

SECTION MA

MAINTENANCE

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PREPARATION

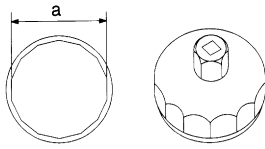
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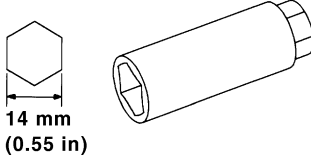
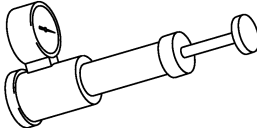
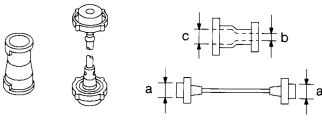
Special Service Tool

INFOID:000000003858218

Tool number (SPX North America No.) Tool name	Description
KV10115801 (J38956) Oil filter wrench	Removing and installing oil filter a: 64.3 mm (2.531 in)
 S-NT375	

Commercial Service Tool

INFOID:000000003858219

Tool name	Description
Spark plug wrench	Removing and installing spark plug
 PBIC3874E	
Radiator cap tester	Checking radiator and radiator cap
 PBIC1982E	
Radiator cap tester adapter	Adapting radiator cap tester to radiator cap and radiator pipe (upper) filler neck a: 28 (1.10) dia. b: 31.4 (1.236) dia. c: 41.3 (1.626) dia. Unit: mm (in)
 S-NT564	

Pre-Delivery Inspection Item

INFOID:000000003858220

Shown below are Pre-delivery Inspection Items required for the new vehicle. It is recommended that necessary items other than those listed here be added, paying due regard to the conditions in each country.

MA

PREPARATION

< PREPARATION >

Perform applicable items on each model. Consult text of this section for specifications.



NEW CAR PRE-DELIVERY INSPECTION

Customer name:		Model:			
Address:		VIN:			
		Engine code & no.:			
		Registration number:		Delivery date:	
Dealer name:		Key no.:			
Code:		Radio code:			

No.	☒ Operation	No.	☒ Operation
1	☐ Install vehicle protection kit		
Where applicable:			
2	☐ Fit all accessories ordered (e.g. towbar, audio, navigation, air conditioner, styling kit)		
UNDER HOOD		ROAD TEST	
3	☐ Check coolant level and cooling system for leaks	38	☐ Check clutch operation
4	☐ Charge battery and check terminals for condition	39	☐ Check foot brake operation
5	☐ Check drive belts tension	40	☐ Check parking brake operation
6	☐ Check fuel filter for water or dust (diesel only) and fuel system for leaks	41	☐ Check steering operation, self-centering and steering wheel alignment
7	☐ Check engine oil level and for oil leaks	42	☐ Check engine performance
8	☐ Check brake and clutch fluid levels and fluid lines for leaks	43	☐ Check for squeaks, rattles and noise from interior, suspension and brakes
9	☐ Check and top up washer reservoirs	44	☐ Check heating, ventilation and air conditioning operation
Where applicable:		45	☐ Check Audio and Navigation system operation
10	☐ Check power steering fluid level and fluid lines for leaks	46	☐ Check odometer and trip meter operation and cancelling
11	☐ Check air conditioning system for gas leaks	47	☐ Check instruments for operation
INSIDE AND OUTSIDE		Where applicable:	
12	☐ Install transit fuse if removed for vehicle storage and perform initialization of disabled electrical systems	48	☐ Check automatic transmission/ transaxle/ CVT shift pattern and kickdown operation
13	☐ Check instruments, gauges, lamps, horn and accessories for operation	49	☐ Check cruise control and navigation system operation
14	☐ Check wipers and washers for operation and adjustment	WITH ENGINE AT OPERATING TEMPERATURE	
15	☐ Check interior and door mirrors and sun visors for operation	50	☐ Check idle speed
16	☐ Set radio code and set clock	Where applicable:	
17	☐ Check parking brake adjustment	51	☐ Check automatic transmission/ transaxle/ CVT oil level
18	☐ Check clutch pedal adjustment	FINAL INSPECTION - TECHNICIAN	
19	☐ Check steering lock operation	52	☐ Remove vehicle protection kit
20	☐ Check seat adjusters and seat belts for operation	53	☐ Fit interior mats and wheel covers
21	☐ Check electric window operation and alignment, including 1 touch up and down (if applicable). Perform initialization if required	54	☐ Check for interior and exterior metal and paint damage
22	☐ Check mouldings, trim and fittings for fit and alignment	55	☐ Wash, clean interior and exterior
23	☐ Check weatherstrips for fit and adhesion	The above checks have been completed, any faults found have been corrected as necessary and the vehicle passed fit for delivery	
24	☐ Check hood, trunk lid, door panels and fuel lid for fit and alignment	Date: _____ Job no.: _____	
25	☐ Check latches, keys, remote key, door locks and remote trunk lid and fuel lid release for operation. Ensure child locks are off	Technician's signature: _____	
26	☐ Check wheel nut torques	FINAL INSPECTION - SALES EXECUTIVE	
27	☐ Check tire pressure (incl. spare tire)	56	☐ Confirm all accessories ordered have been fitted
28	☐ Check tool kit and jack for operation	57	☐ Check content of vehicle owner's manuals pack, operation manuals for accessories and Quick Reference Guide (if applicable)
29	☐ Remove towing eye from bumper (if applicable)	58	☐ Complete warranty booklet record
Where applicable:			
30	☐ Check automatic transmission starter inhibitor		
31	☐ Check sunroof for operation and alignment		
32	☐ Set up Trip Computer service reminder		
UNDER VEHICLE			
33	☐ Check manual transmission/ transaxle, differential and transfer box for oil level and oil leaks	I confirm that I am satisfied with the condition of the vehicle and it is ready for delivery to the customer	
34	☐ Tighten bolts and nuts steering linkage and gear box, axle/suspension parts, propeller shaft and exhaust system	Date: _____	
35	☐ Check brake and clutch lines, and oil/fluid reservoirs for leaks	Sales executive signature: _____	
Where applicable:			
36	☐ Remove front suspension spacer blocks		
37	☐ Check body mountings torque		

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GENERAL MAINTENANCE

< ON-VEHICLE MAINTENANCE >

ON-VEHICLE MAINTENANCE

GENERAL MAINTENANCE

General Maintenance

INFOID:000000003858221

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 they can have their NISSAN dealers do them for a nominal charge.

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.	—
Windshield wiper blades	Check for cracks or wear if not functioning correctly.	—
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 for lubrication frequently.	MA-42
Tire rotation	Tires should be rotated every 10,000 km (6,000 miles).	WT-3
Wheel alignment and balance	If the vehicle should pull to either side while driving on a straight and level road, or if you detect uneven or abnormal tire wear, there may be a need for wheel alignment. If the steering wheel or seat vibrates at normal highway speeds, wheel balancing may be needed.	

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
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.	—
Warning lamps and chimes	Make sure that all warning lamps and chimes are operating properly.	—
Steering wheel	Check that it has the specified play. Check for changes in the steering condition, such as excessive free play, hard steering or strange noises. Free play: Less than 35 mm (1.38 in)	—
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.

Item		Reference page
Windshield washer fluid	Check that there is adequate fluid in the tank.	—
Engine coolant level	Check the coolant level when the engine is cold.	MA-13
Engine oil level	Check the level after parking the vehicle on a level spot and turning off the engine.	LU-7
Brake fluid level	Make sure that the brake fluid level is between the "MAX" and "MIN" lines on the reservoir.	MA-37
Battery	Check the fluid level in each cell. It should be between the "MAX" and "MIN" lines.	—

PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

PERIODIC MAINTENANCE

Periodic Maintenance

INFOID:000000003858222

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 tables requires similar maintenance.

ENGINE AND EMISSION CONTROL MAINTENANCE

(Annual Mileage < 30,000 km/year)

Abbreviations: I = Inspect and correct or replace as necessary, R = Replace, [] = At the specified mileage only.

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Refer- ence page
Perform at a kilometer (mile) interval or month interval, whichever comes first.	km x 1,000	15	30	45	60	75	90	105	120	
	(Miles x 1,000)	(9)	(18)	(27)	(36)	(45)	(54)	(63)	(72)	
	Months	12	24	36	48	60	72	84	96	
Engine compartment and under vehicle										
Intake and exhaust valve clearance	See NOTE (1)									EM-17
Drive belt	See NOTE (2)	I	I	I	I	I	I	I	I	MA-13
Engine oil (Use recommended oil.)★		R	R	R	R	R	R	R	R	MA-18
Engine oil filter (Use genuine NISSAN engine oil filter or equivalent)★		R	R	R	R	R	R	R	R	MA-19
Engine coolant (Use Genuine NISSAN Engine Coolant or equivalent in its quality.)	See NOTE (3)			I						MA-14
Cooling system		I	I	I	I	I	I	I	I	MA-13 , MA-17 , MA-17
Fuel and EVAP vapor lines			I		I		I		I	MA-18 , MA-22
Air cleaner filter★					R				R	MA-18
Positive crankcase ventilation (PSV) system			I		I		I		I	MA-21
Fuel filter (In-tank type)	See NOTE (4)									—
Spark plugs (Iridium-tipped type)	See NOTE (5)	[R]	[R]	[R]	[R]	[R]	[R]	[R]	[R]	MA-20

NOTE:

- Maintenance items 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 belt if found damaged or if the auto belt tensioner 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.
First replace at 90,000 Km (54,000 miles)/60 months, then every 60,000 km (36,000 miles)/48 months. Perform "I" (Checking the mixture ratio and correcting the mixture ratio if necessary) at the middle of replacement interval.
- (4) Fuel filter is maintenance-free. For service procedures, refer to FL section.

PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

- (5) Replace spark plug when the spark plug gap exceeds 1.4 mm (0.055 in) even if within specified periodic replacement mileage.

CHASSIS AND BODY MAINTENANCE (Annual Mileage < 30,000 km/year)

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference page
Perform at a kilometer (mile) interval or month interval, whichever comes first.	km x 1,000	15	30	45	60	75	90	105	120	
	(Miles x 1,000) Months	(9) 12	(18) 24	(27) 36	(36) 48	(45) 60	(54) 72	(63) 84	(72) 96	
Underhood and under vehicle										
Headlamp aiming		I	I	I	I	I	I	I	I	MA-23, MA-27
Brake system and fluid (For level & leaks)		I	I	I	I	I	I	I	I	MA-38, MA-37
Brake fluid★			R		R		R		R	MA-38
Brake booster vacuum hoses, connections & check valve			I		I		I		I	BR-12
Power steering fluid & lines (For level & leaks)		I	I	I	I	I	I	I	I	MA-40
CVT fluid (For level & leaks)	See NOTE (1)	I	I	I	I	I	I	I	I	MA-32, MA-34
Steering gear & linkage, axle & suspension parts, & front drive shafts★			I		I		I		I	MA-39, MA-40, MA-41
Exhaust system★			I		I		I		I	MA-32
Brake pads, rotors & other brake components★		I	I	I	I	I	I	I	I	MA-38, BR-13, BR-15
Foot brake & parking brake (For free play, stroke & operation)		I	I	I	I	I	I	I	I	BR-6, PB-2
Air conditioner filter★			R		R		R		R	VTL-20, VTL-77
Body corrosion	See NOTE (2)									MA-42

NOTE:

- (1) If towing a trailer, using a camper or a car-top carrier, or driving on rough or muddy roads, inspect CVT fluid deterioration with Consult-III every 90,000 km (54,000 miles), then change CVT fluid NS-2 if necessary. (Refer to [TM-204, "CONSULT-III Function \(TRANSMISSION\)"](#) for RE0F10A, [TM-37, "CONSULT-III Function \(TRANSMISSION\)"](#) for RE0F09B.) And if Consult-III is not available, change (do not just inspect) CVT fluid NS-2 every 90,000 km (54,000 miles). Using transmission fluid other than Genuine NISSAN CVT fluid NS-2 will damage the CVT, which is not covered by the warranty.
- (2) Inspect once per year.
- Maintenance items with "★" should be performed more frequently according to "Maintenance Under Severe Driving Conditions".

MAINTENANCE UNDER SEVERE DRIVING CONDITIONS (Annual Mileage < 30,000 km/year)

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 — Driving repeatedly short distances or door to door driving

PERIODIC MAINTENANCE

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C — Towing a trailer or caravan

D — Extensive idling or urban driving

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

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

Driving condition										Maintenance item	Maintenance operation	Maintenance interval	Reference page
A	.	.	.	.	.	.	.	.	.	Air cleaner filter	Replace	Every 30,000 km (18,000 miles) or 24 months	MA-18
A	B	C	D	.	.	.	.	.	.	Engine oil & engine oil filter	Replace	Every 7,500 km (4,500 miles) or 6 months	MA-18 , MA-19
.	.	.	.	.	.	F	.	.	.	Brake fluid	Replace	Every 15,000 km (9,000 miles) or 12 months	MA-38
.	.	.	.	.	.	.	G	H	.	Steering gear & linkage, axle & suspension parts, & front drive shafts	Inspect	Every 15,000 km (9,000 miles) or 12 months	MA-39 , MA-40 , MA-41
.	.	.	.	.	.	.	G	H	.	Exhaust system	Inspect	Every 15,000 km (9,000 miles) or 12 months	MA-32
A	.	C	.	.	.	.	G	H	I	Brake pads, rotors & other brake components	Inspect	Every 7,500 km (4,500 miles) or 6 months	MA-38 , BR-13 , BR-15
A	.	.	.	.	.	.	.	.	.	Air conditioner filter	Replace	Every 15,000 km (9,000 miles) or 12 months	VTL-20 , VTL-77

ENGINE AND EMISSION CONTROL MAINTENANCE

(Annual Mileage > 30,000 km/year)

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Refer- ence page
Perform at number of kilometers (miles) basis only.	km x 1,000 (Miles x 1,000)	15 (9)	30 (18)	45 (27)	60 (36)	75 (45)	90 (54)	105 (63)	120 (72)	
Engine compartment and under vehicle										
Intake and exhaust valve clearance	See NOTE (1)									EM-17
Drive belt	See NOTE (2)	I	I	I	I	I	I	I	I	MA-13
Engine oil (Use recommended oil.)★		R	R	R	R	R	R	R	R	MA-18
Engine oil filter (Use genuine NISSAN engine oil filter or equivalent)★		R	R	R	R	R	R	R	R	MA-19
Engine coolant (Use Genuine NISSAN Engine Coolant or equivalent in its quality.)	See NOTE (3)			I			R		I	MA-14
Cooling system			I		I		I		I	MA-13 , MA-17 , MA-17

PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Refer- ence page
Perform at number of kilometers (miles) basis only.	km x 1,000 (Miles x 1,000)	15 (9)	30 (18)	45 (27)	60 (36)	75 (45)	90 (54)	105 (63)	120 (72)	
Fuel and EVAP vapor lines					I				I	MA-18 , MA-22
Air cleaner filter★					R				R	MA-18
Fuel filter (In-tank type)	See NOTE (4)									—
Positive crankcase ventilation (PCV) system			I		I		I		I	MA-21
Spark-plugs (Iridium-tipped type)	See NOTE (5)	R	R	R	R	R	R	R	R	MA-20

NOTE:

- Maintenance items 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 belt if found damaged or if the auto belt tensioner 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 coolant.
First replace at 90,000 km (54,000 miles), then every 60,000 km (36,000 miles). Perform "I" (Checking the mixture ratio and correcting the mixture ratio if necessary) at the middle of replacement interval.
- (4) Fuel filter is maintenance-free. For service procedures, refer to FL section.
- (5) Replace spark plug when the spark plug gap exceeds 1.4 mm (0.055 in) even if within specified periodic replacement mileage.

CHASSIS AND BODY MAINTENANCE

(Annual Mileage > 30,000 km/year)

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference page
Perform at number of kilometers (miles) basis only.	km x 1,000 (Miles x 1,000)	15 (9)	30 (18)	45 (27)	60 (36)	75 (45)	90 (54)	105 (63)	120 (72)	
Underhood and under vehicle										
Headlamp aiming			I		I		I		I	MA-23 , MA-27
Brake system and fluid (For level & leaks)			I		I		I		I	MA-38 , MA-37
Brake fluid★					R				R	MA-38
Brake booster vacuum hoses, connections & check valve					I				I	BR-12
Power steering fluid & lines (For level & leaks)			I		I		I		I	MA-40
CVT fluid (For level & leaks)	See NOTE (1)		I		I		I		I	MA-32 , MA-34
Steering gear & linkage, axle & suspension parts, & front drive shafts★					I				I	MA-39 , MA-40 , MA-41
Exhaust system★					I				I	MA-32
Brake pads, rotors & other brake components★			I		I		I		I	MA-38 , BR-13 , BR-15
Foot brake & parking brake (For free play, stroke & operation)			I		I		I		I	BR-6 , PB-2

PERIODIC MAINTENANCE

< ON-VEHICLE MAINTENANCE >

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference page
Perform at number of kilometers (miles) basis only.	km x 1,000 (Miles x 1,000)	15 (9)	30 (18)	45 (27)	60 (36)	75 (45)	90 (54)	105 (63)	120 (72)	
Air conditioner filter★			R		R		R		R	VTL-20 , VTL-77
Body corrosion	See NOTE (2)									MA-42

NOTE:

- (1) If towing a trailer, using a camper or a car-top carrier, or driving on rough or muddy roads, inspect CVT fluid deterioration with Consult-III every 90,000 km (54,000 miles), then change CVT fluid NS-2 if necessary. (Refer to [TM-204, "CONSULT-III Function \(TRANSMISSION\)"](#) for RE0F10A, [TM-37, "CONSULT-III Function \(TRANSMISSION\)"](#) for RE0F09B.) And if Consult-III is not available, change (do not just inspect) CVT fluid NS-2 every 90,000 km (54,000 miles). Using transmission fluid other than Genuine NISSAN CVT Fluid NS-2 will damage the CVT, which is not covered by the warranty.
- (2) Inspect once per year.
- Maintenance items with "★" should be performed more frequently according to "Maintenance Under Severe Driving Conditions".

MAINTENANCE UNDER SEVERE DRIVING CONDITIONS

(Annual Mileage > 30,000 km/year)

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 — Driving repeatedly short distances or door to door driving

C — Towing a trailer or caravan

D — Extensive idling or urban driving

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

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

Driving condition									Maintenance item	Maintenance operation	Maintenance interval	Reference page
A	.	.	.	.	.	.	.	.	Air cleaner filter	Replace	Every 30,000 km (18,000 miles)	MA-18
A	B	C	D	.	.	.	.	.	Engine oil & engine oil filter	Replace	Every 7,500 km (4,500 miles)	MA-18 , MA-19
.	.	.	.	.	F	.	.	.	Brake fluid	Replace	Every 30,000 km (18,000 miles)	MA-38
.	.	.	.	.	.	G	H	.	Steering gear & linkage, axle & suspension parts, & front drive shafts	Inspect	Every 30,000 km (18,000 miles)	MA-39 , MA-40 , MA-41
.	.	.	.	.	.	G	H	.	Exhaust system	Inspect	Every 30,000 km (18,000 miles)	MA-32
A	.	C	.	.	.	G	H	I	Brake pads, rotors & other brake components	Inspect	Every 15,000 km (9,000 miles)	MA-38 , BR-13 , BR-15
A	.	.	.	.	.	.	.	.	Air conditioner filter	Replace	Every 15,000 km (9,000 miles)	VTL-20 , VTL-77

RECOMMENDED FLUIDS AND LUBRICANTS

< ON-VEHICLE MAINTENANCE >

RECOMMENDED FLUIDS AND LUBRICANTS

Fluids and Lubricants

INFOID:000000003858223

		Capacity (Approximate)		Recommended Fluids/Lubricants
		Liter	Imp mea- sure	
Engine oil Drain and refill	With oil filter change	4.6	4 qt	Genuine NISSAN engine oil* ¹ API grade SL or SM* ¹ ILSAC grade GF-3 or GF-4* ¹
	Without oil filter change	4.3	3-3/4 qt	
Dry engine (engine overhaul)		5.3	4-5/8 qt	ACEA A1/B1, A3/B3, A3/B4, A5/B5, C2 or C3* ¹
Cooling system (with reservoir)		9.1	8 qt	Genuine NISSAN Engine Coolant or equivalent in its quality* ²
Reservoir tank		0.8	3/4 qt	
CVT fluid	RE0F10A	8.3	7-1/4 qt	Genuine NISSAN CVT Fluid NS-2* ³
	RE0F09B	10.2	9 qt	
Power steering fluid		1.0	7/8 qt	Genuine NISSAN PSF or equivalent* ⁴
Brake fluid		—	—	Genuine NISSAN brake fluid, or equivalent DOT 3 or DOT4 (US FMVSS No. 116)* ⁵
Multi-purpose grease		—	—	NLGI No. 2 (Lithium soap base)

*1: For further details, 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: 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 can be used.

*5: Never mix different types of fluids (DOT3 and DOT4).

SAE Viscosity Number

INFOID:000000003858224

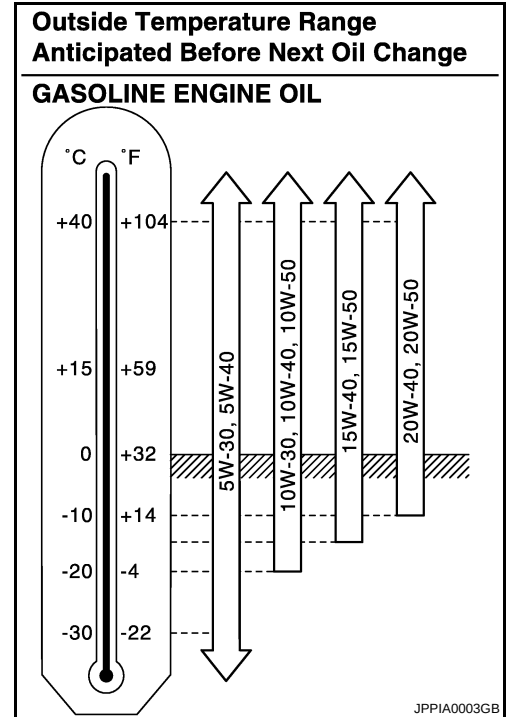
GASOLINE ENGINE

- 5W-30 is preferable.

RECOMMENDED FLUIDS AND LUBRICANTS

< ON-VEHICLE MAINTENANCE >

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



INFOID:000000003858225

Engine Coolant Mixture Ratio

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.

CAUTION:

- When adding or replacing coolant, be sure to use only Genuine NISSAN Engine Coolant or equivalent in its quality. Genuine NISSAN Engine Coolant is premixed (mixture ratio 50%) type coolant.

The use of other types of engine coolant may damage your cooling system.

- 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.

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

SMA089D

Mixed coolant specific gravity

Unit: specific gravity

Engine coolant mixture ratio	Coolant temperature °C (°F)			
	15 (59)	25 (77)	35 (95)	45 (113)
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.

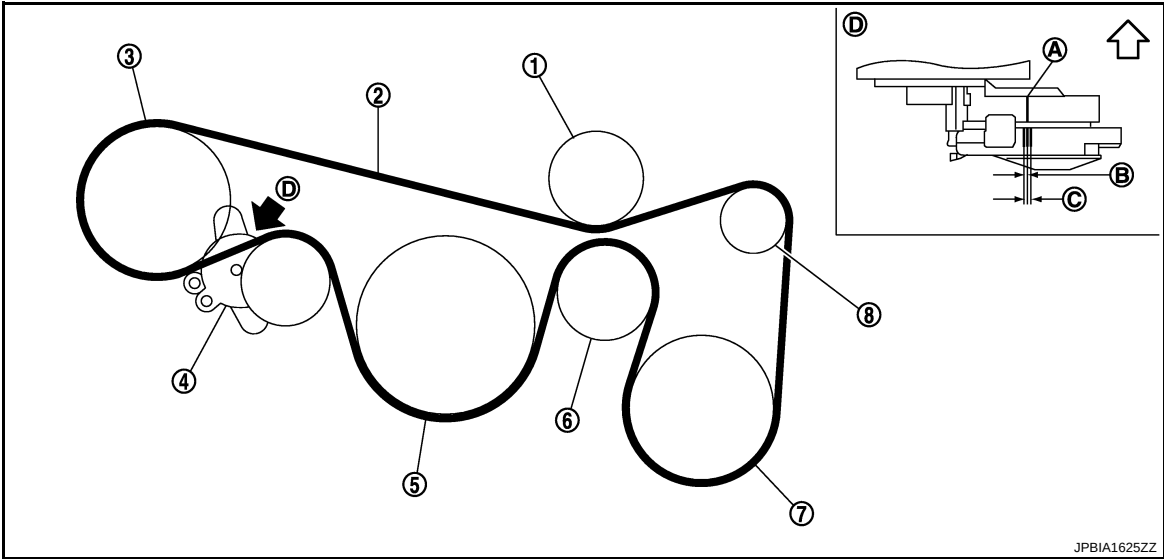
ENGINE MAINTENANCE

< ON-VEHICLE MAINTENANCE >

ENGINE MAINTENANCE DRIVE BELT

DRIVE BELT : Exploded View

INFOID:000000003862446



- | | | |
|------------------------------|---|----------------------------|
| 1. Idler pulley | 2. Drive belt | 3. Power steering oil pump |
| 4. Drive belt auto-tensioner | 5. Crankshaft pulley | 6. Idler pulley |
| 7. A/C compressor | 8. Alternator | |
| A. Indicator | B. Range when new drive belt is installed | C. Possible use range |

D. View D

↶ : Engine front

DRIVE BELT : Checking

INFOID:000000003862447

WARNING:

Be sure to perform the this step when engine is stopped.

- Check that the indicator (A) of drive belt auto-tensioner is within the possible use range (C).

NOTE:

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

DRIVE BELT : Tension Adjustment

INFOID:000000003862448

Refer to [EM-136. "Drive Belt"](#).

ENGINE COOLANT

ENGINE COOLANT : Inspection

INFOID:000000003862449

LEVEL

MA

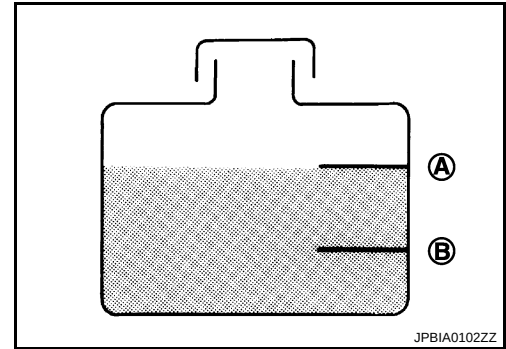
ENGINE MAINTENANCE

< ON-VEHICLE MAINTENANCE >

- Check if the reservoir tank engine coolant level is within the “MIN” to “MAX” when the engine is cool.

A : MAX
B : MIN

- Adjust the engine coolant level as necessary.



LEAKAGE

- To check for leakage, apply pressure to the cooling system with the radiator cap tester (commercial service tool) (A) and radiator cap tester adapter (commercial service tool) (B).

Testing pressure : Refer to [CO-27, "Radiator"](#).

WARNING:

Never remove radiator cap when engine is hot. Serious burns could occur from high-pressure engine coolant escaping from radiator.

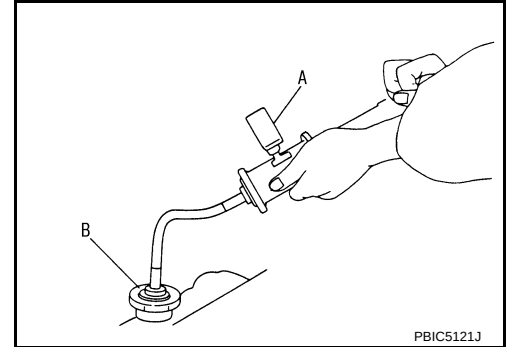
CAUTION:

Higher test pressure than specified may cause radiator damage.

NOTE:

In a case that engine coolant decreases, replenish radiator with engine coolant.

- If anything is found, repair or replace damaged parts.



ENGINE COOLANT : Draining

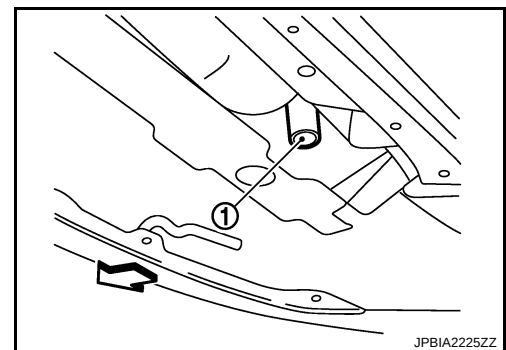
INFOID:0000000003862450

WARNING:

- To avoid being scalded, never change engine coolant when the engine is hot.
- Wrap a thick cloth around radiator cap and carefully remove radiator cap. First, turn radiator cap a quarter of a turn to release built-up pressure. Then turn radiator cap all the way.

1. Remove engine under cover.
2. Open radiator drain plug (1) at the bottom of radiator, and then remove radiator cap.

⇐ : Vehicle front



When draining all of engine coolant in the system, open water drain plugs on cylinder block. Refer to [EM-110, "Disassembly and Assembly"](#).

3. Remove reservoir tank as necessary, and drain engine coolant and clean reservoir tank before installing.
4. Check drained engine coolant for contaminants such as rust, corrosion or discoloration. If contaminated, flush the engine cooling system. Refer to [MA-16, "ENGINE COOLANT : Flushing"](#).

ENGINE COOLANT : Refilling

INFOID:0000000003862451

1. Install reservoir tank if removed, and radiator drain plug.

CAUTION:

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

ENGINE MAINTENANCE

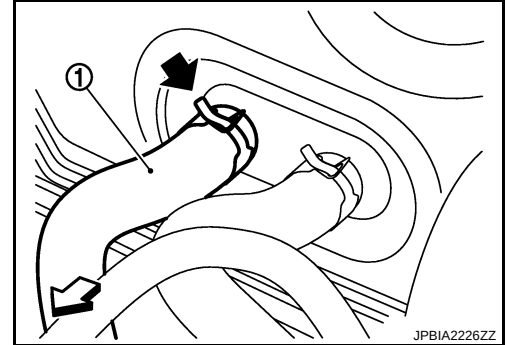
< ON-VEHICLE MAINTENANCE >

Tightening torque : Refer to [CO-13, "Exploded View"](#).

If water drain plugs on cylinder block are removed, close and tighten them. Refer to [EM-110, "Disassembly and Assembly"](#).

2. Check that each hose clamp has been firmly tightened.
3. Remove air duct assembly and air cleaner cases (upper and lower) assembly. Refer to [EM-26, "Exploded View"](#).
4. Disconnect heater hose (1) at the position (↔) in the figure.

↔ : Vehicle front

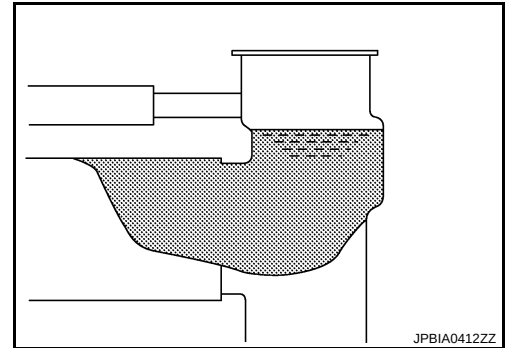


5. Fill radiator, and reservoir tank if removed, to specified level.

CAUTION:

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

- Pour engine coolant through engine coolant filler neck slowly of less than 2 ℓ (1-3/4 Imp qt) a minute to allow air in system to escape.
- When engine coolant overflows disconnected heater hose, connect heater hose, and continue filling the engine coolant.
- Use Genuine NISSAN Engine Coolant or equivalent in its quality mixed with water (distilled or demineralized). Refer to [MA-11, "Fluids and Lubricants"](#).



Engine coolant capacity

(With reservoir tank at "MAX" level)

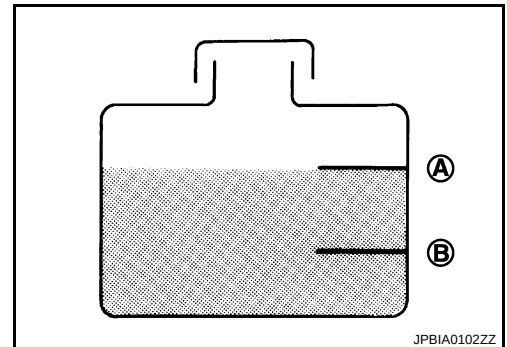
: Refer to [CO-27, "Periodical Maintenance Specification"](#).

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

: Refer to [CO-27, "Periodical Maintenance Specification"](#).

A : MAX

B : MIN



6. Install air duct assembly and air cleaner cases (upper and lower) assembly. Refer to [EM-26, "Exploded View"](#).
7. Install radiator cap.
8. Warm up engine until opening thermostat. Standard for warming-up time is approximately 10 minutes at 3,000 rpm.
 - Check thermostat opening condition by touching radiator hose (lower) to see a flow of warm water.

CAUTION:

ENGINE MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Watch water temperature gauge so as not to overheat engine.

9. Stop the engine and cool down to less than approximately 50°C (122°F).
 - Cool down using fan to reduce the time.
 - If necessary, refill radiator up to filler neck with engine coolant.
- CAUTION:**
Never adhere the engine coolant to electronic equipments. (alternator etc.)
10. Refill reservoir tank to "MAX" level line with engine coolant.
11. Repeat steps 7 through 10 two or more times with radiator cap installed until engine coolant level no longer drops.
12. Check cooling system for leakage with engine running.
13. Warm up the engine, and check for sound of engine coolant flow while running engine from idle up to 3,000 rpm with heater temperature controller set at several position between "COOL" and "WARM".
 - Sound may be noticeable at heater unit.
14. Repeat step 13 three times.
15. If sound is heard, bleed air from cooling system by repeating step 5, and steps from 7 to 14 until engine coolant level no longer drops.

ENGINE COOLANT : Flushing

INFOID:000000003862452

1. Install reservoir tank if removed, and radiator drain plug.

CAUTION:

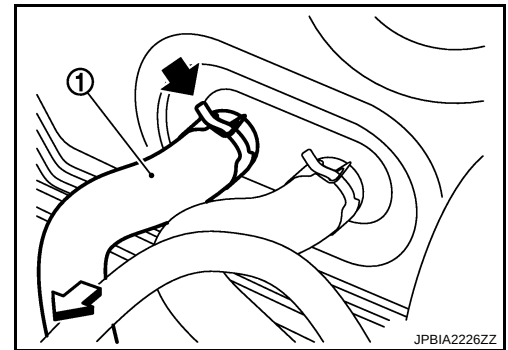
Be sure to clean drain plug and install with new O-ring.

Tightening torque : Refer to [CO-13, "Exploded View"](#).

If water drain plugs on cylinder block are removed, close and tighten them. Refer to [EM-110, "Disassembly and Assembly"](#).

2. Remove air duct assembly and air cleaner cases (upper and lower) assembly. Refer to [EM-26, "Exploded View"](#).
3. Disconnect heater hose (1) at the position (◀) in the figure.

◀ : Vehicle front



4. Fill radiator and reservoir tank with water and reinstall radiator cap.
CAUTION:
Never adhere the water to electronic equipments. (alternator etc.)
 - When water overflows disconnected heater hose, connect heater hose, and continue filling the water.
5. Run the engine and warm it up to normal operating temperature.
6. Rev the engine two or three times under no-load.
7. Stop the engine and wait until it cools down.
8. Drain water from the system. Refer to [MA-14, "ENGINE COOLANT : Draining"](#).
9. Repeat steps 1 through 8 until clear water begins to drain from radiator.

RADIATOR CAP

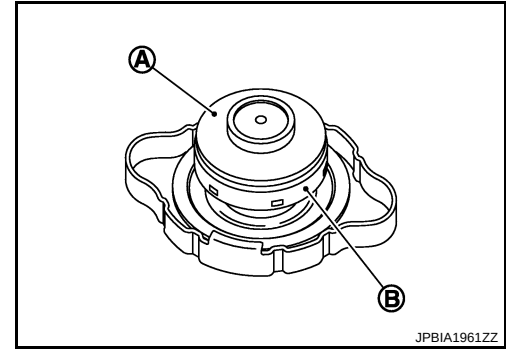
ENGINE MAINTENANCE

< ON-VEHICLE MAINTENANCE >

RADIATOR CAP : Inspection

INFOID:000000003862453

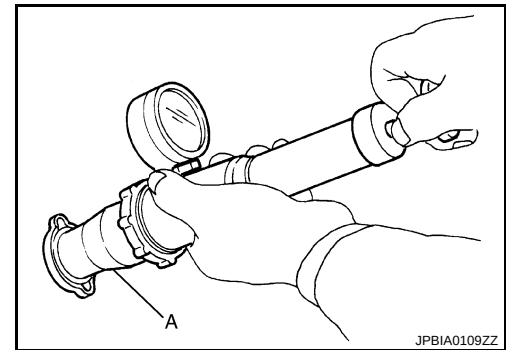
- Check valve seat (A) of radiator cap.
- Check if valve seat is swollen to the extent that the edge of the plunger (B) cannot be seen when watching it vertically from the top.
- Check if valve seat has no soil and damage.
- Check that there is no dirt or damage on the valve seat of radiator cap negative-pressure valve.
- Check that there are no unusualness in the opening and closing conditions of negative-pressure valve.



- Check radiator cap relief pressure.

Standard and limit : Refer to [CO-27, "Radiator"](#).

- When connecting radiator cap to the radiator cap tester (commercial service tool) and the radiator cap tester adapter (commercial service tool) (A), apply engine coolant to the cap seal surface.



- Replace radiator cap if there is an unusualness related to the above three.

CAUTION:

When installing radiator cap, thoroughly wipe out the radiator pipe (upper) filler neck to remove any waxy residue or foreign material.

RADIATOR

RADIATOR : Inspection

INFOID:000000003862454

Check radiator for mud or clogging. If necessary, clean radiator as follows:

CAUTION:

- **Be careful not to bend or damage radiator fins.**
 - **When radiator is cleaned without removal, remove all surrounding parts such as radiator cooling fan assembly and horns. Then tape harness and connectors to prevent water from entering.**
1. Apply water by hose to the back side of the radiator core vertically downward.
 2. Apply water again to all radiator core surfaces once per minute.
 3. Stop washing if any stains no longer flow out from radiator.
 4. Blow air into the back side of radiator core vertically downward.
 - Use compressed air lower than 490 kPa (4.9 bar, 5 kg/cm², 71 psi) and keep distance more than 30 cm (11.81 in).
 5. Blow air again into all the radiator core surfaces once per minute until no water sprays out.

FUEL LINES

ENGINE MAINTENANCE

< ON-VEHICLE MAINTENANCE >

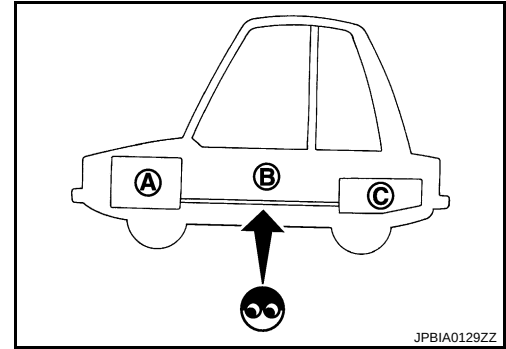
FUEL LINES : Inspection

INFOID:000000003862455

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

- A : Engine
- B : Fuel line
- C : Fuel tank

If necessary, repair or replace damaged parts.



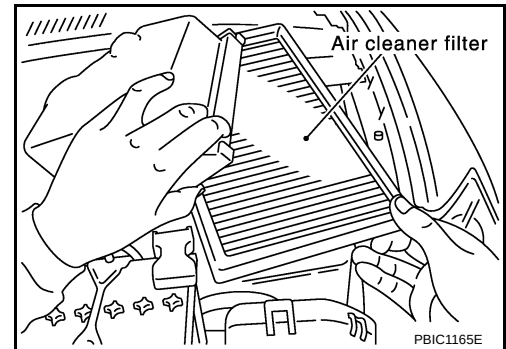
AIR CLEANER FILTER

AIR CLEANER FILTER : Removal and Installation

INFOID:000000003862456

REMOVAL

1. Unhook air cleaner case (lower) side clips and lift up air cleaner case (upper).
2. Remove air cleaner filter from air cleaner case (lower).



INSTALLATION

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

- Install the air cleaner filter by aligning the seal with the notch of air cleaner case.

ENGINE OIL

ENGINE OIL : Draining

INFOID:000000003862457

WARNING:

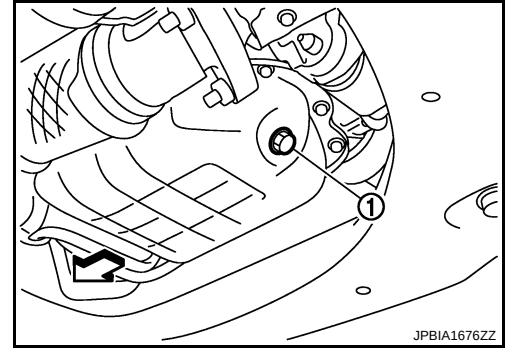
- Be careful not to get burn yourself, as engine oil may be hot.
 - Prolonged and repeated contact with used engine oil may cause skin cancer. Try to avoid direct skin contact with used engine oil. If skin contact is made, wash thoroughly with soap or hand cleaner as soon as possible.
1. Warm up the engine, and check for engine oil leakage from engine components. Refer to [LU-7, "Inspection"](#).
 2. Stop the engine and wait for 10 minutes.
 3. Loosen oil filler cap.

ENGINE MAINTENANCE

< ON-VEHICLE MAINTENANCE >

4. Remove drain plug (1) and then drain engine oil.

← : Vehicle front



INFOID:0000000003862458

ENGINE OIL : Refilling

1. Install drain plug with new washer. Refer to [EM-38, "Exploded View"](#).

CAUTION:

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

Tightening torque : Refer to [EM-38, "Exploded View"](#).

2. Refill with new engine oil.

Engine oil specification and viscosity: Refer to [MA-11, "Fluids and Lubricants"](#).

Engine oil capacity : Refer to [LU-16, "Periodical Maintenance Specification"](#).

CAUTION:

- When filling engine oil, never pull out oil level gauge.
- The refill capacity depends on the engine oil temperature and drain time. Use these specifications for reference only.
- Always use oil level gauge to determine the proper amount of engine oil in engine.

3. Warm up the engine and check area around drain plug and oil filter for engine oil leakage.
4. Stop the engine and wait for 10 minutes.
5. Check the engine oil level. Refer to [LU-7, "Inspection"](#).

OIL FILTER

OIL FILTER : Removal and Installation

INFOID:0000000003862459

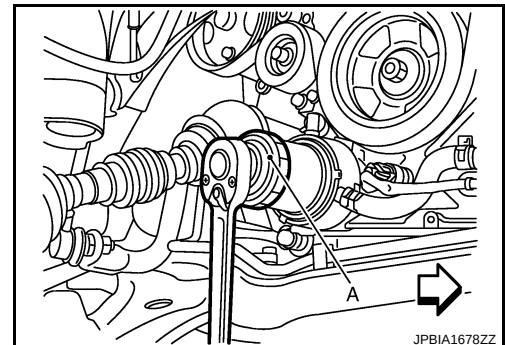
REMOVAL

CAUTION:

- Oil filter is provided with relief valve. Use genuine NISSAN oil filter or equivalent.
- Be careful not to get burned when engine and engine oil may be hot.
- When removing, prepare a shop cloth to absorb any engine oil leakage or spillage.
- Never allow engine oil to adhere to drive belt.
- Completely wipe off any engine oil that adheres to engine and vehicle.

1. Remove splash guard (RH). Refer to [EXT-22, "FENDER PROTECTOR : Exploded View"](#).
2. Using oil filter wrench [SST: KV10115801 (J38956)] (A), remove oil filter.

← : Vehicle front



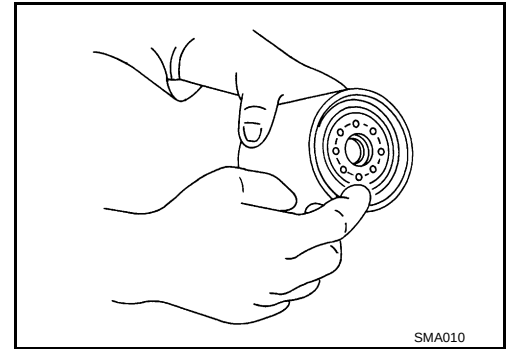
INSTALLATION

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

ENGINE MAINTENANCE

< ON-VEHICLE MAINTENANCE >

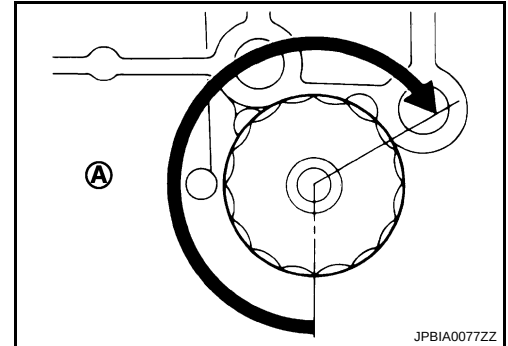
2. Apply engine oil to the oil seal contact surface of new oil filter.



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

Oil filter:

: 17.6 N·m (1.8 kg-m, 13 ft-lb)



OIL FILTER : Inspection

INFOID:000000003862460

INSPECTION AFTER INSTALLATION

1. Check the engine oil level. Refer to [LU-7, "Inspection"](#).
2. Start the engine, and check there is no leakage of engine oil.
3. Stop the engine and wait for 10 minutes.
4. Check the engine oil level, and adjust the level. Refer to [LU-7, "Inspection"](#).

SPARK PLUG

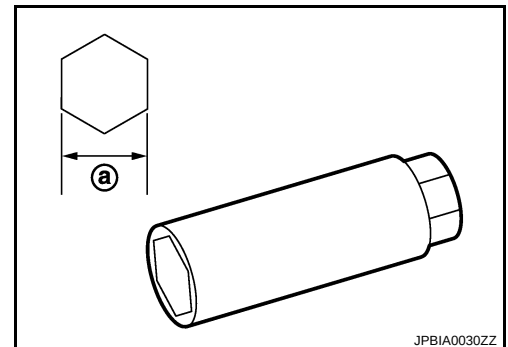
SPARK PLUG : Removal and Installation

INFOID:000000003862461

REMOVAL

1. Remove engine cover. Refer to [EM-24, "Exploded View"](#).
2. Remove air cleaner cases (upper and lower) and air duct assembly. Refer to [EM-26, "Exploded View"](#).
3. Remove electric throttle control actuator. Refer to [EM-28, "Exploded View"](#).
4. Remove intake manifold collector. Refer to [EM-28, "Exploded View"](#).
5. Remove ignition coil. Refer to [EM-49, "Exploded View"](#).
6. Remove spark plug with a spark plug wrench (commercial service tool).

a : 14 mm (0.55 in)



INSTALLATION

Installation is the reverse order of removal.

ENGINE MAINTENANCE

< ON-VEHICLE MAINTENANCE >

SPARK PLUG : Inspection

INFOID:000000003862462

INSPECTION AFTER REMOVAL

Use the standard type spark plug for normal condition.

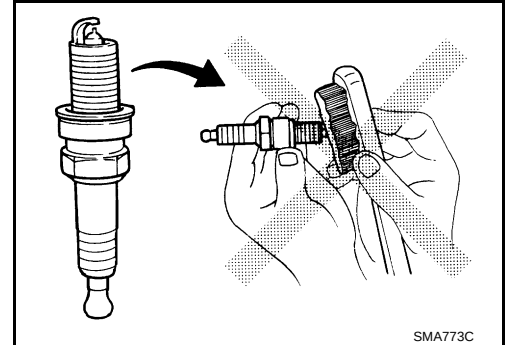
Spark plug (Standard type) : Refer to [EM-136, "Spark Plug"](#).

CAUTION:

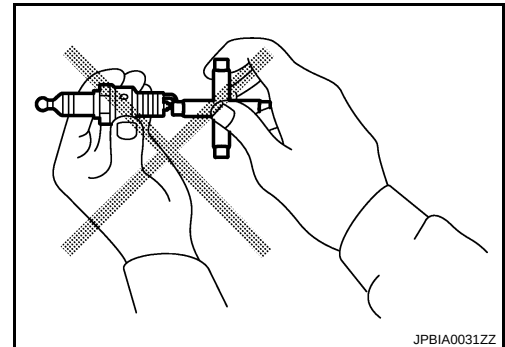
- Never drop or shock spark plug.
- Never use a wire brush for cleaning.
- If plug tip is covered with carbon, spark plug cleaner may be used.

Cleaner air pressure: Less than 588 kPa (6 bar, 6 kg/cm², 85 psi)

Cleaning time: Less than 20 seconds



- Spark plug gap adjustment is not required between replacement intervals.
- Measure spark plug gap. When it exceeds the limit, replace spark plug even if it is within the specified replacement mileage. Refer to [EM-136, "Spark Plug"](#).



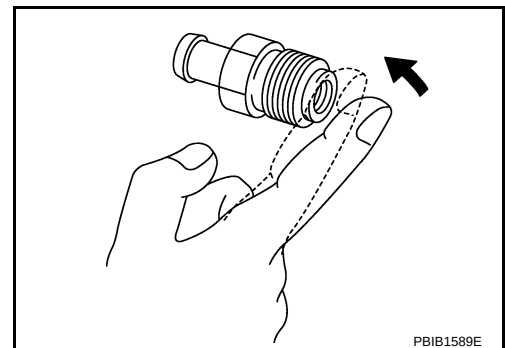
POSITIVE CRANKCASE VENTILATION SYSTEM

POSITIVE CRANKCASE VENTILATION SYSTEM : Inspection

INFOID:000000003861769

PCV (POSITIVE CRANKCASE VENTILATION) VALVE

With engine running at idle, remove PCV valve from rocker cover. A properly working valve makes a hissing noise as air passes through it. A strong vacuum should be felt immediately when a finger is placed over valve inlet.



PCV VALVE VENTILATION HOSE

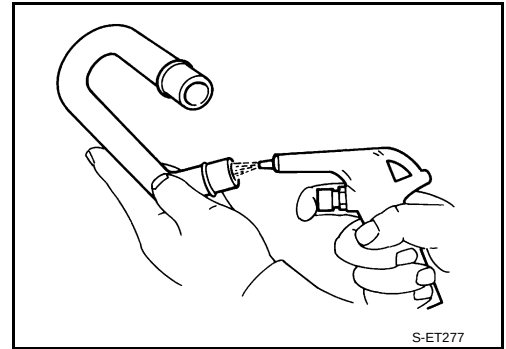
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ENGINE MAINTENANCE

< ON-VEHICLE MAINTENANCE >

1. Check hoses and hose connections for leaks.
2. Disconnect all hoses and clean with compressed air. If any hose cannot be freed of obstructions, replace.



EVAP VAPOR LINES

EVAP VAPOR LINES : Inspection

INFOID:000000003858243

Refer to [EC-413, "Inspection"](#).

CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

CHASSIS MAINTENANCE

HEADLAMP AIMING ADJUSTMENT (XENON TYPE)

HEADLAMP AIMING ADJUSTMENT (XENON TYPE) : Description

INFOID:000000003862420

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the headlamp assembly has been replaced.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the trunk room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

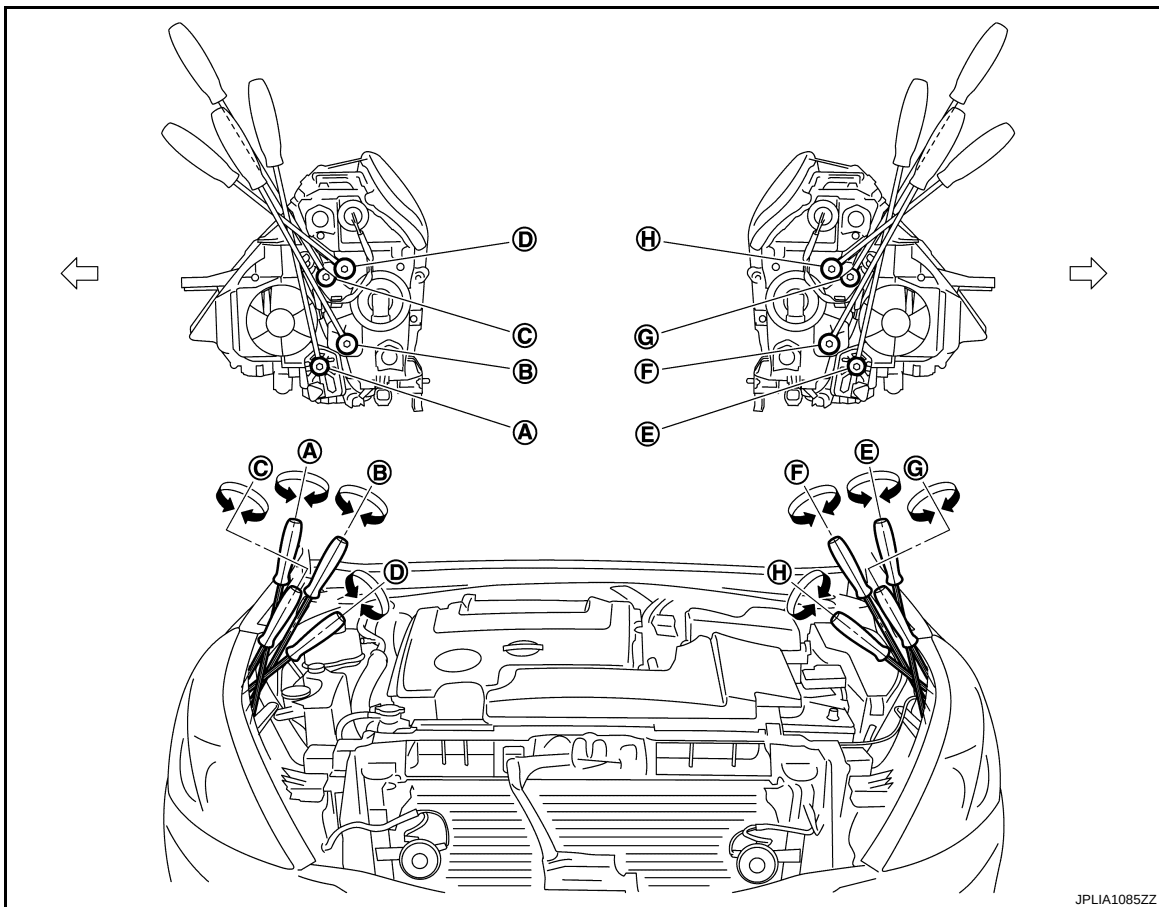
- Wipe out dirt on the headlamp.

CAUTION:

Never use organic solvent (thinner, gasoline etc.)

- Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW



CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

- | | | |
|---|---|---|
| A. Headlamp (LO) RH
(UP/DOWN) adjustment screw | B. Headlamp (HI) RH
(UP/DOWN) adjustment screw | C. Headlamp (LO) RH
(UP-OUTSIDE/DOWN-INSIDE)
adjustment screw |
| D. Headlamp (HI) RH
(UP-INSIDE/DOWN-OUTSIDE)
adjustment screw | E. Headlamp (LO) LH
(UP/DOWN) adjustment screw | F. Headlamp (HI) LH
(UP/DOWN) adjustment screw |
| G. Headlamp (LO) LH
(UP-OUTSIDE/DOWN-INSIDE)
adjustment screw | H. Headlamp (HI) LH
(UP-INSIDE/DOWN-OUTSIDE)
adjustment screw | |

↩ Vehicle center

Adjustment screw		Screw driver rotation	Facing direction
A	Headlamp (LO) RH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN
B	Headlamp (HI) RH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN
C	Headlamp (LO) RH (UP-OUTSIDE/DOWN-INSIDE)	Clockwise	DOWN-INSIDE
		Counterclockwise	UP-OUTSIDE
D	Headlamp (HI) RH (UP-INSIDE/DOWN-OUTSIDE)	Clockwise	DOWN-OUTSIDE
		Counterclockwise	UP-INSIDE
E	Headlamp (LO) LH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN
F	Headlamp (HI) LH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN
G	Headlamp (LO) LH (UP-OUTSIDE/DOWN-INSIDE)	Clockwise	DOWN-INSIDE
		Counterclockwise	UP-OUTSIDE
H	Headlamp (HI) LH (UP-INSIDE/DOWN-OUTSIDE)	Clockwise	DOWN-OUTSIDE
		Counterclockwise	UP-INSIDE

HEADLAMP AIMING ADJUSTMENT (XENON TYPE) : Aiming Adjustment Procedure (Low Beam)

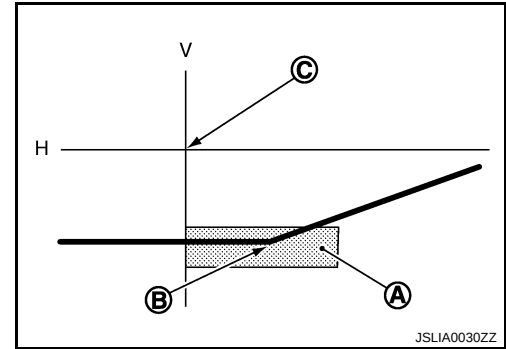
INFOID:000000003862421

- Place the screen.
NOTE:
 - Stop the vehicle at the perpendicular angle to the wall.
 - Set the screen so that it is perpendicular to a level load surface.
- Face the vehicle squarely toward the screen and make the distance between the headlamp center and the screen 10 m (32.8 ft).
- Start the engine and illuminate the headlamp (LO).
NOTE: Block light from the headlamp that is not being adjusted with a thick fabric or another object, so that it does not reach the adjustment screen.
CAUTION:
Do not cover lens surface with tape, etc. because it is made from plastic.
- Use the aiming adjustment screw to adjust the elbow point projected by the low beams on the screen, so that it is within the aiming adjustment area.

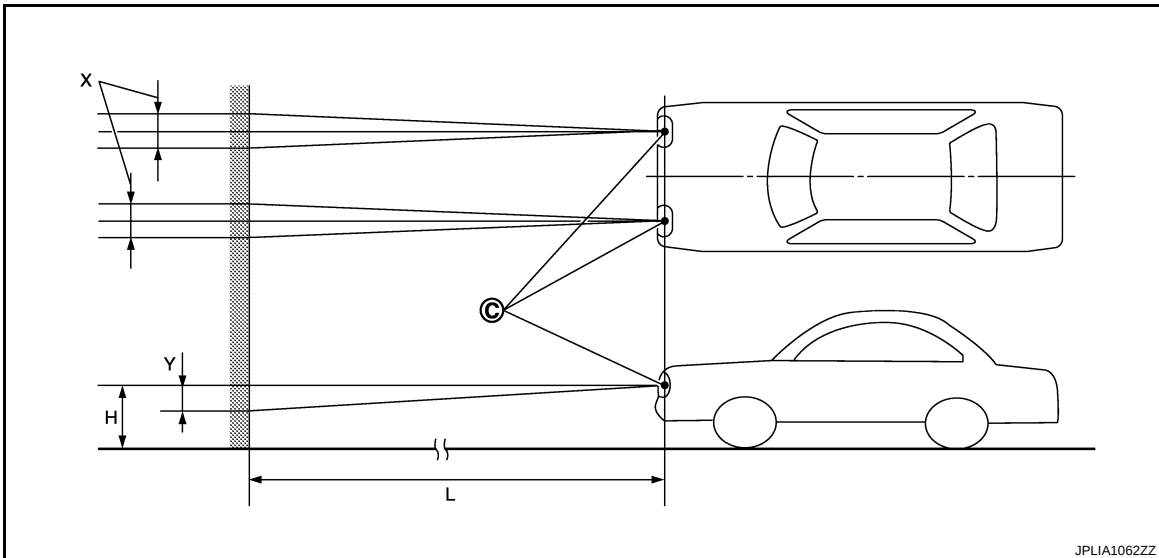
CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Low beam distribution on the screen



- A. Aiming adjustment area
- B. Elbow point
- C. Headlamp center
- H. Horizontal center line of headlamp
- V. Vertical center line of headlamp



- C. Vertical center line of headlamp
- H. Horizontal center line of headlamp
- L. Distance from headlamp center to screen
- X. Aiming adjustment area (lateral)
- Y. Aiming adjustment area (vertical)

Distance from headlamp center to screen (L) : 10m (32.8 ft)

Unit: mm (in)

Aiming adjustment area			
Vertical direction (Y) (Lower side from headlamp center height)		Lateral direction (X) (Right and left side from headlamp centerline)	
Highest light axis	100 (3.94)	0-100 (3.94)	
Target light axis	120 (4.72)		
Lowest light axis	150 (5.91)		

HEADLAMP AIMING ADJUSTMENT (XENON TYPE) : Aiming Adjustment Procedure (High Beam)

INFOID:000000003862422

- Place the screen.

NOTE:

- Stop the vehicle at the perpendicular angle to the wall.

CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

- Set the screen so that it is perpendicular to a level load surface.
- 2. Face the vehicle squarely toward the screen and make the distance between the headlamp center and the screen 10 m (32.8 ft).
- 3. Start the engine and illuminate the headlamp (HI).

NOTE:

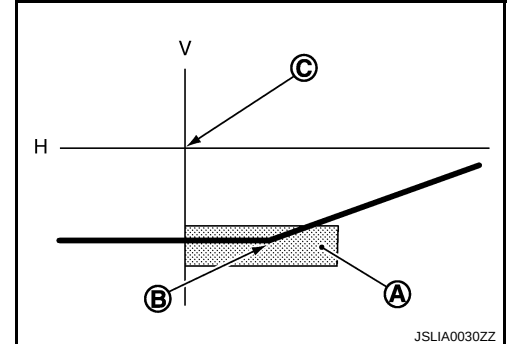
Block light from the headlamp that is not being adjusted with a thick fabric or another object, so that it does not reach the adjustment screen.

CAUTION:

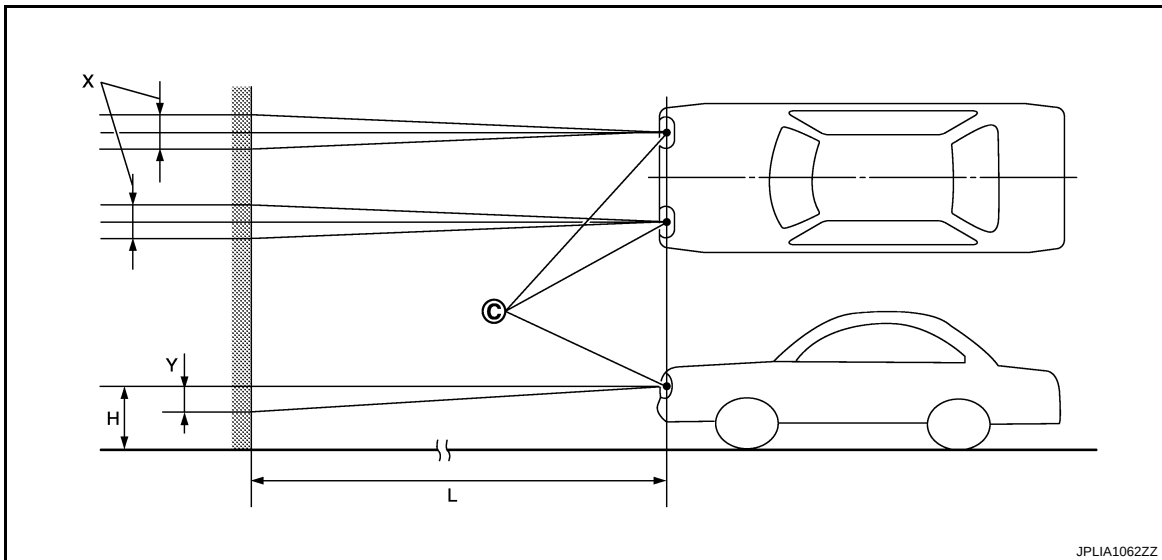
Do not cover lens surface with tape, etc. because it is made from plastic.

- 4. Use the aiming adjustment screw to adjust the elbow point projected by the low beams on the screen, so that it is within the aiming adjustment area.

High beam distribution on the screen



- A. Aiming adjustment area
- B. Elbow point
- C. Headlamp center
- H. Horizontal center line of headlamp
- V. Vertical center line of headlamp



- C. Vertical center line of headlamp
- H. Horizontal center line of headlamp
- L. Distance from headlamp center to screen
- X. Aiming adjustment area (lateral)
- Y. Aiming adjustment area (Vertical)

Distance from headlamp center to screen (L) : 10m (32.8 ft)

CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Unit: mm (in)

Aiming adjustment area		
Vertical direction (Y) (Lower side from headlamp center height)		Lateral direction (X) (Right and left side from headlamp centerline)
Highest light axis	106 (4.17)	0-100 (3.94)
Target light axis	120 (4.72)	
Lowest light axis	164 (6.46)	

HEADLAMP AIMING ADJUSTMENT (HALOGEN TYPE)

HEADLAMP AIMING ADJUSTMENT (HALOGEN TYPE) : Description

INFOID:0000000003862423

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the headlamp assembly has been replaced.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the trunk room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

- Wipe out dirt on the headlamp.

CAUTION:

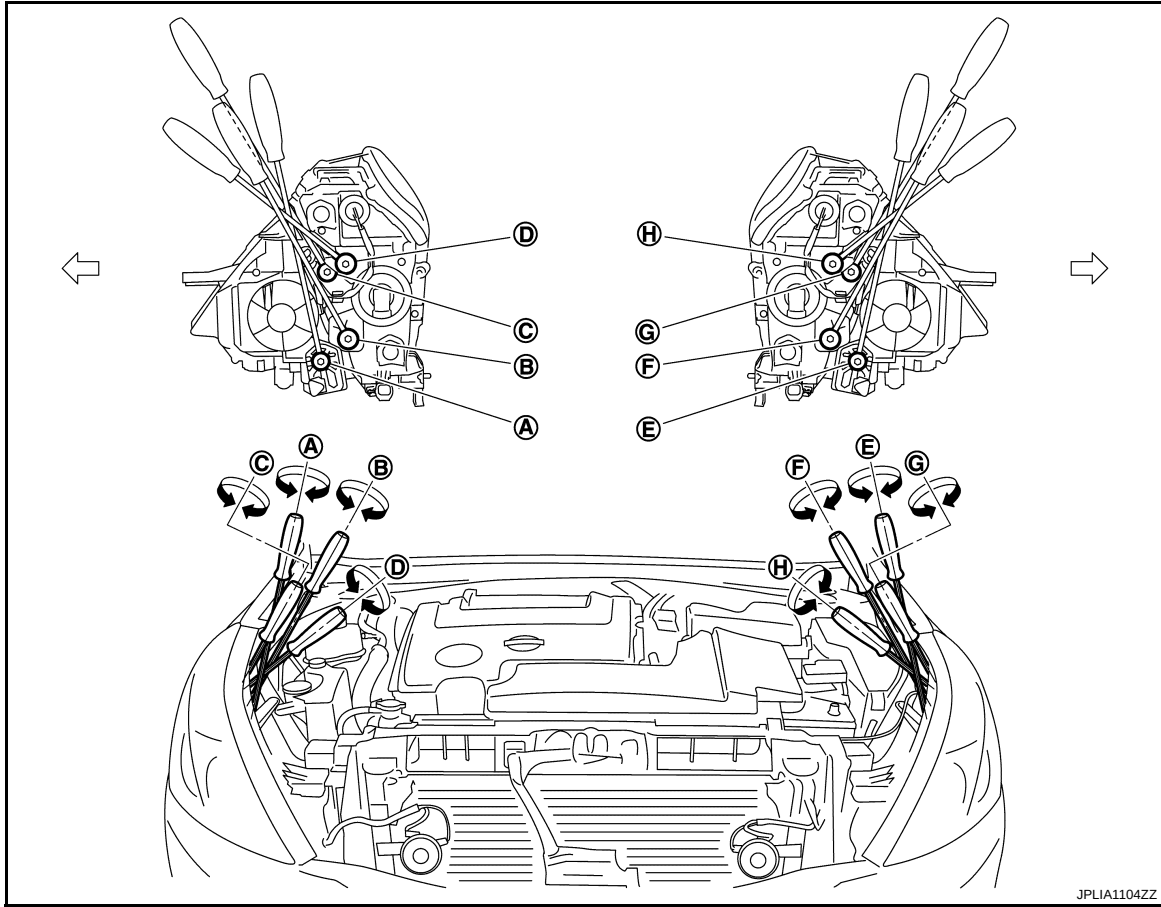
Never use organic solvent (thinner, gasoline etc.)

- Ride alone on the driver seat.
- Headlamp aiming switch sets to "0".

AIMING ADJUSTMENT SCREW

CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >



- A. Headlamp (LO) RH (UP/DOWN) adjustment screw
- B. Headlamp (HI) RH (UP/DOWN) adjustment screw
- C. Headlamp (LO) RH (UP-OUTSIDE/DOWN-INSIDE) adjustment screw
- D. Headlamp (HI) RH (UP-INSIDE/DOWN-OUTSIDE) adjustment screw
- E. Headlamp (LO) LH (UP/DOWN) adjustment screw
- F. Headlamp (HI) LH (UP/DOWN) adjustment screw
- G. Headlamp (LO) LH (UP-OUTSIDE/DOWN-INSIDE) adjustment screw
- H. Headlamp (HI) LH (UP-INSIDE/DOWN-OUTSIDE) adjustment screw

↔: Vehicle center

Adjustment screw		Screw driver rotation	Facing direction
A	Headlamp (LO) RH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN
B	Headlamp (HI) RH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN
C	Headlamp (LO) RH (UP-OUTSIDE/DOWN-INSIDE)	Clockwise	DOWN-INSIDE
		Counterclockwise	UP-OUTSIDE
D	Headlamp (HI) RH (UP-INSIDE/DOWN-OUTSIDE)	Clockwise	DOWN-OUTSIDE
		Counterclockwise	UP-INSIDE
E	Headlamp (LO) LH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN
F	Headlamp (HI) LH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN

CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Adjustment screw		Screw driver rotation	Facing direction
G	Headlamp (LO) LH (UP-OUTSIDE/DOWN-INSIDE)	Clockwise	DOWN-INSIDE
		Counterclockwise	UP-OUTSIDE
H	Headlamp (HI) LH (UP-INSIDE/DOWN-OUTSIDE)	Clockwise	DOWN-OUTSIDE
		Counterclockwise	UP-INSIDE

HEADLAMP AIMING ADJUSTMENT (HALOGEN TYPE) : Aiming Adjustment Procedure (Low Beam)

INFOID:000000003862424

1. Place the screen.

NOTE:

- Stop the vehicle at the perpendicular angle to the wall.
- Set the screen so that it is perpendicular to a level load surface.

2. Face the vehicle squarely toward the screen and make the distance between the headlamp center and the screen 10 m (32.8 ft).

3. Start the engine and illuminate the headlamp (LO).

NOTE:

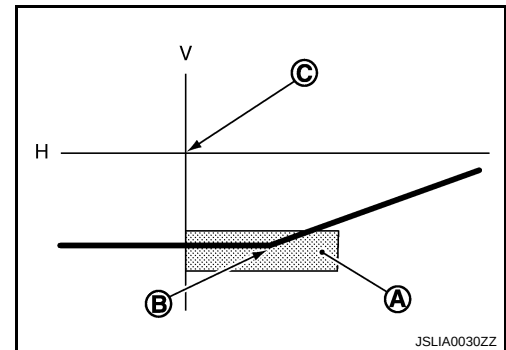
Block light from the headlamp that is not being adjusted with a thick fabric or another object, so that it does not reach the adjustment screen.

CAUTION:

Do not cover lens surface with tape, etc. because it is made from plastic.

4. Use the aiming adjustment screw to adjust the elbow point projected by the low beams on the screen, so that it is within the aiming adjustment area.

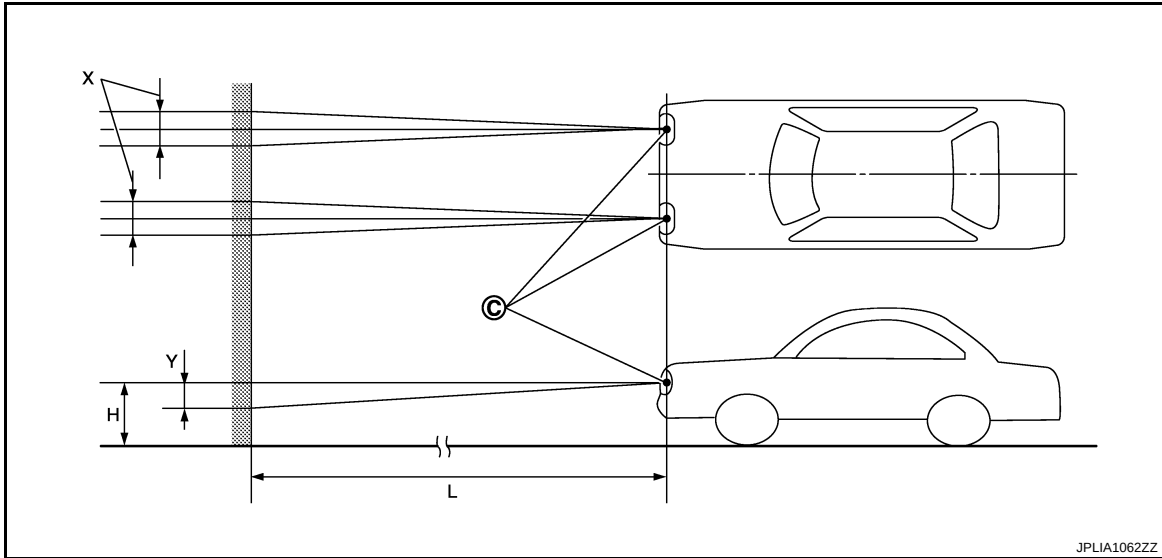
Low beam distribution on the screen



- A. Aiming adjustment area
- B. Elbow point
- C. Headlamp center
- H. Horizontal center line of headlamp
- V. Vertical center line of headlamp

CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >



- C. Vertical center line of headlamp H. Horizontal center line of headlamp L. Distance from headlamp center to screen
 X. Aiming adjustment area (lateral) Y. Aiming adjustment area (Vertical)

Distance from headlamp center to screen (L) : 10m (32.8 ft)

Unit: mm (in)

Aiming adjustment area		
Vertical direction (Y) (Lower side from headlamp center height)		Lateral direction (X) (Right and left side from headlamp centerline)
Highest light axis	100 (3.94)	0-100 (3.94)
Target light axis	120 (4.72)	
Lowest light axis	150 (5.91)	

HEADLAMP AIMING ADJUSTMENT (HALOGEN TYPE) : Aiming Adjustment Procedure (High Beam)

INFOID:000000003862425

- Place the screen.

NOTE:

- Stop the vehicle at the perpendicular angle to the wall.
- Set the screen so that it is perpendicular to a level load surface.

- Face the vehicle squarely toward the screen and make the distance between the headlamp center and the screen 10 m (32.8 ft).

- Start the engine and illuminate the headlamp (HI).

NOTE:

Block light from the headlamp that is not being adjusted with a thick fabric or another object, so that it does not reach the adjustment screen.

CAUTION:

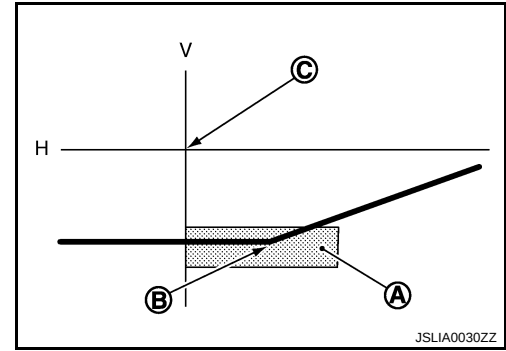
Do not cover lens surface with tape, etc. because it is made from plastic.

- Use the aiming adjustment screw to adjust the elbow point projected by the low beams on the screen, so that it is within the aiming adjustment area.

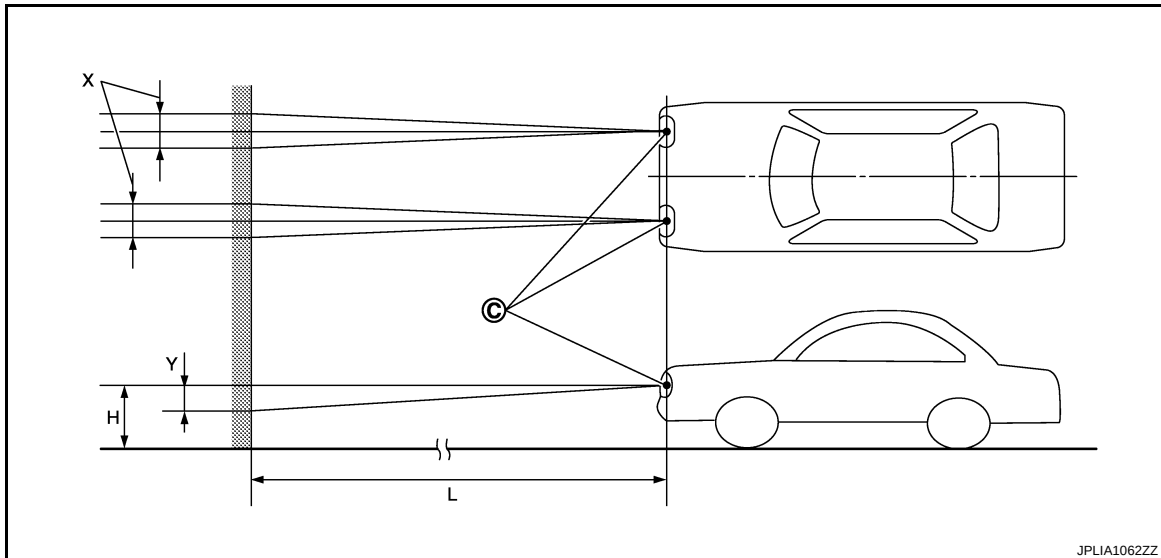
CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

High beam distribution on the screen



- A. Aiming adjustment area
- B. Elbow point
- C. Headlamp center
- H. Horizontal center line of headlamp
- V. Vertical center line of headlamp



- C. Vertical center line of headlamp
- H. Horizontal center line of headlamp
- L. Distance from headlamp center to screen
- X. Aiming adjustment area (lateral)
- Y. Aiming adjustment area (Vertical)

Distance from headlamp center to screen (L) : 10m (32.8 ft)

Unit: mm (in)

Aiming adjustment area

Vertical direction (Y) (Lower side from headlamp center height)		Lateral direction (X) (Right and left side from headlamp centerline)
Highest light axis	106 (4.17)	0-100 (3.94)
Target light axis	120 (4.72)	
Lowest light axis	164 (6.46)	

EXHAUST SYSTEM

CHASSIS MAINTENANCE

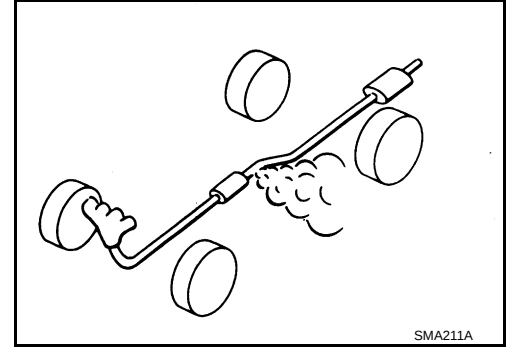
< ON-VEHICLE MAINTENANCE >

EXHAUST SYSTEM : Inspection

INFOID:000000003862426

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

- If anything is found, repair or replace damaged parts.



CVT FLUID: RE0F10A

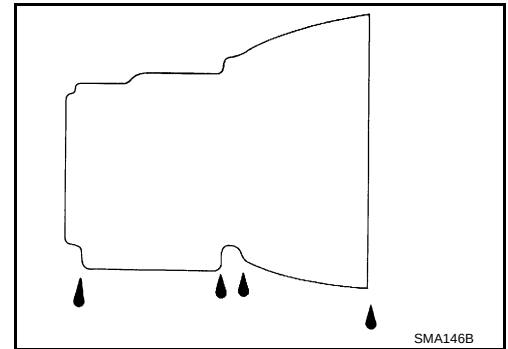
CVT FLUID: RE0F10A : Inspection

INFOID:000000003862427

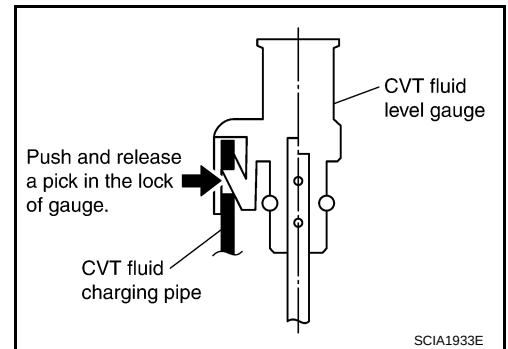
CHECKING CVT FLUID

The 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.



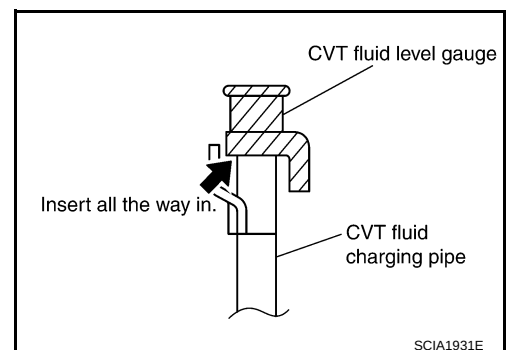
6. Pull out the CVT fluid level gauge from the CVT fluid charging pipe after pressing the tab on the CVT fluid level gauge to release the lock.



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.



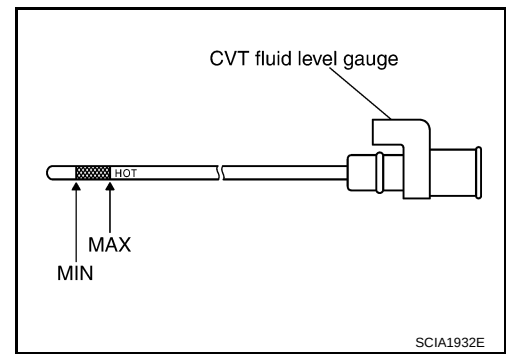
CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

- Place the selector lever in "P" or "N" and check that the fluid level is within the specified range.

CAUTION:

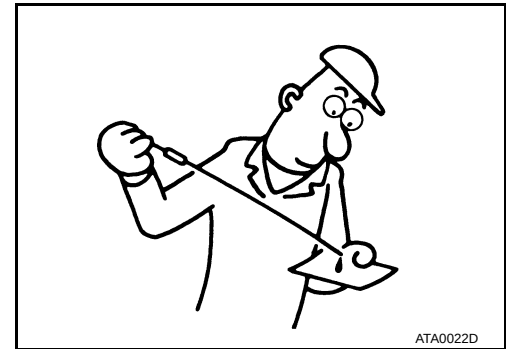
When reinstalling CVT fluid level gauge, insert it into the CVT fluid charging pipe and rotate it to the original installation position until securely locked.



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-13, "Exploded View"](#).



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: RE0F10A : Changing

INFOID:000000003862428

CAUTION:

Replace O-ring with new ones at the final stage of the operation when installing.

- Remove drain plug from oil pan.
- Remove drain plug gasket from drain plug.
- Install drain plug gasket to drain plug.

CAUTION:

Never reuse drain plug gasket.

- Install drain plug to oil pan. Refer to [TM-321, "Exploded View"](#).
- Fill CVT fluid from CVT fluid charging pipe to the specified level.

CVT fluid : Refer to [TM-337, "General Specification"](#).

Fluid capacity : Refer to [TM-337, "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.
- With the engine warmed up, drive the vehicle in an urban area.

NOTE:

CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

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).

7. Check CVT fluid level and condition.
8. Repeat steps 1 to 5 if CVT fluid has been contaminated.

CVT FLUID: RE0F09B

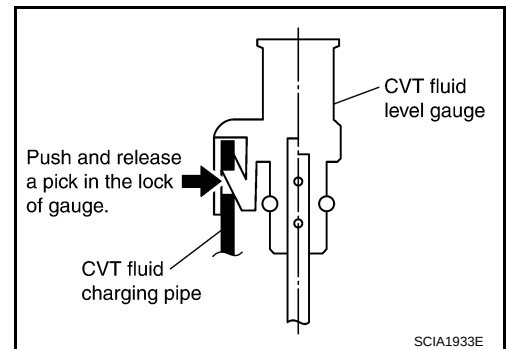
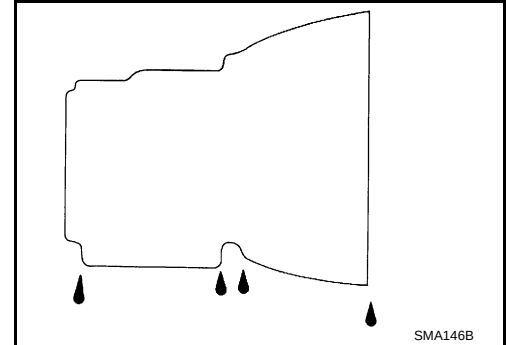
CVT FLUID: RE0F09B : Inspection

INFOID:000000003862429

CHECKING CVT FLUID

The 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:

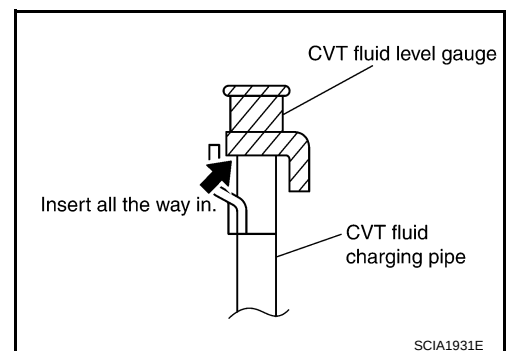
1. Check for fluid leakage.
2. With the engine warmed up, drive the vehicle in an urban area. When ambient temperature is 20°C (68°F), it takes about 10 minutes for the CVT fluid to warm up to 50 to 80°C (122 to 176°F).
3. Park the vehicle on a level surface.
4. Apply parking brake firmly.
5. With engine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

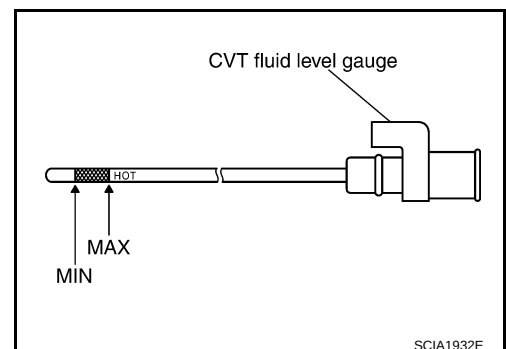
When wiping away the CVT fluid level gauge, always use lint-free paper, not a cloth rag.



8. Place the selector lever in "P" or "N" and check that 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 securely locked.



CHASSIS MAINTENANCE

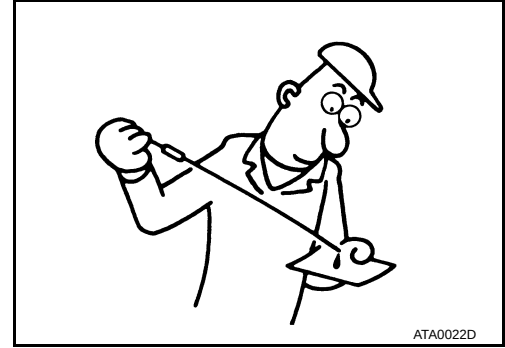
< ON-VEHICLE MAINTENANCE >

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-13, "Exploded View"](#).

Fluid status	Conceivable cause	Required operation
Varnished (viscous varnish state)	CVT fluid becomes 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.



ATA0022D

CVT FLUID: RE0F09B : Changing

INFOID:000000003862430

CAUTION:

Replace O-ring with new ones at the final stage of the operation when installing.

1. Remove drain plug from oil pan.
2. Remove drain plug gasket from drain plug.
3. Install drain plug gasket to drain plug.

CAUTION:

Never reuse drain plug gasket.

4. Install drain plug to oil pan.

Drain plug – tightening torque : Refer to [TM-159, "Exploded View"](#)

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

CVT fluid : Refer to [TM-174, "General Specification"](#).

Fluid capacity : Refer to [TM-174, "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-37, "CONSULT-III Function \(TRANSMISSION\)"](#).

6. With the engine warmed up, drive the vehicle in an urban area.

NOTE:

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

7. Check CVT fluid level and condition.
8. Repeat steps 1 to 5 if CVT fluid has been contaminated.

WHEELS (BONDING WEIGHT TYPE)

WHEELS (BONDING WEIGHT TYPE) : Adjustment

INFOID:000000003911590

BALANCING WHEELS (BONDING WEIGHT TYPE)

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

CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

Preparation Before Adjustment

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

CAUTION:

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

Wheel Balance Adjustment

If a tire balance machine has adhesion balance weight mode settings and drive-in weight mode setting, select and adjust a drive-in weight mode suitable for road wheels.

1. Set road wheel on tire balance machine using the center hole as a guide. Start the tire balance machine.
2. When inner and outer unbalance values are shown on the tire balance machine indicator, multiply outer unbalance value by $5/3$ to determine balance weight that should be used. Select the outer balance weight with a value closest to the calculated value above and install to the designated outer position of, or at the designated angle in relation to the road wheel.

CAUTION:

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

- a. Indicated unbalance value $\times 5/3$ = balance weight to be installed

Calculation example:

$23 \text{ g (0.81 oz)} \times 5/3 = 38.33 \text{ g (1.35 oz)} \Rightarrow 37.5 \text{ g (1.32 oz)}$ balance weight (closer to calculated balance weight value)

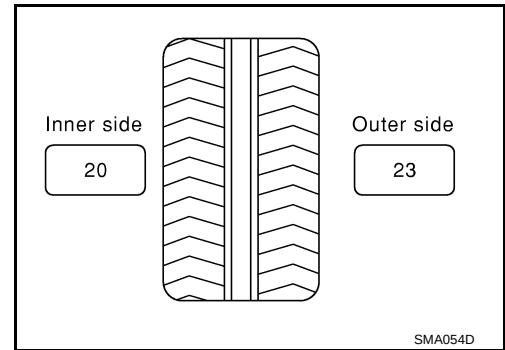
NOTE:

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

Example:

$36.2 \Rightarrow 35 \text{ g (1.23 oz)}$

$36.3 \Rightarrow 37.5 \text{ g (1.32 oz)}$

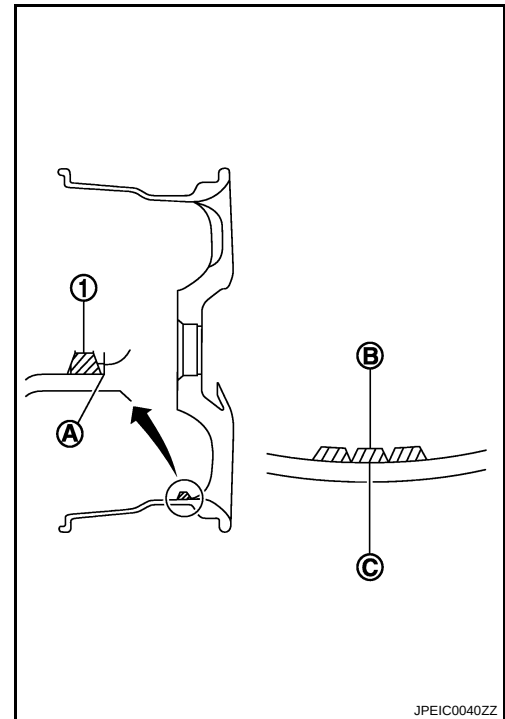


- b. Installed balance weight in the position.

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

CAUTION:

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



CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

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

CAUTION:

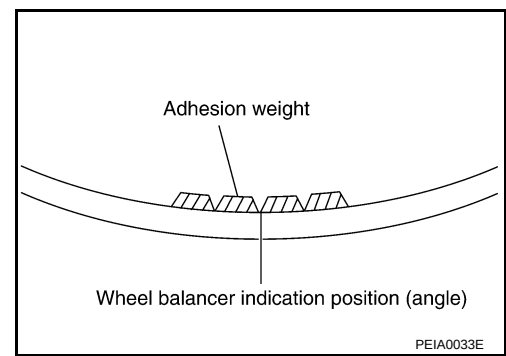
Do not install one balance weight sheet on top of another.

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

CAUTION:

Do not install more than two balance weight.

5. Start the tire balance machine. Make sure that inner and outer residual unbalance values are 5 g (0.17 oz) each or below.
6. If either residual unbalance value exceeds 5 g (0.17 oz), repeat installation procedures.



Limit

Dynamic (At rim flange): Refer to [WT-5, "Road Wheel"](#).

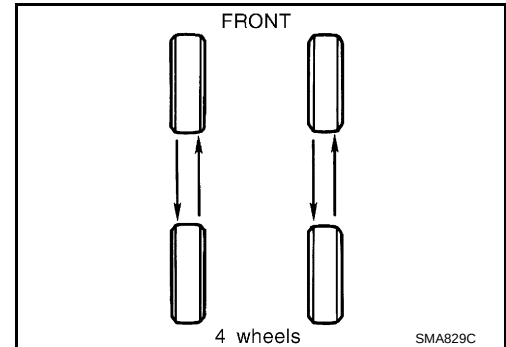
Static (At rim flange): Refer to [WT-5, "Road Wheel"](#).

TIRE ROTATION

- Follow the maintenance schedule for tire rotation service intervals. Refer to [MA-5, "General Maintenance"](#).
- When installing the wheel, tighten wheel nuts to the specified torque.

CAUTION:

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



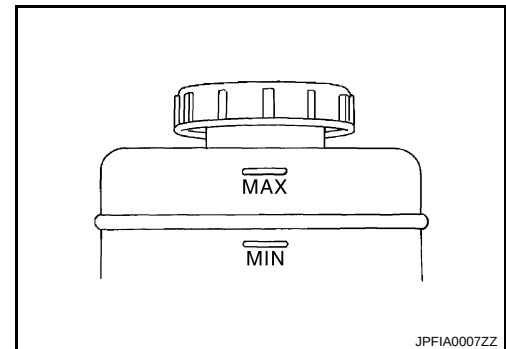
Wheel nuts tightening torque : Refer to [WT-5, "Wheel Nut"](#).

BRAKE FLUID LEVEL AND LEAKS

BRAKE FLUID LEVEL AND LEAKS : Inspection

INFOID:000000003858309

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



BRAKE LINES AND CABLES

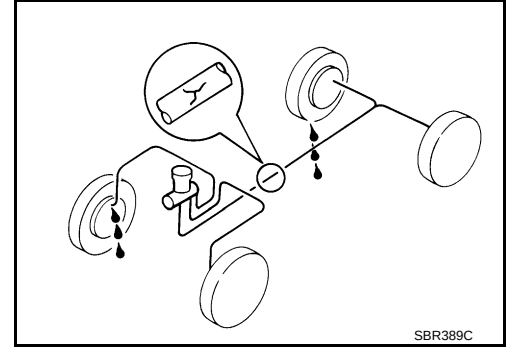
CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

BRAKE LINES AND CABLES : Inspection

INFOID:000000003858310

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

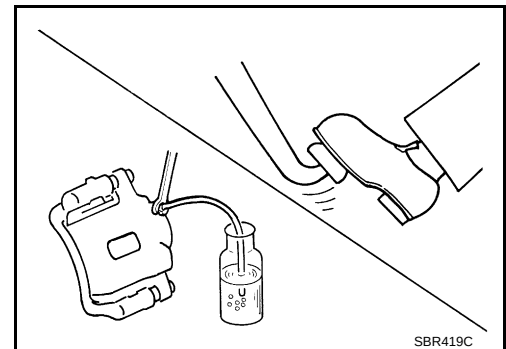


BRAKE FLUID

BRAKE FLUID : Changing

INFOID:000000003858311

1. Drain brake fluid from each bleed valve.
2. Refill until new brake fluid comes out from each bleed valve. Use same procedure as in bleeding hydraulic system to refill brake fluid.
Refer to [BR-10. "Bleeding Brake System"](#).
 - Refill with recommended brake fluid.
Refer to [MA-11. "Fluids and Lubricants"](#).
 - Never reuse drained brake fluid.
 - Be careful not to splash brake fluid on painted areas.



DISC BRAKE

DISC BRAKE : Inspection

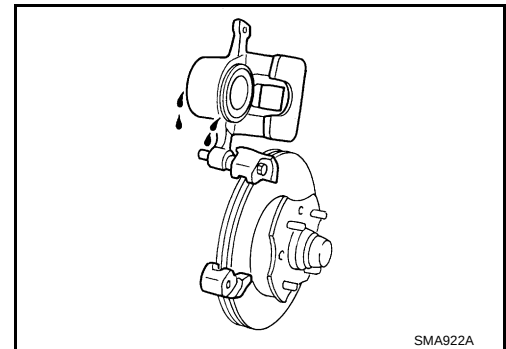
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DISC ROTOR

Check condition, wear, and damage.

CALIPER

- Check for leakage.

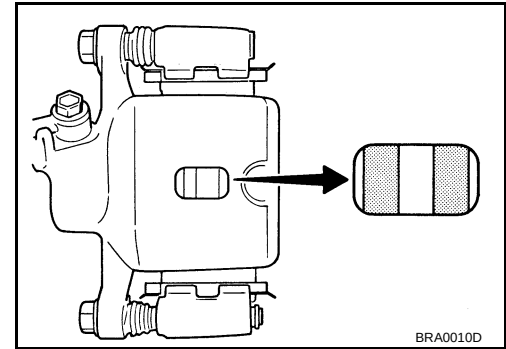


BRAKE PAD

CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

- Check for wear or damage.



DISC BRAKE : Front Disc Brake

INFOID:000000003862434

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
	Wear thickness	24.0 (0.945)
Disc rotor	Runout (with it attached to the vehicle)	0.040 (0.0016) or less

DISC BRAKE : Rear Disc Brake

INFOID:000000003862435

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
	Wear thickness	8.0 (0.315)
Disc rotor	Runout (with it attached to the vehicle)	0.050 (0.0020) or less

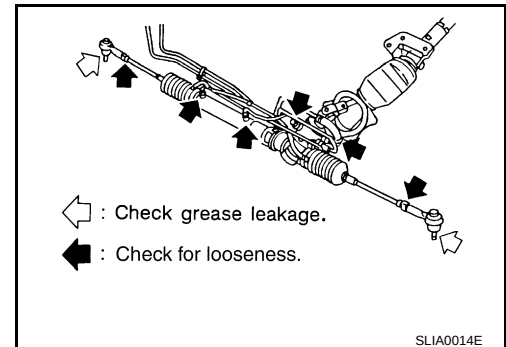
STEERING GEAR AND LINKAGE

STEERING GEAR AND LINKAGE : Inspection

INFOID:000000003858315

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

CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

POWER STEERING FLUID AND LINES : Inspection

INFOID:000000003862441

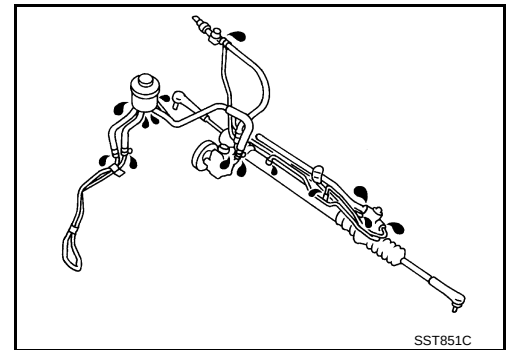
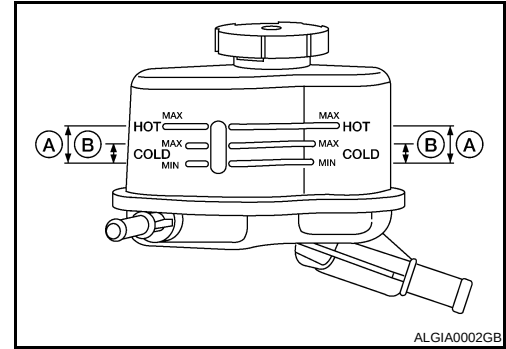
Check fluid level in reservoir tank with engine off.
Fluid levels at HOT and COLD are different. Do not confuse them.

HOT (A) : Fluid temperature 50 – 80°C (122 – 176°F)

COLD (B) : Fluid temperature 0 – 30°C (32 – 86°F)

CAUTION:

- Do not overfill.
- Recommended fluid is Genuine NISSAN PSF or equivalent.
Refer to [MA-11, "Fluids and Lubricants"](#).
- Check lines for improper attachment, leaks, cracks, damage, loose connections, chafing and deterioration.
- Check rack boots for accumulation of power steering fluid.



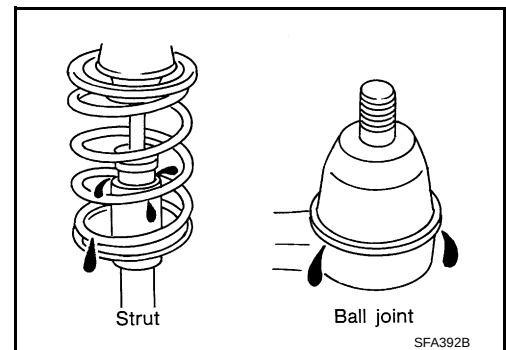
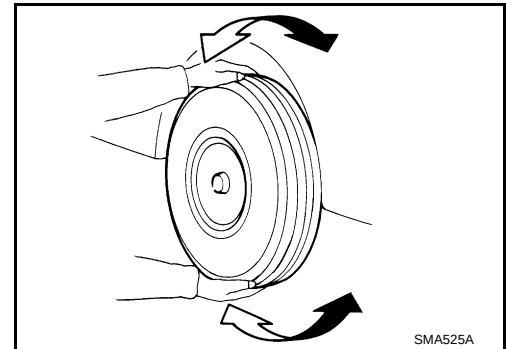
AXLE AND SUSPENSION PARTS

AXLE AND SUSPENSION PARTS : Inspection

INFOID:000000003858316

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

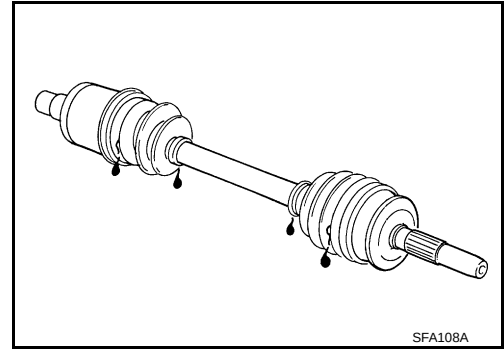
CHASSIS MAINTENANCE

< ON-VEHICLE MAINTENANCE >

DRIVE SHAFT : Inspection

INFOID:000000003858317

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



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BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

BODY MAINTENANCE

LOCKS, HINGES AND HOOD LATCH

LOCKS, HINGES AND HOOD LATCH : Lubricating

INFOID:000000003858318

For hood and hood lock illustration.

- Hood: Refer to [DLK-191, "HOOD ASSEMBLY : Exploded View"](#).
- Hood lock control: Refer to [DLK-220, "Exploded View"](#).

For door and door lock illustration.

- Front door: Refer to [DLK-201, "DOOR ASSEMBLY : Exploded View"](#).
- Front door lock: Refer to [DLK-222, "DOOR LOCK : Exploded View"](#).
- Rear door: Refer to [DLK-207, "DOOR ASSEMBLY : Exploded View"](#).
- Rear door lock: Refer to [DLK-227, "DOOR LOCK : Exploded View"](#).

For trunk lid and trunk lid lock illustration.

- Trunk lid: Refer to [DLK-213, "TRUNK LID ASSEMBLY : Exploded View"](#).
- Trunk lid lock: Refer to [DLK-231, "Exploded View"](#).

SEAT BELT, BUCKLES, RETRACTORS, ANCHORS AND ADJUSTERS

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

INFOID:000000003858319

For front seat belt illustration. Refer to [SB-5, "SEAT BELT RETRACTOR : Exploded View"](#).

For rear seat belt illustration. Refer to [SB-10, "SEAT BELT RETRACTOR : Exploded View"](#).

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-3, "SEAT BELT RETRACTOR : Inspection"](#) , [SB-8, "SEAT BELT RETRACTOR : 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

BODY CORROSION

BODY CORROSION : Checking Body Corrosion

INFOID:000000003858320

Visually check body panels for collision damage (scratches, chipping, rubbing, etc.) or damage to the anti-corrosion materials. In particular, check the following locations.

HEMMED PANELS

Hood front end, door lower end, trunk lid rear end, etc.

PANEL JOINT

Side sill of rear fender and center pillar, rear wheel housing of rear fender, around strut tower in engine compartment, etc.

PANEL EDGE

Trunk lid opening, sunroof opening, fender wheel-arch flange, fuel filler lid flange, around holes in panel, etc.

PARTS CONTACT

Waist moulding, windshield moulding, bumper, etc.

BODY MAINTENANCE

< ON-VEHICLE MAINTENANCE >

PROTECTORS

Damage or condition of mudguard, fender protector, chipping protector, etc.

A

ANTI-CORROSION MATERIALS

Damage or separation of anti-corrosion materials under the body.

B

DRAIN HOLES

Condition of drain holes at door and side sill. When repairing corroded areas, refer to the Corrosion Repair Manual.

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SERVICE DATA AND SPECIFICATIONS (SDS)

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SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

DRIVE BELTS

DRIVE BELTS : Drive Belt

INFOID:0000000003862442

DRIVE BELT

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

ENGINE COOLANT : Periodical Maintenance Specification

INFOID:0000000003862443

ENGINE COOLANT CAPACITY (APPROXIMATE)

Unit: ℓ (Imp qt)

Engine coolant capacity (With reservoir tank at "MAX" level)	9.1 (8)
Reservoir tank	0.8 (3/4)

ENGINE OIL

ENGINE OIL : Periodical Maintenance Specification

INFOID:0000000003862444

ENGINE OIL CAPACITY (APPROXIMATE)

Unit: ℓ (Imp qt)

Drain and refill	With oil filter change	4.6 (4)
	Without oil filter change	4.3 (3-3/4)
Dry engine (Overhaul)		5.3 (4-5/8)

SPARK PLUG

SPARK PLUG : Spark Plug

INFOID:0000000003862445

SPARK PLUG

Unit: mm (in)

Make		DENSO
Standard type	VQ25DE	FXE20HR11
	VQ35DE	FXE22HR11
Gap (Nominal)	Standard	1.1 (0.043)
	Limit	1.4 (0.055)

ROAD WHEEL

ROAD WHEEL : Road Wheel

INFOID:0000000003861779

ALUMINUM WHEEL (CONVENTIONAL)

Item		Limit
Radial runout	Lateral deflection	Less than 0.3 mm (0.012 in)
	Radial deflection	
Allowable unbalance	Dynamic (At flange)	Less than 5 g (0.17 oz) (one side)
	Static (At flange)	Less than 10 g (0.35 oz)

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

STEEL WHEEL

Item		Limit
Radial runout	Lateral deflection	Less than 0.8 mm (0.031 in)
	Radial deflection	Less than 0.5 mm (0.020 in)
Allowable unbalance	Dynamic (At flange)	Less than 5 g (0.17 oz) (one side)
	Static (At flange)	Less than 10 g (0.35 oz)

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