the request switch on a front door and the hazard warning lights will flash twice.

**(Except European models)**

A beep sound will be heard twice.

**NOTE**

- Confirm that all doors and the liftgate are securely locked.

For the liftgate, move it without pressing the electric liftgate opener to verify that the liftgate has not been left ajar.

- **(European models)**

All doors and the liftgate cannot be locked when any door is open.

**(Except European models)**

All doors and the liftgate cannot be locked when any door or the liftgate is open.

- It may require a few seconds for the doors to unlock after the request switch is pressed.

- **(European models)**

The setting can be changed so that a beep sound is heard for confirmation when the doors and the liftgate are locked/unlocked using a request switch.

**(Except European models)**

A beep sound is heard for confirmation when the doors and the liftgate are locked/unlocked using the request switch. If you prefer, the beep sound can be turned off.

The volume of the beep sound can also be changed. Refer to Personalization Features on page 9-10.

Use the following procedure to change the setting.

1. Switch the ignition off and close all of the doors and the liftgate.
2. Open the driver's door.

3. Within 30 seconds of opening the driver's door, press and hold the LOCK button on the key for 5 seconds or longer.  
The beep sound activates at the currently set volume. The setting changes each time the LOCK button on the key is pressed and the beep sound activates at the set volume. (If the beep sound has been set to not activate, it will not activate.)
4. The setting change is completed by doing any one of the following:

- Switching the ignition to ACC or ON.
- Closing the driver's door.
- Opening the liftgate.
- Not operating the key for ten seconds.
- Pressing any button except the LOCK button on the key.
- Pressing a request switch.

- **(With theft-deterrent system)**

The hazard warning lights flash when the theft-deterrent system is armed or turned off.

Refer to Theft-Deterrent System on page 3-44.

- The setting can be changed so that the doors and the liftgate are locked automatically without pressing the request switch.  
Refer to Personalization Features on page 9-10.

## Doors and Locks

### **(Auto-lock function)**

A beep sound is heard when all doors and the liftgate are closed while the advanced key is being carried. All doors and the liftgate are locked automatically after about three seconds when the advanced key is out of the operational range. Also, the hazard warning lights flash once. (Even if the driver is in the operational range, all doors and the liftgate are locked automatically after about 30 seconds.) If you are out of the operational range before the doors and the liftgate are completely closed or another key is left in the vehicle, the auto-lock function will not work. Always make sure that all doors and the liftgate are closed and locked before leaving the vehicle. The auto-lock function does not close the power windows.

### **• Auto re-lock function**

After unlocking with the request switch, all doors and the liftgate will automatically lock if any of the following operations are not performed within about 30 seconds. If your vehicle has a theft-deterrent system, the hazard warning lights will flash for confirmation.

The time required for the doors to lock automatically can be changed.

Refer to Personalization Features on page 9-10.

- Opening a door or the liftgate.
- Switching the ignition to any position other than off.

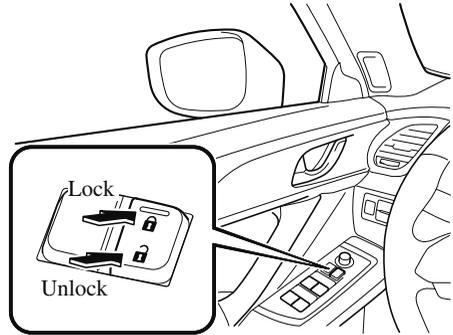
### **▼ Locking, Unlocking with Transmitter**

All doors and the liftgate can be locked/unlocked by operating the keyless entry system transmitter, refer to Keyless Entry System (page 3-3).

### **▼ Locking, Unlocking with Door-Lock Switch\***

All doors and the liftgate lock automatically when the lock side is pressed with all doors and the liftgate closed.

They all unlock when the unlock side is pressed.



### **NOTE**

The doors and the liftgate cannot be locked while any other door or the liftgate is open.

## ▼ Auto Lock/Unlock Function\*

**Do not pull the inner handle on a front door:**

Pulling the inner handle on a front door while the vehicle is moving is dangerous. Passengers can fall out of the vehicle if the door opens accidentally, which could result in death or serious injury.

- When the vehicle speed exceeds 20 km/h (12 mph), all doors and the liftgate lock automatically.
- When the ignition is switched off, all doors and the liftgate unlock automatically.

These functions can also be disabled so that they do not operate.

**Auto lock/unlock function setting change using door-lock switch (With door-lock switch)**

The doors and the liftgate can be set to lock or unlock automatically by selecting any one of the functions from the following table and using the door-lock switch on the interior door panel.

**NOTE**

- Function number 3 in the following table is the factory setting for your vehicle.
- There are only a total of six auto lock/unlock settings available. Be sure to press the unlock side of the door-lock switch the correct number of times according to the selected function number. If the switch is mistakenly pressed seven times, the procedure will be cancelled. If this occurs, start the procedure from the beginning.

Function number	Function*1
1	The auto door-lock function is disabled.
2	All the doors and the liftgate lock automatically when the vehicle speed is about 20 km/h (12 mph) or more.
3 (Factory Setting)	All the doors and the liftgate lock automatically when the vehicle speed is about 20 km/h (12 mph) or more. All the doors and the liftgate unlock when the ignition is switched from ON to Off.
4	When the ignition is switched ON and the selector lever is shifted from park (P) to any other gear position, all the doors and the liftgate lock automatically.
5	When the ignition is switched ON and the selector lever is shifted from park (P) to any other gear position, all the doors and the liftgate lock automatically. When the selector lever is shifted to park (P) while the ignition is switched ON, all the doors and the liftgate unlock automatically.

# Doors and Locks

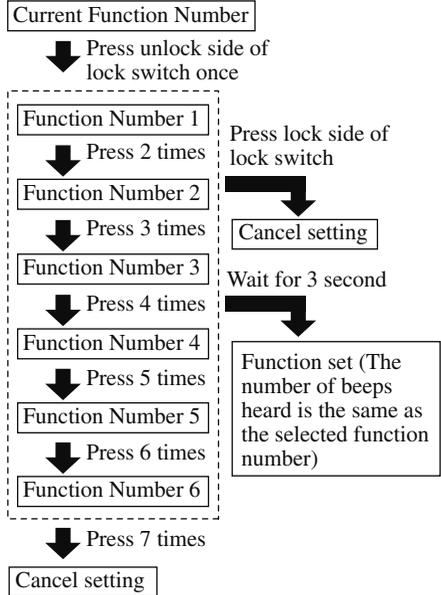
Function number	Function*1
6	All the doors and the liftgate lock automatically when the vehicle speed is about 20 km/h (12 mph) or more. When the selector lever is shifted to park (P) while the ignition is switched ON, all the doors and the liftgate unlock automatically.

\*1 Other settings for the auto door lock function are available at an expert repairer, we recommend an Authorized Mazda Repairer. For details consult an expert repairer, we recommend an Authorized Mazda Repairer. Refer to Personalization Features on page 9-10.

Settings can be changed using the following procedure.

1. Safely park the vehicle. All doors and the liftgate must remain closed.
2. Switch the ignition ON.
3. Press and hold the lock side of the door-lock switch within 20 seconds of switching the ignition ON, and make sure a beep sound is heard about eight seconds afterwards.
4. Refer to the auto lock/unlock function setting table, determine the function number for the desired setting. Press the unlock side of the door-lock switch the same number of times as the selected function number (Ex. If you select function 2, press the unlock side of the switch only 2 times).

5. Three seconds after the function setting has been changed, a beep sound will beep in the amount of the selected function number. (Ex. Function number 3 = 3 beep sounds)



## NOTE

- The doors and the liftgate cannot be locked or unlocked while the setting function is being performed.
- The procedure can be cancelled by pressing the lock side of the door-lock switch.

## ▼ Locking, Unlocking with Door-Lock Knob

### Operation from inside

#### **(With door-lock switch)**

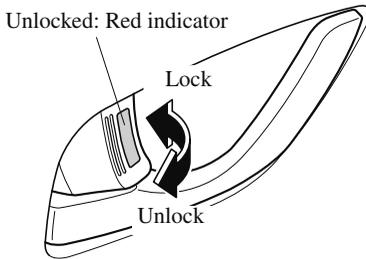
To lock any door from the inside, press the door-lock knob.

To unlock, pull it outward.

This does not operate the other door locks.

#### **(Without door-lock switch)**

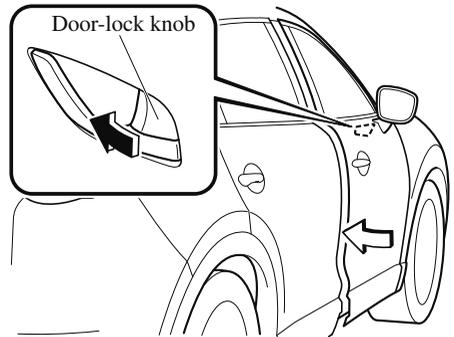
All doors and the liftgate lock automatically when the driver's door-lock knob is pressed. They all unlock when the driver's door-lock knob is pulled out.



### Operation from outside

To lock the rear and front passenger doors with the door-lock knob from the outside, press the door-lock knob to the lock position and close the door (holding the door handle in the open position is not required).

This does not operate the other door locks.



### **NOTE**

*When locking the door this way:*

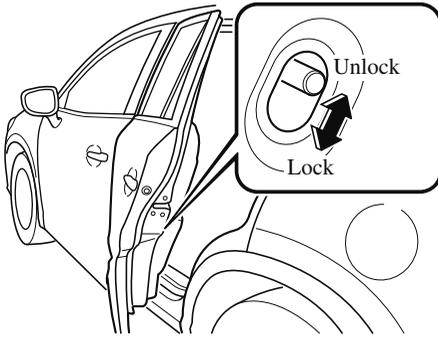
- Be careful not to leave the key inside the vehicle.
- The driver's door lock knob cannot be used while the driver's door is open.

## Doors and Locks

### ▼ Rear Door Child Safety Locks

These locks are intended to help prevent children from accidentally opening the rear doors. Use them on both rear doors whenever a child rides in the rear seat of the vehicle.

If you slide the child safety lock to the lock position before closing that door, the door cannot be opened from the inside. The door can only be opened by pulling the outside handle.



## Liftgate

### ! WARNING

#### **Never allow a person to ride in the luggage compartment:**

*Allowing a person to ride in the luggage compartment is dangerous. The person in the luggage compartment could be seriously injured or killed during sudden braking or a collision.*

#### **Do not drive with the liftgate open:**

*Exhaust gas in the cabin of a vehicle is dangerous. An open liftgate in a moving vehicle will cause exhaust gas to be drawn into the cabin. This gas contains CO (carbon monoxide), which is colorless, odorless, and highly poisonous, and it can cause loss of consciousness and death. Moreover, an open liftgate could cause occupants to fall out in an accident.*

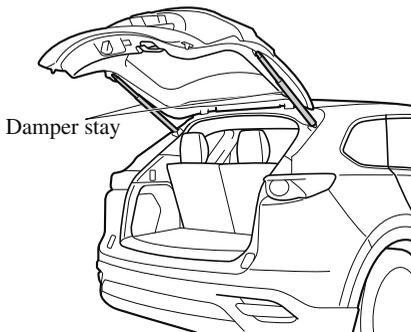
#### **Do not stack or leave loaded luggage unsecured in the luggage compartment:**

*Otherwise, the luggage may move or collapse, resulting in injury or an accident. In addition, do not load luggage higher than the seatbacks. It may affect the side or rear field of view.*

### ! CAUTION

- *Before opening the liftgate, remove any snow and ice accumulation on it. Otherwise, the liftgate could close under the weight of the snow and ice resulting in injury.*

- Be careful when opening/closing the liftgate during strong winds. If a strong gust blows against the liftgate, it could close suddenly resulting in injury.
- Fully open the liftgate and make sure that it stays open. If the liftgate is only opened partially, it could slam shut by vibration or wind gusts resulting in injury.
- When loading or unloading luggage in the luggage compartment, turn off the engine. Otherwise, you could get burned by the heat of the exhaust gas.
- Be careful not to apply excessive force to the damper stay on the liftgate such as by putting your hand on the stay. Otherwise, the damper stay may bend and affect the liftgate operation.



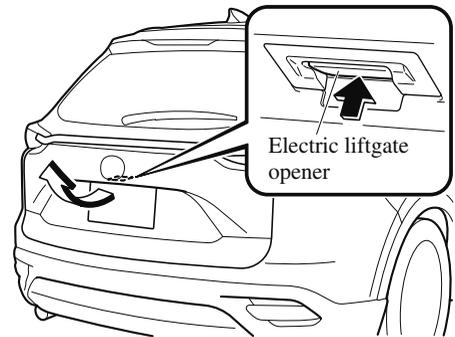
- Do not modify or replace the liftgate damper stay. Consult an expert repairer, we recommend an Authorized Mazda Repairer if a liftgate damper stay is deformed or damaged for reasons such as a collision or if there is some other problem.

## ▼ Opening and Closing the Liftgate

### Opening the liftgate with Electric liftgate opener

Unlock the doors and liftgate, then press the electric liftgate opener on the liftgate and raise the liftgate when the latch releases.

For the power liftgate operation, refer to Power Liftgate on page 3-20.



### **NOTE**

**(With the advanced keyless function)**

- A locked liftgate can also be opened while the key is being carried.
- When opening the liftgate with the doors and the liftgate locked, it may require a few seconds for the liftgate latch to release after the electric liftgate opener is pressed.
- The liftgate can be closed when the doors are locked with the key left in the vehicle. However, to prevent locking the key in the vehicle, the liftgate can be opened by pressing the electric liftgate opener. If the liftgate cannot be opened despite doing this procedure, first push the liftgate completely closed, then press the electric liftgate opener to fully open the liftgate.

## Doors and Locks

- When the liftgate latch is released by pressing the electric liftgate opener, the liftgate raises slightly. If the liftgate is not operated for a certain period of time, the liftgate cannot be raised.

### To open

Press the electric liftgate opener again.

### To close

To close the liftgate from its slightly raised position, open it first by pressing the electric liftgate opener, then close it after waiting at least 1 second.

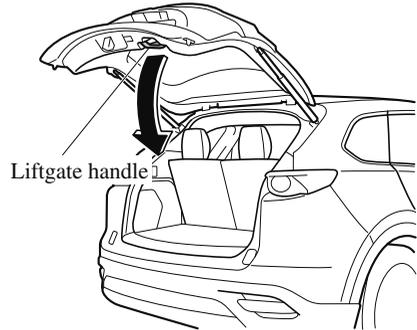
- If the liftgate is not fully closed, the driver is notified by a warning indicated in the instrument cluster.
- If the vehicle battery is dead or there is a malfunction in the electrical system and the liftgate cannot be unlocked, the liftgate can be opened by performing the emergency procedure.  
Refer to *When Liftgate Cannot be Opened* on page 7-61.

### Closing the liftgate

Lower the liftgate slowly using the liftgate handle, then push the liftgate closed using both hands.

Do not slam it. Pull up on the liftgate to make sure it is secure.

For the power liftgate operation, refer to Power Liftgate on page 3-20.



### NOTE

Confirm that the liftgate is securely closed. The liftgate, move it without pressing the electric liftgate opener to verify that the liftgate has not been left ajar.

### ▼ Power Liftgate\*

The power liftgate opens/closes electrically by operating the switches in the vehicle or the buttons on the keyless entry system transmitter.



**Be sure to watch the power liftgate as it opens or closes, and make sure that it closes completely:**

*Opening or closing the power liftgate while not watching it move is dangerous.*

*Because of unseen obstacles and the jam-safe feature, a liftgate may not close completely and, if left unnoticed, could result in serious injury or death if an occupant were to fall out of the vehicle. Always be sure that the area around the liftgate is clear before activating it.*

**Always confirm the safety of the area around the power liftgate before operating it electrically.**

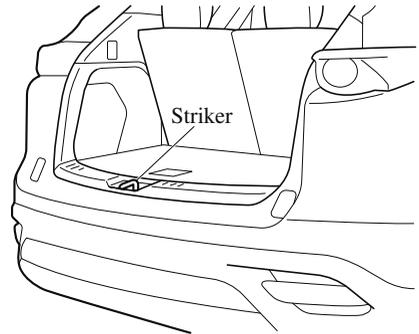
Not checking the area around the liftgate for people before operating it using the power liftgate switch or the button on the keyless entry system is dangerous. A person could become caught between the liftgate and an obstruction while it is opening electrically or between the liftgate and vehicle while it is closing electrically, resulting in an accident and serious injury.

**Never allow children to operate the power liftgate system:**

Allowing children to operate the power liftgate switch and the keyless entry system is dangerous. Children are not aware of the dangers of people getting fingers and hands caught in a moving liftgate. If someone's neck, head or hands get caught in a closing door, it could result in death or serious injury.

**⚠ CAUTION**

- When closing the power liftgate, make sure there are no foreign objects around the striker. If foreign objects are obstructing the striker, the liftgate may not close properly.



- Do not install accessories to the power liftgate other than specified accessories. Otherwise, it cannot be opened/closed automatically and could result in a malfunction.
- Be careful when switching the power liftgate from electrical to manual operation. The power liftgate may open/close unexpectedly depending on its position which could result in injury.

## Doors and Locks

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### **NOTE**

- Do not apply unnecessary force to the power liftgate when it is opening/closing electrically. Unnecessary force on the liftgate may cause it to reverse direction of movement automatically. Also, it could result in a malfunction.
- The power liftgate may not open/close electrically if the vehicle is parked on an incline, or there is strong wind, or the liftgate is laden with snow.
- If a power liftgate system fuse has blown, the liftgate cannot be opened using the power liftgate switch or the electric liftgate opener. Use the emergency lever to open the liftgate.
- Fully close the power liftgate before disconnecting the vehicle battery. If the battery is disconnected with the liftgate open, it cannot be opened or closed automatically after the battery is reconnected. If this happens, fully close the liftgate manually to restore the auto full open/close function.
- If the system detects weight such as that caused by a snow-laden liftgate when it is opened electrically, after the beep activates three times, the liftgate stops after reversing.
- If the power liftgate is snow-laden, remove the snow before operating the liftgate.

### **Operation using the transmitter**

Press the power liftgate button for one second or more. The hazard warning lights flash twice and the liftgate opens/closes after the beep sounds.

Refer to Transmitter on page 3-4.

### **NOTE**

- When the ignition is switched ON, the transmitter does not operate.
- When opening the liftgate by pressing the power liftgate button on the transmitter, the liftgate can be opened even when it is locked.
- If the power liftgate button on the transmitter is pressed while the liftgate is opening/closing electrically, the beep is activated and the liftgate stops. When pressing the power liftgate button again, the liftgate moves in the reverse direction.

### **Operation using each switch**

#### **Operation conditions**

#### **Opening the liftgate**

If the vehicle has satisfied all the following operation conditions, the power liftgate can be opened using the power function.

- All doors and the liftgate are unlocked.
- The ignition is switched OFF, or the selector lever is in P with the ignition switched ON.

#### **Closing the liftgate**

- The ignition is switched OFF, or the selector lever is in P with the ignition switched ON.

**NOTE**

· If the vehicle moves with the selector lever shifted to a position other than P while the liftgate is opening/closing electrically, the liftgate moves as follows:

**While opening electrically**

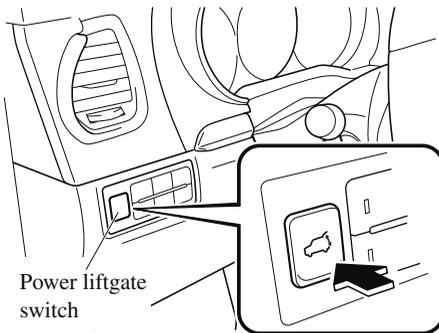
The buzzer is activated, and the liftgate moves in the reverse direction automatically and closes. When the selector lever is shifted to P, you can resume the power liftgate operation using the switches.

**While closing electrically**

The buzzer is activated, but the liftgate continues closing.

**Operation from the driver's seat (To open/close)**

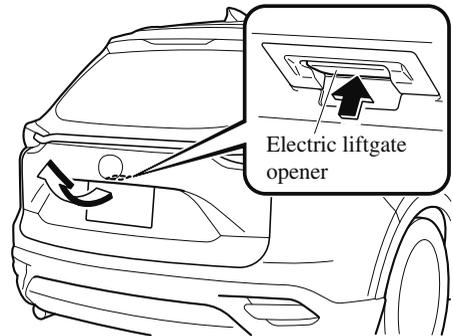
Press the power liftgate switch for about one second or more while the liftgate is in the fully closed/open position. The hazard warning lights flash twice and the liftgate opens/closes fully after the beep sound is heard.

**Operation from outside (To open)**

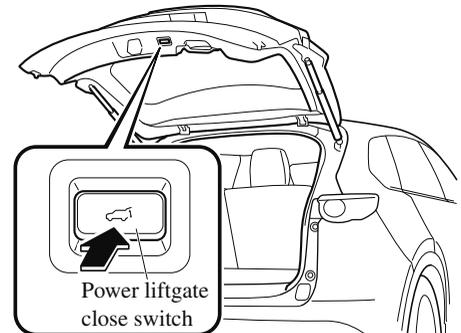
Press the electric liftgate opener on the liftgate and raise the liftgate. The hazard warning lights flash twice and the liftgate opens automatically after the beep sound is heard.

**(With the advanced keyless function)**

A locked liftgate can also be opened while the key is being carried.

**Operation from outside (To close)**

Press the power liftgate close switch while the liftgate is fully opened. The hazard warning lights flash twice and the liftgate closes automatically after the beep sound is heard.



## Doors and Locks

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### **NOTE**

*If the power liftgate switch/power liftgate close switch is pressed or the electric liftgate opener is operated while the liftgate is opening/closing electrically, the beep sound is heard and the liftgate stops. Then, it reverses when any of the switches are pressed again.*

### **Changing the power liftgate fully open position**

The power liftgate fully-open position can be changed according to the height of a garage.

#### **When changing the position**

1. Stop the liftgate at the desired position.
2. Press the power liftgate close switch for about three seconds.  
A beep sound is activated two times to indicate that the position change has been completed.

### **NOTE**

*Set the desired fully-open position of the liftgate at the position where it is open more than halfway. The position where it is less than halfway open cannot be set.*

#### **To reset**

1. Open the liftgate.
2. Press the power liftgate close switch for about seven seconds.  
A beep sound is activated three times to indicate that the reset has been completed.

### **NOTE**

*After about 3 seconds have elapsed since the switch was pressed, a beep sound is activated 2 times to indicate that the liftgate fully-open position has changed. Continuously press the switch for about 7 seconds to complete the reset.*

### **Jam-safe equipment**

While the power liftgate is opening/closing electrically and the system detects a person or an object in the liftgate's path, the liftgate will move in the reverse direction automatically and stops.

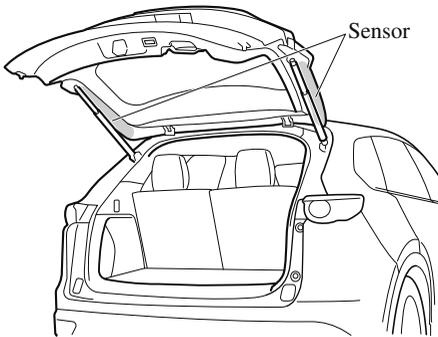


### ***Always check the area around the power liftgate before opening/closing it:***

*Not checking for occupants and objects around the power liftgate before opening/closing it is dangerous. The jam-safe equipment is designed to prevent jamming in the event an obstruction is in the liftgate's path. The system may not detect certain objects obstructing the liftgate depending on the way they are positioned and their shape. However, if the jam-safe function detects an obstruction and moves the liftgate in the reverse direction, an occupant in the liftgate's path could be seriously injured.*

## CAUTION

Sensors are installed on both ends of the power liftgate. Be careful not to allow the sensors to be scratched or damaged by sharp objects, otherwise the liftgate may no longer open/close automatically. In addition, if the sensor is damaged while the liftgate is closing automatically, the system will stop.



### NOTE

The jam-safe equipment does not activate during easy closure operation when the power liftgate is between the near-shut position and fully closed position.

When the power liftgate is moving in the open/close direction and an obstruction is detected, the beep sound will be heard and the liftgate moves in the reverse direction and stops.

### Liftgate easy closure

The Easy Closure system automatically closes the liftgate completely from the near-shut position.

This system also operates when the liftgate is closed manually.

## WARNING

**When closing a liftgate, always keep hands and fingers away from the liftgate:**

Placing hands or fingers around a liftgate is dangerous because the liftgate closes automatically from the near-shut position, which could cause hands and fingers to be pinched and injured.

### NOTE

- If the electric liftgate opener is pressed while the easy closure function is operating, the liftgate can be opened.
- If the liftgate is opened/closed repeatedly in a short period of time, the easy closure function may not operate. Wait for about 2 seconds and then try again.

# Fuel and Emission

## Fuel and Engine Exhaust Precautions

### ▼ 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.

The vehicle will perform best with fuel listed in the table.

Fuel	Research Octane Number	Country
	95 or above	Azerbaijan, Kazakhstan, Armenia, Georgia, Russia, Belarus, Ukraine, Taiwan, Tahiti, New Caledonia, Vanuatu, UAE, Lebanon, Libya, Tunisia, Madagascar, Morocco, Guatemala, Bolivia, Uruguay, Honduras, Nicaragua, Aruba, St. Martin, Singapore, Hong Kong, Malaysia, Thailand, Brunei, Macau, Mauritius, Seychelles, Jamaica, Barbados, Grenada, ST. Lucia, ST. Vincent, Antigua, Surinam
	92 or above	Egypt, Myanmar
Regular unleaded fuel	90 or above	Vietnam, The Philippines, Cambodia, Laos, Marshall Islands, USTT*1, Kuwait, Oman, Qatar, Saudi Arabia, Syria, Bahrain, Jordan, Iraq, Cameroon, Ivory Coast, Nigeria, Angola, Burundi, Gabon, Ghana, Chile, El Salvador, Costa Rica, Ecuador, Haiti, Colombia, Dominican Republic (LHD), Panama, Peru, B. Virgin, Curacao, Nepal, Sri Lanka, Fiji, Papua New Guinea, Kenya, Zimbabwe, Tanzania, Mozambique, Trinidad and Tobago, Commonwealth of Dominica

\*1 Republic of Palau & Federated States of Micronesia

Fuel with a lower rating will negatively affect the emission control system performance and could also cause engine knocking and serious engine damage.



➤ **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.*

➤ *The use of E10 fuel with 10 % ethanol is safe for your vehicle. Damage to your vehicle may occur when ethanol exceeds this recommendation.*

➤ *Never add fuel system additives, otherwise the emission control system could be damaged. Consult an expert repairer, we recommend an Authorized Mazda Repairer 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.

** WARNING*****Never park over or near anything flammable:***

*Parking over or near anything flammable, such as dry grass, is dangerous. Even with the engine 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.*

** CAUTION**

*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 with the ignition switched off.*
- *Do not descend steep grades in gear with the ignition 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.*

# Fuel and Emission

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## ▼ Engine Exhaust (Carbon monoxide)



**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 expert repairer, we recommend an Authorized Mazda Repairer 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.*

## Fuel-Filler Lid and Cap

### ⚠ WARNING

**When removing the fuel-filler cap, loosen the cap slightly and wait for any hissing to stop, then remove it:**

Fuel spray is dangerous. Fuel can burn skin and eyes and cause illness if ingested. Fuel spray is released when there is pressure in the fuel tank and the fuel-filler cap is removed too quickly.

**Before refueling, stop the engine, and always keep sparks and flames away from the filler neck:**

Fuel vapor is dangerous. It could be ignited by sparks or flames causing serious burns and injuries.

Additionally, use of the incorrect fuel-filler cap or not using a fuel-filler cap may result in a fuel leak, which could result in serious burns or death in an accident.

**Do not continue refueling after the fuel pump nozzle shuts off automatically:**

Continuing to add fuel after the fuel pump nozzle has shut off automatically is dangerous because overfilling the fuel tank may cause fuel overflow or leakage. Fuel overflow and leakage could damage the vehicle and if the fuel ignites it could cause a fire and explosion resulting in serious injury or death.

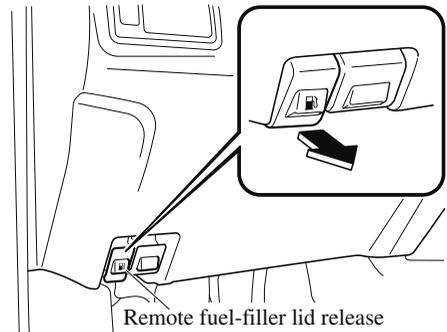
### ⚠ CAUTION

Always use only a designated Mazda fuel-filler cap or an approved equivalent, available at an expert repairer, we recommend an Authorized Mazda Repairer. The wrong cap can result in a serious malfunction of the fuel and emission control systems.

### ▼ Fuel-Filler Lid

To open, pull the remote fuel-filler lid release.

To close, press the fuel-filler lid until it locks securely.



# Fuel and Emission

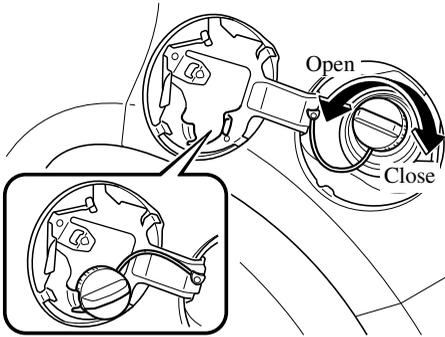
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## ▼ Fuel-Filler Cap

To remove the fuel-filler cap, turn it counterclockwise.

Attach the removed cap to the inner side of the fuel lid.

To close the fuel-filler cap, turn it clockwise until a click is heard.



## Steering Wheel

### ⚠ WARNING

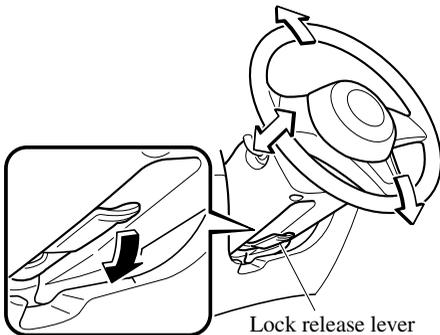
#### **Never adjust the steering wheel while the vehicle is moving:**

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.

#### ▼ Steering Wheel Adjustment

To change the angle or length of the steering wheel:

1. Stop the vehicle, and then pull down the lock release lever under the steering column.

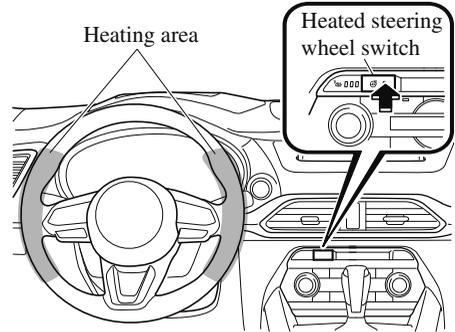


Lock release lever

2. Tilt the steering wheel and/or adjust the steering column length to the desired positions, then push the lever up to lock the column.
3. Attempt to push the steering wheel up and down to make sure it's locked before driving.

#### ▼ Heated Steering Wheel\*

The grips on the left and right of the steering wheel can be warmed up.



The ignition must be switched ON.

Press the switch to turn on the heated steering wheel. The heated steering wheel operates for about 30 minutes and then turns off automatically. The indicator light illuminates when the heater is operating.

To turn off the heated steering wheel before the 30 minutes has elapsed, press the switch again.

### ⚠ CAUTION

*The following types of persons should be careful not to touch the steering wheel. Otherwise, it 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*

## Mirrors

Before driving, adjust the inside and outside mirrors.

### ▼ Outside Mirrors



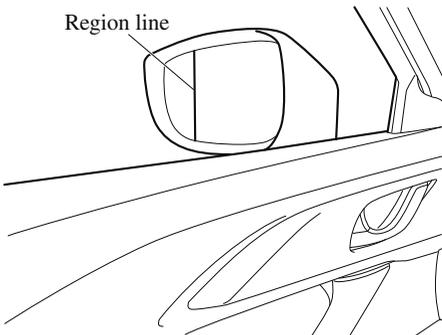
***Be sure to look over your shoulder before changing lanes:***

*Changing lanes without taking into account the actual distance of the 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.*

**NOTE**

***(Driver's Side Wide Angle Mirror\*)***

*The wide angle mirror has two curvatures on its surface separated by a region line into outer and inner regions. The inner region is a standard convex mirror whereas the outer region allows for a wider range of visibility within the same sweep. This combination allows for better assurance when making lane changes.*



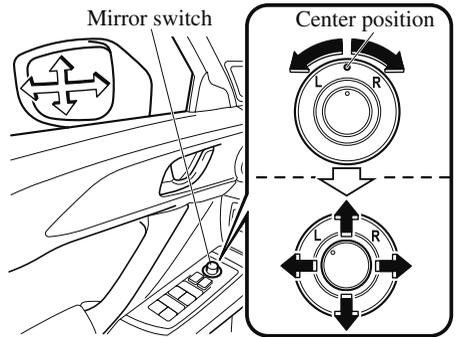
*The perceived distance of objects in the outer and inner regions of the wide angle mirror is different. Objects appearing in the outer region are actually further away than they are in the inner region.*

### Power mirror adjustment

The ignition must be switched to ACC or ON position.

To adjust:

1. Rotate the mirror switch to the left **L** or right **R** to choose the left or right side mirror.
2. Press the mirror switch in the appropriate direction.



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

## Folding outside mirror

### **⚠ WARNING**

**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, and you could have an accident.

**Do not touch a power folding outside mirror while it is moving:** Touching the power folding outside mirror when it is moving is dangerous. Your hand could be pinched and injured or the mirror could be damaged.

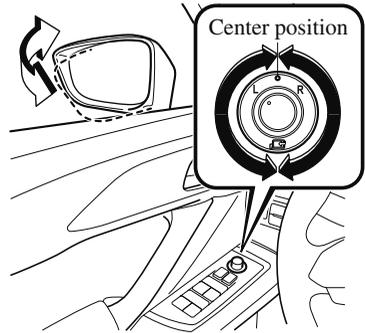
**Use the switch to set the mirror to the on-road position:** Setting the power folding outside mirror to the on-road position by hand is dangerous. The mirror will not lock in position and will prevent effective rearview visibility.

**Only operate the power folding outside mirror with the vehicle safely parked:** Operating the power folding outside mirror while the vehicle is moving is dangerous. Wind blast on the mirror will cause them to collapse and you will be unable to return it to the on-road position, preventing rearview visibility.

The ignition must be switched to ACC or ON position.

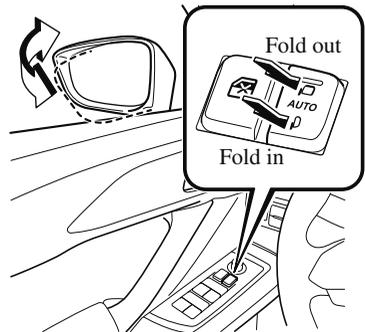
### **Type A**

To fold, rotate the outside mirror switch. To return the mirror to the driving position, rotate the switch to the center position.



### **Type B**

To fold the mirrors, press the lower side  $\rho$  of the outside mirror folding switch. To return the mirrors to their on-road positions, press the upper side  $\rho$  of the outside mirror folding switch.



# Mirrors

## Automatic folding function\*

The automatic folding function operates when the ignition is switched to ACC or OFF.

When the outside mirror automatic folding switch is pressed to the AUTO position (neutral position), the outside mirrors automatically fold in and out when the doors are locked and unlocked.

Also, when the ignition is switched ON or the engine is started, the outside mirrors fold out automatically.

### **NOTE**

*The outside mirrors may not fold in and out automatically under cold weather conditions.*

*If the outside mirrors do not fold in and out automatically, remove any ice or snow, and then press the upper or lower side of the outside mirror automatic folding switch to fold the outside mirrors in or out.*

## Engine-off outside mirror operation

The outside mirrors can be operated for about 40 seconds after the ignition is switched from ON to off.

## ▼ Rearview Mirror

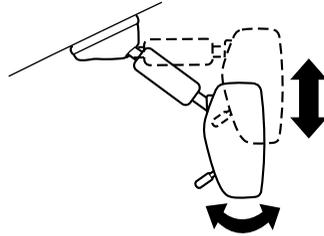


### **Do not stack cargo or objects higher than the seatbacks:**

*Cargo stacked higher than the seatbacks is dangerous. It can block your view in the rearview mirror, which might cause you to hit another car when changing lanes.*

## Rearview mirror adjustment

Before driving, adjust the rearview mirror to center on the scene through the rear window.



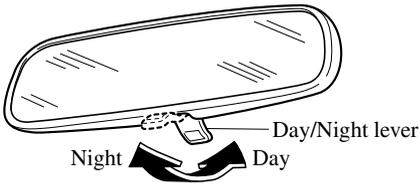
### **NOTE**

*For the manual day/night mirror, perform the adjustment with the day/night lever in the day position.*

## **Reducing glare from headlights**

### **Manual day/night mirror**

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

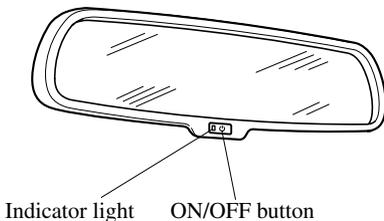


### **Auto-dimming mirror**

The auto-dimming mirror automatically reduces the glare of headlights from vehicles at the rear when the ignition is switched ON.

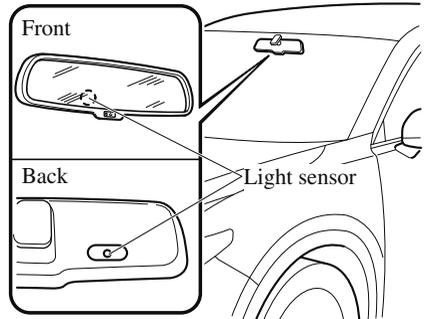
Press the ON/OFF button  $\phi$  to cancel the auto-dimming function. The indicator light will turn off.

To reactivate the auto-dimming function, press the ON/OFF button  $\phi$ . The indicator light will illuminate.



### **NOTE**

*Do not use glass cleaner or suspend objects on or around the light sensor. Otherwise, light sensor sensitivity will be affected and may not operate normally.*



*The auto-dimming function is canceled when the ignition is switched ON and the selector lever is in reverse (R).*

# Windows

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## Power Windows

The windows can be opened/closed by operating the power window switches.

### **WARNING**

**Make sure the opening is clear before closing a window:**

Closing a power window is dangerous. A person's hands, head, or even neck could be caught by the window and result in serious injury or even death. This warning applies especially to children.

**Never allow children to play with power window switches:**

Power window switches that are not locked with the power window lock switch would allow children to operate power windows unintentionally, which could result in serious injury if a child's hands, head or neck becomes caught by the window.

**Make sure nothing blocks the window just before it reaches the fully closed position or while fully holding up the power window switch:**

Blocking the power window just before it reaches the fully closed position or while fully holding up the power window switch is dangerous.

In this case, the jam-safe function cannot prevent the window from closing all the way. If fingers are caught, serious injuries could occur.

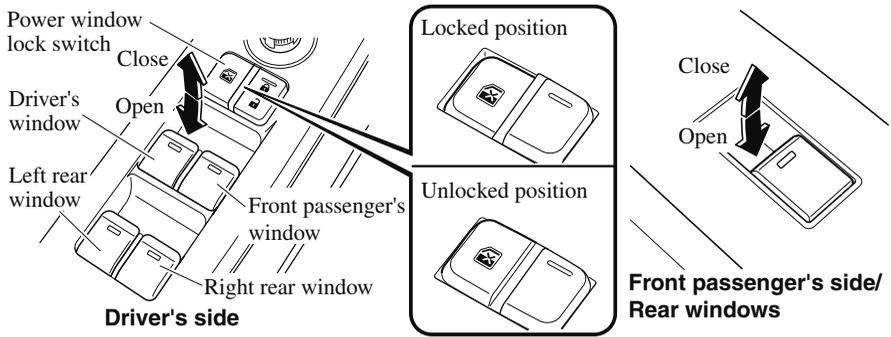
### **NOTE**

*When driving with only one of the rear windows open, your ears might experience a resonating sound. However, this does not indicate a problem. The sound can be reduced by slightly opening a front window or by changing the size of the rear window opening.*

## ▼ Opening/Closing Windows

The window opens while the switch is pressed and it closes while the switch is pulled up with the ignition switched ON. Do not open or close three or more windows at the same time.

The front passenger's side and rear windows can be opened/closed when the power window lock switch on the driver's door is in the unlock position. Keep this switch in the locked position while children are in the vehicle.



### **NOTE**

- A power window may no longer open/close if you continue to press the switch after fully opening/closing the power window. If the power window does not open/close, wait a moment and then operate the switch again.
- The passenger windows may be opened or closed using the master control switches on the driver's door.
- The power window can be operated for about 40 seconds after the ignition is switched from ON to ACC or off with all doors closed. If any door is opened, the power window will stop operating.  
For engine-off operation of the power window, the switch must be held up firmly throughout window closure because the auto-closing function will be inoperable.
- When the power window lock switch is in the locked position, the light on each power window switch, except for the driver's power window switch, turns off. The light may be difficult to see depending on the surrounding brightness.

# Windows

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## ▼ Auto-opening/Closing

To fully open the window automatically, press the switch completely down, then release. The window will fully open automatically.

To fully close the window automatically, pull the switch completely up, then release. The window will fully close automatically.

To stop the window partway, pull or press the switch in the opposite direction and then release it.

### **NOTE**

#### ***Power window system initialization procedure***

*If the battery was disconnected during vehicle maintenance, or for other reasons (such as a switch continues to be operated after the window is fully open/closed), the window will not fully open and close automatically.*

*The power window auto function will only resume on a power window that has been reset.*

1. *Switch the ignition ON.*
2. *Make sure that the power window lock switch located on the driver's door is not depressed.*
3. *Press the switch and fully open the window.*
4. *Pull up the switch to fully close the window and continue holding the switch for about 2 seconds after the window fully closed.*

5. *Make sure that the power windows operate correctly using the door switches.*

*After the system has been re-initialized, each passenger window can be fully opened or closed automatically using the master control switches.*

## ▼ Jam-safe Window

If foreign matter is detected between the window and the window frame while the window is closing automatically (refer to Auto-opening/Closing on page 3-38), the window stops closing and automatically opens partway.

### **NOTE**

- *The jam-safe function may operate under the following conditions:*
  - *A strong impact is detected while the window is closing automatically.*
  - *Window is closing automatically in very low temperatures.*
- *In the event the jam-safe function activates and the power window cannot be closed automatically, pull and hold the switch and the window will close.*
- *The jam-safe window function does not operate until the system has been reset.*

## Sunroof\*

The sunroof can be opened or closed when operating the overhead tilt/slide switch at the front seats.

### **! WARNING**

**Do not let passengers stand up or extend part of the body through the open sunroof while the vehicle is moving:**

*Extending the head, arms, or other parts of the body through the sunroof is dangerous. The head or arms could hit something while the vehicle is moving. This could cause serious injury or death.*

**Never allow children to play with the tilt/slide switch:**

*The tilt/slide switch would allow children to operate the sunroof unintentionally, which could result in serious injury if a child's hands, head or neck becomes caught by the sunroof.*

**Make sure the opening is clear before closing the sunroof:**

*A closing sunroof is dangerous. The hands, head, or even neck of a person, especially a child, could be caught in it as it closes, causing serious injury or even death.*

**Make sure nothing blocks the sunroof just before it reaches the fully closed position:**

*Blocking the sunroof just before it reaches the closed position is dangerous. In this case, the jam-safe function cannot prevent the sunroof from closing. If fingers are caught, serious injuries could occur.*

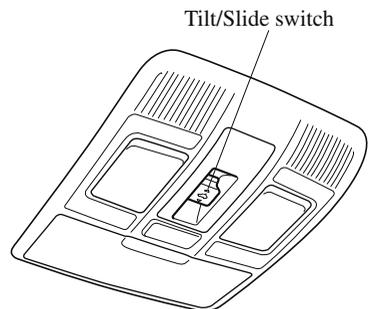
### **! CAUTION**

- *Do not sit on or put heavy items on the area where the sunroof opens and closes. Otherwise, the sunroof could be damaged.*
- *Do not open or close the sunroof forcefully during freezing temperatures or snowfall. Otherwise, the sunroof could be damaged.*
- *The sunshade does not tilt. To avoid damaging the sunshade, do not push it up.*
- *Do not close the sunshade while the sunroof is opening. Trying to force the sunshade closed could damage it.*

### ▼ Tilt/Slide Operation

The sunroof can be opened or closed electrically only when the ignition is switched ON.

- Before leaving the vehicle or washing your Mazda, make sure the sunroof is completely closed so that water does not get inside the cabin area.
- After washing your Mazda or after it rains, wipe the water off the sunroof before operating it to avoid water penetration which could cause rust and water damage to your headliner.



# Windows

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## Tilt Operation

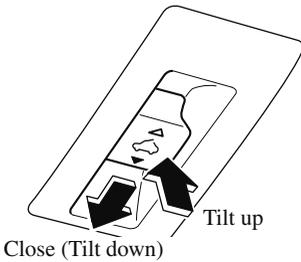
The rear of the sunroof can be tilted open to provide more ventilation.

To fully tilt automatically, momentarily press the tilt/slide switch.

To fully close automatically, momentarily press the tilt/slide switch in the forward direction.

To stop tilting partway, press the tilt/slide switch.

When the sunroof is already slid open and you want to tilt it open, first close the sunroof and then do a tilt operation.



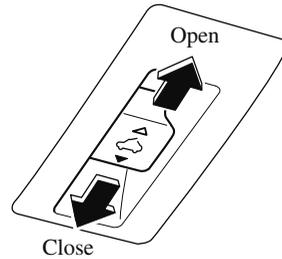
## Slide Operation

To fully open automatically, momentarily press the tilt/slide switch in the backward direction.

To fully close automatically, momentarily press the tilt/slide switch in the forward direction.

To stop sliding partway, press the tilt/slide switch.

When the sunroof is already tilted open and you want to slide it open, first close the sunroof and then do a slide operation.



### **NOTE**

*If the sunroof does not operate normally, do the following procedure:*

1. *Switch the ignition ON.*
2. *Press the tilt switch, to partially tilt open the rear of the sunroof.*
3. *Repeat Step 2. The rear of the sunroof tilts open to the fully open position, then closes a little.*

*If the reset procedure is performed while the sunroof is in the slide position (partially open) it will close before the rear tilt opens.*

### ▼ Jam-safe Sunroof

If a person's hands, head or an object blocks the sunroof while it is closing, the sunroof will stop and move in the open direction.

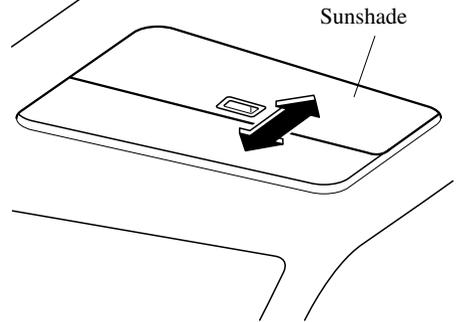
#### **NOTE**

- *The jam-safe function may operate under the following conditions:*
  - *A strong impact is detected while the sunroof is closing automatically.*
  - *The sunroof is closing automatically during very low temperatures.*
- *In the event the jam-safe function activates and the sunroof cannot be closed automatically, press the tilt/slide switch and the sunroof will close.*
- *The jam-safe sunroof function does not operate until the system has been reset.*

### ▼ Sunshade

The sunshade can be opened and closed by hand.

The sunshade opens at the same time as the sunroof slides open, but it must be closed by hand.



## Security System

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### Modification and Add-On Equipment

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



*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.

If someone attempts to start the engine with an unrecognized key, the engine will not start, thereby helping to prevent vehicle theft.

If you have a problem with the immobilizer system or the key, consult an Authorized Mazda Repairer.



- *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:*
  - *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 or hood, 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 Repairer.*

#### **NOTE**

- *The keys carry a unique electronic code. For this reason, and to assure your safety, obtaining a replacement key requires some waiting time. They are only available through an Authorized Mazda Repairer.*

- Always keep a spare key in case one is lost. If a key is lost, consult an Authorized Mazda Repairer as soon as possible.
- If you lose a key, an Authorized Mazda Repairer will reset the electronic codes of your remaining keys and immobilizer system. Bring all the remaining keys to an Authorized Mazda Repairer to reset. Starting the vehicle with a key that has not been reset is not possible.

## ▼ Operation

### 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 or in the glove compartment. Move the key to a location within the signal range, switch the ignition 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 ignition is switched from ON to off.

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



## Disarming

The system is disarmed when the ignition 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 ignition off, and then restart the engine. If the engine does not start after 3 or more tries, contact an Authorized Mazda Repairer.

### NOTE

- If the security indicator light flashes continuously while you are driving, do not shut off the engine. Go to an Authorized Mazda Repairer and have it checked. If the engine is shut off while the indicator light is flashing, you will not be able to restart it.
- Because the electronic codes are reset when the immobilizer system is repaired, the keys are needed. Make sure to bring all the keys to an Authorized Mazda Repairer so that they can be programmed.

# Security System

## Theft-Deterrent System\*

If the theft-deterrent system detects an inappropriate entry into the vehicle or the intrusion sensor detects movement in the vehicle which could result in the vehicle (with the intrusion sensor) or its contents being stolen, the alarm alerts the surrounding area of an abnormality by sounding the siren/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.

### Intrusion sensor\*

The intrusion sensor uses ultrasonic waves to detect movement inside the vehicle and to raise an alert of an intrusion into the vehicle.

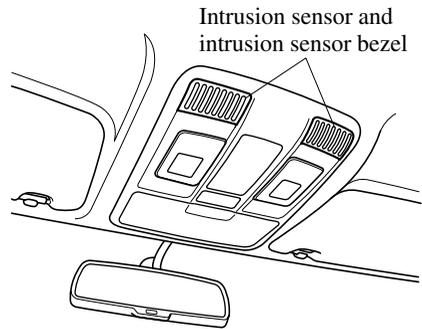
The intrusion sensor detects certain kinds of movement inside the vehicle, however, it may also respond to phenomenon outside the vehicle such as vibrations, loud noise, wind, and air currents.



*In order for the intrusion sensor to operate appropriately, be aware of the following:*

- *Do not hang clothing or objects from a head restraint or a coat hook.*
- *Return the extension sunvisors to their original positions.*
- *Do not blind the intrusion sensor by covering it or placing objects over it.*
- *Do not allow the intrusion sensor to get soiled or wipe it with a liquid.*

- *Do not shock or cause an impact to the intrusion sensor or the intrusion sensor bezel.*
- *Do not install seats that are not Mazda genuine products.*
- *To prevent obstruction of intrusion sensor, do not place objects or cargo near the intrusion sensor that are higher than the head restraints.*



### ▼ Operation

#### Siren/Horn triggering conditions

The siren/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 or an inside door-lock knob.
- Forcing open a door, the hood or the liftgate.
- Opening the hood by operating the hood release handle.
- Switching the ignition ON without using the push button start.

- **(With the intrusion sensor)**

The intrusion sensor detects a movement in the vehicle.

The system will be triggered again (up to 10 times) if one of the above conditions remains.

- **(With the intrusion sensor)**

Disconnecting the battery terminal (the hazard warning lights do not flash).

The system will be triggered about 10 times.

**NOTE**

- *The liftgate does not open while the theft-deterrent system is operating.*
- *For vehicles equipped with the power liftgate, the liftgate can be opened even while the theft-deterrent system is operating by pressing the power liftgate button on the transmitter or the electric liftgate opener switch while carrying the key.*
- *If the battery goes dead while the theft-deterrent system is armed, the siren/horn will activate and the hazard warning lights will flash when the battery is charged or replaced.*

▼ **How to Arm the System**

1. Close the windows and the sunroof\* securely.

**NOTE**

**(With the intrusion sensor)**

*Even with a window or the sunroof\* open, the system can be armed, however, leaving the windows and the sunroof\* even partially open can invite theft, and wind blowing into the vehicle could trigger the alarm.*

*The intrusion sensor function can also be cancelled.*

*Refer to Canceling the Intrusion Sensor (With Intrusion Sensor) on page 3-46.*

2. Switch the ignition OFF.
3. Make sure the hood, the doors, and the liftgate are closed.
4. Press the lock button on the transmitter or lock the driver's door from the outside with the auxiliary key. The hazard warning lights will flash once.

**(With the advanced keyless function)**

Press a request switch.

The security indicator light 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 all the doors, the liftgate and the hood closed. Refer to Transmitter on page 3-4.*

## Security System

---

· *The system will disarm if one of the following operations takes place within 20 seconds after pressing the lock button:*

- *Unlocking any door.*
- *Opening any door.*
- *Opening the hood.*
- *Switching the ignition ON.*

*To rearm the system, do the arming procedure again.*

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

### ▼ **Canceling the Intrusion Sensor (With Intrusion Sensor)**

If the theft deterrent system has been armed while any of the following conditions are present, cancel the intrusion sensor to prevent the alarm from triggering unnecessarily.

- Leaving the vehicle with a movable object, passengers or pets remaining inside.
- Leaving an object inside the vehicle that can roll around, such as when the vehicle is placed on a tilting, unstable surface when being shipped.
- Hanging small objects/accessories in the vehicle, hanging clothing on a coat hook, or placing other items which can move easily inside the vehicle.

- Parking in an area where there is strong vibration or loud noise.
- When using a high pressure or automatic car wash.
- Continuous shock and vibration from hail or thunder and lightning is transmitted to the vehicle.
- Doors are locked with a window or the sunroof\* left open.
- An accessory heater or device that produces moving air and vibration operates while the theft deterrent system is armed.

#### **NOTE**

*If any door or the liftgate remains closed for 30 seconds, all the doors and the liftgate automatically re-lock and the theft deterrent system arms even if a window and the sunroof\* is left open.*

To cancel the intrusion sensor, press the intrusion sensor cancel button on the transmitter within 20 seconds after pressing the lock button.

The hazard warning lights will flash three times.

#### **NOTE**

- *To reactivate the intrusion sensor, turn off the armed theft-deterrent system and then rearm it.*
- *The intrusion sensor is operational when the theft-deterrent system is armed. To cancel the intrusion sensor, press the intrusion sensor cancel button each time the theft-deterrent system is armed.*

**▼ 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 transmitter.
- Starting the engine with the push button start.
- **(With the advanced keyless function)**
  - Pressing a request switch on the doors.

The hazard warning lights will flash twice.

**NOTE**

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

**▼ To Stop the Alarm**

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

- Pressing the unlock button on the transmitter.
- Starting the engine with the push button start.
- **(With the advanced keyless function)**
  - Pressing a request switch on the doors.
  - Pressing the electric liftgate opener while the key is being carried.
  - Pressing the power liftgate button on the transmitter.

The hazard warning lights will flash twice.

## Driving Tips

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### Break-In Period

No special break-in is necessary, but a few precautions in the first 1,000 km (600 miles) may add to the performance, economy, and life of the vehicle.

- Do not race the engine.
- Do not maintain one constant speed, either slow or fast, for a long period of time.
- Do not drive constantly at full-throttle or high engine rpm for extended periods of time.
- Avoid unnecessary hard stops.
- Avoid full-throttle starts.
- Do not tow a trailer.

### Saving Fuel and Protection of the Environment

How you operate your Mazda determines how far it will travel on a tank of fuel. Use these suggestions to help save fuel and reduce CO<sub>2</sub>.

- Avoid long warm-ups. Once the engine runs smoothly, begin driving.
- Avoid fast starts.
- Drive at lower speeds.
- Anticipate when to apply the brakes (avoid sudden braking).
- Follow the maintenance schedule (page 6-3) and have an expert repairer, we recommend an Authorized Mazda Repairer perform inspections and servicing.
- Use the air conditioner only when necessary.
- Slow down on rough roads.
- Keep the tires properly inflated.
- Do not carry unnecessary weight.
- Do not rest your foot on the brake pedal while driving.
- Keep the wheels in correct alignment.
- Keep windows closed at high speeds.
- Slow down when driving in crosswinds and headwinds.

### 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.*

## Hazardous Driving

### WARNING

**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.*

**Avoid sharp turns, excessive speed and abrupt maneuvers when driving this vehicle:**

*Sharp turns, excessive speed and abrupt maneuvering of this vehicle are dangerous as it could result in the increased risk of loss of vehicle control, vehicle roll-over, personal injury or death.*

*This vehicle has a higher center of gravity. Vehicles with a higher center of gravity such as utility vehicles handle differently than vehicles with a lower center of gravity. Utility vehicles are not designed for cornering at high speeds any more than low profile sports cars are designed to perform satisfactorily under off-road conditions.*

*In addition, utility vehicles have a significantly higher rollover rate than other types of vehicles.*

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

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 4-72.
- If you get stuck, select a lower gear and accelerate slowly. Do not spin the front 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 front wheels.

**NOTE**

*Use snow chains only on the front wheels.*

## Floor Mat

We recommend the use of Genuine Mazda floor mats.

### WARNING

**Make sure the floor mats are secured with the grommets or the retainers 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 or retainers.

There are various ways to secure floor mats depending on the type used, therefore secure the mat according to the type.

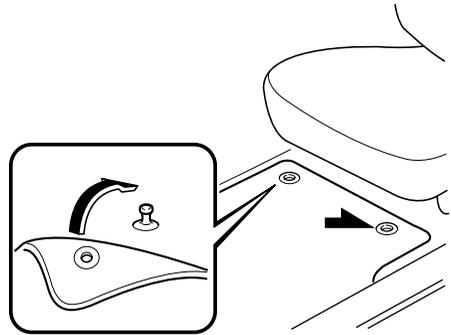
After installing the floor mat, make sure that it does not slide from side to side or back and forth, and that there is sufficient clearance with the accelerator and brake pedals on the driver's side.

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.



When setting a floor mat, position the floor mat so that its grommets or retainers are inserted over the pointed end of the retention posts.

## Rocking the Vehicle

### WARNING

**Do not spin the wheels at high speed, 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.*

### CAUTION

*Too much rocking may cause engine overheating, transaxle 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 selector lever from D to R.

## 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 expert repairer, we recommend an Authorized Mazda Repairer to check the following:

- Have the proper ratio of antifreeze in the radiator.  
Refer to Engine Coolant on page 6-22.
- 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 6-19).
- 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 6-24).

## Driving Tips

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### NOTE

- Remove snow before driving. Snow left on the windshield is dangerous as it could obstruct vision.
- 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



**Use only the same size and type tires (snow, radial, or non-radial) on all four wheels:**

Using tires different in size or type is dangerous. Your vehicle's handling could be greatly affected and result in an accident.



Check local regulations before using studded tires.

### Use snow tires on all four wheels

Do not exceed the maximum permissible speed for your snow tires or legal speed limits.

### ▼ 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.
- 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.

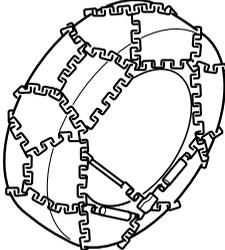
**NOTE**

- If your vehicle is equipped with the tire pressure monitoring system, the system may not function correctly when using tire chains.
- Use of tire chains on a vehicle equipped with P255/50R20 (Left-hand drive model)/255/50R20 (Right-hand drive model) specification tires could cause interference with the vehicle body and scratching. If tire chains are to be used, replace both front and rear tires with P255/60R18 (Left-hand drive model)/255/60R18 (Right-hand drive model) tyres. Please consult an Authorized Mazda Repairer.

Install the chains on the front tires only.  
Do not use chains on the rear tires.

**Tire chain selection (Europe)**

Mazda recommends hexagon type steel ring chains. Select the proper type according to your tire size.



Tire size	Tire chain
255/60R18	Hexagon type
P255/60R18	Hexagon type

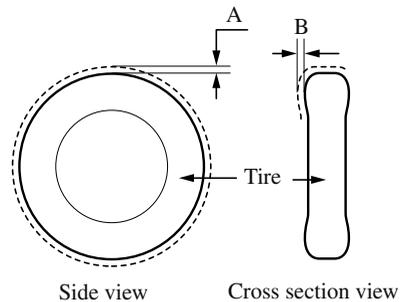
**NOTE**

Although Mazda recommends hexagon type steel ring chains, all chains within the installation specifications may be used.

**Installation specification (Europe)**

When installing tire chains, the distance between the tire tread and the chain must be within the prescribed limits in the following table.

Distance [Unit: mm (in)]	
A	B
MAX 13 (0.51)	MAX 13 (0.51)

**Installing the chains**

1. Secure the chains on the front 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).

## Driving Tips

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### Driving In Flooded Area

#### 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

*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 expert repairer, we recommend an Authorized Mazda Repairer.*

## Turbocharger Information

 **CAUTION**

- *After driving at freeway speeds or up a long hill, idle the engine at least 30 seconds before stopping it. Otherwise, the turbocharger could be damaged.*
- *Racing or over-revving the engine, particularly after it's just been started, can damage the turbocharger.*
- *To protect the engine from damage, the engine is designed so that it cannot be raced just after starting it in extremely cold weather.*

The turbocharger greatly enhances engine power. Its advanced design provides improved operation and requires minimum maintenance.

To get the most from it, observe the following.

1. Change engine oil and filter according to Scheduled Maintenance (page 6-3).
2. Use only recommended engine oil (page 6-19). Extra additives are NOT recommended.

## Towing Caravans and Trailers (Russia)

Your Mazda was designed and built primarily to carry passengers and cargo.

If you tow a trailer, follow these instructions because driver and passenger safety depends on proper equipment and safe driving habits. Towing a trailer will affect handling, braking, durability, performance, and economy.

Never overload vehicle or trailer. Consult an Authorized Mazda Dealer if you need further details.



➤ Do not tow a trailer during the first 1,000 km (600 miles) of your new Mazda. If you do, you may damage the engine, transaxle, differential, wheel bearings, and other power train components.

### NOTE

Your vehicle is equipped with a Trailer Stability Assist (TSA) mechanism, which enhances vehicle stability when towing a trailer.

Refer to Trailer Stability Assist (TSA) on page 4-76.

### ▼ Weight Limits

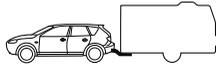
The total trailer weight, gross combination weight and trailer tongue load must be within the prescribed limits in the Trailer Towing-Load Table.

#### TOTAL TRAILER WEIGHT:



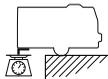
Sum of weights of the trailer and its load.

#### GROSS COMBINATION WEIGHT:



Sum of total trailer weight and towing vehicle weight; including trailer hitch, vehicle passengers, and vehicle load.

#### TRAILER TONGUE LOAD:



The weight exerted on the trailer tongue. It is varied by changing the weight distribution when loading the trailer.

### **CAUTION**

Be aware of the towing load weight differences when towing at high altitudes. For altitudes exceeding 1,000 meter (3,280 ft 10 in), always reduce the towing load by 10% for every 1,000 meter (3,280 ft 10 in) increase in altitude from the load indicated under the gross combination weight heading in the maximum trailer towing-load table. If the determined maximum total towing load weight is exceeded, the engine and other power train parts may be damaged.

### Maximum trailer towing-load table

#### Gradient up to 12%

MODEL	TOTAL TRAILER WEIGHT		GROSS COMBINATION WEIGHT
	Trailer without brake	Trailer with brake	Trailer with brake
2WD	750 kg (1,653.4 lb)	2,500 kg (5,511.5 lb)	5,000 kg (1,1023.0 lb)
4WD	750 kg (1,653.4 lb)	2,500 kg (5,511.5 lb)	5,060 kg (1,1155.2 lb)

TRAILER TONGUE LOAD: 100 kg (220.4 lb)

### **WARNING**

**Always keep tow loads within specified limits as indicated in the Trailer Towing-Load Table:** Attempting to tow loads greater than those specified is dangerous as it may cause serious handling and performance problems that could result in personal injury or vehicle damage, or both.

**Always keep the trailer tongue load within the specified limits in the Trailer Towing-Load Table:**

Loading the trailer with more weight in the rear than in the front is dangerous. This could cause loss of vehicle control and an accident.

#### **NOTE**

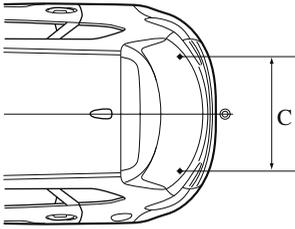
- The total trailer weight and tongue load can be determined by weighing the trailer on platform scales at a highway weighing station or a trucking company.
- Appropriate total trailer weight and tongue load may prevent the danger of trailer sway from crosswinds, rough roads, or other causes.

# Towing

## ▼ Trailer Hitch

When towing a trailer, use an appropriate trailer hitch. We recommend using a genuine Mazda trailer hitch. Use the original holes drilled by the vehicle manufacture for securing the trailer hitch. Contact your Authorized Mazda Dealer for more information.

### Trailer hitch installation area

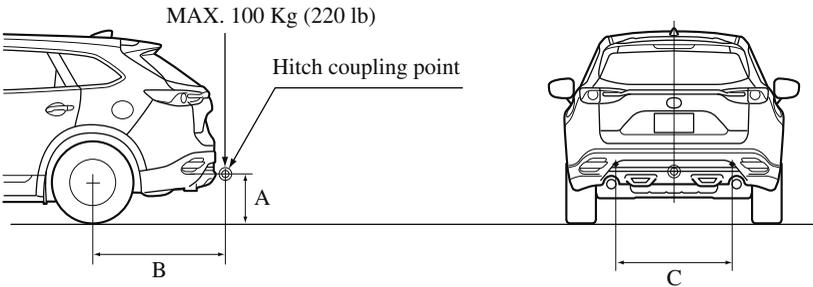


Unit: mm (in)

A:350—420 (13.8—16.5)

B:1193.2 (46.976)

C:1046.9 (41.217)



## ▼ Tires

When towing a trailer, make sure all tires are inflated to the recommended cold-tire pressure, as indicated on the tire pressure chart on the driver's door frame. Trailer tire size, load rating, and inflation pressures should conform to tire manufacturer specifications.



### **Never use the temporary spare tire when towing:**

*Using the temporary spare tire on your vehicle when towing a trailer is dangerous as it could result in tire failure, loss of control, and injury to vehicle occupants.*

## ▼ Safety Chains

Safety chains must be used as a precautionary measure should the trailer become unintentionally unhitched. They should cross under the trailer tongue and attach to the hitch. Leave enough slack to allow full turns. Consult literature published by your trailer or hitch manufacturer for more details.

**⚠ WARNING**

**Make sure the safety chain is securely attached to both the trailer and the vehicle prior to departure:**

*Towing a trailer without using a safety chain securely attached to both the trailer and the vehicle is dangerous. If damage occurs to the coupling unit or hitch ball, the trailer could wander into another lane and cause a collision.*

**▼ Trailer Lights****⚠ CAUTION**

*Do not connect a trailer lighting system directly to the lighting system of your Mazda. This may damage your vehicle's electrical system and lighting systems. To connect the lighting system, consult an Authorized Mazda Dealer.*

**▼ Trailer Brakes**

Check the Maximum trailer towing-load table in Weight Limits (page 3-56), and if your trailer weight exceeds the value in the TOTAL TRAILER WEIGHT (Trailer without brake), trailer brakes are required.

If your trailer has brakes, make sure they meet regulations.

**⚠ WARNING**

**Do not connect a hydraulic trailer-brake system to your vehicle's brake system:**

*Connecting a hydraulic trailer-brake system directly to the vehicle brake system is dangerous and will result in inadequate braking and possible injury.*

**▼ Trailer Towing Tips****Before driving**

- Verify that your Mazda maintains a near-normal attitude when a loaded or unloaded trailer is connected. Do not drive if it has an abnormal front-up or front-down position. Inspect for incorrect tongue load, worn suspension parts, and trailer overloading. Have the vehicle inspected by an expert repairer, we recommend an Authorized Mazda Repairer.
- Make sure the trailer cargo is secure to prevent it from shifting.
- Make sure the mirrors meet all government regulations. Inspect them.
- Before starting out, inspect the operation of all vehicle and trailer lights and all vehicle-to-trailer connections. Stop and re-inspect all lights and connections after driving a short distance.

# Towing

---

## Driving

- Your Mazda will handle differently with a trailer in tow, so practice turning, backing, and stopping in a traffic-free area.
- Take time to get accustomed to the extra weight and length.
- Do not exceed 100 km/h (62 mph) with a trailer in tow. If the local legal maximum speed with a trailer in tow is less than 100 km/h (62 mph), do not exceed the legal speed.



*If the vehicle exceeds 100 km/h (62 mph) with a trailer in tow, the vehicle could be damaged.*

- When ascending a hill, shift into a lower gear to reduce the possibility of overloading or overheating the engine, or both.
- When descending a hill, shift into a lower gear and use engine compression as a braking effect. Pay constant attention to speed and use the brakes only as needed. Holding the brake pedal down for a prolonged period may cause the brakes to overheat and lose power.

## Parking

Avoid parking on an incline with a trailer. If this must be done, follow these instructions.

### **Parking on an Incline**

1. Set the parking brake and the brakes.
2. Have someone block the wheels of the vehicle and trailer while you apply the brakes.
3. After the wheels are blocked, release the parking brake and the brakes slowly, allowing the blocks to bear the load.
4. Set the parking brake firmly.
5. If the vehicle has an automatic transaxle, put the selector lever in P. If it has a manual transaxle, place the gear shift in 1 or R.

### **Starting on an Incline**

1. Start the engine (page 4-5).
2. Release the parking brake and slowly pull away a short distance from the wheel blocks.
3. Stop on the nearest level ground, set the parking brake, and pick up the wheel blocks.

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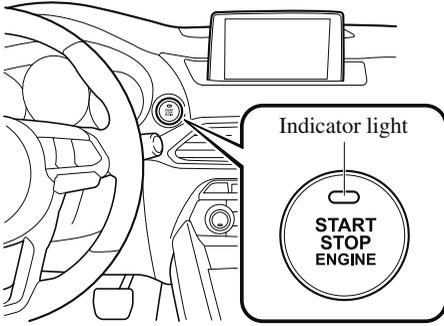
# Start/Stop Engine

## Ignition Switch

### ▼ Push Button Start Positions

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

Each time the push button start is pressed, the ignition switches in the order of off, ACC, and ON. Pressing the push button start again from ON switches the ignition off.



### NOTE

- The engine starts by pressing the push button start while depressing the brake pedal. To switch the ignition position, press the push button start without depressing the pedal.
- Do not leave the ignition switched ON while the engine is not running. Doing so could result in the battery going dead. If the selector lever is in the P position, and the ignition is in ACC, the ignition switches off automatically after about 25 minutes.

### Off

The power supply to electrical devices turns off and the push button start indicator light (amber) also turns off. In this position the steering wheel is locked.

### ! WARNING

**Before leaving the driver's seat, always switch the ignition off, set the parking brake, and make sure the selector lever is in P:**

Leaving the driver's seat without switching the ignition off, setting the parking brake, and shifting the selector lever to P 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 ignition off, as leaving it in another position will disable some of the vehicle's security systems and run the battery down.

### NOTE

#### (Locked steering wheel)

If the push button start indicator light (green) is flashing and the beep sound is heard, this indicates that the steering wheel is not unlocked. To unlock the steering wheel, press the push button start while moving the steering wheel left and right.

**ACC (Accessory)**

Some electrical accessories will operate and the indicator light (amber) illuminates. In this position the steering wheel is unlocked.

**NOTE**

*The keyless entry system does not function while the push button start has been pressed to ACC, and the doors will not lock/unlock even if they have been locked manually.*

**ON**

This is the normal running position after the engine is started. The indicator light (amber) turns off. (The indicator light (amber) illuminates when the ignition is switched ON and the engine is not running.)

Some indicator lights/warning lights should be inspected before the engine is started (page 4-32).

**NOTE**

*When the push button start is pressed to ON, the sound of the fuel pump motor operating near the fuel tank can be heard. This does not indicate an abnormality.*

**Starting the Engine**** WARNING****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.*

**NOTE**

- *The key must be carried because the key carries an immobilizer chip that must communicate with the engine controls at short range.*
- *The engine can be started when the push button start is pressed from off, ACC, or ON.*
- *The push button start system functions (function which can start the engine by only carrying the key) 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 expert repairer; we recommend an Authorized Mazda Repairer for details. If the push button start system functions have been deactivated, you can start the engine by following the procedure indicated when the key battery goes dead. Refer to Engine Start Function When Key Battery is Dead on page 4-9.*

# Start/Stop Engine

· After starting a cold engine, the engine speed increases and a whining sound from the engine compartment can be heard.

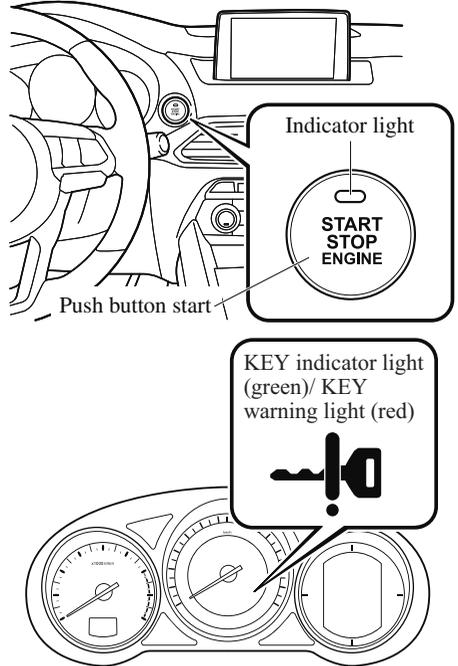
*This is for improved exhaust gas purification and does not indicate any parts defect.*

1. Make sure you are carrying the key.
2. Occupants should fasten their seat belts.
3. Make sure the parking brake is on.
4. Continue to press the brake pedal firmly until the engine has completely started.
5. Put the vehicle in park (P). If you must restart the engine while the vehicle is moving, shift into neutral (N).

### **NOTE**

*The starter will not operate if the selector lever is not in P or N and the brake pedal is not depressed sufficiently.*

6. Verify that the KEY indicator light (green) (if equipped) in the instrument cluster and the push button start indicator light (green) illuminate.



**NOTE**

- If the push button start indicator light (green) flashes, make sure that the key is being carried (for vehicles with a type A instrument cluster (page 4-32), messages are displayed in the instrument cluster).
- If the push button start indicator light (green) flashes with the key being carried, touch the key to the push button start and start the engine (for vehicles with a type A instrument cluster (page 4-32), messages are displayed in the instrument cluster). Refer to *Engine Start Function When Key Battery is Dead* on page 4-9.


**CAUTION**

If the KEY warning light (red) illuminates, 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 ignition to ACC or ON (for vehicles with a type A instrument cluster (page 4-32), messages are displayed in the instrument cluster). Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.

**NOTE**

- Under the following conditions, the KEY warning light (red) flashes after the push button start is pressed. This informs the driver that the push button start will not switch to ACC, even if it is pressed from off (for vehicles with a type A instrument cluster (page 4-32), messages are displayed in the instrument cluster).
  - The key battery is dead.
  - The key is out of operational range.
  - The key is placed in areas where it is difficult for the system to detect the signal (page 3-6).
  - A key from another manufacturer similar to the key is in the operational range.
- **(Forced engine starting method)**  
If the KEY warning light (red) illuminates, or the push button start indicator light (amber) flashes, this could indicate that the engine may not start using the usual starting method (for vehicles with a type A instrument cluster (page 4-32), messages are displayed in the instrument cluster). Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible. If this occurs, the engine can be force-started. Press and hold the push button start until the engine starts. Other procedures necessary for starting the engine, such as having the key in the cabin, and depressing the brake pedal are required.

## Start/Stop Engine

---

- *When the engine is force-started, the KEY warning light (red) (if equipped) remains illuminated and the push button start indicator light (amber) remains flashing.*
  - *When the selector lever is in the neutral (N) position, the KEY indicator light (green) (if equipped) and the push button start indicator light (green) do not illuminate.*
7. Press the push button start after both the KEY indicator light (green) (if equipped) in the instrument cluster and the push button start indicator light (green) illuminate.

### **NOTE**

- *After starting the engine, the push button start indicator light (amber) turns off and the ignition switches to the ON position.*
  - *After pressing the push button start and before the engine starts, the operation sound of the fuel pump motor from near the fuel tank can be heard, however, this does not indicate a malfunction.*
8. After starting the engine, let it idle for about ten seconds (Prohibited in Germany).

### **NOTE**

- **(Germany)**  
*Drive immediately after starting the engine. However do not use high engine speeds until reaching the operating temperature.*
- *Whether the engine is cold or warm, it should be started without the use of the accelerator.*
- *If the engine does not start the first time, refer to Starting a Flooded Engine under Emergency Starting. If the engine still does not start, have your vehicle inspected by an Authorized Mazda Repairer (page 7-31).*

## ▼ Engine Start Function When Key Battery is Dead

### CAUTION

When starting the engine by holding the transmitter over the push button start due to a dead key battery or a malfunctioning key, be careful not to allow the following, otherwise the signal from the key will not be received correctly and the engine may not start.

- Metal parts of other keys or metal objects touch the key.



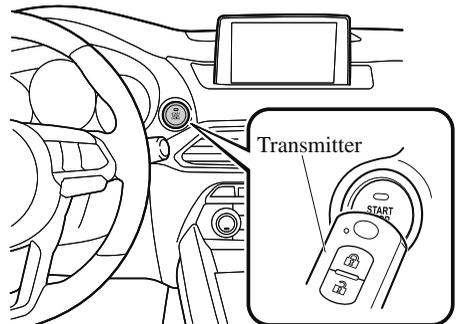
- Spare keys or keys for other vehicles equipped with an immobilizer system touch or come near the key.



- Devices for electronic purchases, or security passage touch or come near the key.

If the engine cannot be started due to a dead key battery, the engine can be started using the following procedure:

1. Continue to depress the brake pedal firmly until the engine has completely started.
2. Verify that the push button start indication light (green) flashes.
3. Touch the push button start using the backside of the key (as shown) while the push button start indicator light (green) flashes.



### **NOTE**

When touching the push button start using the backside of the key as shown in the illustration, touch the push button start with the lock switch side of the key facing up.

4. Verify that the push button start indicator light (green) turns on.
5. Press the push button start to start the engine.

## Start/Stop Engine

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### NOTE

- *The engine cannot be started unless the brake pedal is fully depressed.*
- *If there is a malfunction with the push button start function, the push button start indicator light (amber) flashes. In this case, the engine may start, however, have the vehicle checked at an expert repairer; we recommend an Authorized Mazda Repairer as soon as possible.*
- *If the push button start indicator light (green) does not illuminate, perform the operation from the beginning again. If it does not illuminate, have the vehicle checked at an expert repairer; we recommend an Authorized Mazda Repairer.*
- *To switch the ignition position without starting the engine, perform the following operations after the push button start indicator light (green) turns on.*
  1. *Release the brake pedal.*
  2. *Press the push button start to switch the ignition position. The ignition switches in the order of ACC, ON, and off each time the push button start is pressed. To switch the ignition position again, perform the operation from the beginning.*

### ▼ Emergency Operation for Starting the Engine

If the KEY warning light (red) illuminates, or the push button start indicator light (amber) flashes, this could indicate that the engine may not start using the usual starting method (for vehicles with a type A instrument cluster (page 4-32), messages are displayed in the instrument cluster). Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible. If this occurs, the engine can be force-started. Press and hold the push button start until the engine starts. Other procedures necessary for starting the engine such as having the key in the cabin, and depressing the brake pedal are required.

## Turning the Engine Off

### WARNING

#### **Do not stop the engine while the vehicle is moving:**

Stopping the engine while the vehicle is moving for any reason other than in an emergency is dangerous. Stopping the engine while the vehicle is moving will result in reduced braking ability due to the loss of power braking, which could cause an accident and serious injury.

1. Stop the vehicle completely.
2. Shift the selector lever to the P position and set the parking brake.
3. Press the push button start to turn off the engine. The ignition position is off.

### CAUTION

- When leaving the vehicle, make sure the push button start is off.

#### **NOTE**

- The cooling fan in the engine compartment could turn on for a few minutes after the ignition is switched from ON to OFF, whether or not the A/C is on or off, to cool the engine compartment quickly.
- If the system detects that the remaining battery power of the key is low when the ignition is switched from ON to ACC or OFF, the following is indicated. Replace with a new battery before the key becomes unusable. Refer to Key Battery Replacement on page 6-33.

*(Vehicle equipped with Type A instrument cluster)*

*A message is indicated in the display of the instrument cluster.*

*(Vehicle equipped with Type B instrument cluster)*

*The KEY indicator light (green) flashes for approximately 30 seconds.*

*Refer to Warning/Indicator Lights on page 4-32.*

- *If the engine is turned off while the selector lever is in a position other than P, the ignition switches to ACC.*

#### **▼ Emergency Engine Stop**

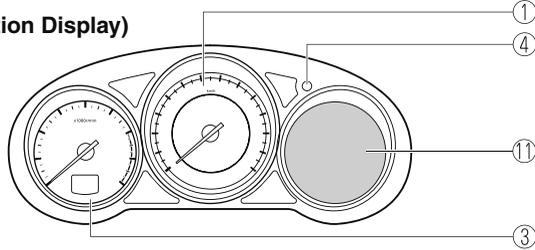
Continuously pressing the push button start or quickly pressing it any number of times while the engine is running or the vehicle is being driven will turn the engine off immediately. The ignition switches to ACC.

# Instrument Cluster and Display

## Meters and Gauges

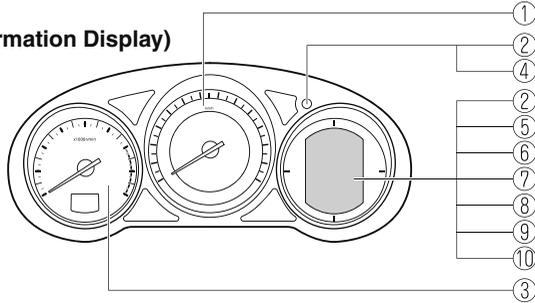
### Instrument Cluster Type A

(With Multi-information Display)

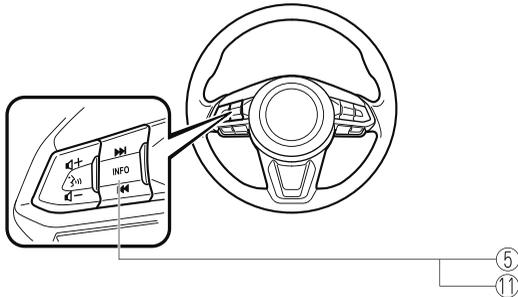


### Type B

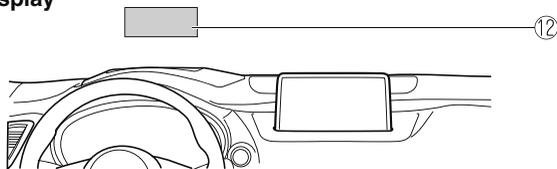
(Without Multi-information Display)



### Steering Switch



### Active Driving Display



- ① Speedometer..... page 4-13
- ② Odometer, Trip Meter and Trip Meter Selector..... page 4-13

# Instrument Cluster and Display

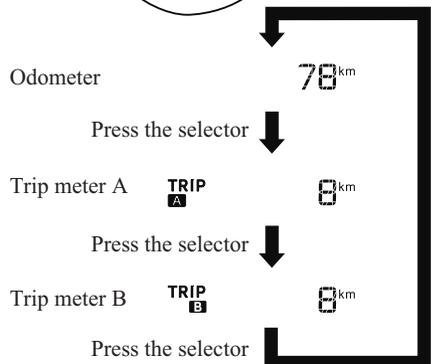
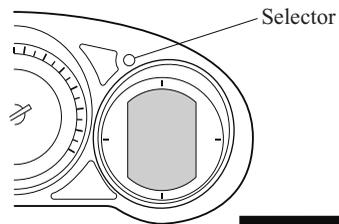
- ③ Tachometer..... page 4-14
- ④ Dashboard Illumination..... page 4-16
- ⑤ Trip Computer and INFO Switch..... page 4-18
- ⑥ Engine Coolant Temperature Gauge..... page 4-15
- ⑦ Fuel Gauge..... page 4-15
- ⑧ Outside Temperature Display..... page 4-17
- ⑨ Cruise Control Set Vehicle Speed Display..... page 4-18
- ⑩ Vehicle Speed Alarm..... page 4-19
- ⑪ Multi-information Display and INFO Switch..... page 4-20
- ⑫ Active Driving Display..... page 4-29

## ▼ Speedometer

The speedometer indicates the speed of the vehicle.

## ▼ Odometer, Trip Meter and Trip Meter Selector (Without Multi-information Display)

The display mode can be changed from odometer to trip meter A to trip meter B and then back to odometer by pressing the selector while one of them is displayed. The selected mode will be displayed.



# Instrument Cluster and Display

## Odometer

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

## Trip meter

The trip meter can record the total distance of two trips. One is recorded in trip meter A, and the other is recorded in trip meter B.

For instance, trip meter A can record the distance from the point of origin, and trip meter B can record the distance from where the fuel tank is filled.

When trip meter A is selected, pressing the selector again within one second will change to trip meter B mode.

When trip meter A is selected, TRIP A will be displayed. When trip meter B is selected, TRIP B will be displayed.

The trip meter records the total distance the vehicle is driven until the meter is again reset. Return it to "0.0" by depressing and holding the selector for one second or more. Use this meter to measure trip distances and to compute fuel consumption.

## **NOTE**

· If the fuel economy data is reset using the fuel economy monitor, or trip A is reset using the trip meter when the function which synchronizes the fuel economy monitor and the trip meter is on, the fuel economy data and trip A are reset simultaneously.

Refer to Fuel Economy Monitor on page 4-77.

· Only the trip meters record tenths of kilometers (miles).

· The trip record will be erased when:

· The power supply is interrupted (blown fuse or the battery is disconnected).

· The vehicle is driven over 9999.9 km (mile).

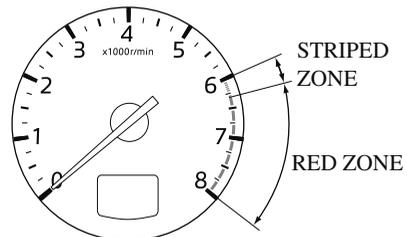
## ▼ **Tachometer**

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



Do not run the engine with the tachometer needle in the RED ZONE.

This may cause severe engine damage.



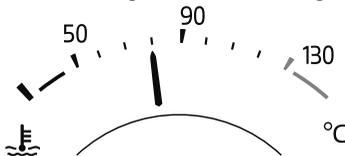
# Instrument Cluster and Display

## 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.

## ▼ Engine Coolant Temperature Gauge (Without Multi-information Display)

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



## ⚠ CAUTION

If the engine coolant temperature gauge indicator flashes, there is a possibility of overheating. Park the vehicle in a safe place immediately and take appropriate measures. If the vehicle continues to be driven, it could cause damage to the engine.

Refer to *Overheating* on page 7-32.

## NOTE

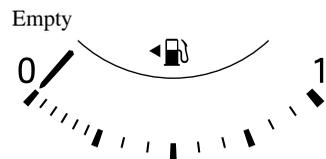
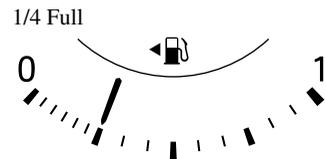
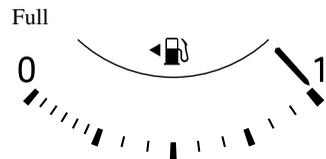
The temperature unit (Centigrade/ Fahrenheit) of the engine coolant gauge display changes in conjunction with the temperature unit of the outside temperature display.

Refer to *Personalization Features* on page 9-10.

During normal driving, the engine coolant temperature stabilizes at 100 °C (210 °F) or less, and the gauge indicates a range lower than 100 °C (210 °F).

## ▼ Fuel Gauge (Without Multi-information Display)

The fuel gauge shows approximately how much fuel is remaining in the tank when the ignition is switched ON. We recommend keeping the tank over 1/4 full.



If the low fuel warning light illuminates or the fuel level is very low, refuel as soon as possible.

Refer to *Taking Action* on page 7-47.

# Instrument Cluster and Display

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## 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 display indicating a quarter or less remaining fuel has more segments to show the remaining fuel level in greater detail.
- The direction of the arrow (➔) indicates that the fuel-filler lid is on the left side of the vehicle.

## ▼ Dashboard Illumination

### (Without auto-light control)

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

### (With auto-light control)

When the position lights are turned on with the ignition 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 position lights are turned on in the daytime, the dashboard illumination does not dim.

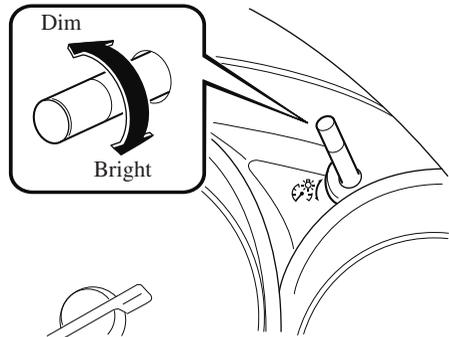
## NOTE

- **(With auto-light control)**  
When the ignition 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 dimmer may cancel after the brightness is detected.

- When the position lights are turned on, the position lights indicator light in the instrument cluster turns on.  
Refer to *Headlights* on page 4-50.

The brightness of the instrument cluster and dashboard illuminations can be adjusted by rotating the knob.

- The brightness decreases by rotating the knob to the left. A beep sound will be heard when the knob has been rotated to the maximum dim position.
- The brightness increases by rotating the knob to the right.



## Function for cancelling illumination dimmer

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

# Instrument Cluster and Display

## NOTE

- **(With Multi-information Display)**  
The illumination dimmer can be canceled by pressing the dashboard illumination knob.
- When the illumination dimmer is canceled, the instrument cluster cannot be dimmed even if the position lights are turned on.
- When the illumination dimmer is canceled, the screen in the center display switches to constant display of the daytime screen.

## ▼ Outside Temperature Display (Without Multi-information Display)

When the ignition is switched ON, the outside temperature is displayed.

### (European model)



### (Except European model)



## NOTE

- Under the following conditions, the outside temperature display may differ from the actual outside temperature depending on the surroundings and vehicle conditions:
  - Significantly cold or hot temperatures.
  - Sudden changes in outside temperature.
  - The vehicle is parked.
  - The vehicle is driven at low speeds.

## Changing the Temperature Unit of the Outside Temperature Display

The outside temperature unit can be switched between Celsius and Fahrenheit using the following procedure.

Settings can be changed by operating the center display screen.

Refer to Personalization Features on page 9-10.

## NOTE

When the temperature unit indicated in the outside temperature display is changed, the temperature unit indicated in the engine coolant gauge display changes in conjunction with it.

## Outside Temperature Warning\*

When the outside temperature is low, the indication flashes and a beep sound is heard to warn the driver of the possibility of icy roads.

If the outside temperature is lower than about 4 °C (39 °F), the outside temperature display and the ❄ mark flashes for about ten seconds and a beep sound is heard once.

## NOTE

If the outside temperature is lower than -20 °C (-4 °F), the beep sound does not operate. However, the ❄ mark illuminates.

# Instrument Cluster and Display

## ▼ Cruise Control Set Vehicle Speed Display (Without Multi-information Display)\*

The vehicle speed preset using the cruise control is displayed.

(European model)



80 km/h

(Except European model)



80 km/h

## ▼ Trip Computer and INFO Switch (Without Multi-information Display)

The following information can be selected by pressing the INFO switch with the ignition switched ON.

- Distance-to-empty mode
- Average fuel economy mode
- Current fuel economy mode

If you have any problems with your trip computer, consult an expert repairer, we recommend an Authorized Mazda Repairer.

### Distance-to-empty mode

This mode displays the approximate distance you can travel on the remaining fuel based on the fuel economy.

The distance-to-empty will be calculated and displayed every second.

(European model)



160

km

(Except European model)

RANGE

160

km

### **NOTE**

- Even though the distance-to-empty display may indicate a sufficient amount of remaining driving distance before refueling is required, refuel as soon as possible if the fuel level is very low or the low fuel warning light illuminates.
- The display may not change unless you add more than approximately 9 L (2.3 US gal, 1.9 Imp gal) of fuel.
- The distance-to-empty is the approximate remaining distance the vehicle can be driven until all the graduation marks in the fuel gauge (indicating the remaining fuel supply) disappear.
- If there is no past fuel economy information such as after first purchasing your vehicle or the information is deleted when the battery cables are disconnected, the actual distance-to empty/range may differ from the amount indicated.

### Average fuel economy mode

This mode displays the average fuel economy by calculating the total fuel consumption and the total traveled distance since purchasing the vehicle, re-connecting the battery after disconnection, or resetting the data. The average fuel economy is calculated and displayed every minute.

(European model)



10.5

L/100km

# Instrument Cluster and Display

(Except European model)

AVG  
**10.5** L/100km

To clear the data being displayed, press the INFO switch for more than 1.5 seconds. After pressing the INFO switch, - - - L/100 km (- - - mpg) will be displayed for about 1 minute before the fuel economy is recalculated and displayed.

## Current fuel economy mode

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

Current fuel economy will be calculated and displayed every 2 seconds.

(European model)

**10.5** L/100km

(Except European model)

CURRENT  
**10.5** L/100km

When you've slowed to about 5 km/h (3 mph), - - - L/100 km (- - - mpg) will be displayed.

## ▼ Vehicle Speed Alarm (Without Multi-information Display)\*

In this mode, the current setting for the vehicle speed alarm is displayed. You can change the vehicle speed setting at which the warning is triggered.

## **NOTE**

The vehicle speed alarm display is activated at the same time the beep sound is heard. The set vehicle speed flashes several times.

 **100** km/h

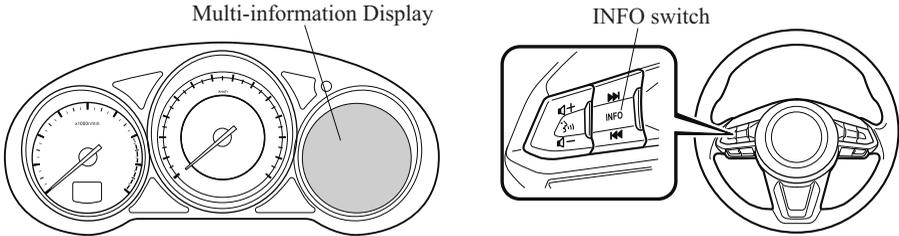
The vehicle speed alarm can be set using the center display.

## **NOTE**

- Always set the vehicle speed according to the laws and regulations of the country/city in which the vehicle is driven. In addition, always verify the speed of the vehicle using the speedometer.
- The vehicle speed alarm function can be set between 30 and 250 km/h (20 and 150 mph).

# Instrument Cluster and Display

## Multi-information Display and INFO Switch\*

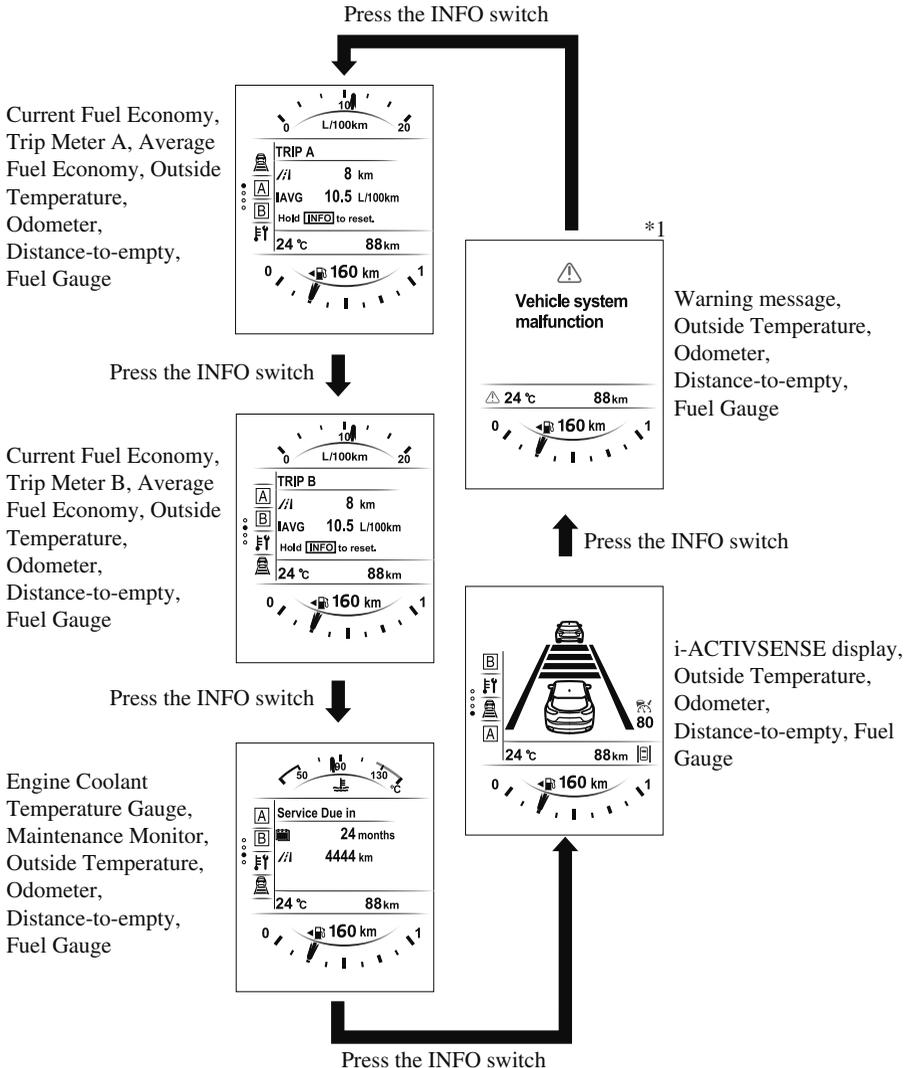


The multi-information display indicates the following information.

- Odometer
- Trip meter
- Engine coolant temperature gauge
- Fuel gauge
- Outside temperature
- Distance-to-empty
- Average fuel economy
- Current fuel economy
- Maintenance Monitor
- Blind Spot Monitoring (BSM) Display
- Distance Recognition Support System (DRSS) Display
- Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) System Display
- Mazda Radar Cruise Control (MRCC) Display
- Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) Display
- Cruise Control Display
- Vehicle Speed Alarm
- Warning message

# Instrument Cluster and Display

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

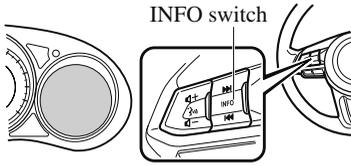


\*1:Displayed only when a warning occurs.

# Instrument Cluster and Display

## ▼ Odometer, Trip Meter and Trip Meter Selector

The odometer is constantly displayed on the screen when the ignition is switched ON, and the TRIP A or TRIP B screen can be displayed by operating the INFO switch.



Odometer, Trip meter A	<b>TRIP A</b>	
	//I	8 km
	IAVG	10.5 L/100km
	Hold <b>INFO</b> to reset.	
		<b>88km</b>
Press the INFO switch ↓		
Odometer, Trip meter B	<b>TRIP B</b>	
	//I	8 km
	IAVG	10.5 L/100km
	Hold <b>INFO</b> to reset.	
		<b>88km</b>

For instance, trip meter A can record the distance from the point of origin, and trip meter B can record the distance from where the fuel tank is filled.

When trip meter A is selected, TRIP A will be displayed. When trip meter B is selected, TRIP B will be displayed.

The trip meter and average fuel economy can be reset by pressing the INFO switch for 1.5 second or more while in each mode.

### NOTE

- Only the trip meters record tenths of kilometers (miles).
- The trip record will be erased when:
  - The power supply is interrupted (blown fuse or the battery is disconnected).
  - The vehicle is driven over 9999.9 km (mile).

### Odometer

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

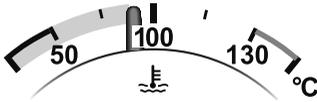
### Trip meter

The driving distance for a specified interval is indicated. Two types (TRIP A, TRIP B) of interval distance and the average fuel economy for each can be measured.

# Instrument Cluster and Display

## ▼ Engine Coolant Temperature Gauge

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



### ⚠ CAUTION

If the high engine coolant temperature warning light (red) turns on, there is a possibility of overheating. Park the vehicle in a safe place immediately and take appropriate measures. If the vehicle continues to be driven, it could cause damage to the engine.

Refer to *Overheating* on page 7-32.

### NOTE

- The temperature unit (Centigrade/ Fahrenheit) of the engine coolant gauge display changes in conjunction with the temperature unit of the outside temperature display.
- Refer to *Personalization Features* on page 9-10.
- During normal driving, the engine coolant temperature stabilizes at 100 °C (210 °F) or less, and the gauge indicates a range lower than 100 °C (210 °F).

## ▼ Fuel Gauge

The fuel gauge shows approximately how much fuel is remaining in the tank when the ignition is switched ON. We recommend keeping the tank over 1/4 full.



If the fuel level is low, (◀) and (0) turn an amber color. Refuel as soon as possible. Refer to *Taking Action* on page 7-47 .

### 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 display indicating a quarter or less remaining fuel has more segments to show the remaining fuel level in greater detail.
- The direction of the arrow (◀) indicates that the fuel-filler lid is on the left side of the vehicle.

## Instrument Cluster and Display

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### ▼ Outside Temperature Display

When the ignition is switched ON, the outside temperature is displayed.

4 °C ❄

#### **NOTE**

- *Under the following conditions, the outside temperature display may differ from the actual outside temperature depending on the surroundings and vehicle conditions:*
  - *Significantly cold or hot temperatures.*
  - *Sudden changes in outside temperature.*
  - *The vehicle is parked.*
  - *The vehicle is driven at low speeds.*

### Changing the Temperature Unit of the Outside Temperature Display

The outside temperature unit can be switched between Celsius and Fahrenheit using the following procedure.

Settings can be changed by operating the center display screen.

Refer to Personalization Features on page 9-10.

#### **NOTE**

*When the temperature unit indicated in the outside temperature display is changed, the temperature unit indicated in the engine coolant gauge display changes in conjunction with it.*

### Outside Temperature Warning\*

When the outside temperature is low, the indication flashes and a beep sound is heard to warn the driver of the possibility of icy roads.

If the outside temperature is lower than about 4 °C (39 °F), the outside temperature display and the ❄ mark flashes for about ten seconds and a beep sound is heard once.

#### **NOTE**

*If the outside temperature is lower than -20 °C (-4 °F), the beep sound does not operate. However, the ❄ mark illuminates.*

# Instrument Cluster and Display

## ▼ Distance-to-empty

This displays the approximate distance you can travel on the remaining fuel based on the fuel economy.

The distance-to-empty will be calculated and displayed every second.

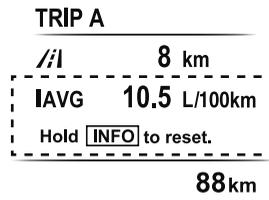


### NOTE

- Even though the distance-to-empty display may indicate a sufficient amount of remaining driving distance before refueling is required, refuel as soon as possible if the fuel level is very low or the low fuel warning light illuminates.
- The display will not change unless you add more than approximately 9 L (2.3 US gal, 1.9 Imp gal) of fuel.
- The distance-to-empty is the approximate remaining distance the vehicle can be driven until all the graduation marks in the fuel gauge indicating the remaining fuel supply disappear.
- If there is no past fuel economy information such as after first purchasing your vehicle or the information is deleted when the battery cables are disconnected, the actual distance-to empty/range may differ from the amount indicated.

## ▼ Average Fuel Economy

The average fuel economy is calculated every minute from the total traveled distance on the trip meter and the total fuel consumption, and the average fuel economy for either TRIP A or TRIP B is displayed.

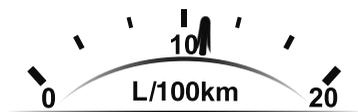


The average fuel economy and trip meters can be reset by pressing the INFO switch for 1.5 s or more while in each mode.

After the data is cleared, the fuel consumption is recalculated and the --- L/100 km (--- mpg) for the one minute prior to it being displayed is indicated.

## ▼ Current Fuel Economy

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



# Instrument Cluster and Display

---

## ▼ Maintenance Monitor

The following maintenance period notifications can be displayed by turning the Maintenance Monitor on.

- Scheduled Maintenance
- Tire Rotation
- Oil Change

For the setting method and indications for the maintenance monitor, refer to the Maintenance Monitor.

Refer to Maintenance Monitor on page 6-11.

The maintenance monitor displays the information when the ignition is switched ON.

### **NOTE**

*This function is inoperable while the vehicle is being driven.*

### **Message display**

When the remaining time or the distance approaches 0, a message is displayed each time the ignition is switched ON.



**Service Soon**

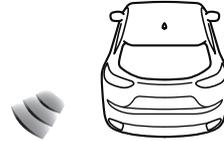
**500 km**

### **NOTE**

- If any of the INFO switch is pressed while a message is displayed, it will no longer be displayed the next time the ignition is switched ON.
- After the vehicle is serviced and the remaining time/distance is reset, the message for the next maintenance period will be displayed when the remaining distance or time to the next maintenance period approaches 0 (displays when engine is started).
- If there are multiple messages, they are displayed according to their order.
- If OFF is set for Messages, messages are not displayed.

## ▼ Blind Spot Monitoring (BSM) Display\*

Displays the system status.

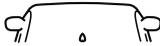


Refer to Blind Spot Monitoring (BSM) on page 4-90.

# Instrument Cluster and Display

## ▼ Distance Recognition Support System (DRSS) Display\*

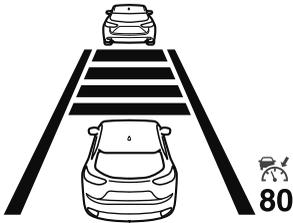
Displays the distance between your vehicle and the vehicle ahead.



Refer to Distance Recognition Support System (DRSS) on page 4-103.

## ▼ Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) Display\*

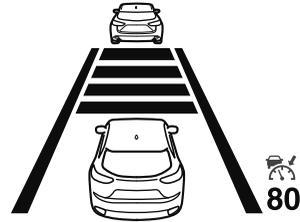
Displays the currently set system status.



Refer to Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) on page 4-121.

## ▼ Mazda Radar Cruise Control (MRCC) Display\*

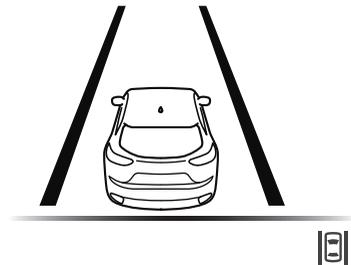
Displays the currently set system status.



Refer to Mazda Radar Cruise Control (MRCC) on page 4-111.

## ▼ Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) Display\*

Displays the system status.



Refer to Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) on page 4-134.

# Instrument Cluster and Display

---

## ▼ Cruise Control Set Vehicle Speed Display\*

The vehicle speed preset using the cruise control is displayed.



Refer to Cruise Control on page 4-170.

## ▼ Vehicle Speed Alarm\*

In this mode, the current setting for the vehicle speed alarm is displayed. You can change the vehicle speed setting at which the warning is triggered.

### NOTE

*The vehicle speed alarm display is activated at the same time the beep sound is heard. The set vehicle speed flashes several times.*



## Speed Warning 100 km/h

The vehicle speed alarm can be set using the center display.

### NOTE

- Always set the vehicle speed according to the laws and regulations of the country/city in which the vehicle is driven. In addition, always verify the speed of the vehicle using the speedometer.
- The vehicle speed alarm function can be set between 30 and 250 km/h (20 and 150 mph).

## ▼ Warning (Display Indication)

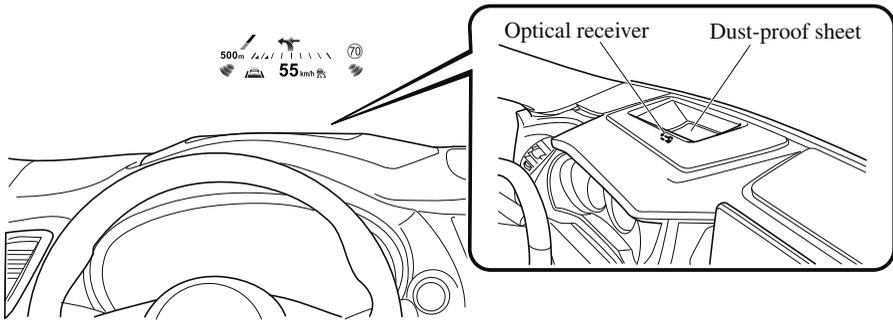
A message is displayed to notify the user of the system operation status and malfunctions or abnormalities.

If the warning light turns on/flashes simultaneously or a symbol is indicated in the display, check the information regarding the warning light or symbol. (page 4-32)

When only a message is displayed, refer to Message Indicated in Multi-information Display. (page 7-54)

# Instrument Cluster and Display

## Active Driving Display\*



### ⚠ WARNING

#### **Always adjust the display brightness and position with the vehicle stopped:**

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

### ⚠ CAUTION

- Do not place beverages near the active driving display. If water or other liquids are splashed on the active driving display, it could cause damage.
- Do not place objects above the active driving display or apply stickers to the dust-proof sheet/optical receiver as they will cause interference.
- A sensor is integrated to control the display's luminosity. If the optical receiver is covered, the display's luminosity will lower making the display difficult to view.
- Do not allow intense light to hit the optical receiver. Otherwise, it could cause damage.

### NOTE

- Wearing polarized sunglasses will reduce the visibility of the active driving display due to the characteristics of the display.
- If the battery has been removed and re-installed or the battery voltage is low, the adjusted position may deviate.
- The display may be difficult to view or temporarily affected by weather conditions such as rain, snow, light, and temperature.
- If the audio system is removed, the active driving display cannot be operated.

The active driving display indicates the following information:

- Blind Spot Monitoring (BSM) Operation Conditions and Warnings

## Instrument Cluster and Display

---

Refer to Blind Spot Monitoring (BSM) on page 4-90.

- Distance Recognition Support System (DRSS) Warnings  
Refer to Distance Recognition Support System (DRSS) on page 4-103.
- Traffic Sign Recognition System (TSR) traffic signs and Warnings  
Refer to Traffic Sign Recognition System (TSR) on page 4-96.
- Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function)  
Operation Conditions and Warnings  
Refer to Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) on page 4-121.
- Mazda Radar Cruise Control (MRCC) Operation Conditions and Warnings  
Refer to Mazda Radar Cruise Control (MRCC) on page 4-111.
- Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) Operation Conditions and Warnings  
Refer to Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) on page 4-134.
- Advanced Smart City Brake Support (Advanced SCBS) Warnings  
Refer to Advanced Smart City Brake Support (Advanced SCBS) on page 4-145.
- Smart City Brake Support [Forward] (SCBS F) Warnings  
Refer to Smart City Brake Support [Forward] (SCBS F) on page 4-148.
- Smart Brake Support (SBS) Warnings  
Refer to Smart Brake Support (SBS) on page 4-156.
- Driver Attention Alert (DAA) Warnings  
Refer to Driver Attention Alert (DAA) on page 4-106.
- Cruise Control Operation Conditions  
Refer to Cruise Control on page 4-170.
- Navigation Guidance (vehicles with navigation system)
- Speed limit indicator (vehicles with navigation system)
- Vehicle Speed

Each setting/adjustment for the active driving display can be performed on the center display.

1. Select the  icon on the home screen and display the Settings screen.
2. Select the AD-Disp tab.
3. Select the desired item and perform the setting/adjustment.
  - Method for adjusting screen brightness (automatically/manually)
  - Screen brightness initial settings (automatic adjustment is selected)

## Instrument Cluster and Display

---

- Screen brightness adjustment (manual adjustment is selected)
- Display position of active driving display (display height)
- Active driving display angle adjustment (display angle correction)
- Active driving display ON/OFF (indication)
- Navigation guidance ON/OFF
- Reset settings (reset)

### **NOTE**

- *The desired driving position (display position, brightness level, display information) can be called up after programming the position.  
Refer to Driving Position Memory on page 2-7.*

# Instrument Cluster and Display

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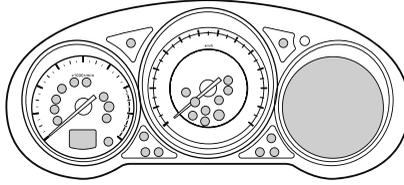
## Warning/Indicator Lights

Instrument Cluster varies depending on model and specifications.

### Instrument Cluster

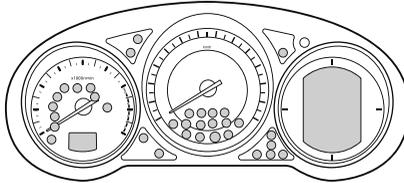
#### Type A

(With Multi-information Display)

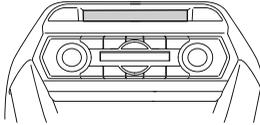


#### Type B

(Without Multi-information Display)



### Center of Dashboard



Warning/Indicator lights will appear in any of the highlighted areas

# Instrument Cluster and Display

## ▼ Warning Indication/Warning Lights

These lights turn on or flash to notify the user of the system operation status or a system malfunction.

Signal	Warning	Page
	Brake System Warning Light* <sup>1</sup>	7-38
	ABS Warning Light* <sup>1</sup>	Electronic Brake Force Distribution System Warning 7-38
		ABS warning 7-41
	Charging System Warning Indication/Warning Light* <sup>1</sup>	7-38
	Engine Oil Warning Light* <sup>1</sup>	7-38
 (Red)	High Engine Coolant Temperature Warning Indication/Warning Light* <sup>1</sup>	7-38
	Power Steering Malfunction Indication/Malfunction Indicator Light* <sup>1</sup>	7-38
	Master Warning Indication/Warning Light* <sup>1</sup>	7-41
	Electric Parking Brake (EPB) Warning Indication/Warning Light	7-41
	*Engine Oil Level Warning Indication	7-41
	Check Engine Light* <sup>1</sup>	7-41
<b>AT</b>	Automatic Transaxle Warning Indication/Warning Light* <sup>1</sup>	7-41
<b>4WD</b>	*4WD Warning Indication/Warning Light* <sup>1</sup>	7-41
	Air Bag/Front Seat Belt Pretensioner System Warning Light* <sup>1</sup>	7-41
	*Tire Pressure Monitoring System Warning Light* <sup>1</sup>	Flashing 7-41
		Turns on 7-47
 (Amber/White)	*KEY Warning Indication	7-41

# Instrument Cluster and Display

Signal	Warning	Page
 (Red)	*KEY Warning Light* <sup>1</sup>	Turns on 7-41
		Flashing 7-47
 (Amber)	*Adaptive LED Headlights (ALH) Warning Indication/Warning Light* <sup>1</sup>	7-41
	*Blind Spot Monitoring (BSM) Warning Indication	7-41
 (Amber)	*Mazda Radar Cruise Control (MRCC) Warning Indication	7-41
	*Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) Warning Indication	7-41
 (Amber)	*Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) Warning Indication	7-41
 (Amber)	*Driver Attention Alert (DAA) Warning Indication	7-41
	LED Headlight Warning Light	7-41
 (Amber)	*Smart Brake Support/Smart City Brake Support (SBS/SCBS) Warning Indication/Warning Light* <sup>1</sup>	7-47
	Low Fuel Warning Indication/Warning Light	7-47
	*120 km/h Warning Light* <sup>1</sup>	7-47
 <b>PASS</b>	Seat Belt Warning Light	7-47
	Engine Oil Level Warning Light	7-47
	*Low Washer Fluid Level Warning Indication/Warning Light	7-47
	*Door-Ajar Warning Indication	7-47

# Instrument Cluster and Display

Signal	Warning	Page
	*Liftgate-Ajar Warning Indication	7-47
	*Door-Ajar Warning Light	7-47

\*1 The light turns on when the ignition is switched on for an operation check, and turns off a few seconds later or when the engine is started. If the light does not turn on or remains turned on, have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.

# Instrument Cluster and Display

## ▼ Indication/Indicator Lights

These lights turn on or flash to notify the user of the system operation status or a system malfunction.

Signal	Indicator	Page
 (Green)	KEY Indicator Light	4-5
	Security Indicator Light* <sup>1</sup>	3-43
	*Vehicle Speed Alarm Indication	4-28
	Wrench Indication/Indicator Light* <sup>1</sup>	4-40
 (Blue)	*Low Engine Coolant Temperature Indicator Light	4-40
	Shift Position Indication	4-44
	Lights-On Indication/Indicator Light	4-50
	Headlight High-Beam Indicator Light	Headlight High-Low Beam 4-53
		Flashing the Headlights 4-53
	Turn Signal/Hazard Warning Indicator Lights	Turn and Lane-Change Signals 4-57
		Hazard Warning Flasher 4-65
	*Front Fog Light Indicator Light	4-55
	*Rear Fog Light Indicator Light	4-56
	Electric Parking Brake (EPB) Indication/Indicator Light* <sup>1*2</sup>	7-41

# Instrument Cluster and Display

Signal	Indicator	Page
	*Brake Pedal Operation demand Indicator Light	4-67
	TCS/DSC Indicator Light* <sup>1</sup>	Traction Control System (TCS) 4-73
		Dynamic Stability Control (DSC) 4-75
		Turns on 7-41
<b>TCS OFF</b>	TCS OFF Indicator Light* <sup>1</sup>	4-74
<b>SPORT</b>	Select Mode Indication	4-80
 (Green)	*Adaptive LED Headlights (ALH) Indicator Light	4-89
	*Blind Spot Monitoring (BSM) OFF Indicator Light* <sup>1</sup>	Malfunction 7-41
		Except malfunction 4-95
 (White)	*Mazda Radar Cruise Control (MRCC) Main Indication	4-114
	*Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) Main Indication	4-124
 (Green)	*Mazda Radar Cruise Control (MRCC) Set Indication	4-114
	*Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) Set Indication	4-124
<b>HOLD</b>	*Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) indicator Light	4-130
 (White/Green)	*Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) Indication	4-137

# Instrument Cluster and Display

Signal	Indicator	Page
	<p>*Smart City Brake Support (SCBS) Indication</p>	<p>Advanced Smart City Brake Support (Advanced SCBS) 4-147</p>
		<p>Smart City Brake Support [Forward] (SCBS F) 4-150</p>
		<p>Smart City Brake Support [Reverse] (SCBS R) 4-155</p>
	<p>*Smart City Brake Support (SCBS) Indicator Light</p>	<p>Advanced Smart City Brake Support (Advanced SCBS) 4-147</p>
		<p>Smart City Brake Support [Forward] (SCBS F) 4-150</p>
		<p>Smart City Brake Support [Reverse] (SCBS R) 4-155</p>

# Instrument Cluster and Display

Signal	Indicator	Page
	*Smart Brake Support/Smart City Brake Support (SBS/SCBS) OFF Indicator Light* <sup>1</sup>	Advanced Smart City Brake Support (Advanced SCBS) 4-147
		Smart City Brake Support [Forward] (SCBS F) 4-151
		Smart City Brake Support [Reverse] (SCBS R) 4-155
		Smart Brake Support (SBS) 4-158
 (White)	*Driver Attention Alert (DAA) Indication	4-107
 (White)	*Cruise Main Indication	4-171
 (Green)	*Cruise Set Indication	4-171

\*1 The light turns on when the ignition is switched on for an operation check, and turns off a few seconds later or when the engine is started. If the light does not turn on or remains turned on, have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.

\*2 The light turns on continuously when the electric parking brake is applied.

## Instrument Cluster and Display

---

### ▼ Wrench Indicator Light



When the ignition is switched ON, the wrench indicator light turns on and then turns off after a few seconds.

The wrench indicator light turns on under the following conditions:

- When the preset maintenance period has arrived.
- When it's time to replace the engine oil.

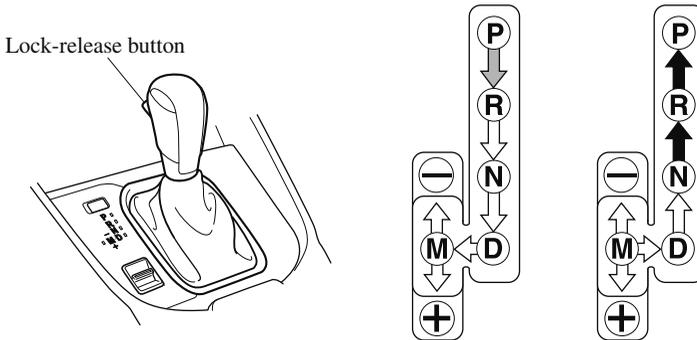
Refer to Maintenance Monitor on page 6-11.

### ▼ Low Engine Coolant Temperature Indicator Light (Blue)\*



The light illuminates continuously when the engine coolant temperature is low and turns off after the engine is warm.

## Automatic Transaxle Controls



### Various Lockouts:

-  Indicates that you must depress the brake pedal and hold in the lock-release button to shift (The ignition must be switched ON).
-  Indicates the selector lever can be shifted freely into any position.
-  Indicates that you must hold in the lock-release button to shift.

### NOTE

*The Sport AT has an option that is not included in the traditional automatic transaxle that gives the driver the option of selecting each gear instead of leaving it to the transaxle to shift gears. Even if you intend to use the automatic transaxle functions as a traditional automatic, you should also be aware that you can inadvertently shift into manual shift mode and an inappropriate gear may be retained as the vehicle speed increases. If you notice the engine speed going higher or hear the engine racing, confirm you have not accidentally slipped into manual shift mode (page 4-45).*

# Automatic Transaxle

## Shift-Lock System

The shift-lock system prevents shifting out of P unless the brake pedal is depressed.

To shift from P:

1. Depress and hold the brake pedal.
2. Start the engine.
3. Press and hold the lock-release button.
4. Move the selector lever.

### NOTE

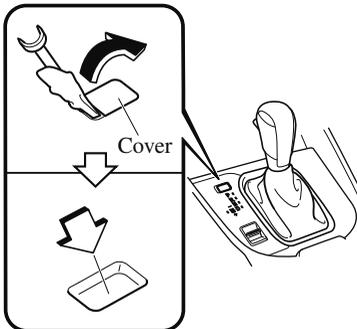
- When the ignition is switched to ACC or the ignition is switched off, the selector lever cannot be shifted from P.
- The ignition cannot be switched to OFF if the selector lever is not in P.

### ▼ Shift-Lock Override

If the selector lever will not move from P using the proper shift procedure, continue to hold down the brake pedal.

#### Type A

1. Remove the shift-lock override cover using a cloth-wrapped flat head screwdriver.
2. Insert a screwdriver and push it down.



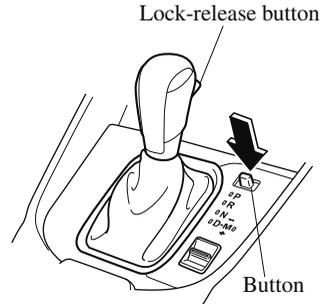
3. Press and hold the lock-release button.

4. Move the selector lever.

Take the vehicle to an expert repairer, we recommend an Authorized Mazda Repairer to have the system checked.

#### Type B

1. Press the lock-release button with the button pressed.



2. Move the selector lever.

Take the vehicle to an expert repairer, we recommend an Authorized Mazda Repairer to have the system checked.

## Transaxle Ranges

- The shift position indication in the instrument cluster illuminates. Refer to Warning/Indicator Lights on page 4-32.
- The selector lever must be in P or N to operate the starter.

### P (Park)

P locks the transaxle and prevents the front wheels from rotating.



**Always set the selector lever to P and set the parking brake:**

Only setting the selector lever to the P position without using the parking brake to hold the vehicle is dangerous. If P fails to hold, the vehicle could move and cause an accident.



- Shifting into P, N or R while the vehicle is moving can damage your transaxle.
- Shifting into a driving gear or reverse when the engine is running faster than idle can damage the transaxle.

### R (Reverse)

In position R, the vehicle moves only backward. You must be at a complete stop before shifting to or from R, except under rare circumstances as explained in Rocking the Vehicle (page 3-51).

### **NOTE**

**(With parking sensor system)**

When the selector lever is shifted to the R position with the ignition switched ON, the parking sensor system is activated and a beep sound is heard.

Refer to Parking Sensor System on page 4-191.

### N (Neutral)

In N, the wheels and transaxle are not locked. The vehicle will roll freely even on the slightest incline unless the parking brake or brakes are on.



**If the engine is running faster than idle, do not shift from N or P into a driving gear:**

It's dangerous to shift from N or P into a driving gear when the engine is running faster than idle. If this is done, the vehicle could move suddenly, causing an accident or serious injury.

**Do not shift into N when driving the vehicle:**

Shifting into N while driving is dangerous. Engine braking cannot be applied when decelerating which could lead to an accident or serious injury.



Do not shift into N when driving the vehicle. Doing so can cause transaxle damage.

# Automatic Transaxle

---

## **NOTE**

*Apply the parking brake or depress the brake pedal before moving the selector lever from N to prevent the vehicle from moving unexpectedly.*

## **D (Drive)**

D is the normal driving position. From a stop, the transaxle will automatically shift through a 6-gear sequence.

## **M (Manual)**

M is the manual shift mode position. Gears can be shifted up or down by operating the selector lever. Refer to Manual Shift Mode on page 4-45.

## **▼ Shift Position Indication**



The selector position is indicated when the ignition is switched ON.

## **Gear position indication**

In manual shift mode, the “M” of the shift position indication illuminates and the numeral for the selected gear is displayed.

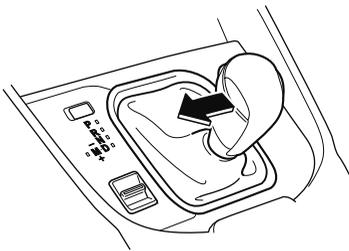
## **▼ Active Adaptive Shift (AAS)**

Active Adaptive Shift (AAS) automatically controls the transaxle shift points to best suit the road conditions and driver input. This improves driving feel. The transaxle may switch to AAS mode when driving up and down slopes, cornering, driving at high elevations, or depressing the accelerator pedal quickly while the selector lever is in the D position. Depending on the road and driving conditions/vehicle operations, gear shifting could be delayed or not occur, however, this does not indicate a problem because the AAS mode will maintain the optimum gear position.

## Manual Shift Mode

The manual shift mode gives you the feel of driving a manual transaxle vehicle by allowing you to operate the selector lever manually. This allows you to control engine rpm and torque to the drive wheels much like a manual transaxle when more control is desired.

To change to manual shift mode, shift the lever from D to M.



### NOTE

Changing to manual shift mode while driving will not damage the transaxle.

To return to automatic shift mode, shift the lever from M to D.

### NOTE

- If you change to manual shift mode when the vehicle is stopped, the gear will shift to M1.
- If you change to manual shift mode without depressing the accelerator pedal when driving in D range, 5th gear/6th gear, the gear will shift to M4/M5.

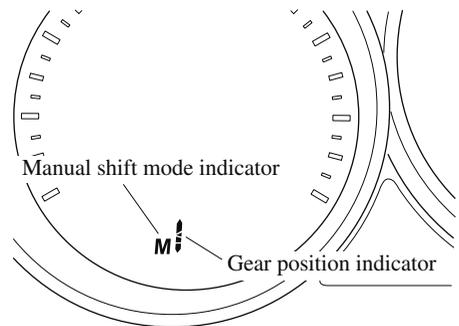
## ▼ Indicators

### Manual shift mode indication

In manual shift mode, the “M” of the shift position indication in the instrument panel illuminates.

### Gear position indication

The numeral for the selected gear illuminates.



### NOTE

- If the gears cannot be shifted down when driving at higher speeds, the gear position indication will flash twice to signal that the gears cannot be shifted down (to protect the transaxle).
- If the automatic transaxle fluid (ATF) temperature becomes too high, there is the possibility that the transaxle will switch to automatic shift mode, canceling manual shift mode and turning off the gear position indication illumination. This is a normal function to protect the AT. After the ATF temperature has decreased, the gear position indication illumination turns back on and driving in manual shift mode is restored.

## Automatic Transaxle

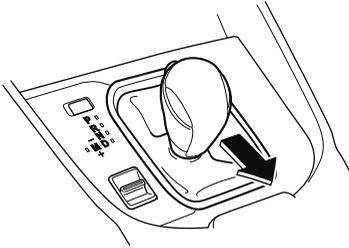
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### ▼ Manually Shifting Up

You can shift gears up by operating the selector lever.

M1 → M2 → M3 → M4 → M5 → M6

To shift up to a higher gear, tap the selector lever back + once.



### NOTE

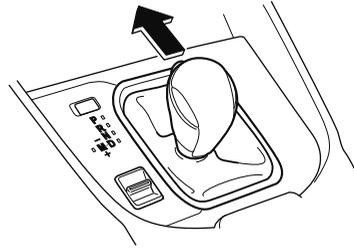
- When driving slowly, the gears may not shift up.
- Do not drive the vehicle with the tachometer needle in the RED ZONE while in manual shift mode. In addition, manual shift mode switches to automatic shift mode while the accelerator pedal is completely depressed. This function is canceled while the 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.

### ▼ Manually Shifting Down

You can shift gears down by operating the selector lever.

M6 → M5 → M4 → M3 → M2 → M1

To shift down to a lower gear, tap the selector lever forward - once.



### ⚠ WARNING

**Do not use 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.

**NOTE**

- *When driving at high speeds, the gear may not shift down.*
- *During deceleration, the gear may automatically shift down depending on vehicle speed.*
- *When depressing the accelerator fully, the transaxle will shift to a lower gear, depending on vehicle speed. However, the gears do not kickdown while the TCS is turned off.*

**▼ Second Gear Fixed Mode**

When the selector lever is moved back + while the vehicle speed is about 10 km/h (6.2 mph) or less, the transaxle is set in the second gear fixed mode. The gear is fixed in second while in this mode for easier acceleration from a stop and driving on slippery roads such as snow-covered roads.

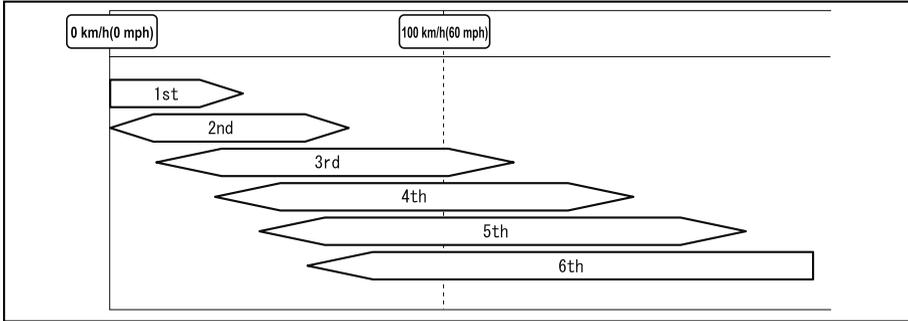
If the selector lever is moved back + or forward – while in the second gear fixed mode, the mode will be canceled.

# Automatic Transaxle

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## ▼ Shift Gear (Shifting) Speed Limit

For each gear position while in the manual mode, the speed limit is set as follows: When the selector lever is operated within the range of the speed limit, the gear is shifted.



### Shift up

The gear does not shift up while the vehicle speed is lower than the speed limit.

### Shift down

The gear does not shift down while the vehicle speed exceeds the speed limit. If the vehicle speed exceeds the speed limit and the gear does not shift down, the gear position indication flashes 2 times to notify the driver that the gear cannot be shifted.

### Kickdown

When the accelerator pedal is depressed fully while driving, the gear shifts down. However, the gears do not kickdown while the TCS is turned off.

### **NOTE**

*The gear also shifts down using kickdown while in the second gear fixed mode.*

### Auto-shift down

The gear shifts down automatically depending on the vehicle speed during deceleration.

### **NOTE**

*If the vehicle comes to a stop while in the second gear fixed mode, the gear remains in second.*

## Driving Tips

### WARNING

**Do not let the vehicle move in a direction opposite to the direction selected by the selector lever:**

Do not let the vehicle move backward with the selector lever in a forward position, or do not let the vehicle move forward with the selector lever in the reverse position. Otherwise, the engine may 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.

### Passing

For extra power when passing another vehicle or climbing steep grades, depress the accelerator fully. The transaxle will shift to a lower gear, depending on vehicle speed.

### **NOTE**

- *The accelerator pedal may initially feel heavy as it is being depressed, then feel lighter as it is depressed further. This change in pedal force aids the engine control system in determining how much the accelerator pedal has been depressed for performing kickdown, and functions to control whether or not kickdown should be performed.*
- *While the selector lever is in the M position and the TCS is turned off, manual shift mode does not switch to automatic shift mode even if the accelerator pedal is completely depressed. Operate the selector lever.*

### Climbing steep grades from a stop

To climb a steep grade from a stopped position:

1. Depress the brake pedal.
2. Shift to D or M1, depending on the load weight and grade steepness.
3. Release the brake pedal while gradually accelerating.

### Descending steep grades

When descending a steep grade, shift to lower gears, depending on load weight and grade steepness. Descend slowly, using the brakes only occasionally to prevent them from overheating.

# Switches and Controls

## Lighting Control

### ▼ Headlights

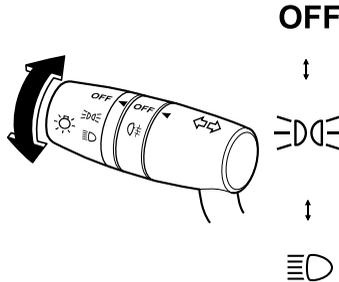
Turn the headlight switch to turn the headlights and other exterior lights on or off. When the lights are turned on, the lights-on indicator light in the instrument cluster turns on.



#### NOTE

- To prevent discharging the battery, do not leave the lights on while the engine is off unless safety requires them.
- Headlights do not blind drivers approaching in the opposite direction no matter what side of the road you must drive your vehicle (left-hand or right-hand traffic). Therefore, it is not necessary to adjust the optical axis of the headlights when switching temporarily to driving on the opposite side of the road (left-hand or right-hand traffic).

#### Without auto-light control



Switch Position	OFF		☰☽☿		☰☽	
	ON	ACC or OFF	ON	ACC or OFF	ON	ACC or OFF
Headlights	Off	Off	Off	Off	On	Off
Running lights*	On*1	Off	Off	Off	Off	Off
Taillights						
Parking lights	On*2	Off	On	On	On	On*3
License plate lights						

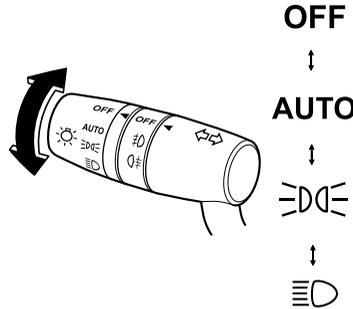
\*1 The lights are turned on while the vehicle is driven.

\*2 When the running lights are turned on, the taillights, and license plate lights turn on. The parking lights does not turn on.

# Switches and Controls

\*3 The lights are turned on continuously if the ignition is switched from ON to any other position with the lights turned on. The lights are turned off when the driver's door is opened or 30 seconds have elapsed since the lights turned on.

## With auto-light control



Switch Position	OFF		AUTO		☰☐☒		☰☐	
	ON	ACC or OFF	ON	ACC or OFF	ON	ACC or OFF	ON	ACC or OFF
Headlights	Off	Off	Auto*3	Off	Off	Off	On	Off
Running lights*	On*1	Off	On*4	Off	Off	Off	Off	Off
Taillights Parking lights License plate lights	On*2	Off	Auto*3	On*5	On	On	On	On*5

\*1 The lights are turned on while the vehicle is driven.

\*2 When the running lights are turned on, the taillights, and license plate lights turn on. The parking lights does not turn on.

\*3 The lights are turned on by the auto light function.

\*4 The lights are turned on while the vehicle is driven, and turned off when the headlights are turned on by the auto light function.

\*5 The lights are turned on continuously if the ignition is switched from ON to any other position with the lights turned on. The lights are turned off when the driver's door is opened or 30 seconds have elapsed since the lights turned on.

## Switches and Controls

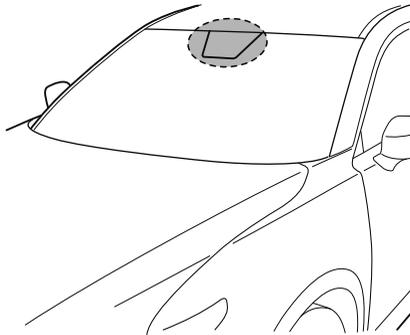
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### Auto-light control\*

When the headlight switch is in the **AUTO** position and the ignition is switched ON, the light sensor senses the surrounding lightness or darkness and automatically turns the headlights and other exterior lights on or off.



- Do not shade the light sensor by adhering a sticker or a label on the windshield. Otherwise the light sensor will not operate correctly.



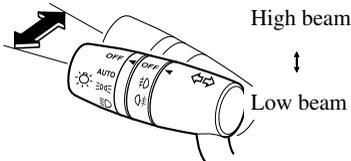
- The light sensor also works as a rain sensor for the auto-wiper control. Keep hands and scrapers clear of the windshield when the wiper lever is in the **AUTO** position and the ignition is switched ON as fingers could be pinched or the wipers and wiper blades damaged when the wipers activate automatically. If you are going to clean the windshield, be sure the wipers are turned off completely — this is particularly important when clearing ice and snow — when it is particularly tempting to leave the engine running.

### **NOTE**

- The headlights and other exterior lights may not turn off immediately even if the surrounding area becomes well-lit because the light sensor determines that it is night time if the surrounding area is continuously dark for several minutes such as inside long tunnels, traffic jams inside tunnels, or in indoor parking lots. In this case, the lights turn off if the light switch is turned to the OFF position.
- The sensitivity of the auto-light control may be changed. Refer to Personalization Features on page 9-10.

### ▼ Headlight High-Low Beam

The headlights switch between high and low beams by moving the lever forward or backward.



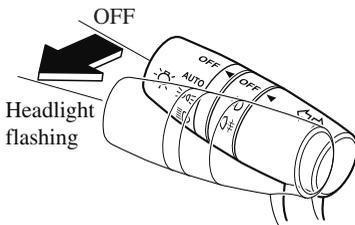
When the headlight high-beams are on, the headlight high-beam indicator light is turned on.



### ▼ Flashing the Headlights

Can be used when the ignition is switched ON.

To flash the headlights, pull the lever fully towards you (the headlight switch does not need to be on).



The headlight high-beam indicator light in the instrument cluster illuminates simultaneously. The lever will return to the normal position when released.



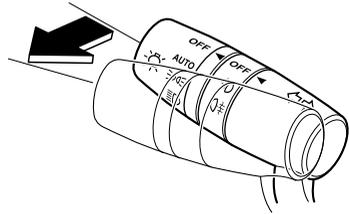
### ▼ Coming Home Light

The coming home light turns on the headlights (low beams) when the lever is operated.

#### To turn on the lights

When the lever is pulled with the ignition switched to ACC or OFF, the low beam headlights turn on.

The headlights turn off after a certain period of time has elapsed after the doors are closed.



#### **NOTE**

- The time until the headlights turn off after all of the doors are closed can be changed.  
Refer to Personalization Features on page 9-10.
- If no operations are done for 3 minutes after the lever is pulled, the headlights turn off.
- The headlights turn off if the lever is pulled again while the headlights are illuminated.

### ▼ Leaving Home Light

The leaving home light turns on the lights when the transmitter unlock button is pressed while away from the vehicle.

The following lights turn on when the leaving home light is operated.

Low beams, Parking lights, Taillights, License plate lights.

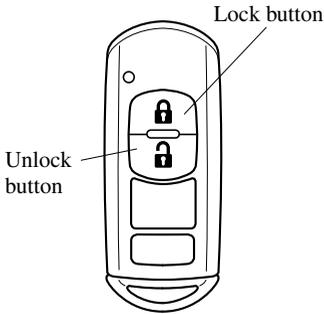
# Switches and Controls

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## To turn on the lights

When the ignition switch and the headlight switch are in the following conditions, the headlights will illuminate when the transmitter unlock button is pressed and the vehicle receives the transmitter signal. The headlights turn off after a certain period of time has elapsed (30 seconds).

- Ignition switch: off
- Headlight switch: **AUTO**,  $\equiv$ , or  $\equiv$



### **NOTE**

- *Operation of the leaving home light can be turned on or off. Refer to Personalization Features on page 9-10.*
- *When the transmitter lock button is pressed and the vehicle receives the transmitter signal, the headlights turn off.*
- *When the headlight switch is turned to the OFF position, the headlights turn 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.

## ▼ **Running Lights**

The running lights, which turn on while the vehicle is being driven during the daytime, are designed to notify on-coming vehicles or pedestrians of the presence of the vehicle.

Some countries require moving vehicles to have their lights on (running lights) during the daytime.

The running lights turn on when the vehicle is driven and turn off when the parking brake is operated or the selector lever is shifted to the P position.

### **NOTE**

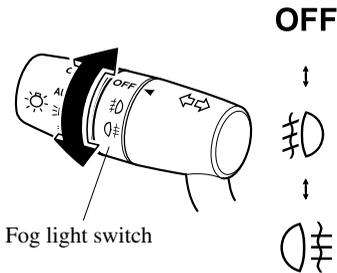
*The running lights can be deactivated. Refer to Personalization Features on page 9-10.*

## Front Fog Lights\*

The front fog lights can be used when the ignition is switched ON.

Use this switch to turn on the front fog lights. The front fog lights will improve visibility at night and during foggy conditions.

To turn the front fog lights on, rotate the fog light switch to the  position.



# Switches and Controls

## Rear Fog Light\*

The rear fog light can be used when the ignition is switched ON.

The rear fog light helps your vehicle to be seen.

When the lights are turned on, the rear fog lights indicator light in the instrument cluster turns on.

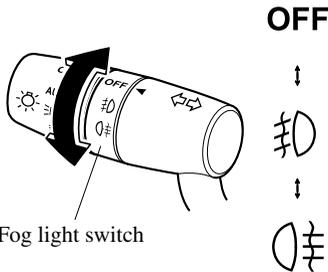


### ▼ With Front Fog Lights

The headlight switch must be in the or position before turning on the rear fog light.

To turn the rear fog light on, rotate the fog light switch to the position (the fog light switch returns to the position automatically).

The rear fog light indicator light in the instrument cluster illuminates while the rear fog light is on.



To turn the rear fog light off, do any of the following:

- Rotate the fog light switch to the position again (the fog light switch returns to the position automatically).
- Rotate the fog light switch to the OFF position.
- Turn the headlight switch to the OFF position.

The rear fog light indicator light in the instrument cluster goes off when the rear fog light is turned off.

### NOTE

- The front fog lights turn on when the rear fog light is turned on.
- If the fog light switch is rotated to the position (the fog light switch returns to the position automatically), the front fog light indicator light in the instrument cluster will also illuminate.
- When the headlight switch is in the **AUTO** position and the headlights, exterior lights and instrument panel are illuminated, the rear fog light turns on when the rear fog light switch is turned on.

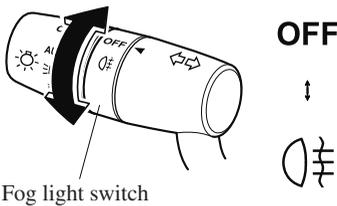
# Switches and Controls

## ▼ Without Front Fog Lights

The headlights must be turned on to turn on the rear fog light.

To turn the rear fog light on, rotate the fog light switch to the  $\text{☉}$  position (the fog light switch returns to its original position automatically).

The rear fog light indicator light in the instrument cluster illuminates while the rear fog light is on.



Fog light switch

To turn the rear fog light off, do any of the following:

- Rotate the fog light switch to the  $\text{☉}$  position again (the fog light switch returns to its original position automatically).
- Turn the headlight switch to the OFF position.

The rear fog light indicator light in the instrument cluster goes off when the rear fog light is turned off.

### NOTE

#### (With auto-light control)

When the headlight switch is in the **AUTO** position and the headlights, exterior lights and instrument panel illuminated, the rear fog light turns on when the rear fog light switch is turned on.

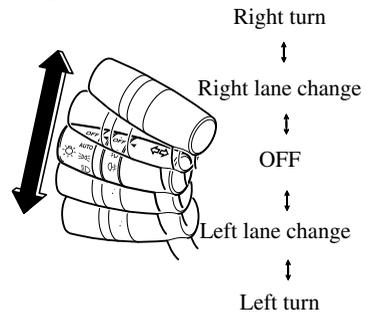
## Turn and Lane-Change Signals

The ignition must be switched ON to use the turn and lane-change signals.

### ▼ Turn Signals

Move the signal lever down (for a left turn) or up (for a right turn) to the stop position. The signal will self-cancel after the turn is completed.

If the indicator light continues to flash after a turn, manually return the lever to its original position.



The turn signal indicators in the instrument cluster flash according to the operation of the turn signal lever to show which signal is working.



### NOTE

- If an indicator light stays on without flashing or if it flashes abnormally, one of the turn signal bulbs may be burned out.
- A personalized function is available to change the turn indicator sound volume. (page 9-10)

## Switches and Controls

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### ▼ Lane-Change Signals

Move the lever halfway toward the direction of the lane change—until the indicator flashes— and hold it there. It will return to the off position when released.

### ▼ Three-Flash Turn Signal

After releasing the turn signal lever, the turn signal indicator flashes three times. The operation can be cancelled by moving the lever in the direction opposite to which it was operated.

#### **NOTE**

*The three-flash turn signal function can be switched to operable/inoperable using the personalization function.*

*Refer to Personalization Features on page 9-10.*

## Windshield Wipers and Washer

The ignition must be switched ON to use the wipers.

### **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.*

#### **Only use windshield washer fluid mixed with anti-freeze protection in freezing weather conditions:**

*Using windshield washer fluid without anti-freeze protection in freezing weather conditions is dangerous as it could freeze on the windshield and block your vision which could cause an accident. In addition, make sure the windshield is sufficiently warmed using the defroster before spraying the washer fluid.*

# Switches and Controls

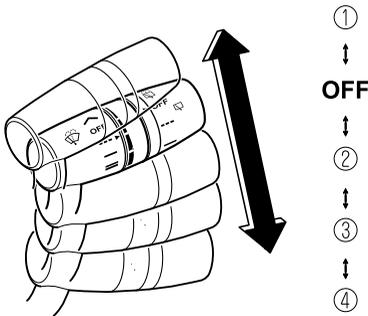
**NOTE**

If the windshield wipers are operated under cold weather conditions or during snowfall, they could stop due to accumulated snow on the windshield. If the windshield wipers stop due to accumulated snow on the windshield, park the vehicle in a safe place, turn the wiper switch off, and then remove the accumulated snow. If the wiper switch is turned to another position other than OFF, the wipers will operate. If the wipers do not operate even though the wiper switch is turned to a position other than OFF, consult an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.

**▼ Windshield Wipers**

Turn the wipers on by pressing the lever up or down.

**With intermittent wiper**

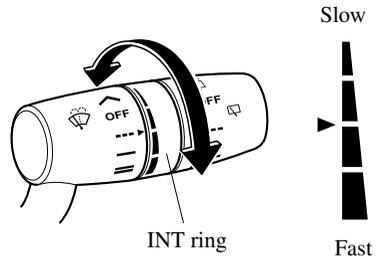


Switch Position			Wiper operation
No.	Type A	Type B	
①	∧	MIST	Operation while pulling up lever
OFF			Stop
②	≡	INT	Intermittent

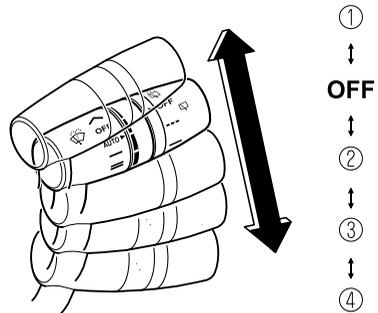
Switch Position			Wiper operation
No.	Type A	Type B	
③	—	LO	Low speed
④	≡	HI	High speed

**Variable-speed intermittent wipers**

Set the lever to the intermittent position and choose the interval timing by rotating the ring.



**With auto-wiper control**



Switch Position			Wiper operation
No.	Type A	Type B	
①	∧	MIST	Operation while pulling up lever
OFF			Stop
②	AUTO	AUTO	Auto control
③	—	LO	Low speed
④	≡	HI	High speed

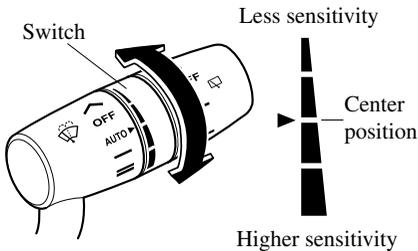
# Switches and Controls

## Auto-wiper control

When the wiper lever is in the **AUTO** position, the rain sensor senses the amount of rainfall on the windshield and turns the wipers on or off automatically (off—intermittent—low speed—high speed).

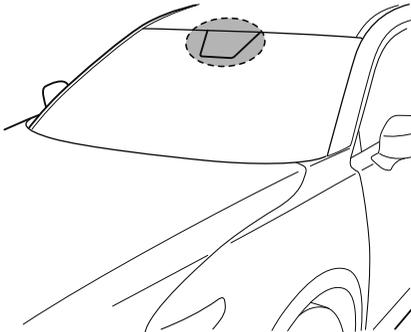
The sensitivity of the rain sensor can be adjusted by turning the switch on the wiper lever.

From the center position (normal), rotate the switch upward for higher sensitivity (faster response) or rotate it downward for less sensitivity (slower response).



### **CAUTION**

- Do not shade the rain sensor by adhering a sticker or a label on the windshield. Otherwise the rain sensor will not operate correctly.



- When the wiper lever is in the **AUTO** position and the ignition is switched **ON**, the wipers may move automatically in the following cases:

- If the windshield above the rain sensor is touched or wiped with a cloth.
- If the windshield is struck with a hand or other object from either outside or inside the vehicle.

Keep hands and scrapers clear of the windshield when the wiper lever is in the **AUTO** position and the ignition is switched **ON** as fingers could be pinched or the wipers and wiper blades damaged when the wipers activate automatically. If you are going to clean the windshield, be sure the wipers are turned off completely (when it is most likely that the engine is left running) this is particularly important when clearing ice and snow.

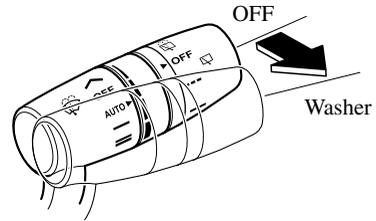
### **NOTE**

- Switching the auto-wiper lever from the **OFF** to the **AUTO** position while driving activates the windshield wipers once, after which they operate according to the rainfall amount.
- The auto-wiper control may not operate when the rain sensor temperature is about  $-10^{\circ}\text{C}$  ( $14^{\circ}\text{F}$ ) or lower; or about  $85^{\circ}\text{C}$  ( $185^{\circ}\text{F}$ ) or higher.
- If the windshield is coated with water repellent, the rain sensor may not be able to sense the amount of rainfall correctly and auto-wiper control may not operate properly.

- If dirt or foreign matter (Such as ice or matter containing salt water) adheres to the windshield above the rain sensor or if the windshield is iced, it could cause the wipers to move automatically. However, if the wipers cannot remove this ice, dirt or foreign matter, the auto-wiper control will stop operation. In this case, set the wiper lever to the low speed position or high speed position for manual operation, or remove the ice, dirt or foreign matter by hand to restore the auto-wiper operation.
- If the auto-wiper lever is left in the **AUTO** position, the wipers could operate automatically 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.
- The auto-wiper control functions can be turned off. Refer to Personalization Features on page 9-10.

### ▼ 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.

If the washer does not work, inspect the fluid level (page 6-24). If the fluid level is normal, consult an expert repairer, we recommend an Authorized Mazda Repairer.

#### **NOTE**

##### **(With headlight washers)**

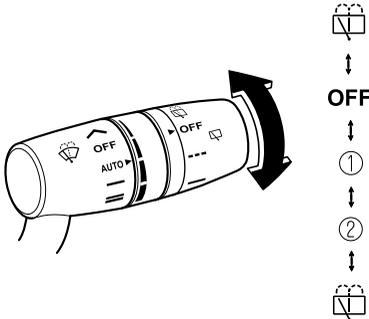
When the headlights are on, the headlight washers operate automatically once every fifth time the windshield washer operates. Refer to Headlight Washer on page 4-62.

# Switches and Controls

## Rear Window Wiper and Washer

The ignition must be switched ON to use the wiper.

### ▼ Rear Window Wiper



Turn the wiper on by turning the rear wiper/washer switch.

Switch Position			Wiper operation
No.	Type A	Type B	
	OFF		Stop
①	---	INT	Intermittent
②	—	ON	Normal

### ▼ Rear Window Washer

To spray washer fluid, turn the rear wiper/washer switch to either of the  position. After the switch is released, the washer will stop.

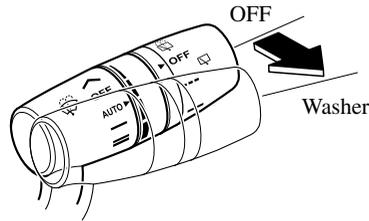
If the washer does not work, inspect the fluid level (page 6-24). If the fluid level is normal and the washer still does not work, consult an expert repairer, we recommend an Authorized Mazda Repairer.

## Headlight Washer\*

The ignition must be switched ON and the headlights must be turned on.

The headlight washers operate automatically once every fifth time the windshield washer operates.

If you want to operate headlight washers, double flick the wiper lever.



### NOTE

*If air enters the headlight washer fluid pipe under conditions such as when the vehicle is brand-new or after an empty washer tank is replenished with washer fluid, washer fluid will not spray even when the wiper lever is operated. If this occurs, perform the following procedure:*

1. Start the engine.
2. Turn on the headlights.
3. Double flick the wiper lever several times until the washer fluid sprays.

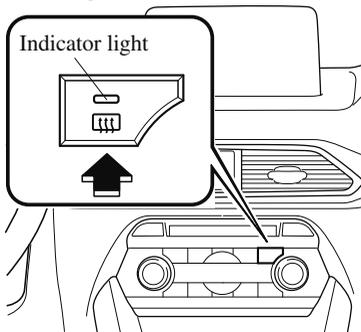
## Rear Window Defogger

The rear window defogger clears fog from the rear window.

The ignition must be switched ON to use the defogger.

Press the switch to turn on the rear window defogger. The rear window defogger operates for about 15 minutes and then turns off automatically. The indicator light illuminates when the defogger is operating.

To turn off the rear window defogger before the 15 minutes has elapsed, press the switch again.



### ⚠ CAUTION

- Do not use sharp instruments or window cleaners with abrasives to clean the inside of the rear window surface. They may damage the defogger grid inside the window.

### NOTE

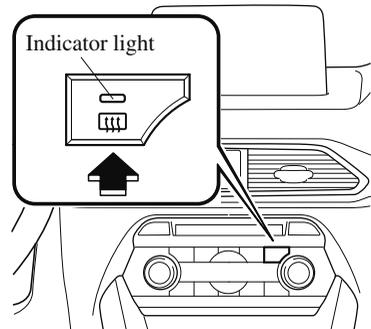
- This defogger is not designed for melting snow. If there is an accumulation of snow on the rear window, remove it before using the defogger.
- The rear window defogger setting can be changed. After changing the setting, the rear window defogger stops automatically after 15 minutes have elapsed and when the ambient temperature is high. When the ambient temperature is low, it continues to operate until the switch is pressed again. Refer to Personalization Features on page 9-10.

### ▼ Mirror Defogger\*

The mirror defoggers defrost the outside mirrors.

The mirror defoggers operate in conjunction with the rear window defogger.

To turn on the mirror defoggers, switch the ignition ON and press the rear window defogger switch (page 4-63).



## Switches and Controls

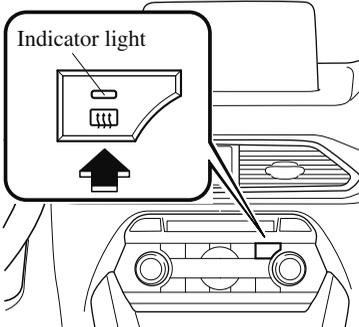
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### ▼ Windshield Wiper De-icer\*

The windshield wiper de-icer warms the lower part of the windshield using thermal filaments which facilitates the removal of ice on the windshield wipers and the accumulated snow on the lower part of the windshield.

The windshield wiper de-icer operates in conjunction with the rear window defogger.

To turn on the windshield wiper de-icer, switch the ignition ON and press the rear window defogger switch (page 4-63).

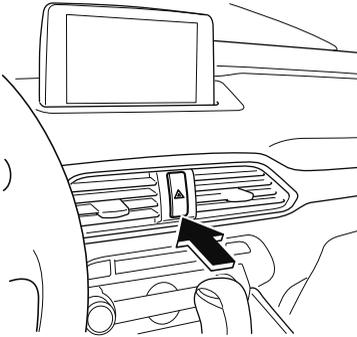


### Horn

To sound the horn, press the  mark on the steering wheel.

## Hazard Warning Flasher

The hazard warning lights should always be used when you stop on or near a roadway in an emergency.



The hazard warning lights warn other drivers that your vehicle is a traffic hazard and that they must take extreme caution when near it.



Depress the hazard warning flasher and all the turn signals will flash. The hazard warning indicator lights in the instrument cluster flash simultaneously.

### **NOTE**

- *The turn signals do not work when the hazard warning lights are on.*
- *Check local regulations about the use of hazard warning lights while the vehicle is being towed to verify that it is not in violation of the law.*

## Brake System

### ▼ Foot Brake

This vehicle has power-assisted brakes that adjust automatically through normal use.

Should power-assist fail, you can stop by applying greater force than normal to the brake pedal. But the distance required to stop will be greater than usual.

### ⚠ WARNING

**Do not coast with the engine stalled or turned off, find a safe place to stop:**

*Coasting with the engine stalled or 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:**

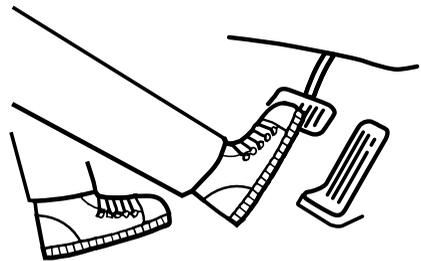
*Driving with your foot continuously on the brake pedal or steadily applying the brakes for long distances is dangerous. This causes overheated brakes, resulting in longer stopping distances or even total brake failure. This could cause loss of vehicle control and a serious accident. Avoid continuous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

### ⚠ CAUTION

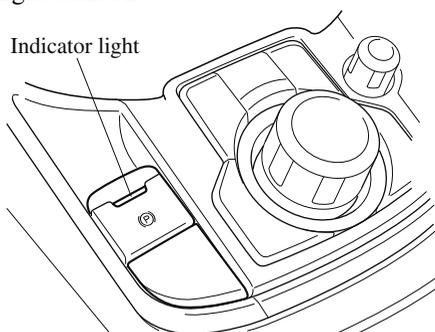
- Do not drive with your foot held on the brake pedal. Doing so could result in the following:
  - The brake parts will wear out more quickly.
  - The brakes can overheat and adversely affect brake performance.
- Always depress the brake pedal with the right foot. Applying the brakes with the unaccustomed 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.*

### ▼ **Electric Parking Brake (EPB)**

The EPB equipment applies the parking brake using an electric motor. When the EPB is applied, the EPB switch indicator light turns on.



### **⚠ WARNING**

#### **Do not drive the vehicle with the EPB 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. Before driving, release the EPB and verify that the EPB indicator light is turned off.*

### **NOTE**

- *The EPB cannot be applied or released while the vehicle battery is dead.*
- *An operation sound occurs when applying or releasing the EPB, however, this does not indicate a malfunction.*
- *If the EPB is not used for long periods, an automatic inspection of the system is performed while the vehicle is parked. An operation sound can be heard, however, this does not indicate a problem.*
- *When the EPB is applied and the ignition is switched OFF, an operation sound can be heard, however, this does not indicate a problem.*
- *The brake pedal may move while the EPB is being applied or released, however, this does not indicate a problem.*
- *If the EPB switch is continually pulled while driving the vehicle, the EPB will be applied and the EPB warning beep will be activated. When the switch is released, the EPB is released and the beep stops.*
- *If the EPB is applied with the ignition switched off or in ACC, the EPB indicator light in the instrument cluster and the indicator light in the switch may turn on for 15 seconds.*
- *When running the vehicle through an automatic car wash, it may be necessary to switch the ignition off with the parking brake released depending on the type of automatic car wash.*

# Brake

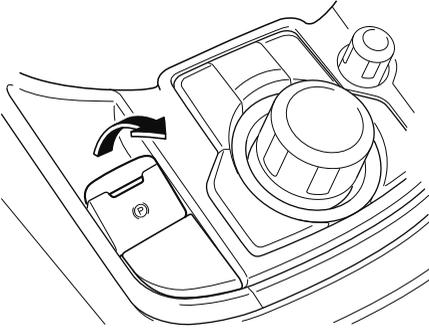
## When applying the EPB

The EPB can be applied regardless of the ignition switch position.

Securely depress the brake pedal and pull up the EPB switch.

The EPB is applied and the EPB indicator light and the EPB switch indicator light turn on.

Refer to Warning/Indicator Lights on page 4-32.

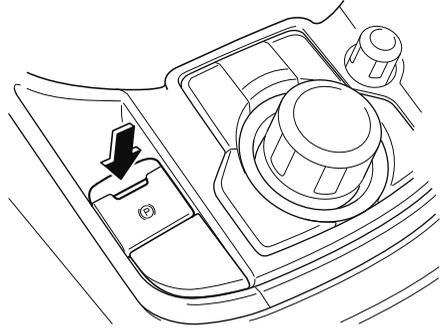


## When releasing the EPB

The EPB can be released while the ignition is switched ON or the engine is running. When the EPB is released, the EPB indicator light and the EPB switch indicator light turn off.

## **EPB manual release**

Firmly depress the brake pedal and press the EPB switch.



If the EPB switch is pressed without depressing the brake pedal, the display or indicator light in the instrument cluster notifies the driver that the brake is not depressed.

### **(Type A instrument cluster)**

A message is displayed on the multi-information display in the instrument cluster.

Refer to Message Indicated in Multi-information Display on page 7-54.

### **(Type B instrument cluster)**

The brake pedal operation demand indicator light in the instrument cluster turns on.



### EPB automatic release

If the accelerator pedal is depressed with the EPB applied and all of the following conditions met, the parking brake is released automatically.

- The engine is running.
- The driver's door is closed.
- The driver's seat belt is fastened.
- Selector lever is in the D, M, or R position

#### **NOTE**

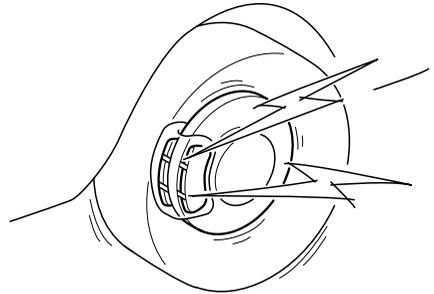
*If something such as the driver's foot contacts the accelerator pedal with the engine running and the EPB applied, the parking brake may be released automatically. If you do not intend to drive immediately, shift the selector lever to the P or N position.*

### ▼ Warning Light

The warning light turns on when the system has a malfunction. Refer to Warning Indication/Warning Lights on page 4-33.

### ▼ Brake Pad Wear Indicator

When the disc brake pads become worn, the built-in wear indicators contact the disc plates. This causes a screeching noise to warn that the pads should be replaced.



When you hear this noise, consult an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.



***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 expert repairer, we recommend an Authorized Mazda Repairer.*

## ▼ Brake Assist

During emergency braking situations when it is necessary to depress the brake pedal with greater force, the brake assist system provides braking assistance, thus enhancing braking performance.

When the brake pedal is depressed hard or depressed more quickly, the brakes apply more firmly.

### **NOTE**

- *When the brake pedal is depressed hard or depressed more quickly, the pedal will feel softer but the brakes will apply more firmly. This is a normal effect of the brake assist operation and does not indicate a malfunction.*
- *When the brake pedal is depressed hard or depressed more quickly, a motor/pump operation noise may be heard. This is a normal effect of the brake assist and does not indicate a malfunction.*
- *The brake assist equipment does not supersede the functionality of the vehicle's main braking system.*

## Emergency Stop Signal System

Your Mazda is equipped with an emergency stop signal system that is designed to determine whether you are depressing the brake pedal with greater force than during normal braking such as in a situation requiring emergency braking. If the system determines that such a situation is occurring, it flashes all the turn signals rapidly to caution the driver of the vehicle following behind your vehicle of the sudden braking situation. The system turns off when it determines that the brake pedal is released or that an emergency braking situation no longer exists based on the reduced vehicle speed.

### **NOTE**

- *If you bring your vehicle to a complete stop while all the turn signals are flashing rapidly, the rapid flashing of all the turn signals changes back to the normal flashing pattern.*
- *The emergency stop signal system does not operate at vehicle speeds under about 60 km/h (37 mph).*
- *If the brake pedal is depressed while driving on slippery roads, the emergency stop signal system could operate causing all the turn and lane change signals to flash.*

## Hill Launch Assist (HLA)

HLA is a function which assists the driver in accelerating from a stop while on a slope. When the driver releases the brake pedal and depresses the accelerator pedal while on a slope, the function prevents the vehicle from rolling. The braking force is maintained automatically after the brake pedal is released on a steep grade. HLA operates on a downward slope when the selector lever is in the reverse (R) position, and on an upward slope when the selector lever is in a forward gear.

### **WARNING**

#### **Do not rely completely on HLA:**

*HLA is an auxiliary device for accelerating from a stop on a slope. The system only operates for about two seconds and therefore, relying only on the system, when accelerating from a stop is dangerous because the vehicle may move (roll) unexpectedly and cause an accident. The vehicle could roll depending on the vehicle's load or if it is towing something. Always confirm the safety around the vehicle before starting to drive the vehicle.*

#### **NOTE**

- HLA does not operate on a gentle slope. In addition, the gradient of the slope on which the system will operate changes depending on the vehicle's load.*
- HLA does not operate if the parking brake is applied, or if the vehicle has not stopped completely.*
- HLA is operating, the brake pedal may feel stiff and vibrate, however; this does not indicate a malfunction.*

- HLA does not operate while the TCS/DSC indicator light is illuminated. Refer to Warning/Indicator Lights on page 4-32.*
- HLA does not turn off even if the TCS OFF switch is pressed to turn off the TCS.*

## Antilock Brake System (ABS)

The ABS control unit continuously monitors the speed of each wheel. If one wheel is about to lock up, the ABS responds by automatically releasing and reapplying that wheel's brake.

The driver will feel a slight vibration in the brake pedal and may hear a chattering noise from the brake system. This is normal ABS system operation. Continue to depress the brake pedal without pumping the brakes.

The warning light turns on when the system has a malfunction.

Refer to Warning Indication/Warning Lights on page 4-33.



***Do not rely on 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.*

### **NOTE**

- Braking distances may be longer on loose surfaces (snow or gravel, for example) which usually have a hard foundation. A vehicle with a normal braking system may require less distance to stop under these conditions because the tires will build up a wedge of surface layer when the wheels skid.*
- The sound of the ABS operating may be heard when starting the engine or immediately after starting the vehicle, however, it does not indicate a malfunction.*

# ABS/TCS/DSC/Trailer Stability Assist (TSA)

## Traction Control System (TCS)

The Traction Control System (TCS) enhances traction and safety by controlling engine torque and braking. When the TCS detects driving wheel slippage, it lowers engine torque and operates the brakes to prevent loss of traction.

This means that on a slick surface, the engine adjusts automatically to provide optimum power to the drive wheels, limiting wheel spin and loss of traction.

The warning light turns on when the system has a malfunction. Refer to Warning Indication/Warning Lights on page 4-33.

### WARNING

**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.*

### NOTE

*To turn off the TCS, press the TCS OFF switch (page 4-74).*

### ▼ TCS/DSC Indicator Light



This indicator light stays on for a few seconds when the ignition is switched ON. If the TCS, DSC or the Trailer Stability Assist (TSA)\* is operating, the indicator light flashes.

If the light stays on, the TCS, DSC or the brake assist system may have a malfunction and they may not operate correctly. Take your vehicle to an expert repairer, we recommend an Authorized Mazda Repairer.

### NOTE

- *In addition to the indicator light flashing, a slight lugging sound will come from the engine. This indicates that the TCS/DSC is operating properly.*
- *On slippery surfaces, such as fresh snow, it will be impossible to achieve high rpm when the TCS is on.*

## ABS/TCS/DSC/Trailer Stability Assist (TSA)

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### ▼ TCS OFF Indicator Light

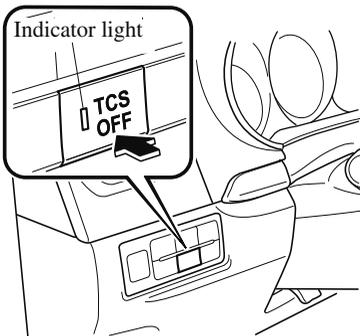
# TCS OFF

This indicator light stays on for a few seconds when the ignition is switched ON. It also illuminates when the TCS OFF switch is pressed and TCS is switched off. Refer to TCS OFF Switch on page 4-74.

If the light remains illuminated and the TCS is not switched off, take your vehicle to an expert repairer, we recommend an Authorized Mazda Repairer. The DSC may have a malfunction.

### ▼ TCS OFF Switch

Press the TCS OFF switch to turn off the TCS. The TCS OFF indicator light in the instrument cluster and TCS OFF switch indicator light turn on.



Press the switch again to turn the TCS back on. The TCS OFF indicator light and TCS OFF switch indicator light will turn off.

### NOTE

- When TCS is on and you attempt to free the vehicle when it is stuck, or drive it out of freshly fallen snow, the TCS (part of the DSC system) will activate. Depressing the accelerator will not increase engine power and freeing the vehicle may be difficult. When this happens, turn off the TCS.
- If the TCS is off when the engine is turned off, it automatically activates when the ignition is switched ON.
- Leaving the TCS on will provide the best traction.
- If the TCS OFF switch is pressed and held for 10 seconds or longer, the TCS can no longer be turned off even if the TCS OFF switch is pressed. In this case, the TCS OFF switch will operate normally when the ignition is switched ON again after being switched OFF.

# ABS/TCS/DSC/Trailer Stability Assist (TSA)

## Dynamic Stability Control (DSC)

The Dynamic Stability Control (DSC) automatically controls braking and engine torque in conjunction with systems such as ABS and TCS to help control side slip when driving on slippery surfaces, or during sudden or evasive maneuvering, enhancing vehicle safety.

Refer to ABS (page 4-72) and TCS (page 4-73).

DSC operation is possible at speeds greater than 20 km/h (12 mph).

The warning light turns on when the system has a malfunction.

Refer to Warning Indication/Warning Lights on page 4-33.

### WARNING

#### **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

- *The DSC may not operate correctly unless the following are observed:*
  - *Use tires of the correct size specified for your Mazda on all four wheels.*

- *Use tires of the same manufacturer, brand and tread pattern on all four wheels.*
- *Do not mix worn tires.*
- *The DSC may not operate correctly when tire chains are used or a temporary spare tire is installed because the tire diameter changes.*

### ▼ TCS/DSC Indicator Light



This indicator light stays on for a few seconds when the ignition is switched ON. If the TCS, DSC or the Trailer Stability Assist (TSA)\* is operating, the indicator light flashes.

If the light stays on, the TCS, DSC or the brake assist system may have a malfunction and they may not operate correctly. Take your vehicle to an expert repairer, we recommend an Authorized Mazda Repairer.

## Trailer Stability Assist (TSA)\*

If the vehicle sways while being driven and towing a trailer, the Trailer Stability Assist (TSA) automatically controls braking and engine torque to suppress the swaying and enhance vehicle stability.

The Trailer Stability Assist (TSA) is operable at a vehicle speed of about 65 km/h (40 mph) or more.

When the Trailer Stability Assist (TSA) operates while driving the vehicle, the TCS/DSC indicator light flashes.

Refer to TCS/DSC Indicator Light on page 4-75.

### **WARNING**

#### **Do not rely solely on the Trailer Stability Assist (TSA)**

*Assured vehicle stability is limited even if the Trailer Stability Assist (TSA) is operating. Drive carefully to prevent accidents.*

*In particular, if the TCS/DSC indicator light is flashing, drive the vehicle carefully as it is in a less stable condition and could sway more easily. Drive with caution and in accordance with the road, vehicle and trailer conditions.*

### **CAUTION**

➤ *The Trailer Stability Assist (TSA) may not operate correctly unless the following are observed:*

- *Use tires of the correct size specified for your Mazda on all four wheels.*

- *Use tires of the same manufacturer, brand and tread pattern on all four wheels.*
- *Do not mix worn tires.*
- *The Trailer Stability Assist (TSA) may not operate correctly when tire chains are used or a temporary spare tire is installed because the tire diameter changes.*

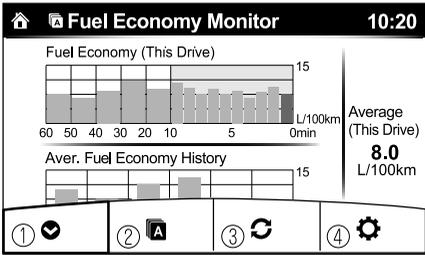
#### **NOTE**

- *The Trailer Stability Assist (TSA) uses the TCS/DSC functions. The Trailer Stability Assist (TSA) does not operate if there is a malfunction in the TCS/DSC (the TCS/DSC indicator light turns on).*
- *When the Trailer Stability Assist (TSA) is operating, the brake lights may turn on.*
- *For information regarding trailer towing, refer to Towing Caravans and Trailers (Russia) on page 3-56.*

## Fuel Economy Monitor

The Fuel Consumption information is displayed by operating each icon in the display. In addition, after completing a trip, the total energy efficiency to date is displayed in the ending display when the ending display is turned on.

1. Select the  icon on the home screen to display the applications screen.
2. Select the “Fuel Economy Monitor”.
3. Select the  icon at the bottom left of the screen to display the menu in the lower part of the screen.
4. Select the icon in the menu and perform the operation. Each icon operates as follows:

Indication on display	Control status
	① Hides the menu display.
	② Displays the application screen.
	③ Resets the fuel economy data.
	④ Displays the following setting screen. ·Ending display on/off switching ·On/off switching for function which synchronizes re-set fuel economy data to trip meter (Trip A) (Type B instrument cluster only)

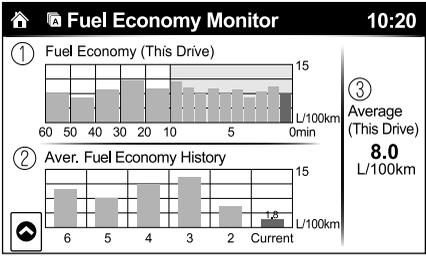
### NOTE

The fuel economy monitor screen after the ignition is switched from ON to OFF is changed to the original fuel economy monitor screen when the ignition is switched ON the next time.

# Fuel Economy Monitor

## ▼ Fuel Consumption Display

Information regarding the fuel economy is displayed.

Indication on display	Control status
 <p>The screenshot shows the Fuel Economy Monitor interface. At the top, it displays 'Fuel Economy Monitor' and the time '10:20'. Below this, there are two main sections: 1. 'Fuel Economy (This Drive)' which is a bar chart showing fuel economy every minute for the past 60 minutes. 2. 'Aver. Fuel Economy History' which is a bar chart showing the average fuel economy over the past 6 resets. To the right of the history chart, it displays 'Average (This Drive) 8.0 L/100km'. There are also navigation icons on the left side of the screen.</p>	<p>① Displays the fuel economy for the past 60 minutes.</p> <ul style="list-style-type: none"> <li>·Displays the fuel economy every minute for the past 1 to 10 minutes.</li> <li>·Displays the fuel economy every 10 minutes for the past 10 to 60 minutes.</li> </ul> <p>② Displays the average fuel economy over the past 5 resets and after the current reset.</p> <p>③ Calculates the average fuel economy every minute after vehicle travel begins, and displays it.</p>

### NOTE

- The fuel economy data can be reset by doing the following operation:
  - Press the reset switch from the menu screen.
  - When the function which synchronizes the fuel economy monitor and the trip meter is on, reset trip A of the trip meter.
  - Delete the average fuel economy information displayed in the trip computer.
  - After resetting the fuel economy data, "--" is displayed while the average fuel economy is calculated.

## ▼ Ending Screen Display

If the ending display on the fuel economy monitor is on when the ignition is switched from ON to OFF, the information regarding the fuel economy is displayed.

## Drive Selection

Drive selection is a system to switch the vehicle's drive mode. When the sport mode is selected, vehicle's response against accelerator operation is enhanced. This provides additional quick acceleration which may be needed to safely make maneuvers such as lane changes, merging onto freeways, or passing other vehicles.

### **CAUTION**

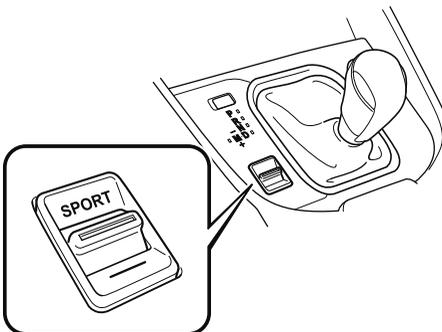
*Do not use the sport mode when driving on slippery roads such as wet or snow-covered roads. It may cause tire slipping.*

### **NOTE**

- *When the sport mode is selected, driving at higher engine speeds increases and it may increase fuel consumption. Mazda recommends that you cancel the sport mode on normal driving.*
- *Drive mode cannot be switched in the following conditions:*
  - *ABS/TCS/DSC is operating*
  - *The Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) System/Mazda Radar Cruise Control (MRCC) system/cruise control is operating.*
  - *Steering wheel is being operated abruptly*

### **▼ Drive Selection Switch**

Press the drive selection switch forward (“SPORT”) to select the sport mode.  
Pull the drive selection switch back (“—”) to cancel the sport mode.



### **NOTE**

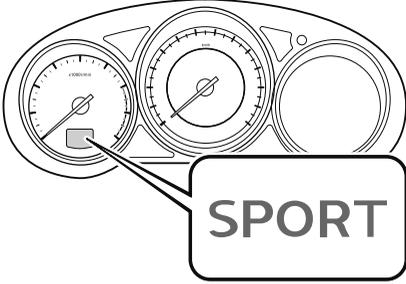
- *When the ignition is switched off, the sport mode is canceled.*
- *Depending on the driving conditions when sport mode is selected, the vehicle may perform shift-down or slightly accelerate.*

## Drive Selection

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### ▼ Select Mode Indication

When the sport mode is selected, the select mode indication turns on in the instrument cluster.



### **NOTE**

*If the drive selection cannot be switched to sport mode, the select mode indication flashes to notify the driver.*

## i-ACTIV AWD Operation\*

4WD provides excellent drivability on snow-covered and ice-packed roads, sand and mud, as well as on steep slopes and other slippery surfaces.

A system malfunction or operation conditions are indicated by a warning. Refer to Warning Indication/Warning Lights on page 4-33.

### WARNING

**Never spin a wheel that is off the ground:**

*Spinning a wheel that is off the ground as a result of the vehicle being stuck or in a ditch is dangerous. The drive assembly could be seriously damaged which could lead to an accident or could even lead to overheating, oil leakage, and a fire.*

### ▼ 4WD Driving

### WARNING

**Avoid sharp turns, excessive speed and abrupt maneuvers when driving this vehicle:**

*Sharp turns, excessive speed and abrupt maneuvering of this vehicle is dangerous as it could result in the increased risk of loss of vehicle control, vehicle roll-over, personal injury or death.*

*This vehicle has a higher center of gravity. Vehicles with a higher center of gravity such as utility and 4WD vehicles handle differently than vehicles with a lower center of gravity.*

*Utility and 4WD vehicles are not designed for cornering at high speeds any more than low profile sports cars are designed to perform satisfactorily under off-road conditions. In addition, utility vehicles have a significantly higher rollover rate than other types of vehicles.*

**Drive carefully when the vehicle is loaded by lowering vehicle speed and applying the brakes earlier:**

*Abrupt maneuvering and sudden braking when driving a loaded vehicle is dangerous as the driving behavior of a vehicle with a high center of gravity is different when it is loaded compared to when it is not, and could result in the loss of vehicle control and an accident.*

## ▼ Tires and Tire Chains

The condition of the tires plays a large role in the performance of the vehicle.

Moreover, to prevent adverse effects to the drive assembly, please note the following:

### Tires

- When replacing tires, always replace all front and rear tires at the same time.
- All tires must be of the same size, manufacture, brand and tread pattern. Pay particular attention when equipping snow or other types of winter tires.
- Do not mix tread-worn tires with normal tires.
- Inspect tire inflation pressures at the specified periods adjust to the specified pressures.

### **NOTE**

*Check the tire inflation pressure label attached to driver's door frame for the correct tire inflation pressure.*

- Make sure to equip the vehicle with genuine wheels of the specified size, on all wheels. With 4WD, the system is calibrated for all four wheels being of the same dimensions.

### Tire chains

- Install tire chains to the front tires.
- Do not use tire chains on the rear wheels.
- Do not drive the vehicle faster than 30 km/h (19 mph) with the tire chains installed.
- Do not drive the vehicle with tire chains on road conditions other than snow or ice.

### ▼ Towing

If the vehicle requires towing, have it towed with all four wheels completely off the ground.

Refer to Towing Description on page 7-34.

## Power Steering

- Power steering is only operable when the engine is running. If the engine is off or if the power steering system is inoperable, you can still steer, but it requires more physical effort. If the steering feels stiffer than usual during normal driving or the steering vibrates, consult an expert repairer, we recommend an Authorized Mazda Repairer.
- The warning indication/warning light notifies the driver of system abnormalities and operation conditions. In addition, the buzzer may also activate depending on the system abnormality or operation condition. Refer to Warning Indication/Warning Lights on page 4-33. Refer to Power Steering Warning Buzzer on page 7-58.



*Never hold the steering wheel to the extreme left or right for more than 5 seconds with the engine running. This could damage the power steering system.*

**i-ACTIVSENSE\***

i-ACTIVSENSE is a collective term covering a series of advanced safety and driver support systems which make use of a Forward Sensing Camera (FSC) and radar sensors. These systems consist of active safety and pre-crash safety systems.

These systems are designed to assist the driver in safer driving by reducing the load on the driver and helping to avert collisions or reduce their severity. However, because each system has its limitations, always drive carefully and do not rely solely on the systems.

**▼ Active Safety Technology**

Active Safety Technology supports safer driving by helping the driver to recognize potential hazards and avert accidents.

**Driver awareness support systems****Nighttime visibility**

Adaptive LED Headlights (ALH)..... page 4-87

**Left/right side and rear side detection**

Lane Departure Warning System (LDWS)..... page 4-134

Blind Spot Monitoring (BSM)..... page 4-90

**Road sign recognition**

Traffic Sign Recognition System (TSR)..... page 4-96

**Inter-vehicle distance recognition**

Distance Recognition Support System (DRSS)..... page 4-103

**Driver fatigue detection**

Driver Attention Alert (DAA)..... page 4-106

**Rear obstruction detection when leaving a parking space**

Rear Cross Traffic Alert (RCTA).....page 4-108

**Driver support systems****Inter-vehicle distance**

Mazda Radar Cruise Control (MRCC)..... page 4-111

Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function)  
.....page 4-121

**Lane departure**

Lane-keep Assist System (LAS).....page 4-134

**▼ Pre-Crash Safety Technology**

Pre-crash safety technology is designed to assist the driver in averting collisions or reduce their severity in situations where they cannot be avoided.

**Collision damage reduction in low vehicle speed range****Forward driving**

Smart City Brake Support [Forward] (SCBS F).....page 4-148

Advanced Smart City Brake Support (Advanced SCBS).....page 4-145

**Reverse driving**

Smart City Brake Support [Reverse] (SCBS R).....page 4-152

**Collision damage reduction in medium/high speed range**

Smart Brake Support (SBS).....page 4-156

**▼ Camera and Sensors****Forward Sensing Camera (FSC)**

The Forward Sensing Camera (FSC) detects lane indications and recognizes headlights, taillights and city lights during nighttime driving. In addition, it also detects the vehicle ahead, pedestrians, or obstructions. The following systems also use the Forward Sensing Camera (FSC).

- Adaptive LED Headlights (ALH)
- Driver Attention Alert (DAA)
- Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS)
- Traffic Sign Recognition System (TSR)
- Advanced Smart City Brake Support (Advanced SCBS)
- Smart City Brake Support [Forward] (SCBS F)
- Smart Brake Support (SBS)
- Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function)

The Forward Sensing Camera (FSC) is installed at the top of the windshield near the rearview mirror.

Refer to Forward Sensing Camera (FSC) on page 4-159.

## **Radar sensor (front)**

The radar sensor (front) functions by detecting the radio waves reflected off a vehicle ahead sent from the radar sensor. The following systems also use the radar sensor (front).

- Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function)
- Mazda Radar Cruise Control (MRCC)
- Distance Recognition Support System (DRSS)
- Smart Brake Support (SBS)

The radar sensor (front) is mounted behind the radiator grille.

Refer to Radar Sensor (Front) on page 4-164.

## **Radar sensors (rear)**

The radar sensors (rear) function by detecting the radio waves reflected off a vehicle approaching from the rear or an obstruction sent from the radar sensors. The following systems also use the radar sensors (rear).

- Blind Spot Monitoring (BSM)
- Rear Cross Traffic Alert (RCTA)

The radar sensors (rear) are installed inside the rear bumper, one each on the left and right sides.

Refer to Radar Sensors (Rear) on page 4-167.

## **Ultrasonic sensors (rear)**

The ultrasonic sensors (rear) function by detecting the ultrasonic waves reflected off obstructions at the rear sent from the ultrasonic sensors. The following systems also use the ultrasonic sensors (rear).

- Smart City Brake Support [Reverse] (SCBS R)

The ultrasonic sensors (rear) are mounted in the rear bumper.

Refer to Ultrasonic Sensors (Rear) on page 4-169.

## **Adaptive LED Headlights (ALH)\***

The ALH are a system which uses the Forward Sensing Camera (FSC) to determine the situation of a vehicle ahead or a vehicle approaching in the opposite direction while driving at night to automatically switch the illumination range of the headlights, the illuminated area, or the illumination brightness.

Refer to Forward Sensing Camera (FSC) on page 4-159.

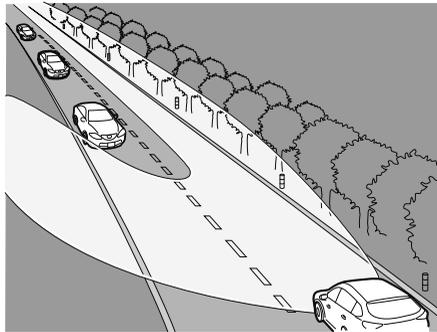
The ALH are controlled between high and low beams as follows to assure the driver's visibility without dazzling a vehicle ahead or a vehicle approaching in the opposite direction.

### **Glare-Free High Beam**

This feature dims only the high-beam light shone on the vehicle ahead.

The high beams will dim while driving at a speed of about 40 km/h (25 mph) or faster.

When the vehicle speed is less than about 30 km/h (18 mph), the beams switch to the low beams.

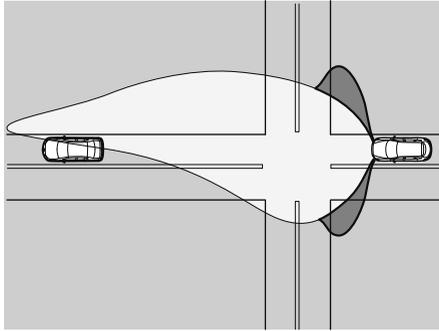


### ***NOTE***

*The headlight high-beam indicator light turns on while the high beams are on.*

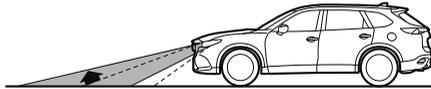
## Wide-Range Low Beam

This feature extends the illumination range of the light cast by the low beams while driving at a speed less than about 40 km/h (25 mph).



## Highway Mode

This feature shifts the illumination angle of the light cast by the headlights upward while driving on highways.



The distance in which the ALH can detect objects varies depending on the surrounding conditions.

### **⚠ CAUTION**

- Do not modify the suspensions or headlight units, or remove the camera. Otherwise, the ALH may not operate normally.
- Do not rely excessively on the ALH and drive the vehicle while paying sufficient attention to safety. Switch the headlights between the high beams and low beams manually if necessary.

### **NOTE**

Under the following conditions, the ALH may not operate normally. Manually switch between the high and low beams according to the visibility, and the road and traffic conditions.

- When there are other sources of light in the area such as street lamps, illuminated signboards, and traffic signals.
- When there are reflective objects in the surrounding area such as reflective plates and signs.

- When visibility is reduced under rain, snow and foggy conditions.
- When driving on roads with sharp curves or undulations.
- When the headlights/rear lamps of vehicles ahead or in the opposite lane are dim or not illuminated.
- When there is insufficient darkness such as at dawn or dusk.
- When the luggage compartment is loaded with heavy objects or the rear passenger seats are occupied.
- When visibility is reduced due to a vehicle ahead spraying water from its tires onto your windshield.

### ▼ To Operate the System

The system switches the headlights to the high beams after the ignition is switched ON and the headlight switch is in the **AUTO** position. The ALH indicator light (green) in the instrument cluster turns on simultaneously.



The ALH determine that it is nighttime based on the brightness of the surrounding area.

The system cancels operation when the headlight switch is turned to a position other than **AUTO**, the headlights are manually switched to low beams, or the high beams are flashed on and off.

#### **NOTE**

*The system can be changed so that the ALH do not operate.  
Refer to Personalization Features on page 9-10.*

### ▼ Manual Switching

#### Switching to low beams

Shift the lever to the low beam position. The ALH indicator light (green) turns off.

#### Switching to high beams

Turn the headlight switch to the  $\equiv \odot$  position.

The ALH indicator light (green) turns off and the  $\equiv \odot$  is illuminated.

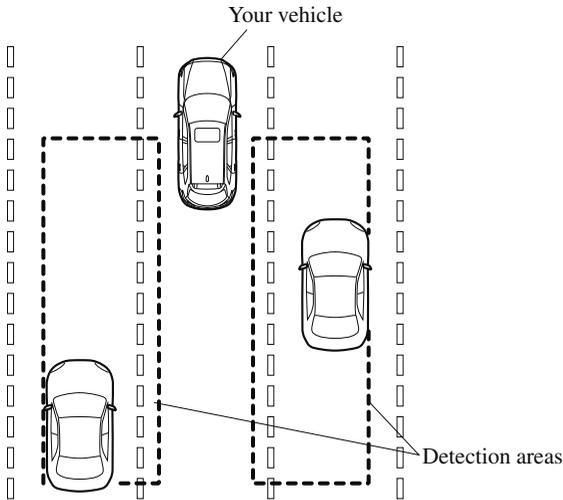
## Blind Spot Monitoring (BSM)\*

The BSM is designed to assist the driver in checking the area to the rear of the vehicle on both sides during lane changes by notifying the driver of the presence of vehicles approaching from the rear in an adjacent lane.

The BSM detects vehicles approaching from the rear while traveling in the forward direction at a speed of 30 km/h (19 mph) or faster and notifies the driver by turning on the BSM warning indicator light and displaying the vehicle detection screen (vehicles with multi-information display and active driving display).

If the turn signal lever is operated to signal a turn in the direction in which the BSM warning indicator light is illuminated while the approaching vehicle is detected, the BSM notifies the driver of possible danger by turning on the BSM warning indicator light, and by activating the warning sound and the warning screen indicator display (vehicles with multi-information display and active driving display).

The detection area on this system covers the driving lanes on both sides of the vehicle and from the rear part of the front doors to about 50 m (164 ft) behind the vehicle.



### **⚠ WARNING**

***Always check the surrounding area visually before making an actual lane change:***

*The system is only designed to assist you in checking for vehicles at your rear when making a lane change. Due to certain limitations with the operation of this system, the BSM warning indicator light, the warning sound and the warning screen indicator display may not activate or they might be delayed even though a vehicle is in an adjacent driving lane. Always make it your responsibility as a driver to check the rear.*

**NOTE**

- *The BSM will operate when all of the following conditions are met:*
  - *The ignition is switched ON.*
  - *The BSM OFF indicator light in the instrument cluster is turned off.*
  - *The vehicle speed is about 30 km/h (19 mph) or faster.*
- *The BSM will not operate under the following circumstances.*
  - *The vehicle speed falls below about 25 km/h (15 mph) even though the BSM OFF switch indicator light is turned off.*
  - *The selector lever is shifted to reverse (R) and the vehicle is reversing.*
  - *The turning radius is small (making a sharp turn, turning at intersections).*
- *In the following cases, the BSM OFF indicator light turns on and operation of the system is stopped. If the BSM OFF indicator light remains illuminated, have the vehicle inspected at an Authorized Mazda Repairer as soon as possible.*
  - *Some problem with the system including the BSM warning indicator lights is detected.*
  - *A large deviation in the installation position of a radar sensor (rear) on the vehicle has occurred.*
  - *There is a large accumulation of snow or ice on the rear bumper near a radar sensor (rear). Remove any snow, ice or mud on the rear bumper.*
  - *Driving on snow-covered roads for long periods.*
  - *The temperature near the radar sensors (rear) becomes extremely hot due to driving for long periods on slopes during the summer.*
  - *The battery voltage has decreased.*
- *Under the following conditions, the radar sensors (rear) cannot detect target objects or it may be difficult to detect them.*
  - *A vehicle is in the detection area at the rear in an adjacent driving lane but it does not approach. The BSM determines the condition based on radar detection data.*
  - *A vehicle is traveling alongside your vehicle at nearly the same speed for an extended period of time.*
  - *Vehicles approaching in the opposite direction.*
  - *A vehicle in an adjacent driving lane is attempting to pass your vehicle.*
  - *A vehicle is in an adjacent lane on a road with extremely wide driving lanes. The detection area of the radar sensors (rear) is set at the road width of expressways.*
- *In the following case, the flashing of the BSM warning indicator light, and the activation of the warning sound and the warning screen indicator display may not occur or they may be delayed.*
  - *A vehicle makes a lane change from a driving lane two lanes over to an adjacent lane.*
  - *Driving on steep slopes.*
  - *Crossing the summit of a hill or mountain pass.*

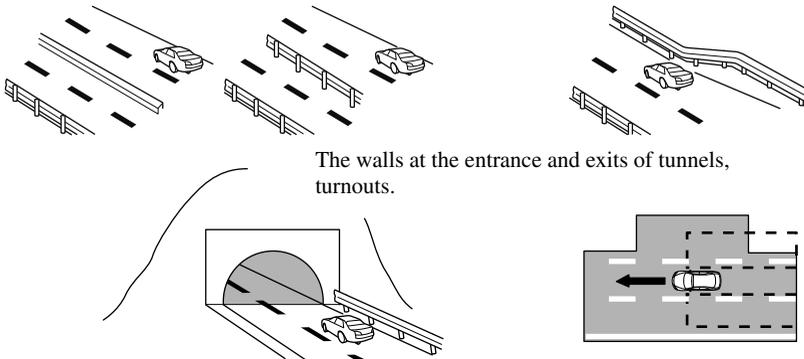
# i-ACTIVSENSE

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- When there is a difference in the height between your driving lane and the adjacent lane.
- Directly after the BSM system becomes operable by changing the setting.
- If the road width is extremely narrow, vehicles two lanes over may be detected. The detection area of the radar sensors (rear) is set according to the road width of expressways.
- The BSM warning indicator light may turn on and the vehicle detection screen may be displayed in the display in reaction to stationary objects (guardrails, tunnels, sidewalls, and parked vehicles) on the road or the roadside.

Objects such as guardrails and concrete walls running alongside the vehicle.

Places where the width between guardrails or walls on each side of the vehicle narrows.



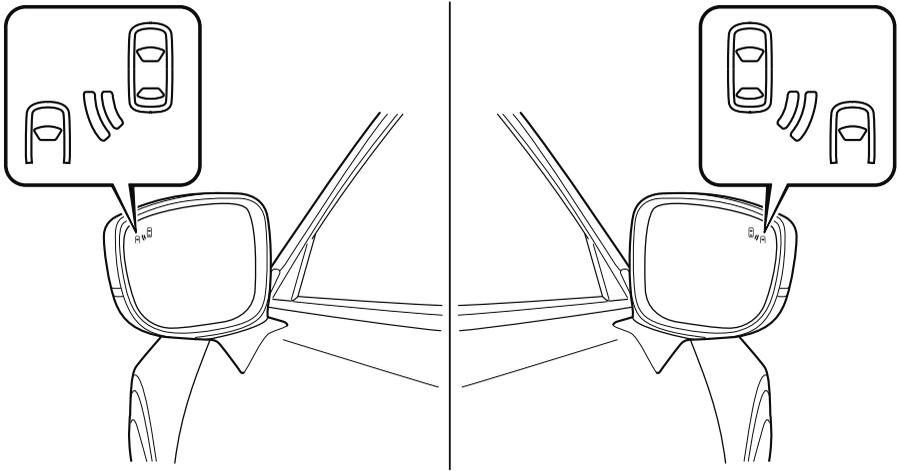
- A BSM warning indicator light may flash or the warning beep and the warning screen indicator display may be activated several times when making a turn at a city intersection.
  - Turn off the BSM while pulling a trailer or while an accessory such as a bicycle carrier is installed to the rear of the vehicle. Otherwise, the radar's radio waves will be blocked causing the system to not operate normally.
  - In the following cases, it may be difficult to view the illumination/flashings of the BSM warning indicator lights equipped on the door mirrors.
    - Snow or ice is adhering to the door mirrors.
    - The front door glass is fogged or covered in snow, frost or dirt.
  - The system switches to the Rear Cross Traffic Alert function when the selector lever is shifted to the reverse (R) position.
- Refer to Rear Cross Traffic Alert (RCTA) on page 4-108.

## ▼ **Blind Spot Monitoring (BSM) Warning Indicator Light/Display Indicator/Blind Spot Monitoring (BSM) Warning Beep**

The BSM or Rear Cross Traffic Alert (RCTA) system notifies the driver of the presence of vehicles in adjacent lanes or at the rear of the vehicle using the BSM warning indicator light, the warning sound and the display indicator (vehicles with multi-information display and active driving display) (BSM) while the systems are operational.

### **BSM warning indicator lights**

The BSM warning indicator lights are equipped on the left and right door mirrors. The warning indicator lights turn on when a vehicle approaching from the rear in an adjacent lane is detected.



When the ignition is switched ON, the warning indicator light turns on momentarily and then turns off after a few seconds.

### **Forward driving (BSM operation)**

The BSM detects vehicles approaching from the rear and turns on the BSM warning indicator lights equipped on the door mirrors according to the conditions. Additionally, while a BSM warning indicator light is illuminated, if the turn signal lever is operated to signal a turn in the direction in which the BSM warning indicator light is illuminated, the BSM warning indicator light flashes.

### **Reverse driving (Rear Cross Traffic Alert (RCTA) system operation)**

The Rear Cross Traffic Alert (RCTA) system detects vehicles approaching from the left and right of your vehicle and flashes the BSM warning indicator lights.

## Function for cancelling illumination dimmer

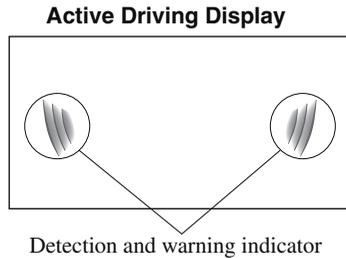
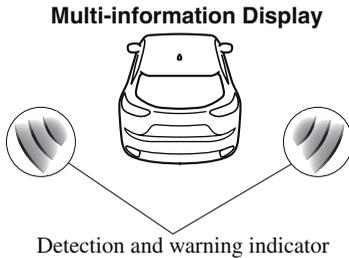
If the BSM warning indicator lights turn on when the parking lights are turned on, the brightness of the BSM warning indicator lights is dimmed.

If the BSM warning indicator lights are difficult to see due to glare from surrounding brightness when traveling on snow-covered roads or under foggy conditions, press the dimmer cancellation button to cancel the dimmer and increase the brightness of BSM warning indicator lights when they turn on.

Refer to Dashboard Illumination on page 4-16.

## Display indicator (Vehicles with multi-information display and active driving display)

The detected approaching vehicle and warning are displayed in the multi-information display and active driving display when the vehicle is moving forward (BSM operational).



The detected direction is displayed with a detection indicator (white) when an approaching vehicle is detected. In addition, if the turn signal lever is operated to signal a lane change while the vehicle is detected, the display changes the color (amber) of the warning indicator.

## BSM warning beep

The BSM warning beep is activated simultaneously with the flashing of a BSM warning indicator light.

### ▼ Canceling Operation of Blind Spot Monitoring (BSM)

The BSM system can be set to inoperable. Refer to Personalization Features on page 9-10.

When the BSM is set to inoperable, the BSM and Rear Cross Traffic Alert (RCTA) systems are turned off and the BSM OFF indicator light in the instrument cluster turns on.



#### **NOTE**

*When the ignition is switched OFF, the system status before it was turned off is maintained. For example, if the ignition is switched OFF while the BSM and Rear Cross Traffic Alert (RCTA) systems are operational, the BSM and Rear Cross Traffic Alert (RCTA) systems remain operational the next time the ignition is switched ON.*

## Traffic Sign Recognition System (TSR)\*

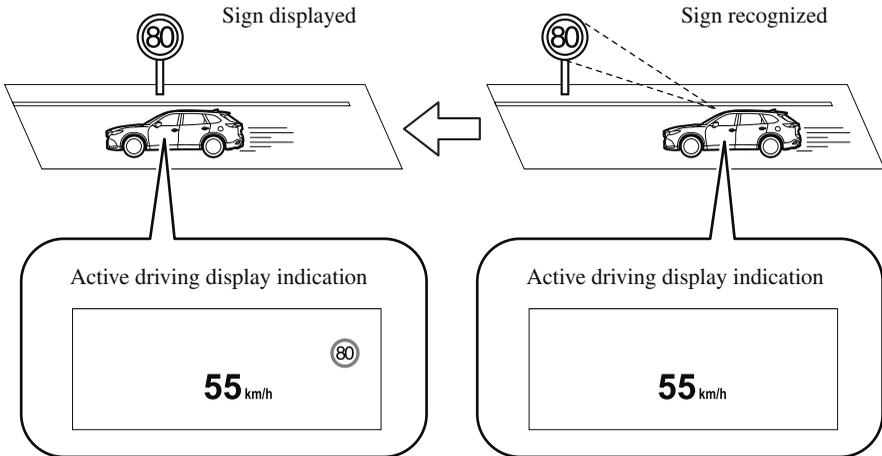
The TSR helps prevent the driver from overlooking traffic signs, and provides support for safer driving by displaying traffic signs on the active driving display which are recognized by the Forward Sensing Camera (FSC) or recorded in the navigation system while the vehicle is driven.

The TSR displays the speed limit (including auxiliary signs), do not enter, and passing prohibited signs.

If the vehicle speed exceeds the speed limit sign indicated in the active driving display while the vehicle is driven, the system notifies the driver using the indication in the active driving display and a warning sound.

### NOTE

- The TSR is not supported in some countries or regions. For information concerning the supported countries or regions, consult an expert repairer; we recommend an Authorized Mazda Repairer.
- The TSR operates only if the navigation system SD card (Mazda genuine) is inserted in the SD card slot. Consult an expert repairer; we recommend an Authorized Mazda Repairer for details.



 **WARNING****Always check the traffic signs visually while driving.**

The TSR helps prevent the driver from overlooking traffic signs and provides support for safer driving. Depending on the weather conditions or problems with traffic signs, a traffic sign may not be recognized or a traffic sign different from the actual traffic sign may be displayed. Always make it your responsibility as a driver to check the actual traffic signs. Otherwise, it could result in an accident.

**NOTE**

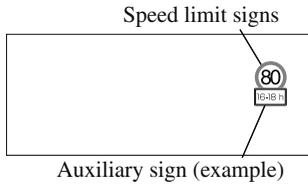
- The TSR does not operate if there is a malfunction in the Forward Sensing Camera (FSC).
- Under the following conditions, the TSR may not operate normally.
  - An object placed on the dashboard is reflected in the windshield and picked up by the camera.
  - Heavy luggage is loaded in the luggage compartment or on the rear seat and the vehicle is tilted.
  - The tire pressures are not adjusted to the specified pressure.
  - Tires other than standard tires are equipped.
  - The vehicle is driven on the ramp and surrounding area to or from a rest area or a tollgate on a highway.
  - When surrounding brightness suddenly changes such as when entering or exiting a tunnel.
  - The illumination of the headlights is weakened because of dirt or the optical axis is deviated.
  - The windshield is dirty or foggy.
  - The windshield and camera are fogged (water droplets).
  - Strong light is directed at the front of the vehicle (such as backlight or high-beam headlights of on-coming vehicles).
  - The vehicle is making a sharp turn.
  - Strong light reflects off the road.
  - A traffic sign is in a position which makes it difficult to reflect the light from the vehicle's headlights, such as when the vehicle is driven at night or in a tunnel.
  - The vehicle is driven under weather conditions such as rain, fog, or snow.
  - The stored map data for the navigation system is not current.
  - A traffic sign is obscured by mud or snow.
  - A traffic sign is concealed by trees or a vehicle.
  - A traffic sign is partially shaded.
  - A traffic sign is bent or warped.
  - A traffic sign is too low or too high.
  - A traffic sign is too bright or too dark (including electronic traffic signs).

- A traffic sign is too big or too small.
  - There is an object similar to the traffic sign being read (such as another traffic sign or other signs resembling it).
  - The TSR does not operate if the active driving display is set to non-display.
  - The TSR can be set to inoperable.
- Refer to Personalization Features on page 9-10.

## ▼ Traffic Sign Display Indication

The following traffic signs are displayed on the active driving display.

### Speed limit signs (including auxiliary signs)



If the Forward Sensing Camera (FSC) cannot classify an auxiliary sign (such as time restrictions, turning restrictions, end of section) correctly, the following screen is displayed.



### Inclement weather speed limit sign



### Do not enter signs



### Passing prohibited sign



The TSR can display a passing prohibited sign and a speed limit sign at the same time.



If the Forward Sensing Camera (FSC) cannot correctly recognize a traffic sign while the vehicle is driven, the following screen is displayed.



### **NOTE**

#### **Speed limit signs (including auxiliary signs)**

- When the vehicle speed is about 1 km/h (0.6 mph) or faster, the speed limit sign is displayed when any one of the following conditions are met.
  - The Forward Sensing Camera (FSC) recognizes a speed limit sign as a sign targeted for your vehicle and the vehicle passes it.
  - The speed limit sign stored in the navigation system is read (if the Forward Sensing Camera (FSC) does not recognize a speed limit sign).
- Inclement weather speed limit signs are displayed when all of the following conditions are met.
  - The vehicle speed is about 1 km/h (0.6 mph) or more.
  - The Forward Sensing Camera (FSC) recognizes an inclement weather speed limit sign as a sign targeted for your vehicle and the vehicle passes it.
  - The inclement weather speed limit sign is lower than the currently displayed speed limit sign.
  - The windshield wipers are operated.
- In the following cases, display of the speed limit sign stops.
  - The Forward Sensing Camera (FSC) recognizes the speed limit sign and the vehicle is driven for a certain distance after passing the sign.
  - Each sensor determines that the vehicle has changed direction of travel. (The display of a speed limit sign does not stop even if the vehicle changes lanes while a "ZONE" auxiliary sign is displayed.)
  - The Forward Sensing Camera (FSC) recognizes a new speed limit sign which differs from the previous one (displays the new speed limit sign).
  - The speed limit sign stored in the navigation system is not read within a certain period of time (if the Forward Sensing Camera (FSC) does not recognize a speed limit sign, the speed limit sign stored in the navigation system is displayed).

- The vehicle speed exceeds the displayed speed limit sign by 30 km/h (19 mph) or more after a certain period of time has elapsed since the speed limit sign was displayed. (Except when there is information for the speed limit sign in the navigation system)

## **Do not enter signs**

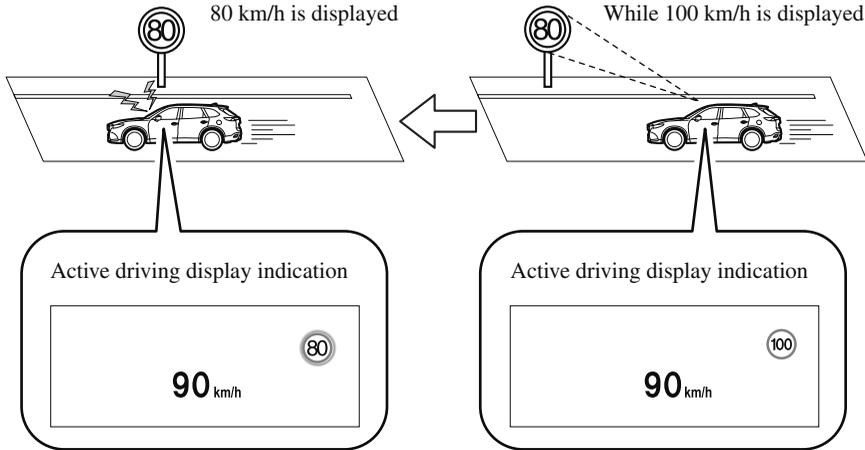
- A do not enter sign is displayed when all of the following conditions are met.
  - The vehicle speed is about 80 km/h (50 mph) or slower.
  - The Forward Sensing Camera (FSC) recognizes a do not enter sign as a sign targeted for your vehicle and the vehicle passes it.
- When the Forward Sensing Camera (FSC) recognizes the do not enter sign and a certain period of time has elapsed since the vehicle passed the sign, display of the do not enter sign stops.

## **Passing prohibited sign**

- A passing prohibited sign is displayed when all of the following conditions are met.
  - The vehicle speed is about 1 km/h (0.6 mph) or more.
  - The Forward Sensing Camera (FSC) recognizes a passing prohibited sign as a sign targeted for your vehicle and the vehicle passes it.
- In the following cases, the display of the passing prohibited sign stops.
  - The Forward Sensing Camera (FSC) recognizes a passing prohibited sign and you drive a certain distance after passing the sign.
  - You have changed vehicle lanes.

### ▼ Excessive Speed Warning

If the vehicle speed exceeds the speed limit sign displayed in the active driving display, the area around the speed limit sign flashes three times in amber and the warning sound is activated three times at the same time. If the vehicle speed continues to exceed the displayed speed limit sign, the indication stops flashing and remains on. Check the surrounding conditions and adjust the vehicle speed to the legal speed using the appropriate operation such as depressing the brake pedal.



The excessive speed warning is initially set to inoperable. If you want to activate the excessive speed warning, change the setting in the personalization features. In addition, the warning pattern and the warning activation timing differ depending on the setting contents. Refer to Personalization Features on page 9-10.

#### Warning pattern

- Off: The excessive speed warning is not activated.
- Visual: The area around the speed limit sign displayed in the display flashes three times in amber, and if the vehicle speed continues to exceed the displayed speed limit sign, the indication stops flashing and remains on.
- Audio & Visual: The area around the speed limit sign displayed in the display flashes three times in amber and the warning sound is activated three times at the same time. If the vehicle speed continues to exceed the displayed speed limit sign, the indication stops flashing and remains on.

## Warning activation timing

- + 0: If the vehicle speed exceeds the speed limit sign displayed in the display, the excessive speed warning is activated.
- + 5: If the vehicle speed exceeds the speed limit sign displayed in the display by 5 km/h (3 mph), the excessive speed warning is activated.
- + 10: If the vehicle speed exceeds the speed limit sign displayed in the display by 10 km/h (6.2 mph), the excessive speed warning is activated.

## NOTE

- *In the following cases, the excessive speed warning stops operating.*
  - *The vehicle speed is less than the speed of the displayed speed limit sign. (If the activation timing for the excessive speed warning is changed in the personalization features, the excessive speed warning stops operating when the vehicle speed is less than the changed vehicle speed.*
  - *A speed limit sign indication has been updated and the vehicle speed is lower than the updated indication.*
  - *Display of the speed limit sign stops.*
- *The warning indication is displayed at the same time the excessive speed warning sound is activated if the vehicle speed exceeds the speed indicated on the speed limit sign. Refer to Warning Sound is Activated on page 7-55.*
- *The TSR can recognize a speed limit sign with an auxiliary sign and display it, but it cannot determine the indication on the auxiliary sign (such as time restrictions, turning restrictions, end of section). Therefore, the excessive speed warning is activated when the vehicle speed exceeds the displayed speed limit sign even if the conditions indicated on the auxiliary sign do not apply to the vehicle.*
- *If the Forward Sensing Camera (FSC) incorrectly recognizes the actual speed limit sign at a lower speed, the excessive speed alarm is activated even if the vehicle is driven at the legal speed.*

## Distance Recognition Support System (DRSS)\*

The DRSS measures the distance between your vehicle and a vehicle ahead using a radar sensor (front) while the vehicle speed is about 30 km/h (19 mph) or faster, and if your vehicle approaches a vehicle ahead more closely than what is appropriate for maintaining distance between the vehicles according to the vehicle speed, a notification in the active driving display is indicated to advise you to keep a safe distance from the vehicle ahead.

### **WARNING**

#### **Do not rely completely on the DRSS and always drive carefully:**

*The ability to detect a vehicle ahead is limited depending on the type of vehicle ahead, the weather conditions, and the traffic conditions. Therefore, if the accelerator and brake pedals are not operated correctly it could lead to an accident. Always verify the safety of the surrounding area and depress the brake pedal or accelerator pedal while keeping a safer distance from vehicles ahead or on-coming vehicles.*

#### **NOTE**

- *The DRSS operates when all of the following conditions are met:*
  - *The ignition is switched ON.*
  - *The DRSS is on.*
  - *The selector lever is in a position other than reverse (R).*
  - *The vehicle speed is 30 km/h or faster (19 mph or faster).*
- *The objects which activate the system are 4-wheeled vehicles.*
- *The DRSS may also operate in the presence of motorcycles and bicycles.*
- *The DRSS may not operate normally under the following conditions:*
  - *The Dynamic Stability Control (DSC) has a malfunction.*
  - *The vehicle ahead is traveling at an extremely slow speed.*
- *The system does not operate with the following objects:*
  - *Vehicles approaching in the opposite direction.*
  - *Stationary objects (stopped vehicles, obstructions)*

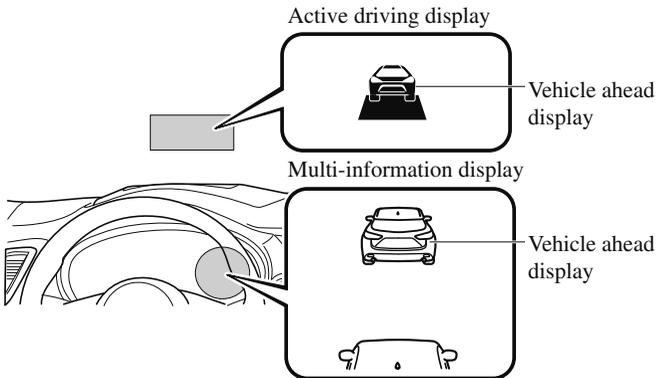
## ▼ Indication on Display

The DRSS operation status is indicated in the active driving display or multi-information display. Regarding malfunctions, check the vehicle conditions or have it inspected by an expert repairer, we recommend an Authorized Mazda Repairer according to the content of the displayed message.

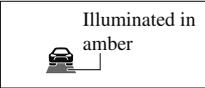
Refer to Warning/Indicator Lights on page 4-32.

### **NOTE**

- When the ignition is switched off, the operation status before the system was turned off is maintained. For example, if the ignition is switched off with the DRSS operable, the system will be operable when the ignition is switched ON the next time.
- The DRSS can be turned on/off and the system's sensitivity can be changed. Refer to Personalization Features on page 9-10.



**Distance-between-vehicles guidelines\*1**

Indication on display		Distance between vehicles guidelines (During travel at about 40 km/h (25 mph))	Distance between vehicles guidelines (During travel at about 80 km/h (50 mph))				
Multi-information display	Active driving display						
		About 25 m (82 ft)	About 50 m (164 ft)				
							
		About 20 m (66 ft)	About 40 m (131 ft)				
							
				About 15 m (49 ft)	About 30 m (98 ft)		
							
						About 10 m (33 ft)	About 20 m (66 ft)
							
 Flashes in white*2		About 10 m (32 ft) or less	About 20 m (65 ft) or less				

\*1 The distance between vehicles differs depending on vehicle speed.

\*2 Indication when the distance setting for notifying the driver that the vehicle approaches a vehicle ahead is Near.

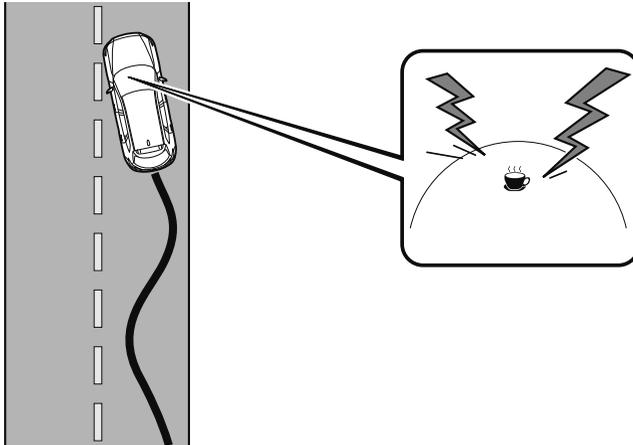
**Driver Attention Alert (DAA)\***

The DAA is a system which detects driver fatigue and decreased attentiveness, and encourages the driver to take a rest.

When the vehicle is driven inside traffic lane lines at about 65 to 140 km/h (41 to 86 mph), the DAA estimates the amount of accumulated fatigue and decreased attentiveness of the driver based on the information from the Forward Sensing Camera (FSC) and other vehicle information, and encourages the driver to take a rest using an indication on the multi-information display and a warning sound.

Use the DAA on expressways or highways.

Refer to Forward Sensing Camera (FSC) on page 4-159.

**⚠ WARNING*****Do not rely completely on DAA and always drive carefully:***

*The DAA detects driver fatigue and decreased attentiveness and encourages the driver to take a rest, however, it is not designed to prevent the vehicle from straying. If you rely too much on the DAA it could lead to an accident. Drive carefully and operate the steering wheel appropriately.*

*In addition, the system may not be able to detect driver fatigue and decreased attentiveness correctly depending on the traffic and driving conditions. The driver must take sufficient rest in consideration of safer driving.*

**NOTE**

- The DAA operates when all of the following conditions are met.*

- The vehicle speed is about 65 to 140 km/h (41 to 86 mph).
- The system detects white (yellow) lane lines.
- The system has completed learning of the driver's driving data.
- The DAA does not operate under the following conditions.
  - The vehicle speed is less than about 65 km/h (41 mph).
  - The vehicle speed exceeds about 140 km/h (86 mph)
  - The vehicle is making a sharp turn.
  - The vehicle is changing lanes.
- The DAA may not operate normally under the following conditions.
  - White (yellow) lane lines are less visible because of dirt or fading/patchiness.
  - The vehicle is jolted or swayed continuously by strong winds or rough roads.
  - The vehicle is driven aggressively.
  - When making frequent lane changes.
- The DAA detects driver fatigue and decreased attentiveness based on the driving data when the vehicle is driven at about 65 to 140 km/h (41 to 86 mph) for about 20 minutes. The driving data will be reset under the following conditions.
  - 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.
  - The ignition is switched off.
- After the DAA has displayed the first message encouraging rest, it does not display the next one until 45 minutes have passed.

### ▼ Driver Attention Alert (DAA) Display

When the system detects driver fatigue or decreased attentiveness, it activates the warning sound and displays an alert in the multi-information display.



## Driver Attention Alert

### Time for a break

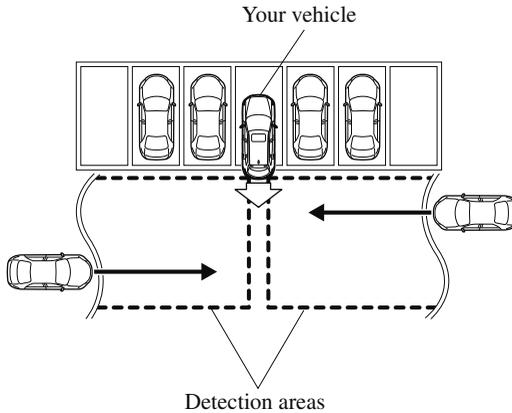
### ▼ Canceling Driver Attention Alert (DAA)

The DAA can be set to not activate. Refer to Personalization Features on page 9-10.

## Rear Cross Traffic Alert (RCTA)\*

The RCTA system is designed to assist the driver in checking the area to the rear of the vehicle on both sides while the vehicle is reversing by alerting the driver to the presence of vehicles approaching the rear of the vehicle.

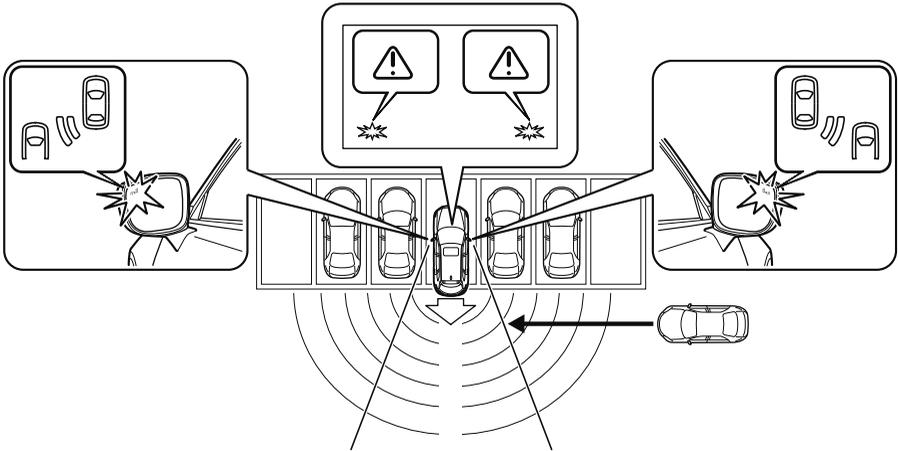
The RCTA system detects vehicles approaching from the left and right sides of the vehicle, and the rear of the vehicle while the vehicle is being reversed out of a parking space, and notifies the driver of possible danger using the Blind Spot Monitoring (BSM) warning indicator lights and the warning buzzer.



### RCTA operation

1. The RCTA system operates when the selector lever is shifted to the reverse (R) position.
2. If there is the possibility of a collision with an approaching vehicle, the Blind Spot Monitoring (BSM) warning indicator lights flashes and the warning beep is activated simultaneously.

The RCTA warning indication in the rearview monitor also synchronizes with the Blind Spot Monitoring (BSM) warning indicator light on the door mirrors.



## **! WARNING**

### **Always check the surrounding area visually before actually putting the vehicle in reverse:**

The system is only designed to assist you in checking for vehicles at the rear when putting the vehicle in reverse. Due to certain limitations with the operation of this system, the Blind Spot Monitoring (BSM) warning indicator lights may not flash or it might be delayed even though a vehicle is behind your vehicle. Always make it your responsibility as a driver to check the rear.

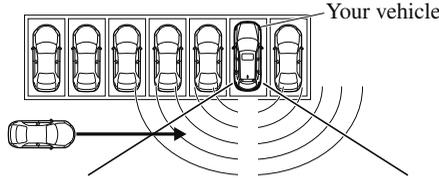
### **NOTE**

- In the following cases, the Blind Spot Monitoring (BSM) OFF Indicator Light turns on and operation of the system is stopped. If the Blind Spot Monitoring (BSM) OFF Indicator Light remains illuminated, have the vehicle inspected at an Authorized Mazda Dealer as soon as possible.
- Some problem with the system including the Blind Spot Monitoring (BSM) warning indicator lights has occurred.
- A large deviation in the installation position of a radar sensor (rear) on the vehicle has occurred.
- There is a large accumulation of snow or ice on the rear bumper near a radar sensor (rear).
- Driving on snow-covered roads for long periods.
- The temperature near the radar sensors becomes extremely hot due to driving for long periods on slopes during the summer.

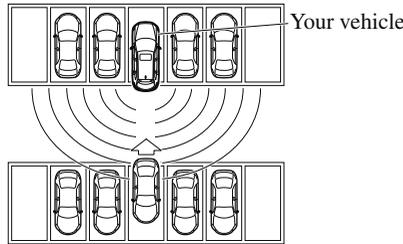
# i-ACTIVSENSE

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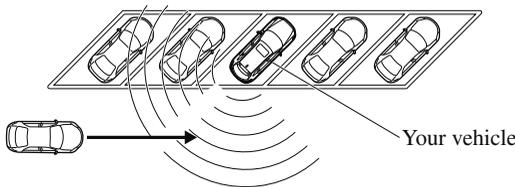
- The battery voltage has decreased.
- Under the following conditions, the radar sensors (rear) cannot detect target objects or it may be difficult to detect them.
  - The vehicle speed when reversing is about 10 km/h (6 mph) or faster.
  - The radar sensor (rear) detection area is obstructed by a nearby wall or parked vehicle. (Reverse the vehicle to a position where the radar sensor detection area is no longer obstructed.)



- A vehicle is approaching directly from the rear of your vehicle.



- The vehicle is parked on a slant.



- Directly after the Blind Spot Monitoring (BSM) system becomes operable using the personalization feature.
- Radio wave interference from a radar sensor equipped on a nearby parked vehicle.
- In the following cases, it may be difficult to view the illumination/flashing of the Blind Spot Monitoring (BSM) warning indicator lights equipped on the door mirrors.
  - Snow or ice adheres to the door mirrors.
  - The front door glass is fogged or covered in snow, frost or dirt.
- Turn off the RCTA system while pulling a trailer or while an accessory such as a bicycle carrier is installed to the rear of the vehicle. Otherwise, the radio waves emitted by the radar will be blocked causing the system to not operate normally.

## Mazda Radar Cruise Control (MRCC)\*

The MRCC system is designed to maintain headway control\*<sup>1</sup> with a vehicle ahead according to your vehicle's speed using a radar sensor (front) to detect the distance to the vehicle ahead and a preset vehicle speed without you having to use the accelerator or brake pedals.

\*<sup>1</sup> Headway Control: Control of the distance between your vehicle and the vehicle ahead detected by the MRCC system.

Additionally, if your vehicle starts closing in on the vehicle ahead such as if the vehicle ahead brakes suddenly, a warning sound and a warning indication in the display are activated simultaneously to alert you to maintain a sufficient distance between the vehicles. Also refer to the following before using the MRCC.

- Radar sensor (front) (page 4-164)

### **WARNING**

#### **Do not rely completely on the MRCC:**

*The MRCC system has detection limitations depending on the type of vehicle ahead and its conditions, the weather conditions, and the road conditions. Additionally, the system may be unable to decelerate sufficiently to avoid hitting the vehicle ahead if the vehicle ahead applies the brakes suddenly or another vehicle cuts into the driving lane, which could result in an accident.*

*Always drive carefully and verify the surrounding conditions and depress the brake pedal or accelerator pedal while keeping a safer distance from vehicles ahead or on-coming vehicles.*

#### **Do not use the MRCC system in the following locations, using the MRCC system at the following locations may result in an unexpected accident:**

- *General roads other than highways (Driving under these conditions using the MRCC system is not possible.)*
- *Roads with sharp curves and where vehicle traffic is heavy and there is insufficient space between vehicles.*
- *Roads where frequent and repetitive acceleration and deceleration occur (Driving under these conditions using the MRCC system is not possible).*
- *When entering and exiting interchanges, service areas, and parking areas of highways (If you exit a highway while headway control is in use, the vehicle ahead will no longer be tracked and your vehicle may accelerate to the set speed).*
- *Slippery roads such as ice or snow-bound roads (Tires could spin causing you to lose vehicle control, or the stop hold control may not operate.)*
- *Long, descending slopes (to maintain distance between vehicles, the system automatically and continuously applies the brakes which could result in the loss of brake power.)*

➤ *Slopes with a steep gradient (The vehicle ahead may not be detected correctly, your vehicle may slide while stopped by the stop hold control, and it may accelerate suddenly after it starts moving.)*

**For safety purposes, switch the MRCC system off when it is not being used.**



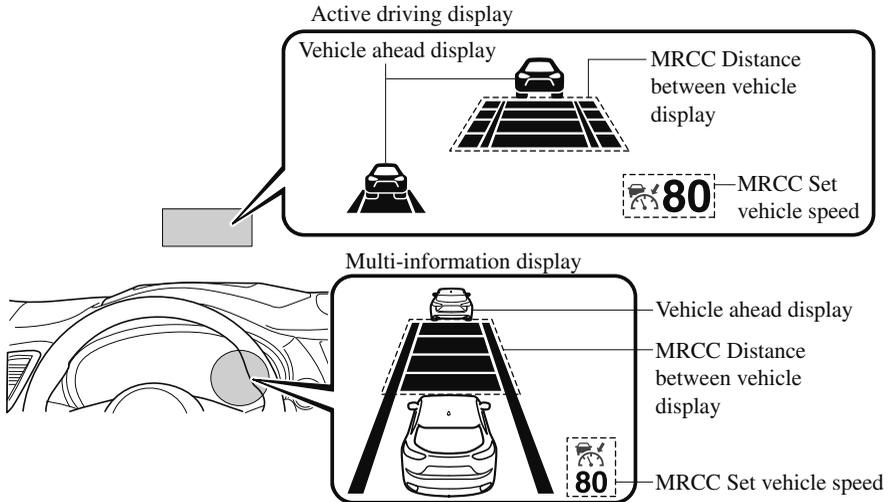
*If your vehicle is towed or you are towing something, switch the MRCC system off to prevent a miss-operation.*

## **NOTE**

- *The MRCC system does not detect the following as physical objects.*
  - *Vehicles approaching in the opposite direction*
  - *Pedestrians*
  - *Stationary objects (stopped vehicles, obstructions)*
  - *If a vehicle ahead is traveling at an extremely low speed, the system may not detect it correctly.*
- *During headway control travel, do not set the system for detection of two-wheeled vehicles such as motorcycles and bicycles.*
- *Do not use the MRCC system under conditions in which close proximity warnings are frequently activated.*
- *During headway control travel, the system accelerates and decelerates your vehicle in conjunction with the speed of the vehicle ahead. However, if it is necessary to accelerate for a lane change or if the vehicle ahead brakes suddenly causing you to close in on the vehicle rapidly, accelerate using the accelerator pedal or decelerate using the brake pedal depending on the conditions.*
- *While the MRCC system is in use, it does not cancel even if the selector lever is operated and any intended engine braking will not occur. If deceleration is required, lower the vehicle speed setting or depress the brake pedal.*
- *The sound of the automatic brakes operating may be heard, however, it does not indicate a problem.*
- *The brake lights turn on while the MRCC automatic braking is operating, however, they may not turn on while the vehicle is on a downslope at the set vehicle speed or traveling at a constant speed and following a vehicle ahead.*

### ▼ Mazda Radar Cruise Control (MRCC) Display Indication

The MRCC setting status and operation conditions are indicated on the multi-information display and the active driving display.



If there is a problem with the MRCC system, a message is displayed on the multi-information display. Check the center display to verify the problem and then have your vehicle inspected by an expert repairer, we recommend an Authorized Mazda Repairer. Refer to Message Indicated on Display on page 7-52.

### ▼ Close Proximity Warning

If your vehicle rapidly closes in on the vehicle ahead because the vehicle ahead applies the brakes suddenly while you are traveling in headway control, the warning sound activates and the brake warning is indicated in the display. Always verify the safety of the surrounding area and depress the brake pedal while keeping a safer distance from the vehicle ahead. Additionally, keep a safer distance from the vehicles behind you.

#### Multi-information Display

**BRAKE!**

#### Active Driving Display

**BRAKE !**

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## NOTE

In the following cases, the warnings and brakes may not operate even if your vehicle starts closing in on the vehicle ahead.

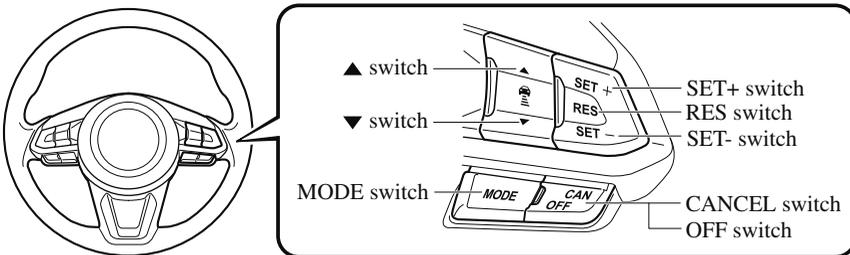
- You are driving your vehicle at the same speed as the vehicle ahead.
- Directly after the MRCC system has been set.
- Directly after the accelerator pedal is released.
- Another vehicle cuts into the driving lane.

## ▼ Setting the System

The MRCC system operates when all of the following conditions are met.

- Vehicle speed is 30 km/h (19 mph) to 145 km/h (90 mph)
- The MRCC is turned on.
- The brake pedal is not depressed.
- The electric parking brake (EPB) is released (electric parking brake (EPB) indicator light is turned off).
- There is no problem with the DSC.
- All the doors are closed.
- The driver's seat belt is fastened.
- The selector lever is in the drive (D) position or manual (M) position (manual mode).

## Turning on the system



When the MODE switch is pressed once, the MRCC system turns on, and the MRCC main indication (white) turns on and the vehicle speed and the distance between the vehicles while in headway control can be set.



In addition, the MRCC system display indication is displayed on the multi-information display and the active driving display at the same time.

**NOTE**

- If the ignition is switched off while the MRCC system is operating, the system will be operable when the ignition is switched ON the next time.
- The MRCC can switch to the Cruise Control Function.  
Refer to Cruise Control Function on page 4-118.

**How to set the speed**

1. Adjust the vehicle speed to the desired setting using the accelerator pedal.
2. Headway control begins when the SET+ or SET– switch is pressed.  
The set speed and the inter-vehicle distance display filled with white lines is displayed.  
The MRCC main indication (white) switches to the MRCC set indication (green) at the same time.



Travel status	Indication on multi-information display	Indication on active driving display
During travel at constant speed		
During travel under headway control		

**NOTE**

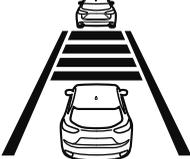
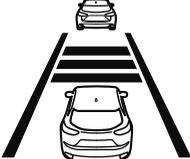
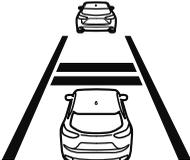
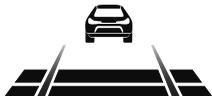
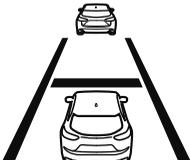
- If a vehicle ahead is detected while traveling at a constant speed, the vehicle-ahead indication is displayed and headway control is performed. Additionally, when a vehicle ahead is no longer detected, the vehicle-ahead indication turns off and the system switches back to travel at constant speed.

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- The lowest possible speed which can be set on the MRCC system is 30 km/h (19 mph).
- Headway control is not possible if the vehicle ahead is driving faster than your vehicle's set speed. Adjust the system to the desired vehicle speed using the accelerator pedal.

## How to set the distance-between-vehicles during headway control

The distance-between-vehicles is set to a shorter distance by pressing the ▼ switch. The distance-between-vehicles is set to a longer distance by pressing the ▲ switch. The distance-between-vehicles can be set to 4 levels; Long, medium, short, and extremely short distance.

Distance-between-vehicles guide-line (at 80 km/h (50 mph) vehicle speed)	Indication on multi-information display	Indication on active driving display*1
Long (about 50 m (164 ft))		
Medium (about 40 m (131 ft))		
Short (about 30 m (98 ft))		
Extremely short (about 25 m (82 ft))		

\*1 Displays a pop-up image in the active driving display only when the driver operates the switch.

**NOTE**

- The distance-between-vehicles differs depending on the vehicle speed, and the slower the vehicle speed, the shorter the distance.
- When the ignition is switched to ACC or OFF and then the engine is started again, the system automatically sets the distance-between-vehicles to the previous setting.

**How to change the set vehicle speed****To accelerate/decelerate using the SET switch**

When you press the SET+ switch, the vehicle accelerates and when you press the SET- switch, it decelerates.

Short press	5 km/h (5 mph)
Long press	10 km/h (5 mph)

**NOTE**

For example, the set vehicle speed is changed by pressing the SET switch four times as follows:

The vehicle speed accelerates or decelerates by 20 km/h (20 mph).

**To increase speed using accelerator pedal**

Depress the accelerator pedal and press and release the SET+ switch or SET- switch at the desired speed. If the switch is not operated, the system returns to the set speed after you release your foot from the accelerator pedal.



The warnings and brake control do not operate while the accelerator pedal is depressed.

**NOTE**

- When accelerating using the SET+ switch while in headway control, the set vehicle speed can be adjusted but acceleration is not possible. If there is no longer a vehicle ahead, acceleration continues until reaching the set vehicle speed. For the set vehicle speed, check the set vehicle speed indication in the display.
- When depressing the accelerator pedal, the inter-vehicle distance indication in the display changes to the white-line indication.

**Canceling the system**

When the following operations are performed, the MRCC system is canceled, and the MRCC set indication (green) switches to the MRCC main indication (white) at the same time.

- The OFF/CAN switch is pressed.
- The brake pedal is depressed.
- The electric parking brake (EPB) is applied.
- The selector lever is in the P (Park), N (Neutral), or R (Reverse) position.
- Any of the doors is opened.
- The driver's seat belt is unfastened.

Under the following conditions, the MRCC cancel indication is displayed in the multi-information display and a single beep sound is heard.

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- The DSC has operated.
- The Smart Brake Support (SBS) has operated.
- The Smart City Brake Support (SCBS) or Advanced Smart City Brake Support (Advanced SCBS) has operated.
- When traveling on a downslope for a long period of time.
- There is a problem with the system.
- The radar sensor (front) cannot detect target objects (during rain, fog, snow or other inclement weather conditions, or when the radiator grille is dirty).
- The vehicle speed decreases to less than 25 km (16 mph).

### Resuming control

If the MRCC system is canceled, you can resume control at the previously set speed by pressing the RES switch and after all of the operation conditions have been met.

#### **NOTE**

*If the set speed is not indicated in the display, the control does not resume even if the RES switch is pressed.*

### Turning off the system

Press the OFF/CAN switch two times while the MRCC system is operating to switch off the system.

### ▼ Cruise Control Function

While this function is operating, the headway control operation is canceled and only the cruise control function operates. The vehicle speed can be set more than about 25 km/h (16 mph).

Use the cruise control function on expressways and other highways which do not require a lot of repeated acceleration and deceleration.



### ***Do not use the cruise control function in the following locations:***

*Otherwise, it could lead to an accident.*

- *Roads with sharp curves and where vehicle traffic is heavy and there is insufficient space between vehicles. (Driving under these conditions using the cruise control function is not possible)*
- *Steep down slopes (Set speed may be exceeded because sufficient engine braking cannot be applied)*
- *Slippery roads such as ice or snow-bound roads (Tires could spin causing you to lose vehicle control)*

### ***Always drive carefully:***

*The warnings and brake control will not operate after the headway control function is canceled and the system is switched to only the cruise control function. Depress the brake pedal to decelerate according to the surrounding conditions while keeping a safer distance from the vehicle ahead and always driving carefully.*

**Switching to cruise control function**

When the MODE switch is pressed until the system switches to the cruise main indication (white) while the MRCC system is turned on, the system switches to the cruise control function.

When the system switches to the cruise control function, the indicator and multi-information display notify the driver as follows:

- The MRCC set indication (green) or the MRCC main indication (white) is turned off, and the cruise main indication (white) is turned on.
- A message is displayed in the multi-information display.

***Always turn off the cruise control function when it is not in use:***

*Leaving the cruise control function turned on when it is not in use is dangerous as it could operate unexpectedly, resulting in an accident.*

**How to set the speed**

Adjust the system to the desired vehicle speed using the accelerator pedal.

When the SET+ or SET- switch is pressed, the cruise set indication (green) is turned on and headway control begins.

***NOTE***

- *The system may not be able to maintain the set speed constantly depending on driving conditions such as steep up or down slopes.*
- *The speed will continue increasing while the SET+ switch is pressed and held. The speed will continue decreasing while the SET- switch is pressed and held.*

**How to increase the set speed**

The set speed can be increased using the following operations:

**To increase speed using the SET+ switch**

Press and hold the SET+ switch and release the switch at the desired speed. The set speed can be adjusted incrementally (1 km/h (1 mph) increments) by pressing the switch and releasing it immediately. For example, if the switch is pressed 4 times, the set speed increases by about 4 km/h (4 mph).

## **To increase speed using accelerator pedal**

Depress the accelerator pedal and press the SET+ or SET- switch at the desired speed.

If the switch is not operated, the system returns to the set speed after you release your foot from the accelerator pedal.

## **How to Decrease the Set Speed**

Press the SET- switch continuously and release the switch at the desired speed.

The set speed can be adjusted incrementally (1 km/h (1 mph) increments) by pressing the switch and releasing it immediately. For example, if the switch is pressed 4 times, the set vehicle speed decreases by about 4 km/h (4 mph).

## **Cancelling the function**

### **Cancelling using OFF/CAN switch**

When the OFF/CAN switch is pressed once, the cruise control function is cancelled.

### **Cancelling using MODE switch**

When the MODE switch is pressed, the cruise control function is canceled and the headway control function is made available for operation.

The cruise control function is canceled automatically in the following cases. If the RES switch is pressed while the vehicle speed is 25 km/h (16 mph) or higher, the speed returns to the original set speed.

- The OFF/CAN switch is pressed once.
- The brake pedal is depressed.
- The parking brake is applied.
- The selector lever is shifted to P or N position.

### ***NOTE***

- *If the vehicle speed decreases by about 15 km/h (9.4 mph) or more than the set speed, the cruise control function may be canceled.*
- *When the vehicle speed is less than 21 km/h (13 mph), the cruise control function is canceled. In this case, the vehicle speed will not return to the original set speed even if the vehicle is accelerated to 25 km/h (16 mph) or higher and the RES switch is pressed. Reset the cruise control function.*

## Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function)\*

The MRCC with Stop & Go function system is designed to maintain headway control\*1 with a vehicle ahead according to your vehicle's speed using a radar sensor (front) to detect the distance to the vehicle ahead and a preset vehicle speed without you having to use the accelerator or brake pedals.

\*1 Headway Control: Control of the distance between your vehicle and the vehicle ahead detected by the Mazda Radar Cruise Control (MRCC) system.

Additionally, if your vehicle starts closing in on the vehicle ahead such as if the vehicle ahead brakes suddenly, a warning sound and a warning indication in the display are activated simultaneously to alert you to maintain a sufficient distance between the vehicles. If the vehicle ahead stops while you are following behind it, your vehicle will stop and be held stopped automatically (stop hold control), and headway control will resume when you resume driving the vehicle such as by pressing the RES switch.

Also refer to the following before using the MRCC with Stop & Go function.

- Forward Sensing Camera (FSC) (page 4-159)
- Radar sensor (front) (page 4-164)

### **WARNING**

#### **Do not rely completely on the MRCC with Stop & Go function:**

*The MRCC with Stop & Go function system has detection limitations depending on the type of vehicle ahead and its conditions, the weather conditions, and the road conditions.*

*Additionally, the system may be unable to decelerate sufficiently to avoid hitting the vehicle ahead if the vehicle ahead applies the brakes suddenly or another vehicle cuts into the driving lane, which could result in an accident.*

*Always drive carefully and verify the surrounding conditions and depress the brake pedal or accelerator pedal while keeping a safer distance from vehicles ahead or on-coming vehicles.*

#### **Do not use the MRCC with Stop & Go function system in the following locations, using the MRCC with Stop & Go function system at the following locations may result in an unexpected accident:**

- *General roads other than highways (Driving under these conditions using the MRCC with Stop & Go function system is not possible.)*
- *Roads with sharp curves and where vehicle traffic is heavy and there is insufficient space between vehicles.*
- *Roads where frequent and repetitive acceleration and deceleration occur (Driving under these conditions using the MRCC with Stop & Go function system is not possible.)*

- *When entering and exiting interchanges, service areas, and parking areas of highways (If you exit a highway while headway control is in use, the vehicle ahead will no longer be tracked and your vehicle may accelerate to the set speed).*
- *Slippery roads such as ice or snow-bound roads (Tires could spin causing you to lose vehicle control, or the stop hold control may not operate.)*
- *Long, descending slopes (to maintain distance between vehicles, the system automatically and continuously applies the brakes which could result in the loss of brake power.)*
- *Slopes with a steep gradient (The vehicle ahead may not be detected correctly, your vehicle may slide while stopped by the stop hold control, and it may accelerate suddenly after it starts moving.)*

**For safety purposes, switch the MRCC with Stop & Go function system off when it is not being used.**

**Do not get out of the vehicle while the stop hold control is operating:**

*Getting out of the vehicle while the stop hold control is operating is dangerous as the vehicle may move unexpectedly and result in an accident. Before getting out of the vehicle, switch the MRCC with Stop & Go function system off, shift the selector lever to the P position, and apply the electric parking brake (EPB).*



*If your vehicle is towed or you are towing something, switch the MRCC with Stop & Go function system off to prevent a miss-operation.*

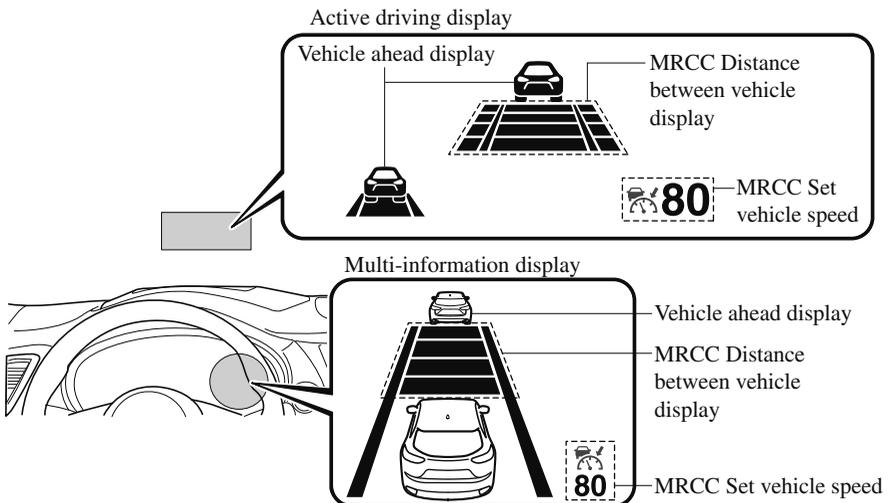
**NOTE**

- *The MRCC with Stop & Go function system does not detect the following as physical objects.*
  - *Vehicles approaching in the opposite direction*
  - *Pedestrians*
  - *Stationary objects (stopped vehicles, obstructions)*
  - *If a vehicle ahead is traveling at an extremely low speed, the system may not detect it correctly.*
- *During headway control travel, do not set the system for detection of two-wheeled vehicles such as motorcycles and bicycles.*
- *Do not use the MRCC with Stop & Go function system under conditions in which close proximity warnings are frequently activated.*

- During headway control travel, the system accelerates and decelerates your vehicle in conjunction with the speed of the vehicle ahead. However, if it is necessary to accelerate for a lane change or if the vehicle ahead brakes suddenly causing you to close in on the vehicle rapidly, accelerate using the accelerator pedal or decelerate using the brake pedal depending on the conditions.
- While the MRCC with Stop & Go function system is in use, it does not cancel even if the selector lever is operated and any intended engine braking does not occur. If deceleration is required, lower the set speed or depress the brake pedal.
- The sound of the automatic brakes operating may be heard, however, it does not indicate a problem.
- The brake lights turn on while the MRCC with Stop & Go function automatic braking is operating, however, they may not turn on while the vehicle is on a downslope at the set vehicle speed or traveling at a constant speed and following a vehicle ahead.

### ▼ Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) Display Indication

The MRCC with Stop & Go function setting status and operation conditions are indicated on the multi-information display and the active driving display.



If there is a problem with the MRCC with Stop & Go function system, a message is displayed on the multi-information display. Check the center display to verify the problem and then have your vehicle inspected by an expert repairer, we recommend an Authorized Mazda Repairer.

Refer to Message Indicated on Display on page 7-52.

**▼ Close Proximity Warning**

If your vehicle rapidly closes in on the vehicle ahead because the vehicle ahead applies the brakes suddenly while you are traveling in headway control, the warning sound activates and the brake warning is indicated in the display. Always verify the safety of the surrounding area and depress the brake pedal while keeping a safer distance from the vehicle ahead. Additionally, keep a safer distance from the vehicles behind you.

**Multi-information Display**

A rectangular display with a dark background and a light border. The word "BRAKE!" is centered in white, bold, uppercase letters. The display is flanked by two horizontal grey bars.

**Active Driving Display**

A rectangular display with a white background and a black border. The word "BRAKE!" is centered in black, bold, uppercase letters.

**NOTE**

*In the following cases, the warnings and brakes may not operate even if your vehicle starts closing in on the vehicle ahead.*

- You are driving your vehicle at the same speed as the vehicle ahead.*
- Directly after the MRCC with Stop & Go function system has been set.*
- Directly after the accelerator pedal is released.*
- Another vehicle cuts into the driving lane.*

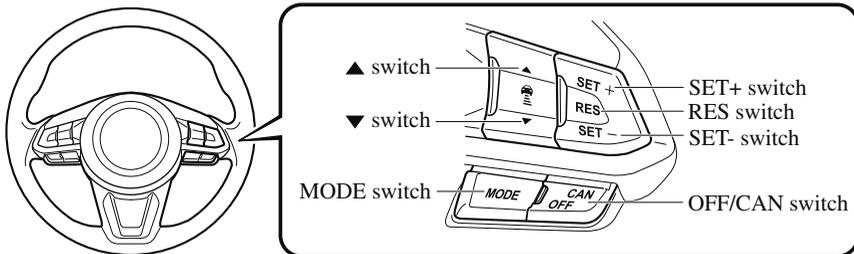
**▼ Setting the System**

The MRCC with Stop & Go function system operates when all of the following conditions are met.

- Vehicle speed is 0 km/h (0 mph) to 145 km/h (90 mph)
- The MRCC with Stop & Go function is turned on.
- The brake pedal is not depressed.
- The electric parking brake (EPB) is released (electric parking brake (EPB) indicator light is turned off).
- There is no problem with the DSC.
- All the doors are closed.
- The driver's seat belt is fastened.
- The selector lever is in the drive (D) position or manual (M) position (manual mode).

**NOTE**

- In the following cases, the MRCC with Stop & Go function system is canceled when the vehicle is traveling at 30 km/h (19 mph) or less and “Mazda Radar Cruise Control disabled under 30 km/h” is displayed in the multi-information display.
- The Forward Sensing Camera (FSC) cannot detect target objects (There is problem with the Forward Sensing Camera (FSC) or windshield is dirty).
- There is a problem with the stop hold control function.
- There is a problem with the electric parking brake (EPB).
- It may not be possible to set the MRCC with Stop & Go function system directly after starting the engine, while the DSC operation is being checked.

**Turning on the system**

When the MODE switch is pressed once, the MRCC with Stop & Go function system turns on, and the MRCC with Stop & Go function main indication (white) turns on and the vehicle speed and the distance between the vehicles while in headway control can be set.



In addition, the MRCC with Stop & Go function system display indication is displayed on the multi-information display and the active driving display at the same time.

**NOTE**

- If the ignition is switched off while the MRCC with Stop & Go function system is operating, the system will be operable when the ignition is switched ON the next time.
- The MRCC with Stop & Go function can switch to the cruise control function.  
Refer to Cruise Control Function on page 4-131.

**How to set the speed**

1. Adjust the vehicle speed to the desired setting using the accelerator pedal.
2. Headway control begins when the SET+ or SET- switch is pressed.  
The set speed and the inter-vehicle distance display filled with white lines is displayed.  
The MRCC with Stop & Go function main indication (white) switches to the MRCC with Stop & Go function set indication (green) at the same time.



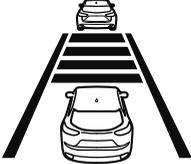
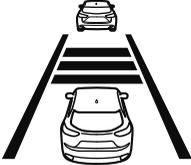
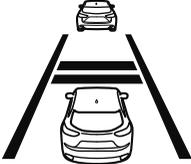
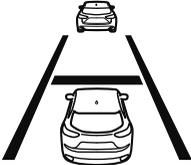
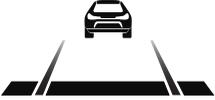
Travel status	Indication on multi-information display	Indication on active driving display
During travel at constant speed		
During travel under headway control		

**NOTE**

- If a vehicle ahead is detected while traveling at a constant speed, the vehicle-ahead indication is displayed and headway control is performed. Additionally, when a vehicle ahead is no longer detected, the vehicle-ahead indication turns off and the system switches back to travel at constant speed.
- The lowest possible speed which can be set on the MRCC with Stop & Go function system is 30 km/h (19 mph).
- Headway control is not possible if the vehicle ahead is driving faster than your vehicle's set speed. Adjust the system to the desired vehicle speed using the accelerator pedal.

### How to set the distance-between-vehicles during headway control

The distance-between-vehicles is set to a shorter distance by pressing the ▼ switch. The distance-between-vehicles is set to a longer distance by pressing the ▲ switch. The distance-between-vehicles can be set to 4 levels; Long, medium, short, and extremely short distance.

Distance-between-vehicles guide-line (at 80 km/h (50 mph) vehicle speed)	Indication on multi-information display	Indication on active driving display*1
Long (about 50 m (164 ft))		
Medium (about 40 m (131 ft))		
Short (about 30 m (98 ft))		
Extremely short (about 25 m (82 ft))		

\*1 Displays a pop-up image in the active driving display only when the driver operates the switch.

#### **NOTE**

- The distance-between-vehicles differs depending on the vehicle speed, and the slower the vehicle speed, the shorter the distance.
- When the ignition is switched to ACC or OFF and then the engine is started again, the system automatically sets the distance-between-vehicles to the previous setting.

**How to change the set vehicle speed****To accelerate/decelerate using the SET switch**

When you press the SET+ switch, the vehicle accelerates and when you press the SET- switch, it decelerates.

Short press	5 km/h (5 mph)
Long press	10 km/h (5 mph)

**NOTE**

For example, the set vehicle speed is changed by pressing the SET switch four times as follows:

The vehicle speed accelerates or decelerates by 20 km/h (20 mph).

**To increase speed using accelerator pedal**

Depress the accelerator pedal and press and release the SET+ switch or SET- switch at the desired speed. If the switch is not operated, the system returns to the set speed after you release your foot from the accelerator pedal.



The warnings and brake control do not operate while the accelerator pedal is depressed.

**NOTE**

- The setting speed can be changed by operating the SET+ switch or SET- switch during stop hold control.

- When accelerating using the SET+ switch while in headway control, the set vehicle speed can be adjusted but acceleration is not possible. If there is no longer a vehicle ahead, acceleration continues until reaching the set vehicle speed. For the set vehicle speed, check the set vehicle speed indication in the display.
- When depressing the accelerator pedal, the inter-vehicle distance indication in the display changes to the white-line indication.

**Canceling the system**

When the following operations are performed, the MRCC with Stop & Go function system is canceled, and the MRCC with Stop & Go function set indication (green) switches to the MRCC with Stop & Go function main indication (white) at the same time.

- The OFF/CAN switch is pressed.
- The brake pedal is depressed.
- The electric parking brake (EPB) is applied.
- The selector lever is in the P (Park), N (Neutral), or R (Reverse) position.
- Any of the doors is opened.
- The driver's seat belt is unfastened.

Under the following conditions, the MRCC with Stop & Go function cancel indication is displayed in the multi-information display and a single beep sound is heard.

- The DSC has operated.
- The Smart Brake Support (SBS) has operated.

- The Smart City Brake Support [Forward] (SCBS F) or Advanced Smart City Brake Support (Advanced SCBS) has operated.
- When traveling on a downslope for a long period of time.
- There is a problem with the system.
- The engine has stalled.
- The electric parking brake (EPB) is automatically applied during stop hold control.
- The radar sensor (front) cannot detect target objects (during rain, fog, snow or other inclement weather conditions, or when the radiator grille is dirty).

### **Resuming control**

If the MRCC with Stop & Go function system is canceled, you can resume control at the previously set speed by pressing the RES switch and after all of the operation conditions have been met.

### ***NOTE***

*If the set speed is not indicated in the display, the control does not resume even if the RES switch is pressed.*

### **Turning off the system**

Press the OFF/CAN switch two times while the MRCC with Stop & Go function system is operating to switch off the system.

## ▼ Stop Hold Control

While in headway control using the MRCC with Stop & Go function system, your vehicle will stop when a vehicle ahead stops. When the vehicle is stopped and the stop hold control operates, the MRCC with Stop & Go function indicator light turns on.

# HOLD

### **NOTE**

- *If the MRCC with Stop & Go function system is canceled during stop hold control, the vehicle is held in its stopped position. The stop hold control can be canceled by performing one the following actions.*
  - *Press the accelerator pedal and resume driving the vehicle.*
  - *While forcefully depressing the brake, switch the MRCC with Stop & Go function system off.*
  - *The electric parking brake (EPB) is automatically applied and the vehicle is held in its stopped position when 10 minutes have elapsed since the stop hold control operated. At this time, the MRCC with Stop & Go function system is canceled.*
  - *The brake lights turn on during stop hold control.*

### **To resume driving**

After the vehicle ahead starts moving while your vehicle is stopped under stop hold control, press the RES switch or depress the accelerator pedal to cancel the stop hold control and resume driving.

### **NOTE**

- *When you resume driving by pressing the RES switch, your vehicle does not start moving until the distance between your vehicle and the vehicle ahead lengthens to the specified distance or farther.*
- *If the MRCC with Stop & Go function is temporarily canceled during stop hold control, you cannot resume driving by pressing the RES switch when there are no vehicles in front of your vehicle. Depress the accelerator pedal and resume driving the vehicle.*

### **Resume driving information**

If you do not resume driving within a few seconds after the vehicle ahead starts moving, the multi-information display vehicle-ahead indication flashes to urge the driver to resume driving.

### ▼ Cruise Control Function

While this function is operating, the headway control operation is canceled and only the cruise control function operates. The vehicle speed can be set more than about 25 km/h (16 mph).

Use the cruise control function on expressways and other highways which do not require a lot of repeated acceleration and deceleration.



**Do not use the cruise control function in the following locations:**

*Otherwise, it could lead to an accident.*

- *Roads with sharp curves and where vehicle traffic is heavy and there is insufficient space between vehicles. (Driving under these conditions using the cruise control function is not possible)*
- *Steep down slopes (Set speed may be exceeded because sufficient engine braking cannot be applied)*
- *Slippery roads such as ice or snow-bound roads (Tires could spin causing you to lose vehicle control)*

**Always drive carefully:**

*The warnings and brake control will not operate after the headway control function is canceled and the system is switched to only the cruise control function. Depress the brake pedal to decelerate according to the surrounding conditions while keeping a safer distance from the vehicle ahead and always driving carefully.*

### Switching to cruise control function

When the MODE switch is pressed until the system switches to the cruise main indication (white) while the MRCC with Stop & Go function system is turned on, the system switches to the cruise control function.

When the system switches to the cruise control function, the indicator and multi-information display notify the driver as follows:

- The MRCC with Stop & Go function set indication (green) or the MRCC with Stop & Go function main indication (white) is turned off, and the cruise main indication (white) is turned on.
- A message is displayed in the multi-information display.



**Always turn off the cruise control function when it is not in use:**

*Leaving the cruise control function turned on when it is not in use is dangerous as it could operate unexpectedly, resulting in an accident.*

## **How to set the speed**

Adjust the system to the desired vehicle speed using the accelerator pedal.

When the SET+ or SET- switch is pressed, the cruise set indication (green) is turned on and headway control begins.

### **NOTE**

- *The system may not be able to maintain the set speed constantly depending on driving conditions such as steep up or down slopes.*
- *The speed will continue increasing while the SET+ switch is pressed and held. The speed will continue decreasing while the SET- switch is pressed and held.*

## **How to increase the set speed**

The set speed can be increased using the following operations:

### **To increase speed using the SET+ switch**

Press and hold the SET+ switch and release the switch at the desired speed. The set speed can be adjusted incrementally (1 km/h (1 mph) increments) by pressing the switch and releasing it immediately. For example, if the switch is pressed 4 times, the set speed increases by about 4 km/h (4 mph).

### **To increase speed using accelerator pedal**

Depress the accelerator pedal and press the SET+ or SET- switch at the desired speed.

If the switch is not operated, the system returns to the set speed after you release your foot from the accelerator pedal.

## **How to Decrease the Set Speed**

Press the SET- switch continuously and release the switch at the desired speed.

The set speed can be adjusted incrementally (1 km/h (1 mph) increments) by pressing the switch and releasing it immediately. For example, if the switch is pressed 4 times, the set vehicle speed decreases by about 4 km/h (4 mph).

## **Cancelling the function**

When the cruise control function is canceled and the RES switch is pressed while the vehicle speed is 25 km/h (16 mph) or faster, the speed returns to the original set speed.

## **Cancelling using OFF/CAN switch**

When the OFF/CAN switch is pressed once, the cruise control function is cancelled.

## **Automatically cancel**

The cruise control function is canceled automatically in the following cases.

- The brake pedal is depressed.
- The parking brake is applied.
- The selector lever is shifted to P or N position.

**NOTE**

- *If the vehicle speed decreases by about 15 km/h (9.4 mph) or more than the set speed, the cruise control function may be canceled.*
- *When the vehicle speed is less than 21 km/h (13 mph), the cruise control function is canceled. In this case, the vehicle speed will not return to the original set speed even if the vehicle is accelerated to 25 km/h (16 mph) or higher and the RES switch is pressed. Reset the cruise control function.*

## Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS)\*

The LAS&LDWS alerts the driver that the vehicle may be deviating from its lane and it provides steering assistance to help the driver stay within the vehicle lanes.

The Forward Sensing Camera (FSC) detects the white lines (yellow lines) of the vehicle lane in which the vehicle is traveling and if the system determines that the vehicle may deviate from its lane, it operates the electric power steering to assist the driver's steering operation. The system also alerts the driver by activating a lane departure warning sound, vibrating the steering wheel, and indicating an alert in the display. Use the system when you drive the vehicle on roads with white (yellow) lines such as expressways and highways. Refer to Forward Sensing Camera (FSC) on page 4-159.

The steering wheel operation of the LAS&LDWS has “Late” and “Early” steering assist timing settings.

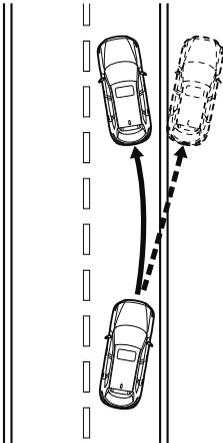
For the “Late” setting, the system assists the driver's steering operation if there is the possibility of the vehicle deviating from its lane.

For the “Early” setting, the system assists the driver's steering operation constantly so that the vehicle stays near the center of the vehicle lane.

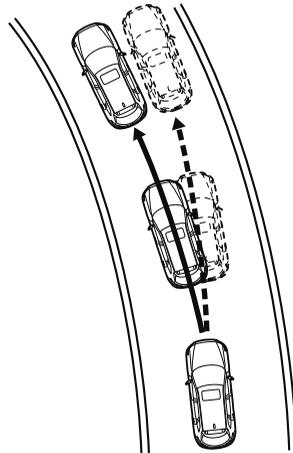
“Late” and “Early” timing can be changed (timing at which steering operation assist is provided) by changing the setting.

Refer to Personalization Features on page 9-10.

“Late” setting



“Early” setting



 **WARNING****Do not rely completely on the LAS&LDWS:**

- *The LAS&LDWS is not an automatic driving system. In addition, the system is not designed to compensate for a driver's lack of caution, and over-reliance on the system could lead to an accident.*
- *The detection ability of the LAS&LDWS is limited. Always stay on course using the steering wheel and drive with care.*

**Do not use the LAS&LDWS in the following cases:**

*The system may not operate adequately according to the actual driving conditions, resulting in an accident.*

- *Driving on roads with tight curves.*
- *Driving under bad weather conditions (rain, fog, and snow).*
- *Slippery roads such as ice or snow-bound roads.*
- *Roads with heavy traffic and insufficient distance between vehicles.*
- *Roads with no white (yellow) lane lines.*
- *Narrow roads resulting from road construction or lane closures.*
- *The vehicle is driven on a temporary lane or section with a closed lane resulting from road construction where there may be multiple white (yellow) lane lines or they are interrupted.*
- *Vehicle is driven on roads other than expressways and highways.*
- *The tire pressures are not adjusted to the specified pressure.*
- *Tires of a different specified size are used, such as an emergency spare tire.*

 **CAUTION**

*Heed the following cautions so that the LAS&LDWS can operate normally.*

- *Do not modify the suspensions.*
- *Always use wheels of the specified type and size for the front and rear wheels. Consult an expert repairer, we recommend an Authorized Mazda Repairer for tire replacement.*

**NOTE**

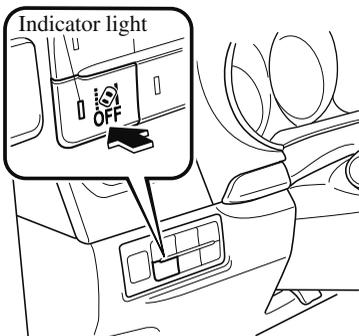
- *When the turn signal lever is operated for a lane change, the LAS&LDWS is automatically disabled. The LAS&LDWS becomes operational again when the turn signal lever is returned and the system detects white (yellow) lane lines while the vehicle is being driven normally within its vehicle lane.*

- *If the steering wheel, accelerator pedal, or brake pedal is operated abruptly and the vehicle moves close to a white (yellow) line, the system determines that the driver is making a lane change and the LAS&LDWS operation is temporarily canceled. The LAS&LDWS becomes operational again when the system detects white (yellow) lane lines while the vehicle is being driven normally within its vehicle lane.*
- *If the vehicle deviates from its lane repeatedly within a short period of time, the LAS&LDWS may not operate.*
- *When white (yellow) lane lines are not detected, the LAS&LDWS does not operate.*
- *Under the following conditions, the LAS&LDWS may not be able to detect white (yellow) lane lines correctly and it may not operate normally.*
  - *If an object placed on the dashboard is reflected in the windshield and picked up by the camera.*
  - *Heavy luggage is loaded in the luggage compartment or on the rear seat and the vehicle is tilted.*
  - *The tire pressures are not adjusted to the specified pressure.*
  - *Tires other than conventional tires are equipped.*
  - *Vehicle is driven on an intersection or junction, or on a forked road.*
  - *The white (yellow) lane lines are less visible because of dirt or fading/patchiness.*
  - *A vehicle in front of your vehicle is running near a white (yellow) lane line making it less visible.*
  - *A white (yellow) lane line is less visible because of bad weather (rain, fog, or snow).*
  - *The vehicle is driven on a temporary lane or section with a closed lane resulting from construction where there may be multiple white (yellow) lane lines or they are interrupted.*
  - *A misleading line is picked up on the road such as a temporary line for construction, or because of shade, lingering snow, or grooves filled with water.*
  - *The surrounding brightness suddenly changes such as when entering or exiting a tunnel.*
  - *The illumination of the headlights is weakened because of dirt or the optical axis is deviated.*
  - *The windshield is dirty or foggy.*
  - *The windshield, camera is fogged (water droplets).*
  - *Back-light is reflected off the road surface.*
  - *The road surface is wet and shiny after rain, or there are puddles on the road.*
  - *The shade of a guardrail parallel to a white (yellow) lane line is cast on the road.*
  - *The width of the driving lane is narrow or wide.*
  - *Driving on roads with tight curves.*
  - *The road is excessively uneven.*
  - *The vehicle is shaken after hitting a road bump.*
  - *There are two or more adjacent white (yellow) lane lines.*

- There are various road markings or lane markings of various shapes near an intersection.

### ▼ System Operation

Make sure that the LAS&LDWS OFF switch indicator light is turned off. When the LAS&LDWS OFF switch indicator light is turned on, press the switch and make sure that the switch indicator light turns off.



The LAS&LDWS indication (white) is displayed in the multi-information display, and the system goes on stand-by.



(White)

Drive the vehicle in the center of the vehicle lane while the system is on standby. When all of the following conditions are met, the LAS&LDWS indication (green) is displayed in the multi-information display, and the system becomes operational.



(Green)

- The engine is running.
- The vehicle speed is about 60 km/h (37 mph) or faster.
- The system detects white (yellow) lane lines on both the right and left sides.
- The driver is operating the steering wheel.
- The driving lane is neither narrow nor wide.

### NOTE

The LAS&LDWS indication is white when the system detects only a white (yellow) line on either the left or right, and the indication changes to green when the system detects white (yellow) lines on both the left and right sides.

Detection only on  
either left or right

Detects on both  
left and right sides



(White)



(Green)

The LAS&LDWS goes on stand-by status in the following cases:

- The system cannot detect white (yellow) lane lines.
- The vehicle speed is less than about 60 km/h (37 mph).
- The ABS/TCS is operating.
- The TCS is turned off.  
(If the TCS is turned off while the system is operational, a warning beep is heard and the system goes on standby.)
- The vehicle is making a sharp curve.
- The brake pedal is depressed.

**i-ACTIVSENSE**

- The steering wheel is operated abruptly.
- The width of a lane is excessively narrow or wide.

**NOTE**

- **(When the timing of the steering assist is set to “Late”)**

- The LAS&LDWS does not operate until the system detects white (yellow) lane lines on either the left or right.
- When the system detects a white (yellow) lane line on one side only, the system will not operate the steering wheel operation assist and the warning for the lane line on the side that is not being detected. The steering wheel operation assist and the warning is only for a lane deviation on the side that is being detected.

- **(When the timing of the steering assist is set to “Early”)**

- When the steering assist timing is set to “Early”, the LAS&LDWS does not operate until the system detects white (yellow) lane lines on the left and right. When the system only detects white (yellow) lane lines on either the left or right, the system only operates for a lane deviation on the side being detected.
- The steering wheel operation assist is performed so that the vehicle remains near the center of the driving lane, however, depending on conditions such as the road curvature, road slope and undulations, and vehicle speed, the system may not be able to keep the vehicle near the center of the driving lane.

- If the driver takes his or her hands off the steering wheel (not holding the steering wheel), the warning sound is activated and an alert is indicated in the multi-information display or the active driving display.

**Multi-information Display**

**Lane-keep Assist System.  
Please Hold Steering Wheel**

**Active Driving Display**

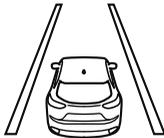
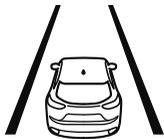
Please hold steering wheel

If the steering wheel is held lightly, or depending on the road conditions, the system may detect that you have released the steering wheel (not holding the steering wheel) even if you are holding it, and display a message in the multi-information display or the active driving display.

- The timing at which the lane departure warning is activated and the steering wheel operation assist is performed varies.
- The following settings for the LAS&LDWS can be changed. Refer to Personalization Features on page 9-10.
  - Steering operation assist operational/non-operational
  - Cancel sensitivity (likelihood of steering assist)

**Vehicle lane line display**

When the LAS&LDWS becomes operational while on standby, the vehicle lane lines are displayed in the multi-information display and the active driving display. In the vehicle lane lines display indicating the operation status, the color of the vehicle lane lines being detected changes to white.

**(Stand-by status)****Multi-information Display****Active Driving Display****(Operational status)****Multi-information Display****Active Driving Display****Auto cancel**

In the following cases, the LAS&LDWS is automatically canceled, the LAS&LDWS warning indication (amber) turns on, and an alert is displayed. When the LAS&LDWS become operational, the system turns back on automatically.

- The temperature inside the camera is high or low.
- The windshield around the camera is foggy.
- The windshield around the camera is blocked by an obstruction, causing poor forward visibility.

**Auto cancel of warning/steering assist**

When the following operations are performed, the LAS&LDWS operation is canceled automatically. The LAS&LDWS resumes automatically after the operation.

- The steering wheel is operated abruptly.
- The brake pedal is operated.
- The accelerator pedal is operated.  
(To cancel the automatic sensitivity cancel function, deselect "Cancel sensitivity" in the personalization features setting.)
- The turn signal lever is operated.
- The vehicle crosses a lane line.

## NOTE

- After the operation, the LAS&LDWS operation may not operate for a period of 5 seconds at the most until the lane lines are detected.
- Under the following conditions, the LAS&LDWS cancels the warning/steering assist automatically.
  - The driver takes his/her hands off the steering wheel.  
(The LAS&LDWS is designed to assist the driver's steering operation and it will resume operation automatically when the driver holds the steering wheel.)
  - The TCS OFF switch is pressed to cancel the TCS.

## Steering operation assist OFF (non-operational)

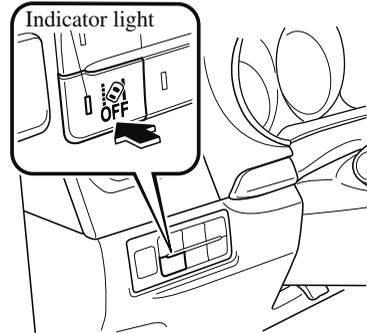
The steering operation assist for the LAS&LDWS can be changed to non-operational (OFF).

Refer to Setting Change (Personalization Features) on page 9-10.

When the steering operation assist has been changed to non-operational (OFF), the operation conditions and the display of the LAS&LDWS differ. Operate the system as follows:

## System operation

Make sure that the LAS&LDWS OFF switch indicator light is turned off. When the LAS&LDWS OFF switch indicator light turns on, press the switch and make sure that the switch indicator light turns off.



Drive the vehicle in the center of the driving lane while the LAS&LDWS OFF switch indicator light is turned off. The system becomes operational when all of the following conditions are met.

- The system detects white (yellow) lane lines on both the right and left sides or on either side.
- The vehicle speed is about 60 km/h (37 mph) or faster.
- The vehicle is driven on a straight road or road with gentle curves.
- The engine is running.

The LAS&LDWS goes on stand-by status in the following cases:

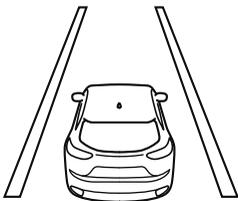
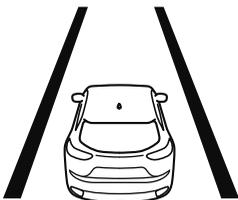
- The system cannot detect white (yellow) lane lines.
- The vehicle speed is less than about 60 km/h (37 mph).
- The vehicle is making a sharp curve.
- The vehicle is making a curve at an inappropriate speed.

**NOTE**

- The LAS&LDWS remains on stand-by until it detects white (yellow) lines on both the left and right sides, or on either side.
- When the system detects a white (yellow) lane line on one side only, the system will not activate warnings for the lane line on the side that is not being detected.
- The distance and warning sensitivity (likelihood of a warning) which the system uses to determine the possibility of a lane departure can be changed. Refer to Setting Change (Personalization Features) on page 9-10.

**Vehicle lane line display**

When the LAS&LDWS becomes operational while on standby, the vehicle lane lines are displayed in the multi-information display. The system changes to operational status display when the system detects a white (yellow) line on either the left or right.

**(Stand-by status)****(Operational status)****Auto cancel**

In the following cases, the LAS&LDWS is automatically canceled, the LAS&LDWS warning indication (amber) turns on, and an alert is displayed. When the LAS&LDWS become operational, the system turns back on automatically.

- The temperature inside the camera is high or low.
- The windshield around the camera is foggy.
- The windshield around the camera is blocked by an obstruction, causing poor forward visibility.

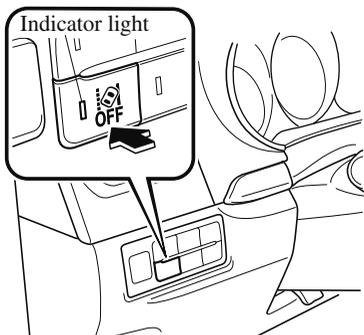
**(Auto cancel of warnings)**

When the following operations are performed, the LAS&LDWS determines that the driver intends to make a lane change and the system operation is canceled automatically. The LAS&LDWS resumes automatically after the operation.

- The steering wheel is operated abruptly.
- The brake pedal is depressed.
- The accelerator pedal is depressed. (To cancel the automatic sensitivity cancel function, deselect “Warning sensitivity” in the personalization features setting.)
- The turn signal lever is operated.
- The vehicle crosses a lane line.

## ▼ System Canceling

When the LAS&LDWS is turned off, press the LAS&LDWS OFF switch.



The LAS&LDWS OFF switch indicator light turns on.

### NOTE

*· In the following cases, the LAS&LDWS is canceled automatically and the LAS&LDWS OFF indication is displayed in the multi-information display. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.*

- There is a malfunction in the power steering.*
- There is a malfunction in the TCS.*
- There is a malfunction in the Forward Sensing Camera (FSC).*

### (European models)

*· When the ignition is switched OFF, the LAS&LDWS becomes operational the next time the ignition switched ON.*

### (Except European models)

- When the ignition is switched OFF, the system status before it was turned off is maintained. For example, if the ignition is switched OFF with the lane-keep system operable, the system will be operable when the ignition is switched ON the next time.*

When the LAS&LDWS is turned off, the vehicle lane line indication in the multi-information display and the active driving display turn off.

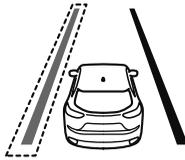
## ▼ Lane Departure Warning

If the system determines that the vehicle may deviate from its lane, the lane departure warning (beep sound, rumble sound\*<sup>1</sup>, or steering wheel vibration) is activated and the direction in which the system determines that the vehicle may deviate is indicated in the multi-information display or the active driving display.

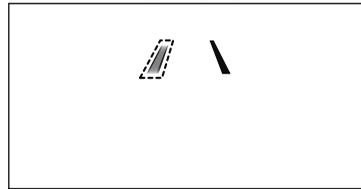
For vehicles equipped with the multi-information display, the direction which the system determined that the vehicle may be deviating from its lane is indicated in the multi-information display.

For vehicles equipped with the active driving display, the color of the lane line in the direction which the system determined that the vehicle may be deviating from its lane changes from white to amber and the vehicle lane line flashes.

**Multi-information Display**



**Active Driving Display**



### NOTE

- If you have set the lane departure warning sound to the beep sound/rumble sound\*<sup>1</sup> setting, the warning sound may not be heard depending on the surrounding noise conditions.
- If you have set the lane departure warning system to the steering wheel vibrations setting, the vibration may not be felt depending on the road surface conditions.
- When the setting for the steering operation assist is changed to operational, the warnings can be set to activate/not activate. (When the setting for the steering operation assist is changed to non-operational, the warnings cannot be set to not activate.)

Refer to Setting Change (Personalization Features) on page 9-10.

- The LAS&LDWS can be changed to the following settings regardless of whether the steering operation assist has been set to operational/non-operational. Always check the setting status when driving the vehicle and make setting changes if necessary.
- Refer to Setting Change (Personalization Features) on page 9-10.

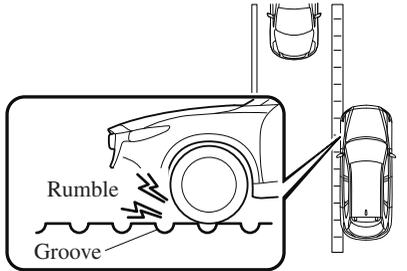
- Steering wheel vibration: Strong/weak
- Warning sound volume
- Types of warnings (steering wheel vibration/beep sound/rumble sound\*<sup>1</sup>)

\*<sup>1</sup> A rumble strip is a series of grooves in the road pavement surface positioned at specific intervals, and when the vehicle passes over it a vibration and rumble sound is produced which alerts the driver that the vehicle is departing from the lane.

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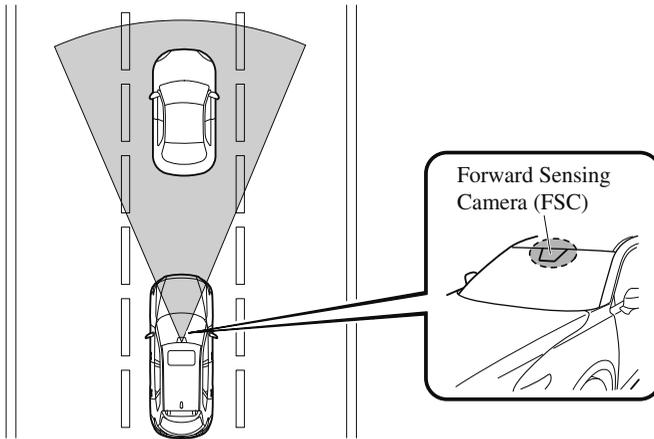
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*The rumble sound is a reproduction of the sound which occurs when a vehicle passes over a rumble strip.*



## Advanced Smart City Brake Support (Advanced SCBS)\*

The Advanced SCBS alerts the driver of a possible collision using the display and a warning sound when the Forward Sensing Camera (FSC) detects a vehicle ahead or pedestrian and determines that a collision with the object is unavoidable while the vehicle is driven at a vehicle speed of about 4 to 80 km/h (2 to 50 mph) if the object is a vehicle ahead and about 10 to 80 km/h (6.2 to 50 mph) if the object is a pedestrian. In addition, the system reduces damage in the event of a collision by operating the brake control (Advanced SCBS brake) when the system determines that a collision is unavoidable. In addition, when the driver depresses the brake pedal, the brakes are applied firmly and quickly to assist. (Brake Assist (Advanced SCBS brake assist))



### **⚠ WARNING**

#### **Do not rely completely on the Advanced SCBS system:**

- *The Advanced SCBS system 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.*
- *The Advanced SCBS system operates in response to a vehicle ahead or a pedestrian. The system does not operate in response to obstructions such as a wall, 2-wheeled vehicles, or animals.*



In the following cases, turn the system off to prevent a mis-operation:

- The vehicle is being towed or when towing another vehicle.
- The vehicle is on a chassis roller.
- When driving on rough roads such as in areas of dense grass or off-road.

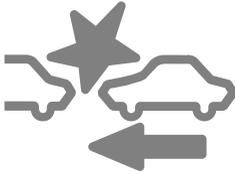
Refer to Stopping the Advanced Smart City Brake Support (Advanced SCBS) System Operation on page 4-147 on how to turn off the Advanced SCBS system.

### **NOTE**

- The Advanced SCBS system will operate under the following conditions.
  - The engine is running.
  - The Smart City Brake Support (SCBS) warning light (amber) does not illuminate.
  - **(Object is vehicle ahead)**  
The vehicle speed is between about 4 to 80 km/h (2 to 50 mph).
  - **(Object is a pedestrian)**  
The vehicle speed is between about 10 to 80 km/h (6.2 to 50 mph).
  - The Advanced SCBS system is not turned off.
- Under the following conditions, the Advanced SCBS system may not operate normally:
  - The Advanced SCBS system will not operate if the driver is deliberately performing driving operations (accelerator pedal and steering wheel).
  - If there is the possibility of partial contact with a vehicle ahead.
  - The vehicle is driven on a slippery road surface such as wet roads or icy or snow-bound roads.
  - The braking performance is adversely affected due to cold temperatures or wet brakes.
  - The vehicle is driven at the same speed as the vehicle ahead.
  - The accelerator pedal is depressed.
  - The brake pedal is depressed.
  - The steering wheel is being operated.
  - The selector lever is being operated.
- In the following cases, the Advanced SCBS may operate.
  - Objects on the road at the entrance to a curve.
  - Vehicles passing in the opposite lane while making a curve.
  - When passing through a toll gate.
  - When passing through low gates, narrow gates, car washing machines, or tunnels.
  - If you suddenly come close to a vehicle ahead.
  - 2-wheeled vehicles, animals, or standing trees.

### ▼ Smart City Brake Support (SCBS) Indicator Light (Red)

If the Advanced SCBS is operating, the indicator light (red) flashes.



### ▼ Collision Warning

If there is the possibility of a collision with a vehicle ahead, the beep sounds continuously and a warning is indicated in the multi-information display or the active driving display.

#### Multi-information Display

**BRAKE!**

#### Active Driving Display

**BRAKE!**

#### **NOTE**

The operation distance and volume of the collision warning can be changed. Refer to Personalization Features on page 9-10.

### ▼ Automatic Brake Operation Display

The automatic brake operation display is indicated on the multi-information display after the Advanced SCBS is operated.



### SCBS Automatic Brake

#### **NOTE**

- The collision warning beep sounds intermittently while the Advanced SCBS brake or brake assist (Advanced SCBS brake assist) is operating.
- If the vehicle is stopped by the Advanced SCBS operation and the brake pedal is not depressed, the warning beep sounds one time after about 2 seconds and the Advanced SCBS brake is automatically released.

### ▼ Stopping the Advanced Smart City Brake Support (Advanced SCBS) System Operation

The Advanced SCBS system can be temporarily deactivated.

Refer to Personalization Features on page 9-10.

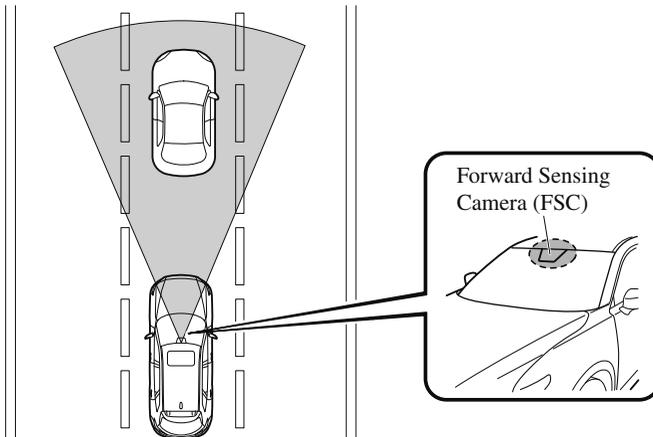
When the Advanced SCBS system is turned off, the Smart City Brake Support (SCBS) OFF indicator light turns on.



When the engine is restarted, the system becomes operational.

**Smart City Brake Support [Forward] (SCBS F)\***

The SCBS F system alerts the driver of a possible collision using an indication in the display and a warning sound when the Forward Sensing Camera (FSC) detects a vehicle ahead and determines that a collision with a vehicle ahead is unavoidable while the vehicle is being driven at a vehicle speed of about 4 to 80 km/h (2 to 50 mph). In addition, the system reduces damage in the event of a collision by operating the brake control (Smart City Brake Support (SCBS) brake) when the system determines that a collision is unavoidable while the vehicle is being driven at a vehicle speed of about 4 to 30 km/h (2 to 18 mph). It may also be possible to avoid a collision if the relative speed between your vehicle and the vehicle in front of you is less than about 20 km/h (12 mph). In addition, when the driver depresses the brake pedal while the system is in the operation range at about 4 to 30 km/h (2 to 18 mph), the brakes are applied firmly and quickly to assist. (Brake Assist (Smart City Brake Support (SCBS) brake assist))

**⚠ WARNING****Do not rely completely on the SCBS F system:**

- *The SCBS F system 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.*
- *The SCBS F is a system which operates in response to a vehicle ahead. The system may not be able to detect or react to 2-wheeled vehicles or pedestrians.*



In the following cases, turn the system off to prevent a mis-operation:

- The vehicle is being towed or when towing another vehicle.
- The vehicle is on a chassis roller.
- When driving on rough roads such as in areas of dense grass or off-road.

Refer to Stopping the Smart City Brake Support [Forward] (SCBS F) system Operation on page 4-151 on how to turn off the SCBS F system.

### **NOTE**

- The SCBS F system will operate under the following conditions.
  - The engine is running.
  - The Smart Brake Support/Smart City Brake Support (SBS/SCBS) system warning indication/warning light (amber) does not illuminate.
  - **(Rear-end collision warning)**  
The vehicle speed is about 4 to 80 km/h (2 to 50 mph).
  - **(Brake control (Smart City Brake Support (SCBS) brake))**  
The vehicle speed is about 4 to 30 km/h (2 to 18 mph).
  - The SCBS F system is not turned off.
- Under the following conditions, the SCBS F system may not operate normally:
  - The SCBS F system will not operate if the driver is deliberately performing driving operations (accelerator pedal and steering wheel).
  - If there is the possibility of partial contact with a vehicle ahead.
  - The vehicle is driven on a slippery road surface such as wet roads or icy or snow-bound roads.
  - The braking performance is adversely affected due to cold temperatures or wet brakes.
  - The vehicle is driven at the same speed as the vehicle ahead.
  - The accelerator pedal is depressed.
  - The brake pedal is depressed.
  - The steering wheel is being operated.
  - The selector lever is being operated.
- In the following cases, the Forward Sensing Camera (FSC) determines that there is a vehicle ahead and the SCBS F may operate.
  - Objects on the road at the entrance to a curve.
  - Vehicles passing in the opposite lane while making a curve.
  - Metal objects, bumps, or protruding objects on the road.
  - When passing through a toll gate.
  - When passing through low gates, narrow gates, car washing machines, or tunnels.

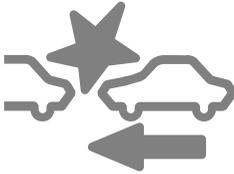
# i-ACTIVSENSE

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- If you suddenly come close to a vehicle ahead.
- 2-wheeled vehicles, pedestrians, animals or standing trees.
- Vehicle is driven with some of the tires having significant wear.

## ▼ Smart City Brake Support (SCBS) Indicator Light (Red)

If the Smart City Brake Support (SCBS) is operating, the indicator light (red) flashes.



## ▼ Collision Warning

If there is the possibility of a collision with a vehicle ahead, the beep sounds continuously and a warning is indicated in the multi-information display or the active driving display.

### Multi-information Display

**BRAKE!**

### Active Driving Display

**BRAKE!**

### NOTE

The operation distance and volume of the collision warning can be changed. Refer to Personalization Features on page 9-10.

## ▼ Automatic Brake Operation Display

The automatic brake operation display is indicated on the multi-information display after the SCBS F is operated.



## SCBS Automatic Brake

### NOTE

- The collision warning beep sounds intermittently while the SCBS F brake or brake assist (SCBS F brake assist) is operating.
- If the vehicle is stopped by the SCBS F operation and the brake pedal is not depressed, the warning beep sounds one time after about 2 seconds and the SCBS F brake is automatically released.

### ▼ Stopping the Smart City Brake Support [Forward] (SCBS F) System Operation

The SCBS F system can be temporarily deactivated.

Refer to Personalization Features on page 9-10.

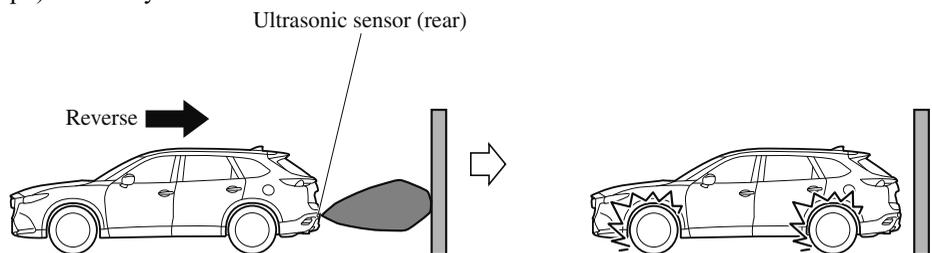
When the SCBS F system is turned off, the Smart City Brake Support (SCBS) OFF indicator light turns on.



When the engine is restarted, the system becomes operational.

## Smart City Brake Support [Reverse] (SCBS R)\*

The SCBS R is a system which is designed to reduce damage in the event of a collision by operating the brake control (SCBS brake) when the system's ultrasonic sensors detect an obstruction at the rear of the vehicle while driving at a speed of about 2 to 8 km/h (2 to 4 mph) and the system determines that a collision is unavoidable.



### **! WARNING**

#### **Do not rely completely on the SCBS R system:**

- The SCBS R system 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.
- To assure the correct operation of the SCBS R, heed the following cautions.
  - Do not apply a sticker to an ultrasonic sensor (rear) (including transparent stickers). Otherwise, the ultrasonic sensor (rear) may not be able to detect vehicles or obstructions which could result in an accident.
  - Do not disassemble an ultrasonic sensor (rear).
  - If cracks or damage caused by flying gravel or debris is visible around an ultrasonic sensor (rear), stop using the SCBS R system immediately and have your vehicle inspected by an expert repairer, we recommend an Authorized Mazda Repairer. If the vehicle continues to be driven with cracks or scratch marks left around an ultrasonic sensor, the system may operate unnecessarily and cause an unexpected accident. Refer to *Stopping the Smart City Brake Support [Reverse] (SCBS R) System Operation* on page 4-155.
  - Consult an expert repairer, we recommend an Authorized Mazda Repairer for rear bumper replacement.

#### **Do not modify the suspension:**

If the vehicle height or inclination is changed, the SCBS R system may not operate correctly because it cannot detect obstructions correctly.

**Do not apply a strong force to an ultrasonic sensor (rear):**

When washing the vehicle, do not spray highly pressurized water against an ultrasonic sensor (rear), or rub it strongly. In addition, do not hit the rear bumper forcefully when loading and unloading cargo. Otherwise, the sensors may not detect obstructions correctly which could cause the SCBS R system to not operate normally, or it could operate unnecessarily.



- When driving off-road in areas where there is grass or foliage, it is recommended that the SCBS R system be turned off.
- Always use tires of the specified size and the same manufacturer, brand, and tread pattern on all 4 wheels. In addition, do not use tires with significantly different wear patterns on the same vehicle. Otherwise, the SCBS R system may not operate normally.
- If ice or snow is stuck on the ultrasonic sensors (rear) they may not be able to detect obstructions correctly depending on the conditions. In such cases, the system may not be able to perform controls correctly. Always drive carefully and pay attention to the rear of the vehicle.

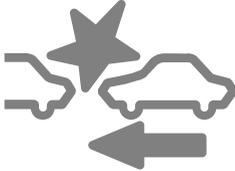
**NOTE**

- The vehicle posture changes depending on the accelerator pedal, brake pedal and steering wheel operations, which could make it difficult for the system to recognize an obstruction, or it could facilitate unnecessary detection. In such cases, the SCBS R may or may not operate.
- The SCBS R system will operate under the following conditions.
  - The engine is running.
  - The selector lever is in the R (reverse) position.
  - “Reverse Smart City Brake Support Malfunction” is not displayed in the multi-information display.
  - The vehicle speed is between about 2 to 8 km/h (2 to 4 mph).
  - The SCBS R is not turned off.
  - The DSC is not malfunctioning.
- The SCBS R operates using ultrasonic sensors (rear) which detect obstructions at the rear by emitting ultrasonic waves and then receiving the returning waves reflected off the obstructions.
- In the following cases, the ultrasonic sensors (rear) cannot detect obstructions and the SCBS R may not operate.
  - The height of the obstruction is low such as low walls or trucks with low loading platforms.
  - The height of the obstruction is high such as trucks with high loading platforms.

- *The obstruction is small.*
  - *The obstruction is thin such as a signpost.*
  - *The obstruction is positioned away from the center of the vehicle.*
  - *The surface of the obstruction is not pointed vertically relative to the vehicle.*
  - *The obstruction is soft such as a hanging curtain or snow stuck to a vehicle.*
  - *The obstruction is shaped irregularly.*
  - *The obstruction is extremely close.*
  - *In the following cases, the ultrasonic sensors (rear) cannot detect obstructions correctly and the SCBS R may not operate.*
    - *Something is stuck on the bumper near an ultrasonic sensor (rear).*
    - *The steering wheel is turned sharply, or the brake or accelerator pedal is operated.*
    - *There is another obstruction near one obstruction.*
    - *During inclement weather such as rain, fog and snow.*
    - *High or low humidity.*
    - *High or low temperatures*
    - *Strong winds.*
    - *The path of travel is not flat.*
    - *Heavy luggage is loaded in the luggage compartment or on the rear seat.*
    - *Objects such as a wireless antenna, fog light, or illuminated license plate is installed near an ultrasonic sensor (rear).*
    - *The orientation of an ultrasonic sensor (rear) has deviated for reasons such as a collision.*
    - *The vehicle is affected by other sound waves such as the horn, engine noise, ultrasonic sensor of another vehicle.*
  - *In the following cases, an ultrasonic sensor (rear) may detect something as a target obstruction which could cause the SCBS R system to operate.*
    - *Driving on a steep slope.*
    - *Wheel blocks.*
    - *Hanging curtains, gate poles such as at toll gates and railroad crossing.*
    - *When traveling near objects such as foliage, barriers, vehicles, walls, and fences along a road.*
    - *When driving off-road in areas where there is grass and forage.*
    - *When passing through low gates, narrow gates, car washing machines, and tunnels.*
    - *A towing bar is installed or a trailer is connected.*
  - *When the system operates, the user is notified by the multi-information display.*
  - *The Smart City Brake Support (SCBS) warning indication (amber) turns on when the system has a malfunction.*
- Refer to Warning Indication/Warning Lights on page 4-33.*

### ▼ Smart City Brake Support (SCBS) Indicator Light (Red)

If the Smart City Brake Support (SCBS) is operating, the indicator light (red) flashes.



### ▼ Automatic Brake Operation Display

“SCBS Automatic Brake” is indicated in the multi-information display after the Smart City Brake Support (SCBS) brakes is operated.



### SCBS Automatic Brake

#### NOTE

- The collision warning beep sounds intermittently while the Smart City Brake Support (SCBS) brake is operating.
- If the vehicle is stopped by the Smart City Brake Support (SCBS) operation and the brake pedal is not depressed, the warning beep sounds one time after about 2 seconds and the Smart City Brake Support (SCBS) brake is automatically released.

### ▼ Stopping the Smart City Brake Support [Reverse] (SCBS R) System Operation

The SCBS R system can be temporarily deactivated.

Refer to Personalization Features on page 9-10.

When the SCBS R system is turned off, the Smart City Brake Support (SCBS) OFF indicator light turns on.



When the engine is restarted, the system becomes operational.

## Smart Brake Support (SBS)\*

The SBS system alerts the driver of a possible collision using a display and warning sound if the radar sensor (front) and the Forward Sensing Camera (FSC) determine that there is the possibility of a collision with a vehicle ahead while the vehicle is being driven at about 15 km/h or faster (10 mph or faster). Furthermore, if the radar sensor (front) and the Forward Sensing Camera (FSC) determines that a collision is unavoidable, the automatic brake control is performed to 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. (Brake Assist (SBS brake assist))



### WARNING

**Do not rely completely on the SBS system and always drive carefully:**

*The SBS is designed to reduce damage in the event of a collision, not avoid an accident. The ability to detect an obstruction is limited depending on the obstruction, weather conditions, or traffic conditions. Therefore, if the accelerator pedal or brake pedal is mistakenly operated it could result in an accident. Always verify the safety of the surrounding area and depress the brake pedal or accelerator pedal while keeping a safer distance from vehicles ahead or on-coming vehicles.*



### CAUTION

*In the following cases, turn the system off to prevent a mis-operation:*

- *The vehicle is being towed or when towing another vehicle.*
- *The vehicle is on a chassis roller.*
- *When driving on rough roads such as in areas of dense grass or off-road.*

### NOTE

- *The SBS system operates when all of the following conditions are met:*
  - *The ignition is switched ON.*
  - *The SBS system is on.*
  - *The vehicle speed is about 15 km/h or faster (10 mph or faster).*
  - *The relative speed between your vehicle and the vehicle ahead is about 15 km/h or faster (10 mph or faster).*
  - *The Dynamic Stability Control (DSC) is not operating.*
- *The SBS system may not operate under the following conditions:*
  - *If the vehicle is accelerated rapidly and it comes close to a vehicle ahead.*

- *The vehicle is driven at the same speed as the vehicle ahead.*
  - *The accelerator pedal is depressed.*
  - *The brake pedal is depressed.*
  - *The steering wheel is being operated.*
  - *The selector lever is being operated.*
  - *The turn signal is being used.*
  - *When the vehicle ahead is not equipped with taillights or the taillights are turned off.*
  - *When warnings and messages, such as a dirty windshield, related to the Forward Sensing Camera (FSC) are being displayed in the multi-information display.*
  - *Although the objects which activate the system are four-wheeled vehicles, the radar sensor (front) could detect the following objects, determine them to be an obstruction, and operate the SBS system.*
    - *Objects on the road at the entrance to a curve (including guardrails and snow banks).*
    - *A vehicle appears in the opposite lane while cornering or rounding a curve.*
    - *When crossing a narrow bridge.*
    - *When passing under a low gate or through a tunnel or narrow gate.*
    - *When entering an underground parking area.*
    - *Metal objects, bumps, or protruding objects on the road.*
    - *If you suddenly come close to a vehicle ahead.*
    - *When driving in areas where there is high grass or forage.*
    - *Two-wheeled vehicles such as motorbikes or bicycles.*
    - *Pedestrians or non-metallic objects such as standing trees.*
  - *When the system operates, the user is notified by the multi-information display.*
  - *The SBS warning indication (amber) turns on when the system has a malfunction.*
- Refer to Warning Indication/Warning Lights on page 4-33.*

## ▼ Collision Warning

If there is the possibility of a collision with a vehicle ahead, the beep sounds continuously and a warning is indicated in the display.

### Multi-information Display



**BRAKE!**

### Active Driving Display



**BRAKE!**

## ▼ Stopping The Smart Brake Support (SBS) System Operation

The SBS system can be temporarily deactivated.

Refer to Personalization Features on page 9-10.

When the SBS system is turned off, the SBS OFF indicator light turns on.



When the engine is restarted, the system becomes operational.

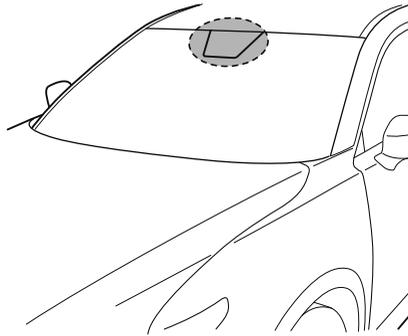
### **NOTE**

*If the SBS system operation is turned off, the Smart City Brake Support (SCBS) system operation is turned off simultaneously.*

## Forward Sensing Camera (FSC)\*

Your vehicle is equipped with a Forward Sensing Camera (FSC). The Forward Sensing Camera (FSC) is positioned near the rearview mirror and used by the following systems.

- Adaptive LED Headlights (ALH)
- Driver Attention Alert (DAA)
- Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS)
- Traffic Sign Recognition System (TSR)
- Advanced Smart City Brake Support (Advanced SCBS)
- Smart City Brake Support [Forward] (SCBS F)
- Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function)
- Smart Brake Support (SBS)



The Forward Sensing Camera (FSC) determines the conditions ahead of the vehicle while traveling at night and detects traffic lanes. The distance in which the Forward Sensing Camera (FSC) can detect objects varies depending on the surrounding conditions.

### **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**

- 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. Consequently, each system may not operate normally which could lead to an unexpected accident.
- Do not disassemble or modify the Forward Sensing Camera (FSC).  
Disassembly or modification of the Forward Sensing Camera (FSC) will cause a malfunction or mistaken operation. Consequently, each system may not operate normally which could lead to an unexpected accident.
- Heed the following cautions to assure the correct operation of the Forward Sensing Camera (FSC).
  - Be careful not to scratch the Forward Sensing Camera (FSC) lens or allow it to get dirty.
  - Do not remove the Forward Sensing Camera (FSC) cover.
  - Do not place objects on the dashboard which reflect light.
  - Always keep the windshield glass around the camera clean by removing dirt or fogging. Use the windshield defroster to remove fogging on the windshield.
  - Consult an expert repairer, we recommend an Authorized Mazda Repairer regarding cleaning the interior side of the windshield around the Forward Sensing Camera (FSC).
  - Consult an expert repairer, we recommend an Authorized Mazda Repairer before performing repairs around the Forward Sensing Camera (FSC).
  - The Forward Sensing Camera (FSC) is installed to the windshield. Consult an expert repairer, we recommend an Authorized Mazda Repairer for windshield repair and replacement.
  - 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.
  - When performing repairs around the rearview mirror, consult an expert repairer, we recommend an Authorized Mazda Repairer.
  - Consult an expert repairer, we recommend an Authorized Mazda Repairer regarding cleaning of the camera lens.
  - Do not hit or apply strong force to the Forward Sensing Camera (FSC) or the area around it. If the Forward Sensing Camera (FSC) is severely hit or if there are cracks or damage caused by flying gravel or debris in the area around it, stop using the following systems and consult an expert repairer, we recommend an Authorized Mazda Repairer.
    - Adaptive LED Headlights (ALH)
    - Driver Attention Alert (DAA)
    - Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS)
    - Traffic Sign Recognition System (TSR)

- *Advanced Smart City Brake Support (Advanced SCBS)*
- *Smart City Brake Support [Forward] (SCBS F)*
- *Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function)*
- *Smart Brake Support (SBS)*
- *The direction in which the Forward Sensing Camera (FSC) is pointed has been finely adjusted. Do not change the installation position of the Forward Sensing Camera (FSC) or remove it. Otherwise, it could result in damage or malfunction.*
- *Always use tires for all wheels that are of the specified size, and the same manufacturer, brand, and tread pattern. In addition, do not use tires with significantly different wear patterns on the same vehicle as the system may not operate normally.*
- *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, ice or snow on the windshield. In such cases, the system cannot accurately determine a vehicle ahead and may not be able to operate normally. Always drive carefully and pay attention to the road ahead.*

**NOTE**

- *In the following cases, the Forward Sensing Camera (FSC) cannot detect target objects correctly, and each system may be unable to operate normally.*
  - *The height of the vehicle ahead is low.*
  - *You drive your vehicle at the same speed as the vehicle ahead.*
  - *Headlights are not turned on during the night or when going through a tunnel.*
- *In the following cases, the Forward Sensing Camera (FSC) may not be able to detect target objects correctly.*
  - *Under bad weather condition, such as rain, fog and snow.*
  - *The window washer is being used or the windshield wipers are not used when it's raining.*
  - *Ice, fog, snow, frost, rainfall, dirt, or foreign matter such as a plastic bag is stuck on the windshield.*
  - *Trucks with low loading platforms and vehicles with an extremely low or high profile.*
  - *When driving next to walls with no patterning (including fences and longitudinally striped walls).*
  - *The taillights of the vehicle ahead are turned off.*
  - *A vehicle is outside the illumination range of the headlights.*
  - *The vehicle is making a sharp turn, or ascending or descending a steep slope.*
  - *Entering or exiting a tunnel.*
  - *Heavy luggage is loaded causing the vehicle to tilt.*
  - *Strong light is shone at the front of the vehicle (back light or high-beam light from on-coming vehicles).*
  - *There are many light emitters on the vehicle ahead.*

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- *When the vehicle ahead is not equipped with taillights or the taillights are turned off at nighttime.*
- *Elongated luggage or cargo is loaded onto installed roof rails and covers the Forward Sensing Camera (FSC).*
- *Exhaust gas from the vehicle in front, sand, snow, and water vapor rising from manholes and grating, and water splashed into the air.*
- *When towing a malfunctioning vehicle.*
- *The vehicle is driven with tires having significantly different wear.*
- *The vehicle is driven on down slopes or bumpy roads.*
- *There are water puddles on the road.*
- *The surroundings are dark such as during the night, early evening, or early morning, or in a tunnel or indoor parking lot.*
- *The illumination brightness of the headlights is reduced or the headlight illumination is weakened due to dirt or a deviated optical axis.*
- *The target object enters 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.*
- *You change lanes and approach a vehicle ahead.*
- *When driving extremely close to the target object.*
- *Tire chains or a temporary spare tire is installed.*
- *The vehicle ahead has a special shape. For example, a vehicle towing a trailer house or a boat, or a vehicle carrier carrying a vehicle with its front pointed rearward.*
- *If the Forward Sensing Camera (FSC) cannot operate normally due to backlight or fog, the system functions related to the Forward Sensing Camera (FSC) are temporarily stopped and the following warning lights turn on. However, this does not indicate a malfunction.*
  - *Adaptive LED Headlights (ALH) warning light (amber)*
  - *Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) warning indication*
  - *Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) warning indication*
  - *Smart Brake Support/Smart City Brake Support (SBS/SCBS) warning indication/ warning light (amber)*
- *If the Forward Sensing Camera (FSC) cannot operate normally due to high temperatures, the system functions related to the Forward Sensing Camera (FSC) are temporarily stopped and the following warning lights turn on. However, this does not indicate a malfunction. Cool down the area around the Forward Sensing Camera (FSC) such as by turning on the air conditioner.*
  - *Adaptive LED Headlights (ALH) warning light (amber)*

- *Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) warning indication*
- *Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) warning indication*
- *Smart Brake Support/Smart City Brake Support (SBS/SCBS) warning indication/warning light (amber)*
- *If the Forward Sensing Camera (FSC) detects that the windshield is dirty or foggy, the system functions related to the Forward Sensing Camera (FSC) are temporarily stopped and the following warning lights turn on. However, this does not indicate a problem. Remove the dirt from the windshield or press the defroster switch and defog the windshield.*
  - *Adaptive LED Headlights (ALH) warning light (amber)*
- *Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) warning indication*
- *Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) warning indication*
- *Smart Brake Support/Smart City Brake Support (SBS/SCBS) warning indication/warning light (amber)*
- *If there are recognizable cracks or damage caused by flying gravel or debris on the windshield, always have the windshield replaced. Consult an Authorized Mazda Repairer for replacement.*
- ***(With Advanced Smart City Brake Support (Advanced SCBS))***
  - *The Forward Sensing Camera (FSC) recognizes pedestrians when all of the following conditions are met:*
    - *The height of a pedestrian is about 1 to 2 meters.*
    - *An outline such as the head, both shoulders, or the legs can be determined.*
  - *In the following cases, the Forward Sensing Camera (FSC) may not be able to detect target objects correctly:*
    - *Multiple pedestrians are walking, or there are groups of people.*
    - *A pedestrian is close to a separate object.*
    - *A pedestrian is crouching, lying, or slouching.*
    - *A pedestrian suddenly jumps into the road right in front of the vehicle.*
    - *A pedestrian opens an umbrella, or is carrying large baggage or articles.*
    - *A pedestrian is in a dark location such as during the night, or blends into the background by wearing clothes matching the background color.*

## Radar Sensor (Front)\*

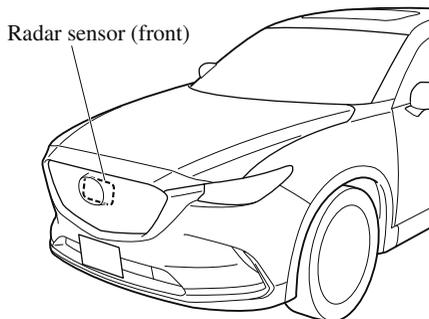
Your vehicle is equipped with a radar sensor (front).

The following systems also use the radar sensor (front).

- Mazda Radar Cruise Control (MRCC)
- Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function)
- Distance Recognition Support System (DRSS)
- Smart Brake Support (SBS)

The radar sensor (front) functions by detecting the radio waves reflected off a vehicle ahead or an obstruction sent from the radar sensor.

The radar sensor (front) is mounted behind the front emblem.



If “Front radar blocked” is displayed in the multi-information display of the instrument cluster, clean the area around the radar sensor (front).

### CAUTION

Heed the following precautions to assure correct operation of each system.

- Do not adhere stickers (including transparent stickers) to the surface of the radiator grille and front emblem in and around the radar sensor (front), and do not replace the radiator grille and front emblem with any product that is not a genuine product designed for use with the radar sensor (front).
- The radar sensor (front) includes a function for detecting soiling of the radar sensor's front surface and informing the driver, however, depending on the conditions, it may require time to detect or it may not detect plastic shopping bags, ice or snow. If this occurs, the system may not operate correctly, therefore always keep the radar sensor (front) clean.
- Do not install a grille guard.
- If the front part of the vehicle has been damaged in a vehicle accident, the position of the radar sensor (front) may have moved. Stop the system immediately and always have the vehicle inspected at an Authorized Mazda Repairer.

- Do not use the front bumper to push other vehicles or obstructions such as when pulling out of a parking space. Otherwise, the radar sensor (front) could be hit and its position deviated.
- Do not remove, disassemble, or modify the radar sensor (front).
- For repairs, replacement or paint work around the radar sensor (front), consult an Authorized Mazda Repairer.
- Do not modify the suspension. If the suspension are modified, the vehicle's posture could change and the radar sensor (front) may not be able to correctly detect a vehicle ahead or an obstruction.

**NOTE**

- Under the following conditions, the radar sensor (front) may not be able to detect vehicles ahead or obstructions correctly and each system may not operate normally.
  - The rear surface of a vehicle ahead does not reflect radio waves effectively, such as an unloaded trailer or an automobile with a loading platform covered by a soft top, vehicles with a hard plastic tailgate, and round-shaped vehicles.
  - Vehicles ahead with low vehicle height and thus less area for reflecting radio waves.
  - Visibility is reduced due to a vehicle ahead casting off water, snow, or sand from its tires and onto your windshield.
  - The luggage compartment is loaded with heavy objects or the rear passenger seats are occupied.
  - Ice, snow, or soiling is on the front surface of the front emblem.
  - During inclement weather such as rain, snow, or sand storms.
  - When driving near facilities or objects emitting strong radio waves.
- Under the following conditions, the radar sensor (front) may not be able to detect vehicles ahead or obstructions.
  - The beginning and end of a curve.
  - Roads with continuous curves.
  - Narrow lane roads due to road construction or lane closures.
  - The vehicle ahead enters the radar sensor's blind spot.
  - The vehicle ahead is running abnormally due to accident or vehicle damage.
  - Roads with repeated up and down slopes
  - Driving on poor roads or unpaved roads.
  - The distance between your vehicle and the vehicle ahead is extremely short.
  - A vehicle suddenly comes close such as by cutting into the lane.
- To prevent incorrect operation of the system, use tires of the same specified size, manufacturer, brand, and tread pattern on all four wheels. In addition, do not use tires with significantly different wear patterns or tire pressures on the same vehicle (Including the temporary spare tire).
- If the battery power is weak, the system may not operate correctly.

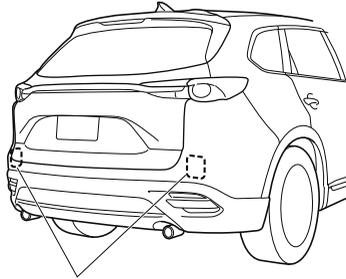
*· When driving on roads with little traffic and few vehicles ahead or obstructions for the radar sensor (front) to detect, "Front radar blocked" may be temporarily displayed, however, this does not indicate a problem.*

## Radar Sensors (Rear)\*

Your vehicle is equipped with radar sensors (rear). The following systems also use the radar sensors (rear).

- Blind Spot Monitoring (BSM)
- Rear Cross Traffic Alert (RCTA)

The radar sensors (rear) function by detecting the radio waves reflected off a vehicle approaching from the rear or an obstruction sent from the radar sensor.



Radar sensors (rear)

The radar sensors (rear) are installed inside the rear bumper, one each on the left and right sides.

Always keep the surface of the rear bumper near the radar sensors (rear) clean so that the radar sensors (rear) operate normally. Also, do not apply items such as stickers. Refer to Exterior Care on page 6-55.



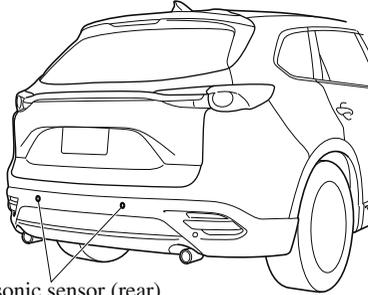
*If the rear bumper receives a severe impact, the system may no longer operate normally. Stop the system immediately and have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.*

## **NOTE**

- *The detection ability of the radar sensors (rear) has limitations. In the following cases, the detection ability may lower and the system may not operate normally.*
  - *The rear bumper near the radar sensors (rear) has become deformed.*
  - *Snow, ice or mud adheres to the radar sensors (rear) on the rear bumper.*
  - *Under bad weather conditions such as rain, snow and fog.*
- *Under the following conditions, the radar sensors (rear) cannot detect target objects or it may be difficult to detect them.*
  - *Stationary objects on a road or a road side such as small, two-wheeled vehicles, bicycles, pedestrians, animals, and shopping carts.*
  - *Vehicle shapes which do not reflect radar waves well such as empty trailers with a low vehicle height and sports cars.*
- *Vehicles are shipped with the direction of the radar sensors (rear) adjusted for each vehicle to a loaded vehicle condition so that the radar sensors (rear) detect approaching vehicles correctly. If the direction of the radar sensors (rear) has deviated for some reason, have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.*
- *For repairs or replacement of the radar sensors (rear), or bumper repairs, paintwork, and replacement near the radar sensors, consult an expert repairer, we recommend an Authorized Mazda Repairer.*
- *Turn off the system while pulling a trailer or while an accessory such as a bicycle carrier is installed to the rear of the vehicle. Otherwise, the radio waves emitted by the radar will be blocked causing the system to not operate normally.*
- *The radar sensors are regulated by the relevant radio wave laws of the country in which the vehicle is driven. If the vehicle is driven abroad, authorization from the country in which the vehicle is driven may be required.*

## Ultrasonic Sensor (Rear)\*

The ultrasonic sensors (rear) function by emitting ultrasonic waves which are reflected off obstructions at the rear and the returning ultrasonic waves are picked up by the ultrasonic sensors (rear).



Ultrasonic sensor (rear)

The ultrasonic sensors (rear) are mounted in the rear bumper.

# Cruise Control

## Cruise Control\*

With cruise control, you can set and automatically maintain any speed of more than about 25 km/h (16 mph).

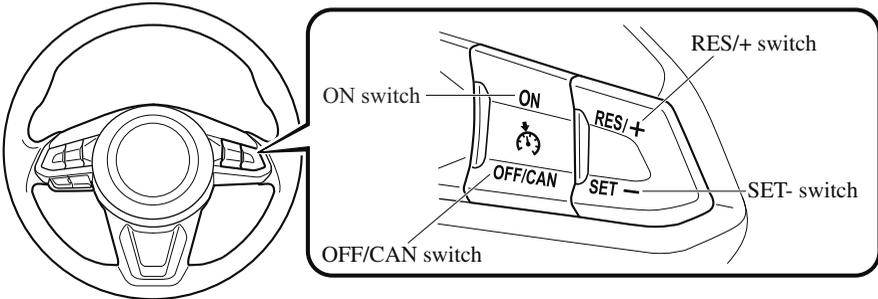
### WARNING

**Do not use the cruise control under the following conditions:**

Using the cruise control under the following conditions is dangerous and could result in loss of vehicle control.

- Hilly terrain
- Steep inclines
- Heavy or unsteady traffic
- Slippery or winding roads
- Similar restrictions that require inconsistent speed

### ▼ Cruise Control Switch

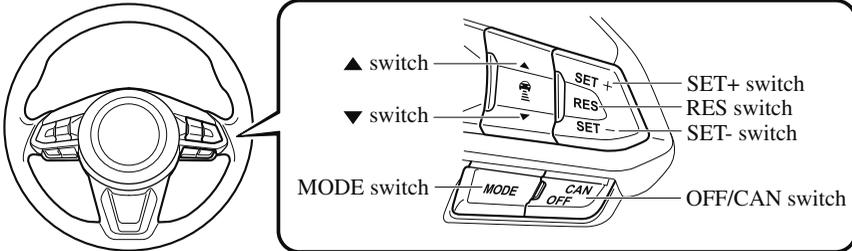


### NOTE

If your Mazda has the following steering switch, your Mazda is equipped the Mazda Radar Cruise Control (MRCC) system or the Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) system.

Refer to Mazda Radar Cruise Control (MRCC) on page 4-111.

Refer to Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) on page 4-121.



### ▼ Cruise Main Indication (White)/ Cruise Set Indication (Green)



The indication has two colors.

#### Cruise Main Indication (White)

The indication turns on (white) when the cruise control system is activated.

#### Cruise Set Indication (Green)

The indication turns on (green) when a cruising speed has been set.

### ▼ Activation/Deactivation

To activate the system, press the ON switch. The cruise main indication (white) is displayed.

To deactivate the system, press the OFF/CAN switch.

The cruise main indication (white) turns off.



#### ***Always turn off the cruise control system when it is not in use:***

*Leaving the cruise control system in an activation-ready state while the cruise control is not in use is dangerous as the cruise control could unexpectedly activate if the activation button is accidentally pressed, and result in loss of vehicle control and an accident.*

#### ***NOTE***

*When the ignition is switched OFF, the system status before it was turned off is maintained. For example, if the ignition is switched OFF with the cruise control system operable, the system will be operable when the ignition is switched ON the next time.*

# Cruise Control

## ▼ To Set Speed

1. Activate the cruise control system by pressing the ON switch. The cruise main indication (white) is displayed.
2. Accelerate to the desired speed, which must be more than 25 km/h (16 mph).
3. Set the cruise control by pressing the SET- switch at the desired speed. The cruise control is set at the moment the SET- switch is pressed. Release the accelerator pedal simultaneously. The cruise set indication (green) is displayed.

### NOTE

- The cruise control speed setting cannot be performed under the following conditions:
  - The selector lever is in the P or N position.
  - The parking brake is applied.
- Release the SET- or RES/+ switch at the desired speed, otherwise the speed will continue increasing while the RES/+ switch is pressed and held, and continue decreasing while the SET- switch is pressed and held (except when the accelerator pedal is depressed).
- On a steep grade, the vehicle may momentarily slow down while ascending, or speed up while descending.
- The cruise control will cancel if the vehicle speed decreases below 21 km/h (13 mph) when climbing a steep grade.
- The cruise control may cancel at about 15 km/h (9 mph) below the preset speed such as when climbing a long, steep grade.

The vehicle speed preset using the cruise control is displayed in the instrument cluster.

### Type A Instrument Cluster

#### Multi-information Display



#### Active Driving Display



### Type B Instrument Cluster

#### European model



#### Except European model



## ▼ To Increase Cruising Speed

Follow either of these procedures.

### To increase speed using cruise control switch

Press the RES/+ switch and hold it. Your vehicle will accelerate. Release the switch at the desired speed.

Press the RES/+ switch and release it immediately to adjust the preset speed. Multiple operations will increase the preset speed according to the number of times it is operated.

**Increasing speed with a single RES/+ switch operation**

Instrument cluster display for vehicle speed indicated in km/h: 1 km/h (0.6 mph)  
 Instrument cluster display for vehicle speed indicated in mph: 1 mph (1.6 km/h)

**To increase speed using accelerator pedal**

Depress the accelerator pedal to accelerate to the desired speed. Press the SET- switch and release it immediately.

**NOTE**

*Accelerate if you want to speed up temporarily when the cruise control is on. Greater speed will not interfere with or change the set speed. Take your foot off the accelerator to return to the set speed.*

**▼ To Decrease Cruising Speed**

Press the SET- switch and hold it. The vehicle will gradually slow. Release the switch at the desired speed.

Press the SET- switch and release it immediately to adjust the preset speed. Multiple operations will decrease the preset speed according to the number of times it is operated.

**Decreasing speed with a single SET- switch operation**

Instrument cluster display for vehicle speed indicated in km/h: 1 km/h (0.6 mph)  
 Instrument cluster display for vehicle speed indicated in mph: 1 mph (1.6 km/h)

**▼ To Resume Cruising Speed at More Than 25 km/h (16 mph)**

If the cruise control system temporarily canceled (such as applying the brake pedal) and the system is still activated, the most recent set speed will automatically resume when the RES/+ switch is pressed. If vehicle speed is below 25 km/h (16 mph), increase the vehicle speed up to 25 km/h (16 mph) or more and press the RES/+ switch.

**▼ To Temporarily Cancel**

To temporarily cancel the system, use one of these methods:

- Slightly depress the brake pedal.
- Press the OFF/CAN switch.

If the RES/+ switch is pressed when the vehicle speed is 25 km/h (16 mph) or higher, the system reverts to the previously set speed.

**NOTE**

- *If any of the following conditions occur, the cruise control system is temporarily canceled.*
  - *The parking brake is applied.*
  - *The selector lever is in the P or N position.*
- *When the cruise control system is temporarily canceled by even one of the applicable cancel conditions, the speed cannot be re-set.*

## Cruise Control

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*· The cruise control cannot be cancelled while driving in manual mode (selector lever shifted from D to M position). Therefore, engine braking will not be applied even if the transaxle is shifted down to a lower gear. If deceleration is required, lower the set speed or depress the brake pedal.*

### ▼ To Deactivate

#### **When a cruising speed has been set (cruise set indication (green) turns on)**

Long-press the OFF/CAN switch or press the OFF/CAN switch 2 times.

#### **When a cruising speed has not been set (cruise main indication (white) turns on)**

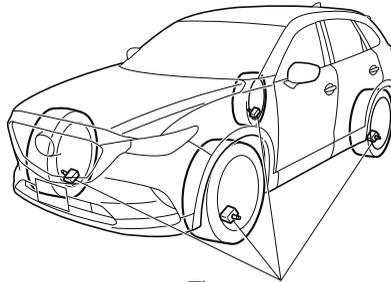
Press the OFF/CAN switch.

# Tire Pressure Monitoring System

## Tire Pressure Monitoring System\*

The Tire Pressure Monitoring System (TPMS) monitors the pressure for each tire. If tire pressure is too low in one or more tires, the system will inform the driver via the warning light in the instrument cluster and by the warning beep sound. Refer to Warning Indication/Warning Lights on page 4-33. Refer to Tire Inflation Pressure Warning Beep on page 7-58.

The tire pressure sensors installed on each wheel send tire pressure data by radio signal to the receiver unit in the vehicle.



Tire pressure sensors

### NOTE

*When the ambient temperature is low due to seasonal changes, tire temperatures are also lower. When the tire temperature decreases, the air pressure decreases as well. The TPMS warning light may illuminate more frequently. Visually inspect the tires daily before driving, and check tire pressures monthly with a tire pressure gauge. When checking tire pressures, use of a digital tire pressure gauge is recommended.*

TPMS does not alleviate your need to check the pressure and condition of all four tires regularly.



- *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.)*

# Tire Pressure Monitoring System

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*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.*

## ▼ System Error Activation

When the warning light flashes, there may be a system malfunction. Consult an Authorized Mazda Dealer.

A system error activation may occur in the following cases:

- When there is equipment or a device near the vehicle using the same radio frequency as that of the tire pressure sensors.
- When a metallic device such as a non-genuine navigation system is equipped near the center of the dashboard, which may block radio signals from the tire pressure sensor to the receiver unit.

- When using the following devices in the vehicle that may cause radio interference with the receiver unit.
  - A digital device such as a personal computer.
  - A current converter device such as a DC-AC converter.
- When excess snow or ice adheres to the vehicle, especially around the wheels.
- When the tire pressure sensor batteries are exhausted.
- When using a wheel with no tire pressure sensor installed.
- When using tires with steel wire reinforcement in the side walls.
- When using tire chains.

# Tire Pressure Monitoring System

## ▼ Tires and Wheels



When inspecting or adjusting the tire air pressures, do not apply excessive force to the stem part of the wheel unit. The stem part could be damaged.

### Changing tires and wheels

The following procedure allows the TPMS to recognize a tire pressure sensor's unique ID signal code whenever tires or wheels are changed, such as changing to and from winter tires.

#### **NOTE**

Each tire pressure sensor has a unique ID signal code. The signal code must be registered with the TPMS before it can work. The easiest way to do it is to have an Authorized Mazda Dealer change your tire and complete ID signal code registration.

#### **When having tires changed at an Authorized Mazda Dealer**

When an Authorized Mazda Dealer changes your vehicle's tires, they will complete the tire pressure sensor ID signal code registration.

#### **When changing tires yourself**

If you or someone else changes tires, you or someone else can also undertake the steps for the TPMS to complete the ID signal code registration.

1. After tires have been changed, switch the ignition ON, then back to ACC or OFF.
2. Wait for about 15 minutes.

3. After about 15 minutes, drive the vehicle at a speed of at least 25 km/h (16 mph) for 10 minutes and the tire pressure sensor ID signal code will be registered automatically.

#### **NOTE**

If the vehicle is driven within about 15 minutes of changing tires, the tire pressure monitoring system warning light will flash because the sensor ID signal code would not have been registered. If this happens, park the vehicle for about 15 minutes, after which the sensor ID signal code will register upon driving the vehicle for 10 minutes.

### Replacing tires and wheels



- When replacing/repairing the tires or wheels or both, have the work done by an Authorized Mazda Dealer, or the tire pressure sensors may be damaged.
- The wheels equipped on your Mazda are specially designed for installation of the tire pressure sensors. Do not use non-genuine wheels, otherwise it may not be possible to install the tire pressure sensors.

Be sure to have the tire pressure sensors installed whenever tires or wheels are replaced.

When having a tire or wheel or both replaced, the following types of tire pressure sensor installations are possible.

- The tire pressure sensor is removed from the old wheel and installed to the new one.

# Tire Pressure Monitoring System

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- The same tire pressure sensor is used with the same wheel. Only the tire is replaced.
- A new tire pressure sensor is installed to a new wheel.

## **NOTE**

- *The tire pressure sensor ID signal code must be registered when a new tire pressure sensor is purchased. For purchase of a tire pressure sensor and registration of the tire pressure sensor ID signal code, consult an Authorized Mazda Dealer.*
- *When reinstalling a previously removed tire pressure sensor to a wheel, replace the grommet (seal between valve body/sensor and wheel) for the tire pressure sensor.*

## Rear View Monitor\*

The rear view monitor provides visual images of the rear of the vehicle when reversing.

### **WARNING**

**Always drive carefully confirming the safety of the rear and the surrounding conditions by looking directly with your eyes:**

*Reversing the vehicle by only looking at the screen is dangerous as it may cause an accident or a collision with an object. The rear view monitor is only a visual assist device when reversing the vehicle. The images on the screen may be different from the actual conditions.*

### **CAUTION**

- Do not use the rear view monitor under the following conditions: Using the rear view monitor under the following conditions is dangerous and could result in injury or vehicle damage or both.
  - Icy or snow-covered roads.
  - Tire chains or a temporary spare tire is installed.
  - The liftgate is not fully closed.
  - The vehicle is on a road incline.
- When the display is cold, images may course across the monitor or the screen and may be dimmer than usual, which could cause difficulty in confirming the surrounding conditions of the vehicle. Always drive carefully confirming the safety of the rear and the surrounding conditions by looking directly with your eyes.
- Do not apply excessive force to the camera. The camera position and angle may deviate.
- Do not disassemble, modify, or remove it as it may no longer be waterproof.
- The camera cover is made of plastic. Do not apply degreasing agents, organic solvents, wax, or glass coating agents to the camera cover. If any are spilled on the cover, wipe off with a soft cloth immediately.
- Do not rub the camera cover forcefully with an abrasive or hard brush. The camera cover or lens may be scratched which might affect the images.

### **NOTE**

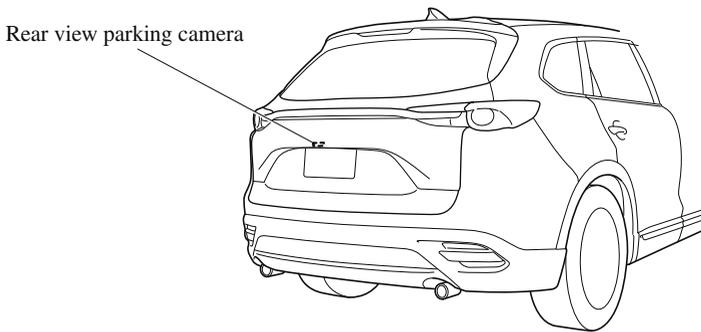
- If water, snow, or mud is stuck on the camera lens, wipe it off using a soft cloth. If it cannot be wiped off, use a mild detergent.
- If the camera temperature changes rapidly (Hot to cold, cold to hot), the rear view monitor may not operate correctly.

## Rear View Monitor

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- *When replacing the tires, consult an expert repairer, we recommend an Authorized Mazda Repairer. Replacing the tires could result in deviation of the guide lines which appear on the display.*
- *If the vehicle's front, side, or rear has been involved in a collision, the alignment of the rear view parking camera (location, installation angle) may have deviated. Always consult an expert repairer, we recommend an Authorized Mazda Repairer to have the vehicle inspected.*
- *If “No Video Signal Available” is indicated in the display, there could be a problem with the camera. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.*
- **(Predicted vehicle path assist lines display type)**  
*If force is applied to the steering wheel, the guide lines may not display. Loosen your grip on the steering wheel to allow the guide lines to display.*

### ▼ Rear View Parking Camera Location



### ▼ Switching to the Rear View Monitor Display

Shift the selector lever to reverse (R) with the ignition switched ON to switch the display to the rear view monitor display.

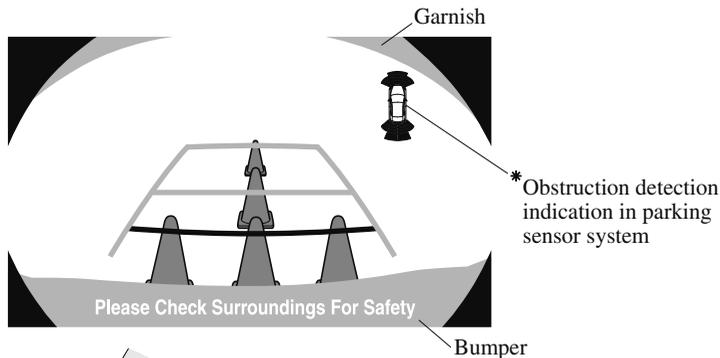
#### **NOTE**

*When the selector lever is shifted from reverse (R) to another selector lever position, the screen returns to the previous display.*

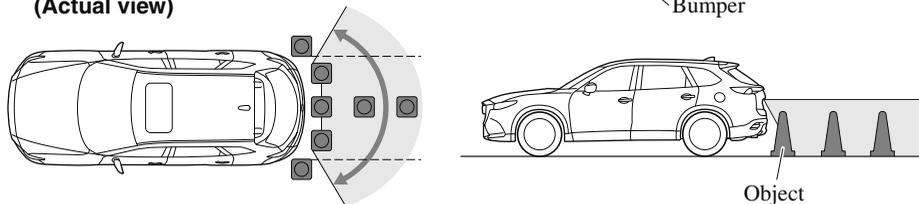
### ▼ Displayable Range on the Screen

The images on the screen may be different from the actual conditions.

(Screen display)



(Actual view)



\* Some models

### NOTE

- The displayable range varies depending on the vehicle and road conditions.
- The displayable range is limited. Objects under the bumper or around the bumper ends cannot be displayed.
- The distance appearing in the displayed image is different from the actual distance because the rear view parking camera is equipped with a specific lens.
- Images displayed on the monitor from the rear view parking camera are reversed images (mirror images).
- Some optionally installed vehicle accessories may be picked up by the camera. Do not install any optional parts that can interfere with the camera view, such as illuminating parts or parts made of reflective material.
- It may be difficult to see the display under the following conditions, however, it does not indicate a malfunction.
  - In darkened areas.
  - When the temperature around the lens is high/low.
  - When the camera is wet such as on a rainy day or during periods of high humidity.
  - When foreign material such as mud is stuck around the camera.
  - When the camera lens reflects sunlight or headlight beams.
- Image display may be delayed if the temperature around the camera is low.

# Rear View Monitor

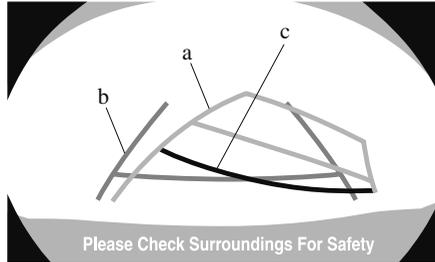
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## ▼ Viewing the Display

### Predicted vehicle path assist lines display type

The projected path guidance mode displays the predicted path of the vehicle after you turn the steering wheel.

Use this mode for parking your vehicle in a parking space or garage.



#### a) Projected vehicle path (yellow)

These lines are displayed as a reference for the projected path of the vehicle.

The lines displaying the projected vehicle path change after you turn the steering wheel.

#### b) Extended vehicle width lines (blue)

These lines indicate the vehicle's extended width.

These lines are not displayed when the vehicle's wheels are in the straight-ahead position.

#### c) Distance guide lines

These lines indicate the approximate distance to a point measured from the vehicle's rear (from the end of the bumper).

The blue line indicates the point about 50 cm (19 in) from the rear bumper.

The red and yellow lines, which change position after you turn the steering wheel, indicate the points about 50 cm (19 in) for the red line and 100 cm (39.3 in) for the yellow lines from the rear bumper (at the center point of each of the lines).

A degree of error occurs when the wheels are not in the straight-ahead position.

In the above illustration, the right side of the vehicle is in a position closer to the actual distance displayed by the distance guide lines (red: about 50 cm (19 in) point, yellow: about 100 cm (39.3 in) point behind the rear bumper), whereas the left side is in a position farther away.



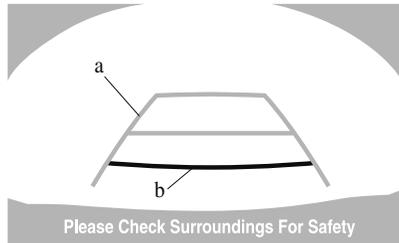
*The indicated position of the guide lines on the display changes depending on the vehicle conditions (such as the number of occupants/cargo load) and the road conditions (such as a steep gradient to the rear of the vehicle).*

*Always check the area to the vehicle's rear and the surrounding area directly with your eyes while backing up.*

**Fixed assist lines display type**

Guide lines which indicate the width of the vehicle (yellow) are displayed on the screen as a reference to the approximate width of the vehicle in comparison to the width of the parking space you are about to back into.

Use this display view for parking your vehicle in a parking space or garage.



## a) Vehicle width guide lines (yellow)

Guide lines serve as a reference to the approximate width of the vehicle.

## b) Distance guide lines

These guide lines indicate the approximate distance to a point measured from the vehicle's rear (from the end of the bumper).

The red and yellow lines indicate the points about 50 cm (19 in) for the red line and 100 cm (39.3 in) for the yellow lines from the rear bumper (at the center point of each of the lines).



*The guide lines on the screen are fixed lines. They are not synced to the driver's turning of the steering wheel. Always be careful and check the area to the vehicle's rear and the surrounding area directly with your eyes while backing up.*

**▼ Rear View Monitor Operation**

The operation of the rear view monitor when reversing the vehicle varies depending on the traffic, road, and vehicle conditions. The amount of steering and the timing also varies depending on conditions, so confirm the surrounding conditions directly with your eyes and steer the vehicle in accordance with the conditions.

Be well aware of the above cautions prior to using the rear view monitor.

**Predicted vehicle path assist lines display type****NOTE**

*The following shows an example of vehicle parking in which the steering wheel is turned to the right when backing up the vehicle. The operation is reversed when backing up the vehicle from the opposite direction.*

# Rear View Monitor

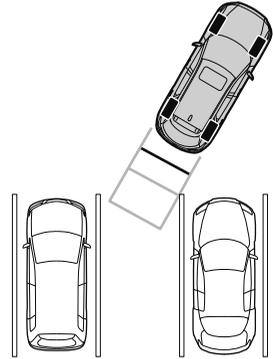
---

1. Shift the selector lever to reverse (R) to switch the display to the rear view monitor display.
2. Before backing the vehicle into the parking space, turn the steering wheel while referring to the projected vehicle path display so that the vehicle enters the center of the parking space.

(Display condition)

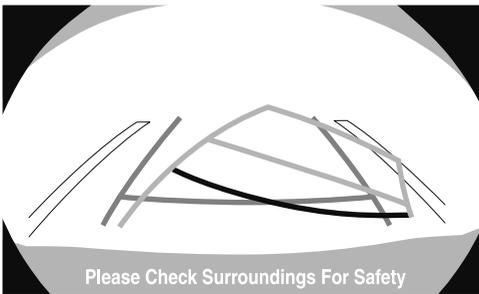


(Vehicle condition)

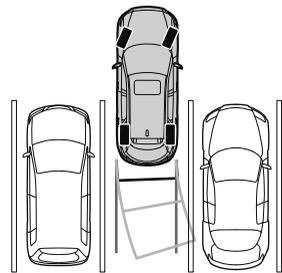


3. After your vehicle begins entering the parking space, continue backing up slowly so that the distance between the vehicle width lines and the sides of the parking space on the left and right are roughly equal.

(Display condition)



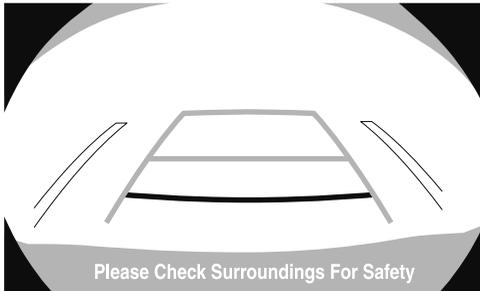
(Vehicle condition)



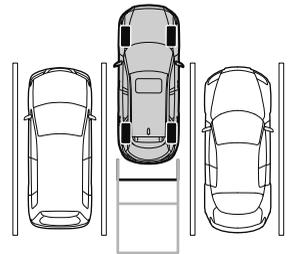
4. Continue to adjust the steering wheel until the vehicle width guide lines are parallel to the left and right sides of the parking space.

5. Once they are parallel, straighten the wheels and back your vehicle slowly into the parking space. Continue checking the vehicle's surroundings and then stop the vehicle in the best possible position. (If the parking space has division lines, check whether the vehicle width guide lines are parallel to them.)

(Display condition)



(Vehicle condition)

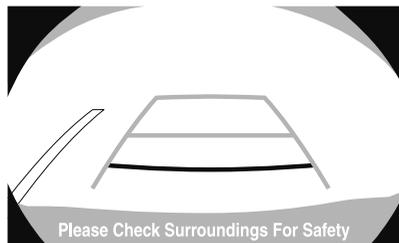


6. When the selector lever is shifted from reverse (R) to another selector lever position, the screen returns to the previous display.

**NOTE**

*Because there may be a difference between the displayed image, such as indicated below, and the actual conditions when parking, always verify the safety at the rear of the vehicle and the surrounding area directly with your eyes.*

- *In the image of the parking space (or garage) displayed on the screen, the back end and distance guide lines may appear aligned in the monitor, but they may not actually be aligned on the ground.*
- *When parking in a space with a division line on only one side of the parking space, the division line and the vehicle width guide line appear aligned in the monitor, but they may not actually be aligned on the ground.*



# Rear View Monitor

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## Fixed assist lines display type

### **NOTE**

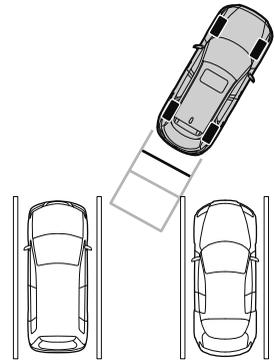
*Images displayed on the monitor from the rear view parking camera are reversed images (mirror images).*

1. Shift the selector lever to reverse (R) to switch the display to the rear view monitor display.
2. Confirming the surrounding conditions, reverse the vehicle.

**(Display condition)**

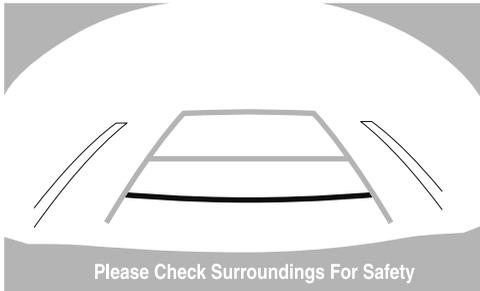
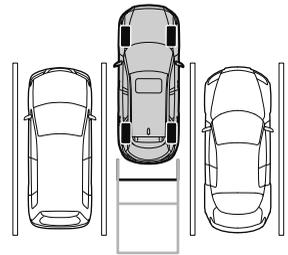


**(Vehicle condition)**



3. After your vehicle begins entering the parking space, continue backing up slowly so that the distance between the vehicle width lines and the sides of the parking space on the left and right are roughly equal.
4. Continue to adjust the steering wheel until the vehicle width guide lines are parallel to the left and right sides of the parking space.

5. Once they are parallel, straighten the wheels and back your vehicle slowly into the parking space. Continue checking the vehicle's surroundings and then stop the vehicle in the best possible position. (If the parking space has division lines, check whether the vehicle width guide lines are parallel to them.)

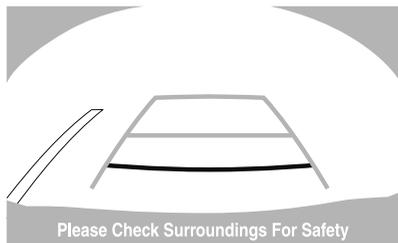
**(Display condition)****(Vehicle condition)**

6. When the selector lever is shifted from reverse (R) to another selector lever position, the screen returns to the previous display.

**NOTE**

*Because there may be a difference between the displayed image, such as indicated below, and the actual conditions when parking, always verify the safety at the rear of the vehicle and the surrounding area directly with your eyes.*

- *In the image of the parking space (or garage) displayed on the screen, the back end and distance guide lines may appear aligned in the monitor, but they may not actually be aligned on the ground.*
- *When parking in a space with a division line on only one side of the parking space, the division line and the vehicle width guide line appear aligned in the monitor, but they may not actually be aligned on the ground.*



# Rear View Monitor

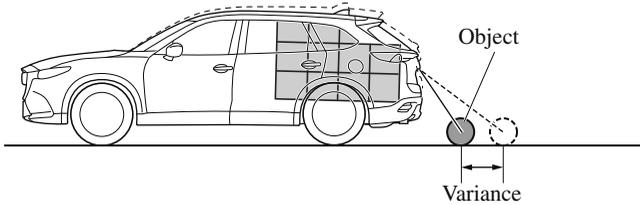
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## ▼ Variance Between Actual Road Conditions and Displayed Image

Some variance occurs between the actual road and the displayed road. Such variance in distance perspective could lead to an accident. Note the following conditions that may cause a variance in distance perspective.

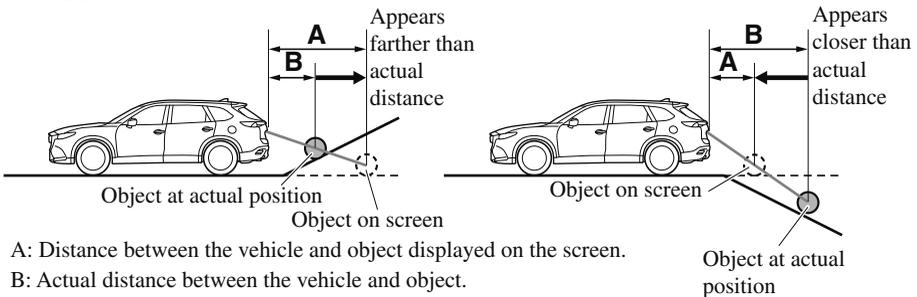
### When the vehicle is tilted due to the weight of passengers and load

When the vehicle rear is lowered, the object displayed on the screen appears farther than the actual distance.



### When there is a steep grade behind the vehicle

When there is a steep upgrade (downgrade) behind the vehicle, the object displayed on the screen appears farther (downgrade: closer) than the actual distance.



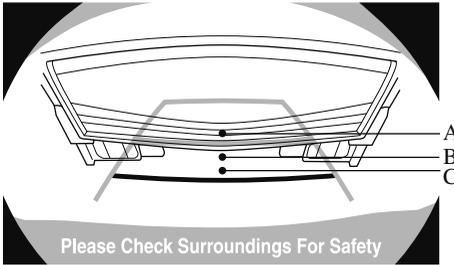
# Rear View Monitor

## Three-dimensional object on vehicle rear

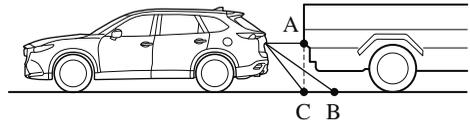
Because the distance guide lines are displayed based on a flat surface, the distance to the three-dimensional object displayed on the screen is different from the actual distance.

(Screen display)

(Actual condition)



Sensed distance on screen  $A > B > C$



(Actual distance)  $B > C = A$

## (Predicted vehicle path assist lines display type)

### When reversing near a three-dimensional object

When reversing near an overhanging object, the vehicle may hit the object even if the anticipated course line does not contact the object on the screen. The position of the object displayed on the screen is different from the actual position because the anticipated course lines on the screen are displayed based on a horizontal road surface. When backing up near an overhanging object, confirm the rear and surrounding conditions directly with your eyes.

(Screen display)

(Actual view)



# Rear View Monitor

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## ▼ Picture Quality Adjustment



***Always adjust the picture quality of the rear view monitor while the vehicle is stopped:***

*Do not adjust the picture quality of the rear view monitor while driving the vehicle. Adjusting the picture quality of the rear view monitor such as brightness, contrast, color, and tint while driving the vehicle is dangerous as it could distract your attention from the vehicle operation which could lead to an accident.*

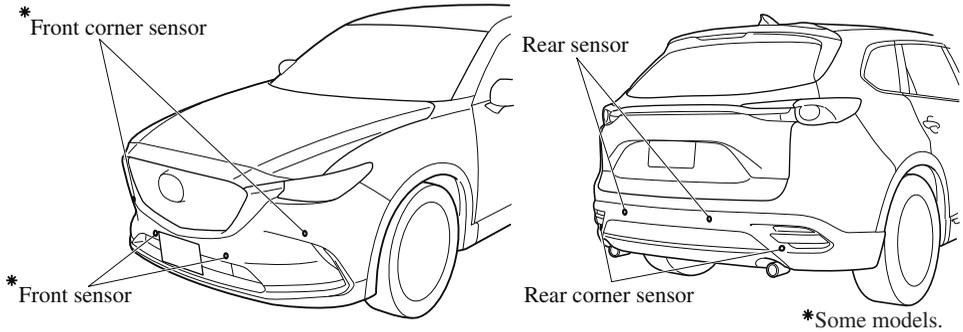
Picture quality adjustment must be done while the selector lever is in reverse (R).

There are four settings which can be adjusted including, brightness, contrast, tint, and color. When adjusting, pay sufficient attention to the vehicle surroundings.

1. Select the  icon on the screen to display the tabs.
2. Select the desired tab item.
3. Adjust the brightness, contrast, tint, and color using the slider.  
If you need to reset, press the reset button.
4. Select the  icon on the screen to close the tab.

## Parking Sensor System\*

The parking sensor system uses ultrasonic sensors to detect obstructions around the vehicle while parking the vehicle in a garage or during parallel parking when the vehicle is driven at a speed of about 10 km/h (6 mph) or less. The system is equipped with an assist device to notify the driver of the approximate distance from the vehicle to the surrounding obstruction using a beep sound and obstruction detection indication\*.



### WARNING

**Do not rely completely on the parking sensor system and be sure to confirm the safety around your vehicle visually when driving.**

This system can assist the driver in operating the vehicle in the forward and backward directions while parking. The detection ranges of the sensors are limited, therefore, driving the vehicle while relying only on the system may cause an accident. Always confirm the safety around your vehicle visually when driving.

### NOTE

- Do not install any accessories within the detection ranges of the sensors. It may affect the system operation.
- Depending on the type of obstruction and the surrounding conditions, the detection range of a sensor may narrow, or the sensors may not be able to detect obstructions.
- The system may not operate normally under the following conditions:
  - Mud, ice, or snow is adhering to the sensor area (Returns to normal operation when removed).
  - The sensor area is frozen (Returns to normal operation when the ice is thawed).
  - The sensor is covered by a hand.
  - The sensor is excessively shocked.

## Parking Sensor System

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- *The vehicle is excessively tilted.*
- *Under extremely hot or cold weather conditions.*
- *The vehicle is driven on bumps, inclines, gravel, or grass covered roads.*
- *Anything which generates ultrasound is near the vehicle, such as another vehicle's horn, the engine sound of a motorcycle, the air brake sound of a large-sized vehicle, or another vehicle's sensors.*
- *The vehicle is driven in heavy rain or in road conditions causing water-splash.*
- *A commercially-available fender pole or an antenna for a radio transmitter is installed to the vehicle.*
- *The vehicle is moving towards a tall or square curbstone.*
- *An obstruction is too close to the sensor.*
- *Obstructions under the bumper may not be detected. Obstructions that are lower than the bumper or thin which may have been initially detected but are no longer detected as the vehicle approaches more closely.*
- *The following types of obstructions may not be detected:*
  - *Thin objects such as wire or rope*
  - *Things which absorb sonic waves easily such as cotton or snow*
  - *Angular shaped objects*
  - *Very tall objects, and those which are wide at the top*
  - *Small, short objects*
- *Always have the system inspected at an expert repairer, we recommend an Authorized Mazda Repairer if any shock is applied to the bumpers, even in a minor accident. If the sensors are deviated, they cannot detect obstructions.*
- ***(With front sensor and front corner sensor)***

*The system may have a malfunction if the beep does not operate or the indicator light does not illuminate when the park assist sensors switch is turned on. Consult an expert repairer, we recommend an Authorized Mazda Repairer.*
- ***(Without front sensor and front corner sensor)***

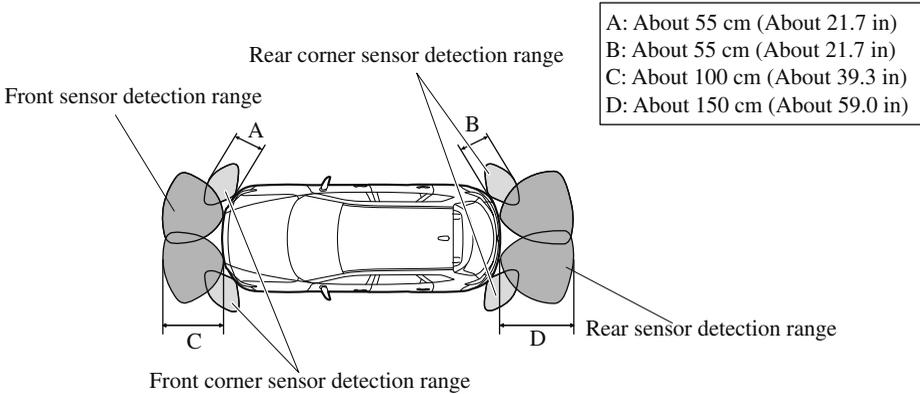
*The system may have a malfunction if the beep does not operate. Consult an expert repairer, we recommend an Authorized Mazda Repairer.*
- ***(With front sensor and front corner sensor)***

*The system may have a malfunction if the beep sound which indicates a system malfunction is heard and the indicator light flashes. Consult an expert repairer, we recommend an Authorized Mazda Repairer.*
- *The beeper which indicates a system malfunction may not be heard if the ambient temperature is extremely cold, or mud, ice, or snow adheres to the sensor area. Remove any foreign material from the sensor area.*
- *When installing a trailer hitch, consult an expert repairer, we recommend an Authorized Mazda Repairer.*

# Parking Sensor System

## ▼ Sensor Detection Range

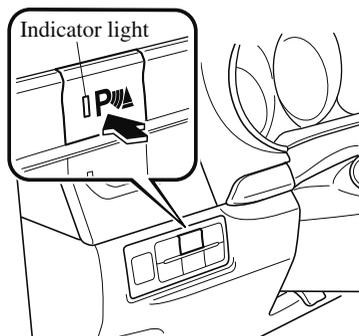
The sensors detect obstructions within the following range.



## ▼ Park Assist Sensor System Operation

### With front sensor and front corner sensor

The switch can be activated when the ignition is switched ON, the selector lever is in any position except reverse (R), and the vehicle speed is about 10 km/h (6 mph) or less. When the parking sensor switch is pressed, a beep sound is heard, the obstruction detection indication is displayed in the audio screen, and the indicator light in the switch illuminates.



### **NOTE**

*If the system is cancelled, it will not restore automatically even when the vehicle speed is decreased to 10 km/h (6 mph) or less.*

# Parking Sensor System

---

## Sensor detection condition

The system can be used when the ignition is switched ON and the Park Assist Sensor Switch has been turned on.

The sensors detect obstructions under the following conditions:

Sensor	Condition
Front Sensor	The selector lever is in any position except reverse (R), and the vehicle speed is about 10 km/h (6 mph) or less.
Front Corner Sensor	The vehicle speed is about 10 km/h (6 mph) or less.
Rear Sensor	The selector lever is in reverse (R).
Rear Corner Sensor	The selector lever is in reverse (R), and the vehicle speed is about 10 km/h (6 mph) or less.

The system is cancelled under the following conditions:

- The parking sensor switch is pressed while the parking sensor is in operation.
- The vehicle speed is 10 km/h (6 mph) or more. (Except rear sensor)

## Without front sensor and front corner sensor

When the ignition is switched ON and the selector lever is shifted to the reverse (R), the beep sound activates and the system is enabled for use.

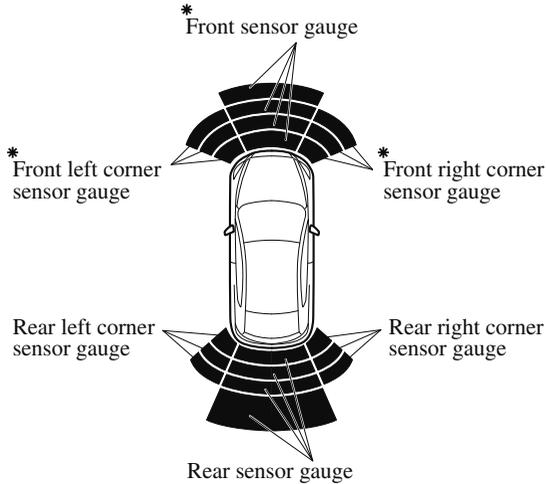
The sensors detect obstructions under the following conditions:

Sensor	Condition
Rear Sensor	The selector lever is in reverse (R).
Rear Corner Sensor	The selector lever is in reverse (R), and the vehicle speed is about 10 km/h (6 mph) or less.

## ▼ Obstruction Detection Indication

The position of a sensor which has detected an obstruction is indicated. The gauge illuminates in different areas depending on the distance to an obstruction detected by the sensor.

As the vehicle approaches closer to an obstruction, the zone in the gauge closer to the vehicle illuminates.



\*Some models.

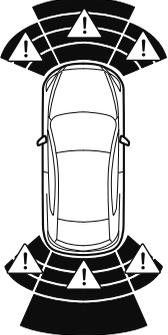
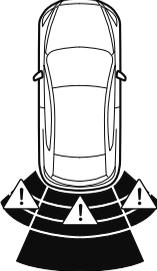
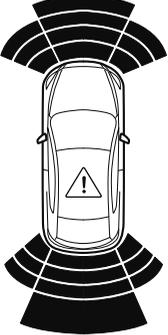
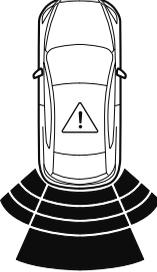
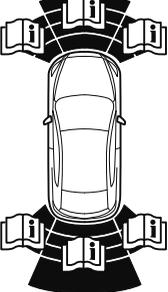
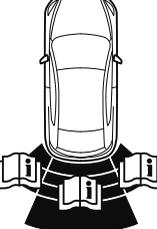
### **NOTE**

The detection indicator can switch between display and non-display.  
Refer to *Personalization Features* on page 9-10.

# Parking Sensor System

## System problem notification

If any of the problems indicated in the table occurs, the driver is notified of the problem depending on the type of system as shown.

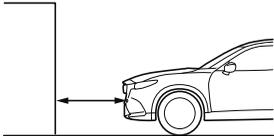
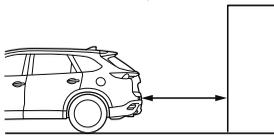
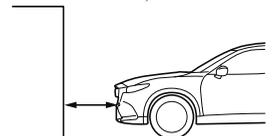
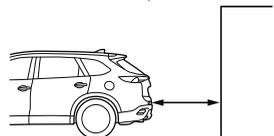
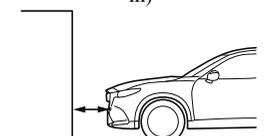
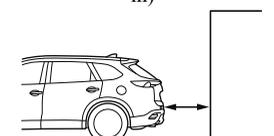
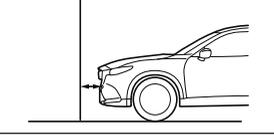
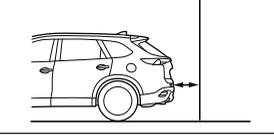
	Detection Indicator		Solution
	With front sensor and front corner sensor	Without front sensor and front corner sensor	
Disconnection			The system may have a malfunction. Have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.
System malfunction			The system may have a malfunction. Have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.
Frost/soiling			Foreign matter may be on the sensor area corresponding to the obstruction detection indication shown. If the system does not recover, have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.

# Parking Sensor System

## ▼ Parking Sensor Warning Beep

The beeper sounds as follows while the system is operating.

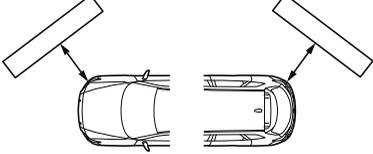
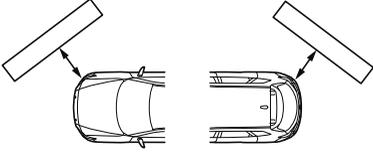
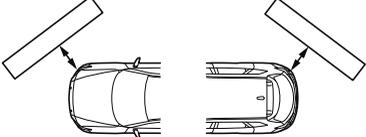
### Front Sensor\*, Rear Sensor

Distance Detection area	Distance between vehicle and obstruction		Beeper sound* <sup>1</sup>
	Front Sensor*	Rear Sensor	
Farthest distance	Approx. 100—60 cm (39.3—23.6 in) 	Approx. 150—60 cm (59.0—23.6 in) 	Slow intermittent sound
Far distance	Approx. 60—45 cm (23.6—17.7 in) 	Approx. 60—45 cm (23.6—17.7 in) 	Medium intermittent sound
Middle distance	Approx. 45—35 cm (17.7—13.7 in) 	Approx. 45—35 cm (17.7—13.7 in) 	Fast intermittent sound
Close distance	Within approx. 35 cm (13.7 in) 	Within approx. 35 cm (13.7 in) 	Continuous sound

\*1 The rate at which the intermittent sound beeps increases as the vehicle approaches the obstruction.

# Parking Sensor System

## Front Corner Sensor\*, Rear Corner Sensor

Distance Detection area	Distance between vehicle and obstruction	Beeper sound*1
	Front*/Rear Corner Sensor	
Far distance	<p>Approx. 55—38 cm (21.7—15.0 in)</p> 	Medium intermittent sound
Middle distance	<p>Approx. 38—25 cm (15.0—9.8 in)</p> 	Fast intermittent sound
Close distance	<p>Within approx. 25 cm (9.8 in)</p> 	Continuous sound

\*1 The rate at which the intermittent sound beeps increases as the vehicle approaches the obstruction.

**NOTE**

*If an obstruction is detected in a zone for 6 seconds or more, the beep sound is stopped (except for the close-distance zone). If the same obstruction is detected in another zone, the corresponding beep sound is heard.*

# Parking Sensor System

## ▼ When Warning Indicator/Beep is Activated

The system notifies the driver of an abnormality by activating the beep sound and the indicator light.

Indicator/Beep	How to check
The indicator light flashes when the parking sensor switch is pressed at a vehicle speed of 10 km/h (6 mph) or less.	The system may have a malfunction. Have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.
The beep sound is not heard.	The system may have a malfunction. Have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.
The intermittent sound of the buzzer is heard five times.	Remove any foreign material from the sensor area. If the system does not recover, have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.
A certain obstruction detection indicator is continuously displayed.	Refer to Obstruction Detection Indication on page 4-195.

# MEMO

# 5

## Interior Features

Use of various features for ride comfort, including air-conditioning and audio system.

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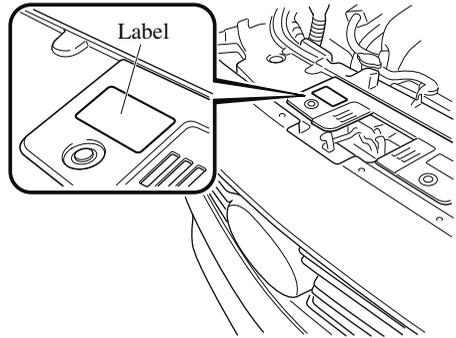
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# Climate Control System

## Operating Tips

- Operate the climate control system with the engine running.
- To prevent the battery from being discharged, do not leave the fan control switch on for a long period of time with the ignition switched ON when the engine is not running.
- Clear all obstructions such as leaves, snow and ice from the hood and the air inlet in the cowl grille to improve the system efficiency.
- Use the climate control system to defog the windows and dehumidify the air.
- The recirculate mode should be used when driving through tunnels or while in a traffic jam, or when you would like to shut off outside air for quick cooling of the interior.
- Use the outside air position for ventilation or windshield defrosting.
- If the vehicle has been parked in direct sunlight during hot weather, open the windows to let warm air escape, then run the climate control system.
- Run the air conditioner about 10 minutes at least once a month to keep internal parts lubricated.
- Have the air conditioner checked before the weather gets hot. 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 expert repairer, we recommend an Authorized Mazda Repairer.



# Climate Control System

## Vent Operation (Front)

### ▼ Adjusting the Vents

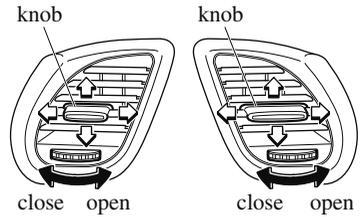
#### Directing airflow

To adjust the direction of airflow, move the adjustment knob.

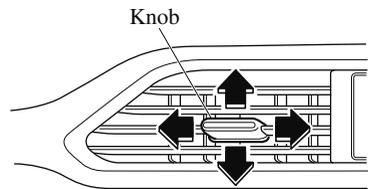
#### **NOTE**

- *When using the air conditioner under humid ambient temperature conditions, the system may blow fog from the vents. This is not a sign of trouble but a result of humid air being suddenly cooled.*
- *The air vents can be fully opened and closed by operating the dial. (Side vents only)*

#### Side Vents



#### Center Vents

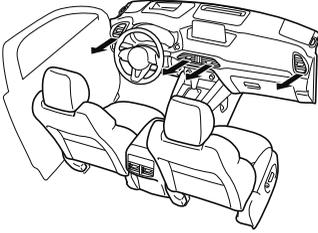


# Climate Control System

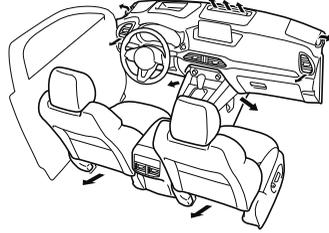
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## ▼ Selecting the Airflow Mode

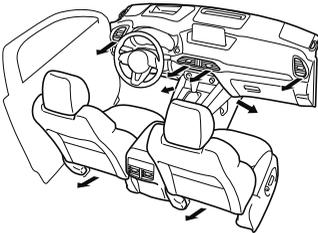
### Dashboard Vents



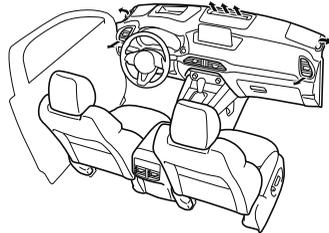
### Defroster and Floor Vents



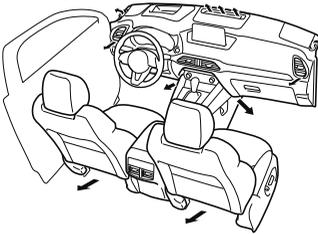
### Dashboard and Floor Vents



### Defroster Vents



### Floor Vents



### **NOTE**

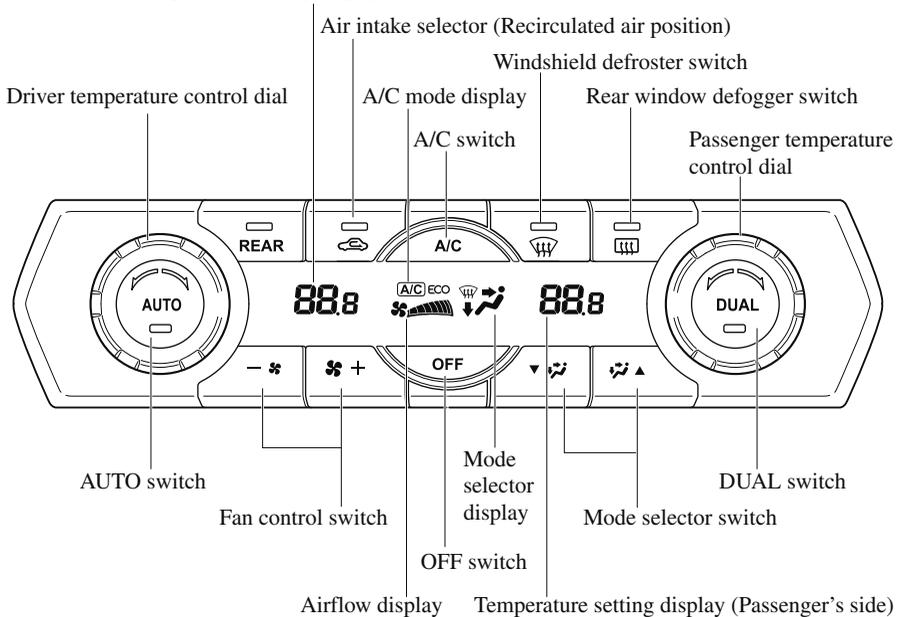
The location airflow exits the air vents and the airflow amount may change depending on the open or close status of the air vents.

# Climate Control System

## Front Air Conditioner

Climate control system information is displayed on the display.

Temperature setting display (Driver's side)



### ▼ Control Switches

#### AUTO switch

By pressing the AUTO switch the following functions will be automatically controlled in accordance with the selected set temperature:

- Airflow temperature
- Amount of airflow
- Selection of airflow mode
- Outside/Recirculated air selection
- Air conditioner operation
- A/C or A/C ECO selection

#### **NOTE**

*AUTO switch indicator light*

- When on, it indicates auto operation, and the system will function automatically.
- If any of the following switches are operated while in auto control, the AUTO switch indicator turns off.

- Mode selector switch
- Fan control switch
- Windshield defroster switch

*The functions for switches other than those operated continue to operate in auto control.*

# Climate Control System

---

## OFF switch

Pressing the OFF switch shuts off the climate control system.

## Temperature control dial

This dial controls temperature. Turn it clockwise for hot and counterclockwise for cold.

- When the DUAL switch is off:  
Turn the driver temperature control dial to control the temperature throughout the entire cabin.
- When the DUAL switch is on:  
Turn the driver or front passenger temperature control dial to independently control the temperature on each side of the cabin.

## **NOTE**

- *The climate control system changes to the individual operation mode (DUAL switch indicator light illuminated) by turning the front passenger temperature control dial even when the DUAL switch is off, which allows individual control of the set temperature for the driver and front passenger.*
- *The temperature units for the temperature setting display can be changed in conjunction with the temperature units for the outside temperature display.  
(Type A instrument cluster)  
Refer to Outside Temperature Display on page 4-24.  
(Type B instrument cluster)  
Refer to Outside Temperature Display (Without Multi-information display) on page 4-17.*

## Fan control switch

The fan has seven speeds. The selected speed will be displayed.

## Mode selector switch

The desired airflow mode can be selected (page 5-4).

## **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.*
- *To set the air vent to , press the windshield defroster switch.*
- *In the  position, the air conditioner is automatically turned on and the outside air position is automatically selected to defrost the windshield.*

## A/C switch

Pressing the A/C switch while the AUTO switch is turned on will turn off the air conditioner (cooling/dehumidifying functions).

The on/off of the air conditioner switches each time the A/C switch is pressed. Changes as follows each time the A/C switch is pressed.

A/C→A/C ECO→Stop

# Climate Control System

## NOTE

- The air conditioner operates when the A/C switch is pressed while the air conditioner is turned off.
- The A/C ECO function is designed to economize use of the climate control system. "A/C ECO" is displayed to indicate that the climate control system is operating at optimum control.
- The air conditioner may not function when the outside temperature approaches 0 °C (32 °F).

## Air intake selector

Outside or recirculated air positions can be selected. Press the switch to select outside/recirculated air positions.

### **Recirculated air position (indicator light illuminated)**

Outside air is shut off. Use this position when going through tunnels, driving in congested traffic (high engine exhaust areas) or when quick cooling is desired.

### **Outside air position (indicator light turned off)**

Outside air is allowed to enter the cabin. Use this mode for ventilation or windshield defrosting.



### **Do not use the recirculated air position in cold or rainy weather:**

*Using the recirculated air position in cold or 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.*

## DUAL switch

Use the DUAL switch to change the mode between the individual operation (driver and passenger) and interconnection (simultaneous) modes.

### **Individual operation mode (indicator light illuminated)**

The set temperature can be controlled individually for the driver and front passenger.

### **Interconnection mode (indicator light turned off)**

The set temperature for the driver and front passenger is controlled simultaneously.

# Climate Control System

---

## Windshield defroster switch

Press the switch to defrost the windshield and front door windows.

Refer to Windshield Defrosting and Defogging on page 5-8.

## Rear window defogger switch

Press the rear window defogger switch to defrost the rear window.

Refer to Rear Window Defogger on page 4-63.

## ▼ Operation of Automatic Air Conditioner

1. Press the AUTO switch. Selection of the airflow mode, air intake selector and amount of airflow will be automatically controlled.
2. Use the temperature control dial to select a desired temperature. Press the DUAL switch or turn the front passenger temperature control dial to control the set temperature individually for the driver and front passenger.

To turn off the system, press the OFF switch.

### **NOTE**

- Setting the temperature to maximum hot or cold will not provide the desired temperature at a faster rate.
- When selecting heat, the system will restrict airflow until it has warmed to prevent cold air from blowing out of the vents.

## ▼ Windshield Defrosting and Defogging

Press the windshield defroster switch.

In this position, the outside air position is automatically selected, and the air conditioner automatically turns on. The air conditioner will directly dehumidify the air to the front windshield and side windows on page 5-4.

Airflow amount will be increased.



**Set the temperature control to the hot or warm position when defogging (☼ position):**

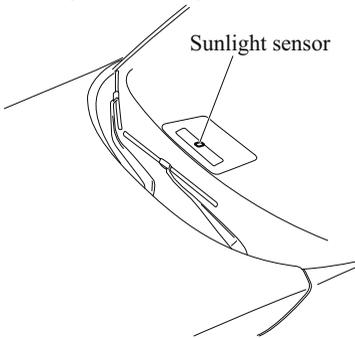
Using the ☼ position with the temperature control set to the cold position is dangerous as it will cause the outside of the windshield to fog up. Your vision will be hampered, which could lead to a serious accident.

### **NOTE**

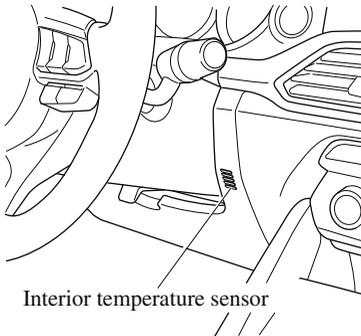
Use the temperature control dial to increase the air flow temperature and defog the windshield more quickly.

**▼ Sunlight/Temperature Sensor****Sunlight sensor**

Do not place objects on the sunlight sensor. Otherwise, the interior temperature may not adjust correctly.

**Interior temperature sensor**

Do not cover the interior temperature sensor. Otherwise, the interior temperature may not adjust correctly.



# Climate Control System

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## Vent Operation (Rear)

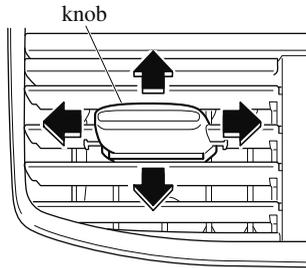
### ▼ Adjusting the Vents

#### Directing airflow

You can direct air flow by moving the adjustment knob.

#### **NOTE**

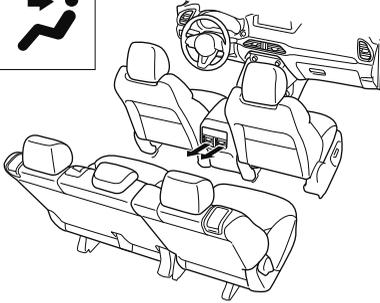
*When using the air conditioner, mist may come out from the vents. This is not a sign of trouble but a result of humid air being suddenly cooled.*



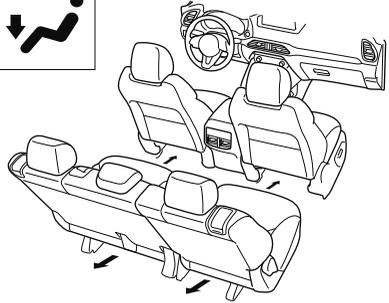
# Climate Control System

## ▼ Selecting the Airflow Mode

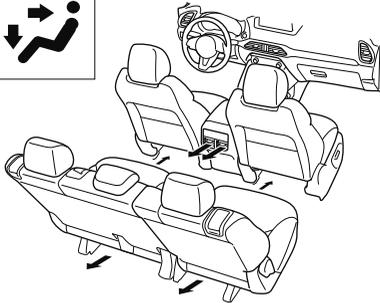
### Dashboard Vents



### Floor Vents



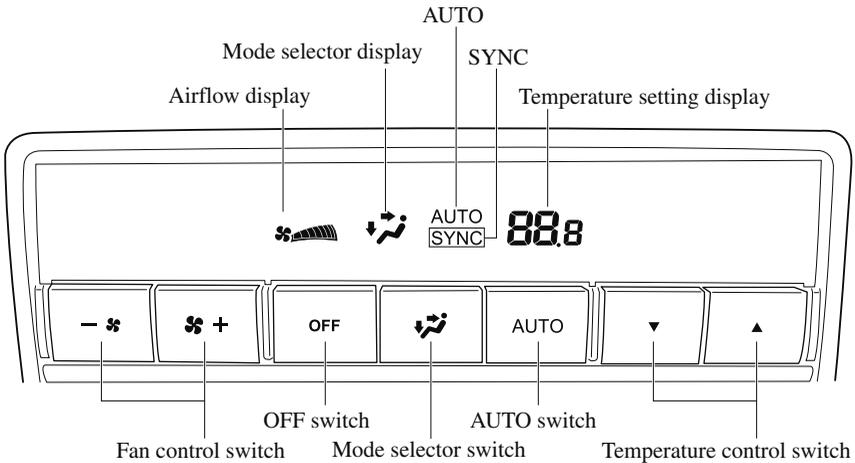
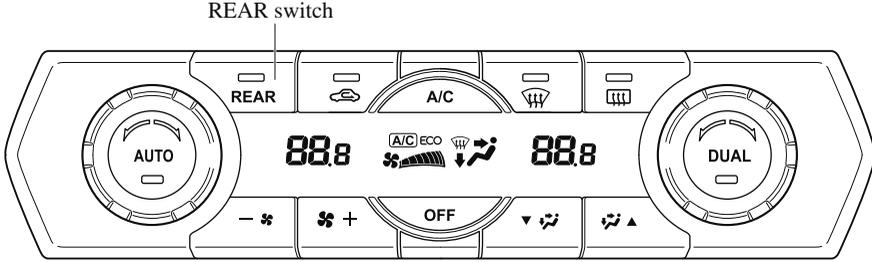
### Dashboard and Floor Vents



# Climate Control System

## Rear Air Conditioner

Climate control system information is displayed on the display.



### ▼ Control Switches

#### Rear switch

Press the rear switch to operate the rear air conditioner.

The indicator illuminates to indicate that the rear air conditioner is operating.

#### AUTO switch

By pressing the AUTO switch the following functions will be automatically controlled in accordance with the set temperature:

- Airflow temperature
- Amount of airflow
- Selection of airflow mode

#### OFF switch

Pressing the OFF switch shuts off the climate control system.

# Climate Control System

## Temperature control switch

This switch controls temperature. Press ▲ for hot and ▼ for cold.

## Fan control switch

The fan has five speeds. The selected speed will be displayed.

## Mode selector switch

The desired airflow mode can be selected. Refer to Selecting the Airflow Mode on page 5-11.

## ▼ Operation of Automatic Air Conditioner

### Operation from front seats

1. Turn the front air conditioner on.
2. Press the rear switch. The rear air conditioner operates.
3. Selection of the airflow mode, airflow amount and temperature will be automatically controlled to the same temperature setting as the front air conditioner for the driver's side.

### **NOTE**

- If the AUTO switch is pressed while the front A/C switch is off, the rear air conditioner operates only to circulate air.
- Setting the temperature to the maximum high or low will not provide the desired temperature at a faster rate.
- When selecting heat, the system will restrict airflow until it has warmed to prevent cold air from blowing out of the vents.

- When the rear air conditioner is controlled to the same temperature setting as the front air conditioner for the driver's side, "SYNC" is displayed on the rear screen.

### Operation from rear seats

1. Turn the front air conditioner on.
2. Press the AUTO switch. The selection of the airflow mode and airflow amount will be automatically controlled.
3. Use the temperature control switch to set the desired temperature.

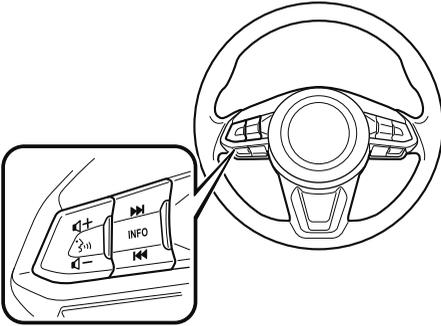
### **NOTE**

- If the AUTO switch is pressed while the front A/C switch is off, the rear air conditioner operates only to circulate air.
- Setting the temperature to the maximum high or low will not provide the desired temperature at a faster rate.
- When selecting heat, the system will restrict airflow until it has warmed to prevent cold air from blowing out of the vents.
- When the rear air conditioner is operated automatically, "AUTO" is displayed on the rear screen.
- When the rear air conditioner is controlled to the same temperature setting as the front air conditioner for the driver's side, "SYNC" is displayed on the rear screen.

To turn off the system, press the OFF switch.

# Before Using the Audio System

## Audio Control Switch



### ▼ Adjusting the Volume

To increase the volume, press up the volume switch (+).

To decrease the volume, press down the volume switch (-).



### ▼ Seek Switch

#### AM/FM radio

Press the seek switch (◀▶). The radio switches to the next/previous stored station in the order that it was stored.

Press and hold the seek switch (◀▶) to seek all usable stations at a higher or lower frequency whether programmed or not.

Radio stations which have been previously stored in the favorite radio can be called up by pressing the seek switch (◀▶) while any radio station stored in the favorite radio is being received. Radio stations can be called up in the order they were stored with each press of the switch (◀▶).



#### USB Audio/Bluetooth® Audio

Press the seek switch (▶▶) to skip forward to the beginning of the next track.

Press the seek switch (◀◀) within a few seconds after playback begins to track down to the beginning of the previous track.

Press the seek switch (◀◀) after a few seconds have elapsed to start playback from the beginning of the current track.

Press and hold the seek switch (◀◀, ▶▶) to continuously switch the tracks up or down.

## Before Using the Audio System

### Aha™/Stitcher™ Radio

Press the seek switch (▶▶) to skip forward to the beginning of the next track.

Press and hold the seek switch (▶▶) to evaluate the playback of the current song as “Like”.

Press and hold the seek switch (◀◀) to evaluate the playback of the current song as “Dislike”.

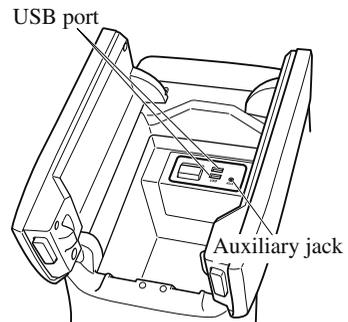
### AUX/USB mode

Audio can be heard from the vehicle's speakers by connecting a commercially-available portable audio unit to the auxiliary jack.

A commercially-available, non-impedance (3.5 $\phi$ ) stereo mini plug cable is required. Contact an expert repairer, we recommend an Authorized Mazda Repairer for details. In addition, audio can be played from the vehicle audio device by connecting a USB device to the USB port.

#### **NOTE**

*The SD card slot is for the navigation system. For vehicles with the navigation system, the SD card (Mazda genuine) with stored map data is inserted into the SD card slot and used.*



- ① How to use AUX mode.....page 5-28
- ② How to use USB mode..... page 5-29

## Before Using the Audio System

### **! WARNING**

#### **Do not adjust the portable audio unit or a similar product while driving the vehicle:**

Adjusting the portable audio unit 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 the portable audio unit or a similar product while the vehicle is stopped.

### **! CAUTION**

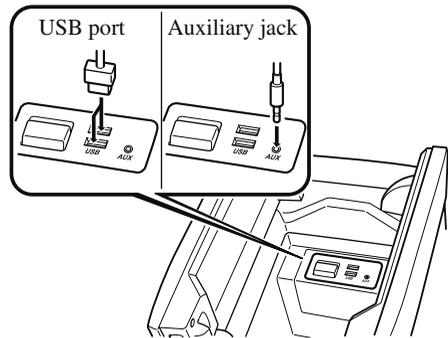
Depending on the portable audio device, noise may occur when the device is connected to the vehicle accessory socket. (If noise occurs, do not use the accessory socket.)

#### **NOTE**

- This mode may not be usable depending on the portable audio device to be connected.
- Before using the auxiliary jack/USB port, refer to the instruction manual for the portable audio device.
- Use a commercially-available, non-impedance (3.5 $\phi$ ) stereo mini plug for connecting the portable audio unit to the auxiliary jack. Before using the auxiliary jack, read the manufacturer's instructions for connecting a portable audio unit to the auxiliary jack.

- To prevent discharging of the battery, do not use the auxiliary input for long periods with the engine off or idling.
- When connecting a device to the auxiliary jack or USB port, noise may occur depending on the connected device. If the device is connected to the vehicle's accessory socket, the noise can be reduced by unplugging it from the accessory socket.

#### **▼ How to connect USB port/Auxiliary jack**



#### **Connecting a device**

1. Open the console lid.
2. Connect the connector on the device to the USB port.

#### **Connecting with a connector cable**

1. Open the console lid.
2. Connect the device plug/connector cable to the auxiliary jack/USB port. Pass the device plug/connector cable through the notch in the console and connect.

# Before Using the Audio System

## **WARNING**

**Do not allow the connection plug cord to get tangled with the selector lever:**

Allowing the plug cord to become tangled with the selector lever is dangerous as it could interfere with driving, resulting in an accident.

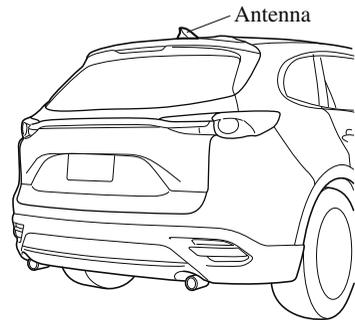
## **CAUTION**

Do not place objects or apply force to the auxiliary jack/USB port with the plug connected.

## **NOTE**

- Insert the plug into the auxiliary jack/USB port securely.
- Insert or pull out the plug with the plug perpendicular to the auxiliary jack/USB port hole.
- Insert or remove the plug by holding its base.

## Antenna



## Basic Operation Method

### 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 may successively change without notice.

Audio Set has three different human interfaces.

- Commander switch
- Touch panel
- Voice recognition with steering switch and microphone

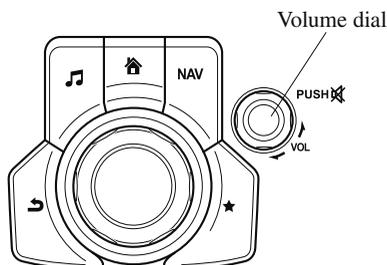
Refer to Voice Recognition on page 5-57.

### ▼ Commander switch operation

### NOTE

For safety reasons, some operations are disabled while the vehicle is being driven.

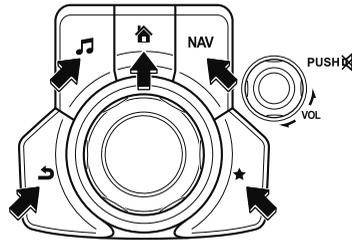
### Volume dial operation



Press the volume dial to switch the audio MUTE on and off.

Turn the volume dial to adjust the volume. The volume increases by turning the dial clockwise, and decreases by turning it counterclockwise.

## Switches around commander knob



The following operations can be done by pressing the switches around the commander knob.

 : Displays the home screen.

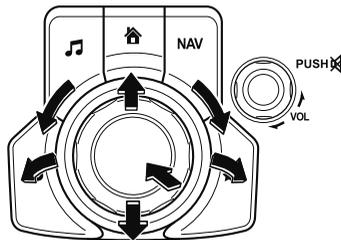
 : Displays the Entertainment screen.

**NAV** : Displays the Navigation screen (Only navigation-equipped vehicles). For operation of the Navigation screen, refer to the navigation system manual. If the SD card for the navigation system is not inserted, the compass indicating the direction in which the vehicle is moving is displayed.

 : Displays the Favorites screen. Long-press to store particular items in Favorites. (Radio, phonebook and destination of the navigation system can be programmed.)

 : Returns to previous screen.

## Commander knob operation



### (Selection of icons on screen)

1. Tilt or turn the commander knob and move the cursor to the desired icon.
2. Press the commander knob and select the icon.

### **NOTE**

*Long-press operation of the commander knob is also possible for some functions.*

# Audio Set

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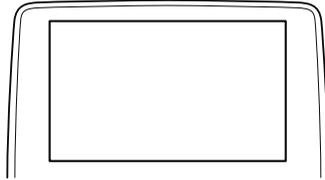
## ▼ Touch panel operation



*Do not press the screen strongly or press it with a sharp-pointed object. Otherwise, the screen could be damaged.*

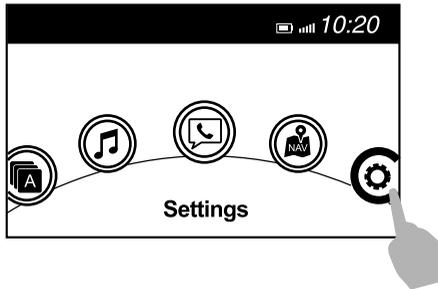
### **NOTE**

*For safety reasons, operation of the center display is disabled while the vehicle is being driven. However, items not displayed in gray can be operated using the commander switch while the vehicle is being driven.*



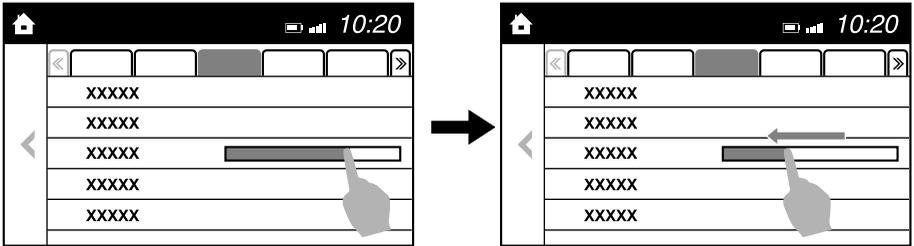
## Touch & Tap

1. Touch or tap on the item indicated on the screen.
2. The operation is launched and the next item is displayed.



**Slide (USB audio only)**

1. Touch the setting item displaying a slider bar.
2. Touch the slider with your finger and move to the desired level.



**Swipe**

1. Touch the screen with your finger and move up or down.
2. Items which were not displayed can be displayed.



**Return to previous screen**

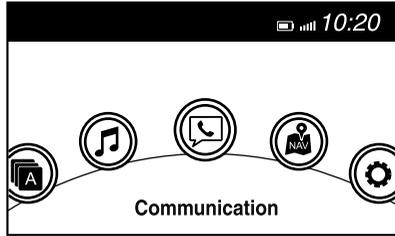
1. Touch the .

**Displaying the home screen**

1. Touch the .

# Audio Set

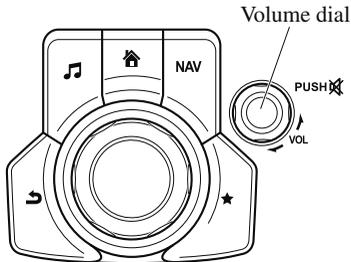
## Home screen



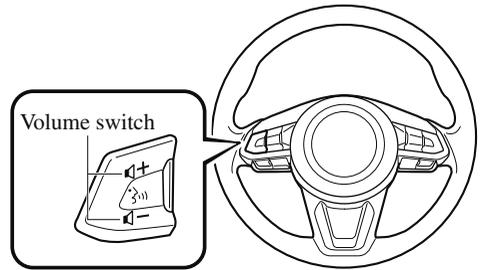
Icon	Function
	<p><b>Applications</b> Information such as average fuel economy, maintenance, and warnings can be verified. Depending on the grade and specification, the screen display may differ.</p>
	<p><b>Entertainment</b> Operates audio such as the radio. The audio source most recently used is displayed. An audio source which cannot be used at that time is skipped and the previous audio source is displayed.  To change the audio source, select the  icon displayed at the bottom of the screen.</p>
	<p><b>Communication</b> Bluetooth<sup>®</sup> related functions are available.</p>
	<p><b>Navigation</b> Navigation screen is displayed (vehicles with navigation system). If the SD card for the navigation system is not inserted, the compass indicating the direction in which the vehicle is moving is displayed. The compass may not indicate the correct bearing when the vehicle is stopped or traveling at a slow speed.</p>
	<p><b>Settings</b> Overall setting menu (Such as display, sound, Bluetooth<sup>®</sup> and Language). Depending on the grade and specification, the screen display may differ.</p>

## Volume/Display/Sound Controls

### Commander switch



### Audio control switch



#### ▼ Volume adjustment

Turn the commander switch volume dial.  
The volume switch on the steering switch can also be pressed.

#### ▼ Display setting

Select the  icon on the home screen to display the Settings screen.  
Select the **Display** tab to select the item you would like to change.

#### Display OFF/Clock

The center display can be turned off.  
Select **Turn Display Off** to turn the display off.  
When **Turn Display Off and Show Clock** is selected the center display turns off and the clock is displayed.  
The center display can be turned back on as follows:

- Touch the center display.
- Operate the commander switch.

#### Daytime/nighttime (Mode) screen setting

The daytime or nighttime screen can be selected.

**Auto** : Switches screen automatically according to headlight illumination condition\*1

**Day** : Daytime screen setting

**Night** : Nighttime screen setting

\*1 The display is constantly on daytime screen when the illumination dimmer is cancelled.

#### Brightness adjustment

Adjust the center display brightness using the slider.

#### Contrast adjustment

Adjust the center display contrast using the slider.

#### Display setting reset

All of the screen setting values can be reset to their initial settings.

1. Select **Reset**.
2. Select **Yes**.

## Audio Set

### ▼ Audio sound adjustment

Select the  icon on the home screen to display the Settings screen.

Select the **Sound** tab to select the item you would like to change.

Indication	Setting value
Bass (Low pitch sound)	+ Side: Low pitch enhancement - Side: Low pitch reduction
Treble (Treble sound)	+ Side: Treble enhancement - Side: Treble reduction
Fade (Front/Rear volume balance)	Front: Front speaker volume enhancement Rear: Rear speaker volume enhancement
Balance (Left/right volume balance)	Right: Right speaker volume enhancement Left: Left speaker volume enhancement
ALC*1 (Automatic volume adjustment)	Off—Adjustment at seven levels
Bose® Centerpoint*2 (Automatic surround level adjustment)	On/Off
Bose® AudioPilot*2 (Automatic volume adjustment)	On/Off
Beep (Audio operation sound)	On/Off

\*1 Standard audio

\*2 Bose® sound system

### ALC (Automatic volume adjustment)

The automatic level control (ALC) is a feature that automatically adjusts audio volume and sound quality according to the vehicle speed. The volume increases in accordance with the increase in vehicle speed, and decreases as vehicle speed decreases.

### Bose® Centerpoint (Automatic surround level adjustment)

Centerpoint®\*3 lets vehicle owners enjoy a Bose® surround sound experience from their existing MP3s.

Specifically engineered to meet the unique demands of reproducing surround sound in a vehicle.

Converts stereo signals to multiple channels allowing greater precision when reproducing the sound.

An enhanced algorithm to simultaneously create a wider, more spacious sound field.

\*3 Centerpoint® is a registered trademark of Bose Corporation.

### Bose® AudioPilot (Automatic volume adjustment)

When driving, background noise can interfere with enjoying music.

AudioPilot®\*4 noise compensation technology continuously adjusts the music to compensate for background noise and vehicle speed.

It reacts only to sustained noise sources and not intermittent ones, such as speed bumps.

An enhanced DSP algorithm allows faster and more effective compensation for unusual situations, such as driving on a very rough road or at high speeds.

\*4 AudioPilot® is a registered trademark of Bose Corporation.

## Operating the Radio

### ▼ Radio ON

Select the  icon on the home screen to display the Entertainment screen. When selecting the desired radio, the following icons are indicated in the lower part of the center display.

#### AM/FM Radio

Icon	Function
	Displays the Entertainment menu. Use to switch to a different audio source.
	Displays the list of receivable RDS radio stations (FM only). <sup>*1</sup>
	Displays the station list. <sup>*2</sup> Select <b>Update Station List</b> to display the frequencies of up to ten radio stations on the auto memory preset list. Select the desired frequency.
	Displays the Favorites list. Long-press to store radio station currently being aired.
	You can search for receivable radio stations. Scanning stops at each station for about five seconds. Select again to continue receiving the radio station.
	You can change the radio frequency manually. Rotate the commander knob, slide the screen, or touch the radio frequency. Press ◀ or ▶ to change the radio frequency one step at a time. When ◀ or ▶ is long-pressed, the radio frequency changes continually. It stops when you remove your hand from the icon or the commander knob.
	Switches the TA mode on and off. <sup>*1</sup>
	Automatic radio station selection. When long-pressed, the radio frequency changes continually. It stops when you remove your hand from the icon or the commander knob.
	Displays the FM settings screen (FM only). <sup>*1</sup> On/Off of Alternative frequency and Region lock can be set.
	Displays sound settings to adjust audio quality level. Refer to Volume/Display/Sound Controls on page 5-23.

\*1 With Radio Data System (RDS)

\*2 Not displayed when listening to FM radio on vehicles with Radio Data System (RDS).

## Audio Set

### NOTE

#### (With Radio Data System (RDS))

When the **◀◀** or **▶▶** icon is selected while FM is selected, each program is selected.

### ▼ Favorites Radio

Selected stations can be registered for convenient operation. Up to 50 stations can be registered. The Favorites list is common to AM and FM radio.

### Registering to Favorites

Long-press the **★** icon to register the current radio station. The registration can also be performed using the following procedure.

1. Select the **★** icon to display the Favorites list.
2. Select **Add/Edit Radio Favourites**.
3. Select **Add <active station>**.
4. The station is added to the bottom of the Favorites list.

### NOTE

If the battery is disconnected, your Favorites list will be not deleted.

### Selecting radio station from Favorites

1. Select the **★** icon to display the Favorites list.
2. Select the radio frequency to tune in the radio station.

### Deleting from Favorites

1. Select the **★** icon to display the Favorites list.
2. Select **Add/Edit Radio Favourites**.
3. Select **Delete**.
4. Select the radio frequency you want to delete.
5. Select **Delete**.

### Changing Favorites list order

1. Select the **★** icon to display the Favorites list.
2. Select **Add/Edit Radio Favourites**.
3. Select **Move**.
4. Select a radio frequency. The selected radio station can be moved.
5. Slide the radio station or move it using the commander switch, then select **OK**.

### ▼ Radio Data System (RDS)\*

#### Alternative frequency (AF)

AF functions on FM stations. Turn on the AF mode. If the radio reception of the current station weakens, the system switches to an alternative station automatically.

If you wish to continue a regional program, turn on the Region lock (REG) mode.

#### AF/REG on or off switching

Select the **⚙** icon while in FM mode to switch to the FM settings screen. AF/REG on or off switching can be performed as follows:

#### (AF mode on/off)

Select On/Off on the FM settings screen.

#### (REG mode on/off)

While the AF mode is on, select On/Off.

#### Traffic announcement (TA)

Select **TA** during FM/AM reception to switch to the TA mode.

If a TA broadcast is received while in the TA mode, the TA broadcast intercedes even while using other functions (FM, USB device, AUX, BT audio, Aha™ radio, or Stitcher™ radio), and “Traffic Announcement” is displayed.

If a TA is received on the Entertainment screen, **Cancel** is displayed on the screen. Select **Cancel** to cancel the received TA and return to TA reception stand-by. If a TA is received on a screen other than the Entertainment screen, the selection screens for **TA Off**, **Cancel**, and **Close** are displayed on the screen. If **Close** is selected, the selection screen turns off when a TA is received while continuing to receive TAs.

### **Selection from Station List**

List of receivable RDS radio stations is displayed. You can easily select the station you want to listen to from the list. If a radio station name is not available, the frequency is displayed. In addition, radio stations which have been programmed to a Genre code (Program types like Rock, News, and so on) can also be displayed separately by category.

#### **NOTE**

*It may take longer to display the station list depending on the reception conditions.*

1. Select the  icon to display the radio station list.
2. Select the radio frequency to tune in the radio station.

#### **(Selecting Genre)**

1. Select the **Genre** on the station list screen to display the genre list screen.
2. Select the genre to display the radio station list in the genre.

#### **NOTE**

*Only one Genre can be selected.*

# Audio Set

## How to use AUX mode

### ▼ Playback

1. Select the  icon on the home screen to display the Entertainment screen.
2. Select **AUX** to switch to the AUX mode. The following icons are displayed in the lower part of the center display.

Icon	Function
	Displays the Entertainment menu. Use to switch to a different audio source.
	Displays sound settings to adjust audio quality level. Refer to Volume/Display/Sound Controls on page 5-23.

### NOTE

- If a device is not connected to the auxiliary jack, the mode does not switch to the AUX mode.
- Adjust the audio volume using the portable audio device, commander switch, or audio control switch.
- Audio adjustments can also be made using the portable audio device's volume setting.
- If the connection plug is pulled out from the auxiliary jack while in AUX mode, noise may occur.

## How to use USB mode

Type	Playable data
USB mode	MP3/WMA/AAC/OGG file

This unit does not support a USB 3.0 device. In addition, other devices may not be supported depending on the model or OS version.

The recommended capacity of the USB memory is 16 GB or less.

USB devices formatted to FAT32 are supported (USB devices formatted to other formats such as NTFS are not supported).

### ▼ Playback

1. Select the  icon on the home screen to display the Entertainment screen.
2. Select **USB 1** or **USB 2** to switch the USB mode. The following icons are displayed in the lower part of the center display.

Icon	Function
	Displays the Entertainment menu. Use to switch to a different audio source.
	Category list is displayed.
	Current track list is displayed. Select a desired track to play it.
	Plays the current track repeatedly. Select it again to play the tracks in the current track list repeatedly. When selected again, the function is canceled.
	Tracks in the current track list are played randomly. Select it again to cancel.
	Starts playing a track similar to the current track using Gracenote®'s More Like This™. Select the desired song from the category list to cancel More Like This™.
	If selected within a few seconds from the beginning of a song which has started to play, the previous song is selected. If more than a few seconds have elapsed, the song currently being played is replayed from the beginning. Long-press to fast reverse. It stops when you remove your hand from the icon or the commander knob.
	Track is played. When selected again, playback is temporarily stopped.
	Advances to the beginning of the next song. Long-press to fast forward.

# Audio Set

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Icon	Function
	Displays sound settings to adjust audio quality level. Refer to Volume/Display/Sound Controls on page 5-23.

## NOTE

- If a file name in the USB memory is too long, it could cause operation problems such as not being able to playback the song.  
(Recommended: Within 80 characters)
- To move to the desired location on the track, move the slider indicating the playback time.
- The appearance of the repeat and shuffle icons changes depending on the type of operation in which the function is used.

## Category list

Select the  icon to display the following category list.

Select a desired category and item.

Category	Function
Playlist*1	Displays playlists on the device.
Artist	Displays the artist name list. All the tracks or tracks for each album of the selected artist can be played.
Album	Displays the album name list.
Song	All the tracks in the device are displayed.
Genre	Displays the genre list. All the tracks or tracks per album or artist in the selected genre can be played.
Audiobook*2	Displays the audiobook list. Chapters can be selected and played.
Podcast*2	Displays the podcast list. Episode can be selected and played.
Folder*3	Displays the folder/file list.

\*1 Playlist folders of Apple devices are not supported.

\*2 Apple device only

\*3 USB-Sticks and USB-Android™ device only

**Example of use (to play all tracks in USB device)**

**(Method 1)**

1. Select  to display the category list.
2. Select **Song**.  
All the tracks in the USB device are displayed.
3. Select a desired track.  
The selected track is played. All the tracks in the USB device can be played by continuing playback.

**NOTE**

*Only the tracks in the desired category selected in Step 2 are played.*

**(Method 2)\*1**

1. Select  to display the category list.
  2. Select **Folder**.  
All the folders in the USB device are displayed.
  3. Select **All Songs**.  
All the tracks in the USB device are displayed.
  4. Select a desired track.  
The selected track is played. All the tracks in the USB device can be played by continuing playback.
- \*1 Can be operated using an Android™ device or USB flash memory.

**NOTE**

*Only the tracks in the desired folder selected in Step 3 are played.*

## Audio Set

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### ▼ Gracenote Database

When a USB device is connected to this unit and the audio is played, the album name, artist name, genre and title information are automatically displayed if there is a match in the vehicle's database compilation to the music being played. The information stored in this device uses database information in the Gracenote® music recognition service.



*For information related to the most recent Gracenote® database which can be used and how to install it, go to the Mazda Hands Free Website:  
<http://www.mazdahandsfree.com>*

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### **Updating the database**

The Gracenote® media database can be updated using USB device.

1. Connect a USB device containing the software for updating Gracenote®.
2. Select the  icon on the home screen to display the Settings screen.
3. Select the **System** tab and select **Music Database Update**.
4. Select **Search**. The list of the update package stored in the USB device and the version are displayed.
5. Select the package to use the update.
6. Select **Install**.

### **NOTE**

*Gracenote® can be downloaded from the Mazda Hands-free Website.*

# Audio Set

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## Bluetooth®

### ▼ Introduction

#### **Bluetooth® Hands-Free outline**

When a Bluetooth® device (mobile phone) is connected to the vehicle's Bluetooth® unit via radio wave transmission, a call can be made or received by pressing the talk button, pick-up button, or hang-up button on the audio remote control switch, or by operating the center display. For example, even if a device (mobile phone) is in your coat pocket, a call can be made without taking the device (mobile phone) out and operating it directly.

#### **Bluetooth® audio outline**

When a portable audio unit equipped with the Bluetooth® communication function is paired to the vehicle, you can listen to music stored on the paired portable audio device from the vehicle's speakers. It is not necessary to connect the portable audio device to the vehicle's external input terminal. After programming, operate the vehicle audio control panel to play/stop the audio.

### **NOTE**

- *For your safety, a device can be paired only when the vehicle is parked. If the vehicle starts to move, the pairing procedure will end. Park the vehicle in a safe place before pairing.*
- *The communication range of a Bluetooth® equipped device is about 10 meters (32 ft) or less.*
- *Basic audio operation is available using voice commands even if Bluetooth® is not connected.*
- *For safety reasons, operation of the center display is disabled while the vehicle is being driven. However, items not displayed in gray can be operated using the commander switch while the vehicle is being driven.*



*Some Bluetooth® mobile devices are not compatible with the vehicle. Consult an Authorized Mazda Repairer, Mazda's call center or Web support center for information regarding Bluetooth® mobile device compatibility:*

Phone:

(Germany)

0800 4263 738 (8:00—18:00 Central European Time)

(Except Germany)

00800 4263 7383 (8:00—18:00 Central European Time)

(Worldwide)

+ 49 (0) 6838 907 287 (8:00—18:00 Central European Time)

Web:

<http://www.mazdahandsfree.com>

**Applicable Bluetooth® specification (Recommended)**

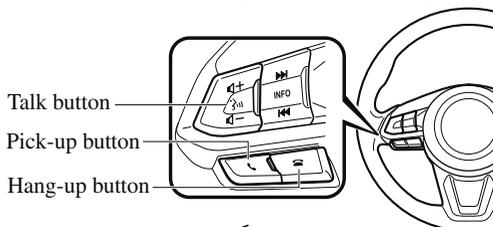
Ver. 1.1/1.2/2.0 + EDR/2.1 + EDR/3.0 (conformity)

### ▼ Component Parts

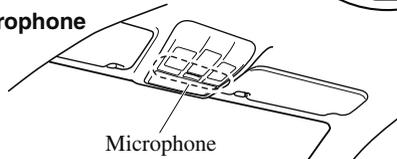
**Audio unit**



**Talk button, Pick-up button and Hang-up button**



**Microphone**



### **Microphone (hands-free)**

The microphone is used for speaking voice commands or when making a Hands-free call.

### **Talk button**

Activates the voice recognition. In addition, it skips the voice guidance.

## Audio Set

---

### Pick-up button

Responds to incoming calls. In addition, after selecting a contact or dialing a number, it places the call when the button is pressed.

### Hang-up button

Ends the call or refuses an incoming call. In addition, it ends the voice recognition operation.

### Commander switch

The commander switch is used for volume adjustment and display operation. Tilt or turn the commander knob to move the cursor. Press the commander knob to select the icon.

### Volume adjustment

The volume dial of the commander switch is used to adjust the volume. Turn the dial to the right to increase volume, to the left to decrease it.

The volume can also be adjusted using the volume button on the steering wheel.

### **NOTE**

*If the volume is lower compared to other audio modes, increase the volume from the device side.*

Conversation volume and the volume of the voice guidance and ringtone can each be set in advance.

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Settings**.
3. Adjust the **Phone Volume** and the **VR and Ringtone** using the slider.

## Bluetooth® Preparation

### ▼ Device pairing

To use Bluetooth® audio and Hands-Free, the device equipped with Bluetooth® has to be paired to the unit using the following procedure. A maximum of seven devices including Bluetooth® audio devices and hands-free mobile phones can be paired.

#### NOTE

· *The Bluetooth® system may not operate for 1 or 2 minutes after the ignition is switched to ACC or ON. However, this does not indicate a problem. If the Bluetooth® system does not connect automatically after 1 or 2 minutes have elapsed, make sure that the Bluetooth® setting on the device is normal and attempt to reconnect the Bluetooth® device from the vehicle side.*

· *If Bluetooth®-enabled devices are used in the following locations or conditions, connection via Bluetooth® may not be possible.*

- *The device is in a location hidden from the center display such as behind or under a seat, or inside the glove compartment.*
- *The device contacts or is covered by a metal object or body.*
- *The device is set to power-saving mode.*

### Pairing Procedure

1. Select the  icon on the home screen to display the Settings screen.
2. Select the **Devices** tab.
3. Select **Bluetooth**.

4. Turn the Bluetooth® setting on.
5. Select **Add New Device** to display the message and switch to the device operation.
6. Using your device, perform a search for the Bluetooth® device (Peripheral device).
7. Select “Mazda” from the device list searched by the device.
8. **(Device with Bluetooth® version 2.0)** Input the displayed 4-digit pairing code into the device.

#### **(Device with Bluetooth® version 2.1 or higher)**

Make sure the displayed 6-digit code on the audio is also displayed on the device, and touch the **Yes**.

Connection permission and phonebook access permission for your mobile device may be required depending on the mobile device.

9. If pairing is successful, the functions of the device connected to Bluetooth® are displayed.
10. **(Devices compatible with Mazda E-mail / SMS function)** SMS (Short Message Service) messages, and E-mail for the device are downloaded automatically. A download permission operation for your device may be required depending on the device.

#### NOTE

*When Call history and messages are downloaded automatically, each automatic download setting must be on.*

*Refer to Communication Settings on page 5-56.*

## Audio Set

After a device is registered, the system automatically identifies the device. By activating Bluetooth® Hands-Free again, or by activating Bluetooth® Hands-Free first after switching the ignition from OFF to ACC, the device connection condition is indicated in the center display.

### IMPORTANT note about pairing and automatic reconnection:

- If pairing is redone on the same mobile phone device, first clear “Mazda” displayed on the Bluetooth® setting screen of the mobile device.
- When the OS of the device is updated, the pairing information may be deleted. If this happens, reprogram the pairing information to the Bluetooth® unit.
- Before you pair your device, make sure that Bluetooth® is “ON”, both on your phone and on the vehicle.

### ▼ Device selection

If several devices have been paired, the Bluetooth® unit links the device last paired. If you would like to link a different paired device, it is necessary to change the link. The order of device priority after the link has been changed is maintained even when the ignition is switched off.

### Connecting other devices

1. Select the  icon on the home screen to display the Settings screen.
2. Select the **Devices** tab.
3. Select **Bluetooth**.
4. Turn the Bluetooth® setting on.
5. Select the name of the device you would like to connect.

### 6. **Phone And Audio** selection

Connects both devices as hands-free and Bluetooth® audio.

#### **Phone Only** selection

Connects as a hands-free device.

#### **Audio Only** selection

Connects as Bluetooth® audio.

### NOTE

The following functions can be used for the Hands-free or audio.

- Hands-free: Phone calls and E-mail/SMS
- Audio: Bluetooth® audio, Aha™, Stitcher™ radio

### Disconnecting a device

1. Select the  icon on the home screen to display the Settings screen.
2. Select the **Devices** tab.
3. Select **Bluetooth**.
4. Turn the Bluetooth® setting on.
5. Select the device name which is currently connected.
6. Select **Disconnect**.

## ▼ Deleting a device

### Selecting and deleting devices

1. Select the  icon on the home screen to display the Settings screen.
2. Select the **Devices** tab.
3. Select **Bluetooth**.
4. Turn the Bluetooth® setting on.
5. Select the device name which you would like to delete.
6. Select **Remove Paired Device**.
7. Select **Yes**.

### Deleting all devices

1. Select the  icon on the home screen to display the Settings screen.
2. Select the **Devices** tab.
3. Select **Bluetooth**.
4. Select **Bluetooth Settings**.
5. Select **Remove All Paired Devices**.
6. Select **Yes**.

## ▼ Changing PIN code

PIN code (4 digits) can be changed.

1. Select the  icon on the home screen to display the Settings screen.
2. Select the **Devices** tab.
3. Select **Bluetooth**.
4. Select **Bluetooth Settings**.
5. Select **Change Paircode**.
6. Input the new PIN code to be set.
7. Select .

## Available Language

The language can be changed.  
Refer to Settings on page 5-60.

### **NOTE**

*Depending on the language, it may only be available for the screen display, but not for the voice recognition.*

# Audio Set

## Bluetooth® Audio

### Applicable Bluetooth® specification (Recommended)

Ver. 1.1/1.2/2.0 + EDR/2.1 + EDR/3.0  
(conformity)

### Response profile

- A2DP (Advanced Audio Distribution Profile) Ver. 1.0/1.2
- AVRCP (Audio/Video Remote Control Profile) Ver. 1.0/1.3/1.4

A2DP is a profile which transmits only audio to the Bluetooth® unit. If your Bluetooth® audio device corresponds only to A2DP, but not AVRCP, you cannot operate it using the control panel of the vehicle's audio system. In this case, only the operations on the mobile device are available the same as when a portable audio device for a non-compliant Bluetooth® device is connected to the AUX terminal.

Function	A2DP	AVRCP		
		Ver. 1.0	Ver. 1.3	Ver. 1.4
Playback	X	X	X	X
Pause	X	X	X	X
File (Track) up/down	—	X	X	X
Reverse	—	—	X	X
Fast-forward	—	—	X	X
Text display	—	—	X	X
Repeat	—	—	De- pends on de- vice	De- pends on de- vice

Function	A2DP	AVRCP		
		Ver. 1.0	Ver. 1.3	Ver. 1.4
Shuffle	—	—	De- pends on de- vice	De- pends on de- vice
Scan	—	—	De- pends on de- vice	De- pends on de- vice
Folder up/ down	—	—	—	De- pends on de- vice

X: Available

—: Not available

### NOTE

- The battery consumption of Bluetooth® audio devices increases while Bluetooth® is connected.
- If a general mobile phone device is USB connected during music playback over the Bluetooth® connection, the Bluetooth® connection is disconnected. For this reason, you cannot have music playback over a Bluetooth® connection and music playback using a USB connection at the same time.
- The system may not operate normally depending on the Bluetooth® audio device.

### ▼ Switching to Bluetooth® audio mode

To listen to music or voice audio recorded to a Bluetooth® audio device, switch to the Bluetooth® audio mode to operate the audio device using the audio system control panel. Any Bluetooth® audio device must be paired to the vehicle's Bluetooth® unit before it can be used.

Refer to Bluetooth® Preparation on page 5-37.

1. Turn on the Bluetooth® audio device's power.
2. Switch the ignition to ACC or ON.
3. Select the  icon on the home screen to display the Entertainment screen.
4. When **[Bluetooth]** is selected, switches to the Bluetooth® audio mode to begin playback.

#### NOTE

- If Bluetooth® audio is used after using Aha™ or Stitcher™ radio, the application on the mobile device has to be closed first.
- If the Bluetooth® audio device does not begin playback, select the  icon.
- If the mode is switched from Bluetooth® audio mode to another mode (radio mode), audio playback from the Bluetooth® audio device stops.

### ▼ Playback

To listen to a Bluetooth® audio device over the vehicle's speaker system, switch the mode to Bluetooth® audio mode. (Refer to “Switching to Bluetooth® audio mode”)

After switching to the Bluetooth® audio mode, the following icons are displayed in the lower part of the display. Icons which can be used differ depending on the version of the Bluetooth® audio device which you are currently using.

Icon	Function
	Displays the Entertainment menu. Use to switch to a different audio source.
	<b>(AVRCP Ver. 1.4 only)</b> Displays the top level folder/file list. Select the folder which you want to select. The files in the selected folder are displayed. Select the file you want to play.
	<b>(AVRCP Ver. 1.3 or higher)</b> Replays the song currently being played repeatedly. When selected again, the songs in the folder are played repeatedly. Select it again to cancel. Icons change when the song is repeated or the folder is repeated.

# Audio Set

Icon	Function
	(AVRCP Ver. 1.3 or higher) Plays songs in the folder in random order. When selected again, the songs on the device are played in random order. Select it again to cancel. Icons change during folder shuffle or device shuffle.
	Scans the titles in a folder and plays the beginning of each song to aid in finding a desired song. When selected again, the beginning of each song on the device is played. When selected again, the operation is canceled and the song currently being played continues.
	Returns to the beginning of the previous song. Long-press to fast reverse. It stops when you remove your hand from the icon or the commander knob.
	Plays the Bluetooth® audio. When selected again, playback is temporarily stopped.
	Advances to the beginning of the next song. Long-press to fast forward. It stops when you remove your hand from the icon or the commander knob.
	Displays sound settings to adjust audio quality level. Refer to Volume/Display/Sound Controls on page 5-23.

## ▼ Bluetooth® Audio Device Information Display

If a Bluetooth® audio device is connected, the following information is displayed in the center display.

	AVRCP Ver. lower than 1.3	AVRCP Ver. 1.3	AVRCP Ver. 1.4 or higher
Device name	X	X	X
Remaining battery charge of device	X	X	X
Song name	—	X	X
Artist name	—	X	X
Album name	—	X	X
Playback time	—	X	X

	AVRCP Ver. lower than 1.3	AVRCP Ver. 1.3	AVRCP Ver. 1.4 or higher
Genre name	—	X	X
Album art image	—	—	—

X: Available

—: Not available

### NOTE

*Some information may not display depending on the device, and if the information cannot be displayed, “Unknown - - -” is indicated.*

## How to Use Aha™

### ▼ What is Aha™?

Aha™\*1 is an application which can be used to enjoy various Internet content such as Internet radio and podcasts.

Stay connected to your friends activities by getting updates from Facebook and Twitter.

Using the location-based service, nearby services and destinations can be searched or real-time local information can be obtained.

For details on Aha™, refer to “<http://www.aharadio.com/>”.

\*1 Aha™, the Aha™ logo, and the Aha™ trade dress are trademarks or registered trademarks of Harman International Industries, Inc., used with permission.

### NOTE

- The service content provided by Aha™ varies depending on the country in which the user resides. In addition, the service is not available in some countries.
- To operate Aha™ from your Bluetooth® device, perform the following in advance:
  - Install the Aha™ application to your device.
  - Create an Aha™ account for your device.
  - Log onto Aha™ using your device.
  - Select the preset station on your device.

### ▼ Playback

Select the  icon on the home screen to display the Entertainment screen. When **[aha]** is selected, the following icons are displayed at the bottom of the center display. The displayed icon differs depending on the selected station.

In addition, icons other than the following icons may be displayed.

Icon	Function
	Displays the Entertainment menu. Use to switch to a different audio source.
	Displays the main menu. Use to switch to other stations.
	Displays the content list. Use to switch to other desired content on the station.
	<b>Shout</b> Records voice. Records voice and posts it as playable audio to Facebook and other social stations.
	<b>Like</b> *1 Evaluates the current content as “Like”.

# Audio Set

Icon	Function
	<b>Dislike*1</b> Evaluates the current content as “Dislike”.
	Reverses for 15 seconds.
	<b>Map (vehicles with navigation system)</b> Displays the destination searched by the location based services on the navigation system.
	<b>Call</b> A call can be made to the telephone number of a shop searched using the Location Based Services. Available when a device is connected as a Hands-Free.
	Returns to the previous content.
	Pauses playback of the content. When selected again, playback resumes.
	Goes to the next content.
	Fast-forwards for 30 seconds.
	Displays sound settings to adjust audio quality level. Refer to Volume/Display/Sound Controls on page 5-23.

\*1 Some stations may use alternate variations of Like and Dislike, based on station type or provider.

## Main menu

Select the  icon.



Switch the tab and select the station category.

Tab	Function
Presets	Displays the preset station list set on the device. Select the preset station name to play the station content.

Tab	Function
Nearby	Select the desired station. Guidance is provided to the searched destination near the vehicle's position. You can designate desired categories previously set using the filter setting on your device.

**NOTE**

The available Location Based Services may differ because the services depend on the content provided by Aha™.

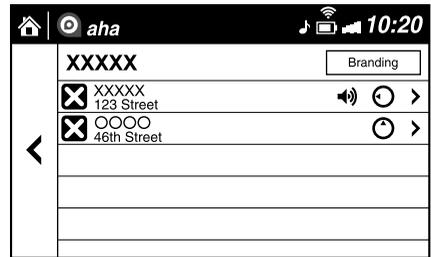
**Example of use (Location Based Services)**

1. Select the desired station from the “Nearby” tab on the main menu. The destination name or address playback starts in the order of the destination name list.



2. When the location icon is selected, the currently displayed destination is displayed on the navigation system (vehicles with navigation system).
3. When the phone icon is selected, a phone call is placed to the currently displayed destination.
4. Select the list icon to display the content list.

Selection of other destinations from the list can be made.



▼ **Shout**

Some social stations, such as Facebook or Caraoke, support the ability to record and share voice messages using the “Shout” function.

1. Select the microphone icon and start the countdown (3, 2, 1, 0). Recording starts when the countdown reaches zero.
2. Records voice.
3. Select [Save] and store/post the recording.

**NOTE**

- Recordable time varies depending on the station (Max. 30 seconds).
- Recording stops automatically when the recordable time has elapsed. You can then post or delete the recording.

## Audio Set

### How to Use Stitcher™ Radio

#### ▼ What is Stitcher™ Radio?

Stitcher™\*1 radio is an application which can be used to listen to Internet radio or stream podcasts.

Recommended content is automatically selected by registering content which you put into your favorites, or by pressing the Like or Dislike button.

For details on Stitcher™ Radio, refer to “<http://stitcher.com/>”.

\*1 Stitcher™, the Stitcher™ logo, and the Stitcher™ trade dress are trademarks or registered trademarks of Stitcher, Inc., used with permission.

#### NOTE

To operate Stitcher™ Radio from your Bluetooth® device, perform the following in advance:

- Install the Stitcher™ Radio application to your device.
- Create a Stitcher™ Radio account for your device.
- Log onto Stitcher™ Radio using your device.

#### ▼ Playback

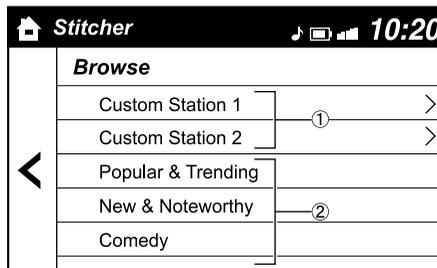
Select the  icon on the home screen to display the Entertainment screen. When Stitcher is selected, the following icons are indicated in the bottom part of the center display.

Icon	Function
	Displays the Entertainment menu. Use to switch to a different audio source.
	Displays the station list. Use to switch to other stations.
	<b>Dislike</b> Evaluates the current program as “Dislike”.
	<b>Like</b> Evaluates the current program as “Like”.
	Adds the current station to your favorites or deletes the current station from your favorites.
	Reverses for 30 seconds.
	Plays the station. Select it again to pause playback.

Icon	Function
	Goes to the next station.
	Displays sound settings to adjust audio quality level. Refer to Volume/Display/Sound Controls on page 5-23.

### Station list

- Select the  icon to display the station list.
  - Favorites station name: Select to display the program registered to your favorites.
  - Category name: A recommended category selected from your favorites by Stitcher™ is displayed.  
Select it to display the category program.



- Select the program name to play it.

### Add to your favorites

If the current program has not been registered to your favorites, it can be registered to your favorites.

- Select the  icon to display the favorites station which the registration can be added.
- Select the station name which you want to register.
- Select  to add the program to the selected favorites station.

### NOTE

· Multiple favorites stations can be selected and registered.

· Favorites stations registered by oneself as well those set by default are displayed.

### Delete from your favorites

If the current program has already been registered to your favorites, the program can be deleted from your favorites.

- Select the  icon.
- The program is automatically deleted from the favorites station.

## Audio Set

### Bluetooth® Hands-Free

#### ▼ Making a Call

For Mazda Connect, making calls is possible using any of the following six methods:

- Phonebook downloaded from Bluetooth® device (mobile phone) (voice recognition function can be used)
- Favorites
- Call record
- Dialing a telephone number (voice recognition function can be used)
- “Redial” - Voice recognition command for making a call to the latest outgoing call record.
- “Call back” - Voice recognition command for making a call to the latest incoming call record.

#### Phonebook Usage

Telephone calls can be made by saying the contact name in the downloaded phonebook or the name of a person whose phone number has been registered in the Bluetooth® Hands-Free. Refer to Import contact (Download Phonebook).

1. Press the talk button.
2. Wait for the beep sound.
3. **Say:** “Call XXXXX... (Ex. “John”) Mobile”.
4. Follow the voice guidance to place the call.

#### Screen operation

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Contacts** to display the contact list.

3. Select the contact you would like to call to display the details for the contact.
4. Select the desired phone number to make the call.

#### Import contact (Download Phonebook)

Phonebook data from your device (Mobile phone) can be sent and registered to your Bluetooth® Hands-Free phonebook using Bluetooth®.

#### (Automatic downloading)

The “Auto Download Contacts” setting must be on. When hands-free is connected to the device, the phonebook is downloaded automatically.

Refer to Communication Settings on page 5-56.

#### (Manually downloading)

If the “Auto Download Contacts” setting is off, download the phonebook using the following procedure.

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Contacts** to display the contact list.
3. Select **Edit Contacts**.
4. Select **Import All Contacts** or **Import Selected Contact** to switch to the device operation.
5. If **Import All Contacts** is selected, select **Download**.
6. Download will be started from the mobile phone.

## NOTE

- If “Import All Contacts” is performed after saving the phonebook to the Bluetooth® unit, the phonebook will be overwritten.
- A maximum of 1,000 contacts can be registered to the phonebook.
- Phonebook, incoming/outgoing call record, and favorite memories are exclusive to each mobile phone to protect privacy.

## Favorites Contacts

A maximum of 50 contacts can be registered. It will take less time to make a call after registering the telephone number. In addition, you do not have to look for the person you want to call in the phonebook.

## Registering to your favorites

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Favourites** to display the favorites list.
3. Select **Add/Edit Communication Favourites**.
4. Select **Add New Contact** or **Add New Contact Details**.
5. Select from the displayed list.

## NOTE

When “Add New Contact” is selected, information such as the selected person’s name is also registered. In addition, when “Add New Contact Details” is selected, only the telephone number of the selected person is registered.

## Calling a favorite

1. Select the  icon on the home screen to display the Communication screen.

2. Select **Favourites** to display the favorites list.
3. **(If only one phone number is registered to contact)**  
Select the contact information you would like to call. Go to Step 5.  
**(If multiple phone numbers are registered to contact)**  
Select the contact you would like to call to display the screen indicating the details for the contact. Go to Step 4.
4. Select the phone number you would like to call.
5. Select **Yes**.

## Deleting a favorite

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Favourites** to display the favorites list.
3. Select **Add/Edit Communication Favourites**.
4. Select **Delete**.
5. Select the contact information which you would like to delete.
6. Select **Delete**.

## Changing the display order of your favorites list

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Favourites** to display the favorites list.
3. Select **Add/Edit Communication Favourites**.
4. Select **Move**.
5. The contact can be moved after it is selected.
6. Slide the contact or move it using the commander switch, then select **OK**.

## Audio Set

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### Changing contact name of your favorites

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Favourites** to display the favorites list.
3. Select **Add/Edit Communication Favourites**.
4. Select **Rename**.
5. Select the contact to display the keyboard screen.
6. If a new name is input and **OK** is selected, the contact name is stored.

#### **NOTE**

*If the contact is long-pressed when the favorites list is displayed, the contact information can be edited (deleted, moved).*

### Telephone Number Input

#### **NOTE**

*Practice this while parked until you are confident you can do it while driving in a non-taxing road situation. If you are not completely comfortable, make all calls from a safe parking position, and only start driving when you can devote your full attention to driving.*

1. Select the  icon on the home screen to display the Communication screen.
2. When **Dial Phone** is pressed, the dial pad is displayed.
3. Input the telephone number using the dial pad.
4. Select  to make the call.

### Numeral or symbol entry

Use the dial pad.

Long-press the  to input +.

Select  to delete the currently input value.

Long-press  to delete all input values.

### Redial Function

Makes a call to the last person called (latest person on outgoing call record) from the mobile phone/vehicle.

1. Press the talk button.
2. Wait for the beep sound.
3. **Say:** “Redial”

### Call back Function

Makes a call to the last person who called your (latest person on incoming call record) mobile phone/vehicle.

1. Press the talk button.
2. Wait for the beep sound.
3. **Say:** “Call back”

## ▼ Receiving an Incoming Call

When an incoming call is received, the incoming call notification screen is displayed. The “Incoming Call Notifications” setting must be on.

Refer to Communication Settings on page 5-56.

To accept the call, press the pick-up button on the audio control switch or select **Answer** on the screen.

To reject the call, press the hang-up button on the audio control switch or select **Ignore** on the screen.

The following icons are displayed on the screen during a call. Icons which can be used differ depending on use conditions.

Icon	Function
	Displays the Communication menu.
	Ends the call.
	<b>Transferring a call from hands-free to a mobile phone</b> Communication between the Bluetooth® unit and a device (mobile phone) is canceled, and an incoming call will be received by the device (mobile phone) like a standard call.
	<b>Transferring a call from a device (mobile phone) to hands-free</b> Communication between devices (mobile phone) can be switched to Bluetooth® Hands-Free.
	<b>Mute</b> The microphone can be muted during a call. When selected again, the mute is canceled.
	To make a 3-way call, select the contacts from the following: <b>Call History</b> : Call History is displayed. <b>Contacts</b> : The phonebook is displayed. <b>Dial</b> : The dial pad is displayed. Input the phone number. The device may be unusable depending on the contractual content.
	The call on hold is made to make a 3-way call. The device may be unusable depending on the contractual content.
	Switches the call on hold.
	<b>DTMF (Dual Tone Multi-Frequency Signal) Transmission</b> This function is used when transmitting DTMF via the dial pad. The receiver of a DTMF transmission is generally a home telephone answering machine or a company's automated guidance call center. Input the number using a dial pad.

## Audio Set

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### NOTE

- If the ignition is switched off during a hands-free call, the line is transferred to the device (Mobile phone) automatically.
- If the DTMF code has two or more digits or symbols, each one must be transmitted individually.

### ▼ Call Interrupt

A call can be interrupted to receive an incoming call from a third party.

When **Hold + Answer** is selected or the pick-up button on the steering wheel is pressed, the current call is held and the system switches to the new incoming call.

When **End + Answer** is selected, the current call is ended and the system switches to the new incoming call (GSM network only).

When **Ignore** is selected or the hang-up button on the steering wheel is pressed, an incoming call is refused.

### NOTE

- The function may not be available depending on the contractual content of the mobile device.
- The function may not be operable depending on the type of the telephone network and the mobile device.

### ▼ Receiving and Replying to Messages (available only with E-mail/SMS compatible phones)

SMS (Short Message Service) messages, and E-mail received by connected devices can be downloaded, displayed, and played (read by the system).

Additionally, replies can also be made to calls and messages in the received messages.

#### Downloading messages

Up to 20 new messages can be downloaded and displayed from a connected device.

### NOTE

*For E-mail, 20 messages for each account can be downloaded.*

#### **(Automatic downloading)**

The “Auto Download Email” (E-mail) or “Auto Download SMS” (SMS) setting must be on. A message is downloaded automatically when the Bluetooth® unit is connected to the device.

Refer to Communication Settings on page 5-56.

#### **(Manually downloading)**

When the “Auto Download Email” (E-mail) or “Auto Download SMS” (SMS) setting is off, the message is downloaded using the following procedure.

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Email** or **SMS** to display the Inbox.
3. Select **Update Inbox**.

4. Download will be started from the mobile phone.

**NOTE**

- Attached data is not downloaded.
- Messages up to 1 kilobyte (E-mail)/ 140-bytes (SMS) can be downloaded.
- A message list is created for each device.
- If the connected device does not correspond to MAP 1.0, the AT command is used to download. The downloaded message indicates that it is already read.
- Downloading using the AT command may not function depending on the connected device.
- If an iPhone is connected, the following functions cannot be used.
  - Downloading past messages
  - Replying to messages

*\*iPhone is a trademark of Apple Inc., registered in the U.S. and other countries.*

**Receiving messages**

**(Method 1)**

When a device receives a message, a message received notification is displayed. The “Email Notifications” (E-mail) or “SMS Notifications” (SMS) setting must be on.

Refer to Communication Settings on page 5-56.

Select **Read** and display the message.

**(Method 2)**

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Notifications** and display the new message list for E-mail and SMS.
3. Select the message you would like to display.

# Audio Set

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The following icons are displayed in the lower part of the details on the message. Icons which can be used differ depending on use conditions.

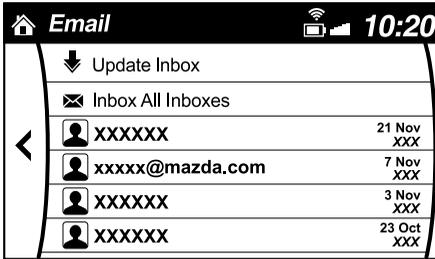
Icon	Function
	Displays the Communication menu.
	Displays the inbox.
	Plays back a message. When selected again, playback is temporarily stopped.
	Displays the previous message.
	Displays the next message.
	Only replies to the sender of the currently displayed message. Select the sentence on the displayed reply screen and select the sentence for sending from the preset message. Select <b>Send</b> .
	<b>(Only E-mail)</b> Replies to all members including CC. Select the sentence on the displayed reply screen and select the sentence for sending from the preset message. Select <b>Send</b> .
	Makes a call to a person who sent a message. For E-mail, this function may not work depending on the device.
	Deletes a message. The messages stored in a device is also deleted.

## NOTE

*Up to three preset messages can be selected.*

### Example of use (verify unread E-mail)

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Email** to display the inbox.



3. Select the unread message displayed in bold.
4. The details of the message are displayed and replying to the message, making a call, or playback can be performed.

### Changing account for displaying (E-mail only)

1. Select **Inbox**.
2. Select the account which you would like to display. Only the messages for the selected account are displayed in the inbox.

### Editing preset messages

1. Select the  icon on the home screen to display the Communication screen.
2. Select **Settings**.
3. Select **Preset Messages**.
4. Select the preset message which you would like to edit. The keyboard screen is displayed.
5. When the message is input and  is selected, the message is stored as a preset message.

### NOTE

- Select the  icon to change the language.
- Select the  icon to switch between capitalized and lower-case characters.
- Select the  icon to return to the previous screen without storing the edit.

# Audio Set

## ▼ Communication Settings

Select the  icon on the home screen to display the Communication screen.

Select **Settings** to change the setting.

Item	Setting	Function
Bluetooth®	—	Go to Bluetooth® setting menu. Refer to Bluetooth® Preparation on page 5-37.
Incoming Call Notifications	On/Off	Notifies when an incoming call is received.
Auto Download SMS	On/Off	Downloads SMS automatically when the Bluetooth® unit is connected to the device.
SMS Notifications	On/Off	Notifies when a new SMS is received.
Auto Download Email*1	On/Off	Downloads E-mail automatically when the Bluetooth® unit is connected to the device.
Email Notifications	On/Off	Notifies when a new E-mail is received.
Auto Download Call History	On/Off	Downloads Call History automatically when the Bluetooth® unit is connected to the device.
Auto Download Contacts*1	On/Off	Downloads the phonebook automatically when the Bluetooth® unit is connected to the device.
Ringtone	Fixed/ In-band/Off	Changes the ringtone setting.
Phone Volume	Adjusts using the slider.	Adjusts the conversation volume.
VR and Ringtone	Adjusts using the slider.	Adjusts the voice guidance and ringtone volume.
Contacts Sort Order	First Name, Last Name	Displays the contact information in alphabetical order of the first name.
	Last Name, First Name	Displays the contact information in alphabetical order of the last name.
Preset Messages	—	Edits the preset message. Refer to Receiving and Replying to Messages (available only with E-mail/SMS compatible phones) on page 5-52.
Reset	—	Initializes all Communication Settings.

\*1 Depending on the device, it may be necessary to acquire download permission on the device side.

## Voice Recognition

### ▼ Basic Operation Method

#### Activating Voice Recognition

Press the talk button.

#### Ending Voice Recognition

Use one of the following methods:

- Press the hang-up button.
- Say, “Cancel”.
- Operate the commander switch or the center display (only when vehicle is stopped).

#### Skipping Voice Guidance (for faster operation)

Press and release the talk button.

#### Troubleshooting for Voice Recognition

If you do not understand an operation method while in the voice recognition mode, say “Tutorial” or “Help”.

#### Commands useable anytime during voice recognition

“Go Back” and “Cancel” are commands which can be used at anytime during voice recognition.

#### **Returning to previous operation**

To return to the previous operation, say, “Go Back” while in voice recognition mode.

#### **Cancel**

To put the Bluetooth® Hands-Free system in standby mode, say, “Cancel” while in voice recognition mode.

#### To prevent a deterioration in the voice recognition rate and voice quality, the following points should be observed:

- The voice recognition cannot be performed while voice guidance or the beep sound is operating. Wait until the voice guidance or the beep sound is finished before saying your commands.
- Phone related commands are available only when your phone is connected via Bluetooth®. Make sure your phone is connected via Bluetooth® before you operate phone related voice commands.
- Music play commands, such as Play Artist and Play Album can be used only in USB audio mode.
- Do not speak too slowly or loudly (no loud voice).
- Speak clearly, without pausing between words or numbers.
- Dialects or different wording other than hands-free prompts cannot be recognized by voice recognition. Speak in the wording specified by the voice commands.
- It is not necessary to face the microphone or approach it. Speak the voice commands while maintaining a safe driving position.
- Close the windows and/or the sunroof to reduce loud noises from outside the vehicle, or turn down the airflow of the climate control system while Bluetooth® Hands-Free is being used.
- Make sure the vents are not directing air up towards the microphone.

#### **NOTE**

*If the voice recognition performance is not satisfactory.*

*Refer to Troubleshooting on page 5-63.*

# Audio Set

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## ▼ Voice Command List

### Voice command

When the talk button is pressed and the following command is spoken, the audio or navigation can be operated. The commands in the ( ) can be omitted. The specified name and number are put into the {}.

### Standard command

Voice command	Function
cancel	Ends the voice recognition mode.
go back	Returns to the previous operation.
help	Usable commands can be verified.
tutorial	Basic voice commands and methods of use can be verified.
(go to) home (screen)/main menu	Moves to the home screen.
(go to) communication	Moves to the communication screen.
(go to) navigation	Moves to the navigation screen (vehicles with navigation system).
(go to) entertainment (menu)	Moves to the entertainment screen.
(go to) settings	Moves to the setting screen.
(go to) favorites	Moves to the favorites screen.

### Communication (phone) related command

Voice command	Function
Call {name in phonebook} (mobile/home/work/other) Example: "Call John Mobile"	Call to the contact in the downloaded phonebook. Refer to Making a Call on page 5-48.
Redial	Call to the last contact you called. Refer to Making a Call on page 5-48.
Callback	Call to the last contact who called you. Refer to Making a Call on page 5-48.

### Entertainment (audio) related command

Voice command	Function	Corresponding audio source
(Go to/Play) AM (Radio)	Switches the audio source to AM radio.	All
(Go to/Play) FM (Radio)	Switches the audio source to FM radio.	All
(Go to/Play) Bluetooth (Audio)	Switches the audio source to BT audio.	All
(Go to/Play) Aha (Radio)	Switches the audio source to Aha™ Radio.	All
(Go to/Play) Stitcher	Switches the audio source to Stitcher™ Radio.	All
(Go to/Play) USB 1	Switches the audio source to USB 1.	All
(Go to/Play) USB 2	Switches the audio source to USB 2.	All

Voice command	Function	Corresponding audio source
Play Playlist {Playlist name}	Plays the selected playlist.	USB
Play Artist {Artist name}	Plays the selected artist.	USB
Play Album {Album name}	Plays the selected album.	USB
Play Genre {Genre name}	Plays the selected genre.	USB
Play Folder {Folder name}	Plays the selected folder.	USB

**Navigation related command\***

For the navigation screen voice commands, refer to the separate navigation system manual.

***NOTE***

- *Some commands cannot be used depending on the grade and specification.*
- *Some commands cannot be used depending on the device connection conditions and the use conditions.*
- *The commands are examples of the available commands.*

# Audio Set

## Settings

### NOTE

Depending on the grade and specification, the screen display may differ.

Select the  icon on the home screen and display the Settings screen.

Switch the tab and select the setting item you want to change.

You can customize settings in the setup display as follows:

Tab	Item	Function
AD-Disp	Height Brightness Control Other	Refer to Active Driving Display on page 4-29.
Display	Refer to Volume/Display/Sound Controls on page 5-23.	
Safety	Distance Recognition Support System SBS/SCBS Other	Refer to Personalization Features on page 9-10.
Sound	Refer to Volume/Display/Sound Controls on page 5-23.	
Clock	Adjust Time	Displays the currently set time is displayed. Press <b>+</b> to advance the hour/minute, and select <b>-</b> to move the hour/minute back. AM/PM can only be selected with the 12-hour clock display.
	GPS Sync	Synchronizes with GPS when turned on. When turned off, the time can be changed from "Adjust Time".
	Time Format	Changes the display between 12 and 24-hour clock time.
	Time Zone Select	When it's not synchronized with GPS, select the region you want to specify.
	Daylight Savings Time	Turns the daylight saving time setting on/off. When ON, the time advances 1 hour. When OFF, it returns to normal time.
Vehicle	Rain Sensing Wiper Door Locks Other	Refer to Personalization Features on page 9-10.
Devices	Bluetooth	Refer to Bluetooth® Preparation on page 5-37.
	Network Management	Wi-Fi™ is used to obtain Navi POI/Real Time Traffic function (Such as gas prices, weather, nearest restaurant)

Tab	Item	Function
System	Tool Tips	Turns button explanations ON/OFF.
	Language	Changes the language.
	Temperature	Changes the setting between Fahrenheit and Celsius.
	Distance	Changes the setting between miles and kilometers.
	Music Database Update	Used to update Gracenote®. Gracenote® is used with USB Audio, and provides: <ol style="list-style-type: none"> <li>1. Supplemental music information (Such as song name, artist name)</li> <li>2. Voice recognition assistance for Play Artist and Play Album</li> </ol> Gracenote® can be downloaded from the Mazda Handsfree Website. Refer to Gracenote® Database on page 5-32.
	Factory Reset	Memory and settings are initialized to the factory settings. The initialization launches by selecting the <input type="button" value="Yes"/> button.
	About	Agreements and Disclaimers
Version Information		Can verify the current audio unit OS version and Gracenote® Database version.

## Applications

**NOTE**

*Depending on the grade and specification, the screen display may differ.*

Select the  icon on the home screen to display the Applications screen. The following information can be verified.

Top screen		Item	Function
Fuel Economy Monitor		Fuel Consumption Display	Refer to Fuel Economy Monitor on page 4-77.
Vehicle Status Monitor	Warning Guidance	Warnings currently active can be verified.	Refer to If a Warning Light Turns On or Flashes on page 7-38.
	Maintenance	Scheduled Maintenance Tire Rotation Oil Change	Refer to Maintenance Monitor on page 6-11.

## Troubleshooting

### Mazda Bluetooth® Hands-Free Customer Service

If you have any problems with Bluetooth®, contact our toll-free customer service center.

Phone:

(Germany)

0800 4263 738 (8:00—18:00 Central European Time)

(Except Germany)

00800 4263 7383 (8:00—18:00 Central European Time)

(Worldwide)

+ 49 (0) 6838 907 287 (8:00—18:00 Central European Time)

Web:

<http://www.mazdahandsfree.com>

### Bluetooth® Device pairing, connection problems

Symptom	Cause	Solution method
Unable to perform pairing	—	Make sure that the Bluetooth® device is compatible with the Bluetooth® unit, and that Bluetooth® and Find Mode*1 are on and the airplane mode is off in the Bluetooth® device setting. Turn off the power of the Bluetooth® device once, then turn it back on. If pairing is still not possible after this, contact an expert repairer, we recommend an Authorized Mazda Repairer or Mazda Bluetooth® Hands-Free Customer Service.

# Audio Set

Symptom	Cause	Solution method
Pairing cannot be performed again	The pairing information paired to the Bluetooth® unit or device is not recognized correctly.	Perform pairing using the following procedure: 1. Delete the applicable Bluetooth® device on the Mazda Connect. 2. Delete “Mazda” from the Bluetooth® search screen of the Bluetooth® device. 3. Perform pairing again. If pairing is not possible after trying the procedure, turn off the power of the Bluetooth® device once, then turn it back on. If pairing is still not possible after this, contact an expert repairer, we recommend an Authorized Mazda Repairer or Mazda Bluetooth® Hands-Free Customer Service.
Unable to perform pairing	The Bluetooth® function and the Find Mode/Visible setting*1 on the device may turn off automatically after a period of time has elapsed depending on the device.	Check whether the Bluetooth® function and the Find Mode/Visible setting*1 on the device are turned on and pairing or reconnect.
Does not connect automatically when starting the engine		
Automatically connects, but then disconnects suddenly		
Disconnects intermittently	The device is in a location in which radio wave interference can occur easily, such as inside a bag in a rear seat, in a rear pocket of a pair of pants.	Move the device to a location in which radio wave interference is less likely to occur.
Does not connect automatically when starting the engine	The pairing information is updated when the device OS is updated.	Perform pairing using the following procedure: 1. Delete the applicable Bluetooth® device on the Mazda Connect. 2. Delete “Mazda” from the Bluetooth® search screen of the Bluetooth® device. 3. Perform pairing again. If pairing is not possible after trying the procedure, turn off the power of the Bluetooth® device once, then turn it back on. If pairing is still not possible after this, contact an expert repairer, we recommend an Authorized Mazda Repairer or Mazda Bluetooth® Hands-Free Customer Service.

\*1 Setting which detects the existence of a device external to the Bluetooth® unit.

**NOTE**

- When the OS of the device is updated, the pairing information may be deleted. If this happens, reprogram the pairing information to the Bluetooth® unit.
- If you pair your phone which has already been paired to your vehicle more than once in the past, you need to delete “Mazda” on your mobile device. Then, execute the Bluetooth® search on your mobile device once again, and pair to a newly detected “Mazda”.
- Before you pair your device, make sure that Bluetooth® is “ON”, both on your phone and on the vehicle.
- If Bluetooth®-enabled devices are used in the following locations or conditions, connection via Bluetooth® may not be possible.
  - The device is in a location hidden from the center display such as behind or under a seat, or inside the glove compartment.
  - The device contacts or is covered by a metal object or body.
  - The device is set to power-saving mode.
- Different Bluetooth®-enabled devices can be used for Bluetooth® Hands-Free and Bluetooth® audio. For example, device A can be connected as a Bluetooth® Hands-Free device and device B can be connected as a Bluetooth® audio device. However, the following may occur when they are used at the same time.
  - The Bluetooth® connection of the device is disconnected.
  - Noise occurs in the Hands-Free audio.
  - Hands-Free operates slowly.

**Voice recognition related problems**

Symptom	Cause	Solution method
Poor voice recognition	<ul style="list-style-type: none"> <li>•Excessive, slow speech.</li> <li>•Excessive, forceful speech (shouting).</li> <li>•Speaking before the beep sound has ended.</li> <li>•Loud noise (speaking or noise from outside/inside vehicle).</li> <li>•Airflow from A/C is blowing against the microphone.</li> <li>•Speaking in off-standard expressions (dialect).</li> </ul>	<p>Regarding the causes indicated on the left, be careful with how you speak. In addition, when numbers are spoken in a sequence, recognition ability will improve if no stop is placed between the numbers.</p>
False recognition of numbers		
Poor voice recognition	There is a malfunction in the microphone.	A poor connection or malfunction with the microphone may have occurred. Consult an expert repairer, we recommend an Authorized Mazda Repairer.

# Audio Set

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Symptom	Cause	Solution method
Phone-related voice recognition is disabled	There is a problem with the connection between the Bluetooth® unit and the device.	If there is any malfunction after checking the pairing situation, check for device pairing or connection problems.
Names in the phonebook are not easily recognized	The Bluetooth® system is under a condition in which recognition is difficult.	By carrying out the following measures, the rate of recognition will improve. <ul style="list-style-type: none"> <li>•Clear memory from the phonebook which is not used very often.</li> <li>•Avoid shortened names, use full names. (Recognition improves the longer the name is. By not using names such as “Mom”, “Dad”, recognition will improve.)</li> </ul>
When operating the audio, a song name is not recognized	Song names cannot be recognized by voice.	—
You want to skip guidance	—	Guidance can be skipped by quickly pressing and releasing the talk button.

**Regarding problems with calls**

Symptom	Cause	Solution method
When starting a call, vehicle noise from the other party can be heard	For about three seconds after starting a call, the Bluetooth® unit's Noise Suppression function requires time to adapt to the call environment.	This does not indicate a problem with the device.
The other party cannot be heard or the speaker's voice is quiet	The volume is set at zero or low.	Increase the volume.

**Other problems**

Symptom	Cause	Solution method
The indication for the remaining battery is different between the vehicle and the device	The indication method is different between the vehicle and the device.	—
When a call is made from the vehicle, the telephone number is updated in the incoming/outgoing call record but the name does not appear	The number has not been registered into the phonebook.	If the number has been registered into the phonebook, the incoming/outgoing call record is updated by the name in the phonebook when the engine is restarted.
The cell phone does not synchronize with the vehicle regarding the incoming/outgoing call record	Some types of cell phones do not synchronize automatically.	Operate the cell phone for synchronization.
It takes a long time to complete the function for changing the language	A maximum of 60 seconds is required.	—

# Appendix

## Things You Need to Know

### **WARNING**

#### **Always adjust the audio while the vehicle is stopped:**

*Do not adjust the audio control switches while driving the vehicle. Adjusting the audio 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 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.*

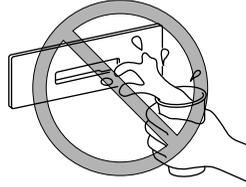
### **CAUTION**

*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.*

#### **NOTE**

- To prevent the battery from being discharged, do not leave the audio system on for a long period of time when the engine is not running.*
- If a cellular phone or CB radio is used in or near the vehicle, it could cause noise to occur from the audio system, however, this does not indicate that the system has been damaged.*

Do not spill any liquid on the audio system.



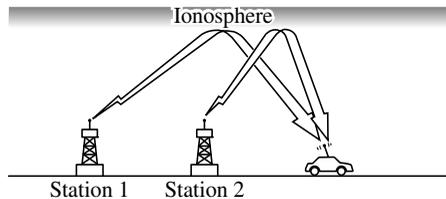
### ▼ Radio Reception

#### AM characteristics

AM signals bend around such things as buildings or mountains and bounce off the ionosphere.

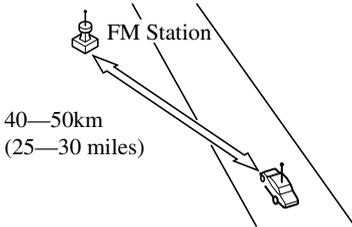
Therefore, they can reach longer distances than FM signals.

Because of this, two stations may sometimes be picked up on the same frequency at the same time.

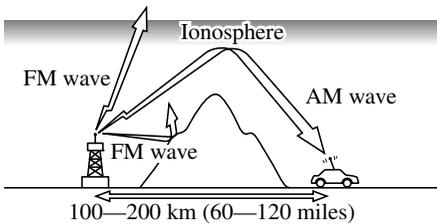


### **FM characteristics**

An FM broadcast range is usually about 40—50 km (25—30 miles) from the source. Because of extra coding needed to break the sound into two channels, stereo FM has even less range than monaural (non-stereo) FM.



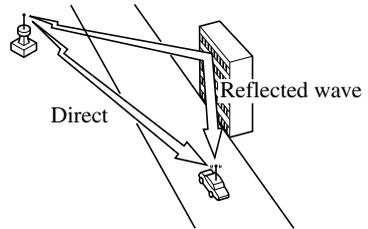
Signals from an FM transmitter are similar to beams of light because they do not bend around corners, but they do reflect. Unlike AM signals, FM signals cannot travel beyond the horizon. Therefore, FM stations cannot be received at the great distances possible with AM reception.



Atmospheric conditions can also affect FM reception. High humidity will cause poor reception. However, cloudy days may provide better reception than clear days.

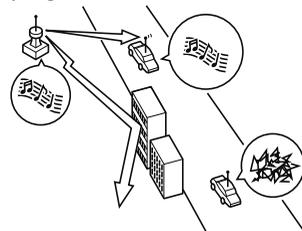
### **Multipath noise**

Since FM signals can be reflected by obstructions, it is possible to receive both the direct signal and the reflected signal at the same time. This causes a slight delay in reception and may be heard as a broken sound or a distortion. This problem may also be encountered when in close proximity to the transmitter.



### **Flutter/Skip noise**

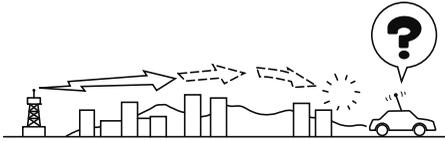
Signals from an FM transmitter move in straight lines and become weak in valleys between tall buildings, mountains, and other obstacles. When a vehicle passes through such an area, the reception conditions may change suddenly, resulting in annoying noise.



# Appendix

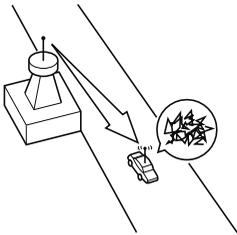
## Weak signal noise

In suburban areas, broadcast signals become weak because of distance from the transmitter. Reception in such fringe areas is characterized by sound breakup.



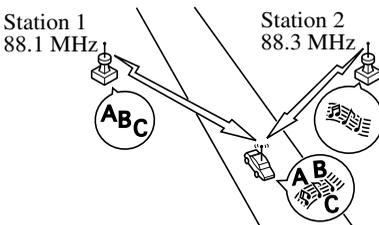
## Strong signal noise

This occurs very close to a transmitter tower. The broadcast signals are extremely strong, so the result is noise and sound breakup at the radio receiver.



## Station drift noise

When a vehicle reaches the area of two strong stations broadcasting at similar frequencies, the original station may be temporarily lost and the second station picked up. At this time there will be some noise from this disturbance.



## ▼ Operating Tips for MP3

MP3 stands for MPEG Audio Layer 3, which is standardized voice compression established by the ISO\*1 working group (MPEG).

Use of MP3 allows for audio data to be compressed to approximately a tenth of the source data size.

This unit plays files with the extension (.mp3) as MP3 files.

\*1 International Organization for Standardization



*Do not use an audio file extension on files other than audio files. In addition, do not change the audio file extension. Otherwise, the unit will not recognize the file correctly resulting in noise or a malfunction.*

## NOTE

*Supply of this product only conveys a license for private, non-commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e. revenue-generating) real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via the Internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent license for such use is required. For details, please visit <http://www.mp3licensing.com>.*

- When naming an MP3 file, be sure to add an MP3 file extension (.mp3) after the file name.

- The number of characters which can be displayed is restricted.

### ▼ Operating Tips for WMA

WMA is short for Windows Media\*<sup>1</sup> Audio and is the audio compression format used by Microsoft\*<sup>1</sup>.

Audio data can be created and stored at a higher compression ratio than MP3.

This unit plays files with the extension (.wma) as WMA files.

\*<sup>1</sup> Windows Media and Microsoft are registered trademarks of Microsoft Corporation U.S. in the United States and other countries.



*Do not use an audio file extension on files other than audio files. In addition, do not change the audio file extension. Otherwise, the unit will not recognize the file correctly resulting in noise or a malfunction.*

- WMA files written under specifications other than the indicated specification may not play normally or files or folder names may not display correctly.
- The file extension may not be provided depending on the computer operating system, version, software, or settings. In this case, add the file extension “.wma” to the end of the file name, and then write it to the memory.

### ▼ Operating Tips for AAC

AAC stands for Advanced Audio Coding, which is standardized voice compression established by the ISO\*<sup>1</sup> working group (MPEG). Audio data can be created and stored at a higher compression ratio than MP3.

This unit plays files with the extensions (.aac/.m4a/.wav) as the AAC files.



*Do not use an audio file extension on files other than audio files. In addition, do not change the audio file extension. Otherwise, the unit will not recognize the file correctly resulting in noise or a malfunction.*

- AAC files written under specifications other than the indicated specification may not play normally or files or folder names may not display correctly.
  - The file extension may not be provided depending on the computer operating system, version, software, or settings. In this case, add the file extension “.aac”, “.m4a”, or “.wav” to the end of the file name, and then write it to the memory.
- \*<sup>1</sup> International Organization for Standardization

# Appendix

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## ▼ Operating Tips for OGG

OGG is the audio compression format for Xiph. Org Foundation.

Audio data can be created and stored at a higher compression ratio than MP3.

This unit plays files with the extension (.ogg) as OGG files.



*Do not use an audio file extension on files other than audio files. In addition, do not change the audio file extension. Otherwise, the unit will not recognize the file correctly resulting in noise or a malfunction.*

- OGG files written under specifications other than the indicated specification may not play normally or files or folder names may not display correctly.
- The file extension may not be provided depending on the computer operating system, version, software, or settings. In this case, add the file extension “.ogg” to the end of the file name, and then write it to the memory.

## ▼ Operating Tips for USB device

This unit plays audio files as follows:

Extension	Playback with this unit
.mp3	MP3
.wma	WMA
.aac	AAC
.m4a	
.wav	WAV
.ogg	OGG



*Do not use an audio file extension on files other than audio files. In addition, do not change the audio file extension. Otherwise, the unit will not recognize the file correctly resulting in noise or a malfunction.*

### NOTE

- *Playback may not be possible depending on the type and condition of the USB flash memory even if the audio file complies with the standard.*
- *A copyright protected WMA/AAC file cannot be played in this unit.*
- *If a file name in the USB memory is too long, it could cause operation problems such as not being able to playback the song.  
(Recommended: Within 80 characters)*
- *The order of the music data stored in the device may differ from the playback order.*
- *To prevent loss or damage of stored data, we recommend that you always back up your data.*

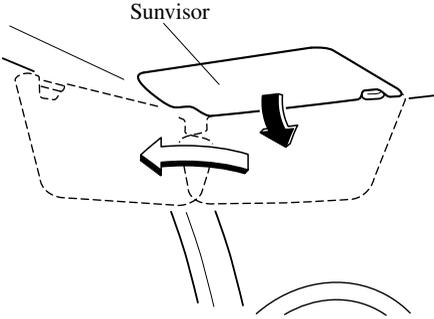
- *If a device exceeds the maximum electric current value of 1,000 mA, it may not operate or recharge when connected.*
- *Do not pull out the USB device while in the USB mode (only pull it out while in FM/AM radio mode).*
- *The device will not operate if the data is password protected.*

MP3/WMA/AAC/OGG files written under specifications other than the indicated specification may not play normally or files/folder names may not display correctly.

# Interior Equipment

## Sunvisors

When you need a sunvisor, lower it for use in front or swing it to the side.

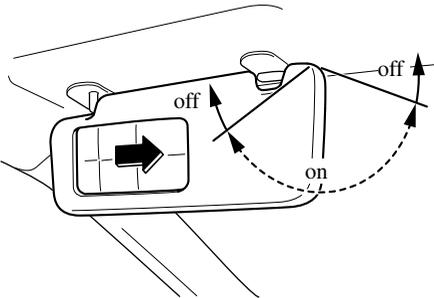


## ▼ Vanity Mirrors

To use the vanity mirror, lower the sunvisor.

The vanity mirror light will illuminate when you open the cover.

To prevent the battery from being discharged, the vanity mirror will only illuminate in the tilt range shown in the figure.



## Interior Lights

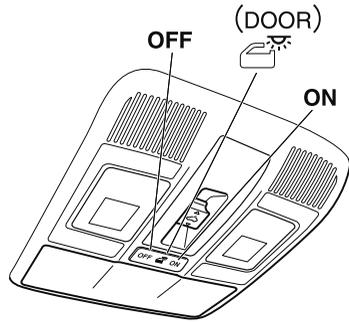
### NOTE

- Do not leave the lights on for long periods while the engine is turned off. Otherwise the battery power could be depleted.

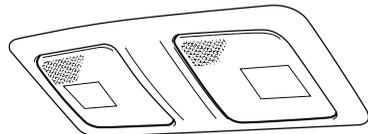
### Overhead Lights

Switch Position	Overhead Lights
OFF	Light off
DOOR	· Light is on when any door is open · Light is on or off when the illuminated entry system is on
ON	Light on

### Front

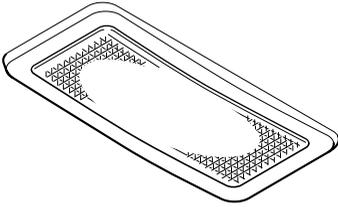


### Center



# Interior Equipment

## Rear



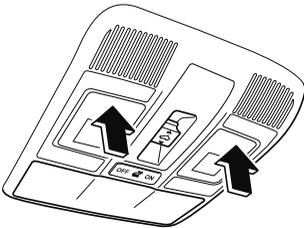
### NOTE

The rear overhead light and the center map lights also turn on and off when the front overhead light switch is operated.

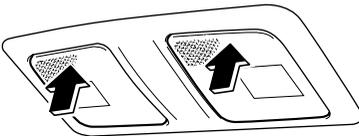
### Map Lights

When the overhead light switch is in the door or off position, press the lens to illuminate the map lights, and then press the lens again to turn them off.

## Front



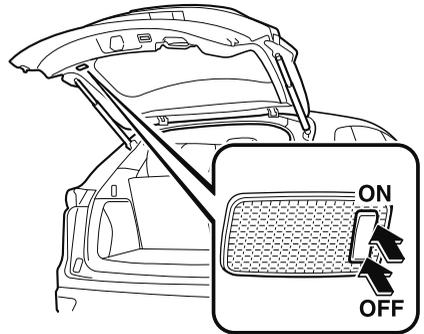
## Center



### NOTE

- Once the center map lights have been turned off, they will turn on and off depending on the position to which the overhead light is switched.
- The map lights will not turn off even if the lens is pressed in the following cases:
  - The overhead light switch is in the ON position.
  - The overhead light switch is in the door position with the door open.
  - The illuminated entry system is on.

### Luggage Compartment Lights



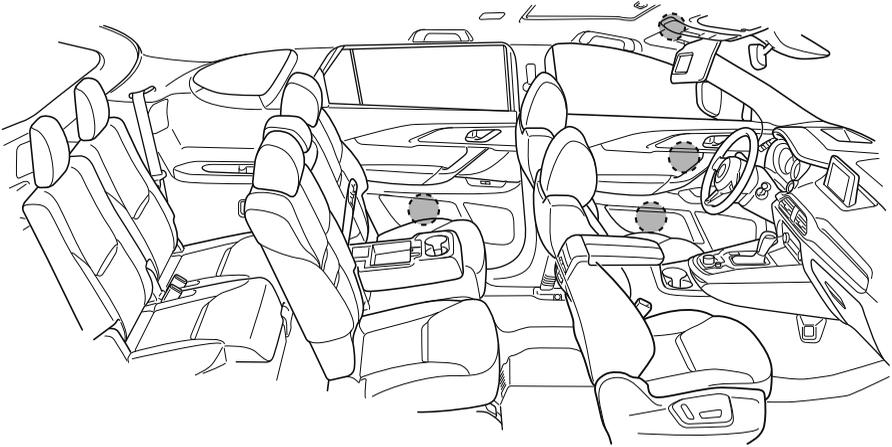
Switch Position	Luggage Compartment Light
OFF	Light off
ON	Light on when the liftgate is open

# Interior Equipment

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## Ambient Light\*

The ambient lights continuously turn on when the ignition is switched ON.  
The ambient lights dim when the parking lights or headlights are turned on.



 Ambient light

### **NOTE**

- The ambient lights turn on or off in conjunction with the illuminated entry system when the ignition is switched OFF.
  - The ambient light illumination level can be changed while the parking lights or headlights are turned on.
- Refer to Personalization Features on page 9-10.

### ▼ 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 ambient lights turn on regardless of the overhead light switch position.

- The driver's door is unlocked with the ignition is switched OFF.
- The ignition is switched OFF with all doors closed.

#### NOTE

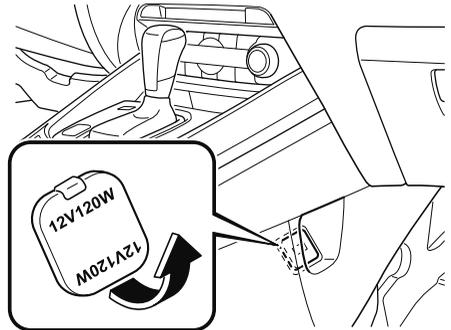
- The illumination time differs depending on the operation.
- **Battery saver**  
If an interior light is left on with the ignition switched OFF, the light is turned off automatically after about 30 minutes to prevent battery depletion.
- The operation of the illuminated entry system can be changed.  
Refer to Personalization Features on page 9-10.

### Accessory Sockets

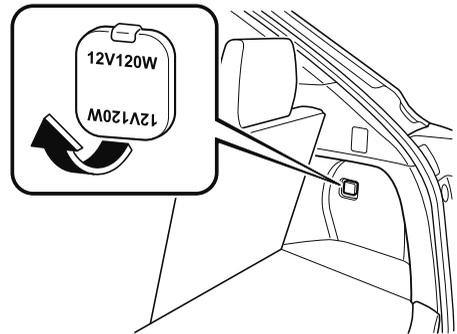
Only use genuine Mazda accessories or the equivalent requiring no greater than 120 W (DC 12 V, 10 A).

The ignition must be switched to ACC or ON.

#### Front



#### Rear



### ⚠ CAUTION

- To prevent accessory socket damage or electrical failure, pay attention to the following:
  - Do not use accessories that require more than 120 W (DC 12 V, 10 A).

## Interior Equipment

- Do not use accessories that are not genuine Mazda accessories or the equivalent.
- Close the cover when the accessory socket is not in use to prevent foreign objects and liquids from getting into the accessory socket.
- Correctly insert the plug into the accessory socket.
- Do not insert the cigarette lighter into the accessory socket.
- Noise may occur on the audio playback depending on the device connected to the accessory socket.
- Depending on the device connected to the accessory socket, the vehicle's electrical system may be affected, which could cause the warning light to illuminate. Disconnect the connected device and make sure that the problem is resolved. If the problem is resolved, disconnect the device from the socket and switch the ignition off. If the problem is not resolved, consult an expert repairer, we recommend an Authorized Mazda Repairer.

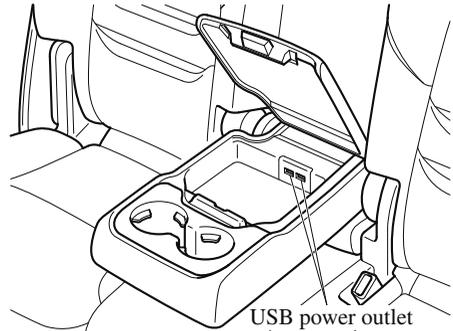
### NOTE

To prevent discharging of the battery, do not use the socket for long periods with the engine off or idling.

## USB Power Outlet\*

The USB power outlets can be used regardless of whether the ignition is switched to ACC or ON.

Only use USB devices that have a maximum power consumption of 10.5W (DC5V, 2.1A) or below.



### CAUTION

- To prevent USB power outlets damage or electrical failure, pay attention to the following:
  - Do not use USB devices that require more than 10.5 W (DC 5 V, 2.1 A).
  - Close the lid when the USB power outlets are not in use to prevent foreign objects and liquids from getting into the USB power outlets.
  - Correctly connect the USB connector into the USB power outlets.

### NOTE

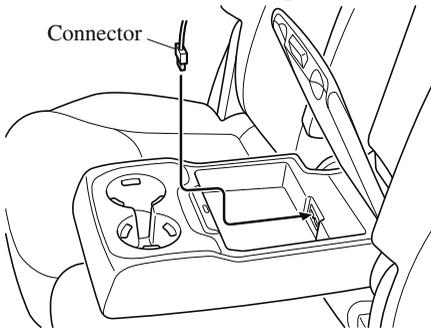
- The USB power outlets are designed only for charging and they cannot be used for connecting to the vehicle's audio system.

- To prevent discharging of the battery, do not use the USB power outlets for long periods with the engine off or idling.

### How to connect

The groove in the armrest box can be used to pass the cord of the device into the box to connect it to the USB power outlets.

1. Open the lid.
2. Route the cord through the groove in the armrest box and insert the USB connector into the USB power outlets.



## Cup Holder

### **⚠ WARNING**

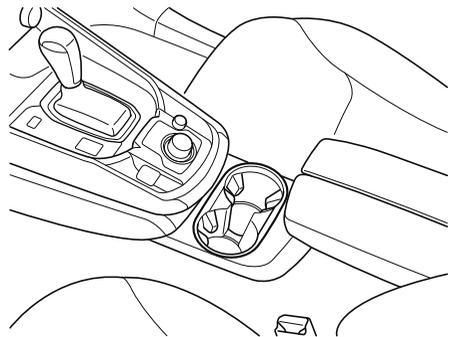
**Never use a cup holder to hold hot liquids while the vehicle is moving:**

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.

### ▼ Front



# Interior Equipment

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## ▼ Rear

### Second-row seat

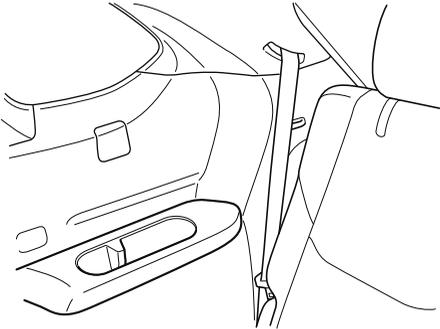
Cup holders are located in the armrest.



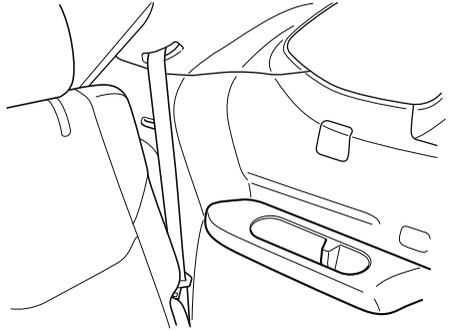
### Third-row seat

Cup holders are located in the third-row seat side trims.

#### Right-side

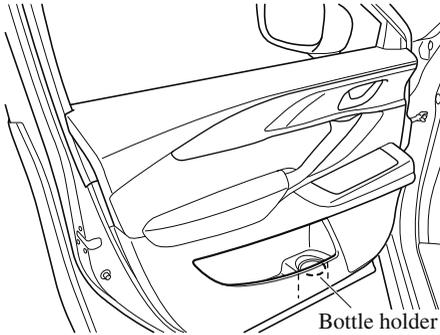


#### Left-side



## Bottle Holder

Bottle holders are on the inside of the doors.



### CAUTION

*Do not use the bottle holders for containers without caps. The contents may spill when the door is opened or closed.*

## Storage Compartments

### WARNING

**Keep storage boxes closed when driving:**  
*Driving with the storage boxes open is dangerous. To reduce the possibility of injury in an accident or a sudden stop, keep the storage boxes closed when driving.*

**Do not put articles in storage spaces with no lid:**

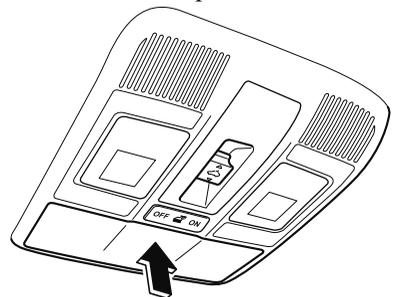
*Putting articles in storage spaces with no lid is dangerous as they could be thrown around the cabin if the vehicle is suddenly accelerated and cause injury depending on how the article is stored.*

### CAUTION

*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.*

### ▼ Overhead Console

This console box is designed to store eyeglasses or other accessories.  
 Push and release to open.

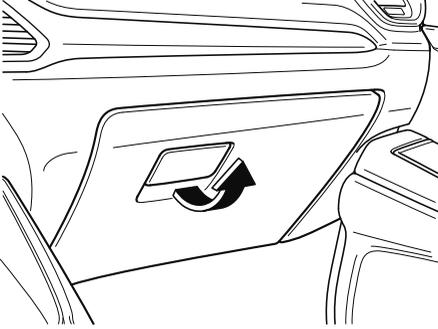


# Interior Equipment

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## ▼ Glove Compartment

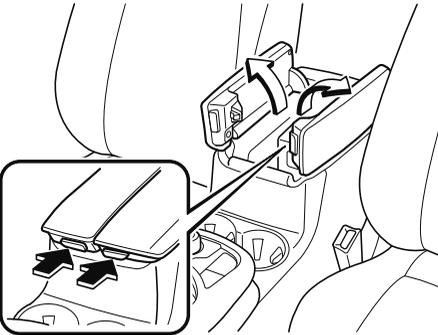
To open the glove compartment, pull the latch toward you.



To close the glove compartment, firmly press in the center of the glove compartment lid.

## ▼ Center Console

To open, push the button.



## ▼ Armrest Box\*

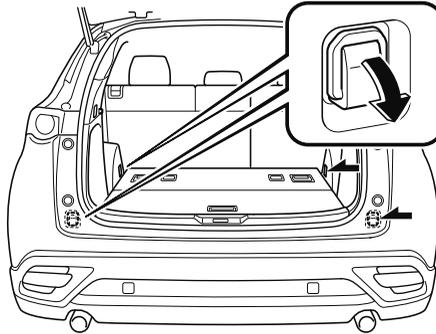
To open, push the button and pull up the lid.



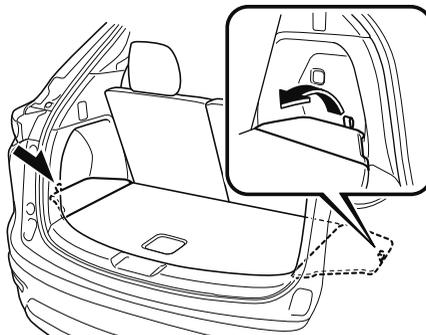
**▼ Luggage Compartment****Cargo Securing Loops*****Make sure luggage and cargo is secured before driving:***

*Not securing cargo while driving is dangerous as it could move or be crushed during sudden braking or a collision and cause injury.*

Use the loops in the luggage compartment to secure cargo with a rope or net. The tensile strength of the loops is 196 N (20 kgf, 44 lbf). Do not apply excessive force to the loops as it will damage them.

**Cargo Sub-Compartment**

Open the cover to put small items in the cargo sub-compartment.



# Interior Equipment

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**NOTE**

**Loading golf bags**

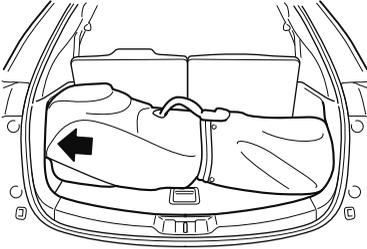
*(Some golf bags may not fit using the following methods depending on their sizes.)*

*Up to two golf bags can be carried in the luggage compartment.*

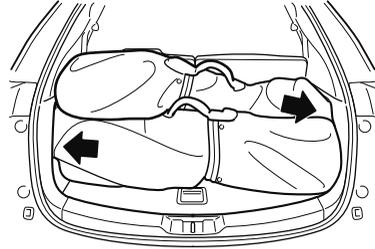
*Bottom: Place the first golf bag in the luggage compartment with the bottoms pointed to the left.*

*Top: Place the second golf bag with its bottom pointed to the right in the luggage compartment.*

**Bottom**



**Top**



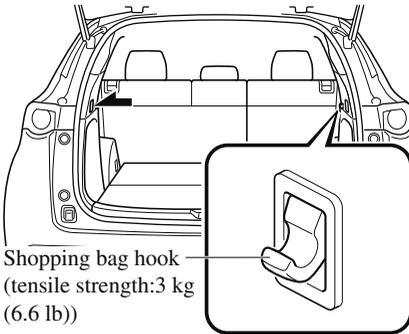
The arrows indicate the bottoms of the golf bags.

### ▼ Shopping Bag Hook

The shopping bag hook can be used for hanging shopping bags.

#### CAUTION

*Do not hang excessive weight on the shopping bag hook as it could be damaged.*



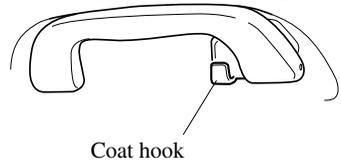
### ▼ Rear Coat Hooks

#### WARNING

***Never hang heavy or sharp objects on the assist grips and coat hooks:***

*Hanging heavy or sharp-ended objects such as a coat hanger from the assist grips or coat hooks is dangerous as they can fly off and hit an occupant in the cabin if a curtain air bag was to deploy, which could result in serious injury or death.*

Always hang clothes on the coat hooks and the assist grips without hangers.



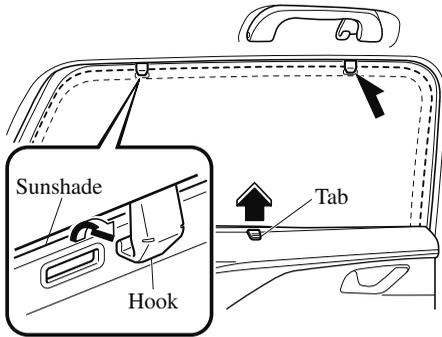
## Interior Equipment

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### Sunshade (Rear Door Window)\*

The sunshades are equipped to the windows on both sides of the second-row seats.

Hold the tab and pull the sunshade upward and hook the slots.



To return the sunshade to its original position, unhook the sunshade and retract it slowly.

#### **CAUTION**

- *Securely hook the sunshade. Otherwise, the sunshade may retract suddenly resulting in injury such as fingers get pinched.*
- *Use the sunshades only when the windows are fully closed. Using a sunshade while a window is open could cause it to unhook and flap around inside the cabin where it can hit someone sitting near the window, resulting in injury.*

# 6

## Maintenance and Care

How to keep your Mazda in top condition.

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## Essential Information

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### Introduction

Be careful not to hurt yourself when inspecting your vehicle, replacing a tire, or doing some kind of maintenance such as car washing.

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 it describes, we strongly urge you to have a reliable and qualified technician perform the work, we recommend an Authorized Mazda Repairer.

Authorized Mazda technicians and genuine Mazda parts are dedicated to 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.

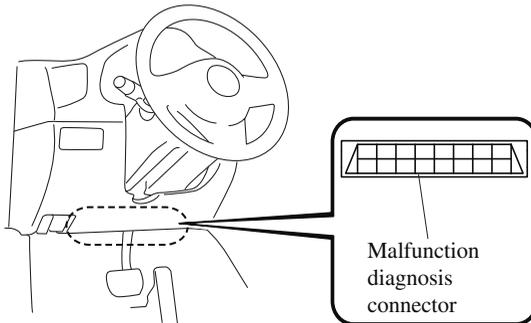
For expert advice and quality service, consult an expert repairer, we recommend an Authorized Mazda Repairer.

The owner should retain evidence that proper maintenance has been performed as prescribed.

A claim against a warranty will not qualify if it results from lack of maintenance and not from defective material or authorized workmanship.

The malfunction diagnosis connector is designed exclusively for connecting the specially designed device to perform on-board diagnosis.

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 battery depletion.



# Scheduled Maintenance

## Scheduled Maintenance

### NOTE

After the prescribed period, continue to follow the described maintenance at the recommended intervals.

### Emission control and related systems

The ignition and fuel systems are highly important to the emission control system and to efficient engine operation. Do not tamper with them.

All inspections and adjustments must be made by an expert repairer, we recommend an Authorized Mazda Repairer.

### ▼ Europe

Maintenance Interval	Number of months or kilometers, whichever comes first.												
	Months	12	24	36	48	60	72	84	96	108	120	132	144
	×1000 km	15	30	45	60	75	90	105	120	135	150	165	180
Drive belts*1			I				I			I			I
Engine oil & filter*2	Replace when indicator is ON. (Max interval: 12 months or 15,000 km)												
Cooling system		I			I		I		I		I		I
Engine coolant*3	Replace at first 195,000 km or 10 years; after that, every 90,000 km or 5 years.												
Air filter*4	Replace every 60,000 km or 3 years.												
Fuel lines and hoses		I			I		I		I		I		I
Spark plugs	I	I	I	R	I	I	I	R	I	I	I	I	R
Evaporative system (if installed)			I				I			I			I
Battery*5	I	I	I	I	I	I	I	I	I	I	I	I	I
Brake lines, hoses and connections	I	I	I	I	I	I	I	I	I	I	I	I	I
Brake fluid*6		R			R		R		R		R		R
Parking brake	I	I	I	I	I	I	I	I	I	I	I	I	I
Disc brakes	I	I	I	I	I	I	I	I	I	I	I	I	I
Steering operation and linkages		I			I		I		I		I		I
Rear differential oil	*7												
Transfer oil	*7												
Front and rear suspension, ball joints and wheel bearing axial play		I			I		I		I		I		I
Driveshaft dust boots		I			I		I		I		I		I
Exhaust system and heat shields						I					I		
Bolts and nuts on chassis and body		T			T		T		T		T		T

# Scheduled Maintenance

Maintenance Interval	Number of months or kilometers, whichever comes first.													
	Months	12	24	36	48	60	72	84	96	108	120	132	144	
	×1000 km	15	30	45	60	75	90	105	120	135	150	165	180	
Body condition (for rust, corrosion and perforation)	Inspect annually.													
Cabin air filter (if installed)		R		R		R		R		R		R		
Tires (including spare tire) (with inflation pressure adjustment) <sup>*8*9</sup>	I	I	I	I	I	I	I	I	I	I	I	I	I	
Emergency flat tire repair kit (if installed) <sup>*10</sup>	Inspect annually.													

## Chart symbols:

**I:** Inspect: Inspect and clean, repair, adjust, fill up, or replace if necessary.

**R:** Replace

**C:** Clean

**T:** Tighten

**L:** Lubricate

**D:** Drain

## Remarks:

- \*1 Also inspect the air conditioner drive belts, if installed.  
If the vehicle is operated primarily under any of the following conditions, inspect the drive belts at every 15,000 km or 12 months.
- Driving in dusty conditions
  - Extended periods of idling or low speed operation
  - Driving for long period in cold temperatures or driving regularly at short distance only
  - Driving in extremely hot conditions
  - Driving in mountainous conditions continually
- \*2 The vehicle calculates the remaining oil life based on engine operating conditions and lets you know when an oil change is due by illuminating the wrench indicator light in the instrument cluster.  
Replace the engine oil and filter when message/wrench indicator light is ON. And they must be changed at least once a year or within 15,000km since last engine oil and filter change.  
The system must be reset whenever replacing the engine oil regardless of the message/wrench indicator light display.
- \*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.
- \*4 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.
- \*5 Inspect the battery electrolyte level, specific gravity and outer appearance. The sealed battery only requires an outer appearance inspection.
- \*6 If the brakes are used extensively (for example, continuous hard driving or mountain driving) or if the vehicle is operated in extremely humid climates, replace the brake fluid annually.
- \*7 If this component has been submerged in water, the oil should be replaced.
- \*8 Tire rotation is recommended every 10,000 km.
- \*9 The Tire Pressure Monitoring System (TPMS) initialization must be performed so that the system operates normally (if equipped).
- \*10 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

## ▼ Except Europe

### Russia/Belarus/Azerbaijan/Kazakhstan

Maintenance Interval	Number of months or kilometers, whichever comes first.												
	Months	12	24	36	48	60	72	84	96	108	120	132	144
	×1000 km	15	30	45	60	75	90	105	120	135	150	165	180
Drive belts*1		I	I	I	I	I	I	I	I	I	I	I	I
Engine oil	Russia/ Belarus/ Kazakhstan*12	Replace when indicator is ON. (Max interval: 12 months or 15,000 km)											
	Azerbaijan*2*13*14	Replace every 5,000 km or 6 months.											
Engine oil filter	Russia/ Belarus/ Kazakhstan*12	Replace when indicator is ON. (Max interval: 12 months or 15,000 km)											
	Azerbaijan*3	Replace every 10,000 km or 12 months.											
Cooling system			I			I			I			I	
Engine coolant*4		Replace at first 195,000 km or 10 years; after that, every 90,000 km or 5 years.											
Air filter*5	Russia/ Belarus/ Kazakhstan	C	C	R	C	C	R	C	C	R	C	C	R
	Azerbaijan	C	R	C	R	C	R	C	R	C	R	C	R
Fuel filter	Russia/ Belarus/ Kazakhstan	Replace every 120,000 km.											
	Azerbaijan	Replace every 60,000 km.											
Fuel lines and hoses			I			I			I			I	
Spark plugs		I	I	I	R	I	I	I	R	I	I	I	R
Evaporative system (if installed)					I				I				I
Battery*6		I	I	I	I	I	I	I	I	I	I	I	I
Brake lines, hoses and connections		I	I	I	I	I	I	I	I	I	I	I	I
Brake fluid*7			R		R		R		R		R		R
Parking brake		I	I	I	I	I	I	I	I	I	I	I	I
Disc brakes		I	I	I	I	I	I	I	I	I	I	I	I
Steering operation and linkages		I	I	I	I	I	I	I	I	I	I	I	I
Rear differential oil		*8											
Transfer oil		*8											
Front and rear suspension, ball joints and wheel bearing axial play		I	I	I	I	I	I	I	I	I	I	I	I

# Scheduled Maintenance

Maintenance Interval	Number of months or kilometers, whichever comes first.												
	Months	12	24	36	48	60	72	84	96	108	120	132	144
	×1000 km	15	30	45	60	75	90	105	120	135	150	165	180
Driveshaft dust boots	I	I	I	I	I	I	I	I	I	I	I	I	I
Exhaust system and heat shields	I	I	I	I	I	I	I	I	I	I	I	I	I
Bolts and nuts on chassis and body	T	T	T	T	T	T	T	T	T	T	T	T	T
Hinges and catches	L	L	L	L	L	L	L	L	L	L	L	L	L
All electrical system	I	I	I	I	I	I	I	I	I	I	I	I	I
Body condition (for rust, corrosion and perforation)	Inspect annually.												
Cabin air filter (if installed)		R		R		R		R		R		R	
Tires (including spare tire) (with inflation pressure adjustment)*9*10	I	I	I	I	I	I	I	I	I	I	I	I	I
Emergency flat tire repair kit (if installed)*11	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:

\*1 Also inspect the air conditioner drive belts, if installed.

If the vehicle is operated primarily under any of the following conditions, inspect the drive belts at every 7,500 km or 6 months.

- Driving in dusty conditions
- Extended periods of idling or low speed operation
- Driving for long period in cold temperatures or driving regularly at short distance only
- Driving in extremely hot conditions
- Driving in mountainous conditions continually

\*2 If the vehicle is operated primarily under any of the following conditions, replace the engine oil at every 2,500 km or 3 months.

- Purpose of vehicle use is police car, taxi or driving school car.
- Driving in dusty conditions
- Extended periods of idling or low speed operation
- Driving for long period in cold temperatures or driving regularly at short distance only
- Driving in extremely hot conditions
- Driving in mountainous conditions continually

## Scheduled Maintenance

---

- \*3 If the vehicle is operated primarily under any of the following conditions, replace the engine oil filter at every 5,000 km or 6 months.
  - a) Purpose of vehicle use is police car, taxi or driving school car.
  - b) Driving in dusty conditions
  - c) Extended periods of idling or low speed operation
  - d) Driving for long period in cold temperatures or driving regularly at short distance only
  - e) Driving in extremely hot conditions
  - f) Driving in mountainous conditions continually
- \*4 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.
- \*5 If the vehicle is operated in very dusty or sandy areas, clean the air filter at every 7,500 km or 6 months.
- \*6 Inspect the battery electrolyte level, specific gravity and outer appearance. The sealed battery only requires an outer appearance inspection.
- \*7 If the brakes are used extensively (for example, continuous hard driving or mountain driving) or if the vehicle is operated in extremely humid climates, replace the brake fluid annually.
- \*8 If this component has been submerged in water, the oil should be replaced.
- \*9 Tire rotation is recommended every 10,000 km.
- \*10 The Tire Pressure Monitoring System (TPMS) initialization must be performed so that the system operates normally (if equipped).
- \*11 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.
- \*12 The vehicle calculates the remaining oil life based on engine operating conditions and lets you know when an oil change is due by illuminating the wrench indicator light in the instrument cluster.  
Replace the engine oil and filter when message/wrench indicator light is ON. And they must be changed at least once a year or within 15,000 km since last engine oil and filter change.  
The system must be reset whenever replacing the engine oil regardless of the message/wrench indicator light display.
- \*13 Reset the engine oil data whenever replacing the engine oil regardless of the message/wrench indicator light display.
- \*14 Replace the engine oil when message/wrench indicator light is ON.

# Scheduled Maintenance

## Except Russia/Belarus/Azerbaijan/Kazakhstan

Maintenance Interval	Number of months or kilometers (miles), whichever comes first.																
	Months	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	×1000 km	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
	×1000 miles	6.25	12.5	18.75	25	31.25	37.5	43.75	50	56.25	62.5	68.75	75	81.25	87.5	93.75	100
Fuel filter	Replace every 60,000 km (37,500 miles).																
Spark plugs* <sup>1</sup>	Replace every 60,000 km (37,500 miles).																
Evaporative system (if installed)		I		I		I		I		I		I		I		I	
Drive belts* <sup>2</sup>	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	
Engine oil* <sup>3*4*5</sup>	Except below countries	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
	Georgia/ Armenia/ Cambodia/ Gabon/ Ghana/ Cameroon/ Burundi/ Mozambique/ Mongolia	Replace every 5,000 km (3,125 miles) or 6 months.															
	Tanzania	Replace every 3,000 km (1,875 miles) or 3 months.															
Engine oil filter* <sup>3</sup>	Except below countries	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
	Georgia/ Armenia/ Cambodia	Replace every 10,000 km (6,250 miles) or 1 year.															
	Gabon/ Ghana/ Cameroon/ Burundi/ Mozambique/ Mongolia	Replace every 5,000 km (3,125 miles) or 6 months.															
	Tanzania	Replace every 3,000 km (1,875 miles) or 3 months.															
Cooling system		I		I		I		I		I		I		I		I	
Engine coolant* <sup>6</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.																

# Scheduled Maintenance

Maintenance Interval	Number of months or kilometers (miles), whichever comes first.																
	Months	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	×1000 km	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
	×1000 miles	6.25	12.5	18.75	25	31.25	37.5	43.75	50	56.25	62.5	68.75	75	81.25	87.5	93.75	100
Air filter*7	Except below countries		C		C		R		C		C		R		C		C
	Georgia/ Armenia		C		R		C		R		C		R		C		R
Fuel lines and hoses			I		I		I		I		I		I		I		I
Battery*8			I		I		I		I		I		I		I		I
Brake lines, hoses and connections			I		I		I		I		I		I		I		I
Brake fluid*9		I	I	I	R	I	I	I	R	I	I	I	R	I	I	I	R
Parking brake		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Power brake unit (Brake booster) and hoses			I		I		I		I		I		I		I		I
Disc brakes		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Steering operation and linkages			I		I		I		I		I		I		I		I
Rear differential oil		*10															
Transfer oil		*10															
Front and rear suspension, ball joints and wheel bearing axial play			I		I		I		I		I		I		I		I
Driveshaft dust boots					I				I				I				I
Exhaust system and heat shields		Inspect every 80,000 km (50,000 miles).															
Bolts and nuts on chassis and body			T		T		T		T		T		T		T		T
Body condition (for rust, corrosion and perforation)		Inspect annually.															
Cabin air filter (if installed)			R		R		R		R		R		R		R		R
Tires (including spare tire) (with inflation pressure adjustment)*11		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Tire rotation*11		Rotate every 10,000 km (6,250 miles).															
Emergency flat tire repair kit (if installed)*12		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

## Scheduled Maintenance

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### Remarks:

- \*1 In the countries below, inspect the spark plugs at every 10,000 km (6,250 miles) or 1 year before replacing them at the said interval.  
Algeria, Armenia, Angola, Bahrain, Bolivia, Burundi, B.Virgin, Cambodia, Cameroon, Chile, Costa Rica, Cote d'Ivoire, Curacao, El Salvador, Gabon, Ghana, Georgia, Guatemala, Haiti, Honduras, Hong Kong, Iran, Jordan, Kenya, Macau, Malaysia, Mongolia, Mozambique, Myanmar, Nigeria, Nicaragua, Oman, Panama, Papua New Guinea, Peru, Philippines, Senegal, Seychelles, Syria, Tanzania, United Arab Emirates, Vietnam, Zaire, Zimbabwe
- \*2 Also inspect the air conditioner drive belts, if installed.  
If the vehicle is operated primarily under any of the following conditions, inspect the drive belts more often than the recommended intervals.
  - a) Driving in dusty conditions
  - b) Extended periods of idling or low speed operation
  - c) Driving for long period in cold temperatures or driving regularly at short distance only
  - d) Driving in extremely hot conditions
  - e) Driving in mountainous conditions continually
- \*3 If the vehicle is operated primarily under any of the following conditions, replace the engine oil and oil filter more often than the recommended intervals.
  - a) Purpose of vehicle use is police car, taxi or driving school car.
  - b) Driving in dusty conditions
  - c) Extended periods of idling or low speed operation
  - d) Driving for long period in cold temperatures or driving regularly at short distance only
  - e) Driving in extremely hot conditions
  - f) Driving in mountainous conditions continually
- \*4 Reset the engine oil data whenever replacing the engine oil regardless of the message/wrench indicator light display.
- \*5 Replace the engine oil when message/wrench indicator light is ON.
- \*6 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.
- \*7 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.
- \*8 Inspect the battery electrolyte level, specific gravity and outer appearance. If the vehicle is operated in extremely hot and cold areas, inspect the battery electrolyte level, specific gravity and appearance every 10,000 km (6,250 miles) or 6 months. The sealed battery only requires an outer appearance inspection.
- \*9 If the brakes are used extensively (for example, continuous hard driving or mountain driving) or if the vehicle is operated in extremely humid climates, replace the brake fluid annually.
- \*10 If this component has been submerged in water, the oil should be replaced.
- \*11 The Tire Pressure Monitoring System (TPMS) initialization must be performed so that the system operates normally (if equipped).
- \*12 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

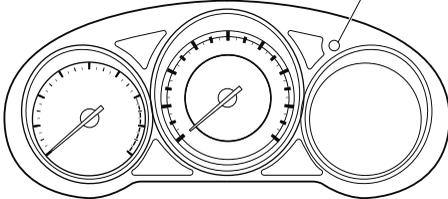
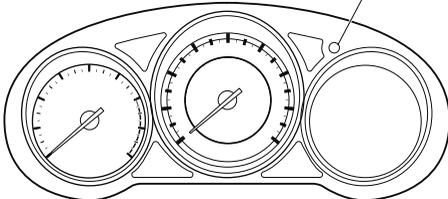
## Maintenance Monitor

1. Select the  icon on the home screen to display the “Applications” screen.
2. Select “Vehicle Status Monitor”.
3. Select “Maintenance” to display the maintenance list screen.
4. Switch the tab and select the setting item you want to change.

You can customize settings in the setup display as follows:

Tab	Item	Explanation
Scheduled	Setting	Notification can be switched on/off.
	Time (months)	Displays the time or distance until maintenance is due.
	Distance (mile or km)	Select this item to set the maintenance period. The wrench indication/indicator light in the instrument cluster will be illuminated when the remaining distance is less than 1,000 km or 600 mile, or the remaining number of days is less than 15 (whichever comes first).
	Reset	Resets the time and distance to the initial values. Once the system turns on, it needs to be reset whenever carrying out maintenance.
Tire Rotation	Setting	Notification can be switched on/off.
	Distance (mile or km)	Displays the distance until tire rotation is due. Select this item to set the tire rotation distance. The wrench indication/indicator light in the instrument cluster will be illuminated when the remaining distance is less than 1,000 km or 600 mile.
	Reset	Resets the remaining distance to the initial value. Once the system turns on, it needs to be reset whenever rotating the tires.

# Scheduled Maintenance

Tab	Item	Explanation
Oil Change	Setting Interval*1	Notification can be switched on/off.
	Distance (mile or km)	<p>Displays the distance until the oil replacement is due. Select this item to set the oil replacement distance.</p> <p>The wrench indication/indicator light in the instrument cluster will be illuminated when the remaining distance is less than 1,000 km or 600 mile.</p>
	Reset*2	<p><b><u>In flexible setting</u></b> Resets the remaining oil life to 100 %.</p> <p><b><u>In fixed setting</u></b> Resets the remaining distance until oil replacement is due to the initial value. In addition, a vehicle engine control unit reset is required as follows: Press and hold the dashboard illumination knob with the ignition switched OFF, then switch it ON. Keep pressing the dashboard illumination knob for more than 7 seconds.</p> <div style="text-align: center;">  <p>Dashboard illumination knob</p> </div> <p><b><u>In OFF setting</u></b> Press and hold the dashboard illumination knob with the ignition switched OFF, then switch it ON. Keep pressing the dashboard illumination knob for more than 7 seconds.</p> <div style="text-align: center;">  <p>Dashboard illumination knob</p> </div>

\*1 The engine oil flexible maintenance setting is available (only some models). Consult an Authorized Mazda Repairer for details.

When the engine oil flexible maintenance setting is selected, you will see the following items in the display. The vehicle calculates the remaining oil life based on the engine operating conditions and lets you know when an oil change is due by illuminating the wrench indicator light in the instrument cluster.

## Scheduled Maintenance

---

\*2 Whenever the engine oil is replaced, the vehicle engine control unit reset is necessary.

Tab	Item	Explanation
Oil Change	Oil life (%)	Displays the engine oil life until the oil replacement is due. The wrench indication/indicator light in the instrument cluster will be illuminated when remaining oil life distance is less than 1,000 km or 600 mile, or remaining days are less than 15 (whichever comes first).
	Reset	Resets the remaining oil life to 100 %. The system must be reset whenever replacing the engine oil.

## Owner Maintenance Precautions

### Routine Service

We highly recommend that these items be inspected daily, or at least every week.

- Engine Oil Level (page 6-21)
- Engine Coolant Level (page 6-22)
- Brake Fluid Level (page 6-23)
- Washer Fluid Level (page 6-24)
- Battery Maintenance (page 6-32)
- Tire Inflation Pressure (page 6-36)

Improper or incomplete service may result in problems. This section gives instructions only for items that are easy to perform.

As explained in the Introduction (page 6-2), several procedures can be done only by a qualified service technician with special tools.

Improper do-it yourself maintenance during the warranty period may affect warranty coverage. 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 expert repairer, we recommend an Authorized Mazda Repairer.

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 Repairer.



***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 engine or cooling fan which may turn on unexpectedly:***

*Working under the hood with the engine running is dangerous. It becomes even more dangerous when you wear jewelry or loose clothing.*

*Either can become entangled in moving parts and result in injury.*



***Pull over to a safe location, then switch the ignition 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 engine damage or a fire leading to an unexpected accident.*

# Owner Maintenance

## Hood

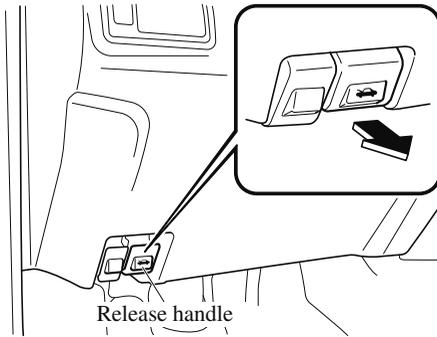
### WARNING

**Always check that the hood is closed and securely locked:**

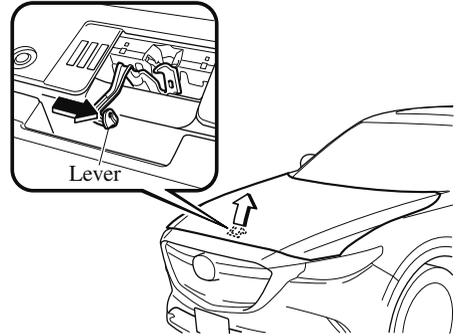
A hood that is not closed and securely locked is dangerous as it could fly open while the vehicle is moving and block the driver's vision which could result in a serious accident.

### ▼ Opening the Hood

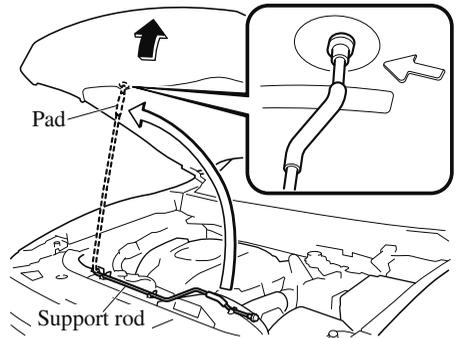
1. With the vehicle parked, pull the release handle to unlock the hood.



2. Insert your hand into the hood opening, slide the latch lever to the right, and lift up the hood.

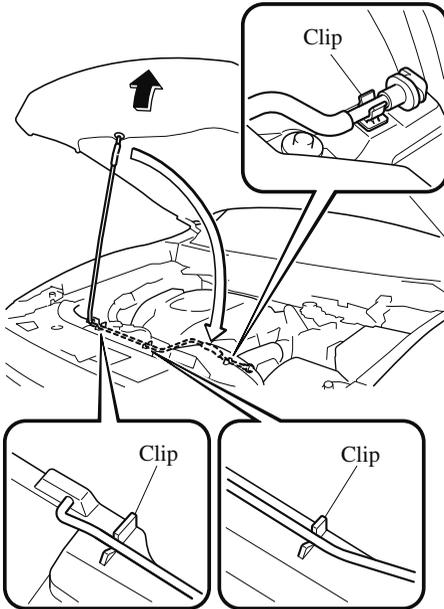


3. Grasp the support rod in the padded area and secure it in the support rod hole indicated by the arrow to hold the hood open.



**▼ 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. Lift the hood, grasp the padded area on the support rod, and secure the support rod in the clip. Verify that the support rod is secured in the clip before closing the hood.



3. Lower the hood slowly to a height of about 20 cm (7.9 in) above its closed position and then let it drop.

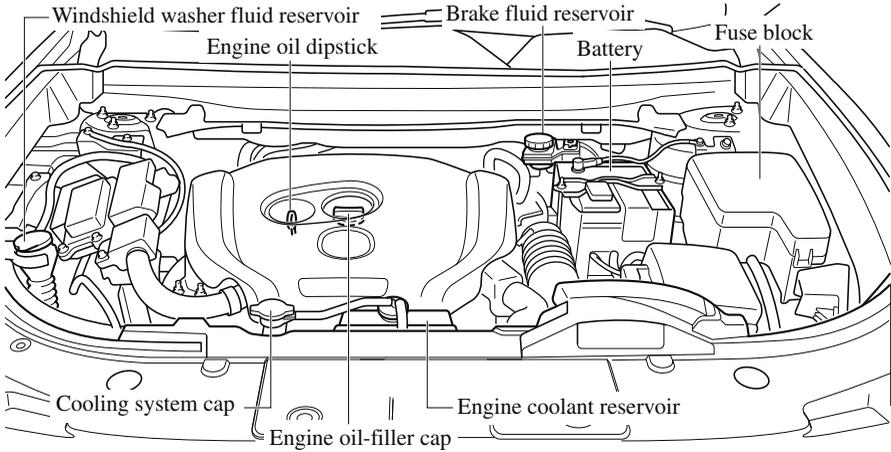
**⚠ CAUTION**

*When closing the hood, do not push it excessively such as by applying your weight. Otherwise, the hood could be deformed.*

# Owner Maintenance

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## Engine Compartment Overview



## Engine Oil

**NOTE**

Changing the engine oil should be done by an expert repairer, we recommend an Authorized Mazda Repairer.

**▼ Recommended Oil**

In order to keep the maintenance interval (page 6-3) and to protect the engine from damage caused by poor lubrication, it is vitally important to make use of engine oil with the correct specification. Do not use oils which do not meet the following specifications or requirements. Use of unsuitable oil may lead to engine damage which is not covered by the Mazda Warranty.

**Europe**

Temperature Range SAE Viscosity Numbers		
<b>Grade</b>		
<b>Recommended oils</b>		
<b>Mazda Original Oil Supra 0W-30</b>		
<b>Mazda Original Oil Ultra 5W-30</b>		
<b>Alternative Oil Quality</b>		
<b>API SN or ACEA A5/B5</b>	<b>0W-30</b>	
	<b>5W-30</b>	

**Except Europe**

Temperature Range SAE Viscosity Numbers		
<b>Grade</b>		
<b>API SM/SN or ILSAC GF-IV/GF-V</b>		

Engine oil viscosity, or thickness, has an effect on fuel economy and cold-weather operation (starting and oil flow).

Low-viscosity engine oils can provide improved fuel economy and cold-weather performance.

When choosing an oil, consider the temperature range your vehicle will operate in before the next oil change.

Then select the recommended viscosity from the chart.

## Owner Maintenance

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- *Using oils of viscosity besides those recommended for specific temperature ranges could result in engine damage.*

### **NOTE**

- It is normal for all engines to consume engine oil under normal driving conditions. Engine oil consumption may be as high as 0.8 L/1,000 km (1 L/800 miles). This may be as a result of evaporation, internal ventilation or burning of the lubricating oil in the working engine. Oil consumption may be higher when the engine is new due to the running-in process. Oil consumption is also dependant on engine speed and engine load. Under extreme driving conditions, oil consumption may be higher.*

### **▼ Vehicle Engine Control Unit Reset Procedure**

After replacing the engine oil, it is recommended to have a repair shop such as an Authorized Mazda Repairer perform the initialization (engine oil data resetting) of the recorded value. If the value recorded by the computer is not initialized, the wrench indicator light may not turn off or it may turn on earlier than normal.

### **NOTE**

*There are two methods for resetting the engine control unit.*

- 1. The procedure described in the following.*
- 2. The procedure described in the maintenance monitor item when the flexible maintenance setting is selected. Refer to Maintenance Monitor on page 6-11.*

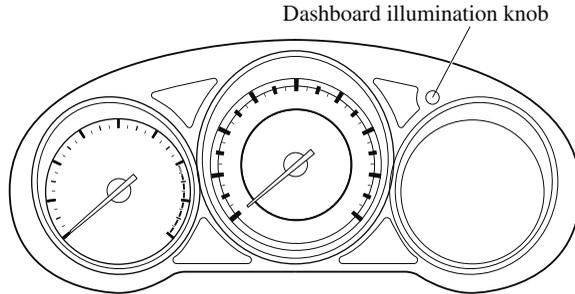
*If either one of the methods is performed, resetting of the engine control unit is completed.*

### **NOTE**

*The initialization (engine oil data resetting) of the recorded value can be performed using the following procedure:*

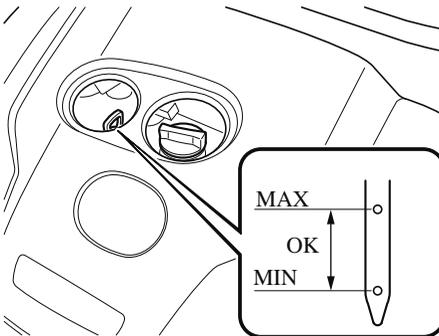
- 1. Switch the ignition OFF.*

2. Switch the ignition ON with the dashboard illumination knob pressed, and press and hold the dashboard illumination knob for about 7 seconds.



### ▼ Inspecting Engine Oil Level

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.
4. 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.

### **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.

# Owner Maintenance

## Engine Coolant

### ▼ Inspecting Coolant Level

#### **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.*



**Pull over to a safe location, then switch the ignition 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 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.*

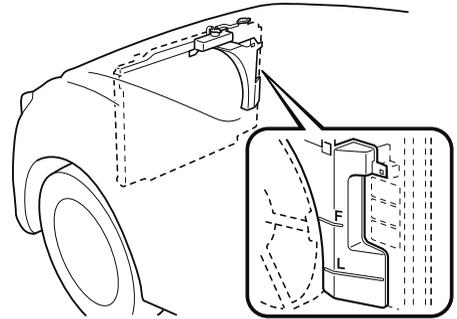
#### **NOTE**

*Changing the coolant should be done by an expert repairer, we recommend an Authorized Mazda Repairer.*

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 F and L marks on the coolant reservoir when the engine is cool.



If it is at or near L, add enough coolant to the coolant reservoir to provide freezing and corrosion protection and to bring the level to F.

Securely tighten the coolant reservoir tank cap after adding coolant.

## ⚠ CAUTION

- 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.



FL22 

If the coolant reservoir is empty or new coolant is required frequently, consult an expert repairer, we recommend an Authorized Mazda Repairer.

## Brake Fluid

### ▼ Inspecting Brake Fluid Level

## ⚠ WARNING

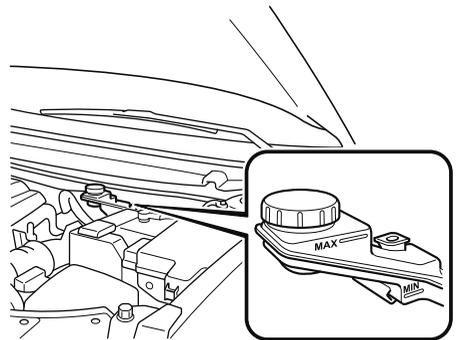
### ***If the brake fluid level is low, have the brakes inspected:***

*A low brake 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.*

Inspect the fluid level in the reservoir regularly. It should be kept between the MAX and MIN lines.

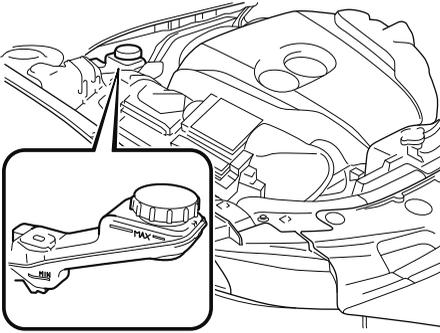
The level normally drops with accumulated distance, a condition associated with wear of brake linings. If it is excessively low, have the brake system inspected by an expert repairer, we recommend an Authorized Mazda Repairer.

### **Left-hand drive model**



# Owner Maintenance

## Right-hand drive model



## Window and Headlight Washer Fluid

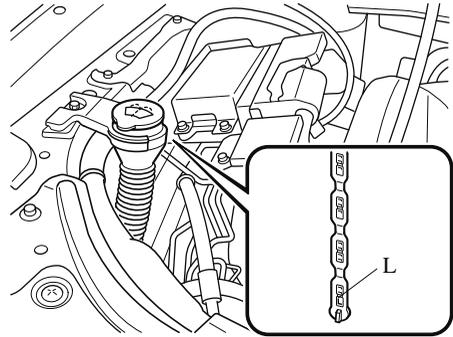
### ▼ Inspecting Washer Fluid Level

### ! 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.*

Inspect fluid level in the washer fluid reservoir; add fluid if necessary.



Use plain water if washer fluid is unavailable.

But use only washer fluid in cold weather to prevent it from freezing.

### **NOTE**

*Front and rear washer fluid is supplied from the same reservoir.*

## 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 nonfreezing lubricant on locks during cold weather.

Make sure the hood's secondary latch keeps the hood from opening when the primary latch is released.

## Wiper Blades

### CAUTION

- *Hot waxes applied by automatic car washers have been known to affect the wiper's ability to clean windows.*
- *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 ignition 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.

# Owner Maintenance

## ▼ Replacing Windshield Wiper Blades

When the wipers no longer clean well, the blades are probably worn or cracked. Replace them.

### CAUTION

- To prevent damage to the wiper arms and other components, do not try to sweep the wiper arm by hand.
- Do not bend the blade rubber unnecessarily when replacing it. Otherwise, the metal stiffener in the blade may deform and the windshield wiper operation may be adversely affected.

### NOTE

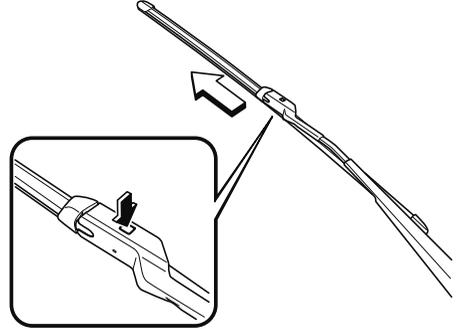
When raising both windshield wiper arms, raise the driver's side wiper arm first. When lowering the wiper arms, slowly lower the wiper arm from the passenger's side first while supporting it with your hand. Forcefully lowering the wiper arms could damage the wiper arm and blade, and may scratch or crack the windshield.

1. Raise the wiper arm.

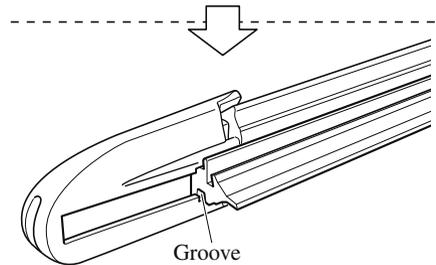
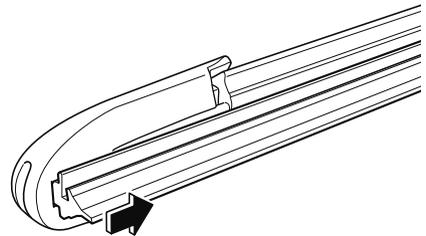
### CAUTION

To prevent damage to the windshield let the wiper arm down easily, do not let it slap down on the windshield.

2. Slide the blade component in the direction of the arrow while pressing the wiper arm tab to remove the blade component from the wiper arm.

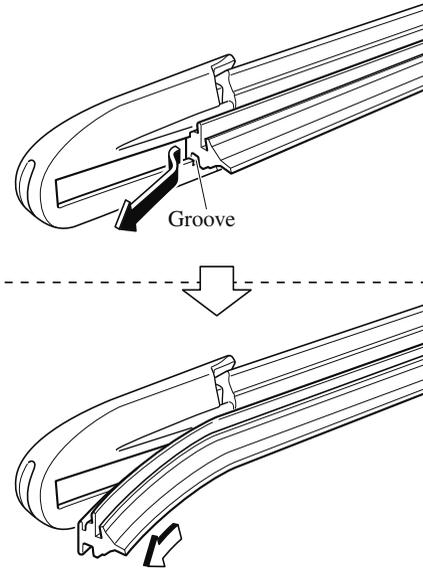


3. Pull the blade rubber in the direction of the arrow and slide it to a position where the blade holder groove can be checked.

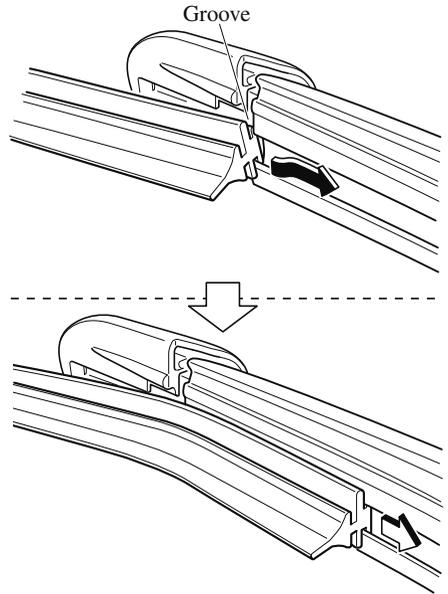


**Owner Maintenance**

4. Pull the end of the blade rubber from the blade holder groove in the direction of the arrow and remove the blade rubber from the blade holder.

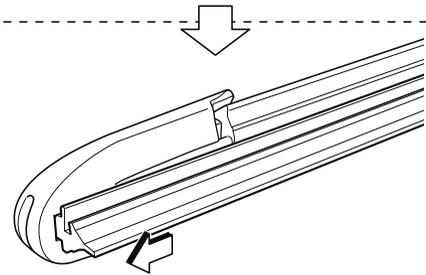
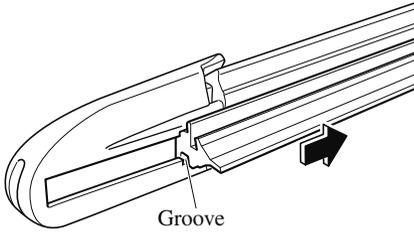


5. Insert the end of the new blade rubber into the groove of the blade holder until it contacts the end of the blade holder.

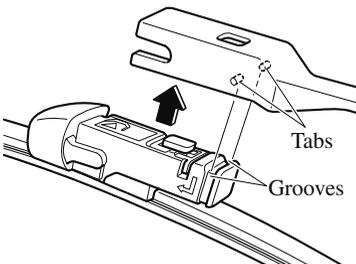


# Owner Maintenance

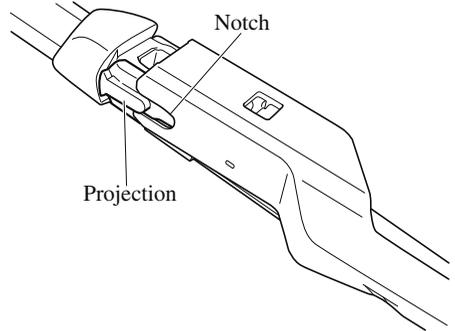
6. After pulling the blade rubber in the direction of the arrow and sliding the blade rubber to a position to check the blade holder groove, slide the blade rubber end in the opposite direction.



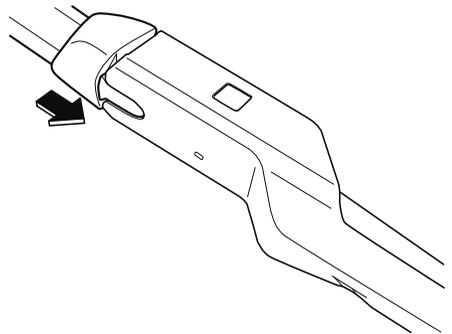
7. Make sure that the blade rubber is correctly installed to the blade holder.
8. Align the wiper arm tabs with the blade component grooves.



9. Align the blade component projection with the wiper arm notch.



10. Slide the blade component and install it to the wiper arm.



11. Slowly lower the wiper arm onto the windshield.

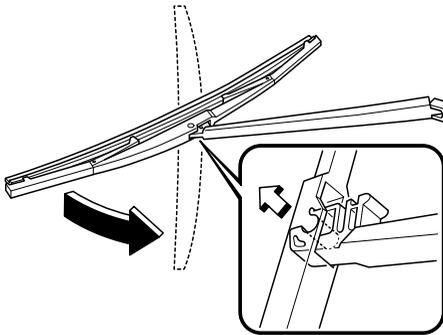
### ▼ Replacing Rear Window Wiper Blade

When the wiper no longer cleans well, the blade is probably worn or cracked. Replace it.

#### **⚠ CAUTION**

*To prevent damage to the wiper arm and other components, do not move the wiper by hand.*

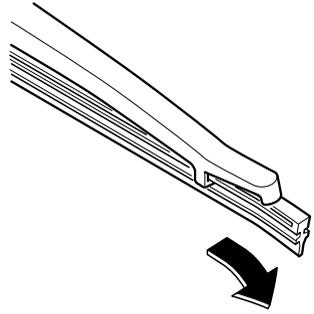
1. Raise the wiper arm and rotate the wiper blade to the right until it unlocks, then remove the blade.



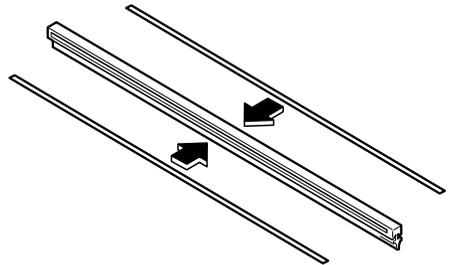
#### **⚠ CAUTION**

*To prevent damage to the rear window, do not let the wiper arm fall on it.*

2. Pull down the blade rubber and slide it out of the blade holder.



3. Remove the metal stiffeners from the blade rubber and install them in the new blade.



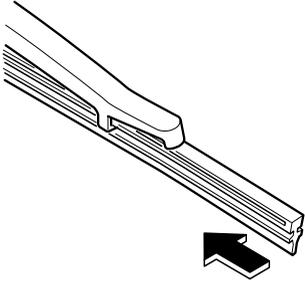
#### **⚠ CAUTION**

*Do not bend or discard the stiffeners. You need to use them again.*

## Owner Maintenance

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4. Carefully insert the new blade rubber. Then install the blade assembly in the reverse order of removal.



## Battery

### **WARNING**



**Read the following precautions carefully before using the battery or inspecting to ensure safe and correct handling:**



**Always wear eye protection when working near the battery:**

Working without eye protection is dangerous. Battery fluid contains SULFURIC ACID which could cause blindness if splashed into your eyes. Also, hydrogen gas produced during normal battery operation, could ignite and cause the battery to explode.



**Wear eye protection and protective gloves to prevent contact with battery fluid:**

Spilled battery fluid is dangerous. 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 batteries out of the reach of children:**

Allowing children to play near batteries is dangerous. Battery fluid could cause serious injuries if it gets in the eyes or on the skin.



**Keep flames and sparks away from open battery cells and do not allow metal tools to contact the positive (+) or negative (-) terminal of the battery when working near a battery. Do not allow the positive (+) terminal to contact the vehicle body:**

Flames and sparks near open battery cells are dangerous. Hydrogen gas, produced during normal battery operation, could ignite and cause the battery to explode. An exploding battery can cause serious burns and injuries. Keep all flames including cigarettes and sparks away from open battery cells.

# Owner Maintenance

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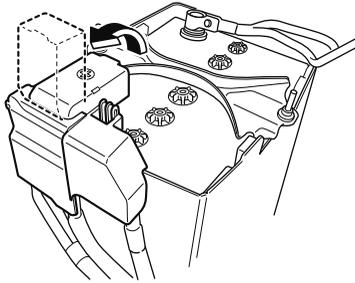


**Keep all flames, including cigarettes, and sparks away from open battery cells:**

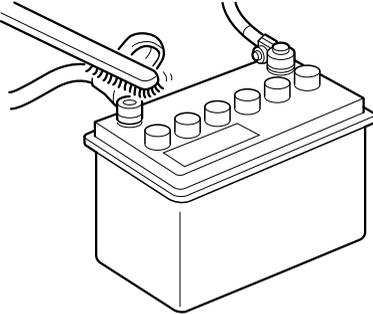
Flames and sparks near open battery cells are dangerous. Hydrogen gas, produced during normal battery operation, could ignite and cause the battery to explode. An exploding battery can cause serious burns and injuries.

**NOTE**

Before performing battery maintenance, remove the battery cover.



## ▼ Battery Maintenance



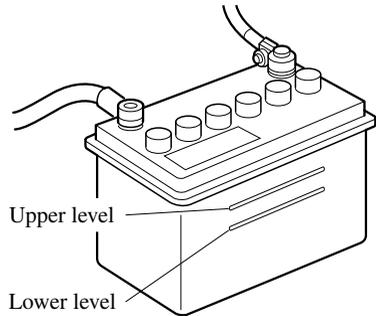
To get the best service from a battery:

- Keep it securely mounted.
- 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 battery cables and charge the battery every six weeks.

## ▼ Inspecting Electrolyte Level

A low level of electrolyte fluid will cause the battery to discharge quickly.



Inspect the electrolyte level at least once a week. If it is low, remove the caps and add enough distilled water to bring the level between the upper and lower level (illustration).

### **Do not overfill.**

Examine the specific gravity of the electrolyte with a hydrometer, especially during cold weather. If it is low, recharge the battery.

### **▼ Battery Recharging**

#### **NOTE**

- *Before performing maintenance or recharging the battery, turn off all accessories and stop the engine.*
- *To disconnect the battery, remove the negative cable first. Install it last when connecting the battery.*
- *Be sure to remove the caps before recharging the battery.*
- If the battery quickly discharges because, for example, the lights were left on too long with the engine off, slow-charge it as required by battery size and charger capacity.
- If the battery gradually discharges because of high electric load while the vehicle is being used, recharge it as required by battery size and charger capacity.

### **▼ Battery Replacement**

Contact an Authorized Mazda Repairer for a battery replacement purchase.

## **Key Battery Replacement**

If the buttons on the transmitter are inoperable and the operation indicator light does not flash, the battery may be dead.

Replace with a new battery before the transmitter becomes unusable.

### **⚠ CAUTION**

- *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 (CR2025 or equivalent).*

# Owner Maintenance

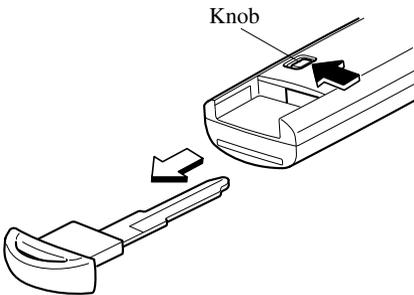
The following conditions indicate that the battery power is low:

- The KEY indicator light (green) flashes in the instrument cluster for about 30 seconds after the engine is turned off (for vehicles with a type A instrument cluster (page 4-32), messages are displayed 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.

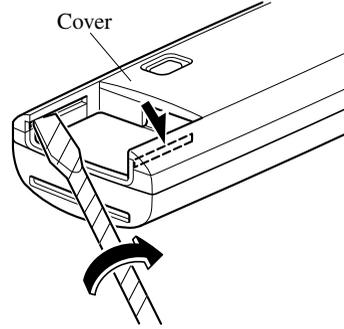
Replacing the battery at an Authorized Mazda Repairer is recommended to prevent damage to the key. If replacing the battery by yourself, follow the instruction.

## Replacing the key battery

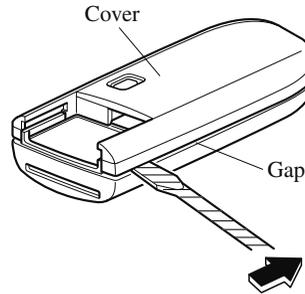
1. Press the knob and pull out the auxiliary key.



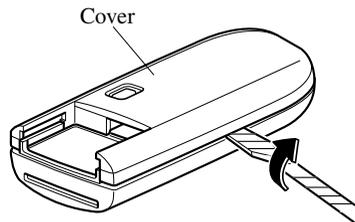
2. Twist a tape-wrapped flathead screwdriver in the direction of the arrow and open the cover slightly.



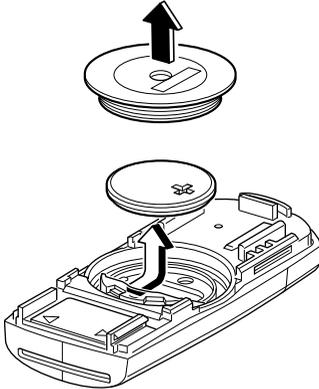
3. Insert the tape-wrapped flathead screwdriver into the gap and slide it in the direction of the arrow.



4. Twist the flathead screwdriver in the direction of the arrow and remove the cover.

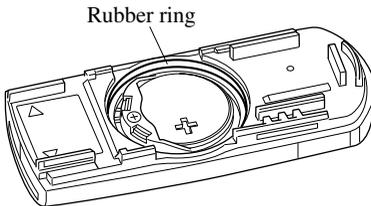


5. Remove the battery cap, then remove the battery.

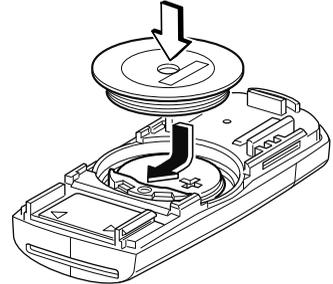


**CAUTION**

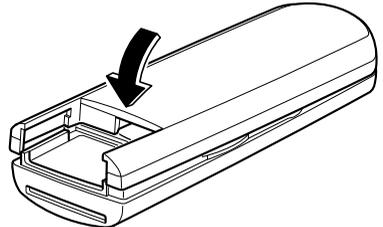
- Be careful not to allow the rubber ring shown in the figure to be scratched or damaged.
- If the rubber ring detaches, reattach it before inserting a new battery.



6. Insert a new battery with the positive pole facing up, and then cover the battery with the battery cap.



7. Close the cover.



8. Reinsert the auxiliary key.

## Owner Maintenance

### 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.

#### **WARNING**

#### **Using Different Tire Types:**

*Driving your vehicle with different types of tires is dangerous. It could cause poor handling and poor braking; leading to loss of control.*

*Except for the limited use of the temporary spare tire, use only the same type tires (radial, bias-belted, bias-type) on all four wheels.*

#### **Using Wrong-Sized Tires:**

*Using any other tire size than what is specified for the vehicle (page 9-7) is dangerous. It could seriously affect ride, handling, ground clearance, tire clearance, and speedometer calibration. This could cause you to have an accident. Use only tires that are the correct size specified for the vehicle.*

#### ▼ **Tire Inflation Pressure**

#### **WARNING**

#### **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 9-7.*

#### **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 (including the spare) when the tires are cold. Maintain recommended pressures for the best ride, handling, and minimum tire wear.

Refer to the specification charts (page 9-7).

#### **NOTE**

- *Always check tire pressure when tires are cold.*
- *Warm tires normally exceed recommended pressures. Do not release air from warm tires to adjust the pressure.*
- *Underinflation can cause reduced fuel economy, uneven and accelerated tire wear, and poor sealing of the tire bead, which will deform the wheel and cause separation of tire from rim.*
- *Overinflation can produce a harsh ride, uneven and accelerated tire wear, and a greater possibility of damage from road hazards.*

*Keep your tire pressure at the correct levels. If one frequently needs inflating, have it inspected.*

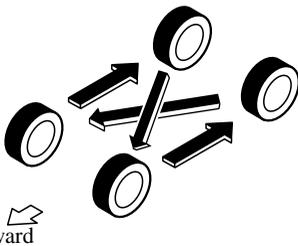
## ▼ Tire Rotation

### ⚠ WARNING

#### **Rotate tires periodically:**

Irregular tire wear is dangerous. To equalize tread wear for maintaining good performance in handling and braking, rotate the tires every 10,000 km (6,250 miles), or sooner if irregular wear develops.

During rotation, inspect them for correct balance.



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 9-7) 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.

## ▼ Replacing a Tire

### ⚠ WARNING

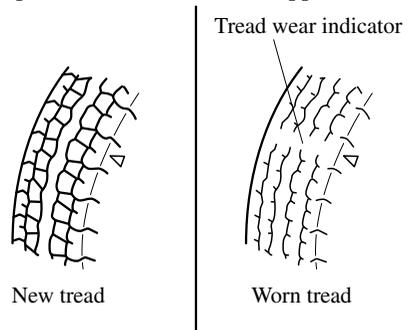
#### **Always use tires that are in good condition:**

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.

If a tire wears evenly, a wear indicator will appear as a solid band across the tread. Replace the tire when this happens.



You should replace the tire before the band crosses the entire tread.

## Owner Maintenance

### ▼ Temporary Spare Tire

Inspect the temporary spare tire at least monthly to make sure it is properly inflated and stored.

#### NOTE

*The temporary spare tire condition gradually deteriorates even if it has not been used.*

The temporary spare tire is easier to handle because of its construction which is lighter and smaller than a conventional tire. This tire should be used only for an emergency and only for a short distance.

Use the temporary spare tire only until the conventional tire is repaired, which should be as soon as possible.

Refer to Tire on page 9-7.



- Do not use your temporary spare tire rim with a snow tire or a conventional tire. Neither will properly fit and could damage both tire and rim.
- The temporary spare tire has a tread life of less than 5,000 km (3,000 miles). The tread life may be shorter depending on driving conditions.
- The temporary spare tire is for limited use, however, if the tread wear solid-band indicator appears, replace the tire with the same type of temporary spare (page 6-37).

### ▼ Replacing a Wheel



#### **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\*

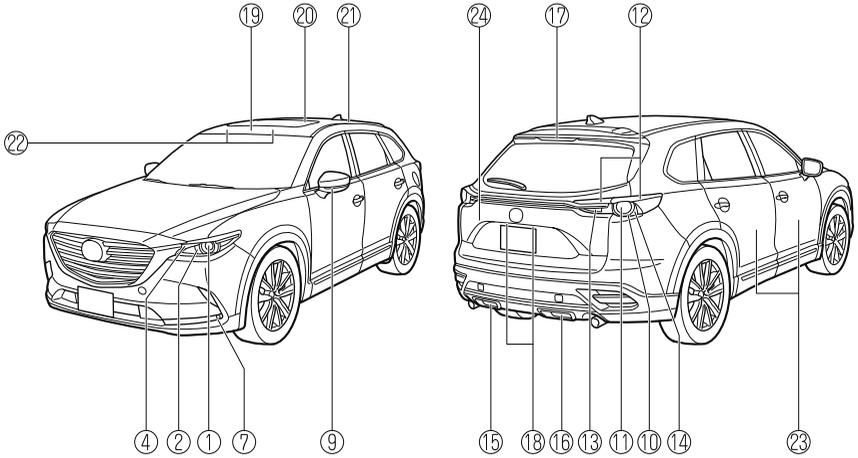
#### NOTE

- *When replacing a wheel, make sure the new one is the same as the original factory wheel in diameter, rim width, and offset (inset/outset).*
- *For details, contact an expert repairer; we recommend an Authorized Mazda Repairer.*

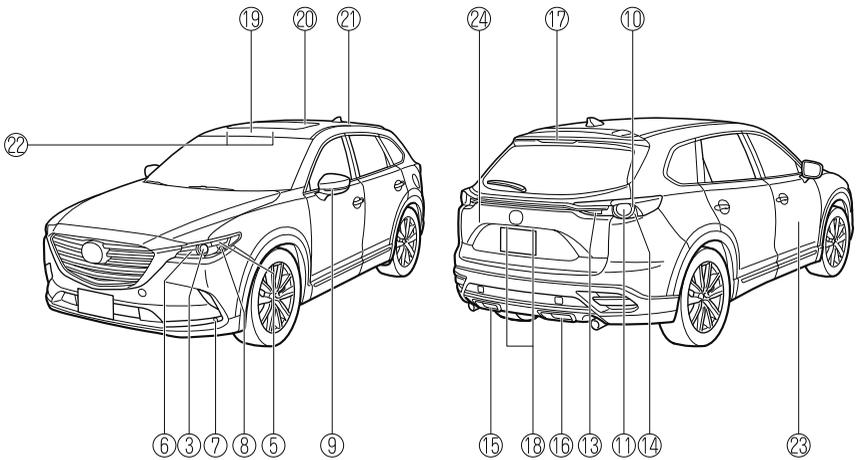
Proper tire balancing provides the best riding comfort and helps reduce tread wear. Out-of-balance tires can cause vibration and uneven wear, such as cupping and flat spots.

## Light Bulbs

### Type A (With Adaptive LED Headlights (ALH))



### Type B (Without Adaptive LED Headlights (ALH))



- ① Headlights (Low beam)
- ② Headlights (High beam)
- ③ Headlights (Low/High beam)

# Owner Maintenance

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- ④ Running lights/Parking lights/Front turn signal lights
- ⑤ Parking lights
- ⑥ Running lights
- ⑦ Front fog lights\*
- ⑧ Front turn signal lights
- ⑨ Side turn signal lights
- ⑩ Brake lights/Taillights
- ⑪ Rear turn signal lights
- ⑫ Taillights
- ⑬ Reverse lights
- ⑭ Brake lights
- ⑮ Rear fog light (Left-hand drive model)\*
- ⑯ Rear fog light (Right-hand drive model)\*
- ⑰ High-mount brake light
- ⑱ License plate lights
- ⑲ Overhead lights (Front)/Map lights (Front)
- ⑳ Map lights (Center)
- ㉑ Overhead light (Rear)
- ㉒ Vanity mirror lights
- ㉓ Ambient lights (Front/Rear door pocket)
- ㉔ Luggage compartment light



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

- To replace the bulb, contact an expert repairer; we recommend an Authorized Mazda Repairer.

- 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

**Headlights, Running lights/Parking lights/Front turn signal lights (type A), Front fog lights\*, Brake lights, Taillights, High-mount brake light, Side turn signal lights**

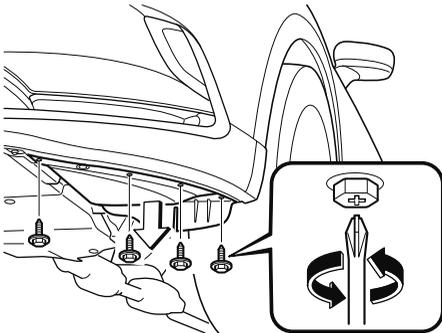
The LED bulb cannot be replaced as a single unit because it is an integrated unit. The LED bulb has to be replaced with the unit. We recommend an Authorized Mazda Repairer when the replacement is necessary.

**Parking lights (type B), Front turn signal lights (type B)****NOTE**

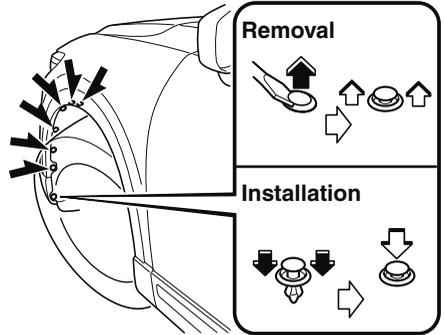
When replacing a bulb for the front turn signal lights and parking lights/front side-marker lights, turn the steering wheel and change the direction in which the tires are pointed to the position where the bulb replacement can be done easily.

Turn the steering wheel after starting the engine and stop the engine after you finish turning the steering wheel.

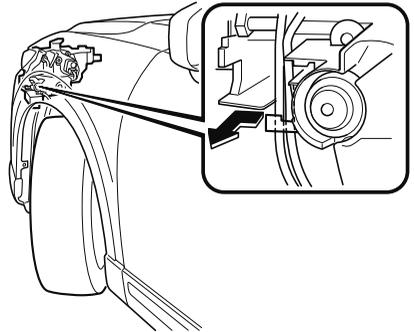
1. If you are changing the right bulb, start the engine, turn the steering wheel all the way to the right, and turn off engine. If you are changing the left bulb, turn the steering wheel to the left, and turn off engine.
2. Make sure the ignition is switched off, and the headlight switch is off.
3. Turn the screw counterclockwise and remove it.



4. Pull the center of each plastic retainer and remove the retainers, and then partially peel back the mudguard.



5. Disconnect the wiring harness by releasing the clamp.

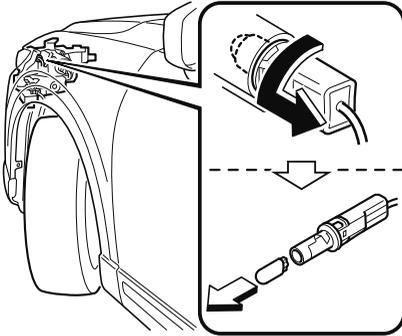


6. Turn the socket and bulb assembly counterclockwise and remove it.

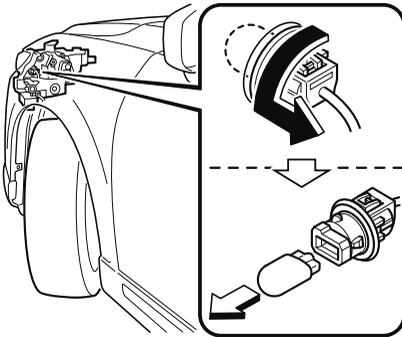
# Owner Maintenance

7. Disconnect the bulb from the socket.

## Parking lights



## Front turn signal lights



8. Install the new bulb in the reverse order of the removal procedure.

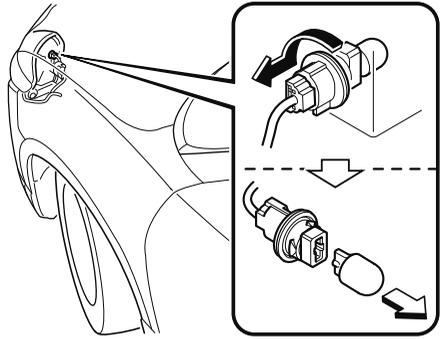
### **NOTE**

*There will be no problem with functionality with the wiring harness disconnected in Step 5 left disconnected.*

*Therefore, there is no need to connect the wiring harness.*

## Running lights (type B)

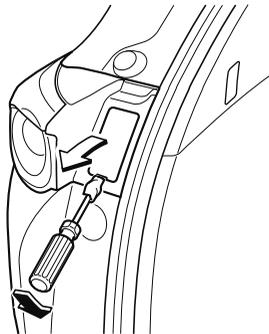
1. Make sure the ignition is switched off, and the headlight switch is off.
2. Turn the screws counterclockwise and remove them.
3. Turn the socket and bulb assembly counterclockwise and remove it.



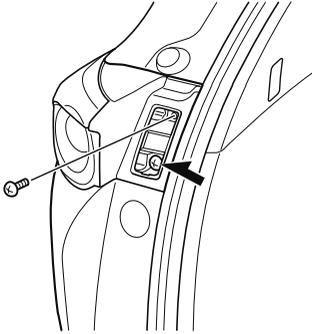
4. Install the new bulb in the reverse order of the removal procedure.

## Rear turn signal lights

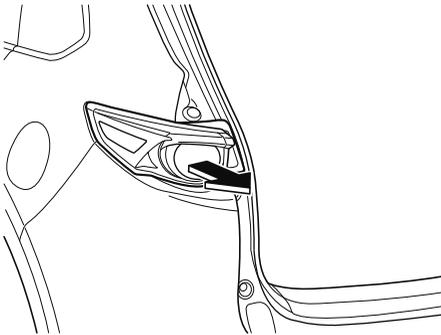
1. Make sure the ignition is switched off, and the headlight switch is off.
2. Remove the cover.



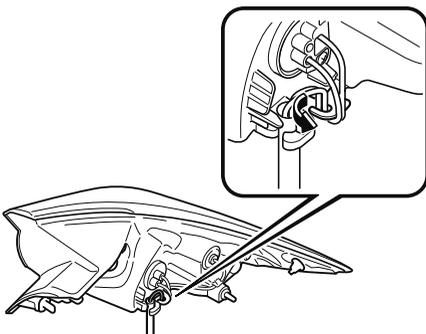
- Turn the screws counterclockwise and remove them.



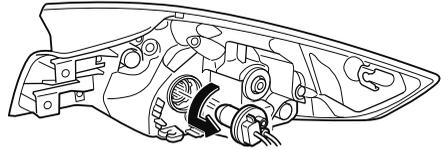
- Pull the unit rearward to remove it.



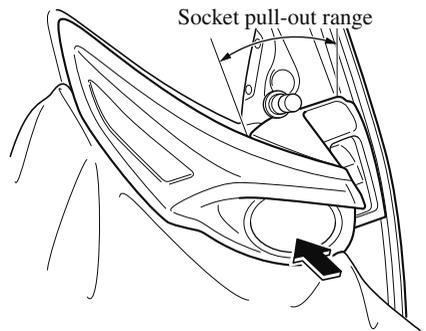
- Disconnect the wiring harness by releasing the clamp.



- Turn the socket and bulb assembly counterclockwise and remove it.



- Temporarily install the light unit with the socket pulled out of the top of the light unit.



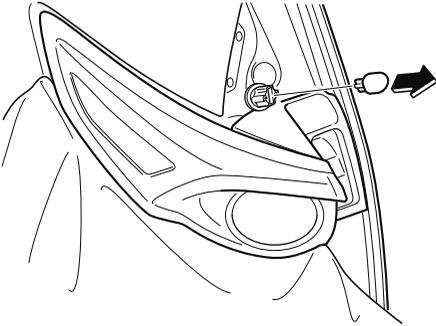
## ⚠ CAUTION

- The wiring harness may be damaged when temporarily installing the light unit. When performing the procedure, observe the following points.
  - Pull out the socket from within the socket pull-out range shown in the figure.
  - Do not push the light unit into the vehicle with force.
  - When temporarily installing the light unit, cover the rear bumper light unit installation surface with a soft cloth. The rear bumper may be scratched or damaged if the light unit contacts it.

# Owner Maintenance

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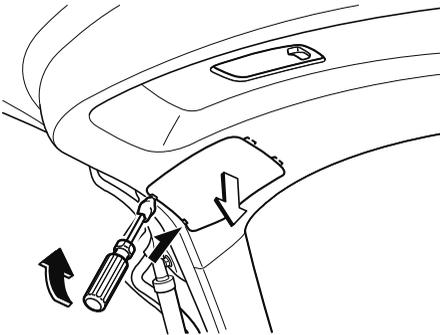
8. Disconnect the bulb from the socket.



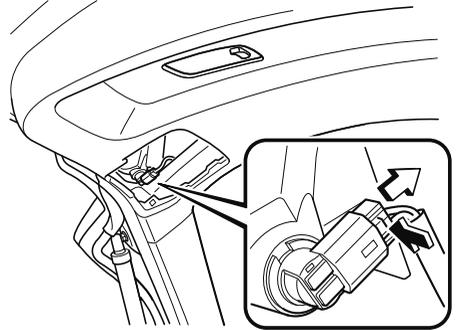
9. Install the new bulb in the reverse order of the removal procedure.

## Reverse lights

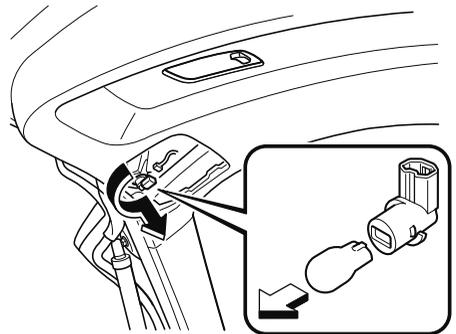
1. Make sure the ignition is switched off, and the headlight switch is off.
2. Remove the cover.



3. Disconnect the electrical connector from the bulb by pressing the tab on the connector with your finger and pulling the connector.



4. Turn the socket and bulb assembly counterclockwise and remove it.
5. Disconnect the bulb from the socket.

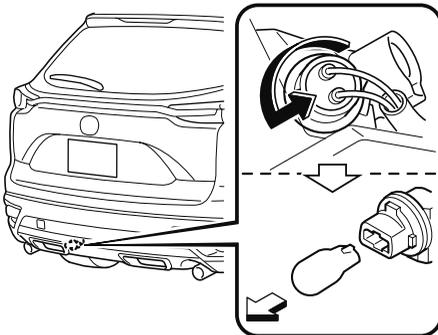


6. Install the new bulb in the reverse order of the removal procedure.

**Rear fog light\*****Do not replace the rear fog light bulb just after turning off the engine:**

Replacing the fog light bulb just after turning off the engine is dangerous because the exhaust pipe near the rear fog light would still be very hot and could cause a burn if you touch it. Replace the bulb after the exhaust pipe has cooled.

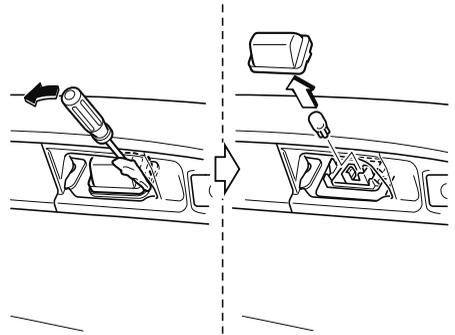
1. Make sure the ignition is switched off, and the headlight switch is off.
2. Turn the screws counterclockwise and remove them.
3. Turn the socket and bulb assembly counterclockwise and remove it.



4. Install the new bulb in the reverse order of the removal procedure.

**License plate lights**

1. Make sure the ignition is switched off, and the headlight switch is off.
2. Wrap a 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 a flathead screwdriver.
3. Disconnect the bulb by pulling it out.



4. Install the new bulb in the reverse order of the removal procedure.

**▼ Replacing Interior Light Bulbs**

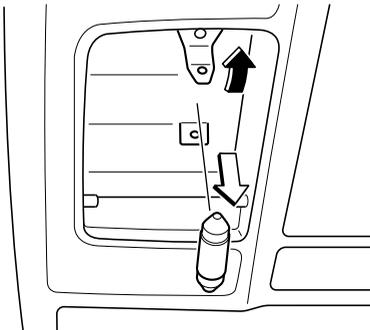
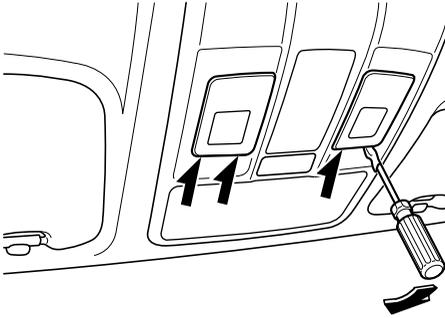
**Overhead lights (Front)/Map lights (Front) (LED type), Map lights (Center) (LED type), Overhead lights (Rear) (LED type), Ambient lights**

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. We recommend an Authorized Mazda Repairer when the replacement is necessary.

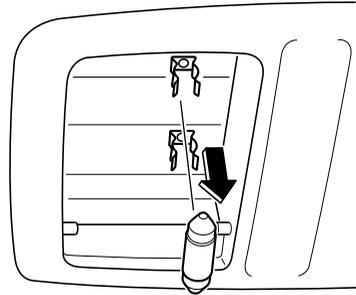
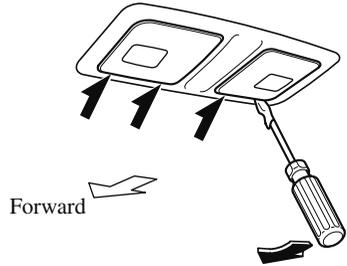
# Owner Maintenance

## Overhead lights (Front)/Map lights (Front) (bulb type), Map lights (Center) (bulb type), Overhead light (Rear) (bulb type), Vanity mirror lights

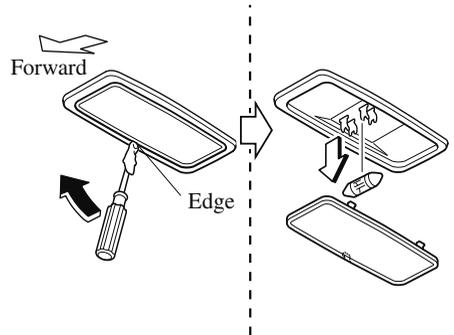
1. Wrap a small flathead screwdriver with a soft cloth to prevent damage to the lens, and then remove the lens by carefully prying on the edge of the lens with the flathead screwdriver.
2. Disconnect the bulb by pulling it out.  
**Overhead lights (Front)/Map lights (Front)**

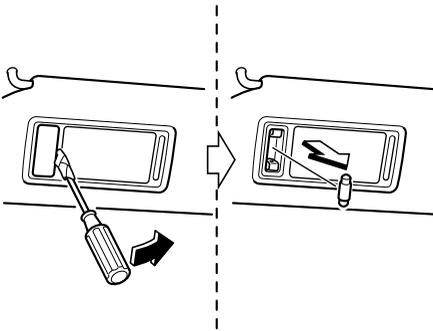


## Map lights (Center)



## Overhead light (Rear)

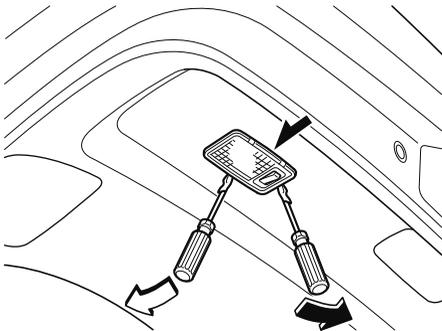


**Vanity mirror lights**

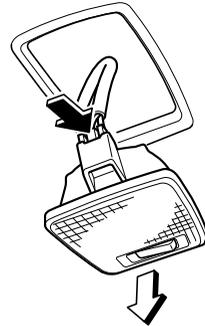
3. Install the new bulb in the reverse order of the removal procedure.

**Luggage compartment light**

1. Wrap a small flathead screwdriver with a soft cloth to prevent damage to the lens and remove the lens unit by carefully prying on the edge of the lens unit with the flathead screwdriver.

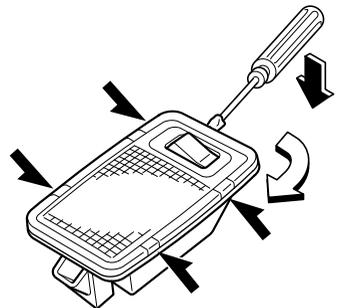


2. Disconnect the electrical connector from the bulb by pressing the tab on the connector with your finger and pulling the connector.

**⚠ CAUTION**

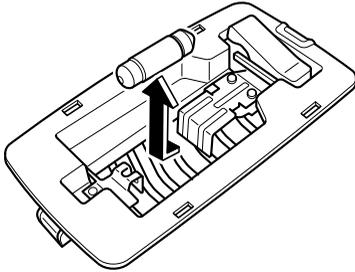
*When replacing the bulb always disconnect the connector first. Otherwise, electric and electronic devices could be shorted.*

3. Insert the flathead screwdriver into the gap between the lens and the lens unit, and then slide the screwdriver to detach the lens.



## Owner Maintenance

4. Disconnect the bulb by pulling it out.



5. Install the new bulb in the reverse order of the removal procedure.

## Fuses

Your vehicle's electrical system is protected by fuses.

If any lights, accessories, or controls do not work, inspect the appropriate circuit protector. If a fuse has blown, the inside element will be melted.

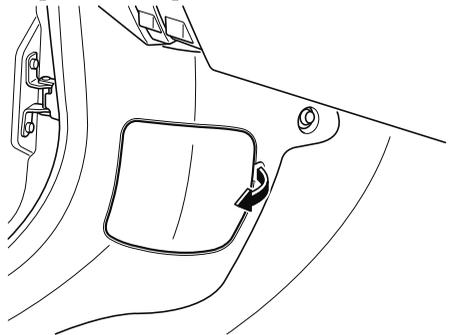
If the same fuse blows again, avoid using that system and consult an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.

### ▼ Fuse Replacement

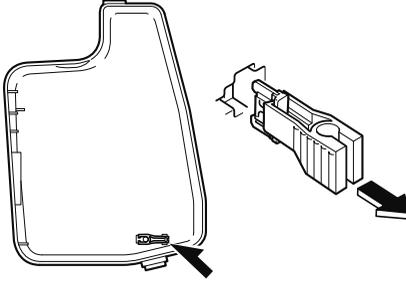
#### Replacing the fuses on the vehicle's left side

If the electrical system does not work, first inspect the fuses on the vehicle's left side.

1. Make sure the ignition is switched off, and other switches are off.
2. Open the fuse panel cover.



3. Pull the fuse straight out with the fuse puller provided on the fuse block located in the engine compartment.



4. Inspect the fuse and replace it if it is blown.



Normal



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. We recommend an Authorized Mazda Repairer. 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 OUTLET circuit.

**CAUTION**

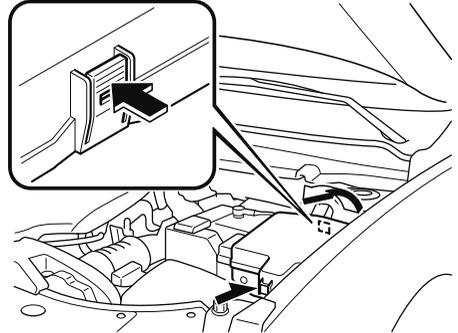
*Always replace a fuse with a genuine Mazda fuse or equivalent of the same rating. Otherwise you may damage the electric system.*

6. Reinstall the cover and make sure that it is securely installed.

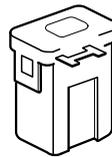
**Replacing the fuses under the hood**

If the headlights or other electrical components do not work and the fuses in the cabin are normal, inspect the fuse block under the hood. If a fuse is blown, it must be replaced. Follow these steps:

1. Make sure the ignition is switched off, and other switches are off.
2. Remove the fuse block cover.



3. If any fuse but the MAIN fuse is blown, replace it with a new one **of the same amperage rating**.



Normal



Blown

## Owner Maintenance

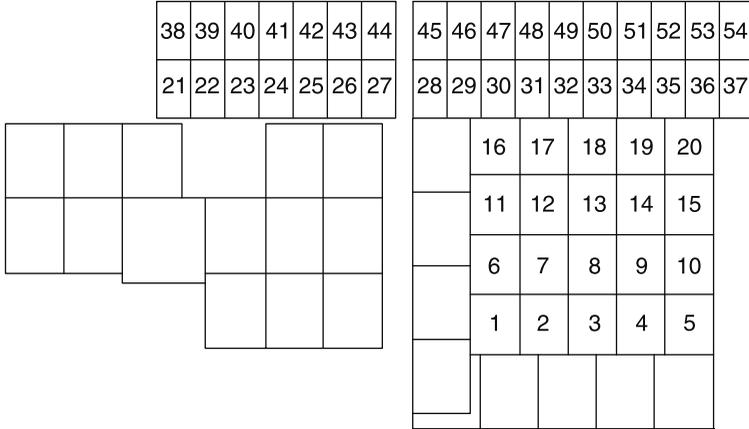
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### **WARNING**

***Do not replace the main fuse by yourself. Have an Authorized Mazda Repairer perform the replacement:***

*Replacing the fuse by yourself is dangerous because the MAIN fuse is a high current fuse. Incorrect replacement could cause an electrical shock or a short circuit resulting in a fire.*

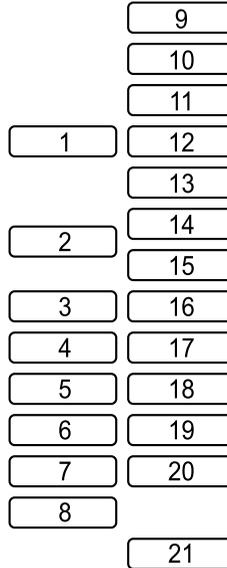
4. Reinstall the cover and make sure that it is securely installed.

**▼ Fuse Panel Description****Fuse block (Engine compartment)**

DESCRIPTION		FUSE RATING	PROTECTED COMPONENT
1	WIPER.DEI	20 A	Windshield wiper de-icer*
2	IG2	30 A	For protection of various circuits
3	INJECTOR	30 A	Engine control system
4	—	—	—
5	P.WINDOW1	30 A	—
6	—	—	—
7	—	—	—
8	EVVT	20 A	Engine control system
9	DEFOG	40 A	Rear window defogger
10	—	—	—
11	R.HEATER	40 A	Air conditioner
12	EPB L	20 A	Electric parking brake (EPB) (LH)
13	AUDIO	40 A	Audio system
14	EPB R	20 A	Electric parking brake (EPB) (RH)
15	ENG.MAIN	40 A	Engine control system
16	ABS/DSC M	50 A	ABS, Dynamic stability control system
17	CABIN.+B	50 A	For protection of various circuits
18	WIPER	20 A	Front window wiper and washer
19	HEATER	40 A	Air conditioner

# Owner Maintenance

DESCRIPTION		FUSE RATING	PROTECTED COMPONENT
20	—	—	—
21	ENGINE.IG1	7.5 A	Engine control system
22	C/U IG1	15 A	For protection of various circuits
23	H/L LOW L	15 A	Headlight low beam (LH)
24	H/L LOW R1	15 A	Headlight low beam (RH)*
25	ENGINE3	15 A	Engine control system
26	ENGINE2	15 A	Engine control system
27	ENGINE1	15 A	Engine control system
28	AT	15 A	Transaxle control system
29	H/CLEAN	20 A	Headlight washer*
30	A/C	7.5 A	Air conditioner
31	AT PUMP	15 A	—
32	STOP	10 A	Brake lights
33	R.WIPER	15 A	Rear window wiper
34	H/L HI	20 A	Headlight high beam
35	H/L LOW R2	15 A	Headlight low beam (RH)*
36	FOG	15 A	Fog lights*
37	ENG.+B	7.5 A	Engine control system
38	AUDIO2	7.5 A	Audio system*
39	INTERIOR	10 A	Overhead light
40	METER2	15 A	—
41	METER1	10 A	Instrument cluster
42	SRS1	7.5 A	Air bag
43	AUDIO4	10 A	Audio system*
44	AUDIO1	25 A	Audio system*
45	ABS/DSC S	30 A	ABS, Dynamic stability control system
46	—	—	—
47	ST.HEATER	15 A	Heated steering wheel*
48	TAIL	15 A	Parking lights
49	FUEL PUMP2	25 A	Fuel system
50	HAZARD	25 A	Hazard warning flashers, Turn signal lights, Taillights
51	DRL	15 A	Running lights
52	R.OUTLET2	15 A	Accessory sockets
53	HORN	15 A	Horn
54	ROOM	25 A	For protection of various circuits

**Fuse block (Left side)**

DESCRIPTION		FUSE RATING	PROTECTED COMPONENT
1	P.SEAT D	30 A	Power seat*
2	P.WINDOW3	30 A	Power windows
3	R.OUTLET3	15 A	Accessory sockets*
4	P.WINDOW2	25 A	Power windows
5	PLG	20 A	Power liftgate*
6	D.LOCK	25 A	Power door locks
7	SEAT WARM	20 A	Seat warmer*
8	SRS2/ESCL	15 A	Electronic steering lock
9	SUNROOF	10 A	Sunroof*
10	INTERIOR2	15 A	Audio system
11	ENG+BB	7.5 A	Engine control system
12	MIRROR	7.5 A	Power control mirror
13	AT IND	7.5 A	AT shift indicator
14	F.OUTLET	15 A	Accessory sockets
15	R.OUTLET1	15 A	Accessory sockets
16	—	—	—

# Owner Maintenance

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DESCRIPTION		FUSE RATING	PROTECTED COMPONENT
17	M.DEF	7.5 A	Mirror defogger*
18	R.SEAT.WARM	20 A	Seat warmer*
19	AUDIO3	15 A	Audio system
20	—	—	—
21	P.SEAT P	30 A	Power seat*

## Exterior Care

The paintwork on your Mazda represents the latest technical developments in composition and methods of application.

Environmental hazards, however, can harm the paint's protective properties, if proper care is not taken.

Here are some examples of possible damage, with tips on how to prevent them.

### Etching Caused by Acid Rain or Industrial Fallout

#### **Occurrence**

Industrial pollutants and vehicle emissions drift into the air and mix with rain or dew to form acids. These acids can settle on a vehicle's finish. As the water evaporates, the acid becomes concentrated and can damage the finish.

And the longer the acid remains on the surface, the greater the chance is for damage.

#### **Prevention**

It is necessary to wash and wax your vehicle to preserve its finish according to the instructions in this section. These steps should be taken immediately after you suspect that acid rain has settled on your vehicle's finish.

### Damage Caused by Bird Dropping, Insects, or Tree Sap

#### **Occurrence**

Bird droppings contain acids. If these are not removed they can eat away the clear and color base coat of the vehicle's paintwork.

When insects stick to the paint surface and decompose, corrosive compounds form. These can erode the clear and color base coat of the vehicle's paintwork if they are not removed.

Tree sap will harden and adhere permanently to the paint finish. If you scratch the sap off while it is hard, some vehicle paint could come off with it.

#### **Prevention**

It is necessary to have your Mazda washed and waxed to preserve its finish according to the instructions in this section. This should be done as soon as possible.

Bird droppings can be removed with a soft sponge and water. If you are traveling and these are not available, a moistened tissue may also take care of the problem. The cleaned area should be waxed according to the instructions in this section.

Insects and tree sap are best removed with a soft sponge and water or a commercially available chemical cleaner.

Another method is to cover the affected area with dampened newspaper for one to two hours. After removing the newspaper, rinse off the loosened debris with water.

## Appearance Care

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### Water Marks

#### Occurrence

Rain, fog, dew, and even tap water can contain harmful minerals such as salt and lime. If moisture containing these minerals settles on the vehicle and evaporates, the minerals will concentrate and harden to form white rings. The rings can damage your vehicle's finish.

#### Prevention

It is necessary to wash and wax your vehicle to preserve its finish according to the instructions in this section. These steps should be taken immediately after you find water marks on your vehicle's finish.

### Paint Chipping

#### Occurrence

Paint chipping occurs when gravel thrown in the air by another vehicle's tires hits your vehicle.

#### How to avoid paint chipping

Keeping a safe distance between you and the vehicle ahead reduces the chances of having your paint chipped by flying gravel.

#### NOTE

- *The paint chipping zone varies with the speed of the vehicle. For example, when traveling at 90 km/h (56 mph), the paint chipping zone is 50 m (164 ft).*
- *In low temperatures a vehicle's finish hardens. This increases the chance of paint chipping.*

- *Chipped paint can lead to rust forming on your Mazda. Before this happens, repair the damage by using Mazda touch-up paint according to the instructions in this section. Failure to repair the affected area could lead to serious rusting and expensive repairs.*

Follow **all** label and container directions when using a chemical cleaner or polish. Read all warnings and cautions.

### ▼ Maintaining the Finish

#### Washing



- *When the wiper lever is in the **AUTO** position and the ignition is switched ON, the wipers may move automatically in the following cases:*

- *If the windshield above the rain sensor is touched or wiped with a cloth.*
- *If the windshield is struck with a hand or other object from either outside or inside the vehicle.*

*Keep hands and scrapers clear of the windshield when the wiper lever is in the **AUTO** position and the ignition is switched ON as fingers could be pinched or the wipers and wiper blades damaged when the wipers activate automatically. If you are going to clean the windshield, be sure the wipers are turned off completely (when it is most likely that the engine is left running) this is particularly important when clearing ice and snow.*

## Appearance Care

- *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 roof. Otherwise, you could dent the vehicle.*

To help protect the finish from rust and deterioration, wash your Mazda thoroughly and frequently, at least once a month, with lukewarm or cold water.

If the vehicle is washed improperly, the paint surface could be scratched. Here are some examples of how scratching could occur.

Scratches occur on the paint surface when:

- The vehicle is washed without first rinsing off dirt and other foreign matter.
- The vehicle is washed with a rough, dry, or dirty cloth.
- The vehicle is washed at a car wash that uses brushes that are dirty or too stiff.
- Cleansers or wax containing abrasives are used.

### NOTE

- *Mazda is not responsible for scratches caused by automatic car washes or improper washing.*
- *Scratches are more noticeable on vehicles with darker paint finishes.*

To minimize scratches on the vehicle's paint finish:

- Rinse off any dirt or other foreign matter using lukewarm or cold water before washing.

- Use plenty of lukewarm or cold water and a soft cloth when washing the vehicle. Do not use a nylon cloth.
- Rub gently when washing or drying the vehicle.
- Take your vehicle only to a car wash that keeps its brushes well maintained.
- Do not use abrasive cleansers or wax that contain abrasives.



- *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.*

Pay special attention to removing salt, dirt, mud, and other foreign material from the underside of the fenders, and make sure the drain holes in the lower edges of the doors and rocker panels are clean.

Insects, tar, tree sap, bird droppings, industrial fallout, and similar deposits can damage the finish if not removed immediately. When prompt washing with plain water is ineffective, use a mild soap made for use on vehicles.

Thoroughly rinse off all soap with lukewarm or cold water. Do not allow soap to dry on the finish.

After washing the vehicle, dry it with a clean chamois to prevent water spots from forming.

## Appearance Care

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***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.*

### **When using an automatic car wash**

- Retract the door mirrors.
- The automatic car wash brushes could reduce the paint lustre or hasten paint deterioration.

### **When using a high water pressure car wash**

High water temperature and high water pressure car washers are available depending on the type of car wash machine. If the car washer nozzle is put too close to the vehicle, the force of the spray could damage or deform the molding, affect the sealability of parts, and allow water to penetrate the interior. Keep a sufficient space (30 cm (12 in) or more) between the nozzle and the vehicle. In addition, do not spend too much time spraying the same area of the vehicle, and be very careful when spraying between gaps in doors and around windows.

### **Waxing**

Your vehicle needs to be waxed when water no longer beads on the finish.

Always wash and dry the vehicle before waxing it. In addition to the vehicle body, wax the metal trim to maintain its luster.

1. Use wax which contains no abrasives. Waxes containing abrasive will remove paint and could damage bright metal parts.
2. Use a good grade of natural wax for metallic, mica, and solid colors.
3. When waxing, coat evenly with the sponge supplied or a soft cloth.
4. Wipe off the wax with a soft cloth.

### ***NOTE***

*A spot remover to remove oil, tar, and similar materials will usually also take off the wax. Rewax these areas even if the rest of the vehicle does not need it.*

### **▼ Paint Damage Touch-up**

Repair damage to the finish caused by stone chipping, damage during parking etc., by using Mazda touch-up paint before rust begins to form. First, remove the dirt and grease with a clean soft cloth.

If rust has already begun to form:

1. Remove rust completely with sandpaper.
  2. Wipe with a clean soft cloth.
  3. Apply rust preventive primer to the area.
  4. After drying it completely, apply a suitable top coat material to the area.
- Of course there will be no problem if you assign the work to an expert repairer, we recommend an Authorized Mazda Repairer.

## ▼ Cavity Protection

Cavities are treated for protection at the factory, but additional protective treatment after the vehicle has been put into use will extend the life of the body.

We recommend that you consult an expert repairer, we recommend an Authorized Mazda Repairer concerning this additional precaution.

## ▼ Bright-Metal Maintenance

- Use tar remover to remove road tar and insects. Never do this with a knife or similar tool.
- To prevent corrosion on bright-metal surfaces, apply wax or chrome preservative and rub it to a high luster.
- During cold weather or in coastal areas, cover bright-metal parts with a coating of wax or preservative heavier than usual. It would also help to coat them with noncorrosive petroleum jelly or some other protective compound.



*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 result in damage to the protective coating and cause discoloration or paint deterioration.*

## ▼ Undercoating

This special coating is applied to the critical parts of the underside to protect vehicles from damage caused by chemicals or stones. This coating is liable to be damaged with time. Check this coating periodically.

Should repairs be necessary, consult an expert repairer, we recommend an Authorized Mazda Repairer. They are well informed on how repairs should be made.

## ▼ Aluminum Wheel Maintenance

A protective coating is provided over the aluminum wheels. Special care is needed to protect this coating.



*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.*

## NOTE

- *Do not use a wire brush or any abrasive cleaner, polishing compound, or solvent on aluminum wheels. They may damage the coating.*
- *Always use a sponge or soft cloth to clean the wheels.*  
*Rinse the wheels thoroughly with lukewarm or cold water. Also, be sure to clean the wheels after driving on dusty or salted roads to help prevent corrosion.*
- *Avoid washing your vehicle in an automatic car wash that uses high-speed or hard brushes.*

## Appearance Care

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### ▼ Plastic Part Maintenance

- When cleaning the plastic lenses of the lights, do not use gasoline, kerosene, rectified spirit, paint, thinner, highly acidic detergents, or strongly alkaline detergents. Otherwise, these chemical agents can discolor or damage the surfaces resulting in a significant loss in functionality. If plastic parts become inadvertently exposed to any of these chemical agents, flush with water immediately.
- If plastic parts such as the bumpers become inadvertently exposed to chemical agents or fluids such as gasoline, oil, engine coolant, or battery fluid, it could cause discoloration, staining, or paint peeling. Wipe off any such chemical agents or fluids using a soft cloth immediately.
- High water temperature and high water pressure car washers are available depending on the type of high pressure car washer device. If the car washer nozzle is put too close to the vehicle or aimed at one area for an extended period of time, it could deform plastic parts or damage the paint.
- Do not use wax containing compounds (polish). Otherwise, it could result in paint damage.
- In addition, do not use an electrical or air tool to apply wax. Otherwise, the frictional heat generated could result in deformation of plastic parts or paint damage.

### Interior Care



**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.*

#### **NOTE**

- *Do not wipe the interior using alcohol, chlorine bleach, or organic solvents such as thinner, benzene, and gasoline. Otherwise, it may cause discoloration or stains.*
- *Rubbing hard with a stiff brush or cloth may cause damage.*

If the vehicle interior becomes soiled by any of the following, wipe it off immediately using a soft cloth. Leaving it uncleaned could cause discoloration, stains, cracks, or peeling of the coating, and it will make it hard to wipe off later.

- Beverage or fragrance
- Grease or oil
- Soiling

## ▼ Seat Belt Maintenance

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.
3. Before retracting seat belts which have been pulled out for cleaning, dry them off thoroughly and make sure there is no remaining moisture on them.



***If a seat belt appears frayed or has abrasions, have it replaced by an Authorized Mazda Repairer:***

*If a seat belts is used under such a condition, it cannot function at its full capacity which could result in serious injury or death.*

***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.*

### **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.*

## ▼ Vinyl Upholstery Maintenance

Remove dust and dirt from the vinyl upholstery using a brush or vacuum. Remove soiling from vinyl upholstery using a leather and vinyl upholstery cleaner.

## ▼ Upholstery Maintenance

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.

## Appearance Care

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### ▼ 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
  - 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.

### ▼ Plastic Part Maintenance



*Do not use polishing agents. Depending on the product ingredients, they could cause discoloration, stains, cracks or peeling of the coating.*

### ▼ Instrument Panel Top Maintenance

1. Wipe the soiled area 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.

### ▼ Active Driving Display Maintenance\*

The dust-proof sheet has a coating. When cleaning, do not use a hard or rough-surface cloth, or cleaning detergent. In addition, if a chemical solvent gets on the active driving display, wipe it off immediately. The dust-proof sheet could be damaged and the surface coating could be scratched. Use a fine, soft cloth such as those used for cleaning eyeglasses.

#### **NOTE**

*Use of compressed air when cleaning the dust-proof sheet is recommended.*

### ▼ Panel Maintenance

If a panel becomes soiled, wipe it off with a soft cloth soaked in clean water and thoroughly wrung out.

If some areas require further cleaning, use the following procedure:

1. Wipe the soiled area 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.

#### **NOTE**

*Be particularly careful when cleaning shiny surface panels and metallic parts such as plating as they can be scratched easily.*

### ▼ Cleaning the Window Interiors

If the windows become covered with an oily, greasy, or waxy film, clean them with glass cleaner. Follow the directions on the container.



- *Do not scrape or scratch the inside of the window glass. It could damage the thermal filaments and the antenna lines.*
- *When washing the inside of the window glass, use a soft cloth dampened in lukewarm water, gently wiping the thermal filaments and the antenna lines. Use of glass cleaning products could damage the thermal filaments and the antenna lines.*

# MEMO

# 7

## If Trouble Arises

Helpful information on what to do if a problem arises with the vehicle.

<b>Mazda ERA-GLONASS.....</b>	<b>7-2</b>	<b>Emergency Towing.....</b>	<b>7-34</b>
Mazda ERA-GLONASS* .....	7-2	Towing Description.....	7-34
Indicator Light/Beep Sound.....	7-10	Towing Hooks.....	7-36
Test Mode.....	7-11	<b>Warning/Indicator Lights and</b>	
<b>Parking in an Emergency.....</b>	<b>7-14</b>	<b>Warning Sounds.....</b>	<b>7-38</b>
Parking in an Emergency.....	7-14	If a Warning Light Turns On or	
<b>Flat Tire.....</b>	<b>7-15</b>	Flashes.....	7-38
Spare Tire and Tool Storage.....	7-15	Message Indicated on	
Changing a Flat Tire.....	7-20	Display.....	7-52
<b>Battery Runs Out.....</b>	<b>7-28</b>	Message Indicated in Multi-	
Jump-Starting.....	7-28	information Display* .....	7-54
<b>Emergency Starting.....</b>	<b>7-31</b>	Warning Sound is Activated.....	7-55
Starting a Flooded Engine.....	7-31	<b>When Liftgate Cannot be</b>	
Push-Starting.....	7-31	<b>Opened.....</b>	<b>7-61</b>
<b>Overheating.....</b>	<b>7-32</b>	When Liftgate Cannot be	
Overheating.....	7-32	Opened.....	7-61
		<b>Active Driving Display Does Not</b>	
		<b>Operate.....</b>	<b>7-62</b>
		If the Active Driving Display Does	
		Not Operate.....	7-62

# Mazda ERA-GLONASS

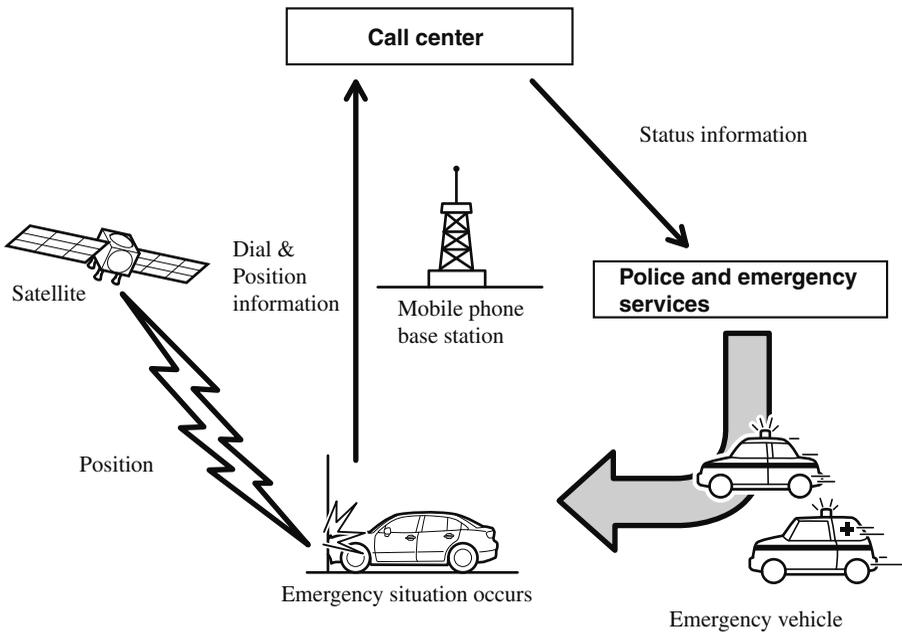
## Mazda ERA-GLONASS\*

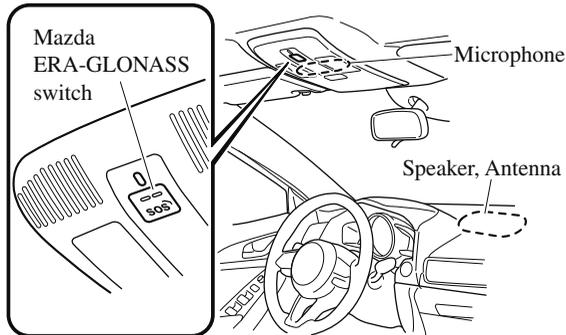
When an emergency situation such as an accident or sudden illness occurs, the Mazda ERA-GLONASS dials the call center automatically or the user can make a call to the call center manually to enable a voice call.

The system operates automatically when the vehicle receives an impact of a certain level or more in a collision, or it can be operated manually using the Mazda ERA-GLONASS switch if an emergency situation arises such as sudden illness.

The call center operator confirms the status via the voice call, confirms the vehicle's position information using the GPS/GLONASS\*<sup>1</sup>, and calls the police or emergency services.

\*<sup>1</sup> GPS/GLONASS, short for “Global Positioning System/Global Navigation Satellite System”, is a system that obtains the vehicle's current location by receiving radio waves emitted from the GPS/GLONASS (operated by the Russian Federation) satellites to the ground.

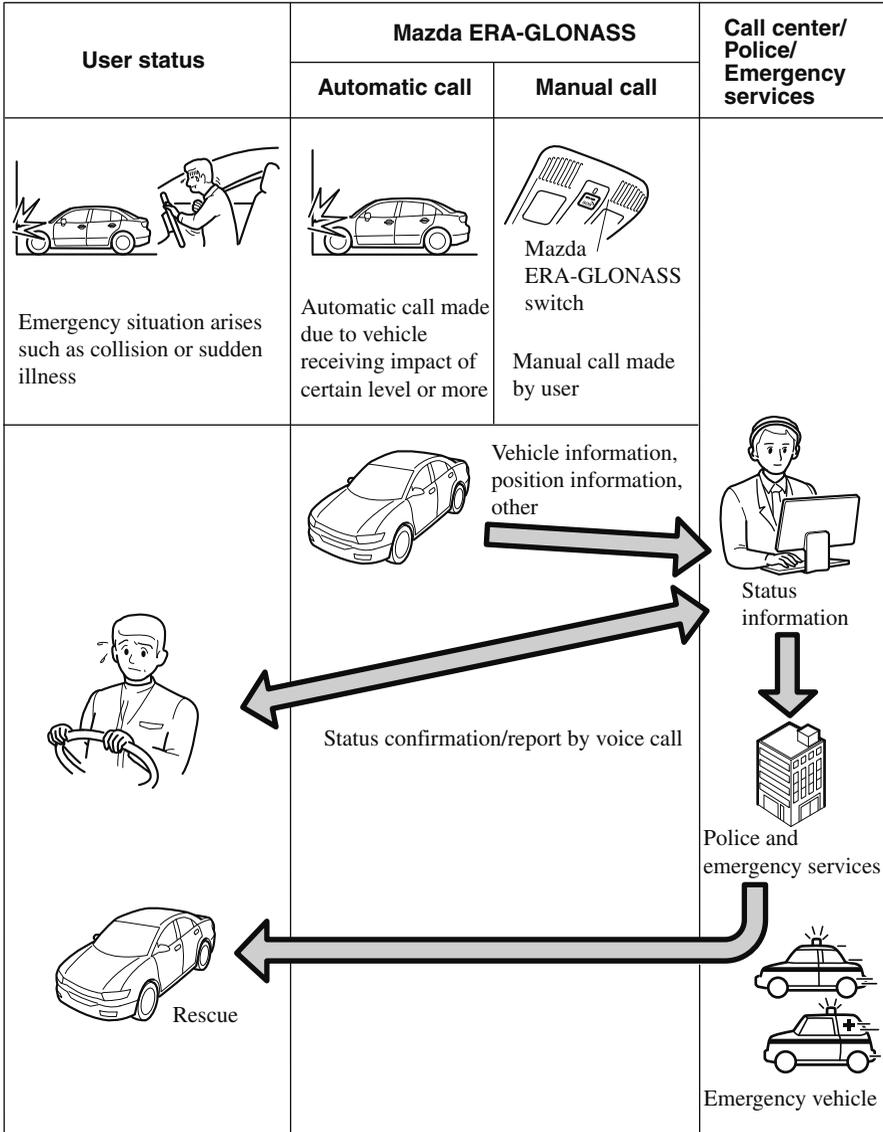


**▼ Component Parts of Mazda ERA-GLONASS****⚠ WARNING**

***When using the Mazda ERA-GLONASS, keep medical devices such as an implanted heart pacemaker or defibrillator about 22 cm (8.7 in) or more away from the vehicle's antenna: Otherwise, the operation of the medical device may be affected by radio waves.***

# Mazda ERA-GLONASS

## ▼ Flow of Mazda ERA-GLONASS




**CAUTION**

- Do not disassemble the Mazda ERA-GLONASS. Otherwise, it could become damaged and may not function in an emergency.
- The Mazda ERA-GLONASS has a special built-in battery so that it can operate even if the power supply from the vehicle is cut such as in an accident. Heed the following cautions. If the Mazda ERA-GLONASS is not used correctly it may not operate.
  - The built-in battery is not a rechargeable type battery. Do not attempt to recharge the battery.
  - If the built-in battery power is low due to natural discharge and the system determines that there is a problem, the Mazda ERA-GLONASS cannot be used. If the system determines that there is a problem, the indicator light (red) in the Mazda ERA-GLONASS switch turns on to notify the driver. Have the vehicle inspected at an Authorized Mazda Repairer. Refer to Indicator light/Beep sound on page 7-10.

**NOTE**

- The Mazda ERA-GLONASS can be used when the ignition is switched ON.
- There are two ways the Mazda ERA-GLONASS makes calls; automatically or manually.
- The Mazda ERA-GLONASS may not make a connection under the following conditions or depending on the use environment. If the Mazda ERA-GLONASS does not connect, make a call from another telephone such as the nearest available public telephone.
  - The vehicle is outside of a mobile phone network area
  - The vehicle is in a weak radio wave transmission environment (such as inside tunnels, underground parking areas, shadow of buildings, and mountain areas)
  - The vehicle does not receive an impact of a certain level or more even if an accident has occurred.
  - An extremely serious collision occurs resulting in damage to the Mazda ERA-GLONASS.
  - The position information cannot be obtained when signals cannot be received from the GPS and GLONASS satellites, however, voice calls are possible.
- When a voice call is made by the Mazda ERA-GLONASS, the audio system is muted so that it does not interfere with the call.
- It may take some time for the call center to respond after the Mazda ERA-GLONASS first starts operating.
- If you are unable to respond to an operator's questions after the voice call begins, the operator may proceed with emergency procedures at their own discretion.
- Even if it is difficult for you to hear the operator's voice, your voice may be heard by the call center. Continue explaining your circumstances.

## Mazda ERA-GLONASS

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- If the Mazda ERA-GLONASS operates while you are making a call with your mobile phone using Bluetooth® Hands-Free, the call may be interrupted.
- It may not be possible to receive a call using the Bluetooth® Hands-Free normally while the Mazda ERA-GLONASS is operating.
- A voice call with an operator may not be possible if the speaker or microphone is broken. If the speaker or microphone is broken, always have the vehicle inspected at an Authorized Mazda Repairer.
- The Mazda ERA-GLONASS may not operate normally outside of the following temperature range: If the Mazda ERA-GLONASS does not operate normally, make a call from another telephone such as the nearest available public telephone.  
Operation temperature range: -40 °C (-40 °F) to 85 °C (185 °F)
- There may be a difference between the position information sent to the call center and the actual position of the vehicle where the call was made. Indicate landmarks around the position of the vehicle where the call is being made to the operator during the voice call.

### Automatic emergency calls

If the vehicle receives an impact of a certain level or more in a collision, vehicle information is automatically sent to the call center.

When the transmission of the vehicle information is completed or about 20 seconds have elapsed since the transmission began, the voice call with the call center starts.



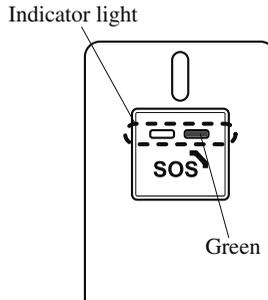
If an automatic call is made, the built-in battery power may be depleted and emergency calls may not be possible in the event that an emergency occurs again. After an automatic emergency call has been made, have the built-in battery replaced by an Authorized Mazda Repairer.

### **NOTE**

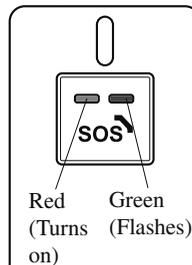
- Automatic emergency calls cannot be canceled by the user.
  - The call center will end an emergency call. The user cannot end the emergency call.
  - If the vehicle receives an impact of a certain level or more in a collision, an automatic call is made even if the air bags do not deploy.
  - If a call is disconnected or a call cannot be made to the call center correctly, an automatic call is made again to the call center. Redialing cannot be canceled.
1. If the vehicle receives an impact of a certain level or more in a collision, the Mazda ERA-GLONASS begins operating automatically.

# Mazda ERA-GLONASS

- The indicator light (green) on the Mazda ERA-GLONASS switch flashes slowly (0.5 second intervals) and the call is made to the call center.



- When the connection is established with the call center, the indicator light (green) flashes somewhat quickly (0.3 second intervals) and the beep sounds simultaneously, and the transmission of the vehicle information begins.
- When the transmission of the vehicle information is completed or about 20 seconds have elapsed since the transmission began, the beep sounds and the voice call with the call center starts.
- If the connection fails, the indicator light (red) turns on and the indicator light (green) flashes quickly (0.15 second intervals) and the beep sounds simultaneously. In this case, make a manual connection using the Mazda ERA-GLONASS switch because an automatic connection is not possible.



## Manual emergency calls

With the ignition switched ON, long-press the Mazda ERA-GLONASS switch and after releasing your finger from the switch, the vehicle information is automatically transmitted to the call center.

When the transmission of the vehicle information is completed or about 20 seconds have elapsed since the transmission began, the voice call with the call center starts.

### **NOTE**

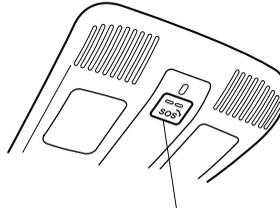
- Only make calls manually for conditions requiring urgent treatment such as illness or serious injury.

# Mazda ERA-GLONASS

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- When making emergency calls manually, stop the vehicle in a safe location before making the call.
- The call center will end an emergency call. The user cannot end the emergency call.
- If a call is disconnected or a call cannot be made to the call center correctly, an automatic call is made again to the call center. To cancel the redialing, refer to Manual emergency call cancellation.

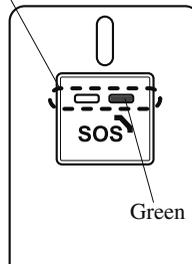
1. Make sure that the ignition is switched ON.
2. Long-press the Mazda ERA-GLONASS switch on the overhead console and then release your finger from the switch.



Mazda ERA-GLONASS switch

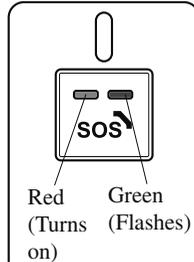
3. The indicator light (green) on the Mazda ERA-GLONASS switch flashes slowly (0.5 second intervals) and the call is made to the call center.

Indicator light



4. When the connection is established with the call center, the indicator light (green) flashes somewhat quickly (0.3 second intervals) and the beep sounds simultaneously, and the transmission of the vehicle information begins.
5. When the transmission of the vehicle information is completed or about 20 seconds have elapsed since the transmission began, the beep sounds and the voice call with the call center starts.
6. If the connection fails, the indicator light (red) turns on and the indicator light (green) flashes quickly (0.15 second intervals), and the beep sounds simultaneously.

Make a manual emergency call again.



**NOTE**

*If a call to the call center does not connect even though the indicator light shows a call is possible, make a call to the police or other authority by means other than the Mazda ERA-GLONASS.*

**Manual emergency call cancellation**

A manual emergency call can be canceled even after the Mazda ERA-GLONASS switch has been pressed by pressing the switch again, as long as the call with the call center has not begun. If the call cannot be canceled and the call with the call center has begun, tell the operator that the call is mistaken.

# Mazda ERA-GLO-NASS

## Indicator Light/Beep Sound

The indicator light turns on/flashes and beep sounds are activated to notify the driver of the system operation status or if there is a problem with the system.

Status	Indicator light			Beep sound status	On/flashing conditions
	Green	Red	Flash interval		
Diagnosis	Turns on	Turns on	—	—	When the ignition is switched ON, it turns on and then turns off after a few seconds.  <b>NOTE</b> <i>A manual emergency call is not possible during diagnosis.</i>
Normal	Turns off	Turns off	—	—	The system is operating normally.
Malfunction	Turns off	Turns on	—	3 beeps (Slow intermittent sound)	<ul style="list-style-type: none"> <li>·A system malfunction is detected.</li> <li>·The remaining power of the built-in battery is low.</li> </ul> <div style="border: 1px solid black; padding: 5px; display: inline-block;">  <b>CAUTION</b> </div> <p><i>If the indicator light (red) remains on constantly, the system will not operate normally. Have the vehicle inspected at an Authorized Mazda Repairer as soon as possible.</i></p>
Call being made with call center	Flashes	Turns off	Slow (0.5 second intervals)	The beep does not sound, but the ringback tone can be heard.	An emergency call is being made by the Mazda ERA-GLO-NASS.
Vehicle information is being transmitted	Flashes	Turns off	Somewhat quick (0.3 second intervals)	Continuous intermittent sound	Vehicle information is being transmitted to the call center.
Start of voice call	Turns on	Turns off	—	1 beep	During a voice call with the call center.
During voice call	Turns on	Turns off	—	—	
Connection failure	Flashes	Turns on	Quick (0.15 second intervals)	3 beeps (Fast intermittent sound)	When an emergency call fails to connect.

## Test Mode

The test mode function makes sure that the Mazda ERA-GLONASS can operate normally. Have your vehicle tested at an Authorized Mazda Repairer when performing the test mode.

### **Method to start test mode**

Switch the ignition ON while the parking brake is applied, and wait two minutes with the vehicle stopped.

# Mazda ERA-GLONASS

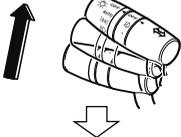
After that, perform the following procedure.

Turn on the hazard warning lights.



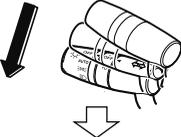
**Within five seconds**

Move the signal lever up to right turn



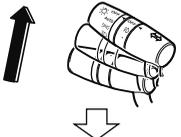
**Within one second**

Return the signal lever to off



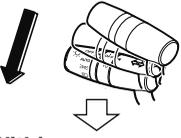
**Within one second**

Move the signal lever up to right turn



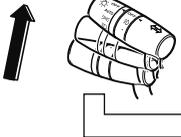
**Within one second**

Return the signal lever to off



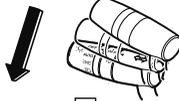
**Within one second**

Move the signal lever up to right turn



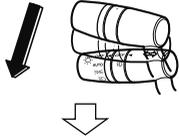
**Within one second**

Return the signal lever to off



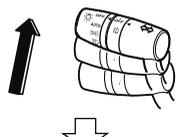
**Within one second**

Move the signal lever down to left turn



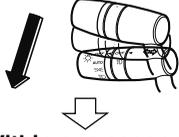
**Within one second**

Return the signal lever to off



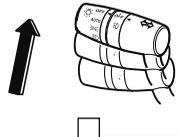
**Within one second**

Move the signal lever down to left turn



**Within one second**

Return the signal lever to off



**Within five seconds**

Turn off the hazard warning lights.

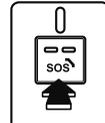


Both red and green Mazda ERA-GLONASS switch indicator lights turn on.

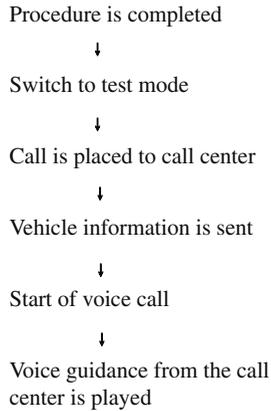


**Within five second**

Press the Mazda ERA-GLONASS switch for one second or longer and release it.



After the procedure is completed, the test mode is performed in the following order automatically.

**NOTE**

*Communication with the call center may fail if the reception is poor. Perform the test mode in a location with good reception.*

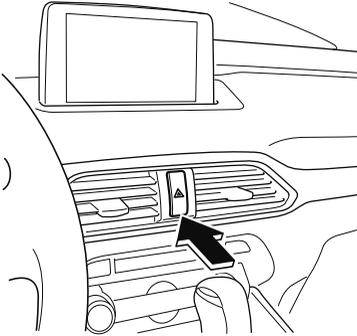
The test mode finishes automatically.

## Parking in an Emergency

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### Parking in an Emergency

The hazard warning lights should always be used when you stop on or near a roadway in an emergency.



The hazard warning lights warn other drivers that your vehicle is a traffic hazard and that they must take extreme caution when near it.



Depress the hazard warning flasher and all the turn signals will flash. The hazard warning indicator lights in the instrument cluster flash simultaneously.

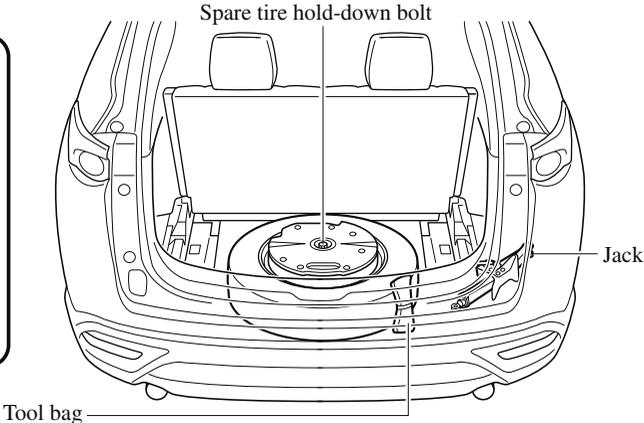
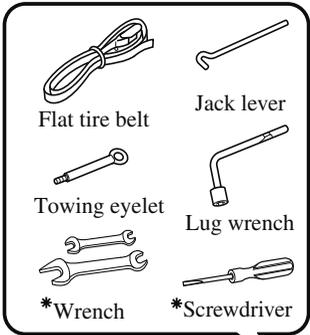
#### **NOTE**

- *The turn signals do not work when the hazard warning lights are on.*
- *Check local regulations about the use of hazard warning lights while the vehicle is being towed to verify that it is not in violation of the law.*

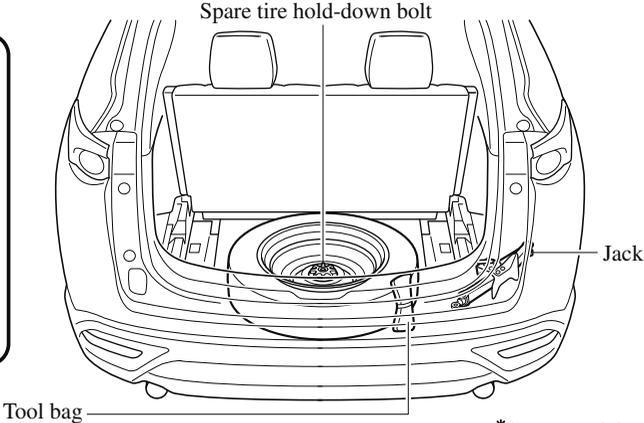
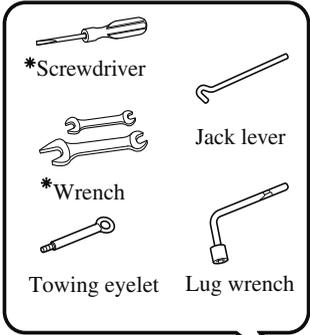
## Spare Tire and Tool Storage

Spare tire and tools are stored in the locations illustrated in the diagram.

### With sub-woofer



### Without sub-woofer



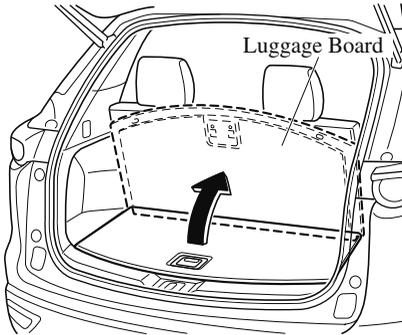
\*Some models.

# Flat Tire

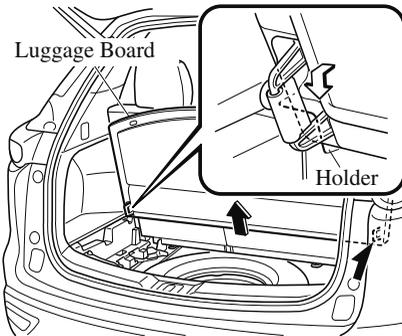
## ▼ Jack

### To remove the jack

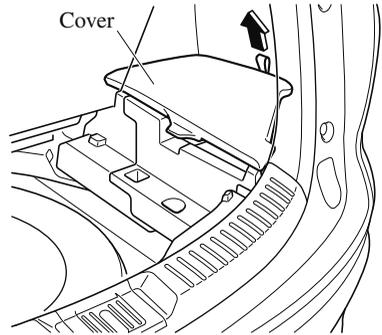
1. Set the third-row seatbacks to their on-road positions.
2. Raise the luggage board.



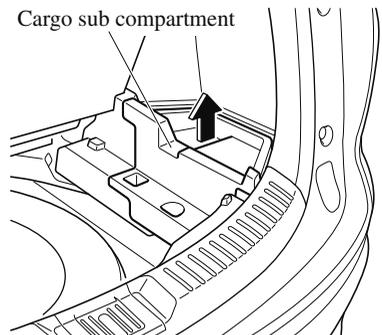
3. Raise the luggage board a little while pulling it towards you, and then insert the bottom edge into the holders.



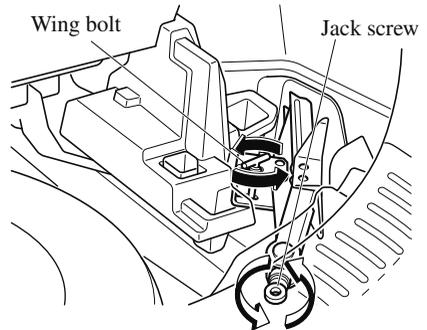
4. Remove the cover on the right side.



5. Remove the cargo sub compartment.

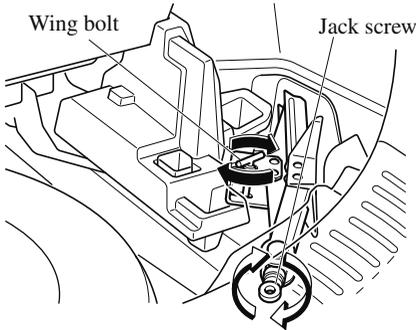


6. Turn the wing bolt and jack screw counterclockwise.



**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. Tighten the jack screw clockwise.



3. Turn the wing bolt completely to secure the jack.

**NOTE**

*If the jack is not completely secured, it could rattle while driving. Make sure the jack screw is sufficiently tightened.*

**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.

**▼ Spare Tire**

Your Mazda has a temporary spare tire. The temporary spare tire is lighter and smaller than a conventional tire, and is designed only for emergency use and should be used only for VERY short periods. Temporary spare tires should NEVER be used for long drives or extended periods.

**⚠ WARNING*****Do not install the temporary spare tire on the front wheels (driving wheels):***

*Driving with the temporary spare tire on one of the front driving wheels is dangerous. Handling will be affected. You could lose control of the vehicle, especially on ice or snow bound roads, and have an accident. Move a regular tire to the front wheel and install the temporary spare tire to the rear.*

**⚠ CAUTION**

- *When using the temporary spare tire, driving stability may decrease compared to when using only the conventional tire. Drive carefully.*
- *To avoid damage to the temporary spare tire or to the vehicle, observe the following precautions:*
  - *Do not exceed 80 km/h (50 mph).*
  - *Avoid driving over obstacles. Also, do not drive through an automatic car wash. This tire's diameter is smaller than a conventional tire, so the ground clearance is reduced.*

# Flat Tire

- Do not use a tire chain on this tire because it will not fit properly.
- Do not use your temporary spare tire on any other vehicle, it has been designed only for your Mazda.
- Use only one temporary spare tire on your vehicle at the same time.

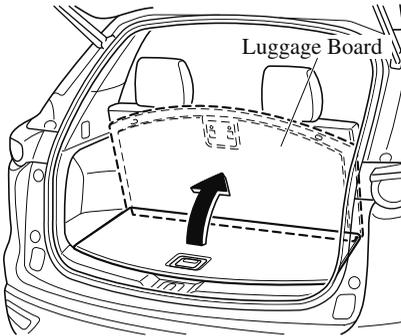
## To remove the spare tire

### **NOTE**

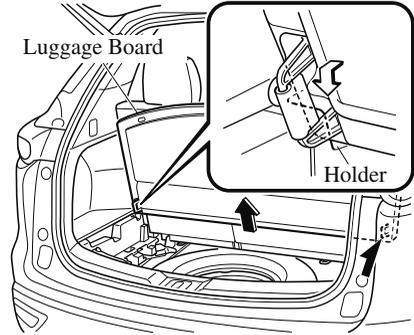
#### **(Vehicles with sub-woofer)**

Because the sub-woofer is not operational when the sub-woofer connector is disconnected, no sound is output from the sub-woofer.

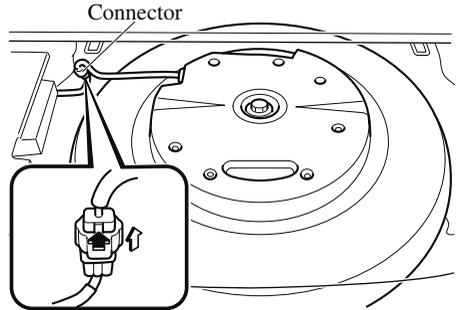
1. Set the third-row seatbacks to their on-road positions.
2. Raise the luggage board.



3. Raise the luggage board a little while pulling it towards you, and then insert the bottom edge into the holders.

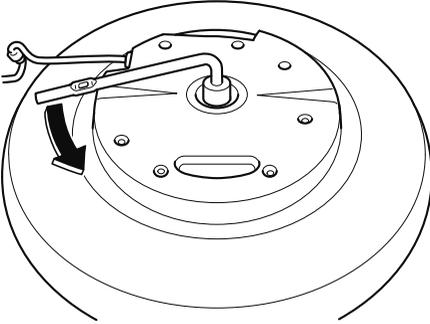


4. Remove the tool bag.
5. **(Vehicles with sub-woofer)**  
Disconnect the sub-woofer connector.

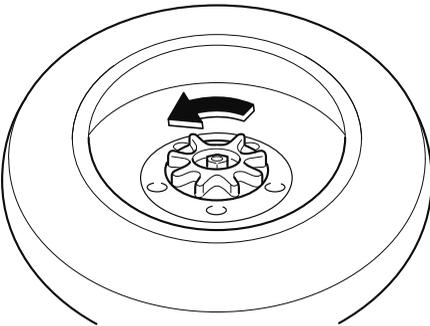


**6. (Vehicles with sub-woofer)**

Turn the hold-down bolt counterclockwise and remove the sub-woofer and the spare tire.

**(Vehicles without sub-woofer)**

Turn the hold-down bolt counterclockwise and remove the spare tire.

**To secure the spare tire**

Store the spare tire in the reverse order of removal. After storing, verify that the spare tire is stored securely.

** CAUTION****(Vehicles with sub-woofer)**

- *Secure the sub-woofer in its correct position. If the sub-woofer is not installed to the correct position, it may move while the vehicle is driven which may damage the sub-woofer or the wiring harness.*
- *Store the tool bag on the right side of the vehicle. If the tool bag is stored on the left side of the vehicle, it may move while the vehicle is driven which may damage the wiring harness.*

*Refer to Spare Tire and Tool Storage on page 7-15.*

# Flat Tire

## Changing a Flat Tire

### NOTE

*If the following occurs while driving, it could indicate a flat tire.*

- *Steering becomes difficult.*
- *The vehicle begins to vibrate excessively.*
- *The vehicle pulls in one direction.*

If you have a flat tire, drive slowly to a level spot that is well off the road and out of the way of traffic to change the tire. Stopping in traffic or on the shoulder of a busy road is dangerous.

### WARNING

#### **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.*

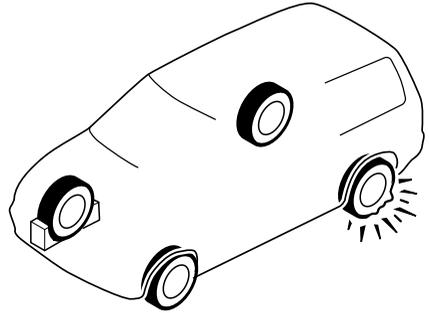
#### **Never allow anyone inside a vehicle supported by a jack:**

*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. Shift into Park (P) and turn off the engine.
3. Turn on the hazard warning flasher.
4. Have everyone get out of the vehicle and away from the vehicle and traffic.
5. Remove the jack, tool, and spare tire (page 7-15).
6. Block the wheel diagonally opposite the flat tire. 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.*

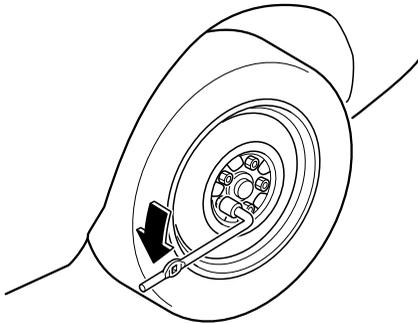
## ▼ Removing a Flat Tire

**⚠ WARNING**

**When jacking-up a vehicle, always shift the shift lever to 1st or R (manual transaxle vehicle) or shift the selector lever to P (automatic transaxle vehicle), apply the parking brake, and place wheel blocks in the position diagonally opposed to the jack:**

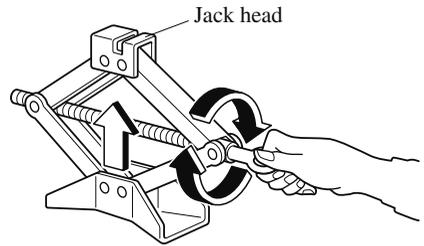
*Changing a flat tire without using wheel blocks is dangerous because the vehicle may move and fall off the jack even with the shift lever in 1st or R, or the select lever is in P, which could result in an accident.*

1. 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.



2. Place the jack on the ground.

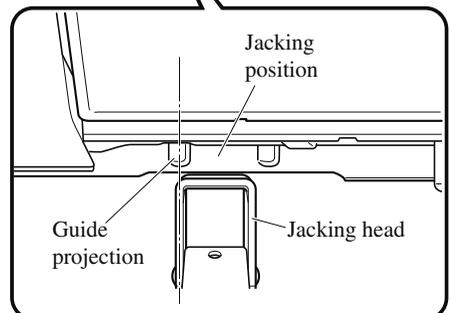
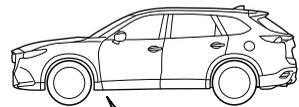
3. Turn the jack screw in the direction shown in the figure and adjust the jack head so that it is close to the jack-up position.



4. Set the jack to the designated jack-up position closest to the tire being removed.

**(Jacking-up the vehicle front)**

Set the groove on the top of the jack head at a right angle into the center of the designated jack-up position guide projection closest to the vehicle front.



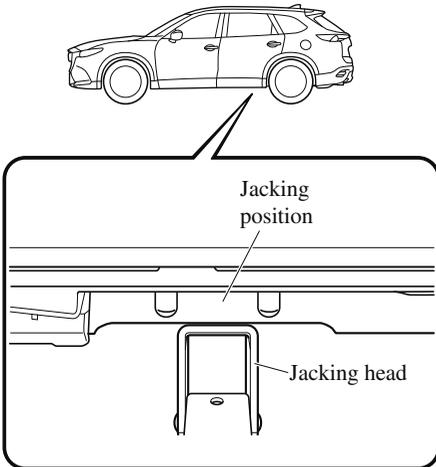
# Flat Tire

## NOTE

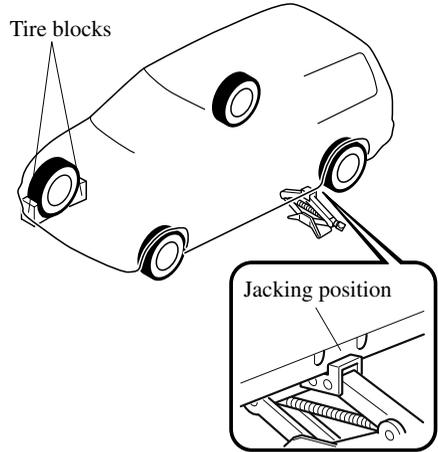
Always set the jack into the designated jack-up position shown in the figure correctly.

### (Jacking-up the vehicle rear)

Set the groove on the top of the jack head at a right angle between the designated jack-up position guide projections.



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.



## **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.

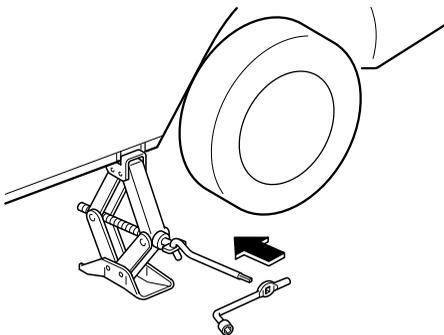
**Use only the jack provided with your Mazda:**

Using a jack that is not designed for your Mazda is dangerous. The vehicle could slip off the jack and seriously injure someone.

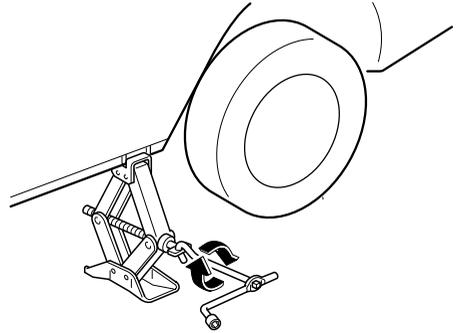
**Never place objects under the jack:**

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.

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 spare tire can be installed. Before removing the lug nuts, make sure your Mazda is firmly in position and that it cannot slip or move.



### **! 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:**

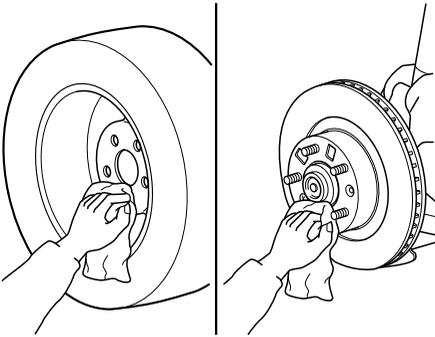
Going under the vehicle while it is jacked up is dangerous as it could result in death or serious injury if the vehicle were to fall off the jack.

# Flat Tire

8. Remove the lug nuts by turning them counterclockwise; then remove the wheel and center cap.

## ▼ Mounting the Spare Tire

1. Remove dirt and grime from the mounting surfaces of the wheel and hub, including the hub bolts, with a cloth.



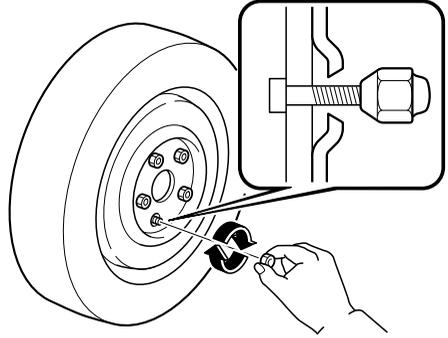
### **WARNING**

***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 spare tire.

3. Install the lug nuts with the beveled edge inward; tighten them by hand.



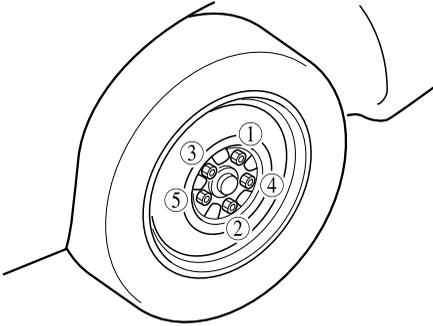
### **WARNING**

***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 lug wrench counterclockwise 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 expert repairer, we recommend an Authorized Mazda Repairer.

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.*

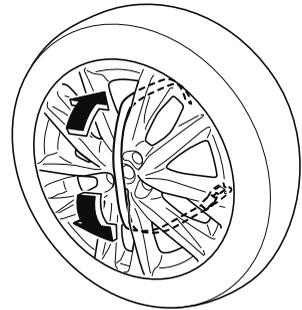
**Be sure to reinstall the same nuts you removed or replace them with metric nuts of the same configuration:**

*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. **(Vehicles with sub-woofer)**

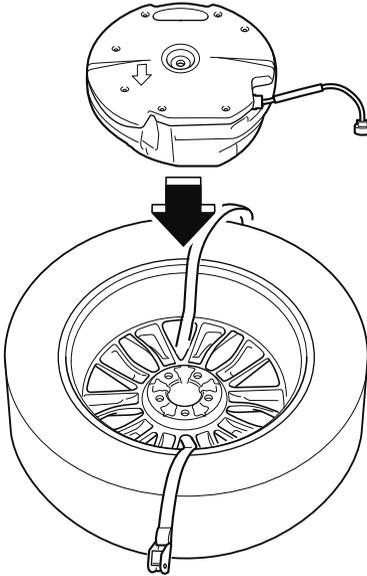
Secure the sub-woofer to the flat tire using the flat tire belt.

1. Pass the flat tire belt through the wheel of the flat tire.

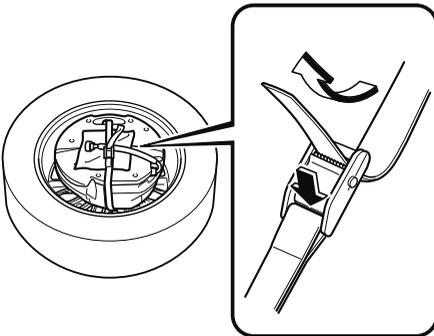


# Flat Tire

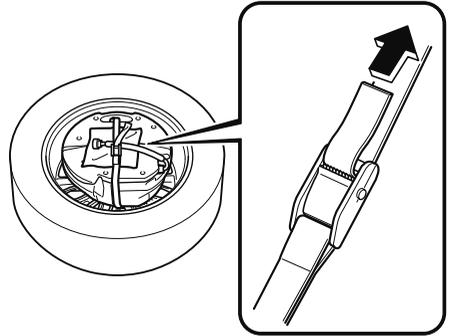
2. Install the sub-woofer to the flat tire.



3. Pass the flat tire belt through the buckle.



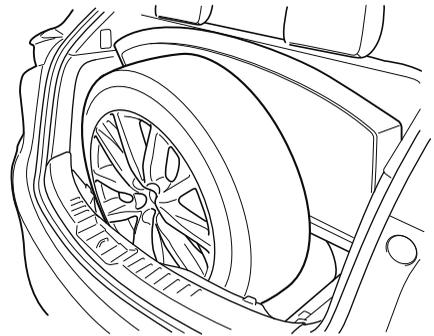
4. Pull the end of the flat tire belt and secure the sub-woofer and the wiring harness to the flat tire.



## CAUTION

*When pulling the flat tire belt, wrap the buckle with a cloth. If the buckle directly contacts the sub-woofer, the sub-woofer may be damaged.*

7. Place the flat tire in the luggage compartment so that it leans against the luggage board.



**⚠ CAUTION**

*Tuck a cloth between the flat tire and the vehicle trim. If the flat tire directly contacts the vehicle trim, the trim may be damaged.*

8. Slowly close the liftgate while making sure that the liftgate trim does not contact the flat tire.

**NOTE**

*If the liftgate trim contacts the flat tire, adjust the position of the flat tire.*

9. Make sure that the liftgate closes securely.
10. Check the tire inflation pressure. Refer to the specification charts on page 9-7.
11. Have the flat tire repaired or replaced as soon as possible.

**⚠ WARNING*****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.*

**NOTE**

*To prevent the jack and tool from rattling, store them properly.*

# Battery Runs Out

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## Jump-Starting

Jump-starting is dangerous if done incorrectly. So 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**



#### **Follow These Precautions Carefully:**

To ensure safe and correct handling of the battery, read the following precautions carefully before using the battery or inspecting it.



**Do not allow the positive (+) terminal to contact any other metal object that could cause sparks:**

Flames and sparks near open battery cells are dangerous. Hydrogen gas, produced during normal battery operation, could ignite and cause the battery to explode. An exploding battery can cause serious burns and injuries. When working near a battery, do not allow metal tools to contact the positive (+) or negative (-) terminal of the battery.



**Keep all flames, including cigarettes, and sparks away from open battery cells:**

Flames and sparks near open battery cells are dangerous. Hydrogen gas, produced during normal battery operation, could ignite and cause the battery to explode. An exploding battery can cause serious burns and injuries.

**Do not jump-start a frozen battery or one with a low fluid level:**

Jump-starting a frozen 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 battery:**

Connecting the end of the second jumper cable to the negative (-) terminal of the discharged battery is dangerous.

A spark could cause the gas around the battery to explode and injure someone.

**Route the jumper cables away from parts that will be moving:**

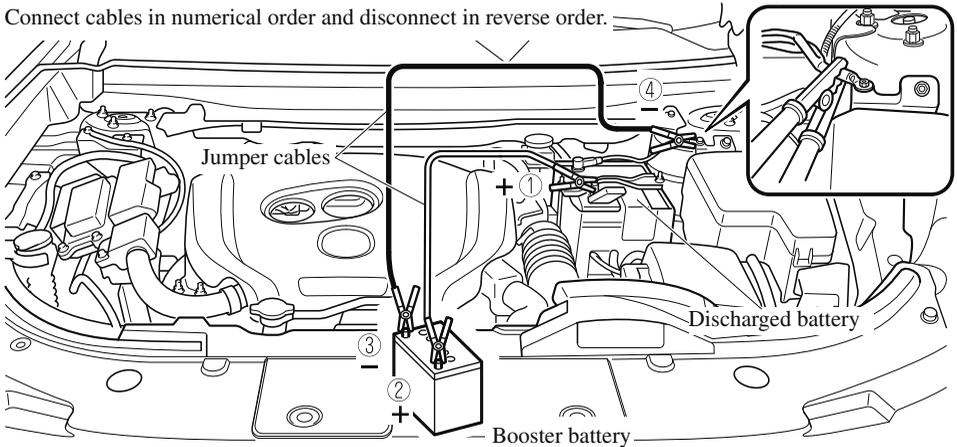
Connecting a jumper cable near or to moving parts (cooling fans, belts) is dangerous. The cable could get caught when the engine starts and cause serious injury.

# Battery Runs Out

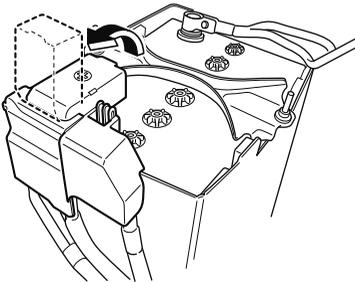
## CAUTION

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 or a 24 V motor generator set).

Connect cables in numerical order and disconnect in reverse order.



1. Remove the battery cover.



2. Make sure the booster battery is 12 V and that its negative terminal is grounded.

3. If the booster battery is in another vehicle, do not allow both vehicles to touch. Turn off the engine of the vehicle with the booster battery and all unnecessary electrical loads in both vehicles.
4. Connect the jumper cables in the exact sequence as in the illustration.
  - Connect one end of a cable to the positive terminal on the discharged battery (1).
  - Attach the other end to the positive terminal on the booster battery (2).
  - Connect one end of the other cable to the negative terminal of the booster battery (3).

## Battery Runs Out

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- Connect the other end to the ground point indicated in the illustration away from the discharged battery (4).
- 5. Start the engine of the booster vehicle and run it a few minutes. Then start the engine of the other vehicle.
- 6. When finished, carefully disconnect the cables in the reverse order described in the illustration.
- 7. If the battery cover has been removed, install it in the reverse order of removal.

### **NOTE**

*Verify that the covers are securely installed.*

## Starting a Flooded Engine

If the engine fails to start, it may be flooded (excessive fuel in the engine).

Follow this procedure:

1. If the engine does not start within five seconds on the first try, wait ten 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 brake pedal, 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 expert repairer, we recommend an Authorized Mazda Repairer.

## 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 two vehicles to collide. The occupants could be injured.*

### **NOTE**

*You cannot start a vehicle with an automatic transaxle by pushing it.*

# Overheating

## Overheating

If the temperature gauge indicates overheating or the high engine coolant temperature warning light turns on, the vehicle loses power, or you hear a loud knocking or pinging noise, the engine is probably too hot.



***Pull over to a safe location, then switch the ignition 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 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.*

***Open the hood ONLY after steam is no longer escaping from the engine:***

*Steam from an overheated engine is dangerous. The escaping steam could seriously burn you.*

If the temperature gauge indicates overheating or the high engine coolant temperature warning light turns on:

1. Drive safely to the side of the road and park off the right-of-way.
2. Shift into park (P).
3. Apply the parking brake.
4. Turn off the air conditioner.
5. 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.



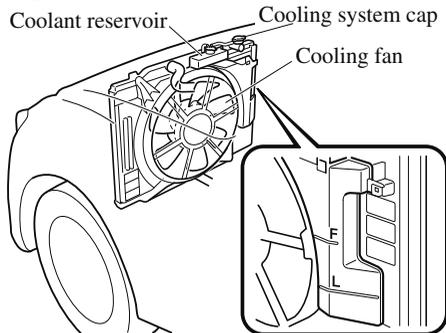
*If the cooling fan does not operate while the engine is running, the engine temperature will increase. Stop the engine and call an expert repairer, we recommend an Authorized Mazda Repairer.*

6. Make sure the cooling fan is operating, then turn off the engine after the temperature has decreased.

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 expert repairer, we recommend an Authorized Mazda Repairer.



**If you find no problems, the engine is cool, and no leaks are obvious:**

Carefully add coolant as required (page 6-22).



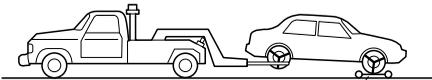
*If the engine continues to overheat or frequently overheats, have the cooling system inspected. The engine could be seriously damaged unless repairs are made. Consult an expert repairer, we recommend an Authorized Mazda Repairer.*

# Emergency Towing

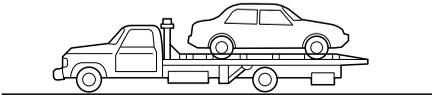
## Towing Description

We recommend that towing be done only by an expert repairer, we recommend an Authorized Mazda Repairer or a commercial tow-truck service.

Proper lifting and towing are necessary to prevent damage to the vehicle. Particularly when towing a 4WD vehicle, where all the wheels are connected to the drive train, proper transporting of the vehicle is absolutely essential to avoid damaging the drive system. Government and local laws must be followed.



Wheel dollies



A towed 2WD vehicle should have its drive wheels (front wheels) off the ground. If excessive damage or other conditions prevent this, use wheel dollies.

When towing a 2WD vehicle with the rear wheels on the ground, release the parking brake.

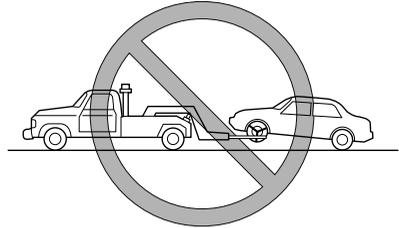
Refer to Electric Parking Brake (EPB) on page 4-67.

A towed 4WD vehicle must have all its wheels off the ground.

## ⚠ WARNING

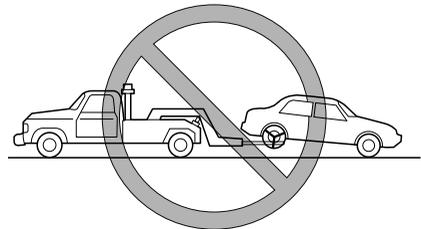
**Always tow a 4WD vehicle with all four wheels off the ground:**

*Towing a 4WD vehicle with either the front or rear wheels on the ground is dangerous as the drive train could be damaged, or the vehicle could trail away from the tow truck and cause an accident. If the drive train has been damaged, transport the vehicle on a flatbed truck.*



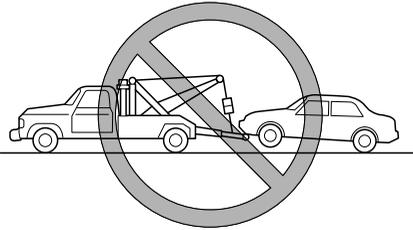
## ⚠ CAUTION

➤ *Do not tow the vehicle pointed backward with driving wheels on the ground. This may cause internal damage to the transaxle.*

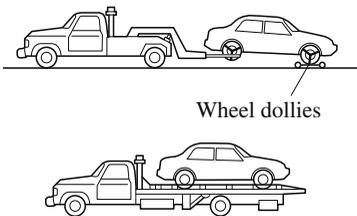


## Emergency Towing

- Do not tow with sling-type equipment. This could damage your vehicle. Use wheel-lift or flatbed equipment.



- If the electric parking brake (EPB) 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.



If towing service is not available in an emergency, the vehicle may be towed with all four wheels on the ground using the towing hook at the front of the vehicle. Only tow the vehicle on paved surfaces for short distances at low speeds.

### CAUTION

Follow these instructions when towing the vehicle with all wheels on the ground.

1. Shift to the N position.
2. Switch the ignition to ON.
3. Release the parking brake.  
Refer to Electric Parking Brake (EPB) on page 4-67.

Remember that power assist for the brakes and steering will not be available when the engine is not running.

# Emergency Towing

## Towing Hooks

### ⚠ CAUTION

- The towing eyelet should be used in an emergency (to get the vehicle out of a ditch or a snow bank, for example).
- When using the towing eyelets, always pull the cable or chain in a straight direction with respect to the eyelet. Never apply a sideways force.

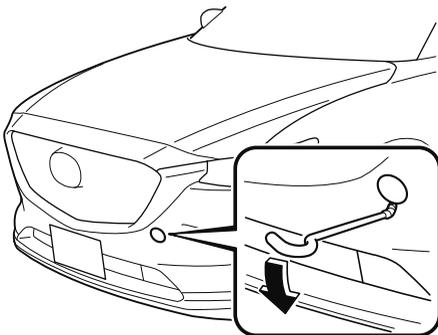
### NOTE

When towing with chain or cable, wrap the chain or cable with a soft cloth near the bumper to prevent damage to the bumper.

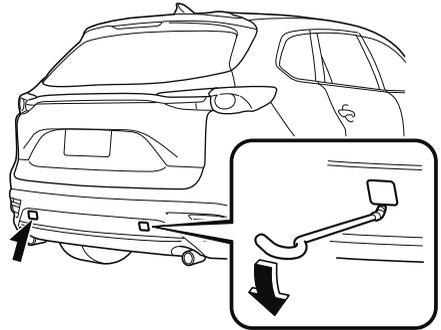
### ▼ Towing Hook

1. Remove the towing eyelet and the lug wrench from the luggage compartment (page 7-15).
2. Wrap a flathead screwdriver or similar tool with a soft cloth to prevent damage to a painted bumper, and open the cap located on the front or rear bumper.

### Front



### Rear



### ⚠ CAUTION

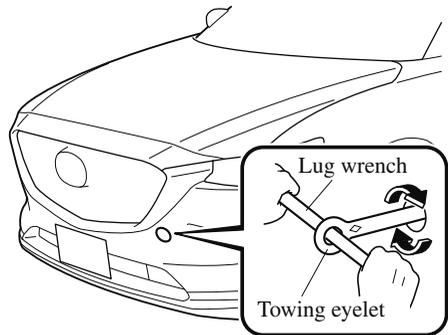
Do not use excessive force as it may damage the cap or scratch the painted bumper surface.

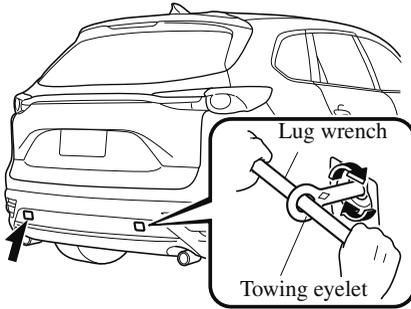
### NOTE

Remove the cap completely and store it so as not to lose it.

3. Securely install the towing eyelet using the lug wrench.

### Front



**Rear**

4. Hook the towing rope to the towing eyelet.

**⚠ CAUTION**

- *If the towing eyelet is not securely tightened, it may loosen or disengage from the bumper when towing the vehicle. Make sure that the towing eyelet is securely tightened to the bumper.*
- *Be careful not to damage the towing eyelet and towing hook, vehicle body, or transaxle system when towing under the following conditions:*
  - *Do not tow a vehicle heavier than yours.*
  - *Do not suddenly accelerate your vehicle as it will apply a severe shock to the towing eyelet and towing hook or rope.*
  - *Do not attach any rope other than to the towing eyelet and towing hook.*

# Warning/Indicator Lights and Warning Sounds

## If a Warning Light Turns On or Flashes

If any warning light turns on/flashes, take appropriate action for each light. There is no problem if the light turns off, however if the light does not turn off or turns on/flashes again, consult an Authorized Mazda Repairer.

The details for some warnings can be viewed on the center display.

1. If the warning light is turned on, select  icon on the home screen to display the application screen.
2. Select “Vehicle Status Monitor”.
3. Select “Warning Guidance” to display the current warnings.
4. Select the applicable warning to view the warning details.

### ▼ Stop Vehicle in Safe Place Immediately

If any of the following warning lights turns on, the system may have a malfunction. Stop the vehicle in a safe place immediately and contact an Authorized Mazda Repairer.

Signal	Warning
 Brake System Warning Light	<p>If the brake system warning light remains illuminated the brake fluid may be low or there could be a problem with the brake system. Park the vehicle in a safe place immediately and contact an expert repairer, we recommend an Authorized Mazda Repairer.</p> <div style="background-color: black; color: white; padding: 5px; text-align: center; margin: 10px 0;">  <b>WARNING</b> </div> <p><b><i>Do not drive with the brake system warning light illuminated. Contact an expert repairer, we recommend an Authorized Mazda Repairer to have the brakes inspected as soon as possible:</i></b></p> <p><i>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.</i></p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px 0;">  <b>CAUTION</b> </div> <p><i>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.</i></p>

# Warning/Indicator Lights and Warning Sounds

Signal	Warning
 <p>Electronic Brake Force Distribution System Warning</p>	<p>If the electronic brake force distribution control unit determines that some components are operating incorrectly, the control unit may illuminate the brake system warning light and the ABS warning light simultaneously. The problem is likely to be the electronic brake force distribution system.</p> <p><b>! WARNING</b></p> <p><b><i>Do not drive with both the ABS warning light and brake warning light illuminated. Have the vehicle towed to an expert repairer, we recommend an Authorized Mazda Repairer to have the brakes inspected as soon as possible:</i></b></p> <p><i>Driving when the brake system warning light and ABS warning light are illuminated simultaneously is dangerous.</i></p> <p><i>When both lights are illuminated, the rear wheels could lock more quickly in an emergency stop than under normal circumstances.</i></p>
 <p>Charging System Warning Indication/Warning Light</p>	<p>If the warning light illuminates while driving, it indicates a malfunction of the alternator or of the charging system.</p> <p>Drive to the side of the road and park off the right-of-way. Consult an expert repairer, we recommend an Authorized Mazda Repairer.</p> <p><b>! CAUTION</b></p> <p><i>Do not continue driving when the charging system warning light is illuminated because the engine could stop unexpectedly.</i></p>
 <p>Engine Oil Warning Light</p>	<p>This warning light indicates low engine oil pressure.</p> <p><b>! CAUTION</b></p> <p><i>Do not run the engine if the oil pressure is low. Otherwise, it could result in extensive engine damage.</i></p> <p>If the light illuminates or the warning indication is displayed while driving:</p> <ol style="list-style-type: none"> <li>1. Drive to the side of the road and park off the right-of-way on level ground.</li> <li>2. Turn off the engine and wait 5 minutes for the oil to drain back into the oil pan.</li> <li>3. Inspect the engine oil level. (page 6-21) If it's low, add the appropriate amount of engine oil while being careful not to overfill.</li> </ol> <p><b>! CAUTION</b></p> <p><i>Do not run the engine if the oil level is low. Otherwise, it could result in extensive engine damage.</i></p> <ol style="list-style-type: none"> <li>4. Start the engine and check the warning light.</li> </ol> <p>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 expert repairer, we recommend an Authorized Mazda Repairer.</p>

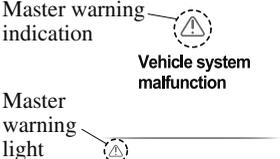
# Warning/Indicator Lights and Warning Sounds

Signal	Warning
 <p>(Red) High Engine Coolant Temperature Warning Indication/Warning Light</p>	<p>The light flashes when the engine coolant temperature is extremely high, and illuminates when the engine coolant temperature increases further.</p> <p><b>Handling Procedure</b> <b>Flashing light</b> Drive slowly to reduce engine load until you can find a safe place to stop the vehicle and wait for the engine to cool down.</p> <p><b>Illuminated light</b> This indicates the possibility of overheating. Park the vehicle in a safe place immediately and stop the engine. Refer to Overheating on page 7-32.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px 0;">  <b>CAUTION</b> </div> <p><i>Do not drive the vehicle with the high engine coolant temperature warning light illuminated. Otherwise, it could result in damage to the engine.</i></p>
 <p>Power Steering Malfunction Indication*</p>	<p>The message is displayed if the electric power steering has a malfunction. If the message is displayed, stop the vehicle in a safe place and do not operate the steering wheel. There is no problem if the message in the display turns off after a while. Contact an expert repairer, we recommend an Authorized Mazda Repairer if the message is displayed continuously.</p> <p><b>NOTE</b></p> <p><i>-If the message is displayed, the 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, or the steering wheel could vibrate when turning.</i></p> <p><i>-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 wait several minutes for the system to return to normal.</i></p>
 <p>Power Steering Malfunction Indicator Light*</p>	<p>The light illuminates/flashes if the electric power steering has a malfunction. If the light illuminates/flashes, stop the vehicle in a safe place and do not operate the steering wheel. There is no problem if the light turns off after a while. Contact an expert repairer, we recommend an Authorized Mazda Repairer if the light illuminates/flashes continuously.</p> <p><b>NOTE</b></p> <p><i>-If the indicator light illuminates/flashes, the power steering will not operate normally. In this happens, the steering wheel can still be operated, however, the operation may feel heavy compared to normal, or the steering wheel could vibrate when turning.</i></p> <p><i>-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 wait several minutes for the system to return to normal.</i></p>

# Warning/Indicator Lights and Warning Sounds

## ▼ Contact Authorized Mazda Repairer and Have Vehicle Inspected

If any of the following warning lights or the indicator light turns on/flashes, the system may have a malfunction. Contact an expert repairer, we recommend an Authorized Mazda Repairer to have your vehicle inspected.

Signal	Warning
 <p>ABS Warning Light</p>	<p>If the ABS warning light stays on while you're driving, the ABS control unit has detected a system malfunction. If this occurs, your brakes will function normally as if the vehicle had no ABS.</p> <p>Should this happen, consult an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>·When the engine is jump-started to charge the battery, uneven rpm occurs and the ABS warning light may illuminate. If this occurs, it is the result of the weak battery and does not indicate an ABS malfunction.</li> <li>·Recharge the battery.</li> <li>·The brake assist system does not operate while the ABS warning light is illuminated.</li> </ul>
 <p>Master Warning Indication/Warning Light</p>	<p><b>Type A instrument cluster</b></p> <div style="text-align: center;">  <p>The diagram shows two warning symbols. The top one is a triangle with an exclamation mark, labeled 'Master warning indication' and 'Vehicle system malfunction'. The bottom one is a smaller triangle with an exclamation mark, labeled 'Master warning light'.</p> </div> <p><b>(Master warning indication)</b> Displays when notification of the system malfunctions is required. Check the message indicated in the display and consult an expert repairer, we recommend an Authorized Mazda Repairer.</p> <p><b>(Master warning light)</b> The master warning light displays when a warning message occurs. This indicates a malfunction with the vehicle system. Check the message indicated in the display and consult an expert repairer, we recommend an Authorized Mazda Repairer. For details, refer to the explanations for the warning/indicator lights, in the warning/indicator lights section, which match the symbol in the upper part of the display. If a message is not indicated in the display, operate the INFO switch to display the “Warning” screen. Refer to Message Indicated in Multi-information Display and INFO switch on page 4-20.</p> <p><b>Type B instrument cluster</b></p> <p>The light illuminates continuously if any one of the following occurs. Consult an expert repairer, we recommend an Authorized Mazda Repairer.</p> <ul style="list-style-type: none"> <li>·There is a malfunction in the battery management system.</li> <li>·There is a malfunction in the brake switch.</li> </ul>

# Warning/Indicator Lights and Warning Sounds

Signal	Warning
 <p>Electric Parking Brake (EPB) Warning Light</p>	<p>The warning light illuminates when the system has a malfunction. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.</p>
 <p>Electric Parking Brake (EPB) Indicator/Warning Light</p>	<p>This warning has the following functions:  <b><u>Parking brake warning/Indicator light inspection</u></b>                      The light illuminates when the electric parking brake is applied with the ignition switched to START or ON. It turns off when the electric parking brake is released.</p> <p><b><u>When the light is turned on</u></b>                      If the light remains turned on even if the electric parking brake switch is released, an expert repairer, we recommend an Authorized Mazda Repairer.</p> <p><b><u>When the light is flashing</u></b>                      The light flashes if the electric parking brake has a malfunction. If the light remains flashing even if the electric parking brake switch is operated, consult an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.</p>
 <p>Engine Oil Level Warning Indication*</p>	<p>The message is displayed when the system has a malfunction. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.</p>
 <p>Check Engine Light</p>	<p>If this light illuminates while driving, the vehicle may have a problem. It is important to note the driving conditions when the light illuminated and consult an expert repairer, we recommend an Authorized Mazda Repairer.</p> <p>The check engine light may illuminate in the following cases:</p> <ul style="list-style-type: none"> <li>·The engine's electrical system has a problem.</li> <li>·The emission control system has a problem.</li> <li>·The fuel tank level being very low or approaching empty.</li> </ul> <p>If the check engine light remains on, or it flashes continuously, do not drive at high speeds and consult an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.</p>
<p><b>AT</b></p> <p>Automatic Trans-axle Warning Indication/Warning Light</p>	<p>The indication/light illuminates when the transaxle has a problem.</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;">  <b>CAUTION</b> </div> <p><i>If the automatic transaxle warning indication/light illuminates, the transaxle has an electrical problem. Continuing to drive your Mazda in this condition could cause damage to your transaxle. Consult an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.</i></p>

# Warning/Indicator Lights and Warning Sounds

Signal	Warning
<p><b>4WD</b> 4WD Warning Indication*</p>	<p><b><u>“4WD system malfunction” is displayed</u></b></p> <p>The indication is displayed under the following conditions. The system may have a malfunction. Have the vehicle checked at an expert repairer, we recommend an Authorized Mazda Repairer.</p> <ul style="list-style-type: none"> <li>·When there is a malfunction in the 4WD system.</li> <li>·When there is a large difference between the tire size of the front and rear wheels.</li> </ul> <p><b><u>“4WD system high-load” is displayed</u></b></p> <p>The indication is displayed under the following conditions. Park the vehicle in a safe place and check that the warning indication light turns off, and then drive the vehicle. Contact an expert repairer, we recommend an Authorized Mazda Repairer if the indication is continuously displayed.</p> <ul style="list-style-type: none"> <li>·When the differential oil temperature is excessively high.</li> <li>·When there is a large difference between the front and rear wheel rotation, such as when trying to remove the vehicle from mud.</li> </ul>
<p><b>4WD</b> 4WD Warning Light*</p>	<p><b><u>When the light is turned on</u></b></p> <p>The light turns on under the following conditions. The system may have a malfunction. Have the vehicle checked at an expert repairer, we recommend an Authorized Mazda Repairer.</p> <ul style="list-style-type: none"> <li>·When there is a malfunction in the 4WD system.</li> <li>·When there is a large difference between the tire size of the front and rear wheels.</li> </ul> <p><b><u>When the light is flashing</u></b></p> <p>Park the vehicle in a safe place. After a few moments, if the warning light stops flashing, you can resume driving. If the light does not stop flashing, contact an expert repairer, we recommend an Authorized Mazda Repairer.</p> <ul style="list-style-type: none"> <li>·When the differential oil temperature is excessively high.</li> <li>·When there is a large difference between the front and rear wheel rotation, such as when trying to remove the vehicle from mud.</li> </ul>
<p> (Turns on) TCS/DSC Indicator Light</p>	<p>If the light stays on, the TCS, DSC or the brake assist system may have a malfunction and they may not operate correctly. Take your vehicle to an expert repairer, we recommend an Authorized Mazda Repairer.</p>

# Warning/Indicator Lights and Warning Sounds

Signal	Warning
 <p>Air Bag/Front Seat Belt Pretensioner System Warning Light</p>	<p>A system malfunction is indicated if the warning light constantly flashes, constantly illuminates or does not illuminate at all when the ignition is switched ON. If any of these occur, consult an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible. The system may not operate in an accident.</p> <p> <b>WARNING</b></p> <p><b>Never tamper with the air bag/pretensioner systems and always have an expert repairer, we recommend an Authorized Mazda Repairer 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.</b></p>
 <p>(Flashing) Tire Pressure Monitoring System Warning Light*</p>	<p>If the tire pressure monitoring system has a malfunction, the tire pressure warning light flashes. Have your vehicle checked by an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.</p> <p> <b>WARNING</b></p> <p><b>If the tire pressure monitoring system warning light illuminates or flashes, or the tire pressure warning beep sound is heard, decrease vehicle speed immediately and avoid sudden maneuvering and braking:</b></p> <p><i>If the tire pressure monitoring system warning light illuminates or flashes, or the tire pressure warning beep sound is heard, it is dangerous to drive the vehicle at high speeds, or perform sudden maneuvering or braking. Vehicle drivability could worsen and result in an accident.</i></p> <p><i>To determine if you have a slow leak or a flat, pull over to a safe position where you can check the visual condition of the tire and determine if you have enough air to proceed to a place where air may be added and the system monitored again by an expert repairer, we recommend an Authorized Mazda Repairer or a tire repair station.</i></p> <p><b>Do not ignore the TPMS Warning Light:</b></p> <p><i>Ignoring the TPMS warning light is dangerous, even if you know why it is illuminated. Have the problem taken care of as soon as possible before it develops into a more serious situation that could lead to tire failure and a dangerous accident.</i></p>

# Warning/Indicator Lights and Warning Sounds

Signal	Warning
 <p>(Amber) KEY Warning Indication*</p>	<p><b>“Keyless System malfunction” is displayed</b> This message is displayed if the advanced keyless entry &amp; push button start system has a problem. Contact an expert repairer, we recommend an Authorized Mazda Repairer.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">  <b>CAUTION</b> </div> <p><i>If the message is indicated, or the push button start indicator light (amber) flashes, the engine may not start. If the engine cannot be started, try starting it using the emergency operation for starting the engine, and have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.</i> <i>Refer to Emergency Operation for Starting the Engine on page 4-10.</i></p> <p><b>“Set Power to OFF” is displayed</b> This message is displayed when the driver's door is opened without switching the ignition off.</p> <p><b>“Key not found” is displayed</b> This message is displayed when any of the following operations is performed with the key out of the operational range or placed in areas inside the cabin where it is difficult for the key to be detected.</p> <ul style="list-style-type: none"> <li>•The push button start is pressed with the ignition switched off</li> <li>•The ignition is switched on</li> <li>•All doors are closed without switching the ignition off</li> </ul>
 <p>(Red) (Turns on) KEY Warning Light*</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;">  <b>CAUTION</b> </div> <p><i>If any malfunction occurs in the keyless entry system, it illuminates continuously.</i></p> <p><i>If the key warning indicator light illuminates or the push button start indicator light (amber) flashes, the engine may not start. If the engine cannot be started, try starting it using the emergency operation for starting the engine, and have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.</i></p> <p><i>Refer to Emergency Operation for Starting the Engine on page 4-10.</i></p>
 <p>Security Indicator Light</p>	<p>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 ignition off, and then restart the engine. If the engine does not start after 3 or more tries, contact an expert repairer, we recommend an Authorized Mazda Repairer.</p>
 <p>(Amber) Adaptive LED Headlights (ALH) Warning Indication/Warning Light*</p>	<p>The light remains turned on if there is a problem with the system. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.</p> <p><b>NOTE</b> <i>If the windshield area in front of the Forward Sensing Camera (FSC) is fogged or obstructed, the light turns on temporarily. If the light remains turned on, there may be a problem with the system.</i></p>

# Warning/Indicator Lights and Warning Sounds

Signal	Warning
 <p>Blind Spot Monitoring (BSM) Warning Indication*</p>	<p>The message is displayed when the system has a malfunction. Have your vehicle inspected by an expert repairer, we recommend an Authorized Mazda Repairer.</p> <p><b>NOTE</b>  <i>If the vehicle is driven on a road with less traffic and few vehicles that the radar sensors can detect, the system may pause. However, it does not indicate a malfunction.</i></p>
 <p>Blind Spot Monitoring (BSM) OFF Indicator Light*</p>	<p>A problem in the system may be indicated under the following conditions. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.</p> <ul style="list-style-type: none"> <li>•The light does not turn on when the ignition is switched ON.</li> <li>•The light remains on even when the Blind Spot Monitoring (BSM) system can be operated.</li> <li>•It turns on while driving the vehicle.</li> </ul> <p><b>NOTE</b>  <i>If the vehicle is driven on a road with less traffic and few vehicles that the radar sensors can detect, the system may pause (The Blind Spot Monitoring (BSM) OFF indicator light in the instrument cluster illuminates). However, it does not indicate a malfunction.</i></p>
 <p>(Amber)  Mazda Radar Cruise Control with Stop &amp; Go function (MRCC with Stop &amp; Go function) Warning Indication*</p>	<p>The message is displayed when the system has a malfunction. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.</p>
 <p>(Amber)  Lane-keep Assist System (LAS) &amp; Lane Departure Warning System (LDWS) Warning Indication*</p>	<p>The message is displayed when the system has a malfunction. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer. The system does not operate when the warning message is displayed.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;">  <b>CAUTION</b> </div> <ul style="list-style-type: none"> <li>➤ Always use tires for all wheels that are of the specified size, and the same manufacture, brand, and tread pattern. In addition, do not use tires with significantly different wear patterns on the same vehicle. If such improper tires are used, the system may not operate normally.</li> <li>➤ When an emergency spare tire is used, the system may not operate normally.</li> </ul>
 <p>(Amber)  Driver Attention Alert (DAA) Warning Indication*</p>	<p>The message is displayed when the system has a malfunction. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.</p>

# Warning/Indicator Lights and Warning Sounds

Signal	Warning
 LED Headlight Warning Light	This light illuminates if there is a malfunction in the LED headlight. Have your vehicle inspected by an expert repairer, we recommend an Authorized Mazda Repairer.

## ▼ Taking Action

Take the appropriate action and verify that the warning light turns off.

Signal	Warning	Action to be taken
 Smart Brake Support/Smart City Brake Support (SBS/SCBS) Warning Indication/Warning Light*	The light turns on if the windshield or the radar sensor are dirty, or there is a malfunction in the system.	Verify the reason why the warning light is illuminated on the center display. If the reason why the warning light is illuminated is due to a dirty windshield, clean the windshield. If the warning light is illuminated because of a dirty radar sensor, clean the front emblem. For any other reasons, have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.
 Low Fuel Warning Indication/Warning Light	The light turns on when the remaining fuel is about 9.0 L (2.3 US gal, 1.9 Imp gal).  <b>NOTE</b> <i>The light illumination timing may vary because fuel inside the fuel tank moves around according to the driving conditions and the vehicle posture.</i>	Add fuel.
<b>120</b> <b>km/h</b> 120km/h Warning Light*	The 120 km/h warning light illuminates when the vehicle speed exceeds 120 km/h.	Lower the vehicle speed.

# Warning/Indicator Lights and Warning Sounds

Signal	Warning	Action to be taken
 <p><b>PASS</b> </p> <p>Seat Belt Warning Light</p>	<p>The seat belt warning light turns on if the driver or front passenger's seat is occupied and the seat belt is not fastened with the ignition switched ON.</p> <p>If the driver or front passenger's seat belt is unfastened (only when the front passenger's seat is occupied) and the vehicle is driven at a speed faster than about 20 km/h (12 mph), the warning light flashes. After a short time, the warning light stops flashing, but remains illuminated. If a seat belt remains unfastened, the warning light flashes again for a given period of time.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>·If the driver or front passenger's seat belt is unfastened after the warning light turns on, and the vehicle speed exceeds 20 km/h (12 mph), the warning light flashes again.</li> <li>·Placing heavy items on the front passenger's seat may cause the front passenger's seat belt warning function to operate depending on the weight of the item.</li> <li>·To allow the front passenger seat weight sensor to function properly, do not place and sit on an additional seat cushion on the front passenger's seat. The sensor may not function properly because the additional seat cushion could cause sensor interference.</li> <li>·If a small child is seated on the front passenger's seat, the warning light may not operate.</li> </ul>	<p>Fasten the seat belts.</p>
 <p>Engine Oil Level Warning Light</p>	<p>This warning light indicates that the engine oil level is around the MIN mark (page 6-21).</p>	<p>Add 1 L (0.3 US gal, 0.2 Imp gal) of engine oil (page 6-19).</p>
 <p>Low Washer Fluid Level Warning Indication/Warning Light*</p>	<p>This warning light indicates that little washer fluid remains.</p>	<p>Add washer fluid (page 6-24).</p>

# Warning/Indicator Lights and Warning Sounds

Signal	Warning	Action to be taken
 <p>Door-Ajar/Liftgate-Ajar Warning Indication/Warning Light</p>	The light turns on if any door/liftgate is not closed securely.	Close the door/liftgate securely.

## Tire Pressure Monitoring System Warning Light (Turns on)\*



Take the appropriate action and verify that the warning light turns off.

Warning
<p>When the warning light illuminates, and the warning beep sound is heard when tire pressure is too low in one or more tires.</p> <div style="background-color: black; color: white; padding: 5px; display: inline-block;">  <b>WARNING</b> </div> <p><b><i>If the tire pressure monitoring system warning light illuminates or flashes, or the tire pressure warning beep sound is heard, decrease vehicle speed immediately and avoid sudden maneuvering and braking:</i></b>  <i>If the tire pressure monitoring system warning light illuminates or flashes, or the tire pressure warning beep sound is heard, it is dangerous to drive the vehicle at high speeds, or perform sudden maneuvering or braking. Vehicle drivability could worsen and result in an accident.</i>  <i>To determine if you have a slow leak or a flat, pull over to a safe position where you can check the visual condition of the tire and determine if you have enough air to proceed to a place where air may be added and the system monitored again by an expert repairer, we recommend an Authorized Mazda Repairer or a tire repair station.</i></p> <p><b><i>Do not ignore the TPMS Warning Light:</i></b>  <i>Ignoring the TPMS warning light is dangerous, even if you know why it is illuminated. Have the problem taken care of as soon as possible before it develops into a more serious situation that could lead to tire failure and a dangerous accident.</i></p>

## Warning/Indicator Lights and Warning Sounds

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### Action to be taken

Inspect the tires and adjust to the specified inflation pressure (page 6-36).

### CAUTION

*When replacing/repairing the tires or wheels or both, have the work done by an Authorized Mazda Repairer, or the tire pressure sensors may be damaged.*

### NOTE

*Perform tire pressure adjustment when the tires are cold. Tire pressure will vary according to the tire temperature, therefore let the vehicle stand for 1 hour or only drive it 1.6 km (1 mile) or less before adjusting the tire pressures. When pressure is adjusted on hot tires to the cold inflation pressure, the TPMS warning light/beep may turn on after the tires cool and pressure drops below specification.*

*Also, an illuminated TPMS warning light, resulting from the tire air pressure dropping due to cold ambient temperature, may turn off if the ambient temperature rises. In this case, it will also be necessary to adjust the tire air pressures. If the TPMS warning light illuminates due to a drop in tire air pressure, make sure to check and adjust the tire air pressures.*

*After adjusting the tire air pressures, it may require some time for the TPMS warning light to turn off. If the TPMS warning light remains illuminated, drive the vehicle at a speed of at least 25 km/h (16 mph) for 10 minutes, and then verify that it turns off.*

*Tires lose air naturally over time and the TPMS cannot tell if the tires are getting too soft over time or you have a flat. However, when you find one low tire in a set of four—that is an indication of trouble; you should have someone drive the vehicle slowly forward so you can inspect any low tire for cuts and any metal objects sticking through tread or sidewall. Put a few drops of water in the valve stem to see if it bubbles indicating a bad valve. Leaks need to be addressed by more than simply refilling the trouble tire as leaks are dangerous — take it to an expert repairer; we recommend an Authorized Mazda Repairer which has all the equipment to fix tires, TPMS systems and order the best replacement tire for your vehicle.*

*If the warning light illuminates again even after the tire pressures are adjusted, there may be a tire puncture.*

# Warning/Indicator Lights and Warning Sounds

## KEY Warning Indication/Warning Light\*

Take the appropriate action and verify that the warning light turns off.

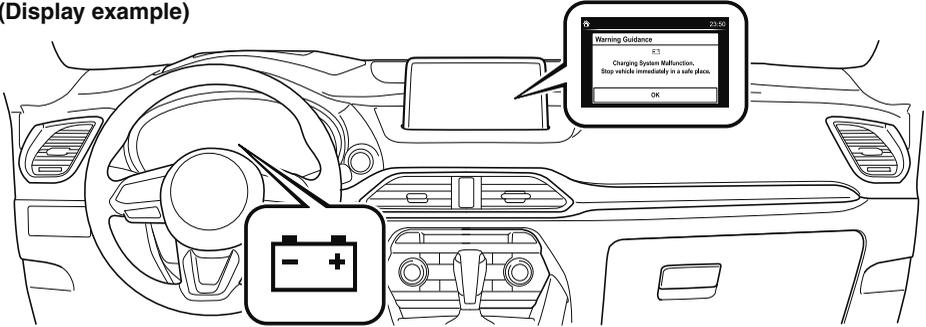
Signal	Cause	Action to be taken
 (White) KEY Warning Indication	The key battery is dead.	Replace the key battery (page 6-33).
 (Red) (Flashing) KEY Warning Light	The key battery is dead.	Replace the key battery (page 6-33).
	The key is not within the operation range.	Bring the key into the operation range (page 3-6).
	The key is placed in areas inside the cabin where it is difficult for the key to be detected.	
	A key from another manufacturer similar to the key is in the operation range.	Take the key from another manufacturer similar to the key out of the operation range.
	Without the ignition switched off, the key is taken out of the cabin, and then all the doors are closed.	Bring the key back into the cabin.

# Warning/Indicator Lights and Warning Sounds

## Message Indicated on Display

If a message is displayed in the center display, take appropriate action (in a calm manner) according to the displayed message.

(Display example)



### ▼ Stop Vehicle in Safe Place Immediately

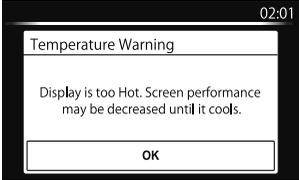
If the following messages are displayed in the center display, a vehicle system may be malfunctioning. Stop the vehicle in a safe place and contact an Authorized Mazda Repairer.

Display	Indicated Condition
	Displays if the engine coolant temperature has increased excessively.
	Displays if the charging system has a malfunction.

# Warning/Indicator Lights and Warning Sounds

## ▼ Verify Display Content

Displays in the following cases:

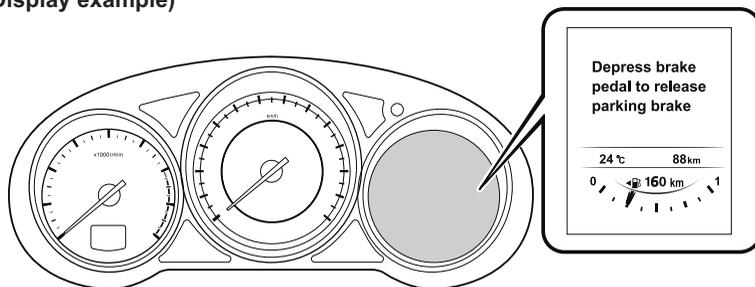
Display	Indicated Condition/Action to be taken
	<p>The following message is displayed when the temperature around the center display is high.</p> <p>Lowering the temperature in the cabin or the temperature around the center display by avoiding direct sunlight is recommended.</p>

# Warning/Indicator Lights and Warning Sounds

## Message Indicated in Multi-information Display\*

If there is a notification from the vehicle, a message is displayed in the multi-information display. Check the information and take the necessary action.

(Display example)



If the warning light turns on/flashes simultaneously or a symbol is indicated in the display, check the information regarding the warning light or symbol. (page 4-32)

Display	Content	Action to be taken
<b>Set Shift Lever to "P"</b>	Indicated when the push button start is pressed while the selector lever is not in the P position.	Shift the selector lever to the P position.
<b>Depress brake pedal to start engine</b>	Indicated when the push button start is pressed without depressing the brake pedal.	Depress the brake pedal and press the push button start.
<b>Steering locked</b>	Indicated while the steering wheel is locked.	Release the steering lock.
<b>Depress brake pedal to release parking brake</b>	Indicates when the Electric Parking Brake (EPB) switch is operated without depressing the brake pedal.	Operate the Electric Parking Brake (EPB) switch while depressing the brake pedal.

# Warning/Indicator Lights and Warning Sounds

## Warning Sound is Activated

### ▼ Lights-On Reminder

If lights are on and the ignition is switched to ACC or off, a continuous beep sound will be heard when the driver's door is opened.

#### NOTE

- When the ignition is switched to ACC, the "Ignition Not Switched Off (STOP) Warning Beep" (page 7-56) overrides the lights-on reminder.
- A personalized function is available to change the sound volume for the lights-on reminder. Refer to Personalization Features on page 9-10.

### ▼ Air Bag/Front Seat Belt Pretensioner System Warning Beep

If there is a problem with the air bag/seat belt pretensioner systems and the warning light illumination, a warning beep sound will be heard for about 5 seconds every minute.

The air bag and seat belt pretensioner system warning beep sound will continue to be heard for approximately 35 minutes. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.

## WARNING

**Do not drive the vehicle with the air bag/seat belt pretensioner system warning beep sounding:**

Driving the vehicle with the air bag/seat belt pretensioner system warning beep sounding is dangerous. In a collision, the air bags and the seat belt pretensioner system will not deploy and this could result in death or serious injury. Contact an expert repairer, we recommend an Authorized Mazda Repairer to have the vehicle inspected as soon as possible.

### ▼ Seat Belt Warning Beep

If the vehicle speed exceeds about 20 km/h (12 mph) with the driver or front passenger's seat belt unfastened, a warning beep sounds continuously. If the seat belt remains unfastened, the beep sound stops once and then continues for about 90 seconds. The beep stops after the driver or front passenger's seat belt is fastened.

#### NOTE

- Placing heavy items on the front passenger seat may cause the front passenger seat belt warning function to operate depending on the weight of the item.
- To allow the front passenger seat weight sensor to function properly, do not place and sit on an additional seat cushion on the front passenger seat. The sensor may not function properly because the additional seat cushion could cause sensor interference.
- When a small child sits on the front passenger seat, it is possible that the warning beep will not operate.

## Warning/Indicator Lights and Warning Sounds

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### ▼ Ignition Not Switched Off (STOP) Warning Beep

#### European models

If the driver's door is opened with the ignition switched to ACC, a beep will be heard 6 times in the cabin to notify the driver that the ignition has not been switched OFF (STOP). Under this condition, the keyless entry system will not operate, the vehicle cannot be locked, and the battery voltage will be depleted.

#### Except European models

If the driver's door is opened with the ignition switched to ACC, a beep will be heard continuously in the cabin to notify the driver that the ignition has not been switched OFF (STOP). Under this condition, the keyless entry system will not operate, the vehicle cannot be locked, and the battery voltage will be depleted.

### ▼ Key Removed from Vehicle Warning Beep

#### Vehicles with advanced keyless function

If the key is taken out of the vehicle while the ignition is not switched OFF and all the doors are closed, the beep which sounds outside of the vehicle will be heard 6 times, the beep which sounds inside the vehicle will be heard 6 times, and the KEY warning light (red) in the instrument cluster flashes continuously to notify the driver that the ignition has not been switched OFF.

#### Vehicles without advanced keyless function

If the key is taken out of the vehicle while the ignition is not switched OFF and all the doors are closed, a beep will be heard in the cabin 6 times and the KEY warning light (red) in the instrument cluster turns on continuously to notify the driver that the ignition has not been switched OFF.

#### **NOTE**

*Because the key utilizes low-intensity radio waves, the Key Removed From Vehicle Warning may activate if the key is carried together with a metal object or it is placed in a poor signal reception area.*

### ▼ Request Switch Inoperable Warning Beep (With the advanced keyless function)

If the request switch is pressed with the door open or ajar, or the ignition 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 liftgate cannot be locked.

## Warning/Indicator Lights and Warning Sounds

### ▼ Key Left-in-luggage Compartment Warning Beep (With the advanced keyless function)

If the key is left in the luggage compartment with all the doors locked and the liftgate closed, a beep will be heard outside for about 10 seconds to notify the driver that the key is in the luggage compartment. In this case, take out the key by pressing the electric liftgate opener and opening the liftgate. The key taken out of the luggage compartment may not operate because its functions have been temporarily stopped. To restore the key's functions, perform the applicable procedure (page 3-7).

### ▼ Key Left-in-vehicle Warning Beep (With the advanced keyless function)

If all the doors and luggage compartment 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 3-7).

### ▼ Electronic Steering Lock Warning Beep

The warning beep operates if the steering wheel is not unlocked after the push button start is pressed. (page 4-4)

### ▼ Power Liftgate Warning Beep\*

If system operation precautions are necessary, the driver is notified by the warning sound.

Cautions	What to check
The beep sounds 3 times	The conditions required for the power liftgate to operate have not been met, such as an object being stuck in the liftgate.
The beep sound continues	The vehicle is being driven with the liftgate open. Stop the vehicle and close the liftgate.

### ▼ Outside Temperature Warning Beep\*

Warns the driver of the possibility of icy roads when the outside temperature is low. If the outside temperature is lower than about 4 °C (39 °F), a beep sound is heard once and the outside temperature display flashes for about ten seconds.

#### (Type A instrument cluster)

Refer to Outside Temperature Display on page 4-24.

#### (Type B instrument cluster)

Refer to Outside Temperature Display on page 4-17.

## Warning/Indicator Lights and Warning Sounds

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### ▼ Vehicle Speed Alarm\*

The vehicle speed alarm function is designed to alarm the driver via a single beep sound and a warning indication in the instrument cluster that the previously set vehicle speed has been exceeded.

You can change the vehicle speed setting at which the warning is triggered.

### ▼ Electric Parking Brake (EPB) Warning Beep

The warning buzzer is activated under the following conditions:

- The vehicle is driven with the electric parking brake (EPB) applied.
- The electric parking brake (EPB) switch is pulled while the vehicle is driven.

### ▼ Tire Inflation Pressure Warning Beep\*

The warning beep sound will be heard for about 3 seconds if the tire pressures decrease.

Refer to Tire Pressure Monitoring System on page 4-175.

### ▼ Power Steering Warning Buzzer

If the power steering system has a malfunction, the power steering malfunction light turns on or flashes and the buzzer operates at the same time.

Refer to Warning Indication/Warning Lights on page 4-33.

### ▼ Lane Departure Warning Sound\*

While the system is operating, if the system determines that the vehicle may depart from the lane, it sounds a warning sound.

#### **NOTE**

- The volume of the Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) warning sound can be changed.

Refer to Personalization Features on page 9-10.

- The type of the Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) warning sound can be changed.

Refer to Personalization Features on page 9-10.

### ▼ Blind Spot Monitoring (BSM) System Warning Beep\*

#### **Driving forward**

The warning beep operates when the turn signal lever is operated to the side where the Blind Spot Monitoring (BSM) warning light is illuminated.

#### **NOTE**

A personalized function is available to change the Blind Spot Monitoring (BSM) warning beep sound volume.

Refer to Personalization Features on page 9-10.

# Warning/Indicator Lights and Warning Sounds

## Reversing

The Blind Spot Monitoring (BSM) warning sound is activated if there is a possibility of collision with a vehicle approaching from behind and from the rear on the left and right sides of the vehicle.

### ▼ Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) System Warnings\*

The Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) system warnings notify the driver of system malfunctions and cautions on use when required. Check based on the beep sound.

Cautions	What to check
The beep sounds 1 time while the Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) is operating	The Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) system has been canceled.
<b>(European models)</b> The beep sounds 3 times while driving <b>(Except European models)</b> The beep continues to sound while the vehicle is being driven.	The distance between your vehicle and the vehicle ahead is too close. Verify the safety of the surrounding area and reduce vehicle speed.

Cautions	What to check
When the Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) is operating, the beep sounds and the multi-information display indicates a problem with the Mazda Radar Cruise Control with Stop & Go function (MRCC with Stop & Go function) system.	A malfunction in the system may be indicated. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.

### ▼ Mazda Radar Cruise Control (MRCC) System Warnings\*

The Mazda Radar Cruise Control (MRCC) system warnings notify the driver of system malfunctions and cautions on use when required.

Check based on the beep sound.

Cautions	What to check
The beep sounds 1 time while the Mazda Radar Cruise Control (MRCC) is operating	The vehicle speed is slower than 25 km/h (16 mph) and the Mazda Radar Cruise Control (MRCC) system has been canceled.
The beep sounds continuously while driving	The distance between your vehicle and the vehicle ahead is too close. Verify the safety of the surrounding area and reduce vehicle speed.
While the Mazda Radar Cruise Control (MRCC) is operating, the beep sounds and the multi-information display indicates a problem with the Mazda Radar Cruise Control (MRCC) system.	A malfunction in the system may be indicated. Have your vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.

## Warning/Indicator Lights and Warning Sounds

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### ▼ Excessive Speed Warning\*

If the vehicle speed exceeds the speed limit sign displayed on the active driving display, the warning sound is activated and the area around the speed limit sign displayed on the active driving display flashes 3 times in amber, and if the vehicle speed continues to exceed the displayed speed limit sign, the indication stops flashing and remains on.

### ▼ 120 km/h Warning Beep\*

If the vehicle speed exceeds 120 km/h, a chime sounds for 5 seconds.

### ▼ Collision warning\*

If there is a possibility of a collision with a vehicle ahead or an obstruction at the rear of the vehicle, a warning sound is activated intermittently at the same time as the warning indications are displayed in the instrument cluster or active driving display.

# When Liftgate Cannot be Opened

## When Liftgate Cannot be Opened

If the battery is dead, the liftgate cannot be unlocked and opened.

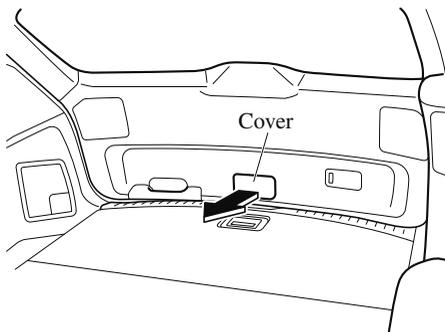
In this case, the liftgate can be unlocked by taking care of the dead battery situation.

Refer to Jump-Starting on page 7-28.

If the liftgate cannot be unlocked even if the dead battery situation has been resolved, the electrical system may have a malfunction.

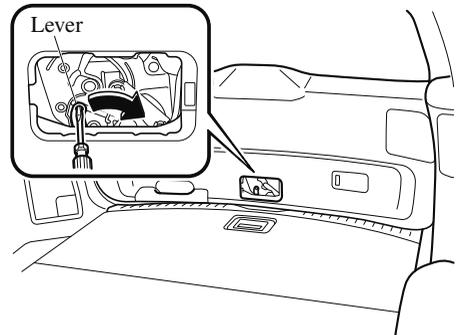
In this case, the liftgate can be opened using the following procedure as an emergency measure.

1. Wrap the end of a flathead screwdriver in a cloth and remove the cover on the interior surface of the liftgate using it.



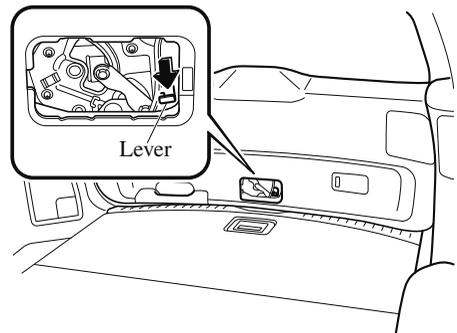
2. **(Without power liftgate)**

Turn the lever to the right to unlock the liftgate.



- (With power liftgate)**

Push the liftgate while pressing the lever down.



After performing this emergency measure, have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer as soon as possible.

## Active Driving Display Does Not Operate

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### If the Active Driving Display Does Not Operate

If the active driving display does not operate, switch the ignition off and then restart the engine. If the active driving display does not operate even with the engine restarted, have the vehicle inspected at an expert repairer, we recommend an Authorized Mazda Repairer.

# 8

## Customer Information

Important consumer information including warranties and add-on equipment.

<b>Warranty.....</b>	<b>8-2</b>	<b>Declaration of Conformity.....</b>	<b>8-6</b>
Registering Your Vehicle in A Foreign Country.....	8-2	Declaration of Conformity.....	8-6
Add-On Non-Genuine Parts and Accessories.....	8-3	<b>Electromagnetic Compatibility.....</b>	<b>8-20</b>
<b>Cell Phones.....</b>	<b>8-4</b>	Electromagnetic Compatibility.....	8-20
Cell Phones Warning.....	8-4	<b>Collection/Disposal of Old Equipment/ Used Battery.....</b>	<b>8-22</b>
<b>Recording of Vehicle Data.....</b>	<b>8-5</b>	Information for Users on Collection and Disposal of Old Equipment and Used Batteries.....	8-22
Recording of Vehicle Data.....	8-5		

# Warranty

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## Registering Your Vehicle in A Foreign Country

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

Please note that technical alterations to the original state of your Mazda vehicle can affect the safety of the vehicle. Such technical alterations include not only the use of unsuitable spare parts, but also accessories, fittings or attachments, including rims and tires.

Genuine Mazda Parts and Genuine Mazda Accessories have been specifically designed for Mazda vehicles.

Other parts and accessories than those mentioned above have not been examined and approved by Mazda unless explicitly stated by Mazda. We cannot certify the suitability of such products. Mazda is not liable for any damage caused by the use of such products.

### **WARNING**

***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.*

# Recording of Vehicle Data

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## Recording of Vehicle Data

This vehicle is equipped with a computer which records the following main vehicle data related to vehicle controls, operation, and other driving conditions.

### Recorded data

- 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 the vehicle is driven
- Malfunction diagnosis information from each on-vehicle computer
- Information related to controls of other on-vehicle computers

### **NOTE**

*The recorded data may vary depending on the vehicle grade and optional equipment. Voice and images are not recorded.*

### Data handling

Mazda and its subcontracting parties may obtain and use the recorded data for 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

# Declaration of Conformity

## Declaration of Conformity

### ▼ Keyless Entry System/Immobilizer System

#### Keyless System Radio approval Marking

<p>Complies with IDA Standards DA100926</p>	 <b>MCMC</b> HIDF15000118	 <b>052</b>	<b>Ghana</b> SKE13E-01 NCA APPROVED:3R8-8M-0E-13D SKE136-01 NCA APPROVED:3R8-8M-0E-13E SKE134-01 NCA APPROVED:3R8-8M-0E-13F SKE133-02 NCA APPROVED:3R8-8M-EX-140 SKE13E-02 NCA APPROVED:2R9-8M-7E0-x54
<b>OMAN - TRA</b> R/0235/11: SKE13E-01 R/0231/11: SKE136-01 R/0234/11: SKE134-01 R/0233/11: SKE133-02 R/3221/16: SKE13E-02 <b>D090258</b>	<b>TRA</b> REGISTERED No: ER0071262/11: SKE13E-01 ER0071259/11: SKE136-01 ER0071260/11: SKE134-01 ER0071261/11: SKE133-02 ER45814/16: SKE13E-02 DEALER No: DA0071258/11	 <b>ICT</b> <small>Mitsubishi Electric Corp. Heavy Works A00102009</small>	

#### 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

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.

#### Thailand

"This telecommunication equipment is in compliance with NTC requirements."

This product has been Type Approved by Jamaica: SMA -SKE13D-01/SKE13D-02/SKE135-01/SKE134-01/SKE133-02

#### 低功率電波輻射性電機管理辦法

##### 第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

##### 第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

#### Nigeria

Connection and use of this communications  
equipment is permitted by the Nigerian  
Communications Commission

# Declaration of Conformity

## ▼ Blind Spot Monitoring (BSM) System

The latest "DECLARATION of CONFORMITY"(DoC) is available at the following:

CONTINENTAL tímto prohlašuje, že tento SRR3-A je ve shodě se za kladnými požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Undertegnede CONTINENTAL erklærer herved, at følgende udstyr SRR3-A overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Hiermit erkläre CONTINENTAL, dass sich das Gerät SRR3-A in Ü bereinstimmung mit den grundlegenden Anforderungen und den ü brigeneinschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Käesolevaga kinnitab CONTINENTAL seadme SRR3-A vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
Hereby, CONTINENTAL, declares that this SRR3-A is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Por medio de la presente CONTINENTAL declara que el SRR3-A cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Μ Ε Τ Η Ν Π Α Ρ Ο Υ Σ Α CONTINENTAL Δ Η Λ Ω Ν Ε Ι Ο Τ Ι SRR3-A Σ Υ Μ Μ Ο Ρ Φ Ω Ν Ε Τ Α Ι Π Ρ Ο Σ Τ Ι Σ Ο Υ Σ Ι Ω Δ Ε Ι Σ Α Π Α Ι Τ Η Σ Ε Ι Σ Κ Α Ι Τ Ι Σ Λ Ο Ι Π Ε Σ Σ Χ Ε Τ Ι Κ Ε Σ Δ Ι Α Τ Α Ξ Ε Ι Σ Τ Η Σ Ο Δ Η Γ Ι Α Σ 1999/5/ΕΚ.
Par la présente CONTINENTAL déclare que l'appareil SRR3-A est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Con la presente CONTINENTAL dichiara che questo SRR3-A è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Ar šo CONTINENTAL deklarē, ka SRR3-A atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Šiuo CONTINENTAL deklaruoja, kad šis SRR3-A atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Hierbij verklaart CONTINENTAL dat het toestel SRR3-A in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Hawnhekk, CONTINENTAL, jiddikjara li dan SRR3-A jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Direttiva 1999/5/EC.

# Declaration of Conformity

<p>Alulírott, CONTINENTAL nyilatkozom, hogy a SRR3-A megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.</p>
<p>Niniejszym CONTINENTAL oświadcza, że SRR3-A jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.</p>
<p>CONTINENTAL declara que este SRR3-A está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.</p>
<p>CONTINENTAL izjavlja, da je ta SRR3-A v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.</p>
<p>CONTINENTAL tímto vyhlasuje, že SRR3-A splňuje základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.</p>
<p>CONTINENTAL vakuuttaa täten että SRR3-A tyypinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.</p>
<p>Härmed intygar CONTINENTAL att denna SRR3-A står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.</p>
<p>Hér með lýsir CONTINENTAL yfir því að SRR3-A er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.</p>
<p>CONTINENTAL erklærer herved at utstyret SRR3-A er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.</p>
<p>С н а с т о я щ е т о, CONTINENTAL, д е к л а р и р а, ч е SRR3-A е в съответствие със съществениите изисквания и другите приложими разпоредби на Директива 1999/5/Е С.</p>
<p>Prin prezenta, CONTINENTAL, declară că aparatul SRR3-A este în conformitate cu cerințele esențiale și cu alte prevederi pertinente ale Directivei 1999/5/CE.</p>
<p>”Ovim , CONTINENTAL, izjavljuje da ovaj SRR3-A je usklađen sa bitnim zahtjevima i drugim relevantnim odredbama Direktive 1999/5/EC.”</p>
<p>Ovim CONTINENTAL, izjavljuje da je SRR3-A u skladu s bitnim zahtjevima i drugim relevantnim odredbama Direktive 1999/5/EC i Pravilnika o RiTT opremi(NN25/2012)</p>

1. **CE0682**

2. DoC (Declaration of Conformity) in local languages

3. Link to the original DoC

<http://continental.automotive-approvals.com/>

# EAC

Radio Approval



Type approval number: UA.086.00840-14

Placement

Product and/or Manual, Packaging

Special Requirements for Manual

No

# Declaration of Conformity

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NTC



Type Approved  
No.: ESD-1409920C

FCC ID : OAYSRR3A

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

#### FCC Warning

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

TRA REGISTERED No:ER35791/14 DEALER No: DA0041485/10
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# Declaration of Conformity

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ictQATAR  
Type approval req No:  
CRA/SA/2014/R-4413

Importer No:  
FT-2222

**Complies with  
IDA Standards  
DA100926**

The Equipment Identified hereon is approved for use under the following rules

- 1- This equipment must not cause harmful interference to other service.
- 2- This equipment is subject to harmful interference, and the owner of this equipment must not claim for protection.

From the Lebanese Telecommunications Ministry:  
Type Approval Number: 12421/O&M/2014

 CCAB14LP5730T6

# Declaration of Conformity

## ▼ Bluetooth® Hands-Free

1999/5/EC Directive regulatory notices

This device has been evaluated against the essential requirements of the 1999/5/EC Directive.

Bulgarian	С настоящето Johnson Controls Inc. декларира, че AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT отговаря на съществените изисквания и другите приложими изисквания на Директива 1999/5/EC.
Croatian	Johnson Controls Inc. izjavljuje da je ova jedinica AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT sukladna bitnim zahtjevima i ostalim primijenjenim normama smjernice 1999/5/EC.
Czech	Johnson Controls Inc. tímto prohlašuje, že tento AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Danish	Undertegnede Johnson Controls Inc. erklærer herved, at følgende udstyr AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Dutch	Hierbij verklaart Johnson Controls Inc. dat het toestel AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
English	Hereby, Johnson Controls Inc., declares that this AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Estonian	Käesolevaga kinnitab Johnson Controls Inc. seadme AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
German	Hiermit erklart Johnson Controls Inc., dass sich das Gerät AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Greek	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Johnson Controls Inc. ΔΗΛΩΝΕΙ ΟΤΙ AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT ΕΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΕΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Hungarian	Alulírott, Johnson Controls Inc. nyilatkozom, hogy a AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Finnish	Johnson Controls Inc. vakuuttaa täten että AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
French	Par la présente Johnson Controls Inc. déclare que l'appareil AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Icelandic	Hér með lýsir Johnson Controls Inc. yfir því að AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC
Italian	Con la presente Johnson Controls Inc. dichiara che questo AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latvian	Ar šo Johnson Controls Inc. deklarē, ka AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lithuanian	Šiuo Johnson Controls Inc. deklaruojama, kad šis AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Maltese	Hawnhekk, Johnson Controls Inc., jiddikjara li dan AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT jikkonforma mal-htigijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Direttiva 1999/5/EC.
Norwegian	Johnson Controls Inc. erklærer herved at utstyret AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.
Polish	Niniejszym Johnson Controls Inc. oświadcza, że AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC
Portuguese	Johnson Controls Inc. declara que este AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

# Declaration of Conformity

Slovak	Johnson Controls Inc. týmto vyhlasuje, že AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Slovenian	Johnson Controls Inc. izjavlja, da je ta AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Spanish	Por medio de la presente Johnson Controls Inc. declara que AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Swedish	Härmed intygar Johnson Controls Inc. att denna AUTOMOTIVE ELECTRONICS INFOTAINMENT HEAD UNIT står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

In order to satisfy the essential requirements of 1999/5/EC Directive, the product is compliant with the following standards:

RF spectrum use (R&TTE art. 3.2)	EN 300 328 v1.7.1 EN 300 440-2 V1.4.1
EMC (R&TTE art. 3.1b)	EN 301 489-1 V1.9.2 EN 301 489-3 V1.4.1 EN 301 489-17 V2.2.1
Health & Safety (R&TTE art. 3.1a)	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 EN 62311:2008

The conformity assessment procedure referred to in Article 10 and detailed in Annex IV of Directive 1999/5/EC has been followed with the involvement of the following Notified Body Notified Body:

AT4 wireless, S.A.  
Parque Tecnológico de Andalucía  
C/ Severo Ochoa 2  
29590 Campanillas – Málaga  
SPAIN  
Notified Body No: 1909

Thus, the following marking is included in the product:

# CE 1909

There is no restriction for the commercialisation of this device in all the countries of the European Union.

# Declaration of Conformity

FCC ID  
CB262932

CE MARK

**CE 1909**

MODEL - MAZDA\_GEN\_65\_CMU  
BRAND - Johnson Controls, Inc.

Botswana

**BOCRA**  
**REGISTERED No :**  
TA/2013/459

Brunei

Certificate Number to be included  
DRQ-D-BRUSIN-03-1998-7494-LPD-22822

Grenada

**NTRC REGISTRATION NUMBER:**  
CL 681 / 13 - TA

Indonesia

**30400/SDPPI/2013**  
3311

Israel

מספר אישור אלחוטי של משרד התקשורת הוא 51-38316  
אסור להחליף את האנטנה המקורית של המכשיר ולא

לעשות בו כל שינוי טכני אחר

Jamaica

This product has been Type Approved by Jamaica: SMA – "MAZDA\_GEN\_65\_CMU".  
This product contains a Type Approved Module by Jamaica: SMA – "MAZDA\_GEN\_65\_CMU".

Jordan

The manufacturer: Johnson Controls, Inc.  
Equipment type: MAZDA\_GEN\_65\_CMU  
TRC's type approval certificate number: TRC/LPD/2013/158

Morocco

**AGREE PAR L'ANRT MAROC**  
Numéro d'agrément : ..... MR 8393 ANRT 2013  
Date d'agrément : ..... 08/07/2013

Mozambique

INCM - 21ETA13  
Model - MAZDA\_GEN\_65\_CMU  
Manufacturer - Johnson Controls, Inc.

Nepal

Type = MAZDA\_GEN\_65\_CMU

New Caledonia

ANFR - 13INF0025

Nigeria

**Connection and use of this communications  
equipment is permitted by the Nigerian  
Communications Commission**

Panama

ASEP DTEL No. 1201

Papua New Guinea

NICTA PNG13/0453

Peru

MTC 1300160

Philippines

 **NTC**  
Type Accepted  
No.: **ESD-1307587C**

Sint Maarten

BT&P - 2013/042-b/TA&2013/042-a/TA

Saint Vincent  
and the Grenadines

NTRC - NTRC/01

Thailand

NBTC - RT.4780

Uruguay

URSEC - 431/FR/2013

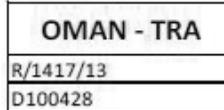
# Declaration of Conformity

Algeria 'Agrée par l'ARPT' and 'Référence d'agrément '.

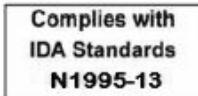
Azerbaijan



Oman



Singapore



South Africa



UAE



Ukraine



Vietnam



Honduras

Frequency Range (MHz)	Output (Watts)
2400.0 – 2483.5	BT: <4dBm WLAN: <30dBm

# Declaration of Conformity

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Product Name: Connectivity Master Unit

Certification Name: MAZDA\_GEN\_65\_CMU

Certificate Holder: Visteon Corporation

注意！

依據 低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信規定作業之無線電信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

# Declaration of Conformity

## ▼ Mazda Radar Cruise Control (MRCC)/Distance Recognition Support System (DRSS)/Smart Brake Support (SBS)



The latest "DECLARATION of CONFORMITY" (DoC) is available at the following address:  
<http://www.globaldenso.com/en/products/oem/index.html>

English	Hereby, DENSO CORPORATION declares that this DNMWR006 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Finnish	DENSO CORPORATION vakuuttaa täten että DNMWR006 tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Dutch	Hierbij verklaart DENSO CORPORATION dat het toestel DNMWR006 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
French	Par la présente DENSO CORPORATION déclare que l'appareil DNMWR006 est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Swedish	Härmed intygar DENSO CORPORATION att denna DNMWR006 står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Danish	Undertegnede DENSO CORPORATION erklærer herved, at følgende udstyr DNMWR006 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
German	Hiermit erklart DENSO CORPORATION, dass sich das Gerat DNMWR006 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Greek	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ DENSO CORPORATION ΔΗΛΩΝΕΙ ΟΤΙ ΙΔΝΜWR006 ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Italian	Con la presente DENSO CORPORATION dichiara che questo DNMWR006 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Spanish	Por medio de la presente DENSO CORPORATION declara que el DNMWR006 cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Portuguese	DENSO CORPORATION declara que este DNMWR006 está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Maltese	Hawnhekk, DENSO CORPORATION, jiddikjara li dan DNMWR006 jikkonforma mal-htigijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Direttiva 1999/5/EC.
Estonian	Käesolevaga kinnitab DENSO CORPORATION seadme DNMWR006 vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sa tetele.
Hungarian	Alulírott, DENSO CORPORATION nyilatkozom, hogy a DNMWR006 megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Slovak	DENSO CORPORATION týmto vyhlasuje, že DNMWR006 spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Czech	DENSO CORPORATION tímto prohlašuje, že tento DNMWR006 je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.

# Declaration of Conformity

Slovene	DENSO CORPORATION izjavlja, da je ta DNMWR006 v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Lithuanian	Šiuo DENSO CORPORATION deklaruoja, kad šis DNMWR006 atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Latvian	Ar šo, DENSO CORPORATION, deklarē, ka DNMWR006 atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Polish	Niniejszym DENSO CORPORATION oświadcza, że DNMWR006 jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Icelandic	Hér með lýsir DENSO CORPORATION yfir því að DNMWR006 er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Norwegian	DENSO CORPORATION erklærer herved at utstyret DNMWR006 er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.
Bulgarian	С настоящето, DENSO CORPORATION, декларира, че DNMWR006 е в съответствие със съществените изисквания и другите приложими разпоредби на Директива 1999/5/EC.
Romanian	Prin prezenta, DENSO CORPORATION, declară că aparatul DNMWR006 este în conformitate cu cerințele esențiale și cu altele prevederi pertinente ale Directivei 1999/5/CE.
Croatian	Ovim DENSO CORPORATION, izjavljuje da je DNMWR006 u skladu s bitnim zahtjevima i drugim relevantnim odredbama Direktive 1999/5/EC i Pravilnika o RITTT opremi (NN 25/2012).
Serbian	Ovim, DENSO CORPORATION, deklarise da je DNMWR006 u skladu sa osnovnim zahtevima i ostalim relevantnim odredbama Direktive 1999/5/EC.

經型式認證合格之低功率射頻電機，非經許可、公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

<p>NOTICE</p> <p>This equipment has been registered with the Telecommunications Regulatory Authority for use in the UAE.</p> <p>TRA</p> <p>REGISTERED No : ER0085986/12</p> <p>DEALER No : 0019826/09</p> <p>DENSO DNMWR006</p>
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Ukraine

For Vehicles sold in Ukraine  
MODEL : DNMWR006



**▼ Mazda ERA-GLONASS**

Нотификация ФСБ № RU0000023712 от 26.11.2015, действительна до 17.11.2020, зарегистрирована ФСБ РФ.

Декларация о соответствии средства связи № Д-МТ-9710 от 25.05.2016, действительна до 19.04.2019, зарегистрирована Федеральным агентством связи РФ.

Декларация о соответствии техническому регламенту Таможенного союза 020/2011 № ТС № RU Д-JP.МЛ26.В.00387 от 23.03.2016, действительна по 22.03.2021, зарегистрирована органом по сертификации продукции АНО «СЦ Связь-сертификат» (аттестат аккредитации RA.RU.11МЛ26, дата регистрации 10.02.2015).

Декларация о соответствии аккумуляторной батареи FT0098A № РОСС JP.МЛ26.Д00213 от 27.11.2015, действительна до 26.11.2018, зарегистрирована органом по сертификации продукции АНО «СЦ Связь-сертификат» (аттестат аккредитации RA.RU.11МЛ26, дата регистрации 10.02.2015).

# Electromagnetic Compatibility

## Electromagnetic Compatibility

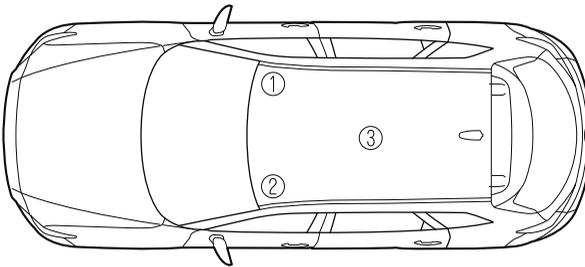
Your Mazda has been tested and certified to the UNECE\*<sup>1</sup> 10 regulation as related to electromagnetic compatibility. Radio Frequency (RF) transmitter equipment (e.g. cellular telephones, amateur radio transmitters, etc.) may only be fitted to your Mazda if they comply with the parameters shown in the table below.

\*1 UNECE stands for United Nations Economic Commission for Europe.

It is your responsibility to ensure that any equipment you have fitted complies with applicable local legislations. Have any equipment fitted by properly trained technicians.

### **! CAUTION**

- Do not mount any transceiver, microphones, speakers, or any other item in the deployment path of the air bag system.
- Do not fasten antenna cable to original vehicle wiring, fuel pipes or brake pipes. Avoid running the antenna cable parallel with the wire harness to the best extent possible.
- Keep the antenna and power cables at least 100 mm (3.9 in) from any electronic modules and the air bags.
- Avoid using the cigar lighter or accessory socket as a power source for the RF-transmitting equipment.



#### Antenna positions:

- ① : front right of roof
- ② : front left of roof
- ③ : center of roof

Frequency Band (MHz)	Maximum output power (Wattage)	Antenna Positions
50 — 54	50	①②③
68 — 87.5	50	①②③
142 — 176	50	①②③
380 — 470	50	①②③
806 — 940	10	①②③
1200 — 1300	10	①②③

# Electromagnetic Compatibility

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Frequency Band (MHz)	Maximum output power (Wattage)	Antenna Positions
1710 — 1885	10	①②③
1885 — 2025	10	①②③
2400 — 2500	0.01*1	In a cabin*1

\*1 Only for Bluetooth®

## **NOTE**

*After the installation of RF transmitters, check for disturbances from and to all electrical equipment in the vehicle, both in the standby and transmit modes.*

*Check all electrical equipment:*

- *with the ignition ON*
- *with the engine running*
- *during a road test at various speeds.*

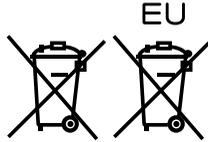
## Collection/Disposal of Old Equipment/Used Battery

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### Information for Users on Collection and Disposal of Old Equipment and Used Batteries

When disposing your old battery, please refer to the information as follows.

#### ▼ Information on Disposal in the European Union



These crossed-out wheeled bin symbols on the products, packaging, and/or accompanying documents mean that used electronic products and batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sales where you purchased the items.

#### **NOTE**



*The bottom two letters might be used in combination with the crossed-out wheeled bin symbol. In this case it complies with the requirement established by the Directive for the chemical involved.*

*“Pb” and “Cd” mean lead and cadmium respectively.*

## Collection/Disposal of Old Equipment/Used Battery

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### ▼ Information on Disposal in Other Countries Outside the European Union

The above symbols are only valid in the European Union. If you wish to discard old products and used batteries, please contact your local authorities, your waste disposal service or the point of sales where you purchased the items, and ask for the correct method of disposal.

# MEMO

# 9

## Specifications

Technical information about your Mazda.

**Identification Numbers..... 9-2**

Vehicle Information Labels..... 9-2

**Specifications..... 9-4**

Specifications..... 9-4

**Personalization Features.....9-10**

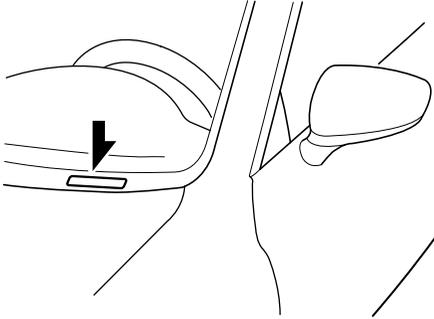
Personalization Features.....9-10

# Identification Numbers

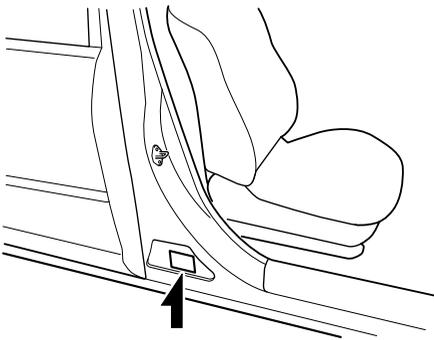
## Vehicle Information Labels

### ▼ Vehicle Identification Number (Arab Gulf Cooperation Council, Iraq)

The vehicle identification number legally identifies your vehicle. The number is on a plate attached to the cowl panel located on the left corner of the dashboard. This plate can easily be seen through the windshield.



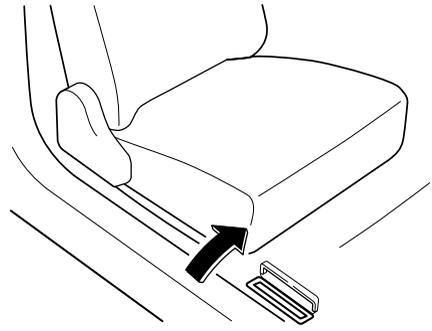
### ▼ Model Plate



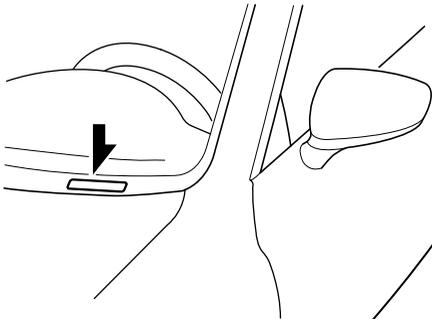
### ▼ Chassis Number/Vehicle Identification Number (Russia, Kazakhstan, Belarus, Armenia)

#### Chassis Number

Open the cover shown in the figure to check the chassis number.

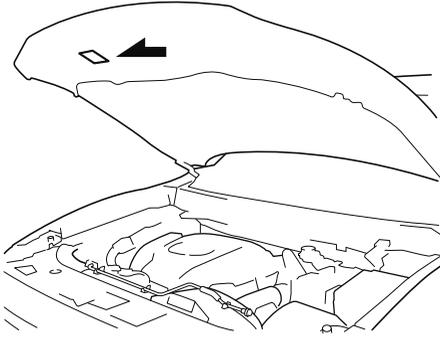


#### Vehicle Identification Number



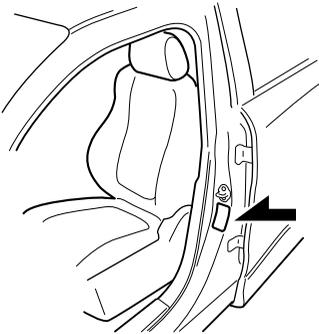
# Identification Numbers

## ▼ Vehicle Emission Control Information Label (The Philippines)

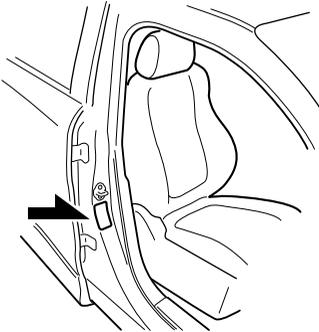


## ▼ Tire Pressure Label

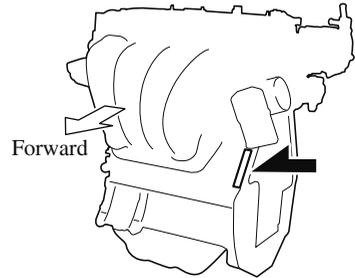
### Left-hand drive model



### Right-hand drive model

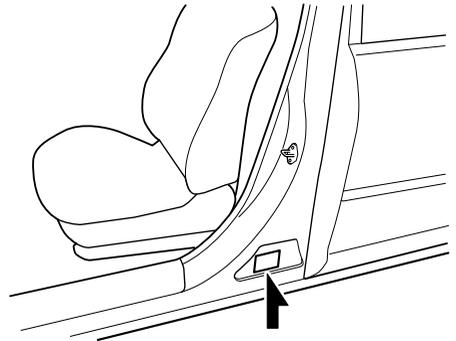


## ▼ Engine Number



## ▼ Conformity Plate (Arab Gulf Cooperation Council)

Production year and month are shown on this plate.



# Specifications

## Specifications

### ▼ Engine

Item	Specification
Type	DOHC-16V in-line, 4-cylinder
Bore × Stroke	89.0 × 100 mm (3.50 × 3.94 in)
Displacement	2,488 ml (2,488 cc)
Compression ratio	10.5

### Arab Gulf Cooperation Council

Item	Specification
Maximum engine power/revolution	170 kW/5,000 rpm
Maximum engine torque/revolution	420 N·m/2,000 rpm
Maximum speed	210 km/h (130 mph)

### ▼ Electrical System

Item	Classification
Battery	12V-55Ah/20HR or 12V-65Ah/20HR
Spark-plug number	Mazda Genuine spark plug* <sup>1</sup> PY8V-18-110

\*1 The spark plugs provide the SKYACTIV-G its optimum performance. Consult an expert repairer, we recommend an Authorized Mazda Repairer 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.*

### ▼ Lubricant Quality

Lubricant	Europe	Except Europe
Engine oil* <sup>1</sup>	Recommended Oils* <sup>2</sup>	Oil Quality
	Mazda Original Oil Supra 0W-30	API SM/SN or ILSAC GF-IV/GF-V 0W-30/5W-30/10W-30
	Mazda Original Oil Ultra 5W-30	
	Alternative Oil Quality* <sup>3</sup>	
	API SN or ACEA A5/B5	
	0W-30	
	5W-30	

\*1 Refer to Recommended Oil on page 6-19.

# Specifications

\*2 Mazda Original Oils are specially designed/tested for the respective engine. For optimum performance we recommend to use Mazda Original Oils at all times.

\*3 If you are unable to find a Mazda Original Oil, alternative oils meeting the listed specification may also be used.

Do not use oils which do not meet the above specification or requirements. Use of unsuitable oil may lead to engine damage which is not covered by the Mazda Warranty.

Lubricant	Classification
Coolant	FL-22 type
Automatic transaxle fluid	Mazda Original Oil ATF-FZ
Transfer case oil	Mazda Long Life Hypoid Gear Oil SG1
Rear differential oil	Mazda Long Life Hypoid Gear Oil SG1
Brake fluid	SAE J1703 or FMVSS116 DOT-3 or DOT-4

## ▼ Capacities

### (Approximate Quantities)

Item		Capacity	
Engine oil	With oil filter replacement	4.8 L (5.1 US qt, 4.2 Imp qt)	
	Without oil filter replacement	4.6 L (4.9 US qt, 4.0 Imp qt)	
Coolant	Azerbaijan, Kazakhstan, Armenia, Georgia, Russia, Belarus, Ukraine	9.9 L (10.5 US qt, 8.7 Imp qt)	
	Except above	Left-hand drive model	9.8 L (10.4 US qt, 8.6 Imp qt)
		Right-hand drive model	9.9 L (10.5 US qt, 8.7 Imp qt)
Automatic transaxle fluid		8.0 L (8.5 US qt, 7.0 Imp qt)	
Transfer case oil		0.45 L (0.48 US qt, 0.40 Imp qt)	
Rear differential oil		0.35 L (0.37 US qt, 0.31 Imp qt)	
Fuel tank	2WD	72.0 L (19.0 US gal, 15.8 Imp gal)	
	4WD	74.0 L (19.5 US gal, 16.3 Imp gal)	

Check oil and fluid levels with dipsticks or reservoir gauges.

## ▼ Dimensions

Item	Vehicle specification
Overall length	5,075 mm (199.8 in)
Overall width	1,969 mm (77.5 in)
Overall height	1,747 mm (68.8 in)
Front tread	1,663 mm (65.5 in)
Rear tread	1,663 mm (65.5 in)
Wheelbase	2,930 mm (115.4 in)

# Specifications

## ▼ Light Bulbs

### Exterior light

#### With Adaptive LED Headlights (ALH)

Light bulb		Category	
		Wattage	UNECE <sup>*1</sup> (SAE)
Headlights	High beam	LED*2	— (—)
	Low beam	LED*2	— (—)
Running lights/Parking lights		LED*2	— (—)
Front turn signal lights		LED*2	— (—)
Front fog lights		LED*2	— (—)
Side turn signal lights		LED*2	— (—)
High-mount brake light		LED*2	— (—)
Rear turn signal lights		21	WY21W (7443NA)
Brake lights/Taillights		LED*2	— (—)
Brake lights		LED*2	— (—)
Taillights		LED*2	— (—)
Reverse lights		16	W16W (921)
Rear fog light*		21	W21W (7440)
License plate lights		5	W5W (—)

\*1 UNECE stands for United Nations Economic Commission for Europe.

\*2 LED is the abbreviation for Light Emitting Diode.

#### Without Adaptive LED Headlights (ALH)

Light bulb		Category	
		Wattage	UNECE <sup>*1</sup> (SAE)
Headlights	High beam	LED*2	— (—)
	Low beam	LED*2	— (—)
Running lights		21/5	W21/5W (7443)
Parking lights		5	W5W (—)
Front turn signal lights		21	WY21W (7443NA)
Front fog light*		LED*2	— (—)
Side turn signal lights		LED*2	— (—)
High-mount brake light		LED*2	— (—)
Rear turn signal lights		21	WY21W (7443NA)
Brake lights/Taillights		LED*2	— (—)

Light bulb	Category	
	Wattage	UNECE *1 (SAE)
Brake lights	LED*2	— (—)
Reverse lights	16	W16W (921)
Rear fog light*	21	W21W (7440)
License plate lights	5	W5W (—)

\*1 UNECE stands for United Nations Economic Commission for Europe.

\*2 LED is the abbreviation for Light Emitting Diode.

### Interior light

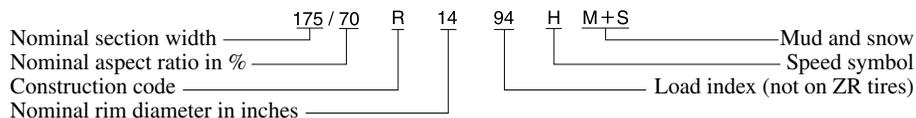
Light bulb		Category	
		Wattage	UNECE *1
Overhead lights (Front)/Map lights (Front)	Bulb type	8	—
	LED type	LED*2	—
Map lights (Center)	Bulb type	8	—
	LED type	LED*2	—
Overhead light (Rear)	Bulb type	10	—
	LED type	LED*2	—
Ambient lights		LED*2	—
Vanity mirror lights		2	—
Luggage compartment light		8	—

\*1 UNECE stands for United Nations Economic Commission for Europe.

\*2 LED is the abbreviation for Light Emitting Diode.

### ▼ Tires

#### Sample tire mark and its meaning



# Specifications

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## 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)
T	Up to 190 km/h (118 mph)
U	Up to 200 km/h (124 mph)
H	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 expert repairer; we recommend an Authorized Mazda Repairer.*

Check the tire pressure label for tire size and inflation pressure (page 6-36).

## Standard tire

**(Left-hand drive model)**

Tire size	Inflation pressure	
	Front	Rear
P255/60R18 107H	230 kPa (2.3 bar, 33 psi)	230 kPa (2.3 bar, 33 psi)
P255/50R20 104V	230 kPa (2.3 bar, 33 psi)	230 kPa (2.3 bar, 33 psi)

**(Right-hand drive model)**

Tire size	Inflation pressure	
	Front	Rear
255/60R18 108H	230 kPa (2.3 bar, 33 psi)	230 kPa (2.3 bar, 33 psi)
255/50R20 105V	230 kPa (2.3 bar, 33 psi)	230 kPa (2.3 bar, 33 psi)

**Temporary spare tire**

Tire size	Inflation pressure
185/80R17 99M	320 kPa (3.2 bar, 46 psi)

**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)

**▼ Fuses**

Refer to Fuses on page 6-48.

**▼ Brakes**

If you require information regarding the wear limit specification for the brake disc plates and the measurement method, please contact an expert repairer, we recommend an Authorized Mazda Repairer. The information is made freely available.

# Personalization Features

## Personalization Features

The following personalization features can be set or changed by the customer or an Authorized Mazda Repairer. Consult an Authorized Mazda Repairer for details.

Additionally, some of the personalization features can be changed by the customer depending on the feature.

Personalization features and settings which can be changed differ depending on the market and specification.

### Settings Change Method

① **Settings can be changed by operating the center display screen.**

A: Refer to Settings on page 5-60.

B: Refer to Fuel Economy Monitor on page 4-77.

C: Refer to Active Driving Display on page 4-29.

② **Settings can be changed by operating the vehicle switches.**

D: Refer to Auto Lock/Unlock Function on page 3-15.

E: Refer to Transmitter on page 3-4.

F: Refer to Locking, Unlocking with Request Switch (With the advanced keyless function) on page 3-12.

③ **Settings can be changed by an Authorized Mazda Repairer.**

Item	Feature	Factory Setting	Available Settings	Settings Change Method		
				①	②	③
<b>Safety</b>						
Smart City Brake Support [Forward] (SCBS F) (page 4-148)	The system can be changed so that Smart City Brake Support (SCBS) does not operate.*1	On	On/Off	A	—	×
Smart City Brake Support [Reverse] (SCBS R) (page 4-152)						
Advanced Smart City Brake Support (Advanced SCBS) (page 4-145)	The system can be changed so that Smart City Brake Support (Advanced SCBS)/Smart Brake Support (SBS) does not operate.*1	On	On/Off	A	—	×
	The distance at which the collision warning activates can be changed.	Med	Near/Med/Far	A	—	×
Smart Brake Support (SBS) (page 4-156)	The volume of the collision warning can be changed.	High	High/Low/Off	A	—	×

# Personalization Features

Item	Feature		Factory Setting	Available Settings	Settings Change Method		
					①	②	③
Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) (page 4-134)	The system can be changed so that the steering wheel assist does not operate.		On	On/Off	A	—	×
	When the steering wheel operation assistance is turned on	The timing at which the steering wheel operation assist of the Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) operates can be changed.	Late	Early/Late	A	—	×
		The cancel sensitivity of the steering assistance for the Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) can be changed.	High	High/Medium/Low	A	—	×
		The system can be changed so that the lane departure warning does not activate.	On	On/Off	A	—	×
	When the steering wheel operation assistance is turned off	The warning timing in which the Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) system determines that the vehicle may be deviating from its lane can be changed.	Med	Early/Med/Late/Adaptive	A	—	×
		The sensitivity of the warning for the Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) can be changed.	Med	Often/Med/Rare	A	—	×
	The type of Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) warning can be changed.		Vibration	Vibration/Beep/Rumble	A	—	×
	The warning intensity/volume of the Lane-keep Assist System (LAS) & Lane Departure Warning System (LDWS) system can be changed.	Vibration	Low	High/Low	A	—	×
		Rumble	Low	High/Mid/Low	A	—	×
		Beep	Low	High/Low	A	—	×

# Personalization Features

Item	Feature	Factory Setting	Available Settings	Settings Change Method		
				①	②	③
Blind Spot Monitoring (BSM) (page 4-90)	The system can be changed so that Blind Spot Monitoring (BSM) does not operate.*1	On	On/Off	A	—	×
	Warning beep volume*2	High	High/Low/Off	A	—	×
Distance Recognition Support System (DRSS) (page 4-103)	The system can be changed so that Distance Recognition Support System (DRSS) does not operate.*1	On	On/Off	A	—	×
	The distance at which the vehicle ahead and your vehicle indicated in the display flashes in white can be changed.	Near	Far/Medium/Near	A	—	×
Driver Attention Alert (DAA) (page 4-106)	The system can be changed so that driver attention alert does not operate.*1	On	On/Off	A	—	×
Traffic Sign Recognition System (TSR)*3 (page 4-96)	The Traffic Sign Recognition System (TSR) can be set to inoperable.*1	On	On/Off	A	—	×
	The warning pattern of the excessive speed warning can be changed.	Off	Off/ Visual/ Audio & Visual	A	—	×
	The activation timing for the excessive speed warning can be changed.	+0 km/h or +0 mph	+0 km/h or +0 mph/ +5 km/h or +5 mph/ +10 km/h or +10 mph/	A	—	×
Parking Sensor System (page 4-195)	Display/non-display	On	On/Off	A	—	×

# Personalization Features

Item	Feature	Factory Setting	Available Settings	Settings Change Method		
				①	②	③
<b>Vehicle</b>						
Door locks (page 3-15)	Operation condition of auto lock/unlock function	Lock: When Driving Unlock: IGN Off	Lock: Out of Park Unlock: In Park/ Lock: Shifting Out of Park/ Lock: When Driving Unlock: In Park/ Lock: When Driving Unlock: IGN Off/ Lock: When Driving/ Off	A	D	×
Keyless entry system (page 3-3)	Time for locking door automatically	30 seconds	90 seconds/ 60 seconds/ 30 seconds	A	—	×
Advanced keyless entry system (page 3-8)	Time for locking door automatically	30 seconds	90 seconds/ 60 seconds/ 30 seconds	A	—	×
	Auto-lock function operation/non-operational	Off	On/Off	A	—	×
	Beep volume when locking/unlocking	Off or Medium	High/ Medium/ Low/ Off	A	E, F	×
Illuminated entry system (page 5-77)	Time until interior lights turn off after closing door	15 seconds	60 seconds/ 30 seconds/ 15 seconds/ 7.5 seconds	A	—	×
	Time until interior lights turn off automatically when any door is not closed completely	30 minutes	60 minutes/ 30 minutes/ 10 minutes	A	—	×
Auto-wiper control (page 4-58)	Operational/non-operational	On	On/Off*4	A	—	×
Running lights (page 4-54)	Operational/non-operational	On	On/Off	—	—	×
Auto-light control (page 4-50)	Timing by which lights turn on	Medium	Light/ Medium Light/ Medium/ Medium Dark/ Dark	A	—	×

# Personalization Features

Item	Feature	Factory Setting	Available Settings	Settings Change Method		
				①	②	③
Adaptive LED Headlights (ALH) (page 4-87)	Operational/non-operational*1	On	On/Off	A	—	×
Lights-on reminder (page 7-55)	Warning beep volume	High or Low or Off	High/Low/Off	A	—	×
Coming home light (page 4-53)	Time until headlights turn off	30 seconds	120 seconds/ 90 seconds/ 60 seconds/ 30 seconds/ Off	A	—	×
Leaving home light (page 4-53)	Operational/non-operational	On or Off	On/Off	A	—	×
Turn signal indicator (page 4-57)	Beep volume	High	High/Low	A	—	×
Three-flash turn signal (page 4-58)	Operational/non-operational	On or Off	On/Off	A	—	×
Ambient lights (page 5-74)	Ambient lights brightness*5	Medium	Bright/ Medium/ Dark/ Off*6	A	—	×
Rear window defogger (page 4-63)	The operation time for the rear window defogger can be changed.	15 minutes	15 minutes/ Continuous*7	—	—	×
<b>System</b>						
Language	Language indicated in display	English-UK	Depends on market*8	A	—	×
Temperature	Temperature unit indicated in display	°C	°F/°C	A	—	×
Distance	Distance unit indicated in display	mi or km	mi/km	A	—	×
<b>Fuel Economy Monitor (page 4-77)</b>						
Ending display	On/off	Off	On/Off	B	—	×
Fuel economy resetting procedure	Linkage/non-linkage with fuel economy reset and trip meter reset	Off	On/Off	B	—	×

# Personalization Features

Item	Feature	Factory Setting	Available Settings	Settings Change Method		
				①	②	③
<b>Active driving display</b> (page 4-29)						
Display	Setting can be changed so that the Active Driving Display is not displayed.	On	On/Off	C	—	×
	The display height (up/down position) can be changed.	0	13 steps up/down from initial setting (total: 27 steps)	C	—	×
	The method for adjusting the display brightness (automatically/manually) can be changed.	AUTO	AUTO/MANUAL	C	—	×
	The standard brightness with the automatic brightness adjustment can be changed.	0	2 steps up/down from initial setting (total: 5 steps)	C	—	×
	The standard brightness with the manual brightness adjustment can be changed.	0	20 steps up/down from initial setting (total: 41 steps)	C	—	×
	The display angle can be changed.	0	3steps up/down from initial setting (total: 7steps)	C	—	×
Navigation guidance	Display/non-display	On	On/Off	C	—	×

- \*1 Though these systems can be turned Off, doing so will defeat the purpose of the system and Mazda recommends that these systems remain On.
- \*2 Only the volume of the warning beep during Blind Spot Monitoring (BSM) operation can be changed. The volume of the warning beep during Rear Cross Traffic Alert (RCTA) operation cannot be changed.
- \*3 This system functions only when the navigation system is functioning.
- \*4 If the auto-wiper control is set to Off, the wiper lever **AUTO** position is set to intermittent operation.
- \*5 Change the ambient light illumination level with the parking lights or headlights turned on.
- \*6 When set to OFF, the ambient lights remain turned off regardless of whether or not the parking lights or headlights are on or off. However, they will turn on or off in conjunction with the illuminated entry system.
- \*7 The operation may stop in 15 minutes due to the effect of the outside temperature even if the operation time of the rear window defogger has been changed to Continuous.
- \*8 Available only in display from the center display.

# MEMO

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