

SECTION **MA**
MAINTENANCE

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PRECAUTIONS

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PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000005789620

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

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PREPARATION

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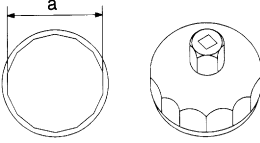
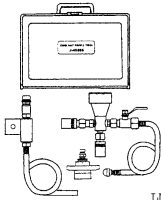
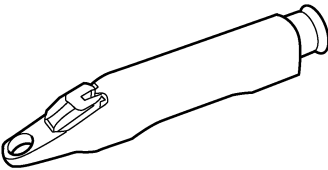
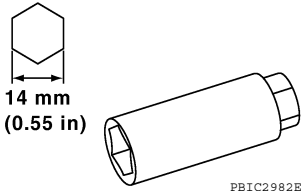
PREPARATION

PREPARATION

Special Service Tool

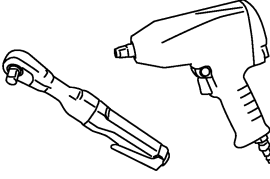
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name		Description
KV10115801 (J-38956) Oil filter wrench	 <p style="text-align: center; font-size: small;">S-NT375</p>	Removing and installing oil filter a: 64.3 mm (2.531 in)
KV991J0070 (J-45695) Coolant Refill Tool	 <p style="text-align: center; font-size: small;">LMA053</p>	Refilling engine cooling system
— (J-23688) Engine coolant refractometer	 <p style="text-align: center; font-size: small;">WBIA0539E</p>	Checking concentration of ethylene glycol in engine coolant
— (J-48891) Spark plug wrench	 <p style="text-align: center; font-size: small;">14 mm (0.55 in)</p> <p style="text-align: center; font-size: small;">PBIC2982E</p>	Removing and installing spark plug

Commercial Service Tool

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Tool name (Kent-Moore No.)		Description
Power tool (—)	 <p style="text-align: center; font-size: small;">PBIC0190E</p>	Loosening nuts and bolts

GENERAL MAINTENANCE

< ON-VEHICLE MAINTENANCE >

ON-VEHICLE MAINTENANCE

GENERAL MAINTENANCE FOR NORTH AMERICA

FOR NORTH AMERICA : Explanation of General Maintenance

INFOID:000000005432023

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.	WT-65
Wheel nuts	When checking the tires, make sure no nuts are missing, and check for any loose nuts. Tighten if necessary.	WT-65
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).	WT-65
Tire Pressure Monitoring System (TPMS) transmitter components	Replace the TPMS transmitter grommet seal, valve core and cap when the tires are replaced due to wear or age.	WT-10
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.	FSU-17 and WT-63
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. 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-50
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.	—

GENERAL MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Item	Reference page
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.	—

FOR MEXICO

FOR MEXICO : Explanation Of General Maintenance

INFOID:000000005789621

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.	WT-65
Wheel nuts When checking the tires, make sure no nuts are missing, and check for any loose nuts. Tighten if necessary.	WT-65
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 10,000 km (6,000 miles).	WT-65
Tire Pressure Monitoring System (TPMS) transmitter components Replace the TPMS transmitter grommet seal, valve core and cap when the tires are replaced due to wear or age.	WT-64
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.	FSU-17 and WT-63
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. 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-50
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.	—

GENERAL MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Item		Reference page	
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)	—	A
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.	—	B C
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-3	D
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.	—	E
Brakes	Check that the brake does not pull the vehicle to one side when applied.	—	F
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-13 , BR-45	G
Clutch pedal	Make sure the pedal operates smoothly and check that it has the proper free play.	CL-6	H
Parking brake	Check that the lever or 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.	PB-4 (Pedal) PB-5 (Lever)	I
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.	—	J

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.	—	K
Engine coolant level	Check the coolant level when the engine is cold.	CO-11 (QR25DE) CO-33 (VQ35DE)	L
Engine oil level	Check the level after parking the vehicle on a level spot and turning off the engine.	LU-9 (QR25DE) LU-25 (VQ35DE)	M
Brake fluid level	Make sure that the brake fluid level is between the "MAX" and "MIN" lines on the reservoir.	MA-44	N
Battery	Check the fluid level in each cell. It should be between the "MAX" and "MIN" lines.	PG-72 Coupe PG-144 Sedan	O

PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

PERIODIC MAINTENANCE FOR NORTH AMERICA

FOR NORTH AMERICA : Introduction of Periodic Maintenance

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

Schedule 1	Follow Periodic Maintenance Schedule 1 if the driving habits frequently include one or more of the following driving conditions: <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-8
Schedule 2	Follow Periodic Maintenance Schedule 2 if none of driving conditions shown in Schedule 1 apply to the driving habits.	Emission Control System Maintenance	MA-11
		Chassis and Body Maintenance	MA-11

FOR NORTH AMERICA : Schedule 1

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EMISSION CONTROL SYSTEM

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	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)									EM-16 (QR25DE) EM-120 (VQ35DE)
Air cleaner filter	NOTE (2)								[R]	EM-123 (QR25DE) EM-123 (VQ35DE)
EVAP vapor lines									I*	MA-26 (QR25DE) EC-1609 (VQ35DE)
Fuel lines									I*	FL-4 (QR25DE) EC-1607 (VQ35DE)
Fuel filter	NOTE (3)									—
Engine coolant	NOTE (4)									MA-19 (QR25DE) MA-28 (VQ35DE)
Engine oil		R	R	R	R	R	R	R	R	LU-10 (QR25DE) LU-26 (VQ35DE)

PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

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	
Engine oil filter [Use Genuine NISSAN engine oil filter or equivalent.]		R	R	R	R	R	R	R	R	LU-11 (QR25DE) LU-27 (VQ35DE)
Spark plugs (Iridium-tipped type)		Replace every 105,000 miles (169,000 km).								EM-14 (QR25DE) EM-118 (VQ35DE)
Intake & exhaust valve clearance*	NOTE (5)									EM-98 (QR25DE) EM-238 (VQ35DE)

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	
Drive belts	NOTE (1)								I*	EM-16 (QR25DE) EM-120 (VQ35DE)
Air cleaner filter	NOTE (2)								[R]	EM-123 (QR25DE) EM-123 (VQ35DE)
EVAP vapor lines									I*	MA-26 (QR25DE) EC-1609 (VQ35DE)
Fuel lines									I*	FL-4 (QR25DE) EC-1607 (VQ35DE)
Fuel filter	NOTE (3)									—
Engine coolant	NOTE (4)								R*	MA-19 (QR25DE) MA-28 (VQ35DE)
Engine oil		R	R	R	R	R	R	R	R	LU-10 (QR25DE) LU-26 (VQ35DE)
Engine oil filter [Use Genuine NISSAN engine oil filter or equivalent.]		R	R	R	R	R	R	R	R	LU-11 (QR25DE) LU-27 (VQ35DE)
Spark plugs (Iridium-tipped type)		Replace every 105,000 miles (169,000 km).								EM-14 (QR25DE) EM-118 (VQ35DE)
Intake & exhaust valve clearance*	NOTE (5)									EM-98 (QR25DE) EM-238 (VQ35DE)

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PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

- (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 or if the auto belt tensioner reading reaches the 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) 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

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-45
Brake pads & rotors			I		I		I		I	MA-46 , MA-46 MA-47 , MA-47
CVT fluid	NOTE (1)				I				I	TM-237 (REOF09B) TM-409 (REOF10B)
Manual transaxle oil	NOTE (2)				I				I	TM-18
Steering gear and linkage, axle & suspension parts			I		I		I		I	MA-48
Tire rotation	NOTE (3)									WT-63
Exhaust system			I		I		I		I	MA-38
Front drive shaft boot			I		I		I		I	MA-49
In-cabin microfilter					R				R	MA-38

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	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-45
Brake pads & rotors			I		I		I		I	MA-46 , MA-46 MA-47 , MA-47
CVT fluid	NOTE (1)				I				I	TM-237 (REOF09B) TM-409 (REOF10B)
Manual transaxle oil	NOTE (2)				I				I	TM-18
Steering gear and linkage, axle & suspension parts			I		I		I		I	MA-48
Tire rotation	NOTE (3)									WT-63
Exhaust system			I		I		I		I	MA-38
Front drive shaft boot			I		I		I		I	MA-49
In-cabin microfilter					R				R	MA-38

PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

- If towing a trailer, or using a car-top carrier, or driving on rough or muddy roads, inspect CVT fluid deterioration with CONSULT-III every 60,000 miles (96,000 km), then change the CVT fluid NS-2, if necessary, (Refer to [TM-238](#), "Changing" RE0F09B or [TM-410](#) RE0F10B).
Use only Genuine NISSAN CVT Fluid NS-2.
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.
- If towing a trailer, or using 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.
- Refer to "Tire rotation" under the "General maintenance" heading earlier in this section.

FOR NORTH AMERICA : Schedule 2

INFOID:000000005432026

EMISSION CONTROL SYSTEM

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

MAINTENANCE OPERATION	Miles x 1,000 (km x 1,000) Months	MAINTENANCE INTERVAL								Reference Section - Page or - Content Title
		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*	EM-16 (QR25DE) EM-120 (VQ35DE)
Air cleaner filter					[R]				[R]	EM-19 (QR25DE) EM-123 (VQ35DE)
EVAP vapor lines					I*				I*	MA-26 (QR25DE) MA-36 (VQ35DE)
Fuel lines					I*				I*	MA-21 (QR25DE) MA-30 (VQ35DE)
Fuel filter	NOTE (2)									—
Engine coolant	NOTE (3)								R*	MA-19 (QR25DE) MA-28 (VQ35DE)
Engine oil		R	R	R	R	R	R	R	R	LU-10 (QR25DE) LU-26 (VQ35DE)
Engine oil filter [Use Genuine NISSAN engine oil filter or equivalent.]		R	R	R	R	R	R	R	R	LU-11 (QR25DE) LU-27 (VQ35DE)
Spark plugs (Iridium-tipped type)		Replace every 105,000 miles (169,000 km).								EM-14 (QR25DE) EM-118 (VQ35DE)
Intake & exhaust valve clearance*	NOTE (4)									EM-98 (QR25DE) EM-238 (VQ35DE)

NOTE:

- 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 or if the auto belt tensioner reading reaches the maximum limit.
- Maintenance-free item. For service procedures, refer to FL section.
- After 60,000 miles (96,000 km) or 48 months, replace every 30,000 miles (48,000 km) or 24 months.
- Periodic maintenance is not required. However, if valve noise increases, inspect valve clearance.

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PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

* 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

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 and cables			I		I		I		I	MA-45
Brake pads & rotors			I		I		I		I	MA-46 , MA-46 , MA-47 , MA-47
CVT fluid	NOTE (1)		I		I		I		I	TM-237 (RE0F09B) TM-409 (RE0F10B)
Steering gear and linkage, axle & suspension parts			I		I		I		I	MA-48
Manual transaxle oil			I		I		I		I	TM-18
Tire rotation	NOTE (2)									WT-65
Exhaust system					I				I	MA-38
Front drive shaft boot			I		I		I		I	MA-49
In-cabin microfilter			R		R		R		R	MA-38

NOTE:

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

FOR MEXICO

FOR MEXICO : Introduction of Periodic Maintenance

INFOID:000000005789628

The following tables show the normal maintenance schedule. Depending upon weather and atmospheric conditions, varying road surfaces, individual driving habits and vehicle usage, additional or more frequent maintenance may be required.

Periodic maintenance beyond the last period shown on the table requires similar maintenance.

ENGINE AND EMISSION CONTROL MAINTENANCE

MAINTENANCE SCHEDULE

Abbreviations: I = Inspect and correct or replace as necessary, R = Replace

MAINTENANCE OPERATION	km x 1,000	10	20	30	40	50	60	70	80	90	100	110	120	130	140
	Miles x 1,000	6.2	12.4	18.6	24.9	31.1	37.3	43.5	49.7	55.9	62.2	68.4	74.6	80.8	87.0
	Months	6	12	18	24	30	36	42	48	54	60	66	72	78	84

EMISSION CONTROL SYSTEM MAINTENANCE

Engine oil and engine oil filter		R	R	R	R	R	R	R	R	R	R	R	R	R	R
Engine coolant	(See Note 1)								R				R		
Drive belts	(See Note 2)				I				I				I		

PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

MAINTENANCE OPERATION	km x 1,000	10	20	30	40	50	60	70	80	90	100	110	120	130	140
	Miles x 1,000	6.2	12.4	18.6	24.9	31.1	37.3	43.5	49.7	55.9	62.2	68.4	74.6	80.8	87.0
	Months	6	12	18	24	30	36	42	48	54	60	66	72	78	84
Perform maintenance at kilometer/mile/month whichever comes first															
Spark plugs (Iridium -tipped type)		Replace every 169,000 km (105,000 miles)													
Air cleaner filter (Viscous paper type)					R				R				R		
Intake and exhaust valve clearance	(See Note 3)														
Fuel lines					I				I				I		
EVAP vapor lines					I				I				I		
Fuel filter	(See Note 4)														
Cooling system					I				I				I		

NOTE:

1. Use Nissan Genuine Engine Coolant, or equivalent in its quality, in order to avoid possible aluminum corrosion within the engine cooling.
2. Replace the belt if found damage or if the auto belt tensioner reading reaches the maximum limit.
3. Periodic maintenance is not required. However, if valve noise increases, check valve clearance.
4. Fuel filter is maintenance-free.

CHASSIS AND BODY MAINTENANCE

MAINTENANCE SCHEDULE

Abbreviations: I = Inspect and correct or replace as necessary, R = Replace, L = Lubricate

MAINTENANCE OPERATION	km x 1,000	10	20	30	40	50	60	70	80	90	100	110	120	130	140
	Miles x 1,000	6.2	12.4	18.6	24.9	31.1	37.3	43.5	49.7	55.9	62.2	68.4	74.6	80.8	87.0
	Months	6	12	18	24	30	36	42	48	54	60	66	72	78	84
Perform maintenance at kilometer/mile/month whichever comes first															

EBODY AND CHASSIS MAINTENANCE

CVT fluid	(See Note 5)		I		I		I		I		I		I		I
Brake pads, rotors, parking brake & other brake components			I		I		I		I		I		I		I
Brake fluid (for level & leaks)			I		I		I		I		I		I		I
Brake fluid (replacement)					R				R				R		
Drive shafts			I		I		I		I		I		I		I
Air conditioner filter			R		R		R		R		R		R		R
Steering gear & linkage, axle & suspension parts					I				I				I		
Wheel alignment (if necessary rotate & balance wheels)			I		I		I		I		I		I		I
Exhaust system					I				I				I		

NOTE:

- (5) Using transmission fluid other than Genuine NISSAN CVT Fluid NS-2 will damage the CVT, which is not covered by the NISSAN new vehicle warranty.

PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

MAINTENANCE UNDER SEVERE DRIVING CONDITIONS

The maintenance interval shown on the proceeding pages are for normal operating conditions. If the vehicle is mainly operated under severe driving conditions as shown below, more frequent maintenance must be performed on the following items as shown in the table.

Severe driving conditions	
A	— Driving under dusty conditions
B	— Driving repeatedly short distances
C	— Towing a trailer or caravan
D	— Extensive idling
E	— Driving in extremely adverse weather conditions or in areas where ambient temperatures are either extremely low or extremely high
F	— Driving in high humidity areas or in mountainous areas
G	— Driving in areas using salt or other corrosive materials
H	— Driving on rough and /or muddy roads or in the desert
I	— Driving with frequent use of braking or in mountainous areas
J	— Frequent driving in water

Driving condition										Maintenance item	Maintenance operation	interval
A	B	C	D							Engine oil & engine oil filter	Replace	Every 5,000 km (3,000 miles) or months
A		C				G	H	I		Brake pads, rotors and other brake components	Inspect	Every 5,000 km (3,000 miles) or months
A										Air cleaner filter (Viscous paper type)	Replace	More frequently
A										Air conditioner filter	Replace	More frequently
					F					Brake fluid	Replace	Every 20,000 km (12,000 miles) or 12 months
						G	H			Drive shafts	Inspect	Every 10,000 km (6,000 miles) or 6 months
						G	H			Steering gear & linkage, suspension parts	Inspect	Every 20,000 km (12,000 miles) or 12 months

RECOMMENDED FLUIDS AND LUBRICANTS

< ON-VEHICLE MAINTENANCE >

RECOMMENDED FLUIDS AND LUBRICANTS FOR USA AND CANADA

FOR USA AND CANADA : Fluids and Lubricants

INFOID:000000005432027

Description		Capacity (Approximate)			Recommended Fluids/Lubricants
		Liter	US measure	Imp measure	
Fuel	QR25DE	75.6	20 gal	16-5/8 gal	Unleaded gasoline with an octane rating of at least 87 AKI (RON 91)
	VQ35DE				
Engine oil Drain and refill	With oil filter change	QR25DE	4.6	4 7/8 qt	<ul style="list-style-type: none"> • Engine oil with API Certification Mark *1 • Viscosity SAE 5W-30 *1
		VQ35DE	4.8	5 1/8 qt	
	Without oil filter change	QR25DE	4.3	4 1/2 qt	
		VQ35DE	4.5	4 3/4 qt	
Dry engine (engine overhaul)	QR25DE	5.4	5 3/4 qt	4 3/4 qt	
	VQ35DE	5.3	5 5/8 qt	4 5/8 qt	
Cooling system with reservoir tank	QR25DE	7.7	8 1/8 qt	6 3/4 qt	Genuine NISSAN Long Life Antifreeze/ Coolant or equivalent
	VQ35DE	9.0	9 1/2 qt	7 7/8 qt	
CVT fluid	RE0F09B	10.2	10 6/8 qt	9 qt	Genuine NISSAN CVT Fluid NS-2 *2
	RE0F10A	7.3	7 3/4 qt	6 3/8	
Manual transaxle fluid (MTF)		1.7	3 5/8 pt	3 pt	Genuine NISSAN Manual Transmission Fluid (MTF) HQ Multi 75W-85 or API GL- 4, Viscosity SAE 75W-85
Power steering fluid (PSF)		1.0	1 1/8 qt	7/8 qt	Genuine NISSAN PSF or equivalent*3
Brake and clutch fluids		—	—	—	Genuine NISSAN Super Heavy Duty Brake Fluid*4 or equivalent DOT 3 (US FMVSS No. 116)
Brake grease		—	—	—	PBC (poly butyl cuprysil)
Brake pad plate grease		—	—	—	Molykote AS880N grease or equivalent
Multi-purpose grease		—	—	—	NLGI No. 2 (Lithium soap base)
Air conditioning system refrigerant		0.55 ± 0.025 kg	1.21 ± 0.055 lb	0.55 ± 0.025 kg	HFC-134a (R-134a) *5
Air conditioning system oil		150 m ℓ	5.03 fl oz	5.3 fl oz	NISSAN A/C System Oil Type S or equiv- alent *5
Windshield washer fluid		—	—	—	Genuine NISSAN Windshield Washer Concentrate Cleaner & Antifreeze or equivalent

*1: For further details, see "Engine Oil Recommendation".

*2: Use only Genuine NISSAN CVT Fluid NS-2, using automatic 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.

*3: DEXRON™ VI type ATF may also be used.

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

*5: For further details, see "Air conditioning specification label".

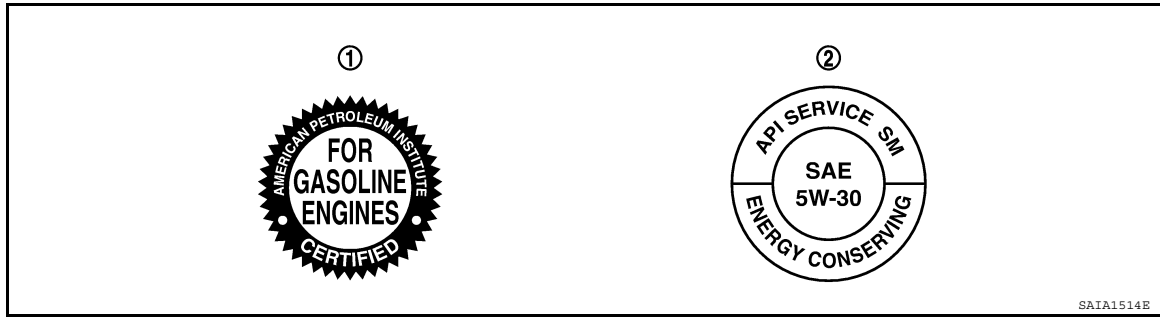
FOR USA AND CANADA : Engine Oil Recommendation

INFOID:000000005432028

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.

RECOMMENDED FLUIDS AND LUBRICANTS

< ON-VEHICLE MAINTENANCE >



1. API certification mark

2. API service symbol

ANTI-FREEZE COOLANT MIXTURE RATIO

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

For outside temperatures down to:		Anti-freeze coolant mixture ratio	
° C	° F	Genuine NISSAN Long Life Antifreeze coolant	Demineralized water or distilled water
- 35°	- 30°	50 %	50 %

CAUTION:

- When adding or replacing coolant, be sure to use only Genuine NISSAN Long Life Anti-freeze coolant or equivalent with the proper mixture ratio of 50% anti-freeze and 50% demineralized water or distilled water.
- Other types of coolant solutions may damage your cooling system.

FOR MEXICO

FOR MEXICO : Fluids and Lubricants

INFOID:000000005789635

QR25DE

Description		Capacity (Approximate)		Recommended Fluids/Lubricants
		Liter	Imp measure	
Engine oil Drain and refill	With oil filter change	4.6	4 qt	Genuine NISSAN engine oil *1 API grade SL or SM*1 ISLAC grade GF-2, GF-3, or GF-4 Viscosity SAE 10W-30
	Without oil filter change	4.3	3 3/4 qt	
Dry engine (engine overhaul)		5.4	4 3/4 qt	
Cooling system with reservoir tank		7.7	6 3/4 qt	Genuine NISSAN Engine Coolant or equivalent in its quality *2
CVT fluid	RE0F09B	10.2	9 qt	Genuine NISSAN CVT Fluid NS-2 *3
	RE0F10B	7.3	6 3/8	
Power steering fluid (PSF)		1.0	7/8 qt	Genuine NISSAN PSF or equivalent*4
Brake fluids		—	—	Genuine NISSAN Brake Fluid, or equivalent DOT3
Multi-purpose grease		—	—	NLGI No. 2 (Lithium soap base)

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

*2: Using Genuine NISSAN Engine Coolant or equivalent in its quality, in order to avoid possible aluminum corrosion within the engine cooling system caused by the use of non-genuine engine coolant.

Note that any repairs for the incidents within the engine cooling system while using non-genuine engine coolant may not be covered by the warranty even if such incidents occurred during the warranty period.

*3: Use only Genuine NISSAN CVT Fluid NS-2. Using transmission fluid other than Genuine NISSAN CVT Fluid NS-2 will damage the CVT, is not covered by the warranty.

*4: DEXTRON™ VI type ATF may also be used.

RECOMMENDED FLUIDS AND LUBRICANTS

< ON-VEHICLE MAINTENANCE >

VQ35DE

Description		Capacity (Approximate)		Recommended Fluids/Lubricants
		Liter	Imp measure	
Engine oil Drain and refill	With oil filter change	4.8	4 1/4 qt	Genuine NISSAN engine oil *1 API grade SL or SM*1 ILSAC grade GF-2, GF-3, or GF-4 Viscosity SAE 10W-30
	Without oil filter change	4.5	4 qt	
Dry engine (engine overhaul)		5.3	4 5/8 qt	Genuine NISSAN Engine Coolant or equivalent in its quality *2
Cooling system with reservoir tank		9.0	7 7/8 qt	
CVT fluid	RE0F09B	10.2	9 qt	Genuine NISSAN CVT Fluid NS-2 *3
	RE0F10B	7.3	6 3/8	
Power steering fluid (PSF)		1.0	7/8 qt	Genuine NISSAN PSF or equivalent*4
Brake fluids		—	—	Genuine NISSAN Brake Fluid, or equivalent DOT3
Multi-purpose grease		—	—	NLGI No. 2 (Lithium soap base)

1: For further details, see SAE Viscosity Number.

*2: Using Genuine NISSAN Engine Coolant or equivalent in its quality, in order to avoid possible aluminum corrosion within the engine cooling system caused by the use of non-genuine engine coolant.

Note that any repairs for the incidents within the engine cooling system while using non-genuine engine coolant may not be covered by the warranty even if such incidents occurred during the warranty period.

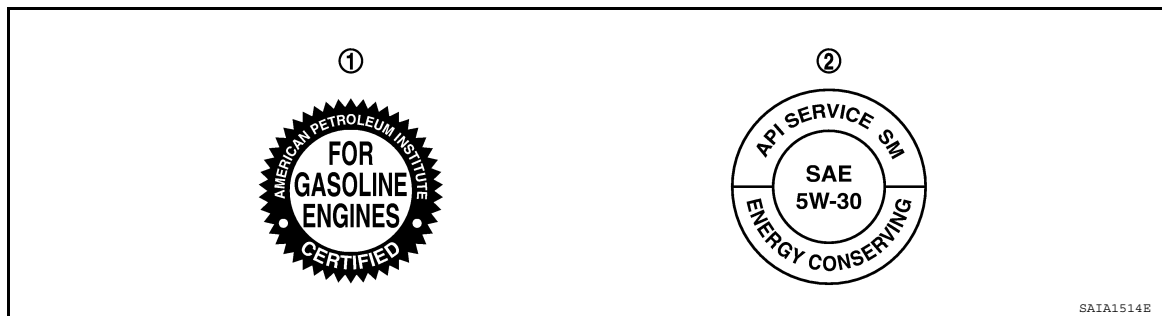
*3: Use only Genuine NISSAN CVT Fluid NS-2. Using transmission fluid other than Genuine NISSAN CVT Fluid NS-2 will damage the CVT, is not covered by the warranty.

*4: DEXTRON™ VI type ATF may also be used.

FOR MEXICO : Engine Oil Recommendation

INFOID:000000005789636

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.



1. API certification mark

2. API service symbol

FOR MEXICO : SAE Viscosity Number

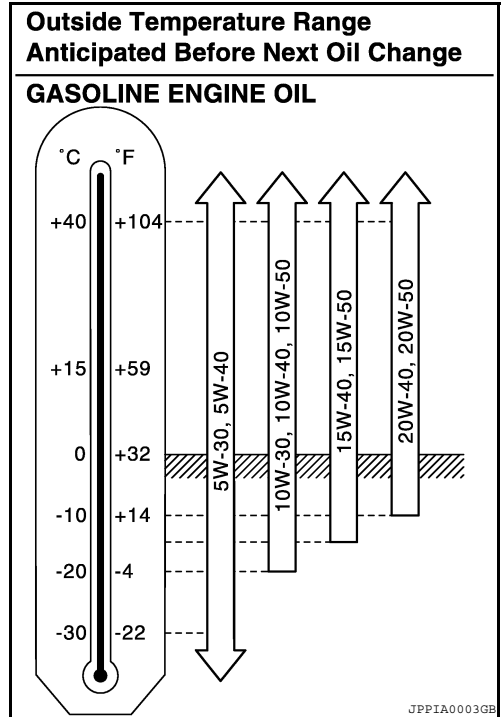
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GASOLINE ENGINE

RECOMMENDED FLUIDS AND LUBRICANTS

< ON-VEHICLE MAINTENANCE >

- 10W-30 is preferable.
5W-30 is also preferable and will improve fuel economy.
If 10W-30 or 5W-30 is not available, select the viscosity, from the chart, that is suitable for the outside temperature range.



FOR MEXICO : Engine Coolant Mixture Ratio

INFOID:000000005789711

The engine cooling system is filled at the factory with a high-quality, year-round and extended life engine coolant. The high quality engine coolant contains the specific solutions effective for the anti-corrosion and the anti-freeze function. Therefore, additional cooling system additives are not necessary.

Minimum Outside Temperature		Composition	
°C	°F	Engine coolant (concentrated)	Demineralized or distilled water
-15	5	30%	70%
-35	-30	50%	50%

When checking the engine coolant mixture ratio by the coolant hydrometer, use the chart below to correct your hydrometer reading (specific gravity) according to coolant temperature.

Mixed coolant specific gravity

Unit: specific gravity

Engine coolant mixture percentage	Specific Gravity at the Following Coolant Temperatures			
	15° C (59° F)	25° C (77° F)	35° C (95° F)	45° C (113° F)
30%	1.046 - 1.050	1.042 - 1.046	1.038 - 1.042	1.033 - 1.038
50%	1.076 - 1.080	1.070 - 1.076	1.065 - 1.071	1.059 - 1.065

WARNING:

Never remove the radiator cap when the engine is hot. Serious burns could be caused by high pressure fluid escaping from the radiator. Wait until the engine and radiator cool down.

CAUTION:

- When adding or replacing coolant, be sure to use only Genuine NISSAN Engine Coolant or equivalent in its quality with the proper mixture ratio. See the examples shown right.
- The use of other types of engine coolant may damage your cooling system.

ENGINE MAINTENANCE (QR25DE)

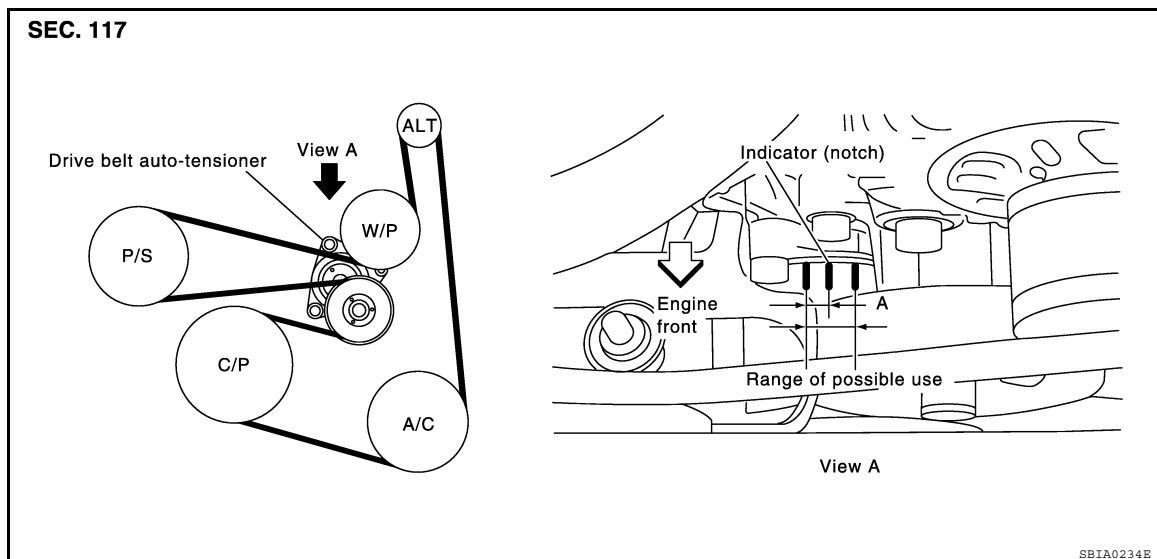
< ON-VEHICLE MAINTENANCE >

ENGINE MAINTENANCE (QR25DE)

DRIVE BELTS

DRIVE BELTS : Checking Drive Belts

INFOID:000000005789664



WARNING:

Inspect the drive belt only when the engine is stopped.

- Make sure that the stamp mark of drive belt auto-tensioner is within the usable range.

NOTE:

- Check the drive belt auto-tensioner indicator (notch) when the engine is cold.
- When the new drive belt is installed, the range should be (A) as shown.
- Visually check entire belt for wear, damage or cracks.
- If the indicator is out of allowable use range or belt is damaged, replace the belt.

DRIVE BELTS : Tension Adjustment

INFOID:000000005789665

- Belt tension is not manually adjustable, it is automatically adjusted by the drive belt auto-tensioner.

ENGINE COOLANT

ENGINE COOLANT : Changing Engine Coolant

INFOID:000000005432031

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 push down and turn the cap all the way to remove.**

DRAINING ENGINE COOLANT

1. Remove the engine undercover using power tool.
2. Open the radiator drain plug at the bottom of the radiator, and remove the radiator filler cap. This is the only step required when partially draining the cooling system (radiator only).

CAUTION:

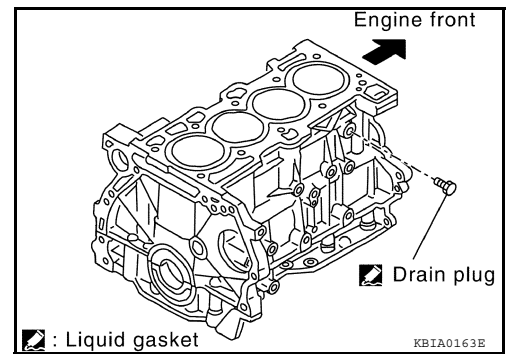
Do not to allow the coolant to contact the drive belts.

3. Follow this step for heater core removal/replacement only. Disconnect the upper heater hose at the engine side and apply moderate air pressure [103.46 kPa (15 psi, 1.055 kg/cm²) maximum air pressure] into the hose for 30 seconds to blow the excess coolant out of the heater core.
4. When draining all of the coolant in the system, remove the reservoir tank and drain the coolant, then clean the reservoir tank before installation.

ENGINE MAINTENANCE (QR25DE)

< ON-VEHICLE MAINTENANCE >

- When draining all of the coolant in the system for engine removal or repair, open the drain plug on the cylinder block.



- Check the drained coolant for contaminants such as rust, corrosion or discoloration. If the coolant is contaminated, flush the engine cooling system. Refer to "FLUSHING COOLING SYSTEM".

REFILLING ENGINE COOLANT

- Install the radiator drain plug. Install the reservoir tank and cylinder block drain plug, if removed for a total system drain or for engine removal or repair.
 - The radiator must be completely empty of coolant and water.**
 - Apply sealant to the threads of the cylinder block drain plugs. Use Genuine High Performance Thread Sealant or equivalent. Refer to [GI-15, "Recommended Chemical Products and Sealants"](#).**

Radiator drain plug : Refer to [CO-15, "Removal and Installation"](#).

Cylinder block drain plug : Refer to [EM-75, "Disassembly and Assembly"](#).

- If disconnected, reattach the upper radiator hose at the engine side.
- Set the vehicle heater controls to the full HOT and heater ON position. Turn the vehicle ignition ON with the engine OFF as necessary to activate the heater mode.
- Install the Tool by installing the radiator cap adapter onto the radiator neck opening. Then attach the gauge body assembly with the refill tube and the venturi assembly to the radiator cap adapter.

Tool number : KV991J0070 (J-45695)

- Insert the refill hose into the coolant mixture container that is placed at floor level. Make sure the ball valve is in the closed position.
 - Use Genuine NISSAN Long Life Anti-freeze coolant or equivalent, mixed 50/50 with distilled water or demineralized water.**
 - Refer to [MA-15, "FOR USA AND CANADA : Engine Oil Recommendation"](#).**

Engine coolant capacity (with reservoir tank) : Refer to [MA-15, "FOR USA AND CANADA : Fluids and Lubricants"](#).

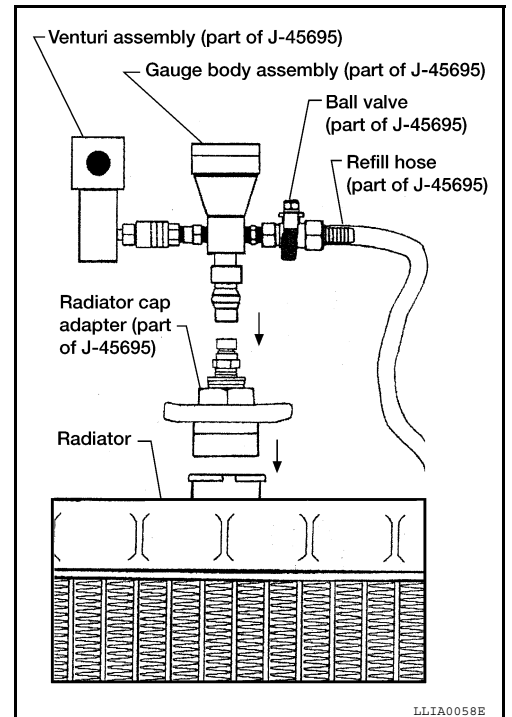
- Install an air hose to the venturi assembly, the air pressure must be within specification.

Compressed air supply pressure : 5.7 - 8.5 kPa (5.6 - 8.4 kg/cm², 80 - 120 psi)

CAUTION:

The compressed air supply must be equipped with an air dryer.

- The vacuum gauge will begin to rise and there will be an audible hissing noise. During this process open the ball valve on the refill hose slightly. Coolant will be visible rising in the refill hose. Once the refill hose is full of coolant, close the ball valve. This will purge any air trapped in the refill hose.

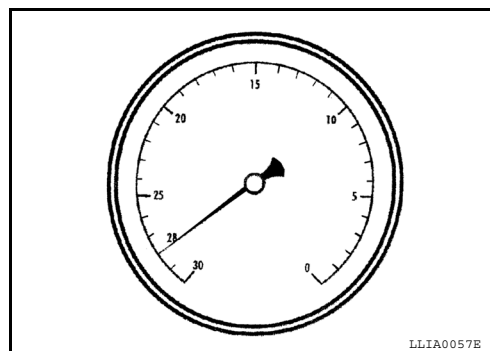


ENGINE MAINTENANCE (QR25DE)

< ON-VEHICLE MAINTENANCE >

8. Continue to draw the vacuum until the gauge reaches 28 inches of vacuum. The gauge may not reach 28 inches in high altitude locations, refer to the vacuum specifications based on the altitude above sea level.

Altitude above sea level	Vacuum gauge reading
0 - 100 m (328 ft)	: 28 inches of vacuum
300 m (984 ft)	: 27 inches of vacuum
500 m (1,641 ft)	: 26 inches of vacuum
1,000 m (3,281 ft)	: 24 - 25 inches of vacuum



9. When the vacuum gauge has reached the specified amount, disconnect the air hose and wait 20 seconds to see if the system loses any vacuum. If the vacuum level drops, perform any necessary repairs to the system and repeat steps 6 - 8 to bring the vacuum to the specified amount. Recheck for any leaks.
10. Place the coolant container (with the refill hose inserted) at the same level as the top of the radiator. Then open the ball valve on the refill hose so the coolant will be drawn up to fill the cooling system. The cooling system is full when the vacuum gauge reads zero.

CAUTION:

Do not allow the coolant container to get too low when filling, to avoid air from being drawn into the cooling system.

11. Remove the Tool from the radiator neck opening.
12. Fill the cooling system reservoir tank to the specified level and install the radiator cap. Run the engine to warm up the cooling system and top up the system as necessary.

FLUSHING COOLING SYSTEM

1. Fill the radiator from the filler cap above the radiator upper hose and reservoir tank, with water and reinstall the filler cap above the radiator upper hose.
2. Run the engine until it reaches normal operating temperature.
3. Press the engine accelerator two or three times under no-load.
4. Stop the engine and wait until it cools down.
5. Drain the water.
6. Repeat steps 1 through 5 until clear water begins to drain from the radiator.

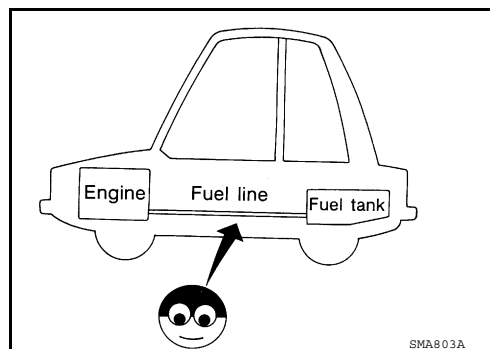
FUEL LINES

FUEL LINES : Inspection

INFOID:000000005789666

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

If necessary, repair or replace damaged parts.



AIR CLEANER FILTER

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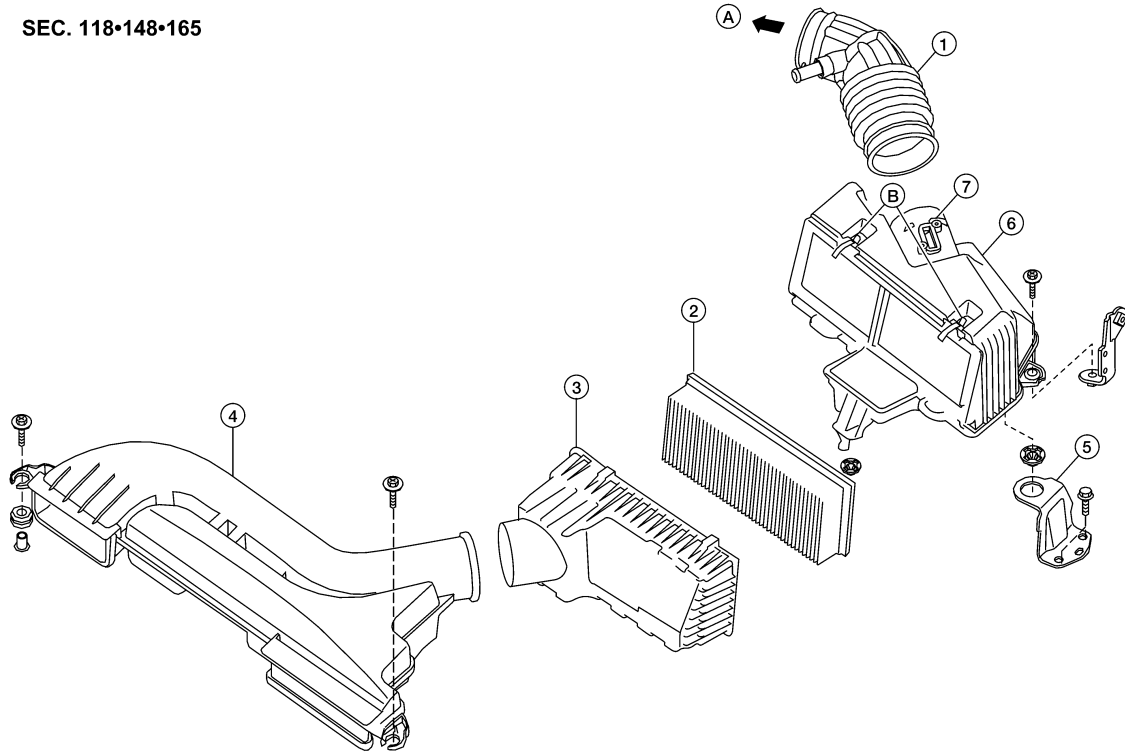
ENGINE MAINTENANCE (QR25DE)

< ON-VEHICLE MAINTENANCE >

AIR CLEANER FILTER : Removal and Installation

INFOID:000000005789667

SEC. 118•148•165



AWBIA0567ZZ

- | | | |
|-------------------------|------------------------------------------|--------------------------------|
| 1. Air duct hose | 2. Air cleaner filter | 3. Air cleaner case (front) |
| 4. Front air duct | 5. Air cleaner mounting bracket | 6. Air cleaner case (rear) |
| 7. Mass air flow sensor | A. To electric throttle control actuator | B. Air cleaner case side clips |

CHANGING THE AIR CLEANER FILTER

1. Remove the front air duct.
2. Unhook the air cleaner case side clips.
3. Remove the air cleaner filter.
4. Install a new air cleaner filter.
5. Lock the air cleaner case side clips.
6. Install the front air duct.

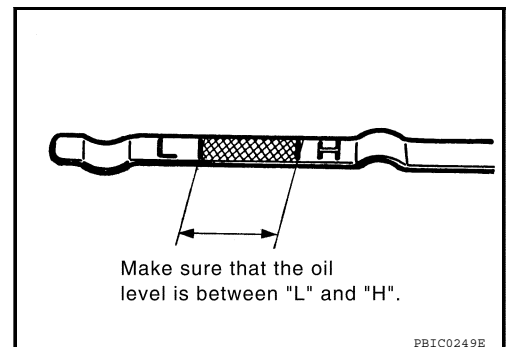
ENGINE OIL

ENGINE OIL : Inspection

INFOID:000000005789668

OIL LEVEL

- Before starting the engine, check the oil level. If the engine is already started, stop it and allow 10 minutes before checking.
- Check that the oil level is within the range on the dipstick.
- If it is out of range, add oil as necessary. Refer to [MA-22. "ENGINE OIL : Inspection"](#).



ENGINE OIL APPEARANCE

- Check engine oil for white milky appearance or excessive contamination.

ENGINE MAINTENANCE (QR25DE)

< ON-VEHICLE MAINTENANCE >

- If engine oil becomes milky, it is highly probable that it is contaminated with engine coolant. Repair or replace damaged parts.

OIL LEAKAGE

Check for oil leakage around the following areas:

- Oil pan
- Oil pan drain plug
- Oil pressure switch
- Oil filter
- Oil cooler
- IVTC cover
- Front cover
- Mating surface between cylinder block and cylinder head
- Mating surface between cylinder head and rocker cover
- Crankshaft oil seal (front and rear)

OIL PRESSURE CHECK

WARNING:

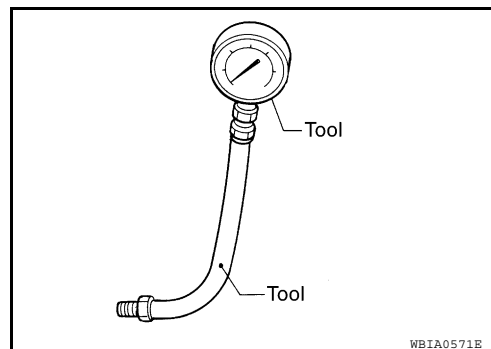
- **Be careful not to burn yourself, as engine oil may be hot.**
- **For M/T models, put the gearshift lever in the Neutral "N" position. For CVT models, put the CVT shift selector in the Park "P" position.**

1. Check engine oil level. Refer to [MA-22, "ENGINE OIL : Inspection"](#).
2. Remove engine under cover. Refer to [EXT-14, "Removal and Installation"](#) (Coupe models) or [EXT-36, "Removal and Installation"](#) (Sedan models).
3. Disconnect oil pressure switch harness connector at oil pressure switch. Remove oil pressure switch and install Tools.

CAUTION:

Do not drop or shock oil pressure switch.

Tool numbers : ST25051001 (J-25695-1)
: ST25052000 (J-25695-2)



4. Start engine and warm it up to normal operating temperature.
5. Check oil pressure with engine running under no-load, using Tool. Refer to [LU-18, "Oil Pressure"](#).

NOTE:

When engine oil temperature is low, engine oil pressure becomes high.

If difference is extreme, check oil passage and oil pump for oil leaks.

6. After the inspections, install oil pressure switch as follows:
 - a. Remove old liquid gasket adhering to oil pressure switch and oil cooler.
 - b. Apply liquid gasket and tighten oil pressure switch to the specification.
Use Genuine RTV Silicone Sealant or equivalent. Refer to [GI-15, "Recommended Chemical Products and Sealants"](#).

Oil pressure switch : Refer to [LU-16, "Removal and Installation"](#).

- c. After warming up engine, make sure there are no leaks of engine oil with engine running.

ENGINE OIL : Changing Engine Oil

INFOID:000000005789669

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. Position the vehicle so it is level on the hoist.

ENGINE MAINTENANCE (QR25DE)

< ON-VEHICLE MAINTENANCE >

2. Warm up the engine and check for oil leaks from the engine.
3. Stop engine and wait for 10 minutes.
4. Remove the oil pan drain plug and oil filler cap.
5. Drain the engine oil.
6. Install the oil pan drain plug with a new washer and refill the engine with new engine oil.

Oil specification and viscosity : Refer to [MA-15, "FOR USA AND CANADA : Engine Oil Recommendation"](#)

Oil pan drain plug : Refer to [EM-32, "Removal and Installation"](#)

CAUTION:

- Be sure to clean the oil pan drain plug and install using a new washer.
- 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.

7. Warm up the engine and check around the drain plug and oil filter for oil leaks.
8. Stop the engine and wait for 10 minutes.
9. Check the oil level using the dipstick.

CAUTION:

Do not overfill the engine with engine oil.

OIL FILTER

OIL FILTER : Removal and Installation

INFOID:000000005789671

REMOVAL

1. Drain engine oil. Refer to [MA-23, "ENGINE OIL : Changing Engine Oil"](#)
2. Remove the oil filter using Tool.

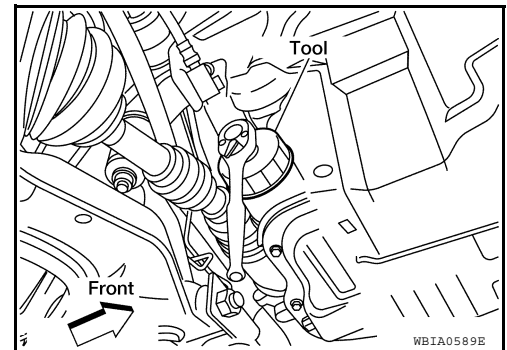
Tool number : KV10115801 (J-38956)

WARNING:

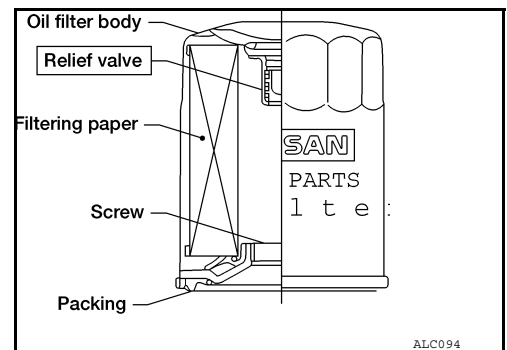
- Be careful not to get burned, the engine and engine oil may be hot.

CAUTION:

- 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.



- The oil filter has a built in pressure relief valve. Use a genuine NISSAN oil filter or equivalent



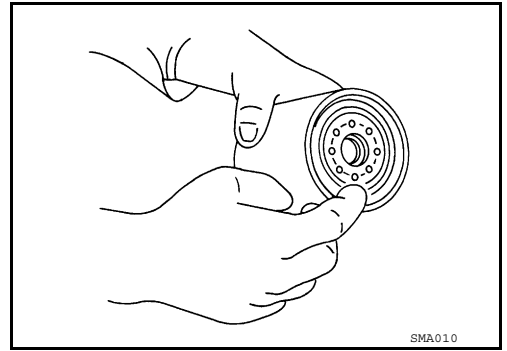
INSTALLATION

1. Remove foreign materials adhering to the oil filter installation surface.

ENGINE MAINTENANCE (QR25DE)

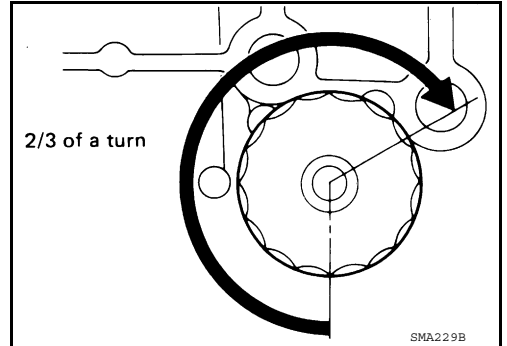
< ON-VEHICLE MAINTENANCE >

2. Apply clean 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 below.

Oil filter : 18.0 N-m (1.8 kg-m, 13 ft-lb)

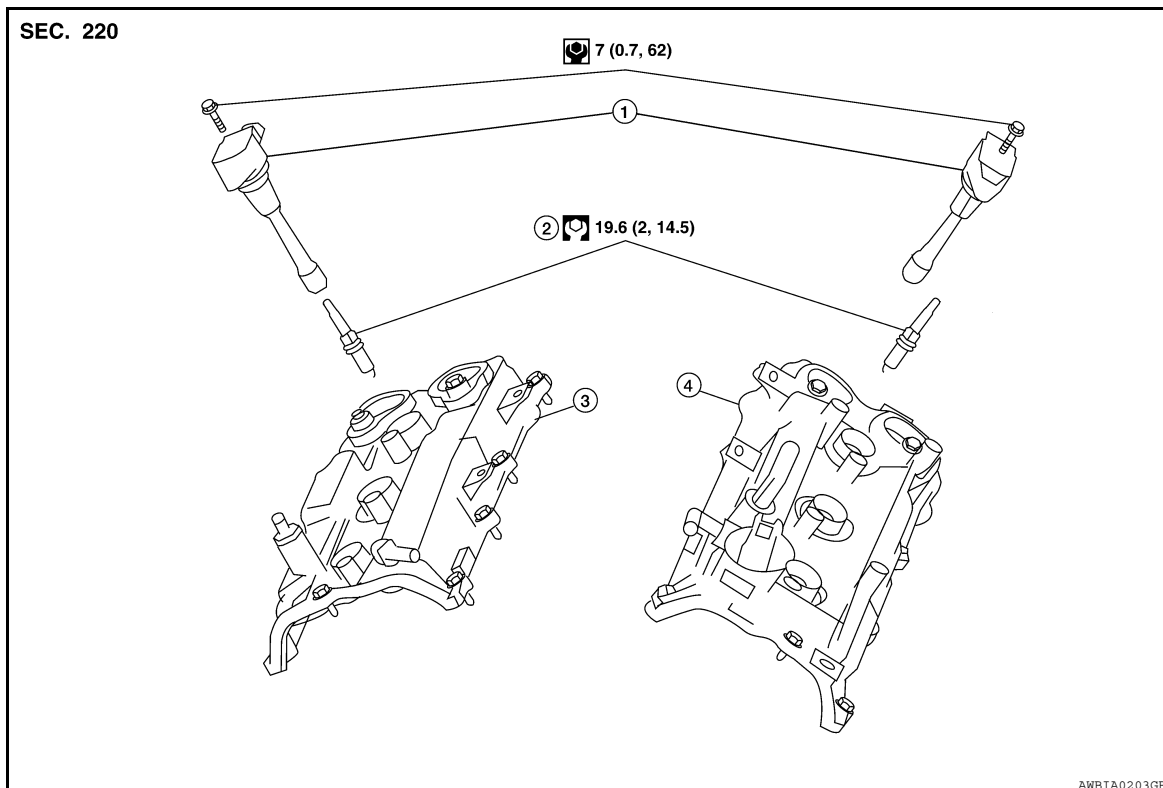


4. Refill engine with new engine oil. Refer to [MA-23, "ENGINE OIL : Changing Engine Oil"](#).
5. After warming up the engine, check for any engine oil leaks.

SPARK PLUG

SPARK PLUG : Removal and Installation

INFOID:000000005789672



1. Ignition coil
4. Rocker cover LH

2. Spark plug

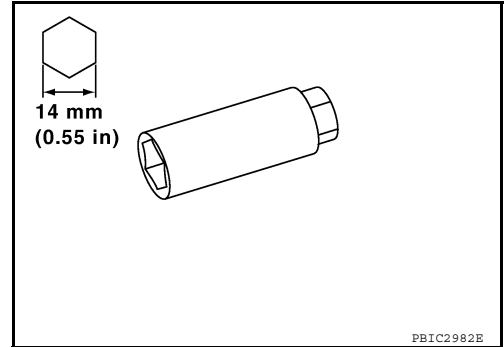
3. Rocker cover RH

ENGINE MAINTENANCE (QR25DE)

< ON-VEHICLE MAINTENANCE >

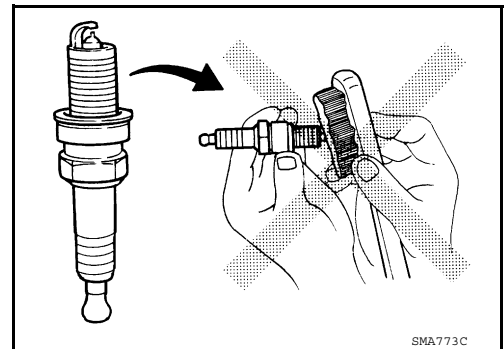
REMOVAL

1. Remove the ignition coil. Refer to [EM-150. "Removal and Installation LH"](#) and [EM-150. "Removal and Installation RH"](#).
2. Remove the spark plug with a suitable spark plug wrench.



INSPECTION AFTER REMOVAL

- Do not use a wire brush for cleaning the spark plugs. Replace as necessary.

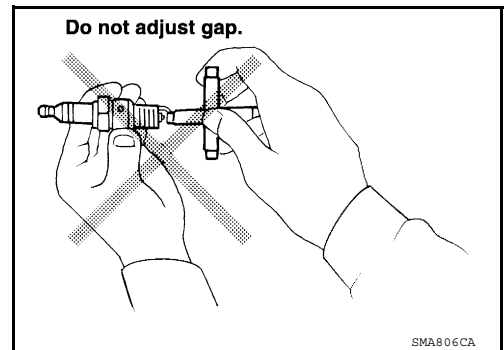


- If plug is covered with carbon, a spark plug cleaner may be used.

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. If the gap is out of specification, replace the spark plug.



INSTALLATION

Installation is in the reverse order of removal.

Standard type*	DENSO
	FXE22HR11
Gap (nominal)	1.1 mm (0.043 in)

*: Always check with the Parts Department for the latest parts information

EVAP VAPOR LINES

EVAP VAPOR LINES : Inspection

INFOID:000000005432037

1. Visually inspect EVAP vapor lines for improper attachment and for cracks, damage, loose connections, chafing and deterioration.

ENGINE MAINTENANCE (QR25DE)

< ON-VEHICLE MAINTENANCE >

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

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ENGINE MAINTENANCE (VQ35DE)

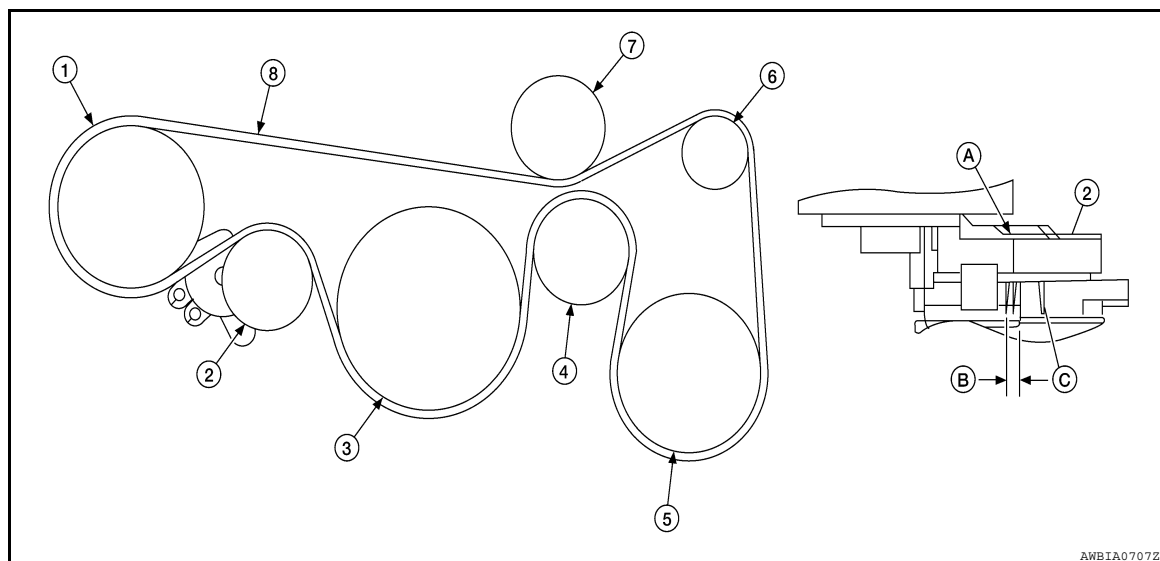
< ON-VEHICLE MAINTENANCE >

ENGINE MAINTENANCE (VQ35DE)

DRIVE BELTS

DRIVE BELTS : Checking Drive Belts

INFOID:000000005789653



- | | | |
|--------------------------------------|------------------------------|---------------------|
| 1. Power steering pump | 2. Drive belt auto-tensioner | 3. Crankshaft |
| 4. Idler pulley | 5. A/C compressor pulley | 6. Generator pulley |
| 7. Idler pulley | 8. Drive belt | A. Indicator |
| B. Possible use range (for new belt) | C. Belt replacement | |

WARNING:

Inspect and check the drive belts with the engine off.

1. Inspect belt for cracks, fraying, wear or oil adhesion. If necessary, replace with a new one.
2. Rotate the crankshaft pulley two times then check the belt tension.

NOTE:

- Inspect drive belt tension when engine is cold.

DRIVE BELTS : Tension Adjustment

INFOID:000000005789654

- Belt tension is not manually adjustable, it is automatically adjusted by the drive belt auto-tensioner.

ENGINE COOLANT

ENGINE COOLANT : Changing Engine Coolant

INFOID:000000005432040

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.**

DRAINING ENGINE COOLANT

1. Open radiator drain plug at the bottom of radiator and remove the radiator filler cap. This is the only step required for a partial cooling system drain.
2. If removing the heater core, remove the upper heater hose from the engine coolant outlet and apply moderate air pressure of 15 psi (103.46 kPa, 1.055 kg-cm²) maximum for 30 seconds into the hose to blow out excess coolant from the core.
3. For a complete cooling system drain, remove the reservoir tank and drain the coolant, and then clean the reservoir tank before installation.
 - Do not allow coolant to spill on the drive belts.

ENGINE MAINTENANCE (VQ35DE)

< ON-VEHICLE MAINTENANCE >

4. When performing a complete cooling system drain (to remove the engine or for engine repair), remove the cylinder block front drain plug and the cylinder block RH drain plug.
5. Check the drained coolant for contaminants such as rust, corrosion or discoloration.
 - If contaminated, flush the engine cooling system. Refer to "FLUSHING COOLING SYSTEM".

REFILLING ENGINE COOLANT

1. Install the radiator drain plug. If the cooling system was drained completely, install the reservoir tank and the cylinder block drain plugs.
 - The radiator must be completely empty of coolant and water.
 - Apply sealant to the threads of the cylinder block drain plugs. Use Genuine High Performance Thread Sealant or equivalent. Refer to [GI-15, "Recommended Chemical Products and Sealants"](#).

Radiator drain plug : Refer to [CO-37, "Removal and Installation"](#).
Cylinder block front drain plug : Refer to [EM-212, "Disassembly and Assembly"](#).
Cylinder block RH drain plug : Refer to [EM-212, "Disassembly and Assembly"](#).

2. If disconnected, reattach the upper radiator hose at the engine side.
3. Set the vehicle heater controls to the full HOT and heater ON position. Turn the vehicle ignition ON with the engine OFF as necessary to activate the heater mode.
4. Install the Tool by installing the radiator cap adapter onto the radiator neck opening. Then attach the gauge body assembly with the refill tube and the venturi assembly to the radiator cap adapter.

Tool number : KV991J0070 (J-45695)

5. Insert the refill hose into the coolant mixture container that is placed at floor level. Make sure the ball valve is in the closed position.
 - Use Genuine NISSAN Long Life Anti-freeze coolant or equivalent, mixed 50/50 with distilled water or demineralized water. Refer to [MA-15, "FOR USA AND CANADA : Engine Oil Recommendation"](#).

Engine coolant capacity (with reservoir tank) : Refer to [MA-15, "FOR USA AND CANADA : Fluids and Lubricants"](#).

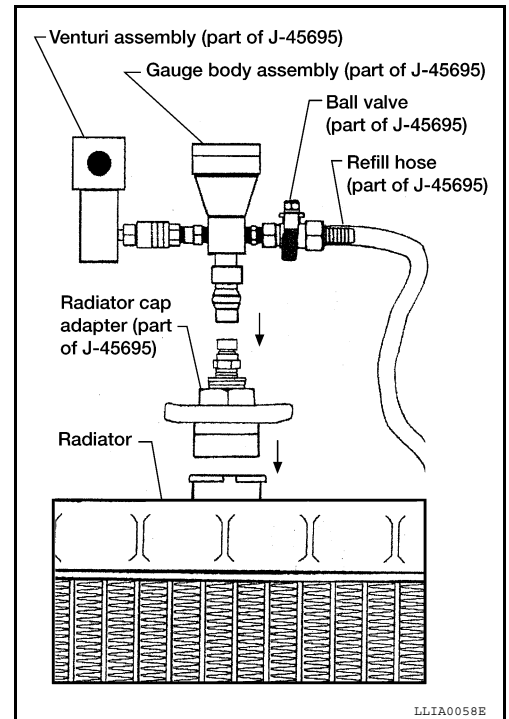
6. Install an air hose to the venturi assembly, the air pressure must be within specification.

Compressed air supply pressure : 5.7 - 8.5 kPa (5.6 - 8.4 kg/cm², 80 - 120 psi)

CAUTION:

The compressed air supply must be equipped with an air dryer.

7. The vacuum gauge will begin to rise and there will be an audible hissing noise. During this process open the ball valve on the refill hose slightly. Coolant will be visible rising in the refill hose. Once the refill hose is full of coolant, close the ball valve. This will purge any air trapped in the refill hose.

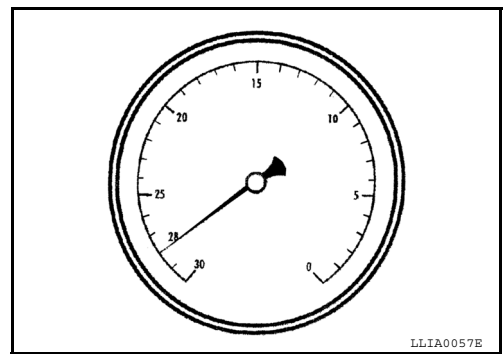


ENGINE MAINTENANCE (VQ35DE)

< ON-VEHICLE MAINTENANCE >

8. Continue to draw the vacuum until the gauge reaches 28 inches of vacuum. The gauge may not reach 28 inches in high altitude locations, refer to the vacuum specifications based on the altitude above sea level.

Altitude above sea level	Vacuum gauge reading
0 - 100 m (328 ft)	: 28 inches of vacuum
300 m (984 ft)	: 27 inches of vacuum
500 m (1,641 ft)	: 26 inches of vacuum
1,000 m (3,281 ft)	: 24 - 25 inches of vacuum



9. When the vacuum gauge has reached the specified amount, disconnect the air hose and wait 20 seconds to see if the system loses any vacuum. If the vacuum level drops, perform any necessary repairs to the system and repeat steps 6 - 8 to bring the vacuum to the specified amount. Recheck for any leaks.
10. Place the coolant container (with the refill hose inserted) at the same level as the top of the radiator. Then open the ball valve on the refill hose so the coolant will be drawn up to fill the cooling system. The cooling system is full when the vacuum gauge reads zero.

CAUTION:

Do not allow the coolant container to get too low when filling, to avoid air from being drawn into the cooling system.

11. Remove the Tool from the radiator neck opening.
12. Fill the cooling system reservoir tank to the specified level and install the radiator cap. Run the engine to warm up the cooling system and top up the system as necessary.

FLUSHING COOLING SYSTEM

1. Fill the radiator from the filler neck above the radiator upper hose and reservoir tank with clean water and reinstall radiator filler cap.
2. Run the engine and warm it up to normal operating temperature.
3. Rev the engine two or three times under no-load.
4. Stop the engine and wait until it cools down.
5. Drain the water from the system. Refer to "DRAINING ENGINE COOLANT".
6. Repeat steps 1 through 5 until clear water begins to drain from the radiator.

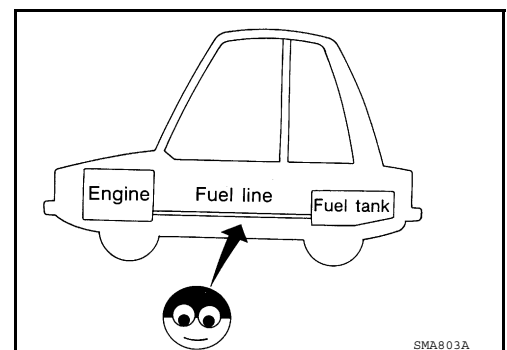
FUEL LINES

FUEL LINES : Inspection

INFOID:000000005789655

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

If necessary, repair or replace damaged parts.



AIR CLEANER FILTER

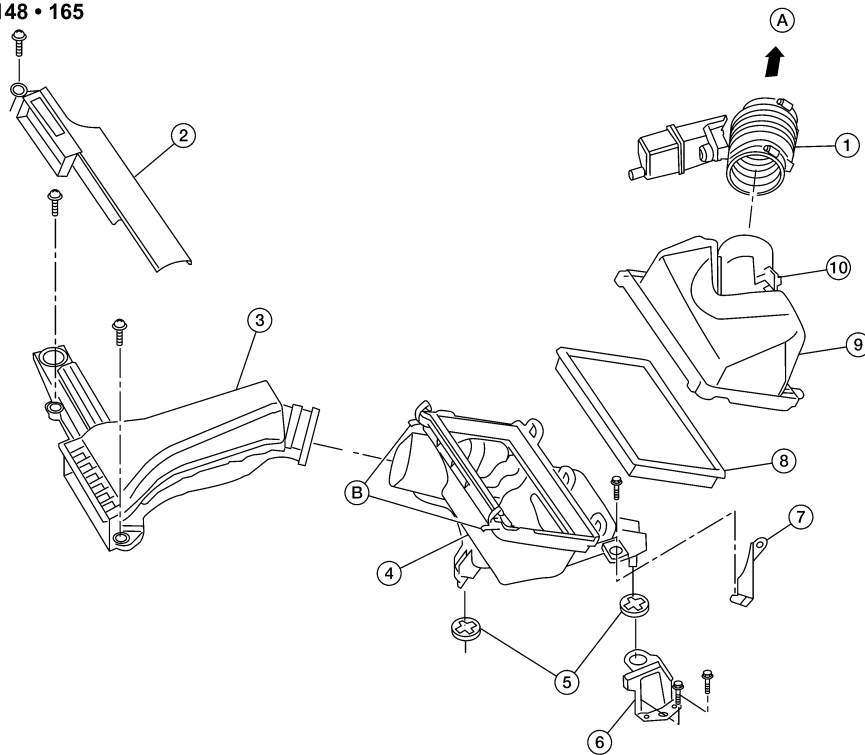
ENGINE MAINTENANCE (VQ35DE)

< ON-VEHICLE MAINTENANCE >

AIR CLEANER FILTER : Removal and Installation

INFOID:000000005789656

SEC. 118 • 148 • 165



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- | | | |
|-----------------------------|------------------------------------------|--------------------------------------|
| 1. Air duct hose | 2. Duct sub-cover | 3. Front air duct |
| 4. Air cleaner case (lower) | 5. Grommets | 6. Air cleaner case mounting bracket |
| 7. Bracket | 8. Air cleaner filter | 9. Air cleaner case (upper) |
| 10. Mass air flow sensor | A. To electric throttle control actuator | B. Air cleaner case side clips |

CHANGING THE AIR CLEANER FILTER

CAUTION:

It is not necessary to remove the front air duct to replace the air cleaner filter.

1. Disconnect mass air flow sensor electrical connector.
2. Remove air cleaner case (upper).
3. Unhook the air cleaner case side clips.
4. Remove the air cleaner filter.
5. Install a new air cleaner filter.
6. Lock the air cleaner case side clips.
7. Install air cleaner case (upper).
8. Connect mass air flow sensor electrical connector.

ENGINE OIL

ENGINE OIL : Inspection

INFOID:000000005789658

OIL LEVEL

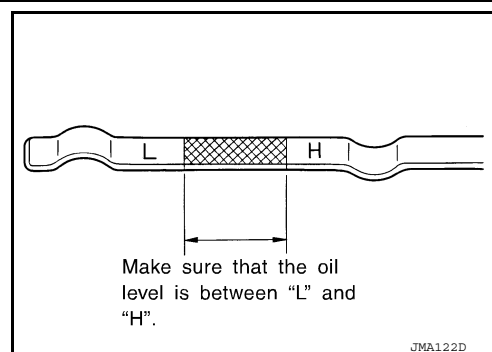
NOTE:

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ENGINE MAINTENANCE (VQ35DE)

< ON-VEHICLE MAINTENANCE >

- Before starting the engine, check the oil level. If the engine is already started, stop it and allow 10 minutes before checking.
- Check that the oil level is within the range as indicated on the dipstick.
- If it is out of range, add oil as necessary. Refer to [MA-31](#).



ENGINE OIL APPEARANCE

- Check engine oil for white milky appearance or excessive contamination.
- If engine oil becomes milky, it is highly probable that it is contaminated with engine coolant. Repair or replace damaged parts.

OIL LEAKAGE

Check for oil leakage around the following areas:

- Oil pan
- Oil pan drain plug
- Oil pressure switch
- Oil filter
- Oil cooler
- IVTC cover
- Front cover
- Mating surface between cylinder block and cylinder head
- Mating surface between cylinder head and rocker cover
- Crank oil seal (front and rear)

OIL PRESSURE CHECK

WARNING:

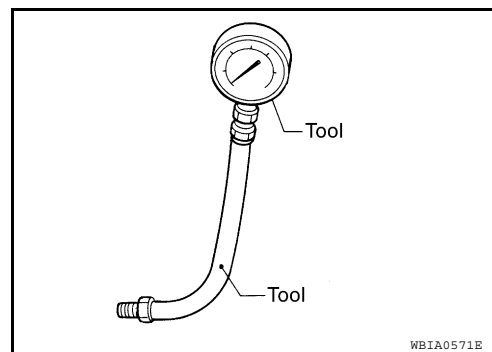
- **Be careful not to burn yourself, as engine oil may be hot.**
- **For M/T models, put the gearshift lever in the Neutral "N" position. For CVT models, put the CVT shift selector in the Park "P" position.**

1. Check the oil level.
2. Remove engine under cover. Refer to [EXT-14, "Removal and Installation"](#) (Coupe models) or [EXT-36, "Removal and Installation"](#) (Sedan models).
3. Disconnect oil pressure switch harness connector at the oil pressure switch. Remove oil pressure switch and install Tools.

CAUTION:

Do not drop or shock oil pressure switch.

Tool numbers : ST25051001 (J-25695-1)
: ST25052000 (J-25695-2)



4. Start the engine and warm it up to normal operating temperature.
5. Check oil pressure with engine running under no-load, using Tool. Refer to [LU-34, "Oil Pressure"](#). **If difference is extreme, check oil passage and oil pump for oil leaks.**
6. After the inspections, install the oil pressure switch as follows:
 - a. Remove the old sealant adhering to oil pressure switch and engine.
 - b. Apply thread sealant and tighten the oil pressure switch to specification. **Use Genuine High Performance Thread Sealant, or equivalent. Refer to [GI-15, "Recommended Chemical Products and Sealants"](#).**

ENGINE MAINTENANCE (VQ35DE)

< ON-VEHICLE MAINTENANCE >

Oil pressure switch : 14.7 N-m (1.5 kg-m, 11 ft-lb)

- c. After warming up engine, make sure there are no leaks of engine oil with engine running.

ENGINE OIL : Changing Engine Oil

INFOID:000000005789657

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. Position the vehicle so it is level on the hoist.
 2. Warm up the engine and check for oil leaks from the engine.
 3. Stop engine and wait for 10 minutes.
 4. Remove the oil pan drain plug and oil filler cap.
 5. Drain the engine oil.
 6. Install the oil pan drain plug with a new washer and refill the engine with new engine oil.

Oil specification and viscosity : Refer to [MA-15, "FOR USA AND CANADA : Engine Oil Recommendation"](#).

Oil pan drain plug : 34.3 N-m (3.5 kg-m, 25 ft-lb)

CAUTION:

- Be sure to clean the oil pan drain plug and install with a new washer.
 - 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.
7. Warm up the engine and check around the oil pan drain plug and oil filter for oil leaks.
 8. Stop engine and wait for 10 minutes.
 9. Check the engine oil level using the dipstick.

CAUTION:

Do not overfill the engine with engine oil.

OIL FILTER

OIL FILTER : Removal and Installation

INFOID:000000005789659

REMOVAL

1. Drain engine oil. Refer to [MA-33, "ENGINE OIL : Changing Engine Oil"](#).
2. Remove the RH fender protector side cover. Refer to [EXT-20, "Removal and Installation"](#) (Coupe models) or [EXT-42, "Removal and Installation"](#) (Sedan models).
3. Remove the oil filter using Tool (A) as shown.

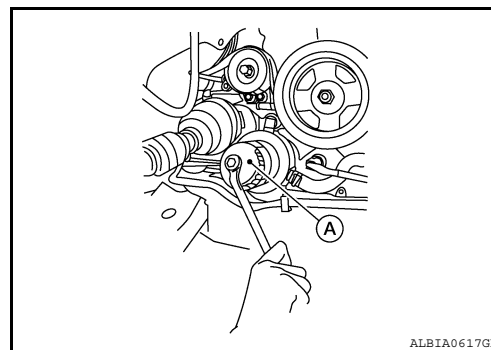
Tool number : KV10115801 (J-38956)

WARNING:

- Be careful not to get burned, the engine and engine oil may be hot.

CAUTION:

- 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.

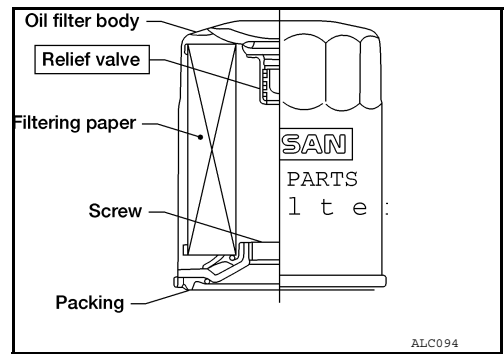


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ENGINE MAINTENANCE (VQ35DE)

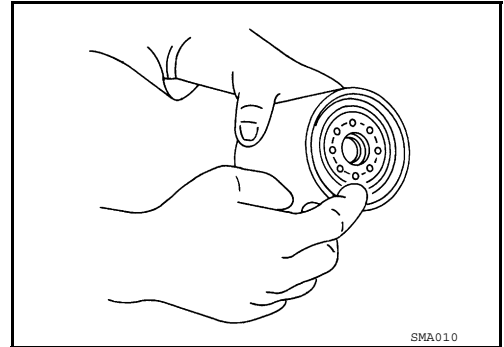
< ON-VEHICLE MAINTENANCE >

- The oil filter has a built in pressure relief valve. Use a genuine NISSAN oil filter or equivalent



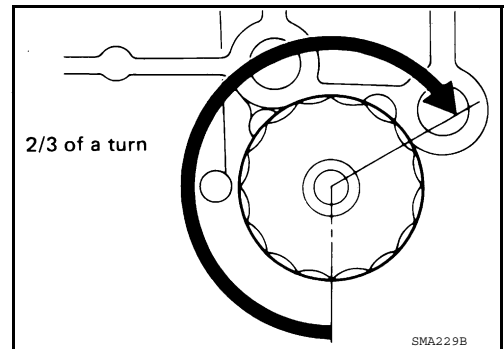
INSTALLATION

1. Remove foreign materials adhering to the oil filter installation surface.
2. Apply clean 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 below.

Oil filter : 18.0 N·m (1.8 kg·m, 13 ft·lb)



4. Refill engine with new engine oil. Refer to [MA-33, "ENGINE OIL : Changing Engine Oil"](#).
5. After warming up the engine, check for any engine oil leaks.
6. Install the RH fender protector side cover. Refer to [EXT-20, "Removal and Installation"](#) (Coupe models) or [EXT-42, "Removal and Installation"](#) (Sedan models).

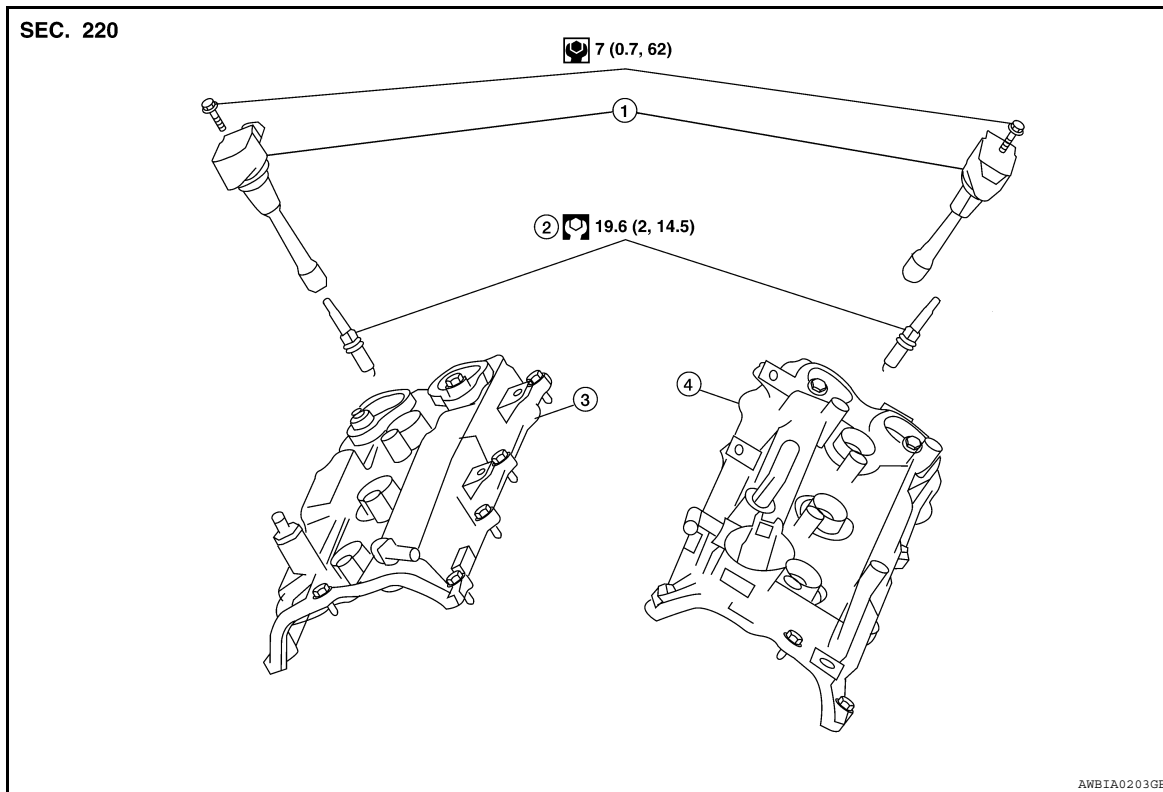
SPARK PLUG

ENGINE MAINTENANCE (VQ35DE)

< ON-VEHICLE MAINTENANCE >

SPARK PLUG : Removal and Installation

INFOID:000000005789660



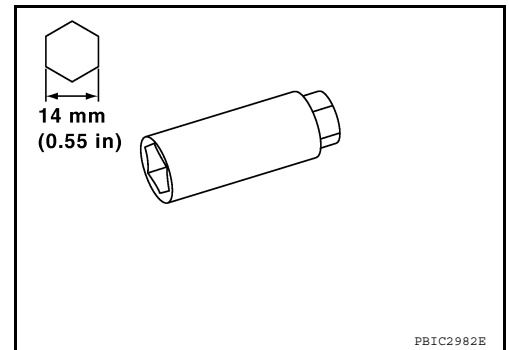
- 1. Ignition coil
- 4. Rocker cover LH

- 2. Spark plug

- 3. Rocker cover RH

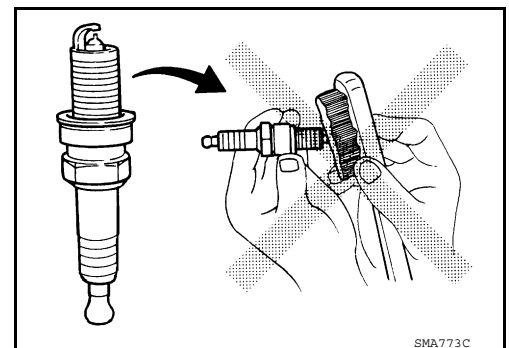
REMOVAL

1. Remove the ignition coil. Refer to [EM-150. "Removal and Installation LH"](#) and [EM-150. "Removal and Installation RH"](#).
2. Remove the spark plug with a suitable spark plug wrench.



INSPECTION AFTER REMOVAL

- Do not use a wire brush for cleaning the spark plugs. Replace as necessary.



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ENGINE MAINTENANCE (VQ35DE)

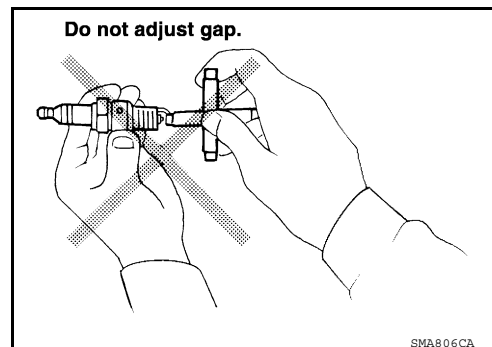
< ON-VEHICLE MAINTENANCE >

- If plug is covered with carbon, a 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. If the gap is out of specification, replace the spark plug.



INSTALLATION

Installation is in the reverse order of removal.

Standard type*	DENSO
	FXE22HR11
Gap (nominal)	1.1 mm (0.043 in)

*: Always check with the Parts Department for the latest parts information

EVAP VAPOR LINES

EVAP VAPOR LINES : Inspection

INFOID:000000005789661

CAUTION:

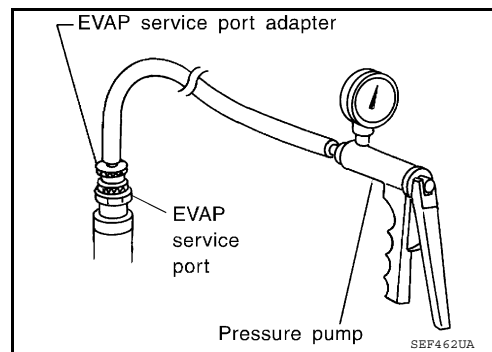
- **Never use compressed air or a high pressure pump.**
- **Never exceed 4.12 kPa (0.042 kg/cm², 0.6 psi) of pressure in EVAP system.**

NOTE:

- Do not start engine.
- Improper installation of EVAP service port adapter (commercial service tool) to the EVAP service port may cause a leakage.

④ WITH CONSULT-III

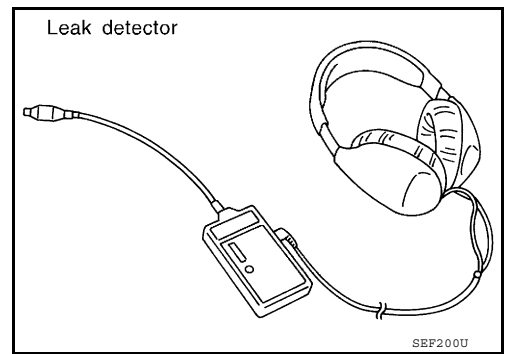
1. To locate the EVAP leakage, install EVAP service port adapter (commercial service tool) and pressure pump to EVAP service port.
2. Turn ignition switch ON.
3. Select the "EVAP SYSTEM CLOSE" of "WORK SUPPORT MODE" with CONSULT-III.
4. Touch "START". A bar graph (Pressure indicating display) will appear on the screen.
5. Apply positive pressure to the EVAP system until the pressure indicator reaches the middle of the bar graph.
6. Remove EVAP service port adapter (commercial service tool) and hose with pressure pump.



ENGINE MAINTENANCE (VQ35DE)

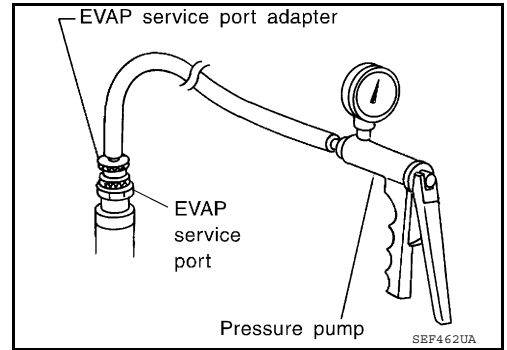
< ON-VEHICLE MAINTENANCE >

7. Locate the leakage using a leakage detector (commercial service tool). Refer to [EC-1131, "System Diagram"](#).

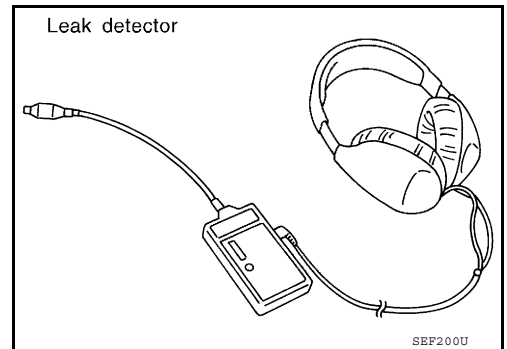


⊗ WITHOUT CONSULT-III

1. To locate the EVAP leakage, install EVAP service port adapter (commercial service tool) and pressure pump to EVAP service port.
2. Apply battery voltage between the terminals of EVAP canister vent control valve to make a closed EVAP system.
3. To locate the leakage, deliver positive pressure to the EVAP system until pressure gauge points reach 1.38 to 2.76 kPa (0.014 to 0.028 kg/cm², 0.2 to 0.4 psi).
4. Remove EVAP service port adapter (commercial service tool) and hose with pressure pump.



5. Locate the leakage using a leakage detector (commercial service tool). Refer to [EC-1131, "System Diagram"](#).



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CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

CHASSIS AND BODY MAINTENANCE

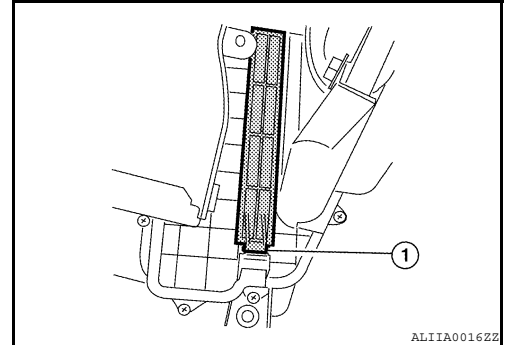
IN-CABIN MICROFILTER

IN-CABIN MICROFILTER : Removal and Installation

INFOID:000000005789638

REMOVAL

1. Remove the glove box assembly. Refer to [IP-11, "Removal and Installation"](#).
2. Remove the console side finisher RH. Refer to [IP-10, "Exploded View"](#).
3. Disengage the filter cover tab (1) to remove the filter cover.



4. Remove the in-cabin microfilter from the blower unit.

INSTALLATION

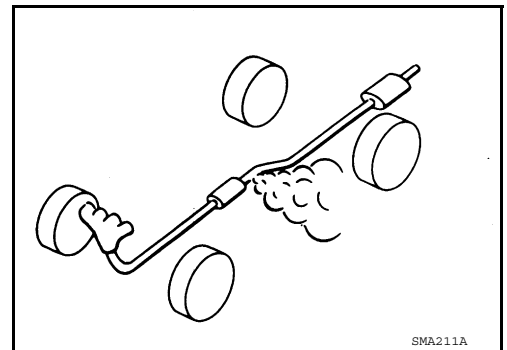
Installation is in the reverse order of removal.

EXHAUST SYSTEM

EXHAUST SYSTEM : Checking Exhaust System

INFOID:000000005789639

Check the exhaust pipes, muffler, and mounting components for incorrect attachment, leaks, cracks, damage, or deterioration.



CVT FLUID

CVT FLUID : RE0F09B

INFOID:000000005432049

CVT FLUID : Inspection

INFOID:000000005789641

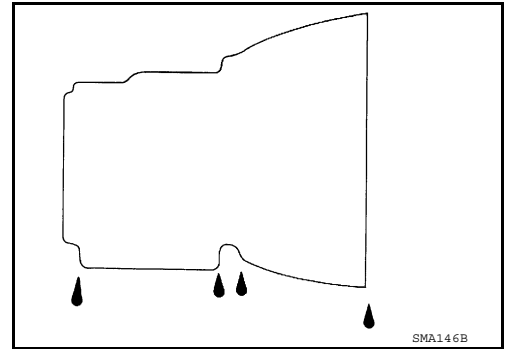
CHECKING CVT FLUID

Fluid level should be checked with the fluid warmed up to 50 to 80°C (122 to 176°F). The fluid level check procedure is as follows:

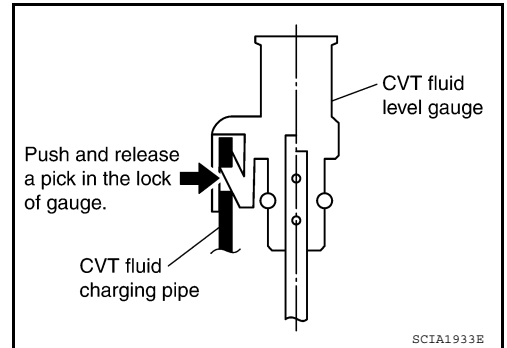
CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

1. Check for fluid leakage.
2. With the engine warmed up, drive the vehicle in an urban area. 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).
3. Park the vehicle on a level surface.
4. Apply parking brake firmly.
5. With engine at idle, while depressing brake pedal, move shift selector throughout the entire shift range.



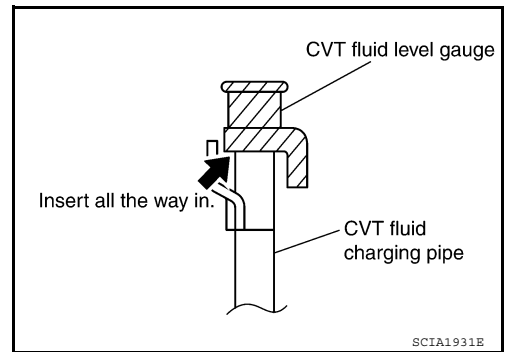
6. Pull out the CVT fluid level gauge from the CVT fluid charging pipe after pressing the tab on the CVT fluid level gauge to release the lock.



7. Wipe fluid off the CVT fluid level gauge. Insert the CVT fluid level gauge rotating 180° from the originally installed position, then securely push the CVT fluid level gauge until it meets the top end of the CVT fluid charging pipe.

CAUTION:

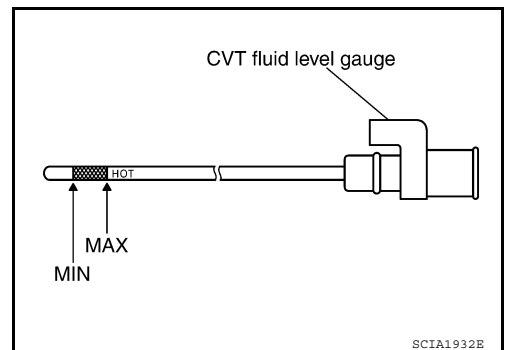
When wiping away the CVT fluid level gauge, always use lint-free paper, not a cloth rag.



8. Place the selector lever in "P" or "N" and make sure the fluid level is within the specified range.

CAUTION:

When reinstalling CVT fluid level gauge, insert it into the CVT fluid charging pipe and rotate it to the original installation position until it is securely locked.



CVT FLUID CONDITION

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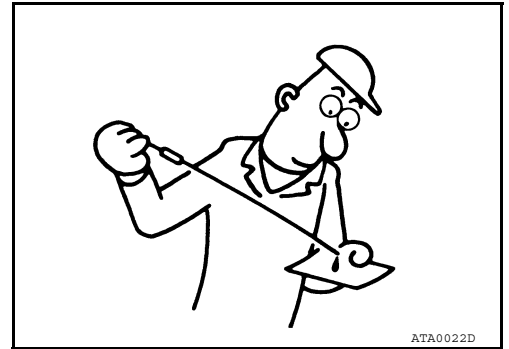
MA

CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Check CVT fluid condition.

- If CVT fluid is very dark or smells burned, check operation of CVT. Flush cooling system after repair of CVT.
- If CVT fluid contains frictional material (clutches, brakes, etc.), replace radiator and flush cooler line using cleaning solvent and compressed air after repair of CVT. Refer to [CO-37, "Removal and Installation"](#) and [TM-239, "Cleaning"](#).

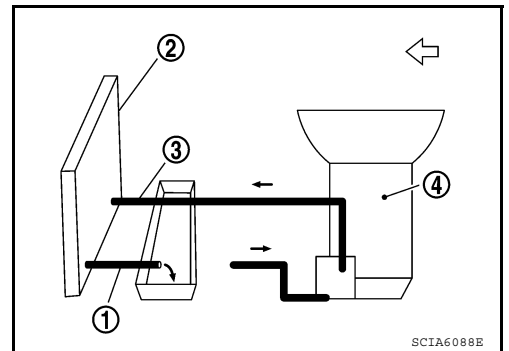


Fluid status	Conceivable cause	Required operation
Varnished (viscous varnish state)	Clutch, brake scorched	Replace the CVT fluid and check the CVT main unit and the vehicle for malfunctions (wire harnesses, cooler pipes, etc.)
Milky white or cloudy	Water in the fluid	Replace the CVT fluid and check for places where water is getting in.
Large amount of metal powder mixed in	Unusual wear of sliding parts within CVT	Replace the CVT fluid and check for improper operation of the CVT.

CVT FLUID : Changing

INFOID:000000005789642

1. Warm up CVT fluid by driving the vehicle for 10 minutes.
 - ↵: Vehicle front
 - Radiator (2)
 - CVT fluid cooler hose (inlet side) (3)
 - Transaxle assembly (4)
2. Drain CVT fluid from CVT fluid cooler hose (outlet side) (1) and refill with new CVT fluid at CVT fluid charging pipe with the engine running at idle speed.
3. Refill until new CVT fluid comes out from CVT fluid cooler hose (outlet side) (1).
About 30 to 50% extra fluid will be required for this procedure.



CVT fluid:

Refer to [TM-259, "General Specification"](#).

Fluid capacity:

Refer to [TM-259, "General Specification"](#).

CAUTION:

- Use only Genuine NISSAN CVT Fluid NS-2. Do not mix with other fluid.
 - Using CVT fluid other than Genuine NISSAN CVT Fluid NS-2 will deteriorate in driveability and CVT durability, and may damage the CVT, which is not covered by the warranty.
 - When filling CVT fluid, take care not to scatter heat generating parts such as exhaust.
 - Delete CVT fluid deterioration date with CONSULT-III after changing CVT fluid. Refer to [TM-122, "CONSULT-III Function \(TRANSMISSION\)"](#).
4. Check fluid level and condition. Refer to [MA-38, "CVT FLUID : Inspection"](#).

CVT FLUID : RE0F10A

INFOID:000000005432052

CVT FLUID : Inspection

INFOID:000000005789643

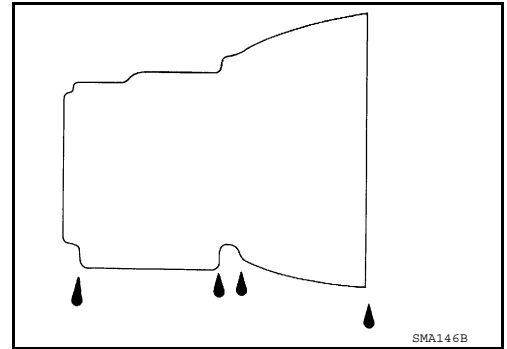
CHECKING CVT FLUID

Fluid level should be checked with the fluid warmed up to 50° to 80°C (122° to 176°F). The fluid level check procedure is as follows:

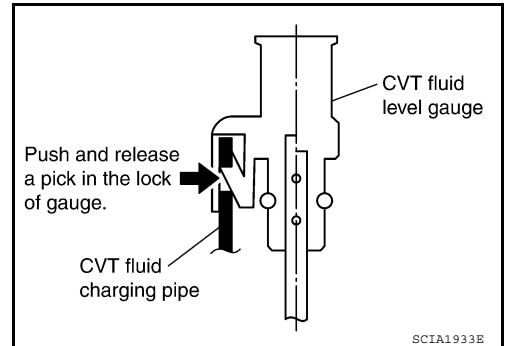
CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

1. Check for fluid leakage.
2. With the engine warmed up, drive the vehicle in an urban area. 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).
3. Park the vehicle on a level surface.
4. Apply parking brake firmly.
5. With engine at idle, while depressing brake pedal, move shift selector throughout the entire shift range.



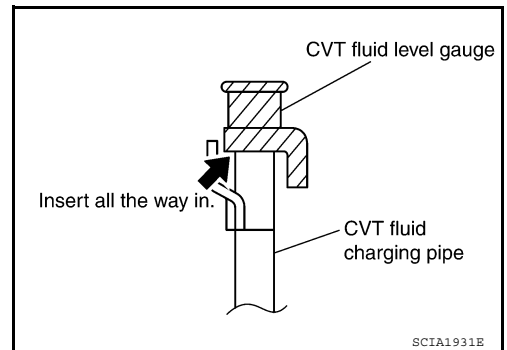
6. Pull out the CVT fluid level gauge from the CVT fluid charging pipe after pressing the tab on the CVT fluid level gauge to release the lock.



7. Wipe fluid off the CVT fluid level gauge. Insert the CVT fluid level gauge rotating 180° from the originally installed position, then securely push the CVT fluid level gauge until it meets the top end of the CVT fluid charging pipe.

CAUTION:

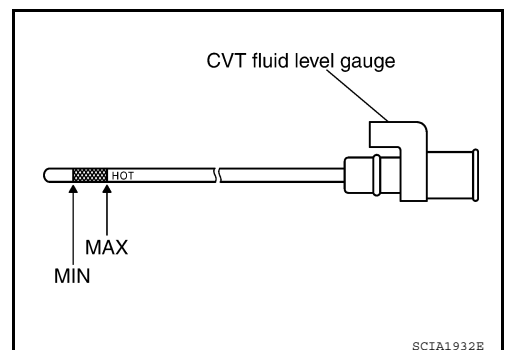
When wiping away the CVT fluid level gauge, always use lint-free paper, not a cloth rag.



8. Place the selector lever in "P" or "N" and make sure the fluid level is within the specified range.

CAUTION:

When reinstalling CVT fluid level gauge, insert it into the CVT fluid charging pipe and rotate it to the original installation position until it is securely locked.



CVT FLUID CONDITION

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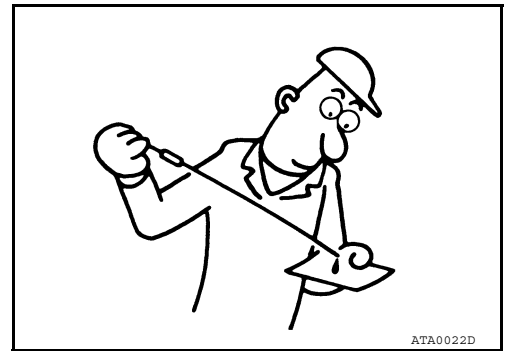
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CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Check CVT fluid condition.

- If CVT fluid is very dark or smells burned, check operation of CVT. Flush cooling system after repair of CVT.
- If CVT fluid contains frictional material (clutches, brakes, etc.), replace radiator and flush cooler line using cleaning solvent and compressed air after repair of CVT. Refer to [CO-15, "Removal and Installation"](#) and [TM-411, "Cleaning"](#).



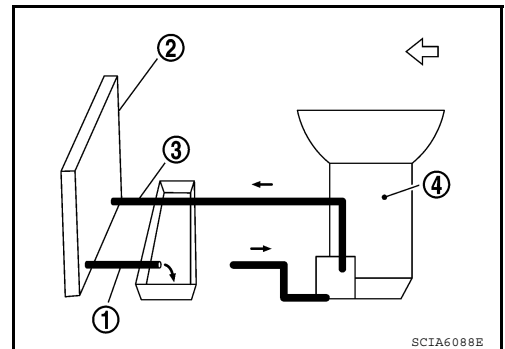
Fluid status	Conceivable cause	Required operation
Varnished (viscous varnish state)	CVT fluid become degraded due to high temperatures.	Replace the CVT fluid and check the CVT main unit and the vehicle for malfunctions (wire harnesses, cooler pipes, etc.)
Milky white or cloudy	Water in the fluid	Replace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

CVT FLUID : Changing CVT Fluid

INFOID:000000005789644

1. Warm up CVT fluid by driving the vehicle for 10 minutes.
 - ↵: Vehicle front
 - Radiator (2)
 - CVT fluid cooler hose [inlet side (3)]
 - Transaxle assembly (4)
2. Drain CVT fluid from CVT fluid cooler hose [outlet side (1)] and refill with new specified NISSAN CVT fluid in the CVT fluid charging pipe with the engine running at idle speed.
3. Refill until new CVT fluid comes out from CVT fluid cooler hose [outlet side (1)].

NOTE:
About 30 to 50% extra fluid will be required for this procedure.
4. Check fluid level and condition. Refer to [MA-40, "CVT FLUID : Inspection"](#).



CVT fluid : Refer to [TM-444, "General Specification"](#)

Fluid capacity : Refer to [TM-444, "General Specification"](#)

CAUTION:

- Use only Genuine NISSAN CVT Fluid NS-2. Never mix with other fluid.
- Using CVT fluid other than Genuine NISSAN CVT Fluid NS-2 will deteriorate in driveability and CVT durability, and may damage the CVT, which is not covered by the warranty.
- When filling CVT fluid, take care not to scatter heat generating parts such as exhaust.
- Sufficiently shake the container of CVT fluid before using.
- Delete CVT fluid deterioration date with CONSULT-III after changing CVT fluid. Refer to TM-34, "CONSULT-III Function (TRANSMISSION)".

M/T OIL

M/T OIL : Draining

INFOID:000000005789645

1. Start engine and let it run to warm up transaxle oil.
2. Stop engine and remove the drain plug to drain the oil.
3. Install the drain plug with a new gasket to the transaxle case. Tighten the drain plug to the specified torque. Refer to [TM-29, "Exploded View"](#).

CAUTION:

Do not reuse gasket.

CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

M/T OIL : Refilling

INFOID:000000005789646

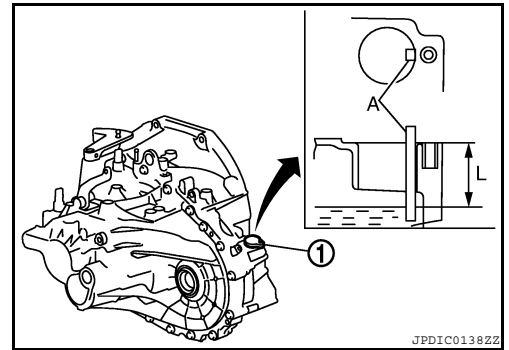
1. Remove the filler plug (1) and fill transaxle with new oil.

Oil grade : Refer to [MA-15, "FOR USA AND CANADA : Fluids and Lubricants"](#).

2. After refilling oil, measure oil level to check if it is within the specification using suitable gauge (A) as shown.

CAUTION:

- Do not start engine while checking oil level.
- Insert the suitable gauge straight and against the wall of the filler plug hole, then measure the gauge from the top of the filler plug hole to the oil level as shown.



Oil level (L) : Refer to [TM-83, "General Specifications"](#).

3. Install the filler plug with a new O-ring to the clutch housing.

CAUTION:

Do not reuse O-ring.

4. Tighten filler plug bolt to the specified torque. Refer to [TM-29, "Exploded View"](#).

M/T OIL : Inspection

INFOID:000000005789647

LEAKAGE

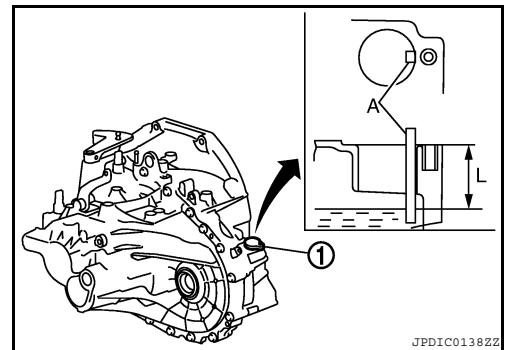
- Make sure that oil is not leaking from transaxle or around it.

LEVEL

1. Remove the filler plug (1).
2. Measure oil level to check if it is within the specification using a suitable gauge (A) as shown.

CAUTION:

- Do not start engine while checking oil level.
- Insert the suitable gauge straight and against the wall of the filler plug hole, then measure the gauge from the top of the filler plug hole to the oil level as shown.



Oil level (L) : Refer to [TM-83, "General Specifications"](#).

3. Install the filler plug with a new O-ring to the clutch housing.

CAUTION:

Do not reuse O-ring.

4. Tighten the filler plug bolt to the specified torque. Refer to [TM-29, "Exploded View"](#).

WHEELS

WHEELS : Inspection

INFOID:000000005789648

ALUMINUM WHEEL

1. Check tires for wear and improper inflation.
2. Check wheels for deformation, cracks and other damage. If deformed, remove wheel and check wheel runout.
 - a. Remove tire from aluminum wheel and mount on a tire balance machine.

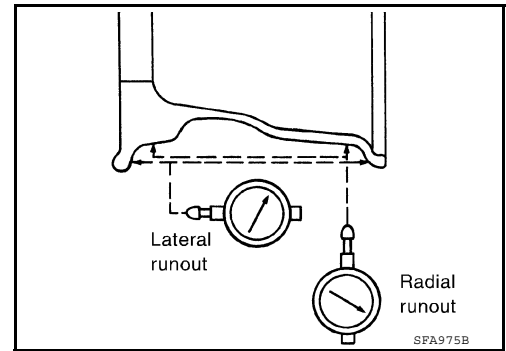
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CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

- b. Set dial indicator as shown in the figure.

Wheel runout (Dial indicator value):
Refer to [WT-69](#).



STEEL WHEEL

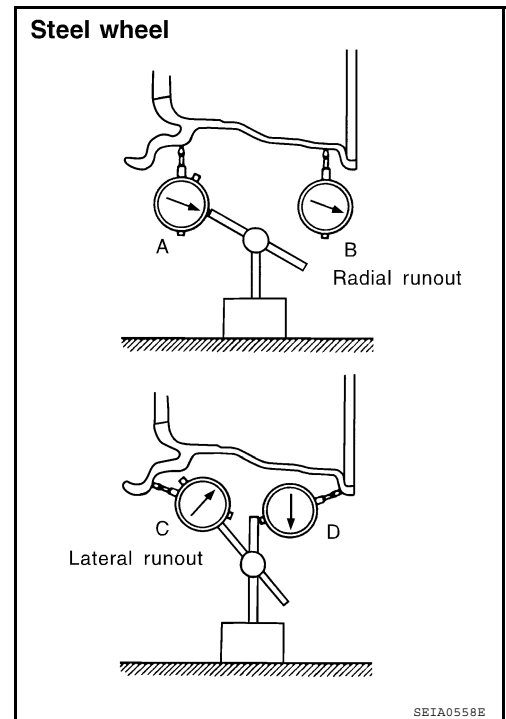
1. Check tires for wear and improper inflation.
2. Check wheels for deformation, cracks and other damage. If deformed, remove wheel and check wheel runout.
 - a. Remove tire from steel wheel and mount on a tire balance machine.
 - b. Set two dial indicators as shown in the figure.
 - c. Set each dial indicator to 0.
 - d. Rotate wheel and check dial indicators at several points around the circumference of the wheel.
 - e. Calculate runout at each point as shown below.

Radial runout = (A+B)/2

Lateral runout = (C+D)/2

- f. Select maximum positive runout value and the maximum negative value.
Add the two values to determine total runout.
In case a positive or negative value is not available, use the maximum value (negative or positive) for total runout.
If the total runout value exceeds the limit, replace steel wheel.

Wheel runout : Refer to [WT-69](#).



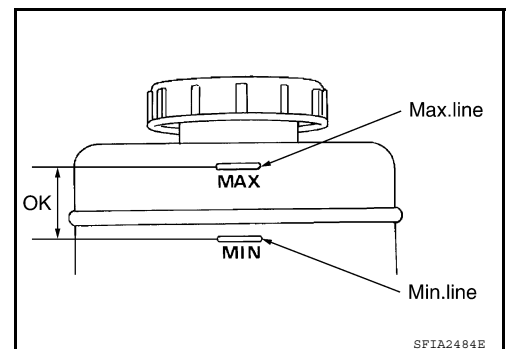
BRAKE FLUID LEVEL AND LEAKS

BRAKE FLUID LEVEL AND LEAKS : Inspection

INFOID:000000005789649

BRAKE FLUID LEVEL

- Make sure that a brake fluid level in reservoir tank is within the specified range between the MAX and MIN lines.
- Visually check around reservoir tank for fluid leaks.
- If the level is excessively low, check brake system for leaks.
- Release parking brake pedal and see if brake warning lamp goes off. If not, check brake system for fluid leaks.



BRAKE LINE

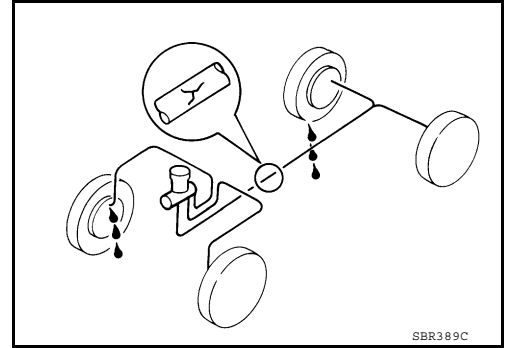
CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

CAUTION:

If leakage occurs around joints, retighten or, if necessary, replace damaged parts.

1. Check brake lines (tubes and hoses) for cracks, deterioration or other damage. Replace any damaged parts.
2. Check for oil leaks by fully depressing brake pedal while the engine is running.

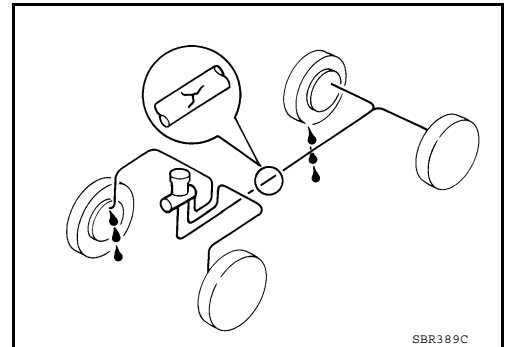


BRAKE LINES AND CABLES

BRAKE LINES AND CABLES : Inspection

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

INFOID:000000005432060



BRAKE FLUID

BRAKE FLUID : Drain and Refill

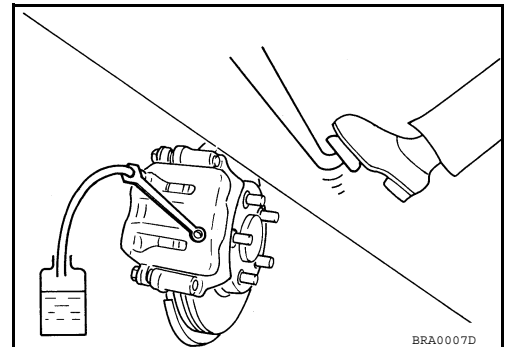
INFOID:000000005789650

DRAINING

CAUTION:

- Be careful not to splash brake fluid on painted areas; it may cause paint damage. If brake fluid is splashed on painted areas, wash it away with water immediately.
- Before working, disconnect connectors of ABS actuator and electric unit (control unit) or battery cable from the negative terminal.

1. Connect a vinyl tube to bleed valve.
2. Depress brake pedal, loosen bleed valve, and gradually remove brake fluid.



REFILLING

CAUTION:

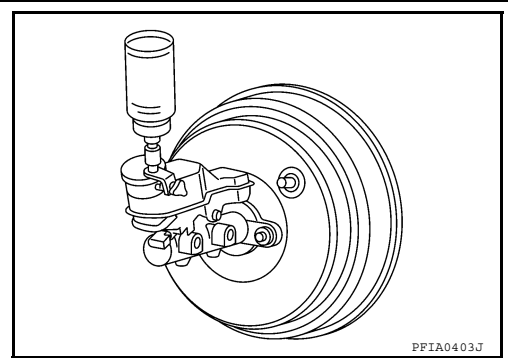
- Refill with new brake fluid "DOT 3".
- Never reuse drained brake fluid.
- Before working, disconnect connectors of ABS actuator and electric unit (control unit) or battery cable from the negative terminal.

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CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

1. Make sure there is no foreign material in the reservoir tank, and refill with new brake fluid.
2. Loosen bleed valve, depress brake pedal slowly to full stroke and then release it. Repeat the procedure every 2 or 3 seconds until the new brake fluid comes out, then close the bleed valve while depressing the pedal. Repeat the same work for each wheel.
3. Bleed air. Refer to [BR-16, "Bleeding Brake System"](#).



DISC BRAKE

DISC BRAKE : Front Brake Pad

INFOID:000000005432063

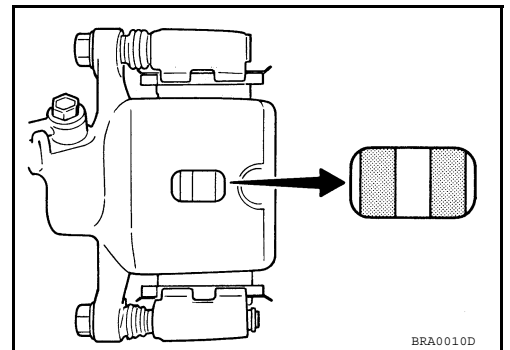
DISC BRAKE : Inspection

INFOID:000000005432064

PAD WEAR

Check pad thickness from an inspection hole on cylinder body. Check using a scale if necessary.

- Standard thickness** : Refer to [BR-45, "Front Disc Brake"](#).
- Wear limit thickness** : Refer to [BR-45, "Front Disc Brake"](#).



DISC BRAKE : Front Brake Rotor

INFOID:000000005432065

DISC BRAKE : Inspection

INFOID:000000005432066

VISUAL

Check surface of disc rotor for uneven wear, cracks, and serious damage. Replace if necessary.

RUNOUT

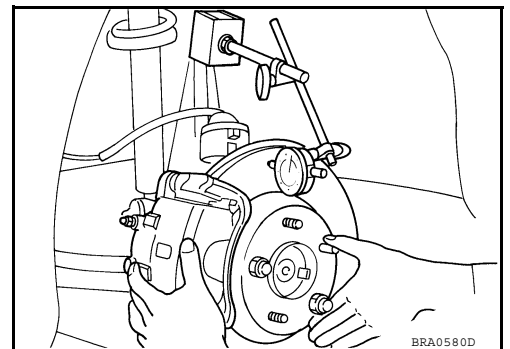
1. Attach the disc rotor to wheel hub using wheel nuts at two or more positions.
2. Inspect runout using a dial gauge. Set the dial gauge to measure at 10 mm (0.39 in) inside the disc edge.

Maximum runout : Refer to [BR-45, "Front Disc Brake"](#).
(with it attached to the vehicle)

NOTE:

Before measuring, make sure that wheel bearing axial end play is within the specification. Refer to [FAX-5, "Inspection"](#).

3. When runout exceeds limit value, displace mounting positions of disc rotor by one hole. And then find a position of the minimum value for runout.
4. If runout is outside the specified value after performing the above operation, turn the disc rotor using Tool.



Tool number : 38-PFM90.5

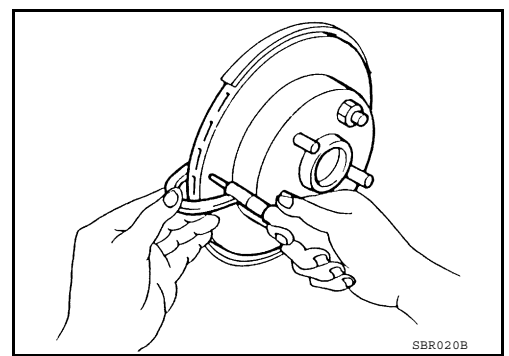
THICKNESS

CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Check thickness of the disc rotor using a micrometer. Replace disc rotor if thickness is under the wear limit.

- Standard thickness** : Refer to [BR-45, "Front Disc Brake"](#).
- Wear limit thickness** : Refer to [BR-45, "Front Disc Brake"](#).
- Thickness variation (Measured at 8 positions)** : Refer to [BR-45, "Front Disc Brake"](#).



DISC BRAKE : Rear Brake Pad

INFOID:000000005432067

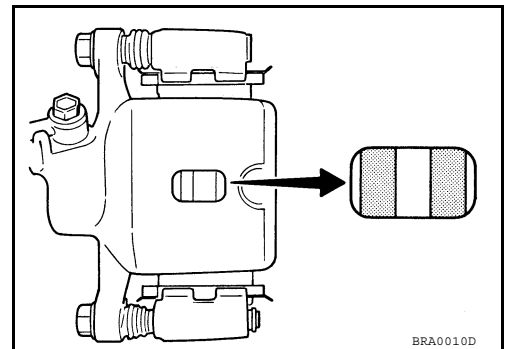
DISC BRAKE : Inspection

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PAD WEAR

Check pad thickness from an inspection hole on cylinder body. Check using a scale if necessary.

- Standard thickness** : Refer to [BR-45, "Rear Disc Brake"](#).
- Wear limit thickness** : Refer to [BR-45, "Rear Disc Brake"](#).



DISC BRAKE : Rear Brake Rotor

INFOID:000000005432069

DISC BRAKE : Inspection

INFOID:000000005432070

VISUAL

Check surface of disc rotor for uneven wear, cracks, and serious damage. Replace if necessary.

RUNOUT

1. Attach the disc rotor to wheel hub using wheel nuts at two or more positions.
2. Inspect runout using dial gauge. Set the dial gauge to measure at 10 mm (0.39 in) inside disc edge.

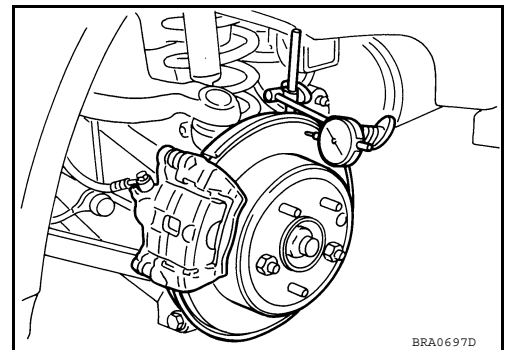
Maximum runout : Refer to [BR-45, "Rear Disc Brake"](#).
(with it attached to the vehicle)

NOTE:

Before measuring, make sure that wheel bearing axial end play is within the specification. Refer to [FAX-5, "Inspection"](#).

3. When runout exceeds limit value, displace mounting positions of disc rotor by one hole. And then find a position of the minimum value for runout.
4. If runout is outside the specified value after performing the above operation, turn the disc rotor using Tool.

Tool number : 38-PFM90.5



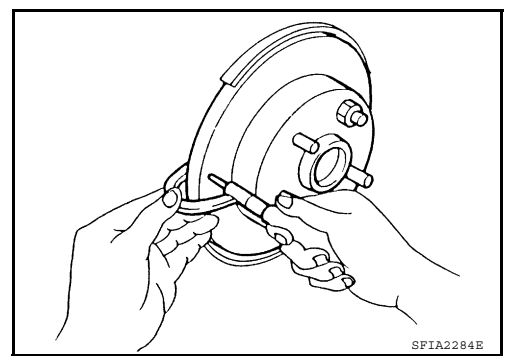
THICKNESS

CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Check the thickness of the disc rotor using a micrometer. Replace disc rotor if the thickness is under the wear limit.

- Standard thickness** : Refer to [BR-45, "Rear Disc Brake"](#).
- Wear limit thickness** : Refer to [BR-45, "Rear Disc Brake"](#).
- Thickness variation (measured at 8 positions)** : Refer to [BR-45, "Rear Disc Brake"](#).



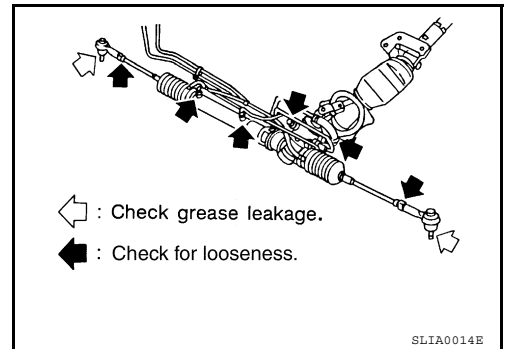
STEERING GEAR AND LINKAGE

STEERING GEAR AND LINKAGE : Inspection

INFOID:000000005432071

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.

POWER STEERING FLUID AND LINES

POWER STEERING FLUID AND LINES : Inspection

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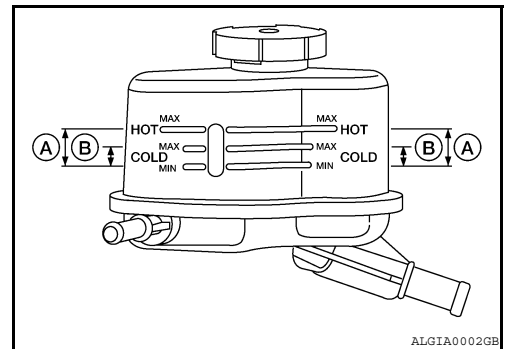
FLUID LEVEL

- Check fluid level with engine stopped.
- Make sure that fluid level is between MIN and MAX.
- Fluid levels at HOT (A) and COLD (B) are different. Do not confuse them.

- HOT (A)** : Fluid temperature 50 - 80 °C (122 - 176°F)
- COLD (B)** : Fluid temperature 0 - 30°C (32 - 86°F)

CAUTION:

- The fluid level should not exceed the MAX line. Excessive fluid will cause fluid leakage from the cap.
- Do not reuse drained power steering fluid.
- Recommended fluid is Genuine Nissan PSF or equivalent.



FLUID LEAKAGE

CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

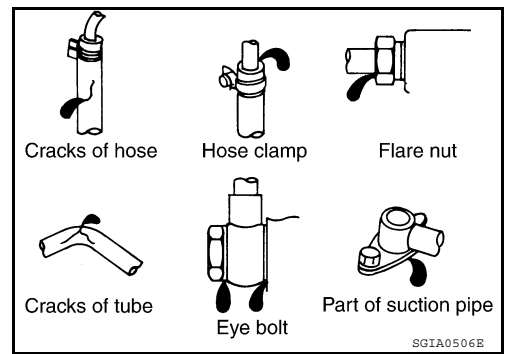
Check hydraulic connections for fluid leakage, cracks, damage, looseness, or wear.

1. Run engine until the fluid temperature reaches 50 to 80° C (122 to 176°F) in reservoir tank, and keep engine speed idle.
2. Turn steering wheel several times from full left stop to full right stop.
3. Hold steering wheel at each lock position for five seconds and carefully, check for fluid leakage.

CAUTION:

Do not hold the steering wheel in a locked position for more than 10 seconds. (There is the possibility that oil pump may be damaged.)

4. If fluid leakage at connections is noticed, then loosen flare nut and then retighten. Do not overtighten connector as this can damage O-ring, washer and connector.
5. If fluid leakage from oil pump is noticed, check oil pump. Refer to [ST-11](#).
6. Check steering gear boots for accumulation of fluid indicating from steering gear.



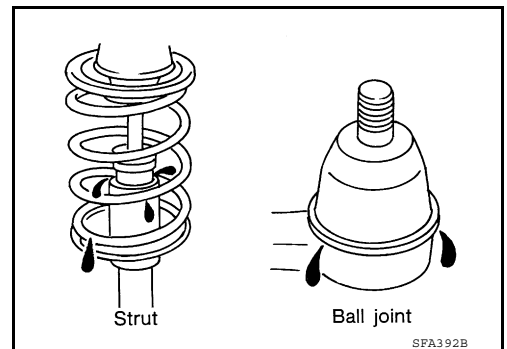
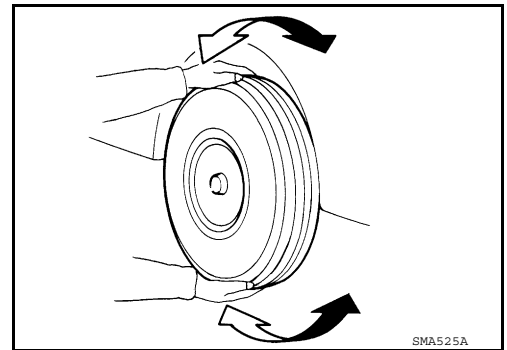
AXLE AND SUSPENSION PARTS

AXLE AND SUSPENSION PARTS : Inspection

INFOID:000000005432073

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.



DRIVE SHAFT

DRIVE SHAFT : Inspection

INFOID:000000005789651

- Check drive shaft mounting point and joint for looseness and other damage.
- Check boot for cracks and other damage.

CAUTION:

Replace entire drive shaft assembly when noise or vibration occur from drive shaft.

LOCKS, HINGES AND HOOD LATCH

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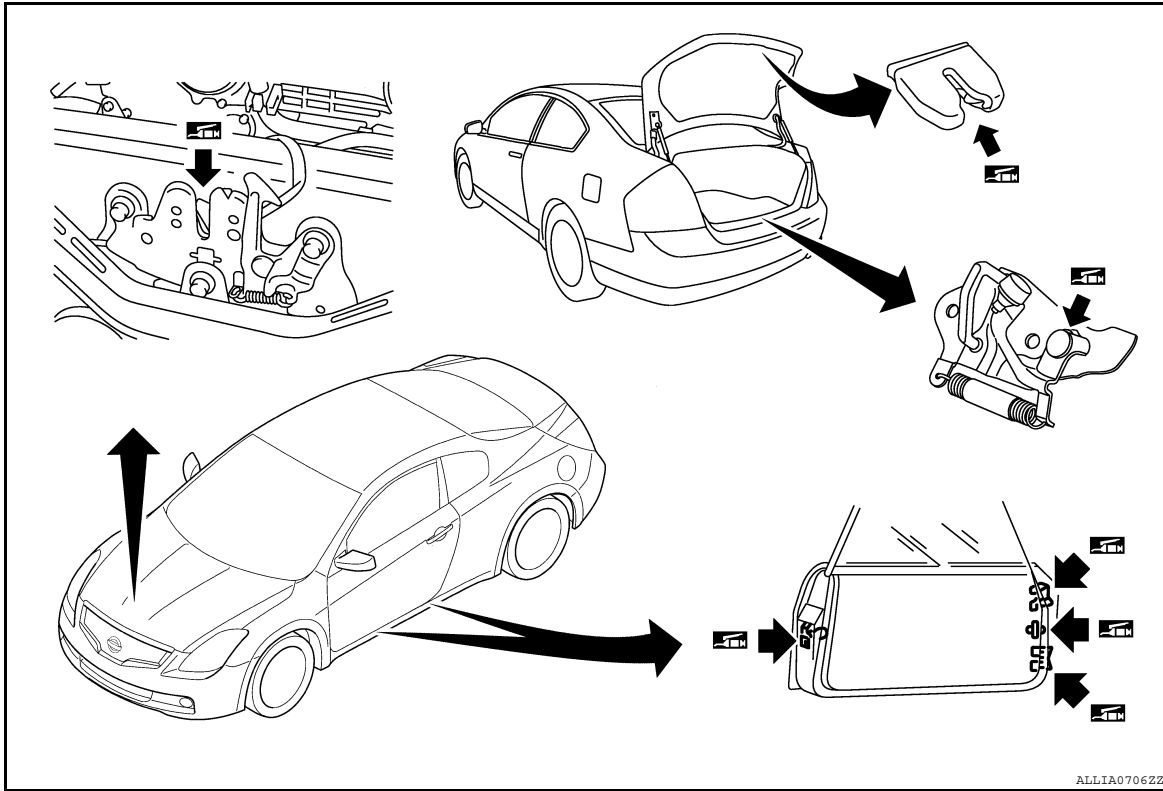
MA

CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

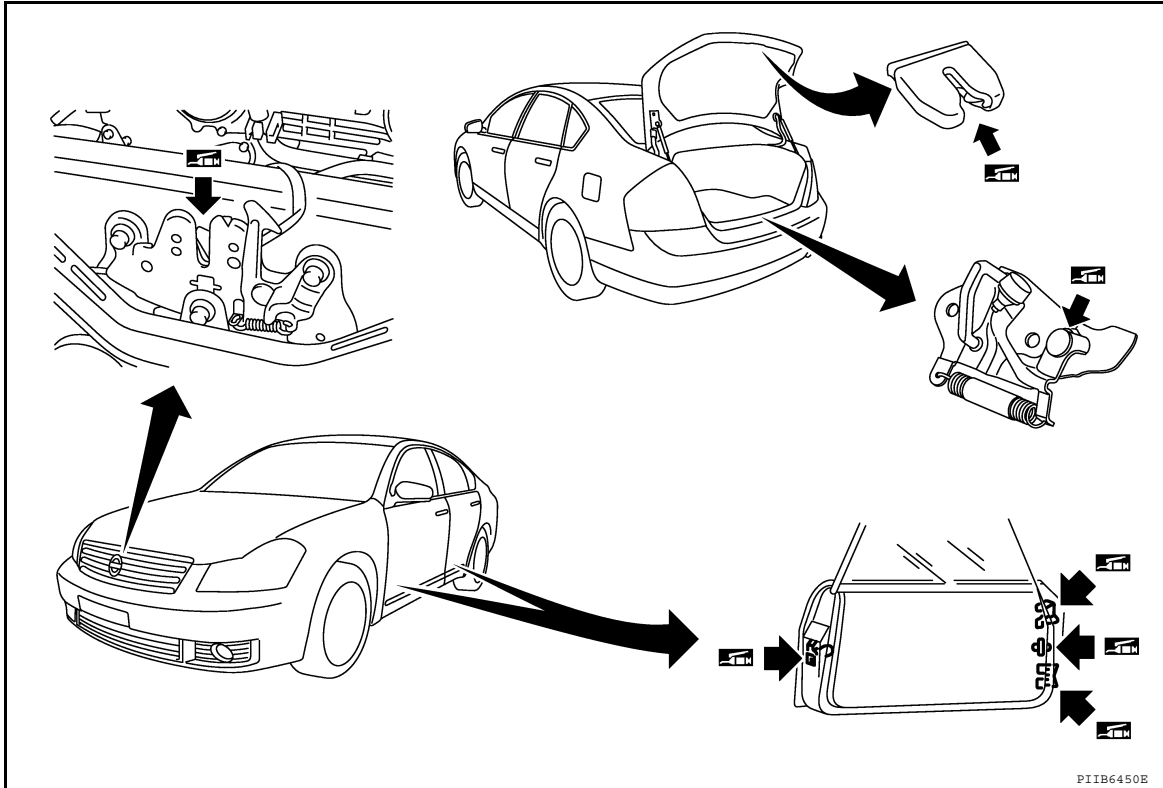
LOCKS, HINGES AND HOOD LATCH : Lubricating - Coupe

INFOID:000000005432075



LOCKS, HINGES AND HOOD LATCH : Lubricating - Sedan

INFOID:000000005432076



SEAT BELT, BUCKLES, RETRACTORS, ANCHORS AND ADJUSTERS

CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

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

INFOID:000000005789652

AFTER A COLLISION

WARNING:

Inspect all seat belt assemblies including retractors and attaching hardware after any collision. NISSAN/INFINITI recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Failure to do so could result in serious personal injury in an accident. Seat belt assemblies not in use during a collision should also be replaced if either damage or improper operation is noted. Seat belt pre-tensioned should be replaced even if the seat belts are not in use during a frontal collision in which the air bags are deployed.

Replace any seat belt assembly (including anchor bolts) if:

- The seat belt was in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).
- The seat belt was damaged in an accident. (i.e. torn webbing, bent retractor or guide, etc.)
- The seat belt attaching point was damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair as necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.
- The seat belt pre-tensioner should be replaced even if the seat belts are not in use during the collision in which the air bags are deployed.

PRELIMINARY CHECKS

1. Check the seat belt warning lamp/chime for proper operation as follows:
 - a. Switch ignition ON. The seat belt warning lamp should illuminate. Also, the seat belt warning chime should sound for about six seconds.
 - b. Fasten driver's seat belt. The seat belt warning lamp should go out and the chime (if sounding) should stop.
2. If the air bag warning lamp is blinking, conduct self-diagnosis using CONSULT-III, and air bag warning lamp. Refer to [SRC-12. "SRS Operation Check"](#).
3. Check that the seat belt retractor, seat belt anchor and buckle bolts are securely attached.
4. Check the shoulder seat belt guide and shoulder belt height adjuster for front seats. Make sure guide swivels freely and that webbing lays flat and does not bind in guide. Make sure height adjuster operates properly and holds securely.
5. Check retractor operation:
 - a. Fully extend the seat belt webbing and check for twists, tears or other damage.
 - b. Allow the seat belt to retract. Make sure that webbing returns smoothly and completely into the retractor. If the seat belt does not return smoothly, wipe the inside of the loops with a clean paper cloth. Dirt built up in the loops of the upper anchors can cause the seat belts to retract slowly.
 - c. Fasten the seat belt. Check that the seat belt returns smoothly and completely to the retractor. If the webbing does not return smoothly, the cause may be an accumulation of dust or dirt. Use the "SEAT BELT TAPE SET" and perform the following steps.

Inspect the front seat belt through-anchor

1. Pull the seat belt out to a length of 500 mm (19.69 in) or more.
 2. Use a clip or other device to hold the seat belt at the center pillar webbing opening.
 3. Pass a thin wire through the through-anchor webbing opening. Hold both ends of the wire and pull it taut while moving it up and down several times along the webbing opening surface to move matter stuck there.
 4. Any dirt that can not be removed with the wire can be removed by cleaning the opening with a clean cloth.
 5. Apply tape at the point where the webbing contacts the through-anchor webbing opening.

NOTE:
Apply the tape so that there is no looseness or wrinkling.
 6. Remove the clip holding the seat belt and check that the webbing returns smoothly.
6. Repeat steps above as necessary to check the other seat belts.

SEAT BELT RETRACTOR ON-VEHICLE CHECK

CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Emergency Locking Retractors (ELR) and Automatic Locking Retractors (ALR)

NOTE:

All seat belt retractors are of the Emergency Locking Retractors (ELR) type. In an emergency (sudden stop) the retractor will lock and prevent the webbing from extending any further. All 3-point type seat belt retractors except the driver's seat belt also have an Automatic Locking Retractors (ALR) mode. The ALR mode (also called child restraint mode) is used when installing child seats. The ALR mode is activated when the seat belt is fully extended. When the webbing is then retracted partially, the ALR mode automatically locks the seat belt in a specific position so the webbing cannot be extended any further. To cancel the ALR mode, allow the seat belt to fully wind back into the retractor.

Check the seat belt retractors using the following test(s) to determine if a retractor assembly is operating properly.

ELR Function Stationary Check

Grasp the shoulder webbing and pull forward quickly. The retractor should lock and prevent the belt from extending further.

ALR Function Stationary Check

1. Pull out entire length of seat belt from retractor until a click is heard.
2. Retract the webbing partially. A clicking noise should be heard as the webbing retracts indicating that the retractor is in the Automatic Locking Retractors (ALR) mode.
3. Grasp the seat belt and try to pull out the retractor. The webbing must lock and not extend any further. If NG, replace the retractor assembly.
4. Allow the entire length of the webbing to retract to cancel the automatic locking mode.

ELR Function Moving Check

WARNING:

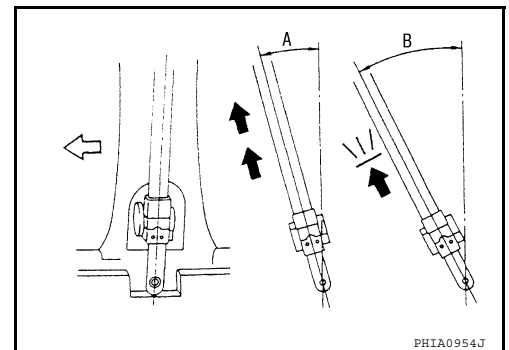
Perform the following test in a safe, open area clear of other vehicles and obstructions (for example, a large, empty parking lot). Road surface must be paved and dry. DO NOT perform the following test on wet or gravel roads or on public streets and highways. This could result in an accident and serious personal injury. The driver and passenger must be prepared to brace themselves in the event the retractor does not lock.

1. Fasten driver's seat belt. Buckle a passenger into the seat for the belt that is to be tested.
2. Proceed to the designated safe area.
3. Drive the vehicle at approximately 16 km/h (10 MPH). Notify any passengers of a pending sudden stop and the driver and passenger must be prepared to brace themselves in the event the retractor does not lock, apply brakes firmly and make a very hard stop.

During stop, seat belts should lock and not be extended. If the seat belt retractor assembly does not lock, perform the retractor off-vehicle check.

SEAT BELT RETRACTOR OFF-VEHICLE CHECK (PILLAR)

1. Remove the seat belt retractor.
 - Remove the front seat belt assembly, refer to [SB-7, "Removal and Installation"](#).
2. Slowly pull out webbing while tilting the retractor assembly forward from the mounted position without twisting the retractor assembly as shown in the illustration.
 - A** : The webbing can be pulled out in case the retractor is tilted 15° degree or less.
 - B** : The webbing can not be pulled out if the retractor is tilted 35° degrees or more.
 - A and B show tilting angles.
 - ↖ : Vehicle front.



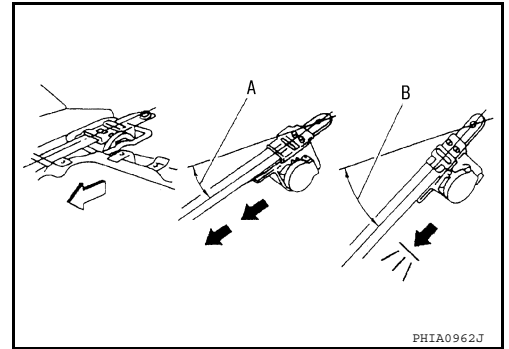
Replace the seat belt assembly if it does not operate within specifications.

SEAT BELT RETRACTOR OFF-VEHICLE CHECK (REAR PARCEL SHELF)

CHASSIS AND BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

1. Remove the seat belt retractor.
 - Remove the rear seat belt assembly, refer to [SB-11, "Removal and Installation"](#).
2. Slowly pull out webbing while tilting the retractor assembly forward from the mounted position without twisting the retractor assembly as shown in the illustration.
 - A** : The webbing can be pulled out in case the retractor is tilted 15° degree or less.
 - B** : The webbing can not be pulled out if the retractor is tilted 35° degrees or more.
 - A and B show tilting angles.
 - ← : Vehicle front.



Replace the seat belt assembly if it does not operate within specifications.

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