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NISSAN XTERRA

MODEL N50 SERIES

QUICK REFERENCE INDEX

FOREWORD

This manual contains maintenance and repair procedure for the 2010 NISSAN XTERRA GCC.

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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SERVICE MANUAL: Model: _____ **Year:** _____

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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.*

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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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Is the organization of the manual clear and easy to follow? (circle your answer) YES NO

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

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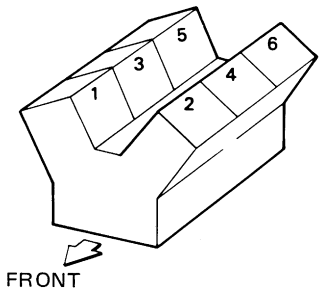
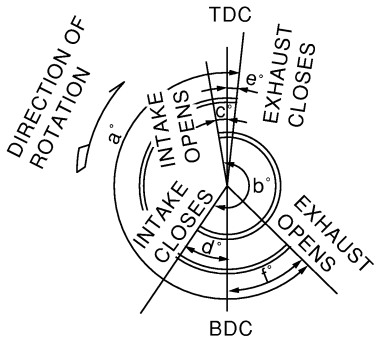
QUICK REFERENCE CHART: XTERRA GCC

Engine Tune-up Data

INFOID:0000000005806122

GENERAL SPECIFICATIONS

Cylinder arrangement		V-6
Displacement cm^3(cu in)		3,954 (241.30)
Bore and stroke mm (in)		95.5 × 92.0 (3.76 × 3.622)
Valve arrangement		DOHC
Firing order		1-2-3-4-5-6
Number of piston rings	Compression	2
	Oil	1
Number of main bearings		4
Compression ratio		9.7
Compression pressure kPa (kg/cm^2, psi)/300 rpm	Standard	1,275 (13.0, 185)
	Minimum	981 (10.0, 142)
	Differential limit between cylinders	98 (1.0, 14)
Cylinder number	 SEM713A	
Valve timing (Intake valve timing control - “OFF”)	 PBIC0187E	

Unit: degree

a	b	c	d	e	f
244	240	–4	64	6	58

DRIVE BELT

Tension of drive belts	Auto adjustment by auto tensioner

SPARK PLUG

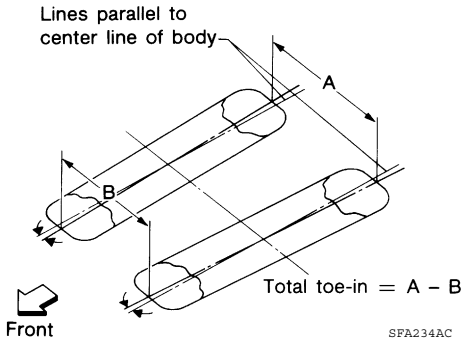
Make	NGK
Standard type*	PLFR5A-11
Gap (nominal)	1.1 mm (0.043 in)

*: Always check with the Parts Department for the latest parts information

Front Wheel Alignment (Unladen*1)

INFOID:0000000005806121

Camber *4 Degree minute (decimal degree)	Minimum	-0° 15′ (-0.25°)
	Nominal	0° 30′ (0.50°)
	Maximum	1° 15′ (1.25°)
	Cross camber	0° 45′ (0.75°) or less
Caster *4 Degree minute (decimal degree)	Minimum	2° 0′ (2.00°)
	Nominal	2° 45′ (2.75°)
	Maximum	3° 30′ (3.50°)
	Cross caster	0° 45′ (0.75°) or less
Kingpin inclination Degree minute (decimal degree)	Nominal	12° 45′ (12.75°)



Total toe-in	Distance (A – B)	Minimum	2.1 mm (0.08 in)
		Nominal	3.1 mm (0.12 in)
		Maximum	4.1 mm (0.16 in)
	Angle (left wheel or right wheel) Degree minute (decimal degree)	Minimum	0° 5′ (0.08°)
		Nominal	0° 7′ (0.12°)
		Maximum	0° 09′ (0.15°)
Wheel turning angle (full turn)	Inside Degree minute (Decimal degree)		33° 40′ – 35° 40′ *2 (33.67° – 35.67°)
	Outside Degree minute (Decimal degree)		29° 54′ – 31° 54′ *3 (29.90° – 31.90°)

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

*2: Target value 35° 40′ (35.67°)

*3: Target value 31° 54′ (31.90°)

*4: Some vehicles may be equipped with straight (non-adjustable) lower link bolts and washers. In order to adjust camber and caster on these vehicles, first replace the lower link bolts and washers with adjustable (cam) bolts and washers.

General Specification (Rear)

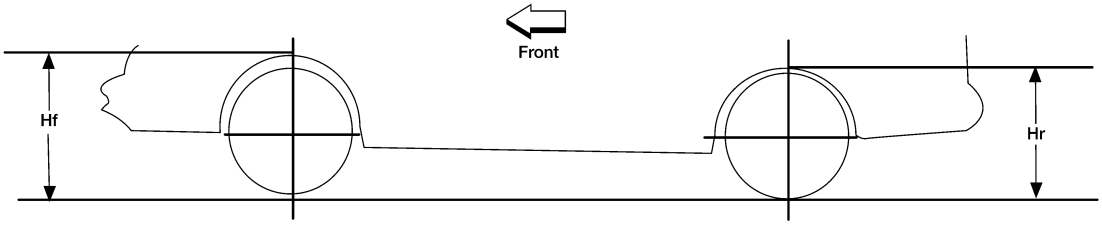
INFOID:0000000005806119

Suspension type	Rigid axle with semi-elliptic leaf springs
Shock absorber type	Double-acting hydraulic

Wheelarch Height (Unladen*1)

INFOID:0000000005806120

Unit: mm (in)



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Tire size	P265/70R16	P265/76R16	P265/65R17
Front wheelarch height (Hf)	858 (33.78)	870 (34.25)	859 (33.82)
Rear wheelarch height (Hr)	892 (35.12)	904 (34.59)	892 (35.12)

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

Brake Specifications

INFOID:0000000005806117

Unit: mm (in)

Front brake	Brake model	CLZ33VB
	Rotor outer diameter × thickness	296 × 28 (11.654 × 1.102)
	Pad Length × width × thickness	140 × 50.5 × 10.0 (5.512 × 1.988 × 0.394)
	Cylinder bore diameter (each)	46.4 (1.83)
Rear brake	Brake model	CLZ14VA
	Rotor outer diameter × thickness	286 × 18.0 (11.260 × 0.709)
	Pad Length × width × thickness	87.6 × 34 × 11.0 (3.449 × 1.339 × 0.433)
	Cylinder bore diameter	38.1 (1.50)
Control valve	Valve model	Electric brake force distribution
Brake booster	Booster model	C215T
	Diaphragm diameter	215 (8.465)

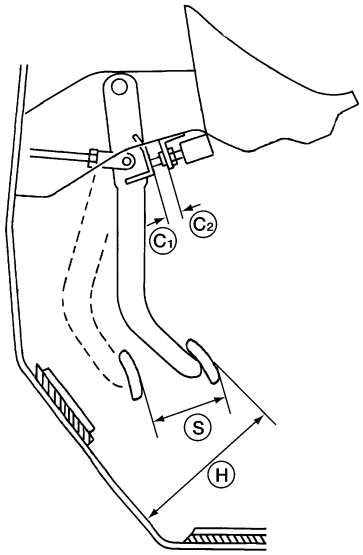
QUICK REFERENCE CHART: XTERRA GCC

2010

Brake Pedal

INFOID:0000000005806118

Unit: mm (in)



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Pedal free height (H)	M/T	174.7 (6.88)
	A/T	182.1 (7.17)
Pedal full stroke (S)		153 (6.02)
Clearance between pedal stopper and threaded end of stop lamp switch and ASCD switch (C_1) or (C_2)		0.74 - 1.96 (0.029 - 0.077)

Front Disc Brake

INFOID:0000000005806115

Unit: mm (in)

Brake model		CLZ33VB
Brake pad	Standard thickness (new)	10.0 (0.394)
	Repair limit thickness	2.0 (0.079)
Disc rotor	Standard thickness (new)	28.0 (1.102)
	Repair limit thickness	26.0 (1.024)
	Maximum uneven wear (measured at 8 positions)	0.015 (0.0006)
	Runout limit (with it attached to the vehicle)	0.05 (0.0020)

Rear Disc Brake

INFOID:0000000005806116

Brake model		CLZ14VA
Brake pad	Standard thickness (new)	11.0 mm (0.433 in)
	Repair limit thickness	2.0 mm (0.079 in)
Disc rotor	Standard thickness (new)	18.0 mm (0.709 in)
	Repair limit thickness	16.0 mm (0.630 in)
	Maximum uneven wear (measured at 8 positions)	0.015 mm (0.0006 in)
	Runout limit (with it attached to the vehicle)	0.05 mm (0.0020 in)

QUICK REFERENCE CHART: XTERRA GCC

2010

Fluids and Lubricants

INFOID:0000000005806114

Description		Capacity (Approximate)		
		Metric	US measure	Imp measure
Fuel		80 ℓ	21 1/8 gal	17 5/8 gal
Engine oil Drain and refill	With oil filter change	5.1 ℓ	5 3/8 qt	4 1/2 qt
	Without oil filter change	4.8 ℓ	5 1/8 qt	4 1/4 qt
Dry engine (engine overhaul)		6.3 ℓ	6 5/8 qt	5 1/2 qt
Cooling system (with reservoir at “MAX” level)		10.2 ℓ	10 3/4 qt	9 qt
Manual transmission gear oil		4.18 ℓ	4 3/8 qt	3 5/8 qt
Automatic transmission fluid (ATF)		10.3 ℓ	10 7/8 qt	9 1/8 qt
Rear final drive oil	C200	1.6 ℓ	3 3/8 pt	2 7/8 pt
	M226	2.01 ℓ	4 1/4 pt	3 1/2 pt
Transfer fluid		2.0 ℓ	2 1/8 qt	1 3/4 qt
Front final drive oil		0.85 ℓ	1 3/4 pt	1 1/2 pt
Power steering fluid (PSF)		1.0 ℓ	2 1/8 pt	1 3/4 pt
Brake and clutch fluid		—	—	—
Multi-purpose grease		—	—	—
Brake grease		—	—	—
A/C system refrigerant		0.70 ± 0.05 kg	1.54 ± 0.11 lb	1.54 ± 0.11 lb
A/C system oil		180 mℓ	6.1 fl oz	6.3 fl oz