

# 8

## Maintenance and Care

How to keep your Mazda in top condition.

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# Introduction

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## Introduction

Be extremely careful and prevent injury to yourself and others or damage to your vehicle when using this manual for inspection and maintenance.

If you're unsure about any procedure it describes, we strongly urge you to have a reliable and qualified service shop perform the work, preferably an Authorized Mazda Dealer.

Factory-trained Mazda technicians and genuine Mazda parts are best for your vehicle. Without this expertise and the parts that have been designed and made especially for your Mazda, inadequate, incomplete, and insufficient servicing may result in problems. This could lead to vehicle damage or an accident and injuries.

For expert advice and quality service, consult an Authorized Mazda Dealer.

The owner should retain evidence that proper maintenance has been performed as prescribed.

Claims against the warranty resulting from lack of maintenance, as opposed to defective materials or authorized Mazda workmanship, will not be honored.

Any auto repair shop using parts equivalent to your Mazda's original equipment may perform maintenance. **But we recommend that it always be done by an Authorized Mazda Dealer using genuine Mazda parts.**

**Scheduled Maintenance (USA, Canada, and Puerto Rico)**

Follow Schedule 1 if the vehicle is operated mainly where none of the following conditions apply.

- Repeated short-distance driving
- Driving in dusty conditions
- Driving with extended use of brakes
- Driving in areas where salt or other corrosive materials are being used
- Driving on rough or muddy roads
- Extended periods of idling or low-speed operation
- Driving for long periods in cold temperatures or extremely humid climates
- Driving in extremely hot conditions
- Driving in mountainous conditions continually

If any do apply, follow Schedule 2 (Canada and Puerto Rico residents follow Schedule 2).

***NOTE***

*After the prescribed period, continue to follow the described maintenance at the recommended intervals.*

# Scheduled Maintenance

## ▼ Schedule 1

Maintenance Interval	Number of months or kilometers (miles), whichever comes first								
	Months	6	12	18	24	30	36	42	48
	×1000 km	12	24	36	48	60	72	84	96
	×1000 miles	7.5	15	22.5	30	37.5	45	52.5	60
<b>ENGINE</b>									
Engine valve clearance	Audible inspect every 120,000 km (75,000 miles), if noisy, adjust								
Drive belts						I			
Engine oil	R	R	R	R	R	R	R	R	R
Engine oil filter	R	R	R	R	R	R	R	R	R
<b>COOLING SYSTEM</b>									
Engine coolant	FL22 type* <sup>1</sup>	Replace at first 192,000 km (120,000 miles) or 10 years; after that, every 96,000 km (60,000 miles) or 5 years							
	Others	Replace at first 96,000 km (60,000 miles) or 4 years; after that, every 2 years							
<b>FUEL SYSTEM</b>									
Air filter						R			
Fuel lines and hoses* <sup>2</sup>					I				I
Hoses and tubes for emission* <sup>2</sup>									I
<b>IGNITION SYSTEM</b>									
Spark plugs	Replace every 120,000 km (75,000 miles)								
<b>CHASSIS and BODY</b>									
Brake lines, hoses and connections					I				I
Disc brakes		I			I		I		I
Tire (Rotation)	Rotate every 12,000 km (7,500 miles)								
Steering operation and linkages					I				I
Front and rear suspension, ball joints and wheel bearing axial play					I				I
Driveshaft dust boots					I				I
Bolts and nuts on chassis and body					T				T
Exhaust system and heat shields	Inspect every 72,000 km (45,000 miles) or 5 years								
All locks and hinges	L	L	L	L	L	L	L	L	L

Maintenance and Care  
**Scheduled Maintenance**

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Maintenance Interval	Number of months or kilometers (miles), whichever comes first								
	Months	6	12	18	24	30	36	42	48
	×1000 km	12	24	36	48	60	72	84	96
	×1000 miles	7.5	15	22.5	30	37.5	45	52.5	60
<b>AIR CONDITIONER SYSTEM</b>									
Cabin air filter	Replace every 40,000 km (25,000 miles) or 2 years								

**Chart symbols:**

**I:** Inspect: Inspect and clean, repair, adjust, fill up or replace if necessary.

**R:** Replace

**L:** Lubricate

**T:** Tighten

**Remarks:**

- \*1 Use FL22 type coolant in vehicles with the inscription “FL22” on the radiator cap itself or the surrounding area. Use FL22 when replacing the coolant.
- \*2 According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or mileage/kilometer period to ensure long-term reliability.

# Scheduled Maintenance

## ▼ Schedule 2

Maintenance Interval	Number of months or kilometers (miles), whichever comes first												
	Months	4	8	12	16	20	24	28	32	36	40	44	48
	×1000 km	8	16	24	32	40	48	56	64	72	80	88	96
×1000 miles	5	10	15	20	25	30	35	40	45	50	55	60	
<b>ENGINE</b>													
Engine valve clearance	Audible inspect every 120,000 km (75,000 miles), if noisy, adjust												
Drive belts								I					
Engine oil	Puerto Rico	Replace every 5,000 km (3,000 miles) or 3 months											
	Others	R	R	R	R	R	R	R	R	R	R	R	R
Engine oil filter		R	R	R	R	R	R	R	R	R	R	R	R
<b>COOLING SYSTEM</b>													
Engine coolant	FL22 type* <sup>1</sup>	Replace at first 192,000 km (120,000 miles) or 10 years; after that, every 96,000 km (60,000 miles) or 5 years											
	Others	Replace at first 96,000 km (60,000 miles) or 4 years; after that, every 2 years											
Engine coolant level		I	I	I	I	I	I	I	I	I	I	I	I
<b>FUEL SYSTEM</b>													
Air filter	Puerto Rico							R					R
	Others								R				
Fuel lines and hoses* <sup>2</sup>								I					I
Hoses and tubes for emission* <sup>2</sup>													I
<b>IGNITION SYSTEM</b>													
Spark plugs	Replace every 120,000 km (75,000 miles)												
<b>ELECTRICAL SYSTEM</b>													
Function of all lights		I	I	I	I	I	I	I	I	I	I	I	I

Maintenance and Care  
**Scheduled Maintenance**

Maintenance Interval	Number of months or kilometers (miles), whichever comes first												
	Months	4	8	12	16	20	24	28	32	36	40	44	48
	×1000 km	8	16	24	32	40	48	56	64	72	80	88	96
	×1000 miles	5	10	15	20	25	30	35	40	45	50	55	60
<b>CHASSIS and BODY</b>													
Brake lines, hoses and connections							I						I
Brake fluid level	I	I	I	I	I	I	I	I	I	I	I	I	I
Disc brakes			I				I			I			I
Tire (Rotation)	Rotate every 8,000 km (5,000 miles)												
Tire inflation pressure and tire wear	I	I	I	I	I	I	I	I	I	I	I	I	I
Steering operation and linkages							I						I
Power steering fluid level	I	I	I	I	I	I	I	I	I	I	I	I	I
Front and rear suspension, ball joints and wheel bearing axial play							I						I
Driveshaft dust boots							I						I
Bolts and nuts on chassis and body							T						T
Exhaust system and heat shields	Inspect every 72,000 km (45,000 miles) or 5 years												
All locks and hinges	L	L	L	L	L	L	L	L	L	L	L	L	L
Washer fluid level	I	I	I	I	I	I	I	I	I	I	I	I	I
<b>AIR CONDITIONER SYSTEM</b>													
Cabin air filter	Replace every 40,000 km (25,000 miles) or 2 years												

**Chart symbols:**

**I:** Inspect: Inspect and clean, repair, adjust, fill up or replace if necessary.

**R:** Replace

**L:** Lubricate

**T:** Tighten

**Remarks:**

\*1 Use FL22 type coolant in vehicles with the inscription “FL22” on the radiator cap itself or the surrounding area. Use FL22 when replacing the coolant.

\*2 According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or mileage/kilometer period to ensure long-term reliability.

## Scheduled Maintenance

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### Scheduled Maintenance (Mexico)

Follow Schedule 1 if the vehicle is operated mainly where none of the following conditions apply.

- Repeated short-distance driving
- Driving in dusty conditions
- Driving with extended use of brakes
- Driving in areas where salt or other corrosive materials are being used
- Driving on rough or muddy roads
- Extended periods of idling or low-speed operation
- Driving for long periods in cold temperatures or extremely humid climates
- Driving in extremely hot conditions
- Driving in mountainous conditions continually

If any do apply, follow Schedule 2.

#### **NOTE**

*After the prescribed period, continue to follow the described maintenance at the recommended intervals.*

▼ **Schedule 1**

Maintenance Interval	Number of months or kilometers, whichever comes first												
	Months	6	12	18	24	30	36	42	48	54	60	66	72
	×1000 km	10	20	30	40	50	60	70	80	90	100	110	120
<b>ENGINE</b>													
Engine valve clearance	Audible inspect every 120,000 km, if noisy, adjust												
Drive belts				I				I					I
Engine oil	R	R	R	R	R	R	R	R	R	R	R	R	R
Engine oil filter	R	R	R	R	R	R	R	R	R	R	R	R	R
<b>COOLING SYSTEM</b>													
Cooling system				I				I					I
Engine coolant	FL22 type*1	Replace at first 190,000 km or 10 years; after that, every 60,000 km or 3 years											
	Others				R				R				R
<b>FUEL SYSTEM</b>													
Air filter		R		R		R		R		R		R	R
Fuel lines and hoses				I*2				I*2					I
Hoses and tubes for emission				I*2				I*2					I
Fuel filter				R				R					R
<b>IGNITION SYSTEM</b>													
Spark plugs	Replace every 60,000 km												
<b>CHASSIS and BODY</b>													
Brake lines, hoses and connections		I		I		I		I		I		I	I
Brake fluid level	I	I	I		I	I	I	I	I	I	I	I	
Brake fluid				R				R					R
Disc brakes	I	I	I	I	I	I	I	I	I	I	I	I	I
Tire (Rotation)	Rotate every 10,000 km												
Tire inflation pressure and tire wear	I	I	I	I	I	I	I	I	I	I	I	I	I
Steering operation and linkages	I	I	I	I	I	I	I	I	I	I	I	I	I
Power steering fluid level	I	I	I	I	I	I	I	I	I	I	I	I	I
Front and rear suspension, ball joints and wheel bearing axial play		I		I		I		I		I		I	I
Driveshaft dust boots		I		I		I		I		I		I	I
Bolts and nuts on chassis and body		T		T		T		T		T		T	T
Exhaust system and heat shields		I		I		I		I		I		I	I
All locks and hinges	L	L	L	L	L	L	L	L	L	L	L	L	L
Washer fluid level	I	I	I	I	I	I	I	I	I	I	I	I	I

# Scheduled Maintenance

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Maintenance Interval	Number of months or kilometers, whichever comes first												
	Months	6	12	18	24	30	36	42	48	54	60	66	72
	×1000 km	10	20	30	40	50	60	70	80	90	100	110	120
<b>AIR CONDITIONER SYSTEM</b>													
Cabin air filter					R				R				R

### Chart symbols:

**I:** Inspect: Inspect and clean, repair, adjust, fill up or replace if necessary.

**R:** Replace

**L:** Lubricate

**C:** Clean

**T:** Tighten

### Remarks:

\*1 Use FL22 type coolant in vehicles with the inscription “FL22” on the radiator cap itself or the surrounding area. Use FL22 when replacing the coolant.

\*2 According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or kilometer period to ensure long-term reliability.

▼ **Schedule 2**

Maintenance Interval	Number of months or kilometers, whichever comes first													
	Months	3	6	9	12	15	18	21	24	27	30	33	36	
	×1000 km	5	10	15	20	25	30	35	40	45	50	55	60	
<b>ENGINE</b>														
Engine valve clearance	Audible inspect every 120,000 km, if noisy, adjust													
Drive belts									I					
Engine oil	R	R	R	R	R	R	R	R	R	R	R	R	R	
Engine oil filter	R	R	R	R	R	R	R	R	R	R	R	R	R	
<b>COOLING SYSTEM</b>														
Cooling system									I					
Engine coolant	FL22 type* <sup>1</sup>	Replace at first 190,000 km or 10 years; after that, every 60,000 km or 3 years												
	Others								R					
Engine coolant level		I	I	I	I	I	I	I	I	I	I	I	I	
<b>FUEL SYSTEM</b>														
Air filter		C			R			C		R		C		R
Fuel lines and hoses									I* <sup>2</sup>					
Hoses and tubes for emission									I* <sup>2</sup>					
Fuel filter									R					
<b>IGNITION SYSTEM</b>														
Spark plugs	Replace every 60,000 km													
<b>ELECTRICAL SYSTEM</b>														
Function of all lights		I	I	I	I	I	I	I	I	I	I	I	I	
<b>CHASSIS and BODY</b>														
Brake lines, hoses and connections					I					I				I
Brake fluid level			I			I			I			I		I
Brake fluid										R				
Disc brakes			I			I			I			I		I
Tire (Rotation)	Rotate every 10,000 km													
Tire inflation pressure and tire wear			I			I			I			I		I
Steering operation and linkages			I			I			I			I		I
Power steering fluid level			I			I			I			I		I
Front and rear suspension, ball joints and wheel bearing axial play						I				I				I
Driveshaft dust boots						I				I				I
Bolts and nuts on chassis and body						T				T				T
Exhaust system and heat shields						I				I				I
All locks and hinges			L			L			L			L		L
Washer fluid level			I			I			I			I		I

# Scheduled Maintenance

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Maintenance Interval	Number of months or kilometers, whichever comes first												
	Months	3	6	9	12	15	18	21	24	27	30	33	36
	×1000 km	5	10	15	20	25	30	35	40	45	50	55	60
<b>AIR CONDITIONER SYSTEM</b>													
Cabin air filter					R				R				R

### Chart symbols:

**I:** Inspect: Inspect and clean, repair, adjust, fill up or replace if necessary.

**R:** Replace

**L:** Lubricate

**C:** Clean

**T:** Tighten

### Remarks:

\*1 Use FL22 type coolant in vehicles with the inscription “FL22” on the radiator cap itself or the surrounding area. Use FL22 when replacing the coolant.

\*2 According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or kilometer period to ensure long-term reliability.

Maintenance and Care  
**Scheduled Maintenance**

(Cont.)

Maintenance Interval	Number of months or kilometers, whichever comes first												
	Months	39	42	45	48	51	54	57	60	63	66	69	72
	×1000 km	65	70	75	80	85	90	95	100	105	110	115	120
<b>ENGINE</b>													
Engine valve clearance	Audible inspect every 120,000 km, if noisy, adjust												
Drive belts				I									I
Engine oil	R	R	R	R	R	R	R	R	R	R	R	R	R
Engine oil filter	R	R	R	R	R	R	R	R	R	R	R	R	R
<b>COOLING SYSTEM</b>													
Cooling system				I									I
Engine coolant	FL22 type* <sup>1</sup>	Replace at first 190,000 km or 10 years; after that, every 60,000 km or 3 years											
	Others				R								
Engine coolant level	I	I	I	I	I	I	I	I	I	I	I	I	I
<b>FUEL SYSTEM</b>													
Air filter		C		R		C		R		C			R
Fuel lines and hoses				I* <sup>2</sup>									I
Hoses and tubes for emission				I* <sup>2</sup>									I
Fuel filter				R									R
<b>IGNITION SYSTEM</b>													
Spark plugs	Replace every 60,000 km												
<b>ELECTRICAL SYSTEM</b>													
Function of all lights	I	I	I	I	I	I	I	I	I	I	I	I	I
<b>CHASSIS and BODY</b>													
Brake lines, hoses and connections				I				I					I
Brake fluid level		I				I		I		I			
Brake fluid				R									R
Disc brakes		I		I		I		I		I		I	I
Tire (Rotation)	Rotate every 10,000 km												
Tire inflation pressure and tire wear		I		I		I		I		I		I	I
Steering operation and linkages		I		I		I		I		I		I	I
Power steering fluid level		I		I		I		I		I		I	I
Front and rear suspension, ball joints and wheel bearing axial play				I				I					I
Driveshaft dust boots				I				I					I
Bolts and nuts on chassis and body				T				T					T
Exhaust system and heat shields				I				I					I
All locks and hinges		L		L		L		L		L		L	L
Washer fluid level		I		I		I		I		I		I	I

# Scheduled Maintenance

---

Maintenance Interval	Number of months or kilometers, whichever comes first												
	Months	39	42	45	48	51	54	57	60	63	66	69	72
	×1000 km	65	70	75	80	85	90	95	100	105	110	115	120
<b>AIR CONDITIONER SYSTEM</b>													
Cabin air filter					R				R				R

### Chart symbols:

**I:** Inspect: Inspect and clean, repair, adjust, fill up or replace if necessary.

**R:** Replace

**L:** Lubricate

**C:** Clean

**T:** Tighten

### Remarks:

\*1 Use FL22 type coolant in vehicles with the inscription “FL22” on the radiator cap itself or the surrounding area. Use FL22 when replacing the coolant.

\*2 According to state/provincial and federal regulations, failure to perform maintenance on these items will not void your emissions warranties. However, Mazda recommends that all maintenance services be performed at the recommended time or kilometer period to ensure long-term reliability.

## Owner Maintenance Schedule

The owner or a qualified service technician should make these vehicle inspections at the indicated intervals to ensure safe and dependable operation.

Bring any problem to the attention of an Authorized Mazda Dealer or qualified service technician as soon as possible.

### ▼ When Refueling

- Brake and clutch fluid level (page 8-22)
- Engine coolant level (page 8-20)
- Engine oil level (page 8-19)
- Washer fluid level (page 8-25)

### ▼ At Least Monthly

Tire inflation pressures (page 8-32)

### ▼ At Least Twice a Year (For Example, Every Spring and Fall)

- Automatic transaxle fluid level (page 8-23)
- Power steering fluid level (page 8-23)

You can do the following scheduled maintenance items if you have some mechanical ability and a few basic tools and if you closely follow the directions in this manual.

- Engine coolant (page 8-20)
- Engine oil (page 8-18)

## Owner Maintenance

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### Owner Maintenance Precautions

Improper or incomplete service may result in problems. This section gives instructions only for items that are easy to perform.

As explained in the Introduction (page 8-2), several procedures can be done only by a qualified service technician with special tools.

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Mazda Warranty statement provided with the vehicle. If you're unsure about any servicing or maintenance procedure, have it done by an Authorized Mazda Dealer.

There are strict environmental laws regarding the disposal of waste oil and fluids. Please dispose of your waste properly and with due regard to the environment.

We recommend that you entrust the oil and fluid changes of your vehicle to an Authorized Mazda Dealer.

#### **WARNING**

***Do not perform maintenance work if you lack sufficient knowledge and experience or the proper tools and equipment to do the work. Have maintenance work done by a qualified technician:***

*Performing maintenance work on a vehicle is dangerous if not done properly. You can be seriously injured while performing some maintenance procedures.*

***If you must run the engine while working under the hood, make certain that you remove all jewelry (especially rings, bracelets, watches, and necklaces) and all neckties, scarves, and similar loose clothing before getting near the engine or cooling fan which may turn on unexpectedly:***

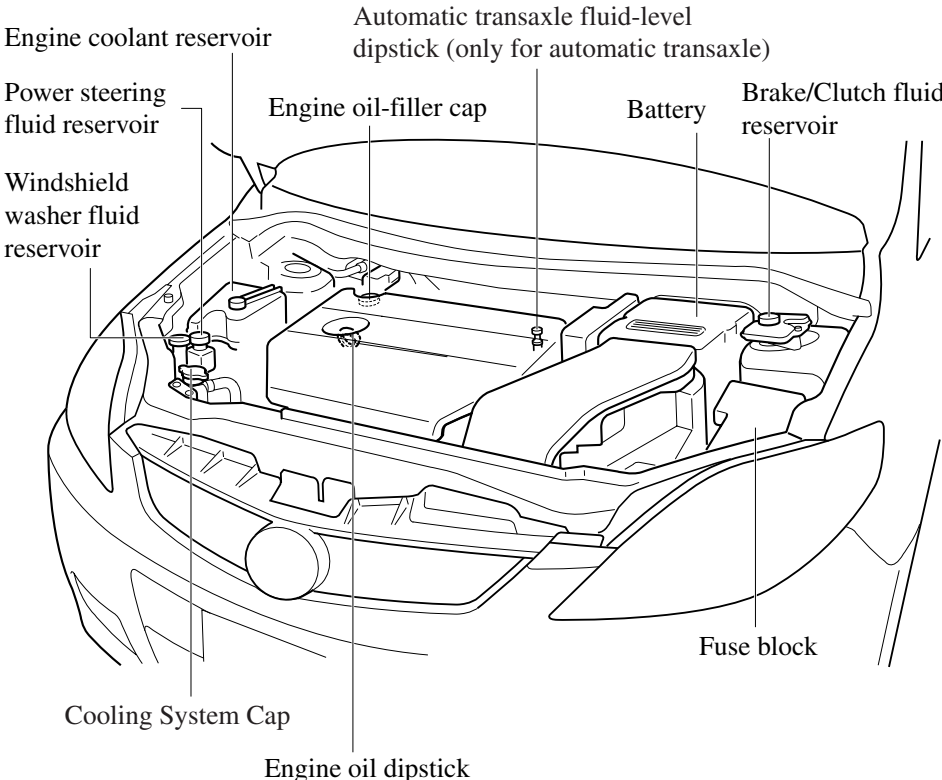
*Working under the hood with the engine running is dangerous. It becomes even more dangerous when you wear jewelry or loose clothing.*

*Either can become entangled in moving parts and result in injury.*

***Turn off the ignition switch and make sure the fan is not running before attempting to work near the cooling fan:***

*Working near the cooling fan when it is running is dangerous. The fan could continue running indefinitely even if the engine has stopped and the engine compartment temperature is high. You could be hit by the fan and seriously injured.*

**Engine Compartment Overview**



# Owner Maintenance

## Engine Oil

### NOTE

*Changing the engine oil should be done by an Authorized Mazda Dealer.*

### ▼ Recommended Oil

#### Use SAE 5W-20 engine oil.

Oil container labels provide important information.

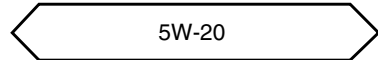
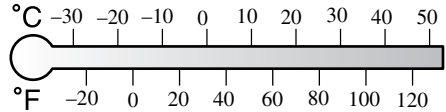
A chief contribution this type of oil makes to fuel economy is reducing the amount of fuel necessary to overcome engine friction.

#### U.S.A. and CANADA

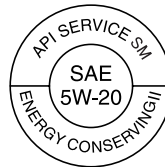


(ILSAC)

Only use oils “Certified For Gasoline Engines” by the American Petroleum Institute (API). An oil with this trademark symbol conforms to the current engine and emission system protection standards and fuel economy requirements of the International Lubricant Standardization and Approval Committee (ILSAC), comprised of U.S. and Japanese automobile manufacturers.



#### Except U.S.A. and CANADA

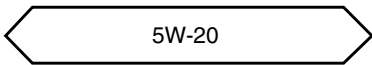
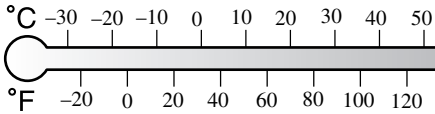


(ILSAC)

#### **Mexico**

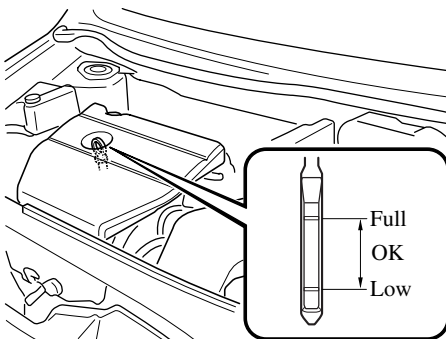
Use SAE 5W-20 engine oil. If SAE 5W-20 engine oil is not available in your market. Use SAE 5W-30 engine oil.

The quality designation SM, or ILSAC must be on the label.



### ▼ Inspecting Engine Oil Level

1. Be sure the vehicle is on a level surface.
2. Warm up the engine to normal operating temperature.
3. Turn it off and wait at least 5 minutes for the oil to return to the oil pan.
4. Pull out the dipstick, wipe it clean, and reinsert it fully.



5. Pull it out again and examine the level. It's OK between MIN and MAX. But if it's near or below MIN, add enough oil to bring the level to MAX.

### **⚠ CAUTION**

*Don't add engine oil over MAX. This may cause engine damage.*

6. Make sure the O-ring on the dipstick is positioned properly before reinserting the dipstick.

The distance between MIN and MAX on the dipstick represents the following:

Oil capacity	
L (US qt, Imp qt)	0.75 (0.79, 0.66)