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#### SECTION 0

## GENERAL, SPECIAL TOOLS AND SERVICE MATERIALS

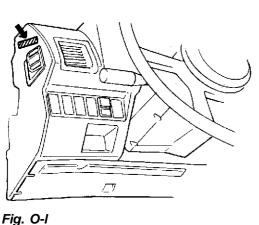
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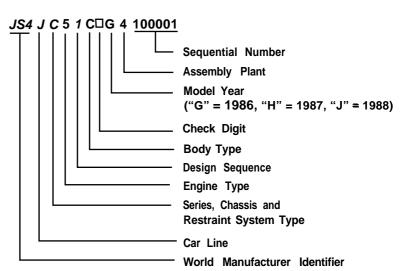
#### O-I. IDENTIFICATION NUMBER

#### VEHICLE IDENTIFICATION NUMBER

The vehicle identification number is on the instrument panel left side. Refer to below figure for detailed VIN cord information and its location.







#### **ENGINE IDENTIFICATION NUMBER**

The engine number is punched on the rear portion of the left-hand skirt part of cylinder block.

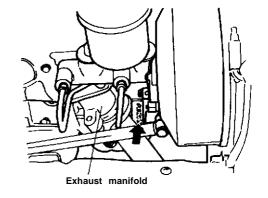


Fig. O-2 Location of Engine No.

#### O-2. STANDARD SHOP PRACTICES

- Protect painted surfaces of the body, and avoid staining or tearing seats. When working on fenders and seats, be sure to cover them up with sheets.
- Disconnect negative terminal connection of the battery when working on any electrical part or component. This is necessary for avoiding electrical shocks and short-circuiting, and is very simple to accomplish: merely loosen wing nut on negative terminal and separate cable from terminal post.
- 3. In raising front or rear car end off the floor by jacking, be sure to put the jack against differential portion of axle housing.

#### NOTE:

Don't get on the car, get under it or service it in this state.

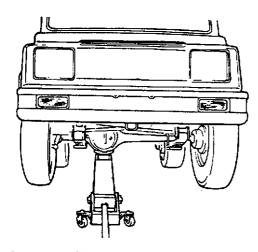


Fig. O-3 Front Side

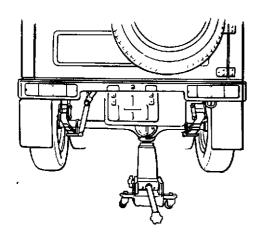


Fig. 0.4 Rear Side

4. To perform service with either front or rear car end jacked up, be sure to place safety stands under chassis frame so that body is securely supported. Refer to below figures for where to place safety stands. And then check to ensure that chassis frame does not slide on safety stands and the car is held stable for safety's sake.

#### **WARNING:**

Place chocks against both right and left wheels on the ground from both front and rear.

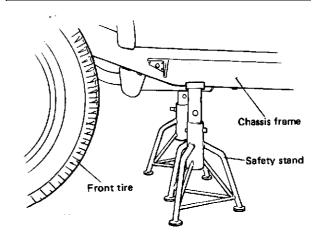


Fig. O-5 Front Side

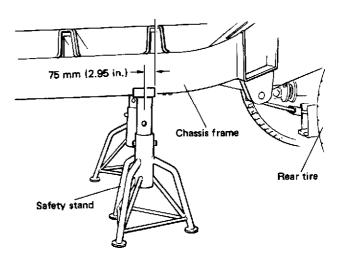


Fig. O-6 Rear Side

5. Fig. O-7 and O-8 show how to lift the car by using a hoist.

#### **WARNING:**

- When using frame contact hoist, apply hoist as shown below (right and left at the same position), Lift up the car till 4 tires are a little off the ground and make sure that the car will not fall off by trying to move car body in both ways. Work can be started only after this confirmation.
- Before applying hoist to underbody, always take car balance throughout service into consideration. Car balance on hoist may change depending of what part to be removed.
- For suspention parts removal, follow previous steps 3 and 4.
- Make absolutely sure to lock hoist after car is hoisted up.

When using frame contact hoist:

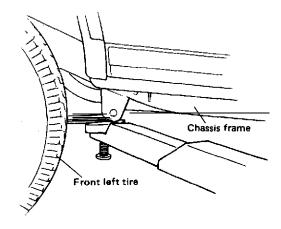


Fig. O-7 Front Support Location

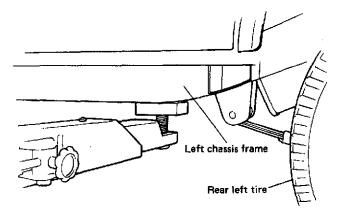


Fig. O-8 Rear Support Location

- 6. Orderliness is a key to successful overhauling. Trays, pans and shelves are needed to set aside disassembled parts in groups or sets in order to avoid confusion and misplacement. This is particularly important for engine overhauling.
- 7. Have on hand liquid packing-SUZUKI BOND No. 1215 (99000-31110) for ready use. This packing dope is an essential item to assure leak-free (water and oil) workmanship.
- 8. Each bolt must be put back to where it was taken from or for which it is intended. Do not depend on your hunch in tightening bolts for which tightening torque values are specified: be sure to use torque wrenches on those bolts.
- 9. It is advisable to discard and scrap gaskets and "0" rings removed in disassembly. Use new ones in reassembly, and try not to econimize gaskets and "0" rings.
- 10. Use of genuine SUZUKI parts is imperative. Use of imitation parts is a big gamble on safety and performance. Use genuine SUZUKI parts and live up to the trust your customer places on you.
- 11. Special tools save time and ensure good workmanship: They are available from SUZUKI. Use them where their use is specified. Moreover, your own safety is assured by the use of special tools in many of the disassembly and reassembly steps.

12. Refer to the contents of this MANUAL as often as practical, and do each job properly as prescribed.

#### NOTE:

Engine cylinders are identified by numbers. See Fig. O-9. Counting from the front end, the cylinders are referred to as No. 1, No. 2, No. 3 and No. 4 cylinders.

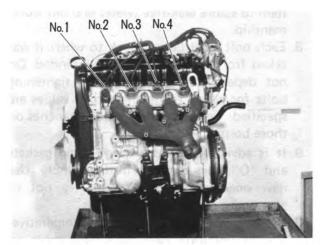
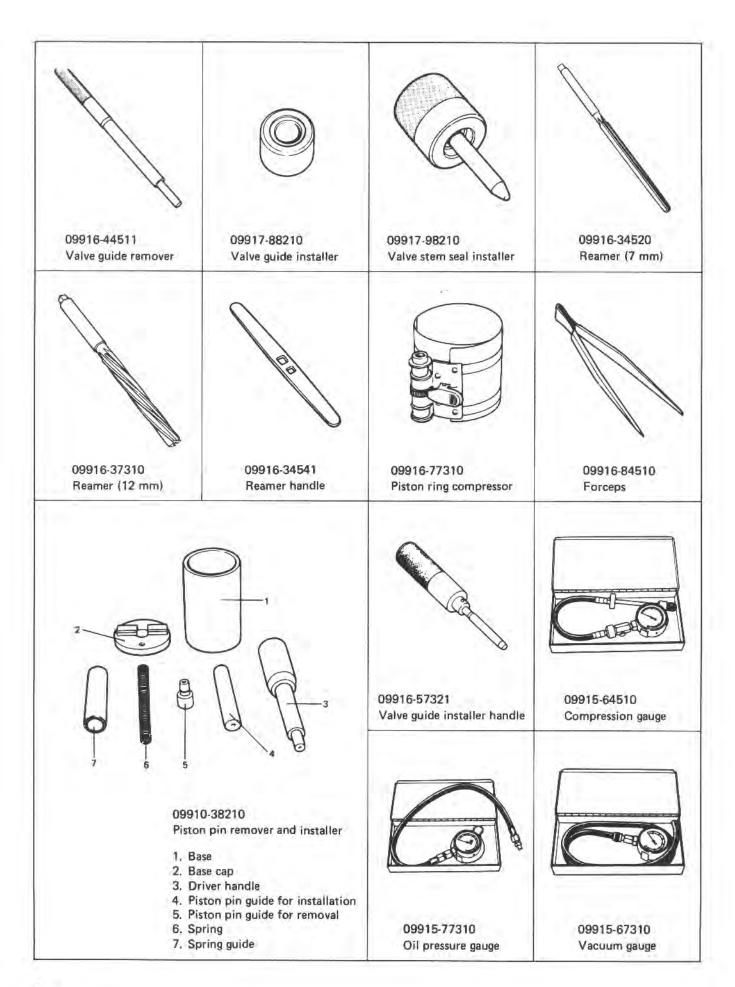


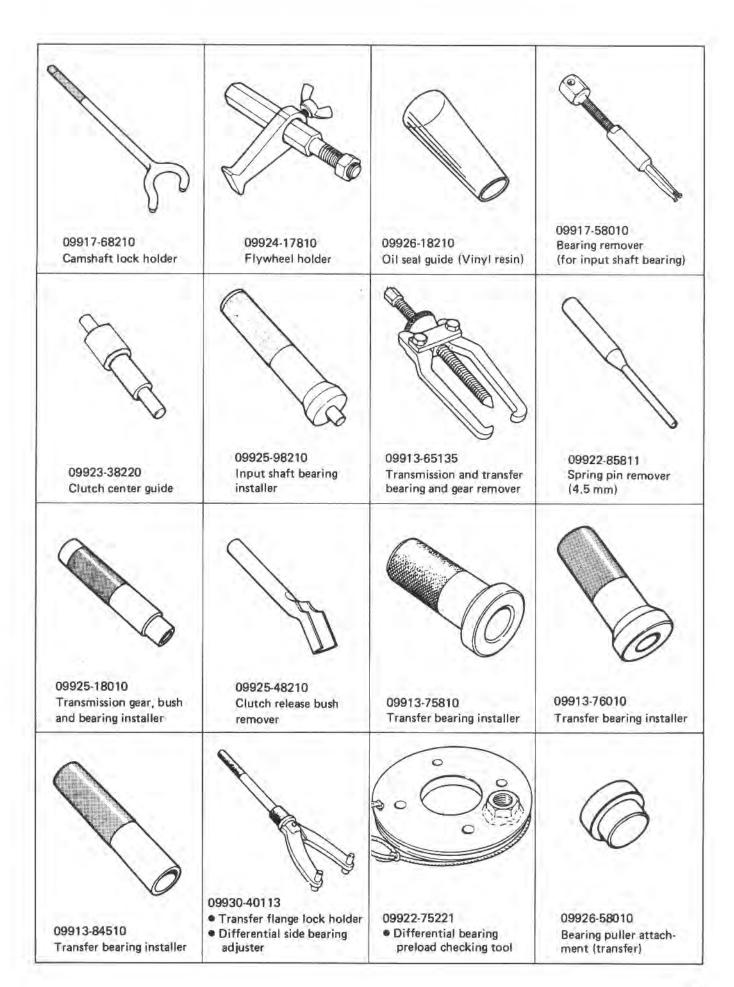
Fig. O-9 Engine Cylinder Numbers

#### O-3. SPECIAL TOOLS

Special tools assure three things: 1) improved workmanship; 2) speedy execution of jobs for which they are meant; and 3) protection of parts and components against damage. Here are the special tools prescribed for this Model:









09913-85230 Differential side bearing remover jig



09926-78310 Differential bevel pinion mounting dummy



09940-53111 Differential side bearing installer



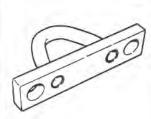
09924-74510 Bearing installer attachment



09926-68310 Differential pinion bearing installer



09942-15510 Sliding hammer



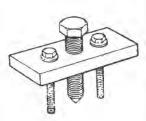
09922-66010 Rear axle shaft remover



09943-35511 Brake drum remover



09941-58010 50 mm socket wrench



09944-36010 Steering wheel remover



09913-65210 Tie-rod end remover



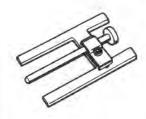
09917-47910 Vacuum pump gauge



09950-78210 Flare nut wrench (10 mm)



09950-88210 Booster overhaul tool set



09950-98210 Booster piston rod gauge



No. 1 09951-08210



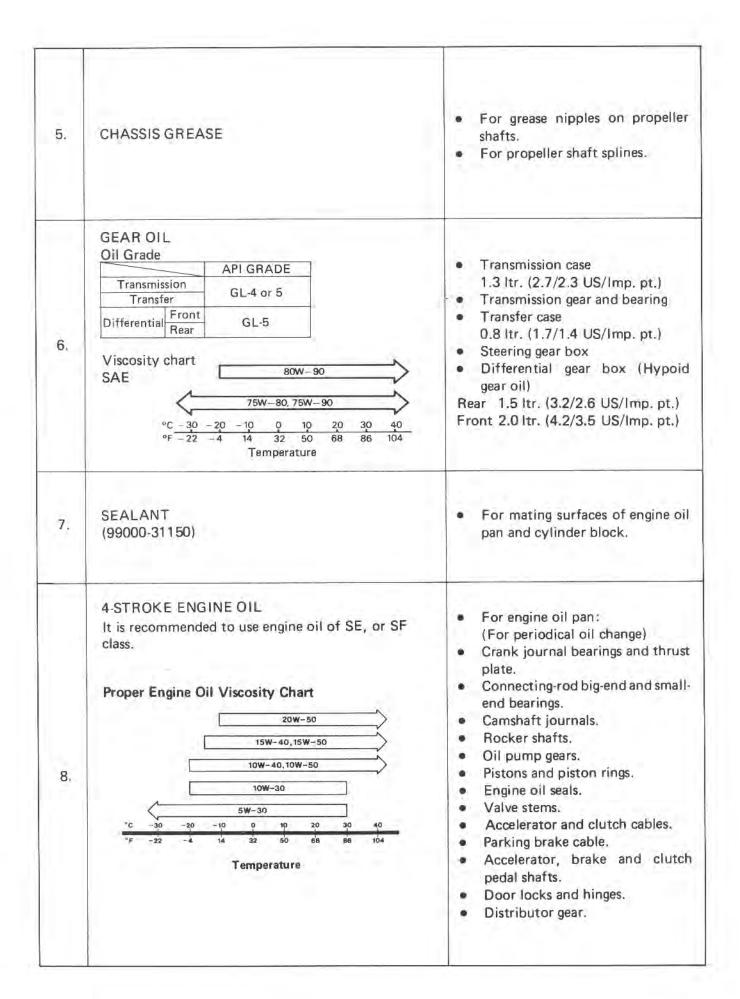
No. 2 09951-18210

Booster No. 2 body Oil seal remover & Installer No. 1, No. 2

#### 0-4. REQUIRED SERVICE MATERIALS

The materials listed below are needed for maintenance work on these cars, and should be kept on hand for ready use. In addition, such standard materials as cleaning fluids, lubricants, etc., should also be available. Methods and time of use are discussed in the text of this manual on later pages.

Ref. No.	Material	Ť	Use
1.	SUZUKI GOLDEN CRUISER 1200 "Anti-freeze/Anti-corrosion Coolant"	1 <del>-</del> 0	Additive to engine cooling system for improving cooling efficiency and for protection of wet walls against rusting.
2.	SUZUKI SUPER GREASE A (99000-25010)		<ul> <li>For locations indicated in the section dealing with the starter motor.</li> <li>Clutch release bearing retainer.</li> <li>Clutch release shaft bushing.</li> <li>Transmission oil seal.</li> <li>Differential oil seal.</li> <li>Wheel bearings.</li> <li>Gear shifting control lever bushing &amp; seat.</li> <li>Door window regulators.</li> <li>For other locations specifically indicated in the text of this manual.</li> </ul>
3.	SUZUKI GREASE SUPER H (99000-25120)	Submit Summer of a state of the summer of th	Special grease intended for use on constant velocity joints.
4.	SUZUKI BOND NO. 1215 (99000-31110)	A STATE OF THE PARTY OF THE PAR	<ul> <li>For top and bottom mating faces of transmission case.</li> <li>For other locations specifically indicated in the text of this manual.</li> </ul>



9.	SEALING COMPOUND "CEMEDINE" 366E (Water tight sealant) (99000-31090) 180 ml	<ul> <li>King pin shim face,</li> <li>For steering knuckle (rear axle housing) and brake packing plate mating surface.</li> <li>For other locations specifically indicated in the text of this manual.</li> </ul>
10.	THREAD LOCK CEMENT SUPER 1333B (99000-32020)	<ul> <li>Transmission reverse gear shift rim bolt.</li> <li>Gear shift lever locating bolt.</li> <li>Differential drive bevel gear bolt.</li> </ul>
11.	BRAKE FLUID "DOT3"	<ul> <li>To fill master cylinder reservoir.</li> <li>To clean and apply to inner parts of master cylinder, caliper and wheel cylinder when they are disassembled.</li> </ul>
12.	SILICONE GREASE (Furnished in repair kit)	<ul> <li>To apply to brake booster inner parts where application is inst- ructed in this manual.</li> </ul>
13.	THREAD LOCK CEMENT "1342" (99000-32050)	• King pin bolt
14.	SUZUKI SUPER GREASE I (99000-25210)	Transmission input shaft

#### O-5. METRIC INFORMATION

#### **METRIC FASTENERS**

Most of the fasteners used for this vehicle are metric. When replacing any fasteners, it is most important that replacement fasteners be the correct diameter, thread pitch and strength.

#### **FASTENER STRENGTH IDENTIFICATION**

Most commonly used metric fastener strength property classes are 4T, 7T and radial line with the class identification embossed on the head of each bolt. Some metric nuts will be marked with punch mark strength identification on the nut face. Fig. 0-10 shows the different strength markings.

When replacing metric fasteners, be careful to use bolts and nuts of the same strength or greater than the original fasteners (the same number marking or higher). It is likewise important to select replacement fasteners of the correct size. Correct replacement bolts and nuts are available through the parts department.

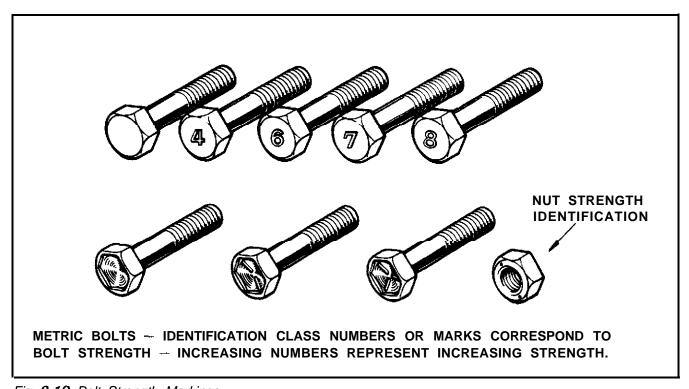


Fig. 0-10 Bolt Strength Markings

#### STANDARD TIGHTENING TORQUE

Each fastener should be tightened to the torque specified in each section of this manual. If no description or specification is provided, refer to the following tightening torque chart for the applicable torque for each fastener. When a fastener of greater strength than the original one is used, however, use the torque specified for the original fastener.

#### NOTE:

- For the flanged bolt and nut, add 10% to the tightening torque given in the below chart
- The below chart is applicable only where the fastened parts are made of steel or light alloy.

THREAD DIAMETER	Conv	ventional bolt "47	"" bolt		"7T" bolt	
(mm)	N⋅m	kg-m	lb-ft	N-m	kg-m	lb-ft
4	1 – 2	0.1 - 0.2	0.7 - 1.0	1.5 - 3.0	0.15 - 0.30	1.5 - 2.0
5	2 – 4	0.2 - 0.4	1.5 - 3.0	3 – 6	0.3 - 0.6	2.5 - 4.0
6	4 – 7	0.4 - 0.7	3.0 - 5.0	8 – 12	0.8 - 1.2	6.0 - 8.5
8	10 – 16	1.0 - 1.6	7.5 – 11.5	18 – 28	1.8 - 2.8	13.5 - 20.0
10	22 - 35	2.2 - 3.5	16.0 - 25.0	40 - 60	4.0 - 6.0	29.0 - 43.0
12	35 – 55	3.5 - 5.5	25.5 - 39.5	70 – 100	7.0 - 10.0	51.0 - 72.0
14	50 - 80	5.0 - 8.0	36.5 - 57.5	110 - 160	11.0 - 16.0	80.0 - 115.5
16	80 - 130	8.0 - 13.0	58.0 - 94.0	170 - 250	17.0 - 25.0	123.0 - 180.5
18	130 - 190	13.0 - 19.0	94.5 — 137.0	200 - 280	20.0 - 28.0	145.0 - 202.5

Fig. 0-11 Tightening Torque Chart

#### 1

### **SECTION 1**

## PERIODIC MAINTENANCE SERVICE

#### **CONTENTS**

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1-2.	ENGINE AND EMISSION CONTROL	1-5
1-3.	CHASSIS AND BODY	1-17

# 1-1. MAINTENANCE SCHEDULE

NOTE: (For U.S.A. specification vehicle)

The "CHECK ENGINE" light in the combination meter flashes or lights at the mileage of 50,000, 80,000 and 100,000 miles each of which is detected by the mileage sensor. Upon completion of maintenance service of the following items required for each mileage, be sure to turn off the "CHECK ENGINE" light cancel switch, referring to SECTION 5 of this manual. Then the mileage sensor will be reset.

Interval:	miles (x 1,000)	7.5	15	22.5	30	37.5	45	52.5	09	67.5	75	82.5	06	97.5	105	112.5	120
This interval should be judged by odometer reading or months.	km (x 1,000)	12	24	36	48	09	72	84	96	108	120	132	144	156	168	180	192
whichever comes first.	months	9	12	18	24	30	36	42	48	54	09	99	72	78	84	90	96
ENGINE & EMISSION CONTROL												ij					
1. Fan (Water pump) drive belt		Ţ	1	Ī	_	1	1	1	œ	Ţ	I	1	T	1	1	I	Œ
2. Camshaft timing belt		1	Ţ	1	1	1	1	j	-	1	1	1	-	1	1	1	=
3. Valve lash (clearance)		1	-	Ţ.	-	1	-	1	-	Ī	-	1	-	I	-	T	-
4. Engine oil and oil filter		œ	æ	æ	œ	œ	æ	æ	œ	œ	æ	æ	æ	œ	æ	Œ	æ
5. Cooling system hoses and connections	ections	1	ĵ	Į	[1]]**	ŧ	1	1	-	1	j	ď,		1	1	1	=
6. Engine coolant		1	J	1	**R[R]	į	ŧ	1	œ	)	1	ï	æ	)	1	t	œ
7. Exhaust pipes and mountings		1	Ì	1	[=] <sub>**</sub>	1	1	1	18(R)	1	1	1	-	Ţ	1	Ţ	18(R)
8. PCV valve		Re	Replace at	t 50,0	00 mi	50,000 miles (80,000 km) and 100,000 miles (160,000 km)	000'0	km) a	nd 100	0000'0	niles	160,0	00 km	-			
9. Oxygen sensor		Rei	olace a	Replace at 80,000 miles (128,000 km) [Replace every 50,000 miles (80,000 km)]	00 mi	les (12	38,000	(my)	[Repla	ace eve	ry 50	000 rr	iles (8	30,000	0 km)		
10. Catalytic converter		Ins	pect a	Inspect at 100,000 miles (160,000 km)	000 m	iles (1	60,00	0 km)									
11. Charcoal canister		Rei	olace a	Replace at 100,000 miles (160,000 km)	000 m	illes (1	90,09	30 km									
12. Emission-related hoses & tubes		1	Ī	1	1	į	I	1	-	1	I	1	4	Ī	1	Ţ	3
13. EGR system		Ins	pect at	Inspect at 50,000 miles (80,000 km) and 100,000 miles (160,000 km)	JO mil	es (80	,000	cm) an	d 100	,000 m	iles (	160,00	00 km	_			
14. ECM & associated sensors		Ins	pect a	Inspect at 100,000 miles (160,000 km)	000 m	iles (1	00'09	0 km)									
15. Wiring harness and connections	ž.	1	Ţ	į	j	t	Ţ	1	-	A	I	1	1.	1	Ţ	1	-
16. Spark plugs		ł	1	ĺ	œ	1	Ţ	Ţ	œ	1	1	Ţ	œ	ŀ	1	)	œ
17. Distributor cap and rotor		ı	İ	ľ	Ĭ	(1)	i	t	-	1	1	ţ	T	1	Ĺ	į.	-
18. Ignition wiring		1	1	1	1	j	1	1	œ	)	Ĭ	1	1	1	1	1	æ
19. Ignition timing		ŀ	ſ	1	Ţ	ŀ	1	Ţ	=	Đ	1	)	1	3	1	U	-
20. Distributor advance		1	j	1	1	1	Ī	1	-	1	1	1	1	Ī	E	Ţ	=

# NOTES:

"\": Inspect and correct or replace if necessary "R": Replace or change

"T": Tighten to the specified torque "L": Lubricate

[ ]: Applicable to Canadian specification vehicle.
 Item 7 (R) is applicable to the exhaust mounting rubber only.
 Ifor U.S.A. specification vehicle) Item 5 \*\*I, Item 6 \*\*R and Item 7 \*\*I are recommended maintenance items.
 Ifor Canadian specification vehicle) Item 13 is recommended item.

Interval:	miles (x 1,000)	7.5	15	22.5	30	37.5	45	52.5	09	67.5	75	82.5	90	97.5	105	112.5	120
Inis interval should be judged by odometer reading or months	km (x 1,000)	12	24	36	48	09	72	84	96	108	120	132	144	156	168	180	192
whichever comes first.	months	9	12	18	24	30	36	42	48	54	09	99	72	78	84	90	96
21. Fuel tank cap		J	1	1	**[[]]	1	Ĭ.	1	æ	1	1	1	1	Ĩ	Ţ	1	œ
22. Air cleaner filter element		T	1	1	æ	T.	F	E	œ	1	T	Y	œ	1	1	1	œ
23. Thermostatically controlled air cleaner sys	cleaner system	Ĭ	1	1	=	1	ī	1	-	1	1	Ĩ	-	1	J	ſ	-
24. Choke system		1	1	1	18L	4	ĵ	1	I&L	4	1	1	I&L	F	1	1	I&L
25. Fuel filter		i	1.	Ī	**R[R]	ī	1	Ť	æ	r	1	1	æ	1	1	í	œ
26. Fuel lines and connections		Í	Ţ	1	*[[]]	1	ŀ	1	œ	1	1	1	-	į	ſ	ì	œ
*27. Idle speed		1	1	1	-	1	-	1	-	1	-	1	_	1	-	Ţ	-
28. Idle mixture		1	Ĩ	ì	1	1	ī	1	-	1	ì	ï	1	Ţ	ï	1	-
29. Carburetor	171	Ins	Inspect at	100,000	000 m	miles (1)	(160,000 km	) km)									
CHASSIS AND BODY																	
30. Clutch		1	-	1	_	ì	-	ī	-	1	-	1	=	T	-	1	-
31. Brake discs and pads (front)		Ĭ	-	1	-	Ĭ	-	î	-	1	-	1	-	ЭĽ	-	1	-
32. Brake hoses and pipes		τ	-	E	-	1	-	1	-	1	-	1	-	Ţ	-	T	-
33, Brake fluid		J.	-	1	-	Ĭ	-	1	œ	1.	=	J	-	1	_	1	Œ
34. Brake pedal		j	-	L	-	1	-	1	_		-	ī	-	T	-	1	-
35. Brake lever and cable		1	Ξ	1	_	1	-	f	-	1	-	1	-	1	-	1	-
36. Tires		-	-	_	-	=	-	_	_	-	-	_	_	=	-	_	-
37. Wheel discs and free wheeling hubs (if equipped)	ubs (if equipped)	1	-	-	-	-	=	-	_	-	-	-	_	-	-	-	-
38. Steering knuckle oil seals		Í	1	œ	1	1	æ	1	Ī	m	1	1	æ	1	1	В	1
39. Wheel bearings		1	-	1	*	ī	-	ıt	*	1	-	1	*	1	-	1	*
40. Shock absorbers		-	-	T.	-	t	-	1	_	1	-	i	-	1	-	1	-
41. Propeller shafts		Í	I&L	).	I&L	1	I&L	1	I&L	1	I&L	1	18L	j	I&L	1	I&L
42. Transmission, transfer and differential oil	rential oil	8	-	_	æ	_	-	_	œ	_	-	_	æ	3	-	_	œ
43. Leaf springs		1	t	1	-	9	1	1	-	1	1:	i	_	İ	1	1	-
44. Bolts and nuts		_	_	ì	-	1	-	1	Н	ï	Н	1	F	1	-	ī	-
45. Steering system		-	1	1	1	I	1	1	_	_	4	-	-	-	-	_	-
46. Door hinges		1	_	_	-	-	_	-	_				-	-	-	- 0	÷

# NOTES:

"I": Inspect and correct or replace if necessary "T": Tighten to the specified torque "R": Replace or change

 [ ]: Applicable to Canadian specification vehicle.
 (For U.S.A. specification vehicle) I tem 21 \*\*I, I tem 25 \*\*R and I tem 26 \*\*I are recommended maintenance items.

Item 26 R is applicable to the fuel hose and clamp only.
Item \*27 is recommended maintenance item.
Item 39 \*! is applicable to not only rattled wear but also their grease.

#### MAINTENANCE RECOMMENDED UNDER SEVERE DRIVING CONDITIONS

If the car is usually used under the conditions corresponding to any severe condition code given below, it is recommended that applicable maintenance operation be performed at the particular interval as given in the below chart.

Severe condition code

A -Towing a trailer

B - Repeated short trips

C — Driving on rough and/or muddy roads

D - Driving on dusty roads

E — Driving in extremely cold weather and/or salted roads

F - Repeated short trips in extremely cold weather

Severe Condition Code	Maintenance	Maintenance Operation	Maintenance Interval
A D E F	Engine oil and oil filter	· R	Every 3 750 miles (6 000 km) or 3 months
A B C - E -	Exhaust pipes and mountings	Ι	Every 7 500 miles (12 000 km) or 6 months
D	Air cleaner filter element * 1	Ι	Every 3 750 miles (6 000 km) or 3 months
D	All cleaner litter element " I	R	Every 15 000 miles (24 000 km) or 12 months
E -	Choke system (Carburetor shafts)	1 & L	Every 7 500 miles (12 000 km) or 6 months
E -	Distributor cap and Ignition wiring *2	I	Every 15 000 miles (24 000 km) or 12 months
A B C D	Brake discs and pads (Front) Brake drums and shoes (Rear)	1	Every 7 500 miles ( 12 000 km) or 6 months
A B C	Propeller shafts	I&L	Every 7 500 miles (12 000 km) or 6 months
A - C	Transmission, transfer and differential oil	R	Every 15 000 miles (24 000 km) or 12 months After first replacement at 7 500 miles (12 000 km)
C	Leaf springs	I	Every 15 000 miles (24 000 km) or 12 months
C	Bolts and nuts on chassis	Т	Every 7 500 miles (12 000 km) or 6 months
C	Steering wheel free play, gear box oil and linkage	I	Every 3 750 miles (6 000 km) or 3 months
C-E-	Steering knuckle oil seals	R	Every 15 000 miles (24 000 km) or 12 months

#### **MOTES:**

T - Tighten to the specified torque

R - Replace or change

L - Lubricate

<sup>\*1</sup> Inspect more frequently if the vehicle is used under dusty conditions.

<sup>\*2</sup> In areas where road salt is used, inspect and clean the distributor cap and ignition wiring more frequently.

#### 1-2. ENGINE AND EMISSION CONTROL

## 1. WATER PUMP BELT INSPECTION AND REPLACEMENT

#### WARNING:

All inspection and replacement are to be performed with ENGINE NOT RUNNING.

#### [INSPECTION]

- 1) Disconnect negative battery lead at battery.
- 2) Inspect belt for cracks, cuts, deformation, wear and cleanliness. If any defect, replace. Check belt for tension. The belt is in' proper tension if it deflects 6 to 9 mm (0.24 0.35 in.) under thumb pressure (about 10 kg or 22 lb.).

Belt tension specification

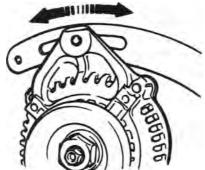
6 - 9 mm (0.24 - 0.35 in.) as deflection

Water pump pulley

10 kg (22 lbs)

 If the belt is too tight or too loose, adjust it to specification by adjusting alternator position.

ankshaft



- 4) Tighten alternator adjusting bolt and pivot bolts.
- 5) Connect negative battery lead to battery.

#### [REPLACEMENT]

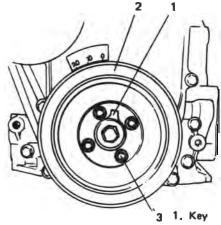
- 1) Disconnect negative battery lead at battery.
- 2) Loosen alternator adjusting bolt and pivot bolts.
- 3) Replace water pump belt.
- 4) Adjust belt tension to specification and tighten alternator adjusting bolt and pivot bolts.
- 5) Connect negative battery lead to battery.

#### 2. CAMSHAFT TIMING BELT INSPECTION

- 1) Disconnect negative battery lead at battery.
- 2) Loosen fan drive belt, and remove 4 bolts securing radiator shroud panel and 4 nuts securing engine cooling fan & clutch. Then remove radiator shroud and cooling fan & clutch at the same time.



- 3) Remove water pump belt and pump pulley.
- 4) Remove crankshaft pulley by removing 4 pulley bolts. The crankshaft timing belt pulley bolt at the center need not be loosened.



- 2. Crankshaft pulley
- 3. Pulley bolt