

SERVICE MANUAL

MODEL
L20A, L24 & L26 SERIES
ENGINES

SECTION EG

EG

ENGINE GENERAL

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NISSAN MOTOR CO., LTD.
TOKYO, JAPAN

SPECIFICATIONS

Engine model		L20A	L24	L26	L26 (Twin carb.)	
Type		In-line				
Number of cylinders		6				
Valve of arrangement		O.H.C.				
Bore x Stroke	mm (in)	78 x 69.7 (3.071 x 2.749)	83 x 73.7 (3.27 x 2.902)	83 x 79 (3.271 x 3.110)	83 x 79 (3.271 x 3.110)	
Displacement	cc (cu in)	1,998 (121.9)	2,393 (146.0)	2,565 (156.5)	2,565 (156.5)	
Compression ratio		8.6	8.5	8.6	8.3	
Firing order		1-5-3-6-2-4				
Number of piston rings	Compression	2				
	Oil control	1				
Number of main bearings		7				
Capacities liters (US gal, Imp gal)	Engine oil	Oil pan	4.1 (1 1/8, 3/8)	5.0 (1 3/8, 1 1/4)	4.1 (1 1/8, 3/8)	4.0 (1 1/8, 3/8)
		With oil filter	4.7 (1 1/4, 1 1/8)	5.7 (1 1/2, 1 1/4)	4.7 (1 1/4, 1 1/8)	4.7 (1 1/4, 1 1/8)
	Engine coolant	Without heater	8.0 (2 1/8, 1 3/4)	8.5 (2 1/4, 1 3/4)	8.0 (2 1/8, 1 3/4)	-
		With heater	9.0 (2 3/8, 2)	9.5 (2 1/2, 2 3/4)	9.0 (2 3/8, 2)	9.4 (2 1/4, 2 3/4)

CAR REFERENCE

Information described herein is about engine only. Please, refer to

both this and each chassis and body manual for complete details about the

car. The cars on which L20A, L24 and L26 engines are mounted as follows.

Engine		Car		
Model	Displacement	Car name	Current model	Remarks
L20A	1,998 cc (121.9 cu in)	DATSUN 200C	230QU	R.H. drive, 4-door Sedan with manual T/M (Column shift)
			L230QT	L.H. drive, 4-door Sedan with manual T/M (Floor shift)
			L230Q	L.H. drive, 4-door Sedan with manual T/M (Column shift)
			L230QA	L.H. drive, 4-door Sedan with automatic T/M (Column shift)
L24	2,393 cc (146.0 cu in)	*1	HGC110UT	R.H. drive, 4-door Sedan with manual T/M (Floor shift)
			HGC110UAT	R.H. drive, 4-door Sedan with automatic T/M (Floor shift)
			HLGC110T	L.H. drive, 4-door Sedan with manual T/M (Floor shift)
			HLGC110AT	L.H. drive, 4-door Sedan with automatic T/M (Floor shift)
			KHGC110UT	R.H. drive, Hardtop with manual T/M (Floor shift)
			KHGC110UAT	R.H. drive, Hardtop with automatic T/M (Floor shift)
			KHLGC110T	L.H. drive, Hardtop with manual T/M (Floor shift)
			KHLGC110AT	L.H. drive, Hardtop with automatic T/M (Floor shift)
		*2	HGC110UQ	R.H. drive, 4-door Sedan with manual T/M (Floor shift)
			HGC110UAQ	R.H. drive, 4-door Sedan with automatic T/M (Floor shift)
			HLGC110Q	L.H. drive, 4-door Sedan with manual T/M (Floor shift)
			HLGC110AQ	L.H. drive, 4-door Sedan with automatic T/M (Floor shift)
			KHGC110UQ	R.H. drive, Hardtop with manual T/M (Floor shift)
			KHGC110UAQ	R.H. drive, Hardtop with automatic T/M (Floor shift)
			KHLGC110Q	L.H. drive, Hardtop with manual T/M (Floor shift)
			KHLGC110AQ	L.H. drive, Hardtop with automatic T/M (Floor shift)
		*3	HGC110UR	R.H. drive, 4-door Sedan with manual T/M (Floor shift)
			HGC110UAR	R.H. drive, 4-door Sedan with automatic T/M (Floor shift)
			KHGC110UR	R.H. drive, Hardtop with manual T/M (Floor shift)
			KHGC110UAR	R.H. drive, Hardtop with automatic T/M (Floor shift)

*1: For common countries

*2: For Europe

*3: For Australia

Engine General

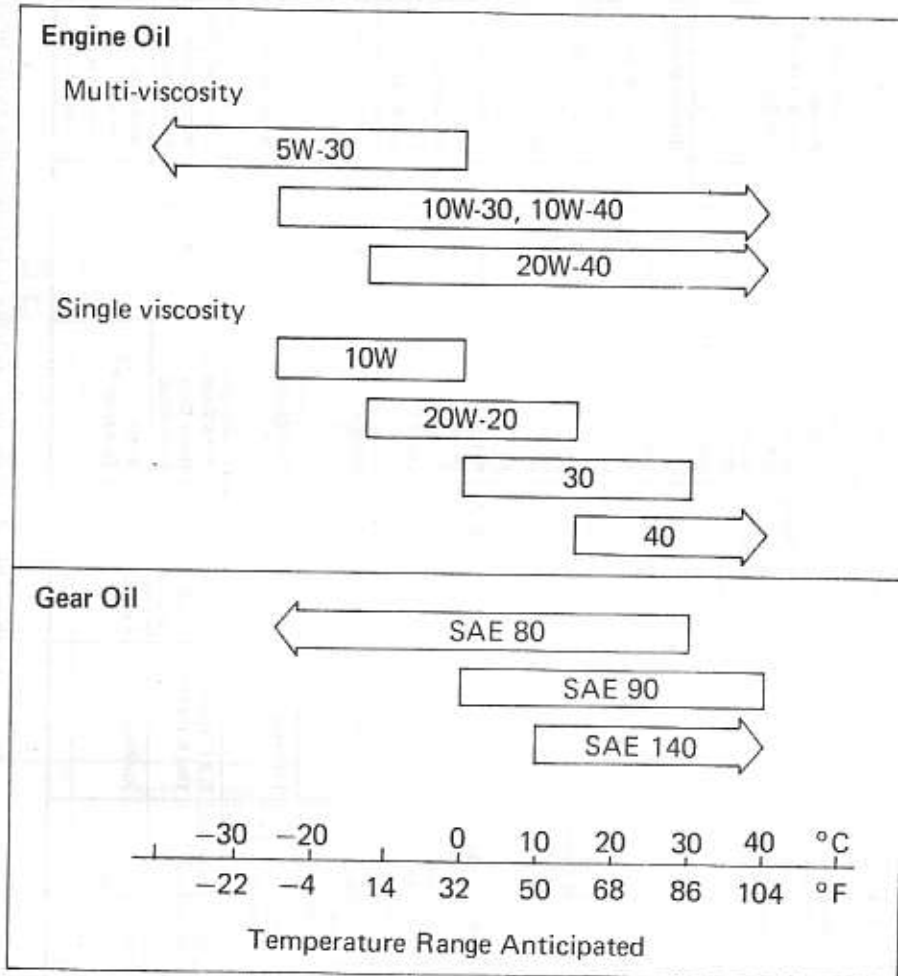
Engine		Car				
Model	Displacement	Car name	Current model	Remarks		
L26	2,565 cc (156.5 cu in)	DATSUN 260C (Hardtop)	KH230QTU	R.H. drive, Hardtop with manual T/M (Floor shift)		
			KH230QTUA	R.H. drive, Hardtop with automatic T/M (Floor shift)		
			KHL230QT	L.H. drive, Hardtop with manual T/M (Floor shift)		
			KHL230QTA	L.H. drive, Hardtop with automatic T/M (Floor shift)		
		DATSUN 260C (Custom Deluxe)	H230VU	R.H. drive, 4-door Sedan with manual T/M (Column shift)		
			H230VTU	R.H. drive, 4-door Sedan with manual T/M (Floor shift)		
			H230VUA	R.H. drive, 4-door Sedan with automatic T/M (Column shift)		
			H230VTUA	R.H. drive, 4-door Sedan with automatic T/M (Floor shift)		
			HL230V	L.H. drive, 4-door Sedan with manual T/M (Column shift)		
			HL230VT	L.H. drive, 4-door Sedan with manual T/M (Floor shift)		
			HL230VA	L.H. drive, 4-door Sedan with automatic T/M (Column shift)		
			HL230VTA	L.H. drive, 4-door Sedan with automatic T/M (Floor shift)		
		DATSUN 260C (Deluxe)	2,565 cc (156.5 cu in)	DATSUN 260C (Deluxe)	H230QU	R.H. drive, 4-door Sedan with manual T/M (Column shift)
					H230QTU	R.H. drive, 4-door Sedan with manual T/M (Floor shift)
H230QUA	R.H. drive, 4-door Sedan with automatic T/M (Column shift)					
H230QTUA	R.H. drive, 4-door Sedan with automatic T/M (Floor shift)					
HL230Q	L.H. drive, 4-door Sedan with manual T/M (Column shift)					
HL230QT	L.H. drive, 4-door Sedan with manual T/M (Floor shift)					
DATSUN 260C (Station Wagon)	HL230QA			L.H. drive, 4-door Sedan with automatic T/M (Column shift)		
	WH230U			R.H. drive, Station Wagon with manual T/M (Column shift)		
	WH230UT			R.H. drive, Station Wagon with manual T/M (Floor shift)		
	WHL230U			L.H. drive, Station Wagon with manual T/M (Column shift)		
	WHL230T			L.H. drive, Station Wagon with manual T/M (Floor shift)		
	VH230U			R.H. drive, Van with manual T/M (Column shift)		
L26 (Twin carb.)	2,565 cc (156.5 cu in)	DATSUN 260Z *4	RS30U	R.H. drive, 2-door Sport with manual T/M (Floor shift)		
			RS30AU	R.H. drive, 2-door Sport with automatic T/M (Floor shift)		
			RLS30	L.H. drive, 2-door Sport with manual T/M (Floor shift)		
			RLS30A	L.H. drive, 2-door Sport with automatic T/M (Floor shift)		
		DATSUN 260Z *5	RS30Q	R.H. drive, 2-door Sport with manual T/M (Floor shift)		
			RS30AQ	R.H. drive, 2-door Sport with automatic T/M (Floor shift)		
			RLS30Q	L.H. drive, 2-door Sport with manual T/M (Floor shift)		
			RLS30AQ	L.H. drive, 2-door Sport with automatic T/M (Floor shift)		

*4: All countries except Europe

*5: For Europe

RECOMMENDED LUBRICANTS, PETROL (FUEL) AND COOLANT

Use the following grades of oil, gasoline and coolant.



RECOMMENDED LUBRICANTS

SPECIFICATIONS		AGIP	BP	CALTEX	CASTROL	ESSO	MOBIL	SHELL	TEXACO	TOTAL
ENGINE OIL	Gasoline	Multigrade SD or SE MIL-L-2104B	Super Viscostatic 5W-20, 10W-40, 20W-50	Custom Five Star Motor Oil 10W-30, 10W-40, 20W-40, 20W-50	GTX 20W-50 Castrolite 10W-30 XL 20W-40	Uniflo 5W-30, 10W-40 Esso Extra Motor Oil 5W-20, 10W-30, 20W-40	Mobilol Super 5W-30, 5W-40, 10W-40, 10W-50, 20W-50 Mobilol Special 5W-20, 10W-30, 20W-40, 20W-50	Shell Super Motor Oil Shell Rotella TX Oil 20W-50	Havoline Super Premium 5W-30, 10W-40, 20W-50	GTS 10W-30, 20W-40, 20W-50
		Monograde SD MIL-L-2104B	Energol HD Oil 10W, 20W, 30, 40	—	5HD, 10HD, 20HD, 30HD, 40HD, 50HD	Esso Motor Oil 10W, 20W, 30, 40, 50	Mobilol 10W, 20W-20, 30, 40, 50	Shell Rotella TX Oil 10W, 20W-20, 30, 40, 50	Havoline Motor Oil 10W, 20W-20, 30, 40, 50	Super HD 10W, 20W-20, 30, 40, 50
GEAR OIL	Transmission and steering	AGIP F.1 Rotra Hypoid 80, 90, 140	BP Gear Oil EP 80, 90, 140	Universal Thuban 80, 90, 140	CASTROL HYPOY 80, 90	Esso Gear Oil GP 90, 140	Mobilube GX or EP Series 80, 90, 140, 80-90	Spirax EP 80, 90, 140	Universal Gear Lub. EP 80, 90, 140	Extreme Precision 80, 90, 140
	Differential	AGIP F.1 Rotra MP 80, 90, 140	BP Hypogear Oil EP 80, 90, 140	3450 Gear Oil 90 Multipurpose Thuban EP 80, 90, 140	CASTROL HYPOY B80, B90	Esso Gear Oil GX 90, 140	Mobilube HD Series 75, 80, 90, 140, 80-90	Spirax 80, 90, 140	3450 Gear Oil 90 Multigear Lub. EP 80, 90, 140	Extreme Precision Type B 80, 90, 140
Automatic T/M & Power steering fluid		AGIP F.1 ATF DEXRON	Autran DX	Texamatic Fluid DEXRON	TQ DEXRON	Esso Automatic Transmission Fluid	Mobil ATF 220	ATF DEXRON	Texamatic Fluid DEXRON	DEXRON
Multi-purpose grease		AGIP F.1 Grease 30	Engrease L-2	Marfak Multipurpose 2 *	LM Grease *	Esso Multi-purpose Grease *	Mobilgrease MP *	Retinax A	Marfak Multipurpose 2 *	Multis *
Brake and clutch fluid		AGIP F.1 Brake Fluid Super HD	Disc Brake Fluid	Caltex Heavy Duty Brake Fluid	G.B.F. Green Disc Brake Fluid	Atlas Brake Fluid S.H.D. 450, 550	Mobil Super Heavy Duty Brake Fluid	Brake Fluid Heavy Duty	Super Heavy Duty Motor Vehicle Brake Fluid	Brake Fluid
Antifreeze (Ethylene glycol base)		—	Antifrost	Startex Antifreeze Coolant	Antifreeze	Esso-Rad *	Mobil Permazone *	Glycoshell *	Antifreeze Coolant * Startex Antifreeze Coolant *	Antigel *

In case the above brand oils are not available, it is permissible to use oils marked "*".

PETROL (FUEL)

Engine model	Compression ratio	Octane number of petrol
L20A	8.6 : 1	More than 85
L24	8.5 : 1	More than 95
L26	8.6 : 1	More than 85
L26 (Twin carb.)	8.3 : 1	For Europe More than 85
		For except Europe More than 95

NISSAN LONG LIFE COOLANT (L.L.C.)

NISSAN L.L.C. is an ethylene glycol base product containing chemical inhibitors to protect the cooling system against rusting and corrosion. L.L.C. does not contain any glycerine, ethyl or methyl alcohol. It will not

evaporate or boil away and can be used with either high or low temperature thermostat. It flows freely, transfers heat efficiently, and will not clog the passages in the cooling system.

L.L.C. must not be mixed with any

other products. This coolant can be used throughout the seasons of the year and exchange period is two years or total running mileage of 40,000 km (24,000 miles).

Percent concentration	Boiling point		Freeze protection
	Sea level	0.9 kg/cm ² (13 psi) cooling system pressure	
30%	106°C (223°F)	124°C (255°F)	-15°C (5°F)
50%	109°C (228°F)	127°C (261°F)	-35°C (-31°F)

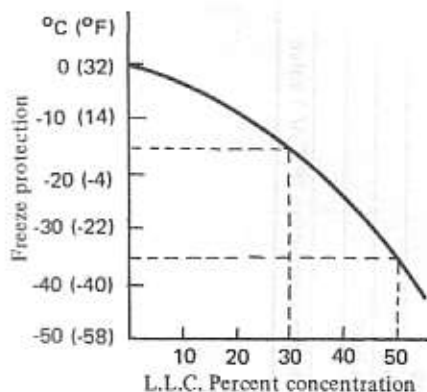


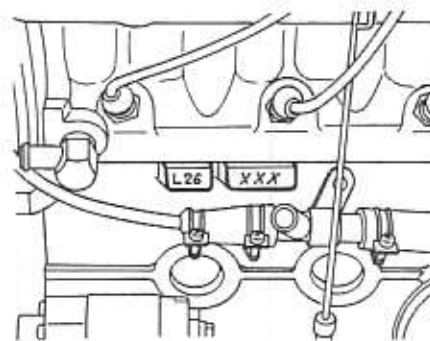
Fig. EG-1 Protection concentration

identification plate located in an easy-to-read position.

ENGINE SERIAL NUMBER

The engine serial number is stamped on the rear left side of cylinder block, at cylinder head contacting face.

The number is preceded by the engine model, L20, L24 or L26.

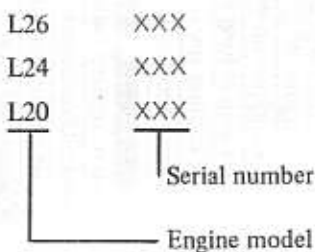


EG002

Fig. EG-2 Engine serial number location

UNIT SERIAL NUMBER LOCATION

There are two serial numbers for unit identification: engine and chassis. These numbers are indicated in the car



PERIODICAL MAINTENANCE SCHEDULE

	MAINTENANCE INTERVAL																				
	Number of thousands of kilometers																				
	1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90		
	Number of thousands of miles																				
	0.6	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54		
MAINTENANCE OPERATION																					
Adjust intake & exhaust valve clearances	X		X		X																
Check drive belt tension	X		X																		
Tighten cylinder head bolts & manifold nuts	X																				
Replace oil filter			R		R																
Check engine oil for leaks			X		X																
Change engine oil		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
Change engine coolant																					
Change engine long life coolant																					
Check cooling system hoses & connections																					
Lubricate accelerator linkage																					
Replace carburetor air cleaner filter (Viscous type)			X																		
Clean or replace carburetor air cleaner filter (Dry type)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Check SU-carburetor damper oil level, top up if necessary		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Adjust carburetor-idle rpm, mixture ratio	X																				
Replace fuel filter																					
Check fuel line (hoses, pipings, connections, etc.) for leaks	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Check & adjust ignition timing	X																				
Check distributor breaker point		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Grease distributor shaft & cam heel			X																		
Check or replace spark plugs			X																		
Check or replace positive crankcase ventilation (P.C.V.) valve																					

R: Replacement