

SUBARU

SVX

1992

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SCHEDULE OF INSPECTION AND MAINTENANCE SERVICES

All states except California

Continue periodic maintenance beyond 192,000 km (120,000 miles) or 120 months by returning to the first column of the maintenance schedule and adding 192,000 km (120,000 miles) or 120 months to the column headings.		Symbols used: R: Replace I: Inspect, correct or replace if necessary. P: Perform (I) or (P): Recommended service for safe vehicle operation																		
		MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)																		
MAINTENANCE ITEM	Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120	REMARKS	
	x 1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192		
	x 1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120		
1	Drive belt(s) [Except camshaft]					I				R				I					R	
2	Camshaft drive belt					I				R				I					R	
3	Engine oil	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	See NOTE 1)
4	Engine oil filter	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	See NOTE 1)
5	Replace engine coolant and inspect cooling system, hoses and connections					P				P				P					P	
6	Replace fuel filter and inspect fuel system, hoses and connections					(P)				P				(P)					P	See NOTE 2), 6) & 7)
7	Air cleaner element					R				R				R					R	See NOTE 8)
8	Spark plugs									R									R	
9	Differential (Front & Rear) lubricants (Gear oil)					I								I						See NOTE 3)
10	Automatic transmission fluid					I				I				I					I	See NOTE 4)
11	Brake fluid					R				R				R					R	See NOTE 5)
12	Disc brake pads and discs, Front and rear axle boots and axle shaft joint portions			I		I		I		I		I		I		I			I	See NOTE 6)
13	Brake linings and drums					I				I				I					I	See NOTE 6)
14	Inspect brake line and check operation of parking and service brake system			P		P		P		P		P		P		P			P	See NOTE 6)
15	Steering and suspension			I		I		I		I		I		I		I			I	See NOTE 6)
16	Front and rear wheel bearing lubricant									(I)									(I)	
17	Supplemental restraint system	Inspect every 10 years																		

NOTE:

- 1) When the vehicle is used under severe driving conditions such as those mentioned below*, the engine oil should be changed more often.
- 2) When the vehicle is used in extremely cold or hot weather areas, contamination of the filter may occur and filter replacement should be performed more often.
- 3) When the vehicle is frequently operated under severe conditions, replacement should be performed every 48,000 km (30,000 miles).
- 4) When the vehicle is frequently operated under severe conditions, replacement should be performed every 24,000 km (15,000 miles).
- 5) When the vehicle is used in high humidity areas or in mountainous areas, change the brake fluid every 24,000 km (15,000 miles) or 15 months, whichever occurs first.
- 6) When the vehicle is used under severe driving conditions such as those mentioned below*, inspection should be performed every 12,000 km (7,500 miles) or 7.5 months, whichever occurs first.
- 7) This inspection is not required to maintain emission warranty eligibility and it does not affect the manufacturer's obligations under EPA's in-use compliance program.
- 8) When the vehicle is used in extremely dusty conditions, the air cleaner element should be replaced more often.

* Examples of severe driving conditions:

- (1) Repeated short distance driving. (Items 3, 12 and 13 only)
- (2) Driving on rough and/or muddy roads. (Items 12, 13 and 15 only)
- (3) Driving in dusty conditions.
- (4) Driving in extremely cold weather. (Items 3 and 15 only)
- (5) Driving in areas where roads salts or other corrosive materials are used. (Items 6, 12, 13, 14 and 15 only)
- (6) Living in coastal areas. (Items 6, 12, 13, 14 and 15 only)

California

Continue periodic maintenance beyond 192,000 km (120,000 miles) or 120 months by returning to the first column of the maintenance schedule and adding 192,000 km (120,000 miles) or 120 months to the column headings.		Symbols used: R: Replace I: Inspect, correct or replace if necessary. P: Perform (I) or (P): Recommended service for safe vehicle operation *: This maintenance operation is required for all states except California. However, we do recommend that this operation be performed on California vehicles as well.																
		MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)																
Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120	
x 1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	
x 1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120	
1	Drive belt(s) [Except camshaft]					I				I				I		R		
2	Camshaft drive belt					I*				I*				I*		R		
3	Engine oil	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
4	Engine oil filter	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
5	Replace engine coolant and inspect cooling system, hoses and connections					P				P				P				P
6	Replace fuel filter and inspect fuel system, hoses and connections					(P)				(P)				(P)				P
7	Air cleaner element					R				R				R				R
8	Spark plugs									R								R
9	Differential (Front & Rear) lubricants (Gear oil)					I								I				
10	Automatic transmission fluid					I				I				I				I
11	Brake fluid					R				R				R				R
12	Disc brake pads and discs, Front and rear axle boots and axle shaft joint portions			I		I		I		I		I		I		I		I
13	Brake linings and drums					I				I				I				I
14	Inspect brake line and check operation of parking and service brake system			P		P		P		P		P		P		P		P
15	Steering and suspension			I		I		I		I		I		I		I		I
16	Front and rear wheel bearing lubricant									(I)								(I)
17	Supplemental restraint system	Inspect every 10 years																

NOTE:

- 1) When the vehicle is used under severe driving conditions such as those mentioned below*, the engine oil should be changed more often.
- 2) When the vehicle is used in extremely cold or hot weather areas, contamination of the filter may occur and filter replacement should be performed more often.
- 3) When the vehicle is frequently operated under severe driving conditions, replacement should be performed every 48,000 km (30,000 miles).
- 4) When the vehicle is frequently operated under severe driving conditions, such as mountain driving replacement should be performed every 24,000 km (15,000 miles).
- 5) When the vehicle is used in high humidity areas or in mountainous areas, change the brake fluid every 24,000 km (15,000 miles) or 15 months, whichever occurs first.
- 6) When the vehicle is used under severe driving conditions such as those mentioned below*, inspection should be performed every 12,000 km (7,500 miles) or 7.5 months, whichever occurs first.
- 7) This inspection is not required to maintain emission warranty eligibility and it does not affect the manufacturer's obligations under EPA's in-use compliance program.
- 8) When the vehicle is used in extremely dusty conditions, the air cleaner element should be replaced more often.

* Examples of severe driving conditions:

- (1) Repeated short distance driving. (Items 3, 12 and 13 only)
- (2) Driving on rough and/or muddy roads. (Items 12, 13 and 15 only)
- (3) Driving in dusty conditions.
- (4) Driving in extremely cold weather. (Items 3 and 15 only)
- (5) Driving in areas where roads salts or other corrosive materials are used. (Items 6, 12, 13, 14 and 15 only)
- (6) Living in coastal areas. (Items 6, 12, 13, 14 and 15 only)

**1. Drive Belt(s)
[Except Camshaft]
(Inspect drive belt tension)**

MAINTENANCE INTERVAL [Number of months or km (miles), whichever occurs first]																	
Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
x1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
California					I				I				I		R		
All states except California					I				R				I				R

A: INSPECTION

- 1) Replace belts, if cracks, fraying or wear is found.
- 2) Check drive belt tension and adjust it if necessary by changing alternator installing position and/or idler pulley installing position.

3) When using a tension gauge to adjust the air conditioner drive belt, remove the alternator in advance.

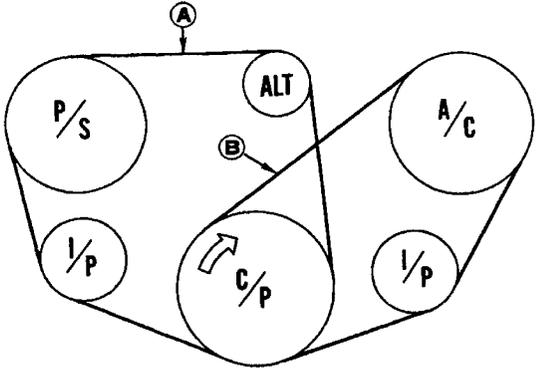
Pulley arrangement	Belt tension				
	Gauge		Belt tension [with 98 N (10 kg, 22 lb) force]		
	A	B	A	B	
 <p style="text-align: right;">C1-037</p>	New belt	637 — 785 N (65 — 80 kg, 143 — 176 lb)	637 — 736 N (65 — 75 kg, 143 — 165 lb)	4.0 — 5.0 mm (0.157 — 0.197 in)	6.0 — 7.0 mm (0.236 — 0.276 in)
	Existing belt	392 — 588 N (40 — 60 kg, 88 — 132 lb)	343 — 441 N (35 — 45 kg, 77 — 99 lb)	5.0 — 6.0 mm (0.197 — 0.236 in)	7.0 — 8.0 mm (0.276 — 0.315 in)

Fig. 1

- C/P: Crankshaft pulley
- ALT: Alternator pulley
- P/S: Power steering oil pump pulley
- A/C: Air conditioner compressor pulley
- I/P: Idler pulley

*1: When replacing belt with a new one, adjust its tension to the specification and then readjust it to the same specification after running engine for 5 minutes in consideration of its initial expansion.

B: REPLACEMENT

1. V-BELT COVER

- 1) Remove drive belt cover.
- (1) Remove the two bolts.

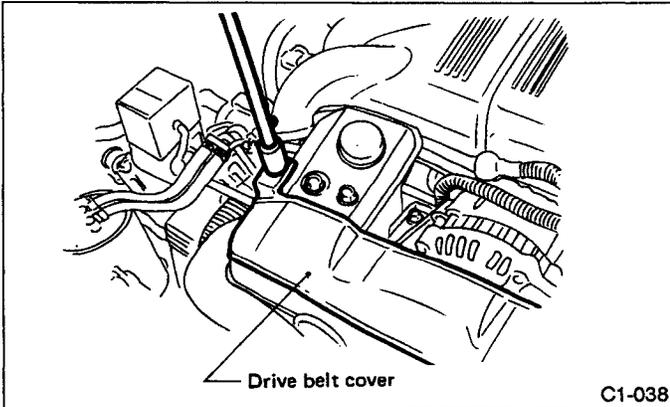


Fig. 2

**2. FRONT SIDE BELT
(Driving Power Steering Oil Pump and Alternator)**

- 1) Loosen the lock nut.
- 2) Loosen the slider bolt.

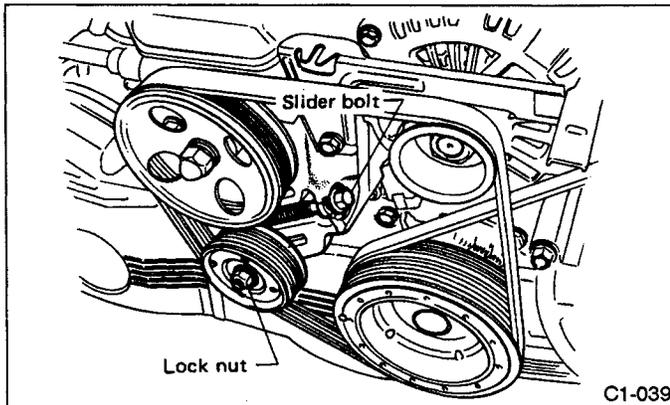


Fig. 3

- 3) Remove the front side belt.
- 4) Install a new belt, and tighten the slider bolt so as to obtain the specified belt tension shown in the above table.
- 5) Tighten the lock nut.

Wipe off any oil or water on the belt and pulley.

**3. REAR SIDE BELT
(Driving Air Conditioner)**

Before removing the rear side belt, remove the front side belt.

- 1) Loosen the lock nut.
- 2) Loosen the lock bolt.

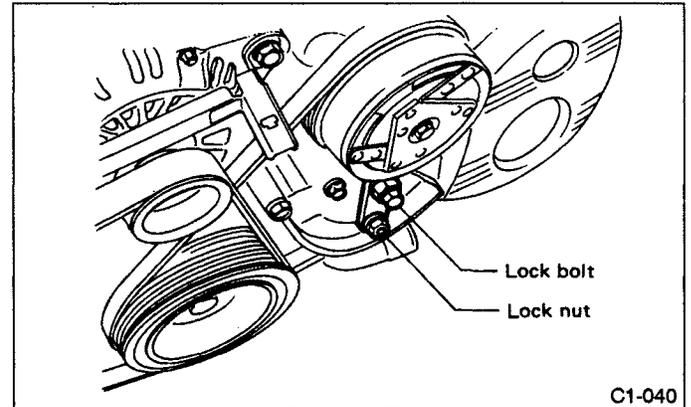


Fig. 4

- 3) Remove the rear side belt.
- 4) Install a new belt, and tense the belt with stay.
- 5) Tighten the lock nut so as to obtain the specified belt tension shown in the above table.
- 6) Tighten the lock bolt.

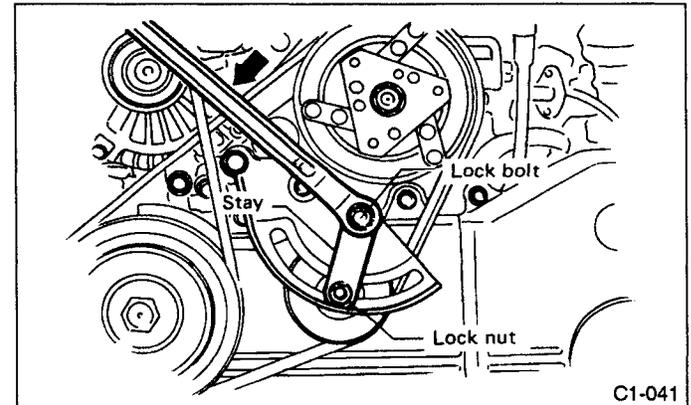


Fig. 5

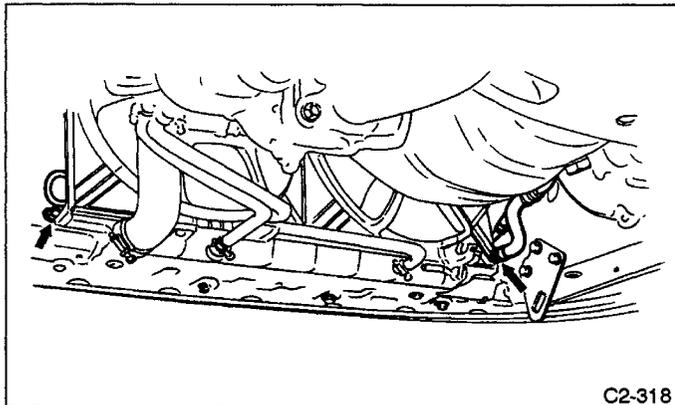
2. Timing Belt (Camshaft drive belt)

MAINTENANCE INTERVAL [Number of months or km (miles), whichever occurs first]																	
Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
x1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
California					I*				I*				I*		R		
All states except California					I				R				I				R

*: This maintenance operation is required for all state except California. However, we do recommend that this operation be performed on California vehicles as well.

A: REPLACEMENT

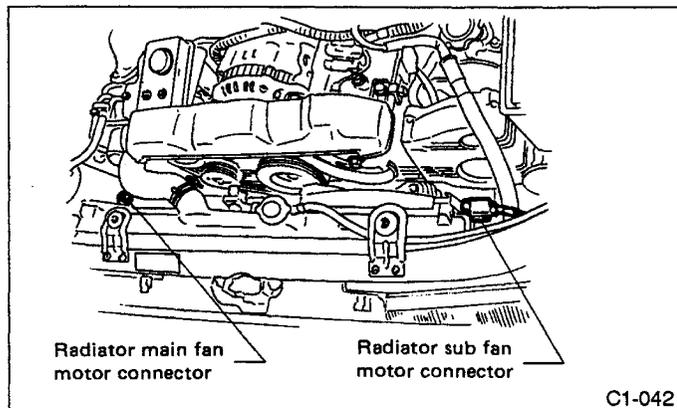
- 1) Open the front hood.
- 2) Disconnect the ground cable from the battery.
- 3) Remove the under cover.
- 4) Remove the two bolts which connect the power steering fluid cooling hose to body.
(Do not remove the power steering fluid cooling hose.)



C2-318

Fig. 6

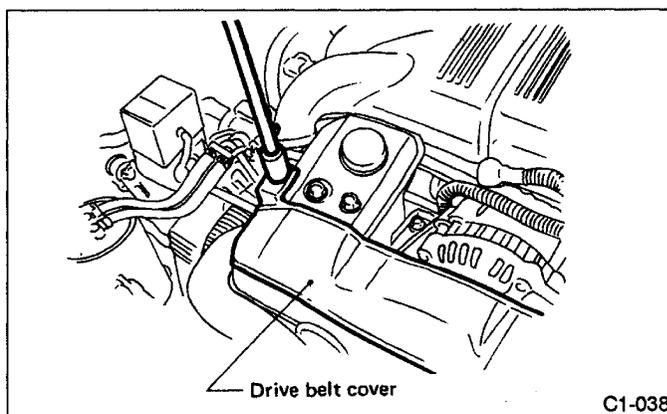
- 5) Disconnect the radiator main fan motor connector and radiator sub fan motor connector.



C1-042

Fig. 7

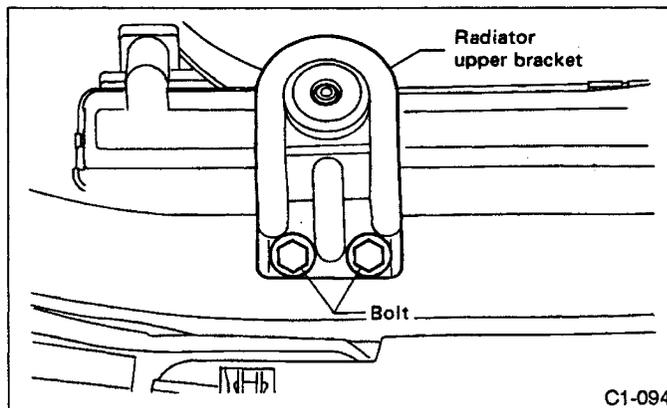
- 6) Remove the drive belt cover.
(1) Remove the two bolts.



C1-038

Fig. 8

- (2) Remove the drive belt cover.
- 7) Remove the radiator upper brackets.



C1-094

Fig. 9

- 8) Remove the radiator fan ASSY.
(1) Remove the two bolts from the upper side of the shroud.
(2) Remove the radiator sub fan ASSY.

Remove the radiator main fan ASSY in same steps described in the removal of radiator sub fan ASSY. For removal of the radiator sub fan ASSY and radiator main fan ASSY, refer to "2-5 ENGINE COOLING SYSTEM" [W5B0].

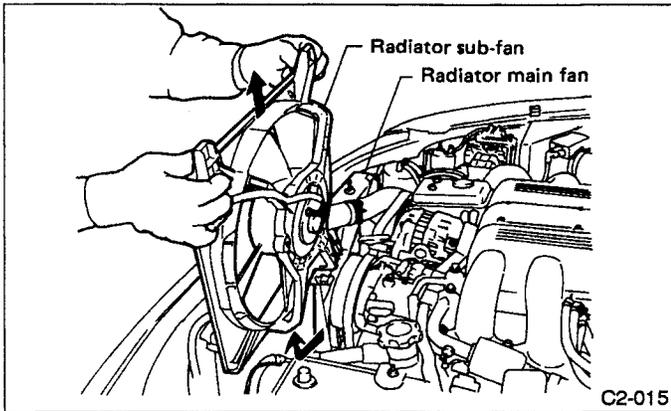


Fig. 10

- 9) Remove the canister and the bracket.
 (1) Remove the hose clamp and pull off the hose.
 (2) Remove the canister from the bracket.
 (3) Remove the bracket from body.

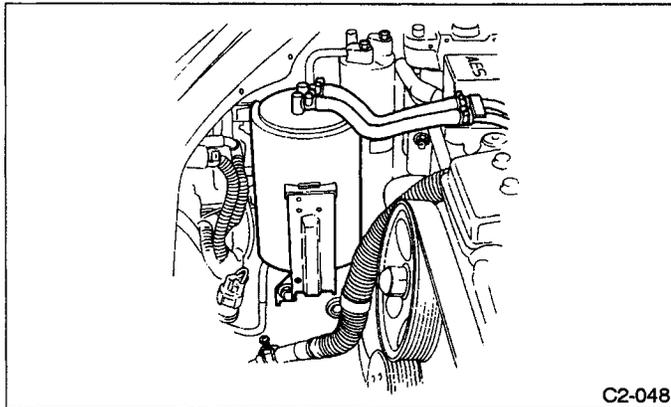


Fig. 11

- 10) Remove the drive belt.
 [Refer to "Drive Belt(s)"]
 11) Remove the alternator.
 (1) Disconnect the alternator connector and B terminal.
 (2) Remove the alternator mounting bolts and drive belt cover bracket.
 (3) Remove the alternator.

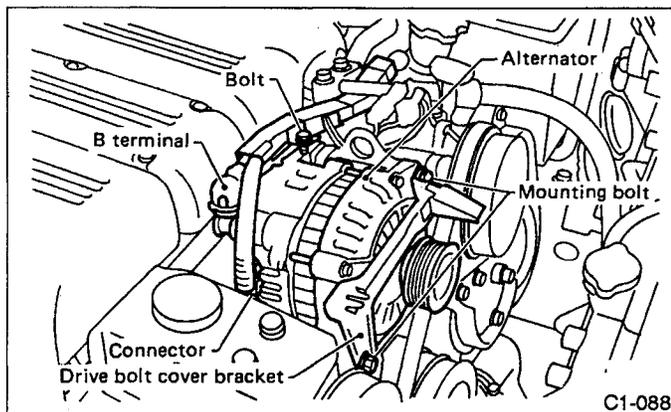


Fig. 12

- 12) Remove the idler pulley ASSY.
 (1) Remove the three bolts.

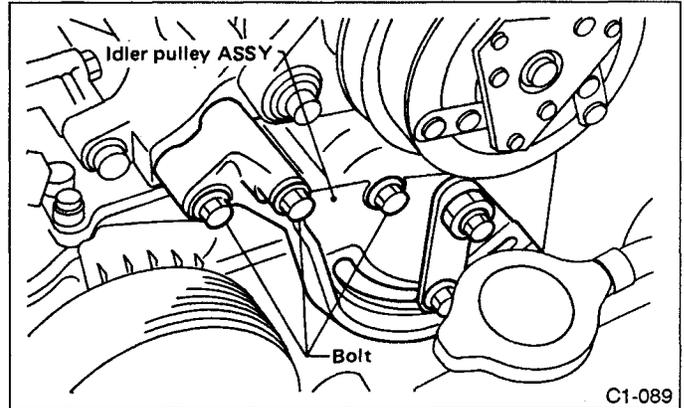


Fig. 13

- (2) Remove the idler pulley ASSY.
 13) Remove the power steering pump bracket ASSY.
 (1) Remove the bolts which hold the power steering fluid pipe to cylinder head.

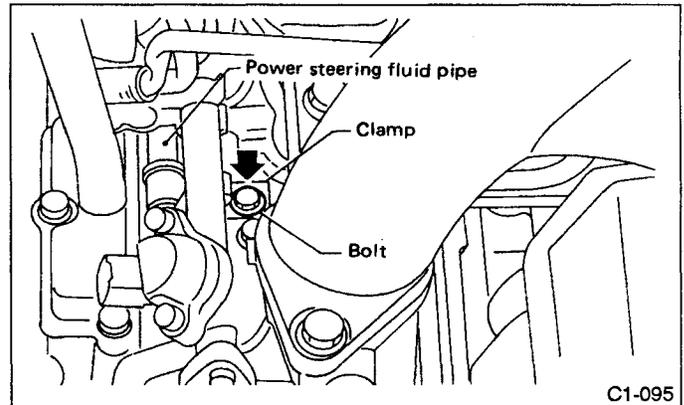


Fig. 14

- (2) Remove the power steering pump from the power steering pump bracket ASSY.

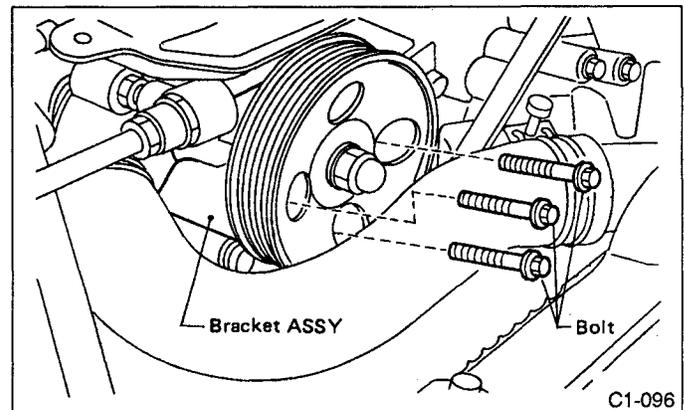


Fig. 15

- (3) Remove the three bolts which install the power steering pump bracket ASSY to cylinder block.

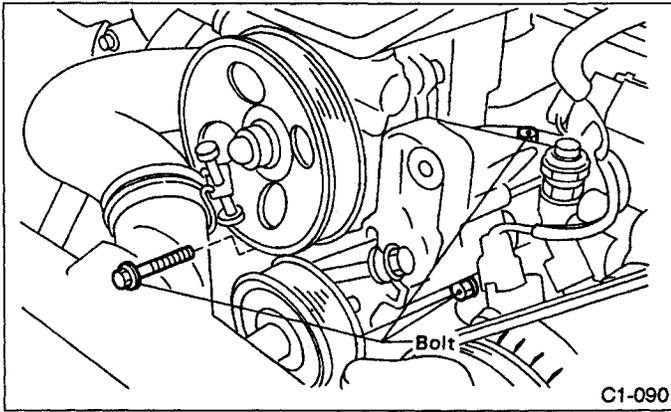


Fig. 16

(4) Remove the power steering pump bracket ASSY.

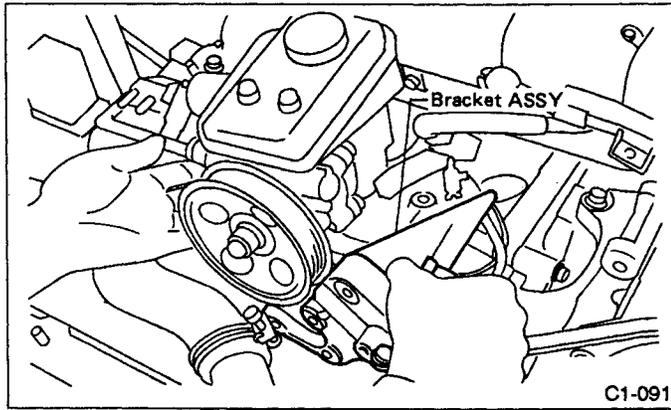


Fig. 17

- 14) Remove the crankshaft pulley.
 - 15) Remove the front timing belt covers.
 - 16) Remove the timing belt (camshaft drive belt).
- For removal of the timing belt, refer to "2-3 ENGINE" [W2A2].

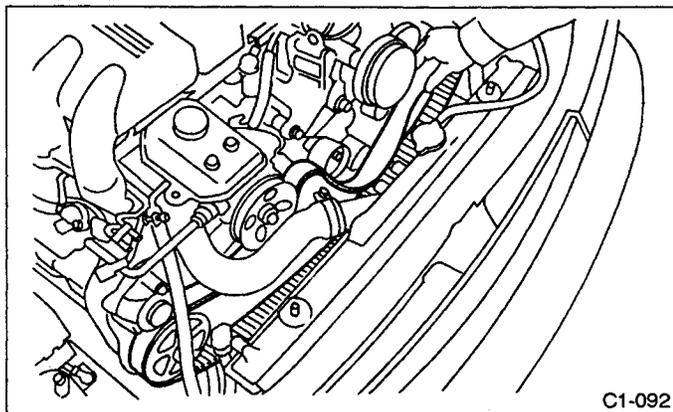


Fig. 18

17) Remove the timing belt tension adjuster.

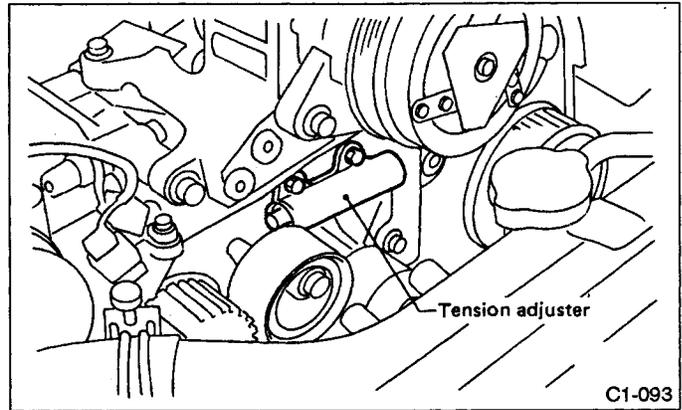


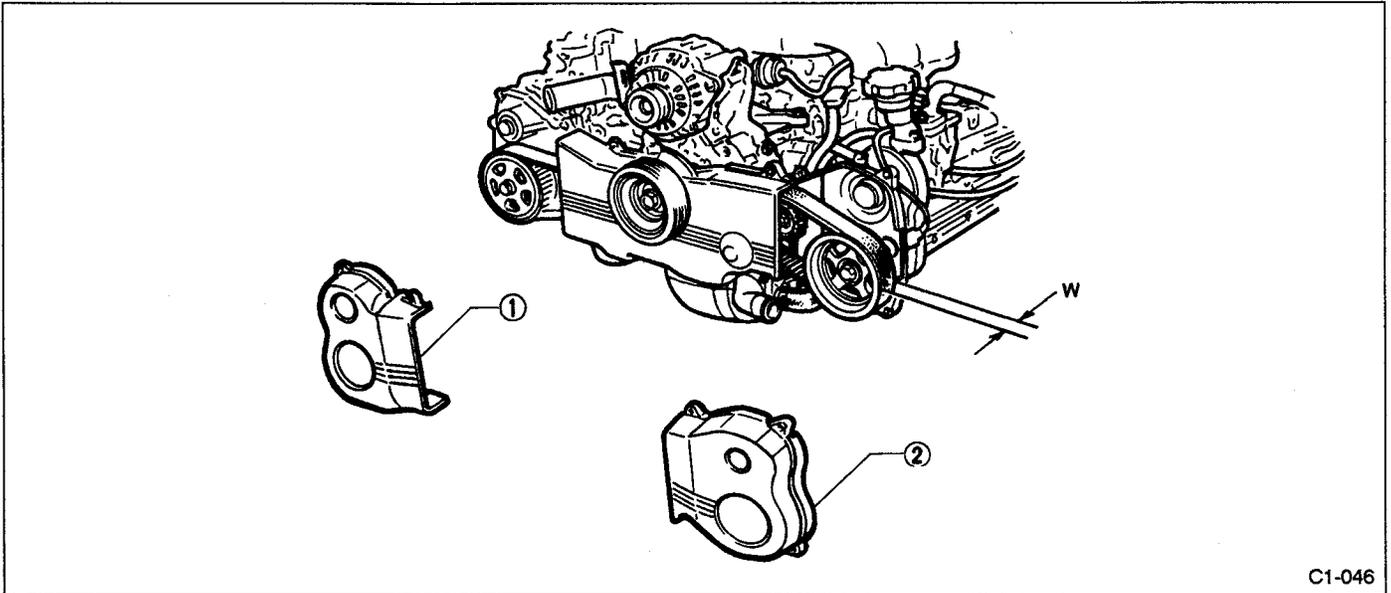
Fig. 19

B: INSTALLATION

To install, reverse order of removal procedures. For installation of tensioner adjuster and timing belt, refer to "2-3 ENGINE" [W2C2] [W2C3].

C: INSPECTION

- 1) Remove left and right timing belt covers ① and ②.



C1-046

Fig. 20

- 2) While cranking engine at least four rotations, check timing belt back surface for cracks or damage. If a fault is found replace the belt with a new one.
- 3) Measure timing belt width W . If it is less than 34 mm (1.34 in), check idlers, tensioner, water pump pulley and cam sprocket to determine idler alignment (squareness). Replace worn timing belt.
- 4) Install left and right timing belt covers ① and ②.

3. Engine Oil

MAINTENANCE INTERVAL [Number of months or km (miles), whichever occurs first]																	
Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
x1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
California	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
All states except California	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

A: REPLACEMENT

1) Drain engine oil by loosening engine oil drain plug.

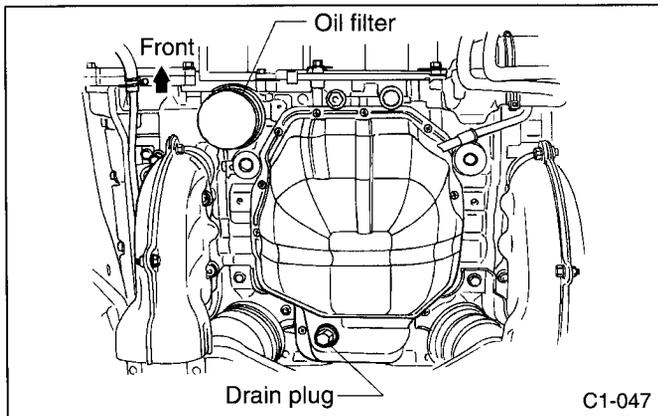


Fig. 1

2) Open engine oil filler cap for quick draining of the engine oil.

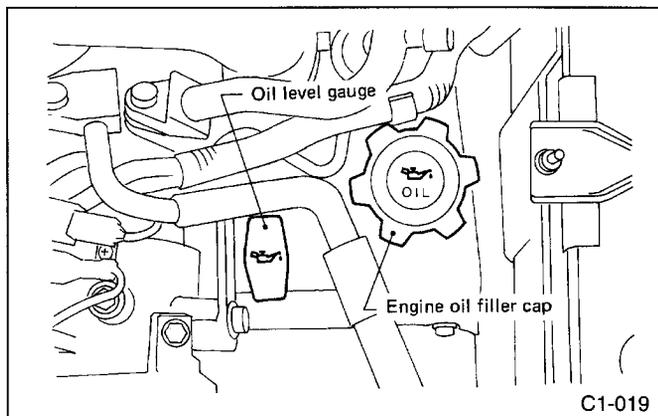


Fig. 2

3) Tighten engine oil drain plug after draining engine oil.

Tightening torque:
44 N-m (4.5 kg-m, 33 ft-lb)

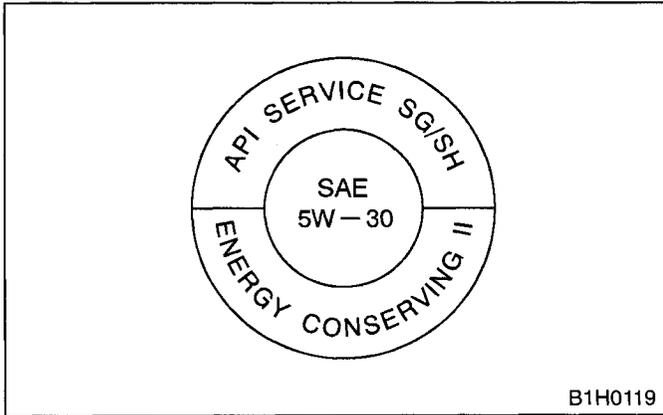
4) Fill engine oil through filler pipe up to upper point on level gauge. Make sure that vehicle is placed level when checking oil level. Use engine oil of proper quality and viscosity, selected in accordance with the table below.

● Recommended oil

**API classification: SH OR SG with the words "Energy Conserving II",
CCMC specification G4 or G5,
or ILSAC certification mark is displayed on the container**

SAE Viscosity No. and Applicable Temperature							
(°C)	-30	-20	-15	0	15	30	40
(°F)	-22	-4	5	32	59	86	104
B1H0118							

Fig. 3



B1H0119

Fig. 4



B1H0042

Fig. 5

The proper viscosity helps car get good cold and hot starting by reducing viscous friction and thus increasing cranking speed.

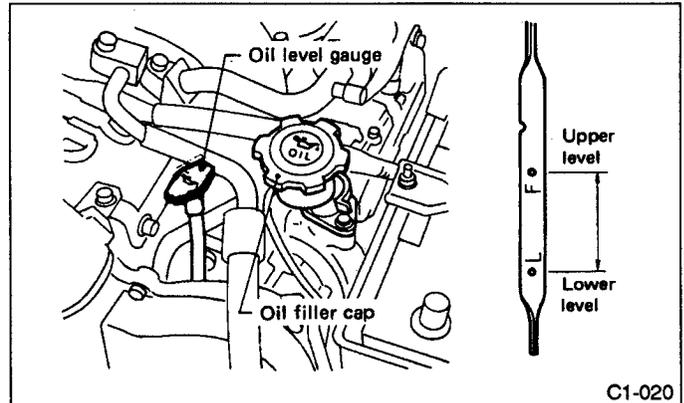
- a. **Insert the oil level gauge into gauge hole in proper direction as figure.**
- b. **When replenishing oil, it does not matter if the oil to be added is a different brand from that in the engine, however, use oil having the API classification and SAE viscosity No. designated by SUBARU.**
- c. **If vehicle is used in desert areas or areas with very high temperatures or for other heavy duty applications, the following viscosity oils may be used:**

API classification: SH
 SAE Viscosity No.: 30, 40, 10W-50, 20W-40,
 20W-50

- 5) Close engine oil filler cap.
- 6) Recheck the oil level.

B: INSPECTION

- 1) Park vehicle on a level surface.
- 2) Remove oil level gauge and wipe it clean.
- 3) Reinsert the level gauge all the way. Be sure that the level gauge is correctly inserted with the symbol on the top appearing as shown in the figure.
- 4) Remove gauge again and check to ensure that oil level is between F and L marks on gauge rod. If the engine oil level is below the "L" line, add oil to bring the level up to the "F" line.
 - a. **Before checking oil level, ensure that engine is cold.**
 - b. **Do not check oil level immediately after engine or vehicle has stopped; wait at least 10 minutes.**
 - c. **Just after driving or while the engine is warm, the engine oil level may be in the range between the "F" line and the "notch" mark. This is caused by thermal expansion of the engine oil.**
 - d. **To prevent overfilling the engine oil, do not add oil above the "F" line when the engine is cold.**



C1-020

Fig. 24

Engine oil capacity:

- Upper level
6.0 l (6.3 US qt, 5.3 Imp qt)
 - Lower level
5.0 l (5.3 US qt, 4.4 Imp qt)
-

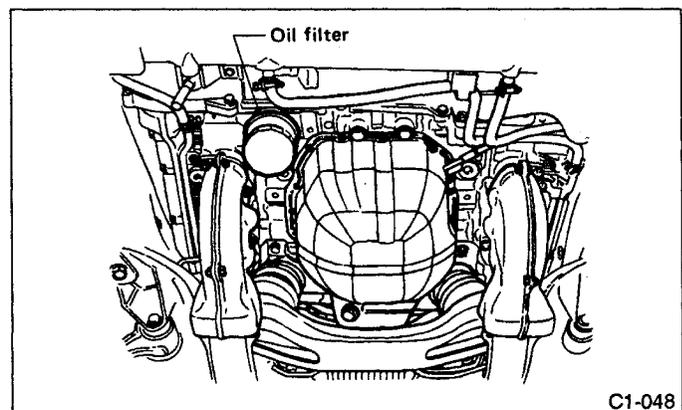
4. Engine Oil Filter

MAINTENANCE INTERVAL [Number of months or km (miles), whichever occurs first]																	
Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
x1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
California	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
All states except California	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

A: REPLACEMENT

- 1) Remove oil filter with an oil filter wrench.
- 2) Get a new oil filter and apply a thin coat of engine oil to the seal rubber.
- 3) Install oil filter by turning it with hand, being careful not to damage seal rubber.
- 4) Tighten by approximately two thirds of a turn after the seal rubber contacts the cylinder block. Do not tighten excessively, or oil may leak.
- 5) After installing oil filter, run engine and make sure that no oil is leaking around seal rubber.

The filter element and filter case are permanently joined; therefore, interior cleaning is not necessary.



C1-048

Fig. 25

5. Replace Engine Coolant and Inspect Cooling System, Hoses and Connections

		MAINTENANCE INTERVAL [Number of months or km (miles), whichever occurs first]															
Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
x1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
California					P				P				P				P
All states except California					P				P				P				P

A: REPLACEMENT

1. REPLACEMENT OF COOLANT

- 1) Prepare a vinyl tube 150 mm (5.91 in) long, 8 mm (0.31 in) dia., and 1 mm (0.04 in) thick.
- 2) Insert vinyl tube into drain pipe via hole in under-cover.

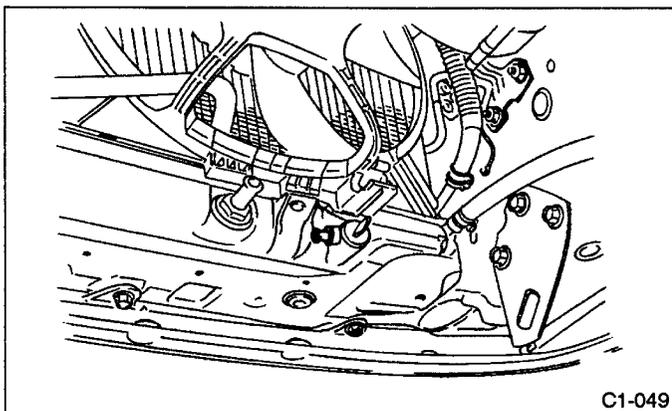


Fig. 26

- 3) Place a container under drain tube, and loosen drain plug.
- 4) Loosen radiator cap to drain coolant.
- 5) Drain coolant from reserve tank.
- 6) Remove two drain plugs on engine side, and drain coolant.

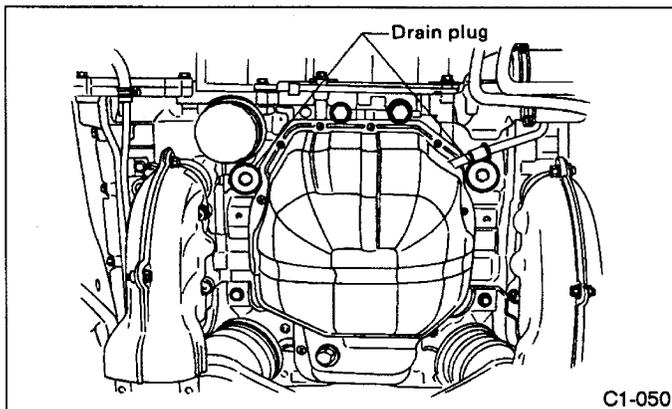


Fig. 27

- 7) Securely tighten engine side drain plugs.
- 8) Tighten radiator drain plug securely. (Drain tube may face to center.)
- 9) Install reserve tank to original position.
- 10) Slowly pour prepared coolant from radiator filler port to neck of filler, then pour into reserve tank up to "FULL" level.

Coolant capacity (Pour up to "FULL" level.)
Approx. 7.0 l (7.4 US qt, 6.2 Imp qt)

The SUBARU Genuine Coolant containing anti-freeze and anti-rust agents is especially made for SUBARU engine, which has an aluminum crankcase. Always use SUBARU Genuine Coolant, since other coolant may cause corrosion.

- 11) Securely install radiator cap.
- 12) Run engine for more than five minutes at 2,000 to 3,000 rpm. (Run engine until radiator becomes hot in order to purge air trapped in cooling system.)
- 13) Stop engine and wait until coolant temperature lowers. Then open radiator cap to check coolant level and add coolant up to radiator filler neck. Next, add coolant into reserve tank up to "FULL" level. **The radiator is of the pressurized type. Do not attempt to open the radiator cap immediately after the engine has been stopped.**
- 14) After adding coolant, securely install radiator and reserve tank caps.

2. RELATIONSHIP OF SUBARU COOLANT CONCENTRATION AND FREEZING TEMPERATURE

The concentration and safe operating temperature of the SUBARU coolant is shown in the following diagram. Measuring the temperature and specific gravity of the coolant will provide this information.

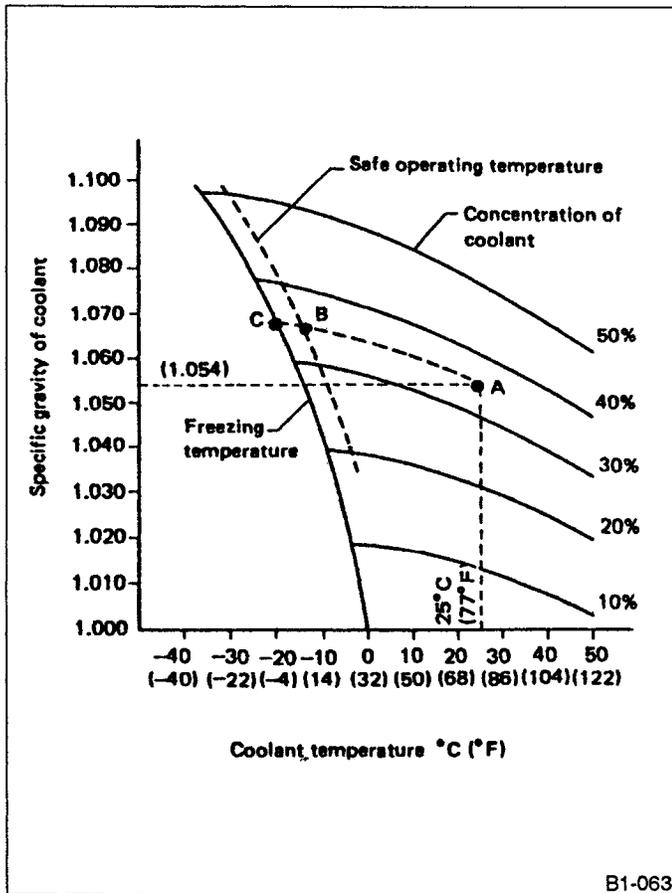


Fig. 28

[Example]

If the coolant temperature is 25°C (77°F) and its specific gravity is 1.054, the concentration is 35% (point A), the safe operating temperature is -14°C (7°F) (point B), and the freezing temperature is -20°C (-4°F) (point C).

3. PROCEDURE TO ADJUST THE CONCENTRATION OF THE COOLANT

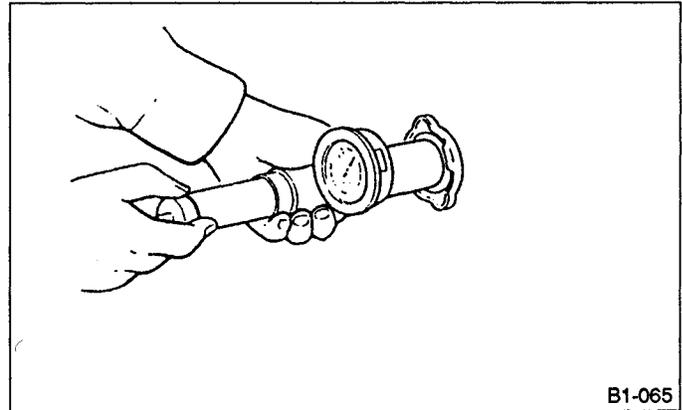
To adjust the concentration of the coolant, replace the all amount of coolant with an undiluted solution of SUBARU genuine coolant (concentration 50).

B: INSPECTION

- 1) Check the radiator reserve tank and hoses for damage or clogging.
 - 2) Check the hose connections for leakage.
 - 3) Check the valve, spring and packing in the cap for damage.
 - 4) Check rubber seal on cap for tears, cracks or deterioration after cleaning it.
- Install the cap on a tester and if cap does not hold or does not release the specified pressure, replace cap.

Cap relief pressure:

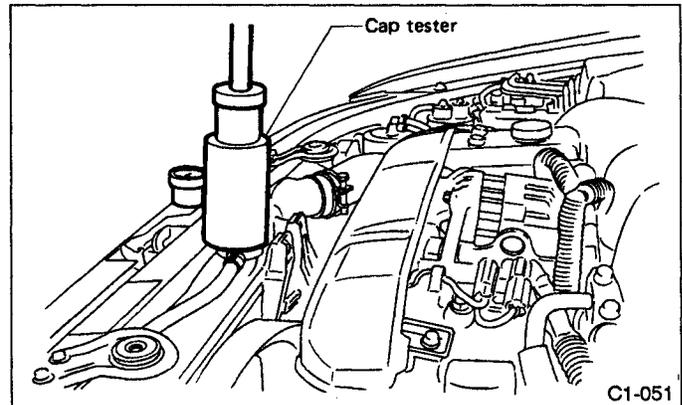
88 kPa (0.9 kg/cm², 13 psi)



B1-065

Fig. 29

- 5) Check the radiator for leakage. Inspect radiator for leakage using a cap tester and applying a pressure of 157 kPa (1.6 kg/cm², 23 psi). If a leakage is detected, repair or replace the radiator.



C1-051

Fig. 30

- 6) If the coolant temperature exceeds 76.0 to 80.0°C (169 to 176°F) while radiator is not so hot, check thermostat.
- 7) If thermostat does not open at 76.0 to 80.0°C (169 to 170°F), replace it with a new one.

6. Replace Fuel Filter and Inspect Fuel System, Lines and Connections

MAINTENANCE INTERVAL [Number of months or km (miles), whichever occurs first]																	
Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
x1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
California					(P)				(P)				(P)				P
All states except California					(P)				P				(P)				P

A: REPLACEMENT

a. Before starting the job, be sure to carry out the following.

- Place "No fire" signs near the working area.
- Disconnect ground cable from battery.

b. Be careful not to spill fuel on the floor.

1) Removal

(1) Before removing the hose, filter, pump, etc., be sure to release the fuel pressure, as follows:

- Disconnect the wiring connector of the fuel pump.
- Crank the engine for more than five seconds. If the engine starts, let the engine run until it stops.

(2) Loosen the screw of the hose clamp and pull off the hose from the filter.

(3) Remove the filter from the holder.

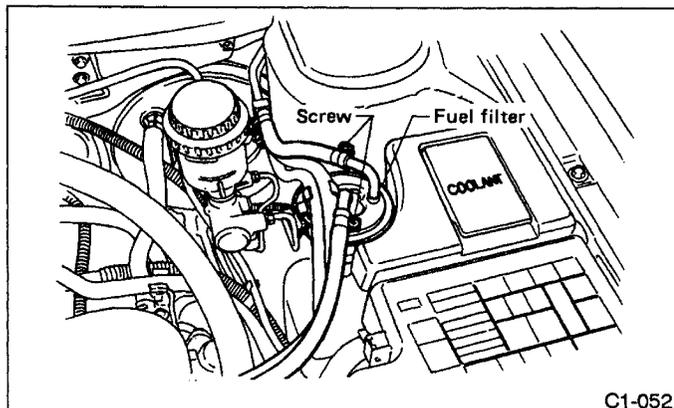


Fig. 31

C1-052

2) Installation

- (1) Install the filter to the holder.
- (2) Connect the hose as illustrated below:

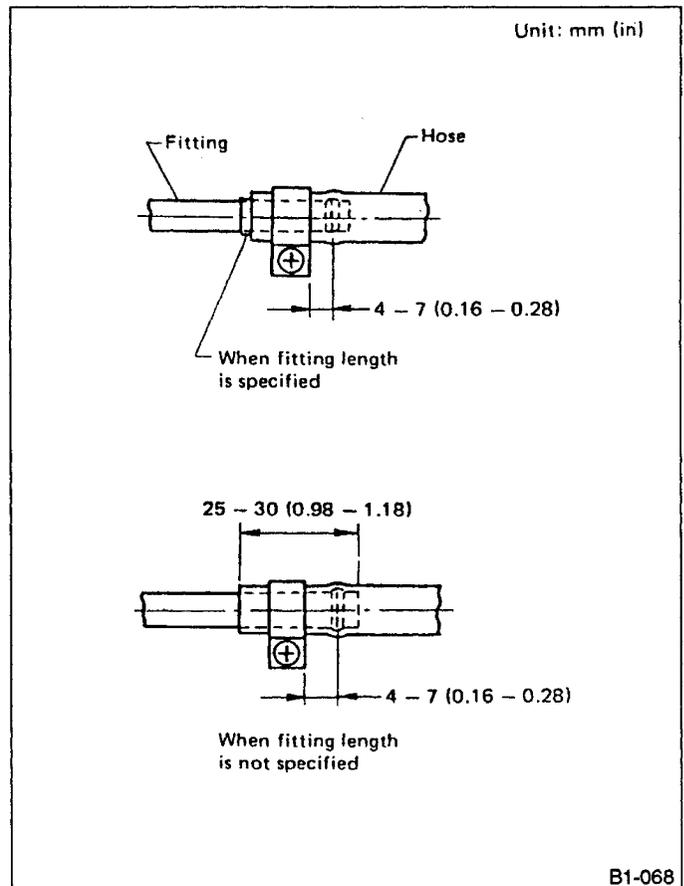


Fig. 32

- (3) Tighten the hose clamp screw to the specified torque.

Tightening torque:

1.0 — 1.5 N•m (0.1 — 0.15 kg-m, 0.7 — 1.1 ft-lb)

- a. If the hose is damaged at the clamping portion, replace the hose with a new one.
- b. If the hose clamp is too deformed, replace with a new one.
- c. Correct the hose position by removing any twist so that it will not interfere with the filter body or washer tank, before tightening the screw of the hose clamp.

B: INSPECTION

1. FUEL PIPING AND CONNECTIONS

Check fuel piping and connections for leakage, scratches, swelling and corrosion.

7. Air Filter Elements

MAINTENANCE INTERVAL [Number of months or km (miles), whichever occurs first]																	
Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
x1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
California					R				R				R				R
All states except California					R				R				R				R

A: REPLACEMENT

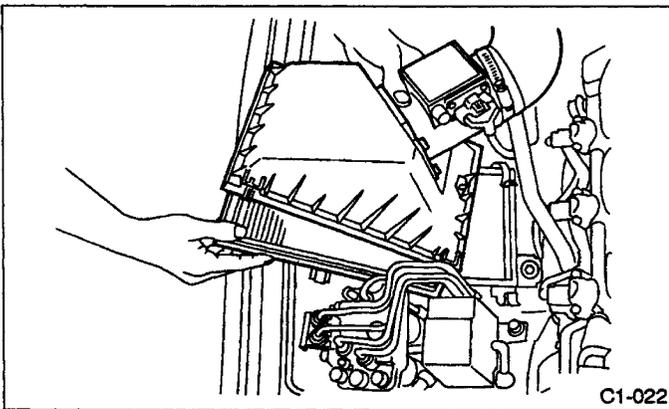


Fig. 33

- a. Do not attempt to clean the air cleaner element. The filter paper of the element is wetted with a special non- inflammable slow-evaporating viscous liquid. It is resistant to cold weather and has a long service life. Dirt adhering to this filter paper forms porous laminations with the viscous liquid, which function as a filtration layer to reduce dust penetration into the filter paper. If this filter paper is cleaned, the filtration layer thus formed will be lost along with the viscous liquid.
- b. Under extremely dusty conditions, replace it more frequently.

8. Spark Plug

MAINTENANCE INTERVAL [Number of months or km (miles), whichever occurs first]																	
Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
x1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
California									R								R
All states except California									R								R

A: REPLACEMENT

Recommended spark plug:

NGK PFR6G-11
NIPPONDENSO PK20PR-11

Spark plug gap:

1.0 — 1.1 mm (0.039 — 0.043 in)

When installing spark plugs on cylinder head, tighten to the specified torque.

Tightening torque:

18 — 24 N•m (1.8 — 2.4 kg-m, 13 — 17 ft-lb)

- a. Be sure to place the gasket between the cylinder head and spark plug.
- b. If torque wrench is not available, tighten spark plug until gasket contacts cylinder head; then tighten further 1/4 to 1/2 turns.

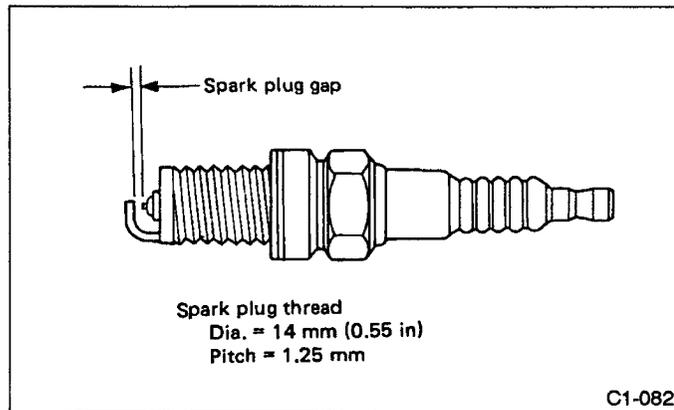


Fig. 34

**9. Differential (Front and rear)
Lubricants (Gear oil)**

MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)									
Months	3	7.5	15	22.5	30	37.5	45	52.5	60
x1,000 km	4.8	12	24	36	48	60	72	84	96
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60
					1				

A: INSPECTION

**1. FRONT DIFFERENTIAL
(Automatic Transmission)**

Oil level should be maintained between two points on the level gauge. If the oil level is at lower point or below, add some oil up to upper point.

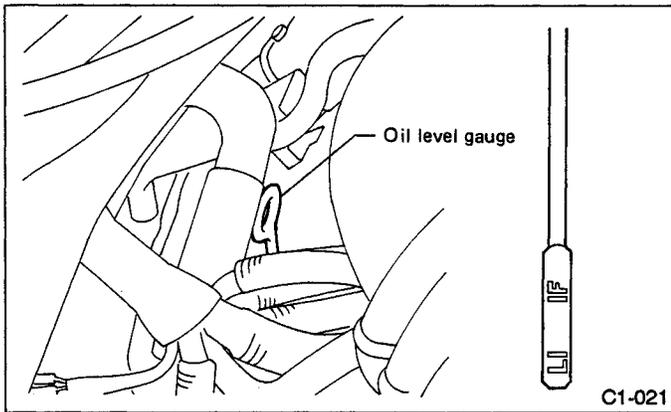


Fig. 35

Oil capacity:

1.1 — 1.3 ℓ (1.2 — 1.4 US qt, 1.0 — 1.1 Imp qt)

2. REAR DIFFERENTIAL (AWD Vehicle)

Remove plug of filler hole and check the oil level. Oil level should be maintained fully to the filler hole. If the oil level is below the mouth of filler hole, and some oil up to the mouth.

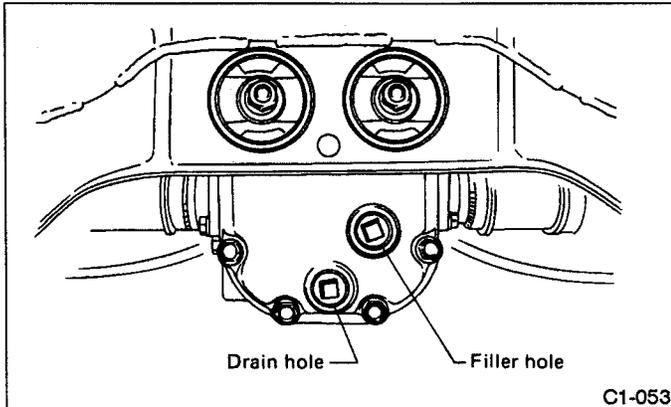


Fig. 36

Oil capacity:

0.8 l (0.8 US qt, 0.7 Imp qt)

Fluid packing:

Three Bond 1105 or equivalent

Drain plug tightening torque:

44 N•m (4.5 kg-m, 33 ft-lb)

<Recommended oil>

a. For rear differential gear.

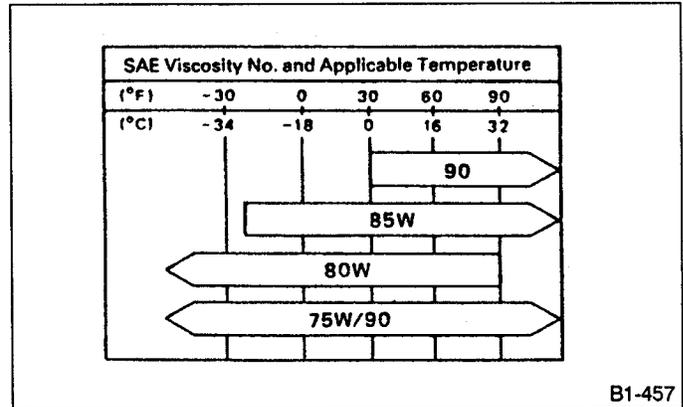


Fig. 37

b. For front differential gear (AT)

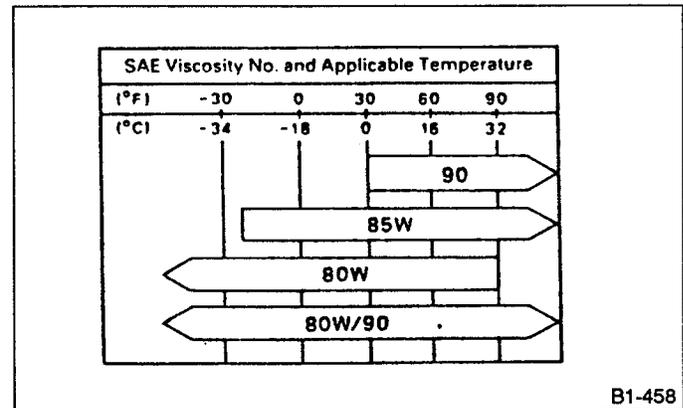


Fig. 38

c. Oil grade is classified as API classification GL-5.

d. Oil manufactures each have their own base oils and additives. Do not mix different brands together.

10. Automatic Transmission Fluid

MAINTENANCE INTERVAL [Number of months or km (miles), whichever occurs first]																	
Months	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
x1,000 km	4.8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5	120
California																	
All states except California																	

A: INSPECTION

- 1) Drive vehicle several km (miles) to bring automatic transmission fluid (ATF) up to normal operation temperature. Normal operating temperature is 60 to 80°C (140 to 176°F).
- 2) Park vehicle on a level surface.
- 3) After selecting all positions, place selector lever in "P" position and run engine on at idling speed.
- 4) Remove level gauge and wipe it clean.
- 5) Reinsert the level gauge all the way.
- 6) Remove it again and note reading. If the fluid level is below the center between high and low marks, add recommended ATF until the fluid level is within the specified range (above the center between high and low marks.) When transmission is hot, the level should be above the center of upper and lower marks, and when it is cold, the level should be below the center of these two marks.

ATF level gauge hole also serves as fluid filler.
NOTE:
 Do not fill the fluid above upper point of level gauge.
 Recommended automatic transmission fluid (ATF Dexron II)

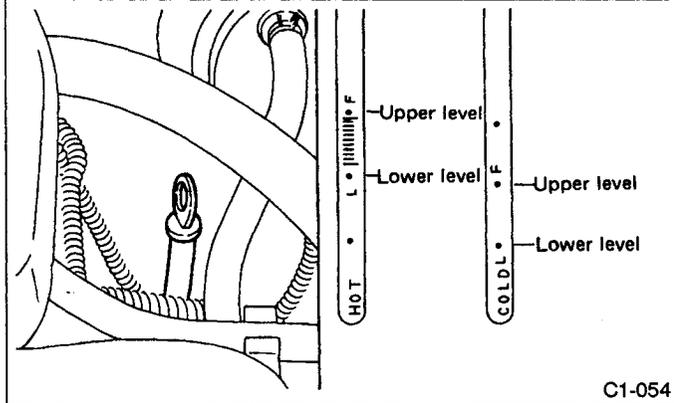


Fig. 39

Recommended automatic transmission fluid (ATF Dexron II)

B: REPLACEMENT

- 1) Drain fluid by removing drain plug after allowing the engine to cool for 3 to 4 hours.

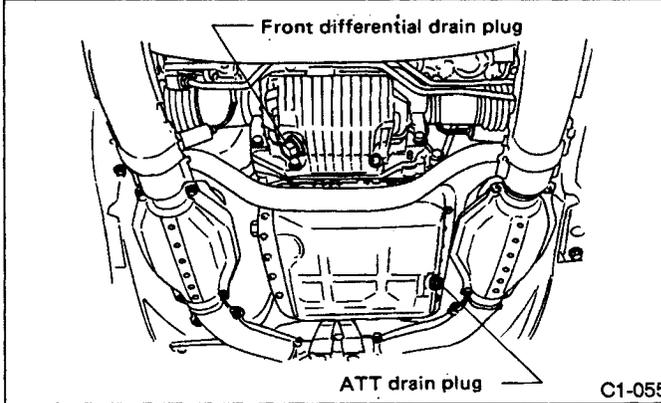


Fig. 40

- 2) Reinstall drain plug after draining fluid, and tighten it to the specified torque.

Tightening torque:
 25 N•m (2.5 kg-m, 18 ft-lb)

- a. Be sure to place a gasket between oil pan and drain plug.
 - b. Replace the gasket with new one.
- 3) Fill ATF through the fluid level gauge hole.

Fluid capacity:
 9.5 — 9.8 ℓ (10.0 — 10.4 US qt, 8.4 — 8.6 Imp qt)

- 4) Run the vehicle until the ATF temperature rises to 60 to 80°C (140 to 176°F) and the check the ATF level.

11. Brake Fluid

MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)									
Months	3	7.5	15	22.5	30	37.5	45	52.5	60
x1,000 km	4.8	12	24	36	48	60	72	84	96
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60
					R				R

A: REPLACEMENT

● **BRAKE SYSTEM WITH ABS (Anti-lock brake system)**

Air bleeding operations are generally performed in the following sequence.

- 1) Bleed air from primary side of circuit between hydraulic unit and master cylinder using FL and RR primary air bleeders on top of hydraulic unit.
- 2) Bleed air from secondary side of circuit pressure reducing circuit, using FR and RL secondary air bleeders on top of hydraulic unit.
- 3) Bleed air from line between hydraulic unit and wheel cylinder using FR wheel cylinder air bleeder.
- 4) Using step 3) above, air is bled from RL wheel cylinder.

Recommended brake fluid:

FMVSS No. 116, fresh DOT3 or DOT4 brake fluid

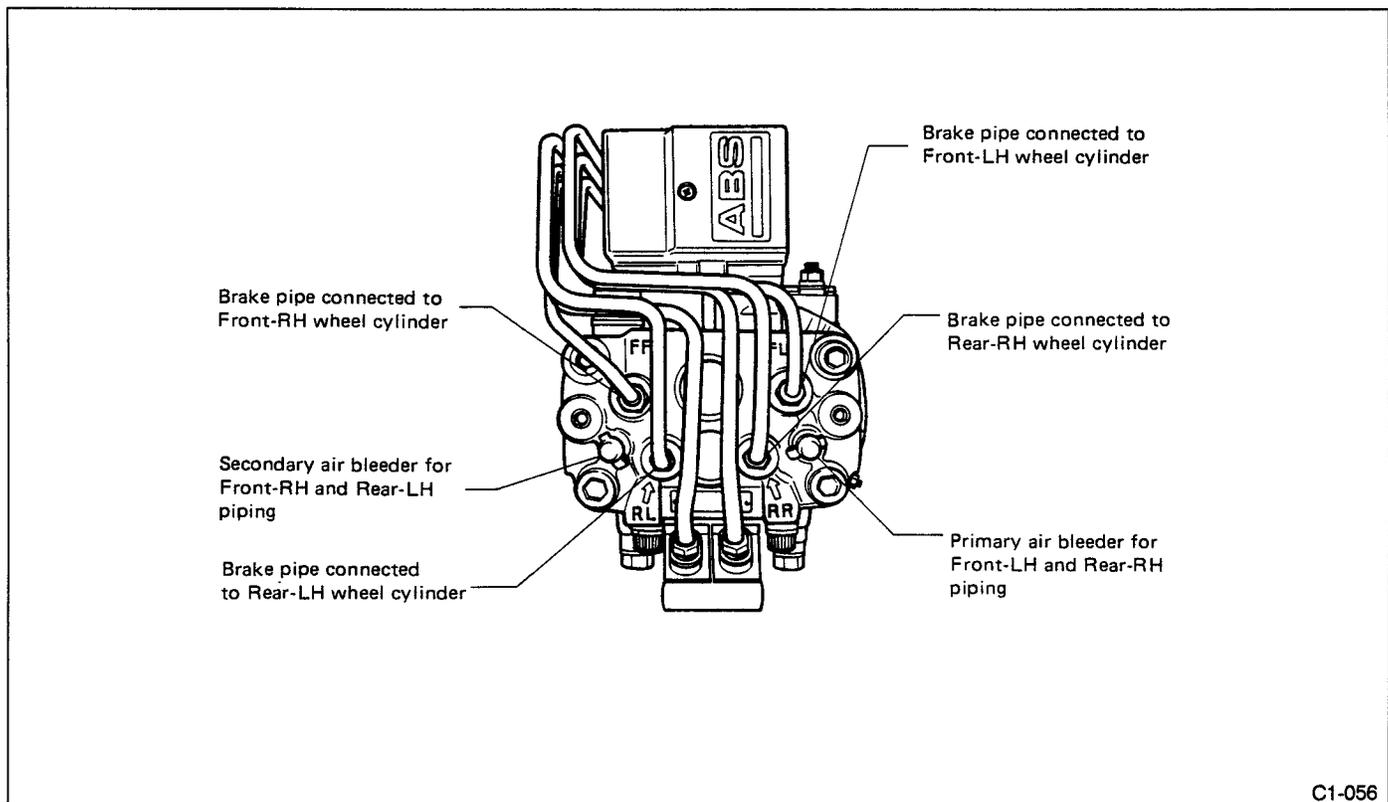
5) Using step 3) above, air is bled from FL wheel cylinder.

6) Using step 3) above, air is bled from RR wheel cylinder.

7) Depress brake pedal to check pedal stroke. Also check pedal-to-floor clearance and pedal feel. Repeat steps 1) through 6) above if necessary.

Tightening torque (Cone screw):

7 — 9 N•m (0.7 — 0.9 kg-m, 5.1 — 6.5 ft-lb)



C1-056

Fig. 41

SCHEDULE OF INSPECTION AND MAINTENANCE SERVICES

12. Disc Brake Pads and Disc/ Front and Rear Axle Boots and Axle Shaft Joint Portions

MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)									
Months	3	7.5	15	22.5	30	37.5	45	52.5	60
x1,000 km	4.8	12	24	36	48	60	72	84	96
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60

A: INSPECTION

1. DISC BRAKE PAD AND DISC (Front and Rear)

- 1) Jack-up vehicle and support with rigid racks. Then remove wheels.
- 2) Visually check pad thickness through inspection hole of disc brake assembly. Replace pad if necessary.

FRONT

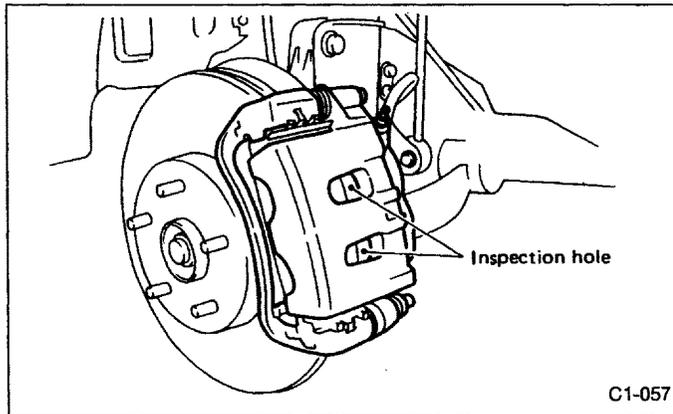


Fig. 1

REAR

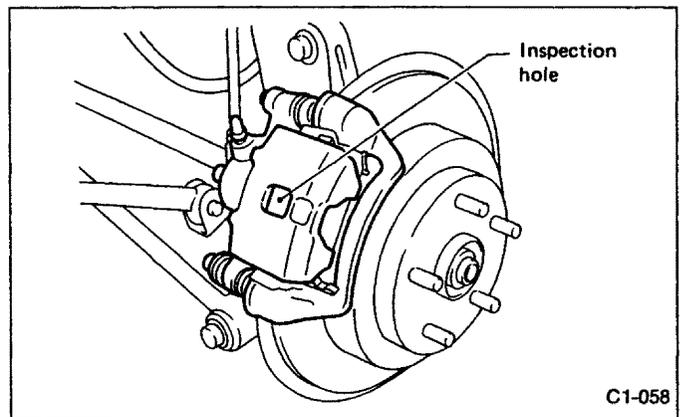


Fig. 3

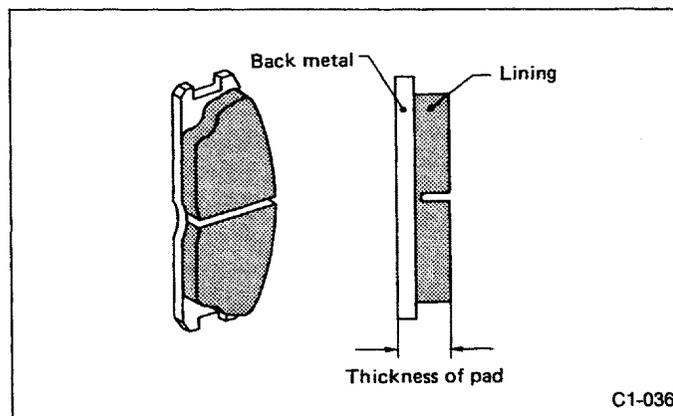


Fig. 2

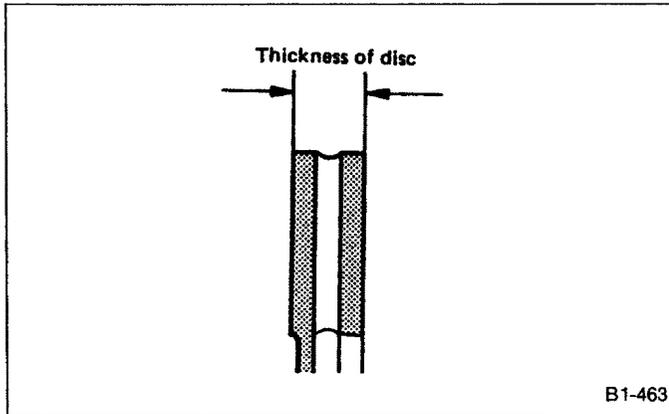
	Pad thickness including back metal mm (in)	
	Front	Rear
Standard	17 (0.67)	15 (0.59)
Wear limit	7.5 (0.295)	6.5 (0.256)
Wear limit (exclude back metal)	1.5 (0.059)	1.5 (0.059)

- a. When replacing a pad, always replace the pads for both the left and right wheels at the same time. Also replace pad clips if they are twisted or worn.
- b. The clip incorporated with pad is also used as a warning device for worn pads. When wear occurs on the pad to such an extent that the clip comes into contact with the rotor, unusual noise (squeak) is produced. If such a noise is noticed, replace the pads.

3) Disc rotor

Check for wear and damage, and correct or replace if abnormal.

Brake disc thickness mm (in)		
	Front	Rear
Standard	28 (1.10)	10 (0.39)
Wear limit	26 (1.02)	8.5 (0.335)



B1-463

Fig. 4

Disc rotor runout:

Limit 0.075 mm (0.0030 in)

Measure the disc rotor runout at a point less than 5 mm (0.20 in) from the outer periphery of the rotor.

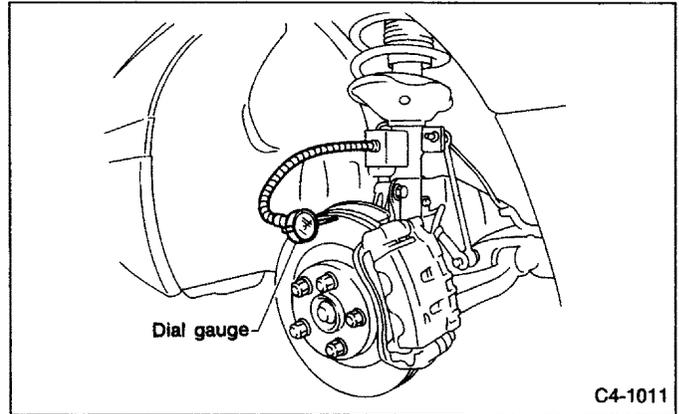


Fig. 5

13. Brake Linings and Drums (Parking brake)

MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)									
Months	3	7.5	15	22.5	30	37.5	45	52.5	60
x1,000 km	4.8	12	24	36	48	60	72	84	96
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60

A: INSPECTION

Inspect brake linings and drums of both sides of the rear brake at the same time by removing brake drums.

1) Inspect brake shoes for damage or deformities and check brake linings for wear.

Always replace both primary and secondary brake shoes for the left and right wheels at the same time.

Brake lining thickness excluding back metal:

- Standard
3.2 mm (0.126 in)
- Wear limit
1.5 mm (0.059 in)

Brake drum inside diameter:

- Standard
190 mm (7.48 in)
- Wear limit
191 mm (7.52 in)

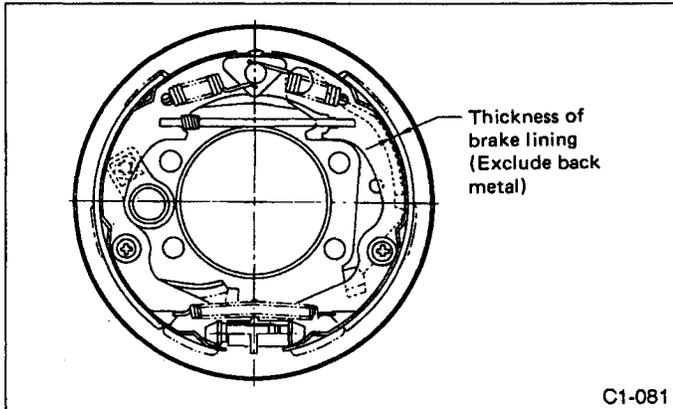


Fig. 49

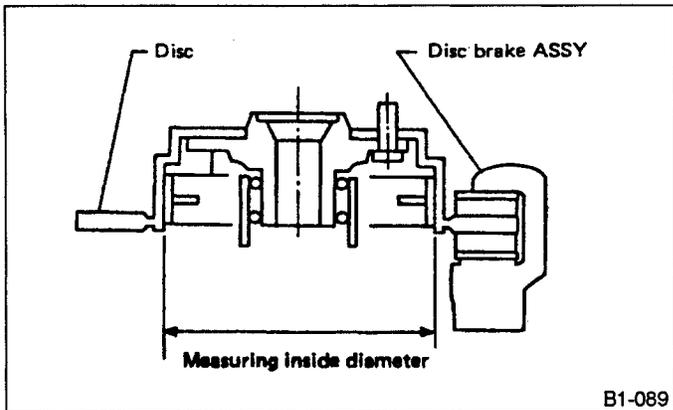


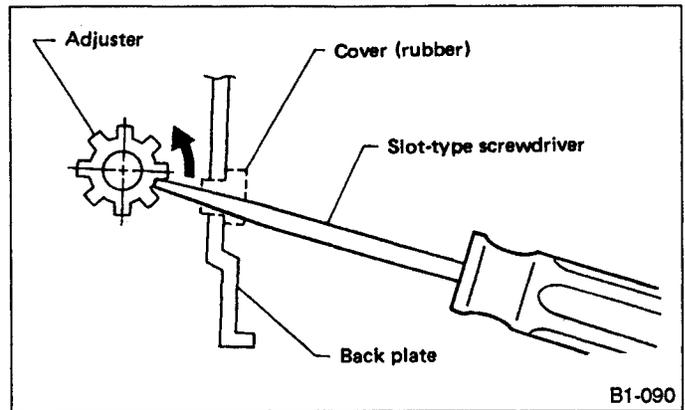
Fig. 50

- 3) If the deformation or wear of back plate, shoe, etc. are notable, replace them.
- 4) When the shoe return spring tension is excessively weakened, replace it, taking care to identify upper and lower springs.

2) Check brake drum for wear, dents or other damage. If the inside surface of brake drum is streaked, correct the surface with emery cloth (#200 or more). If it is unevenly worn, taperingly streaked, or the outside surface of brake drum is damaged, correct or replace it.

B: ADJUSTMENT

- 1) Remove rear cover (rubber) installed at back plate.
- 2) Turn adjuster toward arrow mark (upward) until it is locked slightly, by using slot-type screw driver as shown in illustration below.

*Fig. 51*

- 3) Turn back (downward) adjuster 3 to 4 notches.
- 4) Install cover (rubber) at original position correctly.

14. Inspect Brake Line and Check Operation of Parking and Service Brake System

MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)									
Months	3	7.5	15	22.5	30	37.5	45	52.5	60
x1,000 km	4.8	12	24	36	48	60	72	84	96
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60
			P		P		P		P

A: INSPECTION

1. BRAKE LINE

1) Check scratches, swelling, corrosion and/or traces of fluid leakage on brake hoses or pipe joints.

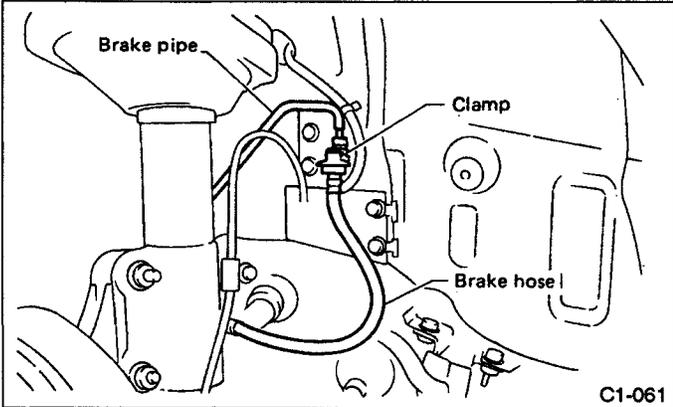


Fig. 52

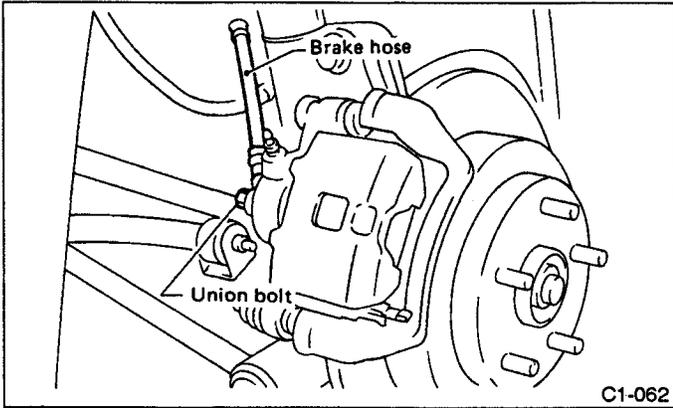


Fig. 53

2) Check the possibility of adjacent parts interfering with brake pipes/hoses during driving, and loose connections/clamps.
 3) Check any trace of fluid leakage, scratches, etc. on master cylinder, wheel cylinder, pressure control valve.
When the brake fluid level in the reservoir tank is lower than the specified limit, the brake fluid warning light on the instrument panel will come on.

B: CHECKING

1. SERVICE BRAKE

1) Check the free play of brake pedal with a force of less than 10 N (1 kg, 2 lb).

Brake pedal free play:
 1.0 — 3.0 mm (0.039 — 0.118 in)

If the free play is out of specifications above, adjust the brake pedal as follows:

- (1) Be sure engine is off. (No vacuum is applied to brake booster.)
- (2) There should be play between brake booster clevis and pin at brake pedal installing portion. (Depress brake pedal pad with a force of less than 10 N (1 kg, 2 lb) to a stroke of 1.0 to 3.0 mm [0.039 to 0.118 in].)

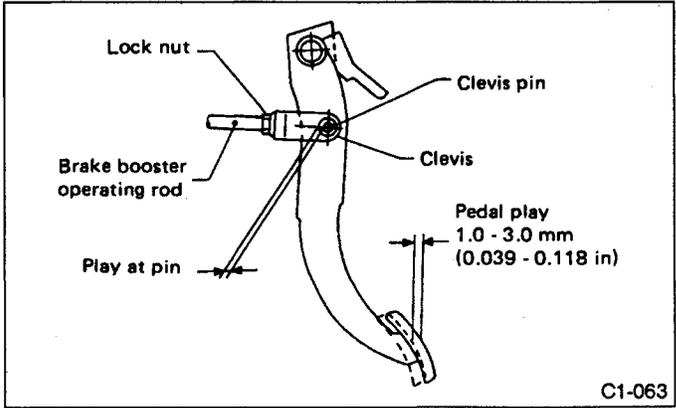


Fig. 54

- (3) Depress the surface of brake pedal pad by hand.
- (4) If there is no free play between clevis pin and clevis, loosen lock nut for operating rod and adjust operating rod by turning in the direction that shortens it.

2) Measure the distance between brake pedal and floor when the pedal is depressed with a force of approximately 294 N (30 kg, 66 lb).

Brake pedal reserve distance:

More than 120 mm (4.72 in)/294 N (30 kg, 66 lb)

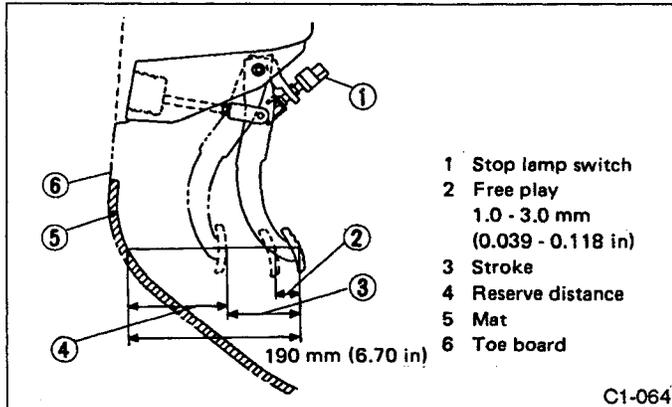


Fig. 55

3) Check to see if air is in the hydraulic brake line by the feel of pedal operation. If air appears to exist in the line, bleed it from the system.

4) Check for even operation of all brakes, using a brake tester or by driving the vehicle for a short distance on a straight road.

2. PARKING BRAKE SYSTEM

1) Remove console box.

2) Adjust parking brake level by turning adjuster (double nut) until parking brake lever stroke is set at 6 to 7 notches with operating force of 196 N (20 kg, 44 lb).

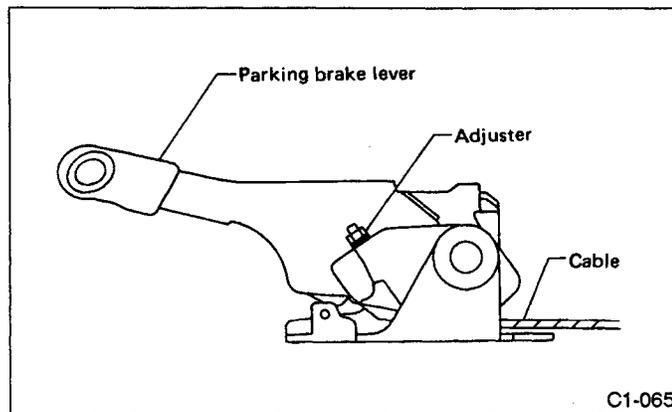


Fig. 56

3. BRAKE SERVO SYSTEM

1) With the engine off, depress the brake pedal several times applying the same pedal force: Make sure the travel distance should not change.

2) With the brake pedal depressed, start the engine: Make sure the pedal should move slightly toward the floor.

3) With the brake pedal depressed, stop the engine and keep the pedal depressed for 30 seconds: Make sure the pedal height should not change.

4) Check valve is built into vacuum hose. Disconnect vacuum hose to inspect function of check valve.

Blow air into vacuum hose from its brake booster side end: Air must flow out of engine side end of hose. Next blow air into hose from engine side: Air should not flow out of hose.

Replace both check valve and vacuum hose if check valve is faulty. Engine side of vacuum hose is indicated by marking "ENGINE" as shown.

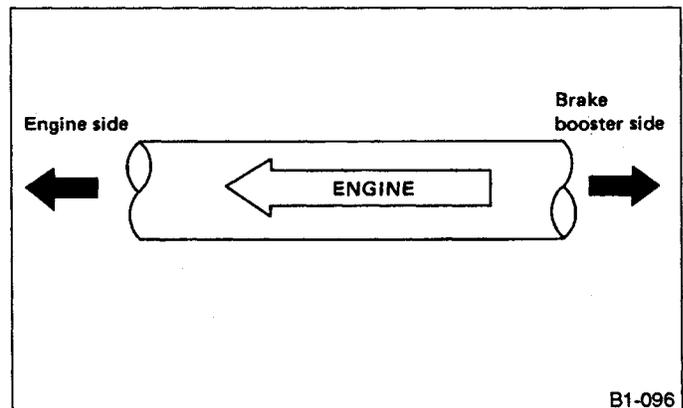


Fig. 57

5) Check vacuum hose for cracks or other damage.

When installing the vacuum hose on the engine and brake booster, do not use soapy water or lubricating oil on their connections.

6) Check vacuum hose to make sure it is tight and secure.

15. Steering and Suspension

MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)									
Months	3	7.5	15	22.5	30	37.5	45	52.5	60
x1,000 km	4.8	12	24	36	48	60	72	84	96
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60

A: INSPECTION

1. STEERING WHEEL

- 1) Set steering wheel in a straight-ahead position, and check wheel spokes to make sure they are correctly set in their specified positions.
- 2) Lightly turn steering wheel to the left and right to determine the point where front wheels start to move. Measure the distance of the movement of steering wheel at the outer periphery of wheel.

Steering wheel free play:
0 — 17 mm (0 — 0.67 in)

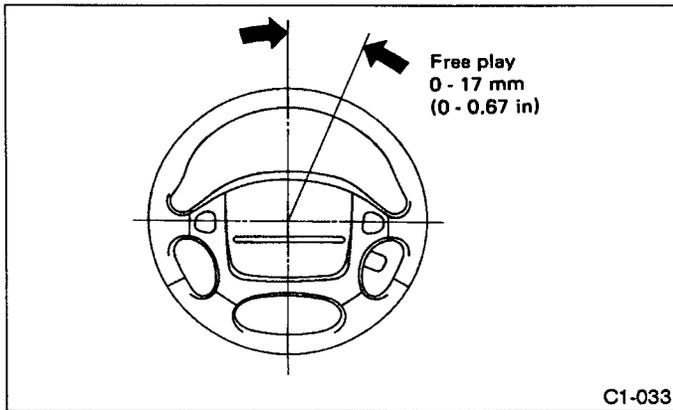


Fig. 58

- 3) Move steering wheel vertically toward the shaft to ascertain if there is play in that direction.

Maximum permissible play:
0.5 mm (0.020 in)

- 4) Drive vehicle and check the following items during operation.

- (1) Steering force

The effort required for steering should be smooth and even at all points, and should not vary.

- (2) Pull to one side

Steering wheel should not be pulled to either side while driving on a level surface.

- (3) Wheel runout

Steering wheel should not show any sign of runout.

- (4) Return factor

Steering wheel should return to its original position after it has been turned and then released.

2. STEERING SHAFT JOINT

- 1) When steering wheel free play is excessive, disconnect universal joint of steering shaft and check it for any play and yawing torque (at the point of the crossing direction). Also inspect for any damage to sealing or worn serrations.

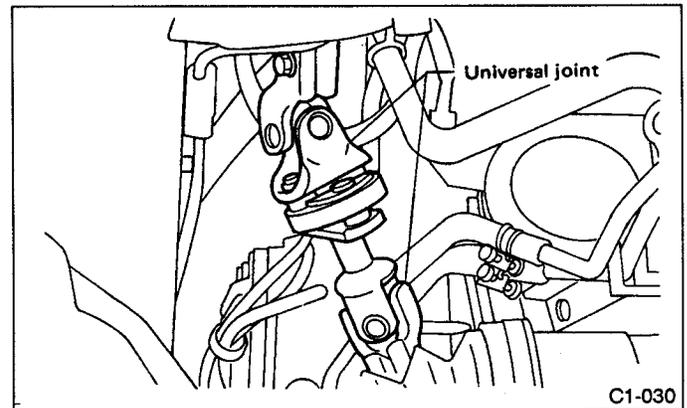


Fig. 59

If the joint is loose, retighten the mounting bolts to the specified torque.

Tightening torque:

21 — 26 N•m (2.1 — 2.7 kg-m, 15 — 20 ft-lb)

3. GEARBOX

- 1) Disconnect ground cable from battery.
- 2) Disconnect both oxygen sensor and steering harness (solenoid valve) connector.
- 3) Raise vehicle with a jack and remove front wheels.
- 4) Remove engine compartment's under cover.
- 5) With wheels placed on a level surface, turn steering wheel 90° in both the left and right directions. While wheel is being rotated, reach under vehicle and check for looseness in gearbox.

Tightening torque:

47 — 71 N·m (4.8 — 7.2 kg·m, 35 — 52 ft·lb)

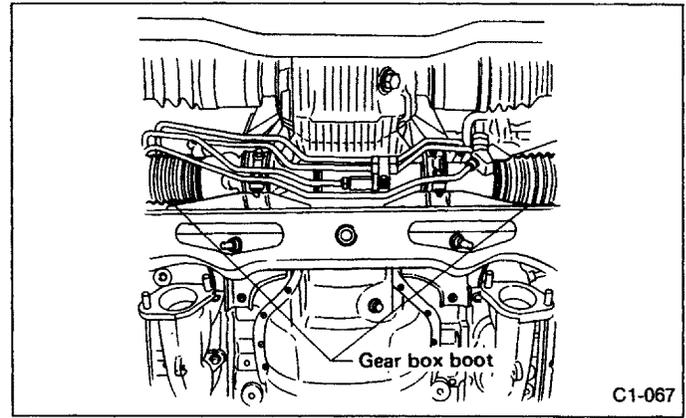


Fig. 7

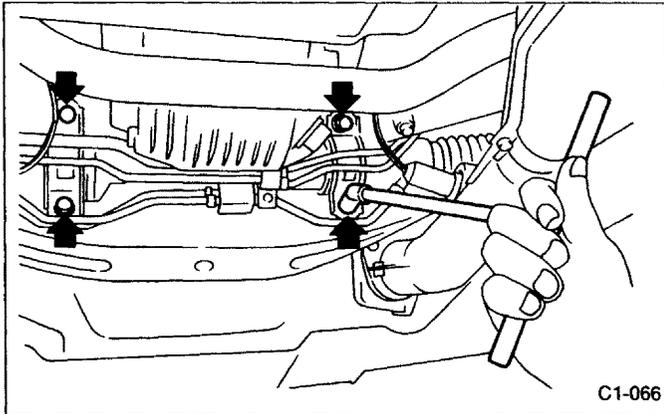


Fig. 6

- 6) Check boot for damage, cracks or deterioration.

MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)									
Months	3	7.5	15	22.5	30	37.5	45	52.5	60
x1,000 km	4.8	12	24	36	48	60	72	84	96
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60

- 7) With vehicle on a level surface, quickly turn steering wheel to the left and right. While steering wheel is being rotated, check the gear backlash. If any unusual noise is noticed, adjust the gear backlash in the following manner.

- (1) Remove front stabilizer and stabilizer lever from stabilizer links and disconnect stabilizer lever from front stabilizer.

Before disconnecting stabilizer lever, put matching marks on affected parts.

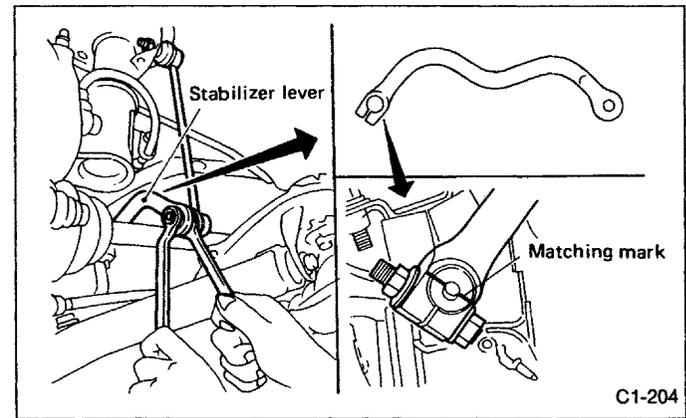


Fig. 8

- (2) Remove both sides clamp and rubber bush.

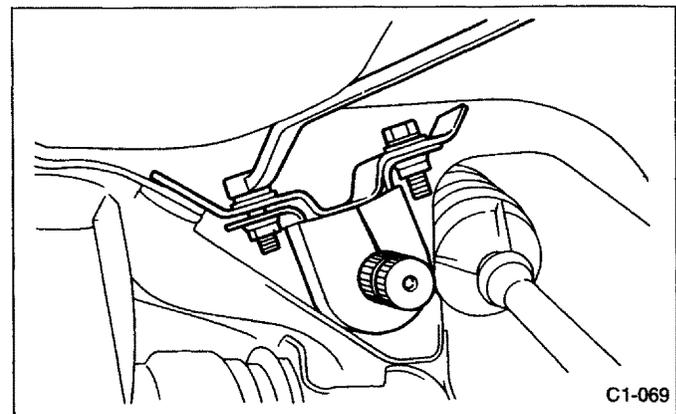


Fig. 9

- (3) Position stabilizer to free.
- (4) Loosen the adjusting screw.

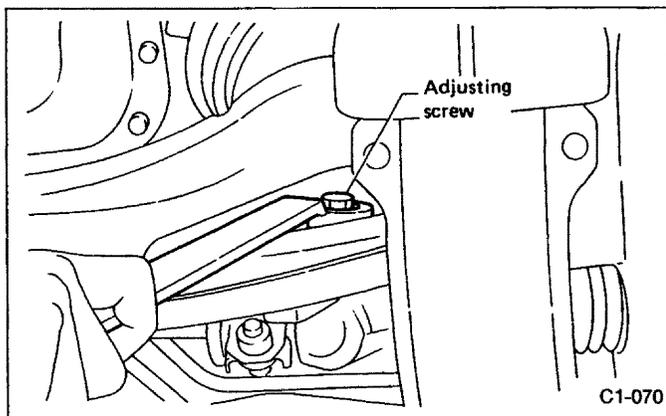


Fig. 10

- (5) Set steering wheel in straight-ahead direction.
- (6) Tighten adjusting screw two turns.
- (7) Tighten adjusting screw and plug at the same time so that the entire thread area is coated with liquid gas-ket.

Liquid packing:

Three Bond 1102 (P/N 004403006) or equivalent

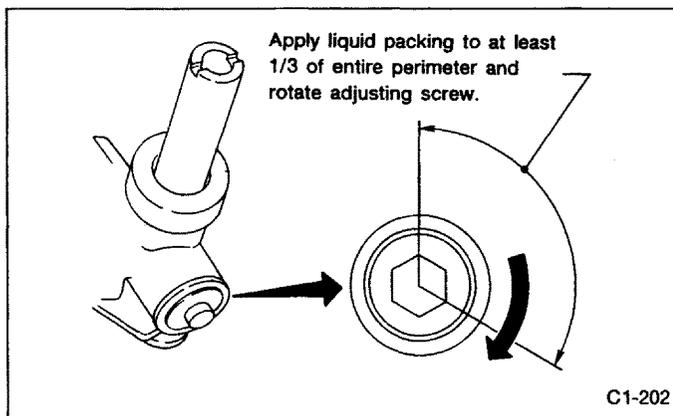


Fig. 11

- (8) Tighten adjusting screw to 5 N·m (0.5 kg-m, 3.6 ft-lb) and then loosen. Repeat this operation twice to fit the sleeve.
- (9) Retighten adjusting screw to 5 N·m (0.5 kg-m, 3.6 ft-lb) and back off 30°.
- (10) Install lock nut. While holding adjusting screw using a closed wrench, tighten lock nut with LOCK NUT WRENCH (34099PA100).

Tightening torque (Lock nut):

29 — 49 N·m (3.0 — 5.0 kg-m, 22 — 36 ft-lb)

Hold the adjusting screw with a wrench to prevent it from turning while tightening the lock nut.

4. TIE-ROD

- 1) Check tie-rod and tie-rod ends for bends, scratches or other damage.
- 2) Check connections of knuckle ball joints for play, inspect for damage on dust seals, and check the free play of ball studs.
- 3) Make sure that the cotter pin is installed correctly in the castle nut of the tie-rod end.

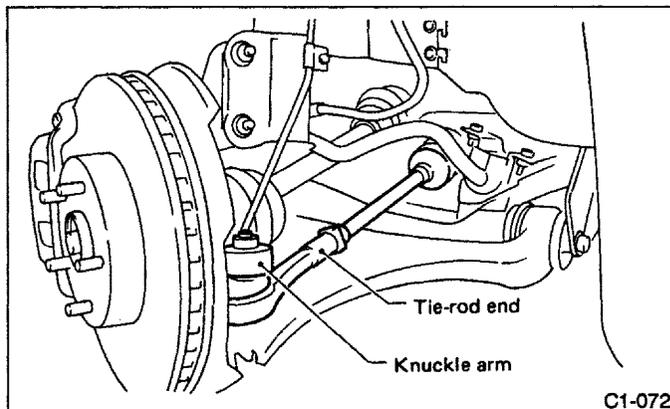
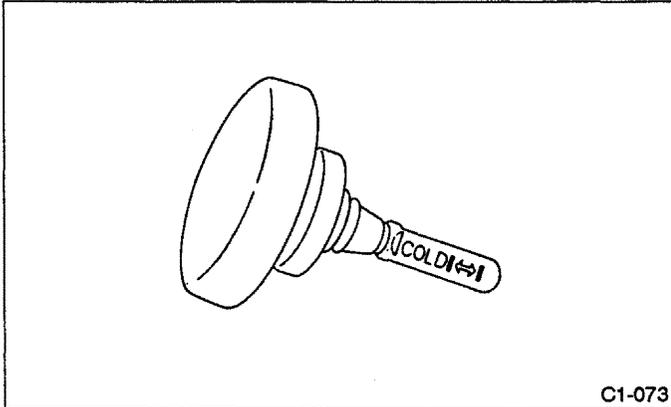


Fig. 66

5. POWER STEERING FLUID LEVEL

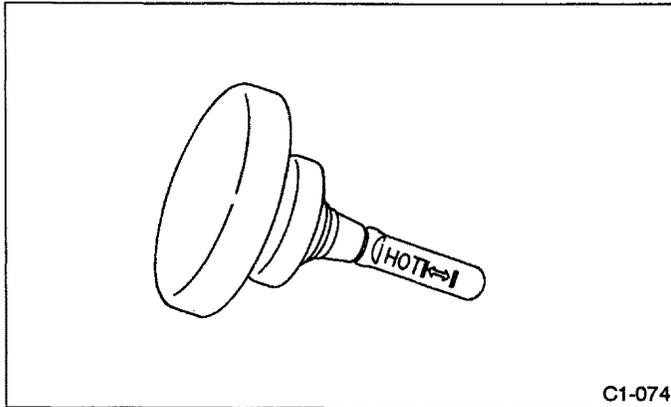
- 1) Place vehicle with engine "off" on the flat and level surface.
- 2) Check the fluid level by removing filler cap of oil pump.
 - (1) Check at temperature 21°C (70°F) of fluid temperature.



C1-073

Fig. 67

- (2) Check at temperature 60°C (140°F) of fluid temperature.



C1-074

Fig. 68

3) Fluid level should be maintained in the each specified range on the indicator of filler cap.
 If fluid level is at lower point or below, add fluid to keep the level in the specified range of indicator.
 If fluid level is at upper point or above, drain fluid to keep the level in the specified range of indicator by using a syringe or the like.

Recommended fluid	Manufacturer
ATF Dexron II	B.P.
	CALTEX
	CASTROL
	MOBIL
	SHELL
	TEXACO

Fluid capacity:

1.0 l (1.1 US qt, 0.9 Imp qt)

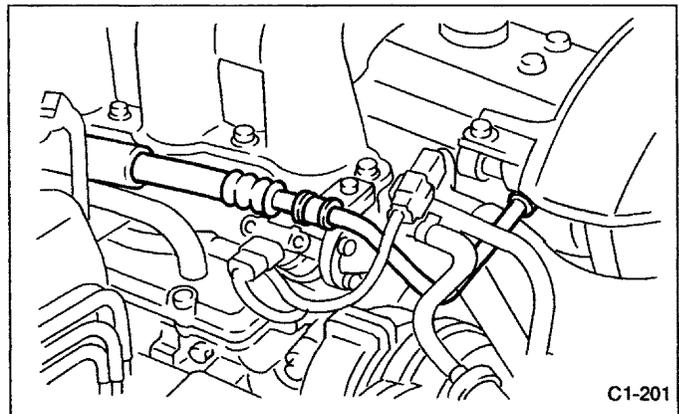
6. POWER STEERING FLUID FOR LEAKS

Inspect the underside of oil pump and gearbox for power steering system, hoses, piping and their couplings for fluid leaks.

If fluid leaks are found, correct them by retightening their fitting bolts (or nuts) and/or replacing their parts.

- a. Wipe the leakage fluid off after correcting fluid leaks, or a wrong diagnosis is taken later.
- b. Also pay attention to clearances between hoses (or pipings) and other parts when inspecting fluid leaks.

7. HOSES OF OIL PUMP FOR DAMAGES



C1-201

Fig. 12

- 1) Check pressure hose and return hose of oil pump for crack, swell or damage. Replace hose with new one if necessary.

Prevent hoses from revolving and/or turning when installing hoses.

8. POWER STEERING PIPES FOR DAMAGE

Check power steering pipes for corrosion and damage. Replace pipes with new one if necessary.

9. GEARBOX BOOTS

Inspect both sides of gearbox boots as follows, and correct the defects if necessary.

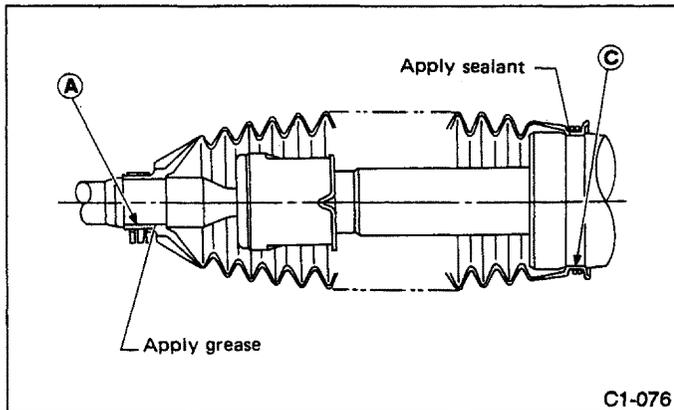


Fig. 70

- 1) A and C position of gearbox boot are fitted correspondingly in A and C grooves of gearbox and the rod.
- 2) Clips are fitted outside of A and C positions of boot.
- 3) Boot does not have crack, hole.

Rotate C position of gearbox boot against twist of it produced by adjustment of toe-in, etc.

10. FITTING BOLTS AND NUTS

Inspect fitting bolts and nuts of oil pump and bracket for looseness, and retighten them if necessary. Inspect and/or retighten them when engine is cold.

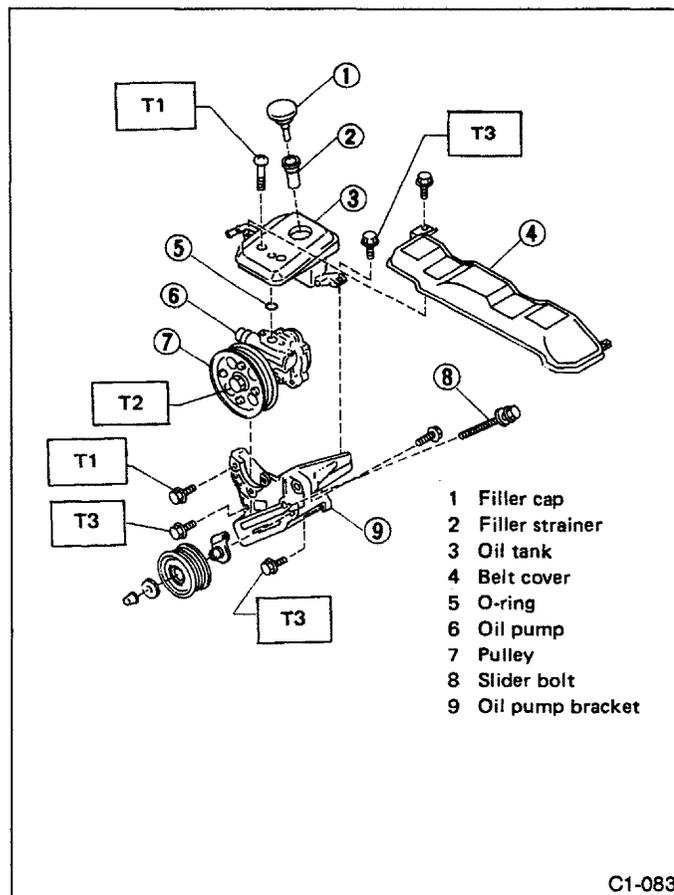


Fig. 71

- 1 Filler cap
- 2 Filler strainer
- 3 Oil tank
- 4 Belt cover
- 5 O-ring
- 6 Oil pump
- 7 Pulley
- 8 Slider bolt
- 9 Oil pump bracket

Tightening torque: N•m (kg-m, ft-lb)

- T1: 18 — 23 (1.8 — 2.3, 13 — 17)
- T2: 42 — 62 (4.3 — 6.3, 31 — 46)
- T3: 20 — 24 (2.0 — 2.4, 14 — 17)

11. SUSPENSION SYSTEM

1) Play of front ball joint Inspect every 24,000 km (15,000 miles) or 15 months, whichever occurs first.

- (1) Jack-up vehicle until front wheels are off ground.
- (2) Next, grasp bottom of tire and move it in and out. If relative movement is observed between brake disc cover and end of lower arm, ball joint may be excessively worn.

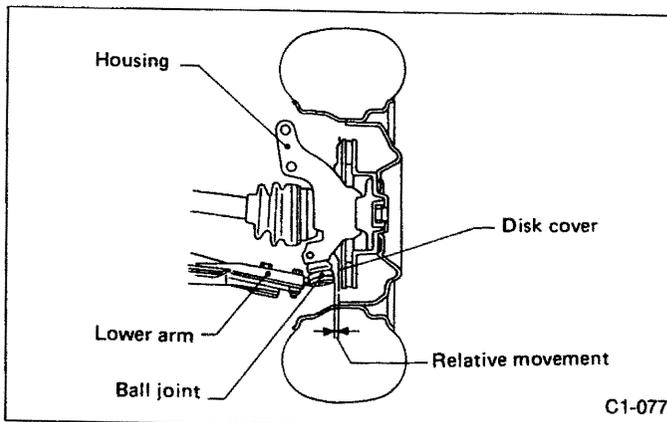


Fig. 13

(3) Next, grasp end of lower arm and move it up and down. Relative movement between housing and lower arm indicates ball joint may be excessively worn.

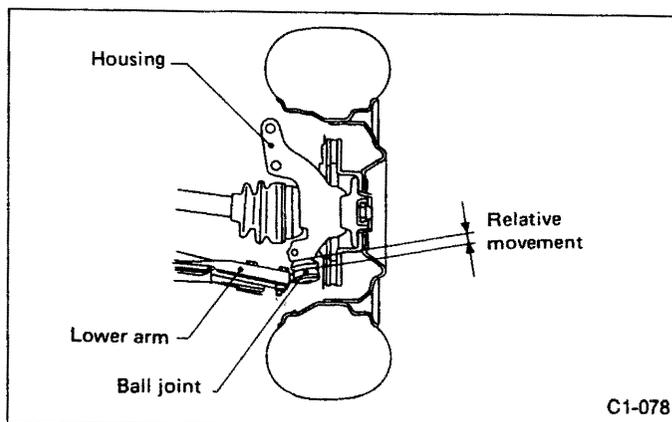


Fig. 14

(4) If relative movement is observed in tests (2) and (3) above, remove and inspect ball joint according to chapter 4-1. If looseness exceeds standard, replace ball joint.

2) Damage of dust cover Inspect every 24,000 km (15,000 miles) or 15 months, whichever occurs first.

Visually inspect ball joint dust cover. If it is damaged, remove ball joint as instructed in chapter 4-1 and measure looseness of ball joint.

(1) When looseness exceeds standard value or dust cover is damaged, replace ball joint assembly.

When lower arm ball joint has been removed or replaced, check toe-in of front wheel.

If front wheel toe-in is not within the tolerance, adjust according to chapter 4-1 so that toe-in conforms to service standard.

3) Lower arm's liquid-filled bushing with new one.

Check oil leaks at or around liquid-filled bushing. If oil leaks, replace bushing with new one.

4) Wheel alignment and ground clearance Inspect every 48,000 km (30,000 miles) or 30 months, whichever occurs first.

(1) Unload cargoes and set vehicle in curb weight (empty) condition.

(2) Then, check ground clearance of front and rear suspensions to conform to standard values.

(Adjusting procedure) — Ground clearance

When ground clearance is out of tolerance, visually inspect following components and replace deformed parts.

- Suspension components [Front: strut assembly, Rear: strut assembly]

- Body parts to which suspensions are installed.

When no components are deformed, adjust ground clearance by replacing coil spring in the strut assembly whose ground clearance is out of tolerance.

(3) Check alignment of front suspension to ensure that following items conform to standard values provided in chapters 4-1 and 4-3.

- Toe-in
- Camber angle
- Caster angle
- Turning angle of tire

(Adjusting procedure) — Front suspension alignment

(a) Caster angles are not adjustable. When caster angle is not within the tolerance, visually inspect following components and replace deformed parts.

- Suspension components [Strut assembly, sub frame, lower arm, etc.]

- Body parts to which suspensions are installed.

(b) When toe-in is not within the tolerance, adjust by the method described in chapter 4-1 so that it conforms to service standard.

(c) When right-and-left turning angles of tire are not within the tolerance, adjust to standard value by method described in chapter 4-3.

(4) Check alignment of rear suspension to ensure that following items conform to standard values provided in chapter 4-1.

- Toe-in
- Camber angle

(Adjusting procedure) — Rear suspension alignment

Camber angle can not be adjusted.

When toe-in or camber angle is not within the tolerance, visually inspect parts listed below. If deformation is observed, replace damaged parts.

- Suspension components [Strut assembly, lateral links, trailing link, sub frame, etc.]

- Body parts to which suspensions are installed.

When no components are deformed, adjust alignment by the method described in chapter 4-1 so that it conforms to service standard.

5) Oil leakage of strut Inspect every 48,000 km (30,000 miles) or 30 months, whichever occurs first.

Remove tire and visually inspect strut for oil leakage as instructed in chapter 4-1. Replace strut if oil leaks excessively.

6) Tightness of bolts and nuts Inspect every 48,000 km (30,000 miles) or 30 months, whichever occurs first.

Check bolts and nuts for looseness. Retighten bolts and nuts to specified torque. If self-locking nuts are loose, replace with new ones and tighten to specified torque. Further, check that cotter pin in place as shown below. If not, install new cotter pin.

FRONT

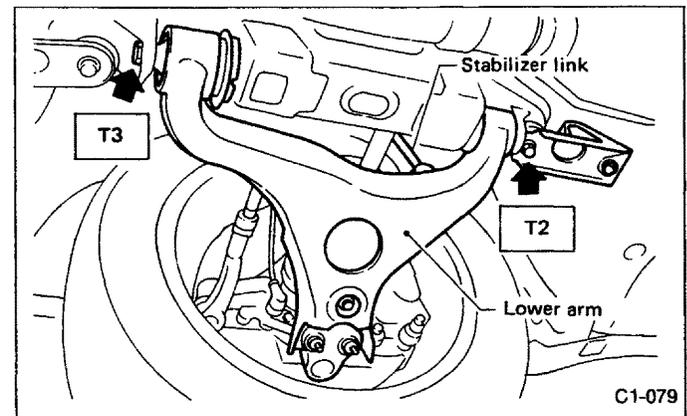


Fig. 15

REAR

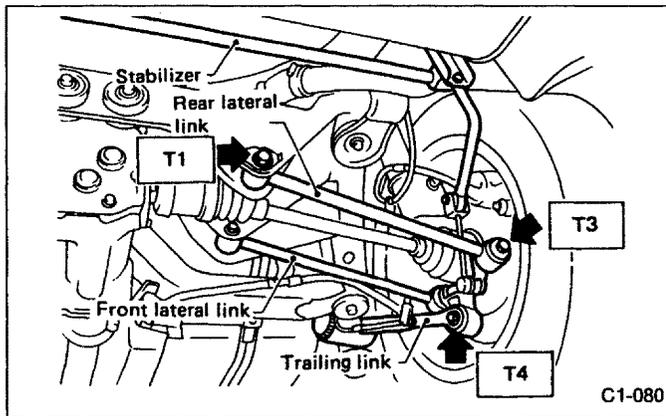


Fig. 16

Tightening torque: N·m (kg·m, ft·lb)**T1: 83 — 113 (8.5 — 11.5, 61 — 83)****T2: 127 — 167 (13 — 17, 94 — 123)****T3: 98 — 137 (10 — 14, 72 — 101)****T4: 142 — 181 (14.5 — 18.5, 105 — 134)**

7) Damage to suspension parts

Check the following parts and the fastening portion of the vehicle body for deformity or excessive rusting which impairs the suspension. Replace faulty parts. If minor rust formation, pitting, etc. are noted, remove rust and apply remedial anti-corrosion measures.

(1) Front suspension

- Lower arm ASSY
- Sub frame
- Strut

(2) Rear suspension

- Sub frame
- Lateral links
- Trailing link
- Strut

16. Front and Rear Wheel Bearing Lubricant

MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)									
Months	3	7.5	15	22.5	30	37.5	45	52.5	60
x1,000 km	4.8	12	24	36	48	60	72	84	96
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60
									(l)

A: INSPECTION

Inspect the condition of front and rear wheel bearing grease as follows:

1. FRONT WHEEL BEARING

- 1) Jack up the front of vehicle.
- 2) While holding front wheel by hand, swing it in and out to check bearing free play.
- 3) Loosen wheel nuts and remove front wheel.
- 4) If bearing free play exists in step 2) above, attach a dial gauge to hub and measure axial displacement in axial direction.

Service limit:

Straight-ahead position within 0.05 mm (0.0020 in)

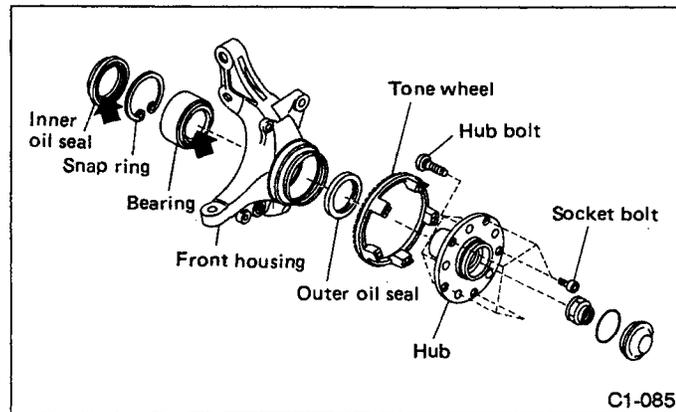


Fig. 76

- 5) Remove the FTJ of front drive shaft from transmission spindle.
For removal of FTJ, refer to "4-2 WHEELS AND AXELS" [W2A0].

- 6) While supporting front drive shaft horizontally with one hand, turn hub with the other to check for noise or binding.

If hub is noisy or binds, disassemble front axle and check condition of oil seals, bearing, etc.

2. REAR WHEEL BEARING

- 1) Jack up the rear of vehicle.
- 2) While holding rear wheel by hand, swing it in and out to check bearing free play.
- 3) Loosen wheel nuts and remove rear wheel.
- 4) If bearing free play exists in step 2) above, attach a dial gauge to hub and measure axial displacement in axial direction.

Service limit:

Straight-ahead position within 0.05 mm (0.0020 in)

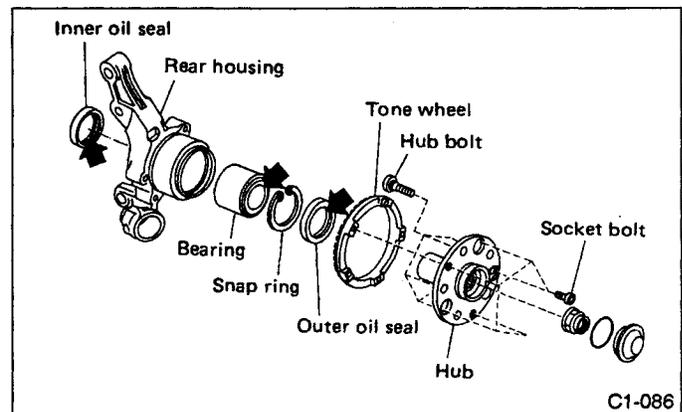


Fig. 77

- 5) Remove the DOJ of rear drive shaft from rear differential.
For removal of DOJ, refer to "4-2 WHEELS AND AXELS" [W5A0].

-
- 6) While supporting rear drive shaft horizontally with one hand, turn hub with the other to check for noise or binding. If hub is noisy or binds, disassemble rear axle and check condition of oil seals, bearings, etc.

17. Supplemental Restraint System (Airbag)

MAINTENANCE INTERVAL (Number of months or km (miles), whichever occurs first)									
Months	3	7.5	15	22.5	30	37.5	45	52.5	60
x1,000 km	4.8	12	24	36	48	60	72	84	96
x1,000 miles	3	7.5	15	22.5	30	37.5	45	52.5	60
Inspect every 10 years									

A: INSPECTION

Check the airbag system in accordance with the result of the self-diagnosis. Refer to "5-5. SUPPLEMENTAL RESTRAINT SYSTEM."

1) Ensure that airbag connectors are connected. If not, properly connect (also double lock the connector). When the ignition switch is turned ON with the connector(s) disconnected, the airbag warning light blinks to identify the fault.

2) Turn the ignition switch ON, and connect the airbag diagnosis terminal of the service connector (located

inside the lower front pillar, trim panel) to the ground terminal.

3) The warning light blinks to indicate a trouble code (a fault is identified). When the airbag system is in good order (no trouble codes are stored in the memory), the warning light blinks on and off at 0.6 second intervals (as long as the diagnosis terminal is connected to the ground terminal).

4) When the warning light indicates a trouble code, check the airbag system in accordance with the troubleshooting procedure outlined under "5-5. SUPPLEMENTAL RESTRAINT SYSTEM."