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Q45
MODEL G50 SERIES



# **FOREWORD**

This manual contains maintenance and repair procedures for the 1996 INFINITI Q45.

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 INFINITI must first be completely satisfied that neither personal safety nor the vehicle's safety will be jeopardized by the service method selected.





Overseas Service Department Tokyo, Japan

## 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	17.02
.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	<del>                                     </del>
.230			18.54
.240	5.84	.740	18.80
	6.10	.750	19.05
.250	6.35	.760	19.30
	6.60	.770	19.56
.270	6.86	.780	19.81
.280	7.11	.790	20.07
.300	7.37	.800	20.32
.310	7.62	.810	20.57
	7.87	.820	20.83
	8.13	.830	21.08
.340	8.38	.840	21.34
.350	8.64	.850	21.59
.360	8.89 9.14	.860 .870	21.84 22.10
.370	9.40	.880	22.35
.380	9.65	.890	22.61
.390	9.91	.900	22.86
	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		
	1		

## METRIC TO INCH CONVERSION TABLE

(Rounded-off for automotive use)

<del>`</del>		1	
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	3.110
31	1.220		_
32		81	3.189
	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	1.929	100	3.898
30	1.707	100	3.931

# **QUICK REFERENCE CHART: Q45** [

## ENGINE TUNE-UP DATA

Engine model	-	VH45DE	
Firing order	1-8-7-3-6-5-4-2		
idle speed A/T (in "N" position) rpm	650 ± 50		
Ignition timing (BTDC at idle speed)	15° ± 2°		
CO% at Idle	Idle mixture screw is preset and sealed at factory.		
Drive bett deflection (Cold)	Used belt deflection		Deflection of
mm (in)	Limit	Deflection after adjustment	new belt
Alternator	14 (0.55)	9 - 10 (0.35 - 0.39)	7.5 - 8.5 (0.295 - 0.335)
Air conditioner compressor	12 (0.47)	8.5 - 9.5 (0.335 - 0.374)	7.5 - 8.5 (0.295 - 0.335)
Power steering oil pump	14 (0.55) 9 - 10 8 - 9 (0.35 - 0.39) (0.31 - 0.3		8 - 9 (0.31 - 0.35)
Applied pushing force N (kg, lb)	98 (10, 22)		
Radiator cap relief pressure kPa (kg/cm², psl)	78 - 98 (0.8 - 1.0, 11 - 14)		
Cooling system leakage testing pressure kPa (kg/cm², psl)	157 (1.6, 23)		
Compression pressure kPa (kg/cm², psi)/rpm			
Standard	1,275 (13.0, 185)/300		
Minimum	981 (10.0, 142)/300		
Spark plug Type (Standard)	PFR5G-11		

## FRONT WHEEL ALIGNMENT (Unladen\*)

Camber	Minimum	-1°35′ (-1.58°)
	Nominal	-0°50′ (-0.83°)
Degree minute	Maximum	0°05′ (0.08°)
(Decimal degree)	Left and right difference	45' (0.75°) or less
Caster	Minimum	5°45′ (5.75°)
	Nominal	6°30' (6.50°)
Degree minute	Maximum	7°15′ (7.25°)
(Decimal degree)	Left and right difference	45' (0.75") or less
Total toe-in	Minimum	0 (0)
Distance (A – B) mm (in)	Nominal	1 (0.04)
	Maximum	2 (0.08)
Angle (left plus right)	Minimum	0' (0.00°)
Angle (len plus right)  Degree minute  (Decimal degree)	Nominal	5' (0.08°)
	Maximum	10′ (0.17°)
Wheel turning angle (Full turn)	Minimum	35°30' (35.50°)
Inside	Nominal	38°30′ (38.50°)
Degree minute ( (Decimal degree)	Maximum	39°30′ (39.50°)
Outside  Degree minute (Decimal degree)	Nominal	32°00′ (32.00°)

<sup>\*</sup> Fuel, radiator coolant and engine oil full.

## REAR WHEEL ALIGNMENT (Unladen\*)

Camber	Minimum	-1°35′ (-1.58°)
Degree minute (Decimal degree)	Nominal	-1°05' (-1.08°)
	Maximum	-0°35′ (-0.58°)
Total toe-in	Minimum	0 (0)
Distance (A B) mm (In)	Nominal	2 (0.08)
	Maximum	4 (0.16)
Angle (left plus right)  Degree minute (Decimal degree)	Minimum	0' (0.00")
	Nominal	11' (0.18°)
	Maximum	22' (0.37°)

<sup>\*</sup> 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	26.0 (1.024)
Rear brake	
Pad wear firmit	2.0 (0.079)
Rotor repair limit	8.0 (0.315)
Pedal free height	184 - 194 (7.24 - 7.64)
Pedal depressed height*	100 - 110 (3.94 - 4.33)

<sup>\*</sup> Under force of 490 N (50 kg, 110 lb) with engine running

## REFILL CAPACITIES

Unit		Liter	US measure
Fuel tank		85	22-1/2 gal
Coolant (With reser	voir tank)	10.3	10-7/8 qt
Engine	With oil filter	6.0	6-3/8 qt
	Without oil fifter	5.6	5-7/8 qt
Transmission	A/T	10.5	11-1/8 qt
Differential carrier		1.3	2-3/4 pt
Power sleering sys	lem	1.2	1-1/4 qt
Air conditioning system	Compressor oil	0.200	6.8 ff oz
	Refrigerant	0.775 - 0.825 kg	1.705 - 1.815 lb

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