

MAINTENANCE

SECTION **MA**

CONTENTS

PRE-DELIVERY INSPECTION ITEMS	2	Maintenance Under Severe Driving Conditions (Annual Driving Distance < 30,000 km/year)	13
GENERAL MAINTENANCE	3	Maintenance Schedule for Petrol Engines (Annual Mileage > 30,000 km/year)	15
PERIODIC MAINTENANCE (EXCEPT FOR EUROPE)	4	QG18DE/SR20DE ENGINES	15
Engine and Emission Control Maintenance (QG18DE/SR20DE engine)	4	CHASSIS AND BODY MAINTENANCE	16
Engine Maintenance (YD22DDTi engine)	6	Maintenance Schedule for Diesel Engines (Annual Mileage > 30,000 km/year)	17
Chassis and Body Maintenance	7	YD22DDTI ENGINE	17
Maintenance Under Severe Driving Conditions	8	CHASSIS AND BODY MAINTENANCE	18
SEVERE DRIVING CONDITIONS	8	Maintenance Under Severe Driving Conditions (Annual Driving Distance > 30,000 km/year)	19
PERIODIC MAINTENANCE	9	RECOMMENDED FLUIDS AND LUBRICANTS	20
Maintenance Schedule for Petrol Engines (Annual Mileage < 30,000 km/year)	9	Fluids and Lubricants	20
QG18DE/SR20DE ENGINES	9	SAE Viscosity Number	21
CHASSIS AND BODY MAINTENANCE	10	GASOLINE ENGINE	21
Maintenance Schedule for Diesel Engines (Annual Mileage < 30,000 km/year)	11	DIESEL ENGINE	21
YD22DDTI ENGINE	11	Engine Coolant Mixture Ratio	22
CHASSIS AND BODY MAINTENANCE	12		

PRE-DELIVERY INSPECTION ITEMS

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.

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

UNDER HOOD — engine off

- Radiator coolant level and coolant hose connections for leaks
- Battery fluid level, specific gravity and conditions of battery terminals
- Drive belts tension
- Fuel filter for water or dusts (Diesel only), and fuel lines and connections for leaks
- Engine oil level and oil leaks
- Clutch and brake reservoir fluid level and fluid lines for leaks
- Windshield and rear window washer and headlamp cleaner reservoir fluid level
- Power steering reservoir fluid level and hose connections for leaks

ON INSIDE AND OUTSIDE

- Remove front spring/strut spacer (If applicable)
- Operation of all instruments, gauges, lights and accessories
- Operation of horn(s), wiper and washer
- Steering lock for operation
- Check air conditioner for gas leaks
- Front and rear seats, and seat belts for operation
- All moldings, trims and fittings for fit and alignment
- All windows for operation and alignment
- Hood, trunk lid, door panels for fit and alignment
- Latches, keys and locks for operation
- Weatherstrips for adhesion and fit
- Headlamp aiming
- Tighten wheel nuts (Inc. inner nuts if applicable)
- Tire pressure (Inc. spare tire)
- Check front wheels for toe-in
- Install clock/voltmeter/room lamp fuse (If applicable)
- Install deodorizing filter to air conditioner (If applicable)
- Remove wiper blade protectors (If applicable)

UNDER BODY

- Manual transmission/transaxle, transfer and differential gear oil level
- Brake and fuel lines and oil/fluid reservoirs for leaks
- Tighten bolts and nuts of steering linkage and gear box, suspension, propeller shafts and drive shafts
- Tighten rear body bolts and nuts (Models with wooden bed only)

ROAD TEST

- Clutch operation
- Parking brake operation
- Service brake operation
- Automatic transmission/transaxle shift timing and kickdown
- Steering control and returnability
- Engine performance
- Squeaks and rattles

ENGINE OPERATING AND HOT

- Adjust idle speed
- Automatic transmission/transaxle fluid level
- Engine idling and stop knob operation (Diesel only)

FINAL INSPECTION

- Install necessary parts (outside mirror, wheel covers, seat belts, mat, carpet or mud flaps)
- Inspect for interior and exterior metal and paint damage
- Check for spare tire, jack, tools (wheel chock), and literature
- Wash, clean interior and exterior

: Not applicable to this model

GENERAL MAINTENANCE

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 periodically when at a service station, including the spare, and adjust to the specified pressure if necessary. 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, the engine hood, the trunk lid and back door operate properly. Also ensure 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.	BT-7 BT-13
Tire rotation	Tires should be rotated every 10,000 km (6,000 miles).	SU-8

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 buzzers/chimes are operating properly.	—
Steering wheel	Check that it has the specified play. Check for changes in the steering conditions, 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.	RS-3

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.	LC-19, LC-59
Engine oil level	Check the level after parking the vehicle (on level ground) and turning off the engine.	LC-8, LC-28
Brake and clutch fluid levels	Make sure that the brake and clutch fluid levels are between the "MAX" and "MIN" lines on the reservoir.	BR-7
Battery	Check the fluid level in each cell. It should be between the "MAX" and "MIN" lines.	—

PERIODIC MAINTENANCE (EXCEPT FOR EUROPE)

Engine and Emission Control Maintenance (QG18DE/SR20DE engine)

Engine and Emission Control Maintenance (QG18DE/SR20DE engine)

NLMA0046S01

Abbreviations: I = Inspect and correct or replace as necessary, R = Replace, A = Adjust, C = Clean, E = Check and correct the engine coolant mixture ratio.

MAINTENANCE OPERATION		MAINTENANCE INTERVAL										Reference page
		km × 1,000	1	10	20	30	40	50	60	70	80	
Perform either at number of kilometers (miles) or months, whichever comes first.	(mile × 1,000)	(0.6)	(6)	(12)	(18)	(24)	(30)	(36)	(42)	(48)		
	Months	—	6	12	18	24	30	36	42	48		
	Underhood and under vehicle											
Torque of manifolds & exhaust tube nuts*1		I									—	
Intake & exhaust valve clearance*2				A		A		A		A	EM-42	
Drive Belts		I*1		I*1		I		I*1		I	EM-17, EM-86	
Engine oil (Use API SE, SF, SG, SH or SJ oil.)★			R	R	R	R	R	R	R	R	LC-8, LC-28	
Engine oil filter (Use Part No. 15208 65F01 or equivalent)★			R	R	R	R	R	R	R	R	LC-9, LC-28	
Engine coolant (Use Nissan genuine engine coolant or equivalent in its quality.)	See NOTE (1)					E				R	LC-19, LC-59	
Cooling system				I		I		I		I	LC-12, LC-32	
Fuel lines						I				I	FE-5	
Air cleaner filter (Viscous paper type)★						R				R	EM-18, EM-88	
Fuel filter	See NOTE (2)										FE-9	
Positive crankcase ventilation (PCV) system				I*1		I*1		I*1		I*1	EC-42, EC-576	
Spark plugs (Conventional type)*3						R				R	EM-19, EM-89	
Spark plugs (Conventional type, For leaded fuel)*1			I	R	I	R	I	R	I	R	EM-19, EM-89	
Spark plugs (Conventional type, For unleaded fuel)*1			I	I	I	R	I	I	I	R	EM-19, EM-89	
Spark plugs (PLATINUM TYPE)		Replace every 100,000 km (60,000 miles)									EM-19, EM-89	
Ignition leads						I				I	EC-816	
EVAP vapor lines (With carbon canister)						I				I	EC-41, EC-575	
Vacuum hoses & connections*1				I		I		I		I	EC-33, EC-568	
Heated oxygen sensor (Exhaust gas sensor)						I				I	EC-191, EC-717	

NOTE:

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

(1) Use Nissan genuine engine coolant or equivalent in its quality, in order to avoid possible aluminium corrosion within the engine cooling system caused by the use of non-genuine engine coolant. After first replacement, replace every 40,000 km (24,000 miles) or 24 months.

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

PERIODIC MAINTENANCE (EXCEPT FOR EUROPE)

Engine and Emission Control Maintenance (QG18DE/SR20DE engine) (Cont'd)

*1: Models without three way catalyst

*2: For models with three way catalyst, periodic maintenance is not required. However, if valve noise increases, check valve clearance.

*3: Models with three way catalyst

PERIODIC MAINTENANCE (EXCEPT FOR EUROPE)

Engine Maintenance (YD22DDTi engine)

Engine Maintenance (YD22DDTi engine)

=NLMA0046S02

Abbreviations: I = Inspect and correct or replace as necessary, R = Replace, A = Adjust, D = Check filter and drain water.

MAINTENANCE OPERATION		MAINTENANCE INTERVAL										Reference page
Perform either at number of kilometers (miles) or months, whichever comes first.	km × 1,000	1	10	20	30	40	50	60	70	80		
	(mile × 1,000)	(0.6)	(6)	(12)	(18)	(24)	(30)	(36)	(42)	(48)		
	Months	—	6	12	18	24	30	36	42	48		
Underhood and under vehicle												
Torque of manifolds & exhaust tube nuts		I									—	
Intake & exhaust valve clearance	See NOTE (1)										EM-214	
Drive belts		I		I		I		I		I	EM-166	
Engine oil (Use API CD, CE, CF, CF-4 oil.)★	See NOTE (5)	Replace every 15,000 km (9,000 miles) or 12 months									LC-47	
Engine oil filter (Use Eco filter or equivalent)★	See NOTE (2)	Replace every 15,000 km (9,000 miles) or 12 months									LC-48	
Engine coolant (Use Nissan genuine engine coolant or equivalent in its quality.)	See NOTE (3)					E				R	LC-59	
Cooling system				I		I		I		I	LC-53	
Fuel lines						I				I	FE-15	
Air cleaner filter (Viscous paper type)★						R				R	EM-169	
Fuel filter★			D	D	D	R	D	D	D	R	FE-15	
Injection nozzles	See NOTE (4)										EC-1085	

NOTE:

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

(1) If valve noise increases, check valve clearance.

(2) Oil filter element assembly (part No. 15208 AD200) and O-ring seal (part No. 15226 AD200) are replacement parts.

(3) Use Nissan genuine engine coolant or equivalent in its quality, in order to avoid possible aluminium corrosion within the engine cooling system caused by the use of non-genuine engine coolant. After first replacement, replace every 40,000 km (24,000 miles) or 24 months.

(4) If engine power decreases, black exhaust smoke is emitted or engine noise increases, check injection nozzles and, if necessary, replace injection nozzle assembly.

(5) Never use CG-4 oil.

PERIODIC MAINTENANCE (EXCEPT FOR EUROPE)

Chassis and Body Maintenance

Chassis and Body Maintenance

=NLMA0046S03

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL									Reference page
Perform either at number of kilometers (miles) or months, whichever comes first.	km × 1,000	1	10	20	30	40	50	60	70	80	
	(mile × 1,000)	(0.6)	(6)	(12)	(18)	(24)	(30)	(36)	(42)	(48)	
	Months	—	6	12	18	24	30	36	42	48	
Underhood and under vehicle											
Brake & clutch fluid (For level & leaks)★			I	I	I	I	I	I	I	I	BR-7
Brake fluid★						R				R	BR-7
Brake booster vacuum hoses, connections & check valve						I				I	BR-16
Power steering fluid & lines (For level & leaks)			I*1	I	I*1	I	I*1	I	I*1	I	ST-7
Brake, clutch & exhaust systems			I	I	I	I	I	I	I	I	BR-7, CL-5, FE-13, FE-15, FE-23
H-CVT fluid (For level and leaks)			I	I	I	I	I	I	I	I	AT-10
H-CVT fluid★						R				R	AT-11
Manual transaxle gear oil (For level & leaks)			I*1	I	I*1	I	I*1	I	I*1	I	MT-10, MT-11
Steering gear & linkage, axle & suspension parts & drive shafts★		I*2		I		I		I		I	ST-7, SU-5, SU-18
Outside and inside											
Wheel alignment (if necessary, rotate & balance wheels)				I		I		I		I	SU-15, SU-27
Brake pads, rotors & other brake components★			I	I	I	I	I	I	I	I	BR-24, BR-28
Lock, hinges & hoods latch★			L*1	L	L*1	L	L*1	L	L*1	L	BT-7, BT-13
Seat belts, buckles, retractors, anchors & adjuster				I		I		I		I	RS-3
Foot brake, parking brake & clutch (For free play, stroke & operation)			I*1	I	I*1	I	I*1	I	I*1	I	BR-11, BR-40, CL-5
Ventilation air filter★		Replace every 12,000 km (7,500 miles) or 12 months									HA-103
Supplemental air bag systems	See NOTE (1)										RS-16
NISSAN Mobility System	See NOTE (2)					I	I	I	I	I	—

NOTE:

(1) Inspect at the first 10 years, and then every 2 years.

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

(2) Check expiration date of the tyre sealant bottle. Replace if necessary.

*1: Models except for Australia

*2: Models without three way catalyst

PERIODIC MAINTENANCE (EXCEPT FOR EUROPE)

Maintenance Under Severe Driving Conditions

Maintenance Under Severe Driving Conditions

=NLMA0046S04

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

NLMA0046S0401

A — Driving under dusty conditions

B — Driving repeatedly short distances

C — Towing a trailer or caravan

D — Extensive idling

E — Driving in extremely adverse weather conditions or in areas where ambient temperatures are either extremely low or extremely high

F — Driving in high humidity areas or in mountainous areas

G — Driving in areas using salt or other corrosive materials

H — Driving on rough and/or muddy roads or in the desert

I — Driving with frequent use of braking or in mountainous areas

Driving condition									Maintenance item	Maintenance operation	Maintenance interval	Reference page	
A	.	.	.	.	.	.	.	.	Air cleaner filter	Viscous paper type	Replace	More frequently	EM-18, EM-88, EM-169
A	B	C	D	.	.	.	.	.	Engine oil & oil filter (QG18DE/SR20DE engine)		Replace	Every 5,000 km (3,000 miles) or 3 months	LC-8, LC-28, LC-9, LC-28
A	B	C	D	.	.	.	.	.	Engine oil (YD22DDTi engine)		Replace	More frequently	LC-47
									Engine oil filter (YD22DDTi engine)			Every 7,500 km (4,500 miles) or 6 months	LC-48
A	.	.	.	E	.	.	.	.	Fuel filter (YD22DDTi engine)		Replace	Every 20,000 km (12,000 miles) or 12 months	FE-15
.	.	.	.	.	F	.	.	.	Brake fluid		Replace	Every 20,000 km (12,000 miles) or 12 months	BR-7
.	.	C	.	.	.	.	.	H	H-CVT fluid		Replace	Every 20,000 km (12,000 miles) or 12 months	AT-11
.	.	.	.	.	.	G	H	.	Steering gear & linkage, axle & suspension parts & drive shafts		Check	Every 10,000 km (6,000 miles) or 6 months	ST-7, SU-5, SU-18
A	.	C	.	.	.	G	H	I	Brake pads, rotors & other brake components		Check	Every 5,000 km (3,000 miles) or 3 months	BR-24, BR-28
.	.	.	.	.	.	G	.	.	Lock, hinges & hood latch		Lubricate	Every 5,000 km (3,000 miles) or 3 months	BT-7, BT-13
A	.	.	.	.	.	.	.	.	Ventilation air filter		Replace	More frequently	HA-103

PERIODIC MAINTENANCE

Maintenance Schedule for Petrol Engines (Annual Mileage < 30,000 km/year)

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.

Maintenance Schedule for Petrol Engines (Annual Mileage < 30,000 km/year)

QG18DE/SR20DE ENGINES

NLMA0043S01

NLMA0043S0101

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference pages	
Perform on a kilometer basis, but on an annual basis when driving less than 15,000 km (9,000 miles) per year	km x 1,000	15	30	45	60	75	90	105	120	QG18DE	SR20DE
	(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											
Engine oil (Use recommended oil)★		R	R	R	R	R	R	R	R	LC-8	LC-28
Engine oil filter (Use NISSAN genuine part or equivalent)★		R	R	R	R	R	R	R	R	LC-9	LC-28
Drive belts		I	I	I	I	I	I	I	I	EM-17	EM-86
Cooling system		I	I	I	I	I	I	I	I	LC-12	LC-32
Engine anti-freeze coolant (Use genuine NISSAN Anti-Freeze Coolant (L2N) or equivalent)	See NOTE (1)			I			R		I	LC-19	LC-59
Air cleaner filter★					R				R	EM-18	EM-88
Intake and exhaust valve clearance (non HLA models)	See NOTE (2)									EM-42	—
Fuel and EVAP vapour lines			I		I		I		I	FE-5/ EC-41	FE-5/ EC-575
Spark plugs	Platinum tipped type						[R]			—	EM-89
	Conventional type		R		R		R		R	EM-19	EM-89
Ignition leads				I			I			—	EC-816
PCV system			I		I		I		I	EC-42	EC-576
Fuel filter	See NOTE (3)									FE-9	FE-9

NOTE:

(1) 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.

(2) Periodic maintenance is not required. However, if valve noise increases, check valve clearance.

(3) Fuel filter is maintenance-free. For service procedures, refer to FE section.

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

PERIODIC MAINTENANCE

Maintenance Schedule for Petrol Engines (Annual Mileage < 30,000 km/year) (Cont'd)

CHASSIS AND BODY MAINTENANCE

=NLMA0043S0102

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Refer- ence pages
Perform on a kilometer basis, but on an annual basis when driving less than 15,000 km (9,000 miles) in a year.	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	
Underhood and under vehicle										
Headlamp aiming		I	I	I	I	I	I	I	I	EL-72
Wheel alignment (if necessary, balance & rotate wheels)		I	I	I	I	I	I	I	I	SU-15/ SU-27
Brake pads, rotors & other brake components★		I	I	I	I	I	I	I	I	BR-24/ BR-28
Foot brake, parking brake & clutch (for free play, stroke & operation)		I	I	I	I	I	I	I	I	BR-11/ BR-40/ CL-5
Brake booster vacuum hoses, connections, check valve			I		I		I		I	BR-16
Brake & clutch, systems and fluid (for level and leaks)		I	I	I	I	I	I	I	I	BR-7
Brake fluid★			R		R		R		R	BR-7
Power steering fluid and lines (for level and leaks)		I	I	I	I	I	I	I	I	ST-7
Supplemental air bag systems	See NOTE (1)									RS-16
Ventilation air filter★			R		R		R		R	HA-103
Manual transaxle gear oil (check for leakage. Use genuine NISSAN XZ gear oil or exact equivalent)		I	I	I	I	I	I	I	I	MT-10 MT-11
CVT fluid [for level and leaks or replace. Use genuine NISSAN CVT fluid (NS-1) or exact equivalent]★		I	I	I	[R]	I	I	I	[R]	AT-10
Steering gear & linkage, axle & suspension parts, drive shafts, exhaust system★			I		I		I		I	ST-7/ SU-5/ SU-18/ FE-13/ FE-15/ FE-23
NISSAN Mobility System	See NOTE (2)		I	I	I	I	I	I	I	—
Body corrosion	See NOTE (3)									BT-6

NOTE:

(1) Inspect after 10 years, then every 2 years.

(2) Check expiration date of the tyre sealant bottle. Replace if necessary.

(3) Inspect once per year.

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

PERIODIC MAINTENANCE

Maintenance Schedule for Diesel Engines (Annual Mileage < 30,000 km/year)

Maintenance Schedule for Diesel Engines (Annual Mileage < 30,000 km/year)

=NLMA0043S02

YD22DDTI ENGINE

NLMA0043S0201

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL						Reference pages
Perform on a kilometer basis, but on an annual basis when driving less than 20,000 km (12,000 miles) per year.	km x 1,000 (miles x 1,000) Months	20 (12) 12	40 (24) 24	60 (36) 36	80 (48) 48	100 (60) 60	120 (72) 72	
Engine compartment and under vehicle								
Engine oil (Use recommended oil)★		R	R	R	R	R	R	LC-47
Engine oil filter (Use Eco filter or equivalent)★	See NOTE (1)	R	R	R	R	R	R	LC-48
Drive belts		I	I	I	I	I	I	EM-166
Cooling system		I	I	I	I	I	I	LC-53
Engine anti-freeze coolant (Use genuine NISSAN Anti-freeze Coolant (L2N) or equivalent)	See NOTE (2)		I				I	LC-59
Air cleaner filter★				R			R	EM-169
Intake & exhaust valve clearance	See NOTE (3)							EM-214
Fuel lines			I		I		I	FE-15
Injection nozzles	See NOTE (4)							EC-1085
Fuel filter★			R		R		R	FE-15

NOTE:

(1) Oil filter element assembly and O-ring seal are replacement parts.

(2) First replace at 100,000 km (60,000 miles)/60 months, then every 60,000 km (36,000 miles)/36 months. After first replacement, perform "I" (checking the mixture ratio and correcting the mixture ratio if necessary) at the middle of replacement interval.

(3) If valve noise increases, check valve clearance.

(4) If engine power decreases, black exhaust smoke is emitted or engine noise increases, check injection nozzles and if necessary, replace injection nozzle assembly.

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

PERIODIC MAINTENANCE

Maintenance Schedule for Diesel Engines (Annual Mileage < 30,000 km/year) (Cont'd)

CHASSIS AND BODY MAINTENANCE

=NLMA0043S0202
Abbreviations: R = Replace I = Inspect: Correct or replace if necessary

MAINTENANCE OPERATION		MAINTENANCE INTERVAL						Reference pages
		20 (12)	40 (24)	60 (36)	80 (48)	100 (60)	120 (72)	
Perform on a kilometer basis, but on an annual basis when driving less than 20,000 km (12,000 miles) per year.	km x 1,000 (miles x 1,000) Months	20 (12) 12	40 (24) 24	60 (36) 36	80 (48) 48	100 (60) 60	120 (72) 72	
Underhood and under vehicle								
Headlamp aiming		I	I	I	I	I	I	EL-72
Wheel alignment (if necessary, balance & rotate wheels)		I	I	I	I	I	I	SU-15 SU-27
Brake pads, rotors & other brake components★		I	I	I	I	I	I	BR-24 BR-28
Foot brake, parking brake & clutch (for free play, stroke & operation)		I	I	I	I	I	I	BR-11 BR-40 CL-5
Brake booster vacuum hoses, connections, check valve			I		I		I	BR-16
Brake & clutch, systems and fluid (for level and leaks)		I	I	I	I	I	I	BR-7 CL-5
Brake fluid★			R		R		R	BR-7
Power steering fluid and lines (for level and leaks)		I	I	I	I	I	I	ST-7
Supplemental air bag systems	See NOTE (1)							RS-16
Ventilation air filter★		R	R	R	R	R	R	HA-103
Manual transaxle gear oil (check for leakage. Use genuine NISSAN XZ gear oil or exact equivalent)		I	I	I	I	I	I	MT-10 MT-11
Steering gear & linkage, axle & suspension parts, drive shafts, exhaust system★			I		I		I	ST-7 SU-5 SU-18 FE-13 FE-15 FE-23
NISSAN Mobility System	See NOTE (2)		I	I	I	I	I	—
Body corrosion	See NOTE (3)							BT-6

NOTE:

(1) Inspect after 10 years, then every 2 years.

(2) Check expiration date of the tyre sealant bottle. Replace if necessary.

(3) Inspect once per year.

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

PERIODIC MAINTENANCE

Maintenance Under Severe Driving Conditions (Annual Driving Distance < 30,000 km/year)

Maintenance Under Severe Driving Conditions (Annual Driving Distance < 30,000 km/year)

=NLMA0043S03

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.

- A — Driving under dusty conditions
- B — Driving repeatedly short distances
- C — Towing a trailer or caravan
- D — Extensive idling
- E — Driving in extremely adverse weather conditions or in areas where ambient temperatures are either extremely low or extremely high
- F — Driving in high humidity areas or in mountainous areas
- G — Driving in areas using salt or other corrosive materials
- H — Driving on rough and/or muddy roads or in the desert
- I — Driving with frequent use of braking or in mountainous areas
- J — Frequent off road use or driving in water
- K — Sustained high speed driving
- L — For models without Euro-OBD system

Driving condition												Maintenance item	Maintenance operation	Maintenance interval
												Engine oil & engine oil filter		
A	B	C	D	.	.	.	.	.	.	.	.	Petrol models	Replace	Every 7,500 km (4,500 miles) or 6 months
												Diesel models	Replace	Every 10,000 km (6,000 miles) or 6 months
												Air cleaner filter		
A	.	.	.	.	.	.	.	.	.	.	.	Petrol models	Replace	Every 30,000 km (18,000 miles) or 24 months
												Diesel models	Replace	Every 30,000 km (18,000 miles) or 18 months
												Fuel filter		
A	.	.	.	E	.	.	.	.	.	.	.	Diesel models	Replace	Every 20,000 km (12,000 miles) or 12 months
												Ventilation air filter		
A	.	.	.	.	.	.	.	.	.	.	.	Petrol models	Replace	Every 15,000 km (9,000 miles) or 12 months
												Diesel models	Replace	Every 10,000 km (6,000 miles) or 6 months
												Brake fluid		
.	.	.	.	.	F	.	.	.	.	.	.	Petrol models	Replace	Every 15,000 km (9,000 miles) or 12 months
												Diesel models	Replace	Every 20,000 km (12,000 miles) or 12 months
												Brake pads, rotors & other brake system components		
A	.	C	.	.	.	G	H	I	.	.	.	Petrol models	Inspect	Every 7,500 km (4,500 miles) or 6 months
												Diesel models	Inspect	Every 10,000 km (6,000 miles) or 6 months

PERIODIC MAINTENANCE

Maintenance Under Severe Driving Conditions (Annual Driving Distance < 30,000 km/year) (Cont'd)

Driving condition											Maintenance item	Maintenance operation	Maintenance interval	
.	.	.	.	.	.	G	H	.	.	.	Steering gear & linkage, axle & suspension parts, drive shafts, exhaust system			
												Petrol models	Inspect	Every 15,000 km (9,000 miles) or 12 months
												Diesel models	Inspect	Every 20,000 km (12,000 miles) or 12 months

PERIODIC MAINTENANCE

Maintenance Schedule for Petrol Engines (Annual Mileage > 30,000 km/year)

Maintenance Schedule for Petrol Engines (Annual Mileage > 30,000 km/year)

=NLMA0043S04

QG18DE/SR20DE ENGINES

NLMA0043S0401
Abbreviations: R = Replace I = Inspect: Correct or replace if necessary

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Reference pages	
	km x 1,000 (miles x 1,000)	15 (9)	30 (18)	45 (27)	60 (36)	75 (45)	90 (54)	105 (63)	120 (72)	QG 18DE	SR 20DE
Engine compartment and under vehicle											
Engine oil (Use recommended oil)★		R	R	R	R	R	R	R	R	LC-8	LC-28
Engine oil filter (Use NISSAN genuine part or equivalent)★		R	R	R	R	R	R	R	R	LC-9	LC-28
Drive belts		I	I	I	I	I	I	I	I	EM-17	EM-86
Cooling system			I		I		I		I	LC-12	LC-32
Engine anti-freeze coolant (Use genuine NISSAN Anti-Freeze Coolant (L2N) or equivalent)	See NOTE (1)			I			R		I	LC-19	LC-59
Air cleaner filter★					R				R	EM-18	EM-88
Intake & exhaust valve clearance (Non HLA models)	See NOTE (2)									EM-42	—
Fuel and EVAP vapor lines					I				I	FE-5/ EC-41	FE-5/ EC-568
Spark plugs	Platinum tipped type						R			—	EM-89
	Conventional type		R		R		R		R	EM-19	EM-89
Ignition leads							I			—	EC-816
PCV system					R				R	EC-42	EC-576
Fuel filter	See NOTE (3)									FE-9	FE-9

NOTE:

(1) 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.

(2) Periodic maintenance is not required. However, if valve noise increases, check valve clearance.

(3) Fuel filter is maintenance-free. For service procedures, refer to FE section.

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

PERIODIC MAINTENANCE

Maintenance Schedule for Petrol Engines (Annual Mileage > 30,000 km/year) (Cont'd)

CHASSIS AND BODY MAINTENANCE

=NLMA0043S0402
Abbreviations: R = Replace I = Inspect: Correct or replace if necessary

MAINTENANCE OPERATION		MAINTENANCE INTERVAL								Refer- ence pages
		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	EL-72
Wheel alignment (if necessary, balance & rotate wheels)			I		I		I		I	SU-15/ SU-27
Brake pads, rotors & other brake components★			I		I		I		I	BR-24 BR-28
Foot brake, parking brake & clutch (for free play, stroke & operation)			I		I		I		I	BR-11/ BR-40/ CL-5
Brake booster vacuum hoses, connections, check valve					I				I	BR-16
Brake & clutch, systems and fluid (for level and leaks)			I		I		I		I	BR-7/ CL-5
Brake fluid★					R				R	BR-7
Power steering fluid and lines (for level and leaks)			I		I		I		I	ST-7
Supplemental air bag systems	See NOTE (1)									RS-16
Ventilation air filter★			R		R		R		R	HA-103
Manual transaxle gear oil (check for leakage. Use genuine NISSAN XZ gear oil or exact equivalent)			I		I		I		I	MT-10 MT-11
CVT fluid [for level and leaks or replace. Use genuine NISSAN CVT fluid (NS-1) or exact equivalent]★			I		[R]		I		[R]	AT-10
Steering gear and linkage, axle & suspension parts, drive shafts, exhaust system★					I				I	ST-7/ SU-5/SU- 18/ FE-13/ FE-15/ FE-23
NISSAN Mobility System	See NOTE (2)		I	I	I	I	I	I	I	—
Body corrosion	See NOTE (3)									BT-6

NOTE:

(1) Inspect after 10 years, then every 2 years.

(2) Check expiration date of the tyre sealant bottle. Replace if necessary.

(3) Inspect once per year.

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

PERIODIC MAINTENANCE

Maintenance Schedule for Diesel Engines (Annual Mileage > 30,000 km/year)

Maintenance Schedule for Diesel Engines (Annual Mileage > 30,000 km/year)

=NLMA0043S05

YD22DDTI ENGINE

NLMA0043S0501
Abbreviations: R = Replace I = Inspect: Correct or replace if necessary

MAINTENANCE OPERATION		MAINTENANCE INTERVAL						Reference pages	
		km x 1,000 (miles x 1,000)	20 (12)	40 (24)	60 (36)	80 (48)	100 (60)		120 (72)
Engine compartment and under vehicle									
Engine oil (Use recommended oil)★			R	R	R	R	R	R	LC-47
Engine oil filter (Use Eco filter or equivalent)★	See NOTE (1)		R	R	R	R	R	R	LC-48
Drive belts			I	I	I	I	I	I	EM-166
Cooling system			I	I	I	I	I	I	LC-53
Engine anti-freeze coolant (Use genuine NISSAN Anti-Freeze Coolant (L2N) or equivalent)	See NOTE (2)			I				I	LC-59
Air cleaner filter★					R			R	EM-169
Intake & exhaust valve clearance	See NOTE (3)								EM-214
Fuel lines					I			I	FE-15
Injection nozzles	See NOTE (4)								EC-1085
Fuel filter★					R			R	FE-15

NOTE:

(1) Oil filter element assembly and O-ring seal are replacement parts.

(2) First replace at 100,000 km (60,000 miles), then every 60,000 km (36,000 miles). After first replacement, perform "I" (checking the mixture ratio and correcting the mixture ratio if necessary) at the middle of replacement interval.

(3) If valve noise increases, check valve clearance.

(4) If engine power decreases, black exhaust smoke is emitted or engine noise increases, check injection nozzles and if necessary, replace injection nozzle assembly.

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

PERIODIC MAINTENANCE

Maintenance Schedule for Diesel Engines (Annual Mileage > 30,000 km/year) (Cont'd)

CHASSIS AND BODY MAINTENANCE

=NLMA0043S0502

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL												Reference pages
		10 (6)	20 (12)	30 (18)	40 (24)	50 (30)	60 (36)	70 (42)	80 (48)	90 (54)	100 (60)	110 (66)	120 (72)	
Underhood and under vehicle														
Headlamp aiming	km x 1,000 (miles x 1,000)				I				I				I	EL-72
Wheel alignment (if necessary, balance & rotate wheels)					I				I				I	SU-15 SU-27
Brake pads, rotors & other brake components★			I		I		I		I		I		I	BR-24 BR-28
Foot brake, parking brake & clutch (for free play, stroke & operation)			I		I		I		I		I		I	BR-11 BR-40 CL-5
Brake booster vacuum hoses, connections, check valve							I						I	BR-16
Brake & clutch, systems and fluid (for level and leaks)			I		I		I		I		I		I	BR-7 CL-5
Brake fluid★							R						R	BR-7
Power steering fluid and lines (for level and leaks)			I		I		I		I		I		I	ST-7
Supplemental air bag systems	See NOTE (1)													RS-16
Ventilation air filter★			R		R		R		R		R		R	HA-103
Manual transaxle gear oil (check for leakage. Use genuine NISSAN XZ gear oil or exact equivalent)					I				I				I	MT-10 MT-11
Steering gear & linkage, axle & suspension parts, drive shafts, exhaust system★							I						I	ST-7 SU-5 SU-18 FE-13 FE-15 FE-23
NISSAN Mobility System	See NOTE (2)						I	I	I	I	I	I	I	—
Body corrosion	See NOTE (3)													BT-6

NOTE:

(1) Inspect after 10 years, then every 2 years.

(2) Check expiration date of the tyre sealant bottle. Replace if necessary.

(3) Inspect once per year.

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

PERIODIC MAINTENANCE

Maintenance Under Severe Driving Conditions (Annual Driving Distance > 30,000 km/year)

Maintenance Under Severe Driving Conditions (Annual Driving Distance > 30,000 km/year)

=NLMA0043S06

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.

- A — Driving under dusty conditions
- B — Driving repeatedly short distances
- C — Towing a trailer or caravan
- D — Extensive idling
- E — Driving in extremely adverse weather conditions or in areas where ambient temperatures are either extremely low or extremely high
- F — Driving in high humidity areas or in mountainous areas
- G — Driving in areas using salt or other corrosive materials
- H — Driving on rough and/or muddy roads or in the desert
- I — Driving with frequent use of braking or in mountainous areas
- J — Frequent off road use or driving in water
- K — Sustained high speed driving
- L — For models without Euro-OBD system

Driving condition												Maintenance item	Maintenance operation	Maintenance interval
A	B	C	D	.	.	.	.	.	.	.	.	Engine oil & engine oil filter		
												Petrol models	Replace	Every 7,500 km (4,500 miles)
												Diesel models	Replace	Every 10,000 km (6,000 miles)
A	.	.	.	.	.	.	.	.	.	.	.	Air cleaner filter		
												Petrol models	Replace	Every 30,000 km (18,000 miles)
												Diesel models	Replace	Every 30,000 km (18,000 miles)
A	.	.	.	E	.	.	.	.	.	.	.	Fuel filter		
												Diesel models	Replace	Every 30,000 km (18,000 miles)
A	.	.	.	.	.	.	.	.	.	.	.	Ventilation air filter		
												Petrol models	Replace	Every 15,000 km (9,000 miles)
												Diesel models	Replace	Every 10,000 km (6,000 miles)
.	.	.	.	.	F	.	.	.	.	.	.	Brake fluid		
												Petrol models	Replace	Every 30,000 km (18,000 miles)
												Diesel models	Replace	Every 30,000 km (18,000 miles)
.	.	C	.	.	.	.	.	H	.	.	.	CVT fluid		
												Petrol models	Replace	Every 22,500 km (13,500 miles)
A	.	C	.	.	.	G	H	I	.	.	.	Brake pads, rotors & other brake system components		
												Petrol models	Inspect	Every 15,000 km (9,000 miles)
												Diesel models	Inspect	Every 10,000 km (6,000 miles)
.	.	.	.	.	.	G	H	.	.	.	.	Steering gear & linkage, axle & suspension parts, drive shafts, exhaust system		
												Petrol models	Inspect	Every 30,000 km (18,000 miles)
												Diesel models	Inspect	Every 30,000 km (18,000 miles)

RECOMMENDED FLUIDS AND LUBRICANTS

Fluids and Lubricants

Fluids and Lubricants		NLMA0006S01
		Recommended fluids and lubricants
Engine oil	QG and SR engine	<ul style="list-style-type: none"> ● Except for Europe API SF, SG, SH or SJ*1 ILSAC grade GF-I or GF-II*1 ● For Europe API SG, SH or SJ*1 ILSAC grade GF-I or GF-II*1 ACEA A1-98, A3-98
	YD engine	<ul style="list-style-type: none"> ● Except for Europe API CD, CE, CF or CF-4*1, *2 ● For Europe API CF-4*1, *2 ACEA B1-98, B3-98
Cooling system		<ul style="list-style-type: none"> ● Except for Europe Nissan genuine engine coolant, or equivalent in its quality*3 ● For Europe Genuine Nissan Anti-freeze Coolant (L2N) or equivalent*3
Manual transaxle gear oil		<ul style="list-style-type: none"> ● Except for Europe API GL-4 Viscosity SAE 75W-90 ● For Europe Genuine Nissan XZ gear oil or exact equivalent
H-CVT fluid		Genuine Nissan CVT fluid (NS-1) or exact equivalent.
Power steering fluid		Type Dexron™III or equivalent
Brake and clutch fluid		<ul style="list-style-type: none"> ● Except for Europe DOT 3 (US FMVSS No. 116) ● For Europe DOT 3 or DOT 4 (US FMVSS No. 116)*4
Multi-purpose grease		NLGI No. 2 (Lithium soap base)

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

*2: Never use API CG-4.

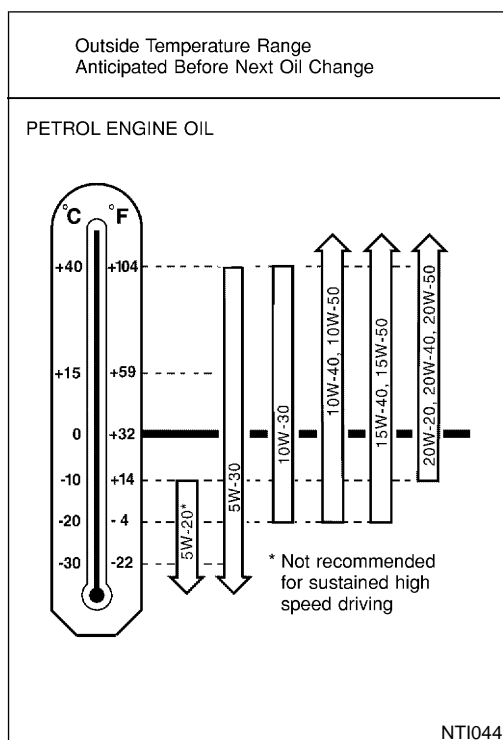
*3: Use Nissan genuine engine coolant [For Europe, Use Genuine Nissan Anti-freeze Coolant (L2N)] or equivalent in its quality, in order to avoid possible aluminium corrosion within the engine cooling system caused by the use of non-genuine engine coolant.

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.

*4: Never mix different types of fluids (DOT 3 and DOT 4).

RECOMMENDED FLUIDS AND LUBRICANTS

SAE Viscosity Number



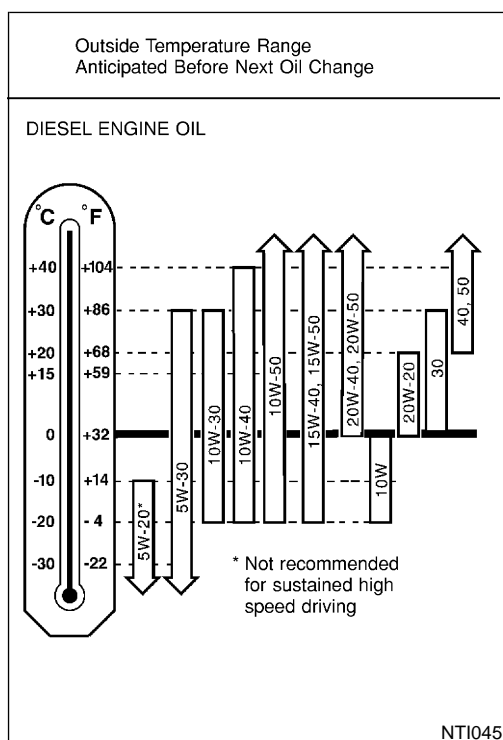
SAE Viscosity Number

=NLMA0006S02

GASOLINE ENGINE

NLMA0006S0204

- For warm and cold areas: 10W-30 is preferable for ambient temperature above -20°C (-4°F).
- 5W-30 will positively improve fuel economy.
- For hot areas: 20W-40 and 20W-50 are suitable.



DIESEL ENGINE

NLMA0006S0205

- For cold areas: 10W-30 is preferable. On turbocharger models, 5W-20 is not recommended, and 5W-30 should be used only below 0°C (32°F).
- For hot and warm areas: 20W-40 and 20W-50 are suitable.

RECOMMENDED FLUIDS AND LUBRICANTS

Engine Coolant Mixture Ratio

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

SMA089D

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:

- **For Europe**
When adding or replacing coolant, be sure to use only Genuine NISSAN Anti-freeze Coolant (L2N) or equivalent. Because L2N is premixed type coolant.
- **Except for Europe**
When adding or replacing coolant, be sure to use only a Nissan Genuine Engine Coolant or equivalent in its quality with the proper mixture ratio. See the examples shown left.

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.

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.