

SERVICE MANUAL

DATSUN PICK-UP

Model **520 series**

NISSAN

NISSAN MOTOR CO., LTD.

TOKYO, JAPAN

1500
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SERVICE MANUAL

DATSUN PICK-UP

MODEL 520 SERIES



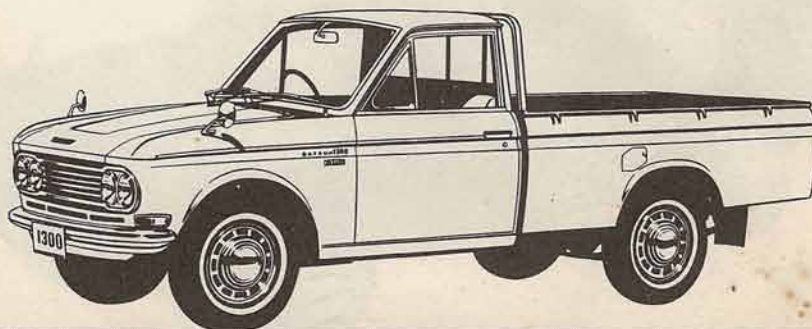
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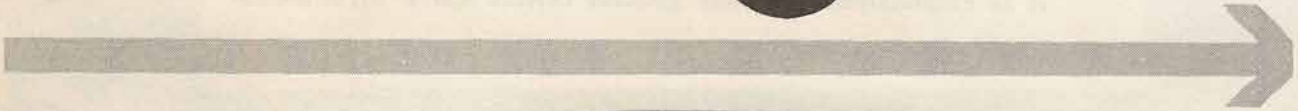
FOREWORD

This manual has been prepared for purpose of assisting Datsun distributors and dealers for effective service and maintenance of the Model 520 Series.

It is emphasised that only genuine Datsun Spare Parts should be used as replacements.



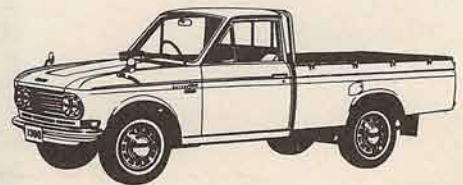
DATSUN PICK-UP



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MAJOR SPECIFICATION

MAJOR SPECIFICATION OF MODEL 520 SERIES

ITEM		MODEL	(L)520-U L520-T	U(L)520-U	V(L)520-U		
DIMENSIONS	Overall Length		4,280 mm (168.5 in.)	4,300 mm (169.3 in.)	4,300 mm (169.3 in.)		
	Overall Width		1,575 mm (62 in.)	1,570 mm (61.8 in.)	1,570 mm (61.8 in.)		
	Overall Height		1,545 mm (60.8 in.)	1,530 mm (60.2 in.)	1,525 mm (60.0 in.)		
	Wheel Base		2,530 mm (99.6 in.)	2,530 mm (99.6 in.)	2,530 mm (99.6 in.)		
	Rear Body (Luggage space)	Length	1,850 mm (72.8 in.)	830 mm (32.7 in.)	1,650 mm (64.9 in.)	1,040 mm (40.9 in.)	
		Width	1,430 mm (56.3 in.)	1,320 mm (51.9 in.)	1,245 mm (49.0 in.)	1,240 mm (48.8 in.)	
		Height	400 mm (15.7 in.)	420 mm (16.5 in.)	900 mm (35.4 in.)		
	Tread	Front	1,250 mm (49.2 in.)	1,250 mm (49.2 in.)	1,250 mm (49.2 in.)		
		Rear	1,267 mm (49.9 in.)	1,267 mm (49.9 in.)	1,267 mm (49.9 in.)		
	Min. Road Clearance		200 mm (7.9 in.)	187 mm (7.4 in.)	187 mm (7.4 in.)		
	Floor Height		690 mm (27.2 in.)	635 mm (25.0 in.)	620 mm (24.4 in.)		
	Overhang to the Front End without Bumper		637 mm (25.1 in.)	637 mm (25.1 in.)	637 mm (25.1 in.)		
	Overhang to the Rear End without Bumper		1,035 mm (40.7 in.)	1,040 mm (40.9 in.)	1,040 mm (40.9 in.)		
	Frame overhang to the front End		535 mm (21.1 in.)	535 mm (21.1 in.)	535 mm (21.1 in.)		
	Frame overhang to the Rear End		820 mm (32.3 in.)	820 mm (32.3 in.)	820 mm (32.3 in.)		
WEIGHT	Vehicle Weight		960 kg (2,116 lb.)	1,035 kg (2,282 lb.)	1,055 kg (2,326 lb.)		

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ITEM		MODEL	(L)520-U L520-T	U(L)520-U	V(L)520-U	
		WEIGHT	Distribution	Front	535 kg (1,179 lb.)	560 kg (1,235 lb.)
Rear	425 kg (937 lb.)			475 kg (1,047 lb.)	525 kg (1,158 lb.)	
Max. Payload			1,000 kg (2,205 lb.)	400 kg (882 lb.)	500 kg (1,102 lb.)	300 kg (661 lb.)
Vehicle Gross Weight			2,070 kg (4,564 lb.)	1,710 kg (3,770 lb.)	1,665 kg (3,671 lb.)	1,630 kg (3,594 lb.)
Distribution	Front		580 kg (1,279 lb.)	600 kg (1,323 lb.)	585 kg (1,290 lb.)	600 kg (1,323 lb.)
	Rear		1,490 kg (3,285 lb.)	1,110 kg (2,447 lb.)	1,080 kg (2,381 lb.)	1,030 kg (2,271 lb.)
Chassis Weight			615 kg (1,356 lb.)	605 kg (1,334 lb.)	605 kg (1,334 lb.)	
Distribution	Front		375 kg (827 lb.)	370 kg (816 lb.)	370 kg (816 lb.)	
	Rear		240 kg (529 lb.)	235 kg (518 lb.)	235 kg (518 lb.)	
Height of Gravity Center			548 mm (21.7 in.)	565 mm (22.2 in.)	565 mm (22.2 in.)	
Proportion of Front Tire with Load			28.0%	35.1%	35.1%	36.8%
Max. Inclination Angle						
			Right	49°	48°	48°
		Left	49°	48°	46°	
Cargo Space, off-set		50 mm (1.95 in.)	395 mm (15.6 in.)	45 mm (1.77 in.)	295 mm (11.6 in.)	
PERFORMANCE	Max. Speed		125 km/h 78 MPH	125 km/h 78 MPH	125 km/h 78 MPH	
	Fuel Consumption		15.5 km/ℓ	15.5 km/ℓ	15.5 km/ℓ	
	Grade Ability ($\sin \theta$)		(L)520-U 0.306 L 520-T 0.241	0.394	0.414	
	Min. Turning Radius		5.2 m (17.1 ft.)	5.2 m (17.1 ft.)	5.2 m (17.1 ft.)	
	Brake Stopping Distance (50 km/h)		13.7 m (44.9 ft.)	13.7 m (44.9 ft.)	13.7 m (44.9 ft.)	
SEAT- ING CAPAC- ITY			2 Persons	5 Persons	2 Persons	5 Persons

MAJOR SPECIFICATION

	MODEL	(L)520-U L520-T	U(L)520-U	V(L)520-U
ENGINE	Model	J		
	Make	NISSAN MOTOR CO., LTD.		
	Classification	Gasoline Engine		
	Cooling System	Water Forced Circulation		
	No. of Cylinder & Arrang.	4 in Line		
	Cycle	4		
	Combustion Chamber	Bathtub Type		
	Valve Arrangement	Over Head Valve		
	Bore x Stroke	73 x 77.6 mm (2.874 x 3.055 in.)		
	Displacement	1,299 c. c. (79.27 cu. in.)		
	Compression Ratio	8.2		
	Compression Pressure	11.5/350 kg/cm ² (r. p. m.) (163.5/350 lb/in ²)		
	Max. Exploding Pressure	48/3600 kg/cm ² (r. p. m.) (682.7/3600 lb/in ²)		
	Max. mean Effective Press.	9.7/2800 kg/cm ² (r. p. m.) (137.9/2800 lb/in ²)		
	Max. B.H.P. (SAE)	67/5200 HP/r. p. m.		
	Max. Torque (SAE)	76.7/2800 ft-lb/r. p. m. (10.6/2800 kg-m r. p. m.)		
	Length x Width x Height	587 x 575 x 673 mm (23.1 x 22.6 x 26.5 in.)		
	Weight	139 kg (306 lb)		
	Piston Type	Split Skirt Type		
	Piston Material	LO-EX		
No. of Piston Ring		2		
	Pressure	2		
	Oil	1		
Valve Timing	Inlet Open	14° B. T. D. C.		
	Inlet Close	50° A. B. D. C.		
	Exh. Open	52° B. B. D. C.		
	Exh. Close	12° A. T. D. C.		

DATSUN PICK-UP

ITEM		MODEL	(L)520-U L520-T	U(L)520-U	V(L)520-U	
ENGINE	Valve Clearance					
	Intake			0.35 mm (0.014 in.)		
	Exhaust			0.35 mm (0.014 in.)		
	Starting Method			Magnetic Starting System		
BATTERY	Type			N41 (14M2) OR N50 (2SMB)		
	Voltage			12V		
	Capacity			40 OR 50 A.H.		
	Ground Polarity			Negative		
GENERATOR	Type			AS2030A1		
	Make			MITUSBISHI		
	Generating Method			Alternator		
	Voltage			12V		
	Capacity			300W		
	Voltage Regulator			RL2220B5		
STARTER	Type			S114-92		
	Make			Hitachi		
	Voltage & Power			12V-1.14HP		
IGNITION SYSTEM (GASOLINE)	Ignition Method			Battery - Coil Type		
	Ignition Timing			8°/600 B.T.D.C./r.p.m.		
	Firing Order			1 - 3 - 4 - 2		
	Ignition Coil	Type			CIZ - 18	
		Make			Hitachi	
	Distributor	Type			D411-53	
		Make			Hitachi	
		Ign. Timing Advance System			Vacuum and Governor	

MAJOR SPECIFICATION

ITEM	MODEL		(L)520-U L 520-T	U(L)520-U	V(L)520-U	
	IGNITION SYSTEM (GASOLINE)	Spark Plug	Type	B - 6E		
Make			NGK			
Thread			14 mm (0.551 in.)			
Gap			0.7~0.8 mm (0.0275~0.0315 in.)			
Carburetor		Type	D2630A-2A (R.H.)	D2630A-3A (L.H.)		
		Make	Nihonkikaki			
		Throttle Valve Bore	P. 26 mm	S. 30 mm		
		Venturi Size	20 mm	27 mm		
		Main Jet	#90	#145		
		Slow Jet	#48	# 48		
		Pump Jet	#45			
		Power Jet	#40			
		Air Draught	Down			
		Air Cleaner	Type & No.	Paper Type 1 each		
Make			Tsuchiya			
Fuel Pump		Type	Diaphragm			
		Make	Showa, Kyosan			
Capacity of Fuel Tank		41 lr (10.8 gl. U.S.A.)				
LUBRICATION		Lubrication Method		Forced Pressure Type		
		Oil Pump Type		Trochoid Type		
	Oil Filter		Full Flow Type			
	Oil Pan Capacity		3.0 lr (0.79 gl. U.S.A.)			
COOLING SYSTEM	Type		Water Cooling Closed Type			
	Radiator		Corugated Fin and Tube Type			
	Cooling Water Capacity		5.6 lr (1.48 gl. U.S.A.)			

DATSUN PICK-UP

ITEM		MODEL	(L)520-U L 520-T	U(L)520-U	V(L)520-U
COOLING SYSTEM	Water Pump Type		Centrifugal Type		
	Thermostat		Pellet Type		
CLUTCH	Type		Single Dry Disc. (Hydraulic Operation)		
	No. of Plate		1 (Facing 2)		
	Out. dia x In. dia x Thickness		200 x 130 x 3.5 mm (7.87 x 5.12 x 0.138 in.)		
	Total Friction Area		181 x 2 cm ² (28.06 x 2 sq. in.)		
	In. dia. of Operating Cylinder		19.05 mm (3/4 in.)		
	In. dia. of Master Cylinder		15.87 mm (5/8 in.)		
TRANSMISSION	Type		4 Forward, 1 Reverse (Synchromeshed on 1st, 2nd, 3rd, 4th)		
	Gear Shift Method		*Remote Control	**Floor Shift	
	Oil Capacity		2ℓ		
	Gear Ratio **L520-T *(L)520-U U(L)520-U V(L)520-U	1st	*5.000	**3.657	
		2nd	3.014	2.177	
		3rd	1.685	1.419	
		4th	1.000	1.000	
		5th			
Reverse		5.146	3.638		
PROPELLER SHAFT	1st Length x Out. dia x In. dia		1,380 x 71 x 67.8 mm		
	Type of Universal Joint		Spicer Type		
FINAL GEAR	Gear Type		Hypoid		
	Gear Ratio		4.875		
DIFF. GEAR	Housing Type		Banjo		
	Type of No. of Gear		Straight Bevel Pinion 2 each		
STEERING SYSTEM	Type		Worm and Roller Type		
	Gear Ratio		17.3		
	Steering Angle	In	36°		
Out		31°			

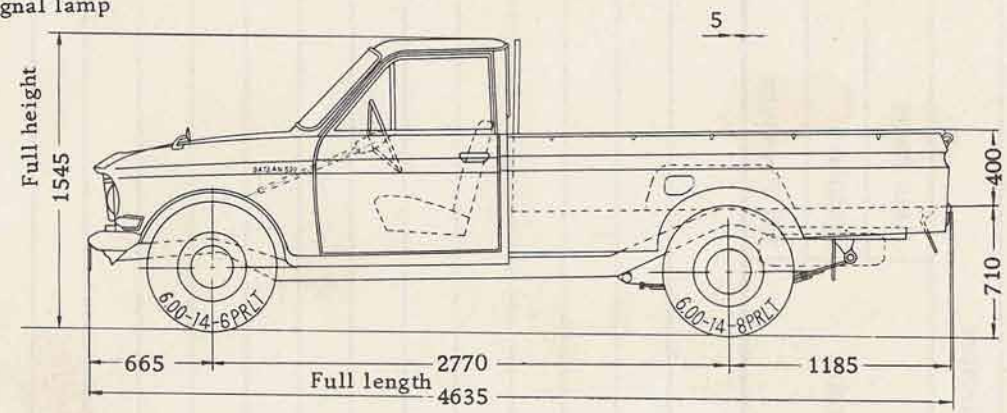
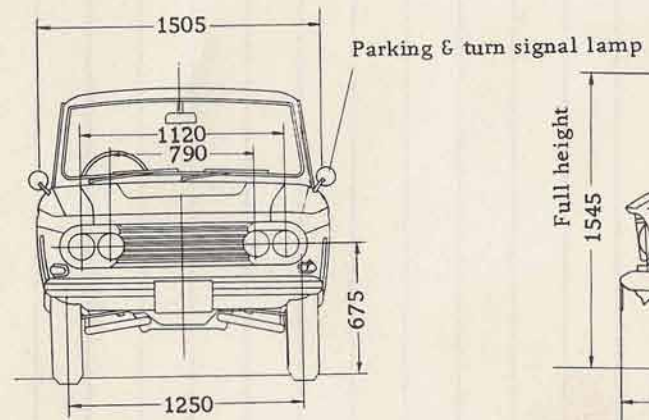
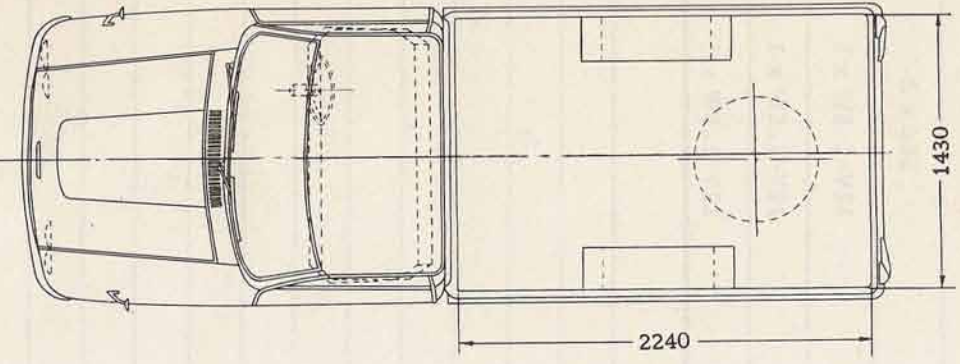
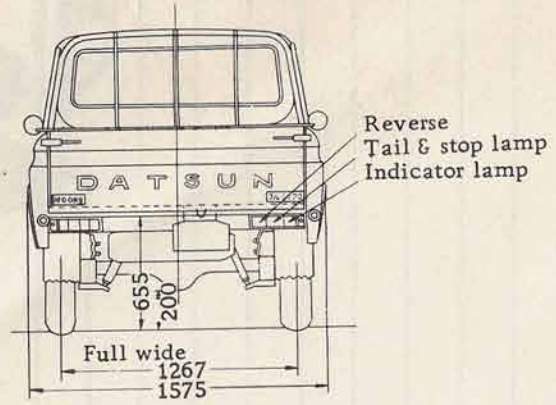
MAJOR SPECIFICATION

MODEL		(L)520-U L 520-T	U(L)520-U	V(L)520-U	
ITEM					
STEERING SYSTEM	Steering Wheel Dia.		400 mm (15.75 in.)		
	Oil Capacity		0.33ℓ		
RUNNING DEVICE	Wheel Arrangement		2 Front, 2 Rear	2 Front, 2 Rear	
	Front axle Type		Wishbone		
	Toe-in		2 ~ 3 mm	2 ~ 3 mm	2 ~ 3 mm
	Camber		1° 15'	1° 20'	1° 15'
	Caster		1° 50'	1° 55'	2° 15'
	Inclination Angle of King Pin		6° 15'	6° 10'	6° 15'
	Rear Axle Type		Semi-Floating Type		Semi-Floating Type
BRAKE SYSTEM	SERVICE BRAKE	Type		Front: Uniservo, Rear: Duoservo	Front: Uniservo, Rear: Duoservo
		Lining Dimension (Width x Thickness x Length)	F.	45 x 4.5 x 244 - 4 mm	45 x 4.5 x 244 - 4 mm
			R.	45 x 4.5 x 244 - 4 mm	45 x 4.5 x 244 - 4 mm
		Total Braking Area	F.	440 cm ²	440 cm ²
			R.	440 cm ²	440 cm ²
		In. dia. of Brake Drum	F.	254 mm	254 mm
			R.	254 mm	254 mm
		In. dia. of Master Cylinder		19.05 mm (3/4 in.)	19.05 mm (3/4 in.)
	In. dia of Wheel Cylinder	F.	19.05 mm (3/4 in.)	19.05 mm (3/4 in.)	
		R.	19.05 mm (3/4 in.)	19.05 mm (3/4 in.)	
	Max. Oil Pressure		144 kg/cm ²	144 kg/cm ²	
PARKING BRAKE	Type		Mechanical for Rear Wheel		
	Lining Dimension		45 x 4.5 x 244 - 4 mm (1.77 x 0.177 x 9.6 - 4 in.)		
	Total Braking Area		440 cm ² (68.2 sq. in.)		
	In. dia. of Drum		254 mm (10 in.)		
SUS- PEN- SION	Front Suspension Type		Independent Wishbone With Torsion Bar Spring		

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ITEM		MODEL		(L) 520-U	U(L) 520-U	V(L) 520-U
				L 520-T		
SUSPENSION	Spring Size Out. dia x Length (Length x Width x Thickness-No.)		21.9 x 830			
	Rear Suspension Type		Longitudinal Semi-Elliptic Spring			
	Spring Size (Length x Width x Thickness-No.)		7-2 1200 x 60 x 6-2 12-1	1200 x 60 x 6-4 12-1		
	Helper Spring (Height x Length x Width)		148 x 100 x 65			
	Shock Absorber	F.	Telescopic Double Action			
	Shock Absorber	R.	Telescopic Double Action			
FRAME	Type		Ladder Type			
	Section Type		BOX TYPE			
	Dimension (Height x Width x Thickness)		Outside 110 x 50 x 3.2 mm Inside 102.6 x 20 x 1.6 mm			
WHEELS & TIRES	Tire Size	F.	6.00-14-6P	5.50-14-6P		
		R.	6.00-14-8P	5.50-14-6P		
	Tire Pressure		F: 1.5 kg/cm ² (22 lb) R: 4.25 kg/cm ² (60 lb)		F: 1.75 kg/cm ² (25 lb) R: 3.25 kg/cm ² (46 lb)	
LAMPS	Head Lamps (Sealed Beam)		12V-37.5/50W x 2 12V-37.5 x 2			
	Width Indicators		12V-8W x 2			
	Tail Lamps		12V-8W x 2			
	License Plate Lamps		12V-8W x 2			
	Stop Lamps		12V-25W x 2			
	Reverse Lamps		12V-25W x 2			
	Room Lamp		12V-6W x 1			
	Fog Lamps		12V-35W x 2			
	Inspection Lamps		12V-6W x 4			
	Parking Lamps		12V-8W x 4			
	Turn Signal Lamps		12V-25W x 4			

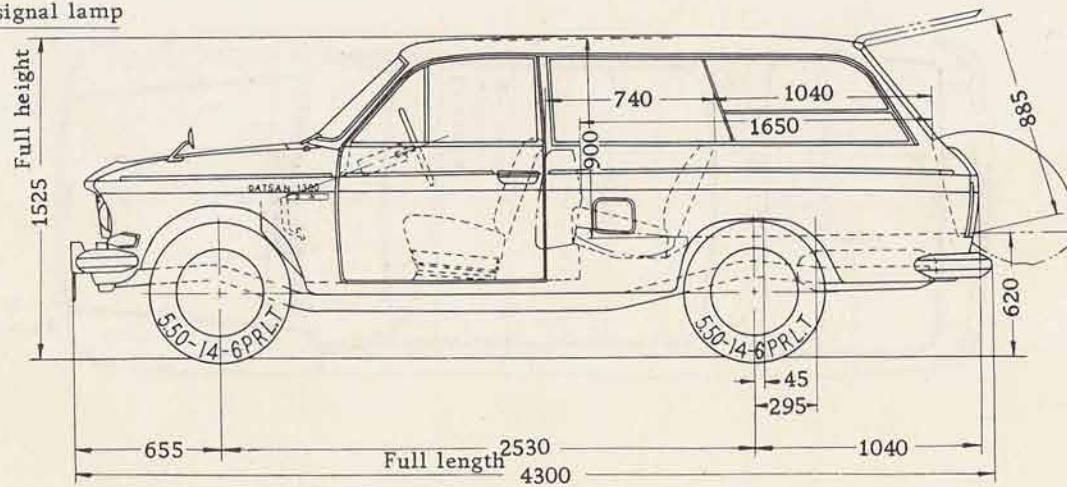
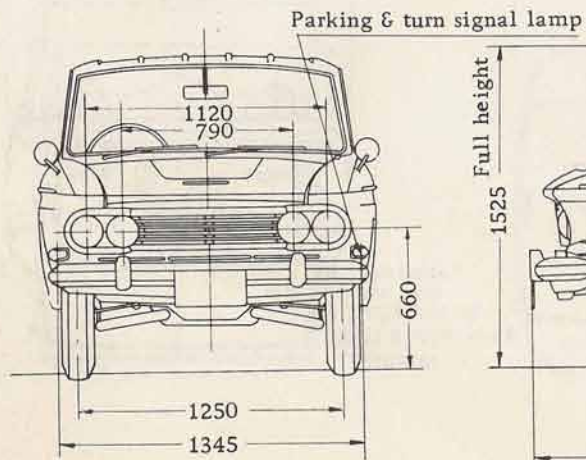
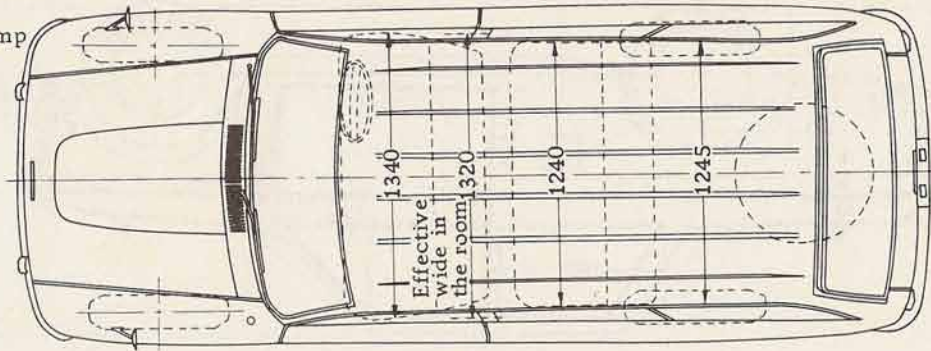
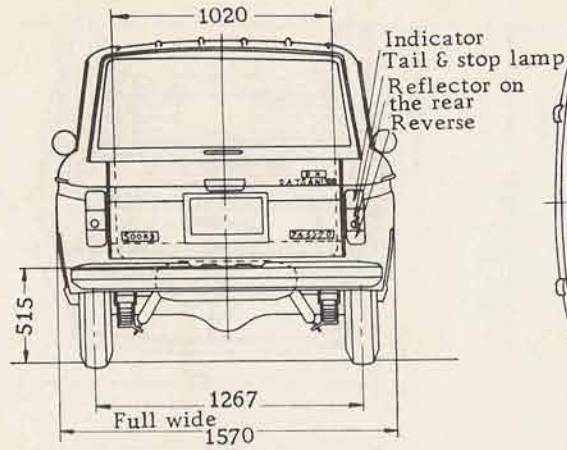
SECTIONAL VIEWS (G520)



X

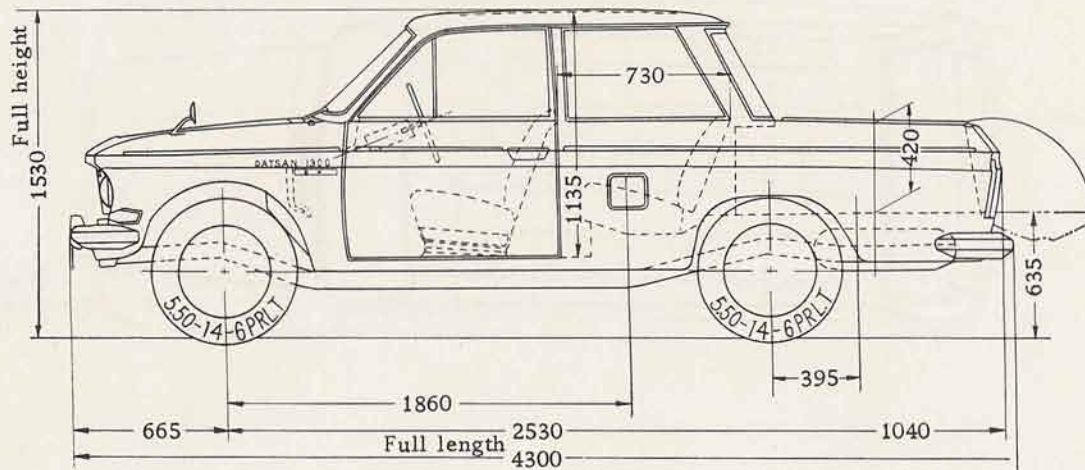
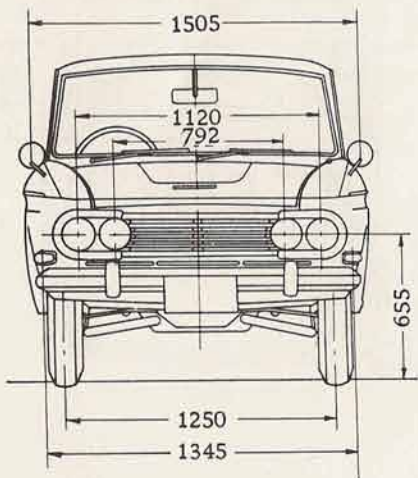
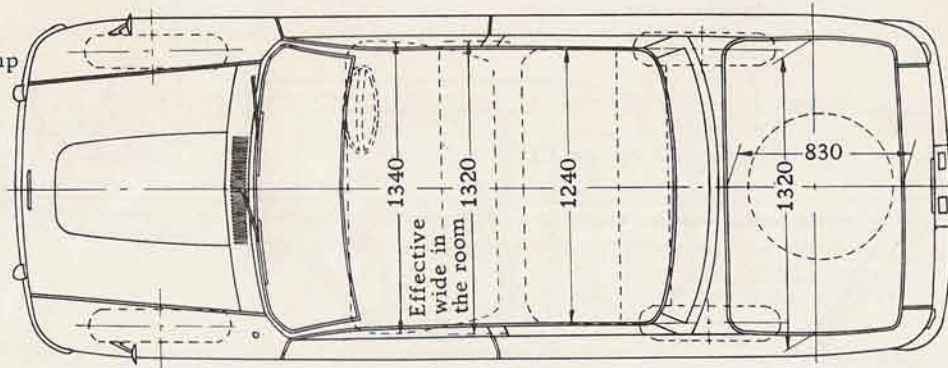
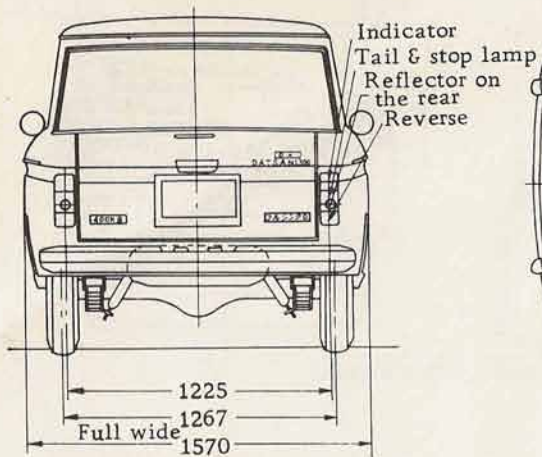
SECTIONAL VIEWS (V520)

IX



SECTIONAL VIEWS

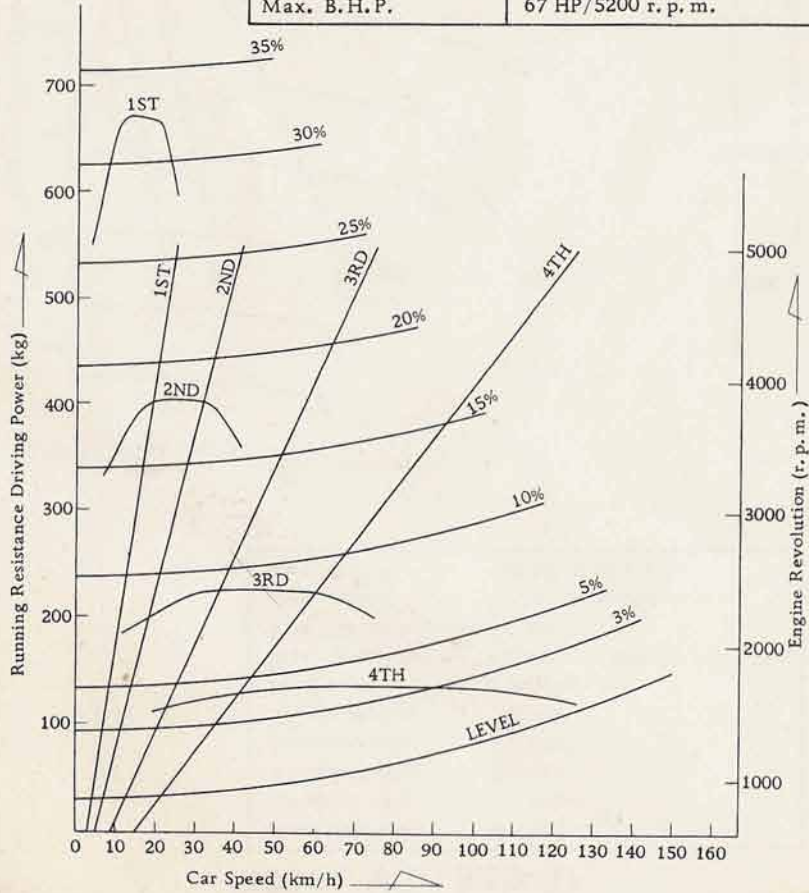
SECTIONAL VIEWS (U520)



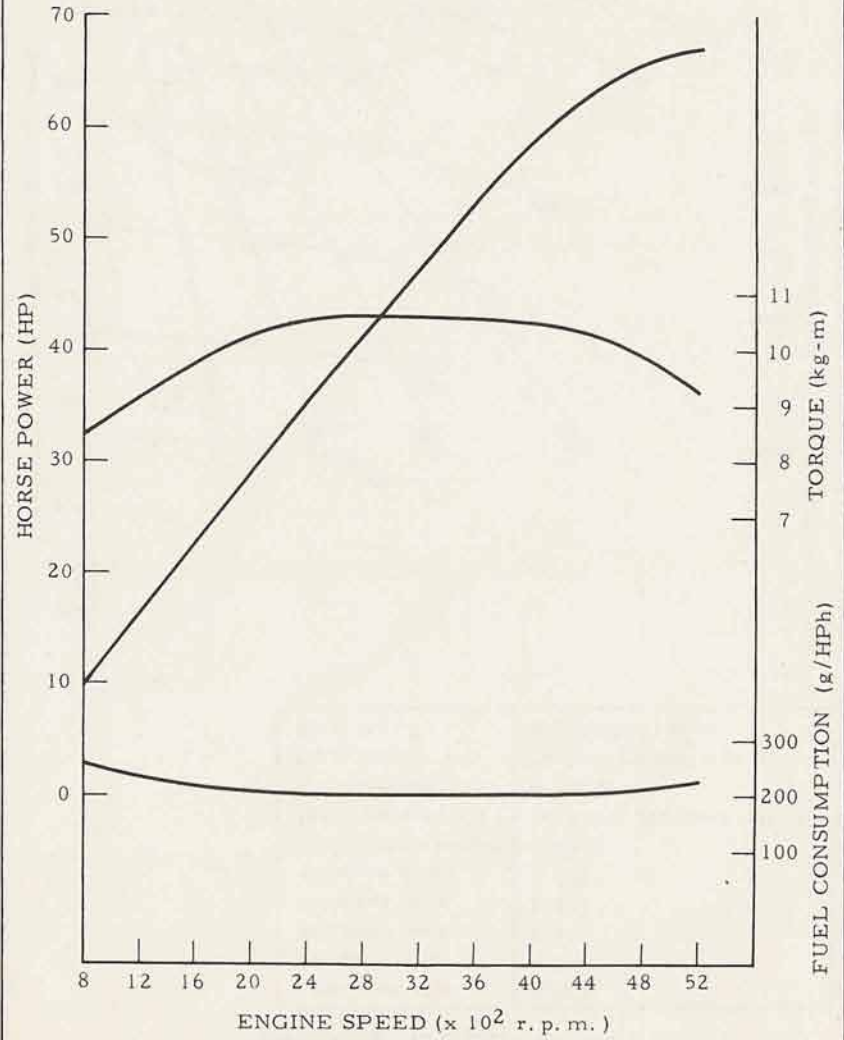
IX

RUNNING PERFORMANCE CURVE MODEL (L) 520-U

Final gear ratio	4.875
1st speed ratio	5.000
2nd speed ratio	3.014
3rd speed ratio	1.685
4th speed ratio	1.000
Gross vehicle weight	2070 kg
Max. grade ability	$\tan \theta = 0.326$ ($\sin \theta = 0.310$)
Tire effective	0.326 m
Max. torque	10.6 m-k _g /2800 r. p. m.
Max. B. H. P.	67 HP/5200 r. p. m.



MODEL J ENGINE PERFORMANCE CURVE

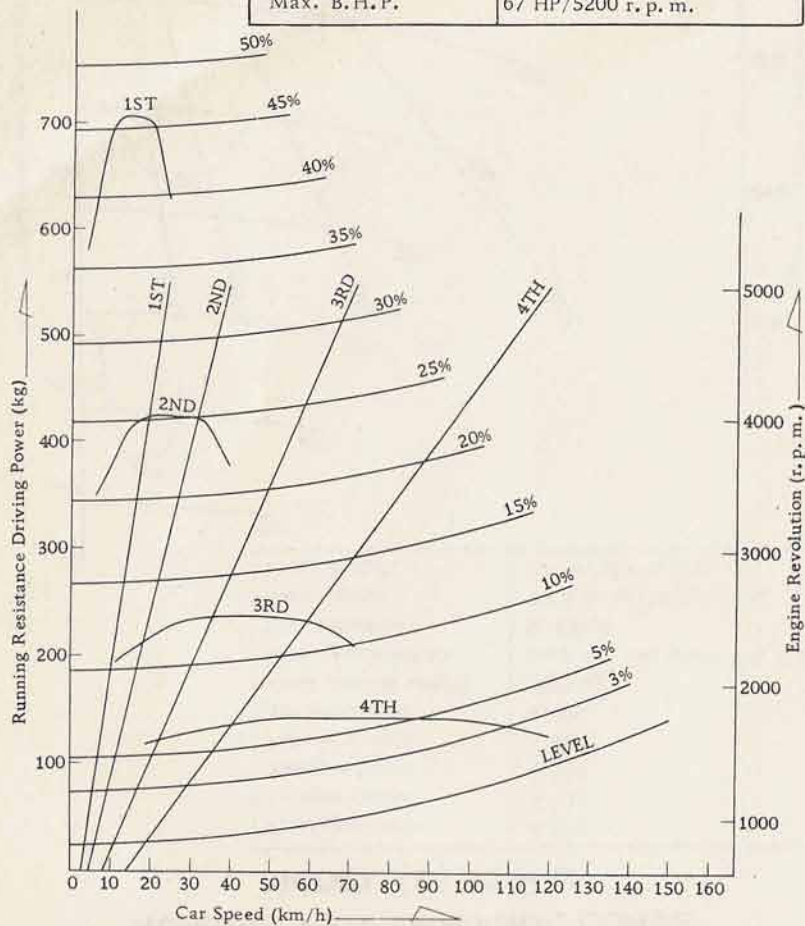


RUNNING PERFORMANCE CURVE

MODEL V(L) 520-U

Final gear ratio	4.875
1st speed ratio	5.000
2nd speed ratio	3.014
3rd speed ratio	1.685
4th speed ratio	1.000
Gross vehicle weight	1630 kg
Max. grade ability	$\tan \theta = 0.462$ ($\sin \theta = 0.419$)
Tire effective radius	0.310 m
Max. torque	10.6 m-kg/2800 r. p. m.
Max. B.H.P.	67 HP/5200 r. p. m.

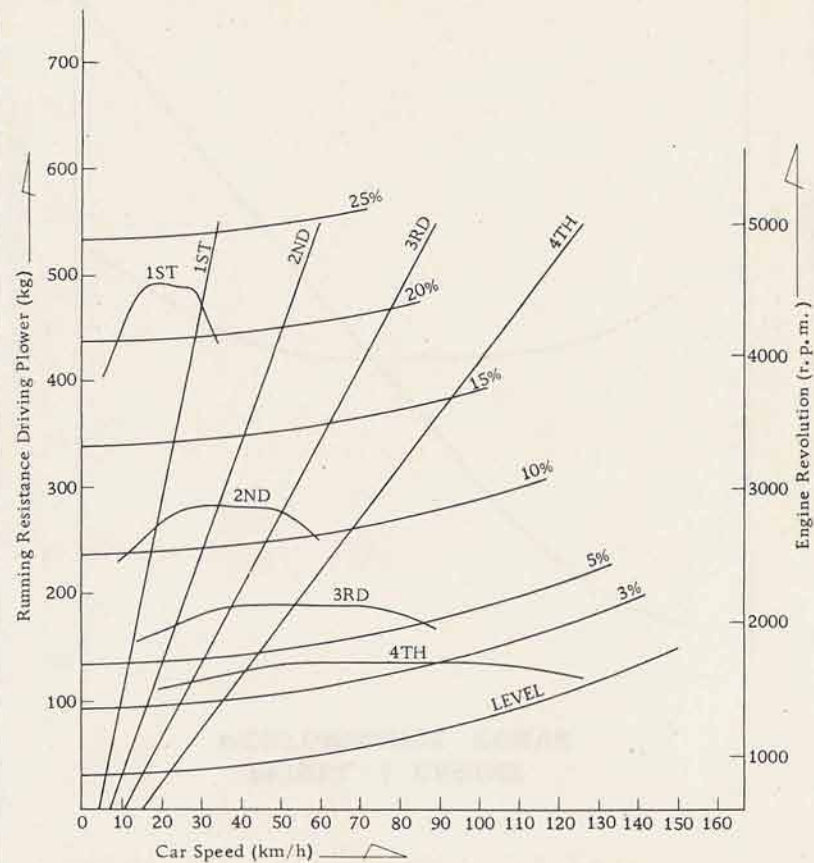
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RUNNING PERFORMANCE CURVE

MODEL L 520-T

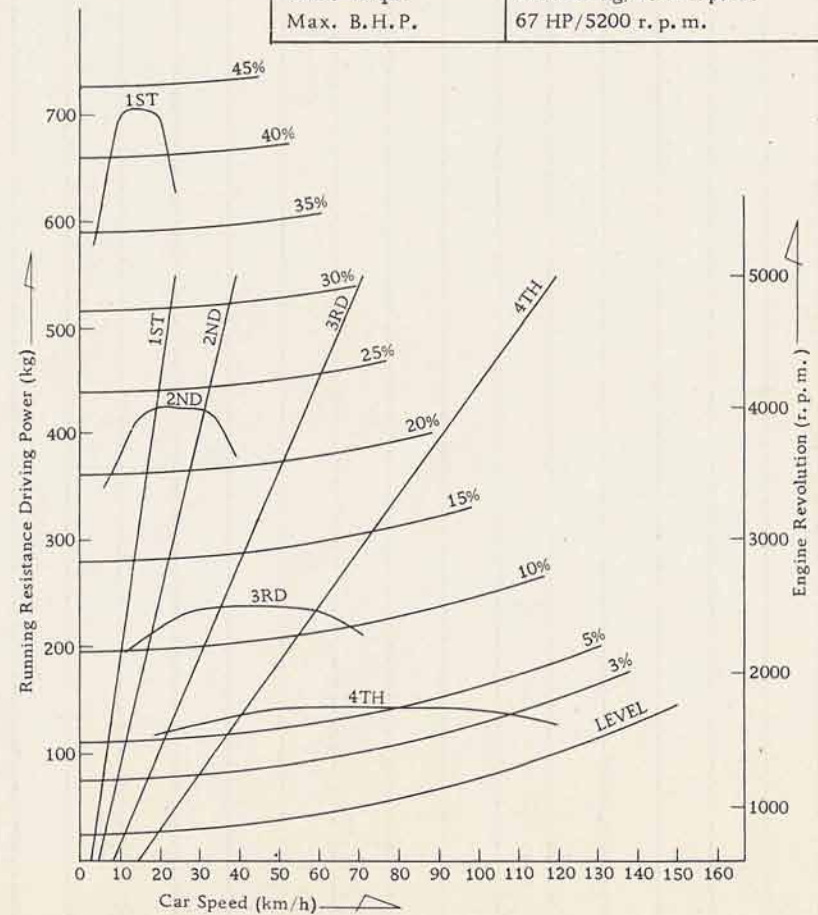
Final gear ratio	4.875
1st speed ratio	3.657
2nd speed ratio	2.177
3rd speed ratio	1.419
4th speed ratio	1.000
Gross vehicle weight	2070 kg
Max. grade ability	$\tan \theta = 0.228$ ($\sin \theta = 0.223$)
Tire effective radius	0.326 m
Max. torque	10.6 m-kg/2800 r. p. m.
Max. B.H.P.	67 HP/5200 r. p. m.



AX

RUNNING PERFORMANCE CURVE MODEL U(L) 520-U

Final gear ratio	4.875
1st speed ratio	5.000
2nd speed ratio	3.014
3rd speed ratio	1.685
4th speed ratio	1.000
Gross vehicle weight	1710 kg
Max. grade ability	$\tan \theta = 0.435$ ($\sin \theta = 0.399$)
Tire effective radius	0.310 m
Max. torque	10.6 m-kg/2800 r. p. m.
Max. B.H.P.	67 HP/5200 r. p. m.



PERFORMANCE CURVE

DATSUN PICK-UP

