

REPORT NUMBER TR-P25003-04-NC

**NEW CAR ASSESSMENT PROGRAM
SIDE IMPACT TEST**

**NISSAN MOTOR COMPANY, LTD.
2005 NISSAN MURANO S
5-DOOR MPV**

NHTSA NUMBER: M55204

**Prepared By:
KARCO ENGINEERING, LLC
9270 HOLLY ROAD
ADELANTO, CALIFORNIA 92301**



FEBRUARY 3, 2005

FINAL REPORT

**PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OFFICE OF CRASHWORTHINESS STANDARDS
RULEMAKING
MAIL CODE: NVS-111
400 SEVENTH STREET, SW, ROOM 5311
WASHINGTON, D.C. 20590**

This final test report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, in response to Contract Number DTNH22-03-D-32005.

This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names or products are mentioned it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

Prepared by: _____
Mr. Yednesh Parnaik, Project Engineer
KARCO Engineering, LLC

Date: 2/17/05

Reviewed by: _____
Mr. Michael L. Dunlap, Quality Assurance Manager
KARCO Engineering, LLC

Date: 2/17/05

Approved by: _____
Mr. Frank D. Richardson, Program Manager
KARCO Engineering, LLC

Date: 2/17/05

FINAL REPORT ACCEPTED BY:

Manager, Side Impact NCAP

Date of Acceptance

Technical Report Documentation Page

1. Report No. TR-P25003-04-NC	2. Government Accession No.	3. Recipients Catalog No.																					
4. Title and Subtitle Final Report of New Car Assessment Program Side Impact Testing of a 2005 Nissan Murano S 5-Door MPV NHTSA No. M55204		5. Report Date February 3, 2005																					
		6. Performing Organization Code KAR																					
7. Authors Mr. Yednesh Parnaik, Project Engineer, Karco Mr. Frank Richardson, Project Manager, Karco		8. Performing Organization Report No. TR-P25003-04-NC																					
9. Performing Organization Name and Address Karco Engineering, LLC 9270 Holly Rd. Adelanto, CA, 92301		10. Work Unit No.																					
		11. Contract or Grant No. DTNH22-03-D-32005																					
12. Sponsoring Agency Name and Address U. S. Department of Transportation National Highway Traffic Safety Administration Rulemaking Office of Crashworthiness Standards Mail Code NVS-111 400 Seventh Street, SW, Room 5311 Washington, D.C 20590		13. Type of Report and Period Covered Final Test Report Base Year																					
		14. Sponsoring Agency Code DOT/NHTSA/NRM/OCS																					
15. Supplementary Notes																							
16. Abstract A 55/28 km/h 90 deg. Moving Deformable Barrier Side Impact NCAP Test was conducted on the subject 2005 Nissan Murano S 5-Door MPV in accordance with the specifications of the Office of Crash Worthiness Standards Test Procedures for the generation of consumer information on vehicle side crash protection. The test was conducted at KARCO Engineering, LLC in Adelanto, California, on February 3, 2005. The impact velocity of the Moving Deformable Barrier was 61.81 km/h (38.41 mph), and the outside ambient temperature at the struck (driver's) side of the vehicle was 13.3 deg. C. The target vehicle's maximum post-test static crush was 360 mm located at level 3. The test vehicle's occupant performance data is as follows: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 35%;">Measurement Description</th> <th style="width: 15%;">Driver SID/HIII</th> <th style="width: 15%;">Pass. SID/HIII</th> <th style="width: 35%;"></th> </tr> </thead> <tbody> <tr> <td>Left Upper Rib (LUR) G's</td> <td style="text-align: center;">46.2</td> <td style="text-align: center;">54.5</td> <td rowspan="5" style="background-color: #cccccc;"></td> </tr> <tr> <td>Left Lower Rib (LLR) G's</td> <td style="text-align: center;">41.2</td> <td style="text-align: center;">49.1</td> </tr> <tr> <td>Lower Spine (T₁₂) G's</td> <td style="text-align: center;">51.3</td> <td style="text-align: center;">53.6</td> </tr> <tr> <td>Thoracic Trauma Index (TTI) G's</td> <td style="text-align: center;">49.0</td> <td style="text-align: center;">54.0</td> </tr> <tr> <td>Pelvis (PEV) G's</td> <td style="text-align: center;">81.7</td> <td style="text-align: center;">92.1</td> </tr> </tbody> </table>				Measurement Description	Driver SID/HIII	Pass. SID/HIII		Left Upper Rib (LUR) G's	46.2	54.5		Left Lower Rib (LLR) G's	41.2	49.1	Lower Spine (T ₁₂) G's	51.3	53.6	Thoracic Trauma Index (TTI) G's	49.0	54.0	Pelvis (PEV) G's	81.7	92.1
Measurement Description	Driver SID/HIII	Pass. SID/HIII																					
Left Upper Rib (LUR) G's	46.2	54.5																					
Left Lower Rib (LLR) G's	41.2	49.1																					
Lower Spine (T ₁₂) G's	51.3	53.6																					
Thoracic Trauma Index (TTI) G's	49.0	54.0																					
Pelvis (PEV) G's	81.7	92.1																					
17. Key Words New Car Assessment Program (NCAP) Side Impact Moving Deformable Barrier (MDB) Side Impact Dummy (SID/HIII)		18. Distribution Statement Copies of this report are available from: National Highway Traffic Safety Admin. NHTSA Technical Reference Division 400 Seventh St., SW, Room 5108 Washington, DC 20590																					
19. Security Classification of this report UNCLASSIFIED	20. Security Classification of this page UNCLASSIFIED	21. No. of Pages 95	22. Price																				

Form DOT F1700.7 (8-72)

TR-P25003-04-NC

TABLE OF CONTENTS

Section		Page
1	Purpose and Test Procedure	1
2	Summary of Side Impact Test	2
3	Occupant and Vehicle Information Sheets	4

Data Sheet No.		Page
1	General Test and Vehicle Parameter Data	5
2	Test Vehicle Summary of Results	10
3	Moving Deformable Barrier (MDB) Summary of Results	11
4	Post-Test Observations	12
5	SID/HIII Injury Criteria and Sensor Data	13
6	Vehicle Pre-Test and Post-Test Measurements	15
7	SID/HIII Longitudinal Clearance Dimensions	16
8	SID/HIII Lateral Clearance Dimensions	17
9	Vehicle Side Measurements	18
10	Vehicle Exterior Crush Profiles	19
11	Vehicle Damage Profile Distances	21
12	Deformable Barrier Honeycomb Face Static Crush	22
13	Vehicle Accelerometer Locations and Data Summary	23
14	MDB Accelerometer Location and Data Summary	25
15	High Speed Camera Locations and Data	26
16	FMVSS 301 Fuel System Integrity Post Impact Data	27
17	FMVSS 301 Static Rollover Data Sheet	28

Appendix		
A	Photographs	A
B	SID/HIII, Vehicle and MDB Response Data	B
C	SID/HIII Configuration and Performance Verification Data	C
D	Instrumentation and Data Channel Assignments	D

SECTION 1

PURPOSE AND TEST PROCEDURE

1.1 PURPOSE

This Side Impact NCAP test is conducted as part of the FY 2005 test program sponsored by the National Highway Traffic Safety Administration (NHTSA), under contract No. DTNH22-03-D-32005. The purpose of this test is to generate comparative side impact data on a 2005 Nissan Murano S 5-Door MPV manufactured by Nissan Motor Company, Ltd.

1.2 TEST PROCEDURE

The side impact test was conducted in accordance with the current National Highway Traffic Safety Administration (NHTSA), Office of Crashworthiness Standards (OCS), laboratory test procedure NCAP Side Impact Testing, dated November 2002. The procedures for receiving, inspection, testing, and reporting of test results are described in the test procedures and are not repeated in this report.

SECTION 2

SUMMARY OF SIDE IMPACT TEST

2.1 SUMMARY OF SIDE IMPACT NCAP TEST

A model year 2005 Nissan Murano S 5-Door MPV was impacted on the left (driver's) side by a Moving Deformable Barrier (MDB) which was moving forward in a 27° crabbed position to the tow road guidance system at a velocity of 61.81 km/h. The specified impact velocity range is from 61.1 to 62.7 km/h. The test (target) vehicle was stationary and positioned 63° to the line of forward motion. The weight of the vehicle as tested was 1969 kg and the test weight of the MDB was 1361 kg. The test was conducted at KARCO Engineering, LLC in Adelanto, California, on February 3, 2005.

SUPPLEMENTAL RESTRAINT INFORMATION

Restraint Type	Left Front Driver		Left Rear (Passenger)	
	Installed	Operation	Installed	Operation
Front Airbag	Yes	No	No	
Side Torso Airbag	Yes	Yes	No	
Head Airbag	No		No	
Curtain Airbag	Yes	Yes	Yes	Yes

Three (3) real-time camera and eleven (11) high-speed cameras were used to document the impact event. Camera locations and pertinent camera information is documented in the data sheets. Pre- and post-test photographs of the vehicle and SID/HIIIs can be found in Appendix A. Two 50th percentile adult male Side Impact Dummies, Hybrid III (SID/HIIIs) were placed in the driver's and left rear passenger designated seating positions according to the test procedure. Each SID/HIII is instrumented with contact switches on the pelvis, thorax and six-axis neck load cells, and fourteen accelerometers in the following locations:

- Left Upper Rib (LUR) uni-axial accelerometer (Y-axis primary and redundant)
- Left Lower Rib (LLR) uni-axial accelerometer (Y-axis primary and redundant)
- Lower Thoracic Spine (T12) uni-axial accelerometer (Y-axis primary and redundant)
- Pelvic (PEV) section uni-axial accelerometer (Y-axis primary and redundant)
- Head Center of Gravity (CG) tri-axial accelerometers (X, Y, and Z axes primary and redundant)

The test vehicle was instrumented with twenty-six (26) structural accelerometers and the MDB was instrumented with five (5) accelerometers and one (1) contact switch on the right bumper to compare left side to right side bumper impact timing. All data channels were recorded with the fully self contained on-board Data Acquisition System (DAS). The data was digitally sampled at 10,000 samples per second and processed per Appendix V of the Test Procedure.

2.2 GENERAL COMMENTS

The driver and passenger door remained latched, although there was separation near the top sill (Figure 66 and Figure 69). The test vehicle sustained a maximum static crush of 360 mm at level 3, 1500 mm rearward of the left vertical impact point. The driver SID/Hybrid III, Serial No. 274 and the passenger SID/Hybrid III, Serial No. 275 were calibrated just prior to this test. The SID/Hybrid III injury criteria is summarized as follows:

Measurement	Units	Driver	Passenger
Thoracic Trauma Index (TTI)	G's	49.0	54.0
Peak Pelvic G's (PEV)	G's	81.7	92.1

Tests summaries and post-test observations are presented in Section 3. Appendix A contains the still photograph prints. Appendix B contains the driver and passenger SID/HIIIs, vehicle, and MDB response data traces. Appendix C contains the SID Configuration and performance verification data. Appendix D contains the test equipment information.

SECTION 3

OCCUPANT AND VEHICLE INFORMATION SHEETS

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05

CONVERSION FACTORS USED IN THIS REPORT*

Quantity	Typical Application	Std Units	Metric Unit	Multiply By
Mass	Vehicle Weight	lb	kg	0.4536
Linear Velocity	Impact Velocity	mile/h	km/h	1.609
Length or Distance	Measurements	in	mm	25.4
Volume	Fuel Systems	gal	liter	3.785
Volume	Small Fluids	oz	mL	29.573
Pressure	Tire Pressures	lbf/in ²	kPa	7.0
Volume	Liquid	gal	liter	3.785
Temperature	General Use	°F	°C	$=(t_f - 32)/1.8$
Force	Dynamic Forces	lbf	N	4.448
Moment	Torque	lbf-ft	Nm	1.355

* Based on the Recommended Practice in SAE J916, May 85

DATA SHEET NO. 1

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05

TEST VEHICLE INFORMATION AND OPTIONS

NHTSA No.	M55204	Anti-Lock Brakes	Yes
Make	Nissan	All Wheel Drive	No
Model	Murano	Power Steering	Yes
Body Style	5-Door MPV	Driver Front Airbag	Yes
Vin No.	JN8AZ08T75W308140	Driver Side Torso Airbag	Yes
Color	Tan	Driver Side Head Airbag	No
Delivery Date	1/31/2005	Driver Curtain Airbag	Yes
Odometer (miles)	44	Rear Pass. Airbag	No
Dealer	Connell Nissan	Rear Pass. Side Airbag	Yes
Transmission	Xtronic CVT*	Rear Pass. Head Airbag	No
Final Drive	Front	Rear Pass. Curtain Airbag	Yes
Type/No. Cyl.	V6	Pre-Tensioners	Yes
Engine Disp. (L)	3.5	Load Limiters	Yes
Engine Placement	Transverse	Bucket Seats	Yes
Roof Rack	Yes	Air Cond.	Yes
Sunroof/T-Top	No	AM/FM Cassette	Yes
Tinted Glass	Yes	Tilt Steering	Yes
Traction Control	Yes	Automatic Door Locks	Yes
Power Brakes	Yes	Power Windows	Yes
Front Disc	Yes	Power Seats	Yes
Rear Disc	Yes	Other	

* CVT - Continuously Variable Transmission

Does Owners Manual provide instructions to turn off automatics door locks.

Yes

DATA FROM CERTIFICATION LABEL

Manufactured By	Nissan Motor Company, Ltd.	GVWR (kg)	2204
Date of Manufacture	11/05	GAWR Front (kg)	1180
		GAWR Rear (kg)	1090

VEHICLE SEATING AND CAPACITY WEIGHT INFORMATION

Measured Parameter	Front	Rear	Third	Total
Type of Seats	Bucket	Bench		
Number of Occupants	2	3		5
Capacity Weight (VCW) (kg)				390
Cargo Weight (RCLW) (kg)				50

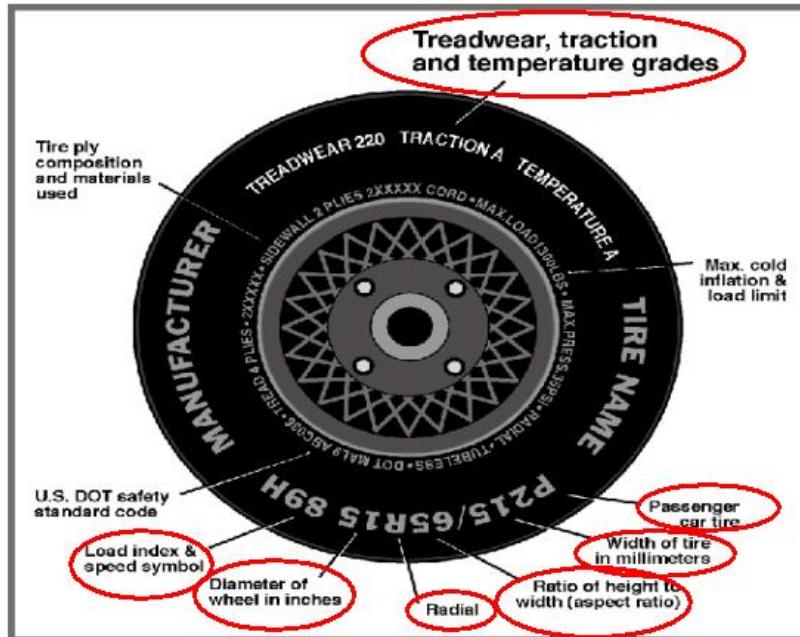
DATA SHEET NO. 1...(CONTINUED)

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

NHTSA No.: M55204
 Test Date: 2/3/05

Collect year, make, model, VIN, items circled in red, and tire manufacturer and tire name.



TIRE INFORMATION

Measured Parameter	Front	Rear
Max. Tire Pressure (kpa)	308	308
Cold Pressure (kpa)	231	231
Recommended Tire Size	P235/65 R18	P235/65 R18
Tire Size on Vehicle	P235/65 R18	P235/65 R18
Tire Manufacturer	Goodyear	Goodyear
Treadwear	360	360
Traction	A	A
Temperature Grades	B	B
Tire Plies Sidewall	2 Polyester	2 Polyester
Tire Plies Body	2 Polyester + 2 Steel + 1 Nylon	2 Polyester + 2 Steel + 1 Nylon
Load Index/Speed Symbol	104T	104T
Tire Material	Polyester + Steel + Nylon	Polyester + Steel + Nylon
DOT Safety Code Right	DOT U2VK-3MLR 4404	DOT U2VK-3MLR 4404
DOT Safety Code Left	DOT U2VK-3MLR 4404	DOT U2VK-3MLR 4404

DATA SHEET NO. 1...(CONTINUED)

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05

TEST VEHICLE WEIGHTS

	Units	As Delivered Weights (UWW)			As Tested Weights (ATW)		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	525	357		593	431	
Right	kg	525	358		546	399	
Ratio	%	59.5	40.5		57.9	42.2	
Totals	kg	1050	715	1765	1139	830	1969

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UWW)	kg	1765
Weight of 2 P572 ATD's	kg	161
Rated Cargo/Luggage Wt. (RCLW)	kg	50
Calculated Vehicle Target Wt. (TVTW)	kg	1976

TEST VEHICLE ATTITUDE AND CG

	Units	LF	RF	LR	RR	CG (aft of front axle)
As Delivered	mm	852	849	871	862	1144
As Tested	mm	830	838	843	848	1191
Fully Loaded	mm	827	836	834	836	

GENERAL TEST VEHICLE DATA

Measurement Description	Units	Value
Test Vehicle Wheel Base	mm	2825
Total Vehicle Length at Left Side	mm	3245
Total Vehicle Length at Centerline	mm	4780
Total Vehicle Length at Right Side	mm	3245
Weight of Ballast In Cargo Area	kg	
Amount of Stoddard Solvent in Fuel Tank	Liters	71.9

TEST VEHICLE VERTICAL IMPACT LINE DATA

Measurement Description	Units	Value
Test Vehicle Wheel Base	mm	2825
Target Impact Point Aft of Front Axle	mm	472
Actual Impact Point Aft of Front Axle	mm	462

DATA SHEET NO. 1...(CONTINUED)

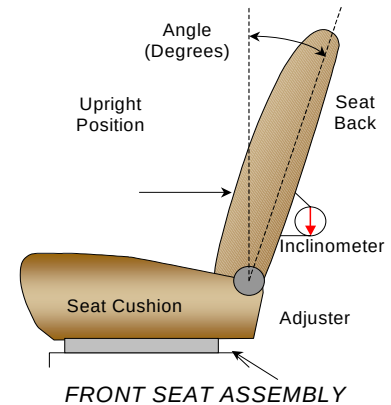
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

NHTSA No.: M55204
 Test Date: 2/3/05

NOMINAL DESIGN RIDING POSITION

The driver and passenger seat backs are positioned to the manufacturers designated angle. The procedure is as follows: An inclinometer is placed against the flat surface of the seat back and the angle is measured directly from the dial face.



SEAT BACK ANGLES

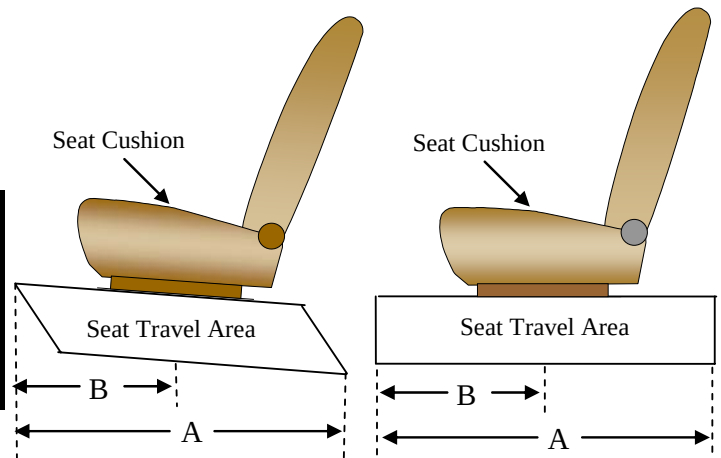
	Deg.
Driver Seat Back Angle	20.0
Rear Seat Back Angle	25.0

SEAT FORE/AFT POSITIONS

The total seat travel was measured from forward most position to rearmost position, irrespective of vertical seat height in those positions. The seat was set at the longitudinal mid position with vertical adjustment at the lowest position obtainable for both the driver and passenger.

SEAT FORE/AFT POSITIONING

	Total Fore/Aft Travel (mm)	Placed in Position (mm)
Driver Seat	265	132
Passenger Seat	0	0



SEAT BELT UPPER ANCHORAGE

Position number one (1) is the uppermost position.

SEAT BELT UPPER ANCHORAGE

	Total # of Positions	Placed in Position #
Driver Seat	4	1
Rear Seat	4	1

DATA SHEET NO. 1...(CONTINUED)

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

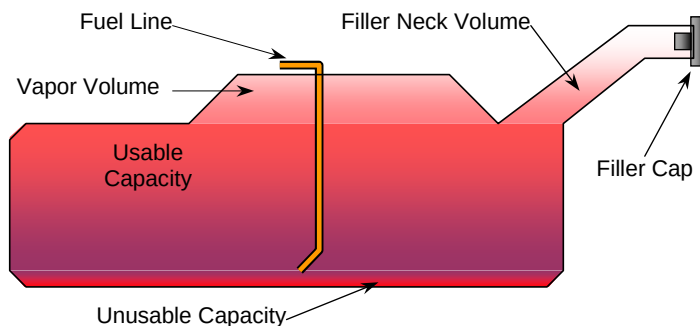
Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05

FUEL TANK CAPACITY

	Liters
Usable Capacity of "Standard Tank"	81.8
Usable Capacity of "Optional" Tank	
Usable Capacity used for FMVSS 301	75.3 to 76.9
Actual Amount of Solvent used	71.9

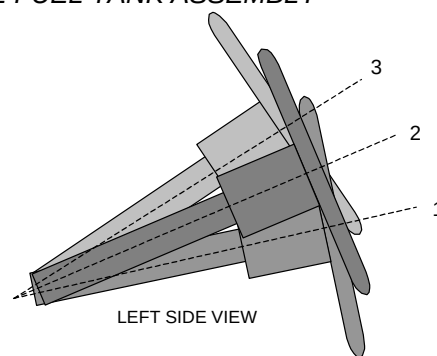
The test vehicle is equipped with an electric fuel pump. The fuel pump will operate for approximately three (3) seconds with the ignition in the "ON" position, after which the fuel pump automatically shuts off. The fuel filler door is located on the left rear fender.



VEHICLE FUEL TANK ASSEMBLY

STEERING COLUMN ADJUSTMENT

Steering wheel and column adjustments are made so that the steering wheel hub is at the geometric center of the locus it describes when moved through its full range of motion. An aluminum plate is placed across the rim of the steering wheel, an inclinometer is placed on the plate and the angle is measured.



STEERING COLUMN ASSEMBLY

STEERING COLUMN POSITIONS

	Degrees	Fore/Aft Position (mm)
Lowermost Position No.1	19.5	
Geometric Center Position No. 2	28.6	
Uppermost Position No.3	37.7	

DATA SHEET NO. 2**TEST VEHICLE SUMMARY OF RESULTS**Test Vehicle: 2005 Nissan Murano S 5-Door MPVNHTSA No.: M55204Test Program: 55/28 km/h Side Impact NCAPTest Date: 2/3/05**MAXIMUM EXTERIOR STATIC CRUSH**

Level	Measured Parameter	Units	Maximum Crush	Above Ground
Level 1	Sill Top Height	mm	253	381
Level 2	Occupant H-Point	mm	350	680
Level 3	Mid Door	mm	360	717
Level 4	Window Sill	mm	220	1071
Level 5	Window top	mm	50	1575
N/A	Maximum Penetration	mm	360	

INSTRUMENTATION

Driver SID/Hybrid III Accelerometers	20
Passenger SID/Hybrid III Accelerometers	20
Vehicle Structure Accelerometers	26
MDB Accelerometers	5
Total number of Contact Switches	5
Total	76

MOVIE COVERAGE

Cameras	Standard	Additional
High Speed	10	1
Real Time	1	2
Total	11	3

DATA SHEET NO. 3**MOVING DEFORMABLE BARRIER (MDB) SUMMARY OF RESULTS**Test Vehicle: 2005 Nissan Murano S 5-Door MPVNHTSA No.: M55204Test Program: 55/28 km/h Side Impact NCAPTest Date: 2/3/05**MDB SPECIFICATIONS (mm)**

Measurement Description	Length
Overall Width of Framework Carriage	1252
Overall Length including Honeycomb Face	4115
Wheel Base of Framework Carriage	2590
C.G. location aft of Front Axle	1127

MDB WEIGHTS

	Units	Front Axle	Rear Axle	Total
Left	kg	384	308	
Right	kg	385	284	
Ratio	%	56.5	43.5	
Totals	kg	769	592	1361

SPEED AND IMPACT DATA

Measured Parameter	Units	Requirement	Value
Trap No. 1 Velocity (Primary)	km/h	61.1 to 62.7	61.81
Trap No. 2 Velocity (Redundant)	km/h	61.1 to 62.7	61.75
MDB CL to Target Vehicle CL	degrees	88.5 to 91.5	89.50

MAXIMUM STATIC CRUSH OF HONEYCOMB FACE (mm)

Vertical Location			From Centerline		Max. Crush
Row	Description	Height	Distance	Direction	
A	Center of Bumper	432	800	Right	188
B	Top of Bumper	533	800	Right	96
C	Mid Level	686	800	Left	80
D	Top of Stack	813	800	Left	131

MDB INSTRUMENTATION AND CAMERAS

Accelerometers	5
Contact Switches	1
High Speed Cameras	2

DATA SHEET NO. 4
POST-TEST OBSERVATIONS

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
Test Program: 55/28 km/h Side Impact NCAP

NHTSA No.: M55204
Test Date: 2/3/05

TEST DUMMY INFORMATION AND CONTACT POINTS

Description	Front Seat SID/HIII	Rear Seat SID/HIII
Dummy Type / Serial No.	P572F, SID/HIII No. 274	P572F, SID/HIII No. 275
Head Contact	Curtain Airbag	Curtain Airbag, D-Ring
Upper Torso Contact	Side Airbag, Door Panel	Door Panel
Lower Torso Contact	Door Panel	Door Panel
Left Knee Contact	Door Panel	No Contact
Right Knee Contact	No Contact	No Contact

POST-TEST DOOR OPENING AND SEAT TRACK INFORMATION

Description	Front	Rear
Left Side Door Opening	Remained Closed/Latch Inoperable	Remained Closed/Latch Inoperable
Right Side Door Opening	Remained Closed/Latch Operable	Remained Closed/Latch Operable
Seat Movement	None	None
Seat Back Failure	None	None

POST-TEST STRUCTURAL OBSERVATIONS

Critical Areas of Performance	Observations and Conclusions
Pillar Performance	Pillars pushed inward with no apparent failure
Sill Separation	Front and Rear Door Separation Near Top Sill
Windshield Damage	None
Window Damage	Driver and Rear Passenger Side Windows Broke
Other Notable Effects	

SUPPLEMENTAL RESTRAINT SYSTEM INFORMATION

Restraint Type	Left Front (Driver) Occupant Location 01		Left Rear (Passenger) Occupant Location 04	
	Installed	Operation	Installed	Operation
Front Airbag	Yes	No Deployment	No	
Side Airbag	Yes	Yes	No	
Head Airbag	No		No	
Curtain Airbag	Yes	Yes	Yes	Yes
Seat Belt Pretensioner	Yes		No	
Seat Belt Load Limiter	Yes		No	

MDB LEFT EDGE IMPACT POINT DATA

Measured Parameter	Units	Requirement	Value
Horizontal Offset	mm	+/- 50	10 (Left)
Vertical Offset	mm	+/- 20	5 (Above)

DATA SHEET NO. 5
SID/HIII INJURY CRITERIA AND SENSOR DATA

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05

THORAX AND PELVIS PEAK ACCELERATIONS, PRIMARY (FIR 100 Filtered)

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Upper Rib (LUR)	Y	G's	46.2	52.5	-2.6	111.3	54.5	51.9	-12.7	96.3
Lower Rib (LLR)	Y	G's	41.2	50.0	-5.1	69.4	49.1	44.4	-14.8	96.3
Lower Spine (T ₁₂)	Y	G's	51.3	37.5	-4.4	72.5	53.6	41.9	-5.6	91.9
Pelvis (PEV)	Y	G's	81.7	33.8	-12.6	61.3	92.1	35.6	-9.1	53.8

THORACIC TRAUMA INDEX (TTI) AND PELVIC ACCELERATION, PRIMARY (FIR 100 Filtered)

Location	Driver				Passenger			
	LUR	T ₁₂	TTI(g)	PEV(g)	LUR	T ₁₂	TTI(g)	PEV(g)
Primary Rib, Spine, and Pelvis	46.227	51.327	49	82	54.495	53.584	54	92

THORAX AND PELVIS PEAK ACCELERATIONS, REDUNDANT (FIR 100 Filtered)

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Upper Rib (LUR)	Y	G's	46.1	52.5	-2.5	111.3	55.1	51.9	-11.7	96.3
Lower Rib (LLR)	Y	G's	41.4	50.0	-5.2	70.0	49.2	45.0	-15.4	96.3
Lower Spine (T ₁₂)	Y	G's	51.2	37.5	-4.6	73.1	53.7	41.9	-5.4	92.5
Pelvis (PEV)	Y	G's	81.6	33.8	-12.4	61.3	91.7	35.6	-9.2	79.4

THORACIC TRAUMA INDEX (TTI) AND PELVIC ACCELERATION, REDUNDANT (FIR 100 Filtered)

Location	Driver				Passenger			
	LUR	T ₁₂	TTI(g)	PEV(g)	LUR	T ₁₂	TTI(g)	PEV(g)
Redundant Rib, Spine, and Pelvis	46.121	51.177	49	82	55.066	53.748	54	92

Positive Acceleration Polarities:

Longitudinal (X) = Forward
 Lateral (Y) = Right
 Vertical (Z) = Down

DATA SHEET NO. 5...(CONTINUED)
SID/HII INJURY CRITERIA AND SENSOR DATA

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05

HEAD PRIMARY PEAK ACCELERATIONS (SAE CLASS 1000 Filtered)

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Head CG	X	G's	3.3	198.9	-12.7	73.0	18.2	64.2	-5.9	47.3
Head CG	Y	G's	21.7	61.7	-3.9	37.5	110.9	62.5	-12.2	81.4
Head CG	Z	G's	19.1	58.1	-4.0	30.4	17.2	93.6	-39.1	61.9
Head CG Resultant	N/A	G's	28.4	61.7			118.3	62.5		

HEAD PRIMARY INJURY CRITERIA (SAE CLASS 1000 Filtered)

Location	Driver				Passenger			
	HIC	T ¹	T ²	Avg G	HIC	T ¹	T ²	Avg G
Head CG	73.0	50.1	86.1	21.0	818.4	56.5	66.0	93.8

HEAD REDUNDANT PEAK ACCELERATIONS (SAE CLASS 1000 Filtered)

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Head CG	X	G's	3.4	196.0	-12.6	75.1	17.9	64.4	-6.0	48.2
Head CG	Y	G's	21.7	62.0	-3.5	36.9	111.0	62.5	-12.8	81.4
Head CG	Z	G's	19.6	58.1	-4.0	30.3	17.3	93.6	-40.0	62.3
Head CG Resultant	N/A	G's	28.4	61.6			118.6	62.5		

HEAD REDUNDANT INJURY CRITERIA (SAE CLASS 1000 Filtered)

Location	Driver				Passenger			
	HIC	T ¹	T ²	Avg G	HIC	T ¹	T ²	Avg G
Head CG	73.3	50.3	86.3	21.0	819.0	56.5	66.1	93.4

UPPER NECK PEAK FORCES AND MOMENTS

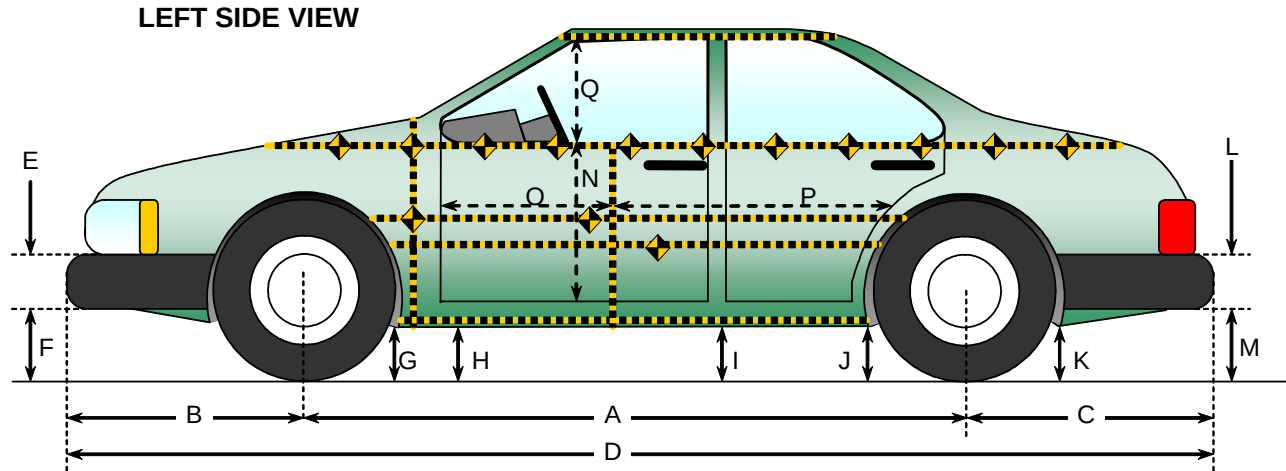
Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Neck Force	X	Newtons	81.2	36.9	-556.0	73.5	108.4	193.9	-278.9	82.2
Neck Force	Y	Newtons	370.0	66.9	-162.6	38.4	80.7	148.5	-1856.5	64.4
Neck Force	Z	Newtons	795.4	58.2	-184.8	30.7	613.2	40.0	-1026.9	67.0
Neck Force Resultant	N/A	Newtons	903.8	58.5			2050.4	66.0		
Neck Moment	X	N•m	13.9	79.2	-45.6	49.3	33.7	65.7	-47.5	56.2
Neck Moment	Y	N•m	33.1	96.3	-35.0	61.9	17.5	92.3	-6.4	77.8
Neck Moment	Z	N•m	33.5	80.6	-7.0	37.9	8.2	169.8	-35.0	81.7
Neck Moment Resultant	N/A	N•m	48.7	49.5			49.8	56.2		

DATA SHEET NO. 6

VEHICLE PRE-TEST AND POST-TEST MEASUREMENTS

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

NHTSA No.: M55204
 Test Date: 2/3/05



VEHICLE PRE AND POST-TEST MEASUREMENT INFORMATION

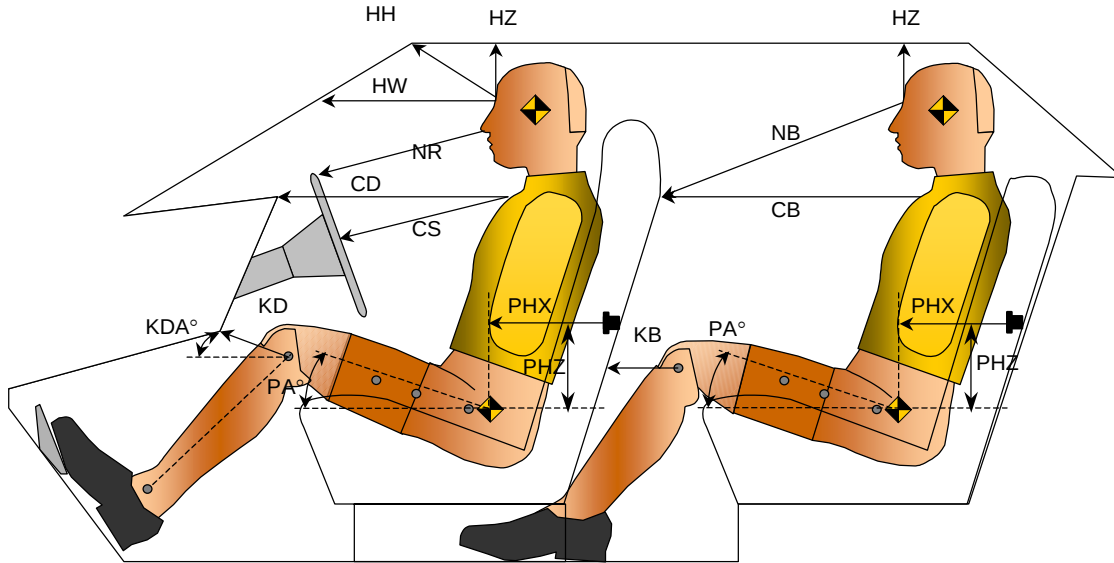
Code	Measurement Description	Pre-Test (mm)	Post-Test (mm)	Difference (mm)
A	Wheelbase	2825	2825	0
B	Front Axle to FSOV	967	999	32
C	Rear Axle to RSOV	988	1042	54
D	Total Length at Centerline	4780	4780	0
E	Front Bumper Thickness	500	500	0
F	Front Bumper Bottom to Ground	278	299	21
G	Sill Height at Front Wheel Well	298	301	3
H	Sill Height at Front Door Leading Edge	298	304	6
I	Sill Height at "B" Pillar	304	390	86
J1	Sill Height at Rear Wheel Well	290	406	116
J2	Pinch Weld Height at Rear Wheel Well	305	330	25
K	Sill Height aft of Rear Wheel Well	391	441	50
L	Rear Bumper Thickness	455	455	0
M	Rear Bumper Bottom to Ground	433	506	73
N	Sill Height to Window Bottom Sill	790	762	-28
O	Front Door Leading Edge to Impact CL	800	685	-115
P	Rear Door Trailing Edge to Impact CL	1320	1045	-275
Q	Front Window Opening	415	410	-5
R	Right Side Length	3245	3250	5
S	Left Side Length	3245	3170	-75
T	Vehicle Width at "B" Post	1860	1730	-130

DATA SHEET NO. 7

SID/HIII LONGITUDINAL CLEARANCE DIMENSIONS

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

NHTSA No.: M55204
 Test Date: 2/3/05



LONGITUDINAL CLEARANCE DIMENSION INFORMATION

Driver Code	Pass. Code	Measurement Description	Driver		Passenger	
			Length(mm)	Angle	Length(mm)	Angle
HH		Head to Header	465	9.3		
HW		Head to Windshield	730			
HZ	HZ	Head to Roof	180		190	
NR	NB	Nose to Rim/Nose to Seatback	515	14.0	710	9.0
CD	CB	Chest to Dash or Seatback	555	1.0	610	4.5
CS		Chest to Steering Wheel	290	3.5		
KDL	KBL	Left Knee to Dash or Seatback	225	14.2	300	0.0
KDR	KBR	Right Knee to Dash or Seatback	200		330	
PA	PA	Pelvic Angle		18.9*		18.7*
PHX	PHX	H-Point to Striker (X-Axis)	265		205	
PHZ	PHZ	H-Point to Striker (Z-Axis)	105		240	

* Correct pelvic angle was not obtainable, dummy was positioned according to the H-point location.

DATA SHEET NO. 8

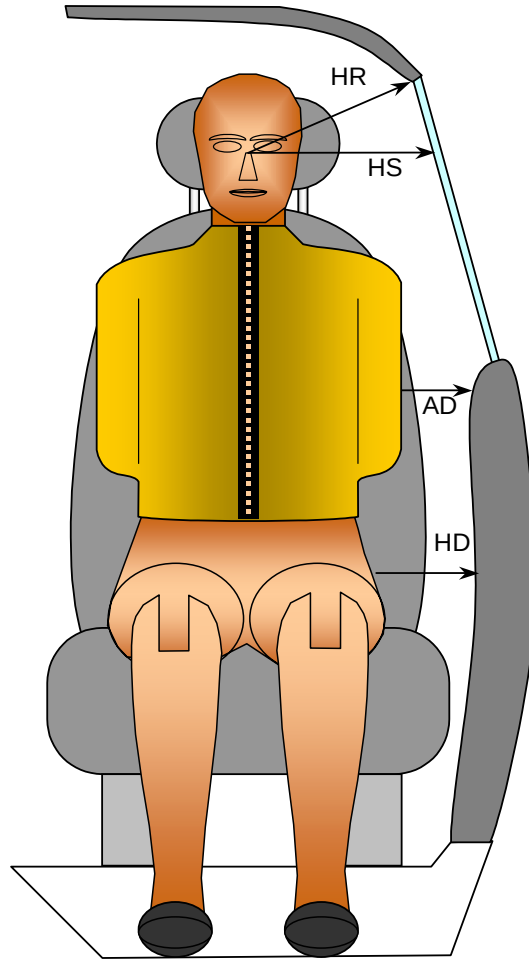
SID/HIII LATERAL CLEARANCE DIMENSIONS

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05



FRONT VIEW OF DUMMY

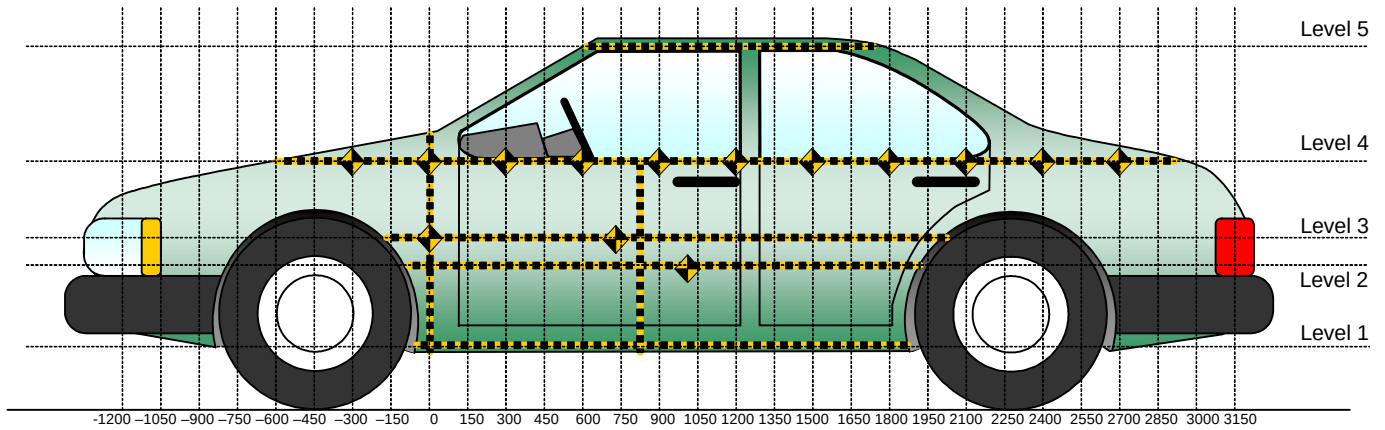
LATERAL CLEARANCE DIMENSION INFORMATION

Code	Measurement Description	Units	Driver	Passenger
HR	Head to Side Header	mm	300	240
HS	Head to Side Window	mm	405	380
AD	Arm to Door	mm	120	110
HD	H-Point to Door	mm	50	140

DATA SHEET NO. 9 **VEHICLE SIDE MEASUREMENTS**

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

NHTSA No.: M55204
 Test Date: 2/3/05



All Measurements Shown in mm

LEFT SIDE VIEW

Measurements are taken with vehicle in the as tested condition.

Measurements taken 900 mm right of impact reference.

All measurements below in mm.

Level	Measurement Description	Height Above Ground
1	Sill Top	381
2	Occupant H-Point	680
3	Mid Door	717
4	Window Sill	1071
5	Window Top	1575

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

NHTSA No.: M55204
 Test Date: 2/3/05

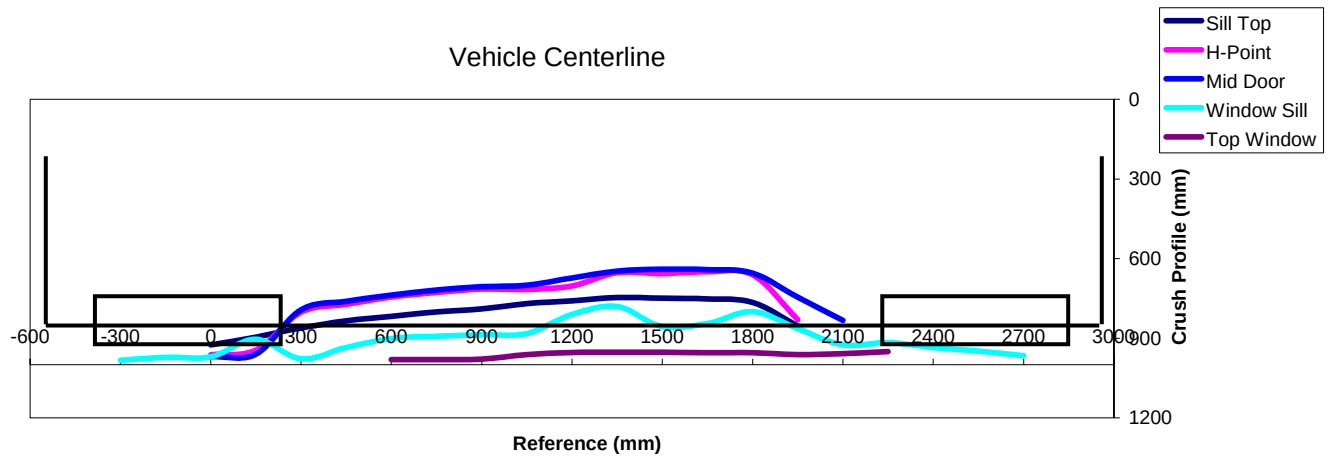
	Pre-Test					Post-Test					Difference				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
-900															
-750															
-600															
-450															
-300				171					188					17	
-150				158					186					28	
0	81	76	78	146		156	113	109	176		75	37	31	30	
150	145	81	76	130		249	136	116	226		104	55	40	96	
300	138	78	74	124		277	276	281	146		139	198	207	22	
450	136	76	74	111		301	304	313	176		165	228	239	65	
600	139	73	74	105		321	328	336	204		182	255	262	99	
750	140	73	69	96		339	346	351	204		199	273	282	108	
900	140	73	69	91	376	351	358	363	204	396	211	285	294	113	20
1050	141	71	66	89	356	371	355	366	206	376	230	284	300	117	20
1200	140	71	65	85	356	381	368	392	274	377	241	297	327	189	21
1350	140	71	65	76	353	393	418	418	296	391	253	347	353	220	38
1500	140	73	66	76	346	391	416	426	219	392	251	343	360	143	46
1650	140	73	66	74	341	388	423	424	230	388	248	350	358	156	47
1800	141	74	69	74	341	376	413	414	274	388	235	339	345	200	47
1950	116	61	63	74	341	262	231	317	210	386	146	170	254	136	45
2100			53	76	341			220	151	386			167	75	45
2250				86	348				170	386				84	38
2400				86	350				151	392				65	42
2550				88	366				140	416				52	50
2700				96					130					34	
2850															
3000															

Measurements are taken from fixed reference 1000 mm from vehicle centerline.

DATA SHEET NO. 10...(CONTINUED)
VEHICLE EXTERIOR CRUSH PROFILES

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

NHTSA No.: M55204
 Test Date: 2/3/05



	Units	Level 1	Level 2	Level 3	Level 4	Level 5
Maximum Crush	mm	253	350	360	220	50
Distance from Impact	mm	1350	1650	1500	1350	2550

DATA SHEET NO. 11

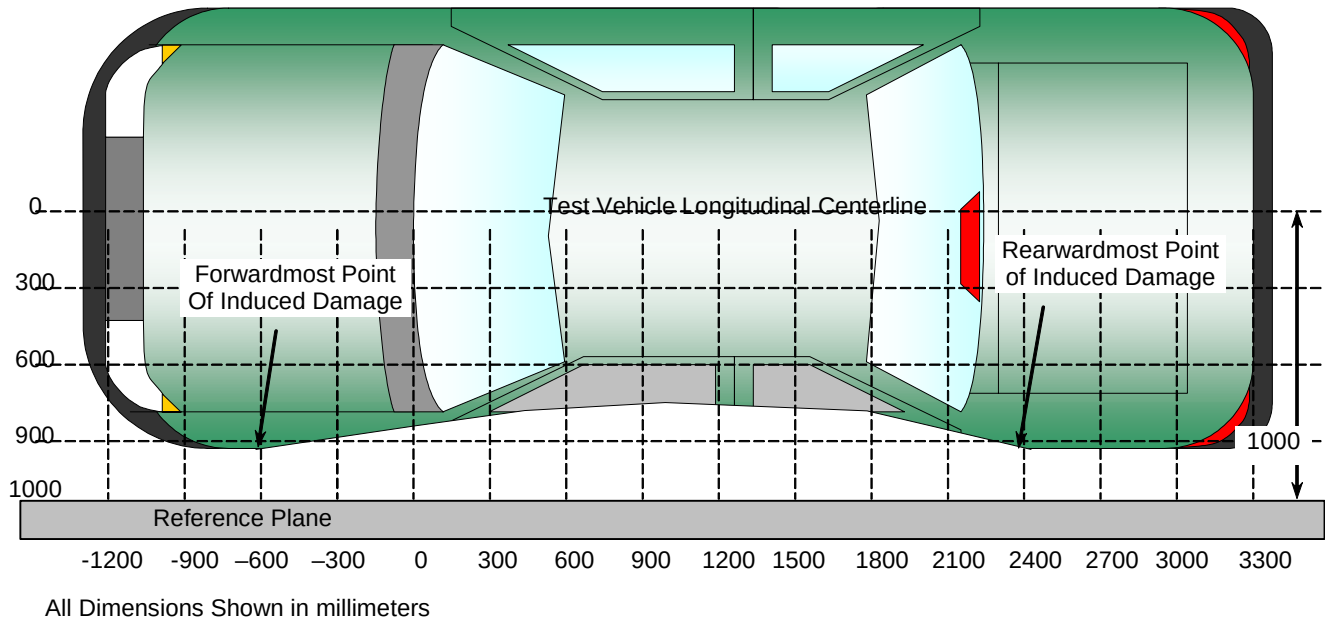
VEHICLE DAMAGE PROFILE DISTANCES

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05



TOP VIEW

DAMAGE PROFILE DISTANCES

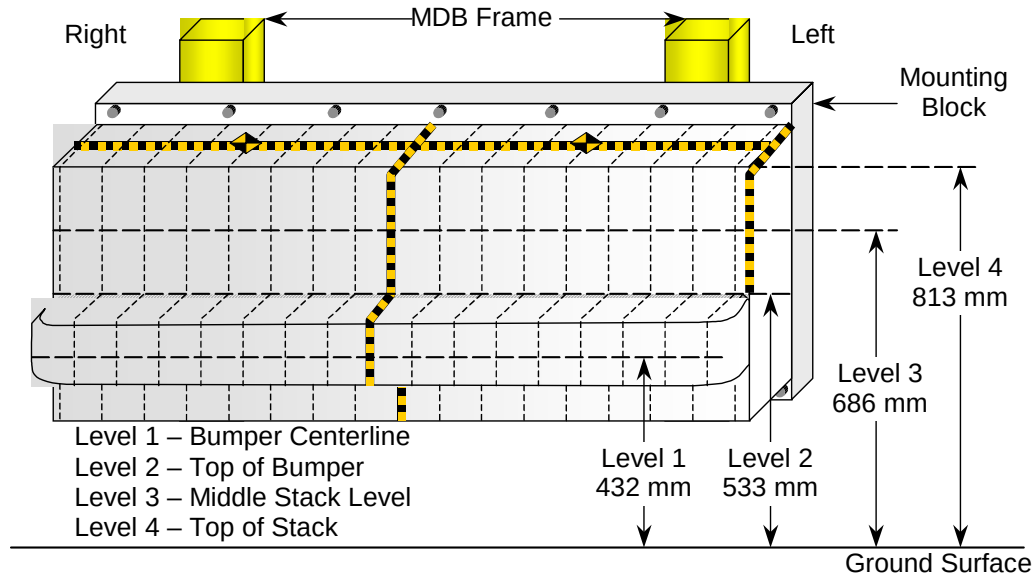
DPD	Distance From Impact Point in mm	Level	Pre-Test (mm)	Post-Test (mm)	Max. Static Crush (mm)
1	-300	4	171	188	17
2	300	3	74	281	207
3	900	3	69	363	294
4	1500	3	66	426	360
5	2100	3	53	220	167
6	2700	4	96	130	34

DATA SHEET NO. 12

DEFORMABLE BARRIER HONEYCOMB FACE STATIC CRUSH

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

NHTSA No.: M55204
 Test Date: 2/3/05



DEFORMABLE BARRIER STATIC CRUSH

Stack Level	Distance Right of Center								C/L	Distance Left of Center							
	800	700	600	500	400	300	200	100		100	200	300	400	500	600	700	800
1	188	158	148	144	144	142	142	143	142	142	142	143	143	143	142	148	158
2	96	73	63	56	48	44	46	40	41	44	40	38	54	56	56	58	66
3	41	25	14	12	12	21	38	26	16	12	12	12	15	21	34	51	80
4	44	21	11	15	18	46	63	43	21	18	18	18	21	38	56	84	131

All Dimensions in mm

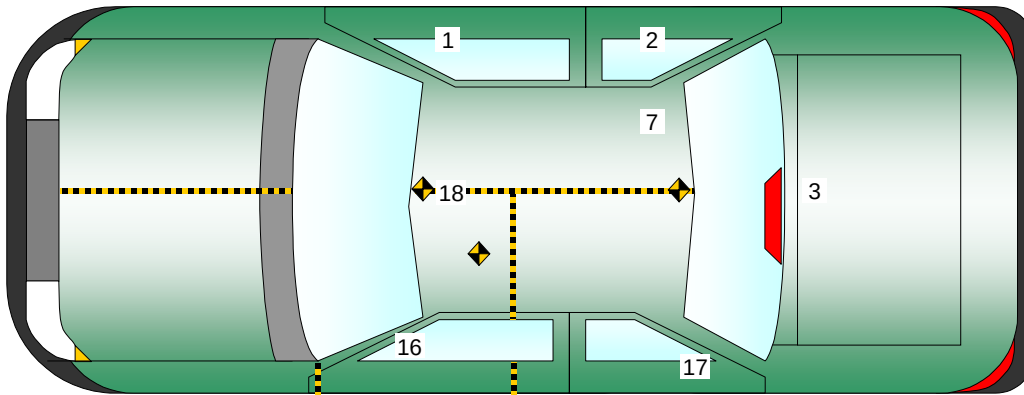
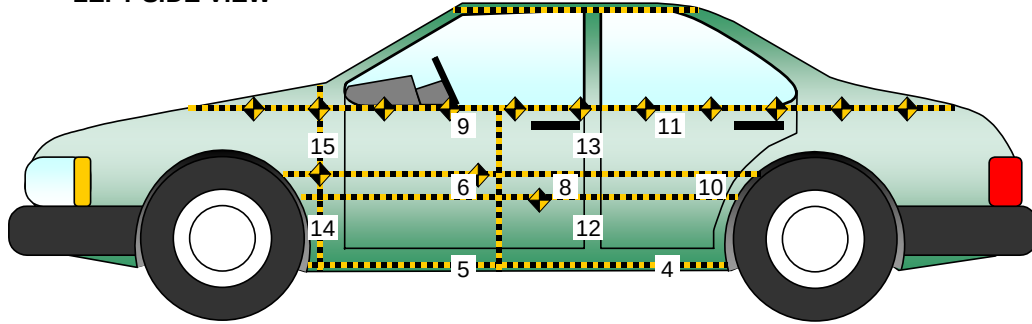
DATA SHEET NO. 13

VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

NHTSA No.: M55204
 Test Date: 2/3/05

LEFT SIDE VIEW



No.	Location
1	Right Sill at Front Seat
2	Right Sill at Rear Seat
3	Rear Floorpan Above Axle
4	Left Sill at Rear Door
5	Left Sill at Front Door
6	Left Front Door Centerline
7	Right Rear Occupant Compartment
8	Left Front Door Mid-Rear
9	Left Front Door Upper Centerline

No.	Location
10	Left Rear Door Mid-Rear
11	Left Rear Door Upper Centerline
12	Left Lower B-Post
13	Left Middle B-Post
14	Left Lower A-Post
15	Left Middle A-Post
16	Front Seat Track
17	Rear Seat Track or Structure
18	Vehicle CG

DATA SHEET NO. 13...(CONTINUED)
VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05

VEHICLE ACCELEROMETER PEAK DATA AND PRE-TEST LOCATIONS

Loc. No.	Accelerometer Location	Measurements (mm)			Peak Values (G's)				
		X	Y	Z	Axis	Max	Time	Min	Time
1	Right Sill at Front Seat	2680	720	400	X	4.0	58.5	-5.8	8.9
					Y	24.0	7.2	-2.7	81.8
					Z	3.8	56.4	-6.6	9.9
					RES	24.7	7.4		
2	Right Sill at Rear Seat	1840	720	500	X	4.8	58.8	-3.6	9.1
					Y	24.3	6.7	-2.6	82.2
					Z	4.3	36.7	-8.0	14.2
					RES	24.5	6.7		
3	Rear Floorpan Above Axle	988	0	520	X	7.6	16.2	-8.0	5.6
					Y	28.1	6.5	-2.4	86.4
					Z	14.0	11.0	-17.1	40.5
					RES	29.5	6.3		
4	Left Sill at Rear Door	1940	-720	300	Y	49.9	5.7	-16.8	18.1
5	Left Sill at Front Door	2500	-720	300	Y	108.2	5.3	-48.4	10.0
6	Front Door Centerline	2750	-810	740	Y	131.0	8.2	-54.4	27.6
7	Rt. Rear Occ. Compartment	2150	360	310	Y	23.7	6.4	-2.8	80.6
8	Front Door Mid-Rear	2444	-810	660	Y	142.4	7.7	-38.0	27.5
9	Front Door Upper Centerline	2800	-820	930	Y	133.9	15.8	-46.7	30.8
10	Rear Door Mid-Rear	1520	-810	800	Y	147.2	18.9	-71.7	26.6 ¹
11	Rear Door Upper Centerline	1780	-810	1000	Y	124.3	13.0	-98.6	29.5
12	B-Post Lower	2210	-770	440	Y	151.9	6.7	-40.6	15.3
13	B-Post Middle	2210	-770	620	Y	0.0	0.0	0.0	0.0 ²
14	A-Post Lower	3300	-830	660	Y	25.7	9.6	-8.3	19.6
15	A-Post Middle	3300	-830	980	Y	38.0	2.8	-0.7	32.0 ³
16	Front Seat Track	2700	-620	410	Y	64.6	15.5	-1.4	25.7 ⁴
17	Rear Seat Structure	1840	-470	500	Y	37.4	27.5	-0.4	0.0
18	Vehicle CG	2970	180	300	X	4.3	12.6	-7.0	25.6
					Y	23.5	7.4	-2.7	81.9
					Z	11.6	12.3	-8.7	38.7
					RES	24.4	7.3		

1.) Channel failed at 35.3 msec.

2.) Channel failed, no data

3.) Channel failed at 28.0 msec.

4.) Channel failed at 22.0 msec.

DATA SHEET NO. 14

MDB ACCELEROMETER LOCATION AND DATA SUMMARY

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05

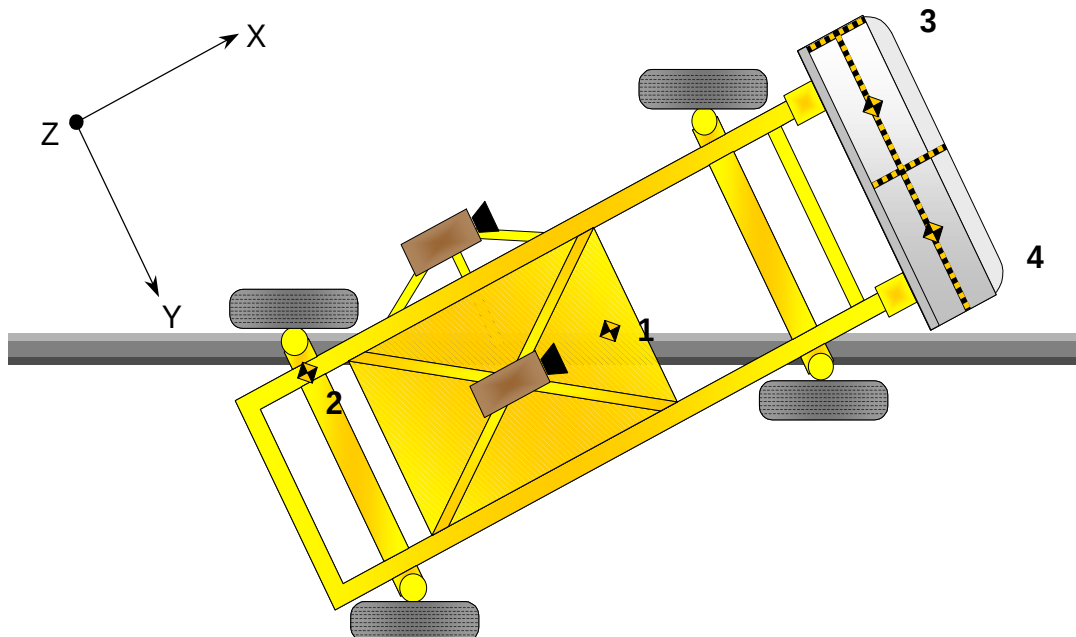
MDB ACCELEROMETER PEAK DATA AND LOCATIONS

Loc. No.	Accelerometer Location	Measurements (mm)			Peak Values (G's)				
		X	Y	Z	Axis	Max	Time	Min	Time
1	MDB CG	-1195	0	430	X	4.2	172.8	-19.8	47.7
					Y	3.0	121.8	-10.5	29.0
					Z	19.6	130.3	-23.6	120.7
					RES	23.8	120.8		
2	MDB Rear	-2642	-593	608	X	2.3	102.6	-21.6	32.0
					Y	2.9	108.1	-6.6	32.4

Reference Points X - MDB Front Axle Y - MDB Centerline Z - Ground Plane

MDB BUMPER CONTACT SWITCH DATA

Loc. No.	Contact Switch Location	Units	Peak and 50% Crossing Point			
			Max	Time	50%	Time
3	MDB Left Bumper (T=0)	% F.S.	100.0	0.0	50.0	0.0
4	MDB Right Bumper	% F.S.	99.8	21.2	50.0	3.2



DATA SHEET NO. 15

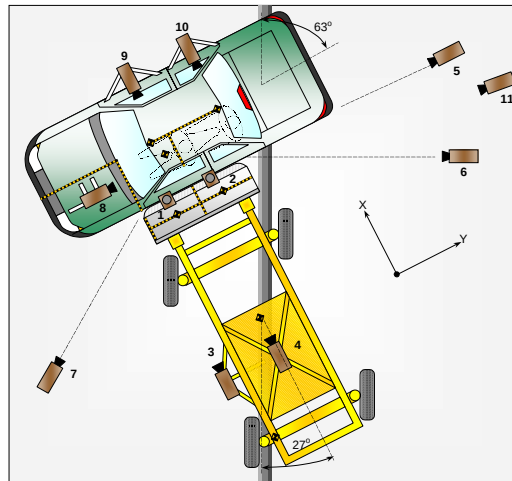
HIGH SPEED CAMERA LOCATIONS AND DATA

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05



No.	Camera View	Location (mm)			Angle (deg.)	Lens (mm)	Film Speed (fps)
		X	Y	Z			
1	Overhead Overall	2286	1220	-5486	-90	12	1000
2	Overhead Close Up	1676	609	-5486	-90	25	1000
3	Impact Point	0	-2134	-1143	-7	13	TBD
4	Side Overall	838	-3912	-1829	-11	13	TBD
5	Rear	15545	228	-1371	-1	35	1000
6	Left Rear	16459	-7188	-939	-1	85	TBD
7	Left Front	-3550	-2666	-1473	-10	13	1000
8	Driver Front	-711	483	-1422	-20	24	1000
9	Driver Side	610	1219	-1219	-2	24	1000
10	Rear Passenger	1473	1219	-1219	-2	24	1000
11	Real Time	22860	3658	-1727	-5		TBD

Additional Cameras

1	Real Time	16459	-7100	-839	0		30
2	Real Time	-4700	-2600	-1473	-1		30
3	Left Front	-3475	-2575	-1421	-7	85	1000

X = Barrier Face Y = Monorail Centerline Z = Ground NTM: No Timing Marks

DATA SHEET NO. 16

FMVSS 301 FUEL SYSTEM INTEGRITY POST IMPACT DATA

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05

Test Time: 12:22 PM

Temperature: 13.3 Deg. C.

Stoddard Solvent Spillage Measurements

- A. From impact until vehicle motion ceases: 0.0 oz.
(Maximum Allowable = 1 ounce)
- B. For the 5 minute period after motion ceases: 0.0 oz.
(Maximum Allowable = 5 ounces)
- C. For the following 25 minutes: 0.0 oz.
(Maximum Allowable = 1 oz./minute)
- D. Spillage Details: No leakage occurred

DATA SHEET NO. 17

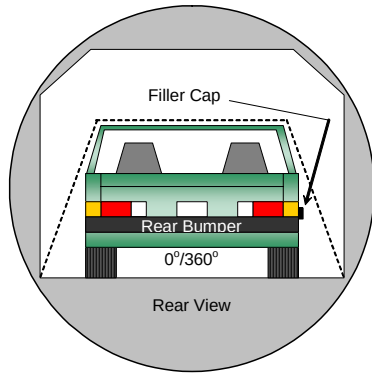
FMVSS 301 STATIC ROLLOVER DATA SHEET

Test Vehicle: 2005 Nissan Murano S 5-Door MPV

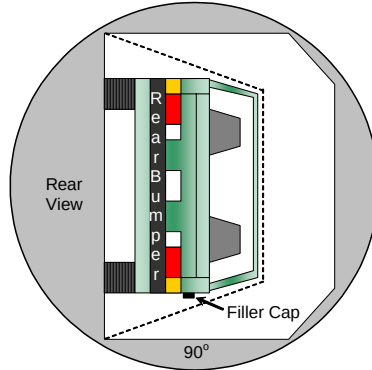
NHTSA No.: M55204

Test Program: 55/28 km/h Side Impact NCAP

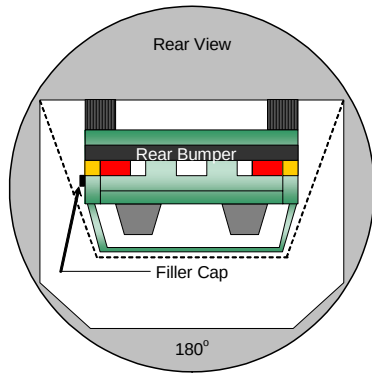
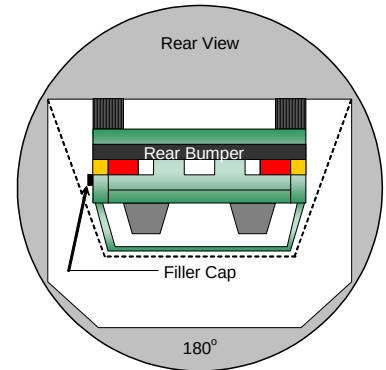
Test Date: 2/3/05



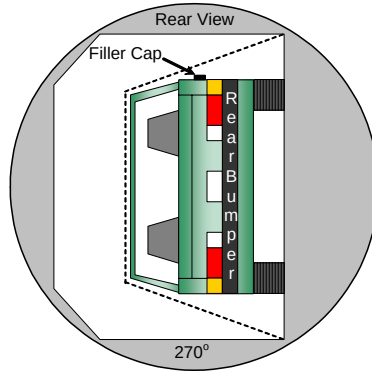
0° TO 90°



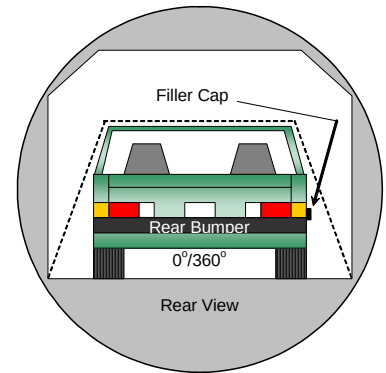
90° TO 180°



180° TO 270°



270° TO 360°



1. The specified fixture rollover rate for each 90° of rotation is 60 to 120 seconds.
2. The position hold time at each position is 300 seconds (minimum).
3. Details of Stoddard Solvent spillage locations.

No solvent leakage occurred during static rollover testing.

DATA SHEET NO. 17...(CONTINUED)**FMVSS 301 STATIC ROLLOVER DATA SHEET**Test Vehicle: 2005 Nissan Murano S 5-Door MPVNHTSA No.: M55204Test Program: 55/28 km/h Side Impact NCAPTest Date: 2/3/05**SOLVENT COLLECTION TIME TABLE IN SECONDS**

Test Phase	Rotation Time	Hold Time	Total Time
0° to 90°	83	300	383
90° to 180°	78	300	378
180° to 270°	82	300	382
270° to 360°	73	300	373

FMVSS 301 SPILLAGE TABLE REQUIREMENT (oz.)

First 5 Minutes	5.0
Sixth Minute	1.0
Seventh Minute	1.0
Eighth Minute	1.0

Test Phase	First 5 Minutes	Sixth Minute	Seventh Minute	Eighth Minute
0° to 90°	0	0	0	0
90° to 180°	0	0	0	0
180° to 270°	0	0	0	0
270° to 360°	0	0	0	0

SOLVENT SPILLAGE LOCATION TABLE

Test Phase	Spillage Location
0° to 90°	None
90° to 180°	None
180° to 270°	None
270° to 360°	None

APPENDIX A
PHOTOGRAPHS

LIST OF PHOTOGRAPHS

<u>Figure</u>		<u>Page</u>
A-1	Left Front $\frac{3}{4}$ View, as Received	A-1
A-2	Right Rear $\frac{3}{4}$ View, as Received	A-2
A-3	Manufacturer's Label	A-3
A-4	Tire Placard	A-4
A-5	Pre-Test Front View	A-5
A-6	Post-Test Front View	A-6
A-7	Pre-Test Left Front $\frac{3}{4}$ View	A-7
A-8	Post -Test Left Front $\frac{3}{4}$ View	A-8
A-9	Pre-Test Left Side View	A-9
A-10	Post-Test Left Side View (Vehicle Moved)	A-10
A-11	Pre-Test Left Rear $\frac{3}{4}$ View	A-11
A-12	Post Test Left Rear $\frac{3}{4}$ View	A-12
A-13	Pre-Test Rear View	A-13
A-14	Post-Test Rear View	A-14
A-15	Pre-Test Right Rear $\frac{3}{4}$ View	A-15
A-16	Post-Test Right Rear $\frac{3}{4}$ View	A-16
A-17	Pre-Test Right Side View	A-17
A-18	Post-Test Right Side View	A-18
A-19	Pre-Test Right Front $\frac{3}{4}$ View	A-19
A-20	Post-Test Right Front $\frac{3}{4}$ View	A-20
A-21	Pre-Test Overhead View	A-21
A-22	Post-Test Overhead View	A-22
A-23	Pre-Test Overhead Close-up View	A-23
A-24	Post-Test Overhead Close-up View	A-24
A-25	Pre-Test Impact Point	A-25
A-26	Post-Test Impact Point	A-26
A-27	Pre-Test Front $\frac{3}{4}$ View of Left Side Doors	A-27
A-28	Post-Test Front $\frac{3}{4}$ View of Left Side Doors	A-28
A-29	Pre-Test Rear $\frac{3}{4}$ View of Left Side Doors	A-29
A-30	Post-Test Rear $\frac{3}{4}$ View of Left Side Doors	A-30
A-31	Pre-Test Left Front Door	A-31
A-32	Post-Test Left Front Door	A-32
A-33	Pre-Test Left Rear Door	A-33

LIST OF PHOTOGRAPHS ...(CONTINUED)

Figure		Page
A-34	Post-Test Left Rear Door	A-34
A-35	Pre-Test Driver Dummy (Door Open)	A-35
A-36	Pre-Test Driver Dummy (Through Window)	A-36
A-37	Pre-Test Driver Dummy (Through Window)	A-37
A-38	Pre-Test Driver Dummy Clearance from Door	A-38
A-39	Post-Test Driver Dummy Clearance from Door	A-39
A-40	Pre-Test Driver Dummy Right Side View	A-40
A-41	Post-Test Driver Dummy Right Side View	A-41
A-42	Pre-Test Front Door Panel (Interior)	A-42
A-43	Post-Test Front Door Panel (Interior)	A-43
A-44	Pre-Test Passenger Dummy (Door Open)	A-44
A-45	Pre-Test Passenger Dummy (Through Window)	A-45
A-46	Post-Test Passenger Dummy (Through Window)	A-46
A-47	Pre-Test Passenger Dummy Clearance from Door	A-47
A-48	Post-Test Passenger Dummy Clearance from Door	A-48
A-49	Pre-Test Passenger Dummy Right Side View	A-49
A-50	Post-Test Passenger Dummy Right Side View	A-50
A-51	Pre-Test Rear Door Panel (Interior)	A-51
A-52	Post-Test Rear Door Panel (Interior)	A-52
A-53	Pre-Test Front View of Deformable Barrier	A-53
A-54	Post-Test Front View of Deformable Barrier	A-54
A-55	Pre-Test Top View of Deformable Barrier	A-55
A-56	Post-Test Top View of Deformable Barrier	A-56
A-57	Pre-Test Right Side View of Deformable Barrier	A-57
A-58	Post-Test Right Side View of Deformable Barrier	A-58
A-59	Pre-Test Left Side View of Deformable Barrier	A-59
A-60	Post-Test Left Side View of Deformable Barrier	A-60
A-61	Vehicle on Rollover Device (0°)	A-61
A-62	Vehicle on Rollover Device (90°)	A-62
A-63	Vehicle on Rollover Device (180°)	A-63
A-64	Vehicle on Rollover Device (270°)	A-64
A-65	Vehicle Impact	A-65
A-66	Post-Test Driver Door Overhead View	A-66
A-67	Post-Test Driver Door	A-67

LIST OF PHOTOGRAPHS ...(CONTINUED)

Figure		Page
A-68	Post-Test Driver Door	A-68
A-69	Post-Test Driver Door Overhead View	A-69
A-70	Post-Test Driver Door	A-70
A-71	Post-Test Rear Passenger Contact	A-71



Figure A-1: Left Front $\frac{3}{4}$ View, as Received



Figure A-2: Right Rear $\frac{3}{4}$ View, as Received

MFD. BY NISSAN MOTOR CO., LTD.

DATE 11/04

GVWR/PNBV 4858 LBS.

GAWR/PNBE FR. 2601 LBS.

WITH P235/65R18 TIRES,

18x7 1/2 RIMS. AT 33 PSI

COLD SINGLE.

GAWR/PNBE RR. 2403 LBS.

WITH P235/65R18 TIRES,

18x7 1/2 RIMS. AT 33 PSI

COLD SINGLE.

THIS VEHICLE CONFORMS

TO ALL APPLICABLE FED-

ERAL MOTOR VEHICLE SA-

FETY AND THEFT PREVEN-

TION STANDARDS IN EFF-

ECT ON THE DATE OF MA-

NUFACTURE SHOWN ABOVE.

VIN: JN8AZ08T75W308140

TYPE: MPV

COLOR TRIM TRANS

EY0 C RE0F09A

AXLE ENGINE

FZ51 VQ35(DE) 3498 cc



Figure A-3: Manufacturer's Label



Figure A-4: Tire Placard



Figure A-5: Pre-Test Front View



Figure A-6: Post-Test Front View



Figure A-7: Pre-Test Left Front $\frac{3}{4}$ View



Figure A-8: Post-Test Left Front $\frac{3}{4}$ View



Figure A-9: Pre-Test Left Side View



Figure A-10: Post-Test Left Side View (Vehicle Moved)



Figure A-11: Pre-Test Left Rear $\frac{3}{4}$ View



Figure A-12: Post-Test Left Rear $\frac{3}{4}$ View



Figure A-13: Pre-Test Rear View



Figure A-14: Post-Test Rear View



Figure A-15: Pre-Test Right Rear $\frac{3}{4}$ View



Figure A-16: Post-Test Right Rear ¾ View



Figure A-17: Pre-Test Right Side View



Figure A-18: Post-Test Right Side View



Figure A-19: Pre-Test Right Front $\frac{3}{4}$ View



Figure A-20: Post-Test Right Front $\frac{3}{4}$ View





Figure A-22: Post-Test Overhead View



Figure A-23: Pre-Test Overhead Close-up View

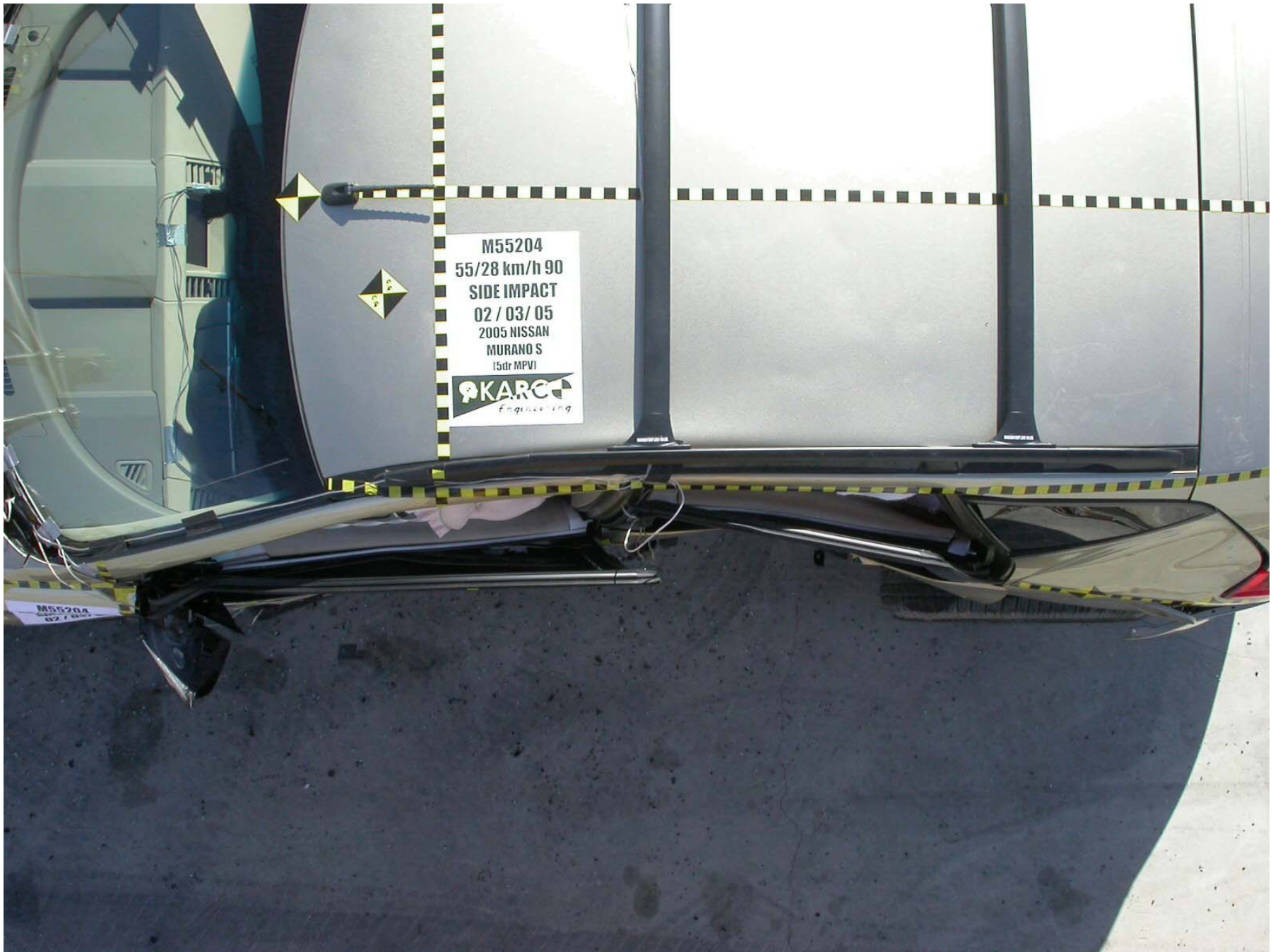


Figure A-24: Post-Test Overhead Close-up View



Figure A-25: Pre-Test Impact Point

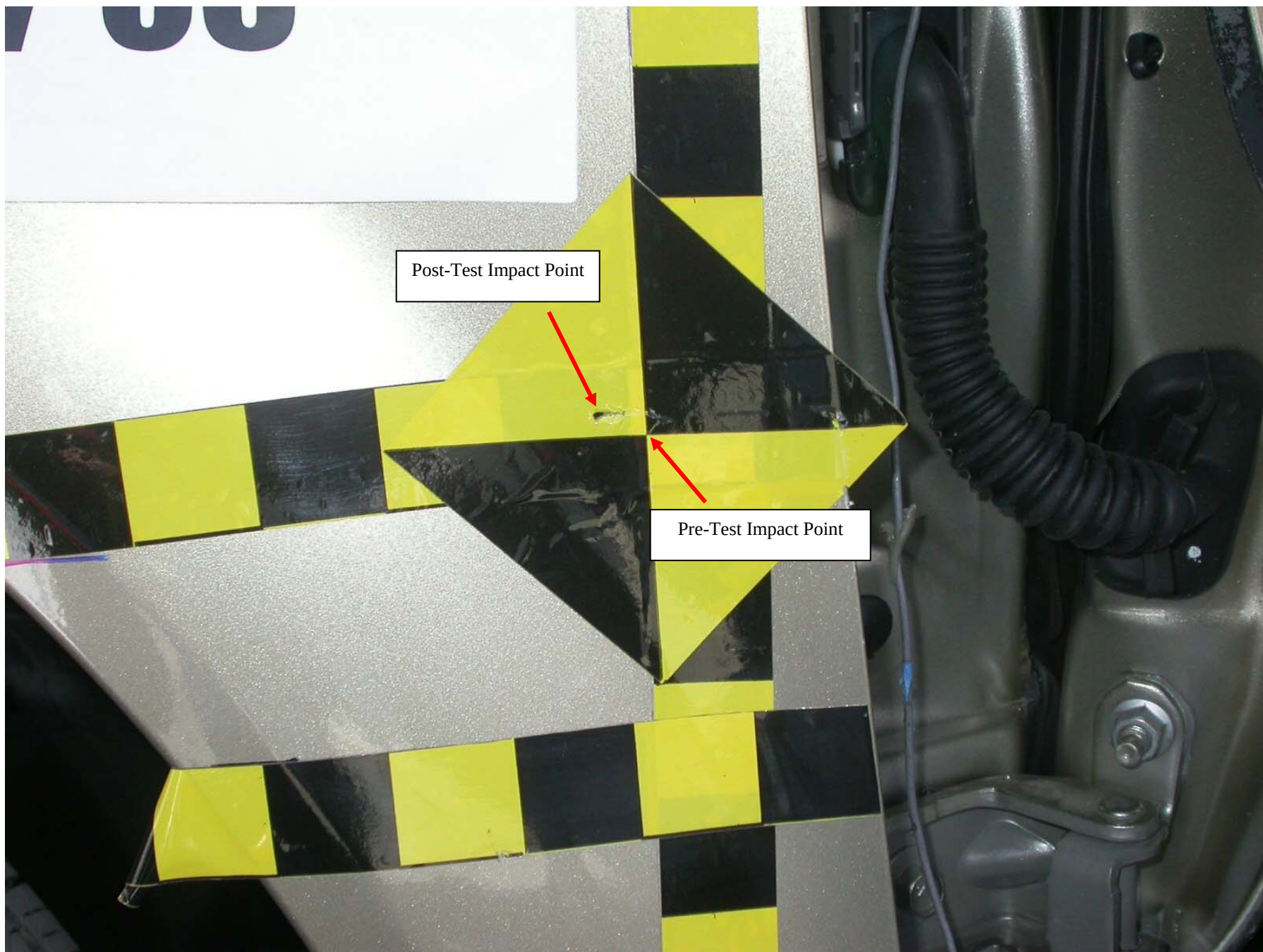


Figure A-26: Post-Test Impact Point



Figure A-27: Pre-Test Front $\frac{3}{4}$ View of Left Side Doors



Figure A-28: Post-Test Front $\frac{3}{4}$ View of Left Side Doors



Figure A-29: Pre-Test Rear $\frac{3}{4}$ View of Left Side Doors



Figure A-30: Post-Test Rear $\frac{3}{4}$ View of Left Side Doors



Figure A-31: Pre-Test Left Front Door



Figure A-32: Post-Test Left Front Door



Figure A-33: Pre-Test Left Rear Door



Figure A-34: Post-Test Left Rear Door



Figure A-35: Pre-Test Driver Dummy (Door Open)



Figure A-36: Pre-Test Driver Dummy (Through Window)



Figure A-37: Post-Test Driver Dummy (Through Window)



Figure A-38: Pre-Test Driver Dummy Clearance From Door



Figure A-39: Post-Test Driver Dummy Clearance From Door



Figure A-40: Pre-Test Driver Dummy Right Side View



Figure A-41: Post-Test Driver Dummy Right Side View



Figure A-42: Pre-Test Front Door Panel (Interior)



Figure A-43: Post-Test Front Door Panel (Interior)



Figure A-44: Pre-Test Passenger Dummy Left Side (Door Open)



Figure A-45: Pre-Test Passenger Dummy (Through Window)

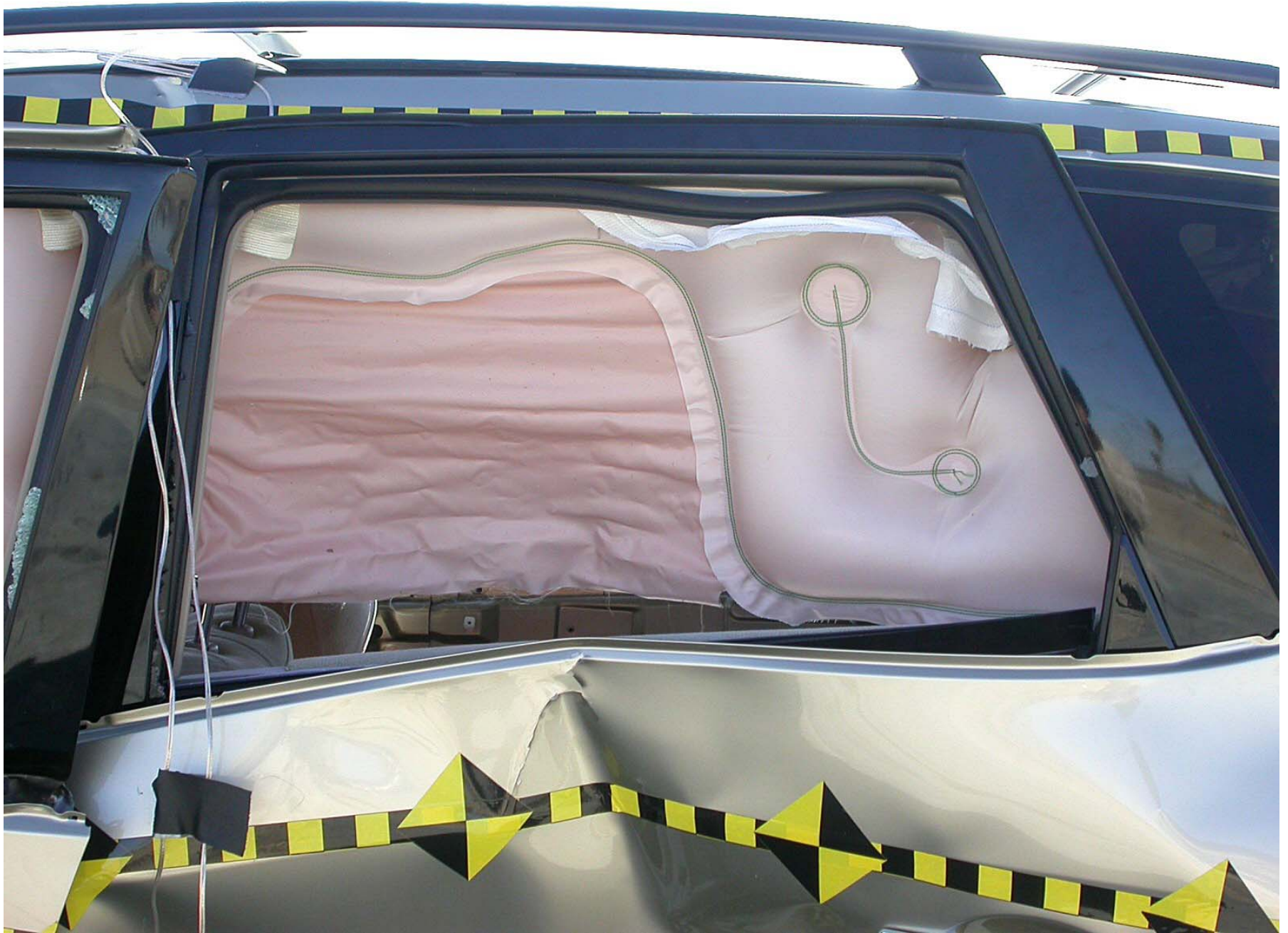


Figure A-46: Post-Test Passenger Dummy (Through Window)



Figure A-47: Pre-Test Passenger Dummy Clearance From Door

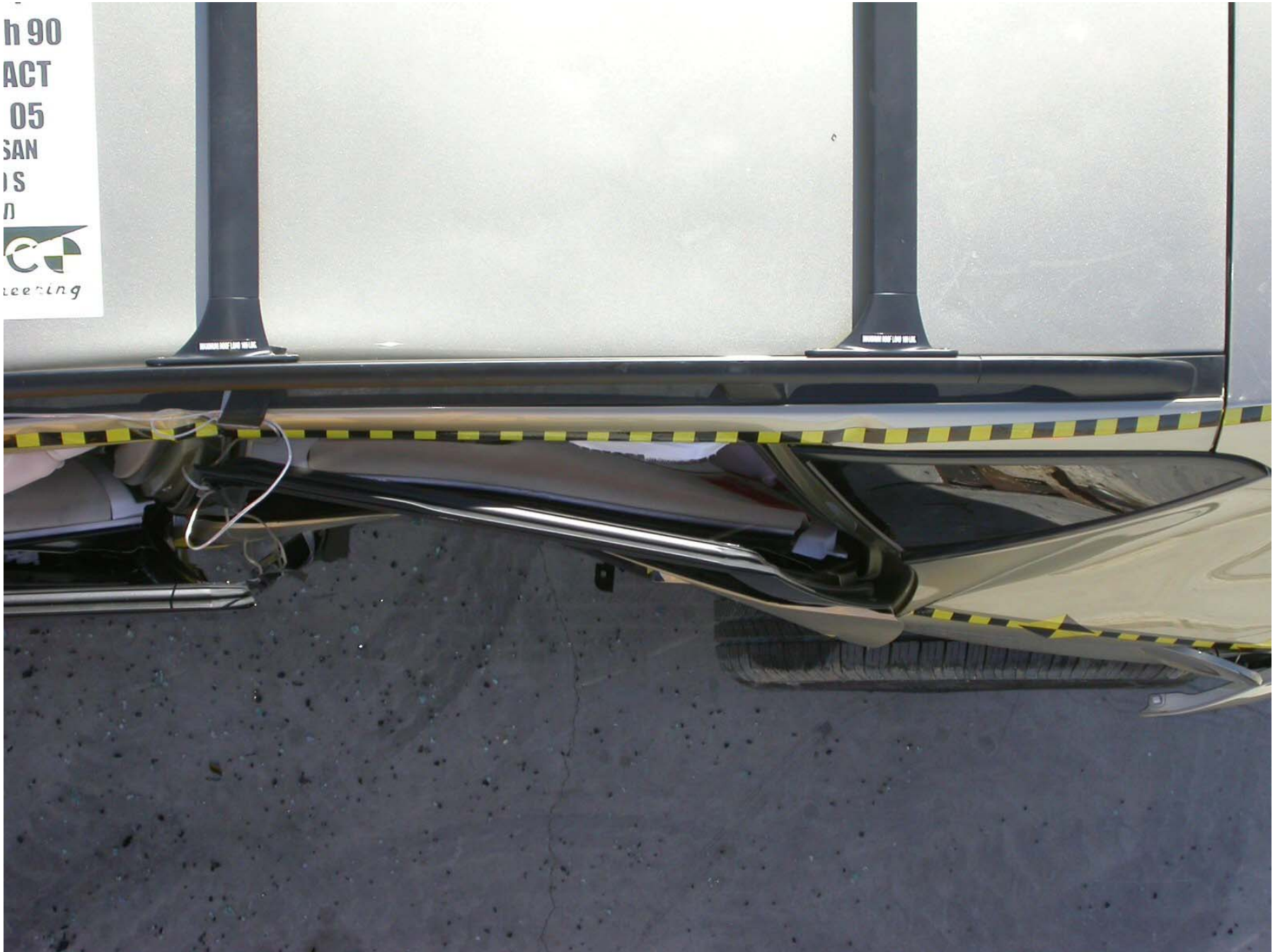


Figure A-48: Post-Test Passenger Dummy Clearance From Door



Figure A-49: Pre-Test Passenger Dummy Right Side View



Figure A-50: Post-Test Passenger Dummy Right Side View



Figure A-51: Pre-Test Rear Door Panel (Interior)



Figure A-52: Post-Test Rear Door Panel (Interior)



Figure A-53: Pre-Test Front View of Deformable Barrier



Figure A-54: Post-Test Front View of Deformable Barrier

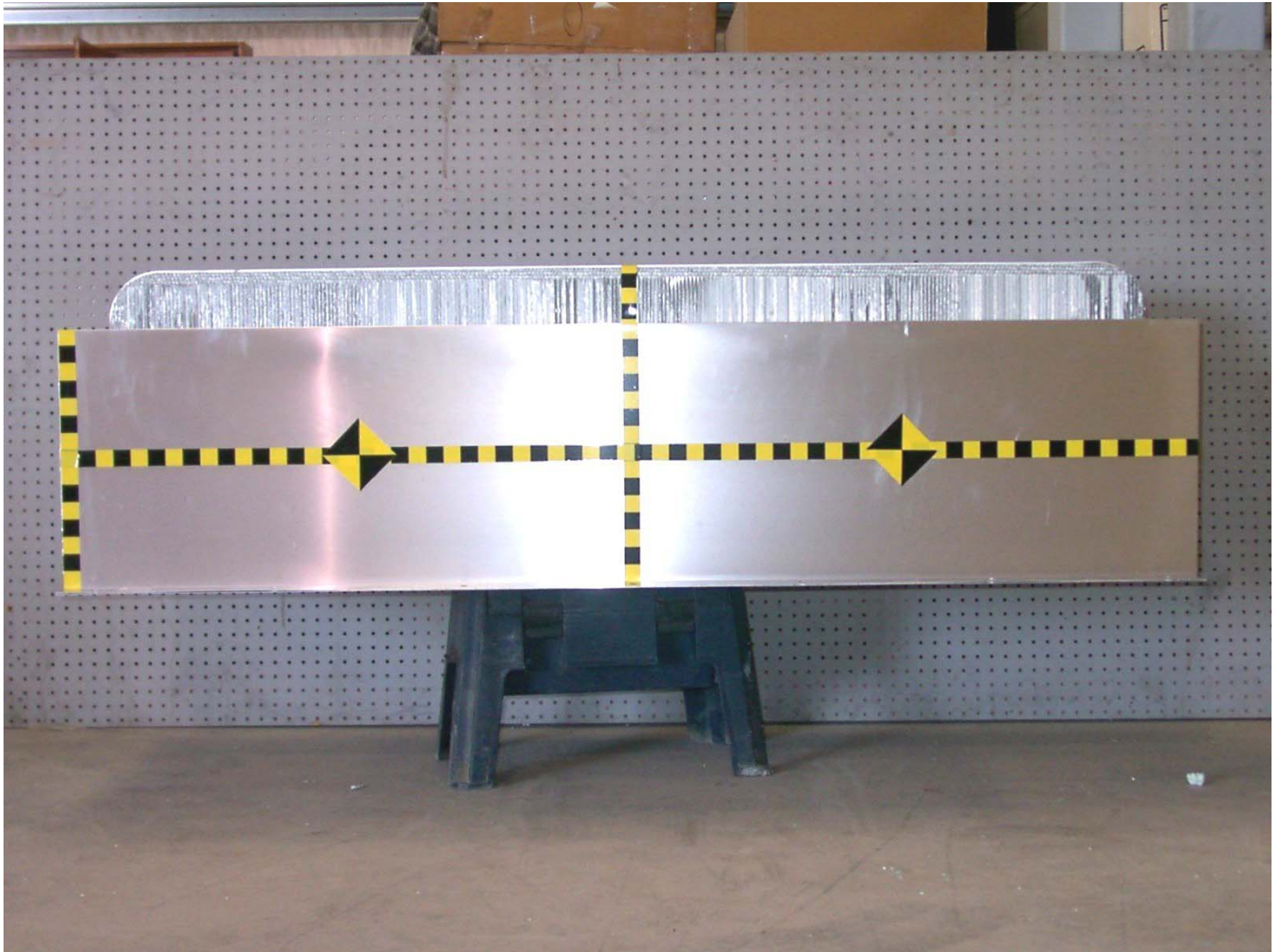


Figure A-55: Pre-Test Top View of Deformable Barrier



Figure A-56: Post-Test Top View of Deformable Barrier



Figure A-57: Pre-Test Right Side View of Deformable Barrier



Figure A-58: Post-Test Right Side View of Deformable Barrier



Figure A-59: Pre-Test Left Side View of Deformable Barrier



Figure A-60: Post-Test Left Side View of Deformable Barrier



Figure A-61: Vehicle on Rollover Device (0°)



Figure A-62: Vehicle on Rollover Device (90°)



Figure A-63: Vehicle on Rollover Device (180°)

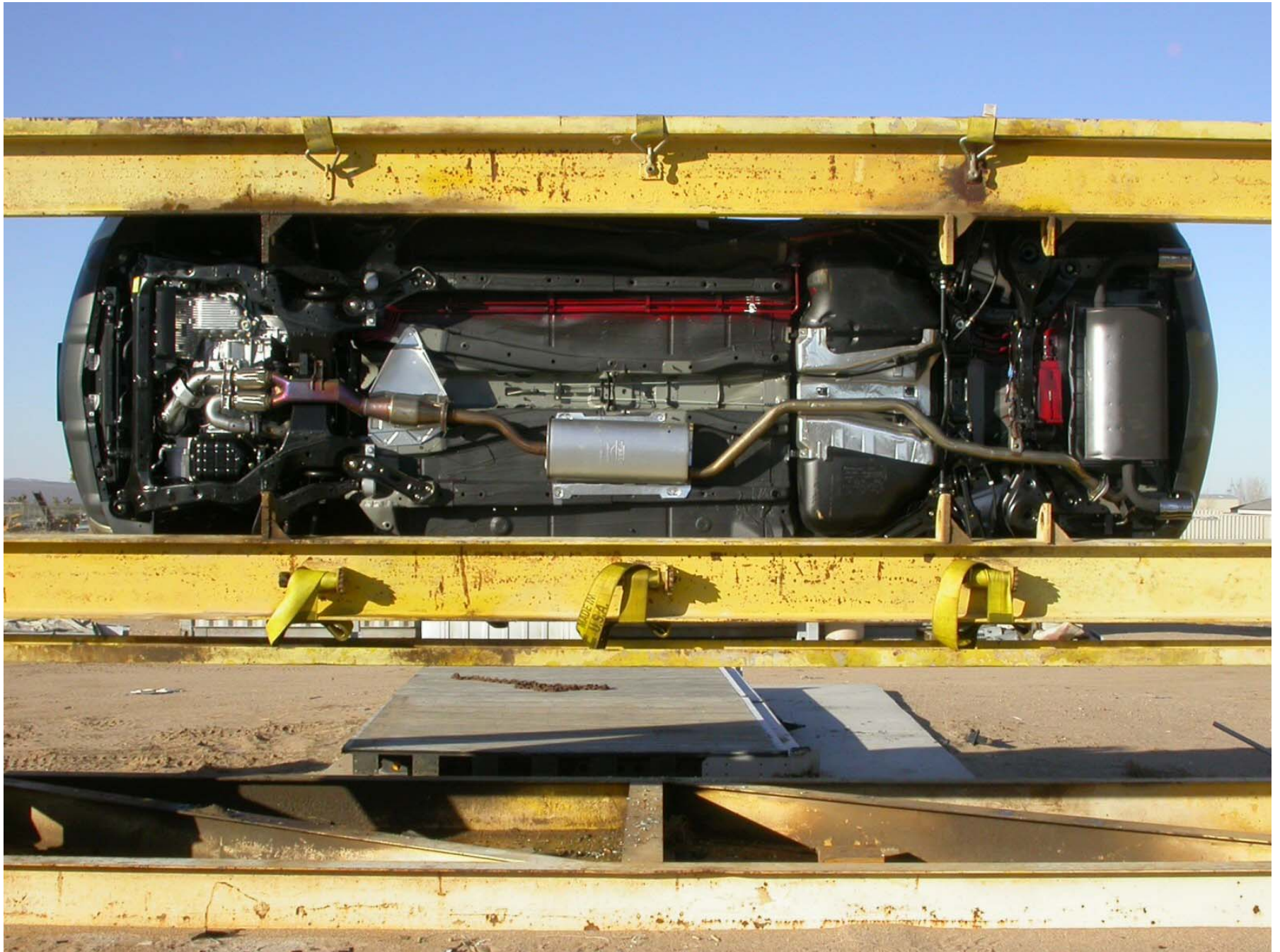


Figure A-64: Vehicle on Rollover Device (270°)



Figure A-65: Vehicle Impact



Figure A-66: Post-Test Driver Door Overhead View



Figure A-67: Post-Test Driver Door



Figure A-68: Post-Test Driver Door



Figure A-69: Post-Test Passenger Door Overhead View



Figure A-70: Post-Test Passenger Door



Figure A-71: Post-Test Rear Passenger Contact

APPENDIX B
SID/HIII, VEHICLE AND MDB RESPONSE DATA

LIST OF DATA PLOTS

Data Plot	Page
B-1	Driver Head X Primary
	Driver Head Y Primary
	Driver Head Z Primary
	Driver Head Resultant Primary
B-2	Driver Head Primary X Velocity
	Driver Head Primary Y Velocity
	Driver Head Primary Z Velocity
B-3	Driver Head X Redundant
	Driver Head Y Redundant
	Driver Head Z Redundant
	Driver Head Resultant Redundant
B-4	Driver Head Redundant X Velocity
	Driver Head Redundant Y Velocity
	Driver Head Redundant Z Velocity
B-5	Driver Upper Neck Force X
	Driver Upper Neck Force Y
	Driver Upper Neck Force Z
	Driver Upper Neck Force Resultant
B-6	Driver Upper Neck Moment X
	Driver Upper Neck Moment Y
	Driver Upper Neck Moment Z
	Driver Upper Neck Moment Resultant
B-7	Driver Upper Rib Primary Y
	Driver Lower Rib Primary Y
	Driver Lower Spine Primary Y
	Driver Pelvis Primary Y
B-8	Driver Upper Rib Primary Y Velocity
	Driver Lower Rib Primary Y Velocity
	Driver Lower Spine Primary Y Velocity
	Driver Pelvis Primary Y Velocity
B-9	Driver Upper Rib Redundant Y
	Driver Lower Rib Redundant Y
	Driver Lower Spine Redundant Y
	Driver Pelvis Redundant Y

LIST OF DATA PLOTS...(CONTINUED)

Data Plot		Page
B-10	Driver Upper Rib Redundant Y Velocity	B-10
	Driver Lower Rib Redundant Y Velocity	B-10
	Driver Lower Spine Redundant Y Velocity	B-10
	Driver Pelvis Redundant Y Velocity	B-10
B-11	Driver Thorax Contact	B-11
	Driver Pelvis Contact	B-11
B-12	Passenger Head X Primary	B-12
	Passenger Head Y Primary	B-12
	Passenger Head Z Primary	B-12
	Passenger Head Resultant Primary	B-12
B-13	Passenger Head Primary X Velocity	B-13
	Passenger Head Primary Y Velocity	B-13
	Passenger Head Primary Z Velocity	B-13
B-14	Passenger Head X Redundant	B-14
	Passenger Head Y Redundant	B-14
	Passenger Head Z Redundant	B-14
	Passenger Head Resultant Redundant	B-14
B-15	Passenger Head Redundant X Velocity	B-15
	Passenger Head Redundant Y Velocity	B-15
	Passenger Head Redundant Z Velocity	B-15
B-16	Passenger Upper Neck Force X	B-16
	Passenger Upper Neck Force Y	B-16
	Passenger Upper Neck Force Z	B-16
	Passenger Upper Neck Force Resultant	B-16
B-17	Passenger Upper Neck Moment X	B-17
	Passenger Upper Neck Moment Y	B-17
	Passenger Upper Neck Moment Z	B-17
	Passenger Upper Neck Moment Resultant	B-17
B-18	Passenger Upper Rib Primary Y	B-18
	Passenger Lower Rib Primary Y	B-18
	Passenger Lower Spine Primary Y	B-18
	Passenger Pelvis Primary Y	B-18

LIST OF DATA PLOTS...(CONTINUED)

Data Plot		Page
B-19	Passenger Upper Rib Primary Y Velocity	B-19
	Passenger Lower Rib Primary Y Velocity	B-19
	Passenger Lower Spine Primary Y Velocity	B-19
	Passenger Pelvis Primary Y Velocity	B-19
B-20	Passenger Upper Rib Redundant Y	B-20
	Passenger Lower Rib Redundant Y	B-20
	Passenger Lower Spine Redundant Y	B-20
	Passenger Pelvis Redundant Y	B-20
B-21	Passenger Upper Rib Redundant Y Velocity	B-21
	Passenger Lower Rib Redundant Y Velocity	B-21
	Passenger Lower Spine Redundant Y Velocity	B-21
	Passenger Pelvis Redundant Y Velocity	B-21
B-22	Passenger Thorax Contact	B-22
	Passenger Pelvis Contact	B-22
B-23	Vehicle Right Sill at Front Seat X	B-23
	Vehicle Right Sill at Front Seat Y	B-23
	Vehicle Right Sill at Front Seat Z	B-23
	Vehicle Right Sill Front Seat Resultant	B-23
B-24	Vehicle Right Sill at Front Seat X Velocity	B-24
	Vehicle Right Sill at Front Seat Y Velocity	B-24
	Vehicle Right Sill at Front Seat Z Velocity	B-24
B-25	Vehicle Right Sill at Rear Seat X	B-25
	Vehicle Right Sill at Rear Seat Y	B-25
	Vehicle Right Sill at Rear Seat Z	B-25
	Vehicle Right Sill Rear Seat Resultant	B-25
B-26	Vehicle Right Sill at Rear Seat X Velocity	B-26
	Vehicle Right Sill at Rear Seat Y Velocity	B-26
	Vehicle Right Sill at Rear Seat Z Velocity	B-26
B-27	Vehicle Rear Floor Above Axle X	B-27
	Vehicle Rear Floor Above Axle Y	B-27
	Vehicle Rear Floor Above Axle Z	B-27
	Vehicle Rear Floor Above Axle Resultant	B-27
B-28	Vehicle Rear Floor Above Axle X Velocity	B-28
	Vehicle Rear Floor Above Axle Y Velocity	B-28
	Vehicle Rear Floor Above Axle Z Velocity	B-28

LIST OF DATA PLOTS...(CONTINUED)

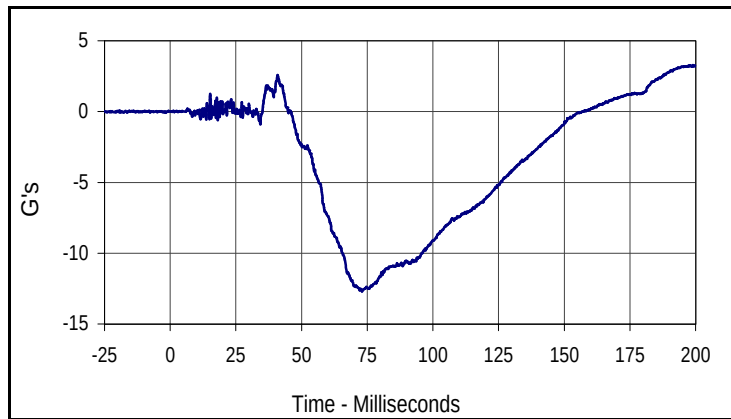
Data Plot	Page
B-29	Vehicle Left Sill at Rear Door Y
	Vehicle Left Sill at Front Door Y
	Vehicle Left Sill at Rear Door Y Velocity
	Vehicle Left Sill at Front Door Y Velocity
B-30	Vehicle Left Front Door CL Y
	Vehicle Right Rear Occupant Compartment
	Vehicle Left Front Door Mid Rear Y
	Vehicle Left Front Door Upper CL Y
B-31	Vehicle Left Front Door CL Y Velocity
	Vehicle Right Rear Occupant Compartment Y Velocity
	Vehicle Left Front Door Mid Rear Y Velocity
	Vehicle Left Rear Door Upper CL Y Velocity
B-32	Vehicle Left Rear Door Mid Rear Y
	Vehicle Left Rear Door Upper CL Y
	Vehicle Left Rear Door Mid Rear Y Velocity
	Vehicle Left Rear Door Upper CL Y Velocity
B-33	Vehicle B-Post Lower Y
	Vehicle B-Post Middle Y
	Vehicle B-Post Lower Y Velocity
	Vehicle B-Post Middle Y Velocity
B-34	Vehicle A-Post Lower Y
	Vehicle A-Post Middle Y
	Vehicle A-Post Lower Y Velocity
	Vehicle A-Post Middle Y Velocity
B-35	Vehicle Left Front Seat Track
	Vehicle Rear Seat Structure
	Vehicle Left Front Seat Track Y Velocity
	Vehicle Rear Seat Structure Y Velocity
B-36	Vehicle CG X
	Vehicle CG Y
	Vehicle CG Z
	Vehicle CG Resultant
B-37	Vehicle CG X Velocity
	Vehicle CG Y Velocity
	Vehicle CG Z Velocity

LIST OF DATA PLOTS...(CONTINUED)

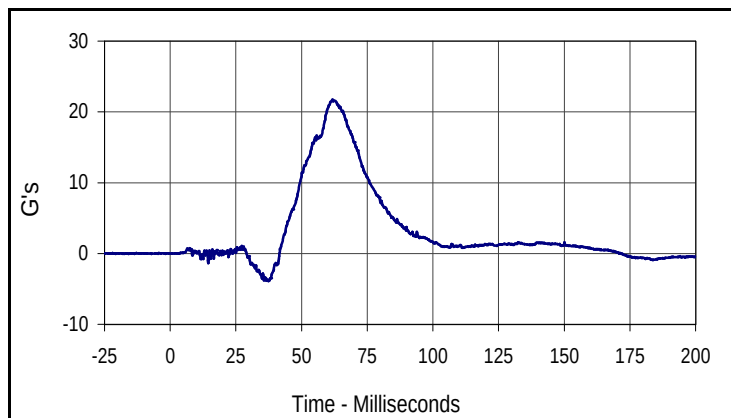
Data Plot	Page
B-38	Driver Upper Rib Primary Y
	Driver Lower Rib Primary Y
	Driver Lower Spine Primary Y
	Driver Pelvis Primary Y
B-39	Driver Upper Rib Redundant Y
	Driver Lower Rib Redundant Y
	Driver Lower Spine Redundant Y
	Driver Pelvis Redundant Y
B-40	Passenger Upper Rib Primary Y
	Passenger Lower Rib Primary Y
	Passenger Lower Spine Primary Y
	Passenger Pelvis Primary Y
B-41	Passenger Upper Rib Redundant Y
	Passenger Lower Rib Redundant Y
	Passenger Lower Spine Redundant Y
	Passenger Pelvis Redundant Y
B-42	MDB CG X
	MDB CG Y
	MDB CG Z
	MDB CG Resultant
B-43	MDB CG X Velocity
	MDB CG Y Velocity
	MDB CG Z Velocity
B-44	MDB Rear X
	MDB Rear Y
	MDB Rear X Velocity
	MDB Rear Y Velocity
B-45	MDB Right Bumper Contact

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

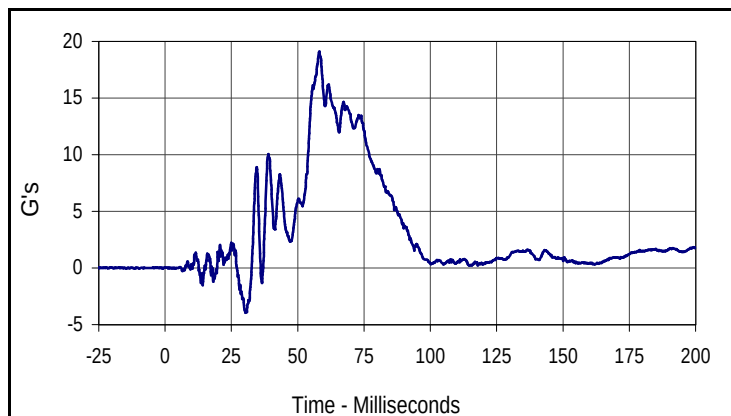
Test Date: 2/3/05
 NHTSA No.: M55204



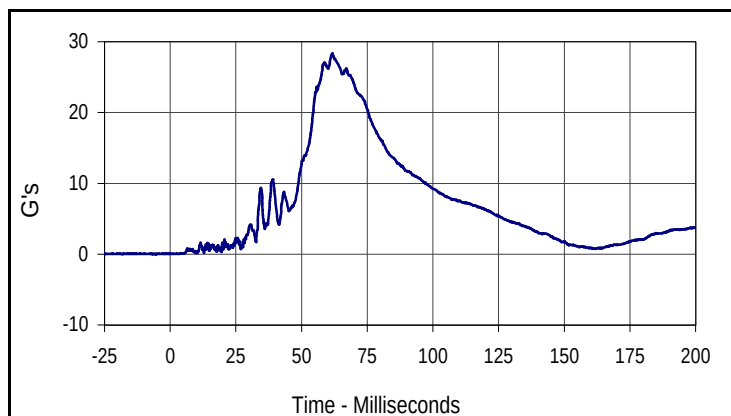
Curve Description			
Driver Head X Primary			
CURNO	Type	SAE Class	Units
001	FIL	1000	G's
Max	Time	Min	Time
3.3	198.9	-12.7	73.0



Curve Description			
Driver Head Y Primary			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
21.7	61.7	-3.9	37.5



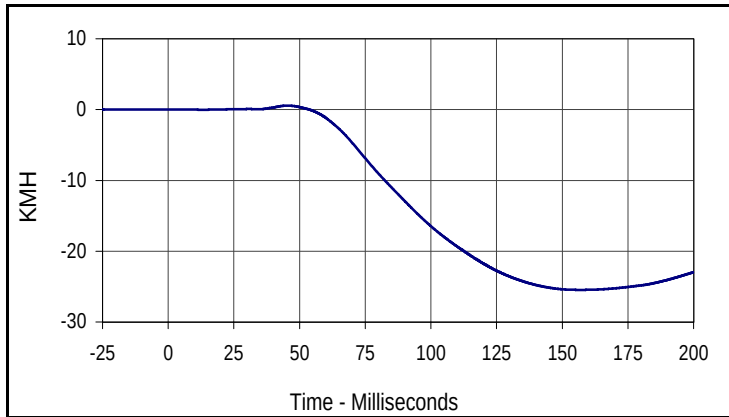
Curve Description			
Driver Head Z Primary			
CURNO	Type	SAE Class	Units
003	FIL	1000	G's
Max	Time	Min	Time
19.1	58.1	-4.0	30.4



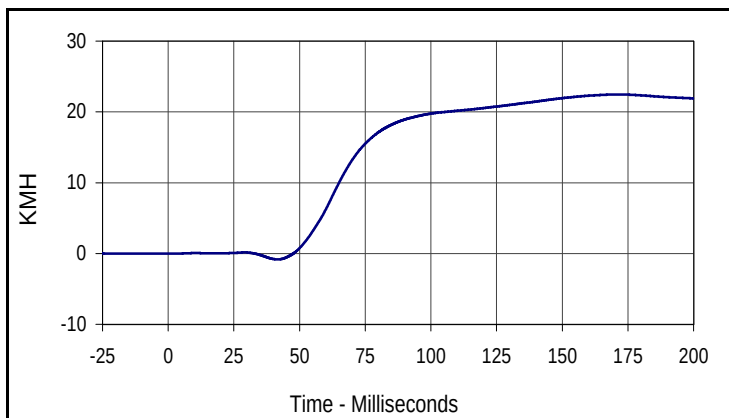
Curve Description			
Driver Head Resultant Primary			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
28.4	61.7	0.0	2.7

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

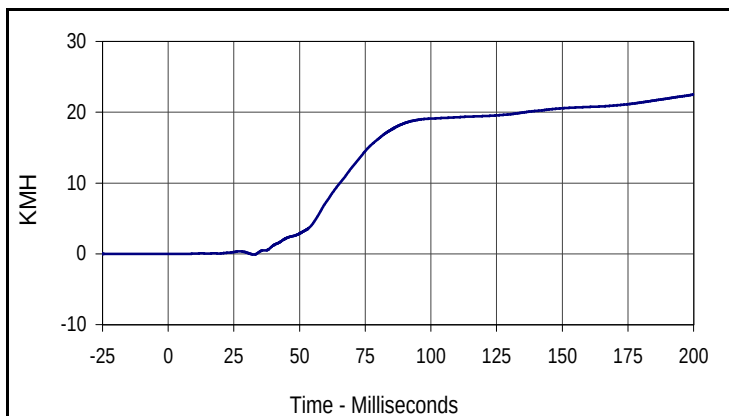
Test Date: 2/3/05
 NHTSA No.: M55204



Curve Description			
Driver Head Primary X Velocity			
CURNO	Type	SAE Class	Units
001	IN1	180	KMH
Max	Time	Min	Time
0.5	45.5	-25.5	157.0



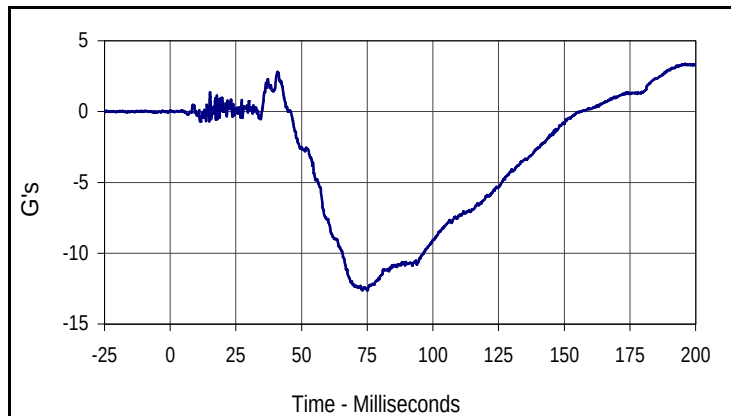
Curve Description			
Driver Head Primary Y Velocity			
CURNO	Type	SAE Class	Units
002	IN1	180	KMH
Max	Time	Min	Time
22.5	171.5	-0.8	41.7



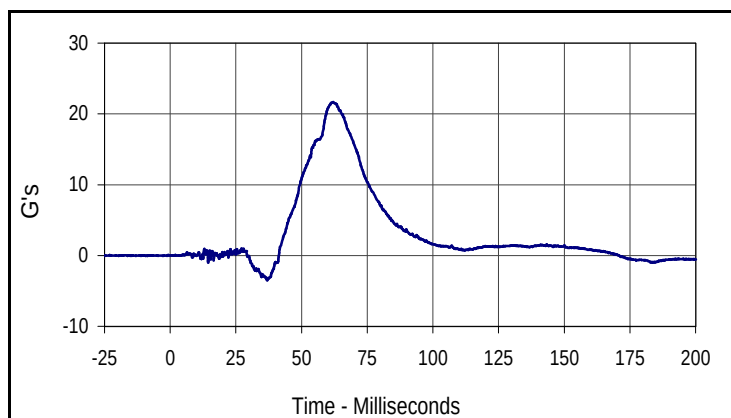
Curve Description			
Driver Head Primary Z Velocity			
CURNO	Type	SAE Class	Units
003	IN1	180	KMH
Max	Time	Min	Time
22.5	200.0	-0.1	32.6

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

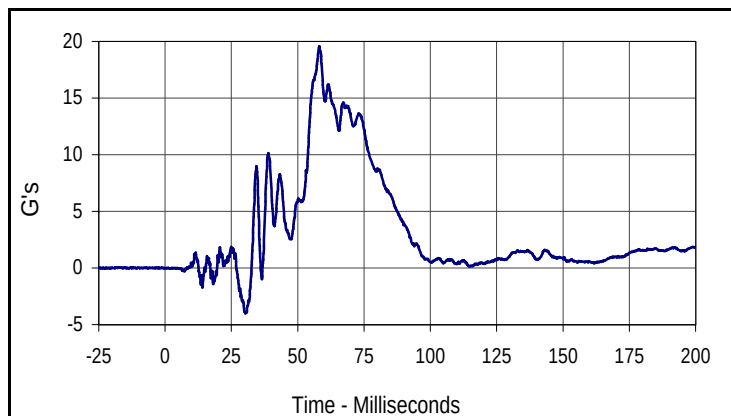
Test Date: 2/3/05
 NHTSA No.: M55204



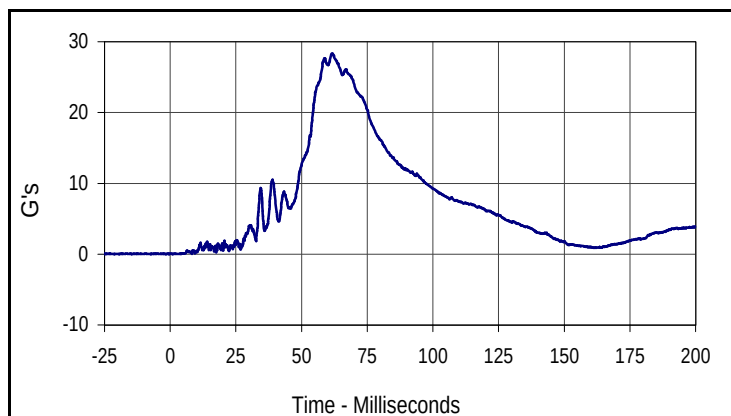
Curve Description			
Driver Head X Redundant			
CURNO	Type	SAE Class	Units
004	FIL	1000	G's
Max	Time	Min	Time
3.4	196.0	-12.6	75.1



Curve Description			
Driver Head Y Redundant			
CURNO	Type	SAE Class	Units
005	FIL	1000	G's
Max	Time	Min	Time
21.7	62.0	-3.5	36.9



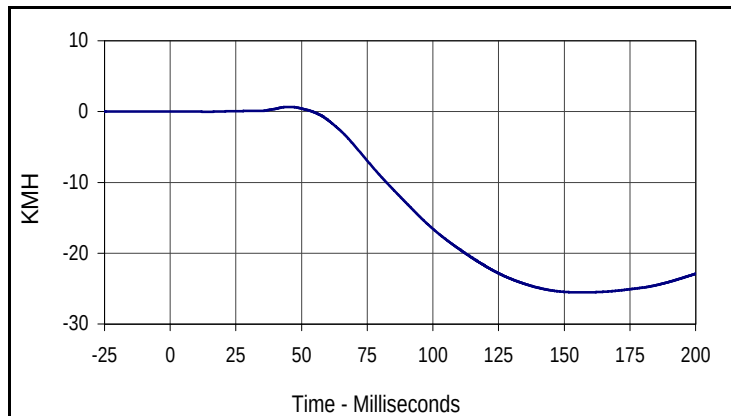
Curve Description			
Driver Head Z Redundant			
CURNO	Type	SAE Class	Units
006	FIL	1000	G's
Max	Time	Min	Time
19.6	58.1	-4.0	30.3



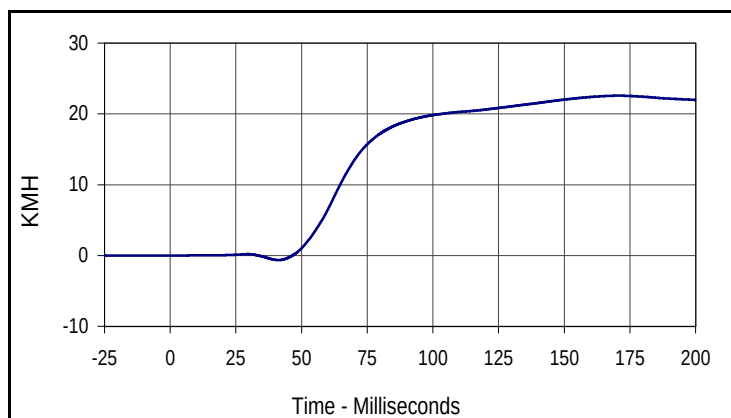
Curve Description			
Driver Head Resultant Redundant			
CURNO	Type	SAE Class	Units
004	RES	1000	G's
Max	Time	Min	Time
28.4	61.6	0.0	1.0

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

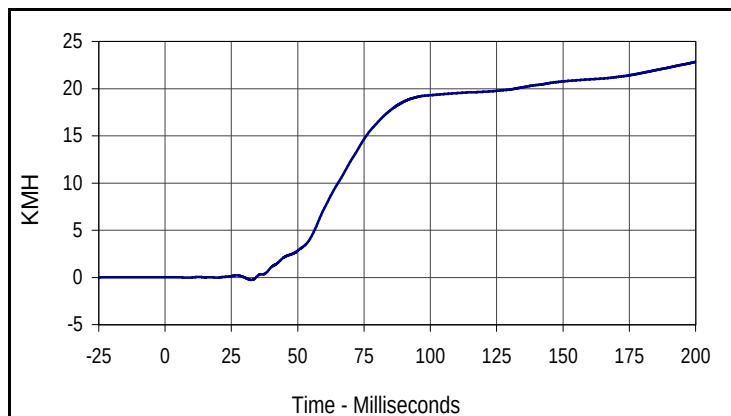
Test Date: 2/3/05
 NHTSA No.: M55204



Curve Description			
Driver Head Redundant X Velocity			
CURNO	Type	SAE Class	Units
004	IN1	180	KMH
Max	Time	Min	Time
0.7	45.5	-25.5	156.2



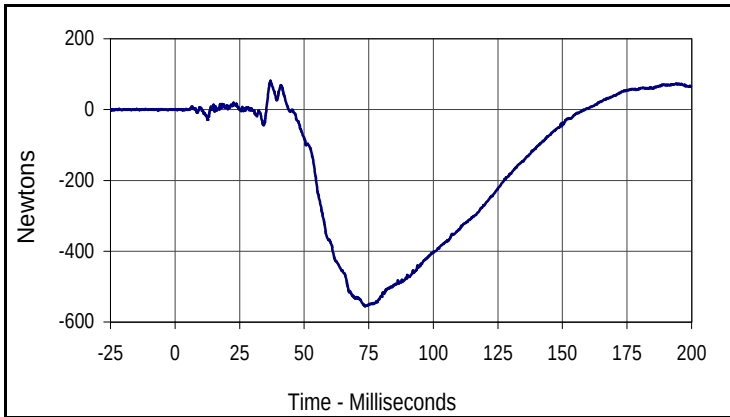
Curve Description			
Driver Head Redundant Y Velocity			
CURNO	Type	SAE Class	Units
005	IN1	180	KMH
Max	Time	Min	Time
22.6	170.8	-0.6	41.3



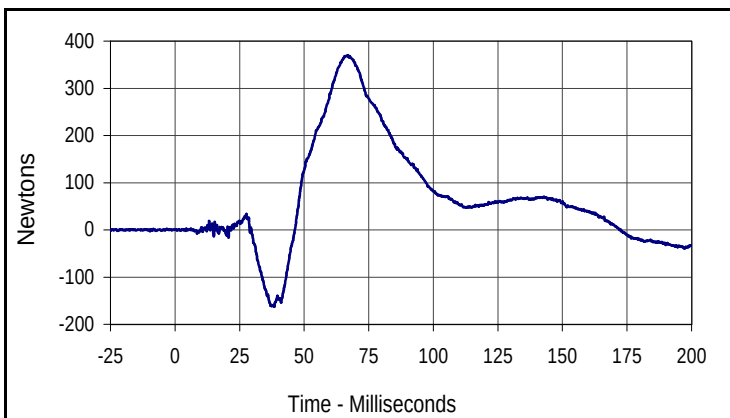
Curve Description			
Driver Head Redundant Z Velocity			
CURNO	Type	SAE Class	Units
006	IN1	180	KMH
Max	Time	Min	Time
22.8	200.0	-0.3	32.6

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

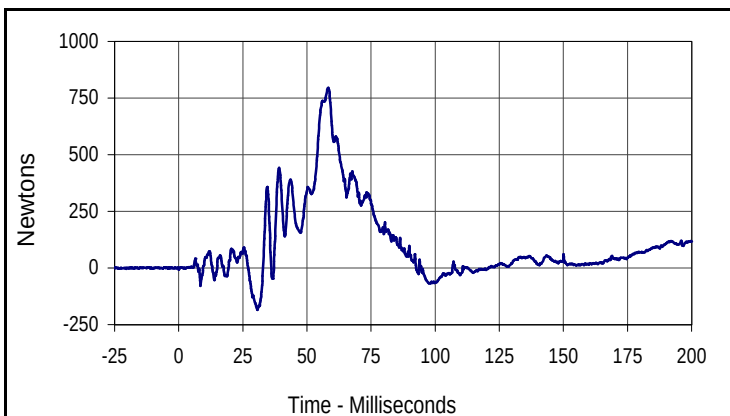
Test Date: 2/3/05
 NHTSA No.: M55204



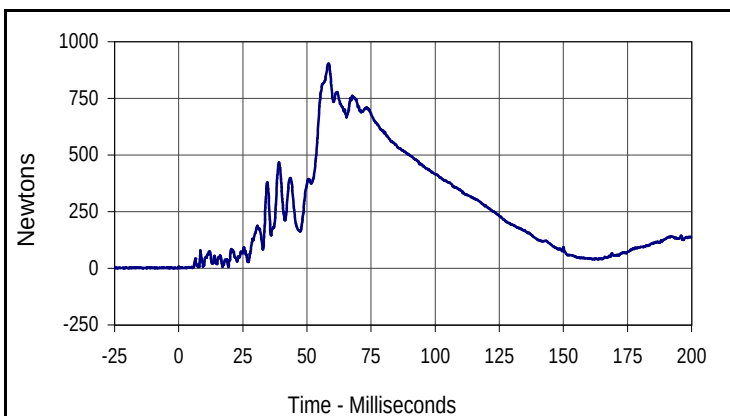
Curve Description			
Driver Upper Neck Force X			
CURNO	Type	SAE Class	Units
007	FIL	1000	Newtons
Max	Time	Min	Time
81.2	36.9	-556.0	73.5



Curve Description			
Driver Upper Neck Force Y			
CURNO	Type	SAE Class	Units
008	FIL	1000	Newtons
Max	Time	Min	Time
370.0	66.9	-162.6	38.4



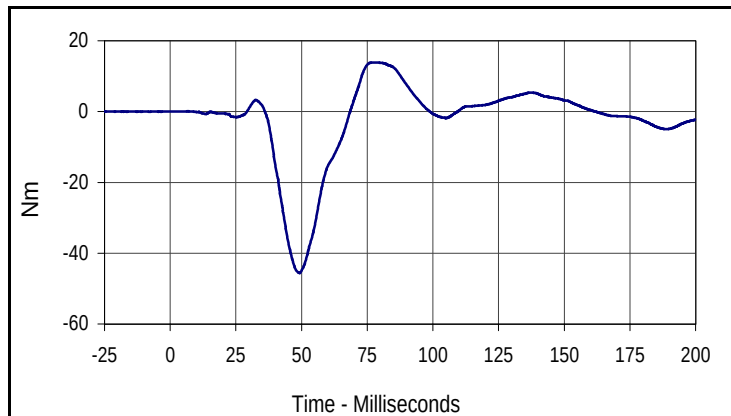
Curve Description			
Driver Upper Neck Force Z			
CURNO	Type	SAE Class	Units
009	FIL	1000	Newtons
Max	Time	Min	Time
795.4	58.2	-184.8	30.7



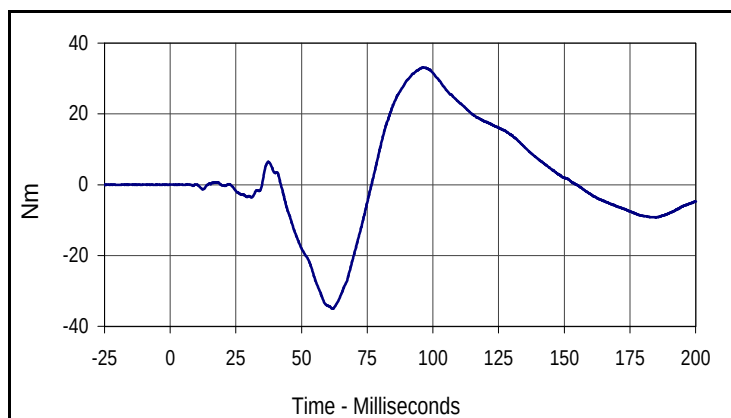
Curve Description			
Driver Upper Neck Force Resultant			
CURNO	Type	SAE Class	Units
007	RES	1000	Newtons
Max	Time	Min	Time
903.8	58.5	1.1	2.1

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

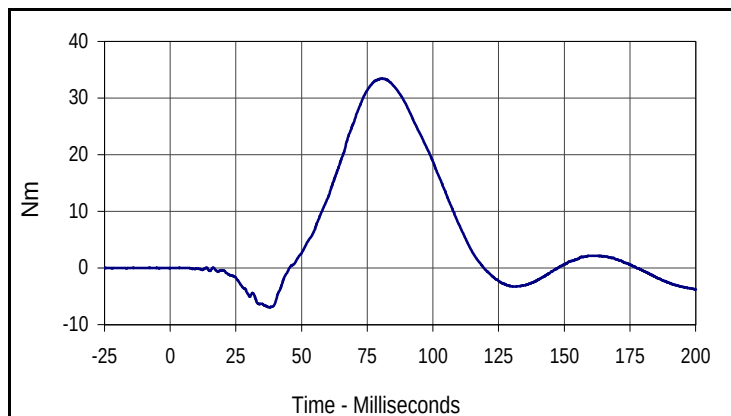
Test Date: 2/3/05
 NHTSA No.: M55204



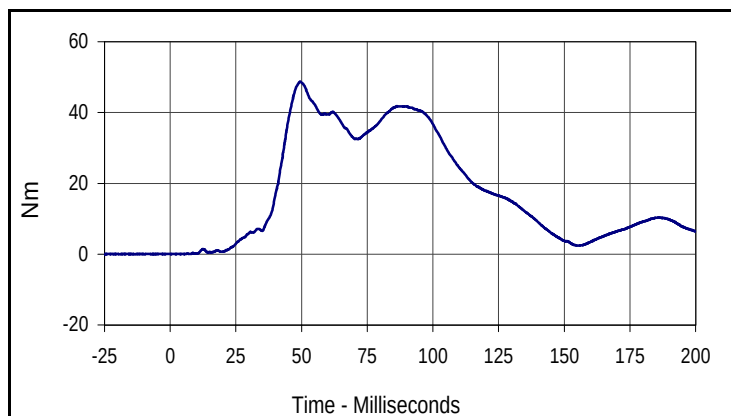
Curve Description			
Driver Upper Neck Moment X			
CURNO	Type	SAE Class	Units
010	FIL	600	Nm
Max	Time	Min	Time
13.9	79.2	-45.6	49.3



Curve Description			
Driver Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
011	FIL	600	Nm
Max	Time	Min	Time
33.1	96.3	-35.0	61.9



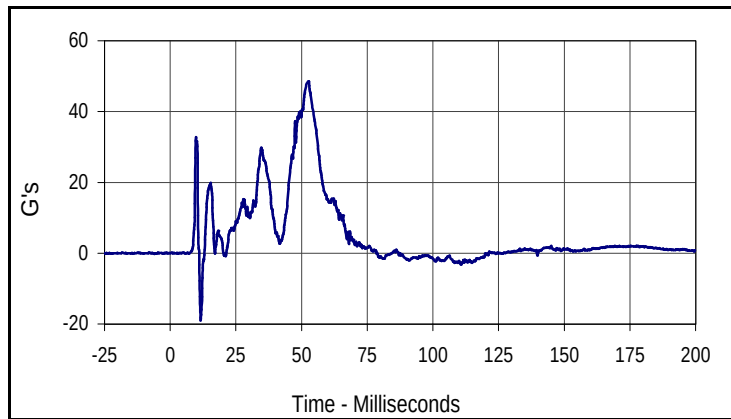
Curve Description			
Driver Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
012	FIL	600	Nm
Max	Time	Min	Time
33.5	80.6	-7.0	37.9



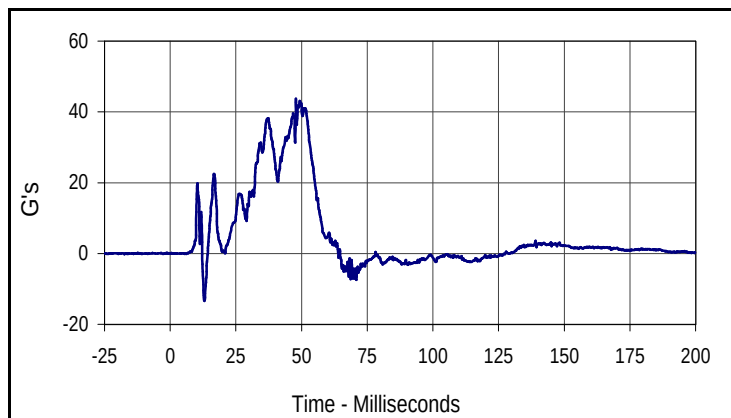
Curve Description			
Driver Upper Neck Moment Resultant			
CURNO	Type	SAE Class	Units
010	RES	600	Nm
Max	Time	Min	Time
48.7	49.5	0.0	2.2

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

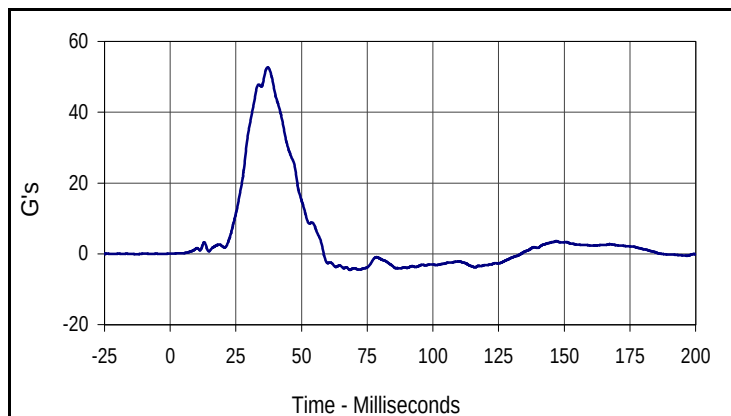
Test Date: 2/3/05
 NHTSA No.: M55204



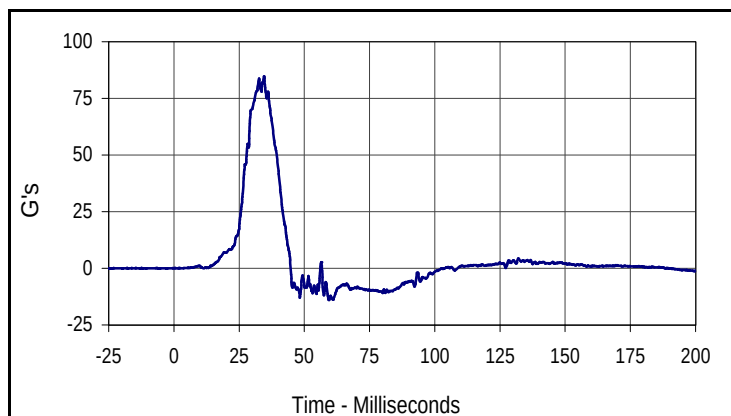
Curve Description			
Driver Upper Rib Primary Y			
CURNO	Type	SAE Class	Units
013	FIL	1000	G's
Max	Time	Min	Time
48.5	52.7	-19.0	11.6



Curve Description			
Driver Lower Rib Primary Y			
CURNO	Type	SAE Class	Units
014	FIL	1000	G's
Max	Time	Min	Time
43.8	47.9	-13.4	13.0



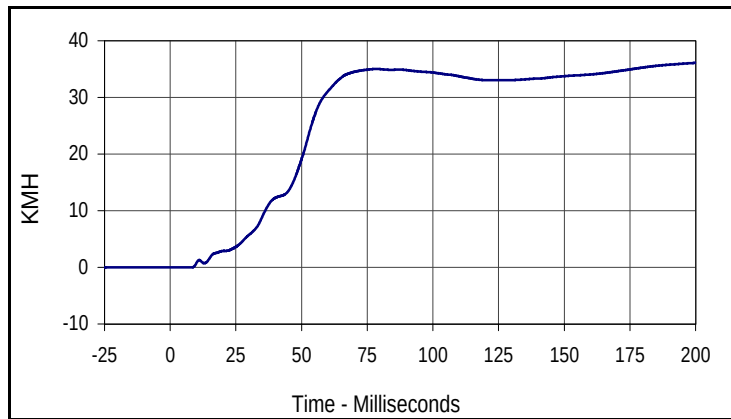
Curve Description			
Driver Lower Spine Primary Y			
CURNO	Type	SAE Class	Units
015	FIL	180	G's
Max	Time	Min	Time
52.7	37.1	-4.5	68.4



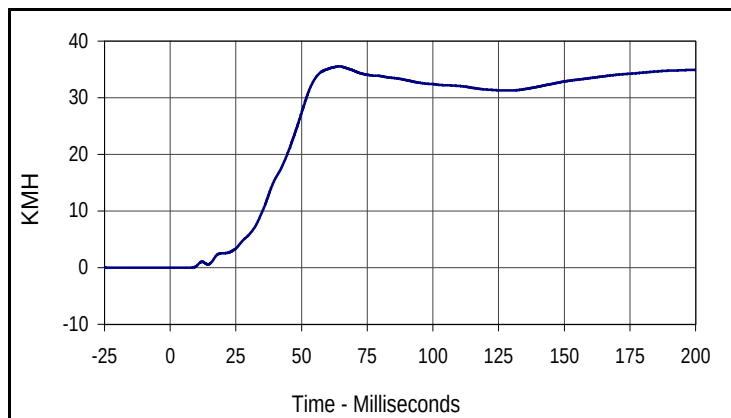
Curve Description			
Driver Pelvis Primary Y			
CURNO	Type	SAE Class	Units
016	FIL	1000	G's
Max	Time	Min	Time
84.7	34.6	-14.0	59.4

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

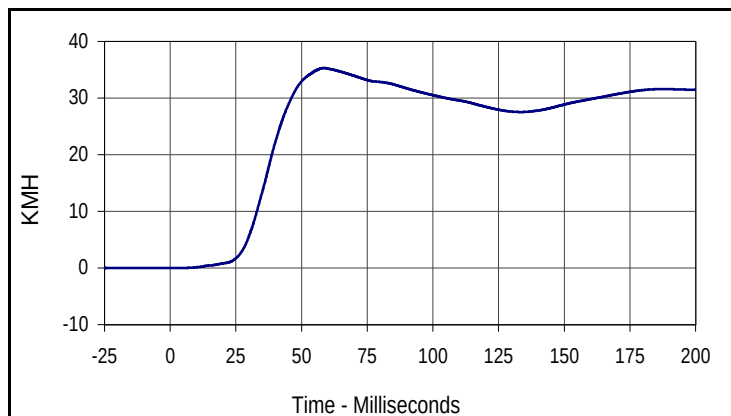
Test Date: 2/3/05
 NHTSA No.: M55204



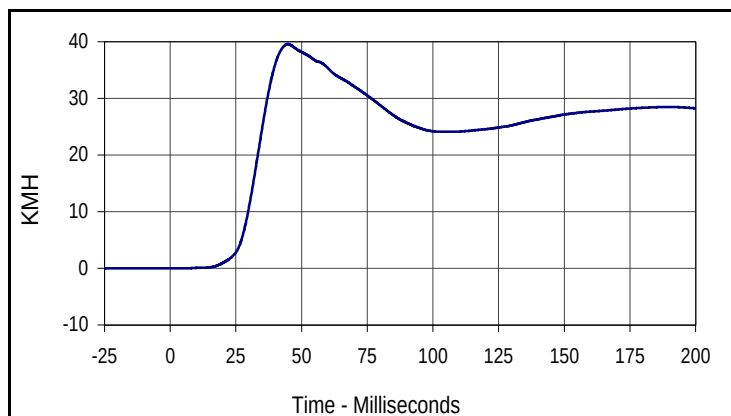
Curve Description			
Driver Upper Rib Primary Y Velocity			
CURNO	Type	SAE Class	Units
013	IN1	180	KMH
Max	Time	Min	Time
36.1	200.0	0.0	8.0



Curve Description			
Driver Lower Rib Primary Y Velocity			
CURNO	Type	SAE Class	Units
014	IN1	180	KMH
Max	Time	Min	Time
35.5	64.3	0.0	0.0



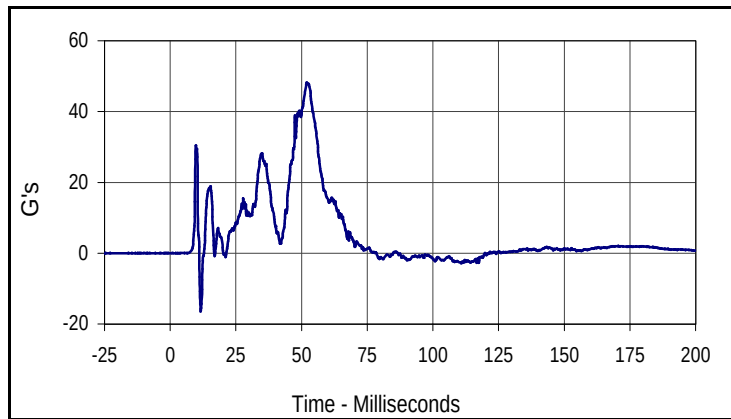
Curve Description			
Driver Lower Spine Primary Y Velocity			
CURNO	Type	SAE Class	Units
015	IN1	180	KMH
Max	Time	Min	Time
35.3	58.5	0.0	0.0



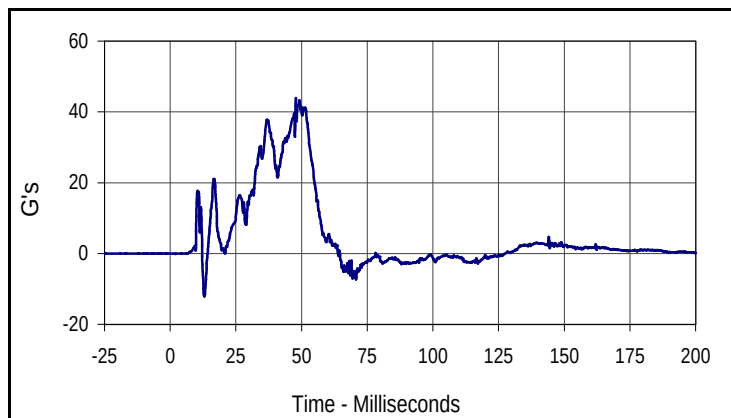
Curve Description			
Driver Pelvis Primary Y Velocity			
CURNO	Type	SAE Class	Units
016	IN1	180	KMH
Max	Time	Min	Time
39.6	44.7	0.0	0.0

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

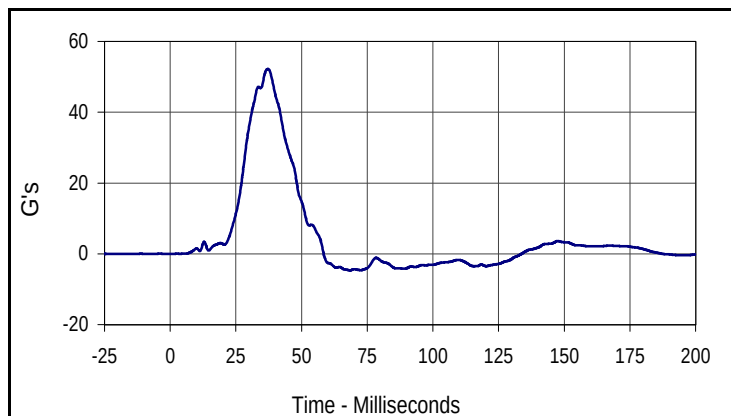
Test Date: 2/3/05
 NHTSA No.: M55204



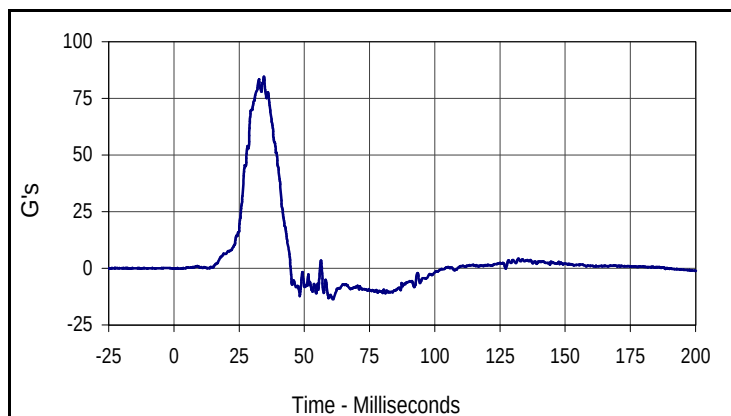
Curve Description			
Driver Upper Rib Redundant Y			
CURNO	Type	SAE Class	Units
017	FIL	1000	G's
Max	Time	Min	Time
48.2	52.0	-16.5	11.6



Curve Description			
Driver Lower Rib Redundant Y			
CURNO	Type	SAE Class	Units
018	FIL	1000	G's
Max	Time	Min	Time
43.9	47.8	-12.1	13.0



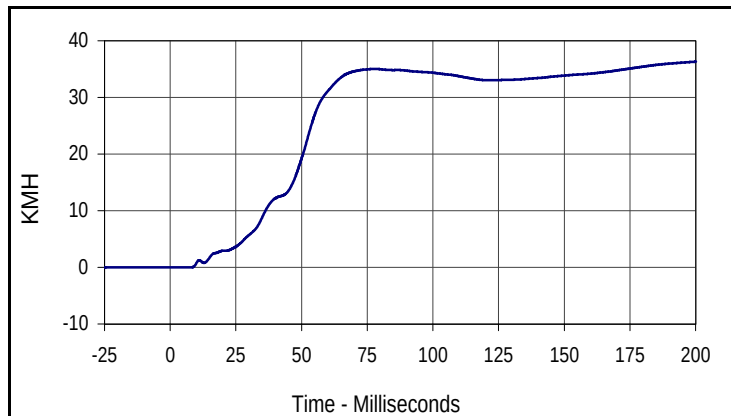
Curve Description			
Driver Lower Spine Redundant Y			
CURNO	Type	SAE Class	Units
019	FIL	180	G's
Max	Time	Min	Time
52.2	37.2	-4.7	68.5



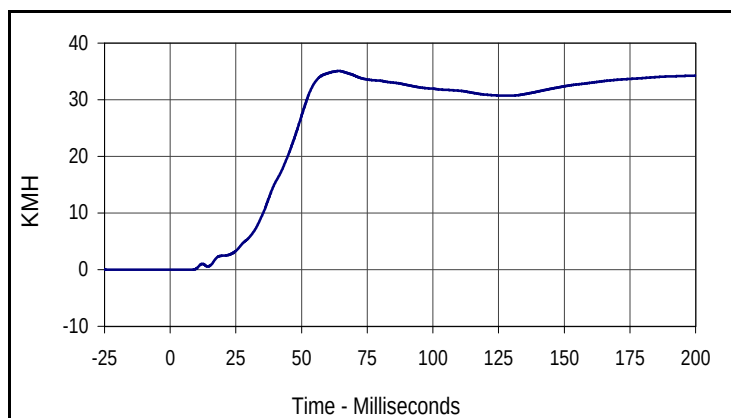
Curve Description			
Driver Pelvis Redundant Y			
CURNO	Type	SAE Class	Units
020	FIL	1000	G's
Max	Time	Min	Time
84.6	34.5	-13.7	61.0

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

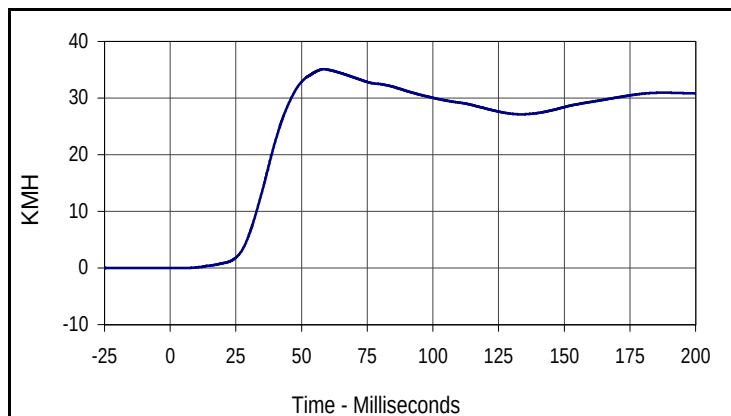
Test Date: 2/3/05
 NHTSA No.: M55204



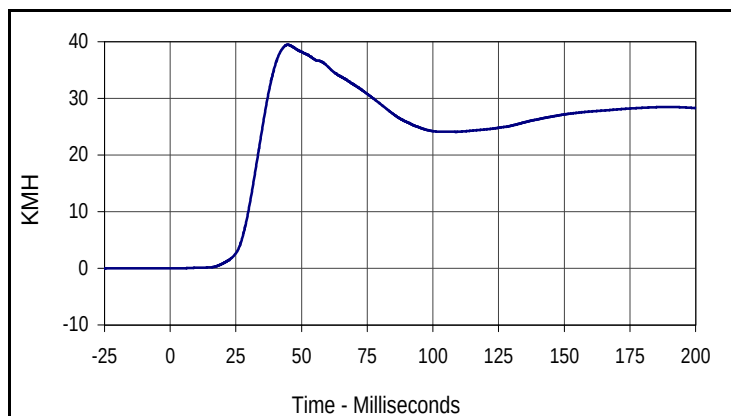
Curve Description			
Driver Upper Rib Redundant Y Velocity			
CURNO	Type	SAE Class	Units
017	IN1	180	KMH
Max	Time	Min	Time
36.3	200.0	0.0	7.9



Curve Description			
Driver Lower Rib Redundant Y Velocity			
CURNO	Type	SAE Class	Units
018	IN1	180	KMH
Max	Time	Min	Time
35.1	64.2	0.0	5.7



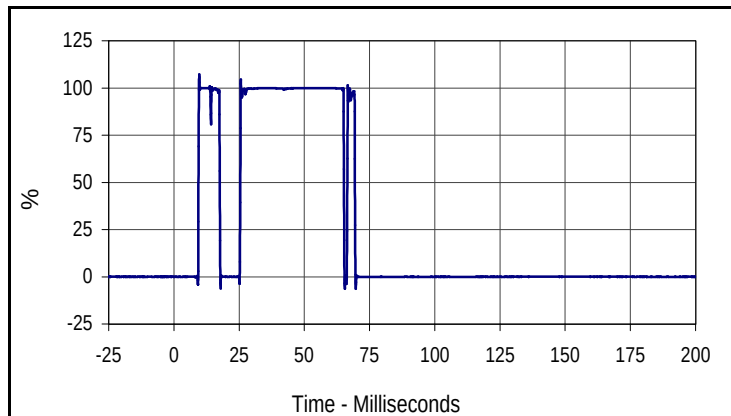
Curve Description			
Driver Lower Spine Redundant Y Velocity			
CURNO	Type	SAE Class	Units
019	IN1	180	KMH
Max	Time	Min	Time
35.1	58.4	0.0	0.0



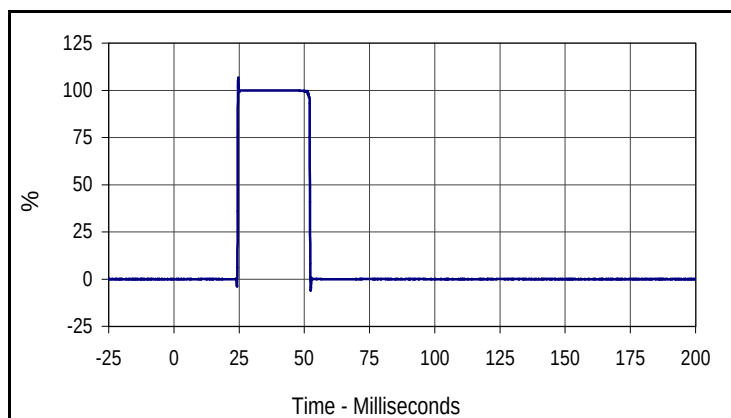
Curve Description			
Driver Pelvis Redundant Y Velocity			
CURNO	Type	SAE Class	Units
020	IN1	180	KMH
Max	Time	Min	Time
39.5	44.7	0.0	3.7

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05
 NHTSA No.: M55204



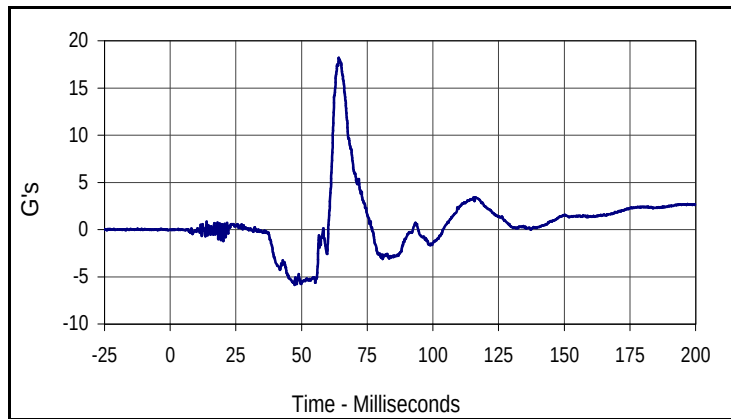
Curve Description			
Driver Thorax Contact			
CURNO	Type	SAE Class	Units
021	FIL	1000	%
Max	Time	Cross %	Time
107.2	9.7	50.0	25.5



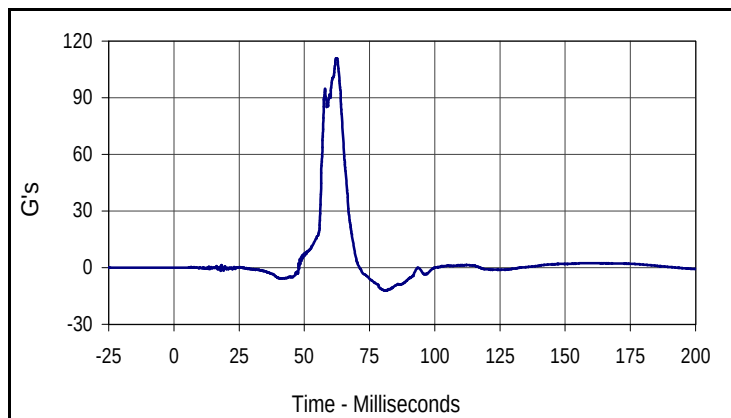
Curve Description			
Driver Pelvis Contact			
CURNO	Type	SAE Class	Units
022	FIL	1000	%
Max	Time	Cross %	Time
106.6	24.7	50.0	24.5

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

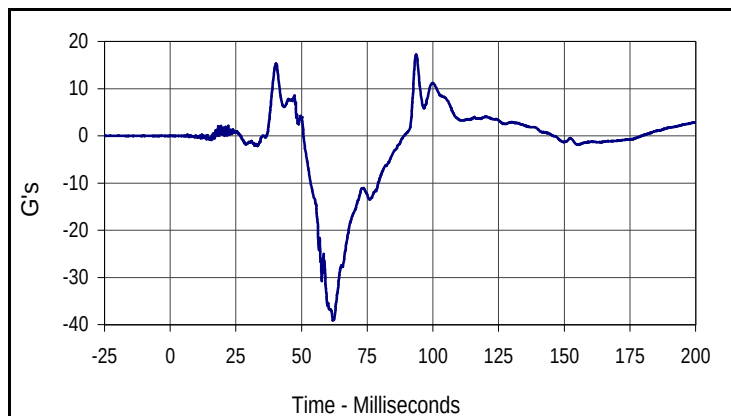
Test Date: 2/3/05
 NHTSA No.: M55204



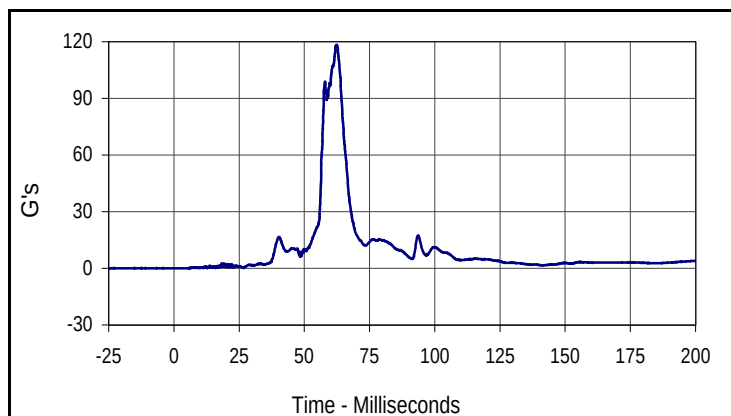
Curve Description			
Passenger Head X Primary			
CURNO	Type	SAE Class	Units
023	FIL	1000	G's
Max	Time	Min	Time
18.2	64.2	-5.9	47.3



Curve Description			
Passenger Head Y Primary			
CURNO	Type	SAE Class	Units
024	FIL	1000	G's
Max	Time	Min	Time
110.9	62.5	-12.2	81.4



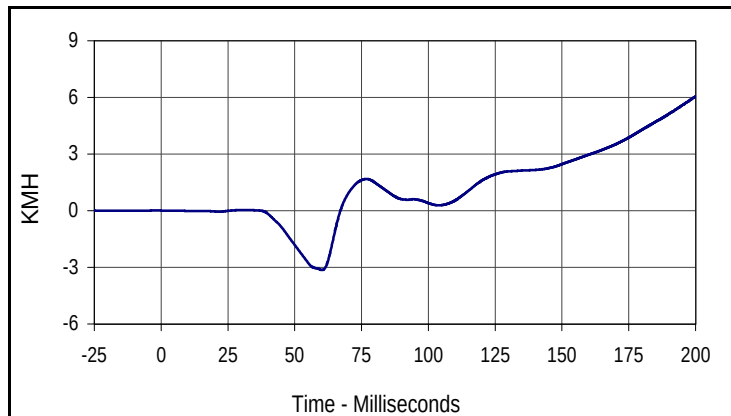
Curve Description			
Passenger Head Z Primary			
CURNO	Type	SAE Class	Units
025	FIL	1000	G's
Max	Time	Min	Time
17.2	93.6	-39.1	61.9



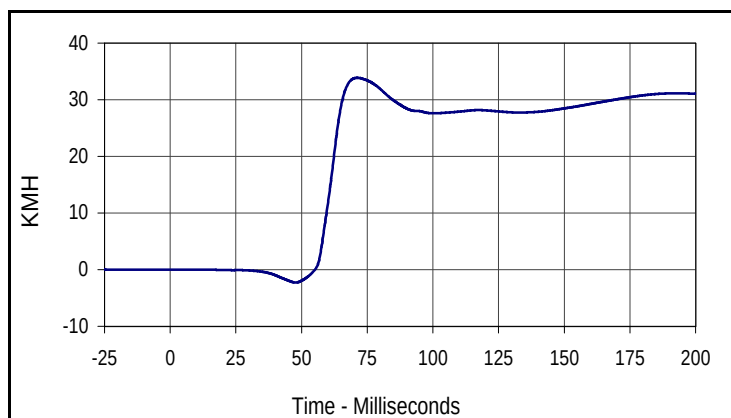
Curve Description			
Passenger Head Resultant Primary			
CURNO	Type	SAE Class	Units
023	RES	1000	G's
Max	Time	Min	Time
118.3	62.5	0.0	4.4

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

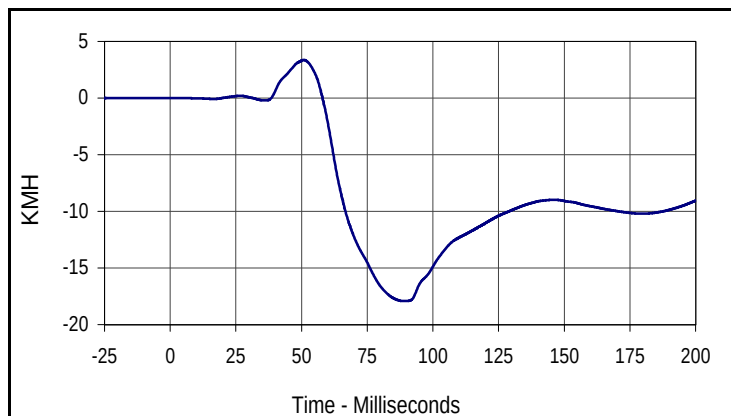
Test Date: 2/3/05
 NHTSA No.: M55204



Curve Description			
Passenger Head Primary X Velocity			
CURNO	Type	SAE Class	Units
023	IN1	180	KMH
Max	Time	Min	Time
6.1	200.0	-3.1	60.2



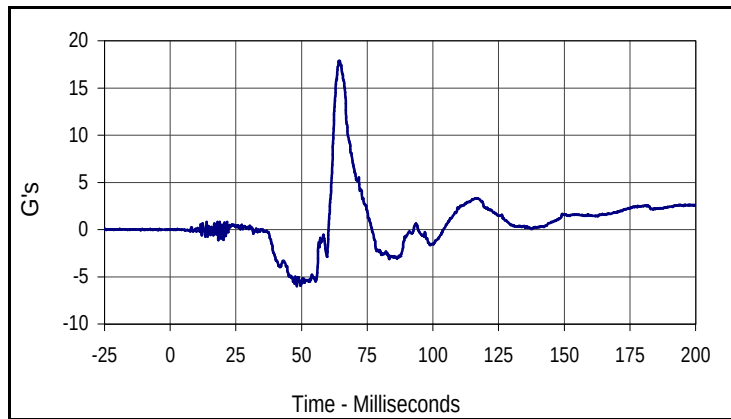
Curve Description			
Passenger Head Primary Y Velocity			
CURNO	Type	SAE Class	Units
024	IN1	180	KMH
Max	Time	Min	Time
33.9	71.1	-2.3	47.8



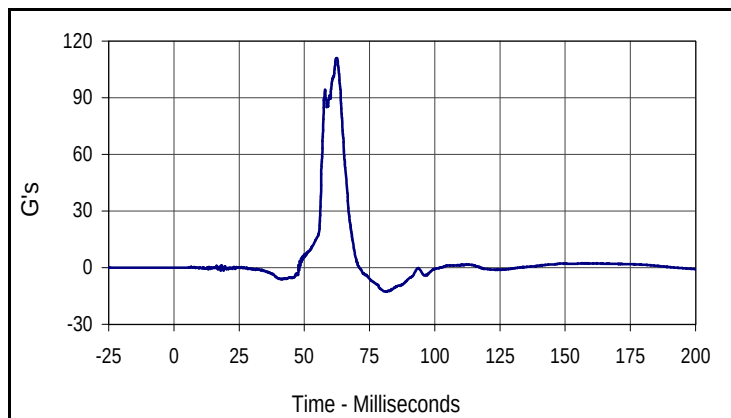
Curve Description			
Passenger Head Primary Z Velocity			
CURNO	Type	SAE Class	Units
025	IN1	180	KMH
Max	Time	Min	Time
3.4	50.8	-17.9	89.0

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

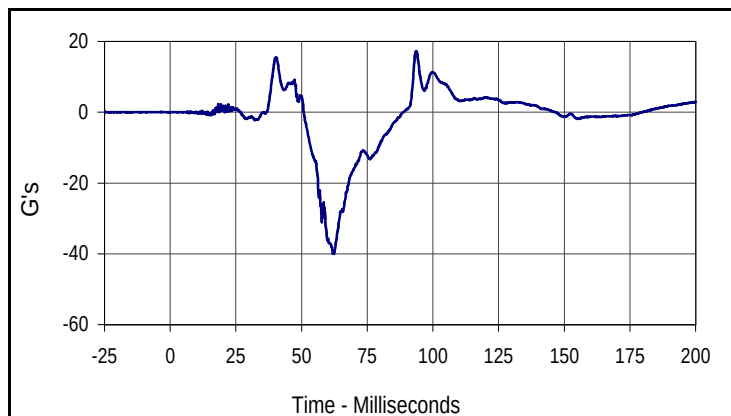
Test Date: 2/3/05
 NHTSA No.: M55204



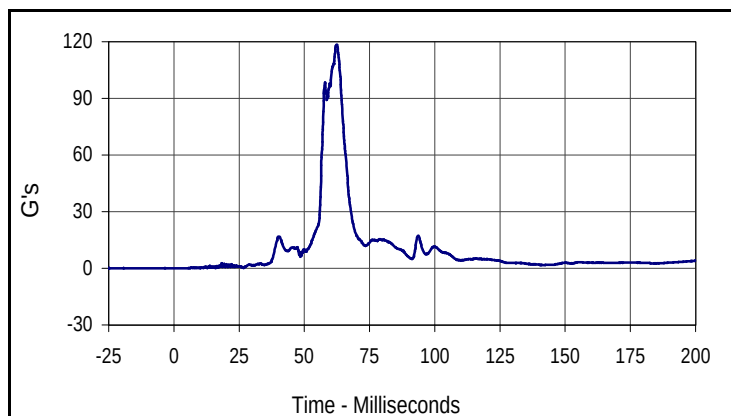
Curve Description			
Passenger Head X Redundant			
CURNO	Type	SAE Class	Units
026	FIL	1000	G's
Max	Time	Min	Time
17.9	64.4	-6.0	48.2



Curve Description			
Passenger Head Y Redundant			
CURNO	Type	SAE Class	Units
027	FIL	1000	G's
Max	Time	Min	Time
111.0	62.5	-12.8	81.4



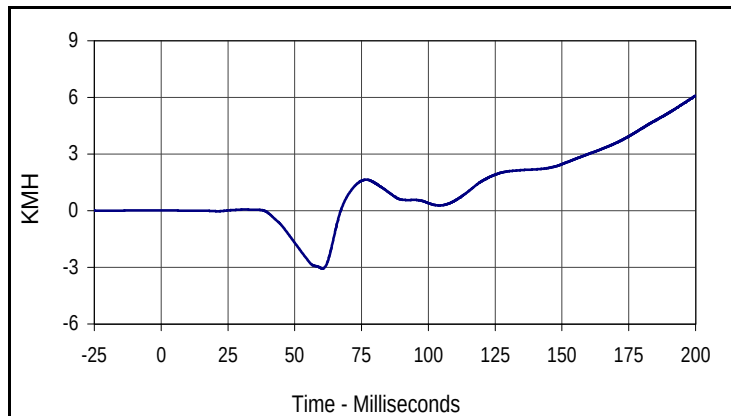
Curve Description			
Passenger Head Z Redundant			
CURNO	Type	SAE Class	Units
028	FIL	1000	G's
Max	Time	Min	Time
17.3	93.6	-40.0	62.3



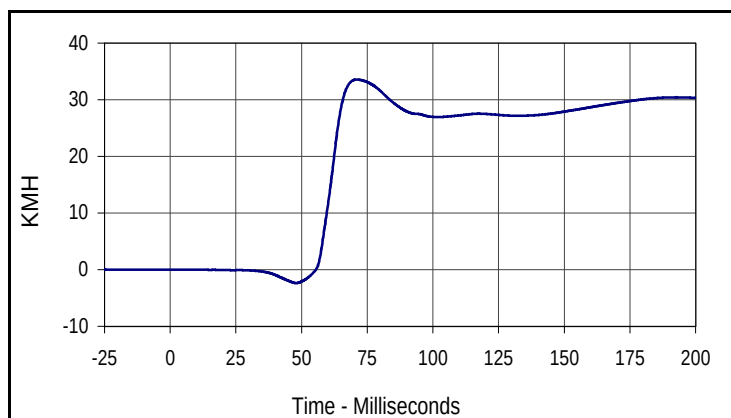
Curve Description			
Passenger Head Resultant Redundant			
CURNO	Type	SAE Class	Units
026	RES	1000	G's
Max	Time	Min	Time
118.6	62.5	0.0	2.3

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

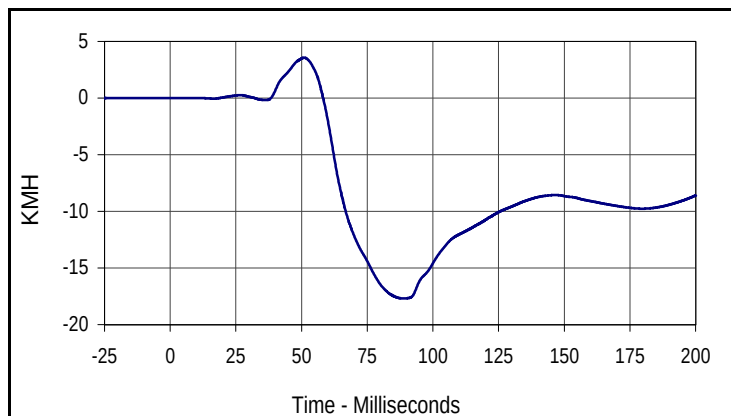
Test Date: 2/3/05
 NHTSA No.: M55204



Curve Description			
Passenger Head Redundant X Velocity			
CURNO	Type	SAE Class	Units
026	IN1	180	KMH
Max	Time	Min	Time
6.1	200.0	-3.1	60.4



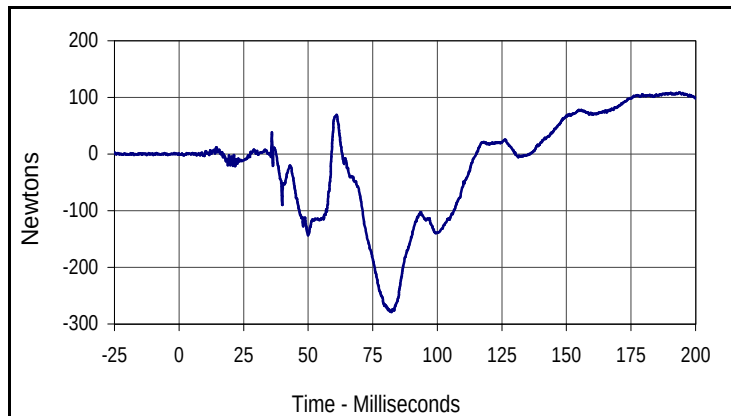
Curve Description			
Passenger Head Redundant Y Velocity			
CURNO	Type	SAE Class	Units
027	IN1	180	KMH
Max	Time	Min	Time
33.6	71.1	-2.4	48.0



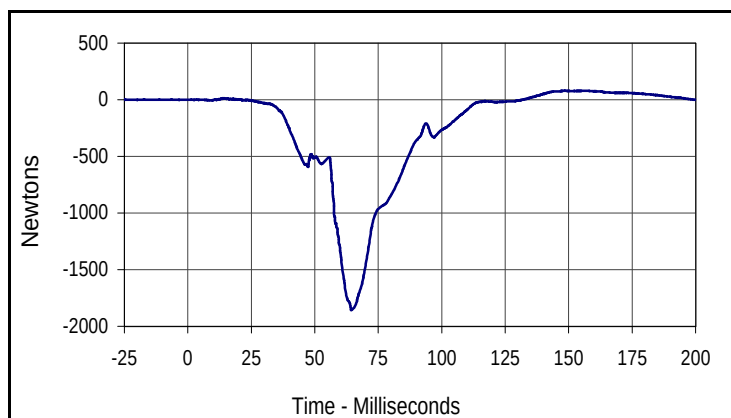
Curve Description			
Passenger Head Redundant Z Velocity			
CURNO	Type	SAE Class	Units
028	IN1	180	KMH
Max	Time	Min	Time
3.6	50.9	-17.7	88.7

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

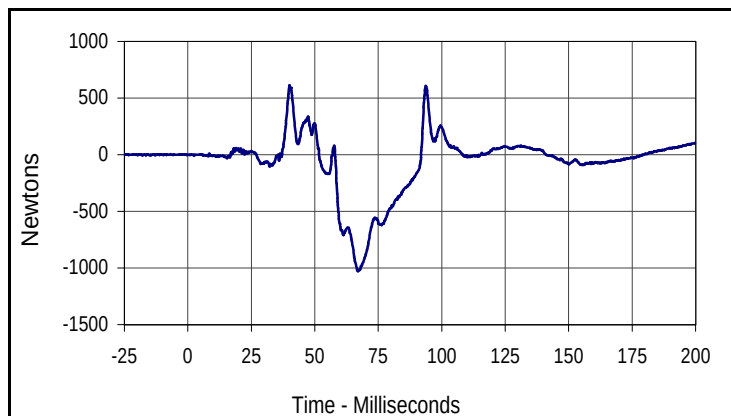
Test Date: 2/3/05
 NHTSA No.: M55204



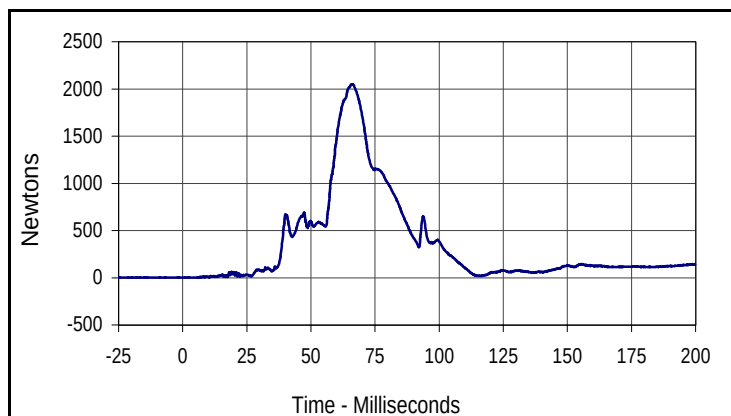
Curve Description			
Passenger Upper Neck Force X			
CURNO	Type	SAE Class	Units
029	FIL	1000	Newtons
Max	Time	Min	Time
108.4	193.9	-278.9	82.2



Curve Description			
Passenger Upper Neck Force Y			
CURNO	Type	SAE Class	Units
030	FIL	1000	Newtons
Max	Time	Min	Time
80.7	148.5	-1856.5	64.4



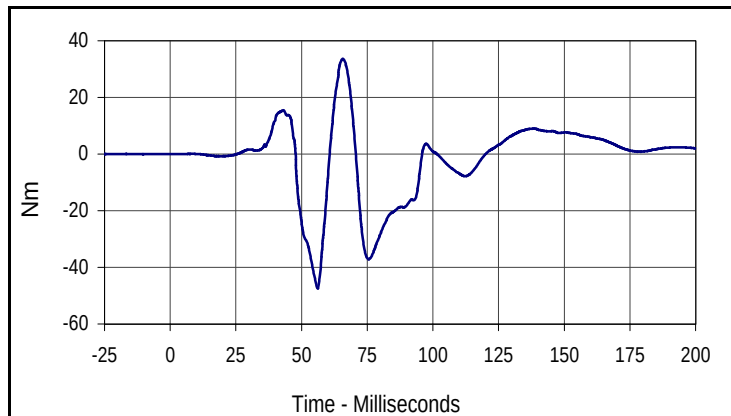
Curve Description			
Passenger Upper Neck Force Z			
CURNO	Type	SAE Class	Units
031	FIL	1000	Newtons
Max	Time	Min	Time
613.2	40.0	-1026.9	67.0



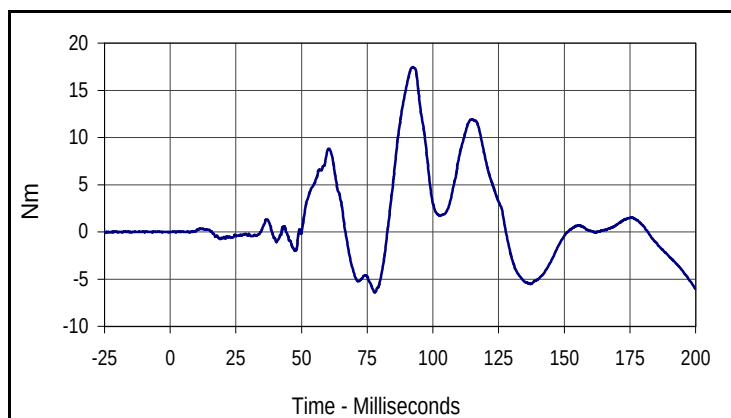
Curve Description			
Passenger Upper Neck Force Resultant			
CURNO	Type	SAE Class	Units
029	RES	1000	Newtons
Max	Time	Min	Time
2050.4	66.0	0.7	2.8

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

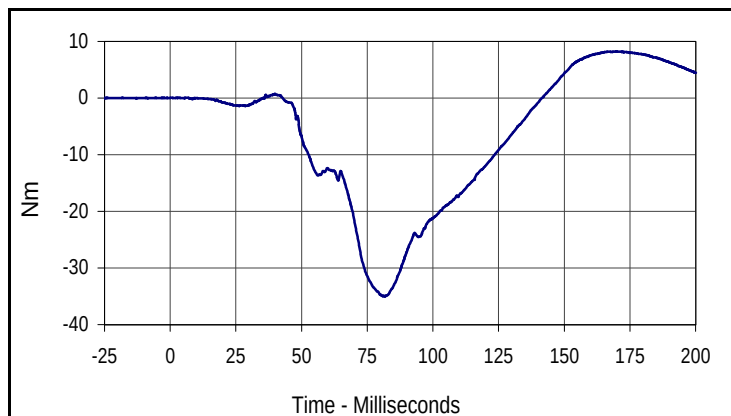
Test Date: 2/3/05
 NHTSA No.: M55204



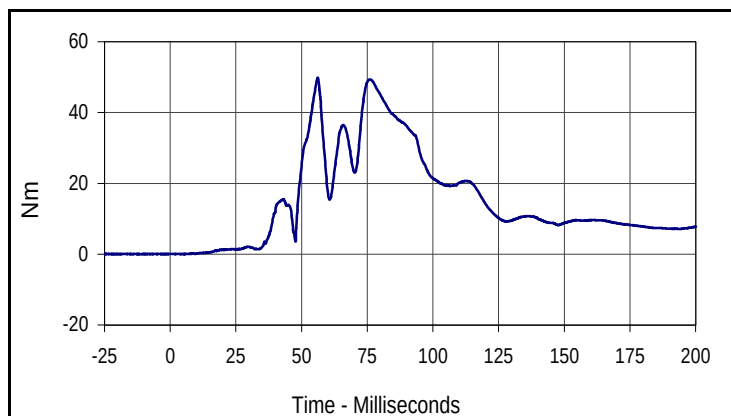
Curve Description			
Passenger Upper Neck Moment X			
CURNO	Type	SAE Class	Units
032	FIL	600	Nm
Max	Time	Min	Time
33.7	65.7	-47.5	56.2



Curve Description			
Passenger Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
033	FIL	600	Nm
Max	Time	Min	Time
17.5	92.3	-6.4	77.8



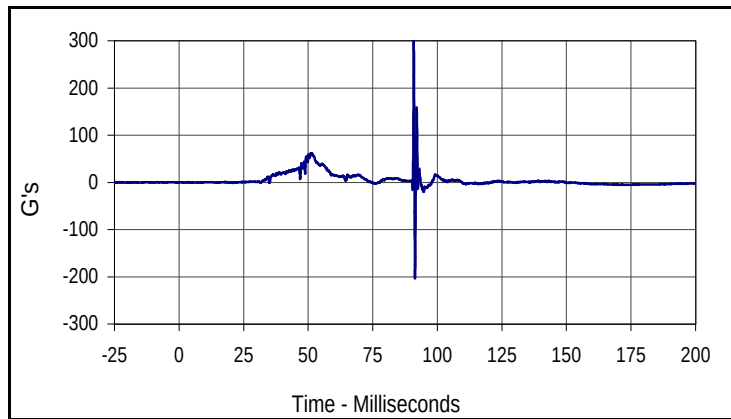
Curve Description			
Passenger Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
034	FIL	600	Nm
Max	Time	Min	Time
8.2	169.8	-35.0	81.7



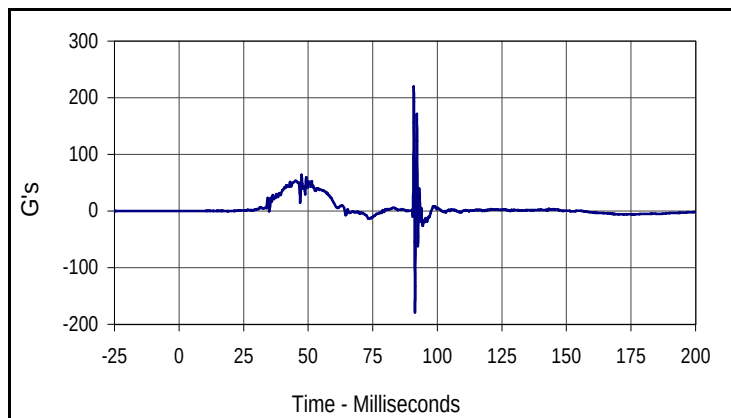
Curve Description			
Passenger Upper Neck Moment Resultant			
CURNO	Type	SAE Class	Units
032	RES	600	Nm
Max	Time	Min	Time
49.8	56.2	0.0	5.6

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

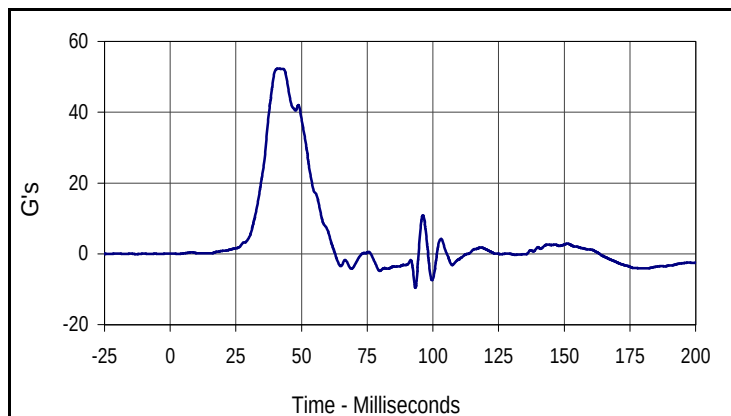
Test Date: 2/3/05
 NHTSA No.: M55204



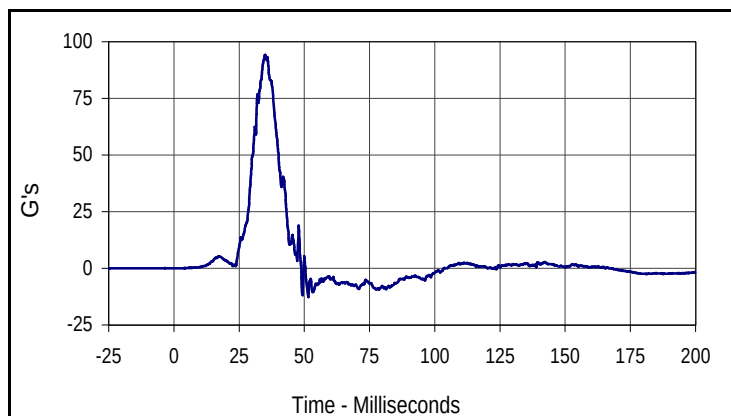
Curve Description			
Passenger Upper Rib Primary Y			
CURNO	Type	SAE Class	Units
035	FIL	1000	G's
Max	Time	Min	Time
299.7	90.9	-203.4	91.4



Curve Description			
Passenger Lower Rib Primary Y			
CURNO	Type	SAE Class	Units
036	FIL	1000	G's
Max	Time	Min	Time
219.2	90.9	-179.4	91.4



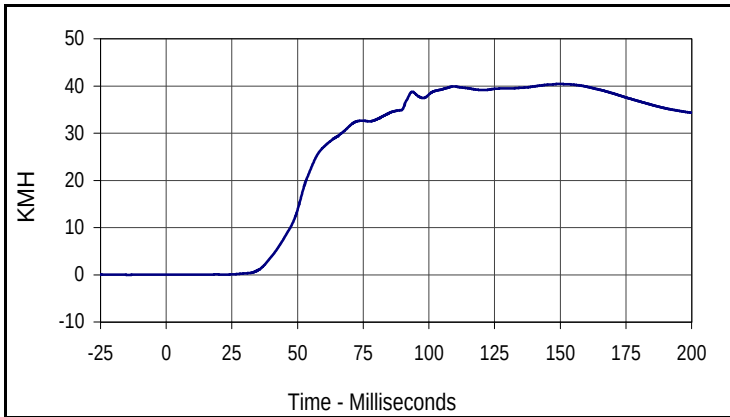
Curve Description			
Passenger Lower Spine Primary Y			
CURNO	Type	SAE Class	Units
037	FIL	180	G's
Max	Time	Min	Time
52.3	41.2	-9.6	93.3



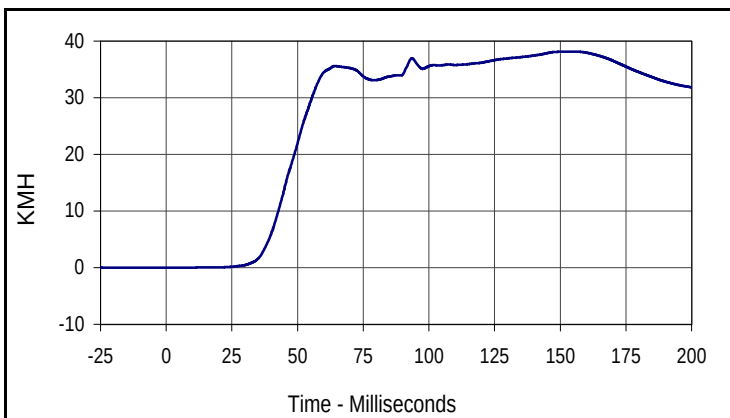
Curve Description			
Passenger Pelvis Primary Y			
CURNO	Type	SAE Class	Units
038	FIL	1000	G's
Max	Time	Min	Time
94.1	35.0	-12.8	51.5

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

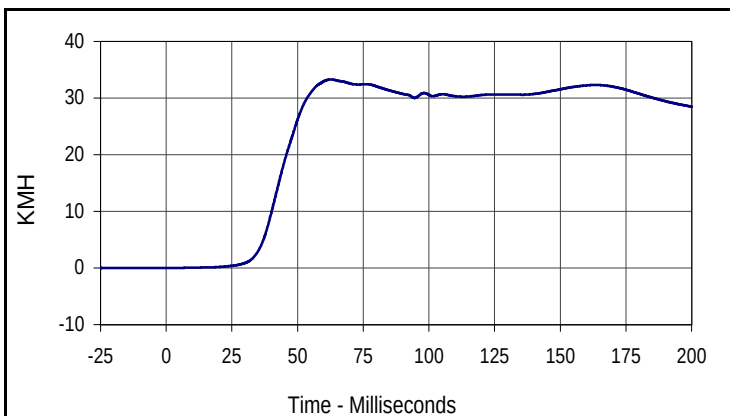
Test Date: 2/3/05
 NHTSA No.: M55204



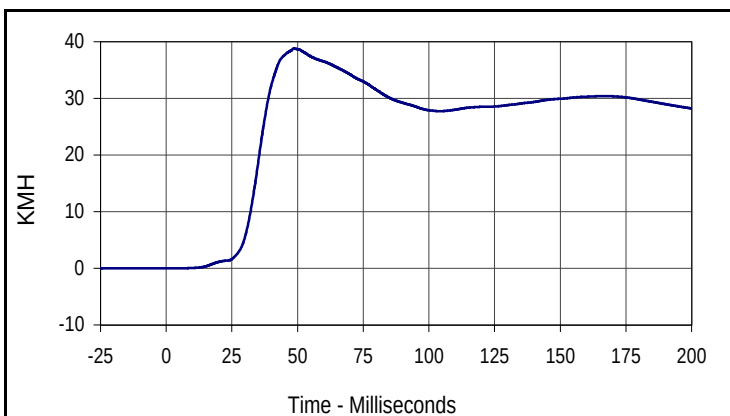
Curve Description			
Passenger Upper Rib Primary Y Velocity			
CURNO	Type	SAE Class	Units
035	IN1	180	KMH
Max	Time	Min	Time
40.4	149.7	0.0	8.8



Curve Description			
Passenger Lower Rib Primary Y Velocity			
CURNO	Type	SAE Class	Units
036	IN1	180	KMH
Max	Time	Min	Time
38.1	151.3	0.0	2.8



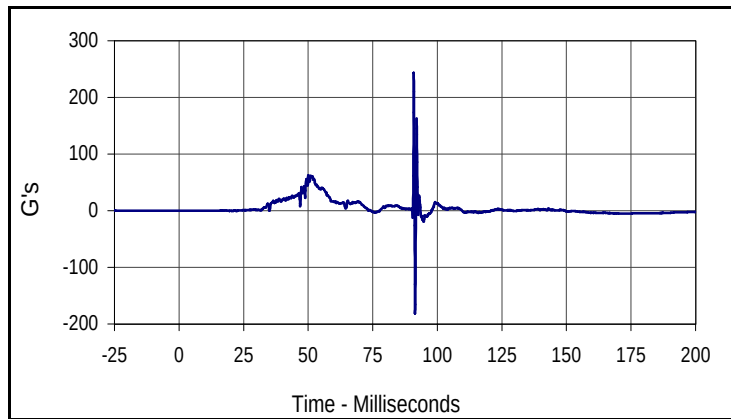
Curve Description			
Passenger Lower Spine Primary Y Velocity			
CURNO	Type	SAE Class	Units
037	IN1	180	KMH
Max	Time	Min	Time
33.3	62.8	0.0	0.0



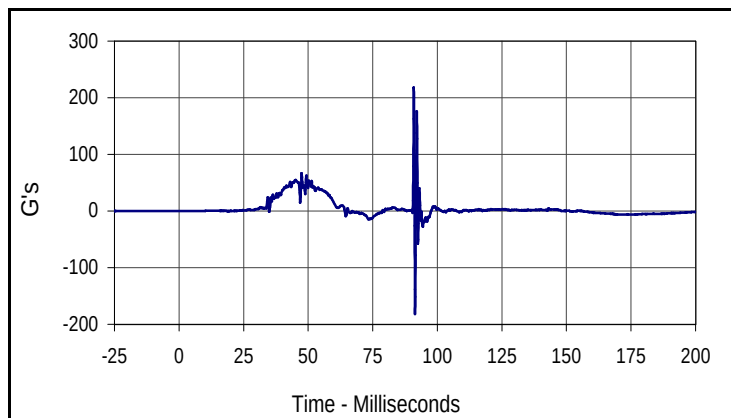
Curve Description			
Passenger Pelvis Primary Y Velocity			
CURNO	Type	SAE Class	Units
038	IN1	180	KMH
Max	Time	Min	Time
38.8	48.8	0.0	2.9

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

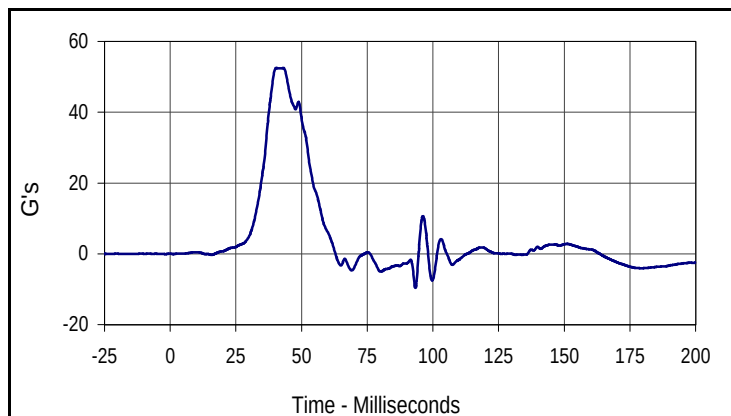
Test Date: 2/3/05
 NHTSA No.: M55204



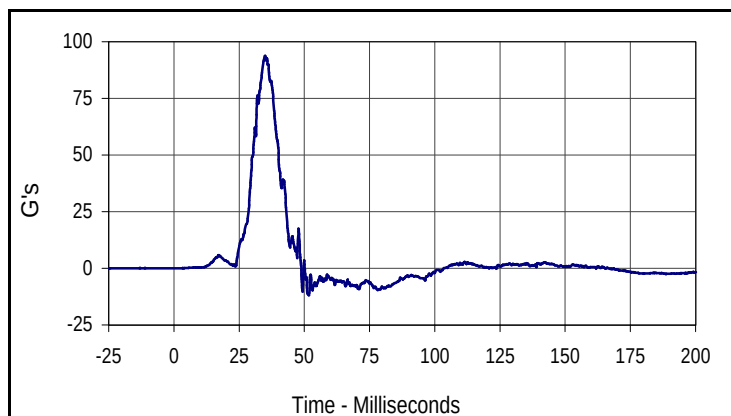
Curve Description			
Passenger Upper Rib Redundant Y			
CURNO	Type	SAE Class	Units
039	FIL	1000	G's
Max	Time	Min	Time
243.2	90.9	-180.7	91.4



Curve Description			
Passenger Lower Rib Redundant Y			
CURNO	Type	SAE Class	Units
040	FIL	1000	G's
Max	Time	Min	Time
217.7	90.9	-182.1	91.4



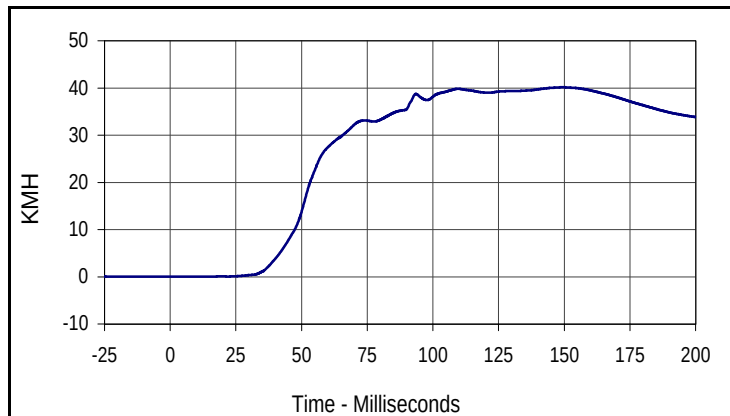
Curve Description			
Passenger Lower Spine Redundant Y			
CURNO	Type	SAE Class	Units
041	FIL	180	G's
Max	Time	Min	Time
52.5	43.1	-9.6	93.4



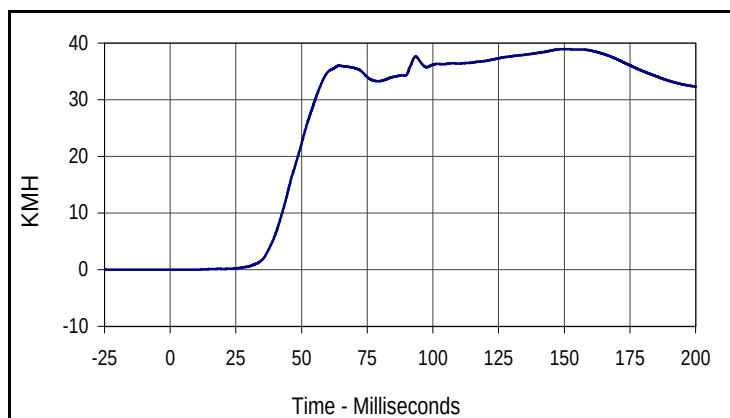
Curve Description			
Passenger Pelvis Redundant Y			
CURNO	Type	SAE Class	Units
042	FIL	1000	G's
Max	Time	Min	Time
93.8	35.0	-11.8	51.7

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

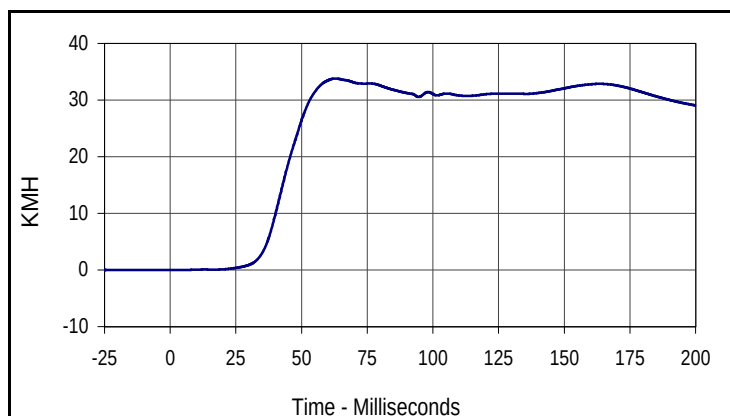
Test Date: 2/3/05
 NHTSA No.: M55204



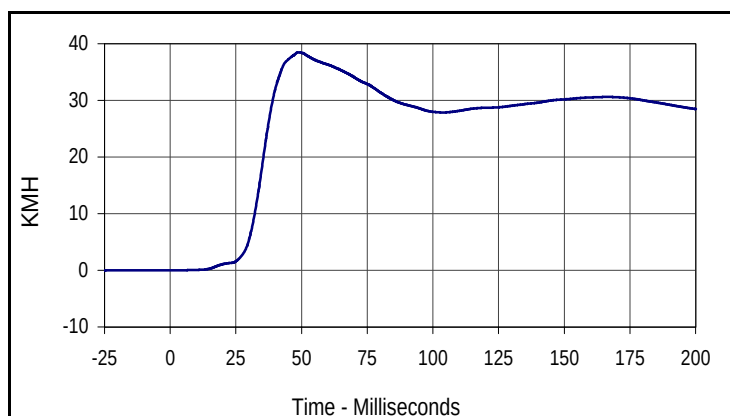
Curve Description			
Passenger Upper Rib Redundant Y Velocity			
CURNO	Type	SAE Class	Units
039	IN1	180	KMH
Max	Time	Min	Time
40.2	149.4	0.0	4.0



Curve Description			
Passenger Lower Rib Redundant Y Velocity			
CURNO	Type	SAE Class	Units
040	IN1	180	KMH
Max	Time	Min	Time
38.9	151.1	0.0	9.4



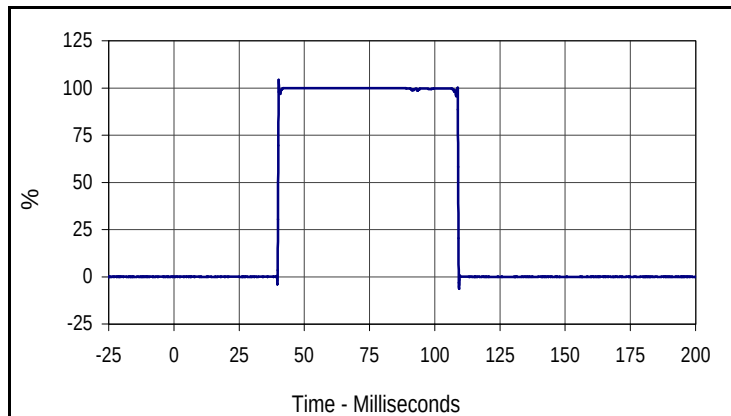
Curve Description			
Passenger Lower Spine Redundant Y Velocity			
CURNO	Type	SAE Class	Units
041	IN1	180	KMH
Max	Time	Min	Time
33.8	62.9	0.0	2.0



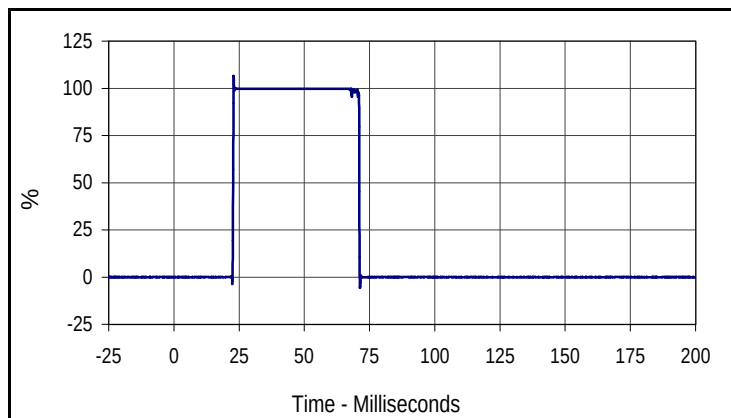
Curve Description			
Passenger Pelvis Redundant Y Velocity			
CURNO	Type	SAE Class	Units
042	IN1	180	KMH
Max	Time	Min	Time
38.5	48.8	0.0	0.0

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05
 NHTSA No.: M55204



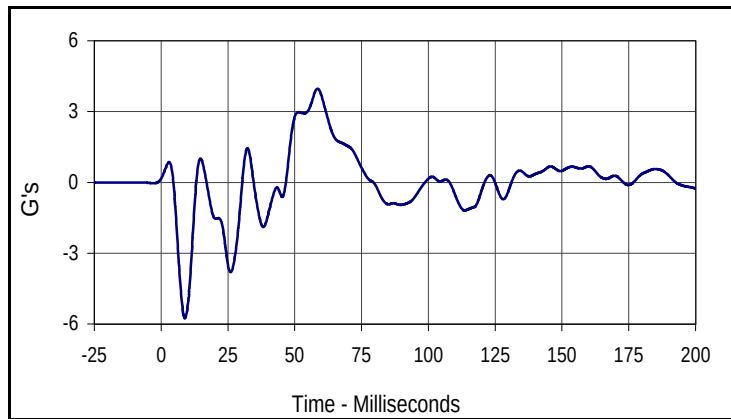
Curve Description			
Passenger Thorax Contact			
CURNO	Type	SAE Class	Units
043	FIL	1000	%
Max	Time	Cross %	Time
104.4	40.2	50.0	40.0



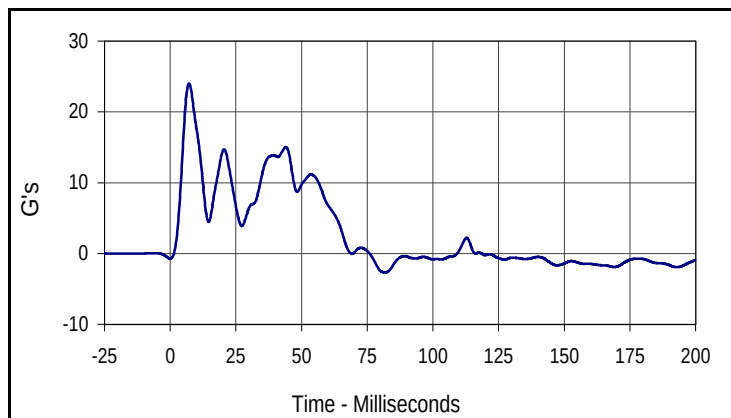
Curve Description			
Passenger Pelvis Contact			
CURNO	Type	SAE Class	Units
044	FIL	1000	%
Max	Time	Cross %	Time
106.4	22.9	50.0	22.7

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

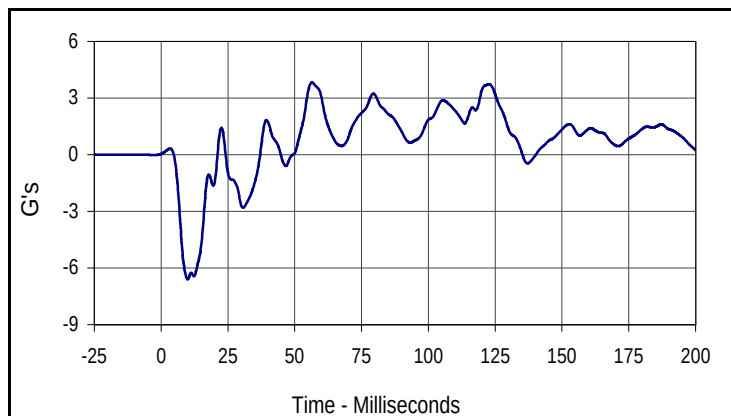
Test Date: 2/3/05
 NHTSA No.: M55204



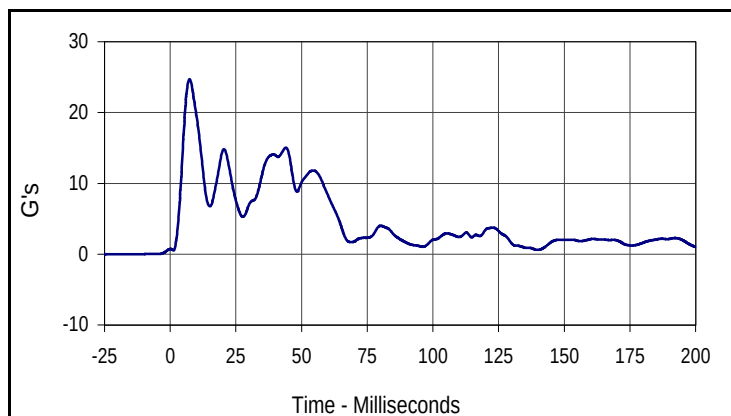
Curve Description			
Vehicle Right Sill at Front Seat X			
CURNO	Type	SAE Class	Units
045	FIL	60	G's
Max	Time	Min	Time
4.0	58.5	-5.8	8.9



Curve Description			
Vehicle Right Sill at Front Seat Y			
CURNO	Type	SAE Class	Units
046	FIL	60	G's
Max	Time	Min	Time
24.0	7.2	-2.7	81.8



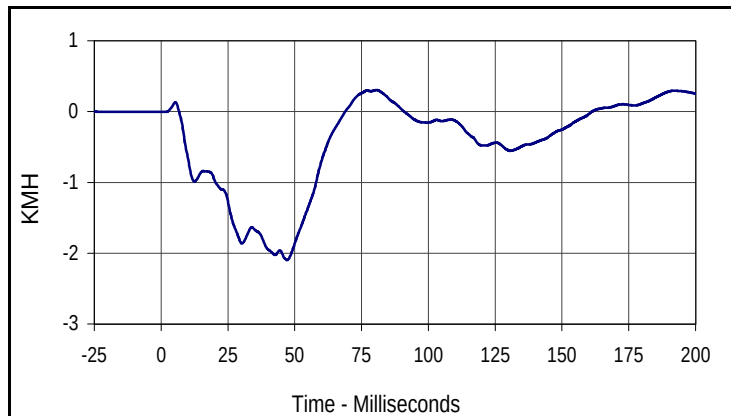
Curve Description			
Vehicle Right Sill at Front Seat Z			
CURNO	Type	SAE Class	Units
047	FIL	60	G's
Max	Time	Min	Time
3.8	56.4	-6.6	9.9



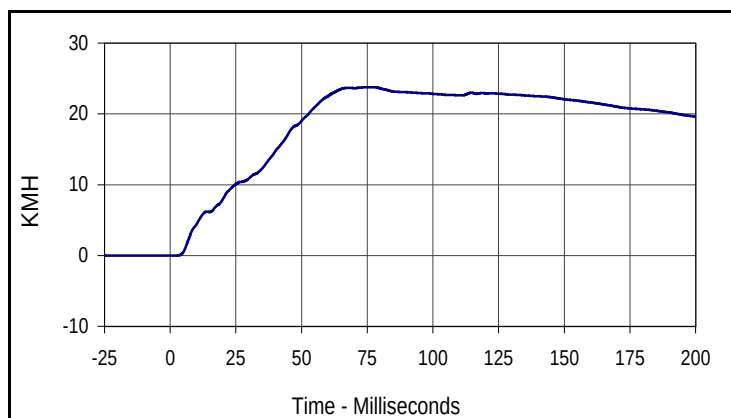
Curve Description			
Vehicle Right Sill Front Seat Resultant			
CURNO	Type	SAE Class	Units
045	RES	60	G's
Max	Time	Min	Time
24.7	7.4	0.5	1.3

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

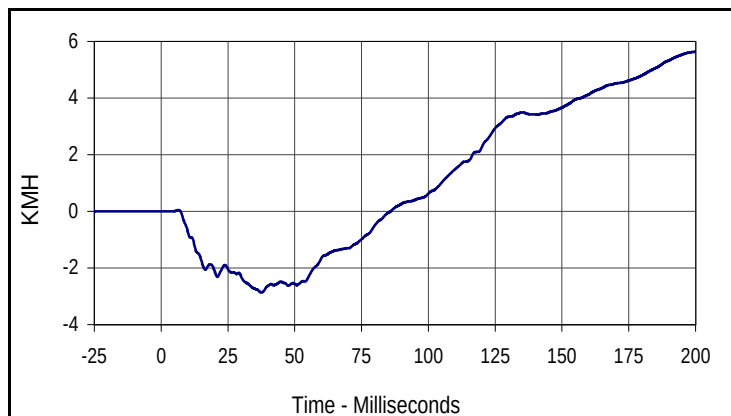
Test Date: 2/3/05
 NHTSA No.: M55204



Curve Description			
Vehicle Right Sill at Front Seat X Velocity			
CURNO	Type	SAE Class	Units
045	IN1	180	KMH
Max	Time	Min	Time
0.3	80.6	-2.1	47.2



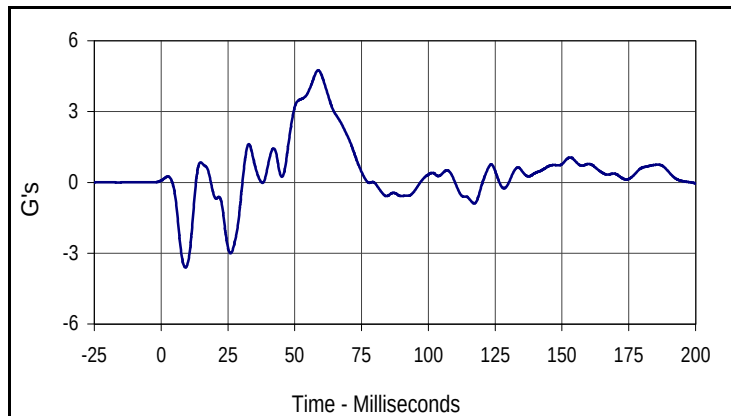
Curve Description			
Vehicle Right Sill at Front Seat Y Velocity			
CURNO	Type	SAE Class	Units
046	IN1	180	KMH
Max	Time	Min	Time
23.8	75.9	0.0	0.0



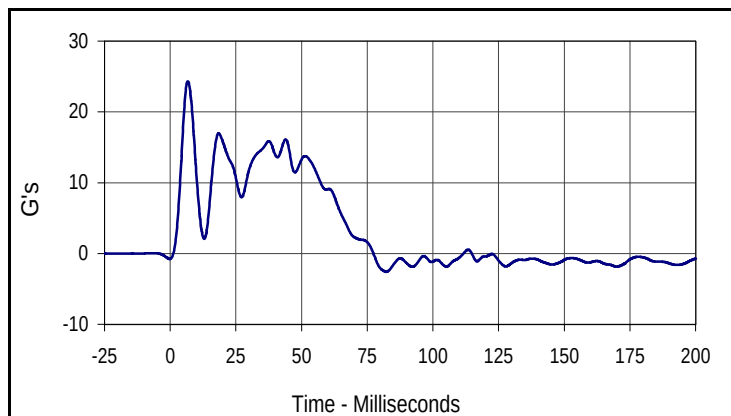
Curve Description			
Vehicle Right Sill at Front Seat Z Velocity			
CURNO	Type	SAE Class	Units
047	IN1	180	KMH
Max	Time	Min	Time
5.6	200.0	-2.9	37.6

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

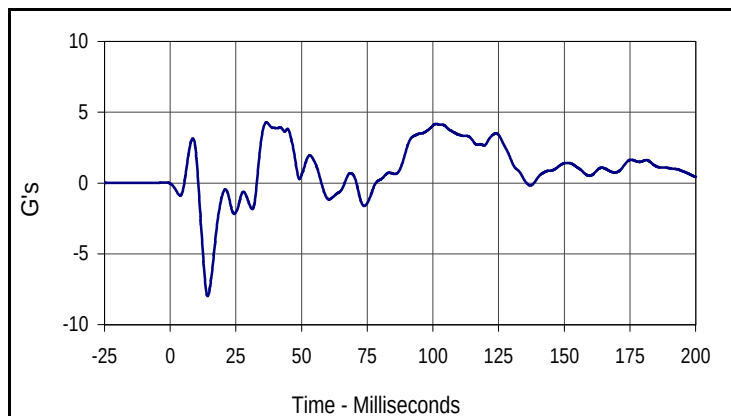
Test Date: 2/3/05
 NHTSA No.: M55204



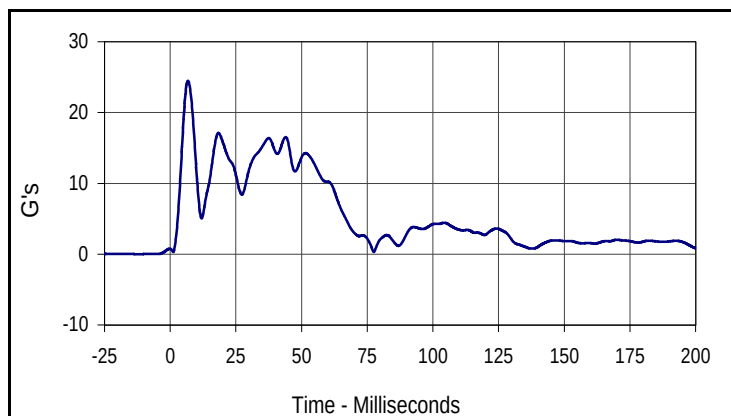
Curve Description			
Vehicle Right Sill at Rear Seat X			
CURNO	Type	SAE Class	Units
048	FIL	60	G's
Max	Time	Min	Time
4.8	58.8	-3.6	9.1



Curve Description			
Vehicle Right Sill at Rear Seat Y			
CURNO	Type	SAE Class	Units
049	FIL	60	G's
Max	Time	Min	Time
24.3	6.7	-2.6	82.2



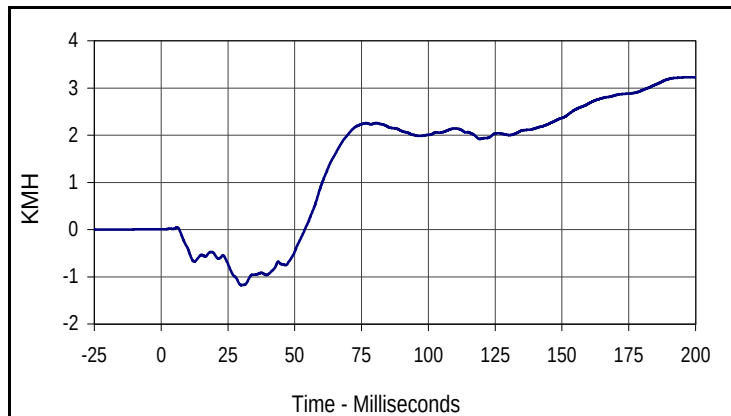
Curve Description			
Vehicle Right Sill at Rear Seat Z			
CURNO	Type	SAE Class	Units
050	FIL	60	G's
Max	Time	Min	Time
4.3	36.7	-8.0	14.2



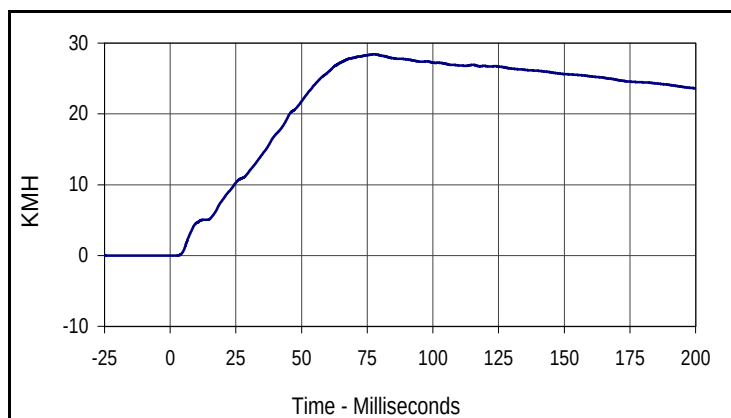
Curve Description			
Vehicle Right Sill Rear Seat Resultant			
CURNO	Type	SAE Class	Units
048	RES	60	G's
Max	Time	Min	Time
24.5	6.7	0.3	1.1

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

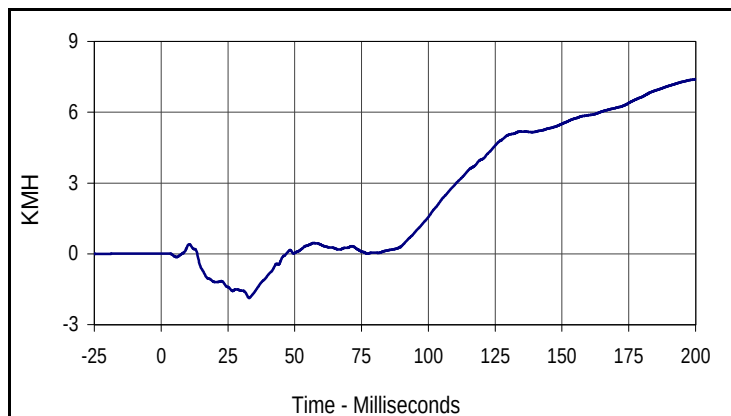
Test Date: 2/3/05
 NHTSA No.: M55204



Curve Description			
Vehicle Right Sill at Rear Seat X Velocity			
CURNO	Type	SAE Class	Units
048	IN1	180	KMH
Max	Time	Min	Time
3.2	199.2	-1.2	30.0



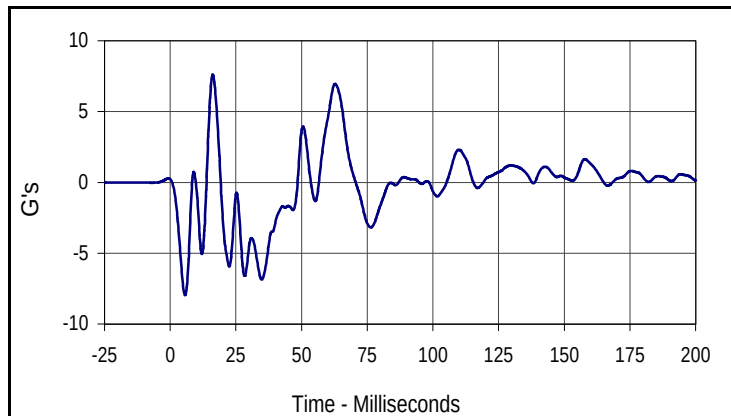
Curve Description			
Vehicle Right Sill at Rear Seat Y Velocity			
CURNO	Type	SAE Class	Units
049	IN1	180	KMH
Max	Time	Min	Time
28.4	77.6	0.0	2.4



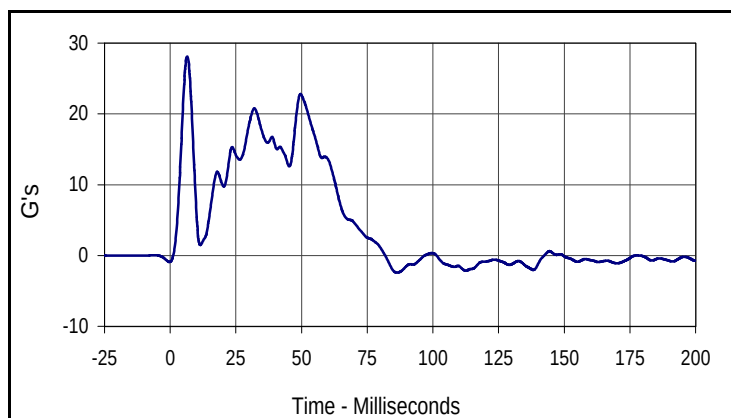
Curve Description			
Vehicle Right Sill at Rear Seat Z Velocity			
CURNO	Type	SAE Class	Units
050	IN1	180	KMH
Max	Time	Min	Time
7.4	200.0	-1.9	33.0

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

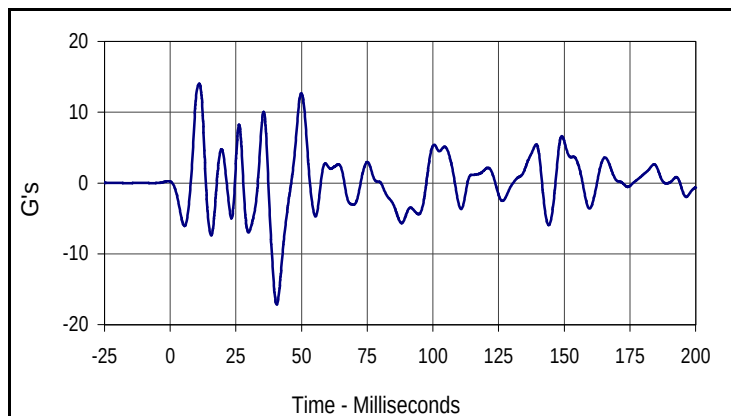
Test Date: 2/3/05
 NHTSA No.: M55204



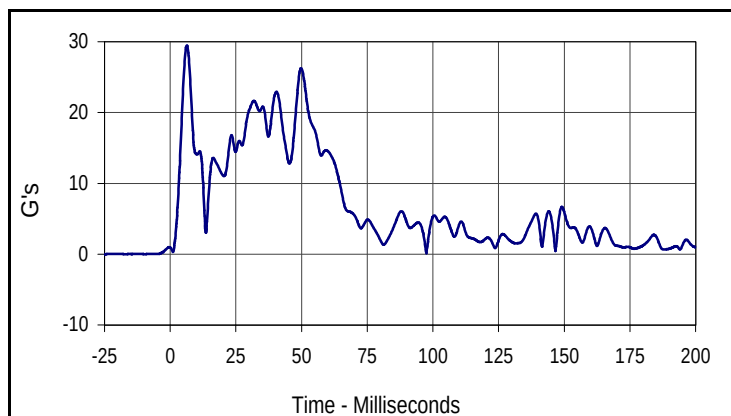
Curve Description			
Vehicle Rear Floor Above Axle X			
CURNO	Type	SAE Class	Units
051	FIL	60	G's
Max	Time	Min	Time
7.6	16.2	-8.0	5.6



Curve Description			
Vehicle Rear Floor Above Axle Y			
CURNO	Type	SAE Class	Units
052	FIL	60	G's
Max	Time	Min	Time
28.1	6.5	-2.4	86.4



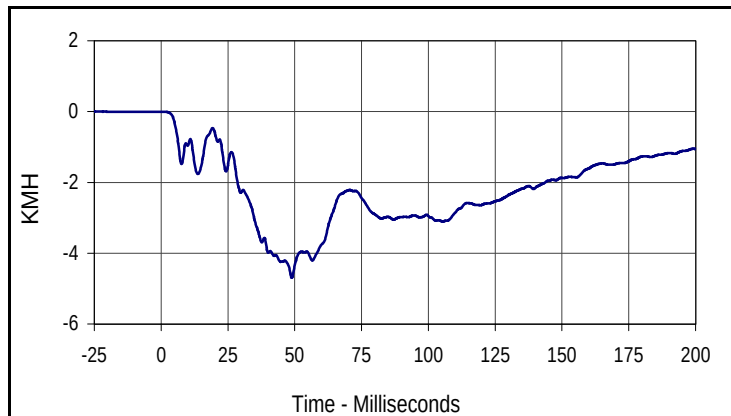
Curve Description			
Vehicle Rear Floor Above Axle Z			
CURNO	Type	SAE Class	Units
053	FIL	60	G's
Max	Time	Min	Time
14.0	11.0	-17.1	40.5



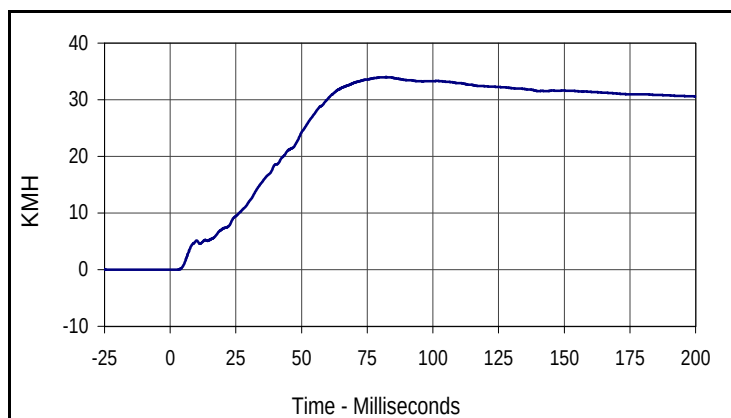
Curve Description			
Vehicle Rear Floor Above Axle Resultant			
CURNO	Type	SAE Class	Units
051	RES	60	G's
Max	Time	Min	Time
29.5	6.3	0.1	97.5

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

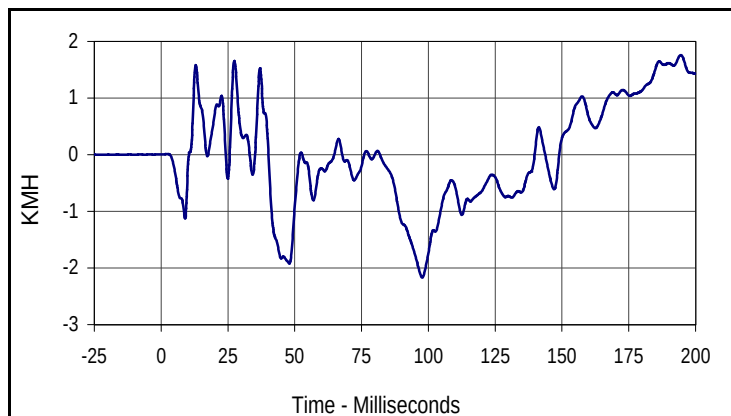
Test Date: 2/3/05
 NHTSA No.: M55204



Curve Description			
Vehicle Rear Floor Above Axle X Velocity			
CURNO	Type	SAE Class	Units
051	FIL	180	KMH
Max	Time	Min	Time
0.0	1.7	-4.7	48.9



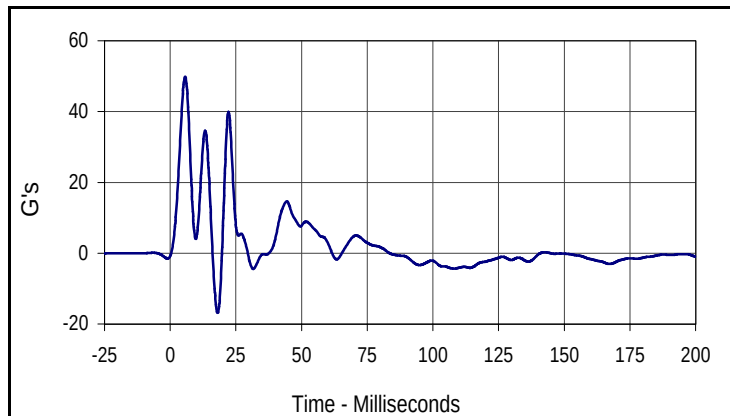
Curve Description			
Vehicle Rear Floor Above Axle Y Velocity			
CURNO	Type	SAE Class	Units
052	FIL	180	KMH
Max	Time	Min	Time
34.0	82.1	0.0	1.9



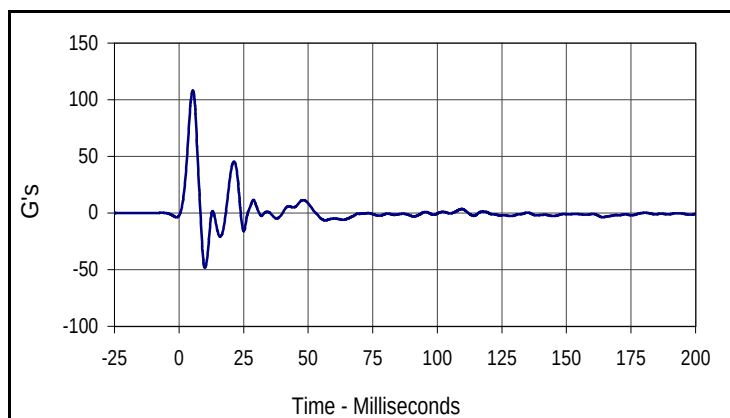
Curve Description			
Vehicle Rear Floor Above Axle Z Velocity			
CURNO	Type	SAE Class	Units
053	FIL	180	KMH
Max	Time	Min	Time
1.8	194.5	-2.2	97.7

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

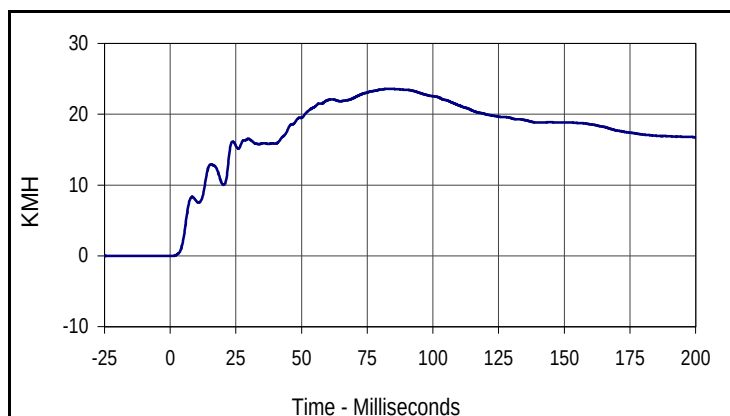
Test Date: 2/3/05
 NHTSA No.: M55204



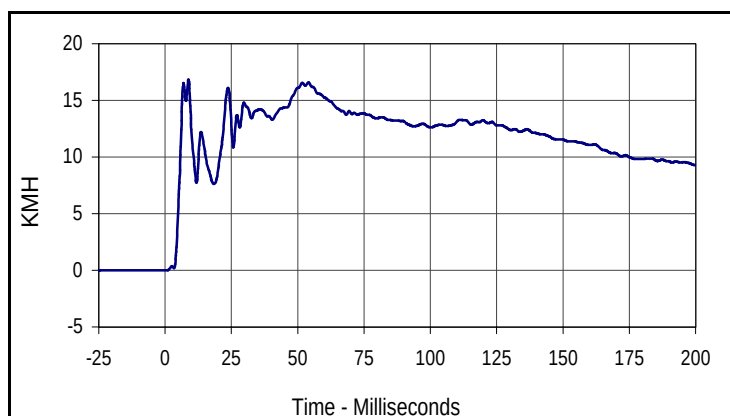
Curve Description			
Vehicle Left Sill at Rear Door Y			
CURNO	Type	SAE Class	Units
054	FIL	60	G's
Max	Time	Min	Time
49.9	5.7	-16.8	18.1



Curve Description			
Vehicle Left Sill at Front Door Y			
CURNO	Type	SAE Class	Units
055	FIL	60	G's
Max	Time	Min	Time
108.2	5.3	-48.4	10.0



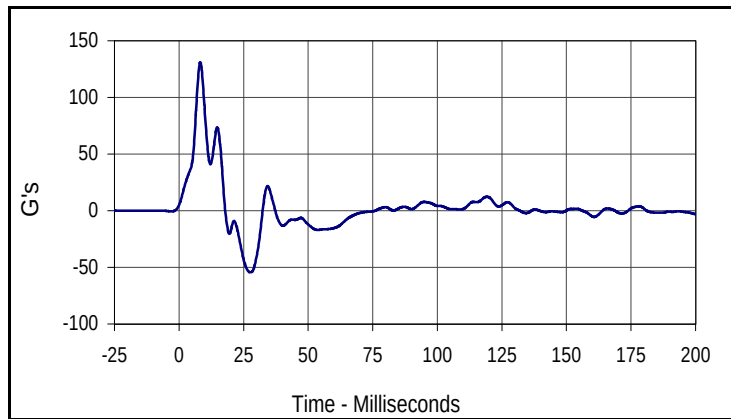
Curve Description			
Vehicle Left Sill at Rear Door Y Velocity			
CURNO	Type	SAE Class	Units
054	IN1	180	KMH
Max	Time	Min	Time
23.6	82.7	0.0	1.0



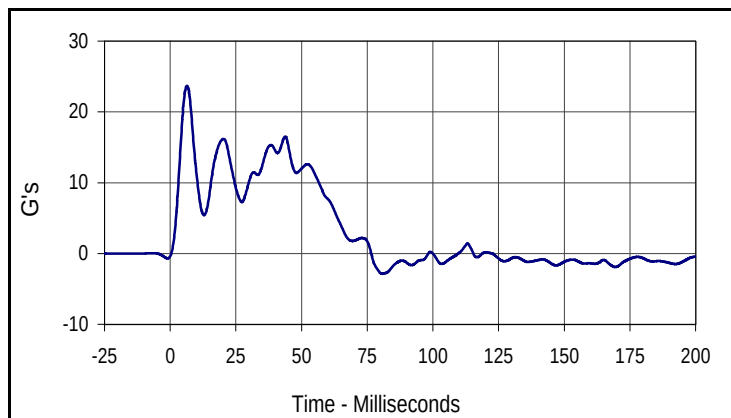
Curve Description			
Vehicle Left Sill at Front Door Y Velocity			
CURNO	Type	SAE Class	Units
055	IN1	180	KMH
Max	Time	Min	Time
16.8	8.8	0.0	0.6

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

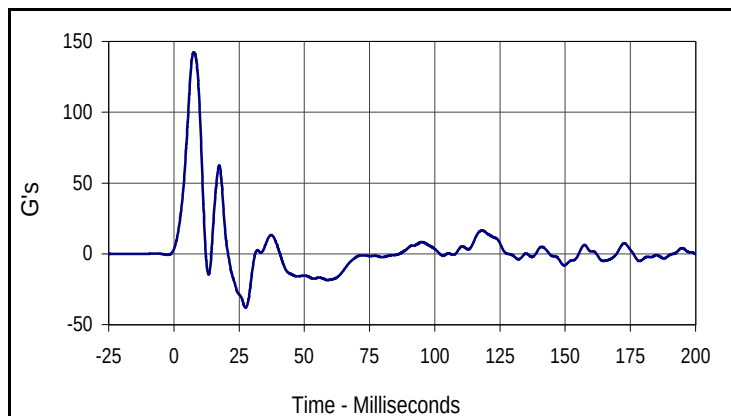
Test Date: 2/3/05
 NHTSA No.: M55204



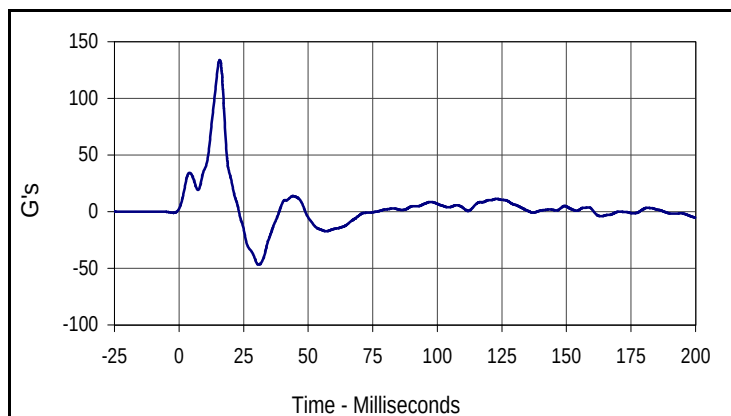
Curve Description			
Vehicle Left Front Door CL Y			
CURNO	Type	SAE Class	Units
056	FIL	60	G's
Max	Time	Min	Time
131.0	8.2	-54.4	27.6



Curve Description			
Vehicle Right Rear Occupant Compartment			
CURNO	Type	SAE Class	Units
057	FIL	60	G's
Max	Time	Min	Time
23.7	6.4	-2.8	80.6



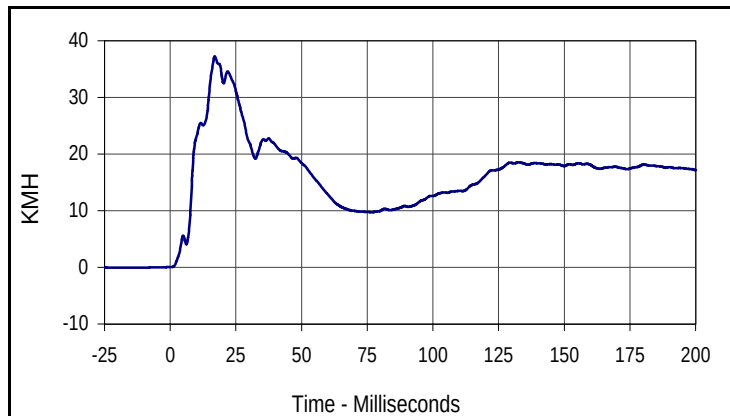
Curve Description			
Vehicle Left Front Door Mid Rear Y			
CURNO	Type	SAE Class	Units
058	FIL	60	G's
Max	Time	Min	Time
142.4	7.7	-38.0	27.5



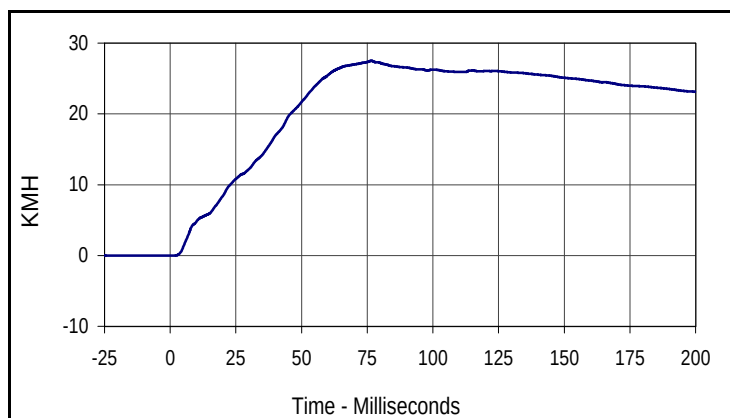
Curve Description			
Vehicle Left Front Door Upper CL Y			
CURNO	Type	SAE Class	Units
059	FIL	60	G's
Max	Time	Min	Time
133.9	15.8	-46.7	30.8

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

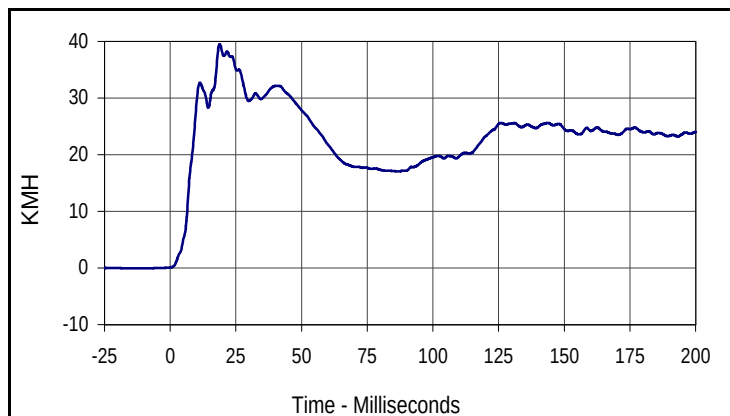
Test Date: 2/3/05
 NHTSA No.: M55204



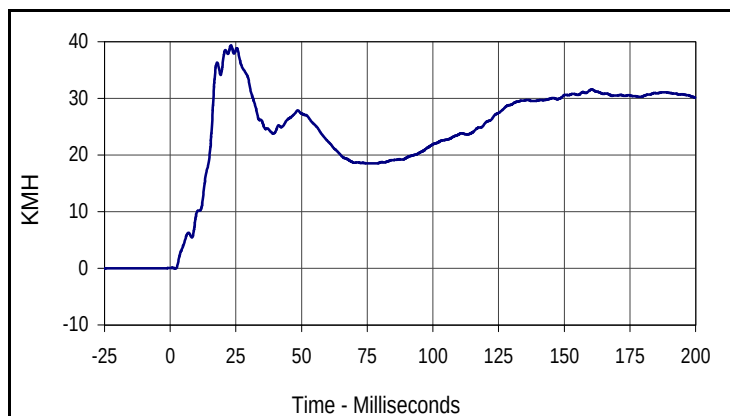
Curve Description			
Vehicle Left Front Door CL Y Velocity			
CURNO	Type	SAE Class	Units
056	IN1	180	KMH
Max	Time	Min	Time
37.2	17.0	0.1	0.0



Curve Description			
Vehicle Right Rear Occupant Compartment Y Velocity			
CURNO	Type	SAE Class	Units
057	IN1	180	KMH
Max	Time	Min	Time
27.5	76.6	0.0	1.7



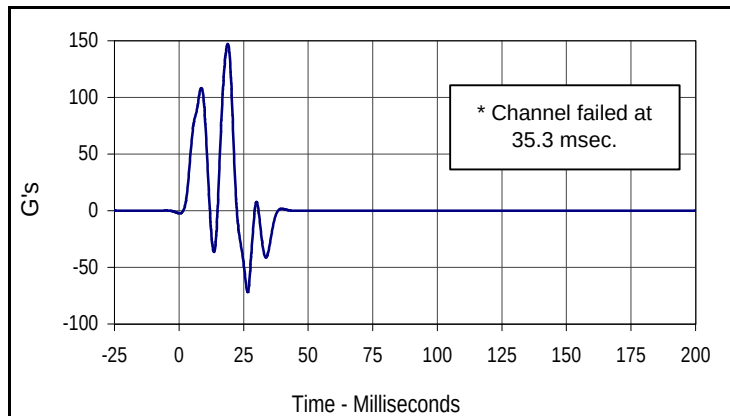
Curve Description			
Vehicle Left Front Door Mid Rear Y Velocity			
CURNO	Type	SAE Class	Units
058	IN1	180	KMH
Max	Time	Min	Time
39.5	18.8	0.1	0.0



Curve Description			
Vehicle Left Front Door Upper CL Y Velocity			
CURNO	Type	SAE Class	Units
059	IN1	180	KMH
Max	Time	Min	Time
39.4	23.1	-0.1	2.0

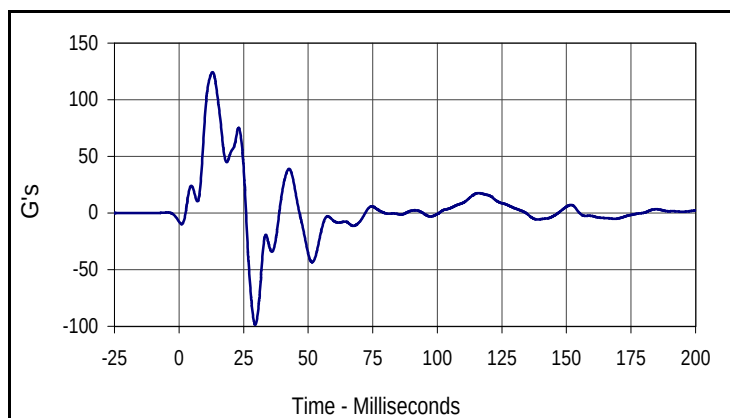
Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05
 NHTSA No.: M55204

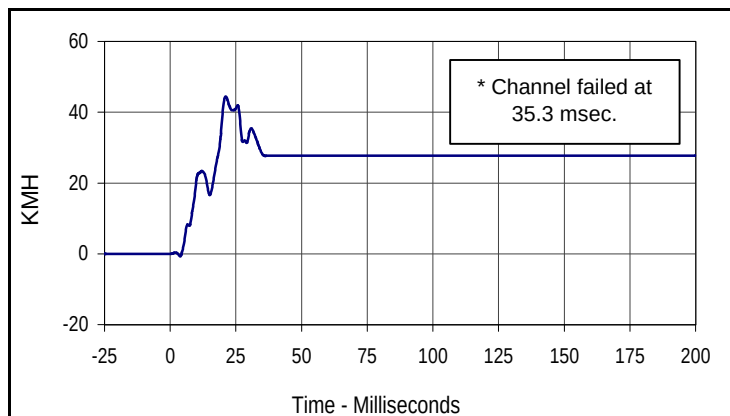


Curve Description			
Vehicle Left Rear Door Mid Rear Y			
CURNO	Type	SAE Class	Units
060	FIL	60	G's
Max	Time	Min	Time
147.2	18.9	-71.7	26.6

* Channel failed at 35.3 msec.

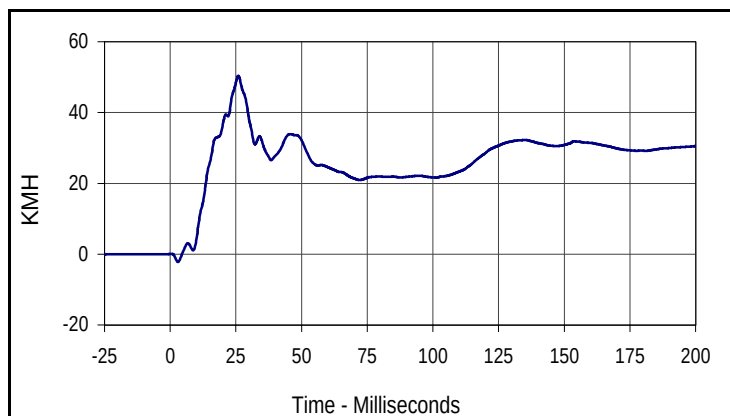


Curve Description			
Vehicle Left Rear Door Upper CL Y			
CURNO	Type	SAE Class	Units
061	FIL	60	G's
Max	Time	Min	Time
124.3	13.0	-98.6	29.5



Curve Description			
Vehicle Left Rear Door Mid Rear Y Velocity			
CURNO	Type	SAE Class	Units
060	IN1	180	KMH
Max	Time	Min	Time
44.5	21.1	-0.8	3.8

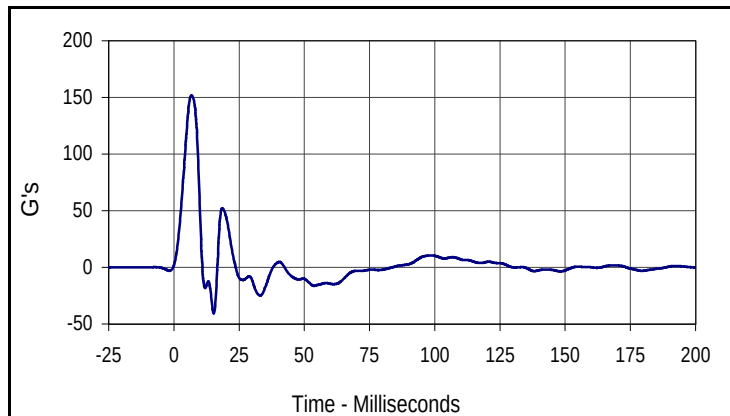
* Channel failed at 35.3 msec.



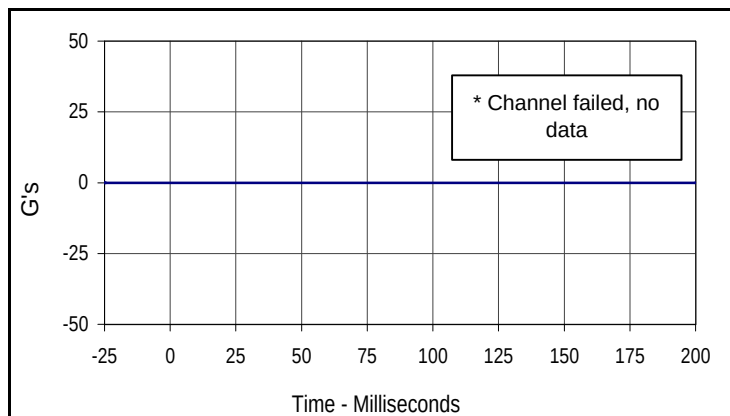
Curve Description			
Vehicle Left Rear Door Upper CL Y Velocity			
CURNO	Type	SAE Class	Units
061	IN1	180	KMH
Max	Time	Min	Time
50.4	25.9	-2.2	3.0

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05
 NHTSA No.: M55204

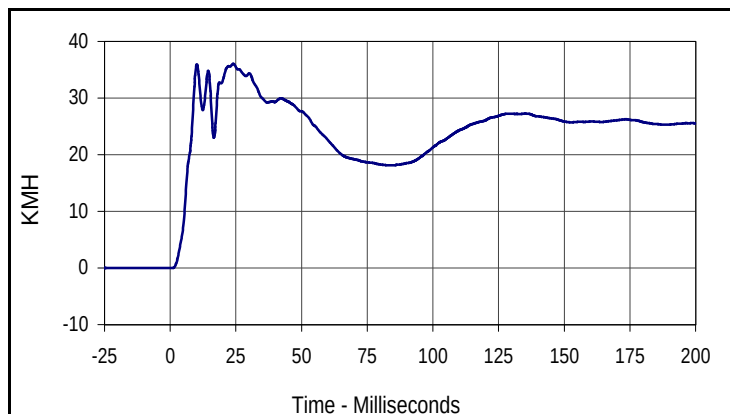


Curve Description			
Vehicle B-Post Lower Y			
CURNO	Type	SAE Class	Units
062	FIL	60	G's
Max	Time	Min	Time
151.9	6.7	-40.6	15.3

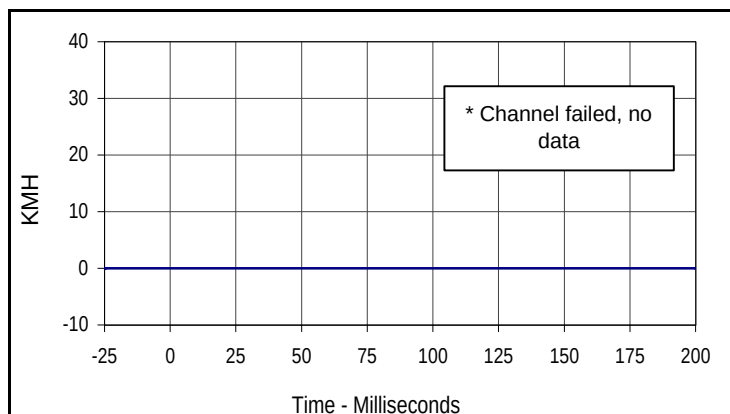


Curve Description			
Vehicle B-Post Middle Y			
CURNO	Type	SAE Class	Units
063	FIL	60	G's
Max	Time	Min	Time
0.0	0.0	0.0	0.0

* Channel failed, no data



Curve Description			
Vehicle B-Post Lower Y Velocity			
CURNO	Type	SAE Class	Units
062	IN1	180	KMH
Max	Time	Min	Time
36.0	24.0	0.0	0.8

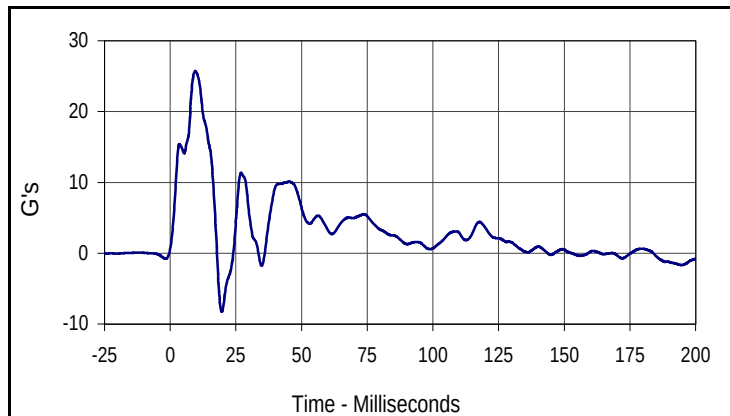


Curve Description			
Vehicle B-Post Middle Y Velocity			
CURNO	Type	SAE Class	Units
063	IN1	180	KMH
Max	Time	Min	Time
0.0	0.0	0.0	0.0

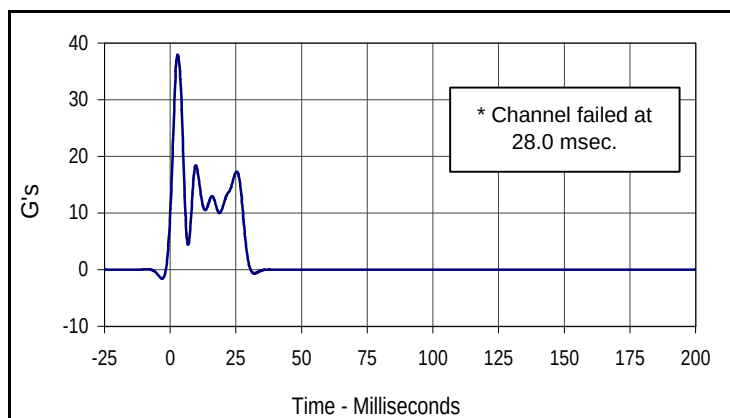
* Channel failed, no data

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05
 NHTSA No.: M55204

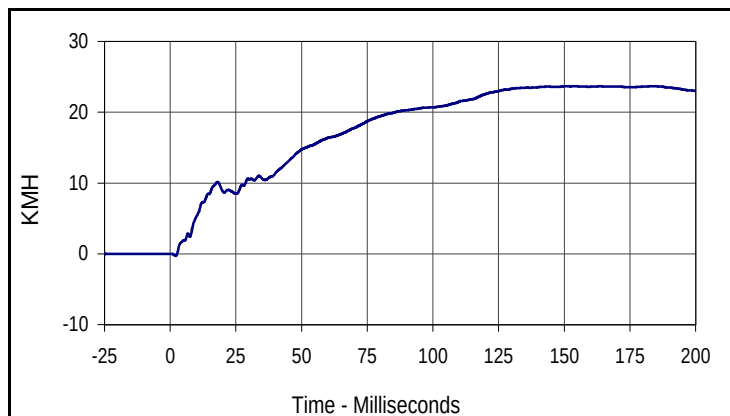


Curve Description			
Vehicle A-Post Lower Y			
CURNO	Type	SAE Class	Units
064	FIL	60	G's
Max	Time	Min	Time
25.7	9.6	-8.3	19.6

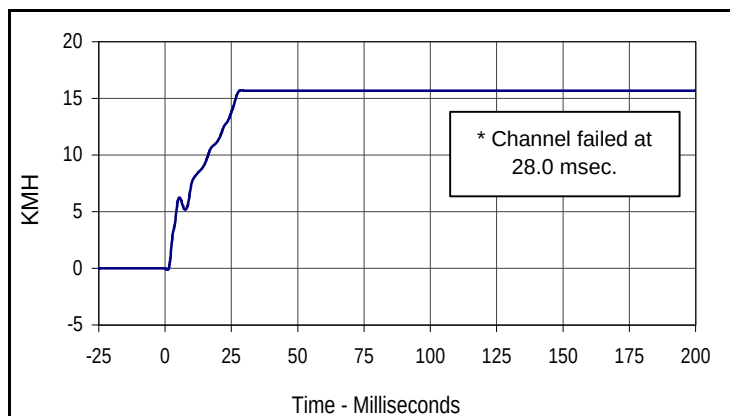


Curve Description			
Vehicle A-Post Middle Y			
CURNO	Type	SAE Class	Units
065	FIL	60	G's
Max	Time	Min	Time
38.0	2.8	-0.7	32.0

* Channel failed at 28.0 msec.



Curve Description			
Vehicle A-Post Lower Y Velocity			
CURNO	Type	SAE Class	Units
064	IN1	180	KMH
Max	Time	Min	Time
23.7	184.3	-0.3	2.1

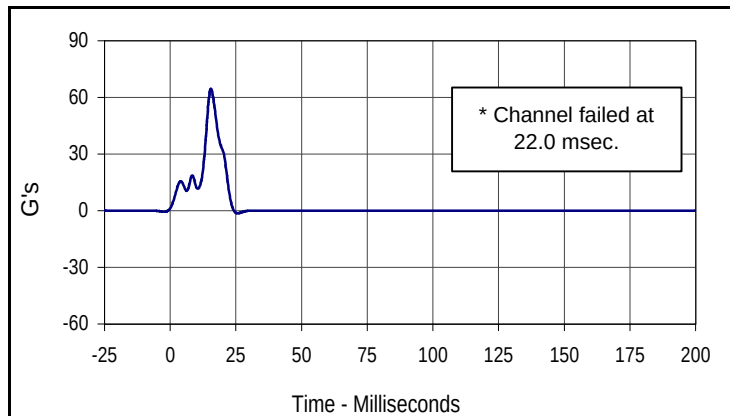


Curve Description			
Vehicle A-Post Middle Y Velocity			
CURNO	Type	SAE Class	Units
065	IN1	180	KMH
Max	Time	Min	Time
15.7	28.6	-0.1	0.9

* Channel failed at 28.0 msec.

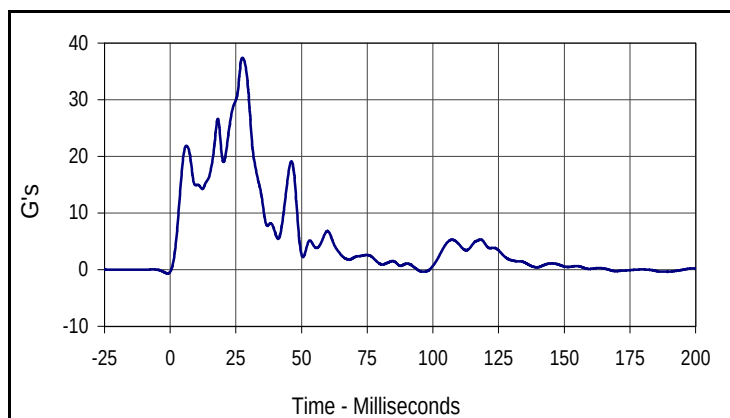
Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05
 NHTSA No.: M55204

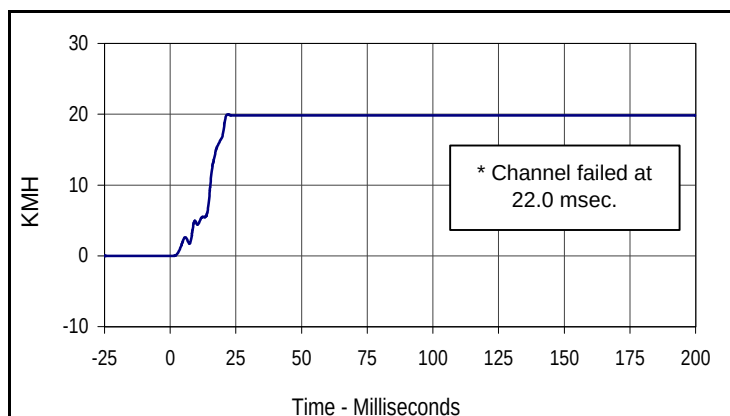


Curve Description			
Vehicle Left Front Seat Track			
CURNO	Type	SAE Class	Units
066	FIL	60	G's
Max	Time	Min	Time
64.6	15.5	-1.4	25.7

* Channel failed at 22.0 msec.

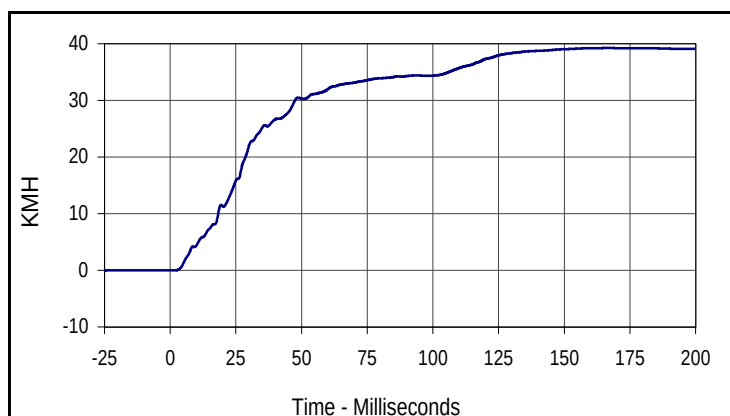


Curve Description			
Vehicle Rear Seat Structure			
CURNO	Type	SAE Class	Units
067	FIL	60	G's
Max	Time	Min	Time
37.4	27.5	-0.4	0.0



Curve Description			
Vehicle Left Front Seat Track Y Velocity			
CURNO	Type	SAE Class	Units
066	IN1	180	KMH
Max	Time	Min	Time
20.0	21.8	0.0	1.1

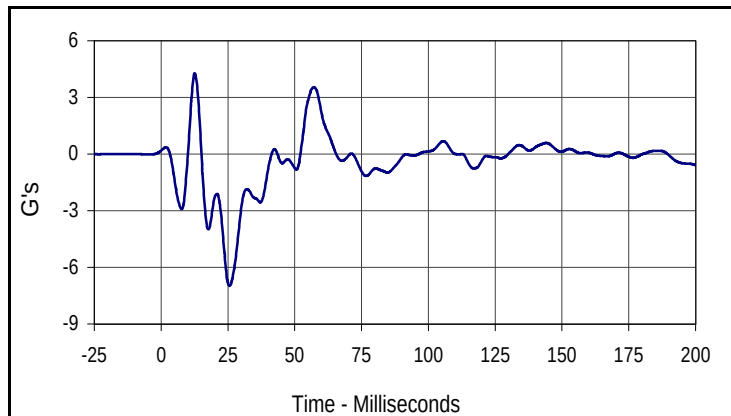
* Channel failed at 22.0 msec.



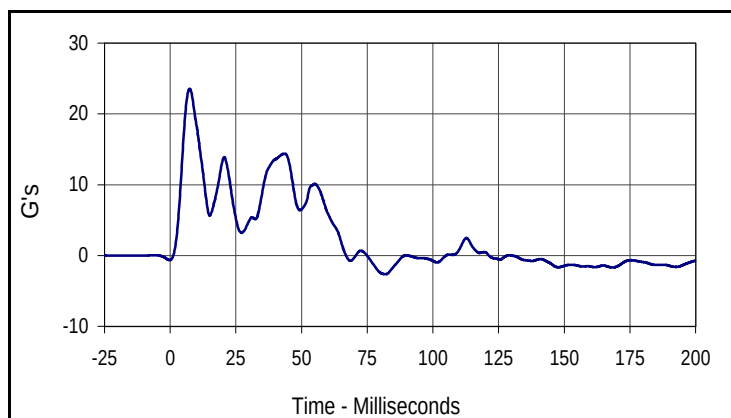
Curve Description			
Vehicle Rear Seat Structure Y Velocity			
CURNO	Type	SAE Class	Units
067	IN1	180	KMH
Max	Time	Min	Time
39.3	167.3	0.0	1.7

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

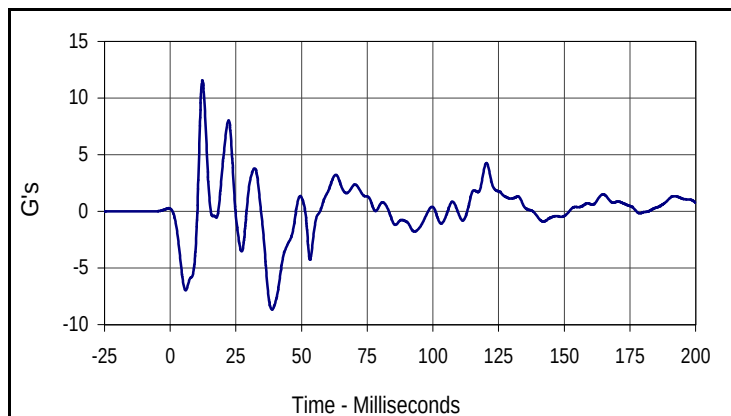
Test Date: 2/3/05
 NHTSA No.: M55204



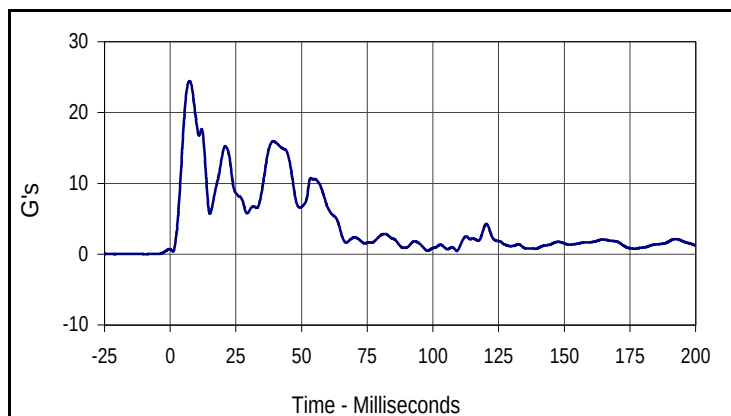
Curve Description			
Vehicle CG X			
CURNO	Type	SAE Class	Units
068	FIL	60	G's
Max	Time	Min	Time
4.3	12.6	-7.0	25.6



Curve Description			
Vehicle CG Y			
CURNO	Type	SAE Class	Units
069	FIL	60	G's
Max	Time	Min	Time
23.5	7.4	-2.7	81.9



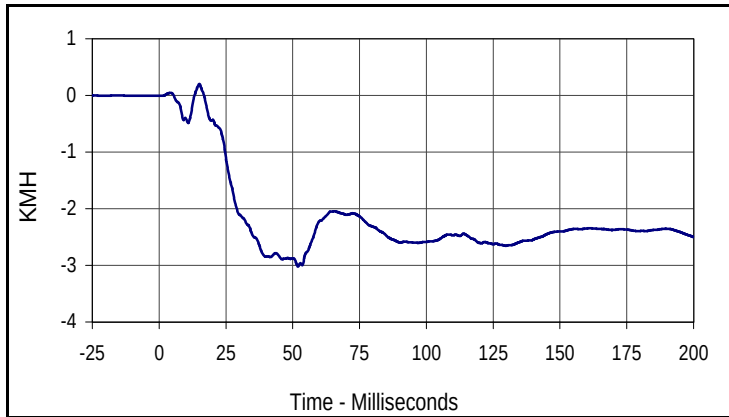
Curve Description			
Vehicle CG Z			
CURNO	Type	SAE Class	Units
070	FIL	60	G's
Max	Time	Min	Time
11.6	12.3	-8.7	38.7



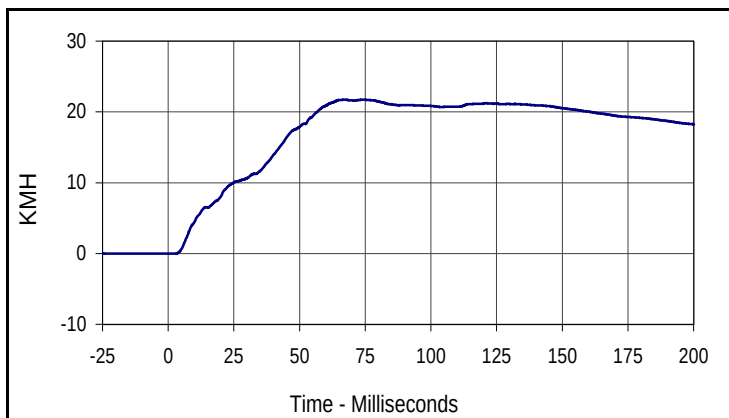
Curve Description			
Vehicle CG Resultant			
CURNO	Type	SAE Class	Units
068	RES	60	G's
Max	Time	Min	Time
24.4	7.3	0.3	1.1

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

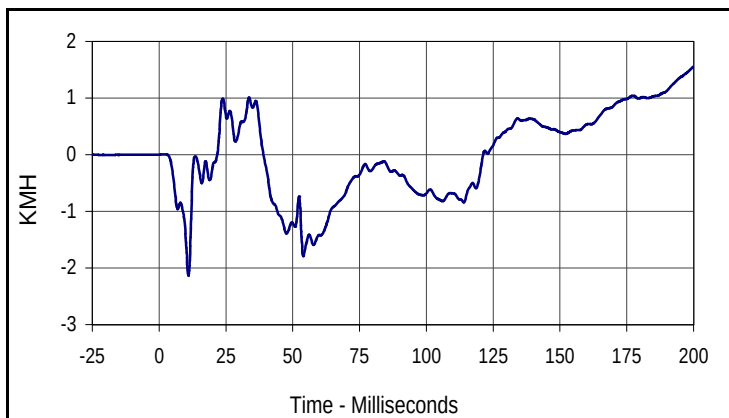
Test Date: 2/3/05
 NHTSA No.: M55204



Curve Description			
Vehicle CG X Velocity			
CURNO	Type	SAE Class	Units
068	IN1	180	KMH
Max	Time	Min	Time
0.2	15.0	-3.0	51.9



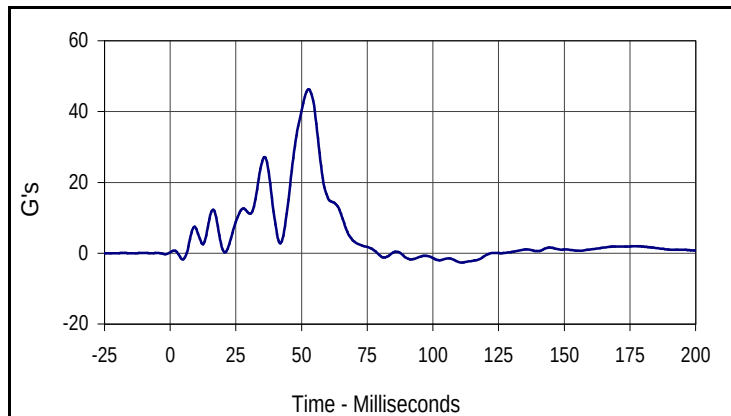
Curve Description			
Vehicle CG Y Velocity			
CURNO	Type	SAE Class	Units
069	IN1	180	KMH
Max	Time	Min	Time
21.7	67.4	0.0	0.0



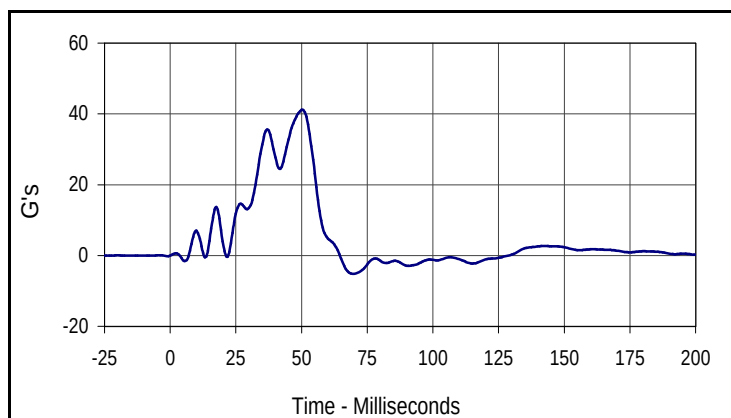
Curve Description			
Vehicle CG Z Velocity			
CURNO	Type	SAE Class	Units
070	IN1	180	KMH
Max	Time	Min	Time
1.6	200.0	-2.1	11.0

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

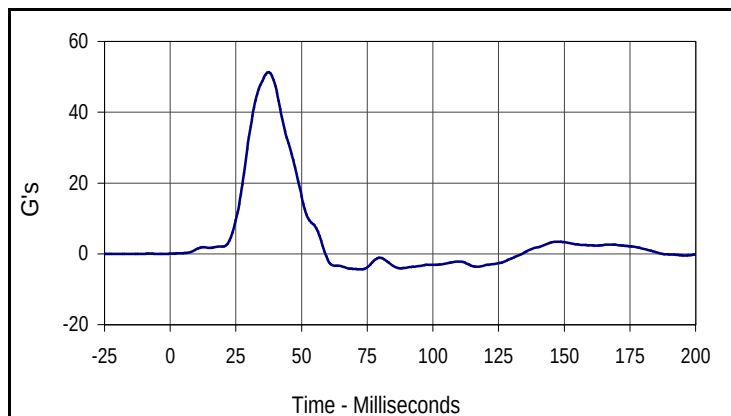
Test Date: 2/3/05
 NHTSA No.: M55204



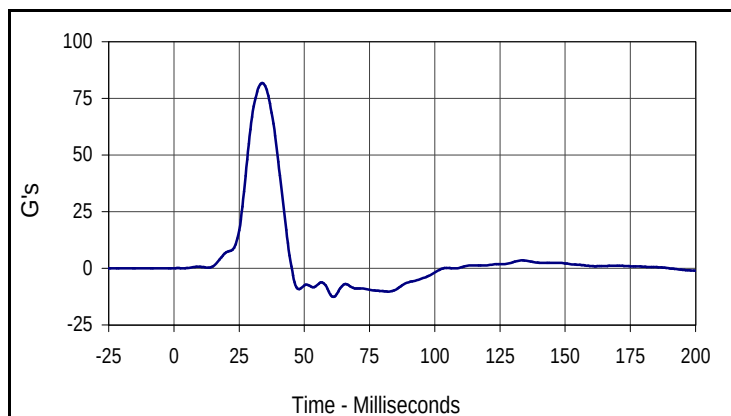
Curve Description			
Driver Upper Rib Primary Y			
CURNO	Type	SAE Class	Units
013	FIR	FIR100	G's
Max	Time	Min	Time
46.2	52.5	-2.6	111.3



Curve Description			
Driver Lower Rib Primary Y			
CURNO	Type	SAE Class	Units
014	FIR	FIR100	G's
Max	Time	Min	Time
41.2	50.0	-5.1	69.4



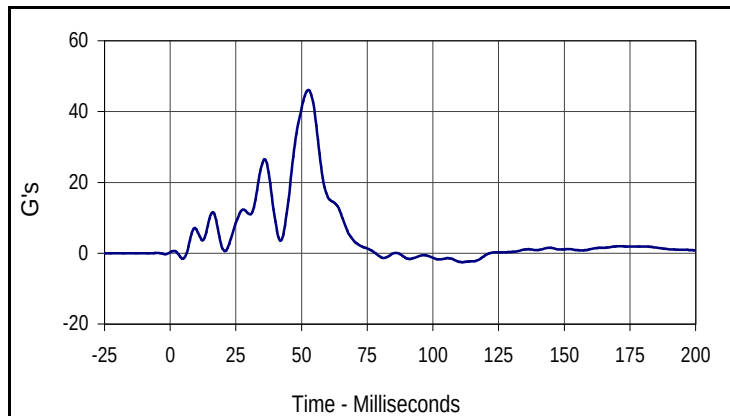
Curve Description			
Driver Lower Spine Primary Y			
CURNO	Type	SAE Class	Units
015	FIR	FIR100	G's
Max	Time	Min	Time
51.3	37.5	-4.4	72.5



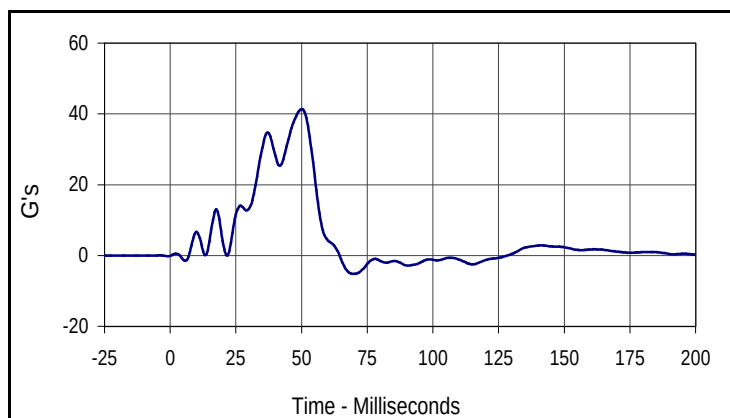
Curve Description			
Driver Pelvis Primary Y			
CURNO	Type	SAE Class	Units
016	FIR	FIR100	G's
Max	Time	Min	Time
81.7	33.8	-12.6	61.3

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

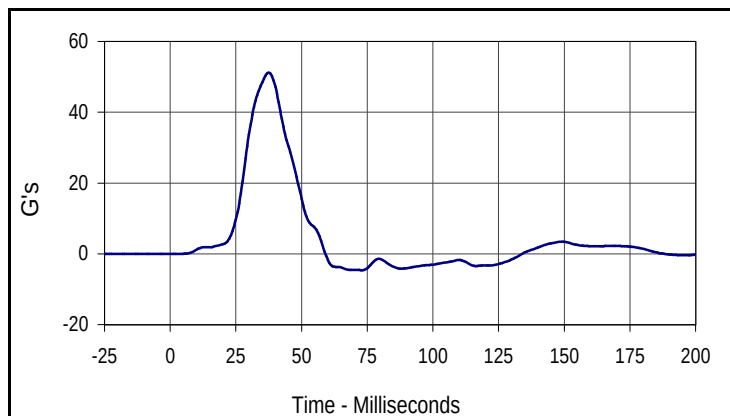
Test Date: 2/3/05
 NHTSA No.: M55204



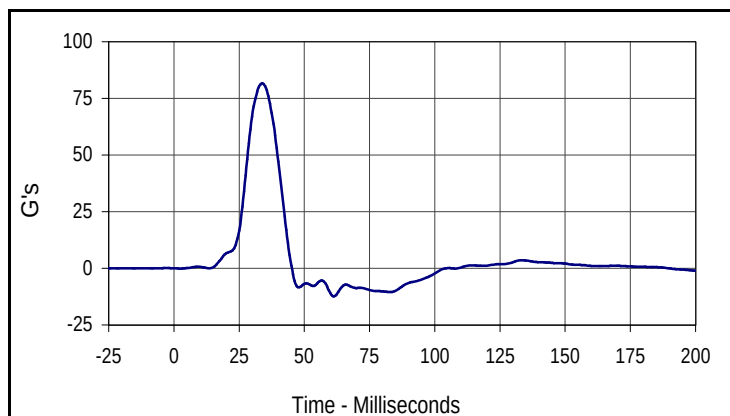
Curve Description			
Driver Upper Rib Redundant Y			
CURNO	Type	SAE Class	Units
017	FIR	FIR100	G's
Max	Time	Min	Time
46.1	52.5	-2.5	111.3



Curve Description			
Driver Lower Rib Redundant Y			
CURNO	Type	SAE Class	Units
018	FIR	FIR100	G's
Max	Time	Min	Time
41.4	50.0	-5.2	70.0



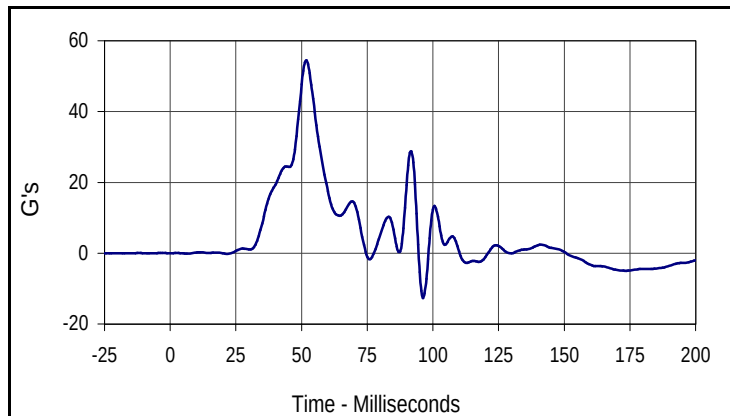
Curve Description			
Driver Lower Spine Redundant Y			
CURNO	Type	SAE Class	Units
019	FIR	FIR100	G's
Max	Time	Min	Time
51.2	37.5	-4.6	73.1



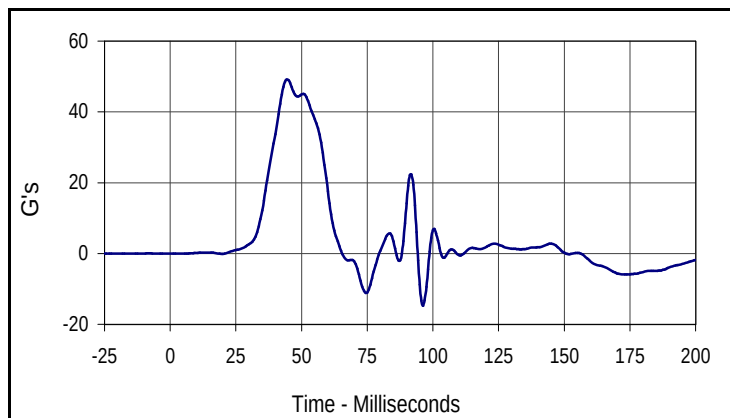
Curve Description			
Driver Pelvis Redundant Y			
CURNO	Type	SAE Class	Units
020	FIR	FIR100	G's
Max	Time	Min	Time
81.6	33.8	-12.4	61.3

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

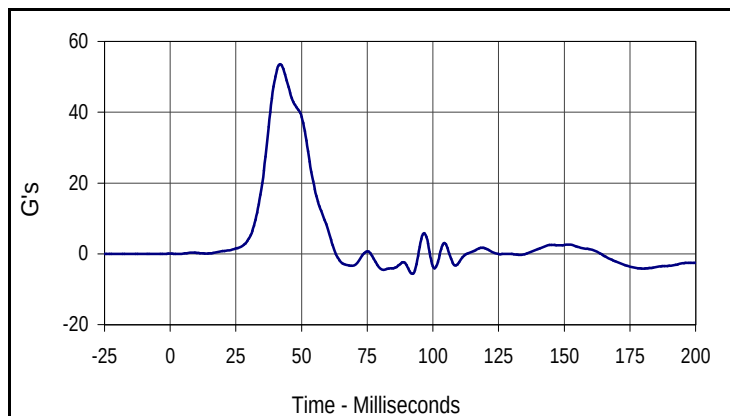
Test Date: 2/3/05
 NHTSA No.: M55204



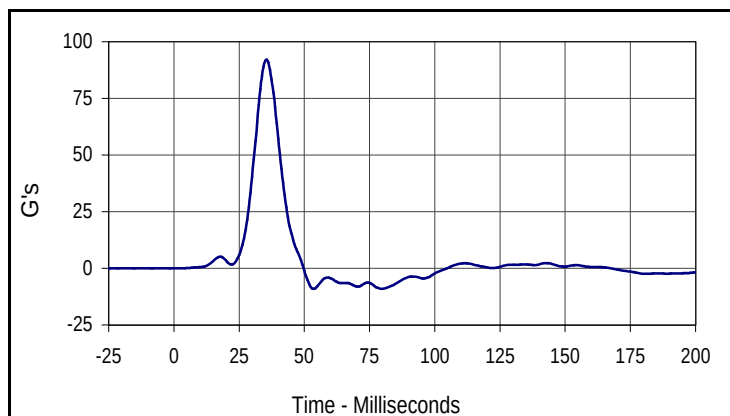
Curve Description			
Passenger Upper Rib Primary Y			
CURNO	Type	SAE Class	Units
035	FIR	FIR100	G's
Max	Time	Min	Time
54.5	51.9	-12.7	96.3



Curve Description			
Passenger Lower Rib Primary Y			
CURNO	Type	SAE Class	Units
036	FIR	FIR100	G's
Max	Time	Min	Time
49.1	44.4	-14.8	96.3



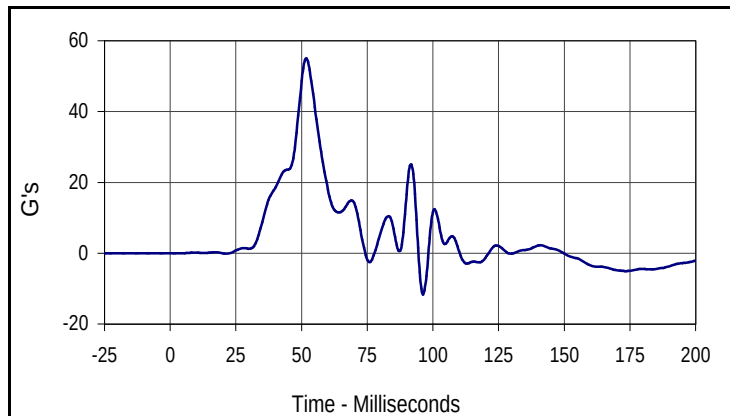
Curve Description			
Passenger Lower Spine Primary Y			
CURNO	Type	SAE Class	Units
037	FIR	FIR100	G's
Max	Time	Min	Time
53.6	41.9	-5.6	91.9



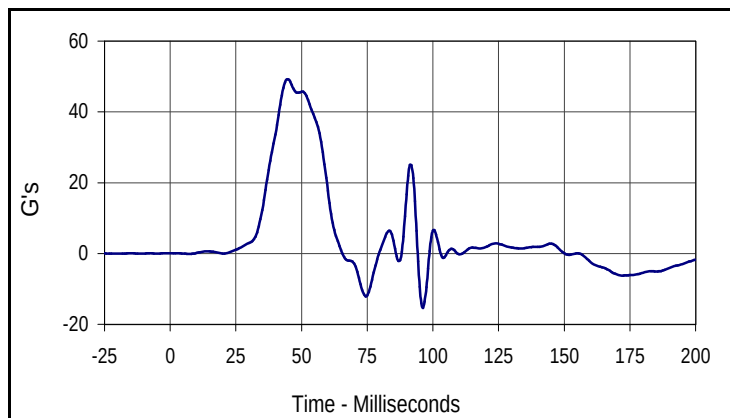
Curve Description			
Passenger Pelvis Primary Y			
CURNO	Type	SAE Class	Units
038	FIR	FIR100	G's
Max	Time	Min	Time
92.1	35.6	-9.1	53.8

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

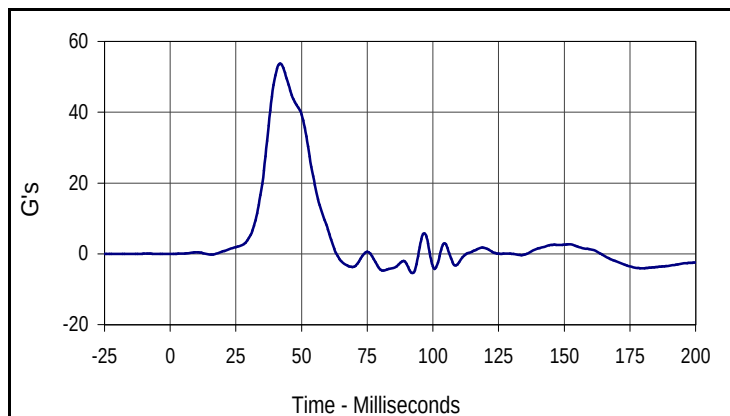
Test Date: 2/3/05
 NHTSA No.: M55204



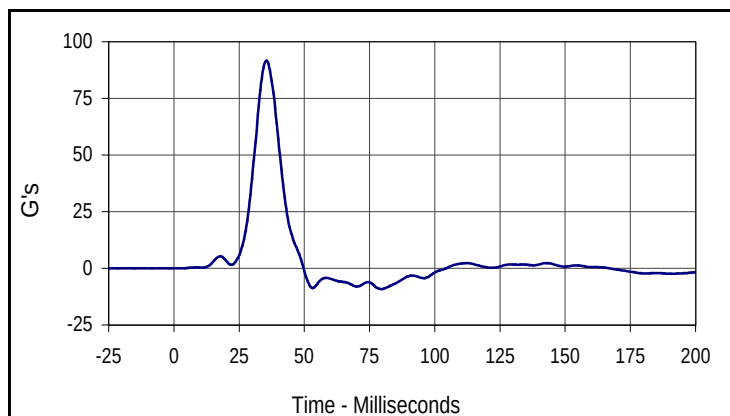
Curve Description			
Passenger Upper Rib Redundant Y			
CURNO	Type	SAE Class	Units
039	FIR	FIR100	G's
Max	Time	Min	Time
55.1	51.9	-11.7	96.3



Curve Description			
Passenger Lower Rib Redundant Y			
CURNO	Type	SAE Class	Units
040	FIR	FIR100	G's
Max	Time	Min	Time
49.2	45.0	-15.4	96.3



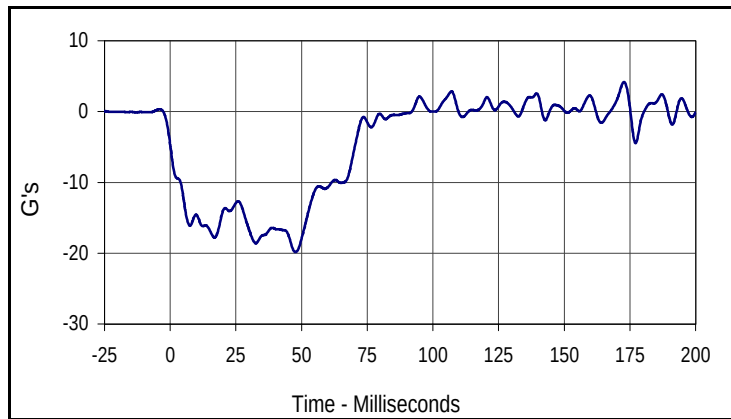
Curve Description			
Passenger Lower Spine Redundant Y			
CURNO	Type	SAE Class	Units
041	FIR	FIR100	G's
Max	Time	Min	Time
53.7	41.9	-5.4	92.5



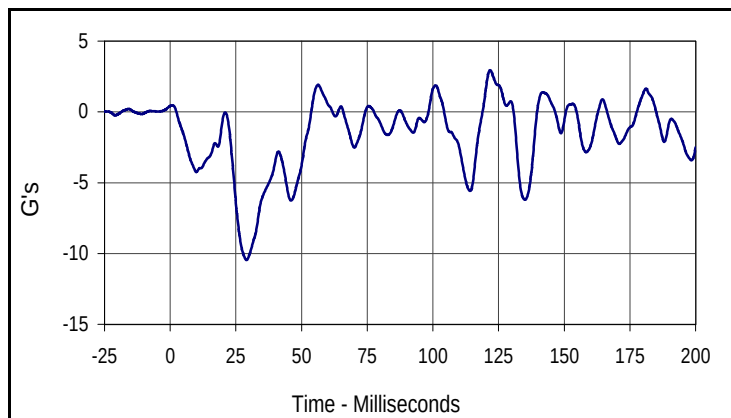
Curve Description			
Passenger Pelvis Redundant Y			
CURNO	Type	SAE Class	Units
042	FIR	FIR100	G's
Max	Time	Min	Time
91.7	35.6	-9.2	79.4

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

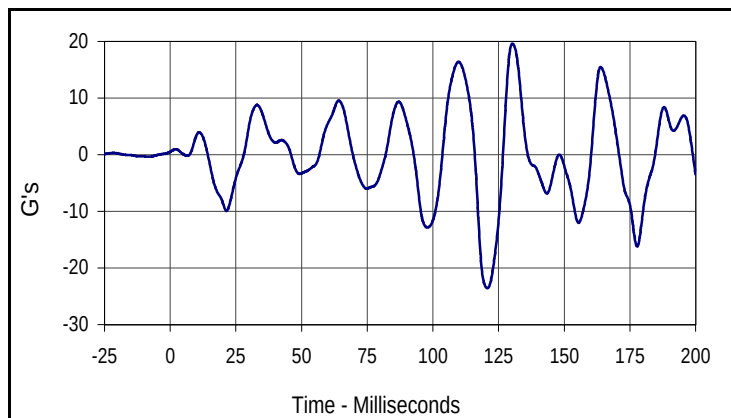
Test Date: 2/3/05
 NHTSA No.: M55204



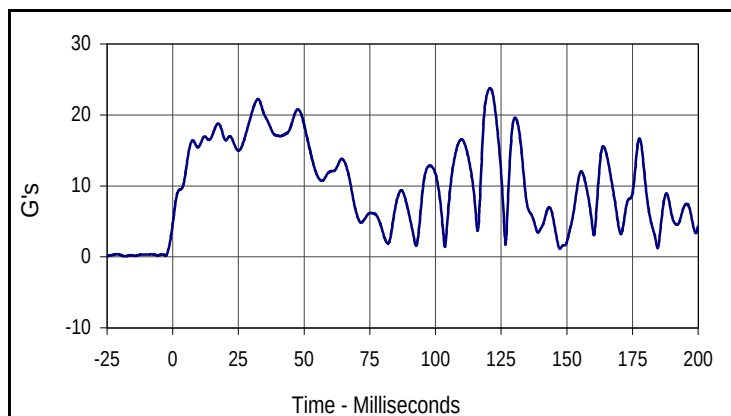
Curve Description			
MDB CG X			
CURNO	Type	SAE Class	Units
071	FIL	60	G's
Max	Time	Min	Time
4.2	172.8	-19.8	47.7



Curve Description			
MDB CG Y			
CURNO	Type	SAE Class	Units
072	FIL	60	G's
Max	Time	Min	Time
3.0	121.8	-10.5	29.0



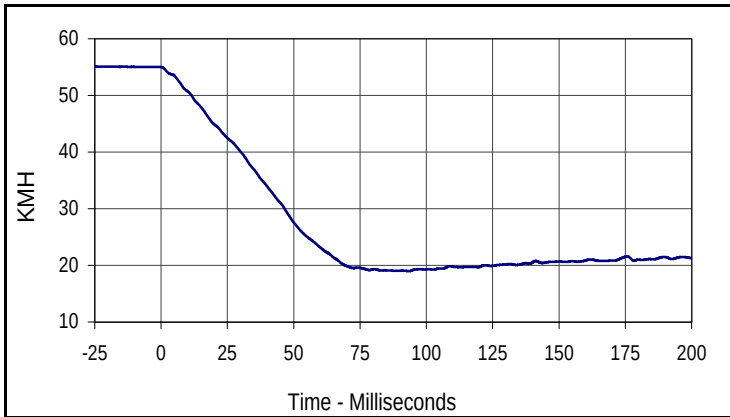
Curve Description			
MDB CG Z			
CURNO	Type	SAE Class	Units
073	FIL	60	G's
Max	Time	Min	Time
19.6	130.3	-23.6	120.7



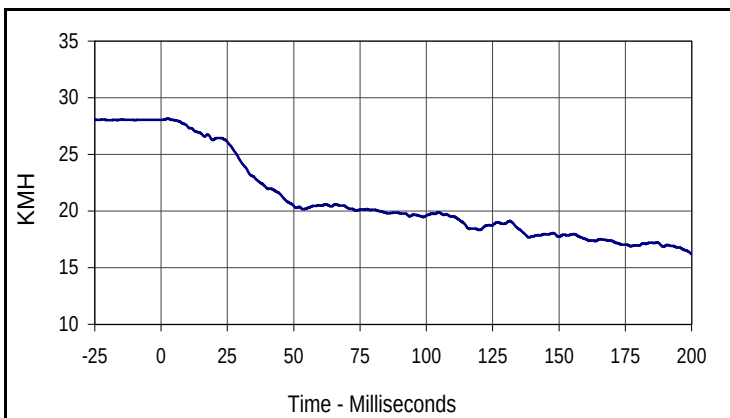
Curve Description			
MDB CG Resultant			
CURNO	Type	SAE Class	Units
071	RES	60	G's
Max	Time	Min	Time
23.8	120.8	1.1	147.4

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

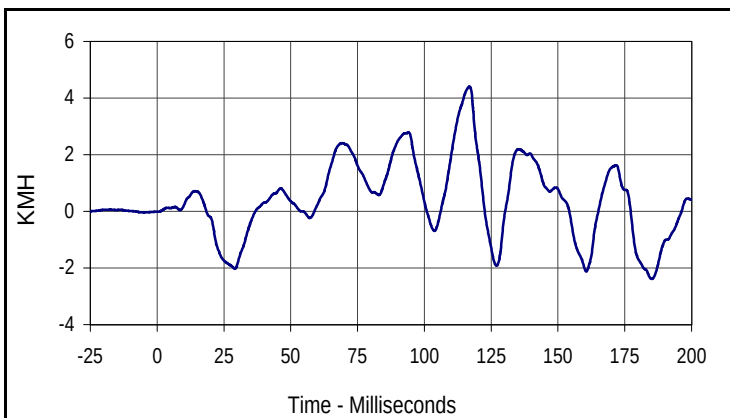
Test Date: 2/3/05
 NHTSA No.: M55204



Curve Description			
MDB CG X Velocity			
CURNO	Type	SAE Class	Units
071	IN1	180	KMH
Max	Time	Min	Time
55.0	0.0	19.0	93.5



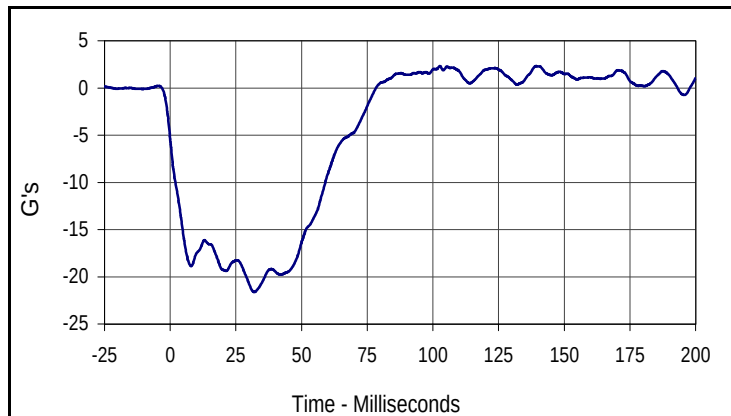
Curve Description			
MDB CG Y Velocity			
CURNO	Type	SAE Class	Units
072	IN1	180	KMH
Max	Time	Min	Time
28.2	2.5	16.2	200.0



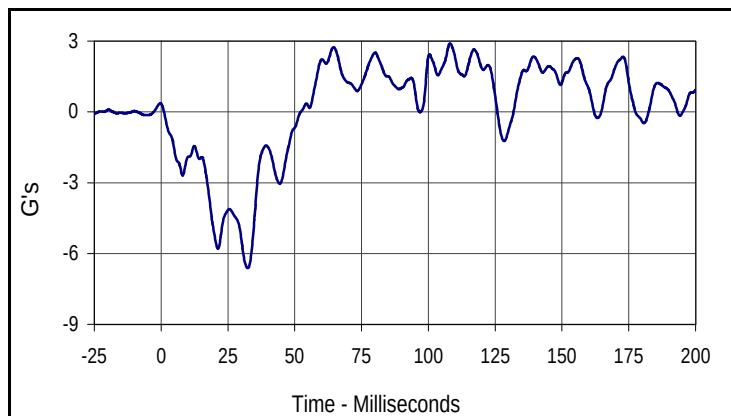
Curve Description			
MDB CG Z Velocity			
CURNO	Type	SAE Class	Units
073	IN1	180	KMH
Max	Time	Min	Time
4.4	116.9	-2.4	185.1

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

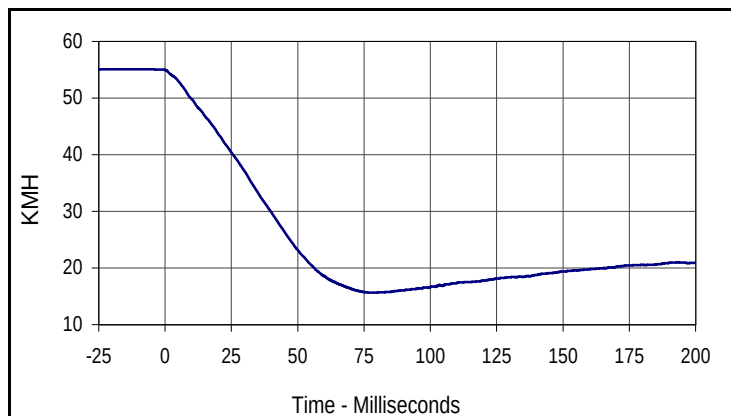
Test Date: 2/3/05
 NHTSA No.: M55204



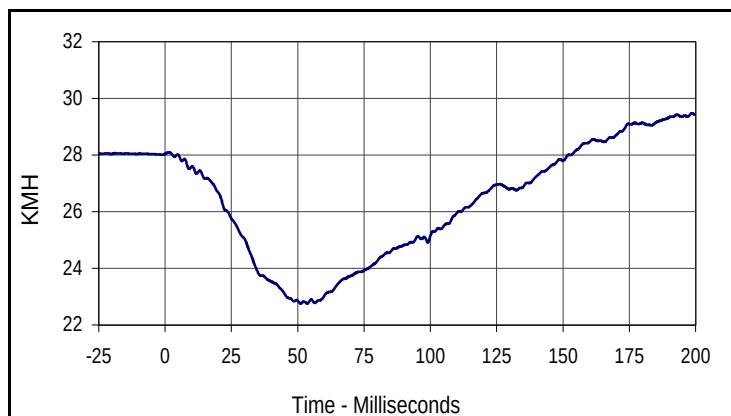
Curve Description			
MDB Rear X			
CURNO	Type	SAE Class	Units
074	FIL	60	G's
Max	Time	Min	Time
2.3	102.6	-21.6	32.0



Curve Description			
MDB Rear Y			
CURNO	Type	SAE Class	Units
075	FIL	60	G's
Max	Time	Min	Time
2.9	108.1	-6.6	32.4



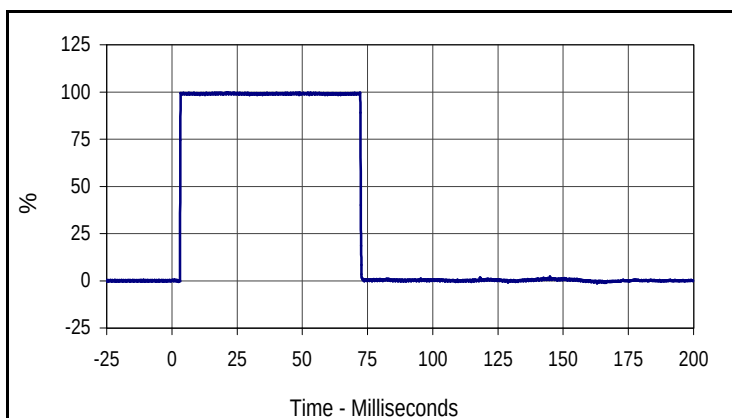
Curve Description			
MDB Rear X Velocity			
CURNO	Type	SAE Class	Units
074	IN1	180	KMH
Max	Time	Min	Time
55.0	0.0	15.6	77.8



Curve Description			
MDB Rear Y Velocity			
CURNO	Type	SAE Class	Units
075	IN1	180	KMH
Max	Time	Min	Time
29.5	198.7	22.8	51.1

Test Vehicle: 2005 Nissan Murano S 5-Door MPV
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 2/3/05
 NHTSA No.: M55204



Curve Description			
MDB Right Bumper Contact			
CURNO	Type	SAE Class	Units
076	FIL	1000	%
Max	Time	Cross %	Time
99.8	21.2	50.0	3.2

APPENDIX C

SID/HIII CONFIGURATION AND PERFORMANCE VERIFICATION DATA

APPENDIX C
PRE-TEST SID / HIII CONFIGURATION AND PERFORMANCE VERIFICATION DATA

Test Program: SID / HIII External Measurements
 ATD Serial No.: 274

Test Date: 12/22/04
 Test I.D.: N/A



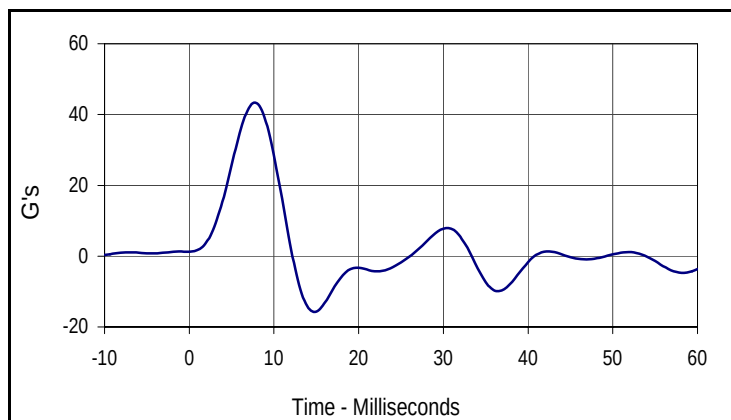
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
SH- Seated Height	mm	889 to 909	905	Pass
HP- Hip Point Height	mm	99 (reference)	99	Pass
RH- Rib Height	mm	502 to 520	510	Pass
KH- Knee Pivot From Back Line	mm	511 to 526	514	Pass
KV- Knee Pivot From Floor	mm	490 to 505	500	Pass
HW- Hip Width	mm	356 to 391	366	Pass
Overall Test Results				Pass

Test Program: SID / HIII Thorax Lateral Impact
 ATD Serial No.: 274

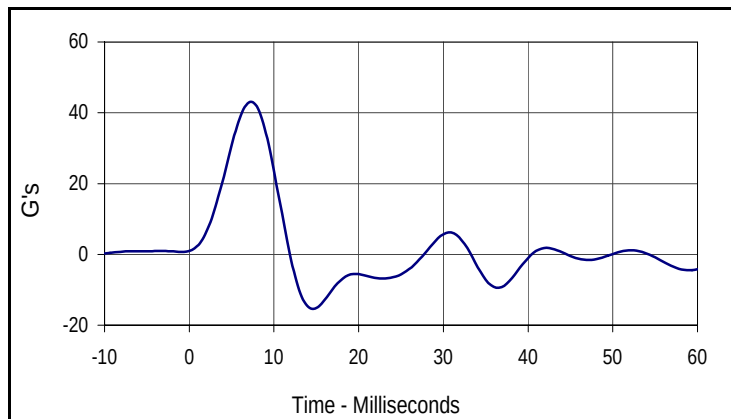
Test Date: 12/20/04
 Test I.D.: TH12F



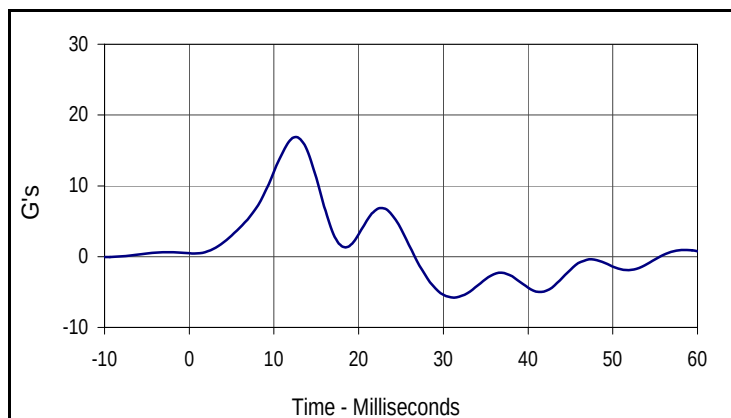
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.25	Pass
Upper Rib Acceleration	G's	37.0 to 46.0	43.2	Pass
Lower Rib Acceleration	G's	37.0 to 46.0	43.0	Pass
Thoracic Spine Acceleration	G's	15.0 to 22.0	16.9	Pass
Overall Test Results			Pass	



Curve Description			
Upper Rib Primary			
CURNO	Type	SAE Class	Units
001	FIL	FIR100	G's
Max	Time	Min	Time
43.2	7.5	-15.6	15.0



Curve Description			
Lower Rib Primary			
CURNO	Type	SAE Class	Units
002	FIL	FIR100	G's
Max	Time	Min	Time
43.0	7.5	-15.3	14.4



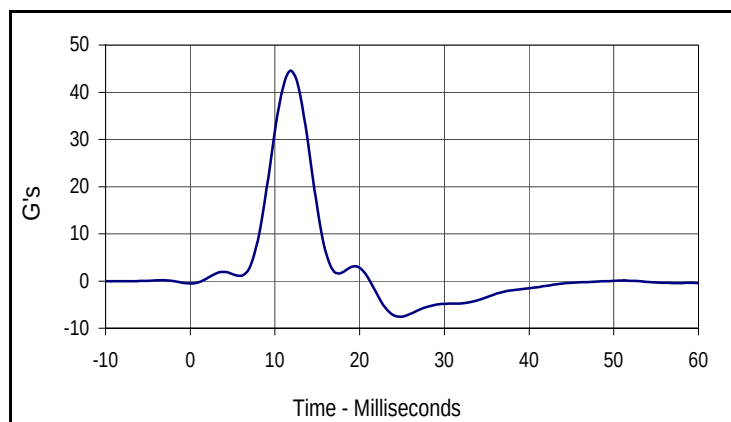
Curve Description			
Lower Spine Primary			
CURNO	Type	SAE Class	Units
003	FIL	FIR100	G's
Max	Time	Min	Time
16.9	12.5	-5.8	31.3

Test Program: SID / HIII Pelvis Lateral Impact
 ATD Serial No.: 274

Test Date: 12/21/04
 Test I.D.: PI12G



Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.25	Pass
Peak Pelvis Acceleration	G's	40.0 to 60.0	44.6	Pass
Acceleration Time Above 20 G's	Msec.	3.0 to 7.0	5.63	Pass
Overall Test Results				Pass



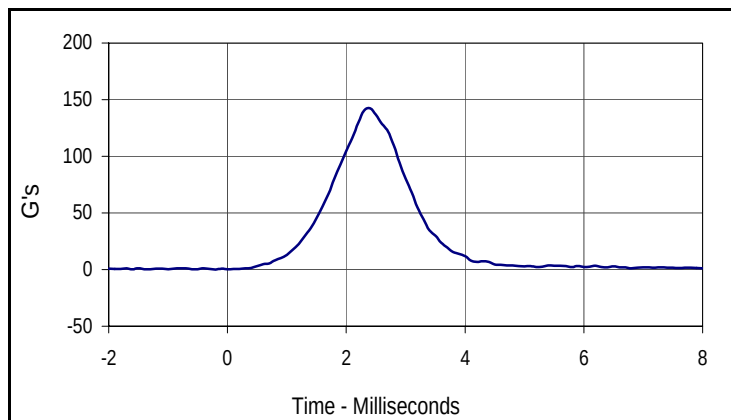
Curve Description			
Pelvis Y			
CURNO	Type	SAE Class	Units
001	FIL	FIR100	G's
Max	Time	Min	Time
44.6	11.9	-7.6	25.0

Test Program: SID / HIII Head Drop Lateral Impact Test
 ATD Serial No.: 274

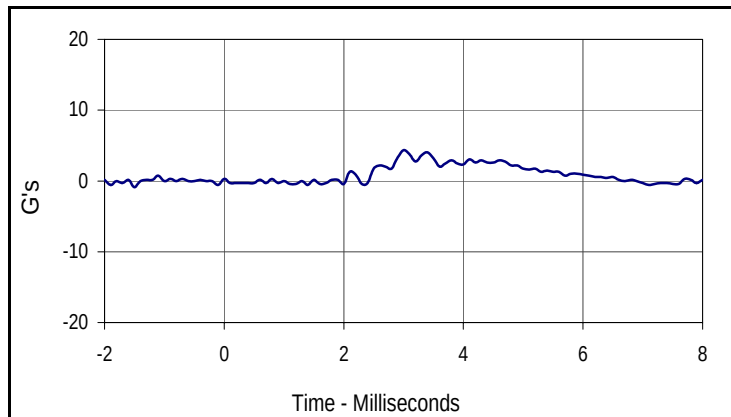
Test Date: 12/21/04
 Test I.D.: HD12J



Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	120.0 to 150.0	142.4	Pass
Peak Longitudinal Acceleration	G's	≤15.0	4.3	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Oscillations After Main Pulse	%	<15	2.5	Pass
Overall Test Results			Pass	



Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
142.4	2.4	0.0	-0.2



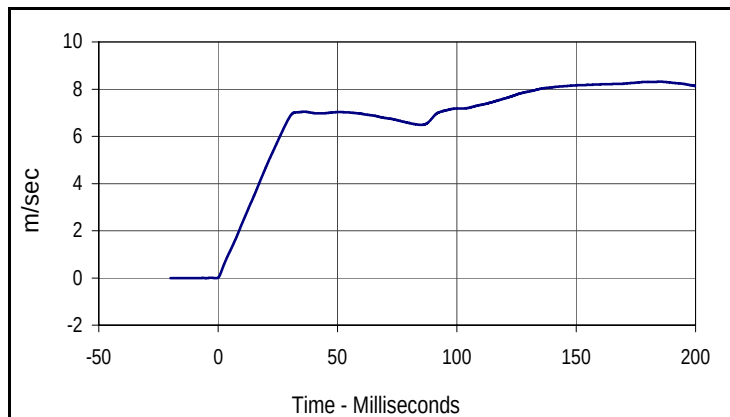
Curve Description			
Head X			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
4.3	3.0	-0.9	-1.5

Test Program: SID / HIII Neck Pendulum Lateral Test
 ATD Serial No.: 274

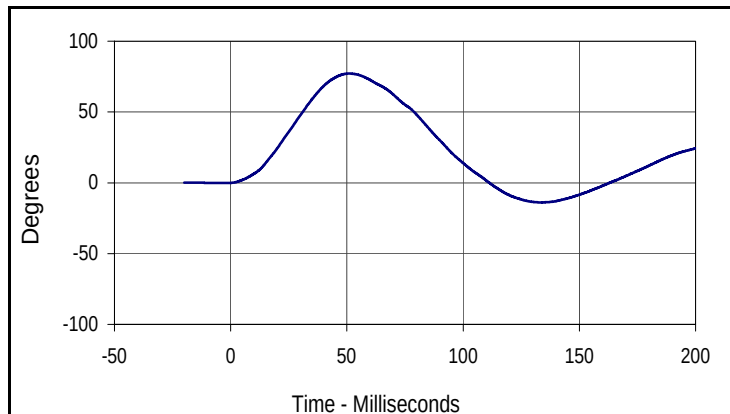
Test Date: 12/22/05
 Test I.D.: NB12H



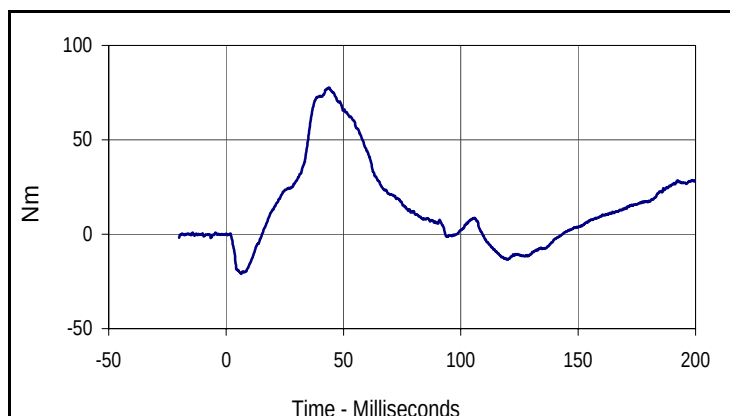
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/sec	6.89 to 7.13	7.06	Pass
Pendulum Deceleration	10 Msec.	m/sec	1.96 to 2.55	2.31	Pass
	20 Msec.	m/sec	4.12 to 5.10	4.69	Pass
	30 Msec.	m/sec	5.73 to 7.01	6.83	Pass
	40 to 70	m/sec	6.27 to 7.64	7.03	Pass
"D" Plane Rotation	Max	Degrees	66.0 to 82.0	77.1	Pass
Max Rotation Time After Peak Moment		Msec.	2.0 to 16.0	7.0	Pass
Rotation Time From Peak to Zero Angle		Msec.	58.0 to 67.0	60.3	Pass
Moment About Occipital Condyle		Nm	73.0 to 88.0	77.6	Pass
Positive Moment Decay, Time To 0 Nm		Msec.	49.0 to 64.0	49.4	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/sec
Max	Time	Min	Time
8.3	185.1	0.0	-0.7



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
77.1	51.0	-13.8	133.5



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
77.6	44.0	-21.0	6.5

Test Program: SID / HIII External Measurements
 ATD Serial No.: 275

Test Date: 1/15/05
 Test I.D.: N/A



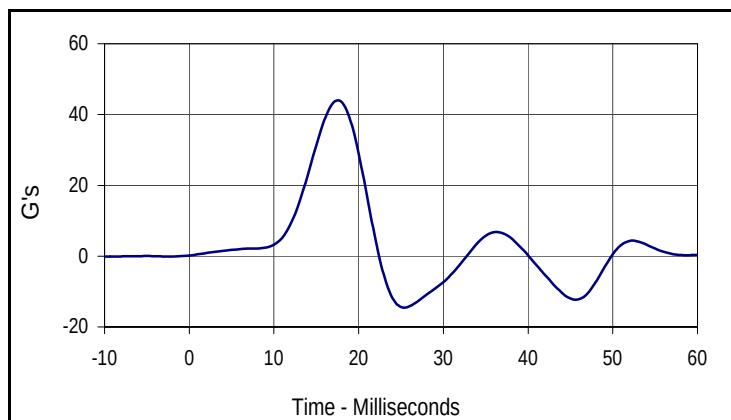
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
SH- Seated Height	mm	889 to 909	900	Pass
HP- Hip Point Height	mm	99 (reference)	99	Pass
RH- Rib Height	mm	502 to 520	510	Pass
KH- Knee Pivot From Back Line	mm	511 to 526	515	Pass
KV- Knee Pivot From Floor	mm	490 to 505	500	Pass
HW- Hip Width	mm	356 to 391	387	Pass
Overall Test Results				Pass

Test Program: SID / HIII Thorax Lateral Impact
 ATD Serial No.: 275

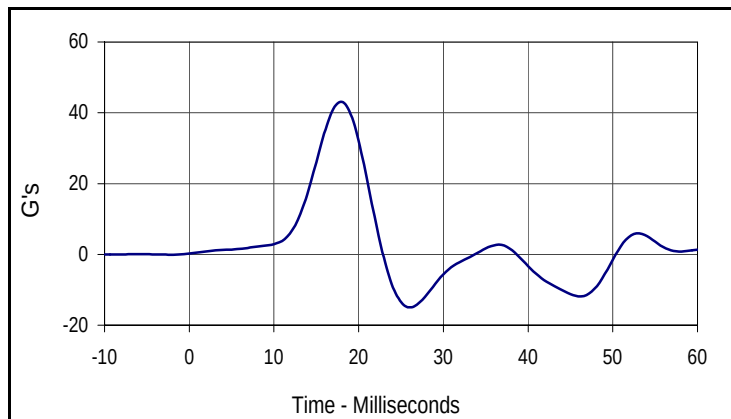
Test Date: 1/14/05
 Test I.D.: TH01C



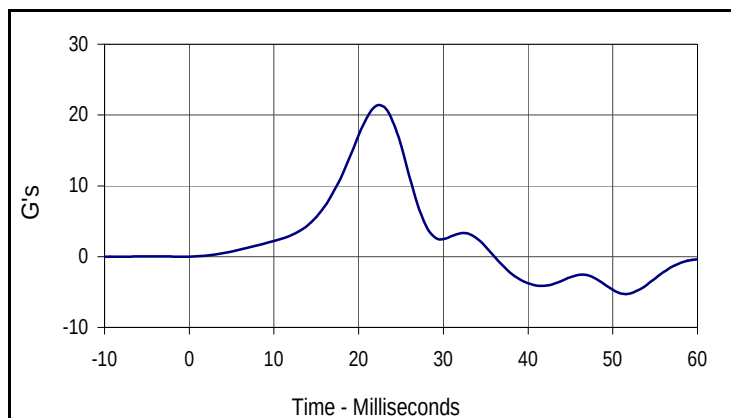
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.30	Pass
Upper Rib Acceleration	G's	37.0 to 46.0	44.0	Pass
Lower Rib Acceleration	G's	37.0 to 46.0	43.0	Pass
Thoracic Spine Acceleration	G's	15.0 to 22.0	21.4	Pass
Overall Test Results			Pass	



Curve Description			
Upper Rib Primary Y			
CURNO	Type	SAE Class	Units
001	FIL	FIR100	G's
Max	Time	Min	Time
44.0	17.5	-14.5	25.6



Curve Description			
Lower Rib Primary Y			
CURNO	Type	SAE Class	Units
002	FIL	FIR100	G's
Max	Time	Min	Time
43.0	18.1	-14.9	26.3



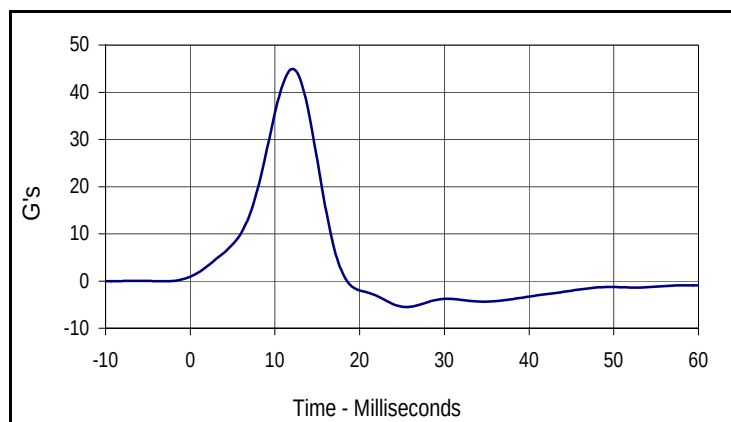
Curve Description			
Lower Spine Primary Y			
CURNO	Type	SAE Class	Units
003	FIL	FIR100	G's
Max	Time	Min	Time
21.4	22.5	-5.2	51.3

Test Program: SID / HIII Pelvis Lateral Impact
 ATD Serial No.: 275

Test Date: 1/14/05
 Test I.D.: PI01A



Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.26	Pass
Peak Pelvis Acceleration	G's	40.0 to 60.0	44.8	Pass
Acceleration Time Above 20 G's	Msec.	3.0 to 7.0	7.00	Pass
Overall Test Results				Pass



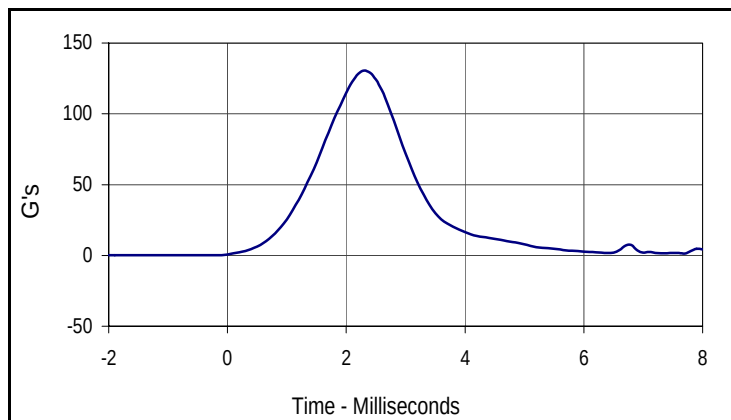
Curve Description			
Pelvis Primary Y			
CURNO	Type	SAE Class	Units
001	FIL	FIR100	G's
Max	Time	Min	Time
44.8	11.9	-5.5	25.6

Test Program: SID / HIII Head Drop Lateral Impact Test
 ATD Serial No.: 275

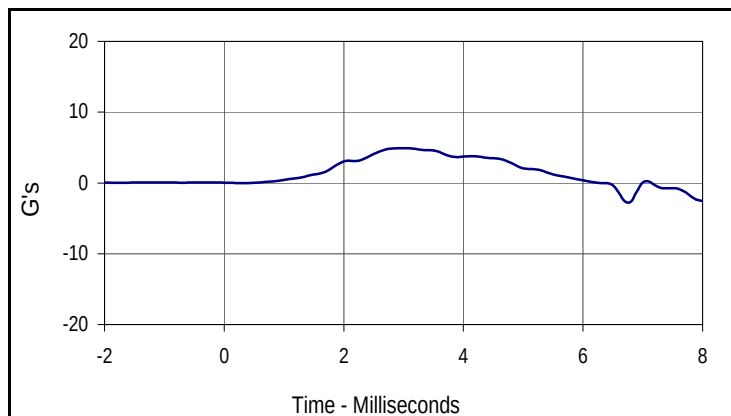
Test Date: 1/14/05
 Test I.D.: HD01A



Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	120.0 to 150.0	130.6	Pass
Peak Longitudinal Acceleration	G's	≤15.0	4.9	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Oscillations After Main Pulse	%	<15	6.1	Pass
Overall Test Results			Pass	



Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
130.6	2.3	0.1	-1.6



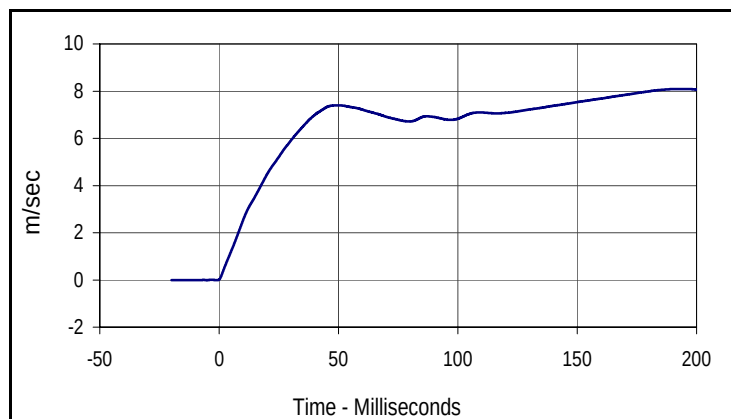
Curve Description			
Head X			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
4.9	3.0	0.0	0.3

Test Program: SID / HIII Neck Pendulum Lateral Test
 ATD Serial No.: 275

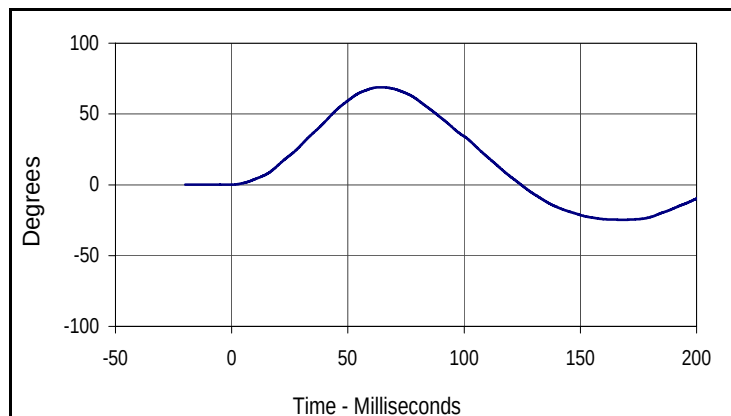
Test Date: 1/15/05
 Test I.D.: NB01A



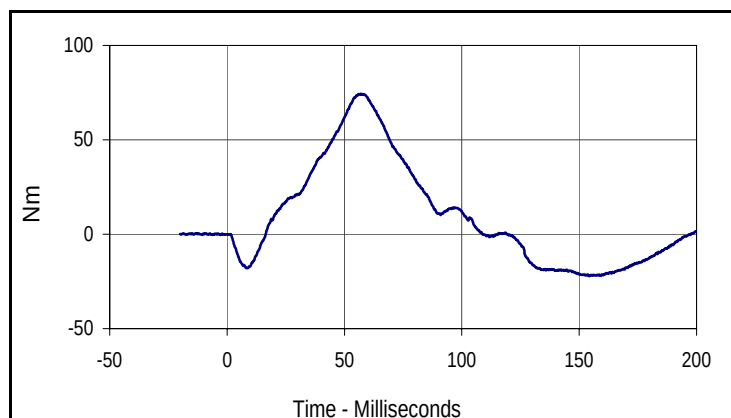
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/sec	6.89 to 7.13	7.06	Pass
Pendulum Deceleration	10 Msec.	m/sec	1.96 to 2.55	2.53	Pass
	20 Msec.	m/sec	4.12 to 5.10	4.47	Pass
	30 Msec.	m/sec	5.73 to 7.01	5.90	Pass
	40 to 70	m/sec	6.27 to 7.64	7.40	Pass
"D" Plane Rotation	Max	Degrees	66.0 to 82.0	68.9	Pass
Max Rotation Time After Peak Moment		Msec.	2.0 to 16.0	7.1	Pass
Rotation Time From Peak to Zero Angle		Msec.	58.0 to 67.0	60.5	Pass
Moment About Occipital Condyle		Nm	73.0 to 88.0	74.3	Pass
Positive Moment Decay, Time To 0 Nm		Msec.	49.0 to 64.0	51.8	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/sec
Max	Time	Min	Time
8.1	192.1	0.0	-0.7



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
68.9	64.1	-24.7	168.4



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
74.3	57.0	-22.2	154.3

APPENDIX C
POST-TEST SID / HIII CONFIGURATION AND PERFORMANCE VERIFICATION DATA

Test Program: SID / HIII External Measurements
 ATD Serial No.: 274

Test Date: 2/8/05
 Test I.D.: N/A



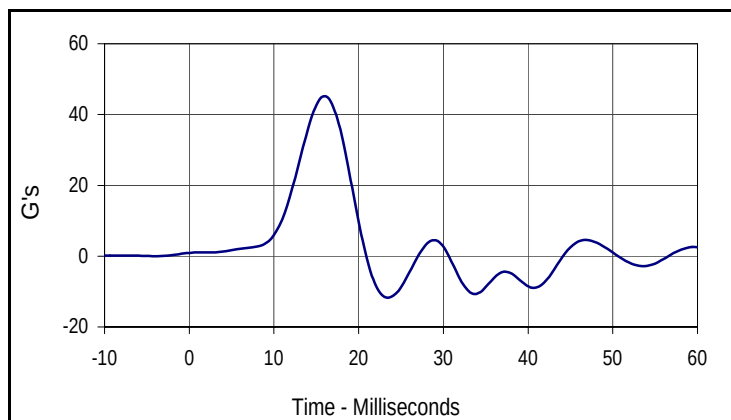
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
SH- Seated Height	mm	889 to 909	905	Pass
HP- Hip Point Height	mm	99 (reference)	99	Pass
RH- Rib Height	mm	502 to 520	515	Pass
KH- Knee Pivot From Back Line	mm	511 to 526	518	Pass
KV- Knee Pivot From Floor	mm	490 to 505	495	Pass
HW- Hip Width	mm	356 to 391	385	Pass
Overall Test Results				Pass

Test Program: SID / HIII Thorax Lateral Impact
 ATD Serial No.: 274

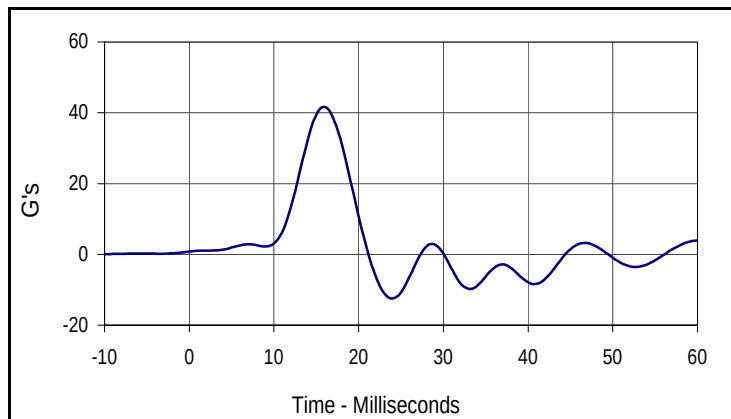
Test Date: 2/8/05
 Test I.D.: TH02A



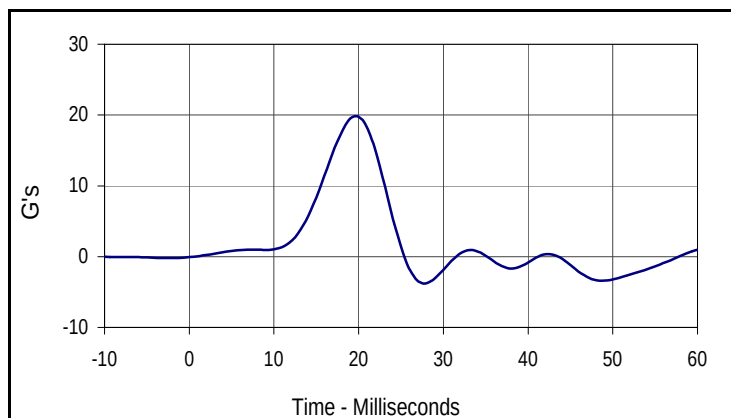
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.25	Pass
Upper Rib Acceleration	G's	37.0 to 46.0	45.0	Pass
Lower Rib Acceleration	G's	37.0 to 46.0	41.5	Pass
Thoracic Spine Acceleration	G's	15.0 to 22.0	19.8	Pass
Overall Test Results			Pass	



Curve Description			
Upper Rib Primary			
CURNO	Type	SAE Class	Units
001	FIL	FIR100	G's
Max	Time	Min	Time
45.0	16.3	-11.6	23.8



Curve Description			
Lower Rib Primary			
CURNO	Type	SAE Class	Units
002	FIL	FIR100	G's
Max	Time	Min	Time
41.5	15.6	-12.4	23.8



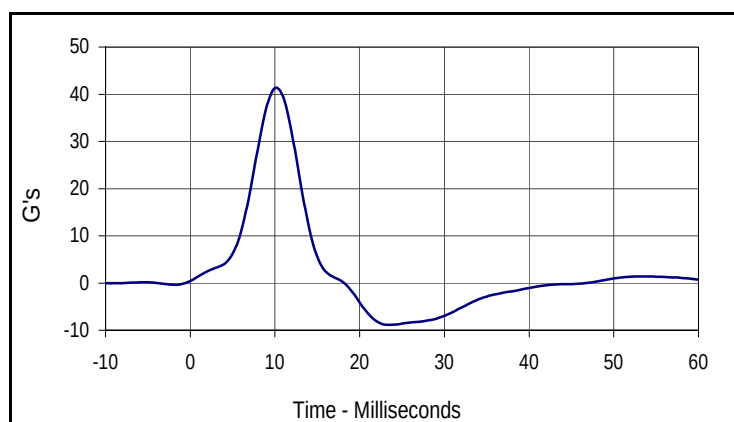
Curve Description			
Lower Spine Primary			
CURNO	Type	SAE Class	Units
003	FIL	FIR100	G's
Max	Time	Min	Time
19.8	19.4	-3.7	27.5

Test Program: SID / HIII Pelvis Lateral Impact
 ATD Serial No.: 274

Test Date: 2/8/05
 Test I.D.: PI02A



Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.25	Pass
Peak Pelvis Acceleration	G's	40.0 to 60.0	41.3	Pass
Acceleration Time Above 20 G's	Msec.	3.0 to 7.0	6.25	Pass
Overall Test Results				Pass



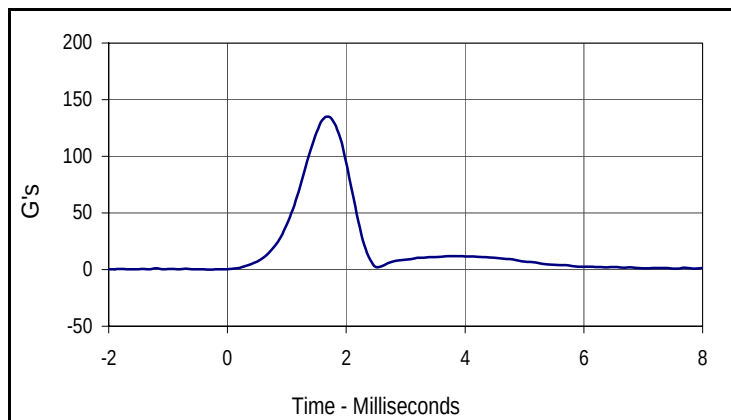
Curve Description			
Pelvis Primary Y			
CURNO	Type	SAE Class	Units
001	FIL	FIR100	G's
Max	Time	Min	Time
41.3	10.0	-8.9	23.8

Test Program: SID / HIII Head Drop Lateral Impact Test
 ATD Serial No.: 274

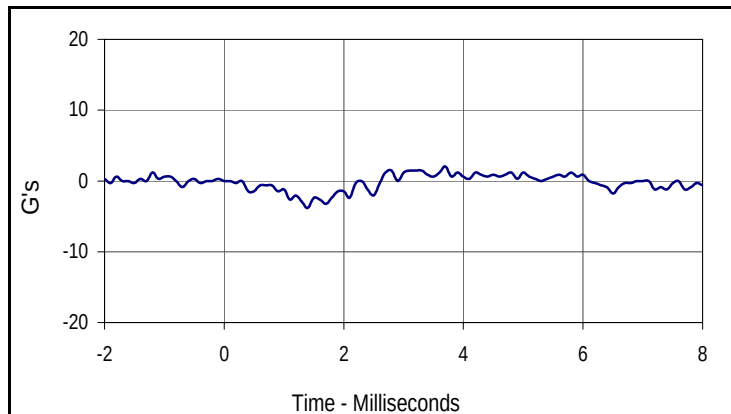
Test Date: 2/4/05
 Test I.D.: HD02A



Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	120.0 to 150.0	135.0	Pass
Peak Longitudinal Acceleration	G's	≤15.0	3.8	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Oscillations After Main Pulse	%	<15	5.3	Pass
Overall Test Results			Pass	



Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
135.0	1.7	0.1	-0.3



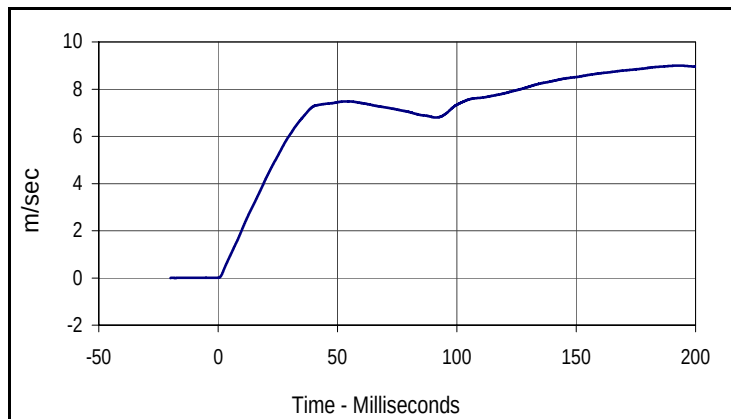
Curve Description			
Head X			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
2.1	3.7	-3.8	1.4

Test Program: SID / HIII Neck Pendulum Lateral Test
 ATD Serial No.: 274

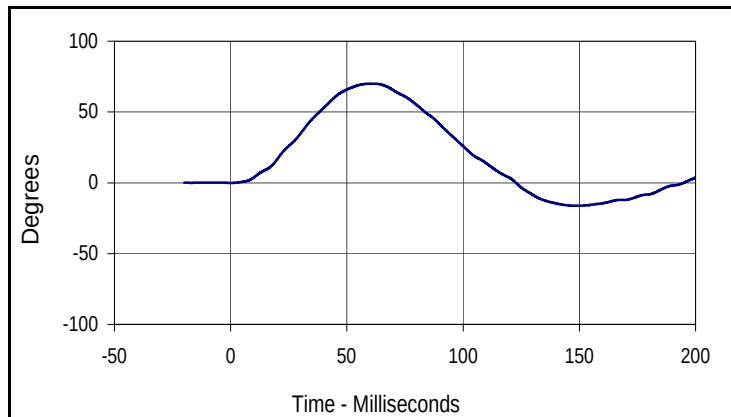
Test Date: 2/8/05
 Test I.D.: NB02A



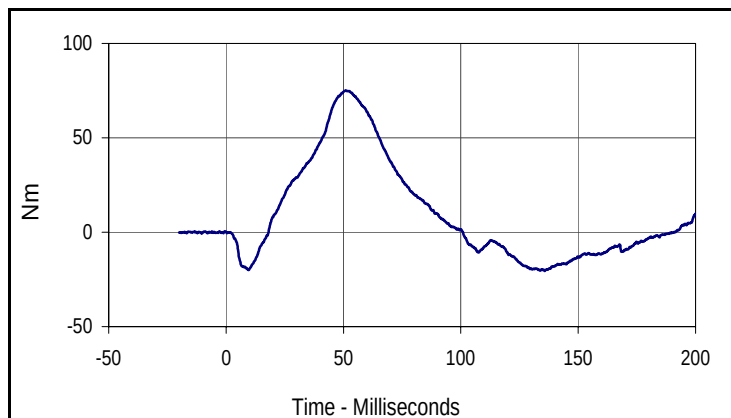
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/sec	6.89 to 7.13	7.06	Pass
Pendulum Deceleration	10 Msec.	m/sec	1.96 to 2.55	2.05	Pass
	20 Msec.	m/sec	4.12 to 5.10	4.21	Pass
	30 Msec.	m/sec	5.73 to 7.01	6.06	Pass
	40 to 70	m/sec	6.27 to 7.64	7.48	Pass
"D" Plane Rotation	Max	Degrees	66.0 to 82.0	70.0	Pass
Max Rotation Time After Peak Moment		Msec.	2.0 to 16.0	9.8	Pass
Rotation Time From Peak to Zero Angle		Msec.	58.0 to 67.0	61.8	Pass
Moment About Occipital Condyle		Nm	73.0 to 88.0	75.0	Pass
Positive Moment Decay, Time To 0 Nm		Msec.	49.0 to 64.0	49.7	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/sec
Max	Time	Min	Time
9.0	192.9	0.0	-17.9



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
70.0	61.0	-16.2	148.8



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
75.0	51.2	-20.6	135.8

Test Program: SID / HIII External Measurements
 ATD Serial No.: 275

Test Date: 2/8/05
 Test I.D.: N/A



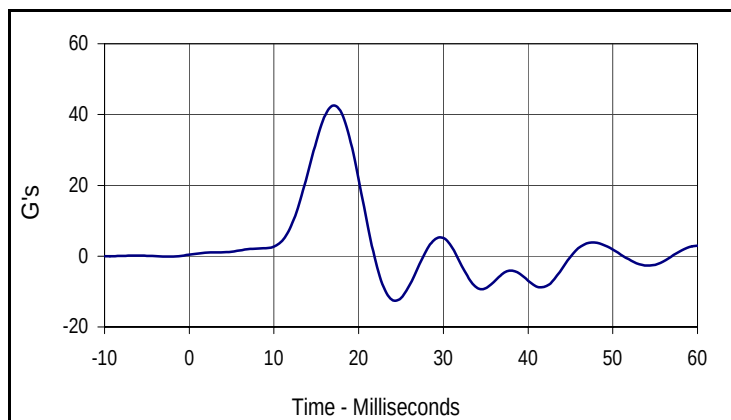
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
SH- Seated Height	mm	889 to 909	894	Pass
HP- Hip Point Height	mm	99 (reference)	99	Pass
RH- Rib Height	mm	502 to 520	510	Pass
KH- Knee Pivot From Back Line	mm	511 to 526	521	Pass
KV- Knee Pivot From Floor	mm	490 to 505	500	Pass
HW- Hip Width	mm	356 to 391	385	Pass
Overall Test Results				Pass

Test Program: SID / HIII Thorax Lateral Impact
 ATD Serial No.: 275

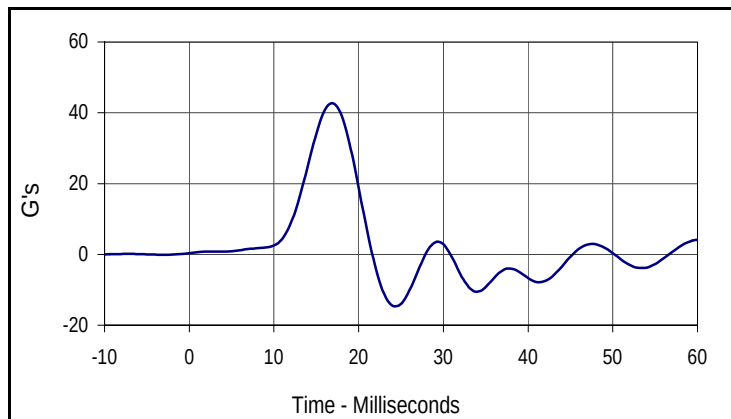
Test Date: 2/8/05
 Test I.D.: TH02B



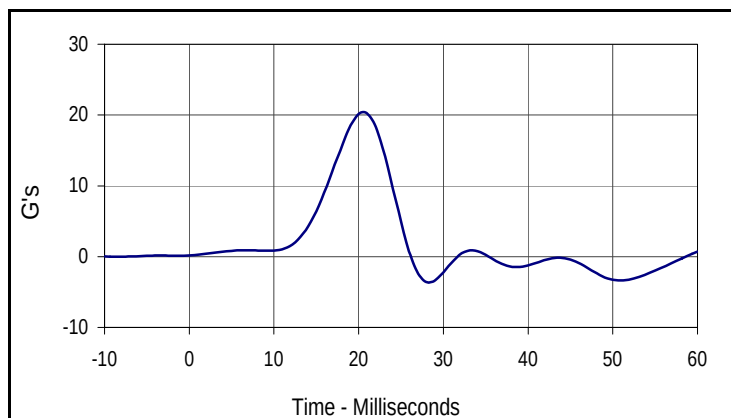
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.30	Pass
Upper Rib Acceleration	G's	37.0 to 46.0	42.4	Pass
Lower Rib Acceleration	G's	37.0 to 46.0	42.8	Pass
Thoracic Spine Acceleration	G's	15.0 to 22.0	20.4	Pass
Overall Test Results			Pass	



Curve Description			
Upper Rib Primary			
CURNO	Type	SAE Class	Units
001	FIL	FIR100	G's
Max	Time	Min	Time
42.4	16.9	-12.6	24.4



Curve Description			
Lower Rib Primary			
CURNO	Type	SAE Class	Units
002	FIL	FIR100	G's
Max	Time	Min	Time
42.8	16.9	-14.7	24.4



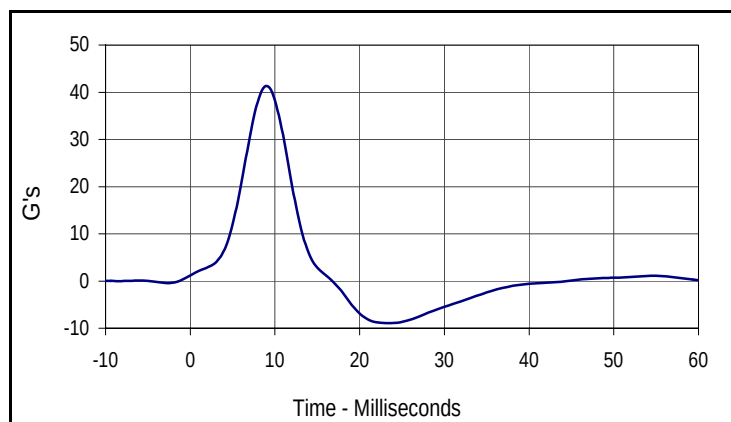
Curve Description			
Lower Spine Primary			
CURNO	Type	SAE Class	Units
003	FIL	FIR100	G's
Max	Time	Min	Time
20.4	20.6	-3.6	28.1

Test Program: SID / HIII Pelvis Lateral Impact
 ATD Serial No.: 275

Test Date: 2/8/05
 Test I.D.: PI02B



Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.27	Pass
Peak Pelvis Acceleration	G's	40.0 to 60.0	41.1	Pass
Acceleration Time Above 20 G's	Msec.	3.0 to 7.0	6.25	Pass
Overall Test Results				Pass



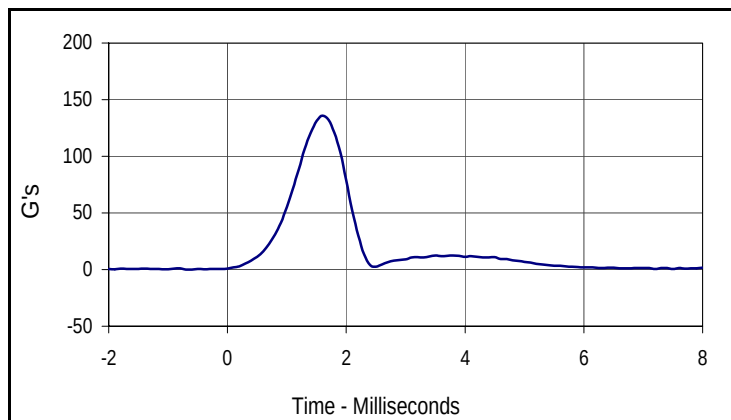
Curve Description			
Pelvis Primary Y			
CURNO	Type	SAE Class	Units
001	FIL	FIR100	G's
Max	Time	Min	Time
41.1	8.8	-8.9	23.1

Test Program: SID / HIII Head Drop Lateral Impact Test
 ATD Serial No.: 275

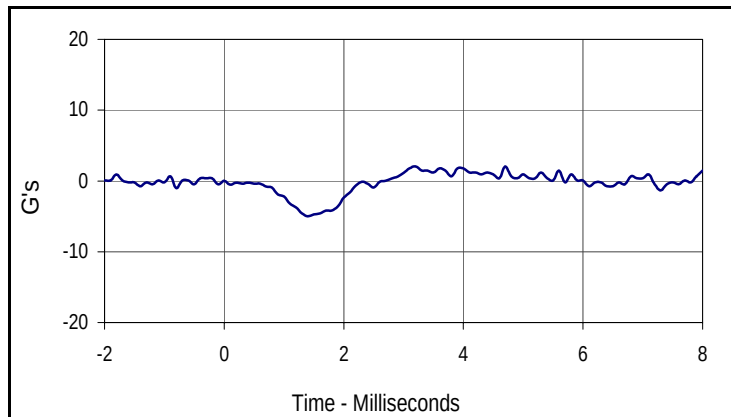
Test Date: 2/4/05
 Test I.D.: HD02B



Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	120.0 to 150.0	135.7	Pass
Peak Longitudinal Acceleration	G's	≤15.0	5.0	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Oscillations After Main Pulse	%	<15	5.0	Pass
Overall Test Results			Pass	



Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
135.7	1.6	0.1	-0.6



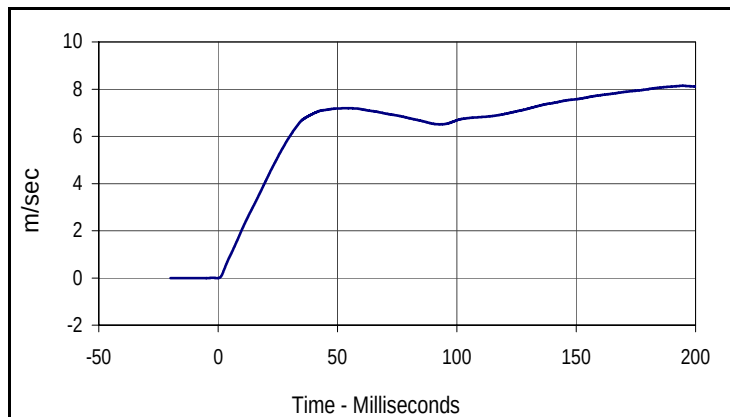
Curve Description			
Head X			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
2.1	3.2	-5.0	1.4

Test Program: SID / HIII Neck Pendulum Lateral Test
 ATD Serial No.: 275

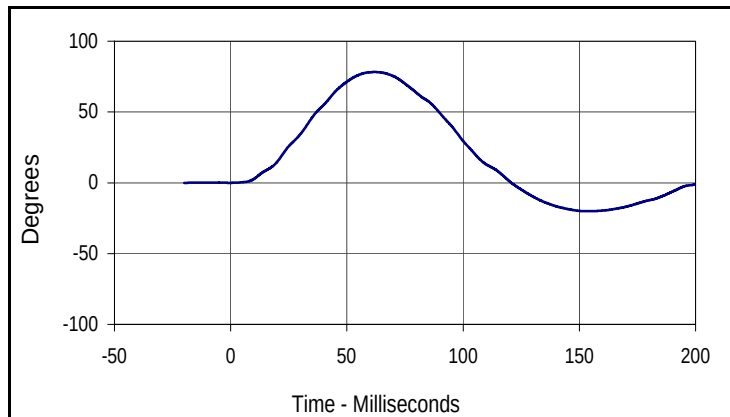
Test Date: 2/8/05
 Test I.D.: NB02B



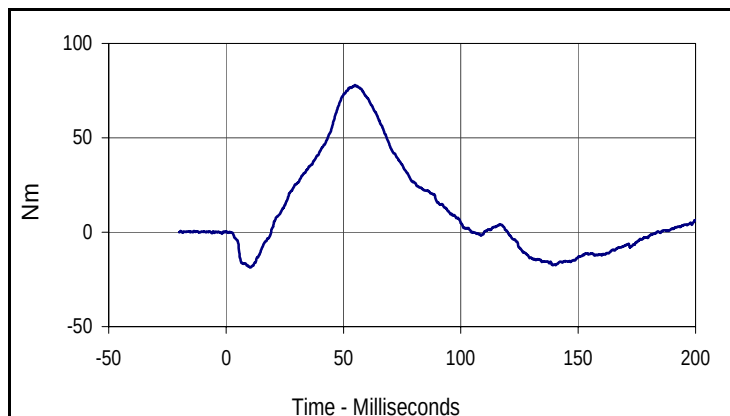
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/sec	6.89 to 7.13	7.06	Pass
Pendulum Deceleration	10 Msec.	m/sec	1.96 to 2.55	2.06	Pass
	20 Msec.	m/sec	4.12 to 5.10	4.12	Pass
	30 Msec.	m/sec	5.73 to 7.01	6.00	Pass
	40 to 70	m/sec	6.27 to 7.64	7.19	Pass
"D" Plane Rotation	Max	Degrees	66.0 to 82.0	78.2	Pass
Max Rotation Time After Peak Moment		Msec.	2.0 to 16.0	7.0	Pass
Rotation Time From Peak to Zero Angle		Msec.	58.0 to 67.0	58.9	Pass
Moment About Occipital Condyle		Nm	73.0 to 88.0	78.0	Pass
Positive Moment Decay, Time To 0 Nm		Msec.	49.0 to 64.0	49.6	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/sec
Max	Time	Min	Time
8.1	194.6	0.0	-0.1



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
78.2	61.9	-20.1	153.6



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
78.0	54.9	-18.7	10.4

APPENDIX D

INSTRUMENTATION AND DATA CHANNEL ASSIGNMENTS

55/28 km/h Side Impact NCAP
Instrumentation Data Channel Assignments
Driver SID/HIII Serial Number 274
2/3/05
2005 Nissan Murano S 5-Door MPV

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
1	Head CG	X	GPAC066X	Accel., Full Bridge	Entran	2000JF	G
2	Head CG	Y	GPAC067Y	Accel., Full Bridge	Entran	2000JF	G
3	Head CG	Z	GPAC068Z	Accel., Full Bridge	Entran	2000JF	G
4	Head CG, Redundant	X	GPAC069X	Accel., Full Bridge	Entran	2000JF	G
5	Head CG, Redundant	Y	GPAC070Y	Accel., Full Bridge	Entran	2000JF	G
6	Head CG, Redundant	Z	GPAC071Z	Accel., Full Bridge	Entran	2000JF	G
7	Neck Force	X	274_NFX	Load cell, six axis neck	R. A. Denton	1716A	N
8	Neck Force	Y	274_NFY	Load cell, six axis neck	R. A. Denton	1716A	N
9	Neck Force	Z	274_NFZ	Load cell, six axis neck	R. A. Denton	1716A	N
10	Neck Moment	X	274_NMX	Load cell, six axis neck	R. A. Denton	1716A	Nm
11	Neck Moment	Y	274_NMY	Load cell, six axis neck	R. A. Denton	1716A	Nm
12	Neck Moment	Z	274_NMZ	Load cell, six axis neck	R. A. Denton	1716A	Nm
13	Upper Rib Primary	Y	KEAC070X	Accel.,1/2 bridge	Endevco	7264-2000X	G
14	Lower Rib, Primary	Y	KEAC071Y	Accel.,1/2 bridge	Endevco	7264-2000Y	G
15	Lower Spine, Primary	Y	KEAC072Z	Accel.,1/2 bridge	Endevco	7264-2000Z	G
16	Pelvis, Primary	Y	GPAC065X	Accel.,Full bridge	Endevco	7264A-2000	G
17	Upper Rib Redundant	Y	KEAC076X	Accel.,1/2 bridge	Endevco	7264-2000X	G
18	Lower Rib, Redundant	Y	KEAC077Y	Accel.,1/2 bridge	Endevco	7264-2000Y	G
19	Lower Spine, Redundant	Y	KEAC078Z	Accel.,1/2 bridge	Endevco	7264-2000Z	G
20	Pelvis, Redundant	Y	KEAC089X	Accel.,1/2 bridge	Endevco	7264-2000X	G
21	Thorax Contact	N/A	T0	Contact Switch	Tapeswitch	8 oz. Yellow	%
22	Pelvis Contact	N/A	T0	Contact Switch	Tapeswitch	8 oz. Yellow	%

55/28 km/h Side Impact NCAP
Instrumentation Data Channel Assignments
Passenger SID/HII Serial Number 275
2/3/05
2005 Nissan Murano S 5-Door MPV

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
23	Head CG	X	GPAC072X	Accel., Full Bridge	Entran	2000JF	G
24	Head CG	Y	GPAC073Y	Accel., Full Bridge	Entran	2000JF	G
25	Head CG	Z	GPAC074Z	Accel., Full Bridge	Entran	2000JF	G
26	Head CG, Redundant	X	GPAC075X	Accel., Full Bridge	Entran	2000JF	G
27	Head CG, Redundant	Y	GPAC077Y	Accel., Full Bridge	Entran	2000JF	G
28	Head CG, Redundant	Z	GPAC078Z	Accel., Full Bridge	Entran	2000JF	G
29	Neck Force	X	275_NFX	Load cell, six axis neck	R. A. Denton	1716A	N
30	Neck Force	Y	275_NFY	Load cell, six axis neck	R. A. Denton	1716A	N
31	Neck Force	Z	275_NFZ	Load cell, six axis neck	R. A. Denton	1716A	N
32	Neck Moment	X	275_NMX	Load cell, six axis neck	R. A. Denton	1716A	Nm
33	Neck Moment	Y	275_NMY	Load cell, six axis neck	R. A. Denton	1716A	Nm
34	Neck Moment	Z	275_NMZ	Load cell, six axis neck	R. A. Denton	1716A	Nm
35	Upper Rib Primary	Y	KEAC066X	Accel.,1/2 bridge	Endevco	7264-2000X	G
36	Lower Rib, Primary	Y	KEAC067Y	Accel.,1/2 bridge	Endevco	7264-2000Y	G
37	Lower Spine, Primary	Y	KEAC068Z	Accel.,1/2 bridge	Endevco	7264-2000Z	G
38	Pelvis, Primary	Y	KEAC079X	Accel.,1/2 bridge	Endevco	7264-2000X	G
39	Upper Rib Redundant	Y	KEAC073X	Accel.,1/2 bridge	Endevco	7264-2000X	G
40	Lower Rib, Redundant	Y	KEAC074Y	Accel.,1/2 bridge	Endevco	7264-2000Y	G
41	Lower Spine, Redundant	Y	KEAC075Z	Accel.,1/2 bridge	Endevco	7264-2000Z	G
42	Pelvis, Redundant	Y	KEAC081X	Accel.,1/2 bridge	Endevco	7264-2000X	G
43	Thorax Contact	Y	T0	Contact Switch	Tapeswitch	8 oz. Yellow	%
44	Pelvis Contact	Y	T0	Contact Switch	Tapeswitch	8 oz. Yellow	%

55/28 km/h Side Impact NCAP
Instrumentation Data Channel Assignments
Vehicle Accelerometers
2/3/05

2005 Nissan Murano S 5-Door MPV

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
45	Right at Sill Front Seat	X	KETX1A	Accel., Triax	I.C. Sensor	3031-200	G
46	Right at Sill Front Seat	Y	KETX1B	Accel., Triax	I.C. Sensor	3031-200	G
47	Right at Sill Front Seat	Z	KETX1C	Accel., Triax	I.C. Sensor	3031-200	G
48	Right at Sill Rear Seat	X	KETX4A	Accel., Triax	I.C. Sensor	3031-500	G
49	Right at Sill Rear Seat	Y	KETX4B	Accel., Triax	I.C. Sensor	3031-500	G
50	Right at Sill Rear Seat	Z	KETX4C	Accel., Triax	I.C. Sensor	3031-500	G
51	Rear Floorpan Above Axle	X	KETX5A	Accel., Triax	I.C. Sensor	3031-500	G
52	Rear Floorpan Above Axle	Y	KETX5B	Accel., Triax	I.C. Sensor	3031-500	G
53	Rear Floorpan Above Axle	Z	KETX5C	Accel., Triax	I.C. Sensor	3031-500	G
54	Left Sill at Rear Door	Y	KEVA012	Accel., Vehicle block	I.C. Sensor	3031-500	G
55	Left Sill at Front Door	Y	KEVA010	Accel., Vehicle block	I.C. Sensor	3031-500	G
56	Left Front Door Centerline	Y	ICST004X	Accel., Triax	I.C. Sensor	3031-500	G
57	Rear Occupant Compartment	Y	KEVA013	Accel., Vehicle block	I.C. Sensor	3031-200	G
58	Left Front Door Mid-Rear	Y	ICST004Y	Accel., Triax	I.C. Sensor	3031-500	G
59	Left Front Door Upper Centerline	Y	ICST004Z	Accel., Triax	I.C. Sensor	3031-500	G
60	Rear Door Mid-Rear	Y	ICST005X	Accel., Triax	I.C. Sensor	3031-500	G
61	Rear Door Upper Centerline	Y	ICST005Y	Accel., Triax	I.C. Sensor	3031-500	G
62	B-Post Lower	Y	KEBX2A	Accel., Biax	I.C. Sensor	3031-500	G
63	B-Post Middle	Y	KEBX2B	Accel., Biax	I.C. Sensor	3031-500	G
64	A-Post Lower	Y	KEBX1A	Accel., Biax	I.C. Sensor	3031-500	G
65	A-Post Middle	Y	KEBX1B	Accel., Biax	I.C. Sensor	3031-500	G
66	Front Seat Track	Y	KEIC008Y	Single	I.C. Sensor	3031-500	G
67	Rear Seat Structure	Y	N/A	N/A	N/A	N/A	N/A
68	Vehicle CG	X	KETX4A	Accel., Triax	I.C. Sensor	3031-200	G
69	Vehicle CG	Y	KETX4B	Accel., Triax	I.C. Sensor	3031-200	G
70	Vehicle CG	Z	KETX4C	Accel., Triax	I.C. Sensor	3031-200	G

**55/28 km/h Side Impact NCAP
Instrumentation Data Channel Assignments
Moving Deformable Barrier
2/3/05
2005 Nissan Murano S 5-Door MPV**

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
71	MDB CG	X	MDASX	Accel., Triax	I.C. Sensor	3031-500	G
72	MDB CG	Y	MDASY	Accel., Triax	I.C. Sensor	3031-500	G
73	MDB CG	Z	MDASZ	Accel., Triax	I.C. Sensor	3031-500	G
74	MDB Rear Centerline	X	SLDBX	Accel., Triax	I.C. Sensor	3031-50	G
75	MDB Rear Centerline	Y	SLDBY	Accel., Triax	I.C. Sensor	3031-50	G
76	Right Bumper Contact	N/A	T0	Contact Switch	Tapeswitch	40 oz. Grey	%