## SAFETY COMPLIANCE TESTING FOR FMVSS NO.110 TIRE SELECTION AND RIMS

NISSAN MOTOR COMPANY, LTD. 2009 NISSAN ROGUE FOUR-DOOR MPV NHTSA NO.C95205

## U.S. DOT SAN ANGELO TEST FACILITY 131 COMANCHE TRAIL, BUILDING 3527 GOODFELLOW AFB, TEXAS 76908



March 27, 2009

FINAL REPORT

#### PREPARED FOR

U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
NVS-220
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVENUE, SE
WASHINGTON, D.C. 20590

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Approved By: Section Beeting

Accepted By: Marketing

Acceptance Date: 3/27/09

**Technical Report Documentation Page** 

			Technical R	eport Documentation Page		
1. Report No.	2. Government Accession	n No.	3. Recipient's	Catalog No.		
110-STF-09-005						
4. Title and Subtitle			5. Report Dat	0		
4. Title and Subtitle	5		March 27, 200			
Final Report of FM	VSS 110 Compliance Tes	stina	-	Organization Code		
	gue Four-door MPV, NHT		o. r enoming	Organization Code		
No. C95205			STF			
7. Author(s)				Organization Rep#		
				·		
	unior Systems Analyst		STF-DOT-09-	110-005		
	Safety Compliance Engine					
	Safety Compliance Engin		40.144	(TD 110)		
9. Performing Orga	nization Name and Addre	ess	10. Work Unit	No. (TRAIS)		
U.S. DOT San Ang	ielo Test Facility		44. 0 - 11 11 - 11 1			
131 Comanche Tra			11. Contract of	or Grant No.		
Goodfellow AFB, T						
	ency Name and Address		13. Type of R	eport and Period Covered		
	artment of Transportation		Final Test Report			
	Traffic Safety Administration	on	February 23 through February 25, 2009			
Office of Vehicle S			14. Sponsoring Agency Code			
1200 New Jersey			NI) (O. 000			
Washington, DC 2			NVS-220			
15. Supplementary	Notes					
16. Abstract						
Compliance tests v	vere conducted on the sul	bject 20	09 Nissan Rog	ue four-door MPV in		
	e specifications of the Off					
	110T-02 for the determina	ition of I	FMVSS 110 co	mpliance. Test failures		
identified were as f	ollows: None.	T				
17. Key Words		18. Di	stribution State	ment		
Compliance Testin	g	Copie	s of this report	are available from:		
Safety Engineering	1		•			
FMVSS 110			National Highway Traffic Safety Administration			
				n Services Division		
			O-411, Room E12-100			
			0 New Jersey Avenue, S.E.			
			hington, DC 20590			
Email   FAX:			tis@dot.go 202-493-2833			
19. Security Classi	fication (of this report)		o. of Pages	22. Price		
	- (					
UNCLASSIFIED 41						
20. Security Classi	fication (of this page)					
LINCL ASSIEIED						
UNCLASSIFIED						

Form DOT F 1700.7 (8-72)

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#### INTRODUCTION

### 1.1 PURPOSE OF COMPLIANCE TEST

A 2009 Nissan Rogue four-door MPV was tested to determine if the vehicle was in compliance with the requirements of FMVSS 110. All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Test Procedure, TP-110T-02, dated August 31, 2007.

This standard establishes requirements to ensure that applicable vehicles are equipped with tires of adequate size and load rating and rims of appropriate size and type designation. This standard also establishes location, content, and format requirements for the Vehicle Placard and optional Tire Inflation Pressure Label.

### 1.2 TEST VEHICLE

The test vehicle was a 2009 Nissan Rogue four-door MPV. Nomenclatures applicable to the test vehicle are:

A. Vehicle Identification Number: JN8AS58T59W320598

B. NHTSA Number: C95205

C. Manufacturer: Nissan Motor Company, Ltd.

D. Manufacture Date: 07/2008

#### 1.3 <u>TEST DATE</u>

The test vehicle was tested February 23 through February 25, 2009.

#### TEST PROCEDURE AND SUMMARY OF RESULTS

### 2.1 <u>TEST PROCEDURE</u>

The test vehicle was inspected for completeness, systems operability, and appropriate fuel and liquid levels, i.e. oil and coolant. The vehicle was then photographically documented as required by the NHTSA/OVSC Test Procedure. Tire sidewall information was recorded. The owner's manual was reviewed. Pertinent information from the tire and rim was photographed.

Subsequent events included weighing the vehicle to establish delivered Unloaded Vehicle Weight and the distribution of weight on the front and rear axles and each wheel position. The vehicle was ballasted to its Normal Load, Full Occupant Load, and Maximum Vehicle Load weight. At each step of the ballasting procedure, data was recorded. Ballast was photographically documented for Normal and Maximum Vehicle Load weight. The vehicle maximum load on each wheel was measured. Data from each tire furnished with the vehicle were recorded. Tire size information was taken from vehicle certification label and vehicle placard. The right front wheel was removed from the vehicle and the tire was dismounted from the rim. The rim was measured from flange to flange, and rim markings were photographically documented. The owner's manual was checked for all required information on tire loading, and on general tire and loading parameters.

### 2.2 <u>SUMMARY OF RESULTS</u>

The Nissan Rogue test vehicle appears to be in compliance with all FMVSS 110 requirements.

TEST DATA

## DATA SUMMARY SHEET (1 of 2)

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Nissan	Rogue four-door MPV
VEHICLE NHTSA NUMBER: <u>C95205</u> VIN:	JN8AS58T59W320598
VEHICLE TYPE: MPV DATE OF MANUE	FACTURE: <u>07/2008</u>
LABORATORY: US DOT San Angelo Test Facility	
LIGHT TRUCK TYPE REQUIREMENTS	PASS/FAIL
General (Data Sheet 2)	
The vehicle must be equipped with tires that meet the requirem of S139. (S110, S4.1)	nents PASS
Tire Load Limits (Data Sheet 2)	
The sum of the maximum load ratings of the tires fitted to an ax not less than the gross axle weight rating (GAWR) of the axle is specified on the certification label. When passenger car tires a tire's load rating is reduced by dividing it by 1.10 before determine the maximum load ratings of the tires fitted to an axle. (S110, S4.2.2.2)	ystem as re installed, each ining the sum of
When passenger car tires are installed, the vehicle normal load greater than the value of 94 percent of the de-rated load rating manufacturer's recommended cold inflation pressure for that tire are installed, the vehicle normal load on the tire is not grater the 94 percent of the load rating at the vehicle manufacturer's recoinflation pressure for that tire. (S110, S4.2.2.3(a), (b))	at the vehicle e. When LT tires an the value of
Rim (Data Sheet 3)	
Each rim is constructed to the dimensions of a rim referred to in that is listed by the manufacturer of the tires as suitable for use (S110, S4.4.1(a))	
Vehicle rims retain deflated tires during a controlled brake appl (S110, S4.4.1(b))	
Each rim is properly marked. (S110, S4.4.2)	PASS

### DATA SUMMARY SHEET (2 of 2)

Certification, Placard, and Tire Inflation Pressure Labels (Data Sheet 4)	
The placard and tire inflation pressure label (if provided) are affixed and located correctly, and display the information and format required. (S110, S4.3)	PASS
The Part 567 certification label shows the size designation of the tires and and rims appropriate for the vehicle including the tire size(s) listed on the vehicle placard and, if provided, tire inflation pressure label. (S110, S4.3.3)	PASS
No inflation pressure other than the maximum permissible inflation pressure is shown on the placard and, if any, tire inflation pressure label unless as required. (S110, S4.3.4)	PASS
Vehicle Weight Distribution (Data Sheet 5)	
The Gross Vehicle Weight Rating (GVWR) is not less than the sum of the unloaded vehicle weight, rated cargo load, and 68 kg times the vehicle's designated seating capacity. However, for school buses, the minimum occupant weight allowance is 54 kg. (49 CFR 567, <i>Certification</i> )	PASS
Owner's Manual (Data Sheet 6)	
Owner's manual or other document has discussion of Vehicle Placard, Loading and Tires. (575.6(a)(4))	PASS
Owner's manual includes exact statement relating to "Steps for Determining Correct Load Limits". (575.6(a)(5))	PASS
REMARKS: The rim retention test required by FMVSS No.110, paragraph S4.4. not executed on the subject Nissan Rogue.	1(b) was

RECORDED BY: Todd P. Groghan DATE: February 23, 2009

APPROVED BY: Kenneth H. Yates

# DATA SHEET 1 TEST VEHICLE INFORMATION / RECEIVING INSPECTION

VEHIC	VEHICLE MAKE/MODEL/BODY STYLE: 2009 Nissan Rogue four-door MPV							
VEHI	VEHICLE NHTSA NUMBER: <u>C95205</u> TEST DATE: <u>February 23, 2009</u>							
VIN:	VIN: JN8AS58T59W320598 MANUFACTURE DATE: 07/2008							
GVW	GAWR: 1,920 kg (4,233 lbs)  GAWR (front): 1,017 kg (2,241 lbs)  GAWR (rear): 911 kg (2,008 lbs)							
SEAT	ING POSITIONS:	FRON <sup>-</sup>	T <u>2</u> MID <u>N/A</u>	<u>.                                    </u>	REAR 3			
ODO	METER READING AT S	START	OF TEST: 105 ki	m (65	5 mi)			
ENGI	NE DATA:	4 C	ylinders <u>2.5</u> Liter	rs	Cubic Inches			
TRAN	ISMISSION DATA:	<u>Χ</u> Αι	utomatic Mar	nual	_CVT*_ No. of Speeds			
FINAL	DRIVE DATA:	R	ear Drive <u>X</u> Fror	nt Drive	e 4 Wheel Drive			
CHEC	CK APPROPRIATE BOX	XES F	OR INSTALLED VEHIC	LE EC	QUIPMENT:			
Х	Air Conditioning	Х	Traction Control	Х	Clock			
	Tinted Glass	Х	Tachometer		Roof Rack			
Х	Power Steering	Х	Cruise Control	Х	Console			
Х	Power Windows	Х	Rear Window Defroster	Х	Driver Air Bag			
Х	Power Door Locks		Sun Roof or T-Top	Х	Passenger Air Bag			
	Power Seat(s)	Х	Tilt Steering Wheel	Х	Side Curtain Air Bag(s)			
Х	Power Brakes	Х	Stereo	Х	Front Disc Brakes			
Х	Antilock Brake System		Telephone	Х	Rear Disc Brakes			
	Navigation System		Trailer Hitch		Other -			
REMA	ARKS: *CVT = Continu	uously	Variable Transmission					
RECO	RECORDED BY: Todd P. Groghan DATE: February 23, 2009							
APPF	APPROVED BY: Kenneth H. Yates							

# DATA SHEET 2 (1 of 2) VEHICLE RIM IDENTIFICATION AND LOAD LIMITS

VEHICLE MAKE/MOI	009 Nissan Rog	gue tour-	door MPV			
VEHICLE NHTSA NUMBER: C95205 VIN: JN8AS58T59W3205						
LABORATORY: US	S DOT Sar	n Angelo Test Facili	ty_ TEST DAT	ΓE: <u>Feb</u>	oruary 23, 2009	
All tires on the vehicle and model:	e (excludin	g the spare) are the	e same make	( X ) Y	ES ( ) NO	
All tires on the vehicle	e (excludin	g the spare) are the	e same size:	(X)Y	ES ( ) NO	
Spare tire is the same	e size as a	Il other tires:		( ) YI	ES (X)NO	
Tire Sidewall	١	Right Front	<b>Left Rea</b> (If different		Spare Tire (If different)	
Manufacturer and Model	Conti	nental 4x4 Contact			Goodyear	
Tire Size Designation	P215/	/70R16		T155/90D16		
Load Index/Speed Symbo	ol <u>99</u> H				110M	
Maximum Inflation Pressu	ire <u>300 k</u>	Pa (44 psi)			420 kPa (60 psi)	
Maximum Load Rating	775 k	g (1,709 lbs)			1,060 kg (2,337 lbs)	
Tread/Traction/Temperatu	ıre <u>350/A</u>	VA			N/A	
Tires Have "DOT" Marking	gs <u>Yes</u>				Yes	
Serial Number: Rig	ht Front	FDYV3AJ2708	Left Front	FDYV	3AJ2708	
Rig	ht Rear	FDYV3AJ2708	Left Rear	FDYV:	3AJ2708	
Spa	are	7TT3KARP				

# DATA SHEET 2 (2 of 2) VEHICLE TIRE IDENTIFICATION AND LOAD LIMITS

MOUNTED TIRE VS. AXLE RATING COMPARISON (at sidewall maximum inflation pressure)						
	FRONT AXLE	REAR AXLE				
A. GAWR from certification label	1,017 kg (2,241 lbs)	911 kg (2,008 lbs)				
B. Tire Maximum Load Rating from above	775 kg (1,709 lbs)	775 kg (1,709 lbs)				
C. Reduced tire load rating if applicable*	705 kg (1,554 lbs)	705 kg (1,554 lbs)				
D. (No. of tires) x (Tire load rating de-rated if appropriate)	1,410 kg (3,108 lbs)	1,410 kg (3,108 lbs)				
Is "D" equal to or greater than "A"? (Yes/No)	Yes	Yes				

<sup>\*</sup> If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck or bus, the tire's load rating is reduced by dividing by 1.10.

DATA INDIC	ATES COMPLIANCE:	PASS/FAIL:	PASS
REMARKS:	None		

RECORDED BY: \_Todd P. Groghan DATE: \_February 23, 2009

APPROVED BY: Kenneth H. Yates

# DATA SHEET 3 VEHICLE RIM IDENTIFICATION

VEHICLE MAKE/MODEL/BODY STYLE	Ξ:20	09 Nissar	Rogue fou	ur-door MP	٧
VEHICLE NHTSA NUMBER: <u>C9520</u>	5_	VIN:	JN8AS5	8T59W320	)598
LABORATORY: US DOT San Angelo	Test Facility	TEST	DATE: Fe	bruary 23,	2009
Rim Markings		RIGHT	FRONT	LEFT f	
A. Source of published dimensions (letter designation)	gnation)	J			
B. Rim Size Designation		16x6½ J	IJ		
C. Does rim contain DOT symbol? (Yes/No)		Yes			
D. Manufacturer's name, symbol or trademark	(copy format)	TOPY			
E. Date of manufacture or symbol (copy forma	t)	703 08			
F. Letter height (not less than 3 mm)		Yes			
G. Lettering (impressed or embossed)			Impressed		
H. Are all rim markings legible? (Yes/No)		Yes			
Do items A-C appear on weather side of r	im (Yes/No)	Yes			
Do all markings comply with requirements	(Yes/No)	Yes			
Rim Measurements	RIGHT F	RONT	LEFT (If diffe		
Rim width	16.5 cm	(6.5 in)			
Rim diameter	40.6 cm	(16.0 in)			
Rim measurements same as rim markings?	Yes				
Rims are suitable for tires on vehicle?	(X)YES (	) NO			
Reference source used for tire/rim match	h verification:	2008 Ti	re & Rim A	ssociation	Yearbook
DATA INDICATES COMPLIANCE:				PASS/FA	IL: PASS

RECORDED BY: Todd P. Groghan DATE: February 23, 2009

APPROVED BY: Kenneth H. Yates

REMARKS: None

# DATA SHEET 4 (1 of 3) VEHICLE PLACARD AND TIRE INFLATION PRESSURE LABEL

VEHICLE MAKE/MODEL/BODY	STYLE:	2009 Nissan Rogue f	our-door MPV
VEHICLE NHTSA NUMBER:(	C95205	VIN:JN8AS	558T59W320598
LABORATORY: US DOT San A	Angelo Test Fa	acility TEST DATE:	February 23, 2009
Identification of Vehicle Labelin	ng		
	(Yes/No)	Location	PASS/FAIL
1. Certification Label*	Yes	Driver's side B pillar	PASS
2. Vehicle Placard*	Yes	Driver's side B pillar	PASS
3. Tire Inflation Pressure Label*	N/A		
* Lahels must be located as specified	in section 12.4 of	test procedure	

### **Vehicle Placard**

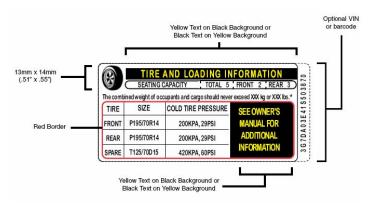


FIGURE 1 (70 FR 14425)

**Vehicle Placard** has the exact color and format as specified in the above Figure 1 and text is in English language. ( X ) YES ( ) NO

**Vehicle Placard** and, if provided, **Tire Inflation Pressure Label** are permanently affixed. (X) YES () NO

# DATA SHEET 4 (2 of 3) VEHICLE PLACARD AND TIRE INFLATION PRESSURE LABEL

### **Vehicle Placard** Information:

	Combined weight of occupants and cargo 408 kg (900 lbs)								
	Seating Cap	pacity: Tota	l <u>5</u> ;	Front 2	<u>;</u>	Rear _	3_		
	Is the number capacity?	er of belted s	eating po	ositions the sa			peled (	_	
	Is the tire size	ze and press	ure provi	ded?	(X)	YES	( ) N	IO	
	Tire Informat	ion:							
	Tire Size:		Front _	P215/70R16	;	Rear	P215	5/70R16	_
	Tire Inflation	n Pressure:	Front _	230 kPa (33 բ	psi) ;	Rear	230 I	kPa (33 psi)	_
	Are the size	s of the insta	lled tires	the same as	the si	zes of th			
		ed cold tire infold tire infold tire inflation	•	essure equal ure?	to or I	ess thar	n the s	idewall labe	led
	Front axle:	(X)YES	( ) NC	Rear ax	kle:	(X)Y	ES	( ) NO	
Vehicle	Certification	<b>Label</b> inforn	nation:						
		Tire Size		Rim Size	I	Rim Suit	table f	or Tire?*	
	Front Axle	P215/70R16	<u> </u>	16x6½			Yes		
	Rear Axle	P215/70R16	<u> </u>	16x6½			Yes		
	*Referenced	d source used	d for tire/	rim match vei	rificati	on:			
	2008 Tire a	and Rim Asso	ciation Y	'earbook					

# DATA SHEET 4 (3 of 3) VEHICLE PLACARD AND TIRE INFLATION PRESSURE LABEL

Is (Are) tire size(s) listed on the vehicle placard and/or tire inflation pressure label also listed on the certification label with suitable rim size? (X) YES () NO

LABELED TIRE CAPACITY AT SPECIFIED PRESSURE							
GVWR 1,920 kg (4,233 lbs)	FRONT AXLE	REAR AXLE					
A. GAWR from certification label	1,017 kg (2,241 lbs)	911 kg (2,008 lbs)					
B. Tire load rating of labeled tire size at labeled inflation pressure*	755 kg (1,665 lbs)	755 kg (1,665 lbs)					
C. Reduced tire load rating if applicable**	686 kg (1,514 lbs)	686 kg (1,514 lbs)					
D. (No. of tires) x (Tire load rating de-rated if appropriate)	1,372 kg (3,026 lbs)	1,372 kg (3,026 lbs)					
Is "D" equal to or greater than "A"?	Yes	Yes					

<sup>\*</sup>Reference source used for determining load rating:

#### 2008 Tire and Rim Association Yearbook

DATA INDICATES COMPLIANCE: PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Todd P. Groghan DATE: February 23, 2009

APPROVED BY: Kenneth H. Yates

<sup>\*\*</sup> If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck or bus, the tire's load rating is reduced by dividing by 1.10.

# DATA SHEET 5 (1 of 4) CURB WEIGHT, NORMAL LOAD WEIGHT & MAXIMUM VEHICLE WEIGHT

/EHICLE MAKE/MODEL/BODY STYLE: 2009 Nissan Rogue four-door MPV								
VEHICLE NH	/EHICLE NHTSA NUMBER: C95205 VIN: JN8AS58T59W320598							
LABORATOR	RY: US DOT	San Angelo	Test Fac	cility TE	ST DATE:	February 2	25, 2009	
Full Fluid Levels: Fuel <u>Full</u> Coolant <u>Full</u> Other Fluids* <u>Full</u> Transmission, windshield washer, brake fluid, engine oil, etc.								
Fire Pressures: LF <u>230 kPa (33 psi)</u> LR <u>230 kPa (33 psi)</u>								
(cold, prior to vehicle)	loading	RF	230 kPa	(33 psi)	RR	230 kPa	(33 psi)	
	ED CURB WEI			LED OPT	IONS AND A	CCESSOR	IES	
	ed Unloaded Ve	_						
	LF 455 k							
	RF 442 k			_			<del></del>	
Front A	xle <u>897 k</u>	g (1,979 l	b) R	ear Axle _	597 kg	(1,316 lb)		
	Total Vehicl	e Weight _	1,494	kg (3,29	5 lb)			
B. MEASURI	ED VEHICLE N	IORMAL L	OAD WE	IGHT				
(1) S	Seating Capaci	ty from Vel	nicle Placa	ard = <u>5</u>				
(2) N	Normal Load N	umber of C	ccupants	3				
C	Occupant Distri	bution:	Front Se	at <u>2</u>	Second Sea	t <u>1</u>		
	Total Normal O # of occupants x			1 kg (450	) lb)			
(4) N	Measured Norm	nal Load or	n Axles					
	LF 499 k	g (1,101 l	b)	LR _	351 kg	(774 lb)		
	RF <u>484 k</u>	g (1,067 l	b)	RR _	364 kg	(803 lb)		
Front A	xle 983 k	g (2,168 l	b) R	ear Axle _	715 kg	(1,577 lb)		
	Total Vehicle Weight1,698 kg (3,745 lb)							

# DATA SHEET 5 (2 of 4) CURB WEIGHT, NORMAL LOAD WEIGHT & MAXIMUM VEHICLE WEIGHT

(5)	Calculated Vehicle Normal Load on the Tire	
	Front Tires [measured front axle normal load/2] = _	492 kg (1,084 lbs)
	Rear Tires [measured rear axle normal load/2] = _	358 kg (789 lbs)

(6) Measured Normal Load on Tire vs. Value of 94% of Load Rating for that Tire at Specified Pressure

MEASURED NORMAL LOAD ON TIRE VS. VALUE OF 94% OF LOAD RATING FOR THAT TIRE AT SPECIFIED PRESSURE						
FRONT AXLE REAR AXLE						
A. Calculated Vehicle Normal Load on the Tire from (5)	492 kg (1,084 lbs)	358 kg (789 lbs)				
B. Tire load rating of installed tire size at recommended inflation pressure*	755 kg (1,665 lbs)	755 kg (1,665 lbs)				
C. Reduced tire load rating**	686 kg (1,514 lbs)	686 kg (1,514 lbs)				
D. 94% of reduced tire load rating	645 kg (1,423 lbs)	645 kg (1,423 lbs)				
Is "D" equal to or greater than "A"?	Yes	Yes				

<sup>\*</sup>Reference source used for tire/rim match verification:

2008 Tire and Rim As	sociation Yearbook	

Vehicle Normal Load on the tire is not greater than 94% of the Recommended Cold Inflation Load Rating.

PASS/FAIL

Front Tires PASS
Rear Tires PASS

<sup>\*\*</sup> If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck or bus, the tire's load rating is reduced by dividing by 1.10.

# DATA SHEET 5 (3 of 4) CURB WEIGHT, NORMAL LOAD WEIGHT & MAXIMUM VEHICLE WEIGHT

C.	MEASU	RED \	/EHICLE WE	IGHT WITH	H FULL O	CCUP	PANT LOAD
	Seati	ng Ca	pacity: Tota	al <u>5</u> ;	Front 2	_ ;	Rear 3
		•	ant Load: nts x 68 KG p			4 KG	per student occupant]
		LF	510 kg	(1,124 lb)		LR	409 kg (902 lb)
		RF	496 kg	(1,093 lb)		RR	420 kg (926 lb)
	Front	Axle	1,006 kg	(2,217 lb)	Rear	Axle	829 kg (1,828 lb)
		Т	otal Vehicle \	Weight	1,835 kg	(4,0	45 lb)
D.	MEASU	RED N	MAXIMUM V	EHICLE LO	AD WEIG	НТ	
	(1)	Vehic	cle Capacity	Weight (fror	n placard)		408 kg (900 lbs)
	(2)	Full (	Occupant Loa	ad (from abo	ove)		340 kg (750 lbs)
	(3)	Lugg	age/Cargo L	oad (subtra	ct (2) from	(1))	68 kg (150 lbs)
	(4)	Meas	sured Vehicle	Maximum	Load on A	xles	
		LF	506 kg	(1,116 lb)		LR	446 kg (984 lb)
		RF	493 kg	(1,086 lb)		RR	458 kg (1,009 lb)
	Front	Axle	999 kg	(2,202 lb)	Rear	Axle	904 kg (1,993 lb)
		Т	otal Vehicle \	Neight	1.903 kg	(4.19	95 lb)

### DATA SHEET 5 (4 of 4) VEHICLE WEIGHT DISTRIBUTION

ITEM			Unloaded Vehicle Vehicle Weight with Normal Occup		cupant	with		Vehicle Maximum Weight with Occupants and Cargo	
		Measured	Over- load	Measured	Over- load	Measured	Over- load	Measured	Over- load
Left Front Tire	686 kg	455 kg	no	499 kg	no	510 kg	no	506 kg	no
	(1,514 lbs)	(1,004 lbs)		(1,101 lbs)		(1,124 lbs)		(1,116 lbs)	
Right Front Tire	686 kg	442 kg	no	484 kg	no	496 kg	no	493 kg	no
	(1,514 lbs)	(975 lbs)		(1,067 lbs)		(1,093 lbs)		(1,086 lbs)	
Front Axle (GAWR)	1,017 kg	897 kg	no	983 kg	no	1,006 kg	no	999 kg	no
	(2,241 lbs)	(1,979 lbs)		(2,168 lbs)		(2,217 lbs)		(2,202 lbs)	
Left Rear Tire	686 kg	293 kg	no	351 kg	no	409 kg	no	446 kg	no
	(1,514 lbs)	(646 lbs)		(774 lbs)		(902 lbs)		(984 lbs)	
Right Rear Tire	686 kg	304 kg	no	364 kg	no	420 kg	no	458 kg	no
	(1,514 lbs)	(670 lbs)		(803 lbs)		(926 lbs)		(1,009 lbs)	
Rear Axle (GAWR)	911 kg	597 kg	no	715 kg	no	829 kg	no	904 kg	no
,	(2,008 lbs)	(1,316 lbs)		(1,577 lbs)		(1,828 lbs)		(1,993 lbs)	
Total Vehicle (GVWR)	1,920 kg	1,494 kg	no	1,698 kg	no	1,835 kg	no	1,903 kg	no
*\/ahiala and avla	(4,233 lbs)	(3,295 lbs)		(3,745 lbs)		(4,045 lbs)		(4,195 lbs)	

\*Vehicle and axle weight ratings (GVWR & GAWR) are located on the vehicle certification label. Vehicle tire load ratings are based upon the inflation pressure specified on the Vehicle Placard or Tire Inflation Pressure Label for each respective axle, as determined from the appropriate Tire and Rim reference manual. If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck, or bus, the tire's load rating is reduced by dividing by 1.10

DATA INDICATES COMPLIANCE:		PASS/FAIL:	PASS
REMARKS:	None		

RECORDED BY: Todd P. Groghan DATE: February 25, 2009

APPROVED BY: Kenneth H. Yates

# DATA SHEET 6 (1 of 2) OWNER'S MANUAL REQUIREMENTS

VEHICLE MAKE/MODEL/BODY STYLE:2	2009 Niss	an Rogue	four-door MPV	_
VEHICLE NHTSA NOC95205	VIN:	JN8A	S58T59W320598	_
LABORATORY: US DOT San Angelo Test Facili	itv TES	T DATE:	February 23, 2009	

### Owner's Manual Discusses:

Part 575.6(a) Paragraph	Required Discussion Topic	Discussed in Manual? (YES/NO)	Page Numbers
(4)(i)	Tire labeling, including a description and explanation of each marking on the tires provided with the vehicle, and information about the location of the Tire Identification Number (TIN).	YES	8-33, 34
(4)(ii)	(A) Description and explanation of recommended cold tire inflation pressure.	YES	8-32
	(B) Description and explanation of FMVSS 110 Vehicle Placard and Tire Inflation Pressure Label and their location(s).	YES	8-29, 30
	(C) Description and explanation of adverse safety consequences of under-inflation including tire failure.	YES	5-3, 8-30
	(D) Description and explanation for measuring and adjusting air pressure to achieve proper inflation.	YES	8-32
(4)(iii)	Glossary of tire terminology, including "cold tire pressure," maximum inflation pressure," and "recommended inflation pressure," and all non-technical terms defined in S3 of FMVSS 110 & 139.	YES	8-31, 34
(4)(iv)	Tire care, including maintenance and safety practices.	YES	8-29, 30
(4)(v)	(A) Description and explanation of locating and understanding load limit information, total load capacity, seating capacity, towing capacity, and cargo capacity.	YES	9-14, 15
	(B) Description and explanation for calculating total and cargo load capacities with varying seating configurations including quantitative examples showing/illustrating how the vehicle's cargo and luggage capacity decreases as the combined number and size of occupants increases.	YES	9-14, 15
	(C) Description and explanation for determining compatibility of tire and vehicle load capabilities.	YES	9-13
	(D) Description and explanation of adverse safety consequences of overloading on handling and stopping and on tires.	YES	9-17

## DATA SHEET 6 (2 of 2) OWNER'S MANUAL REQUIREMENTS

The following statement, in the English language, is provided verbatim in the Owner's Manual. Reference Part 575.6(a)(5)

YES ( X )

NO ( )

### **Steps for Determining Correct Load Limit**

- (1) Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
- (2) Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- (3) Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
- (4) The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400-750 (5x150) = 650 lbs.)
- (5) Determine the combined weight of the luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
- (6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

DATA INDIC	PASS/FAIL: _	PASS	
REMARKS:	None		

RECORDED BY: Todd P. Groghan DATE: February 23, 2009

APPROVED BY: Kenneth H. Yates

### TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

		MODEL/		NEXT
<b>EQUIPMENT</b>	DESCRIPTION	SERIAL NO	CAL. DATE	CAL. DATE
PLATFORM	HOWE RICHARDSON	MODEL #6401	8/5/2008	8/5/2009
SCALE		SERIAL #0181-		
(BALLAST)		5509-26		
AIR PRESSURE	ASHCROFT	MODEL #D1005PS	11/20/2008	11/20/2009
GAUGE	GENERAL PURPOSE	02L 100 PSI		
	DIGITAL GAUGE	SERIAL #20017398-		
		01		
FLOOR SCALES	INTERCOMP SW	PART #100156	8/5/2008	8/5/2009
(VEHICLE)	DELUXE SCALES	SERIAL #27032382		

SECTION 5 PHOTOGRAPHS



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.1 3/4 FRONT VIEW FROM LEFT SIDE OF VEHICLE



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.2 % REAR VIEW FROM RIGHT SIDE OF VEHICLE

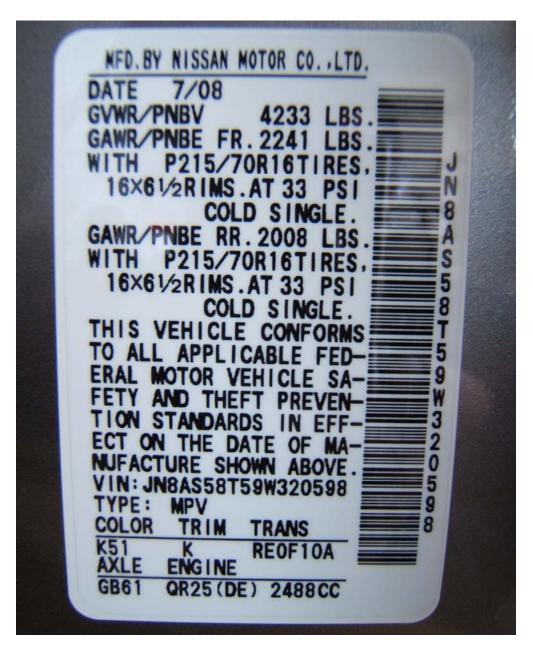


FIGURE 5.3 VEHICLE CERTIFICATION LABEL

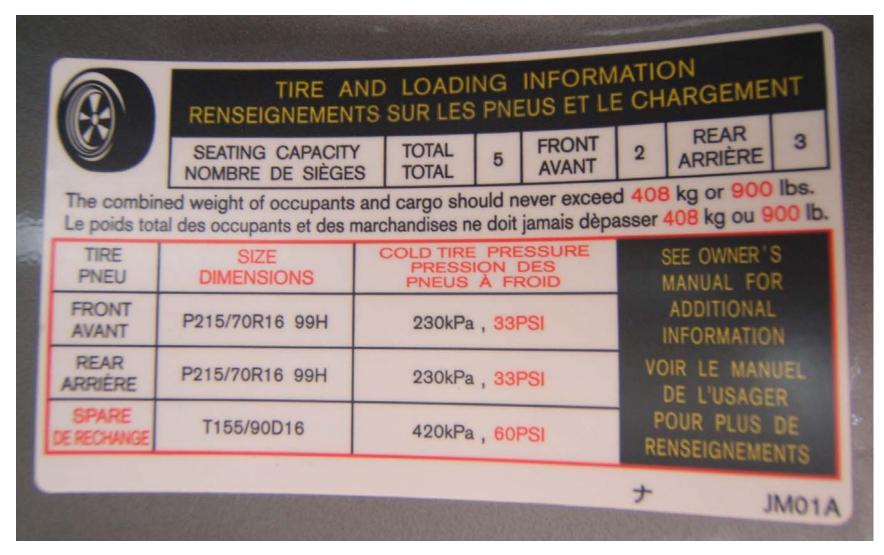


FIGURE 5.4 VEHICLE PLACARD



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.5 TIRE SHOWING BRAND



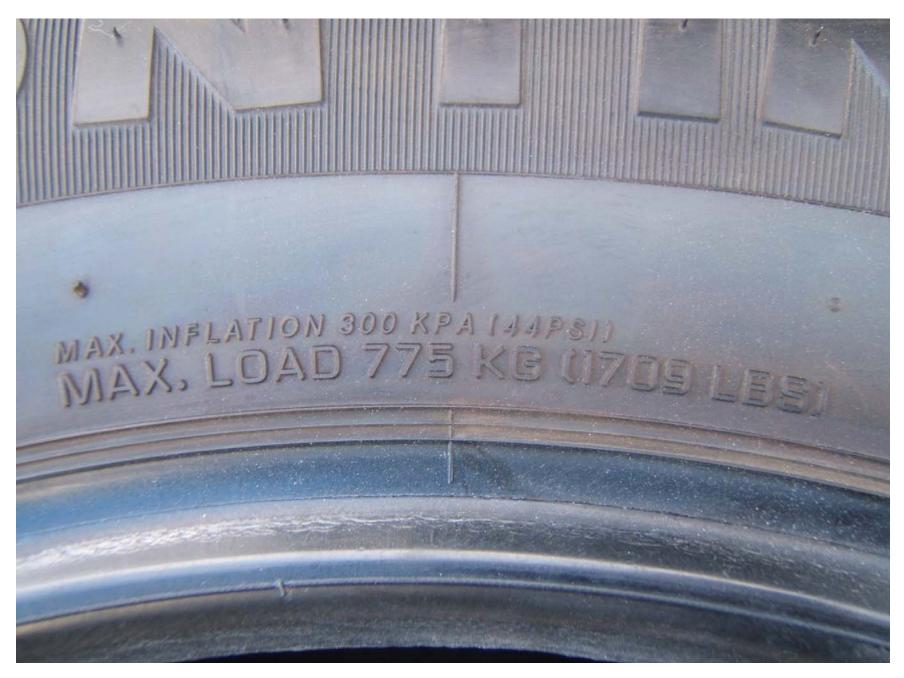
2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.6 TIRE SHOWING MODEL



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.7 TIRE SHOWING SIZE, LOAD INDEX, AND SPEED SYMBOL



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.8 TIRE SHOWING MAX LOAD RATING AND MAX INFLATION PRESSURE



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.9 TIRE SHOWING SERIAL NUMBER



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS 110

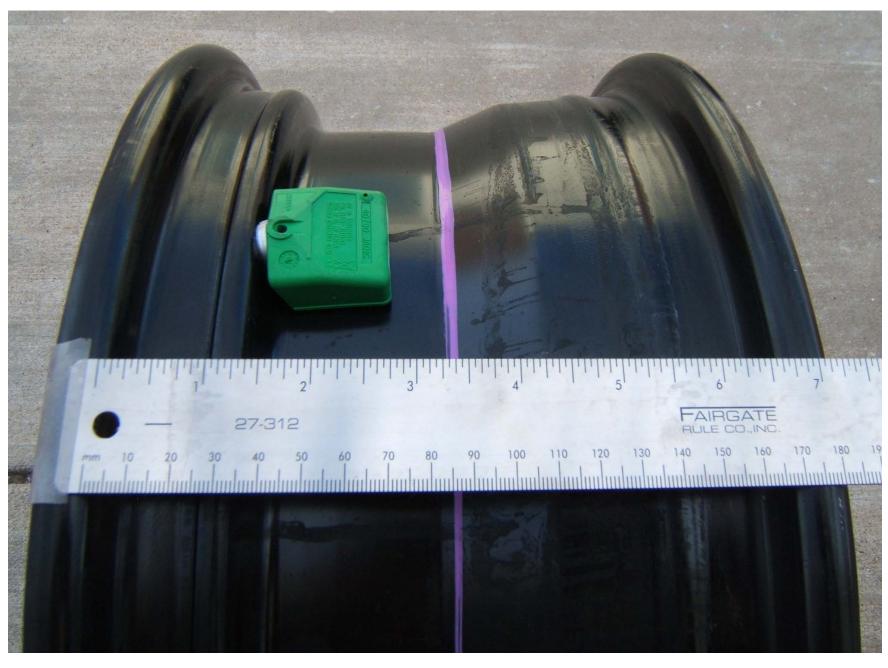
FIGURE 5.10 RIM SHOWING LETTER DESIGNATION FOR SOURCE OF PUBLISHED DIMENSIONS, SIZE, DOT NAME, MANUFACTURER'S SYMBOL, DATE OF MANUFACTURE, AND OTHER RIM MARKINGS





2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.11 OTHER RIM MARKINGS



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.12 RIM CONTOUR FOR FULL WIDTH OF CROSS SECTION



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.13 VEHICLE REAR SEAT BALLASTED FOR NORMAL LOAD

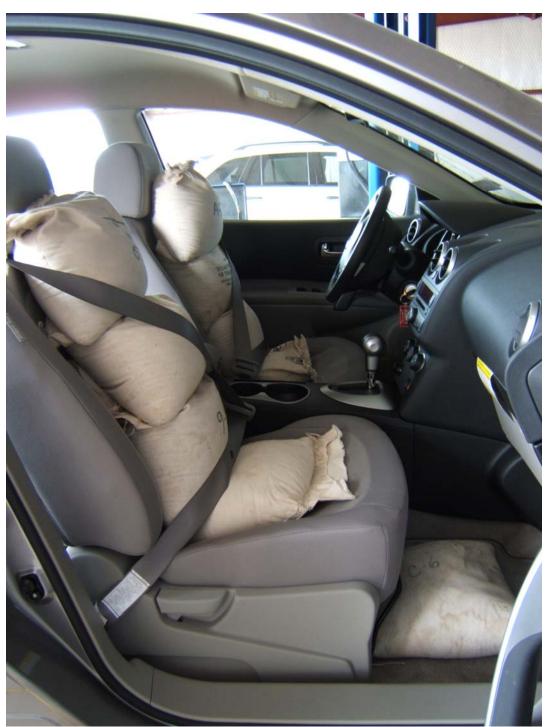


FIGURE 5.14 VEHICLE FRONT SEAT BALLASTED FOR NORMAL AND MAXIMUM LOADS



FIGURE 5.15 VEHICLE REAR SEAT BALLASTED FOR MAXIMUM LOAD



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.16 REAR OF VEHICLE SHOWN BALLASTED FOR MAXIMUM LOAD



2009 NISSAN ROGUE NHTSA NO. C95205 FMVSS NO. 110

FIGURE 5.17 VEHICLE ON WEIGHT SCALES