

NISSAN PATHFINDER

MODEL R50 SERIES

QUICK REFERENCE INDEX

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FOREWORD

This manual contains maintenance and repair procedures for the 1996 Nissan PATHFINDER.

In order to assure your safety and the efficient functioning of the vehicle, this manual should be read thoroughly. It is especially important that the PRECAUTIONS in the GI section be completely understood before starting any repair task.

All information in this manual is based on the latest product information at the time of publication. The right is reserved to make changes in specifications and methods at any time without notice.

IMPORTANT SAFETY NOTICE

The proper performance of service is essential for both the safety of the technician and the efficient functioning of the vehicle.

The service methods in this Service Manual are described in such a manner that the service may be performed safely and accurately. Service varies with the procedures used, the skills of the technician and the tools and parts available. Accordingly, anyone using service procedures, tools or parts which are not specifically recommended by NISSAN must first be completely satisfied that neither personal safety nor the vehicle's safety will be jeopardized by the service method selected.



NISSAN MOTOR CO., LTD.

Overseas Service Department
Tokyo, Japan

QUICK REFERENCE CHART: PATHFINDER 1996

ENGINE TUNE-UP DATA

Engine model		VG33E	
Firing order		1-2-3-4-5-6	
Idle speed	M/T	750±50	
	A/T (in "N" position)	750±50	
Ignition timing (degree BTDC at idle speed)		15°±2°	
CO% at idle		Idle mixture screw is preset and sealed at factory.	
Drive belt deflection (Cold)		mm (in)	
Alternator	Used belt		Deflection of new belt
	Limit	Deflection after adjustment	
	With air conditioner compressor	16.5 (0.650)	
Without air conditioner compressor		10.5 (0.413)	6 - 7 (0.24 - 0.28)
Power steering oil pump		18 (0.71)	11 - 13 (0.43 - 0.51)
Applied pressed force		98 (10, 22)	
Radiator cap relief pressure		78 - 96 (0.8 - 1.0, 11 - 14)	
Cooling system leakage testing pressure		157 (1.6, 23)	
Compression pressure	Standard	1,196 (12.20, 173.4)/300	
	Minimum	883 (9.01, 128.0)/300	
Spark plug	Type	BKR5E5-II	
	Gap mm (in)	1.0 - 1.1 (0.039 - 0.043)	

CLUTCH PEDAL

Unit: mm (in)

Pedal height	181 - 191 (7.13 - 7.52)
Pedal free play	9 - 16 (0.35 - 0.63)

WHEEL ALIGNMENT (Unladen*)

Applied model		265/70 R15 tire	235/70 R15 tire
Camber	Minimum	-0°35' (-0.58°)	
	Nominal	0°10' (0.17°)	
	Maximum	0°55' (0.92°)	
Degree minute (Decimal degree)		Left and right difference	
		45' (0.75°) or less	
Caster	Minimum	2°15' (2.25°)	
	Nominal	3°00' (3.00°)	
	Maximum	3°45' (3.75°)	
Degree minute (Decimal degree)		Left and right difference	
		45' (0.75°) or less	
Total toe-in	Minimum	1 (0.04)	
	Nominal	2 (0.08)	
	Maximum	3 (0.12)	
Distance (A - B)			
mm (in)			
Angle (left plus right)			
Minimum		5' (0.08°)	
Nominal		10' (0.17°)	
Maximum		15' (0.25°)	
Wheel turning angle (Full turn)		30°00' (30.00°)	32°00' (32.00°)
Inside	Minimum	33°00' (33.00°)	35°00' (35.00°)
	Nominal	33°00' (33.00°)	35°00' (35.00°)
	Maximum	34°00' (34.00°)	36°00' (36.00°)
Outside	Minimum	28°00' (28.00°)	30°00' (30.00°)
	Nominal	31°00' (31.00°)	33°00' (33.00°)
	Maximum	31°00' (31.00°)	33°00' (33.00°)

BRAKE

Unit: mm (in)

Front brake		
Pad wear limit		2.0 (0.079)
Rotor repair limit		26.0 (1.024)
Rear brake		
Lining wear limit		1.5 (0.059)
Drum repair limit		296.5 (11.67)
Pedal free height		
M/T		165 - 175 (6.50 - 6.89)
A/T		175 - 185 (6.89 - 7.28)
Pedal depressed height*1		
M/T		65 (2.56)
A/T		70 (2.76)
Parking brake		
Number of notches*2		6 - 8

*1 Under force of 490 N (50 kg, 110 lb) with engine running

*2 At pulling force: 196 N (20 kg, 44 lb)

REFILL CAPACITIES

Unit			Liter	US measure
Fuel tank			80	21-1/8 gal
Coolant with reservoir			10.8	11-1/4 qt
Engine	With oil filter		3.7	3-7/8 qt
	Without oil filter		3.4	3-5/8 qt
Transmission	M/T	2WD	2.4	5-1/8 pt
		4WD	5.1	10-3/4 pt
	A/T	2WD	8.3	8-3/4 qt
		4WD	8.5	9 qt
Transfer			2.2	2-3/8 qt
Differential carrier		Front	2.05	4-3/8 pt
		Rear	2.8	5-7/8 pt
Power steering system			0.9	1 qt
Air conditioning system		Refrigerant	0.60 - 0.70 kg	1.32 - 1.54 lb
		Compressor oil	0.25	8.5 fl oz

FRONT WHEEL BEARING

Preload (At hub bolt) N (kg, lb)	Wheel bearing lock nut		
	Tightening torque	N-m (kg-m, ft-lb)	78 - 98 (8 - 10, 58 - 72)
	Retightening torque after loosening wheel bearing lock nut	N-m (kg-m, in-lb)	0.5 - 1.5 (0.05 - 0.15, 4.3 - 13.0)
	Axial end play	mm (in)	0 (0)
	Starting force at wheel hub bolt	N (kg, lb)	A
	Turning angle	degree	15° - 30°
	Starting force at wheel hub bolt	N (kg, lb)	B
	Wheel bearing preload at wheel hub bolt B - A	N (kg, lb)	7.06 - 20.99 (0.72 - 2.14, 1.59 - 4.72)

* Fuel, radiator coolant and engine oil full.

Spare tire, jack, hand tools and mats in designated positions.