REPORT NUMBER: NCAPSIDE-MGA-2005-004

NEW CAR ASSESSMENT PROGRAM
SIDE IMPACT TEST

DAIMLER CHRYSLER CORPORATION
2005 DODGE DAKOTA CLUB CAB SLT
NHTSA NUMBER: M50304

PREPARED BY:
MGA RESEARCH CORPORATION
5000 WARREN ROAD
BURLINGTON, WI 53105

Test Date: January 5, 2005

Report Date: March 8, 2005

FINAL REPORT

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

This final test report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, in response to Contract Number DTNH22-03-D-12005.

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Reviewed by: David Winkelbauer Date: 03/08/05
David Winkelbauer, Facility Director

FINAL REPORT ACCEPTED BY:

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COTR, Side Impact

_____
Date of Acceptance

Technical Report Documentation Page

1. Report No. NCAPSIDE-MGA-2005-004	*2. Government Accession No.*	*3. Recipient's Catalog No.*
4. Title and Subtitle Final Report of New Car Assessment Program Side Impact Testing of 2005 Dodge Dakota Club Cab SLT NHTSA No.: M50304		*5. Report Date* March 8, 2005 *6. Performing Organization Code* MGA
7. Author(s) Shefalika Naik, Project Engineer		*8. Performing Organization Report No.* NCAPSIDE-MGA-2005-004
9. Performing Organization Name and Address MGA Research Corporation 5000 Warren Road Burlington, WI 53105		*10. Work Unit No.* *11. Contract or Grant No.* DTNH22-03-D-12005
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Rulemaking, Office of Crashworthiness Standards 400 Seventh Street, SW, Room 5311 Washington, D.C. 20590		*13. Type of Report and Period Covered:* *Final Report* 01/05/05 to 03/08/05 *14. Sponsoring Agency Code* NVS-111

15. Supplementary Notes

16. Abstract

A 55/28 km/h 90° Moving Deformable Barrier NCAP side impact was conducted on the subject 2005 Dodge Dakota Club Cab SLT to obtain new car assessment and research data indicant of FMVSS No. 214D performance. The test was conducted at MGA Research Corporation, in Burlington, Wisconsin, on January 5, 2005. The impact velocity of the Moving Deformable Barrier (MDB) was 62.0 km/h, and the ambient temperature at the struck side (driver's) of the vehicle was 21°C. The target vehicle's maximum post test static crush was 328 mm at level 2. The test vehicle's occupant performance is as follows:

	DRIVER
Left Upper Rib (LUR) Accel., g	30.0
Left Lower Rib (LLR) Accel., g	35.9
Lower Spine (T_{12}) Accel., g	26.1
Thoracic Trauma Index (TTI)	31.0
Pelvis (PEV) Accel., g	42.3
HIC	71.8

The doors on the struck side of the vehicle did not separate from the body at the hinges or latches and the opposite doors did not open during the side impact event.

17. Key Words New Car Assessment Program (NCAP) Side Impact Side Impact Hybrid III Dummy (SID/HIII) Occupant Side Impact Protection		*18. Distribution Statement* Copies of this report are available from: National Highway Traffic Safety Adm. Technical Ref. Division, Room 5108 (NPO-230) 400 Seventh Street, S.W. Washington, D.C. 20590	
19. Security Classif. (of this report) Unclassified	*20. Security Classif. (of this page)* Unclassified	*21. No. of Pages* 166	22. Price

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SECTION 1
PURPOSE AND TEST PROCEDURE

1.1 PURPOSE

This side impact test was conducted as part of the FY' 2005 test program sponsored by the National Highway Traffic Safety Administration (NHTSA), under Contract No. DTNH22-03-D-12005. The purpose of this test was to evaluate side impact protection in a 2005 Dodge Dakota Club Cab SLT manufactured by DaimlerChrysler Corporation.

1.2 TEST PROCEDURE

The side impact test was conducted in accordance with the Laboratory Test Procedure for New Car Assessment Program Side Impact Testing dated November 2002 and the corresponding MGA Research Corporation Test Procedure MGA-NHTSA5. The procedures for receiving, inspection, testing, and reporting of test results are described in the test procedures and are not repeated in this report.

MGA does not endorse or certify products. The manufacturer's name appears solely for identification purposes.

SECTION 2

SUMMARY OF NCAP SIDE IMPACT TEST

2.1 SUMMARY OF SIDE IMPACT TEST

A model year 2005 Dodge Dakota Club Cab SLT was impacted on the left (driver's) side by a Moving Deformable Barrier (MDB) which was moving forward in a 27° crabbed position to the tow road guidance system at a velocity of 62.0 km/h. The specified impact velocity range is from 61.1 to 62.7 km/h. The test (target) vehicle was stationary and positioned 63° to the line of forward motion. The weight of the vehicle as tested was 2222.2 kg and the test weight of the MDB was 1361.2 kg. The test was conducted at MGA Research Corporation in Burlington, Wisconsin, on January 5, 2005.

One (1) real-time motion picture camera and nine (9) high-speed motion picture cameras were used to document the impact event. The pre-test and post-test conditions were recorded by one (1) real-time motion picture camera. Camera locations and pertinent camera information are documented in the data sheets. Pre- and post-test photographs of the vehicle and Side Impact Dummy (SID/HIII) can be found in Appendix A. The 50th percentile adult male SID/HIII was placed in the driver designated seating position according to instructions specified in the Laboratory Test Procedure for New Car Assessment Program Side Impact Testing dated November 2002. The driver SID/HIII was instrumented in the following locations:

- Left Upper Rib (LUR) uni-axial accelerometer (Y-axis primary and redundant)
- Left Lower Rib (LLR) uni-axial accelerometer (Y-axis primary and redundant)
- Lower Thoracic Spine (T12) uni-axial accelerometer (Y-axis primary and redundant)
- Pelvic (PEV) section uni-axial accelerometer (Y-axis primary and redundant)
- Head Center of Gravity (CG) tri-axial accelerometers (X, Y and Z axes primary and redundant)
- Upper Neck load cell (Fx, Fy, Fz, Mx, My, Mz)

The test vehicle was instrumented with twenty-five (25) structural accelerometers and the MDB was instrumented with six (6) accelerometers and two (2) contact switches on the bumper to compare left side to right side bumper impact timing. All data channels were recorded with a fully self contained on-board DTS TDAS Pro Data Acquisition System. The data was digitally sampled at 10,000 samples per second and processed per Appendix V of the Test Procedure.

2.2 GENERAL COMMENTS

The test vehicle sustained a maximum static crush of 328 mm at level 2, 1350 mm rearward of the left vertical impact point. The driver SID/HIII, Serial No. 904 was calibrated just prior to this test. The SID/HIII's injury criteria are summarized as follows:

Measurements	Units	Driver
Thoracic Trauma Index (TTI)	G's	31.0
Peak Pelvic G's (PEV)	G's	42.3
Head Injury Criteria (HIC)	none	71.8

Test summaries and post-test observations are presented in Section 3. The vehicle, camera, and occupant measurements are presented in Section 4. Appendix A contains the still photograph prints. Appendix B contains the driver SID/HIII, vehicle, and MDB response data traces. Appendix C contains the SID/HIII's configuration and performance verification data. Appendix D contains the test equipment information.

TEST NOTES

Driver Door Opening of approximately 290 mm.

The following channels did not collect any valid data:
Left Rear Sill Y after 29ms

SECTION 3

SIDE IMPACT HYBRID III DUMMY (SID/HIII) AND VEHICLE TEST DATA

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

CONVERSION FACTORS USED IN THIS REPORT*

Quantity	Typical Application	English 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 Pressure	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

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

TEST VEHICLE INFORMATION

Make	DaimlerChrysler Corp
Model	Dodge Dakota Club Cab SLT
Body Style	Truck
NHTSA No.	M50304
VIN	1D7HE42K65S198658
Color	Black
Delivery Date	12/21/04
Odometer Reading (mile)	44
Dealer	Wilde Dodge
Transmission	Automatic
Final Drive	Rear
Number of Cylinders	6
Engine Displacement (L)	3.7
Engine Placement	Longitudinal
Automatic Door Locks (ADL)	Yes
Owner's Manual Details Instructions on Disabling ADLs	Yes

TEST VEHICLE OPTIONS

Front Airbag	Yes
Side Airbags	Yes
Power Windows	Yes
Power Steering	Yes
Power Door Locks	Yes
Tilt Wheel	Yes
Air Conditioning	Yes
Power Brakes	Yes
Disc Brakes, Front	Yes
Disc Brakes, Rear	Yes
Anti-lock Brakes	Yes
AM/FM/CD	Yes
Anti-theft System	No
Cruise Control	Yes

DATA FROM CERTIFICATION LABEL

Manufactured By	DaimlerChrysler Corporation
Date of Manufacture	11/04

GVWR (kg)	2727
GAWR Front (kg)	1407
GAWR Rear (kg)	1727

DATA FROM TIRE PLACARD

Measured Parameter	Front	Rear
Cold / Test Pressure (kPa)	240	240
Recommended Tire Size	P255/65R16	P255/65R16
Tire Size on Vehicle	P255/65R16	P255/65R16
Tire Manufacturer	Goodyear	Goodyear

Measured Parameter	Front	Rear	Third	Total
Type of Seats	Bucket	Bucket		
Number Of Occupants	3	2		5
Capacity Wt. (VCW) (kg)				781
Cargo Wt. (RCLW) (kg)				136.1

DATA SHEET NO. 1... (continued)

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

TEST VEHICLE WEIGHTS

	Units	As Delivered (UVW) (Axle)			As Tested (ATW) (Axle)		
		Front	Rear	Total	Front	Rear	Total
Left	kg	561.1	411.4		599.7	531.6	
Right	kg	552.5	407.3		577.0	513.9	
Ratio	%	57.6	42.4		53.0	47.0	
Totals	kg	1113.6	818.7	1932.3	1176.7	1045.5	2222.2

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UVW)	kg	1932.3
Weight of 2 P572E ATDs	kg	161.5
Rated Cargo/Luggage Weight (RCLW)	kg	136.1
Calculated Vehicle Target Weight (TVTW)	kg	2229.9

* Actual As Tested Weight (ATW) will be TVTW -5/-10 kg

TEST VEHICLE ATTITUDES AND CG

	Units	LF	RF	LR	RR	CG(aft of front axle)
As Delivered	mm	845	849	898	905	1413
As Tested	mm	835	841	864	878	1569
Fully Loaded	mm	830	841	864	878	

GENERAL TEST VEHICLE DATA

Measurement Description	Units	Value
Test Vehicle Wheel Base	mm	3335
Total Vehicle Length at Left Side	mm	4803
Total Vehicle Length at Centerline	mm	5557
Total Vehicle Length at Right Side	mm	4805
Total Vehicle Width	mm	1825
Weight of Ballast in Cargo Area	kg	80.7
Amount of Stoddard Solvent in Fuel Tank	liters	77.2

TEST VEHICLE VERTICAL IMPACT LINE DATA

Measurement Description	Units	Value
Test Vehicle Wheel Base	mm	3335
Target Impact Point Aft of Front Axle	mm	508
Actual Impact Point Aft of Front Axle	mm	514

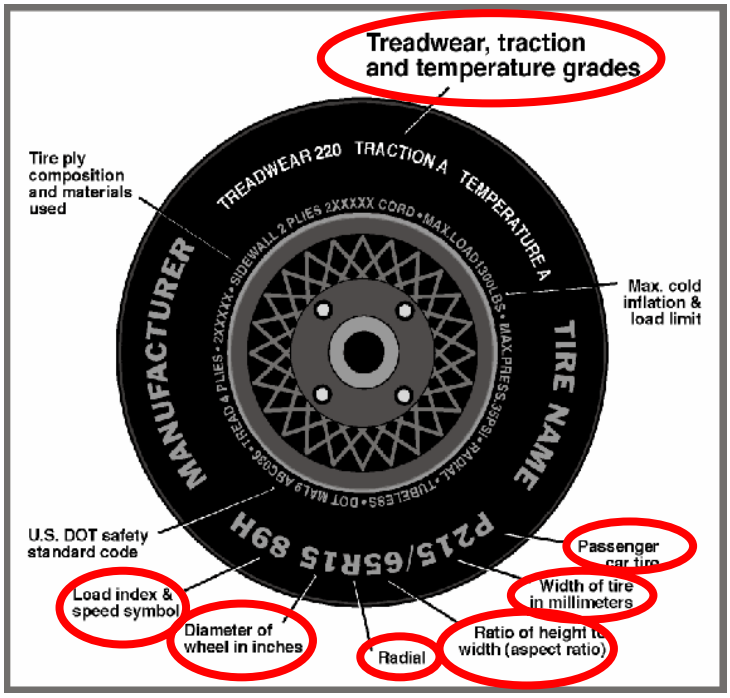
DATA SHEET NO. 2

TEST VEHICLE TIRE INFORMATION

Test Vehicle: 2005 Dodge Dakota Club Cab SLT
Test Program: NCAP Side Impact

NHTSA No.: M50304
Test Date: 01/05/05

Vehicle Year	2005	Vehicle Make	Dodge
VIN	1D7HE42K65S198658	Vehicle Model	Dakota Club Cab SLT



	Front	Rear
Tire Manufacturer	Goodyear	Goodyear
Tire Name	Eagle LS	Eagle LS
Tire Type	P	P
Tire Width (mm)	255	255
Ratio of Height to Width (aspect ratio)	65	65
Radial	R	R
Wheel Diameter	16	16
Load Index & Speed Symbol	106S	106S
Treadwear	360	360
Traction Grade	A	A
Temperature Grade	B	B

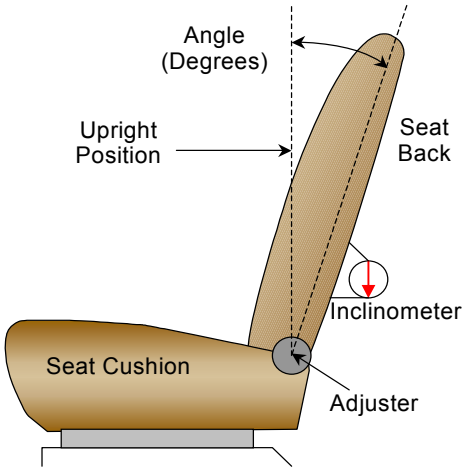
DATA SHEET NO. 3

TEST VEHICLE INFORMATION

Test Vehicle:	2005 Dodge Dakota Club Cab SLT	NHTSA No.	M50304
Test Program:	NCAP Side Impact	Test Date:	01/05/05

NORMAL DESIGN RIDING POSITION

The driver and passenger seat back is positioned to the manufacturer's designated angle. Cut the trim away from the outboard edge of the seat back of back so that the vertical seat back frame is exposed. Place inclinometer flush against upper half of seat back frame. The second row is non adjustable.



FRONT SEAT ASSEMBLY

Driver seat back angle: 21.4° from upright position.

The rear seat has no adjustable mechanism.

SEAT FORE/AFT POSITIONS

Position of the driver seat and the passenger seat:

Driver seat fore/aft total travel: 220 mm

Driver seat fore/aft position: 110 of 220 mm

The rear seat has no adjustable mechanism.

NOTE: The left rear dummy was included for mass only. The legs were removed to place the dummy in the rear seating position.

DATA SHEET NO. 3... (continued)

TEST VEHICLE INFORMATION

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

FUEL TANK CAPACITY DATA

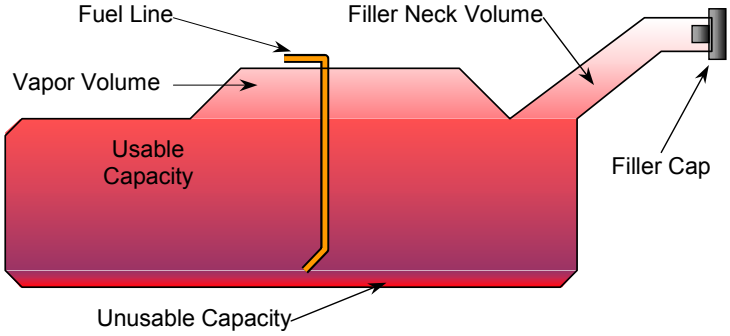
The "Usable Capacity" of the standard equipment fuel tank is: 83.3 liters

The "Usable Capacity" of any optional equipment fuel tank is: N/A liters

The "Usable Capacity" used for certification to FMVSS 301 requirements: 83.3 liters

Actual amount of Stoddard solvent added to vehicle for certification test: 77.2 liters

The fuel pump is powered through the ASD relay, the ASD relay is energized upon key on fro 2 seconds, then only if engine is operating.



VEHICLE FUEL TANK ASSEMBLY

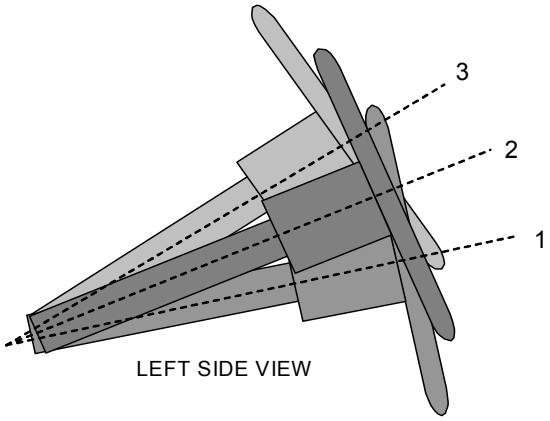
STEERING COLUMN ADJUSTMENT

Steering wheel and column adjustments are made so that the steering wheel hub is at the geometric center of the locus it describes, when it is moved through its full range of driving positions.

Lowermost, position 1: 14.3°

Geometric center, position 2: 23.9°

Uppermost. Position 3: 32.9°



STEERING COLUMN ASSEMBLY

DATA SHEET NO. 4

TEST VEHICLE SUMMARY OF RESULTS

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

TEST VEHICLE WEIGHTS

	Units	As Delivered (UVW)			As Tested (ATW)		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	561.1	411.4		599.7	531.6	
Right	kg	552.5	407.3		577.0	513.9	
Weight Ratio	%	57.6	42.4		53.0	47.0	
Totals	kg	1113.6	818.7	1932.3	1176.7	1045.5	2222.2

MAXIMUM EXTERIOR STATIC CRUSH

Level	Measured Parameter	Units	Maximum Crush	Above Ground
Level 1	Sill Top Height	mm	277	371
Level 2	Occupant H-Point	mm	328	764
Level 3	Mid Door	mm	325	790
Level 4	Window Sill	mm	185	1151
Level 5	Window Top	mm	106	1620
N/A	Maximum Penetration	mm	328	764

INSTRUMENTATION

Driver SID/HIII Instrumentation	23
Vehicle Structure Accelerometers	25
MDB Accelerometers	6
Total	54

DATA SHEET NO. 5

MOVING DEFORMABLE BARRIER (MDB) SUMMARY OF RESULTS

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

MDB SPECIFICATIONS

Measurement Description	Length (mm)
Overall Width of Framework Carriage	1252
Overall Length Including Honeycomb Face	4115
Wheel base of Framework Carriage	2587
C.G. Location aft of Front Axle	1103

MDB WEIGHTS

	Units	Front Axle	Rear Axle	Total
Left	kg	449.4	239.9	
Right	kg	331.3	340.6	
Ratio	%	57.4	42.6	
Totals	kg	780.7	580.5	1361.2

SPEED AND IMPACT ANGLE DATA

Measured Parameter	Units	Requirement	Value
Trap No. 1 Velocity (Primary)	km/h	61.1 to 62.7	62.0
Trap No. 2 Velocity (Redundant)	km/h	61.1 to 62.7	62.0
MDB CL to Target Vehicle CL	degrees	88.5 to 91.5	89.8

MAXIMUM STATIC CRUSH OF HONEYCOMB FACE

Vertical Location			From Centerline		Max. Crush
Level	Description	Height	Distance	Direction	
1	Center of Bumper (mm)	432	800	Right	121
2	Top of Bumper (mm)	533	800	Right	117
3	Mid Level (mm)	686	800	Left	119
4	Top of Stack (mm)	813	800	Left	149

MDB INSTRUMENTATION AND CAMERAS

Accelerometers	6
Contact Switches	2
High Speed Cameras	2

DATA SHEET NO. 6

POST TEST OBSERVATIONS

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

TEST DUMMY INFORMATION AND CONTACT POINTS

Description	Front Seat SID/HIII
Dummy Type / Serial No.	SID/HIII / 904
Head Contact	Door window, side header
Upper Torso Contact	Door Panel
Lower Torso Contact	Door Panel
Left Knee Contact	Door Panel
Right Knee Contact	Left Knee

POST TEST DOOR OPENING AND SEAT TRACK INFORMATION

Description	Front	Rear
Locked/Unlocked Doors	Doors were unlocked	Doors were unlocked
Left Side Door Opening	Door remained closed and latched	Door remained closed and latched
Right Side Door Opening	Door remained closed and latched; Door opened without tools	Door remained closed and latched; Door opened without tools
Seat Movement	0	0
Seat Back Failure	None	None

POST TEST STRUCTURAL OBSERVATIONS

Critical Areas of Performance	Observations and Conclusions
Pillar Performance	No Separation
Sill Separation	None
Windshield Damage	None
Window Damage	None
Other Notable Effects	None

AIRBAG DEPLOYMENT

	Driver	Front Passenger	Rear Passenger
Front	No	N/A	N/A
Side (Torso Bag)	No	N/A	N/A
Curtain	No	N/A	N/A

MDB LEFT EDGE IMPACT POINT DATA

Measured Parameter	Units	Requirement	Value
Horizontal Offset	mm	+/- 50	6 mm rear
Vertical Offset	mm	+/-20	2 mm down

SECTION 4
OCCUPANT AND VEHICLE INFORMATION

DATA SHEET NO. 7

SID/HIII INJURY CRITERIA AND SENSOR DATA

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

THORAX AND PELVIS PEAK ACCELERATIONS (FIR 100 Filtered)

Location	Axis	Units	Driver			
			Max	Time	Min	Time
Upper Rib (LUR)	Y	G's	30.0	59	-1.6	92
Upper Rib (LUR) (R)	Y	G's	29.7	59	-1.4	93
Lower Rib (LLR)	Y	G's	35.9	51	-2.3	113
Lower Rib (LLR) (R)	Y	G's	35.4	51	-2.3	113
Lower Spine (T_{12})	Y	G's	26.1	48	-3.2	103
Lower Spine (T_{12}) (R)	Y	G's	24.8	48	-2.9	103
Pelvis (PEV)	Y	G's	42.3	42	-3.5	145
Pelvis (PEV) (R)	Y	G's	40.4	42	-3.5	145

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

Location	Driver			
	LLR	T_{12}	TTI(g)	PEV(g)
Rib, Spine, and Pelvis	35.9	26.1	31.0	42.3
Rib, Spine, and Pelvis (R)	35.4	24.8	30.1	40.4

HEAD CG PEAK ACCELERATIONS (SAE CLASS 1000 Filtered)

Location	Axis	Units	Driver			
			Max	Time	Min	Time
Head CG	X	G's	7.1	33	-21.7	95
Head CG	Y	G's	41.5	95	-2.9	54
Head CG	Z	G's	21.8	74	-4.8	36
Head CG Resultant		G's	50.0	94		

HEAD INJURY CRITERIA (SAE CLASS 1000 Filtered)

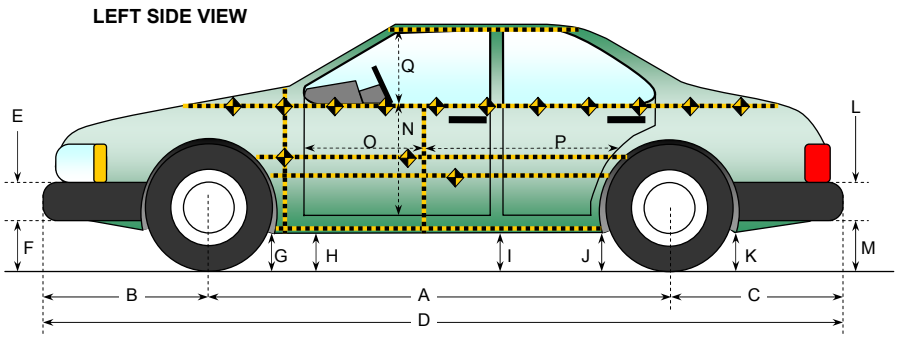
Location	Driver			
	HIC	T^1	T^2	Avg G's
Head CG	71.8	66.4	102.4	20.9

Positive Acceleration Polarities: Longitudinal (X) = Forward
(Conforms to SAE J211) Lateral (Y) = Right
Vertical (Z) = Down

DATA SHEET NO. 8

VEHICLE PRE-TEST AND POST-TEST MEASUREMENTS

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05



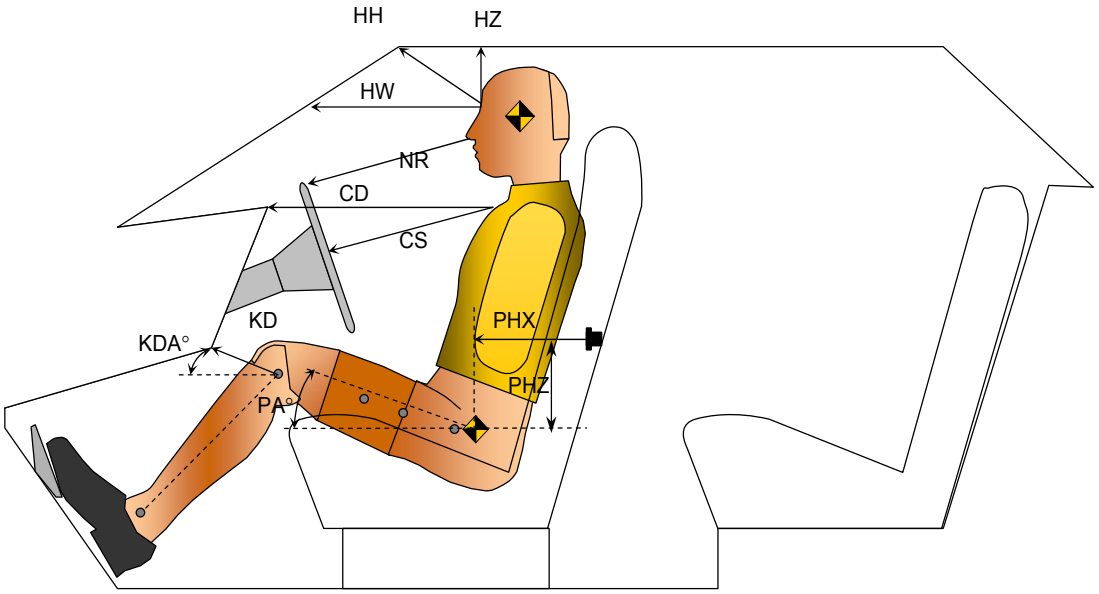
All Measurements in mm

Code	Measurement Description	Pre-Test	Post-Test	Difference
A	Wheelbase	3335	3280	55
B	Front Axle to FSOV	1010	1027	-17
C	Rear Axle to RSOV	1212	1234	-22
D	Total Length at Centerline	5557	5543	14
E	Front Bumper Thickness	224	224	0
F	Front Bumper Bottom to Ground	388	380	8
G	Sill Height at Front Wheel Well	323	333	-10
H	Sill Height at Front Door Leading Edge	359	348	11
I	Sill Height at "B" Pillar	359	324	35
J1	Sill Height at Rear Wheel Well	316	300	16
J2	Pinch Weld Height at Rear Wheel Well	361	334	27
K	Sill Height Aft of Rear Wheel Well	354	355	-1
L	Rear Bumper Thickness	180	180	0
M	Rear Bumper Bottom to Ground	428	460	-32
N	Sill Height to Window Bottom Sill	798	806	-8
O	Front Door Leading Edge to Impact CL	883	815	68
P	Rear Door Trailing Edge to Impact CL	867	820	47
Q	Front Window Opening	470	463	7
R	Right Side Length	4805	4821	-16
S	Left Side Length	4803	4696	107
T	Vehicle Width at "B" Post	1830	1632	198

DATA SHEET NO. 9

SID/HIII LONGITUDINAL CLEARANCE DIMENSIONS

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

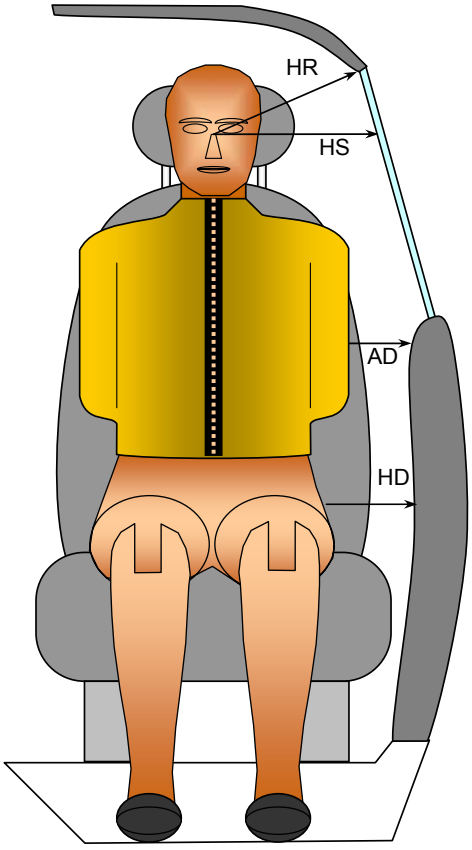


Driver Code	Measurement Description	Driver S/N 904	
		Length(mm)	Angle(°)
HH	Head to Header	514	
HW	Head to Windshield	683	
HZ	Head to Roof	185	
NR	Nose to Rim/Nose to Seatback	478	
CD	Chest to Dash or Seatback	593	
CS	Chest to Steering Wheel	372	
KDL	Left Knee to Dash or Seatback	155	20.3
KDR	Right Knee to Dash or Seatback	124	24.4
PA	Pelvic Angle		23.1
PHX	H-Point to Striker (X-Axis)	198	
PHZ	H-Point to Striker (Z-Axis)	98	

DATA SHEET NO. 10

SID/HIII LATERAL CLEARANCE DIMENSIONS

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05



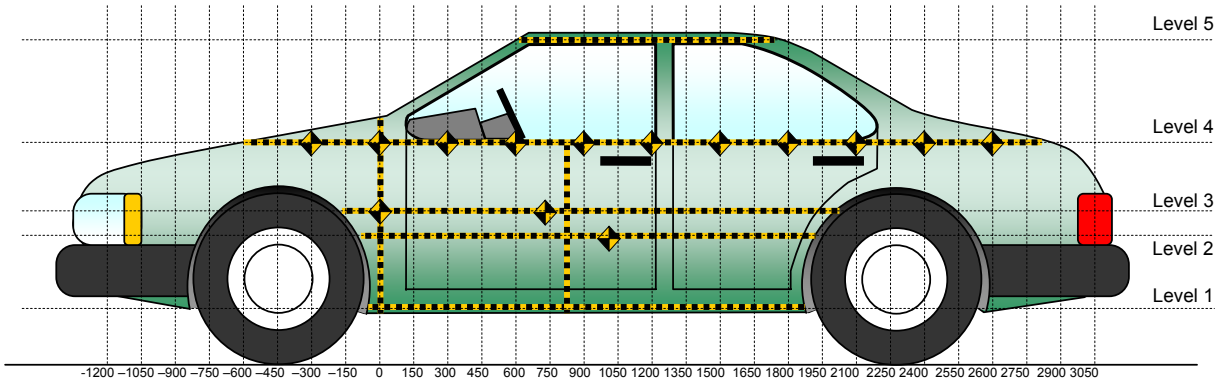
FRONT VIEW OF DUMMY

Code	Measurement Description	Units	Driver S/N 904
HR	Head to Side Header	mm	156
HS	Head to Side Window	mm	294
AD	Arm to Door	mm	104
HD	H-Point to Door	mm	179

DATA SHEET NO. 11

VEHICLE SIDE MEASUREMENTS

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05



All Measurements Shown in mm

LEFT SIDE VIEW

Measurements are taken with vehicle in the as tested condition.
Measurements along the vertical 800 mm.
All measurements below in mm.

Level	Measurement Description	Height Above Ground
5	Window	1620
4	Window Sill	1151
3	Mid Door	790
2	Occupant H-Point	764
1	Sill Top	371

DATA SHEET NO. 12

VEHICLE EXTERIOR CRUSH PROFILES

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

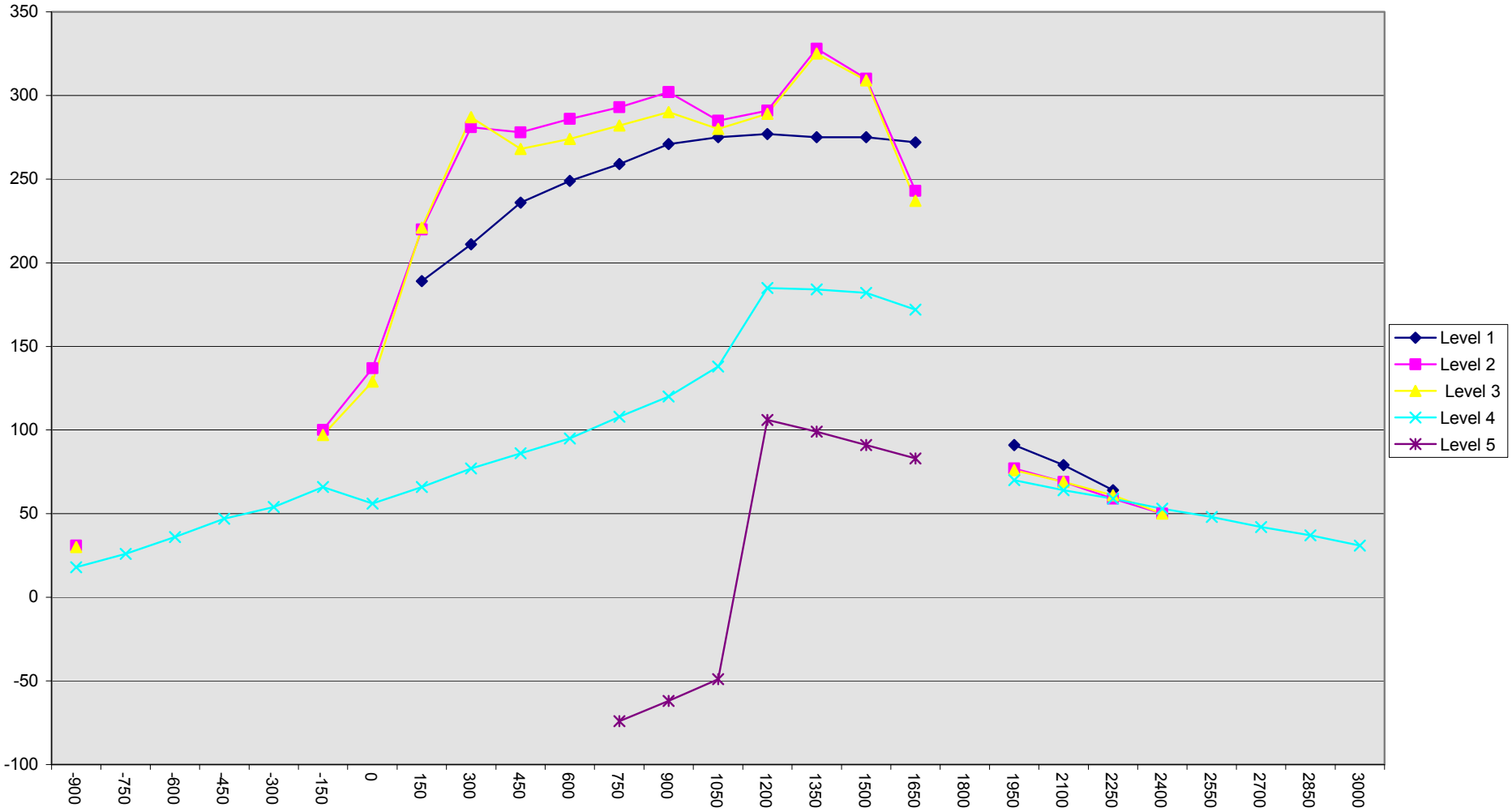
	Pre-Test					Post-Test					Difference				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
-900		207	208	407			238	238	425			31	30	18	
-750				369					395					26	
-600				338					374					36	
-450				320					367					47	
-300				304					358					54	
-150		189	189	290			289	286	356			100	97	66	
0		195	195	294			332	324	350			137	129	56	
150	296	204	204	297		485	424	425	363		189	220	221	66	
300	297	215	205	290		508	496	492	367		211	281	287	77	
450	288	230	230	287		524	508	498	373		236	278	268	86	
600	284	230	230	285		533	516	504	380		249	286	274	95	
750	279	228	229	284	486	538	521	511	392	412	259	293	282	108	-74
900	276	228	226	283	483	547	530	516	403	421	271	302	290	120	-62
1050	276	226	225	282	483	551	511	505	420	434	275	285	280	138	-49
1200	276	225	225	281	484	553	516	514	466	590	277	291	289	185	106
1350	278	224	224	279	485	553	552	549	463	584	275	328	325	184	99
1500	276	223	222	278	485	551	533	531	460	576	275	310	309	182	91
1650	273	222	222	277	487	545	465	459	449	570	272	243	237	172	83
1800															
1950	273	223	223	282		364	300	299	352		91	77	76	70	
2100	269	205	205	283		348	274	274	347		79	69	69	64	
2250	268	186	186	282		332	245	247	341		64	59	61	59	
2400		173	173	284			223	223	337			50	50	53	
2550				285					333					48	
2700				286					328					42	
2850				288					325					37	
3000				289					320					31	

Reference plane is parallel to test vehicle longitudinal centerline.
Given dimensions = Reference plane to car body

DATA SHEET NO. 12...(continued)

VEHICLE EXTERIOR CRUSH PROFILES

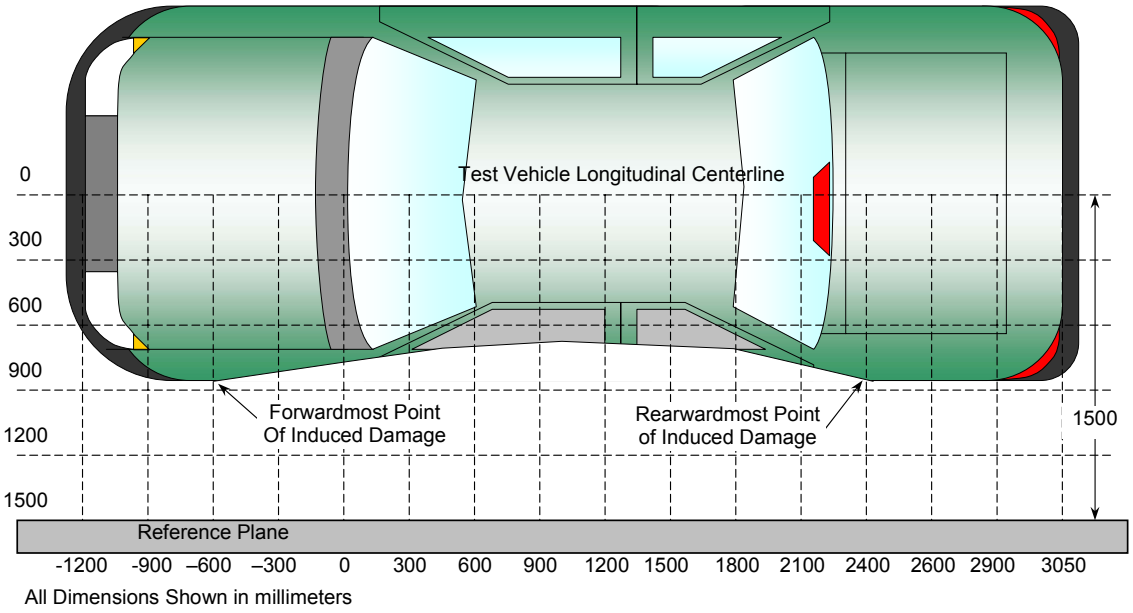
Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05



DATA SHEET NO. 13

VEHICLE DAMAGE PROFILE DISTANCES

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05



TOP VIEW

DAMAGE PROFILE DISTANCES

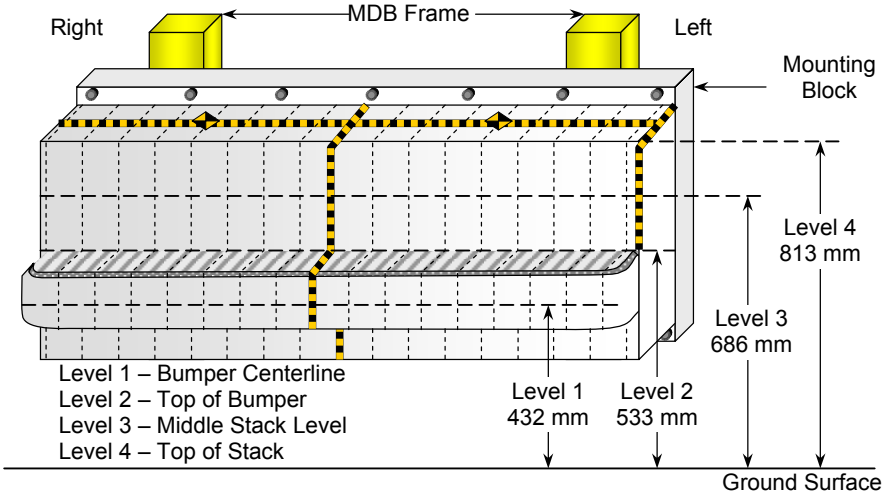
DPD	Distance from Impact Point in mm	Level	Pre-Test (mm)	Post-Test (mm)	Max Static Crush (mm)
1	2700 mm	4	286	328	42
2	2021 mm	4	283	348	65
3	1200 mm	2	225	516	291
4	503 mm	2	230	510	280
5	-171 mm	2	190	291	101
6	-900 mm	4	407	425	18

Reference plane is parallel to test vehicle longitudinal centerline.
Given dimensions = Reference plane to car body.

DATA SHEET NO. 14

DEFORMABLE BARRIER HONEYCOMB FACE STATIC CRUSH

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05



DEFORMABLE BARRIER STATIC CRUSH

Stack Level	Distance Right of Center								C_L	Distance Left of Center							
	800	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	800
1	121	104	88	74	71	71	71	67	67	69	71	74	78	82	90	105	119
2	117	75	74	73	69	67	54	52	69	71	72	74	76	82	84	89	101
3	109	98	38	6	13	19	28	17	5	5	7	8	10	13	22	48	119
4	117	125	54	18	15	36	53	28	19	22	25	31	34	36	43	74	149

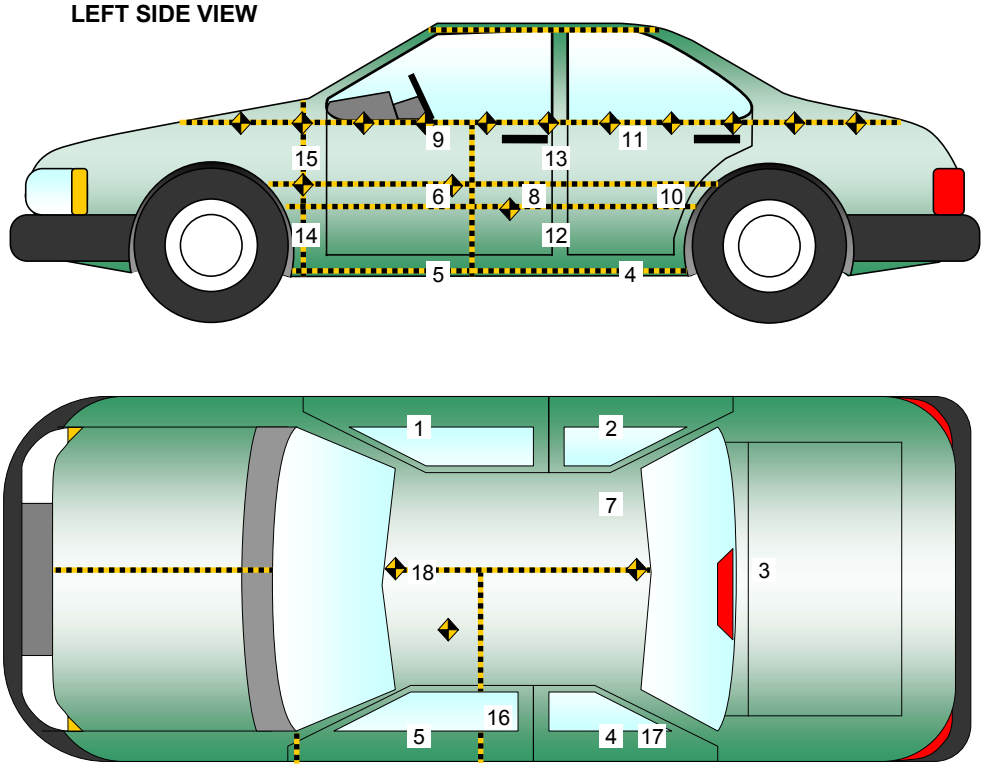
All Dimensions in mm

DATA SHEET NO. 15

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

LEFT SIDE VIEW



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

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

DATA SHEET NO. 15...(continued)

VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

VEHICLE ACCELEROMETER PEAK DATA AND PRE-TEST LOCATIONS

Loc. No.	Accelerometer Location	Measurements (mm)			Peak Values (G's)				
		X	Y	Z	Axis	Max	Time	Min	Time
1	Right Sill at Front Seat	3405	750	395	X	5.2	26	-6.8	63
					Y	42.4	7	-13.4	64
					Z	6.9	5	-21.1	10
					RES	42.5	7		
2	Right Sill at Rear Seat	2606	750	415	X	5.6	11	-6.8	64
					Y	62.6	7	-11.1	65
					Z	6.1	153	-22.9	9
					RES	64.2	7		
3	Rear Floorpan Above Axle	1257	0	835	X	3.2	57	-7.2	36
					Y	15.6	20	-3.1	147
					Z	11.2	77	-8.1	28
					RES	17.7	28		
4	Left Sill at Rear Door	2532	-750	392	Y	*	*	*	*
5	Left Sill at Front Door	3348	-750	401	Y	107.9	5	-44.0	28
6	Left Front Door C/L	3386	-756	835	Y	209.3	16	-146.4	29
7	Rear Occupant Compartment	2713	360	590	Y	59.4	6	-11.9	64
8	Left Front Door Mid-Rear	3107	-756	838	Y	127.3	19	-95.4	29
9	Left Front Door Upper C/L	3398	-768	1068	Y	123.4	16	-100.8	33
10	Left Rear Door Mid-Rear	2779	-755	972	Y	143.2	7	-38.3	32
11	Left Rear Door Upper C/L	2636	-750	1202	Y	153.0	9	-52.3	32
12	Left Lower B-Post	2870	-728	816	Y	150.2	8	-34.7	31
13	Left Middle B-Post	2882	-698	1290	Y	84.9	12	-39.2	27
14	Left Lower A-Post	3910	-720	675	Y	89.0	4	-23.3	24
15	Left Middle A-Post	4030	-775	1125	Y	28.1	7	-1.2	287
16	Front Seat Track				Y	79.3	12	-17.8	28
17	Rear Seat Track or Structure				Y				
18	Vehicle CG	2255	0	670	X	7.2	28	-13.8	6
					Y	56.1	6	-9.2	53
					Z	32.8	14	-78.4	9
					RES	82.2	9		

* No Valid Data collected after 29ms
See reference points on the following page.

DATA SHEET NO. 15...(continued)

VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY

Test Vehicle:	2005 Dodge Dakota Club Cab SLT	NHTSA No.	M50304
Test Program:	NCAP Side Impact	Test Date:	01/05/05

Reference Points X - Test Vehicle Rear Bumper (+ forward)
Y - Test Vehicle Centerline (+ to right)
Z - Ground Plane (+ down)

DATA SHEET NO. 16

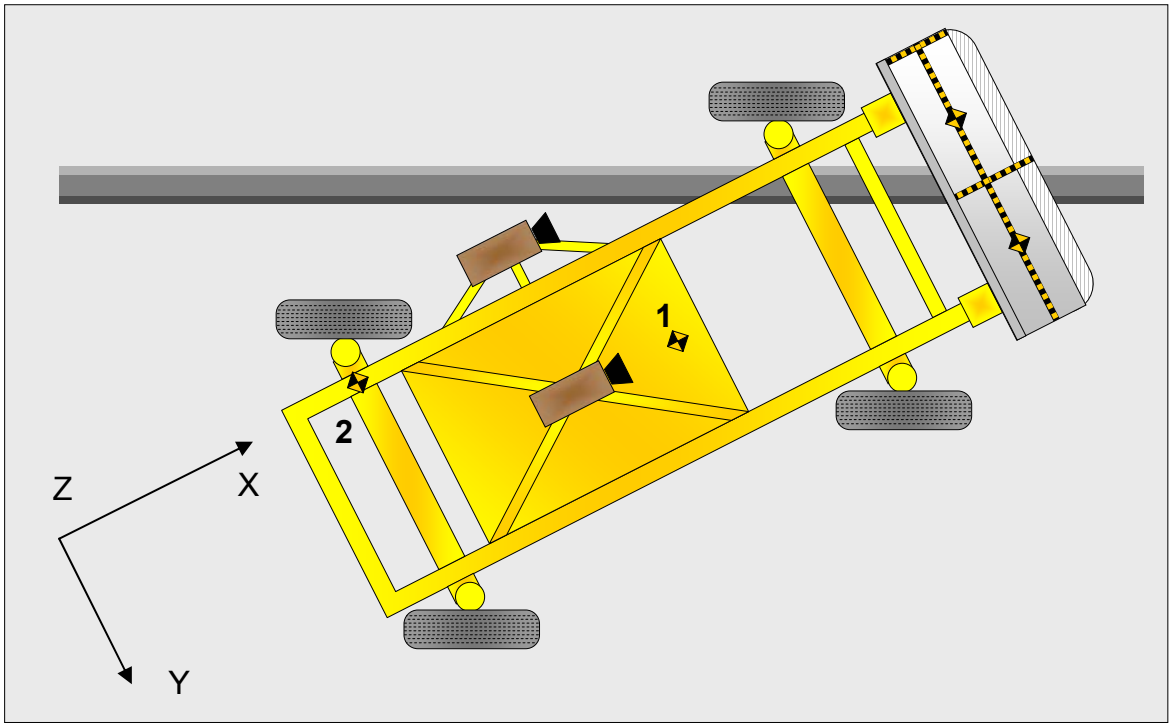
MDB ACCELEROMETER LOCATIONS AND DATA SUMMARY

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

MDB ACCELEROMETER PEAK DATA AND LOCATIONS

Loc. No.	Accelerometer Location	Measurement (mm)			Peak Values (G's)				
		X	Y	Z	Axis	Max	Time	Min	Time
1	MDB CG	-1092	0	-483	X	1.2	130	-19.1	35
					Y	0.2	0	-7.5	41
					Z	13.7	16	-13.3	68
					RES	23.5	43		
2	MDB Rear	-2591	-625	-622	X	1.9	176	-22.4	39
					Y	4.1	43	-2.9	78
					Z	5.2	37	-1.3	138
					RES	23.0	39		

Reference Points X - MDB Front Axle (+ forward)
Y - MDB Centerline (+ to right)
Z - Ground Plane (+ down)



DATA SHEET NO. 17

VEHICLE STRUCTURAL MEASUREMENTS

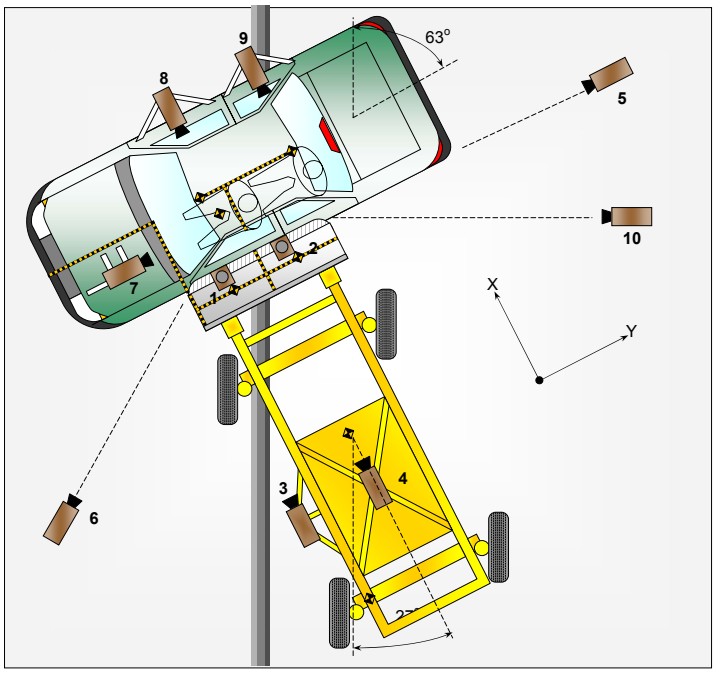
Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

	Elements	Pre-Test (mm)
1	Total Length	5557
2	Total Width	1825
3	Bumper Top Height	625
4	Bumper Bottom Height	403
5	Longitudinal Member Top Height	570
6	Distance between Longitudinal Members	775
7	Longitudinal Member Width	110
8	Engine Top Height	987
9	Engine Bottom Height	304
10	Engine and gearbox width	530
11	Front bumper-engine distance	762
12	Front shock absorber fixing height	705
13	Bonnet leading edge height	678
14	Front shock absorber fixing width	911
15	Front bumper – front axle distance	991
16	Front axle – a pillar distance	463
17	A-pillar – B-pillar distance	1190
18	B-Pillar – rear axle distance	1691
19	B-pillar – C-pillar distance	655
20	Roof sill bottom height	1650
21	Roof sill top height	1689
22	Floor sill bottom height	410
23	Floor sill top height	487

DATA SHEET NO. 18

HIGH SPEED CAMERA LOCATIONS AND DATA

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05



No.	Camera View	Location (mm)			Lens (mm)	Film Speed (fps)
		X	Y	Z		
1	Overhead Close-up	0	1100	5460	50	1000
2	Overhead Overall	0	1020	5472	14	1000
3	MDB Onboard, Impact Point Close-up				25	1000
4	MDB Onboard, Centerline of Impact				13	1000
5	Right Side, Ground Level, Overall	890	5532	1318	19	1000
6	Left Side, Ground Level, Overall	1160	-7790	1360	19	1000
7	Vehicle Onboard Front SID/HIII, Front				13	1000
8	Vehicle Onboard Front SID/HIII, Side				10	1000
9	Vehicle Onboard Rear SID/HIII, Side				16	1000
10	Real Time Coverage				13	24

Reference Points X - Impact Line
Y - MDB Left Edge Impact Point
Z - Ground Plane

DATA SHEET NO. 19

FMVSS 301 FUEL SYSTEM INTEGRITY POST IMPACT DATA

Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

Test Time: 12:55 pm Temperature at Time of Impact: 21°C

STODDARD SOLVENT SPILLAGE MEASUREMENTS

A. From impact until vehicle motion ceases: 0 oz.
(Maximum Allowable = 1 ounce)

B. For the 5 minute period after motion ceases: 0 oz.
(Maximum allowable = 5 ounces)

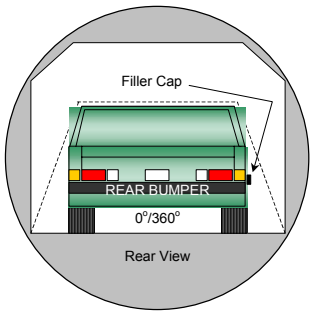
C. For the following 25 minutes: 0 oz.
(Maximum allowable = 1 oz./minute)

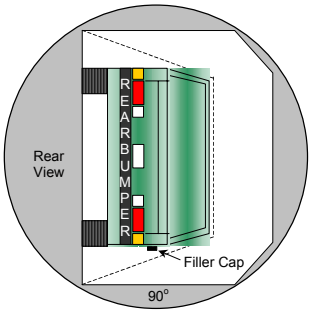
D. Spillage Details: None

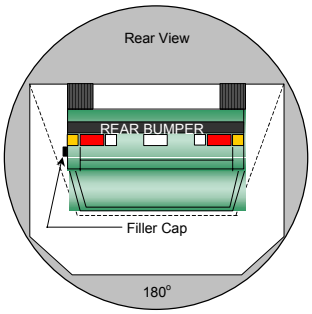
DATA SHEET NO. 20

FMVSS 301 STATIC ROLLOVER DATA SHEET

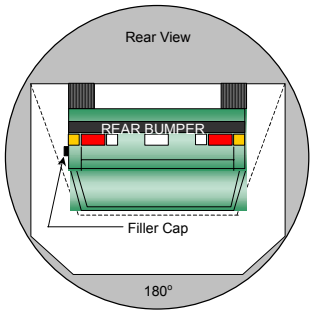
Test Vehicle: 2005 Dodge Dakota Club Cab SLT NHTSA No. M50304
Test Program: NCAP Side Impact Test Date: 01/05/05

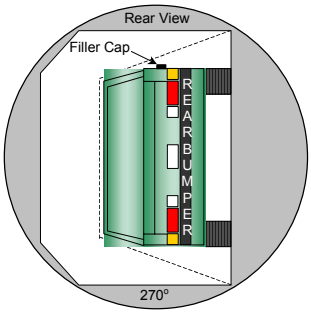


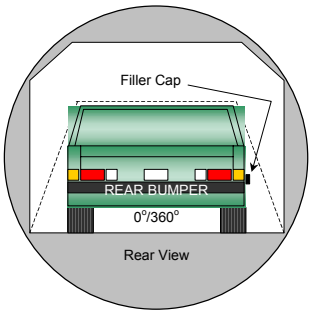




0^O to 90^O 90^O to 180^O







180^O to 270^O 270^O to 360^O

1. The specified fixture rollover rate for each 90^o of rotation is 60 to 180 seconds.
2. The position hold time at each position is 300 seconds (minimum).
3. Details of Stoddard Solvent Spillage locations: None

Rollover Test Phase	Rotation Time (sec.)	Hold Time (sec.)	Spillage (oz.)
0° to 90°	162	300	0
90° to 180°	153	300	0
180° to 270°	143	300	0
270° to 360°	161	300	0

APPENDIX A

PHOTOGRAPHS

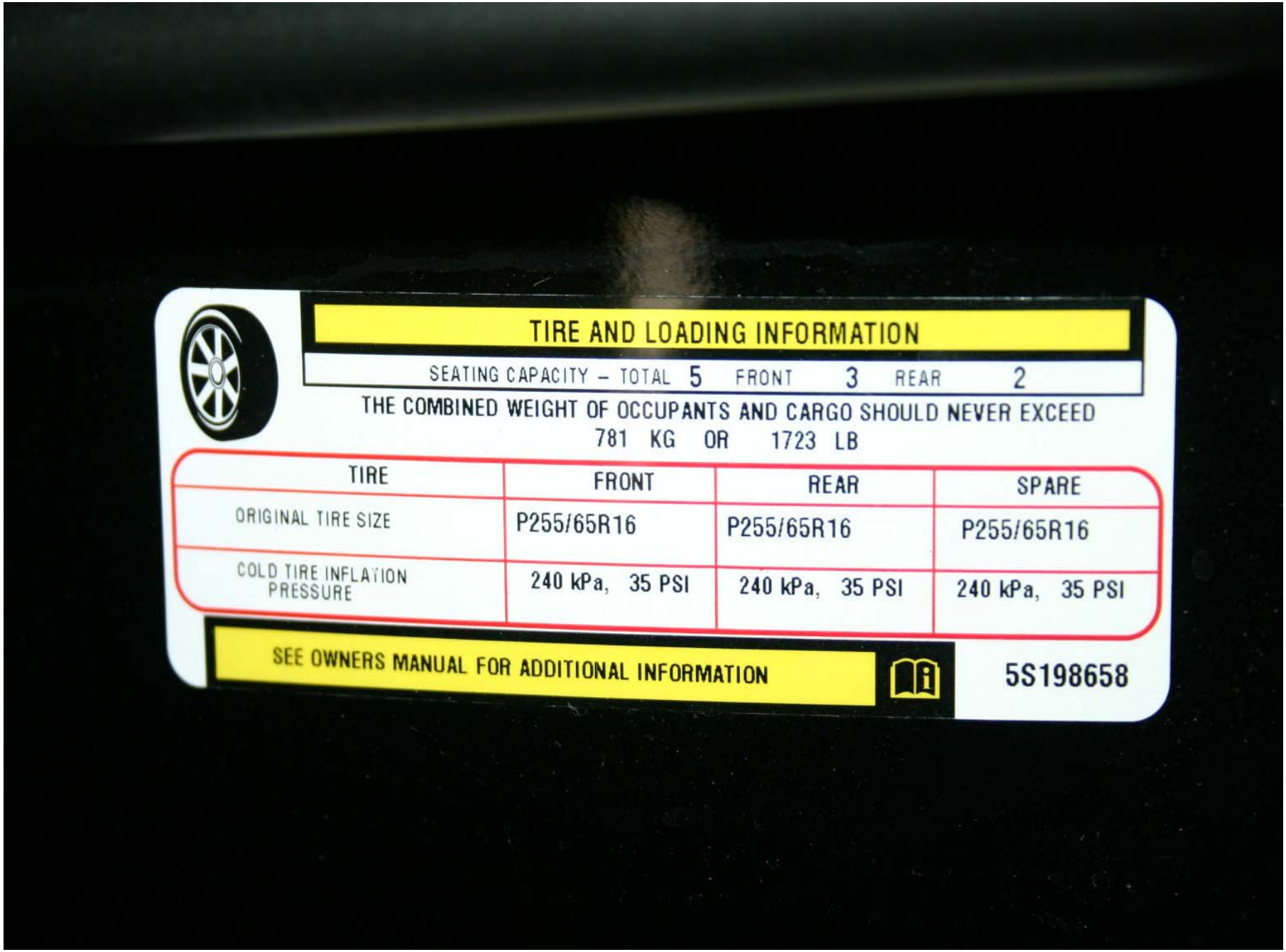
TABLE OF PHOTOGRAPHS

Left Rear of Vehicle As Received

A-1.

Right Front of Vehicle As Received

Vehicle Certification Label



Tire Placard

Pre-Test Front View of Test Vehicle

Post-Test Front View of Test Vehicle

Pre-Test Left Front ¾ View of Test Vehicle

Post-Test Left Front ¾ View of Test Vehicle

Pre-Test Left Side View of Test Vehicle

Post-Test Left Side View of Test Vehicle

Pre-Test Left Rear ¾ View of Test Vehicle

Post-Test Left Rear ¾ View of Test Vehicle

Pre-Test Rear View of Test Vehicle

Post-Test Rear View of Test Vehicle

Pre-Test MDB (Left Side) Positioned Against Vehicle

Pre-Test MDB (Right Side) Positioned Against Vehicle

Pre-Test MDB Positioned Against Vehicle Overhead View

Post-Test MDB (Front) and Vehicle

Post-Test MDB (Rear) and Vehicle

Pre-Test Impact Point on Vehicle

Post-Test Impact Point on Vehicle

Pre-Test Fuel Filler Cap View

Post-Test Fuel Filler Cap View

Pre-Test Three-Quarter View of Left Side Doors of Test Vehicle

Post-Test Three-Quarter View of Left Side Doors of Test Vehicle

Pre-Test Three-Quarter View of Right Side Doors of Test Vehicle

Post-Test Three-Quarter View of Right Side Doors of Test Vehicle

Pre-Test Driver Dummy Left Side View (Door Open)

Pre-Test Driver Dummy Left Side View

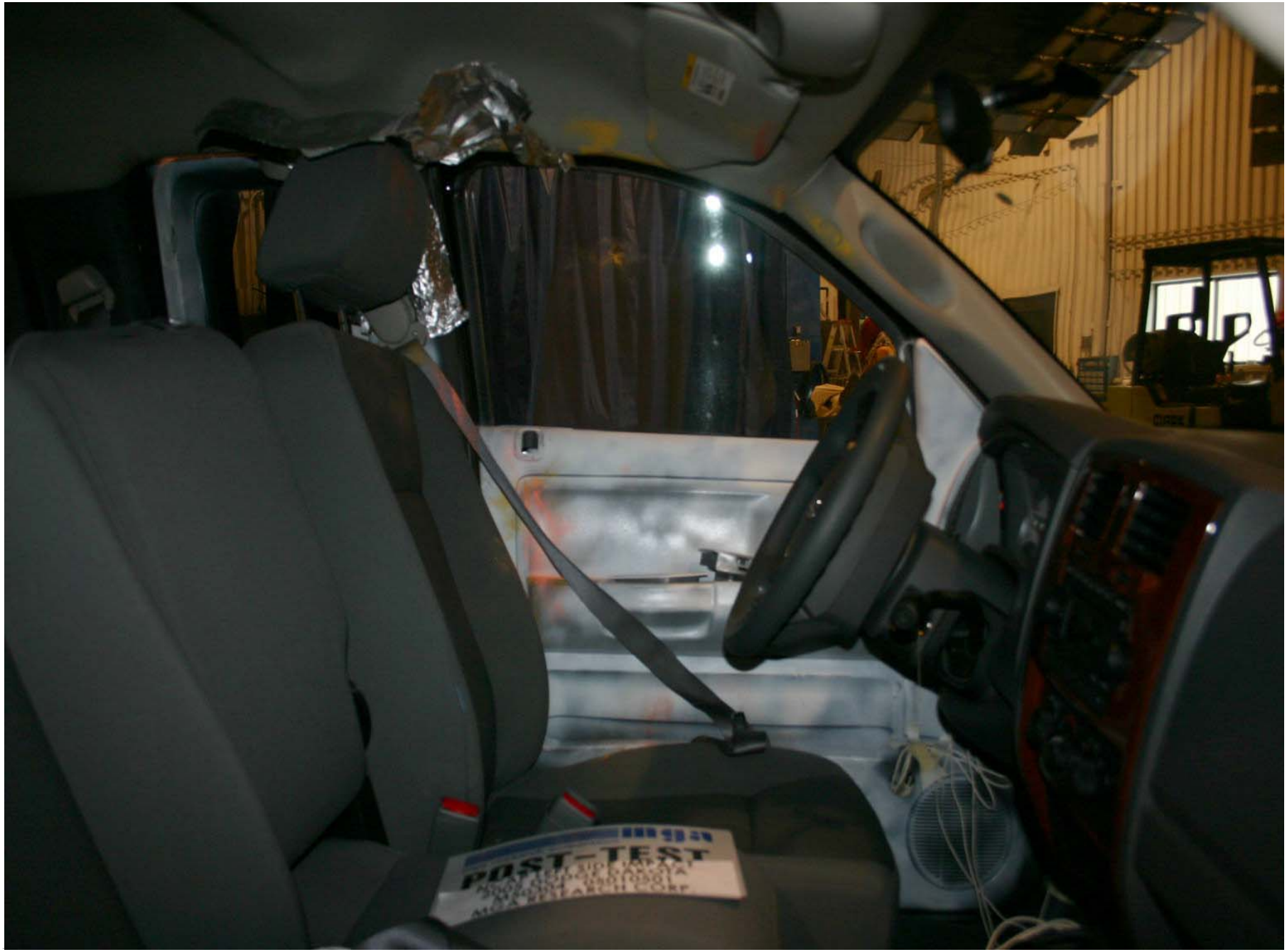
Post-Test Driver Dummy Left Side View

Pre-Test Driver Dummy Shoulder and Door Top View

Post-Test Driver Dummy Shoulder and Door Top View

Pre-Test Driver Dummy Right Side View

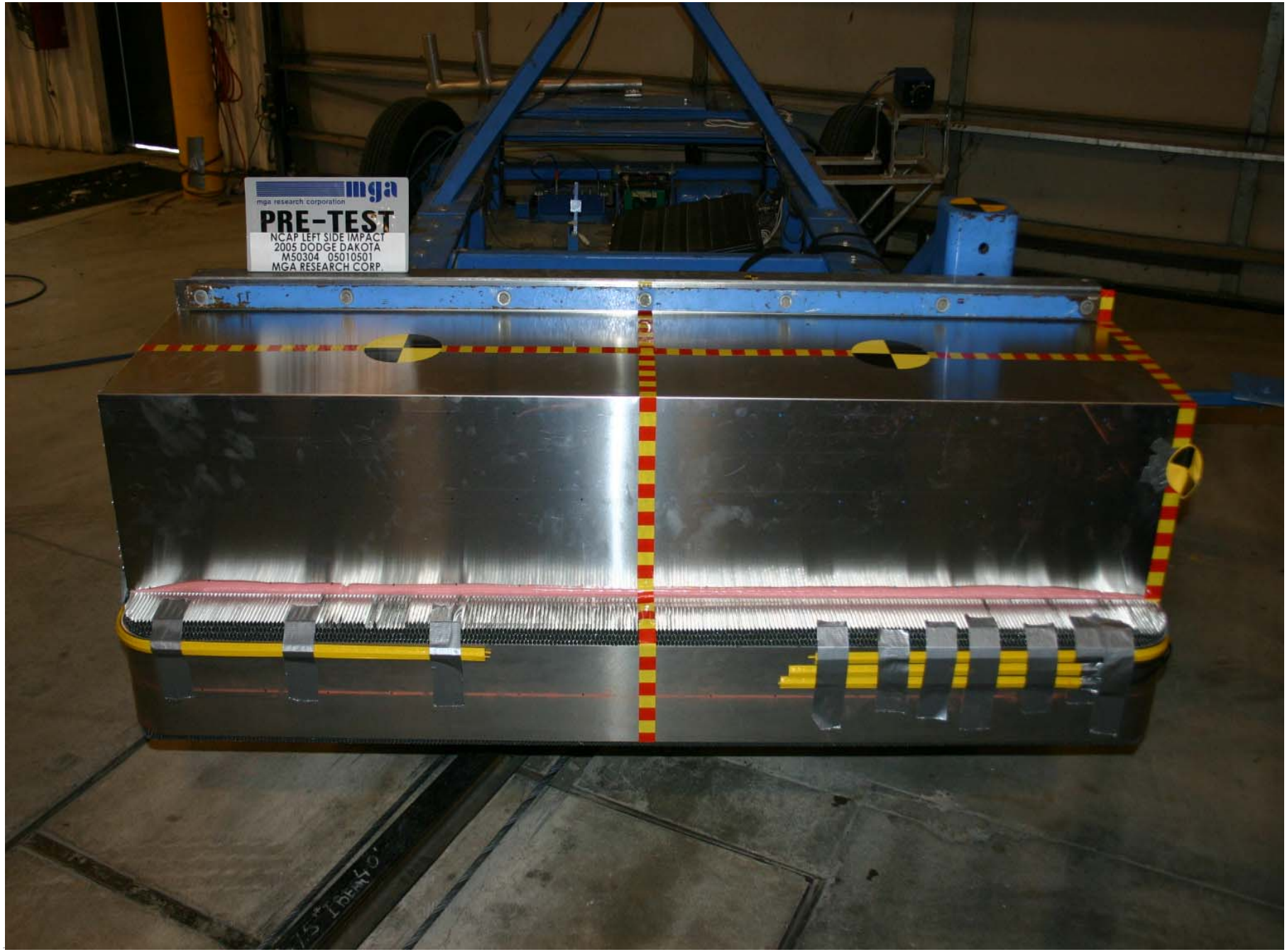
Post-Test Driver Dummy Right Side View



Post-Test Driver Dummy Contact

Post-Test Driver Dummy Head Contact

Post-Test Driver Dummy Mid Contact



Pre-Test MDB Front View

Post-Test MDB Front View

Pre-Test MDB Top View

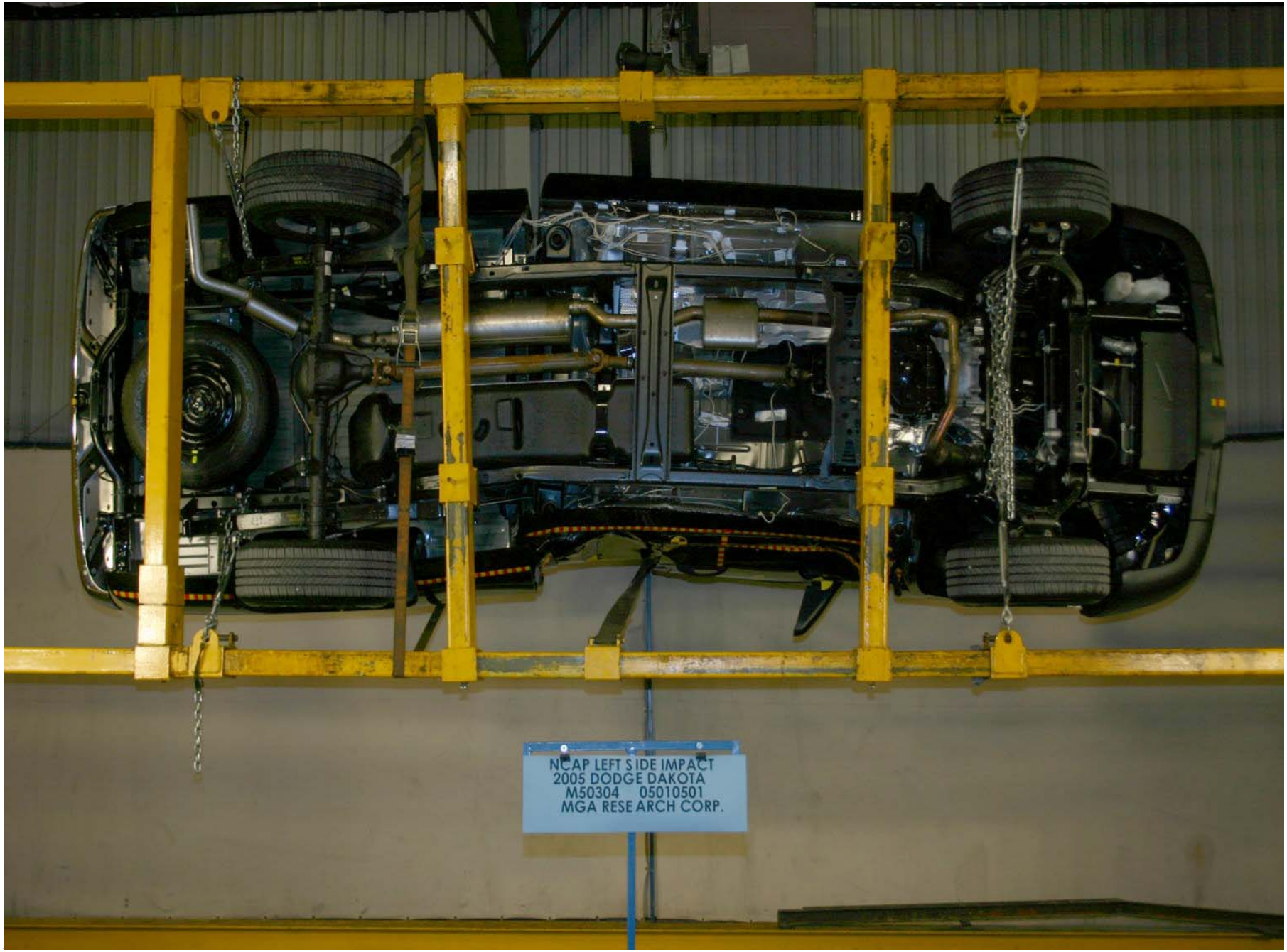
Post-Test MDB Top View

Pre-Test MDB Right Side View

Post-Test MDB Right Side View

Pre-Test MDB Left Side View

Post-Test MDB Left Side View



Rollover 90 Degrees

Rollover 180 Degrees

Rollover 270 Degrees

Rollover 360 Degrees

Vehicle Impact

Post-Test Left Front Door Opening

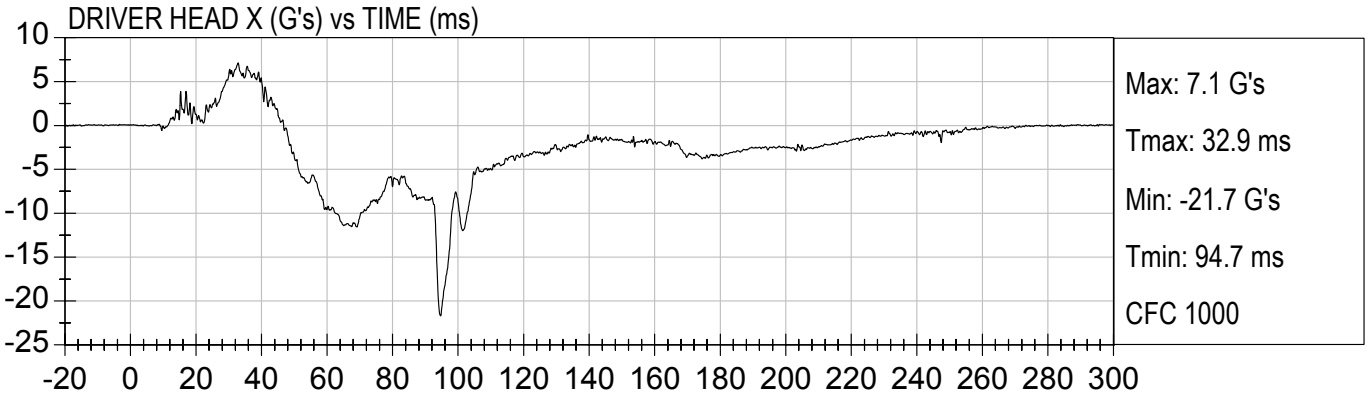
APPENDIX B

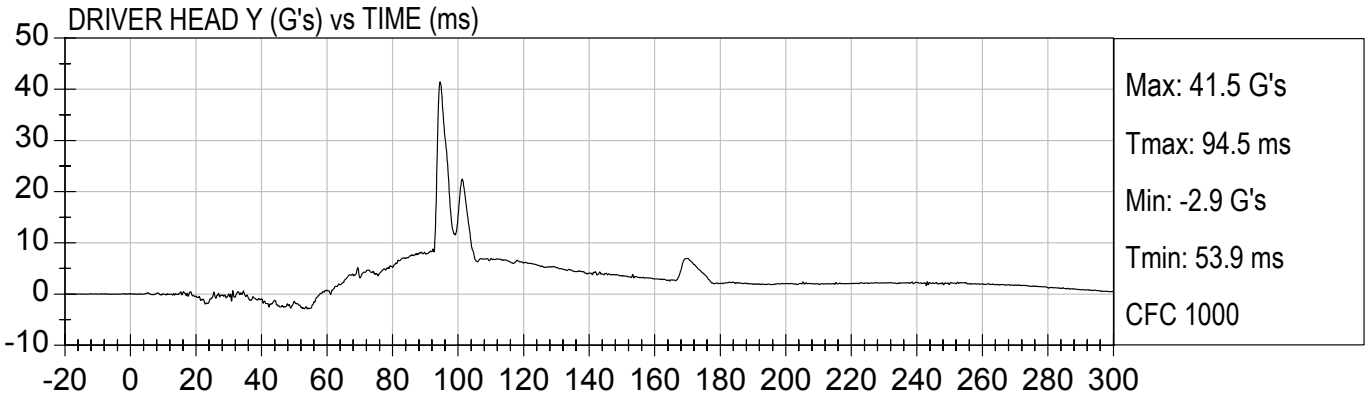
SID/HIII, VEHICLE, AND MDB RESPONSE DATA

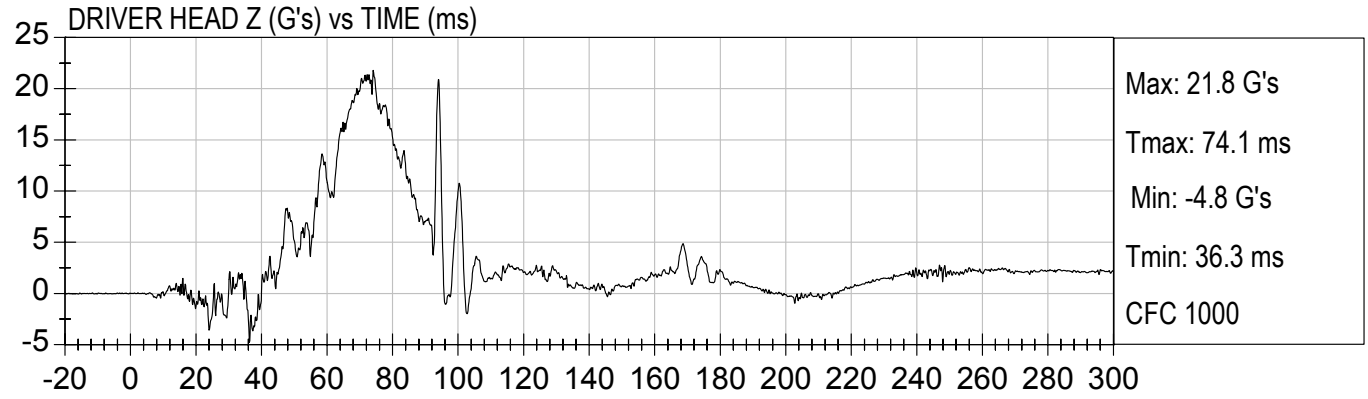
TABLE OF DATA PLOTS

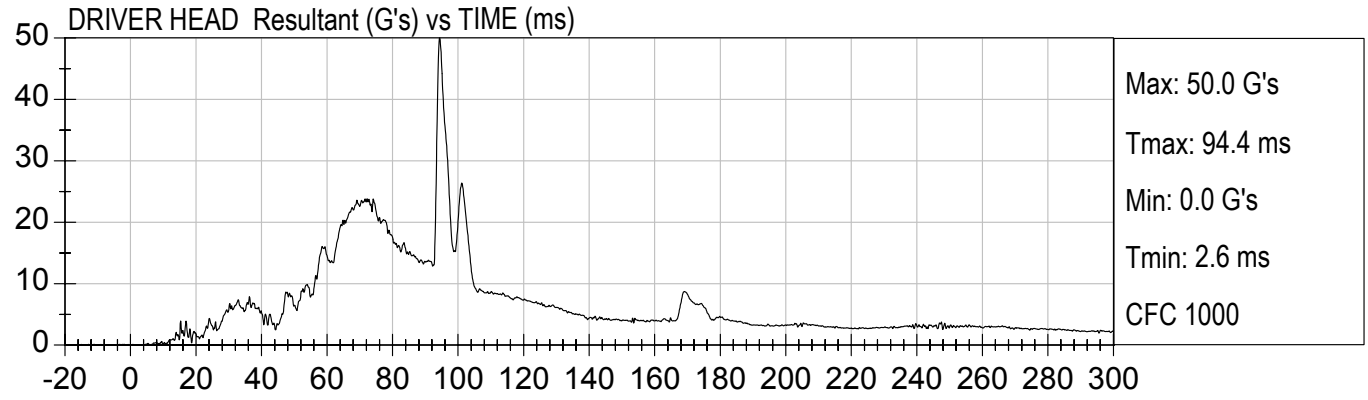
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



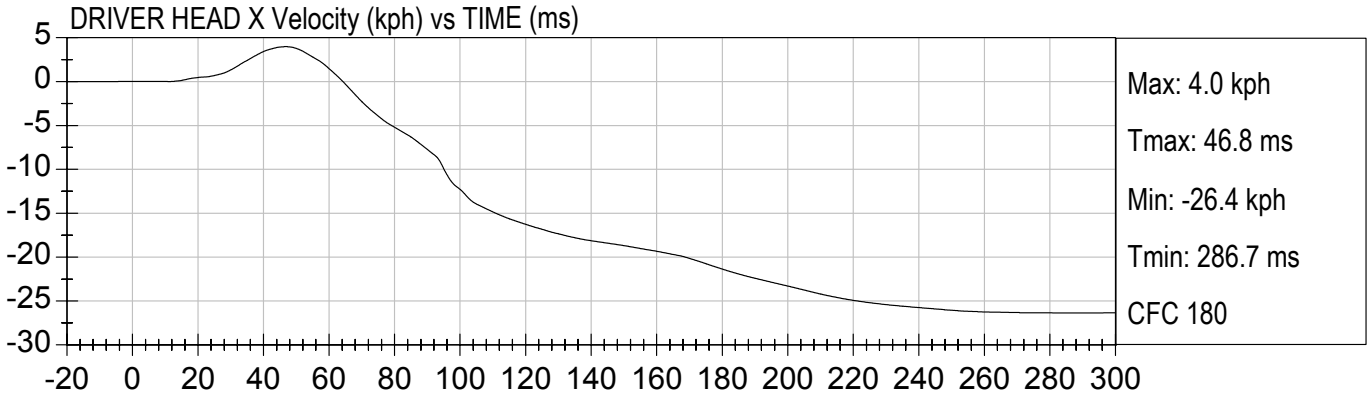


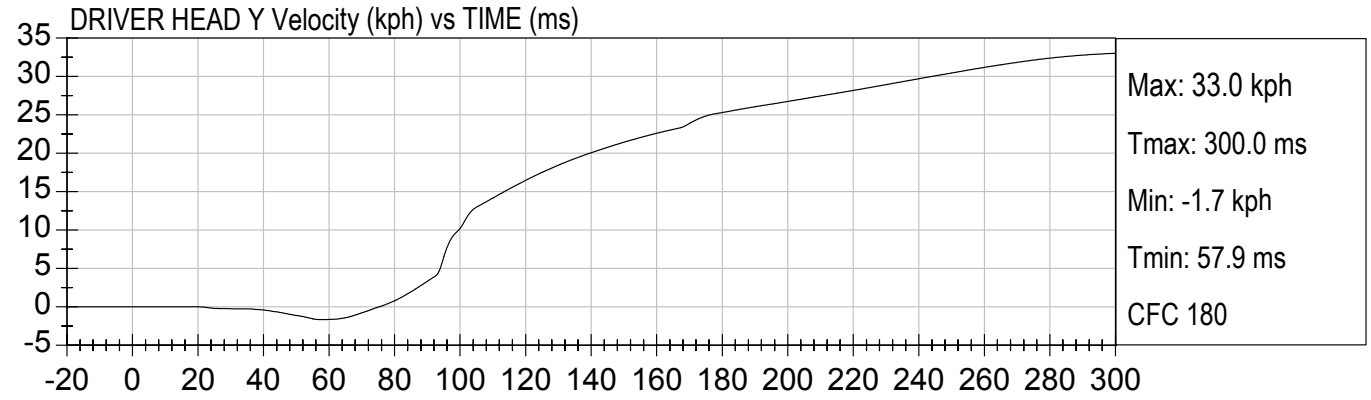


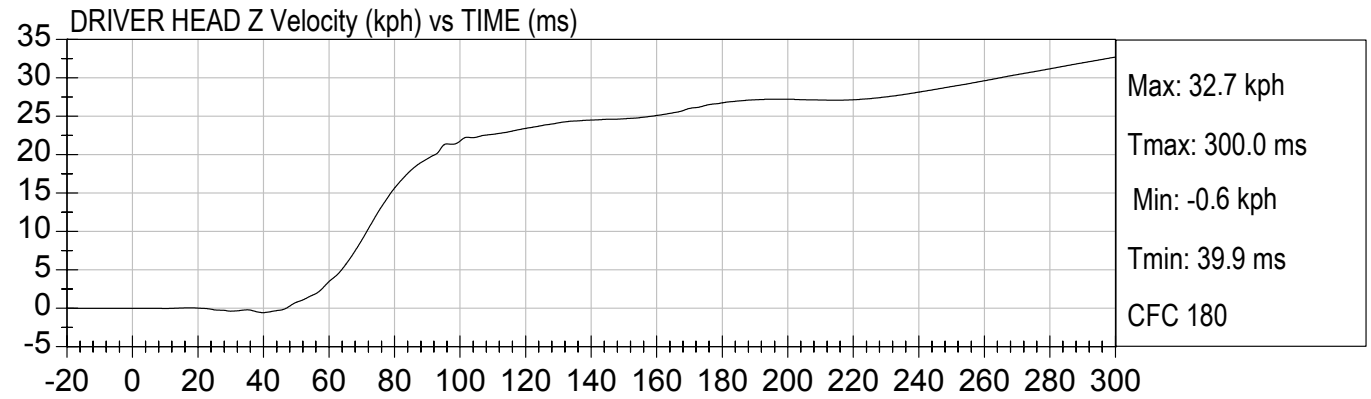


NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)

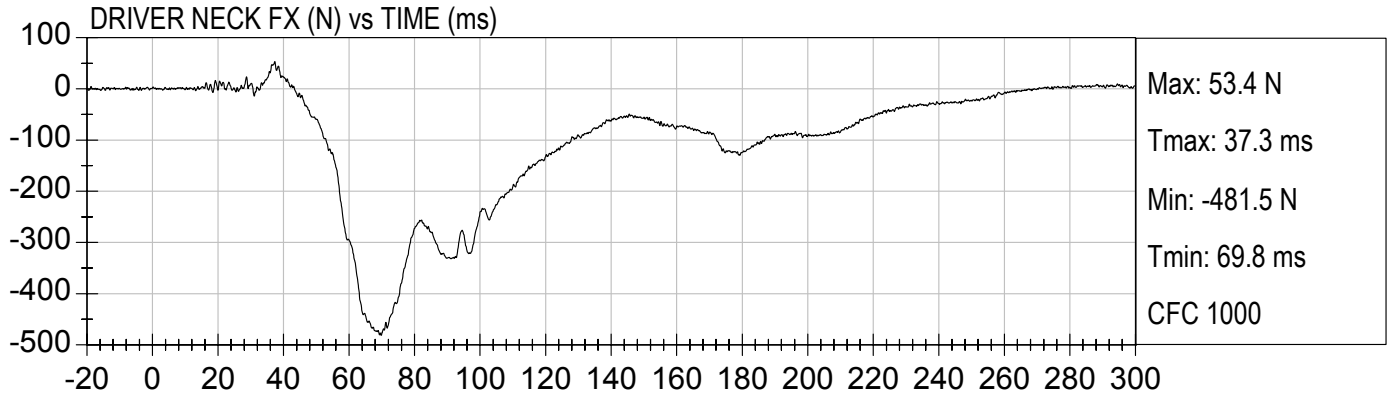


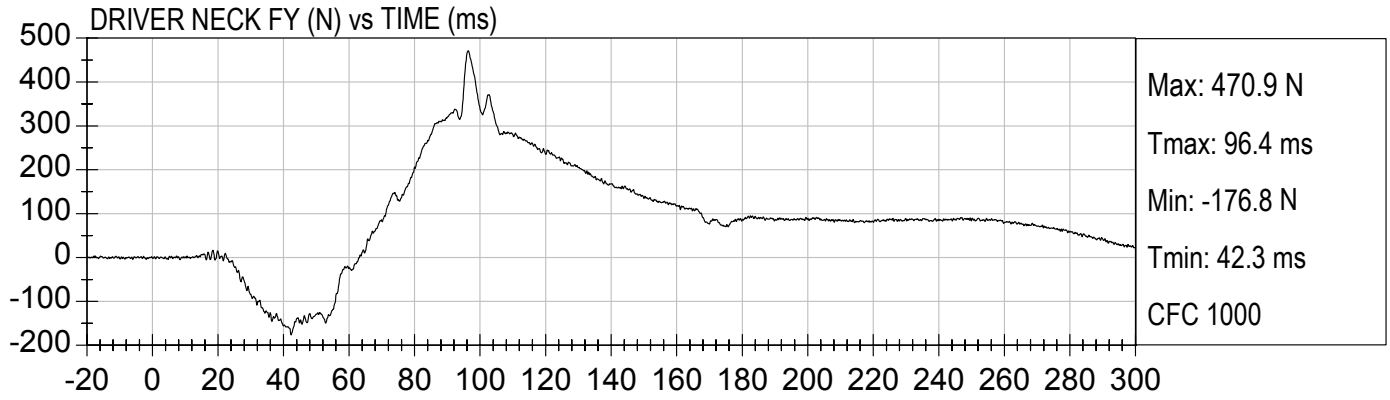


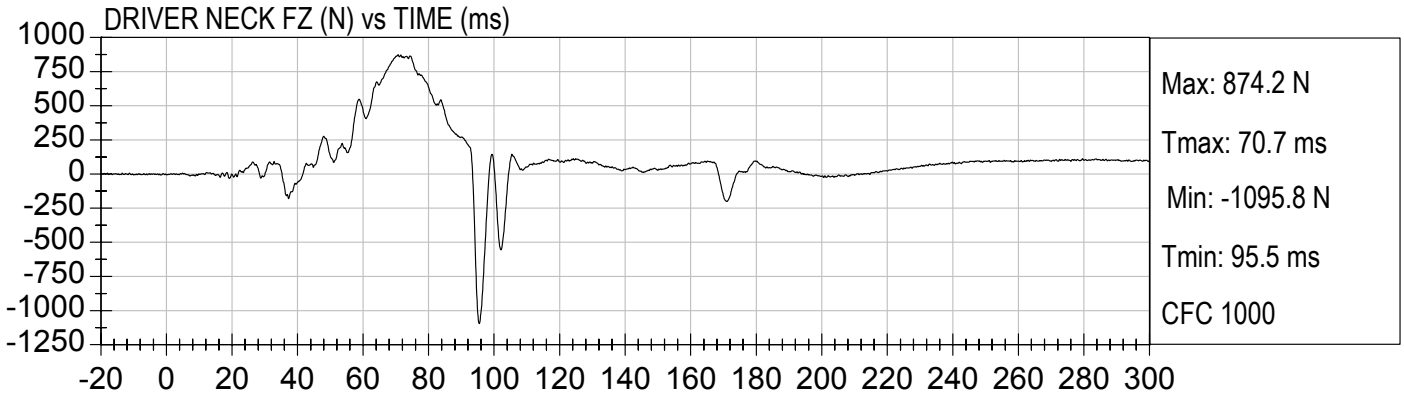


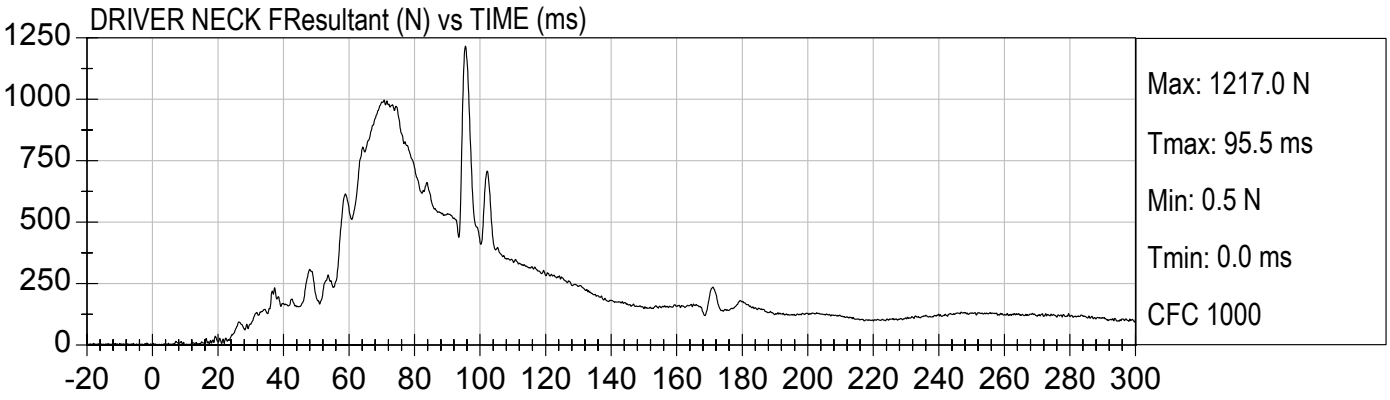
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



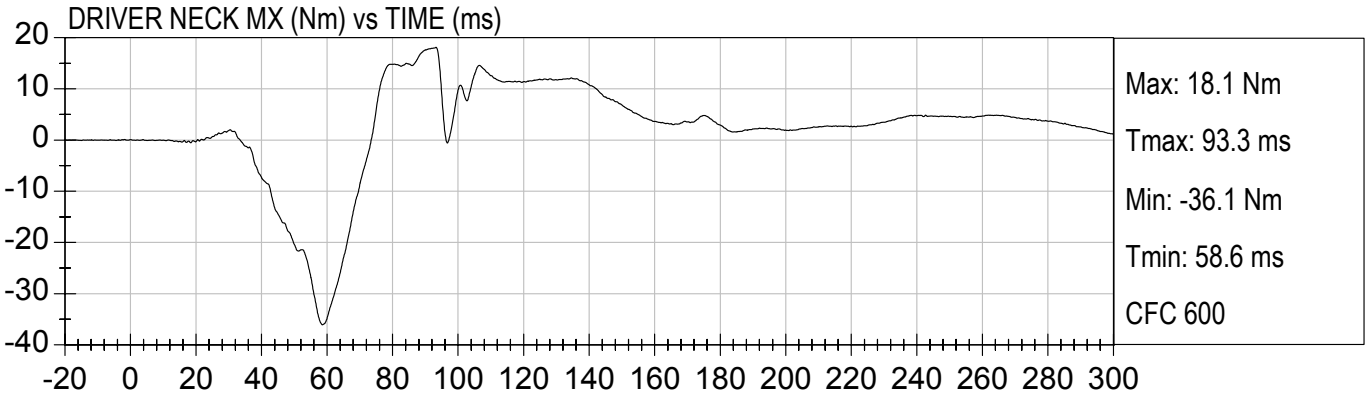


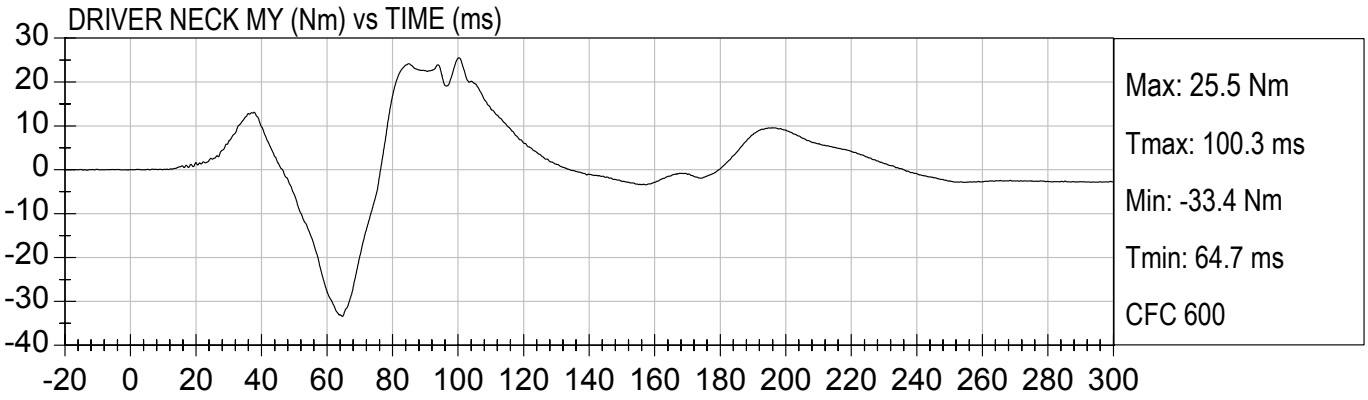


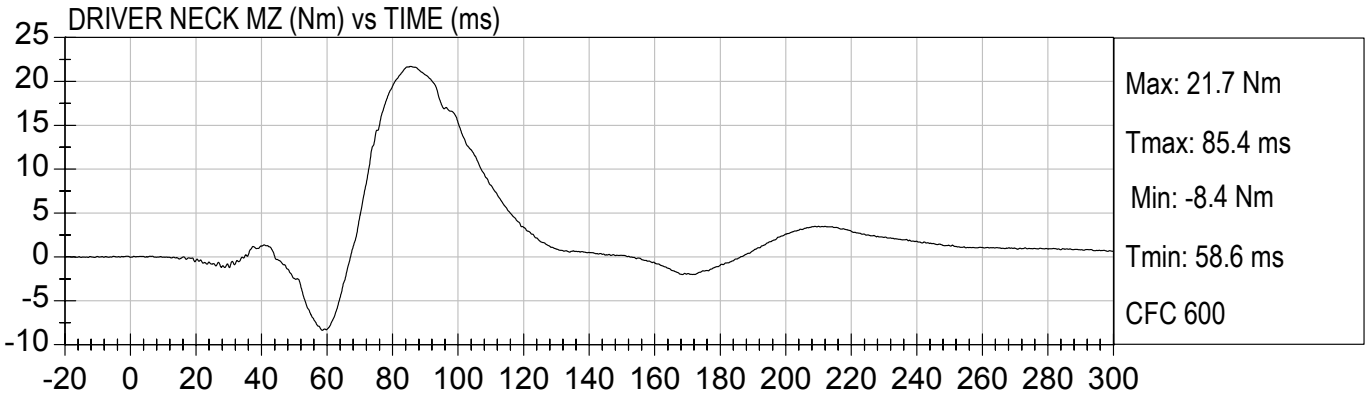


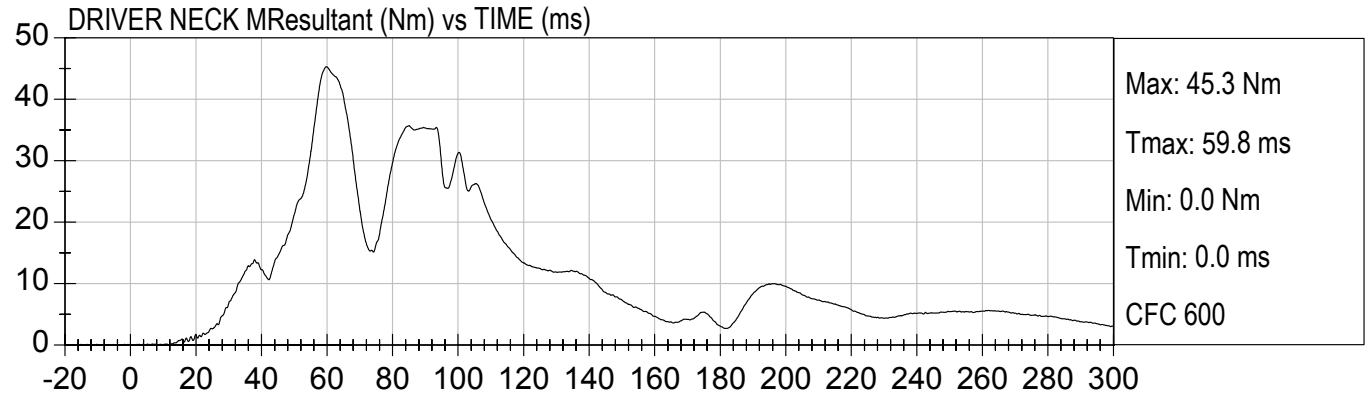
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



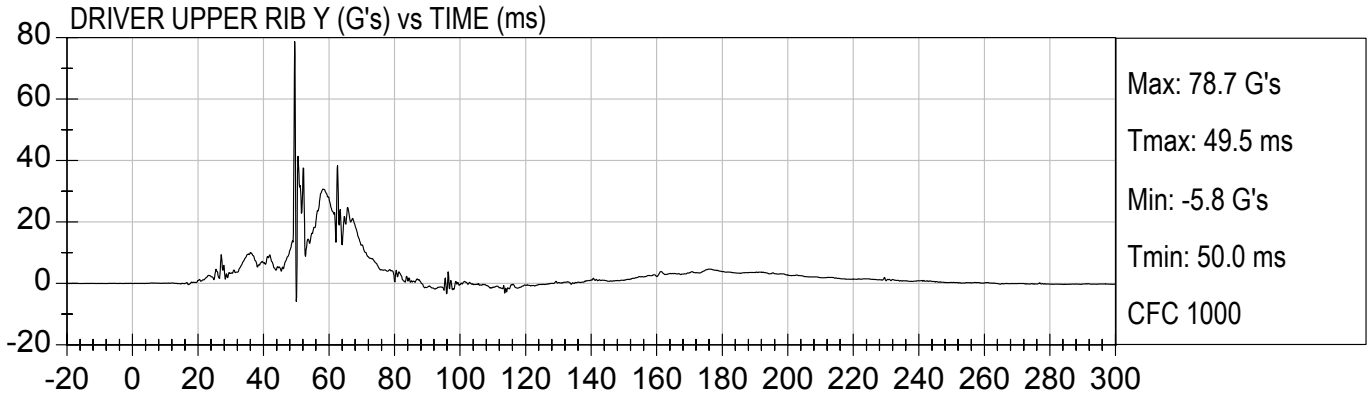


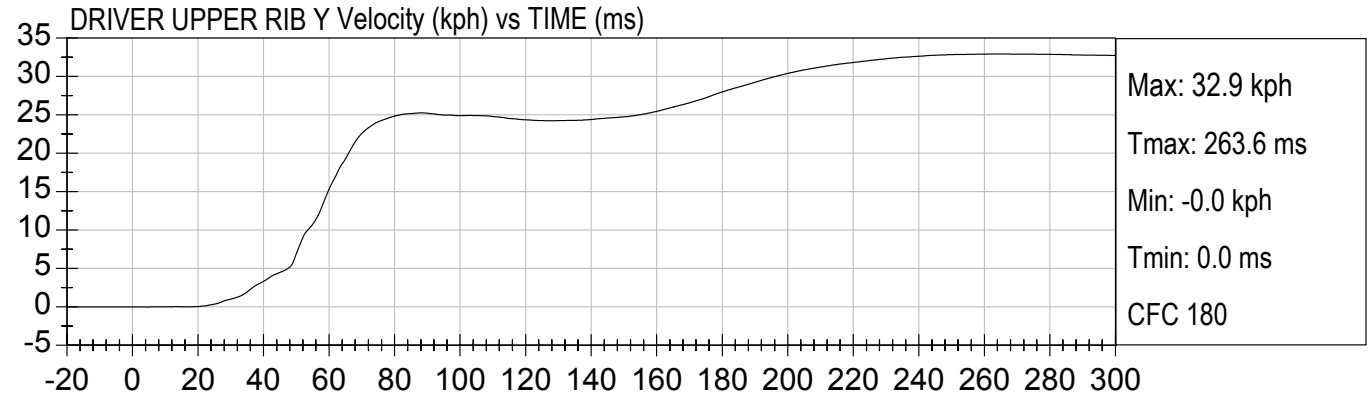


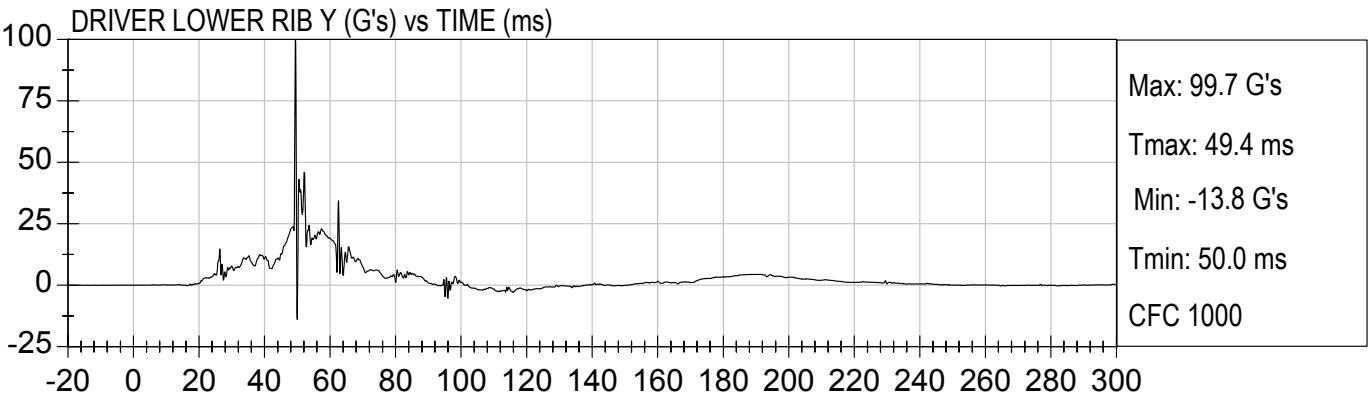


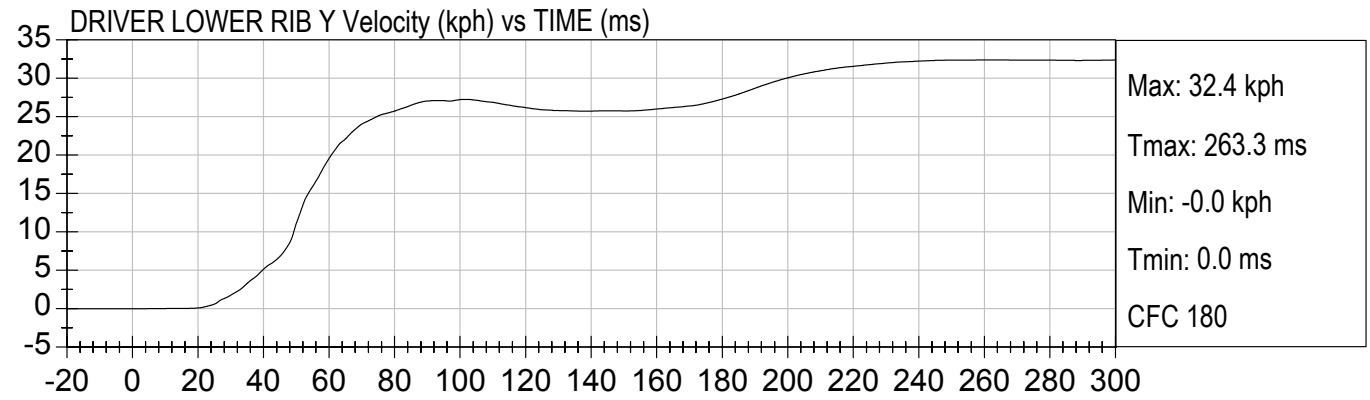
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



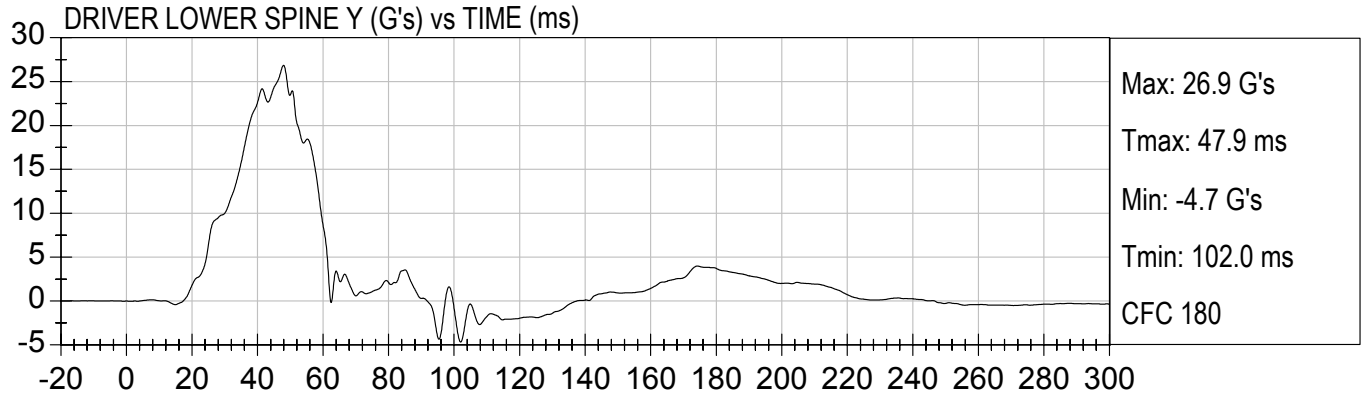


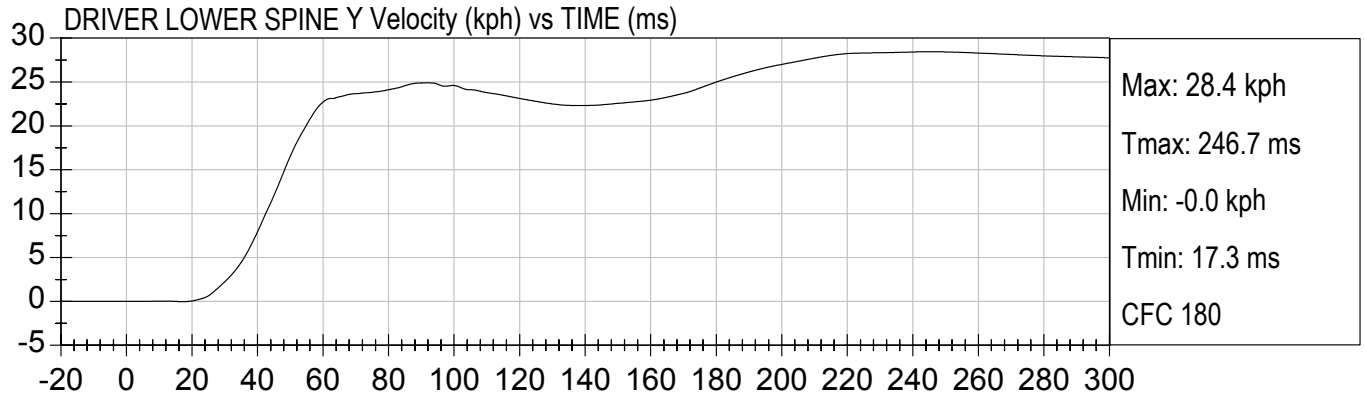


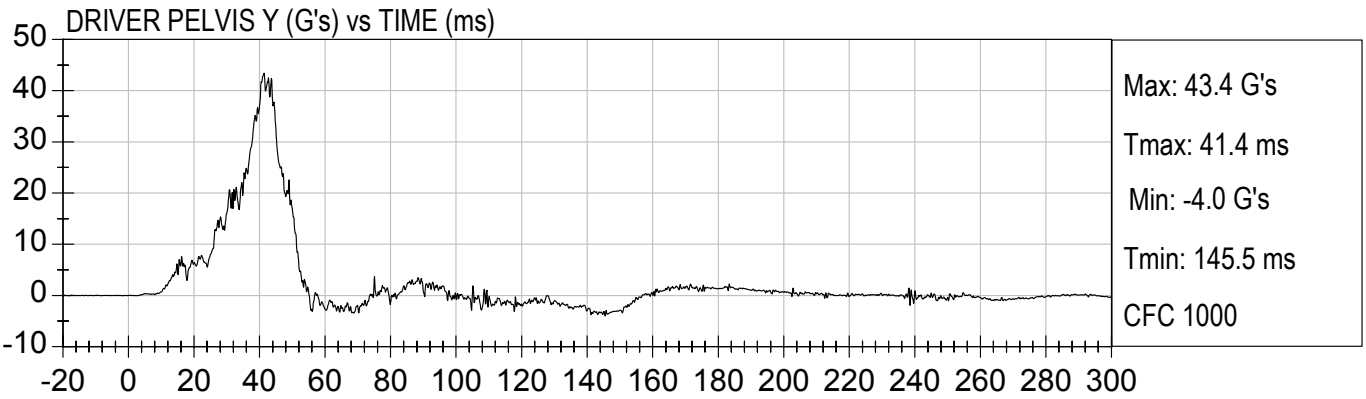


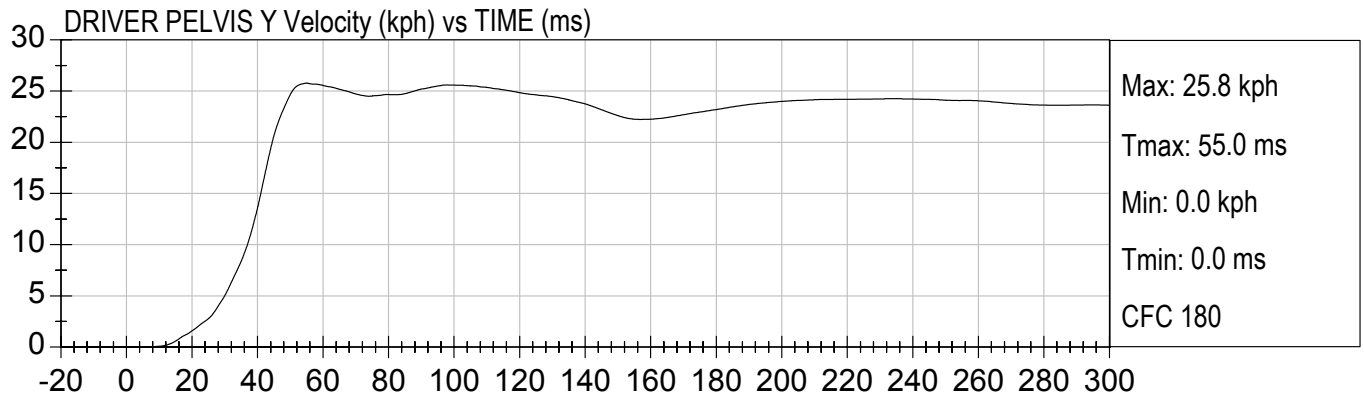
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



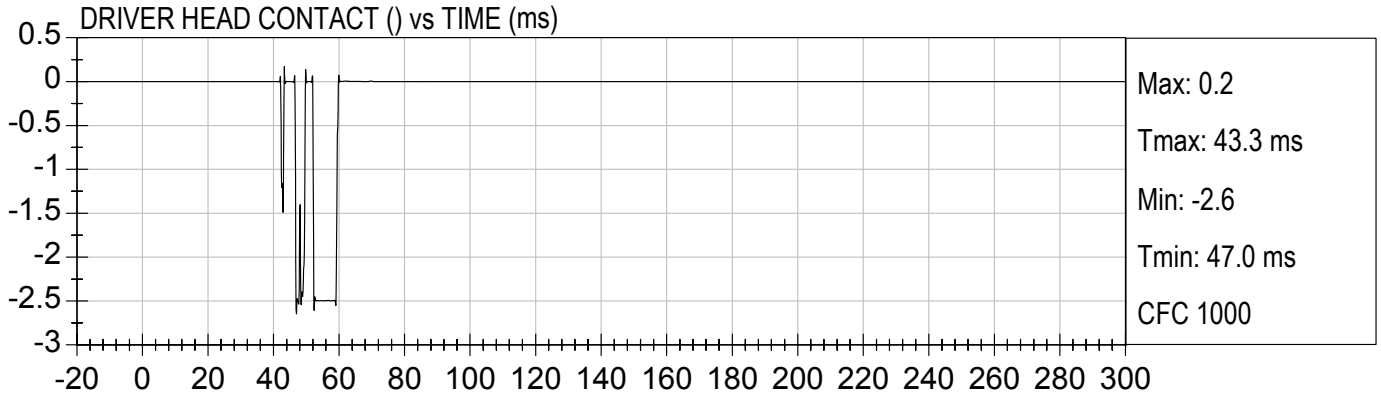


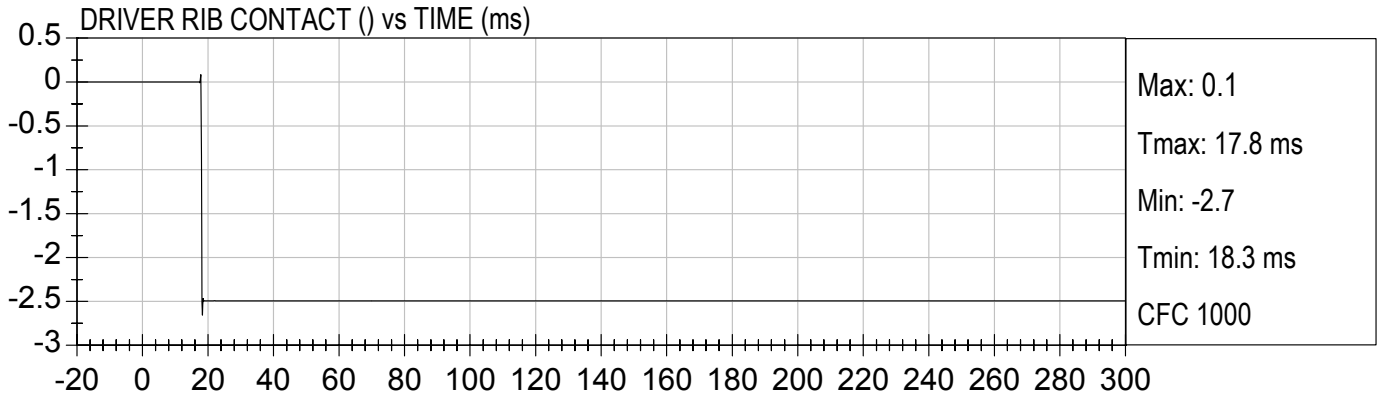


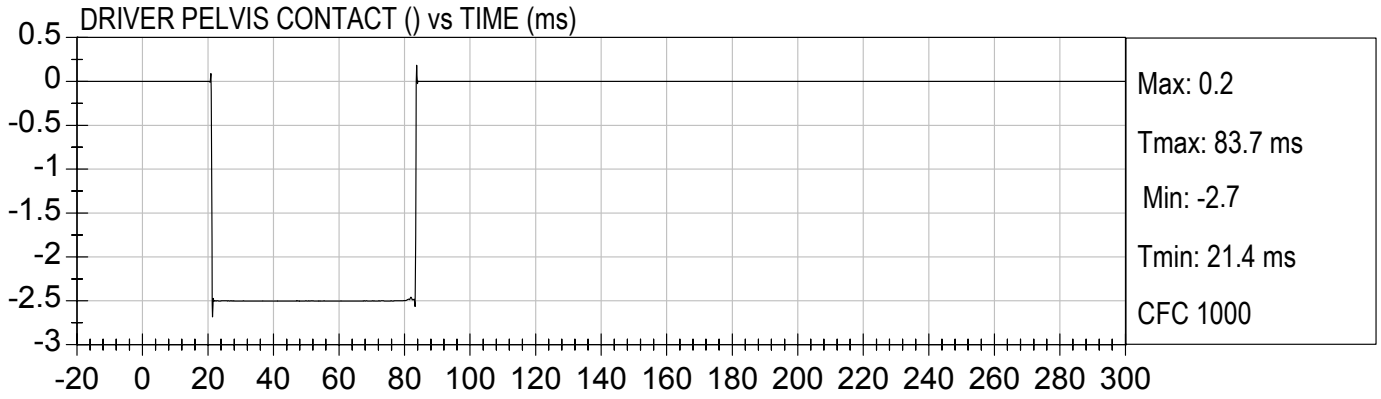


NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)

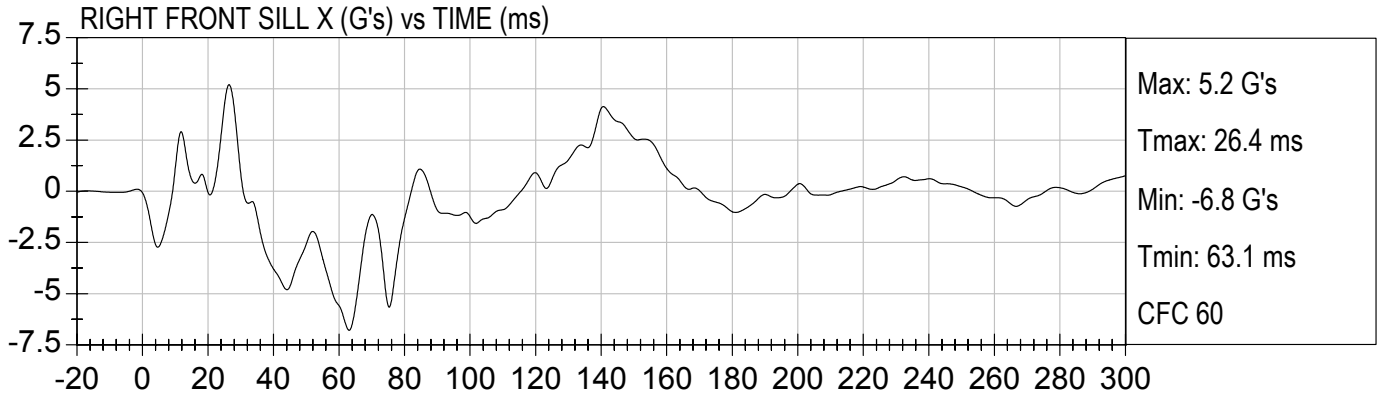


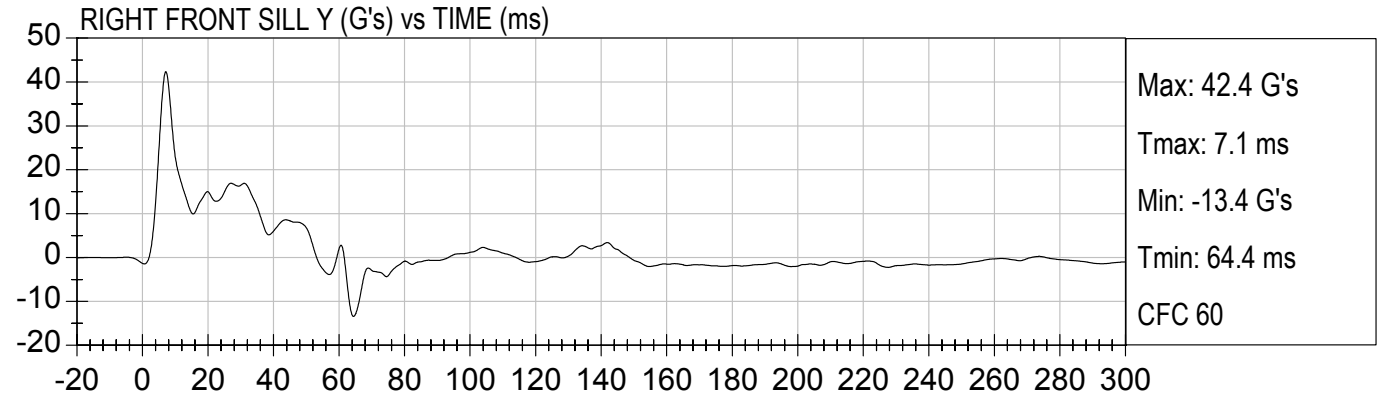


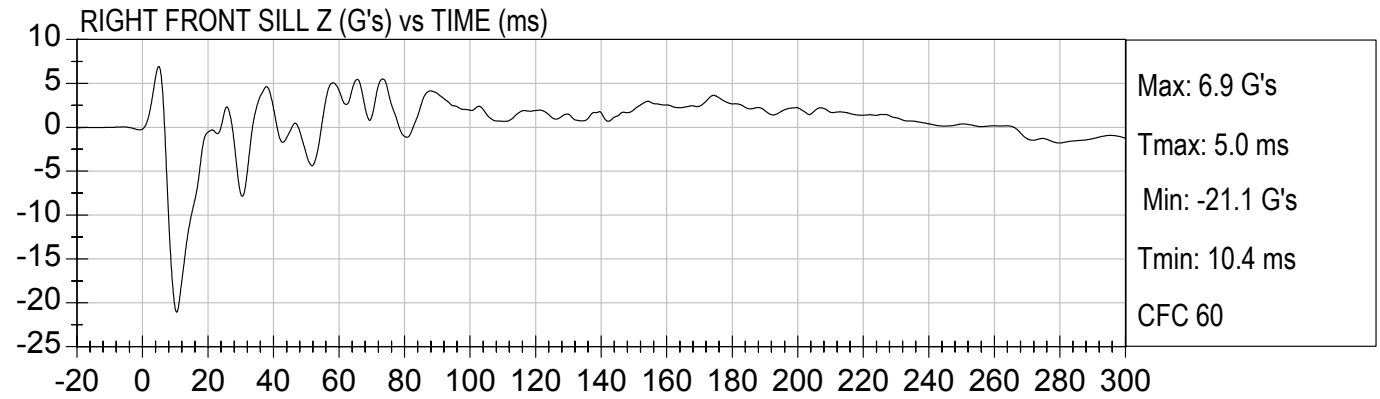


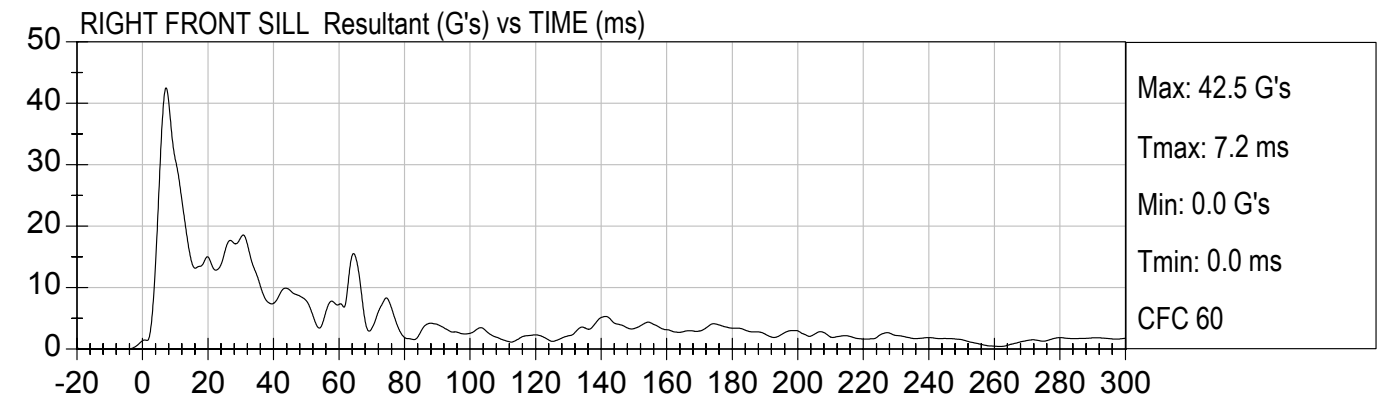
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

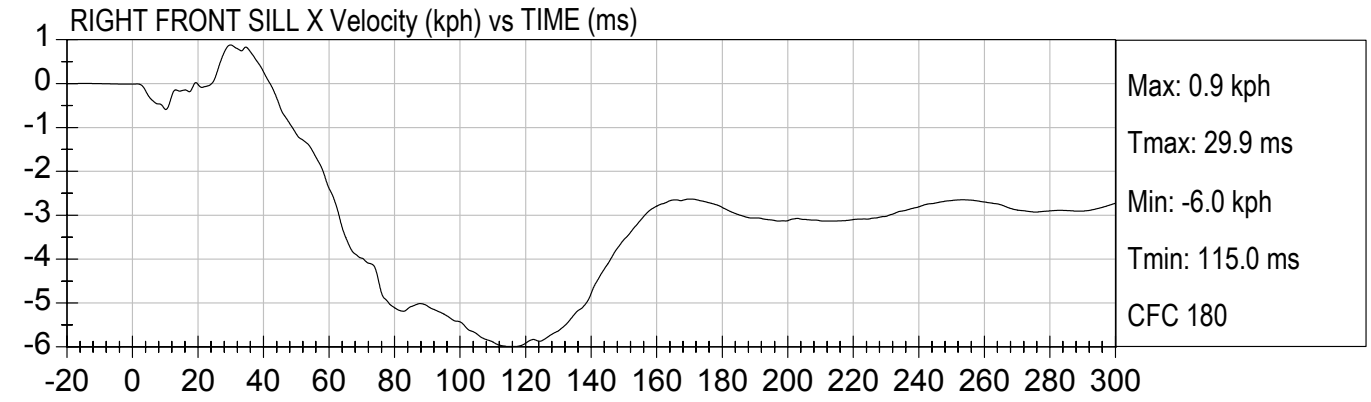
Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)

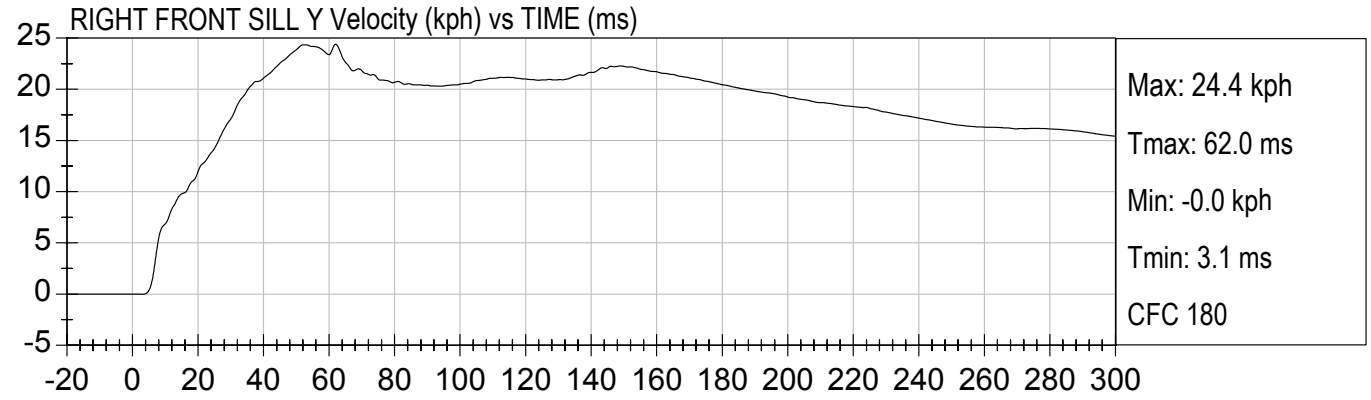


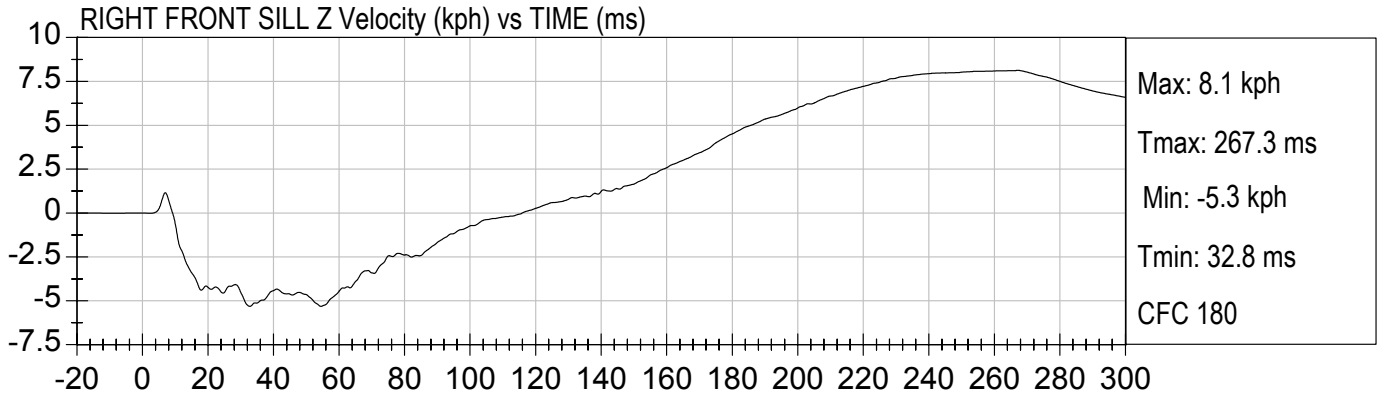


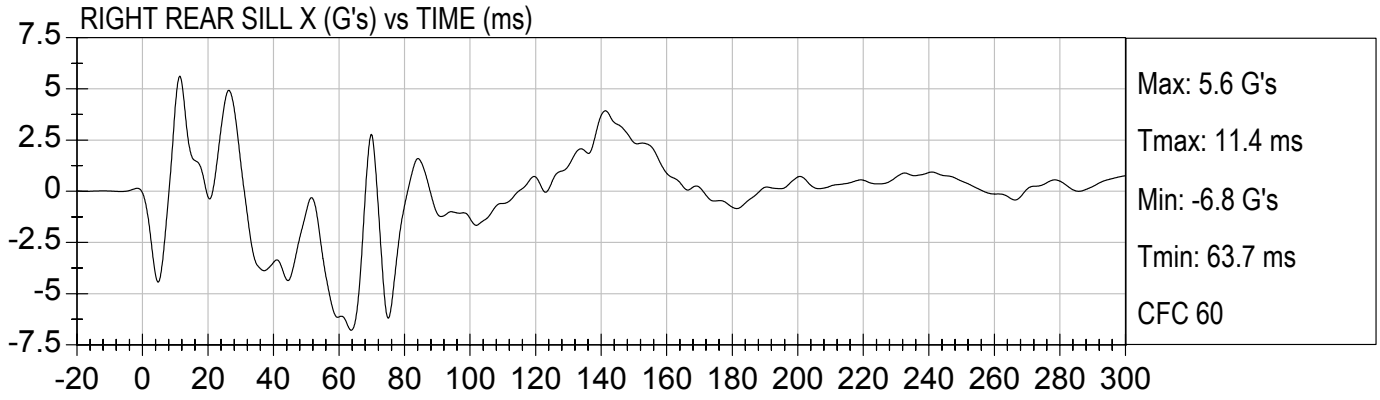


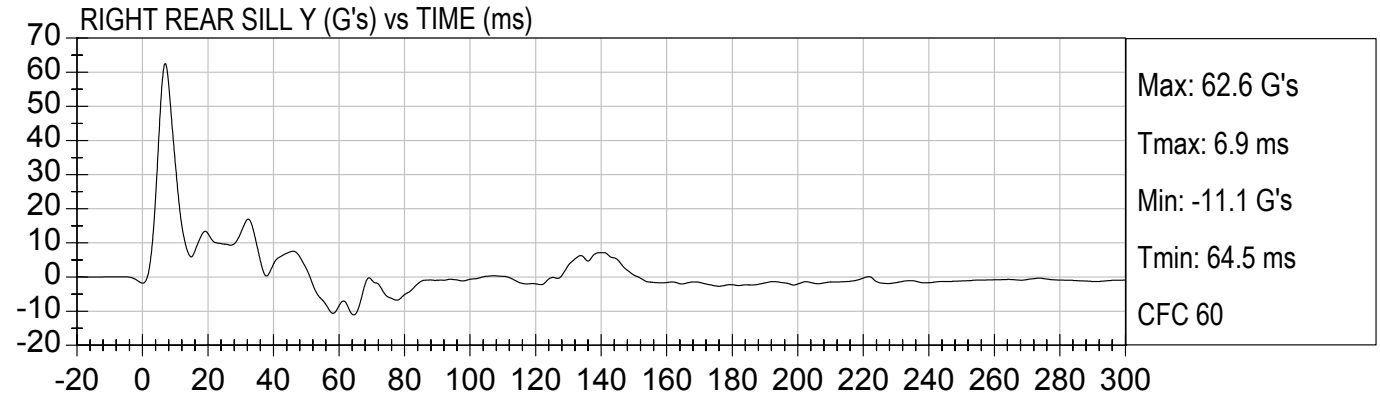


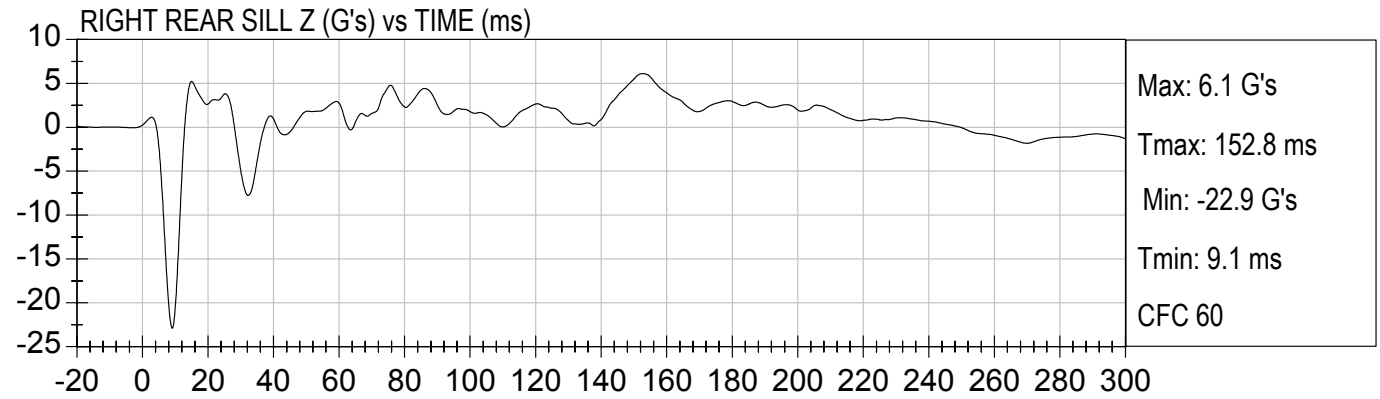

RIGHT FRONT SILL X Velocity (kph) vs TIME (ms)
1
0
-1
-2
-3
-4
-5
-6
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 0.9 kph
Tmax: 29.9 ms
Min: -6.0 kph
Tmin: 115.0 ms
CFC 180

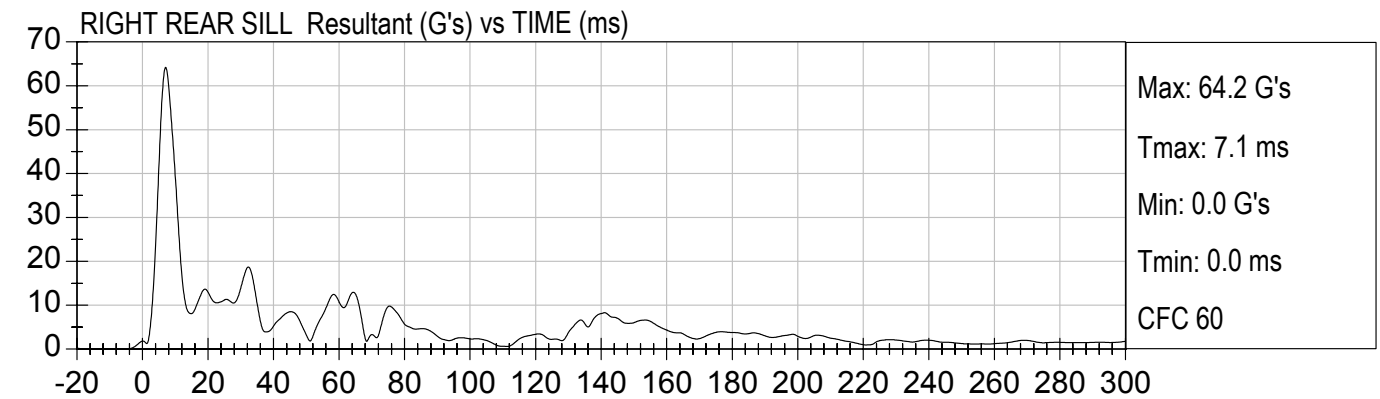

RIGHT FRONT SILL Y Velocity (kph) vs TIME (ms)
25
20
15
10
5
0
-5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 24.4 kph
Tmax: 62.0 ms
Min: -0.0 kph
Tmin: 3.1 ms
CFC 180


RIGHT FRONT SILL Z Velocity (kph) vs TIME (ms)
10
7.5
5
2.5
0
-2.5
-5
-7.5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 8.1 kph
Tmax: 267.3 ms
Min: -5.3 kph
Tmin: 32.8 ms
CFC 180


RIGHT REAR SILL X (G's) vs TIME (ms)
7.5
5
2.5
0
-2.5
-5
-7.5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 5.6 G's
Tmax: 11.4 ms
Min: -6.8 G's
Tmin: 63.7 ms
CFC 60

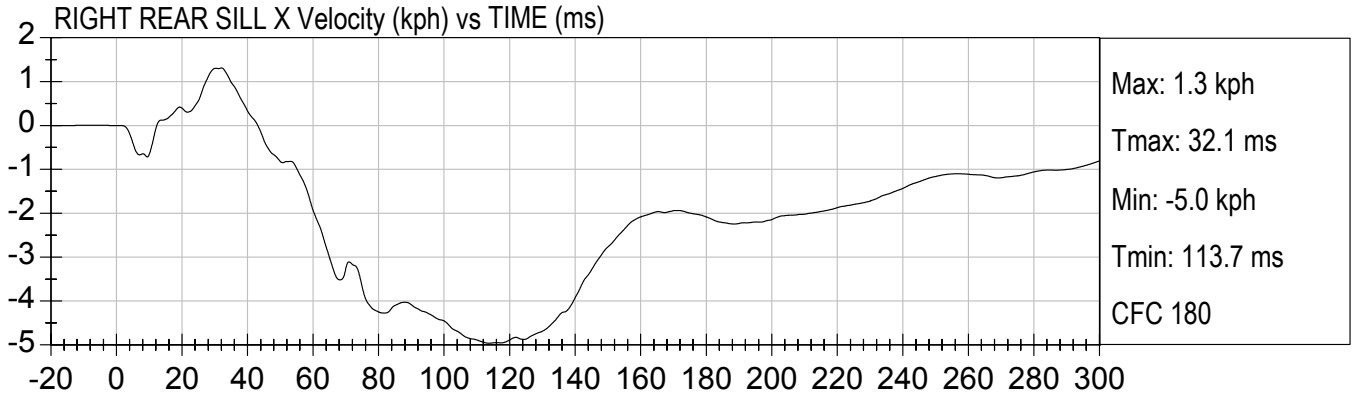

RIGHT REAR SILL Y (G's) vs TIME (ms)
70
60
50
40
30
20
10
0
-10
-20
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 62.6 G's
Tmax: 6.9 ms
Min: -11.1 G's
Tmin: 64.5 ms
CFC 60

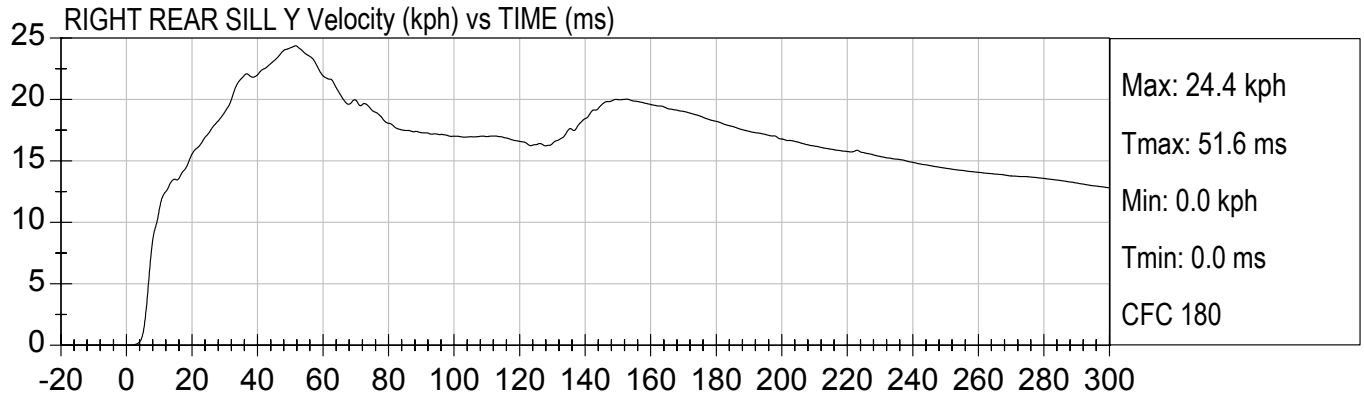

RIGHT REAR SILL Z (G's) vs TIME (ms)
10
5
0
-5
-10
-15
-20
-25
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 6.1 G's
Tmax: 152.8 ms
Min: -22.9 G's
Tmin: 9.1 ms
CFC 60

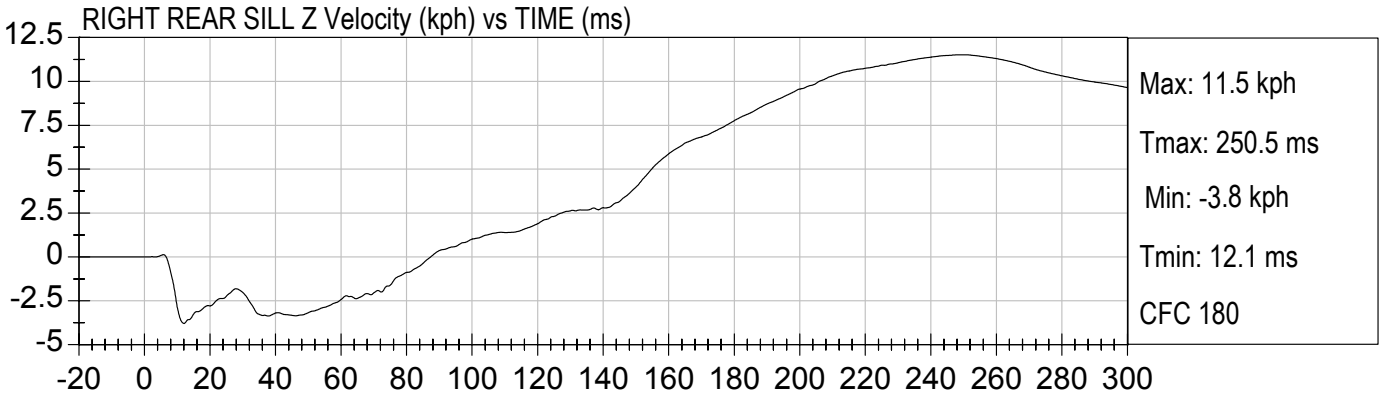

RIGHT REAR SILL Resultant (G's) vs TIME (ms)
70
60
50
40
30
20
10
0
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 64.2 G's
Tmax: 7.1 ms
Min: 0.0 G's
Tmin: 0.0 ms
CFC 60

NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)

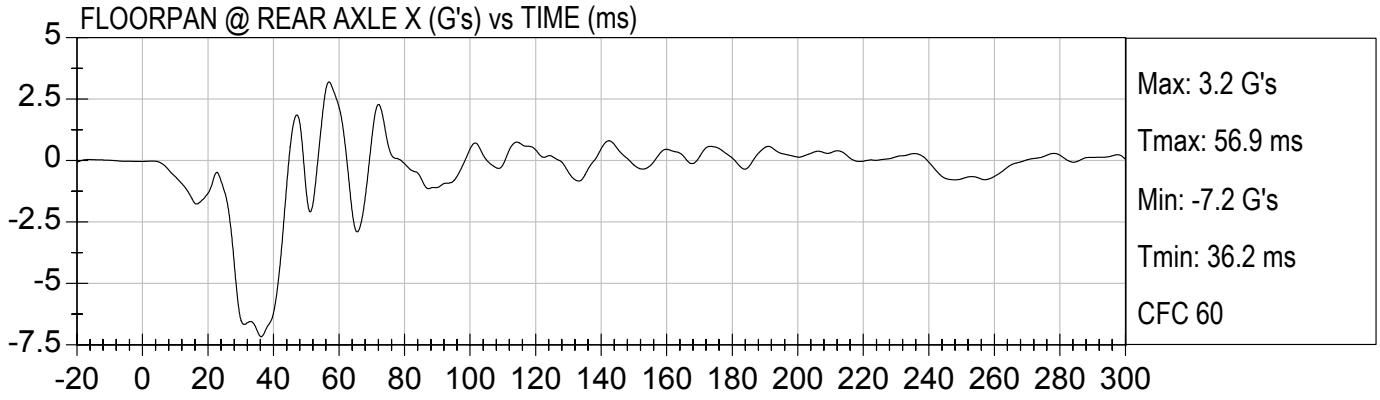


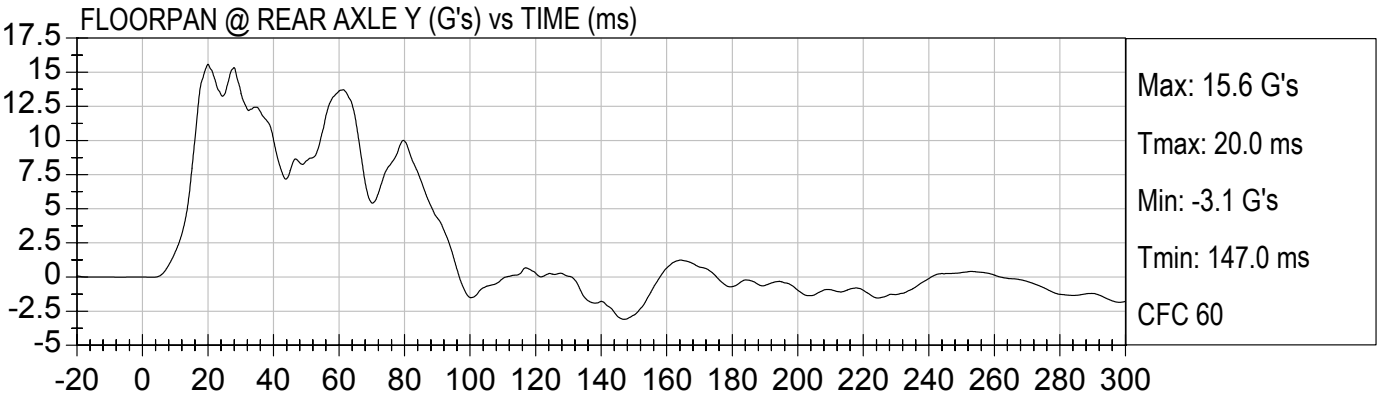


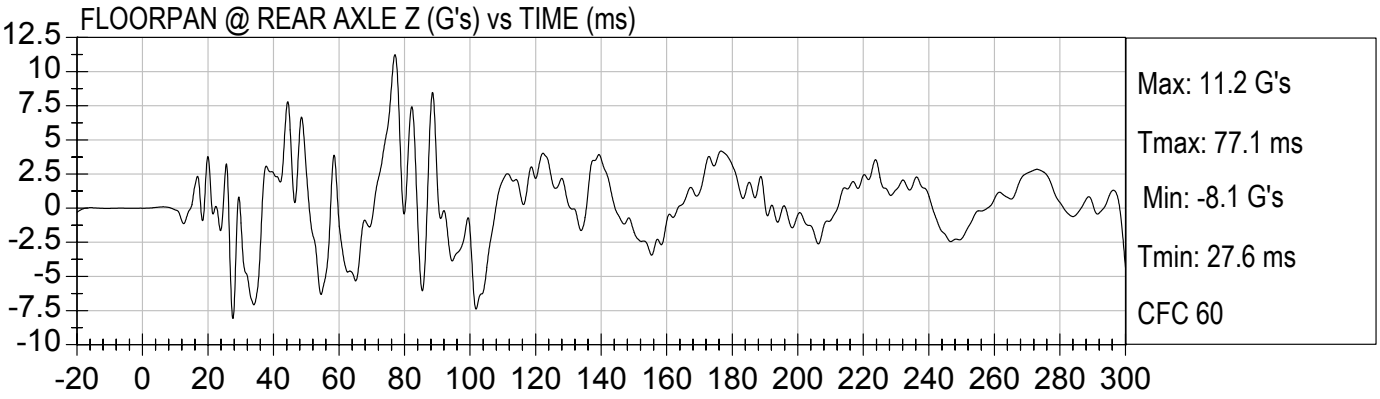


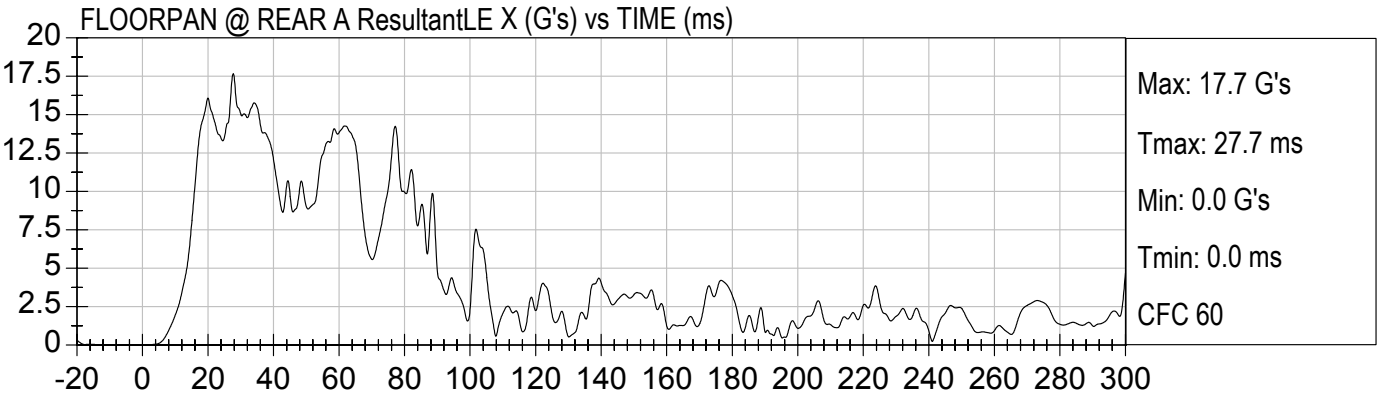
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

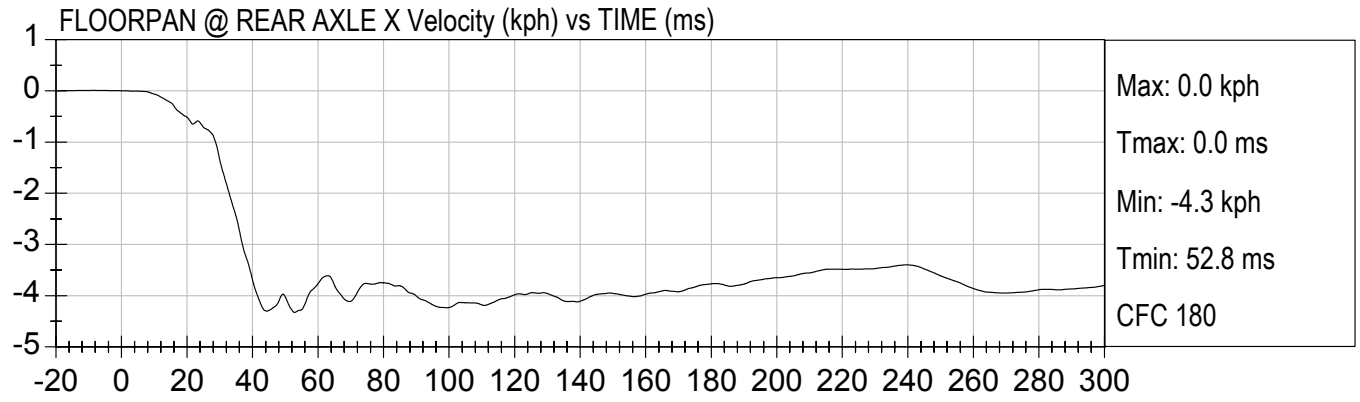
Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)

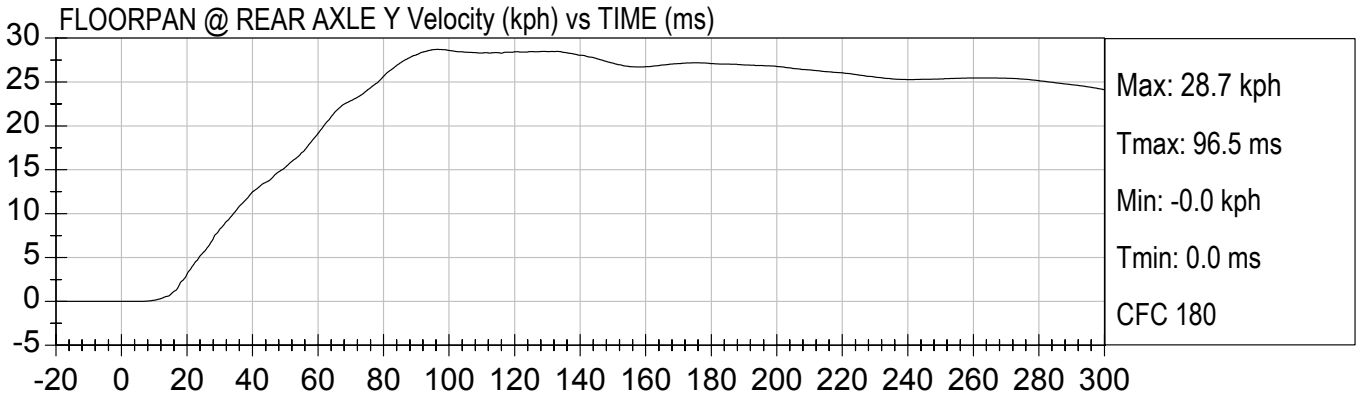


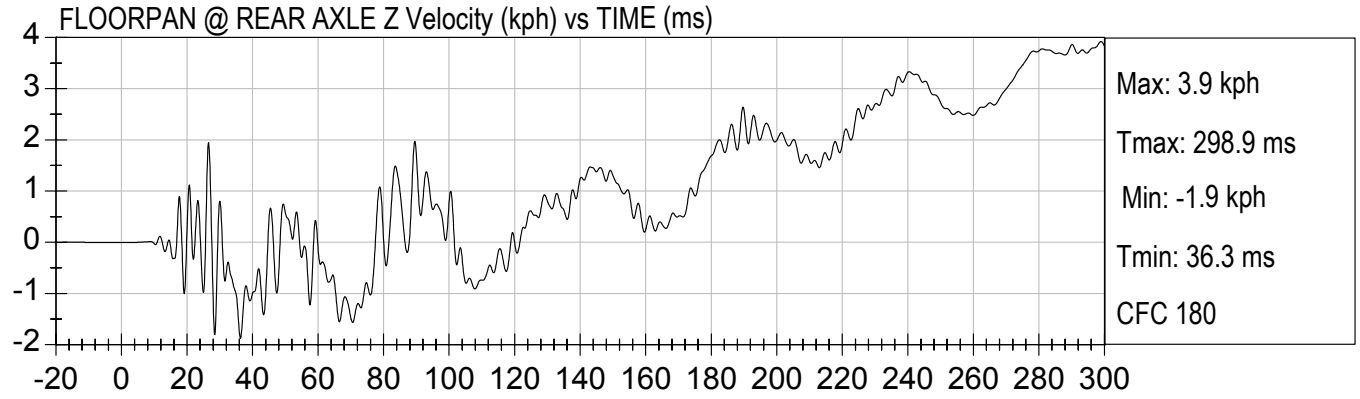






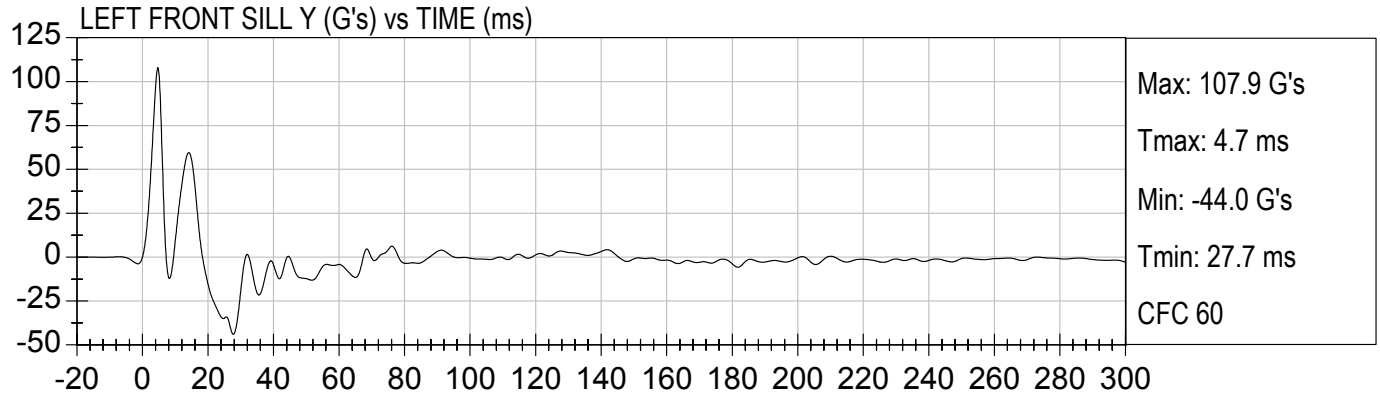

FLOORPAN @ REAR AXLE X Velocity (kph) vs TIME (ms)
1
0
-1
-2
-3
-4
-5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 0.0 kph
Tmax: 0.0 ms
Min: -4.3 kph
Tmin: 52.8 ms
CFC 180

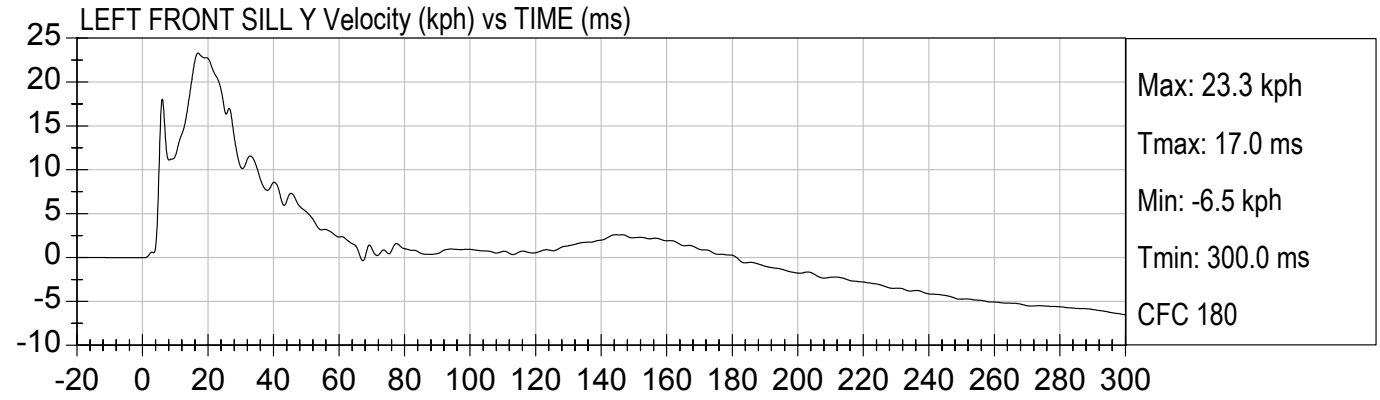

FLOORPAN @ REAR AXLE Y Velocity (kph) vs TIME (ms)
30
25
20
15
10
5
0
-5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 28.7 kph
Tmax: 96.5 ms
Min: -0.0 kph
Tmin: 0.0 ms
CFC 180

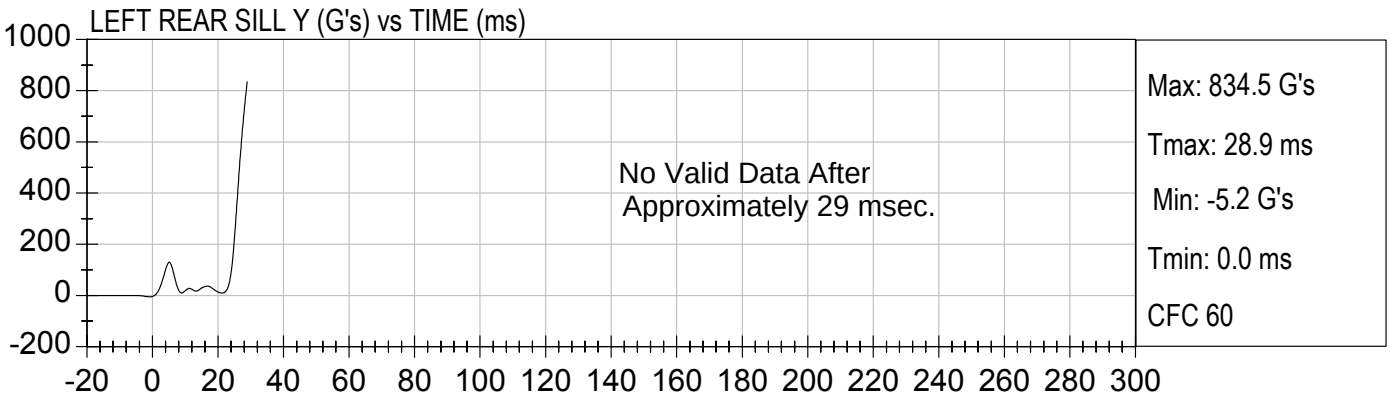

FLOORPAN @ REAR AXLE Z Velocity (kph) vs TIME (ms)
4
3
2
1
0
-1
-2
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 3.9 kph
Tmax: 298.9 ms
Min: -1.9 kph
Tmin: 36.3 ms
CFC 180

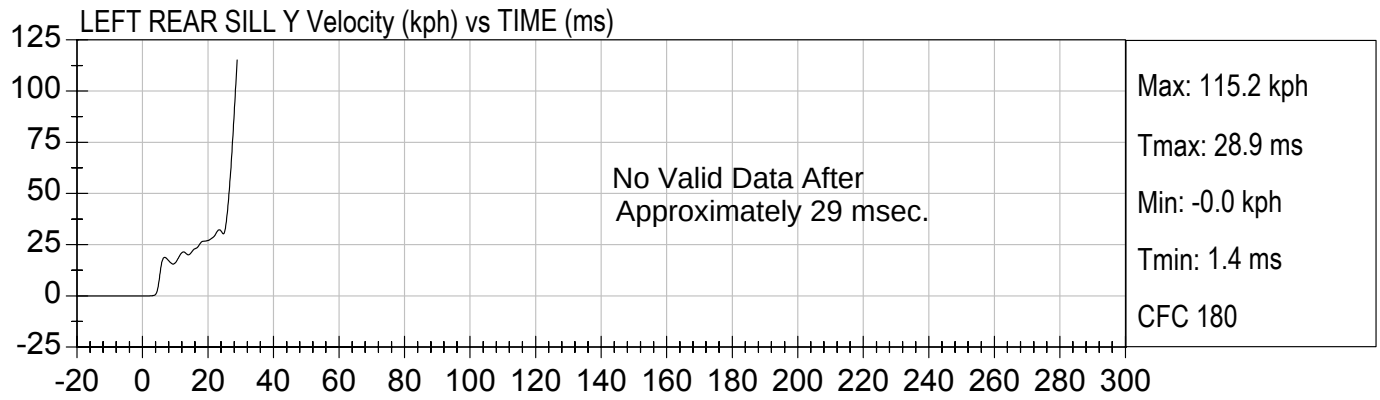
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



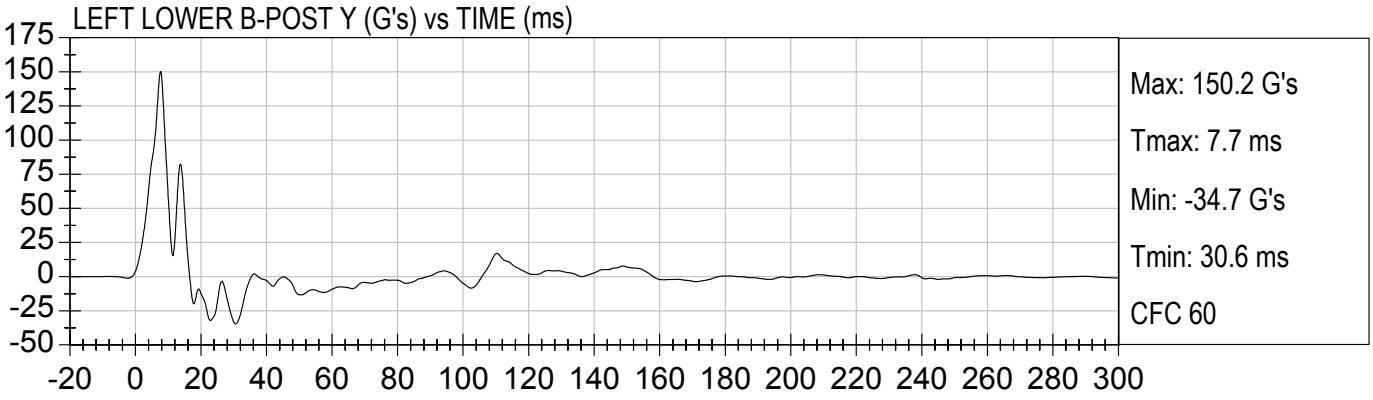


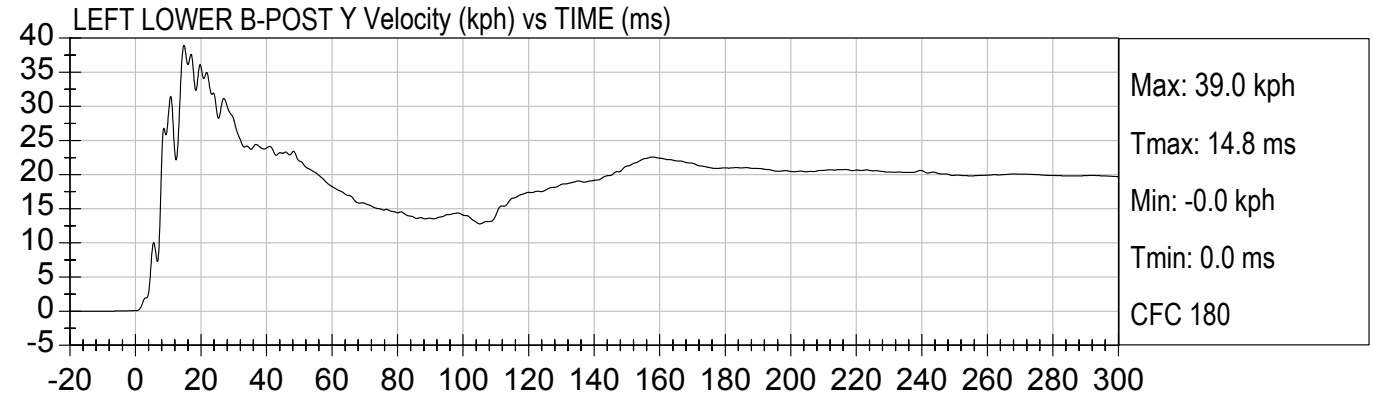


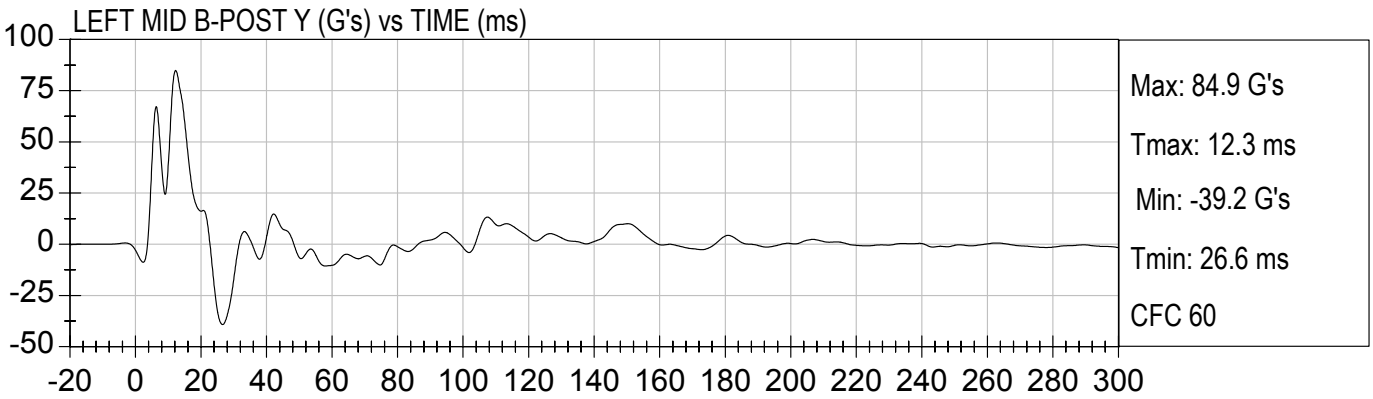


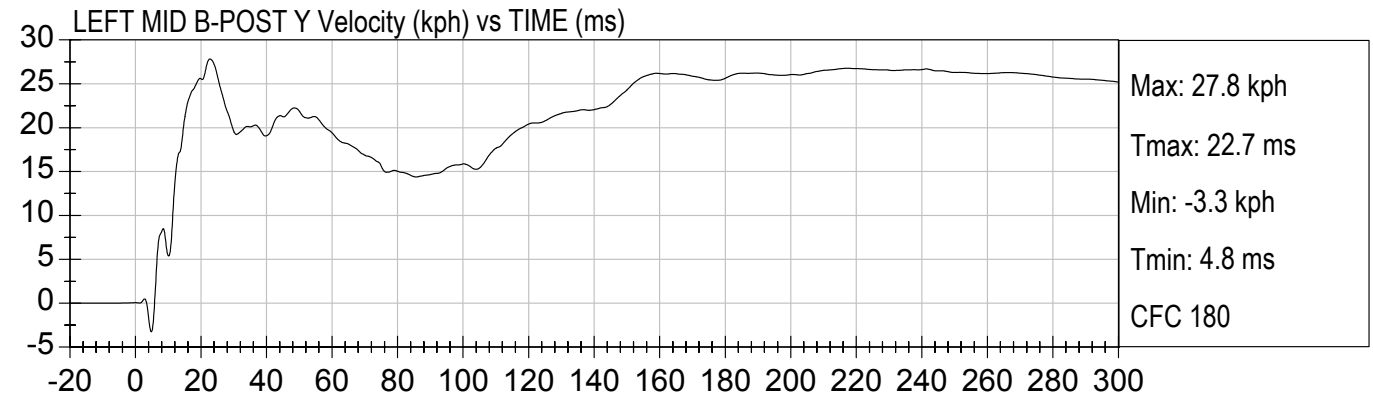
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



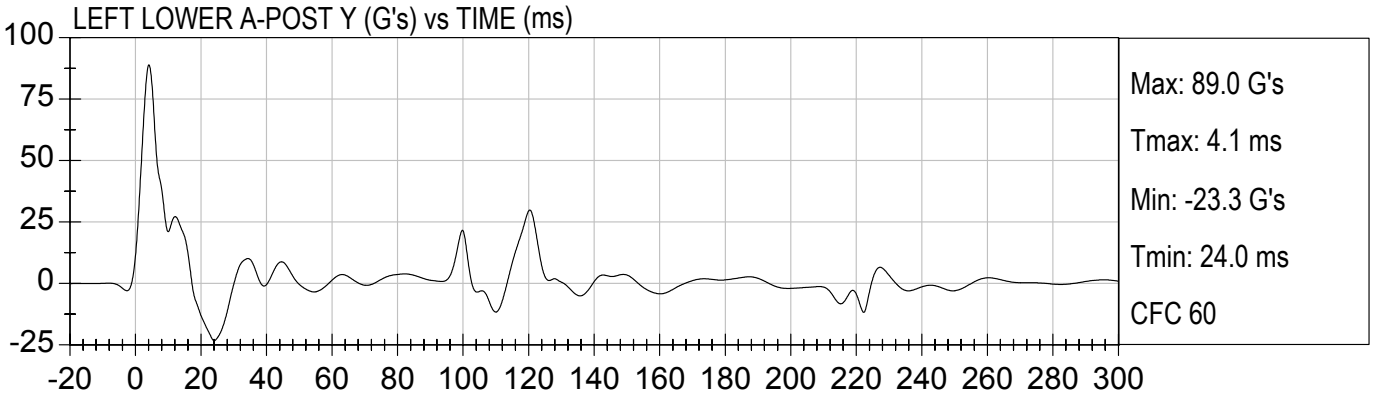


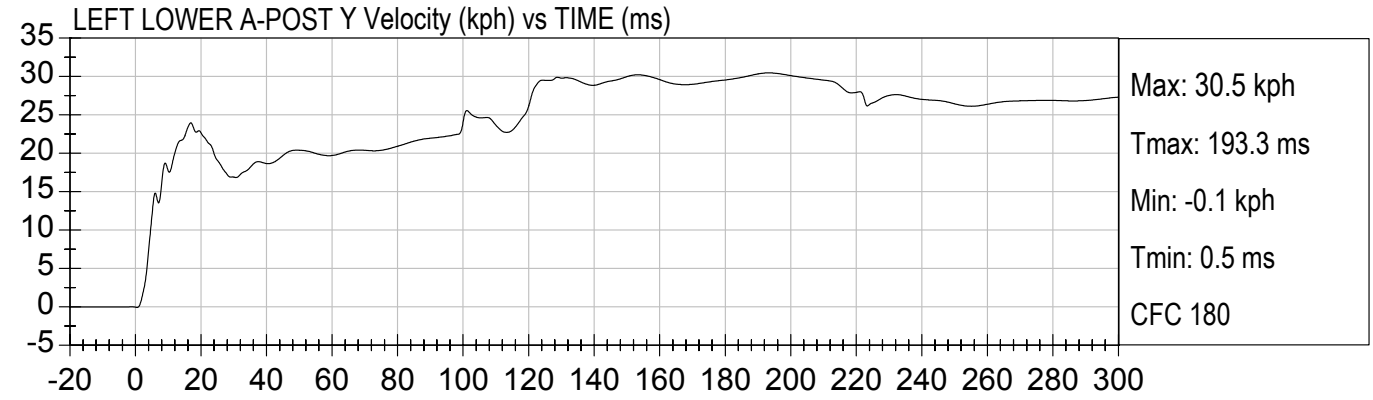


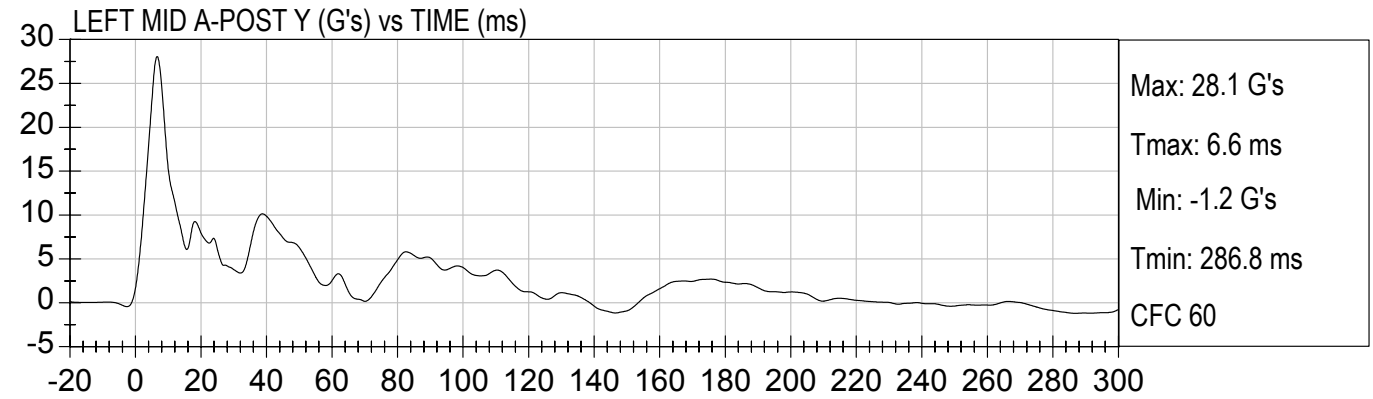


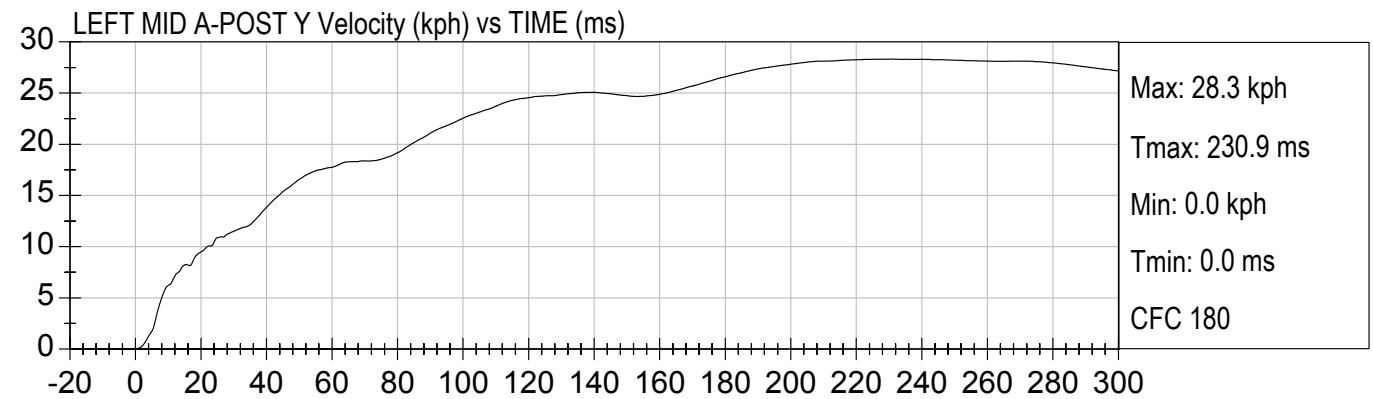
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



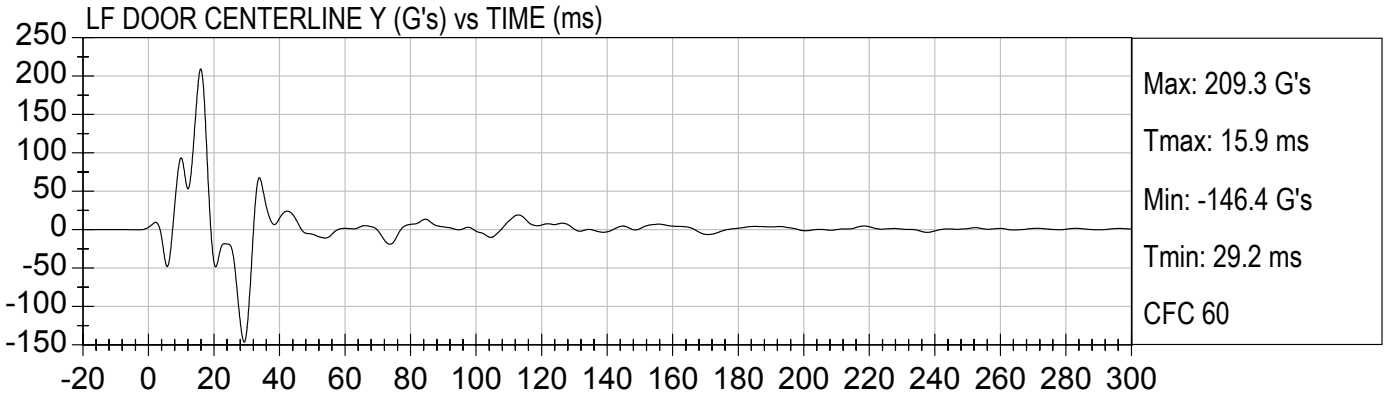


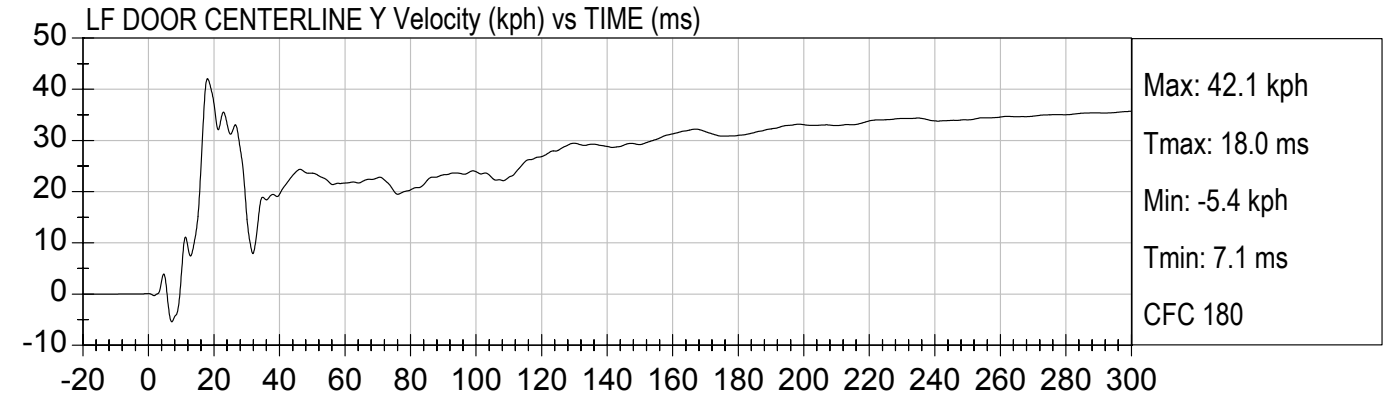


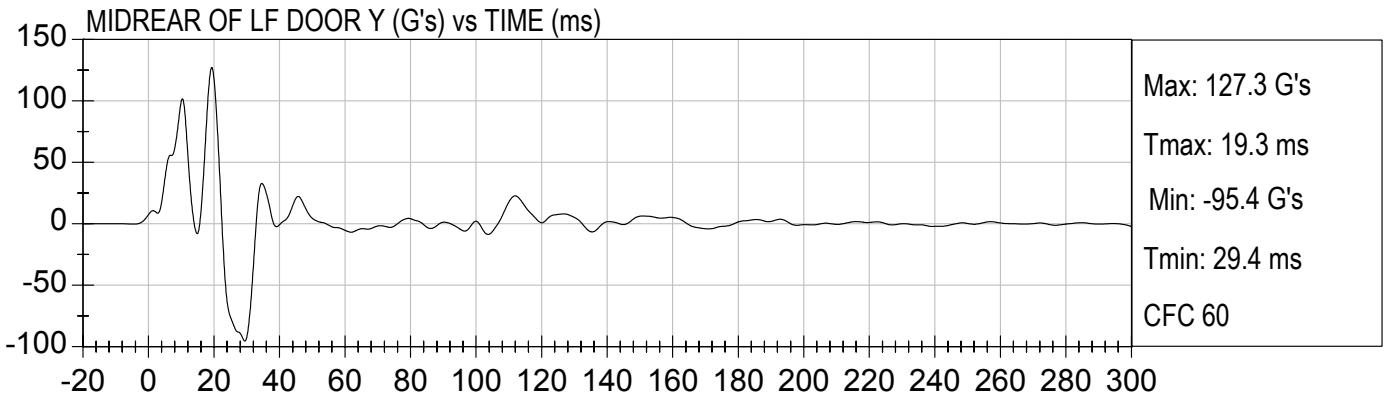


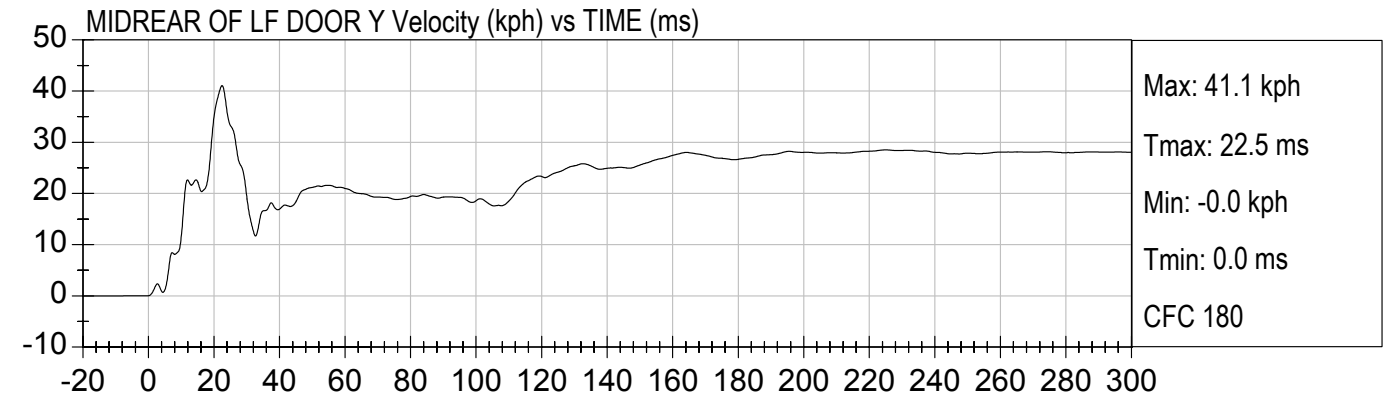
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



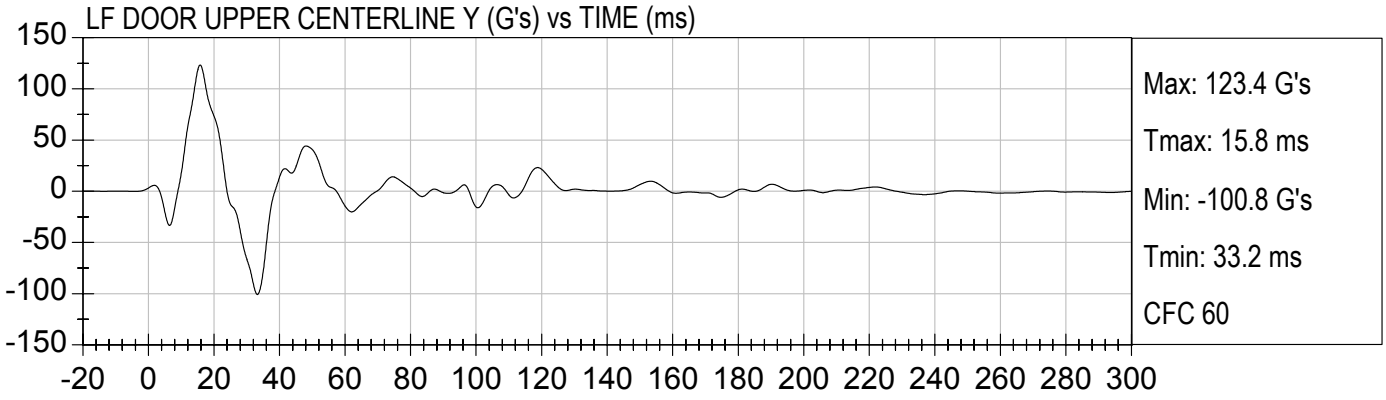


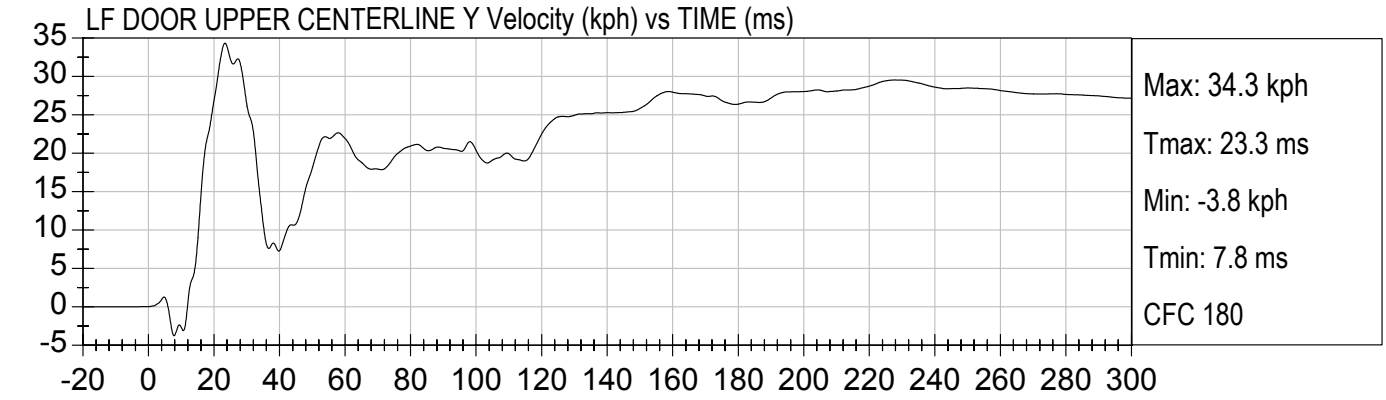


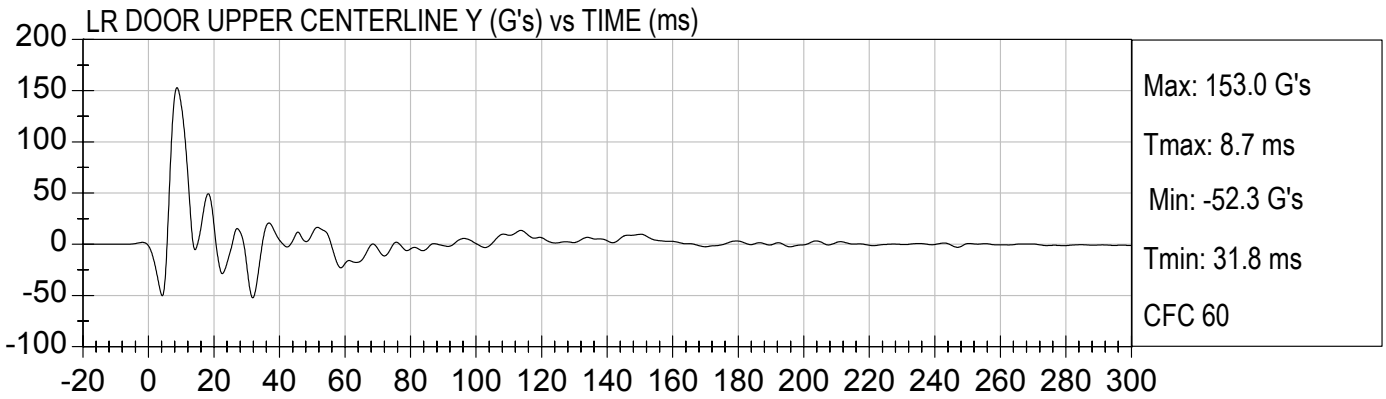


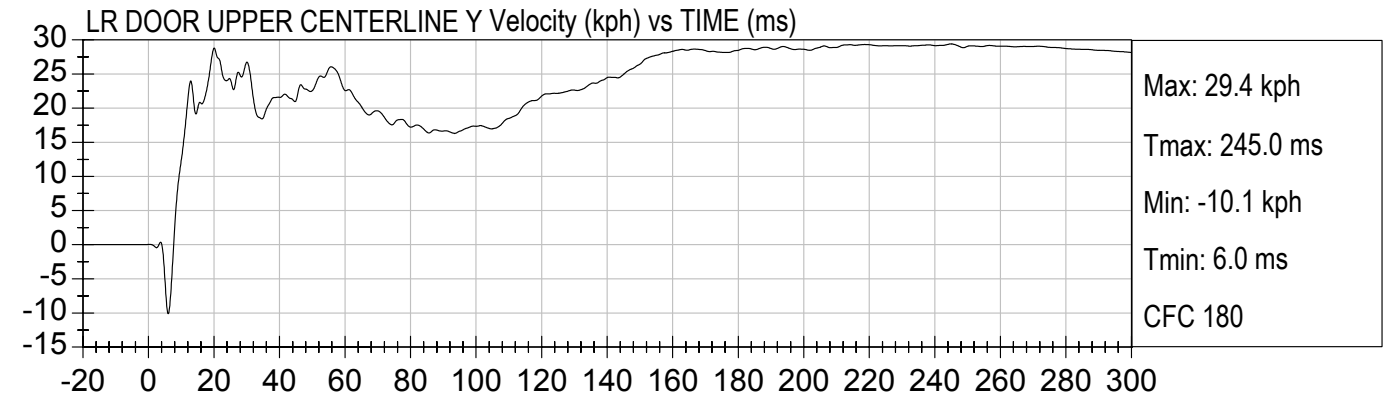
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



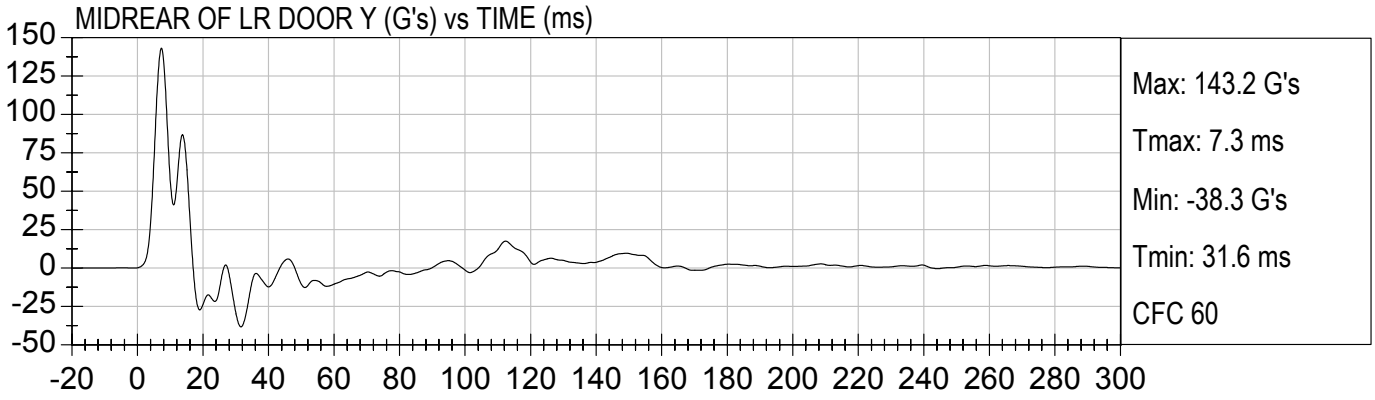


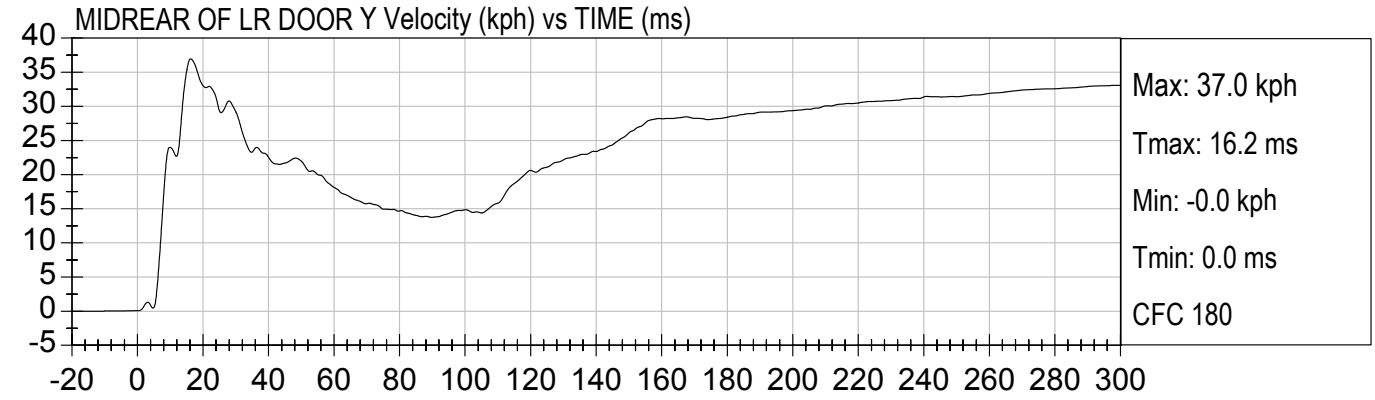


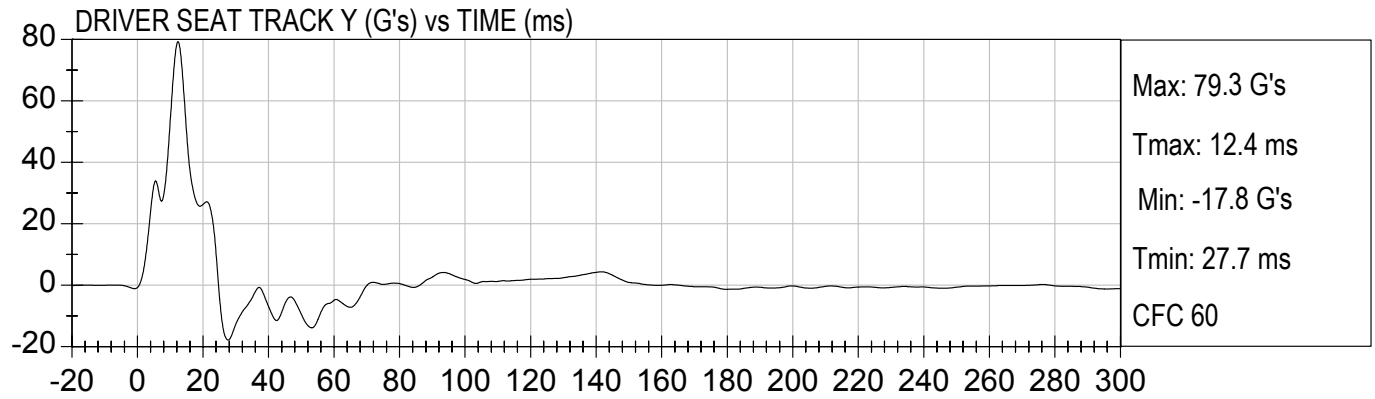


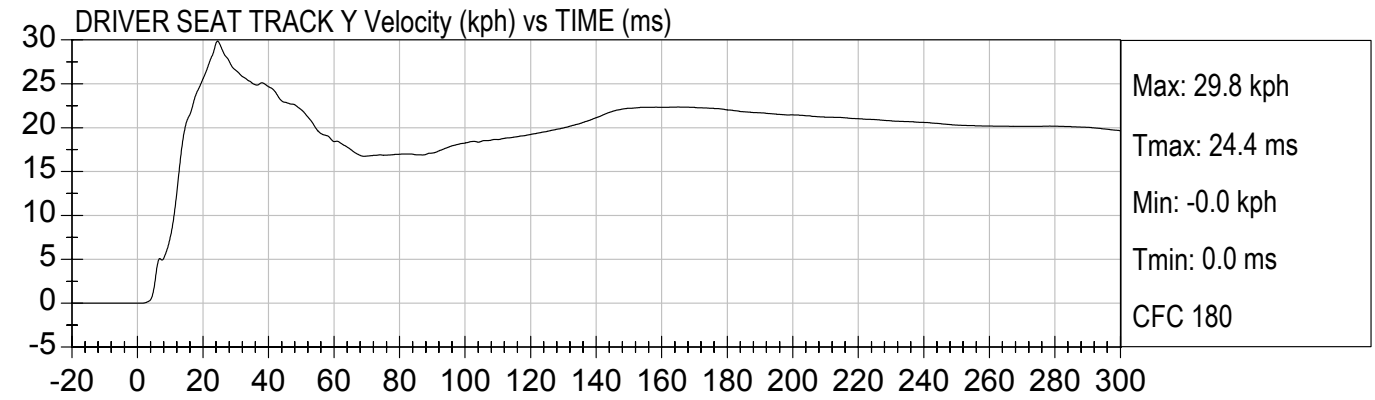
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



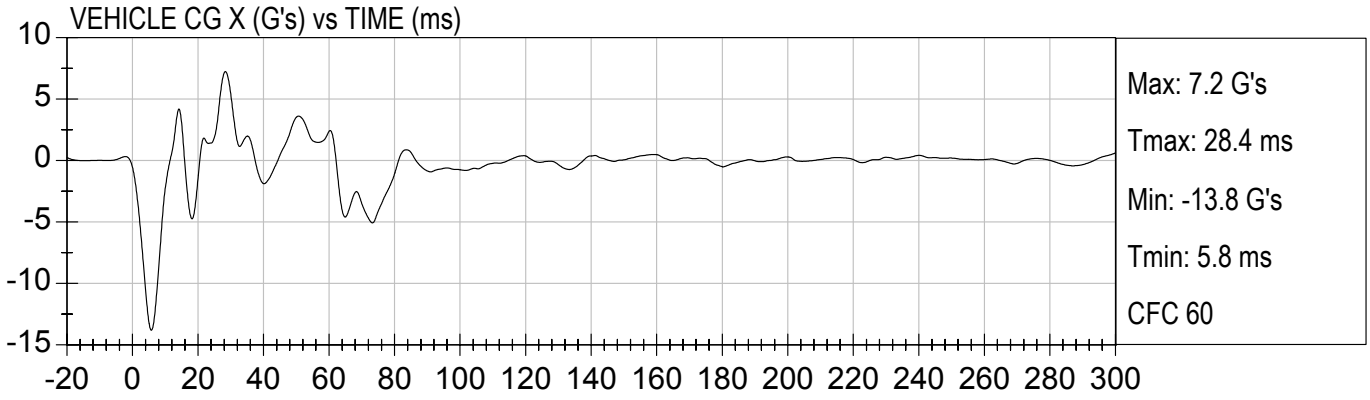


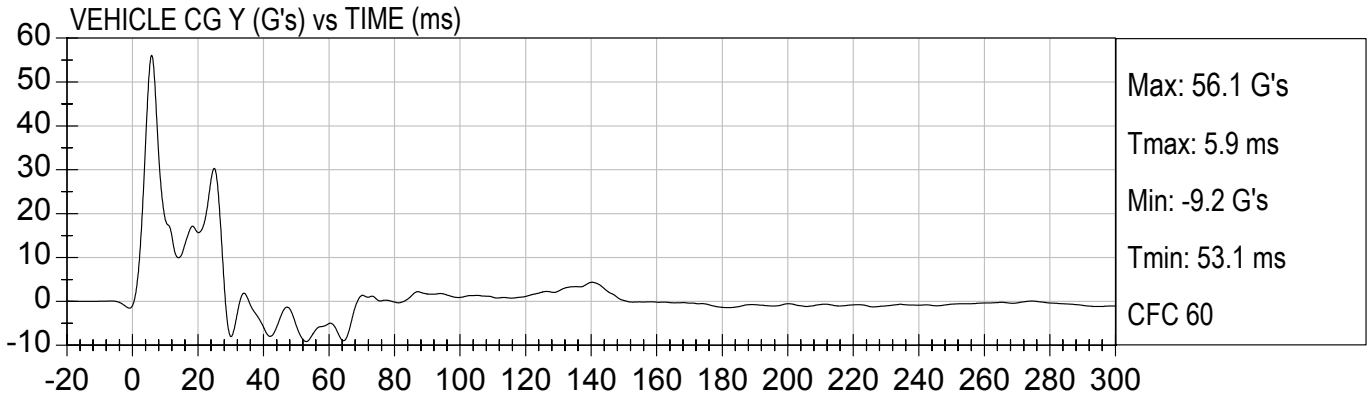


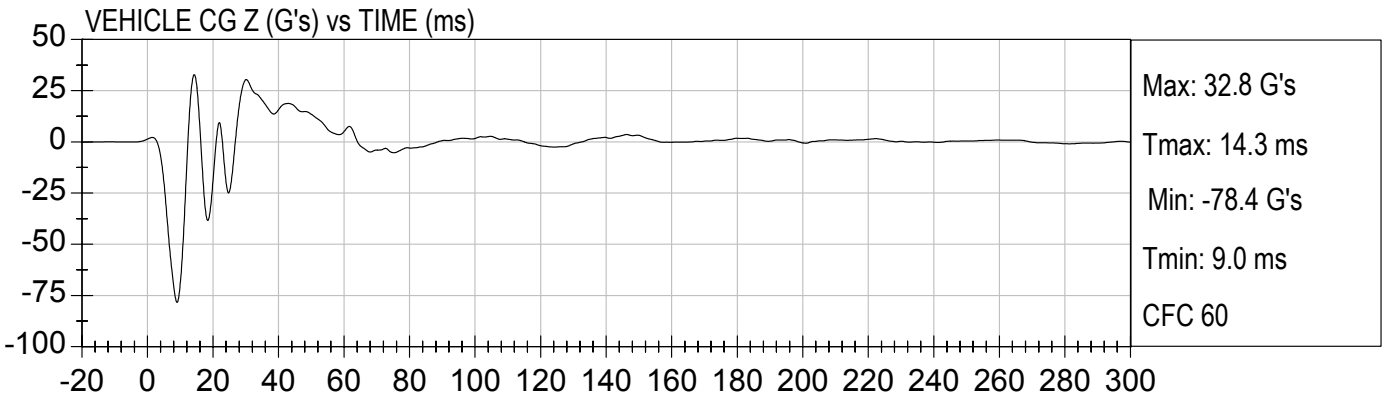


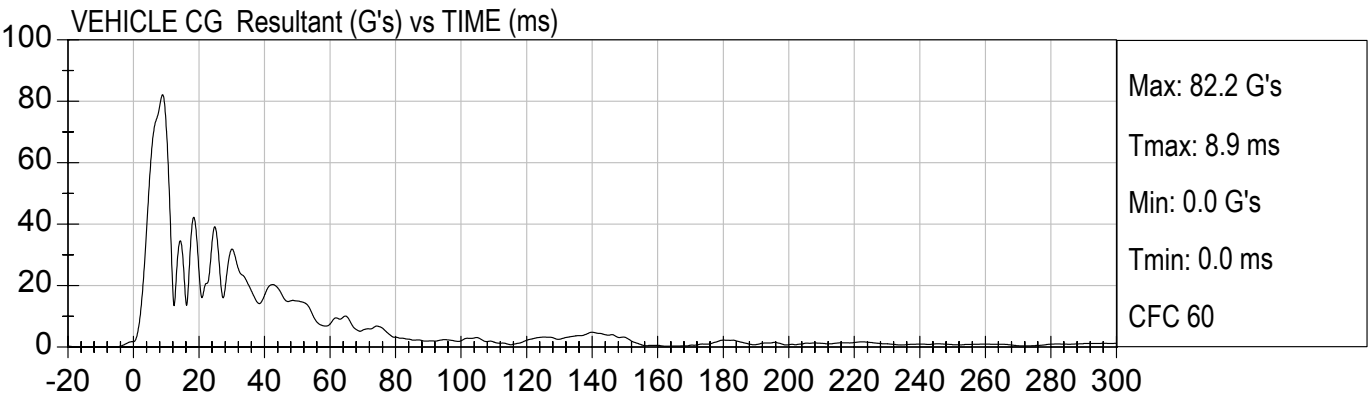
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



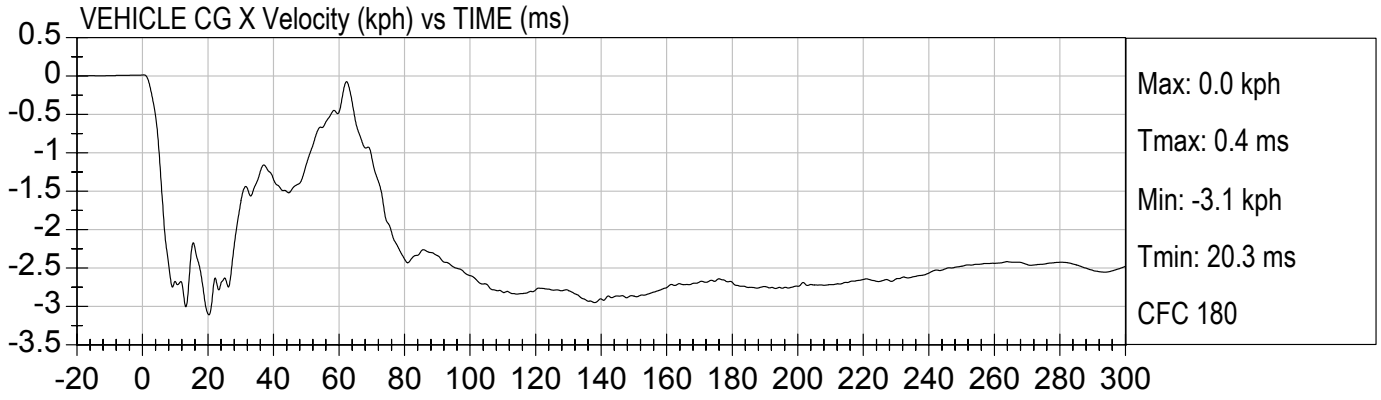


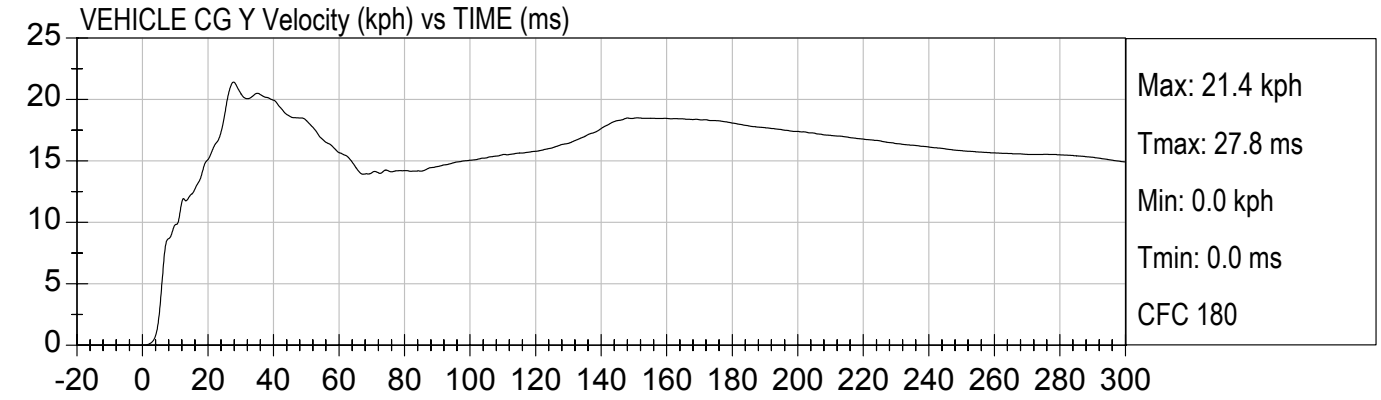


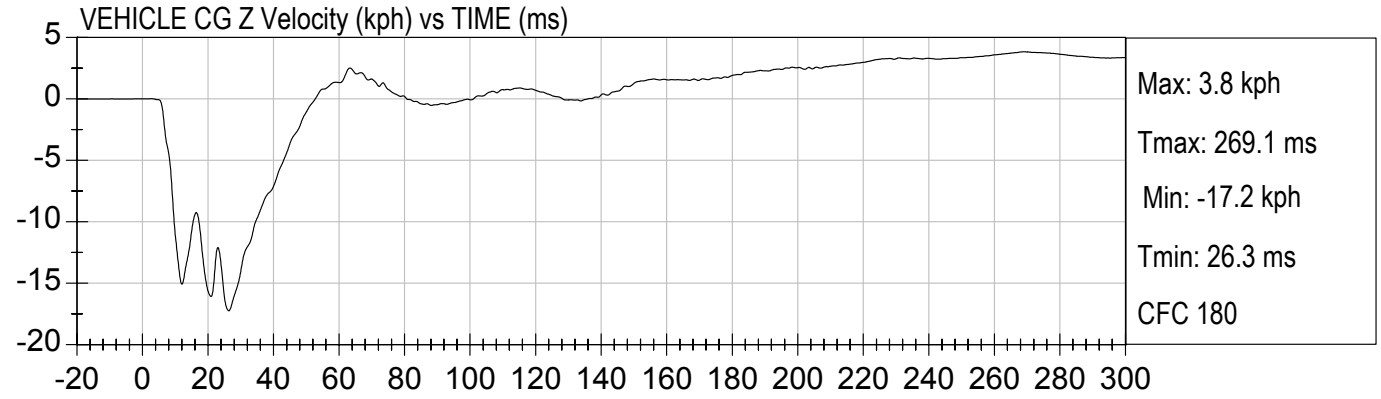


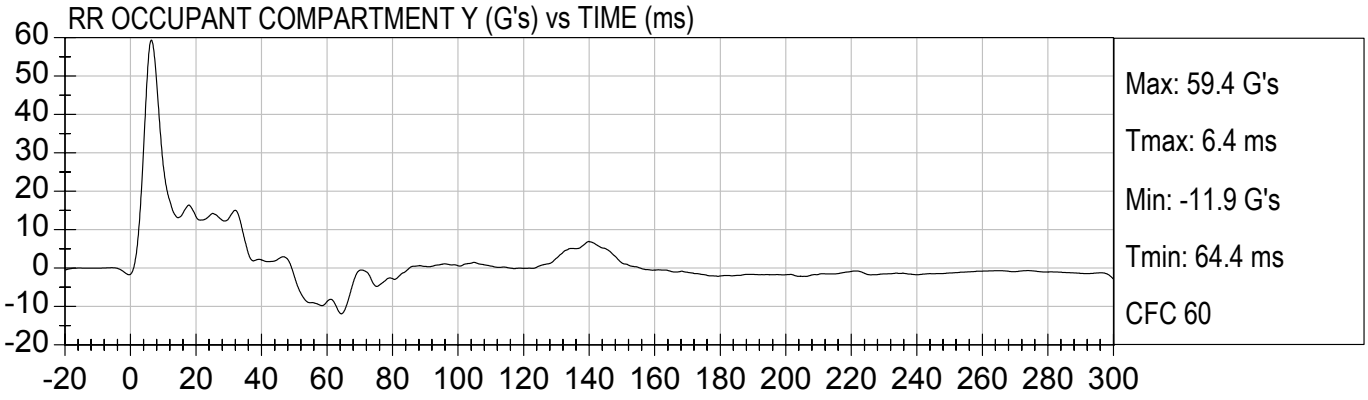
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

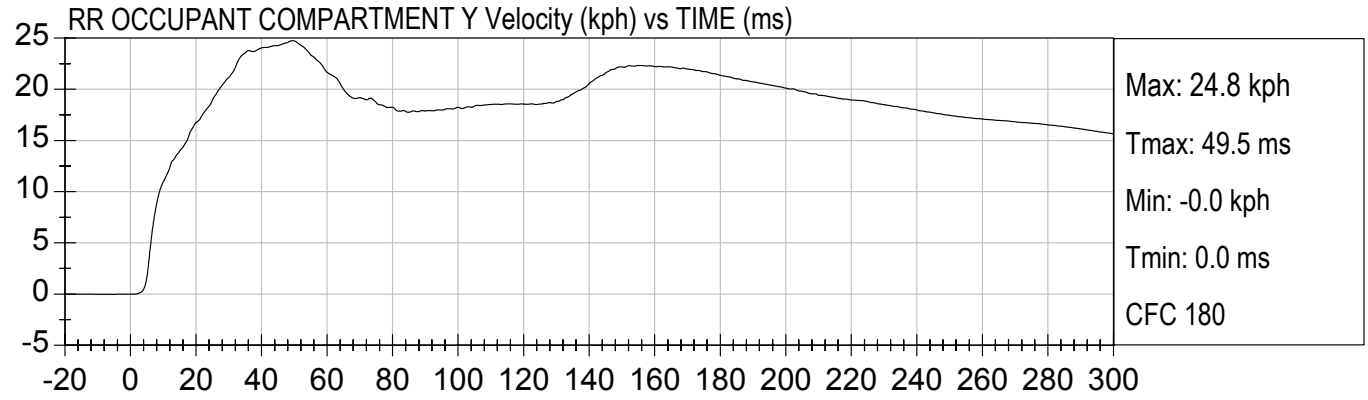
Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)





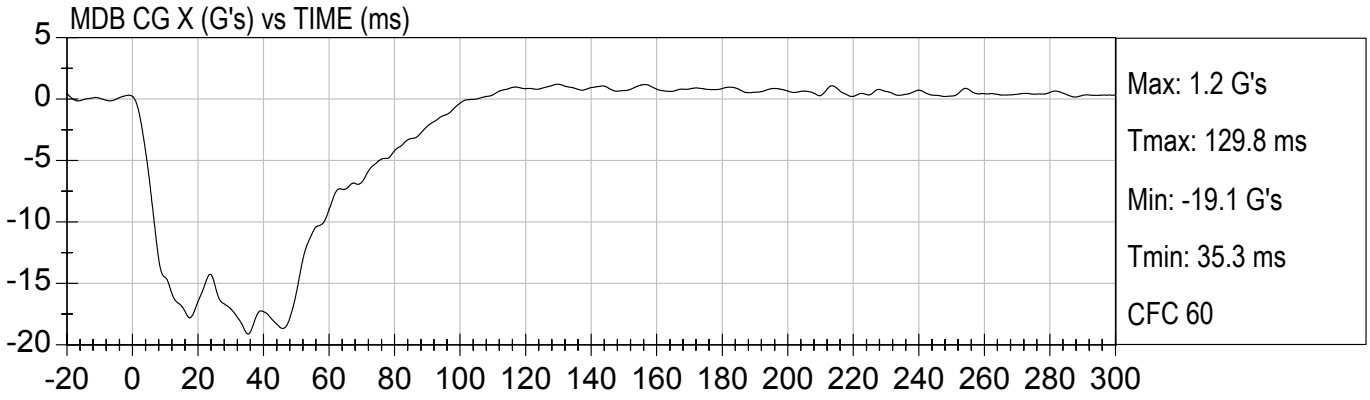


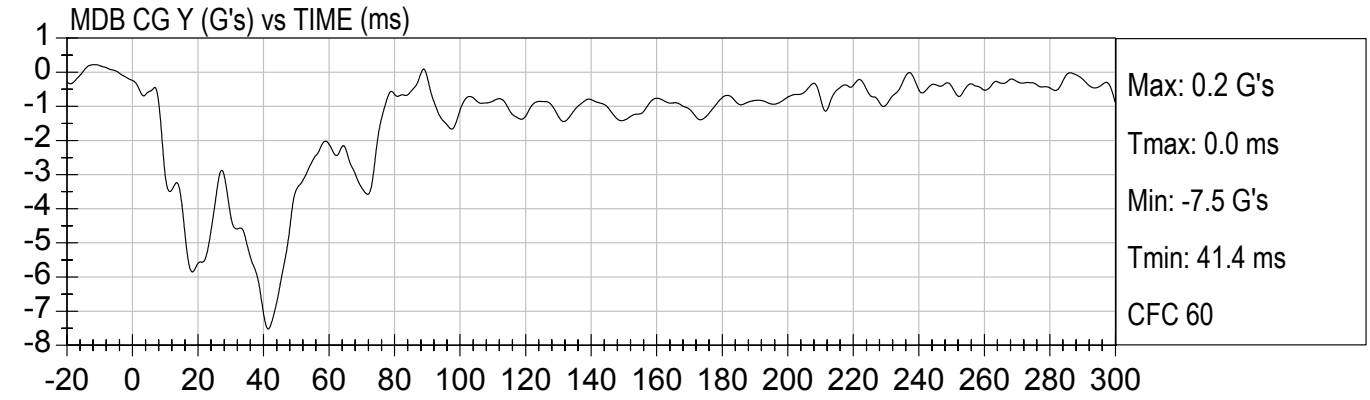

RR OCCUPANT COMPARTMENT Y (G's) vs TIME (ms)
60
50
40
30
20
10
0
-10
-20
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 59.4 G's
Tmax: 6.4 ms
Min: -11.9 G's
Tmin: 64.4 ms
CFC 60

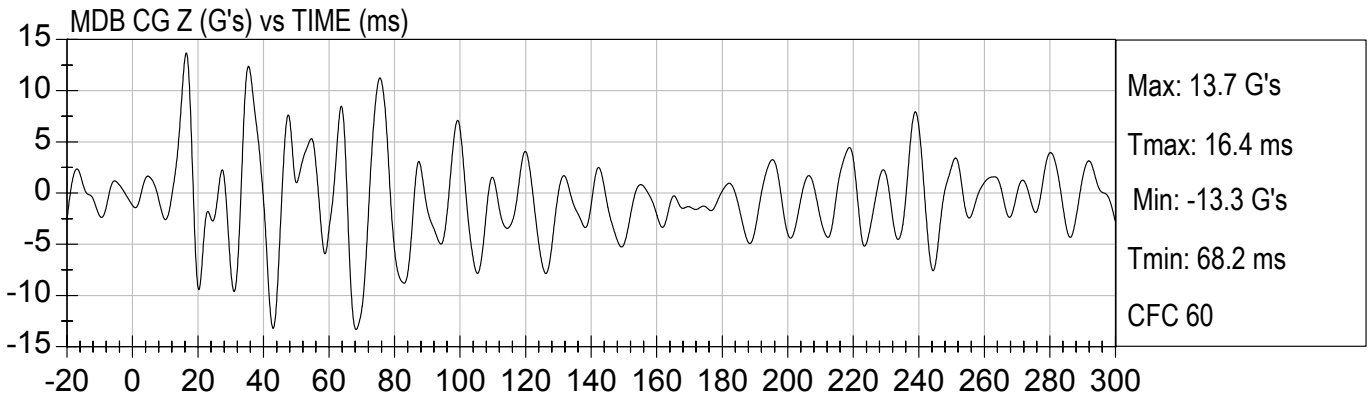

RR OCCUPANT COMPARTMENT Y Velocity (kph) vs TIME (ms)
25
20
15
10
5
0
-5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 24.8 kph
Tmax: 49.5 ms
Min: -0.0 kph
Tmin: 0.0 ms
CFC 180

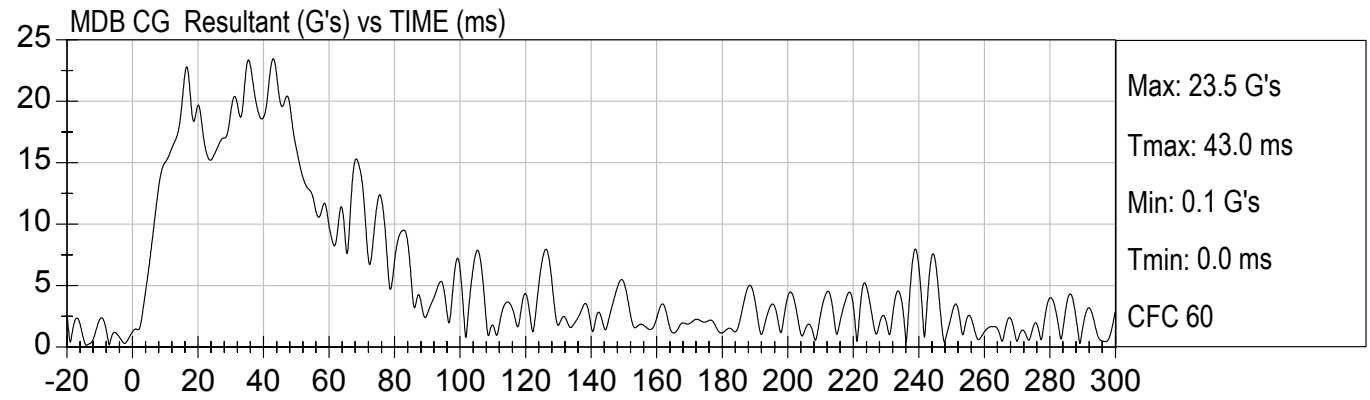
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

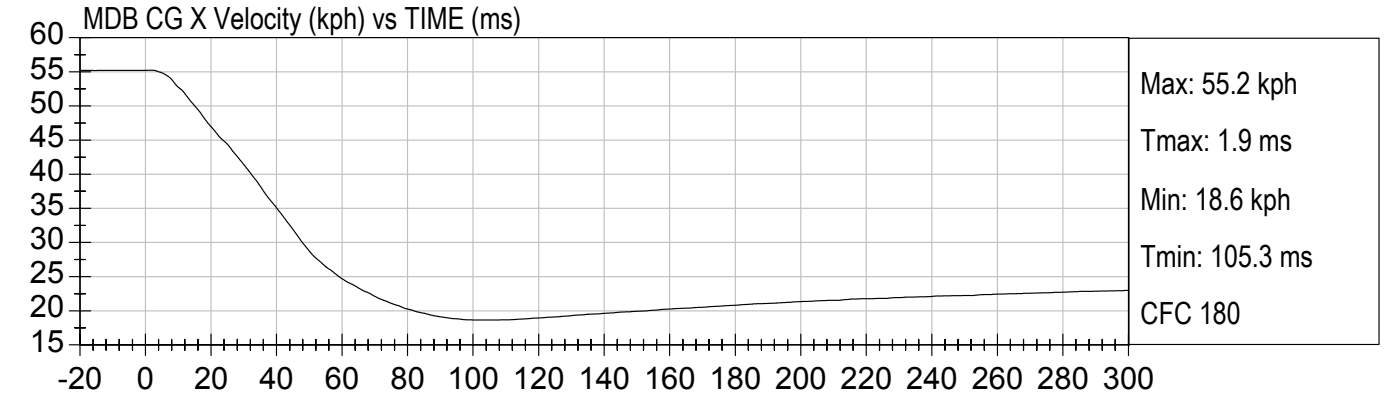
Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)

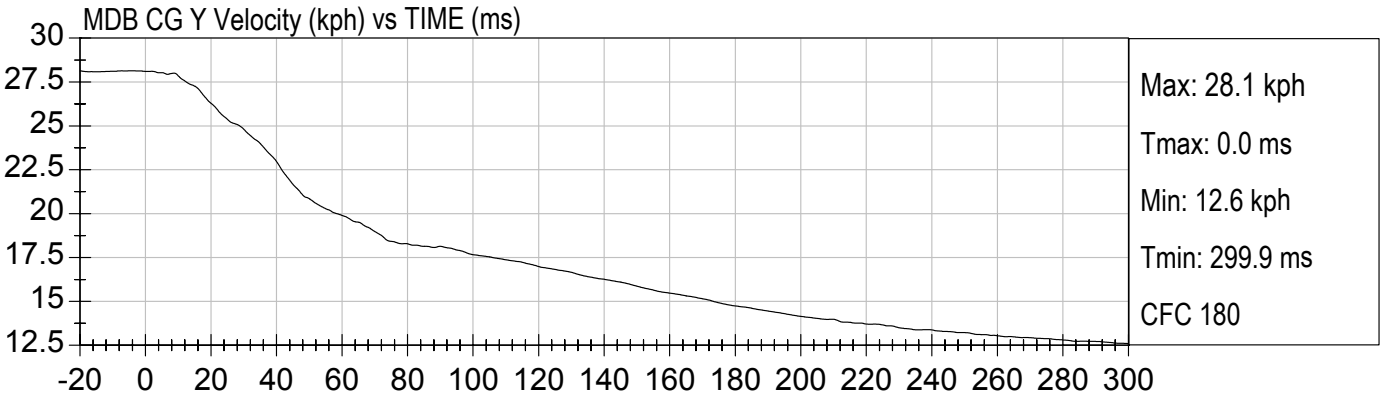


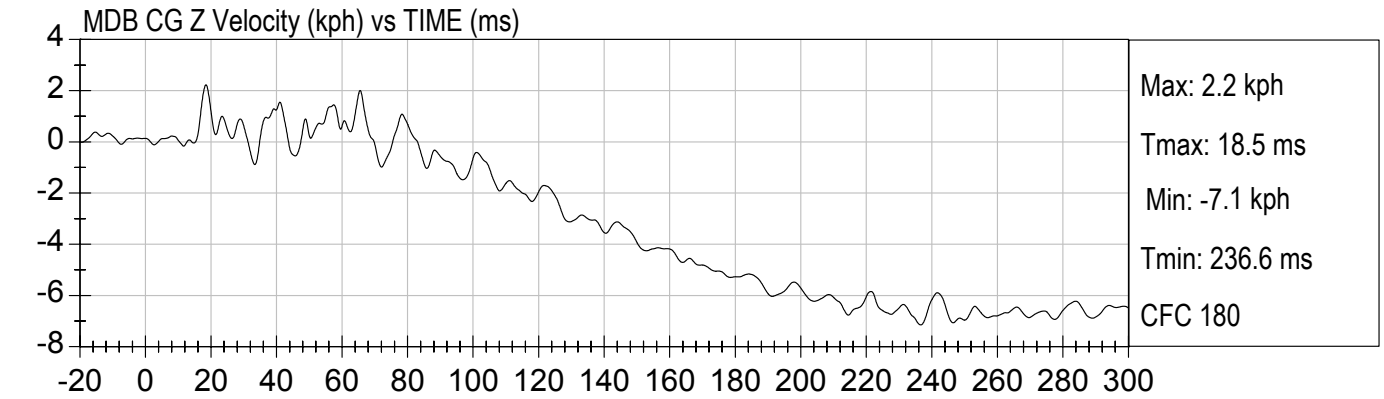






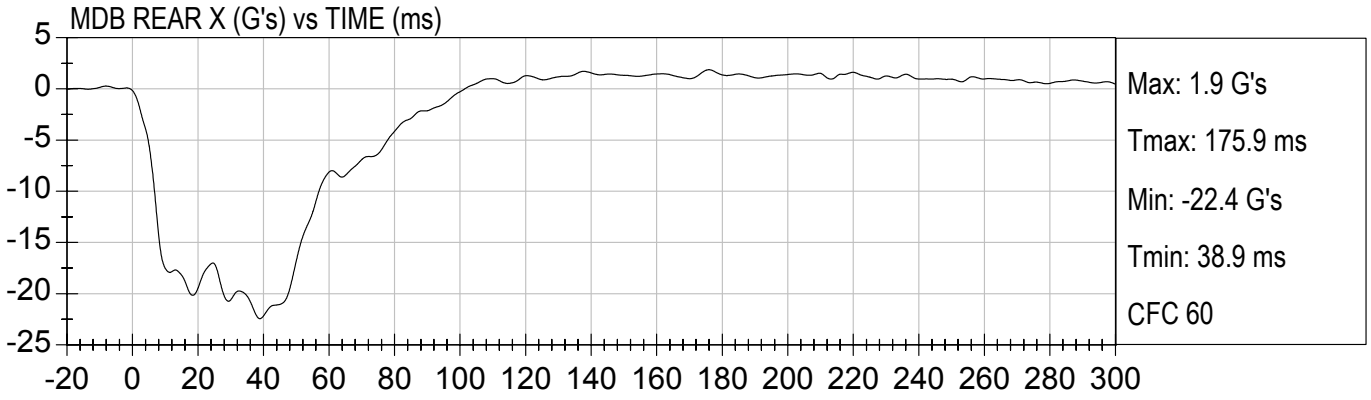

MDB CG X Velocity (kph) vs TIME (ms)
60
55
50
45
40
35
30
25
20
15
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 55.2 kph
Tmax: 1.9 ms
Min: 18.6 kph
Tmin: 105.3 ms
CFC 180

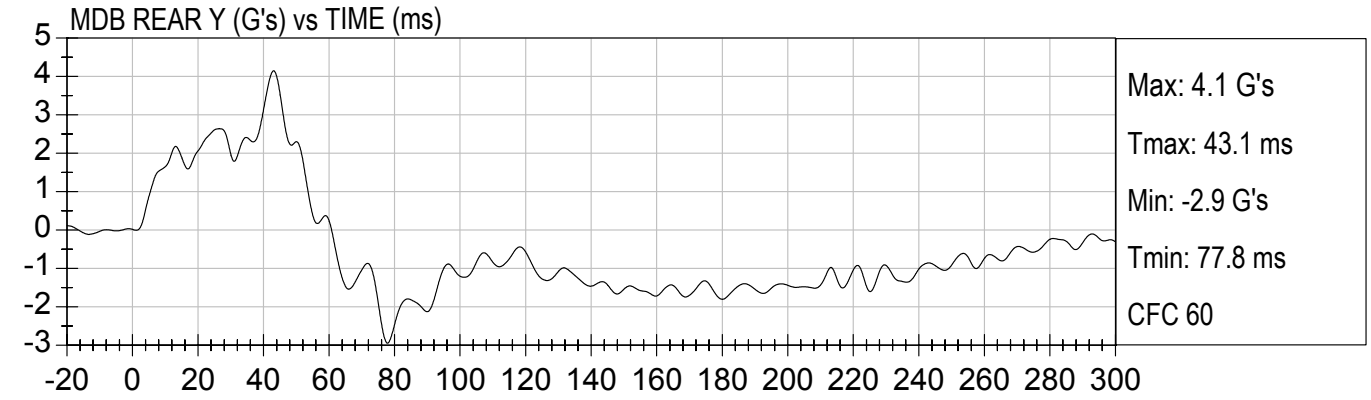

MDB CG Y Velocity (kph) vs TIME (ms)
30
27.5
25
22.5
20
17.5
15
12.5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 28.1 kph
Tmax: 0.0 ms
Min: 12.6 kph
Tmin: 299.9 ms
CFC 180

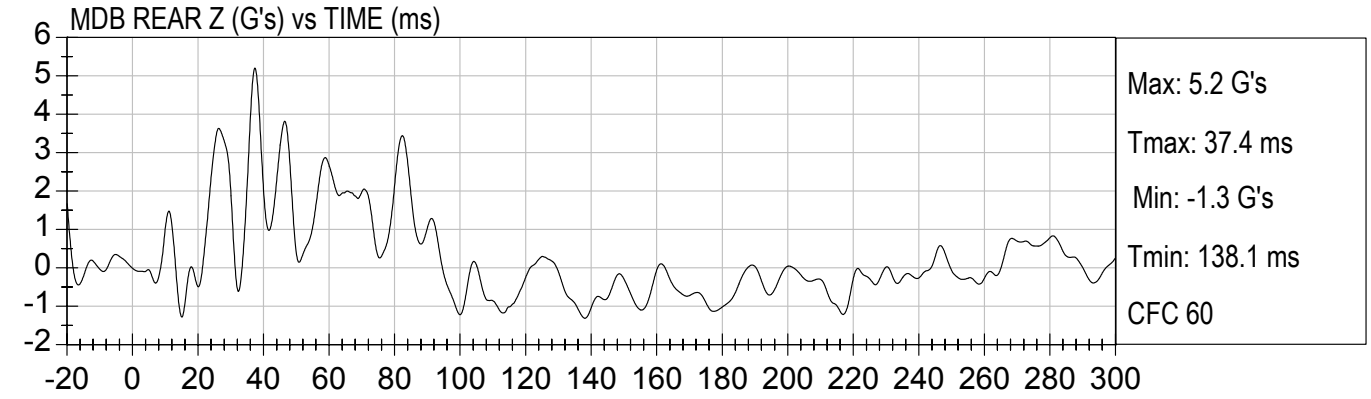

MDB CG Z Velocity (kph) vs TIME (ms)
4
2
0
-2
-4
-6
-8
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 2.2 kph
Tmax: 18.5 ms
Min: -7.1 kph
Tmin: 236.6 ms
CFC 180

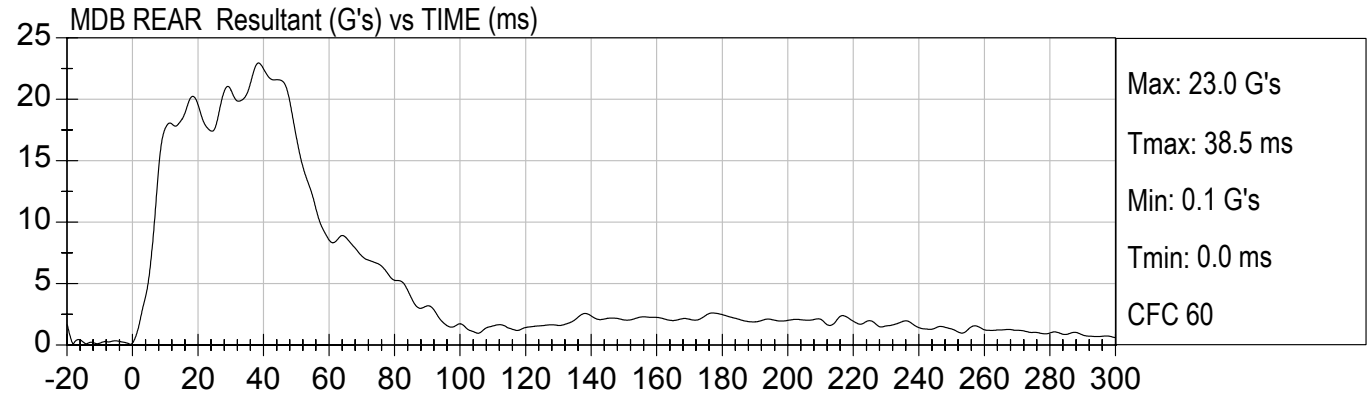
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

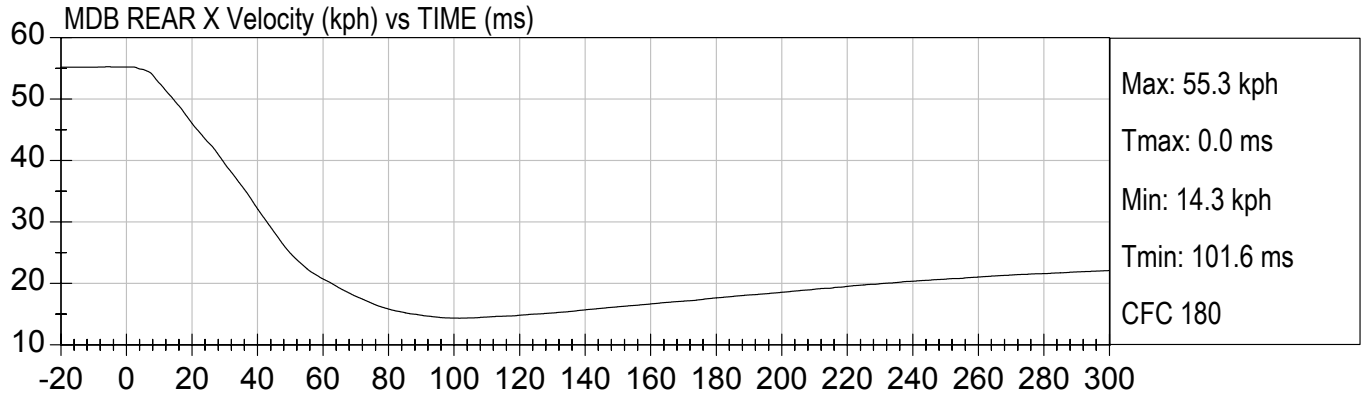
Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)

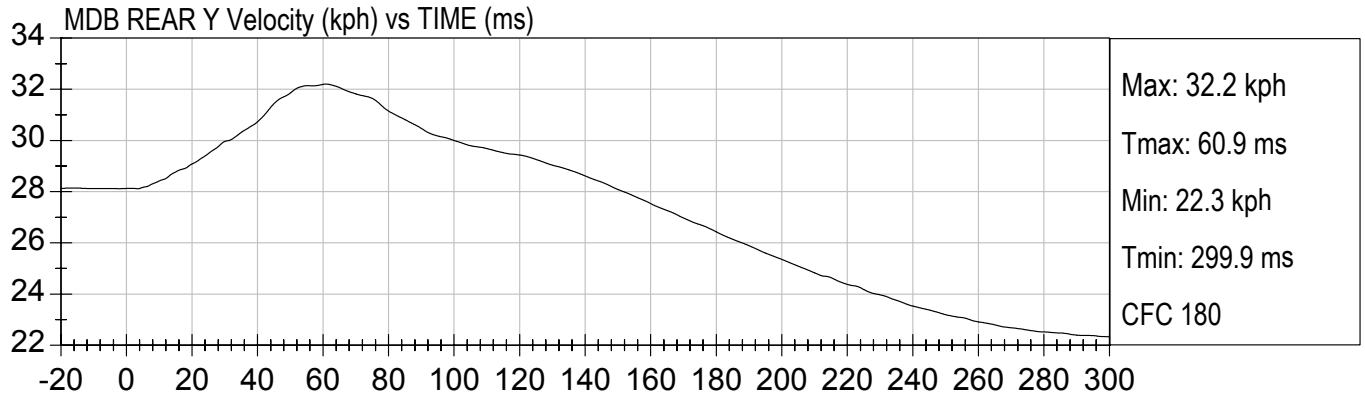


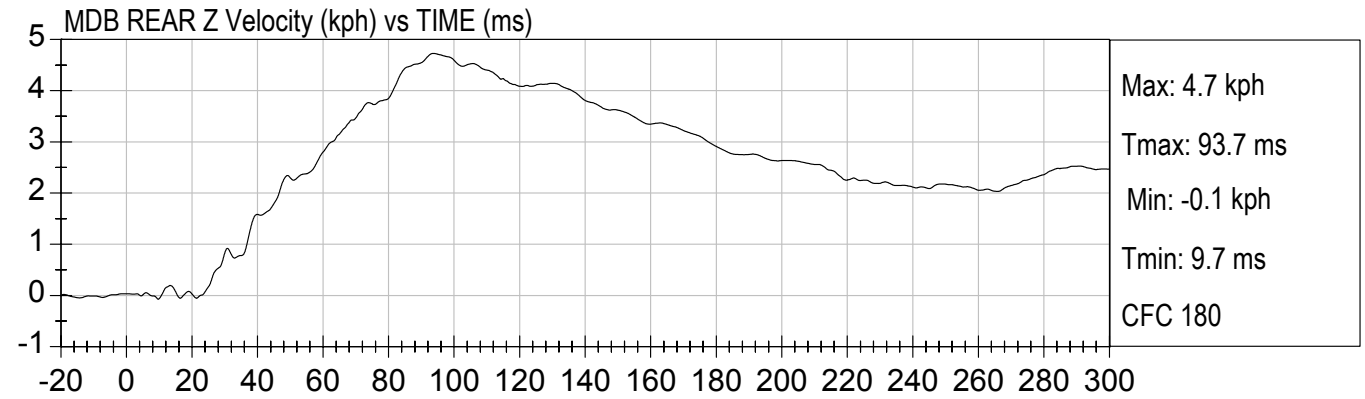


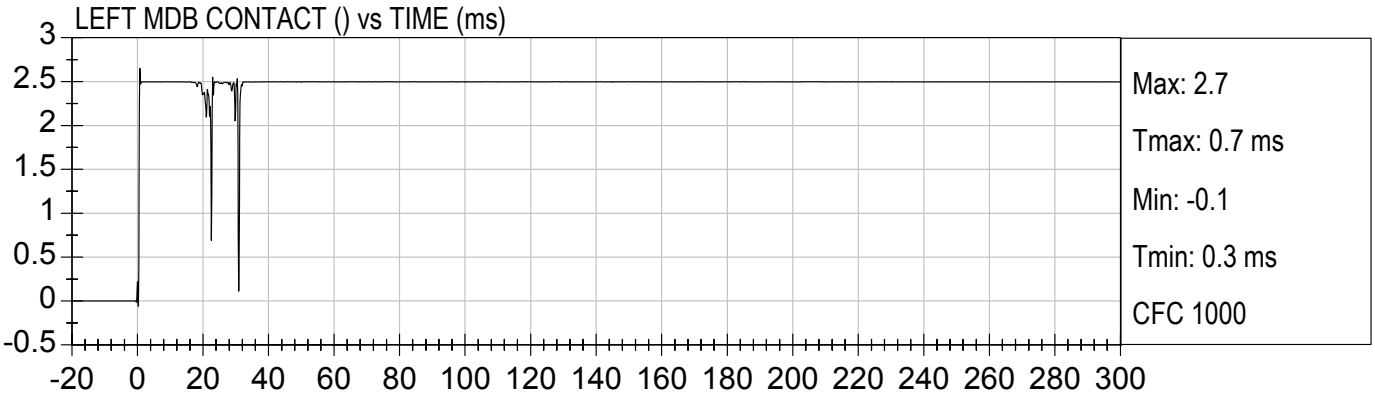


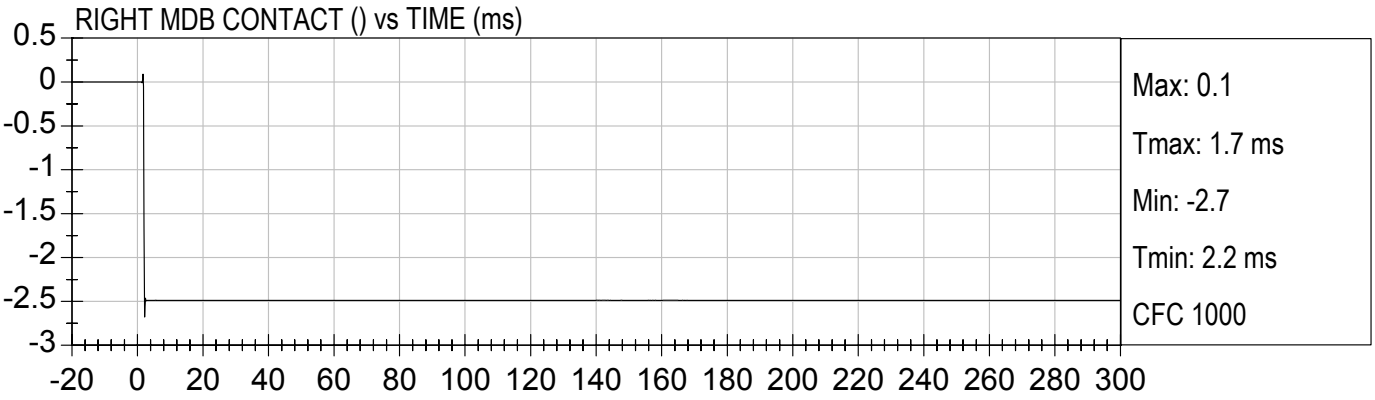



MDB REAR X Velocity (kph) vs TIME (ms)
60
50
40
30
20
10
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 55.3 kph
Tmax: 0.0 ms
Min: 14.3 kph
Tmin: 101.6 ms
CFC 180


MDB REAR Y Velocity (kph) vs TIME (ms)
34
32
30
28
26
24
22
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 32.2 kph
Tmax: 60.9 ms
Min: 22.3 kph
Tmin: 299.9 ms
CFC 180

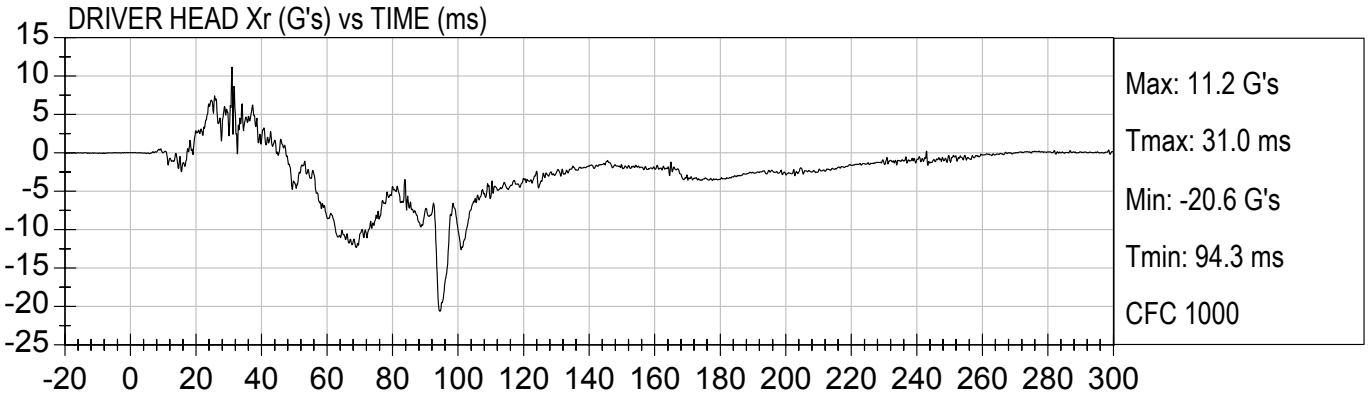

MDB REAR Z Velocity (kph) vs TIME (ms)
5
4
3
2
1
0
-1
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 4.7 kph
Tmax: 93.7 ms
Min: -0.1 kph
Tmin: 9.7 ms
CFC 180

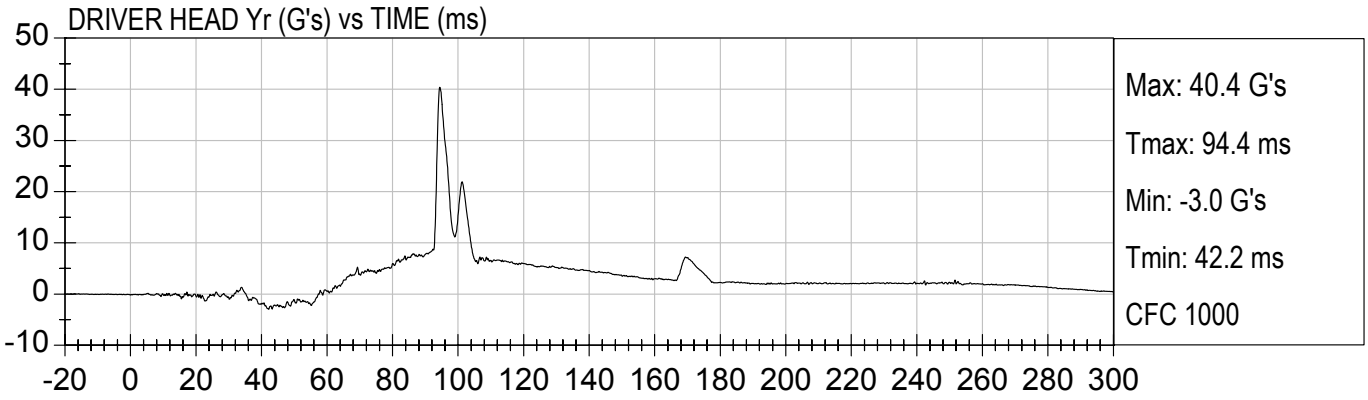

LEFT MDB CONTACT () vs TIME (ms)
3
2.5
2
1.5
1
0.5
0
-0.5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 2.7
Tmax: 0.7 ms
Min: -0.1
Tmin: 0.3 ms
CFC 1000

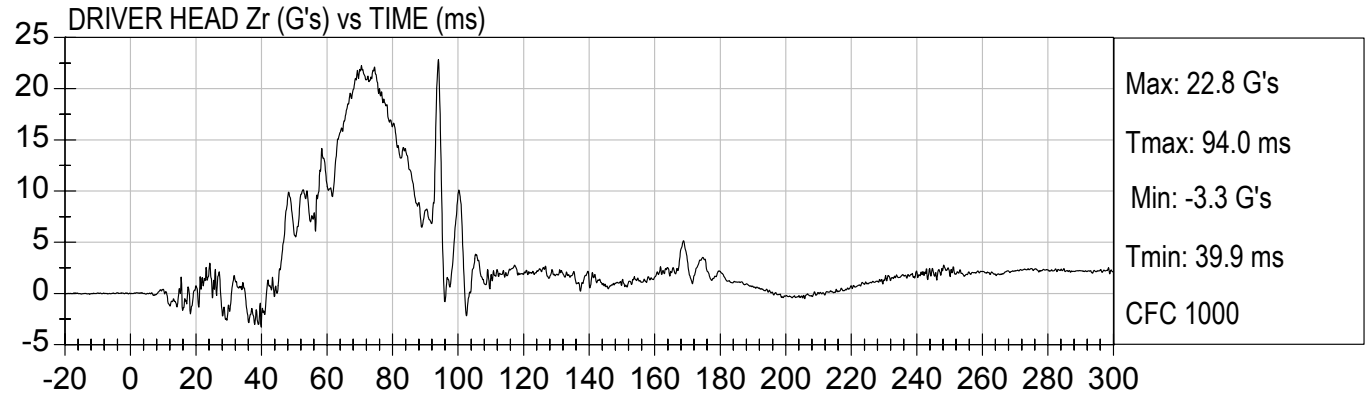

RIGHT MDB CONTACT () vs TIME (ms)
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 0.1
Tmax: 1.7 ms
Min: -2.7
Tmin: 2.2 ms
CFC 1000

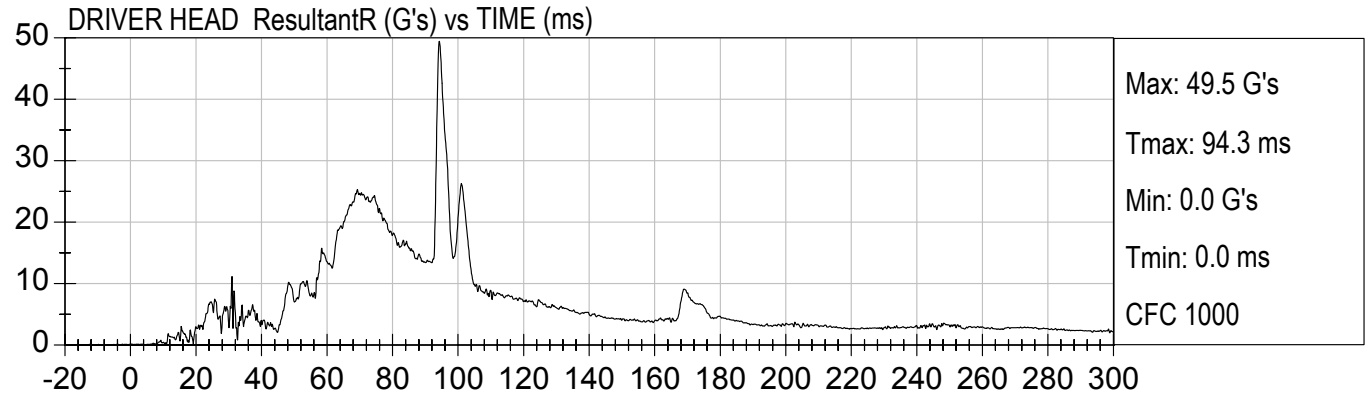
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

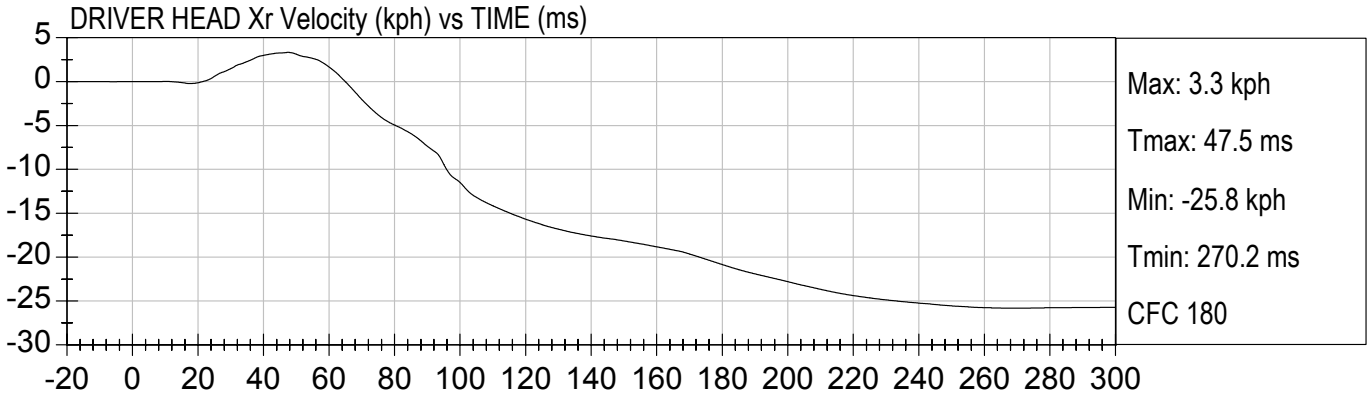
Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)

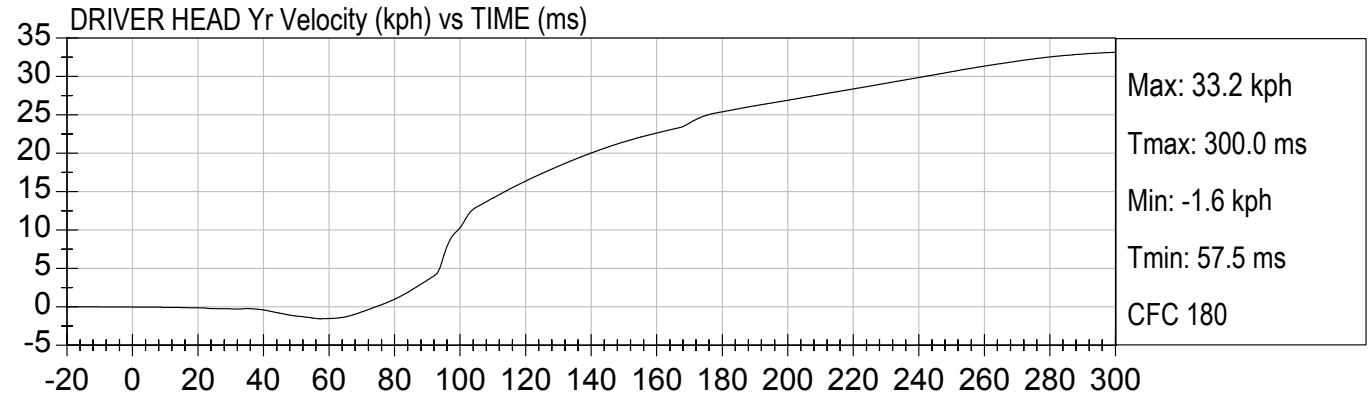


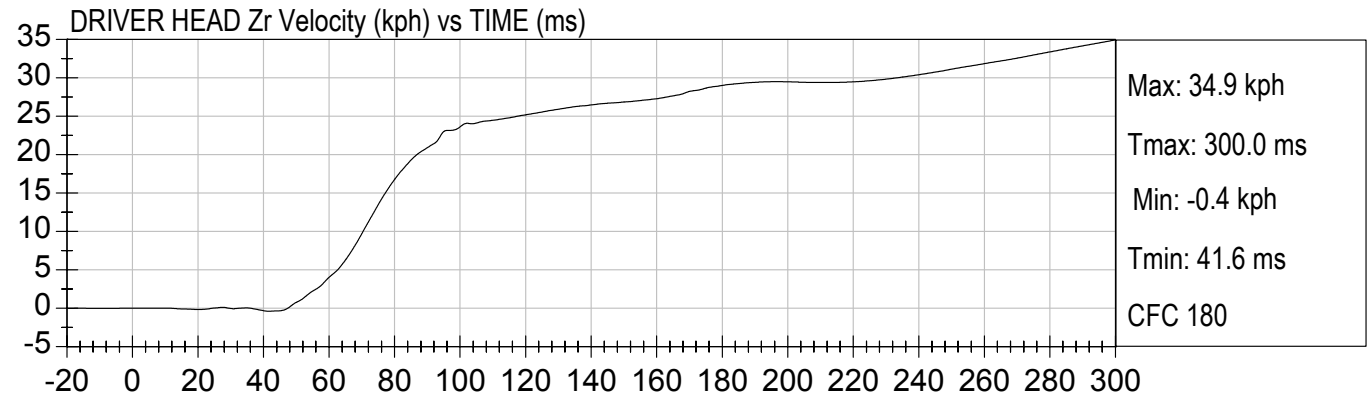






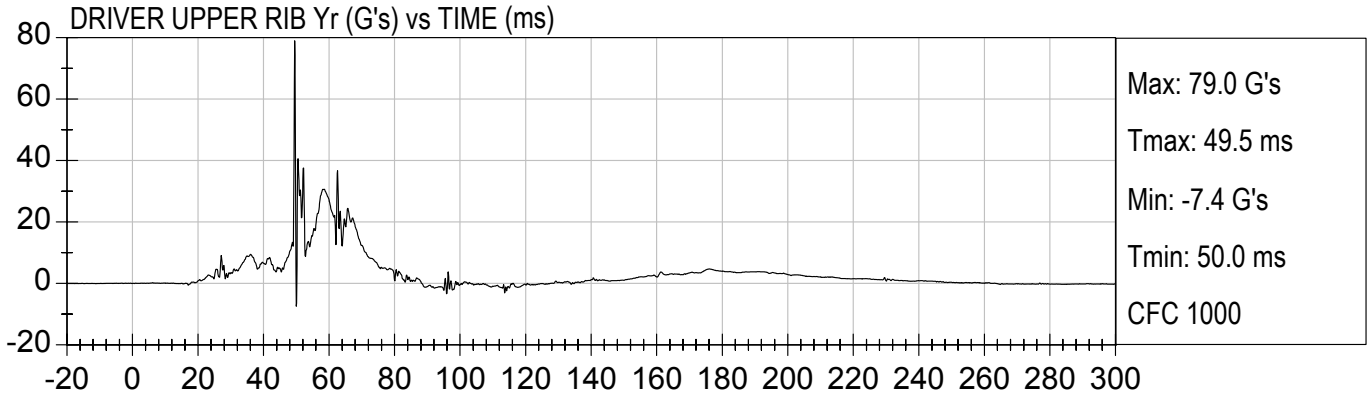

DRIVER HEAD Xr Velocity (kph) vs TIME (ms)
5
0
-5
-10
-15
-20
-25
-30
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 3.3 kph
Tmax: 47.5 ms
Min: -25.8 kph
Tmin: 270.2 ms
CFC 180

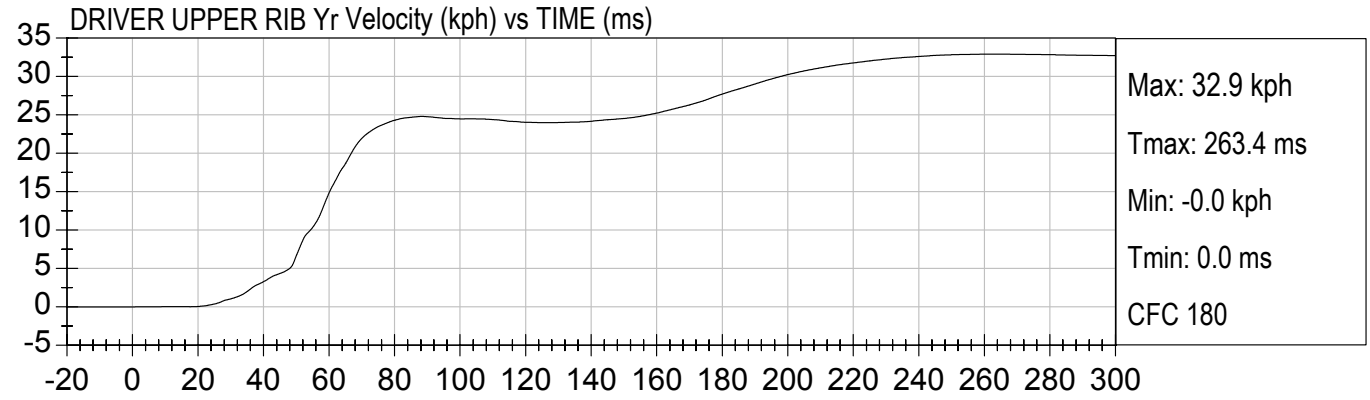

DRIVER HEAD Yr Velocity (kph) vs TIME (ms)
35
30
25
20
15
10
5
0
-5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 33.2 kph
Tmax: 300.0 ms
Min: -1.6 kph
Tmin: 57.5 ms
CFC 180

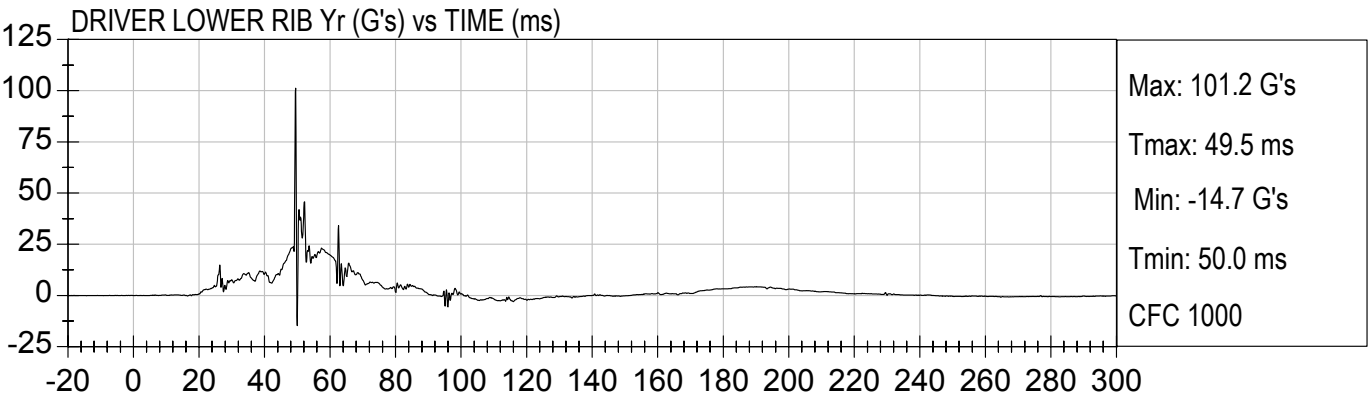

DRIVER HEAD Zr Velocity (kph) vs TIME (ms)
35
30
25
20
15
10
5
0
-5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 34.9 kph
Tmax: 300.0 ms
Min: -0.4 kph
Tmin: 41.6 ms
CFC 180

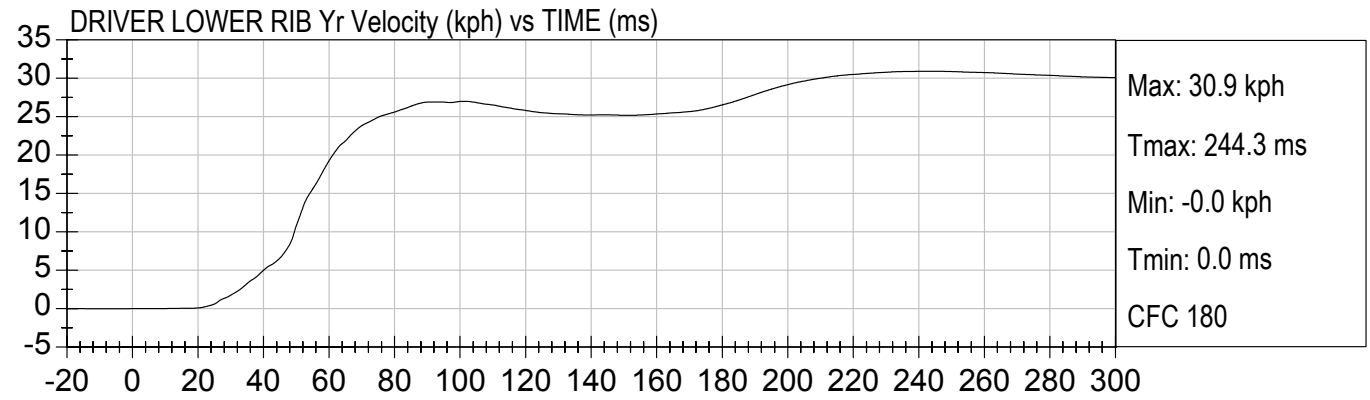
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



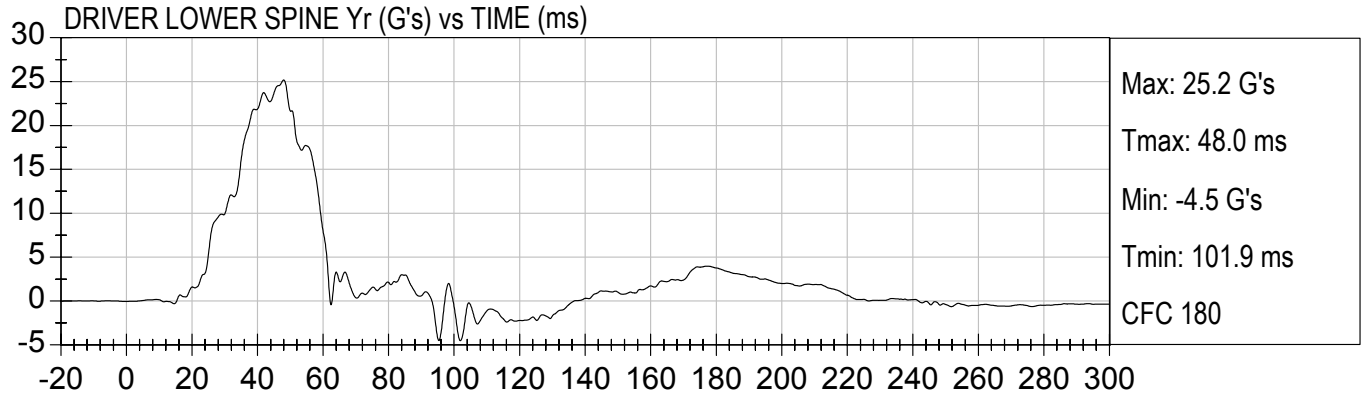


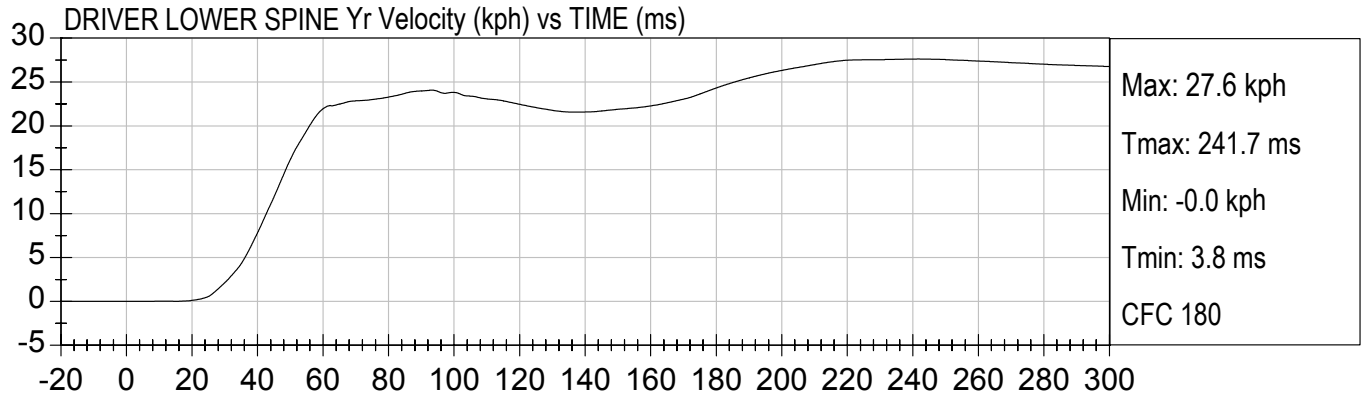


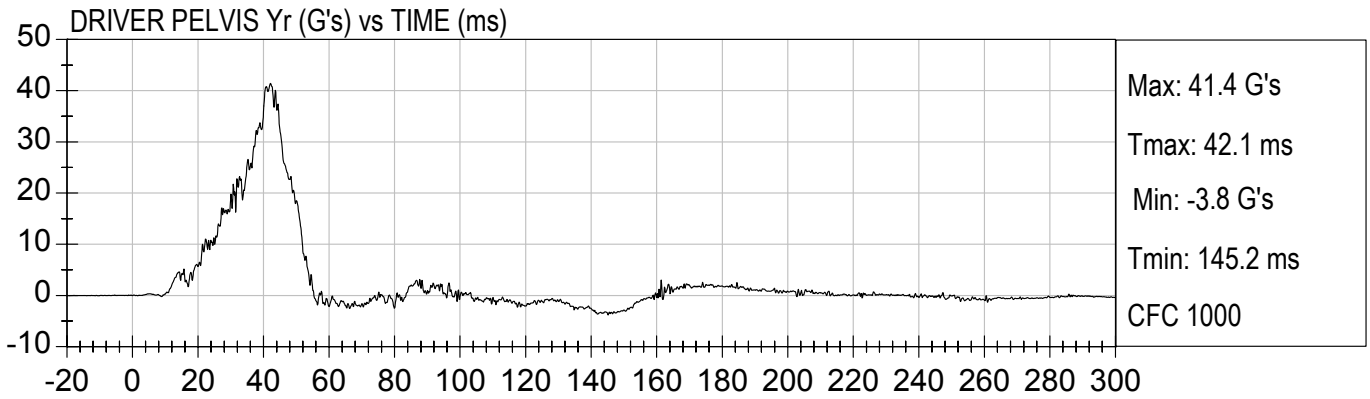


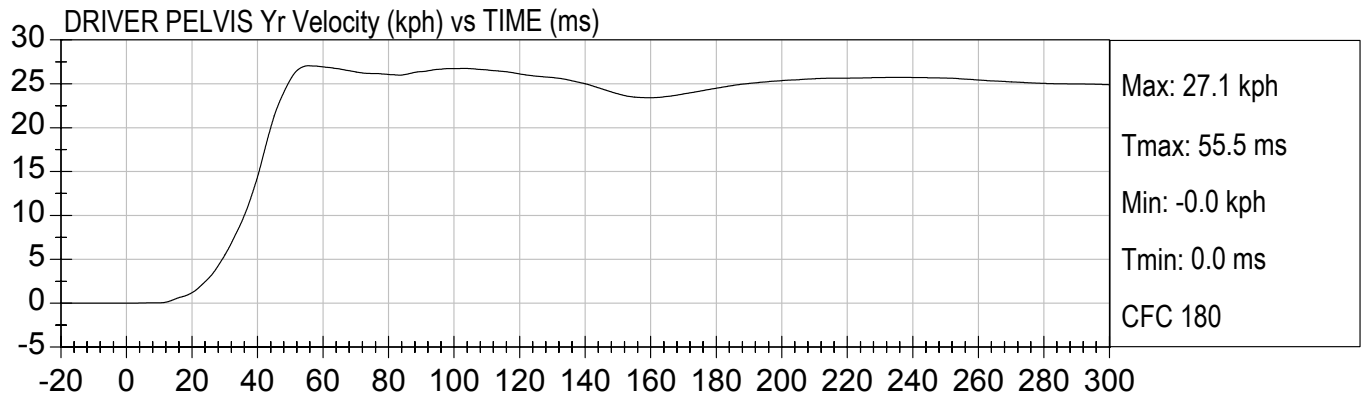
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)



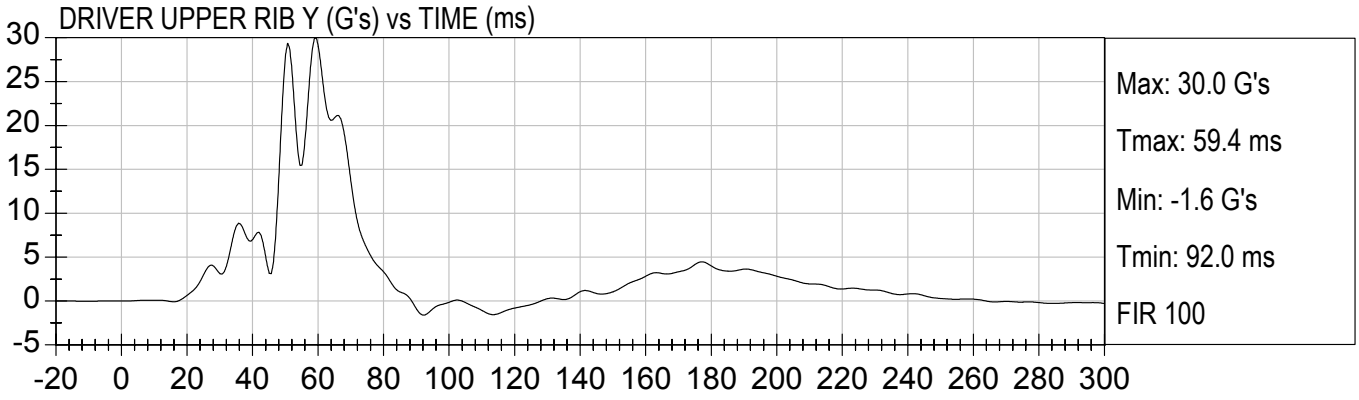


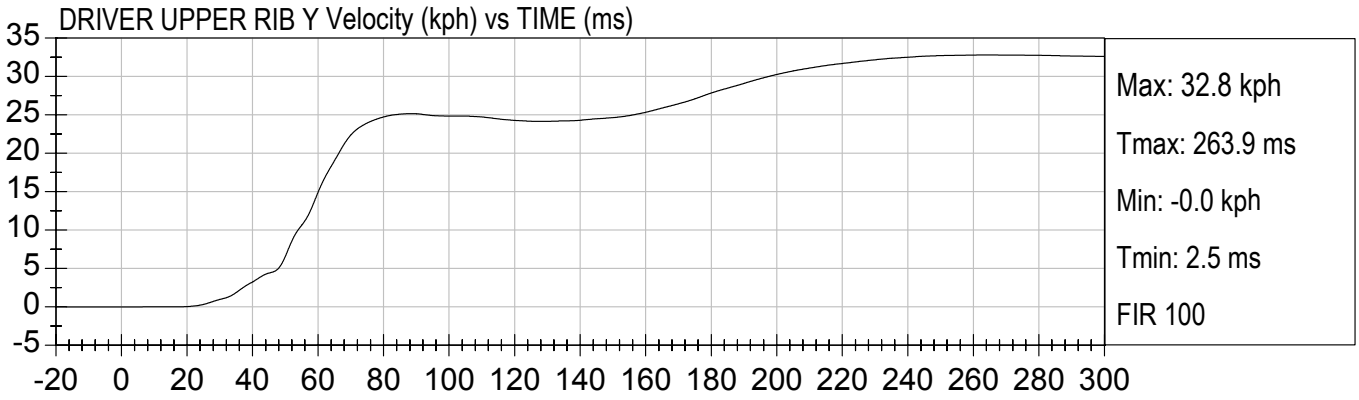


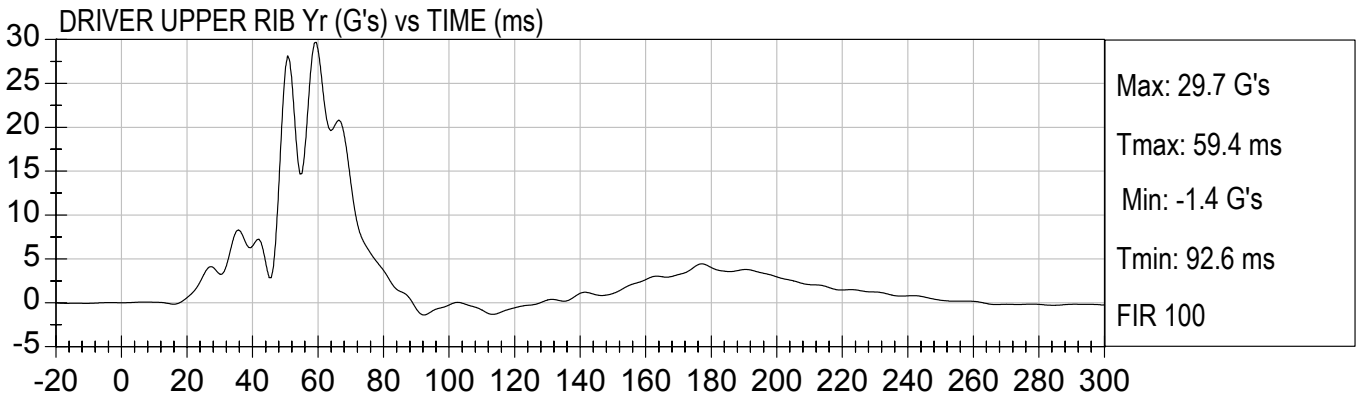


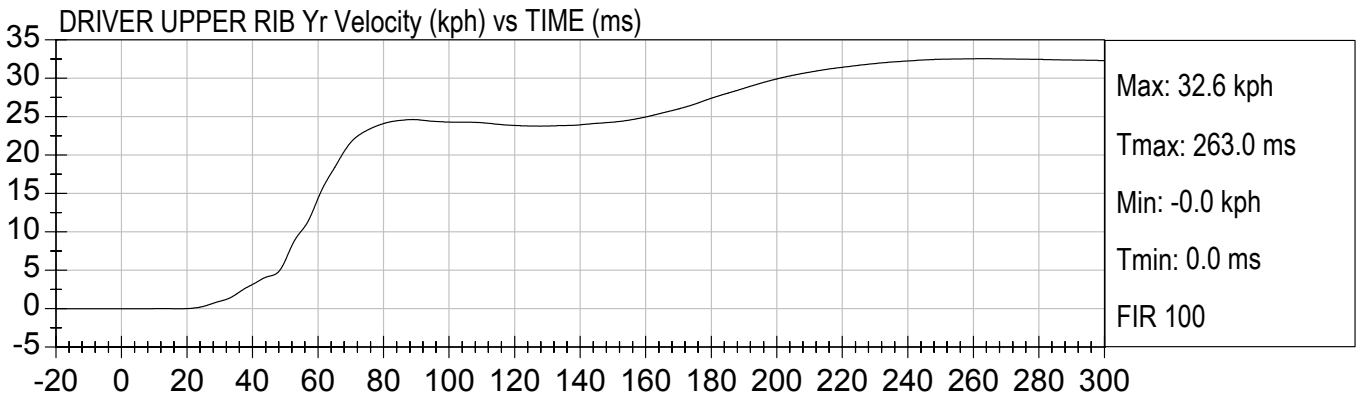
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

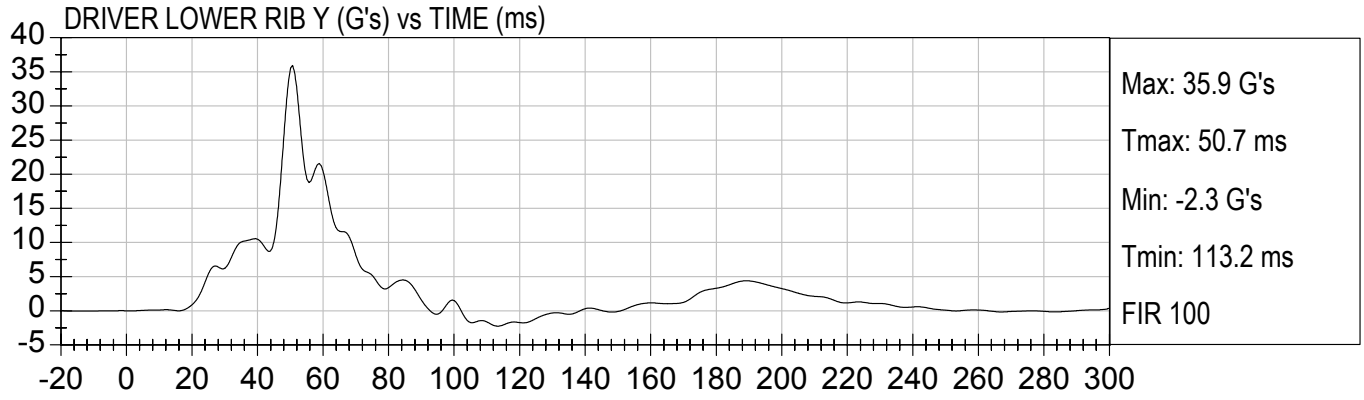
Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)

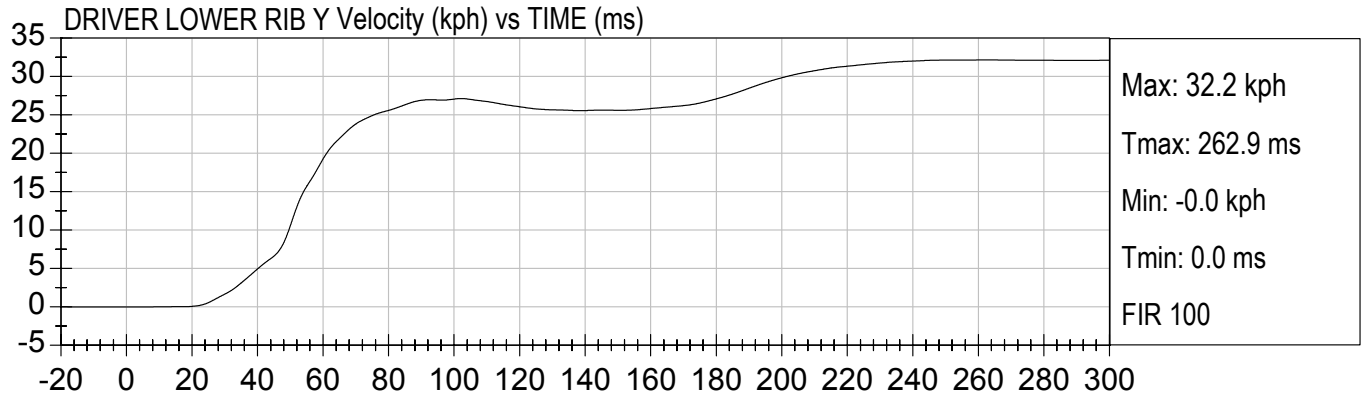


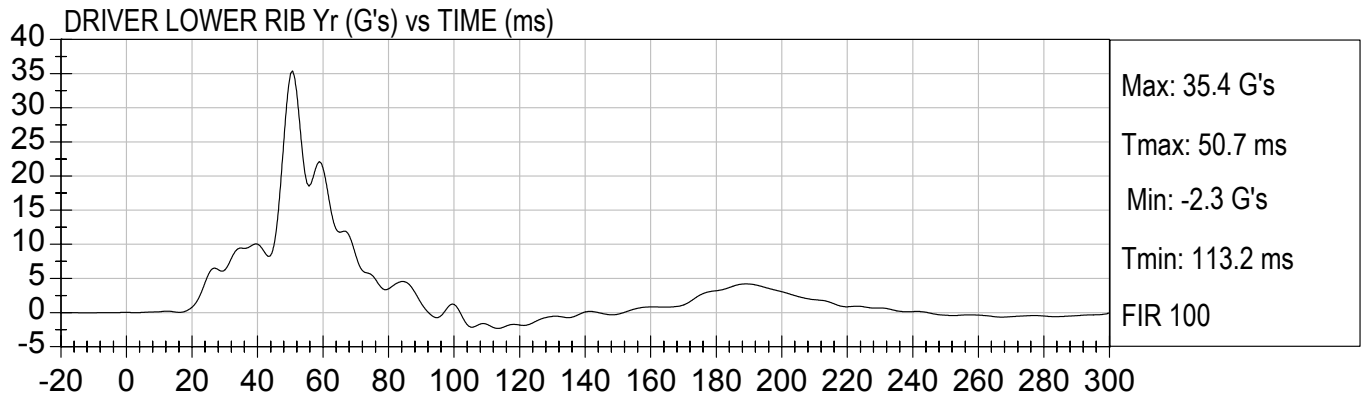


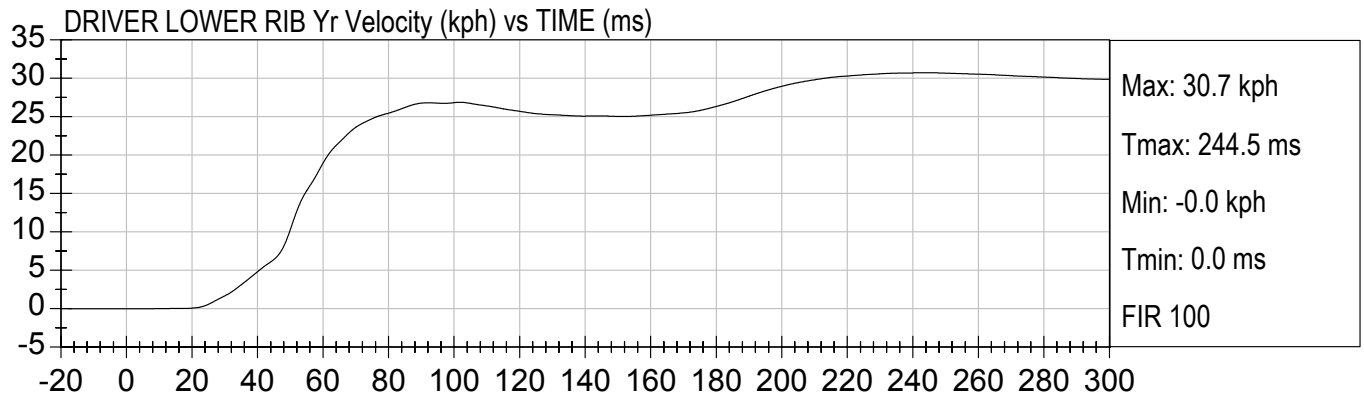





DRIVER LOWER RIB Y (G's) vs TIME (ms)
Max: 35.9 G's
Tmax: 50.7 ms
Min: -2.3 G's
Tmin: 113.2 ms
FIR 100

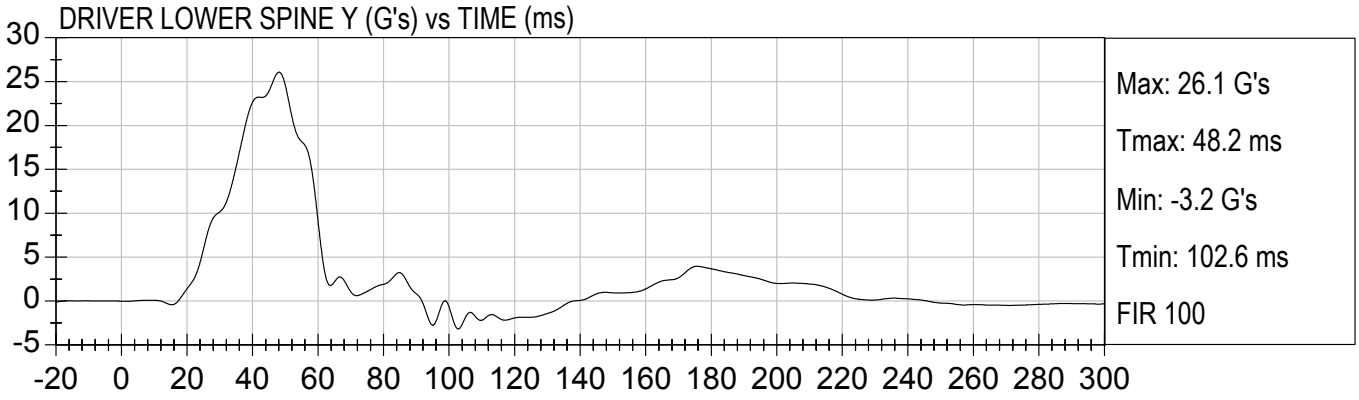

DRIVER LOWER RIB Y Velocity (kph) vs TIME (ms)
Max: 32.2 kph
Tmax: 262.9 ms
Min: -0.0 kph
Tmin: 0.0 ms
FIR 100

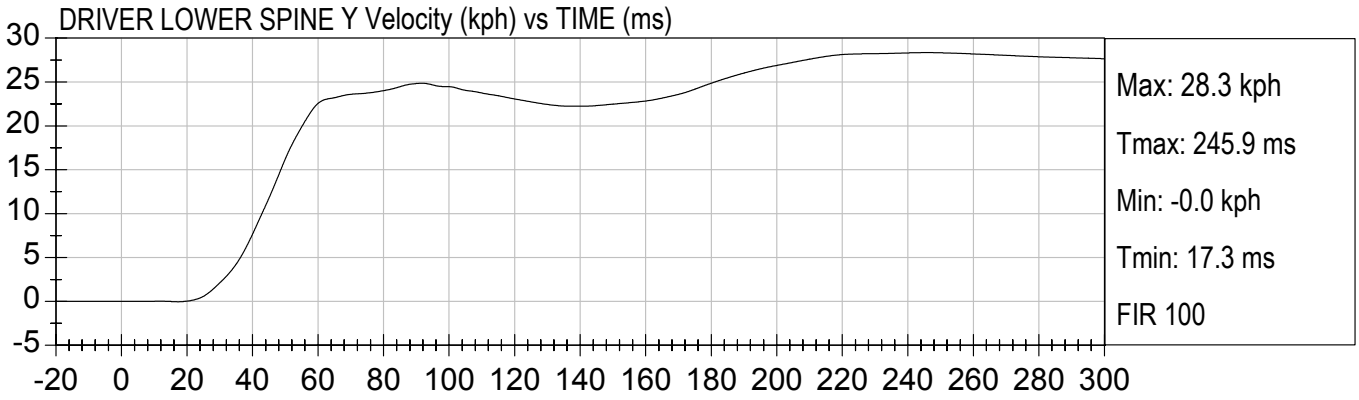

DRIVER LOWER RIB Yr (G's) vs TIME (ms)
Max: 35.4 G's
Tmax: 50.7 ms
Min: -2.3 G's
Tmin: 113.2 ms
FIR 100

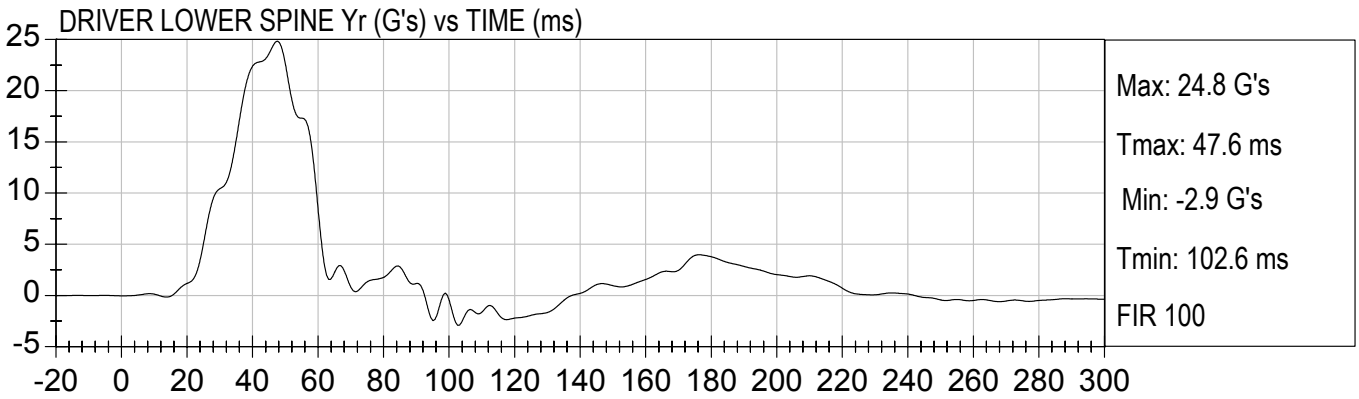

DRIVER LOWER RIB Yr Velocity (kph) vs TIME (ms)
Max: 30.7 kph
Tmax: 244.5 ms
Min: -0.0 kph
Tmin: 0.0 ms
FIR 100

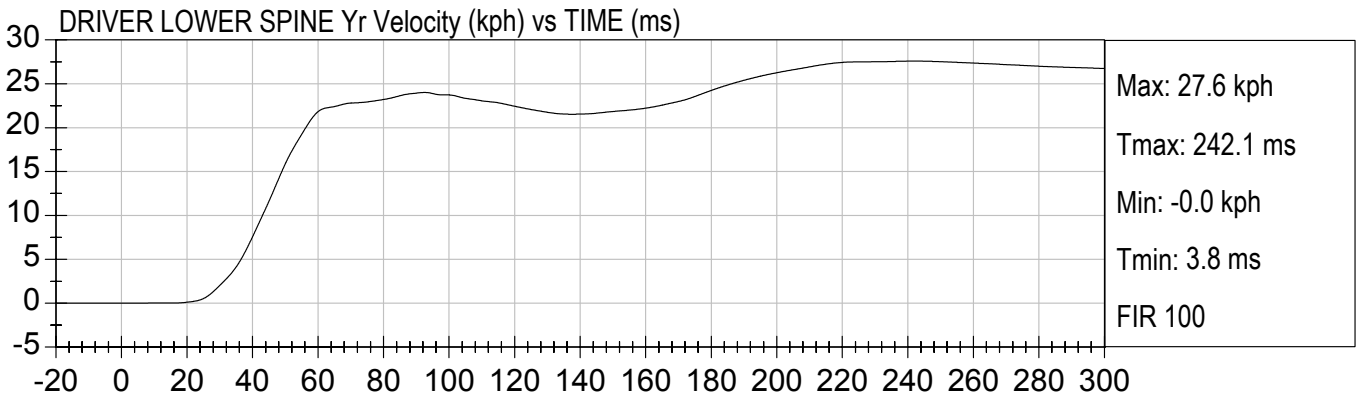
NCAP LEFT SIDE IMPACT
2005 DODGE DAKOTA CLUB CAB SLT

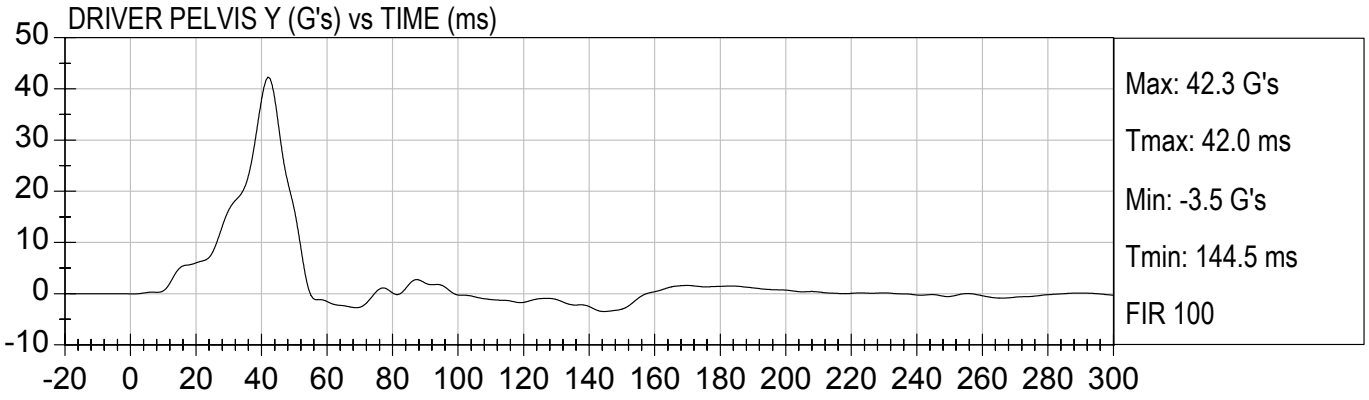
Test Date: 01/05/05
Speed: 38.5 mph (62.0 km/h)

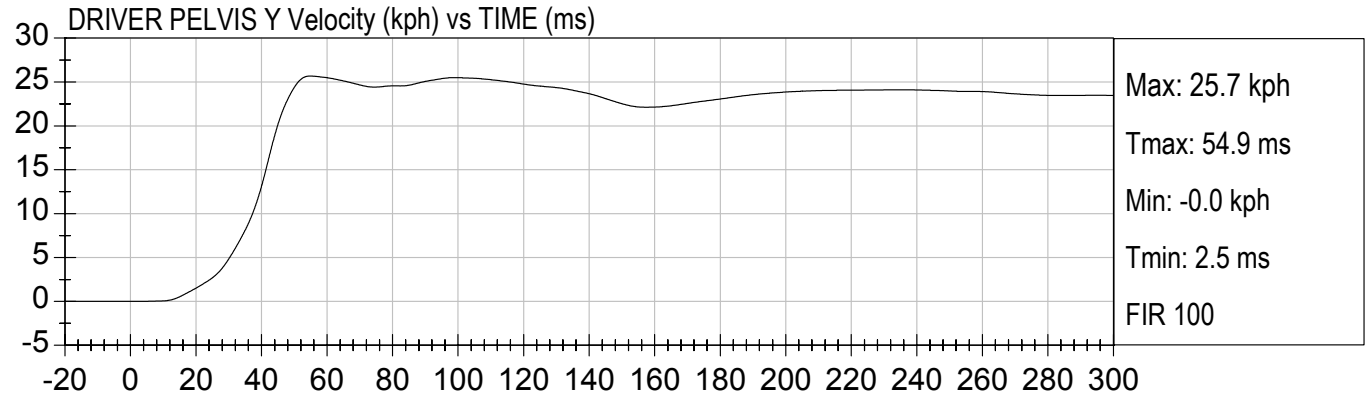


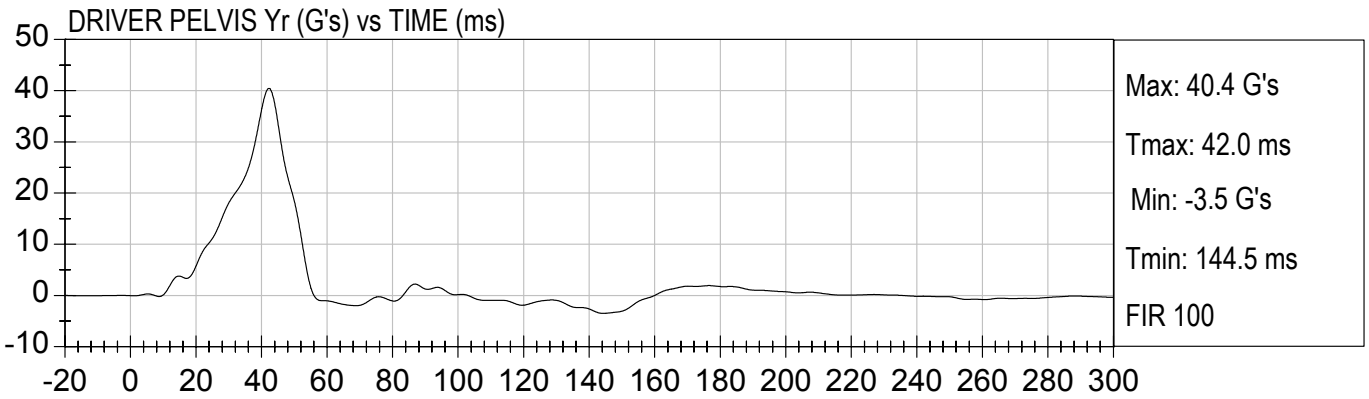


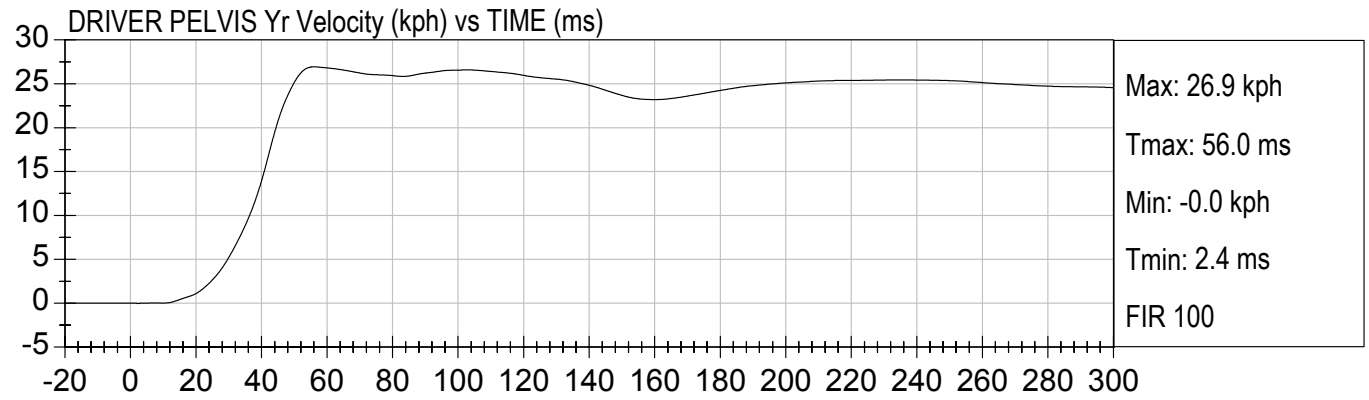





DRIVER PELVIS Y (G's) vs TIME (ms)
50
40
30
20
10
0
-10
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 42.3 G's
Tmax: 42.0 ms
Min: -3.5 G's
Tmin: 144.5 ms
FIR 100


DRIVER PELVIS Y Velocity (kph) vs TIME (ms)
30
25
20
15
10
5
0
-5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 25.7 kph
Tmax: 54.9 ms
Min: -0.0 kph
Tmin: 2.5 ms
FIR 100


DRIVER PELVIS Yr (G's) vs TIME (ms)
50
40
30
20
10
0
-10
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 40.4 G's
Tmax: 42.0 ms
Min: -3.5 G's
Tmin: 144.5 ms
FIR 100


DRIVER PELVIS Yr Velocity (kph) vs TIME (ms)
30
25
20
15
10
5
0
-5
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 26.9 kph
Tmax: 56.0 ms
Min: -0.0 kph
Tmin: 2.4 ms
FIR 100

APPENDIX C

SID/HIII CONFIGURATION AND PERFORMANCE VERIFICATION DATA

CERTIFICATION DATA

Dummy Serial Number: 904

Calibration Test Results Summary

Dummy Serial Number: 904

Pre-Test Calibration

External Dimensions:	The dummy passed all external dimension requirements.
Head Drop Test:	The head passed all drop test requirements.
Neck Pendulum Test:	The neck passed all pendulum test requirements.
Thorax Impact Test:	The thorax passed all impact test requirements.
Pelvic Impact Test:	The pelvis passed all impact test requirements.
Abdominal Compression Test:	The abdomen passed all compression test requirements.
Lumbar Flexion Test:	The lumbar passed all flexion test requirements.

SID Calibration Data Sheet

Side Impact Dummy

External Measurements

ATD Serial No: 904 **Test I.D:** D04245

Tested Parameter	Units	Specification	Result	Pass/Fail
SH - Seated Height	mm	889 - 909	903	Pass
RH - Rib Height	mm	501 - 521	509	Pass
HP - Hip Pivot Height	mm	99 ref.	99	Pass
RD - Rib from Back Line	mm	229 - 241	240	Pass
KV - Knee Pivot to Back Line	mm	511 - 526	525	Pass
SW - Knee Pivot to Floor	mm	490 - 505	500	Pass
HW - Hip Width	mm	356 - 391	368	Pass
		Overall Test Results		Pass

Jessica Hall
Laboratory Technician

10/21/2004
Test Date

David Winkelbauer
Approved By

SID Calibration Data Sheet

Side Impact Dummy

Head Drop Calibration (Lateral)

ATD Serial No: 904 **Test I.D:** D042451

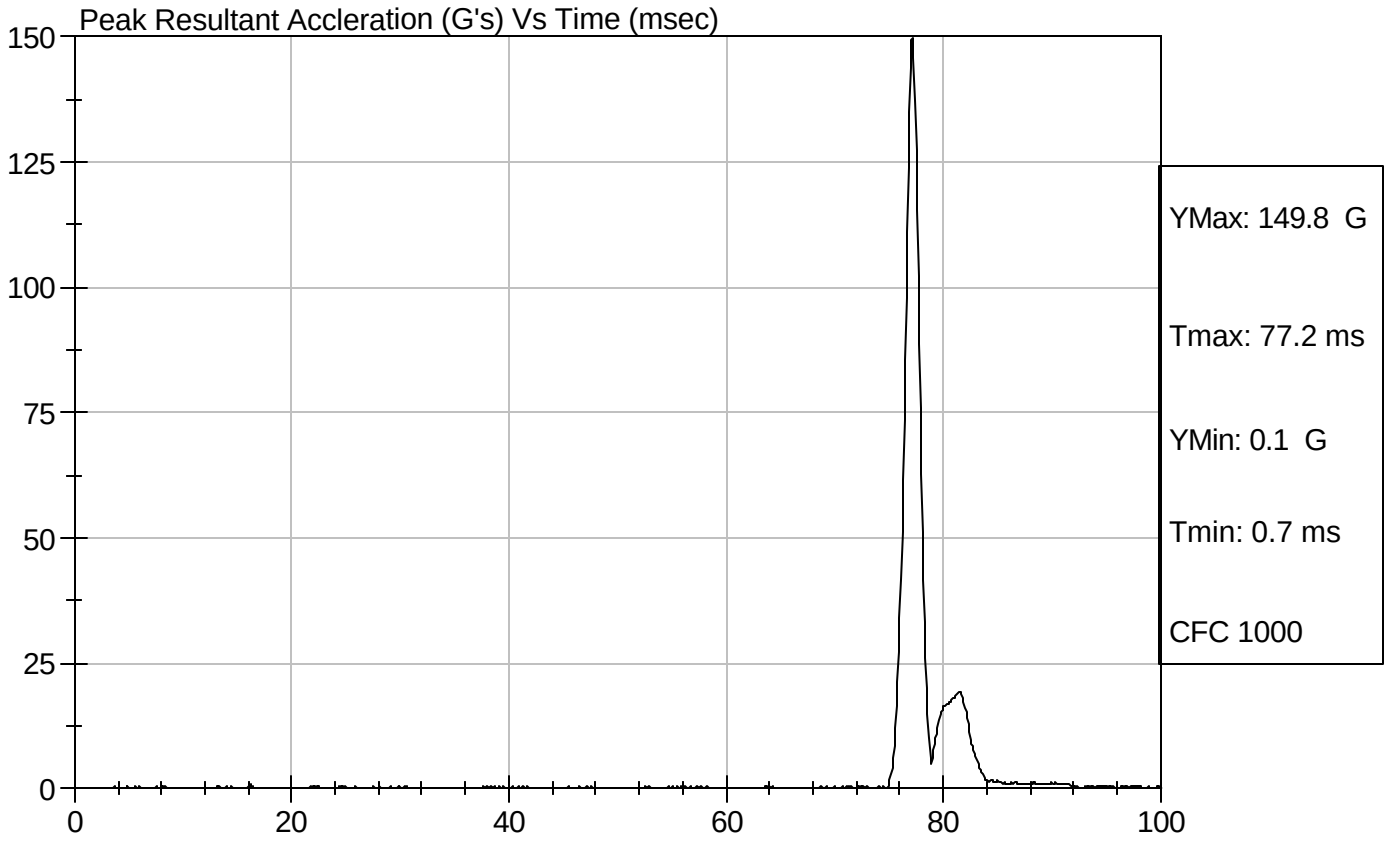
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	deg C	18.9 to 25.5	21.5	Pass
Laboratory Relative Humidity	%	10 to 70	40	Pass
Peak Resultant Acceleration	G's	120 to 150	150	Pass
Is Resultant Curve Unimodal?	Yes/No	15% of peak	Yes	Pass
Peak Longitudnal Acceleration	G's	+/- 15	-10	Pass
		Overall Test Results		Pass

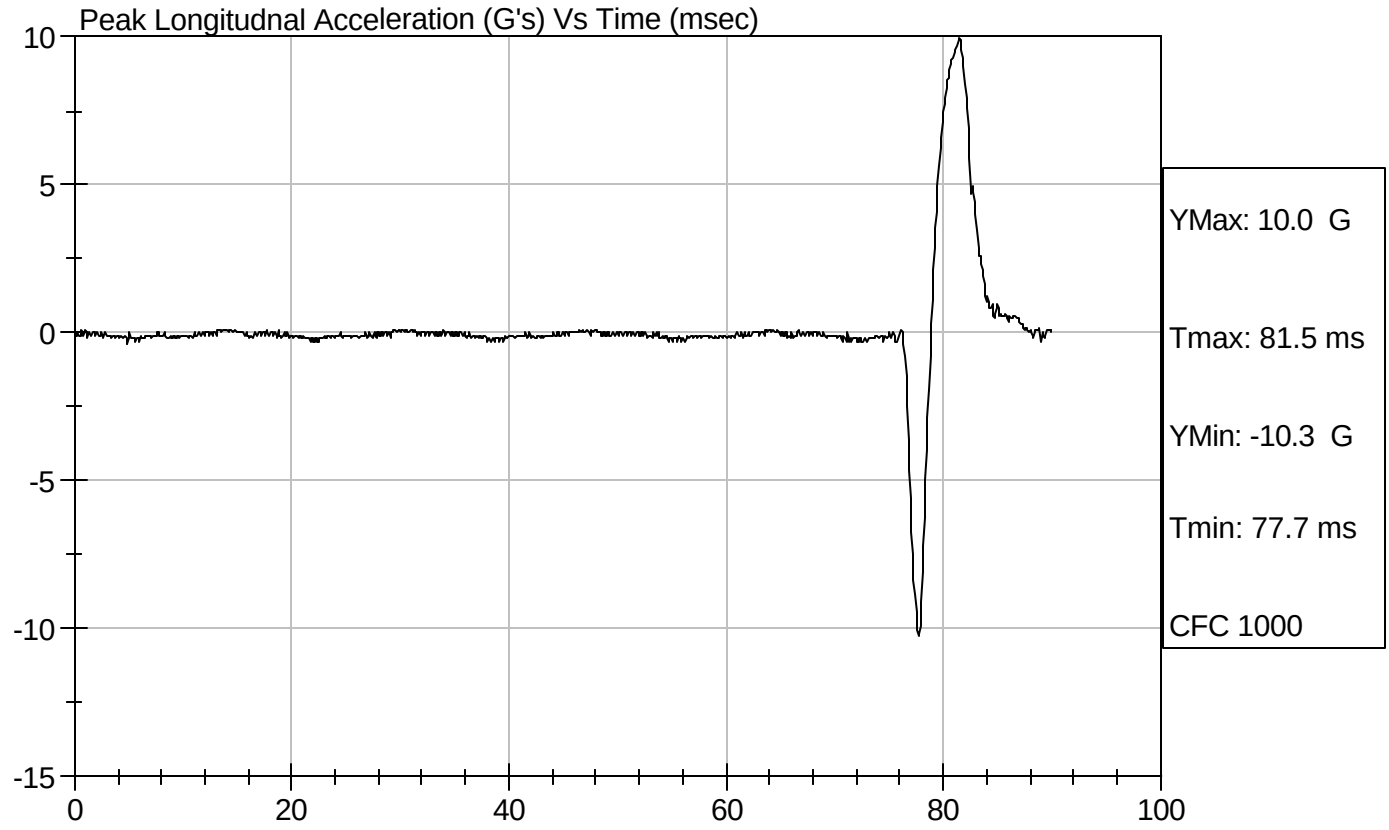
Jessica Hall
Laboratory Technician

10/21/2004
Test Date

David Winkelbauer
Approved By

	Test Description: Head Drop	Test Date: 10/21/2004
	Component: D042451	Speed: 0 ft/s, 0.00 m/s





SID Calibration Data Sheet

Side Impact Dummy

Thorax Impact Test

ATD Serial No: 904 **Test I.D:** D042452

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	deg C	18.9 - 25.5	22.0	Pass
Laboratory Relative Humidity	%	10 to 70	39	Pass
Probe Velocity	m/s	4.27 - 4.33	4.27	Pass
Upper Rib	G's	37 - 46	41	Pass
Lower Rib	G's	37 - 46	42	Pass
Lower Spine	G's	15 - 22	21	Pass
		Overall Test Results		Pass

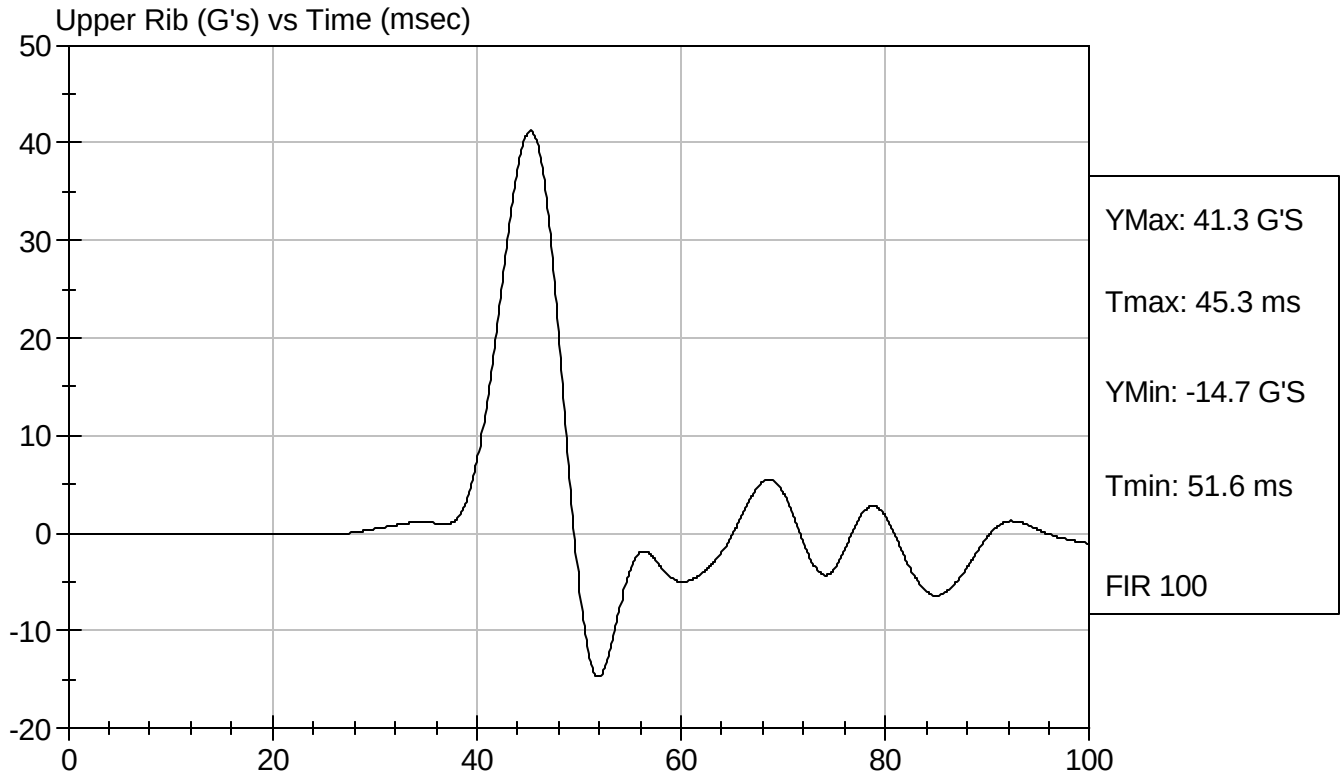
Jessica Hall
Laboratory Technician

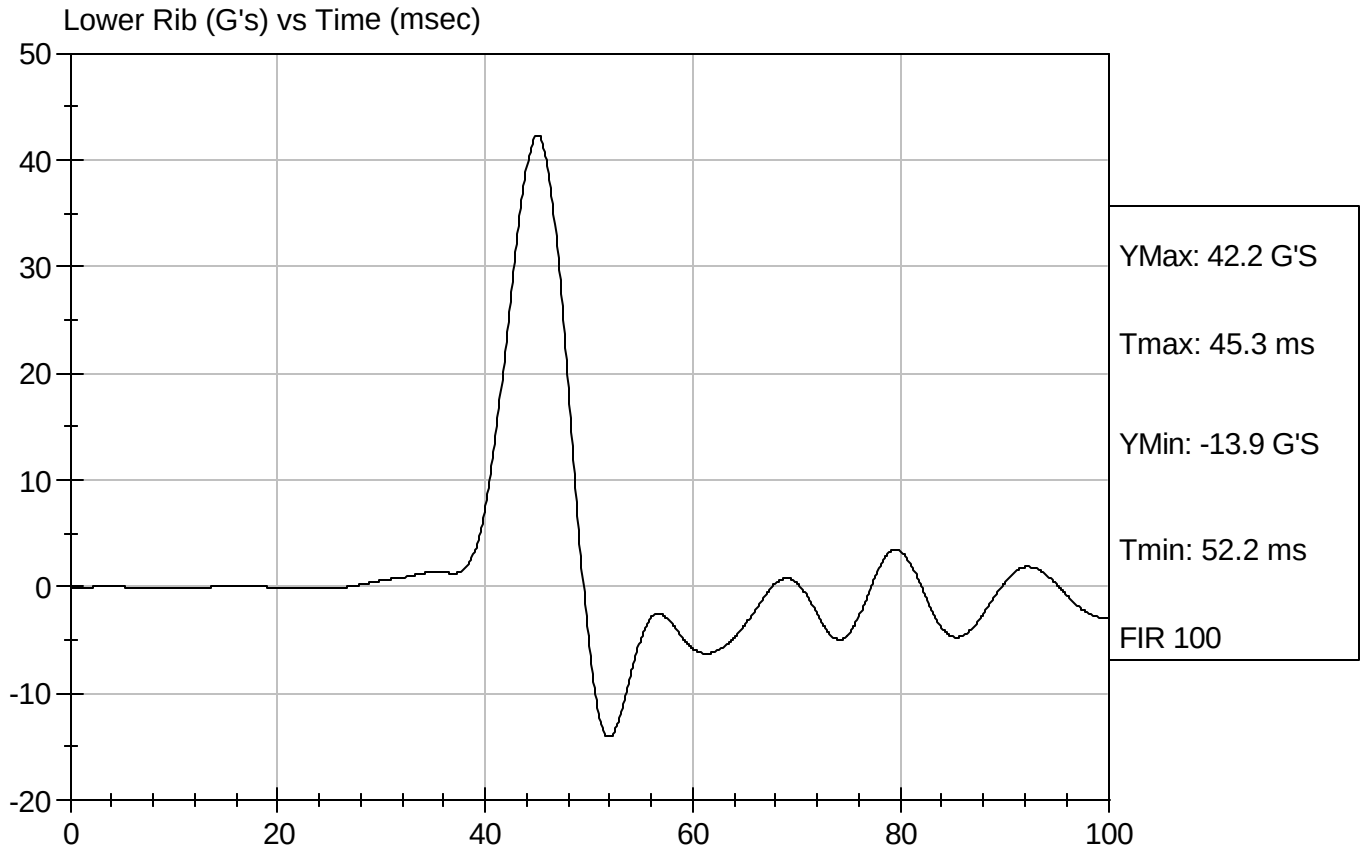
10/21/2004
Test Date

David Winkelbauer
Approved By

Test Desc: Thorax Impact
Component ID: D042452

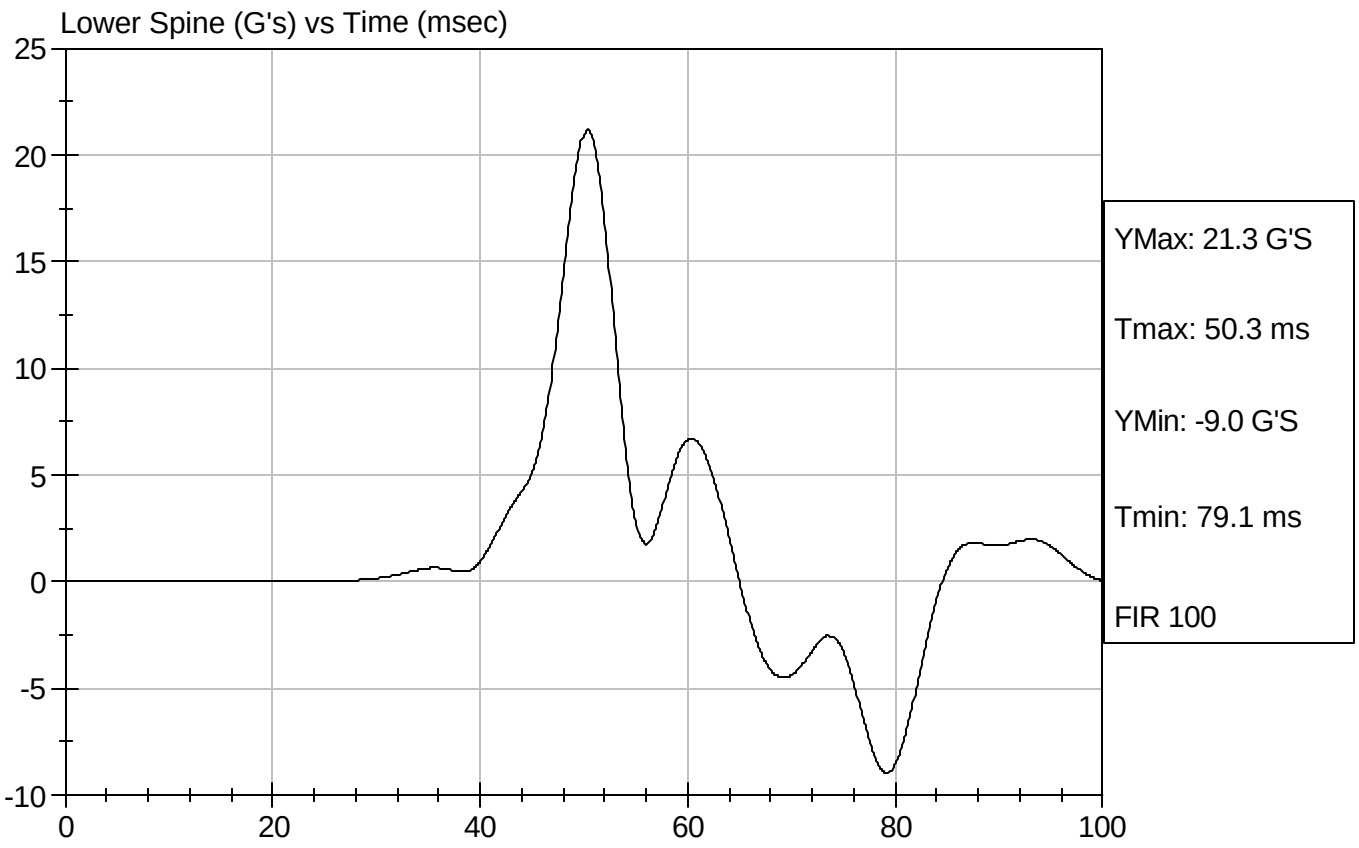
Test Date: 10/21/2004
Speed: 14.0 ft/sec, 4.27 m/sec





Test Desc: Thorax Impact
Component ID: D042452

Test Date: 10/21/2004
Speed: 14.0 ft/sec, 4.27 m/sec



SID Calibration Data Sheet

Side Impact Dummy

Pelvis Impact Test

ATD Serial No: 904 **Test I.D:** D042453

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	deg C	18.9 to 25.5	22.0	Pass
Laboratory Relative Humidity	%	10 to 70	39	Pass
Probe Velocity	m/s	4.27 - 4.33	4.27	Pass
Pelvis Acceleration	G's	40 - 60	49	Pass
		Overall Test Results		Pass

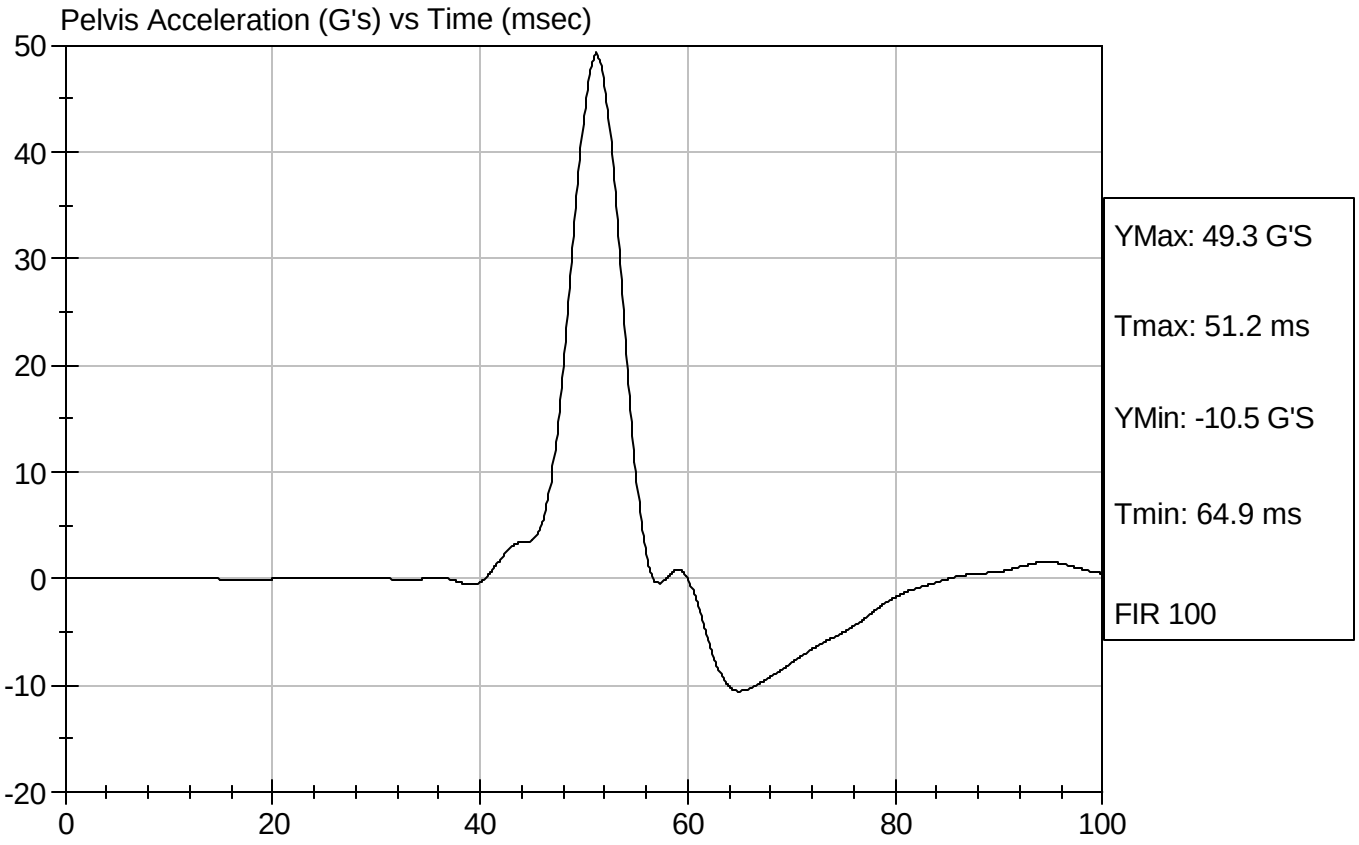
Jessica Hall
Laboratory Technician

10/21/2004
Test Date

David Winkelbauer
Approved By

Test Desc: Pelvis Impact
Component ID: D042453

Test Date: 10/21/2004
Speed: 14.0 ft/sec, 4.27 m/sec



SID Calibration Data Sheet

Side Impact Dummy

Abdominal Compression Calibration (Pre-Load = 10 lbs)

ATD Serial No: 904 **Test I.D:** D042454

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	deg C	18.9 - 25.5	21.5	Pass
Laboratory Relative Humidity	%	10 to 70	40	Pass
Force At 12.7 mm	N	104 -162	143	Pass
Force At 19 mm	N	163 - 222	198	Pass
Force At 25.4 mm	N	222 - 280	263	Pass
Force At 33 mm	N	325 - 391	368	Pass
		Overall Test Results		Pass

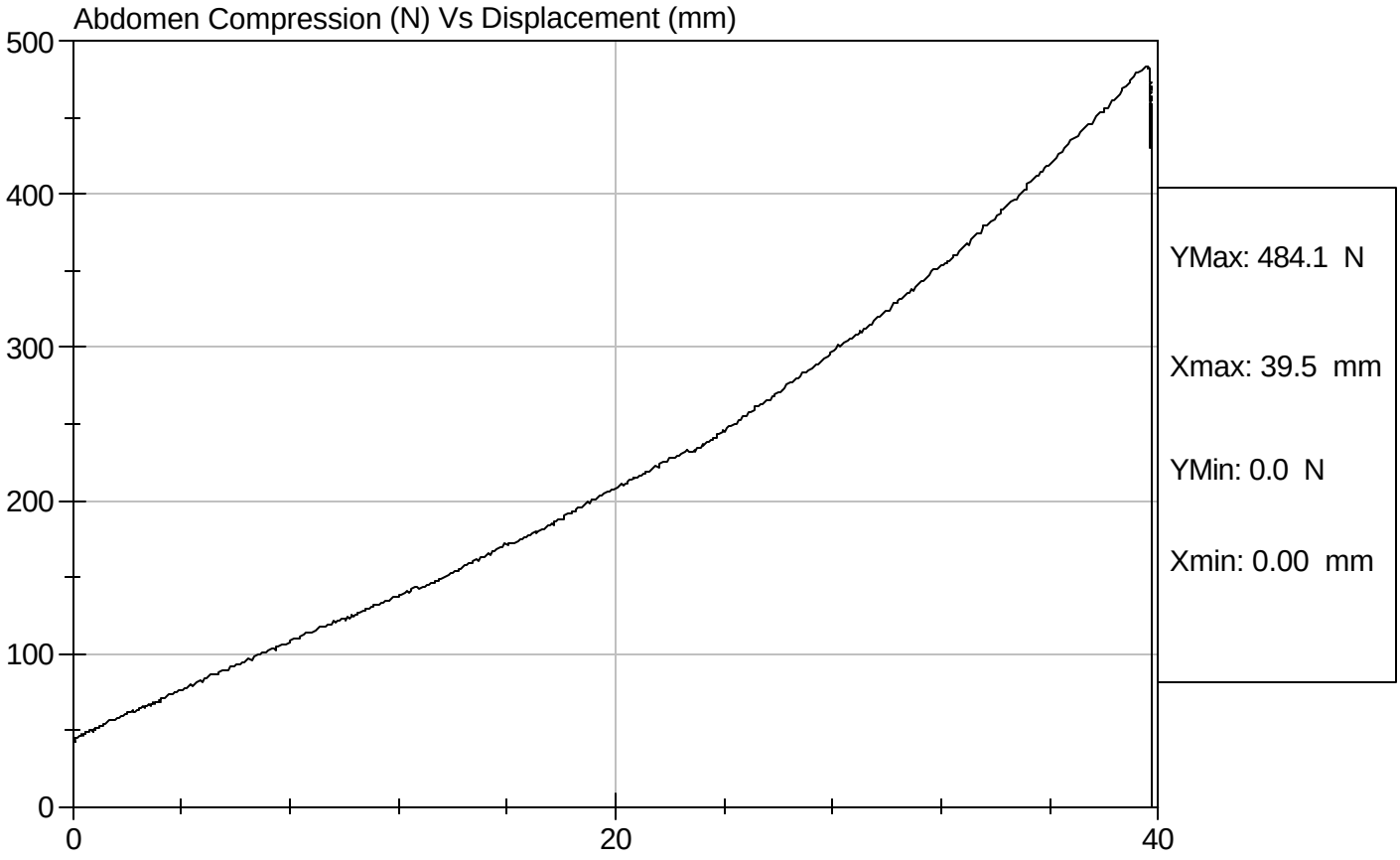
Jessica Hall
Laboratory Technician

10/21/2004
Test Date

David Winkelbauer
Approved By

Test Description: Abdomen Compression Test Date: 10/21/2004

Component: D042454 Speed: 0 ft/sec, 0 m/sec



SID Calibration Data Sheet

Side Impact Dummy

Lumbar Flexion Calibration

ATD Serial No: 904 **Test I.D:** D042455

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	deg C	18.9 - 25.5	21.5	Pass
Laboratory Relative Humidity	%	10 to 70	40	Pass
Force At 0 deg	N	0 - 26.7	0.0	Pass
Force At 20 deg	N	97.9 - 151.2	123.1	Pass
Force At 30 deg	N	151.2 - 204.6	174.0	Pass
Force At 40 deg	N	204.6 - 258.0	255.3	Pass
Return Angle	Deg	12 Maximum	6	Pass
		Overall Test Results		Pass

Jessica Hall
Laboratory Technician

10/21/2004
Test Date

David Winkelbauer
Approved By

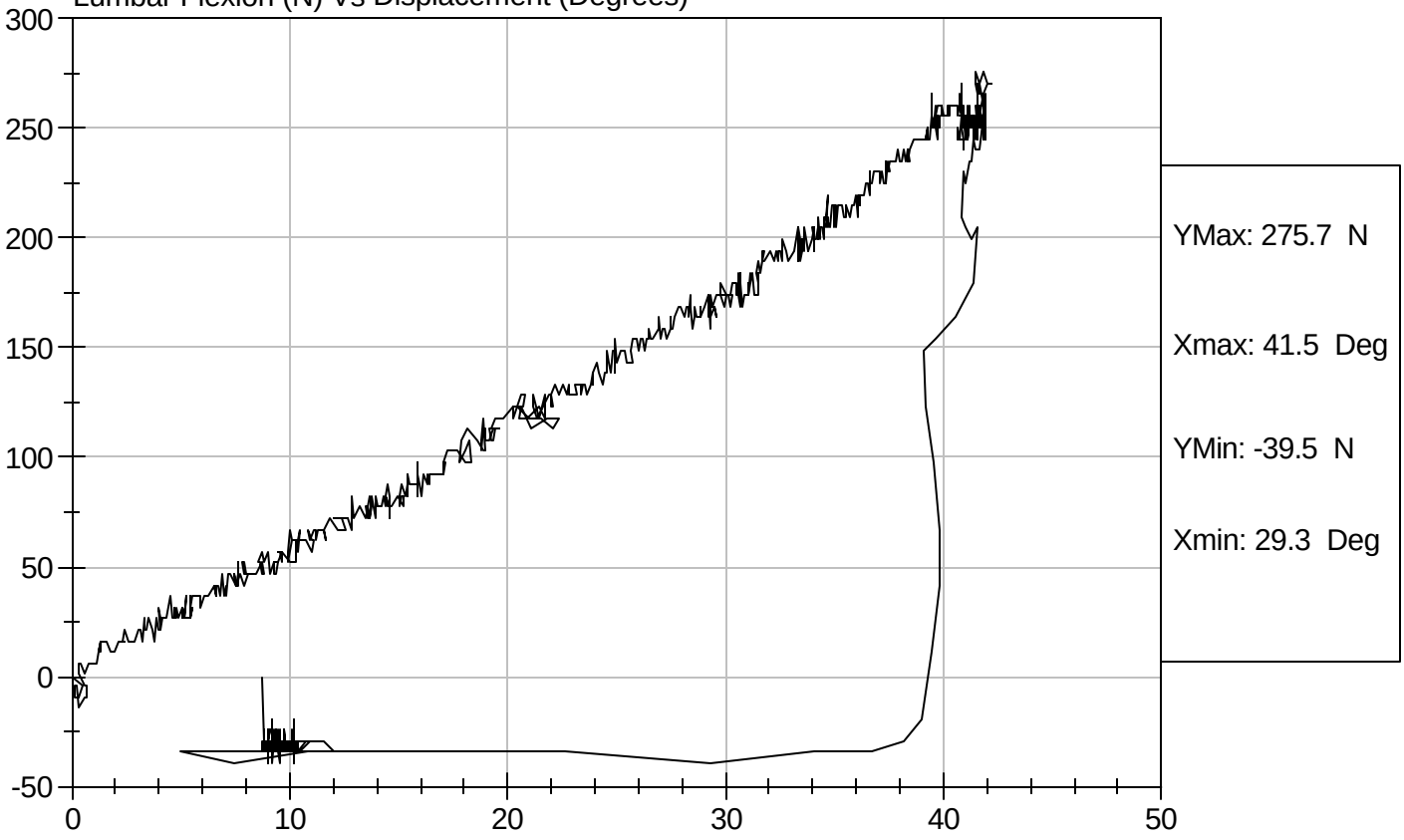
Test Description: Lumbar Flexion

Test Date: 10/21/2004

Component: D042455

Speed: 0 ft/sec, 0 m/sec

Lumbar Flexion (N) Vs Displacement (Degrees)



SID Calibration Data Sheet

Side Impact Dummy (SID)

Neck Pendulum Test

ATD Serial No: 904 **Test I.D:** D042459

Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		deg C	20.6 to 22.2	21.5	Pass
Laboratory Relative Humidity		%	10 to 70	40	Pass
Impact Velocity		m/s	6.89 to 7.13	7.06	Pass
Pendulum Deceleration	10 msec	m/s	1.96 to 2.55	2.30	Pass
	20 msec	m/s	4.12 to 5.10	4.57	Pass
	30 msec	m/s	5.73 to 7.01	6.43	Pass
	40 to 70 msec	m/s	6.27 to 7.64	7.28	Pass
Midsaggital Plane Max Rotation		deg	66 to 82	72	Pass
Head Rotation Peak to Zero - Decay Time		msec	58 to 67	59	Pass
Max. Mx at Occipital Condyles		Nm	73 to 88	79	Pass
Mx Peak To Zero - Decay Time		msec	49 to 64	56	Pass
Mx Peak to Max. Head Rotation		msec	2 to 16	11	Pass

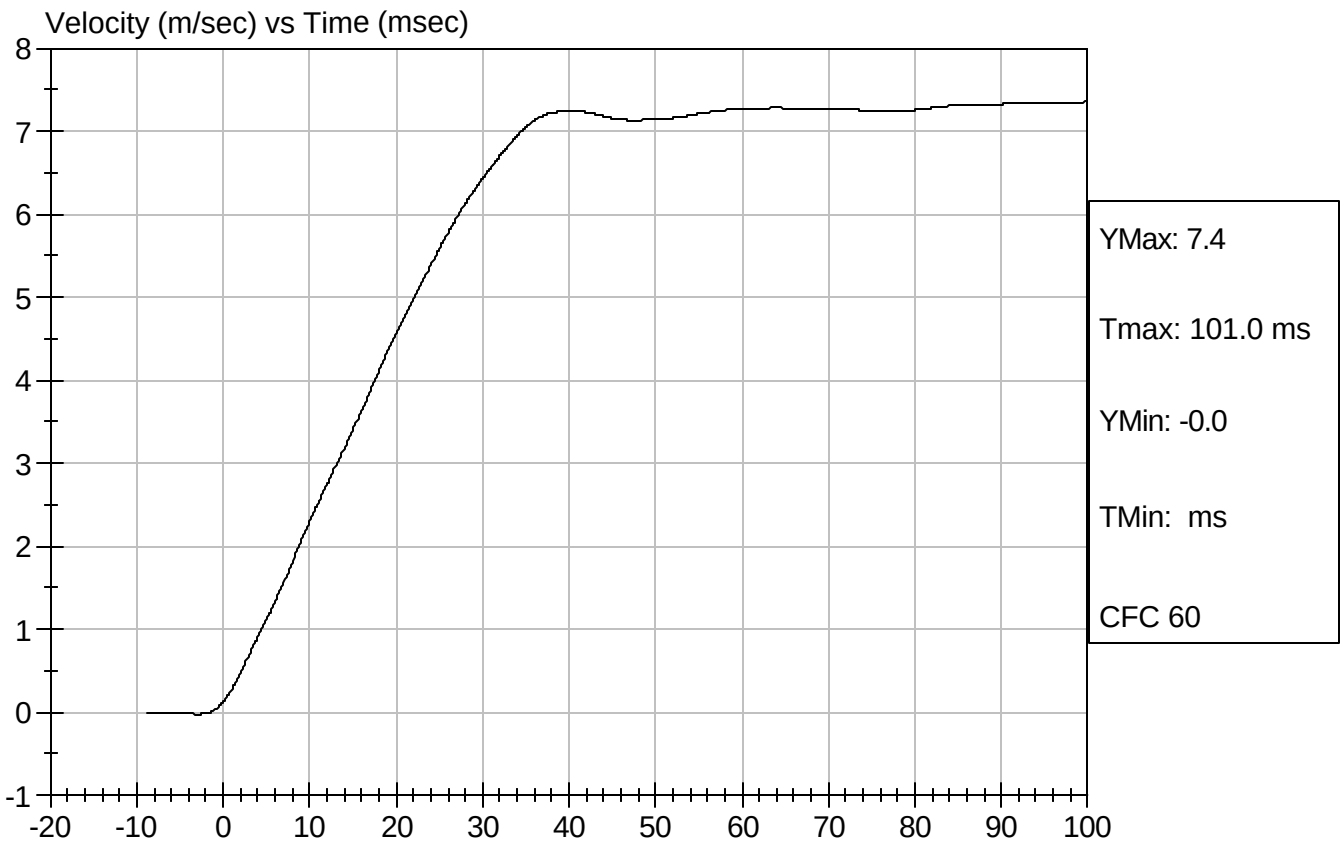
Jessica Hall
Laboratory Technician

10/22/2004
Test Date

David Winkelbauer
Approved By

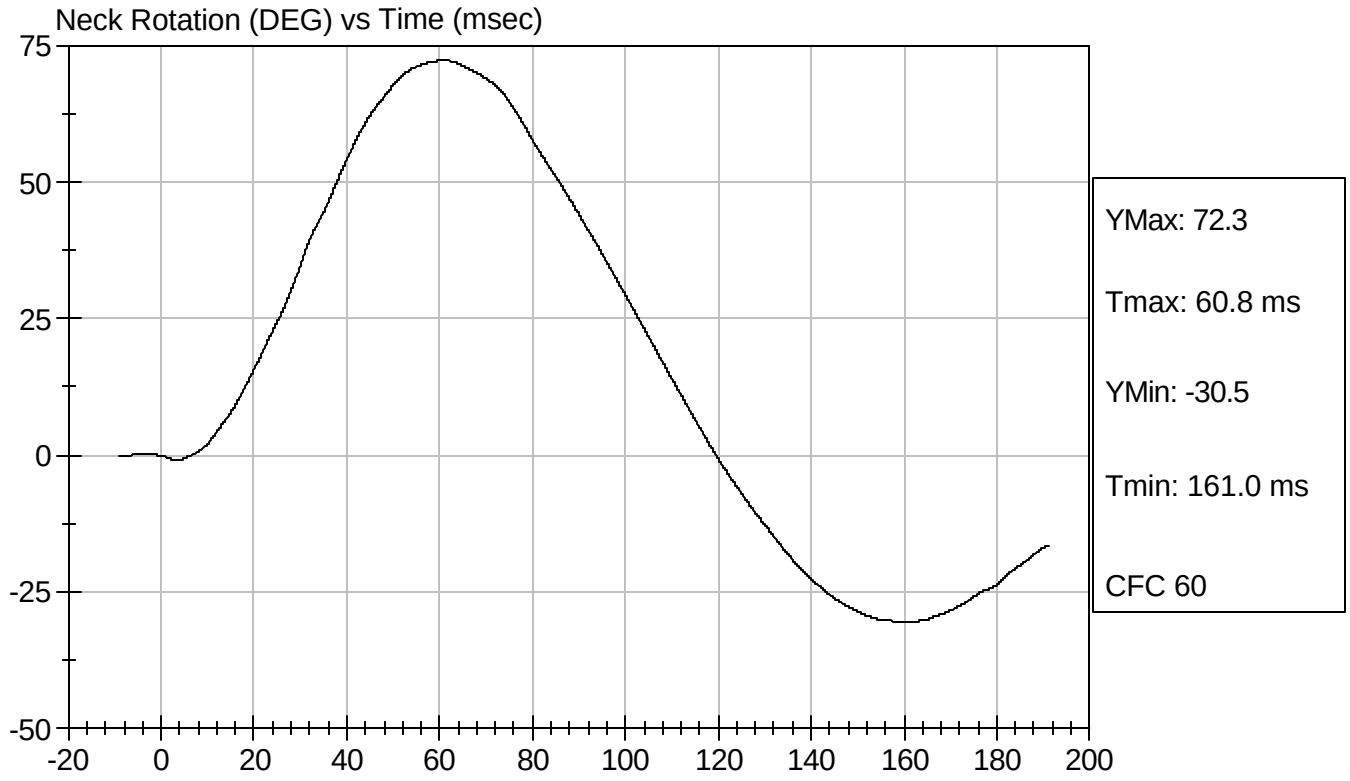
Test Desc: Neck Bending
Component ID: D042459

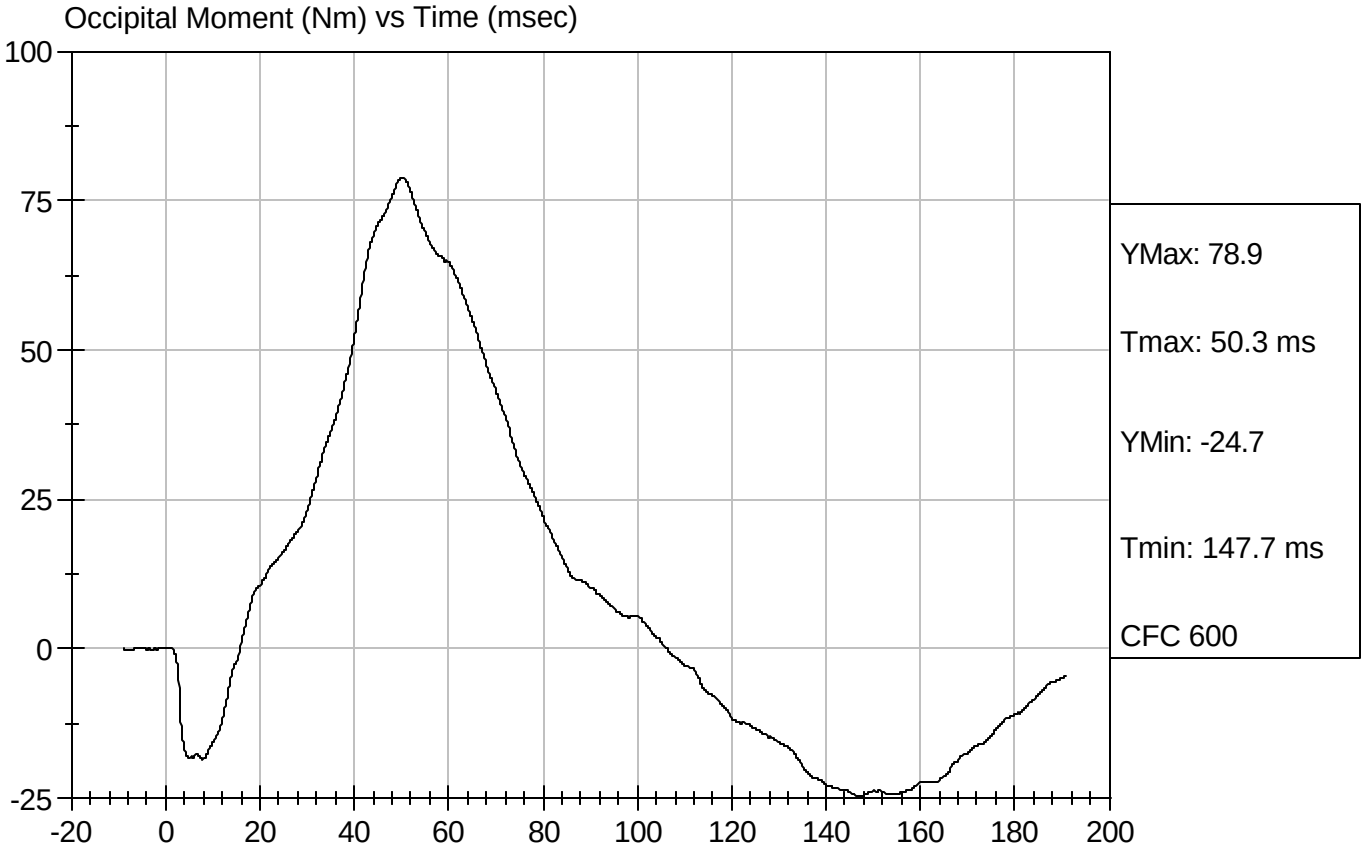
Test Date: 10/22/2004
Speed: 23.16 ft/sec, 7.06 m/sec



Test Desc: Neck Bending
Component ID: D042459

Test Date: 10/22/2004
Speed: 23.16 ft/sec, 7.06 m/sec





Calibration Test Results Summary

Dummy Serial Number: 904

Post-Test Calibration

External Dimensions:	The dummy passed all external dimension requirements.
Head Drop Test:	The head passed all drop test requirements.
Neck Pendulum Test:	The neck passed all pendulum test requirements.
Thorax Impact Test:	The thorax passed all impact test requirements.
Pelvic Impact Test:	The pelvis passed all impact test requirements.
Abdominal Compression Test:	The abdomen passed all compression test requirements.
Lumbar Flexion Test:	The lumbar passed all flexion test requirements.

SID Calibration Data Sheet

Side Impact Dummy

Head Drop Calibration (Lateral)

ATD Serial No: 904 **Test I.D:** D05041

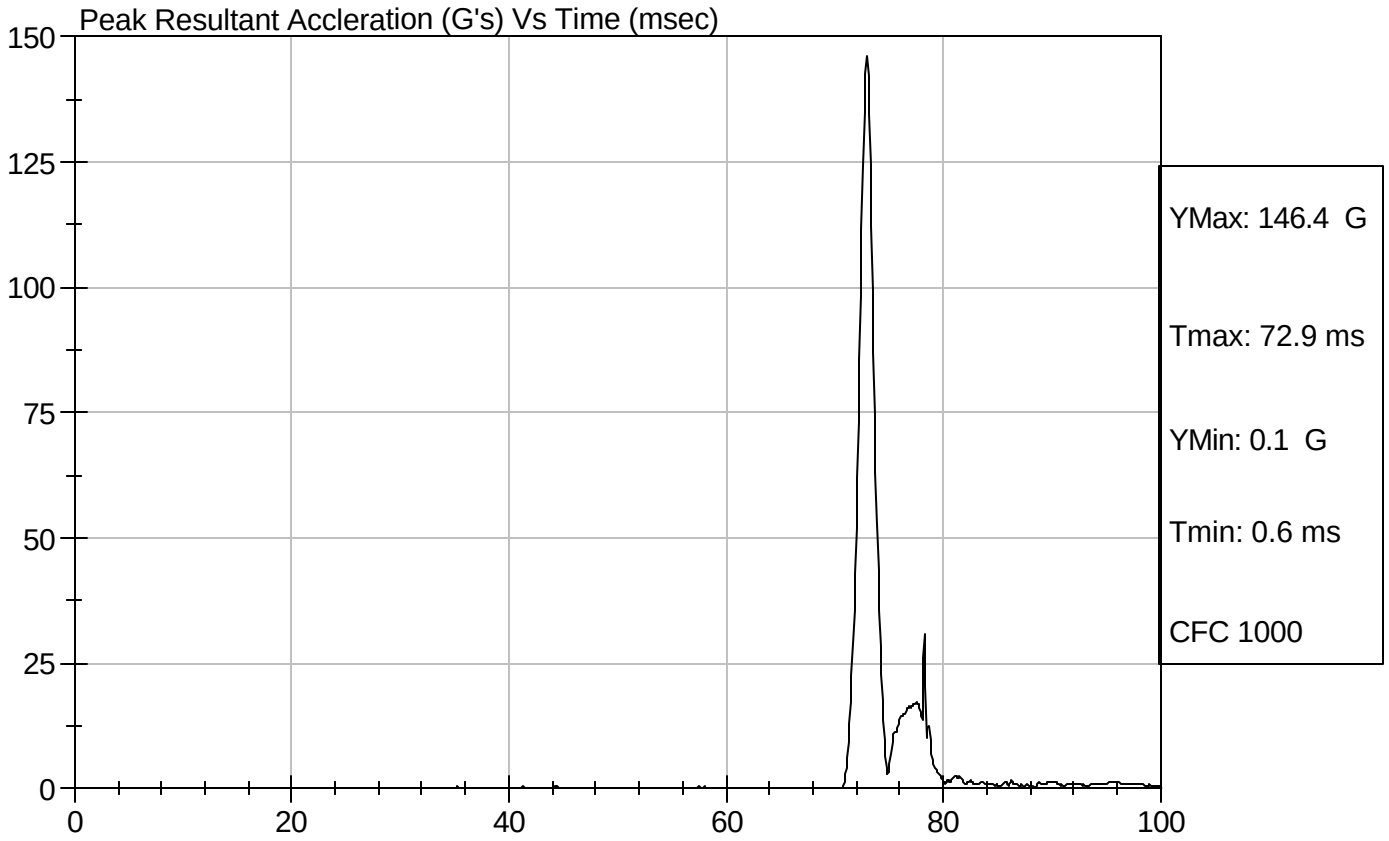
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	deg C	18.9 to 25.5	21.4	Pass
Laboratory Relative Humidity	%	10 to 70	22	Pass
Peak Resultant Acceleration	G's	120 to 150	146	Pass
Is Resultant Curve Unimodal?	Yes/No	15% of peak	Yes	Pass
Peak Longitudnal Acceleration	G's	+/- 15	-11	Pass
		Overall Test Results		Pass

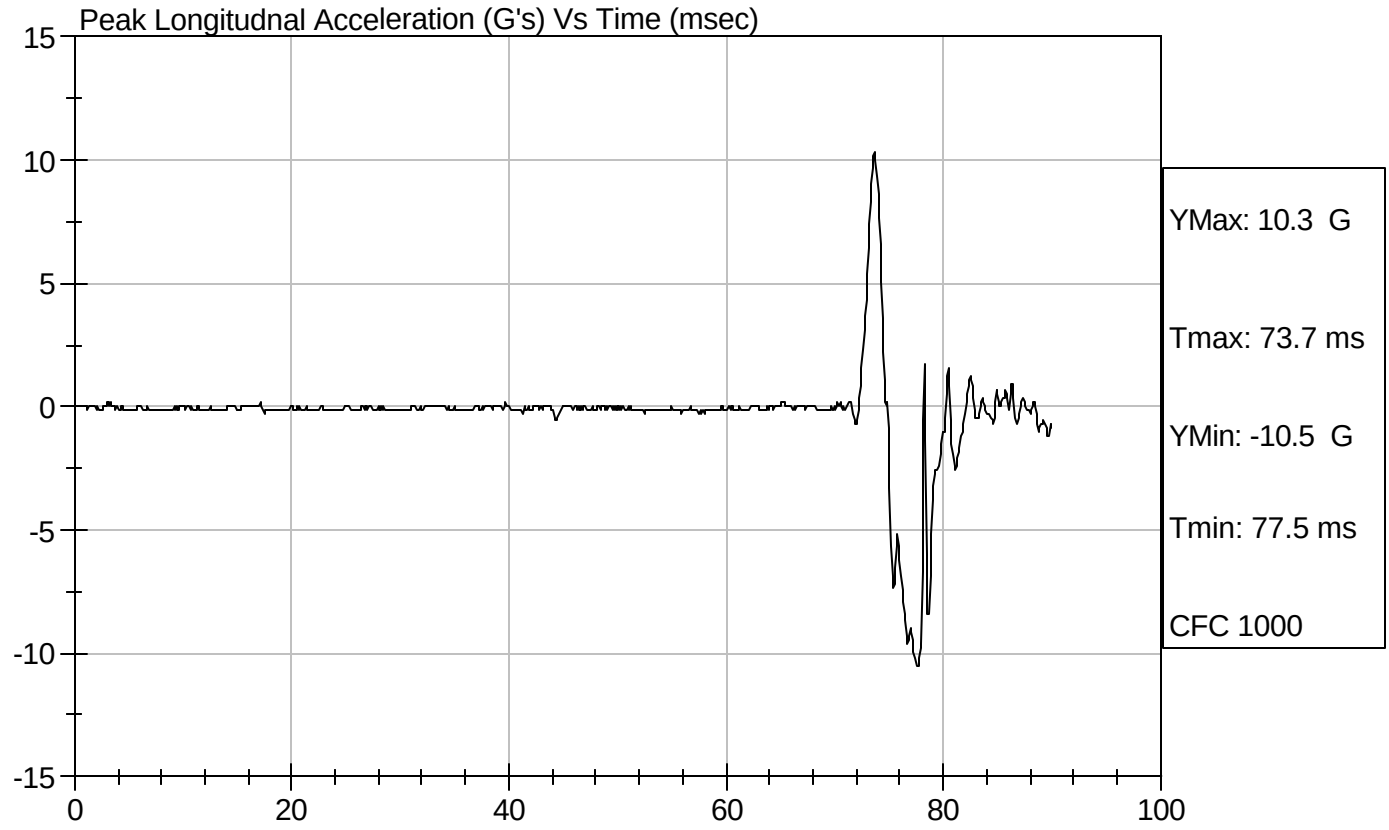
Jessica Hall
Laboratory Technician

01/05/2005
Test Date

David Winkelbauer
Approved By

	Test Description: Head Drop	Test Date: 01/05/2005
	Component: D05041	Speed: 0 ft/s, 0.00 m/s





SID Calibration Data Sheet

Side Impact Dummy

Thorax Impact Test

ATD Serial No: 904 **Test I.D:** D05042

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	deg C	18.9 - 25.5	21.2	Pass
Laboratory Relative Humidity	%	10 to 70	20	Pass
Probe Velocity	m/s	4.27 - 4.33	4.33	Pass
Upper Rib	G's	37 - 46	39	Pass
Lower Rib	G's	37 - 46	38	Pass
Lower Spine	G's	15 - 22	22	Pass
		Overall Test Results		Pass

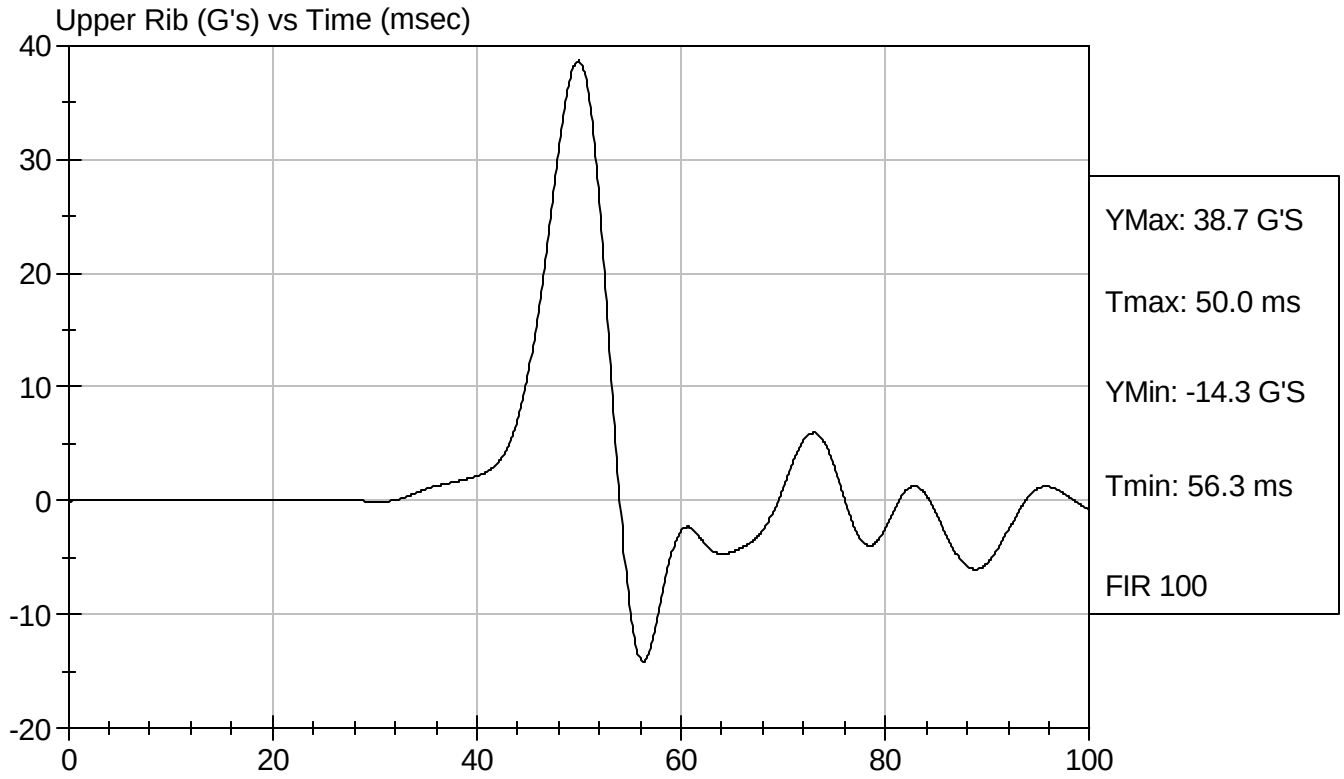
Jessica Hall
Laboratory Technician

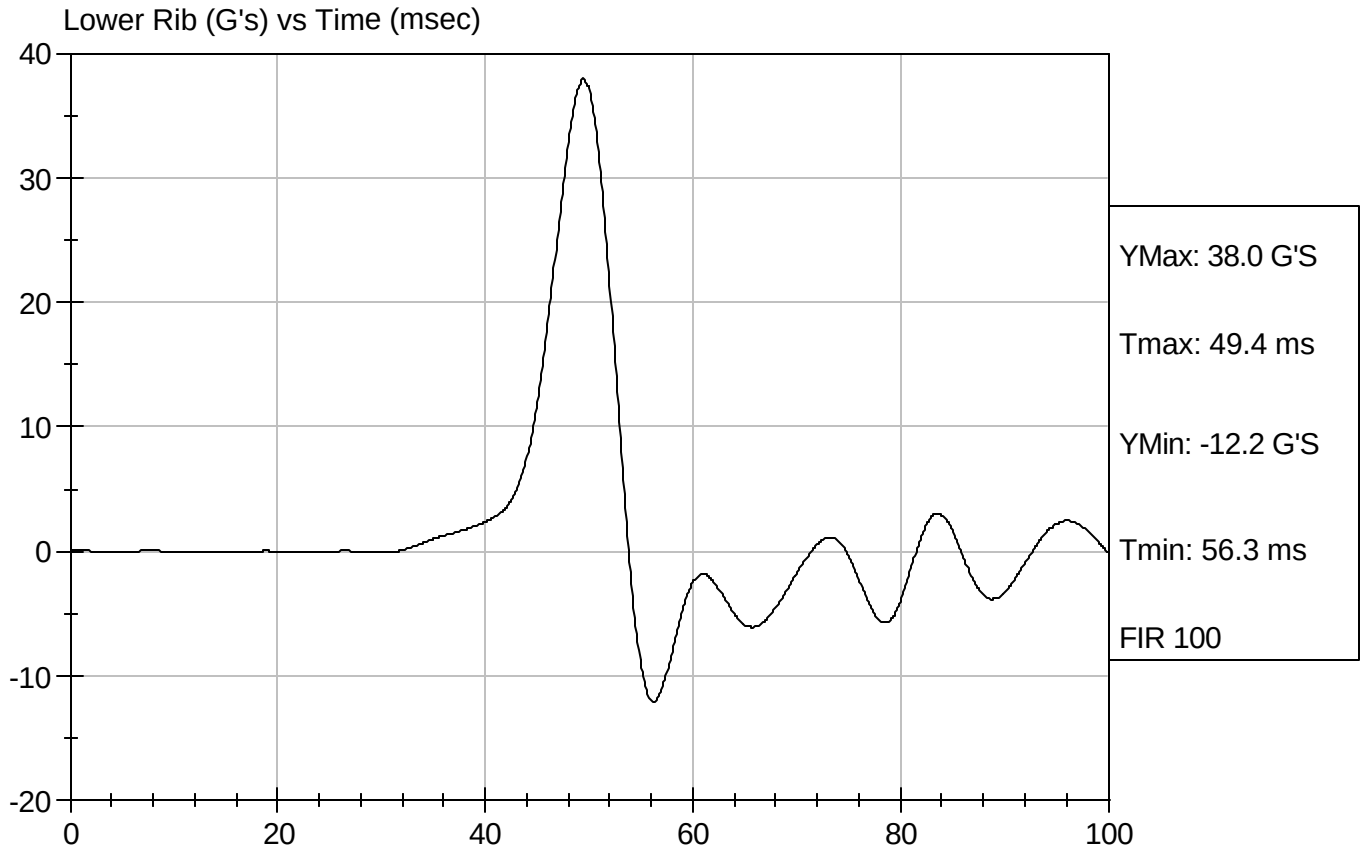
01/06/2005
Test Date

David Winkelbauer
Approved By

Test Desc: Thorax Impact
Component ID: D05042

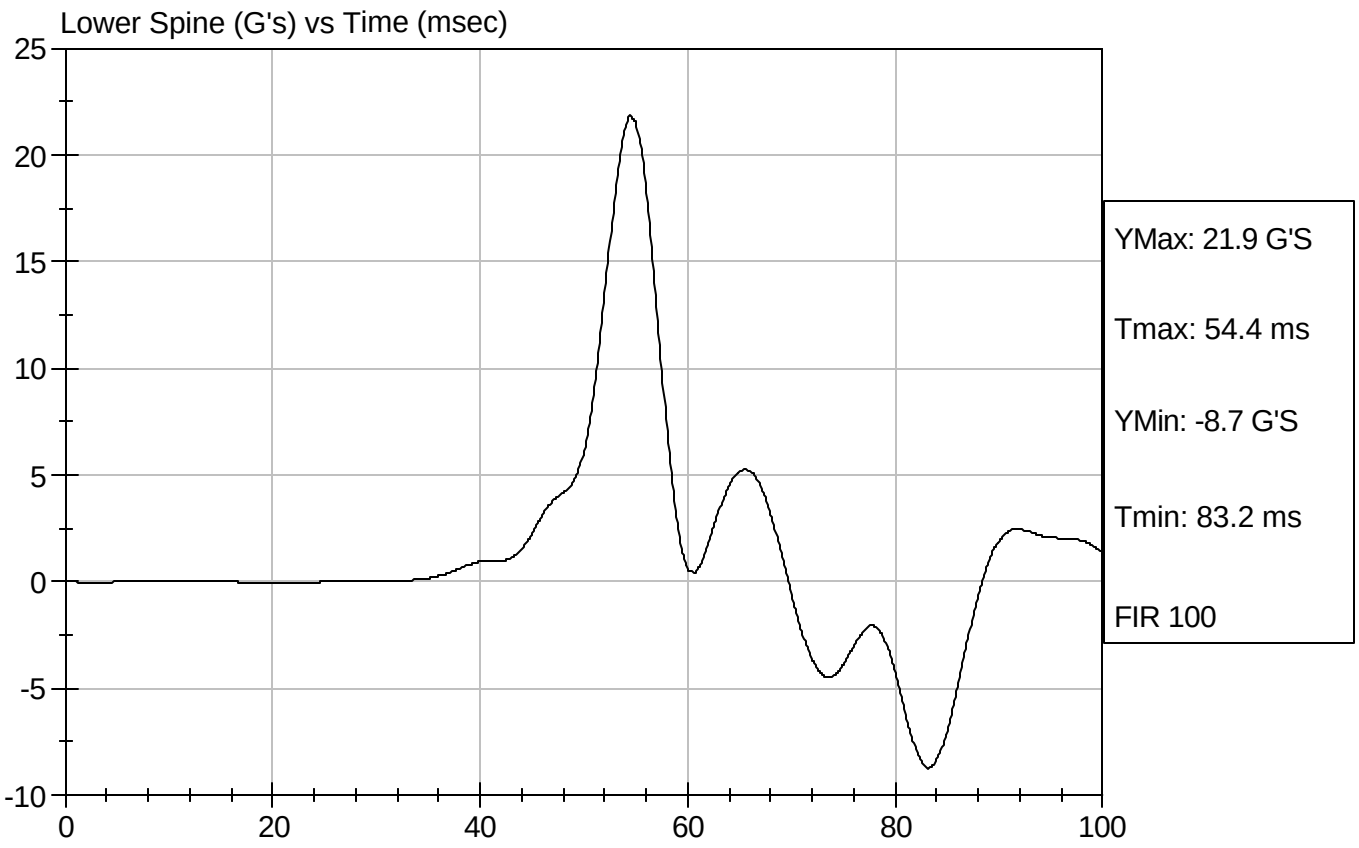
Test Date: 01/06/2005
Speed: 14.2 ft/sec, 4.33 m/sec





Test Desc: Thorax Impact
Component ID: D05042

Test Date: 01/06/2005
Speed: 14.2 ft/sec, 4.31 m/sec



SID Calibration Data Sheet

Side Impact Dummy

Pelvis Impact Test

ATD Serial No: 904 **Test I.D:** D05043

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	deg C	18.9 to 25.5	21.2	Pass
Laboratory Relative Humidity	%	10 to 70	20	Pass
Probe Velocity	m/s	4.27 - 4.33	4.30	Pass
Pelvis Acceleration	G's	40 - 60	53	Pass
		Overall Test Results		Pass

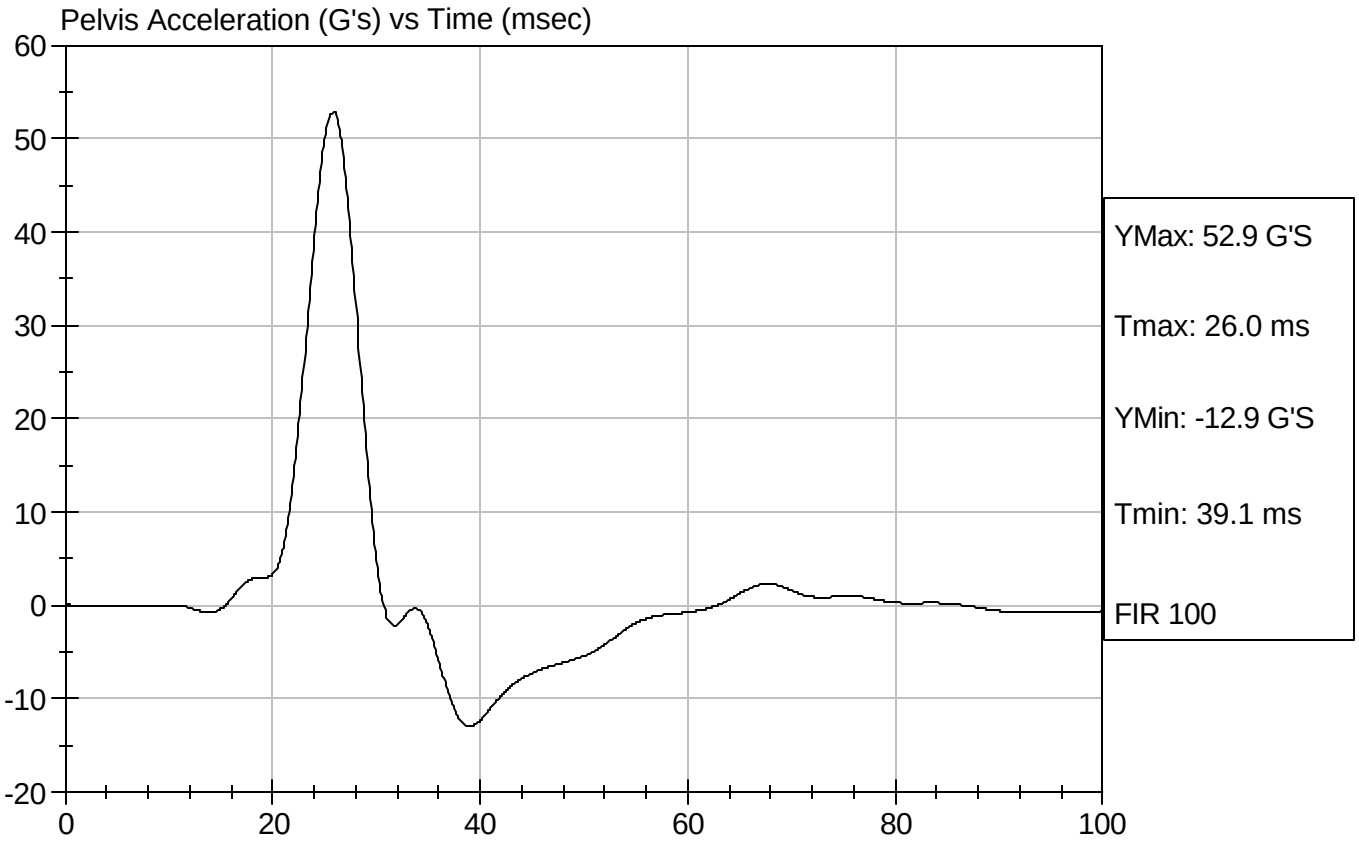
Jessica Hall
Laboratory Technician

01/06/2005
Test Date

David Winkelbauer
Approved By

Test Desc: Pelvis Impact
Component ID: D05043

Test Date: 01/06/2005
Speed: 14.1 ft/sec, 4.30 m/sec



SID Calibration Data Sheet

Side Impact Dummy

Abdominal Compression Calibration (Pre-Load = 10 lbs)

ATD Serial No: 904 **Test I.D:** D05044

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	deg C	18.9 - 25.5	21.4	Pass
Laboratory Relative Humidity	%	10 to 70	22	Pass
Force At 12.7 mm	N	104 -162	141	Pass
Force At 19 mm	N	163 - 222	196	Pass
Force At 25.4 mm	N	222 - 280	259	Pass
Force At 33 mm	N	325 - 391	364	Pass
		Overall Test Results		Pass

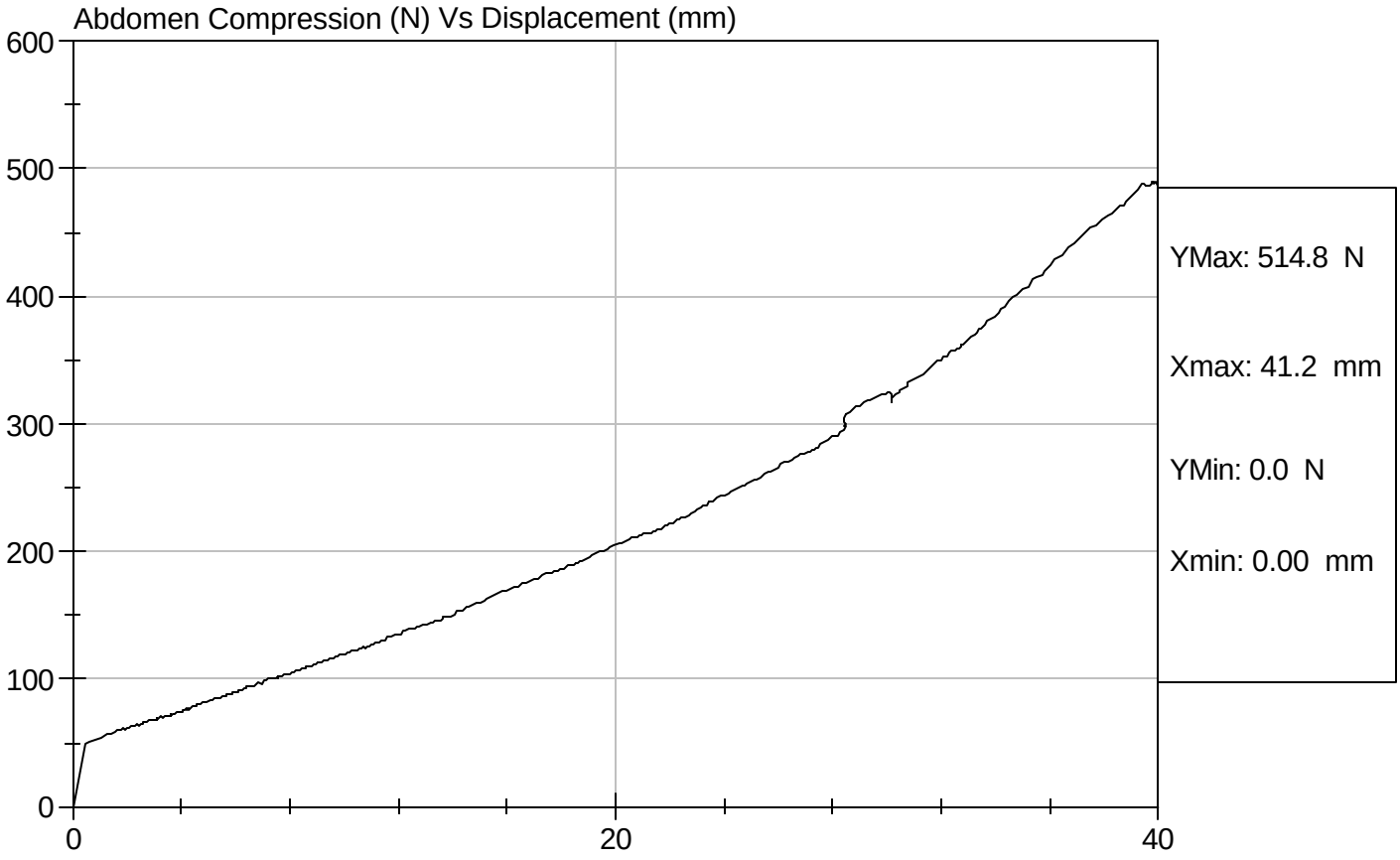
Jessica Hall
Laboratory Technician

01/05/2005
Test Date

David Winkelbauer
Approved By

Test Description: Abdomen Compression | Test Date: 01/05/2005

Component: D05044 | Speed: 0 ft/sec, 0 m/sec



SID Calibration Data Sheet

Side Impact Dummy

Lumbar Flexion Calibration

ATD Serial No: 904 **Test I.D:** D05045

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	deg C	18.9 - 25.5	21.4	Pass
Laboratory Relative Humidity	%	10 to 70	19	Pass
Force At 0 deg	N	0 - 26.7	0.0	Pass
Force At 20 deg	N	97.9 - 151.2	106.7	Pass
Force At 30 deg	N	151.2 - 204.6	177.9	Pass
Force At 40 deg	N	204.6 - 258.0	249.1	Pass
Return Angle	Deg	12 Maximum	4	Pass
		Overall Test Results		Pass

Jessica Hall
Laboratory Technician

01/06/2005
Test Date

David Winkelbauer
Approved By

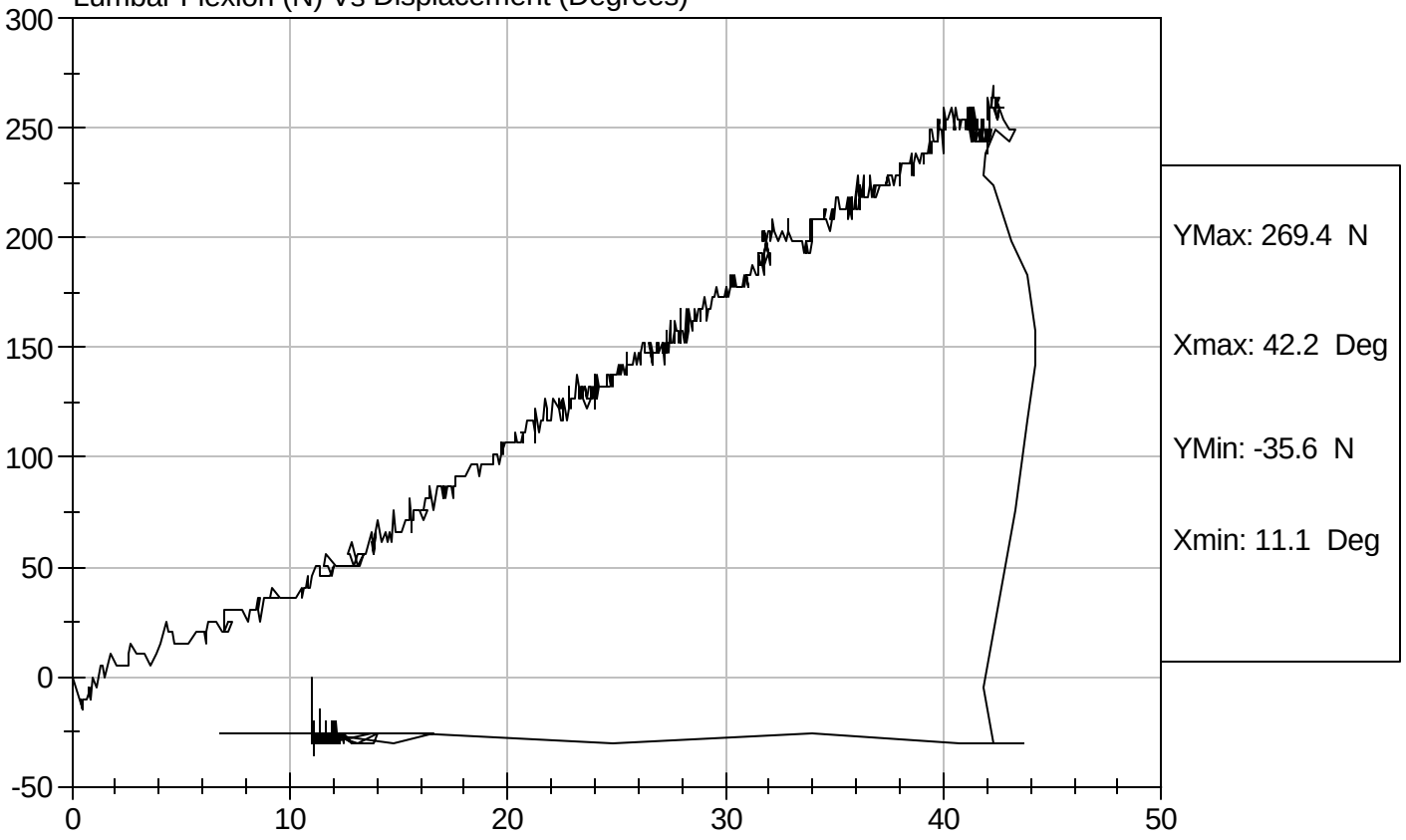
Test Description: Lumbar Flexion

Test Date: 01/06/2005

Component: D05045

Speed: 0 ft/sec, 0 m/sec

Lumbar Flexion (N) Vs Displacement (Degrees)



SID Calibration Data Sheet

Side Impact Dummy (SID)

Neck Pendulum Test

ATD Serial No: 904 **Test I.D:** D05049

Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		deg C	20.6 to 22.2	21.3	Pass
Laboratory Relative Humidity		%	10 to 70	19	Pass
Impact Velocity		m/s	6.89 to 7.13	6.90	Pass
Pendulum Deceleration	10 msec	m/s	1.96 to 2.55	2.37	Pass
	20 msec	m/s	4.12 to 5.10	4.72	Pass
	30 msec	m/s	5.73 to 7.01	6.65	Pass
	40 to 70 msec	m/s	6.27 to 7.64	7.23	Pass
Midsaggital Plane Max Rotation		deg	66 to 82	74	Pass
Head Rotation Peak to Zero - Decay Time		msec	58 to 67	60	Pass
Max. Mx at Occipital Condyles		Nm	73 to 88	79	Pass
Mx Peak To Zero - Decay Time		msec	49 to 64	58	Pass
Mx Peak to Max. Head Rotation		msec	2 to 16	11	Pass

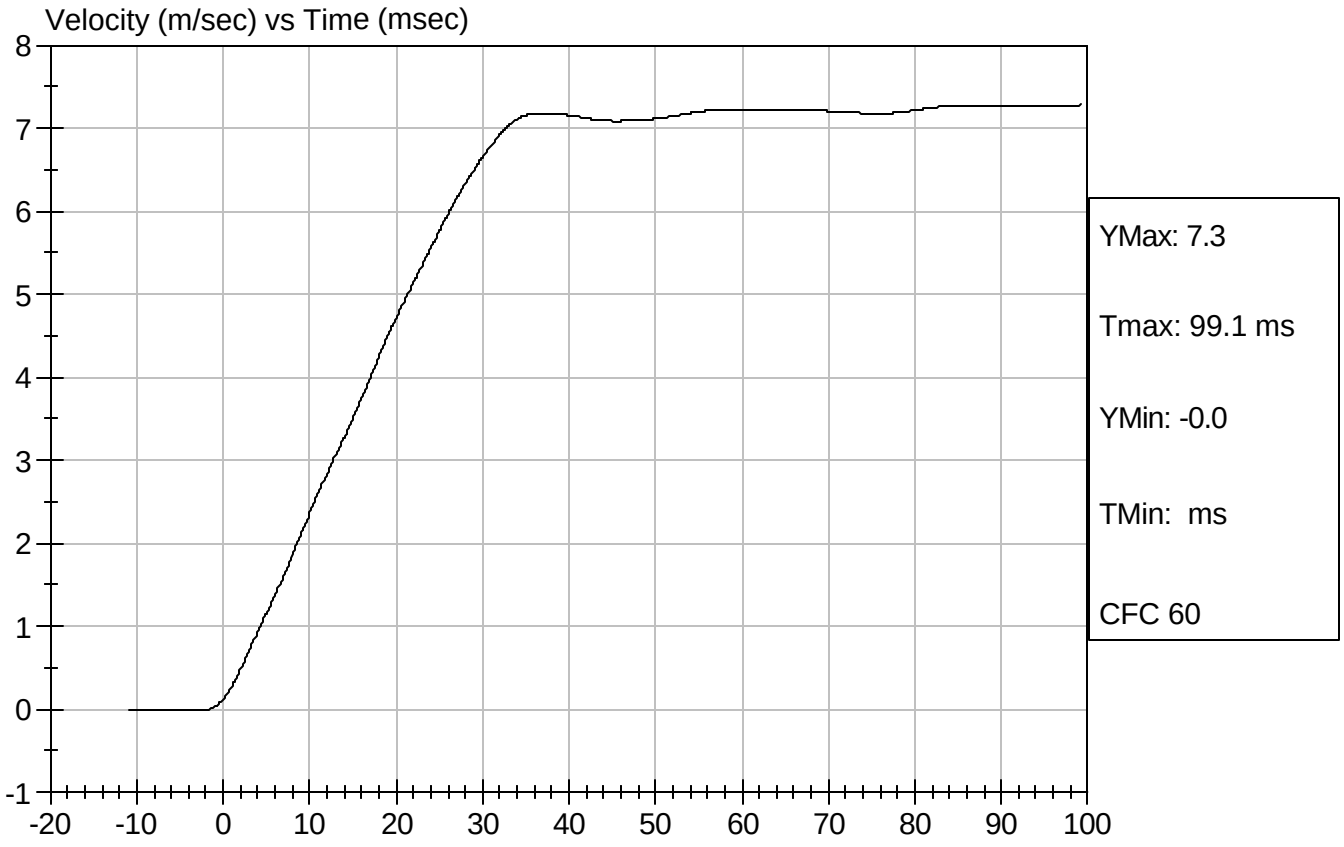
Jessica Hall
Laboratory Technician

01/06/2005
Test Date

David Winkelbauer
Approved By

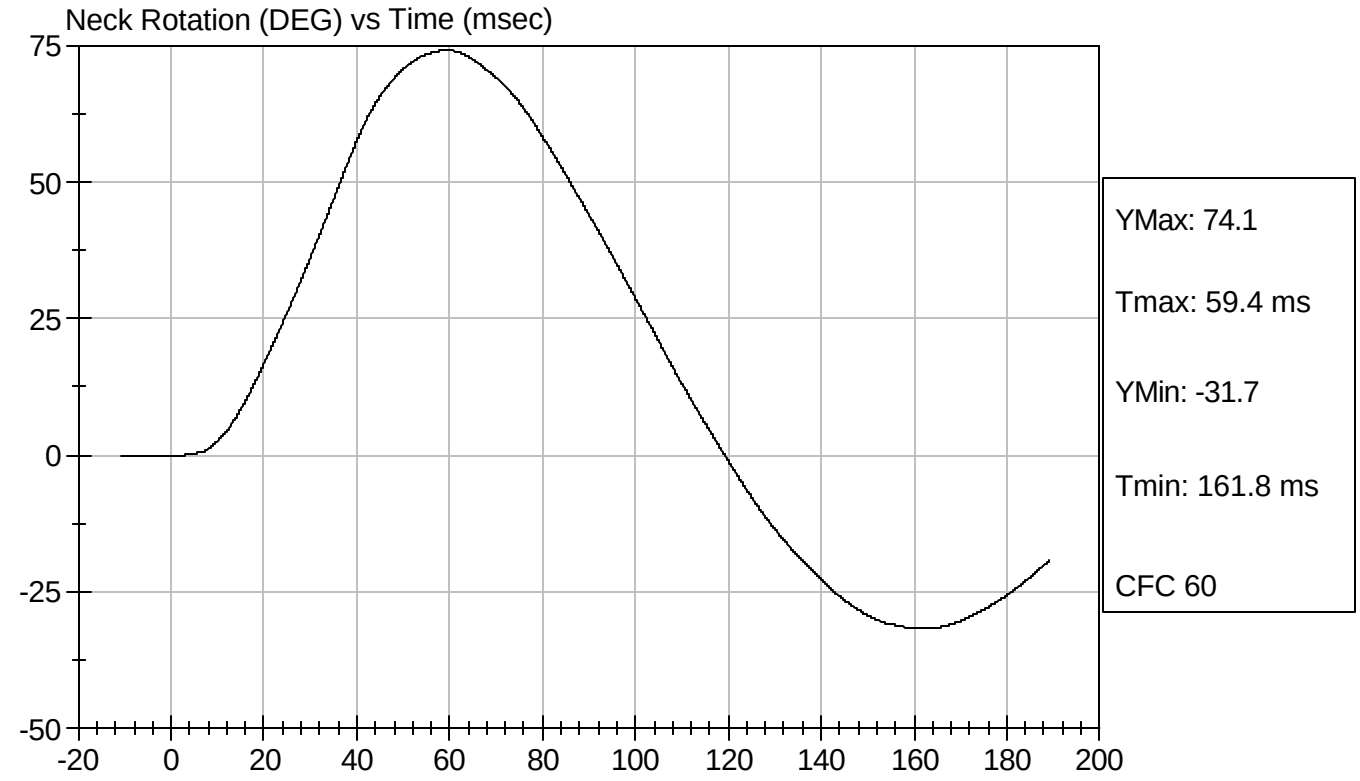
Test Desc: Neck Bending
Component ID: D05049

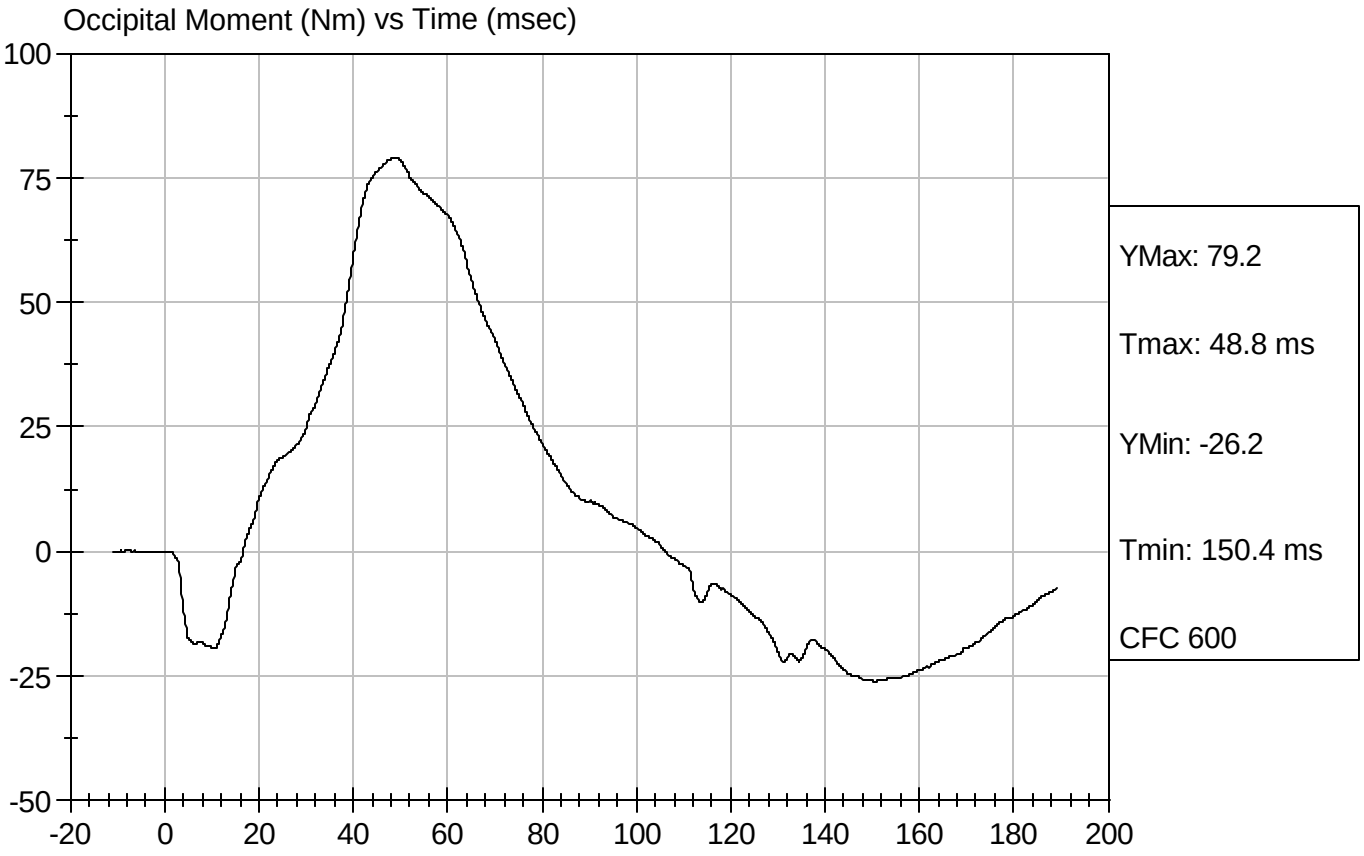
Test Date: 01/06/2005
Speed: 22.63 ft/sec, 6.90 m/sec



Test Desc: Neck Bending
Component ID: D05049

Test Date: 01/06/2005
Speed: 22.63 ft/sec, 6.90 m/sec





SID Calibration Data Sheet
Side Impact Dummy
Inspection Checklist

ATD Serial No: 904

Test Part	Items Checked	Result
Skin	Visual inspection	Pass
Head	Visual, ballast, accelerometer mount	Pass
Neck	Visual	Pass
Spine Box	Visual, ballast, accelerometer mount	Pass
Rib Cage	Visual, measure	Pass
Sternum	Visual	Pass
Lumbar Spine	Visual	Pass
Abdomen	Visual	Pass
Pelvis	Visual, palpate, accelerometer mount	Pass
Upper Legs	Visual	Pass
Knees	Visual	Pass
Lower Legs	Visual, range of motion	Pass
Ankles	Visual, range of motion	Pass
Feet	Visual, range of motion	Pass
Joints	1 to 2 g range	Pass
Other		Pass

Jessica Hall
Laboratory Technician

01/06/2005
Test Date

David Winkelbauer
Approved By

APPENDIX D

INSTRUMENTATION CALIBRATION DATA

DUMMY AND VEHICLE CALIBRATION DATA

	INSTRUMENTS FOR DRIVER DUMMY NO. 904		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Upper Rib Y	J03-J09	Entran	8/23/04
Lower Rib Y	J23-J08	Entran	8/23/04
Lower Spine Y	J14-J17	Entran	8/19/04
Pelvis Y	AH0A2	Endevco	8/24/04
Upper Rib Redundant Y	J14-J14	Entran	8/23/04
Lower Rib Redundant Y	J23-J04	Entran	8/23/04
Lower Spine Redundant Y	AHY54	Endevco	7/26/04
Pelvis Redundant Y	AJ462	Endevco	8/24/04
Head X	AGTY6	Endevco	8/23/04
Head Y	AALH1	Endevco	8/23/04
Head Z	J13943	Endevco	8/23/04
Head Redundant X	AN8D2	Endevco	8/23/04
Head Redundant Y	J10195	Endevco	8/23/04
Head Redundant Z	J11166	Endevco	8/23/04
Neck Load Cell	1561	Entran	7/21/04

VEHICLE INSTRUMENT CALIBRATION

	VEHICLE ACCELEROMETERS		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Left Front Door Centerline Y	H21-N16	Entran	10/27/04
Midrear of Left Front Door Y	F03-F12	Entran	12/02/04
Left Front Door Upper Centerline Y	A09-N37	Entran	9/24/04
Midrear of Left Rear Door Y	I28-H43	Entran	10/29/04
Left Rear Door Upper Centerline Y	L17-D08	Entran	9/13/04
Left Mid A-Post Y	H20-R07	Entran	10/27/04
Left Lower A-Post Y	I16-B11	Entran	10/27/04
Left Mid B-Post Y	J07-M19	Entran	10/29/04
Left Lower B-Post Y	K18-D14	Entran	12/02/04
Floorpan @ Rear Axle X	J25-R20	Entran	12/1/04
Floorpan @ Rear Axle Y	L18-N12	Entran	10/22/04
Floorpan @ Rear Axle Z	J25-R17	Entran	12/01/04
Right Front Sill X	K18-D18	Entran	12/02/04
Right Front Sill Y	K18-D15	Entran	12/02/04
Right Front Sill Z	K18-J04	Entran	12/02/04
Right Rear Sill X	L20-B11	Entran	8/24/04
Right Rear Sill Y	L18-N15	Entran	9/24/04
Right Rear Sill Z	L13-R28	Entran	8/13/04
Left Front Sill Y	K18-D23	Entran	12/02/04
Left Rear Sill Y	A08-M06	Entran	9/13/04
Right Rear Occupant Compartment Y	K18-D17	Entran	12/02/04
Vehicle CG X	K07-R11	Entran	8/25/04
Vehicle CG Y	L18-J07	Entran	8/24/04
Vehicle CG Z	A27-R17	Entran	10/22/04
Driver Seat Track Y	C12-M13	Entran	12/02/04