

SECTION **MA**

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PRECAUTIONS

Supplemental Restraint System "AIR BAG"

The Supplemental Restraint System "Air Bag", used along with a seat belt, helps to reduce the risk or severity of injury to the driver and front passenger in a frontal collision. The Supplemental Restraint System consists of air bag modules (located in the center of the steering wheel and on the instrument panel on the passenger side), a diagnosis sensor unit, warning lamp, wiring harness and spiral cable. Information necessary to service the system safely is included in the **BF section** of this Service Manual.

WARNING:

- **To avoid rendering the SRS Inoperative, which could lead to personal injury or death in the event of a severe frontal collision, all maintenance must be performed by an authorized NISSAN dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system.**
- **All SRS air bag electrical wiring harnesses and connectors are covered with yellow outer insulation. Do not use electrical test equipment on any circuit related to the SRS SYSTEM.**

GENERAL MAINTENANCE

General maintenance includes those items which should be checked during normal day-to-day operation of the vehicle. They are essential if the vehicle is to continue operating properly. The owners can perform checks and inspections themselves or have their NISSAN dealers do them.

Item	Reference page	
OUTSIDE THE VEHICLE		
The maintenance items listed here should be performed from time to time, unless otherwise specified.		
Tires Check the pressure with a gauge periodically when at a service station, including the spare, and adjust to the specified pressure if necessary. Check carefully for damage, cuts or excessive wear.	—	GI
Wheel nuts When checking the tires, make sure no nuts are missing, and check for any loose nuts. Tighten if necessary.	—	MA
Tire rotation Tires should be rotated every 12,000 km (7,500 miles).	MA-17	EM
Wheel alignment and balance If the vehicle pulls to either side while driving on a straight and level road, or if you detect uneven or abnormal tire wear, there may be a need for wheel alignment. If the steering wheel or seat vibrates at normal highway speeds, wheel balancing may be needed.	MA-17 FA-5	LC
Windshield wiper blades Check for cracks or wear if they do not wipe properly.	—	EC
Doors and engine hood Check that all doors and the engine hood operate smoothly as well as the trunk lid and back hatch. Also make sure, that all latches lock securely. Lubricate hinges, latches, rollers and links if necessary. Make sure that the secondary latch keeps the hood from opening when the primary latch is released. When driving in areas using road salt or other corrosive materials, check lubrication frequently.	MA-19	FE
INSIDE THE VEHICLE		
The maintenance items listed here should be checked on a regular basis, such as when performing periodic maintenance, cleaning the vehicle, etc.		
Lights Make sure that the headlights, stop lights, tail lights, turn signal lights, and other lights are all operating properly and installed securely. Also check headlight aim.	—	CL
Warning lights and buzzers/chimes Make sure that all warning lights and buzzers/chimes are operating properly.	—	MT
Windshield wiper and washer Check that the wipers and washer operate properly and that the wipers do not streak.	—	AT
Windshield defroster Check that air comes out of the defroster outlets properly and in good quantity when operating the heater or air conditioner.	—	PD
Steering wheel Check that it has the specified free play. Be sure to check for changes in the steering condition, such as excessive free play, hard steering or strange noises. Free play: Less than 35 mm (1.38 in)	—	FA
Seats Check seat position controls such as seat adjusters, seatback recliner, etc. to make sure they operate smoothly and that all latches lock securely in every position. Check that the head restraints move up and down smoothly and that the locks (if equipped) hold securely in all latched positions. Check that the latches lock securely for folding-down rear seatbacks.	—	RA
Seat belts Check that all parts of the seat belt system (e.g. buckles, anchors, adjusters and retractors) operate properly and smoothly, and are installed securely. Check the belt webbing for cuts, fraying, wear or damage.	MA-19	BR

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GENERAL MAINTENANCE

Item	Reference page
Clutch pedal Make sure the pedal operates smoothly and check that it has the proper free travel.	CL-4
Brakes Check that the brake does not pull the vehicle to one side when applied.	—
Brake pedal Check the pedal for smooth operation and make sure it has the proper distance under it when depressed fully. Check the brake booster function. Be sure to keep floor mats away from the pedal.	BR-6
Parking brake Check that the lever has the proper travel and make sure that your vehicle is held securely on a fairly steep hill with only the parking brake applied.	BR-21
Automatic transmission "Park position" mechanism Check that the lock release button on the selector lever operates properly and smoothly. On a fairly steep hill check that your vehicle is held securely with the selector lever in the "P" position without applying any brakes.	—
UNDER THE HOOD AND VEHICLE	
The maintenance items listed here should be checked periodically (e.g. each time you check the engine oil or refuel).	
Windshield washer fluid Check that there is adequate fluid in the tank.	—
Engine coolant level Check the coolant level when the engine is cold.	MA-11
Radiator and hoses Check the front of the radiator and clean off any dirt, insects, leaves, etc., that may have accumulated. Make sure the hoses have no cracks, deformation, deterioration or loose connections.	—
Brake and clutch fluid levels Make sure that the brake and clutch fluid levels are between the "MAX" and "MIN" lines on the reservoir.	MA-15, 17
Battery Check the fluid level in each cell. It should be between the "MAX" and "MIN" lines.	—
Engine drive belts Make sure that no belt is frayed, worn, cracked or oily.	MA-9
Engine oil level Check the level on the dipstick after parking the vehicle on a level spot and turning off the engine.	MA-13
Power steering fluid level and lines Check the level when the fluid is cold and the engine is turned off. Check the lines for proper attachment, leaks, cracks, etc.	MA-18
Automatic transmission fluid level Check the level on the dipstick after putting the selector lever in "P" with the engine idling.	MA-16
Exhaust system Make sure there are no loose supports, cracks or holes. If the sound of the exhaust seems unusual or there is a smell of exhaust fumes, immediately locate the trouble and correct it.	MA-15
Underbody The underbody is frequently exposed to corrosive substances such as those used on icy roads or to control dust. It is very important to remove these substances, otherwise rust will form on the floor pan, frame, fuel lines and around the exhaust system. At the end of winter, the underbody should be thoroughly flushed with plain water, being careful to clean those areas where mud and dirt can easily accumulate.	—
Fluid leaks Check under the vehicle for fuel, oil, water or other fluid leaks after the vehicle has been parked for a while. Water dripping from the air conditioner after use is normal. If you should notice any leaks or gasoline fumes are evident, check for the cause and correct it immediately.	—

PERIODIC MAINTENANCE

Two different maintenance schedules are provided, and should be used, depending upon the conditions in which the vehicle is mainly operated. **After 60,000 miles (96,000 km) or 48 months, continue the periodic maintenance at the same mileage/time intervals.**

SCHEDULE 1

Follow Periodic Maintenance Schedule 1 if your driving habits frequently includes one or more of the following driving conditions:

- Repeated short trips of less than 5 miles (8 km).
- Repeated short trips of less than 10 miles (16 km) with outside temperatures remaining below freezing.
- Operating in hot weather in stop-and-go "rush hour" traffic.
- Extensive idling and/or low speed driving for long distances, such as police, taxi or door-to-door delivery use.
- Driving in dusty conditions.
- Driving on rough, muddy, or salt spread roads.
- Towing a trailer, using a camper or a car-top carrier.

SCHEDULE 2

Follow Periodic Maintenance Schedule 2 if none of the driving conditions shown in Schedule 1 apply to your driving habits.

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Schedule 1

Abbreviations: R = Replace I = Inspect. Correct or replace if necessary. []: At the mileage intervals only

MAINTENANCE OPERATION

Perform at number of miles, kilometers or months, whichever comes first.	MAINTENANCE INTERVAL												Reference page				
	3	6	9	12	15	18.75	22.5	26.25	30	33.75	37.5	41.25		45	48.75	52.5	56.25
Miles x 1,000																	
(km x 1,000)																	
Months																	

Emission control system maintenance

Drive belts	See NOTE (1)	I*																I*	MA-9
Air cleaner filter	See NOTE (2)						[R]											[R]	MA-12
Vapor lines																		I*	MA-14
Fuel lines																		I*	MA-11
Fuel filter	See NOTE (3)*																		MA-12
Engine coolant	See NOTE (4)																	R*	MA-11
Engine oil		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	MA-13
Engine oil filter (Use Nissan PREMIUM type or equivalent.)		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	MA-13
Spark plugs (Use PLATINUM-TIPPED type)																		[R]	MA-14
Intake & exhaust valve clearances	See NOTE (5)*																		EM-30

Chassis and body maintenance

Brake lines & cables																				MA-17
Brake pads & discs																				MA-17, 18
Manual and automatic transmission oil, & differential gear oil	See NOTE (6)																			MA-15, 16
Steering gear & linkage, axle & suspension parts																				MA-18, FA-5, RA-4
Steering linkage ball joints & front suspension ball joints																				MA-18, FA-5
Exhaust system																				MA-15
Air bag system	See NOTE (7)																			BF-84

NOTE: (1) After 60,000 miles (96,000 km) or 48 months, inspect every 15,000 miles (24,000 km) or 12 months.

(2) If operating mainly in dusty conditions, more frequent maintenance may be required.

(3) If vehicle is operated under extremely adverse weather conditions or in areas where ambient temperatures are either extremely low or extremely high, the filters might become clogged. In such an event, replace them immediately.

(4) After 60,000 miles (96,000 km) or 48 months, replace every 30,000 miles (48,000 km) or 24 months.

(5) If valve noise increases, inspect valve clearances.

(6) If towing a trailer, using a camper or a car-top carrier, or driving on rough or muddy roads, change (not just inspect) oil at every 30,000 miles (48,000 km) or 24 months.

(7) Inspect the air bag system 10 years after the date of manufacture as noted on the F.M.V.S.S. certification label.

(8) Maintenance items and intervals with "*" are recommended by NISSAN for reliable vehicle operation. The owner need not perform such maintenance in order to maintain the emission warranty or manufacturer recall liability. Other maintenance items and intervals are required.

Schedule 2

Abbreviations: R = Replace I = Inspect. Correct or replace if necessary. []: At the mileage intervals only

MAINTENANCE OPERATION	MAINTENANCE INTERVAL										Reference page
	Miles x 1,000	7.5	15	22.5	30	37.5	45	52.5	60		
Perform at number of miles, kilometers or months, whichever comes first.	(km x 1,000)	(12)	(24)	(36)	(48)	(60)	(72)	(84)	(96)		
	Months	6	12	18	24	30	36	42	48		
Emission control system maintenance											
Drive belts	See NOTE (1)								I*		MA-9
Air cleaner filter					[R]				[R]		MA-12
Vapor lines									I*		MA-14
Fuel lines									I*		MA-11
Fuel filter	See NOTE (2)*										MA-12
Engine coolant	See NOTE (3)										MA-11
Engine oil		R	R	R	R	R	R	R	R		MA-13
Engine oil filter (Use Nissan PREMIUM type or equivalent.)			R								MA-13
Spark plugs (Use PLATINUM-TIPPED type)									[R]		MA-14
Intake & exhaust valve clearances	See NOTE (4)*										EM-30
Chassis and body maintenance											
Brake lines & cables											MA-17
Brake pads & discs											MA-17, 18
Manual and automatic transmission oil, & differential gear oil											MA-15, 16
Steering gear linkage, axle & suspension parts											MA-18, FA-5, RA-4
Exhaust system											MA-15
Air bag system	See NOTE (5)										BF-84

NOTE: (1) After 60,000 miles (96,000 km) or 48 months, inspect every 15,000 miles (24,000 km) or 12 months.
(2) If vehicle is operated under extremely adverse weather conditions or in areas where ambient temperatures are either extremely low or extremely high, the filters might become clogged. In such an event, replace them immediately.
(3) After 60,000 miles (96,000 km) or 48 months, replace every 30,000 miles (48,000 km) or 24 months.
(4) If valve noise increases, inspect valve clearances.
(5) Inspect the air bag system 10 years after the date of manufacture as noted on the F.M.V.S.S. certification label.
(6) Maintenance items and intervals with "*" are recommended by NISSAN for reliable vehicle operation. The owner need not perform such maintenance in order to maintain the emission warranty or manufacturer recall liability. Other maintenance items and intervals are required.

RECOMMENDED FLUIDS AND LUBRICANTS

Fluids and Lubricants

	Capacity (Approximate)			Recommended fluids and lubricants
	US measure	Imp measure	Liter	
Engine oil (Refill)				
With oil filter	4 qt	3-3/8 qt	3.8	Energy Conserving Oils of API SG or SH*2, *3
Without oil filter	3-3/4 qt	3-1/8 qt	3.5	
Cooling system (with reservoir tank)	7-1/4 qt	6-1/8 qt	6.9	Anti-freeze coolant (Ethylene glycol base)
Manual transmission oil	5-1/8 pt	4-1/4 pt	2.4	API GL-4*2
Differential gear oil				
R200	2-3/4 pt	2-1/4 pt	1.3	API GL-5*2
R200V	3-1/8 pt	2-5/8 pt	1.5	
Automatic transmission fluid	8-3/4 qt	7-1/4 qt	8.3	Genuine Nissan ATF (Nissan Matic Fluid D) or equivalent*1
Power steering fluid	—	—	—	Type DEXRON™II or equivalent
Brake fluid	—	—	—	Genuine Nissan Brake Fluid*1 or equivalent DOT 3 (US FMVSS No. 116)
Multi-purpose grease	—	—	—	NLGI No. 2 (Lithium soap base)

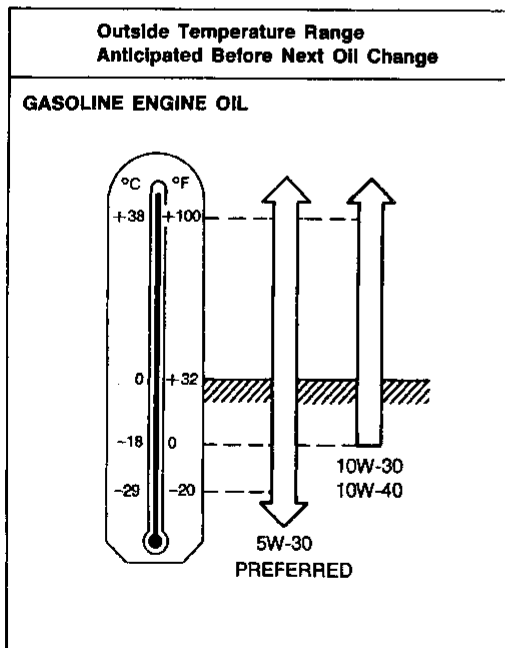
*1: Contact a Nissan dealer for suitable fluids.

*2: For further details, see "SAE Viscosity Number"

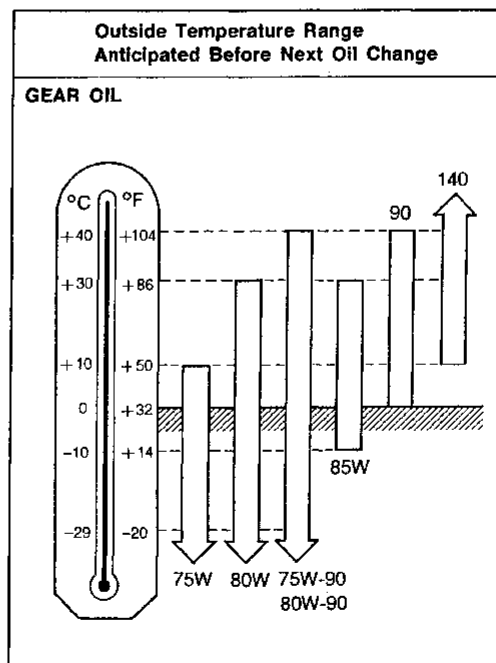
*3: Energy Conserving Oils

These oils can be identified by such labels as EC-I, EC-II, energy conserving, energy saving, improved fuel economy, etc.

SAE Viscosity Number

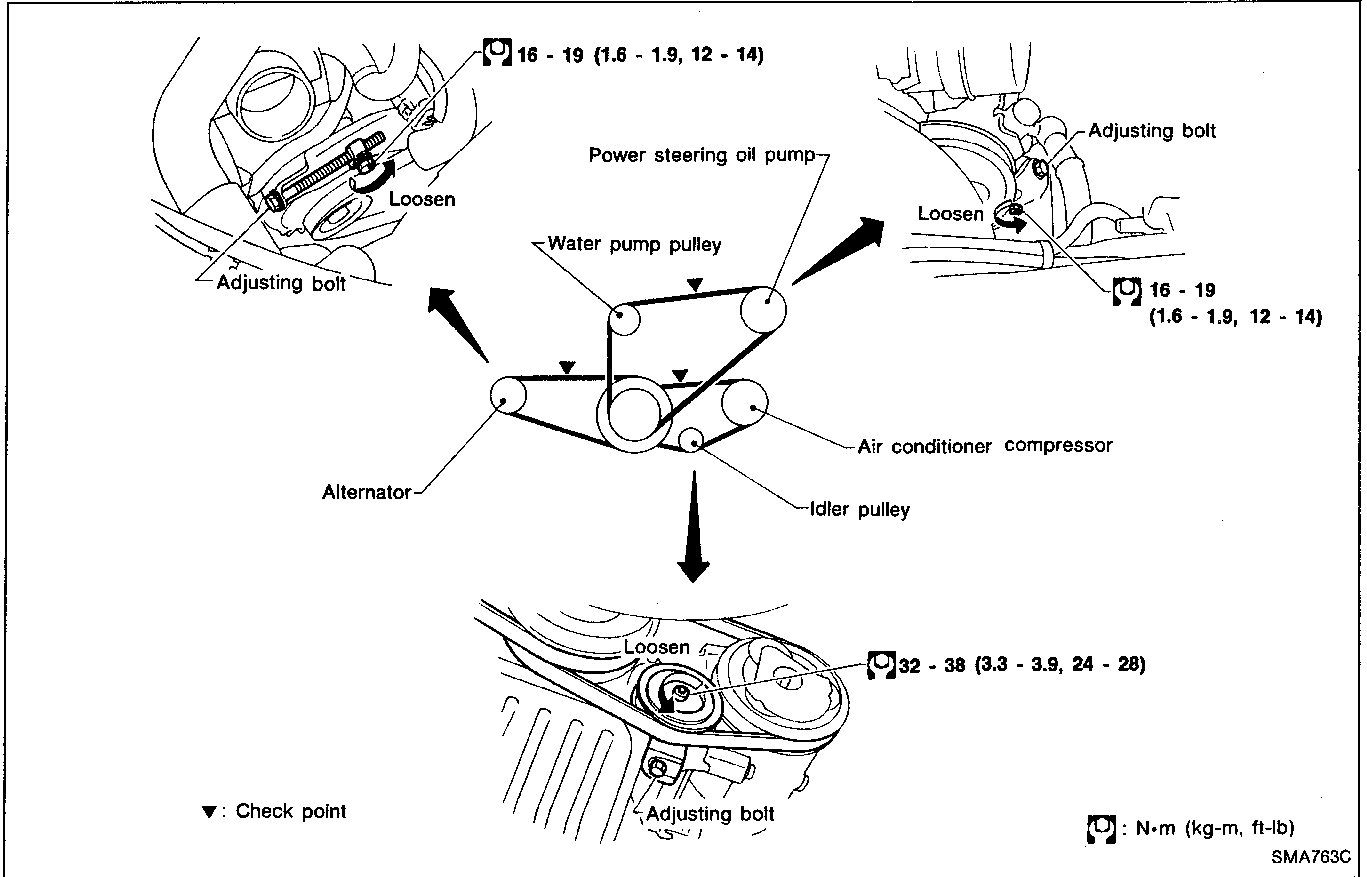


5W-30 is preferable for all ambient temperatures. 20W-40 and 20W-50 are usable if the ambient temperature is above 10°C (50°F) for all seasons.



75W-90 for the transmission and 80W-90 for the differential are preferable if the ambient temperature is below 40°C (104°F).

Checking Drive Belts



1. Inspect for cracks, fraying, wear or oil adhesion. If necessary, replace with a new one.
2. Inspect drive belt deflections by pushing on the belt midway between pulleys.

Adjust if belt deflections exceed the limit.

Belt deflection:

Inspect drive belt deflections when engine is cold.

Unit: mm (in)

	Used belt deflection		Deflection of new belt
	Limit	Deflection after adjustment	
Alternator	11 (0.43)	7 - 8 (0.28 - 0.31)	6 - 7 (0.24 - 0.28)
Air conditioner compressor	12 (0.47)	7.5 - 8.5 (0.295 - 0.335)	6.5 - 7.5 (0.256 - 0.295)
Power steering oil pump	13 (0.51)	7.5 - 8.5 (0.295 - 0.335)	6.5 - 7.5 (0.256 - 0.295)
Applied pushing force	98 N (10 kg, 22 lb)		

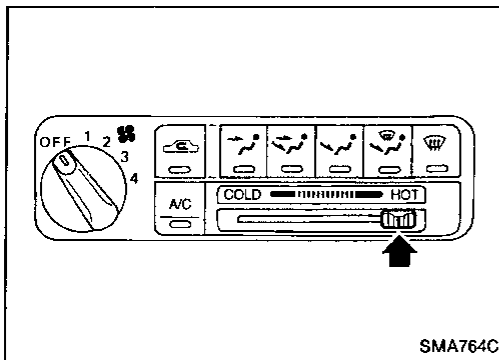
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Changing Engine Coolant

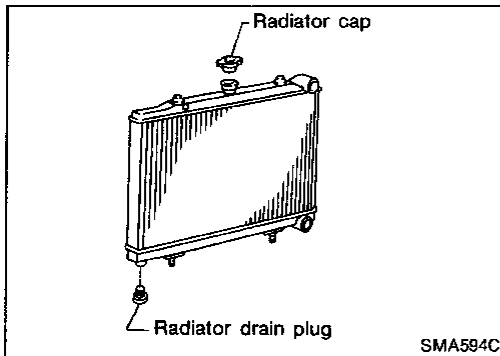
WARNING:

To avoid being scalded, never change the coolant when the engine is hot.

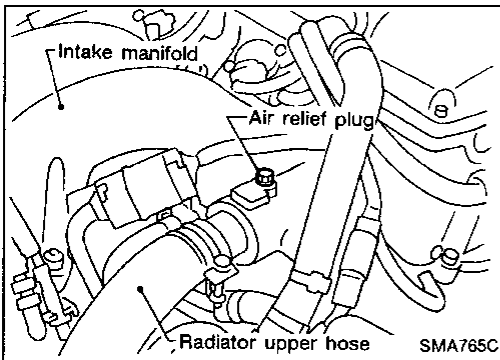
1. Remove undercover.
2. Turn ignition switch "ON" and move heater "TEMP" control lever to "HOT" position. After air mix door moves to "HOT" position, turn ignition switch "OFF"



3. Open drain plug at the bottom of radiator, and remove radiator cap.



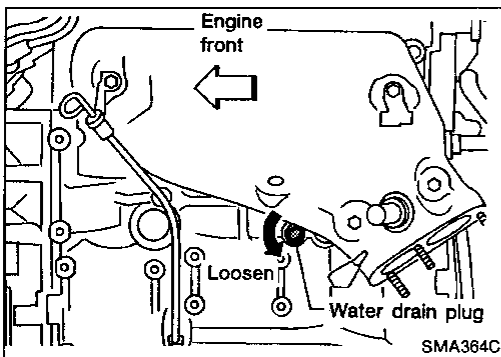
4. Remove air relief plug at water outlet.



5. Remove drain plug on cylinder block.
6. Close and securely tighten drain plug.

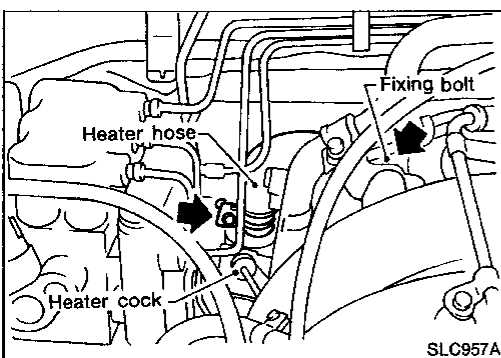
Apply sealant to the thread of drain plug.

\square : 34 - 44 N·m
(3.5 - 4.5 kg-m, 25 - 33 ft-lb)



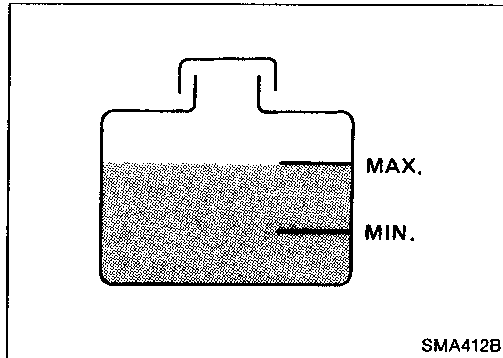
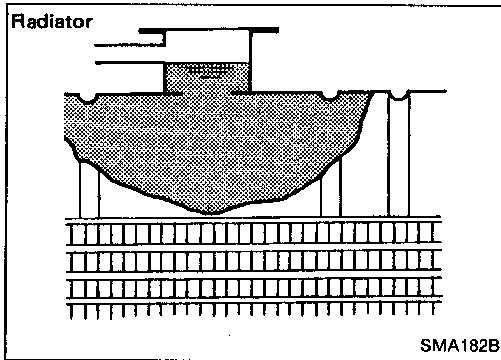
7. Disconnect heater hose (between heater cock and heater core) at heater cock.
Before disconnection, remove bolt fixing brake booster hose bracket to intake manifold for easy working.

When refilling after engine removal, never refill the coolant without this procedure. Otherwise, remaining air will cause engine to overheat.



ENGINE MAINTENANCE

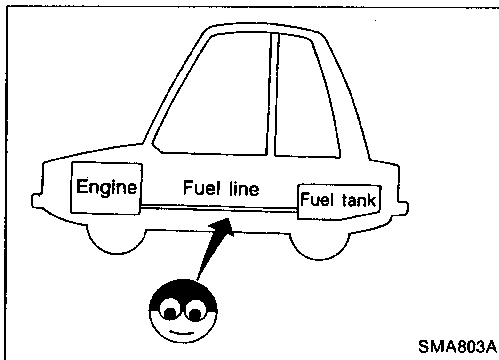
Changing Engine Coolant (Cont'd)



8. Fill radiator with water up to specified level with a filling speed of 2 liters per minute like pouring water by kettle. When water spills from opening at air relief plug or heater cock, close air relief plug or connect heater hose to heater cock.
9. Close radiator cap and run engine.
10. Wait until coolant temperature gauge indicates more than middle level.
11. Be sure thermostat has opened by touching radiator lower hose. If the hose becomes hot, thermostat has opened.
12. Race engine up to 2,500 rpm and keep it for 10 seconds under no-load. Repeat this 2 or 3 times.

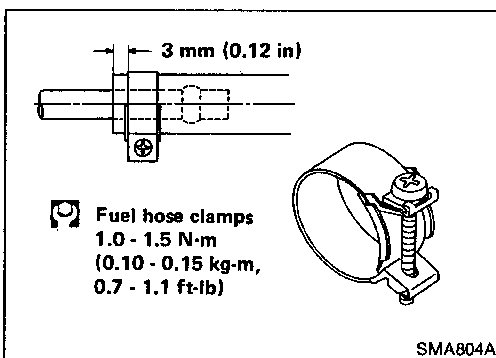
Watch coolant temperature gauge so as not to overheat the engine.

13. Stop engine and wait until it cools down.
 - Cool down using a fan to reduce the time.
14. Repeat steps 3 through 13 until clear water begins to drain from radiator.
15. Fill radiator with coolant up to specified level according to steps 3 through 12.
16. Check for sound of coolant flow in heater core under the following conditions.
 - a. Running engine from idle up to 4,000 rpm.
 - b. Heater control lever (or switch) at "HOT" position.
 - If the sound can be heard, repeat steps 3 through 12 until the sound disappears.
17. Remove radiator cap and check coolant level.
 - If coolant level is low, refill radiator up to filler neck with coolant, and repeat steps 3 through 13 until coolant level become stable.
18. Close radiator cap and fill reservoir tank with coolant up to "MAX" level.
19. Position brake booster hose and install bolt for fitting brake booster hose bracket to intake manifold.



Checking Fuel Lines

Check fuel lines and tank for improper attachment, leaks, cracks, damage, loose connections, chafing and deterioration. If necessary, repair or replace faulty parts.



Changing Fuel Filter

CAUTION:

Tighten high-pressure rubber hose clamp so that clamp end is 3 mm (0.12 in) from hose end.

Ensure that screw does not contact adjacent parts.

ENGINE MAINTENANCE

Changing Fuel Filter (Cont'd)

WARNING:

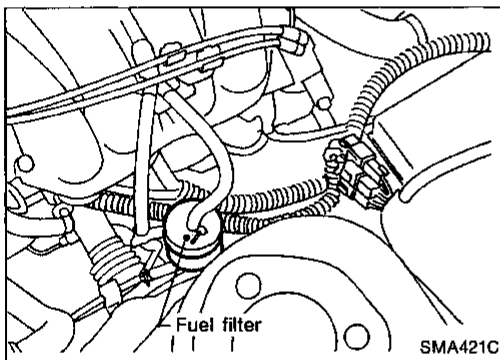
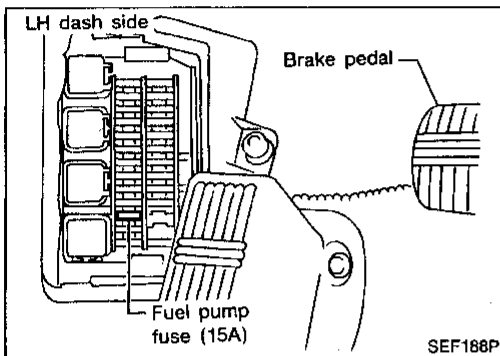
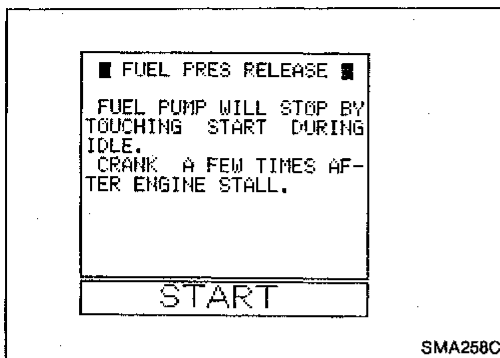
Before removing fuel filter, release fuel pressure from fuel line.



1. Start engine.
2. Perform "FUEL PRESSURE RELEASE" in "WORK SUPPORT" mode to release fuel pressure to zero.
3. After engine stalls, crank engine two or three times to make sure that fuel pressure is released.
4. Turn ignition switch "OFF".



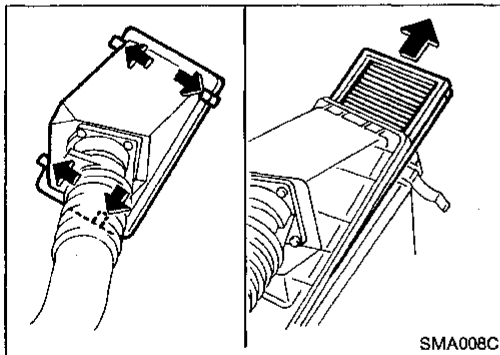
1. Remove fuse for fuel pump.
2. Start engine.
3. After engine stalls, crank engine two or three times to make sure that fuel pressure is released.
4. Turn ignition switch "OFF" and install fuse for fuel pump.



5. Loosen fuel hose clamps.
 6. Replace fuel filter.
- Be careful not to spill fuel over engine compartment. Place a shop towel to absorb fuel.
 - Use a high-pressure type fuel filter. Do not use a synthetic resinous fuel filter.
 - When tightening fuel hose clamps, refer to "Checking Fuel Lines".

Changing Air Cleaner Filter

The viscous paper type filter does not need cleaning between renewals.

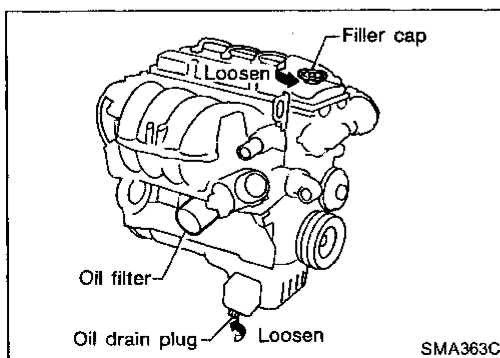


Changing Engine Oil

WARNING:

- Be careful not to burn yourself, as the engine oil is hot.
- Be careful not to burn yourself, as the engine oil is hot.
- Prolonged and repeated contact with used engine oil may cause skin cancer; try to avoid direct skin contact with used oil. If skin contact is made, wash thoroughly with soap or hand cleaner as soon as possible.

1. Warm up engine, and check for oil leakage from engine components.
2. Remove drain plug and oil filler cap.



ENGINE MAINTENANCE

Changing Engine Oil (Cont'd)

3. Drain oil and refill with new engine oil.

Oil grade: API SG or SH

Viscosity: See MA-8.

Refill oil capacity (Approximately):

With oil filter change

3.8 ℓ (4 US qt, 3-3/8 Imp qt)

Without oil filter change

3.5 ℓ (3-3/4 US qt, 3-1/8 Imp qt)

CAUTION:

- **Be sure to clean drain plug and install with new washer.**
Drain plug:
⌚: 29 - 39 N·m
(3.0 - 4.0 kg-m, 22 - 29 ft-lb)
- **The refill capacity changes depending on the oil temperature and drain time; use these values as a reference and be certain to check with the dipstick when changing the oil.**

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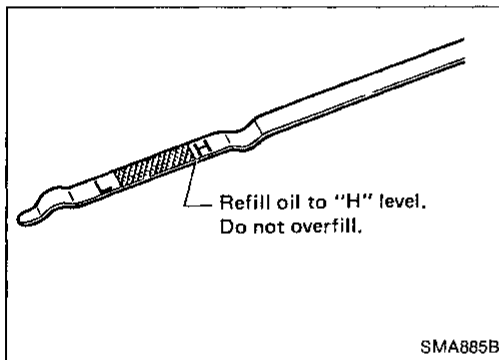
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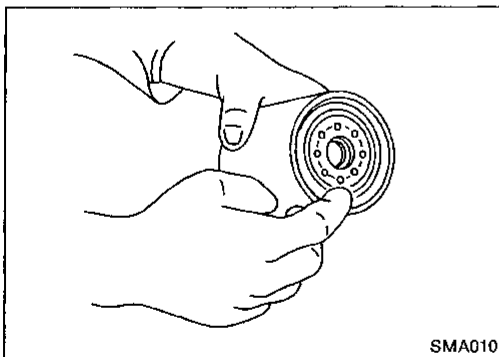
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4. Check oil level.

5. Start engine and check area around drain plug and oil filter for oil leakage.

6. Run engine for a few minutes, then turn it off. After several minutes, check oil level.



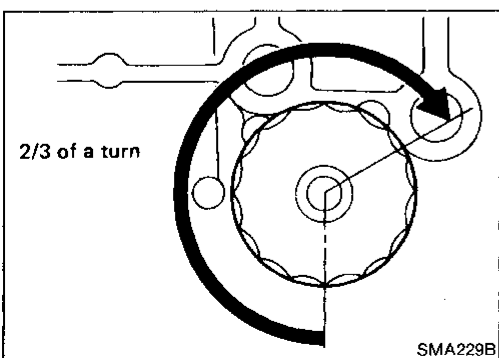
Changing Oil Filter

1. Remove oil filter with a suitable tool.

WARNING:

Be careful not to burn yourself, as the engine and the engine oil are hot.

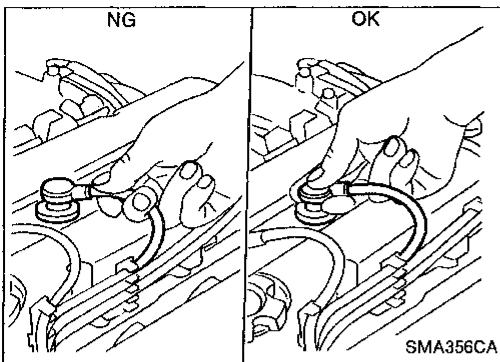
2. Before installing new oil filter, clean the oil filter mounting surface on cylinder block. Then coat the rubber seal of oil filter with a little engine oil.



3. Screw in the oil filter until a slight resistance is felt, then tighten additionally more than 2/3 turn.

4. Add engine oil.

Refer to Changing Engine Oil.



Changing Spark Plugs

1. Disconnect ignition wires from spark plugs at boot. Do not pull on the wire.
2. Remove spark plugs with 16 mm (0.63 in) spark plug wrench.

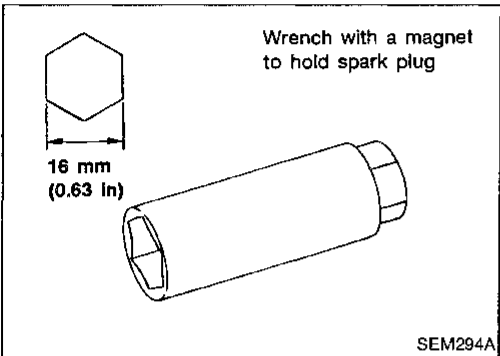
Spark plug:

Standard type PFR5C-11

Cold type PFR6C-11 PFR7C-11

⊖: 20 - 29 N·m

(2.0 - 3.0 kg-m, 14 - 22 ft-lb)



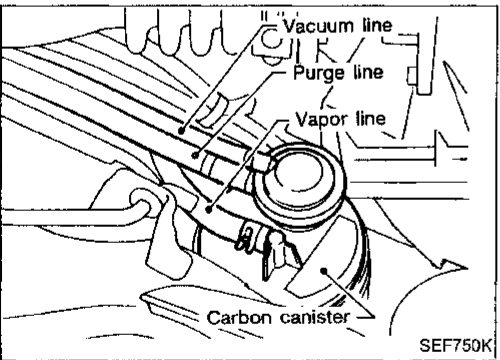
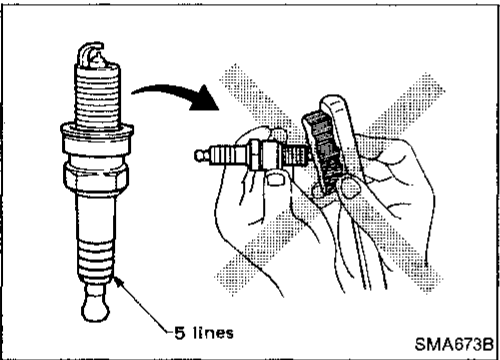
- Checking and adjusting plug gap are not required between renewals.
- Do not use a wire brush for cleaning.
- If plug tip is covered with carbon, spark plug cleaner may be used.

Cleaner air pressure:

Less than 588 kPa (6 kg/cm², 85 psi)

Cleaning time:

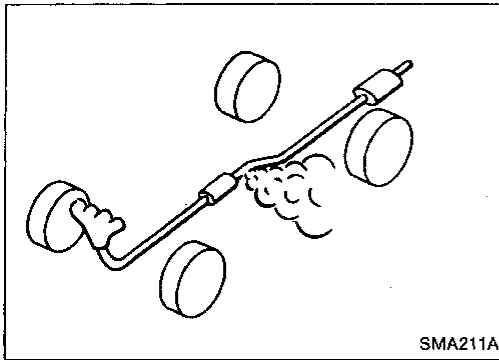
Less than 20 seconds



Checking Vapor Lines

1. Visually inspect vapor lines for improper attachment and for cracks, damage, loose connections, chafing and deterioration.
2. Inspect vacuum relief valve of fuel tank filler cap for clogging, sticking, etc.

Refer to **EVAPORATIVE EMISSION SYSTEM** in section "EC".



Checking Exhaust System

- Check exhaust pipes, muffler and mounting for improper attachment, leaks, cracks, damage, loose connections, chafing and deterioration.

GI

MA

EM

LC

EC

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MT

AT

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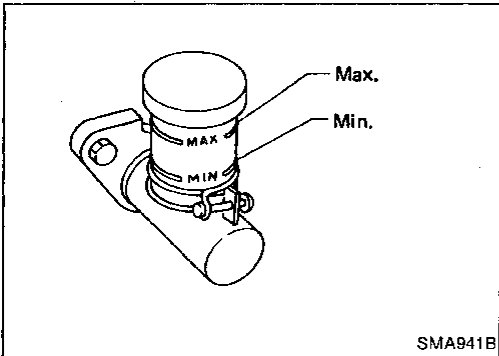
ST

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HA

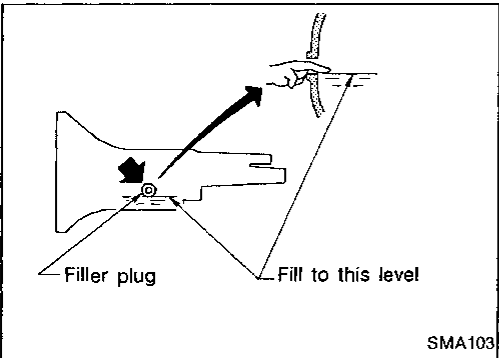
EL

IDX



Checking Clutch Fluid Level and Leaks

- If fluid level is extremely low, check clutch system for leaks.



Checking M/T Oil

- Check for oil leakage and oil level.
- Never start engine while checking oil level.**

: Filler plug 25 - 34 N·m (2.5 - 3.5 kg-m, 18 - 25 ft-lb)

Changing M/T Oil

1. Drain oil from drain plug and refill with new gear oil.
2. Check oil level.

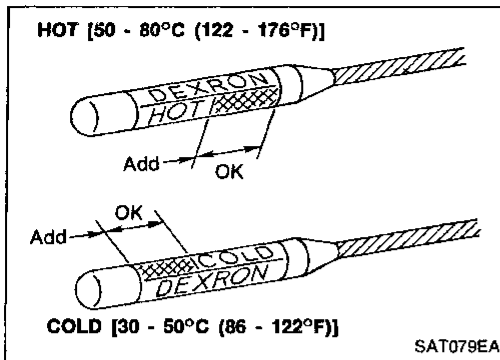
Oil grade: API GL-4

Viscosity: See "RECOMMENDED FLUIDS AND LUBRICANTS" in MA section.

Capacity: 2.5 l (5-1/4 US pt, 4-3/8 Imp pt)

Drain plug: : 25 - 34 N·m (2.5 - 3.5 kg-m, 18 - 25 ft-lb)

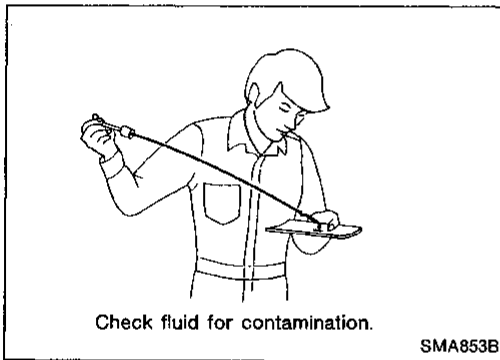
After refilling oil, leave M/T unattended for about two minutes. Then check oil level again following the above procedure. Add oil if necessary.



Checking A/T Fluid

1. Check for fluid leakage and fluid level.
Drive vehicle approximately 5 minutes in urban areas after engine is warmed up. Then check fluid level using "HOT" range on dipstick [at fluid temperatures of 50 to 80°C (122 to 176°F)]. For reference, after engine is warmed up, it can be checked using "COLD" range [at fluid temperatures of 30 to 50°C (86 to 122°F)]. However, fluid level must be rechecked using "HOT" range.
- 1) Park vehicle on level surface and set parking brake.
- 2) Start engine and then move selector lever through each gear range, ending in "P".
- 3) Check fluid level with engine idling.
- 4) Remove dipstick and wipe it clean with lint-free paper.
- 5) Reinsert dipstick into charging pipe as far as it will go.
- 6) Remove dipstick and note reading. If level is at low side of either range, add fluid to the charging pipe.

Do not overfill.



2. Check fluid for contamination. If fluid is very dark or smells burned, or contains frictional material (clutches, band, etc.), check operation of A/T.
Refer to section AT for checking operation of A/T.

Changing A/T Fluid

1. Warm up A/T fluid.
2. Stop engine.
3. Drain A/T fluid from drain plug and refill with new A/T fluid.
Always refill same volume with drained fluid.

Oil grade:

Genuine Nissan ATF (Nissan Matic Fluid D) or equivalent

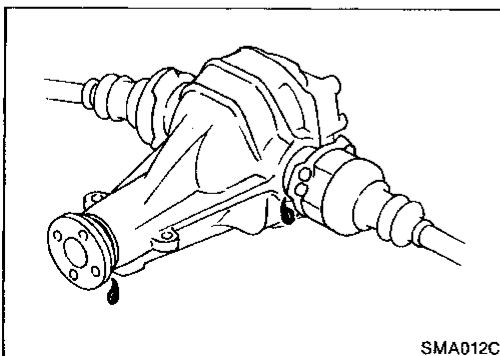
Oil capacity (With torque converter):

8.3 l (8-3/4 US qt, 7-1/4 Imp qt)

Drain plug:

[⊠]: 29 - 39 N·m (3.0 - 4.0 kg-m, 22 - 29 ft-lb)

4. Run engine at idle speed for five minutes.
5. Check fluid level and condition.
Refer to "Checking A/T Fluid".
If fluid is still dirty, repeat step 2. through 5.

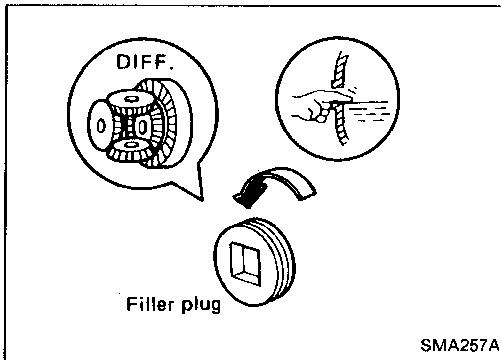


Checking Differential Gear Oil

- Check for oil leakage and oil level.

Filler plug:

[⊠]: 39 - 59 N·m (4 - 6 kg-m, 29 - 43 ft-lb)



Changing Differential Gear Oil

1. Drain oil from drain plug and refill with new gear oil.
2. Check oil level.

Oil grade: API GL-5

Viscosity: See "RECOMMENDED FUEL AND LUBRICANTS" in MA section.

Capacity:

1.2 - 1.4 ℓ (2-1/2 - 3 US pt, 2-1/8 - 2-1/2 Imp pt)

Drain plug:

: 39 - 59 N·m (4 - 6 kg-m, 29 - 43 ft-lb)

Balancing Wheels

- Adjust wheel balance using road wheel center.

Wheel balance (Maximum allowable unbalance):

Refer to SDS (MA-20).

GI

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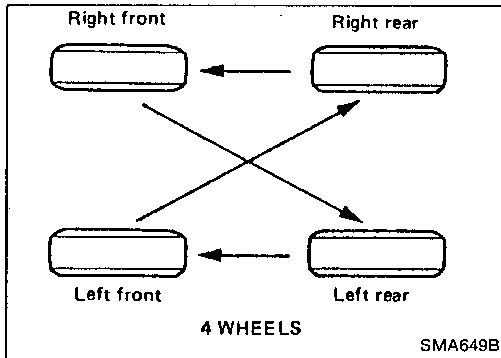
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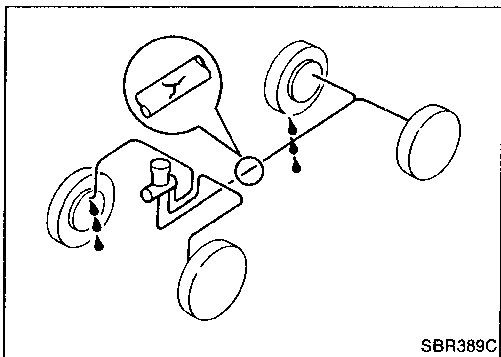


Tire Rotation

- Do not include the T-type spare tire when rotating the tires.

Wheel nuts:

: 99 - 117 N·m (10.1 - 11.9 kg-m, 73.0 - 86.3 ft-lb)

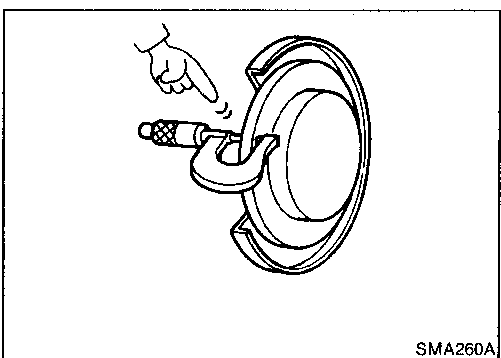


Checking Brake Fluid Level and Leaks

- If fluid level is extremely low, check brake system for leaks.

Checking Brake Lines and Cables

- Check brake fluid lines and parking brake cables for improper attachment, leaks, chafing, abrasions, deterioration, etc.



Checking Disc Brake

ROTOR

- Check condition and thickness.

Unit: mm (in)

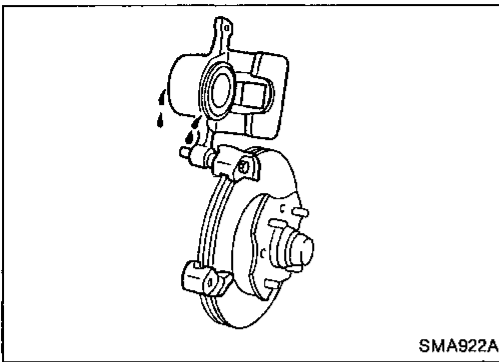
	Front	Rear
Disc brake type	CL22VF	CL11H
Standard thickness	20.0 (0.787)	9.0 (0.354)
Minimum thickness	18.0 (0.709)	8.0 (0.315)

CHASSIS AND BODY MAINTENANCE

Checking Disc Brake (Cont'd)

CALIPER

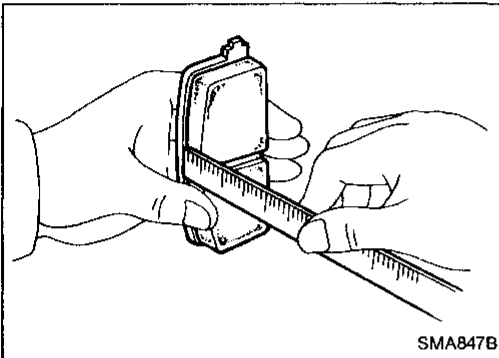
- Check for leakage.



SMA922A

PAD

- Check for wear or damage.



SMA847B

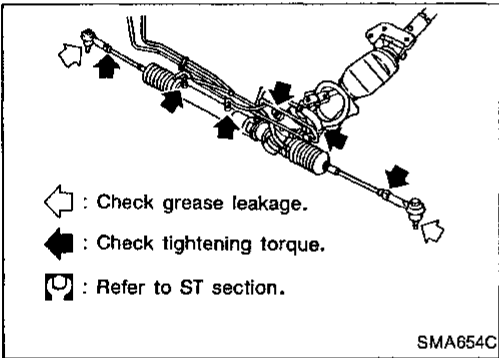
Unit: mm (in)

	Front	Rear
Disc brake type	CL22VF	CL11H
Standard thickness	10.0 (0.394)	9.5 (0.374)
Minimum thickness	2.0 (0.079)	

Checking Steering Gear and Linkage

STEERING GEAR

- Check gear housing and boots for looseness, damage or grease leakage.
- Check connection with steering column for looseness.



SMA654C

STEERING LINKAGE

- Check ball joint, dust cover and other component parts for looseness, wear, damage or grease leakage.

Checking Power Steering Fluid and Lines

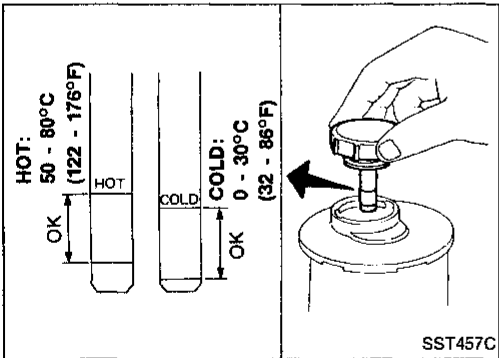
CHECKING FLUID LEVEL

Check fluid level with dipstick.

Use "HOT" range at fluid temperatures of 50 to 80°C (122 to 176°F) or "COLD" range at fluid temperatures of 0 to 30°C (32 to 86°F).

CAUTION:

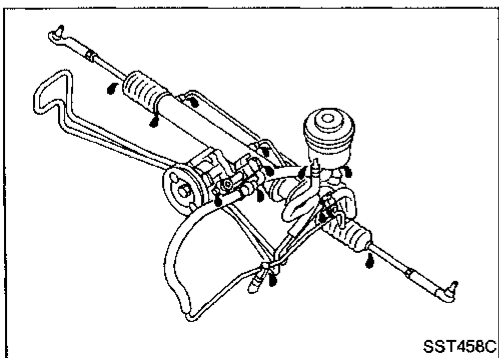
- Do not overfill.
- Recommended fluid is Automatic Transmission Fluid type DEXRON™II or equivalent.



SST457C

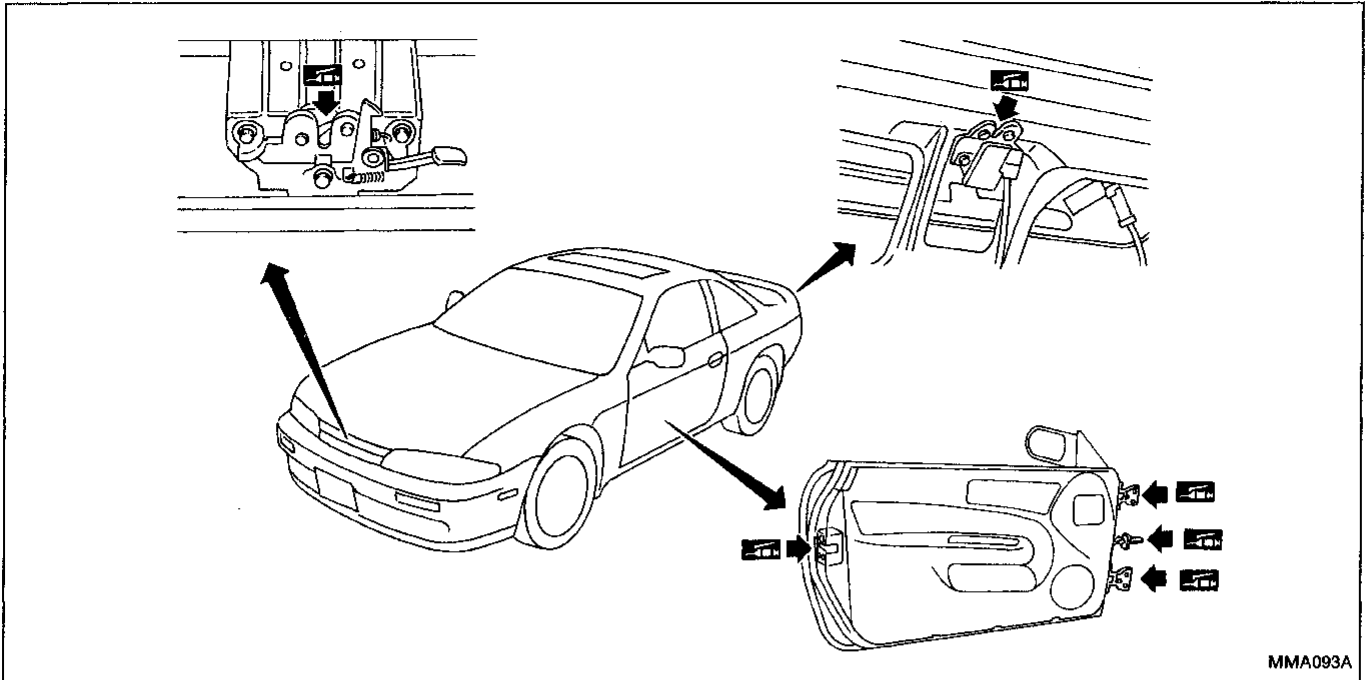
CHECKING LINES

Check lines for improper attachment, leaks, cracks, damage, loose connections, chafing and deterioration.



SST458C

Lubricating Locks, Hinges and Hood Latches

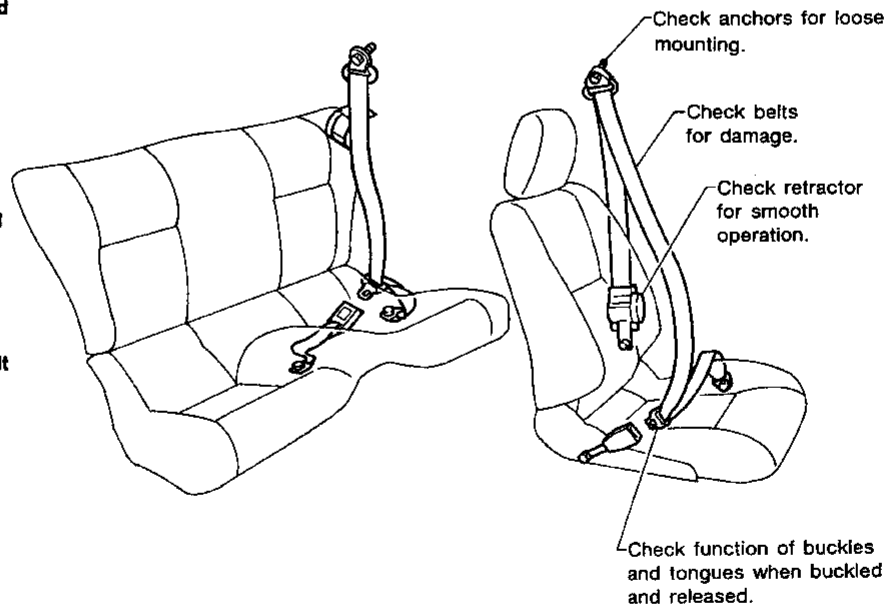



GI
MA
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 LC
 EC
 FE
 CL

Checking Seat Belts, Buckles, Retractors, Anchors and Adjusters

CAUTION:

1. All seat belt assemblies, including retractors and attaching hardware such as guide rail set, etc., should be inspected after any collision. Nissan recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Seat belt assemblies not in use during a collision should also be inspected and replaced if either damage or improper operation is noted.
2. If the condition of any component of seat belt assembly is questionable, do not have it repaired, but replaced as seat belt assembly.
3. If webbing is cut, frayed, or damaged, replace belt assembly.
4. Do not spill drinks, oil, etc. on inner lap belt buckle. Never oil tongue and buckle.
5. Use a NISSAN genuine seat belt assembly.



Anchor bolt
 43 - 55 N·m
 (4.4 - 5.6 kg-m,
 32 - 41 ft-lb)

AT
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 EL
 IDX

MMA094A

SERVICE DATA AND SPECIFICATIONS (SDS)

Engine Maintenance

INSPECTION AND ADJUSTMENT

Drive belt deflection

Unit: mm (in)

	Used belt deflection		Deflection of new belt
	Limit	Deflection after adjustment	
Alternator	11 (0.43)	7 - 8 (0.28 - 0.31)	6 - 7 (0.24 - 0.28)
Air conditioner compressor	12 (0.47)	7.5 - 8.5 (0.295 - 0.335)	6.5 - 7.5 (0.256 - 0.295)
Power steering oil pump	13 (0.51)	7.5 - 8.5 (0.295 - 0.335)	6.5 - 7.5 (0.256 - 0.295)
Applied pushing force	98 N (10 kg, 22 lb)		

Spark plug

Standard type	PFR5C-11
Cold type	PFR6C-11
	PFR7C-11
Plug gap	1.0 - 1.1 mm (0.039 - 0.043 in)

Ignition wire

Resistance kΩ	Less than 30
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Chassis and Body Maintenance

INSPECTION AND ADJUSTMENT

Wheel balance

Maximum allowable unbalance	Dynamic (at rim flange)	10 (0.35) (One side)
	Static	20 (0.71)

Brake

Unit: mm (in)

Disc brake	
Pad	
Standard thickness	
CL22VF	10.0 (0.394)
CL11H	9.5 (0.374)
Minimum thickness	
CL22VF	2.0 (0.079)
CL11H	2.0 (0.079)
Rotor	
Standard thickness	
CL22VF	20.0 (0.787)
CL11H	9.0 (0.354)
Minimum thickness	
CL22VF	18.0 (0.709)
CL11H	8.0 (0.315)