



# Mazda MX-5

Owner's Manual

8992

# FOREWORD

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Thank you for choosing a Mazda. To help ensure the enjoyable and trouble-free operation of your new Mazda, we urge you to read this manual carefully and follow its recommendations.

When service is necessary, remember that your Authorized Mazda Dealer knows your vehicle best and is ready to help you with all maintenance and service needs.

We assure you of our continuing interest in your motoring pleasure and complete satisfaction.

**Mazda Motor Corporation**  
HIROSHIMA, JAPAN

# How to Use This Manual

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- Keep this manual in the glove box as a permanent and convenient reference.
- Throughout this manual, you will find **WARNINGS**, **CAUTIONS**, and **NOTES**.  
The **WARNING!**s remind you to be especially careful to avoid possible personal injury.  
The **CAUTION**s are given to prevent you from making an error that could damage the vehicle or cause personal injury.  
The **NOTE**s are suggestions that will help you make full use of your vehicle.
- The number above each explanation in this manual (e.g., 895UP4000AE) is not directly related to the contents.
- The specifications and descriptions in this manual 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 incurring any obligation. Please note that this manual applies to all models in this series and explains all equipment, including options. You may therefore find explanations for equipment not installed on your vehicle.
- When you resell your Mazda, leave this manual in the vehicle. The next owner will also need this information.
- Right-hand and left-hand references in this manual are made as if facing in the same direction as the vehicle.
- This manual mainly explains the right-hand drive models, though it is applicable to both right-hand and left-hand drive models.

# TABLE OF CONTENTS

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<b>1</b>	<b>Your Vehicle at a Glance</b>	1-1
	This section shows the location of each control and attachment of your vehicle.	
<b>2</b>	<b>Knowing Your Mazda</b>	2-1
	This section contains information to fully acquaint the driver with the vehicle.	
<b>3</b>	<b>Protecting Your Mazda</b>	3-1
	This section contains information necessary for the safety, care, and operating economy of the vehicle.	
<b>4</b>	<b>Driving Your Mazda</b>	4-1
	This section explains starting and driving the vehicle and how to operate its many controls and attachments.	
<b>5</b>	<b>In Case of Emergency</b>	5-1
	This section recommends ways to deal with the most common emergencies.	

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<b>6</b>	<b>Appearance Care</b>	6-1
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This section shows how to maintain the interior and exterior of the vehicle for pleasant use and longer life.

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<b>7</b>	<b>Maintenance</b>	7-1
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This section explains easily executed user maintenance and scheduled maintenance that is best performed only by an Authorized Mazda Dealer.

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<b>8</b>	<b>Customer Information</b>	8-1
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This section contains information to help ensure the complete satisfaction of all owners of Mazda vehicles.

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<b>9</b>	<b>Specifications</b>	9-1
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This section contains essential data concerning your new Mazda.

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<b>10</b>	<b>Index</b>	10-1
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# 1

## Your Vehicle at a Glance

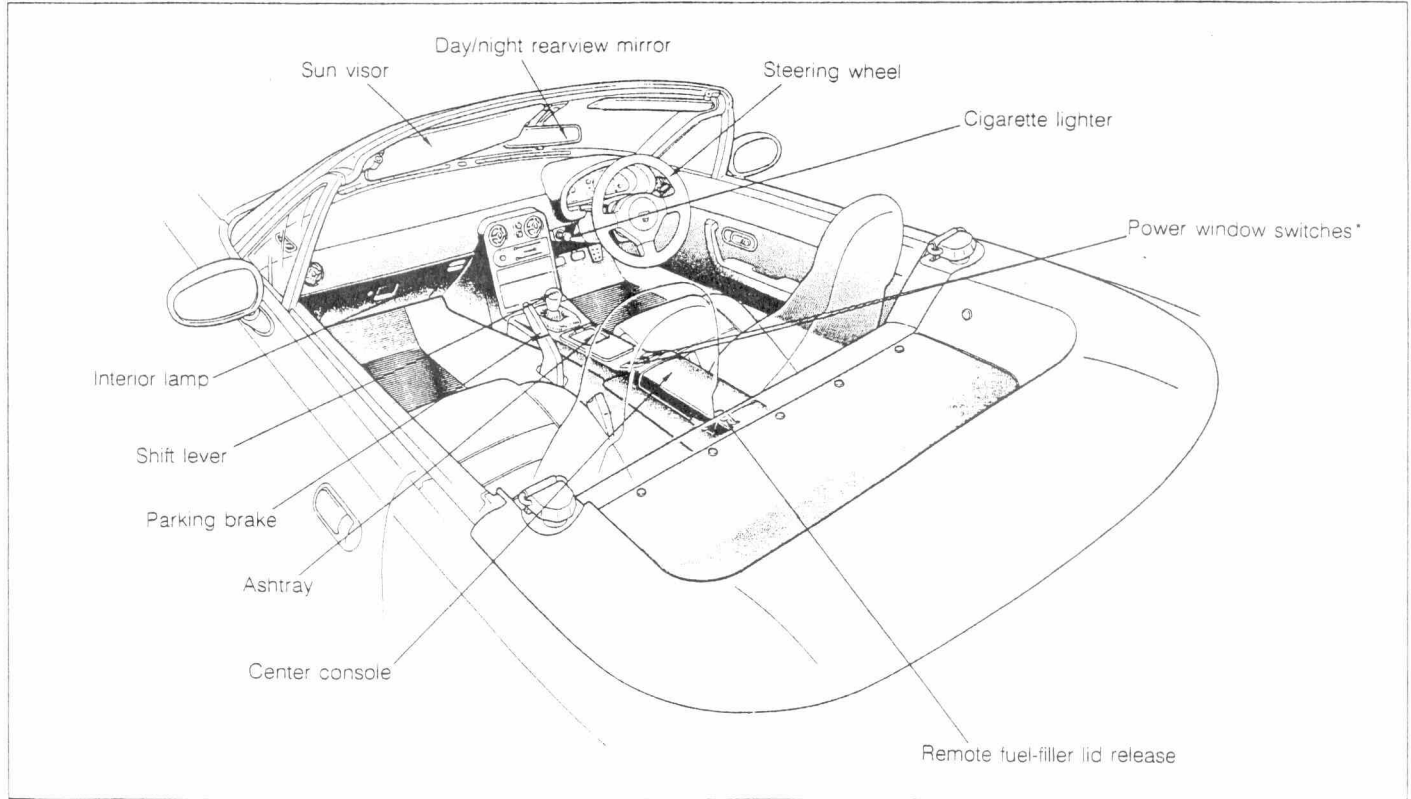
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YOUR VEHICLE AT A GLANCE	1-2
GRAPHIC SYMBOLS	1-6

# YOUR VEHICLE AT A GLANCE

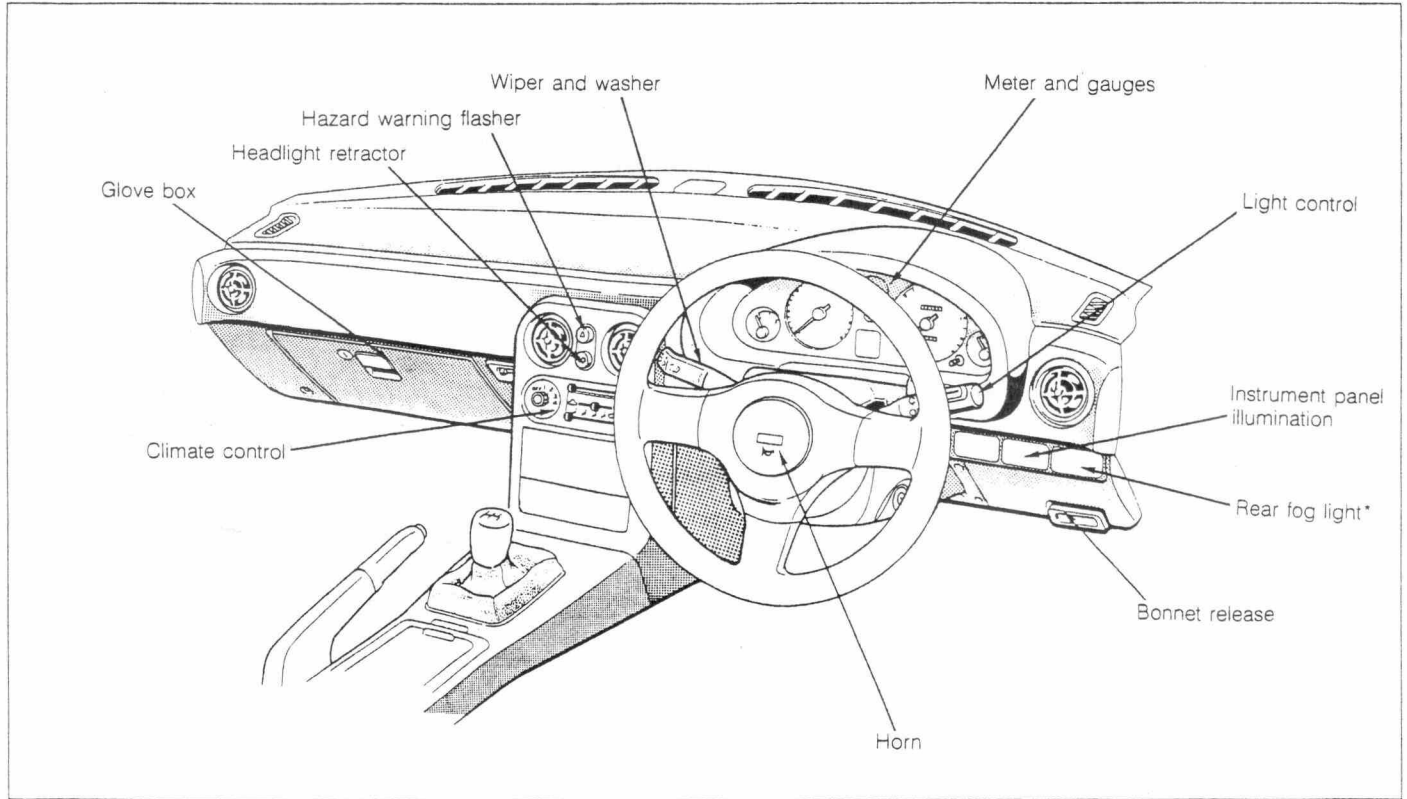
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## Interior Overview



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## Instrument Panel Overview



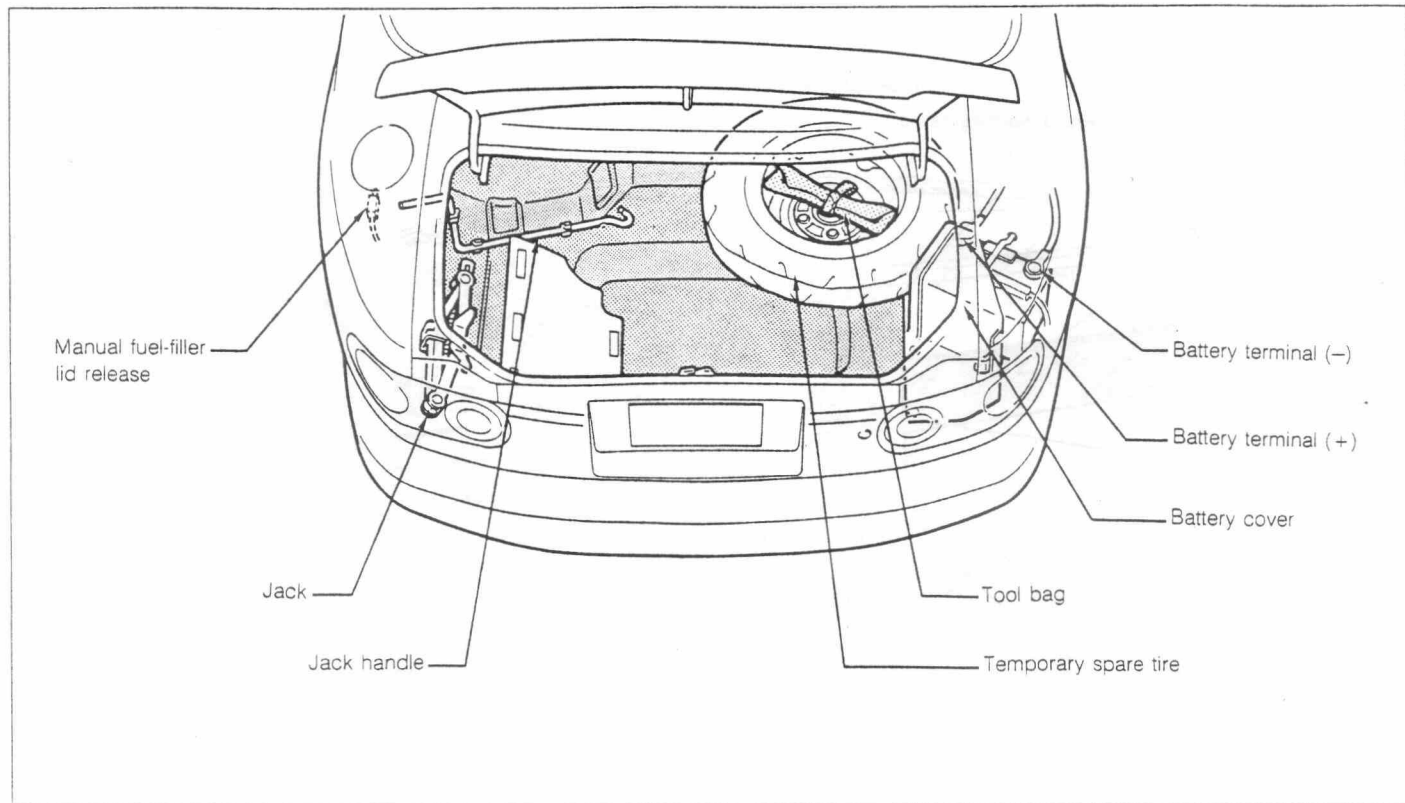
\* Some models.



# YOUR VEHICLE AT A GLANCE

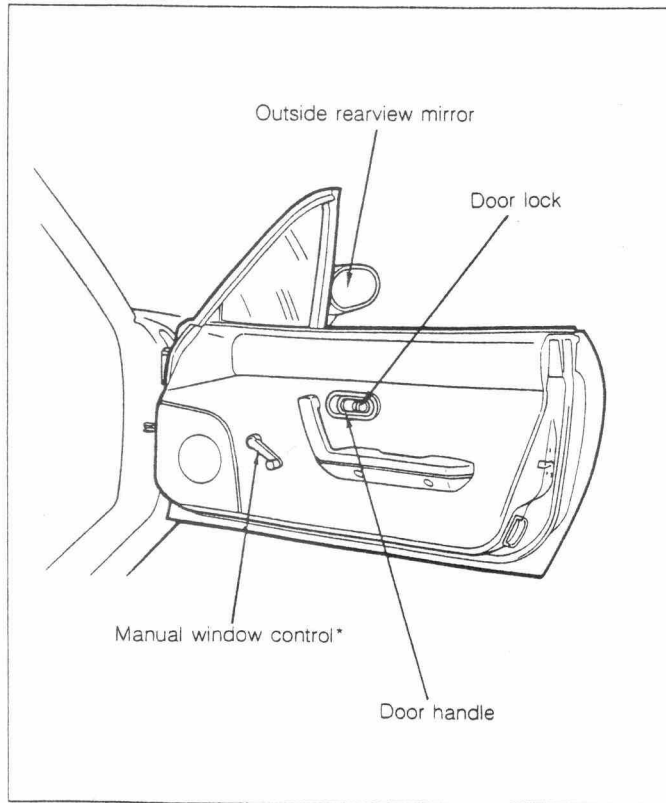
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## Luggage Compartment



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## Doors






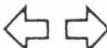


















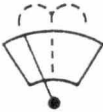





\* Some models.

# GRAPHIC SYMBOLS

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Some of the following symbols are used to identify controls and displays on your vehicle.

						
LIGHTS	HEADLIGHT HIGH BEAM	HEADLIGHT LOW BEAM	POSITION LIGHT	ILLUMINATION CONTROL	TURN SIGNALS	HAZARD WARNING FLASHER
						
BONNET RELEASE	TRUNK RELEASE	FUEL	ENGINE COOLANT TEMPERATURE	ENGINE OIL	BATTERY CHARGING SYSTEM	REAR FOG LIGHT
						
BRAKE SYSTEM	VENTILATION FAN	AIR RECIRCULATION	FRESH AIR	VENTILATION	BI-LEVEL	HEATER
						
HEATER & DEFROSTER	WINDSHIELD DEFROSTER	REAR WINDOW DEFROSTER	WINDSHIELD WIPER & WASHER	LIGHTER	HORN	WASHER FLUID

# 2

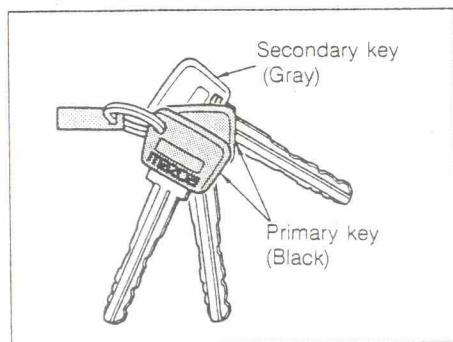
## Knowing Your Mazda

KEYS	2- 2
DOORS	2- 3
WINDOWS	2- 4
TRUNK LID	2- 5
BONNET	2- 6
FUEL-FILLER CAP	2- 7
SEATS	2- 9
SEAT BELTS	2-10
STEERING WHEEL	2-12
MIRRORS	2-13
INTERIOR LAMPS	2-14
CONVERTIBLE TOP	2-15
DETACHABLE HARDTOP	2-21

# KEYS

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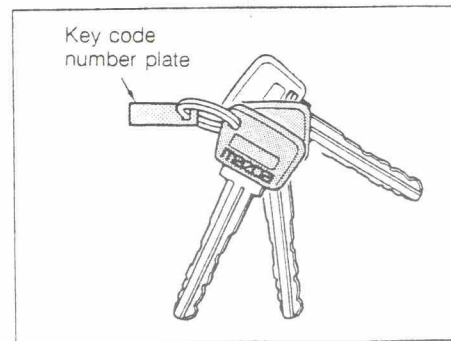
## Keys



Your vehicle has two primary keys and a secondary key.

### Operation of each key

Key	Primary key	Secondary key
Lock Operates		
Ignition switch and steering column lock	Yes	Yes
Door locks	Yes	Yes
Glove box lock	Yes	No
Center console lock	Yes	No
Trunk lid lock	Yes	No

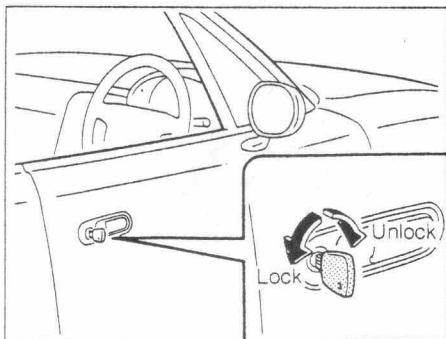


When you must leave a key with a parking attendant, leave the secondary key, which cannot operate the glove box, center console, or trunk lid locks.

The plate attached to the keys has key code numbers. If you should lose your keys, these numbers will enable an Authorized Mazda Dealer to replace them more easily. Detach the plate and store it in a safe place, not in the vehicle. You should also file a copy of the key code numbers with your important papers.

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## Door Locks

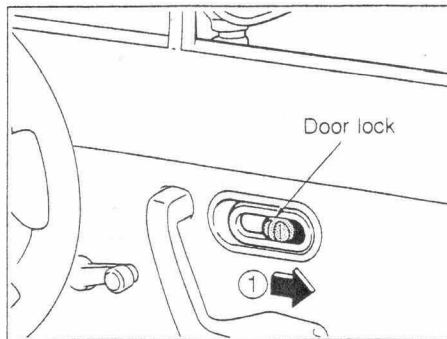


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### FROM OUTSIDE

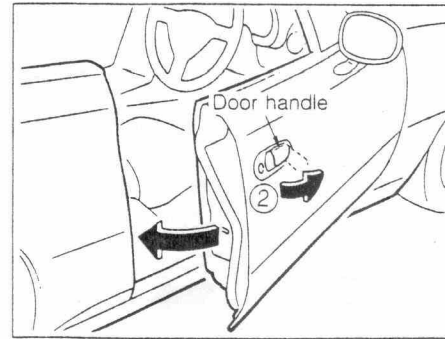
#### With Key

- Either door can be locked or unlocked with the key.  
Turn the key toward the front of the vehicle to unlock and toward the back to lock.
- Once a door is unlocked, it may be opened by pulling the door handle outward.



#### Without Key

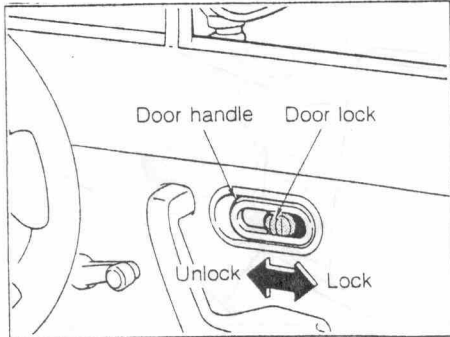
To lock a door without the key, ① slide the door lock rearward and ② pull the outside handle outward while closing the door.



#### CAUTION

**Always remove the ignition key, close the convertible top and all windows, and lock all doors when leaving your vehicle unattended.**

## DOORS, WINDOWS



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### FROM INSIDE

- To lock either door, slide the door lock rearward.
- To unlock, slide the door lock forward.
- To open, pull the door handle outward.

### WARNING!

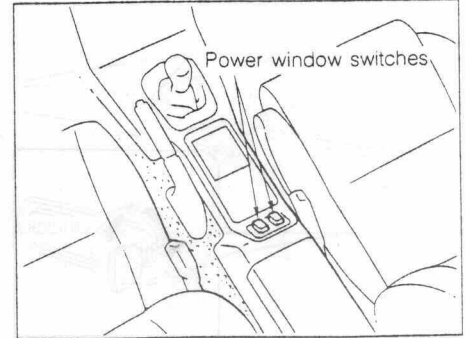
***Never leave children or animals unattended in the vehicle.***

### NOTE

Squirt deicer or glycerine into the locks to keep them from freezing. To open a frozen lock, try heating the key before inserting it.

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## Power Windows\*

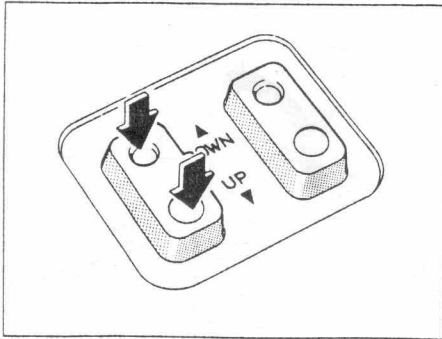


### WARNING!

- ***Use caution when closing windows. Make sure all arms, hands, and other obstructions are safely out of the way.***
- ***Do not allow children to play with the power windows. They may injure themselves, perhaps seriously.***

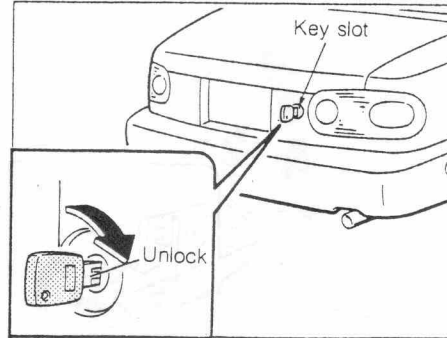
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## Trunk Lid



The ignition switch must be in the ON (II) position for the power windows to operate.

To open or close the window, depress the switch.



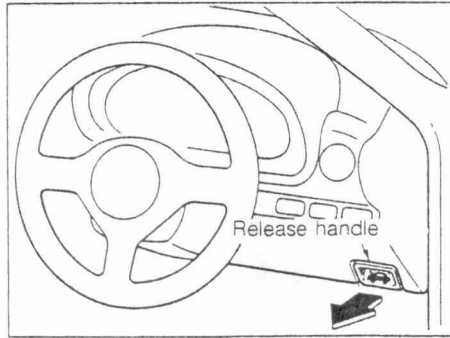
- To open the trunk, insert the primary key into the key slot and turn it clockwise. The secondary key will not operate this lock. For more information, refer to page 2-2.
- To close, use both hands to push the trunk lid down until the lock snaps shut. Do not slam it. Pull up on the trunk lid to make sure it is secure.



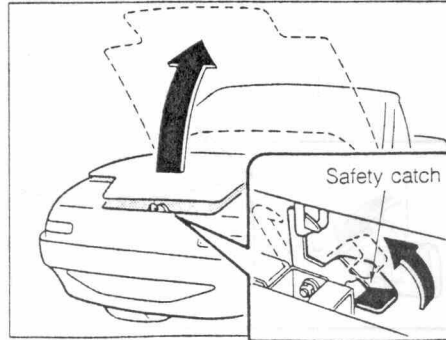
# BONNET

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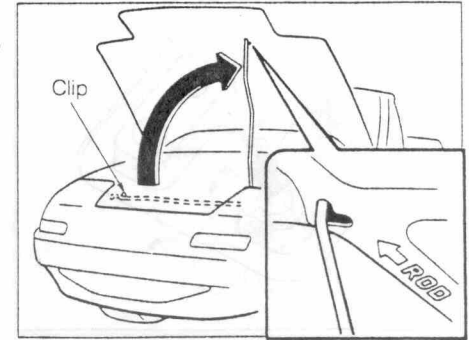
## Bonnet Release



1. Pull the release handle to unlatch the bonnet.



2. Pull the safety catch up and lift the bonnet.



3. Hold the bonnet open with the support rod.

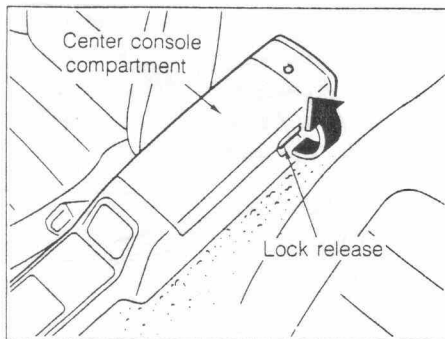
Before closing the bonnet, secure the support rod in its clip to prevent it from rattling.

### To close the bonnet:

- Check the underbonnet area to make certain all filler caps are in place and that all loose items have been removed.
- Close the bonnet firmly so that it latches securely. Do not slam it shut.

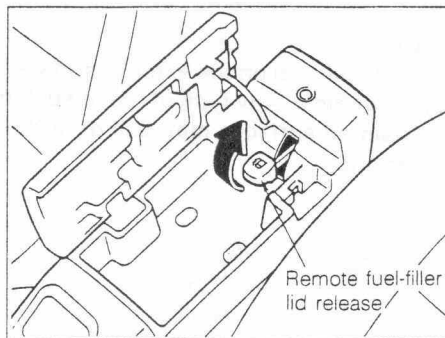
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## Fuel-Filler Cap Release

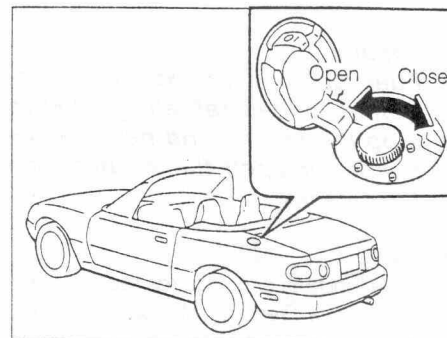


The remote fuel-filler lid release is mounted in the center console compartment.

To open the center console compartment, pull up the lock release.



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



- To remove the cap, first turn it counter-clockwise.
- To install the cap, turn it clockwise until it clicks. This signals that the cap is securely tightened.

### **WARNING!**

- ***Fuel may be under pressure. Always remove the fuel cap carefully and slowly. If the cap is venting fuel or if a hissing sound is heard, wait until the condition stops before removing the cap. If these precautions are not followed, fuel may spray out and cause per-***

## FUEL-FILLER CAP

### *sonal injury.*

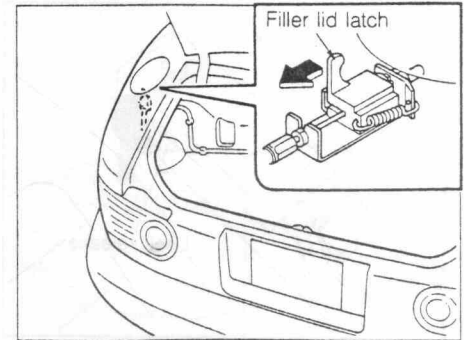
- ***Fuel vapor can be extremely hazardous. When refueling, always stop the engine and never allow sparks or open flames near the filler neck.***

### NOTE

- If the fuel tank cap requires replacement, use only a Genuine Mazda cap or the equivalent specified for your vehicle. An incorrect fuel cap can result in a serious malfunction of the fuel system or emission control system. Correct replacement caps are available at Authorized Mazda Dealers.
- If the fuel-filler lid will not open in cold weather because the area around it is frozen, push or lightly tap the lid.

### CAUTION

Do not spill fuel on the exterior surfaces of the vehicle. Any type of fuel if spilled on painted surfaces may dull or soften the paint.



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### MANUAL OVERRIDE

If for any reason the fuel-filler lid release does not operate normally, reach into the opening through the trunk compartment and pull the filler lid latch toward the rear of the vehicle.

### **WARNING!**

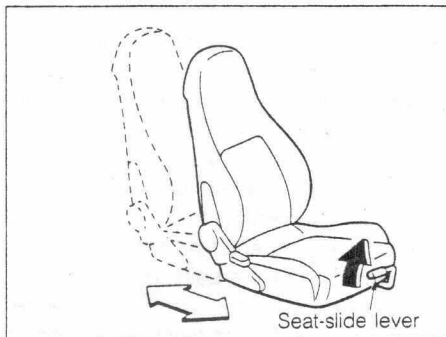
***To avoid possible injury by sharp objects, it is advisable to wear protective gloves when attempting to open the fuel-filler lid manually.***

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**Seat****WARNING!**

- Do not adjust the driver's seat while the vehicle is in motion. Doing so could cause loss of control, an accident, and personal injury.
- Do not allow packages or other objects to interfere with the normal position of a seat back. A seat back that is folded forward even slightly may not lock properly during a sudden stop or a collision.

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**Seat Adjustment**

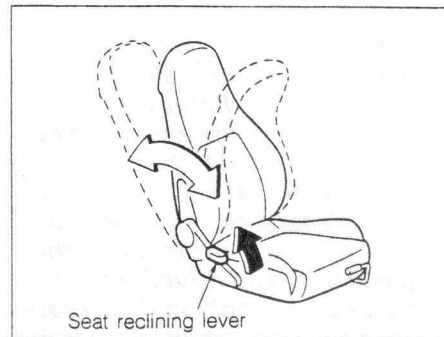
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**SEAT SLIDE**

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

**CAUTION**

Place nothing under a seat. Loose objects might interfere with the seat-slide mechanism.



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**SEAT RECLINER**

To change the seat-back angle, lean forward slightly and raise the lever. Then lean back to the desired angle and release the lever. After adjustment, make sure the lever is returned to its original position; otherwise, the seat back could unlatch while the vehicle is in motion, causing the driver to lose control of the vehicle.

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### Seat-Belt Restraint System

#### **WARNING!**

*To reduce the risk of sliding under the lap belt and thereby suffering personal injury in the event of a collision, do not recline the seat back any more than necessary for comfort. The seat belts are designed to provide optimum protection when the passenger and driver are sitting well back and upright in their seats. During a collision, especially a front-end collision, the risk of personal injury may increase with the increasing recline angle of the seat back because the passenger and driver may slide under the lap belt and have restraint forces applied directly to their abdominal areas. Therefore, try to keep the seatback in a fairly upright position whenever possible.*

To help decrease the possibility or severity of injury during accidents and sudden stops, we recommend that the driver and your passenger be properly restrained at all times by using the seat belts provided. The lap/shoulder belts have retractors with inertia locks. The retractors keep the belts out of the way while passengers enter or exit the vehicle. Inertia locks allow the belts to remain slack on the passengers for comfort until a deceleration force occurs (such as a sudden stop or a collision). At that time, the belts will automatically lock in position, and the passengers will not be thrown forward.

#### **WARNING!**

- *Lap/shoulder-belt assemblies may be damaged when subjected to stress. Replace all belts, retractors, and hardware that was in use during any collision except a minor one. Replace all restraint systems and properly repair all anchorages that were in areas damaged by a collision.*
- *Persons who are not riding in a*

*seat with a fastened seat belt are much more likely to suffer serious bodily injury during a collision.*

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## Seat Belts

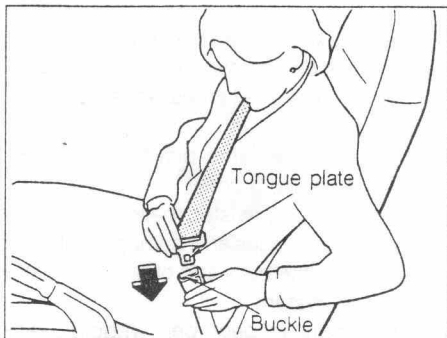
### WARNING!

- Never wear the shoulder belt under the arm.
- Never swing it around your neck and over the inside shoulder.
- Never use a single belt for more than one person at a time.
- Be sure the lap portion of the belt is fitted snugly around the hips, not the waist.
- Use the shoulder belt on the outside shoulder only.

**Failure to follow these precautions could increase the chance and severity of injury.**

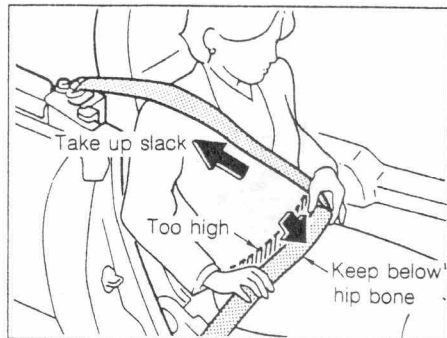
### NOTE

If the belt locks when being pulled out, rewind it completely in the retractor, then pull it out to the desired length.



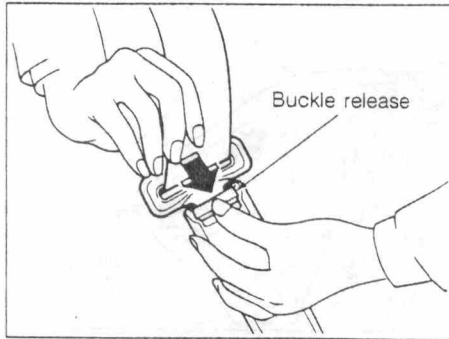
### To fasten seat belt

1. Grasp the buckle and tongue plate.
2. Slowly pull out the lap/shoulder belt.
3. Insert the tongue plate into the open end of the buckle until an audible click is heard. An audible click will come out when the belt is securely locked.



Position the lap belt across your lap as **LOW ON THE HIPS** as possible to reduce the risk of sliding under it during an accident. Adjust the belt to a **SNUG FIT** by pulling it. The belt retractor is designed to take up excess webbing automatically and to maintain tension on the belt.

## SEAT BELTS, STEERING WHEEL



### To unfasten seat belt

Depress the buckle release.

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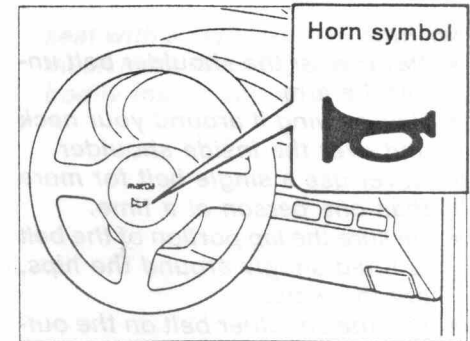
### Proper Use and Care of Seat-Belt System

To gain maximum effectiveness from the seat-belt system, follow these suggestions:

- Use the belts at all times—even on short trips.
- Never use the same belt for more than one person at a time.
- Avoid wearing twisted belts.
- Keep sharp edges and damaging objects away from the belts and other parts of the restraint system.
- Periodically inspect belt webbing, anchors, buckles, and all other parts for signs of wear, damage, and weakness. Replace questionable parts immediately.
- To clean the belt webbing, use any mild soap solution recommended for cleaning upholstery or carpets; follow the instructions provided with the soap. Do not bleach or redye the webbing because this may weaken it.
- No modifications or additions should be made by the user.
- After wearing a seat belt, make sure it is not caught on the adjusting levers or elsewhere.

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### Horn Control



Push the pad marked with the horn symbol to sound the horn. Check the horn regularly for proper operation.

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## Outside Rearview Mirrors

Be sure to adjust mirror angles before driving.

### **WARNING!**

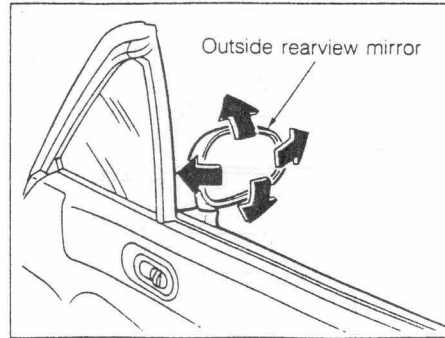
*If the outside rearview mirrors are convex (this is noted on the face of the mirror), objects seen in the mirror appear to be farther away than they actually are.*

*The mirror should be used carefully to estimate distances of following vehicles when changing lanes.*

*Use your inside rearview mirror to determine the size and distance of objects seen in the convex mirror.*

### **CAUTION**

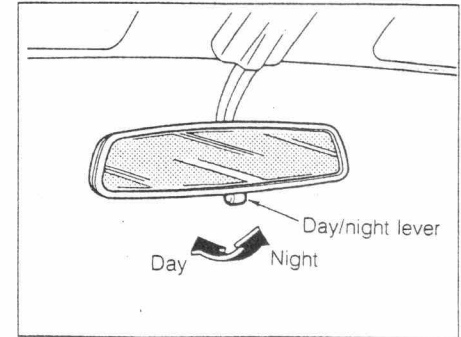
Do not scrape ice off the mirror face; this may damage the surface of the glass. If ice should restrict movement of the mirror, do not force the mirror to adjust it. To remove any ice, use a deicer (spray or blower, for example), sponge, or soft cloth.



To adjust an outside rearview mirror, move the mirror by hand.

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## Day/Night Rearview Mirror



Adjust the mirror to center on the view. Make this adjustment while the day/night lever is in the day position.

Pull the day/night lever toward you to reduce glare from the headlights of vehicles behind you during night driving.

### **NOTE**

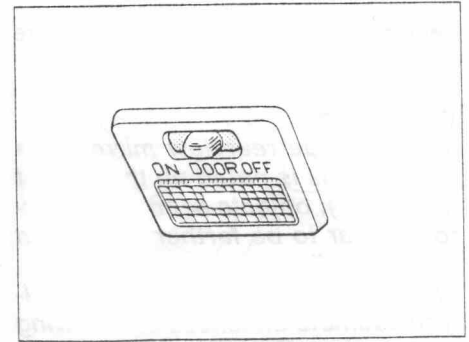
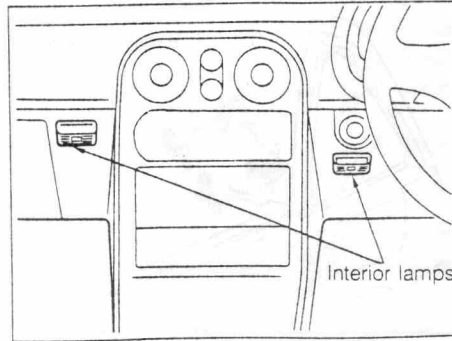
Remember that you lose some rearview clarity in the night position.



## MIRRORS, INTERIOR LAMPS

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### Interior Lamps



#### **WARNING!**

***Do not put large objects behind the seat because they may obscure vision and could become dangerous projectiles in the event of a sudden stop or collision.***

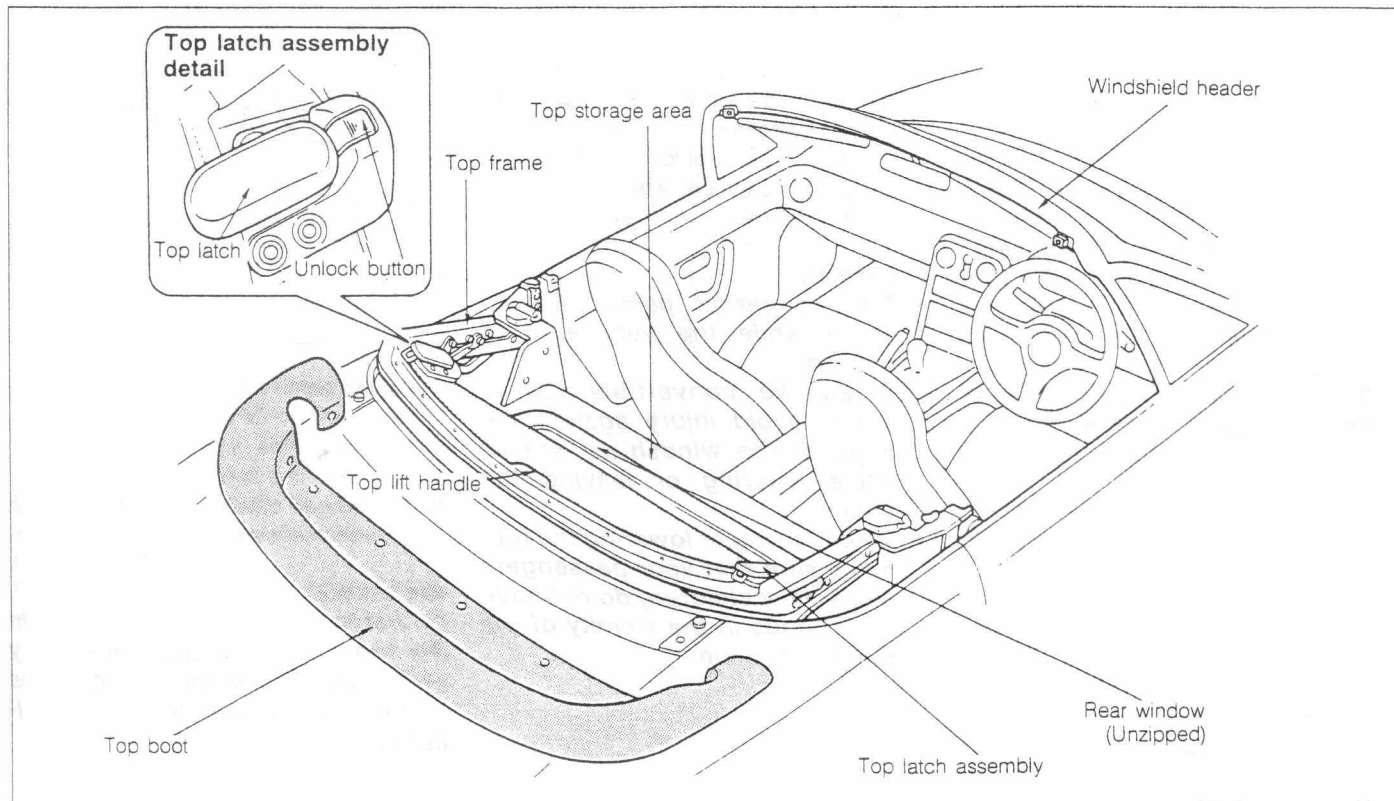
The interior lamps are on the driver's side and the passenger's side, as illustrated.

The interior lamp switch has three positions:

- OFF —Lights off
- DOOR —Lights on when door is open
- ON —Lights on

895JD2000AE

# Convertible Top Overview



## CONVERTIBLE TOP

895UD2100AE

### Convertible Top Precautions

- Before lowering or raising the top, be sure to stop the vehicle in a safe place out of the way of traffic and park on a level surface.
- Make sure there are no objects in the top storage area when raising or lowering the top. Even small objects may interfere with top operation and can cause damage.
- Secure all loose objects inside the vehicle when driving with the top down. This will help prevent them from being blown outside.
- Do not sit on the folded top. Sitting or placing objects on the folded top could result in bodily injury from a fall or damage to the top.
- To help prevent burglary or vandalism of the vehicle and to ensure that the passenger compartment does not get wet from rain, close the top securely and lock all doors whenever leaving the vehicle.
- Do not run this vehicle through an automatic car wash; it may damage the convertible top and rear window.
- Do not raise or lower the convertible top when the temperature is below 5°C because this will damage the top material.

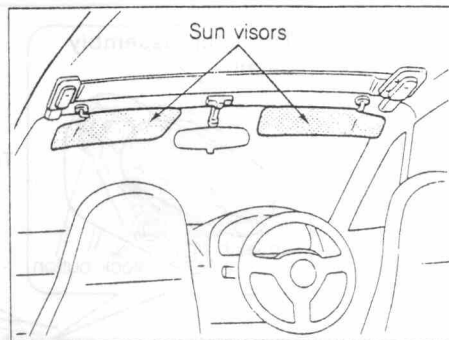
- Do not lower the convertible top when it is wet. This can cause deterioration and shrinkage if the top is allowed to dry while folded. Lowering the top while it is wet can also cause water to drop into the passenger compartment, which can result in mold or mildew.

#### **WARNING!**

- ***Do not permit passengers to stand while the vehicle is in motion.***
- ***When the convertible top is down, avoid injury against the edge of the windshield header while entering or leaving the vehicle.***
- ***When raising or lowering the top, make sure that your passengers (especially children) do not have their hands in the vicinity of the top mechanism.***

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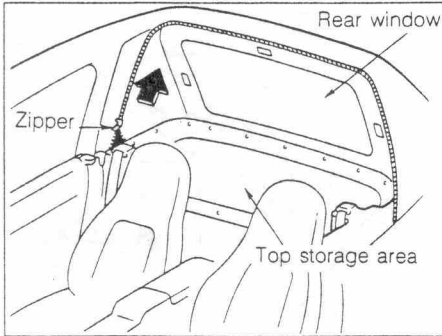
### Lowering Convertible Top



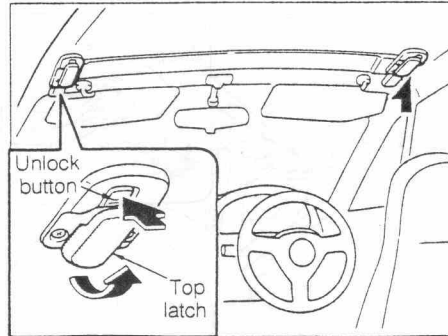
1. Set the parking brake and turn the ignition switch to OFF.
2. Lower the side windows.
3. Pull down the sun visors.
4. Remove all objects in the top storage area before lowering the top.

#### **WARNING!**

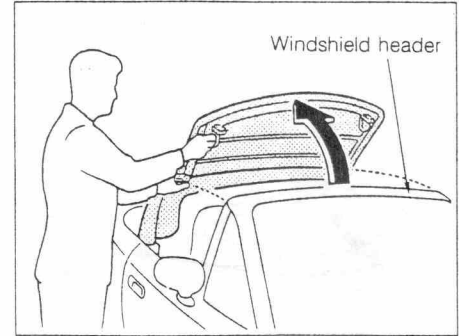
***Do not put heavy or sharp objects in the top storage area because they could become dangerous projectiles in the event of a sudden stop or collision.***



5. Unzip the rear window and carefully lower it to the top storage area.



6. Push the unlock buttons and fully release the top latches.



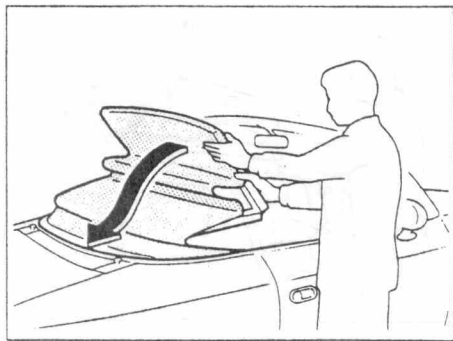
7. Lift up on the front section of the top to release it from the windshield header.

### CAUTION

To prevent scratching a dusty or dirty window, wash it with clear water before lowering the top.

For information on cleaning the rear window, refer to page 6-8.

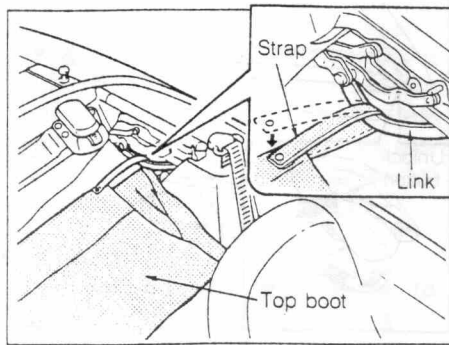
## CONVERTIBLE TOP



8. Fold back the front of the top and carefully lower it to the top storage area. Then place the latches in the locked position.

### **WARNING!**

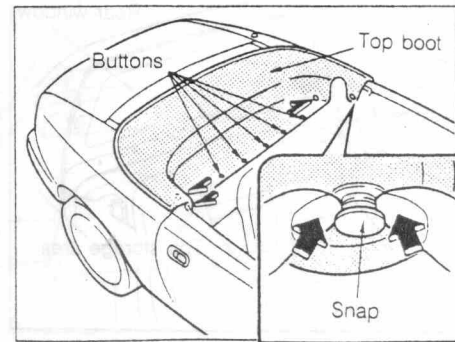
**Do not catch your hand in the mechanism while lowering the top.**



9. Cover the folded top with top boot stored in the trunk. For the best storage fit, feed the straps on the bottom of stored boot through the lower links, and snap them into position.

### **NOTE**

Be sure to fix the top boot with the straps to prevent its fluttering in the wind while driving.



10. Then cover the folded top with the top boot, affix it to the snaps and buttons provided.

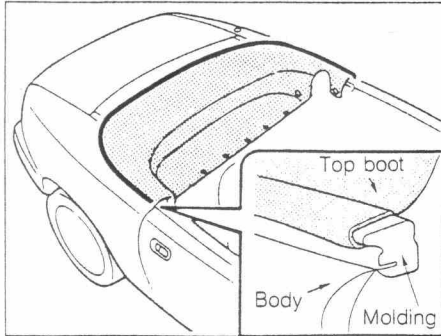
### **CAUTION**

**Press the snaps on as shown to prevent breaking the snaps.**

**Do not press the tops of the snaps.**

895BD2300AE

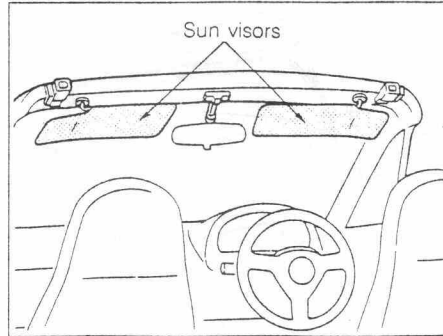
## Raising Convertible Top



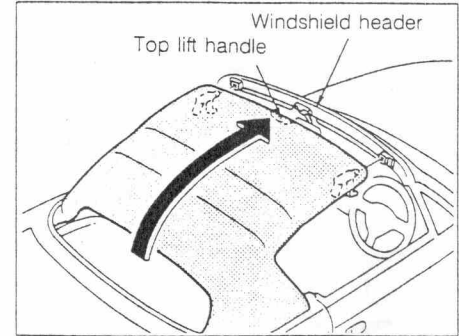
11. Attach the top boot by inserting its rear edge into the groove in the body molding.

### CAUTION

Never drive with the top partially folded or uncovered. Always install top boot when the top is fully lowered.



1. Set the parking brake and turn the ignition switch to OFF.
2. Undo the fasteners and straps; remove the top boot and store it properly in the trunk.
3. Lower the side windows.
4. Pull down the sun visors.
5. Unlock the top latches and open them fully.



6. Grasp the top lift handle and pull the top up and forward until it is against the windshield header.

### WARNING!

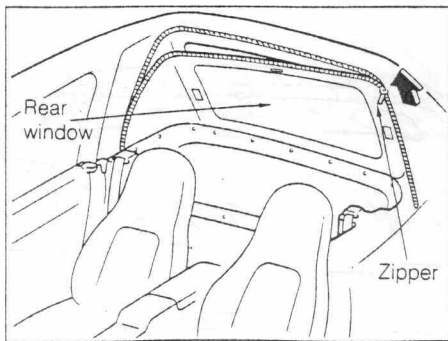
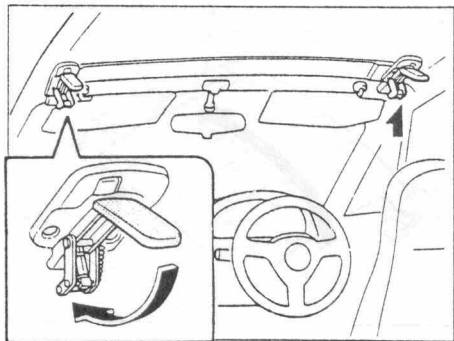
Keep hands and arms away from the top mechanism while it is being operated.

## CONVERTIBLE TOP

895J02400AE

### Top and Rear Window Appearance Care

Refer to page 6-7 for information on top and rear window appearance care.



7. After securely hooking the top latches onto the windshield header, push each top latch up with the palm of your hand until the lock buttons click and the latches are locked.

#### **WARNING!**

***Be careful not to catch your fingers in the top latch.***

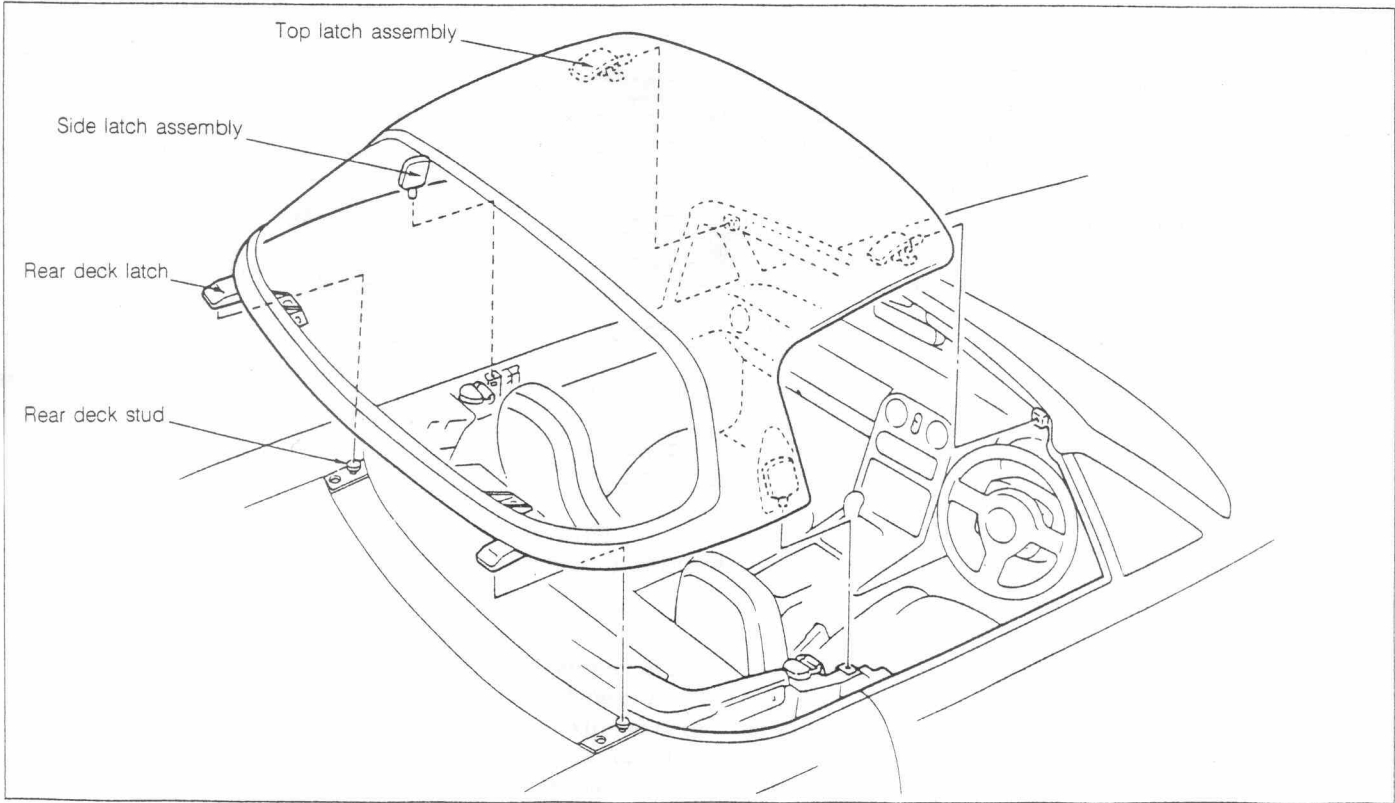
#### **NOTE**

Make sure the top is securely locked by pushing up on it. If the top still sounds loose (rattles) after being locked by the top latches, have it inspected at an Authorized Mazda Dealer.

8. Lift the rear window and zip it into place. WE RECOMMEND that in most conditions, especially in cold or rainy weather, you will find it easier to zip the rear window into position BEFORE latching the top. In this case, leave the top loose from the windshield header and zip in the window; then be sure the latches are locked as described. This will make it easier to zip in the window and prevent damage to the zip.

895U03000AE

### Detachable Hardtop Overview





## DETACHABLE HARDTOP\*

895UD3100AE

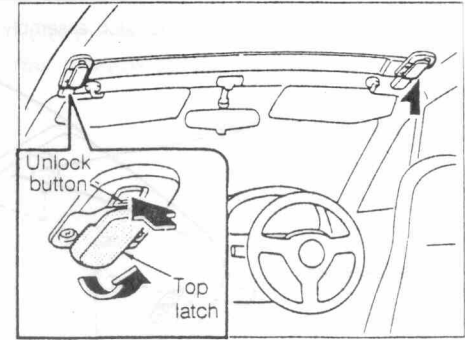
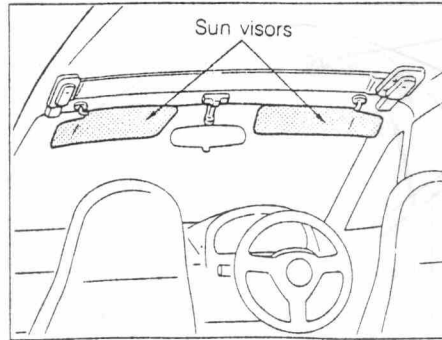
### Detachable Hardtop

#### **WARNING!**

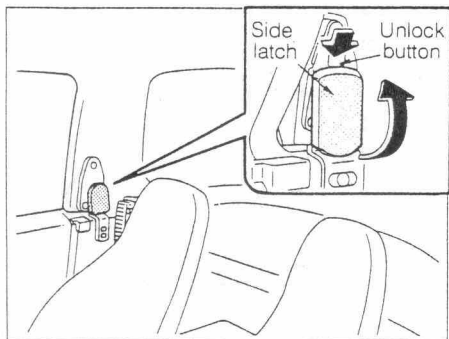
*This hardtop is made of reinforced plastic and is not as strong as the steel roof of a sedan or coupe. Over-speeding and reckless driving are extremely dangerous and could lead to a roll-over accident and severe injuries.*

895UD3200BE

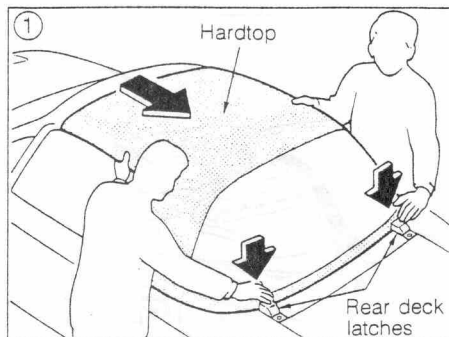
### Removal of Detachable Hardtop



1. Set the parking brake and turn the ignition switch to OFF.
2. Lower the side windows.
3. Pull down the sun visors.
4. Push the unlock buttons and fully release the top latches.



5. Push the unlock buttons and fully release the side latches.



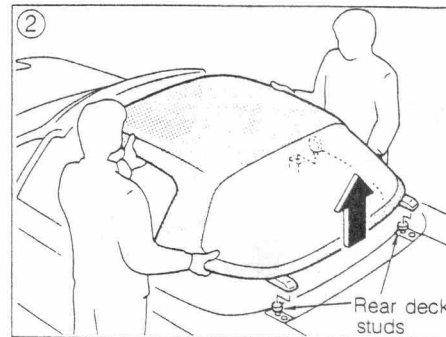
6. ① Slide the hardtop rearward while pressing down on the rear deck latches to unlock the latches. ② Lift the hardtop straight off the body to prevent damage to the rear deck latches and studs.

### **WARNING!**

*The hardtop requires two people to remove it.*

### **CAUTION**

- Be careful not to strike the body with any of the protruding hardtop latches.
- Use extreme care when carrying the hardtop to prevent scratching or other damage to it.



### **NOTE**

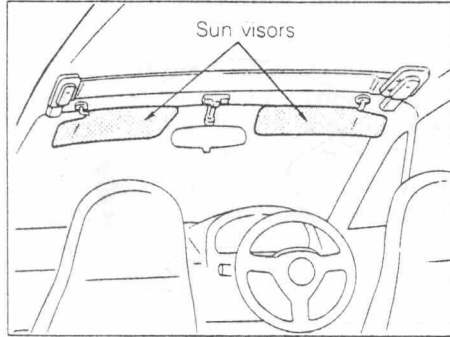
Points to remember when storing the detachable hardtop.

- Do not place the hardtop on a hard surface, such as concrete or asphalt. Place it on a cushioning material, such as an old blanket.
- Be sure the top latches and the side latches are locked.
- Do not lean the hardtop against a wall or stand it in an unstable way.
- Store the hardtop in a dry clean area, and cover it with a soft material, such as an old blanket.

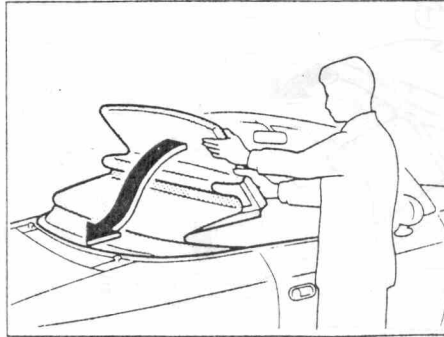
## DETACHABLE HARDTOP\*

895U033008E

### Installation of Detachable Hardtop



1. Set the parking brake and turn the ignition switch to OFF.
2. Lower the side windows.
3. Pull down the sun visors.



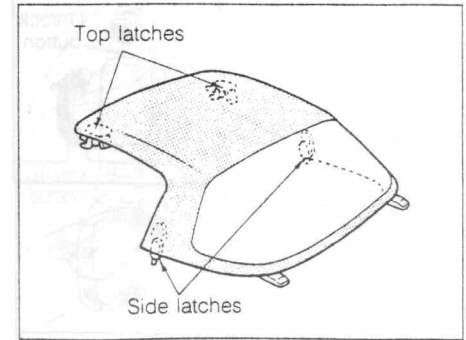
4. Fully lower the convertible top.  
(Refer to page 2-16.)

#### CAUTION

Do not attempt to install the hardtop with the top boot also installed. Remove the top boot before installing the hardtop, otherwise damage will occur to the top boot.

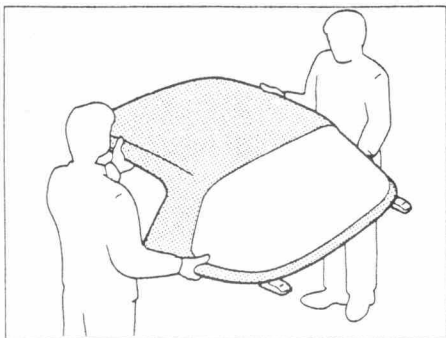
#### NOTE

Be sure to place the top latches in the locked position.



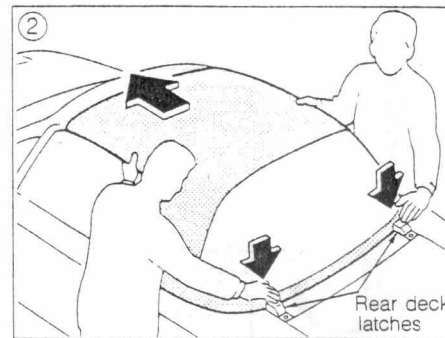
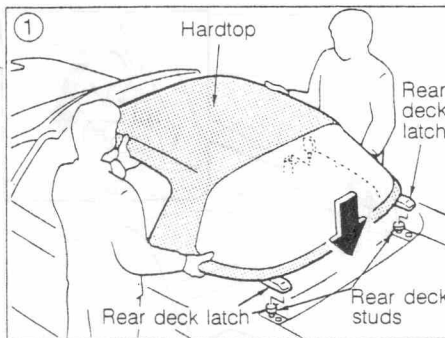
5. Unlock the top latches and the side latches on the hardtop.

## DETACHABLE HARDTOP\*



**WARNING!**

*The hardtop requires two people to remove it.*



6. ① Align the rear deck latches with the rear deck studs and set the hardtop squarely onto the body. ② Slide the hardtop forward while pressing on the rear deck latches to lock the latches, and then verify that they are secure by attempting to lift the rear of the hardtop.

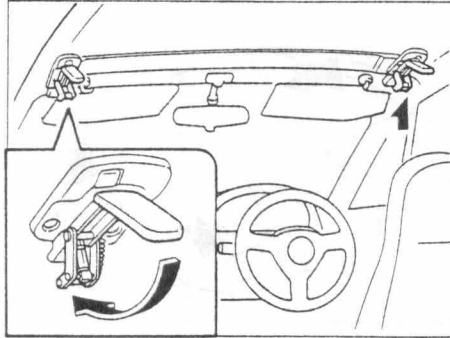
**WARNING!**

*Be careful not to catch your fingers in the hardtop.*

**CAUTION**

*Be careful not to strike the body with any of the protruding hardtop latches.*

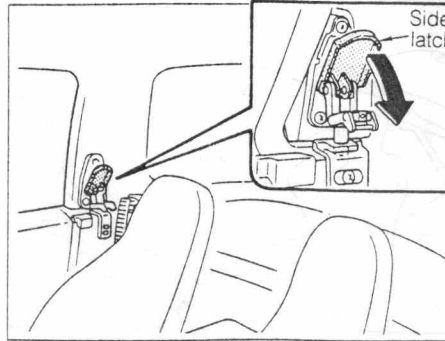
## DETACHABLE HARDTOP\*



7. Push each top latch up with the palm of your hand until the lock buttons click and the latches are locked.

### **WARNING!**

*Be careful not to catch your fingers in the top latch.*



8. Push each side latch down with the palm of your hand until the lock buttons click and the latches are locked.

### **WARNING!**

*Be careful not to catch your fingers in the top latch.*

### **CAUTION**

After installation, verify that all latches are secure. Operating the vehicle with unlocked latches may cause hardtop damage or loss.

895UD3400AE

## Detachable Hardtop Appearance Care

Refer to page 6-8 for information on detachable hardtop appearance care.

# 3

## Protecting Your Mazda

FUEL REQUIREMENTS	3-2
EMISSION CONTROL SYSTEM	3-2
BEFORE DRIVING	3-3
BREAK-IN	3-4
ECONOMICAL OPERATION	3-4
SPECIAL DRIVING CONDITIONS	3-5
LABEL INFORMATION	3-8

## FUEL REQUIREMENTS, EMISSION CONTROL SYSTEM

895EG1000AE

### Fuel Requirements

Use only **unleaded gasoline** with an Octane Rating of at least 91 (Research Octane Number) or DIN 51 607.

#### **WARNING!**

***Lead will be deposited on the oxygen sensor and the catalyst converter of the Emission Control System. This will result in malfunction of the system, which will cause low performance. Therefore, under no circumstances use leaded gasoline in your Mazda. If you suspect your engine is not functioning properly, contact your nearest Mazda Dealer immediately.***

89JUG2100AE

### Engine Exhaust Gas Caution (Carbon Monoxide)

Engine exhaust gases contain carbon monoxide. Though colorless and odorless, it is dangerous, even lethal, if inhaled.

- Carbon monoxide can be present with other exhaust fumes. Therefore, if you smell exhaust fumes of any kind inside your vehicle, have it inspected and repaired immediately by an Authorized Mazda Dealer. Do not drive with exhaust fumes present, but if you must, do so only with all windows fully open.
- Do not operate the engine in confined or closed areas (such as garages) any more than what is necessary to move the vehicle to and from the area.
- When the vehicle is stopped in an unconfined area for more than a short time with the engine running, adjust the heating or cooling system to draw outside air into the vehicle.
- Never sit in a parked or stopped vehicle for any extended time with the engine running.

895UG2200AE

### Operating Precautions for Catalytic Converter

Your vehicle is equipped with a catalytic converter emission control device.

Therefore, the following precautions must be observed:

- Use only UNLEADED FUEL.
- Do not park the vehicle over or near flammable objects, such as dry grass. Under certain conditions, they could be ignited by a hot exhaust system.
- Do not operate the vehicle when there are signs of engine malfunction, such as misfire or other noticeable loss of performance.
- Do not misuse or abuse the engine. Examples of misuse are coasting with the ignition off and descending down steep grades in gear with the ignition off.
- Do not operate the engine at high idle speed for extended periods (5 minutes or more).
- Do not modify or tamper with any part of the engine or emission control system. All inspections and adjustments must be made by a qualified technician.

# EMISSION CONTROL SYSTEM, BEFORE DRIVING

895EG3000AE

## Before Driving

Failure to observe the above precautions could result in damage to the catalytic converter and to your vehicle.

895UG3010AE

### BEFORE ENTERING VEHICLE

- Be sure that all windows, outside mirror(s), and outside lights are clean.
- Check the condition of the tires.
- Check under the vehicle for any sign of leaks.
- Be sure no one and no obstacle is at the rear of the vehicle if you intend to back up.

### Necessary Inspections

Fluid levels, such as engine oil, engine coolant, brake fluid, clutch fluid, and washer fluid, should be checked daily, weekly, or whenever you refuel, depending on the fluid. Further details are provided in Maintenance, Section 7.

893EG3020AE

### BEFORE STARTING

- Close all doors.
- Position the seat so that all controls are easily reached.
- Adjust the inside and outside rearview mirrors.
- Fasten seat belts of occupied seats.
- Be sure that all lights work.
- Check all gauges.
- Check the operation of warning lamps when the ignition switch is turned to the ON(II) position.
- Release the parking brake and make sure the brake warning lamp goes out.

For safe operation, be sure you are familiar with your vehicle and its equipment.



## BREAK-IN, ECONOMICAL OPERATION

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89SUG4000AE

### Break-in

No special break-in period is needed. But by following a few simple precautions for the first 1,000 km (600 miles), you may add to the performance, economy, and life of your vehicle.

- Do not race the engine.
- Do not maintain a single speed for long, either fast or slow.
- Avoid hard stops, except in emergencies, to allow the brakes to seat properly.
- Avoid full-throttle starts.

89SEGS000AE

### Suggestions for Economical Operation

Your vehicle's fuel economy is mainly dependent on your style of driving: how you drive, where you drive, and when you drive. These have an effect on how many kilometers (miles) you can get from a liter (gallon) of fuel. To operate your vehicle as economically as possible, use the following driving suggestions to help save money in both fuel and repairs:

- Avoid lengthy warm up idling. Once the engine is running smoothly, begin driving—but gently. Remember, though, that on cold days, warm up may take a little longer.
- Save fuel by avoiding fast starts.
- Keep the engine in tune and follow the recommended periodic maintenance schedule. This will increase the life of all parts and lower operating costs.
- Slow down when driving on rough roads.
- For longer tire life and better fuel economy, always keep the tires inflated to the recommended pressures.
- Maintain a safe distance from other vehicles to avoid sudden stops. This will reduce wear on brake pads and save fuel

because extra fuel is required to accelerate back to driving speed.

- Do not carry unnecessary weight in the vehicle.
- Do not rest your foot on the brake pedal while driving. This can cause needless wear, possible damage to the brakes, and poor fuel economy.
- Improper wheel alignment causes the tires to roll at excessive angles, which results in faster tire wear. It takes more power to overcome this improper alignment, which wastes fuel.

Keeping a vehicle in good operating condition is important both for economy and safety. Therefore, have an Authorized Mazda Dealer perform scheduled inspections and maintenance.

## ECONOMICAL OPERATION, SPECIAL DRIVING CONDITIONS

895EG6000AE

### Hazardous Driving

#### CAUTION

Never turn off the engine to coast down hills. The power steering\* and power brakes will not function without the engine running. Instead, downshift to an appropriate gear for engine braking effect.

When hazardous driving is encountered because of water, snow, ice, mud, sand, or similar hazard, follow these suggestions.

- Drive cautiously and allow extra distance for braking.
- Avoid sudden movements in braking or steering.
- When braking, depress the brake pedal with a light up-and-down motion until the vehicle is stopped.
- If stalled in snow, mud, or sand, use 2 (Second) gear and accelerate slowly. 1 (First) gear may be used, if necessary. Accelerate slowly to avoid spinning the rear wheels.
- Use sand, rock salt, tire chains, or other nonslip material under the rear wheels to provide traction when stalled in ice, snow, or mud.

#### WARNING!

*On slippery surfaces, do not downshift into 1 (First). This may cause skidding.*

#### NOTE

Use tire chains only on driven (rear) wheels.

895EG6100AE

### Rocking the Vehicle

If it is necessary to rock the vehicle to free it from snow, sand, or mud, move the shift lever from 1 (First) to R (Reverse) in a repeat pattern while depressing the accelerator gently. Do not race the engine. If you are still stuck after a minute or two of rocking, have the vehicle pulled out to avoid engine overheating and possible damage to the transmission.

#### CAUTION

**Prolonged rocking may cause engine overheating, transmission damage or failure, and tire damage.**

#### WARNING!

*Do not spin the wheels too much, because increased wear and damage to the drive components may result.*

## SPECIAL DRIVING CONDITIONS

895BG6200AE

### Winter Driving

- Depending on where you are driving, we recommend you carry emergency equipment. Some things you might include are tire chains, a window scraper, bag of sand or salt, a small shovel, and jumper cables.
- Make sure you have sufficient ethylene-glycol coolant in the radiator.
- Check the battery condition and cables. Cold temperatures reduce the capacity of any battery, so it must be in good condition to provide enough winter starting power.
- Make sure the engine oil viscosity is suitable for cold weather.
- Check the ignition system for loose connections and damage.
- Use antifreeze-formulated washer fluid. (Do not use engine coolant/anti-freeze.)
- Do not use parking brake when it might freeze. When parking, shift to 1 (First) or R (Reverse) and block the front wheels.

895EG6210AE

### SNOW TIRES

**When snow tires are used, select the size and construction specified on the tire pressure label. It is strongly recommended that snow tires be used on all four wheels, or poor handling may result.** According to regulations, a label with the maximum allowable speed for the tires must be placed within the field of vision of the driver. Please also note the inflation pressure recommended by the tire maker.

### **WARNING!**

***Snow tires should be equivalent in size and type to the vehicle's standard tires. Otherwise, the safety and handling of your vehicle may be adversely affected.***

### NOTE

Do not install studded tires without first checking local regulations for possible restrictions.

895BG6220AE

### TIRE CHAINS

#### Tire Chain Selection

Regulations regarding the use of tire chains vary according to location or type of road, so always check them before installing chains.

#### Chain Installation

When installing chains on your tires, carefully follow the instructions of the chain manufacturer.

Install the chains on the rear tires as tightly as possible. Do not use the chains on the front tires. Retighten the chains after driving 0.5—1.0 km (1/4—1/2 mile).

### CAUTION

- The use of chains may adversely affect vehicle handling.
- Do not exceed 50 km/h (30 mph) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully and avoid bumps, holes, and sharp turns, which may cause the vehicle to bounce.

855UG6300AE

### Driving in Flooded Areas

- **Avoid sharp turns or locked-wheel braking.**
- **Do not attempt to use a tire chain on the temporary spare tire because it may result in damage to the vehicle and to the tire.**

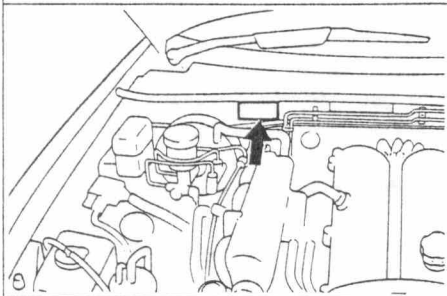
Avoid driving through flooded areas unless you are sure the water is no higher than the bottom of the wheel rims. Drive through any water slowly. Allow adequate stopping distance because wet brakes do not grip well. After driving through water, dry the brakes by gently applying several times while the vehicle is moving slowly.

# LABEL INFORMATION

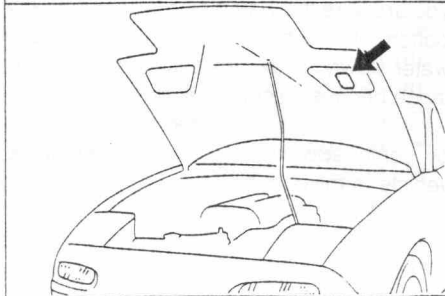
895UH1000AE

## Label Information

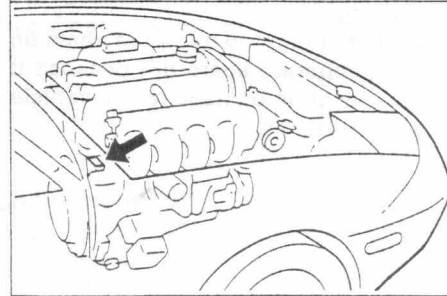
Model plate



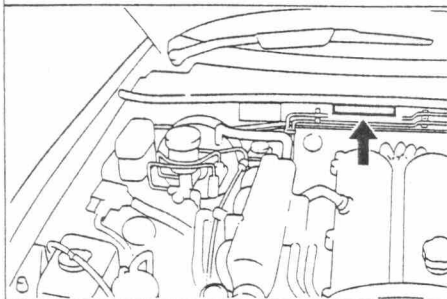
Oil label



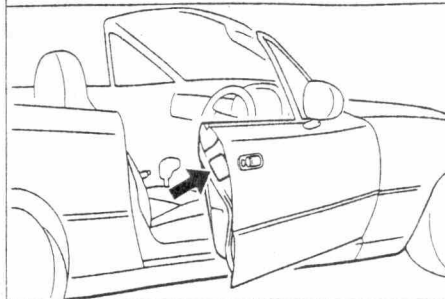
Engine number



Chassis number



Tire pressure label



# 4

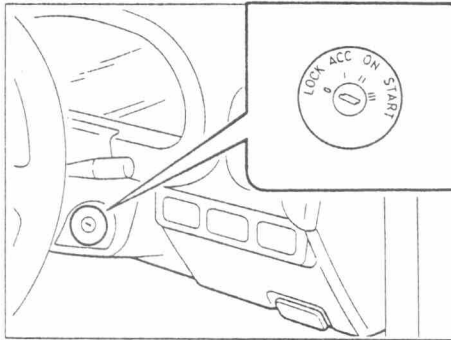
## Driving Your Mazda

IGNITION SWITCH	4- 2
STARTING	4- 3
MANUAL TRANSMISSION	4- 4
BRAKE SYSTEM	4- 4
POWER STEERING	4- 7
INSTRUMENT PANEL	4- 8
GAUGES	4- 9
WARNINGS AND INDICATORS	4-11
LIGHTING	4-13
WIPERS AND WASHER	4-19
INTERIOR FEATURES	4-20
CLIMATE CONTROL SYSTEM	4-24

## IGNITION SWITCH

89SEM1000AE

### Ignition Switch and Antitheft Steering Column Lock



#### SWITCH POSITION

##### LOCK (0)

The steering wheel is locked to protect against theft. Only in this position can the key be removed.

##### ACC (I)

The steering wheel is unlocked and some electrical accessories are operative.

##### ON (II)

The warning lamps can be checked before the engine is started. This is the normal running position after the engine is started. Do not leave the ignition switch ON(II) if the

engine is not running. The battery will discharge.

##### START (III)

Used to start the engine. The engine will crank until you release the key; then it returns to ON(II).

#### NOTE

If difficulty is experienced in turning the ignition switch, turn the steering wheel right and left while turning the switch to ON(II).

#### WARNING!

- Never turn the ignition switch to LOCK(0) or ACC(I) while the vehicle is in motion.
- The antitheft steering column lock is not a substitute for the parking brake. Before leaving the driver's seat, always make sure the gearshift lever is engaged in 1 (First), set the parking brake fully, AND shut off the engine. Unexpected and possibly sudden vehicle movement may occur if these precautions are not taken.
- Never reach for the ignition switch through the steering wheel; it could suddenly turn, causing serious injury.

B95EM2000AE

## Starting the Engine

1. Make sure the parking brake is applied.
2. Depress the clutch pedal fully and shift the transmission into NEUTRAL. Keep the clutch pedal depressed while cranking the engine.
3. Turn the ignition switch to START(III) and hold it there until the engine starts (a maximum of 10 seconds). Then release the key.

### NOTE

Whether the engine is cold or warm, it should be started without depressing the accelerator.

- When the engine is cold, if the engine fails to start using the normal procedures, it may be that the engine is flooded (has excessive fuel in the cylinders). If this is case, follow the starting procedure outlined below.
  - (1) Depress the accelerator fully and hold it.
  - (2) While holding the accelerator fully depressed, turn the ignition switch to the START(III) position and hold it (a maximum of 10 seconds; cranking) to discharge the excess fuel.

If the engine starts, the engine speed will increase suddenly; release the key and the accelerator immediately. In this case, the following procedures are not necessary.

- (3) Release the accelerator after cranking the engine.
- (4) Without depressing the accelerator, crank the engine until it starts (a maximum of 10 seconds).

When the engine is warm, the above procedure should not be performed, as it will make starting even more difficult. If the engine is unusually difficult to restart when it is warm (fails to start after repeated attempts without depressing the accelerator), depress the accelerator about halfway to start it.

4. Let the engine warm up for about 10 seconds before driving.

In extremely cold weather, below  $-18^{\circ}\text{C}$  ( $0^{\circ}\text{F}$ ), or after the vehicle has been standing idle several days, let it warm up without operating the accelerator.

### CAUTION

**Do not keep the starter engaged for more than 10 seconds. If the engine stalls or fails to start, wait 5 to 10 seconds before reengaging the starter; otherwise, you may damage it.**

### NOTE

Engine noise (from valve tappets) may occur if the engine has not been operated for an extended period.

The noise should stop after the engine has reached normal operating temperature.

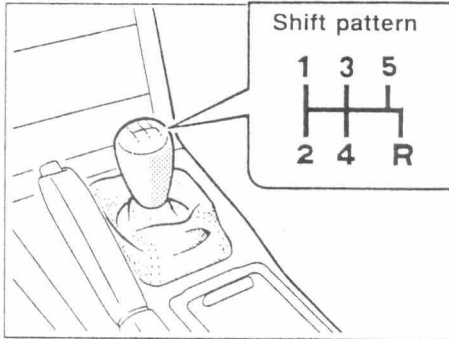
If the noise does not stop, have the vehicle inspected by an Authorized Mazda Dealer.



# MANUAL TRANSMISSION

895EM3000AE

## Manual Transmission Operation



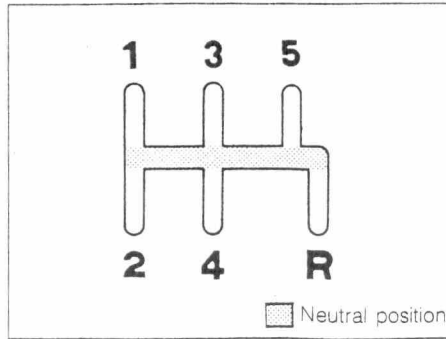
The shift pattern is conventional, as shown above.

Press the clutch pedal down fully while shifting, then release it slowly.

A special safety feature prevents inadvertent shifting from 5 (Fifth) to R (Reverse). The gearshift lever must be returned to the Neutral position (as shown) before shifting into R (Reverse).

### NOTE

Make sure the vehicle is completely stopped before shifting into R (Reverse).



### CAUTION

**To avoid premature clutch wear and damage, do not drive with your foot resting on the clutch pedal; do not use the clutch to hold the vehicle stopped on an upgrade, as when waiting for a traffic light.**

893EM3010AE

## SHIFT POINT RECOMMENDATIONS

In order to save fuel consumptions and improve driveability, it is recommended to shift up at speeds explained below.

FIRST GEAR ..... Up to 24 km/h (15 mph), then shift to second.

SECOND GEAR ..... Up to 40 km/h (25 mph), then shift to third.

THIRD GEAR ..... Up to 64 km/h (40 mph), then shift to fourth.

FOURTH GEAR ..... Up to 72 km/h (45 mph), then shift to fifth.

FIFTH GEAR ..... From 72 km/h (45 mph), up to cruising speed.

895UM8000AE

### Power Brakes

895UM81000AE

### Service Brakes

#### NOTE

Once the vehicle reaches the desired road speed (or when the vehicle speed is compatible with traffic flow or legal speed limits) at approximately 40 km/h (25 mph) or above, the transaxle should be shifted into FOURTH gear as soon as possible to maintain best fuel economy.

Downshifting from FOURTH gear is not necessary unless the engine begins to lug (this condition is likely at speeds of 30 km/h (19 mph) or less).

Your vehicle has power brakes. They adjust automatically through normal usage.

In the event power assist is lost because of a stalled engine or some other reason, you can still stop your vehicle by applying greater force to the brake pedal than you normally would with the power assist. The stopping distance, however, will be longer.

When the engine is not running, the reserve brake power is partially depleted each time the brake pedal is applied. Do not pump the brake pedal when the power assist has been interrupted, except when necessary to maintain steering control on slippery surfaces.

If the service brakes should fail to operate while the vehicle is in motion, you can make an emergency stop with the parking brake. The stopping distance, however, will be much greater than normal.

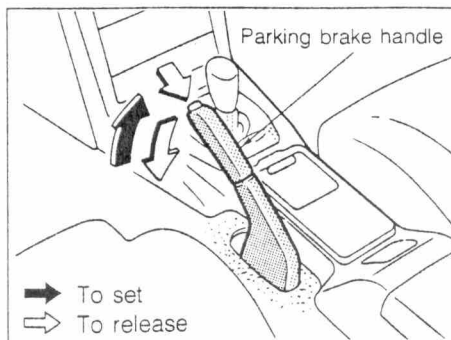
#### **WARNING!**

- *Do not drive with your foot resting on the brake pedal. This will create abnormally high brake temperatures, excessive brake pad wear, and increased stopping distances.*
- *When descending a long or steep hill, shift to a lower gear and avoid continuous application of the brakes. Continuous brake application will cause the brakes to overheat, resulting in a temporary loss of braking performance.*
- *Driving through water deep enough to wet the brakes may adversely affect brake performance. The vehicle may not slow down at the usual rate and may pull to one side when the brakes are applied. Applying the brakes lightly will in-*

895UM8200AE

### Parking Brake

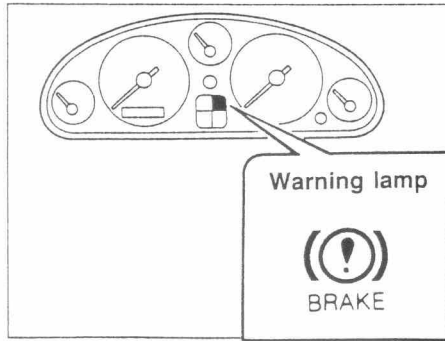
*dicating whether they have been affected in this way. To dry the brakes, apply them lightly while maintaining a safe forward speed until brake performance returns to normal.*



- To set the parking brake, apply the service brake while pulling the parking brake handle fully and firmly upward.
  - To release the parking brake, pull the handle upward and push the button. Then lower the handle to the released position while holding the button in.
- WARNING!**
- **Do not use the gearshift lever in place of the parking brake. Always set the parking brake fully AND make sure the gearshift lever is securely latched in 1 (First).**
  - **Turn the ignition switch off when you leave the vehicle, even momentarily. Never leave the vehicle unattended while the engine is running.**
  - **Unexpected and possibly sudden vehicle movement may occur if these precautions are not taken.**
  - **Do not drive with the parking brake on. This will cause abnormally high brake temperatures, excessive brake pad wear, and increased stopping distances.**

895UM8300AE

## Brake System Warning



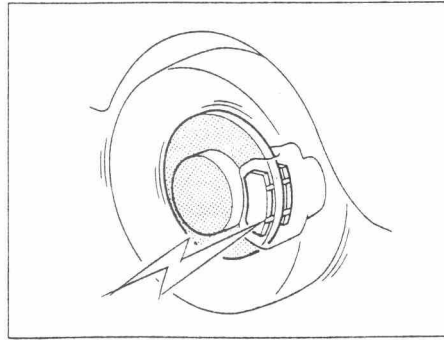
Always check the brake warning lamp each time you start the engine. This warning will be illuminated when the engine is running and the parking brake is set.

Before driving, be sure the parking brake is fully released and the brake warning is off.

If the brake warning lamp remains on after the parking brake is fully released, there may be a malfunction in the brake system. For more information, refer to Warnings and Indicators (page 4-11).

895UM8400AE

## Brake Pad Wear Indicator (Front disc brake pads)



When the disc brake pads become worn, the built-in wear indicators will contact the disc plates, causing a screeching noise to warn the driver that the brake pads should be replaced.

If you hear a squealing or scraping noise while driving, have the brake pads checked and if necessary replaced by an Authorized Mazda Dealer as soon as possible.

### **WARNING!**

***Failure to replace the disc pads may result in damage to the brake system and adversely affect brake performance.***

895UM9000AE

## Power Steering\*

Power steering uses energy from the engine to assist you in steering the vehicle. If the engine is off or if the power steering system becomes inoperative, the vehicle may still be steered, but it will require increased steering effort.

Should you notice any change in the effort required to steer during normal vehicle operation, have the power steering system checked by an Authorized Mazda Dealer.

### **CAUTION**

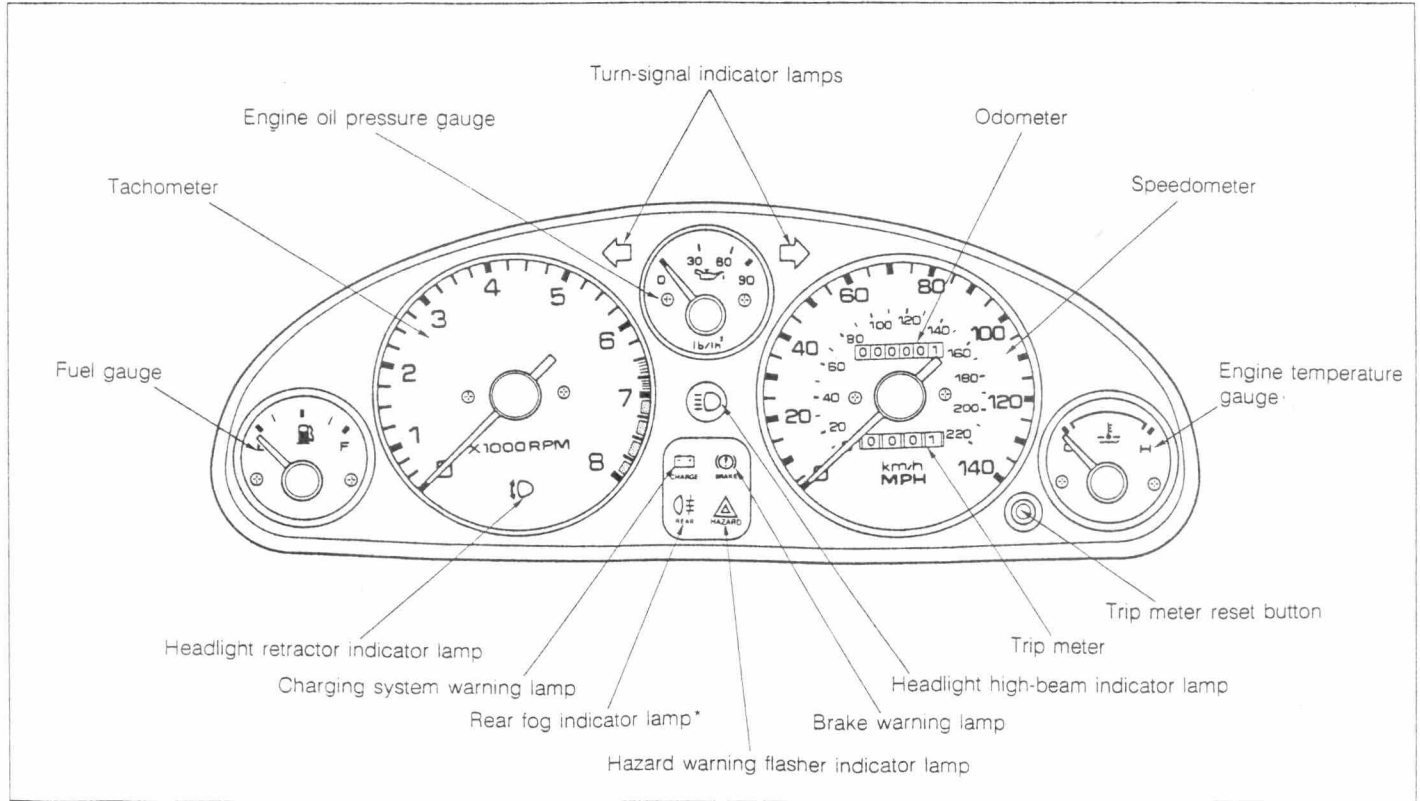
- **Never hold the steering wheel against a stop (extreme right or left turn) for more than 5 seconds with the engine running. More than 5 seconds in either position may cause damage to the power steering pump.**
- **If the power steering drive belt breaks or if the power steering pump malfunctions, the steering effort will become hard.**

\* Some models.

# INSTRUMENT PANEL

895EN3000AE

## Instrument Panel



895UN4010AE

**SPEEDOMETER**

The speedometer indicates the forward speed of the vehicle.

895UN4020AE

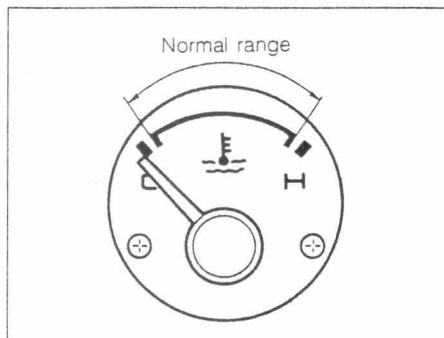
**ODOMETER**

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

895UN4030AE

**TRIP METER**

The trip meter logs the distance on each trip. It is returned to zero by pushing in the reset button. Use it also for checking fuel consumption.



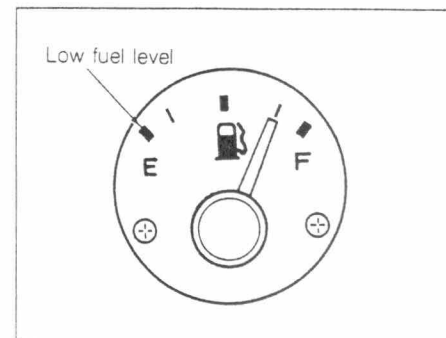
895UN4040AE

**ENGINE TEMPERATURE GAUGE**

The engine temperature gauge indicates the temperature of the engine coolant when the ignition switch is ON(II).

If the needle moves beyond the normal range area toward the H position, it indicates overheating that may damage the engine.

Do not continue driving with an overheated engine. If your vehicle overheats, refer to Overheating (page 5-2).

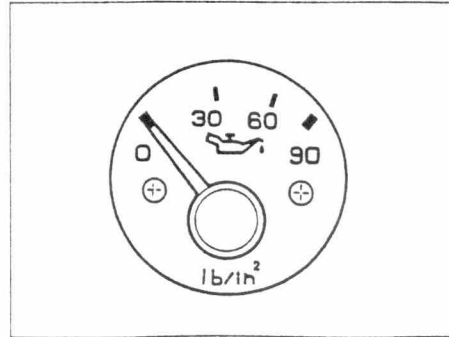


895UN4050AE

**FUEL GAUGE**

The fuel gauge indicates the approximate amount of fuel remaining in the fuel tank. When the fuel gauge needle indicates low fuel level, approximately 6 liters (1.6 US gal) of fuel remains in the tank. You should refuel as soon as possible.

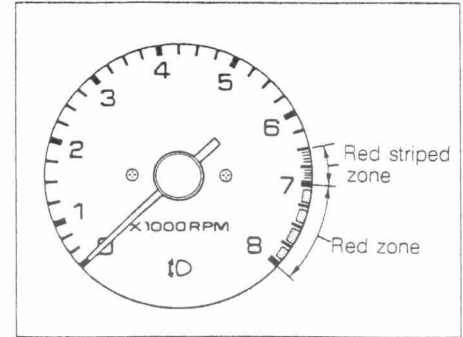
## GAUGES



895UN4080AE

### ENGINE OIL PRESSURE GAUGE

The engine oil pressure gauge indicates the oil pressure when the engine is running.



895UN4060AE

### TACHOMETER

The tachometer indicates the approximate number of engine revolutions per minute (rpm).

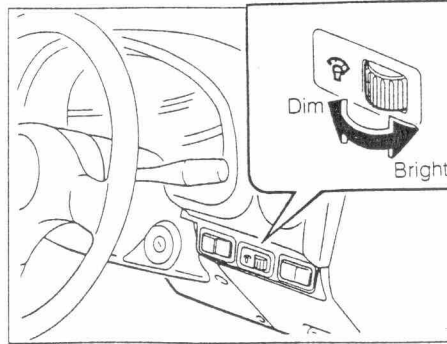
Use this while driving to select the correct shift points to prevent engine lugging and overrevving.

### NOTE

The tachometer needle may move slightly when the ignition switch is at ACC(I) or ON(II) with the engine off. This needle movement is normal and will not affect the accuracy of the tachometer once the engine is running.

895UN4200AE

### Instrument Panel Illumination



#### CAUTION

The tachometer has a **RED STRIPED ZONE** (6,500—7,000 rpm) that indicates momentary allowable engine speed. The engine should not be operated in the **RED ZONE** (7,000—8,000 rpm).

When the vehicle's parking lights or head-lights are on, rotate the thumbwheel to adjust the instrument panel illumination brightness.

895EN5000AE

### Warning Lamps

893EN5010AE

#### CHECKING OPERATION

The warning lamps are checked by turning the ignition switch ON(II) (do not start the engine). Any lamp that does not come on should be checked by an Authorized Mazda Dealer.

After starting the engine, check to make sure that all warning lamps are off. If any is still on, it indicates a situation that needs attention.

When releasing the parking brake, the brake system warning should go off.

895EN5020AE



#### BRAKE SYSTEM WARNING

This warning has two functions.

#### Parking Brake Warning

This warning lights when the parking brake is applied and the ignition switch at ON(II). The warning should go off when the parking brake is released.

#### Low Brake Fluid Level Warning

If the warning lamp remains on, it may indicate that the brake fluid level in the reservoir is low.



## WARNINGS AND INDICATORS

### If the Warning Lamp Remains on:

1. Be sure the parking brake is released.

If the lamp still remains on:

2. Drive safely to the side of the road and carefully stop your vehicle.
3. With the engine stopped, check the brake fluid level immediately and add fluid as required (page 7-14). All brake components should also be checked immediately for fluid leaks.
4. If leaks are found, if the warning remains on, or if the brakes do not operate properly, do not drive the vehicle. Have it towed to an Authorized Mazda Dealer for a brake system inspection and necessary repairs.

### **WARNING!**

*Driving the vehicle with a warning lamp on is dangerous. If the brake warning remains on, have the brakes checked and repaired immediately.*

895UN5040AE



### CHARGING SYSTEM WARNING

This warning indicates a malfunction of either the alternator or electrical wiring system.

### If the warning lamp comes on while the vehicle is in motion:

1. Drive safely to the side of the road and stop.
2. With the engine off, check the alternator drive belt for looseness or breakage.
3. If the belt is operating properly, a problem exists somewhere in the electrical charging system. Have an Authorized Mazda Dealer locate and correct the problem as soon as possible.

### CAUTION

Do not drive the vehicle with a loose or broken alternator belt; the engine could be damaged by overheating because this belt also drives the water pump.

895EN5100AE

### Indicator Lamps

893UN5110AE



### HEADLIGHT HIGH-BEAM INDICATOR

The indicator comes on when the headlights are on and in the high-beam position or when the turn-signal lever is pulled into the Flash-to-Pass position.

895UN5140AE



### HEADLIGHT RETRACTOR INDICATOR

The headlight retractor indicator comes on while the headlight motor is operating; it should go out after the headlights are fully raised or retracted.

If the indicator remains on, refer to page 4-18.

895EN5150AE



### REAR FOG LIGHT INDICATOR \*

This indicator comes on when the rear fog light is operating.

893EN5160AE

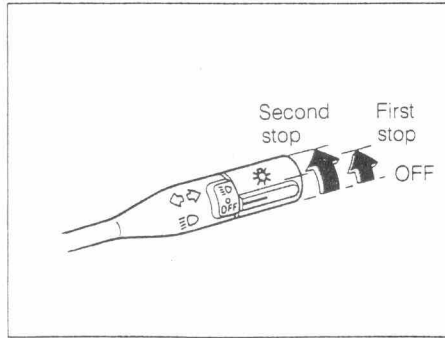


### HAZARD WARNING FLASHER INDICATOR

This indicator comes on when the hazard warning flasher switch is on.

895BN6000AE

## Lighting Control



To turn the lights on, twist the knob on the end of the control lever.

### First stop

Tail, parking, license lights and instrument panel lamps ON.

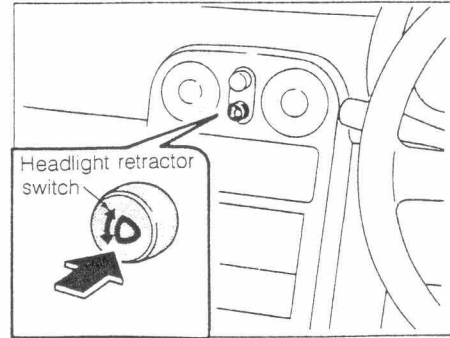
### Second stop

Head, tail, parking, license lights and instrument panel lamps ON.

### NOTE

(U.K model)

- When the ignition switch is ON(II), turning the lighting control from OFF to the first stop will cause the headlights to rise



and illuminate (Dim dip) with reduced intensity.

- When returning the knob back to the OFF, the headlights retract.

If you wish to raise the headlights when the knob is at the OFF position (to use them as a passing signal, for example), you may do so by pushing the headlight retractor switch.

(Except U.K model)

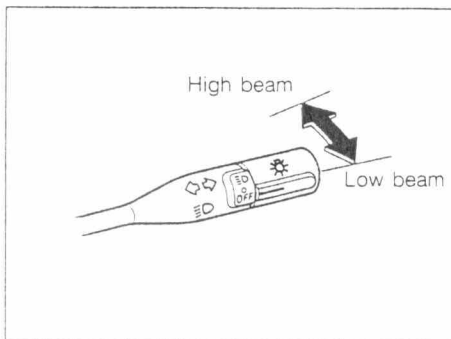
- When turning the knob from the first stop to the second stop, the headlights rise and come on.
- When returning the knob back to the first stop, the headlights go off and retract.

If you wish to raise the headlights when the knob is at the first stop, or OFF, position (to use them as a passing signal, for example), you may do so by pushing the headlight retractor switch.

### **WARNING!**

***Do not operate the lighting control or headlight retractor switch if anyone's hands are near the headlights.***

## LIGHTING

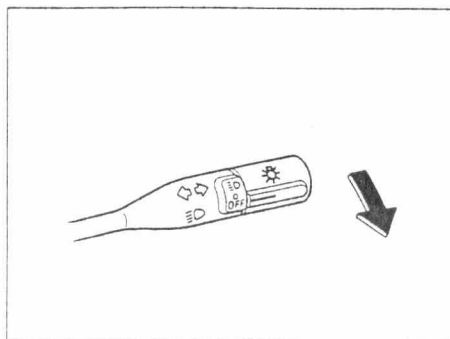


Push the lever forward for high beams: Pull it back for low beams.

The high-beam indicator illuminates in blue when the headlight high beams are switched on.

### NOTE

To prevent the battery from being discharged, do not leave the lights on for a long period while the engine is not running.



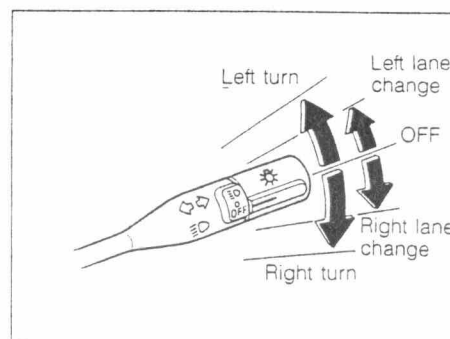
995EN6010AE

### FLASHING HEADLIGHTS

To flash the headlights, first push the headlight retractor switch to raise up the headlights. Then pull the lever fully toward you. The lever will return to the normal position when released. The headlight switch does not need to be ON to use this feature.

895UN6100BE

## Turn Signals



The ignition switch must be ON(II).

### TURN SIGNALS

Move the lever up or down to the stop position to engage the turn signals. They will self-cancel after the turn is completed.

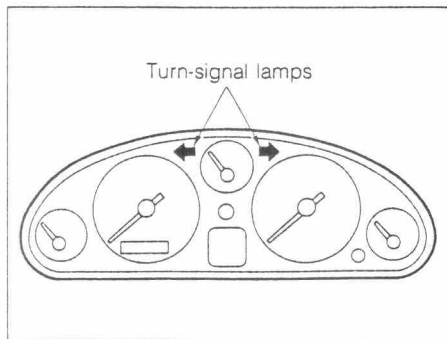
If the indicator continues to flash after a turn, manually return the lever to the OFF(center) position.

### LANE-CHANGE SIGNALS

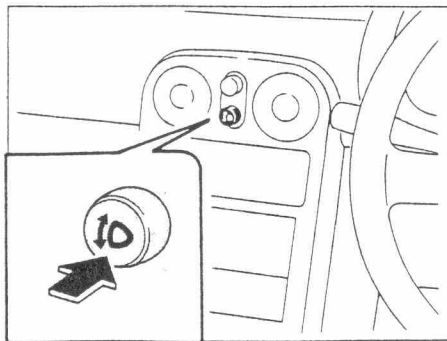
Move the lever partway and hold it there. The lever will return to the OFF (center) position when released.

895EN6200AE

## Headlight Retractor



Green indicators on the instrument panel indicate which turn signal is working. If an indicator stays on and does not flash or if it flashes abnormally, one of the turn-signal bulbs may be burned out and will require replacement.



The ignition switch may be at any position.

For convenience, an independent headlight retractor switch (which will not turn on the headlights) is provided. To raise or retract the headlights, push the headlight retractor switch.

### NOTE

The headlight retractor switch will not retract the headlights if they are already turned on.

### WARNING!

*Do not operate the headlight retractor switch if anyone's hands are near the headlights.*

Push the switch to raise the headlights

- Before flashing the headlights
- Before washing the vehicle
- To prevent the headlights from freezing during the night
- Before repairing a headlight

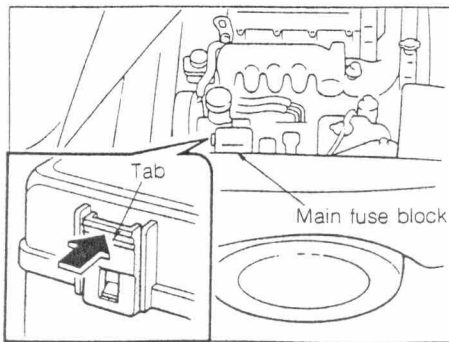
### CAUTION

- During very cold weather or during travel on a snow-covered road, the headlight retractor mechanism and the area around the headlight cover may freeze. If this happens, do not try to raise or retract the headlights because trying to force them up or down could damage the headlight retractor mechanism. It might also cause other problem, such as a discharged battery.

Therefore, before attempting to raise or retract the headlights, be sure first to open the bonnet and break the ice.

## LIGHTING

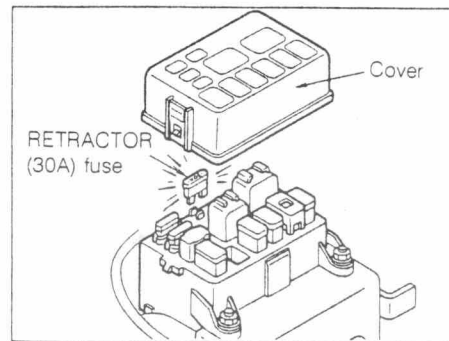
- We recommend that the headlights be kept in the raised position both for parking and driving during cold weather. To raise the headlights, use only the headlight retractor switch; do not use the headlight switch.



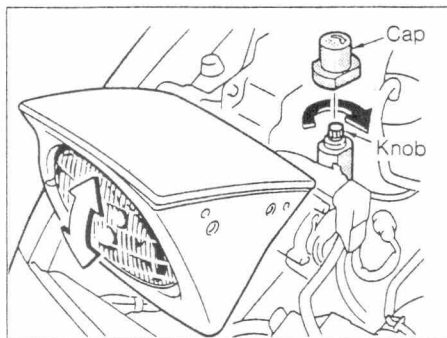
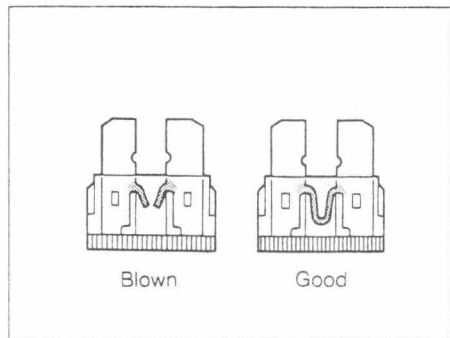
99SEN6210AE

### IF A HEADLIGHT RETRACTOR DOES NOT OPERATE

1. Turn off the ignition switch.
2. Lift the bonnet and open the main fuse block cover by unhooking the tab on one end and tilting the cover back toward the other end.



3. Pull the RETRACTOR (30A) fuse straight out with the removal tool provided on the fuse box cover. (Refer to page 5-5.)



4. Check the removed fuse. If it is blown, replace it with a new fuse of same rating. However, if the fuse has not blown, or if a new fuse does not solve the problem, remove the fuse and operate the headlight motor manually.

**WARNING!**  
**Always remove the RETRACTOR (30A) fuse before manually operating a headlight motor; otherwise the motor may suddenly activate.**

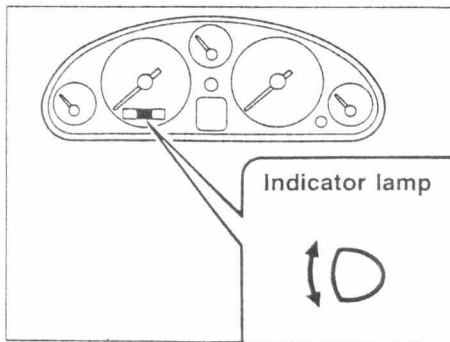
5. Remove the cap from the top of the headlight motor; then turn the knob in the direction of the arrow (clockwise) until the headlight is fully raised or retracted.
6. Replace the cap properly.
7. Reinstall the fuse and main fuse block cover.

**WARNING!**

**When installing the fuse, make sure no object is in the vicinity of the headlight retractor. It may move without notice while the fuse is being installed.**

Have the system checked by an Authorized Mazda Dealer as soon as possible.

## LIGHTING



895UN6220AE

### HEADLIGHT RETRACTOR INDICATOR

The headlight retractor indicator comes on while the headlight motor is operating and should go out after the headlights are fully raised or retracted.

**If the indicator lamp remains on**, it may be due to pebbles, pieces of ice, or similar foreign material lodged in the headlight. You should remove these objects by performing the following steps.

#### **WARNING!**

*While the indicator is lit, the headlight motor is in operation. Thus, before removing foreign objects from the headlight, you should remove the RETRACTOR (30A) fuse.*

1. Turn off the ignition switch.
2. Remove the RETRACTOR (30A) fuse. (Refer to page 4-16.)
3. Dislodge the obstruction.
4. Install the RETRACTOR (30A) fuse.

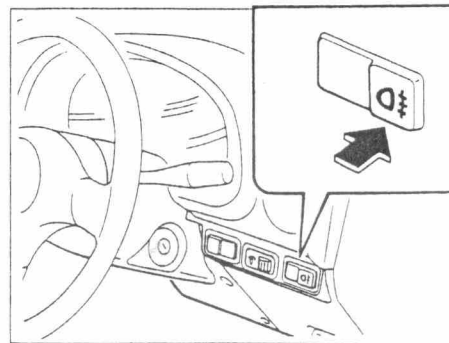
#### **WARNING!**

*When installing the fuse, make sure no object is in the vicinity of the headlight retractor. It may move without notice while the fuse is being installed.*

5. Check the headlight retractor operation and indicator by pushing the switch.

895EN6300AE

### Rear Fog Light\*



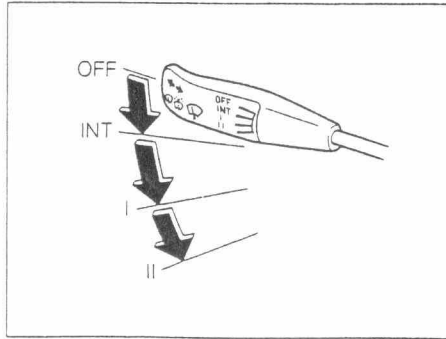
When visibility is poor due to thick fog, turn the rear fog light on to prevent other vehicles from colliding into your vehicle from behind.

The indicator lamp comes on when the rear fog light is on.

The rear fog light will not function when the headlight switch is not on.

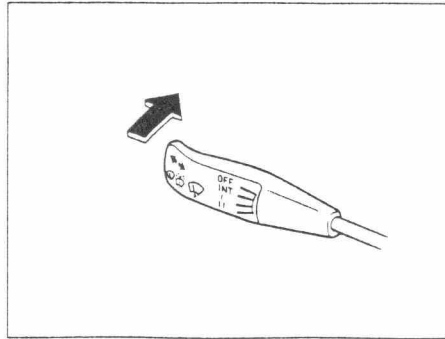
895UN7000BE

## Windshield Wipers



The ignition switch must be ON(II).  
To turn the wipers on, pull the lever down as illustrated.

- INT — Intermittent wiper operation
- I — Normal wiper speed
- II — Fast wiper speed



895UN7020AE

### ONE-TOUCH WIPERS

For a single wiping cycle, push the lever forward and release it with the lever in the OFF position.

### CAUTION

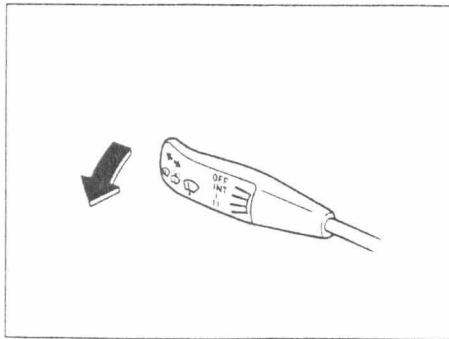
- To prevent possible damage to the wipers or windshield, do not operate the wipers when the windshield is dry.
- To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.
- To prevent damage to the wiper arms and other components, do not attempt to move the wipers manually.



## WIPERS AND WASHER, INTERIOR FEATURES

895UN7100BE

### Windshield Washer



The ignition switch must be ON(II).

To clean the windshield, pull the lever toward you and hold it. Washer fluid is sprayed and the wipers are activated until the lever is released.

If the washer does not work, check the washer fluid level (page 7-18), which may be low. If the fluid level is sufficient, consult an Authorized Mazda Dealer.

#### **WARNING!**

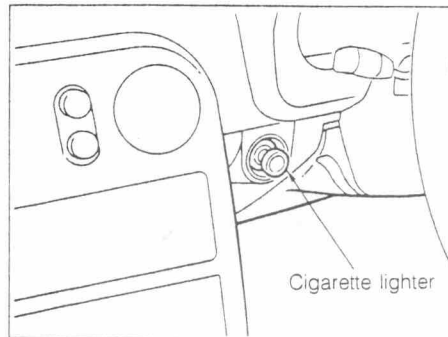
***Do not use the washer in freezing temperatures without first warming the windshield with the defrosters; the washer solution may freeze on the windshield and obscure your vision.***

#### **CAUTION**

To prevent possible damage to the washer pump, do not operate the washer when the fluid reservoir is empty.

893UN9100AE

### Cigarette Lighter



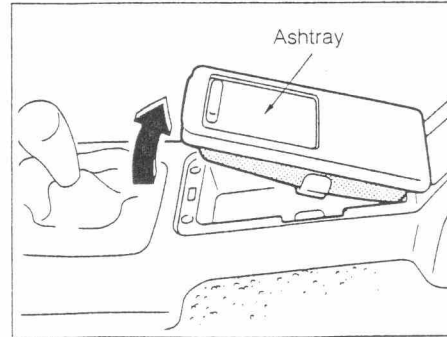
To operate the cigarette lighter, press it in and release it. When it is heated, it automatically pops out ready for use. If the engine is not running, the ignition switch must be at ACC(I) for the lighter to operate.

#### **CAUTION**

- Do not hold the lighter in manually because it will become overheated.
- Only a Genuine Mazda lighter or equivalent should be used in the cigarette lighter socket. The use of plug-in accessories (shavers and coffee-pots, for example) may damage the socket or cause electrical failure.

895UN9200AE

### Ashtray



- If the lighter does not pop out within 30 seconds, remove it to prevent overheating.

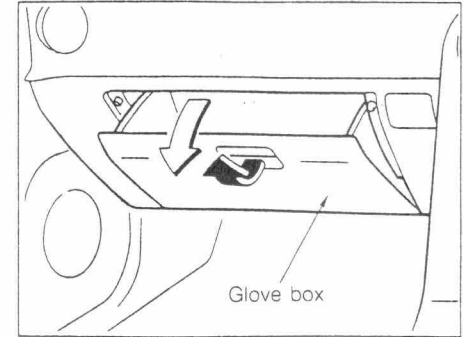
The ashtray can be easily removed for cleaning by lifting it from the front.

#### **WARNING!**

*Do not use the vehicle's ashtray as a waste receptacle. Putting lit cigarettes or matches in an ashtray with other combustible materials may cause a fire.*

895UN9300BE

### Glove Box



To open the glove box lid, pull the latch toward you.

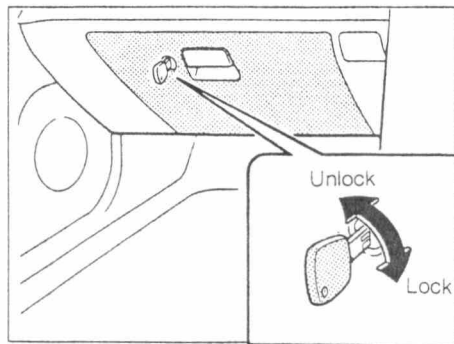
#### **WARNING!**

*To reduce the chance of injury in case of an accident or a sudden stop, always keep the glove box lid closed while driving.*

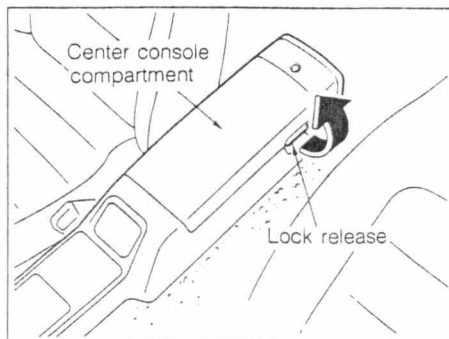
## INTERIOR FEATURES

895UN9900AE

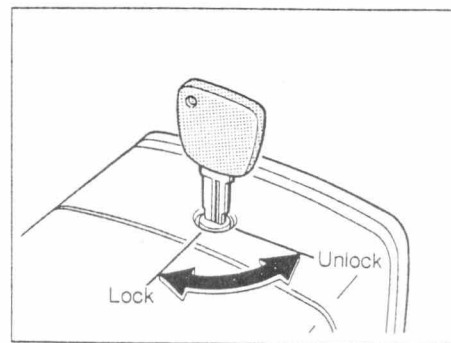
### Center Console



When using the key, insert the primary key into the slot; then turn the key clockwise to lock, counterclockwise to unlock. The secondary key will not operate this lock. For more information on the key security system, refer to page 2-2.



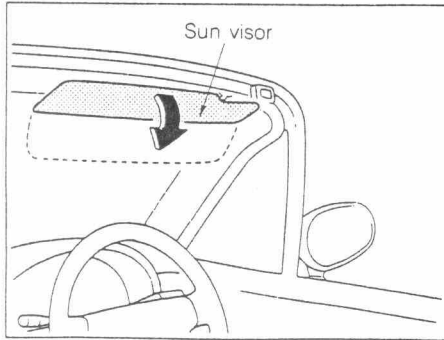
To open the lid, pull up the lock release.



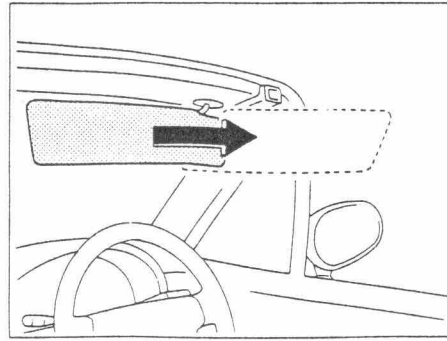
The center console can be locked or unlocked with the primary key. To lock or unlock, turn the key as illustrated. The secondary key will not operate this lock. For more information on the key security system, refer to page 2-2.

895UN9600AE

## Sun Visors



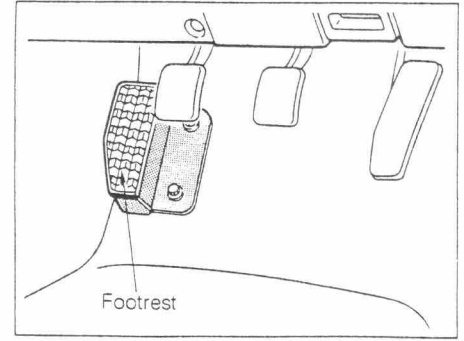
To use a sun visor, pull it downward.



To use a sun visor at a side window, pull it downward and swing it to the side.

895UN9800AE

## Footrest

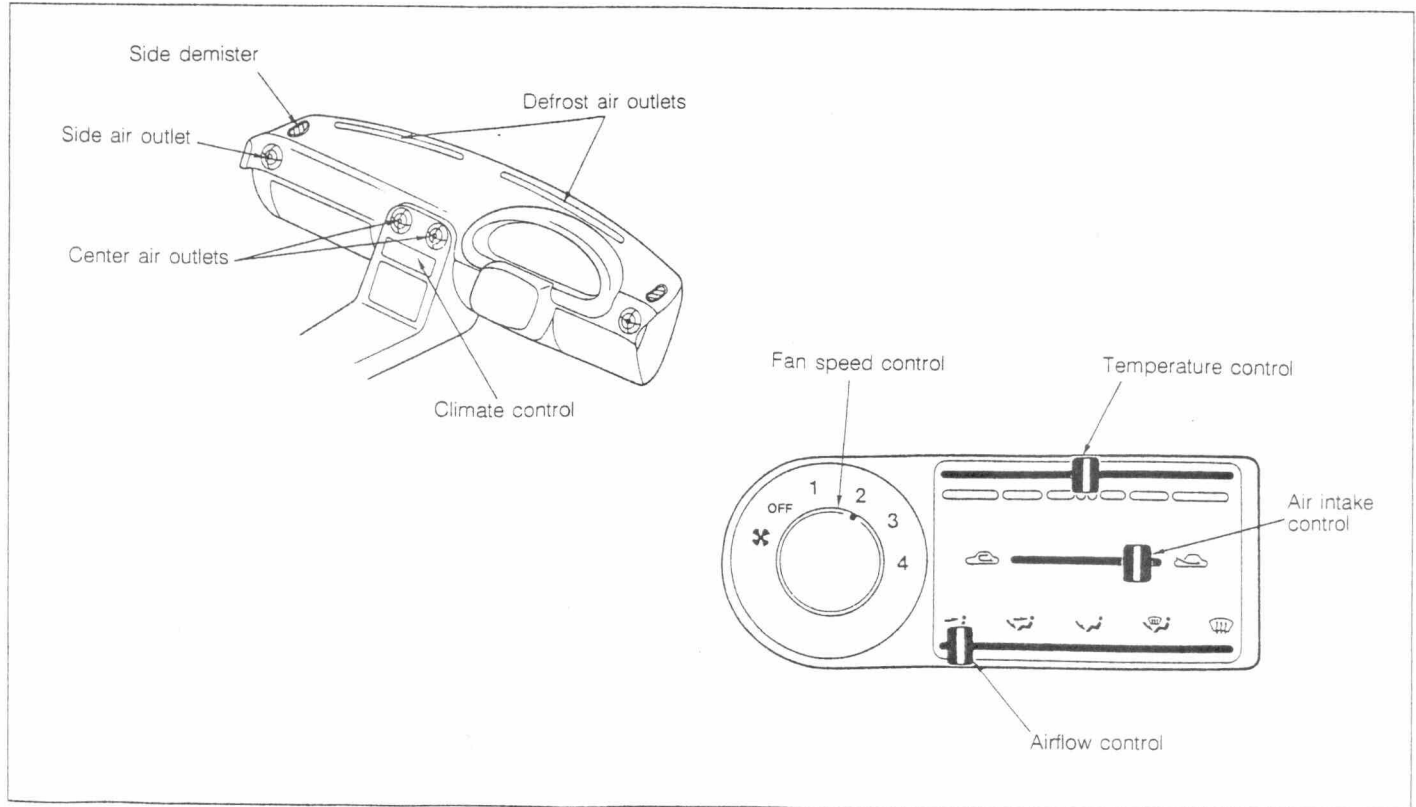


A convenient footrest is provided for the driver's left foot.

# CLIMATE CONTROL SYSTEM

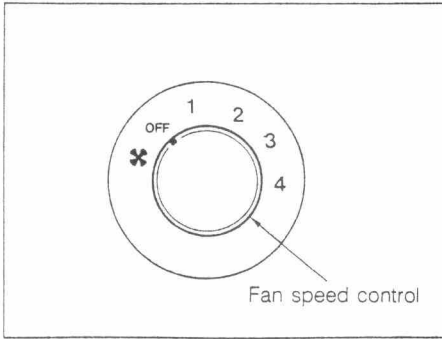
895UP2000AE

## Climate Control Features



895EP2100AE

## Controls and Functions

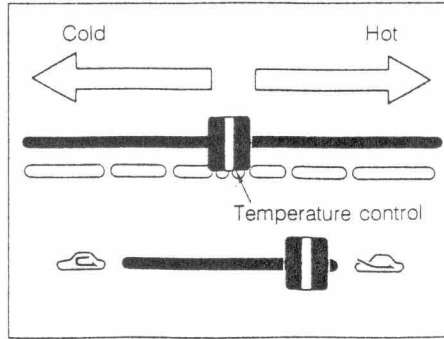


895UP2110AE

### FAN SPEED CONTROL

The fan speed control allows variable fan speeds.

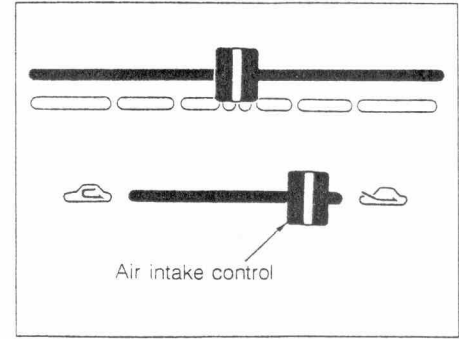
- OFF** — Fan off
- 1** — Low speed
- 2** — Medium speed
- 3** — High speed
- 4** — Superhigh speed



895UP2120AE

### TEMPERATURE CONTROL

Select the desired air temperature by sliding the control lever either to the right for hot or to the left for cold.



895UP2130AE

### AIR INTAKE CONTROL

Select the desired intake air by sliding the control lever.

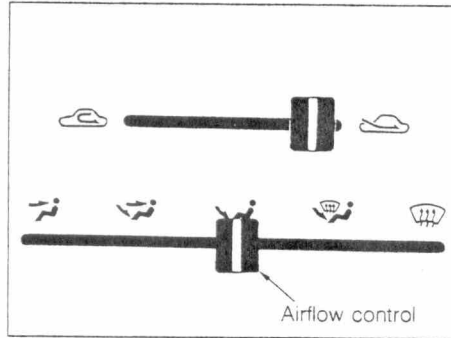
#### (Recirculated air) position

Outside air is shut off and the air inside the vehicle is recirculated.

#### (Outside air) position

Outside air is delivered to the vehicle.

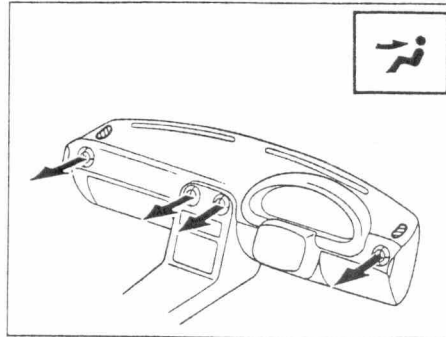
## CLIMATE CONTROL SYSTEM



895UP2140AE

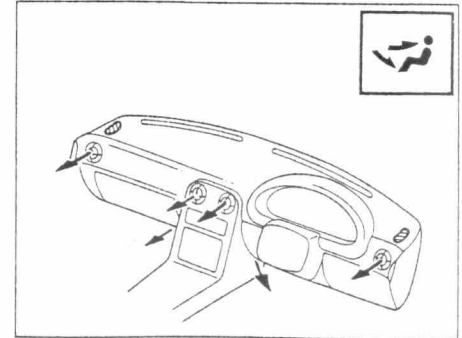
### AIRFLOW CONTROL

The airflow control lever is used to select the flow of air from particular vents. Select the desired vent by moving the lever.



### Ventilation Position

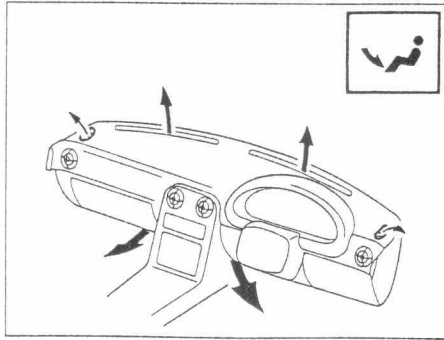
In this position, the air is delivered toward the face.



### Bi-level Position

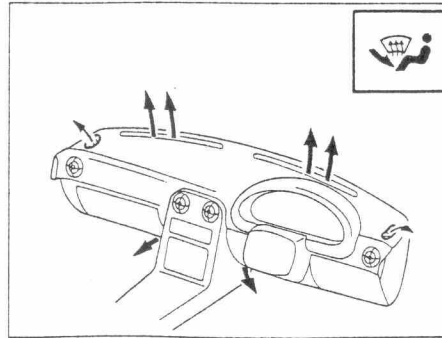
In this position, the air is delivered toward the face and the floor.

The air to the floor is warmer than to the face (except when the temperature control is set at the extreme left position).



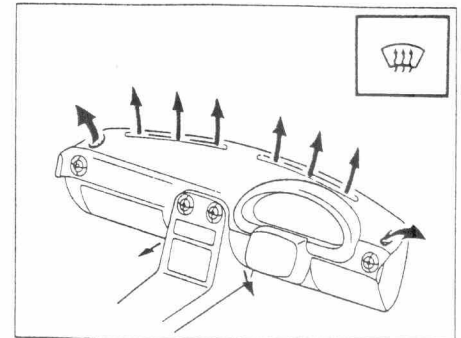
## Heating Position

In this position, most of the air is delivered to the floor, and a small amount is delivered to the windshield and side windows.



## Heating and Defrosting Position

In this position, most of the air is delivered to the floor and the windshield, and a small amount is delivered to the side windows.



## Defrosting and Defogging Windshield Position

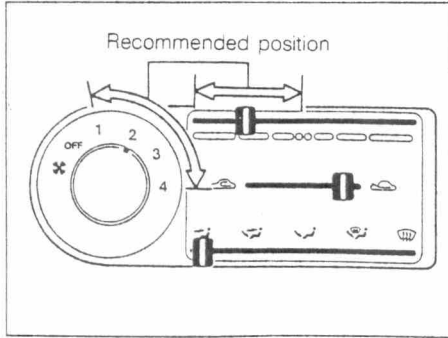
In this position, most of the air is delivered to the windshield, and a small amount is delivered to the side windows and the floor.



# CLIMATE CONTROL SYSTEM



895EP2300AE

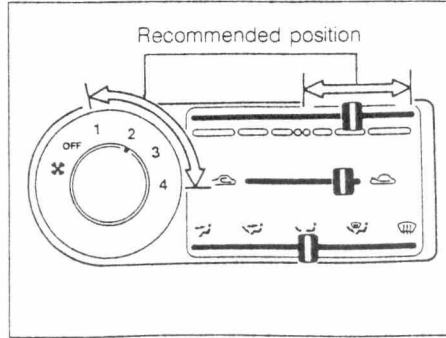
## System Operation



895UP2310AE



### VENTILATION

1. Set the temperature control to the recommended position.
2. Set the air intake control to the  position.
3. Set the airflow control to the  position.
4. Set the fan speed control to the recommended position.





895EP2320AE

### HEATING



1. Set the temperature control to the recommended position.
2. Set the air intake control to the  position.
3. Set the airflow control to the  position.

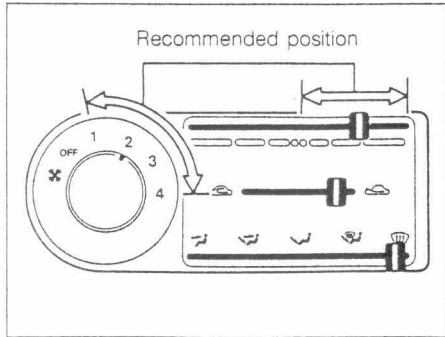
#### NOTE

- If cooler air is desired at face level for bi-level operation, set the airflow control to the  position.
- If the windshield fogs up easily, set the airflow control to the  position.

4. Set the fan speed control to the recommended position.

#### NOTE

To warm up the interior quickly, set the air intake control to the  position. However, if the windshield becomes foggy, set the air intake control to the  position.



895EP2340AE

## WINDSHIELD DEFROSTING AND DEFOGGING

1. Set the temperature control to the recommended position.
2. Set the air intake control to the position.
3. Set the airflow control to the position.

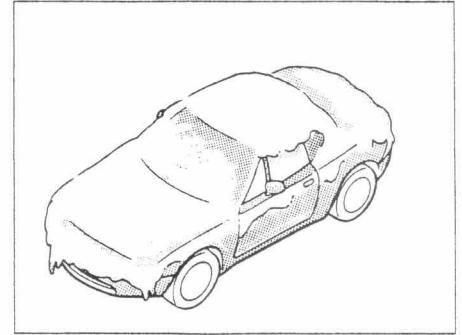
### NOTE

If warm air is desired at the floor level, set the airflow control to the position.

4. Set the fan speed control to the recommended position.

### NOTE

For maximum defrosting, set the temperature control to the extreme right position and set the fan speed control to position 4.

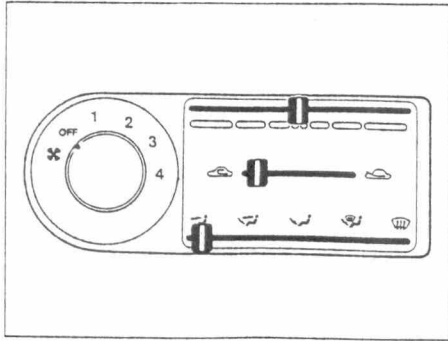


### NOTE

- Clear all ice and snow from the windshield, rear window, outside rearview mirrors, and all side windows before driving the vehicle.
- Clean all snow and ice from the bonnet and the air inlet in the cowl grill to improve heater and defroster efficiency and to reduce the probability of fogging on the inside of the windshield.

## CLIMATE CONTROL SYSTEM

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995UP2360AE

### SHUT OFF OUTSIDE AIR

Set the air intake control to the  position.

# 5

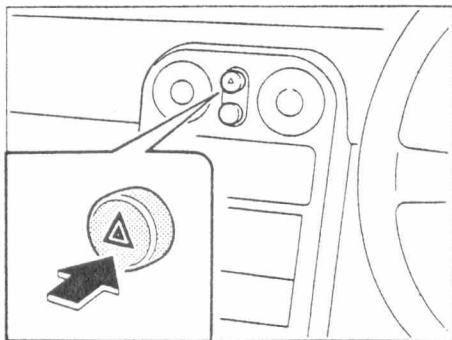
## In Case of Emergency

ROAD WARNING	5- 2
OVERHEATING	5- 2
EMERGENCY STARTING	5- 3
ELECTRIC CIRCUIT PROTECTION	5- 5
TOWING	5- 9
IF YOU HAVE A FLAT TIRE	5-11

## ROAD WARNING, OVERHEATING

89SUS1000AE

### Hazard Warning Flasher



The hazard warning flasher serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle. It should be used whenever emergency repairs are being made or when your vehicle is stopped near the edge of a roadway.

Depress the flasher switch with the ignition switch in any position and all turn-signal lights will flash simultaneously.

#### NOTE

- The turn signals do not work when the hazard flasher is on.
- Care must be taken when using the hazard warning flasher while the vehicle is being towed. Local regulations may prohibit using it in this manner.

89SES1100AE

### Overheating

If your temperature gauge indicates overheating, if you experience a loss of power, or if you hear a loud knocking or pinging noise, the engine has probably overheated. You should follow these procedures if you experience any of these signals.

1. Drive safely to the side of the road and stop your vehicle; shift to neutral and apply the parking brake.
2. **If coolant or steam is boiling out of the radiator**, stop the engine. Then turn the ignition switch to the ON(II) position, but do not start the engine. The radiator cooling fans will automatically operate with the ignition switch in the ON(II) position. If the cooling fans do not operate, call an Authorized Mazda Dealer for assistance.

**If coolant is not boiling out**, allow the engine to idle and open the bonnet to permit the engine to cool gradually. If the temperature does not go down with the engine idling, stop the engine and allow sufficient time for it to cool.

89SES2000AE

### Jump-Starting

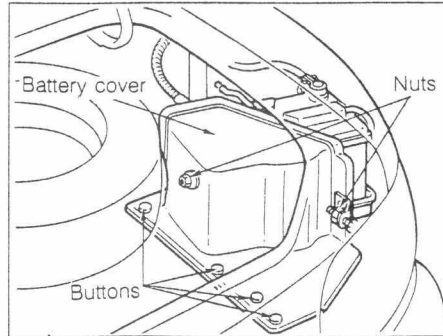
- The coolant level should then be checked. If the level in the reservoir is low, look for leaks at the radiator hoses and connections, heater hoses and connections, radiator, and water pump. If you find a major leak or another problem that may have caused the engine to overheat, do not run the engine until it has been corrected. Call an Authorized Mazda Dealer for assistance. If you do not find a leak or other problem, carefully add coolant to the reservoir (page 7-12).

#### **WARNING!**

**Do not remove the radiator cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure. This could cause serious injury.**

#### **CAUTION**

**If the engine frequently overheats, have the cooling system checked and repaired.**



The battery is in the trunk. To detach the battery cover, remove buttons and nuts first.

Jump-starting can be dangerous if done incorrectly. Therefore, to avoid harm to yourself or damage to your vehicle or battery, follow jump-starting procedures. If in doubt, we strongly recommend that you have a competent mechanic or a road service business do any jump-starting of your vehicle.

#### **CAUTION**

Use only a 12-volt jumper system. You can damage a 12-volt starting motor, ignition system, and other electrical parts beyond repair by use of a 24-volt power supply (two 12-volt batteries in series or a 24-volt motor generator set).

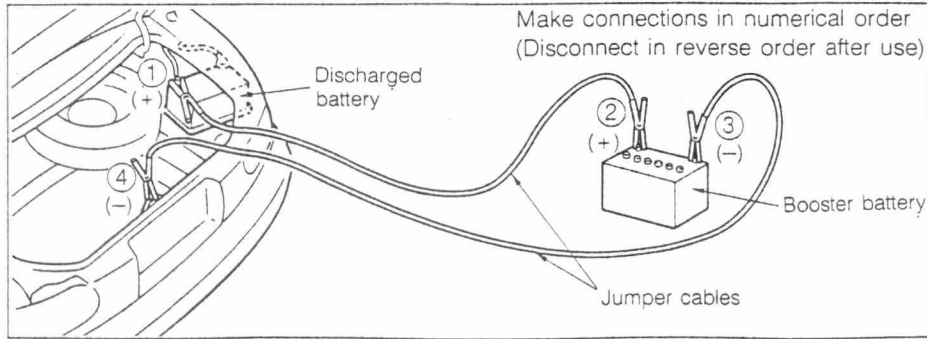
#### **WARNING!**

- **Keep all flames away from the battery, and avoid creating any sparks near the battery. Gas that can be exploded by a flame or a spark is produced during normal battery operation.**
- **Do not attempt a jump-start if the discharged battery is frozen; the battery may rupture or explode.**

## EMERGENCY STARTING

895US2100AE

### Push-Starting



895US20108E

### JUMP-STARTING PROCEDURE

1. Make sure the booster battery is 12-volt and that its negative terminal is grounded.
2. If the booster battery is in another vehicle, do not allow the vehicles to touch.
3. Turn off all unnecessary electrical loads.
4. Connect the jumper cables in the exact sequence in the illustration. First connect one end of a jumper cable to the positive terminal of the discharged battery, then the other end to the positive terminal on the booster battery. Next connect one end of the other jumper cable to the negative terminal of the booster battery, then the other end to a solid, stationary, metallic point away from the battery. **NOT TO THE BATTERY NEGATIVE (-) TERMINAL**, being careful that the clamps of one cable do not touch the clamps on the other cable or any metal on either vehicle. Do not lean over the battery when making connections.
5. Start the engine of the vehicle with the booster battery and let it run a few minutes. Then start the engine of the vehicle with the discharged battery.
6. Carefully disconnect the cables in the exact reverse order described in step 4.

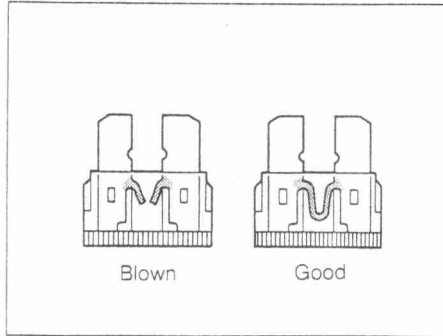
A vehicle should not be push-started because it might damage the emission control system. Follow the directions on the previous page for jump-starting.

### CAUTION

**Never tow a vehicle to start it because the sudden surge forward when the engine starts could cause a collision with the tow vehicle.**

895BS3000AE

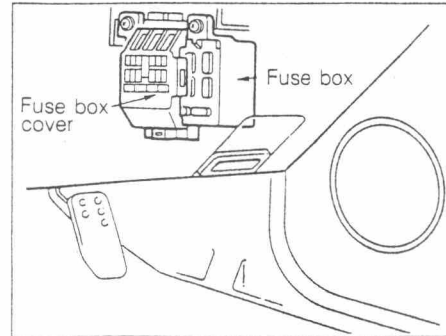
## Fuses



If any of your vehicle's lights, accessories, or controls does not work, check the fuses. If a fuse has blown, the wire inside it will be broken from burning.

Always replace a blown fuse with one of the same specified rating.

If the same fuse blows again, avoid using the system involved and immediately consult an Authorized Mazda Dealer.

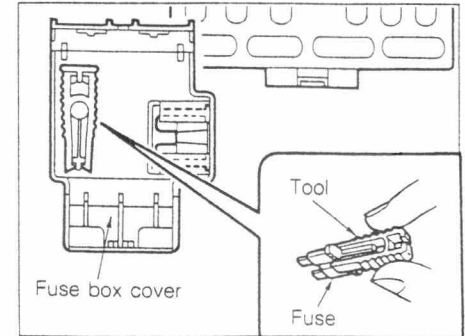


## Fuse Replacement

Fuses are installed to prevent damage being caused to the wiring circuits.

## CAUTION

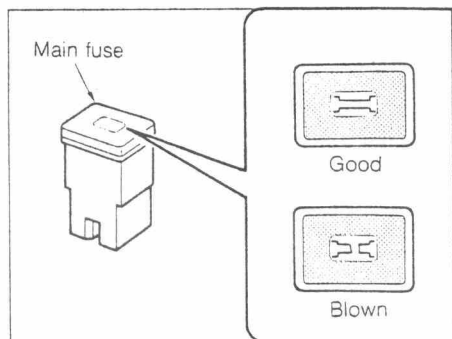
- **Never replace a fuse with anything but another fuse of the same rating. A higher-capacity fuse could cause damage and even start a fire.**
- **Never install a wire instead of the proper fuse—even for a temporary repair. It may cause extensive wiring damage and possibly a fire.**
- **Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.**



1. Turn off the ignition switch and all other switches.
2. Pull the suspected fuse straight out with the removal tool provided on the fuse box cover.
3. Check the removed fuse; replace it if it is blown.
4. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it fits loosely, have an Authorized Mazda Dealer fix it. If you do not have a spare, use a fuse of the same rating from a circuit you may not need. Remember to install the correct fuses as soon as possible.



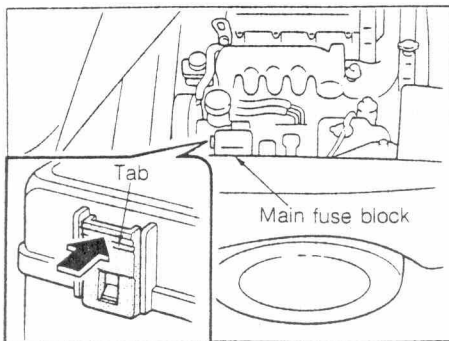
## ELECTRIC CIRCUIT PROTECTION



895US3010AE

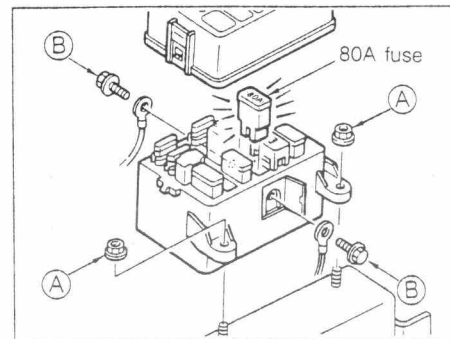
### MAIN FUSE

If the headlights or other electrical components do not work and the fuses are OK, check the main fuse block in the engine compartment. If a fuse is blown, it must be replaced.



### Fuse Replacement

1. Turn off the ignition switch and all other switches.
2. Open the fuse block cover by unhooking the tab on one end and tilting the cover back toward the other end.
3. Check the fuses. If one is blown, replace it with a new one of the specified rating.

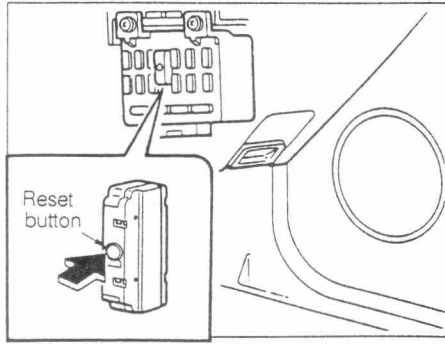


If the 80A fuse is blown, it must be removed as follows.

4. Disconnect the negative battery cable.
5. Remove nuts (A).
6. Lift the fuse block and remove bolts (B).
7. Replace the fuse with a new one of the specified rating.
8. Install in the reverse order of removal.

895ES3100AE

## Circuit Breaker



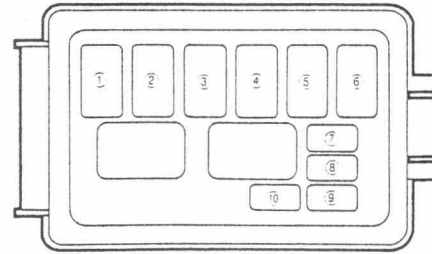
The climate control systems require high amperage. If the rated amperage is exceeded, a protective circuit breaker will open.

If the circuit is broken by the circuit breaker, turn all heater switches off and restore the circuit by pushing the reset button. If it breaks again, have it inspected by an Authorized Mazda Dealer.

895BS3200AE

## Fuse Panel Description

### Main fuse block

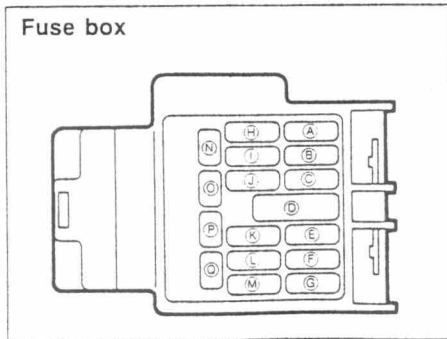


### Main fuse block

	POSITION	DESCRIPTION	COLOR	CIRCUIT PROTECTED
1	FUEL INJ	30A	Pink	Fuel injection, Alternator
2	HEAD	30A	Pink	Headlights
3	MAIN	80A	Black	For protection of all circuits
4	BTN	40A	Green	Refer to HAZARD (10A), STOP (10A), ROOM (10A), TAIL (10A)
5	—	—	—	—
6	COOLING FAN	30A	Pink	Cooling fan
7	AD FAN*	20A	Yellow	Additional fan (Air conditioner)
8	FOG*	15A	Blue	Rear fog light
9	ST SIGN	10A	Red	Fuel injection
10	RETRACTOR	30A	Green	Headlight retractor

\* Some models.

# ELECTRIC CIRCUIT PROTECTION



Fuse box

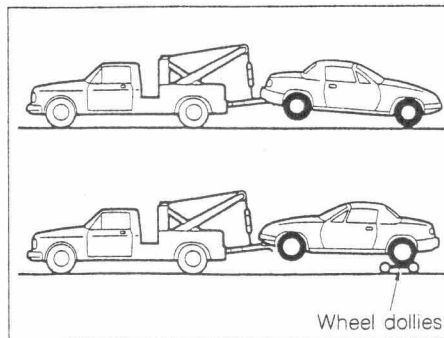
POSITION	DESCRIPTION	Amps	COLOR	CIRCUIT PROTECTED
A	ENGINE	15A	Blue	Cooling fan
B	METER	10A	Red	Gauges, Warning lamps
C	—	—	—	—
D	HEATER	30A	—	Heater
E	—	—	—	—
F	POWER WIND*	30A	Green	Power windows
G	WIPER	20A	Yellow	Wipers, Washer
H	—	—	—	—
I	TAIL	10A	Red	Taillights
J	—	—	—	—
K	STOP	10A	Red	Horn, Stoplights
L	HAZARD	10A	Red	Hazard warning lights
M	—	—	—	—
N	—	—	—	—
O	CIGAR	15A	Blue	Cigarette lighter
P	—	—	—	—
Q	ROOM	10A	Red	Interior lamps

885ES4000AE

## Towing

If towing is necessary, we recommend having it done by an Authorized Mazda Dealer or a commercial tow-truck service.

Proper lifting and towing procedures are necessary to prevent damage to the vehicle. Government laws applicable to vehicles in tow must be followed.



As a general rule, towed vehicles should be pulled with the driving (rear) wheels off the ground.

If excessive damage or other conditions prevent towing the vehicle with the driving (rear) wheels off the ground, use wheel dollies.

1. Set the ignition switch in the ACC(I) position;
2. Place the shift lever in Neutral;
3. Release the parking brake.

If the transmission, rear axle and steering system are not damaged, the vehicle may be towed on all four wheels. If these components are damaged, use wheel dollies.

The following points are important when towing a vehicle with all wheels on the ground.

1. Set the ignition switch in the ACC(I) position;
2. Place the shift lever in Neutral;
3. Release the parking brake.

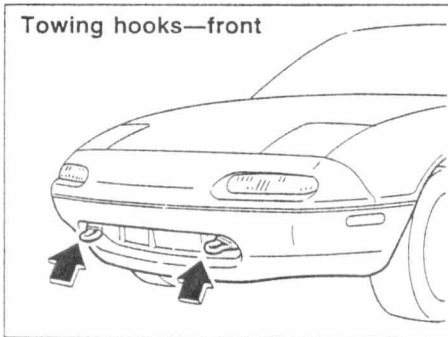
### CAUTION

**Remember that the power assist for the brakes and steering will not be available when the engine is inoperative.**

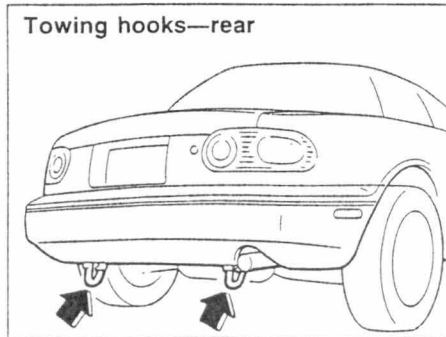
## TOWING

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Towing hooks—front



Towing hooks—rear



896ES401DAE

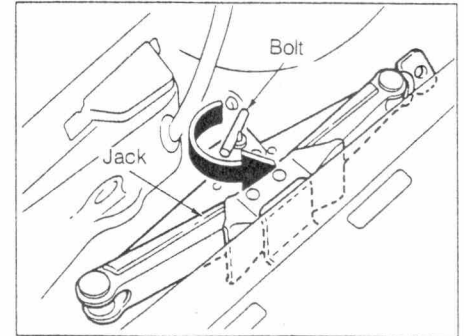
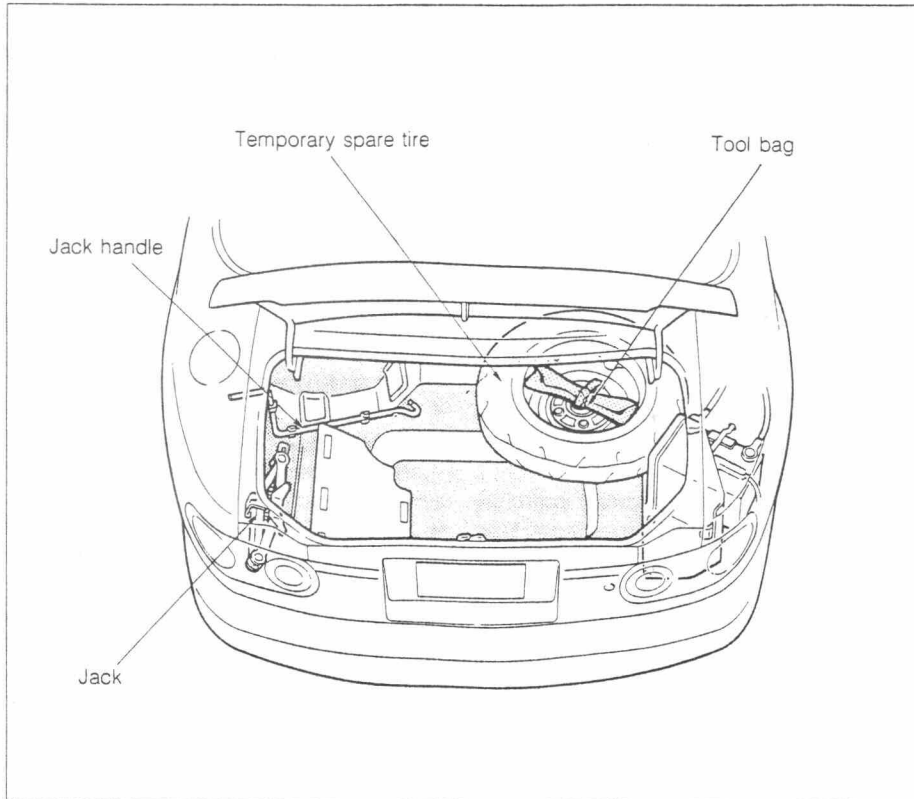
### Towing Hook

The towing hook should be used only in an emergency situation, (for example, to pull the vehicle out of a ditch, a snow bank, or mud). When the towing hook is used, always pull the cable or chain in a straight direction with respect to the hook. Do not apply force to the hook from any side direction. To prevent damage, do not take up slack in the cable or chain too quickly.

## IF YOU HAVE A FLAT TIRE

095E55000A6

### Spare Tire, Tool Bag, Jack, and Jack Handle



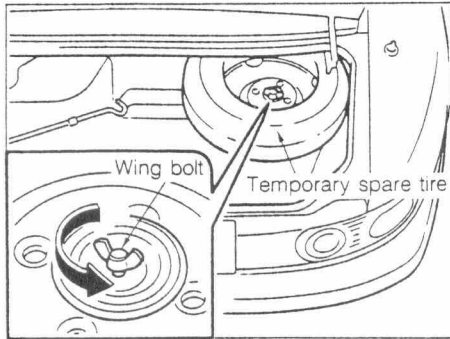
#### To remove the jack

1. Turn the bolt counterclockwise and remove it.
2. Remove the jack.

#### NOTE

To prevent the jack from rattling while the vehicle is in motion, store it properly.

## IF YOU HAVE A FLAT TIRE

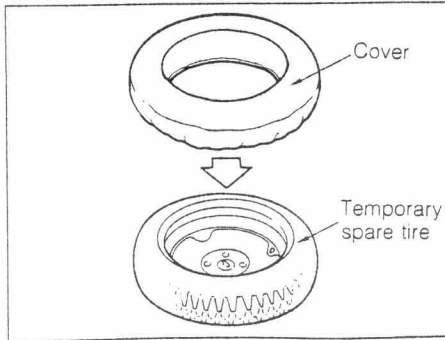


### To remove the temporary spare tire

1. Turn the wing bolt counterclockwise by hand and remove it.
2. Remove the temporary spare tire.

### NOTE

To prevent the temporary spare tire from rattling while the vehicle is in motion, store it properly.



### NOTE

Place the cover on the temporary spare tire as illustrated before housing the tire in its appropriate place. This cover is used for temporary spare tire only. It cannot be used for conventional tires.

89SESS100AE

## Spare Tire

89SESS110AE

### TEMPORARY SPARE TIRE

The temporary spare tire should be used only for VERY short periods. Temporary spares should NEVER be used for long drives or extended periods.

### When using the temporary spare tire, observe the following precautions:

- Use for limited mileage, temporary emergency use only.
- Any continuous road use of this tire could result in tire failure, loss of vehicle control, and possible personal injury.
- Do not exceed the vehicle's maximum load rating or the load-carrying capacity molded on the sidewall of the temporary spare tire.
- Under no circumstance should you exceed 80 km/h (50 mph); a higher speed could damage the tire.
- Avoid driving over obstacles. Also, do not take the vehicle through an automatic vehicle wash while the temporary spare tire is installed. Because this tire's diameter is smaller than the diameter of a conventional tire, the ground clearance is reduced approximately 25mm (1 in).

895B55200AE

### Changing Tires

- Do not use wheel covers, wheel rings or center caps with the temporary spare tire wheel.
- Do not use tire chains with this tire. Because of its smaller size, a tire chain will not fit it properly. This could cause damage to the vehicle and result in loss of the chain.
- This tire should not be installed on the rear axle if the vehicle must be driven in snow or on ice.  
To avoid loss of vehicle control under snowy and icy conditions, install the temporary spare tire on the front axle and use a conventional tire on the rear axle.
- Do not use the temporary spare tire on any other vehicle because this tire has been designed especially for your vehicle.
- Use only one temporary spare tire.

893U55210AE

### JACKING INSTRUCTIONS

The jack is provided for emergency tire changing only.

Follow jacking instructions to reduce the possibility of personal injury.

### WARNING!

- *Never attempt vehicle repairs in the traffic lanes of a public road or highway. Always move the vehicle completely off the road and onto the shoulder before trying to change a tire. If you cannot find a firm, level place off the road, call a road service company for assistance.*
- *Do not exceed the jack's maximum permissible load: 600 kg (1,320 lbs).*
- *Be sure to use the correct front and rear jacking positions on the vehicle; never use the bumpers or any other part of the vehicle for jack support.*
- *Never get beneath the vehicle while using the jack.*
- *Do not start or run the engine while the vehicle is on the jack.*

895U55220CE

### TIRE REPLACEMENT

1. Park on a level surface and set the parking brake firmly.
2. Shift into R (Reverse).

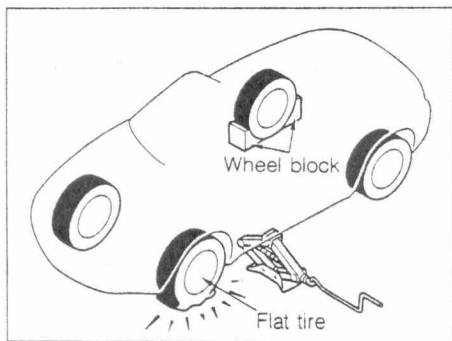
### WARNING!

*When one rear wheel is lifted off the ground, R (Reverse) position will not prevent the vehicle from moving and possibly slipping off the jack, even if this position is properly engaged. To prevent vehicle movement while changing a tire, always set the parking brake fully, and always block the wheel diagonally opposite the wheel being changed.*

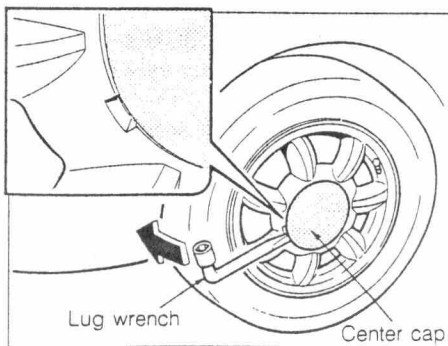
3. Activate the hazard warning flasher.
4. Remove the lug wrench, jack, jack handle, and spare tire from the vehicle.



## IF YOU HAVE A FLAT TIRE



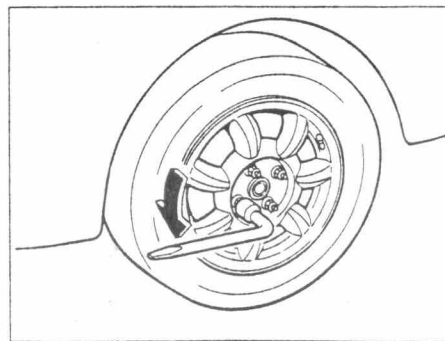
5. Block both the front and rear of the wheel that is diagonally opposite the jacking position.



6. Pry off the center cap\* with the beveled end of a lug wrench.

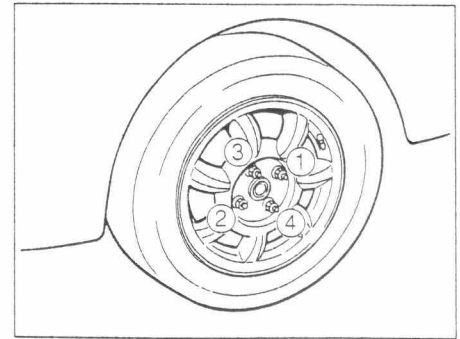
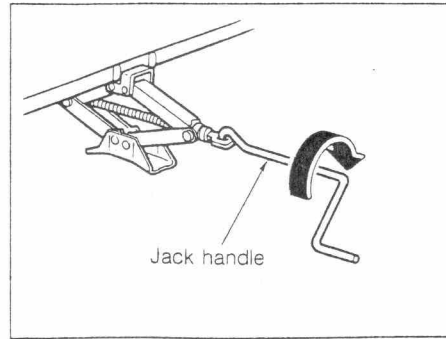
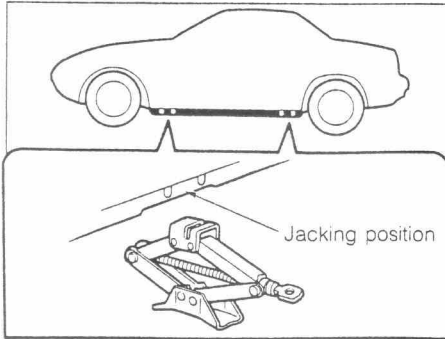
### NOTE

When removing the center cap, firmly force in the beveled end of the lug wrench between the wheel and the cap. Failure to insert lug wrench fully into the space will make removal of the center cap difficult.



7. Loosen the lug nuts counterclockwise one turn each, but do not remove any nut until the tire has been raised off the ground.

## IF YOU HAVE A FLAT TIRE



8. Place the jack at the front or rear jacking position closest to the tire you are changing. Place the jack under the side sill.

### **WARNING!**

**To reduce the possibility of injury, be sure to use only the jack provided with the vehicle and the correct jacking position; never use any other part of the vehicle for jack support.**

9. Insert the jack handle into the jack and turn it clockwise until the tire just clears the ground, less than 30mm (1.2 in). Before removing the lug nuts, make sure the vehicle is stable and that there is no chance for it to slip or move.
10. Remove the lug nuts by turning them counterclockwise, and then remove the wheel.
11. Mount the spare tire into position and tighten the lug nuts by hand.

12. Turn the jack handle and lower the vehicle to the ground. Tighten the lug nuts firmly in an X pattern.

If you are unsure of the tightness of the lug nuts, have them checked at the nearest service station. The specified tightening torque is 90 to 120 N·m. (9.0 to 12.0 m·kg, 65 to 87 ft·lb).

## IF YOU HAVE A FLAT TIRE

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13. Place the flat tire in the trunk.  
Have the flat tire repaired and replace the spare tire with it as soon as possible. This is the same procedure for changing a tire.

### **WARNING!**

*Your vehicle has metric threads on the wheel studs and nuts. Make certain during wheel removal that the same nuts removed are reinstalled or, if replaced, that nuts with metric threads and the same chamfer configuration are used. Installation of a nonmetric thread nut on a metric stud or vice versa will not properly secure the wheel to the hub and will damage the stud so that it must be replaced. Be sure to use extreme care in checking for thread style before installing aftermarket lug nuts or wheels. If in doubt, consult an Authorized Mazda Dealer. Damaged studs may result in wheel loss and personal injury.*

### **CAUTION**

**Check the inflation pressure as soon as possible after installing the spare tire. Adjust it to the specified pressure, if necessary.  
Refer to Section 9.**

### **NOTE**

To prevent the jack, jack handle, tools or spare tire from rattling while the vehicle is in motion, store them properly.

# 6

## Appearance Care

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EXTERIOR CARE	6-2
INTERIOR CARE	6-5
CONVERTIBLE TOP CARE	6-7
DETACHABLE HARDTOP CARE	6-8

## EXTERIOR CARE

895UT100DAF

### Exterior General Caution

It is very important to follow label directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

895ET1100AE

### Finish Maintenance

1. Damage to the vehicles finish can be caused by small deposits of dirt, insects, tree sap, chemicals and bird droppings. Prompt removal of these deposits will preserve the vehicles finish. A mild car wash soap should be used; avoid using strong soaps or chemical detergents.
2. Wash your Mazda by hand, using plenty of water and a mild car wash soap.
3. Wash away the detergent using plenty of clean water. The water used for washing and rinsing should be cold or lukewarm.
4. To help protect your vehicle from rust and deterioration, wash it thoroughly and frequently (at least once a month), paying particular attention to the removal of any accumulation of salt, dirt, mud, or other materials, from the underside of the fenders. Remove these completely from the underbody by using a stream of water. If the mud is difficult to remove, use a mild soap or a car-washing detergent.
5. After soaping, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow the soap to dry on the finish. In addition, the painted and bright metal exterior surfaces of your vehicle should be

coated with a good quality wax.

#### CAUTION

- Do not wash or wax in direct sunlight.
- Washing the vehicle should be delayed if the body is hot. If not, water spots may form on the paint surface.
- Do not use hot water. It is best to use cool to lukewarm water to prevent damaging the paint.
- Wiping off dust or dirt with a dry cloth may scratch the finish.
- When cleaning plastic wheel covers, wash with plenty of water. Use a sponge, chamois, or soft cloth to prevent scratching or damaging the finished surface.
- Wipe the vehicle dry using a chamois to avoid water spots.

893ET1600AE

## Polishing and Waxing

### **WARNING!**

- ***After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water.***
  - ***For your safety, do not wash, wax, or dry the vehicle with the engine running.***
  - ***Do not clean the underside of the chassis, fenders, or other such areas, without protecting your hands and arms. You may cut yourself on sharp-edged metal parts.***
6. After washing, check whether drainholes of doors, side sills, rear fenders are clogged. If they are, clean them.

1. The vehicle should be washed and dried before being waxed.
2. Use wax which contains no abrasives. Waxes containing large amounts of abrasive will remove paint and may etch or otherwise damage bright metal parts.
3. Use a good grade of carnauba wax for metallic, mica and solid dark colors.
4. When waxing, coat evenly with the supplied sponge or a soft cloth.
5. Wipe the vehicle using soft cloth such as flannel.

893ET1700AE

## Paint Damage Touch-up

- Repair damage in coated film caused by stone chipping, damage during parking etc., by using Mazda touch-up paint immediately after removing the dirt and grease with a clean soft cloth, before rust begins to form.
- If rust has already begun to form:
  - (1) Remove rust completely with sandpaper, etc.
  - (2) Wipe with a clean soft cloth.
  - (3) Apply rust preventive primer to the area.

After drying it completely:

  - (4) Apply a suitable top coat material to the area.
- Of course there will be no problem if you assign the work to an Authorized Mazda Dealer.

## EXTERIOR CARE

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893ET1900AE

### Cavity Protection

Cavities are protected from the factory, but an additional protection of these, after the vehicle has been taken in use, will of course extend the life time of the body.

We recommend you to consult your dealer for a further protection.

893ET1300AE

### Bright-Metal Maintenance

- Use tar remover and not knives or other sharp objects to remove road tar and insects.
- To protect the surfaces of bright-metal parts from corrosion, apply a coating of wax or chrome preservative and rub to a high luster.
- During winter weather or in coastal areas, cover the bright-metal parts with a heavier coating of wax or preservative. If necessary, coat the parts with noncorrosive petroleum jelly or other protective compound.

#### CAUTION

**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.**

895BT1900AE

### 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 as the vehicle is used. Consequently, check this coating periodically and, if damage is found, repair it.

In this connection, Mazda Dealers are well informed on how repairs should be made. We recommend that you consult with a Mazda Dealer.

89SBT1500AE

### Aluminum Wheel Maintenance

The aluminum wheels are coated with a clear protective finish.

#### NOTE

- Do not use any abrasive cleaner, polishing compound, solvent, or wire brushes on aluminum wheels. These may scratch or damage the finish.
- Use only a mild soap or neutral detergent, and rinse thoroughly with water. Also, be sure to clean the wheels after driving on salted roads. This helps prevent corrosion.
- Avoid washing the wheels with high-speed car-wash brushes.
- Deposits of salt and mud can damage alloy wheels wash off regularly, particularly during winter driving conditions.

89SUT2000AE

### Interior General Precautions

Prevent caustic solutions such as perfume and cosmetic oil from contacting the dashboard because they may cause damage or discoloration. If they do contact the dashboard, wipe them off immediately.

89JET2400AE

### Cleaning Interior and Floor

Rust begins to form not only from the outside but also from the inside.

Water, humidity, salt, mud, etc. collect under the mat in the luggage compartment, so rust could begin from there.

Periodically dry the floor after removing the accumulations of mud and deposits of salt which rapidly attach metal.

If you place or carry de-icing salt, fertilizers, chemicals etc. in the luggage compartment or elsewhere, take every possible precaution to be sure that they do not adhere to the floor or fall onto the floor.



## INTERIOR CARE

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895BT2100AE

### Upholstery and Interior Trim Cleaning

#### VINYL

Remove dust and loose dirt from vinyl with a whisk broom or vacuum cleaner. Clean vinyl surfaces with a leather and vinyl cleaner.

#### FABRIC

Remove dust and loose dirt from fabric with a whisk broom or vacuum cleaner. Clean with a mild soap solution recommended for upholstery or carpets. Remove fresh spots immediately with a fabric spot cleaner.

This fabric can be stained and its color can be affected. Also its fire-resistant properties can be reduced if the material is not properly taken care of.

#### CAUTION

Using any but recommended cleaners and procedures may affect the fabric's appearance and fire-resistant properties.

895UT2200AE

### Lap/Shoulder Belt Webbing Cleaning

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpets; follow the instructions provided with the soap. Do not bleach or redye the webbing because this may weaken it.

895UT2300AE

### Interior Window Glass Cleaning

If the interior glass surfaces (Except convertible top rear window) of the vehicle become fogged (that is, covered with an oily, greasy, or waxy film), they should be cleaned with glass cleaner. Follow the directions on the container of cleaner.

895UT3000AE

### Care and Maintenance of the Convertible Top

A special, high-quality material is used for the convertible top, but when care of the top is improper or insufficient, hardening, staining, and loss of luster may result. The top must be maintained according to the prescribed car and maintenance guidelines.

895UT3010AE

#### WASHING THE CONVERTIBLE TOP

Do not wait until the top gets very dirty before cleaning it. Dirt that remains too long on the top can cause deterioration.

1. Gently clean the top with a synthetic neutral detergent, plenty of water, and a soft brush.
2. Thoroughly rinse the top with clean water to remove all soap.
3. Wipe the top dry before the water dries on it.
4. Allow the top to dry completely before lowering it.

#### CAUTION

- Automatic or high pressure car washes are harmful to the convertible top. Avoid using these to wash the vehicle.
- Do not direct water from the hose directly to the area where the window glass and the convertible top meet. This would most likely cause water to enter the passenger compartment of the vehicle.

895UT3020AE

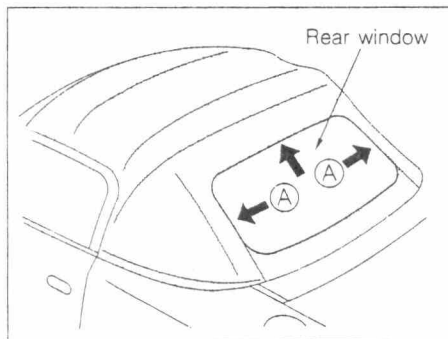
#### APPEARANCE CARE

The convertible top may be dressed about once a month after it has been washed and dried well. For best results, use a water-based leather treatment or vinyl top dressing. Several brands of spray-on treatments for vinyl are widely available.

#### CAUTION

- Some brands of leather treatment on the market can ruin the gloss on the top. You should be careful, therefore, to choose a treatment that is appropriate.
- Be careful not to let any regular car wax get on the convertible top. If for any reason car wax should get on the top, remove it with a leather cleaner.
- Too much treatment on your top can be as damaging as too little. Follow directions for the brand of treatment, and don't overdo it!
- Avoid lowering the top immediately after using treatment or dressing on the top fabric. Instead, allow it to dry fully before lowering.

## CONVERTIBLE TOP CARE, DETACHABLE HARDTOP CARE \*



895UT3030AE

### CLEANING THE REAR WINDOW

The rear window is made of transparent chloride vinyl. Be careful when handling it because it is easily scratched and abraded. Remove dust and loose dirt with flowing water.

#### CAUTION

- Do not scrub the window surface with a brush or cloth.
- Do not spray excessive water toward the sides of the window (A directions).
- Do not use an automatic car wash.

895AT4000AE

### Care and Maintenance of the Detachable Hardtop

895UT4010AE

#### WASHING

To help protect the hardtop's finish from deterioration, use a soft cloth or sponge to wash it.

Insects, tar, tree sap, bird droppings, industrial fallout, and similar deposits can damage the hardtop finish if they are not removed immediately. Even prompt washing with plain water may not completely remove all these deposits. A mild vehicle wash soap, safe for use on painted surfaces, may be used.

#### CAUTION

- Do not use an automatic car wash.
- Do not use strong soap, chemical detergents, or hot water, and do not wash the hardtop in direct sunlight or when it is warm.

After soaping, rinse the hardtop thoroughly with lukewarm or cold water. Do not allow the soap to dry on the finish.

895AT4020AE

#### WAXING

##### (Red hardtop)

Wax the hardtop when water will no longer bead on the paint.

Always wash and dry the hardtop before waxing.

#### NOTE

Removing oil, tar, and similar materials with a spot remover will usually strip the wax from the finish. Be sure to re wax these areas even if the rest of the vehicle does not need waxing.

#### CAUTION

- Wiping dust or dirt off the hardtop with a dry cloth will scratch the finish.
- Do not use abrasive wax. This may result in damage to the protective coating and cause discoloration or paint deterioration.

(Black hardtop)

**CAUTION**

Do not use wax. This wax will be absorbed into the coating and become unremovable.

# 7

## Maintenance

MAINTENANCE SERVICES	7- 2
ENGINE COMPARTMENT	7- 8
ENGINE OIL AND OIL FILTER	7- 9
ENGINE COOLING SYSTEM	7-11
BRAKES	7-14
CLUTCH	7-16
POWER STEERING	7-16
MANUAL TRANSMISSION	7-17
OTHER LUBRICANTS AND FLUIDS	7-18
AIR CLEANER	7-19
WIPER BLADES	7-20
BATTERY	7-22
BELT TENSIONS	7-24
SPARK PLUGS	7-25
TIRES	7-27
WHEELS	7-30
LIGHT BULBS	7-30
LUBRICANT SPECIFICATIONS	7-36
TROUBLESHOOTING	7-38

## MAINTENANCE SERVICES

85SUU1000AE

### Maintenance Services

You should exercise the utmost care to prevent damage to your vehicle and injury to yourself whenever using this manual for maintenance or inspection.

Should you have any doubts concerning the inspection or servicing of your vehicle, we strongly recommend that you have a reliable and qualified service shop perform this work, preferably an Authorized Mazda Dealer.

An Authorized Mazda Dealer has factory-trained technicians and genuine Mazda parts to service your vehicle properly. For expert advice and quality service, see an Authorized Mazda Dealer.

Inadequate, incomplete, or insufficient servicing may result in operational problems with your vehicle that could even lead to vehicle damage, an accident, or personal injury.

893EU1100AE

### Owner's Responsibility

#### **Maintenance Services and Record Retention are the owner's responsibility.**

You should retain evidence that proper maintenance has been performed on your vehicle in accordance with scheduled maintenance, services chart starting on the following page.

Detailed warranty information is also provided with your Mazda vehicle.

Claims made during the warranty term will not qualify under any warranty if they result from lack of maintenance rather than from defective material or workmanship. We recommend that such maintenance be performed by an Authorized Mazda Dealer using genuine Mazda parts.

895EU1200AE

### Scheduled Maintenance Services

#### **NOTE**

After 80,000 km (48,000 miles) or 48 months, continue to follow the described scheduled maintenance items periodically.

#### **Emission control and related systems:**

The ignition and fuel systems are vitally important to the proper operation of the emission control and related systems, as well as for efficient engine operation.

It is strongly recommended that all servicing related to these systems be done by your Authorized Mazda Dealer.

## MAINTENANCE SERVICES

I : Inspect, and if necessary correct, clean or replace  
 A: Adjust      R: Replace or change      T: Tighten

MAINTENANCE INTERVALS  MAINTENANCE ITEM	Number of months or km (miles), whichever comes first											
	Months* <sup>1</sup>				12		24		36		48	
	× 1000	km	1.0	10	20	30	40	50	60	70	80	
miles		0.6	6	12	18	24	30	36	42	48		
Intake and exhaust manifold bolts and nuts			T					T			T	
Drive belts* <sup>2</sup>			A		A		A		A		A	
Engine timing belt* <sup>3</sup>		Replace every 100,000 km (60,000 miles)										
Engine oil* <sup>4</sup>		R	R	R	R	R	R	R	R	R	R	
Oil filter* <sup>4</sup>			R	R	R	R	R	R	R	R	R	
Cooling system (including coolant level adjustment)				I		I		I		I		
Engine coolant		Replace every 2 years										
Idle speed				A		A		A		A		
Air cleaner element* <sup>5</sup>						R				R		
Fuel filter						R				R		
Fuel lines and hoses						I				I		
Initial ignition timing						I				I		

- \*1 Major service interval at 12 months/20,000 km (12,000 miles)  
Lubrication service based on distance only 10,000 km (6,000 miles) not time
- \*2 Adjust alternator and water pump drive belt, power steering drive belt, if equipped.
- \*3 Replacement of timing belt is required at every 100,000 km (60,000 miles). Failure to replace timing belt may result in damage to the engine.
- \*4 If the vehicle is operated under the following conditions, it is suggested that the engine oil and oil filter be changed more often than at usual recommended intervals.
  - a) Driving in dusty conditions.
  - b) Extended periods of idling or low speed operation.
  - c) Driving for a prolonged period in cold temperatures or driving only short distance regularly.
- \*5 If the vehicle is operated in very dusty or sandy areas, inspect and, if necessary, replace more often than at usual recommended intervals.

# MAINTENANCE SERVICES

I : Inspect, and if necessary correct, clean or replace  
 A: Adjust      R: Replace or change

MAINTENANCE ITEM	MAINTENANCE INTERVALS	Number of months or km (miles), whichever comes first										
		Months* <sup>1</sup>				12		24		36		48
		× 1000	km	1.0	10	20	30	40	50	60	70	80
miles	0.6		6	12	18	24	30	36	42	48		
Spark plugs						A		A		A		A
Throttle sensor						A		A		A		A
Evaporative system						I		I		I		I
Dash pot						A		A		A		A
Battery electrolyte level and specific gravity						A		A		A		A
All electrical system* <sup>6</sup>				I	I	I	I	I	I	I	I	I
Head lamp alignment						A		A		A		A
Clutch pedal				I	I	I	I	I	I	I	I	I
Clutch fluid				I	I	I	I	I	I	I	I	I
Brake lines, hoses and connections						I		I		I		I
Brake pedal				I	I	I	I	I	I	I	I	I
Brake fluid* <sup>7</sup>				I	I	I	R	I	I	I	I	R
Parking brake						A		A		A		A
Power brake unit and hoses						I		I		I		I
Disc brakes						I		I		I		I

\*1 Major service interval at 12 months/20,000 km (12,000 miles)

Lubrication service based on distance only 10,000 km (6,000 miles) not time

\*6 This is a full function check of all electrical systems, i.e., all lights, washers (including condition of blades) electric windows, horn, etc...

\*7 Replace every 2 years.

If there has been continuous hard driving, mountain driving, or if the brakes are used extensively or the vehicle is operated in extremely humid climates, the brake fluid should be changed annually.



## MAINTENANCE SERVICES

I : Inspect, and if necessary correct, clean or replace  
 A: Adjust      T: Tighten      R: Replace or change

MAINTENANCE INTERVALS	Number of months or km (miles), whichever comes first										
	Months* <sup>1</sup>				12		24		36		48
	× 1000	km	1.0	10	20	30	40	50	60	70	80
miles		0.6	6	12	18	24	30	36	42	48	
Power steering fluid (if equipped)			I	I	I	I	I	I	I	I	
Power steering system and hoses				I		I		I		I	
Steering and front suspension				I		I		I		I	
Manual transmission oil						A				R	
Rear-axle oil						A				R	
Rear suspension ball joints						I				I	
Wheel bearing grease (if applicable)										A	
Bolts and nuts on chassis and body		T		T		T		T		T	
Body condition, visual only		Inspect annually									
Exhaust system heat shield						I				I	
Tires (including spare tire, with inflation pressure adjustment)				I		I		I		I	
Hinges and catches				A		A		A		A	
Underside of vehicle				I		I		I		I	
Seat belt				I		I		I		I	
Road test				I		I		I		I	

\*1 Major service interval at 12 months/20,000 km (12,000 miles)  
 Lubrication service based on distance only 10,000 km (6,000 miles) not time

## MAINTENANCE SERVICES

895EU1500AE

### Routine Service

It is strongly recommended that the following items be checked daily and/or weekly.

- **Engine Oil Level**  
(page 7-9)
- **Engine Coolant Level**  
(page 7-11)
- **Brake Fluid Level**  
(page 7-14)
- **Clutch Fluid Level**  
(page 7-16)
- **Washer Fluid Level**  
(page 7-18)
- **Tire Inflation Pressure**  
(page 7-27)

895EU1400AE

### Maintenance Service Precautions

When performing any inspection or maintenance work on your vehicle, always exercise care to reduce the risk of personal injury or damage to the vehicle.

Here are some general precautions that should be closely observed in carrying out any service operation.

- Do not work on the engine while it is hot. Always turn it off and allow it to cool.
- If you must work with the engine running, make sure that no article of clothing, including neckties and handkerchiefs, can become entangled by any moving parts. Remove watches, bracelets, rings, necklaces, and similar items. Keep hands, clothing, hair, and tools away from moving fans and drive belts.
- Never get under the vehicle while it is supported by a jack. If it is necessary to work under the vehicle, use safety stands.
- Keep smoking materials, flames, and sparks away from the battery and all fuel and fuel-related parts.
- Never connect or disconnect either the battery or any transistorized component while the ignition switch is ON(II).

- When connecting the battery cables, pay special attention to their polarities. Never connect a positive cable to a negative terminal or a negative cable to a positive terminal.
- Remember that the battery, ignition cables, and vehicle wiring carry high currents or voltage. Be careful not to cause a short circuit.
- When performing any checks in an enclosed space with the engine running, such as in a garage, be sure there is proper ventilation.

You should be aware that improper or incomplete service may result in operating problems. This section gives instructions only for those items that are easy for an owner to perform. Performing do-it-yourself maintenance during the warranty period may affect the warranty coverage. Read the separate Mazda Warranty statement for details. If in doubt about any service operation, have it done by an Authorized Mazda Dealer.

### **WARNING!**

- *Do not release the bonnet latch unless the ignition switch is first turned off, the shift lever is placed in 1 (First), and the parking brake is firmly set.*
- *If it is necessary to check beneath the bonnet with the engine running, place the shift lever in NEUTRAL and set the parking brake firmly.*

*Unexpected and possibly sudden vehicle movement may occur if these precautions are not taken.*

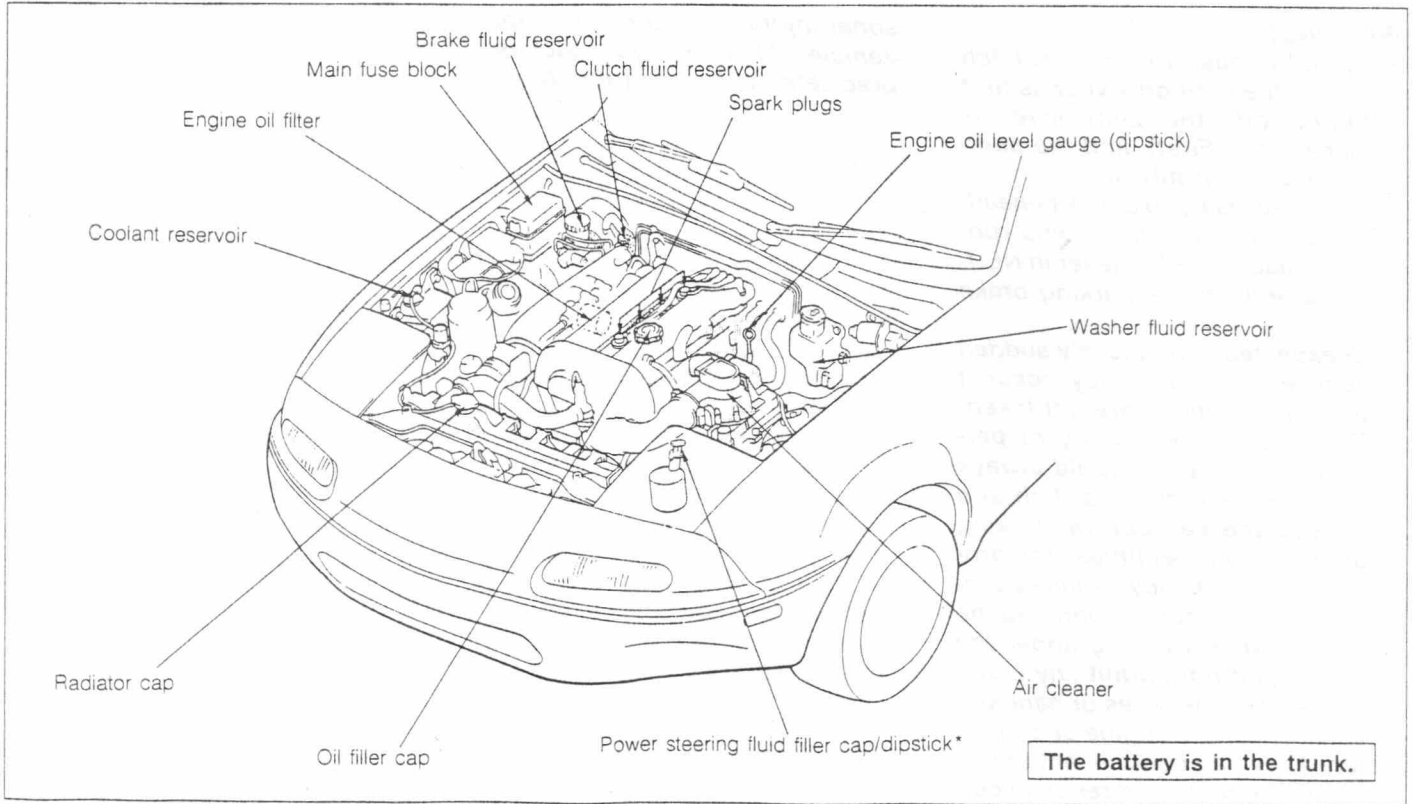
- *To avoid the possibility of personal injury, you should always turn off the ignition switch and remove the key before working under the bonnet unless the procedure specifically requires otherwise. If it requires running the engine while working under the bonnet, do not permit any clothing, such as neckties or handkerchiefs, near the engine or cooling fan. They can become entangled in moving parts and result in per-*

*sonal injury and damage to the vehicle. Also remove watches, bracelets, and rings for safety.*

# ENGINE COMPARTMENT

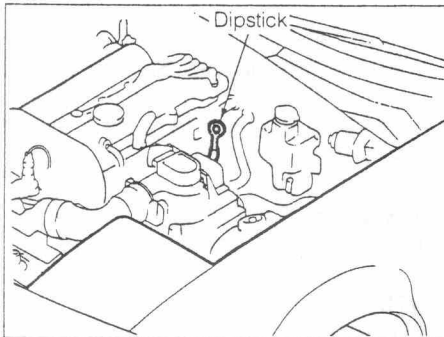
895UU2000AE

## Engine Compartment Overview

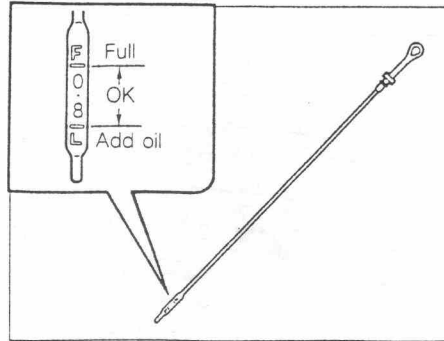


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## Checking Engine Oil Level



1. Be sure the vehicle is on level ground.
2. Warm up the engine to the normal operating temperature.
3. Turn off the engine and wait 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 the dipstick out again and check the level. If the level is between F and L, it is adequate.  
If it is near or at L, add enough oil to bring the level to F.  
**Do not overfill.**

### NOTE

The distance between L and F on the dipstick represents **0.8 liter (0.85 US qt, 0.70 Imp qt)**.

895ULU3100BE

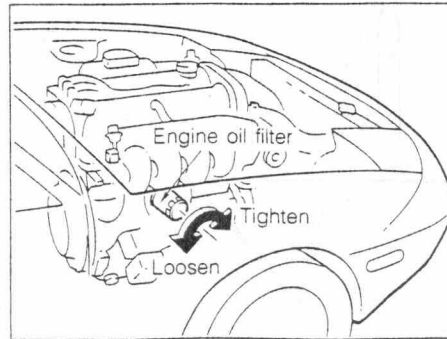
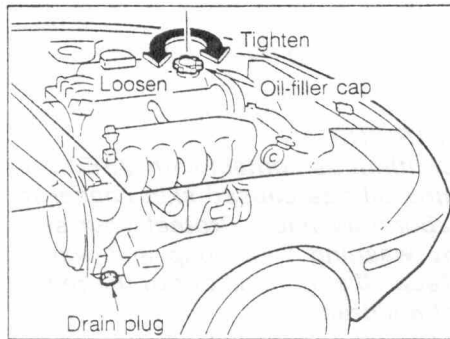
## Changing Engine Oil and Filter

Change engine oil and filter according to the Scheduled Maintenance Services on page 7-3.

### **WARNING!**

**Continuous contact with USED Engine oil has caused skin cancer in laboratory mice. Protect your skin by washing with soap and water. Keep all engine oil out of the reach of children.**

## ENGINE OIL AND OIL FILTER



1. Warm up the engine for a few minutes and then turn it off. Remove the oil-filler cap.
2. Drain the oil into a suitable container after removing the oil-filler cap and drain plug.

**Both the oil and the engine are hot. Do not burn yourself.**

3. Remove the engine oil filter with an oil-filter wrench.
4. Use a clean rag to clean the mounting surface on the engine.
5. Apply a small amount of engine oil to the rubber seal of a new oil filter.
6. Install the oil filter and tighten it. (Please refer to the oil filter caution label for tightening instructions.)
7. Replace the drain plug tightly after the oil has thoroughly drained.
8. Refill the engine with new oil to the F mark on the dipstick.

**Do not overfill.**

9. Refit the oil-filler cap securely.

10. Start the engine and inspect around the oil filter seal for leaks. Stop the engine.

Check the oil level and fill to the F mark if necessary.

### Oil capacity

**3.6 liters (3.8 US qt, 3.2 Imp qt)**

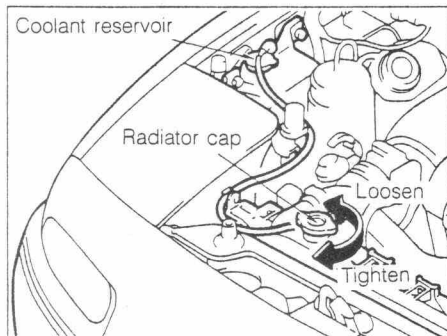
### NOTE

Use only specified engine oil (refer to chart on page 7-36).

### CAUTION

- Follow these instructions carefully. An improper oil filter installation can cause oil leakage and engine damage.
- Although oil filters may have the same external appearance, their internal designs differ significantly. These filters are not interchangeable. To avoid potential engine damage, use only the specified filter for each application.

## Engine Cooling System



The cooling system is a high-pressure type with a see-through coolant reservoir and is filled with year-round antifreeze coolant at the factory.

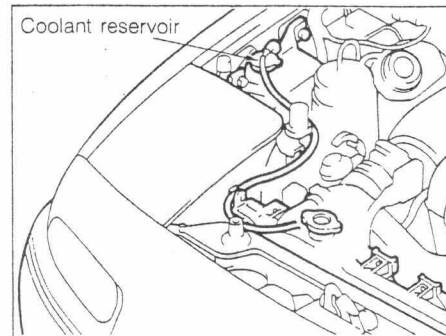
Check the antifreeze protection level at least once a year—at the beginning of the winter season—and before traveling to a colder climate.

### **WARNING!**

- **Never attempt to remove the radiator cap while the engine is operating. Doing so might lead to cooling system and engine dam-**

## ENGINE COOLING SYSTEM

## Checking Coolant Level



**age and could result in serious personal injury from escaping hot coolant or steam.**

**Turn off the engine and wait until it has cooled. Even then, use extreme care when removing the radiator cap. Wrap a thick cloth around it, and turn it counter-clockwise slowly to the first stop. Step back while the pressure is released from the cooling system. When you are sure all the pressure has been released, press down on the cap—still using a cloth—turn it, and remove it.**

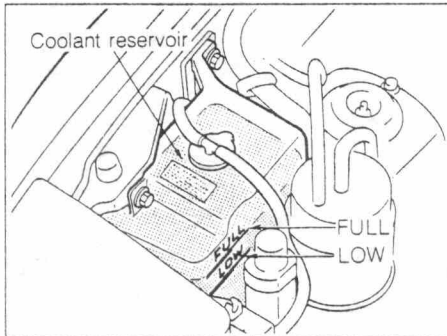
- **Even if the engine is not operating, do not remove the radiator cap while the engine and radiator are hot. Scalding hot coolant and steam may still blow out under pressure; this could cause serious injury.**

Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hose.

# ENGINE COOLING SYSTEM

895EU4200AE

## Changing Coolant



The coolant level should be full in the radiator and between FULL and LOW on the coolant reservoir when the engine is cool.

If the level is near or at LOW, add enough specified coolant to provide protection against freezing and corrosion and to bring the level to FULL. **Do not overfill.** If frequent additions are required, see an Authorized Mazda Dealer for a cooling system inspection.

Change coolant according to the Scheduled Maintenance Services on page 7-3.

### CAUTION

- Use only soft (demineralized) water in the coolant mixture.
- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene glycol based coolant to prevent corrosion and freezing.

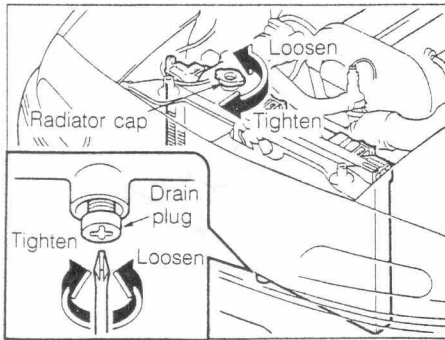
**DO NOT USE** alcohol or methanol antifreeze or mix them with the specified coolant.

- Do not use a solution that contains more than 60 percent antifreeze, which would reduce the effectiveness of solution.

For mixture percentage, refer to the following table.

Protection	Mixture percentage (volume)	
	Anti-freeze solution	Water
Above $-16^{\circ}\text{C}$ ( $3^{\circ}\text{F}$ )	35	65
Above $-26^{\circ}\text{C}$ ( $-15^{\circ}\text{F}$ )	45	55
Above $-40^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ )	55	45





### **WARNING!**

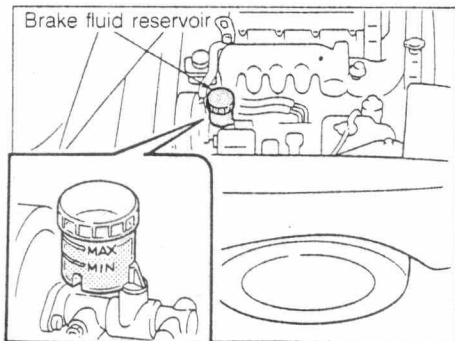
**To prevent burning yourself, do not remove the radiator cap or loosen the drain plug if the engine is hot.**

1. Turn the radiator cap counterclockwise and remove it.
2. Loosen the radiator drain plug and drain the coolant into a suitable container.
3. With the drain plug loose, flush out the system with running water.
4. Drain the system completely and retighten the drain plug. Add the necessary amount of ethylene-glycol based coolant and water to provide the required protection against freezing and corrosion. In extremely cold climates, add the necessary amount of ethylene-glycol based coolant in accordance with the instructions of the coolant manufacturer.
5. Run the engine at idle with the radiator cap off. Slowly add additional coolant if necessary.
6. At this point, wait until the engine reaches normal operating temperature. Depress the accelerator two or three times; then add coolant if required.  
**Be careful not to burn yourself.**
7. Install the radiator cap. Inspect all connections for leaks and recheck the coolant level in the reservoir.

## BRAKES

895EU5000AE

### Checking Brake Fluid Level



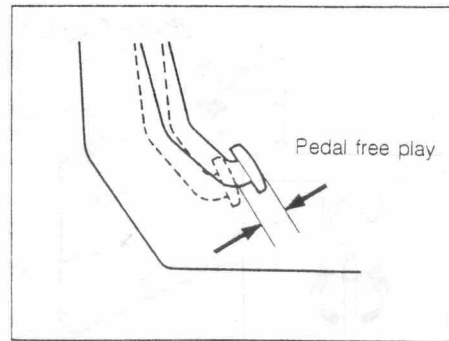
Check the fluid level in the brake fluid reservoir periodically; it should be between MAX and MIN on the reservoir.

Before adding fluid, clean the area around the reservoir cap thoroughly to prevent brake fluid contamination.

If the level is low, add fluid to the MAX level. The level will fall with accumulated distance. If the fluid level is excessively low, have the brake system checked by an Authorized Mazda Dealer.

895JU5100AE

### Checking Brake Pedal



895JU5110AE

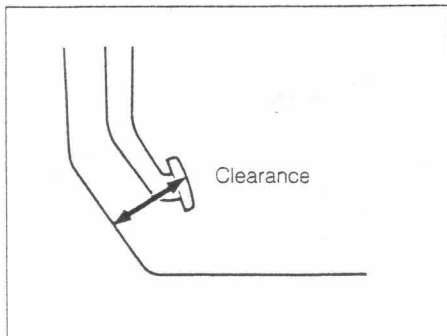
#### CHECKING PEDAL FREE PLAY

Turn off the engine and depress the brake pedal several times to deplete the vacuum in the power brake unit. Gently depress the brake pedal by hand and measure the distance it moves until slight resistance is felt. If the free play is more or less than specified, have the brakes adjusted by an Authorized Mazda Dealer.

**Pedal free play: 4—7mm (0.16—0.28 in)**

895UUS200AE

## Checking Parking Brake



895UUS120AE

### CHECKING PEDAL CLEARANCE

Start the engine and check the brake pedal for smooth operation and proper clearance when it is fully depressed (approximately 60 kg [132 lb, 589 N]). The clearance is measured between the center of the upper surface of the brake pedal pad and the floorboard without the carpet.

If it is less than about 95mm (3.7 in), have the brakes adjusted by an Authorized Mazda Dealer.

**Clearance: about 95mm (3.7 in) min**

895UUS300AE

## Checking Power Brakes



Check the power brakes for proper operation.

- Depress the brake pedal a few times and then hold it down. Start the engine and the pedal should drop slightly.
- Depress the brake pedal, stop the engine, and hold the pedal down for about 30 seconds. The pedal should neither drop nor rise.
- Restart the engine, let it run for about a minute, and turn it off. Then firmly depress the brake pedal several times. The pedal travel should decrease with each subsequent stroke.

If the brakes do not operate properly, have the brake system checked by an Authorized Mazda Dealer.

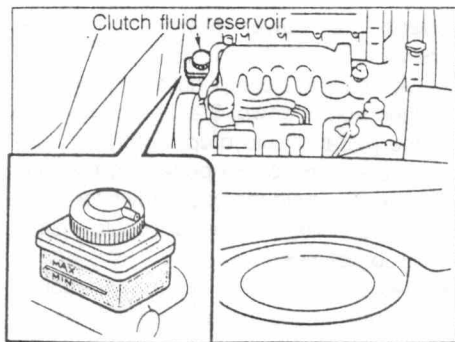
### Stroke:

**5—7 clicks at a force of 10 kg (22 lb, 98 N)**

## CLUTCH, POWER STEERING\*

895UU6000BE

### Checking Clutch Fluid Level



Check the fluid level in the clutch fluid reservoir periodically; it should be between MAX and MIN on the reservoir.

Before adding fluid, clean the area around the reservoir cap thoroughly to prevent fluid contamination.

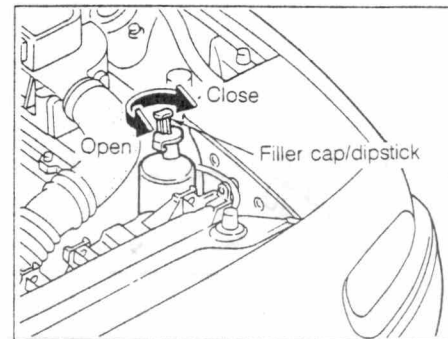
If the level is low, add fluid to the clutch reservoir.

#### CAUTION

- Use only specified clutch fluid. (Refer to chart on page 7-36.)
- Do not mix different types of fluid.
- In the event the clutch system requires frequent supplies of fluid, the vehicle should be inspected by an Authorized Mazda Dealer.

895UU7000AE

### Checking Power Steering Fluid Level

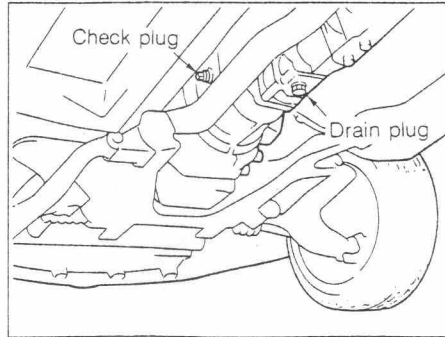
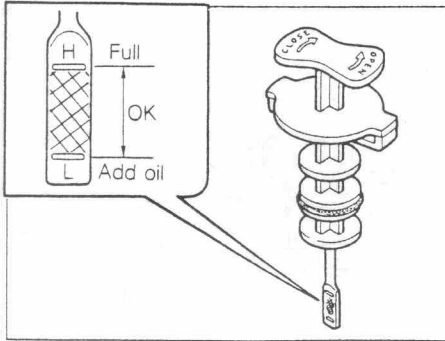


1. Park the vehicle on level ground and set the parking brake firmly.
2. Turn the engine off and allow it to cool.
3. Turn the filler cap counterclockwise to remove it.
4. Wipe the filler cap/dipstick clean, and reinstall it.
5. Remove the cap again and check the fluid level.
6. It must be between H and L. Add fluid if necessary.

**Do not overfill.**

895UJ18000AE

## Changing Manual Transmission Oil



In the event the power steering system requires frequent supplies of fluid, the vehicle should be inspected by an Authorized Mazda Dealer.

### CAUTION

To avoid damage to the power steering pump, do not operate the vehicle for prolonged periods with a low power steering fluid level.

### NOTE

Use only specified power steering fluid. (Refer to chart on page 7-36.)

1. Remove drain plug and check plug.
2. Wipe the drain plug clean.
3. After the oil has drained completely, install and retighten the drain plug.
4. Add lubricant until the level reaches the bottom of the check plug hole.
5. Install and retighten the check plug.

Change manual transmission oil according to the Scheduled Maintenance Services on page 7-5.

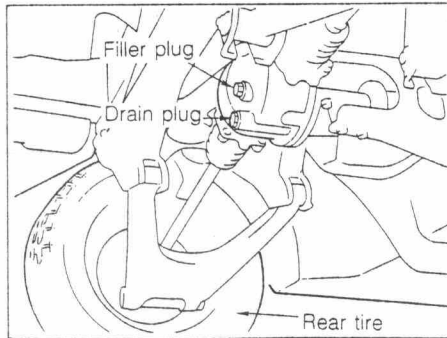
### NOTE

Use only specified manual transmission oil. (Refer to chart on page 7-36.)

## OTHER LUBRICANTS AND FLUIDS

895UV1300AE

### Changing Rear-Axle Oil



1. Raise the vehicle on safety stands or a hoist.
2. Remove the drain plug and the filler plug.
3. Wipe the drain plug clean.
4. After the oil has been completely drained, reinstall and tighten the drain plug.
5. Refill with new oil until it reaches the bottom of the filler plug hole.
6. Reinstall and tighten the filler plug.

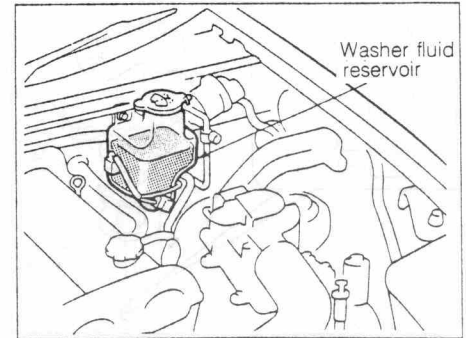
Change rear-axle oil according to the Scheduled Maintenance Services on page 7-5.

#### NOTE

Use only specified rear-axle oil. (Refer to chart on page 7-36.)

895UV1200AE

### Checking Washer Fluid Level



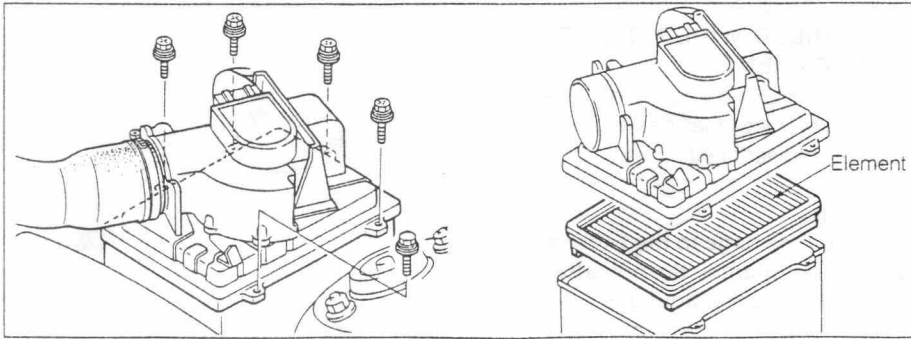
Check fluid level in the washer fluid reservoir and add fluid if necessary. Plain water may be used if washer fluid is not available. However, use washer solution in cold climates to prevent freezing.

#### WARNING!

**Do not use radiator coolant or anti-freeze in the washer fluid reservoir. Radiator coolant can severely affect visibility when sprayed on the windshield and may cause damage to paint and body trim.**

995UV2000BE

## Air Cleaner



### ELEMENT REPLACEMENT

A viscous paper air cleaner element is used. It must be replaced when necessary, and it should not be cleaned and reused.

1. Remove the attaching bolts of that air cleaner cover.
2. Wipe the inside of the air cleaner housing and cover with a damp cloth.
3. Replace the air cleaner element.
4. Install in the reverse order of removal.

Replace the element according to the Scheduled Maintenance Services on page 7-3.

### NOTE

If the vehicle is operated in extremely dusty or sandy areas, replace this element more often than at the usual recommended intervals.

### CAUTION

**Do not drive with the air cleaner removed; this will result in excessive engine wear.**

**Driving without an air cleaner encourages backfiring, which could cause a fire in the engine compartment.**

## WIPER BLADES

895UV30008E

### Wiper Blades

895UV3010AE

#### WIPER BLADE MAINTENANCE

##### CAUTION

**Commercial hot waxes applied by automatic car washes have been known to affect the cleanability of the window.**

Contamination of either the window or the wiper blades with foreign matter can reduce the effectiveness of the window wipers. Common sources of contamination are insects, tree sap, and hot wax treatments used by some commercial car washes. If the blades are not wiping properly, clean both the window and the blades with a good cleaner or mild detergent and rinse thoroughly with clear water. Repeat if necessary.

##### CAUTION

**To prevent damage to wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.**

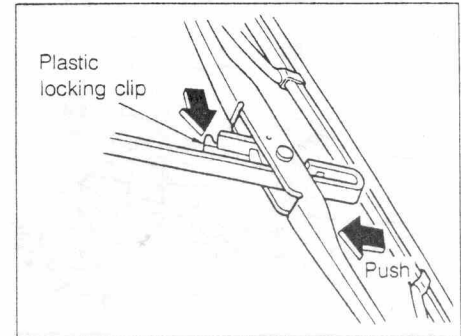
895UV30208E

#### WINDSHIELD WIPER BLADE REPLACEMENT

When the wipers no longer clean adequately, the wiper blades may be worn or cracked, requiring replacement.

##### CAUTION

**To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.**

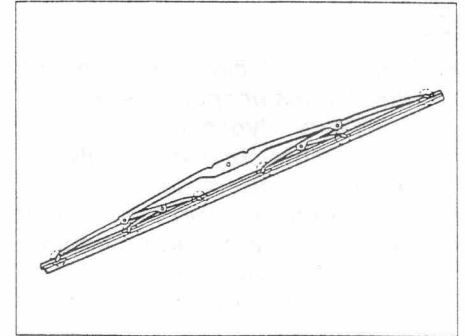
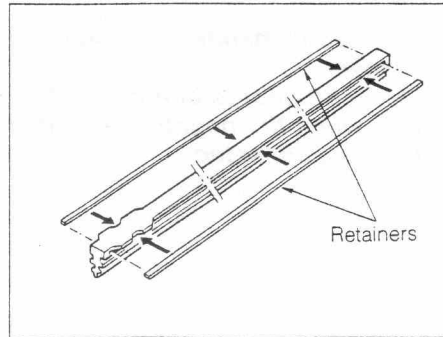
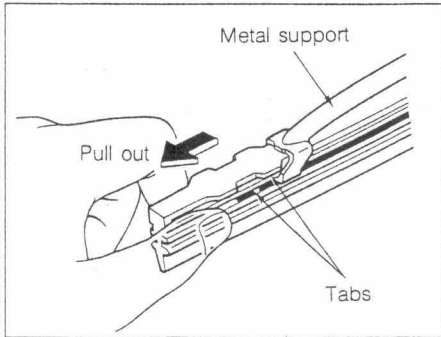


1. Raise the wiper arm and turn the wiper blade assembly to expose the plastic locking clip. Compress the clip and slide the blade assembly downward; then lift it off the arm.

##### CAUTION

**Do not allow the wiper arm to fall against the windshield.**





2. Firmly grasp the end of the blade rubber and pull until the tabs are free of the metal support.

3. Remove the metal retainers from the blade rubber and install them in new blade rubber.

4. Carefully insert a new blade rubber and install the blade assembly in the reverse order of removal.

### CAUTION

Do not bend the metal retainers.

# BATTERY

895EV4000AE

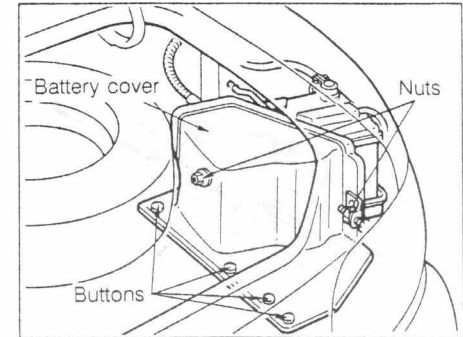
## Battery

### **WARNING!**

- *Keep lighted cigarettes and all other flames or sparks away from the battery. Hydrogen, which is a highly combustible gas, is always present in battery cells.*
- *Keep batteries out of the reach of children because they contain SULFURIC ACID. Prevent its contact with skin, eyes, clothing, or the vehicle.*
- *If electrolyte gets into your eyes, flush them with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.*
- *If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel a pain or burn, get medical attention immediately.*
- *When charging or working near a battery, always shield your eyes. Always provide ventilation. When lifting a plastic-cased battery, lift with a battery carrier or*

*with your hands on opposite corners.*

- *Never attempt to charge the battery when the negative (-) cable lead is connected.*



The battery is in the right side of the trunk.

To detach the battery cover, remove buttons and nuts first.

895UV4010BE

## MAINTENANCE

For best battery service:

- Keep battery securely mounted.
- Keep battery top clean and dry.
- Keep terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended time, disconnect the battery cables.

895UV4030AE

## BATTERY RECHARGING

Your vehicle has a Maintenance-Free (MF) calcium-based battery.

- When using a normal-type battery charger (constant current or semiconstant voltage charger), recharge the battery for 12 hours with electric current equal to 1/10 of the battery capacity.
- When using a rapid-type battery charger, recharge in the same way as a regular battery. **Read carefully the instructions provided in the battery charger manual, and make sure you do not overcharge the battery.**

## CAUTION

When recharging the battery according to the procedures described above, observe the following precautions.

- The battery must be removed from the vehicle and put in an airy place.
- Do not bring anything like a fire, cigarettes, sparks, or flame near the battery.
- Disconnect the battery charger in the following order.
  - 1) Turn off the battery charger main switch.
  - 2) Unhook the negative clamp from the negative terminal.
  - 3) Unhook the positive clamp from the positive terminal.

## NOTE

- Before performing maintenance or recharging the battery, turn off all accessories and stop the engine.
- The negative (–) cable must be removed first and installed last.

# BATTERY, BELT TENSIONS

B95EV5000AE

## Checking Belt Tensions

B95LUV4040AE

### BATTERY REPLACEMENT

The battery in this vehicle is not available on the market. If you are going to replace this battery with one available on the market, you will need to replace the installation parts also. These parts can be obtained from any Authorized Mazda Dealer. For further details, contact your Authorized Mazda Dealer.

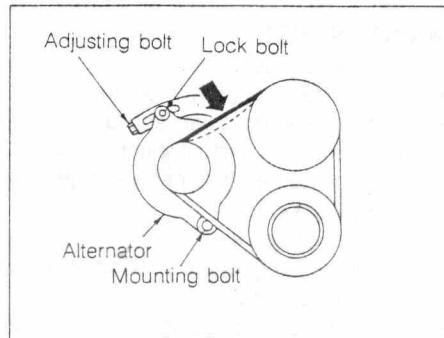
Apply moderate thumb pressure (approximately 10 kg, 22 lbs, 98N) midway between pulleys, and check the deflection.

#### WARNING!

- **Before checking belt tension, remove the key from the ignition switch for safety.**
- **Keep hair, loose clothing, neckties, necklaces, and similar articles away from drive belts, especially when the engine is running. ALWAYS REMOVE ALL TOOLS from the engine compartment before attempting to start the engine. Any of the above items could become entangled in the belts and cause severe personal injury or damage to the vehicle, or both.**

#### NOTE

If the drive belt becomes worn, cracked, or frayed, it should be replaced.



B95LUV5010AE

### ALTERNATOR DRIVE BELT

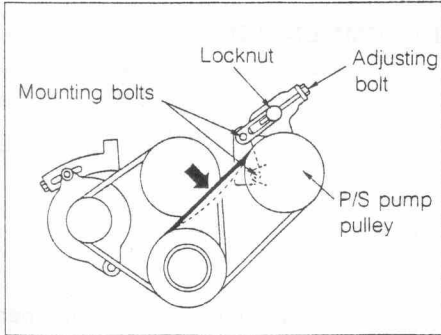
Deflection	
New	Used
8—9mm (0.31—0.35 in)	9—10mm (0.35—0.39 in)

#### Adjustment

1. Loosen the alternator mounting bolt and lock bolt.
2. Turn the adjusting bolt until the correct tension is obtained.
3. Tighten the bolts and recheck the deflection.

895EV6000AE

## Spark Plugs



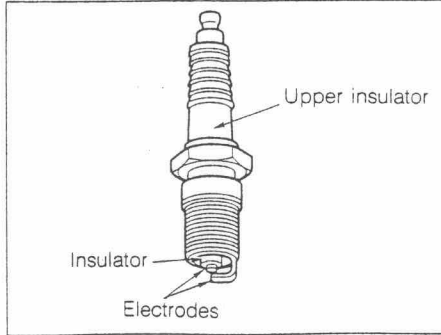
895UV5030AE

### POWER STEERING (P/S) PUMP DRIVE BELT \*

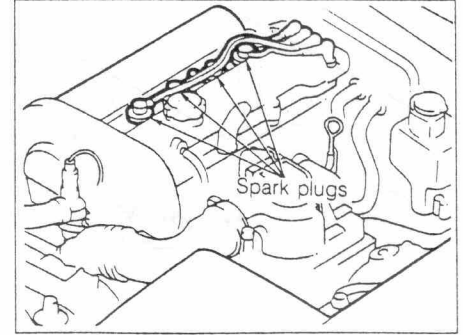
Deflection	
New	Used
8—9mm (0.31—0.35 in)	9—10mm (0.35—0.39 in)

#### Adjustment

1. Loosen the mounting bolts and locknut.
2. Turn the adjusting bolt until the correct tension is obtained.
3. Tighten the locknut and bolts and recheck the deflection.



If necessary, clean the electrodes with a fine wire brush and carefully scrape the carbon off the insulator with a small file. The spark plugs should then be blown clean with compressed air and the upper insulator wiped clean.



895UV6010AE

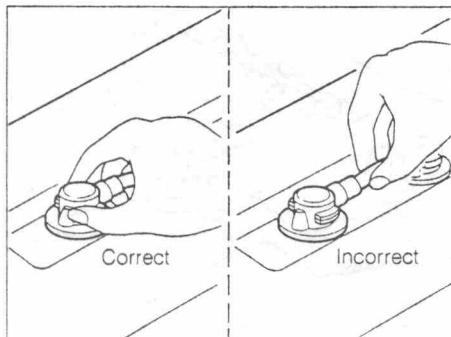
### REPLACING SPARK PLUGS

#### NOTE

- When removing or unfastening the spark plug cable leads, pull the boot, not the lead itself.
  - When installing the plugs, use a small amount of antiseize compound or molybdenum-based thread lubricant on the first few threads.
1. Clean any dirt from around the spark plug base of each spark plug.

\* Some models.

## SPARK PLUGS



2. Unfasten the spark plug cables by pulling on the boot, and then remove the plugs with a spark plug wrench.
3. Install each new plug by hand as far as it will go. If necessary, a spark plug wrench may be used for an extension; if a plug does not turn in smoothly, remove it and try again to ensure the correct engagement of the threads on the spark plug with the threads in the cylinder head.
4. Tighten the plugs with a spark plug wrench. Do not overtighten.
5. Make sure the spark plug leads are installed in the correct order. Fasten the boot squarely over the end of each plug.

### **WARNING!**

*The spark plugs may be hot. Be careful not to burn yourself.*

### **CAUTION**

The spark plugs must be securely tightened, but not overtightened. A plug that's too loose can get very hot and possibly damage the engine; one that's too tight could damage the threads in the cylinder head.

#95UV6020AE

## RECOMMENDED SPARK PLUGS

NGK	BKR5E-11 BKR6E-11 BKR7E-11
Nippon denso	K16PR-U11 K20PR-U11 K22PR-U11

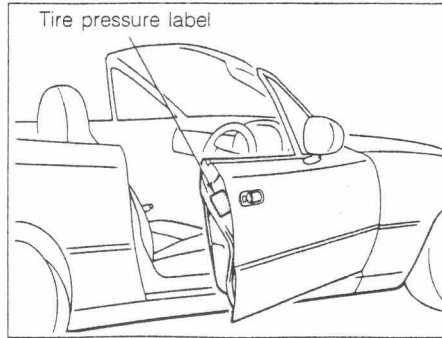
### **CAUTION**

Never use spark plugs with an improper heat range; they will adversely affect engine performance and durability.

895UV7000BE

## Tire Care

For proper performance, safety, and maximum fuel economy, you must always maintain recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.



895UV7010AE

### INFLATION PRESSURES

All tire pressures (including the spare) should be checked monthly when the tires are cold. Recommended pressures must be maintained for the best ride, top vehicle handling, and minimum tire wear.

#### NOTE

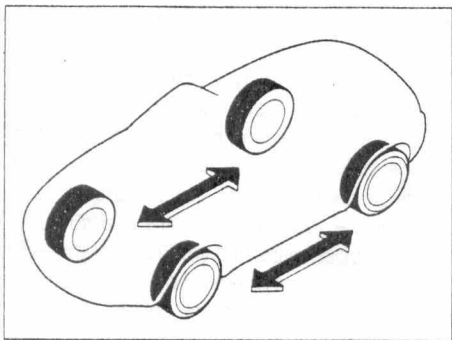
- Warm tires normally exceed recommended pressures. Do not release air from warm tires to adjust the pressure.

- Underinflation results in excessive wear, poor handling, reduced fuel economy, and the possibility of blowouts of overheated tires. Also, low tire pressure can cause poor sealing of the tire bead. If the tire pressure is excessively low, wheel deformation and/or tire separation are possible. So keep your tire pressures at the proper levels. If a tire frequently needs refilling, have it checked by an Authorized Mazda Dealer or a tire shop.
- Overinflation produces a harsh ride, handling problems, excessive wear at the center of the tire tread, and a greater possibility of damage from road hazards.

#### **WARNING!**

***Over or under -inflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure. This could result in loss of vehicle control.***

## TIRES



895UV7020AE

### TIRE ROTATION

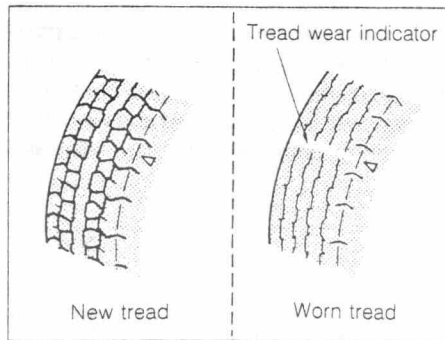
To equalize tread wear, it is recommended that the tires be rotated every 6,000 km (3,750 miles), or sooner if irregular wear develops. During rotation check the tires for correct balance.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, out-of-balance wheels, or severe braking.

After rotation, be sure to bring the front and rear tire pressures to specification and check lug nut tightness.

### NOTE

Disc brake pads should be inspected for wear whenever tires are rotated.



895UV7030BE

### TIRE REPLACEMENT

If the tire is worn evenly, a tread wear indicator will appear as a solid band across the tread. Replace the tire when this happens. Replacement of an unevenly worn tire may be necessary before an indicator band appears across the entire tread.

### WARNING!

- **When replacing tires, never mix radial, bias-belted, or bias-type tires. Use only the tire sizes listed on the tire label attached to your vehicle, on the driver's door.**



895UV7100BE

## Spare Tire

*Make sure that all tires and wheels are the same size and have the same load-carrying capacity. Use only tire and wheel combinations recommended on the tire label or by an Authorized Mazda Dealer. Failure to follow these precautions can adversely affect the safety and handling of your vehicle.*

- *The use of any other tire size or type may seriously affect ride, handling, ground clearance, tire clearance, and speedometer calibration.*
- *Driving on worn-out tires is very hazardous and will reduce braking effectiveness, steering accuracy, and traction.*

Check the spare tire at least monthly to be sure it is properly inflated and is stored securely.

895UV7110AE

## TEMPORARY SPARE TIRE

The temporary spare tire is easier to handle because of its construction; it is lighter and smaller than a conventional tire. It is to be used only for emergency situations and for limited travel. Check the temporary spare tire inflation pressure at least once a month and maintain it at 415 kPa (4.2 kgf/cm<sup>2</sup>, 60 psi).

### CAUTION

- Do not use the temporary spare tire rim with a snow tire or conventional tire.
- The temporary spare tire has a tread life of up to 4,800 km (3,000 miles), depending on road conditions and driving habits.

When the tread wear solid band indicator appears across the tread, replace the tire with the same type of temporary spare tire.

To conserve the tire's tread life, the

temporary spare tire should be used only until the conventional tire can be repaired, which should be as soon as possible.

## WHEELS, LIGHT BULBS

895UV8000BE

### Wheels

895UV8010BE

#### WHEEL REPLACEMENT

When replacing wheels for any reason, make sure the new wheels are equivalent to original factory units in diameter, rim width, and offset.

Proper tire balancing provides the best riding comfort and helps reduce tire tread wear. Out-of-balance tires can cause annoying vibration and uneven tire wear, such as cupping and flat spots.

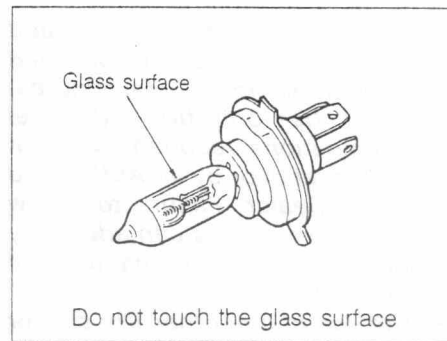
#### CAUTION

**A wrong-sized wheel may adversely affect wheel life and bearing life, braking and stopping abilities, handling characteristics, ground clearance, body-to-tire clearance, snow chain clearance, speedometer calibration, headlight aim, and bumper height.**

895EV9000AE

### Headlights

Your vehicle's headlights have replaceable halogen bulbs. A burned-out bulb should be replaced.



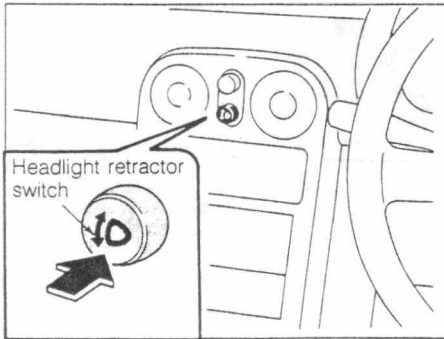
893UV9010AE

#### HALOGEN BULBS

Halogen bulbs contain pressurized gas that will produce flying pieces of glass if broken. Always handle them carefully and avoid scratches and abrasion. If the bulbs are lit, avoid their contact with liquids. Never touch the glass with bare hands. Residual oil may cause the bulb to overheat and burst when lit. A bulb should be operated only when installed in a headlight.

If a bulb becomes damaged or cracked, replace it immediately and carefully dispose of it.

Keep bulbs **out of the reach of children.**



895EV9020AE

## HALOGEN HEADLIGHT BULB REPLACEMENT

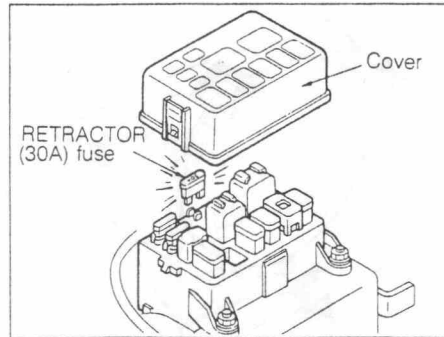
### **WARNING!**

*Wear eye protection when changing a bulb. Allow the bulb to cool before handling it.*

1. Raise the headlights with the headlight retractor switch.

### **WARNING!**

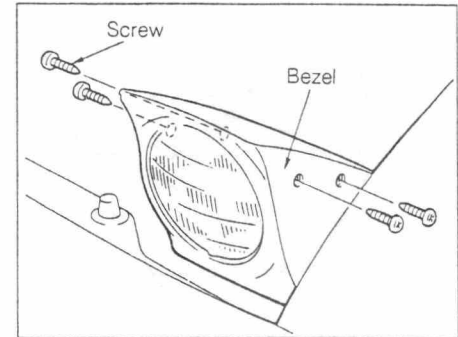
*Do not operate the headlight retractor switch if anyone's hands are near the headlights.*



2. Pull the RETRACTOR (30A) fuse straight out with the removal tool provided on the fuse box cover. (Refer to page 5-5.)

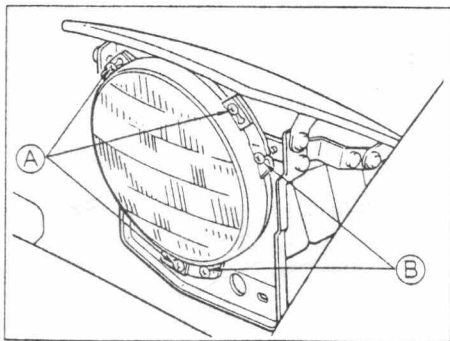
### **WARNING!**

*To avoid personal injury that might result from the accidental lowering of the headlights while you are replacing the headlight, pull out the RETRACTOR (30A) fuse.*



3. Unscrew the screws and remove the bezel.

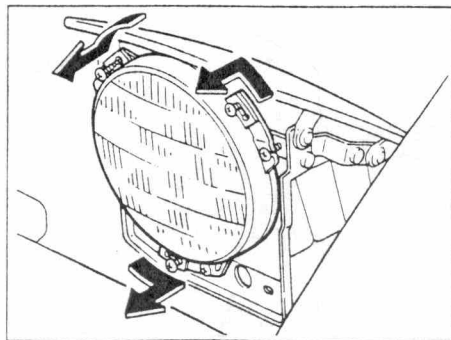
## LIGHT BULBS



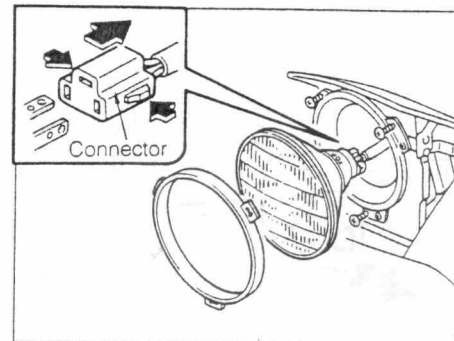
4. Loosen the screws (A).

### CAUTION

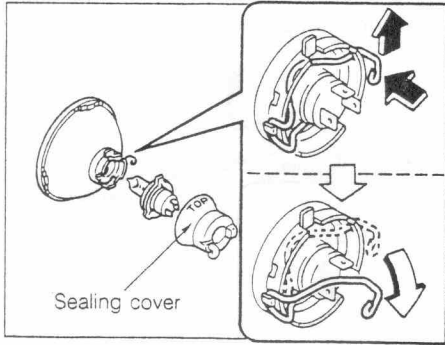
Never attempt to loosen the headlight-aim adjusting screws (B).



5. Turn the retaining ring counterclockwise to remove it.



6. Disconnect the connector.



7. Remove the sealing cover.
8. Unfasten the bulb retaining spring.
9. Carefully remove the headlight bulb from its socket in the reflector by gently pulling it straight backward out of the socket. Do not rotate the bulb while removing it.
10. Install the new headlight bulb in the reverse order of removal.

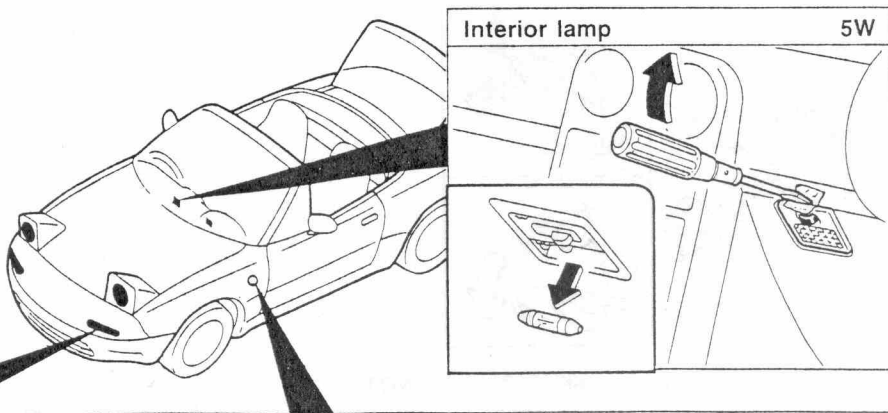
## NOTE

- Do not touch the glass portion of the bulb.
- Install the sealing cover properly.
- Check the aim of the headlights and adjust if necessary.
- Use the protective cover and carton to promptly dispose of the old bulb.

# LIGHT BULBS

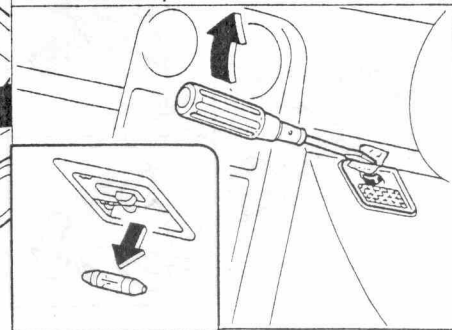
895LUV9100AE

## Bulb Replacement (Front)



Interior lamp

5W

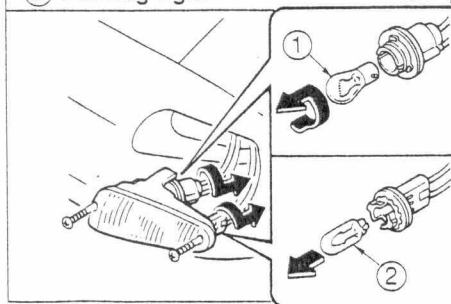


① Turn-signal light

21W

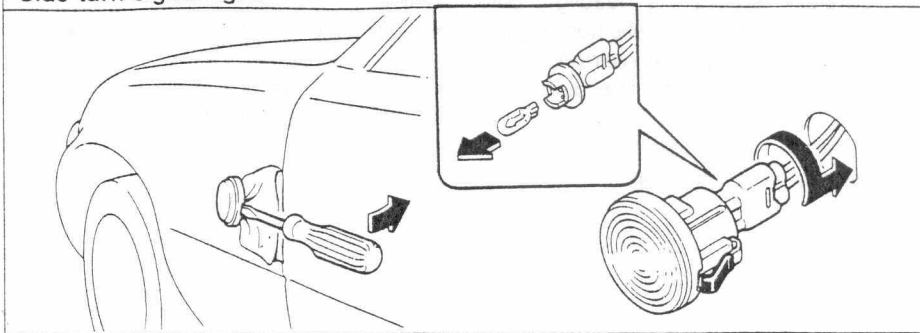
② Parking light

5W



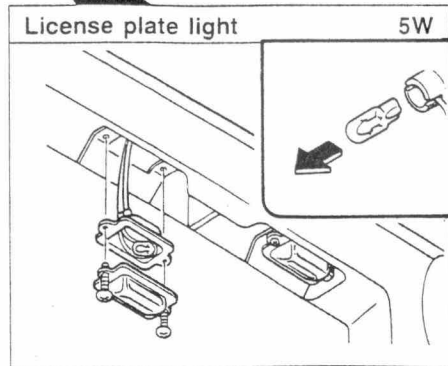
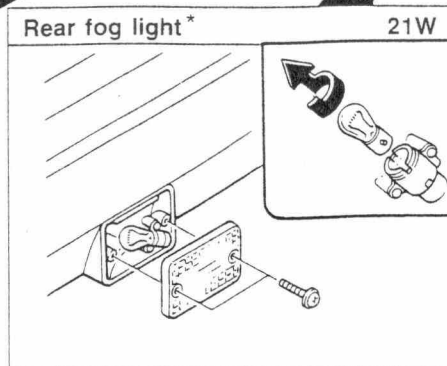
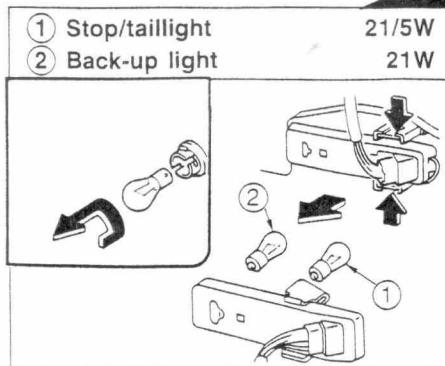
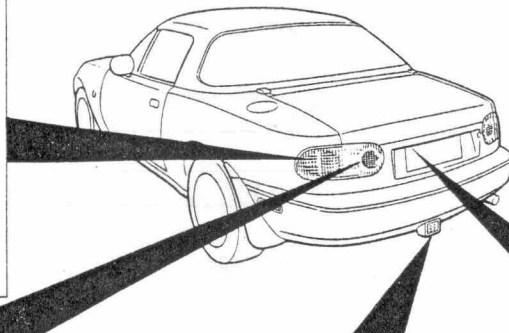
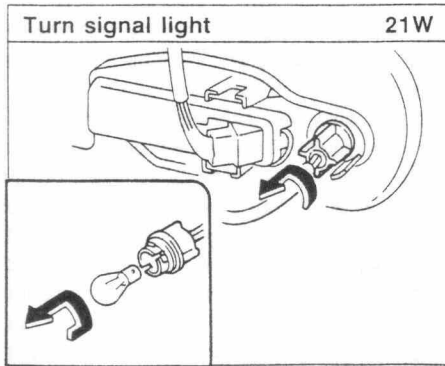
Side turn-signal light

5W



895EV9200AE

# Bulb Replacement (Rear)



## LUBRICANT SPECIFICATIONS

895EW1000AE

### Recommended Lubricants

Lubricant	Classification
Engine oil*	API Service SD, SE or SF
Manual transmission oil*	API Service GL-4, GL-5
Power steering fluid	ATF DEXRON®-II or M-III
Rear-axle oil*	API Service GL-5
Brake/clutch fluid	SAE J1703 or FMVSS116 DOT-3

\* Refer to the recommended SAE viscosity numbers on the next page.

To help achieve proper engine and power-train performance and durability, use only lubricating oils of the proper quality. The correct oils also help promote engine efficiency that results in improved fuel economy. Engine oils labeled Energy Conserving Oil are now available. They contribute to fuel economy by reducing the amount of fuel necessary to overcome engine friction and in other ways. Often these improvements are difficult to measure in everyday driving, but in a year's time, they can offer significant cost and energy savings. These oils are recommended for use in conjunction with the recommended API classification.



895UW1100AE

Recommended SAE Viscosity Numbers

Temperature range anticipated before subsequent oil change										
Temperature °C (°F)	-30	-20	-10	0	10	20	30	40	50	
	-20	0	20	40	60	80	100	120		
Engine oil	5W-30		30							
	5W-20		20W-20				40			
	10W-30									
	10W-40				10W-50					
	20W-40					20W-50				
Manual transmission oil	75W-90									
							80W-90			
Rear-axle oil	80W		90							

Engine oil viscosity (thickness) has an effect on fuel economy and cold-weather operation (starting and oil flow). Lower-viscosity engine oils can provide better fuel economy and cold-weather performance; however, higher-temperature weather conditions require higher-viscosity engine oils for satisfactory lubrication. Using oils of any viscosity other than those recommended could result in engine damage.

When choosing an oil, consider the range of temperature your vehicle will be operated in before the next oil change. Then select the recommended oil viscosity from the chart.

**CAUTION BEFORE CHECKING LUBRICANTS**

Always be sure to clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant. This is especially important in dusty/sandy areas or when the vehicle is used on unpaved roads. Cleaning the plug and dipstick areas will prevent dirt and grit from entering the engine or other mechanism that could be damaged.

# TROUBLESHOOTING

885EW5000AE

## Minor Troubleshooting Guide

The following procedures may help if any of the problems listed below should occur. These suggestions are intended only as emergency measures. If you are in doubt whether the problem is fully corrected, see your Authorized Mazda Dealer as soon as possible. Minor problems may lead to serious ones, if neglected.

### ENGINE WILL NOT START

**If the engine will not turn over,** inspect these items:

1. Ignition switch.
2. Fuses, including fuse block in the engine compartment.
3. Battery and connections.
4. Cable connections to starter and solenoid.

**If engine turns over,** inspect these items:

1. Fuel gauge, to see that the tank is not empty.
2. Ignition system-distributor leads, coil.
3. Spark plugs.
4. Fuel line and air flow system.

### ENGINE STARTS, BUT ...

**If the charging system warning lamp comes on,** inspect these items:

1. Drive belt, broken, or needs adjustment tension and condition.
2. Alternator.
3. Battery and connections.

**If stalling occurs while idling,** inspect these items:

1. Spark plugs.
2. Throttle body (adjustment by an Authorized Mazda Dealer).
3. Fuel line and air flow system.

**If idling is rough,** inspect these items:

1. Air cleaner element.
2. Spark plugs.
3. Throttle body (adjustment by an Authorized Mazda Dealer).

**If acceleration is poor,** inspect these items:

1. Ignition system including spark plugs.
2. Air cleaner element.
3. Fuel line and air flow system.

**If overheating occurs,** inspect these items:

1. Radiator coolant level.
2. Restriction of airflow through radiator.
3. Drive belt tension and condition.
4. Radiator electric cooling fan.
5. Engine oil level.
6. Thermostat.
7. Ignition timing.

**If a flat spot occurs when accelerating,** inspect these items:

1. Fuel lines and filter.
2. Air cleaner element.
3. Throttle body (by an Authorized Mazda Dealer).

**If full engine power is not obtained,** inspect these items:

1. Air cleaner element and fuel filter.
2. Spark plugs and ignition system.
4. Fuel line and air flow system.

### ELECTRICAL SYSTEM PROBLEMS ...

**If a light does not come on**, inspect these items.

1. Bulb and fuse.
2. Terminal connections and system ground.

### **If Braking-Steering coordination is poor...**

The braking and steering systems form an integrated system. If you detect a malfunction in any of their components, have your vehicle inspected immediately at your Authorized Mazda Dealer.

# 8

## Customer Information

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REGISTERING YOUR VEHICLE IN A FOREIGN COUNTRY	8-2
ADD-ON ELECTRIC EQUIPMENT	8-2

## REGISTERING YOUR VEHICLE IN A FOREIGN COUNTRY, ADD-ON ELECTRIC EQUIPMENT

893EX4100AE

### Registering Your Vehicle in A Foreign Country

When planning to register your vehicle in a foreign country, before taking it there you should confirm whether it conforms to regulations in that country. Even if you successfully register the vehicle in a foreign country, you may still experience such problems as these in its actual use and should therefore consider the possibility of having to deal with them.

1. The fuel specified for your vehicle may be unavailable. If other than specified fuel is used, it could cause problems to the engine and other fuel-related parts.
2. Because vehicles like yours may not be marketed in the new country of registration, parts, servicing techniques, and tools necessary to maintain and repair your vehicle may be unavailable. Even if vehicles like yours are sold there, mechanical specifications required by the government may vary enough from the country of purchase to cause similar problems. Further, you may experience difficulty in getting after-sales servicing for any one of several reasons.

895EX5000AE

### Add-on Electric Equipment

3. There may be no Authorized Mazda Dealer in the area in which you plan to register your vehicle.

We must therefore clearly state that when you leave the country in which you purchased your Mazda as a new vehicle and register it in another country, troubles arising from the use of fuel other than specified fuel are not subject to manufacturer's warranty.

Further, we cannot assume any responsibility for problems that result from unsatisfactory service or lack of service because of the reasons outlined above.

The electric system of your vehicle is designed to perform under expected operating conditions. Before any additional electric equipment is installed on your vehicle, consult an Authorized Mazda Dealer. Certain electric equipment or the way in which it is installed may adversely affect the operation of your vehicle, including such systems as the engine, control system, including the driver information system, and the electrical charging system. We assume no responsibility for any expense you may incur or for any malfunctioning of your vehicle or any of its components or systems that may result from the installation of additional electric equipment that is not supplied by or recommended for installation by Mazda.

895CX5010AE

### **INSTALLATION OF A MOBILE TWO-WAY RADIO SYSTEM**

If a mobile two-way radio system is installed improperly or if an excessively powerful type of system is used, the fuel injection system, and other electronic systems may be affected. To avoid damage to your vehicle, consult an Authorized Mazda Dealer concerning the proper installation.

# 9

## Specifications

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## SPECIFICATIONS

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895EY1000AE

### Specifications

The specifications given here are for information only. Before using them, see the CAUTIONS and other instructions throughout this manual. The index (page 10-1) may help you locate these items. An Authorized Mazda Dealer may also be able to help.

895UY1010AE

### DIMENSIONS

Unit: mm (in)

Overall length	3,950 (155.5)
Overall width	1,675 ( 65.9)
Overall height	1,230 ( 48.2)
Front tread	1,410 ( 55.5)
Rear tread	1,430 ( 56.2)
Wheelbase	2,265 ( 89.2)



## SPECIFICATIONS

895UY1030AE

### ENGINE

Type	DOHC-16V in-line, 4-cylinder
Bore × Stroke	78 × 83.6mm (3.1 × 3.3 in)
Displacement	1,597 cc (97.45 cu in)
Compression ratio	9.4 : 1

895UY1040AE

### ELECTRICAL SYSTEM

Battery	Maintenance-free, 12V—32ah
Alternator	12V—60 amp
Starter	12V—0.95 kw
Spark plug gap	1.1 $\begin{smallmatrix} +0.0 \\ -0.1 \end{smallmatrix}$ mm (0.043 $\begin{smallmatrix} +0.000 \\ -0.004 \end{smallmatrix}$ in)

895UY1050AE

### CAPACITIES

Item	Unit	Liter	US qt	Imp qt
	Engine oil		3.6	3.8
Coolant		6.0	6.3	5.3
Transmission oil		2.0	2.1	1.8
Rear-axle oil		0.65	0.69	0.57
Fuel tank	<b>Liter</b>	<b>US gal</b>	<b>Imp gal</b>	
	45	11.9	9.9	

# SPECIFICATIONS

895UY1070AE

## TIRES

Item \ Type	Front	Rear	Temporary spare
Inflation pressure kPa (kgf/cm <sup>2</sup> , psi)	180 (1.8, 26)	180 (1.8, 26)	415 (4.2, 60)
Size	185/60 R14 82H		T115/70D14

psi: pounds per square inch

895EY1080AE

## LIGHT BULBS

Light bulb	Wattage
Headlights	60/55
Front turn-signal lights	21
Parking lights	5
Front side turn-signal lights	5
Rear turn-signal lights	21
Stop/taillights	21/5
Back-up lights	21
Rear fog light*	21
License plate lights	5
Interior lamps	5

895UY1090AE

**FUSES** ..... Refer to page 5-7

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# 10

## Index



E	Page	Fuses	Page	I	Page
Economical operation.....	3-4			<b>If you have a flat tire</b> .....	5-11
Electric circuit protection.....	5-5			Ignition switch.....	4-2
Electric equipment, add-on.....	8-2			Indicator lamp —	
<b>Emergency starting</b> .....	5-3			Hazard warning flasher.....	4-12
Emission control system.....	3-2	<b>G</b>		Headlight high beam.....	4-12
Engine compartment overview.....	7-8	Gauges —		Headlight retractor.....	4-12
Engine cooling system.....	7-11	Engine oil pressure.....	4-10	Rear fog light.....	4-12
Engine exhaust gas caution.....	3-2	Engine temperature.....	4-9	Instrument panel.....	4-8
Engine oil and filter, changing.....	7-9	Fuel.....	4-9	Overview.....	1-3
Engine oil level, checking.....	7-9	Speedometer.....	4-9	Instrument panel illumination.....	4-11
Engine oil pressure gauge.....	4-10	Tachometer.....	4-10	Interior care.....	6-5
Engine temperature gauge.....	4-9	Glove box.....	4-21	Interior features.....	4-20
Exterior care.....	6-2	Graphic symbols.....	1-6	Interior lamps.....	2-14
				Interior overview.....	1-2
		<b>H</b>		Interior trim cleaning.....	6-6
		Hazard warning flasher.....	5-2	Interior window glass cleaning.....	6-6
		Indicator.....	4-12		
		Hazardous driving.....	3-5		
		Headlights.....	7-30	<b>J</b>	
		Headlights, flashing.....	4-14	Jack.....	5-11
		Headlight high-beam indicator.....	4-12	Jacking instructions.....	5-13
		Headlight retractor —		<b>Jump-starting</b> .....	5-3
		Indicator.....	4-18		
		Switch.....	4-15		
		Heater.....	4-28		
		High-beam indicator, Headlights.....	4-12		
		Horn control.....	2-12		

# INDEX

	Page		Page		Page
<b>K</b>		Outside rearview mirrors .....	2-13	Power windows .....	2-4
Keys .....	2-2			Push-starting .....	5-4
<b>L</b>		<b>O</b>		<b>R</b>	
Label information .....	3-8	Odometer .....	4-9	Rear fog light .....	4-18
Lamps, Interior .....	2-14	Oil —		Indicator .....	4-12
Lane-change signals .....	4-14	Brake .....	7-14	Recommended lubricants .....	7-36
License plate lights .....	7-35	Changing engine oil .....	7-9	Recommended SAE viscosity numbers .....	7-37
Lights —		Clutch .....	7-16	Registering your vehicle in a foreign	
Light bulbs .....	9-4	Engine oil level .....	7-9	country .....	8-2
Stoplights .....	7-35	Filter .....	7-9	<b>Road warning</b> .....	5-2
Taillights .....	7-35	Manual transmission oil .....	7-17	Rocking the vehicle .....	3-5
Lighter, cigarette .....	4-20	Viscosity .....	7-37	Routine service .....	7-6
Lighting control .....	4-13	Oil filter, changing .....	7-9		
Lubricant specifications .....	7-36	Operating precautions for catalytic			
Luggage compartment .....	1-4	converter .....	3-2		
		Outside rearview mirrors .....	2-13	<b>S</b>	
		<b>Overheating</b> .....	5-2	SAE viscosity numbers .....	7-37
				Scheduled maintenance services .....	7-2
<b>M</b>		<b>P</b>		Seat belts —	
Maintenance services .....	7-2	Paint damage touch-up .....	6-3	Cleaning .....	6-6
Precautions .....	7-6	Parking brake .....	4-6	Proper use and care .....	2-12
Manual transmission operation .....	4-4	Parking light .....	7-34,7-35	Restraint system .....	2-10
Shift point recommendation .....	4-4	Polishing and waxing .....	6-3	Seat adjustment —	
Mirrors		Power brakes .....	4-5	Seat recliner .....	2-9
Day/night rearview mirror .....	2-13	Power steering .....	4-7	Seat slide .....	2-9
				Service brakes .....	4-5

	Page		Page		Page
Shift point recommendation .....	4-4	Flat tire.....	5-13	Wheel .....	7-30
Snow tires.....	3-6	Snow tires.....	3-6	Wheel maintenance, aluminum .....	6-5
<b>Spare tire</b> .....	5-12	<b>Spare tire</b> .....	5-12	Windows —	
Spare tire, temporary .....	5-12,7-29	Temporary spare tire .....	5-12,7-29	Glass cleaning .....	6-6
Spark plugs.....	7-25	Tire care .....	7-27	Power window.....	2-4
Special driving conditions —		Tire chain.....	3-6	Windshield washer .....	4-20
Flooded area .....	3-7	Tire replacement.....	7-28	Windshield wipers .....	4-19
Hazardous driving .....	3-5	Tire rotation.....	7-28	One-touch wipers .....	4-19
Rocking the vehicle .....	3-5	Tools.....	5-11	Winter driving .....	3-6
Winter driving .....	3-6	<b>Towing</b> .....	5-9	Wipers —	
Specifications.....	9-2	Transmission, manual.....	4-4	Blades.....	7-20
Speedometer.....	4-10	Trip meter.....	4-9	Switch .....	4-19
Starting .....	4-3	Troubleshooting guide, minor .....	7-38	Windshield .....	4-19
Starting the engine.....	4-3	Trunk lid .....	2-5		
Steering, power .....	4-7	Turn-signals .....	4-14		
Steering column lock.....	4-2	Turn-signal light.....	7-34,7-35		
Steering wheel.....	2-12				
Stoplight .....	7-35				
Stowage of tire, jack, jack handle, and tools.....	5-11				
Sun visors.....	4-23				
		<b>U</b>			
		Upholstery and interior trim cleaning.....	6-6		
		<b>W</b>			
		Warning lamp —			
		Brake system.....	4-11		
		Charging system .....	4-12		
		Washer, windshield .....	4-19		

## T

Tachometer .....	4-10
Tires	
Air pressures .....	7-27
Changing a tire.....	5-13