

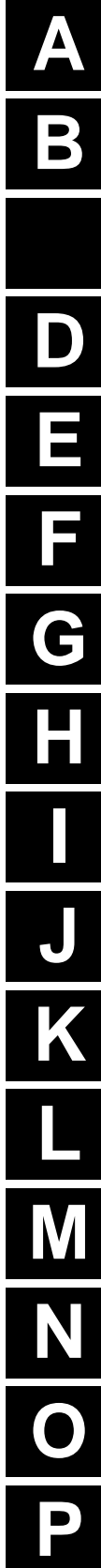
QUICK REFERENCE INDEX

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
	STR	Starting System
	ACC	Accelerator Control System
C ELECTRIC POWER TRAIN		
D TRANSMISSION & DRIVELINE	TM	Transaxle & Transmission
	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	ST	Steering System
	STC	Steering Control System
H RESTRAINTS	SB	Seat Belt
	SR	SRS Airbag
	SRC	SRS Airbag Control System
I VENTILATION, HEATER & AIR CONDITIONER	VTL	Ventilation System
	HA	Heater & Air Conditioning System
	HAC	Heater & Air Conditioning Control System
J BODY INTERIOR	INT	Interior
	IP	Instrument Panel
	SE	Seat
	ADP	Automatic Drive Positioner
K BODY EXTERIOR, DOORS, ROOF & VEHICLE SECURITY	DLK	Door & Lock
	SEC	Security Control System
	GW	Glass & Window System
	PWC	Power Window Control System
	RF	Roof
	EXT	Exterior
	BRM	Body Repair
L DRIVER CONTROLS	MIR	Mirrors
	EXL	Exterior Lighting System
	INL	Interior Lighting System
	WW	Wiper & Washer
	DEF	Defogger
	HRN	Horn
M ELECTRICAL & POWER CONTROL	PWO	Power Outlet
	BCS	Body Control System
	LAN	LAN System
	PCS	Power Control System
	CHG	Charging System
	PG	Power Supply, Ground & Circuit Elements
N DRIVER INFORMATION & MULTIMEDIA	MWI	Meter, Warning Lamp & Indicator
	WCS	Warning Chime System
	AV	Audio, Visual & Navigation System
O CRUISE CONTROL & DRIVER ASSISTANCE	CCS	Cruise Control System
	DAS	Driver Assistance System
P MAINTENANCE	MA	Maintenance

NISSAN
QUEST
 MODEL E52 SERIES

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FOREWORD

This manual contains maintenance and repair procedure for the 2013 NISSAN QUEST.

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 NISSAN 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:

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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) YES NO

If no, what page number(s)? _____ *Note: Please include a copy of each page, marked with your comments.*

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What information should be included in NISSAN Service Manuals to better support you in servicing or repairing customer vehicles?

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QUICK REFERENCE CHART QUEST

2013

QUICK REFERENCE CHART QUEST ENGINE TUNE-UP DATA (VQ35DE)

PFP:00000

ELS0003W

Engine model	VQ35DE
Firing order	1-2-3-4-5-6
Idle speed CVT (In "P" or "N" position) rpm	650 ± 50
Ignition timing (BTDC at idle speed) CVT (In "P" or "N" position)	12° ± 2°
Tensions of drive belt	Belt tension is not necessary, as it is automatically adjusted by drive belt auto-tensioner.
Radiator cap relief pressure kPa (kg/cm ² , psi)	
Standard	122.3 - 151.7 (1.2 - 1.5, 17.7 - 22.0)
Limit	108 (1.1, 15.6)
Cooling system leakage testing pressure kPa (kg/cm ² , psi)	156 (1.59, 22.6)
Compression pressure kPa (kg/cm ² , psi)/rpm	
Standard	1,275 (13.0, 185)/300
Minimum	981 (10.0, 142)/300
Spark plug Make	DENSO
Standard type	FXE22HR11
Gap Standard	1.1 mm (0.043 in)
Limit	1.4 mm (0.055 in)

FRONT WHEEL ALIGNMENT

ELS0003X

FOR USA MODELS

Item		Standard		
		Left side	Right side	
Camber Degree minute (Decimal degree)	Minimum	-1° 00' (-1.00°)	-1° 15' (-1.25°)	
	Nominal	-0° 15' (-0.25°)	-0° 30' (-0.50°)	
	Maximum	0° 30' (0.50°)	0° 15' (0.25°)	
	Left and right difference*1	-0° 18' (-0.30°) - 0° 48' (0.80°)		
Caster Degree minute (Decimal degree)	Minimum	3° 55' (3.92°)	4° 05' (4.09°)	
	Nominal	4° 40' (4.67°)	4° 50' (4.83°)	
	Maximum	5° 25' (5.41°)	5° 35' (5.58°)	
	Left and right difference*1	-0° 18' (-0.30°) - 0° 48' (0.80°)		
Kingpin inclination Degree minute (Decimal degree)	Minimum	12° 00' (12.00°)		
	Nominal	12° 45' (12.75°)		
	Maximum	13° 30' (13.50°)		
Toe-in	Total toe-in Distance	Minimum	Out 1.4 mm (0.055 in)	
		Nominal	In 0.6 mm (0.024 in)	
		Maximum	In 2.6 mm (0.102 in)	
	Total toe-angle Degree minute (Decimal degree)	Minimum	In 0° 00' (In 0.0°)	
		Nominal	In 0° 08' (In 0.13°)	
		Maximum	In 0° 16' (In 0.27°)	

Measure value under unladen*2 conditions.

*1: A difference when assuming the left side a standard.

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

FOR CANADA MODELS

For 3.5S Grade

Item		Standard		
		Left side	Right side	
Camber Degree minute (Decimal degree)	Minimum	-1° 00' (-1.00°)	-1° 15' (-1.25°)	
	Nominal	-0° 15' (-0.25°)	-0° 30' (-0.50°)	
	Maximum	0° 30' (0.50°)	0° 15' (0.25°)	
	Left and right difference*1	-0° 18' (-0.30°) - 0° 48' (0.80°)		
Caster Degree minute (Decimal degree)	Minimum	3° 50' (3.84°)	4° 05' (4.09°)	
	Nominal	4° 35' (4.58°)	4° 50' (4.83°)	
	Maximum	5° 20' (5.33°)	5° 35' (5.58°)	
	Left and right difference*1	-0° 18' (-0.30°) - 0° 48' (0.80°)		
Kingpin inclination Degree minute (Decimal degree)	Minimum	12° 00' (12.00°)		
	Nominal	12° 45' (12.75°)		
	Maximum	13° 30' (13.50°)		
Toe-in	Total toe-in Distance	Minimum	Out 1.4 mm (0.055 in)	
		Nominal	In 0.6 mm (0.024 in)	
		Maximum	In 2.6 mm (0.102 in)	
	Total toe-angle Degree minute (Decimal degree)	Minimum	In 0° 00' (In 0.0°)	
		Nominal	In 0° 08' (In 0.13°)	
		Maximum	In 0° 16' (In 0.27°)	

Measure value under unladen*2 conditions.

*1: A difference when assuming the left side a standard.

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

QUICK REFERENCE CHART QUEST

2013

For 3.5SV Grade

Item		Standard		
		Left side	Right side	
Camber Degree minute (Decimal degree)	Minimum	-1° 00' (-1.00°)	-1° 15' (-1.25°)	
	Nominal	-0° 15' (-0.25°)	-0° 30' (-0.50°)	
	Maximum	0° 30' (0.50°)	0° 15' (0.25°)	
	Left and right difference*1	-0° 18' (-0.30°) - 0° 48' (0.80°)		
Caster Degree minute (Decimal degree)	Minimum	3° 50' (3.84°)	4° 00' (4.00°)	
	Nominal	4° 35' (4.58°)	4° 45' (4.75°)	
	Maximum	5° 20' (5.33°)	5° 30' (5.50°)	
	Left and right difference*1	-0° 18' (-0.30°) - 0° 48' (0.80°)		
Kingpin inclination Degree minute (Decimal degree)	Minimum	12° 00' (12.00°)		
	Nominal	12° 45' (12.75°)		
	Maximum	13° 30' (13.50°)		
Toe-in	Total toe-in Distance	Minimum	Out 1.4 mm (0.055 in)	
		Nominal	In 0.6 mm (0.024 in)	
		Maximum	In 2.6 mm (0.102 in)	
	Total toe-angle Degree minute (Decimal degree)	Minimum	In 0° 00' (In 0.0°)	
		Nominal	In 0° 08' (In 0.13°)	
		Maximum	In 0° 16' (In 0.27°)	

Measure value under unladen*2 conditions.

*1: A difference when assuming the left side a standard.

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

For 3.5SL and 3.5LE Grade

Item		Standard		
		Left side	Right side	
Camber Degree minute (Decimal degree)	Minimum	-1° 00' (-1.00°)	-1° 15' (-1.25°)	
	Nominal	-0° 15' (-0.25°)	-0° 30' (-0.50°)	
	Maximum	0° 30' (0.50°)	0° 15' (0.25°)	
	Left and right difference*1	-0° 18' (-0.30°) - 0° 48' (0.80°)		
Caster Degree minute (Decimal degree)	Minimum	3° 55' (3.92°)	4° 05' (4.09°)	
	Nominal	4° 40' (4.67°)	4° 50' (4.83°)	
	Maximum	5° 25' (5.41°)	5° 35' (5.58°)	
	Left and right difference*1	-0° 18' (-0.30°) - 0° 48' (0.80°)		
Kingpin inclination Degree minute (Decimal degree)	Minimum	12° 00' (12.00°)		
	Nominal	12° 45' (12.75°)		
	Maximum	13° 30' (13.50°)		
Toe-in	Total toe-in Distance	Minimum	Out 1.4 mm (0.055 in)	
		Nominal	In 0.6 mm (0.024 in)	
		Maximum	In 2.6 mm (0.102 in)	
	Total toe-angle Degree minute (Decimal degree)	Minimum	In 0° 00' (In 0.0°)	
		Nominal	In 0° 08' (In 0.13°)	
		Maximum	In 0° 16' (In 0.27°)	

Measure value under unladen*2 conditions.

*1: A difference when assuming the left side a standard.

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

REAR WHEEL ALIGNMENT

FOR USA MODELS

Item		Standard		
Camber Degree minute (Decimal degree)	Minimum	-1° 06' (-1.10°)		
	Nominal	-0° 36' (-0.60°)		
	Maximum	-0° 06' (-0.10°)		
Toe-in	Total toe-in Distance	Minimum	In 1.2 mm (0.047 in)	
		Nominal	In 2.8 mm (0.110 in)	
		Maximum	In 4.4 mm (0.173 in)	
	Total toe-angle Degree minute (Decimal degree)	Minimum	In 0° 06' (In 0.1°)	
		Nominal	In 0° 14' (In 0.23°)	
		Maximum	In 0° 22' (In 0.37°)	

Measure value under unladen* conditions.

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

FOR CANADA MODELS

Item		Standard		
Wheel size		16 inch	18 inch	
Camber Degree minute (Decimal degree)	Minimum	-1° 05' (-1.08°)		
	Nominal	-0° 35' (-0.58°)		
	Maximum	-0° 05' (-0.09°)		
Toe-in	Total toe-in Distance	Minimum	In 0.8 mm (0.031 in)	
		Nominal	In 2.4 mm (0.094 in)	
		Maximum	In 4.0 mm (0.157 in)	
	Total toe-angle Degree minute (Decimal degree)	Minimum	In 0° 04' (In 0.07°)	
		Nominal	In 0° 12' (In 0.2°)	
		Maximum	In 0° 20' (In 0.33°)	

Measure value under unladen* conditions.

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

BRAKE PEDAL

Unit: mm (in)

Item	Standard
Brake pedal height	195.6 – 205.6 (7.70 – 8.09)
Depressed brake pedal height [Depressing 490 N (50 kg, 110 lb) while turning the engine ON]	105.0 (4.13) or more
Clearance between stop lamp switch and brake switch threaded end and the stopper rubber	0.2 – 1.96 (0.008 – 0.0772)
Brake pedal play	3 – 11 (0.12 – 0.43)

BRAKE BOOSTER

Vacuum type

Unit: mm (in)

Item	Standard
Input rod length	127.0 – 128.0 (5.00 – 5.04)

QUICK REFERENCE CHART QUEST

2013

FRONT DISC BRAKE

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear thickness	26.0 (1.024)
	Runout (with it attached to the vehicle)	0.040 (0.0016)

REAR DISC BRAKE

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear thickness	14.0 (0.551)
	Runout (with it attached to the vehicle)	0.050 (0.0020)

FREFILL CAPACITIES

UNIT	Liter	US measure	
Fuel tank	75.6	20 gal	
Engine coolant capacity (With reservoir tank at "MAX" level)	11.3	12 qt	
Engine oil capacity	Drain and refill		
	With oil filter change	4.6	4-7/8 qt
	Without oil filter change	4.3	4-1/2 qt
	Dry engine (Overhaul)	5.3	5-5/8 qt
Transmission	CVT	10.2	10-3/4 qt
Power steering system		1.0	1-1/8 qt
Air conditioning system	Compressor oil	0.25	8.5 fl oz
	Refrigerant	0.9 kg	1.98 lb