

Edition: May 1999
 Revision: September 2000
 Publication no.: SM0E-1D22U8

NISSAN FRONTIER

MODEL D22 SERIES

For vehicles equipped with the 3.3L, VG engine up to serial number 343314. The serial number is shown on the Vehicle Identification Number Plate. (Except Crew Cab and 2WD King Cab Models)

QUICK REFERENCE INDEX

GENERAL INFORMATION _____	GI
MAINTENANCE _____	MA
ENGINE MECHANICAL _____	EM
ENGINE LUBRICATION & COOLING SYSTEMS _____	LC
ENGINE CONTROL SYSTEM _____	EC
ACCELERATOR CONTROL, FUEL & EXHAUST SYSTEMS _____	FE
CLUTCH _____	CL
MANUAL TRANSMISSION _____	MT
AUTOMATIC TRANSMISSION _____	AT
TRANSFER _____	TF
PROPELLER SHAFT & DIFFERENTIAL CARRIER _____	PD
FRONT AXLE & FRONT SUSPENSION _____	FA
REAR AXLE & REAR SUSPENSION _____	RA
BRAKE SYSTEM _____	BR
STEERING SYSTEM _____	ST
RESTRAINT SYSTEM _____	RS
BODY & TRIM _____	BT
HEATER & AIR CONDITIONER _____	HA
ELECTRICAL SYSTEM _____	EL
ALPHABETICAL INDEX _____	IDX

FOREWORD

This manual contains maintenance and repair procedures for the 2000 Nissan FRONTIER equipped with the 3.3L, VG engine. (Except Crew Cab and 2WD King Cab Models)

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.



NISSAN NORTH AMERICA, INC.

Technical Service Information Department
Gardena, California



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:

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. (Please photocopy back cover): _____

VEHICLE INFORMATION VIN: _____ **Production Date:** _____

Please describe any 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: _____

NOTES

TEST VALUE AND TEST LIMIT (GST ONLY — NOT APPLICABLE TO CONSULT-II)

The following is the information specified in Mode 6 of SAE J1979.

The test value is a parameter used to determine whether a system/circuit diagnostic test is "OK" or "NG" while being monitored by the ECM during self-diagnosis. The test limit is a reference value which is specified as the maximum or minimum value and is compared with the test value being monitored.

Items for which these data (test value and test limit) are displayed are the same as SRT code items.

These data (test value and test limit) are specified by Test ID (TID) and Component ID (CID) and can be displayed on the GST screen.

SRT item	Self-diagnostic test item	DTC	Test value (GST display)		Test limit	Conversion
			TID	CID		
CATALYST	Three way catalyst function (Bank 1)	P0420	01H	01H	Max.	1/128
		P0420	02H	81H	Min.	1
	Three way catalyst function (Bank 2)	P0430	03H	02H	Max.	1/128
		P0430	04H	82H	Min.	1
EVAP SYSTEM	EVAP control system (Small leak)	P0440	05H	03H	Max.	1/128mm ²
	EVAP control system purge flow monitoring	P1440	05H	03H	Max.	1/128mm ²
HO2S	Heated oxygen sensor 1 (Bank 1)	P1447	06H	83H	Min.	20mV
		P0133	09H	04H	Max.	16ms
		P0131	0AH	84H	Min.	10mV
		P0130	0BH	04H	Max.	10mV
	Heated oxygen sensor 1 (Bank 2)	P0132	0CH	04H	Max.	10mV
		P0134	0DH	04H	Max.	1s
		P0153	11H	05H	Max.	16ms
		P0151	12H	85H	Min.	10mV
		P0150	13H	05H	Max.	10mV
		P0152	14H	05H	Max.	10mV
	Heated oxygen sensor 2 (Bank 1)	P0154	15H	05H	Max.	1s
		P0139	19H	86H	Min.	10mV/500ms
		P0137	1AH	86H	Min.	10mV
		P0140	1BH	06H	Max.	10mV
	Heated oxygen sensor 2 (Bank 2)	P0138	1CH	06H	Max.	10mV
		P0159	21H	87H	Min.	10mV/500ms
		P0157	22H	87H	Min.	10mV
		P0160	23H	07H	Max.	10mV
HO2S HTR	Heated oxygen sensor 1 heater (Bank 1)	P0158	24H	07H	Max.	10mV
		P0135	29H	08H	Max.	20mV
	Heated oxygen sensor 1 heater (Bank 2)	P0135	2AH	88H	Min.	20mV
		P0155	2BH	09H	Max.	20mV
	Heated oxygen sensor 2 heater (Bank 1)	P0155	2CH	89H	Min.	20mV
		P0141	2DH	0AH	Max.	20mV
	Heated oxygen sensor 2 heater (Bank 2)	P0141	2EH	8AH	Min.	20mV
		P0161	2FH	0BH	Max.	20mV
EGR SYSTEM (if so equipped)	EGR function	P0161	30H	8BH	Min.	20mV
		P0400	31H	8CH	Min.	1°C
		P0400	32H	8CH	Min.	1°C
		P0400	33H	8CH	Min.	1°C
	EGRC-BPT valve function	P0400	34H	8CH	Min.	1°C
		P1402	35H	0CH	Max.	1°C
		P0402	36H	0CH	Max.	1count
		P0402	37H	8CH	Min.	1count