



TECHNICAL RECONSTRUCTION ATTACHMENT

Vehicle Specifications Report Nissan Rogue

Delray Beach, Florida

HWY23MH006

(4 pages)

ERIC GREGSON

NTSB - OFFICE OF HIGHWAY SAFETY

490 L'ENFANT PLAZA EAST SW

WASHINGTON DC 20594

3/3/2023

2015 NISSAN ROGUE 4 DOOR 4X2 UTILITY

Curb Weight:	<input type="text" value="3429"/>	lbs.	<input type="text" value="1555"/>	kg.
Curb weight Distribution -	Front: <input type="text" value="56"/>	%	Rear: <input type="text" value="44"/>	%
Gross Vehicle Weight Rating:	<input type="text" value="4489"/>	lbs.	<input type="text" value="2036"/>	kg.
Number of Tires on Vehicle:	<input type="text" value="4"/>			
Drive wheels:	<input type="text" value="FRONT"/>			

Horizontal Dimensions

	Inches	Feet	Meters
Total Length	<input type="text" value="182"/>	<input type="text" value="15.17"/>	<input type="text" value="4.62"/>
wheelbase:	<input type="text" value="107"/>	<input type="text" value="8.92"/>	<input type="text" value="2.72"/>
Front Bumper to Front Axle:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Front Bumper to Front of Front Well:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Front Bumper to Front of Hood:	<input type="text" value="7"/>	<input type="text" value="0.58"/>	<input type="text" value="0.18"/>
Front Bumper to Base of windshield:	<input type="text" value="42"/>	<input type="text" value="3.50"/>	<input type="text" value="1.07"/>
Front Bumper to Top of windshield:	<input type="text" value="75"/>	<input type="text" value="6.25"/>	<input type="text" value="1.91"/>
Rear Bumper to Rear Axle:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Rear Bumper to Rear of Rear Well:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Rear Bumper to Rear of Trunk:	<input type="text" value="3"/>	<input type="text" value="0.25"/>	<input type="text" value="0.08"/>
Rear Bumper to Base of Rear Window:	<input type="text" value="6"/>	<input type="text" value="0.50"/>	<input type="text" value="0.15"/>

Width Dimensions

Maximum width:	<input type="text" value="72"/>	<input type="text" value="6.00"/>	<input type="text" value="1.83"/>
Front Track:	<input type="text" value="63"/>	<input type="text" value="5.25"/>	<input type="text" value="1.60"/>
Rear Track:	<input type="text" value="63"/>	<input type="text" value="5.25"/>	<input type="text" value="1.60"/>

Vertical Dimensions

Height:	<input type="text" value="66"/>	<input type="text" value="5.50"/>	<input type="text" value="1.68"/>
Ground to -			
Front Bumper (Top)	<input type="text" value="25"/>	<input type="text" value="2.08"/>	<input type="text" value="0.64"/>
Headlight - center	<input type="text" value="34"/>	<input type="text" value="2.83"/>	<input type="text" value="0.86"/>
Hood - top front:	<input type="text" value="37"/>	<input type="text" value="3.08"/>	<input type="text" value="0.94"/>
Base of Windshield	<input type="text" value="44"/>	<input type="text" value="3.67"/>	<input type="text" value="1.12"/>
Rear Bumper - top:	<input type="text" value="26"/>	<input type="text" value="2.17"/>	<input type="text" value="0.66"/>
Trunk - top rear:	<input type="text" value="42"/>	<input type="text" value="3.50"/>	<input type="text" value="1.07"/>
Base of Rear Window:	<input type="text" value="48"/>	<input type="text" value="4.00"/>	<input type="text" value="1.22"/>

2015 NISSAN ROGUE 4 DOOR 4X2 UTILITY

Interior Dimensions

	Inches	Feet	Meters
Front Seat Shoulder width	56	4.67	1.42
Front Seat to Headliner	42	3.50	1.07
Front Leg Room - seatback to floor (max)	43	3.58	1.09
Rear Seat Shoulder width	56	4.67	1.42
Rear Seat to Headliner	37	3.08	0.94
Front Leg Room - seatback to floor (min)	38	3.17	0.97

Seatbelts: **3pt - front and rear**
 Airbags: **FRONT SEAT AIRBAGS + SIDE AIRBAGS**

Steering Data

Turning Circle (Diameter)
 Steering Ratio: :1
 Wheel Radius:
 Tire Size (OEM): **225/65R17**

Acceleration & Braking Information

Brake Type: **BRAKES UNKNOWN**
 ABS System: **ALL WHEEL ABS**

Braking, 60 mph to 0 (Hard pedal, no skid, dry pavement):
 d = ft t = sec a = ft/sec² G-force =

Acceleration:
 0 to 30mph t = sec a = ft/sec² G-force =
 0 to 60mph t = sec a = ft/sec² G-force =
 45 to 65mph t = sec a = ft/sec² G-force =

Transmission Type: **AUTOMATIC**

Notes:
 Federal Bumper Standard Requirements: **No Requirement**

N.S.D.C = **2014 - 2020**

2015 NISSAN ROGUE 4 DOOR 4X2 UTILITY

Other Information

Tip-Over Stability Ratio =
NHTSA Star Rating (calculated)

1.20

Reasonably Stable

Center of Gravity (No Load):

behind front axle

=

Inches

47.08

Feet

3.92

Meters

1.20

in front of rear axle

=

59.92

4.99

1.52

from side of vehicle

=

36.00

3.00

0.91

from ground

=

26.33

2.19

0.67

from front corner

=

from rear corner

=

from front bumper

=

from rear bumper

=

Moments of Inertia Approximations (No Load):

Yaw Moment of Inertia

=

lb*ft*sec²

2188.87

kg*m*sec²

302.62

Pitch Moment of Inertia

=

2183.48

301.88

Roll Moment of Inertia

=

519.38

71.81

Front Profile Information

Angle Front Bumper to Hood Front

=

59.7

deg

Angle Front of Hood to windshield Base

=

11.3

deg

Angle Front of Hood to windshield Top

=

21.7

deg

Angle of windshield

=

31.2

deg

Angle of Steering Tires at Max Turn

=

deg

First Approximation Crush Factors:

Speed Equivalent (mph) of Kinetic Energy (KE) used in causing crush of indentation may be evaluated using the following formula, the appropriated Crush Factor (CF), and Maximum Indentation Depth (MID), in feet:

$$V(\text{mph}) = \sqrt{(30 * CF * \text{MID})}$$

KE Equivalent Speed (Front/Rear/Side) = 21 CF

Bullet vehicle IMPACT SPEED estimation
based on TARGET VEHICLE damage ONLY = 27 CF
(Tested for Rear/Side Impact only)

These CF values are based upon analysis of NHTSA Barrier Crash data, and from over 1000 vehicle accidents where independent evaluation of speed was possible. (These are NOT 'A', 'B', 'C', or 'G' values)

The rear Impact data with more then 2-3 inches of crush damage should be looked at carefully, since some vehicles have very weak trunk & fender strength. Therefore, on some cars, especially GM, you estimate from the rear crush data may be high by as much as 4-5 mph (on a crush of 18 inches).