

NISSAN QUEST

MODEL V40 SERIES

QUICK REFERENCE INDEX

GENERAL INFORMATION _____	GI
MAINTENANCE _____	MA
ENGINE MECHANICAL _____	EM
ENGINE LUBRICATION AND COOLING SYSTEMS _____	LC
ENGINE FUEL AND EMISSION CONTROL SYSTEM _____	EF & EC
ACCELERATOR CONTROL, FUEL AND EXHAUST SYSTEMS _____	FE
AUTOMATIC TRANSAXLE _____	AT
FRONT AXLE AND FRONT SUSPENSION _____	FA
REAR AXLE AND REAR SUSPENSION _____	RA
BRAKE SYSTEM _____	BR
STEERING SYSTEM _____	ST
BODY _____	BF
HEATER AND AIR CONDITIONING _____	HA
ELECTRICAL SYSTEM _____	EL
INDEX _____	IDX

FOREWORD

This manual contains maintenance and repair procedures for the 1994 Nissan QUEST equipped with a supplemental air bag. For the 1994 Nissan QUEST without supplemental air bag, use 1993 QUEST Service Manual, Publication No. SM1E-0V40U0.

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 completely satisfy himself that neither his safety nor the vehicle's safety will be jeopardized by the service method selected.



NISSAN NORTH AMERICA, INC.

Service Engineering Department

Torrance, California

INCH TO METRIC CONVERSION TABLE (Rounded-off for automotive use)

inches	mm	inches	mm
.100	2.54	.610	15.49
.110	2.79	.620	15.75
.120	3.05	.630	16.00
.130	3.30	.640	16.26
.140	3.56	.650	16.51
.150	3.81	.660	16.76
.160	4.06	.670	17.02
.170	4.32	.680	17.27
.180	4.57	.690	17.53
.190	4.83	.700	17.78
.200	5.08	.710	18.03
.210	5.33	.720	18.29
.220	5.59	.730	18.54
.230	5.84	.740	18.80
.240	6.10	.750	19.05
.250	6.35	.760	19.30
.260	6.60	.770	19.56
.270	6.86	.780	19.81
.280	7.11	.790	20.07
.290	7.37	.800	20.32
.300	7.62	.810	20.57
.310	7.87	.820	20.83
.320	8.13	.830	21.08
.330	8.38	.840	21.34
.340	8.64	.850	21.59
.350	8.89	.860	21.84
.360	9.14	.870	22.10
.370	9.40	.880	22.35
.380	9.65	.890	22.61
.390	9.91	.900	22.86
.400	10.16	.910	23.11
.410	10.41	.920	23.37
.420	10.67	.930	23.62
.430	10.92	.940	23.88
.440	11.18	.950	24.11
.450	11.43	.960	24.38
.460	11.68	.970	24.64
.470	11.94	.980	24.89
.480	12.19	.990	25.15
.490	12.45	1.000	25.40
.500	12.70	2.000	50.80
.510	12.95	3.000	76.20
.520	13.21	4.000	101.60
.530	13.46	5.000	127.00
.540	13.72	6.000	152.40
.550	13.97	7.000	177.80
.560	14.22	8.000	203.20
.570	14.48	9.000	228.60
.580	14.73	10.000	254.00
.590	14.99	20.000	508.00
.600	15.24		

METRIC TO INCH CONVERSION TABLE (Rounded-off for automotive use)

mm	inches	mm	inches
1	.0394	51	2.008
2	.079	52	2.047
3	.118	53	2.087
4	.157	54	2.126
5	.197	55	2.165
6	.236	56	2.205
7	.276	57	2.244
8	.315	58	2.283
9	.354	59	2.323
10	.394	60	2.362
11	.433	61	2.402
12	.472	62	2.441
13	.512	63	2.480
14	.551	64	2.520
15	.591	65	2.559
16	.630	66	2.598
17	.669	67	2.638
18	.709	68	2.677
19	.748	69	2.717
20	.787	70	2.756
21	.827	71	2.795
22	.866	72	2.835
23	.906	73	2.874
24	.945	74	2.913
25	.984	75	2.953
26	1.024	76	2.992
27	1.063	77	3.031
28	1.102	78	3.071
29	1.142	79	3.110
30	1.181	80	3.150
31	1.220	81	3.189
32	1.260	82	3.228
33	1.299	83	3.268
34	1.339	84	3.307
35	1.378	85	3.346
36	1.417	86	3.386
37	1.457	87	3.425
38	1.496	88	3.465
39	1.535	89	3.504
40	1.575	90	3.543
41	1.614	91	3.583
42	1.654	92	3.622
43	1.693	93	3.661
44	1.732	94	3.701
45	1.772	95	3.740
46	1.811	96	3.780
47	1.850	97	3.819
48	1.890	98	3.858
49	1.929	99	3.898
50	1.969	100	3.937

QUICK REFERENCE CHART: QUEST 1994

Important: Applicable for QUEST equipped with Supplemental Air Bag

ENGINE TUNE-UP DATA

Engine model		VG30E		
Firing order		1-2-3-4-5-6		
Idle speed	rpm	(A/T in "N" position)	750 ± 50	
Ignition timing (B.T.D.C. at idle speed)		15° ± 2°		
CO% at idle		Idle mixture screw is preset and sealed at factory.		
Drive belt deflection (Cold)	Item	Used belt deflection		
		Limit	Deflection after adjustment	
	Generator	12 (0.47)	7.5 - 8.5 (0.295 - 0.335)	6.5 - 7.5 (0.256 - 0.295)
	Air conditioning compressor	10 (0.39)	5 - 7 (0.20 - 0.28)	4 - 6 (0.16 - 0.24)
	Power steering oil pump	16 (0.63)	10 - 12 (0.39 - 0.47)	8 - 10 (0.31 - 0.39)
Applied pushing force	N (kg, lb)	98 N (10 kg, 22 lb)		
Radiator cap relief pressure		kPa (kg/cm ² , psi)		
		78 - 98 (0.8 - 1.0, 11 - 14)		
Cooling system leakage testing pressure		kPa (kg/cm ² , psi)		
		157 (1.6, 23)		
Compression pressure	Standard	1,196 (12.2, 173)/300		
	Minimum	883 (9.0, 128)/300		
High tension cable resistance		kΩ		
		Less than 30		
Spark plug	Type	Standard: BKR5EY, Cold: BKR6EY		
	Gap	mm (in)		
		0.8 - 0.9 (0.031 - 0.035)		

FRONT WHEEL ALIGNMENT (Unladen*)

Camber	degree	-27' to 1°03'
Caster	degree	3' - 1°33'
Kingpin inclination	degree	12°50' - 14°20'
Toe-in	mm (in)	2 - 4 (0.08 - 0.16)
	degree	11' - 22'
Wheel turning angle (Full turn)	degree	
	Inside	36° - 40°
Outside	28° - 32°	

* Fuel, radiator coolant and engine oil full.
Spare tire, jack, hand tools and mats in designated positions.

REAR WHEEL ALIGNMENT (Unladen*)

Camber	degree	0° ± 15'
Toe-in	mm (in)	0 ± 4.0 (0 ± 0.157)

* Fuel, radiator coolant and engine oil full.
Spare tire, jack, hand tools and mats in designated positions.

BRAKE

Unit: mm (in)

Front brake		
Pad wear limit		2.0 (0.079)
Rotor repair limit		24.0 (0.94)
Rear brake		
Lining wear limit		2.0 (0.079)
Drum repair limit		251.5 (9.90)
Pedal free height		195 - 205 (7.68 - 8.07)
Pedal depressed height *1		115 (4.53) or more
Parking brake		
Number of notches *2		11 - 12

*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

Item	Liter	US measure		
Fuel tank	75.7	20 gal		
Coolant	Without rear heater	10.7	11-3/8 qt	
	With rear heater	12.1	12-3/4 qt	
Engine	With oil filter	4.0	4-1/4 qt	
	Without oil filter	3.6	3-7/8 qt	
Transaxle	A/T *1	9.4	10 qt	
Power steering system *2		1.2	1-1/4 qt	
Air conditioning system	Compressor lubricant *3	Only front A/C models	0.21	7.0 fl oz
		Front A/C & rear A/C models	0.30	10.0 fl oz
	Refrigerant *4	Only front A/C models	0.907 kg	2.0 lb
		Front A/C & rear A/C models	1.474 kg	3.25 lb

*1 Genuine Nissan ATF or equivalent DEXRON™ II E type fluid
*2 Type F Automatic Transmission Fluid
*3 Nissan A/C System Lubricant PAG Type F or equivalent
*4 R-134a

