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SECTION MA
MAINTENANCE

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SERVICE INFORMATION

MODIFICATION NOTICE

Major Modification Item

INFOID:0000000007461887

- The general maintenance schedule have been revised.
- The periodic maintenance schedules for KA24D engine model have been revised.

GENERAL MAINTENANCE

General Maintenance

INFOID:0000000007461888

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

OUTSIDE THE VEHICLE

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

Item		Reference page
Lamps	Clean the head lamps on a regular basis. Make sure that the headlamps, stop lamps, tail lamps, turn signal lamps, and other lamps are all operating properly installed securely. Also check the aim of the headlamps.	—
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.	—
Wiper blades	Check for cracks or wear if not functioning correctly.	—
Doors and engine hood	Check that all doors and the engine hood operate smoothly as well as the back door, trunk lid and glass hatch. Also make sure that all latches lock securely. Lubricate if necessary. Make sure that the secondary latch keeps the hood from opening when the primary latch is released. When driving in areas using road salt or other corrosive materials, check lubrication frequently.	MA section*
Tire rotation	Tires should be rotated every 10,000 km (6,000 miles) for 2WD models and every 5,000 km (3,000 miles) for 4WD models.	MA section*
Windshield	Clean the windshield on a regular basis. Check the windshield at least every six months for cracks or other damage. Repair as necessary.	—

INSIDE THE VEHICLE

The maintenance items listed here should be checked on a regular basis, such as when performing periodic maintenance, cleaning the vehicle, etc.

Item		Reference page
Accelerator pedal	Check the pedal for smooth operation and make sure that the pedal does not catch or require uneven effort. Keep the floor mats away from the pedal.	—
Brake pedal	Check the pedal for smooth operation and make sure that it has the proper distance under it when depressed fully. Check the brake booster function. Be sure to keep the floor mats away from the pedal.	BR section*
Parking brake	Check that the lever or the pedal has the proper travel and make sure that the vehicle is held securely on a fairly steep hill when only the parking brake is applied.	BR section*
Warning lamps and chimes	Make sure that all warning lamps and chimes are operating properly.	—
Windshield defogger	Check that the air comes out of the defogger outlets properly and in good quantity when operating the heater or air conditioner.	—
Windshield wiper and washer	Check that the wipers and washer operate properly and that the wipers do not streak.	—
Steering wheel	Check for changes in the steering condition, such as excessive play, hard steering or strange noises. Check that it has the specified play. **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 section*

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 reservoir tank.	—
Engine coolant level	Check the coolant level when the engine is cold.	MA section*

Item		Reference page
Engine drive belts	Make sure that drive belts are not frayed, worn, cracked or oily.	MA section*
Engine oil level	Check the level after parking the vehicle (on a level ground) and turning off the engine.	MA section*
Brake and clutch fluid levels	Make sure that the brake and clutch fluid levels are between the “MAX” and “MIN” lines on the reservoir(s).	MA section*
Battery	Check the fluid level in each cell. It should be between the “MAX” and “MIN” lines. Vehicles operated in high temperatures or under severe conditions require frequent checks of the battery fluid level.	EL section*
Fluid leaks	Check under the vehicle for fuel, oil, water or other fluid leaks after the vehicle has been parked for a while. Water dripping from the air conditioner after use is normal. If you should notice any leaks or if gasoline fumes are evident, check for cause and have it corrected immediately.	—
Power steering fluid level and lines	Check the level when the fluid is cold, with the engine off. check the lines for proper attachment, leaks, cracks, etc..	MA section*

***:Refer to SM7E-0D22G1 & SM9E-D22BG0**

PERIODIC MAINTENANCE

Periodic Maintenance

INFOID:0000000007461889

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 (KA24D ENGINE)

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL									Reference page
Perform at kilometer (mile) interval or month interval, whichever comes first.	km x 1,000 (Miles x 1,000) Months	1 (0.6) -	10 (6) 6	20 (12) 12	30 (18) 18	40 (24) 24	50 (30) 30	60 (36) 36	70 (42) 42	80 (48) 48	
Engine compartment and under vehicle											
Intake & exhaust valve clearance	See NOTE (1)										EM section*
Drive belts	See NOTE (2)					I				I	MA section*
Engine oil & engine oil filter★			R	R	R	R	R	R	R	R	MA section*
Engine coolant (Use Genuine NISSAN Engine Coolant or equivalent in its quality.)	See NOTE (3)					E				R	MA section*
Cooling system				I		I		I		I	MA section*
Cyclone pre-air cleaner★			I	I	I	I	I	I	I	I	MA section*
Fuel lines						I				I	MA section*
EVAP vapor lines						I				I	MA section*
Air cleaner filter (Dry paper type)★		Clean every 5,000 km (3,000 miles)									MA section*
						R				R	MA section*
Fuel filter★						R				R	MA section*
Heated oxygen sensor (Exhaust gas sensor)						I				I	MA section*
Ignition wires						I				I	MA section*
Positive crankcase ventilation (PCV) system				I		I		I		I	MA section*
Positive crankcase ventilation (PCV) filter★						R				R	MA section*
Vacuum hoses & connections				I		I		I		I	MA section*
Spark plugs (Nickel-tipped type)	See NOTE (4)					R				R	MA section*

***: Refer to SM7E-0D22G1 & SM9E-D22BG0**

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 belts 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. After first replacement, replace every 40,000 km (24,000 miles) or 24 months.
- (4) Replace spark plug when the plug gap exceeds 1.25 mm (0.049 in) even if within specified periodic replacement mileage.

CHASSIS AND BODY MAINTENANCE

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

MAINTENANCE OPERATION		MAINTENANCE INTERVAL									Reference page
Perform at kilometer (mile) interval or month interval, whichever comes first.	km x 1,000 (Miles x 1,000) Months	1 (0.6) -	10 (6) 6	20 (12) 12	30 (18) 18	40 (24) 24	50 (30) 30	60 (36) 36	70 (42) 42	80 (48) 48	
Underhood and under vehicle											
Body mountings	See NOTE (1)	T		T		T		T		T	—
Brake booster vacuum hoses, connections & check valve						I				I	MA section*
Brake fluid★						R				R	MA section*
Brake linings, drums & other brake components★				I		I		I		I	MA section*
Brake pads, rotors & other brake components★			I	I	I	I	I	I	I	I	MA section*
Brake & clutch fluid (For level & leaks)			I	I	I	I	I	I	I	I	MA section*
Brake, clutch & exhaust system			I	I	I	I	I	I	I	I	MA section*
Differential gear oil (For level & leaks)			I	I	I	R	I	I	I	R	MA section*
Foot brake, parking brake & clutch (For free play, stroke & operation)			I	I	I	I	I	I	I	I	MA section*
Free-running hub grease★				I		I		I		I	FA section*
Front wheel bearing grease (2WD models)						I				I	FA section*
Front wheel bearing grease (4WD models)★				I		R		I		R	FA section*
Locks, hinges & hood latch★			L	L	L	L	L	L	L	L	MA section*
Manual transmission gear oil (For level & leaks)	See NOTE (2)		I	I	I	I	I	I	I	I	MA section*
Power steering fluid & lines (For level & leaks)			I	I	I	I	I	I	I	I	MA section*
Propeller shaft grease★	See NOTE (3)			L		L		L		L	MA section*
Steering gear & linkage, axle & suspension parts, propeller shaft (Except for 4WD models)★				I		I		I		I	MA section*
Steering gear & linkage, axle & suspension parts, propeller shaft & front drive shaft (For 4WD models)★		I	I	I	I	I	I	I	I	I	MA section*
Seat belts, buckles, retractors, anchors & adjusters				I		I		I		I	MA section*
Transfer fluid (For level & leaks)			I	I	I	R	I	I	I	R	MA section*
Wheel alignment (if necessary, rotate & balance wheels)				I		I		I		I	FA section*

***: Refer to SM7E-0D22G1 & SM9E-D22BG0**

NOTE:

- **Maintenance items with "★" should be performed more frequently according to "Maintenance Under Severe Driving Conditions".**
- (1) It is applicable, when the vehicle is in commercial use.
- (2) Replace oil at 100,000 km (60,000 miles).
- (3) The propeller shaft should be re-greased after being immersed in water.

MAINTENANCE UNDER SEVERE DRIVING CONDITIONS

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

Severe driving conditions
A — Driving 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 areas
H — Driving on rough and/or muddy roads or in the desert
I — Driving with frequent use of braking or in mountainous areas
J — Frequent driving in water

Operation: Inspect = Inspect and correct or replace as necessary.

Driving condition										Maintenance item	Maintenance operation	Maintenance interval	Reference page
A	B	C	D	.	.	.	.	.	.	Engine oil & engine oil filter	Replace	Every 5,000 km (3,000 miles) or 3 months	MA section*
A	.	.	.	.	.	.	.	.	.	Air cleaner filter	Replace	More frequently	MA section*
A	.	.	.	.	.	.	.	.	.	Cyclone pre-air cleaner	Inspect	More frequently	MA section*
A	.	.	.	E	.	.	.	.	.	Fuel filter	Replace	Every 20,000 km (12,000 miles) or 12 months	MA section*
A	.	.	.	.	.	.	.	.	.	Positive crankcase ventilation (PCV) filter	Replace	More frequently	MA section*
.	.	.	.	.	F	.	.	.	.	Brake fluid	Replace	Every 20,000 km (12,000 miles) or 12 months	MA section*
A	.	C	.	.	.	G	H	I	.	Brake linings, drums & other brake components	Inspect	Every 10,000 km (6,000 miles) or 6 months	MA section*
A	.	C	.	.	.	G	H	I	.	Brake pads, rotors & other brake components	Inspect	Every 5,000 km (3,000 miles) or 3 months	MA section*
.	.	.	.	.	.	.	.	.	J	Free-running hub grease	Inspect	Every 5,000 km (3,000 miles) or 3 months	FA section*
.	.	.	.	.	.	.	.	.	J	Front wheel bearing grease (For 4WD models)	Inspect	Every 5,000 km (3,000 miles) or 3 months	FA section*
											Replace	Every 40,000 km (24,000 miles) or 24 months	FA section*
.	.	.	.	.	.	G	.	.	.	Locks, hinges & hood latch	Lubricate	Every 5,000 km (3,000 miles) or 3 months	MA section*
.	.	.	.	.	.	G	H	.	J	Propeller shaft grease	Lubricate	Every 10,000 km (6,000 miles) or 6 months	MA section*
.	.	.	.	.	.	G	H	.	.	Steering gear & linkage, axle & suspension parts, propeller shaft (Except for 4WD models)	Inspect	Every 10,000 km (6,000 miles) or 6 months	MA section*
.	.	.	.	.	.	G	H	.	.	Steering gear & linkage, axle & suspension parts, propeller shaft & front drive shaft (For 4WD models)	Inspect	Every 5,000 km (3,000 miles) or 3 months	MA section*

***: Refer to SM7E-0D22G1 & SM9E-D22BG0**