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# **PREPARATION**

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# **PREPARATION**

# **PREPARATION**

# Special Service Tool

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Tool number (Kent-Moore No.) Tool name		Description
KV10115801 (J-38956) Oil filter wrench	a	Removing and installing oil filter a: 64.3 mm (2.531 in)

# **Commercial Service Tool**

INFOID:0000000004992503

(Kent-Moore No.) Tool name		Description
( — ) Power tool	PBICO190E	Loosening nuts and bolts
( — ) Radiator cap tester	PRICUISUE	Checking radiator and radiator cap
	PBIC1982E	
( — ) Radiator cap tester adapter		Adapting radiator cap tester to radiator cap and radiator filler neck a: 28 (1.10) dia. b: 31.4 (1.236) dia. c: 41.3 (1.626) dia. Unit: mm (in)
( — ) Spark plug wrench	S-NT564	Removing and installing spark plug
	14 mm (0.55 in)	

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### **GENERAL MAINTENANCE**

# PERIODIC MAINTENANCE

# **GENERAL MAINTENANCE**

# **Explanation of General Maintenance**

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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 often and always prior to long distance trips. Adjust the pressure in all tires, including the spare, to the pressure specified. Check carefully for damage, cuts or excessive wear.	<u>WT-97</u>
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-22
Tire Pressure Monitor- ing System (TPMS) transmitter compo- nents	Replace the TPMS transmitter grommet seal, valve core and cap when the tires are replaced due to wear or age.	<u>WT-94</u>
Wheel alignment and balance	If the vehicle should pull 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.	FSU-7, RSU-6, MA-22
Windshield	Clean the windshield on a regular basis. Check the windshield at least every six months for cracks or other damage. Repair as necessary.	_
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 back door, trunk lid and glass 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-28
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. 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 restrains 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.	_

# **GENERAL MAINTENANCE**

# < PERIODIC MAINTENANCE >

Item		Reference page
Seat belts	Check that all parts of the seat belt system (e.g. buckles, anchors, adjusters and retractors) operate properly and smoothly and are installed securely. Check the belt webbing for cuts, fraying, wear or damage.	MA-28
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.	_
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-7, BR-13
Clutch pedal	Make sure the pedal operates smoothly and check that it has the proper free play.	
Parking brake	Check that the lever or the pedal 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.	<u>PB-3</u>
CVT P (Park) position mechanism	On a fairly steep hill check that the vehicle is held securely with the selector lever in the P (Park) position without applying any brakes.	_
JNDER THE HOOD	AND VEHICLE	
	d 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.	<u>CO-9</u>
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 level are between the "MAX" and "MIN" lines on the reservoir.	MA-24, 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.	<u>PG-3</u>
Engine drive belt	Make sure that no belt is frayed, worn, cracked or oily.	<u>MA-12</u>
Engine oil level	Check the level on the oil level gauge after parking the vehicle on a level spot and turning off the engine.	<u>LU-7</u>
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-19
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.	-

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### < PERIODIC MAINTENANCE >

# PERIODIC MAINTENANCE

# Introduction of 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.

	Follow Periodic Maintenance Schedule 1 if the driving habits frequently include one or more of the following driving conditions:	Emission Control System Maintenance	<u>MA-6</u>
Schedule 1	<ul> <li>Repeated short trips of less than 5 miles (8 km).</li> <li>Repeated short trips of less than 10 miles (16 km) with outside temperatures remaining below freezing.</li> <li>Operating in hot weather in stop-and-go "rush hour" traffic.</li> <li>Extensive idling and/or low speed driving for long distances, such as police, taxi or door-to-door delivery use.</li> <li>Driving in dusty conditions.</li> <li>Driving on rough, muddy, or salt spread roads.</li> <li>Towing a trailer, using a camper or a car-top carrier.</li> </ul>	Chassis and Body Maintenance	<u>MA-6</u>
Schedule 2	Follow Periodic Maintenance Schedule 2 if none of driving conditions shown in	Emission Control System Maintenance	<u>MA-8</u>
Scriedule 2	Schedule 1 apply to the driving habits.	Chassis and Body Maintenance	<u>MA-8</u>

Schedule 1

### **EMISSION CONTROL SYSTEM MAINTENANCE**

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

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MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference
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	Section - Page or - Content Title
Drive belt	NOTE (1)									MA-12
Air cleaner filter	NOTE (2)								[R]	MA-15
EVAP vapor lines									*	MA-18
Fuel lines									*	MA-15
Fuel filter	NOTE (3)									-
Engine coolant	NOTE (4)									MA-12
Engine oil		R	R	R	R	R	R	R	R	MA-16
Engine oil filter (Use genuine NISSAN engine oil filter or equivalent.)		R	R	R	R	R	R	R	R	MA-17
Spark plugs (Iridium-tipped type)	NOTE (5)	Replace every 105,000 miles (169,000 km).					MA-18			
Intake & exhaust valve clear- ance*	NOTE (6)									<u>EM-18</u>

MAINTENANCE OPERATION		MAINTENANCE INTERVAL							Reference	
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	Section - Page or - Content Title
Drive belt	NOTE (1)								<b> </b> *	MA-12
Air cleaner filter	NOTE (2)								[R]	MA-15
EVAP vapor lines									<b> </b> *	MA-18
Fuel lines									<b> </b> *	<u>MA-15</u>

### < PERIODIC MAINTENANCE >

MAINTENANCE OPERATION	MAINTENANCE OPERATION			MAINTENANCE INTERVAL						
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	Section - Page or - Content Title
Fuel filter	NOTE (3)									-
Engine coolant	NOTE (4)								R*	MA-12
Engine oil		R	R	R	R	R	R	R	R	MA-16
Engine oil filter (Use genuine NISSAN engine oil filter or equivalent.)		R	R	R	R	R	R	R	R	<u>MA-17</u>
Spark plugs (Iridium-tipped type)	NOTE (5)		Repla	ace every	/ 105,00	0 miles (	169,000	km).		MA-18
Intake & exhaust valve clear- ance*	NOTE (6)									EM-18

#### 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 belt if found damaged (or if the auto belt tensioner reading reaches maximum limit).
- (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) Replace spark plug when the spark plug gap exceeds 1.4 mm (0.055 in) even if within specified periodic replacement mileage.
- (6) Periodic maintenance is not required. However, 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 OPERATIO	N			MAIN	ITENAN	CE INTE	RVAL			Reference
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	Section - Page or - Content Ti- tle
Brake lines & cables					I				I	MA-24
Brake pads, rotors, drums& linings			I		I		I		I	MA-24
CVT fluid	NOTE (1)				I				I	MA-19, MA-20
Manual transaxle gear oil	NOTE (2)				I				I	MA-21
Steering gear & linkage, axle & suspension parts			I		I		I		I	MA-26, MA-26
Tire rotation	NOTE (3)									MA-4, MA-22
Front drive shaft boots			I		I		I		I	MA-27
Exhaust system			I		I		I		I	<u>MA-19</u>
In-cabin microfilter					R				R	VTL-6

MAINTENANCE OPERATIO	MAINTENANCE INTERVAL								Reference	
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	Section - Page or - Content Ti- tle
Brake lines & cables					I				I	MA-24
Brake pads, rotors, drums & linings			I		I		I		I	MA-24
CVT fluid	NOTE (1)				I				I	MA-19, MA-20

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### < PERIODIC MAINTENANCE >

MAINTENANCE OPERATIO	MAINTENANCE INTERVAL								Reference	
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	Section - Page or - Content Ti- tle
Manual transaxle gear oil	NOTE (2)				I				I	MA-21
Steering gear & linkage, axle & suspension parts			I		I		I		I	MA-26, MA-26
Tire rotation	NOTE (3)						ı		ı	MA-4, MA-22
Front drive shaft boots			1		I		I		I	MA-27
Exhaust system			I		I		ļ		I	MA-19
In-cabin microfilter					R				R	VTL-6

#### NOTE:

- (1) If towing a trailer, using a camper or a car-top carrier, or driving on rough or muddy roads, inspect CVT fluid deterioration with CON-SULT-III every 60,000 miles (96,000 km), then change CVT fluid NS-2 if necessary. (Refer to TM-92, "CONSULT-III Function (TRANS-MISSION)".) And if CONSULT-III is not available, change (not just inspect) CVT fluid NS-2 every 60,000 miles (96,000 km). Using transmission fluid other than Genuine NISSAN CVT Fluid NS-2 will damage the CVT, which is not covered by the NISSAN new vehicle limited warranty.
- (2) 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.
- (3) Refer to "Tire rotation" under the "GENERAL MAINTENANCE" heading earlier in this section.

Schedule 2

#### EMISSION CONTROL SYSTEM MAINTENANCE

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

MAINTENANCE OPERATION	MAINTENANCE OPERATION				Reference Sec-					
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	tion - Page or - Content Title
Drive belt	NOTE (1)								l*	MA-12
Air cleaner filter					[R]				[R]	MA-15
EVAP vapor lines					<b>I</b> *				l*	MA-18
Fuel lines					l*				l*	MA-15
Fuel filter	NOTE (2)									-
Engine coolant	NOTE (3)								R*	MA-12
Engine oil		R	R	R	R	R	R	R	R	<u>MA-16</u>
Engine oil filter (Use genuine NISSAN engine oil filter or equivalent.)		R	R	R	R	R	R	R	R	<u>MA-17</u>
Spark plugs (Iridium-tipped type)	NOTE (4)	Replace every 105,000 miles (169,000 km).			MA-18					
Intake & exhaust valve clear- ance*	NOTE (5)									EM-18

### 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 belt if found damaged or if the auto belt tensioner reading reaches maximum limit.
- (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) Replace spark plug when the spark plug gap exceeds 1.4 mm (0.055 in) even if within specified periodic replacement mileage.
- (5) Periodic maintenance is not required. However, 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

			Abb	reviatior	ns: R = F	Replace.	I = Ins	spect. C	orrect or	replace if necessary.			
MAINTENANCE OPERATION	MAINTENANCE OPERATION					MAINTENANCE INTERVAL							
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	Reference Section - Page or - Content Title			
Brake lines & cables			I		I		I		I	MA-24			
Brake pads, rotors, drums & linings			I		I		I		I	MA-24			
CVT fluid	NOTE (1)		I		I		ı		I	MA-19			
Manual transaxle gear oil			I		I		I		I	MA-21			
Steering gear & linkage, axle & suspension parts					I				I	MA-26, MA-26			
Tire rotation	NOTE (2)									MA-4, MA-22			
Front drive shaft boots			I		Ţ		I		I	MA-27			
Exhaust system					I				I	MA-19			
In-cabin microfilter			R		R		R		R	VTL-6			

### NOTE:

(1) Using transmission fluid other than Genuine Nissan CVT Fluid NS-2 will damage the CVT, which is not covered by the NIS-SAN new vehicle limited warranty.

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

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# RECOMMENDED FLUIDS AND LUBRICANTS

< PERIODIC MAINTENANCE >

# RECOMMENDED FLUIDS AND LUBRICANTS

### Fluids and Lubricants

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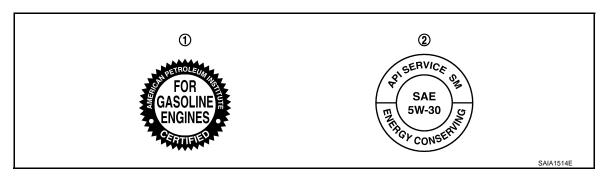
			Сар	acity (Approxim	nate)	Recommended Fluids/Lubri-
			US measure	Imp mea- sure	Liter	cants
Engine oil	With oil filter of	hange	4-3/8 qt	3-5/8 qt	4.1	Engine oil with API Certification
Drain and refill	Without oil filte	Without oil filter change		3-3/8 qt	3.8	Mark* <sup>1</sup>
Dry engine (Overha	ul)		5-1/8 qt	4-3/8 qt	4.9	Viscosity SAE 5W-30
	With reser-	CVT models	7-1/2 qt	6-1/4 qt	7.1	
Cooling system	voir tank	M/T models	7-1/4 qt	6 qt	6.8	Genuine NISSAN Long Life An- tifreeze/Coolant or equivalent
	Reservoir tanl	<	3/4 qt	5/8 qt	0.7	timoseo, occident or oquivalent
CVT fluid			7-7/8 qt	6-1/2 qt	7.4	Genuine NISSAN CVT Fluid NS-2 *2
Manual transaxle gear oil		4-1/4 pt	3-1/2 pt	2.0	Genuine NISSAN gear Oil (Chevron Texaco ETL 8997B) 75W-80, Genuine NISSAN gear oil (ELF XT4447M+) 75W- 80, or equivalent *3	
Brake and clutch fluid		_	_	_	Genuine NISSAN Super Heavy Duty Brake Fluid* <sup>4</sup> or equiva- lent DOT 3 (US FMVSS No. 116)	
Multi-purpose grease		_	_	_	NLGI No. 2 (Lithium soap base)	
Windshield washer fluid		_	_	_	Genuine NISSAN Windshield Washer Concentrate Cleaner & Antifreeze or equivalent	
Fuel recommendation	on		_	_	_	Refer to GI-25, "Fuel"

<sup>\*1:</sup> For further details, see "Engine Oil Recommendation".

# **Engine Oil Recommendation**

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NISSAN recommends the use of an energy conserving oil in order to improve fuel economy. Select only engine oils that meet the American Petroleum Institute (API) certification and International Lubricant Standardization and Approval Committee (ILSAC) certification and SAE viscosity standard. These oils have the API certification mark on the front of the container. Oils which do not have the specified quality label should not be used as they could cause engine damage.



<sup>\*2:</sup> Using transmission fluid other than Genuine NISSAN CVT Fluid NS-2 will damage the CVT, which is not covered by the NISSAN new vehicle limited warranty.

<sup>\*3:</sup> If Genuine NISSAN gear oill is not available, API GL-4, Viscocity SAE 75W-80 may be used as a temporary replacement. However, use Genuine NISSAN gear oil as soon as it is available.

<sup>\*4:</sup> Available in mainland U.S.A. through a NISSAN dealer.

# RECOMMENDED FLUIDS AND LUBRICANTS

### < PERIODIC MAINTENANCE >

1. API certification mark

#### 2. API service symbol

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# 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 Long Life Antifreeze/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.

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

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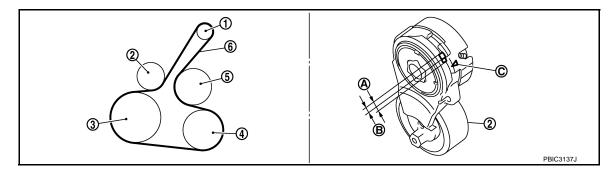
### < PERIODIC MAINTENANCE >

# **ENGINE MAINTENANCE**

**DRIVE BELT** 

DRIVE BELT : Exploded View

INFOID:0000000005148252



- Alternator
- 4. A/C compressor (models with A/C) Idler pulley (models without A/C)
- A. Possible use range
- 2. Drive belt auto-tensioner
- 5. Water pump
- B. Range when new drive belt is installed
- 3. Crankshaft pulley
- 6. Drive belt
- C. Indicator

DRIVE BELT : Checking

INFOID:0000000005148253

#### **WARNING:**

Perform this step when engine is stopped.

• Check that the indicator (C) (notch on fixed side) of drive belt auto-tensioner is within the possible use range (A) in the figure.

### NOTE:

- Check the drive belt auto-tensioner indication when the engine is cold.
- When new drive belt is installed, the indicator (notch on fixed side) should be within the range (B) in the figure.
- Visually check entire drive belt for wear, damage or cracks.
- If the indicator (notch on fixed side) is out of the possible use range or belt is damaged, replace drive belt.

**DRIVE BELT: Tension Adjustment** 

INFOID:0000000005148254

Refer to : EM-113, "Drive Belt".

ENGINE COOLANT

**ENGINE COOLANT: Draining** 

INFOID:0000000005148256

### **WARNING:**

- Never remove radiator cap when engine is hot. Serious burns may occur from high-pressure engine coolant escaping from radiator.
- Wrap a thick cloth around the radiator cap. Slowly turn it a quarter of a turn to release built-up pressure. Then turn it all the way.
- 1. Remove engine under cover.

#### < PERIODIC MAINTENANCE >

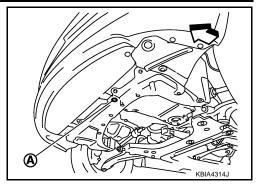
2. Open radiator drain plug (A) at the bottom of radiator, and then remove radiator cap.

⟨□ : Vehicle front

#### **CAUTION:**

Perform this step when engine is cold.

 When draining all of engine coolant in the system, open water drain plugs on cylinder block. Refer to <u>EM-87</u>, "<u>Disassembly</u> and <u>Assembly</u>".



- Remove reservoir tank if necessary, and drain engine coolant and clean reservoir tank before installing. Refer to <u>CO-14, "Exploded View"</u>.
- 4. Check drained engine coolant for contaminants such as rust, corrosion or discoloration. If contaminated, flush the engine cooling system. Refer to MA-14, "ENGINE COOLANT: Flushing".

# **ENGINE COOLANT: Refilling**

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Install reservoir tank if removed and radiator drain plug.

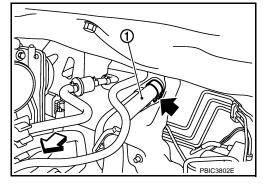
#### **CAUTION:**

Be sure to clean drain plug and install with new O-ring.

Radiator drain plug : Refer to CO-14, "Exploded View".

- If water drain plugs on cylinder block are removed, close and tighten them. Refer to <a href="EM-87">EM-87</a>, "Disassembly and Assembly".
- Check that each hose clamp has been firmly tightened.
- 3. Remove air duct (between air cleaner case and electric throttle control actuator). Refer to <a href="EM-24">EM-24</a>. <a href="Exploded View"</a>.
- Disconnect heater hose (1) at position (←) in the figure.

Enhance heater hose as high as possible.

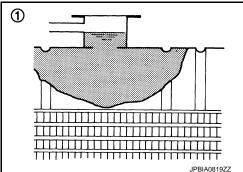


Fill radiator (1) to specified level.

#### **CAUTION:**

Never adhere the engine coolant to electronic equipments (alternator etc.).

- Pour coolant slowly of less than 2  $\,\ell$  (2-1/8 US qt, 1-3/4 lmp qt) a minute to allow air in system to escape.
- When engine coolant overflows disconnected heater hose, connect heater hose, and continue filling the engine coolant.
- Use Genuine NISSAN Long Life Antifreeze/Coolant or equivalent mixed with water (distilled or demineralized).
   Refer to MA-10, "Fluids and Lubricants".



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Engine coolant capacity (With reservoir tank at "MAX" level)

Refer to CO-24, "Periodical Maintenance Specification".

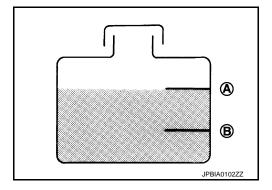
#### < PERIODIC MAINTENANCE >

Refill reservoir tank to "MAX" level line with engine coolant.

A : MAX B : MIN

Reservoir tank engine coolant capacity (At "MAX" level)

Refer to CO-24, "Periodical Maintenance Specification".



- Install air duct (between air cleaner case and electric throttle control actuator). Refer to <u>EM-24, "Exploded View"</u>.
- Install radiator cap.
- 9. Warm up engine until opening thermostat. Standard for warming-up time is approximately 10 minutes at 3,000 rpm.
  - Check thermostat opening condition by touching radiator hose (lower) to see a flow of warm water.
     CAUTION:

#### Watch water temperature gauge so as not to overheat engine.

- 10. Stop the engine and cool down to less than approximately 50°C (122°F).
  - Cool down using fan to reduce the time.
  - If necessary, refill radiator up to filler neck with engine coolant.
     CAUTION:

### Never adhere the engine coolant to electronic equipments (alternator etc.).

- 11. Refill reservoir tank to "MAX" level line with engine coolant.
- Repeat steps 5 through 10 two or more times with radiator cap installed until engine coolant level no longer drops.
- 13. Check cooling system for leakage with engine running.
- 14. Warm up the engine, and check for sound of engine 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.
- 15. Repeat step 14 three times.
- 16. If sound is heard, bleed air from cooling system by repeating step 5 through 10 until reservoir tank level no longer drops.

# **ENGINE COOLANT: Flushing**

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Install reservoir tank if removed and radiator drain plug.

#### **CAUTION:**

Be sure to clean drain plug and install with new O-ring.

#### Radiator drain plug : Refer to CO-14, "Exploded View".

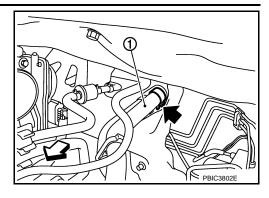
- If water drain plugs on cylinder block are removed, close and tighten them. Refer to <u>EM-87</u>, "<u>Disassembly and Assembly</u>".
- Remove air duct (between air cleaner case and electric throttle control actuator). Refer to <u>EM-24</u>, <u>"Exploded View"</u>.

### < PERIODIC MAINTENANCE >

Disconnect heater hose (1) at position ( ) in the figure.

: Vehicle front

Enhance heater as high as possible.



- Fill radiator and reservoir tank with water and reinstall radiator cap.
  - When engine coolant over flows disconnected heater hose, connect heater hose, and continue filling the engine coolant.
- Install air duct (between air cleaner case and electric throttle control actuator). Refer to EM-24, "Exploded View".
- 6. Run the engine and warm it up to normal operating temperature.
- 7. Rev the engine two or three times under no-load.
- Stop the engine and wait until it cools down.
- Drain water from the system. Refer to MA-12, "ENGINE COOLANT: Draining".
- 10. Repeat steps 1 through 9 until clear water begins to drain from radiator.

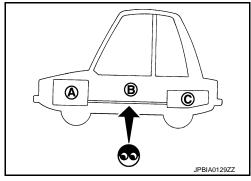
### **FUEL LINES**

# **FUEL LINES: Inspection**

Inspect fuel lines, fuel filler cap, and fuel tank for improper attachment, leakage, cracks, damage, loose connections, chafing or deterioration.

> Α : Engine В : Fuel line : Fuel tank

If necessary, repair or replace damaged parts.

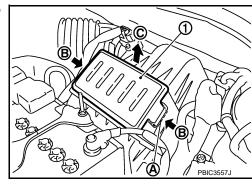


### AIR CLEANER FILTER

### AIR CLEANER FILTER: Removal and Installation

### **REMOVAL**

- 1. Push the tabs (A) of both ends of the air cleaner cover (1) into the inside (B).
- 2. Pull up the air cleaner cover forward (C) and remove it.



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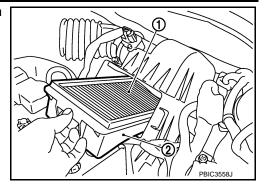
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#### < PERIODIC MAINTENANCE >

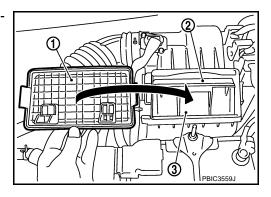
- 3. Remove the air cleaner filter (1) and holder (2) assembly from the air cleaner case.
- 4. Remove the air cleaner filter from the holder.



#### INSTALLATION

Note the following, and install in the reverse order of removal.

- Install the air cleaner cover (1) in the direction as shown in the figure.
  - 2 : Air cleaner filter
  - 3 : Holder



## **ENGINE OIL**

**ENGINE OIL: Draining** 

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#### **WARNING:**

- Be careful not to get burned, as 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 engine oil. If skin contact is made, wash thoroughly with soap or hand cleaner as soon as possible.
- Warm up the engine, and check for engine oil leakage from engine components. Refer to <u>LU-7</u>, "Inspection".
- 2. Stop the engine and wait for 10 minutes.
- Loosen oil filler cap.
- 4. Remove drain plug and then drain engine oil.

# **ENGINE OIL**: Refilling

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Install drain plug with new drain plug washer. Refer to <u>EM-32</u>, "<u>Exploded View</u>".

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

Tightening torque: Refer to EM-32, "Exploded View".

2. Refill with new engine oil.

Engine oil specification and viscosity: Refer to MA-10, "Fluids and Lubricants".

Engine oil capacity: Refer to <u>LU-14, "Periodical Maintenance Specification"</u>.

### **CAUTION:**

- The refill capacity depends on the engine oil temperature and drain time. Use these specifications for reference only.
- Always use oil level gauge to determine the proper amount of engine oil in the engine.
- 3. Warm up engine and check area around drain plug and oil filter for engine oil leakage.

### < PERIODIC MAINTENANCE >

- 4. Stop engine and wait for 10 minutes.
- 5. Check the engine oil level. Refer to LU-7, "Inspection".

### OIL FILTER

### OIL FILTER: Removal and Installation

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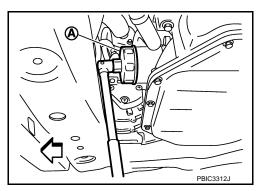
#### **REMOVAL**

- 1. Remove engine under cover. Refer to EXT-23, "Exploded View".
- Using oil filter wrench [SST: KV10115801 (J-38956)] (A), remove oil filter.

⟨⇒ : Vehicle front

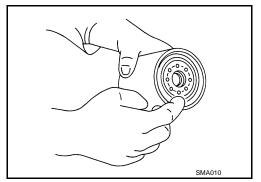
### **CAUTION:**

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



#### INSTALLATION

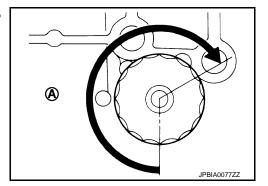
- 1. Remove foreign materials adhering to the oil filter installation surface.
- Apply new engine oil to the oil seal contact surface of new oil filter.



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

### Oil filter:

(1.8 kg-m, 13 ft-lb)



OIL FILTER: Inspection

#### INFOID:0000000005148264

#### INSPECTION AFTER INSTALLATION

- 1. Check the engine oil level. Refer to <u>LU-7</u>, "Inspection".
- 2. Start the engine, and check that there is no leakage of engine oil.
- Stop the engine and wait for 10 minutes.
- 4. Check the engine oil level, and adjust the level. Refer to <u>LU-7</u>, "Inspection".

# SPARK PLUG

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### < PERIODIC MAINTENANCE >

### SPARK PLUG: Removal and Installation

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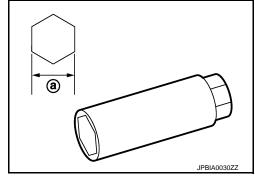
### **REMOVAL**

- 1. Remove ignition coil. Refer to EM-40, "Exploded View".
- 2. Remove spark plug with a spark plug wrench (commercial service tool).

a : 14 mm (0.55 in)

#### **CAUTION:**

Never drop or shock spark plug.



#### INSTALLATION

Install in the reverse order of removal.

SPARK PLUG: Inspection

INFOID:0000000005148266

### INSPECTION AFTER REMOVAL

Use the standard type spark plug for normal condition.

Spark plug (Standard type) : Refer to EM-113, "Spark Plug".

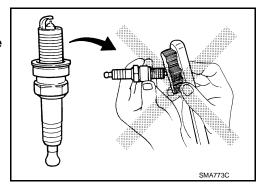
#### **CAUTION:**

- Never drop or shock spark plug.
- Never use a wire brush for cleaning.
- If plug tip is covered with carbon, spark plug cleaner may be used.

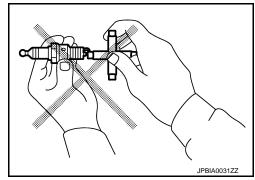
Cleaner air pressure: Less than 588 kPa (6 kg/cm<sup>2</sup>,

85 psi)

Cleaning time : Less than 20 seconds



- Spark plug gap adjustment is not required between replacement intervals.
- Measure spark plug gap. when it exceeds the limit, replace spark plug even if it is with in the specified replacement mileage. Refer to <u>EM-113</u>, "<u>Spark Plug"</u>.



# **EVAP VAPOR LINES**

**EVAP VAPOR LINES: Inspection** 

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- 1. Visually inspect EVAP vapor lines for improper attachment and for cracks, damage, loose connections, chafing and deterioration.
- Inspect fuel tank filler cap vacuum relief valve for clogging, sticking, etc.
   Refer to <u>EC-473</u>, "Inspection".

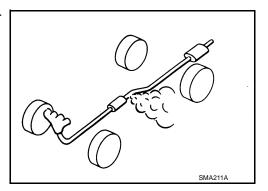
### < PERIODIC MAINTENANCE >

# CHASSIS MAINTENANCE EXHAUST SYSTEM

# **EXHAUST SYSTEM: Inspection**

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

If anything is found, repair or replace damaged parts.



### **CVT FLUID**

# **CVT FLUID**: Inspection

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#### Level check

Check fluid level in HOT state [CVT fluid temperature is between 50 to 80°C (122 to 176°F)], according to the following procedures.

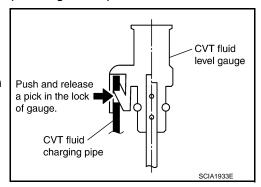
- 1. Visually check that CVT fluid leakage from transaxle assembly is not detected.
- 2. After engine warms up, drive the vehicle in an urban area for approximately 10 minutes.

When ambient temperature is 20°C (68°F), driving vehicle for approximately 10 minutes in an urban area ordinarily warms up CVT fluid temperature between 50 to 80°C (122 to 176°F).

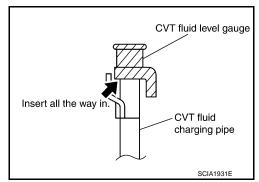
- 3. Park the vehicle on a level surface.
- 4. Fully apply parking brake.
- 5. Adjust engine speed at idle state.
- Shift selector lever through entire position from "P" to "D" while depressing brake pedal.
- 7. Press claw of CVT fluid level gauge lock to unlock.
- 8. Remove CVT fluid level gauge from CVT fluid charging pipe.
- 9. Wipe CVT fluid that is on CVT fluid level gauge.

#### **CAUTION:**

Always use shop paper when wiping off CVT fluid that is on CVT fluid level gauge.



- 10. Rotate CVT fluid level gauge 180° from installed state.
- Inset CVT fluid level gauge until it contacts CVT fluid charging pipe end.



12. Check that CVT fluid level is within the specified level of CVT fluid level gauge (MAX side).

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#### **CAUTION:**

- After level check, when returning CVT fluid level gauge to the original state, insert CVT fluid level gauge to CVT fluid charging pipe until it is locked.
- Always use shop paper when wiping off CVT fluid that is on CVT fluid level gauge.

#### CVT FLUID CONDITION

Check CVT fluid condition.

- If CVT fluid is very dark or smells burned, check operation of transaxle assembly. Flush cooling system after repair of transaxle assembly.
- If CVT fluid contains frictional material (clutches, brakes, etc.), replace radiator and flush cooler line using cleaning solvent and compressed air after repair of transaxle assembly. Refer to <u>TM-219</u>, "CVT FLUID COOLER HOSE: Exploded View".

Fluid status	Conceivable cause	Required operation
Varnished (viscous varnish state)	CVT fluid become degraded due to high temperatures	Replace the CVT fluid.     Check the transaxle assembly and the vehicle for malfunctions (wire harnesses, cooler pipes, etc.)
Milky white or cloudy	Water in the fluid	Replace the CVT fluid.     Check for places where water is getting in.
Large amount of metal powder mixed in	Unusual wear of sliding parts within transaxle assembly	Replace the CVT fluid.     Check for improper operation of the transaxle assembly.



# CVT FLUID : Changing

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- Remove drain plug from oil pan and then the CVT fluid.
- 2. Remove drain plug gasket from drain plug.
- 3. Install drain plug gasket to drain plug.

### **CAUTION:**

Never reuse drain plug gasket.

4. Install drain plug to oil pan.

### : TM-213, "Exploded View"

5. Fill CVT fluid from CVT fluid charging pipe to the specified level.

CVT fluid and fluid capacity: TM-228, "General Specification"

### **CAUTION:**

- Always use the specified fluid. If use, misuse, or mixing of fluid other than the specified fluid occurs, original performance cannot be obtained or it may cause serious malfunctions.
- CVT fluid is not reusable. Never reuse CVT fluid.
- Always use shop paper. Never use shop cloth.
- After replacement, always perform CVT fluid leakage check.
- Delete CVT fluid deterioration date with CONSULT-III after changing CVT fluid.
- 6. After engine warms up, drive the vehicle in an urban area for approximately 10 minutes. **NOTE:**

When ambient temperature is 20°C (68°F), it takes about 10 minutes for the CVT fluid to warm up to 50 to 80°C (122 to 176°F).

- Check CVT fluid level and condition. Refer to MA-19, "CVT FLUID: Inspection".
- 8. Repeat steps 1 to 6 if CVT fluid has been contaminated.

### **GEAR OIL**

### < PERIODIC MAINTENANCE >

# **GEAR OIL: Inspection**

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# **OIL LEAKAGE**

Make sure that gear oil is not leaking from transaxle or around it.

#### OIL LEVEL

- 1. Remove filler plug (1) and gasket from transaxle case.
- 2. Check the oil level from filler plug mounting hole as shown in the

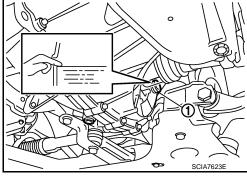
### **CAUTION:**

Never start engine while checking oil level.

3. Set a gasket on filler plug and then install it to transaxle case. **CAUTION:** 

Never reuse gasket.

4. Tighten filler plug to the specified torque. Refer to TM-26, "Exploded View".



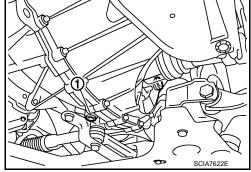
# **GEAR OIL**: Draining

- 1. Start engine and let it run to warm up transaxle.
- Stop engine. Remove drain plug (1) and gasket, using a socket [Commercial service tool] and then drain gear oil.
- 3. Set a gasket on drain plug and install it to clutch housing, using a socket [Commercial service tool].

#### **CAUTION:**

Never reuse gasket.

4. Tighten drain plug to the specified torque. Refer to TM-26, "Exploded View".



# GEAR OIL: Refilling

Remove filler plug (1) and gasket from transaxle case.

Fill with new gear oil until oil level reaches the specified limit at 2. filler plug mounting hole as shown in the figure.

> Oil grade and : Refer to MA-10, "Fluids and Lubricants". viscosity

> : Refer to TM-57, "General Specification". Oil capacity

- 3. After refilling gear oil, check oil the level. Refer to MA-21 "GEAR OIL: Inspection".
- 4. Set a gasket on filler plug and then install it to transaxle case. **CAUTION:**

Never reuse gasket.

Tighten filler plug to the specified torque. Refer to TM-26, "Exploded View".

# **CLUTCH FLUID**

CLUTCH FLUID: Inspection

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FLUID LEVEL

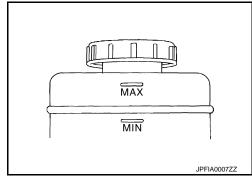
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### < PERIODIC MAINTENANCE >

- Check that the fluid level in the reservoir tank is within the specified range (MAX – MIN lines).
- Visually check for any clutch fluid leakage around the reservoir tank.
- Check the clutch system for any leakage if the fluid level is extremely low (lower than MIN).



#### FLUID LEAKAGE

- Check clutch line for cracks, deterioration or other damage. Replace any damaged parts.
- Check for fluid leakage by fully depressing clutch pedal while engine is running.
   CAUTION:

If leakage occurs around joints, reinstall the joints or, if necessary, replace damaged parts. WHEELS (BONDING WEIGHT TYPE)

WHEELS (BONDING WEIGHT TYPE): Adjustment

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# BALANCING WHEELS (BONDING WEIGHT TYPE)

Preparation Before Adjustment

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 tire balance machine using the center hole as a guide. Start the tire balance machine.
- 2. When inner and outer unbalance values are shown on the tire balance machine indicator, multiply outer unbalance value by 5/3 to determine balance weight that should be used. Select the outer balance weight with a value closest to the calculated value above and install 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.
- a. Indicated unbalance value  $\times$  5/3 = balance weight to be installed **Calculation example:**

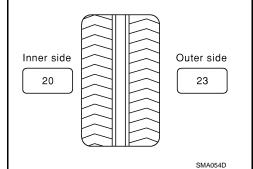
23 g (0.81 oz)  $\times$  5/3 = 38.33 g (1.35 oz)  $\Rightarrow$  40 g (1.41 oz) balance weight (closer to calculated balance weight value)

#### NOTE:

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

#### **Example:**

 $37.4 \Rightarrow 35 \text{ g } (1.23 \text{ oz})$  $37.5 \Rightarrow 40 \text{ g } (1.41 \text{ oz})$ 



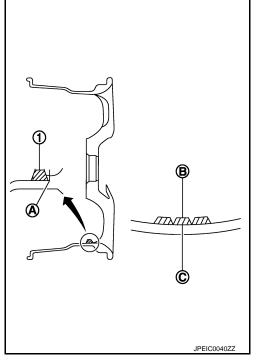
b. Installed balance weight in the position.

### < PERIODIC MAINTENANCE >

 When installing balance weight (1) to road wheels, set it into the grooved area (A) on the inner wall of the road wheel as shown in the figure so that the balance weight center (B) is aligned with the tire balance machine indication position (angle) (C).

### **CAUTION:**

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



c. 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.

#### **CAUTION:**

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

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

### Do not install more than two balance weight.

- 5. Start the tire balance machine. Make sure that inner and outer residual unbalance values are 10 g (0.35 oz) each or below.
- 6. If either residual unbalance value exceeds 10 g (0.35 oz), repeat installation procedures.



Dynamic (At flange) : Refer to WT-97, "Road Wheel".

Static (At flange) : Refer to WT-97, "Road Wheel".

### TIRE ROTATION

- Follow the maintenance schedule for tire rotation service intervals. Refer to MA-4, "Explanation of General Maintenance".
- When installing the wheel, tighten wheel nuts to the specified torque.

#### **CAUTION:**

- When installing wheels, tighten them diagonally by dividing the work two to three times in order to prevent the wheels from developing any distortion.
- Be careful not to tighten wheel nut at torque exceeding the criteria for preventing strain of disc rotor.
- Use NISSAN genuine wheel nuts for aluminum wheels.

Wheel nuts tighting torque : Refer to WT-91, "Exploded View".

BRAKE FLUID LEVEL AND LEAKS

Adhesion weight

Wheel balancer indication position (angle)

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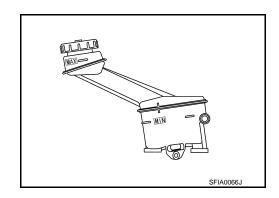
### < PERIODIC MAINTENANCE >

# BRAKE FLUID LEVEL AND LEAKS: Inspection

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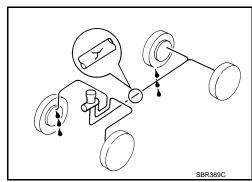
• If fluid level is extremely low, check brake system for leaks.



# BRAKE LINES AND CABLES

# **BRAKE LINES AND CABLES: Inspection**

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



# **BRAKE FLUID**

# **BRAKE FLUID: Changing**

- 1. Drain brake fluid from each bleed valve.
- Refill until new brake fluid comes out from each bleed valve.
   Use same procedure as in bleeding hydraulic system to refill brake fluid.

Refer to BR-10, "Refilling".

- Refill with recommended brake fluid.
   Refer to MA-10, "Fluids and Lubricants".
- Never reuse drained brake fluid.
- Be careful not to splash brake fluid on painted areas.

# **DISC BRAKE**

**DISC BRAKE: Inspection** 

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SBR419C

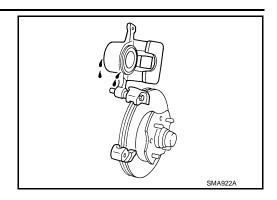
**DISC ROTOR** 

Check condition, wear, and damage.

**CALIPER** 

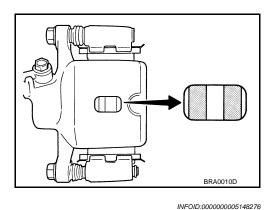
# < PERIODIC MAINTENANCE >

· Check for leakage.



### **BRAKE PAD**

• Check for wear or damage.



# **DISC BRAKE: Front Disc Brake**

	Item	Limit
Brake pad	Wear thickness	2.0 (0.079)
	Wear thickness	22.0 (0.866)
Disc rotor	Thickness variation (measured at 8 positions)	0.015 (0.0006)
	Runout (with it attached to the vehicle)	0.035 (0.0014)

# DRUM BRAKE

**DRUM BRAKE**: Inspection

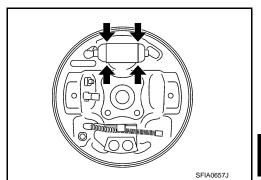
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### **DRUM**

Check condition, wear, and damage.

# WHEEL CYLINDER

• Check for leakage.



LINING

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Unit: mm (in)

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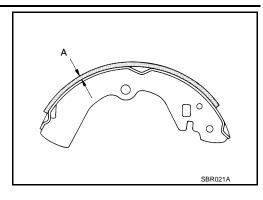
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### < PERIODIC MAINTENANCE >

· Check for lining thickness.



DRUM BRAKE: Rear Drum Brake

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Unit: mm (in)

	Item	Limit
Brake lining	Wear thickness	1.5 (0.059)
Brake drum	Wear inner diameter	230.0 (9.06)

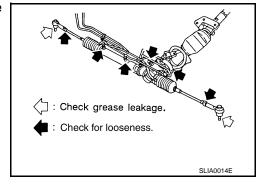
# STEERING GEAR AND LINKAGE

# STEERING GEAR AND LINKAGE: Inspection

INFOID:0000000004992554

### STEERING GEAR

- 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.

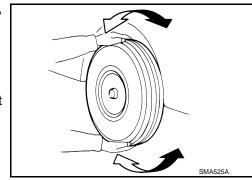
# **AXLE AND SUSPENSION PARTS**

# AXLE AND SUSPENSION PARTS: Inspection

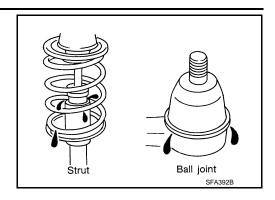
INFOID:0000000004992555

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.



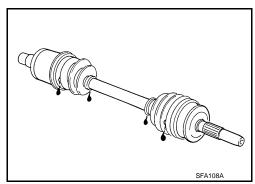
# < PERIODIC MAINTENANCE >



# **DRIVE SHAFT**

# **DRIVE SHAFT: Inspection**

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



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### **BODY MAINTENANCE**

### < PERIODIC MAINTENANCE >

# **BODY MAINTENANCE**

# LOCKS, HINGES AND HOOD LATCH

# LOCKS, HINGES AND HOOD LATCH: Lubricating

INFOID:0000000004992557

For hood and hood lock illustration.

- Hood: Refer to <u>DLK-176</u>, "<u>HOOD ASSEMBLY</u>: <u>Exploded View</u>". (WITH INTELLIGENT KEY SYSTEM)
- Hood: Refer to <u>DLK-323</u>, "<u>HOOD ASSEMBLY</u>: <u>Exploded View"</u>. (WITHOUT INTELLIGENT KEY SYSTEM)
- Hood lock control: Refer to <u>DLK-204, "Exploded View"</u>. (WITH INTELLIGENT KEY SYSTEM)
- Hood lock control: Refer to DLK-351, "Exploded View". (WITHOUT INTELLIGENT KEY SYSTEM) For door and door lock illustration.
- Front door: Refer to <u>DLK-185, "DOOR ASSEMBLY: Exploded View"</u>. (WITH INTELLIGENT KEY SYSTEM)
   Front door: Refer to <u>DLK-332, "DOOR ASSEMBLY: Exploded View"</u>. (WITHOUT INTELLIGENT KEY SYS-TEM)
- Front door lock: Refer to DLK-206, "DOOR LOCK: Exploded View". (WITH INTELLIGENT KEY SYSTEM)
- Front door lock: Refer to DLK-353, "DOOR LOCK: Exploded View". (WITHOUT INTELLIGENT KEY SYS-
- Rear door: Refer to <u>DLK-190, "DOOR ASSEMBLY: Exploded View"</u>. (WITH INTELLIGENT KEY SYSTEM)
   Rear door: Refer to <u>DLK-337, "DOOR ASSEMBLY: Exploded View"</u>. (WITHOUT INTELLIGENT KEY SYS-
- Rear door lock: Refer to DLK-210, "DOOR LOCK: Exploded View". (WITH INTELLIGENT KEY SYSTEM)
- Rear door lock: Refer to <u>DLK-357, "DOOR LOCK: Exploded View"</u>. (WITHOUT INTELLIGENT KEY SYS-TEM)

For back door and back door lock illustration.

- Back door: Refer to <u>DLK-195</u>, "BACK <u>DOOR ASSEMBLY</u>: Exploded View". (WITH INTELLIGENT KEY SYSTEM)
- Back door: Refer to DLK-342, "BACK DOOR ASSEMBLY: Exploded View". (WITHOUT INTELLIGENT KEY SYSTEM)
- Back door lock: Refer to DLK-214, "DOOR LOCK: Exploded View". (WITH INTELLIGENT KEY SYSTEM)
- Back door lock: Refer to DLK-361, "DOOR LOCK: Exploded View". (WITHOUT INTELLIGENT KEY SYS-

# SEAT BELT, BUCKLES, RETRACTORS, ANCHORS AND ADJUSTERS

# SEAT BELT, BUCKLES, RETRACTORS, ANCHORS AND ADJUSTERS: Inspection

INFOID:0000000004992558

For front seat belt illustration. Refer to SB-6, "SEAT BELT RETRACTOR: Exploded View". For rear seat belt illustration. Refer to SB-11, "SEAT BELT RETRACTOR: Exploded View". **CAUTION:** 

 After any collision, inspect all seat belt assemblies, including retractors and other attached hardwares (I.e. anchor bolt, quide 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 SB-4, "SEAT BELT RETRACTOR: Inspection", SB-9, "SEAT BELT RETRACTOR: <u>Inspection</u> in SB section.

- Check anchors for loose mounting
- Check belts for damage
- Check retractor for smooth operation
- Check function of buckles and tongues when buckled and released

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

< SERVICE DATA AND SPECIFICATIONS (SDS)

# SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

**DRIVE BELT** 

DRIVE BELT: Drive Belt

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DRIVE BELT

Tension of drive belt	Belt tension is not necessary, as it is automatically adjusted by drive belt auto-tensioner.
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# **ENGINE COOLANT**

**ENGINE COOLANT: Periodical Maintenance Specification** 

INFOID:0000000005148279

# ENGINE COOLANT CAPACITY (APPROXIMATE)

		Unit: $\ell$ (US qt, Imp qt)
Engine coolant capacity (With reservoir tank at "MAX" level)	CVT models	7.1 (7-1/2, 6-1/4)
Engine coolant capacity (with reservoir tank at INAX level)	M/T models	6.8 (7-1/4, 6)
Reservoir tank engine coolant capacity (At "MAX" level)	0.7 (3/4, 5/8)	

## **ENGINE OIL**

**ENGINE OIL**: Periodical Maintenance Specification

INFOID:0000000005148280

### ENGINE OIL CAPACITY (APPROXIMATE)

Unit:  $\ell$  (US qt, Imp qt)

Drain and refill	With oil filter change	4.1 (4-3/8, 3-5/8)
Drain and remi	Without oil filter change	3.8 (4, 3-3/8)
Dry engine (Overhaul)		4.9 (5-1/8, 4-3/8)

# **SPARK PLUG**

SPARK PLUG: Spark Plug

INFOID:0000000005148281

### SPARK PLUG

Unit: mm (in)

Make		DENSO
Standard type		FXE20HR11
Gap (Nominal)	Standard	1.1 (0.043)
	Limit	1.4 (0.055)

# **ROAD WHEEL**

**ROAD WHEEL: Road Wheel** 

INFOID:0000000005148282

# ALUMINUM WHEEL

Item		Limit
Radial runout	Lateral deflection	Less than 0.3 mm (0.012 in)
	Vertical deflection	
Allowable unbalance	Dynamic (At flange)	Less than 10 g (0.35 oz) (one side)
	Static (At flange)	Less than 20 g (0.70 oz)

STEEL WHEEL

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# SERVICE DATA AND SPECIFICATIONS (SDS)

# < SERVICE DATA AND SPECIFICATIONS (SDS)

ltem			Limit
		Lateral deflection	Less than 0.8 mm (0.031 in)
Radial runout	Conventional	Vertical deflection	Less than 0.5 mm (0.020 in)
		Lateral deflection	Less than 1.2 mm (0.031 in)
	Emergency	Vertical deflection	Less than 1.0 mm (0.020 in)
Allowable unbalance		Dynamic (At flange)	Less than 10 g (0.35 oz) (one side)
		Static (At flange)	Less than 20 g (0.70 oz)