

REPORT NUMBER TR-P25001-09-NC

**NEW CAR ASSESSMENT PROGRAM
FRONTAL BARRIER IMPACT TEST**

**NISSAN MOTORS CORPORATION
2005 NISSAN MAXIMA 3.5 SE
4-DOOR SEDAN**

NHTSA NUMBER: M55201

**PREPARED BY:
KARCO ENGINEERING, LLC
9270 HOLLY ROAD
ADELANTO, CALIFORNIA 92301**



JANUARY 20, 2005

FINAL REPORT

**PREPARED FOR:
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**

This final test report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, in response to Contract Number DTNH22-01-D-02005.

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. Biren J. Patel, Project Engineer
KARCO Engineering, LLC

Date: 2/2/05

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

Date: 2/2/05

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

Date: 2/2/05

FINAL REPORT ACCEPTED BY:

Manager, New Car Assessment Program

Date of Acceptance

COTR, NCAP Frontal Impact Program

Date of Acceptance

Technical Report Documentation Page

1. Report No. TR-P25001-09-NC	2. Government Accession No.	3. Recipients Catalog No.																										
4. Title and Subtitle Final Report of New Car Assessment Program 2005 Nissan Maxima 3.5 SE 4-Door Sedan NHTSA No. M55201	5. Report Date January 20, 2005		6. Performing Organization Code KAR																									
	8. Performing Organization Report No. TR-P25001-09-NC																											
7. Authors Mr. Biren J. Patel, Project Engineer, Karco Mr. Frank Richardson, Program Manager, Karco	10. Work Unit No.																											
9. Performing Organization Name and Address Karco Engineering, LLC 9270 Holly Rd. Adelanto, CA, 92301	11. Contract or Grant No. DTNH22-01-D-02005																											
	13. Type of Report and Period Covered Final Test Report Option Year 3																											
12. Sponsoring Agency Name and Address U. S. Department of Transportation National Highway Traffic Safety Administration Rulemaking Office of Crashworthiness Standards Mail Code NPS-111 400 Seventh Street, SW, Room 5311 Washington, D.C 20590	14. Sponsoring Agency Code DOT/NHTSA/NRMOCS																											
	15. Supplementary Notes																											
16. Abstract A 35 mph (56.3 km/h) frontal barrier impact was conducted on a 2005 Nissan Maxima 3.5 SE 4-Door Sedan at Karco Engineering, LLC on January 20, 2005. This test was conducted to obtain data indicant of FMVSS 208, 212, 219 (partial), 301, and footwell intrusion performance. The impact velocity was 56.12 km/h. The ambient temperature at the barrier face at the time of impact was 21.1 degrees Celcius. The vehicle's maximum post-test static crush was 554 mm to the left of the vehicle centerline. The test vehicle is equipped with a 3-point continuous belt system and second generation supplemental airbags in both front outboard seating positions. With respect to FMVSS 208 "Occupant Crash Protection", the occupant injury criteria summary is as follows:																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Measurement Description</th> <th style="width: 15%;">Units</th> <th style="width: 15%;">Threshold</th> <th style="width: 15%;">Driver ATD</th> <th style="width: 20%;">Passenger ATD</th> </tr> </thead> <tbody> <tr> <td>Head Injury Criteria (HIC₃₆)</td> <td>N/A</td> <td>1000</td> <td style="background-color: yellow;">282.8</td> <td style="background-color: yellow;">609.1</td> </tr> <tr> <td>Max. Chest Accel. (3 msec Clip)</td> <td>G's</td> <td>60</td> <td style="background-color: yellow;">39.9</td> <td style="background-color: yellow;">43.7</td> </tr> <tr> <td>Left Femur Force</td> <td>Newtons</td> <td>10008</td> <td style="background-color: yellow;">-1338.0</td> <td style="background-color: yellow;">-2014.4</td> </tr> <tr> <td>Right Femur Force</td> <td>Newtons</td> <td>10008</td> <td style="background-color: yellow;">-2699.1</td> <td style="background-color: yellow;">-872.1</td> </tr> </tbody> </table>				Measurement Description	Units	Threshold	Driver ATD	Passenger ATD	Head Injury Criteria (HIC ₃₆)	N/A	1000	282.8	609.1	Max. Chest Accel. (3 msec Clip)	G's	60	39.9	43.7	Left Femur Force	Newtons	10008	-1338.0	-2014.4	Right Femur Force	Newtons	10008	-2699.1	-872.1
Measurement Description	Units	Threshold	Driver ATD	Passenger ATD																								
Head Injury Criteria (HIC ₃₆)	N/A	1000	282.8	609.1																								
Max. Chest Accel. (3 msec Clip)	G's	60	39.9	43.7																								
Left Femur Force	Newtons	10008	-1338.0	-2014.4																								
Right Femur Force	Newtons	10008	-2699.1	-872.1																								
17. Key Words 56.3 km/h NCAP Frontal Barrier Impact Test New Car Assessment Program (NCAP) 2005 Nissan Maxima 3.5 SE 4-Door Sedan NHTSA No. M55201			18. Distribution of Statement Copies of this report available from: NHTSA Technical Reference Division National Highway Traffic Safety Admin. 400 Seventh St., SW, Room 5108 Washington, D.C. 20590																									
19. Security Classification (this report) Unclassified	20. Security Classification (this page) Unclassified	21. No. of Pages 191	22. Price																									

Form DOT F1700.7 (8-72)

TABLE OF CONTENTS

Section	Description	Page
1	Purpose and Summary of Test M55201	1
2	Occupant and Vehicle Information/Data Sheets	3

Data Sheet	Description	Page
1	Crash Test Summary	4
2	General Test and Vehicle Parameter Data	5
3	Post-Test Impact Data	8
4	Test Vehicle Information	9
5	Dummy Positioning in Vehicle	11
6	Seat Belt Positioning Data	13
7	Vehicle Accelerometer Location and Data Summary	14
8	Hybrid III ATD Injury Criteria and Sensor Data	15
9	Seat Belt Assessment Test Data	18
10	Summary of FMVSS 212 Data	19
11	Windshield Zone Intrusion FMVSS 219 Data (Partial)	20
12	FMVSS 301 Fuel System Integrity Post Impact Data	21
13	FMVSS 301 Static Rollover Data	22
14	Vehicle Measurements	24
15	Camera Locations	27
16	Photographic Reference Target Locations	28
17	Vehicle Intrusion Measurements	29
18	Fixed Barrier Load Cell Locations	33
19	Post-Test Air Bag Data	34
20	Accident Investigation Division Data	35
21	Dummy/Vehicle Temperature Stabilization	36

Appendix	Description	Appendix
A	Photographs	A
B	Data Plots	B
C	Load Cell Barrier Data Plots	C
D	Instrumentation Data Channel Assignments	D
E	Dummy Calibration Data	E
F	Child Restraint System	F

SECTION 1

PURPOSE AND SUMMARY OF TEST M55201

1.1 PURPOSE

This 35 mph (56.3 km/h) frontal barrier impact test is part of the New Car Assessment Program (NCAP) sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-01-D-02005. The purpose of this test was to obtain vehicle crashworthiness and occupant restraint system performance data for an impact speed in excess of the current 30 mph (48.3 km/h) requirements.

This 56.3 km/h frontal barrier impact test was conducted in accordance with the Office of Crashworthiness Standards (OCS) New Car Assessment Program (NCAP) Laboratory Indicant Test Procedure, dated December 1999. Data was obtained indicant of FMVSS 208 "Occupant Crash Protection"; FMVSS 212, "Windshield Retention"; FMVSS 219, "Windshield Zone Intrusion (Partial)"; and FMVSS 301 "Fuel System Integrity" performance. Procedures for receiving, inspection testing and reporting of test results are described in the test procedures and are not repeated in this report.

1.2 SUMMARY

A load cell barrier consisting of 36 load cells was impacted by a 2005 Nissan Maxima 3.5 SE 4-Door Sedan at a velocity of 56.12 km/h (34.88 mph). The test was performed at Karco Engineering, LLC on January 20, 2005.

Three (3) real-time video cameras and thirteen (13) high-speed film cameras were used to document the frontal barrier impact event. Camera locations and other pertinent camera information can be found in data sheet number 15 (page number: 27) of this report.

Two Part 572E, 50th percentile male anthropomorphic test devices (ATDs), were placed in the driver and right-front passenger seating positions according to dummy placement instructions specified in the Laboratory Indicant Test Procedure.

Both ATDs were fully instrumented with head (primary and redundant), chest (primary and redundant) and pelvic triaxial accelerometers, chest displacement potentiometers, six-axis upper neck transducers, right/left femur load cells, and lower leg instrumentation. Seat belt load cells were also placed on the driver's and passenger's lap and shoulder belts to measure dummy torso and pelvic section loading. Also, shoulder belt spool-off was measured for the driver and passenger dummies. The driver (position 1) ATD (Serial No. 034) and the right-front passenger (position 2) ATD (Serial No. 035) were calibrated one test prior to this test.

Ninety seven (97) channels of data were recorded using an on-board data acquisition system. Appendix A contains Pre and Post-Test Photographs, Appendix B contains the vehicle and dummy response data traces. Appendix C contains Load Cell Barrier information. Appendix D contains the Instrumentation Data Channel assignments. Appendix E contains the Dummy Calibration data. Appendix F contains the Child Restraint data.

There was 100 percent windshield retention and no intrusion into the protected zone of the windshield during the impact event. There was no Stoddard solvent leakage after the event or during any phase of the static rollover.

The maximum static crush of the vehicle was 554 mm and both the driver and passenger side doors remained closed during the impact and were operable after the impact.

The driver's visible contact points were as follows: The driver ATD head, chest and abdomen contacted the airbag and on rebound the head contacted the headrest, both knees contacted the knee bolster.

The passenger's visible contact points were as follows: The passenger ATD head, chest and abdomen contacted the airbag and on rebound the head contacted the headrest, both knees contacted the glove box.

Occupant injury data is contained in table below.

OCCUPANT DATA SUMMARY

ATD Position	HIC ₃₆	Clip (g)	Chest Def. (mm)	Left Femur (N)	Right Femur (N)	Belt Spool (mm)
Driver	282.8	39.9	-20.7	-1338.0	-2699.1	88.5
Passenger	609.1	43.7	-22.9	-2014.4	-872.1	117.0

**SECTION 2
OCCUPANT AND VEHICLE INFORMATION/DATA SHEETS**

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

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	=(tf -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
CRASH TEST SUMMARY**

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

PRIMARY IMPACT DATA

Measured Parameter	Units	Value
Velocity at Impact	km/h	56.12
Test Weight	kg	1779
Impact Angle	degrees	0
Average Rebound	mm	1613
Maximum Static Crush	mm	554

DOOR OPENING AND SEAT TRACK INFORMATION

Description	Driver	Passenger
Front Door opening	Remained closed, opened w/o tools	Remained closed, opened w/o tools
Rear Door Opening	Remained closed, opened w/o tools	Remained closed, opened w/o tools
Seat Track Shift (mm)	0	0
Seat Back Failure	No	No

TEST DUMMY INFORMATION

Description	Driver	Passenger
Dummy Type/ Serial No.	50% Male Hybrid III No. 034	50% Male Hybrid III No. 035
Head Contact	Airbag, Headrest	Airbag, Headrest
Chest Contact	Airbag	Airbag
Abdomen Contact	Airbag	Airbag
Left Knee Contact	Knee Bolster	Glove Box
Right Knee Contact	Knee Bolster	Glove Box

16mm MOVIE COVERAGE

Description	Standard	Additional
High Speed	13	0
Real Time	1	2
Total	14	2

DATA CHANNELS

Driver ATD Sensors	40
Passenger ATD Sensors	40
Belt Assessment Sensors	8
Vehicle Structure Accelerometers	9
Rigid Barrier Load Cells	36
Total	133

**DATA SHEET NO. 2
GENERAL TEST AND VEHICLE PARAMETER DATA**

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

TEST VEHICLE INFORMATION AND OPTIONS

NHTSA No.	M55201
Make	Nissan
Model	Maxima 3.5 SE
Body Style	4-Door Sedan
Vin No.	1N4BA41E85C806932
Color	Bronze
Delivery Date	12/14/2004
Odometer (mi)	146
Dealer	Soutars
Transmission	5-Speed Automatic
Final Drive	Front
Type/No. Cyl.	V6
Engine Disp. (L)	3.5
Engine Placement	Transverse
Roof Rack	No
Sunroof/T-Top	Yes
Tinted Glass	No
Traction Control	No
Power Brakes	Yes
Front Disc	Yes
Rear Disc	Yes

Anti-Lock Brakes	Yes
All Wheel Drive	No
Power Steering	Yes
Driver Front Airbag	Yes
Driver Side Airbag	Yes
Driver Head Airbag	No
Driver Curtain Airbag	Yes
Pass. Airbag	Yes
Pass. Side Airbag	Yes
Pass. Head Airbag	No
Pass. Curtain Airbag	Yes
Pre-Tensioners	Yes
Load Limiters	Yes
Bucket Seats	Yes
Air Cond.	Yes
AM/FM Cassette	Yes
Tilt Steering	Yes
Automatic Door Locks	Yes
Power Windows	Yes
Power Seats	Yes
Other	

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

Yes

DATA FROM CERTIFICATION LABEL

Manufactured By	Nissan Motors Corporation
Date of Manufacture	Aug-04

GVWR (kg)	2062
GAWR Front (kg)	1120
GAWR Rear (kg)	951

VEHICLE SEATING AND CAPACITY WEIGHT INFORMATION

Measured Parameter	Front	Rear	Third	Total
Type of Seats	Bucket	Bucket	Bench	
Number of Occupants	2	3	0	5
Capacity Weight (VCW) (kg)				390
Cargo Weight (RCLW) (kg)				50

DATA SHEET NO. 2...(CONTINUED)
GENERAL TEST AND VEHICLE PARAMETER DATA

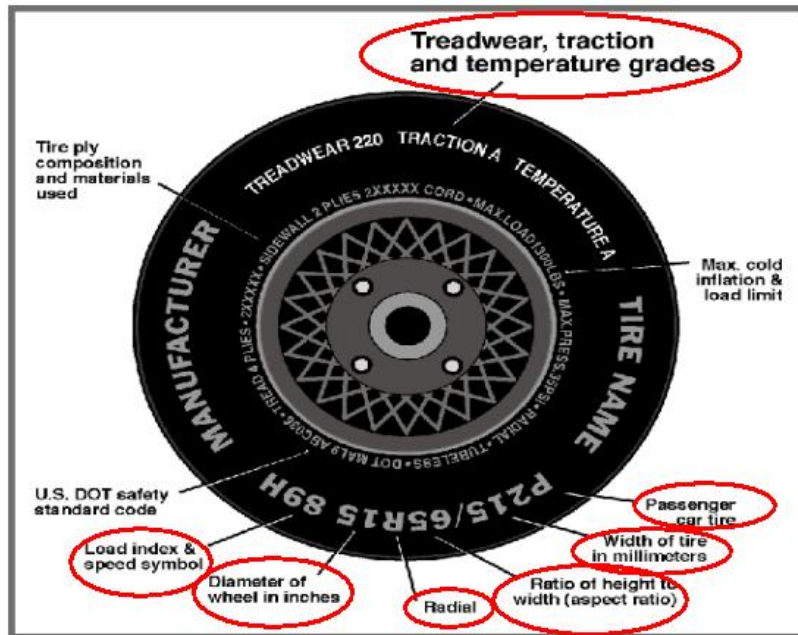
Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

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)	300	300
Cold Pressure (kpa)	221	221
Recommended Tire Size	P245/45R18	P245/45R18
Tire Size on Vehicle	P245/45R18	P245/45R18
Tire Manufacturer	Goodyear	Goodyear
Treadwear	260	260
Traction	A	A
Temperature Grades	A	A
Tire Plies Sidewall	2 Ply Polyester	2 Ply Polyester
Tire Plies Body	2 Polyester + 2 Steel + 2 Nylon	2 Polyester + 2 Steel + 2 Nylon
Load Index/Speed Symbol	96V	96V
Tire Material	Polyester + Steel + Nylon	Polyester + Steel + Nylon
DOT Safety Code Right		
DOT Safety Code Left		

DATA SHEET NO. 2...(CONTINUED)
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan NHTSA No.: M55201
 Test Program: 2005 NHTSA 35mph NCAP Test Date: 1/20/05

TEST VEHICLE WEIGHTS

	Units	As Delivered Weights (UVW)			As Tested Weights (ATW)		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	489	311	800	515	363	1137
Right	kg	478	304	997	522	379	901
Ratio	%	61.1	38.9	100%	58.3	41.7	100%
Totals	kg	967	615	1582	1037	742	1779

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UVW)	kg	1582
Weight of 2 P572 ATD's	kg	152
Rated Cargo/Luggage Wt. (RCLW)	kg	50
Calculated Vehicle Target Wt. (TVTWT)	kg	1784

TEST VEHICLE ATTITUDE AND CG

	Units	LF	RF	LR	RR	CG (aft of front axle)
As Delivered	mm	745	745	710	710	1100
As Tested	mm	720	723	690	688	1181

Vehicle Wheel Base (mm) 2830

Weight of Ballast Secured in cargo area (kg) 0

Vehicle Components Removed Muffler Assembly, Rear Bumper, Tail Lights, Spare Tire
Trunk Lid

* Ballast weight does not include cameras, instrumentation and brake abort system.

FUEL SYSTEM DATA

Fuel System Capacity From Owners Manual (L) 75.70

Usable Capacity Furnished by COTR (L) N/A

Actual Test Volume with entire fuel System Filled (L) 26.50

1/3 of Usable Capacity (L) 25.23

Test Fluid Type: Stoddard Solvent

Kinematic Viscosity: as per ASTM Standard D484-71 Purple

Is Vehicle Fuel Pump Electric or Mechanical? Electric

If electric, does pump operate with ignition switch "On" & engine "OFF" Yes

Fuel System Particulars: None

**DATA SHEET NO. 3
POST-TEST IMPACT DATA**

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

SPEED TRAP DATA

Measured Parameter	Units	Requirement	Value
Trap No.1 Velocity (Primary)	km/h	55.51 to 57.12	56.12
Trap No. 1 Entry Distance	mm	<1524	1524
Trap No.1 Exit Distance	mm	<1524	305
Trap No.2 Velocity (Redun.)	km/h	55.51 to 57.12	56.02
Trap No.2 Entry Distance	mm	<1524	1524
Trap No.2 Exit Distance	mm	<1524	305

VEHICLE STATIC CRUSH

Measured Parameter	Units	Pre-Test	Post-Test	Difference
Left Side	mm	4780	4270	-510
Center	mm	4905	4358	-547
Right Side	mm	4780	4261	-519

VEHICLE REBOUND FROM BARRIER

Measured Parameter	Units	Value
Left Side	mm	1630
Center	mm	1560
Right Side	mm	1650
Average	mm	1613

DATA SHEET NO. 4
TEST VEHICLE INFORMATION

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

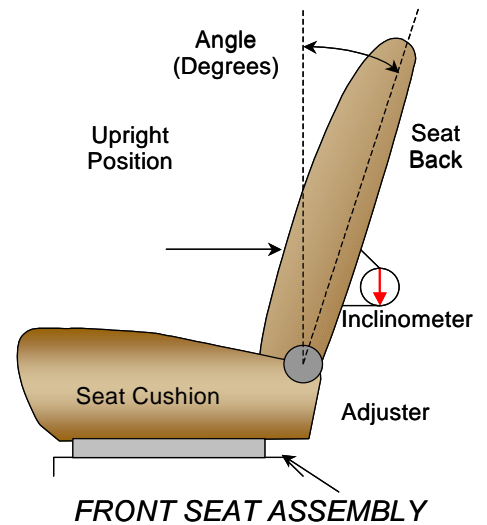
NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

NOMINAL DESIGN RIDING POSITION

The driver and passenger seat backs are positioned to the manufacturers designated angle. The procedure is as follows: Seat back angle was measured at the headrest using a digital inclinometer.



SEAT BACK ANGLES

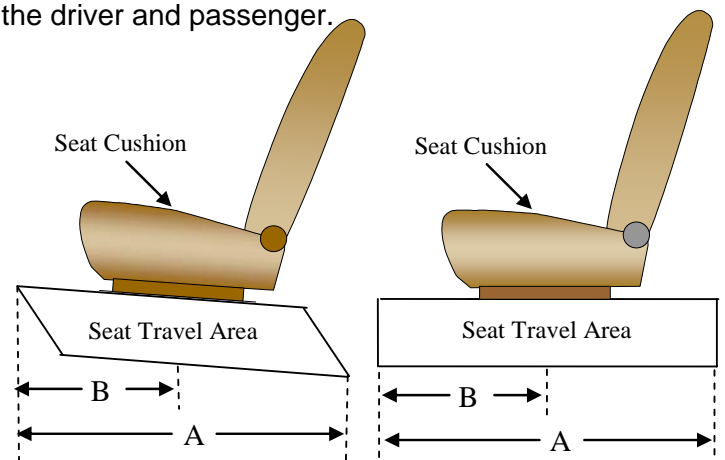
	Angle (Deg.)
Driver w/seated Dummy	11.7
Passenger w/seated Dummy	11.7

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	Placed in Position #
Driver	235 mm	118 mm
Passenger	21 Detents	11th Detent



SEAT BELT UPPER ANCHORAGE

Position number one (1) is the uppermost position.

SEAT BELT UPPER ANCHORAGE

	Total # of Positions	Placed in Position #
Driver	4	1
Passenger	4	1

DATA SHEET NO. 4...(CONTINUED)
TEST VEHICLE INFORMATION

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

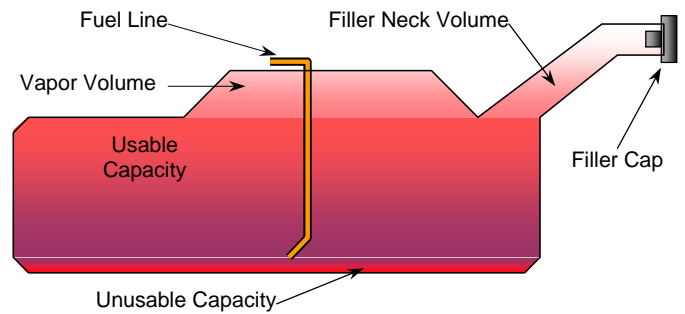
Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

FUEL TANK CAPACITY

	Liters
Usable Capacity of "Standard Tank"	75.70
Usable Capacity of "Optional" Tank	
Usable Capacity used for FMVSS 301	69.64 to 71.16
Actual Amount of Solvent used	26.50
1/3 of Usable Capacity	25.23

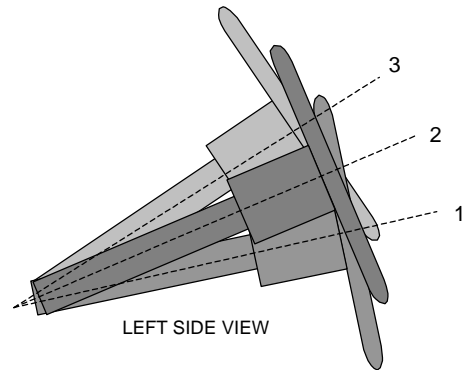
The test vehicle is equipped with an electric fuel pump. The fuel pump operates for approximately two seconds after the ignition is placed in the "ON" position, after which the fuel pump automatically shuts off. The fuel filler door is located on the right rear fender. The standard fuel tank occupies the area under the rear seat.



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

	Fore/Aft Positon (mm)	Degrees
Lowermost positon No. 1	0	17.0
Geometric center position No. 2	25	23.0
Uppermost position No. 3	50	31.0

DATA SHEET NO. 5
DUMMY POSITIONING IN VEHICLE

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

TEST DUMMY POSITION MEASUREMENTS

Code	Measurement Description	Driver		Passenger	
		Length (mm)	Angle (deg)	Length (mm)	Angle (deg)
WA	Windshield Angle		65.0		
SWA	Steering Wheel Angle		67.0		
SCA	Steering Column Angle		23.0		
SA	Seat Back Angle		11.7		11.7
HZ	Head to Roof (Z)	190	90.0	155	90.0
HH	Head to Header	330		325	
HW	Head to Windshield	615		630	
HR	Head to Side Header (Y)	270		250	
NR	Nose to Rim	385	13.0		
CD	Chest to Dash	580		555	
CS	Chest to Steering Hub	290			
RA	Rim to Abdomen	175			
KDL	Left Knee to Dash	175	16.0	190	
KDR	Right Knee to Dash	130		219	9.3
PA	Pelvic Angle		25.0		24.0
TA	Tibia Angle		45.0		40.5
KK	Knee to Knee (Y)	300		270	
SK	Striker to Knee	630	2.0	635	4.0
ST	Striker to Head	525	80.0	530	80.0
SH	Striker to H-Point	265	32.0	270	28.0
SHY	Striker to H-Point (Y)	240		228	
HS	Head to Side Window	330		320	
HD	H-Point to Door (Y)	200		140	
AD	Arm to Door (Y)	140		45	

DATA SHEET NO. 5...(CONTINUED)
DUMMY POSITIONING IN VEHICLE

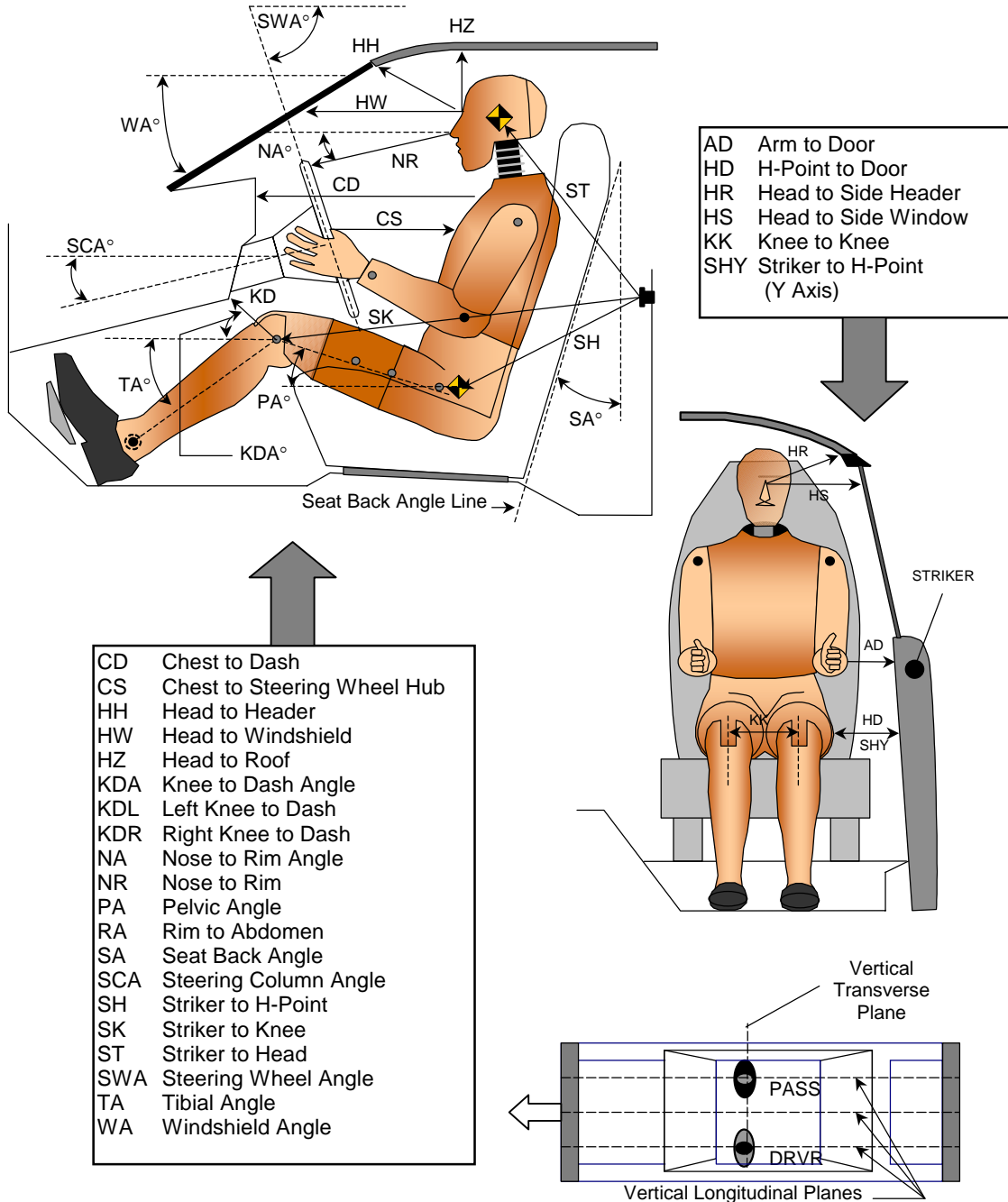
Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

DUMMY MEASUREMENTS FOR FRONT SEAT OCCUPANTS



- CD Chest to Dash
- CS Chest to Steering Wheel Hub
- HH Head to Header
- HW Head to Windshield
- HZ Head to Roof
- KDA Knee to Dash Angle
- KDL Left Knee to Dash
- KDR Right Knee to Dash
- NA Nose to Rim Angle
- NR Nose to Rim
- PA Pelvic Angle
- RA Rim to Abdomen
- SA Seat Back Angle
- SCA Steering Column Angle
- SH Striker to H-Point
- SK Striker to Knee
- ST Striker to Head
- SWA Steering Wheel Angle
- TA Tibial Angle
- WA Windshield Angle

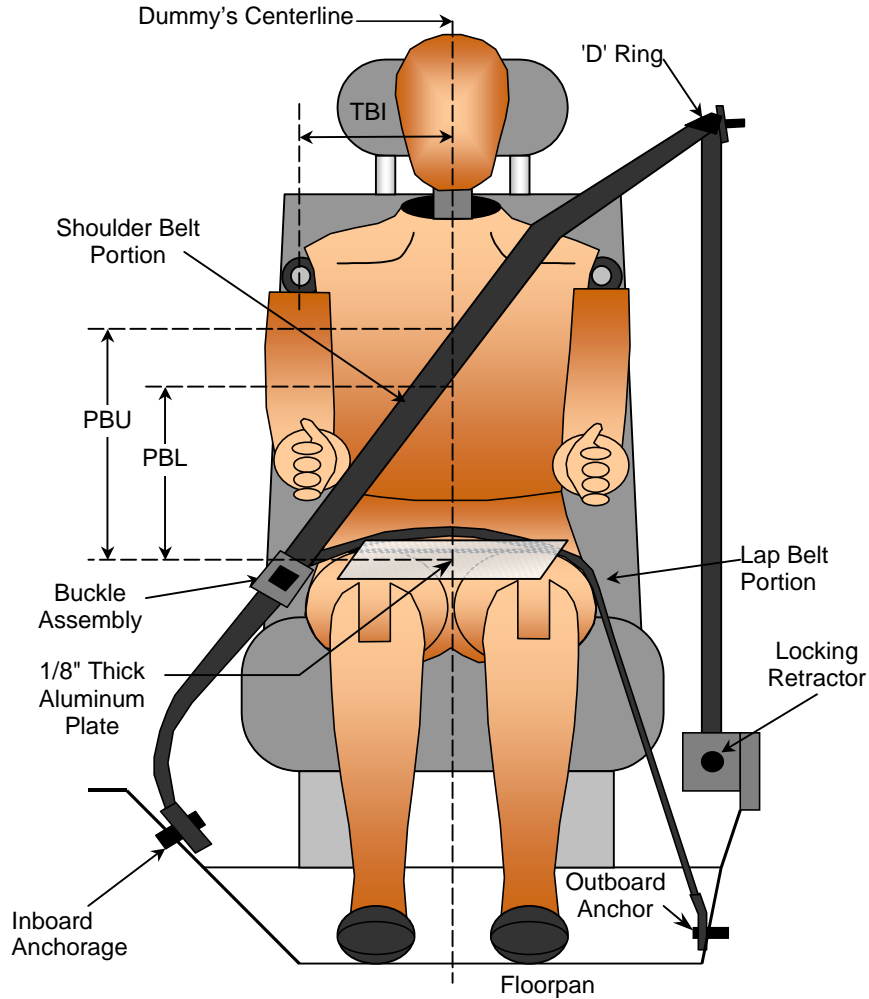
DATA SHEET NO. 6
SEAT BELT POSITIONING DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05



SEAT BELT POSITIONING MEASUREMENTS

Measured Parameter	Units	Driver	Passenger
TBI -Dummy C/L to Lap/Shoulder Belt Intersect	mm	245	245
PBU - Top Surface of reference to belt upper edge	mm	320	330
PBL - Top Surface of reference to belt lower edge	mm	250	260
Lap Belt Tension	Newtons	10	10
Shoulder Belt Tension	N/A	Retractor	Retractor

DATA SHEET NO. 7 - VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

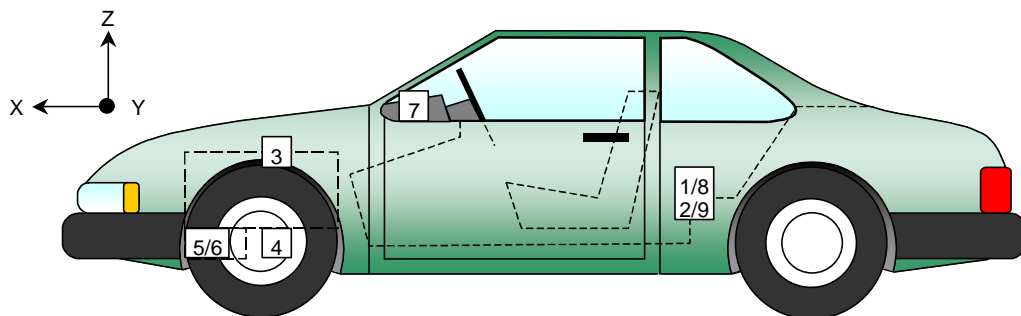
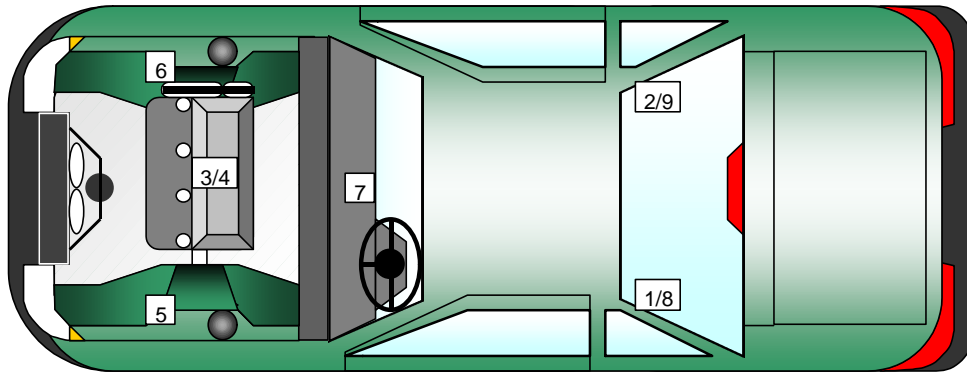
Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

VEHICLE ACCELEROMETER PEAK DATA AND PRE-TEST LOCATIONS

No.	Accelerometer Location	Measurements (mm)			Peak Values				
		X	Y	Z	Units	Max	Time	Min	Time
1	Left Rear X-Member	1980	-800	330	G's	3.0	123.1	-36.6	64.0
2	Right Rear X-Member	1980	800	330	G's	3.2	127.5	-36.0	57.9
3	Engine Top	4210	-50	860	G's	52.8	46.0	-148.4	32.6
4	Engine Bottom	4250	330	160	G's	56.3	42.0	-117.6	30.5
5	Left Brake Caliper	4200	-700	350	G's	13.1	72.0	-48.9	48.4
6	Right Brake Caliper	4200	700	350	G's	34.8	67.8	-60.3	46.7
7	Instrument Panel	3410	0	870	G's	35.1	43.2	-59.0	49.4
8	Left Rear X-Member (Z-Axis)	1930	-800	330	G's	4.3	87.8	-6.5	49.9
9	Right Rear X-Member (Z-Axis)	1930	800	330	G's	4.4	55.6	-8.4	30.7

Reference Planes: X=From Rear Surface of Vehicle, Y=Vehicle Centerline, Z=Ground Plane



DATA SHEET NO. 8 - HYBRID III ATD INJURY CRITERIA AND SENSOR DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

HEAD PRIMARY PEAK ACCELERATIONS

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Head CG	X	G's	1.7	191.6	-38.9	81.9	9.5	178.5	-56.3	78.9
Head CG	Y	G's	5.2	111.4	-5.8	31.8	3.0	179.1	-18.5	87.8
Head CG	Z	G's	11.5	51.0	-1.5	19.1	21.0	59.1	-16.5	90.6
Head CG Resultant	N/A	G's	39.6	78.8			58.3	78.9		

CHEST PRIMARY PEAK ACCELERATIONS

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Chest CG	X	G's	1.9	178.0	-39.6	71.5	4.1	185.5	-44.2	79.0
Chest CG	Y	G's	6.3	93.3	-3.8	45.6	2.1	100.8	-7.7	93.8
Chest CG	Z	G's	3.8	24.9	-11.5	64.9	7.4	57.5	-9.4	88.7
Chest CG Resultant	N/A	G's	40.2	71.1			44.6	79.0		

FEMUR PEAK FORCES

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Left Femur	Z	Newtons	368.8	46.9	-1338.0	58.4	450.1	47.0	-2014.4	61.1
Right Femur	Z	Newtons	576.8	48.9	-2699.1	64.3	1229.2	57.5	-872.1	36.6

SEAT BELT SENSOR PEAK VALUES

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Shoulder Belt Pullout	N/A	MM	88.5	101.7	-13.5	51.1	117.0	97.0	0.0	1.9
Shoulder Belt Stretch	N/A	MM/CM	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.0
Lap Belt Force	N/A	Newtons	6708.0	62.7	-23.0	191.4	8355.2	67.2	-1.7	155.2
Shoulder Belt Force	N/A	Newtons	6000.8	71.3	-66.7	155.3	6049.8	54.5	-82.0	160.5

1.) Not used with pre-tensioners

PRIMARY HEAD INJURY CRITERIA (HIC36)

Location	Driver				Passenger			
	HIC	T ¹	T ²	Avg G	HIC	T ¹	T ²	Avg G
Head CG Primary	282.8	59.3	95.3	36.1	609.1	60.8	96.8	49.1

PRIMARY CHEST CLIP (3MSEC)

Location	Driver			Passenger		
	CLIP	T ¹	T ²	CLIP	T ¹	T ²
Chest CG Primary	39.9	69.8	72.8	43.7	82.6	85.6

DATA SHEET NO. 8...(CONTINUED)

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

PELVIC PEAK ACCELERATIONS

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Pelvis	X	G's	1.5	126.1	-50.2	58.4	4.4	97.8	-46.6	61.5
Pelvis	Y	G's	7.5	87.2	-5.4	46.8	3.6	23.1	-7.2	76.4
Pelvis	Z	G's	1.6	173.5	-34.7	67.5	1.9	198.7	-29.0	77.7
Pelvis Resultant	N/A	G's	57.3	63.4			50.3	61.5		

UPPER NECK PEAK FORCES AND MOMENTS

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Neck Force	X	Newtons	218.0	64.3	-269.7	44.3	147.8	102.8	-379.1	53.1
Neck Force	Y	Newtons	186.8	111.1	-69.2	55.1	176.7	120.3	-88.1	185.6
Neck Force	Z	Newtons	813.8	54.7	-80.4	19.3	913.4	55.5	-139.3	90.7
Neck Force Resultant	N/A	Newtons	818.6	54.7			970.0	55.3		
Neck Moment	X	Nm	11.9	117.9	-5.0	62.2	21.0	88.3	-5.9	173.2
Neck Moment	Y	Nm	31.9	60.5	-21.5	91.4	27.0	66.4	-47.8	88.8
Neck Moment	Z	Nm	3.0	112.8	-1.8	94.9	16.7	110.8	-6.4	177.7
Neck Moment Resultant	N/A	Nm	32.3	60.6			53.2	88.7		

FOOT PEAK ACCELERATIONS

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Left Foot Aft	X	G's	15.8	39.0	-41.3	23.9	19.9	65.5	-125.6	53.4
Left Foot Aft	Z	G's	1.8	199.1	-38.2	24.6	21.6	76.2	-44.2	42.2
Left Foot Fore	Z	G's	13.8	40.0	-83.4	22.8	32.9	76.2	-84.0	41.9
Right Foot Aft	X	G's	33.6	57.0	-77.6	47.7	11.0	74.3	-57.3	50.1
Right Foot Aft	Z	G's	14.1	62.6	-76.7	46.5	40.1	74.4	-49.9	36.6
Right Foot Fore	Z	G's	56.9	62.5	-122.6	46.4	3.1	19.8	-20.2	24.7

1.) Passenger channel failed at 25.7 msec.

UPPER AND LOWER TIBIA PEAK FORCES AND MOMENTS

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Left Upper Moment	X	Nm	36.9	51.7	-21.7	33.4	51.6	59.1	-88.6	43.6
Left Upper Moment	Y	Nm	16.4	134.7	-111.4	58.6	19.3	45.0	-14.8	60.7
Right Upper Moment	X	Nm	10.1	64.4	-24.9	48.0	12.9	145.1	-99.5	39.6
Right Upper Moment	Y	Nm	14.7	136.2	-115.3	61.5	5.1	29.0	-38.6	66.5
Left Lower Moment	X	Nm	65.9	68.5	-9.2	32.4	22.7	65.0	-52.9	55.5
Left Lower Moment	Y	Nm	53.3	86.6	-41.4	55.3	55.3	60.0	-27.9	52.8
Left Lower Force	Z	Newtons	80.4	135.2	-1422.9	69.3	121.7	173.8	-3311.4	43.0
Right Lower Moment	X	Nm	10.2	47.6	-45.6	63.8	34.2	94.4	-10.9	38.8
Right Lower Moment	Y	Nm	92.9	64.7	-37.7	47.9	24.8	89.7	-35.3	49.6
Right Lower Force	Z	Newtons	118.0	193.1	-2952.8	61.1	216.7	174.8	-3188.3	39.4

DATA SHEET NO. 8...(CONTINUED)

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

CHEST PEAK DEFLECTIONS

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Chest	X	MM	0.0	6.2	-20.7	94.1	0.0	1.3	-22.9	86.8

HEAD REDUNDANT PEAK ACCELERATIONS

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Head CG	X	G's	2.0	191.1	-39.0	81.9	9.7	178.5	-56.2	78.9
Head CG	Y	G's	5.2	111.4	-5.7	31.8	3.0	179.2	-18.5	87.8
Head CG	Z	G's	11.6	51.0	-1.6	19.2	20.6	58.8	-16.8	90.6
Head CG Resultant	N/A	G's	39.6	81.9			58.2	79.0		

CHEST REDUNDANT PEAK ACCELERATIONS

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Chest CG	X	G's	2.0	177.9	-39.6	71.5	4.1	185.6	-43.9	79.0
Chest CG	Y	G's	6.5	93.3	-3.8	45.5	1.9	100.8	-7.9	93.8
Chest CG	Z	G's	4.0	24.7	-11.6	64.8	7.5	57.7	-9.3	88.7
Chest CG Resultant	N/A	G's	40.2	71.3			44.4	79.0		

REDUNDANT HEAD INJURY CRITERIA (HIC36)

Location	Driver				Passenger			
	HIC	T ¹	T ²	Avg G	HIC	T ¹	T ²	Avg G
Head CG Redundant	287.1	59.3	95.3	36.3	611.7	61.0	97.0	49.2

REDUNDANT CHEST CLIP (3MSEC)

Location	Driver			Passenger		
	CLIP	T ¹	T ²	CLIP	T ¹	T ²
Chest CG Redundant	39.8	69.8	72.8	43.5	82.5	85.5

DATA SHEET NO. 9
SEAT BELT ASSESSMENT TEST DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

SEAT BELT POSITIONING MEASUREMENTS

Measurement Description	Units	Driver	Passenger
TBI -Dummy C/L to Lap/Shoulder Belt Intersect	mm	245	245
PBU - Top Surface of reference to belt upper edge	mm	320	330
PBL - Top Surface of reference to belt lower edge	mm	250	260
Lap Belt Tension	Newtons	10	10
Shoulder Belt Tension		Retractor	Retractor

SEAT BELT POSITIONING MEASUREMENTS

Measurement Description	Units	Driver	Passenger
Retractor Reel to "D" ring	mm	780	780
Shoulder Belt length as measured on ATD	mm	900	890
Lap Belt length as measured on ATD	mm	840	810
Remainder of belt on reel	mm	580	700
Total belt length for continuous webbing systems	mm	3100	3180

SHOULDER BELT SPOOL-OFF DATA

Measurement Description	Units	Driver	Passenger
As determined mechanically	mm	70.0	45.0
As determined electronically	mm	88.5	117.0

BELT STRETCH DATA

Measurement Description	Units	Driver	Passenger
Electronically between belt load cell and "D" ring	mm/cm	*	*
Mechanically	mm/cm		

* Not used with shoulder belt pre-tensioner systems.

DATA SHEET NO. 10
SUMMARY OF FMVSS 212 DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

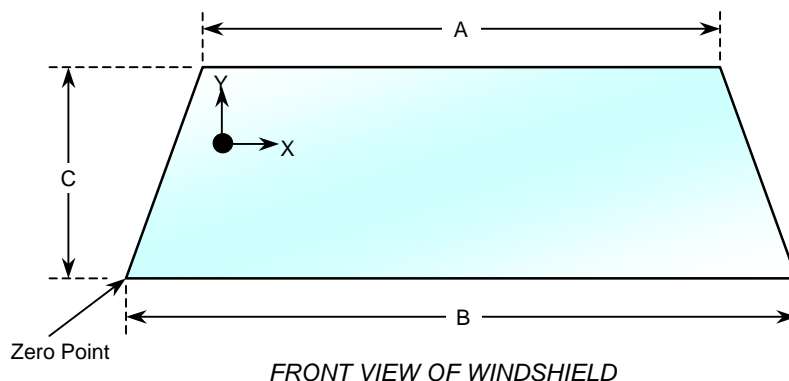
Windshield Mounting Details: Windshield glass is secured to the vehicle frame with a rubber type adhesive. No molding covers the windshield periphery at any point.

The standard requires that the post-test retention measurement be a minimum of 75 percent of the pretest total periphery measurement for vehicles not equipped with occupant passive restraints and 50 percent for each side of the windshield for vehicles that are equipped with occupant passive restraints.

Temperature of windshield molding during test: 21.1 °C

WINDSHIELD PERIPHERY MEASUREMENTS

Measurement	Pre-Test(mm)	Post-Test(mm)	% of Retention
Left Side	2185	2185	100
Right Side	2185	2185	100
Total	4370	4370	100



WINDSHIELD DIMENSIONS

Item	Units	Segment Length	Molding Width
A	mm	1200	15
B	mm	1540	15
C-Left	mm	815	25
C-Right	mm	815	25

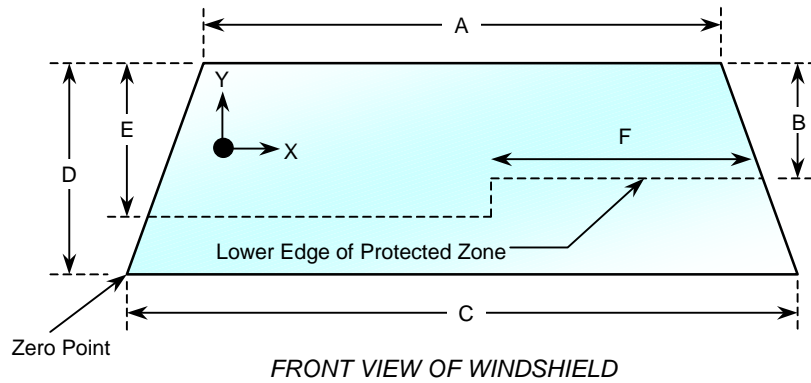
DATA SHEET NO. 11
WINDSHIELD ZONE INTRUSION FMVSS 219 DATA (PARTIAL)

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05



**WINDSHIELD AND
PROTECTED ZONE**

Item	Units	Value
A	mm	1200
B	mm	570
C	mm	1540
D	mm	815
E	mm	590
F	mm	350

AREA OF PROTECTED ZONE FAILURES

- A. Provide coordinates of the area that the protected zone was penetrated more than 0.25 in. by a vehicle component other than one that is normally in contact with the windshield.

X	Y

- B. Provide coordinates of the area beneath the protected zone that the inner surface of the windshield was penetrated by a vehicle component.

X	Y

DATA SHEET NO. 12
FMVSS 301 FUEL SYSTEM INTEGRITY POST IMPACT DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP Test Date: 1/20/05

Test Time: 12:02 PM

Temperature: 18.9 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 Location Details: No leakage occurred

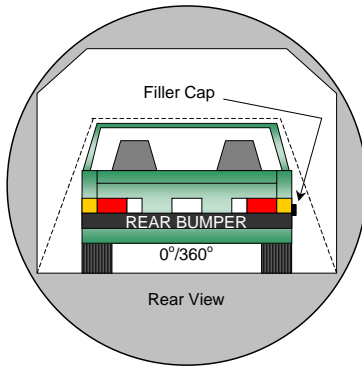
DATA SHEET NO. 13
FMVSS 301 STATIC ROLLOVER DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

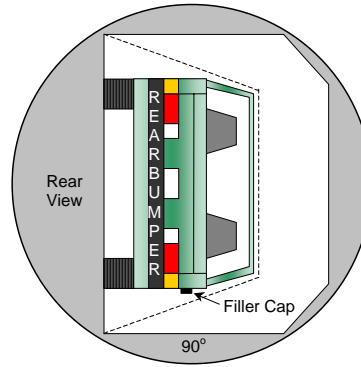
NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

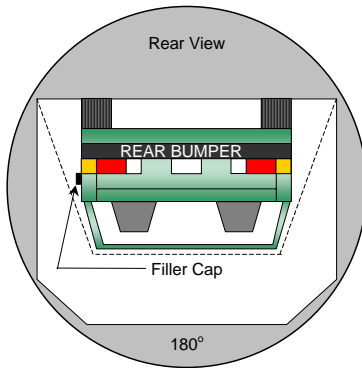
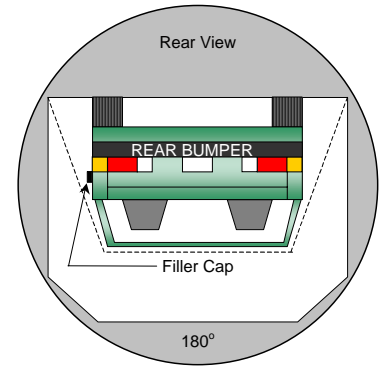
Test Date: 1/20/05



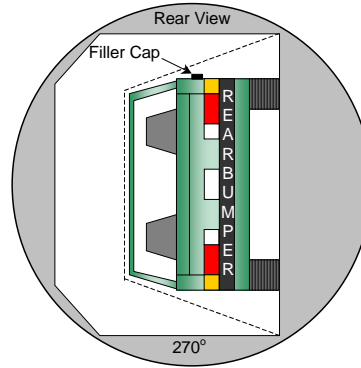
0° to 90°



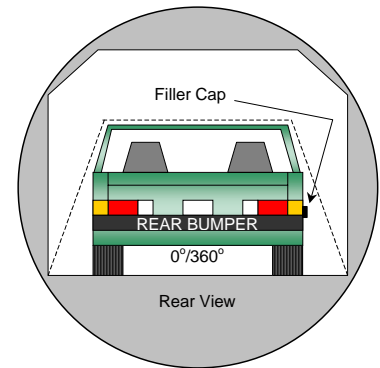
90° to 180°



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. No solvent leakage occurred during rollover.

**DATA SHEET NO. 13...(CONTINUED)
FMVSS 301 STATIC ROLLOVER DATA**

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

SOLVENT COLLECTION TIME TABLE IN SECONDS

Test Phase	Rotation Time	Hold Time	Total Time
0° to 90°	83	300	383
90° to 180°	80	300	380
180° to 270°	75	300	375
270° to 360°	76	300	376

FMVSS 301 SPILLAGE TABLE REQUIREMENT (oz.)

First 5 Minutes	5
Sixth Minute	1
Seventh Minute	1
Eighth Minute	1

ACTUAL TEST VEHICLE SOLVENT SPILLAGE TABLE (oz.)

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

DATA SHEET NO. 14
VEHICLE MEASUREMENTS

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

VEHICLE MEASUREMENT TABLE

No.	Measurement Description	Units	Pre-Test	Post-Test	Diff.
1	Total length of vehicle at centerline	mm	4905	4358	-547
2	RSOV to front of engine	mm	4465	4160	-305
3	RSOV to firewall centerline	mm	3805	3714	-91
4	RSOV to leading edge of right door	mm	3405	3405	0
5	RSOV to leading edge of left door	mm	3405	3400	-5
6	RSOV to lower leading edge of right door	mm	3425	3427	2
7	RSOV to lower leading edge of left door	mm	3420	3428	8
8	RSOV to upper trailing edge of right door	mm	2295	2297	2
9	RSOV to upper trailing edge of left door	mm	2300	2295	-5
10	RSOV to lower trailing edge of right door	mm	2310	2317	7
11	RSOV to lower trailing edge of left door	mm	2310	2320	10
12	RSOV to bottom of right 'A' pillar	mm	3416	3415	-1
13	RSOV to bottom of left 'A' pillar	mm	3416	3413	-3
14	RSOV to firewall on right side	mm	3810	3620	-190
15	RSOV to firewall on left side	mm	3825	3720	-105
16	RSOV to steering column	mm	2900	2945	45
17	Center of steering column to left 'A' pillar	mm	420	370	-50
18	Center of steering column to headlining	mm	410	440	30
19	RSOV to right side of front bumper	mm	4780	4261	-519
20	RSOV to left side of front bumper	mm	4780	4270	-510
21	Length of engine block	mm	470	470	0
RD	RSOV to right side of dash panel	mm	3226	3228	2
CD	RSOV to center of dash panel	mm	3100	3050	-50
LD	RSOV to left side of dash panel	mm	3211	3206	-5

DATA SHEET NO. 14...(CONTINUED)
VEHICLE STRUCTURAL MEASUREMENTS

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

VEHICLE STRUCTURAL MEASUREMENT TABLE

No.	Measurement Description	Units	Pre-Test	Post-Test	Diff.
1	Total length	mm	4905	4358	-547
2	Total width	mm	1800	1827	27
3	Bumper top height	mm	600	550	-50
4	Bumper bottom height	mm	220	285	65
5	Longitudinal member top height	mm	550	600	50
6	Longitudinal member bottom height	mm	310	448	138
7	Distance between longitudinal members	mm	920	1115	195
8	Longitudinal member width	mm	100	100	0
9	Engine top height	mm	900	900	0
10	Engine bottom height	mm	196	210	14
11	Engine and gear box width	mm	725	775	50
12	Front bumper to engine distance	mm	470	190	-280
13	Front shock absorber fixing width	mm	900	940	40
14	Bonnet leading edge height	mm	745	765	20
15	Front shock absorber fixing width	mm	1057	1075	18
16	Front bumper to front axle distance	mm	965	490	-475
17	Front axle to 'A' pillar distance	mm	485	450	-35
18	'A' pillar to 'B' pillar distance	mm	1135	1134	-1
19	'B' pillar to rear axle distance	mm	1204	1203	-1
20	'B' pillar to 'C' pillar distance	mm	1000	1005	5
21	Roof sill bottom height	mm	1255	1295	40
22	Roof sill top height	mm	1430	1475	45
23	Floor sill bottom height	mm	130	262	132
24	Floor sill top height	mm	325	404	79

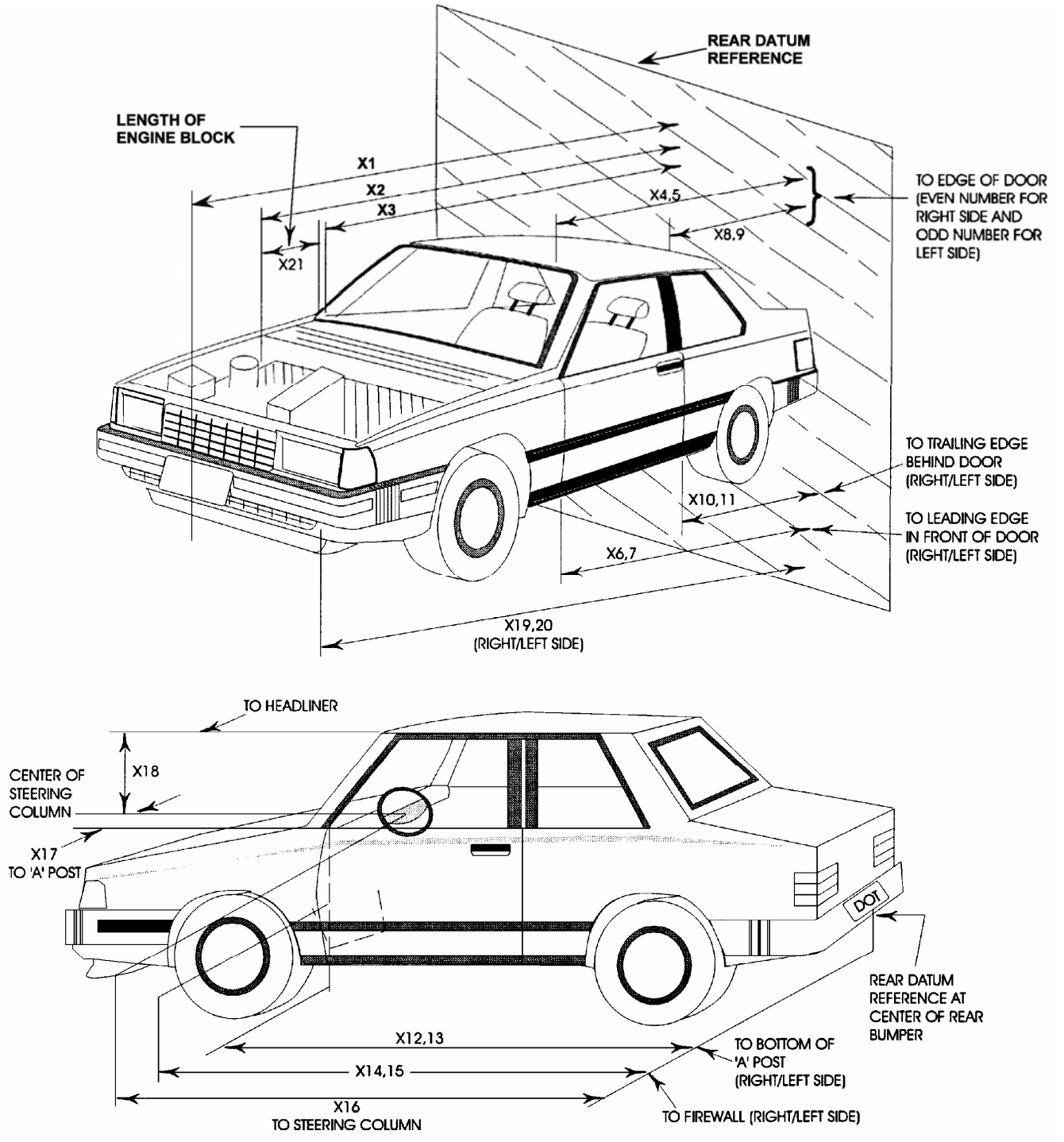
DATA SHEET NO. 14...(CONTINUED)
VEHICLE MEASUREMENTS

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05



**DATA SHEET NO. 15
CAMERA LOCATIONS**

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

VEHICLE CAMERA MEASUREMENT TABLE

No.	Camera View	Location (mm)			Angle (deg.)	Film Plane to Head (mm)	Lens (mm)	Speed (fps)
		X	Y	Z				
1	Real Time Camera (Panning)	-12192	-6096	-1651	-10	N/A	Zoom	30
2	Overall Left Side	-2489	-8280	-1143	-4	8818	24	1000
3	Left Side View	-1677	-7620	-1329	-4	7177	50	1000
4	Driver and Interior View	-6477	-10185	-4748	-13	11069	80	
5	Steering Column (Bottom)	-2134	-8230	-2997	-16	7943	19	
6	Steering Column (Top)	-2134	-8230	-3404	-20	8041	19	
7	Overall Right Side	-2083	8230	-1270	-6	7755	13	
8	Right Side View	-1677	7316	-1422	-4	6877	50	1000
9	Right Side View	-1829	7316	-1422	-4	8767	28	1000
10	Windshield View	-610	0	-5944	-90	N/A	13	
11	Driver Front View	610	-432	-2667	-40	N/A	13	
12	Passenger Front View	610	432	-2667	-40	N/A	13	
13	Pit View of Engine	-914	0	1499	90	N/A	6	
14	Pit View of Fuel Tank	-2438	0	1499	90	N/A	6	

ADDITIONAL CAMERAS

1	Real Time Camera (Still)	-1219	-8585	-1372	0	8194	Zoom	30
2	Real Time Camera (Still)	-1067	7976	-991	0	7623	Zoom	30

X = Barrier Face Y = Monorail Centerline Z = Ground DNR = Did Not Run NTM = No Timing Marks

DATA SHEET NO. 16
PHOTOGRAPHIC REFERENCE TARGET LOCATIONS

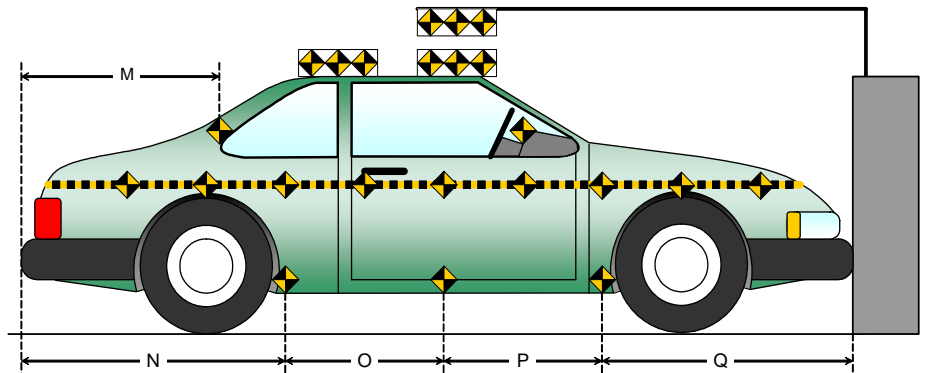
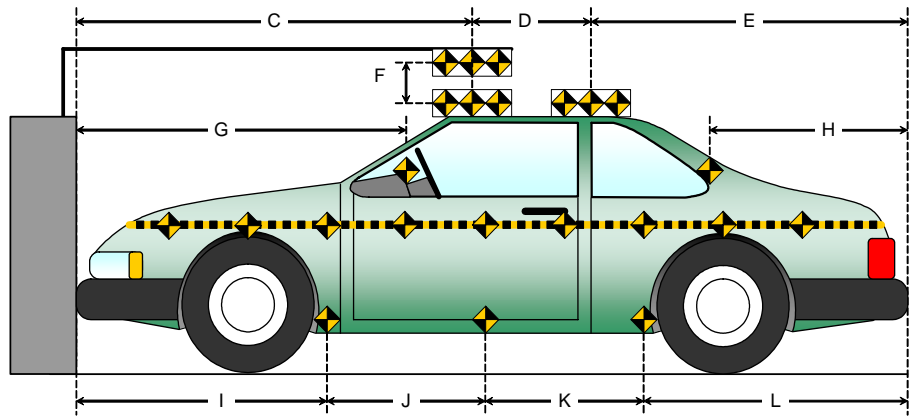
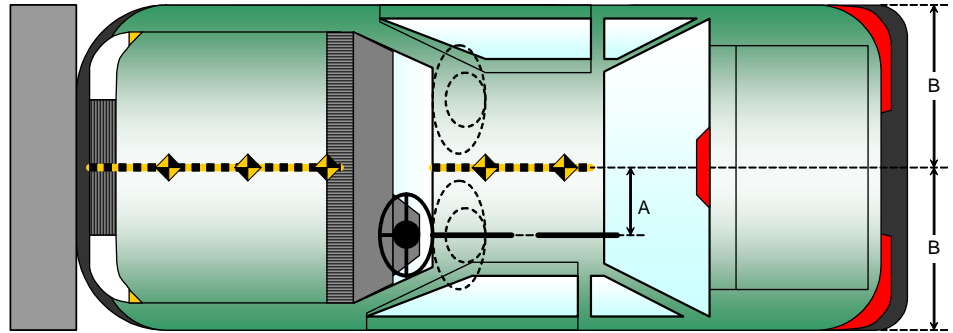
Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

All Dimensions in (mm)	
Item	Value
A	340
B	900
C	2590
D	610
E	1775
F	155
G	1780
H	1055
I	1500
J	920
K	920
L	1560
M	1055
N	1555
O	920
P	920
Q	1500



DATA SHEET NO. 17
VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

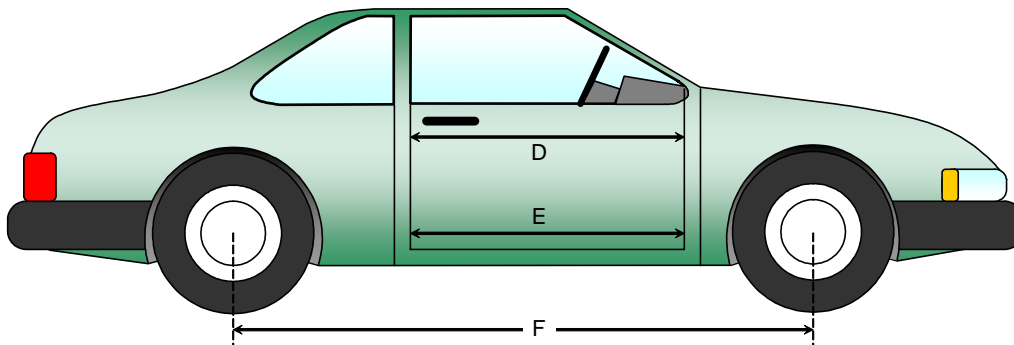
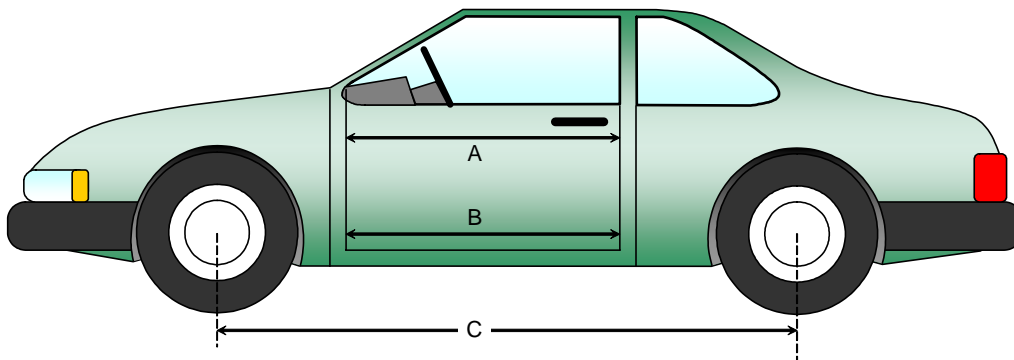
Test Date: 1/20/05

DOOR OPENING WIDTH TABLE

Item	Description	Units	Pre-Test	Post-Test	Diff.
A	Left Side Upper	mm	1046	1045	-1
B	Left Side Lower	mm	961	974	13
D	Right Side Upper	mm	1051	1045	-6
E	Right Side Lower	mm	946	946	0

WHEELBASE MEASUREMENT TABLE

Item	Description	Units	Pre-Test	Post-Test	Diff.
C	Left Side Wheel Base	mm	2830	2740	-90
F	Right Side Wheel Base	mm	2830	2740	-90



DATA SHEET NO. 17...(CONTINUED)
VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

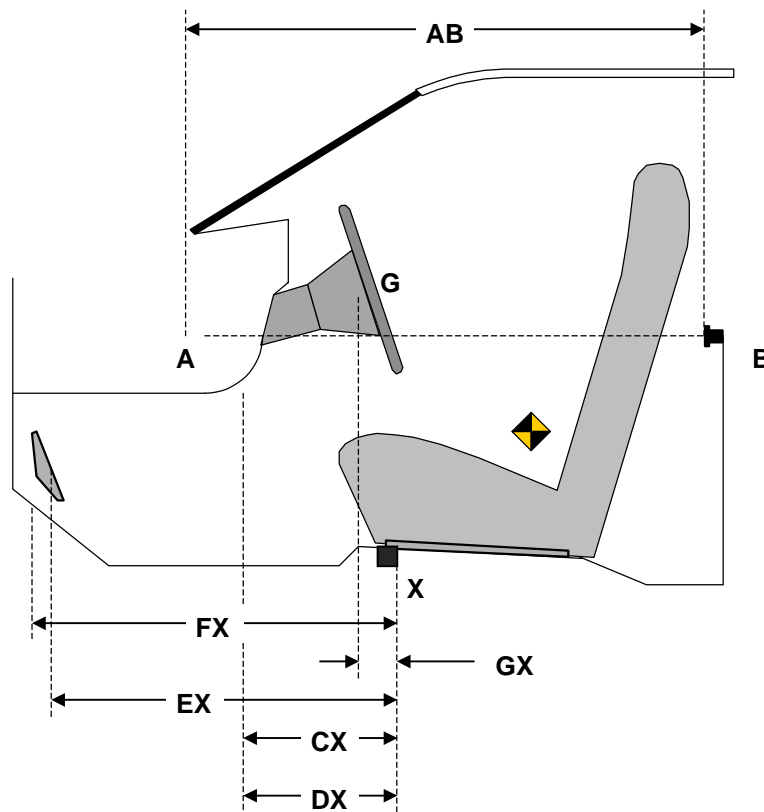
Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

DRIVER COMPARTMENT INTRUSION TABLE

Item	Description	Units	Pre-Test	Post-Test	Diff.
AB	Door Opening (Inside window jam)	mm	1046	1045	-1
CX	Left Knee Bolster to X	mm	260	270	10
DX	Right Knee Bolster to X	mm	260	280	20
EX	Brake Pedal to X	mm	545	518	-27
FX	Foot Rest to X	mm	535	573	38
GX	Center of Steering Wheel Hub to X	mm	0	55	55

X = Left Front Seat Outboard Anchor Bolt Head



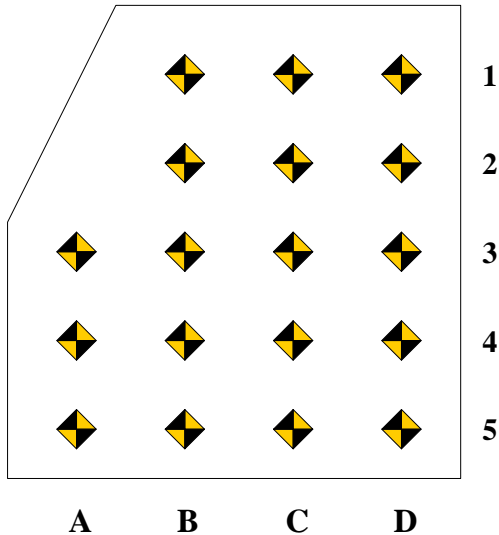
DATA SHEET NO. 17...(CONTINUED)
VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05



Measurement reference point for X and Z-axis is the forward outboard seat mounting bolt.

Columns A through D are evenly spaced.

Rows 1 and 2 are on the toe kick portion of the floor pan. Rows 3, 4 and 5 are located on the most level portion of the floor pan.

Row 3 will be at the intersection of the toe kick and the level sections of the floor pan.

DRIVER FLOOR PAN X-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1		747	752	735		700	692	683		-48	-60	-52
2		669	673	666		615	619	625		-54	-54	-42
3	592	591	594	589	579	550	547	555	-12	-41	-47	-34
4	497	493	488	485	493	487	485	473	-4	-6	-3	-12
5	388	386	387	388	395	408	395	398	7	22	8	10

DRIVER FLOOR PAN Z-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1		-35	-23	-25		-75	-65	-65		-41	-43	-39
2		38	47	47		-11	10	28		-49	-37	-18
3	96	38	120	121	80	-11	81	84	-16	-49	-39	-37
4	108	107	103	101	92	94	85	104	-16	-13	-19	3
5	111	110	103	100	108	99	88	102	-3	-11	-15	2

**DATA SHEET NO. 17...(CONTINUED)
VEHICLE INTRUSION MEASUREMENTS**

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

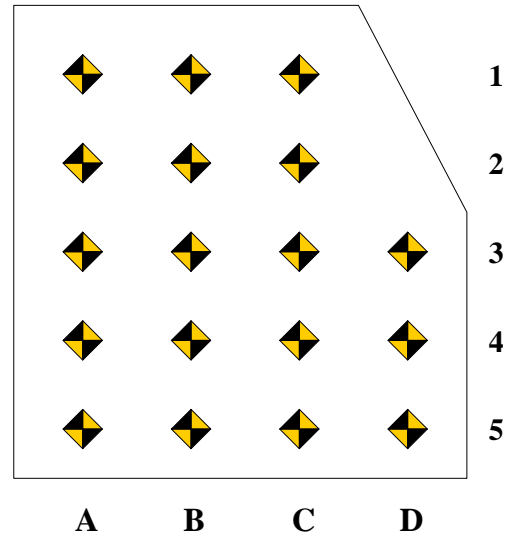
Test Date: 1/20/05

Measurement reference point for X and Z axis is the forward outboard seat mounting bolt.

Columns A through D are evenly spaced.

Rows 1 and 2 are on the toe kick portion of the floor pan. Rows 3, 4 and 5 are located on the most level portion of the floor pan.

Row 3 will be at the intersection of the toe kick and the level sections of the floor pan.



PASSENGER FLOOR PAN X-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	750	749	741		689	680	670		-62	-69	-72	
2	683	676	676		613	612	620		-70	-63	-56	
3	588	587	588	589	558	560	601	606	-30	-27	12	17
4	492	491	491	489	494	513	514	509	2	23	23	19
5	390	388	388	392	391	417	414	411	1	29	26	19

PASSENGER FLOOR PAN Z-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	-11	-18	-23		-47	-61	-59		-35	-43	-35	
2	58	46	45		16	9	9		-42	-37	-36	
3	124	102	103	116	110	100	109	116	-13	-2	6	0
4	107	111	111	123	94	101	112	126	-13	-10	2	3
5	103	115	110	125	88	118	112	129	-15	3	2	3

DATA SHEET NO. 18
FIXED BARRIER LOAD CELL LOCATIONS

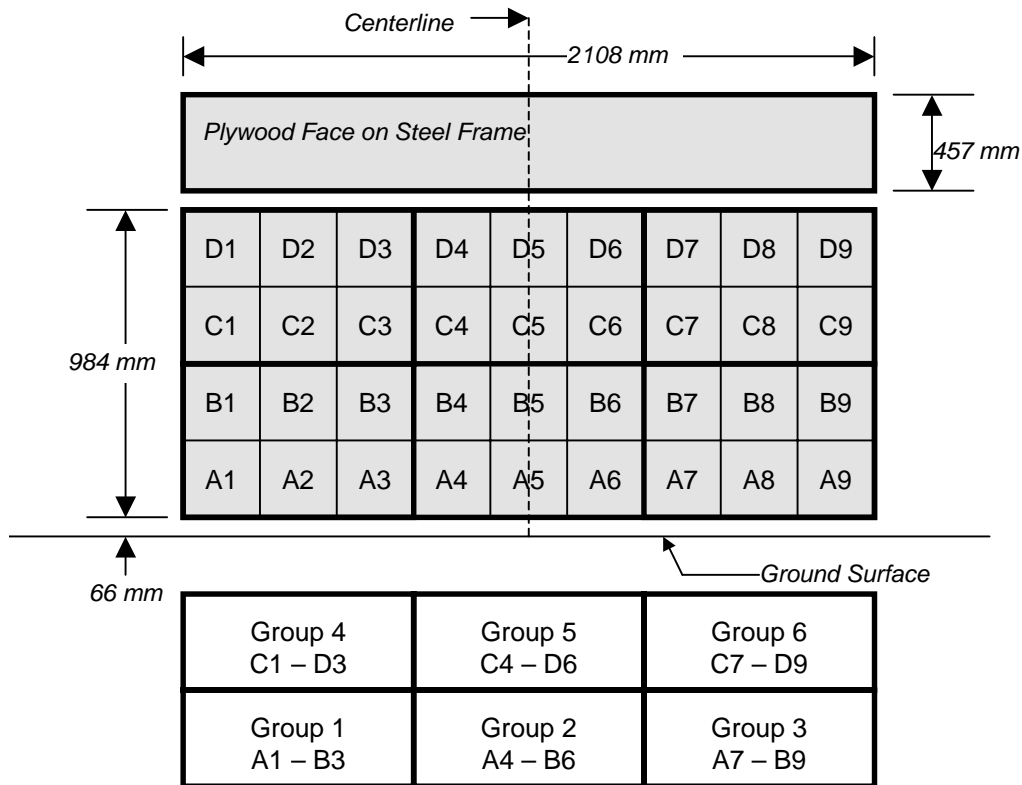
Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

36 Load Cell Rigid Barrier (NHTSA Standard)
Load Cell Locations on Fixed Barrier



6 Groups of 6 Load Cells Each

The Data is presented in Appendix C with the following requirements:

- 1.) Data from 36 individual load cells
- 2.) Sum data from 6 groupings shown above (6 cells/group)
- 3.) Total or sum of all 36 individual load cells
- 4.) Sum of all 36 individual load cells vs. vehicle dynamic crush

**DATA SHEET NO. 19
POST-TEST AIRBAG DATA**

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

POST-TEST AIRBAG DATA

	DRIVER	PASSENGER
No. of vent holes	2	2
Size of vent (mm ²)	495	1268
Total vent area (mm ²)	990	2536

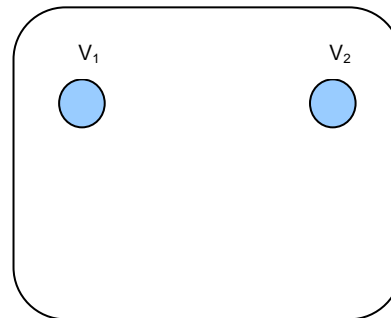
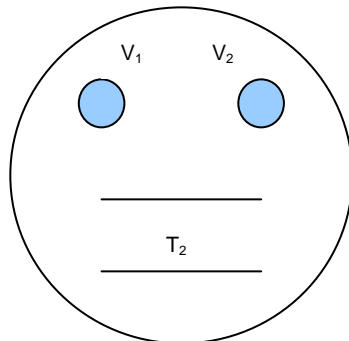
Deflated Airbag Length and Width Dimensions or, If Round, Diameter (mm)		
Length		600
Width		640
Depth or Diameter	530	620

Tethering Information		
Is the airbag tethered?	No	No
Record length of tether (mm)		

Airbag Manufacturing Information		
Manufacturer	*	*
Part No.	*	SC046232641
Gas Generator	*	NK40S-E12

* Manufacturers, part no. and gas generator label was burned due to airbag deployment.

Sketch the airbag showing the location of the vent holes, how the bag is tethered, and where the bag is tethered. Also describe how the tethers are attached to the bag and the steering wheel:



DATA SHEET NO. 20
ACCIDENT INVESTIGATION DIVISION DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan NHTSA No.: M55201
 Test Program: 2005 NHTSA 35mph NCAP Test Date: 1/20/05

VEHICLE INFORMATION

VIN: 1N4BA41E85C806932 Wheel base (mm): 2830
 Vehicle Size Category: 4-Door Sedan Test Weight (kg): 1779

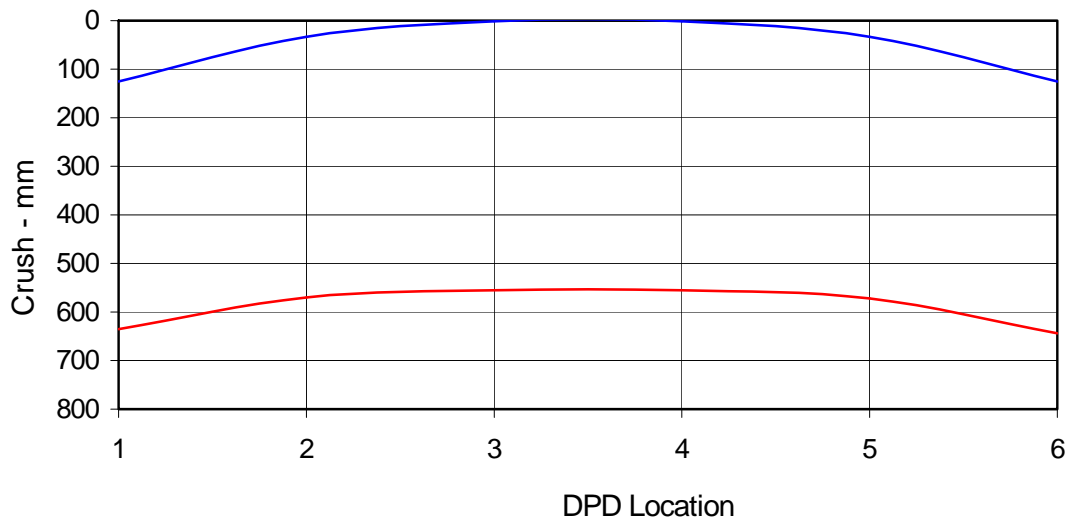
ACCELEROMETER DATA

Accelerometer Location: Left Rear Sill
 Cal. Procedure/Interval: 6 months / drop test
 Integration Algorithm: NHTSA Standard Linearity: Good
 Impact Velocity (km/h): 56.12
 Velocity Change (km/h): 65.5 Time of Separation (msec): 75.1

CRUSH PROFILE

Collision Deformation Classification: 12FDEW6 Maximum Damage: Left Side of Vehicle Centerline
 Damage Region Length (mm): 1345 Impact Mode: Full Frontal

No.	Measurement Description	Units	Pre-Test	Post-Test	Difference
C1	Crush zone 1 at left side	mm	125	635	-510
C2	Crush zone 2 on left side	mm	33	570	-537
C3	Crush zone 3 on left side	mm	1	555	-554
C4	Crush zone 4 on right side	mm	1	555	-554
C5	Crush zone 5 on right side	mm	33	572	-539
C6	Crush zone 6 at right side	mm	125	644	-519



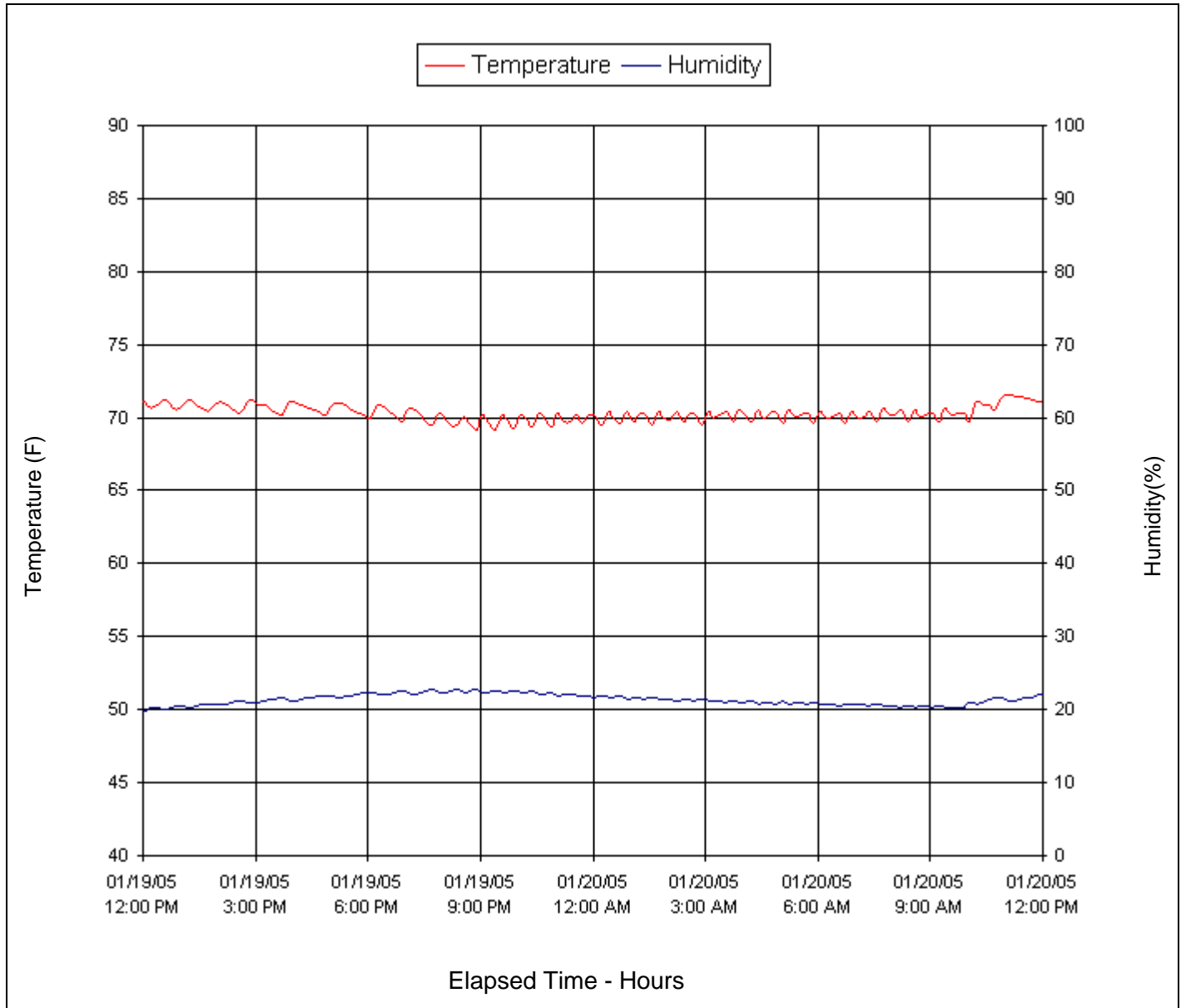
DATA SHEET NO. 21
DUMMY/VEHICLE TEMPERATURE STABILIZATION

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05



APPENDIX A
PHOTOGRAPHS

LIST OF PHOTOGRAPHS

Figure		Page
1	Load Cell Location	A-1
2	Manufacturer's Label	A-2
3	Tire Placard	A-3
4	Right Front $\frac{3}{4}$ View, As Received	A-4
5	Left Rear $\frac{3}{4}$ View, As Received	A-5
6	Pre-Test Front View	A-6
7	Post-Test Front View (Vehicle Moved)	A-7
8	Pre-Test Left Side View	A-8
9	Post-Test Left Side View	A-9
10	Pre-Test Right Side View	A-10
11	Post-Test Right Side View	A-11
12	Pre-Test Right Front $\frac{3}{4}$ View	A-12
13	Post-Test Right Front $\frac{3}{4}$ View	A-13
14	Pre-Test Left Rear $\frac{3}{4}$ View	A-14
15	Post-Test Left Rear $\frac{3}{4}$ View	A-15
16	Post-Test Left Side $\frac{3}{4}$ View of Doors After Impact	A-16
17	Post-Test Right Side $\frac{3}{4}$ View of Doors After Impact	A-17
18	Pre-Test Windshield View	A-18
19	Post-Test Windshield View	A-19
20	Pre-Test Engine Compartment	A-20
21	Post-Test Engine Compartment (Vehicle Moved)	A-21
22	Pre-Test Fuel Cap	A-22
23	Post-Test Fuel Cap	A-23
24	Pre-Test Front Underbody	A-24
25	Post-Test Front Underbody	A-25
26	Pre-Test Mid Underbody	A-26
27	Post-Test Mid Underbody	A-27
28	Pre-Test Rear Underbody	A-28
29	Post-Test Rear Underbody	A-29
30	Pre-Test Driver Dummy Front View (Head Position)	A-30
31	Post-Test Driver Dummy Front View (Head Position)	A-31
32	Pre-Test Driver Dummy (Through Window)	A-32
33	Post-Test Driver Dummy (Through Window)	A-33
34	Pre-Test Driver Dummy (Door Open)	A-34

LIST OF PHOTOGRAPHS...(CONTINUED)

Figure		Page
35	Post-Test Driver Dummy (Door Open)	A-35
36	Pre-Test Driver Dummy Feet	A-36
37	Post-Test Driver Dummy Feet	A-37
38	Pre-Test Driver Side Knee Bolster	A-38
39	Post-Test Driver Side Knee Bolster	A-39
40	Pre-Test Driver Side Floor Pan	A-40
41	Post-Test Driver Side Floor Pan	A-41
42	Post-Test Driver Dummy Head	A-42
43	Post-Test Driver Dummy Airbag Contact	A-43
44	Pre-Test Passenger Dummy Front View (Head Position)	A-44
45	Post-Test Passenger Dummy Front View (Head Position)	A-45
46	Pre-Test Passenger Dummy (Through Window)	A-46
47	Post-Test Passenger Dummy (Through Window)	A-47
48	Pre-Test Passenger Dummy (Door Open)	A-48
49	Post-Test Passenger Dummy (Door Open)	A-49
50	Pre-Test Passenger Dummy Feet	A-50
51	Post-Test Passenger Dummy Feet	A-51
52	Pre-Test Passenger Side Glove Box	A-52
53	Post-Test Passenger Side Glove Box	A-53
54	Pre-Test Passenger Side Floor Pan	A-54
55	Post-Test Passenger Side Floor Pan	A-55
56	Post-Test Passenger Dummy Head	A-56
57	Post-Test Passenger Dummy Airbag Contact	A-57
58	Vehicle on Rollover Device at 0°	A-58
59	Vehicle on Rollover Device 90°	A-59
60	Vehicle on Rollover Device 180°	A-60
61	Vehicle on Rollover Device 270°	A-61
62	Vehicle Impact	A-62

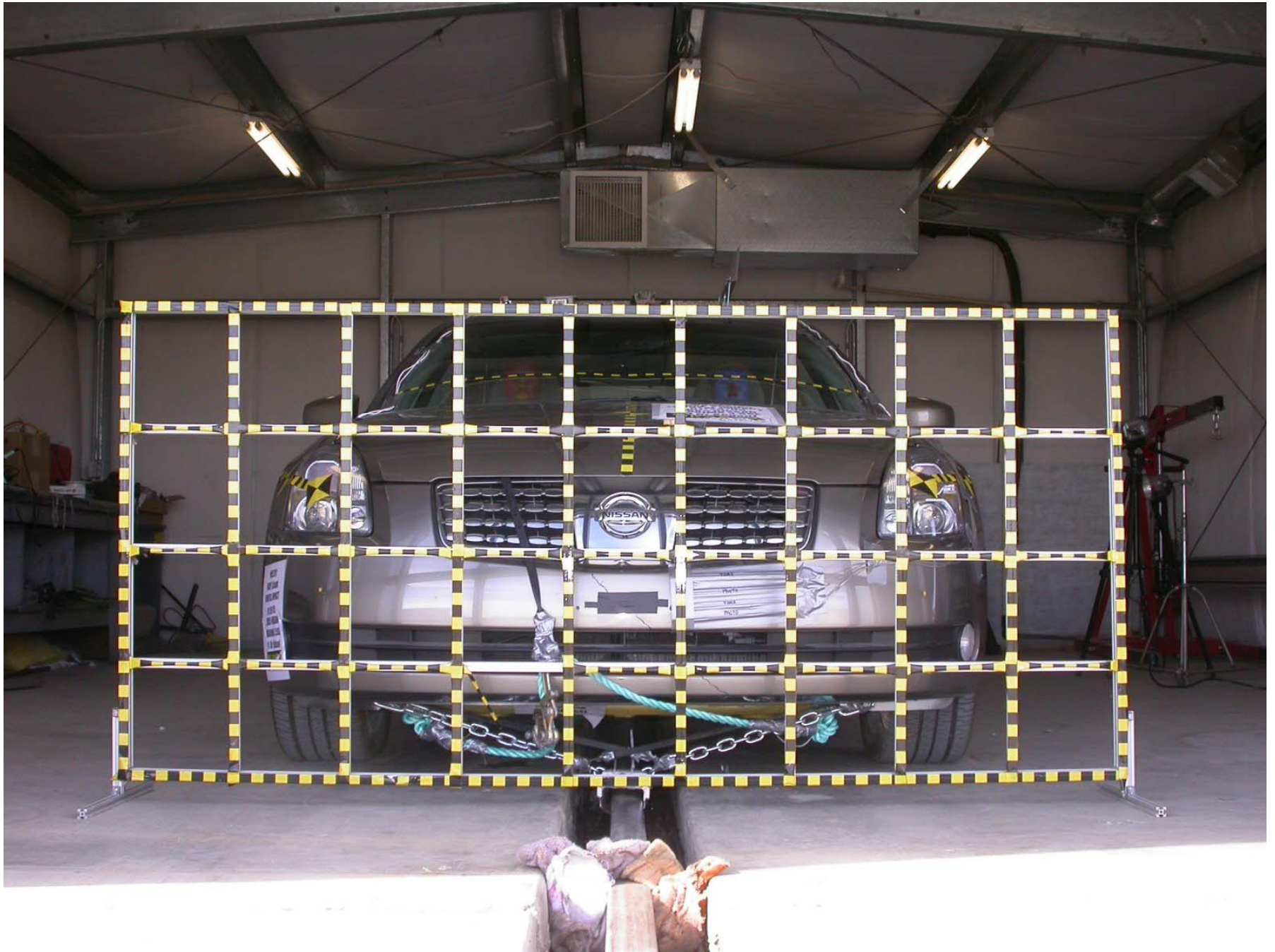


Figure A-1: Load Cell Location

This Space Intentionally Left Blank

MANUFACTURED BY NISSAN MOTOR CO., LTD.

DATE 08/04 GVWR 4546 LB
GAWR FR. 2469 LB GAWR RR. 2097 LB

THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR
VEHICLE SAFETY, BUMPER AND THEFT PREVENTION STANDARDS
IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.
SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION.

VIN: 1N4BA41E85C806932 PASSENGER CAR

COLOR	TRIM	TRANS	AXLE	ENGINE
KY2	K	RESF22A	GA24	VQ35DE 3498CC
MODEL:	BLJALTN-EU5		752	02000



1N4BA41E85C806932

Figure A-2: Manufacturer's Label



TIRE AND LOADING INFORMATION PNEU ET INFORMATION DE CHARGEMENT

SEATING CAPACITY NOMBRE DE PLACES	TOTAL TOTAL	5	FRONT AVANT	2	REAR ARRIÈRE	3
--------------------------------------	----------------	---	----------------	---	-----------------	---

THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED 390 kg OR 860 lbs.
LE POIDS COMBINÉ D'OCCUPANTS ET DE CARGAISON NE DEVRAIT JAMAIS EXCÉDER 390 kg OU 860 lbs.

RECOMMENDED COLD TIRE INFLATION PRESSURE PRESSION DE GONFLAGE RECOMMANDÉE DES PNEUS FROIDS		
ORIGINAL TIRE SIZE TAILLE DU PNEU D'ORIGINE	FRONT AVANT	REAR ARRIÈRE
P245/45R18	221 kPa (32 psi)	
SPARE TIRE ROUE DE SECOURS		
T145/80D17	420 kPa (60 psi)	

SEE OWNER'S MANUAL
FOR ADDITIONAL
INFORMATION.
POUR D'AUTRES
DÉTAILS, SE REPORTER
AU MANUEL DU
CONDUCTEUR.

ZA508

Figure A-3: Tire Placard



Figure A-4: Right Front $\frac{3}{4}$ View, As Received



Figure A-5: Left Rear $\frac{3}{4}$ View, as Received



Figure A-6: Pre-Test Front View

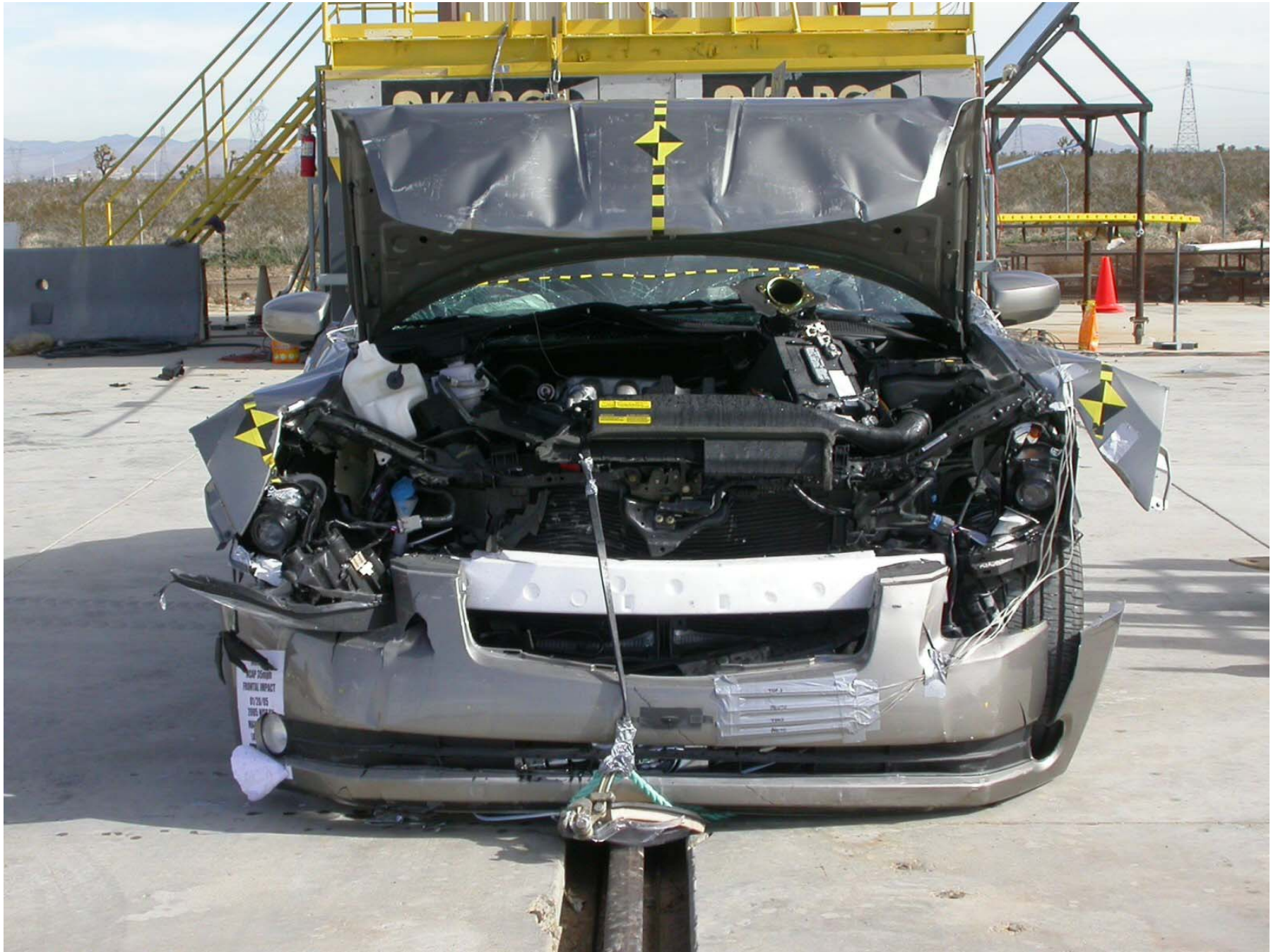


Figure A-7: Post-Test Front View (Vehicle Moved)



Figure A-8: Pre-Test Left Side View



Figure A-9: Post-Test Left Side View



Figure A-10: Pre-Test Right Side View



Figure A-11: Post-Test Right Side View



Figure A-12: Pre-Test Right Front ¾ View



Figure A-13: Post-Test Right Front $\frac{3}{4}$ View



Figure A-14: Pre-Test Left Rear $\frac{3}{4}$ View



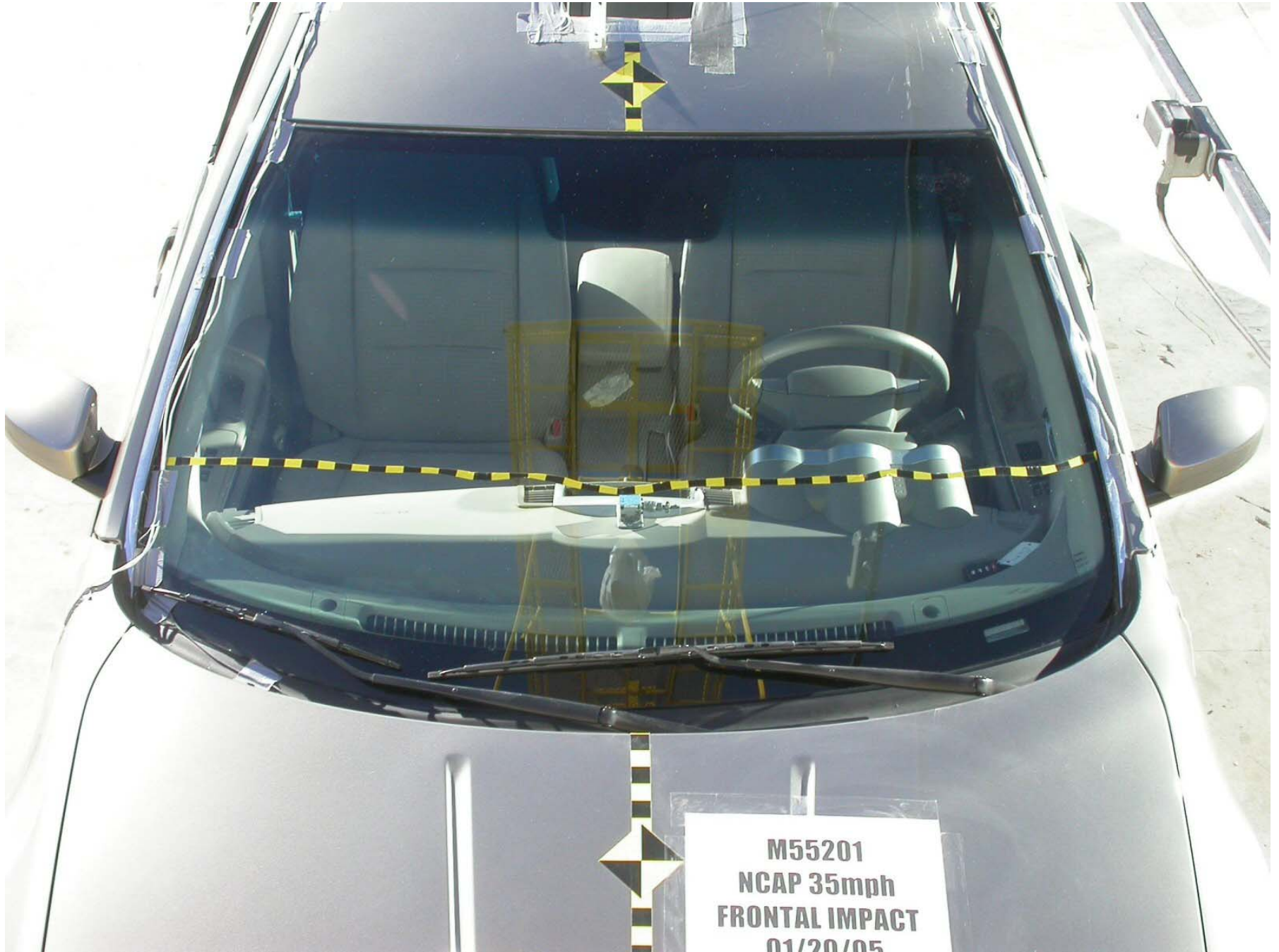
Figure A-15: Post-Test Left Rear $\frac{3}{4}$ View



Figure A-16: Post-Test Left Side ¾ View of Doors After Impact



Figure A-17: Post-Test Right Side ¾ View of Doors After Impact



A-18

TR-P25001-09-NC

Figure A-18: Pre-Test Windshield



Figure A-19: Post-Test Windshield



Figure A-20: Pre-Test Engine Compartment



Figure A-21: Post-Test Engine Compartment (Vehicle Moved)



Figure A-22: Pre-Test Fuel Cap



Figure A-23: Post-Test Fuel Cap



Figure A-24: Pre-Test Front Underbody

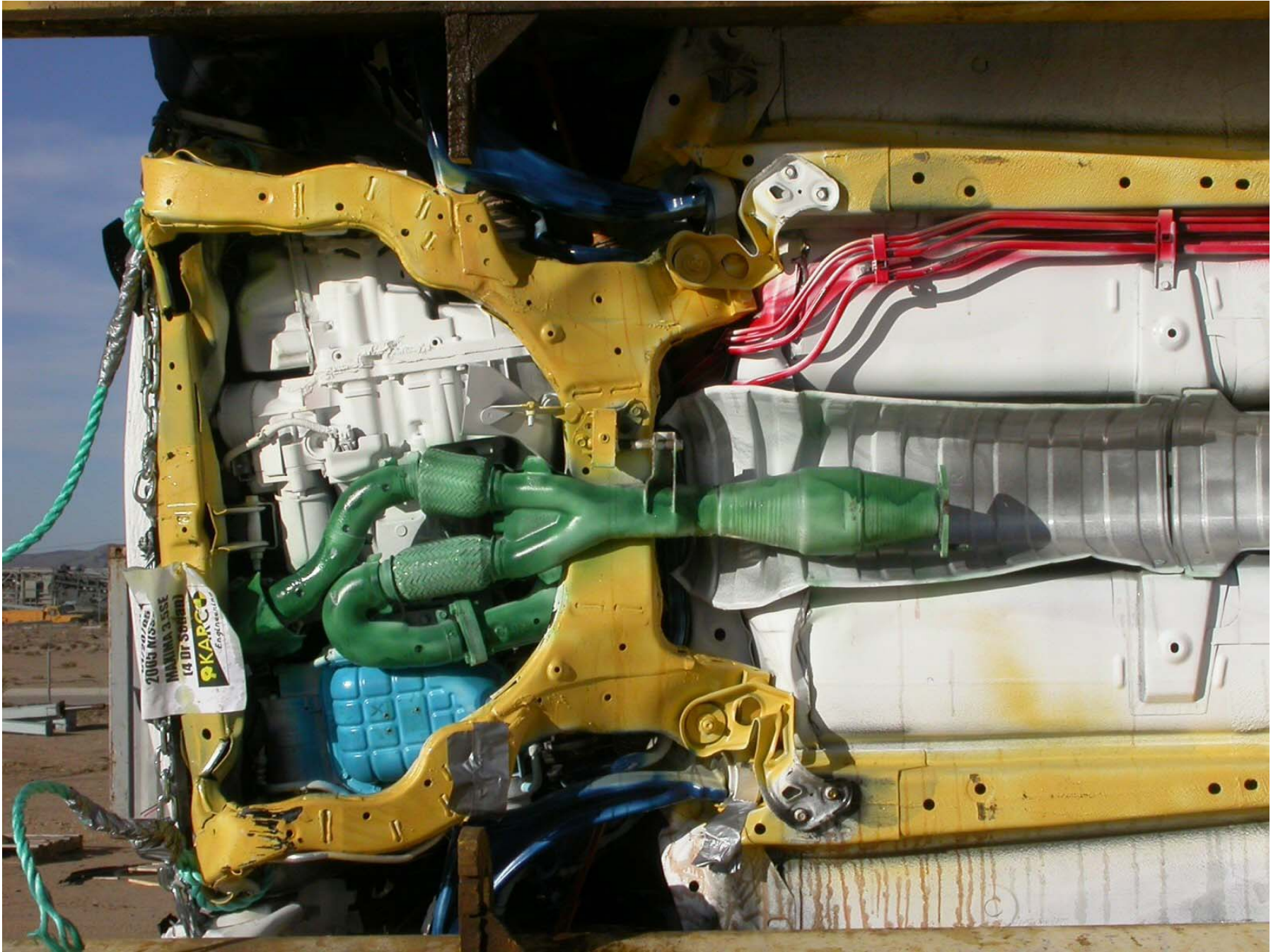


Figure A-25: Post-Test Front Underbody

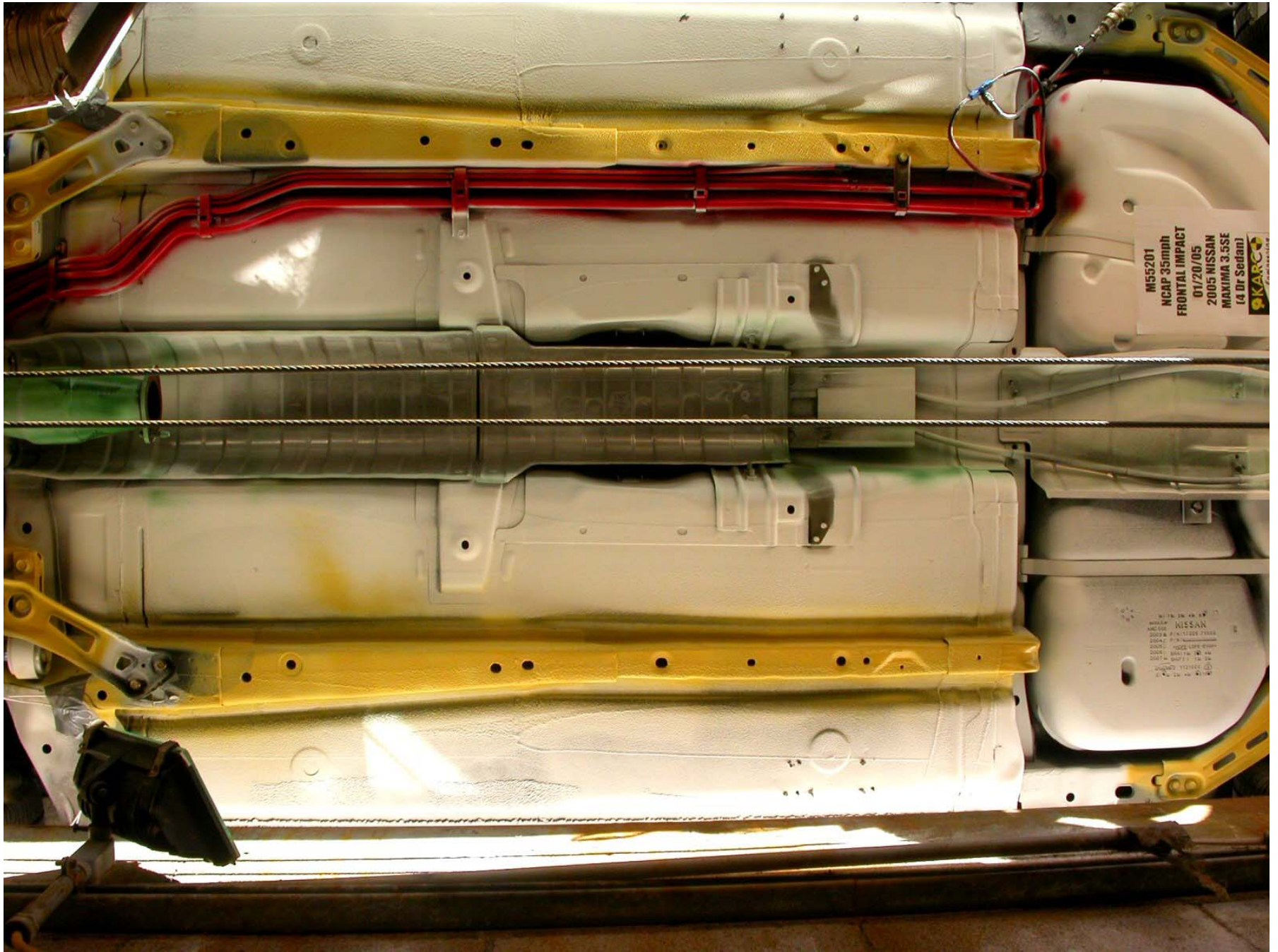


Figure A-26: Pre-Test Mid Underbody

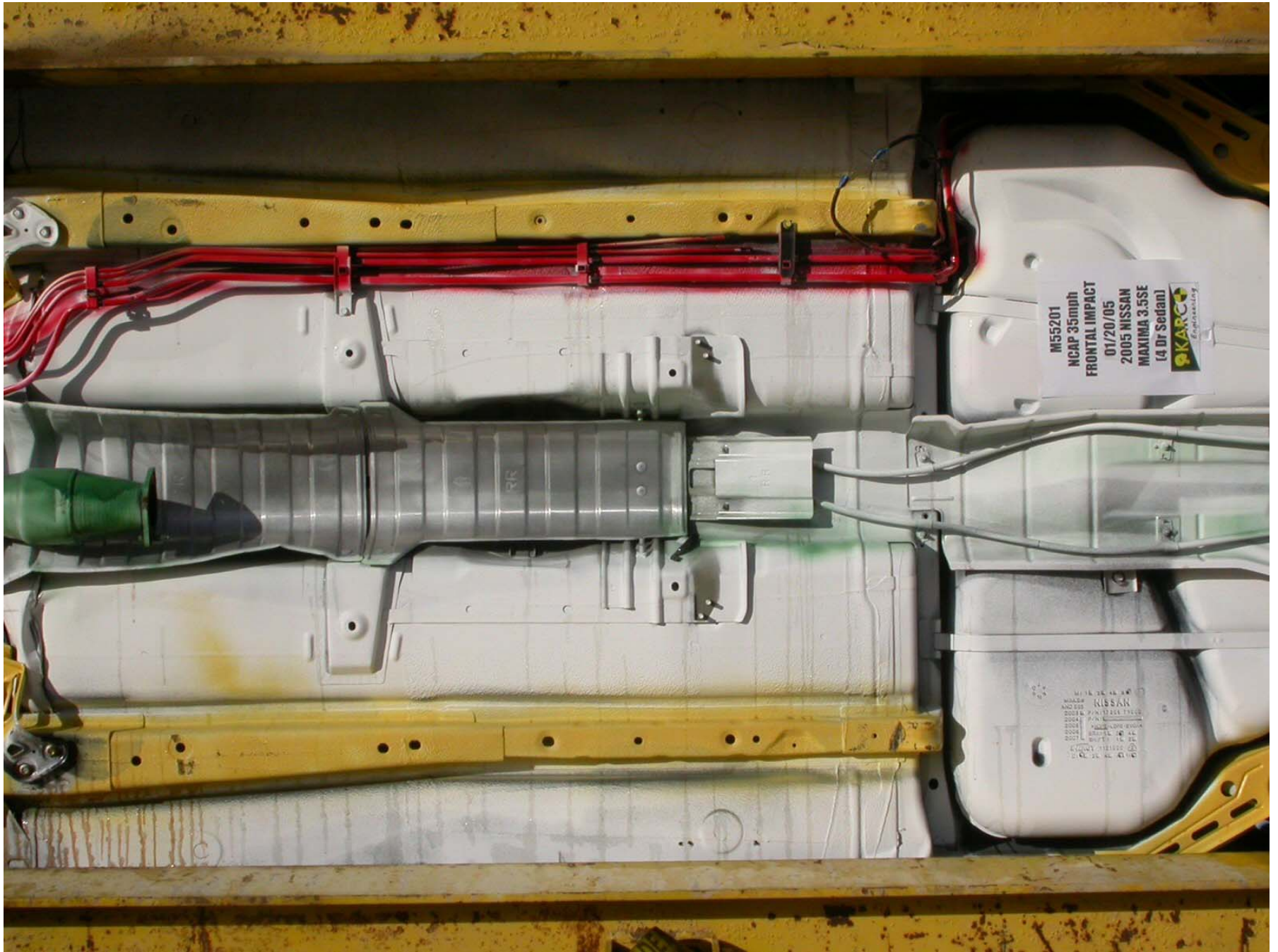


Figure A-27: Post-Test Mid Underbody

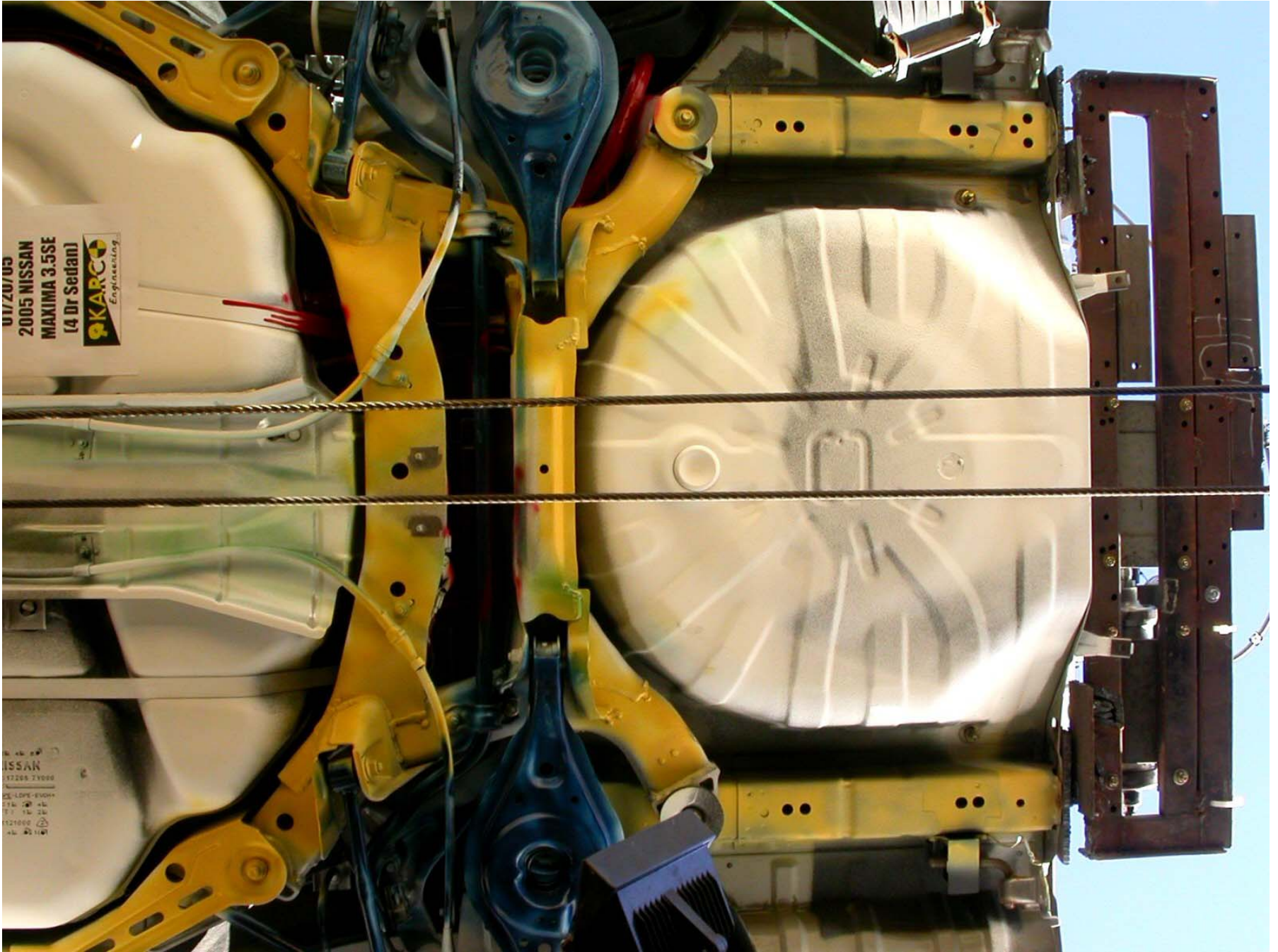


Figure A-28: Pre-Test Rear Underbody

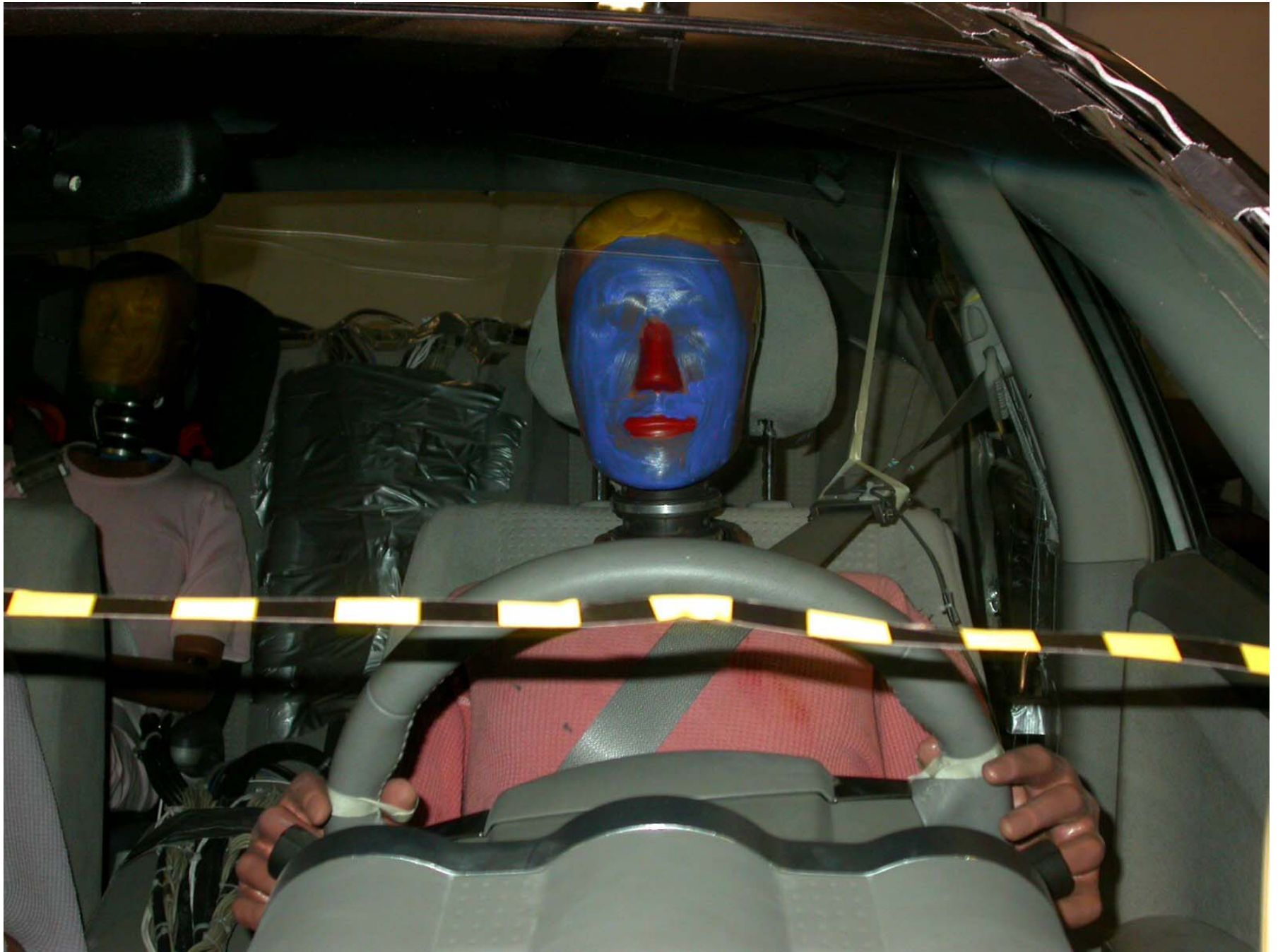


Figure A-30: Pre-Test Driver Dummy Front View (Head Position)



Figure A-31: Post-Test Driver Dummy Front View (Head Position)



Figure A-32: Pre-Test Driver Dummy (Through Window)



A-33

TR-P25001-09-NC

Figure A-33: Post-Test Driver Dummy (Through Window)



Figure A-34: Pre-Test Driver Dummy (Door Open)



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

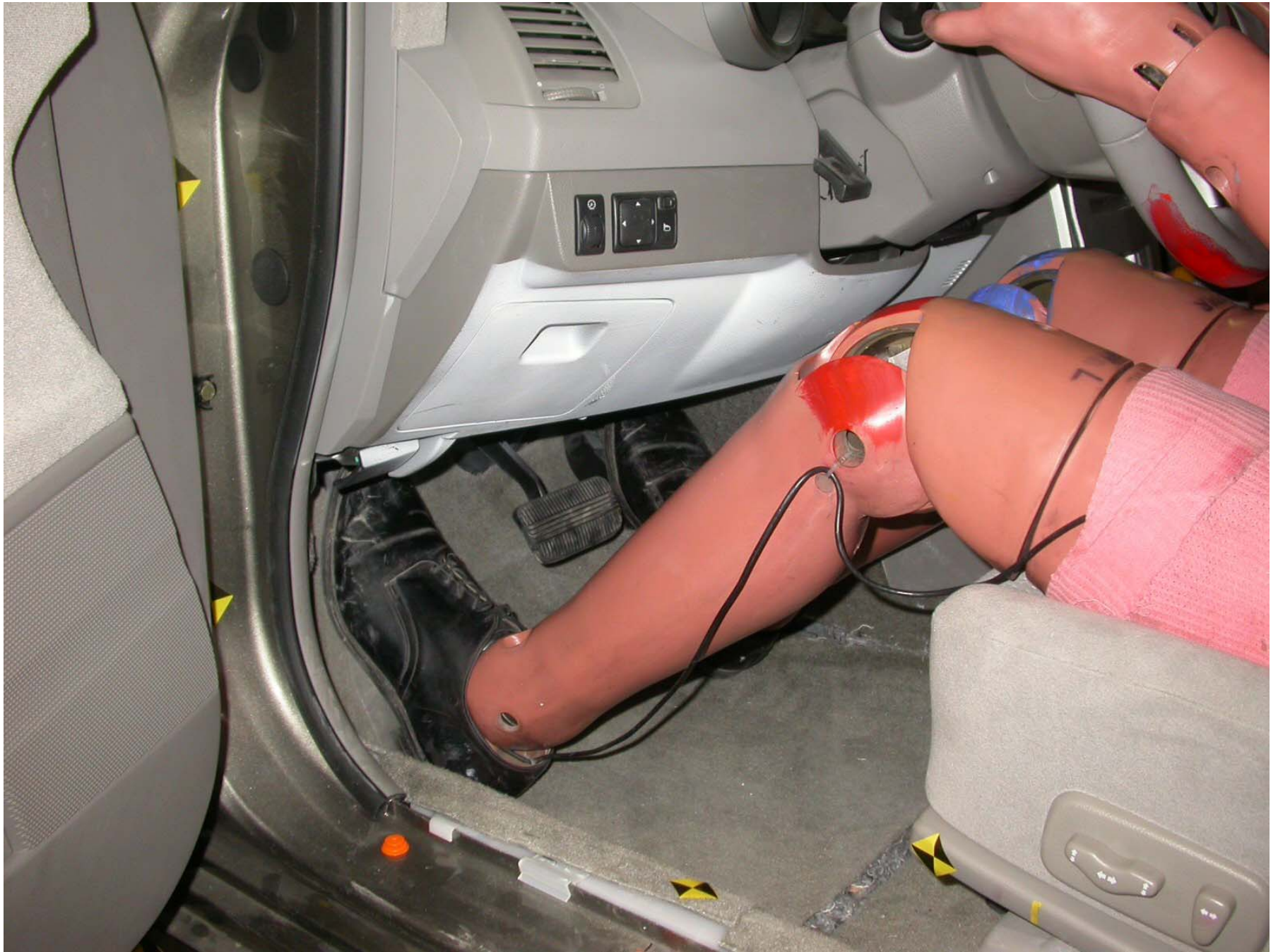


Figure A-36: Pre-Test Driver Dummy Feet



Figure A-37: Post-Test Driver Dummy Feet



A-38

TR-P25001-09-NC

Figure A-38: Pre-Test Driver Side Knee Bolster



Figure A-39: Post-Test Driver Side Knee Bolster



Figure A-40: Pre-Test Driver Side Floor Pan



Figure A-41: Post-Test Driver Side Floor Pan



Figure A-42: Post-Test Driver Dummy Head



Figure A-43: Post-Test Driver Dummy Airbag Contact



Figure A-44: Pre-Test Passenger Dummy Front View (Head Position)



A-45

TR-P25001-09-NC

Figure A-45: Post-Test Passenger Dummy Front View (Head Position)



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



Figure A-47: Post-Test Passenger Dummy (Through Window)



Figure A-48: Pre-Test Passenger Dummy (Door Open)



Figure A-49: Post-Test Passenger Dummy (Door Open)

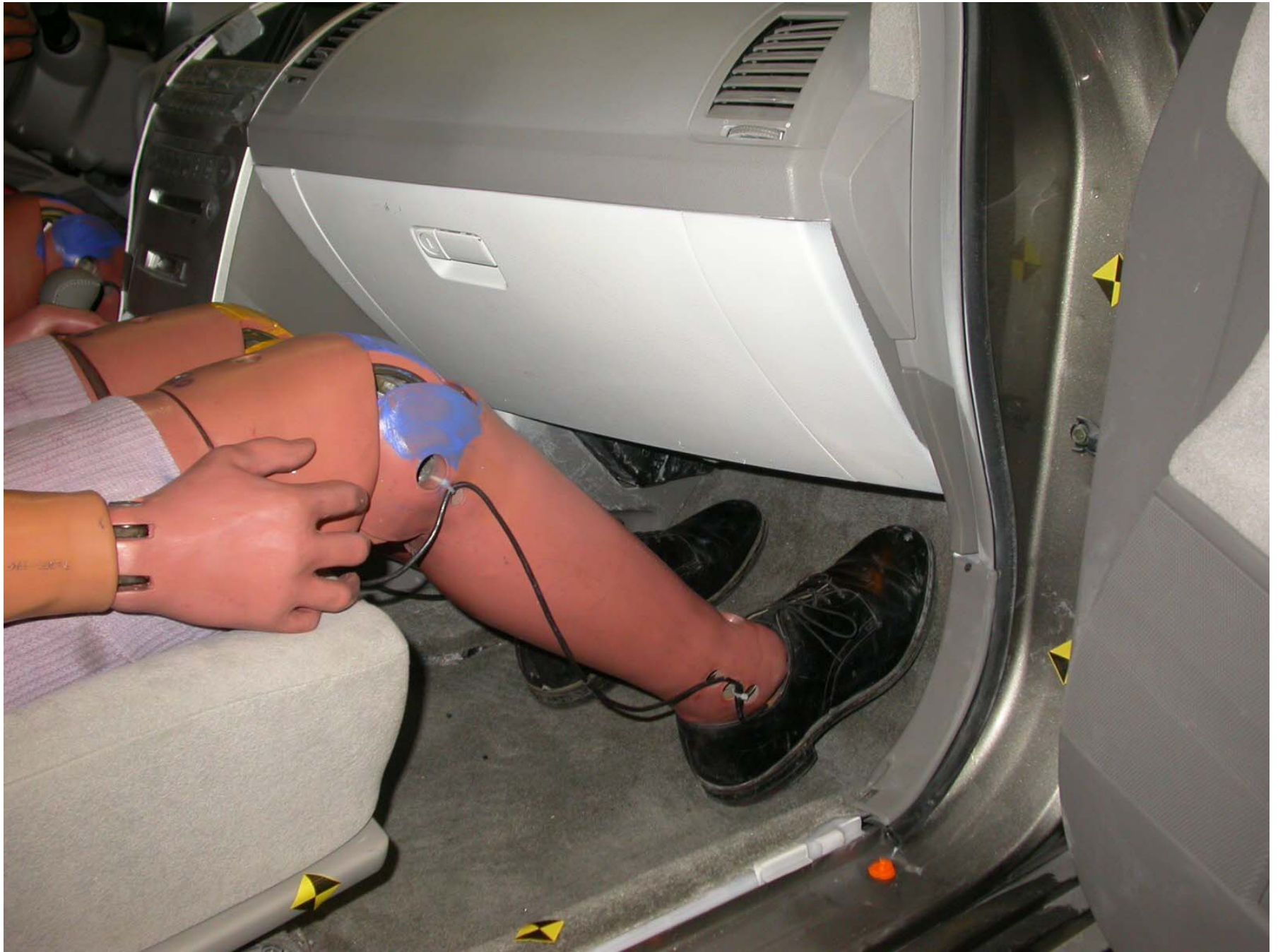


Figure A-50: Pre-Test Passenger Dummy Feet



Figure A-51: Post-Test Passenger Dummy Feet



Figure A-52: Pre-Test Passenger Side Glove Box



Figure A-53: Post-Test Passenger Side Glove Box



Figure A-54: Pre-Test Passenger Side Floor Pan



Figure A-55: Post-Test Passenger Side Floor Pan



Figure A-56: Post-Test Passenger Dummy Head



Figure A-57: Post-Test Passenger Dummy Airbag Contact



A-58

TR-P25001-09-NC

Figure A-58: Vehicle on Rollover Device (0°)



Figure A-59: Vehicle on Rollover Device (90°)



Figure A-60: Vehicle on Rollover Device (180°)

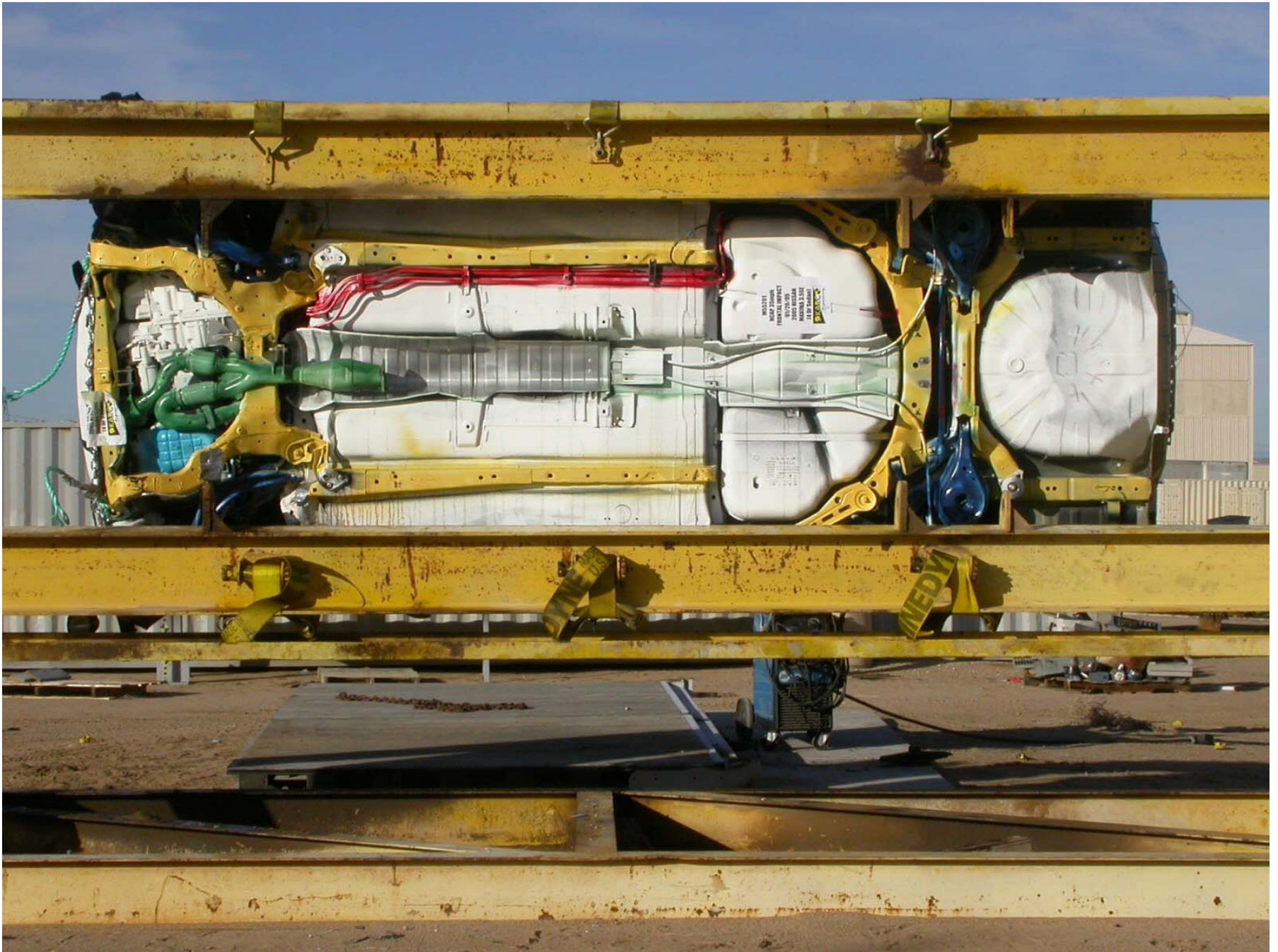


Figure A-61: Vehicle on Rollover Device (270°)



Figure A-62: Vehicle Impact

APPENDIX B

DATA PLOTS

LIST OF DATA PLOTS

Data Plot	Page	
B-1	Driver Head Primary X	B-1
	Driver Head Primary Y	B-1
	Driver Head Primary Z	B-1
	Driver Head Resultant Primary	B-1
B-2	Driver Head Primary X Velocity	B-2
	Driver Head Primary X Displacement	B-2
B-3	Driver Head Redundant X	B-3
	Driver Head Redundant Y	B-3
	Driver Head Redundant Z	B-3
	Driver Head Resultant Redundant	B-3
B-4	Driver Head Redundant X Velocity	B-4
	Driver Head Redundant X Displacement	B-4
B-5	Driver Upper Neck Force X	B-5
	Driver Upper Neck Force Y	B-5
	Driver Upper Neck Force Z	B-5
	Driver Upper Neck Force Resultant	B-5
B-6	Driver Upper Neck Moment X	B-6
	Driver Upper Neck Moment Y	B-6
	Driver Upper Neck Moment Z	B-6
	Driver Upper Neck Moment Resultant	B-6
B-7	Driver Chest Primary X	B-7
	Driver Chest Primary Y	B-7
	Driver Chest Primary Z	B-7
	Driver Chest Resultant Primary	B-7
B-8	Driver Chest Primary X Velocity	B-8
	Driver Chest Primary X Displacement	B-8
B-9	Driver Chest Redundant X	B-9
	Driver Chest Redundant Y	B-9
	Driver Chest Redundant Z	B-9
	Driver Chest Resultant Redundant	B-9
B-10	Driver Chest Redundant X Velocity	B-10
	Driver Chest Redundant X Displacement	B-10
B-11	Driver Chest Deflection	B-11

LIST OF DATA PLOTS...(CONTINUED)

Data Plot	Page	
B-12	Driver Pelvis X	B-12
	Driver Pelvis Y	B-12
	Driver Pelvis Z	B-12
	Driver Pelvis Resultant	B-12
B-13	Driver Pelvis X Velocity	B-13
	Driver Pelvis X Displacement	B-13
B-14	Driver Left Femur Force	B-14
	Driver Right Femur Force	B-14
B-15	Driver Left Upper Tibia Moment X	B-15
	Driver Left Upper Tibia Moment Y	B-15
	Driver Right Upper Tibia Moment X	B-15
	Driver Right Upper Tibia Moment Y	B-15
B-16	Driver Left Lower Tibia Moment X	B-16
	Driver Left Lower Tibia Moment Y	B-16
	Driver Left Lower Tibia Force Z	B-16
B-17	Driver Right Lower Tibia Moment X	B-17
	Driver Right Lower Tibia Moment Y	B-17
	Driver Right Lower Tibia Force Z	B-17
B-18	Driver Left Foot Aft X	B-18
	Driver Left Foot Aft Z	B-18
	Driver Left Foot Fore Z	B-18
B-19	Driver Right Foot Aft X	B-19
	Driver Right Foot Aft Z	B-19
	Driver Right Foot Fore Z	B-19
B-20	Driver Lap Belt Force	B-20
	Driver Shoulder Belt Force	B-20
	Driver Shoulder Belt Pullout	B-20
	Driver Shoulder Belt Elongation	B-20
B-21	Passenger Head Primary X	B-21
	Passenger Head Primary Y	B-21
	Passenger Head Primary Z	B-21
	Passenger Head Resultant Primary	B-21
B-22	Passenger Head Primary X Velocity	B-22
	Passenger Head Primary X Displacement	B-22

LIST OF DATA PLOTS...(CONTINUED)

<u>Data Plot</u>		<u>Page</u>
B-23	Passenger Head Redundant X	B-23
	Passenger Head Redundant Y	B-23
	Passenger Head Redundant Z	B-23
	Passenger Head Resultant Redundant	B-23
B-24	Passenger Head Redundant X Velocity	B-24
	Passenger Head Redundant X Displacement	B-24
B-25	Passenger Upper Neck Force X	B-25
	Passenger Upper Neck Force Y	B-25
	Passenger Upper Neck Force Z	B-25
	Passenger Upper Neck Force Resultant	B-25
B-26	Passenger Upper Neck Moment X	B-26
	Passenger Upper Neck Moment Y	B-26
	Passenger Upper Neck Moment Z	B-26
	Passenger Upper Neck Moment Resultant	B-26
B-27	Passenger Chest Primary X	B-27
	Passenger Chest Primary Y	B-27
	Passenger Chest Primary Z	B-27
	Passenger Chest Resultant Primary	B-27
B-28	Passenger Chest Primary X Velocity	B-28
	Passenger Chest Primary X Displacement	B-28
B-29	Passenger Chest Redundant X	B-29
	Passenger Chest Redundant Y	B-29
	Passenger Chest Redundant Z	B-29
	Passenger Chest Resultant Redundant	B-29
B-30	Passenger Chest Redundant X Velocity	B-30
	Passenger Chest Redundant X Displacement	B-30
B-31	Passenger Chest Deflection	B-31
B-32	Passenger Pelvis X	B-32
	Passenger Pelvis Y	B-32
	Passenger Pelvis Z	B-32
	Passenger Pelvis Resultant	B-32
B-33	Passenger Pelvis X Velocity	B-33
	Passenger Pelvis X Displacement	B-33

LIST OF DATA PLOTS...(CONTINUED)

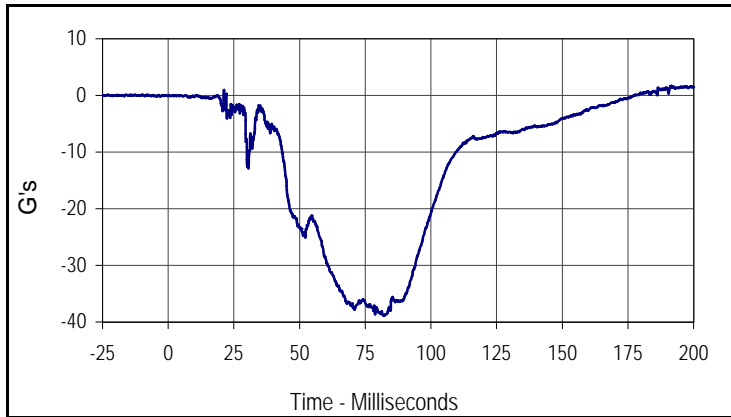
Data Plot	Page	
B-34	Passenger Left Femur Force	B-34
	Passenger Right Femur Force	B-34
B-35	Passenger Left Upper Tibia Moment X	B-35
	Passenger Left Upper Tibia Moment Y	B-35
	Passenger Right Upper Tibia Moment X	B-35
	Passenger Right Upper Tibia Moment Y	B-35
B-36	Passenger Left Lower Tibia Moment X	B-36
	Passenger Left Lower Tibia Moment Y	B-36
	Passenger Left Lower Tibia Force Z	B-36
B-37	Passenger Right Lower Tibia Moment X	B-37
	Passenger Right Lower Tibia Moment Y	B-37
	Passenger Right Lower Tibia Force Z	B-37
B-38	Passenger Left Foot Aft X	B-38
	Passenger Left Foot Aft Z	B-38
	Passenger Left Foot Fore Z	B-38
B-39	Passenger Right Foot Aft X	B-39
	Passenger Right Foot Aft Z	B-39
	Passenger Right Foot Fore Z	B-39
B-40	Passenger Lap Belt Force	B-40
	Passenger Shoulder Belt Force	B-40
	Passenger Shoulder Belt Pullout	B-40
	Passenger Shoulder Belt Elongation	B-40
B-41	Vehicle Left Rear X	B-41
	Vehicle Left Rear X Velocity	B-41
	Vehicle Left Rear X Displacement	B-41
B-42	Vehicle Right Rear X	B-42
	Vehicle Right Rear X Velocity	B-42
	Vehicle Right Rear X Displacement	B-42
B-43	Vehicle Engine Top X	B-43
	Vehicle Engine Top X Velocity	B-43
	Vehicle Engine Top X Displacement	B-43
B-44	Vehicle Engine Bottom X	B-44
	Vehicle Engine Bottom X Velocity	B-44
	Vehicle Engine Bottom X Displacement	B-44

LIST OF DATA PLOTS...(CONTINUED)

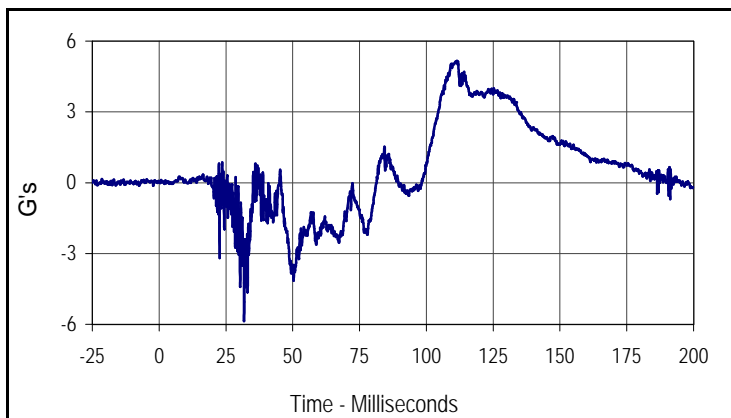
Data Plot	Page	
B-45	Vehicle Left Brake Caliper X	B-45
	Vehicle Left Brake Caliper X Velocity	B-45
	Vehicle Left Brake Caliper X Displacement	B-45
B-46	Vehicle Right Brake Caliper X	B-46
	Vehicle Right Brake Caliper X Velocity	B-46
	Vehicle Right Brake Caliper X Displacement	B-46
B-47	Vehicle Instrument Panel X	B-47
	Vehicle Instrument Panel X Velocity	B-47
	Vehicle Instrument Panel X Displacement	B-47
B-48	Vehicle Left Rear Z	B-48
	Vehicle Left Rear Z Velocity	B-48
	Vehicle Left Rear Z Displacement	B-48
B-49	Vehicle Right Rear Z	B-49
	Vehicle Right Rear Z Velocity	B-49
	Vehicle Right Rear Z Displacement	B-49

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

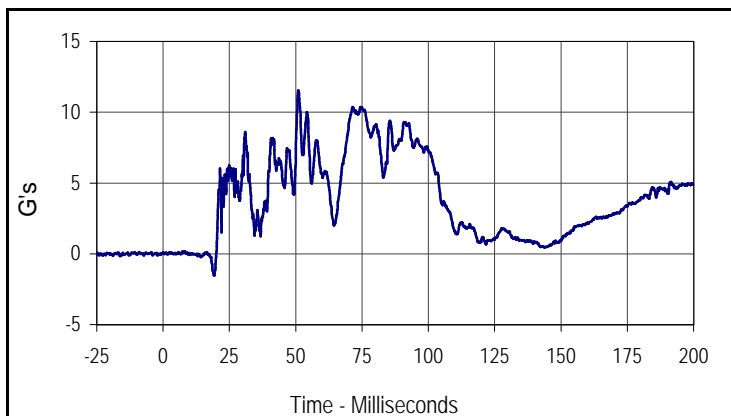
Test Date: 1/20/05
 NHTSA No.: M55201



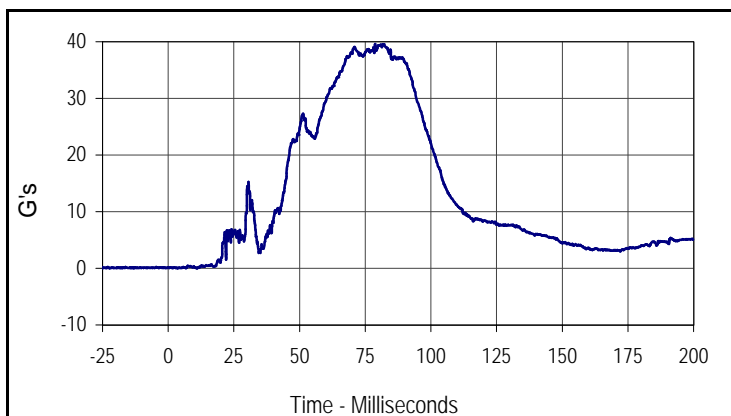
Curve Description			
Driver Head Primary X			
CURNO	Type	SAE Class	Units
001	FIL	1000	G's
Max	Time	Min	Time
1.7	191.6	-38.9	81.9



Curve Description			
Driver Head Primary Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
5.2	111.4	-5.8	31.8



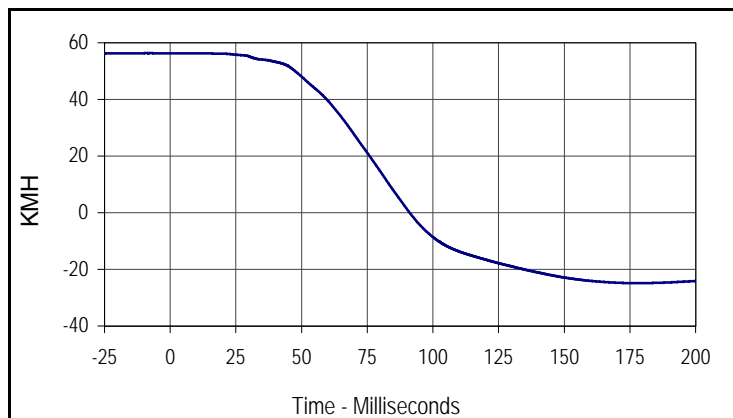
Curve Description			
Driver Head Primary Z			
CURNO	Type	SAE Class	Units
003	FIL	1000	G's
Max	Time	Min	Time
11.5	51.0	-1.5	19.1



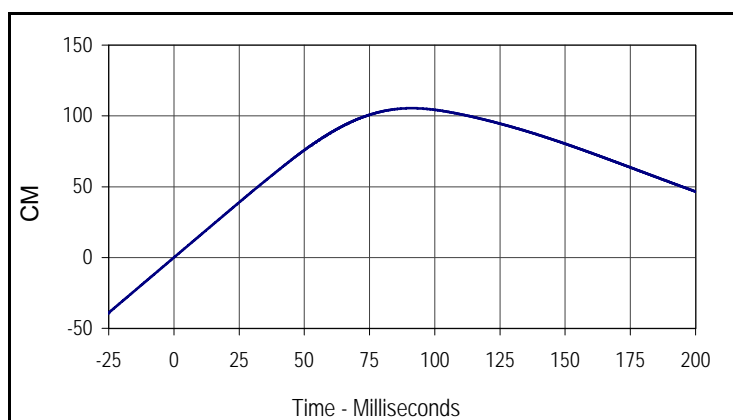
Curve Description			
Driver Head Resultant Primary			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
39.6	78.8	0.0	3.5

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



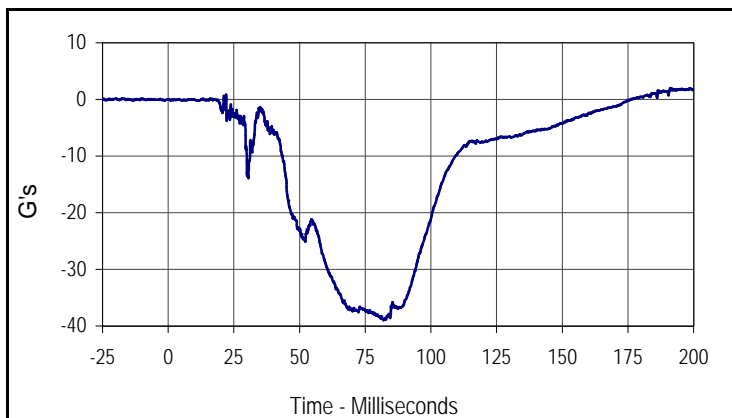
Curve Description			
Driver Head Primary X Velocity			
CURNO	Type	SAE Class	Units
001	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-24.9	177.4



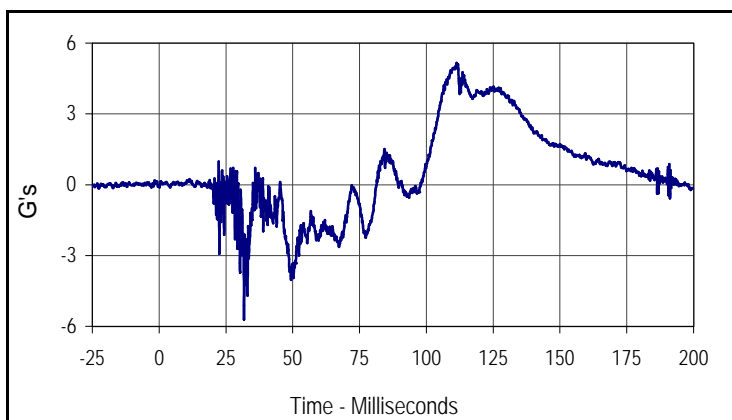
Curve Description			
Driver Head Primary X Displacement			
CURNO	Type	SAE Class	Units
001	IN2	180	CM
Max	Time	Min	Time
105.4	91.1	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

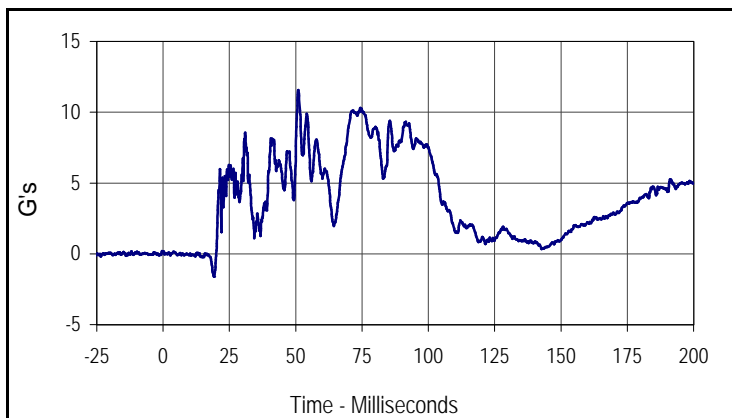
Test Date: 1/20/05
 NHTSA No.: M55201



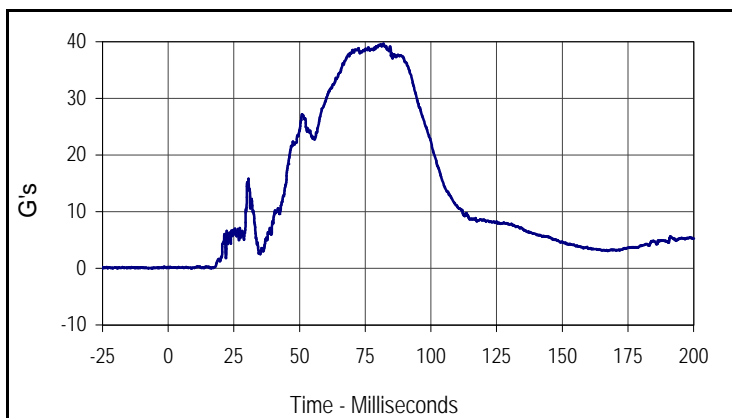
Curve Description			
Driver Head Redundant X			
CURNO	Type	SAE Class	Units
004	FIL	1000	G's
Max	Time	Min	Time
2.0	191.1	-39.0	81.9



Curve Description			
Driver Head Redundant Y			
CURNO	Type	SAE Class	Units
005	FIL	1000	G's
Max	Time	Min	Time
5.2	111.4	-5.7	31.8



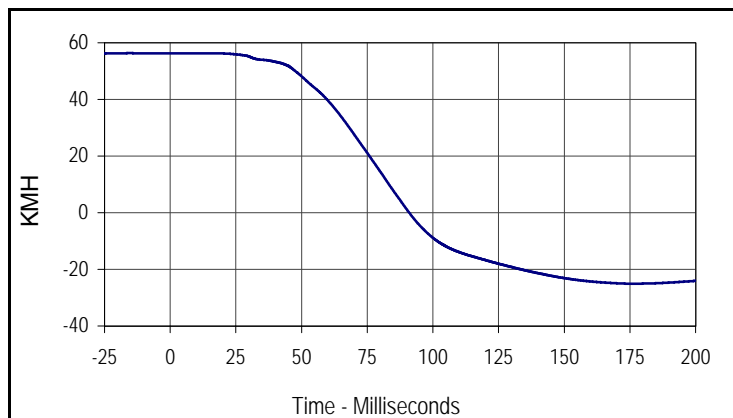
Curve Description			
Driver Head Redundant Z			
CURNO	Type	SAE Class	Units
006	FIL	1000	G's
Max	Time	Min	Time
11.6	51.0	-1.6	19.2



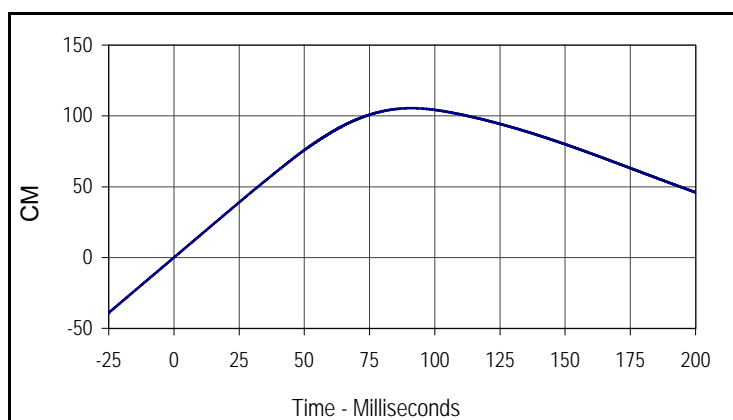
Curve Description			
Driver Head Resultant Redundant			
CURNO	Type	SAE Class	Units
004	RES	1000	G's
Max	Time	Min	Time
39.6	81.9	0.0	9.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



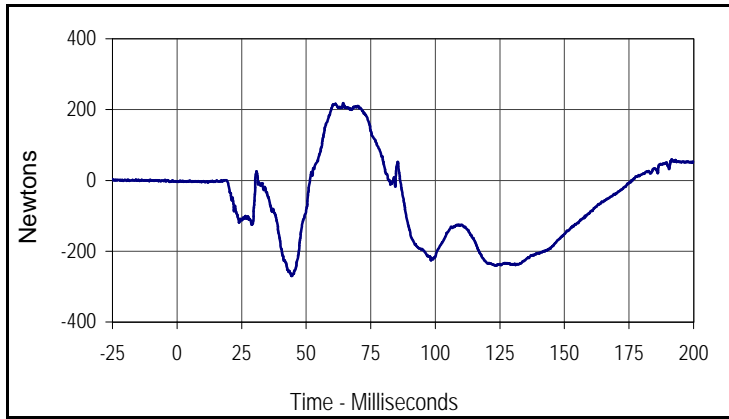
Curve Description			
Driver Head Redundant X Velocity			
CURNO	Type	SAE Class	Units
004	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-25.1	176.0



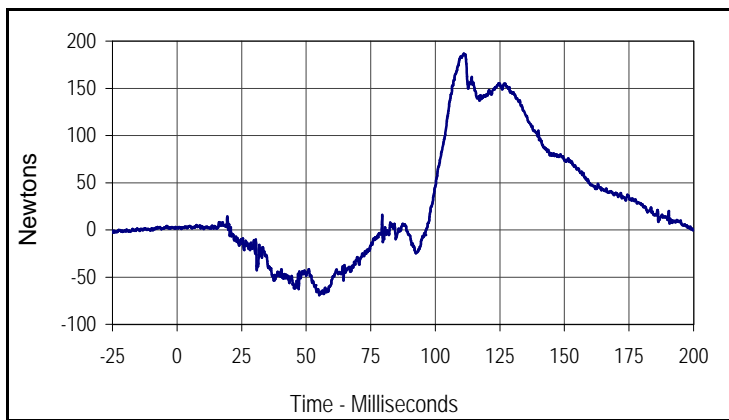
Curve Description			
Driver Head Redundant X Displacement			
CURNO	Type	SAE Class	Units
004	IN2	180	CM
Max	Time	Min	Time
105.5	91.0	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

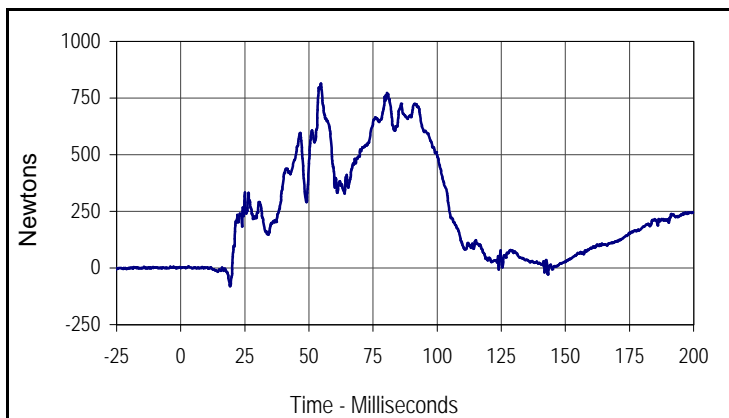
Test Date: 1/20/05
 NHTSA No.: M55201



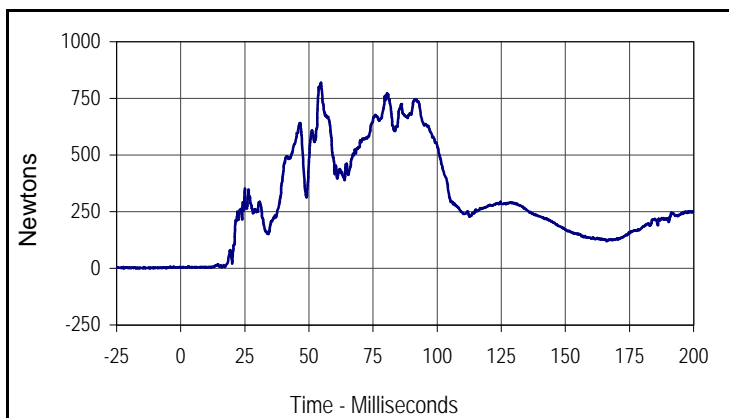
Curve Description			
Driver Upper Neck Force X			
CURNO	Type	SAE Class	Units
007	FIL	1000	Newtons
Max	Time	Min	Time
218.0	64.3	-269.7	44.3



Curve Description			
Driver Upper Neck Force Y			
CURNO	Type	SAE Class	Units
008	FIL	1000	Newtons
Max	Time	Min	Time
186.8	111.1	-69.2	55.1



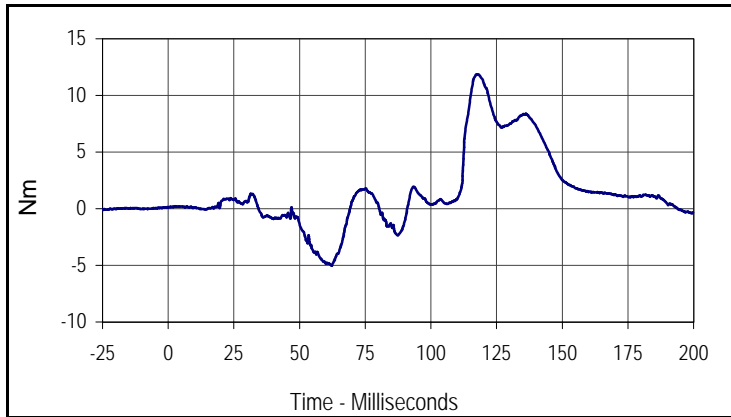
Curve Description			
Driver Upper Neck Force Z			
CURNO	Type	SAE Class	Units
009	FIL	1000	Newtons
Max	Time	Min	Time
813.8	54.7	-80.4	19.3



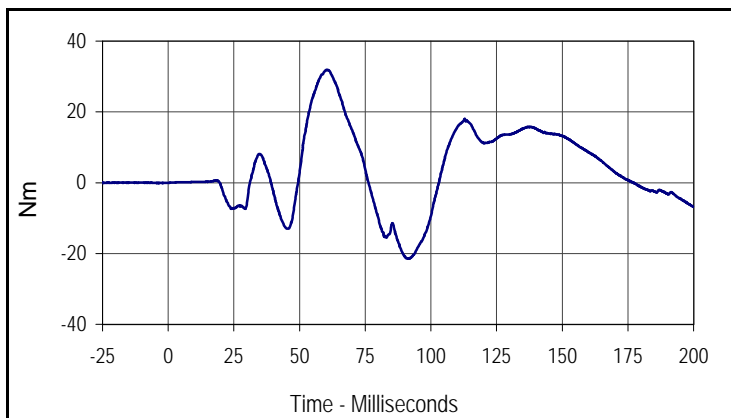
Curve Description			
Driver Upper Neck Force Res.			
CURNO	Type	SAE Class	Units
007	RES	1000	Newtons
Max	Time	Min	Time
818.6	54.7	3.0	5.9

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

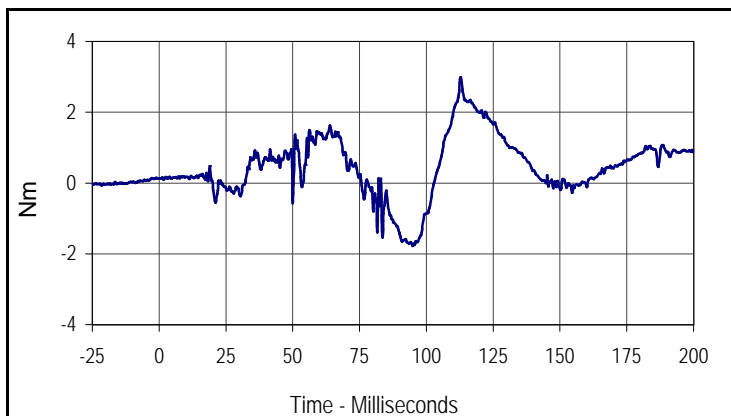
Test Date: 1/20/05
 NHTSA No.: M55201



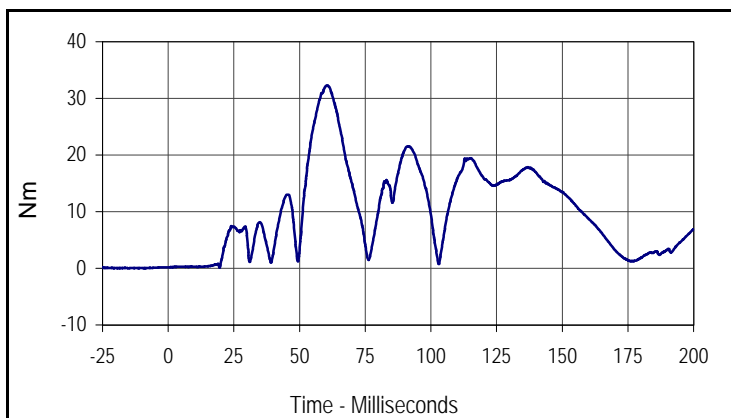
Curve Description			
Driver Upper Neck Moment X			
CURNO	Type	SAE Class	Units
010	FIL	600	Nm
Max	Time	Min	Time
11.9	117.9	-5.0	62.2



Curve Description			
Driver Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
011	FIL	600	Nm
Max	Time	Min	Time
31.9	60.5	-21.5	91.4



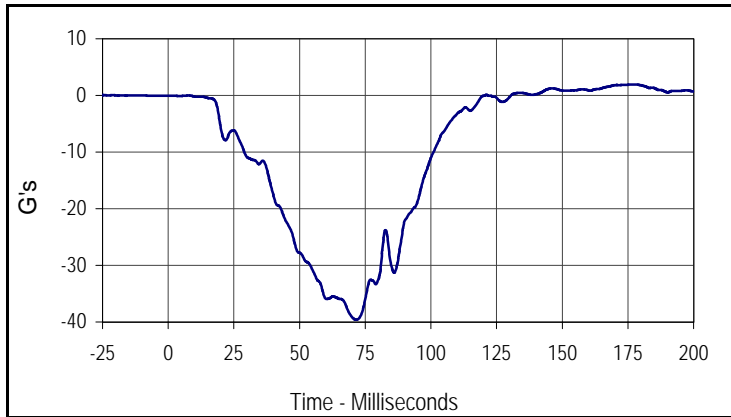
Curve Description			
Driver Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
012	FIL	600	Nm
Max	Time	Min	Time
3.0	112.8	-1.8	94.9



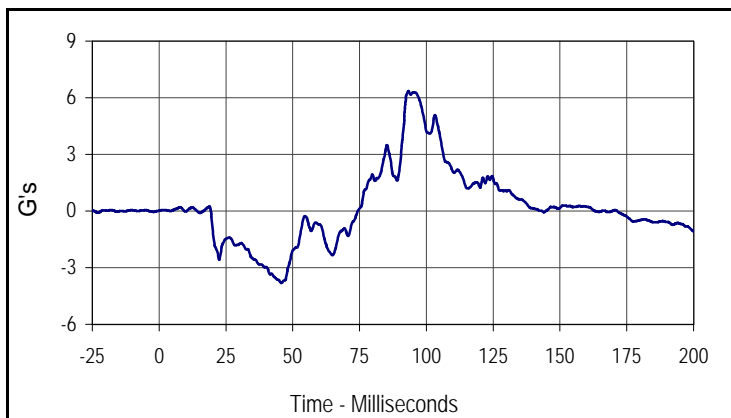
Curve Description			
Driver Upper Neck Moment Res.			
CURNO	Type	SAE Class	Units
010	RES	600	Nm
Max	Time	Min	Time
32.3	60.6	0.1	19.6

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

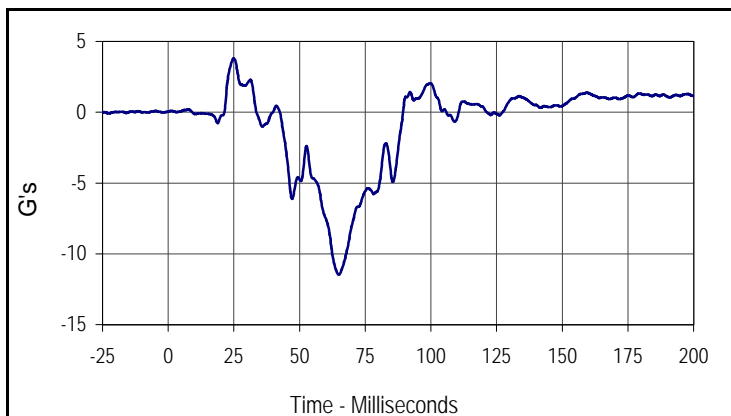
Test Date: 1/20/05
 NHTSA No.: M55201



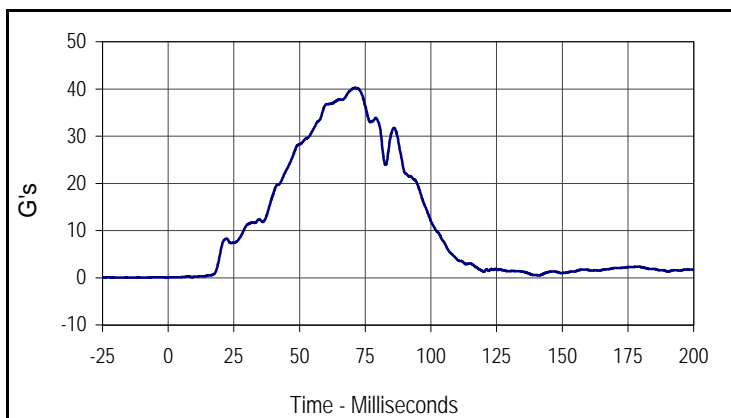
Curve Description			
Driver Chest Primary X			
CURNO	Type	SAE Class	Units
013	FIL	180	G's
Max	Time	Min	Time
1.9	178.0	-39.6	71.5



Curve Description			
Driver Chest Primary Y			
CURNO	Type	SAE Class	Units
014	FIL	180	G's
Max	Time	Min	Time
6.3	93.3	-3.8	45.6



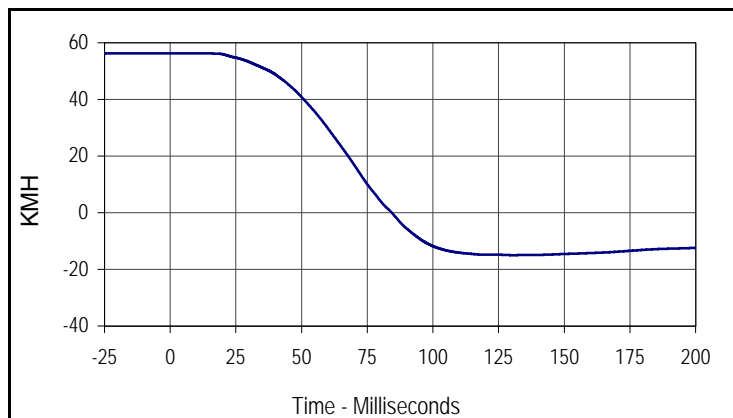
Curve Description			
Driver Chest Primary Z			
CURNO	Type	SAE Class	Units
015	FIL	180	G's
Max	Time	Min	Time
3.8	24.9	-11.5	64.9



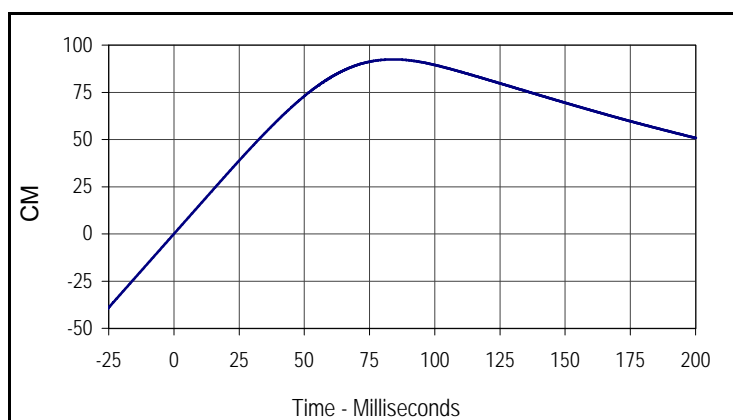
Curve Description			
Driver Chest Resultant Primary			
CURNO	Type	SAE Class	Units
013	RES	180	G's
Max	Time	Min	Time
40.2	71.1	0.1	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



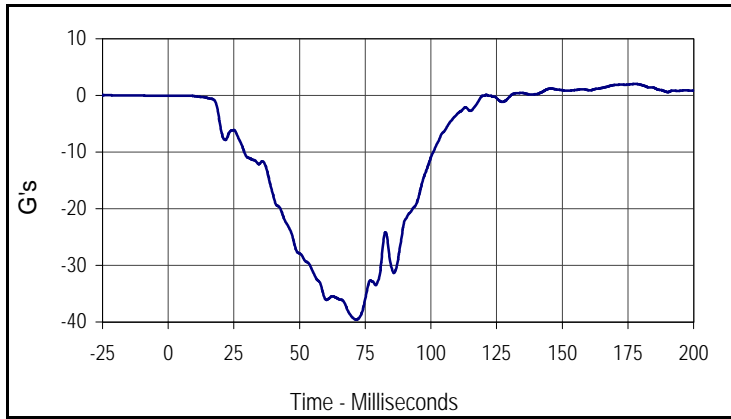
Curve Description			
Driver Chest Primary X Velocity			
CURNO	Type	SAE Class	Units
013	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-15.0	130.5



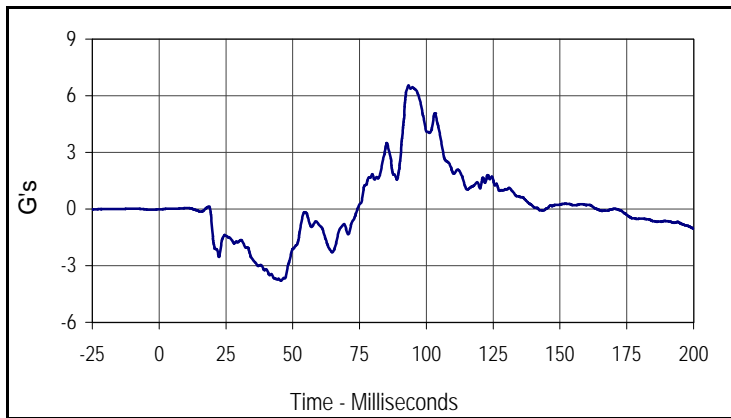
Curve Description			
Driver Chest Primary X Displacement			
CURNO	Type	SAE Class	Units
013	IN2	180	CM
Max	Time	Min	Time
92.4	84.4	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

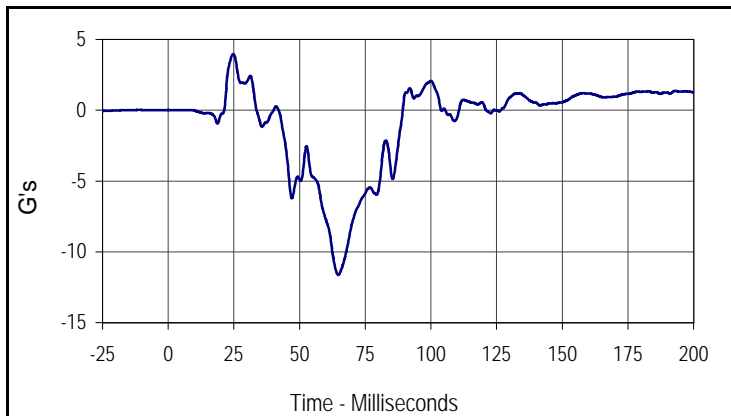
Test Date: 1/20/05
 NHTSA No.: M55201



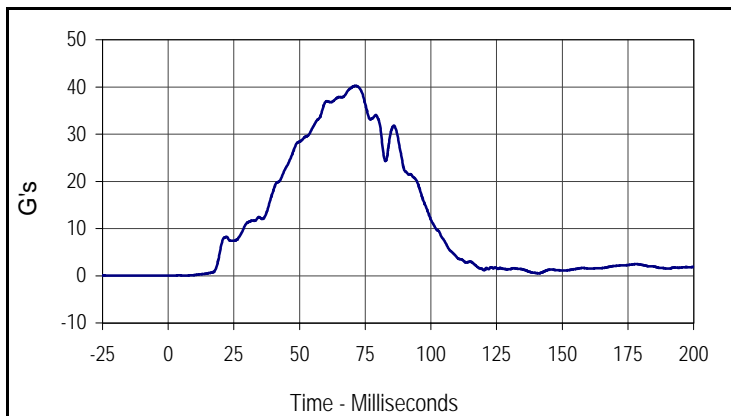
Curve Description			
Driver Chest Redundant X			
CURNO	Type	SAE Class	Units
016	FIL	180	G's
Max	Time	Min	Time
2.0	177.9	-39.6	71.5



Curve Description			
Driver Chest Redundant Y			
CURNO	Type	SAE Class	Units
017	FIL	180	G's
Max	Time	Min	Time
6.5	93.3	-3.8	45.5



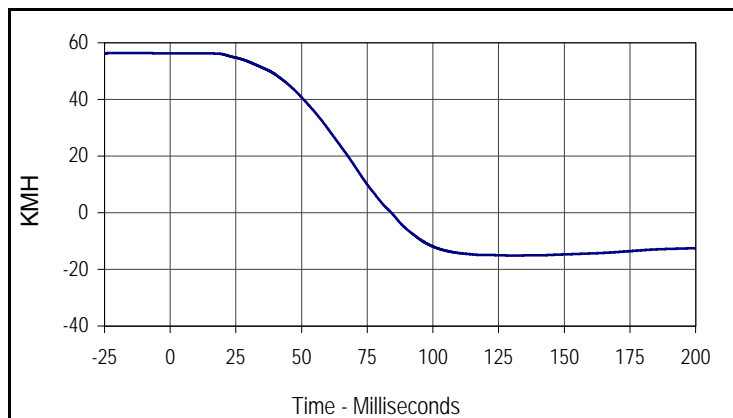
Curve Description			
Driver Chest Redundant Z			
CURNO	Type	SAE Class	Units
018	FIL	180	G's
Max	Time	Min	Time
4.0	24.7	-11.6	64.8



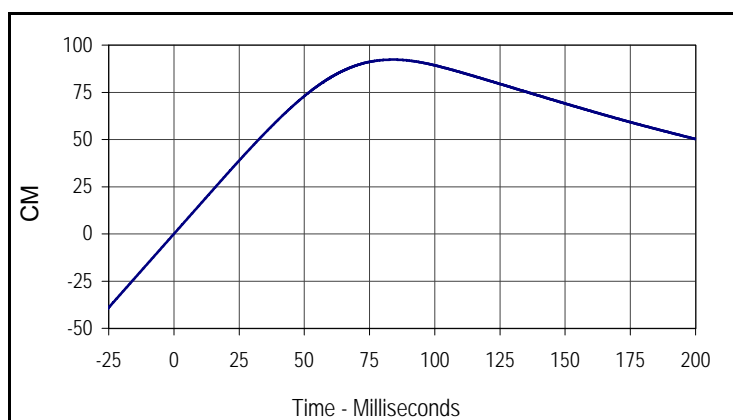
Curve Description			
Driver Chest Resultant Redundant			
CURNO	Type	SAE Class	Units
016	RES	180	G's
Max	Time	Min	Time
40.2	71.3	0.0	0.6

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



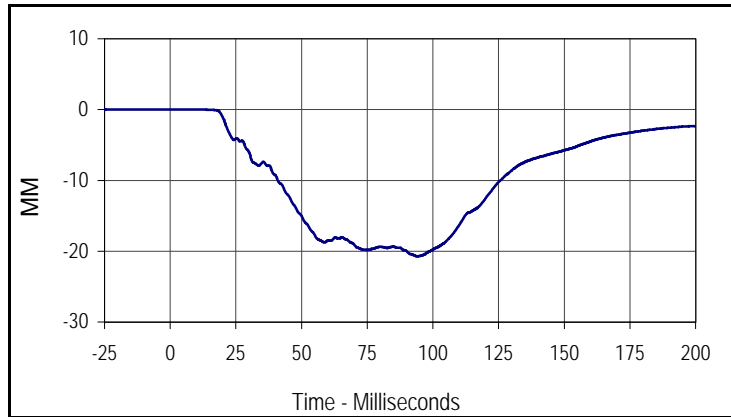
Curve Description			
Driver Chest Redundant X Velocity			
CURNO	Type	SAE Class	Units
016	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-15.1	130.4



Curve Description			
Driver Chest Redundant X Displacement			
CURNO	Type	SAE Class	Units
016	IN2	180	CM
Max	Time	Min	Time
92.3	84.2	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

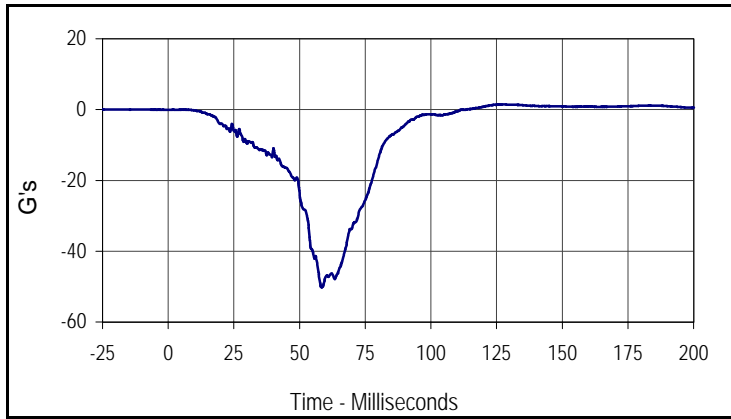
Test Date: 1/20/05
 NHTSA No.: M55201



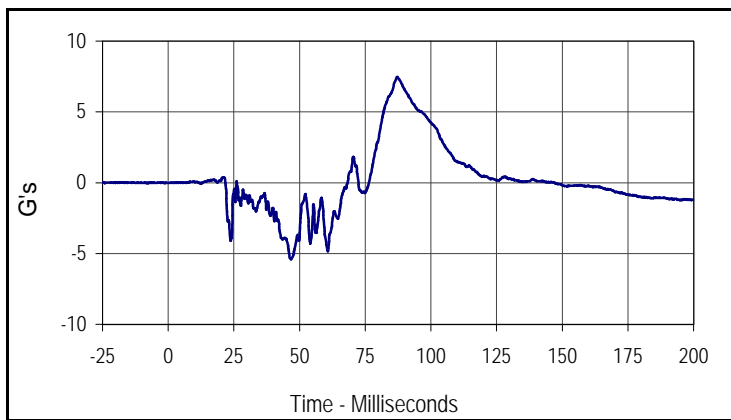
Curve Description			
Driver Chest Deflection			
CURNO	Type	SAE Class	Units
019	FIL	600	MM
Max	Time	Min	Time
0.0	6.2	-20.7	94.1

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

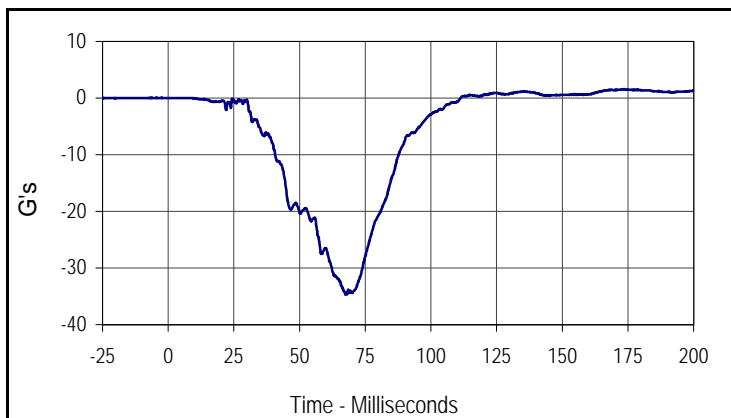
Test Date: 1/20/05
 NHTSA No.: M55201



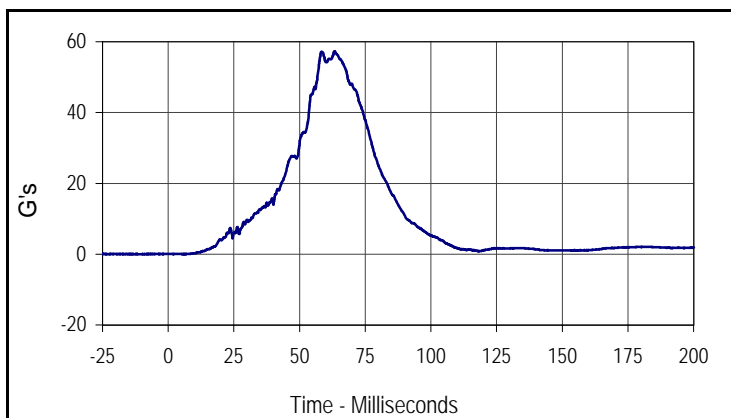
Curve Description			
Driver Pelvis X			
CURNO	Type	SAE Class	Units
020	FIL	1000	G's
Max	Time	Min	Time
1.5	126.1	-50.2	58.4



Curve Description			
Driver Pelvis Y			
CURNO	Type	SAE Class	Units
021	FIL	1000	G's
Max	Time	Min	Time
7.5	87.2	-5.4	46.8



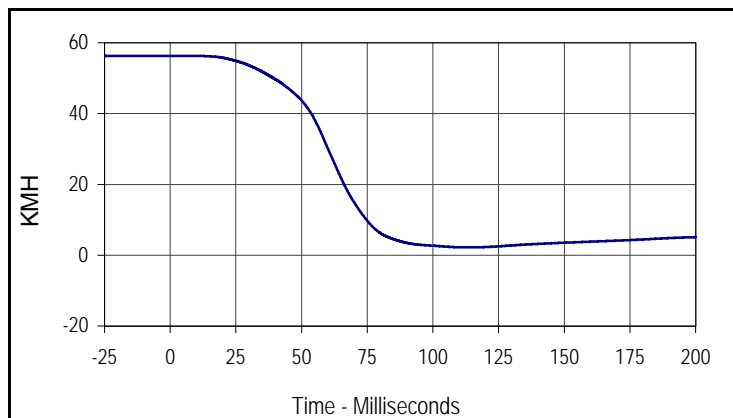
Curve Description			
Driver Pelvis Z			
CURNO	Type	SAE Class	Units
022	FIL	1000	G's
Max	Time	Min	Time
1.6	173.5	-34.7	67.5



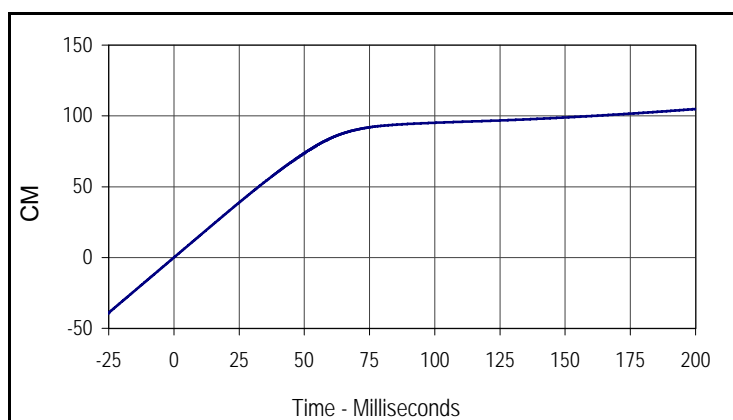
Curve Description			
Driver Pelvis Resultant			
CURNO	Type	SAE Class	Units
020	RES	1000	G's
Max	Time	Min	Time
57.3	63.4	0.0	5.5

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



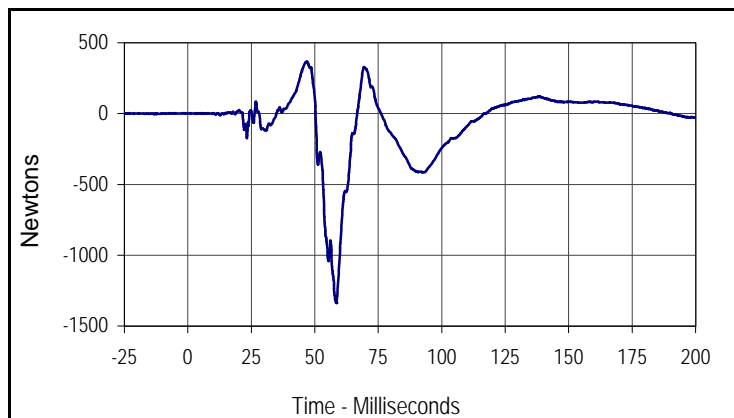
Curve Description			
Driver Pelvis X Velocity			
CURNO	Type	SAE Class	Units
020	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	2.2	113.5



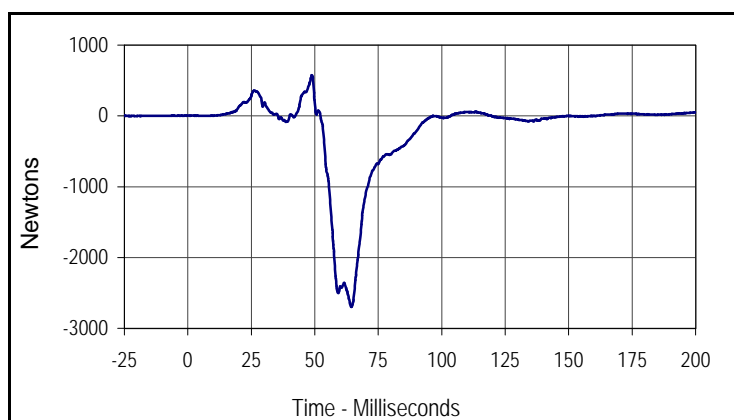
Curve Description			
Driver Pelvis X Displacement			
CURNO	Type	SAE Class	Units
020	IN2	180	CM
Max	Time	Min	Time
104.9	200.0	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



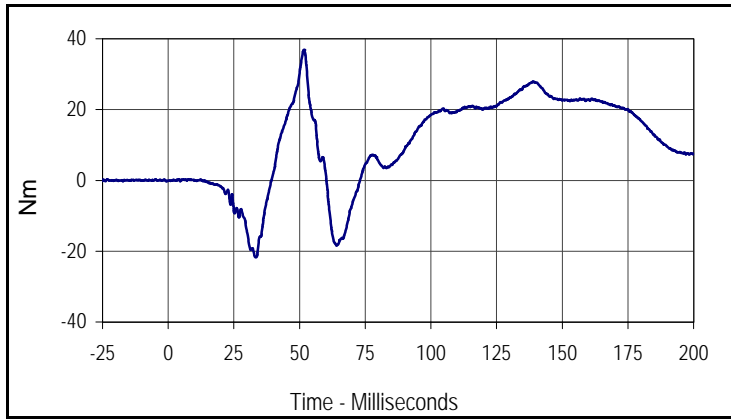
Curve Description			
Driver Left Femur Force			
CURNO	Type	SAE Class	Units
023	FIL	600	Newtons
Max	Time	Min	Time
368.8	46.9	-1338.0	58.4



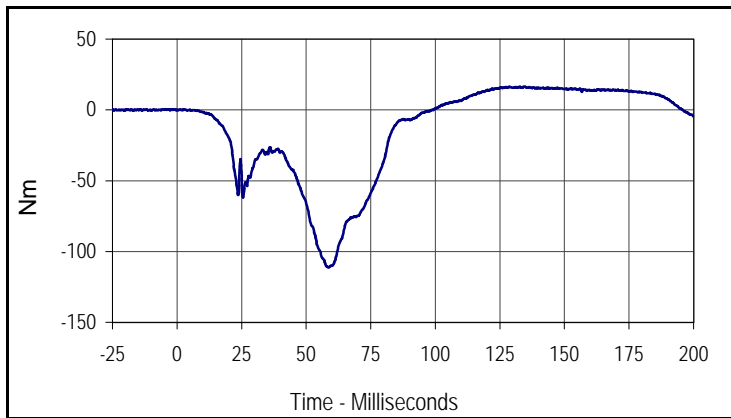
Curve Description			
Driver Right Femur Force			
CURNO	Type	SAE Class	Units
024	FIL	600	Newtons
Max	Time	Min	Time
576.8	48.9	-2699.1	64.3

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

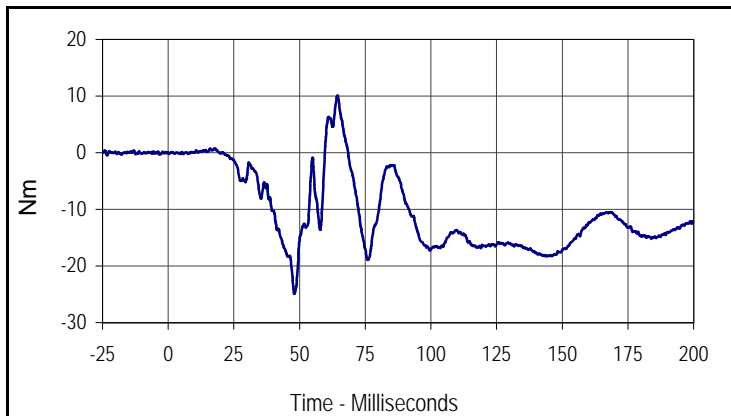
Test Date: 1/20/05
 NHTSA No.: M55201



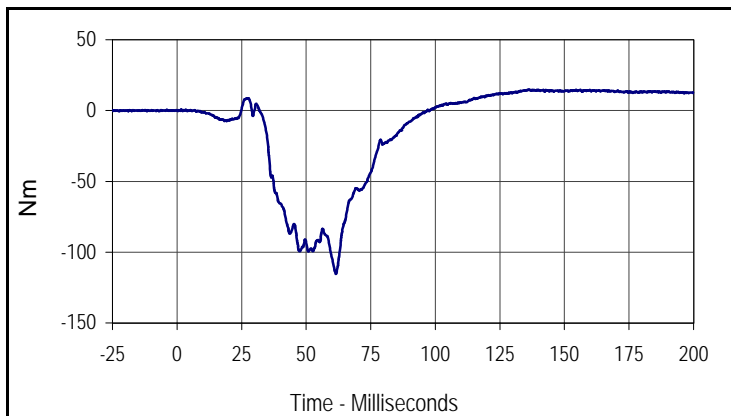
Curve Description			
Driver Left Upper Tibia Moment X			
CURNO	Type	SAE Class	Units
025	FIL	600	Nm
Max	Time	Min	Time
36.9	51.7	-21.7	33.4



Curve Description			
Driver Left Upper Tibia Moment Y			
CURNO	Type	SAE Class	Units
026	FIL	600	Nm
Max	Time	Min	Time
16.4	134.7	-111.4	58.6



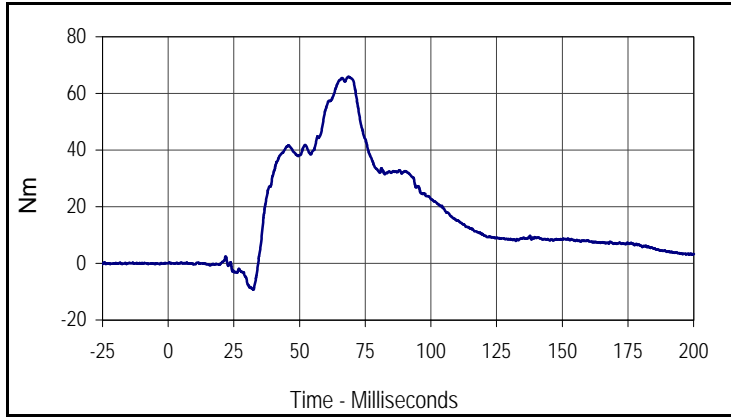
Curve Description			
Driver Right Upper Tibia Moment X			
CURNO	Type	SAE Class	Units
027	FIL	600	Nm
Max	Time	Min	Time
10.1	64.4	-24.9	48.0



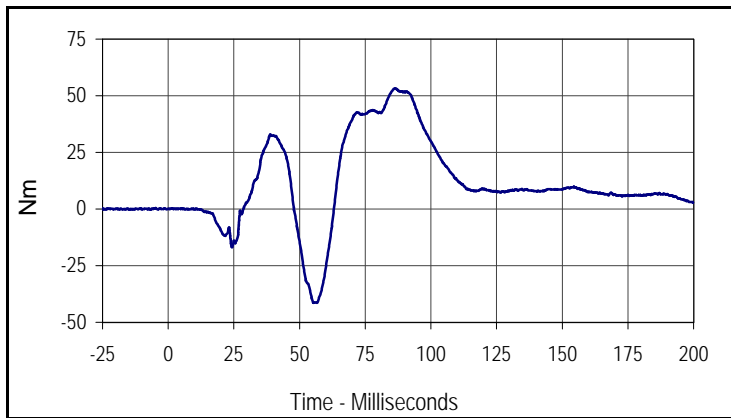
Curve Description			
Driver Right Upper Tibia Moment Y			
CURNO	Type	SAE Class	Units
028	FIL	600	Nm
Max	Time	Min	Time
14.7	136.2	-115.3	61.5

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

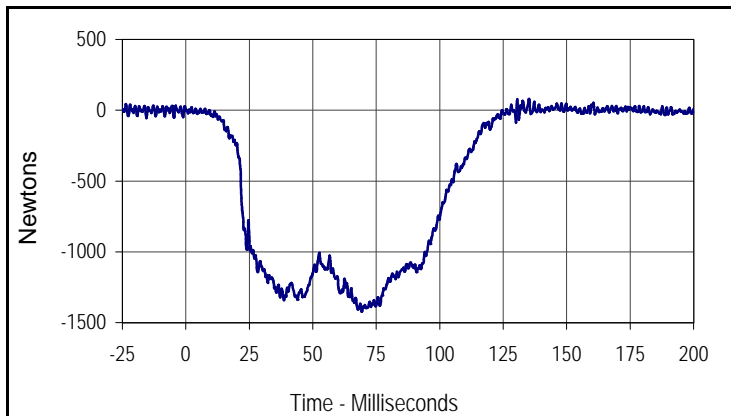
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Driver Left Lower Tibia Moment X			
CURNO	Type	SAE Class	Units
029	FIL	600	Nm
Max	Time	Min	Time
65.9	68.5	-9.2	32.4



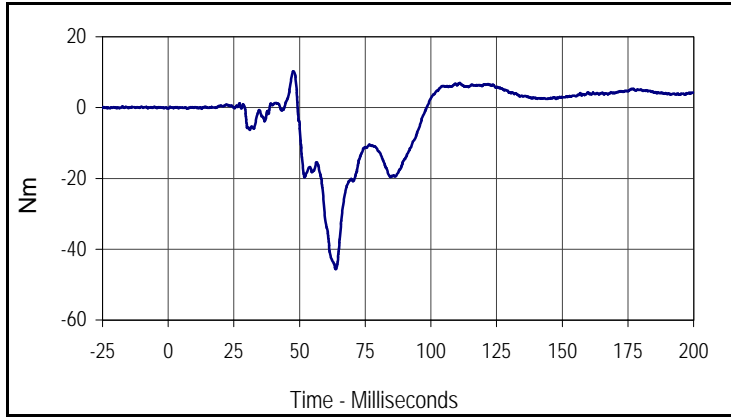
Curve Description			
Driver Left Lower Tibia Moment Y			
CURNO	Type	SAE Class	Units
030	FIL	600	Nm
Max	Time	Min	Time
53.3	86.6	-41.4	55.3



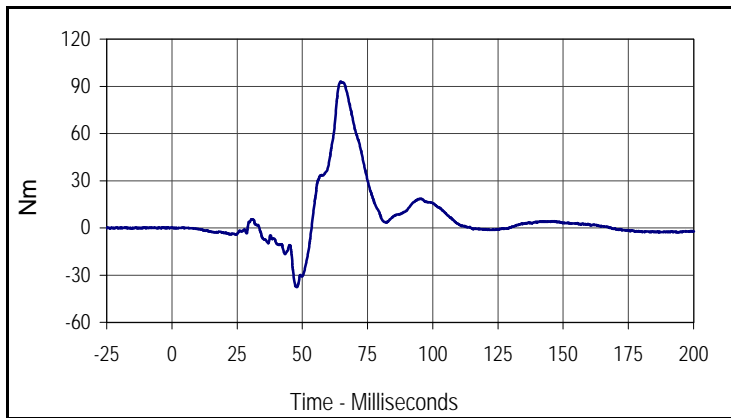
Curve Description			
Driver Left Lower Tibia Force Z			
CURNO	Type	SAE Class	Units
031	FIL	600	Newtons
Max	Time	Min	Time
80.4	135.2	-1422.9	69.3

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

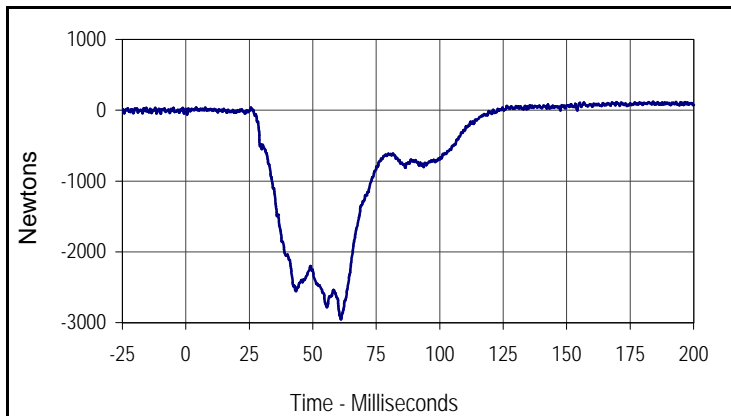
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Driver Right Lower Tibia Moment X			
CURNO	Type	SAE Class	Units
032	FIL	600	Nm
Max	Time	Min	Time
10.2	47.6	-45.6	63.8



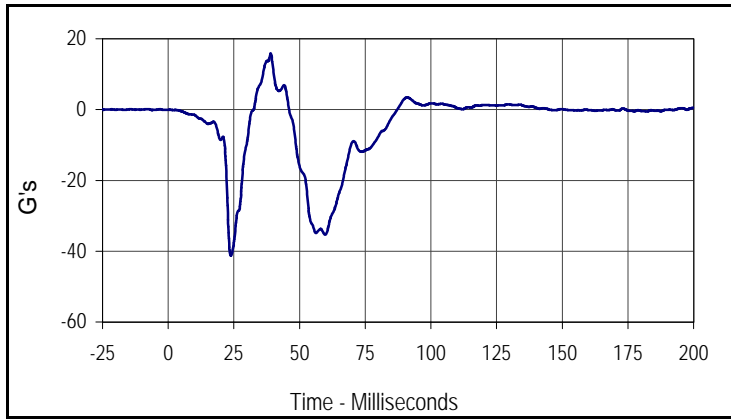
Curve Description			
Driver Right Lower Tibia Moment Y			
CURNO	Type	SAE Class	Units
033	FIL	600	Nm
Max	Time	Min	Time
92.9	64.7	-37.7	47.9



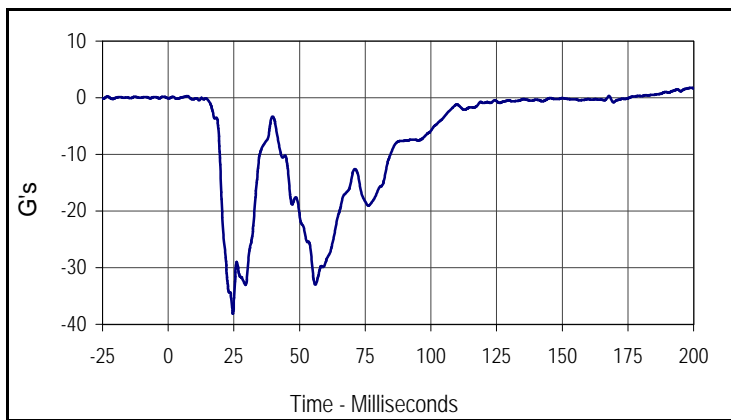
Curve Description			
Driver Right Lower Tibia Force Z			
CURNO	Type	SAE Class	Units
034	FIL	600	Newtons
Max	Time	Min	Time
118.0	193.1	-2952.8	61.1

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

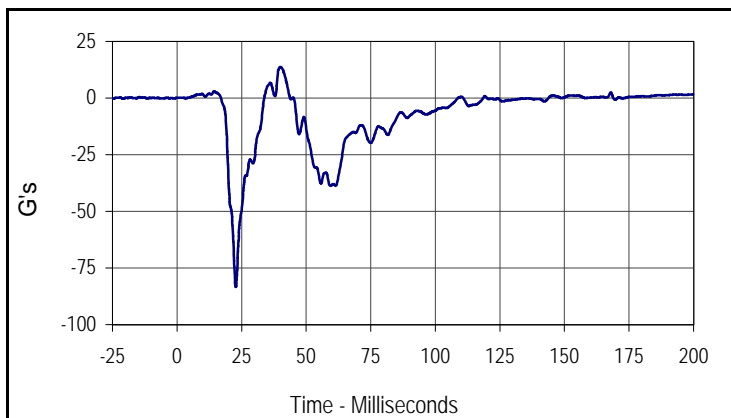
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Driver Left Foot Aft X			
CURNO	Type	SAE Class	Units
035	FIL	180	G's
Max	Time	Min	Time
15.8	39.0	-41.3	23.9



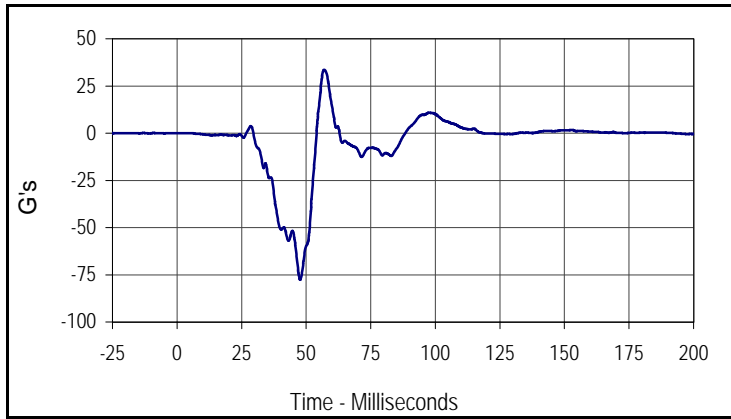
Curve Description			
Driver Left Foot Aft Z			
CURNO	Type	SAE Class	Units
036	FIL	180	G's
Max	Time	Min	Time
1.8	199.1	-38.2	24.6



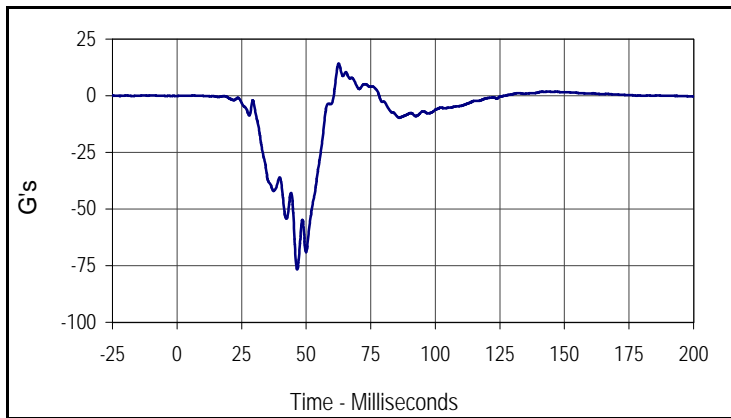
Curve Description			
Driver Left Foot Fore Z			
CURNO	Type	SAE Class	Units
037	FIL	180	G's
Max	Time	Min	Time
13.8	40.0	-83.4	22.8

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

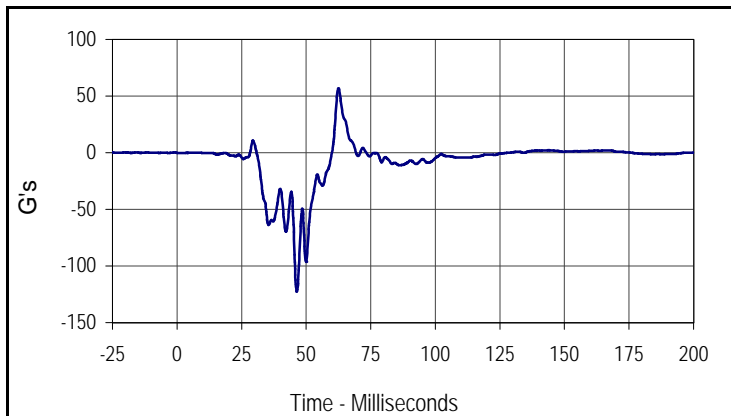
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Driver Right Foot Aft X			
CURNO	Type	SAE Class	Units
038	FIL	180	G's
Max	Time	Min	Time
33.6	57.0	-77.6	47.7



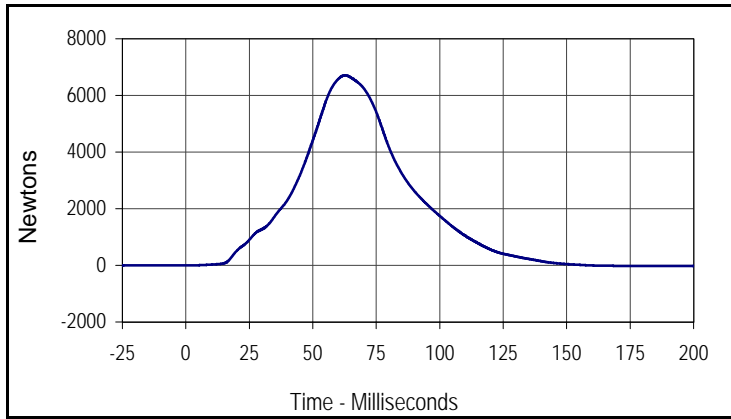
Curve Description			
Driver Right Foot Aft Z			
CURNO	Type	SAE Class	Units
039	FIL	180	G's
Max	Time	Min	Time
14.1	62.6	-76.7	46.5



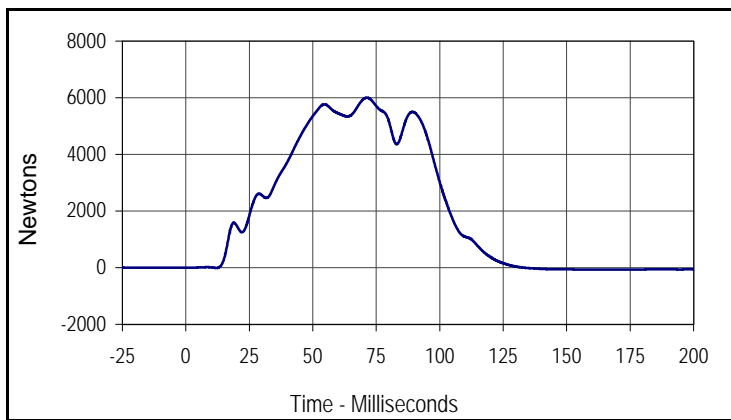
Curve Description			
Driver Right Foot Fore Z			
CURNO	Type	SAE Class	Units
040	FIL	180	G's
Max	Time	Min	Time
56.9	62.5	-122.6	46.4

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

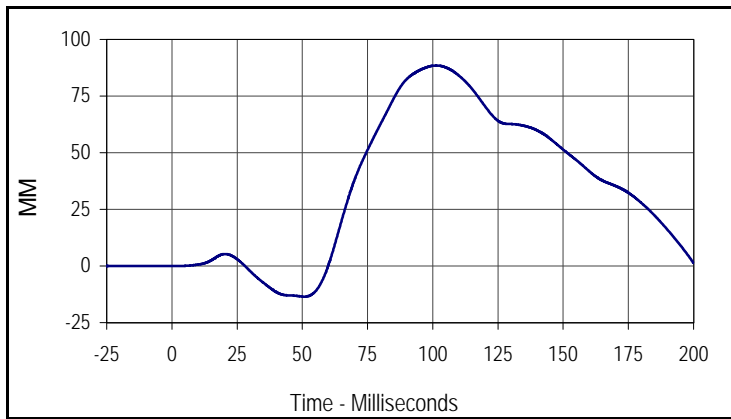
Test Date: 1/20/05
 NHTSA No.: M55201



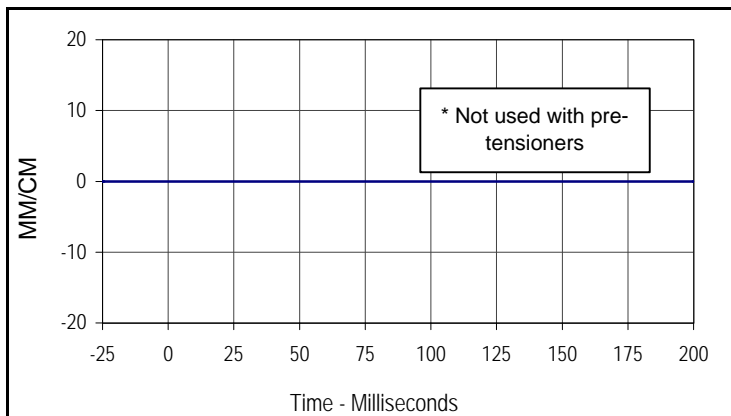
Curve Description			
Driver Lap Belt Force			
CURNO	Type	SAE Class	Units
041	FIL	60	Newtons
Max	Time	Min	Time
6708.0	62.7	-23.0	191.4



Curve Description			
Driver Shoulder Belt Force			
CURNO	Type	SAE Class	Units
042	FIL	60	Newtons
Max	Time	Min	Time
6000.8	71.3	-66.7	155.3



Curve Description			
Driver Shoulder Belt Pullout			
CURNO	Type	SAE Class	Units
043	FIL	60	MM
Max	Time	Min	Time
88.5	101.7	-13.5	51.1

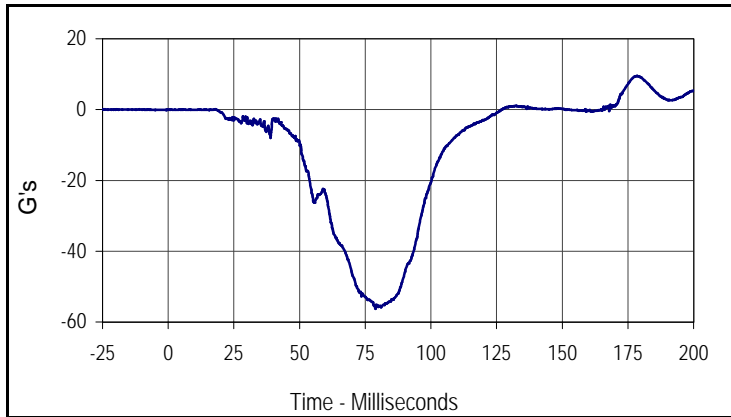


Curve Description			
Driver Shoulder Belt Elongation			
CURNO	Type	SAE Class	Units
044	FIL	60	MM/CM
Max	Time	Min	Time
0.0	0.0	0.0	0.0

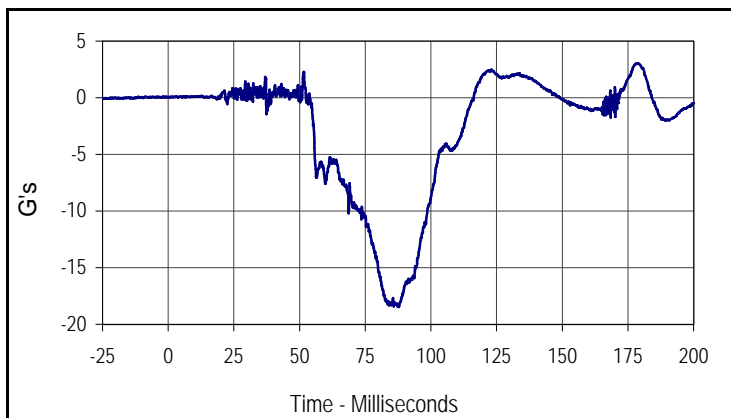
* Not used with pre-tensioners

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

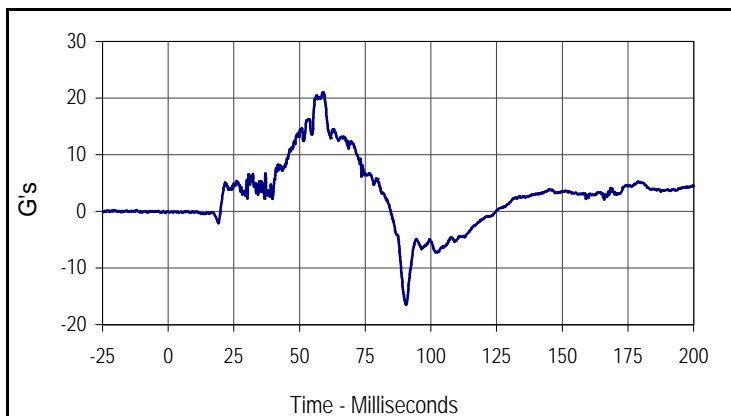
Test Date: 1/20/05
 NHTSA No.: M55201



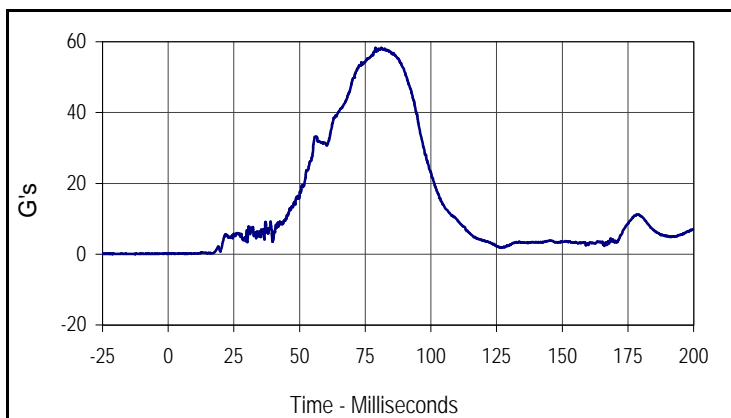
Curve Description			
Passenger Head Primary X			
CURNO	Type	SAE Class	Units
045	FIL	1000	G's
Max	Time	Min	Time
9.5	178.5	-56.3	78.9



Curve Description			
Passenger Head Primary Y			
CURNO	Type	SAE Class	Units
046	FIL	1000	G's
Max	Time	Min	Time
3.0	179.1	-18.5	87.8



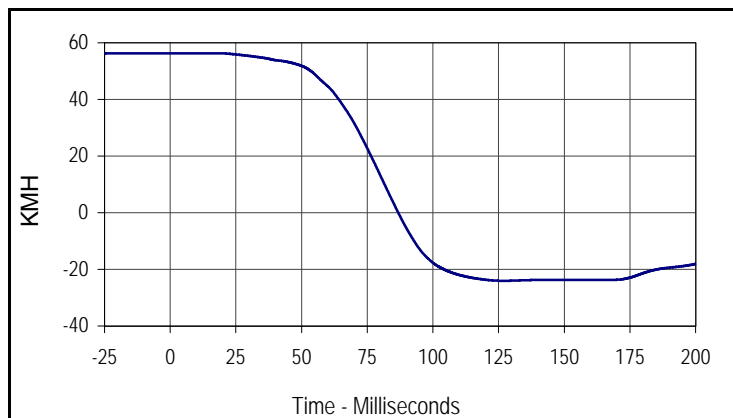
Curve Description			
Passenger Head Primary Z			
CURNO	Type	SAE Class	Units
047	FIL	1000	G's
Max	Time	Min	Time
21.0	59.1	-16.5	90.6



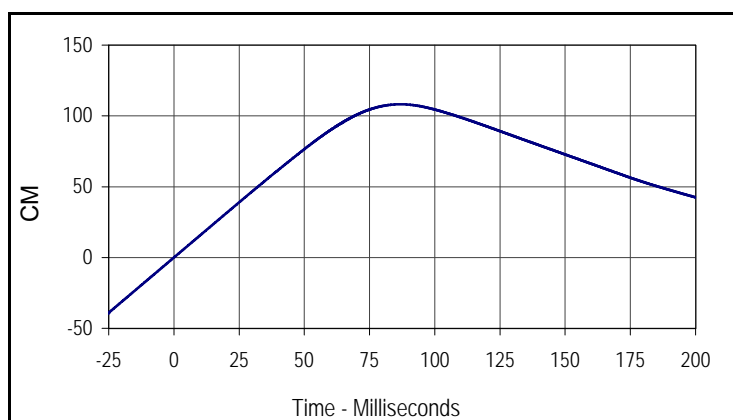
Curve Description			
Passenger Head Resultant Primary			
CURNO	Type	SAE Class	Units
045	RES	1000	G's
Max	Time	Min	Time
58.3	78.9	0.1	6.2

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



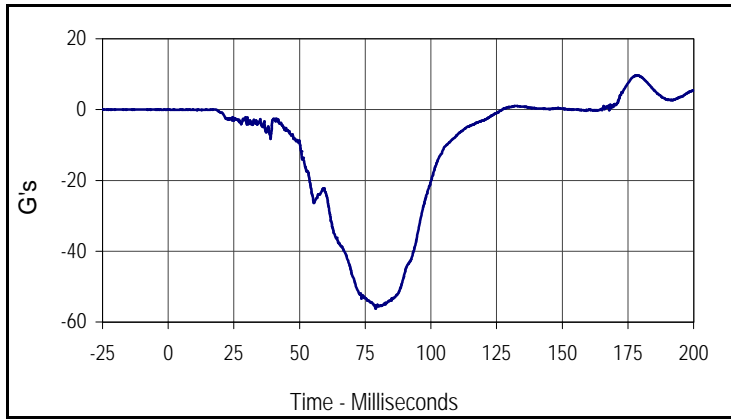
Curve Description			
Passenger Head Primary X Velocity			
CURNO	Type	SAE Class	Units
045	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-24.1	127.0



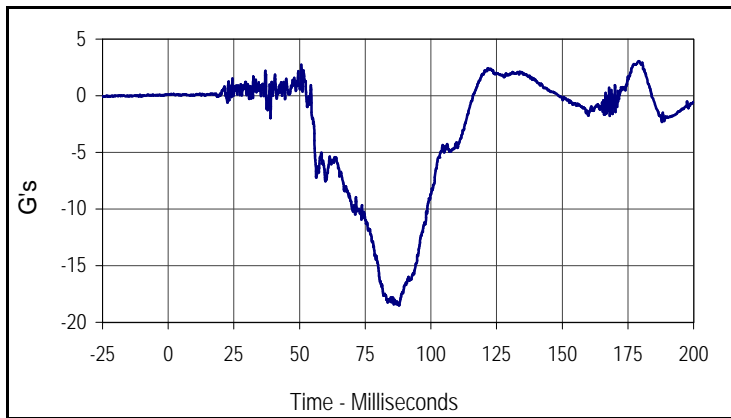
Curve Description			
Passenger Head Primary X Displacement			
CURNO	Type	SAE Class	Units
045	IN2	180	CM
Max	Time	Min	Time
108.2	86.8	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

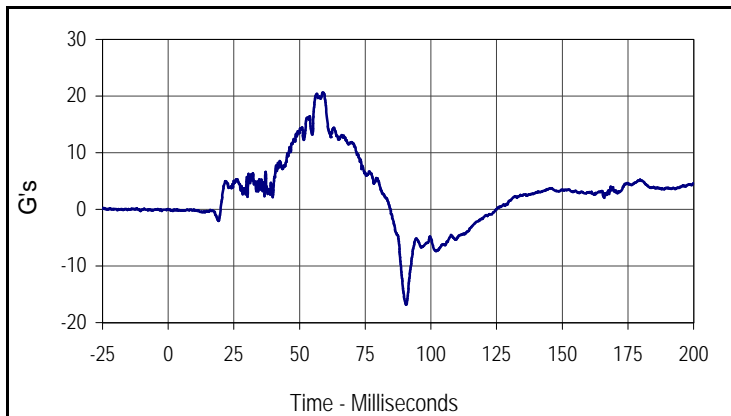
Test Date: 1/20/05
 NHTSA No.: M55201



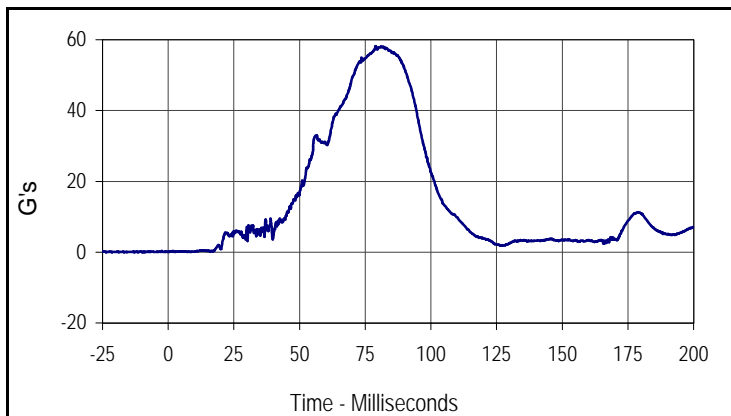
Curve Description			
Passenger Head Redundant X			
CURNO	Type	SAE Class	Units
048	FIL	1000	G's
Max	Time	Min	Time
9.7	178.5	-56.2	78.9



Curve Description			
Passenger Head Redundant Y			
CURNO	Type	SAE Class	Units
049	FIL	1000	G's
Max	Time	Min	Time
3.0	179.2	-18.5	87.8



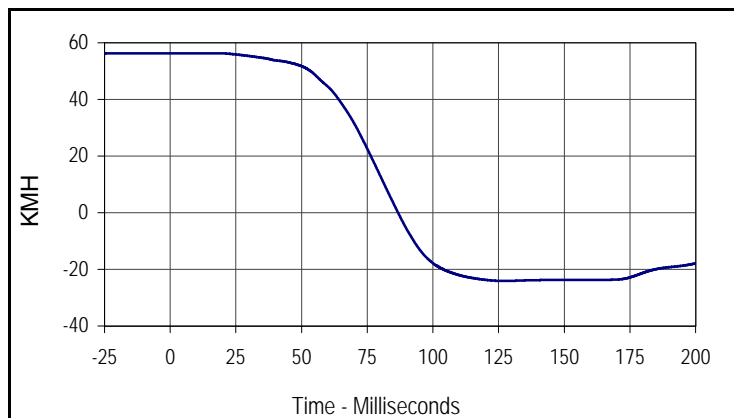
Curve Description			
Passenger Head Redundant Z			
CURNO	Type	SAE Class	Units
050	FIL	1000	G's
Max	Time	Min	Time
20.6	58.8	-16.8	90.6



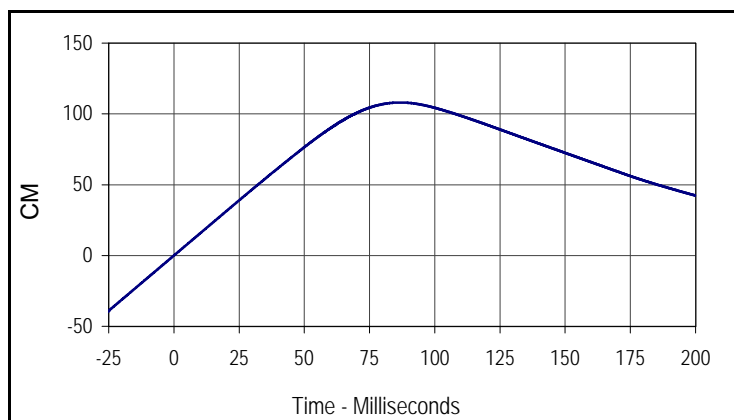
Curve Description			
Passenger Head Resultant Redundant			
CURNO	Type	SAE Class	Units
048	RES	1000	G's
Max	Time	Min	Time
58.2	79.0	0.1	8.4

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



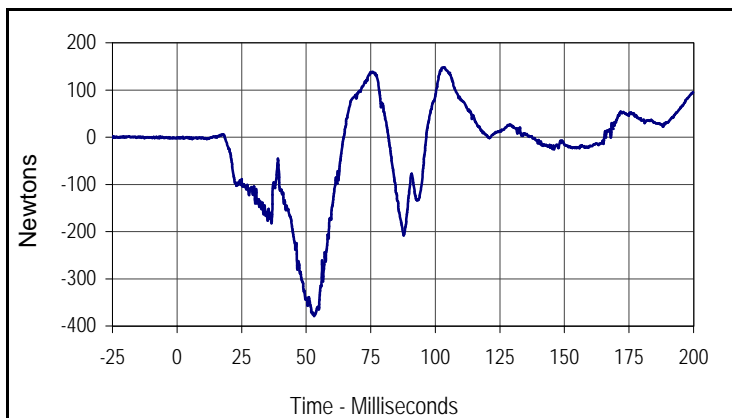
Curve Description			
Passenger Head Redundant X Velocity			
CURNO	Type	SAE Class	Units
048	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-24.1	127.2



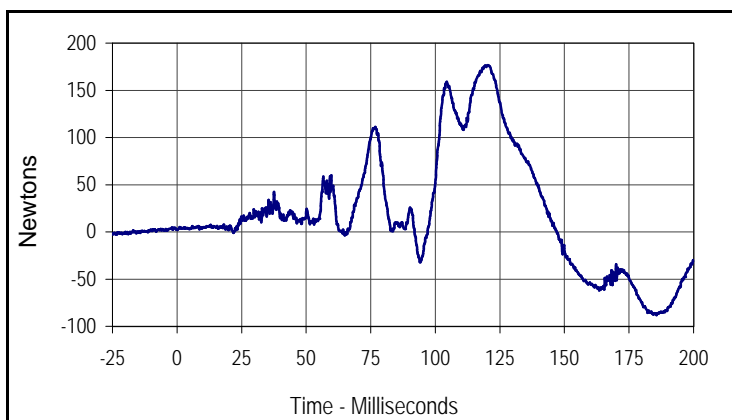
Curve Description			
Passenger Head Redundant X Displacement			
CURNO	Type	SAE Class	Units
048	IN2	180	CM
Max	Time	Min	Time
108.1	86.7	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

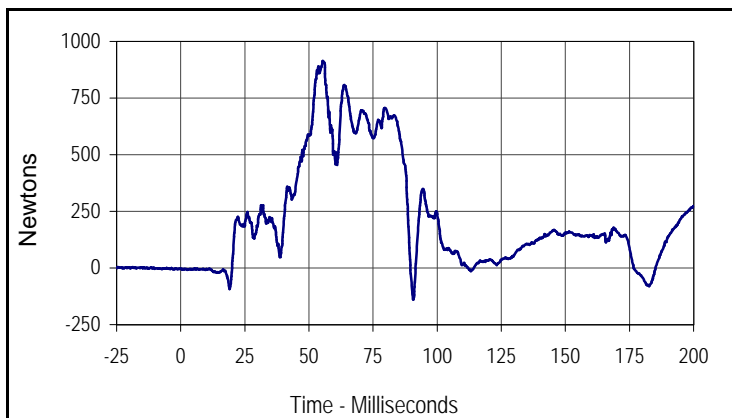
Test Date: 1/20/05
 NHTSA No.: M55201



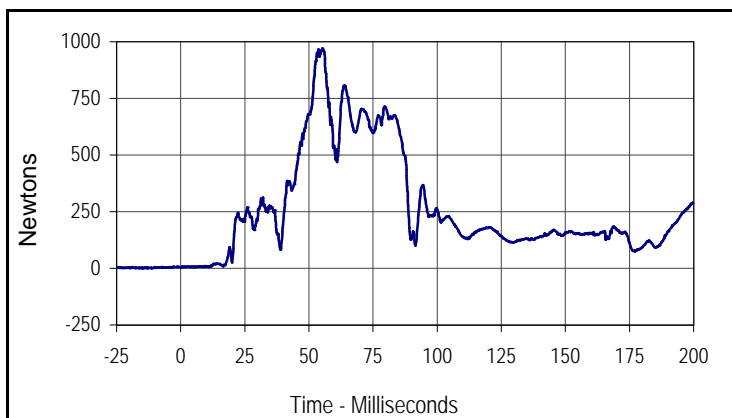
Curve Description			
Passenger Upper Neck Force X			
CURNO	Type	SAE Class	Units
051	FIL	1000	Newtons
Max	Time	Min	Time
147.8	102.8	-379.1	53.1



Curve Description			
Passenger Upper Neck Force Y			
CURNO	Type	SAE Class	Units
052	FIL	1000	Newtons
Max	Time	Min	Time
176.7	120.3	-88.1	185.6



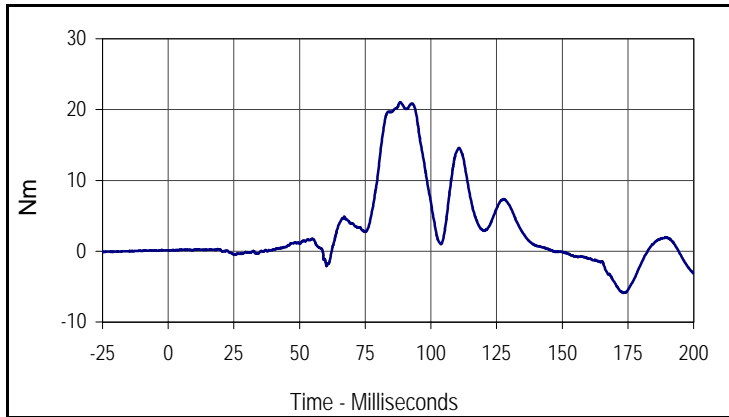
Curve Description			
Passenger Upper Neck Force Z			
CURNO	Type	SAE Class	Units
053	FIL	1000	Newtons
Max	Time	Min	Time
913.4	55.5	-139.3	90.7



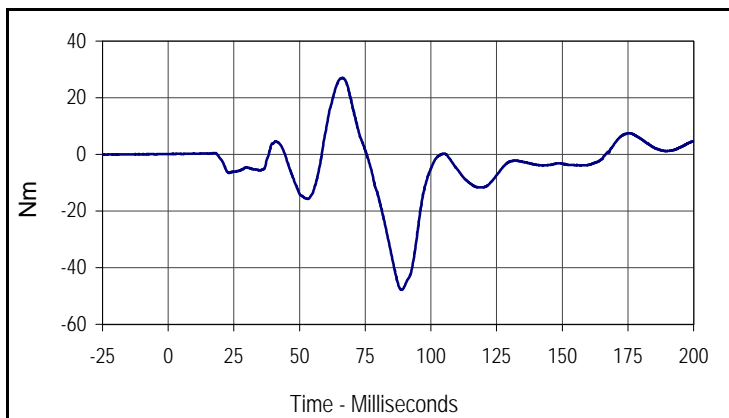
Curve Description			
Passenger Upper Neck Force Res.			
CURNO	Type	SAE Class	Units
051	RES	1000	Newtons
Max	Time	Min	Time
970.0	55.3	4.0	5.5

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

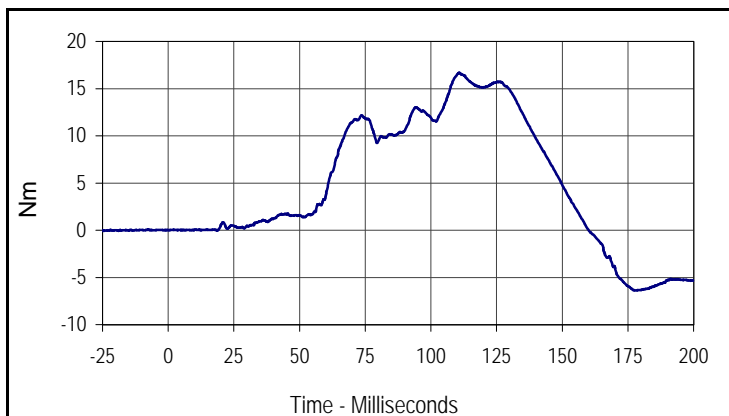
Test Date: 1/20/05
 NHTSA No.: M55201



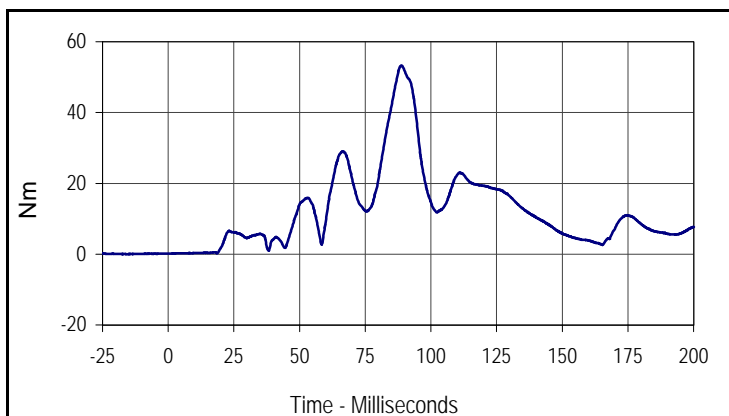
Curve Description			
Passenger Upper Neck Moment X			
CURNO	Type	SAE Class	Units
054	FIL	600	Nm
Max	Time	Min	Time
21.0	88.3	-5.9	173.2



Curve Description			
Passenger Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
055	FIL	600	Nm
Max	Time	Min	Time
27.0	66.4	-47.8	88.8



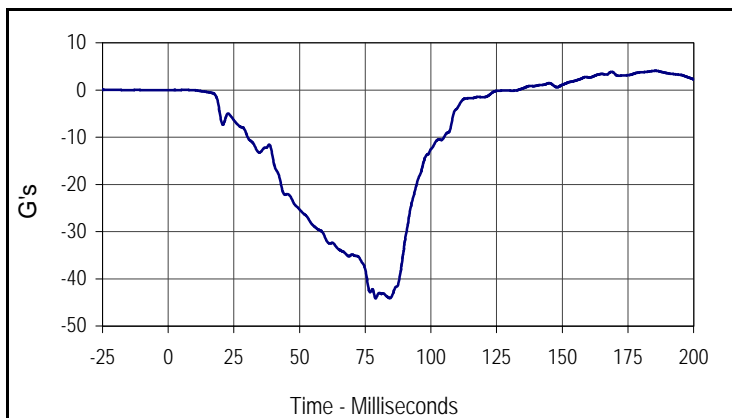
Curve Description			
Passenger Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
056	FIL	600	Nm
Max	Time	Min	Time
16.7	110.8	-6.4	177.7



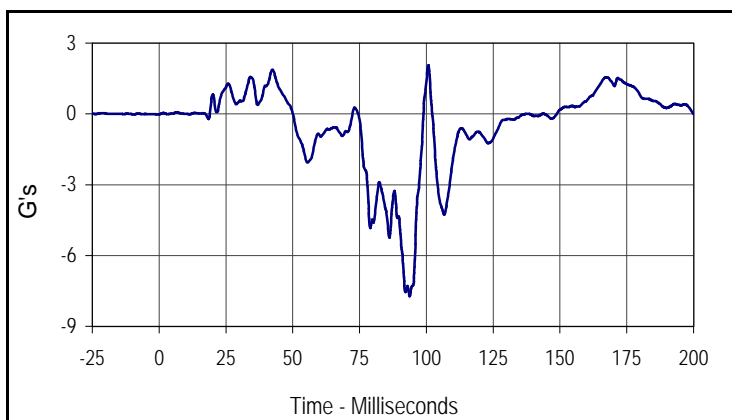
Curve Description			
Passenger Upper Neck Moment Res.			
CURNO	Type	SAE Class	Units
054	RES	600	Nm
Max	Time	Min	Time
53.2	88.7	0.1	0.6

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

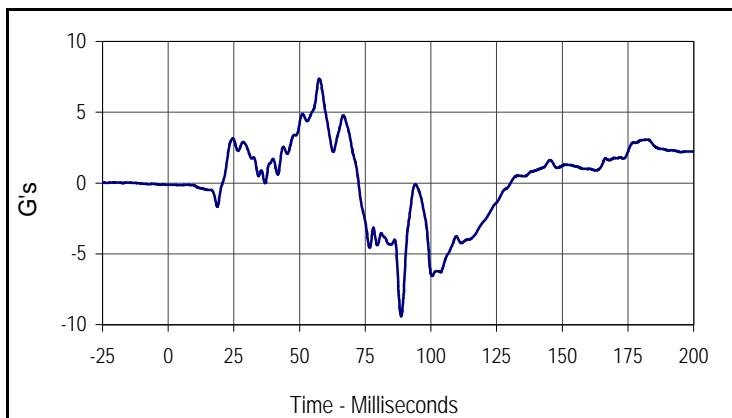
Test Date: 1/20/05
 NHTSA No.: M55201



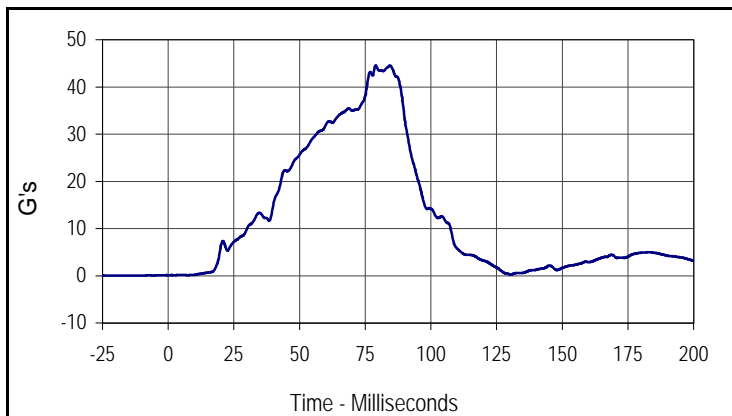
Curve Description			
Passenger Chest Primary X			
CURNO	Type	SAE Class	Units
057	FIL	180	G's
Max	Time	Min	Time
4.1	185.5	-44.2	79.0



Curve Description			
Passenger Chest Primary Y			
CURNO	Type	SAE Class	Units
058	FIL	180	G's
Max	Time	Min	Time
2.1	100.8	-7.7	93.8



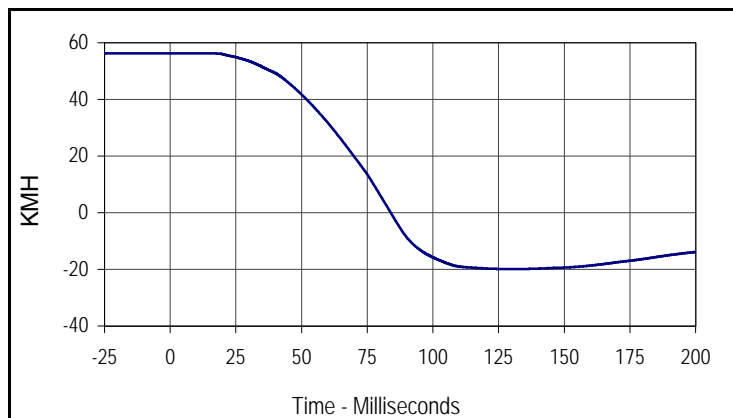
Curve Description			
Passenger Chest Primary Z			
CURNO	Type	SAE Class	Units
059	FIL	180	G's
Max	Time	Min	Time
7.4	57.5	-9.4	88.7



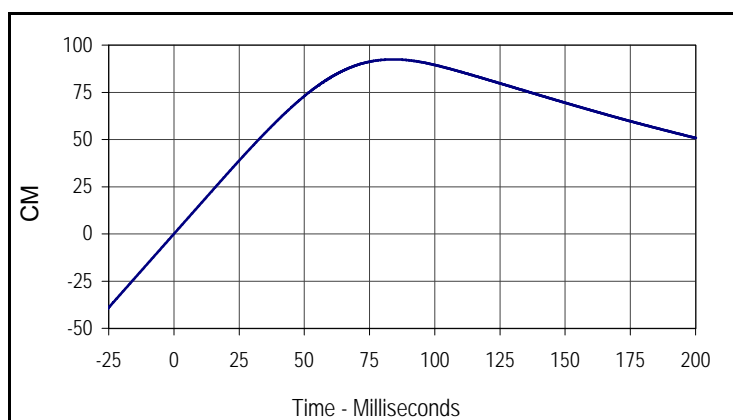
Curve Description			
Passenger Chest Resultant Primary			
CURNO	Type	SAE Class	Units
057	RES	180	G's
Max	Time	Min	Time
44.6	79.0	0.1	2.4

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



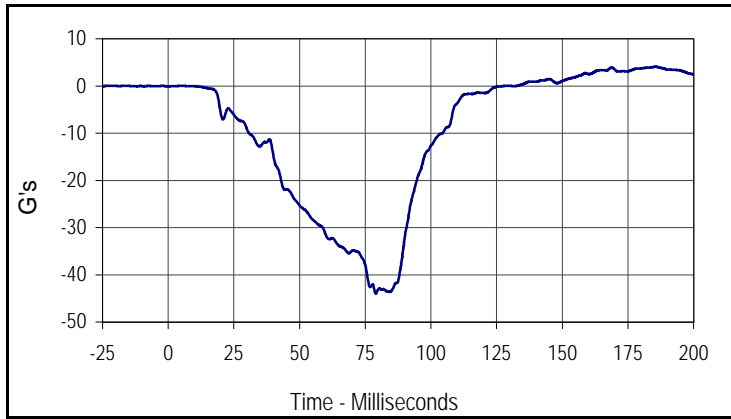
Curve Description			
Passenger Chest Primary X Velocity			
CURNO	Type	SAE Class	Units
057	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-19.9	133.2



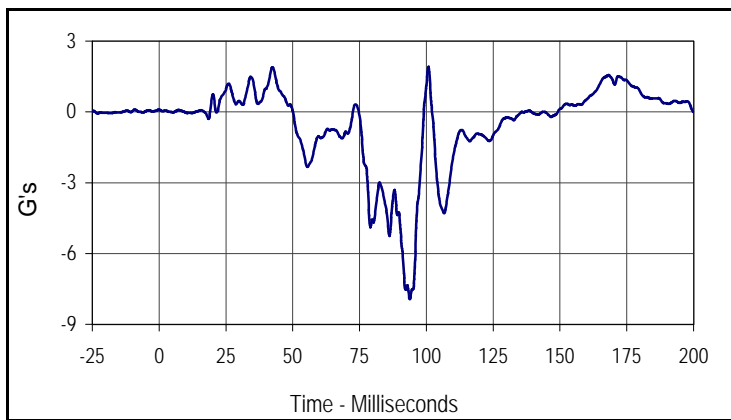
Curve Description			
Passenger Chest Primary X Displacement			
CURNO	Type	SAE Class	Units
057	IN2	180	CM
Max	Time	Min	Time
92.4	84.4	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

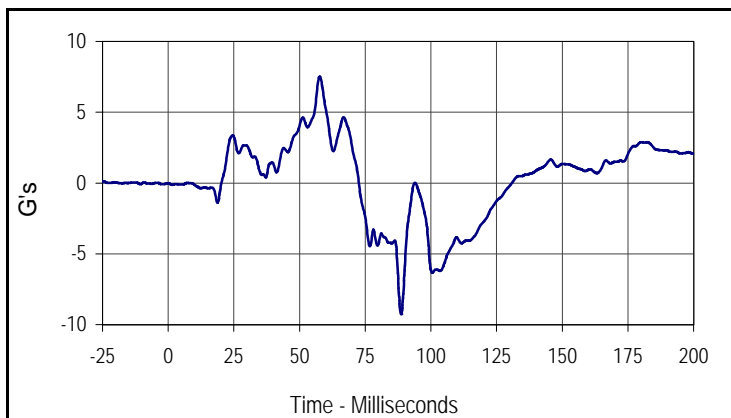
Test Date: 1/20/05
 NHTSA No.: M55201



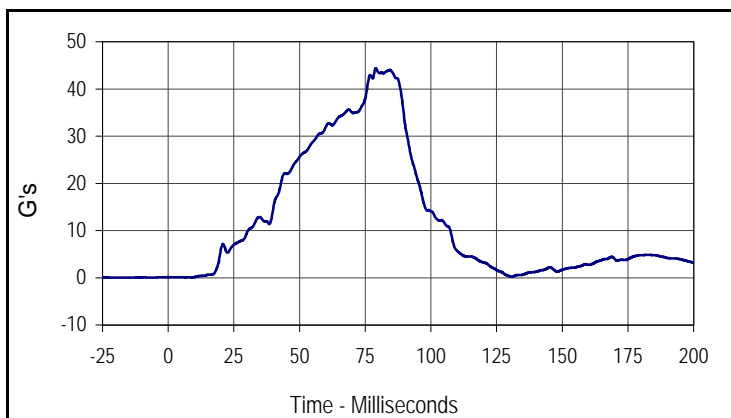
Curve Description			
Passenger Chest Redundant X			
CURNO	Type	SAE Class	Units
060	FIL	180	G's
Max	Time	Min	Time
4.1	185.6	-43.9	79.0



Curve Description			
Passenger Chest Redundant Y			
CURNO	Type	SAE Class	Units
061	FIL	180	G's
Max	Time	Min	Time
1.9	100.8	-7.9	93.8



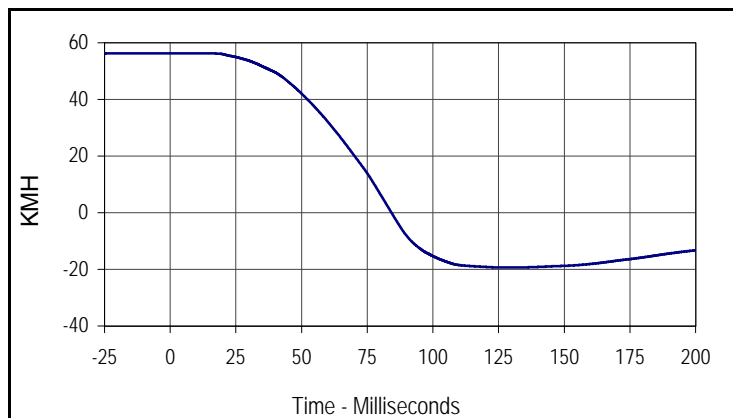
Curve Description			
Passenger Chest Redundant Z			
CURNO	Type	SAE Class	Units
062	FIL	180	G's
Max	Time	Min	Time
7.5	57.7	-9.3	88.7



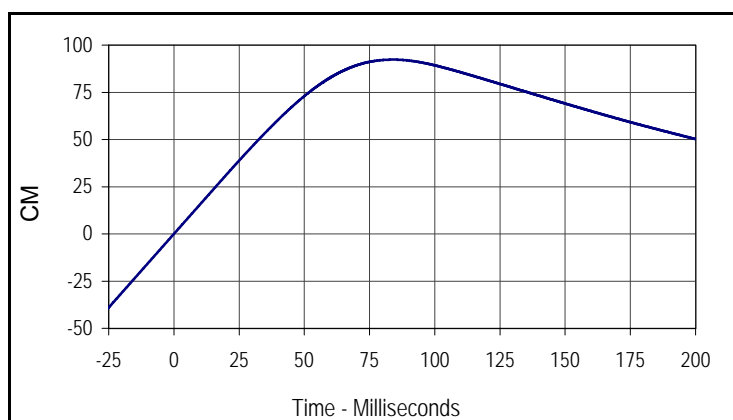
Curve Description			
Passenger Chest Resultant Redundant			
CURNO	Type	SAE Class	Units
060	RES	180	G's
Max	Time	Min	Time
44.4	79.0	0.1	9.1

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



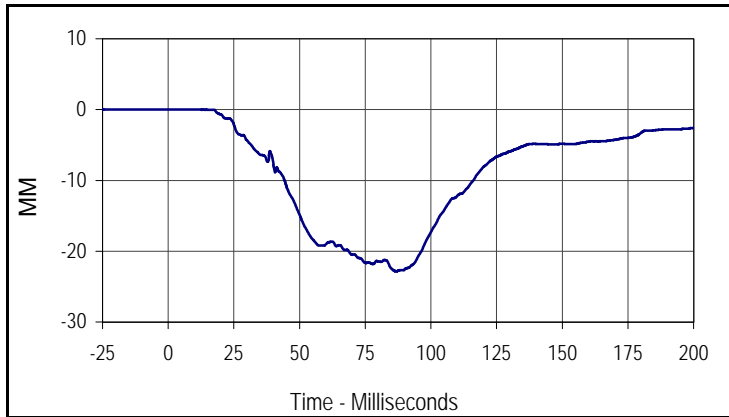
Curve Description			
Passenger Chest Redundant X Velocity			
CURNO	Type	SAE Class	Units
060	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-19.3	127.8



Curve Description			
Passenger Chest Redundant X Displacement			
CURNO	Type	SAE Class	Units
060	IN2	180	CM
Max	Time	Min	Time
92.3	84.2	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

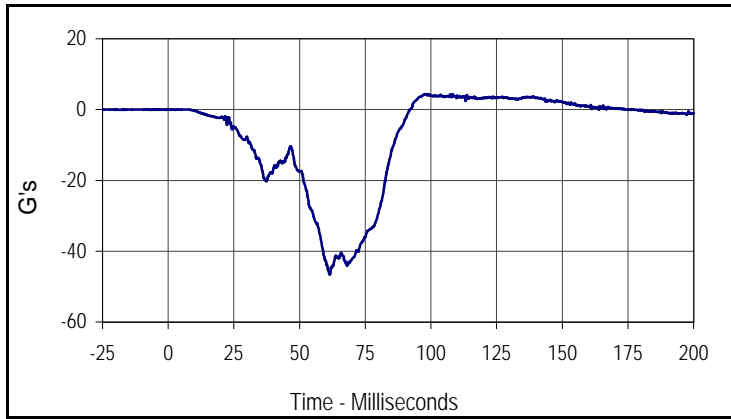
Test Date: 1/20/05
 NHTSA No.: M55201



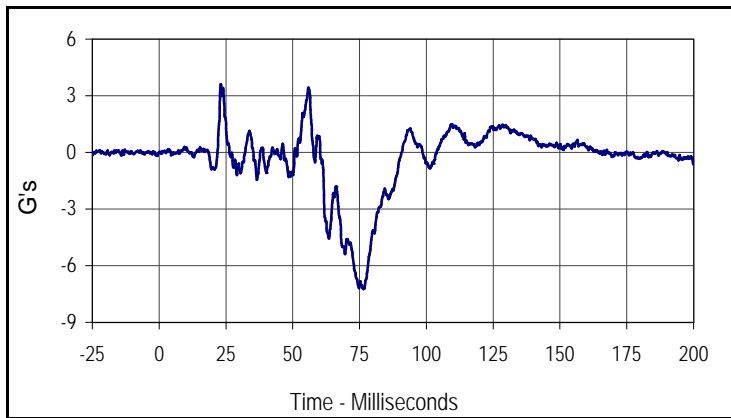
Curve Description			
Passenger Chest Deflection			
CURNO	Type	SAE Class	Units
063	FIL	600	MM
Max	Time	Min	Time
0.0	1.3	-22.9	86.8

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

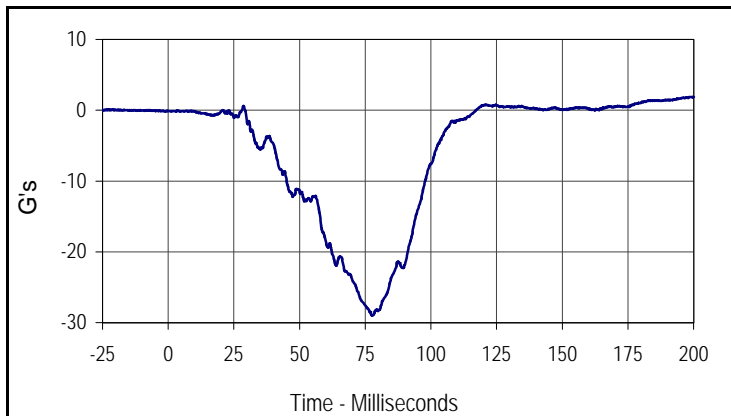
Test Date: 1/20/05
 NHTSA No.: M55201



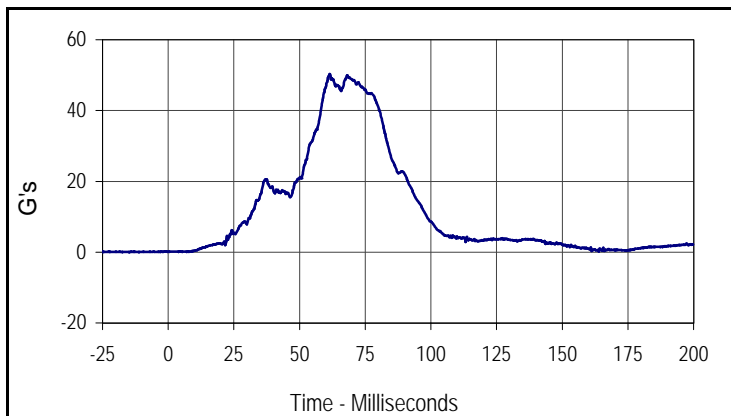
Curve Description			
Passenger Pelvis X			
CURNO	Type	SAE Class	Units
064	FIL	1000	G's
Max	Time	Min	Time
4.4	97.8	-46.6	61.5



Curve Description			
Passenger Pelvis Y			
CURNO	Type	SAE Class	Units
065	FIL	1000	G's
Max	Time	Min	Time
3.6	23.1	-7.2	76.4



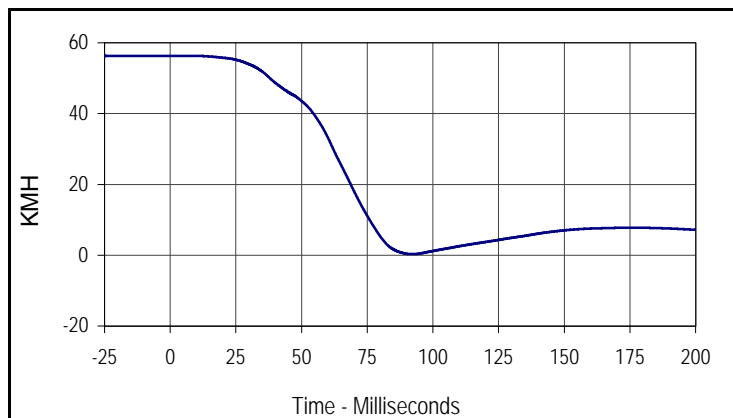
Curve Description			
Passenger Pelvis Z			
CURNO	Type	SAE Class	Units
066	FIL	1000	G's
Max	Time	Min	Time
1.9	198.7	-29.0	77.7



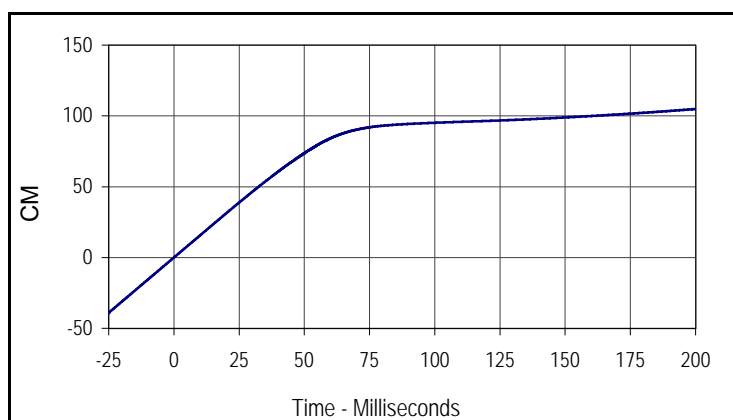
Curve Description			
Passenger Pelvis Resultant			
CURNO	Type	SAE Class	Units
064	RES	1000	G's
Max	Time	Min	Time
50.3	61.5	0.1	7.9

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



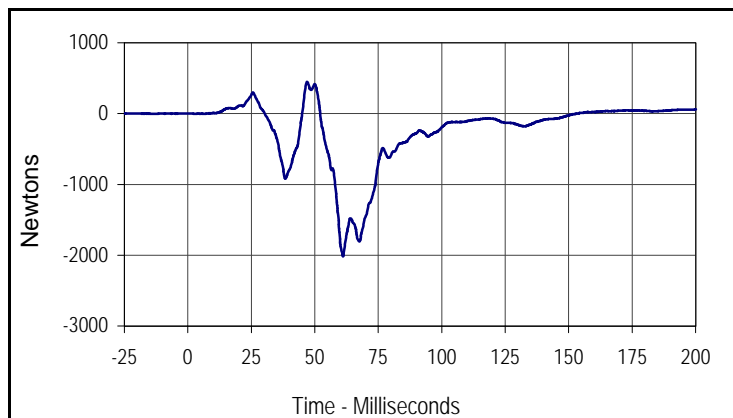
Curve Description			
Passenger Pelvis X Velocity			
CURNO	Type	SAE Class	Units
064	IN1	180	KMH
Max	Time	Min	Time
56.3	7.9	0.3	92.1



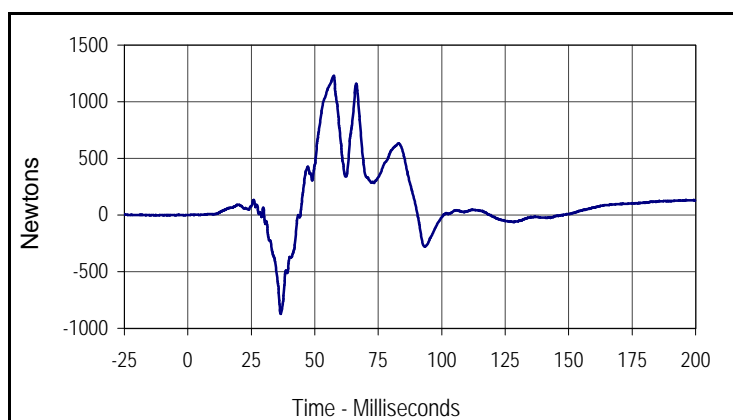
Curve Description			
Passenger Pelvis X Displacement			
CURNO	Type	SAE Class	Units
064	IN2	180	CM
Max	Time	Min	Time
104.9	200.0	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



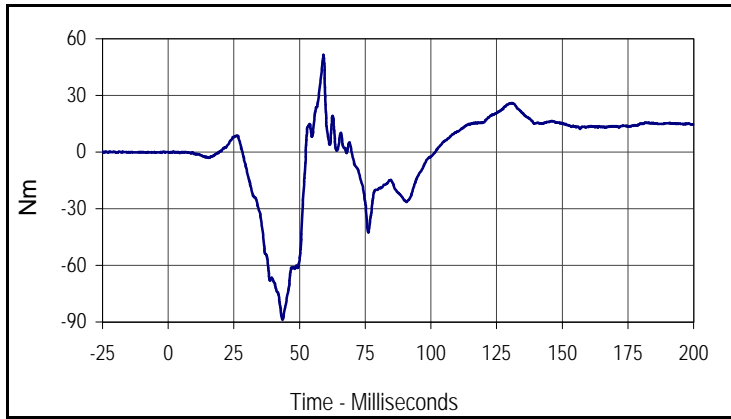
Curve Description			
Passenger Left Femur Force			
CURNO	Type	SAE Class	Units
067	FIL	600	Newtons
Max	Time	Min	Time
450.1	47.0	-2014.4	61.1



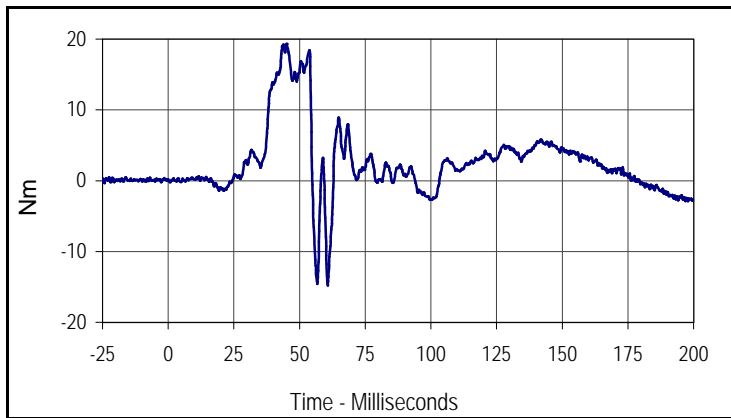
Curve Description			
Passenger Right Femur Force			
CURNO	Type	SAE Class	Units
068	FIL	600	Newtons
Max	Time	Min	Time
1229.2	57.5	-872.1	36.6

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

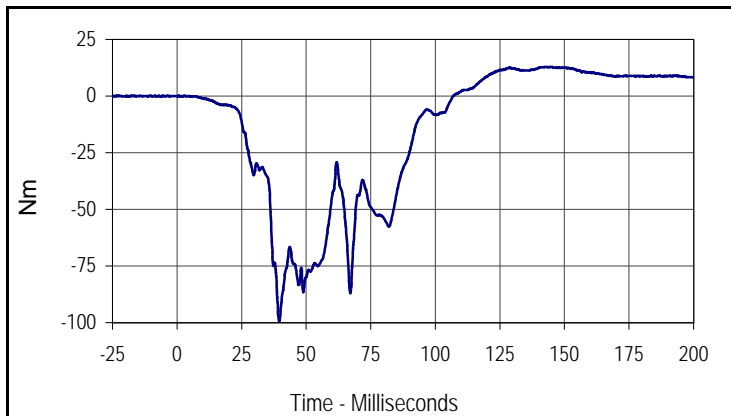
Test Date: 1/20/05
 NHTSA No.: M55201



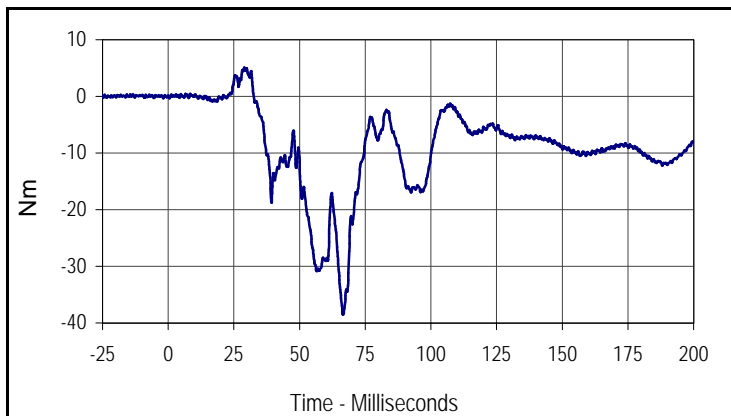
Curve Description			
Passenger Left Upper Tibia Moment X			
CURNO	Type	SAE Class	Units
069	FIL	600	Nm
Max	Time	Min	Time
51.6	59.1	-88.6	43.6



Curve Description			
Passenger Left Upper Tibia Moment Y			
CURNO	Type	SAE Class	Units
070	FIL	600	Nm
Max	Time	Min	Time
19.3	45.0	-14.8	60.7



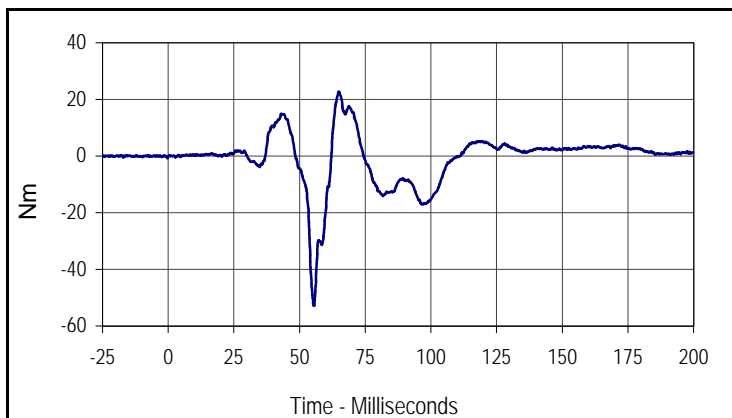
Curve Description			
Passenger Right Upper Tibia Moment X			
CURNO	Type	SAE Class	Units
071	FIL	600	Nm
Max	Time	Min	Time
12.9	145.1	-99.5	39.6



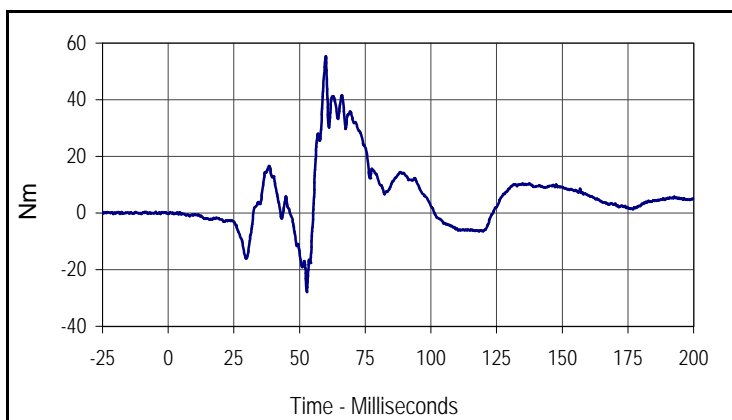
Curve Description			
Passenger Right Upper Tibia Moment Y			
CURNO	Type	SAE Class	Units
072	FIL	600	Nm
Max	Time	Min	Time
5.1	29.0	-38.6	66.5

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

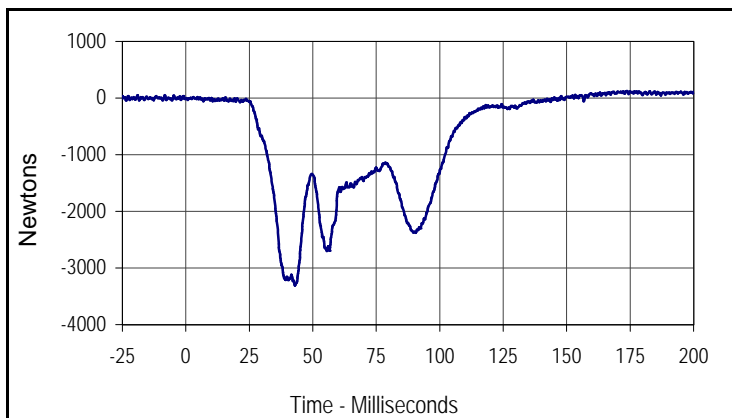
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Passenger Left Lower Tibia Moment X			
CURNO	Type	SAE Class	Units
073	FIL	600	Nm
Max	Time	Min	Time
22.7	65.0	-52.9	55.5



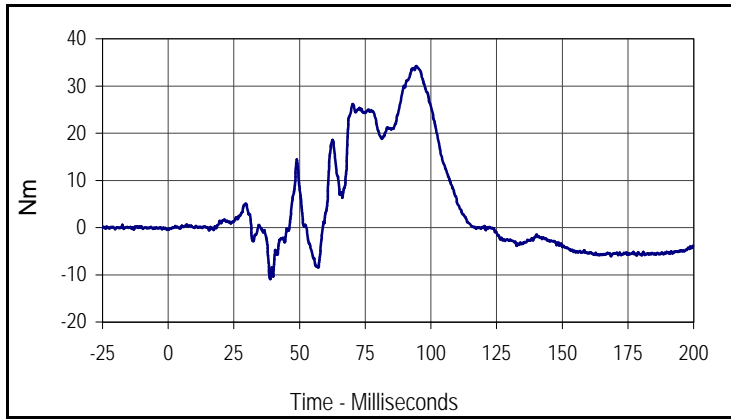
Curve Description			
Passenger Left Lower Tibia Moment Y			
CURNO	Type	SAE Class	Units
074	FIL	600	Nm
Max	Time	Min	Time
55.3	60.0	-27.9	52.8



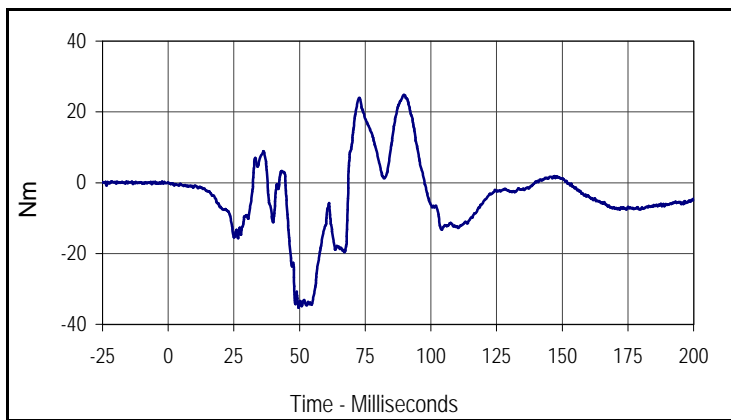
Curve Description			
Passenger Left Lower Tibia Force Z			
CURNO	Type	SAE Class	Units
075	FIL	600	Newtons
Max	Time	Min	Time
121.7	173.8	-3311.4	43.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

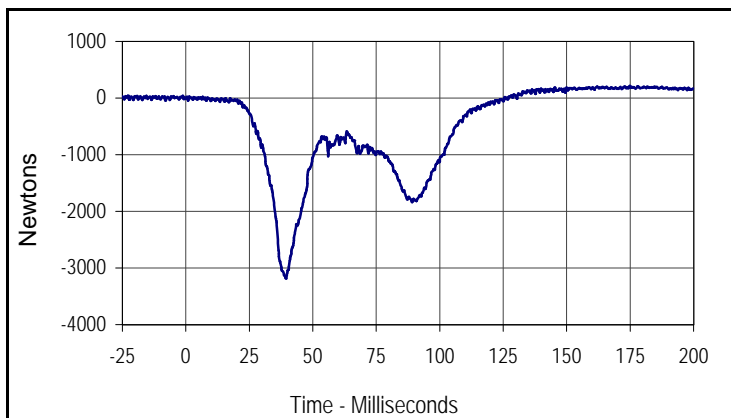
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Passenger Right Lower Tibia Moment X			
CURNO	Type	SAE Class	Units
076	FIL	600	Nm
Max	Time	Min	Time
34.2	94.4	-10.9	38.8



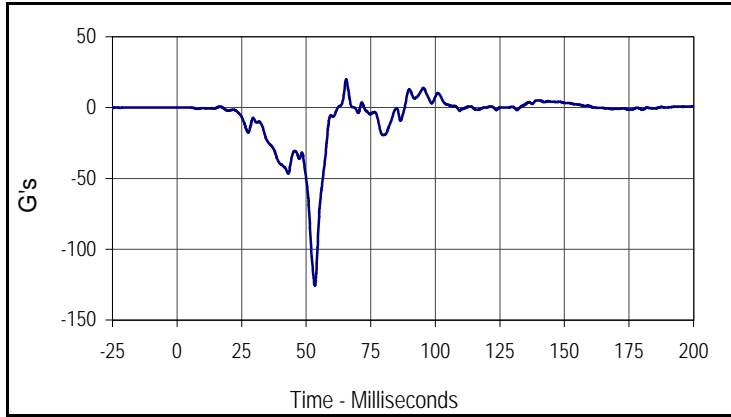
Curve Description			
Passenger Right Lower Tibia Moment Y			
CURNO	Type	SAE Class	Units
077	FIL	600	Nm
Max	Time	Min	Time
24.8	89.7	-35.3	49.6



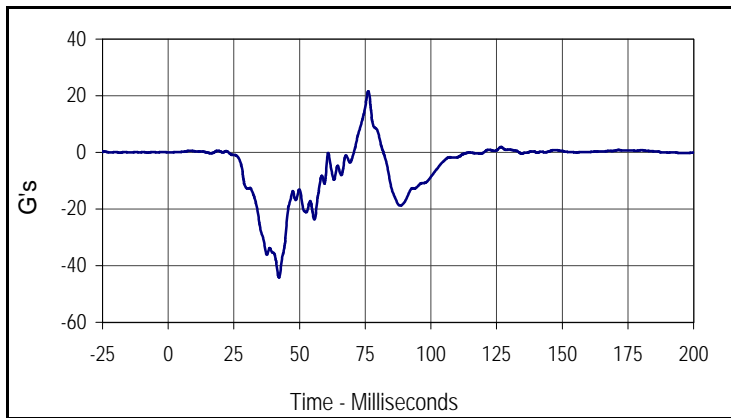
Curve Description			
Passenger Right lower Tibia Force Z			
CURNO	Type	SAE Class	Units
078	FIL	600	Newtons
Max	Time	Min	Time
216.7	174.8	-3188.3	39.4

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

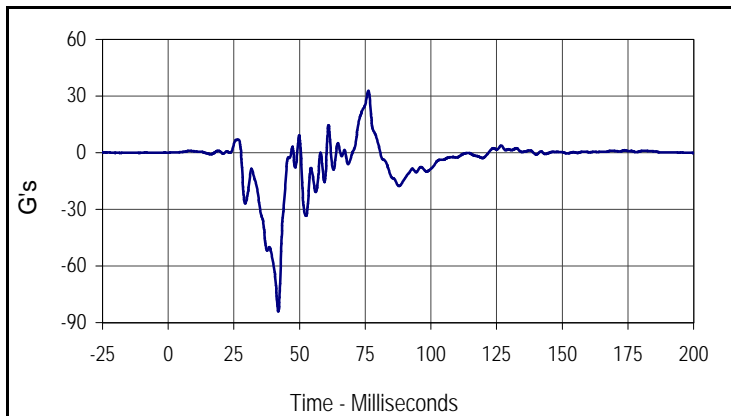
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Passenger Left Foot Aft X			
CURNO	Type	SAE Class	Units
079	FIL	180	G's
Max	Time	Min	Time
19.9	65.5	-125.6	53.4



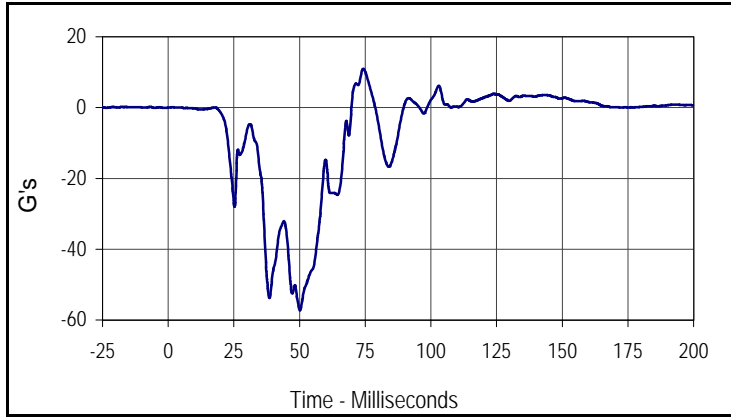
Curve Description			
Passenger Left Foot Aft Z			
CURNO	Type	SAE Class	Units
080	FIL	180	G's
Max	Time	Min	Time
21.6	76.2	-44.2	42.2



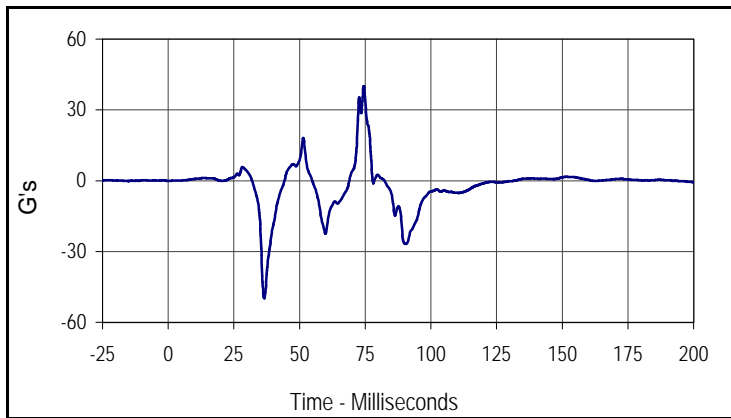
Curve Description			
Passenger Left Foot Fore Z			
CURNO	Type	SAE Class	Units
081	FIL	180	G's
Max	Time	Min	Time
32.9	76.2	-84.0	41.9

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

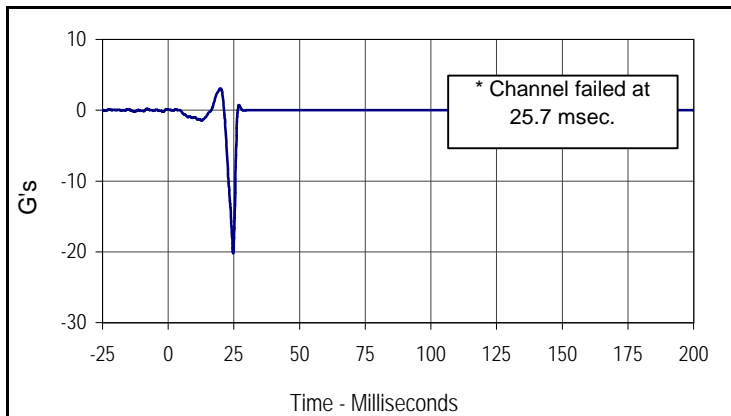
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Passenger Right Foot Aft X			
CURNO	Type	SAE Class	Units
082	FIL	180	G's
Max	Time	Min	Time
11.0	74.3	-57.3	50.1



Curve Description			
Passenger Right Foot Aft Z			
CURNO	Type	SAE Class	Units
083	FIL	180	G's
Max	Time	Min	Time
40.1	74.4	-49.9	36.6

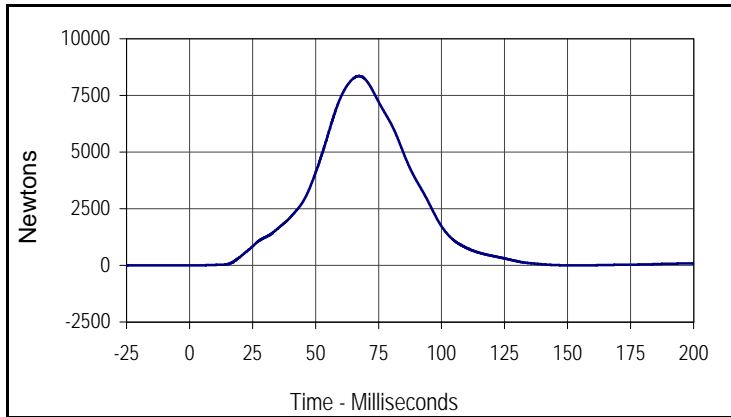


Curve Description			
Passenger Right Foot Fore Z			
CURNO	Type	SAE Class	Units
084	FIL	180	G's
Max	Time	Min	Time
3.1	19.8	-20.2	24.7

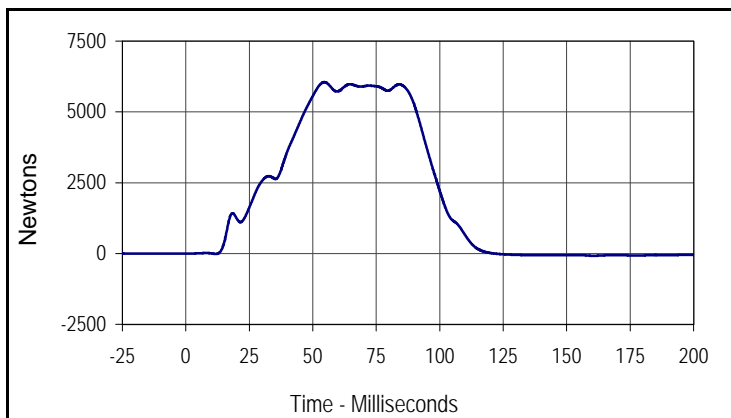
* Channel failed at 25.7 msec.

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

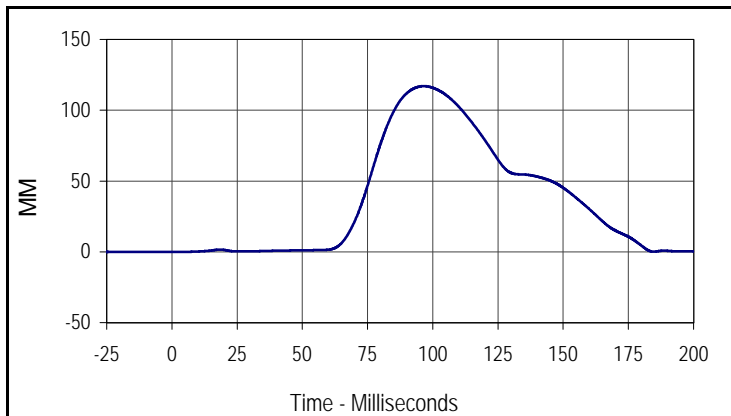
Test Date: 1/20/05
 NHTSA No.: M55201



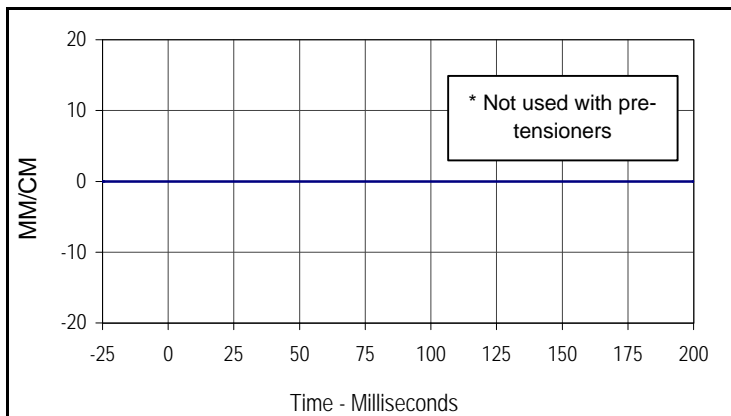
Curve Description			
Passenger Lap Belt Force			
CURNO	Type	SAE Class	Units
085	FIL	60	Newtons
Max	Time	Min	Time
8355.2	67.2	-1.7	155.2



Curve Description			
Passenger Shoulder Belt Force			
CURNO	Type	SAE Class	Units
086	FIL	60	Newtons
Max	Time	Min	Time
6049.8	54.5	-82.0	160.5



Curve Description			
Passenger Shoulder Belt Pullout			
CURNO	Type	SAE Class	Units
087	FIL	60	MM
Max	Time	Min	Time
117.0	97.0	0.0	1.9

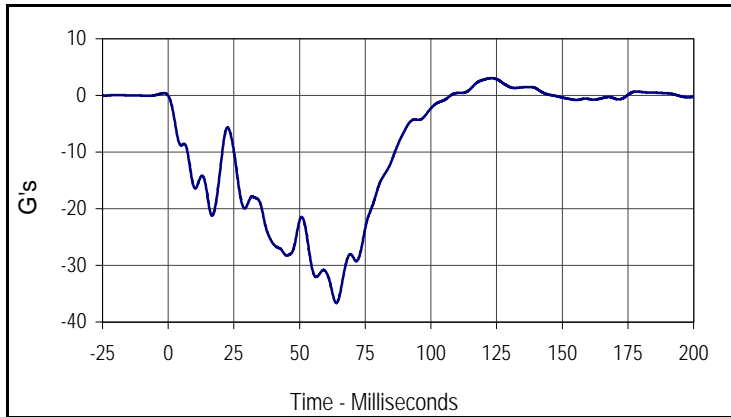


Curve Description			
Passenger Shoulder Belt Elongation			
CURNO	Type	SAE Class	Units
088	FIL	60	MM/CM
Max	Time	Min	Time
0.0	0.0	0.0	0.0

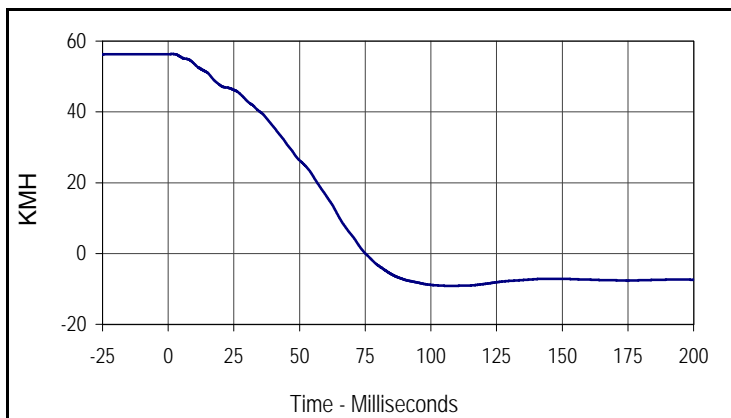
* Not used with pre-tensioners

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

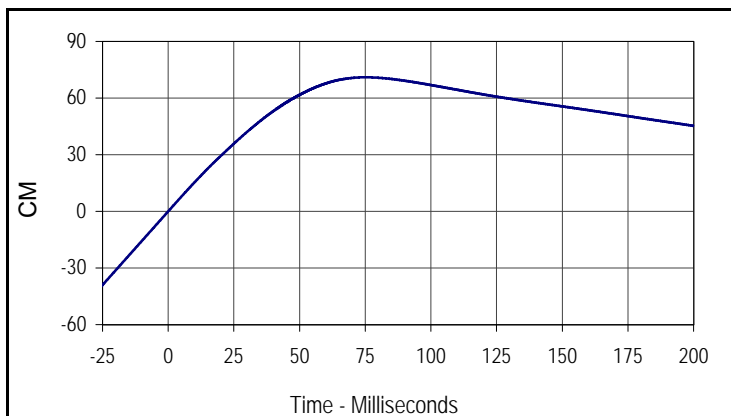
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Vehicle Left Rear X			
CURNO	Type	SAE Class	Units
089	FIL	60	G's
Max	Time	Min	Time
3.0	123.1	-36.6	64.0



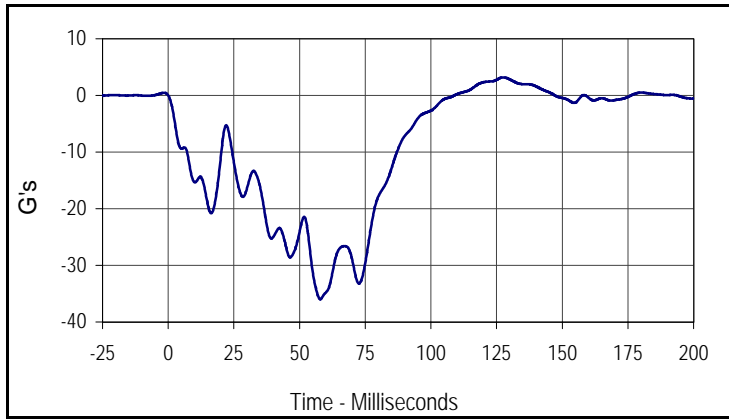
Curve Description			
Vehicle Left Rear X Velocity			
CURNO	Type	SAE Class	Units
089	IN1	180	KMH
Max	Time	Min	Time
56.3	1.7	-9.2	107.1



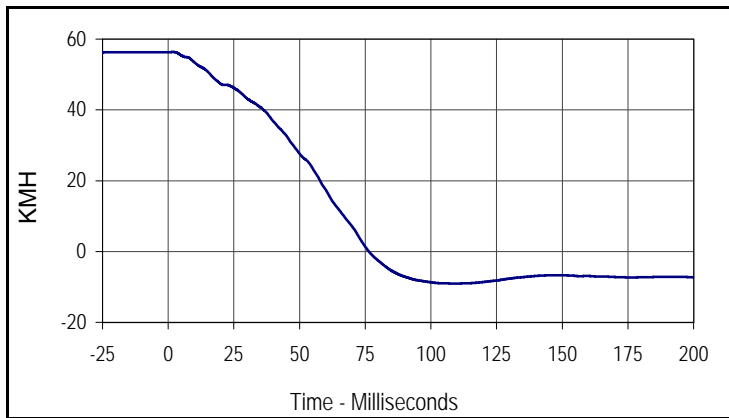
Curve Description			
Vehicle Left Rear X Displacement			
CURNO	Type	SAE Class	Units
089	IN2	180	CM
Max	Time	Min	Time
71.0	75.0	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

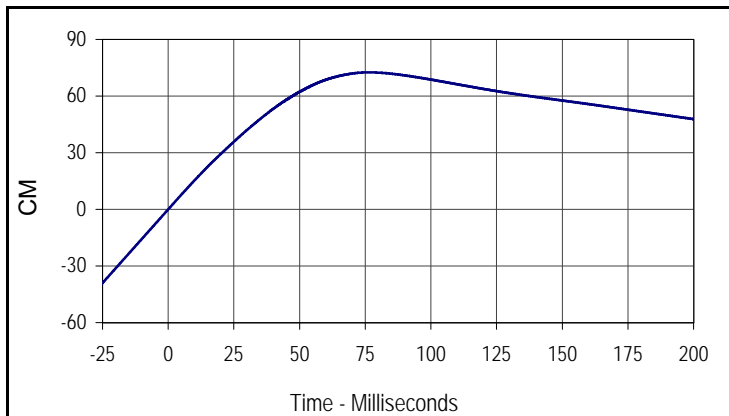
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Vehicle Right Rear X			
CURNO	Type	SAE Class	Units
090	FIL	60	G's
Max	Time	Min	Time
3.2	127.5	-36.0	57.9



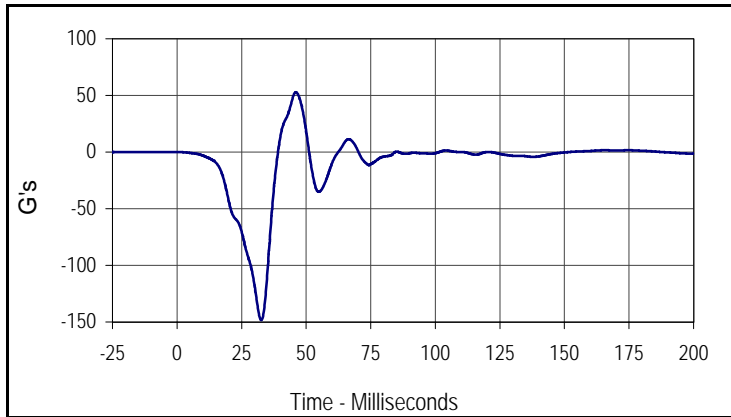
Curve Description			
Vehicle Right Rear X Velocity			
CURNO	Type	SAE Class	Units
090	IN1	180	KMH
Max	Time	Min	Time
56.3	1.9	-9.1	108.7



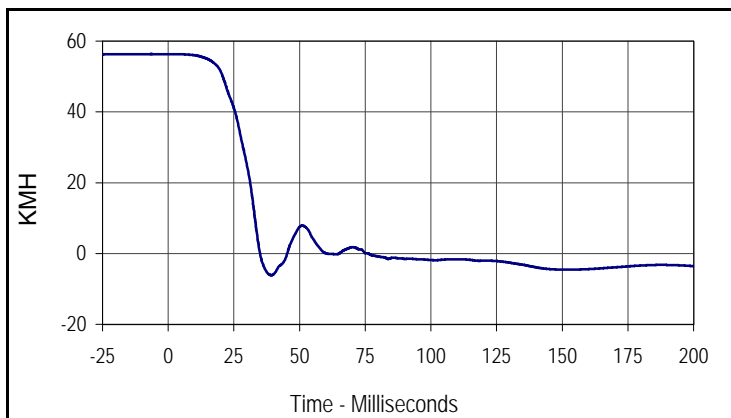
Curve Description			
Vehicle Right Rear X Displacement			
CURNO	Type	SAE Class	Units
090	IN2	180	CM
Max	Time	Min	Time
72.5	76.4	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

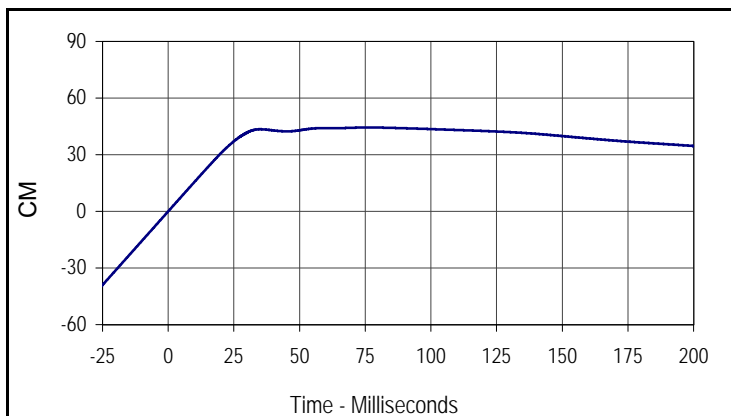
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Vehicle Engine Top X			
CURNO	Type	SAE Class	Units
091	FIL	60	G's
Max	Time	Min	Time
52.8	46.0	-148.4	32.6



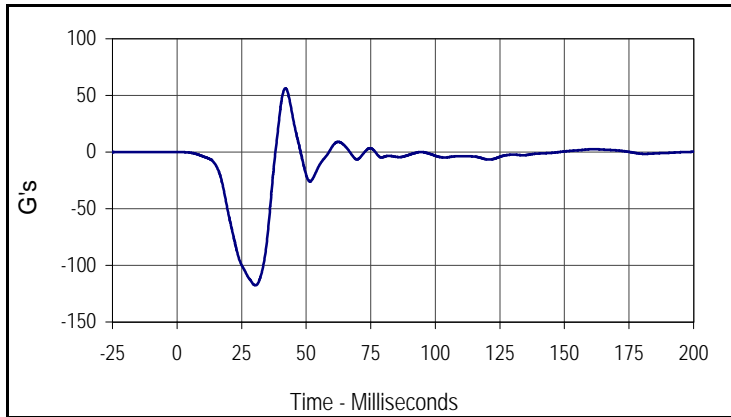
Curve Description			
Vehicle Engine Top X Velocity			
CURNO	Type	SAE Class	Units
091	IN1	180	KMH
Max	Time	Min	Time
56.3	1.1	-6.1	39.3



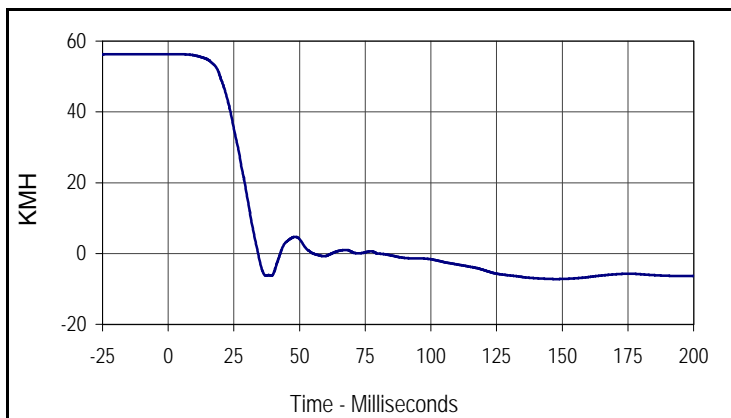
Curve Description			
Vehicle Engine Top X Displacement			
CURNO	Type	SAE Class	Units
091	IN2	180	CM
Max	Time	Min	Time
44.4	76.2	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

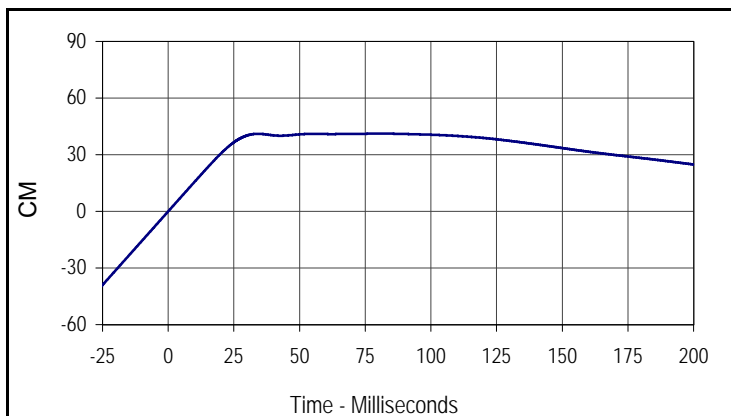
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Vehicle Engine Bottom X			
CURNO	Type	SAE Class	Units
092	FIL	60	G's
Max	Time	Min	Time
56.3	42.0	-117.6	30.5



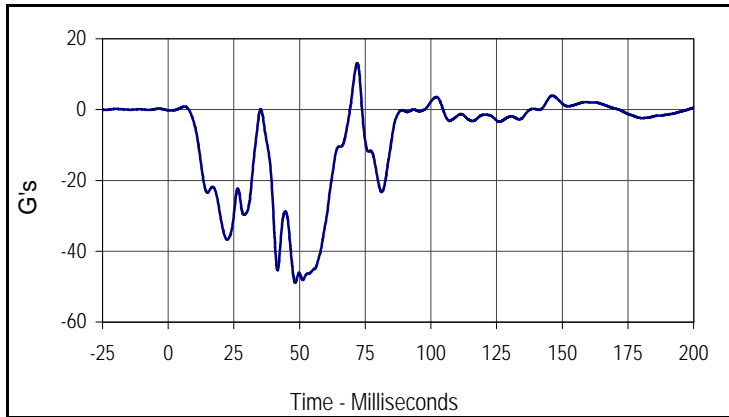
Curve Description			
Vehicle Engine Bottom X Velocity			
CURNO	Type	SAE Class	Units
092	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-7.2	147.6



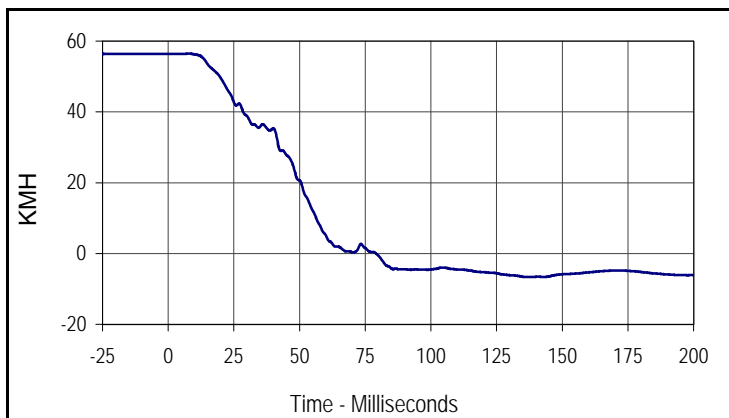
Curve Description			
Vehicle Engine Bottom X Displacement			
CURNO	Type	SAE Class	Units
092	IN2	180	CM
Max	Time	Min	Time
41.1	79.5	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

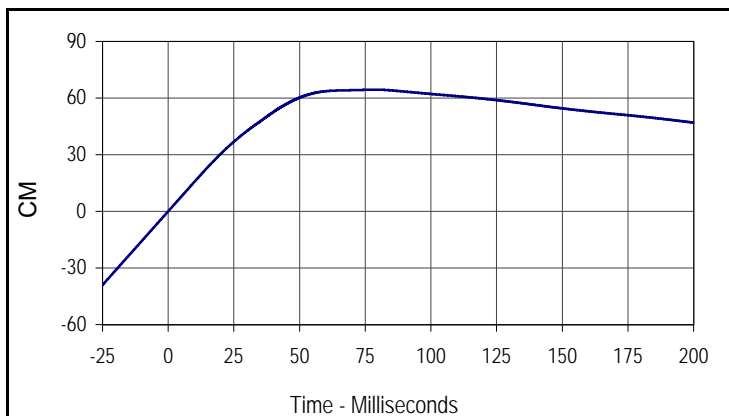
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Vehicle Left Brake Caliper X			
CURNO	Type	SAE Class	Units
093	FIL	60	G's
Max	Time	Min	Time
13.1	72.0	-48.9	48.4



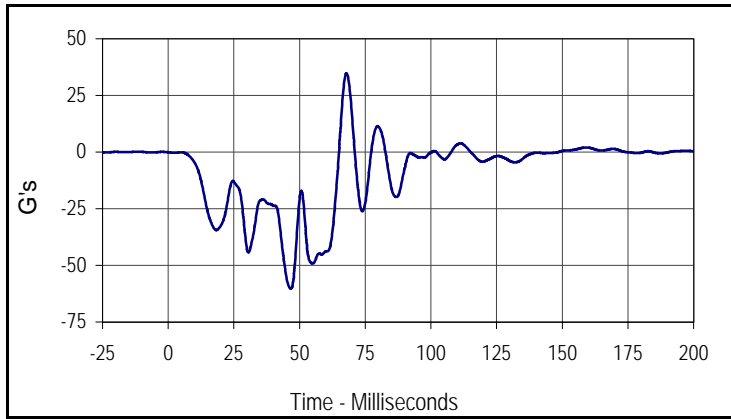
Curve Description			
Vehicle Left Brake Caliper X Velocity			
CURNO	Type	SAE Class	Units
093	IN1	180	KMH
Max	Time	Min	Time
56.5	7.9	-6.6	136.0



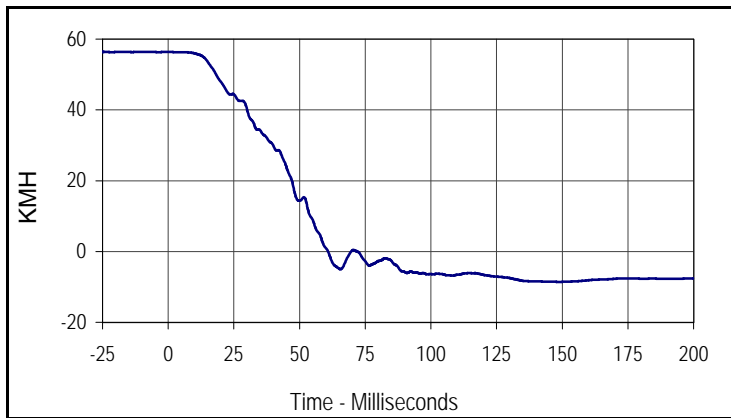
Curve Description			
Vehicle Left Brake Caliper X Displacement			
CURNO	Type	SAE Class	Units
093	IN2	180	CM
Max	Time	Min	Time
64.4	79.1	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

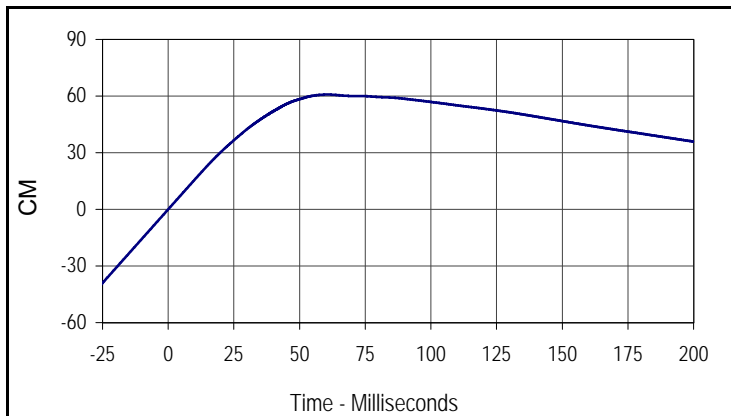
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Vehicle Right Brake Caliper X			
CURNO	Type	SAE Class	Units
094	FIL	60	G's
Max	Time	Min	Time
34.8	67.8	-60.3	46.7



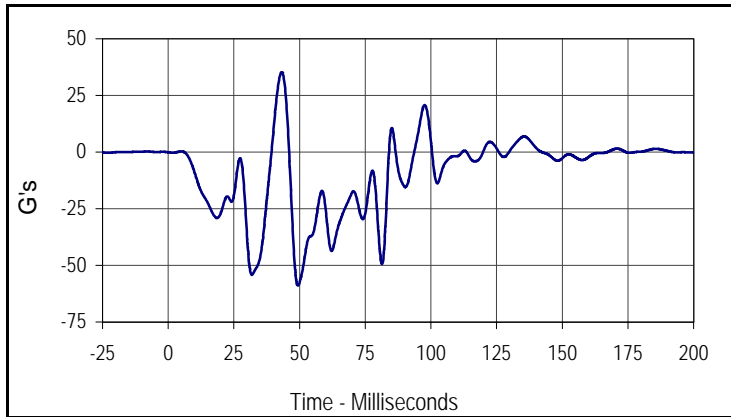
Curve Description			
Vehicle Right Brake Caliper X Velocity			
CURNO	Type	SAE Class	Units
094	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-8.6	148.8



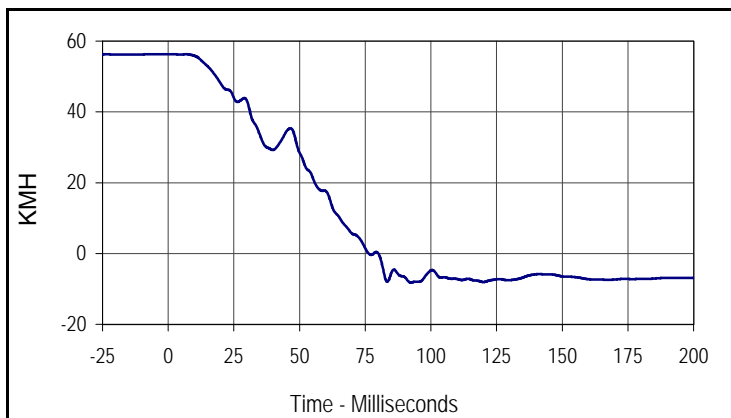
Curve Description			
Vehicle Right Brake Caliper X Displacement			
CURNO	Type	SAE Class	Units
094	IN2	180	CM
Max	Time	Min	Time
60.8	60.8	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

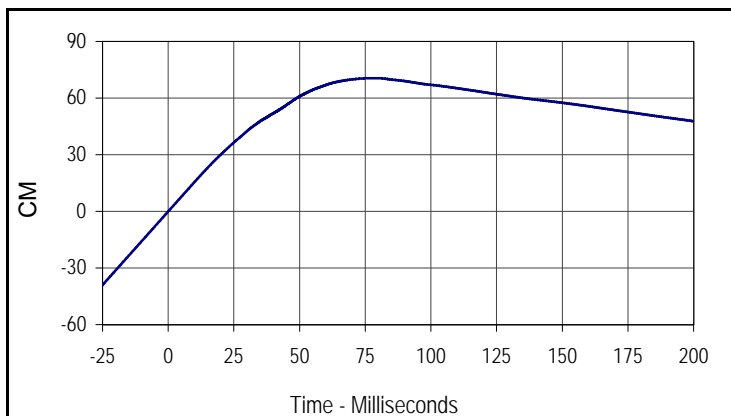
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Vehicle Instrument Panel X			
CURNO	Type	SAE Class	Units
095	FIL	60	G's
Max	Time	Min	Time
35.1	43.2	-59.0	49.4



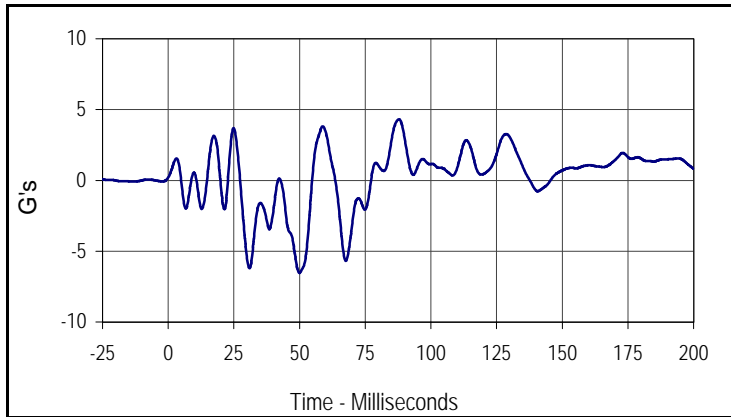
Curve Description			
Vehicle Instrument Panel X Velocity			
CURNO	Type	SAE Class	Units
095	IN1	180	KMH
Max	Time	Min	Time
56.3	0.0	-8.2	92.4



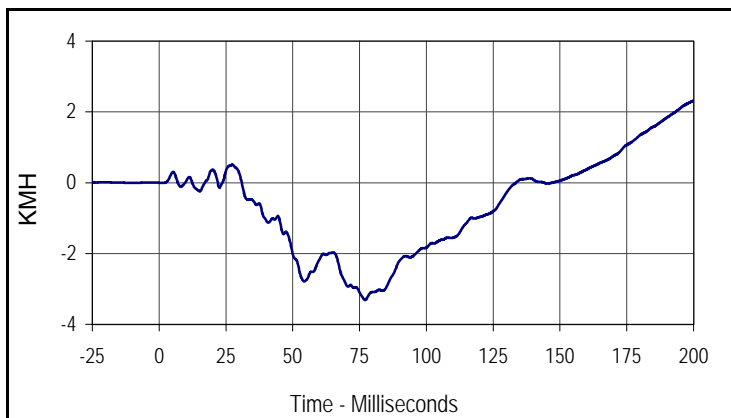
Curve Description			
Vehicle Instrument Panel X Displacement			
CURNO	Type	SAE Class	Units
095	IN2	180	CM
Max	Time	Min	Time
70.5	80.0	0.0	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

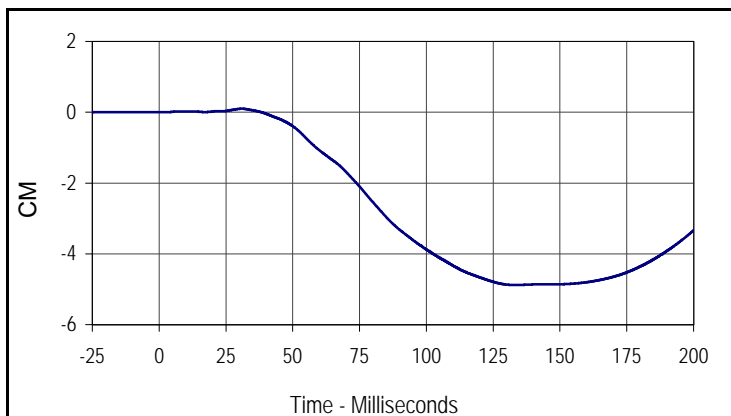
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Vehicle Left Rear Z			
CURNO	Type	SAE Class	Units
096	FIL	60	G's
Max	Time	Min	Time
4.3	87.8	-6.5	49.9



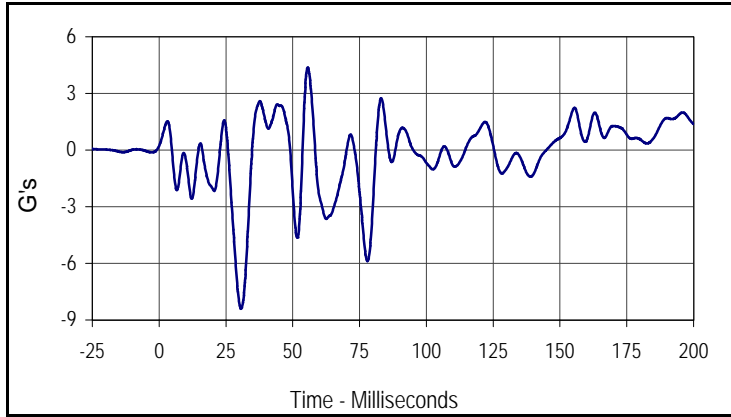
Curve Description			
Vehicle Left Rear Z Velocity			
CURNO	Type	SAE Class	Units
096	IN1	180	KMH
Max	Time	Min	Time
2.3	200.0	-3.3	77.1



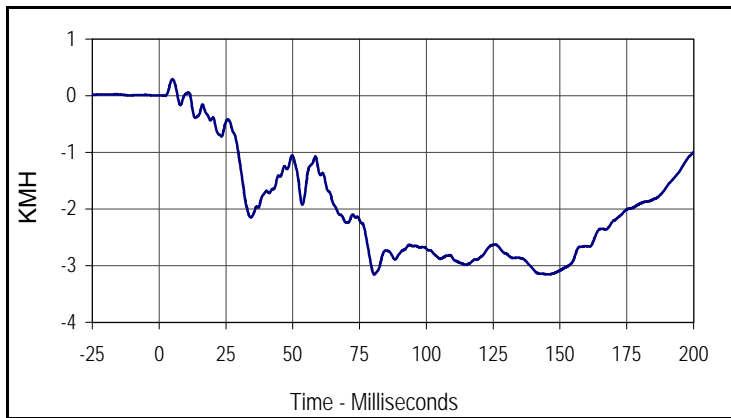
Curve Description			
Vehicle Left Rear Z Displacement			
CURNO	Type	SAE Class	Units
096	IN2	180	CM
Max	Time	Min	Time
0.1	30.9	-4.9	133.5

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

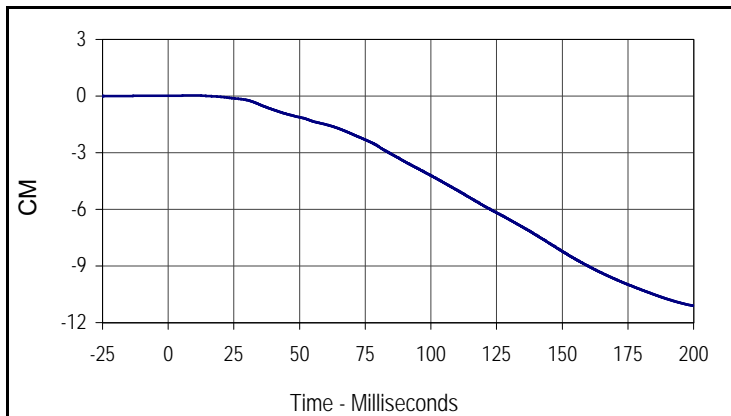
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Vehicle Right Rear Z			
CURNO	Type	SAE Class	Units
097	FIL	60	G's
Max	Time	Min	Time
4.4	55.6	-8.4	30.7



Curve Description			
Vehicle Right Rear Z Velocity			
CURNO	Type	SAE Class	Units
097	IN1	180	KMH
Max	Time	Min	Time
0.3	5.0	-3.2	80.5



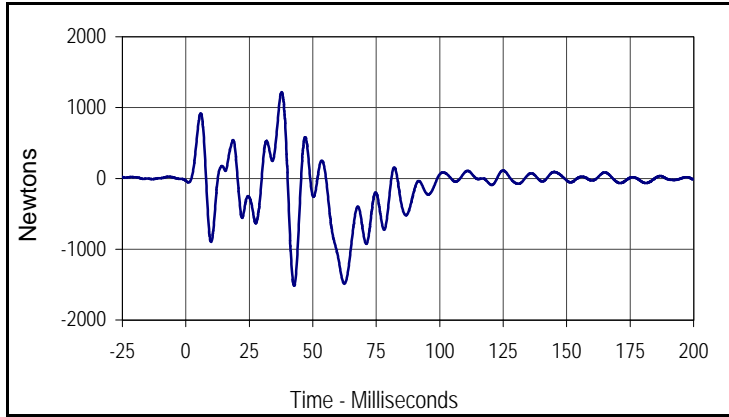
Curve Description			
Vehicle Right Rear Z Displacement			
CURNO	Type	SAE Class	Units
097	IN2	180	CM
Max	Time	Min	Time
0.0	6.9	-11.1	200.0

APPENDIX C

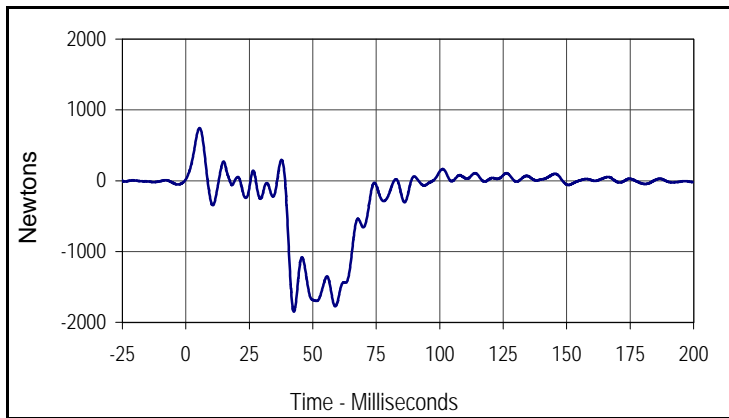
LOAD CELL BARRIER DATA PLOTS

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

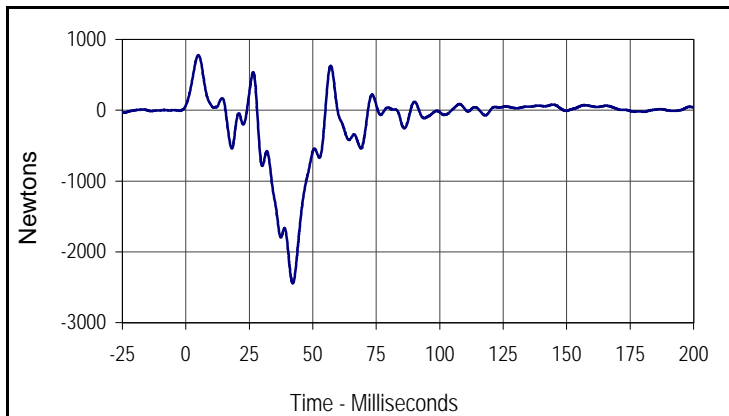
Test Date: 1/20/05
 NHTSA No.: M55201



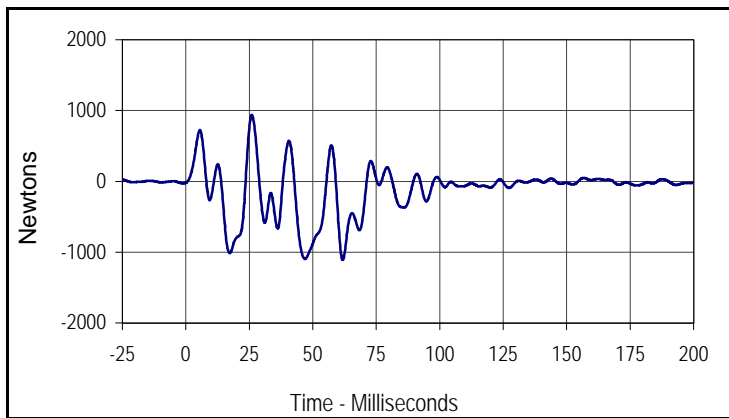
Curve Description			
Barrier Force A1			
CURNO	Type	SAE Class	Units
098	FIL	60	Newtons
Max	Time	Min	Time
1217.5	37.7	-1517.0	42.6



Curve Description			
Barrier Force B1			
CURNO	Type	SAE Class	Units
107	FIL	60	Newtons
Max	Time	Min	Time
742.8	5.4	-1852.1	42.5



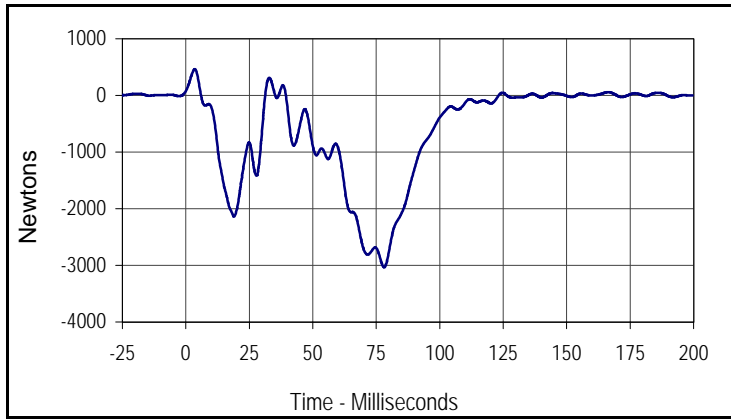
Curve Description			
Barrier Force C1			
CURNO	Type	SAE Class	Units
116	FIL	60	Newtons
Max	Time	Min	Time
778.5	4.9	-2444.2	42.1



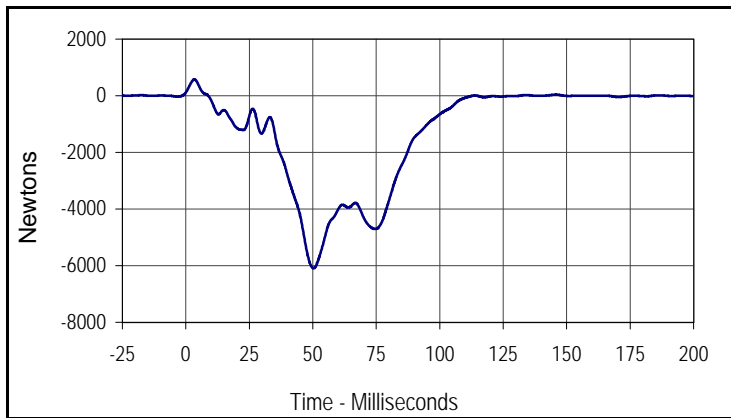
Curve Description			
Barrier Force D1			
CURNO	Type	SAE Class	Units
125	FIL	60	Newtons
Max	Time	Min	Time
937.0	26.0	-1111.3	61.8

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

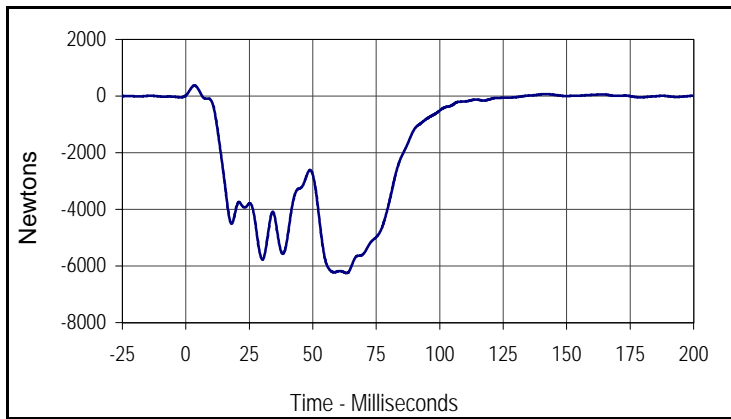
Test Date: 1/20/05
 NHTSA No.: M55201



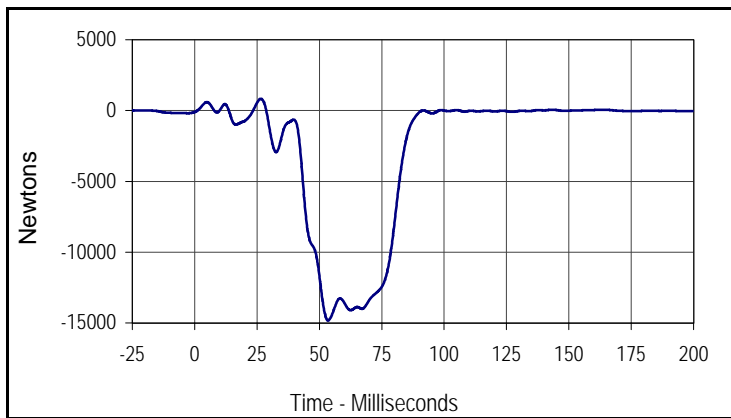
Curve Description			
Barrier Force A2			
CURNO	Type	SAE Class	Units
099	FIL	60	Newtons
Max	Time	Min	Time
464.5	3.5	-3034.6	78.1



Curve Description			
Barrier Force B2			
CURNO	Type	SAE Class	Units
108	FIL	60	Newtons
Max	Time	Min	Time
573.8	3.4	-6094.5	50.3



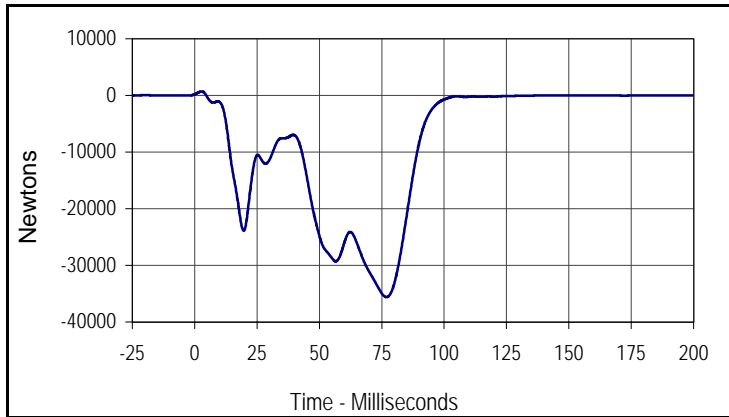
Curve Description			
Barrier Force C2			
CURNO	Type	SAE Class	Units
117	FIL	60	Newtons
Max	Time	Min	Time
374.8	3.4	-6251.5	63.3



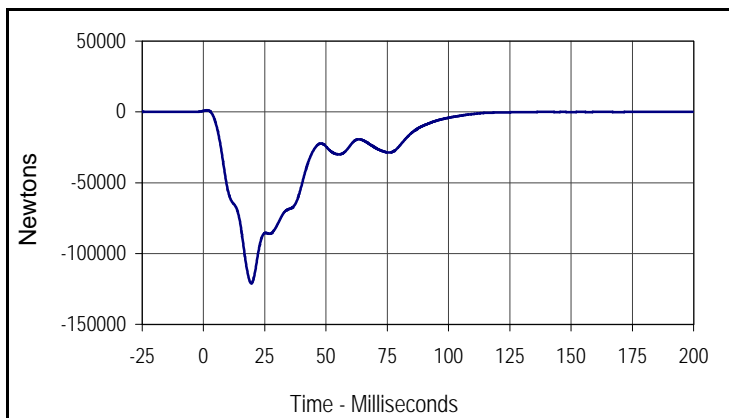
Curve Description			
Barrier Force D2			
CURNO	Type	SAE Class	Units
126	FIL	60	Newtons
Max	Time	Min	Time
825.2	26.5	-14820.4	53.5

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

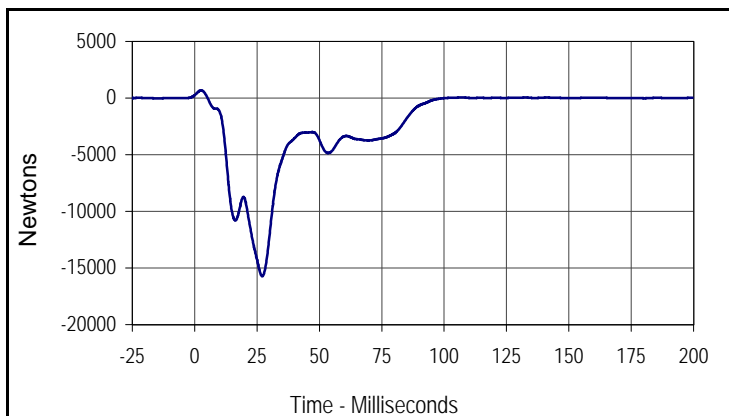
Test Date: 1/20/05
 NHTSA No.: M55201



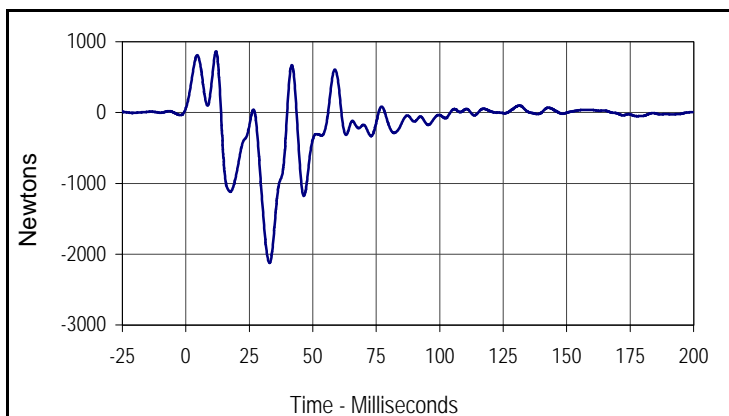
Curve Description			
Barrier Force A3			
CURNO	Type	SAE Class	Units
100	FIL	60	Newtons
Max	Time	Min	Time
692.4	2.7	-35614.4	76.9



Curve Description			
Barrier Force B3			
CURNO	Type	SAE Class	Units
109	FIL	60	Newtons
Max	Time	Min	Time
1108.7	1.4	-121047.0	19.5



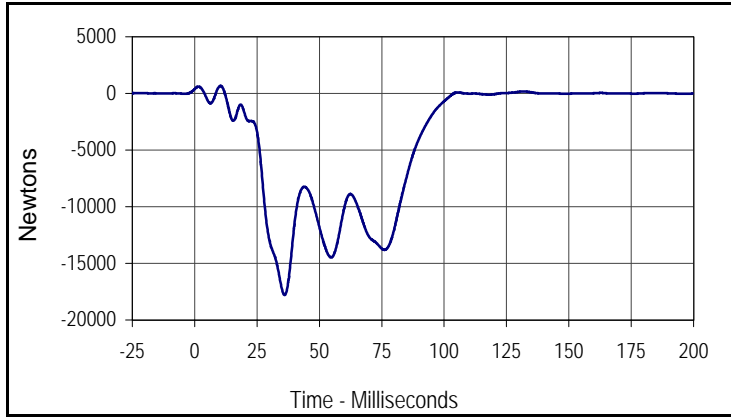
Curve Description			
Barrier Force C3			
CURNO	Type	SAE Class	Units
118	FIL	60	Newtons
Max	Time	Min	Time
674.2	2.6	-15731.9	27.1



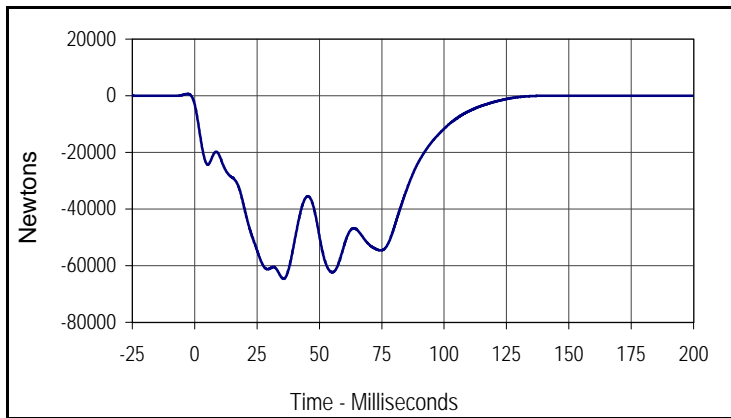
Curve Description			
Barrier Force D3			
CURNO	Type	SAE Class	Units
127	FIL	60	Newtons
Max	Time	Min	Time
865.8	11.8	-2123.4	33.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

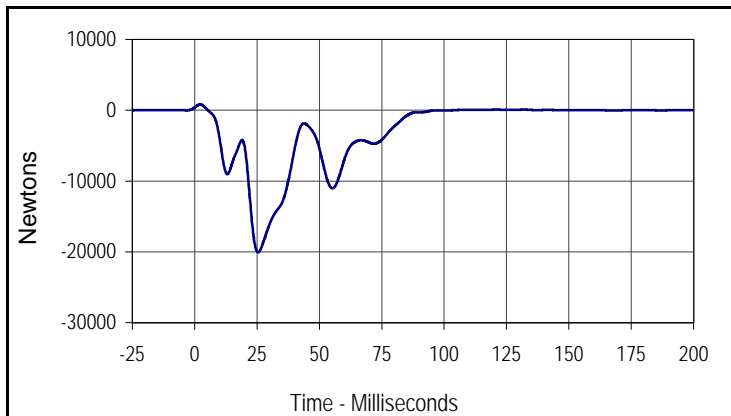
Test Date: 1/20/05
 NHTSA No.: M55201



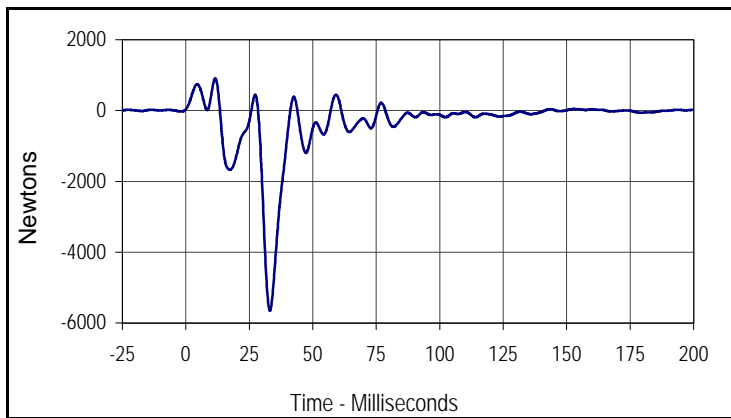
Curve Description			
Barrier Force A4			
CURNO	Type	SAE Class	Units
101	FIL	60	Newtons
Max	Time	Min	Time
664.4	10.4	-17804.9	36.0



Curve Description			
Barrier Force B4			
CURNO	Type	SAE Class	Units
110	FIL	60	Newtons
Max	Time	Min	Time
29.7	170.2	-64623.5	35.6



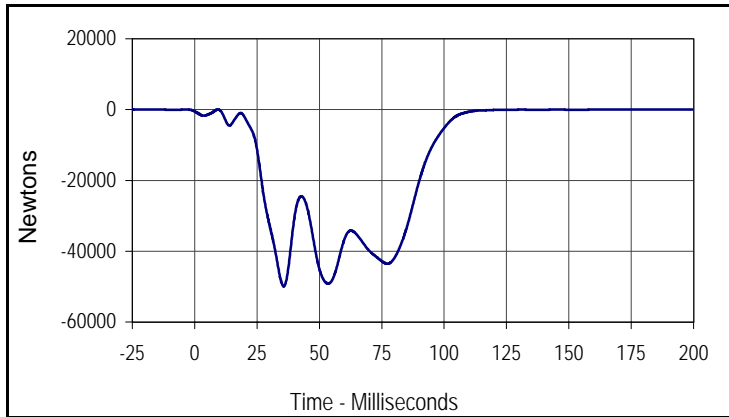
Curve Description			
Barrier Force C4			
CURNO	Type	SAE Class	Units
119	FIL	60	Newtons
Max	Time	Min	Time
809.6	2.2	-20076.9	25.4



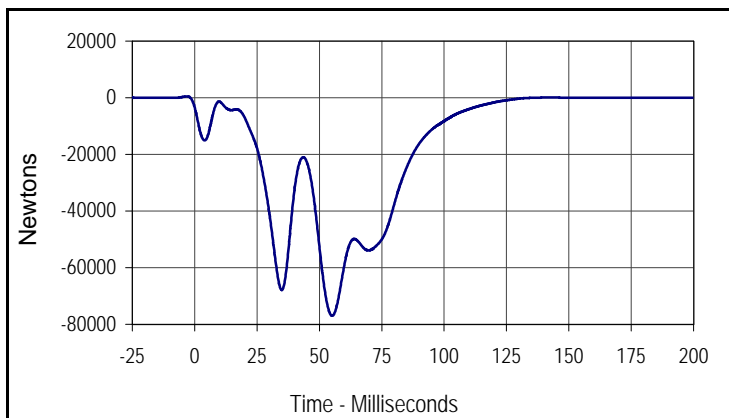
Curve Description			
Barrier Force D4			
CURNO	Type	SAE Class	Units
128	FIL	60	Newtons
Max	Time	Min	Time
913.0	11.6	-5651.3	33.1

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

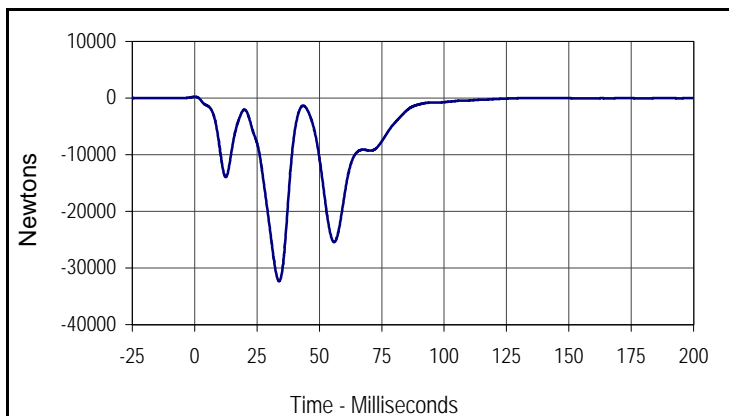
Test Date: 1/20/05
 NHTSA No.: M55201



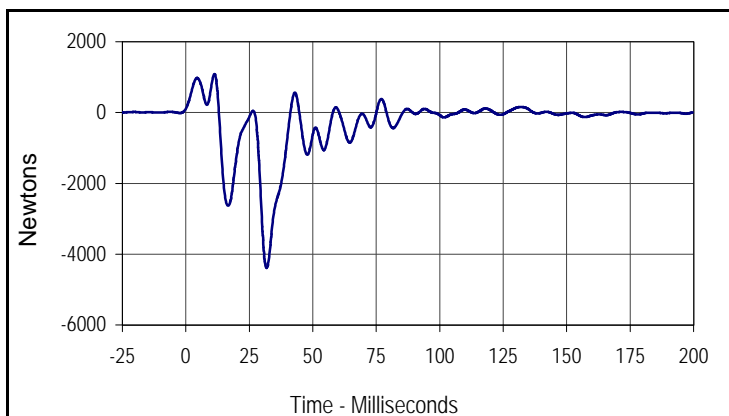
Curve Description			
Barrier Force A5			
CURNO	Type	SAE Class	Units
102	FIL	60	Newtons
Max	Time	Min	Time
37.5	181.0	-49935.8	35.7



Curve Description			
Barrier Force B5			
CURNO	Type	SAE Class	Units
111	FIL	60	Newtons
Max	Time	Min	Time
84.6	144.3	-76979.7	55.1



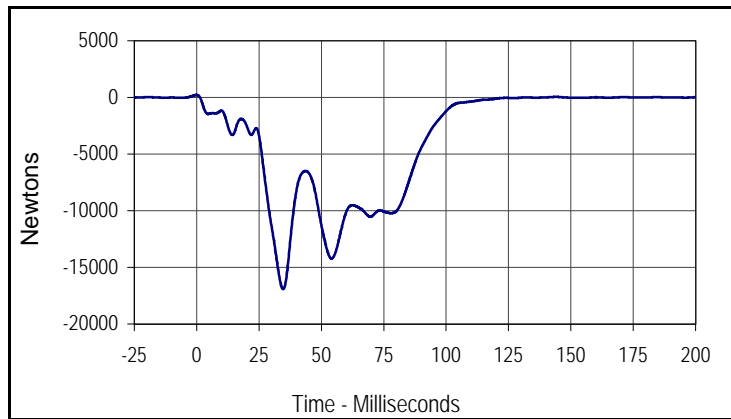
Curve Description			
Barrier Force C5			
CURNO	Type	SAE Class	Units
120	FIL	60	Newtons
Max	Time	Min	Time
224.4	0.2	-32301.0	33.9



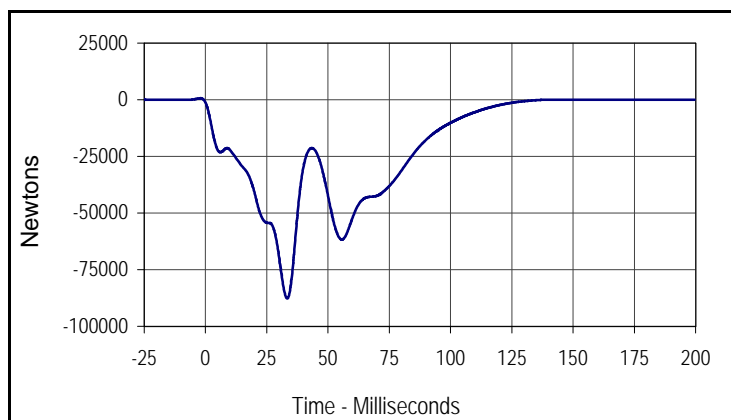
Curve Description			
Barrier Force D5			
CURNO	Type	SAE Class	Units
129	FIL	60	Newtons
Max	Time	Min	Time
1084.6	11.3	-4388.7	31.8

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

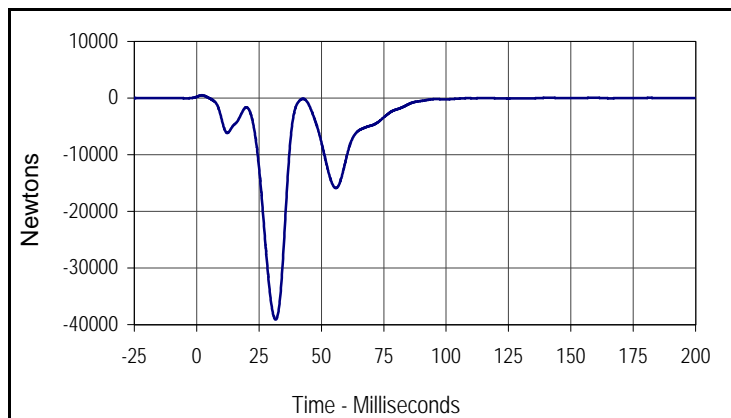
Test Date: 1/20/05
 NHTSA No.: M55201



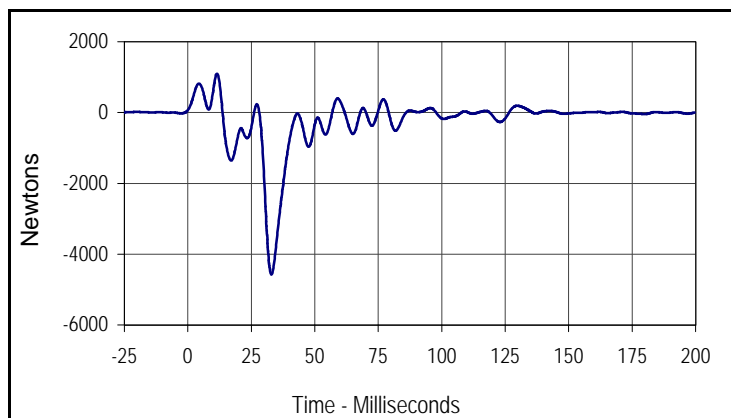
Curve Description			
Barrier Force A6			
CURNO	Type	SAE Class	Units
103	FIL	60	Newtons
Max	Time	Min	Time
220.3	0.0	-16932.7	34.7



Curve Description			
Barrier Force B6			
CURNO	Type	SAE Class	Units
112	FIL	60	Newtons
Max	Time	Min	Time
30.9	147.6	-87759.4	33.3



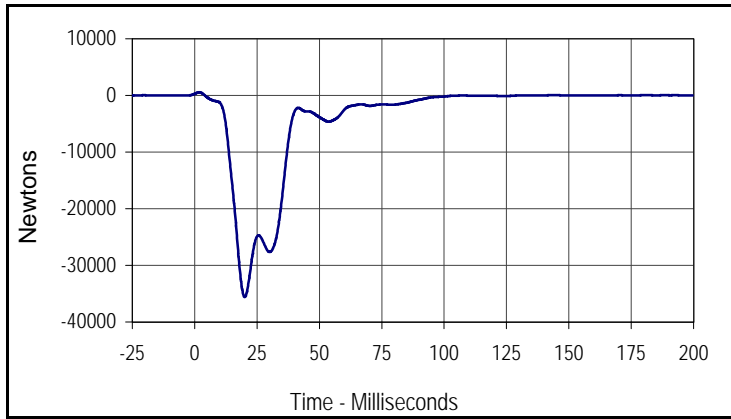
Curve Description			
Barrier Force C6			
CURNO	Type	SAE Class	Units
121	FIL	60	Newtons
Max	Time	Min	Time
484.8	2.0	-39113.0	31.7



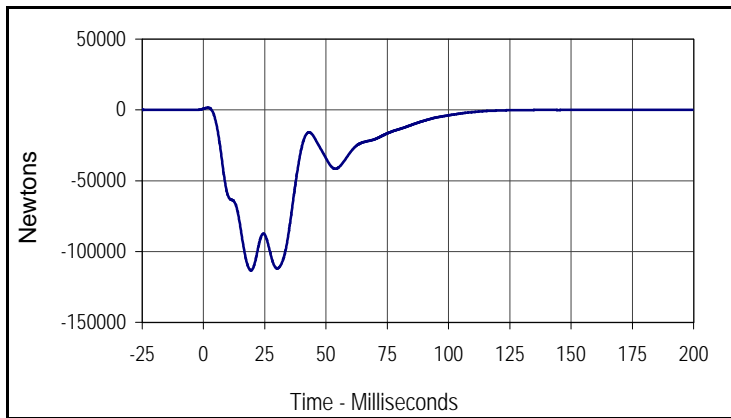
Curve Description			
Barrier Force D6			
CURNO	Type	SAE Class	Units
130	FIL	60	Newtons
Max	Time	Min	Time
1095.4	11.5	-4574.1	32.9

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

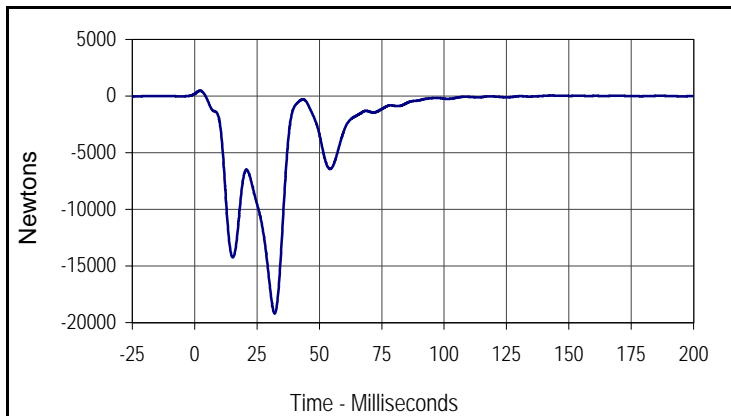
Test Date: 1/20/05
 NHTSA No.: M55201



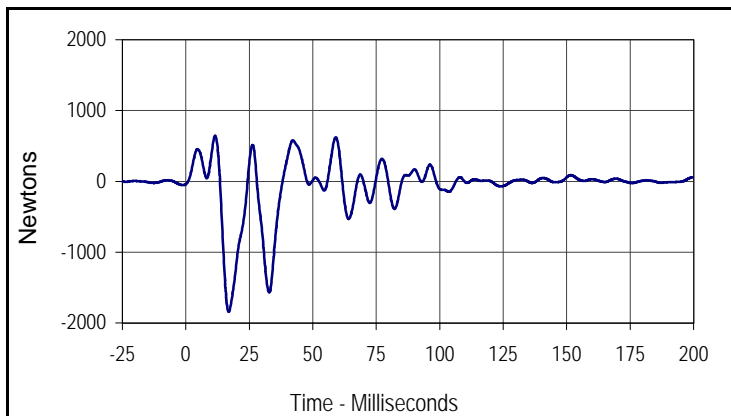
Curve Description			
Barrier Force A7			
CURNO	Type	SAE Class	Units
104	FIL	60	Newtons
Max	Time	Min	Time
546.9	1.9	-35597.4	20.0



Curve Description			
Barrier Force B7			
CURNO	Type	SAE Class	Units
113	FIL	60	Newtons
Max	Time	Min	Time
1533.0	1.8	-113320.6	19.4



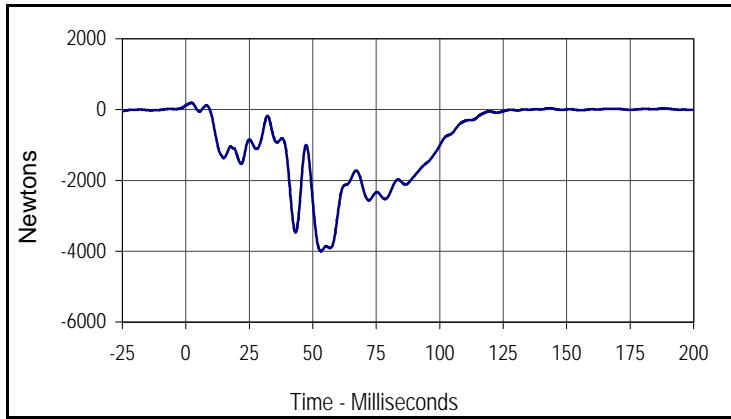
Curve Description			
Barrier Force C7			
CURNO	Type	SAE Class	Units
122	FIL	60	Newtons
Max	Time	Min	Time
472.5	2.2	-19167.6	32.1



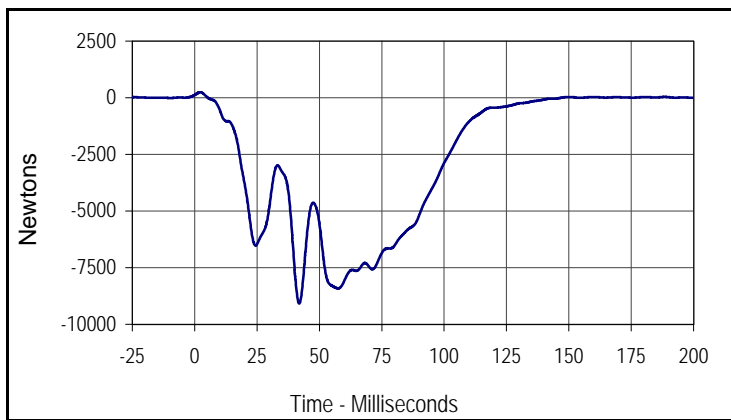
Curve Description			
Barrier Force D7			
CURNO	Type	SAE Class	Units
131	FIL	60	Newtons
Max	Time	Min	Time
642.1	11.5	-1843.4	16.9

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

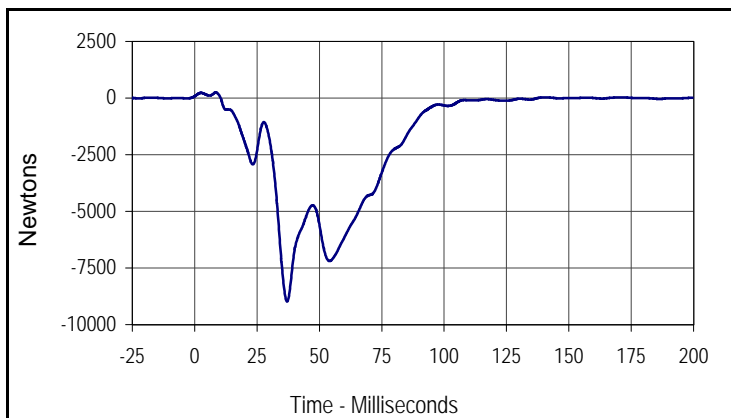
Test Date: 1/20/05
 NHTSA No.: M55201



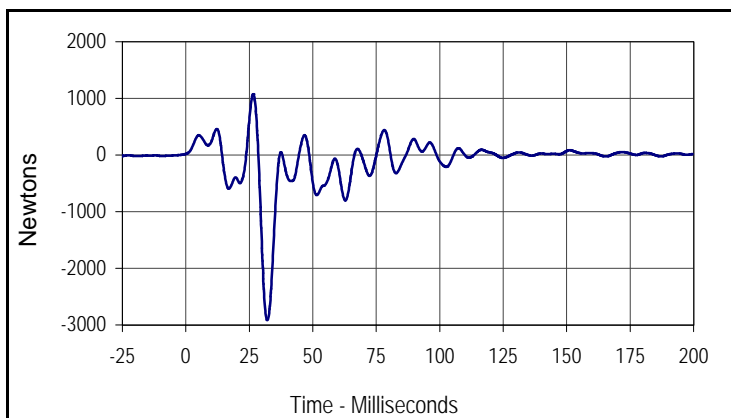
Curve Description			
Barrier Force A8			
CURNO	Type	SAE Class	Units
105	FIL	60	Newtons
Max	Time	Min	Time
190.4	2.2	-3999.2	53.2



Curve Description			
Barrier Force B8			
CURNO	Type	SAE Class	Units
114	FIL	60	Newtons
Max	Time	Min	Time
247.1	2.2	-9085.8	41.9



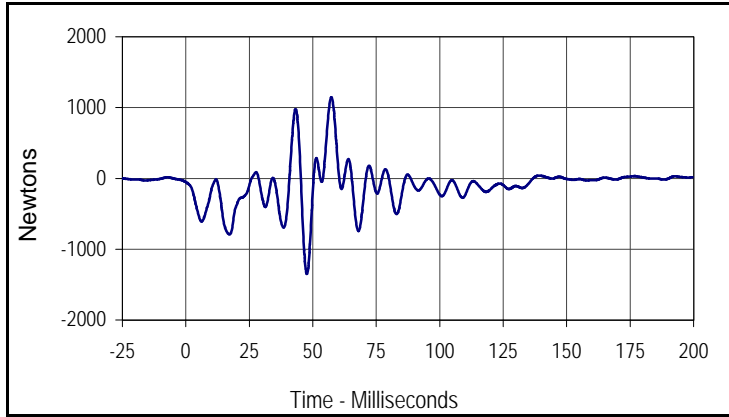
Curve Description			
Barrier Force C8			
CURNO	Type	SAE Class	Units
123	FIL	60	Newtons
Max	Time	Min	Time
250.7	8.5	-8983.0	37.0



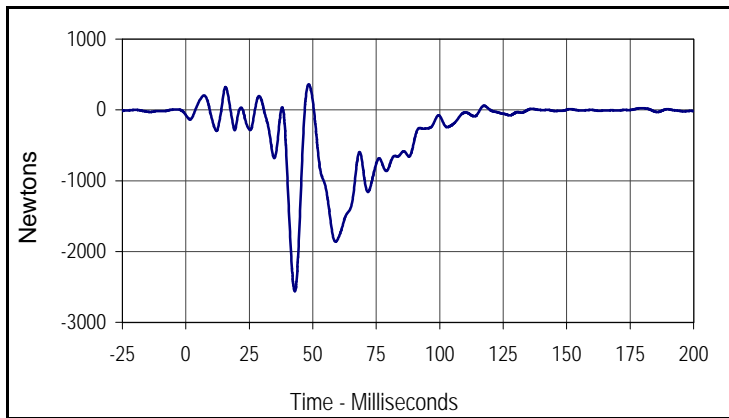
Curve Description			
Barrier Force D8			
CURNO	Type	SAE Class	Units
132	FIL	60	Newtons
Max	Time	Min	Time
1074.0	26.5	-2915.2	32.1

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

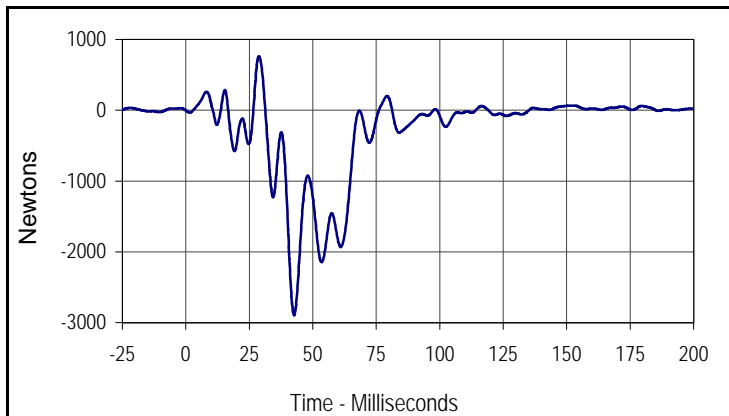
Test Date: 1/20/05
 NHTSA No.: M55201



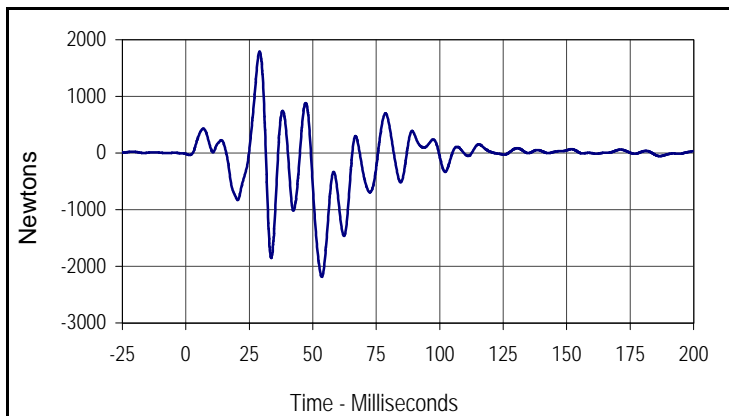
Curve Description			
Barrier Force A9			
CURNO	Type	SAE Class	Units
106	FIL	60	Newtons
Max	Time	Min	Time
1144.9	57.3	-1349.8	47.7



Curve Description			
Barrier Force B9			
CURNO	Type	SAE Class	Units
115	FIL	60	Newtons
Max	Time	Min	Time
362.2	48.4	-2562.6	42.9



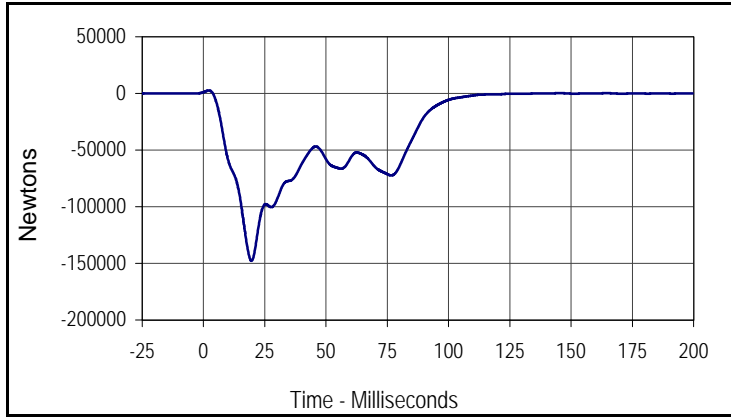
Curve Description			
Barrier Force C9			
CURNO	Type	SAE Class	Units
124	FIL	60	Newtons
Max	Time	Min	Time
758.5	28.8	-2895.8	42.6



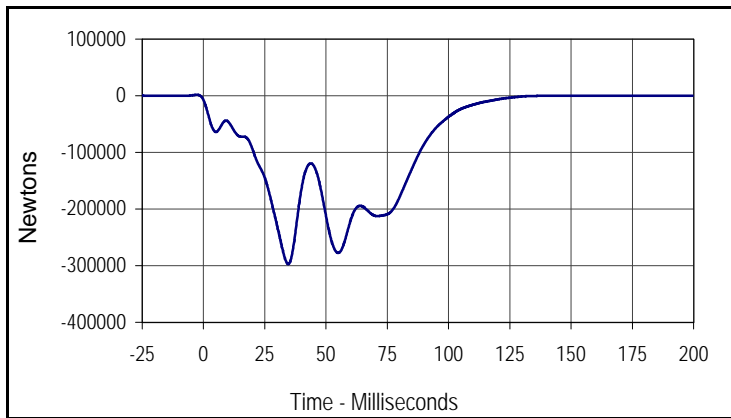
Curve Description			
Barrier Force D9			
CURNO	Type	SAE Class	Units
133	FIL	60	Newtons
Max	Time	Min	Time
1788.7	29.0	-2183.6	53.6

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

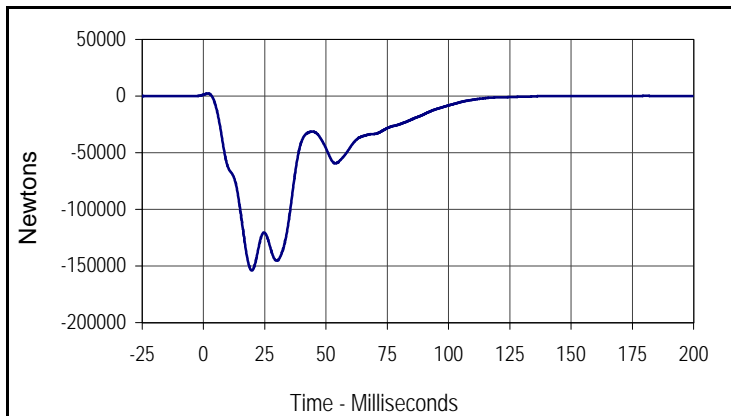
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Barrier Force Sum Group 1			
CURNO	Type	SAE Class	Units
001	SUM	60	Newtons
Max	Time	Min	Time
2592.6	2.2	-147743.6	19.6



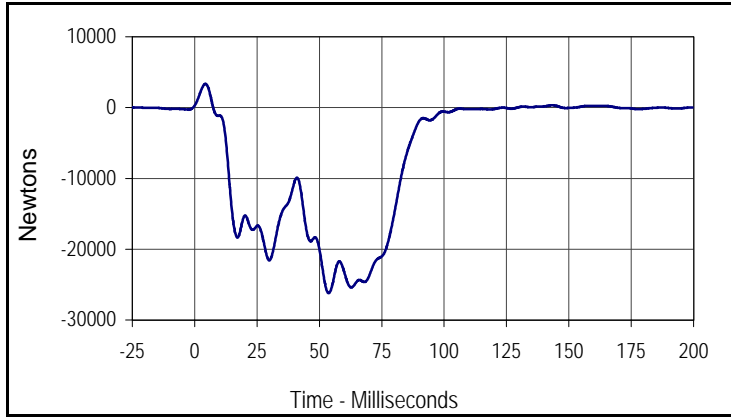
Curve Description			
Barrier Force Sum Group 2			
CURNO	Type	SAE Class	Units
002	SUM	60	Newtons
Max	Time	Min	Time
160.3	144.3	-297238.2	34.6



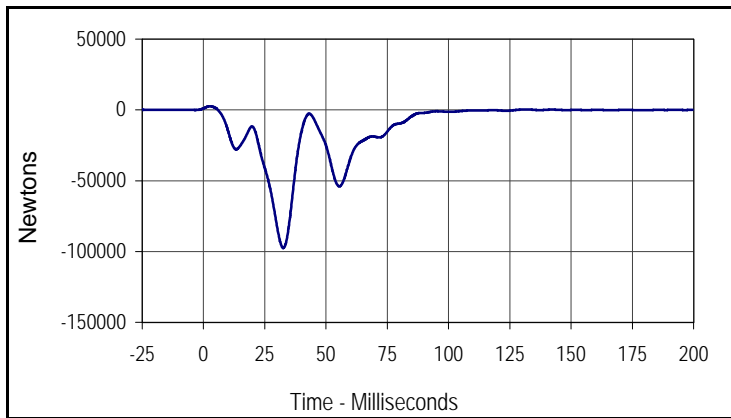
Curve Description			
Barrier Force Sum Group 3			
CURNO	Type	SAE Class	Units
003	SUM	60	Newtons
Max	Time	Min	Time
2264.1	1.8	-153989.9	19.7

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

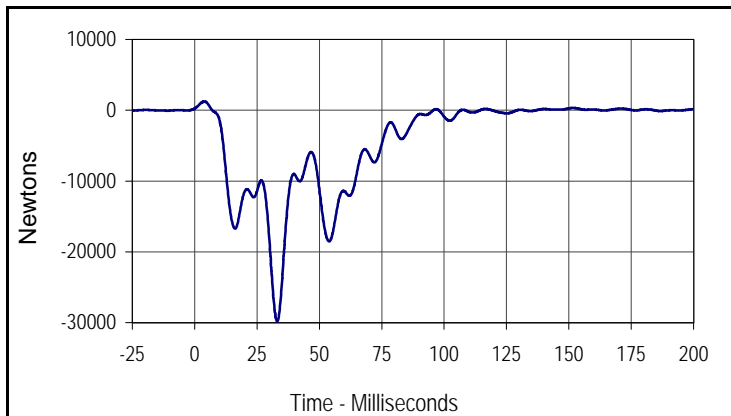
Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Barrier Force Sum Group 4			
CURNO	Type	SAE Class	Units
004	SUM	60	Newtons
Max	Time	Min	Time
3347.0	4.3	-26212.5	53.7



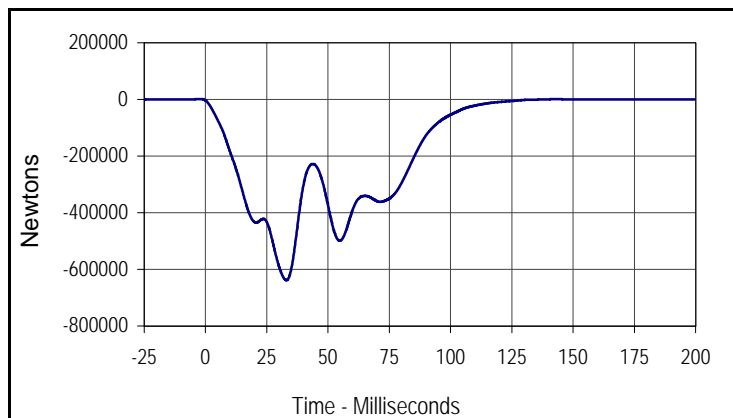
Curve Description			
Barrier Force Sum Group 5			
CURNO	Type	SAE Class	Units
005	SUM	60	Newtons
Max	Time	Min	Time
2565.0	2.6	-97472.6	32.6



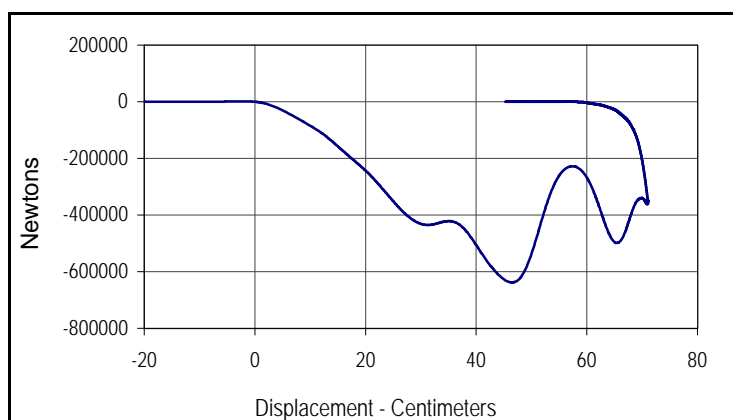
Curve Description			
Barrier Force Sum Group 6			
CURNO	Type	SAE Class	Units
006	SUM	60	Newtons
Max	Time	Min	Time
1240.1	3.9	-29838.1	33.1

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Barrier Force Total Sum			
CURNO	Type	SAE Class	Units
007	SUM	60	Newtons
Max	Time	Min	Time
885.2	143.2	-638043.5	33.0



Curve Description			
Barrier Force Total Sum vs. Displ.			
CURNO	Type	SAE Class	Units
001	XVY	60	Newtons
Max	CM	Min	CM
885.2	56.9	-638043.5	45.6

BARRIER LOAD CELL SUMMARY DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

Location	Units	Max	Time	Min	Time
Barrier Force A1	Newtons	1217.5	37.7	-1517.0	42.6
Barrier Force A2	Newtons	464.5	3.5	-3034.6	78.1
Barrier Force A3	Newtons	692.4	2.7	-35614.4	76.9
Barrier Force A4	Newtons	664.4	10.4	-17804.9	36.0
Barrier Force A5	Newtons	37.5	181.0	-49935.8	35.7
Barrier Force A6	Newtons	220.3	0.0	-16932.7	34.7
Barrier Force A7	Newtons	546.9	1.9	-35597.4	20.0
Barrier Force A8	Newtons	190.4	2.2	-3999.2	53.2
Barrier Force A9	Newtons	1144.9	57.3	-1349.8	47.7
Barrier Force B1	Newtons	742.8	5.4	-1852.1	42.5
Barrier Force B2	Newtons	573.8	3.4	-6094.5	50.3
Barrier Force B3	Newtons	1108.7	1.4	-121047.0	19.5
Barrier Force B4	Newtons	29.7	170.2	-64623.5	35.6
Barrier Force B5	Newtons	84.6	144.3	-76979.7	55.1
Barrier Force B6	Newtons	30.9	147.6	-87759.4	33.3
Barrier Force B7	Newtons	1533.0	1.8	-113320.6	19.4
Barrier Force B8	Newtons	247.1	2.2	-9085.8	41.9
Barrier Force B9	Newtons	362.2	48.4	-2562.6	42.9
Barrier Force C1	Newtons	778.5	4.9	-2444.2	42.1
Barrier Force C2	Newtons	374.8	3.4	-6251.5	63.3
Barrier Force C3	Newtons	674.2	2.6	-15731.9	27.1
Barrier Force C4	Newtons	809.6	2.2	-20076.9	25.4
Barrier Force C5	Newtons	224.4	0.2	-32301.0	33.9
Barrier Force C6	Newtons	484.8	2.0	-39113.0	31.7
Barrier Force C7	Newtons	472.5	2.2	-19167.6	32.1
Barrier Force C8	Newtons	250.7	8.5	-8983.0	37.0
Barrier Force C9	Newtons	758.5	28.8	-2895.8	42.6
Barrier Force D1	Newtons	937.0	26.0	-1111.3	61.8
Barrier Force D2	Newtons	825.2	26.5	-14820.4	53.5
Barrier Force D3	Newtons	865.8	11.8	-2123.4	33.0
Barrier Force D4	Newtons	913.0	11.6	-5651.3	33.1
Barrier Force D5	Newtons	1084.6	11.3	-4388.7	31.8
Barrier Force D6	Newtons	1095.4	11.5	-4574.1	32.9
Barrier Force D7	Newtons	642.1	11.5	-1843.4	16.9
Barrier Force D8	Newtons	1074.0	26.5	-2915.2	32.1
Barrier Force D9	Newtons	1788.7	29.0	-2183.6	53.6
Barrier Force Sum Group 1	Newtons	2592.6	2.2	-147743.6	19.6
Barrier Force Sum Group 2	Newtons	160.3	144.3	-297238.2	34.6
Barrier Force Sum Group 3	Newtons	2264.1	1.8	-153989.9	19.7
Barrier Force Sum Group 4	Newtons	3347.0	4.3	-26212.5	53.7
Barrier Force Sum Group 5	Newtons	2565.0	2.6	-97472.6	32.6
Barrier Force Sum Group 6	Newtons	1240.1	3.9	-29838.1	33.1
Barrier Force Total Sum	Newtons	885.2	143.2	-638043.5	33.0

APPENDIX D

INSTRUMENTATION DATA CHANNEL ASSIGNMENTS

**2005 NHTSA 35mph NCAP
Instrumentation Data Channel Assignments
Driver A.T.D. Serial Number 34
1/20/05
2005 Nissan Maxima 3.5 SE 4-Door Sedan**

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
1	HEAD, PRIMARY	X	KEAC039	Accel.,1/2 bridge	Endevco	7264-2000	G
2	HEAD, PRIMARY	Y	KEAC038	Accel.,1/2 bridge	Endevco	7264-2000	G
3	HEAD, PRIMARY	Z	KEAC027	Accel.,1/2 bridge	Endevco	7264-2000	G
4	HEAD, REDUNDANT	X	KEAC031	Accel.,1/2 bridge	Endevco	7264-2000	G
5	HEAD, REDUNDANT	Y	KEAC032	Accel.,1/2 bridge	Endevco	7264-2000	G
6	HEAD, REDUNDANT	Z	KEAC026	Accel.,1/2 bridge	Endevco	7264-2000	G
7	NECK FORCE	X	GPUN02FX	Load cell, six axis neck	R. A. Denton	1716A	N
8	NECK FORCE	Y	GPUN02FY	Load cell, six axis neck	R. A. Denton	1716A	N
9	NECK FORCE	Z	GPUN02FZ	Load cell, six axis neck	R. A. Denton	1716A	N
10	NECK MOMENT	X	GPUN02MX	Load cell, six axis neck	R. A. Denton	1716A	Nm
11	NECK MOMENT	Y	GPUN02MY	Load cell, six axis neck	R. A. Denton	1716A	Nm
12	NECK MOMENT	Z	GPUN02MZ	Load cell, six axis neck	R. A. Denton	1716A	Nm
13	CHEST, PRIMARY	X	GPAC031	Accel., 1/2 bridge	Endevco	7264-2000	G
14	CHEST, PRIMARY	Y	GPAC024	Accel., 1/2 bridge	Endevco	7264-2000	G
15	CHEST, PRIMARY	Z	GPAC029	Accel., 1/2 bridge	Endevco	7264-2000	G
16	CHEST, REDUNDANT	X	KEAC023	Accel.,1/2 bridge	Endevco	7264-200	G
17	CHEST, REDUNDANT	Y	KEAC022	Accel.,1/2 bridge	Endevco	7264-200	G
18	CHEST, REDUNDANT	Z	KEAC024	Accel.,1/2 bridge	Endevco	7264-200	G
19	CHEST DISPLACEMENT	X	GPCP001	Rotary Pot Chest	Servo	14CBI	MM
20	PELVIS, PRIMARY	X	KEAC019	Accel.,1/2 bridge	Endevco	7264-200	G
21	PELVIS, PRIMARY	Y	KEAC020	Accel.,1/2 bridge	Endevco	7264-200	G
22	PELVIS, PRIMARY	Z	KEAC021	Accel.,1/2 bridge	Endevco	7264-200	G
23	LEFT FEMUR FORCE	Z	KEFF001	Load cell, Femur	R.A. Denton	2121	N
24	RIGHT FEMUR FORCE	Z	KEFF002	Load cell, Femur	R.A. Denton	2121	N

**2005 NHTSA 35mph NCAP
Instrumentation Data Channel Assignments
Driver A.T.D. Serial Number 34
1/20/05
2005 Nissan Maxima 3.5 SE 4-Door Sedan**

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
25	UP. TIBIA LEFT MOM.	X	GPUT09MX	2 ch., Upper tibia gage	R. A. Denton	1583	Nm
26	UP. TIBIA LEFT MOM.	Y	GPUT09MY	2 ch., Upper tibia gage	R. A. Denton	1583	Nm
27	UP. TIBIA RIGHT MOM.	X	GPUT09MX	2 ch., Upper tibia gage	R. A. Denton	1583	Nm
28	UP. TIBIA RIGHT MOM.	Y	GPUT09MY	2 ch., Upper tibia gage	R. A. Denton	1583	Nm
29	LWR. TIBIA LEFT MOM.	X	GPLT09MX	3 ch., lower tibia gage	R. A. Denton	3093	Nm
30	LWR. TIBIA LEFT MOM.	Y	GPLT09MY	3 ch., lower tibia gage	R. A. Denton	3093	Nm
31	LWR. TIBIA LEFT FORCE	Z	GPLT09FZ	3 ch., lower tibia gage	R. A. Denton	3093	N
32	LWR. TIBIA RIGHT MOM.	X	GPLT09MX	3 ch., lower tibia gage	R. A. Denton	3093	Nm
33	LWR. TIBIA RIGHT MOM.	Y	GPLT09MY	3 ch., lower tibia gage	R. A. Denton	3093	Nm
34	LWR. TIBIA RIGHT FORCE	Z	GPLT09FZ	3 ch., lower tibia gage	R. A. Denton	3093	N
35	FOOT LEFT, AFT	X	KEIC003X	Accel., Foot Triax	I.C. Sensor	3031-500	G
36	FOOT LEFT, AFT	Z	KEIC003Y	Accel., Foot Triax	I.C. Sensor	3031-500	G
37	FOOT LEFT, FORE	Z	KEIC003Z	Accel., Foot Triax	I.C. Sensor	3031-500	G
38	FOOT RIGHT, AFT	X	KEIC004X	Accel., Foot Triax	I.C. Sensor	3031-500	G
39	FOOT RIGHT, AFT	Z	KEIC004Y	Accel., Foot Triax	I.C. Sensor	3031-500	G
40	FOOT RIGHT, FORE	Z	KEIC004Z	Accel., Foot Triax	I.C. Sensor	3031-500	G
41	LAP BELT FORCE	X	BL134	Load cell, Seat belt	FGP	FN4060	N
42	SHOULDER BELT FORCE	X	BL135	Load cell, Seat belt	FGP	FN4060	N
43	SHOULDER BELT SPOOL	X	KEPP001	Pullout pot	Celesco	PTX101-0030	MM
44	SHOULDER BELT ELONG.	X	KEEP001	Linear pot., belt stretch	E.T.I.	LCP8-10 10K	MM/CM

**2005 NHTSA 35mph NCAP
Instrumentation Data Channel Assignments
Passenger A.T.D. Serial Number 35
1/20/05
2005 Nissan Maxima 3.5 SE 4-Door Sedan**

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
45	HEAD, PRIMARY	X	GPAC027	Accel., 1/2 bridge	Endevco	7264-2000	G
46	HEAD, PRIMARY	Y	GPAC002	Accel., 1/2 bridge	Endevco	7264-2000	G
47	HEAD, PRIMARY	Z	GPAC003	Accel., 1/2 bridge	Endevco	7264-2000	G
48	HEAD, REDUNDANT	X	GPAC032	Accel., 1/2 bridge	Endevco	7264-2000	G
49	HEAD, REDUNDANT	Y	GPAC021	Accel., 1/2 bridge	Endevco	7264-2000	G
50	HEAD, REDUNDANT	Z	GPAC026	Accel., 1/2 bridge	Endevco	7264-2000	G
51	NECK FORCE	X	GPUN01FX	Load cell, six axis neck	R. A. Denton	1716A	N
52	NECK FORCE	Y	GPUN01FY	Load cell, six axis neck	R. A. Denton	1716A	N
53	NECK FORCE	Z	GPUN01FZ	Load cell, six axis neck	R. A. Denton	1716A	N
54	NECK MOMENT	X	GPUN01MX	Load cell, six axis neck	R. A. Denton	1716A	Nm
55	NECK MOMENT	Y	GPUN01MY	Load cell, six axis neck	R. A. Denton	1716A	Nm
56	NECK MOMENT	Z	GPUN01MZ	Load cell, six axis neck	R. A. Denton	1716A	Nm
57	CHEST, PRIMARY	X	GPAC005	Accel., 1/2 bridge	Endevco	7264-2000	G
58	CHEST, PRIMARY	Y	GPAC011	Accel., 1/2 bridge	Endevco	7264-2000	G
59	CHEST, PRIMARY	Z	GPAC010	Accel., 1/2 bridge	Endevco	7264-2000	G
60	CHEST, REDUNDANT	X	GPAC034	Accel., 1/2 bridge	Endevco	7264-2000	G
61	CHEST, REDUNDANT	Y	GPAC023	Accel., 1/2 bridge	Endevco	7264-2000	G
62	CHEST, REDUNDANT	Z	GPAC020	Accel., 1/2 bridge	Endevco	7264-2000	G
63	CHEST DISPLACEMENT	X	GPCP002	Rotary Pot Chest	Servo	14CBI	MM
64	PELVIS, PRIMARY	X	GPAC025	Accel., 1/2 bridge	Endevco	7264-2000	G
65	PELVIS, PRIMARY	Y	GPAC022	Accel., 1/2 bridge	Endevco	7264-2000	G
66	PELVIS, PRIMARY	Z	GPAC019	Accel., 1/2 bridge	Endevco	7264-2000	G
67	LEFT FEMUR FORCE	Z	KEFF003	Load cell, Femur	R.A. Denton	2121	N
68	RIGHT FEMUR FORCE	Z	KEFF004	Load cell, Femur	R.A. Denton	2121	N

**2005 NHTSA 35mph NCAP
Instrumentation Data Channel Assignments
Passenger A.T.D. Serial Number 35
1/20/05
2005 Nissan Maxima 3.5 SE 4-Door Sedan**

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
69	UP. TIBIA LEFT MOM.	X	GPUT09MX	2 ch., Upper tibia gage	R. A. Denton	1583	Nm
70	UP. TIBIA LEFT MOM.	Y	GPUT09MY	2 ch., Upper tibia gage	R. A. Denton	1583	Nm
71	UP. TIBIA RIGHT MOM.	X	GPUT09MX	2 ch., Upper tibia gage	R. A. Denton	1583	Nm
72	UP. TIBIA RIGHT MOM.	Y	GPUT09MY	2 ch., Upper tibia gage	R. A. Denton	1583	Nm
73	LWR. TIBIA LEFT MOM.	X	GPLT09MX	3 ch., lower tibia gage	R. A. Denton	3093	Nm
74	LWR. TIBIA LEFT MOM.	Y	GPLT09MY	3 ch., lower tibia gage	R. A. Denton	3093	Nm
75	LWR. TIBIA LEFT FORCE	Z	GPLT09FZ	3 ch., lower tibia gage	R. A. Denton	3093	N
76	LWR. TIBIA RIGHT MOM.	X	GPLT09MX	3 ch., lower tibia gage	R. A. Denton	3093	Nm
77	LWR. TIBIA RIGHT MOM.	Y	GPLT09MY	3 ch., lower tibia gage	R. A. Denton	3093	Nm
78	LWR. TIBIA RIGHT FORCE	Z	GPLT09FZ	3 ch., lower tibia gage	R. A. Denton	3093	N
79	FOOT LEFT, AFT	X	KEIC002X	Accel., Foot Triax	I.C. Sensor	3031-500	G
80	FOOT LEFT, AFT	Z	KEIC002Y	Accel., Foot Triax	I.C. Sensor	3031-500	G
81	FOOT LEFT, FORE	Z	KEIC002Z	Accel., Foot Triax	I.C. Sensor	3031-500	G
82	FOOT RIGHT, AFT	X	KEIC001X	Accel., Foot Triax	I.C. Sensor	3031-500	G
83	FOOT RIGHT, AFT	Z	KEIC001Y	Accel., Foot Triax	I.C. Sensor	3031-500	G
84	FOOT RIGHT, FORE	Z	KEIC001Z	Accel., Foot Triax	I.C. Sensor	3031-500	G
85	LAP BELT FORCE	X	BL168	Load cell, Seat belt	First Tech	IF-964	N
86	SHOULDER BELT FORCE	X	BL169	Load cell, Seat belt	First Tech	IF-964	N
87	SHOULDER BELT SPOOL	X	KEPP001	Pullout pot	Celesco	PTX101-0030	MM
88	SHOULDER BELT ELONG.	X	KEEP001	Linear pot., belt stretch	E.T.I.	LCP8-10 10K	MM/CM

**2005 NHTSA 35mph NCAP
Instrumentation Data Channel Assignments
Vehicle Accelerometers
1/20/05
2005 Nissan Maxima 3.5 SE 4-Door Sedan**

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
89	LEFT REAR	X	KEVA002	Accel., Pre-Amp	I.C.S/Karco	3031-500	G
90	RIGHT REAR	X	KEVA006	Accel., Vehicle block	I.C. Sensor	3031-200	G
91	ENGINE TOP	X	KEVA009	Accel., Vehicle block	I.C. Sensor	3031-500	G
92	ENGINE BOTTOM	X	KEVA007	Accel., Vehicle block	I.C. Sensor	3031-500	G
93	LEFT BRAKE CALIPER	X	KEVA008	Accel., Vehicle block	I.C. Sensor	3031-500	G
94	RIGHT BRAKE CALIPER	X	KEVA012	Accel., Vehicle block	I.C. Sensor	3031-500	G
95	INSTRUMENT PANEL	X	KEVA011	Accel., Vehicle block	I.C. Sensor	3031-200	G
96	LEFT REAR	Z	KEVA001	Accel., Vehicle block	I.C. Sensor	3031-500	G
97	RIGHT REAR	Z	KEVA010	Accel., Vehicle block	I.C. Sensor	3031-200	G

**2005 NHTSA 35mph NCAP
Instrumentation Data Channel Assignments
Rigid Load Cell Barrier
1/20/05
2005 Nissan Maxima 3.5 SE 4-Door Sedan**

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
98	BARRIER FORCE A1	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
99	BARRIER FORCE A2	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
100	BARRIER FORCE A3	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
101	BARRIER FORCE A4	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
102	BARRIER FORCE A5	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
103	BARRIER FORCE A6	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
104	BARRIER FORCE A7	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
105	BARRIER FORCE A8	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
106	BARRIER FORCE A9	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
107	BARRIER FORCE B1	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
108	BARRIER FORCE B2	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
109	BARRIER FORCE B3	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
110	BARRIER FORCE B4	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
111	BARRIER FORCE B5	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
112	BARRIER FORCE B6	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
113	BARRIER FORCE B7	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
114	BARRIER FORCE B8	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
115	BARRIER FORCE B9	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N

**2005 NHTSA 35mph NCAP
Instrumentation Data Channel Assignments
Rigid Load Cell Barrier
1/20/05
2005 Nissan Maxima 3.5 SE 4-Door Sedan**

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
116	BARRIER FORCE C1	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
117	BARRIER FORCE C2	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
118	BARRIER FORCE C3	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
119	BARRIER FORCE C4	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
120	BARRIER FORCE C5	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
121	BARRIER FORCE C6	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
122	BARRIER FORCE C7	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
123	BARRIER FORCE C8	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
124	BARRIER FORCE C9	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
125	BARRIER FORCE D1	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
126	BARRIER FORCE D2	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
127	BARRIER FORCE D3	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
128	BARRIER FORCE D4	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
129	BARRIER FORCE D5	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
130	BARRIER FORCE D6	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
131	BARRIER FORCE D7	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
132	BARRIER FORCE D8	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N
133	BARRIER FORCE D9	X	BARRIER	Load Cell, LCB	Interface	1220-FS	N

APPENDIX E
DUMMY CALIBRATION DATA

Test Program: Hybrid III 50th Percentile Male Head Drop Test

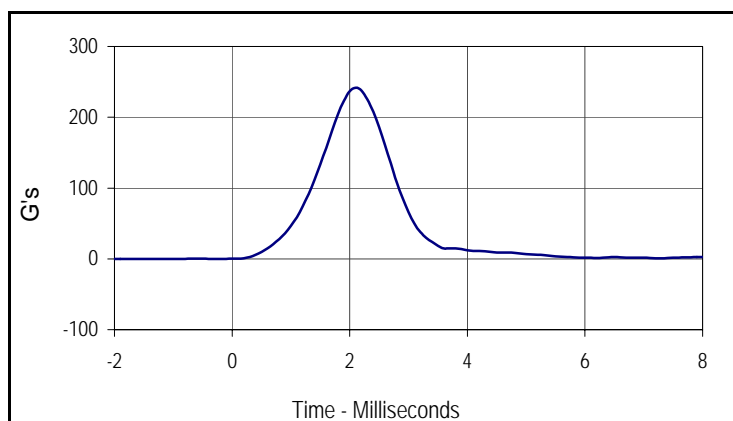
Test Date: 1/18/05

ATD Serial No.: 034

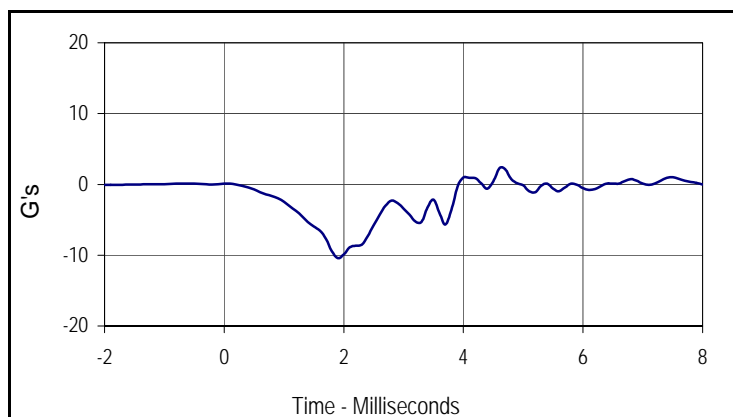
Test I.D.: HD01A



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	225.0 to 275.0	241.8	Pass
Peak Lateral Acceleration	G's	≤15.0	10.4	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Overall Test Results				Pass



Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
241.8	2.1	0.0	-1.4



Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
2.3	4.6	-10.4	1.9

Test Program: Hybrid III 50th Percentile Male Thorax Impact Test

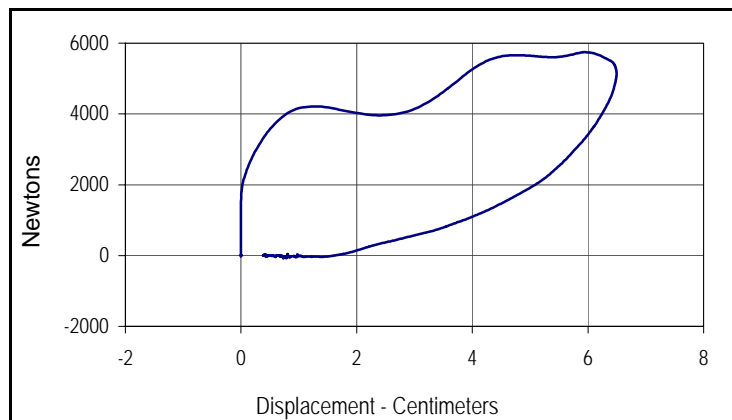
Test Date: 1/19/05

ATD Serial No.: 034

Test I.D.: CH01A



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
Probe Velocity	m/s	6.58 to 6.82	6.64	Pass
Peak Probe Force	Newtons	5159 to 5893	5743	Pass
Peak Sternum Deflection	CM	6.35 to 7.26	6.49	Pass
Internal Hysteresis	%	69 to 85	75.9	Pass
Overall Test Results				Pass



Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysteresis
001	FIL	180	75.9
Peak Probe Force		Peak Chest Deflection	
5743		6.49	

Test Program: Hybrid III 50th Percentile Male Neck Flexion Test

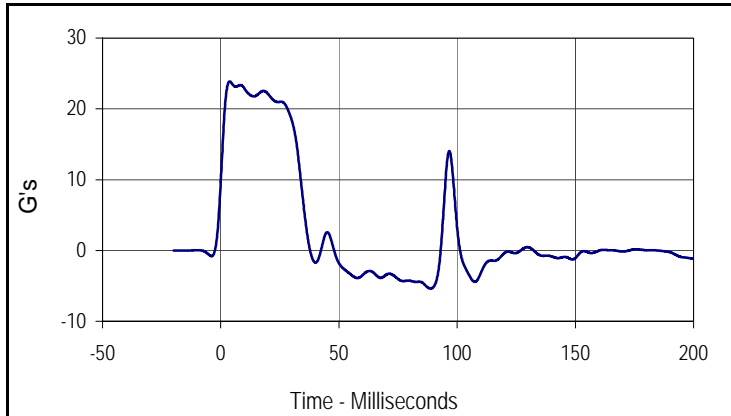
Test Date: 1/18/05

ATD Serial No.: 034

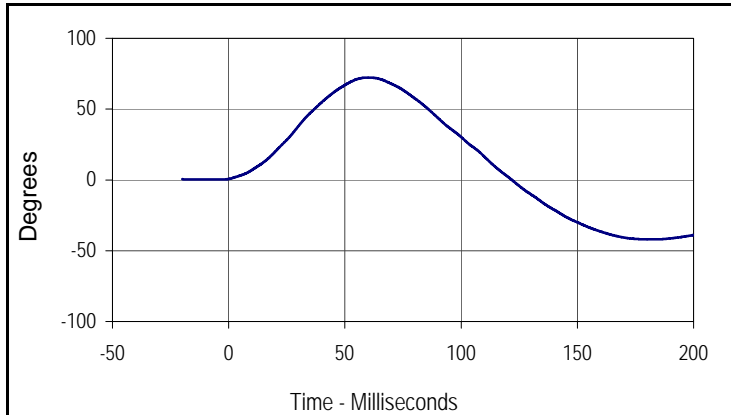
Test I.D.: NF01A



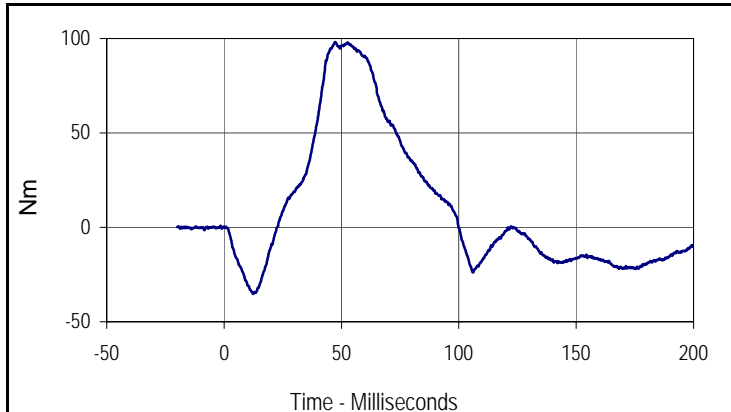
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	6.89 to 7.13	7.04	Pass	
Pendulum Deceleration	10 Msec.	G's	22.5 to 27.5	22.9	Pass
	20 Msec.	G's	17.6 to 22.6	22.1	Pass
	30 Msec.	G's	12.5 to 18.5	18.4	Pass
Peak Pendulum Decel. after 30 Msec.	G's	≤ 29.0	18.4	Pass	
Deceleration Decay, Time to Cross 5 G's	Msec.	34.0 to 42.0	35.6	Pass	
Maximum "D" Plane Rotation	Max	Degrees	64.0 to 78.0	72.3	Pass
	Time	Msec.	57.0 to 64.0	59.7	Pass
"D" Plane Rotation Decay, Time To Zero Crossing	Msec.	113.0 to 128.0	121.9	Pass	
Moment About Occ. Condyle	Max	Nm	84.1 to 108.5	98.2	Pass
	Time	Msec.	47.0 to 58.0	47.3	Pass
Positive Moment Decay, Time To Zero Crossing	Msec.	97.0 to 107.0	100.0	Pass	
Overall Test Results				Pass	



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
23.9	3.7	-5.4	88.7



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
72.3	59.7	-42.0	181.3



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
98.2	47.3	-35.2	12.4

Test Program: Hybrid III 50th Percentile Male Neck Extension Test

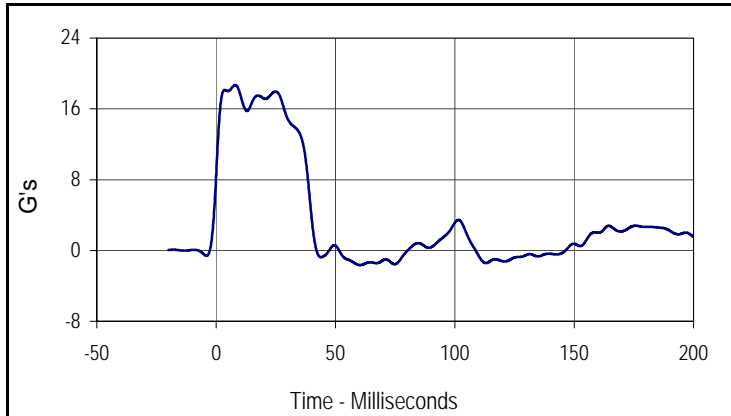
Test Date: 1/18/05

ATD Serial No.: 034

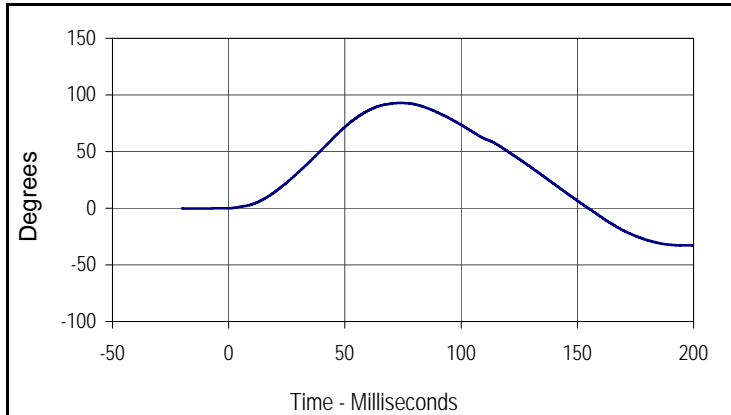
Test I.D.: NE01A



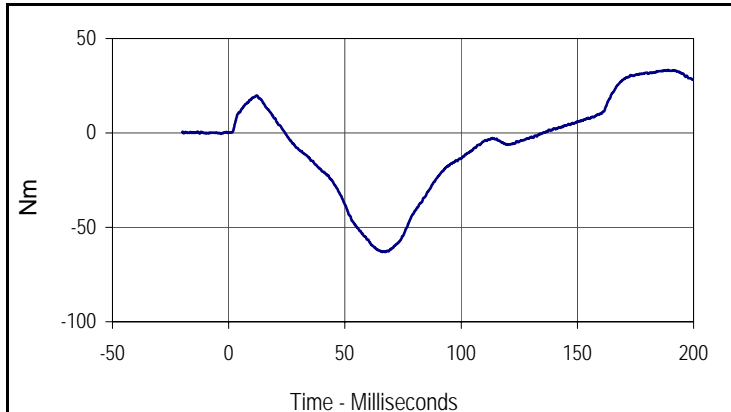
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	5.94 to 6.19	6.08	Pass	
Pendulum Deceleration	10 Msec.	G's	17.2 to 21.2	17.7	Pass
	20 Msec.	G's	14.0 to 19.0	17.2	Pass
	30 Msec.	G's	11.0 to 16.0	14.8	Pass
Peak Pendulum Decel. after 30 Msec.	G's	≤ 22.0	14.8	Pass	
Deceleration Decay, Time to Cross 5 G's	Msec.	38.0 to 46.0	39.6	Pass	
Maximum "D" Plane Rotation	Max	Degrees	81.0 to 106.0	92.9	Pass
	Time	Msec.	72.0 to 82.0	73.9	Pass
"D" Plane Rotation Decay, Time To Zero Crossing	Msec.	147.0 to 174.0	154.7	Pass	
Moment About Occ. Condyle	Max	Nm	-52.9 to- 79.9	-63.1	Pass
	Time	Msec.	65.0 to 79.0	66.2	Pass
Positive Moment Decay, Time To Zero Crossing	Msec.	120.0 to 148.0	135.1	Pass	
Overall Test Results				Pass	



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
18.7	8.0	-1.7	60.3



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
92.9	73.9	-32.8	196.7



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
33.5	189.0	-63.1	66.2

Test Program: Hybrid III 50th Percentile Male Knee Impact Test

Test Date: 1/18/05

ATD Serial No.: 034

Test I.D.: LK01A , RK01A



Left Knee

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
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.09	Pass
Peak Probe Force	Newtons	4715 to 5782	5505	Pass
Overall Test Results				Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.13	Pass
Peak Probe Force	Newtons	4715 to 5782	5493	Pass
Overall Test Results				Pass



Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
5505.0	2.5	-10.1	-0.2



Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
5492.6	2.4	-18.3	9.7

Test Program: Hybrid III 50th Percentile Male External Measurements Test Date: 1/19/05
 ATD Serial No.: 034 Test I.D.: N/A



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
A - Total sitting height	mm	879 to 889	887	Pass
B - Shoulder pivot height	mm	505 to 521	512	Pass
C - "H" point height	mm	84 to 89	86	Pass
D - "H" point from seat back	mm	135 to 140	138	Pass
E - Shoulder pivot from back	mm	84 to 94	89	Pass
F - Thigh clearance	mm	140 to 155	150	Pass
G - Elbow back to wrist pivot	mm	290 to 305	298	Pass
H - Skull cap to back line	mm	41 to 46	44	Pass
I - Shoulder to elbow length	mm	330 to 345	341	Pass
J - Elbow rest height	mm	190 to 211	198	Pass
K - Buttock to knee length	mm	579 to 604	600	Pass
L - Popliteal length	mm	429 to 455	445	Pass
M - Knee pivot height	mm	485 to 500	498	Pass
N - Buttock popliteal length	mm	452 to 477	470	Pass
O - Chest depth	mm	213 to 229	225	Pass
P - Foot length	mm	251 to 267	265	Pass
V - Shoulder breadth	mm	422 to 437	425	Pass
W - Foot breadth	mm	91 to 107	105	Pass
Y - Chest circumference	mm	970 to 1001	987	Pass
Z - Waist circumference	mm	836 to 866	860	Pass
AA - Location for chest circumference	mm	429 to 434	430	Pass
BB - Location for waist circumference	mm	226 to 231	229	Pass
Overall Test Results				Pass

Test Program: Hybrid III 50th Percentile Male Head Drop Test

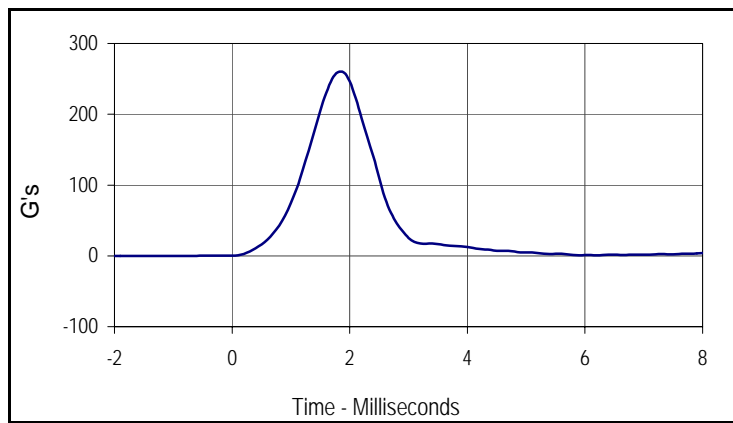
Test Date: 1/18/05

ATD Serial No.: 035

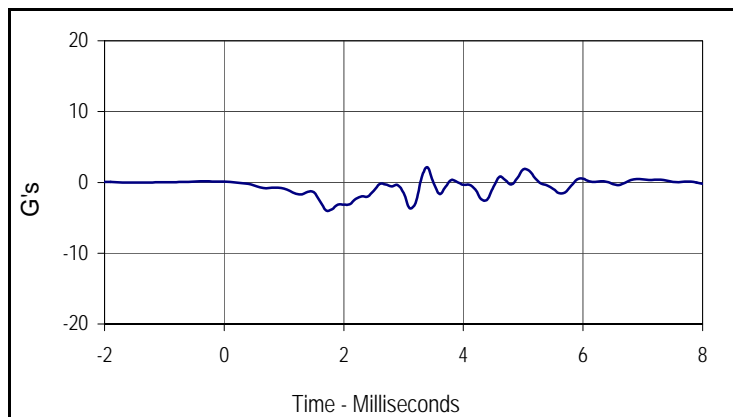
Test I.D.: HD01B



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	225.0 to 275.0	259.3	Pass
Peak Lateral Acceleration	G's	≤15.0	4.0	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Overall Test Results				Pass



Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
259.3	1.8	0.0	-1.4



Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
2.1	3.4	-4.0	1.7

Test Program: Hybrid III 50th Percentile Male Thorax Impact Test

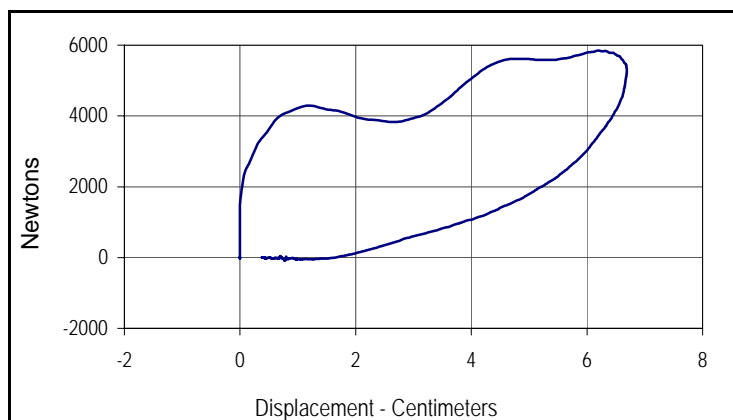
Test Date: 1/19/05

ATD Serial No.: 035

Test I.D.: CH01B



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
Probe Velocity	m/s	6.58 to 6.82	6.72	Pass
Peak Probe Force	Newtons	5159 to 5893	5846	Pass
Peak Sternum Deflection	CM	6.35 to 7.26	6.69	Pass
Internal Hysteresis	%	69 to 85	75.5	Pass
Overall Test Results				Pass



Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysteresis
001	FIL	180	75.5
Peak Probe Force		Peak Chest Deflection	
5846		6.69	

Test Program: Hybrid III 50th Percentile Male Neck Flexion Test

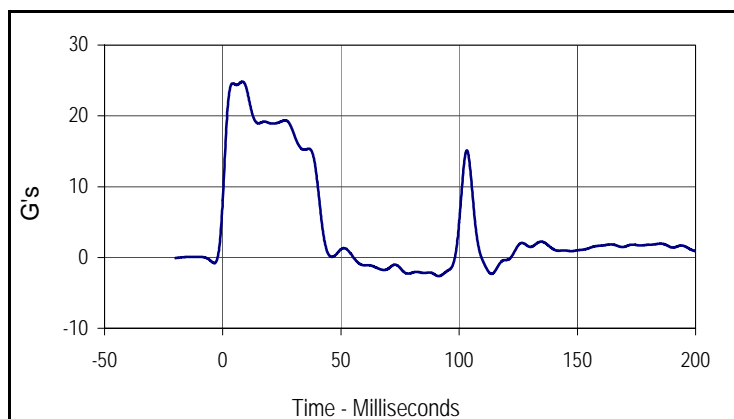
Test Date: 1/18/05

ATD Serial No.: 035

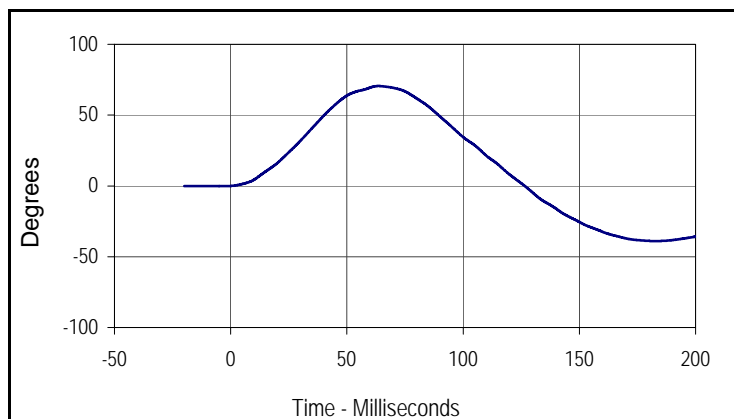
Test I.D.: NF01B



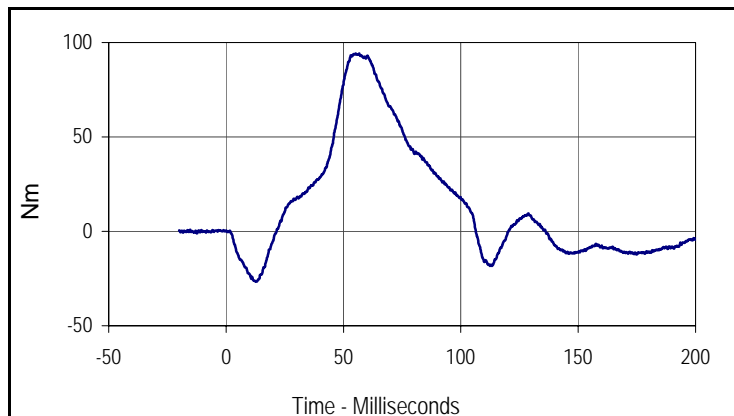
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	6.89 to 7.13	6.98	Pass	
Pendulum Deceleration	10 Msec.	G's	22.5 to 27.5	23.9	Pass
	20 Msec.	G's	17.6 to 22.6	19.0	Pass
	30 Msec.	G's	12.5 to 18.5	17.5	Pass
Peak Pendulum Decel. after 30 Msec.	G's	≤ 29.0	17.5	Pass	
Deceleration Decay, Time to Cross 5 G's	Msec.	34.0 to 42.0	41.9	Pass	
Maximum "D" Plane Rotation	Max	Degrees	64.0 to 78.0	70.5	Pass
	Time	Msec.	57.0 to 64.0	63.6	Pass
"D" Plane Rotation Decay, Time To Zero Crossing	Msec.	113.0 to 128.0	126.5	Pass	
Moment About Occ. Condyle	Max	Nm	84.1 to 108.5	94.3	Pass
	Time	Msec.	47.0 to 58.0	56.7	Pass
Positive Moment Decay, Time To Zero Crossing	Msec.	97.0 to 107.0	106.4	Pass	
Overall Test Results				Pass	



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
24.8	8.3	-2.6	91.3



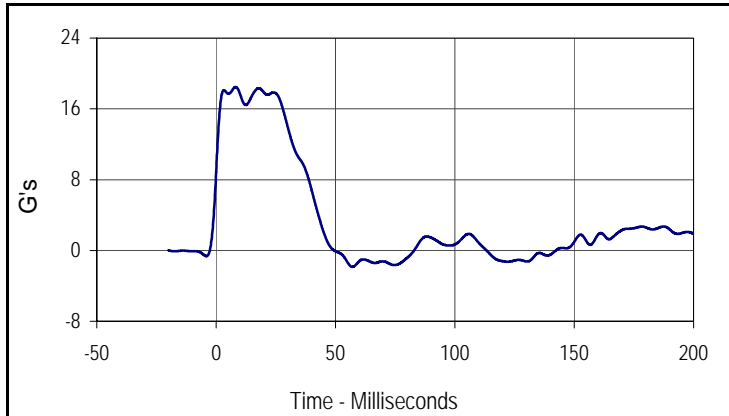
Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
70.5	63.6	-38.9	182.4



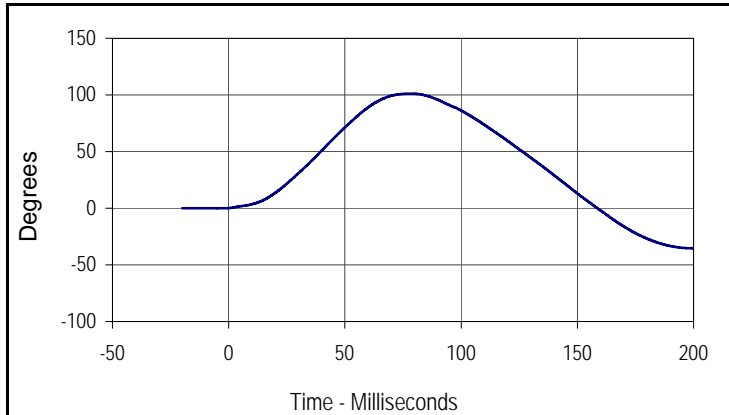
Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
94.3	56.7	-26.7	13.0



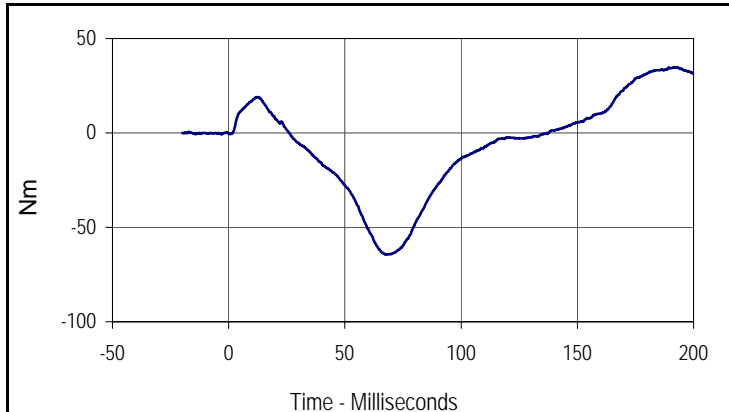
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	5.94 to 6.19	6.11	Pass	
Pendulum Deceleration	10 Msec.	G's	17.2 to 21.2	17.7	Pass
	20 Msec.	G's	14.0 to 19.0	17.9	Pass
	30 Msec.	G's	11.0 to 16.0	13.9	Pass
Peak Pendulum Decel. after 30 Msec.	G's	≤ 22.0	13.9	Pass	
Deceleration Decay, Time to Cross 5 G's	Msec.	38.0 to 46.0	41.8	Pass	
Maximum "D" Plane Rotation	Max	Degrees	81.0 to 106.0	101.1	Pass
	Time	Msec.	72.0 to 82.0	78.1	Pass
"D" Plane Rotation Decay, Time To Zero Crossing	Msec.	147.0 to 174.0	158.6	Pass	
Moment About Occ. Condyle	Max	Nm	-52.9 to- 79.9	-64.4	Pass
	Time	Msec.	65.0 to 79.0	68.3	Pass
Positive Moment Decay, Time To Zero Crossing	Msec.	120.0 to 148.0	137.6	Pass	
Overall Test Results				Pass	



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
18.5	8.1	-1.9	57.1



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
101.1	78.1	-35.4	200.0



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
34.8	191.6	-64.4	68.3

Test Program: Hybrid III 50th Percentile Male Knee Impact Test

Test Date: 1/18/05

ATD Serial No.: 035

Test I.D.: LK01B , RK01B



Left Knee

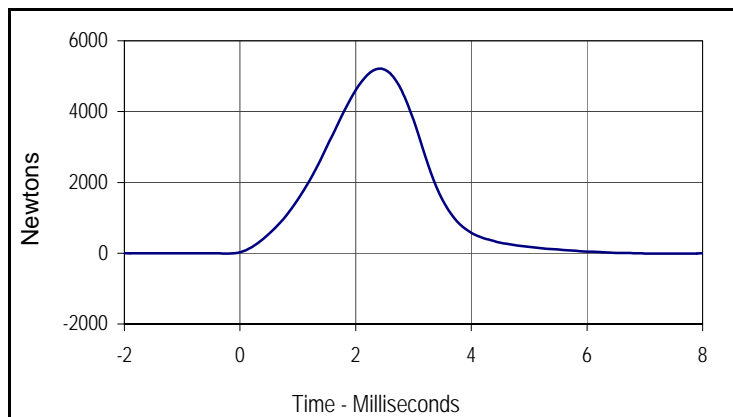
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.13	Pass
Peak Probe Force	Newtons	4715 to 5782	5601	Pass
Overall Test Results				Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.10	Pass
Peak Probe Force	Newtons	4715 to 5782	5212	Pass
Overall Test Results				Pass



Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
5600.9	2.5	-10.3	-0.2



Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
5212.4	2.4	-12.1	-0.2

Test Program: Hybrid III 50th Percentile Male External Measurements Test Date: 1/19/05
 ATD Serial No.: 035 Test I.D.: N/A



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
A - Total sitting height	mm	879 to 889	882	Pass
B - Shoulder pivot height	mm	505 to 521	516	Pass
C - "H" point height	mm	84 to 89	88	Pass
D - "H" point from seat back	mm	135 to 140	138	Pass
E - Shoulder pivot from back	mm	84 to 94	91	Pass
F - Thigh clearance	mm	140 to 155	149	Pass
G - Elbow back to wrist pivot	mm	290 to 305	301	Pass
H - Skull cap to back line	mm	41 to 46	45	Pass
I - Shoulder to elbow length	mm	330 to 345	344	Pass
J - Elbow rest height	mm	190 to 211	205	Pass
K - Buttock to knee length	mm	579 to 604	584	Pass
L - Popliteal length	mm	429 to 455	450	Pass
M - Knee pivot height	mm	485 to 500	495	Pass
N - Buttock popliteal length	mm	452 to 477	470	Pass
O - Chest depth	mm	213 to 229	228	Pass
P - Foot length	mm	251 to 267	255	Pass
V - Shoulder breadth	mm	422 to 437	431	Pass
W - Foot breadth	mm	91 to 107	106	Pass
Y - Chest circumference	mm	970 to 1001	994	Pass
Z - Waist circumference	mm	836 to 866	860	Pass
AA - Location for chest circumference	mm	429 to 434	431	Pass
BB - Location for waist circumference	mm	226 to 231	228	Pass
Overall Test Results				Pass

APPENDIX F
CHILD RESTRAINT SYSTEM

REPORT NUMBER TR-P25001-09-NC

**NEW CAR ASSESSMENT PROGRAM
FRONTAL BARRIER IMPACT TEST**

**NISSAN MOTORS CORPORATION
2005 NISSAN MAXIMA 3.5 SE
4-DOOR SEDAN**

NHTSA NUMBER: M55201

**PREPARED BY:
KARCO ENGINEERING, LLC
9270 HOLLY ROAD
ADELANTO, CALIFORNIA 92301**



JANUARY 20, 2005

FINAL REPORT

**PREPARED FOR:
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**

This final test report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, in response to Contract Number DTNH22-01-D-02005.

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. Biren J. Patel, Project Engineer
KARCO Engineering, LLC

Date: 2/2/05

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

Date: 2/2/05

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

Date: 2/2/05

FINAL REPORT ACCEPTED BY:

Manager, New Car Assessment Program

Date of Acceptance

COTR, NCAP Frontal Impact Program

Date of Acceptance

Technical Report Documentation Page

1. Report No. TR-P25001-09-NC		2. Government Accession No.		3. Recipients Catalog No.	
4. Title and Subtitle Final Report of a Graco Hi-Back TurboBooster CRS NHTSA NO. M55201			5. Report Date January 20, 2005		
			6. Performing Organization Code KAR		
7. Authors Mr. Biren J. Patel, Project Engineer, Karco Mr. Frank Richardson, Program Manager, Karco			8. Performing Organization Report No. TR-P25001-09-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. DTNH22-01-D-02005		
12. Sponsoring Agency Name and Address U. S. Department of Transportation National Highway Traffic Safety Administration Rulemaking Office of Crashworthiness Standards Mail Code NPS-111 400 Seventh Street, SW, Room 5311 Washington, D.C 20590			13. Type of Report and Period Covered Final Test Report Option Year 3		
			14. Sponsoring Agency Code DOT/NHTSA/NRM/OCS		
15. Supplementary Notes					
16. Abstract A frontal test was conducted on the subject CRS Graco Hi-Back TurboBooster in conjunction with frontal NCAP testing on a 2005 Nissan Maxima 3.5 SE 4-Door Sedan and in accordance with the specifications of the Office of Crashworthiness Standards Test Procedure for the determination of CRS crashworthiness. This test was conducted at Karco Engineering, LLC on January 20, 2005					
Measurement Description		Units		Left Rear	Right Rear
Head Injury Criteria (HIC) 36		N/A			1499.2
Head Injury Criteria (HIC) 15		N/A			1008.4
3 msec. Chest Clip		G's			52.0
Peak Chest Deflection		mm			-23.0
17. Key Words 56.3 km/h NCAP Frontal Barrier Impact Test New Car Assessment Program (NCAP) Final Report of a Graco Hi-Back TurboBooster CRS				18. Distribution of Statement Copies of this report available from: NHTSA Technical Reference Division National Highway Traffic Safety Admin. 400 Seventh St., SW, Room 5108 Washington, D.C. 20590	
19. Security Classification (this report) Unclassified		20. Security Classification (this page) Unclassified		21. No. of Pages 45	22. Price

Form DOT F1700.7 (8-72)

TABLE OF CONTENTS

<u>Section</u>	<u>Description</u>	<u>Page</u>
F-1	Purpose and Summary of Test M55201	F1-1 to F1-10
F-2	Photographs	F2-1 to F2-36
F-3	Child Dummy Response and CRS Data Traces	F3-1 to F3-24
F-4	Child Dummy Instrumentation Information	F4-1 to F4-3
F-5	Child Dummy Calibration Information	F5-1 to F5-13

<u>Data Sheet</u>	<u>Description</u>	<u>Page</u>
1	Crash Test Summary	F1-2
2	CRS Parameter Data	F1-3
3	Child Dummy Positioning in Vehicle	F1-4
4	10 Year Old Hybrid III ATD Injury Criteria and Sensor Data	F1-6
5	CRS Performance Data	F1-9
6	CRS Camera Data	F1-10

SECTION F-1

PURPOSE AND SUMMARY OF TEST M55201

The purpose of this test is to obtain CRS performance data during an NCAP (35mph) frontal impact test.

The 56.12 km/h NCAP frontal impact test was conducted in accordance with the Office of Crashworthiness Standards (OCS) NCAP Laboratory Test Procedure.

SUMMARY

One ten year old child Hybrid III dummy (Position 3) was instrumented with head, chest, and pelvic tri-axial accelerometers, a chest displacement potentiometer, six axis upper neck, lumbar, clavicle, ASIS and femur load cells. In addition a tri-axial accelerometer was installed on the CRS and the CRS seat back. Seat belt load cells were placed on the shoulder and lap belts, also shoulder belt spool-out and elongation was measured.

The right rear child dummy (Serial No. 011) was calibrated two tests prior to this test. Child dummy calibration information is found in Section F-5.

CHILD DUMMY VALUES

Location	HIC 36 Values	HIC 15 Values	3 Msec. Chest Clip	Peak Chest Deflection
Right Rear Child (10 Yr.)	1499.2	1008.4	52.0	-23.0
Left Rear Child				

**DATA SHEET NO.1
CRASH TEST SUMMARY**

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

CHILD RESTRAINT SYSTEM INFORMATION

Description	Position #3 CRS	Position #4 CRS
Manufacturer	Graco	
Model Name	TurboBooster	
Serial No.	JJ 1202042319250	
Type	Hi-Back Booster	
Forward/Rearward	Forward	

VISIBLE DUMMY CONTACT POINTS

Description	Position #3 CRS	Position #4 CRS
Head Contact	Chin to Chest, Roof	
Chest Contact	None	
Abdomen Contact	None	
Left Knee Contact	None	
Right Knee Contact	None	
Left Toe Contact	None	
Right Toe Contact	None	

POST-TEST DOOR OPENINGS

Description	Position #3 CRS	Position #4 CRS
Front Door	Remained closed/latched, opened w/o tools	
Rear Door	Remained closed/latched, opened w/o tools	
Hatch/Other Door	Remained closed/latched, opened w/o tools	

POST-TEST SEAT DATA

Location	Seat Movement (mm)	Seat Back Failure
Left Rear		
Right Rear	0	None

CAMERA COVERAGE

Description	Standard
High Speed	2
Real Time	0
Total	2

DATA CHANNELS

Child Sensors	32
Belt Sensors	4
CRS Sensors	6
Total	42

DATA SHEET NO.2
CRS PARAMETER DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

RETAINING CLIP INFORMATION

Description	Position #3 CRS	Position #4 CRS
Ret. Clip Movement		

CHILD HARNESS STRETCH

Description	Position #3 CRS	Position #4 CRS
Harness Stretch		

TEST VEHICLE WEIGHTS

	Units	As Delivered Weights (UVW)			As Tested Weights (ATW)		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	489	311	800	515	363	878
Right	kg	478	304	782	522	379	901
Ratio	%	61.1	38.9	100	58.3	41.7	100
Totals	kg	967	615	1582	1037	742	1779

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UVW)	kg	1582
Weight of 2 P572 ATD's	kg	152
Rated Cargo/Luggage Wt. (RCLW)	kg	50
Calculated Vehicle Target Wt. (TVTWTW)	kg	1784

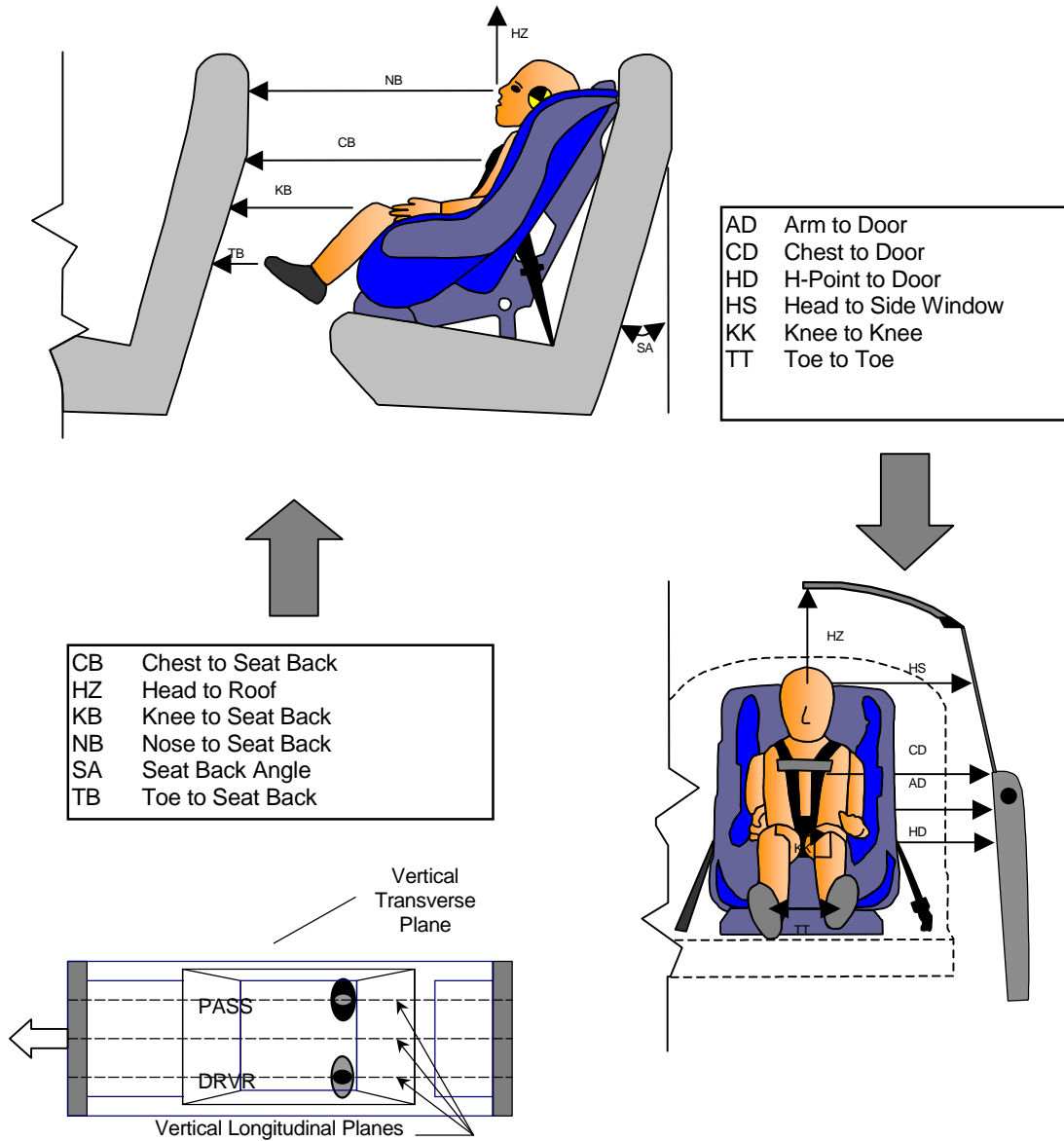
DATA SHEET NO.3
CHILD DUMMY POSITIONING IN VEHICLE

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program 2005 NHTSA 35mph NCAP

Test Date: 1/20/05



DUMMY MEASUREMENTS FOR REAR SEAT OCCUPANTS

DATA SHEET NO.3
CHILD DUMMY POSITIONING IN VEHICLE...(CONTINUED)

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

CHILD DUMMY POSITION MEASUREMENTS

Code	Measurement	Units	P3 CRS Serial No. 011			P4 CRS		
			Pre-Test	Post-Test	Diff.	Pre-Test	Post-Test	Diff.
SA	Seat Back Angle	deg.	36.5	29.2	-7.3			
HZ	Head to Roof (Z)	mm	215	200	-15			
CD	Chest to Dash	mm	435	440	5			
KK	Knee to Knee (Y)	mm	170	205	35			
HS	Head to Side Window	mm	390	320	-70			
HD	H-Point to Door (Y)	mm	290	290	0			
AD	Arm to Door	mm	255	110	-145			
NB	Nose to Seat Back	mm	620	640	20			
CB	Chest to Seat Back	mm	590	590	0			
FF	Foot to Foot	mm	180	240	60			
KB-Left	Knee to Seat Back	mm	315	340	25			
KB-Right	Knee to Seat Back	mm	315	410	95			
TB-Left	Toe to Seat Back	mm	125	200	75			
TB-Right	Toe to Seat Back	mm	150	260	110			

DATA SHEET NO. 4 - 10 YEAR OLD HYBRID III ATD INJURY CRITERIA AND SENSOR DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

HEAD PEAK ACCELERATIONS

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
Head CG	X	G's	3.0	200.0	-69.4	103.1
Head CG	Y	G's	12.1	101.8	-2.8	93.3
Head CG	Z	G's	85.5	85.6	-3.1	38.7
Head CG Resultant	N/A	G's	93.7	89.7		

HEAD INJURY CRITERIA (HIC)

Location	Right Rear (10 Yr.)			
	HIC	T ¹	T ²	Avg G
Head CG Primary (HIC36)	1499.2	71.8	107.8	70.4
Head CG Primary (HIC15)	1008.4	81.2	96.2	85.2

CHEST PEAK ACCELERATIONS

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
Chest CG	X	G's	1.9	147.5	-46.9	66.4
Chest CG	Y	G's	23.6	78.7	-1.8	157.8
Chest CG	Z	G's	19.4	102.1	-15.9	75.8
Chest CG Resultant	N/A	G's	53.2	76.9		

CHEST CLIP (3MSEC)

Location	Right Rear (10 Yr.)		
	CLIP	T ¹	T ²
Chest CG Primary	52.0	76.1	79.1

CHEST PEAK DISPLACEMENTS

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
Chest	X	MM	0.7	41.9	-23.0	99.1

PELVIC PEAK ACCELERATIONS

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
Pelvis	X	G's	8.2	120.8	-45.1	71.7
Pelvis	Y	G's	5.0	163.7	-8.2	74.9
Pelvis	Z	G's	8.0	104.1	-47.4	77.4
Pelvis Resultant	N/A	G's	62.5	76.9		

DATA SHEET NO. 4...(CONTINUED)

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

UPPER NECK PEAK FORCES AND MOMENTS

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
Neck Force	X	Newtons	19.5	26.2	-1612.4	103.5
Neck Force	Y	Newtons	403.0	103.4	-57.9	62.2
Neck Force	Z	Newtons	3461.5	102.1	-90.0	35.5
Neck Force Resultant	N/A	Newtons	3807.0	102.3		
Neck Moment	X	Nm	10.0	92.4	-24.4	103.4
Neck Moment	Y	Nm	23.6	99.3	-38.8	71.5
Neck Moment	Z	Nm	6.7	82.6	-0.8	21.8
Neck Moment Resultant	N/A	Nm	39.3	71.5		

CRS BELT SENSOR PEAK VALUES

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
Lap Belt Force	N/A	Newtons	3356.3	73.7	-1.2	30.7
Shoulder Belt Force	N/A	Newtons	6979.3	83.3	-5.7	167.0
Shoulder Belt Pullout	N/A	MM	107.6	89.5	0.0	8.1
Shoulder Belt Elongation	N/A	MM/CM	0.0	0.0	0.0	0.0

1.) Not installed

CRS ACCELEROMETER PEAK VALUES

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
CRS	X	G's	17.3	124.1	-50.3	77.7
CRS	Y	G's	26.5	47.4	-10.1	129.3
CRS	Z	G's	5.7	49.4	-5.4	68.5
CRS Resultant	N/A	G's	55.0	47.1		
CRS Seat Back	X	G's	70.6	158.8	-68.2	73.8
CRS Seat Back	Y	G's	48.6	73.1	-24.8	56.7
CRS Seat Back	Z	G's	34.6	75.2	-27.2	89.6
CRS Seat Back Res.	N/A	G's	87.0	74.0		

FEMUR PEAK FORCES

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
Left Femur	Z	Newtons	1985.8	68.1	-624.6	162.7
Right Femur	Z	Newtons	1093.7	59.9	-40.5	60.7

1.) Channel failed at 60.4 msec.

DATA SHEET NO. 4...(CONTINUED)

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

LUMBAR PEAK FORCES AND MOMENTS

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
Lumbar Force	X	Newtons	2184.9	87.8	-231.2	53.2
Lumbar Force	Y	Newtons	952.6	86.8	-92.2	156.8
Lumbar Force	Z	Newtons	1907.5	91.3	-959.6	73.7
Lumbar Force Resultant	N/A	Newtons	2967.5	89.8		
Lumbar Moment	X	Nm	130.8	79.4	-9.5	186.2
Lumbar Moment	Y	Nm	54.5	122.7	-87.9	83.7
Lumbar Moment	Z	Nm	2.7	198.9	-31.1	90.3
Lumbar Moment Resultant	N/A	Nm	158.1	79.7		

CLAVICLE PEAK FORCES

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
Left Clavicle	X	Newtons	108.0	101.0	-130.8	90.6
Left Clavicle	Z	Newtons	28.9	181.6	-315.0	99.3
Right Clavicle	X	Newtons	4386.6	84.3	-15.9	140.0
Right Clavicle	Z	Newtons	2274.5	83.4	-132.8	124.6

ASIS PEAK FORCES

Location	Axis	Units	Right Rear (10 Yr.)			
			Max	Time	Min	Time
Left Upper	N/A	Newtons	522.6	68.4	-476.8	96.3
Left Lower	N/A	Newtons	849.1	91.0	-25.2	163.0
Right Upper	N/A	Newtons	448.3	70.6	-103.5	156.6
Right Lower	N/A	Newtons	486.5	70.8	-9.6	199.5

DATA SHEET NO.5
CRS PERFORMANCE DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

CRS PERFORMANCE DATA

Location	P3 CRS Serial No. 011		P4 CRS	
	Damage	Post-Test	Damage	Post-Test
Upper Tether Strap	No	None		
Upper Tether Buckle	No	None		
Upper Tether Hook	No	None		
Veh. Upper Tether Anchor	No	None		
Lower Anchor Strap	No	None		
Lower Anchor Buckle	No	None		
Lower Anchor Hooks	No	None		
Veh. Lower CRS Anchors	No	None		
5-Point Harness Connections	No	None		
Cracks on CRS	No	None		
Fabric Tears on CRS	No	None		
Vehicle Seat Structure	No	None		
Vehicle Seat Fabric Tears	No	None		

DATA SHEET NO.6
CRS CAMERA DATA

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan

NHTSA No.: M55201

Test Program 2005 NHTSA 35mph NCAP

Test Date: 1/20/05

CAMERA LOCATIONS

No.	Camera View	Location(mm)			Angle (Deg.)	Film Plane to Head	Lens (mm)	Speed (fps)
		X	Y	Z				
1	Right Rear Dummy Onboard	-2794	-736	-1373	-10	1272	13	1000
2	Left Rear Dummy Onboard	-2997	-736	-1373	-10	1175	12	1000

X = Barrier Face Y = Monorail Centerline Z = Ground DNR = Did Not Run NTM = No Time Marks

SECTION F-2
PHOTOGRAPHS

LIST OF PHOTOGRAPHS

Figure		Page
1	Close-up, Position 3 CRS Label	F-1
2	Pre-Test Frontal View of Position 3 CRS	F-2
3	Post-Test Frontal View of Position 3 CRS	F-3
4	Pre-Test Rear View of Position 3 CRS	F-4
5	Post-Test Rear View of Position 3 CRS	F-5
6	Pre-Test Left Side View of Position 3 CRS	F-6
7	Post-Test Left Side View of Position 3 CRS	F-7
8	Pre-Test Right Side View of Position 3 CRS	F-8
9	Post-Test Right Side View of Position 3 CRS	F-9
10	Pre-Test Position 3 Front View (Head Position)	F-10
11	Post-Test Position 3 Front View (Head Position)	F-11
12	Pre-Test Position 3 Front View (Seat Belt Position)	F-12
13	Post-Test Position 3 Front View (Seat Belt Position)	F-13
14	Pre-Test Position 3 Right Side View	F-14
15	Post-Test Position 3 Right Side View	F-15
16	Pre-Test Position 3 Left Side View	F-16
17	Post-Test Position 3 Left Side View	F-17
18	Post-Test Position 3 Dummy Legs	F-18

Para información sobre retiradas, llame al 1-800-345-4109.
seguridad automotriz del gobierno de EE.UU. al 1-800-424-9393
(202-366-0123 en el Distrito de Columbia).

LAPB0095B

MODEL 8495SRT NAME: TurboBooster
SERIAL JJ 1202042319250
Manufactured in 120204
GRACO CHILDREN'S PRODUCTS, INC.
EXTON, PA 19341 1-888-224-6549
Made in China

LAPZ0004B

Figure F2-1: Close-up, Position 3 CRS Label

This Space Intentionally Left Blank



Figure F2-2: Pre-Test Frontal View of Position 3 CRS



Figure F2-3: Post-Test Frontal View of Position 3 CRS



Figure F2-4: Pre-Test Rear View of Position 3 CRS



Figure F2-5: Post-Test Rear View of Position 3 CRS



Figure F2-6: Pre-Test Left Side View of Position 3 CRS



Figure F2-7: Post-Test Left Side View of Position 3 CRS



Figure F2-8: Pre-Test Right Side View of Position 3 CRS



Figure F2-9: Post-Test Right Side View of Position 3 CRS



Figure F2-10: Pre-Test Position 3 Front View (Head Position)



Figure F2-11: Post-Test Position 3 Front View (Head Position)

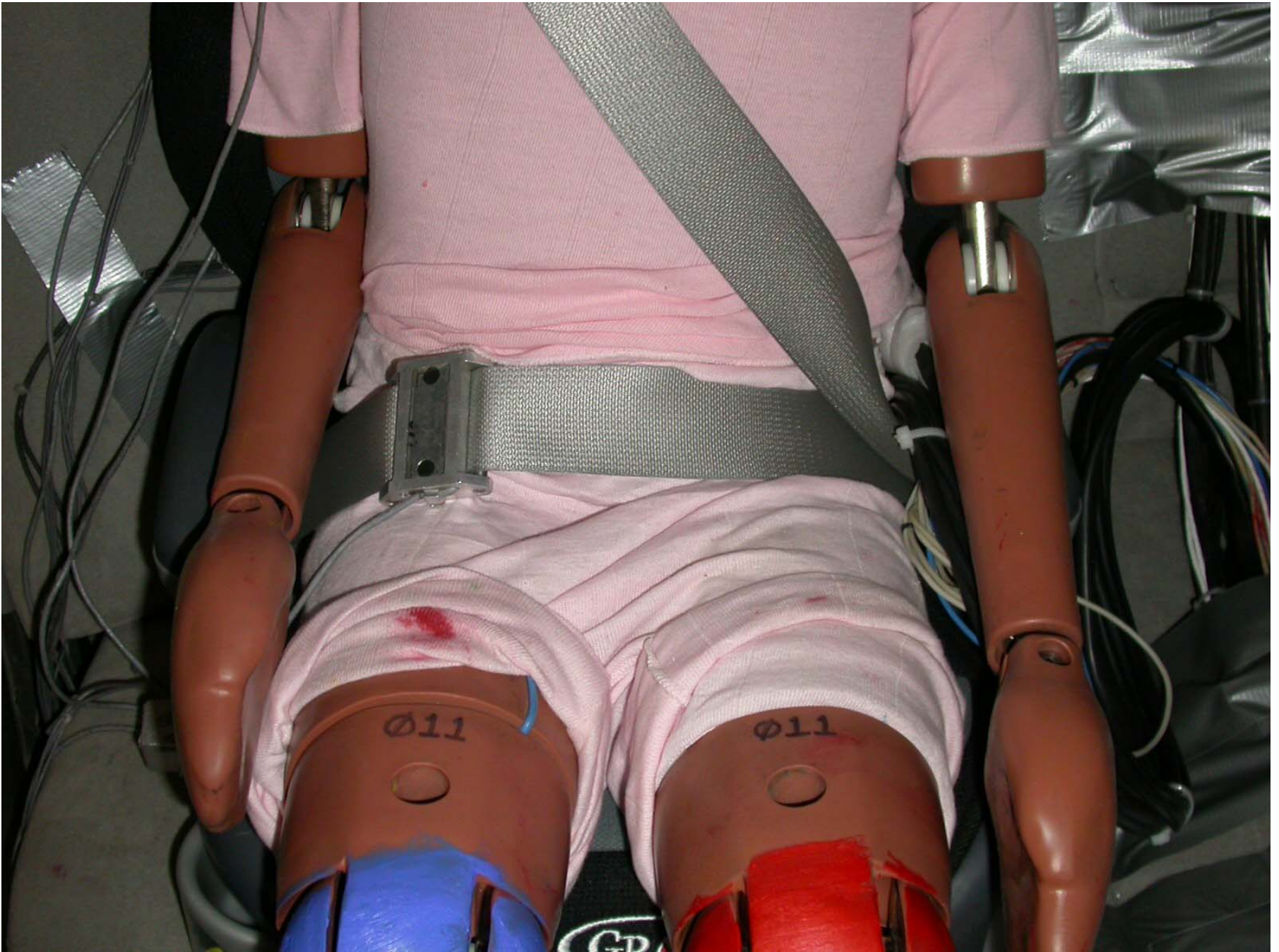


Figure F2-12: Pre-Test Position 3 Front View (Seat Belt Position)



Figure F2-13: Post-Test Position 3 Front View (Seat Belt Position)



Figure F2-14: Pre-Test Position 3 Right Side View



Figure F2-15: Post-Test Position 3 Right Side View



Figure F2-16: Pre-Test Position 3 Left Side View

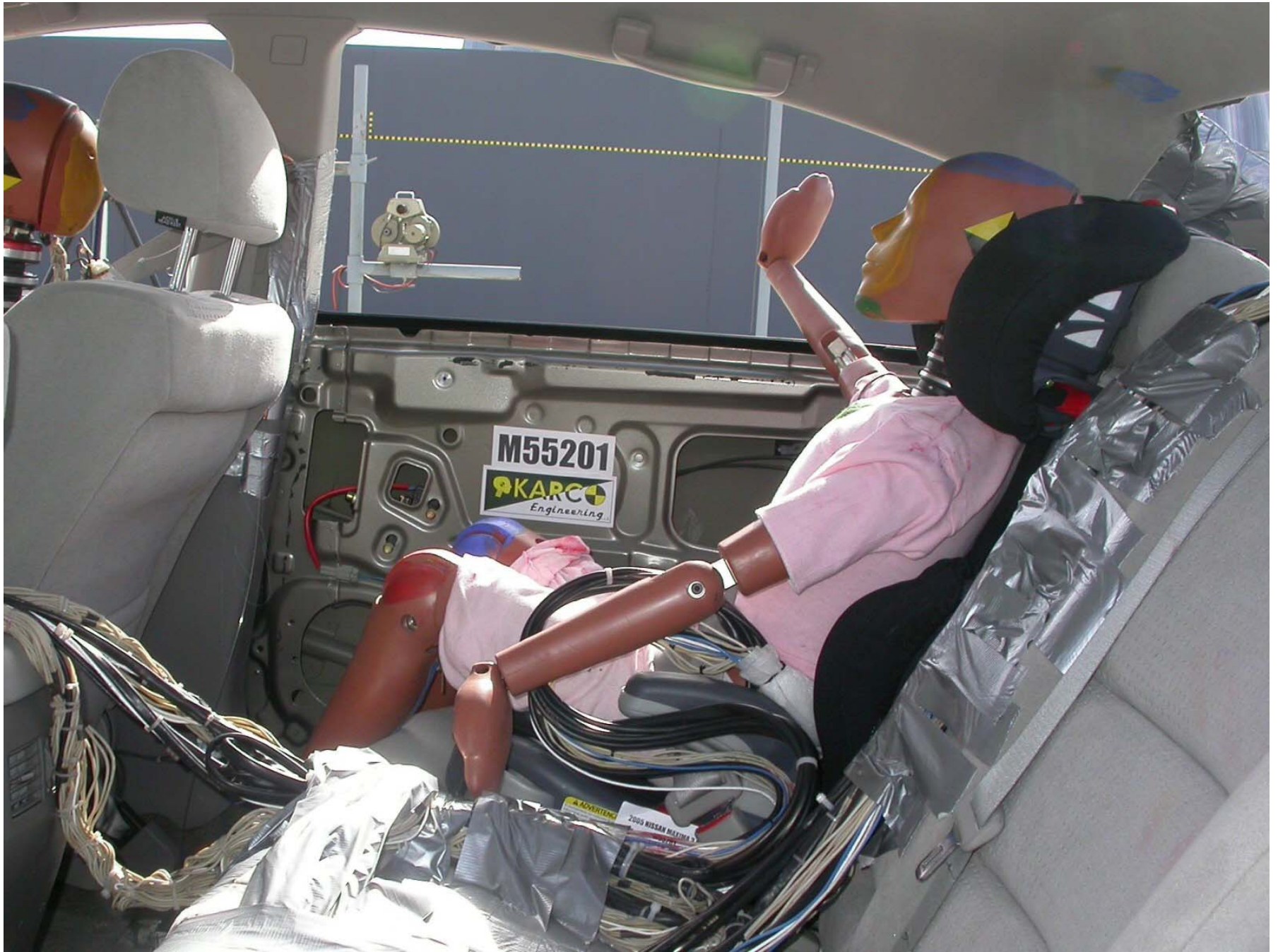


Figure F2-17: Post-Test Position 3 Left Side View



Figure F2-18: Post-Test Position 3 Dummy Legs

SECTION F-3

CHILD DUMMY RESPONSE AND CRS DATA TRACES

LIST OF DATA PLOTS

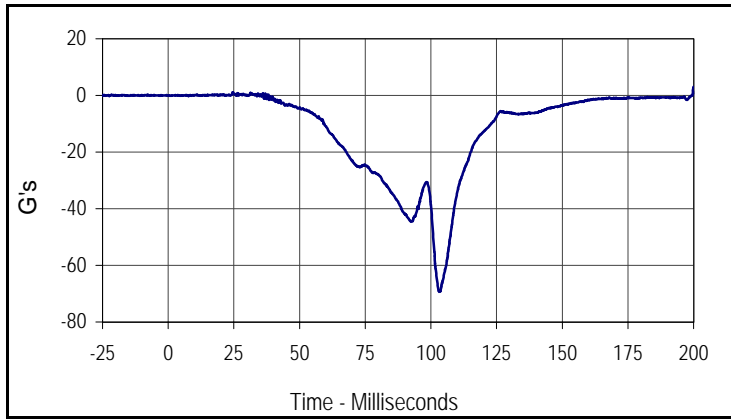
<u>Data Plot</u>	<u>Page</u>	
F3-1	Right Rear (10 Yr.) Head X	F3-1
	Right Rear (10 Yr.) Head Y	F3-1
	Right Rear (10 Yr.) Head Z	F3-1
	Right Rear (10 Yr.) Head Resultant	F3-1
F3-2	Right Rear (10 Yr.) Upper Neck Force X	F3-2
	Right Rear (10 Yr.) Upper Neck Force Y	F3-2
	Right Rear (10 Yr.) Upper Neck Force Z	F3-2
	Right Rear (10 Yr.) Upper Neck Force Resultant	F3-2
F3-3	Right Rear (10 Yr.) Upper Neck Moment X	F3-3
	Right Rear (10 Yr.) Upper Neck Moment Y	F3-3
	Right Rear (10 Yr.) Upper Neck Moment Z	F3-3
	Right Rear (10 Yr.) Upper Neck Moment Resultant	F3-3
F3-4	Right Rear (10 Yr.) Chest X	F3-4
	Right Rear (10 Yr.) Chest Y	F3-4
	Right Rear (10 Yr.) Chest Z	F3-4
	Right Rear (10 Yr.) Chest Resultant	F3-4
F3-5	Right Rear (10 Yr.) Chest Deflection	F3-5
F3-6	Right Rear (10 Yr.) Pelvis X	F3-6
	Right Rear (10 Yr.) Pelvis Y	F3-6
	Right Rear (10 Yr.) Pelvis Z	F3-6
	Right Rear (10 Yr.) Pelvis Resultant	F3-6
F3-7	Right Rear (10 Yr.) Left Femur Force	F3-7
	Right Rear (10 Yr.) Right Femur Force	F3-7
F3-8	Right Rear (10 Yr.) Lumbar Force X	F3-8
	Right Rear (10 Yr.) Lumbar Force Y	F3-8
	Right Rear (10 Yr.) Lumbar Force Z	F3-8
	Right Rear (10 Yr.) Lumbar Force Resultant	F3-8
F3-9	Right Rear (10 Yr.) Lumbar Moment X	F3-9
	Right Rear (10 Yr.) Lumbar Moment Y	F3-9
	Right Rear (10 Yr.) Lumbar Moment Z	F3-9
	Right Rear (10 Yr.) Lumbar Moment Resultant	F3-9
F3-10	Right Rear (10 Yr.) Left Clavicle Force X	F3-10
	Right Rear (10 Yr.) Left Clavicle Force Z	F3-10
	Right Rear (10 Yr.) Right Clavicle Force X	F3-10

LIST OF DATA PLOTS...(CONTINUED)

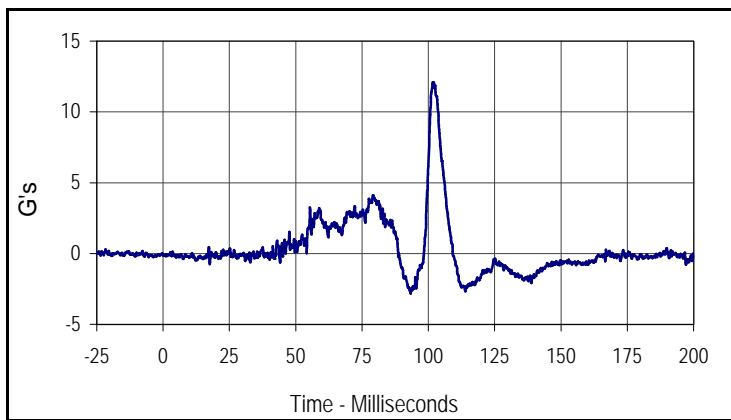
<u>Data Plot</u>	<u>Page</u>	
	Right Rear (10 Yr.) Right Clavicle Force Z	F3-10
F3-11	Right Rear (10 Yr.) Left Upper ASIS Force	F3-11
	Right Rear (10 Yr.) Left Lower ASIS Force	F3-11
	Right Rear (10 Yr.) Right Upper ASIS Force	F3-11
	Right Rear (10 Yr.) Right Lower ASIS Force	F3-11
F3-12	Right Rear (10 Yr.) Lap Belt Force	F3-12
	Right Rear (10 Yr.) Shoulder Belt Force	F3-12
	Right Rear (10 Yr.) Shoulder Belt Pullout	F3-12
	Right Rear (10 Yr.) Lap Belt Elongation	F3-12
F3-13	Right Rear (10 Yr.) CRS X	F3-13
	Right Rear (10 Yr.) CRS Y	F3-13
	Right Rear (10 Yr.) CRS Z	F3-13
	Right Rear (10 Yr.) CRS Resultant	F3-13
F3-14	Right Rear (10 Yr.) CRS Seat Back X	F3-14
	Right Rear (10 Yr.) CRS Seat Back Y	F3-14
	Right Rear (10 Yr.) CRS Seat Back Z	F3-14
	Right Rear (10 Yr.) CRS Seat Back Resultant	F3-14

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

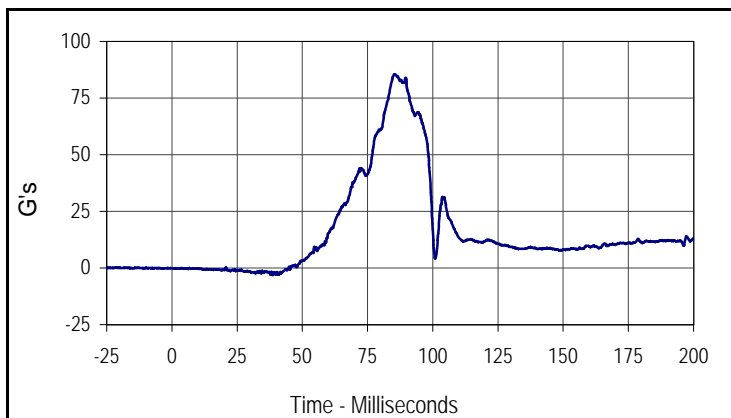
Test Date: 1/20/05
 NHTSA No.: M55201



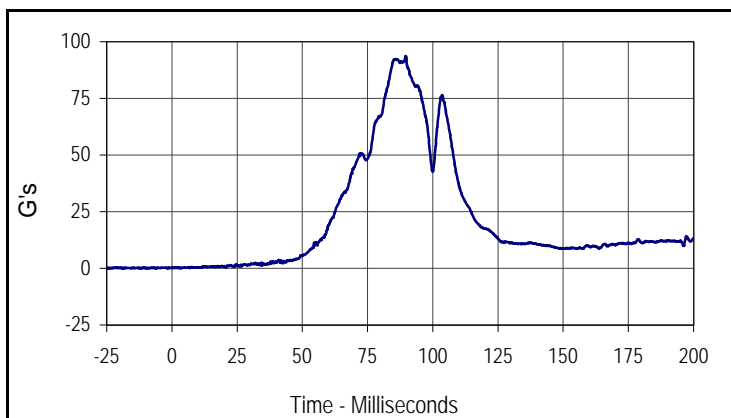
Curve Description			
Right Rear (10 Yr.) Head X			
CURNO	Type	SAE Class	Units
134	FIL	1000	G's
Max	Time	Min	Time
3.0	200.0	-69.4	103.1



Curve Description			
Right Rear (10 Yr.) Head Y			
CURNO	Type	SAE Class	Units
135	FIL	1000	G's
Max	Time	Min	Time
12.1	101.8	-2.8	93.3



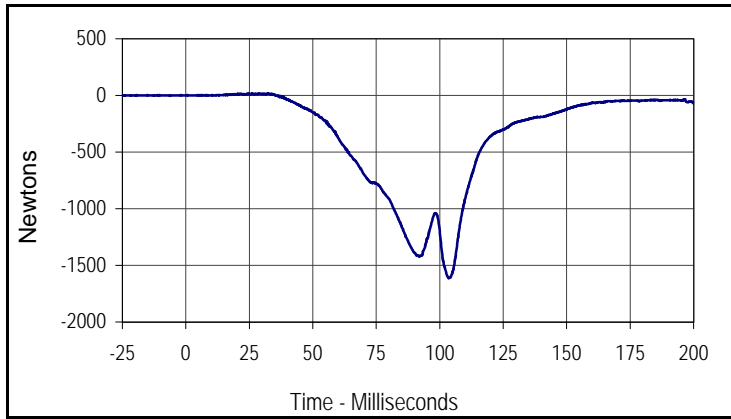
Curve Description			
Right Rear (10 Yr.) Head Z			
CURNO	Type	SAE Class	Units
136	FIL	1000	G's
Max	Time	Min	Time
85.5	85.6	-3.1	38.7



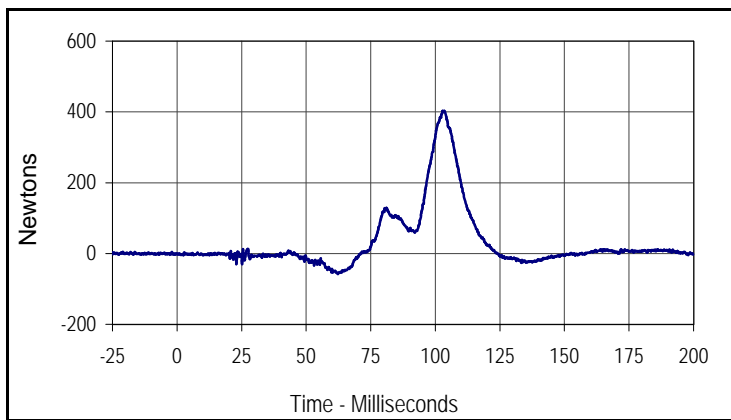
Curve Description			
Right Rear (10 Yr.) Head Resultant			
CURNO	Type	SAE Class	Units
134	RES	1000	G's
Max	Time	Min	Time
93.7	89.7	0.1	3.4

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

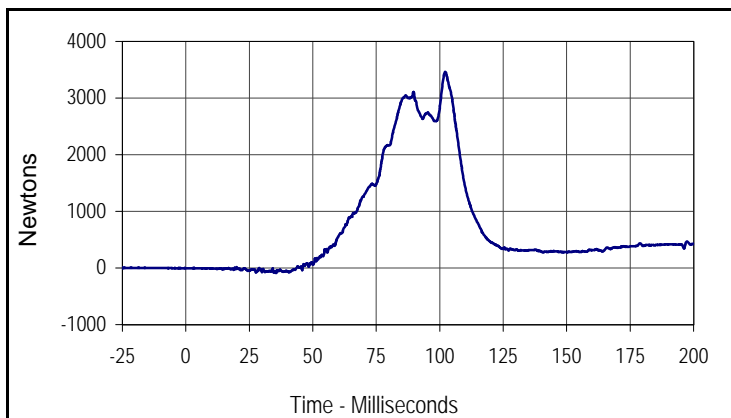
Test Date: 1/20/05
 NHTSA No.: M55201



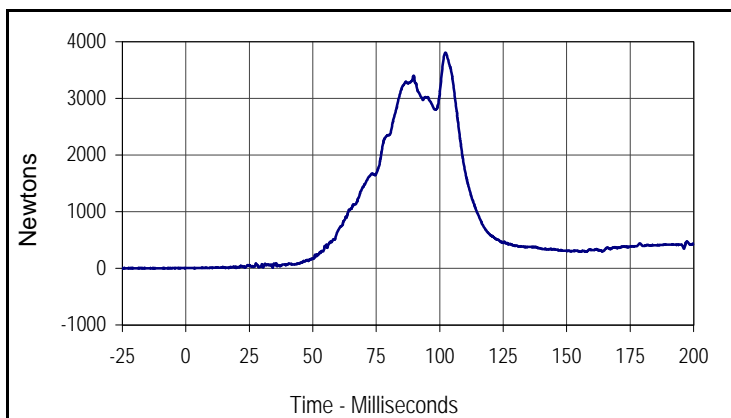
Curve Description			
Right Rear (10 Yr.) Upper Neck Force X			
CURNO	Type	SAE Class	Units
137	FIL	1000	Newtons
Max	Time	Min	Time
19.5	26.2	-1612.4	103.5



Curve Description			
Right Rear (10 Yr.) Upper Neck Force Y			
CURNO	Type	SAE Class	Units
138	FIL	1000	Newtons
Max	Time	Min	Time
403.0	103.4	-57.9	62.2



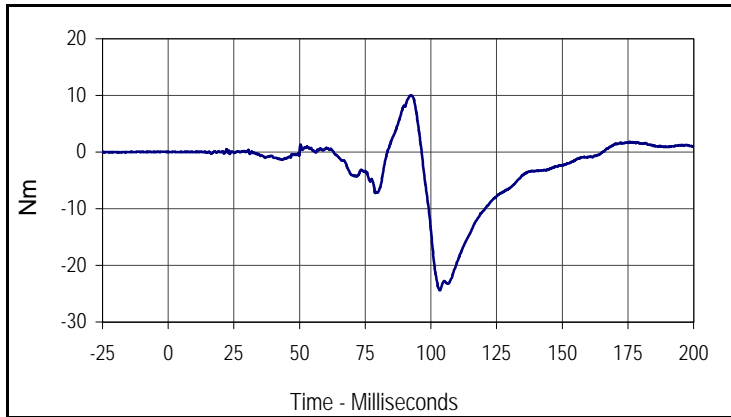
Curve Description			
Right Rear (10 Yr.) Upper Neck Force Z			
CURNO	Type	SAE Class	Units
139	FIL	1000	Newtons
Max	Time	Min	Time
3461.5	102.1	-90.0	35.5



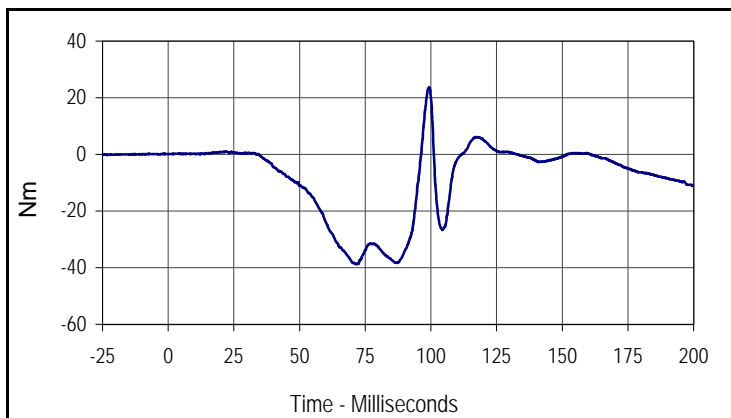
Curve Description			
Right Rear (10 Yr.) Upper Neck Force Res.			
CURNO	Type	SAE Class	Units
137	RES	1000	Newtons
Max	Time	Min	Time
3807.0	102.3	2.0	3.4

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

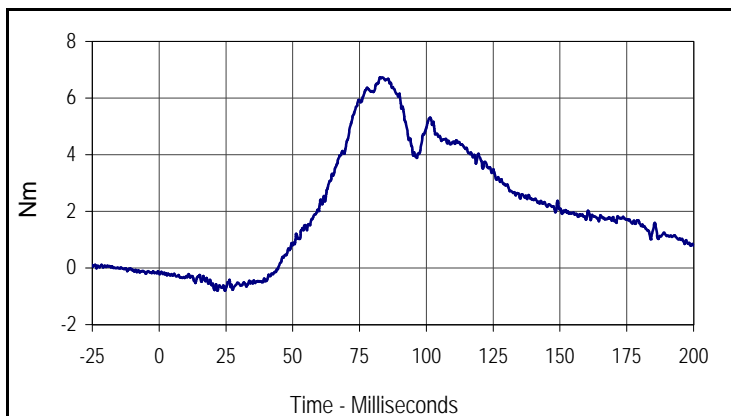
Test Date: 1/20/05
 NHTSA No.: M55201



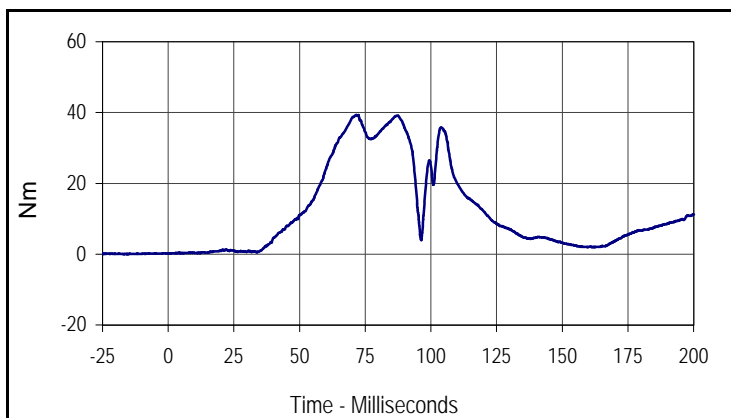
Curve Description			
Right Rear (10 Yr.) Upper Neck Moment X			
CURNO	Type	SAE Class	Units
140	FIL	600	Nm
Max	Time	Min	Time
10.0	92.4	-24.4	103.4



Curve Description			
Right Rear (10 Yr.) Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
141	FIL	600	Nm
Max	Time	Min	Time
23.6	99.3	-38.8	71.5



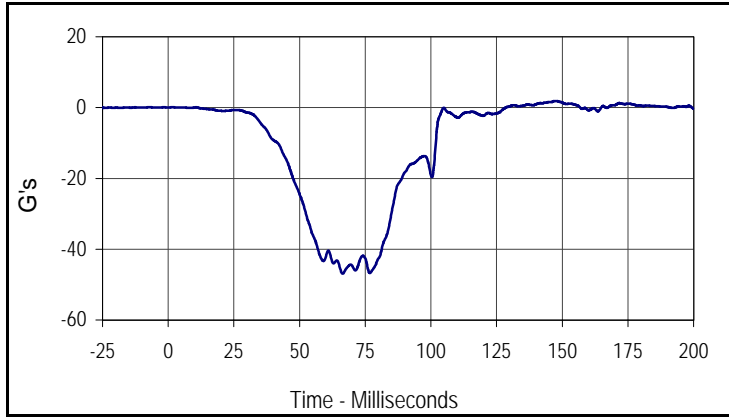
Curve Description			
Right Rear (10 Yr.) Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
142	FIL	600	Nm
Max	Time	Min	Time
6.7	82.6	-0.8	21.8



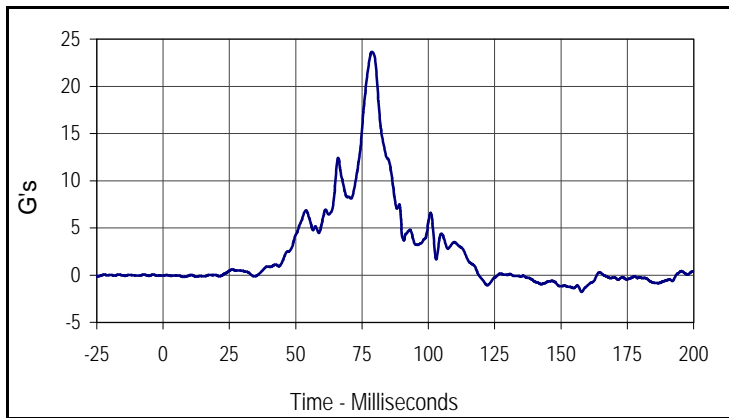
Curve Description			
Right Rear (10 Yr.) Upper Neck Moment Res.			
CURNO	Type	SAE Class	Units
140	RES	600	Nm
Max	Time	Min	Time
39.3	71.5	0.2	0.8

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

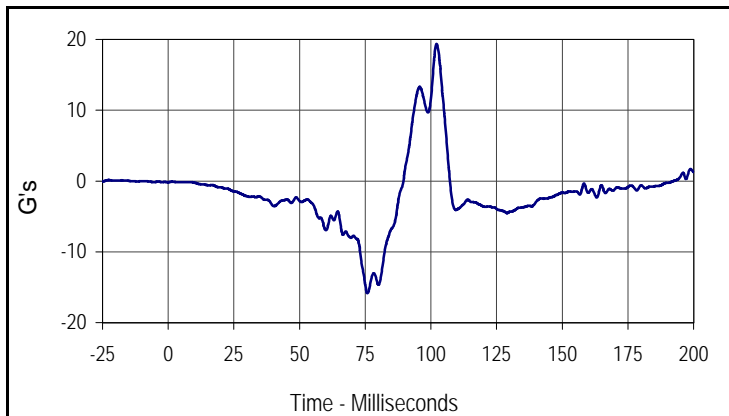
Test Date: 1/20/05
 NHTSA No.: M55201



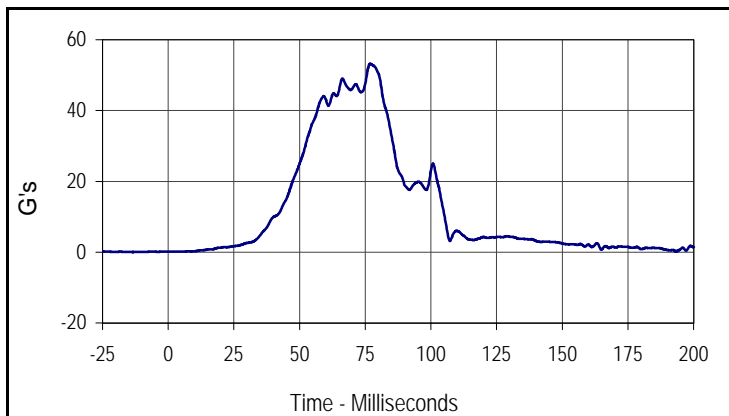
Curve Description			
Right Rear (10 Yr.) Chest X			
CURNO	Type	SAE Class	Units
143	FIL	180	G's
Max	Time	Min	Time
1.9	147.5	-46.9	66.4



Curve Description			
Right Rear (10 Yr.) Chest Y			
CURNO	Type	SAE Class	Units
144	FIL	180	G's
Max	Time	Min	Time
23.6	78.7	-1.8	157.8



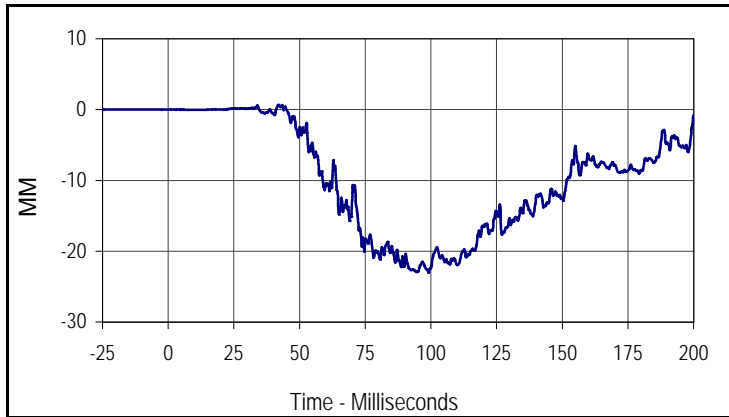
Curve Description			
Right Rear (10 Yr.) Chest Z			
CURNO	Type	SAE Class	Units
145	FIL	180	G's
Max	Time	Min	Time
19.4	102.1	-15.9	75.8



Curve Description			
Right Rear (10 Yr.) Chest Resultant			
CURNO	Type	SAE Class	Units
143	RES	180	G's
Max	Time	Min	Time
53.2	76.9	0.1	1.1

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

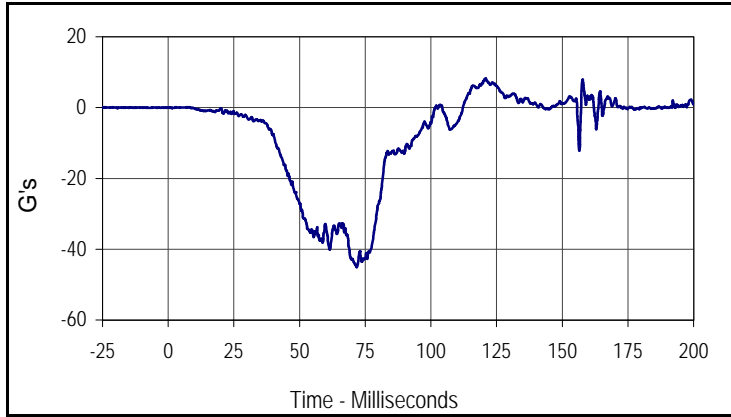
Test Date: 1/20/05
 NHTSA No.: M55201



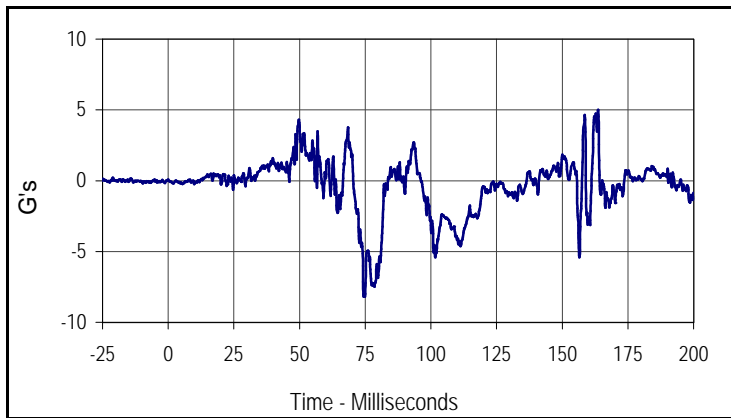
Curve Description			
Right Rear (10 Yr.) Chest Deflection			
CURNO	Type	SAE Class	Units
146	FIL	600	MM
Max	Time	Min	Time
0.7	41.9	-23.0	99.1

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

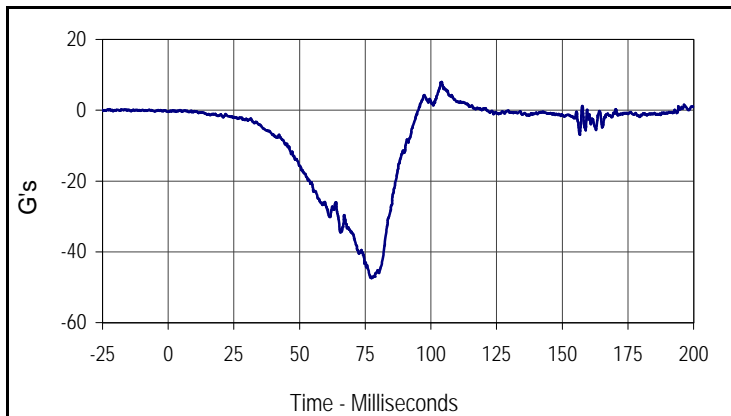
Test Date: 1/20/05
 NHTSA No.: M55201



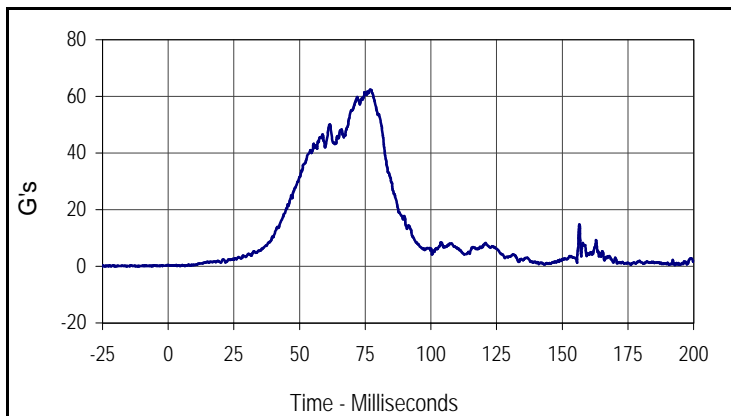
Curve Description			
Right Rear (10 Yr.) Pelvis X			
CURNO	Type	SAE Class	Units
147	FIL	1000	G's
Max	Time	Min	Time
8.2	120.8	-45.1	71.7



Curve Description			
Right Rear (10 Yr.) Pelvis Y			
CURNO	Type	SAE Class	Units
148	FIL	1000	G's
Max	Time	Min	Time
5.0	163.7	-8.2	74.9



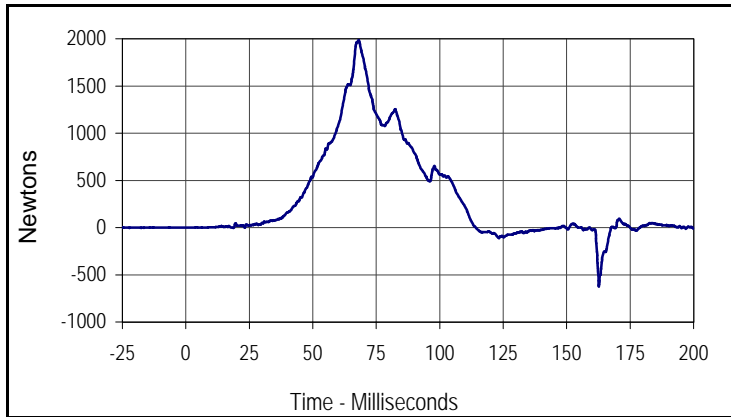
Curve Description			
Right Rear (10 Yr.) Pelvis Z			
CURNO	Type	SAE Class	Units
149	FIL	1000	G's
Max	Time	Min	Time
8.0	104.1	-47.4	77.4



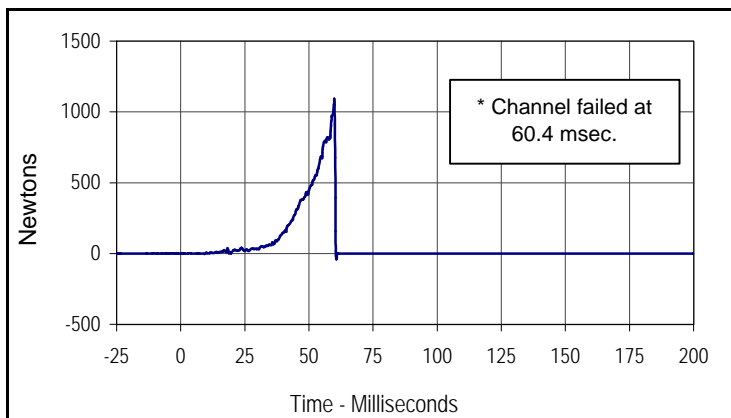
Curve Description			
Right Rear (10 Yr.) Pelvis Resultant			
CURNO	Type	SAE Class	Units
147	RES	1000	G's
Max	Time	Min	Time
62.5	76.9	0.1	3.4

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

Test Date: 1/20/05
 NHTSA No.: M55201



Curve Description			
Right Rear (10 Yr.) Left Femur Force			
CURNO	Type	SAE Class	Units
150	FIL	600	Newtons
Max	Time	Min	Time
1985.8	68.1	-624.6	162.7

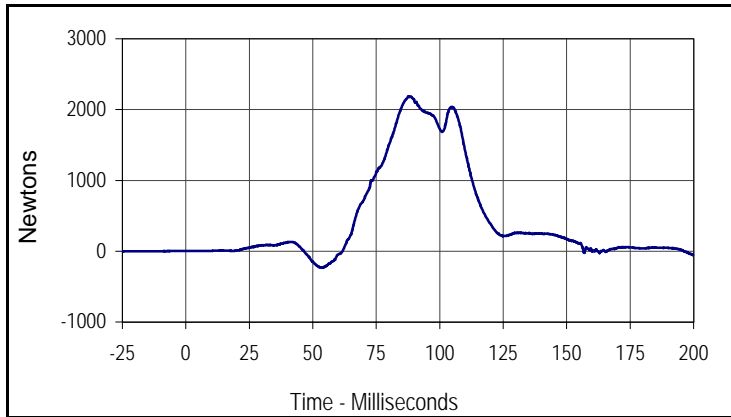


Curve Description			
Right Rear (10 Yr.) Right Femur Force			
CURNO	Type	SAE Class	Units
151	FIL	600	Newtons
Max	Time	Min	Time
1093.7	59.9	-40.5	60.7

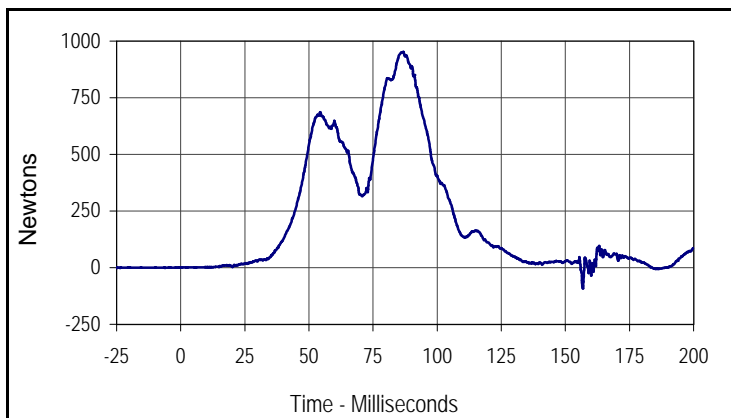
* Channel failed at 60.4 msec.

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

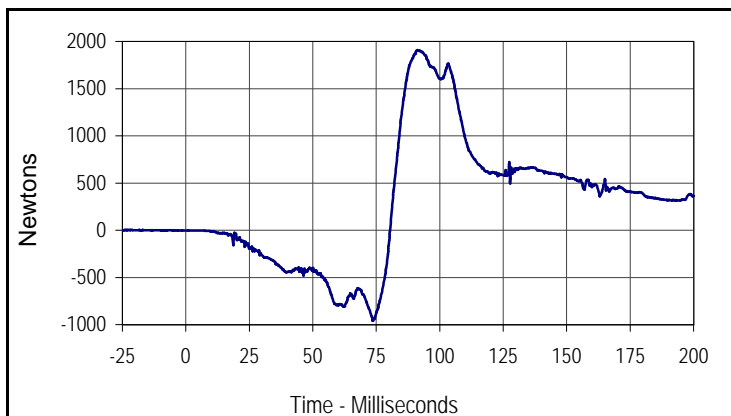
Test Date: 1/20/05
 NHTSA No.: M55201



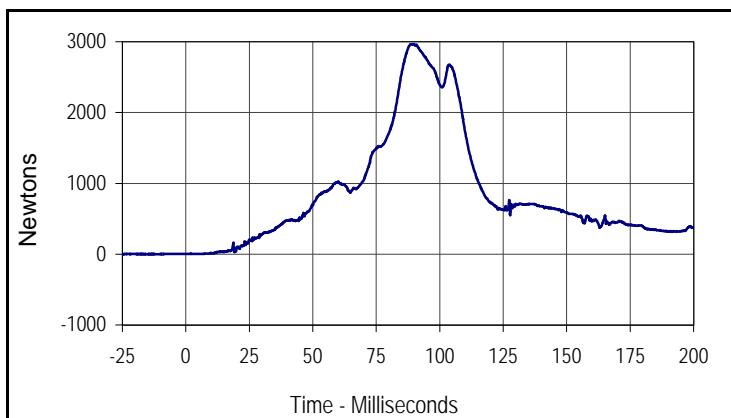
Curve Description			
Right Rear (10 Yr.) Lumbar Force X			
CURNO	Type	SAE Class	Units
152	FIL	1000	Newtons
Max	Time	Min	Time
2184.9	87.8	-231.2	53.2



Curve Description			
Right Rear (10 Yr.) Lumbar Force Y			
CURNO	Type	SAE Class	Units
153	FIL	1000	Newtons
Max	Time	Min	Time
952.6	86.8	-92.2	156.8



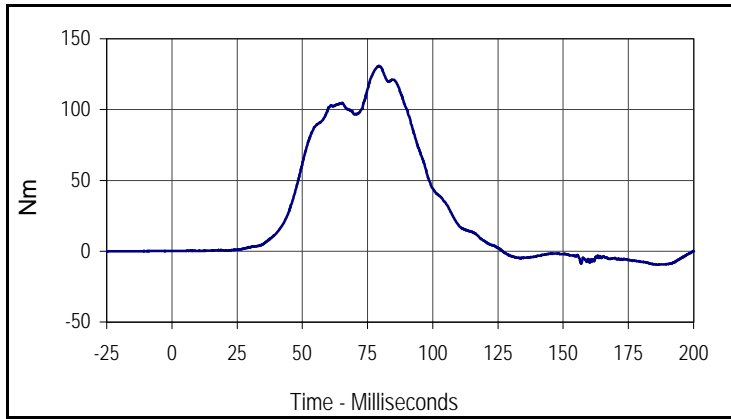
Curve Description			
Right Rear (10 Yr.) Lumbar Force Z			
CURNO	Type	SAE Class	Units
154	FIL	1000	Newtons
Max	Time	Min	Time
1907.5	91.3	-959.6	73.7



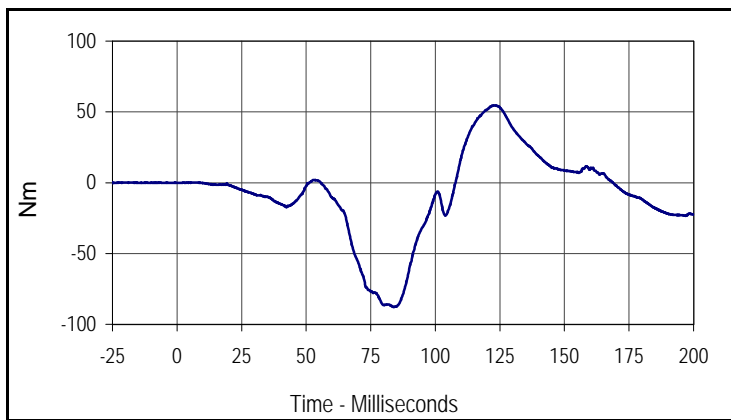
Curve Description			
Right Rear (10 Yr.) Lumbar Force Resultant			
CURNO	Type	SAE Class	Units
152	RES	1000	Newtons
Max	Time	Min	Time
2967.5	89.8	3.0	1.1

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

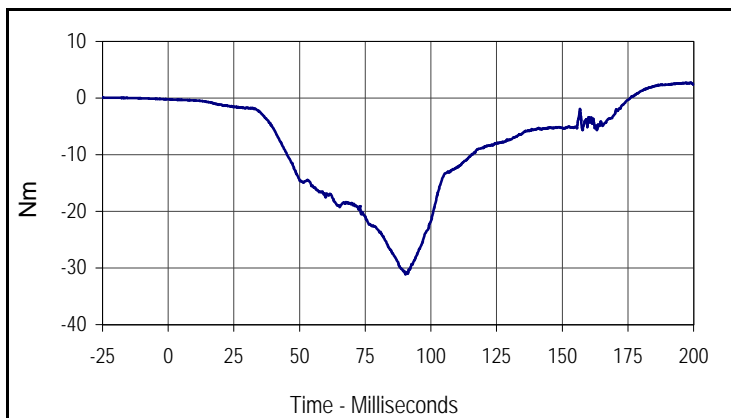
Test Date: 1/20/05
 NHTSA No.: M55201



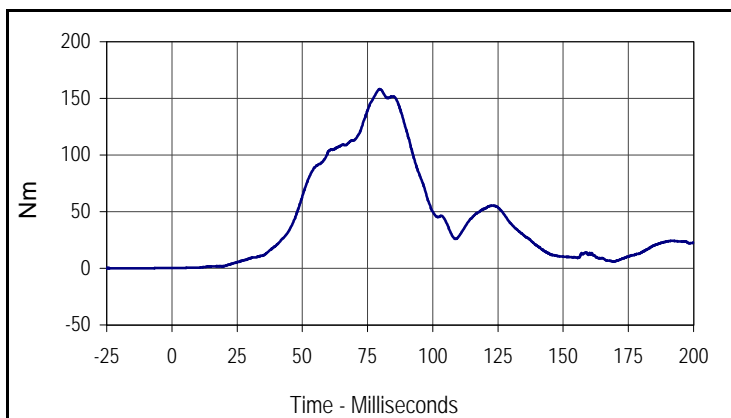
Curve Description			
Right Rear (10 Yr.) Lumbar Moment X			
CURNO	Type	SAE Class	Units
155	FIL	1000	Nm
Max	Time	Min	Time
130.8	79.4	-9.5	186.2



Curve Description			
Right Rear (10 Yr.) Lumbar Moment Y			
CURNO	Type	SAE Class	Units
156	FIL	1000	Nm
Max	Time	Min	Time
54.5	122.7	-87.9	83.7



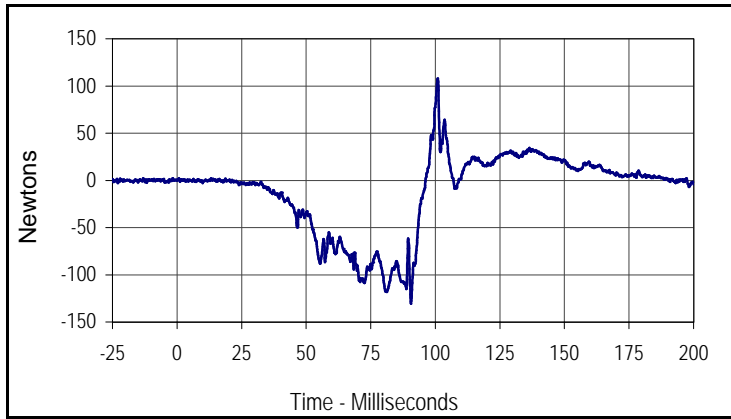
Curve Description			
Right Rear (10 Yr.) Lumbar Moment Z			
CURNO	Type	SAE Class	Units
157	FIL	1000	Nm
Max	Time	Min	Time
2.7	198.9	-31.1	90.3



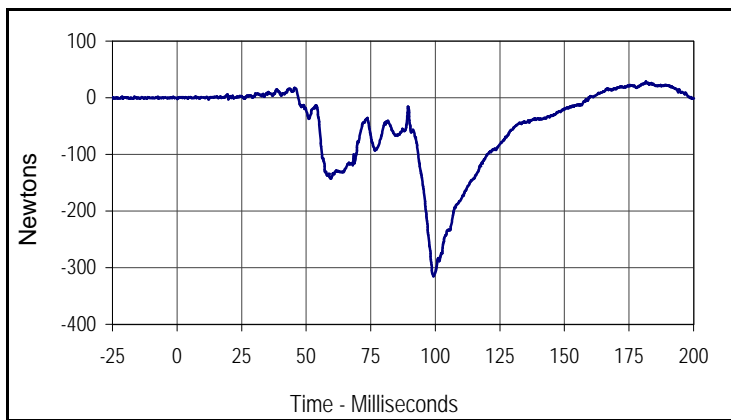
Curve Description			
Right Rear (10 Yr.) Lumbar Moment Resultant			
CURNO	Type	SAE Class	Units
155	RES	1000	Nm
Max	Time	Min	Time
158.1	79.7	0.3	0.5

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

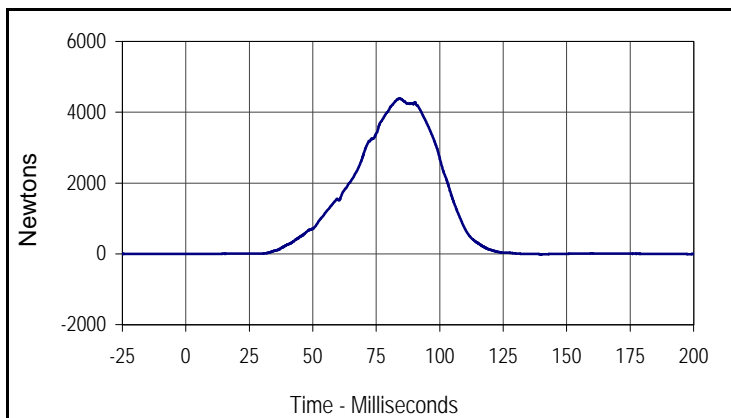
Test Date: 1/20/05
 NHTSA No.: M55201



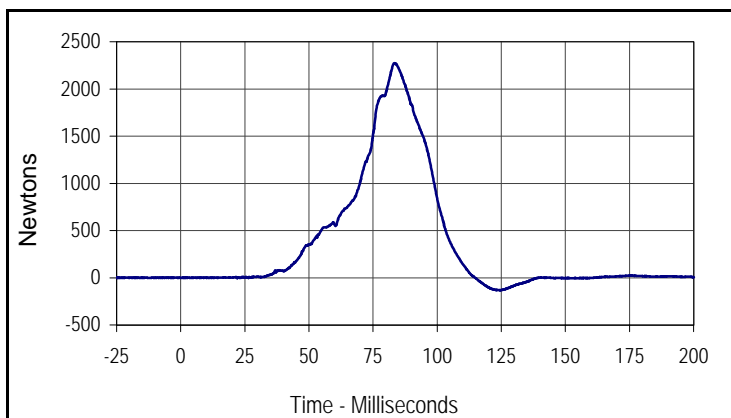
Curve Description			
Right Rear (10 Yr.) Left Clavicle Force X			
CURNO	Type	SAE Class	Units
158	FIL	1000	Newtons
Max	Time	Min	Time
108.0	101.0	-130.8	90.6



Curve Description			
Right Rear (10 Yr.) Left Clavicle Force Z			
CURNO	Type	SAE Class	Units
159	FIL	1000	Newtons
Max	Time	Min	Time
28.9	181.6	-315.0	99.3



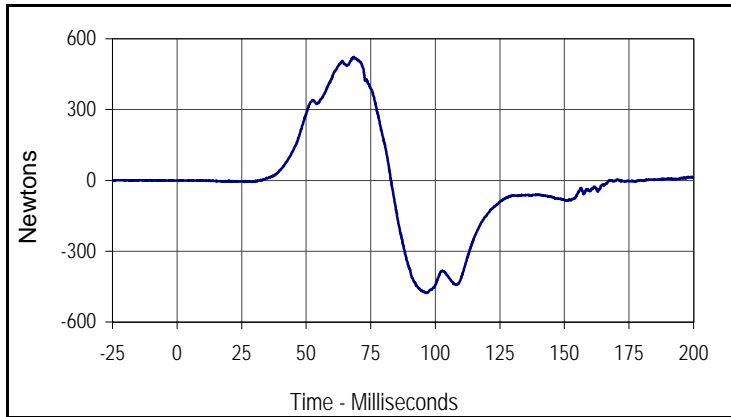
Curve Description			
Right Rear (10 Yr.) Right Clavicle Force X			
CURNO	Type	SAE Class	Units
160	FIL	1000	Newtons
Max	Time	Min	Time
4386.6	84.3	-15.9	140.0



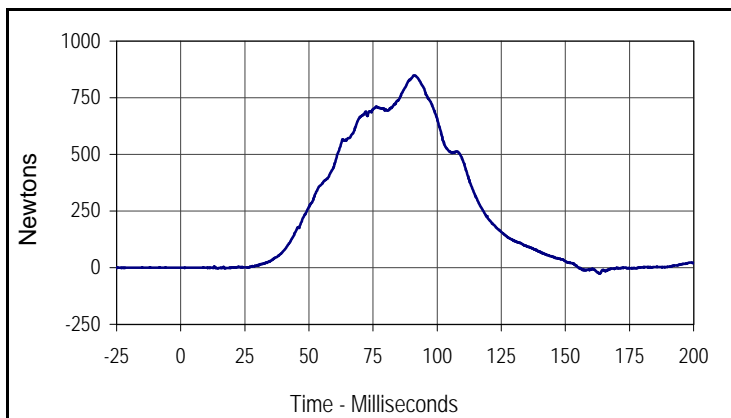
Curve Description			
Right Rear (10 Yr.) Right Clavicle Force Z			
CURNO	Type	SAE Class	Units
161	FIL	1000	Newtons
Max	Time	Min	Time
2274.5	83.4	-132.8	124.6

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

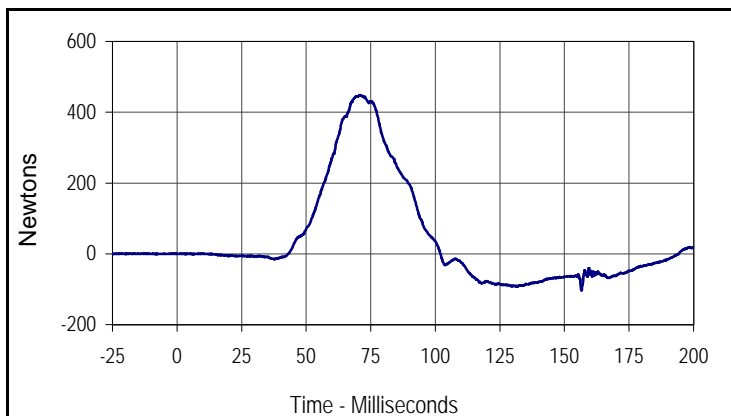
Test Date: 1/20/05
 NHTSA No.: M55201



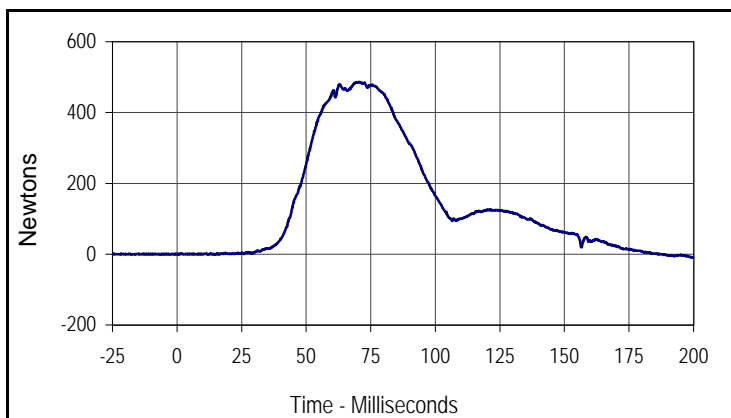
Curve Description			
Right Rear (10 Yr.) Left Upper ASIS Force			
CURNO	Type	SAE Class	Units
162	FIL	1000	Newtons
Max	Time	Min	Time
522.6	68.4	-476.8	96.3



Curve Description			
Right Rear (10 Yr.) Left Lower ASIS Force			
CURNO	Type	SAE Class	Units
163	FIL	1000	Newtons
Max	Time	Min	Time
849.1	91.0	-25.2	163.0



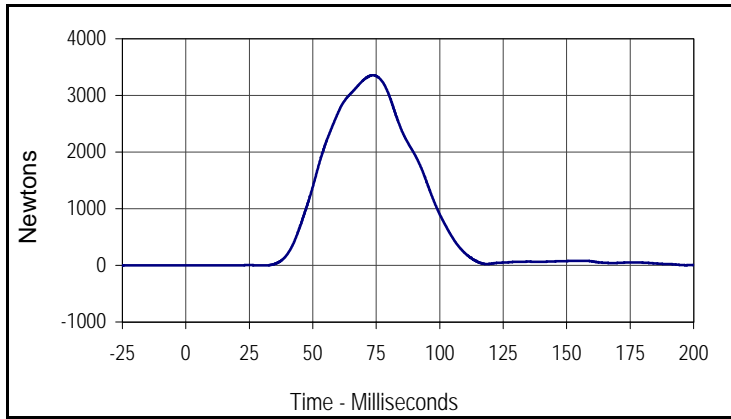
Curve Description			
Right Rear (10 Yr.) Right Upper ASIS Force			
CURNO	Type	SAE Class	Units
164	FIL	1000	Newtons
Max	Time	Min	Time
448.3	70.6	-103.5	156.6



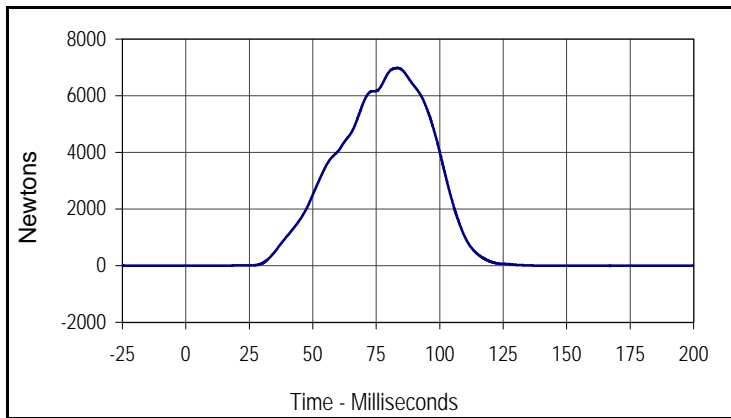
Curve Description			
Right Rear (10 Yr.) Right Lower ASIS Force			
CURNO	Type	SAE Class	Units
165	FIL	1000	Newtons
Max	Time	Min	Time
486.5	70.8	-9.6	199.5

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

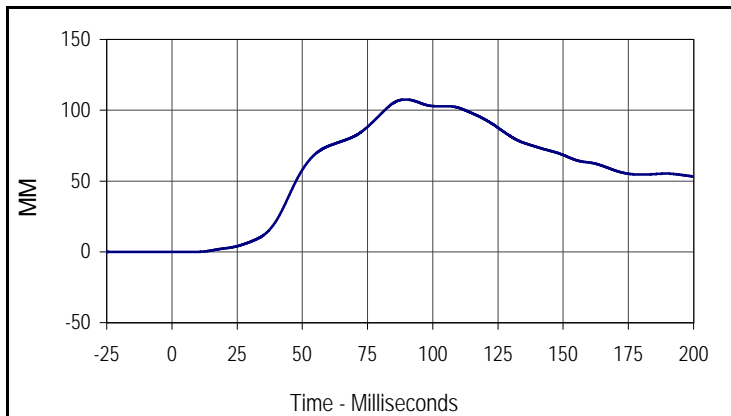
Test Date: 1/20/05
 NHTSA No.: M55201



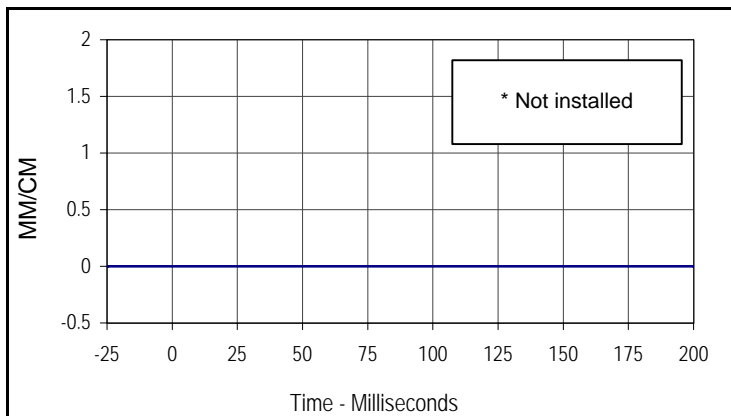
Curve Description			
Right Rear (10 Yr.) Lap Belt Force			
CURNO	Type	SAE Class	Units
166	FIL	60	Newtons
Max	Time	Min	Time
3356.3	73.7	-1.2	30.7



Curve Description			
Right Rear (10 Yr.) Shoulder Belt Force			
CURNO	Type	SAE Class	Units
167	FIL	60	Newtons
Max	Time	Min	Time
6979.3	83.3	-5.7	167.0



Curve Description			
Right Rear (10 Yr.) Shoulder Belt Pullout (10Yr.)			
CURNO	Type	SAE Class	Units
168	FIL	60	MM
Max	Time	Min	Time
107.6	89.5	0.0	8.1

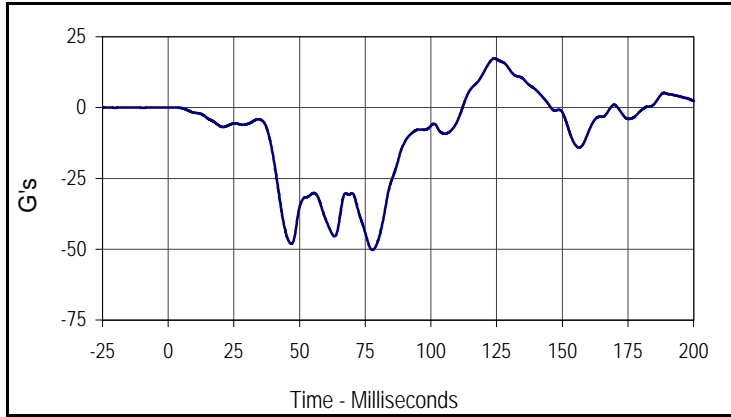


Curve Description			
Right Rear (10 Yr.) Shoulder Belt Elongation			
CURNO	Type	SAE Class	Units
169	FIL	60	MM/CM
Max	Time	Min	Time
0.00	0.0	0.00	0.0

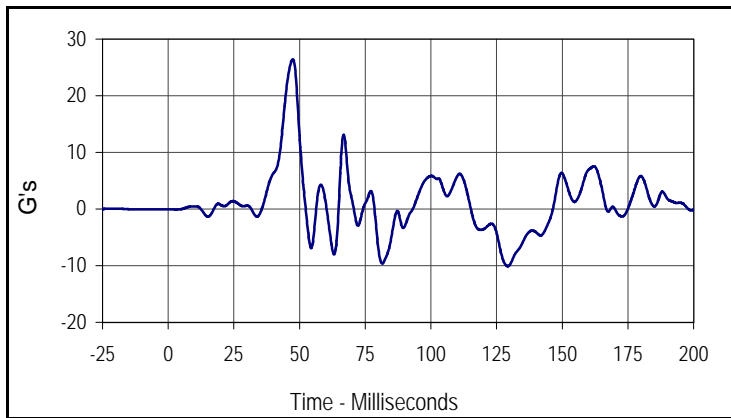
* Not installed

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

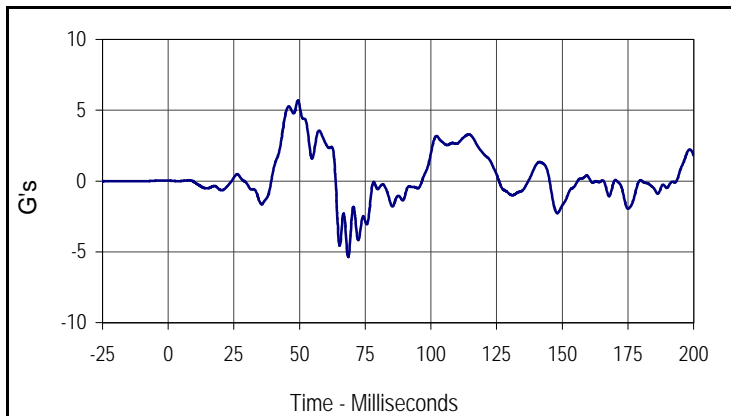
Test Date: 1/20/05
 NHTSA No.: M55201



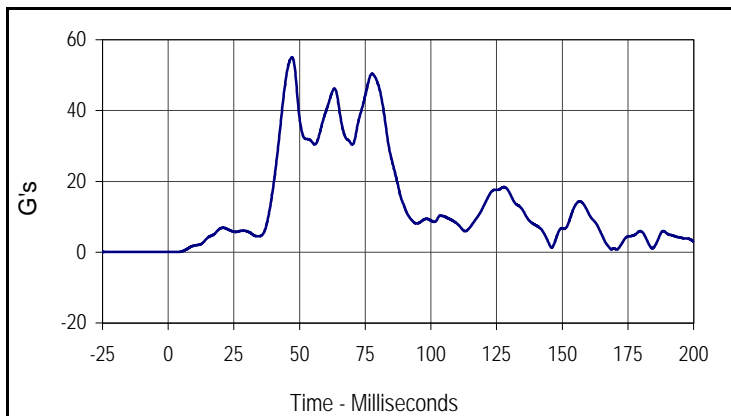
Curve Description			
Right Rear (10 Yr.) CRS X			
CURNO	Type	SAE Class	Units
170	FIL	60	G's
Max	Time	Min	Time
17.3	124.1	-50.3	77.7



Curve Description			
Right Rear (10 Yr.) CRS Y			
CURNO	Type	SAE Class	Units
171	FIL	60	G's
Max	Time	Min	Time
26.5	47.4	-10.1	129.3



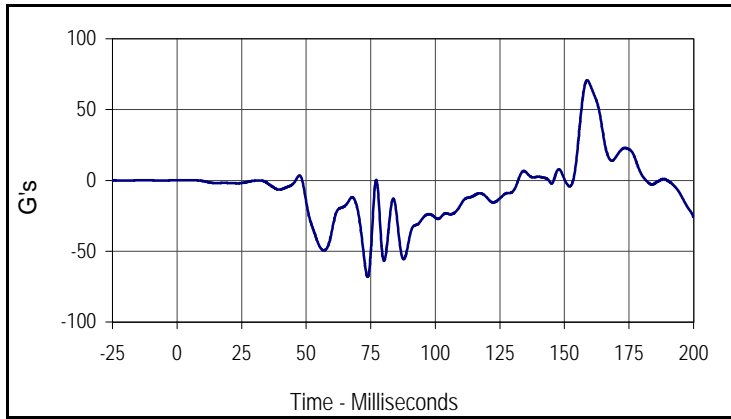
Curve Description			
Right Rear (10 Yr.) CRS Z			
CURNO	Type	SAE Class	Units
172	FIL	60	G's
Max	Time	Min	Time
5.7	49.4	-5.4	68.5



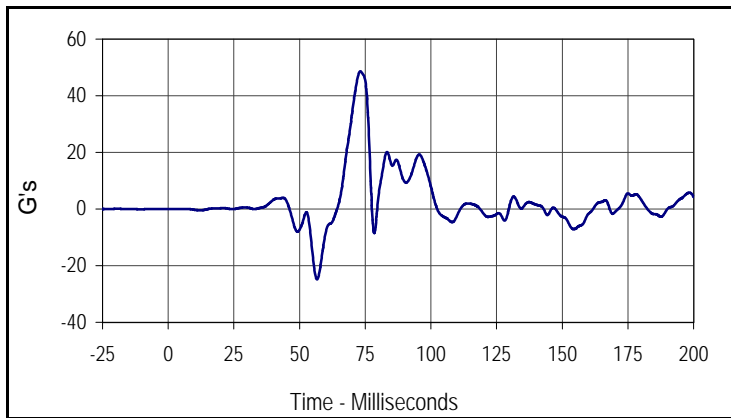
Curve Description			
Right Rear (10 Yr.) CRS Resultant			
CURNO	Type	SAE Class	Units
170	RES	60	G's
Max	Time	Min	Time
55.0	47.1	0.1	0.0

Test Vehicle: 2005 Nissan Maxima 3.5 SE 4-Door Sedan
 Test Program: 2005 NHTSA 35mph NCAP

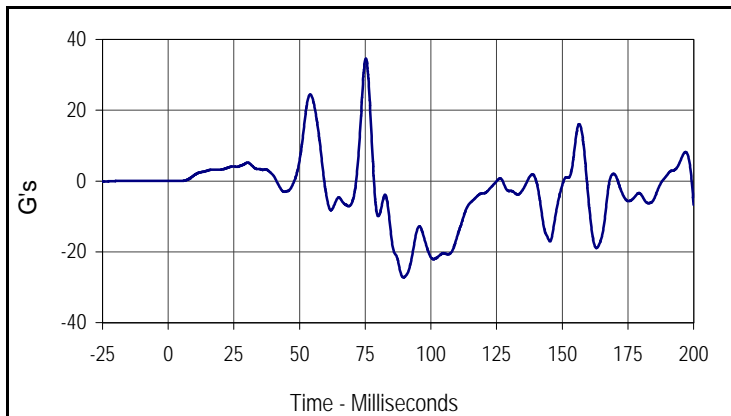
Test Date: 1/20/05
 NHTSA No.: M55201



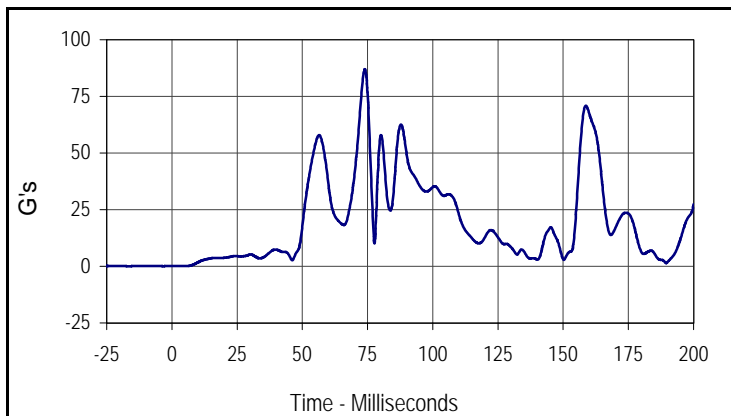
Curve Description			
Right Rear (10 Yr.) CRS Seat Back X			
CURNO	Type	SAE Class	Units
173	FIL	60	G's
Max	Time	Min	Time
70.6	158.8	-68.2	73.8



Curve Description			
Right Rear (10 Yr.) CRS Seat Back Y			
CURNO	Type	SAE Class	Units
174	FIL	60	G's
Max	Time	Min	Time
48.6	73.1	-24.8	56.7



Curve Description			
Right Rear (10 Yr.) CRS Seat Back Z			
CURNO	Type	SAE Class	Units
175	FIL	60	G's
Max	Time	Min	Time
34.6	75.2	-27.2	89.6



Curve Description			
Right Rear (10 Yr.) CRS Seat Back Resultant			
CURNO	Type	SAE Class	Units
173	RES	60	G's
Max	Time	Min	Time
87.0	74.0	0.1	4.3

SECTION F-4

CHILD DUMMY INSTRUMENTATION INFORMATION

**2005 NHTSA 35mph NCAP
Instrumentation Data Channel Assignments
Right Rear Child A.T.D. Serial Number 011 (10 Yr.)
1/20/05
2005 Nissan Maxima 3.5 SE 4-Door Sedan**

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
134	HEAD CG	X	GPAC047	Accel.,1/2 bridge	Endevco	7264-2000	G
135	HEAD CG	Y	GPAC048	Accel.,1/2 bridge	Endevco	7264-2000	G
136	HEAD CG	Z	GPAC049	Accel.,1/2 bridge	Endevco	7264-2000	G
137	UPPER NECK FORCE	X	10UNFX	Load cell, six axis neck	R. A. Denton	IF-234	N
138	UPPER NECK FORCE	Y	10UNFY	Load cell, six axis neck	R. A. Denton	IF-234	N
139	UPPER NECK FORCE	Z	10UNFZ	Load cell, six axis neck	R. A. Denton	IF-234	N
140	UPPER NECK MOMENT	X	10UNMX	Load cell, six axis neck	R. A. Denton	IF-234	Nm
141	UPPER NECK MOMENT	Y	10UNMY	Load cell, six axis neck	R. A. Denton	IF-234	Nm
142	UPPER NECK MOMENT	Z	10UNMZ	Load cell, six axis neck	R. A. Denton	IF-234	Nm
143	CHEST CG	X	2116-A01	Accel., Full Bridge	Entran	2000JF	G
144	CHEST CG	Y	2116-A06	Accel., Full Bridge	Entran	2000JF	G
145	CHEST CG	Z	2116-A07	Accel., Full Bridge	Entran	2000JF	G
146	CHEST DISPLACEMENT	X	10CP	Rotary Pot Chest	Servo	14CBI	MM
147	PELVIS	X	2116-N07	Accel., Full Bridge	Entran	2000JF	G
148	PELVIS	Y	2116-A03	Accel., Full Bridge	Entran	2000JF	G
149	PELVIS	Z	2116-A17	Accel., Full Bridge	Entran	2000JF	G
150	LEFT FEMUR FORCE	Z	KEFF001	Load cell, Femur	R.A. Denton	2090	N
151	RIGHT FEMUR FORCE	Z	KEFF002	Load cell, Femur	R.A. Denton	2090	N
152	LUMBAR FORCE	X	LUMFX	Load cell, Lumbar	R.A. Denton	2431	N
153	LUMBAR FORCE	Y	LUMFY	Load cell, Lumbar	R.A. Denton	2431	N
154	LUMBAR FORCE	Z	LUMFZ	Load cell, Lumbar	R.A. Denton	2431	N
155	LUMBAR MOMENT	X	LUMMX	Load cell, Lumbar	R.A. Denton	2431	N
156	LUMBAR MOMENT	Y	LUMMY	Load cell, Lumbar	R.A. Denton	2431	N
157	LUMBAR MOMENT	Z	LUMMZ	Load cell, Lumbar	R.A. Denton	2431	N

E4-1

TR-P25001-09-NC

**2005 NHTSA 35mph NCAP
Instrumentation Data Channel Assignments
Right Rear Child A.T.D. Serial Number 011 (10 Yr.)
1/20/05
2005 Nissan Maxima 3.5 SE 4-Door Sedan**

CH.	LOCATION	AXIS	IDENT. NO.	DESCRIPTION	MFR	MODEL	UNITS
158	CLAVICLE FORCE	X	CLFX	Load cell, Clavicle	R.A. Denton	5400J	N
159	CLAVICLE FORCE	Z	CLFY	Load cell, Clavicle	R.A. Denton	5400J	N
160	CLAVICLE FORCE	X	CLRFX	Load cell, Clavicle	R.A. Denton	5410J	N
161	CLAVICLE FORCE	Z	CLRFZ	Load cell, Clavicle	R.A. Denton	5410J	N
162	LEFT ASIS UPPER	X	10LUASIS	Load cell, ASIS	R.A. Denton	3475	N
163	LEFT ASIS LOWER	X	10LLASIS	Load cell, ASIS	R.A. Denton	3475	N
164	RIGHT ASIS UPPER	X	10RUASIS	Load cell, ASIS	R.A. Denton	3476	N
165	RIGHT ASIS LOWER	X	10RLASIS	Load cell, ASIS	R.A. Denton	3476	N
166	LAP BELT FORCE	X	BL168	Load cell, Seat belt	First Tech	IF-964	N
167	SHOULDER BELT FORCE	X	BL169	Load cell, Seat belt	First Tech	IF-964	N
168	SHOULDER BELT SPOOL	X	KEPP001	Pullout pot	Celesco	PTX101-0030	MM
169	SHOULDER BELT ELONG.	X	KEEP001	Linear pot., belt stretch	E.T.I.	LCP8-10 10K	MM/CM
170	CRS	X	KETX4A	Accel.,1/2 bridge	Endevco	7264-200	G
171	CRS	Y	KETX4B	Accel.,1/2 bridge	Endevco	7264-200	G
172	CRS	Z	KETX4C	Accel.,1/2 bridge	Endevco	7264-200	G
173	CRS SEAT BACK	X	KETX4A	Accel.,1/2 bridge	Endevco	7264-200	G
174	CRS SEAT BACK	Y	KETX4B	Accel.,1/2 bridge	Endevco	7264-200	G
175	CRS SEAT BACK	Z	KETX4C	Accel.,1/2 bridge	Endevco	7264-200	G

SECTION F-5

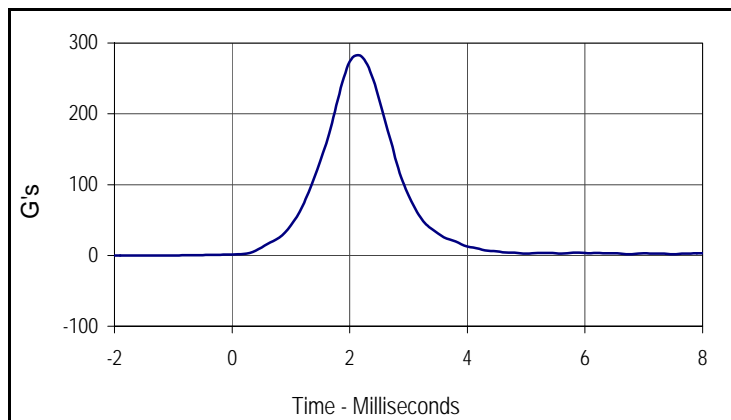
CHILD DUMMY CALIBRATION INFORMATION

Test Program: Hybrid III 10 Yr Old Head Drop Test
 ATD Serial No.: 009

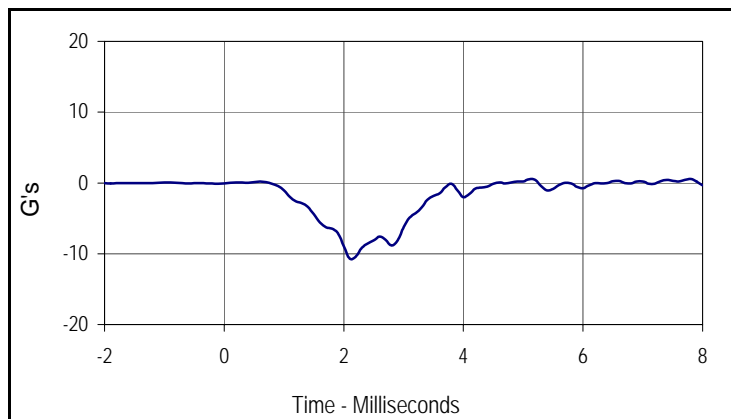
Test Date: 1/18/05
 Test I.D.: HD01A



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	250.0 to 300.0	282.5	Pass
Peak Lateral Acceleration	G's	≤15.0	10.7	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Oscillations After Main Pulse	%	<10	1.4	Pass
Overall Test Results				Pass



Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
282.5	2.1	0.0	-2.0



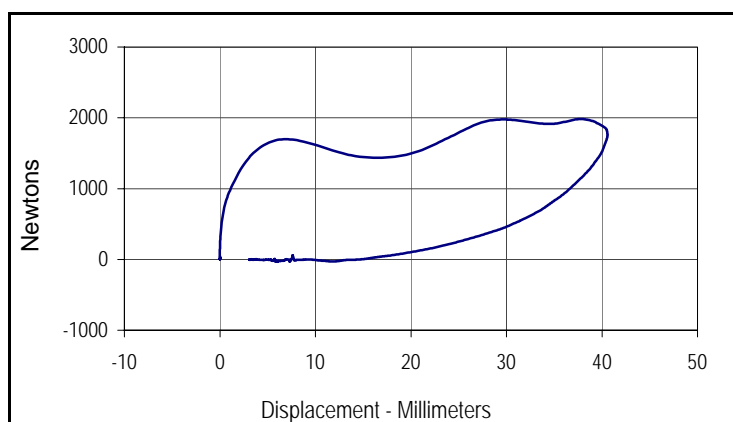
Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
0.5	5.1	-10.7	2.1

Test Program: Hybrid III 10 Yr Old Thorax Impact Test
 ATD Serial No.: 009

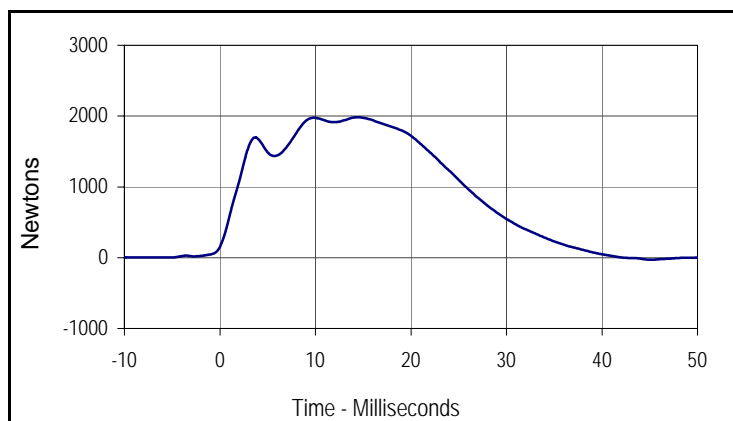
Test Date: 1/19/05
 Test I.D.: CH01A



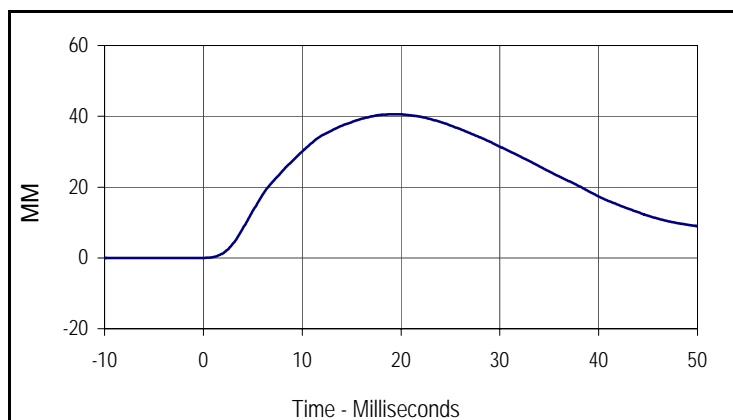
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	5.88 to 6.12	6.10	Pass
Peak Chest Deflection	MM	40.5 to 48.5	40.6	Pass
Peak Force Between 40.5 and 48.5 MM	Newtons	1830 to 2330	1983	Pass
Peak Force Between 20 and 40.5 MM	Newtons	≤2330	1757	Pass
Internal Hysteresis	%	69 to 85	81.5	Pass
Overall Test Results				Pass



Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysteresis
003	FIL	180	81.5
Peak Probe Force		Peak Chest Deflection	
1982.8		40.6	



Curve Description			
Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	180	Newtons
Max	Time	Min	Time
1982.8	14.4	-34.3	77.8



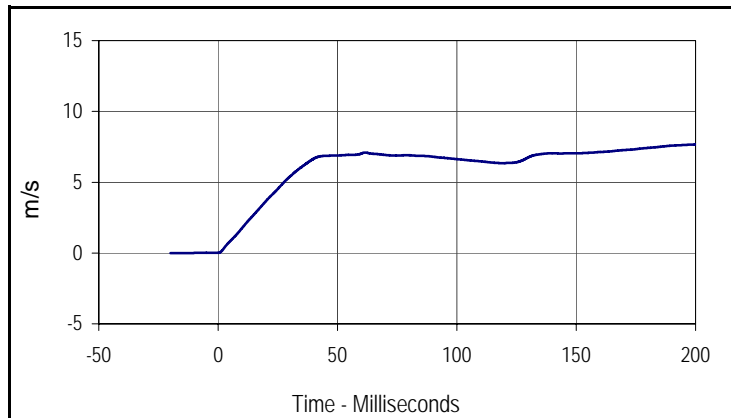
Curve Description			
Chest Deflection			
CURNO	Type	SAE Class	Units
001	FIL	180	MM
Max	Time	Min	Time
40.6	19.5	0.0	-0.4

Test Program: Hybrid III 10 Yr Old Neck Flexion Test
 ATD Serial No.: 009

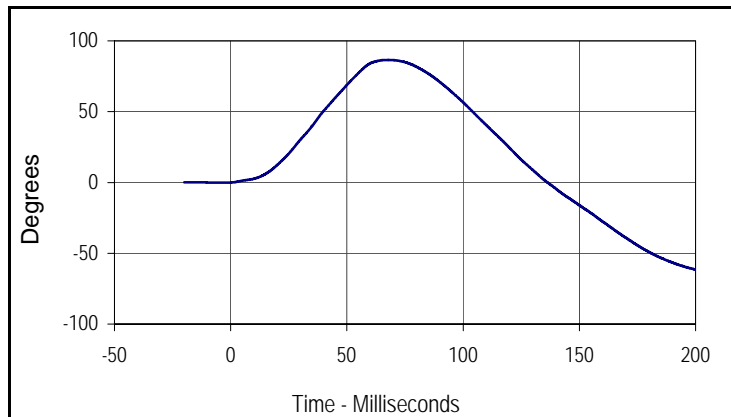
Test Date: 1/18/05
 Test I.D.: NF01A



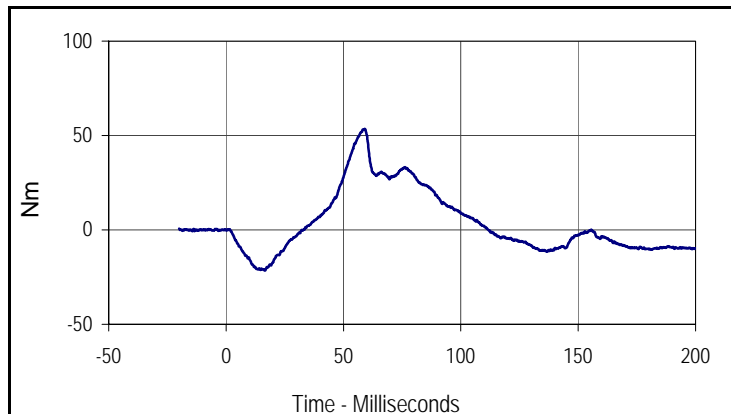
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	5.98 to 6.22	6.13	Pass	
Pendulum Deceleration	10 Msec.	m/s	1.64 to 2.04	1.76	Pass
	20 Msec.	m/s	3.04 to 4.04	3.66	Pass
	30 Msec.	m/s	4.45 to 5.65	5.39	Pass
"D" Plane Rotation	Max	Degrees	74.0 to 88.0	86.6	Pass
Peak Moment in Rotation	Max	Nm	50.0 to 62.0	53.5	Pass
Positive Moment Decay, Time To 10 Nm	Msec.		85.0 to 105.0	99.0	Pass
Overall Test Results				Pass	



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/s
Max	Time	Min	Time
7.7	200.0	0.0	-20.0



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
86.6	67.8	-61.5	200.0



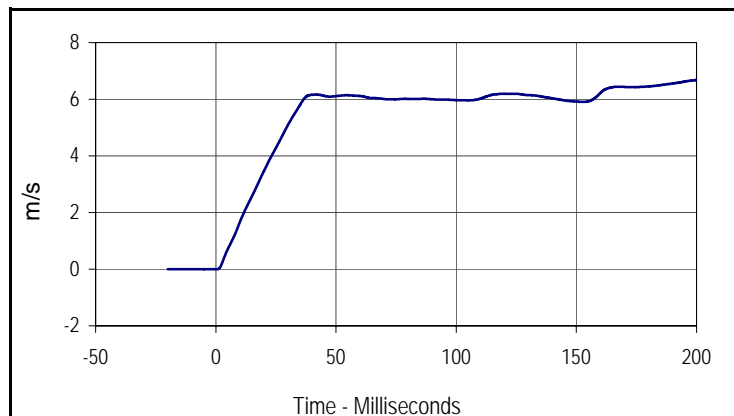
Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Time	Min	Time
53.5	59.1	-21.6	16.6

Test Program: Hybrid III 10 Yr Old Neck Extension Test
 ATD Serial No.: 009

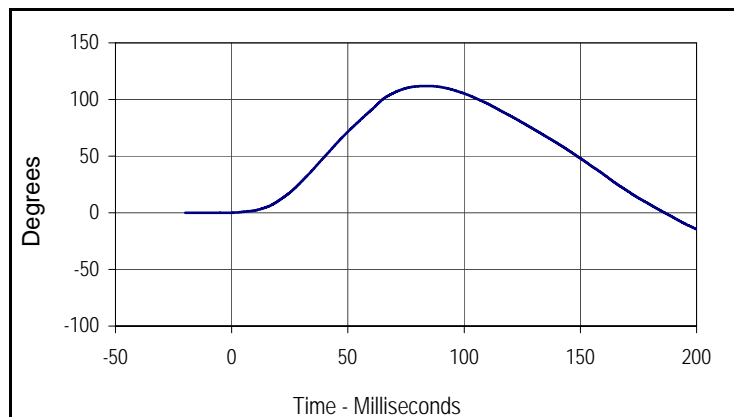
Test Date: 1/18/05
 Test I.D.: NE01A



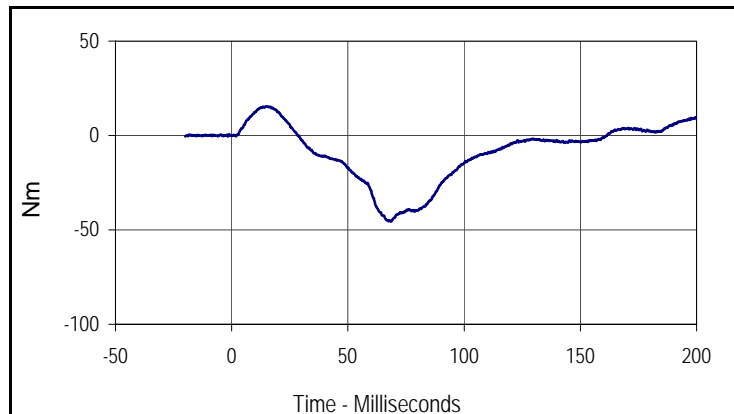
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	4.91 to 5.15	5.09	Pass	
Pendulum Deceleration	10 Msec.	m/s	1.59 to 1.89	1.66	Pass
	20 Msec.	m/s	2.88 to 3.68	3.47	Pass
	30 Msec.	m/s	4.20 to 5.20	5.09	Pass
"D" Plane Rotation	Max	Degrees	99.0 to 114.0	112.0	Pass
Peak Moment in Rotation	Max	Nm	-35.0 to -47.0	-45.6	Pass
Positive Moment Decay, Time To 10 Nm	Msec.	100.0 to 120.0	107.9	Pass	
Overall Test Results				Pass	



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/s
Max	Time	Min	Time
6.7	200.0	0.0	0.4



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
112.0	83.9	-14.5	200.0



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Time	Min	Time
15.4	14.6	-45.6	68.5

Test Program: Hybrid III 10 Yr Old Knee Impact Test
 ATD Serial No.: 009

Test Date: 1/19/05
 Test I.D.: LK01A , RK01A

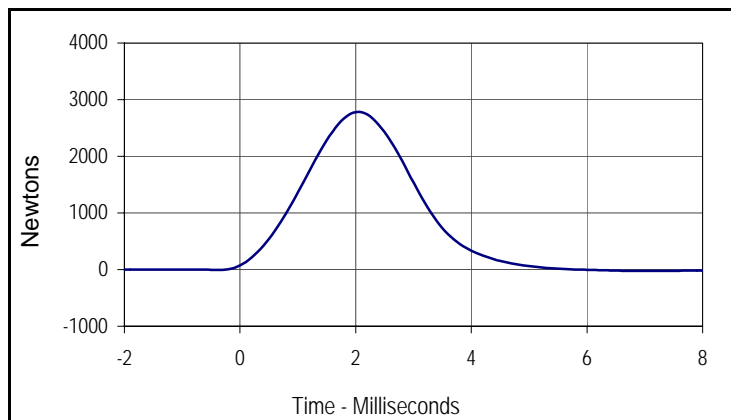


Left Knee

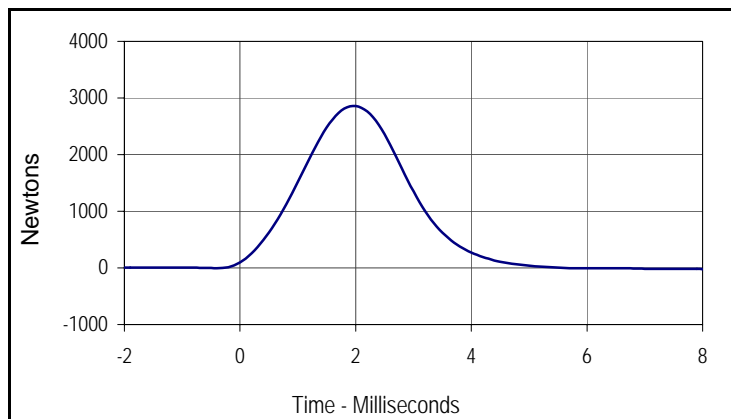
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.09	Pass
Peak Probe Force	Newtons	2560 to 3140	2780	Pass
Overall Test Results				Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.08	Pass
Peak Probe Force	Newtons	2560 to 3140	2859	Pass
Overall Test Results				Pass



Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
2780.3	2.0	-24.7	6.9



Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
2859.1	2.0	-25.4	8.6

Test Program: Hybrid III 10 Yr Old External Measurements

Test Date: 1/19/05

ATD Serial No.: 009

Test I.D.: N/A



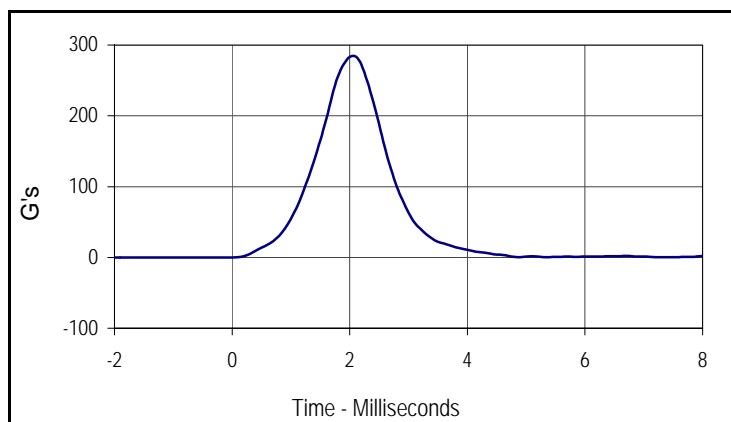
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
A - Total sitting height	mm	710 to 737	715	Pass
B - Shoulder pivot height	mm	385 to 405	398	Pass
C - "H" point height	mm	78 to 88	82	Pass
D - "H" point from backline	mm	133 to 143	140	Pass
E - Shoulder pivot from back	mm	80 to 90	86	Pass
F - Thigh clearance	mm	105 to 121	109	Pass
G - Elbow back to wrist pivot	mm	227 to 243	240	Pass
H - Skull cap to back line	mm	46 to 51	50	Pass
I - Shoulder to elbow length	mm	269 to 285	272	Pass
J - Elbow rest height	mm	137 to 158	150	Pass
K - Buttock to knee length	mm	464 to 484	475	Pass
L - Popliteal length	mm	321 to 342	335	Pass
M - Knee pivot height	mm	370 to 389	380	Pass
N - Buttock popliteal length	mm	367 to 387	380	Pass
O - Chest depth without jacket	mm	158 to 173	165	Pass
P - Foot length	mm	188 to 203	200	Pass
R - Buttock to knee pivot length	mm	414 to 434	425	Pass
S - Head breadth	mm	137 to 147	145	Pass
T - Head depth	mm	178 to 188	182	Pass
U - Hip breadth	mm	257 to 272	265	Pass
V - Shoulder breadth	mm	307 to 323	310	Pass
W - Foot breadth	mm	69 to 84	75	Pass
X - Head circumference	mm	528 to 549	540	Pass
Y - Chest circumference with jacket	mm	691 to 716	700	Pass
Z - Waist circumference	mm	696 to 721	715	Pass
AA - Location for chest circumference	mm	338 to 348	340	Pass
Overall Test Results				Pass

Test Program: Hybrid III 10 Yr Old Head Drop Test
 ATD Serial No.: 011

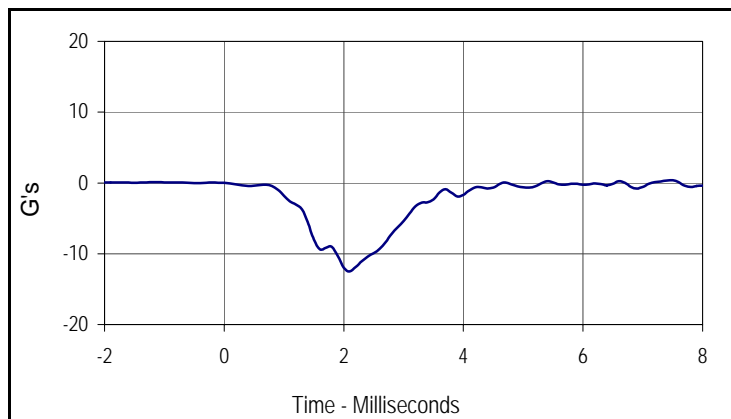
Test Date: 1/18/05
 Test I.D.: HD01B



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	250.0 to 300.0	283.7	Pass
Peak Lateral Acceleration	G's	≤15.0	12.5	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Oscillations After Main Pulse	%	<10	0.7	Pass
Overall Test Results				Pass



Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
283.7	2.1	0.0	-0.4



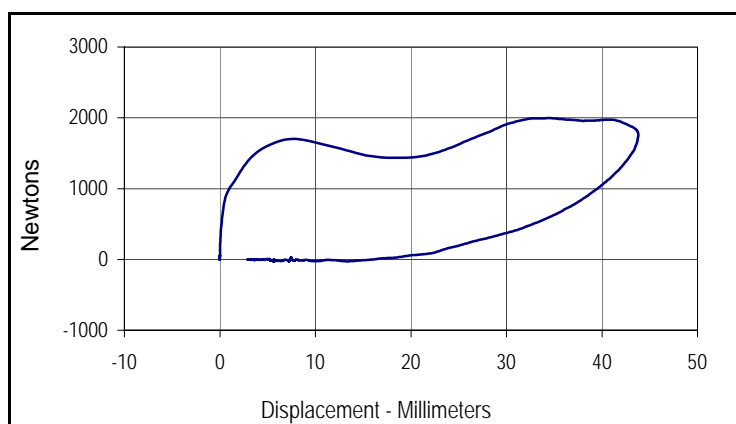
Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
0.2	5.4	-12.5	2.1

Test Program: Hybrid III 10 Yr Old Thorax Impact Test
 ATD Serial No.: 011

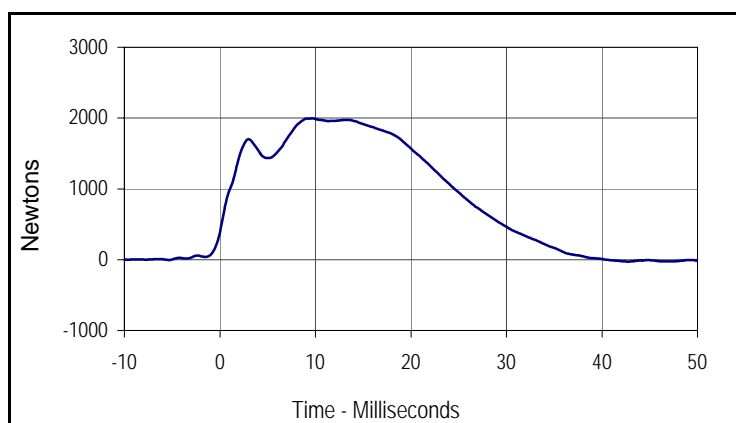
Test Date: 1/19/05
 Test I.D.: CH01B



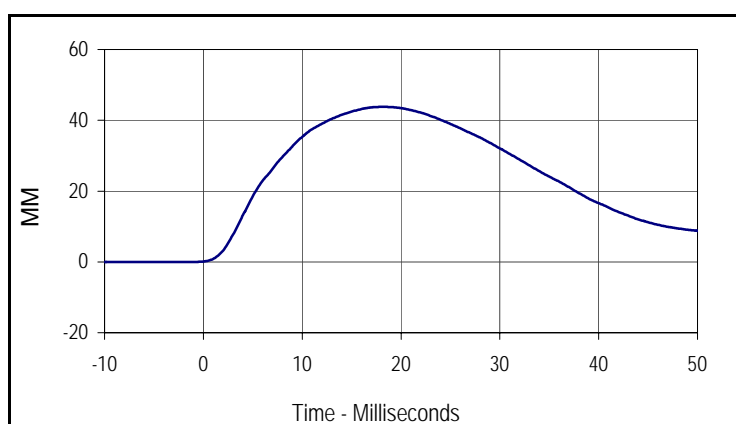
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	5.88 to 6.12	5.96	Pass
Peak Chest Deflection	MM	40.5 to 48.5	43.8	Pass
Peak Force Between 40.5 and 48.5 MM	Newtons	1830 to 2330	1995	Pass
Peak Force Between 20 and 40.5 MM	Newtons	≤2330	1975	Pass
Internal Hysteresis	%	69 to 85	81.4	Pass
Overall Test Results			Pass	Pass



Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysteresis
003	FIL	180	81.4
Peak Probe Force		Peak Chest Deflection	
1994.7		43.8	



Curve Description			
Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	180	Newtons
Max	Time	Min	Time
1994.7	9.7	-32.1	85.1



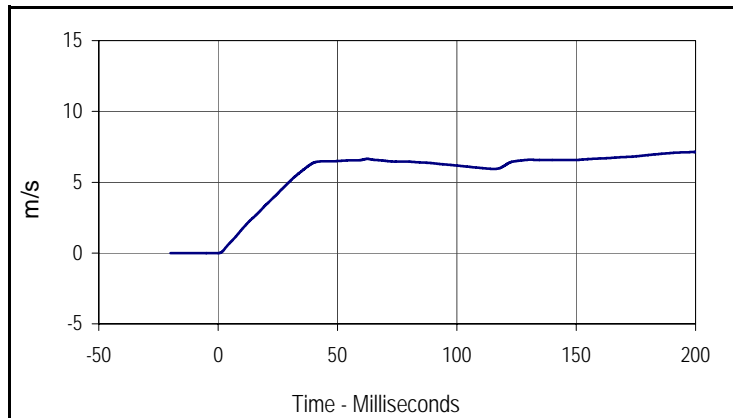
Curve Description			
Chest Deflection			
CURNO	Type	SAE Class	Units
001	FIL	180	MM
Max	Time	Min	Time
43.8	18.2	0.0	-7.1

Test Program: Hybrid III 10 Yr Old Neck Flexion Test
 ATD Serial No.: 011

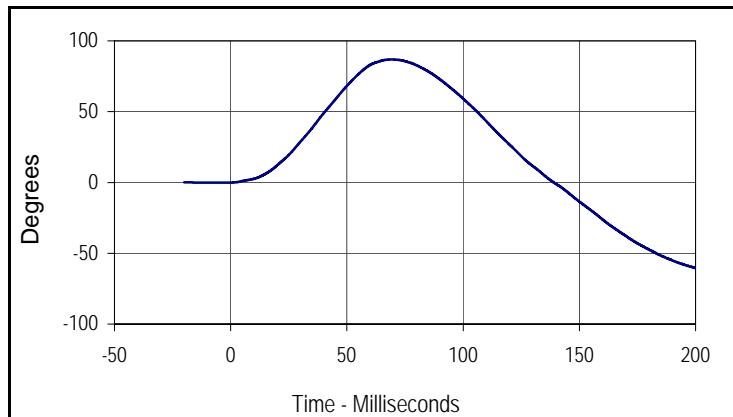
Test Date: 1/18/05
 Test I.D.: NF01B



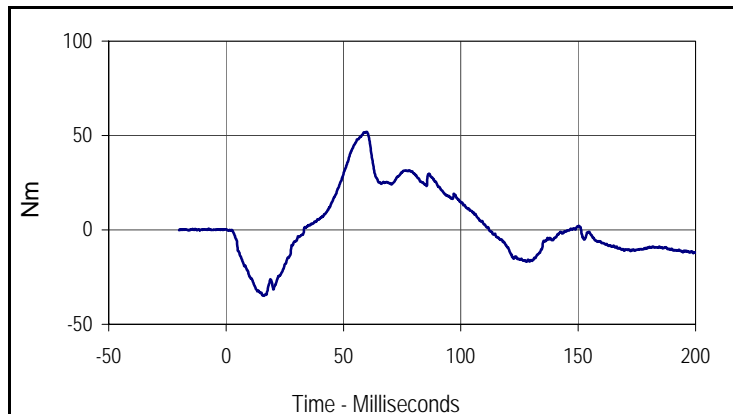
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	5.98 to 6.22	6.08	Pass	
Pendulum Deceleration	10 Msec.	m/s	1.64 to 2.04	1.69	Pass
	20 Msec.	m/s	3.04 to 4.04	3.40	Pass
	30 Msec.	m/s	4.45 to 5.65	5.06	Pass
"D" Plane Rotation	Max	Degrees	74.0 to 88.0	86.8	Pass
Peak Moment in Rotation	Max	Nm	50.0 to 62.0	51.9	Pass
Positive Moment Decay, Time To 10 Nm	Msec.		85.0 to 105.0	104.6	Pass
Overall Test Results				Pass	



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/s
Max	Time	Min	Time
7.1	200.0	0.0	0.1



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
86.8	69.1	-60.4	200.0



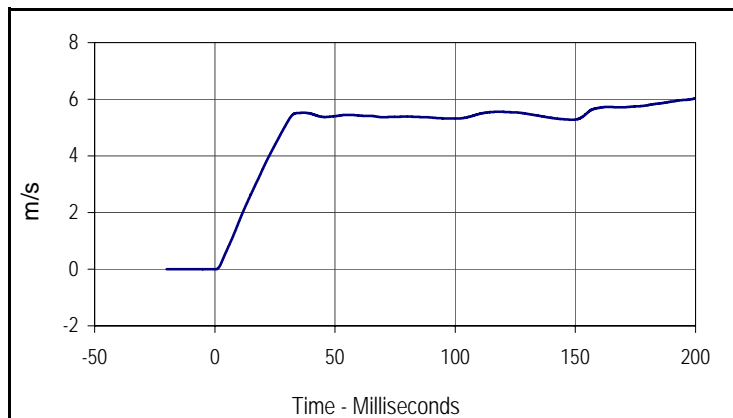
Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Time	Min	Time
51.9	59.6	-34.9	16.2

Test Program: Hybrid III 10 Yr Old Neck Extension Test
 ATD Serial No.: 011

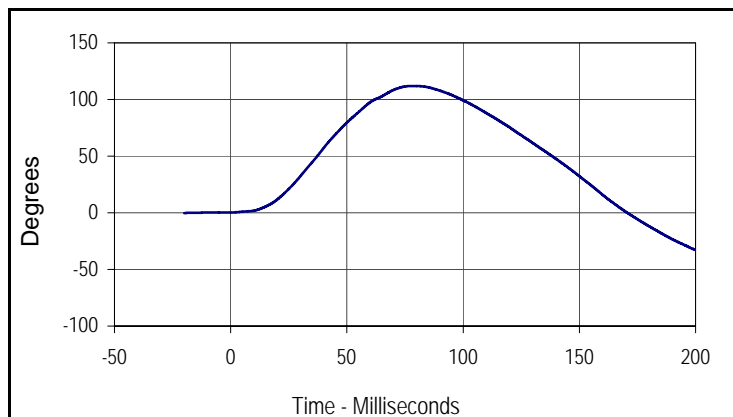
Test Date: 1/18/05
 Test I.D.: NE01B



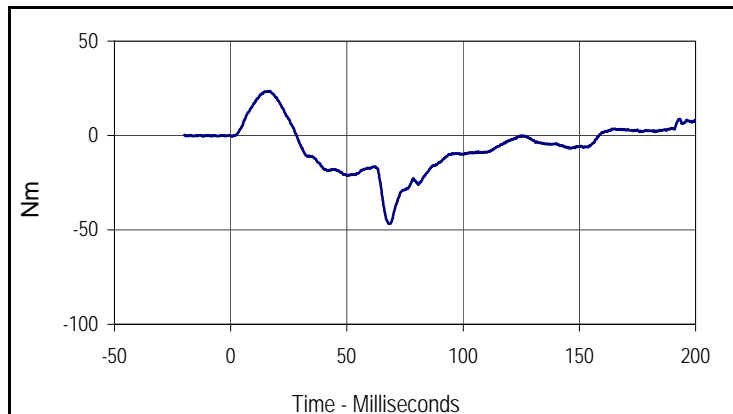
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	4.91 to 5.15	4.94	Pass	
Pendulum Deceleration	10 Msec.	m/s	1.59 to 1.89	1.67	Pass
	20 Msec.	m/s	2.88 to 3.68	3.55	Pass
	30 Msec.	m/s	4.20 to 5.20	5.16	Pass
"D" Plane Rotation	Max	Degrees	99.0 to 114.0	111.9	Pass
Peak Moment in Rotation	Max	Nm	-35.0 to -47.0	-46.8	Pass
Positive Moment Decay, Time To 10 Nm	Msec.	100.0 to 120.0	100.6	Pass	
Overall Test Results				Pass	



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/s
Max	Time	Min	Time
6.0	200.0	0.0	0.2



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
111.9	78.5	-32.8	200.0



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Time	Min	Time
23.6	16.9	-46.8	68.1

Test Program: Hybrid III 10 Yr Old Knee Impact Test
 ATD Serial No.: 011

Test Date: 1/19/05
 Test I.D.: LK01B , RK01B

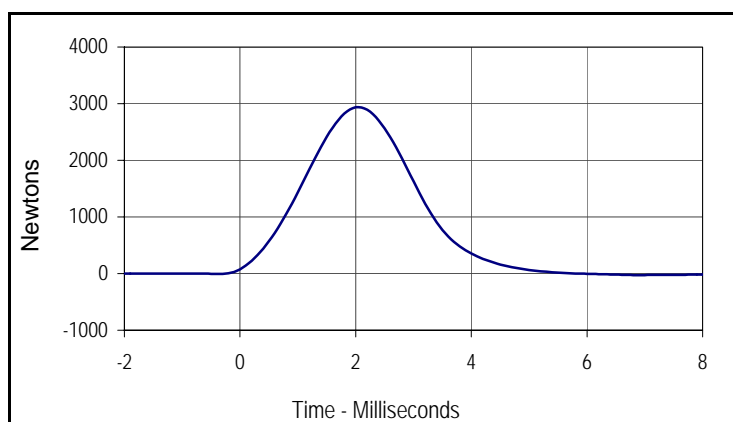


Left Knee

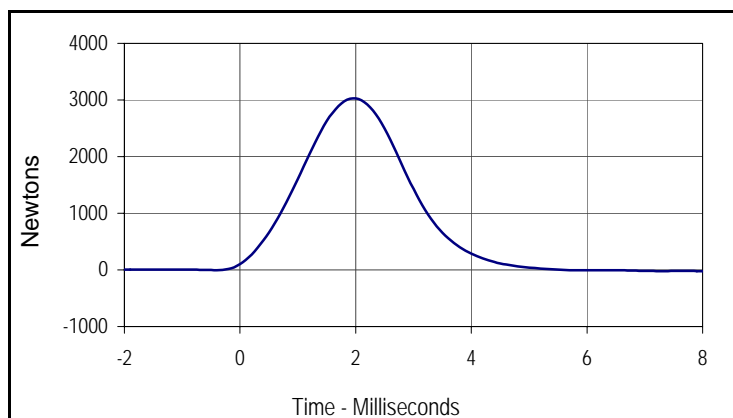
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.10	Pass
Peak Probe Force	Newtons	2560 to 3140	2936	Pass
Overall Test Results				Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.10	Pass
Peak Probe Force	Newtons	2560 to 3140	3027	Pass
Overall Test Results				Pass



Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
2936.0	2.0	-26.1	6.9



Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
3026.9	2.0	-26.9	8.6

Test Program: Hybrid III 10 Yr Old External Measurements

Test Date: 1/19/05

ATD Serial No.: 011

Test I.D.: N/A



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
A - Total sitting height	mm	710 to 737	730	Pass
B - Shoulder pivot height	mm	385 to 405	400	Pass
C - "H" point height	mm	78 to 88	85	Pass
D - "H" point from backline	mm	133 to 143	135	Pass
E - Shoulder pivot from back	mm	80 to 90	85	Pass
F - Thigh clearance	mm	105 to 121	110	Pass
G - Elbow back to wrist pivot	mm	227 to 243	238	Pass
H - Skull cap to back line	mm	46 to 51	50	Pass
I - Shoulder to elbow length	mm	269 to 285	280	Pass
J - Elbow rest height	mm	137 to 158	155	Pass
K - Buttock to knee length	mm	464 to 484	480	Pass
L - Popliteal length	mm	321 to 342	325	Pass
M - Knee pivot height	mm	370 to 389	375	Pass
N - Buttock popliteal length	mm	367 to 387	380	Pass
O - Chest depth without jacket	mm	158 to 173	170	Pass
P - Foot length	mm	188 to 203	200	Pass
R - Buttock to knee pivot length	mm	414 to 434	420	Pass
S - Head breadth	mm	137 to 147	139	Pass
T - Head depth	mm	178 to 188	182	Pass
U - Hip breadth	mm	257 to 272	270	Pass
V - Shoulder breadth	mm	307 to 323	310	Pass
W - Foot breadth	mm	69 to 84	80	Pass
X - Head circumference	mm	528 to 549	540	Pass
Y - Chest circumference with jacket	mm	691 to 716	710	Pass
Z - Waist circumference	mm	696 to 721	700	Pass
AA - Location for chest circumference	mm	338 to 348	340	Pass
Overall Test Results				Pass