

SECTION 1

PERIODIC MAINTENANCE SERVICE

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1-1. MAINTENANCE SCHEDULE

Interval: This interval should be judged by odometer reading or months, whichever comes first.		This table includes services as scheduled up to 80,000 km (48,000 miles) mileage. Beyond 80,000 km (48,000 miles), carry out the same services at the same intervals respectively.									
		km (x 1,000)	1	10	20	30	40	50	60	70	80
		miles (x 1,000)	1	6	12	18	24	30	36	42	48
		months	1	6	12	18	24	30	36	42	48
ENGINE											
1. Water pump (fan) drive belt (tension, damage)		I	-	I	-	R	-	I	-	R	
*2. Camshaft timing belt		-	-	-	-	I	-	-	-	I	
3. Valve lash (clearance)		I	-	I	-	I	-	I	-	I	
4. Engine bolts (All cylinder head and manifold fixings)		-	-	-	-	T	-	-	-	T	
5. Engine oil filter		R	R	R	R	R	R	R	R	R	
6. Engine oil	API Grade SD, SE or SF	R	Replace every 10,000 km (6,000 miles)								
	API Grade SC	R	Replace every 5,000 km (3,000 miles)								
7. Engine coolant		-	-	-	-	R	-	-	-	R	
8. Cooling system hoses and connections		-	-	I	-	I	-	I	-	I	
9. Exhaust pipes and mountings (leakage, damage, tightness)		-	-	I	-	I	-	I	-	I	
IGNITION											
10. Ignition wiring (high tension cords)		-	-	I	-	I	-	I	-	I	
11. Distributor cap and rotor (crack, wear)		-	-	I	-	I	-	I	-	I	
12. Spark plugs		-	R	R	R	R	R	R	R	R	
13. Ignition timing		I	I	I	I	I	I	I	I	I	
14. Distributor advance		-	-	I	-	I	-	I	-	I	
FUEL SYSTEM											
15. Air cleaner filter element	Paved-road	Clean every 10,000 km (6,000 miles)									
	Dusty condition	Clean every 2,500 km (1,500 miles) or as required Replace every 40,000 km (24,000 miles) More frequent replacement if under dusty driving conditions.									
16. Carburetor choke system		-	I&L	I&L	I&L	I&L	I&L	I&L	I&L	I&L	
17. Fuel tank cap, gas lines and connections		I	-	-	-	I	-	-	-	I	
18. Fuel filter		-	-	-	-	R	-	-	-	R	
19. Idle speed and idle mixture		I	-	I	-	I	-	I	-	I	

*Item 2 is applicable to the car whose owner's manual specifies to inspect about this item in its periodic maintenance schedule.

Interval. This interval should be judged by odometer reading or months, whichever comes first.	This table includes services as scheduled up to 80,000 km (48,000 miles) mileage. Beyond 80,000 km (48,000 miles), carry out the same services at the same intervals respectively.									
	km (x 1,000)	1	10	20	30	40	50	60	70	80
	miles (x 1,000)	1	6	12	18	24	30	36	42	48
	months	1	6	12	18	24	30	36	42	48
EMISSION CONTROL SYSTEM										
20. Crankcase ventilation hoses and connections	-	-	I	-	I	-	I	-	I	
*21. PCV valve	-	-	-	-	I	-	-	-	I	
22. Fuel vapor storage system, hoses and connections	-	-	I	-	I	-	I	-	I	
ELECTRICAL										
23. Wiring harness connections and headlights	-	-	I	-	I	-	I	-	I	
CHASSIS AND BODY										
24. Clutch pedal (travel and height)	I	I	I	I	I	I	I	I	I	I
25. Brake discs and pads (wear, damage) Brake drums and shoes (wear, damage)	-	I	I	I	I	I	I	I	I	I
26. Brake hoses and pipes (leakage, damage, clamp)	-	I	I	I	I	I	I	I	I	I
27. Brake fluid	I	I	I	I	R	I	I	I	I	R
28. Brake pedal	I	I	I	I	I	I	I	I	I	I
29. Brake lever and cable	I	I	I	I	I	I	I	I	I	I
30. Tires (abnormal wear and pressure)	-	I	I	I	I	I	I	I	I	I
31. Wheels, wheel nuts [and free wheeling hubs (Optional parts)]	I	I	I	I	I	I	I	I	I	I
32. Shock absorbers	I	I	I	I	I	I	I	I	I	I
33. Propeller shafts	-	-	I&L	-	I&L	-	I&L	-	I&L	
34. Transmission, (transfer) and differential oil (leakage, level)	R	I	I	I	R	I	I	I	I	R
*35. Axle hub oil seals	-	R	R	R	R	R	R	R	R	R
36. Suspension (Tightness, damage, rattle)	T	-	T	-	T	-	T	-	T	
37. Steering condition (Tightness, damage, breakage, rattle)	I	I	I	I	I	I	I	I	I	I
38. Test drive	Test drive on completion of each service									

* Item 21 is applicable to the car equipped with a PCV valve on the intake manifold.

* Item 35 is applicable to the car driven under severe conditions (off-road or muddy conditions).

NOTE:

"R" : Replace or Change

"I" : Inspect and correct or replace if necessary

"T" : Tighten to the specified torque

"L" : Lubricate

1-2. ENGINE

1. WATER PUMP BELT INSPECTION

- 1) Disconnect negative battery lead at battery.
- 2) Inspect belt for cracks, cuts, deformation, wear and cleanliness. 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
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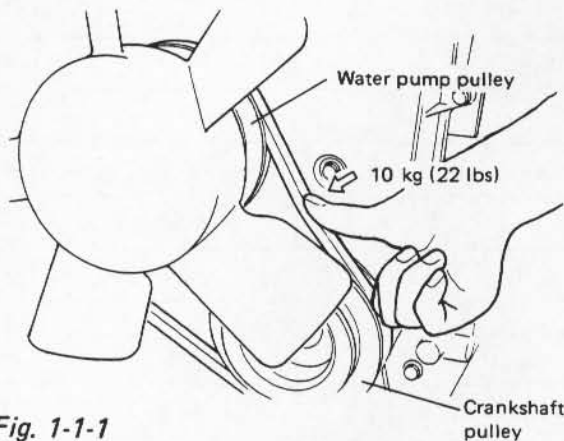


Fig. 1-1-1

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

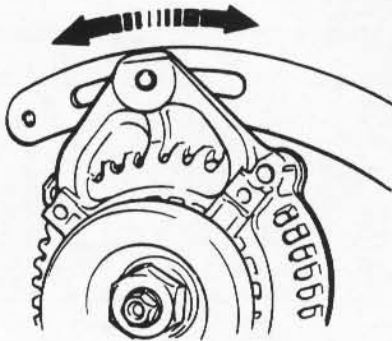


Fig. 1-1-2

- 4) Tighten alternator adjusting bolt and pivot bolt.
- 5) If belt replacement is necessary, refer to p. 6-5 of SECTION 6 for the procedure.
- 6) Connect negative battery lead to battery.

WARNING:

All adjustments noted above are to be performed with ENGINE NOT RUNNING.

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. Then remove radiator shroud and cooling fan at the same time.

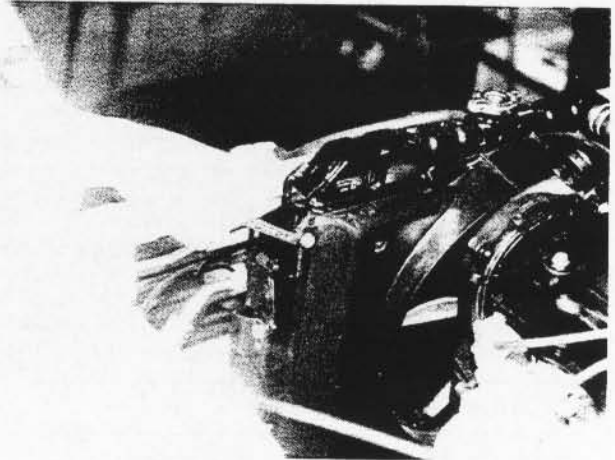


Fig. 1-2-1

- 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.

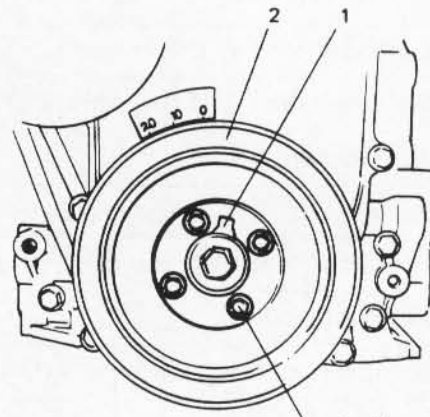


Fig. 1-2-2

1. Key
2. Crankshaft pulley
3. Pulley bolt

5) Remove timing belt outside cover. Inspect the belt for damage or wear. When any damage or wear is found on the belt, replace it.

If belt replacement is necessary, be sure to install the belt properly, referring to p. 3-48 to p. 3-51 for installation procedure.

Tighten each bolt and nut to specified torque.

6) Install timing belt outside cover and torque bolts and nut to specification. (Refer to p. 3-58 for torque data.)

7) Install crankshaft pulley and torque bolts to specification. (Refer to p. 3-58 for torque data.)

8) Install water pump pulley and belt.

9) Install radiator shroud and cooling fan.

10) Adjust water pump belt tension to specification. (Refer to p. 1-4.)

11) Connect negative battery lead to battery.

3. VALVE LASH INSPECTION

1) Remove cylinder head cover.

2) Inspect intake and exhaust valve lash and adjust as necessary.

Valve lash (gap A) specification		When cold (Coolant temperature is 15 – 25°C or 59 – 77°F)	When hot (Coolant temperature is 60 – 68°C or 140 – 154°F)
		Intake	0.13 - 0.17 mm (0.0051 - 0.0067 in)
Exhaust		0.16 - 0.20 mm (0.0063 - 0.0079 in)	0.26 - 0.30 mm (0.0102 - 0.0118 in)

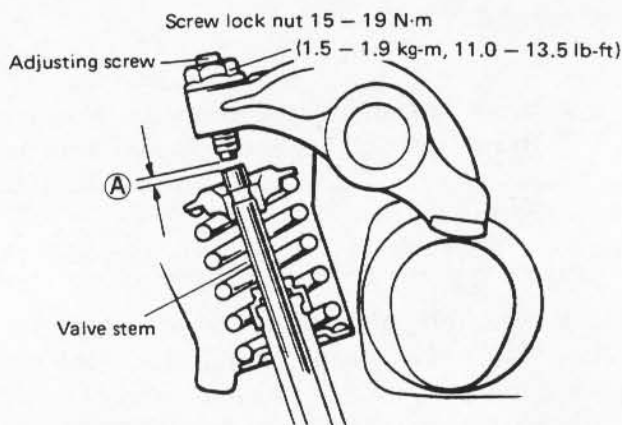


Fig. 1-3-1

3) Refer to 3-53 of SECTION 3 for valve lash inspection and adjustment procedures.

4) Install cylinder head cover and tighten bolts to specification. (Refer to item 4)

4. ENGINE BOLTS (ALL CYLINDER HEAD AND MANIFOLD FIXINGS)

1) To check cylinder head bolts, head cover must be removed. The tightening torque for the cylinder head bolts is as follows.

Tightening torque for cylinder head bolts	N-m	kg-m	lb-ft
	63-70	6.3-7.0	46.0-50.5

2) When securing cylinder head or when retightening these bolts, torque each bolt in such a way as to equalize the pressure throughout gasketed surface. The tightening sequence is as shown below.

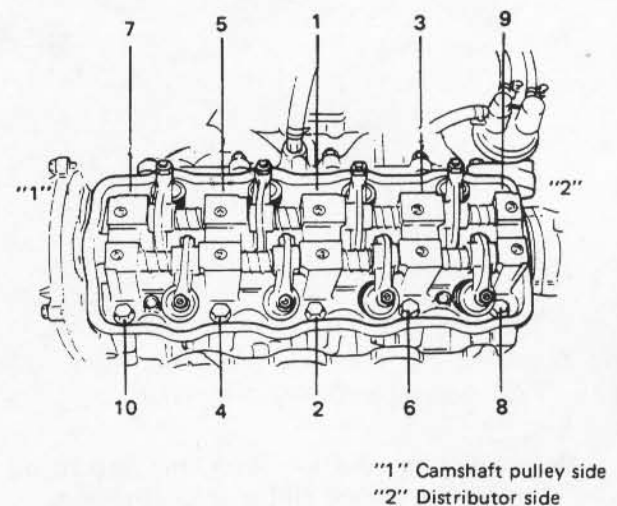


Fig. 1-4-1 Tightening Sequence of Cylinder Head Bolts

3) Cylinder-head cover bolt should be tightened to the following torque:

Tightening torque for cylinder head cover bolts	N-m	kg-m	lb-ft
	4 - 5	0.4 - 0.5	3.0 - 3.5

- 4) Check the intake and exhaust manifold nuts for tightness and retighten them as necessary.

Tightening torque

Exhaust manifold nut	N·m	kg·m	lb·ft
	18-28	1.8-2.8	13.5-20.0
Intake manifold nut	18-28	1.8-2.8	13.5-20.0

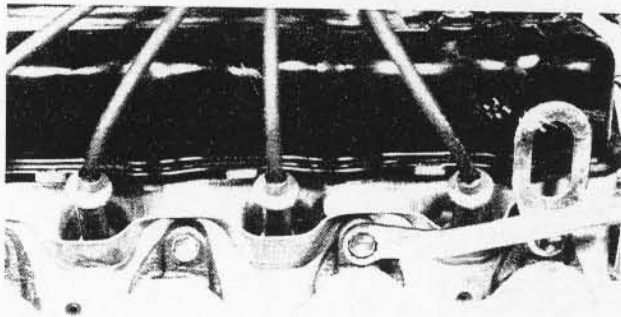


Fig. 1-4-2

5. ENGINE OIL FILTER CHANGE

- 1) Loosen oil filter by using oil filter wrench "A" (special tool 09915-47310).

NOTE:

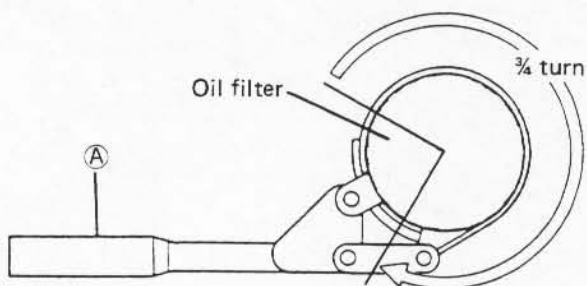
Before fitting new oil filter, be sure to oil its "O" ring. Use engine oil for this purpose.

- 2) Screw new filter on oil filter stand by hand until the filter "O" ring contacts the mounting surface.

CAUTION:

To tighten the oil filter properly, it is important to accurately identify the position at which the filter "O" ring first contacts the mounting surface.

- 3) Tighten the filter $\frac{3}{4}$ turn from the point of contact with the mounting surface using an oil filter wrench (A).



Oil filter wrench (A) (09915-47310)

CAUTION:

To prevent oil leakage, make sure that the oil filter is tight, but do not overtighten it.

- 4) After installing oil filter, start engine and check oil filter for oil leakage.

6. ENGINE OIL CHANGE

Before draining engine oil, check engine for oil leakage. If any evidence of leakage is found, make sure to correct defective part before proceeding to the following work.

- 1) Drain engine oil by removing drain plug.

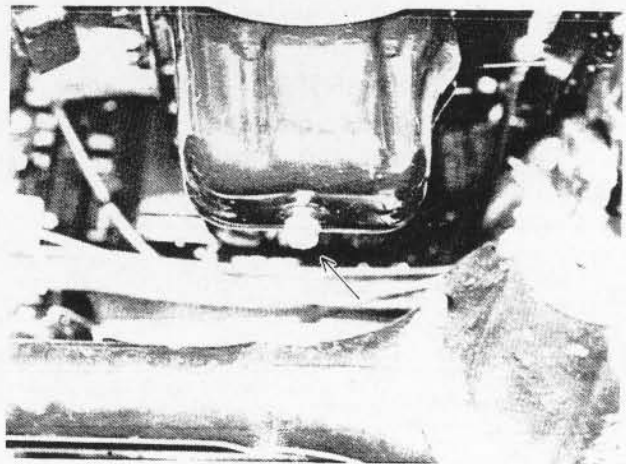


Fig. 1-6-1

- 2) After draining oil, wipe drain plug clean. Reinstall drain plug, and tighten it securely.

Tightening torque for oil drain plug	N·m	kg·m	lb·ft
	30-40	3.0-4.0	22.0-28.5

- 3) Replenish oil until oil level is brought to FULL level mark on dipstick. (about 3.5 liters or 7.4/6.2 US/Imp pt.). The filler inlet is atop the cylinder head cover.
- 4) Start engine and run it for three minutes. Stop engine and wait another three minutes before checking oil level. Add oil, as necessary, to bring oil level to FULL level mark on dipstick.

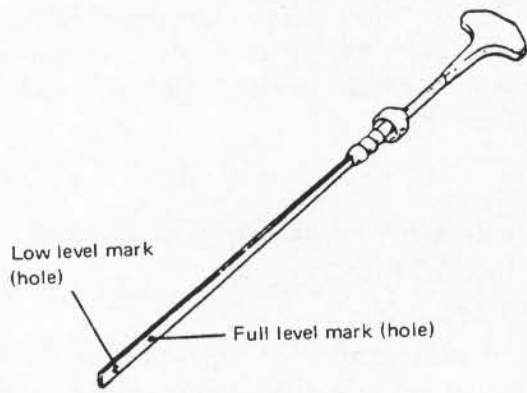


Fig. 1-6-2

NOTE:

Steps 1) – 3) outlined above must be performed with **ENGINE NOT RUNNING**. For step 4), be sure to have adequate ventilation while engine is running.

It is recommended to use engine oil of SD, SE or SF class.

Proper Engine Oil Viscosity Chart

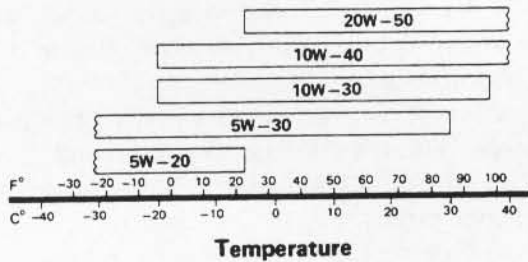


Fig. 1-6-3 Engine Oil Viscosity Chart

Engine oil capacity

Oil pan capacity	3.5 liters (7.4/6.2 US/Imp pt.)
Oil filter capacity	0.2 liters (0.4/0.3 US/Imp pt.)
Others	0.3 liters (0.6/0.5 US/Imp pt.)
Total	4.0 liters (8.4/7.0 US/Imp pt.)

7. ENGINE COOLANT CHANGE

WARNING:

To help avoid danger of being burned, do not remove radiator cap while engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure if the cap is taken off too soon.

- 1) Remove radiator cap when engine is cool:
- 2) Loosen radiator drain plug ① to drain coolant.
- 3) Remove reservoir tank ②, which is on the side of radiator, and drain.
- 4) Reinstall plug ① securing it properly in place. Also reinstall reservoir tank.

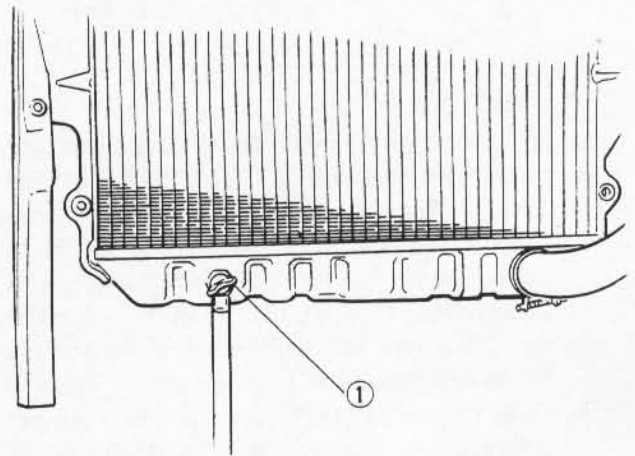


Fig. 1-7-1

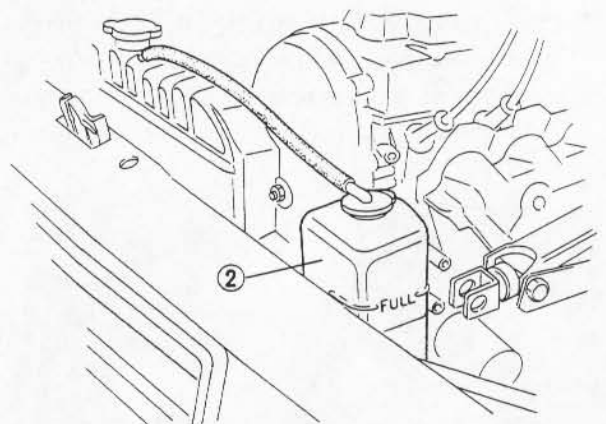


Fig. 1-7-2

- 5) Fill radiator with specified amount of coolant, and run engine for 2 or 3 minutes at idle. This drives out any air which may still be trapped within cooling system. STOP ENGINE. Add coolant as necessary until coolant level reaches the filler throat of radiator. Reinstall radiator cap.
- 6) Add coolant to reservoir tank so that the level aligns with Full mark.

COOLANT CAPACITY	
Engine, radiator and heater	4.4 liters (9.3/7.7 US/Imp pt.)
Reservoir tank	0.6 liters (1.3/1.1 US/Imp pt.)
Total	5.0 liters (10.6/8.8 US/Imp pt.)

CAUTION:

When changing engine coolant, use mixture of 50% water and 50% GOLDEN CRUISER 1200 for the market where ambient temperature falls lower than -16°C (3°F) in winter and mixture of 70% water and 30% GOLDEN CRUISER 1200 for the market where ambient temperature doesn't fall lower than -16°C (3°F).

Even in a market where no freezing temperature is anticipated, mixture of 70% water and 30% GOLDEN CRUISER 1200 should be used for the purpose of corrosion protection and lubrication.

8. COOLING SYSTEM HOSES INSPECTION

- 1) Visually inspect cooling system hoses for any evidence of leakage and cracks. Examine them for damage, and check connection clamps for tightness.

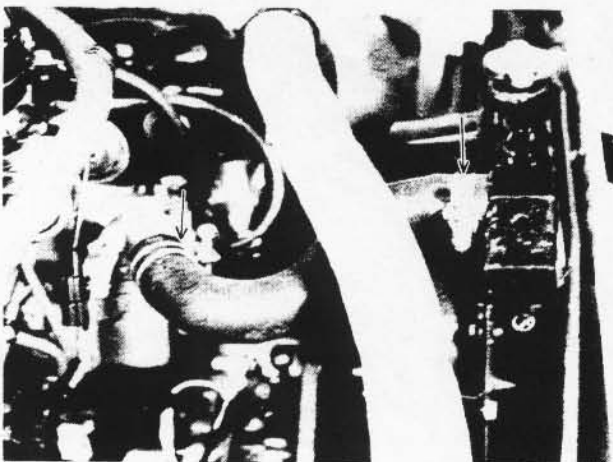


Fig. 1-8-1

- 2) Replace all hoses which show evidence of leakage, cracks or other damage. Replace all clamps which cannot maintain proper tightness.

9. EXHAUST PIPES AND MOUNTINGS INSPECTION

WARNING:

To avoid danger of being burned, do not touch exhaust system when system is hot. Any service on exhaust system should be performed when system is cool.

When carrying out periodic maintenance, or the car is raised for other service, check exhaust system as follows:

- Check rubber mountings for damage, deterioration, and out of position.
- Check exhaust system for leakage, loose connections, dents, and damages. If bolts or nuts are loose, tighten them to specification. Refer to below chart for torque specification.
- Check nearby body areas for damaged, missing, or mispositioned parts, open seams, holes, loose connections or other defects which could permit exhaust fumes to seep into the car.
- Make sure that exhaust system components have enough clearance from the underbody to avoid overheating and possible damage to the floor carpet.
- Any defects should be fixed at once.

Bolts and nut	Tightening torque
Exhaust pipe bolts	40 – 60 N·m
	4.0 – 6.0 kg·m 29.0 – 43.0 lb·ft
Muffler nuts	18 – 28 N·m
	1.8 – 2.8 kg·m 13.5 – 20.0 lb·ft

1-3. IGNITION SYSTEM

10. IGNITION WIRING (High Tension Cords) INSPECTION

- 1) Inspect high-tension cords for cracks and check that their connections are secure.
- 2) Measure resistance of high-tension cords by using a circuit tester (special tool 09900-25002).

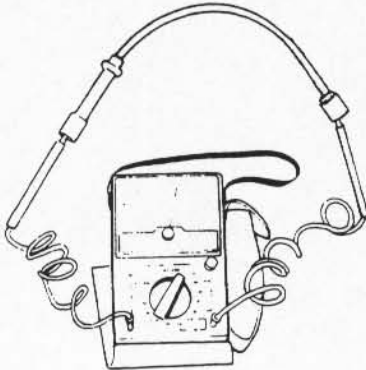


Fig. 1-10-1

- 3) Replace high-tension cords that show evidence of deterioration.

NOTE:

Check to make sure that each of the high tension cord terminals and connections is secure and fully inserted into its mating component. Any burnt fitting must be replaced.

HIGH-TENSION CORD RESISTANCE	
Standard	16 k Ω /3.3 ft (1 m)
Service limit	20 k Ω /pc.

11. DISTRIBUTOR CAP AND ROTOR INSPECTION

- 1) Inspect distributor cap and rubber caps for cracks.
- 2) Inspect center electrode and terminals for wear.

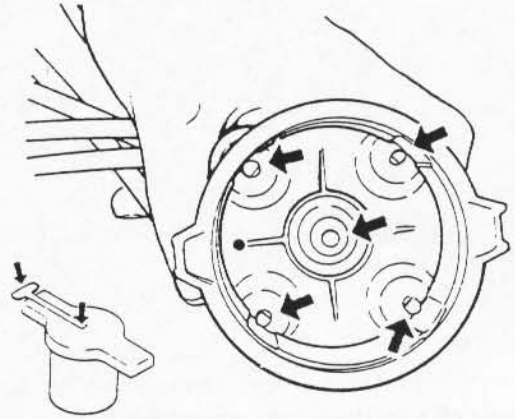


Fig. 1-11-1

- 3) Inspect rotor for cracks, and its electrode for wear.
- 4) Check to see that there are no excessive closes in ventilation plug hole.
- 5) Repair or replace as necessary any component which is found to be in malcondition as described above.

NOTE:

Dust and stains found within distributor can be cleaned by using a dry, soft cloth.

12. SPARK PLUGS REPLACEMENT

- 1) Disconnect high-tension cords from spark plugs. Make sure to pull only on spark plug caps.

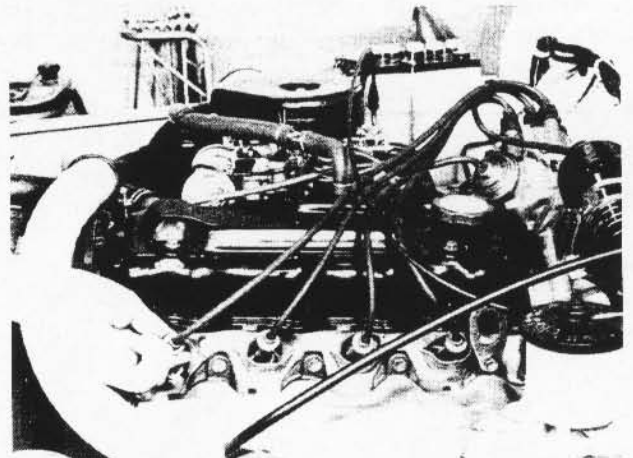


Fig. 1-12-1

- 2) Using a spark plug wrench, loosen and remove plugs.

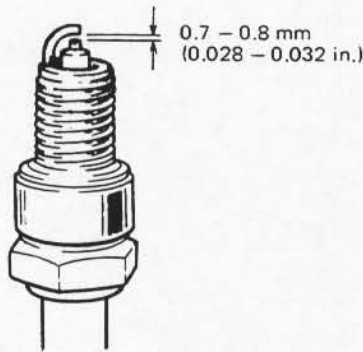


Fig. 1-12-2

NOTE:

When replacing plugs, make sure to use new plugs of specified heat range and size.

PLUG SPECIFICATION

Maker	Heat range Standard type
NGK	BP5ES (BPR5ES)
Nippon Denso	W16EX-U (W16EXR-U)

As can be seen in the above table, there are two types of spark plugs for this car, one without R included in its code and the other with R as in parenthesis. Which one is used depends on countries. Look at the label attached to the car. If originally equipped plug was with R included in its code, replacement plug should have R in its code, too.

- 3) Install new spark plugs. Tighten plugs to specification.
 4) Connect high tension cords to spark plugs. DO NOT push cords for connection. Push boots.

Spark plug tightening torque	20 – 30 N·m 2.0 – 3.0 kg·m 14.5 – 21.5 lb·ft
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13. IGNITION TIMING INSPECTION

Check to make sure that ignition timing is set properly. If out of specification, adjust it. Refer to p. 8-9 of SECTION 8 for inspection and adjustment procedure.

14. DISTRIBUTOR ADVANCE INSPECTION

Check advance for proper operation. Refer to p. 8-9 of SECTION 8 for checking procedure.

1-4. FUEL SYSTEM

15. AIR CLEANER ELEMENT CLEANING AND REPLACEMENT

Replacement

- 1) Remove air cleaner cap.
- 2) Take cleaner element ① out of air cleaner case.
- 3) Install new cleaner element ① into cleaner case.

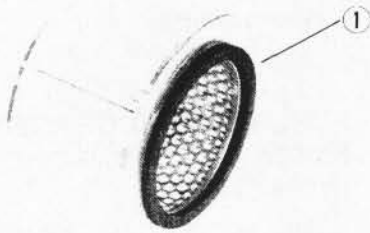


Fig. 1-15-1

Inspection and cleaning

(Applicable when used under severe conditions). After driving in a dusty area, check element for dust. If found dusty, clean it as follows.

- 1) Blow off dust with compressed air from inside of element.

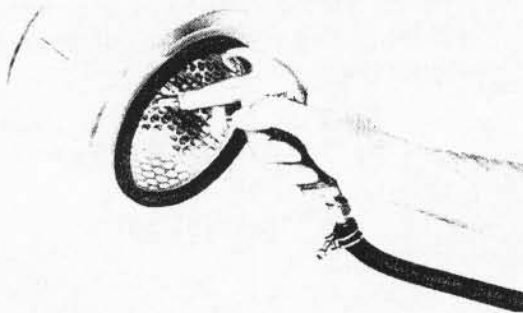


Fig. 1-15-2

- 2) Install cleaner element into air cleaner case.

16. CARBURETOR CHOKE SYSTEM LUBRICATION AND INSPECTION

[Manual choke type]

- 1) Remove air intake case and lubricate rotating parts.
- 2) Check if choke valve operates smoothly to open and close fully when choke knob is pulled and pushed back respectively. Correct if it doesn't operate as described above.
- 3) With choke knob pulled, start engine and run it at idle speed. Then check choke valve. It should not be fully closed but a little open. If faulty, check choke opener or its jet.

[Auto choke type]

- 1) Remove air intake case, and lubricate rotating parts.
- 2) Check choke for proper operation, referring to CHOKE INSPECTION in MAINTENANCE SERVICE (p. 4-20) of SECTION 4.

17. FUEL TANK CAP, GAS LINES AND CONNECTIONS INSPECTION

- 1) Visually inspect fuel lines and connections for evidence of fuel leakage, hose cracking, and damage. Make sure all clamps are secure. Repair leaky joints, if any. Replace hoses that are suspected of being cracked.
- 2) Visually inspect packing of fuel tank cap. If it is damaged or deteriorated, replace it with new one.

18. FUEL FILTER CHANGE

The entire filter unit is replaced at regular scheduled intervals. The method of replacement is as follows:

- 1) Fuel filter is located at the front part of fuel tank, inside the right-hand side of chassis. The filter is removed from the car by disconnecting inlet and outlet hoses from the filter.
- 2) Position the new filter in place, and connect inlet and outlet hoses to it.

NOTE:

The top connection is for the outlet hose, the lower one for the inlet hose.

WARNING:

The above procedure must be performed in a well ventilated area and away from any open flames (such as gas hot water heaters).

19. ENGINE IDLE SPEED AND IDLE MIXTURE INSPECTION

Check idle speed and idle mixture, and adjust them as necessary. Refer to MAINTENANCE SERVICE (p. 4-18) of SECTION 4 for procedures to check and adjust idle speed/idle mixture.

1-5. EMISSION CONTROL SYSTEM

20. CRANKCASE VENTILATION HOSES AND CONNECTIONS INSPECTION

Refer to the following item 21, PCV VALVE INSPECTION.

21. PCV (Positive Crankcase Ventilation) VALVE INSPECTION

Check crankcase ventilation hoses and PCV hoses for leaks, cracks or clog, and PCV valve for stick or clog. Refer to MAINTENANCE SERVICE (p. 5-9) of SECTION 5 for PCV valve checking procedure.

22. FUEL VAPOR STORAGE SYSTEM, HOSES AND CONNECTIONS INSPECTION

- 1) Visually inspect hoses for cracks, damage, or excessive bends. Inspect all clamps for damage and proper position.
- 2) If any of these is defective, repair or replace.

Charcoal Canister

[Applicable to the car equipped with canister in engine compartment.]

- 1) Disconnect rubber hose from charcoal canister, which is located in engine compartment.
- 2) When air is blown into pipe A, there should be no restriction of current through pipes B and C.
- 3) When air is blown into pipe B, air should not pass through either pipe A or C.
- 4) If operation differs from above description, charcoal canister must be replaced.
- 5) The canister is cleaned by blowing 3 kg/cm² (40 psi) of air into pipe A while sealing pipe B with a finger.

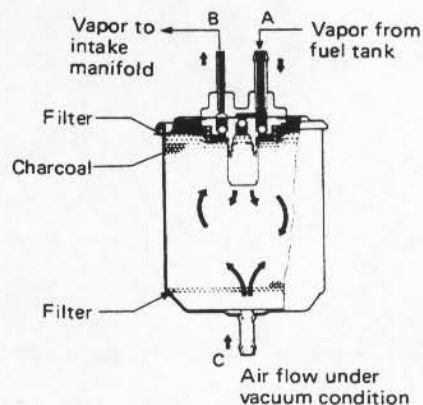


Fig. 1-22-1

1-6. ELECTRICAL

23. WIRING HARNESS CONNECTIONS AND HEADLIGHTS INSPECTION

[Wiring harness and connections]

- 1) Visually inspect all wires located in engine compartment for evidence of breakage. Inspect the condition of the insulation (cracks). All clips and clamps should have solid connections to wires.
- 2) Replace any wires in a deteriorated or otherwise defective condition.

[Headlights]

- 1) Check vertical beam alignment.
- 2) Check horizontal beam alignment.

Refer headlight (p. 21-5) of SECTION 21 for above 1) and 2) checking procedures.

NOTE:

In the countries where statutory regulations define headlight alignments, adjust in conformity with such regulations.

1-7. CHASSIS AND BODY

24. CLUTCH PEDAL INSPECTION

- 1) Check clutch pedal height. It should be the same as brake pedal height.
- 2) Check clutch pedal free travel.

Clutch pedal free travel	20 – 30 mm (0.8 – 1.1 in.)
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For the details of the above steps 1) and 2), refer to MAINTENANCE SERVICE (p. 11-8) of SECTION 11.

25. BRAKE DISCS, PADS, BRAKE DRUMS AND SHOES INSPECTION

Brake Discs and Pads

- 1) Remove wheel and caliper but don't disconnect brake hose from caliper.
- 2) Check front disc brake pads and discs for excessive wear, damage and deflection. Replace parts as necessary. For the details, refer to p. 19-16 and 19-17 of SECTION 19. Be sure to torque caliper bolts to specification for reinstallation.

Brake Drums and Shoes

- 1) Remove wheel and brake drum.
- 2) Check rear brake drums and brake linings for excessive wear and damage, while wheels and drums are removed. Also check wheel cylinders for leaks, at the same time. Replace these parts as necessary.

For the details, refer to p. 19-21 and p. 19-22 of SECTION 19.

26. BRAKE HOSES AND PIPES INSPECTION

Check brake hoses and pipes for proper hook-up, leaks, cracks, chafing and other damage. Replace any of these parts as necessary.

CAUTION:

After replacing any brake pipe or hose, be sure to carry out air purge operation.

27. BRAKE FLUID INSPECTION AND CHANGE

- 1) Check around master cylinder and reservoir for fluid leakage.
If found leaky, correct.
- 2) Check fluid level
If fluid level is lower than the minimum level of reservoir, refilling is necessary. Fill reservoir with either one of brake fluids listed below:

Brake fluid	Specifications
	DOT 3, or SAE J1703

For the details, refer to MAINTENANCE SERVICE (p. 19-42) of SECTION 19.

CAUTION:

Since the brake system of this car is factory-filled with glycol-base brake fluid, do not use or mix different type of fluid when refilling the system; otherwise serious damage will occur. Do not use old or used brake fluid, or one taken from unsealed container.

- 3) Change brake fluid every 2 years. As fluid change procedure, drain existing fluid from brake system completely, fill the system with above recommended fluid and carry out air purge operation.

For description of air purge, refer to p. 19-46 and 19-47 of SECTION 19.

28. BRAKE PEDAL INSPECTION

Check brake pedal travel.

For checking procedure, refer to PEDAL TRAVEL CHECK (p. 19-43) of SECTION 19.

29. BRAKE LEVER AND CABLE INSPECTION

Parking Brake Lever

- 1) Check tooth tip of each notch for damage or wear. If any damage or wear is found, replace parking lever.
- 2) Check parking brake lever for proper operation and stroke, and adjust it if necessary.
For checking and adjusting procedures, refer to PARKING BRAKE INSPECTION AND ADJUSTMENT (p. 19-44) of SECTION 19.

Parking Brake Cable

Inspect brake cable for damage and smooth movement. Replace cable if it is in deteriorated condition.

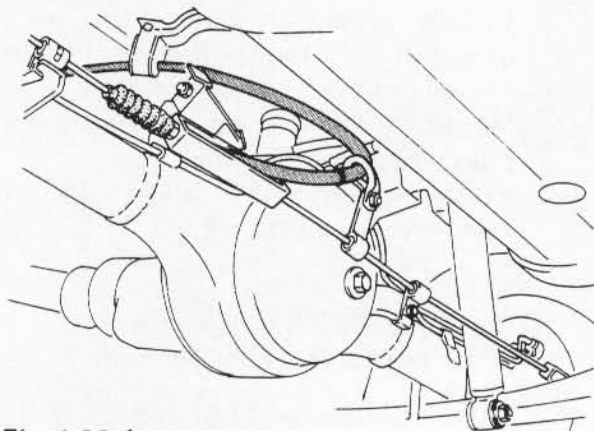


Fig. 1-29-1

30. TIRE INSPECTION AND ROTATION

- 1) Check tires for uneven or excessive wear, or damage. If defective, replace.
- 2) Check inflating pressure of each tire and adjust pressure to specification as necessary.

NOTE:

- Tire inflation pressure should be checked when tires are cool.
- Specified tire inflation pressure should be found on tire placard or in owners' manual which came with the car.

- 3) Rotate tires.

For the details of above steps 1) to 3), refer to MAINTENANCE SERVICE (p. 18-20 and 18-21) of SECTION 18.

31. WHEELS, WHEEL NUTS AND FREE WHEELING HUBS (Optional Parts) INSPECTION

Wheel Disc

Inspect each wheel disc for dents, distortion and cracks. A disc in badly damaged condition must be replaced.

Wheel Bearings

- 1) Check front wheel bearing for wear, damage or rattles. For the details, refer to MAINTENANCE (p. 17-20 and 17-21) of SECTION 17.
- 2) Check rear wheel bearing for wear, damage or rattles. For the details, refer to MAINTENANCE SERVICE (p. 17-24) of SECTION 17.

Wheel Nuts

Check wheel nuts for tightness and, retighten them to specification as necessary.

Tightening torque for wheel nuts	50 – 80 N·m
	5.0 – 8.0 kg·m (36.5 – 57.5 lb·ft)

Free Wheeling Hub (Optional Parts)

[Manual type]

This is applicable to the car equipped with manual type free wheeling hubs.

Check free wheeling hub for proper operation by moving free wheeling hub knob to LOCK and FREE positions. (The same check on both right and left wheels)

For checking procedure, refer to Maintenance Service (p. 17-29) of SECTION 17.

[Automatic free wheeling hub]

This is applicable to the car equipped with automatic free wheeling hubs.

Check to ensure that free wheeling hub moves properly to LOCK and FREE positions, referring to Maintenance Service (p. 17-35) of SECTION 17.

(The same check on both right and left wheels)

32. SHOCK ABSORBERS INSPECTION

- 1) Inspect absorbers for evidence of oil leakage, dents or any other damage on sleeves; and inspect anchor ends for deterioration.
- 2) Depending on the results of the above inspection, replace absorbers.

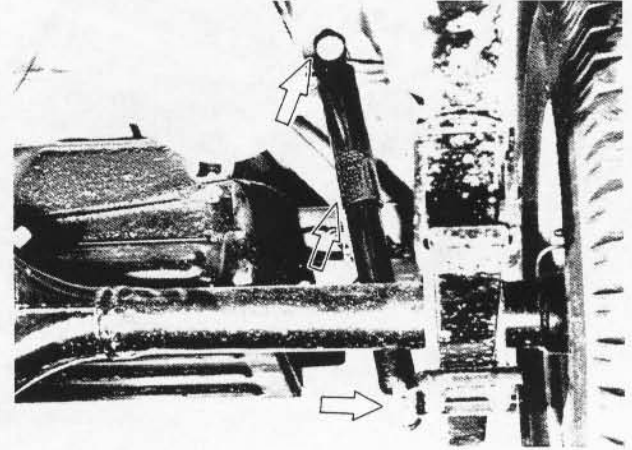


Fig. 1-32-1

WARNING:

When handling rear shock absorber in which high-pressure gas is sealed, make sure to observe the following precautions.

1. Don't disassemble it.
2. Don't put it into fire.
3. Don't store it where it gets hot.
4. Before disposing it, be sure to drill a hole in it where shown in the illustration below and let gas and oil out. Lay it down sideways for this work.



Fig. 1-32-2

33. PROPELLER SHAFTS INSPECTION AND LUBRICATION

1) Lubricate propeller shaft.

The nipple for lubrication is located on each sliding yoke. Be sure to use chassis grease.

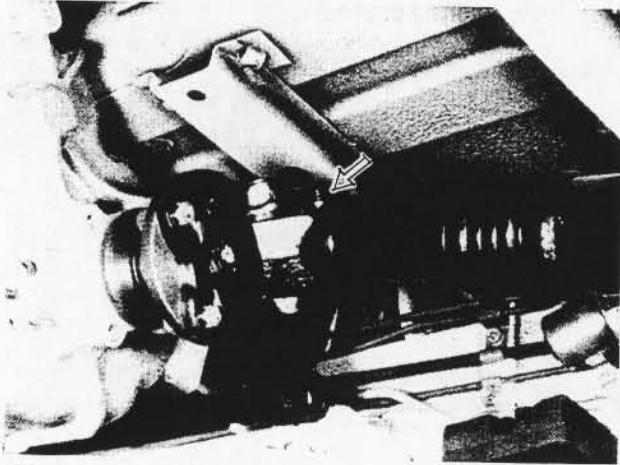


Fig. 1-33-1

2) Check universal joint and spline of propeller shaft for rattle. If rattle is found, replace defective part with a new one.

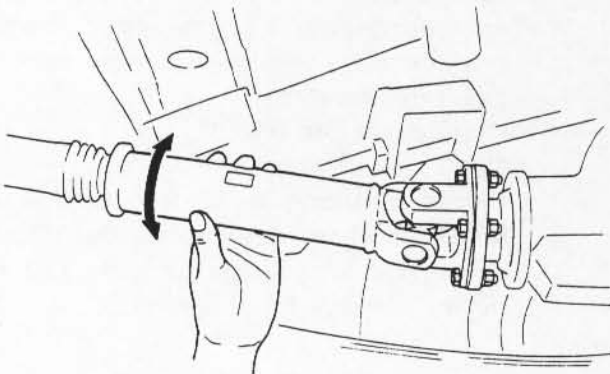


Fig. 1-33-2

3) Check propeller shaft (No. 1, No. 2, No. 3) flange yoke bolts for tightness, and retighten them as necessary:

Tightening torque	N·m	kg-m	lb-ft
	23 – 30	2.3 – 3.0	17.0 – 21.5

34. TRANSMISSION, TRANSFER, DIFFERENTIAL OIL INSPECTION AND CHANGE

[Inspection]

- 1) Inspect transmission case, transfer case and differential housing for evidence of oil leakage. Repair leaky point if any.
- 2) Make sure that the car is placed level for oil level check.
- 3) Remove each filler plug of transmission, transfer and differential (front and rear). In any of these cases, oil level can be checked roughly by means of filler plug hole. That is, if oil flows out of filler plug hole or if oil level is found up to hole when filler plug is removed, oil is properly filled.
If oil is found insufficient, pour specified amount of specified oil as given in the below table.

[Change]

Oil change procedure is as follows. Place the car level and drain oil by removing drain plug. Pour specified amount of specified oil as in the below table and tighten drain plug and filler plug to specified torque.

NOTE:

For the car used in such areas where ambient temperature becomes lower than -15°C (5°F) during the coldest season, it is recommended that oil be changed with SAE80W or 75W/80 – 85 oils on such occasion of service as periodic maintenance.

Transmission oil change

Oil capacity	1.3 liters (2.7/2.3 US/Imp pt.)
Type of oil	Gear oil, SAE # 90, SAE 75W/80 – 85 or SAE 80W

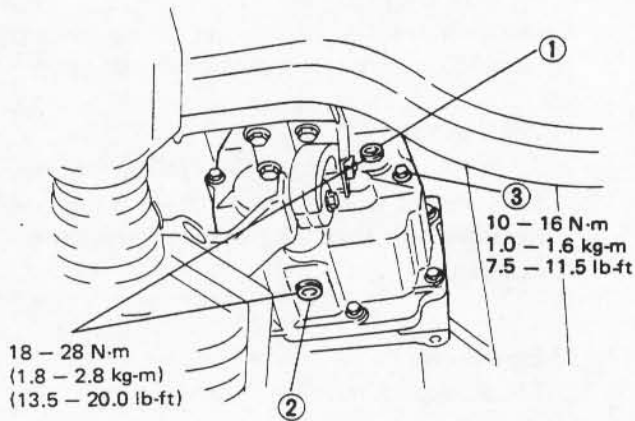


Fig. 1-34-1

1. Oil filler plug
2. Oil drain plug
3. Oil level plug

Transfer oil change

Oil capacity	0.8 liters (1.7/1.4 US/Imp. pt.)
Type of oil	Gear oil SAE # 90, 75W/80 - 85 or SAE 80W

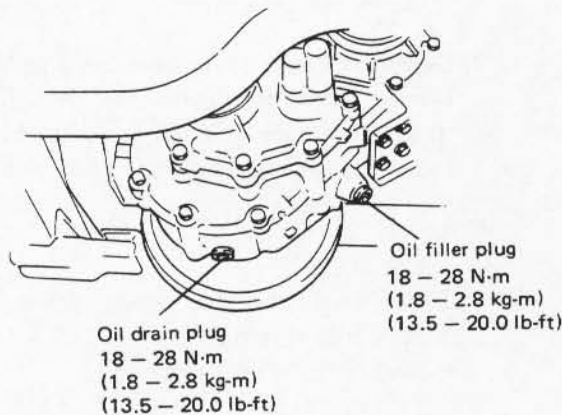


Fig. 1-34-2

Differential oil change (Front and rear)

	Front	Rear
Oil capacity	2.0 liters (4.2/3.5 US/Imp pt.)	1.5 liters (3.2/2.6 US/Imp pt.)
Type of oil	Hypoid gear oil, SAE # 90, 75W/80 - 85 or SAE 80W	

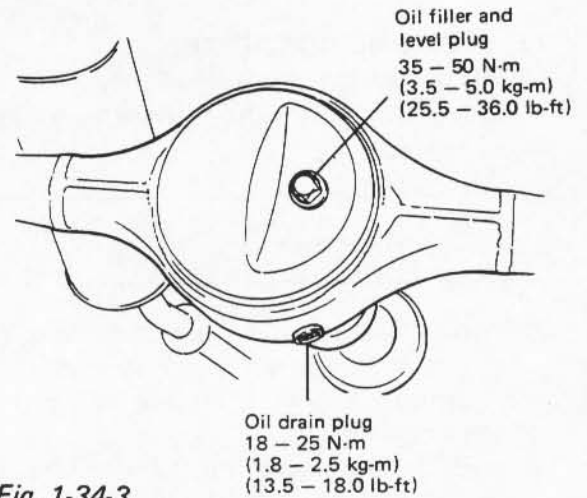


Fig. 1-34-3

35. AXLE HUB OIL SEAL CHANGE

This is applicable to the car driven under severe conditions (off-road or muddy conditions). Replace oil seals (right & left) periodically.

NOTE:

For replacement procedure, refer to **MAINTENANCE SERVICE** (p. 17-23) of **SECTION 17**.

36. SUSPENSION INSPECTION AND TIGHTENING

- 1) Check leaf spring for wear, crack and damage. (Where each end of the shorter leaf contacts.) If excessive wear or cracking is noted, replace the spring with a new one.

NOTE:

For the details of leaf spring check, refer to **MAINTENANCE SERVICE** (p. 17-20) of **SECTION 17**.

- 2) Check bolts and nuts for tightness and retighten them as necessary.

Repair or replace defective parts, if any.

NOTE:

For the details of check points, refer to the table of **MAINTENANCE SERVICE** (p. 17-24) of **SECTION 17**.

37. STEERING CONDITION

- 1) Check steering wheel for play and rattle, holding car in straight forward condition on the ground.

Steering wheel play	10 – 30 mm (0.4 – 1.2 in.)
---------------------	-------------------------------

- 2) Check universal joint and rubber joint of steering shaft for rattle and damage. If rattle or damage is found, replace defective part with a new one.
- 3) Check bolts and nuts for tightness and retighten them as necessary. Repair or replace defective parts, if any.
Refer to MAINTENANCE SERVICE on p. 18-19 for particular check points.
- 4) Inspect steering gear box for evidence of oil leakage. If leakage is found, check oil level in gear box.

NOTE:

For the details of the above steps 1) to 4), refer to MAINTENANCE SERVICE (p. 18-19) of SECTION 18.

- 5) Check boots of tie rod ends for damage. If damage is found, replace it with a new one.
- 6) Check wheel alignment.

Alignment service data

Side slip	OUT 0 – IN 3 m/km
Toe-in	2 – 6 mm (0.079 – 0.236 in.)
Camber	1 degree (1°)
Trail (FR78-15 tire)	19 mm (0.75 in.)
Kingpin inclination	9 degrees (9°)
Caster	3 degrees 30 minutes (3° 30')

NOTE:

For the details of wheel alignment, refer to WHEEL ALIGNMENT (p. 18-17) of SECTION 18.

- 7) Drive the car on road to be sure that:
 - a) Steering wheel does not show abnormal resistance.
 - b) Steering wheel does not wobble.

38. TEST DRIVE

Upon completion of all periodical checks, 1 through 37, carry out road test in safe place.

WARNING:

When carrying out the following road tests, select a safe place where no man or no running car is seen so as to prevent any accident.

1) Engine start

Check engine start for readiness.

NOTE:

In the cold weather, start to operate engine by pulling choke control knob (if equipped).

2) Clutch

Check the following:

- that clutch is completely released when depressing clutch pedal,
- that no slipping clutch occurs when releasing pedal and accelerating,
- and that clutch itself is free from any abnormal condition.

3) Gearshift Lever (Transmission and Transfer)

Check gearshift lever for smooth shifting to all positions and for good performance of transmission and transfer in any position.

4) Brake

[Foot brake]

Check the following when depressing brake pedal while driving;

- that brake works properly,
- that it is free from noise,
- and that braking force applies equally on all wheels.

[Parking brake]

Check to ensure that parking brake is fully effective when the car is stopped on the slope and brake lever is pulled all the way.

5) Steering

Check to ensure that steering wheel is free from instability, or abnormally heavy feeling while driving.

6) Engine

- Check that engine responds readily at all speed.
- Check that engine is free from abnormal noise and abnormal vibration.

7) Body, Wheels and Power Transmitting System

Check that body, wheels and power transmitting system are free from abnormal noise and abnormal vibration or any other abnormal condition.

8) Meters and Gauge

Check that speedometer, odometer, fuel meter, and temperature gauge are operating accurately.

9) Oil pressure and charging indicator lights

Make sure that these lights stay off while engine is operating. If either of them comes on during engine operation, it means that something is wrong with engine lubrication system or charging system, and consequently immediate inspection is necessary.

10) Seat Belt

Check that seat belt is securely locked at hard braking.

WARNING:

For this test, select a safe place without any running car so as to prevent any accident. And again make sure that no man or no other car is seen in front or behind and use great care to the surroundings when carrying out the test.