## **MAINTENANCE**

# SECTION MA

Gi

MA

EM

LC

# **CONTENTS**

GENERAL MAINTENANCE	2
PERIODIC MAINTENANCE	
Schedule 1	5
Schedule 2	
RECOMMENDED FLUIDS AND LUBRICANTS	
Fluids and Lubricants	
SAE Viscosity Number	
ENGINE MAINTENANCE	
Checking Drive Belts	8
Changing Engine Coolant	9
Draining Engine Coolant	9
Flushing Cooling System	10
Refilling Engine Coolant	10
Checking Fuel Lines	10
Changing Fuel Filter	11
Changing Air Cleaner Filter	11
Changing Engine Oil	12
Changing Oil Filter	12
Changing Spark Plugs	13
Checking Vapor Lines	13
Checking Valve Clearance	
CHASSIS AND BODY MAINTENANCE	14
Checking Clutch Fluid Level and Leaks	14
Checking M/T Oil	14
Changing M/T Oil	14
Checking A/T Fluid	
ATF Cooler Service	15
Changing A/T Fluid	
Checking Brake Fluid Level and Leaks	
Checking Brake Lines and Cables	16

•	EF &
Checking Disc Brake16	EC
Rotor16	
Caliper16	FE
Pad17	
Checking Drum Brake17	@B
Wheel Cylinder17	CL
Drum17	
Lining17	MT
Temporary Method For Checking Lining	
Wear17	
Balancing Wheels18	ΑT
Tire Rotation18	
Checking Steering Gear and Linkage18	FA
Steering Gear18	IT IAU
Steering Linkage18	
Checking Power Steering Fluid and Lines18	$\mathbb{R}\mathbb{A}$
Checking Exhaust System18	
CHASSIS AND BODY MAINTENANCE19	
Lubricating Locks, Hinges and Hood Latches 19	BR
Checking Seat Belts, Buckles, Retractors,	
Anchors and Adjusters19	ST
SERVICE DATA AND SPECIFICATIONS (SDS)20	91
Engine Maintenance	
Inspection And Adjustment20	BF
Drive belt deflection20	
Spark plug	ILII A
Chassis and Body Maintenance20	HA
Inspection And Adjustment20	
Brake	EL
Wiles Dalaile20	

(DX

#### **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.

ltem	Reference page
OUTSIDE THE VEHICLE The maintenance items listed here should be performed from time to time, unless otherwise specified.	
<b>Tires</b> 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.	_
Wheel nuts When checking the tires, make sure no nuts are missing, and check for any loose nuts. Tighten if necessary.	_
Tire rotation Tires should be rotated every 12,000 km (7,500 miles.)	MA-18
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-18, FA-6
Windshield wiper blades Check for cracks or wear if they do not wipe properly.	<del>-</del>
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 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
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.	
Lamps Make sure that the headlamps, stop lamps, tail lamps, turn signal lamps, and other amps are all operating properly and installed securely. Also, check headlamp aim.	_
Warning lamps and buzzers/chimes Make sure that all warning lamps and buzzers/chimes are operating properly.	_
Windshield wiper and washer Check that the wipers and washer operate properly and that the wipers do not streak.	_
Windshield defroster Check that air comes out of the defroster outlets properly and in good quantity when operating the heater or air conditioning.	<u>–</u>
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)	ST-5
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 nead 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.	<del>-</del>
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 or cuts, fraying, wear or damage.	MA-19
Clutch pedal Make sure the pedal operates smoothly and check that it has the proper free ravel.	CL-4
Brakes Check that the brake does not pull the vehicle to one side when applied.	
Brake pedal and booster 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 the floor mats away from the pedal.	BR-9, 14

## **GENERAL MAINTENANCE**

Item	Reference page	
Parking brake Check that the lever has the proper travel and make sure that the vehicle is held securely on a fairly steep hill when only the parking brake is applied.	BR-33	
Automatic transaxle "Park" 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.	_	MA
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).		 EM
Windshield washer fluid Check that there is adequate fluid in the tank.	_	LC
Engine coolant level Check the coolant level when the engine is cold.	MA-10	
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.	LC-8	Ef & EC
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-14, 16	F <u>e</u>
Battery Check the fluid level in each cell. It should be between the "MAX" and "MIN" lines.	EL-13	
Engine drive belts Make sure that no belt is frayed, worn, cracked or oily.	MA-8	— CL
Engine oil level Check the level on the dipstick after parking the vehicle on a level spot and turning off the engine.	MA-12	MT
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	AT
Automatic transaxle fluid level Check the level on the dipstick after putting the selector lever in "P" with the engine idling.	MA-15	1 <sub>67.1</sub>
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-18	FA
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.	_	RA Br
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 conditioning after use is normal. If you should notice any leaks or if gasoline fumes are evident, check for the cause and correct it immediately.	_	ST BF

HA

EL

IDX

37

MA-3

#### 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 include 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.

#### Schedule 1

[ ]: At the mileage intervals only

I = Inspect. Correct or replace if necessary.

Abbreviations: R = Replace.

After 60,000 miles (96,000 km) or 48 months, inspect every 15,000 miles (24,000 km) or 12 months. <del>ପ</del>୍ରତ

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

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.

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

If valve noise increases, inspect valve clearance.

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) 400

Inspect the air bag system 10 years after the date of manufacture as noted on the F.M.V.S.S. certification label. **E**@

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.

GI

MΑ

EM

LC

ef & ec

FE CL

MT

AT

FA

RA

BR

BF

ST

HA

EL

IDX

FA-8 BF-58

#### Schedule 2

Abbreviations: $R = Replace$ . $I = Inspect$ . Correct or replace if necessary.	ect or replace if necessary.							[ ]: At th	he mileage	[]: At the mileage intervals only
MAINTENANCE OPERATION				Ν	AINTENANC	E INTERVA	<b>/</b>			
Perform at number of miles, kilometers	Miles x 1,000	7.5	5	22.5	ଚ	37.5		52.5	99	Herer-
or months, whichever comes first.	(km × 1,000) Months	(12) 6	(24) 12	(36) 18	(48) (60) 24 30	( <u>(</u>	(72) 36	(84) 42	(96) 48	bage
Emission control system maintenance	e)									
Drive betts	See NOTE (1)			į					*	MA-8
Air cleaner filter					Œ				<u>E</u>	MA-11
Vapor lines					<u>*</u> _				*	MA-13
Fuel lines			:		<u>*</u>				*	MA-10
Fuel filter	See NOTE (2)*									MA-11
Engine coolant	See NOTE (3)								Ť.	MA-9
Engine oil		æ	Œ	Œ	Œ	æ	Ж	Œ	Œ	MA-12
Engine oil filter (Use Nissan PREMIUM type or equivalent)	quiv-		æ		Œ		æ		Œ	MA-12
Spark plugs					E				匠	MA-13
Intake & exhaust valve clearance	See NOTE (4)*						<u>}</u>			EM-37
Chassis and body maintenance				į						
Brake lines & cables			_		_		_		_	MA-16
Brake pads, discs, drums & linings			_		_		_			MA-16
Manual & automatic transaxle oil			_	i.			_		_	MA-14,
Steering gear linkage, axle & suspension parts					_				_	MA-18, FA-4,
		٠								PA-4
Exhaust system										MA-18

If vehicle is operated under extremely adverse weather conditions or in areas where ambient temperatures are either extremely low or extremely high, the (1) After 60,000 miles (96,000 km) or 48 months, inspect every 15,000 miles (24,000 km) or 12 months. Air bag system NOTE: (1) Afte <u></u>

See NOTE (5)

Drive shaft boots

filters might become clogged. In such an event, replace them immediately.

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

If valve noise increases, inspect valve clearance.

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

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. **6400** 

#### RECOMMENDED FLUIDS AND LUBRICANTS

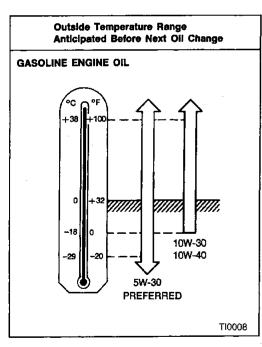
#### Fluids and Lubricants

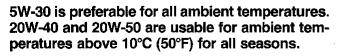
•	Ca	Capacity (Approximate)		Department of third panel habitaness
	US measure	Imp measure	Liter	Recommended fluids and lubricants
Engine oil (Refill)				
With oil filter	4-1/8 qt	3-3/8 qt	3.9	From Course in O'le of ARI COto to
Without oil filter	3-3/4 qt	3-1/8 qt	3.5	— Energy Conserving Oils of API SG*2, *3
Cooling system (Reservoir tank included)	8-1/4 qt	6-7/8 qt	7.8	Anti-freeze coolant (Ethylene glycol base)
Manual transaxle gear oil	10 pt	8-1/4 pt	4.7	API GL-4*2
Automatic transaxle fluid	10 qt	8-1/4 qt	9.4	Genuine Nissan ATF*1 or equivalent type DEXRON II E <sup>TM</sup>
Power steering fluid	1 qt	3/4 qt	0.9	Type DEXRON II <sup>™</sup> or equivalent
Brake & Clutch fluid	_	_	_	Genuine Nissan Brake Fluid*1 or equiva- lent DOT 3 (US FMVSS No. 116)
Multi-purpose grease		_	_	NLGI No. 2 (Lithium soap base)

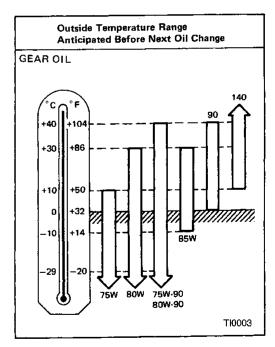
Available in mainland USA through your Nissan dealer. For further details, see "SAE Viscosity Number".

#### **SAE Viscosity Number**

MA-7







80W-90 is preferable for ambient temperatures below 40°C (104°F).

41

MA

GI

EM

EF &

EC

LC

FE

CL

MT

FA

RA

BR

ST

BF

HA

EL

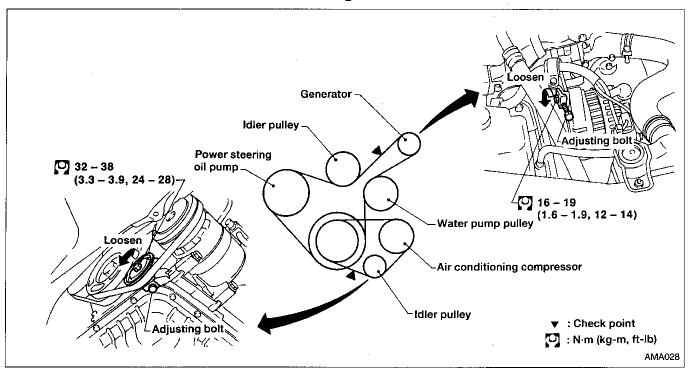
IDX

Energy conserving oils

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

#### **ENGINE MAINTENANCE**

#### **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 be	elt deflection	Deflection	
	Limit	Deflection after adjustment	of new belt	
Generator & Power steering oil pump	8 (0.31)	6 - 7 (0.24 - 0.28)	5 - 6 (0.20 - 0.24)	
Air conditioning compressor	10 (0.39)	7 - 8 (0.28 - 0.31)	6 - 7 (0.24 - 0.28)	
Applied pushing force	98 N (10 kg, 22 lb)			

#### Changing Engine Coolant

#### WARNING:

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

#### -DRAINING ENGINE COOLANT-

Set air conditioning system as follows to prevent coolant from remaining in the system.



EM

LC

EF &

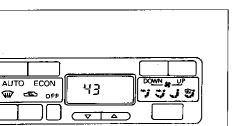
EC

FE

CL

MT

AT



SMA550C

#### Automatic air conditioning

Perform self-diagnosis step 4 of Automatic Air Conditioning system, referring to the following notes. Refer to HA section ("Self-diagnosis", "TROUBLE DIAGNOSES - Auto Air Conditioning").

Turn ignition switch from "OFF" to "ON". 1)

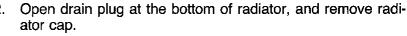
- Within 5 seconds after ignition switch is turned "ON", press switch and hold in for at least 5 seconds.
- Press (HOT) switch 3 times. Press (DEF) switch 2 times. 3)
- 4)
- Confirm indication of the A/C display shown at left.
- Wait 10 seconds before turning ignition switch "OFF". This step is necessary to allow heater water cock to open wide.



- Turn ignition switch "ON" and set temperature controller to maximum hot position.
- Wait 10 seconds before turning ignition switch "OFF".

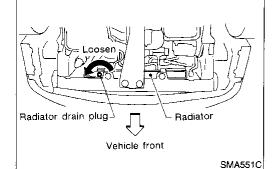


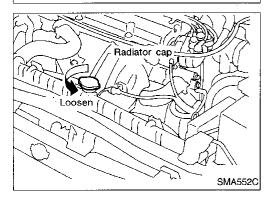






ST





HA

BF

EL

IDX

43 MA-9

#### **ENGINE MAINTENANCE**

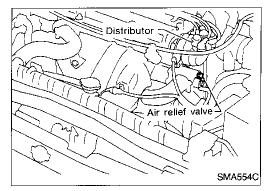
# Upper radiator hose Drain plug

SEM175E

#### **Changing Engine Coolant (Cont'd)**

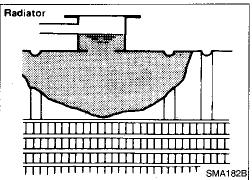
- 3. Remove drain plug on water pipe.
- 4. Close radiator drain plug and tighten drain plug on water pipe securely.
- Apply sealant to the thread of drain plug on water pipe.

(3.5 - 4.5 kg-m, 25 - 33 ft-lb)



#### -FLUSHING COOLING SYSTEM-

- 5. Open air relief plug.
- 6. Fill radiator with water until water spills from the air relief hole, then reinstall air relief plug. Fill radiator and reservoir tank with water and reinstall radiator cap.
- Run engine and warm it up sufficiently.
- 8. Race engine 2 or 3 times under no-load.
- 9. Stop engine and wait until it cools down.
- 10. Drain water.
- 11. Repeat step 1 through step 10 until clear water begins to drain from radiator.



#### -REFILLING ENGINE COOLANT-

- 12. Open radiator cap and air relief plug.
- 13. Fill radiator with coolant up to specified level following step 1 though step 9.

Follow instructions attached to anti-freeze container for mixing ratio of anti-freeze to water.

Engine coolant level (With reservoir tank):

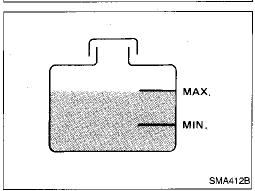
7.8  $\ell$  (8-1/4 US qt, 6-7/8 Imp qt)

Reservoir tank:

0.7 ℓ (3/4 US qt, 5/8 lmp qt)

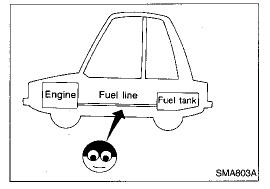
Pour coolant through coolant filler neck slowly to allow air in system to escape.

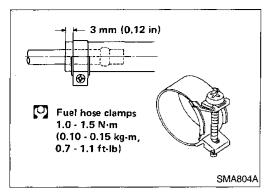
14. If necessary, add coolant.

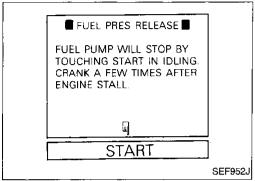


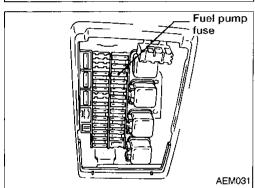
### **Checking Fuel Lines**

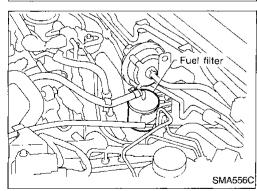
Inspect fuel lines and tank for improper attachment and for leaks, cracks, damage, loose connections, chafing and deterioration. If necessary, repair or replace faulty parts.

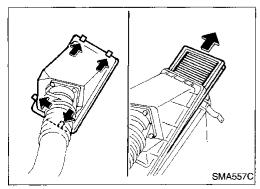












#### **Changing Fuel Filter**

#### **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.



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



- Start engine.
   Perform "FUEL PRE
- 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.
- 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.

WARNING:

Use rubber gloves to prevent fuel from contacting the skin when removing fuel hoses and filter.

- Loosen fuel hose clamps.
- 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.

#### **Changing Air Cleaner Filter**

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

MA

EM LC

ef &

EC

FE

CL

MT

AT

FA

RA

(a)

BR

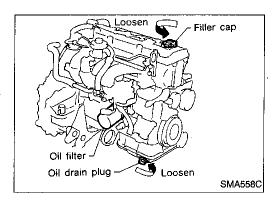
BF

ĦA

EL

IDX

MA-11 45



#### **Changing Engine Oil**

#### **WARNING:**

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

- Warm up engine, and check for oil leakage from engine components.
- 2. Remove drain plug and oil filler cap.
- 3. Drain oil and refill with new engine oil.

Oil grade: API SG

Viscosity: Refer to MA-7.

#### Refill oil capacity (Approximately):

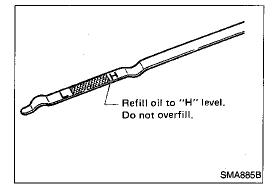
With oil filter change	3.9 ℓ (4-1/8 US qt, 3-3/8 Imp qt)
Without oil filter change	3.5 t (3-3/4 US qt, 3-1/8 Imp qt)

#### **CAUTION:**

Be sure to clean drain plug and install with new washer.
 Drain plug:

(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.
- 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.

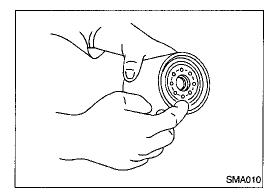


#### **Changing Oil Filter**

1. Remove oil filter with a suitable tool.

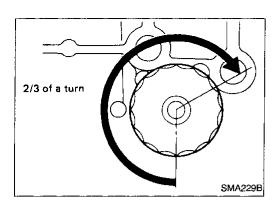
#### **WARNING:**

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



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

#### **ENGINE MAINTENANCE**



N.G.

#### Changing Oil Filter (Cont'd)

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 MA-12.

Gi

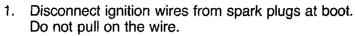
MA

EM

المماض

LC

#### **Changing Spark Plugs**



ef & ec

FE

CL

MT

Remove spark plugs with spark plug wrench.

Spark plug:

SMA356C

Standard type

BKR5E-11

Cold type BKR6E-11

DKU0E-11

**BKR7E-11** 

ΑT

FA

RA

BR

3. Check plug gap of each new spark plug.

Gap: 1.0 - 1.1 mm (0.039 - 0.043 in)

 Install spark plugs. Reconnect ignition wires according to Nos. indicated on them.

ST

Spark plug:

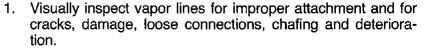
(C):20 - 29 N·m

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

BF

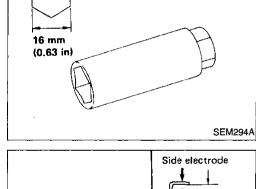
HA

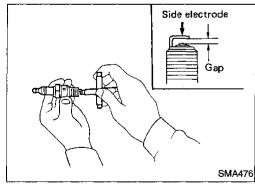
#### **Checking Vapor Lines**

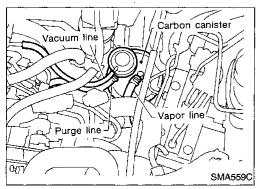


Inspect vacuum relief valve of fuel tank filler cap for clogging, sticking, etc.

Refer to EF & EC section ("Inspection", "EVAPORATIVE EMISSION (EVAP) SYSTEM").

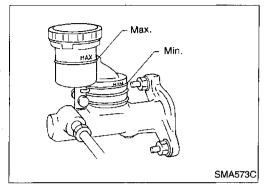






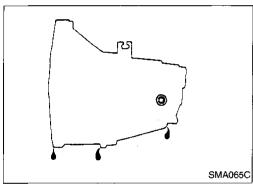
#### **Checking Valve Clearance**

If engine runs with unusual mechanical noise, refer to EM section ("Inspection", "CYLINDER HEAD").



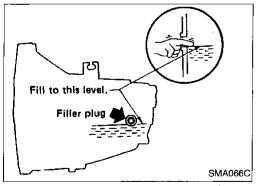
#### **Checking Clutch Fluid Level and Leaks**

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



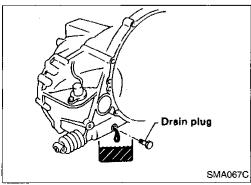
#### Checking M/T Oil

1. Check for oil leaks.



2. Check oil level.

Never start engine while checking oil level.



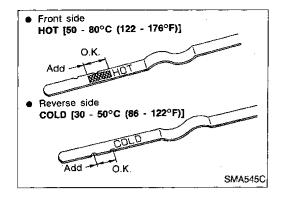
#### Changing M/T Oil

Oil grade: API GL-4 Oil viscosity:

Refer to MA-7.

Oil capacity:

4.7 liters (10 US pt, 8-1/4 Imp pt)



#### Checking A/T Fluid

Check for fluid leakage.

Check fluid level. Fluid level should be checked using "HOT" range on dipstick at fluid temperatures of 50 to 80°C (122 to 176°F) after vehicle has been driven approximately 5 minutes in urban areas and engine is warmed up. It can be checked at fluid temperatures of 30 to 50°C (86 to 122°F) using "COLD" range on

dipstick for reference after engine is warmed up and before driving. However, fluid level must be rechecked using "HOT"

1) Park vehicle on level surface and set parking brake.

Start engine and then move selector lever through each gear range, ending in "P".

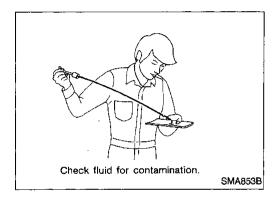
3) Check fluid level with engine idling.

Remove dipstick and wipe it clean with lint-free paper. 4)

Re-insert dipstick into charging pipe as far as it will go.

Remove dipstick and note reading. If level is at low side of either range, add fluid to the charging pipe.

Do not overfill.

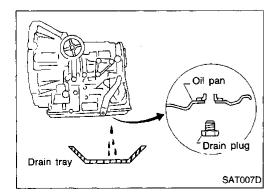


Check fluid condition.

Check fluid for contamination. If fluid is very dark or smells burned, refer to AT section for checking operation of A/T. Flush cooling system after repair of A/T.

#### ATF COOLER SERVICE

If foreign matter is found to accumulate in the oil pan in large quantities during overhaul or the strainer is excessively clogged, replace radiator lower tank (which includes ATF cooler) with a new one and flush cooler line using cleaning solvent and compressed air. Refer to LC section ("Radiator", "ENGINE COOLING SYSTEM").



#### Changing A/T Fluid

- Warm up A/T fluid.
- Stop engine.
- 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 or "DEXRON II ETM" or equivalent

Oil capacity (With torque converter):

9.4 (10 US qt, 8-1/4 Imp qt)

Run engine at idle speed for five minutes.

MA-15

GI

MA

EM

LC

EF & EC

CL

MT

AT

FA

RA

BR

ST

BF

HA

凮

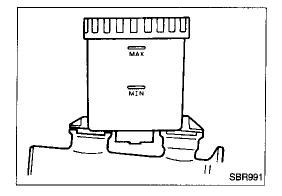
IDX

49

#### **CHASSIS AND BODY MAINTENANCE**

#### Changing A/T Fluid (Cont'd)

5. Check fluid level and condition. Refer to "Checking A/T Fluid" MA-15. If fluid is still dirty, repeat step 2. through 5.

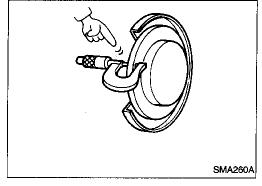


#### **Checking Brake Fluid Level and Leaks**

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 and for leaks, chafing, abrasions, deterioration, etc.



# Check condition and thickness.

**Checking Disc Brake** 

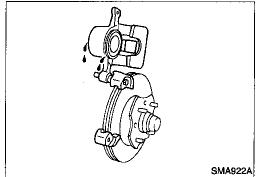
Unit: mm (in)

	CL25VB	CL9HA
Standard	22.0 (0.866)	9.0 (0.354)
Minimum	20.0 (0.787)	8.0 (0.315)



ROTOR

Check operation and for leakage.

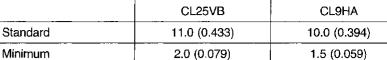


#### CHASSIS AND BODY MAINTENANCE

#### **Checking Disc Brake (Cont'd) PAD**

Check for wear or damage.

Unit: mm (in)

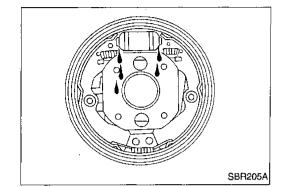






LC

G



Check conditionof inner surface

Inner diameter

of drum =

#### **Checking Drum Brake** WHEEL CYLINDER

Check operation and for leakage.

EF & EC



CL

#### MT



SMA848B

SMA847B

#### **DRUM**

Check condition of inner surface. Standard inner diameter: 228.6 mm (9 in) Maximum diameter: 230.0 mm (9.06 in)

FA

RA

BR



ST

36

HA

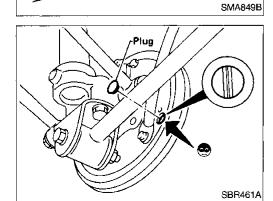


#### EL









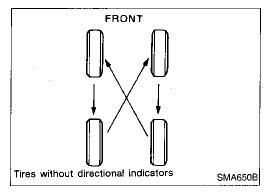
## LINING

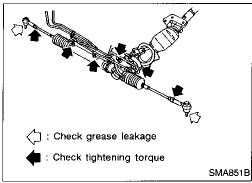
Check for wear or damage. Standard thickness: 4.1 mm (0.161 in) Minimum thickness: 1.5 mm (0.059 in)

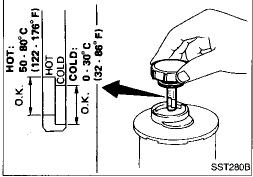
#### TEMPORARY METHOD FOR CHECKING LINING WEAR

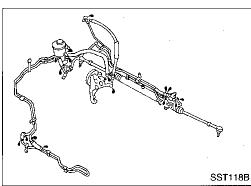
Remove inspection hole plug and check for lining wear.

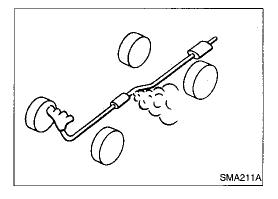
#### CHASSIS AND BODY MAINTENANCE











#### **Balancing Wheels**

Adjust wheel balance using road wheel center.
 Wheel balance (Maximum allowable unbalance):
 Refer to MA-20.

#### Tire Rotation

• Do not include the T-type spare tire when rotating the tires. Wheel nuts:

(10 - 12 kg-m, 72 - 87 ft-lb)

# 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.

#### STEERING LINKAGE

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

#### **Checking Power Steering Fluid and Lines**

Check fluid level.

Fluid level should be checked using "HOT" range on dipstick at fluid temperatures of 50 to 80°C (122 to 176°F) or using "COLD" range on dipstick at fluid temperatures of 0 to 30°C (32 to 86°F). **CAUTION:** 

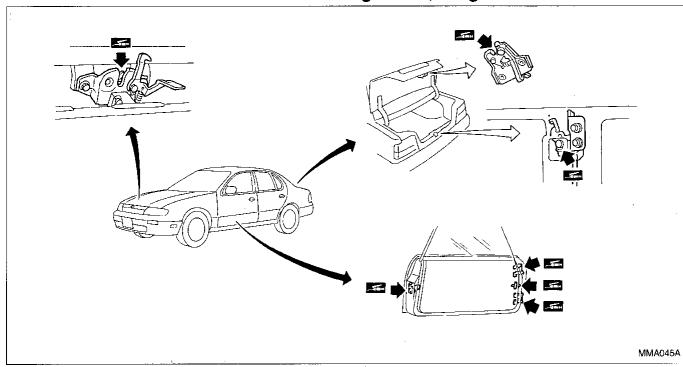
- Do not overfill.
- Recommended fluid is type DEXRON II<sup>TM</sup> or equivalent.

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

#### **Checking Exhaust System**

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

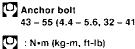
#### **Lubricating Locks, Hinges and Hood Latches**

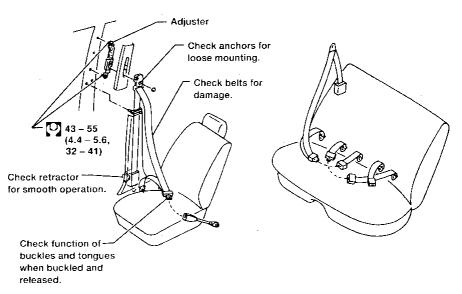


## Checking Seat Belts, Buckles, Retractors, **Anchors and Adjusters**

#### **CAUTION:**

- 1. All seat belt assemblies, including retractors and attaching hardwares such as anchors, 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 (4.4 - 5.6, 32 - 41)





**MA-19** 53

GI

MA

EM

LC

EF & EC

FE

CL

MT

FA

RA

BR

ST

85

HA

EL

ID)X

AMA031

#### **SERVICE DATA AND SPECIFICATIONS (SDS)**

#### Engine Maintenance Spark plug

#### **INSPECTION AND ADJUSTMENT**

#### **Drive belt deflection**

#### Unit: mm (in) Used belt deflection Deflection of Deflection after Limit new belt adjustment Generator & 6 - 7 5 - 6 Power steering 8 (0.31) (0.24 - 0.28) (0.20 - 0.24) oil pump Air conditioning 7 - 8 6 - 7 10 (0.39) (0.28 - 0.31)compressor (0.24 - 0.28)

98 N (10 kg, 22 lb)

Standard type	BKR5E-11
Cald has	BKR6E-11
Cold type	BKR7E-11
Plug gap	1.0 - 1.1 mm (0.039 - 0.043 in)

#### Chassis and Body Maintenance Wheel balance

#### INSPECTION AND ADJUSTMENT

#### **Brake**

Applied push-

ing force

Disc brake	mm (in)	
Pad		
Standard thickness		
CL25VB		11.0 (0.433)
CL9HA		10.0 (0.394)
Minimum thickness		
CL25VB		2.0 (0.079)
CL9HA		1.5 (0.059)
Rotor		
Standard thickness		
CL25VB		22.0 (0.866)
CL9HA		9.0 (0.354)
Minimum thickness		
CL25VB		20.0 (0.787)
CL9HA		8.0 (0.315)
Drum brake	mm (in)	
Lining		
Standard thickness		4.1 (0.161)
Minimum thickness		1.5 (0.059)
Drum		
Standard diameter		228.6 (9)
Maximum diameter		230.0 (9.06)

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