## This file is available for free download at <a href="http://www.iluvmyrx7.com">http://www.iluvmyrx7.com</a>

This file was not scanned to deprive Mazda of any money – it was scanned due to the rareness of the original manuals and the overwhelming need of the RX-7 owner to have this information so that they can accurately troubleshoot problems. Perhaps if Mazda's dealerships could support the Rotary Engine it wouldn't be so necessary for the owners to do so.



Many thanks to Anh Diep for scanning this file.

# PRE-DELIVERY INSPECTION AND SCHEDULED MAINTENANCE SERVICES

A – 2	E	TABLE	INSPECTIO	PRE-DELIVERY
A - 3	ICES	SERV	AINTENANC	SCHEDULED N
				SCHEDULE
A - 3		(NOITIC	RIVING CON	(NORMAL [
		ŕ		SCHEDULE 2
A - 4		ITION)	RIVING CONI	(UNIQUE D
'U0AX-007		,		, -,

## PRE-DELIVERY INSPECTION TABLE

The following items may be done at any time prior to delivery to your customer.

#### EXTERIOR

**INSPECT** and **ADJUST**, if necessary, the following items to the specifications:

- ☐ Glass, exterior bright metal, and paint for damage
- □ Wheel lug nuts and locks
  - 89-117 N·m {9.0-12.0 kgf·m, 66-86 ft·lbf}
- □ All weather strips for damage and detachment
- □ Operation of hood release and lock
- □ Operation of fuel lid and rear hatch opener
- □ Door operation and alignment
- Headlight aim

**INSTALL** the following parts

- □ Wheel caps (if equipped)
- □ Outside rearview mirror (s)
- □ Front air deflector (if equipped)

#### REMOVE

□ Tie-down hooks

## UNDER HOOD-ENGINE OFF

**INSPECT** and **ADJUST**, if necessary, the following items to the specifications:

- ☐ Fuel, coolant, and hydraulic lines, fittings, connections, and components for leaks
- □ Engine oil level
- □ Power steering fluid level
- □ Brake and clutch master cylinder fluid levels
- □ Windshield washer reservoir fluid level
- □ Radiator coolant level and specific gravity
- ☐ Tightness of battery terminals

#### INTERIOR

**INSTALL** the following parts:

- ☐ Rubber stopper for inside rearview mirror
- **CHECK** the operations of the following items:
- □ Seat controls (sliding and reclining) and headrest
- □ Door locks
- □ Seat belts and warning system
- □ Ignition switch and steering lock
- ☐ Air bag system using indicator light (if equipped)
- ☐ Shift-lock system and inhibitor switch (A/T only)
- □ Starter interlock switch (clutch pedal, M/T only)
- □ All lights including warning and indicator lights and retractable headlight mechanism
- □ IC audible warning system
- □ Horn, wipers, and washers (front and rear, if equipped)
- □ Radio and antenna (if equipped)
- □ Cigarette lighter and clock
- □ Remote control outside rearview mirror (if equipped)
- □ Power windows (if equipped)
- Heater, defroster, and air conditioner at all mode selections (if equipped)
- ☐ Sunroof (if equipped)

- □ Theft-deterrent system (if equipped)
- CHECK the following items:
- □ Spare fuse
- Upholstery and interior finishes

CHECK and ADJUST, if necessary, the following items:

Pedal height and free play of brake and clutch pedal

	Pedal height mm (in)	Pedal free play mm (in)
Clutch pedal	183-193 {7.20-7.60} (With carpet)	0.6–3.0 {0.02–0.12}
Brake pedal	184–189 {7.24–7.44}	3.0-8.0
	(With carpet)	{0.12-0.31}

☐ Parking brake

7-10 notches / 200 N {20 kgf, 44 lbf}

# UNDER HOOD-ENGINE RUNNING AT OPERATING TEMPERATURE

**CHECK** the following items:

- □ Bypass air control system
- ☐ Automatic transmission fluid level

#### ON HOIST

CHECK the following items:

- □ Manual transmission oil level
- ☐ Rear axle oil level
- ☐ Underside fuel, coolant, and hydraulic lines, fittings, connections, and components for leaks
- □ Tires for cuts and bruises
- Steering linkage, suspension, exhaust system, and all underside hardware for looseness or damage

## **ROAD TEST**

CHECK the following items:

- □ Brake operation
- □ Clutch operation
- ☐ Steering control
- D Operation of meters and gauges
- □ Squeaks, rattles, or unusual noises
- □ Emergency locking retractors
- □ Cruise control system (if equipped)

## AFTER ROAD TEST

- ☐ CHECK for necessary owner information materials tools, and spare tire in vehicle
- REMOVE identification color tape on directiona tires

Following items must be done just before the delivery to your customer.

- □ Load test battery and charge if necessary
- □ Adjust tire pressure to the specification (Refer to Section Q)
- □ Clean outside of véhicle

- □ Install fuses for accessories
- □ Remove seat and floor mat protective covers
- □ Vacuum inside of vehicle

17U0AX-001A-3

R

## SCHEDULED MAINTENANCE SERVICES

#### MAINTENANCE TABLE (USA)

Follow Schedule 1 (Normal Driving Conditions) if the vehicle is operated mainly where none of the following conditions apply. Follow Schedule 2 (Unique Driving Conditions) if any of the conditions below apply.

- · Repeated short-distance driving
- Driving in dusty conditions.
- Driving with extended use of brakes.
- Driving in areas where road salt or other corrosive materials are used.
- Driving on rough and/or muddy roads.
- Extended periods of idling and/or low-speed operation.
- Driving for prolonged periods in cold temperatures and/or extremely humid climates.

#### Schedule 1 (Normal Driving Conditions)

Maintenance		Number Of	Months Or	Miles (F	(llometer	), Which	ever Cor	nes Firs	t	
Interval		Months	7.5	15	22.5	30	37.5	45	52.5	60
Maintenance	V 1000	Miles	7.5	15	22.5	30	37.5	45	52.5	60
Operation	X 1000	Km	12	24	36	48	60	72	84	96

#### Engine

Engine Oil	Replac	e every 5	.000 mile	s (8.000	km) or 5	months	
Oil Filter	Replac	e every 5	.000 mile	s (8.000	km) or 5	months	
Drive Beits			I				1

#### Air cleaner

Air Cleaner Element

Ignition system				
Spark Plugs		R		R
Fuel system				
Idta Casad	*2	1*2	1 *2	1

Idle Speed	*2	l *2	1 *2	I.
Fuel Filter				R
Fuel Lines		] *1		<u> </u>

#### Cooling system

Cooling System	1	1	 1	 <u> </u>
Engine Coolant		R		 R
	 ·	 		 

#### Chassis & body

Brake Lines, Hoses & Connections								1
Disc Brakes					<u> </u>			1
Steering Operations & Linkages								
Front & Rear Suspension Ball Joints			<u></u>	1 1	<u> </u>			1
Rear Suspension Uni Ball & Sliding Rubber Bushing				1				<u> </u>
Manual Transmission Oil				ļ				R
Rear Axle Oil						<u> </u>		R
Drive Shaft Dust Boots				1				1
Bolts & Nuts on Chassis & Body				T		-		
Exhaust System Heat Shield					<u> </u>	ļ		1
All Looks & Hinges	L	L_	L	L	L	L	L	L

#### Air conditioner system (If equipped)

7(1 001101101101 )	
Refrigerant	Inspect the refrigerant amount annually
Compressor	Inspect the operation annually

#### Electrical system

7	 		1	
Engine Oil Level Warning System	{			
Engine Coolant Level Warning System		ł		 

#### Chart symbols:

1: Inspect and, if necessary, correct, clean, or replace

R: Replace or change

T: Tighten

L: Lubricate

#### Remarks:

After 60 months or 60.000 miles (96.000 km), continue to follow the prescribed maintenance items and intervals periodically. As for \* marked items in this maintenance chart, please pay attention to the following points.

\*1 This maintenance operation is recommended by Mazda. However, it is not necessary for emission warranty coverage or manufacturer recall liability.
\*2 This maintenance operation is required for Canada and all states except California. However, we recommend that it also be performed on California vehicles as well.

\$\triangle = 3\$



Schedule 2 (Unique Driving Conditions)

Nu	mber O	f Monti	18 Or I	Miles (	Kilome	ter), V	Yhiche:	ver Co	mes F	irst		
Months	5	10	15	20	25	30	35	40	45		55	60
X1000 Miles	5	10	15	20	25	30	35	40	45			60
X1000 Km	8	16	24	32	40	48	56	64	72			96
	Months X1000 Miles	Mumber Q           Months         5           X1000 Miles         5	Mumber Of Month           Months         5         10           X1000 Miles         5         10	Mumber Of Months Or I           Months         5         10         15           X1000 Miles         5         10         15	Mumber Of Months Or Miles (           Months         5         10         15         20           X1000 Miles         5         10         15         20	Months         5         10         15         20         25           X1000 Miles         5         10         15         20         25	Months         5         10         15         20         25         30           X1000 Miles         5         10         15         20         25         30	Months         5         10         15         20         25         30         35           X1000 Miles         5         10         15         20         25         30         35	Months         5         10         15         20         25         30         35         40           X1000 Miles         5         10         15         20         25         30         35         40	Number Of Months Or Miles (Kilometer), Whichever Comes F           Months         5         10         15         20         25         30         35         40         45           X1000 Miles         5         10         15         20         25         30         35         40         45	Number Of Months Or Miles (Kilometer), Whichever Comes First           Months         5         10         15         20         25         30         35         40         45         50           X1000 Miles         5         10         15         20         25         30         35         40         45         50	Number Of Months Or Miles (Kilometer), Whichever Comes First           Months         5         10         15         20         25         30         35         40         45         50         55           X1000 Miles         5         10         15         20         25         30         35         40         45         50         55           X1000 Mes         8         16         24         20         25         30         35         40         45         50         55



Engine

Engine												
Engine Oil			Re	place e	every 3.	.000 mi	les (5.0	000 km	) or 3 i	nonths	<del></del>	
Oil Filter			Re	place e	very 3.	.000 mi	les (5.0	000 km	) or 3 r	nonths	<del></del>	
Drive Belts						1		:	, 	1		Т
Air cleaner											<del></del>	
Air Cleaner Element		i	:	Т.		R	Ţ		7	T		B
Ignition system												
Spark Plugs			·	<del></del>		R			i			T
Cooling system				<u></u>			<del></del>					F?
Cooling System		7	<del>                                     </del>	T	·	1	,	<u> </u>		T	T	<del></del> -
Engine Coolant	<del>-</del>		<del> </del>	†	<del>  -</del>	R	<del></del>		<del> </del> '-	+	+	F '
Fuel system			<del></del>	<del></del>		<u> </u>					<u> </u>	<u> </u>
Fuel Filter		T	Т	7	T		<del></del>	7	<del>                                  </del>		<del></del>	
Fuel Lines				+	<del> </del>	*1	<del> </del> -	<del> </del>	+	+	+	
Idle Speed	_ †	<del></del>	1.2		<del> </del>	1 *2	+	<del> </del>	1 *2	<del> </del>	<del> </del>	<del></del>
Chassis & body			<del></del>				·	-1		<del></del>	1	<u> </u>
Brake Lines, Hoses & Connections			<del></del>	1		<del>-</del>		<del></del>	T -		T	<del></del>
Brake Fluid				<del> </del>	<del> </del> -	B	<del> </del> -	<del> </del>	+	<del></del>	<del> </del>	<del></del>
Di <b>s</b> c Brakes				†		1	<del> </del> -	+	<del> </del>	<del></del> -	<del> </del> -	
Steering Operations & Linkages			1			ī	<del> </del>	† <del>-</del>	<del>                                     </del>		<del> </del>	-
Front & Rear Suspension Ball Joints		-	†		<u> </u>	1	<del>i</del>	†	<del> </del>		<del> </del>	<del> </del>
Rear Suspension Uni Ball & Sliding Rubber Bushing						ı		<del> </del>			ļ	<del> </del> -
Manual Transmission Oil			T			R	<del></del>	<del> </del>	<del> </del>	1	<del></del>	
Rear Axle Oil				<del></del>	†	R		†	<b>†</b>	<del> </del>	<del></del>	R
Drive Shaft Dust Boots			<del> </del>			l T		<del> </del>	<del></del>	<del> </del>	<del> </del>	<del>                                     </del>
Bolts & Nuts on Chassis & Body		1	7	!	<del>†</del>	† T	i	<del> </del> -	T	<del></del>	<del> </del>	<del></del> -
Exhaust System Heat Shield				•				<del> </del>			<del> </del>	<del></del>
All Locks & Hinges	L	T	L.	L	į L	L	L	L	L	1	<del></del>	

Air conditioner system (If equipped)

Refrigerant	Inspect the refrigerant amount annually					
Compressor	inspect the operation annually					
Electrical system						
Engine Oil Level Warning System	: 1					
Engine Coolant Level Warning System						

#### Chart symbols:

- 1: Inspect and, if necessary, correct, clean, or replace
- R: Replace or change T: Tighten L: Lubricate

After 60 months or 60.000 miles (96.000 km), continue to follow the prescribed maintenance items and intervals periodically.

As for \* marked items in this maintenance chart, please pay attention to the following points.

1 This maintenance operation is recommended by Mazda. However, it is not necessary for emission warranty coverage or manufacturer recall liability.

2 This maintenance operation is required for Canada and all states except California. However, we recommend that it also be performed on California. vehicles as well.

## **MAINTENANCE TABLE (CANADA)**

Maintenance	Number Of Months Or Miles (Kilometer), Whichever Comes First												
Interval	Months	5	10	15	20	25	30	35	40	45	50	5 <b>5</b>	60
Maintenance	X1000 Km	8	16	24	32	40	48	56	64	72	80	88	9-3
Operation	(X1000 Miles)	(5)	(10)	(15)	(20)	(25)	(30)	(35)	(40)	(45)	(50)	(55)	(6:0)
Engine													
Engine Oil		7		Rep	ace ev	ery 5,0	00 kilo	meters	or eve	ry 3 mi	onths		
Oil Filter		1							or eve				
Tension of All Drive Belts		1		Insp	ect ev	ery 5.00	00 kilor	neters	or ever	y 3 m	onths		
Air cleaner													
Air Cleaner Element		<u> </u>		! !			R	· · · · · · · · · · · · · · · · · · ·		1			F
Ignition system				·		•					·———		
Spark Plugs			Ţ	T		·····	R		Ī				F
Cooling system			<u> </u>	<u></u>		<del></del>	•	i	L,				
Engine Coolant Level & Stre	noth			Inec	act av	arv 5 M	nn kilor	natore	or ever	2 m	anthe		
Cooling System for Leaks			Ţ	1 1	ect ev	1 3,00	I I	Heters	OI EVE	y 3 1111.	7111115	r	
Engine Coolant			<del> </del>			<b></b>	R		ļ	'			' F
Fuel system		<del></del>	.l	<del></del>					L				
Idle Speed		<del></del>				· · · · · ·							
Fuel Lines & Hoses			<del> </del>	<del>.</del> '			1 *1		<del> </del>				
Fuel Filter		. +			· · · · · · - ·		- ' r						<u>-</u>
Emission Hoses & Tubes		+											
Chassis & body				<u> </u>									'
Manual Transmission Oil Le	vei	Т	<del>                                     </del>	· · · · · · · · · · · · · · · · · · ·		- :	1		-				
Automatic Transmission Flui	- <del>-</del>	- +	<u>-</u>	Inen	ect eve	erv 5.00	nn kilor	neters	or ever	v 3 mc	nthe		
Transmission Oil M/T & A/T	O COVE	<del> </del>	T	11130	eci eve	31 9 3,00	R	i eters	OI EVE	y 3 (11)			—
Oil Level in Final Drive Case			L	Li Insn	ect eve	erv 5.00	O kilon	neters	or ever	v 3 mc	l		
Differential Oil		· + · · · -	T		001.011	1, 0,00	R	101013		<i>y</i> G 1110			 R
Driveshaft Dust Boots		- +	<del></del>	·i									
Brake Lines & Hoses							$\overline{}$						
Brake & Clutch Fluid Level				Insp	ect eve	ery 5,00	0 kilon	neters	or ever	v 3 mo	nths		
Brake Fluid				<u>_</u>			R						R
Disc Brakes (Front & Rear)							T			1			
Tire Inflation Pressure & Tire	Wear			Insp	ect eve	ery 5,00	0 kilon	neters	or ever	y 3 mo	nths		
Rotate Tires									or every				
Power Steering Fluid Level				Insp	ect eve	ry 5.00	0 kilon	neters	or ever	y 3 mo	nths		
Steering Operation & Linkag (Includes Four Wheel Alignm													ı
Suspension Components Fro		<del></del>											
Rear Suspension Uniball & S Bushing							<del></del>					-	<u> </u>
All Chassis 9 Parks Nuts 9 P		+	<del>                                     </del>				<del>-</del>			<del></del>			<u>-</u>

## Air conditioner system (If equipped)

All Chassis & Body Nuts & Bolts Exhaust System Heat Shield All Locks & Hinges

Engine Oil Level Warning System
Engine Coolant Level Warning System

Washer Fluid Level

Function of All Lights

Refrigerant	Inspect the refrigerant amount annually
Compressor	Inspect the operation annually

Lubricate every 5,000 kilometers or every 3 months

Inspect every 5.000 kilometers or every 3 months

Inspect every 5.000 kilometers or every 3 months

#### Note:

1: Inspect and if necessary, correct, clean, or replace. (Inspect and if necessary, replace air cleaner element only)

R: Replace or change

T: Tighten

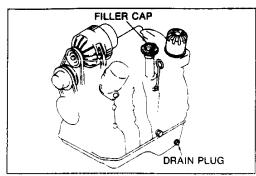
L: Lubricate

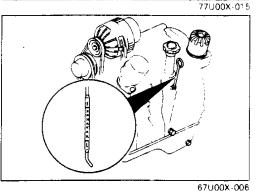
After 60 months or 96,000 km (60,000 miles), continue to follow the described maintenance items and intervals periodically.

Please pay attention to the following point.

This maintenance is recommended by Mazda; however it is not necessary for emission warranty coverage or manufacturer recall liability.

( 3





#### REPLACEMENT OF ENGINE OIL

- Warm up the engine if it is cold.
- 2. Remove the drain plug.
- 3. Remove the oil filler cap. This will allow the oil to drain more easily.
- 4. Fill engine oil to the "F" mark on the dipstick. Use oil with the proper SAE viscosity.

#### Oil capacity:

Total: 4.9 L {5.2 US qt, 4.3 Imp-qt} ..... except R1 model 5.4 L {5.7 US qt, 4.8 Imp·qt}...... R1 model

Oil pan: 3.9 L {4.1 US qt, 3.4 Imp-qt} Note

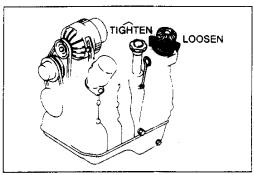
 After starting the engine, recheck the oil level and also check the drain plug washer for leaks.

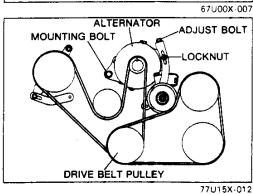
## Typical specification:

API service "Fuel efficient" SG grade (Mineral oil only)

## Recommended SAE viscosity numbers

Temperature	(°C) (°F)	-30	-20	-10	0	10	20	30	40	50
remperature	(°F)	-20	Ò	20	40	60	)	80	100	120
			5W-30		$\supset$					
Engine oil		١,	$\overline{}$				16W-3	0		





#### REPLACEMENT OF ENGINE OIL FILTER

To install the oil filter, apply engine oil to the oil filter gasket, and then tighten the oil filter fully by hand.

 After installing the filter, start the engine and check that the joints are not leaking. Top up with oil if necessary.

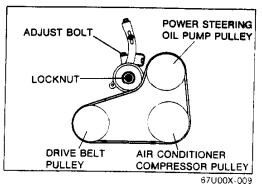
#### **INSPECTION OF DRIVE BELTS**

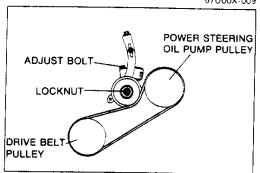
- 1. Check the belt for cracks or any other damage.
- 2. If necessary, adjust the drive belt tension with thumb pressure of about 98N {10 kgf, 22 lbf}.

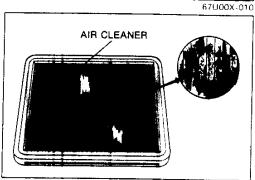
#### Alternator and air pump drive belt

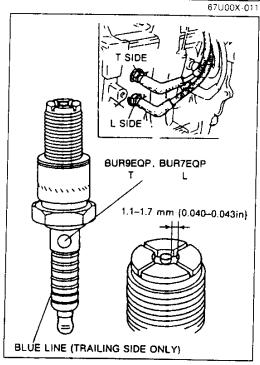
- 1. Loosen the alternator mounting bolt and locknut.
- 2. Move the alternator to obtain proper belt tension.
- 3. Tighten the bolts and recheck the tension.

	· · · · · · · · · · · · · · · · · · ·
Deflection	7.0–7.5 mm {0.28–0.29 in}
Deliaction	7.0-7.5 (1)(0.26-0.29 (1))
	<del> </del>









## Air conditioner drive belt (if equipped)

- 1. Loosen the lock nut on the idler pulley.
- 2. Turn the adjusting bolt until the correct tension is obtained.
- 3. Tighten the lock nut and recheck the tension.

Deflection	45 50 mm (0.19 0.00 in)
23113311311	4.5-5.0 mm {0.18-0.20 in}

## Power steering oil pump drive belt

- 1. Loosen the lock nut on the idler pulley.
- 2. Turn the adjusting bolt until the correct tension s obtained.
- 3. Tighten the lock nut and recheck the tension.

Deflection	45 50 mm (0.18 0.00 :)
Banadion	4.5–5.0 mm {0.18–0.20 in}

## REPLACEMENT OF AIR CLEANER ELEMENT

Use only a genuine Mazda air cleaner element or one cf equivalent quality.

## INSPECTION OF SPARK PLUGS

Check the following points. If a problem is found, replace the spark plug.

- Damaged insulation
- Worn electrodes
- Carbon deposits
   If cleaning is necessary, use a plug cleaner or a wire-brush. Clean the upper insulator, also.
- Damaged gasket
- Burnt

## Plug gap: 1.0-1.1 mm {0.040-0.043 in}

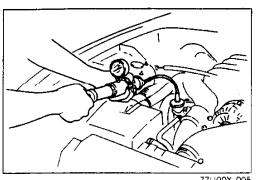
Plug position	NGK	Discrimination color
Leading side	BUR7EQP*, (BUR7EQ) (BUR6EQP) (BUR6EQ)	-
Trailing side	BUR9EQP*, (BUR9EQ) (BUR8EQP) (BUR8EQ)	Blue

<sup>\*</sup> Standard plug

#### Caution

- To protect the platinum electrode:
  - (1) Do not use a wire brush to clean the electrode.
  - (2) Use a plug cleaner for a maximum of 20 seconds and air pressure below 589 kPa (6 kgf/cm², 85 psi).
  - (3) Do not adjust the plug gap to pretect a platinum electrode.

8-A



#### 77U00X-005

#### INSPECTION OF COOLING SYSTEM

- 1. Check the cooling system hoses (including the heater hoses) for cracks or wear.
- 2. Check the cooling system for leaks by applying a pressure of 103 kPa {1.05 kgf/cm², 14.93 psi} with a radiator cap tester.

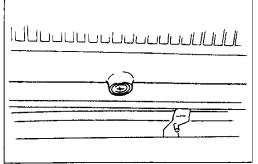
#### Note

• Do not pressurize the system to more than 103 kPa {1.05 kgf/cm<sup>2</sup>, 14.93 psi}.

If necessary, replace the hoses.

#### Warning

• Be careful to avoid injury from escaping steam or hot water when removing the radiator cap.



67U00X-014

#### REPLACEMENT OF ENGINE COOLANT

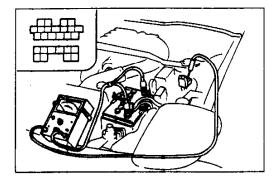
Drain the engine coolant by removing the radiator drain plug.

#### Warning

• Be careful to avoid injury when checking a hot

Fill with new coolant according to the recommended mixture ratio as follows.

Drotootion	Mixture percentage (volume)					
Protection	Anti-freeze solution	Water				
Above -4°C {25°F}	20	80				
Above -16°C (3°F)	35	65				
Above -26°C {-15°F}	45	<b>5</b> 5				
Above -40°C {-40°F}	55	45				

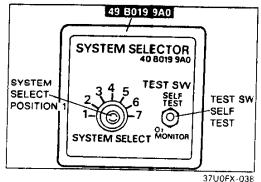


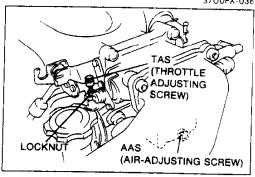
## INSPECTION OF IDLE SPEED Preparation

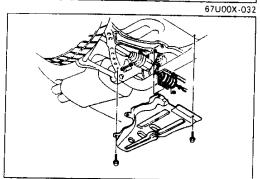
- 1. Warm up the engine to normal operating temperature.
- 2. Turn all electric loads OFF.
- 3. Connect the **SST** to the diagnosis connector.
- 4. Connect a tachometer to the diagnosis connector IG-terminal as shown.

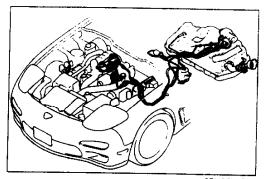
## A

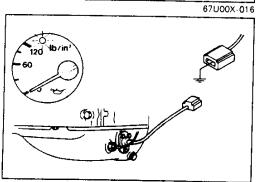
## SCHEDULED MAINTENANCE SERVICES











67U00X-017

idle Speed

1. Perform "Preparation".

2. Verify that the idle speed is within specification.

Idle speed: 700-750 rpm

Caution

 Check the idle speed when the electric cooling fan does not operate.

3. If not within the specification, adjust the idle by turning the air-adjusting screw. (AAS)

4. If not within specification when air adjusting screw fully closed, loosen the locknut and turn the throttle adjusting screw to set the idle.

5. Tighten the locknut and put a paint mark on the nut and throttle body.

6. Disconnect the SST.

## REPLACEMENT OF FUEL FILTER

Replace the fuel filter with a new one.

Note

Be careful of the fuel flow direction on the filter.

Caution

a) Cover the hoses with a rag since fuel will be splashed out when you disconnect the hoses.

b) Keep sparks and open flames away from the fuel area.

#### INSPECTION OF FUEL LINES

1. Check the fuel line fittings, connections and components for leaks.

2. There should be no wetness or stained areas that might indicate leaks.

3. Replace any defective hoses or clips.

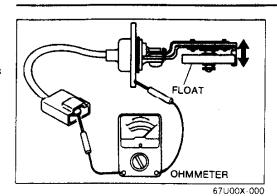
## INSPECTION OF OIL LEVEL WARNING SYSTEM

- 1. When you turn the ignition switch ON, the oil leve warning light comes ON.
- 2. Start the engine and the warning light should go OFF
- 3. Disconnect the connector from the oil level sensor and ground the terminal at idle.

The oil level warning light comes ON and the buzzer sounds.

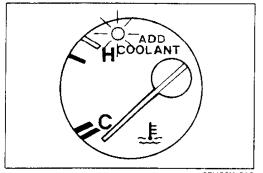
- 4. Remove the sensor.
- 5. Check that the oil holes of the oil chamber are not clogged.

If necessary, clean the oil holes with solvent.



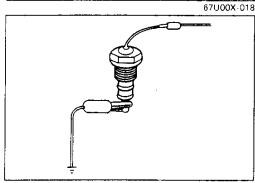
 Connect an ohmmeter to the level sensor and check the continuity by moving the float up and down. When the float is on the upper side, the ohmmeter should not show any continuity.

When moved to the lower side, it should show a continuity of the circuit. If this is found not to be so, replace the oil level sensor.



## INSPECTION OF ENGINE COOLANT LEVEL WARNING SYSTEM

- 1. Turn the ignition switch ON. The coolant level warning light comes ON.
- 2. Start the engine and the warning light should go OFF.
- 3. Disconnect the connector from the level sensor and make sure the warning light comes ON after 9-16 seconds and the buzzer sounds at idle.

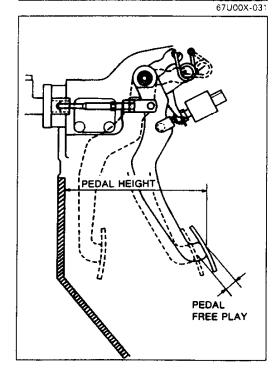


- 4. Remove the radiator cap to relieve the pressure in the radiator.
- 5. Remove the sensor from the radiator and plug the hole to prevent coolant leakage.
- 6. Carefully check the sensor for cracks or damage.
- 7. Start the engine.
- 8. Ground the tip of the sensor.

  Check to see if the coolant level warning light goes

  OFF.

If it does not, replace the sensor.



## INSPECTION OF CLUTCH PEDAL Clutch Pedal Height

Measure the distance from the upper surface of the pedal to the carpet.

# Pedal height: 165.5-177.0 mm {6.516-6.968 in} (with carpet)

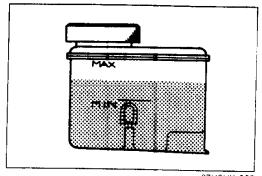
If necessary, adjust the pedal height.

#### Clutch Pedal Free Play

Depress the clutch pedal by hand until clutch resistance is felt.

Pedal free play: 0.6–3.2 mm {0.02–0.13 in}
Total pedal free play: 5.1–14 mm {0.20–0.55 in}

If necessary, adjust the pedal free play.



## INSPECTION OF CLUTCH FLUID

#### Note

- A common reservoir is used for the clutch and brake system fluids.
- Make sure that fluid level in the reservoir is between the MAX and MIN mark.
- 2. If the fluid level is extremely low, check the clutch and brake systems for leakage.

# INSPECTION OF BRAKE PEDAL Pedal Height Inspection

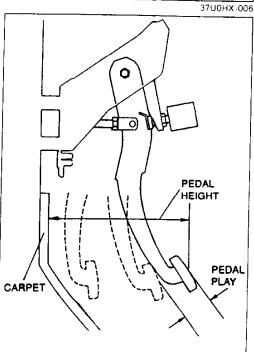
Check if the distance from the center of the upper surface of the pedal pad to the carpet is as specifiec.

Pedal height: 164.5-176.0 mm {6.48-6.92 in} (with carpet)

## **Pedal Play Inspection**

- 1. Depress the pedal a few times to eliminate the vacuum in the system.
- 2. Lightly depress the pedal by hand unitil resistance is feit and check the free play.

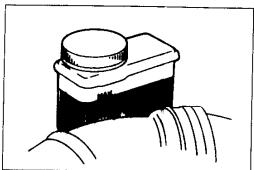
Free play: 3-8 mm {0.12-0.31 in}



# INSPECTION OF BRAKE FLUID Check that the brake fluid leve

Check that the brake fluid level is near the "MAX" leve line on the see-through reservoir. If necessary, add brake fluid to bring the level to the "MAX" level line.

Fluid specification: FMVS\$ 116 DOT-3



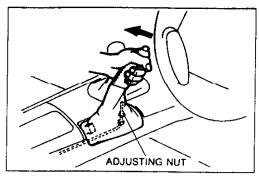
39G00X-030

# 39500X-030

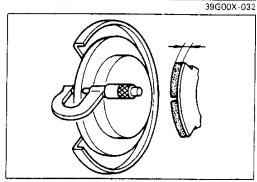
39G00X-028

# INSPECTION OF BRAKE LINE, HOSES AND CONNECTIONS

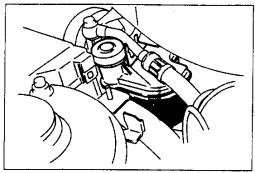
Check the brake lines and hoses for proper attachment and connections. There should not be any leaks, cracks, chafing, abrasion, deterioration, etc. on lines and connections.



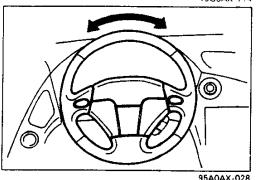
77U00X-009



39G00X-033



19G0AX-114



#### INSPECTION OF PARKING BRAKE

- 1. Pull the brake lever with 200 N {20 kgf, 44 lbf} of force and measure the lever stroke.
- 2. If necessary, adjust the lever stroke by turning the adjusting nut.

Lever notices: 7-10

## INSPECTION OF POWER BRAKE UNIT AND HOSES

- 1. Check the vacuum hoses, connectors, and check the valve for cracks, chafing, deterioration, etc.
- 2. Check the power brake for proper operation. To check, depress the brake pedal several times to make sure the pedal play does not change. Then, while depressing the brake pedal, start the engine. At this time, the pedal should go down a little.

#### **INSPECTION OF DISC BRAKES**

Check the following conditions of disc brake components.

- 1. Check caliper operation and inspect for leaks.
- 2. Check pads for wear.
- 3. Check condition and thickness of disc plate.

#### **INSPECTION OF POWER STEERING FLUID LEVEL**

Check the power steering fluid level. Add fluid to the specified level, if necessary.

Use only the specified power steering fluid.

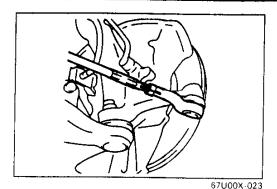
Fluid specification: ATF Dexron®II or M-III

#### **INSPECTION OF STEERING OPERATION AND LINKAGE**

1. Check the steering wheel free play. (Refer to page N-6.)

Free play: 0-30 mm {0-1.18 in}

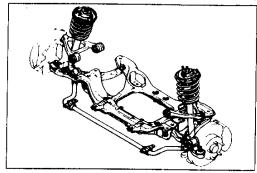
- 2. Check the steering for proper operation and for looseness of the steering housing.
- 3. Check the steering gear housing for fluid leakage or seepage.
- 4. Check for excessive play on the tie rod ends and rack guide
- 5. Check for damage of the dust boots.
- 6. Check for looseness or grease leakage of the tie rod ends.



## INSPECTION OF STEERING LINKAGES, RACK GUIDE AND TIE ROD ENDS

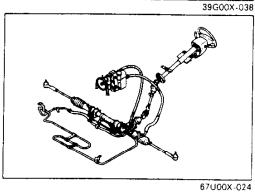
Check the steering linkage for looseness and damage. Check that there is:

- 1. No excessive play on tie rod ends and rack guide.
- 2. No looseness or grease leakage on tie rod ends.



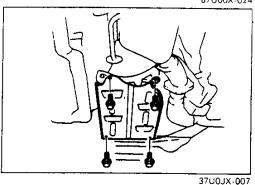
## INSPECTION OF SUSPENSION BALL JOINTS

Check the ball joints for damage, looseness and grease leakage.



#### **INSPECTION OF RACK SEAL BOOTS**

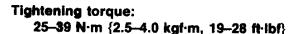
Check the boot for cracking or other damage. If a problem is found, replace the boot.



## INSPECTION OF MANUAL TRANSMISSION OIL

#### Caution

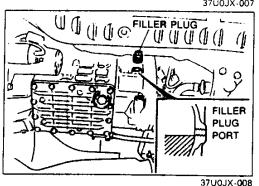
- Park the vehicle on level ground.
- 1. Remove the transmission cover.
- 2. Remove the filler plug.
- 3. Verify that the oil is up to the bottom of the check pluc
- 4. If the oil level is low, add the specified oil through the filler plug port.
- 5. Install a new filler plug.

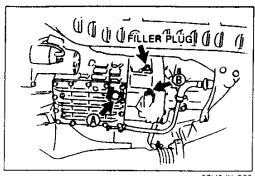


6. Install the transmission cover.

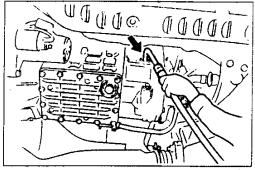


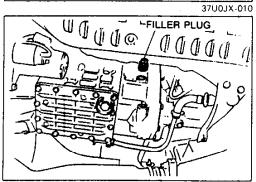
7.9-10.7 N·m {80-110 kgf·cm, 70-95.4 in·lbf}



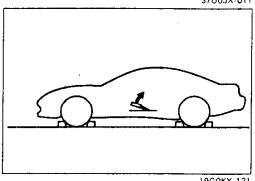


37U0.IX-009

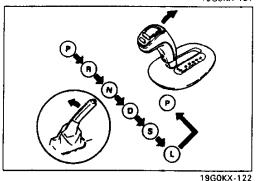




37U0JX-011



19G0KX-121



#### REPLACEMENT OF MANUAL TRANSMISSION OIL

- Remove the transmission cover.
- 2. Remove plug A (with washer) and B, and drain the oil into a suitable container.
- 3. Wipe all plug clean.
- 4. Apply sealant to the B plug threads.
- 5. Install new plugs A (with new washer) and B.

## Tightening torque:

A: 40-58 N·m {4.0-6.0 kgf·m, 29-43 ft·lbf} B: 21-31 N·m {2.1-3.2 kgf·m, 16-23 ft·lbf}

6. Remove filler plug and add the specified oil through the filler plug port until the level rises to the bottom of the port.

#### Specified oil:

Grade: API service GL-4 or GL-5

All-season: SAE 75W-90

Above 10°C {50°F}: SAE 80W-90

Capacity: 2.5 L {2.6 US qts, 2.2 Imp qts}

7. Install a new filler plug.

## Tightening torque:

25-39 N·m {2.5-4.0 kgf·m, 19-28 ft·lbf}

8. Install the transmission cover.

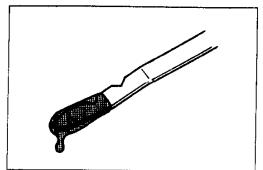
#### Tightening torque:

7.9-10.7 N·m {80-110 kgf·cm, 70-95.4 in·lbf}

## INSPECTION OF AUTOMATIC TRANSMISSION FLUID LEVEL

#### Caution

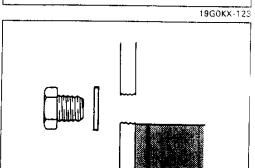
- Place the vehicle on a flat, level surface.
- 1. Apply the parking brake and securely position wheel chocks to prevent the vehicle from rolling.
- 2. Warm up the engine until the ATF temperature reaches 60-70°C {140-158°F}.
- 3. While depressing the brake pedal, shift the selector lever to each range (P-L). Leave it a few seconds in each range.
- 4. Shift back to P range.



5. Ensure that the ATF level is between the notches of the ATF dipstick. Add ATF to the specified level, if necessarv.

ATF Type: Dexron®II or M-III

Capacity: 8.6 L {9.1 US qt, 7.6 Imp qt}



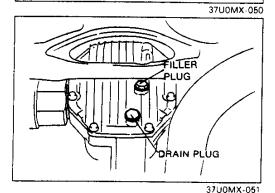
INSPECTION OF DIFFERENTIAL OIL

#### Caution

- Position the vehicle level.
- 1. Remove the filler plug.
- 2. Verify that the oil is at the bottom of the filler plug hole. If it is low, add the specified oil.
- 3. Install a new washer and the filler plug.



39-53 N·m {4.0-5.5 kgf·m, 29-39 ft·lbf}



## REPLACEMENT OF DIFFERENTIAL OIL

- 1. Remove the filler and drain plugs.
- 2. Drain the differential oil into a suitable container.
- 3. Wipe the plugs clean.
- 4. Install a new washer and the drain plug.

#### Tightening torque:

39-53 N·m {4.0-5.5 kgf·m, 29-39 ft·lbf}

5. Add the specified oil from the filler plug hole until it reaches the bottom of the hole.

#### Specified oil

Type

Above -18°C {0°F}: API GL-4 or 5. SAE 90 Below -18°C {0°F}: API GL-4 or 5, SAE 80 Capacity: 1.30 L {1.38 US qt, 1.14 Imp qt}

6. Install a new washer and the filler plug.

## Tightening torque:

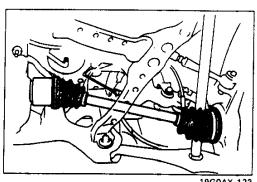
39-53 N·m {4.0-5.5 kgf·m, 29-39 ft·lbf}

29LI0MX-060

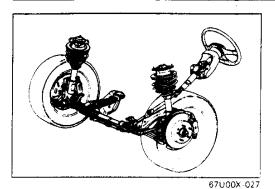
On vehicles equipped with limited-slip differential, API GL-5, SAE 90 special lubricant is required for limited-slip differentials.

#### INSPECTION OF DRIVE SHAFT DUST BOOTS

Check the dust boot on the drive shaft for cracks, damage, grease leakage, and a loose boot band.

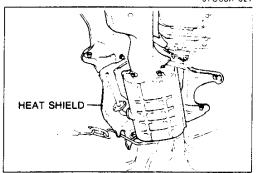


19G0AX-123



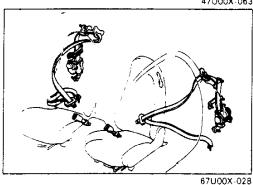
# TIGHTENING BOLTS AND NUTS ON CHASSIS AND BODY

- 1. Tighten all seat mounting bolts.
- 2. Retighten all loose nuts and bolts of front and rear suspensions to the specified torque. (Refer to Section 30)



## INSPECTION OF EXHAUST SYSTEM HEAT SHIELDS

- 1. Check the clearance between insulator and body, and also between the insulator and the exhaust system.
- 2. Visually inspect the pipes, hangers and connections for severe corrosion, leaks or damage.



47U00X-063

# INSPECTION OF SEAT BELTS, BUCKLES, RETRACTORS AND ANCHORS

- 1. Pull each seat belt to be sure it moves smoothly.
- 2. Check for scratches, tears, or wear of the webbing, and doe bent metal fittings.

#### Caution

- Do not disassemble the buckle or ELR assembly.
- 3. Check operation of retractors.
- 4. Check tightness of belt anchor bolts.