

SECTION **MA**
MAINTENANCE

CONTENTS

PRECAUTIONS	3	REMOVAL	18	F
Precautions for Battery Service	3	INSTALLATION	19	
PREPARATION	4	Changing Spark Plugs (Platinum-Tipped Type)	19	
Special Service Tools	4	REMOVAL	19	G
Commercial Service Tools	4	INSPECTION AFTER REMOVAL	19	
GENERAL MAINTENANCE	5	INSTALLATION	20	
Explanation of General Maintenance	5	Checking EVAP Vapor Lines	20	H
PERIODIC MAINTENANCE	7	CHASSIS AND BODY MAINTENANCE	21	
Introduction of Periodic Maintenance	7	Checking Exhaust System	21	
SCHEDULE 1	8	Checking Clutch Fluid Level and Leaks	21	
EMISSION CONTROL SYSTEM MAINTENANCE	8	Checking M/T Oil	21	I
CHASSIS AND BODY MAINTENANCE	9	Changing M/T Oil	22	
SCHEDULE 2	10	Checking A/T Fluid	22	J
EMISSION CONTROL SYSTEM MAINTENANCE	10	Changing A/T Fluid	23	
CHASSIS AND BODY MAINTENANCE	10	Checking Propeller Shaft	24	
RECOMMENDED FLUIDS AND LUBRICANTS	11	Checking Differential Gear Oil	24	K
Fluids and Lubricants	11	Changing Differential Gear Oil	25	
SAE Viscosity Number	11	Balancing Wheels (Bonding Weight Type)	25	
GASOLINE ENGINE OIL	11	REMOVAL	25	
ANTI-FREEZE COOLANT MIXTURE RATIO	12	WHEEL BALANCE ADJUSTMENT	25	MA
ENGINE MAINTENANCE	13	Tire Rotation	26	
Checking Drive Belts	13	Checking Brake Fluid Level and Leaks	27	
Tension Adjustment	13	Checking Brake Lines and Cables	27	M
ALTERNATOR, POWER STEERING PUMP AND FAN BELT	14	Changing Brake Fluid	27	
AIR CONDITIONER COMPRESSOR BELT	14	Checking Disc Brake	27	
Changing Engine Coolant	14	ROTOR	27	
DRAINING ENGINE COOLANT	14	CALIPER	28	
REFILLING ENGINE COOLANT	15	PAD	28	
FLUSHING COOLING SYSTEM	16	Checking Steering Gear and Linkage	28	
Checking Fuel Lines	17	STEERING GEAR	28	
Changing Air Cleaner Filter	17	STEERING LINKAGE	28	
VISCOUS PAPER TYPE	17	Checking Power Steering Fluid and Lines	29	
Changing Engine Oil	18	Axle and Suspension Parts	29	
Changing Oil Filter	18	Drive Shaft	30	
		Lubricating Locks, Hinges and Hood Latch	30	
		Checking Seat Belt, Buckles, Retractors, Anchors and Adjusters	31	

SERVICE DATA AND SPECIFICATIONS (SDS)	32
Standard and Limit	32
BELT DEFLECTION AND TENSION	32
ENGINE COOLANT CAPACITY	32
ENGINE OIL CAPACITY	32
SPARK PLUG (PLATINUM-TIPPED TYPE)	32
WHEEL BALANCE	32

PRECAUTIONS

PRECAUTIONS

PFP:00001

Precautions for Battery Service

ALS0007K

This vehicle is equipped with the automatic window adjusting function. When a door is opened, the window automatically lowers slightly to avoid contact between the window and the side roof panel. After the door is closed, the window will automatically raise slightly.

On vehicles equipped with the automatic window adjusting function, lower both the driver and front passenger side windows before disconnecting the battery cables. This will prevent interference between the side window and the roof panel when either door is opened/closed.

CAUTION:

After the battery cables are disconnected, do not open/close the driver and/or front passenger door with the window in the full up position. The automatic window adjusting function will not work and the side roof panel may be damaged.

A

B

C

D

E

F

G

H

I

J

K

MA

M

PREPARATION


PREPARATION

PFP:00002

Special Service Tools

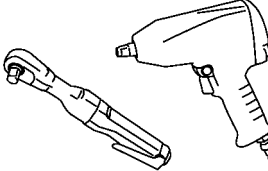
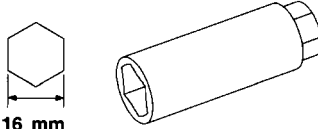
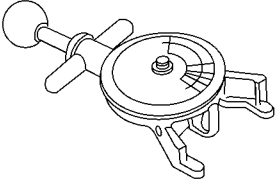
ALS00028

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
KV10115801 (J38956) Oil filter wrench <div data-bbox="608 457 909 549">  <p>14 faces Inner span 64.3 mm (2.531 in) (Face to opposite face)</p> </div> <div data-bbox="837 585 893 606">S-NT772</div>	Removing and installing oil filter

Commercial Service Tools

ALS00029

Tool name (Kent-Moore No.)	Description
Power tool <div data-bbox="608 798 909 989">  <p>PBIC0190E</p> </div>	Loosening bolts and nuts
Spark plug wrench <div data-bbox="598 1042 917 1223">  <p>16 mm (0.63 in)</p> <p>S-NT047</p> </div>	Removing and installing spark plug
Belt tension gauge (BT3373-F) <div data-bbox="598 1255 877 1436">  <p>AMA126</p> </div>	Checking drive belt tension

GENERAL MAINTENANCE

GENERAL MAINTENANCE

PFP:00000

Explanation of General Maintenance

ALS0002A

General maintenance includes those items which should be checked during the 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.

OUTSIDE THE VEHICLE

The maintenance items listed here should be performed from time to time, unless otherwise specified.

Item		Reference page
Tires	Check the pressure with a gauge, including the spare, at least once a month and always prior to a long distance trips. 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.	—
Windshield	Clean the windshield on a regular basis. Check the windshield at least every six months for cracks or other damage. Repair as necessary.	—
Tire rotation	Tires should be rotated every 12,000 km (7,500 miles).	MA-26
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-25,FSU-5
Windshield wiper blades	Check for cracks or wear if they do not wipe properly.	—
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-30
Lamps	Make sure that the headlamps, stop lamps, tail lamps, turn signal lamps, and other lamps are all operating properly and installed securely. Also check headlamp aim. Clean the headlamps on a regular basis.	—

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.

Item		Reference page
Warning lamps and chimes	Make sure that all warning lamps and 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 the air comes out of the defroster outlets properly and in sufficient quantity when operating the heater or air conditioner.	—
Steering wheel	Check that it has the specified play. Be sure to check for changes in the steering condition, such as excessive play, hard steering or strange noises. Free play: Less than 35 mm (1.38 in)	—
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.	—
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.	SB-4
Accelerator pedal	Check the pedal for smooth operation and make sure the pedal does not catch or require uneven effort. Keep the floor mats away from the pedal.	—

GENERAL MAINTENANCE

Item		Reference page
Clutch pedal	Make sure the pedal operates smoothly and check that it has the proper free play.	CL-5
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-6 , BR-22
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.	PB-3 .
Automatic transmission “Park” mechanism	Check that the lock release button on the selector lever operates properly and smoothly. On a fairly steep hill check that the 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).

Item		Reference page
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-14
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 reservoirs.	BR-9 , MA-21
Battery	Check the fluid level in each cell. It should be between the “MAX” and “MIN” lines. Vehicles operated in high temperatures or under severe conditions require frequent checks of the battery fluid level.	—
Engine drive belts	Make sure that no belt is frayed, worn, cracked or oily.	MA-13
Engine oil level	Check the level on the dipstick after parking the vehicle on a level spot and turning off the engine.	LU-6 , “OIL LEVEL” .
Power steering fluid level and lines	Check the level on the dipstick with the engine off. Check the lines for improper attachment, leaks, cracks, etc.	MA-29
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-21
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

PERIODIC MAINTENANCE

PFP:00026

Introduction of Periodic Maintenance

ALS0002B

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	<p>Follow Periodic Maintenance Schedule 1 if the driving habits frequently include one or more of the following driving conditions:</p> <ul style="list-style-type: none">● 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.	Emission Control System Maintenance	MA-8
		Chassis and Body Maintenance	MA-9
Schedule 2	<p>Follow Periodic Maintenance Schedule 2 if none of driving conditions shown in Schedule 1 apply to the driving habits.</p>	Emission Control System Maintenance	MA-10
		Chassis and Body Maintenance	MA-10

PERIODIC MAINTENANCE

SCHEDULE 1 EMISSION CONTROL SYSTEM MAINTENANCE

AL50002C

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference Section - Page or - Content Title
Perform at number of miles, kilometers or months, which- ever comes first.	Miles x 1,000 (km x 1,000) Months	3.75 (6) 3	7.50 (12) 6	11.25 (18) 9	15 (24) 12	18.75 (30) 15	22.5 (36) 18	26.25 (42) 21	30 (48) 24	
Drive belts	NOTE (1)									MA-13
Air cleaner filter	NOTE (2)								[R]	MA-17
EVAP vapor lines									I*	EC-621
Fuel lines									I*	MA-17
Fuel filter	NOTE (3)									-
Engine coolant	NOTE (4)									MA-14
Engine oil		R	R	R	R	R	R	R	R	MA-18
Engine oil filter (Use part No. 15208 31U00 or 15208 65F00 or equivalent.)		R	R	R	R	R	R	R	R	MA-18
Spark plugs (PLATINUM- TIPPED type)		Replace every 105,000 miles (169,000 km).								MA-19
Intake & exhaust valve clear- ance*	NOTE (5)									EM-71. "Valve Clear- ance"

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference Section - Page or - Content Title
Perform at number of miles, kilometers or months, which- ever comes first.	Miles x 1,000 (km x 1,000) Months	33.75 (54) 27	37.5 (60) 30	41.25 (66) 33	45 (72) 36	48.75 (78) 39	52.5 (84) 42	56.25 (90) 45	60 (96) 48	
Drive belts	NOTE (1)								I*	MA-13
Air cleaner filter	NOTE (2)								[R]	MA-17
EVAP vapor lines									I*	EC-621
Fuel lines									I*	MA-17
Fuel filter	NOTE (3)									-
Engine coolant	NOTE (4)								R*	MA-14
Engine oil		R	R	R	R	R	R	R	R	MA-18
Engine oil filter (Use part No. 15208 31U00 or 15208 65F00 or equivalent.)		R	R	R	R	R	R	R	R	MA-18
Spark plugs (PLATINUM- TIPPED type)		Replace every 105,000 miles (169,000 km).								MA-19
Intake & exhaust valve clear- ance*	NOTE (5)									EM-71. "Valve Clear- ance"

NOTE:

- (1) After 60,000 miles (96,000 km) or 48 months, inspect every 15,000 miles (24,000 km) or 12 months. Replace the drive belts if found damaged.
- (2) If operating mainly in dusty conditions, more frequent maintenance may be required.
- (3) Maintenance-free item. For service procedures, refer to FL section.
- (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 clearance.

* 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.

PERIODIC MAINTENANCE

CHASSIS AND BODY MAINTENANCE

Abbreviations: R = Replace. I = Inspect. Correct or replace if necessary.

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference Section - Page or - Content Title
Perform at number of miles, kilometers or months, whichever comes first.	Miles x 1,000 (km x 1,000) Months	3.75 (6) 3	7.50 (12) 6	11.25 (18) 9	15 (24) 12	18.75 (30) 15	22.5 (36) 18	26.25 (42) 21	30 (48) 24	
Brake lines & cables					I				I	MA-27
Brake pads & rotors			I		I		I		I	MA-27
Automatic transmission fluid, manual transmission & differential gear oil	NOTE (1)				I				I	MA-22 , MA-24 , MT-7 , MT-7
Steering gear & linkage, axle & suspension parts			I		I		I		I	MA-28 , RSU-5 , MA-29
Tire rotation	NOTE (2)									MA-5 , MA-26
Exhaust system			I		I		I		I	MA-21

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference Section - Page or - Content Title
Perform at number of miles, kilometers or months, whichever comes first.	Miles x 1,000 (km x 1,000) Months	33.75 (54) 27	37.5 (60) 30	41.25 (66) 33	45 (72) 36	48.75 (78) 39	52.5 (84) 42	56.25 (90) 45	60 (96) 48	
Brake lines & cables					I				I	MA-27
Brake pads & rotors			I		I		I		I	MA-27
Automatic transmission fluid, manual transmission & differential gear oil	NOTE (1)				I				I	MA-22 , MA-24 , MT-7 , MT-7
Steering gear & linkage, axle & suspension parts			I		I		I		I	MA-28 , RSU-5 , MA-29
Tire rotation	NOTE (2)									MA-5 , MA-26
Exhaust system			I		I		I		I	MA-21

NOTE:

- (1) 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. Using automatic transmission fluid other than Genuine Nissan ATF Matic Fluid J will cause deterioration in driveability and automatic transmission durability, and may damage the automatic transmission, which is not covered by the NISSAN new vehicle limited warranty.
- (2) Refer to "Tire rotation" under the "General maintenance" heading earlier in this section.

PERIODIC MAINTENANCE

SCHEDULE 2 EMISSION CONTROL SYSTEM MAINTENANCE

AL50002D

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference Section - Page or - Content Title
Perform at number of miles, kilometers or months, whichever comes first.	Miles x 1,000 (km x 1,000) Months	7.5 (12) 6	15 (24) 12	22.5 (36) 18	30 (48) 24	37.5 (60) 30	45 (72) 36	52.5 (84) 42	60 (96) 48	
Drive belts	NOTE (1)								I*	MA-13
Air cleaner filter					[R]				[R]	MA-17
EVAP vapor lines					I*				I*	EC-621
Fuel lines					I*				I*	MA-17
Fuel filter	NOTE (2)									-
Engine coolant	NOTE (3)								R*	MA-14
Engine oil		R	R	R	R	R	R	R	R	MA-18
Engine oil filter (Use part No. 15208 31U00 or 15208 65F00 or equivalent.)		R	R	R	R	R	R	R	R	MA-18
Spark plugs (PLATINUM-TIPPED type)		Replace every 105,000 miles (169,000 km).								MA-19
Intake & exhaust valve clearance*	NOTE (4)									EM-71, "Valve Clearance"

NOTE:

(1) After 60,000 miles (96,000 km) or 48 months, inspect every 15,000 miles (24,000 km) or 12 months. Replace the drive belts if found damaged.

(2) Maintenance-free item. For service procedures, refer to FL section.

(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 clearance.

* 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

CHASSIS AND BODY MAINTENANCE

Abbreviations: R = Replace. I = Inspect. Correct or replace if necessary.

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference Section - Page or - Content Title
Perform at number of miles, kilometers or months, whichever comes first.	Miles x 1,000 (km x 1,000) Months	7.5 (12) 6	15 (24) 12	22.5 (36) 18	30 (48) 24	37.5 (60) 30	45 (72) 36	52.5 (84) 42	60 (96) 48	
Brake lines & cables			I		I		I		I	MA-27
Brake pads & rotors			I		I		I		I	MA-27
Automatic transmission fluid, manual transmission & differential gear oil	NOTE (1)		I		I		I		I	MA-22, MA-24 , MT-7 , MT-7
Steering gear & linkage, axle & suspension parts					I				I	MA-28 , RSU-5,MA-29
Tire rotation	NOTE (2)									MA-5 , MA-26
Exhaust system					I				I	MA-21

NOTE:

(1) Using automatic transmission fluid other than Genuine Nissan ATF Matic Fluid J will cause deterioration in driveability and automatic transmission durability, and may damage the automatic transmission, which is not covered by the NISSAN new vehicle limited warranty.

(2) Refer to "Tire rotation" under the "General maintenance" heading earlier in this section.

RECOMMENDED FLUIDS AND LUBRICANTS

RECOMMENDED FLUIDS AND LUBRICANTS

PPF:00000

Fluids and Lubricants

ALS0002E

		Capacity (Approximate)			Recommended Fluids/Lubricants
		US measure	Imp measure	Liter	
Engine oil Drain and refill	With oil filter change	5 qt	4-1/8 qt	4.7	<ul style="list-style-type: none"> ● API Certification Mark*1 ● API grade SG/SH, Energy Conserving I & II or API grade SJ or SL, Energy Conserving*1 ● ILSAC grade GF-I, GF-II & GF-III*1
	Without oil filter change	4-5/8 qt	3-7/8 qt	4.4	
Dry engine (Overhaul)		5-3/4 qt	4-3/4 qt	5.4	
Cooling system	With reservoir tank	9-1/4 qt	7-5/8 qt	8.7	Genuine Nissan Anti-freeze coolant or equivalent
	Reservoir tank	7/8 qt	3/4 qt	0.8	
Automatic transmission fluid		10-7/8 qt	9-1/8 qt	10.3	Genuine Nissan ATF Matic Fluid J*2
Manual transmission gear oil		3-1/4 qt	2-3/4 qt	2.9	API GL-4, Viscosity SAE 75W-85
Power steering fluid		1-1/8 qt	7/8 qt	1.0	Genuine Nissan PSF II or equivalent*3
Brake and clutch fluid		—	—	—	Genuine Nissan Brake Fluid*4 or equivalent DOT 3 (US FMVSS No. 116)
Differential gear oil		3 pt	2-1/2 pt	1.4	API GL-5, Viscosity SAE 80W-90*5
Multi-purpose grease		—	—	—	NLGI No. 2 (Lithium soap base)

*1: For further details, see "SAE Viscosity Number".

*2: Using automatic transmission fluid other than Genuine Nissan ATF Matic Fluid J will cause deterioration in driveability and automatic transmission durability, and may damage the automatic transmission, which is not covered by the NISSAN new vehicle limited warranty .

*3: Genuine Nissan PSF, Canada NISSAN Automatic Transmission Fluid, Dexron™ III/Mercon™ or equivalent ATF may also be used.

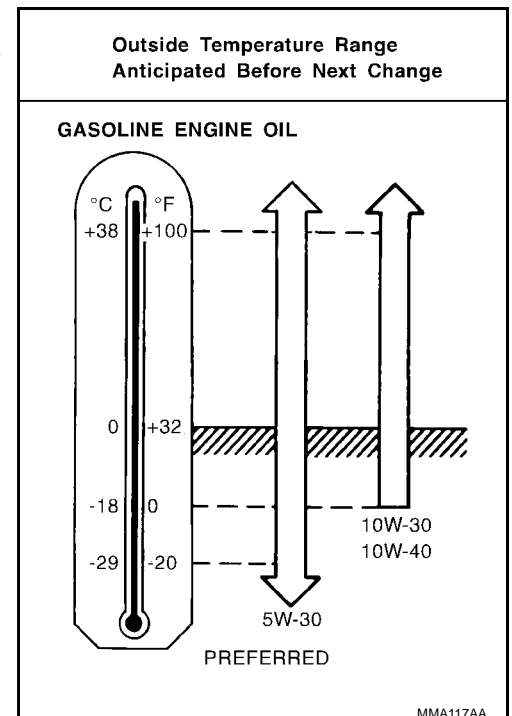
*4: Available in mainland U.S.A. through your NISSAN dealer.

*5: For hot climates, viscosity SAE 90 is suitable for ambient temperatures above 0°C(32°F).

SAE Viscosity Number GASOLINE ENGINE OIL

ALS0002F

SAE 5W-30 viscosity oil is preferred for all temperatures. SAE 10W-30 and 10W-40 viscosity oil may be used if the ambient temperature is above -18°C(0°F)



RECOMMENDED FLUIDS AND LUBRICANTS

ANTI-FREEZE COOLANT MIXTURE RATIO

The engine cooling system is filled at the factory with a high-quality, year-round, anti-freeze coolant solution. The anti-freeze solution contains rust and corrosion inhibitors. Therefore, additional cooling system additives are not necessary.

CAUTION:

When adding or replacing coolant, be sure to use only Genuine Nissan anti-freeze coolant or equivalent with the proper mixture ratio of 50% anti-freeze and 50% demineralized water/distilled water.

Other types of coolant solutions may damage your cooling system.

Outside temperature down to		Anti-freeze	Demineralized water or distilled water
°C	°F		
-35	-30	50%	50%

SMA947CA

ENGINE MAINTENANCE

PPF:00000

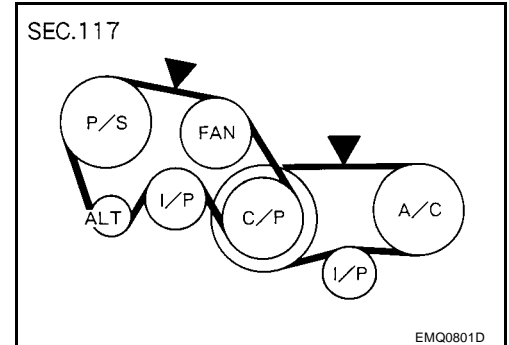
Checking Drive Belts

ALS00058

WARNING:

Be sure to perform when the engine is stopped.

1. Inspect belts for cracks, fraying, wear and oil. If necessary, replace.
2. Inspect drive belt deflection or tension at a point on the belt mid-way between pulleys.
 - Inspection should be done only when engine is cold, or over 30 minutes after engine is stopped.
 - Measure belt tension with tension gauge (BT 3373-F or equivalent) at points marked ▼ shown in the figure.
 - When measuring deflection, apply 98 N (10 kg, 22 lb) at the ▼ marked point.
 - Adjust if belt deflection exceeds the limit or if belt tension is not within specifications.



CAUTION:

- When checking belt deflection or tension immediately after installation, first adjust it to the specified value. Then, after turning the crankshaft two turns or more, re-adjust to the specified value to avoid variation in deflection between pulleys.
- Tighten idler pulley lock nut by hand and measure deflection or tension without looseness.

Belt Deflection and Tension

	Deflection adjustment		Unit: mm (in)	Tension adjustment*		Unit: N (kg, lb)
	Used belt		New belt	Used belt		New belt
	Limit	After adjustment		Limit	After adjustment	
Alternator, power steering pump and fan belt	7 (0.28)	4 - 5 (0.16 - 0.20)	3.5 - 4.5 (0.138 - 0.177)	294 (30, 66)	730 - 818 (74.5 - 83.5, 164 - 184)	838 - 926 (85.5 - 94.5, 188 - 208)
Air conditioning compressor	12 (0.47)	9 - 10 (0.35 - 0.39)	8 - 9 (0.31 - 0.35)	196 (20, 44)	348 - 436 (35.5 - 44.5, 78 - 98)	470 - 559 (48 - 57, 106 - 126)
Applied pushing force	98 N (10 kg, 22 lb)			—		

*: If belt tension gauge cannot be installed at check points shown, check drive belt tension at different location on the belt.

Tension Adjustment

ALS00059

Portion	Belt tightening method for adjustment
Alternator, power steering pump and fan belt	Adjusting bolt on idler pulley
Air conditioner compressor belt	Adjusting bolt on idler pulley


CAUTION:

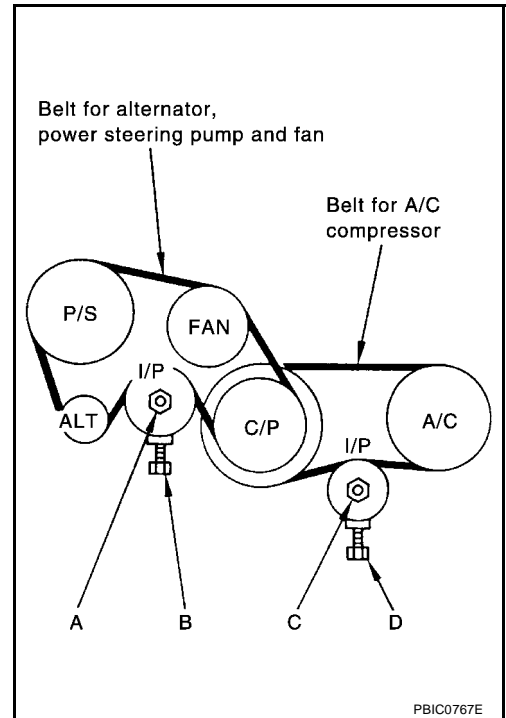
- When belt is replaced with a new one, adjust it to value for “New belt” to accommodate for insufficient adaptability with pulley grooves.
- When deflection or tension of belt being used exceeds “Used belt limit”, adjust it to value for “Used belt”.
- When checking belt deflection or tension immediately after installation, first adjust it to the specified value. Then, after turning the crankshaft two turns or more, re-adjust to the specified value to avoid variation in deflection between pulleys.
- When installing belt, make sure that it is correctly engaged with pulley groove.
- Keep oil and water away from belt.
- Do not twist or bend belt excessively.

ENGINE MAINTENANCE

ALTERNATOR, POWER STEERING PUMP AND FAN BELT


1. Remove undercover with power tool.
2. Loosen idler pulley lock nut (A) and adjust tension by turning adjusting bolt (B).
 - For specified belt tension, refer to [MA-13, "Checking Drive Belts"](#).
3. Tighten nut (A).

 : 31.4 - 38.2 N·m (3.2 - 3.9 kg-m, 24 - 28 ft-lb)



AIR CONDITIONER COMPRESSOR BELT

1. Remove undercover with power tool.
2. Loosen idler pulley lock nut (C) and adjust tension by turning adjusting bolt (D).
 - For specified belt tension, refer to [MA-13, "Checking Drive Belts"](#).
3. Tighten nut (C).

 : 30.4 - 39.2 N·m (3.1 - 4.0 kg-m, 23 - 28 ft-lb)

Changing Engine Coolant

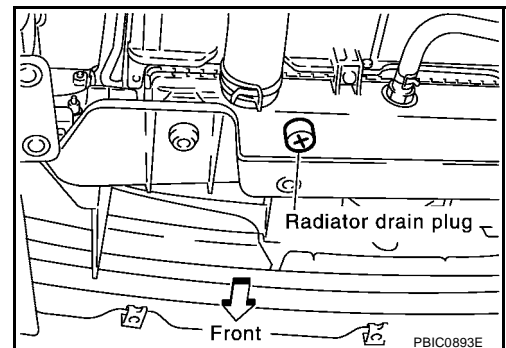
ALS0007C

WARNING:

- To avoid being scalded, never change the coolant when the engine is hot.
- Wrap a thick cloth around cap and carefully remove the cap. First, turn the cap a quarter of a turn to release built-up pressure. Then turn the cap all the way.
- Be careful not to allow coolant to contact drive belts.

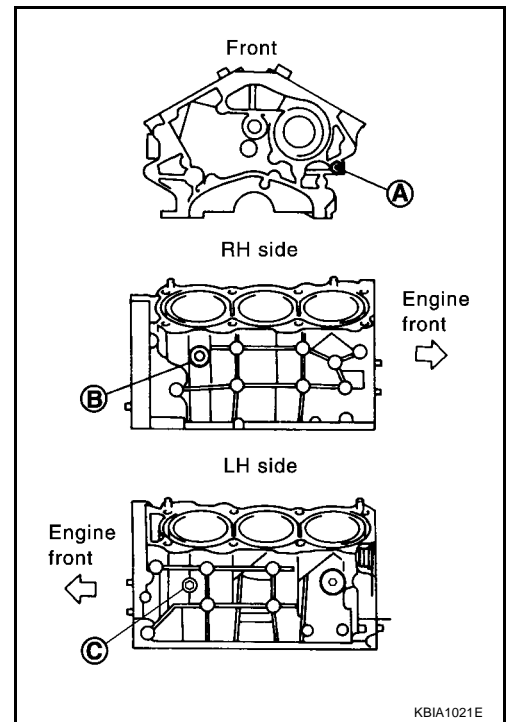
DRAINING ENGINE COOLANT

1. Remove engine undercover using power tools.
2. Open radiator drain plug at the bottom of radiator, and remove radiator cap.
When draining all the coolant in the system, also perform the following steps.
3. Remove the reservoir tank, drain the coolant and clean the tank before installing.



ENGINE MAINTENANCE


4. Drain coolant from both sides of cylinder block at B and C in the figure and cylinder block front at A in the figure when draining all the coolant in the system.
5. Check drained coolant for contaminants such as rust, corrosion or discoloration.
If contaminated, flush the engine cooling system. Refer to [MA-16, "FLUSHING COOLING SYSTEM"](#).




REFILLING ENGINE COOLANT

1. Install reservoir tank if removed, and radiator drain plug.
2. Close and tighten cylinder block drain plugs securely if removed.
 - **Apply sealant to the threads of the cylinder block drain plugs.**
 - **Use Genuine RTV silicone sealant or equivalent. Refer to [GI-48, "RECOMMENDED CHEMICAL PRODUCTS AND SEALANTS"](#).**


Radiator drain plug:

 : 0.78 - 1.6 N·m (0.08 - 0.15 kg-m, 7 - 13 in-lb)


Cylinder block drain plug (LH):

 : 17.6 - 21.6 N·m (1.8 - 2.2 kg-m, 13 - 15 ft-lb)

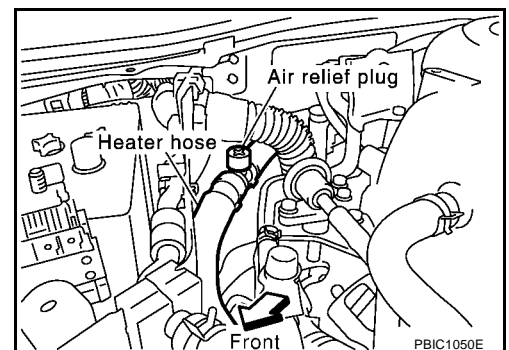
Cylinder block drain plug (RH):

 : 17.6 - 21.6 N·m (1.8 - 2.2 kg-m, 13 - 15 ft-lb)

Cylinder block drain plug (Front side):

 : 7.8 - 11.8 N·m (0.8 - 1.2 Kg-m, 69 - 104 in-lb)

3. Remove air relief plug on heater hose.



ENGINE MAINTENANCE

4. Fill radiator and reservoir tank to specified level.

- Pour coolant through coolant filler neck slowly of less than 2 ℓ (2-1/8US qt, 1-3/4 Imp qt) a minute to allow air in system to escape.
- Use genuine Nissan anti-freeze coolant or equivalent mixed with water (distilled or demineralized. Refer to [MA-11, "RECOMMENDED FLUIDS AND LUBRICANTS"](#).

Engine coolant capacity

(with reservoir tank at MAX level):


Approximately 8.7 ℓ (9-1/4 US qt, 7-5/8 Imp qt)

Reservoir tank capacity (at MAX level):

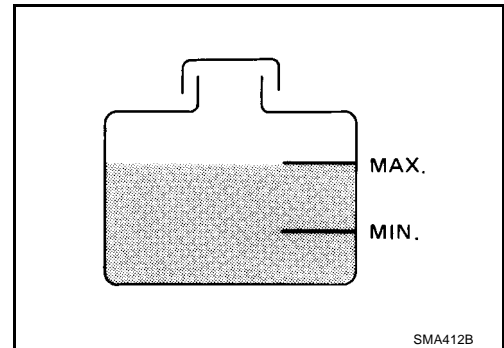
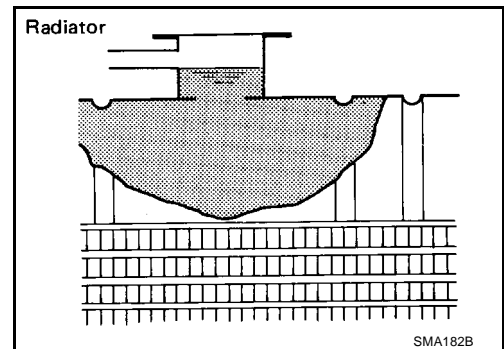
0.8 ℓ (7/8 US qt, 3/4 Imp qt)

- When coolant overflows air relief hole on heater hose, install air relief plug with new O-ring.

Air relief plug:

 : **0.78 - 1.6 N·m (0.08 - 0.15 kg·m, 7 - 13 ft·lb)**

If coolant does not overflow air relief hole, grasp upper radiator hose so that it occurs with closing radiator cap. After installing air relief plug, open radiator cap and fill radiator.



5. Warm up engine to normal operating temperature with radiator cap installed.
6. Run engine at 3,000 rpm for 10 seconds and return to idle speed.
 - Repeat two or three times.
7. Stop engine and cool down to less than approximately 50°C (122°F).
 - Cool down using a fan to reduce the time.
 - If necessary, refill radiator up to filler neck with coolant.
8. Refill reservoir tank to MAX level line with coolant.
9. Repeat steps 5 through 8 two or more times with radiator cap installed until coolant level no longer drops.
10. Check cooling system for leaks with engine running.
11. Warm up engine, and check for sound of coolant flow while running engine from idle up to 3,000 rpm with heater temperature controller set at several position between COOL and WARM.
 - Sound may be noticeable at heater unit.
12. Repeat step 10 three times.
13. If sound is heard, bleed air from cooling system by repeating step 5 through 8 until coolant level no longer drops.
 - Clean excess coolant from engine.

FLUSHING COOLING SYSTEM

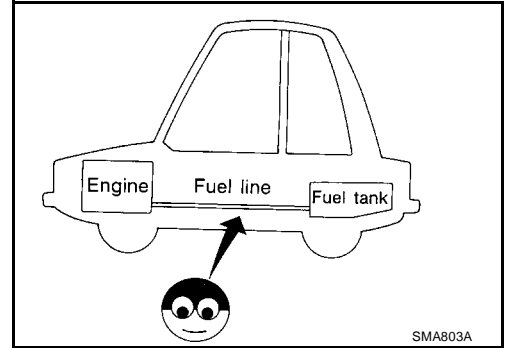
1. Fill radiator with water until water spills from the air relief hole, then close air relief plug. Fill radiator and reservoir tank with water and reinstall radiator cap.
2. Run engine and warm it up to normal operating temperature.
3. Rev engine two or three times under no-load.
4. Stop engine and wait until it cools down.
5. Drain the water from the system. Refer to [MA-14, "DRAINING ENGINE COOLANT"](#).
6. Repeat steps 1 through 5 until clear water begins to drain from the radiator.

ENGINE MAINTENANCE

Checking Fuel Lines

ALS0007B

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



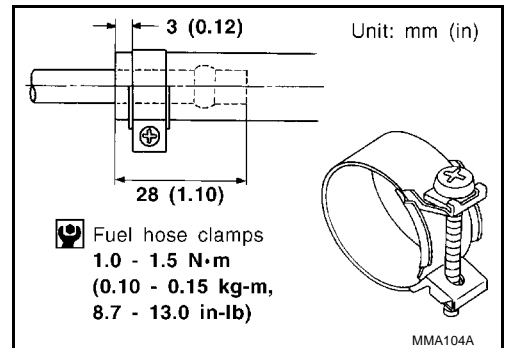
Fuel Hose Clamp

CAUTION:

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

Tightening torque specifications are the same for all rubber hose clamps.

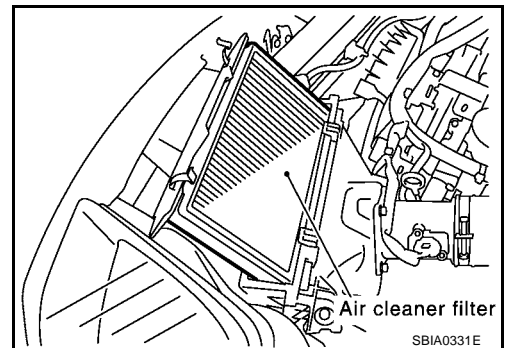
Ensure that screw does not contact adjacent parts.



Changing Air Cleaner Filter VISCOUS PAPER TYPE

ALS0002K

The viscous paper type filter does not need cleaning between replacement intervals. Refer to [MA-7, "PERIODIC MAINTENANCE"](#).



ENGINE MAINTENANCE

ALS0007D

Changing Engine Oil

WARNING:

- Be careful not to burn yourself, as the engine oil may be 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. Stop engine and wait for 10 minutes.
 3. Remove drain plug and oil filler cap.
 4. Drain engine oil.
 5. Install drain plug and refill with new engine oil.

Oil specification and viscosity:

- Refer to [MA-11, "RECOMMENDED FLUIDS AND LUBRICANTS"](#) .

Oil capacity (Approximate)


Unit: ℓ (US qt, Imp qt)

Drain and refill	With oil filter change	Approximately 4.7 (5, 4-1/8)
	Without oil filter change	Approximately 4.4 (4-5/8, 3-7/8)
Dry engine (Overhaul)		Approximately 5.4 (5-3/4, 4-3/4)

CAUTION:

- Be sure to clean drain plug and install with new washer.
- When filling oil, do not pull out oil level gauge.

Oil pan drain plug:

 : 29.4 - 39.2 N·m (3.0 - 4.0 kg-m, 22 - 28 ft-lb)

- The refill capacity depends on the oil temperature and drain time. Use these specifications for reference only.
 - Always use the dipstick to determine when the proper amount of oil is in the engine.
6. Warm up engine and check area around drain plug and oil filter for oil leakage.
 7. Stop engine and wait for 10 minutes.
 8. Check oil level. Refer to [LU-6, "Inspection"](#) .

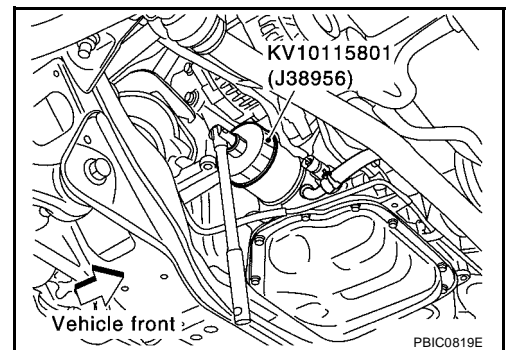
Changing Oil Filter

REMOVAL

1. Remove undercover with power tool.
2. Using an oil filter wrench (special service tool), remove the oil filter.

CAUTION:

- The oil filter is provided with a relief valve. Use genuine NISSAN oil filter or equivalent.
- Be careful not to get burned, the engine oil may be hot.
- When removing, prepare a shop cloth to absorb any oil leakage or spillage.
- Do not allow engine oil to adhere to the drive belts.
- Completely wipe off any oil that adheres to the engine and the vehicle.

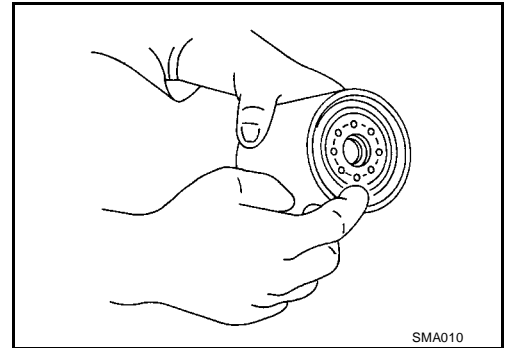


ALS0005D

ENGINE MAINTENANCE


INSTALLATION

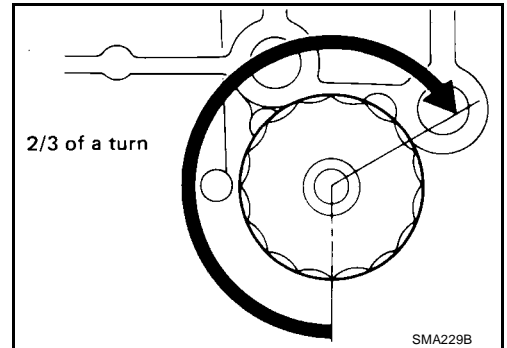
1. Remove foreign materials adhering to the oil filter installation surface.
2. Apply engine oil to the oil seal contact surface of the new oil filter.



3. Screw the oil filter manually until it touches the installation surface, then tighten it by 2/3 turn. Or tighten to specification.

Oil filter:

 : 14.7 - 20.5 N·m (1.5 - 2.0 kg·m, 11 - 15 ft-lb)



4. After warming up the engine, check for engine oil leakage.
5. Check oil level and add engine oil. Refer to [LU-6, "ENGINE OIL"](#).

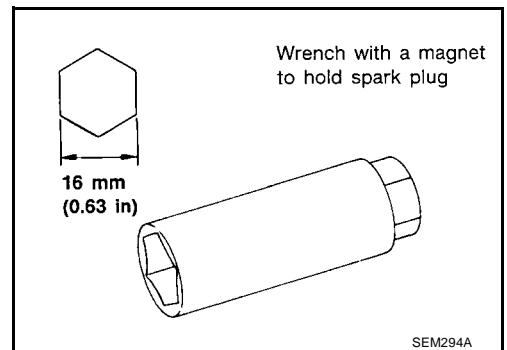
Changing Spark Plugs (Platinum-Tipped Type) REMOVAL

ALS00068

1. Remove engine cover with power tool. Refer to [EM-17, "INTAKE MANIFOLD COLLECTOR"](#).
2. Remove ignition coil. Refer to [EM-30, "IGNITION COIL"](#).
3. Remove spark plug using spark plug wrench (commercial service tool).

CAUTION:

Do not drop or shock it.



INSPECTION AFTER REMOVAL

- Use standard type spark plug for normal condition.

The hot type spark plug is suitable when fouling occurs with the standard type spark plug under conditions such as:

- Frequent engine starts
- Low ambient temperatures

The cold type spark plug is suitable when spark plug knock occurs with the standard type spark plug under conditions such as:

- Extended highway driving
- Frequent high engine revolution

ENGINE MAINTENANCE

Make	NGK
Standard type	PLFR5A-11
Hot type	PLFR4A-11
Cold type	PLFR6A-11

Gap (Nominal) : 1.1mm (0.043 in)

CAUTION:

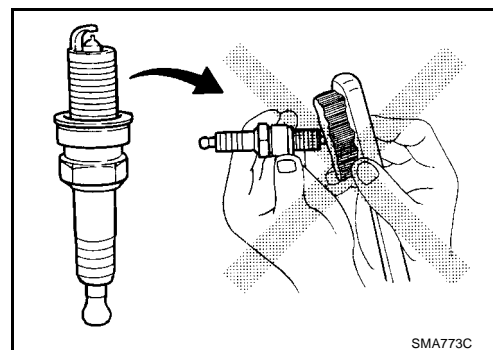
- Do not use a wire brush for cleaning.
- If plug tip is covered with carbon, spark plug cleaner may be used.

Cleaner air pressure:

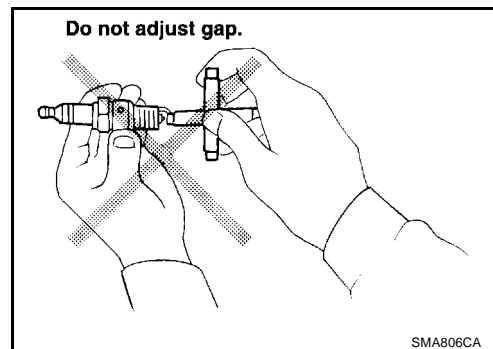
Less than 588 kPa (6 kg/cm² , 85 psi)

Cleaning time:

Less than 20 seconds



- Checking and adjusting plug gap is not required between change intervals.



INSTALLATION

Install in the reverse order of removal.

Checking EVAP Vapor Lines

ALS00020

1. Visually inspect EVAP vapor lines for improper attachment and for cracks, damage, loose connections, chafing and deterioration.
2. Inspect fuel tank filler cap vacuum relief valve for clogging, sticking, etc.
Refer to EC-621, "EVAPORATIVE EMISSION SYSTEM" .

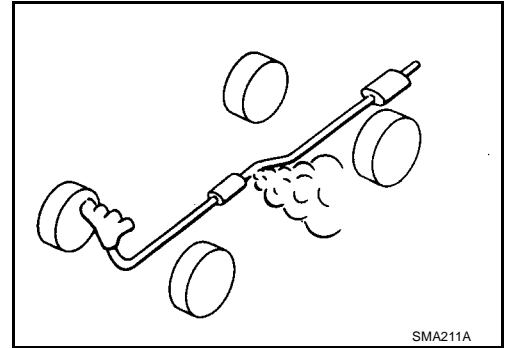
CHASSIS AND BODY MAINTENANCE

PFP:00100

Checking Exhaust System

ALS00060

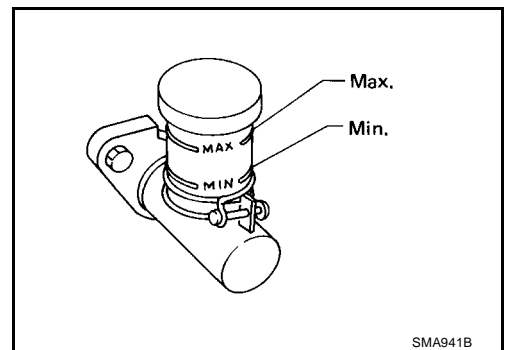
Check exhaust pipes, muffler and mounting for improper attachment, leaks, cracks, damage, chafing or deterioration.



Checking Clutch Fluid Level and Leaks

ALS0007E

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



Checking M/T Oil

ALS0007F

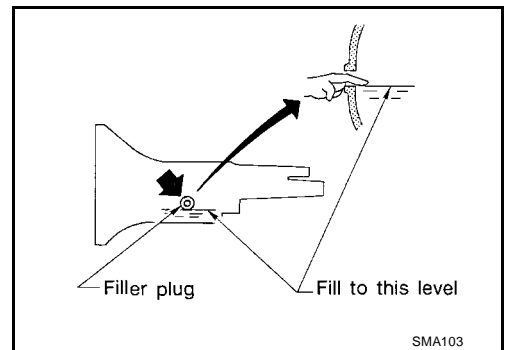
1. Check for oil leakage and oil level.

Filler plug:

: 30 - 39 N-m (3.1 - 3.9 kg-m, 23 - 28 ft-lb)

CAUTION:

Gaskets are not reusable. Never reuse them.



Changing M/T Oil

ALS0007G


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

Oil grade: API GL-4

Viscosity: Refer to [MA-11, "Fluids and Lubricants"](#) .

Oil capacity: Approx. 2.9 ℓ (3-1/4 US qt, 2-3/4 Imp pt)

Drain plug:

: 30 - 39 N-m (3.1 - 3.9 kg-m, 23 - 28 ft-lb)

CAUTION:

Gaskets are not reusable. Never reuse them.

Checking A/T Fluid

ALS0002Q

1. Warm up engine.
2. Check for fluid leakage.
3. Remove the tightening bolt for A/T fluid level gauge.
4. Before driving, fluid level can be checked at fluid temperatures of 30 to 50°C (86 to 122°F) using "COLD" range on A/T fluid level gauge as follows.
 - a. Park vehicle on level surface and set parking brake.
 - b. Start engine and move selector lever through each gear position. Leave selector lever in "P" position.
 - c. Check fluid level with engine idling.
 - d. Remove A/T fluid level gauge and wipe clean with lint-free paper.

CAUTION:

When wiping away the fluid level gauge, always use lint-free paper, not a cloth one.

- e. Re-insert A/T fluid level gauge into charging pipe as far as it will go.

CAUTION:

Insert A/T fluid level gauge securely.

- f. Remove A/T fluid level gauge and note reading. If reading is at low side of range, add fluid to the charging pipe.

CAUTION:

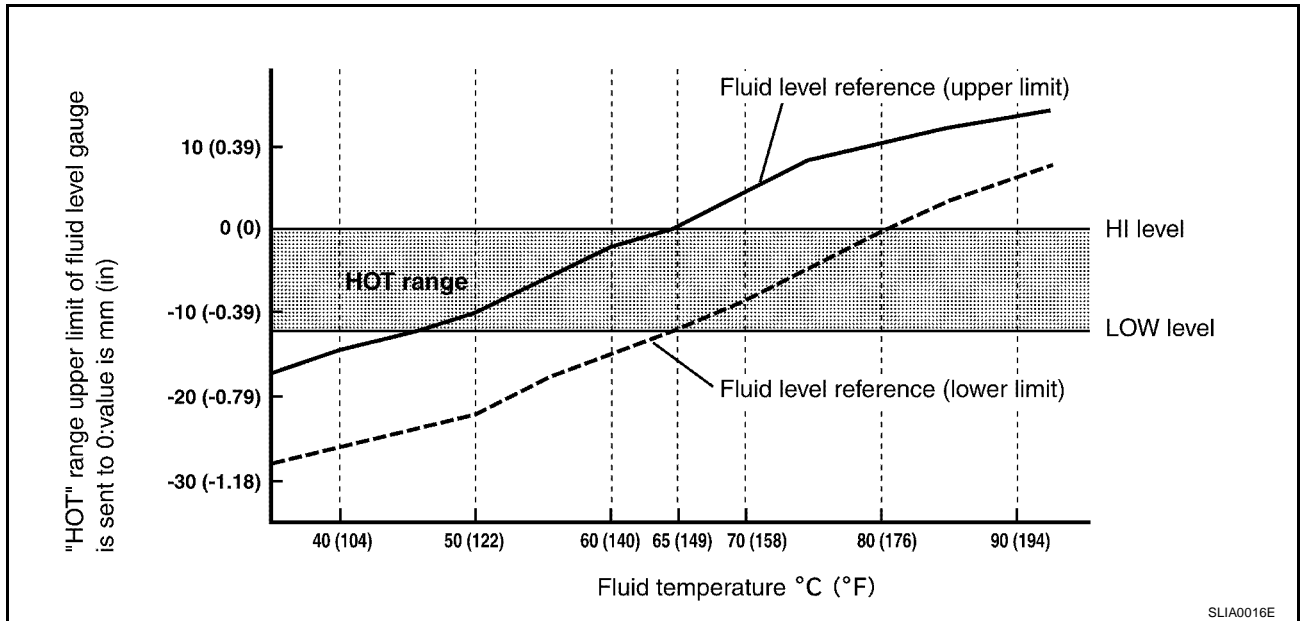
Do not overfill.

5. Drive vehicle for approximately 5 minutes in urban areas.
6. Make the fluid temperature approximately 65°C (149°F).

CHASSIS AND BODY MAINTENANCE

NOTE:

Fluid level will be greatly affected by temperature as shown in figure. Therefore, be certain to perform operation while checking data with CONSULT-II.

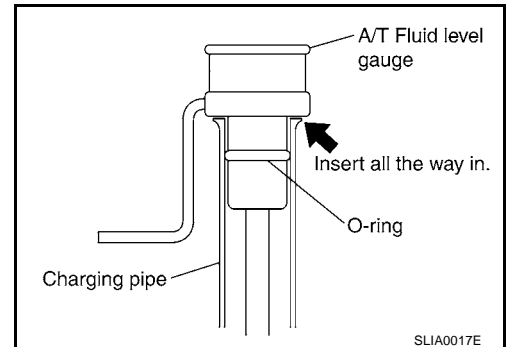


- Connect CONSULT-II to data link connector.
- Select "MAIN SIGNALS" in "DATA MONITOR" mode for "A/T" with CONSULT-II.
- Read out the value of "ATF TEMP 1".
- Re-check fluid level at fluid temperatures of approximately 65°C (149°F) using "HOT" range on A/T fluid level gauge.

CAUTION:

- When wiping away the fluid level gauge, always use lint-free paper, not a cloth one.
- Insert A/T fluid level gauge securely into the position shown in the figure.

- Check fluid condition.
 - If fluid is very dark or smells burned, refer to check operation of A/T. Flush cooling system after repair of A/T.
 - If A/T fluid contains frictional material (clutches, bands, etc.), replace radiator and flush cooler line using cleaning solvent and compressed air after repair of A/T. Refer to [CO-11, "RADIATOR"](#).
- Install the removed A/T fluid level gauge in the fluid charging pipe.



Level gauge bolt:

: 4.4 - 5.8 N·m (0.45 - 0.59 kg-m, 39 - 51 in-lb)

Changing A/T Fluid

- Warm up A/T fluid.
- Stop engine.
- Remove the tightening bolt for A/T fluid level gauge.
- Drain A/T fluid from drain plug and refill with new A/T fluid. Always refill same volume with drained fluid.
 - To replace the A/T fluid, pour in new fluid at the charging pipe with the engine idling and at the same time drain the old fluid from the radiator cooler hose return side.
 - When the color of the fluid coming out is about the same as the color of the new fluid, the replacement is complete. The amount of new transmission fluid to use should be 30 to 50% of the stipulated amount.

CHASSIS AND BODY MAINTENANCE

A/T fluid: Nissan Matic Fluid J

Fluid capacity: 10.3 ℓ (10-7/8 US pt, 9-1/8 Imp pt)

CAUTION:

- Use only Genuine Nissan ATF Matic Fluid J. Do not mix with other fluid.
- Using automatic transmission fluid other than Genuine Nissan ATF Matic Fluid J will cause deterioration in driveability and automatic transmission durability, and may damage the automatic transmission, which is not covered by the NISSAN new vehicle limited warranty.

Drain plug:

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

5. Run engine at idle speed for 5 minutes.
6. Check fluid level and condition. Refer to [MA-22, "Checking A/T Fluid"](#) . If fluid is still dirty, repeat step 2. through 5.
7. Install the removed A/T fluid level gauge in the fluid charging pipe.

Level gauge bolt:

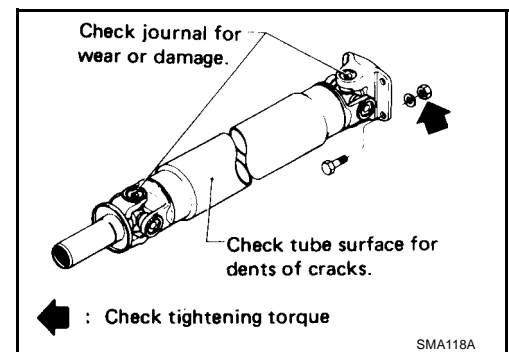
 : 4.4 - 5.8 N·m (0.45 - 0.59 kg-m, 39 - 51 in-lb)

Checking Propeller Shaft

Check propeller shaft for damage, looseness or grease leakage.

Tightening torque:


Refer to [PR-5, "REAR PROPELLER SHAFT"](#)



Checking Differential Gear Oil

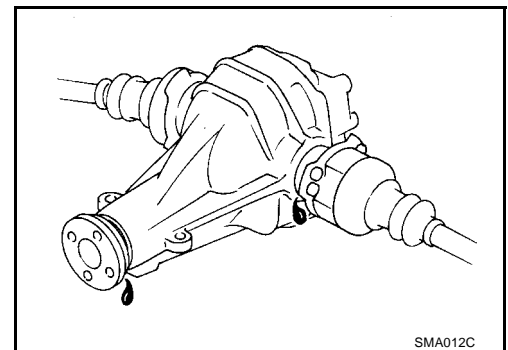
1. Check for oil leakage and oil level.

Filler plug:

 : 30 - 39 N·m (3.1 - 3.9 kg-m, 55 - 61 ft-lb)

CAUTION:

Gaskets are not reusable. Never reuse them.



CHASSIS AND BODY MAINTENANCE

Changing Differential Gear Oil

ALS0002U

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

Oil grade and Viscosity:


Refer to [MA-11, "Fluids and Lubricants"](#)

Capacity:

R200, R200V

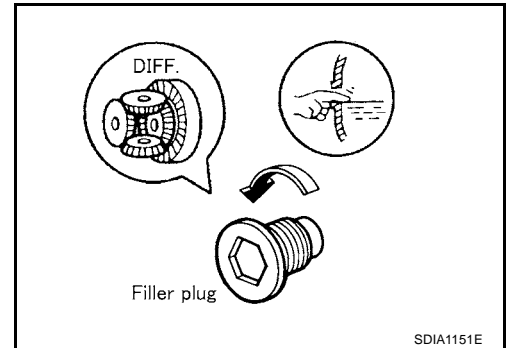
1.4 ℓ (3 US pt, 2 - 1/2 Imp pt)

Drain plug:

: 30 - 39 N·m (3.1 - 3.9 kg-m, 55 - 61 ft-lb)

CAUTION:

Gaskets are not reusable. Never reuse them.



SDIA1151E

Balancing Wheels (Bonding Weight Type) REMOVAL

ALS0002V

1. Remove inner and outer balance weights from the road wheel.

CAUTION:

Be careful not to scratch the road wheel during removal procedures.

2. Using releasing agent, remove double-faced adhesive tape from the road wheel.

CAUTION:

- Be careful not to scratch the road wheel during removal.
- After removing double-faced adhesive tape, wipe clean traces of releasing agent from the road wheel.

WHEEL BALANCE ADJUSTMENT

- If a tire balance machine has adhesion balance weight mode settings and drive-in weight mode setting, select and adjust a drive-in weight mode suitable for road wheels.
1. Set road wheel on wheel balancer using the center hole as a guide. Start the tire balance machine.
 2. When inner and outer unbalance values are shown on the wheel balancer indicator, multiply outer unbalance value by 1.6 to determine balance weight that should be used. Select the outer balance weight with a value closest to the calculated value above and install it to the designated outer position of, or at the designated angle in relation to the road wheel.

CAUTION:

- Do not install the inner balance weight before installing the outer balance weight.
- Before installing the balance weight, be sure to clean the mating surface of the road wheel.

Indicated unbalance value $\times 1.6$ = balance weight to be installed
Calculation example:

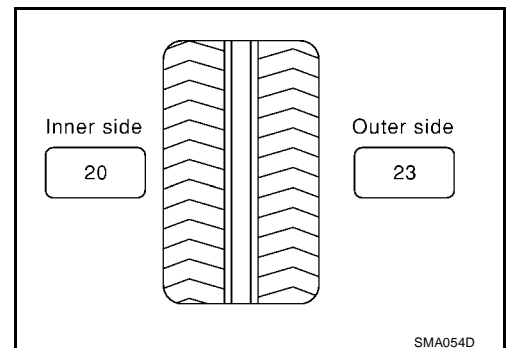
23 g (0.81 oz) $\times 1.6$ = 38.33 g (1.35 oz) = 40 g (1.41 oz) balance weight (closer to calculated balance weight value)

Note that balance weight value must be closer to the calculated balance weight value.

Example:

37.4 = 35 g (1.23 oz)

37.5 = 40 g (1.41 oz)



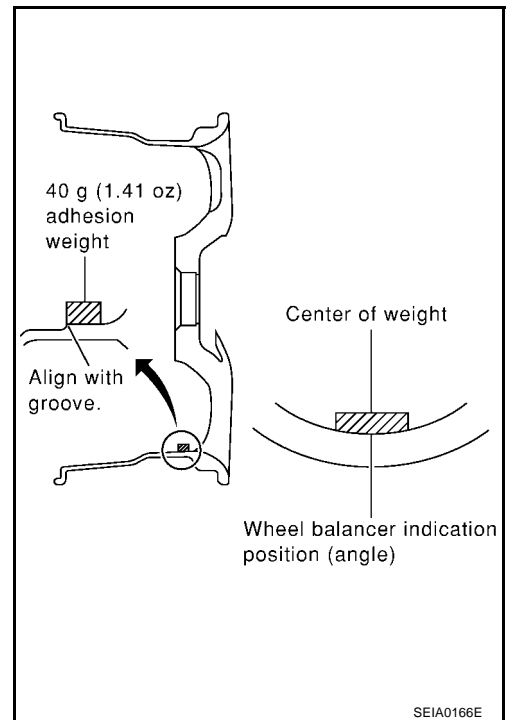
SMA054D

CHASSIS AND BODY MAINTENANCE

- Install balance weight in the position shown in the figure at right.
- When installing balance weight to road wheels, set it into the grooved area on the inner wall of the road wheel as shown in the figure at left so that the balance weight center is aligned with the wheel balancer indication position (angle).

CAUTION:

- Always use genuine Nissan adhesion balance weights.
- Balance weights are un reusable; always replace with new ones.
- Do not install more than three sheets of balance weight.



- If calculated balance weight value exceeds 50 g (1.76 oz), install two balance weight sheets in line with each other (as shown in the figure at left).

CAUTION:

Do not install one balance weight sheet on top of another.

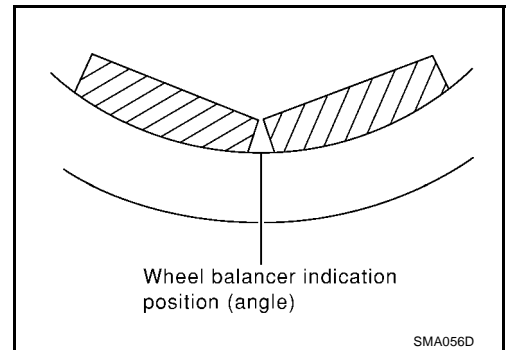
- Start wheel balancer again.
- Install drive-in balance weight on inner side of road wheel in the wheel balancer indication position (angle).

CAUTION:

Do not install more than two balance weights.

- Start wheel balancer. Make sure that inner and outer residual unbalance values are 10 g (0.35 oz) each or below.
 - If either residual unbalance value exceeds 10 g (0.35 oz), repeat installation procedures.

Wheel balance (Maximum allowable unbalance):



Maximum allowable unbalance	Dynamic (At rim flange)	Less than 10 g (0.35 oz) (one side)
	Static (At rim flange)	Less than 20 g (0.70 oz)

Tire Rotation

ALS00071

CAUTION:

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

NOTE:

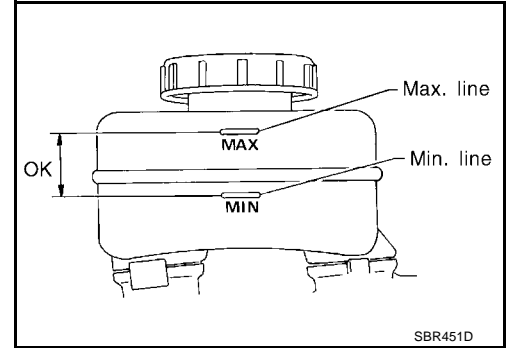
Tire cannot be rotated in vehicle, as front tire are different size from rear tire and the direction of wheel rotation is fixed in each tire.

CHASSIS AND BODY MAINTENANCE

Checking Brake Fluid Level and Leaks

ALS0002X

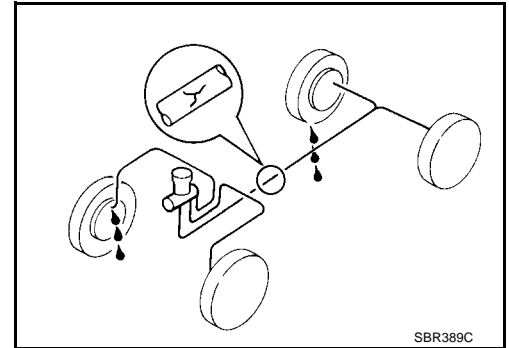
- If fluid level is extremely low, check brake system for leaks.



Checking Brake Lines and Cables

ALS0002Y

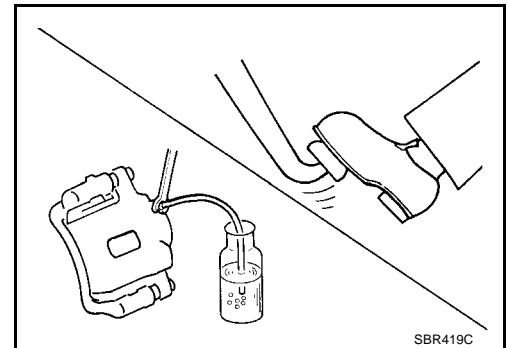
- Check brake fluid lines and parking brake cables for improper attachment, leaks, chafing, abrasions, deterioration, etc.



Changing Brake Fluid

ALS0002Z

1. Drain brake fluid from each air bleeder valve.
 2. Refill until new brake fluid comes out from each air bleeder valve.
Use same procedure as in bleeding hydraulic system to refill brake fluid.
Refer to [BR-9, "BRAKE FLUID"](#) .
- Refill with recommended Genuine Brake Fluid or equivalent DOT 3 (US FMVSS No. 116).
Refer to [MA-11, "RECOMMENDED FLUIDS AND LUBRICANTS"](#) .
 - Never reuse drained brake fluid.
 - Be careful not to splash brake fluid on painted areas.



Checking Disc Brake ROTOR

ALS00030

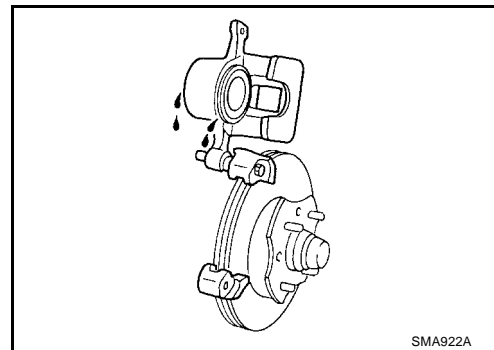
Check condition, wear, and damage.

Brake model	Front		Rear	
	CLZ25VD	OPB27VA	AD14VE	OPB13VB
Standard thickness	24.0 mm (0.945 in)	30.0 mm (1.181 in)	16.0 mm (0.630 in)	22.0 mm (0.866 in)
Maximum runout	0.035 mm (0.0014 in)	0.050 mm (0.0028 in)	0.10mm (0.0039 in)	0.07 mm (0.0028 in)
Minimum thickness (Wear limit)	22.0 mm (0.866 in)	28.4 mm (1.118 in)	14.0 mm (0.551 in)	20.2 mm (0.798 in)

CHASSIS AND BODY MAINTENANCE

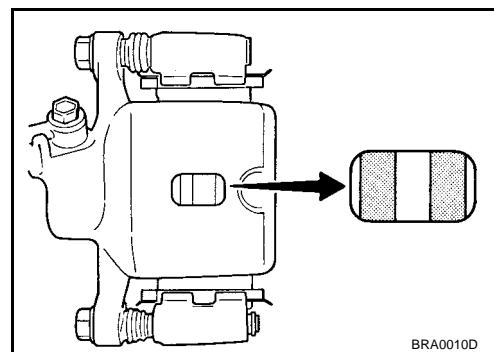
CALIPER

- Check for leakage.



PAD

- Check for wear or damage.

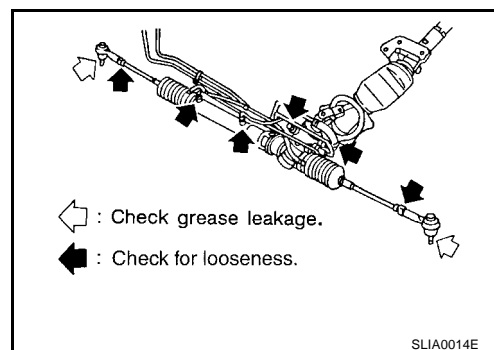


	Front		Rear	
Brake model	CLZ25VD	OPB27VA	OPB13VB	AD14VE
Standard thickness	11.0 mm (0.433 in)	9.3 mm (0.366 in)	8.5 mm (0.325 in)	9.1 mm (0.358 in)
Minimum thickness (Wear limit)	2.0 mm (0.079 in)		2.0 mm (0.079 in)	

Checking Steering Gear and Linkage

ALS00031

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



STEERING LINKAGE

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

CHASSIS AND BODY MAINTENANCE

Checking Power Steering Fluid and Lines

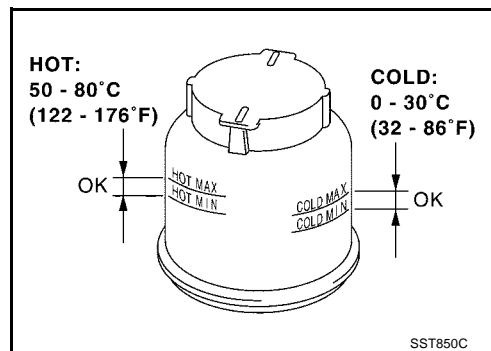
ALS00032

Check fluid level in reservoir tank with engine off.

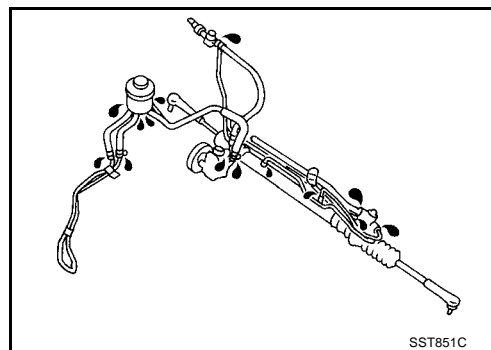
Use "HOT" range at fluid temperatures of 50 to 80°C (122 to 176°F) or "COLD" range at fluid temperatures of 0 to 30°C (32 to 86°F).

CAUTION:

- Do not overfill.
 - Recommended fluid is Genuine NISSAN PSF II or equivalent.
- Refer to [MA-11, "RECOMMENDED FLUIDS AND LUBRICANTS"](#)



- Check lines for improper attachment, leaks, cracks, damage, loose connections, chafing and deterioration.
- Check rack boots for accumulation of power steering fluid.

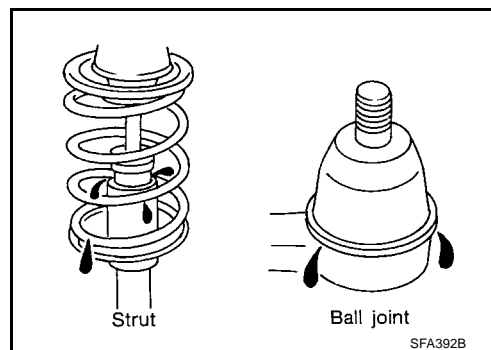
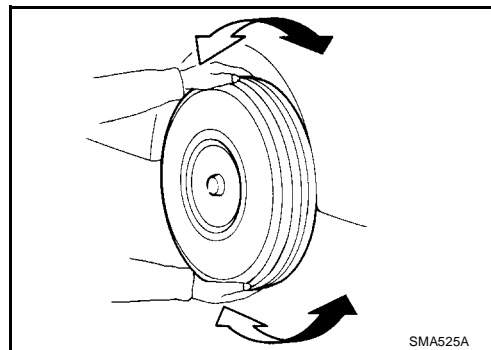


Axle and Suspension Parts

ALS00033

Check front and rear axle and suspension parts for excessive play, cracks, wear or other damage.

- Shake each wheel to check for excessive play.
- Check wheel bearings for smooth operation.
- Check axle and suspension nuts and bolts for looseness.
- Check strut (shock absorber) for oil leakage or other damage.
- Check suspension ball joint for grease leakage and ball joint dust cover for cracks or other damage.

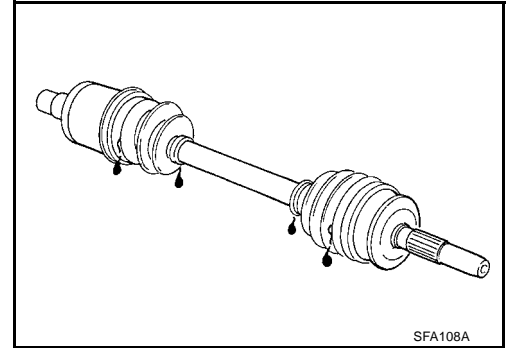


CHASSIS AND BODY MAINTENANCE

Drive Shaft

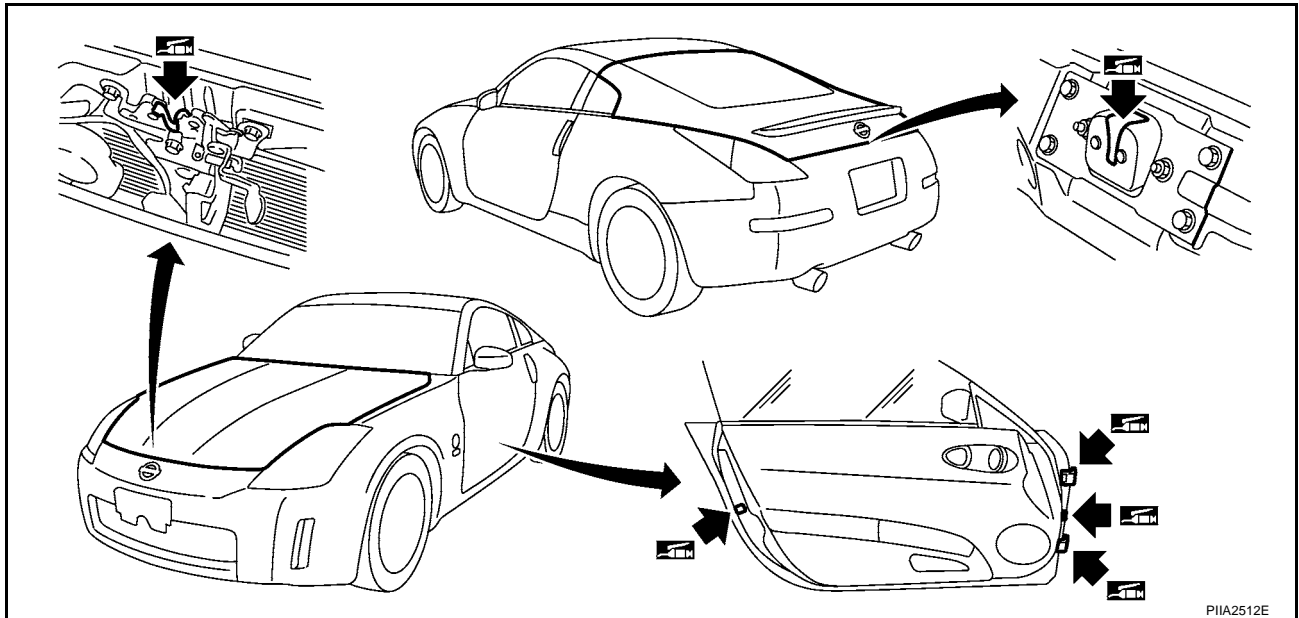
ALS00034

Check boot and drive shaft for cracks, wear, damage and grease leakage.



Lubricating Locks, Hinges and Hood Latch

ALS00035



Checking Seat Belt, Buckles, Retractors, Anchors and Adjusters


ALS00036

CAUTION:

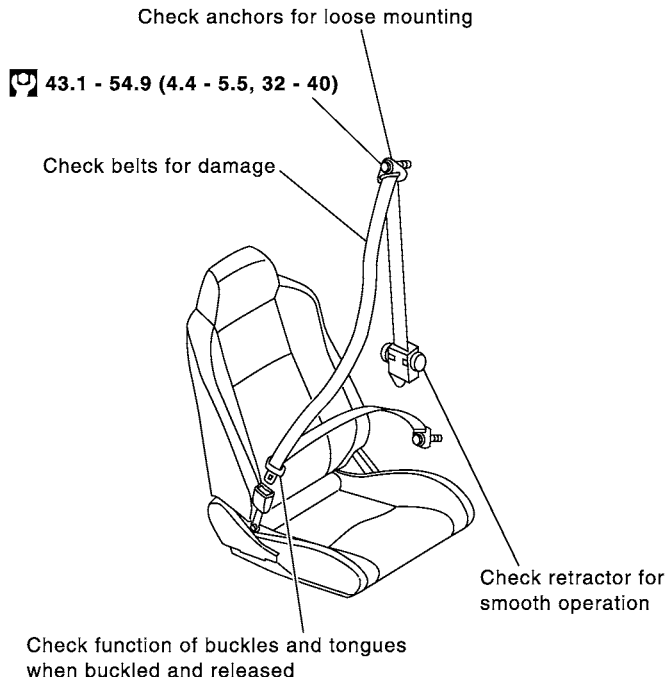
- After any collision, inspect all seat belt assemblies, including retractors and other attached hardware (i.e. anchor bolt, guide rail set). Nissan recommends to replace all seat belt assemblies in use during a collision, unless not damaged and properly operating after minor collision. Also inspect seat belt assemblies not in use during a collision, and replace if damaged or improperly operating. Seat belt pre-tensioner should be replaced even if the seat belts are not in use during a frontal collision where the driver and passenger air bags are deployed.
- If any component of seat belt assembly is questionable, do not repair. Replace as seat belt assembly.
- If webbing is cut, frayed, or damaged, replace belt assembly.
- Never oil tongue and buckle.
- Use a genuine NISSAN seat belt assembly.

For details, refer to "Seat Belt Inspection" in SB section.

Anchor bolt

 43.1 - 54.9 (4.4 - 5.5, 32 - 40)

 N·m (kg-m, ft-lb)



PIIA2513E

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

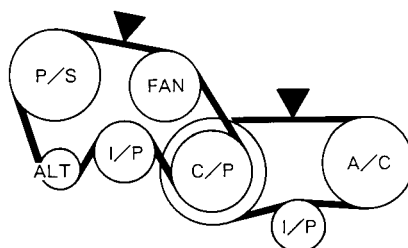
PFP:00030

Standard and Limit BELT DEFLECTION AND TENSION

ALS00037

	Deflection adjustment		Unit: mm (in)	Tension adjustment*		Unit: N (kg, lb)
	Used belt		New belt	Used belt		New belt
	Limit	After adjustment		Limit	After adjustment	
Alternator, power steering pump and fan belt	7 (0.28)	4 - 5 (0.16 - 0.20)	3.5 - 4.5 (0.138 - 0.177)	294 (30, 66)	730 - 818 (74.5 - 83.5, 164 - 184)	838 - 926 (85.5 - 94.5, 188 - 208)
Air conditioning compressor	12 (0.47)	9 - 10 (0.35 - 0.39)	8 - 9 (0.31 - 0.35)	196 (20, 44)	348 - 436 (35.5 - 44.5, 78 - 98)	470 - 559 (48 - 57, 106 - 126)
Applied pushing force	98 (10, 22)			—		

SEC.117



EMQ0801D

*: If belt tension gauge cannot be installed at check points shown, check drive belt tension at different location on the belt.

ENGINE COOLANT CAPACITY

Unit: ℓ (US qt, Imp qt)

Coolant capacity (With reservoir tank at MAX level)	8.7 (9-1/4, 7-5/8)
Reservoir tank coolant capacity (At MAX level)	0.8 (7/8, 3/4)

ENGINE OIL CAPACITY

Unit: ℓ (US qt, Imp qt)

Drain and refill	With oil filter change	Approximately 4.7 (5, 4-1/8)
	Without oil filter change	Approximately 4.4 (4-5/8, 3-7/8)
Dry engine (Overhaul)		Approximately 5.4 (5-3/4, 4-3/4)

SPARK PLUG (PLATINUM-TIPPED TYPE)

Type	Standard	PLFR5A-11
	Hot	PLFR4A-11
	Cold	PLFR6A-11
Spark plug gap		Nominal: 1.1 mm (0.043 in)

WHEEL BALANCE

Maximum allowable unbalance	Dynamic (At rim flange)	Less than 10 g (0.35 oz) (one side)
	Static (At rim flange)	Less than 20 g (0.71 oz)