

QUICK REFERENCE INDEX

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		PG	Power Supply, Ground & Circuit Elements
		MWI	Meter, Warning Lamp & Indicator
		WCS	Warning Chime System
		SN	Sonar System
		AV	Audio, Visual & Navigation System
		CCS	Cruise Control System
		MA	Maintenance

**NISSAN
TITAN
MODEL A60 SERIES**

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FOREWORD

This manual contains maintenance and repair procedure for the 2011 NISSAN TITAN.

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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Technical Publications Department



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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.

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 NISSAN Service Manuals to better support you in servicing or repairing customer vehicles?

DATE: **YOUR NAME:** **POSITION:**

DEALER: **DEALER NO.:** **ADDRESS:**

CITY: _____ STATE/PROV/COUNTRY: _____ ZIP/POSTAL CODE: _____

QUICK REFERENCE CHART: TITAN

2011

QUICK REFERENCE CHART: TITAN

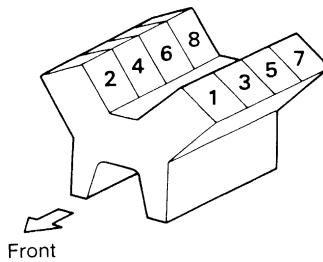
Engine Tune-up Data

INFOID:0000000006812182

GENERAL SPECIFICATIONS

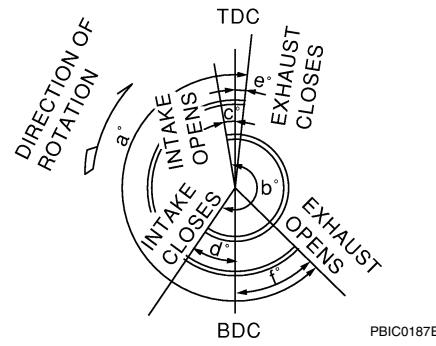
Cylinder arrangement	V-8	
Displacement cm ³ (in ³)	5,552 (338.80)	
Bore and stroke mm (in)	98 x 92 (3.86 x 3.62)	
Valve arrangement	DOHC	
Firing order	1-8-7-3-6-5-4-2	
Number of piston rings	Compression	2
	Oil	1
Number of main bearings	5	
Compression ratio	9.8:1	
Compression pressure kPa (kg/cm ² , psi)/rpm	Standard	1,520 (15.5, 220)/200
	Minimum	1,324 (13.5, 192)/200
	Differential limit between cylinders	98 (1.0, 14)/200

Cylinder number



SEM957C

Valve timing



PBIC0187E

Unit: degree

a	b	c	d	e	f
244°	232°	-8°	60°	10°	54°

DRIVE BELTS

Tension of drive belts	Auto adjustment by auto tensioner
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SPARK PLUG

Unit: mm (in)

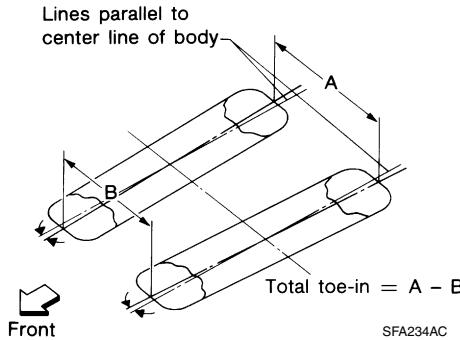
Make	NGK	
Model	Standard model	FFV model
Standard type*	DILFR5A-11	DILFR5A-11D
Gap (Nominal)	1.1 (0.043)	1.1 (0.043)

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

Front Wheel Alignment (Unladen*1)

INFOID:0000000006812180

Drive type	2WD	4WD
Camber *6 Degree minute (decimal degree)	Minimum	-0° 57' (-0.95°)
	Nominal	-0° 12' (-0.20°)
	Maximum	0° 33' (0.55°)
	Cross camber	0° 45' (0.75°) or less
Caster *6 Degree minute (decimal degree)	Minimum	2° 15' (2.25°)
	Nominal	3° 0' (3.00°)
	Maximum	3° 45' (3.75°)
	Cross caster	0° 45' (0.75°) or less
Kingpin inclination (reference only) Degree minute (decimal degree)	13° 33' (13.55°)	13° 0' (13.00°)



SFA234AC

Total toe-in	Distance (A - B)	Minimum	1.8 mm (0.07 in)	1.8 mm (0.07 in)
		Nominal	2.8 mm (0.11 in)	2.8 mm (0.11 in)
		Maximum	3.8 mm (0.15 in)	3.8 mm (0.15 in)
	Angle (left or right) Degree minute (decimal degree)	Minimum	0° 3' (0.05°)	0° 3' (0.05°)
		Nominal	0° 5' (0.08°)	0° 5' (0.08°)
		Maximum	0° 7' (0.12°)	0° 7' (0.12°)
Wheel turning angle (full turn)	Inside Degree minute (decimal degree)	34° 30' – 38° 30' *2 (34.50° – 38.50°)	34° 56' – 38° 56' *4 (34.93° – 38.93°)	
		Outside Degree minute (decimal degree)	30° 58' – 34° 58' *3 (30.97° – 34.97°)	31° 01' – 35° 01' *5 (31.02° – 35.02°)

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

*2: Target value 37° 30' (37.50°)

*3: Target value 33° 58' (33.97°)

*4: Target value 37° 56' (37.93°)

*5: Target value 34° 01' (34.02°)

*6: 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.

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Rear Suspension Specifications

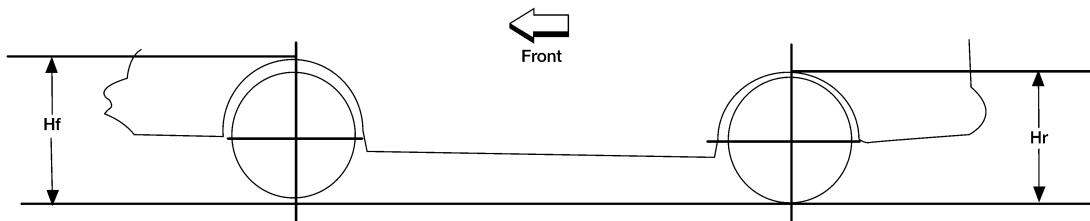
INFOID:0000000006812179

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

Wheelarch Height (Unladen*1)

INFOID:0000000006812181

Unit: mm (in)



LEIA0085E

Drive type		2WD				4WD*2				4WD*3			
Wheel base		Short		Long		Short		Long		Short		Long	
Body		King Cab	Crew Cab	King Cab	Crew Cab	King Cab	Crew Cab	King Cab	Crew Cab	King Cab	Crew Cab	King Cab	Crew Cab
Front wheel arch height (Hf)	P265/70R18	912 (35.91)	914 (35.98)	912 (35.91)	914 (35.98)	949 (37.36)	951 (37.44)	949 (37.36)	951 (37.44)	949 (37.36)	951 (37.44)	949 (37.36)	951 (37.44)
	P275/70R18	922 (36.30)	925 (36.42)	922 (36.30)	925 (36.42)	960 (37.80)	962 (37.87)	959 (37.76)	962 (37.87)	960 (37.80)	962 (37.87)	959 (37.76)	962 (37.87)
	P275/60R20	917 (36.10)	919 (36.18)	917 (36.10)	920 (36.22)	955 (37.60)	957 (37.68)	954 (37.56)	957 (37.68)	955 (37.60)	957 (37.68)	954 (37.56)	957 (37.68)
Rear wheel arch height (Hr)	P265/70R18	952 (37.48)	954 (37.56)	950 (37.40)	951 (37.44)	991 (39.02)	994 (39.13)	989 (38.94)	991 (39.02)	991 (39.02)	993 (39.09)	989 (38.94)	991 (39.02)
	P275/70R18	962 (37.87)	965 (37.99)	960 (37.80)	962 (37.87)	1002 (39.45)	1004 (39.53)	1000 (39.37)	1002 (39.45)	1001 (39.41)	1004 (39.53)	1000 (39.37)	1002 (39.45)
	P275/60R20	957 (37.68)	959 (37.76)	955 (37.60)	956 (37.64)	996 (39.21)	999 (39.33)	995 (39.17)	996 (39.21)	996 (39.21)	998 (39.29)	995 (39.17)	996 (39.21)

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

*2: Without tow package.

*3: With tow package.

Brake Specifications

INFOID:0000000006812177

Unit: mm (in)

Front brake	Brake model	AD41VA
	Rotor outer diameter × thickness	350 × 30 (13.78 × 1.181)
	Pad Length × width × thickness	151.6 × 56.5 × 12.0 (5.97 × 2.22 × 0.472)
	Cylinder bore diameter (each)	50.8 (2.00)
Rear brake	Brake model	AD14VE
	Rotor outer diameter × thickness	320 × 14 (12.6 × 0.551)
	Pad Length × width × thickness	83.0 × 33.0 × 12.0 (3.268 × 1.299 × 0.472)
	Cylinder bore diameter	48 (1.89)
Control valve	Valve model	Electric brake force distribution

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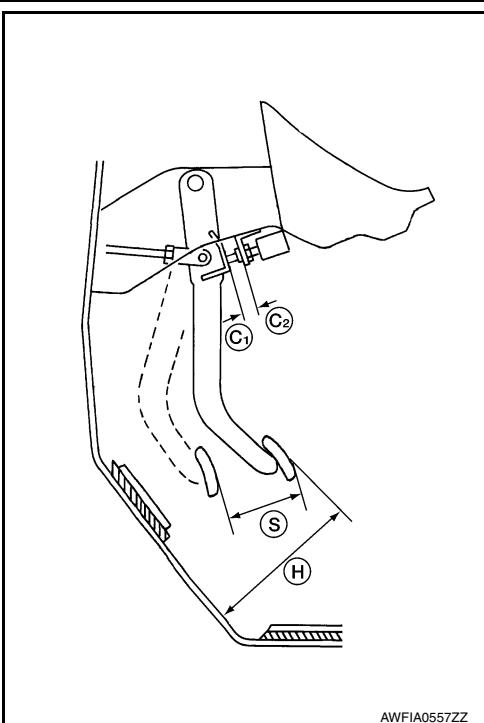
Brake booster	Booster model	C215T
	Diaphragm diameter	215 (8.46)

Brake Pedal

INFOID:0000000006812178

STANDARD PEDAL

Unit: mm (in)



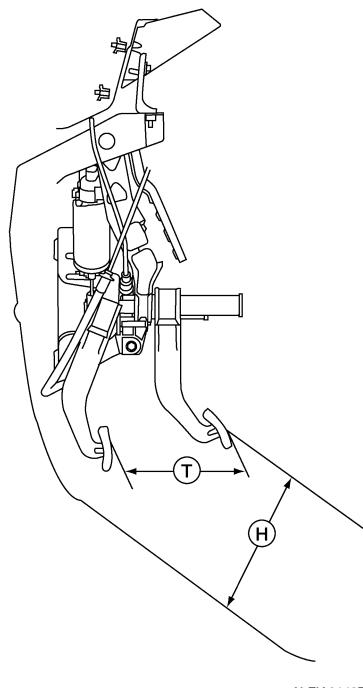
Free height (H)	182.3 – 192.3 (7.18 – 7.57)
Pedal full stroke (S)	152.3 (6.00)
Clearance between brake pedal bracket and the threaded end of stop lamp switch (C1) and ASCD cancel switch [if equipped] (C2)	0.74 – 1.96 (0.029 – 0.077)

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ADJUSTABLE PEDAL

Unit: mm (in)



ALFIA0149ZZ

Pedal free height (H) with pedal in forward most position	182.3 - 192.3 (7.18 - 7.57)
Pedal full stroke (T)	153.3 (6.04)
Stop lamp switch and ASCD cancel switch threaded end to brake pedal bracket gap	0.74 - 1.96 (0.029 - 0.077)

CAUTION:

When equipped with adjustable pedal, the pedal must be in the forward most position (closest to the floor) for pedal height adjustment.

Front Disc Brake

INFOID:0000000006812175

Unit: mm (in)

Brake model	AD41VA
Brake pad	Standard thickness (new) 12.0 (0.472) Repair limit thickness 1.0 (0.039)
Disc rotor	Standard thickness (new) 30.0 (1.181) Wear limit 28.5 (1.122) Maximum uneven wear (measured at 8 positions) 0.015 (0.0006) Runout limit (with it attached to the vehicle) 0.03 (0.001)

Rear Disc Brake

INFOID:0000000006812176

Unit: mm (in)

Brake model	AD14VE
Brake pad	Standard thickness (new) 12.0 (0.472) Repair limit thickness 1.0 (0.039)
Disc rotor	Standard thickness (new) 14.0 (0.551) Wear limit 12.5 (0.492) Maximum uneven wear (measured at 8 positions) 0.015 (0.0006) Runout limit (with it attached to the vehicle) 0.05 (0.002)

QUICK REFERENCE CHART: TITAN

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Fluids and Lubricants: FOR NORTH AMERICA

INFOID:0000000006812169

Description		Capacity (Approximate)		
		Metric	US measure	Imp measure
Windshield Washer Fluid		4.5 ℥	1 1/4 gal	1 gal
Fuel		105.8 ℥	28 gal	23 1/4 gal
Engine oil Drain and refill	With oil filter change	6.5 ℥	6 7/8 qt	5 3/4 qt
	Without oil filter change	6.2 ℥	6 1/2 qt	5 1/2 qt
Dry engine (engine overhaul)		7.6 ℥	8 qt	6 3/4 qt
Cooling system	With reservoir at MAX level	12.2 ℥	12 7/8 qt	10 3/4 qt
Automatic transmission fluid (ATF)		10.6 ℥	11 1/4 qt	9 3/8 qt
Rear differential gear oil		2.01 ℥	4 1/4 pt	3 1/2 pt
Transfer fluid		2.0 ℥	2 1/8 qt	1 3/4 qt
Front differential gear oil		1.6 ℥	3 3/8 pt	2 7/8 pt
Power steering fluid (PSF)		1.0 ℥	1 1/8 qt	7/8 qt
Brake fluid		—	—	—
Multi-purpose grease		—	—	—
Windshield washer fluid		4.5 ℥	4 3/4 qt	4 qt
Air conditioning system refrigerant		0.70 ± 0.05 kg	1.54 ± 0.11 lb	1.54 ± 0.11 lb
Air conditioning system oil		200 mℓ	6.8 fl oz	7.0 fl oz

Fluids and Lubricants: FOR MEXICO

INFOID:0000000006812172

Description		Capacity (Approximate)		
		Metric	US measure	Imp measure
Windshield Washer Fluid		4.5 ℥	1 1/4 gal	1 gal
Fuel		105.8 ℥	28 gal	23 1/4 gal
Engine oil Drain and refill	With oil filter change	6.5 ℥	6 7/8 qt	5 3/4 qt
	Without oil filter change	6.2 ℥	6 1/2 qt	5 1/2 qt
Dry engine (engine overhaul)		7.6 ℥	8 qt	6 3/4 qt
Cooling system	With reservoir at MAX level	12.2 ℥	12 7/8 qt	10 3/4 qt
Automatic transmission fluid (ATF)		10.6 ℥	11 1/4 qt	9 3/8 qt
Rear differential gear oil		2.01 ℥	4 1/4 pt	3 1/2 pt
Transfer fluid		2.0 ℥	2 1/8 qt	1 3/4 qt
Front differential gear oil		1.6 ℥	3 3/8 pt	2 7/8 pt
Power steering fluid (PSF)		1.0 ℥	1 1/8 qt	7/8 qt
Brake fluid		—	—	—
Multi-purpose grease		—	—	—
Windshield washer fluid		4.5 ℥	4 3/4 qt	4 qt

QUICK REFERENCE CHART: TITAN

2011

Description	Capacity (Approximate)		
	Metric	US measure	Imp measure
Air conditioning system refrigerant	0.70 ± 0.05 kg	1.54 ± 0.11 lb	1.54 ± 0.11 lb
Air conditioning system oil	200 m ℓ	6.8 fl oz	7.0 fl oz