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FX35/FX45

MODEL S50 SERIES



INFINITI®

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QUICK REFERENCE INDEX

A GENERAL INFORMATION	GI General Information
B ENGINE	EM Engine Mechanical
	LU Engine Lubrication System
	CO Engine Cooling System
	EC Engine Control System
	FL Fuel System
	EX Exhaust System
	ACC Accelerator Control System
C TRANSMISSION/ TRANSAXLE	AT Automatic Transmission
D DRIVELINE/AXLE	TF Transfer
	PR Propeller Shaft
	FFD Front Final Drive
	RFD Rear Final Drive
	FAX Front Axle
	RAX Rear Axle
E SUSPENSION	FSU Front Suspension
	RSU Rear Suspension
	WT Road Wheels & Tires
F BRAKES	BR Brake System
	PB Parking Brake System
	BRC Brake Control System
G STEERING	PS Power Steering System
H RESTRAINTS	SB Seat Belts
	SRS Supplemental Restraint System (SRS)
I BODY	BL Body, Lock & Security System
	GW Glasses, Window System & Mirrors
	RF Roof
	EI Exterior & Interior
	IP Instrument Panel
	SE Seat
J AIR CONDITIONER	ATC Automatic Air Conditioner
K ELECTRICAL	SC Starting & Charging System
	LT Lighting System
	DI Driver Information System
	WW Wiper, Washer & Horn
	BCS Body Control System
	LAN LAN System
	AV Audio Visual, Navigation & Telephone System
	ACS Auto Cruise Control System
	PG Power Supply, Ground & Circuit Elements
L MAINTENANCE	MA Maintenance
M INDEX	IDX Alphabetical Index

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QUICK REFERENCE CHART FX35/FX45

PFP:00000

ENGINE TUNE-UP DATA (VQ35DE)

ELS0003W

Engine model			VQ35DE			
Firing order			1-2-3-4-5-6			
Idle speed A/T (In “P” or “N” position)			rpm	650 ± 50		
Ignition timing (BTDC at idle speed) A/T (In “P” or “N” position)			15° ± 5°			
Drive Belt	Deflection adjustment		Unit: mm (in)	Tension adjustment		Unit: N (kg, lb)
	Used belt		New belt	Used belt		New belt
	Limit	After adjustment		Limit	After adjustment	
Alternator and power steering oil pump belt	7 (0.28)	4 - 5 (0.16 - 0.20)	3.5 - 4.5 (0.138 - 0.177)	294 (30, 66)	730 - 818 (74.5 - 83.5, 164 - 184)	838 - 926 (85.5 - 94.5, 188 - 208)
A/C compresor belt	12 (0.47)	9 - 10 (0.35 - 0.39)	8 - 9 (0.31 - 0.35)	196 (20, 44)	348 - 436 (35.5 - 44.5, 78 - 98)	470 - 559 (47.9 - 57.0, 106 - 126)
Applied pushing force	98N (10kg, 22lb)			—		
Radiator cap relief pressure			kPa (kg/cm ² , psi)			
Standard			78 - 98 (0.8 - 1.0, 11 - 14)			
Limit			59 (0.6, 9)			
Cooling system leakage testing pressure			kPa (kg/cm ² , psi)	157 (1.6, 23)		
Compression pressure			kPa (kg/cm ² , psi)/rpm			
Standard			1,275 (13.0, 185) /300			
Minimum			981 (10.0, 142) /300			
Spark plug	Standard type		PLFR5A-11			
	Hot type		PLFR4A-11			
	Cold type		PLFR6A-11			

ENGINE TUNE-UP DATA (VK45DE)

Engine model	VK45DE	
Firing order	1-8-7-3-6-5-4-2	
Idle speed A/T (In “P” or “N” position)	rpm	650 ± 50
Ignition timing (BTDC at idle speed)	12° ± 5°	
Tensions of drive belts	Auto adjustment by auto tensioner	
Radiator cap relief pressure	kPa (kg/cm ² , psi)	
Standard	78 - 98 (0.8-1.0 , 11-14)	
Limit	59 (0.6, 9)	
Cooling system leakage testing pressure	kPa (kg/cm ² , psi)	157 (1.6, 23)
Compression pressure	kPa (kg/cm ² , psi)/rpm	
Standard	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	Degree minute (Decimal degree)	Minimum	-1° 29' (-1.48°)
		Nominal	-0° 44' (-0.73°)
		Maximum	0° 01' (0.02°)
		Left and right difference	45' (0.75°) or less
Caster	Degree minute (Decimal degree)	Minimum	3° 02' (3.03°)
		Nominal	3° 47' (3.78°)
		Maximum	4° 32' (4.53°)
		Left and right difference	45' (0.75°) or less
Kingpin inclination	Degree minute (Decimal degree)	Minimum	12° 20' (12.33°)
		Nominal	13° 05' (13.08°)
		Maximum	13° 50' (13.83°)
Total toe-in	Distance	Minimum	0.6 mm (0.024 in)
		Nominal	1.6 mm (0.063 in)
		Maximum	2.6 mm (0.102 in)
	Angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 01' (0.02°)
		Nominal	0° 04' (0.06°)
		Maximum	0° 06' (0.10°)
Wheel turning angle (Full turn)	Inside Degree minute (Decimal degree)	Minimum	32° 00' (32.0°)
		Nominal	35° 00' (35.0°)
		Maximum	36° 00' (36.0°)
	Outside Degree minute (Decimal degree)	Nominal	30° 00' (30.0°)

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

REAR WHEEL ALIGNMENT (Unladen*)

ELS0003Y

Camber Degree minute (Decimal degree)		Minimum	-1° 18' (-1.30°)
		Nominal	-0° 48' (-0.80°)
		Maximum	- 0° 18' (- 0.30°)
Total toe-in	Distance	Minimum	2.4 mm (0.09 in)
		Nominal	4.7 mm (0.19 in)
		Maximum	7.0 mm (0.28 in)
	Angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 05' (0.08°)
		Nominal	0° 10' (0.17°)
		Maximum	0° 15' (0.25°)

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

BRAKE

ELS0003Z

Front brake	Pad wear limit	2.0 mm (0.079 in)
	Rotor repair limit	32.0 mm (1.260 in)
Rear brake	Pad wear limit	2.0 mm (0.079 in)
	Rotor repair limit	14.0 mm (0.551 in)
Pedal free height		161.5 - 171.5 mm (6.358 - 6.752 in)
Pedal depressed height*		More than 95 mm (3.74 in)

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

REFILL CAPACITIES

ELS00040

UNIT		Liter	US measure
Fuel tank		90	23 - 3/4 gal
Coolant (With reservoir tank)	VQ35DE	8.6	9 - 1/8 qt
	VK45DE	10.0	10 - 5/8 qt
Engine(VQ35DE)	Drain and refill		
	With oil filter change	4.7	5 qt
	Without oil filter change	4.4	4 - 5/8 qt
	Dry engine (Overhaul)	5.4	5 - 3/4 qt
Engine(VK45DE)	Drain and refill		
	With oil filter change	5.8	6 - 1/8 qt
	Without oil filter change	5.2	5 - 1/2 qt
	Dry engine (Overhaul)	7.0	7 - 3/8 qt
Transmission	A/T	10.3	10 - 7/8 qt
Transfer		1.25	2 - 5/8 pt
Differential carrier	Front	0.65	1 - 3/8 pt
	Rear	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	0.55 kg	1.21 lb