

REPORT NUMBER: MCW-DOT-08SN07

**NEW CAR ASSESSMENT PROGRAM
SIDE IMPACT TEST**

2008 HONDA ACCORD 4-DOOR SEDAN

NHTSA NUMBER: M85303

**PREPARED BY:
MEDICAL COLLEGE OF WISCONSIN
5000 WEST NATIONAL AVENUE
RESEARCH 151
MILWAUKEE, WISCONSIN 53295**



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FINAL REPORT

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Prepared by:_____

Date:

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16. Abstract A 55/28 km/h 90° Moving Deformable Barrier (MDB) New Car Assessment Program (NCAP) side impact was conducted on the subject 2008 Honda Accord 4-door sedan to obtain new car assessment and research data indicant of FMVSS No. 214D performance. The test was conducted at the Medical College of Wisconsin (MCW) in Milwaukee, Wisconsin on 15 November 2007. The impact velocity of the Moving Deformable Barrier (MDB) was 61.7 km/h, and the ambient temperature at the struck side of the vehicle was 20 °C. The target vehicle's maximum post test static crush was 294 mm at level 2. The test vehicle's occupant performance is as follows: <table border="1" data-bbox="149 1218 1505 1491"> <thead> <tr> <th></th> <th><u>Units</u></th> <th><u>DRIVER</u></th> <th><u>PASS.</u></th> </tr> </thead> <tbody> <tr> <td>Left upper rib (LUR) acceleration</td> <td>G</td> <td>46.1</td> <td>82.8</td> </tr> <tr> <td>Left lower rib (LLR) acceleration</td> <td>G</td> <td>47.4</td> <td>90.2</td> </tr> <tr> <td>Lower spine (T₁₂) acceleration</td> <td>G</td> <td>52.3</td> <td>68.8</td> </tr> <tr> <td>Thoracic Trauma Index (TTI)</td> <td></td> <td>50</td> <td>80</td> </tr> <tr> <td>Pelvis (PEV) acceleration</td> <td>G</td> <td>68.4</td> <td>66.1</td> </tr> <tr> <td>HIC</td> <td></td> <td>89.5</td> <td>451.3</td> </tr> </tbody> </table> 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.							<u>Units</u>	<u>DRIVER</u>	<u>PASS.</u>	Left upper rib (LUR) acceleration	G	46.1	82.8	Left lower rib (LLR) acceleration	G	47.4	90.2	Lower spine (T ₁₂) acceleration	G	52.3	68.8	Thoracic Trauma Index (TTI)		50	80	Pelvis (PEV) acceleration	G	68.4	66.1	HIC		89.5	451.3
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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: U.S. Department of Transportation National Highway Traffic Safety Administration Rulemaking, Office of Crashworthiness Standards, NVS-111 1200 New Jersey Ave, SE, Room W43-410 Washington, D.C. 20590																														
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SECTION 1

PURPOSE AND TEST PROCEDURE

PURPOSE

This side impact test was conducted as part of the FY'08 test program sponsored by the National Highway Traffic Safety Administration (NHTSA), under Contract No. DTNH22-03-D-42005. The purpose of this test was to evaluate side impact protection of a manufactured by Ford Motor Company.

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. The procedures for receiving, inspection, testing, and reporting of test results are described in the test procedures and are not repeated in this report.

SECTION 2

SUMMARY OF NCAP SIDE IMPACT TEST

A 2008 Honda Accord 4-door sedan was impacted on the left (driver's) side by a Moving Deformable Barrier (MDB) modeling a 90° impact as if the test vehicle were moving forward at 28 km/h perpendicular to and across the path of the MDB traveling forward at 55 km/h. Here the test vehicle was stationary and positioned 27° from perpendicular to the MDB tow road guidance system and the MDB was towed 27° ("crabbed") from the guidance system. [See p 26.] The 1675.4 kg test vehicle was impacted by the 1360 kg MDB traveling at a speed of 61.7 km/h (measured inline with the guidance system.) The test was conducted at the Medical College of Wisconsin on 15 November 2007.

Two (2) 50th percentile adult male Hybrid III-Side Impact Dummies (SID/HIIIs) were placed in designated seating positions within the test vehicle: one (1) driver, and one (1) left rear passenger; serial numbers 056 and 058 respectively. Each SID/HIII was instrumented in the following locations:

- Left upper rib uni-axial (Y) accelerometers (primary and redundant)
- Left lower rib uni-axial (Y) accelerometers (primary and redundant)
- Lower thoracic spine uni-axial (Y) accelerometers (primary and redundant)
- Pelvis uni-axial (Y) accelerometers (primary and redundant)
- Head center of gravity tri-axial (X, Y, Z) accelerometers (primary and redundant)
- Upper neck tri-axial (X, Y, Z) force load cells and tri-axial (X, Y, Z) moment load cells

The test vehicle was instrumented with twenty-one (21) structural accelerometers and the MDB was instrumented with six (6) accelerometers. All data channels were recorded with a fully self contained on-board DTS TDAS Pro Data Acquisition System. The data were digitally sampled at 12.5 kHz and processed according to SAEJ211-1 (March 1995).

One (1) real-time video camera and nine (9) high-speed video 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 dummies can be found in Appendix A.

All of the above was conducted in accordance to the Laboratory Test Procedure for New Car Assessment Program Side Impact Testing dated November 2002.

2.2 GENERAL COMMENTS

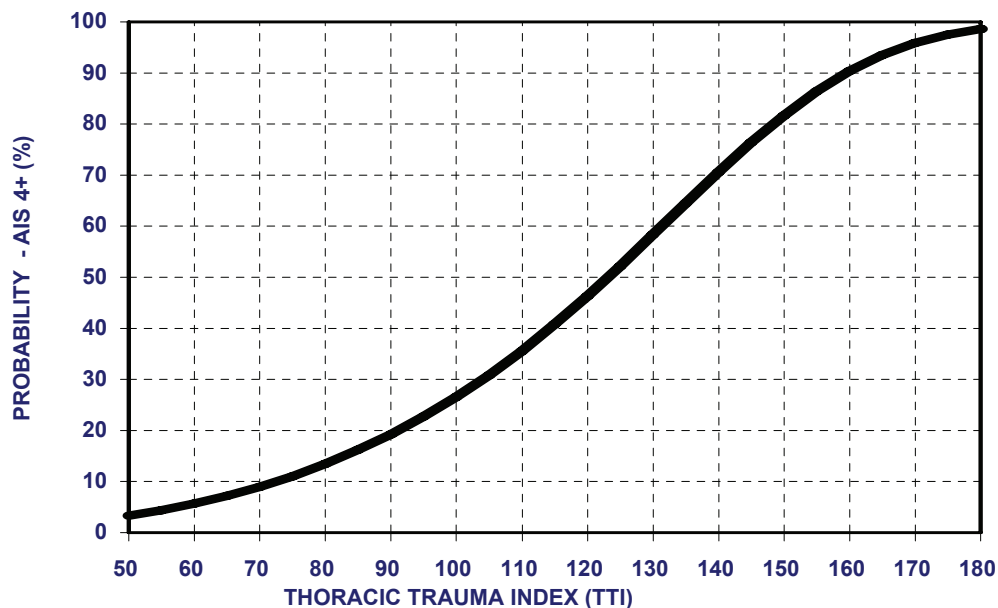
The test vehicle sustained a maximum static crush of 294 mm at level 2, 1350 mm rearward of the vertical impact line.

Test summaries, post test observations, vehicle, MDB, camera, and occupant measurements are presented in datasheets 1-16. Appendix A contains the still photograph prints. Appendix B contains selected driver and passenger SID/HIII's response data traces. Appendix C contains the SID/HIII's configuration and performance verification data.

OCCUPANT SUMMARY		
Injury criteria	Driver (P1)	Left rear passenger (P4)
HIC36	89.5	451.3
T1 (ms)	28.6	48.6
T2 (ms)	63.6	62.9
TTI	50	80
Maximum pelvic acceleration (G)	68.4	66.1

Head Injury Criterion (HIC) is the standardized calculation using resultant head acceleration to assess head injury. Generally, a higher HIC represents an increase in the likelihood of a serious head injury. HIC36 specifies a time 'window' of 36 milliseconds over which the integral is calculated. T1 and T2 represent the time of the lower and upper bounds of the window in which the HIC is calculated.

The Thoracic Trauma Index (TTI) is computed from the crash test dummy's accelerations at the upper rib, lower rib, and lower spine to quantify the risk of a serious thorax injury during a typical near side impact crash. The injury risk curve is shown below. The vertical axis of the curve is the probability of sustaining an Abbreviated Injury Scale (AIS) level 4 or greater injury. AIS is an anatomical scoring system used to assess a 'threat to life' associated with a specific injury; injuries are ranked on a scale of 1 to 6, with 1 being 'minor', 4 'severe' and 6 an 'unsurvivable' injury. A lower TTI corresponds to a decreased probability of a severe thorax injury. (www.trauma.org)



The maximum pelvic acceleration is used to assess the likelihood of injury to the pelvis during a side impact crash. Higher pelvic accelerations correspond to an increase in the likelihood of sustaining a severe pelvis injury.

SUPPLEMENTAL RESTRAINT SYSTEM INFORMATION				
Restraint type	Left front (driver) occupant Location 01		Left rear (passenger) occupant Location 04	
	Installed	Operation	Installed	Operation
Front airbag	Yes – steering wheel	Deployed	No	N/a
Side airbag	Yes – side back	Deployed	No	N/a
Head airbag	No	N/a	No	N/a
Curtain airbag	Yes – side header	Deployed	Yes	Deployed
Seat belt pretensioner	Yes	Deployed	No	N/a
Seat belt load limiter	Yes	N/a	No	N/a

These test data and report can be found in detail on the NHTSA website at www.nhtsa.dot.gov.

A brief summary of the crash test can be located at www.safercar.gov

TEST NOTES

DATA SHEET NO. 1
GENERAL TEST AND VEHICLE PARAMETER DATA

VEHICLE INFORMATION		VEHICLE OPTIONS	
Year	2008	Air conditioning	Yes
Make	Honda	Anti-lock brakes	Yes
Model	Accord	AM/FM radio	Yes
Body style	4-door sedan	All wheel drive	No
NHTSA number	M8 5303	Combo bag	No
MCW test ID	08SN07	Console	Yes
VIN	1HGCP26348A024606	Cruise/speed control	Yes
Color	Royal blue pearl	Curtain bag	Yes - front and rear
Build date	October 2007	Disc brakes	Yes - front and rear
Engine No. of cylinders	4	Frontal bag	Yes
Engine Displacement (L)	2.4	Power brakes	Yes
Engine Placement	Lateral	Power door locks	Yes
Transmission	Automatic with O/D	Power steering	Yes
Final drive	Front wheel drive	Power windows	Yes
Delivery date	November 2, 2007	Torso bag	Yes - front only
Odometer reading	30	Tilt steering wheel	Yes

CERTIFICATION LABEL INFORMATION			
Manufacturer	Honda of America Mfg., Inc.	GVWR (kg)	1954.1
		GAWR front (kg)	1062.3
Date of manufacture	October 2007	GAWR rear (kg)	916.8

SEAT INFORMATION			
	Number of occupants	Seat type	Seat back type
Front	2	Bucket	Adjustable
Back	3	Split bench	Fixed
Third	0		
Total	5		

CARGO CAPACITY CALCULATION			
	Units	Value	Reference label
Vehicle maximum capacity	kg	386.4	(A)
Number of occupants (7) X 68.04 kg	kg	340.9	(B)
Cargo capacity (RCLW) †	kg	45.5	(C) = (A)-(B) †

† Note if RCLW is > 136.1 kg (300 lbs), use 136.1 kg

DATA SHEET NO. 1
GENERAL TEST AND VEHICLE PARAMETER DATA (CONTINUED)

TEST VEHICLE MASS INFORMATION				
	Units	As delivered	As tested	Fully loaded
Left front	kg	455.9	465.0	466.8
Right front	kg	440.5	444.1	444.1
Left rear	kg	288.6	398.6	401.9
Right rear	kg	290.5	367.7	369.6
Total front	kg	896.4	909.1	910.9
% Total front	%	60.8	54.3	54.1
Total rear	kg	579.1	766.3	771.5
% Total rear	%	39.2	45.7	45.9
Total	kg	1475.5	1675.4	1682.4

As delivered mass is vehicle mass with maximum fluids

Fully loaded mass is the as delivered mass + 1 or 2 ATD's + RCLW

As tested mass is the mass of test vehicle with 1 or 2 ATD's + instrumentation + ballast (if necessary)

CALCULATION OF TEST VEHICLE TARGET MASS			
	Units	Value	Reference label
As delivered test vehicle mass	kg	1475.5	(D)
Maximum cargo capacity (RCLW)	kg	45.5	(C)
Mass of SID HIII's (1 or 2)	kg	161.4	(E)
Test vehicle target mass (TVTW)	kg	1682.4	(D) + (C) + (E)

As tested mass must be 4.5 kg to 9 kg less than the test vehicle target mass

BALLAST INFORMATION	
Mass of ballast added (kg)	None added
Location	N/a
<u>Components removed from test vehicle</u> Non-struck front and rear door windows, non-struck side interior panels, exhaust system, spare tire, valve cover, rear and center head rest, rear tail-lights, radiator, exhaust manifold, non-struck side mirror, air cleaner, trunk panel, windshield wipers	

IMPACT LOCATION ON TEST VEHICLE	
Wheelbase	2800 mm
Nominal impact point	460 mm rearward of front axle
Actual impact point	465 mm rearward of front axle

DATA SHEET NO. 1
GENERAL TEST AND VEHICLE PARAMETER DATA (CONTINUED)

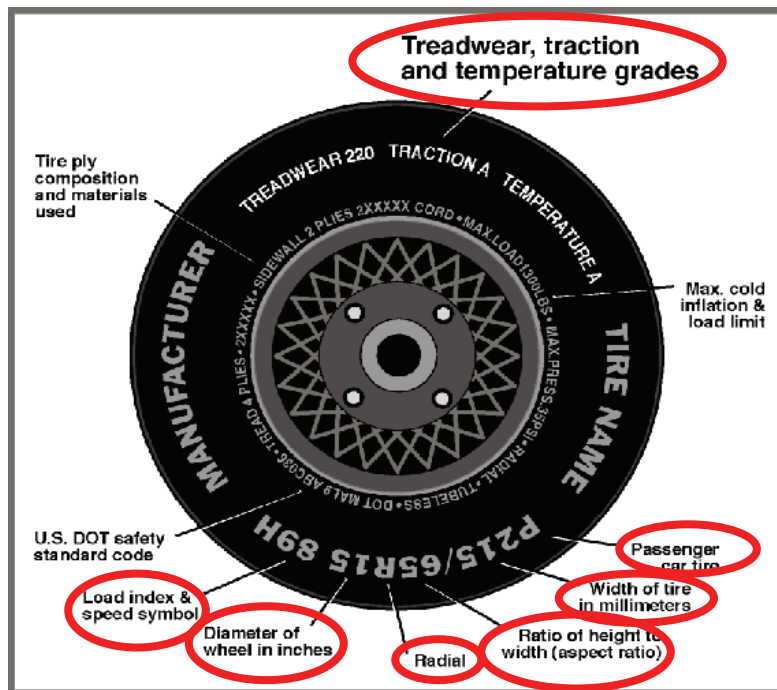
TEST VEHICLE ATTITUDES				
	Units	As delivered	As tested	Fully loaded
Left front	mm	720	712	711
Right front	mm	719	717	717
Left rear	mm	729	692	690
Right rear	mm	734	709	708
CG (X)	mm	1701	1519	1516

As tested attitudes must be between as delivered and fully loaded attitudes

CG (X) measured rearward from front axle centerline

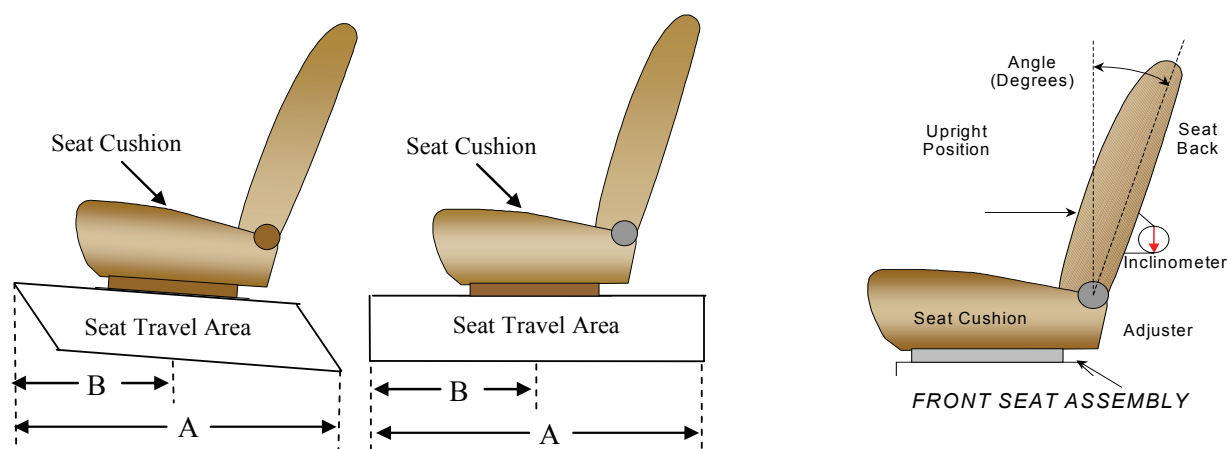
AUTOMATIC DOOR LOCK (ADL) INFORMATION				
	Left front	Left rear	Right front	Right rear
ADL present	Yes	Yes	Yes	Yes
ADL deactivated	Yes	Yes	Yes	Yes
Deactivation method	Followed instructions in owner's manual			
Door lock status	Unlocked	Unlocked	Unlocked	Unlocked

DATA SHEET NO. 2
TEST VEHICLE TIRE INFORMATION



TIRE INFORMATION		
Measured Parameter	Front	Rear
Maximum tire pressure (kPa)	350	350
Cold / test pressure (kPa)	207	207
Recommended tire size	215/60R16	215/60R16
Tire size on vehicle	215/60R16	215/60R16
Tire manufacturer	Dunlop	Dunlop
Tire name	SP Sport 7000	SP Sport 7000
Tire type	All season	All season
Tire width (mm)	215	215
Ratio of height to width (aspect ratio)	60	60
Radial	Yes	Yes
Wheel diameter (inches)	16	16
Load index & speed symbol	94H	94H
Tread wear	340	340
Traction grade	A	A
Temperature grade	A	A

DATA SHEET NO. 3 TEST VEHICLE INFORMATION



Seat fore/aft positions

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

SEAT FORE/AFT POSITION		
	Left front seat	Left rear seat
Type	Manual/Adjustable	Fixed
Fore/aft total travel (mm)	278	N/a
Number of detents	25	N/a
Test position	11 th notch	N/a

‡Full forward = notch 0

Seat back position

The driver and passenger seat back is positioned according to the manufacturers designated angle.

SEAT BACK POSITION		
	Left front seat	Left rear seat
Seat back angle @ head rest post	8.8°	Fixed
Test position	4 th notch	N/a

‡Full upright = notch 0

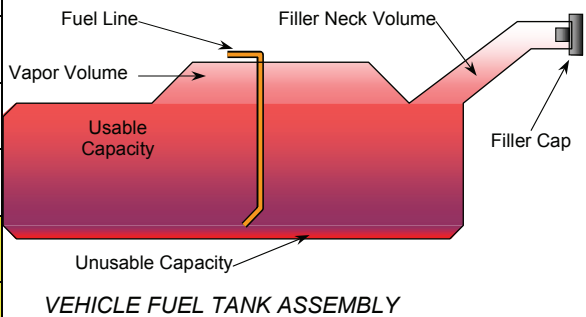
Seat belt position

The adjustable anchorage locations are positioned according to the manufacture's specifications.

SEAT BELT ADJUSTABLE ANCHORAGE (D-RING)		
	Left Front Seat	Left Rear Seat
Adjustable anchor present	Yes	Fixed
Total travel (mm)	64	N/a
Test position	Highest position	N/a

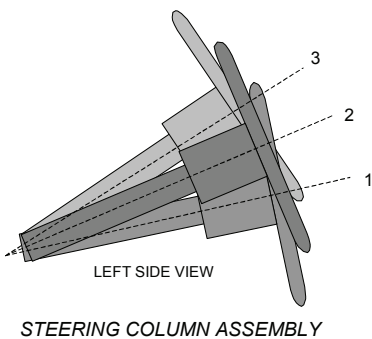
DATA SHEET NO. 3
TEST VEHICLE INFORMATION (CONTINUED)

Fuel tank information

STODDARD INFORMATION			
Description	Units	Value	
Usable capacity of standard equipment fuel tank	L	68.9	
Usable capacity of optional equipment fuel tank	L	N/a	
Usable capacity of vehicle used for certification testing to requirements	L	68.9	
Amount of stoddard added for test	L	64.5	
% Usable capacity (92%-94%)	%	93.6	
Operational instructions	None		
Electric fuel pump present	Yes		
Operating condition of test vehicle for fuel pump operation	The fuel pump is activated when the ignition is turned on.		

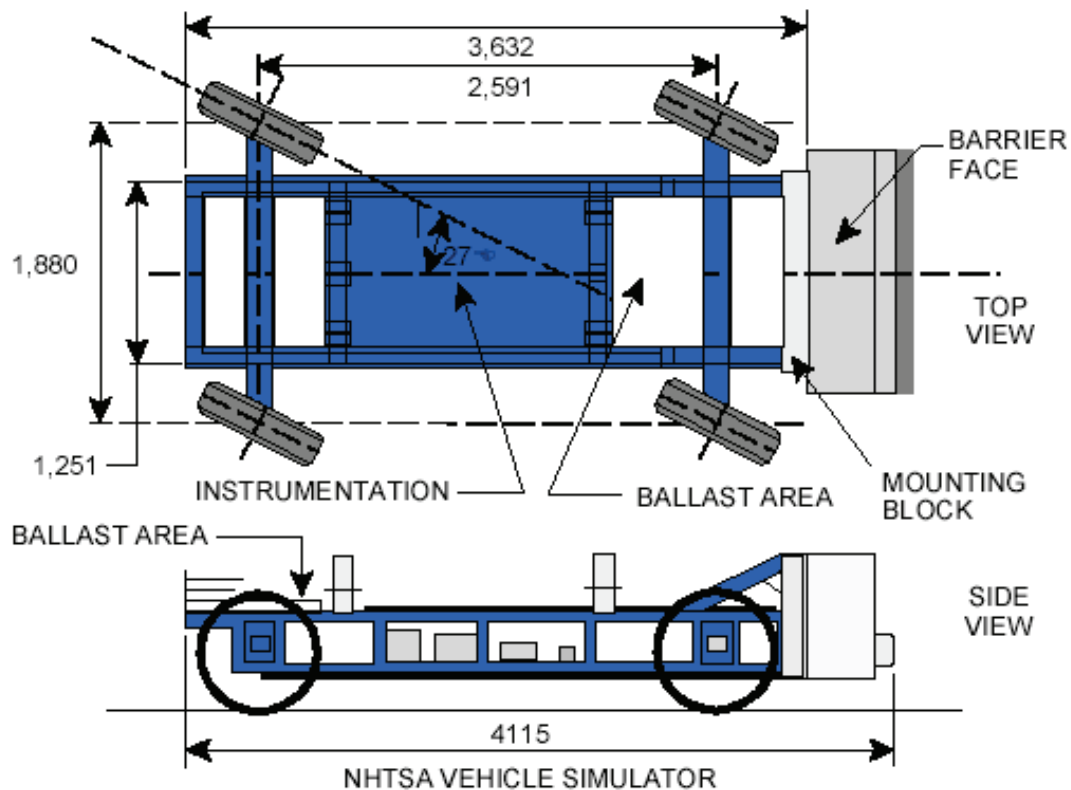
Steering wheel information

Steering wheel and column adjustments are placed according to the manufacturer's specifications.

ADJUSTABLE STEERING COLUMN		
Adjustable column	Yes	
Steering wheel angle in upper most position	25.9°	
Steering wheel fore/aft travel	42	
Number of detents	N/a	
Test position	Steering wheel positioned 22.5° relative to side sill panel.	

DATA SHEET NO. 4
MOVING DEFORMABLE BARRIER (MDB) SUMMARY OF RESULTS

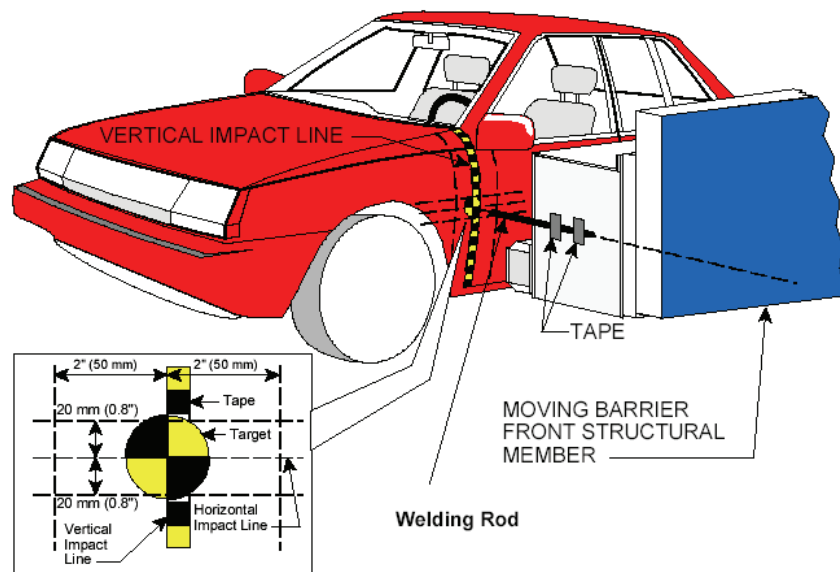
MDB SPECIFICATIONS				
	Units	Specification	Range	Value
Overall Width of Framework Carriage	mm	1251	1226-1276	1245
Overall Length w/Impactor Face	mm	4115	4090-4140	4101
Overall Length w/o Impactor Face	mm	3632	3607-3657	3617
Longitudinal Cg from Front Axle	mm	1123	1098-1148	1135
Track Width	mm	1880	1855-2005	1864
Mass	kg	1361	1356.5-1365.5	1360
MOI (X)	kg-m ²	508	483-533	496
MOI (Y)	kg-m ²	2263	2150-2376	2227
MOI (Z)	kg-m ²	2572	2443-2701	2609



DATA SHEET NO. 4
MOVING DEFORMABLE BARRIER (MDB) SUMMARY OF RESULTS (CONTINUED)

MDB MASS INFORMATION		
	Units	As tested
Left front	kg	546.4
Right front	kg	214.5
Left rear	kg	139.5
Right rear	kg	459.1
Total front	kg	760.9
% Total front	%	56.0
Total rear	kg	598.6
%Total rear	%	44.0
Total	kg	1359.5

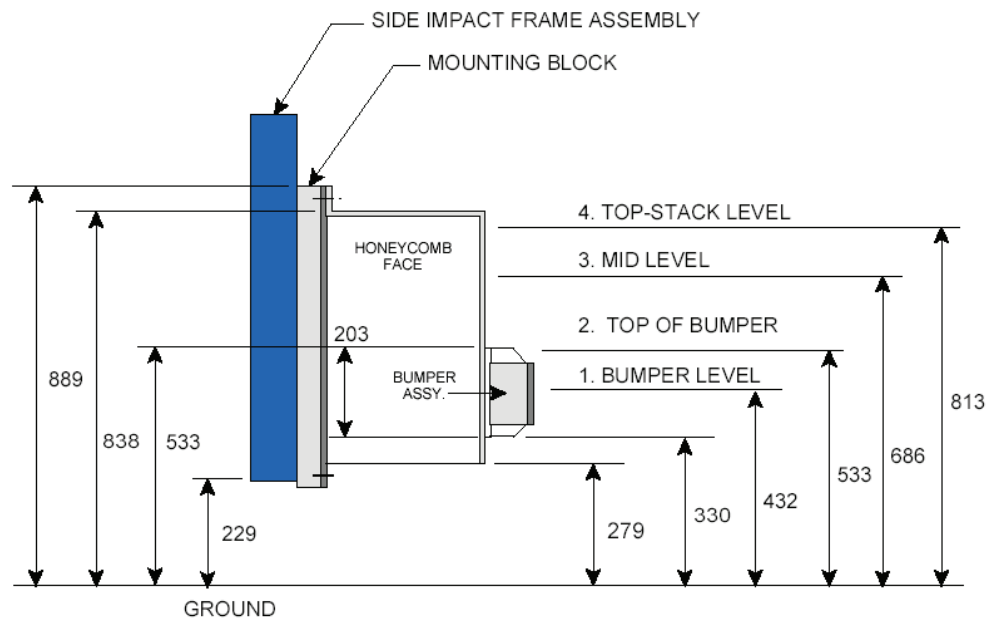
IMPACT SPEED				
	Units	Specification	Range	Value
Primary speed trap	kmh	61.9	61.1-62.7	61.7
Redundant speed trap	kmh	61.9	61.1-62.7	61.5



IMPACT POINT INFORMATION		
Vertical impact line is	460 mm rearward of front axle	
Actual impact is	465 mm rearward of front axle	
Measurement	Value	Tolerance
Impact point distance from vertical impact line	5 mm rearward	+/- 50 mm
Impact point distance from horizontal impact line	9 mm below	+/- 20 mm

DATA SHEET NO. 4
MOVING DEFORMABLE BARRIER (MDB) SUMMARY OF RESULTS (Continued)

HONEYCOMB FACE CLEARANCE					
	Units	Specification	Range	Left	Right
Bottom of barrier	mm	279	276-282	278	279
Bottom of bumper	mm	330	327-333	329	331
Top of bumper	mm	533	530-536	532	533
Top of barrier	mm	838	835-841	836	836



RIGHT SIDE VIEW

**DATA SHEET NUMBER 5
POST TEST OBSERVATIONS**

TEST DUMMY INFORMATION AND CONTACT POINTS		
Description	Left front seat	Left rear seat
Dummy type / serial no.	SID HIII/056	SID HIII/058
Head contact	To side curtain airbag	To side curtain airbag
Upper torso contact	To seat mounted side airbag	To left rear door panel 105 mm below window sill
Lower torso contact	To seat mounted side airbag	To left rear door panel ~245 mm below window sill
Left leg contact	To left front door panel along bottom of arm rest; 360 mm below window sill	To left rear door panel along bottom edge of armrest
Left knee contact	To left front door panel in front of arm rest	To left rear door panel 365 mm below window sill

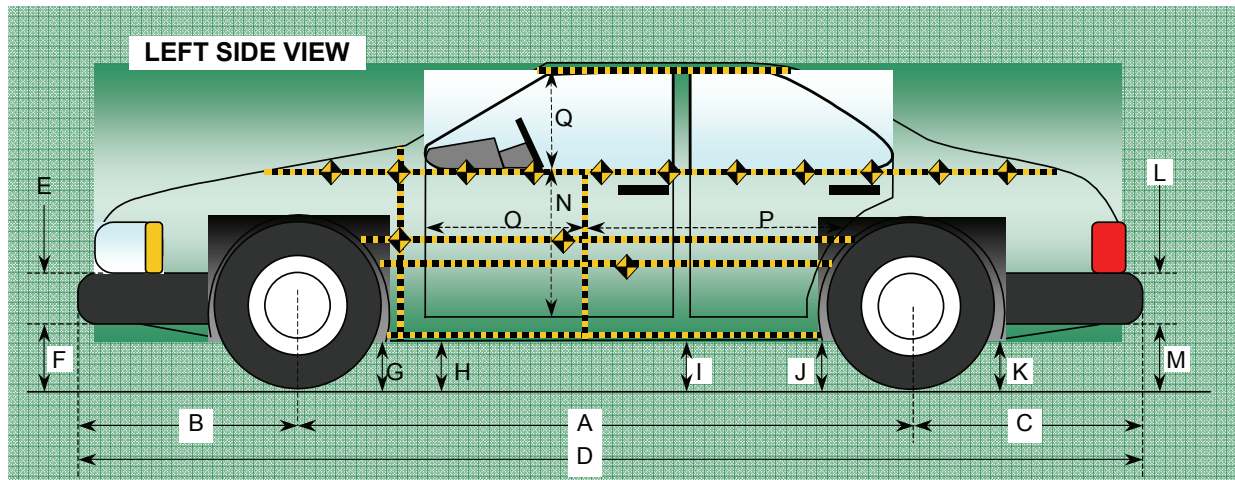
POST TEST DOOR OPENING AND SEAT TRACK INFORMATION		
Description	Front	Rear
Locked/unlocked doors	Unlocked	Unlocked
Left side door opening	Closed/latched/inoperable	Closed/latched/inoperable
Right side door opening	Closed/latched/operable	Closed/latched/operable
Seat movement	~24 mm of seat crush	~130 mm of seat crush
Seat back failure	None	None

POST TEST STRUCTURAL OBSERVATIONS	
Critical areas of performance	Observations/conclusions
Pillar performance	Lower b-pillar panel separated from upper b-pillar panel below d-ring
Sill separation	Rear door max. separation at b-pillar, ~175 mm
Windshield damage	Damage at upper right corner; moved downward and medially; additional damage along top and extending ~850 medially
Window damage	Front and rear struck side door windows shattered at impact
Other notable effects	Max. separation of rear door along window/c-pillar, ~105 mm

DATA SHEET NUMBER 5
POST TEST OBSERVATIONS (CONTINUED)

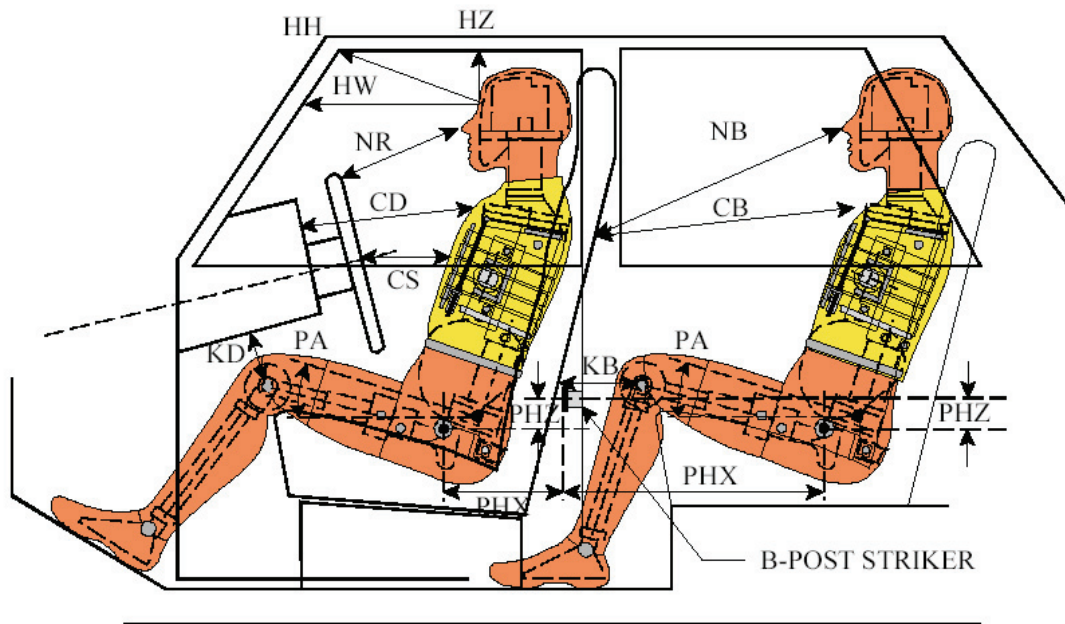
SUPPLEMENTAL RESTRAINT SYSTEM INFORMATION				
Restraint Type	Left front (Driver) occupant Location 01		Left rear (passenger) occupant Location 04	
	Installed	Operation	Installed	Operation
Front airbag	Yes - steering wheel	Deployed properly	No	N/a
Side airbag	Yes - seat back	Deployed properly	No	N/a
Head airbag	No	N/a	No	N/a
Curtain airbag	Yes - side header	Deployed properly	Yes - side header	Deployed properly
Seat belt pretensioner	Yes	Deployed properly	No	N/a
Seat belt load limiter	Yes	N/a	No	N/a

DATA SHEET NUMBER 6
VEHICLE PRE AND POST MEASUREMENTS



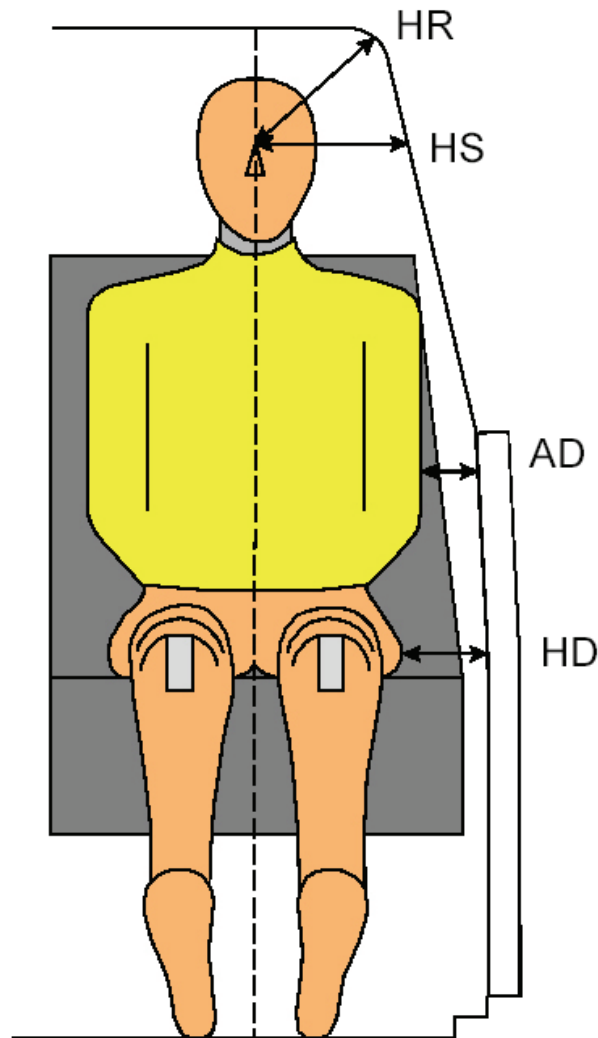
VEHICLE DIMENSIONS				
Code	Description	Pre test	Post test	Change
		mm	mm	mm
A	Wheelbase	2800	2785	-15
B	Front axle to front side of vehicle	468	472	4
C	Rear axle to rear side of vehicle	927	930	3
D	Total length at centerline	4930	4933	3
E	Front bumper thickness	227	227	0
F	Front bumper bottom to ground	288	304	16
G	Sill height at front wheel well	225	204	-21
H	Sill height at front door leading edge	227	298	71
I	Sill height at b-pillar	239	299	60
J1	Sill height at rear wheel well	170	159	-11
J2	Pinch weld height at rear wheel well	246	266	20
K	Sill height aft of rear wheel well	286	247	-39
L	Rear bumper thickness	224	224	0
M	Rear bumper bottom to ground	428	385	-43
N	Sill height to window bottom sill	765	688	-77
O	Front door leading edge to impact C/L	1145	1088	-57
P	Rear door trailing edge to impact C/L	887	788	-99
Q	Front window opening	454	432	-22
R	Right side length	4195	4205	10
S	Left side length	4195	4187	-8
T	Vehicle width at b-pillar	1849	1628	-221

DATA SHEET NUMBER 7
SID HIII LONGITUDINAL CLEARANCES



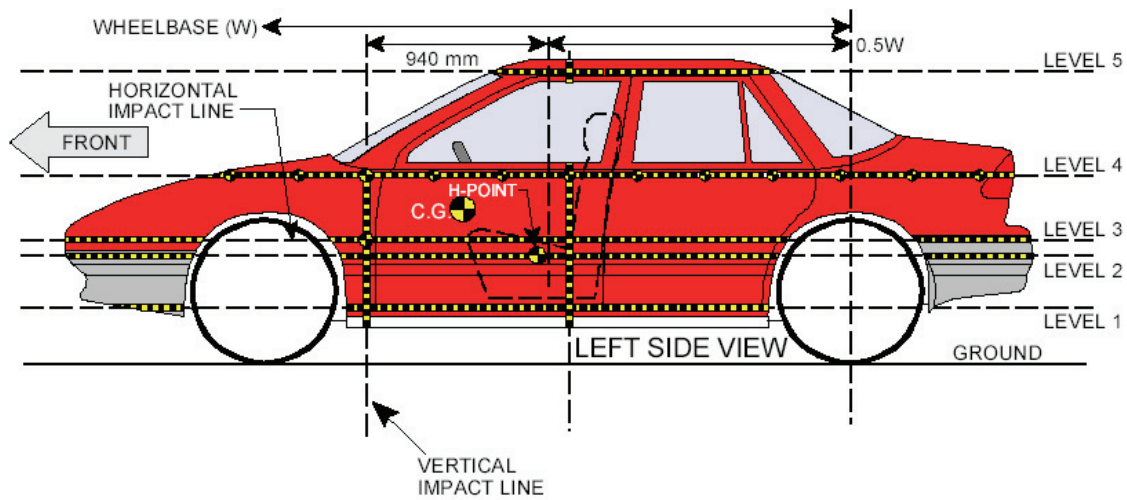
SID HIII LONGITUDINAL CLEARANCE MEASUREMENTS					
Driver code	Pass. code	Measurement description	Units	Left front seat	Left rear seat
		ATD serial number	-	056	058
HH	-	Head to header	mm	274	N/a
HW	-	Head to windshield	mm	732	N/a
HZ	HZ	Head to roof	mm	197	177
NR	NB	Nose to rim/nose to seatback	mm	407	762
CD	CB	Chest to dash or seatback	mm	552	650
CS	-	Chest to steering wheel	mm	324	N/a
KDL	KBL	Left knee to dash or seatback length	mm	138	311
KDA	KBA	Left knee to dash or seatback angle	°	21.3	29.8
KDR	KBR	Right Knee to dash or seatback length	mm	125	305
KDA	KDA	Right knee to dash or seatback angle	°	17.9	29.8
PA	PA	Pelvic angle	°	24.2	24.7
PHX	PHX	H-Point to striker (x-axis)	mm	260	242
PHZ	PHZ	H-Point to striker (z-axis)	mm	166	270

DATA SHEET NUMBER 8
SID HIII LATERAL CLEARANCES



SID HIII LATERAL CLEARANCE MEASUREMENTS				
Code	Measurement description	Units	Left front seat	Left rear seat
-	ATD serial number	-	056	058
HR	Head to side header	mm	194	182
HS	Head to side window	mm	328	300
-	Shoulder to door	mm	113	107
AD	Arm to door	mm	156	172

DATA SHEET 9 VEHICLE SIDE MEASUREMENTS



VEHICLE STATIC CRUSH SUMMARY				
Level	Description	Height above ground (mm)	Maximum static crush (mm)	Longitudinal (X) distance from impact point (mm)
5	Window top	1348	13	1200 & 1350
4	Window sill	933	182	1650
3	Mid-door	582	271	1650
2	Driver H-point	484	294	1350
1	Axle centerline or sill top	238	103	1200
Maximum static crush		294 mm at level 2 1350 mm rearward from vertical impact line		

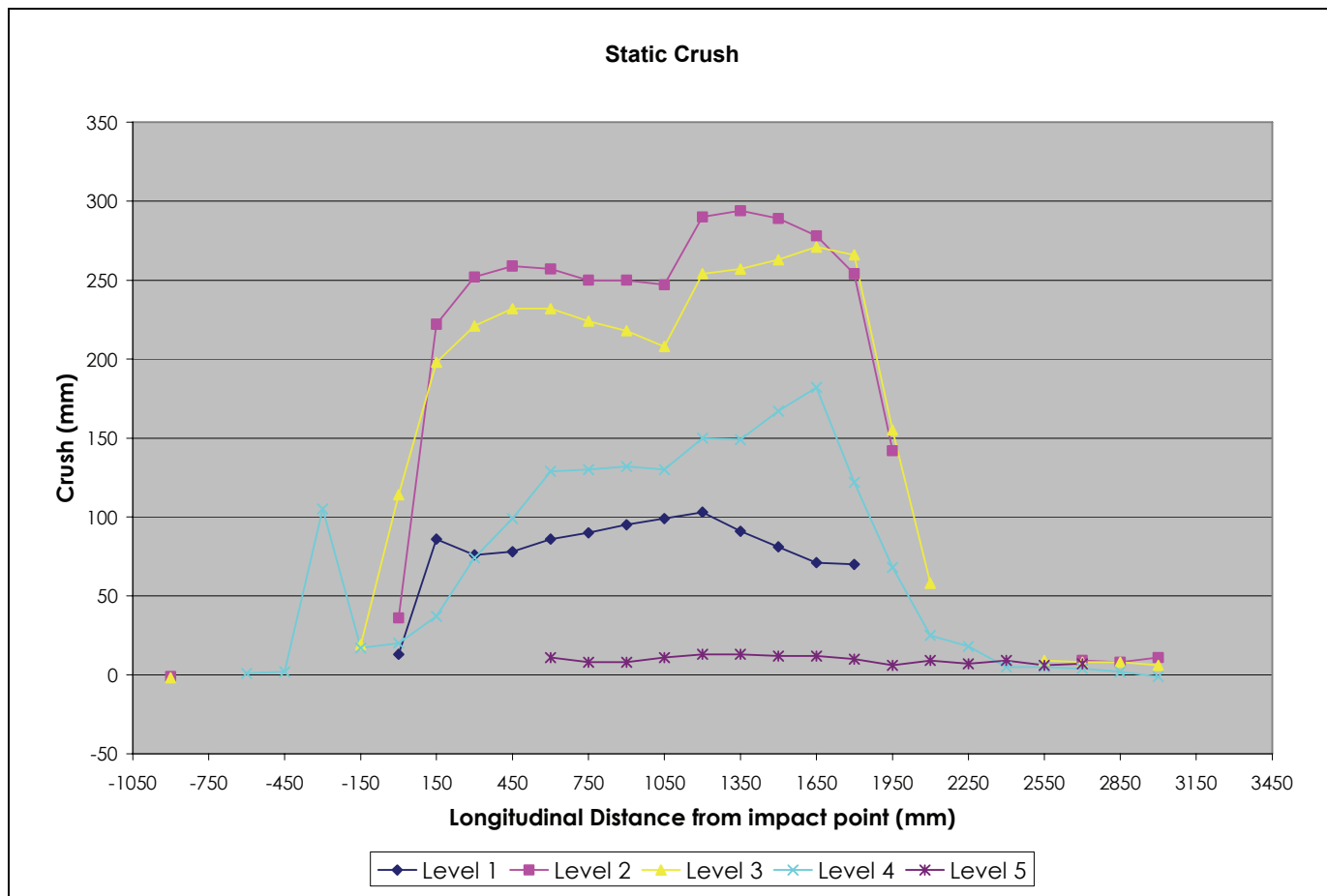
Height measurements taken 750 mm rearward from vertical impact line.

DATA SHEET 10
VEHICLE STATIC CRUSH PROFILE

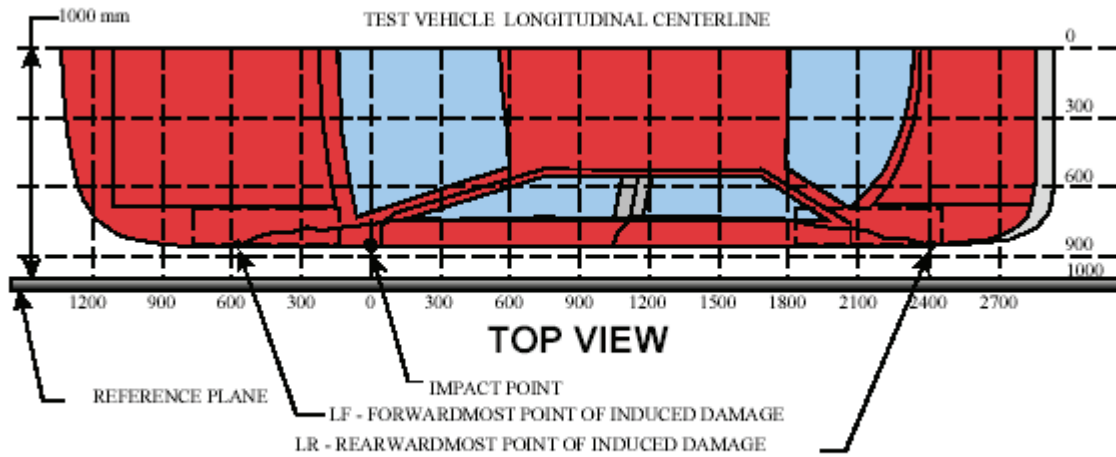
Note: All dimensions are in millimeters with a tolerance of ± 3 mm

TEST VEHICLE STATIC CRUSH																
Level		1			2			3			4			5		
Height		238			484			582			933			1348		
		Pre	Post	Crush	Pre	Post	Crush	Pre	Post	Crush	Pre	Post	Crush	Pre	Post	Crush
DISTANCE IN MILLIMETERS (mm) FROM IMPACT POINT	-1050															
	-900				171	170	-1	184	182	-2						
	-750															
	-600										261	262	1			
	-450										253	255	2			
	-300										249	254	5			
	-150							140	159	19	245	262	17			
	0	167	180	13	150	186	36	149	263	114	239	259	20			
	150	177	263	86	151	373	222	150	348	198	243	280	37			
	300	176	252	76	151	403	252	149	370	221	244	318	74			
	450	175	253	78	150	409	259	148	380	232	244	343	99			
	600	173	259	86	148	405	257	146	378	232	245	374	129	415	426	11
	750	170	260	90	145	395	250	144	368	224	245	375	130	446	454	8
	900	170	265	95	144	394	250	143	361	218	246	378	132	467	475	8
	1050	170	269	99	143	390	247	143	351	208	246	376	130	479	490	11
	1200	169	272	103	143	433	290	144	398	254	251	401	150	485	498	13
	1350	168	259	91	145	439	294	146	403	257	251	400	149	489	502	13
	1500	168	249	81	148	437	289	148	411	263	255	422	167	491	503	12
	1650	168	239	71	149	427	278	151	422	271	260	442	182	490	502	12
	1800	168	238	70	148	402	254	153	419	266	263	385	122	491	501	10
	1950				138	280	142	147	302	155	273	341	68	488	494	6
	2100							138	196	58	280	305	25	476	485	9
	2250										290	308	18	464	471	7
	2400										303	308	5	449	458	9
	2550							145	154	9	320	325	5	434	440	6
	2700				156	165	9	176	184	8	338	342	4	429	427	-2
	2850				198	206	8	204	212	8	355	357	2			
	3000				223	234	11	229	235	6	378	377	-1			
	3150															
	3330															

DATA SHEET 10 **VEHICLE STATIC CRUSH PROFILE**

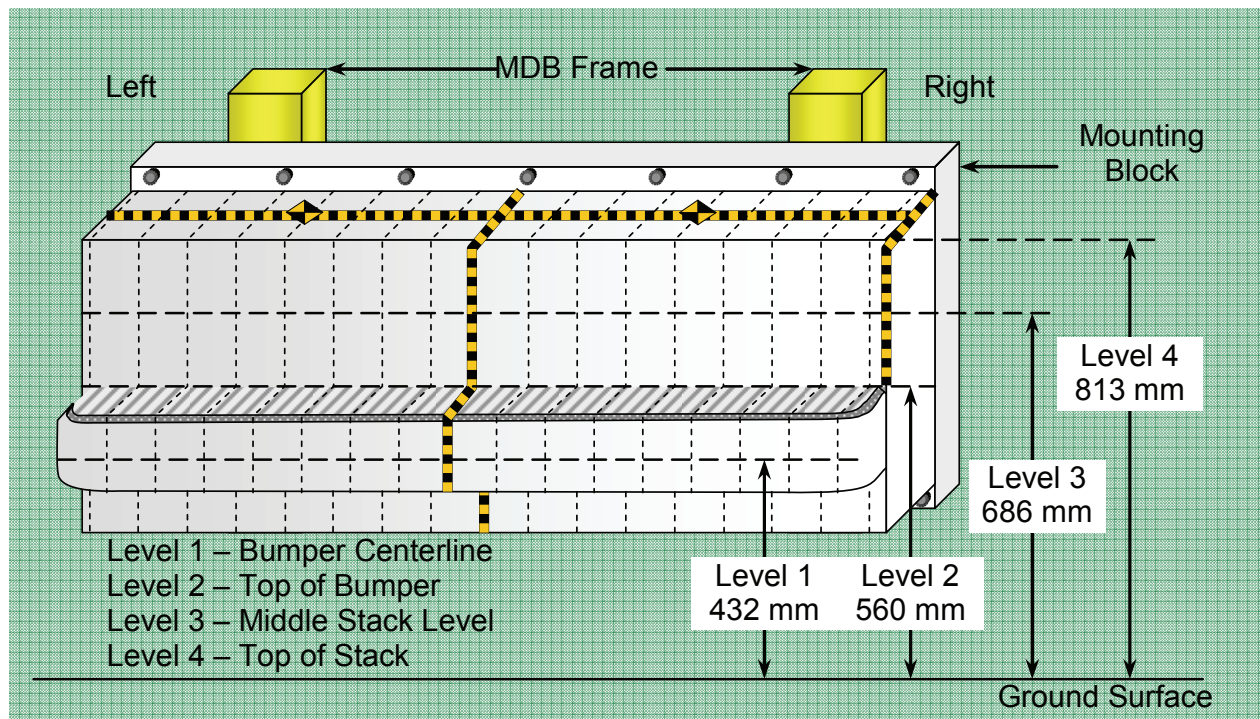


DATA SHEET 11
VEHICLE DAMAGE PROFILE DISTANCES (DPD)



DPD MEASUREMENTS				
	DPD measurement (mm)	Pre test (mm)	Post test (mm)	Crush (mm)
1	-150	155	155	0
2	390	154	405	251
3	930	155	391	236
4	1470	152	434	282
5	2010	150	223	73
6	2550	150	150	0

DATA SHEET 12
DEFORMABLE BARRIER STATIC CRUSH

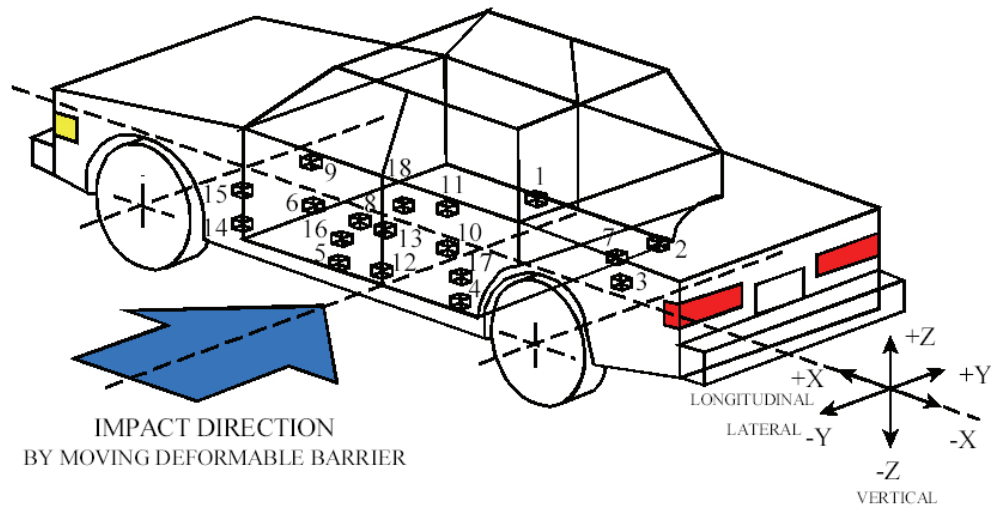


DEFORMABLE BARRIER FACE SUMMARY		
Barrier face manufacturer		Plascore
Serial number		186B0706
Level	Description	Maximum crush
1	Center of bumper	166
2	Top of bumper	68
3	Middle of stack	64
4	Top of stack	103
Maximum post test intrusion is 166 mm at level 1		

BARRIER STATIC CRUSH																	
	Distance left of center								C _L	Distance right of center							
	800	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	800
4	37	-2	-17	-7	5	25	55	60	34	21	4	2	5	16	39	68	103
3	20	-4	-3	1	7	19	49	35	15	9	6	5	7	12	18	34	64
2	64	49	44	38	32	26	27	30	24	26	23	23	23	27	28	34	68
1	166	162	143	130	121	117	115	111	106	104	101	98	94	89	88	86	83

all values in mm

DATA SHEET 13 VEHICLE ACCELEROMETER LOCATIONS



TEST VEHICLE ACCELEROMETER LOCATIONS				
Loc. no.	Accelerometer location	Measurements (mm)		
		X	Y	Z
1	Right sill at front seat	2608	808	412
2	Right sill at rear seat	1665	810	412
3	Rear floor pan above axle	1019	406	162
4	Left sill at rear door	1659	-858	351
5	Left sill at front door	2611	-858	353
6	Left front door C/L	†	†	†
7	Rear occupant compartment	1994	574	276
8	Left front door mid-rear	†	†	†
9	Left front door upper C/L	†	†	†
10	Left rear door mid-rear	†	†	†
11	Left rear door upper C/L	†	†	†
12	Left lower b-pillar	2361	-753	114
13	Left middle b-pillar	2316	-746	-101
14	Left lower a-pillar	3428	-835	148
15	Left middle a-pillar	3412	-808	-171
16	Front seat track	2679	-660	345
17	Rear seat track or structure	1979	-322	305
18	Vehicle CG	2699	19	105

Origin

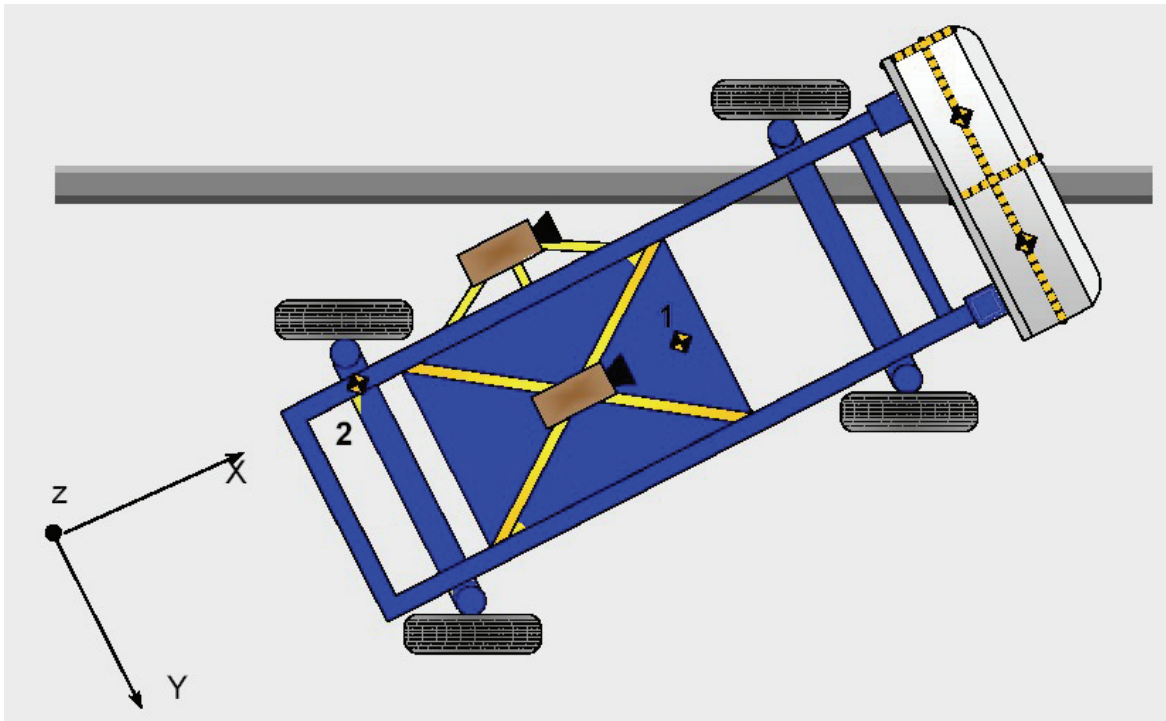
X Rear bumper
Y Midline of vehicle
Z Top of rear bumper

Orientation

X +(X) Forward
Y +(Y) Right
Z +(Z) Down

† Front and rear door accelerometers not installed as per NCAP policy (02Nov05)

DATA SHEET 14
MDB ACCELEROMETER LOCATIONS



MDB ACCELEROMETER LOCATIONS			
Location	Measurements (mm)		
	X	Y	Z
Center of gravity	1113	-1	311
Right rear	2812	-614	585

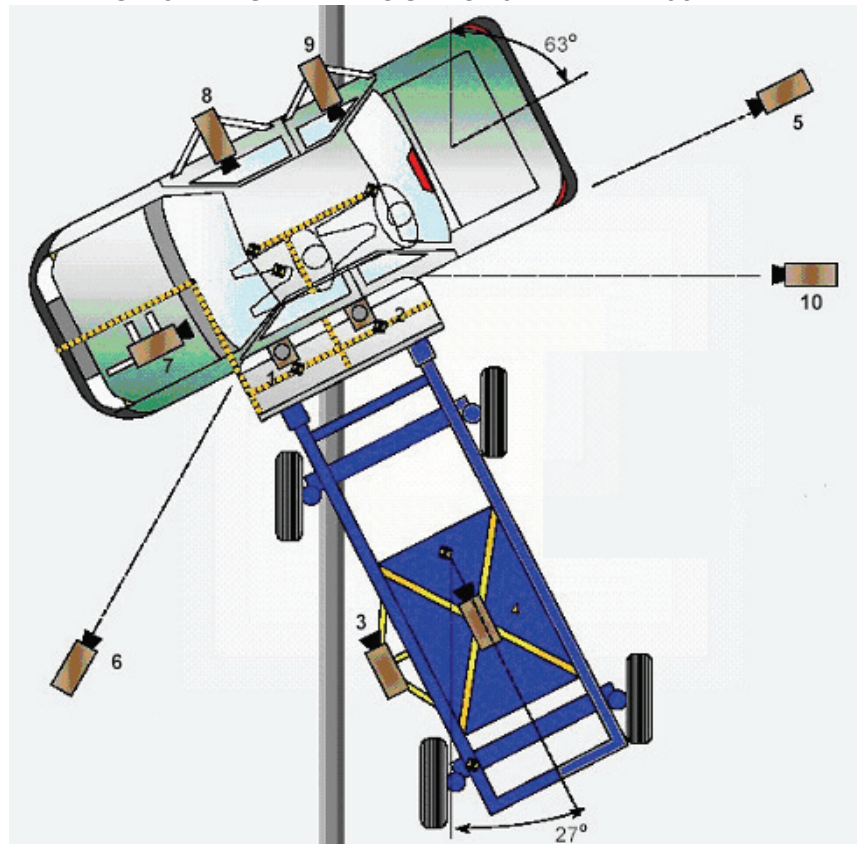
Origin

X Rear structural member
 Y Midline of MDB
 Z Middle of rear structural member

Orientation

X +(X) Forward
 Y +(Y) Right
 Z +(Z) Down

DATA SHEET 15
HIGH-SPEED CAMERA LOCATIONS AND DATA SUMMARY



	View	Coordinates †			Angle °	Lens mm	Rate fps
		X	Y	Z			
		mm	mm	mm			
1	Overhead view of test vehicle	-310	-658	-4900	90	12.5	1000
2	Overhead close-up view of impact plane	-599	-148	-4426	90	16	1000
3	MDB onboard close-up view of impact point	-2081	-87	-129	0.4	25.4	1000
4	MDB onboard view of driver dummy	-2303	838	-900	4.0	13	1000
5	Right side ground level overall view	-604	12108	-961	2.6	50	1000
6	Left side ground level overall view	-1608	-3824	-1021	6.1	25	1000
7	Test vehicle onboard driver front view	-436	-504	-464	12.5	25	1000
8	Test vehicle onboard driver side view	1717	933	-341	15.1	12.5	1000
9	Test vehicle onboard passenger side view	1704	1719	-399	16.1	12.5	1000
10	Real-time film coverage of test	-	-	-	-	-	-

Origin

X

Y

Z

Impact Point

Impact Point

Impact Point

Orientation

X

Y

Z

+(X) Forward

+(Y) Right

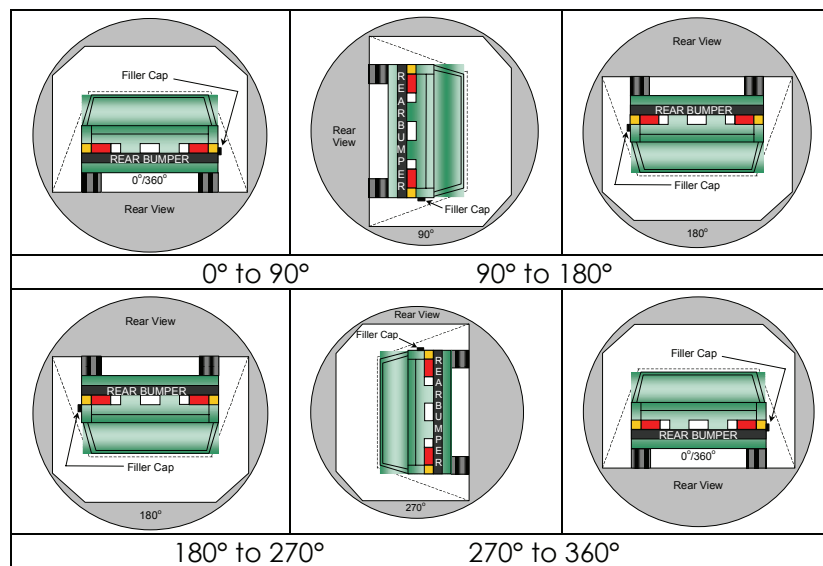
+(Z) Down

DATA SHEET 16
FMVSS 301 FUEL SYSTEM INTEGRITY POST IMPACT DATA

Temperature at Time of Impact: 20° C Test Time: 2:30 pm

STODDARD SOLVENT SPILLAGE MEASUREMENTS				
Period	Description	Maximum allowable spillage	Spillage	
			Amount	Location
A	From impact until vehicle motion ceases	1 oz	0	N/a
B	5 minutes after vehicle motion ceases	5 oz	0	N/a
C	Next 25 minutes	1 oz/minute	0	N/a

FMVSS 301 STATIC ROLLOVER



FMVSS301 STATIC ROLLOVER DATA			
Test phase	Rotation time (sec.)	Hold time (sec.)	Total time (sec.)
Tolerance	60-180	>= 300	-
0° to 90°	62	300	362
90° to 180°	65	303	368
180° to 270°	65	301	366
270° to 360°	67	300	367

DATA SHEET 16
FMVSS 301 FUEL SYSTEM INTEGRITY POST IMPACT DATA (CONTINUED)

FMVSS301 STATIC ROLLOVER - SPILLAGE				
	First five minutes (oz)	Sixth minute (oz)	Seventh minute (oz)	Eighth minute (oz)
Max allowable leakage	5.0	1.0	1.0	1.0
0° to 90°	0	0	0	N/a
90° to 180°	0	0	0	N/a
180° to 270°	0	0	0	N/a
270° to 360°	0	0	0	N/a

SPILLAGE LOCATION(s)	
0° to 90°	N/a
90° to 180°	N/a
180° to 270°	N/a
270° to 360°	N/a

APPENDIX A
PHOTOGRAPHS

LIST OF PHOTOGRAPHS

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A-8	Post test left front $\frac{3}{4}$ view of test vehicle	A-7
A-9	Pre test left side view of test vehicle	A-8
A-10	Post test left side view of test vehicle	A-8
A-11	Pre test left rear $\frac{3}{4}$ view of test vehicle	A-9
A-12	Post test left rear $\frac{3}{4}$ view of test vehicle	A-9
A-13	Pre test rear view of test vehicle	A-10
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A-25	Pre test impact point	A-16
A-26	Post test impact point	A-16
A-27	Pre test front $\frac{3}{4}$ view of left side doors	A-17
A-28	Post test front $\frac{3}{4}$ view of left side doors	A-17
A-29	Pre test rear $\frac{3}{4}$ view of left side doors	A-18
A-30	Post test rear $\frac{3}{4}$ view of left side doors	A-18
A-31	Pre test left front door	A-19
A-32	Post test left front door	A-19
A-33	Pre test left rear door	A-20
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A-38	Post test driver shoulder clearance	A-22
A-39	Pre test driver, right side view	A-23
A-40	Post test driver, right side view	A-23
A-41	Post test driver contact locations (1)	A-24
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A-43	Pre test passenger, left side view	A-25
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Figure	Photograph Description	Page
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A-50	Post test passenger contact locations (2)	A-28
A-51	Pre test front view of MDB barrier face	A-29
A-52	Post test front view of MDB barrier face	A-29
A-53	Pre test overhead view of MDB barrier face	A-30
A-54	Post test overhead view of MDB barrier face	A-30
A-55	Pre test right side view of MDB barrier face	A-31
A-56	Post test right side view of MDB barrier face	A-31
A-57	Pre test left side view of MDB barrier face	A-32
A-58	Post test left side view of MDB barrier face	A-32
A-59	FMVSS301 0 degrees	A-33
A-60	FMVSS301 90 degrees	A-33
A-61	FMVSS301 180 degrees	A-34
A-62	FMVSS301 270 degrees	A-34
A-63	FMVSS301 360 degrees	A-35
A-64	Impact	A-35



Figure A-1: Left front 3/4 view, as delivered



Figure A-2: Right rear 3/4 view, as delivered

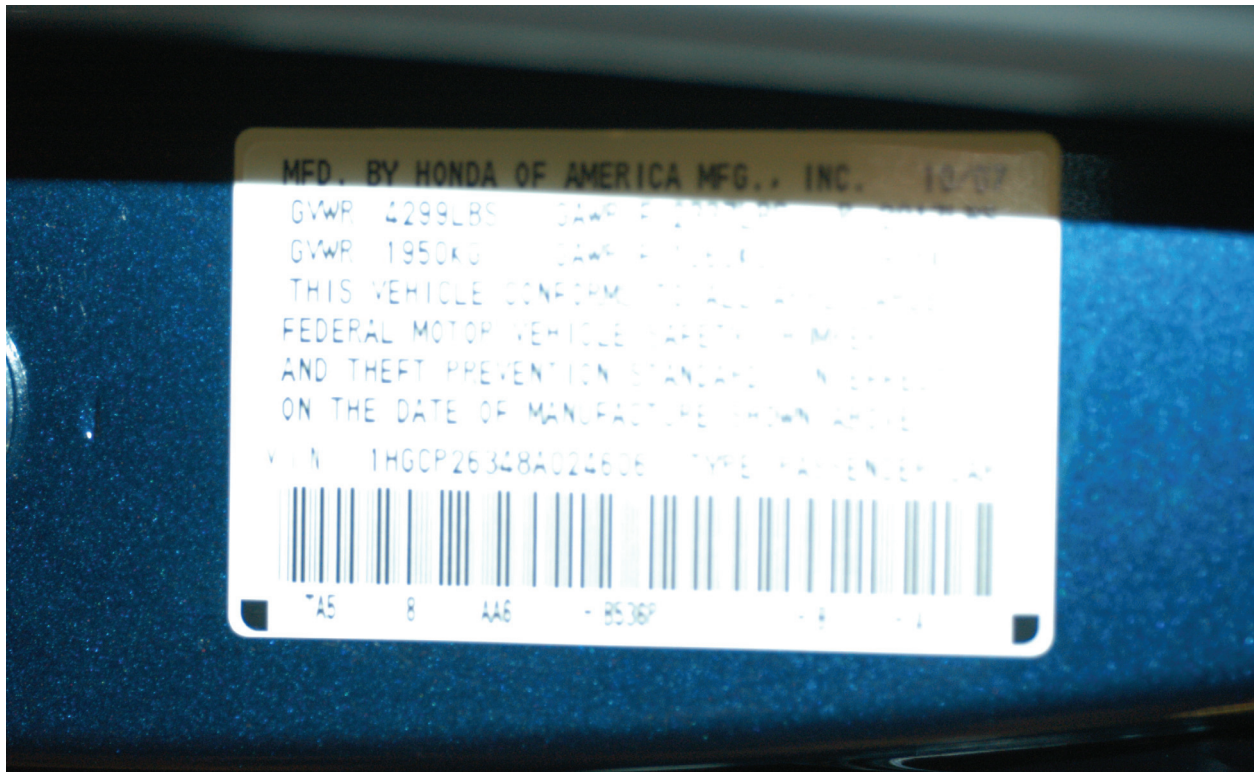


Figure A-3: Manufacturer's label



Figure A-4: Tire placard



Figure A-5: Pre test front view of test vehicle



Figure A-6: Post test front view of test vehicle



Figure A-7: Pre test left front 3/4 view of test vehicle



Figure A-8: Post test left front 3/4 view of test vehicle



Figure A-9: Pre test left side view of test vehicle



Figure A-10: Post test left side view of test vehicle



Figure A-11: Pre test left rear 3/4 view of test vehicle



Figure A-12: Post test left rear 3/4 view of test vehicle



Figure A-13: Pre test rear view of test vehicle



Figure A-14: Post test rear view of test vehicle



Figure A-15: Pre test right rear 3/4 view of test vehicle



Figure A-16: Post test right rear 3/4 view of test vehicle



Figure A-17: Pre test right side view of test vehicle



Figure A-18: Post test right side view of test vehicle



Figure A-19: Pre test right front 3/4 view of test vehicle



Figure A-20: Post test right front 3/4 view of test vehicle



Figure A-21: Pre test overhead view

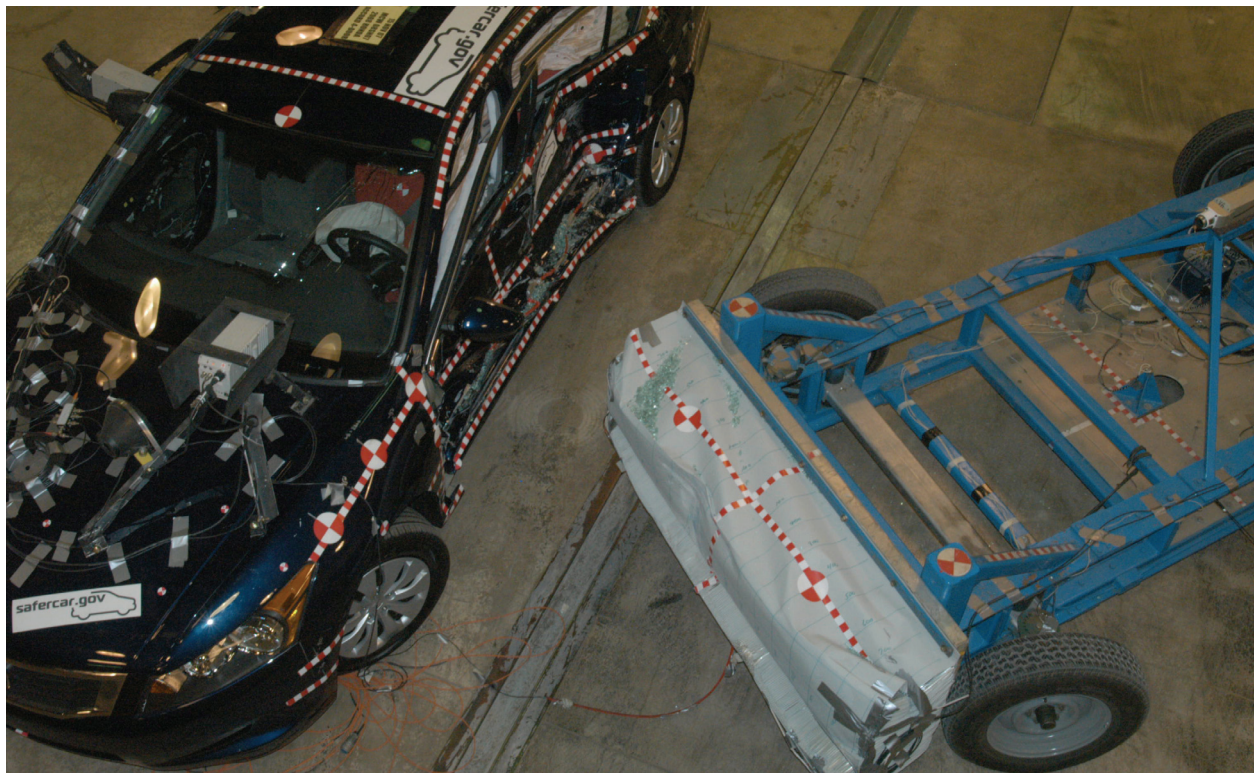


Figure A-22: Post test overhead view



Figure A-23: Pre test overhead close-up view



Figure A-24: Post test overhead close-up view



Figure A-25: Pre test impact point



Figure A-26: Post test impact point



Figure A-27: Pre test front 3/4 view of left side doors



Figure A-28: Post test front 3/4 view of left side doors



Figure A-29: Pre test rear 3/4 view of left side doors



Figure A-30: Post test rear 3/4 view of left side doors



Figure A-31: Pre test left front door



Figure A-32: Post test left front door

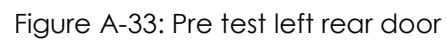




Figure A-35: Pre test driver left side view



Figure A-36: Post test driver left side view



Figure A-37: Pre test driver shoulder clearance



Figure A-38: Post test driver shoulder clearance



Figure A-39: Pre test driver right side view



Figure A-40: Post test driver right side view



Figure A-41: Post test driver contact locations (1)



Figure A-42: Post test driver contact locations (2)



Figure A-43: Pre test passenger left side view



Figure A-44: Post test passenger left side view



Figure A-45: Pre test passenger shoulder clearance



Figure A-46 Post test passenger shoulder clearance



Figure A-47: Pre test passenger right side view



Figure A-48: Post test passenger right side view



Figure A-49: Post test passenger contact locations (1)



Figure A-50: Post test passenger contact locations (2)



Figure A-51: Pre test front view of MDB barrier face



Figure A-52: Post test front view of MDB barrier face

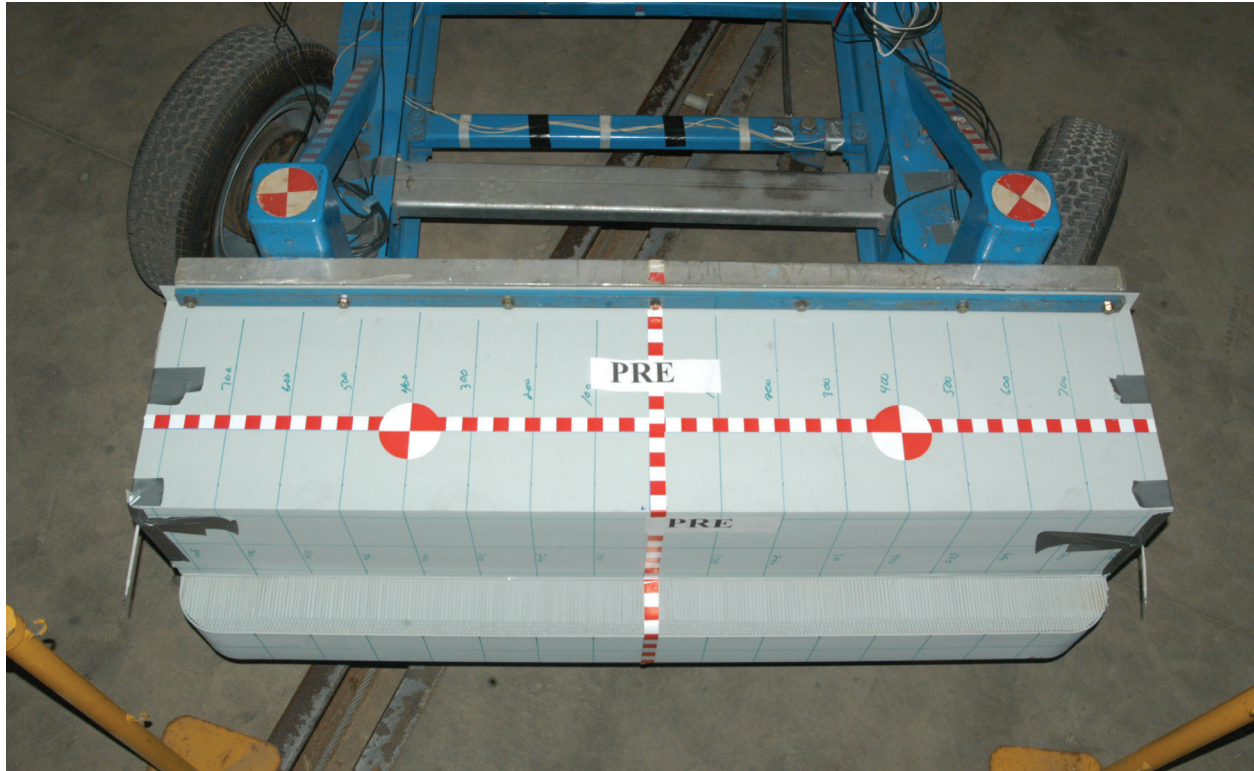


Figure A-53: Pre test overhead view of MDB barrier face



Figure A-54: Post test overhead view of MDB barrier face



Figure A-55: Pre test right side view of MDB barrier face



Figure A-56: Post test right side view of MDB barrier face



Figure A-57: Pre test left side view of MDB barrier face



Figure A-58: Post test left side view of MDB barrier face



Figure A-59: FMVSS 301 0 degrees

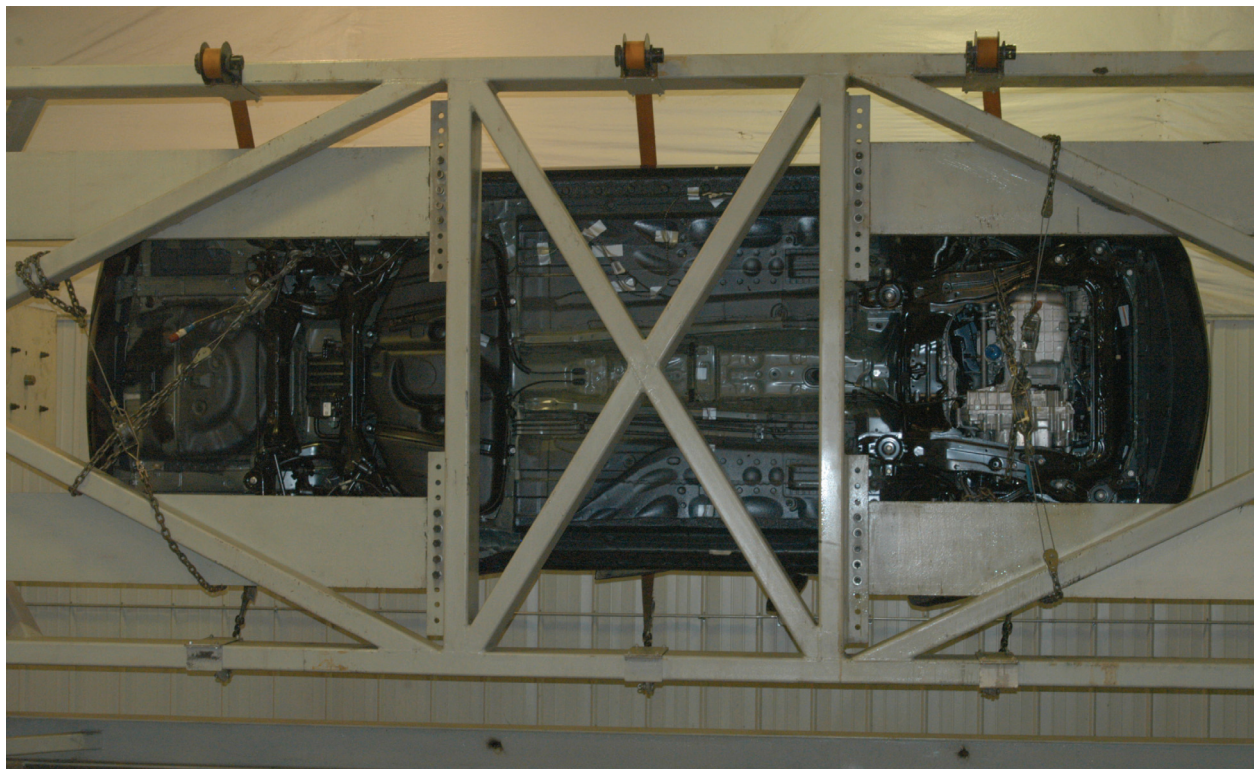


Figure A-60: FMVSS 301 90 degrees

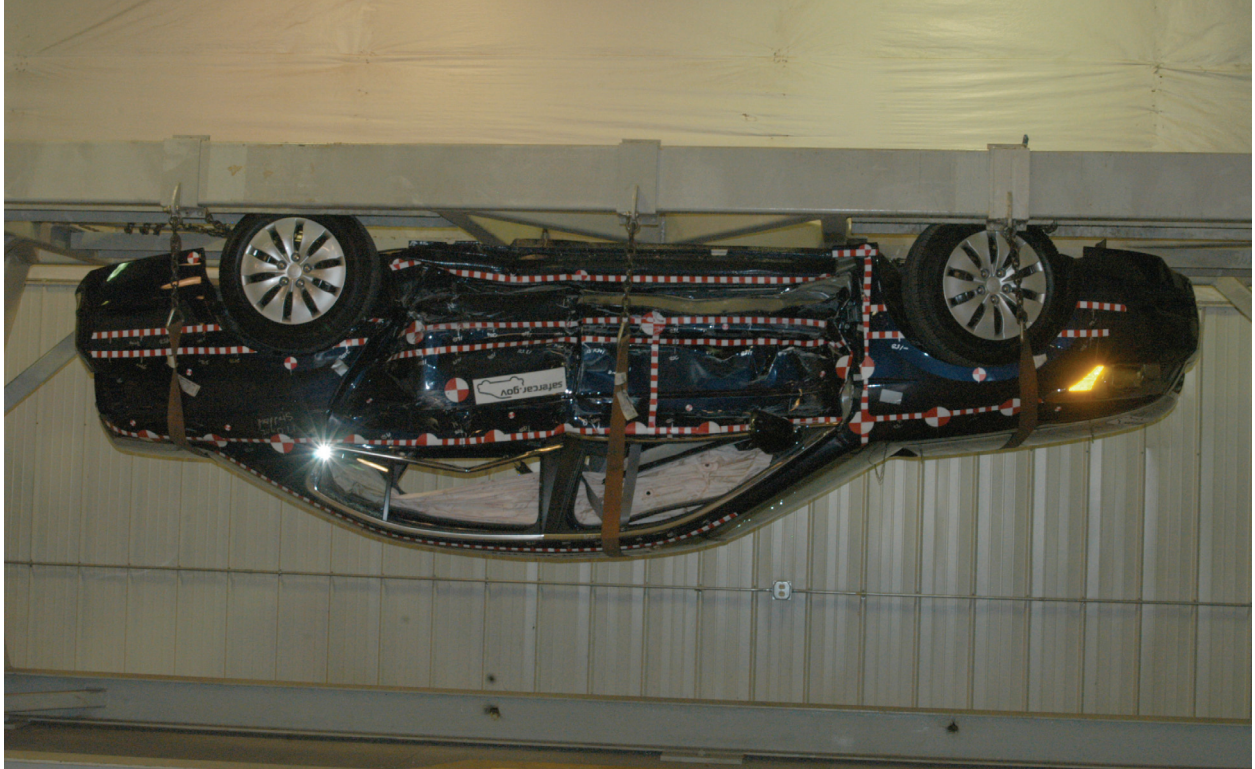


Figure A-61: FMVSS 301 180 degrees



Figure A-62: FMVSS 301 270 degrees



Figure A-63: FMVSS 301 360 degrees



Figure A-64: Impact

APPENDIX B
SID/HIII, VEHICLE AND MDB RESPONSE DATA

The following plots are provided in the test report

Data Plot	Description	Page
B-1	Driver upper rib(y) acceleration - primary – FIR100	B-4
B-2	Driver lower rib(y) acceleration - primary – FIR100	B-5
B-3	Driver lower spine (y) acceleration - primary – FIR100	B-6
B-4	Driver pelvis (y)acceleration - primary – FIR100	B-7
B-5	Passenger upper rib(y) acceleration - primary – FIR100	B-8
B-6	Passenger lower rib(y) acceleration - primary – FIR100	B-9
B-7	Passenger lower spine (y) acceleration - primary – FIR100	B-10
B-8	Passenger pelvis (y)acceleration - primary – FIR100	B-11

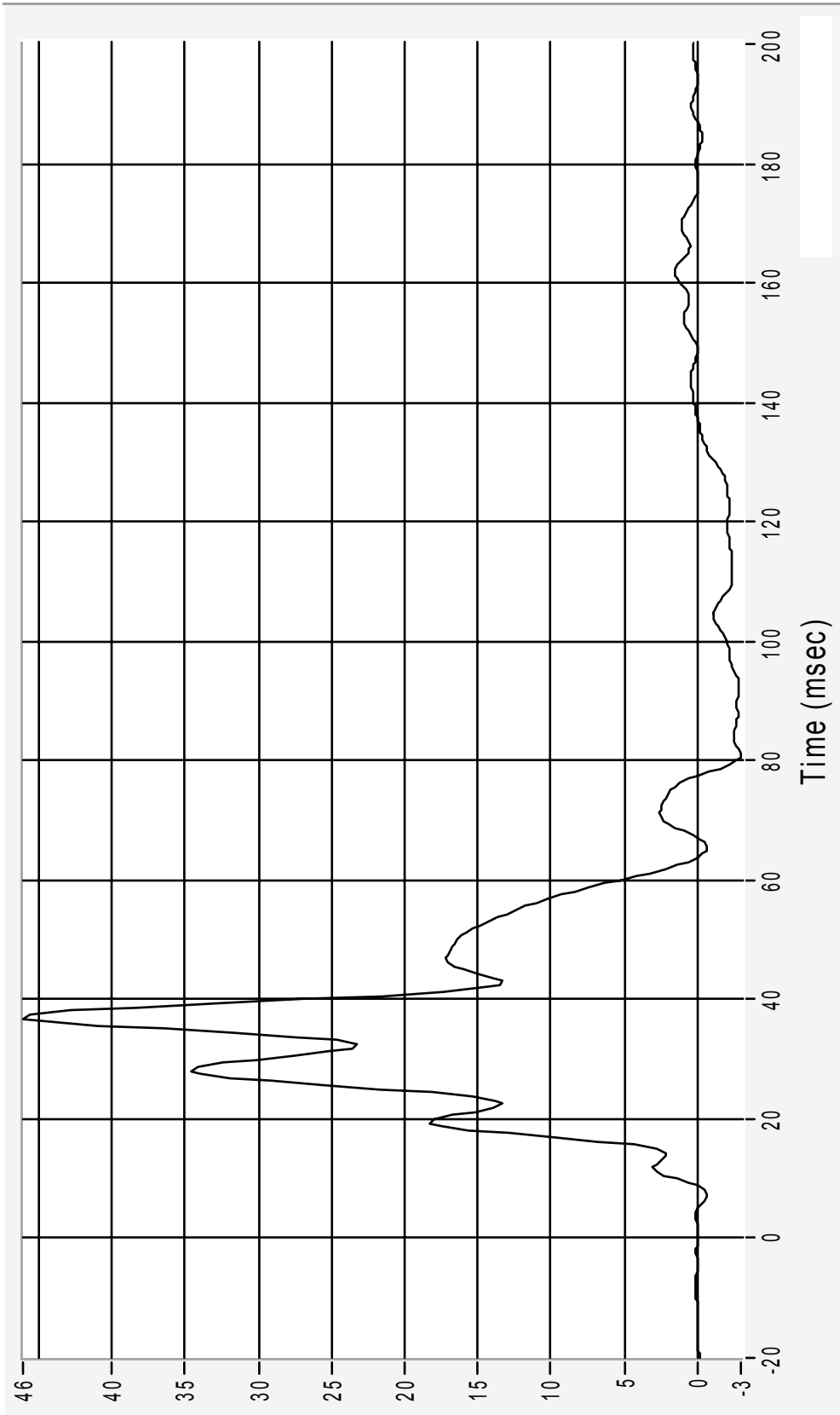
The following dummy, vehicle, and MDB response data can be found in the R&D section of the NHTSA website at: www-nrd.nhtsa.dot.gov/database/nrd-11/veh_db.html.

Description
Driver head (x) acceleration
Driver head (y) acceleration
Driver head (z) acceleration
Driver upper neck (x) force
Driver upper neck (y) force
Driver upper neck (z) force
Driver upper neck (x) moment
Driver upper neck (y) moment
Driver upper neck (z) moment
Driver upper rib (y) acceleration – redundant
Driver lower rib (y) acceleration – redundant
Driver lower spine (y) acceleration – redundant
Driver pelvis (y) acceleration – redundant
Passenger head (x) acceleration
Passenger head (y) acceleration
Passenger head (z) acceleration
Passenger upper neck (x) force
Passenger upper neck (y) force
Passenger upper neck (z) force
Passenger upper neck (x) moment
Passenger upper neck (y) moment
Passenger upper neck (z) moment
Passenger upper rib (y) acceleration – redundant
Passenger lower rib (y) acceleration – redundant
Passenger lower spine (y) acceleration – redundant
Passenger pelvis (y) acceleration – redundant
Vehicle right side sill at front seat (x) acceleration
Vehicle right side sill at front seat (y) acceleration
Vehicle right side sill at front seat (z) acceleration
Vehicle right side sill at rear seat (x) acceleration
Vehicle right side sill at rear seat (y) acceleration
Vehicle right side sill at rear seat (z) acceleration
Vehicle rear floor pan above axle (x) acceleration
Vehicle rear floor pan above axle (y) acceleration
Vehicle rear floor pan above axle (z) acceleration
Vehicle left side sill at rear seat (y) acceleration
Vehicle left side sill at front seat (y) acceleration
Vehicle right rear occupant compartment (y) acceleration

Vehicle left lower b-pillar (y) acceleration
Vehicle left middle b-pillar (y) acceleration
Vehicle left lower a-pillar (y) acceleration
Vehicle left middle a-pillar (y) acceleration
Vehicle front seat track (y) acceleration
Vehicle rear seat track/structure (y) acceleration
Vehicle center of gravity (x) acceleration
Vehicle center of gravity (y) acceleration
Vehicle center of gravity (z) acceleration
MDB center of gravity (x) acceleration
MDB center of gravity (y) acceleration
MDB center of gravity (z) acceleration
MDB rear (x) acceleration
MDB rear (y) acceleration

Driver Upper Rib (Y) Acceleration
 Acceleration (G's) FIR100

Max	46.1	G	at	36.9	msec
Min	-3.0	G	at	81.2	msec

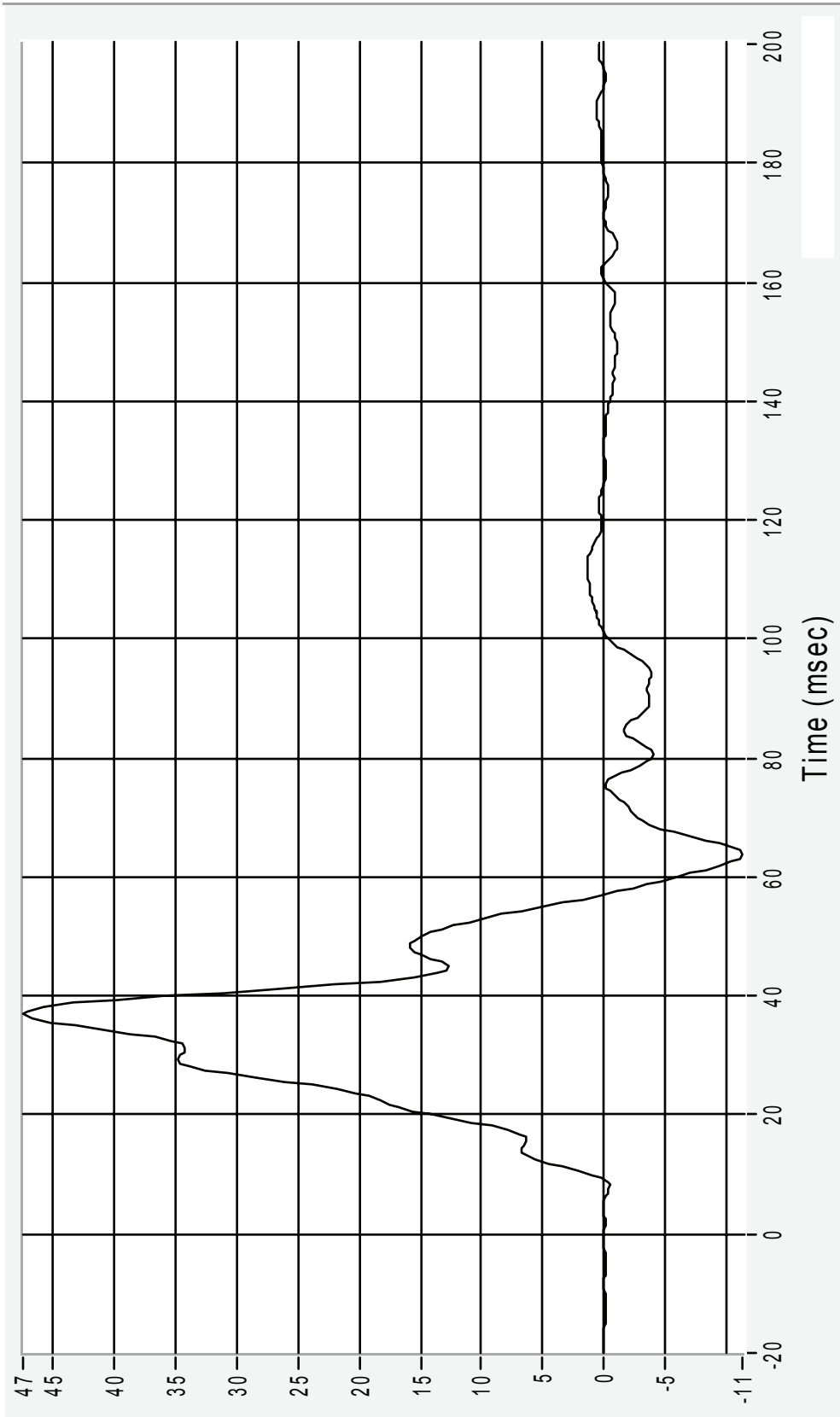


08SN07 - 2008 Honda Accord 4-Door Sedan
 15 November 2007

Medical College of Wisconsin
 Vehicle Crashworthiness Lab

Driver Lower Rib (Y) Acceleration
 Acceleration (G's) FIR100

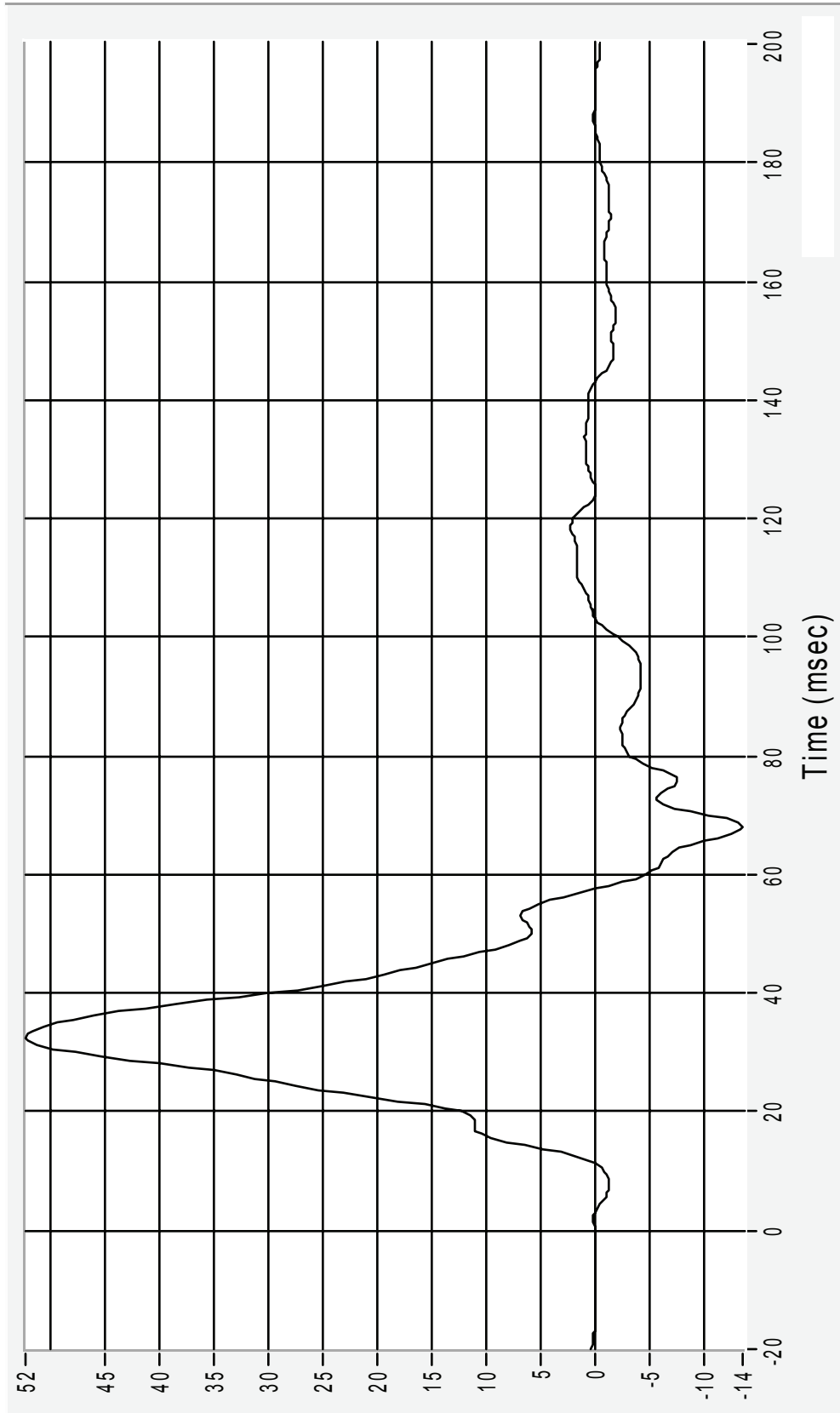
Max	47.4	G	at	36.9	msec
Min	-11.2	G	at	63.8	msec



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 Vehicle Crashworthiness Lab

08SN07 - 2008 Honda Accord 4-Door Sedan
 15 November 2007

Driver Lower Spine (Y) Acceleration
 Acceleration (G's) FIR100 Max 52.3 G at 32.5 msec
 Min -13.5 G at 68.1 msec



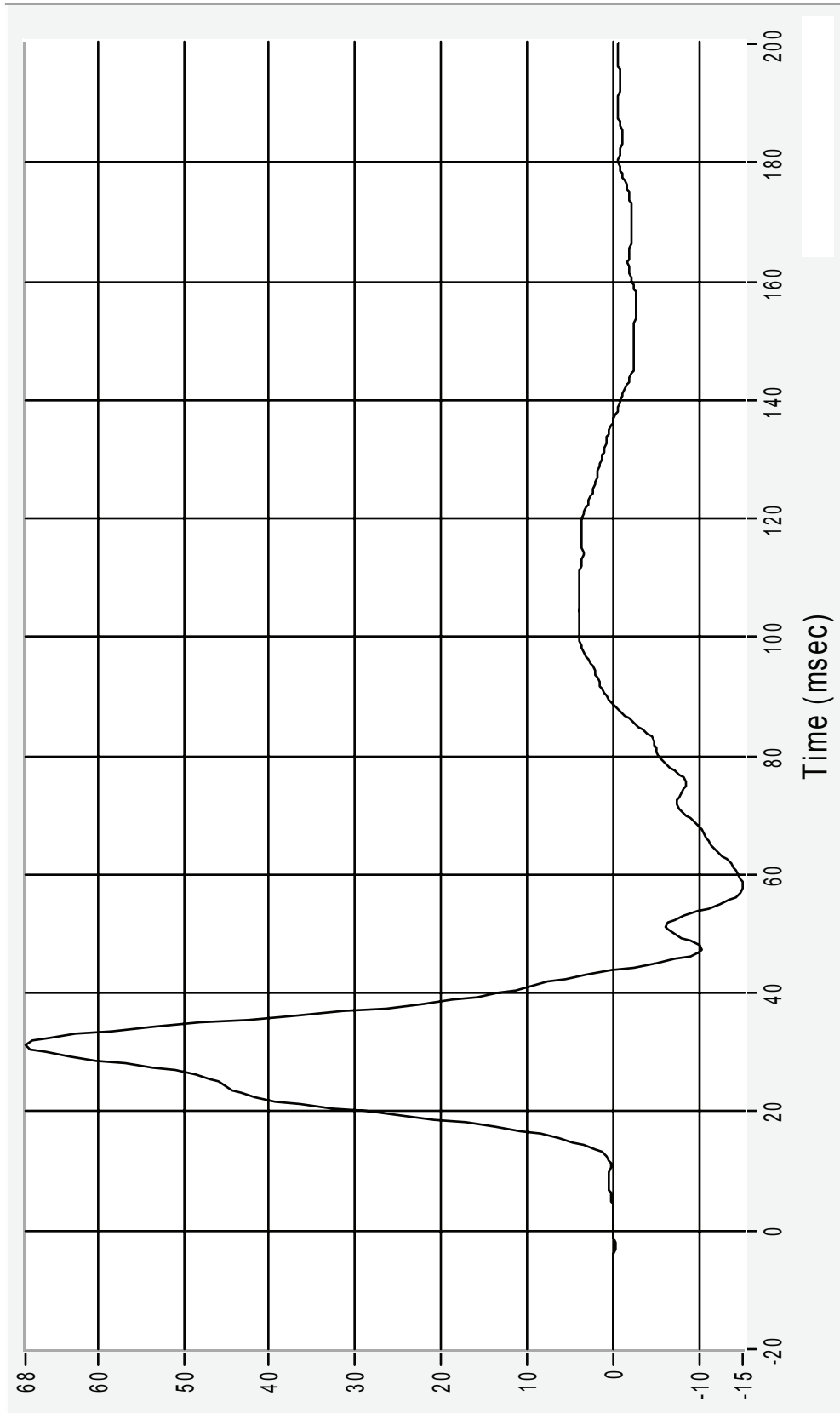
08SN07 - 2008 Honda Accord 4-Door Sedan

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Driver Pelvic (Y) Acceleration
 Acceleration (G's) FIR100

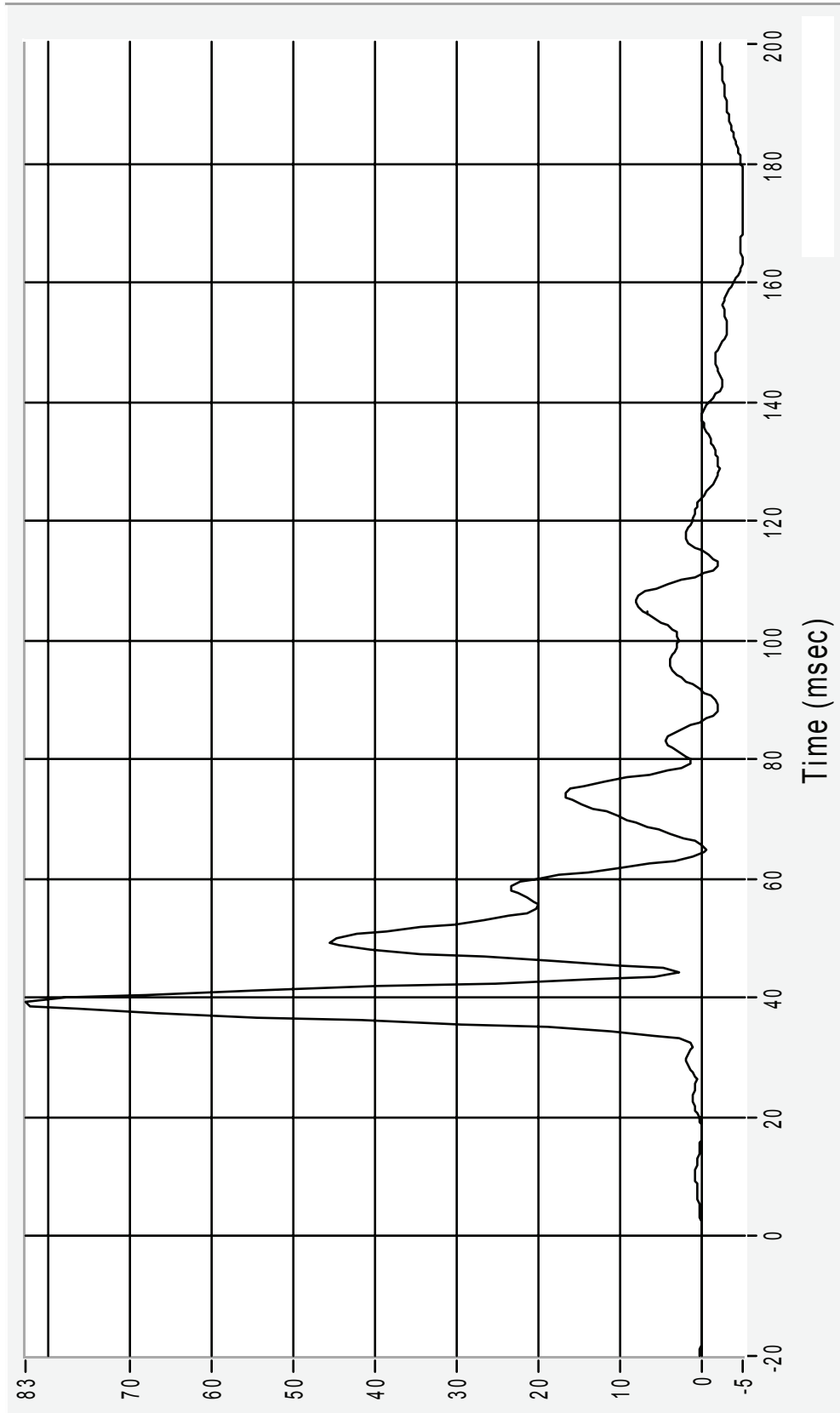
Max	68.4	G	at	31.2	msec
Min	-15.0	G	at	58.1	msec



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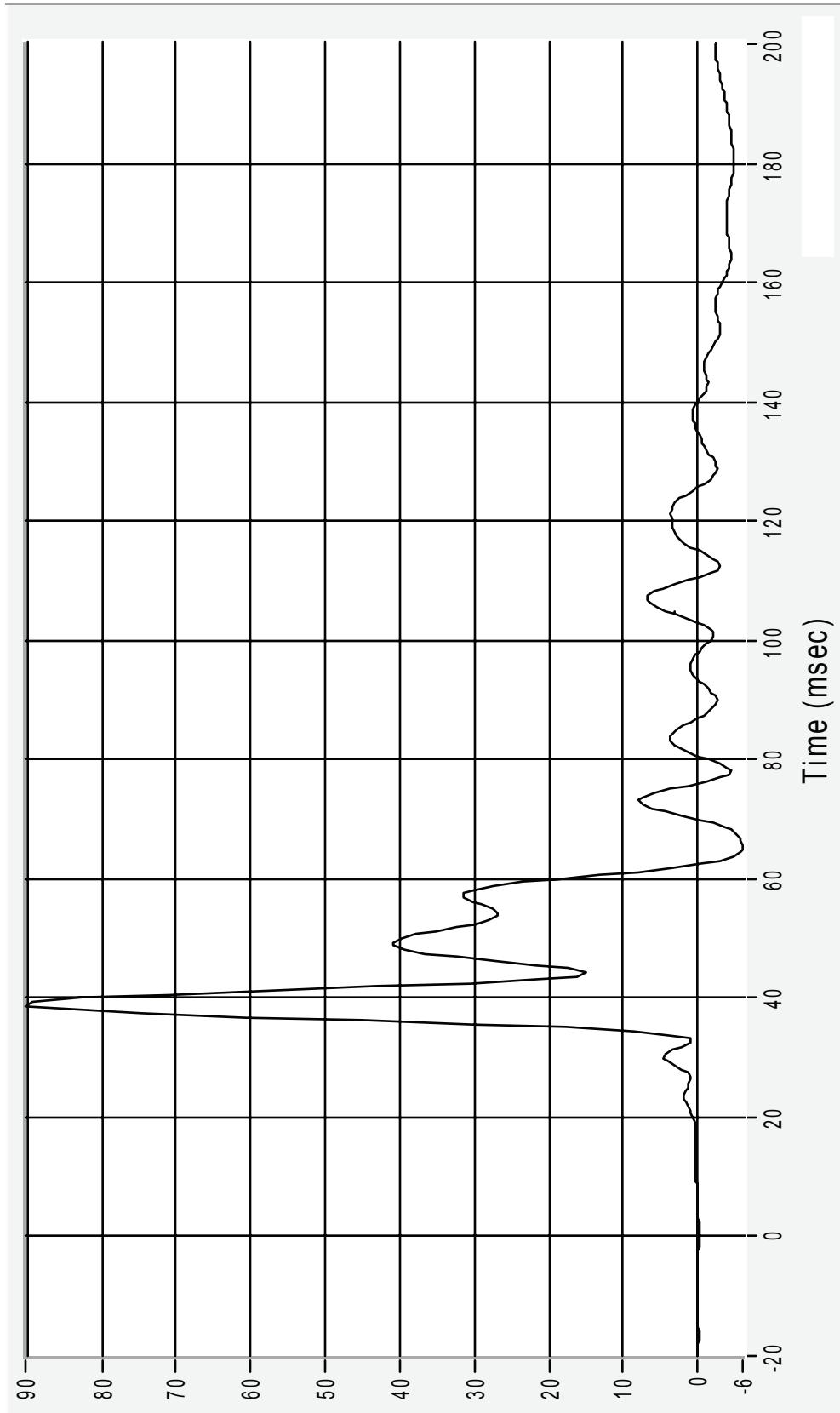
Passenger Upper Rib (Y) Acceleration
 Acceleration (G's) FIR100 Max 82.8 G at 39.4 msec
 Min -5.1 G at 175.0 msec



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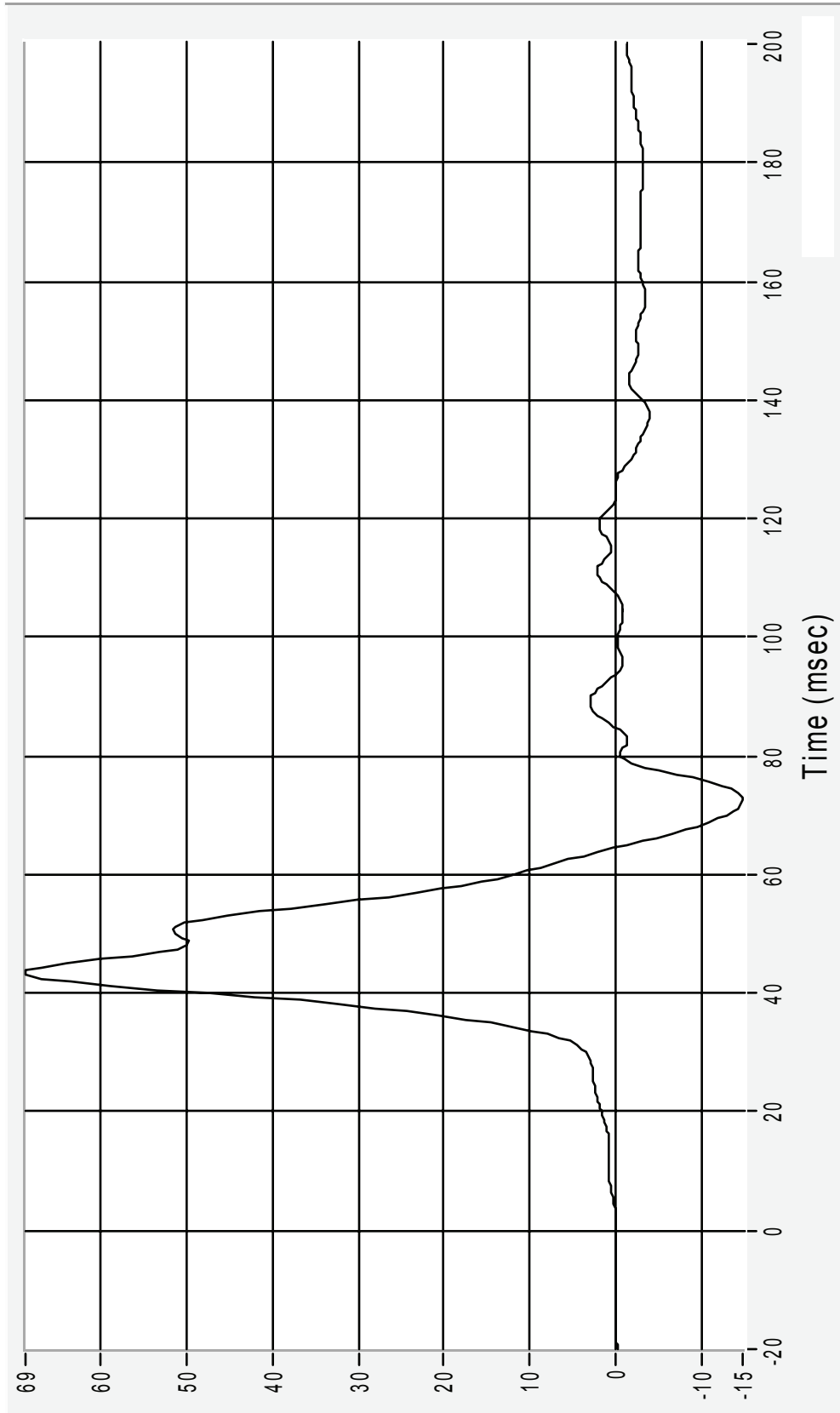
Passenger Lower Rib (Y) Acceleration
 Acceleration (G's) FIR100 Max 90.2 G at 38.8 msec
 Min -6.0 G at 65.0 msec



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Passenger Lower Spine (Y) Acceleration
 Acceleration (G's) FIR100 Max 68.8 G at 43.1 msec
 Min -14.9 G at 72.5 msec

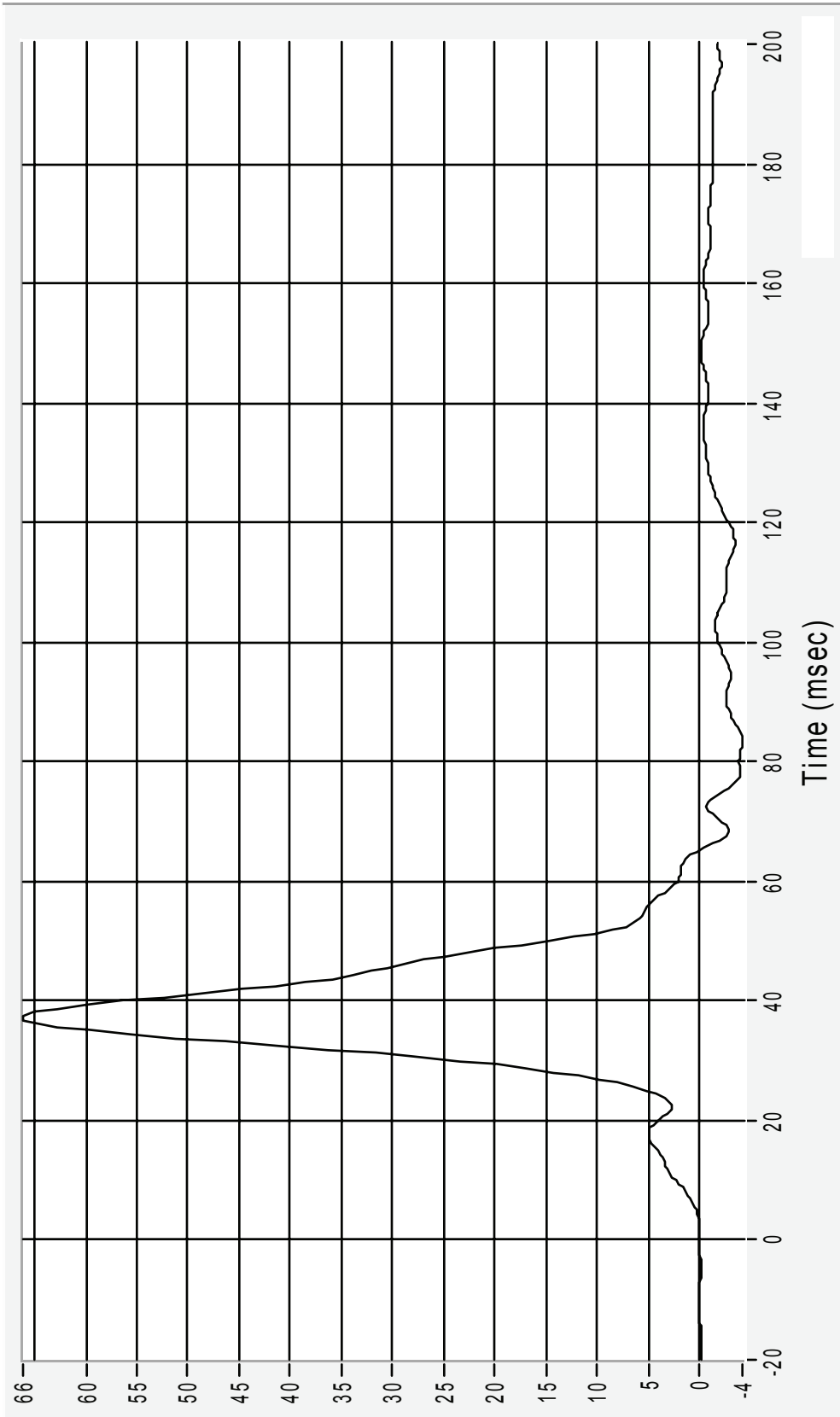


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Passenger Pelvic (Y) Acceleration
 Acceleration (G's) FIR100

Max	66.1	G	at	36.9	msec
Min	-4.2	G	at	83.8	msec



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APPENDIX C
DUMMY CALIBRATION DATA

**VERIFICATION TEST RESULTS SUMMARY
PRE AND POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial Number 056Test Sequences 6 and 7

TEST	PRE		POST	
	COMMENTS	BY	COMMENTS	BY
EXTERNAL DIMENSIONS	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
THORACIC SHOCK ABSORBER TEST	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
LATERAL THORAX IMPACT TEST	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
LATERAL PELVIS IMPACT TEST	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
ABDOMINAL COMPRESSION	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
LUMBAR FLEXION	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
HYBRID III LATERAL NECK TEST	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
HYBRID III LATERAL HEAD DROP	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski

SID Serial Number 058Test Sequences 6 and 7

TEST	PRE		POST	
	COMMENTS	BY	COMMENTS	BY
EXTERNAL DIMENSIONS	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
THORACIC SHOCK ABSORBER TEST	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
LATERAL THORAX IMPACT TEST	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
LATERAL PELVIS IMPACT TEST	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
ABDOMINAL COMPRESSION	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
LUMBAR FLEXION	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
HYBRID III LATERAL NECK TEST	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski
HYBRID III LATERAL HEAD DROP	Pass all requirements	Mike Rawski	Pass all requirements	Mike Rawski

SUMMARY
SID H3 PRE AND POST VERIFICATION

CONFIGURED FOR LEFT SIDE IMPACT

TEST PARAMETER	SPEC	SID HIII/056		SID HIII/058	
		PRE	POST	PRE	POST
MEASUREMENTS					
Date	-	22Oct07	21Nov07	7Nov07	21Nov07
Sequential Test Number	-	6	7	6	7
Temperature (°C)	18.9-25.5	20.0	21.9	23.0	21.3
Relative Humidity (%)	10-70	48.7	29.4	24.7	30.3
SH – Seated Height (mm)	889-909	906	906	909	909
RH – Rib Height (mm)	501-521	508	509	518	519
HP – Hip Pivot Height (mm)	99	99/99	99/99	99/99	99/99
RD – Rib From Back Line (mm)	229-241	229	230	229	229
KH – Knee Pivot from Back Line (mm)	511-526	518/526	525/525	525/525	525/525
KV – Knee Pivot to Floor (mm)	490-505	505/505	503/503	505/505	503/503
HW – Hip Width (mm)	356-391	360	365	360	360
THORAX IMPACTS					
Date	-	22Oct07	21Nov07	7Nov07	21Nov07
Sequential Test Number	-	6	7	6	7
Temperature (°C)	18.9-25.5	20.7	21.6	21.2	22.3
Relative Humidity (%)	10-70	48.6	29.9	33.0	29.2
Probe Speed (m/s)	4.21-4.33	4.24	4.22	4.27	4.22
Upper Rib Acceleration (G)	37-46	44.11	45.44	40.89	39.36
Lower Rib Acceleration (G)	37-46	43.08	43.93	38.95	39.23
Lower Spine Acceleration (G)	15-22	21.59	21.46	20.83	20.07
PELVIS IMPACTS					
Date	-	22Oct07	21Nov07	7Nov07	21Nov07
Sequential Test Number	-	6	7	6	7
Temperature (°C)	18.9-25.5	20.7	21.6	21.1	22.6
Relative Humidity (%)	10-70	46.5	30.1	33.3	29.0
Probe Speed (m/s)	4.21-4.33	4.24	4.25	4.24	4.25
Pelvis Acceleration (G)	40-60	58.71	53.07	44.25	43.21
THORACIC SHOCK ABSORBER					
Shock Absorber ID Number	-	1746	1746	31310164	31310164
Damper Setting	1-10	5.75	6	5	5
Date	-	04Oct07	20Nov07	05Oct07	20Nov07
Sequential Test Number	-	2	3	2	3
Temperature	18.9-25.5	20.0	20.7	19.7	20.6
Relative Humidity	10-70	37.0	34.0	38.2	34.7
Probe Speed (m/s) Low	3.05	3.05	3.05	3.05	3.05
Force (N)	836 – 1125	1074.5	1107.1	1016.8	1078.6
Displacement (mm)	30 – 35	30.1	30.3	30.8	30.1
Probe Speed (m/s) Middle	4.27	4.27	4.27	4.27	4.27
Force (N)	1730 – 2099	1756.5	1961.7	1740.4	1804.0
Displacement (mm)	32 – 37	32.8	32.5	33.0	32.1
Probe Speed (m/s) High	6.10	6.10	6.10	6.10	6.10
Force (N)	3741 – 4448	4019.4	3954.2	3840.8	4126.3
Displacement (mm)	33 - 40	35.3	35.7	36.0	34.9

TEST PARAMETER	SPEC	SID HIII/056		SID HIII/058	
		PRE	POST	PRE	POST
ABDOMINAL COMPRESSION					
Date	-	11Oct07	19Nov07	5Nov07	19Nov07
Sequential Test Number	-	6	7	6	7
Temperature (°C)	18.9-25.5	21.0	21.7	22.3	22.3
Relative Humidity (%)	10-70	38.6	35.4	24.9	35.2
Force at 13 mm (N)	104-162	136.00	147.08	138.09	142.87
Force at 19 mm (N)	163-221	184.40	203.92	192.33	193.62
Force at 25 mm (N)	222-280	244.66	278.22	251.37	264.10
Force at 33 mm (N)	325-391	343.27	377.03	358.03	375.42
LUMBAR FLEXION					
Date	-	11Oct07	19Nov07	2Nov07	19Nov07
Sequential Test Number	-	6	7	6	7
Temperature (°C)	18.9-25.5	20.9	22.0	22.0	21.9
Relative Humidity (%)	10-70	38.9	33.0	24.7	35.4
Force at 0° (N)	0-26.7	0	24.3	0	0
Force at 0° (N)	97.8-151.2	105.6	102.5	112.2	119.7
Force at 0° (N)	151.2-204.6	154.7	171.1	152.3	152.9
Force at 0° (N)	204.6-258	212.1	210.3	218.7	213.6
Return Angle	12° Maximum	6.8	4.6	8.7	7.5
HYBRID III LATERAL NECK					
Date	-	18Oct07	19Nov07	6Nov07	20Nov07
Sequential Test Number	-	6	7	6	7
Temperature (°C)	18.9-25.5	22.2	21.90	21.90	21.6
Relative Humidity (%)	10-70	53.0	35.4	29.0	29.9
Pendulum Speed (m/s)	6.89-7.13	7.10	7.09	7.09	7.09
Pendulum Pulse 10ms (m/s)	1.96-2.55	2.21	1.96	2.25	1.96
Pendulum Pulse 20ms (m/s)	4.12-5.10	4.74	4.54	4.87	4.38
Pendulum Pulse 30ms (m/s)	5.73-7.01	6.89	6.82	6.88	6.57
Pendulum Pulse 40 –70 ms (m/s)	6.27-7.64	7.23	7.44	7.08	7.45
Max Head rotation (deg)	66-82	81.93	81.31	81.79	81.87
Head angle crosses zero (ms)	58-67	65.12	61.12	62.72	62.88
Peak Moment (Nm)	73-88	82.95	80.76	77.32	73.56
Moment crosses zero (ms)	49-63	57.92	57.52	57.84	59.12
Max rotation wrt pk. moment (ms)	2-15	2.0	5.12	5.92	5.28
HYBRID III LATERAL HEAD DROP					
Date	-	11Oct07	19Nov07	2Nov07	19Nov07
Sequential Test Number	-	6	7	6	7
Temperature (°C)	18.9-25.5	19.7	22.5	22.2	22.2
Relative Humidity (%)	10-70	40.1	31.8	23.3	33.2
Resultant Max (G)	120-150	124.99	126.85	139.52	132.47
Longititudinal Max (G)	<15	5.15	2.71	5.72	6.14

**DUMMY INSPECTION LIST
PRE AND POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

		SID H3 056		SID H3 058	
		PRE	POST	PRE	POST
	Date	14Nov07	16Nov07	14Nov07	16Nov07
	Performed By	Mike Rawski	Mike Rawski	Mike Rawski	Mike Rawski
PART	INSPECTION	RESULT	RESULT	RESULT	RESULT
Skin	Visual	Pass	Pass	Pass	Pass
Head	Visual, Ballast, Accelerometer Mount	Pass	Pass	Pass	Pass
Neck	Visual and Palpated, Cable Torque	Pass	Pass	Pass	Pass
Spine Box	Visual, Ballast, Weldment, Accelerometer Mount	Pass	Pass	Pass	Pass
Rib Cage	Visual, Palpated, Measured, Stiffness	Pass	Pass	Pass	Pass
Sternum	Visual	Pass	Pass	Pass	Pass
Lumbar Spine	Visual	Pass	Pass	Pass	Pass
Abdomen	Visual	Pass	Pass	Pass	Pass
Pelvis	Visual, Palpated, Accelerometer Mount	Pass	Pass	Pass	Pass
Upper Legs	Visual	Pass	Pass	Pass	Pass
Knees	Visual, Stops, Inserts	Pass	Pass	Pass	Pass
Lower Legs	Visual, Range of Motion	Pass	Pass	Pass	Pass
Ankles	Visual, Range of Motion	Pass	Pass	Pass	Pass
Feet	Visual, Range of Motion	Pass	Pass	Pass	Pass
Joints	1 to 2 G Range	Pass	Pass	Pass	Pass
Other		N/a	N/a	N/a	N/a