Edition: August 2002	QUICK REFERENCE INDEX		
Revision: April 2004	A GENERAL INFORMATION	GI (General Information
Publication No. SM3E-1F50U4	B ENGINE	EM E	Engine Mechanical
		LU E	Engine Lubrication System
		CO E	Engine Cooling System
		EC E	Engine Control System
		FL F	-uel System
		EX E	Exhaust System
		ACC A	Accelerator Control System
	C TRANSMISSION/ TRANSAXLE	AT A	Automatic Transmission
	D DRIVELINE/AXLE	PR F	Propeller Shaft
		RFD F	Rear Final Drive
		FAX F	Front Axle
		RAX F	Rear Axle
INFINITI	E SUSPENSION	FSU F	Front Suspension
		RSU F	Rear Suspension
O45		WT F	Road Wheels & Tires
		SCS S	Suspension Control System
MODEL F50 SERIES	F BRAKES	BR E	Brake System
		PB F	Parking Brake System
		BRC E	Brake Control System
	G STEERING	PS F	Power Steering System
		STC S	Steering Control System
	H RESTRAINTS	SB S	Seat Belts
			Supplemental Restraint System (SRS)
	I BODY	BL E	Body, Lock & Security System
			Glasses, Window System & Mir- ors
		RF F	Roof
		El E	Exterior & Interior
		IP I	nstrument Panel
		SE S	Seat
	J AIR CONDITIONER	ATC A	Automatic Air Conditioner
	K ELECTRICAL	SC S	Starting & Charging System
		LT L	ighting System
		DI [Oriver Information System
		WW V	Wiper, Washer & Horn
		LAN L	_AN System
			Audio, Visual,Navigation & Tele- phone System
		ACS A	Auto Cruise Control System
		PG F	Power Supply, Ground & Circuit Elenents
	L MAINTENANCE	MA N	Maintenance
	M INDEX	IDX A	Alphabetical Index



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FOREWORD

This manual contains maintenance and repair procedure for the 2003 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 NISSAN must first be completely satisfied that neither personal safety nor the vehicle's safety will be jeopardized by the service method selected.



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PLEASE HELP MAKE THIS SERVICE MANUAL BETTER!

Your comments are important to INFINITI and will help us to improve our Service Manuals. Use this form to report any issues or comments you may have regarding our Service Manuals. Please print this form and type or write your comments below. Mail or fax to:

Nissan North America, Inc. Technical Service Information 39001 Sunrise Drive, P.O. Box 9200 Farmington Hills, MI USA 48331 FAX: (248) 488-3910

SERVICE MANUAL: Model: ______ Year: _____ PUBLICATION NO. (Refer to Quick Reference Index): _____ Please describe any Service Manual issues or problems in detail: Page number(s) ______ Note: Please include a copy of each page, marked with your comments. Are the trouble diagnosis procedures logical and easy to use? (circle your answer) NO If no, what page number(s)?_____Note: Please include a copy of each page, marked with your comments. Please describe the issue or problem in detail: Is the organization of the manual clear and easy to follow? (circle your answer) YES NO Please comment: What information should be included in INFINITI Service Manuals to better support you in servicing or repairing customer vehicles? DATE: _____ YOUR NAME: _____ _____ POSITION: _____ DEALER: _____ DEALER NO.: ____ ADDRESS: ___ _____ STATE/PROV./COUNTRY: _____ ZIP/POSTAL CODE: ____

INCH TO METRIC CONVERSION TABLE

(Rounded-off for automotive use)

Inches	(INDUITUEU-OII	TOT GUICITION	vc usc)	
.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	inches		inches	
.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	.100		.610	
.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 .330 7.62 .810 20.57 .310 7.87 .820 20.83	.110	2.79	.620	15.75
.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 21.34	.120		.630	
.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 .350 8.89 .860 21.84	.130	3.30	.640	16.26
.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	.140	3.56	.650	16.51
.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	.150	3.81	.660	16.76
.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	.160	4.06	.670	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 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		4.32		17.27
.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				
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.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				
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.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 24.13 .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				
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.420 10.67 .930 23.62 .430 10.92 .940 23.88 .440 11.18 .950 24.13 .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				
.430 10.92 .940 23.88 .440 11.18 .950 24.13 .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 .590 14.99 20.000 508.00	.420			
.440 11.18 .950 24.13 .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 9.000 254.00 .590 14.99 20.000 508.00	.430	10.92		23.88
.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				
.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				
.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	.460	11.68	.970	24.64
.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	.470	11.94	.980	24.89
.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		12.19		25.15
.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	.490	12.45	1.000	25.40
.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	.500	12.70	2.000	50.80
.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	.510	12.95	3.000	76.20
.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	.520	13.21	4.000	101.60
.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	.530	13.46	5.000	127.00
.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	.540	13.72	6.000	152.40
.570 14.48 9.000 228.60 .580 14.73 10.000 254.00 .590 14.99 20.000 508.00	.550		7.000	177.80
.580 14.73 10.000 254.00 .590 14.99 20.000 508.00	.560		8.000	
.590 14.99 20.000 508.00				
			10.000	254.00
.600 15.24			20.000	508.00
	.600	15.24		

METRIC TO INCH CONVERSION TABLE

(Rounded-off for automotive use)

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	mm	inches	mm	inches
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				
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				
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				
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				
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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				
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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 <t< th=""><th></th><th></th><th></th><th></th></t<>				
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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	14	.551	64	2.520
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 <t< th=""><th>15</th><th>.591</th><th>65</th><th>2.559</th></t<>	15	.591	65	2.559
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 <t< th=""><th>16</th><th>.630</th><th>66</th><th>2.598</th></t<>	16	.630	66	2.598
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			67	
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				
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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 <th></th> <th></th> <th></th> <th></th>				
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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				3.307
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				3.346
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	36	1.417	86	3.386
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	37	1.457	87	3.425
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	38	1.496	88	3.465
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	39	1.535	89	3.504
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	40	1.575	90	3.543
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	41		91	
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	42		92	
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				
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				
46 1.811 96 3.780 47 1.850 97 3.819 48 1.890 98 3.858 49 1.929 99 3.898				
47 1.850 97 3.819 48 1.890 98 3.858 49 1.929 99 3.898				
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49 1.929 99 3.898				
1.709 100 3.937				
		1.703	100	3.731

QUICK REFERENCE CHART Q45 ENGINE TUNE-UP DATA (VK45DE)

PFP:00000

ELS0003W

Engine model		VK45DE	
Firing order		1-8-7-3-6-5-4-2	
Idle speed A/T (In "P" or "N" po	osition) rpm	650±50	
Ignition timing (BTDC at idle spee	d)	12°±5°	
CO% at idle		0.7 - 9.9 % and engine runs smoothly	
Tensions of drive be	elts	Auto adjustment by auto tensioner	
Radiater cap relief	pressure		
Standard	kPa (kg/cm² , psi)	78-98 (0.8-1.0 , 11-14)	
Cooling system lea	kage testing pressure	4774.0.00	
	kPa (kg/cm² , psi)	157(1.6, 23)	
Compression press	sure		
Standard	kPa (kg/cm ² , psi)/rpm	1,320 (13.5, 191) /300	
Minimum		1,130 (11.5, 164)/300	
Spark plug	Standard type	PLFR5A - 11	
	Hot type	PLFR4A - 11	
	Cold type	PLFR6A - 11	

FRONT WHEEL ALIGNMENT (Unladen*)

ELS0003X

Camber		Minimum	– 1° 30′ (– 1.50°)	
		Nominal	- 0° 45′ (- 0.75°)	
	Degree minute	Maximum	0° 00′ (0.00°)	
	(Decimal degree)	Left and right difference	45' (0.75°) or less	
Caster		Minimum	5° 25′ (5.42°)	
		Nominal	6° 10′ (6.17°)	
	Degree minute	Maximum	6° 55′ (6.92°)	
	(Decimal degree)	Left and right difference	45' (0.75°) or less	
Kingpin inclination		Minimum	13° 15′ (13.25°)	
	Degree minute	Nominal	14° 00′ (14.00°)	
	(Decimal degree)	Maximum	14° 45′ (14.75°)	
Total toe-in				
Distance (A – B)		Nominal	1 (0.04)	
	mm (in)			
Angle (left plus right)		Minimum	0′ (0°)	
	Degree minute	Nominal	3′ (0.05°)	
	(Decimal degree)	Maximum	6' (0.10°)	
Wheel turning angle (Full turn)		Minimum	41° 45′ (41.75°)	
Inside	Degree minute	Nominal	42° 45′ (42.75°)	
	(Decimal degree)	Maximum	45° 45′ (45.75°)	
Outside	Degree minute	Naminal	220 FO/ (22 020)	
	(Decimal degree)	Nominal	33° 50′ (33.83°)	

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

REAR WHEEL ALIGNMENT (Unladen*)

ELS0003Y

Tire		17 inch	18 inch	
Camber Degree minute (Decimal degree)		Minimum	- 0° 55′ (- 0.92°)	- 1° 05′ (- 1.08°)
		Nominal	- 0° 25′ (- 0.42°)	- 0° 35′ (- 0.58°)
		Maximum	0° 05′ (0.08°)	- 0° 05′ (-0.08°)
		Left and right difference	45'(0.75) or less	
Total toe-in	Distance	Minimum	- 2.0 (- 0.079)	- 1.6 (- 0.063)
(A–B)	(A–B)	Nominal	0.8 (0.031)	1.2 (0.047)
	mm (in)	Maximum	3.6 (0.142)	4.0 (0.157)
	Angle (left plus right)	Minimum	- 5' (0.08°)	- 4' (0.07°)
		Nominal	2′ (0.03°)	3′ (0.05°)
	Degree minute (Decimal degree)	Maximum	9′ (0.15°)	10′ (0.17°)

^{*:} Fuel, radiator coolant and oil full.

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

BRAKE

ELS0003Z

Unit: mm (in)

Front brake		
Pad wear limit	2.0 (0.079)	
Rotor repair limit	26.0 (1.024)	
Rear brake		
Pad wear limit	2.0 (0.079)	
Rotor repair limit	14.0 (0.551)	
Pedal free height	192.4 - 202.4 (7.57 - 7.97)	
Pedal depressed height*	More than 90 (3.54)	

^{*:} Under force of 490 N(50 kg, 110 lb) with engine running.

REFILL CAPACITIES

ELS00040

UNIT		Liter	US measure
Fuel tank		80	21 - 1/8 gal
Coolant (With reservoir tank)		9.8	10 - 3/8 qt
	Drain and refill		
Engine*	With oil filter change	5.6	5 - 7/8 qt
	Without oil filter change	5.0	5 - 1/4 qt
	Dry engine (overhall)	6.7	7 - 1/8 qt
Transmission	A/T	10.3	10 - 7/8 qt
Differential carrier		1.4	3 pt
Power steering system		1.0	1 - 1/8 qt
Air conditioning system	Compressor oil	0.18	6.0 fl oz
	Refrigerant	0.60 kg	1.32 lb

^{*:} For further details, see "Changing Engine Oil" in MA section.