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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"

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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.

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

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NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

This vehicle is equipped with a push-button ignition switch and a steering lock unit.

If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

2. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.

PRECAUTIONS

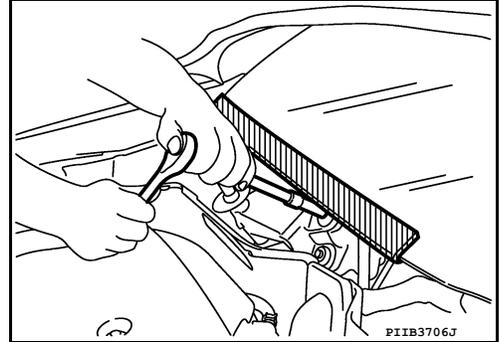
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5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT.

Procedures without Cowl Top Cover

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When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc.



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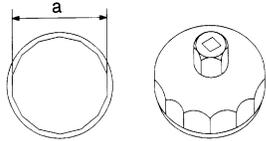
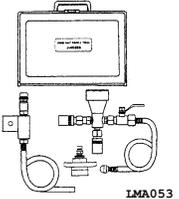
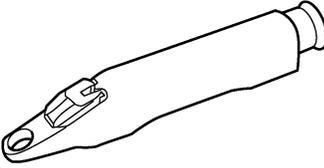
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Special Service Tool

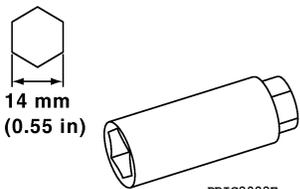
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

| Tool number (Kent-Moore No.) Tool name | Description |
|--|--|
| KV10115801 (J-38956) Oil filter wrench  S-NT375 | Removing and installing oil filter a: 64.3 mm (2.531 in) |
| KV991J0070 (J-45695) Coolant Refill Tool  LMA053 | Refilling engine cooling system |
| — (J-23688) Engine Coolant Refractometer  WBIA0539E | Checking concentration of ethylene glycol in engine coolant |

Commercial Service Tool

INFOID:000000007418685

| (Kent-Moore No.) Tool name | Description |
|--|-------------------------------------|
| (—) Spark plug wrench  PBIC2982E | Removing and installing spark plugs |
| (—) Power tool  PIIB1407E | Loosening nuts, screws and bolts |

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GENERAL MAINTENANCE

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GENERAL MAINTENANCE

Explanation General Maintenance

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

OUTSIDE THE VEHICLE

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

| Item | | Reference page |
|--|---|--|
| Lamps | Clean the headlamps on a regular basis. 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. | EXL-205 |
| Tires | Check the pressure with a gauge often and always prior to long distance trips. Adjust pressure in all tires, including the spare, to the pressure specified. Check carefully for damage, cuts or excessive wear. | WT-68 |
| 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 properly. 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 frequently for sufficient lubrication. | MA-41 (Coupe) MA-41 (Sedan) |
| Tire rotation | Tires should be rotated every 10,000 km (6,000 miles). | WT-68 |
| 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-67 |
| Windshield | Clean the windshield on a regular basis. Check the windshield at least every six months for cracks or other damage. Repair as necessary. | — |

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 |
|------------------------------------|---|-----------------------|
| 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. | — |
| Brake pedal | Check the pedal for smooth operation and make sure it has the proper distance under it when depressed fully. Check the brake booster function. Be sure to keep the floor mats away from the pedal. | BR-44 |
| 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-15 |
| Warning lamps and chimes | Make sure that all warning lamps and chimes are operating properly. | — |
| Windshield defogger | Check that the air comes out of the defogger outlets properly and in sufficient quantity when operating the heater or air conditioner. | — |
| Windshield wiper and washer | Check that the wipers and washer operate properly and that the wipers do not streak. | — |
| Steering wheel | Check that it has the specified play. Check for changes in the steering condition, such as excessive play, hard steering or strange noises. Free play: Less than 35 mm (1.38 in) | ST-10 |
| Seat belts | Check that all parts of the seat belt system (e.g. buckles, anchors, adjusters and retractors) operate properly and smoothly, and are installed securely. Check the belt webbing for cuts, fraying, wear or damage. | MA-42 |

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).

GENERAL MAINTENANCE

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| Item | | Reference page | |
|---|--|--|---|
| Windshield washer fluid | Check that there is adequate fluid in the reservoir tank. | — | A |
| Engine coolant level | Check the coolant level when the engine is cold. | MA-14 (QR25DE) MA-22 (VQ35DE) | B |
| Engine drive belts | Make sure that drive belts are not frayed, worn, cracked or oily. | MA-14 (QR25DE) MA-22 (VQ35DE) | C |
| Engine oil level | Check the level on the oil level gauge after parking the vehicle on a level spot and turning off the engine. | MA-18 (QR25DE) MA-26 (VQ35DE) | D |
| Brake and clutch fluid levels | Make sure that the brake and clutch fluid levels are between the "MAX" and "MIN" lines on the reservoir(s). | MA-35 | E |
| Battery | Check the fluid level in each cell. It should be between the "MAX" and "MIN" lines. Vehicles operated in high temperatures or under severe conditions require frequent checks of the battery fluid level. | — | F |
| Fluid leaks | Check under the vehicle for fuel, oil, water or other fluid leaks after the vehicle has been parked for a while. Water dripping from the air conditioner after use is normal. If you should notice any leaks or if gasoline fumes are evident, check for the cause and correct it immediately. | — | G |
| Power steering fluid level and lines | Check the level when the fluid is cold, with the engine off. Check the lines for proper attachment, leaks, cracks, etc.. | MA-38 | H |

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PERIODIC MAINTENANCE

Introduction of Periodic Maintenance

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The following tables show the normal maintenance schedule. Depending on 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 tables requires similar maintenance.

EMISSION CONTROL SYSTEM

Abbreviations: R = Replace. I = Inspect and correct or replace if necessary, C = Clean, E = Check and correct the engine coolant, .
[] = At the mileage intervals only,

| MAINTENANCE OPERATION | | MAINTENANCE INTERVAL | | | | | | | | | | | | | | | | Reference Section - Page or - Content Title | |
|---|-----------------------------------|----------------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|---|
| Perform either at number of miles, kilometers (miles) or months, whichever comes first. | km x 1,000 (Miles x 1,000) Months | 5 (3) | 10 (6) | 15 (9) | 20 (12) | 25 (15) | 30 (18) | 35 (21) | 40 (24) | 45 (27) | 50 (30) | 55 (33) | 60 (36) | 65 (39) | 70 (42) | 75 (45) | 80 (48) | | |
| Intake & exhaust valve clearance | NOTE (1) | | | | | | | | | | | | | | | | | I | EM-20 (QR25DE) EM-127 (VQ35DE) |
| Drive belts | NOTE (2) | | | | | | | | I | | | | | | | | | I | MA-14 (QR25DE) MA-22 (VQ35DE) |
| Engine oil (Use recommended oil) ★ | | | R | | R | | R | | R | | R | | R | | R | | R | MA-18 (QR25DE) MA-26 (VQ35DE) | |
| Engine oil filter (Use genuine NISSAN oil filter or equivalent) ★ | | | R | | R | | R | | R | | R | | R | | R | | R | MA-19 (QR25DE) MA-27 (VQ35DE) | |
| Engine coolant (use Genuine NISSAN Engine Coolant or equivalent in quality) | NOTE (3) | | | | | | | | | E | | | | | | | | R | MA-15 (QR25DE) MA-23 (VQ35DE) |
| Cooling system | | | | | I | | | | I | | | | | I | | | | I | MA-14 (QR25DE) MA-22 (VQ35DE) |
| Fuel lines | | | | | | | | | I | | | | | | | | | I | MA-17 (QR25DE) MA-25 (VQ35DE) |

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| MAINTENANCE OPERATION | MAINTENANCE INTERVAL | | | | | | | | | | | | | | | | | Reference Section - Page or - Content Title | |
|---|---|--|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|--|
| Perform either at number of miles, kilometers (miles) or months, whichever comes first. | km x 1,000 (Miles x 1,000) Months | 5 (3) 3 | 10 (6) 6 | 15 (9) 9 | 20 (12) 12 | 25 (15) 15 | 30 (18) 18 | 35 (21) 21 | 40 (24) 24 | 45 (27) 27 | 50 (30) 30 | 55 (33) 33 | 60 (36) 36 | 65 (39) 39 | 70 (42) 42 | 75 (45) 45 | 80 (48) 48 | | |
| Air cleaner filter (Dry paper type) ★ | | [C] | [C] | [C] | [C] | [C] | [C] | [C] | R | [C] | [C] | [C] | [C] | [C] | [C] | [C] | [C] | R | MA-17 (QR25DE) MA-25 (VQ35DE) |
| Fuel filter (in tank type) | NOTE (4) | | | | | | | | | | | | | | | | | | — |
| Spark plugs (Iridium-tipped) | NOTE (5) | Replace every 100,000 km (60,000 miles). | | | | | | | | | | | | | | | | MA-20 (QR25DE) MA-28 (VQ35DE) | |
| EVAP vapor lines | | | | | | | | | I | | | | | | | | | | MA-21 (QR25DE) MA-29 (VQ35DE) |
| Positive crankcase ventilation (PCV) system | | | | | | | | | I | | | | | | | | | | EC-270 (QR25DE) EC-634 (VQ35DE) |

★ Maintenance items and intervals with "★" should be performed more frequently according to "Maintenance Under Severe Driving Conditions".

- (1) Periodic maintenance is not required. However, if valve noise increases, check valve clearance.
- (2) Replace the drive belts if found damaged or if the automatic belt tension reading reaches the maximum limit.
- (3) Use 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. After replacement, replace every 40,000 km (24,000 miles) or 24 months.
- (4) Maintenance-free item. For service procedures, refer to FL section.
- (5) Replace spark plug when spark plug gap exceeds 1.4 mm (0.055 in) even if within the specified periodic replacement mileage.

CHASSIS AND BODY

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

| MAINTENANCE OPERATION | MAINTENANCE INTERVAL | | | | | | | | | Reference Section Page or Content Title |
|--|---|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|
| Perform either at number of kilometers (miles) or months, whichever comes first. | km x 1,000 (Miles x 1,000) Months | 10 (6) 6 | 20 (12) 12 | 30 (18) 18 | 40 (24) 24 | 50 (30) 30 | 60 (36) 36 | 70 (42) 42 | 80 (48) 48 | |
| Under hood and under vehicle | | | | | | | | | | |
| Brake and clutch fluid (For level and leaks) | | I | I | I | I | I | I | I | I | MA-35 |
| Brake fluid ★ | | | | | R | | | | R | MA-36 |
| Brake booster vacuum hoses, connections and check valve | | | | | I | | | | I | MA-36 |
| Power steering fluid and lines (For level and leaks) | | I | I | I | I | I | I | I | I | MA-38 |
| Brake, clutch and exhaust systems | | I | I | I | I | I | I | I | I | MA-30 |
| CVT fluid (For level and leaks) | NOTE (1) | | I | | I | | I | | I | MA-30 |

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| MAINTENANCE OPERATION | | MAINTENANCE INTERVAL | | | | | | | | Reference Section Page or Content Title |
|--|---|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|
| | | 10 (6) 6 | 20 (12) 12 | 30 (18) 18 | 40 (24) 24 | 50 (30) 30 | 60 (36) 36 | 70 (42) 42 | 80 (48) 48 | |
| Perform either at number of kilometers (miles) or months, whichever comes first. | km x 1,000 (Miles x 1,000) Months | | | | | | | | | |
| Manual transaxle gear oil (For level and leaks) | | I | I | I | I | I | I | I | I | MA-32 |
| Steering gear and linkage, axle and suspension parts, and drive shafts ★ | | | I | | I | | I | | I | MA-38 (steering) MA-40 (axle) MA-40 (drive shafts) |
| Outside and inside | | | | | | | | | | |
| Wheel alignment (If necessary, rotate and balance wheels) | | | I | | I | | I | | I | MA-33 |
| Brake pads, rotors and other brake components★ | | I | I | I | I | I | I | I | I | MA-37 (front) MA-37 (rear) |
| Lock, hinges and hood latch★ | | L | L | L | L | L | L | L | L | MA-41 (coupe) MA-41 (sedan) |
| Seat belts, buckles, retractors, anchors and adjuster | | | I | | I | | I | | I | MA-42 |
| Foot brake, parking brake and clutch (For free play, stroke and operation) | | I | I | I | I | I | I | I | I | BR-44 (BR) PB-15 (PB) CL-6 (CL) |
| Air conditioner filter ★ | | | R | | R | | R | | R | MA-30 |

★ Maintenance items with “★” should be performed more frequently according to “Maintenance Under Severe Driving Conditions”.

(1) If towing a trailer, using a car-top carrier, or driving on rough or muddy roads, inspect CVT fluid deterioration with CONSULT every 100,000 km (60,000 miles), then change CVT fluid NS-2 if necessary. If CONSULT is not available, change not just inspect CVT fluid NS-2 every 100,000 km (60,000 miles). Using transmission fluid other than Genuine NISSAN CVT Fluid NS-2 will damage the CVT, which is not covered by the warranty.

MAINTENANCE UNDER SEVERE DRIVING CONDITIONS

The maintenance intervals shown on the preceding 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 in dusty conditions
- B — Repeatedly driving 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 or 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

Maintenance operation: Inspect = Check and correct or replace as necessary.

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| Driving condition | | | | | | | | | | Maintenance item | Maintenance operation | Maintenance interval | Reference page |
|-------------------|---|---|---|---|---|---|---|---|---|--|-----------------------|---|---|
| A | . | . | . | . | . | . | . | . | . | Air cleaner filter | Replace | More frequently | MA-17 (QR25DE) MA-25 (VQ35DE) |
| A | B | C | D | . | . | . | . | . | . | Engine oil & engine oil filter | Replace | Every 5,000 km (3,000 miles) or 3 months | MA-18 (QR25DE) MA-26 (VQ35DE) |
| . | . | . | . | . | F | . | . | . | . | Brake fluid | Replace | Every 20,000 km (12,000 miles) or 12 months | MA-36 |
| . | . | . | . | . | . | G | H | . | . | Steering gear and linkage, axle and suspension parts, and drive shafts | Inspect | Every 10,000 km (6,000 miles) or 6 months | MA-38 (steering) MA-40 (axle) MA-40 (drive shafts) |
| A | . | C | . | . | . | G | H | I | . | Brake pads, rotors and other brake components | Inspect | Every 5,000 km (3,000 miles) or 3 months | MA-37 (front) MA-37 (rear) |
| . | . | . | . | . | . | G | . | . | . | Lock, hinges and hood latch | Lubricate | Every 5,000 km (3,000 miles) or 3 months | MA-41 (coupe) MA-41 (sedan) |
| A | . | . | . | . | . | . | . | . | . | Air conditioner filter | Replace | More frequently | MA-30 |

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RECOMMENDED FLUIDS AND LUBRICANTS

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RECOMMENDED FLUIDS AND LUBRICANTS

Fluids and Lubricants

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| Description | | Capacity (Approximate) | | | Recommended Fluids/Lubricants |
|---|---------------------------|------------------------|-----------------|-----------------|---|
| | | Liter | US measure | Imp measure | |
| Fuel | QR25DE | 75.6 | 20 gal | 16 5/8 gal | Unleaded gasoline with octane rating at least 87 AKI [91 (RON)] |
| | VQ35DE | 75.6 | 20 gal | 16 5/8 gal | Unleaded gasoline with octane rating at least 91 AKI [96 (RON)] |
| Engine oil (drain and refill) | With oil filter change | QR25DE | 4.6 | 4 7/8 qt | Genuine NISSAN engine oil *1 • API grade SJ, SL or SM *1 • ILSAC grade GF-2, GF-3, GF-4, or GF-5 *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 (Overhaul) | QR25DE | 5.4 | 5 3/4 qt | 4 3/4 qt | |
| | VQ35DE | 5.3 | 5 5/8 qt | 4 5/8 qt | |
| Engine coolant (with reservoir tank at MAX level) | QR25DE | 7.7 | 8 1/8 qt | 6 3/4 qt | Genuine NISSAN Engine Coolant or equivalent in its quality *2 |
| | VQ35DE | 9.0 | 9 1/2 qt | 7 7/8 qt | |
| CVT fluid | RE0F10A | QR25DE | 7.3 | 7 3/4 qt | Genuine NISSAN CVT Fluid NS-2 *3 |
| | RE0F09B | VQ35DE | 10.2 | 10 3/4 qt | |
| Manual transaxle fluid (MTF) | | 1.7 | 3 5/8 pt | 3 pt | Genuine NISSAN Manual Transmission Fluid (MTF) HQ Multi 75W-85 or equivalent *6 |
| Power steering fluid (PSF) | | 1.0 | 1 1/8 qt | 7/8 qt | Genuine NISSAN PSF or equivalent *4 |
| Brake and clutch fluid | | — | — | — | Genuine NISSAN Brake Fluid, or equivalent DOT 3 (US FMVSS No. 116) |
| Multi-purpose grease | | — | — | — | NLGI No. 2 (Lithium soap base) |
| Windshield washer fluid | | 4.5 ℓ | 4 3/4 qt | 4 qt | Genuine NISSAN Windshield Washer Concentrate Cleaner & Antifreeze or equivalent |
| Air conditioning system refrigerant | | 0.55 ± 0.025 kg | 1.21 ± 0.055 lb | 1.21 ± 0.055 lb | HFC-134a (R-134a) *5 |
| Air conditioning system oil | | 150 m ℓ | 5.03 fl oz | 5.3 fl oz | A/C System Oil Type S *5 |

*1: For additional information, see "SAE Viscosity Number".

*2: Use 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, which is not covered by the warranty.**

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

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

*6: If Genuine NISSAN Manual Transmission Fluid (MTF) HQ Multi 75W-85 is hard to obtain, API GL-4, Viscosity SAE 75W-85 may be used as a temporary replacement. However use Genuine NISSAN gear oil as soon as it is available.

SAE Viscosity Number

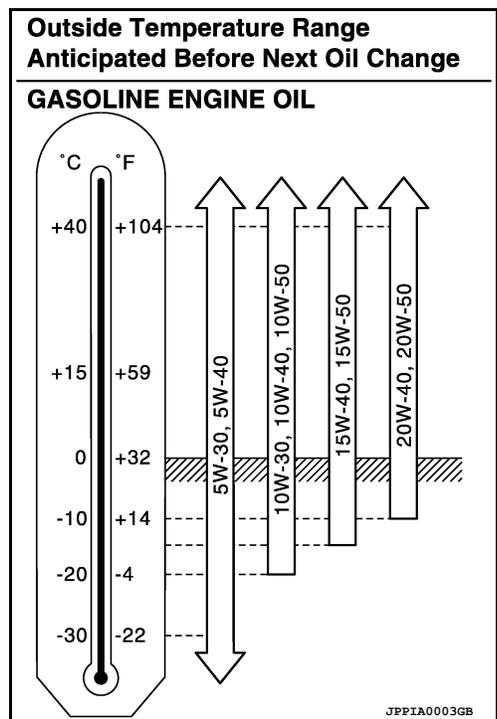
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GASOLINE ENGINE OIL

RECOMMENDED FLUIDS AND LUBRICANTS

< PERIODIC MAINTENANCE >

- 5W-30 is preferable.
If 5W-30 is not available, select the viscosity from the chart that is suitable for the outside temperature range.



Engine Coolant Mixture Ratio

INFOID:000000007418690

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

Engine Coolant Mixture Ratio

| Outside temperature down to: | | Engine coolant (concentrated) | Demineralized water or distilled water |
|------------------------------|------|-------------------------------|--|
| °C | °F | | |
| -15° | 5° | 30% | 70% |
| -35° | -30° | 50% | 50% |

When checking the engine coolant mixture ratio with the coolant hydrometer, use the chart below to correct the hydrometer reading (specific gravity) according to the coolant temperature as shown in the table.

Mixed Coolant Specific Gravity

| Engine coolant mixture ratio | Coolant temperature °C (°F) | | | |
|------------------------------|-----------------------------|---------------|---------------|---------------|
| | 15° (59°) | 25° (77°) | 35° (95°) | 45° (113°) |
| | Specific gravity | | | |
| 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 quality with the proper mixture ratio as specified.
- Other types of coolant solutions may damage your cooling system.

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
MA

ENGINE MAINTENANCE (QR25DE)

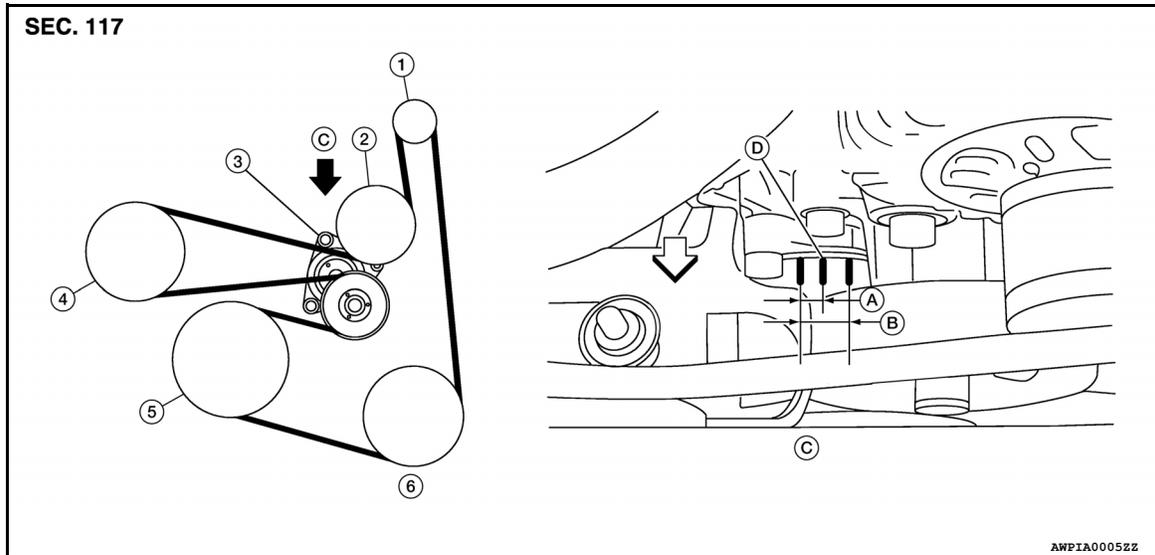
< PERIODIC MAINTENANCE >

ENGINE MAINTENANCE (QR25DE)

DRIVE BELTS

DRIVE BELTS : Checking Drive Belts

INFOID:000000007418691



- | | | |
|-------------------------------|------------------------|------------------------------|
| 1. Generator pulley | 2. Water pump pulley | 3. Drive belt auto-tensioner |
| 4. Power steering pump pulley | 5. Crankshaft pulley | 6. A/C compressor pulley |
| A. New drive belt range | B. Allowable use range | C. View C |
| D. Indicator (notch) | ⇐ Engine front | |

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:000000007418692

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

ENGINE COOLANT

ENGINE COOLANT : System Inspection

INFOID:000000007418693

WARNING:

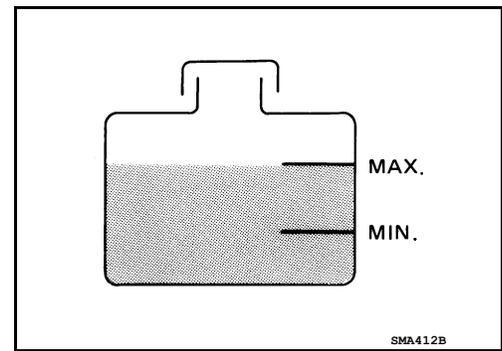
- **Never remove the radiator cap when the engine is hot. Serious burns could occur from high pressure fluid escaping from the radiator.**
- **Wrap a thick cloth around the cap. Slowly push down and turn it a quarter turn to allow built-up pressure to escape. Carefully remove the cap by pushing down and turning it all the way.**

CHECKING RESERVOIR LEVEL

ENGINE MAINTENANCE (QR25DE)

< PERIODIC MAINTENANCE >

- Check if the reservoir tank coolant level is within MIN to MAX when the engine is cool.
- Adjust coolant level if it is too much or too little.



ENGINE COOLANT : Changing Engine Coolant

INFOID:000000007418694

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. Refer to [EXT-16, "Removal and Installation - Coupe"](#) (Coupe models) or [EXT-40, "Removal and Installation"](#) (Sedan models).
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:

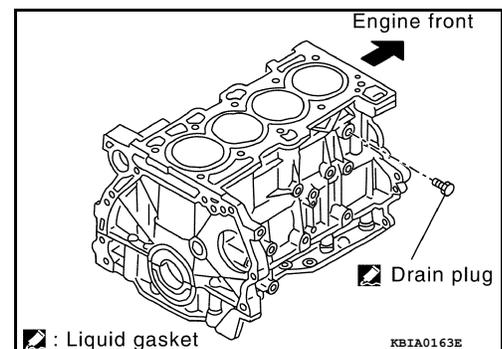
- Do not to allow the coolant to contact the drive belts
- Perform this step when engine is cold.

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 (1.0346 bar, 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.

CAUTION:

- Do not to allow the coolant to contact the drive belts
- Perform this step when engine is cold.

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



6. Check the drained coolant for contaminants such as rust, corrosion or discoloration. If the coolant is contaminated, flush the engine cooling system.

REFILLING ENGINE COOLANT

1. 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.

NOTE:

- 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"](#).

ENGINE MAINTENANCE (QR25DE)

< PERIODIC MAINTENANCE >

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

Cylinder block drain plug : 9.8 N·m (1.0 kg-m, 87 in-lb)

- 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 recommended engine coolant. Refer to [MA-12, "SAE Viscosity Number"](#).**

Engine coolant capacity (with reservoir tank) : Refer to [MA-12, "Fluids and Lubricants"](#).

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

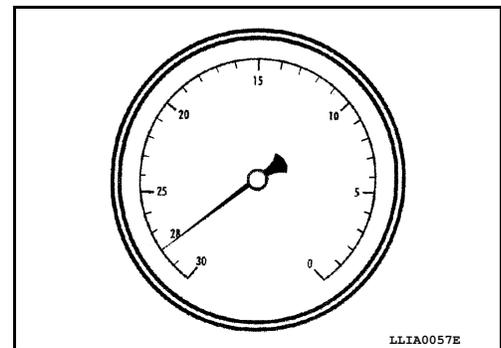
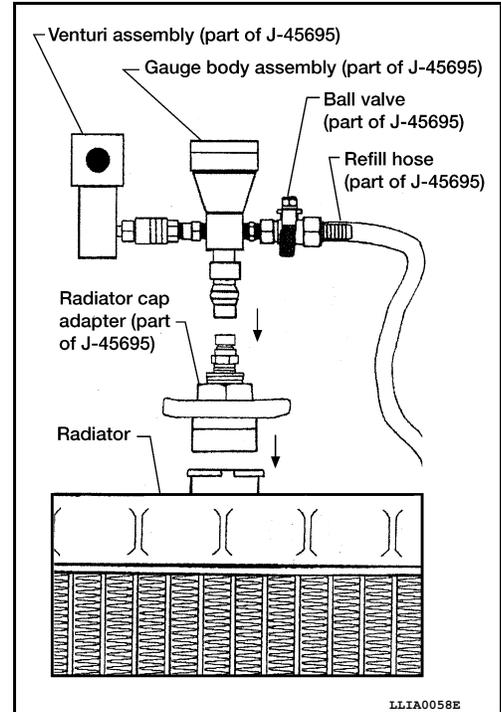
Compressed air supply pressure : 549 - 824 kPa (5.49 - 8.24 bar, 5.6 - 8.4 kg/cm², 80 - 119 psi)

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.
- Continue to draw the vacuum until the gauge reaches 28 inches of vacuum. The gauge may not reach 28 inches in high altitude locations, use 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 |



- 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.
- 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.

- Remove the Tool from the radiator neck opening.

ENGINE MAINTENANCE (QR25DE)

< PERIODIC MAINTENANCE >

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.
13. Install the engine undercover. Refer to [EXT-16. "Removal and Installation - Coupe"](#) (Coupe models) or [EXT-40. "Removal and Installation"](#) (Sedan models).

FLUSHING COOLING SYSTEM

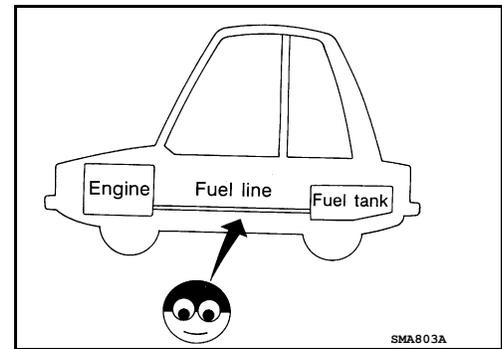
1. Fill the radiator from the filler neck above the radiator upper hose and reservoir tank with clean water and reinstall the radiator filler cap.
2. Run the engine until it reaches normal operating temperature.
3. Rev the engine two or three times under no-load.
4. Stop the engine and wait until it cools down.
5. Drain the water from the system. Refer to [MA-15. "ENGINE COOLANT : Changing Engine Coolant"](#).
6. Repeat steps 1 through 5 until clear water begins to drain from the radiator.

FUEL LINES

FUEL LINES : Checking Fuel Line

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

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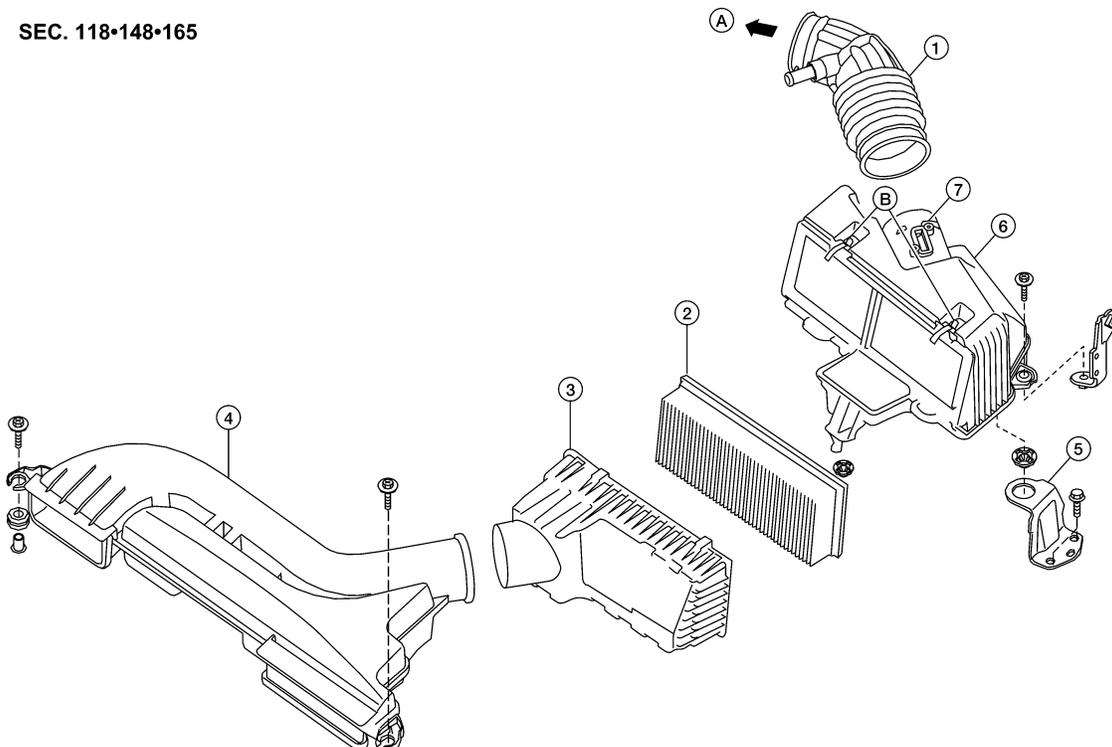


AIR CLEANER FILTER

AIR CLEANER FILTER : Removal and Installation

INFOID:000000007418696

SEC. 118•148•165



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ENGINE MAINTENANCE (QR25DE)

< PERIODIC MAINTENANCE >

- | | | |
|-------------------------|--|--------------------------------|
| 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 case (front).
4. Remove the air cleaner filter.
5. Install a new air cleaner filter.
6. Install the air cleaner case (front).
7. Lock the air cleaner case side clips.
8. Install the front air duct.

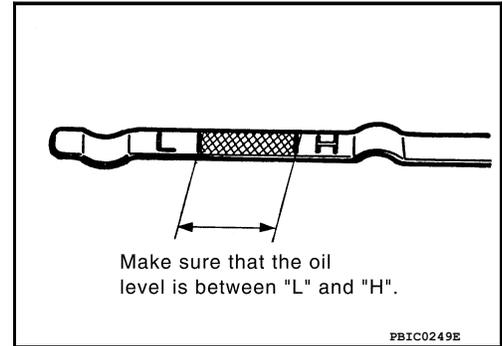
ENGINE OIL

ENGINE OIL : Inspection

INFOID:000000007418697

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.



ENGINE OIL : Changing Engine Oil

INFOID:000000007418698

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-12, "Fluids and Lubricants"](#).

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

CAUTION:

- **Be sure to clean the 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 the area 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.

ENGINE MAINTENANCE (QR25DE)

< PERIODIC MAINTENANCE >

CAUTION:

Do not overfill the engine with engine oil.

OIL FILTER

OIL FILTER : Removal and Installation

INFOID:000000007418699

REMOVAL

1. Drain engine oil. Refer to [MA-18, "ENGINE OIL : Changing Engine Oil"](#).
2. Remove the oil filter using Tool.

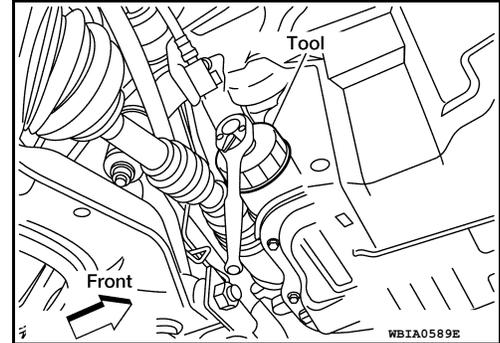
Tool number : KV10115801 (J-38956)

WARNING:

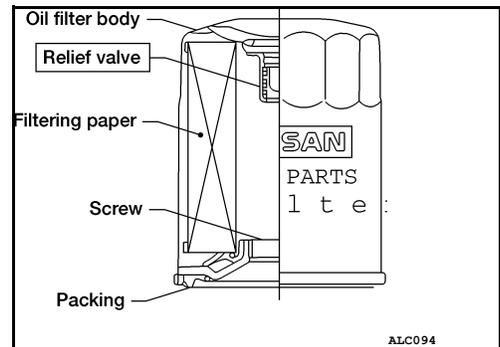
- Be careful not to get burned, the engine and engine oil may be hot.

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.

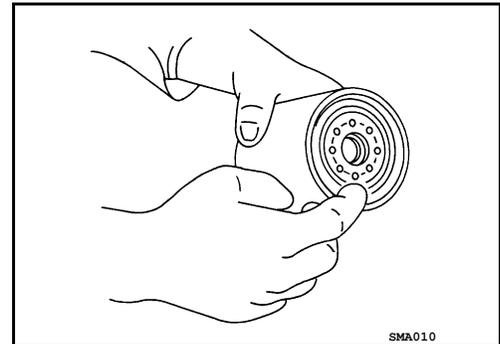


- The oil filter has a built in pressure relief valve. Use a genuine NISSAN oil filter or equivalent



INSTALLATION

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

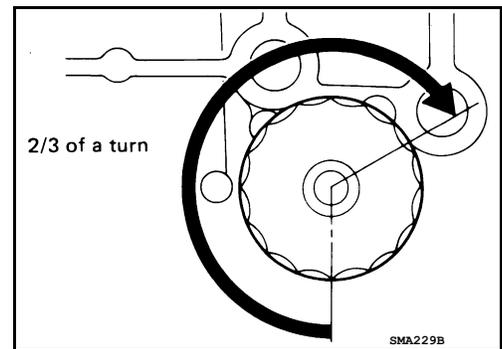


ENGINE MAINTENANCE (QR25DE)

< PERIODIC MAINTENANCE >

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)

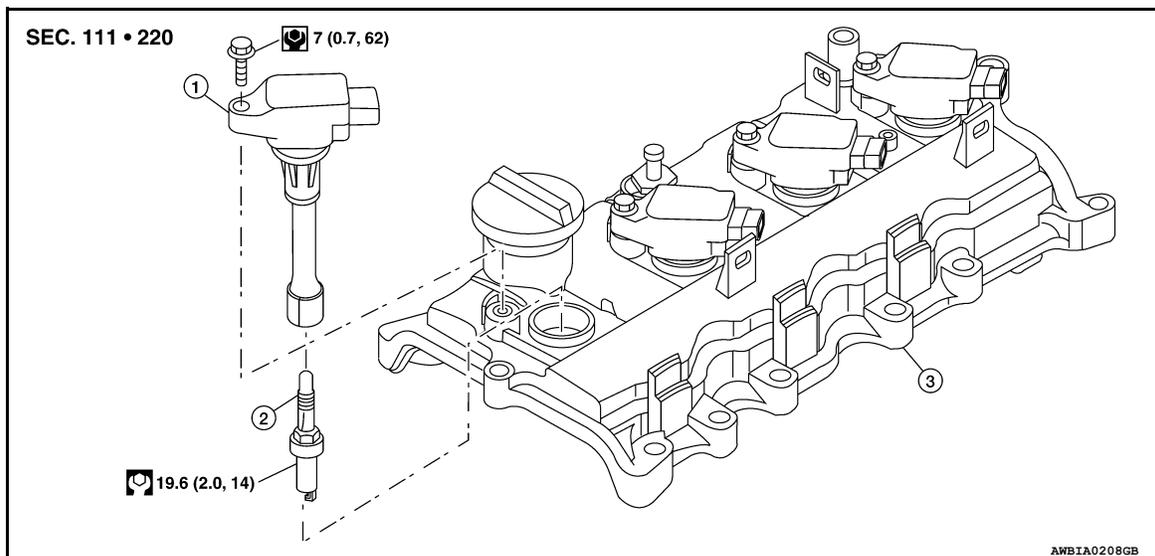


4. Refill engine with new engine oil. Refer to [MA-18, "ENGINE OIL : Changing Engine Oil"](#).
5. After warming up the engine, check for oil leaks. Repair as necessary.

SPARK PLUG

SPARK PLUG : Removal and Installation

INFOID:000000007418700



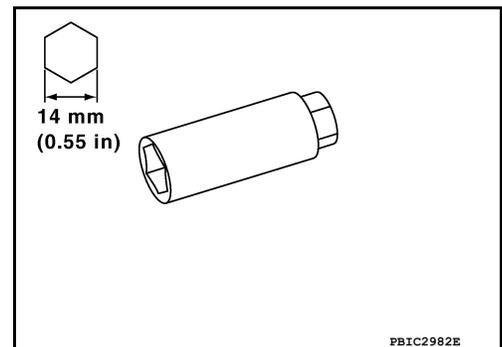
1. Ignition coil

2. Spark plug

3. Rocker cover

REMOVAL

1. Remove engine room cover.
2. Remove the ignition coil. Refer to [EM-36, "Removal and Installation"](#).
3. Remove the spark plug with a suitable spark plug wrench.

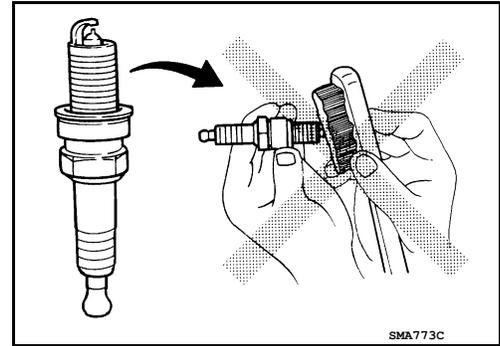


INSPECTION AFTER REMOVAL

ENGINE MAINTENANCE (QR25DE)

< PERIODIC MAINTENANCE >

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



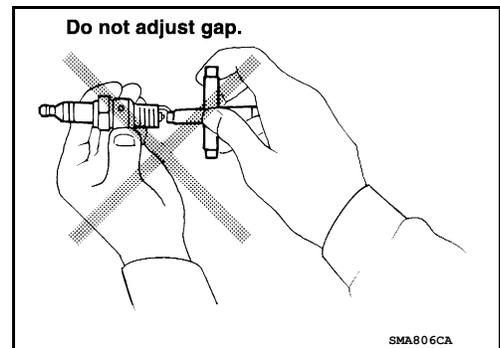
- If plug is covered with carbon, a spark plug cleaner may be used.

Cleaner air pressure : less than 588 kPa (5.88 bar, 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.

Gap (nominal) : 1.1 mm (0.043 in)



INSTALLATION

Installation is in the reverse order of removal.

| | |
|----------------|-------------------|
| Standard type* | NGK |
| | DILKAR6A-11 |
| 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:000000007418701

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

ENGINE MAINTENANCE (VQ35DE)

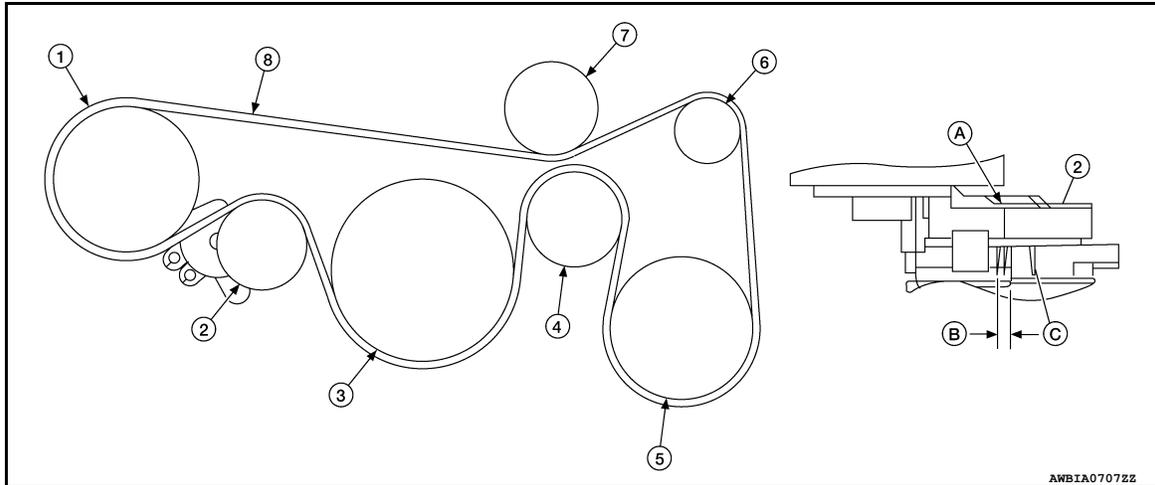
< PERIODIC MAINTENANCE >

ENGINE MAINTENANCE (VQ35DE)

DRIVE BELTS

DRIVE BELTS : Checking Drive Belts

INFOID:000000007418702



- | | | |
|--------------------------------------|------------------------------|---------------------|
| 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:000000007418703

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

ENGINE COOLANT

ENGINE COOLANT : System Inspection

INFOID:000000007418704

WARNING:

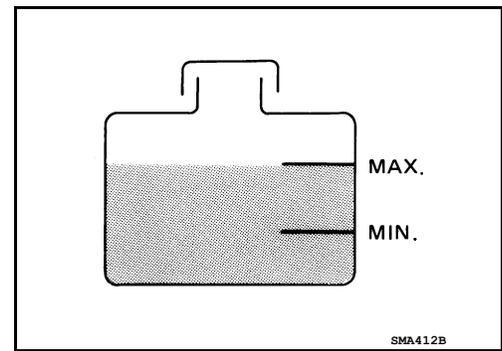
- **Never remove the radiator cap when the engine is hot. Serious burns could occur from high pressure coolant escaping from the radiator.**
- **Wrap a thick cloth around the cap. Slowly push down and turn it a quarter turn to allow built-up pressure to escape. Carefully remove the cap by pushing down and turning it all the way.**

CHECKING RESERVOIR LEVEL

ENGINE MAINTENANCE (VQ35DE)

< PERIODIC MAINTENANCE >

- Check if the reservoir tank coolant level is within MIN to MAX range when the engine is cool.
- Adjust coolant level if it is too much or too little.



INFOID:000000007418705

ENGINE COOLANT : Changing Engine Coolant

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. Refer to [EXT-16, "Removal and Installation - Coupe"](#) (Coupe models) or [EXT-40, "Removal and Installation"](#) (Sedan models).
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 allow the coolant to contact the drive belts.
 - Perform this step when engine is cold.
3. Follow this step for heater core removal/replacement only. Disconnect the upper heater hose at the engine side and apply moderate air pressure of 103.46 kPa (1.0346 bar, 1.055 kg-cm², 15 psi) maximum for 30 seconds into the hose to blow out excess coolant from 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.

CAUTION:

- Do not allow the coolant to contact the drive belts.
 - Perform this step when engine is cold.
5. 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.
 6. Check the drained coolant for contaminants such as rust, corrosion or discoloration.
 - If the coolant is contaminated, flush the engine cooling system.

REFILLING ENGINE COOLANT

1. Install the radiator drain plug. Install the reservoir tank and the cylinder block drain plugs, if removed for a total system drain or for engine removal or repair.

NOTE:

- 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-39, "Removal and Installation"](#)

Cylinder block front drain plug : 9.8 N·m (1.0 kg-m, 87 in-lb)

Cylinder block RH drain plug : 19.6 N·m (2.0 kg-m, 14 ft-lb)

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.

ENGINE MAINTENANCE (VQ35DE)

< PERIODIC MAINTENANCE >

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 recommended engine coolant. Refer to [MA-12, "SAE Viscosity Number"](#).**

Engine coolant capacity (with reservoir tank) : Refer to [MA-12, "Fluids and Lubricants"](#).

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

Compressed air supply pressure : 549 - 824 kPa (5.49 - 8.24 bar, 5.6 - 8.4 kg/cm², 80 - 119 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.
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, use 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.

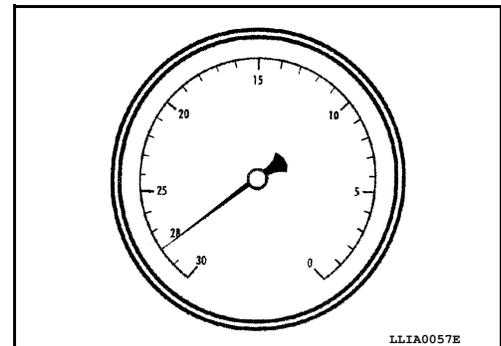
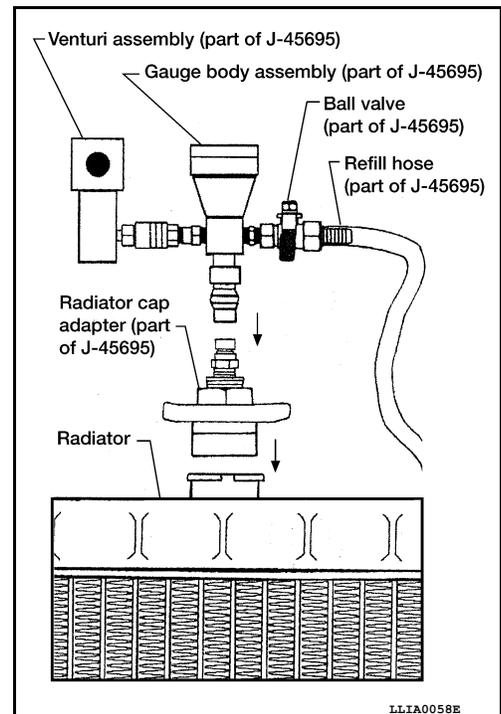
CAUTION:

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.
13. Install the engine undercover. Refer to [EXT-16, "Removal and Installation - Coupe"](#) (Coupe models) or [EXT-40, "Removal and Installation"](#) (Sedan models).

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.



ENGINE MAINTENANCE (VQ35DE)

< PERIODIC MAINTENANCE >

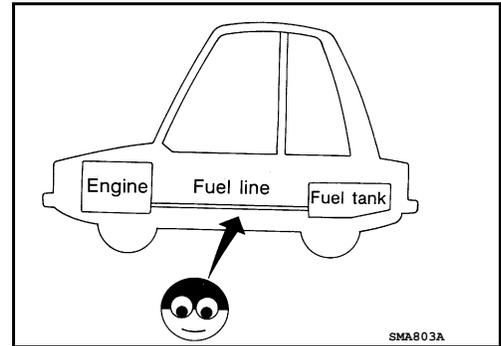
2. Run the engine until it reaches normal operating temperature.
3. Rev the engine two or three times under no-load.
4. Stop the engine and wait until it cools down.
5. Drain the water from the system. Refer to [MA-23. "ENGINE COOLANT : Changing Engine Coolant"](#).
6. Repeat steps 1 through 5 until clear water begins to drain from the radiator.

FUEL LINES

FUEL LINES : Checking Fuel Line

INFOID:000000007418706

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

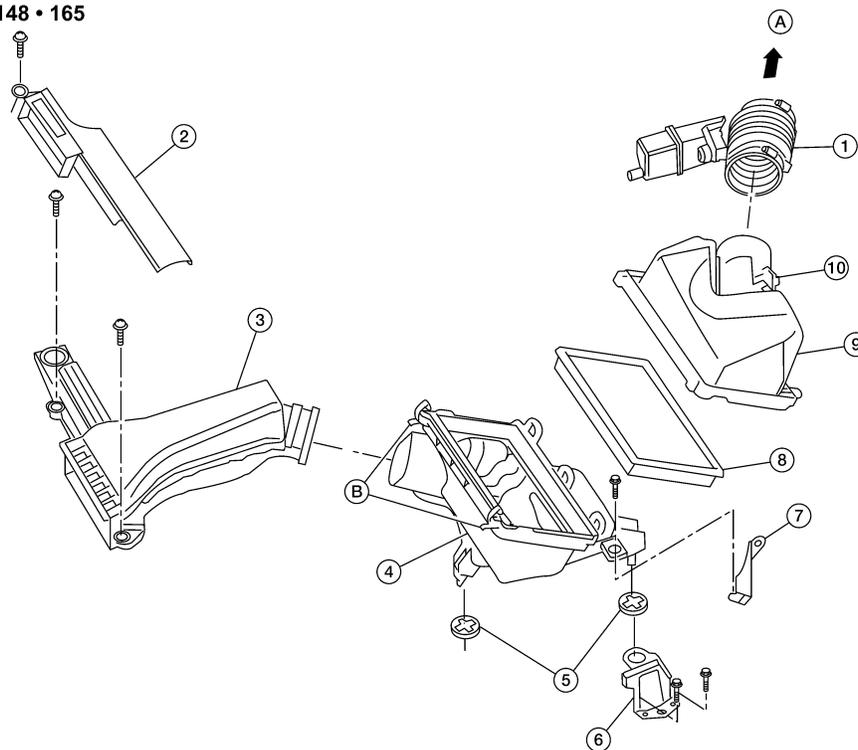


AIR CLEANER FILTER

AIR CLEANER FILTER : Removal and Installation

INFOID:000000007418707

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.

ENGINE MAINTENANCE (VQ35DE)

< PERIODIC MAINTENANCE >

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

ENGINE OIL

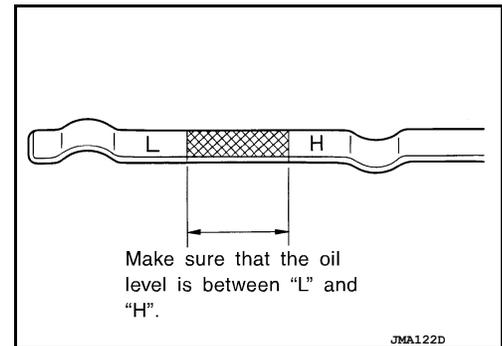
ENGINE OIL : Inspection

INFOID:000000007418708

OIL LEVEL

NOTE:

- 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.



ENGINE OIL : Changing Engine Oil

INFOID:000000007418709

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-12, "SAE Viscosity Number"](#)

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

ENGINE MAINTENANCE (VQ35DE)

< PERIODIC MAINTENANCE >

OIL FILTER : Removal and Installation

INFOID:000000007418710

REMOVAL

1. Drain engine oil. Refer to [MA-26, "ENGINE OIL : Changing Engine Oil"](#).
2. Remove the fender protector side cover (RH). Refer to [EXT-22, "Removal and Installation"](#) (Coupe models) or [EXT-46, "Removal and Installation"](#) (Sedan models).
3. Remove the oil filter using Tool (A) as shown.

Tool number : KV10115801 (J-38956)

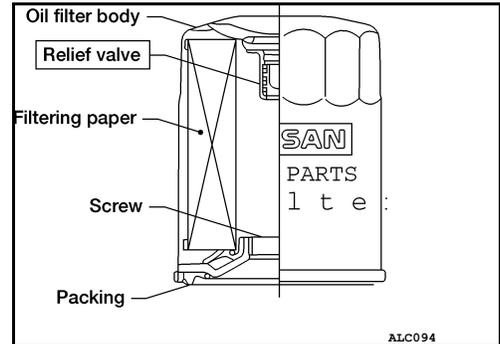
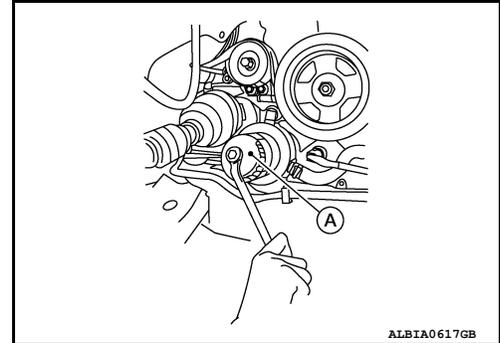
WARNING:

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

CAUTION:

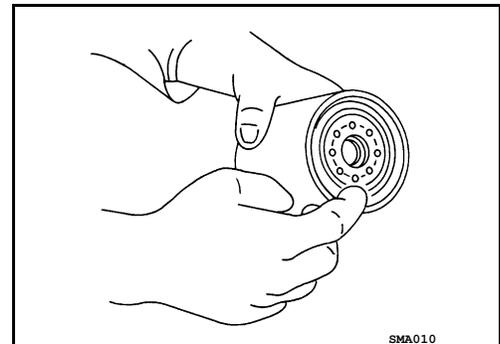
- When removing, prepare a shop cloth to absorb any oil leakage or spillage.
- Do not allow engine oil to adhere to the drive belts.
- Completely wipe off any oil that adheres to the engine and the vehicle.

- The oil filter is provided with a relief valve. Use a genuine NISSAN oil filter or equivalent



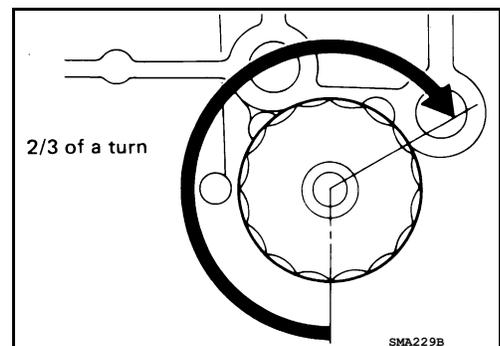
INSTALLATION

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-26, "ENGINE OIL : Changing Engine Oil"](#).

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ENGINE MAINTENANCE (VQ35DE)

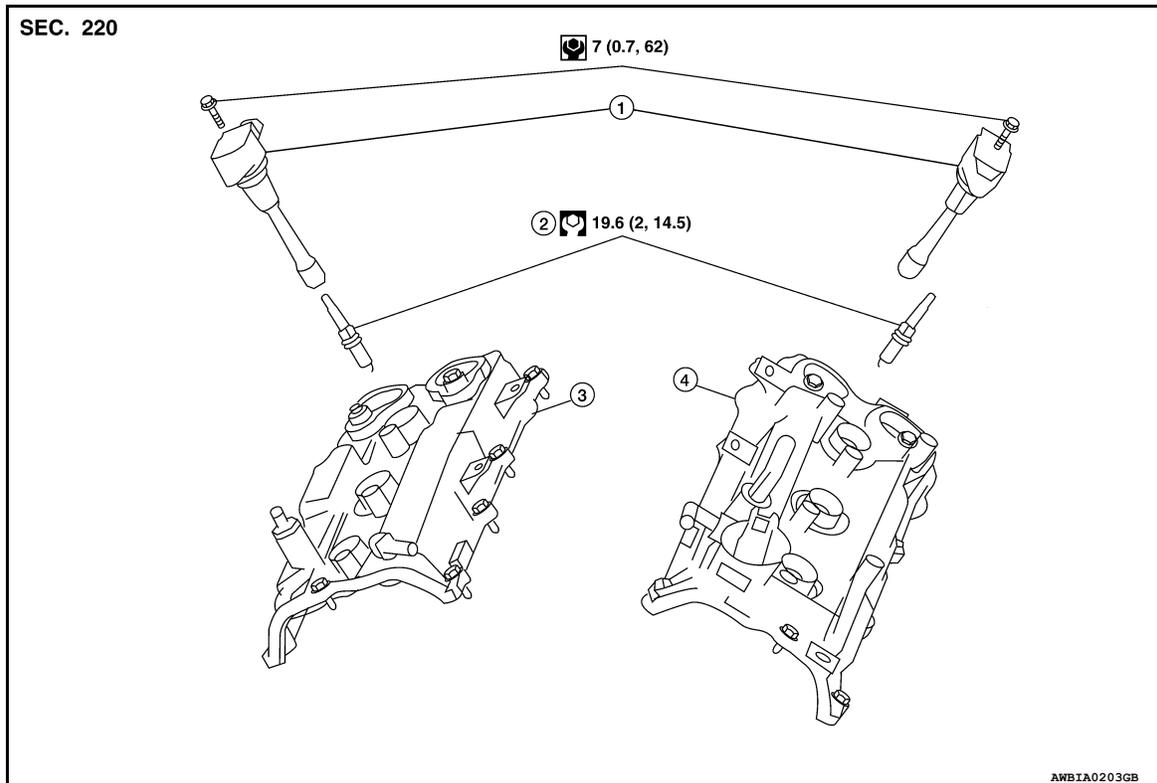
< PERIODIC MAINTENANCE >

5. After warming up the engine, check for any engine oil leaks.
6. Install the fender protector side cover (RH). Refer to [EXT-22. "Removal and Installation"](#) (Coupe models) or [EXT-46. "Removal and Installation"](#) (Sedan models).

SPARK PLUG

SPARK PLUG : Removal and Installation

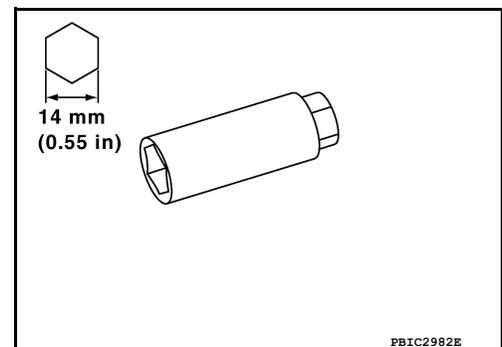
INFOID:000000007418711



1. Ignition coil
2. Spark plug
3. Rocker cover RH
4. Rocker cover LH

REMOVAL

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

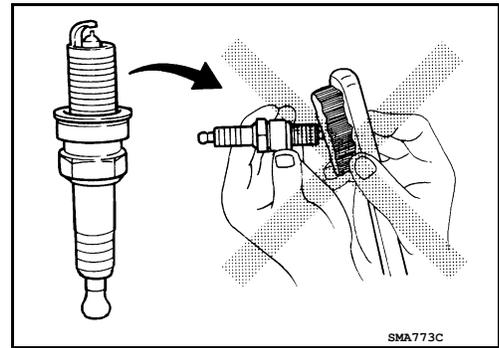


INSPECTION AFTER REMOVAL

ENGINE MAINTENANCE (VQ35DE)

< PERIODIC MAINTENANCE >

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

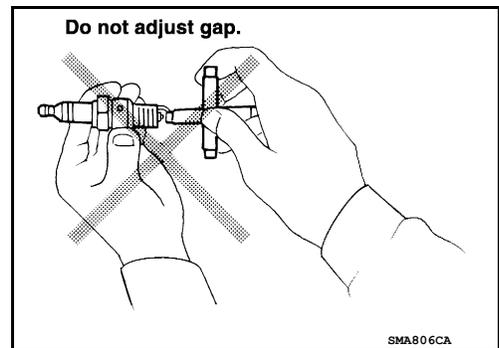


- If plug is covered with carbon, a spark plug cleaner may be used.

Cleaner air pressure : less than 588 kPa (5.88 bar, 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 |
| | FXE22HR-11 |
| 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:000000007418712

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

CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

CHASSIS AND BODY MAINTENANCE

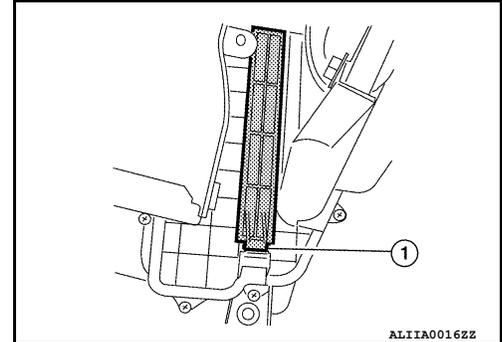
IN-CABIN MICROFILTER

IN-CABIN MICROFILTER : Removal and Installation

INFOID:000000007418713

REMOVAL

1. Remove the glove box assembly. Refer to [IP-19. "Removal and Installation"](#).
2. Remove the console side finisher RH. Refer to [IP-11. "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

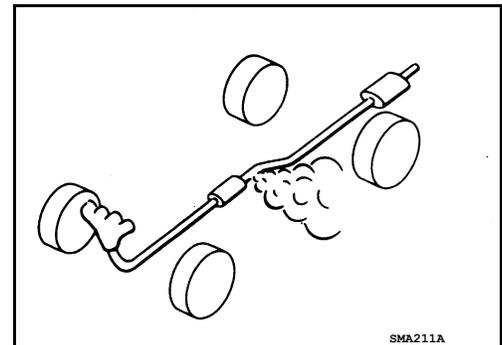
Installation is in the reverse order of removal.

EXHAUST SYSTEM

EXHAUST SYSTEM : Checking Exhaust System

INFOID:000000007418714

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



CVT FLUID

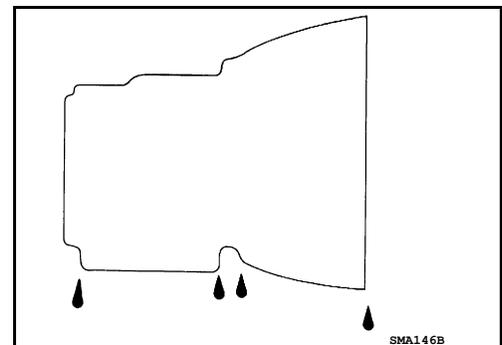
CVT FLUID : Inspection

INFOID:000000007418715

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:

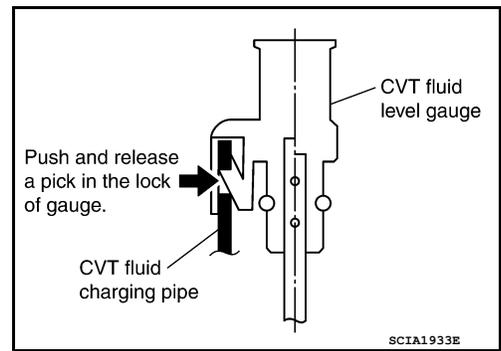
1. Check for fluid leakage.
2. With the engine warmed up, drive the vehicle in an urban area. When ambient temperature is 20°C (68°F), it takes about 10 minutes for the CVT fluid to warm up to 50° to 80°C (122° to 176°F).
3. Park the vehicle on a level surface.
4. Apply parking brake firmly.
5. With engine at idle, while depressing brake pedal, move shift selector throughout the entire shift range.



CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

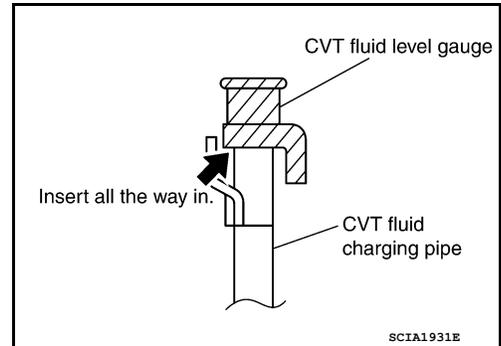
6. Pull out the CVT fluid level gauge from the CVT fluid charging pipe after pressing the tab on the CVT fluid level gauge to release the lock.



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:

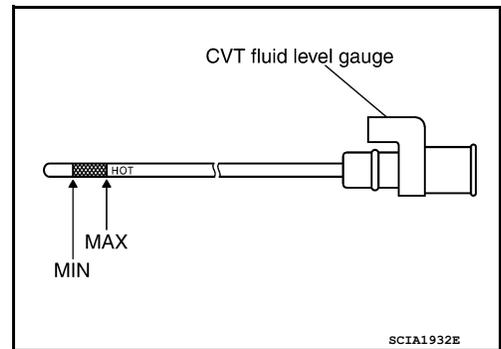
When wiping away the CVT fluid level gauge, always use lint-free paper, not a cloth rag.



8. Place the shift selector 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

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"](#) (QR25DE), [TM-391. "Cleaning"](#) (QR25DE/RE0F10A), [CO-39. "Removal and Installation"](#) (VQ35DE) and [TM-227. "Cleaning"](#) (VQ35DE/RE0F09B).



| 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. |

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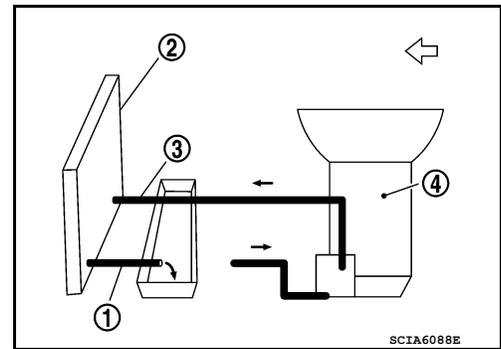
CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

CVT FLUID : Changing - RE0F09B

INFOID:000000007418716

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 : Genuine NISSAN CVT Fluid NS-2

Fluid capacity : Approximately 10.2 ℓ (10 3/4 US qt, 9 Imp qt)

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 spill on heat generating parts such as the exhaust.
 - Sufficiently shake the container of CVT fluid before using.
 - Delete CVT fluid deterioration date with CONSULT after changing CVT fluid.
4. Check fluid level and condition. Refer to [MA-30, "CVT FLUID : Inspection"](#).

CVT FLUID : Changing - RE0F10A

INFOID:000000007418717

1. Remove drain plug, and then drain CVT fluid from oil pan.
2. Install drain plug to oil pan.

CAUTION:

Do not reuse drain plug gasket.

Drain plug torque 34.3 N·m (3.5 kg·m, 25 ft·lb)

3. Fill CVT fluid from CVT fluid charging pipe to the specified level.
4. 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).
5. Check CVT fluid level and condition.
6. Repeat steps 1 to 5 if CVT fluid has been contaminated.

CVT fluid : Genuine NISSAN CVT Fluid NS-2

Fluid capacity : Approximately 7.3 ℓ (7 3/4 US qt, 6 3/4 Imp qt)

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 spill on heat generating parts such as the exhaust.
- Sufficiently shake the container of CVT fluid before using.
- Delete CVT fluid deterioration date with CONSULT after changing CVT fluid.

M/T OIL

M/T OIL : Inspection

INFOID:000000007418718

LEAKAGE

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

CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

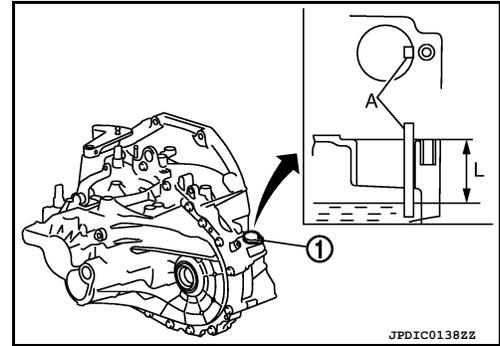
LEVEL

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-85](#),
"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-31](#), "Exploded View".

M/T OIL : Draining

INFOID:000000007418719

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-31](#), "Exploded View".

CAUTION:

Do not reuse gasket.

M/T OIL : Refilling

INFOID:000000007418720

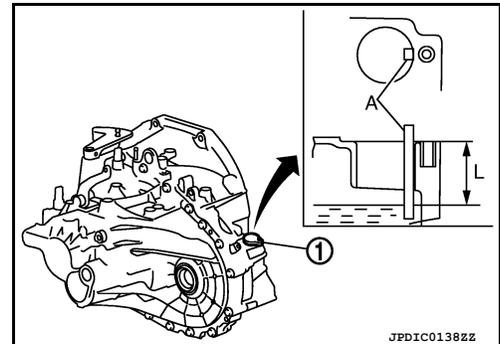
1. Remove the filler plug (1) and fill transaxle with new oil.

Oil grade : Refer to [MA-12](#), "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 [MA-12](#), "Fluids and Lubricants".

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-31](#), "Exploded View".

WHEELS

WHEELS : Adjustment

INFOID:000000007418721

BALANCING WHEELS (ADHESIVE WEIGHT TYPE)

Preparation Before Adjustment

Remove inner and outer balance weights from the road wheel. Using releasing agent, remove double-faced adhesive tape from the road wheel.

CAUTION:

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

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CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

- After removing double-faced adhesive tape, wipe clean traces of releasing agent from the road wheel.

Wheel Balance Adjustment

- If a balancer machine has an adhesive weight mode setting, select the adhesive weight mode setting and skip Step 2. below. If a balancer machine only has the clip-on (rim flange) weight mode setting, follow Step 2. to calculate the correct size adhesive weight.

1. Set road wheel on balancer machine using the center hole as a guide. Start the balancer machine.
2. For balancer machines that only have a clip-on (rim flange) weight mode setting, follow this step to calculate the correct size adhesive weight to use. When inner and outer imbalance values are shown on the balancer machine indicator, multiply outer imbalance value by 5/3 (1.67) to determine balance weight that should be used. Select the outer balance weight with a value closest to the calculated value above and install in to the designated outer position of, or at the designated angle in relation to the road wheel.

- a. Indicated imbalance value $\times 5/3$ (1.67) = balance weight to be installed

Calculation example:

23 g (0.81 oz) $\times 5/3$ (1.67) = 38.33 g (1.35 oz) \Rightarrow 40 g (1.41 oz)
balance weight (closer to calculated balance weight value)

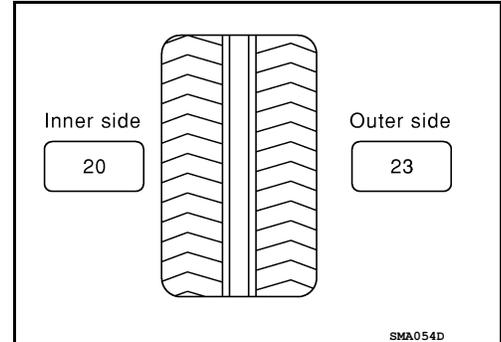
NOTE:

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

Example:

37.4 \Rightarrow 35 g (1.23 oz)

37.5 \Rightarrow 40 g (1.41 oz)



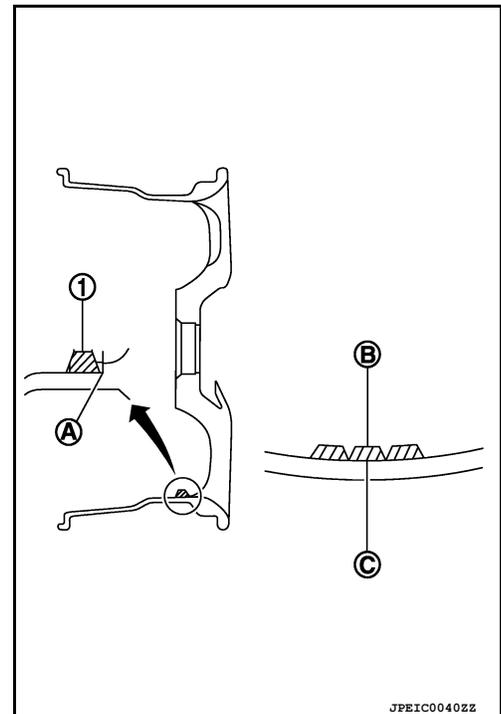
3. Install balance weight in the position shown.

CAUTION:

- Do not install the inner balance weight before installing the outer balance weight.
- Before installing the balance weight, be sure to clean the mating surface of the road wheel.
- When installing balance weight (1) to road wheel, set it into the grooved area (A) on the inner wall of the road wheel as shown so that the balance weight center (B) is aligned with the balancer machine indication position (angle) (C).

CAUTION:

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



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

CAUTION:

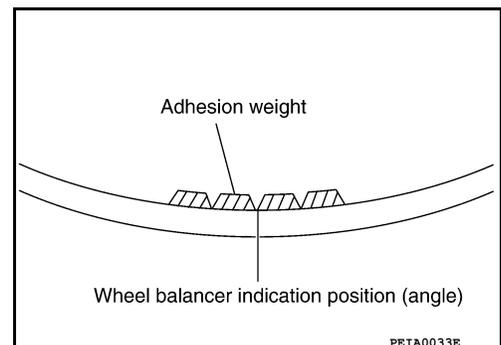
Do not install one balance weight sheet on top another.

5. Start balancer machine again.

6. Install balance weight on inner side of road wheel in the balancer machine indication position (angle).

CAUTION:

Do not install more than two balance weights.



CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

7. Start balancer machine. Make sure that inner and outer residual imbalance values are 5 g (0.17 oz) each or below.
8. If either residual imbalance value exceeds 5 g (0.17 oz), repeat installation procedures.

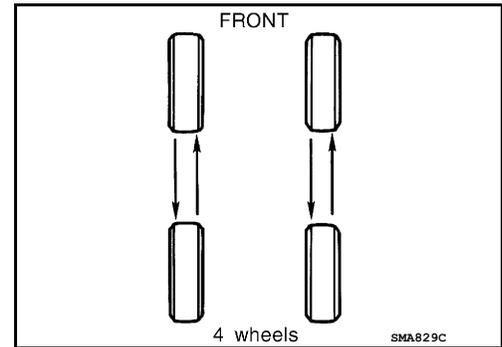
| Wheel balance | Dynamic (At flange) | Static (At flange) |
|-----------------------------|--|--------------------|
| Maximum allowable imbalance | Refer to WT-72, "Road Wheel" . | |

TIRE ROTATION

- Follow the maintenance schedule for tire rotation service intervals. Refer to [MA-6, "Explanation General Maintenance"](#).
- When installing the wheel, tighten wheel nuts to the specified torque.

CAUTION:

- Do not include T-type spare tire for tire rotation service intervals. Refer to [MA-33, "WHEELS : Adjustment"](#)
- When installing wheels, tighten them diagonally by dividing the work two to three times in order to prevent the wheels from developing any distortion.
- Be careful not to tighten wheel nut at torque exceeding the criteria for preventing strain of disc rotor.
- Use NISSAN genuine wheel nuts for aluminum wheels.



Wheel nut tightening torque : 113 N·m (12 kg-m, 83 ft-lb)

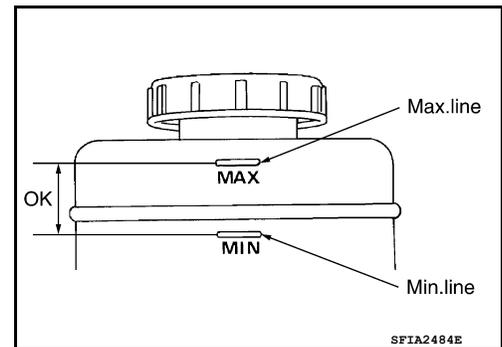
BRAKE FLUID LEVEL AND LEAKS

BRAKE FLUID LEVEL AND LEAKS : Inspection

INFOID:000000007418722

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.

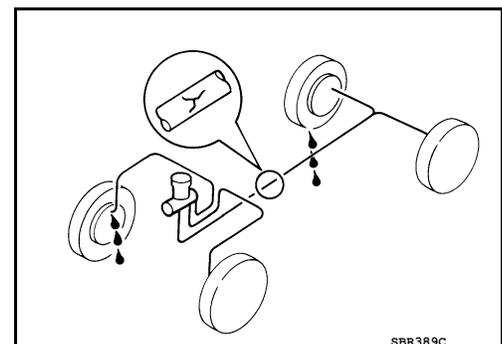


BRAKE LINE

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.



CHASSIS AND BODY MAINTENANCE

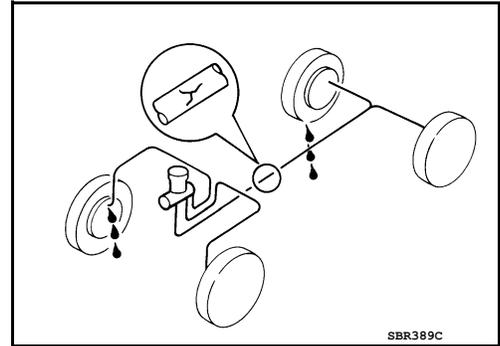
< PERIODIC MAINTENANCE >

BRAKE LINES AND CABLES

BRAKE LINES AND CABLES : Inspection

INFOID:000000007418723

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



BRAKE FLUID

BRAKE FLUID : Drain and Refill

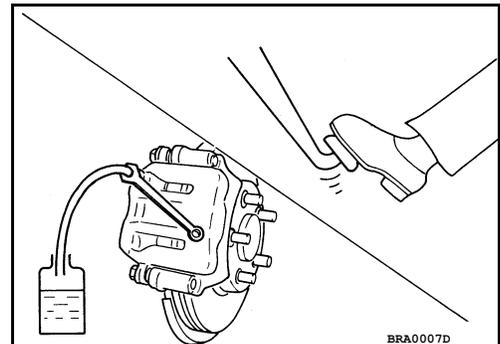
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DRAINING

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.

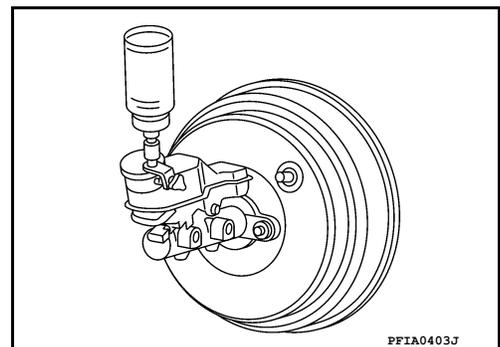


REFILLING

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.

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 [MA-36. "BRAKE FLUID : Bleeding Brake System"](#).



BRAKE FLUID : Bleeding Brake System

INFOID:000000007418725

BLEEDING BRAKE SYSTEM

CAUTION:

CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

- While bleeding, pay attention to master cylinder fluid level.
 - 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 rear right brake caliper bleed valve.
 2. Fully depress brake pedal 4 or 5 times.
 3. With brake pedal depressed, loosen bleed valve to bleed air in brake line, and then tighten it immediately.
 4. Repeat steps 2 and 3 until all of the air is out of the brake line.
 5. Tighten the bleed valve to the specified torque. Refer to front disc brake: [BR-30, "BRAKE CALIPER ASSEMBLY : Exploded View"](#), rear disc brake: [BR-35, "BRAKE CALIPER ASSEMBLY : Exploded View"](#).
 6. From step 1 to 5, with master cylinder reservoir tank filled at least half way, bleed air from brake hydraulic line bleed valves in the following order:
Rear right brake→Front left brake→Rear left brake→Front right brake

FRONT BRAKE

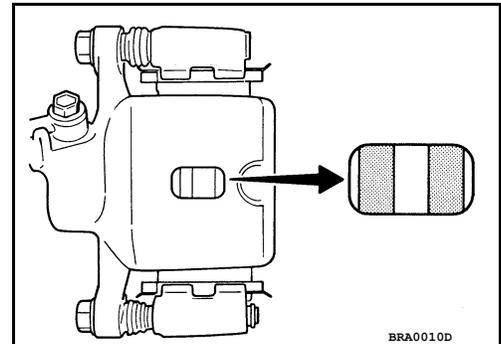
FRONT BRAKE : Inspection

INFOID:000000007418726

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"](#).



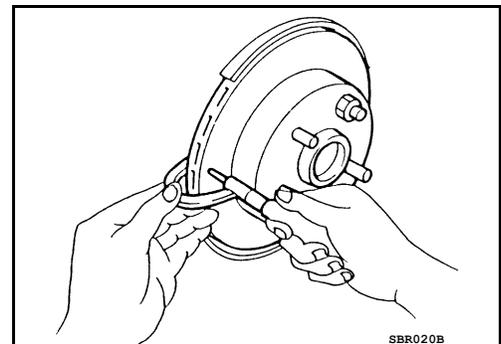
VISUAL

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

THICKNESS

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"](#).



REAR BRAKE

REAR BRAKE : Inspection

INFOID:000000007418727

PAD WEAR

MA

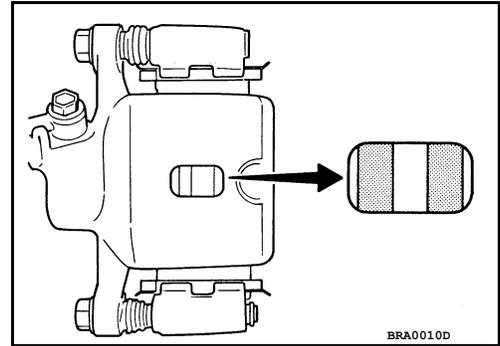
CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

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"](#).



VISUAL

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

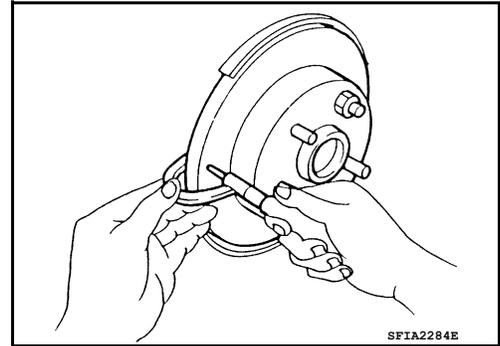
THICKNESS

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"](#).



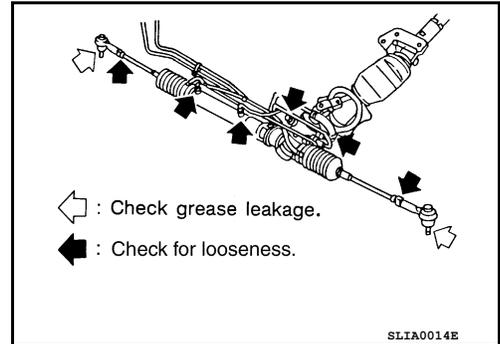
STEERING GEAR AND LINKAGE

STEERING GEAR AND LINKAGE : Inspection

INFOID:000000007418728

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

INFOID:000000007418729

FLUID LEVEL

- Check fluid level with engine stopped.

CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

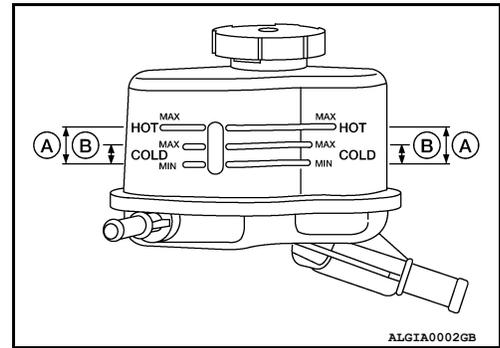
- Make sure that fluid level is between MIN and MAX.
- Fluid levels at HOT (A) and COLD (B) are different. Do not confuse them.

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

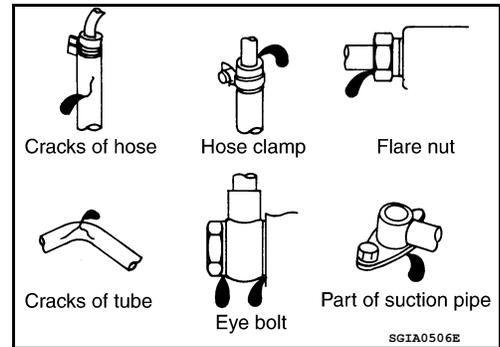
Check hydraulic connections for fluid leakage, cracks, damage, looseness, or wear.

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-12, "Inspection"](#).
6. Check steering gear boots for accumulation of fluid indicating from steering gear.



POWER STEERING FLUID AND LINES : Draining

INFOID:000000007418730

1. Disconnect both high and low pressure lines from power steering gear.
2. Drain into a suitable container.

POWER STEERING FLUID AND LINES : Refilling

INFOID:000000007418731

FILLING HYDRAULIC SYSTEM

1. Fill power steering reservoir while checking fluid level.
2. Bleed air from hydraulic system.
3. Check for fluid leaks.

AIR BLEEDING HYDRAULIC SYSTEM

CAUTION:

If air bleeding is not complete, the following symptoms can be observed.

- Bubbles are created in reservoir tank.
- Clicking noise can be heard from oil pump.
- Excessive buzzing in the oil pump.

NOTE:

Fluid noise may occur in the steering gear or oil pump. This does not affect performance or durability of the system.

1. Turn steering wheel several times from full left stop to full right stop with engine off.

CAUTION:

Turn steering wheel while filling reservoir tank with fluid so as not to lower fluid level below the MIN line.

2. Start engine and hold steering wheel at each lock position for 3 seconds at idle to check for fluid leakage.
3. Repeat step 2 above several times at approximately 3 second intervals.

CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

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. Check fluid for bubbles and white contamination.
5. Stop engine if bubbles and white contamination do not drain out. Perform step 2 and 3 above after waiting until bubbles and white contamination drain out.
6. Stop the engine, and then check fluid level.

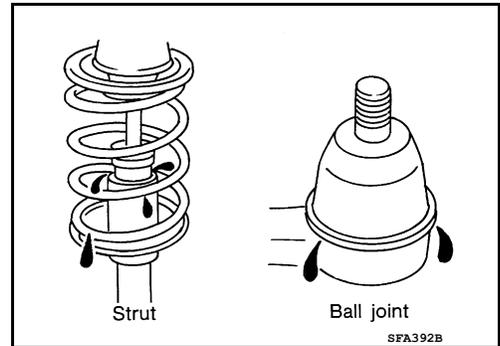
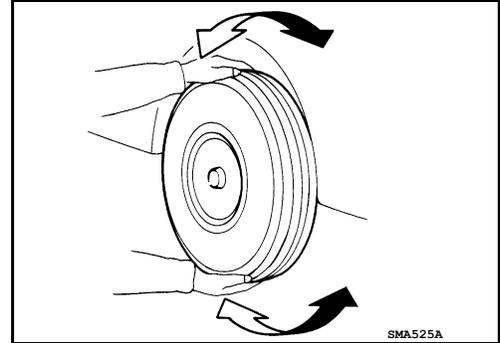
AXLE AND SUSPENSION PARTS

AXLE AND SUSPENSION PARTS : Inspection

INFOID:000000007418732

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.

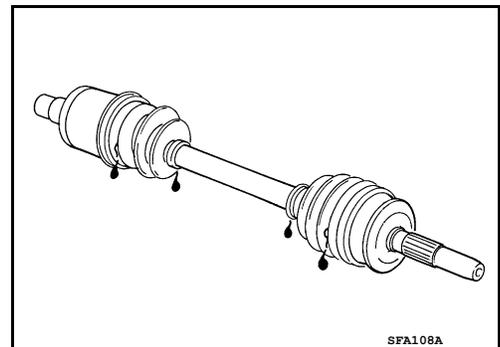


DRIVE SHAFT

DRIVE SHAFT : Inspection

INFOID:000000007418733

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



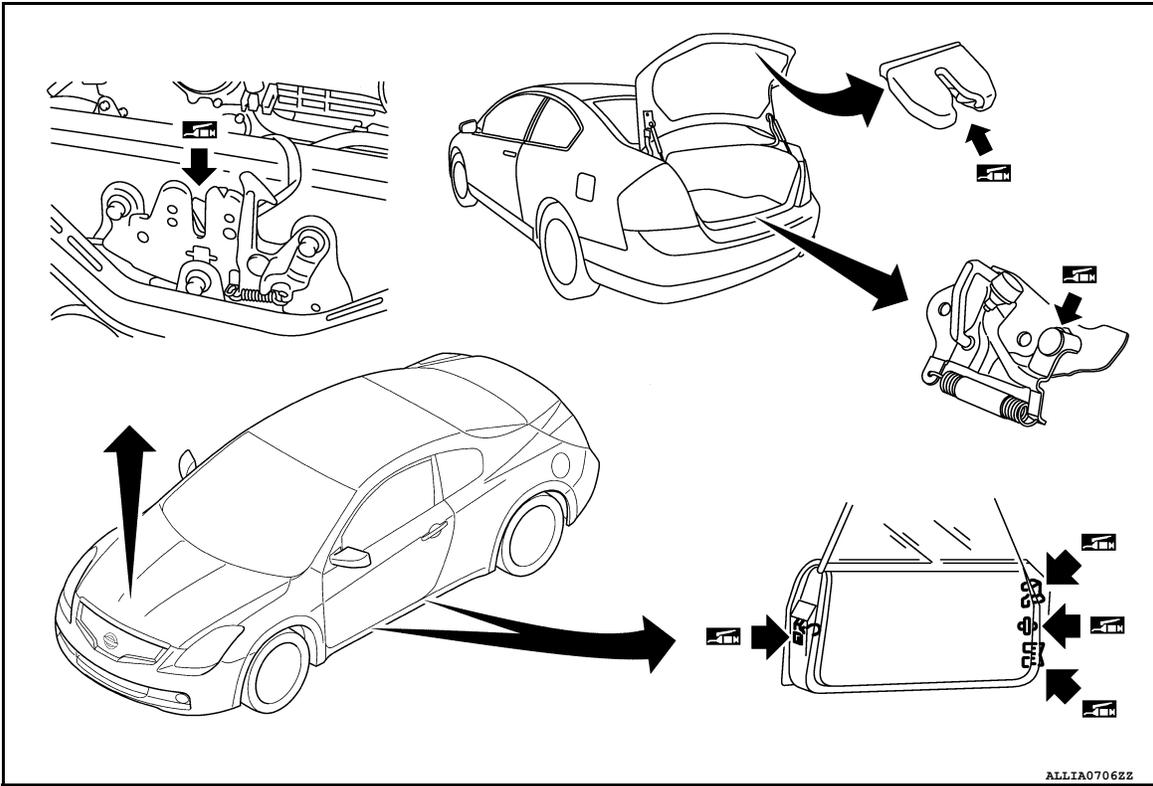
LOCKS, HINGES AND HOOD LATCH

CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

LOCKS, HINGES AND HOOD LATCH : Lubricating - Coupe

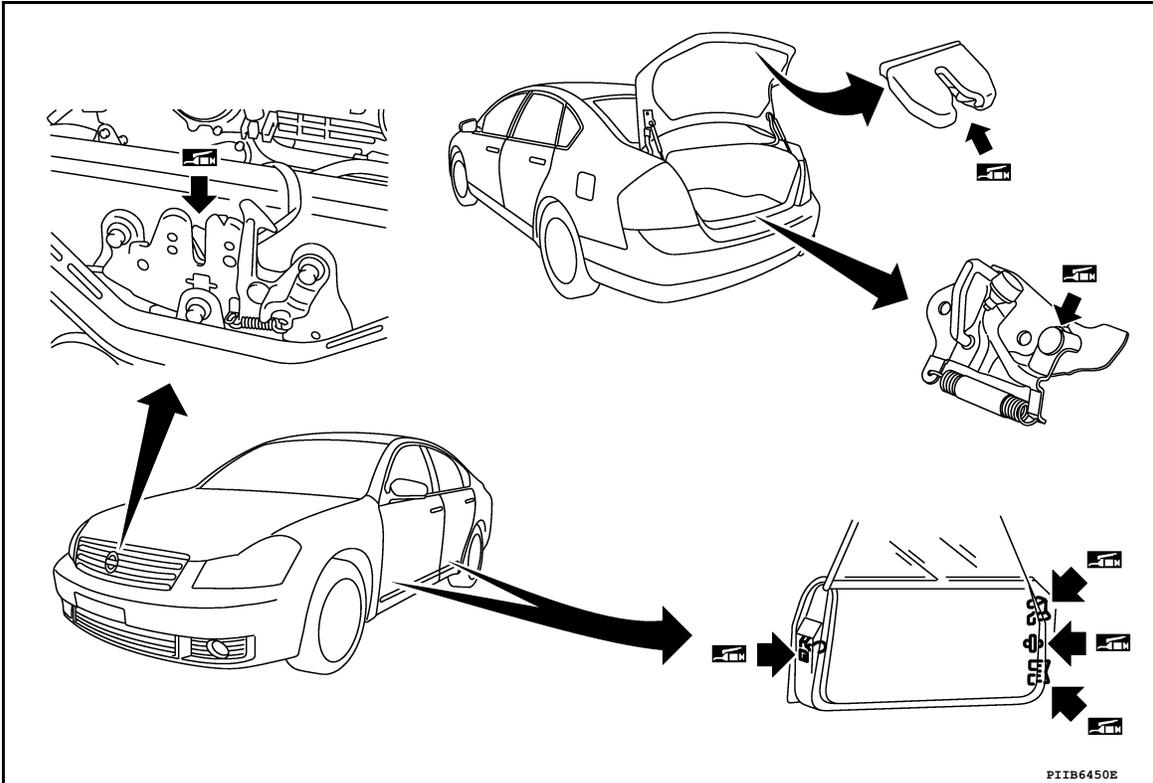
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LOCKS, HINGES AND HOOD LATCH : Lubricating - Sedan

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SEAT BELT, BUCKLES, RETRACTORS, ANCHORS AND ADJUSTERS

CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

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

INFOID:000000007418736

CAUTION:

- After any collision, inspect all seat belt assemblies, including retractors and other attached hardware (i.e. anchor bolt, guide rail set). Nissan recommends to replace all seat belt assemblies in use during a collision, unless not damaged and properly operating after minor collision.

Also inspect seat belt assemblies not in use during a collision, and replace if damaged or improperly operating.

Seat belt pre-tensioner should be replaced even if the seat belts are not in use during a frontal collision where the driver and passenger air bags are deployed.

- If any component of seat belt assembly is questionable, do not repair.

Replace as seat belt assembly.

- If webbing is cut, frayed, or damaged, replace belt assembly.
- Never oil tongue and buckle.
- Use a genuine NISSAN seat belt assembly.

For details, refer to [SB-4. "Inspection"](#) in SB section.

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