

REPORT NUMBER TR-P24118-01-NC

**NEW CAR ASSESSMENT PROGRAM
SIDE IMPACT TEST**

**FORD MOTOR COMPANY
2005 FORD FOCUS
3-DOOR HATCHBACK**

NHTSA NUMBER: F50201

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JULY 22, 2004

FINAL REPORT

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

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

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Technical Report Documentation Page

1. Report No. TR-P24118-01-NC		2. Government Accession No.		3. Recipients Catalog No.	
4. Title and Subtitle Final Report of New Car Assessment Program Side Impact Testing of a 2005 Ford Focus 3-Door Hatchback NHTSA No. F50201				5. Report Date 7/22/04	
				6. Performing Organization Code KAR	
7. Authors Mr. Matthew A. Ivory, Project Engineer, Karco Mr. Frank Richardson, Project Manager, Karco				8. Performing Organization Report No. TR-P24118-01-NC	
9. Performing Organization Name and Address Karco Engineering, LLC 9270 Holly Rd. Adelanto, CA, 92301				10. Work Unit No.	
				11. Contract or Grant No. DTNH22-03-D-32005	
12. Sponsoring Agency Name and Address U. S. Department of Transportation National Highway Traffic Safety Administration Rulemaking Office of Crashworthiness Standards Mail Code NVS-111 400 Seventh Street, SW, Room 5311 Washington, D.C 20590				13. Type of Report and Period Covered Final Test Report	
				14. Sponsoring Agency Code DOT/NHTSA/NRM/OCS	
15. Supplementary Notes					
16. Abstract A 55/28 km/h 90 deg. Moving Deformable Barrier Side Impact NCAP Test was conducted on the subject 2005 Ford Focus 3-Door Hatchback in accordance with the specifications of the Office of Crash Worthiness Standards Test Procedures for the generation of consumer information on vehicle side crash protection. The test was conducted at KARCO Engineering, LLC laboratories in Adelanto, California, on July 22, 2004. The impact velocity of the Moving Deformable Barrier was 62.01 km/h, and the outside ambient temperature at the struck (driver's) side of the vehicle was 41.0 deg. C. The target vehicle's maximum post test static crush was 347 mm located at level 2. The test vehicle's occupant performance data is as follows:					
Measurement Description		Driver SID/HIII	Pass. SID/HIII		
Left Upper Rib (LUR) G's		83.5	77.2		
Left Lower Rib (LLR) G's		74.9	78.5		
Lower Spine (T ₁₂) G's		84.5	59.6		
Thoracic Trauma Index (TTI) G's		84.0	69.0		
Pelvis (PEV) G's		91.0	70.0		
17. Key Words New Car Assessment Program (NCAP) Side Impact Moving Deformable Barrier (MDB) Side Impact Dummy (SID/HIII)				18. Distribution Statement Copies of this report are available from: National Highway Traffic Safety Admin. NHTSA Technical Reference Division 400 Seventh St., SW, Room 5108 Washington, DC 20590	
19. Security Classification of this report UNCLASSIFIED		20. Security Classification of this page UNCLASSIFIED		21. No. of Pages 205	22. Price

Form DOT F1700.7 (8-72)

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SECTION 1

PURPOSE and TEST PROCEDURE

1.1 PURPOSE

This Side Impact NCAP test is conducted as part of the FY' 2005 test program sponsored by the National Highway Traffic Safety Administration (NHTSA), under contract No. DTNH22-03-D-32005. The purpose of this test is to generate comparative side impact data on a Ford Focus 3-Door Hatchback by Ford Motor Corporation.

1.2 TEST PROCEDURE

The side impact test was conducted in accordance with the current National Highway Traffic Safety Administration (NHTSA), Office of Crashworthiness Standards (OCS), laboratory test procedure NCAP Side Impact Testing, dated July 1997 and the corresponding KARCO Engineering Test Procedure KTP-214D, dated November 18, 1998. The procedures for receiving, inspection, testing, and reporting of test results are described in the test procedures and are not repeated in this report.

SECTION 2

SUMMARY OF SIDE IMPACT TEST

2.1 SUMMARY OF SIDE IMPACT NCAP TEST

A model year 2005 Ford Focus 3-Door Hatchback 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 62.01 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 1407 kg and the test weight of the MDB was 1361 kg. The test was conducted at KARCO Engineering, LLC in Adelanto, California, on July 22, 2004.

SUPPLEMENTAL RESTRAINT INFORMATION

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

One (1) real-time motion picture camera, two (2) high-speed digital cameras and eleven (11) 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 is documented in the data sheets. Pre- and post-test photographs of the vehicle and SID/HIIIs can be found in Appendix A. Two 50th percentile adult male Side Impact Dummies, Hybrid III (SID/HIIIs) were placed in the driver's and left rear passenger designated seating positions according to the test procedure. Each SID/HIII is instrumented with contact switches on the pelvis and thorax, six-axis neck load cells, and fourteen accelerometers in the following locations:

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

The test vehicle was instrumented with twenty-five (25) structural accelerometers and the MDB was instrumented with five (5) accelerometers and one (1) contact switch on the right bumper to compare left side to right side bumper impact timing. All data channels were recorded with the fully self contained on-board Data Acquisition System (DAS). The data was digitally sampled at 10,000 samples per second and processed per Appendix V of the Test Procedure.

SECTION 2 (CONTINUED)

2.2 GENERAL COMMENTS

The test vehicle sustained a maximum static crush of 347 mm at level 2, 1200 mm rearward of the left vertical impact point. The driver SID/Hybrid III, Serial No. 274 and the passenger SID/Hybrid III, Serial No. 275 were calibrated just prior to this test. The SID/Hybrid III injury criteria is summarized as follows:

Measurement	Units	Driver	Passenger
Thoracic Trauma Index (TTI)	G's	84	69
Peak Pelvic G's (PEV)	G's	91	70

Tests 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 and passenger SID/HIIIs, vehicle, and MDB response data traces. Appendix C contains the SID Configuration and performance verification data. Appendix D contains the test equipment information.

SECTION 3

OCCUPANT AND VEHICLE INFORMATION SHEETS

Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04

CONVERSION FACTORS USED IN THIS REPORT*

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

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

DATA SHEET NO. 1

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04

TEST VEHICLE INFORMATION AND OPTIONS

NHTSA No.	F50201	Anti-Lock Brakes	Yes
Make	Ford	All Wheel Drive	No
Model	Focus	Power Steering	Yes
Body Style	3-Door Hatchback	Driver Front Airbag	Yes
Vin No.	3FAFP31N65R105205	Driver Side Torso Airbag	No
Color	Blue	Driver Side Head Airbag	No
Delivery Date	7/14/2004	Driver Curtain Airbag	No
Odometer	116.0	Rear Pass. Airbag	No
Dealer	Antelope Valley Ford	Rear Pass. Side Airbag	No
Transmission	3 Speed Automatic	Rear Pass. Head Airbag	No
Final Drive	Front	Rear Pass. Curtain Airbag	No
Type/No. Cyl.	4	Pre-Tensioners	N/A
Engine Disp. (L)	2.0	Load Limiters	N/A
Engine Placement	Transverse	Bucket Seats	Yes
Roof Rack	No	Air Cond.	Yes
Sunroof/T-Top	No	AM/Fm Cassette	Yes
Tinted Glass	No	Tilt Steering	No
Traction Control	No	Automatic Door Locks	No
Power Brakes	Yes	Power Windows	Yes
Front Disc	Yes	Power Seats	No
Rear Disc	No	Other	No
Does Owners Manual provide instructions to turn off automatic door locks			Yes

DATA FROM CERTIFICATION LABEL

Manufactured By	Ford Motor Company	GVWR (kg)	1664
Date of Manufacture	05/04	GAWR Front (kg)	895
		GAWR Rear (kg)	791

VEHICLE SEATING AND CAPACITY WEIGHT INFORMATION

Measured Parameter	Front	Rear	Third	Total
Type of Seats	Bucket	Bench	None	
Number of Occupants	2	3	N/A	5
Capacity Weight (VCW) (kg)				375
Cargo Weight (RCLW) (kg)				35

DATA SHEET NO. 1 (CONTINUED)

GENERAL TEST AND VEHICLE PARAMETER DATA

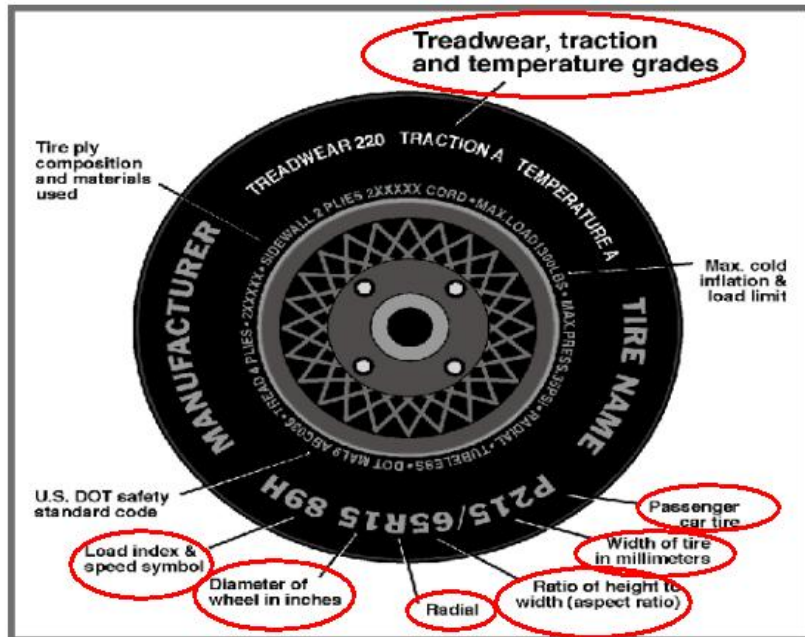
Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04

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



Measured Parameter	Front	Rear
Max. Tire Pressure (kpg)	308	308
Cold Pressure (kpg)	220	220
Recommended Tire Size	P195/60R15	P195/60R15
Tire Size on Vehicle	P195/60R15	P195/60R15
Tire Manufacturer	Goodyear	Goodyear
Treadwear	260	260
Traction	A	A
Temperature Grades	B	B
Tire Plies Sidewall	1 Ply - Polyester Cord	1 Ply - Polyester Cord
Tire Plies Body	0	0
Load Index/Speed Symbol	877	877
Tire Material	Polyester/Steel	Polyester/Steel
DOT Safety Code Right	M6V9-LNER 1804	M6V9-LNER 1804
DOT Safety Code Left	M6V9-LNER 1804	M6V9-LNER 1804

DATA SHEET NO. 1 (CONTINUED)**GENERAL TEST AND VEHICLE PARAMETER DATA**Test Vehicle: 2005 Ford Focus 3-Door HatchbackNHTSA No.: F50201Test Program: 55/28 km/h 90 Deg. Side Impact NCAPTest Date: 7/22/04

Ratio	%	61.5	38.5		60.3	39.7	
Totals	kg	748	468	1216	848	559	1407

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UWW)	kg	1216
Weight of 2 P572 ATD's	kg	161
Rated Cargo/Luggage Wt. (RCLW)	kg	35
Calculated Vehicle Target Wt. (TVTW)	kg	1412

TEST VEHICLE ATTITUDE AND CG

	Units	LF	RF	LR	RR	CG (aft of front axle)
As Delivered	mm	680	680	689	693	1001
As Tested	mm	655	658	660	673	1033
Fully Loaded	mm	663	675	653	669	

GENERAL TEST VEHICLE DATA

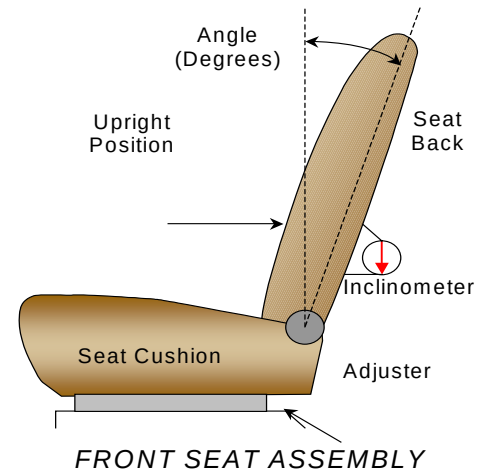
Measurement Description	Units	Value
Test Vehicle Wheel Base	mm	2600
Total Vehicle Length at Left Side	mm	3038
Total Vehicle Length at Centerline	mm	4285
Total Vehicle Length at Right Side	mm	3038
Weight of Ballast In Cargo Area	kg	5
Amount of Stoddard Solvent in Fuel Tank	Liters	86.6
1/3 of Usable Capacity	Liters	31.0

TEST VEHICLE VERTICAL IMPACT LINE DATA

Measurement Description	Units	Value
Test Vehicle Wheel Base	mm	2600
Target Impact Point Aft of Front Axle	mm	360
Actual Impact Point Aft of Front Axle	mm	342

DATA SHEET NO. 1 (CONTINUED)**GENERAL TEST AND VEHICLE PARAMETER DATA**Test Vehicle: 2005 Ford Focus 3-Door HatchbackNHTSA No.: F50201Test Program: 55/28 km/h 90 Deg. Side Impact NCAPTest Date: 7/22/04**NOMINAL DESIGN RIDING POSITION**

The driver and passenger seat backs are positioned to the manufacturers designated angle. The procedure is as follows: A special application tool with pointed probes is inserted through the fabric to make contact with the rigid portion of the lower seat frame assembly, approximately 13 inches above the pivot point of the seat back. An inclinometer is placed against the flat surface of the tool and the seat back angle is measured directly from the dial face.

**SEAT BACK ANGLES**

	Deg.
Driver Seat Back Angle	22.2
Rear Seat Back Angle	21.5

SEAT FORE/AFT POSITIONS

The Drivers seat is adjustable. The fore/aft position is set to the middle.

SEAT FORE/AFT POSITIONING

	Total Fore/Aft Travel	Placed in Position #
Driver Seat	17	9
Rear Seat	N/A	N/A

SEAT BELT UPPER ANCHORAGE

Position number one (1) is the uppermost position.

SEAT BELT UPPER ANCHORAGE

	Total # of Positions	Placed in Position #
Driver Seat	4	2
Rear Seat	1	1

DATA SHEET NO. 1 (CONTINUED)

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

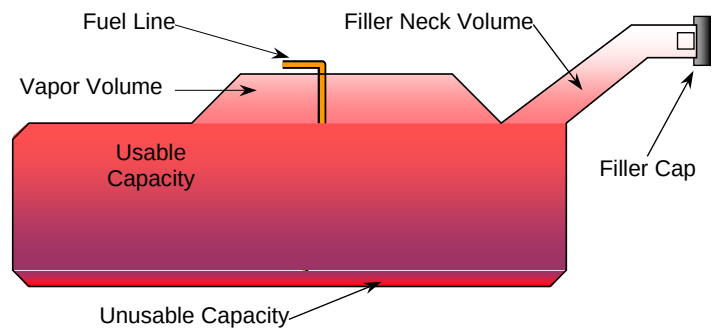
Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04

FUEL TANK CAPACITY

	Liters
Usable Capacity of "Standard Tank"	49.96
Usable Capacity of "Optional" Tank	N/A
Usable Capacity used for FMVSS 301	45.95 to 46.94
Actual Amount of Solvent used	46.45

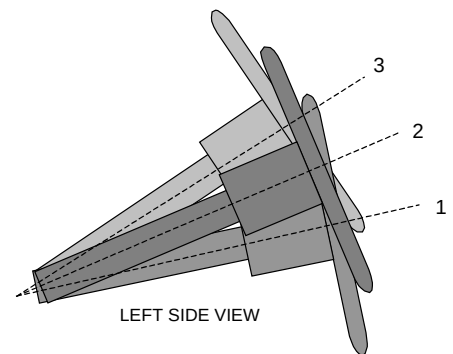
The test vehicle is equipped with an electric fuel pump. The fuel pump will operate for approximately three (3) seconds with the ignition in the "ON" position, after which the fuel pump automatically shuts off. The fuel filler door is located on the right rear fender.



VEHICLE FUEL TANK ASSEMBLY

STEERING COLUMN ADJUSTMENT

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



STEERING COLUMN ASSEMBLY

STEERING COLUMN POSITIONS

	Degrees
Lowermost position No. 1	N/A
Geometric center position No. 2	23°
Uppermost position No. 3	N/A

DATA SHEET NO. 2**TEST VEHICLE SUMMARY OF RESULTS**Test Vehicle: 2005 Ford Focus 3-Door HatchbackNHTSA No.: F50201Test Program: 55/28 km/h 90 Deg. Side Impact NCAPTest Date: 7/22/04**TEST VEHICLE WEIGHTS**

	Units	As Delivered Weights (UWW)			As Tested Weights (ATW)		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	367	235		431	292	
Right	kg	381	233		417	267	
Ratio	%	61.5	38.5		60.3	39.7	
Totals	kg	748	468	1216	848	559	1407

MAXIMUM EXTERIOR STATIC CRUSH

1	Measured Parameter	Units	Maximum Crush	Above Ground
Level 1	Sill Top Height	mm	67	154
Level 2	Occupant H-Point	mm	347	546
Level 3	Mid Door	mm	302	609
Level 4	Window Sill	mm	231	810
Level 5	Window top	mm	72	1414
N/A	Maximum Penetration	mm	347	

INSTRUMENTATION

Driver SID/Hybrid III Accelerometers	14
Passenger SID/Hybrid III Accelerometers	14
Vehicle Structure Accelerometers	25
MDB Accelerometers	5
Total	58

CAMERA COVERAGE

High Speed, Vehicle On-Board	3
High Speed, Off-Board	8
High Speed, MDB On-Board	2
Real Time, Panning	1
Total	14

DATA SHEET NO. 3**MOVING DEFORMABLE BARRIER (MDB) SUMMARY OF RESULTS**Test Vehicle: 2005 Ford Focus 3-Door HatchbackNHTSA No.: F50201Test Program: 55/28 km/h 90 Deg. Side Impact NCAPTest Date: 7/22/04**MDB SPECIFICATIONS (mm)**

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

MDB WEIGHTS

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

SPEED AND IMPACT DATA

Measured Parameter	Units	Requirement	Value
Trap No. 1 Velocity (Primary)	km/h	61.1 to 62.7	62.01
Trap No. 2 Velocity (Redundant)	km/h	61.1 to 62.7	62.10
MDB CL to Target Vehicle CL	degrees	88.5 to 91.5	89.5

MAXIMUM STATIC CRUSH OF HONEYCOMB FACE (mm)

Vertical Location			From Centerline		Max. Crush
Row	Description	Height	Distance	Direction	
A	Center of Bumper	432	800	Right	165
B	Top of Bumper	533	800	Right	89
C	Mid Level	686	800	Left	118
D	Top of Stack	813	800	Left	168

MDB INSTRUMENTATION AND CAMERAS

Accelerometers	5
Contact Switches	2
High Speed Cameras	2

DATA SHEET NO. 4**POST TEST OBSERVATIONS**Test Vehicle: 2005 Ford Focus 3-Door HatchbackNHTSA No.: F50201Test Program: 55/28 km/h 90 Deg. Side Impact NCAPTest Date: 7/22/04**TEST DUMMY INFORMATION AND CONTACT POINTS**

Description	Front Seat SID/HIII	Rear Seat SID/HIII
Dummy Type / Serial No.	P572F, SID / No. 274	P572F, SID / No. 275
Head Contact	Window, Sill	Window, Door Panel, Side Header
Upper Torso Contact	Door Panel	Door Panel
Lower Torso Contact	Door Panel	Door Panel
Left Knee Contact	None	Door Panel
Right Knee Contact	None	None

POST TEST DOOR OPENING AND SEAT TRACK INFORMATION

Description	Front	Rear
Left Side Door Opening	Remained closed/latched, inoperable	N/A
Right Side Door Opening	Opened without the aid of tools	N/A
Seat Movement	None	None
Seat Back Failure	None	None

POST TEST STRUCTURAL OBSERVATIONS

Critical Areas of Performance	Observations and Conclusions
Pillar Performance	Pillars pushed inward with no apparent failure
Sill Separation	No apparent visible failure
Windshield Damage	Glazing cracks on struck side only
Window Damage	Left front and left rear windows broke
Other Notable Effects	Front head skin of the rear passenger dummy came off

SUPPLEMENTAL RESTRAINT SYSTEM INFORMATION

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

MDB LEFT EDGE IMPACT POINT DATA

Measured Parameter	Units	Requirement	Value
Horizontal Offset	mm	+/- 50	-18
Vertical Offset	mm	+/- 20	0

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

Test Vehicle: 2005 Ford Focus 3 Door Hatchback

NHTSA No.: F50201

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

Test Date: 7/22/04

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

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Upper Rib (LUR)	Y	G's	83.5	36.3	-33.2	72.5	77.2	37.5	-16.1	85.6
Lower Rib (LLR)	Y	G's	74.9	36.3	-20.6	73.1	78.5	38.1	-14.4	63.8
Lower Spine (T ₁₂)	Y	G's	84.5	30.6	-27.8	63.1	59.6	36.3	-20.5	61.3
Pelvis (PEV)	Y	G's	91.4	25.0	-8.0	54.4	69.6	23.1	-13.9	61.3

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

Location	Driver				Passenger			
	LUR	T ₁₂	TTI(g)	PEV(g)	LLR	T ₁₂	TTI(g)	PEV(g)
Primary Rib, Spine, and Pelvis	83.460	84.455	84	91	78.503	59.582	69	70

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

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Upper Rib (LUR)	Y	G's	83.1	36.3	-33.2	72.5	77.4	37.5	-15.3	85.6
Lower Rib (LLR)	Y	G's	74.5	36.3	-20.8	73.1	79.1	38.1	-14.4	63.1
Lower Spine (T ₁₂)	Y	G's	84.8	30.6	-28.5	63.1	59.7	36.3	-20.1	60.6
Pelvis (PEV)	Y	G's	90.7	25.0	-8.6	55.0	69.4	23.1	-14.7	61.3

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

Location	Driver				Passenger			
	LUR	T ₁₂	TTI(g)	PEV(g)	LLR	T ₁₂	TTI(g)	PEV(g)
Redundant Rib, Spine, and Pelvis	83.143	84.795	84	91	79.126	59.665	69	69

Positive Acceleration Polarities:

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

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

Test Vehicle: 2005 Ford Focus 3 Door Hatchback

NHTSA No.: F50201

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

Test Date: 7/22/04

HEAD PRIMARY PEAK ACCELERATIONS (SAE CLASS 1000 Filtered)

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Head CG	X	G's	1.7	193.3	-29.7	82.0	11.3	158.5	-60.6	80.4
Head CG	Y	G's	42.1	79.6	-8.7	32.6	131.2	80.5	-9.3	35.7
Head CG	Z	G's	72.7	53.9	-3.2	19.7	106.6	62.6	-16.7	54.1
Head CG Resultant	N/A	G's	73.7	53.4			144.5	80.4		

HEAD PRIMARY INJURY CRITERIA (SAE CLASS 1000 Filtered)

Location	Driver				Passenger			
	HIC	T ¹	T ²	Avg G	HIC	T ¹	T ²	Avg G
Head CG	657.5	47.6	83.6	50.7	1230.6	57.8	83.6	74.3

HEAD REDUNDANT PEAK ACCELERATIONS (SAE CLASS 1000 Filtered)

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Head CG	X	G's	1.7	193.1	-30.0	82.0	11.1	158.3	-60.1	80.3
Head CG	Y	G's	43.0	79.7	-8.6	32.7	131.9	80.4	-9.7	35.6
Head CG	Z	G's	73.3	53.4	-3.5	19.5	107.3	62.5	-15.9	54.0
Head CG Resultant	N/A	G's	74.7	51.7			145.1	80.4		

HEAD REDUNDANT INJURY CRITERIA (SAE CLASS 1000 Filtered)

Location	Driver				Passenger			
	HIC	T ¹	T ²	Avg G	HIC	T ¹	T ²	Avg G
Head CG	678.5	47.6	83.6	51.3	1255.1	57.7	83.6	74.7

UPPER NECK PEAK FORCES AND MOMENTS

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Neck Force	X	Newtons	919.1	71.9	-145.0	18.5	145.7	31.2	-1605.1	62.6
Neck Force	Y	Newtons	717.9	47.3	-347.4	32.6	1052.4	58.3	-1132.1	81.3
Neck Force	Z	Newtons	2910.9	54.1	-160.1	19.8	3807.0	62.7	-923.7	52.3
Neck Force Resultant	N/A	Newtons	2978.3	54.1			4175.6	62.6		
Neck Moment	X	N•m	60.9	55.8	-85.7	44.0	143.3	81.3	-123.8	52.4
Neck Moment	Y	N•m	37.7	82.2	-42.4	47.6	27.1	82.1	-78.2	59.2 ¹
Neck Moment	Z	N•m	28.1	73.2	-16.0	40.8	23.1	76.4	-22.2	54.7
Neck Moment Resultant	N/A	N•m	94.5	44.0			146.3	81.3		2

1.) Pass. Channel failed from 49.8 to 57.4 msec and at 174.2 msec

2.) Pass. Moment Y channel failed

DATA SHEET NO. 6

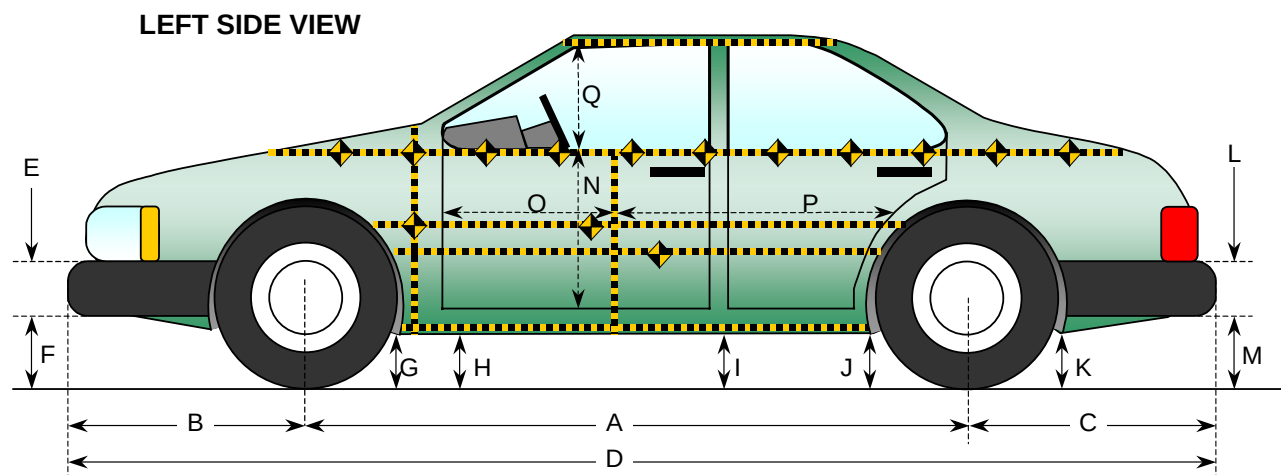
VEHICLE PRE-TEST AND POST-TEST MEASUREMENTS

Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04



VEHICLE PRE AND POST TEST MEASUREMENT INFORMATION

Code	Measurement Description	Pre-Test	Post-Test	Difference
A	Wheelbase	2600	2576	-24
B	Front Axle to FSOV	853	898	45
C	Rear Axle to RSOV	765	790	25
D	Total Length at Centerline	4285	4267	-18
E	Front Bumper Thickness	358	358	0
F	Front Bumper Bottom to Ground	202	231	29
G	Sill Height at Front Wheel Well	184	254	70
H	Sill Height at Front Door Leading Edge	179	254	75
I	Sill Height at "B" Pillar	185	296	111
J1	Sill Height at Rear Wheel Well	166	235	69
J2	Pinch Weld Height at Rear Wheel Well	189	267	78
K	Sill Height aft of Rear Wheel Well	170	325	155
L	Rear Bumper Thickness	310	310	0
M	Rear Bumper Bottom to Ground	370	361	-9
N	Sill Height to Window Bottom Sill	677	547	-130
O	Front Door Leading Edge to Impact CL	739	785	46
P	Rear Door Trailing Edge to Impact CL	N/A	N/A	N/A
Q	Front Window Opening	434	398	-36
R	Right Side Length	3038	3050	12
S	Left Side Length	3038	2960	-78
T	Vehicle Width at "B" Post	1700	1452	-248

DATA SHEET NO. 7

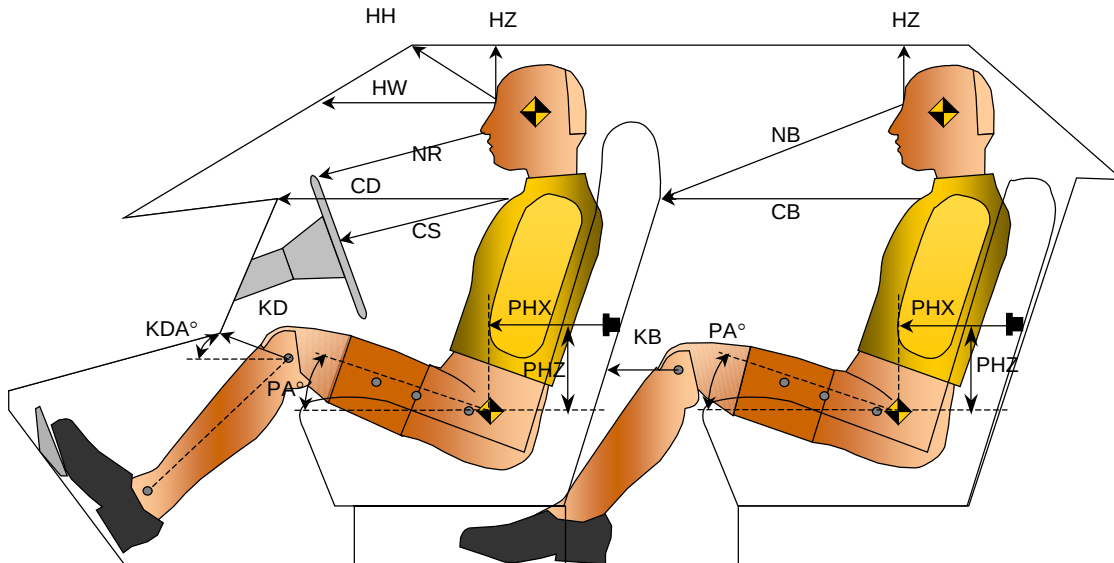
SID/HIII LONGITUDINAL CLEARANCE DIMENSIONS

Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04



LONGITUDINAL CLEARANCE DIMENSION INFORMATION

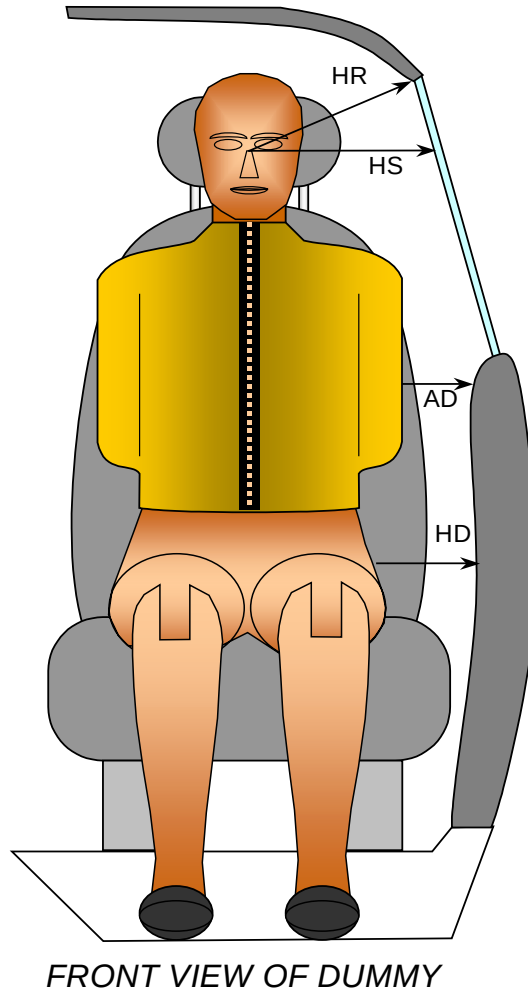
Driver Code	Pass. Code	Measurement Description	Driver		Passenger	
			Length(mm)	Angle	Length(mm)	Angle
HH		Head to Header	443	14		
HW		Head to Windshield	698	0		
HZ	HZ	Head to Roof	185		185	90
NR	NB	Nose to Rim/Nose to Seatback	507	17	538	19
CD	CB	Chest to Dash or Seatback	585	3	785	4
CS		Chest to Steering Wheel	298	0		
KDL	KBL	Left Knee to Dash or Seatback	148	5	162	10
KDR	KBR	Right Knee to Dash or Seatback	168		160	
PA	PA	Pelvic Angle		24		24
PHX	PHX	H-Point to Striker (X-Axis)	480	15	580	0
PHZ	PHZ	H-Point to Striker (Z-Axis)	118	0	80	0

DATA SHEET NO. 8

SID/HIII LATERAL CLEARANCE DIMENSIONS

Test Vehicle: 2005 Ford Focus 3-Door Hatchback
Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

NHTSA No.: F50201
Test Date: 7/22/04



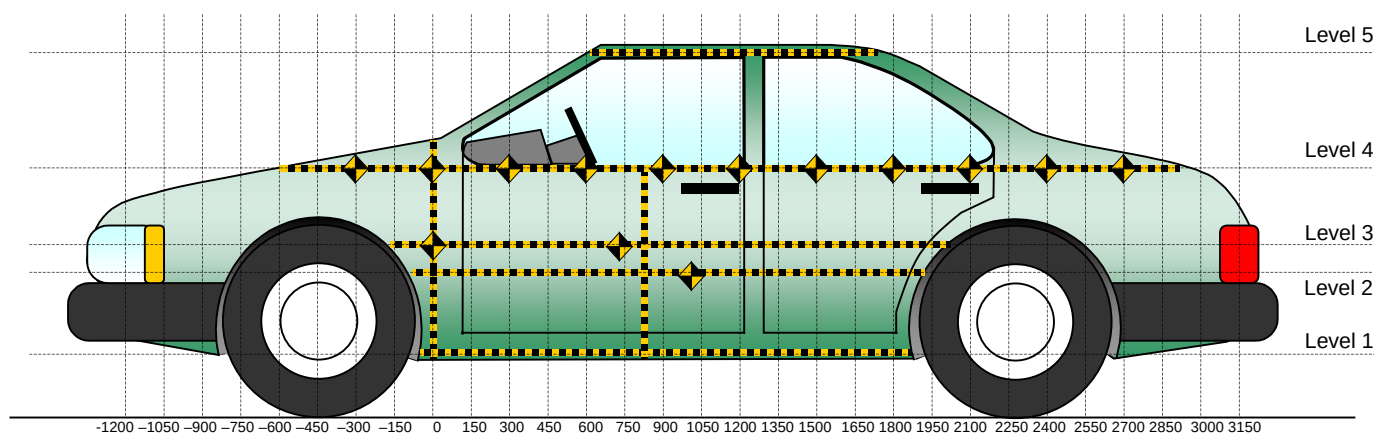
LATERAL CLEARANCE DIMENSION INFORMATION

Code	Measurement Description	Units	Driver	Passenger
HR	Head to Side Header	mm	250	195
HS	Head to Side Window	mm	305	318
AD	Arm to Door	mm	90	78
HD	H-Point to Door	mm	85	130

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

Test Vehicle: 2005 Ford Focus 3-Door Hatchback
 Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

NHTSA No.: F50201
 Test Date: 7/22/04



All Measurements Shown in mm

LEFT SIDE VIEW

Measurements are taken with vehicle in the as tested condition.

Measurements taken 900mm right of impact reference.

All measurements below in mm.

Level	Measurement Description	Height Above Ground
1	Sill Top	154
2	Occupant H-Point	546
3	Mid Door	609
4	Window Sill	810
5	Window Top	1414

DATA SHEET NO. 10

VEHICLE EXTERIOR CRUSH PROFILES

Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04

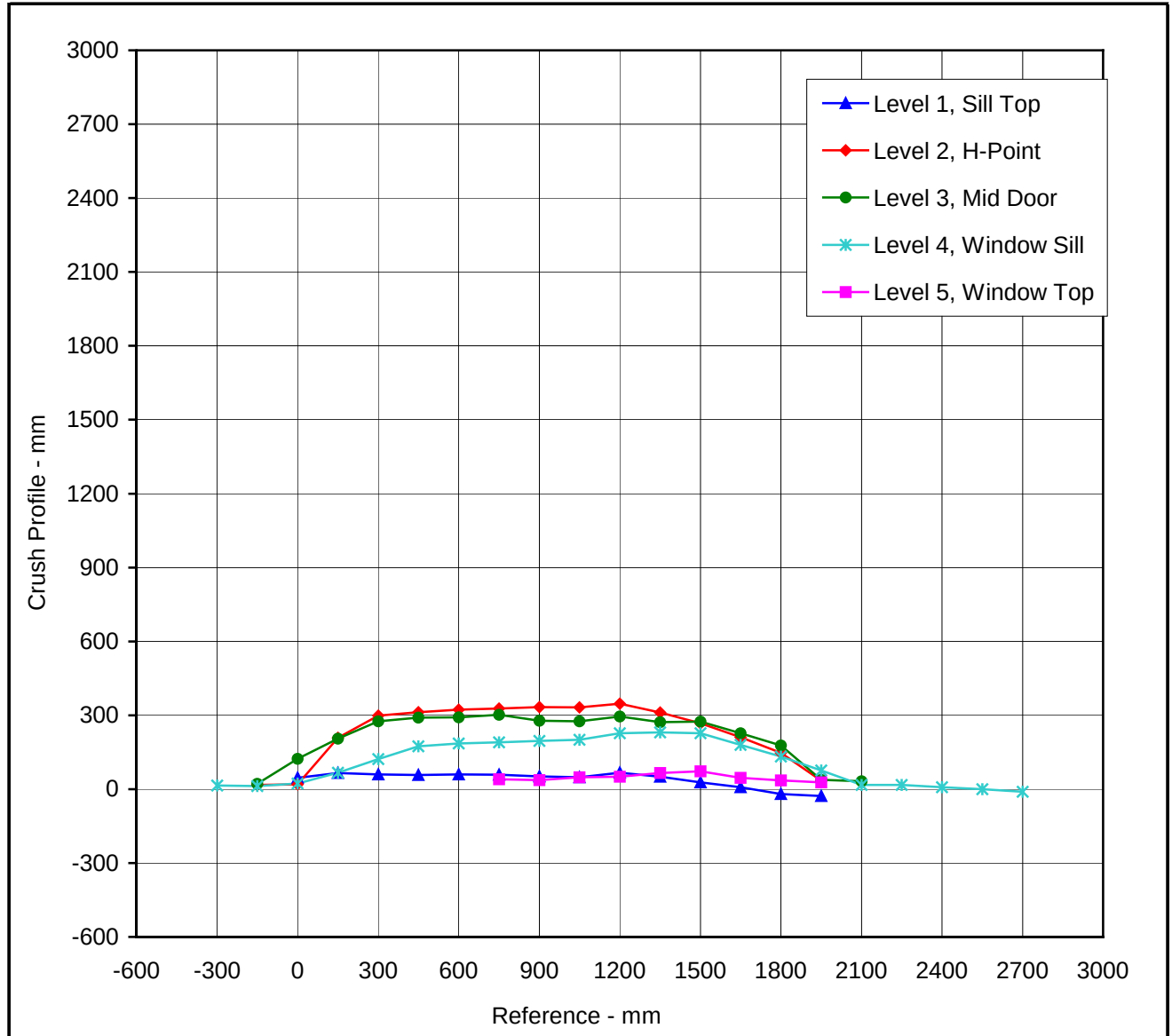
	Pre-Test					Post-Test					Difference				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
-900															
-750															
-600															
-450															
-300															
-150		539	539	626			611	609	698			72	70	72	
0	85	549	549	626		85	616	615	696		0	67	66	70	
150	85	578	576	626		85	689	682	676		0	111	106	50	
300	85	584	586	626		85	753	748	677		0	169	162	51	
450	85	588	586	621		85	806	790	683		0	218	204	62	
600	85	586	586	616		85	810	786	689		0	224	200	73	
750	85	588	586	616	828	85	813	792	696	888	0	225	206	80	60
900	85	589	586	616	818	85	818	798	704	876	0	229	212	88	58
1050	85	590	591	616	818	85	810	790	711	866	0	220	199	95	48
1200	85	591	590	616	809	85	801	792	727	869	0	210	202	111	60
1350	85	594	593	616	814	85	845	822	750	869	0	251	229	134	55
1500	85	599	597	621	821	85	847	827	734	866	0	248	230	113	45
1650	85	596	597	621	818	85	822	812	722	866	0	226	215	101	48
1800	85	570	575	622	819	85	766	781	708	866	0	196	206	86	47
1950		550	551	628	820		676	686	696	862		126	135	68	42
2100				630	825				659	868				29	43
2250				631	807				680	862				49	55
2400				623	814				676	869				53	55
2550				627	814				669	872				42	58
2700				631	820				671	872				40	52
2850				632	822				671	862				39	40
3000				638					671					33	0

Measurements are taken from fixed reference 1500mm from vehicle CL.

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

Test Vehicle: 2005 Ford Focus 3-Door Hatchback
 Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

NHTSA No.: F50201
 Test Date: 7/22/04



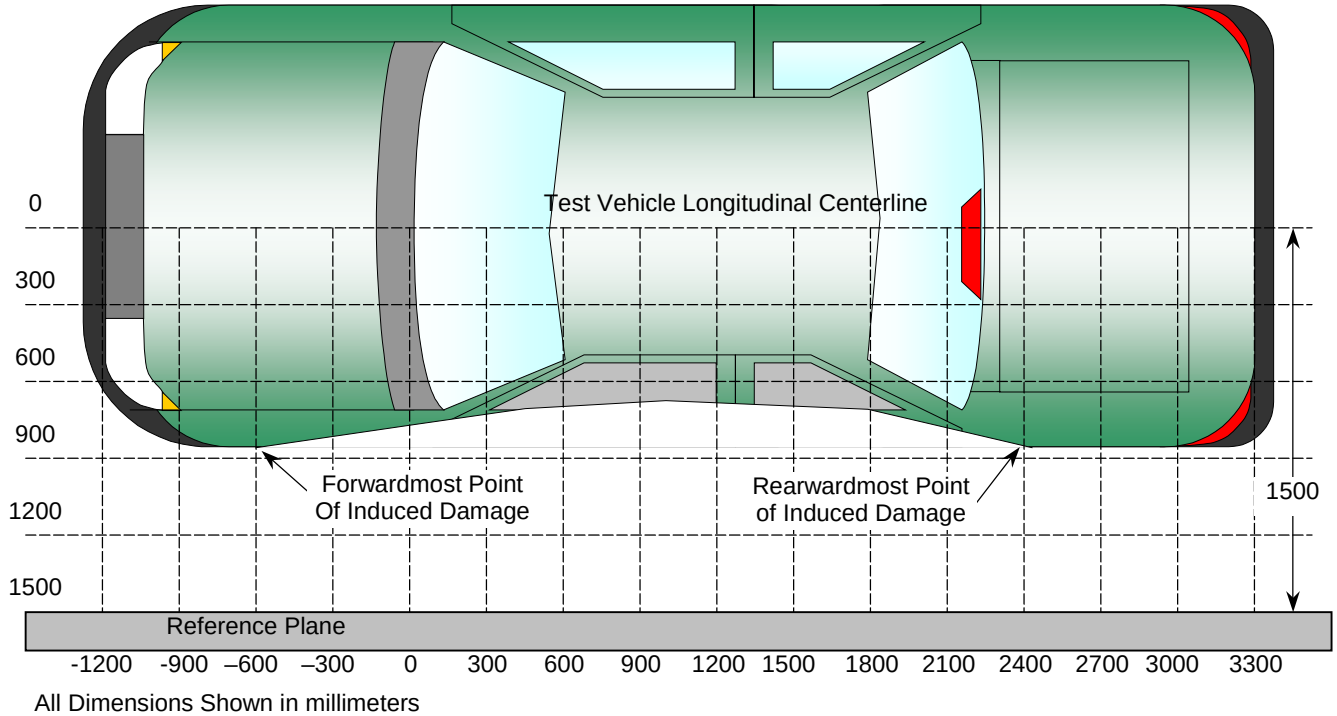
	Units	Level 1	Level 2	Level 3	Level 4	Level 5
Maximum Crush	mm	67	347	302	231	72
Distance from Impact	mm	1200	1200	750	1350	1500

DATA SHEET NO. 11

VEHICLE DAMAGE PROFILE DISTANCES

Test Vehicle: 2005 Ford Focus 3-Door Hatchback
 Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

NHTSA No.: F50201
 Test Date: 7/22/04



TOP VIEW

DAMAGE PROFILE DISTANCES

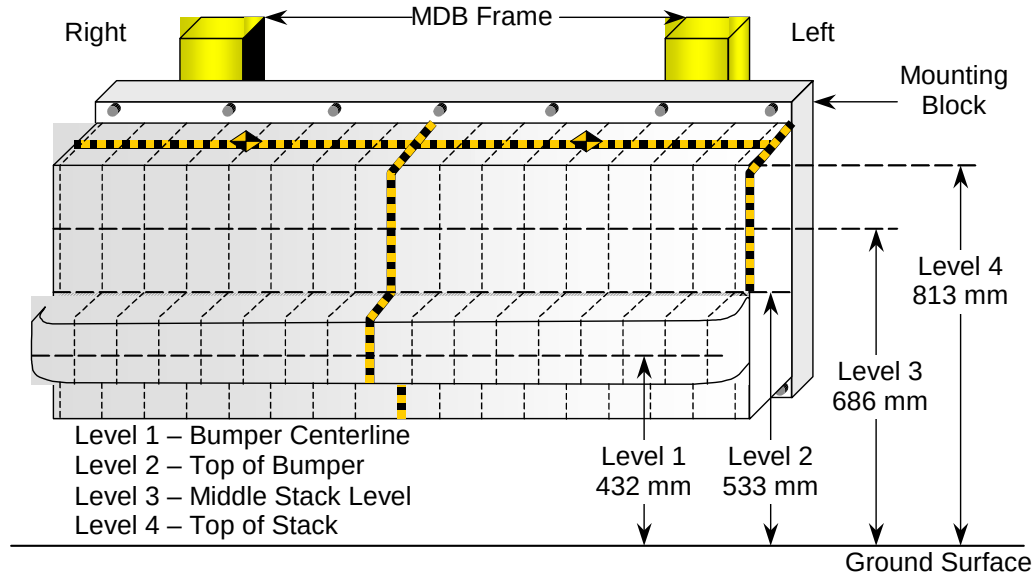
DPD	Distance From Impact Point in mm	Level	Pre-Test	Post-Test	Max. Static
			(mm)	(mm)	Crush (mm)
1	-300	6	686	701	15
2	300	2	610	711	101
3	900	2	613	946	333
4	1500	3	616	890	274
5	2100	4	608	640	32
6	2700	4	671	661	-10

DATA SHEET NO. 12

DEFORMABLE BARRIER HONEYCOMB FACE STATIC CRUSH

Test Vehicle: 2005 Ford Focus 3-Door Hatchback
 Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

NHTSA No.: F50201
 Test Date: 7/22/04



DEFORMABLE BARRIER STATIC CRUSH

Stack Level	Distance Right of Center								C/L	Distance Left of Center							
	800	700	600	500	400	300	200	100		100	200	300	400	500	600	700	800
1	165	140	103	103	92	84	80	80	81	80	80	81	83	88	98	120	141
2	89	71	47	47	39	36	38	38	39	40	40	41	43	48	54	64	70
3	44	23	23	23	14	11	13	13	14	14	15	18	23	28	38	68	118
4	61	18	1	10	6	14	14	4	4	12	18	23	31	46	73	113	168

DATA SHEET NO. 13

VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY

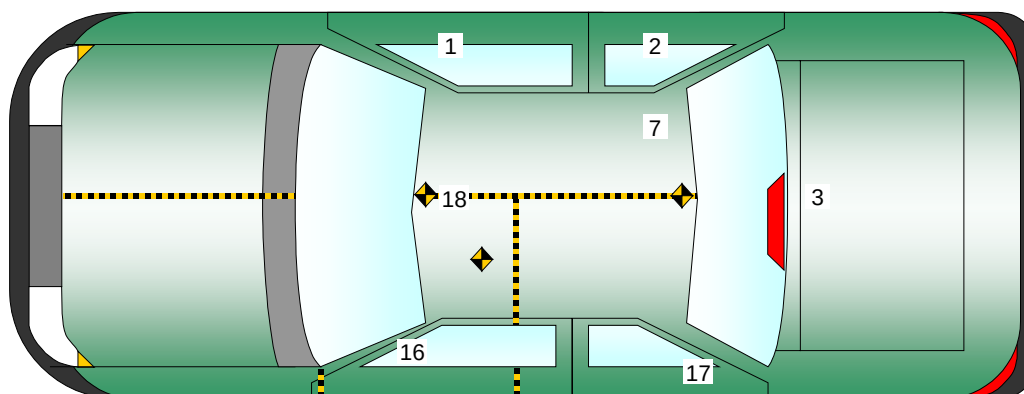
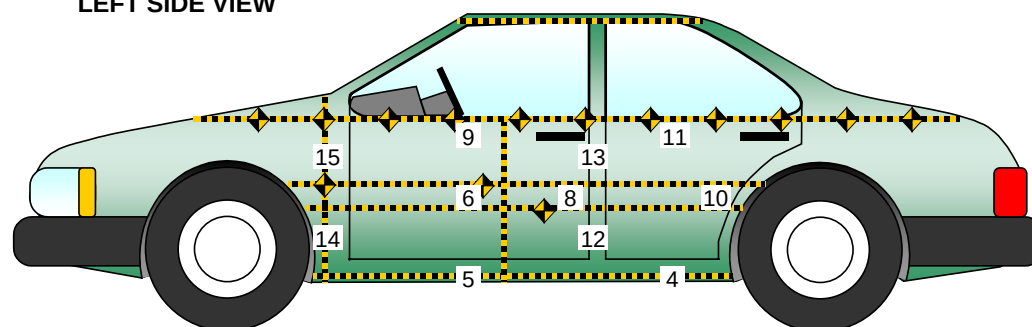
Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04

LEFT SIDE VIEW



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

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

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

Test Vehicle: 2005 Ford Focus 3 Door Hatchback

NHTSA No.: F50201

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

Test Date: 7/22/04

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	2460	600	170	X	4.0	30.3	-4.2	8.8
					Y	20.7	11.7	-2.2	141.6
					Z	4.4	68.4	-6.1	12.0
					RES	21.8	11.8		
2	Right Sill at Rear Seat	1700	540	180	X	3.2	32.9	-3.6	8.3
					Y	21.8	11.5	-2.9	142.5
					Z	7.5	37.8	-3.8	50.5
					RES	21.9	11.5		
3	Rear Floorpan Above Axle	650	40	310	X	6.5	29.1	-9.5	38.2
					Y	31.2	41.4	-4.7	85.1
					Z	12.9	33.3	-15.6	29.5
					RES	31.6	41.3		
4	Left Sill at Rear Door	1430	-690	195	Y	53.0	16.1	-8.7	50.2
5	Left Sill at Front Door	2110	-670	185	Y	38.8	11.6	-6.8	51.4
6	Front Door Centerline	2230	-770	650	Y	0.0	0.0	0.0	0.0
7	Rt. Rear Occ. Compartment	2030	410	175	Y	24.0	11.5	-3.3	142.3
8	Front Door Mid-Rear	1760	-730	710	Y	199.7	7.0	-74.5	23.3
9	Front Door Upper Centerline	2230	-770	860	Y	204.3	14.8	-114.0	22.1
10	Rear Door Mid-Rear	1320	-840	700	Y	208.0	6.7	-150.9	30.2
11	Rear Door Upper Centerline	1400	-840	760	Y	234.6	6.0	-76.1	13.8
12	B-Post Lower	1670	-715	600	Y	197.4	4.8	-72.7	18.1
13	B-Post Middle	1670	-715	800	Y	114.0	6.6	-33.7	30.1
14	A-Post Lower	2890	-760	510	Y	120.1	3.2	-32.2	15.8
15	A-Post Middle	2890	-760	710	Y	69.6	5.7	-40.1	16.2
16	Front Seat Track	2260	-530	310	Y	77.7	8.9	-14.4	26.0
17	Rear Seat Structure				Y				
18	Vehicle CG	2460	280	195	X	3.6	27.9	-8.6	15.5
					Y	21.4	11.6	-2.6	141.6
					Z	7.7	40.6	-7.6	32.9
					RES	21.6	11.6		

1.) Not installed

2.) Channel failed from 46.5 to 52.3 msec and from 66.0 to 69.9 msec

3.) Channel failed, no data

4.) Channel failed at 31.0 msec

5.) Channel failed at 17.4 msec

DATA SHEET NO. 14

MDB ACCELEROMETER LOCATION AND DATA SUMMARY

Test Vehicle: 2005 Ford Focus 3 Door Hatchback

NHTSA No.: F50201

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

Test Date: 7/22/04

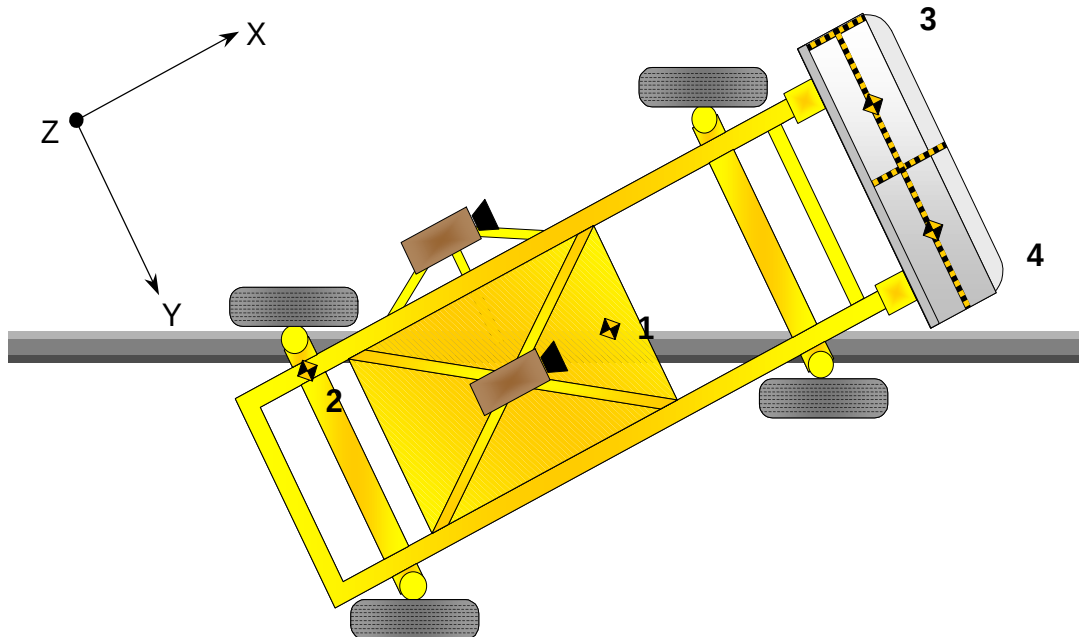
MDB ACCELEROMETER PEAK DATA AND LOCATIONS

Loc. No.	Accelerometer Location	Measurements (mm)			Peak Values (G's)				
		X	Y	Z	Axis	Max	Time	Min	Time
1	MDB CG	-1195	0	430	X	3.1	105.4	-21.2	37.7
					Y	3.5	195.1	-7.9	32.0
					Z	10.0	120.7	-13.6	165.3
					RES	21.9	35.0		
2	MDB Rear	-2642	-593	608	X	2.0	113.3	-21.0	35.1
					Y	2.4	112.5	-6.1	26.6

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

MDB BUMPER CONTACT SWITCH DATA

Loc. No.	Contact Switch Location	Units	Peak and 50% Crossing Point			
			Max	Time	50%	Time
3	MDB Left Bumper (T=0)	% F.S.	100.0	0.0	50.0	0.0
4	MDB Right Bumper	% F.S.	100.0	36.1	50.0	-0.7



DATA SHEET NO. 15

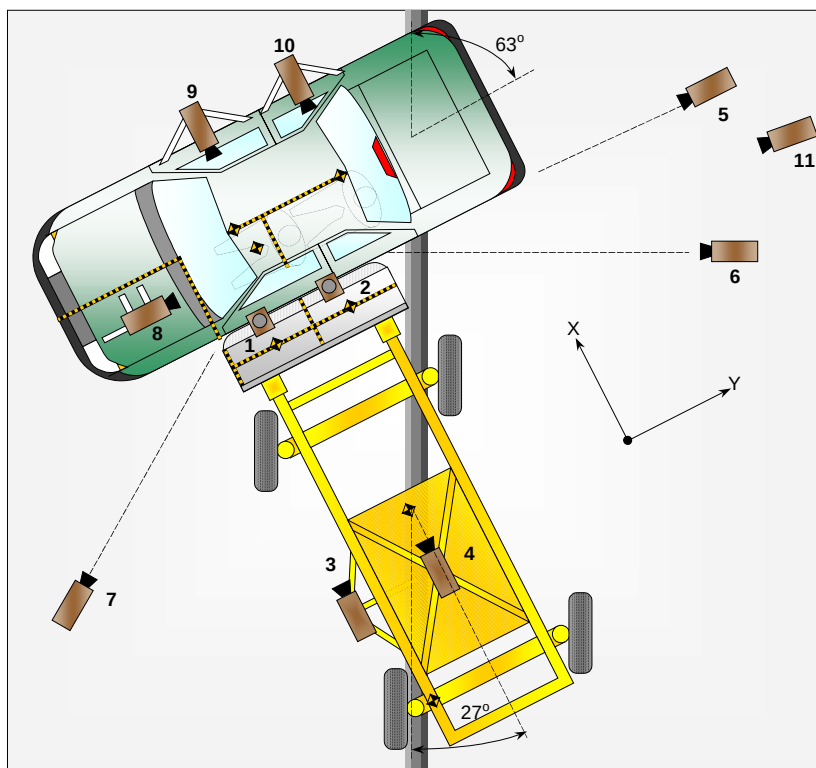
HIGH SPEED CAMERA LOCATIONS AND DATA

Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04



No.	Camera View	Location (mm)			Angle (deg.)	Lens (mm)
		X	Y	Z		
DOC	Real Time Film	22860	3658	1727	-5	17-70
1	Overhead Overall	2438	609	5486	-90	6
2	Overhead Close UP	1676	-1067	5486	-90	35
3	Impact Point (Sled)	0	-2134	1143	-7	13
4	Side Overall (Sled)	838	-3912	1829	-11	13
5	Rear	15545	228	1371	-1	25
6	Left Rear	16459	-7188	939	-1	80
6B	Left Rear (HSD)	16560	-7299	820	-1	10
7	Left Front	-4775	-2666	1473	-7	13
7B	Left Front	-4800	-2700	1473	-5	17
7C	Left Front (HSD)	-4880	-2765	1473	-3	25
8	Front (Onboard)	-610	483	1321	-20	19
9	Side, Driver Dummy Onboard	914	1019	991	-5	6
10	Side, Rear Dummy Onboard	914	1419	991	-5	6

X = Barrier Face Y = Monorail Centerline Z = Ground

DATA SHEET NO. 16

FMVSS 301 FUEL SYSTEM INTEGRITY POST IMPACT DATA

Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04

Test Time: 2:15 PM

Temperature: 41 Deg. C.

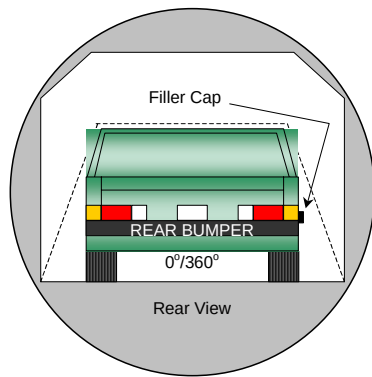
Stoddard Solvent Spillage Measurements

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

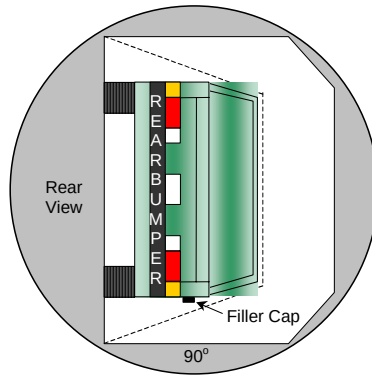
DATA SHEET NO. 17
FMVSS 301 STATIC ROLLOVER DATA SHEET

Test Vehicle: 2005 Ford Focus 3-Door Hatchback
 Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

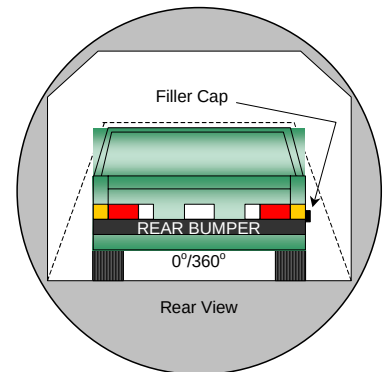
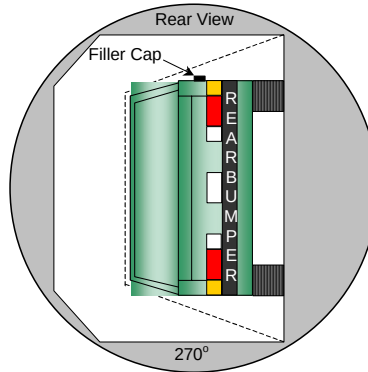
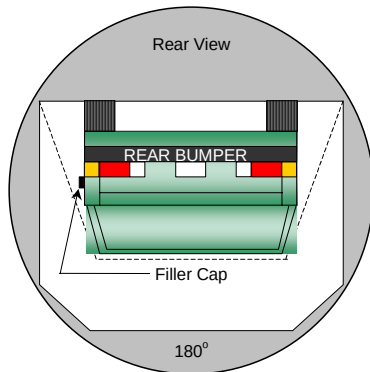
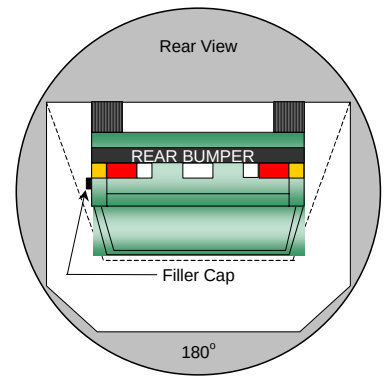
NHTSA No.: F50201
 Test Date: 7/22/04



0° TO 90°



90° TO 180°



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

No solvent leakage occurred during static rollover testing.

DATA SHEET NO. 17 (CONTINUED)
FMVSS 301 STATIC ROLLOVER DATA SHEET

Test Vehicle: 2005 Ford Focus 3-Door Hatchback

NHTSA No.: F50201

Test Program: 55/28 km/h 90 Deg. Side Impact NCAP

Test Date: 7/22/04

SOLVENT COLLECTION TIME TABLE IN SECONDS

Test Phase	Rotation Time	Hold Time	Total Time
0° to 90°	84	300	384
90° to 180°	74	300	374
180° to 270°	78	300	378
270° to 360°	0	300	300

FMVSS 301 SPILLAGE TABLE REQUIREMENT (oz.)

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

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

SOLVENT SPILLAGE LOCATION TABLE

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

**APPENDIX A
PHOTOGRAPHS**

LIST OF PHOTOGRAPHS

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A-1	Left Front as Received	A-1
A-2	Right Rear as Received	A-2
A-3	Vehicle Certification Label	A-3
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A-5	Front View, Pre-test	A-5
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A-7	Left Front $\frac{3}{4}$ View, Pre-Test	A-7
A-8	Left Front $\frac{3}{4}$ View, Post -Test	A-8
A-9	Left (Impacted) Side View, Pre-Test	A-9
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Figure A-1: Left Front, as Received



Figure A-2: Right Rear, as Received

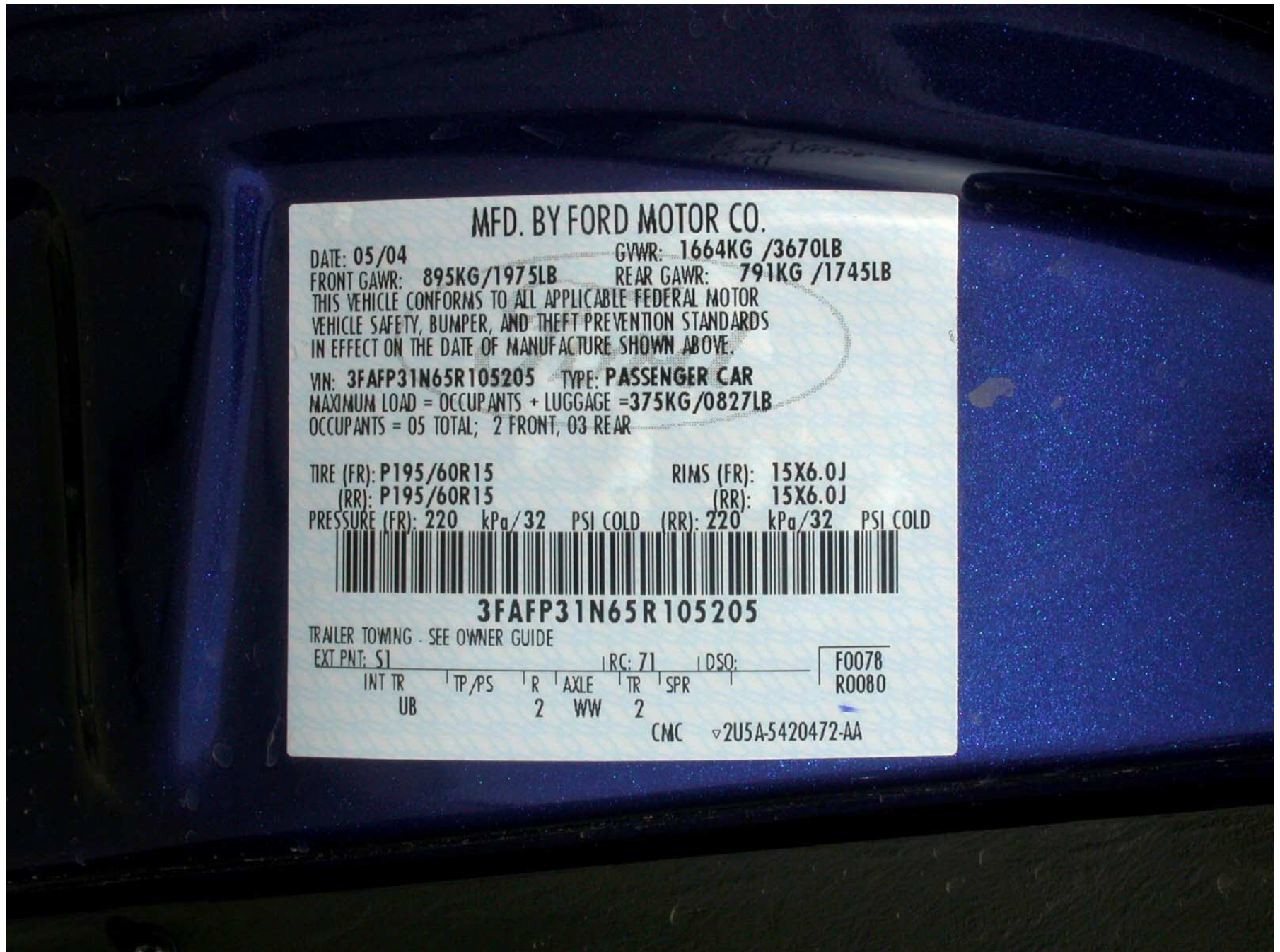


Figure A-3: Vehicle Certification Label



TIRE AND LOAD INFORMATION

SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION

The combined weight of occupants and cargo should never exceed 375 kg or 0827 lbs.

SEATING CAPACITY TOTAL : 05 FRONT: 2 REAR: 03

4USA1532-AA (TLU)

ORIGINAL TIRE SIZE		COLD TIRE INFLATION PRESSURE	
FRONT	P195/60R15	FRONT	220 KPA, 32 PSI
REAR	P195/60R15	REAR	220 KPA, 32 PSI
SPARE TIRE SIZE		COLD TIRE INFLATION PRESSURE	
T125/80R15		415 KPA, 60 PSI	



Figure A-4: Vehicle Tire Label



Figure A-5: Front View, Pre-Test



Figure A-6: Front View, Post-Test



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



Figure A-8: Left Front 3/4 View, Post-Test



Figure A-9: Left (Impacted) Side View, Pre-Test



Figure A-10: Left (Impacted) Side View, Post-Test



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



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



Figure A-13: Rear View, Pre-Test



Figure A-14: Rear View, Post-Test



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



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



Figure A-17: Right Side View, Pre-Test





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



Figure A-20: Right Front 3/4 View, Post-Test



Figure A-21: Overhead Overall View, Pre-Test



Figure A-22: Overhead Overall View, Post-Test



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

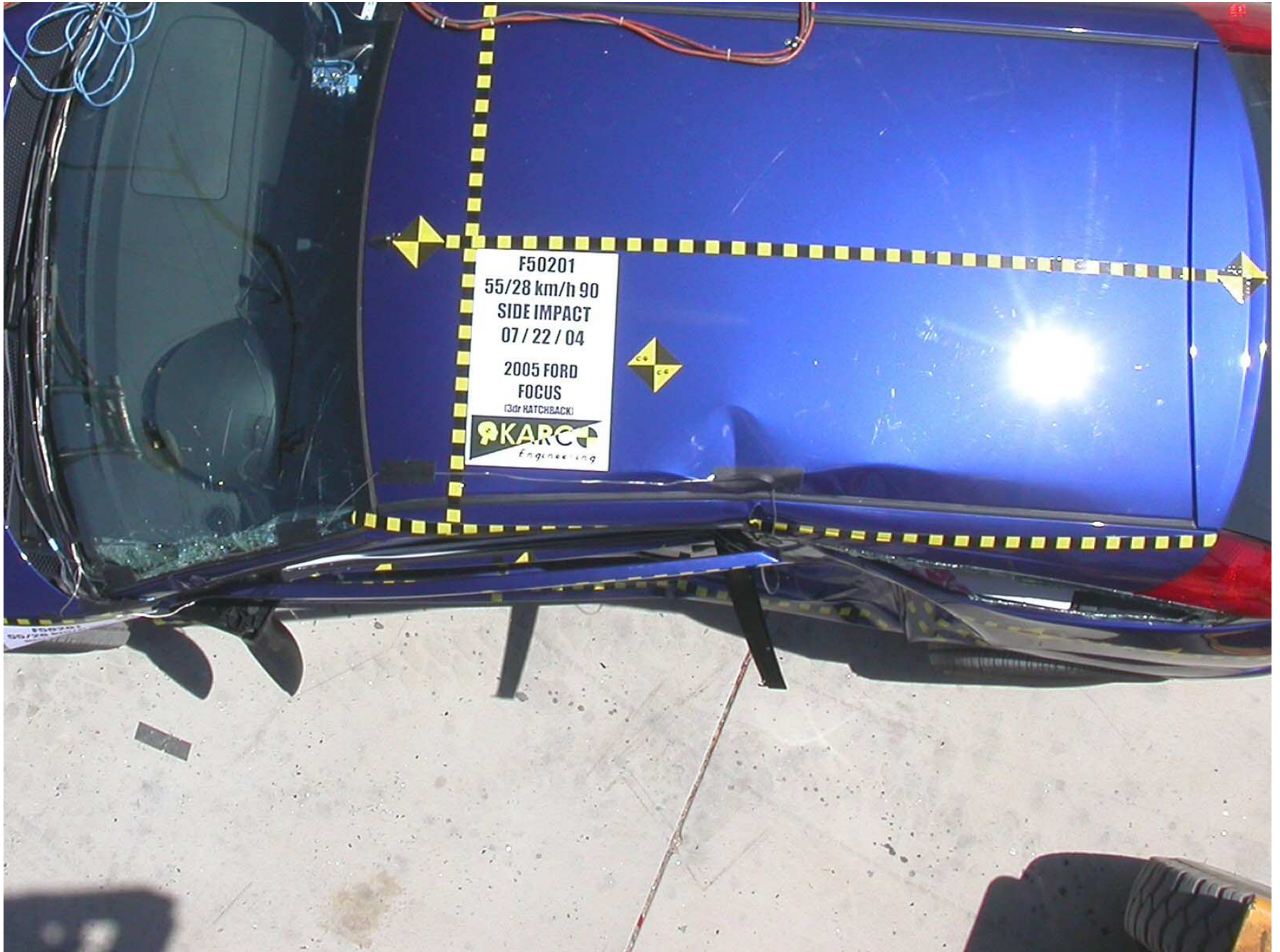


Figure A-24: Overhead Close-up View, Post-Test



Figure A-25: Impact Point Target Set-up, Pre-Test



Figure A-26: Impact Point Target, Post-Test



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



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



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



Figure A-30: Rear ¾ View of Left Side Doors, Post-Test

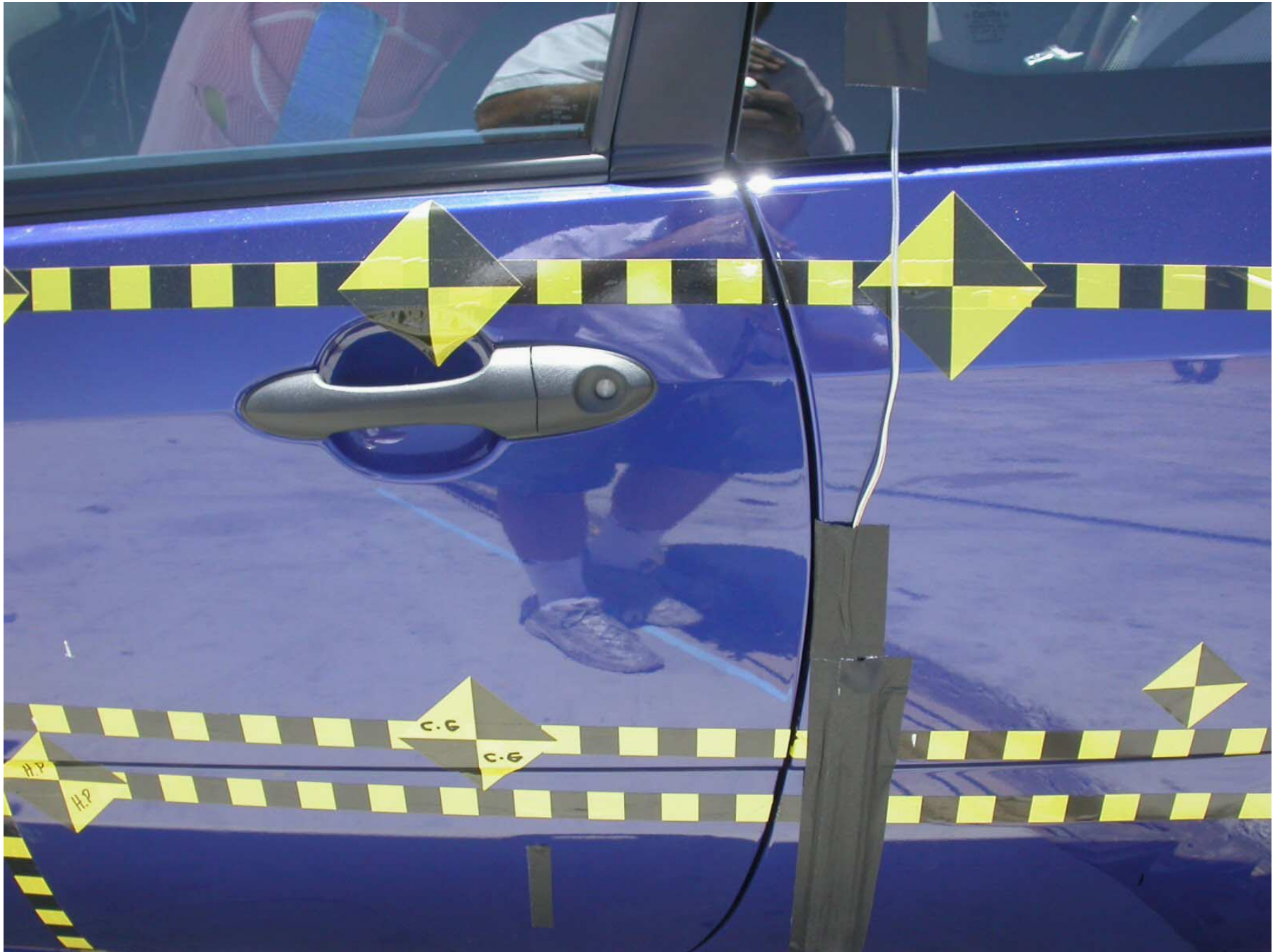


Figure A-31: Left Front Door Closed, Pre-Test



Figure A-32: Left Front Door Closed, Post-Test



Figure A-33: Driver Dummy Left Side with Door Open, Pre-Test



Figure A-34: Driver Dummy Left Side, Pre-test



Figure A-35: Driver Dummy Left Side, Post-Test



Figure A-36: Driver Dummy Clearance, Pre-Test



Figure A-37: Driver Dummy Clearance, Post-Test



Figure A-38: Driver Dummy Inside View, Pre-Test



Figure A-39: Driver Dummy Inside View, Post-Test



Figure A-40: Driver Door Inside View, Pre-Test



Figure A-41: Driver Dummy Contact Points Inside View, Post-Test (Vehicle Moved)



Figure A-42: Passenger Dummy Left Side, Pre-Test



Figure A-43: Passenger Dummy Left Side, Post-Test



Figure A-44: Passenger Dummy Clearance, Pre-Test



Figure A-45: Passenger Dummy Clearance, Post-Test



Figure A-46: Passenger Dummy Inside View, Pre-Test



Figure A-47: Passenger Dummy Inside View, Post-Test



Figure A-48: Passenger Door Inside View, Pre-Test



Figure A-49: Passenger Dummy Contact Points Inside View, Post-Test (Vehicle Moved)

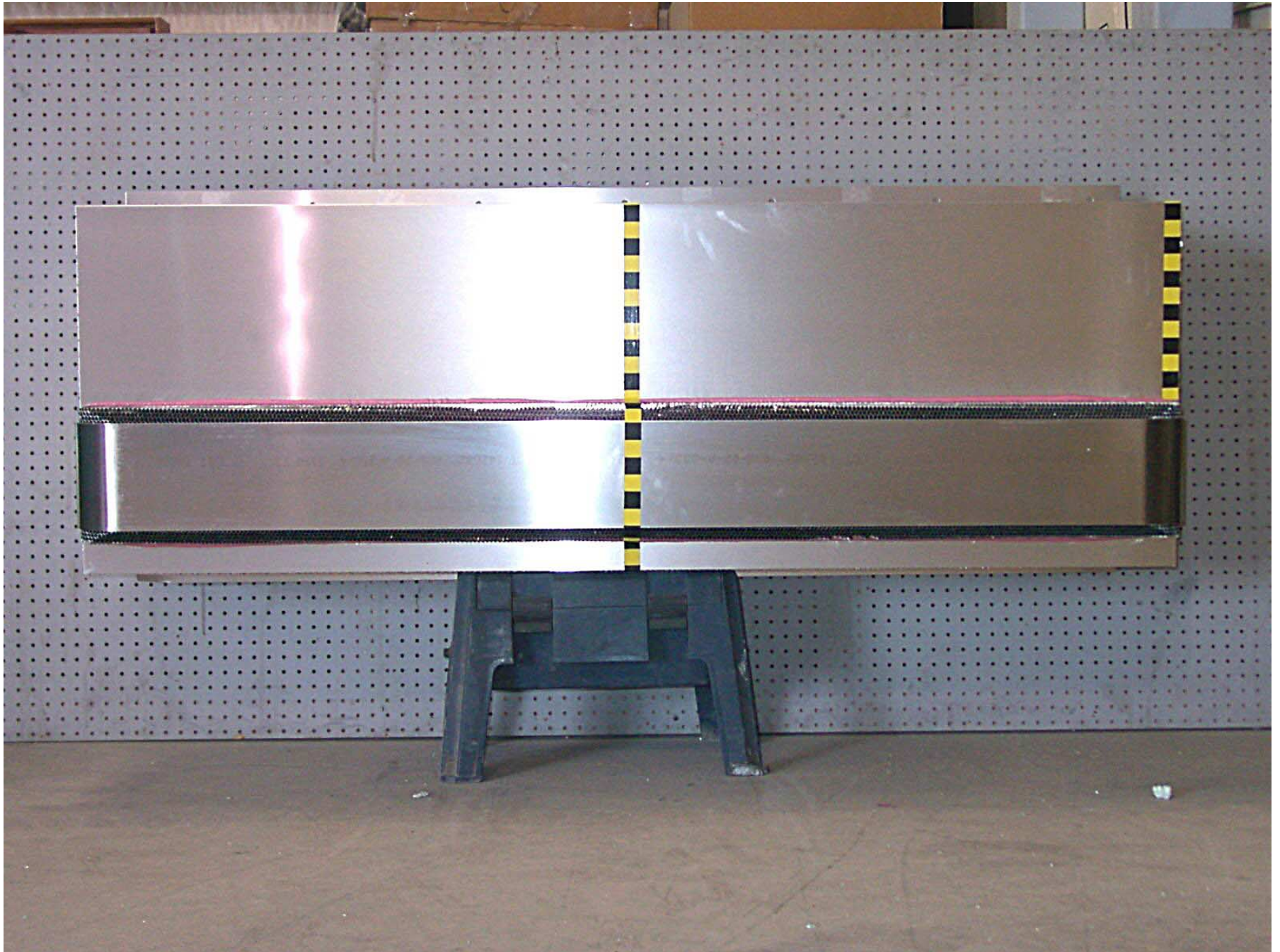


Figure A-50: Front View of Deformable Barrier, Pre-Test



Figure A-51: Front View of Deformable Barrier, Post-Test

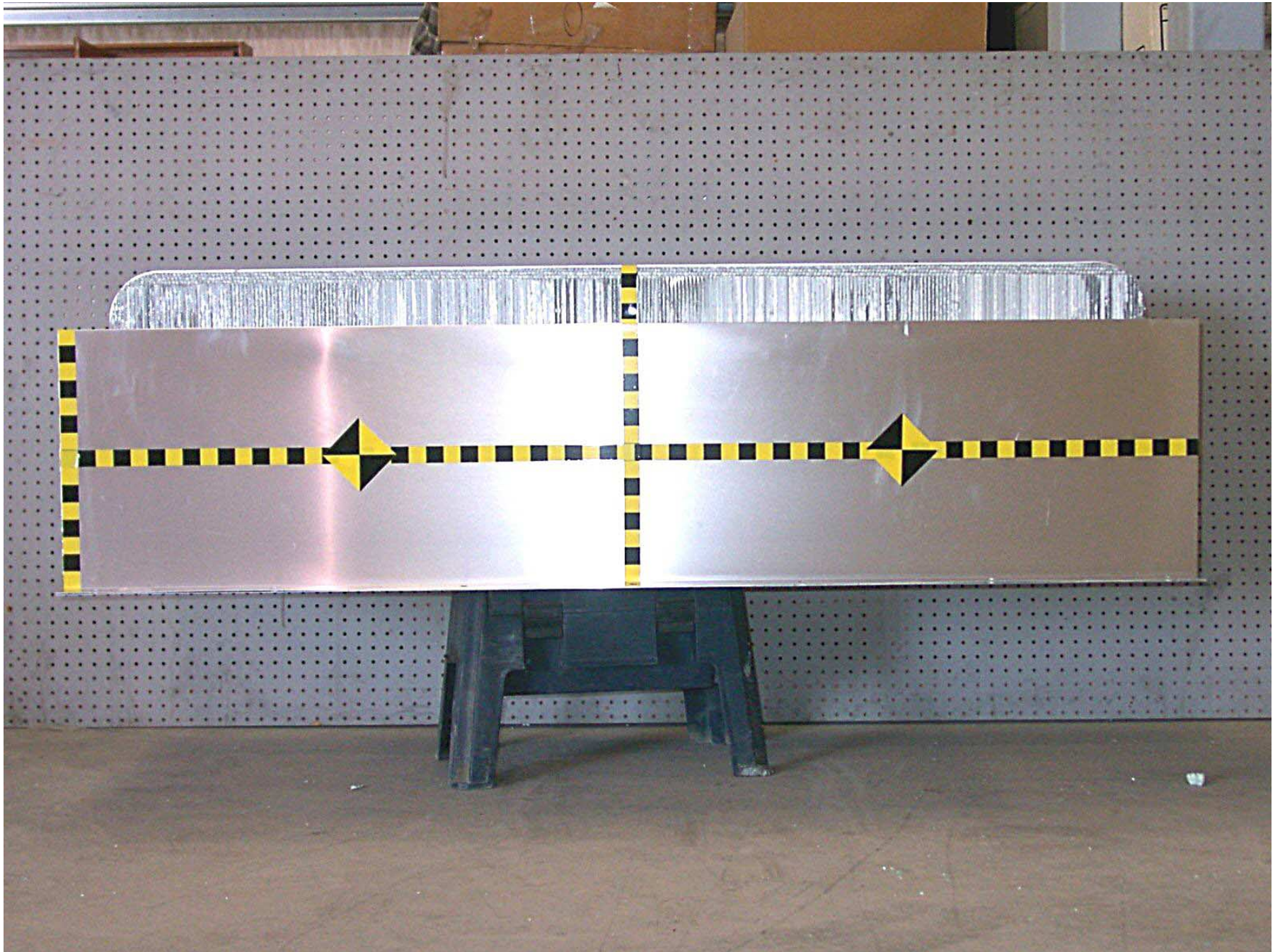


Figure A-52: Top View of Deformable Barrier, Pre-Test



Figure A-53: Top View of Deformable Barrier, Post-Test

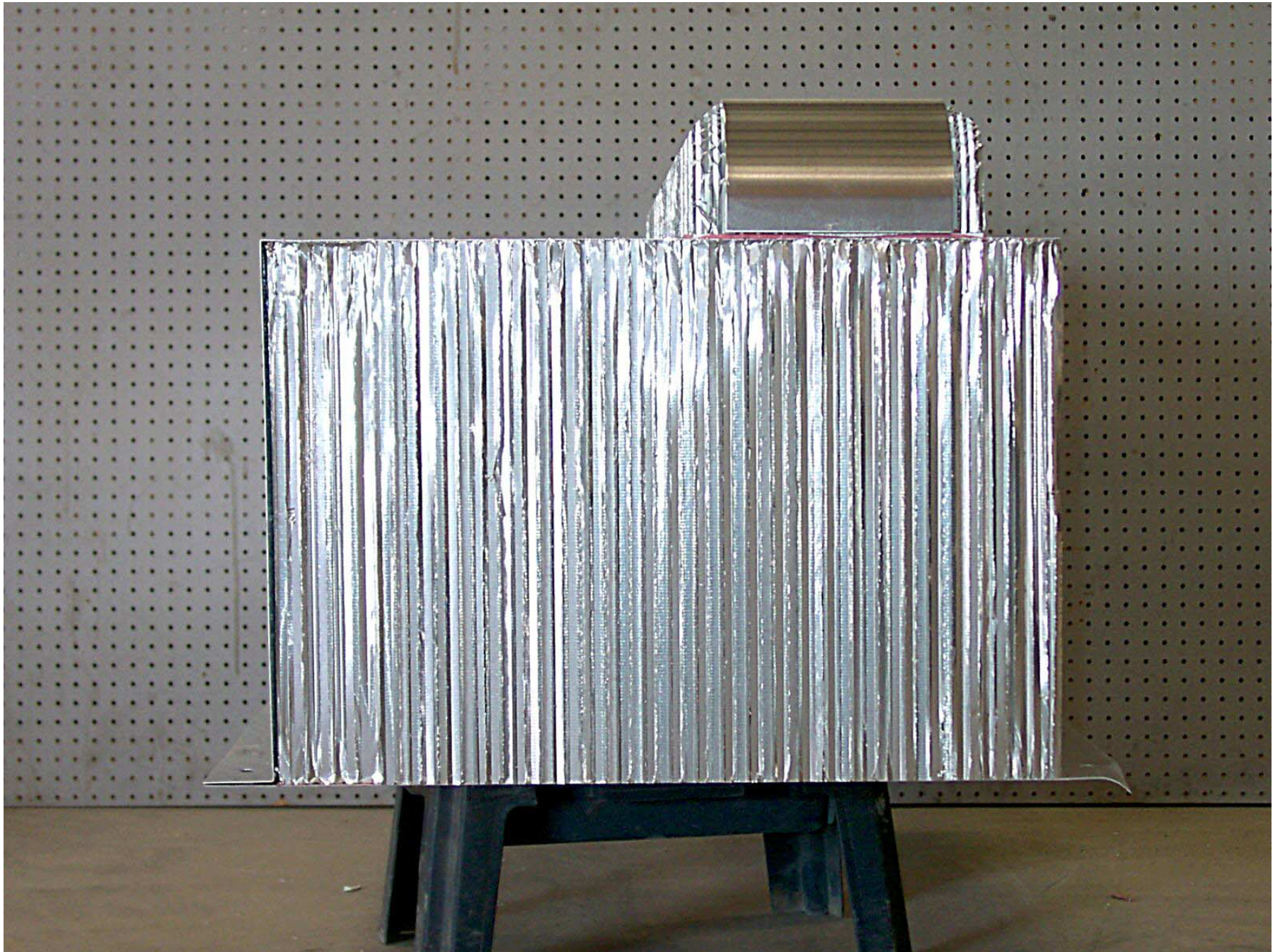


Figure A-54: Right Side View of Deformable Barrier, Pre-Test



Figure A-55: Right Side View of Deformable Barrier, Post-Test



Figure A-56: Left Side View of Deformable Barrier, Pre-Test



Figure A-57: Left Side View of Deformable Barrier, Post-Test



Figure A-58: Vehicle on Rollover Device, 0° View



Figure A-59: Vehicle on Rollover Device, 90° View



Figure A-60: Vehicle on Rollover Device, 180° View

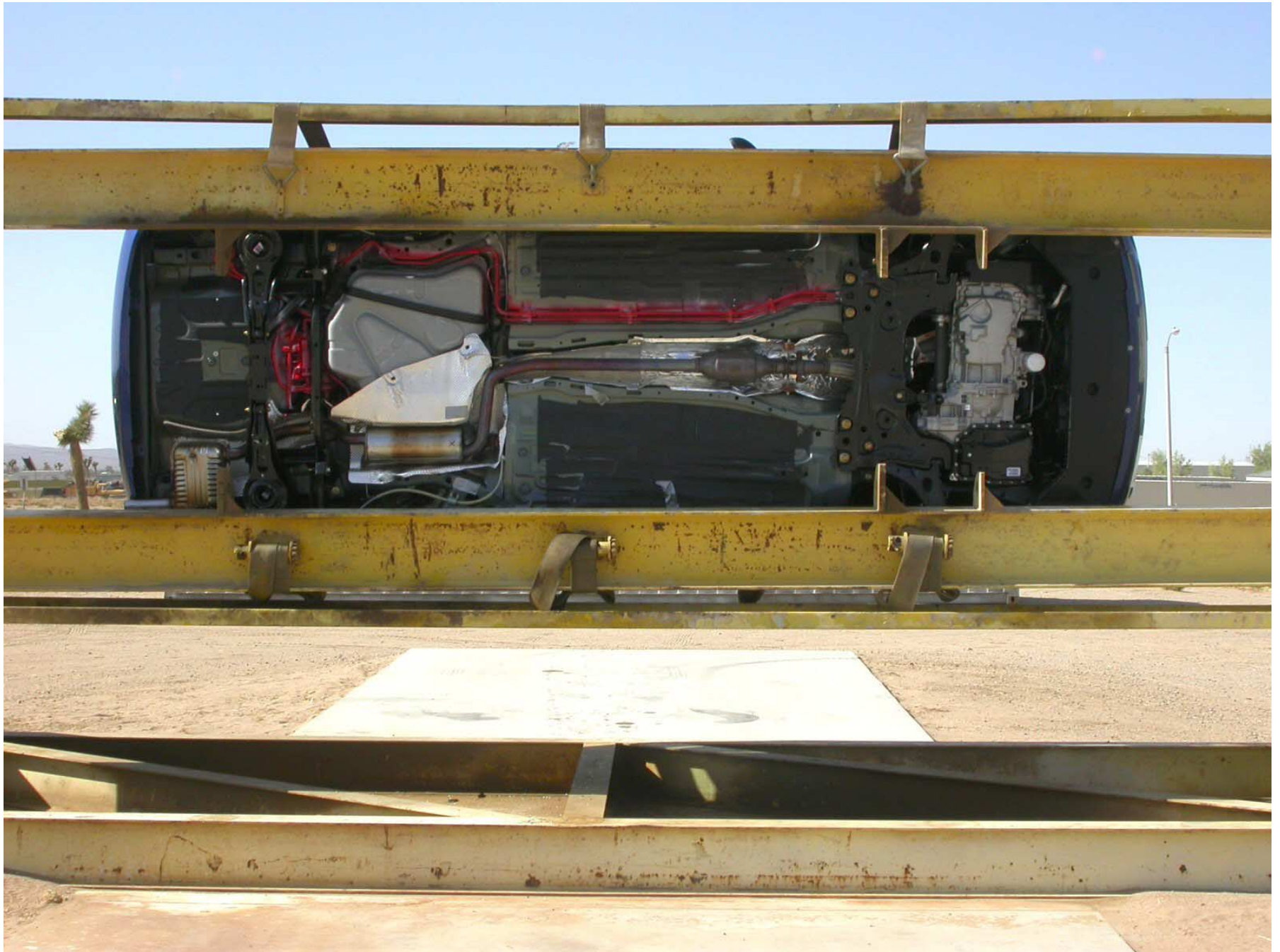


Figure A-61: Vehicle on Rollover Device, 270° View



Figure A-62: Vehicle During Impact

APPENDIX B
SID/HIII, VEHICLE AND MDB RESPONSE DATA

LIST OF DATA PLOTS

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

LIST OF DATA PLOTS (Continued)

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

LIST OF DATA PLOTS (Continued)

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

LIST OF DATA PLOTS (Continued)

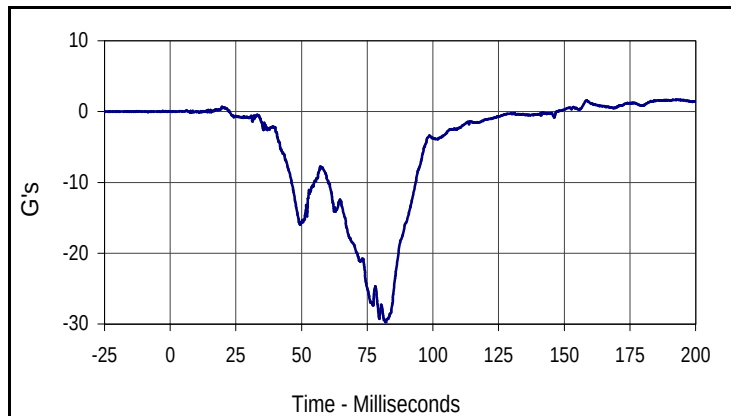
<u>Data Plot</u>	<u>Page</u>
B-29	Vehicle Left Sill at Rear Door Y
	Vehicle Left Sill at Front Door Y
	Vehicle Left Sill at Rear Door Y Velocity
	Vehicle Left Sill at Front Door Y Velocity
B-30	Vehicle Left Front Door C/L Y
	Vehicle Right Rear Occupant Compartment
	Vehicle Left Front Door Mid Rear Y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

LIST OF DATA PLOTS (Continued)

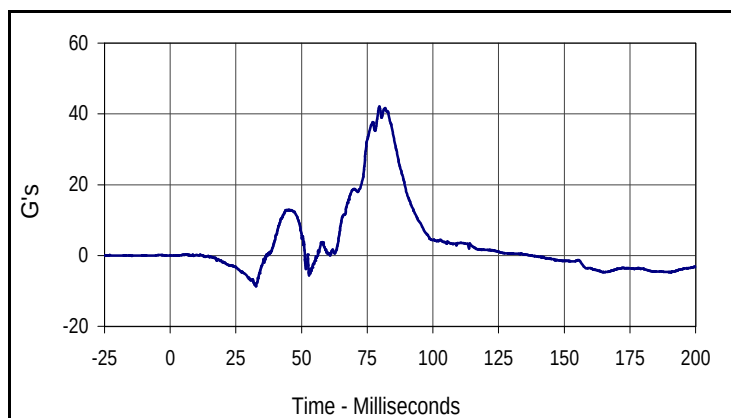
<u>Data Plot</u>	<u>Page</u>
B-38	Driver Upper Rib Primary Y
	Driver Lower Rib Primary Y
	Driver Lower Spine Primary Y
	Driver Pelvis Primary Y
B-39	Driver Upper Rib Redundant Y
	Driver Lower Rib Redundant Y
	Driver Lower Spine Redundant Y
	Driver Pelvis Redundant Y
B-40	Passenger Upper Rib Primary Y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

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

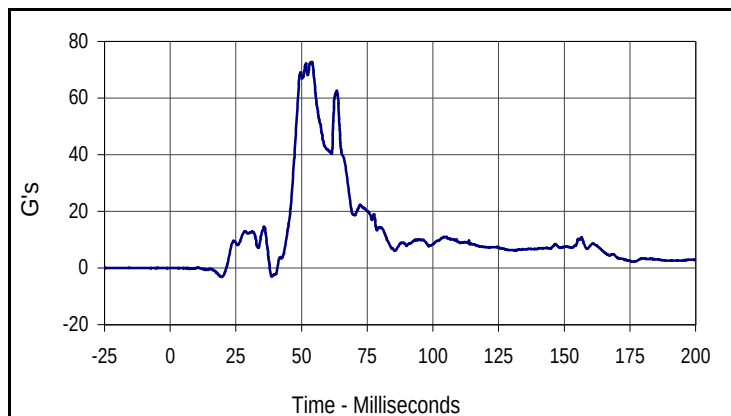
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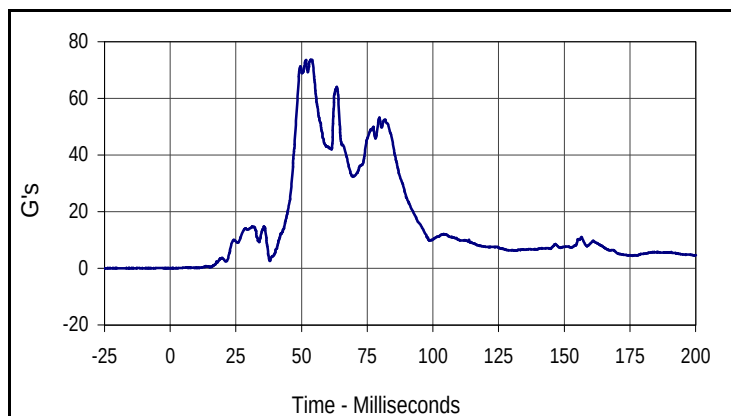
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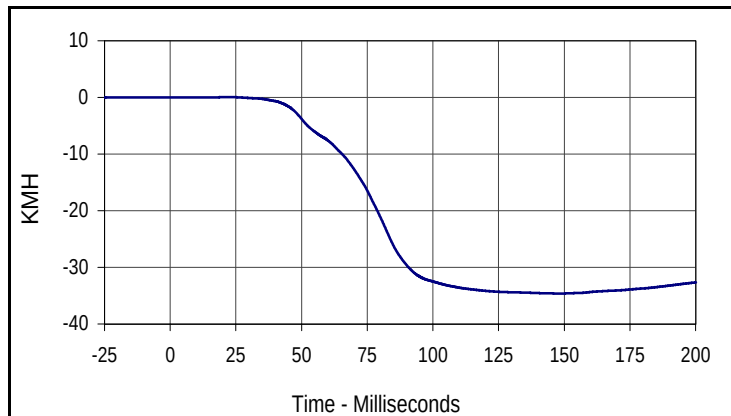
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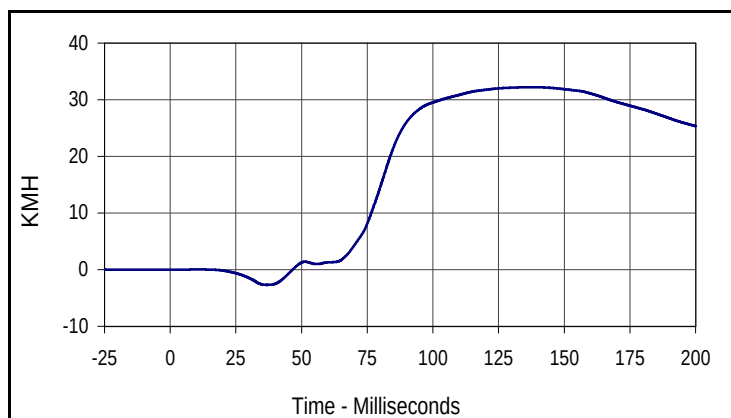
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Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

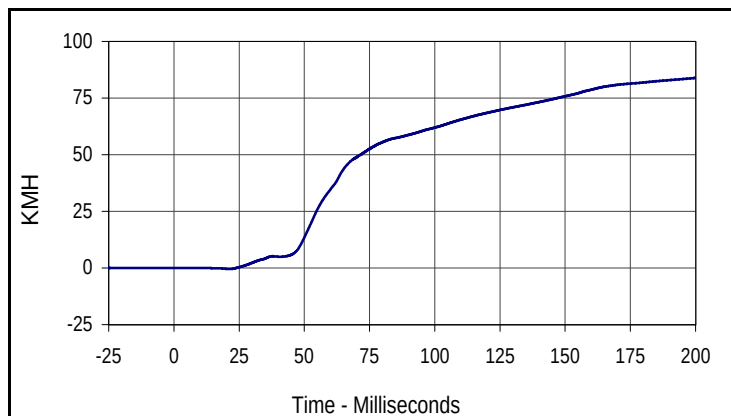
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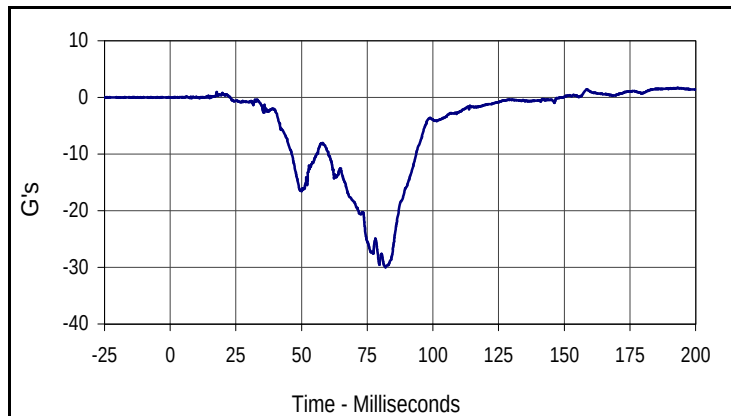
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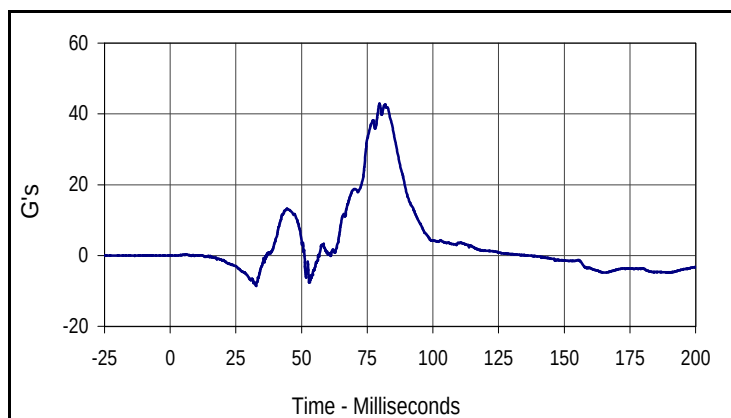
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Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

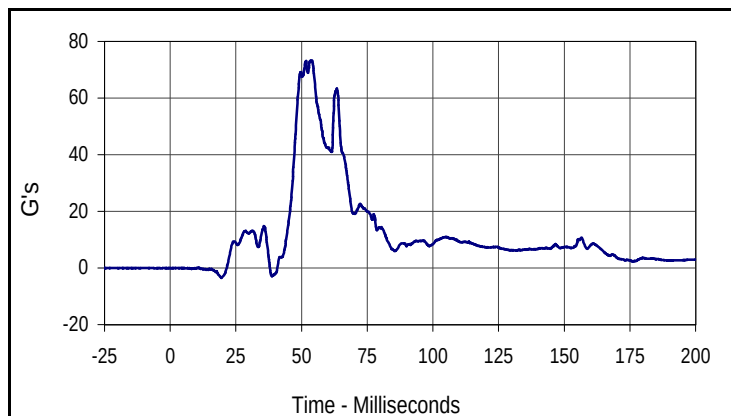
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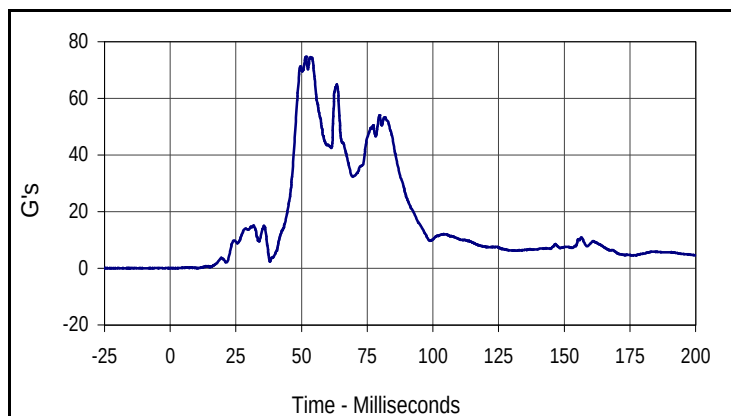
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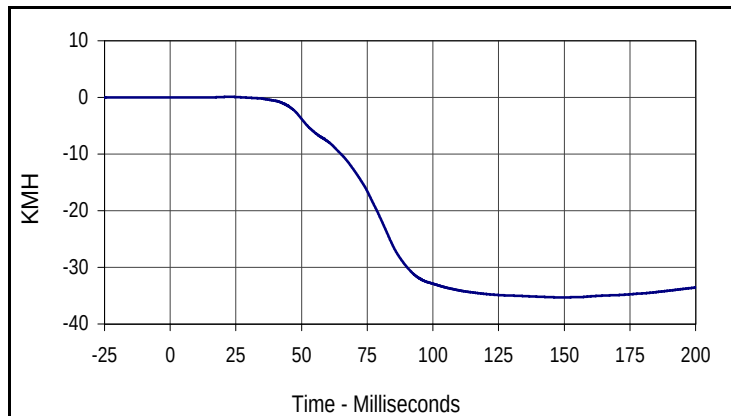
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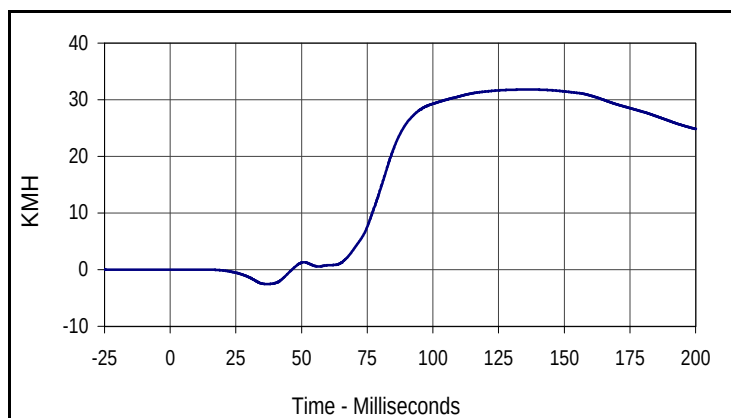
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Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

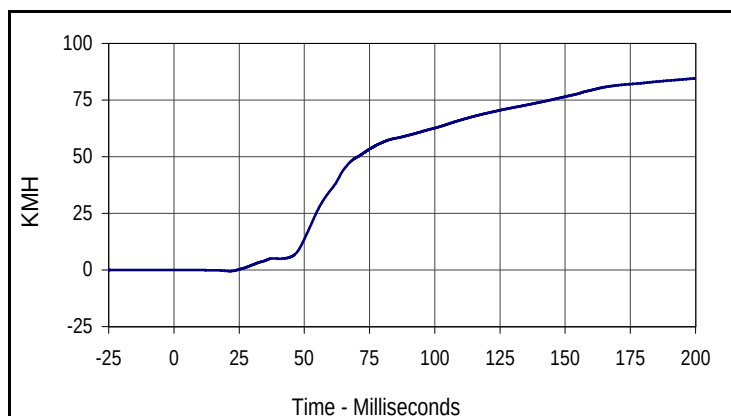
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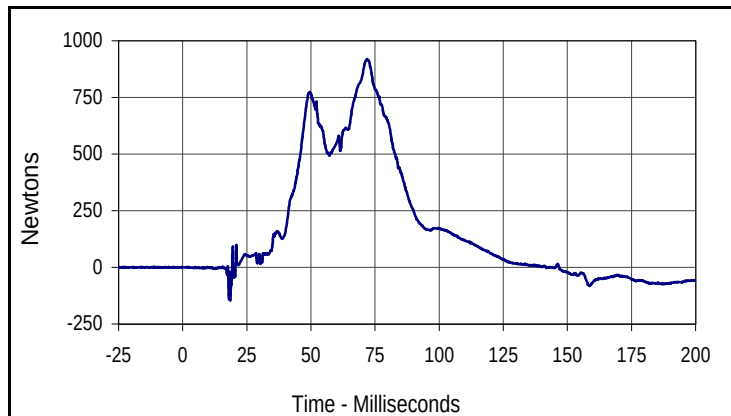
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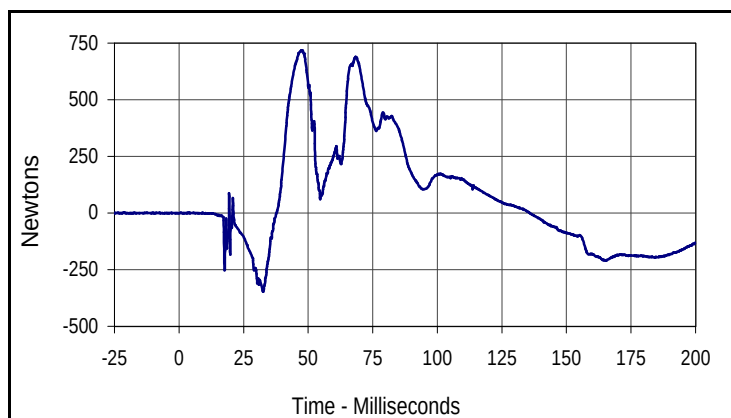
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Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

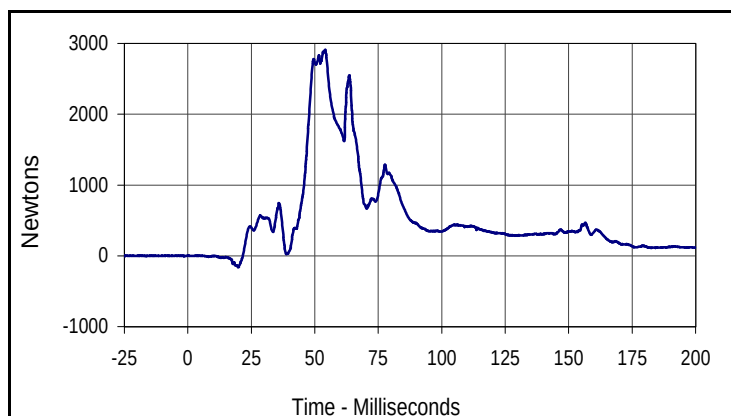
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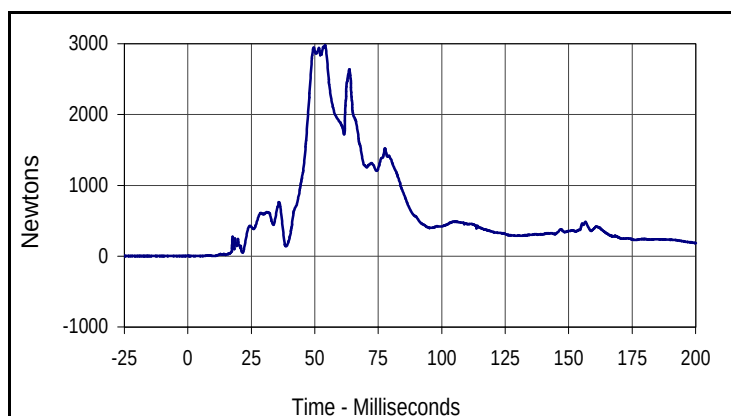
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Curve Description			
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Max	Time	Min	Time
717.9	47.3	-347.4	32.6



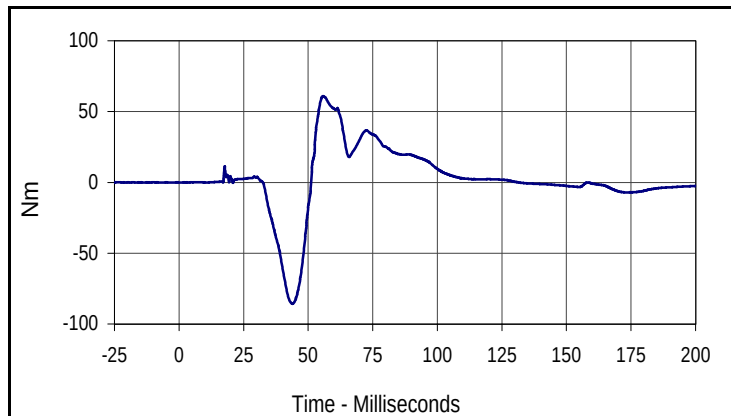
Curve Description			
Driver Upper Neck Force Z			
CURNO	Type	SAE Class	Units
009	FIL	1000	Newtons
Max	Time	Min	Time
2910.9	54.1	-160.1	19.8



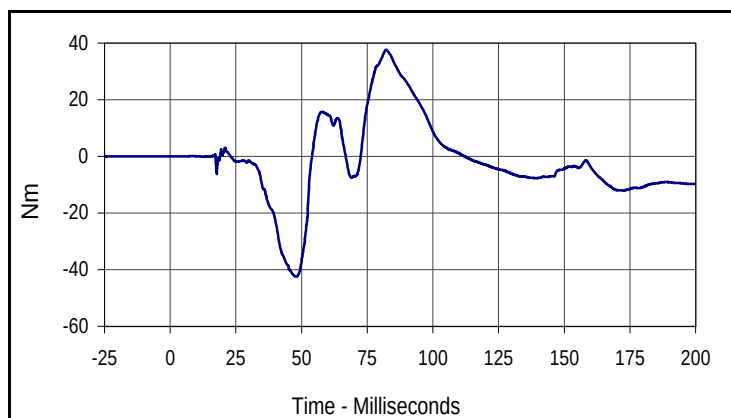
Curve Description			
Driver Upper Neck Force Resultant			
CURNO	Type	SAE Class	Units
007	RES	1000	Newtons
Max	Time	Min	Time
2978.3	54.1	0.2	2.5

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

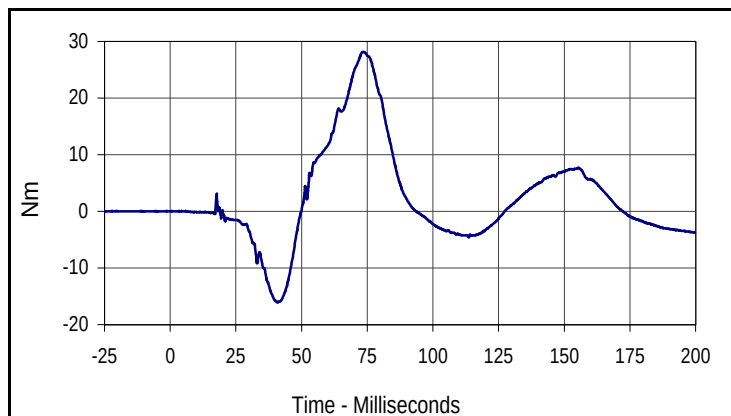
Test Date: 7/22/04
 NHTSA No.: F50201



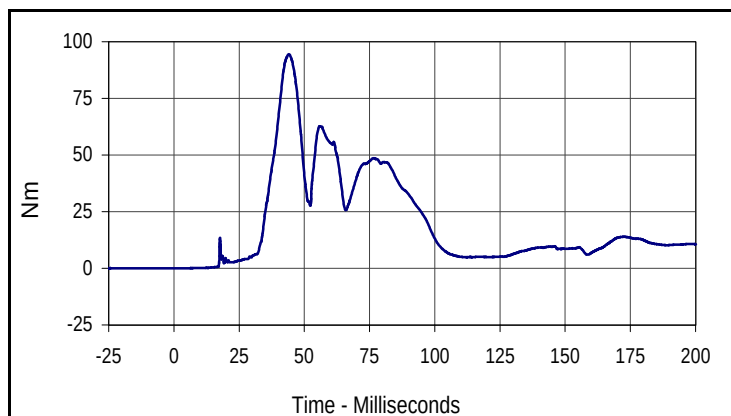
Curve Description			
Driver Upper Neck Moment X			
CURNO	Type	SAE Class	Units
010	FIL	600	Nm
Max	Time	Min	Time
60.9	55.8	-85.7	44.0



Curve Description			
Driver Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
011	FIL	600	Nm
Max	Time	Min	Time
37.7	82.2	-42.4	47.6



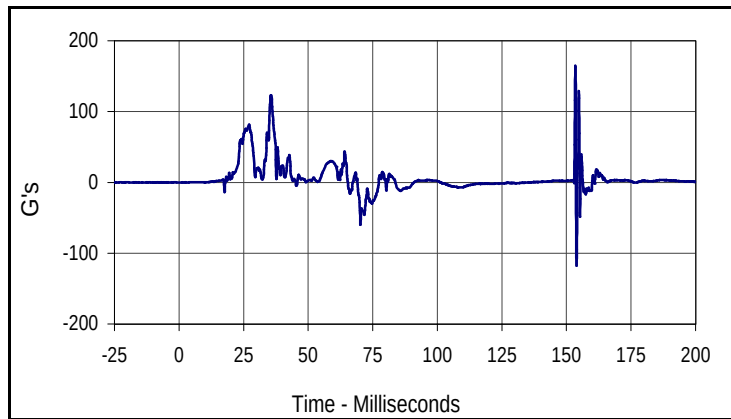
Curve Description			
Driver Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
012	FIL	600	Nm
Max	Time	Min	Time
28.1	73.2	-16.0	40.8



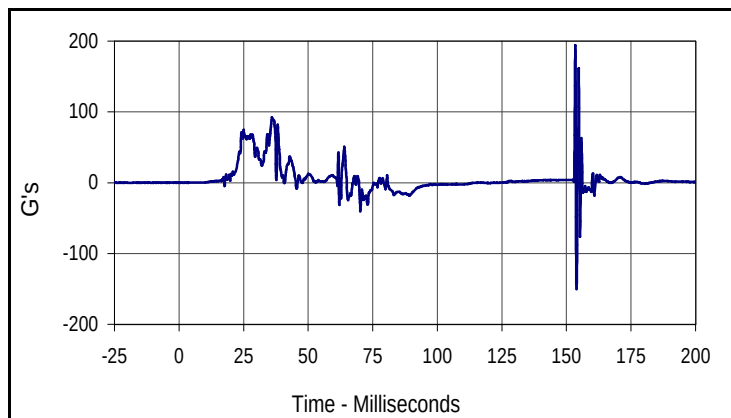
Curve Description			
Driver Upper Neck Moment Resultant			
CURNO	Type	SAE Class	Units
010	RES	600	Nm
Max	Time	Min	Time
94.5	44.0	0.0	1.6

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

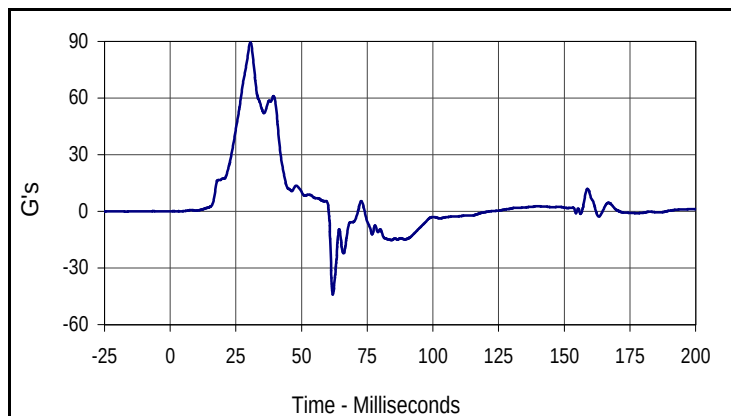
Test Date: 7/22/04
 NHTSA No.: F50201



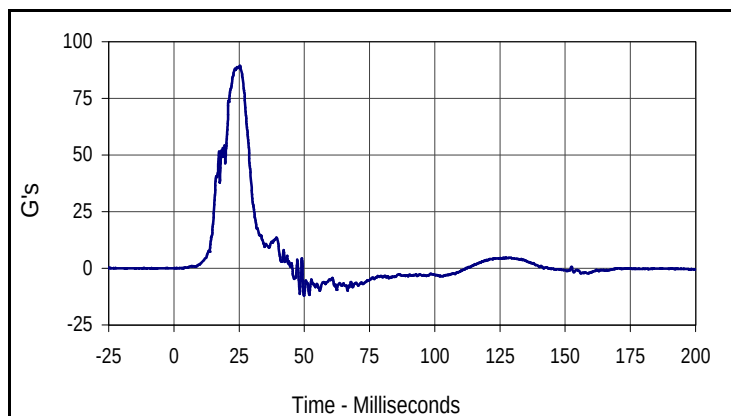
Curve Description			
Driver Upper Rib Primary Y			
CURNO	Type	SAE Class	Units
013	FIL	1000	G's
Max	Time	Min	Time
164.8	153.4	-117.9	153.9



Curve Description			
Driver Lower Rib Primary Y			
CURNO	Type	SAE Class	Units
014	FIL	1000	G's
Max	Time	Min	Time
193.7	153.4	-150.4	153.9



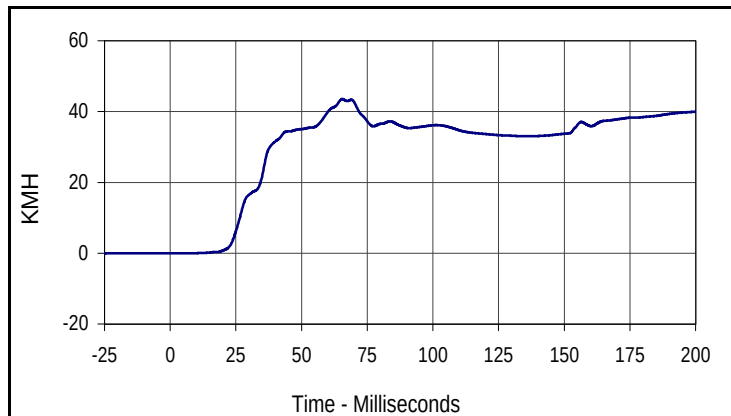
Curve Description			
Driver Lower Spine Primary Y			
CURNO	Type	SAE Class	Units
015	FIL	180	G's
Max	Time	Min	Time
89.6	30.5	-44.0	61.9



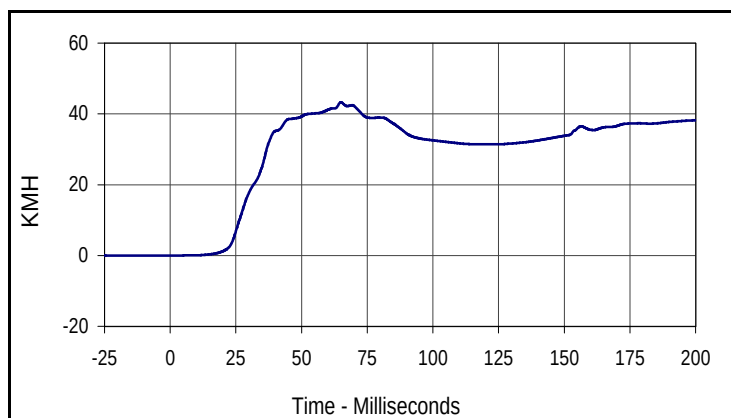
Curve Description			
Driver Pelvis Primary Y			
CURNO	Type	SAE Class	Units
016	FIL	1000	G's
Max	Time	Min	Time
89.4	25.3	-12.1	49.9

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

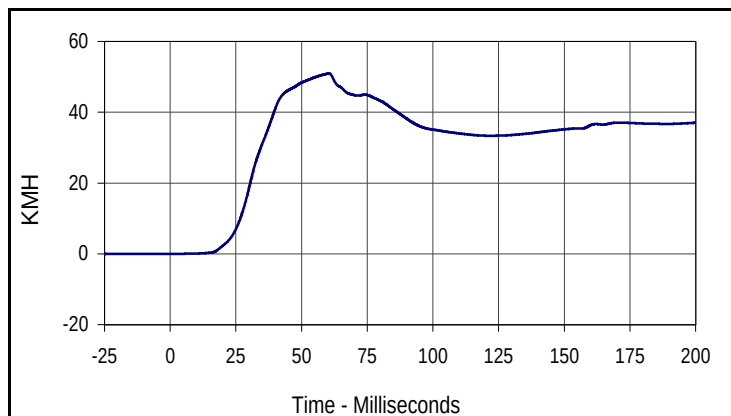
Test Date: 7/22/04
 NHTSA No.: F50201



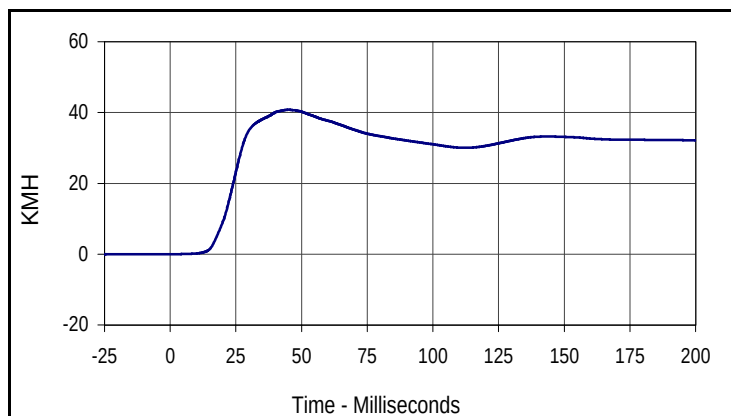
Curve Description			
Driver Upper Rib Primary Y Velocity			
CURNO	Type	SAE Class	Units
013	IN1	180	KMH
Max	Time	Min	Time
43.5	65.5	0.0	3.9



Curve Description			
Driver Lower Rib Primary Y Velocity			
CURNO	Type	SAE Class	Units
014	IN1	180	KMH
Max	Time	Min	Time
43.3	65.0	0.0	0.0



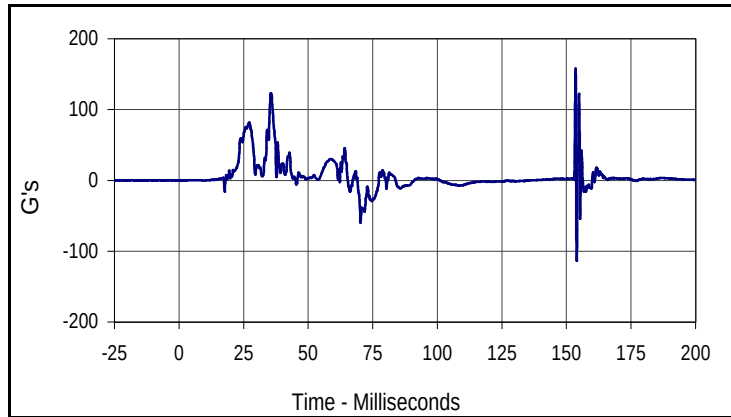
Curve Description			
Driver Lower Spine Primary Y Velocity			
CURNO	Type	SAE Class	Units
015	IN1	180	KMH
Max	Time	Min	Time
50.9	60.4	0.0	0.0



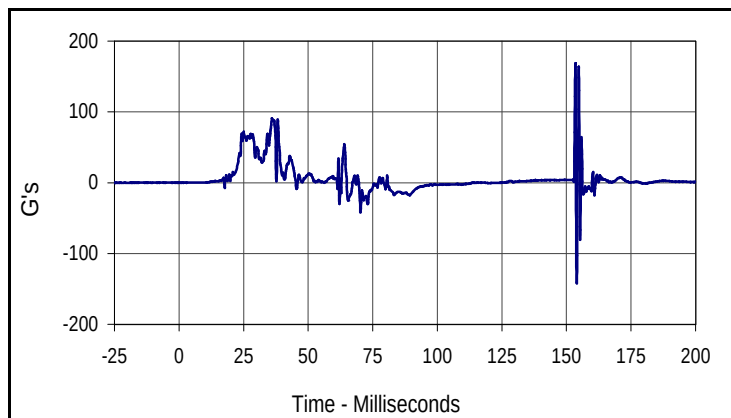
Curve Description			
Driver Pelvis Primary Y Velocity			
CURNO	Type	SAE Class	Units
016	IN1	180	KMH
Max	Time	Min	Time
40.8	45.1	0.0	0.0

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

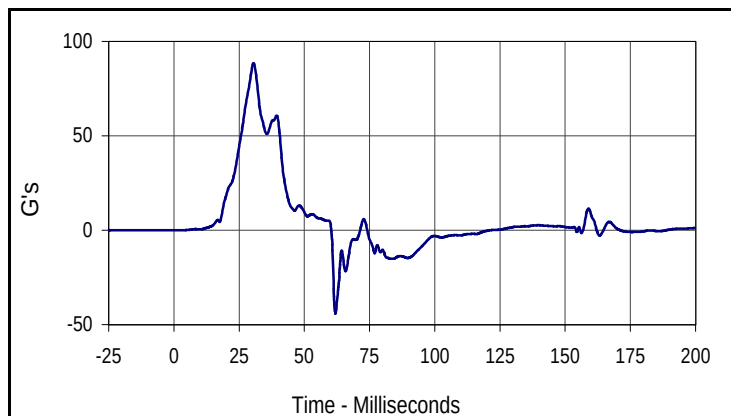
Test Date: 7/22/04
 NHTSA No.: F50201



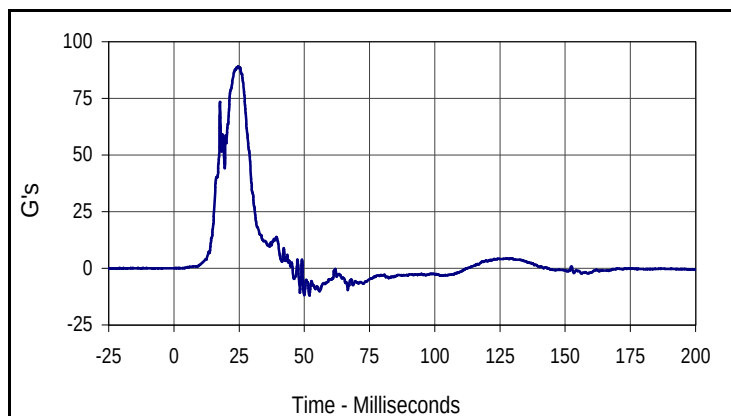
Curve Description			
Driver Upper Rib Redundant Y			
CURNO	Type	SAE Class	Units
017	FIL	1000	G's
Max	Time	Min	Time
158.0	153.5	-113.4	154.0



Curve Description			
Driver Lower Rib Redundant Y			
CURNO	Type	SAE Class	Units
018	FIL	1000	G's
Max	Time	Min	Time
168.3	153.5	-142.4	154.0



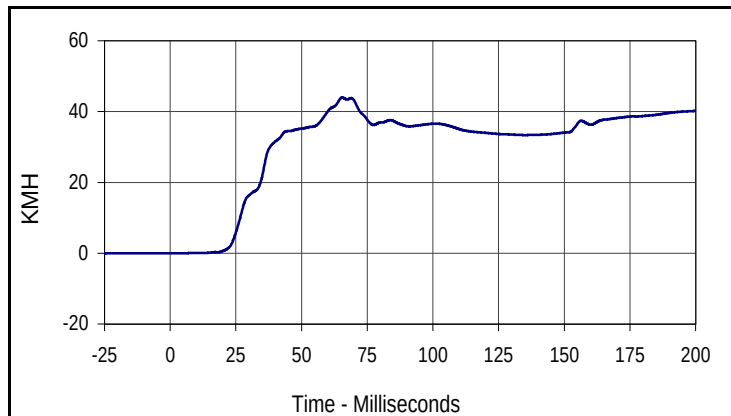
Curve Description			
Driver Lower Spine Redundant Y			
CURNO	Type	SAE Class	Units
019	FIL	180	G's
Max	Time	Min	Time
88.5	30.5	-44.2	61.9



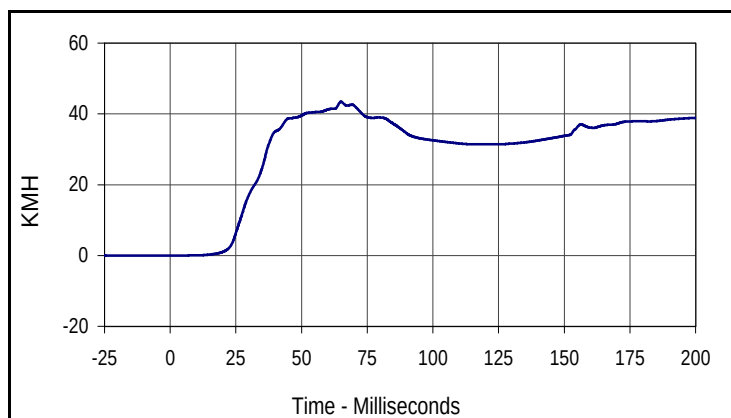
Curve Description			
Driver Pelvis Redundant Y			
CURNO	Type	SAE Class	Units
020	FIL	1000	G's
Max	Time	Min	Time
89.2	24.7	-12.0	52.0

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

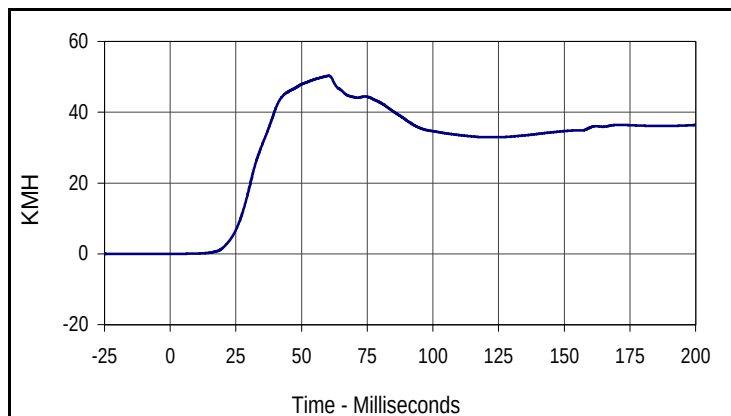
Test Date: 7/22/04
 NHTSA No.: F50201



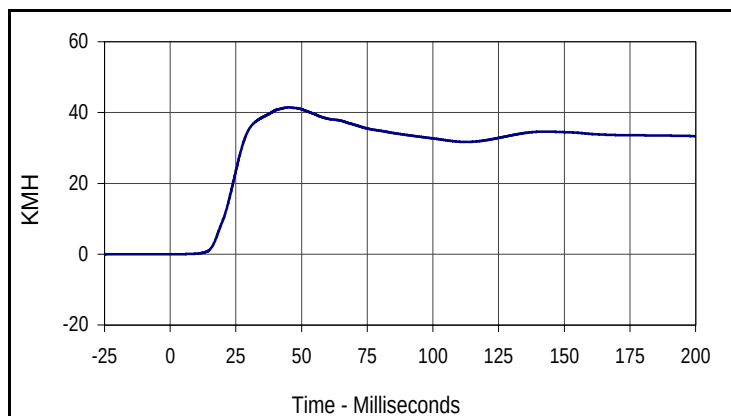
Curve Description			
Driver Upper Rib Redundant Y Velocity			
CURNO	Type	SAE Class	Units
017	IN1	180	KMH
Max	Time	Min	Time
44.0	65.5	0.0	2.1



Curve Description			
Driver Lower Rib Redundant Y Velocity			
CURNO	Type	SAE Class	Units
018	IN1	180	KMH
Max	Time	Min	Time
43.4	65.0	0.0	0.0



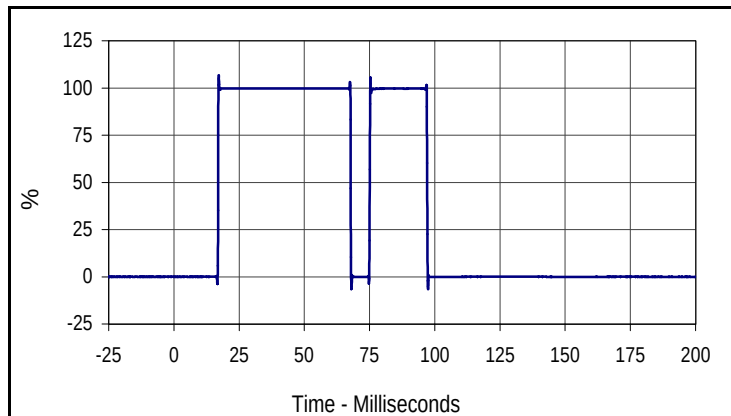
Curve Description			
Driver Lower Spine Redundant Y Velocity			
CURNO	Type	SAE Class	Units
019	IN1	180	KMH
Max	Time	Min	Time
50.3	60.4	0.0	0.0



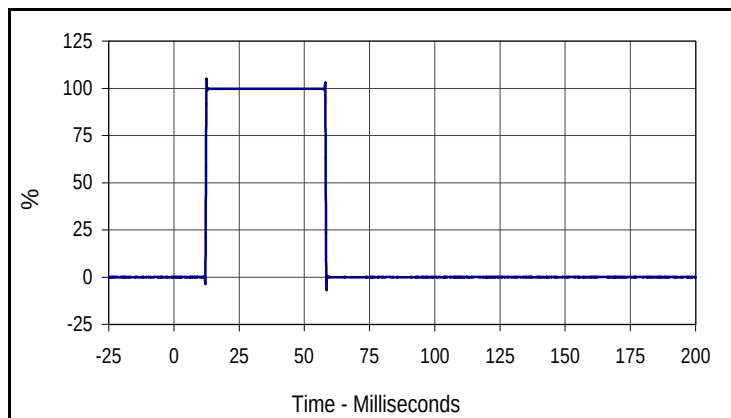
Curve Description			
Driver Pelvis Redundant Y Velocity			
CURNO	Type	SAE Class	Units
020	IN1	180	KMH
Max	Time	Min	Time
41.5	45.2	0.0	0.0

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 7/22/04
 NHTSA No.: F50201



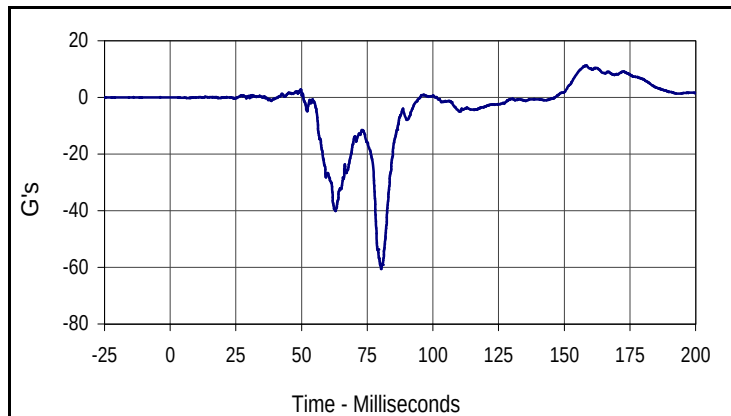
Curve Description			
Driver Thorax Contact			
CURNO	Type	SAE Class	Units
021	FIL	1000	%
Max	Time	Cross %	Time
106.7	17.2	50.0	16.6



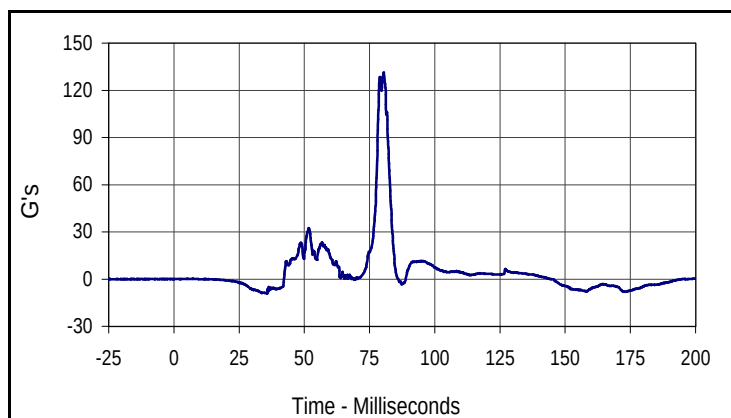
Curve Description			
Driver Pelvis Contact			
CURNO	Type	SAE Class	Units
022	FIL	1000	%
Max	Time	Cross %	Time
104.8	12.5	50.0	11.9

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

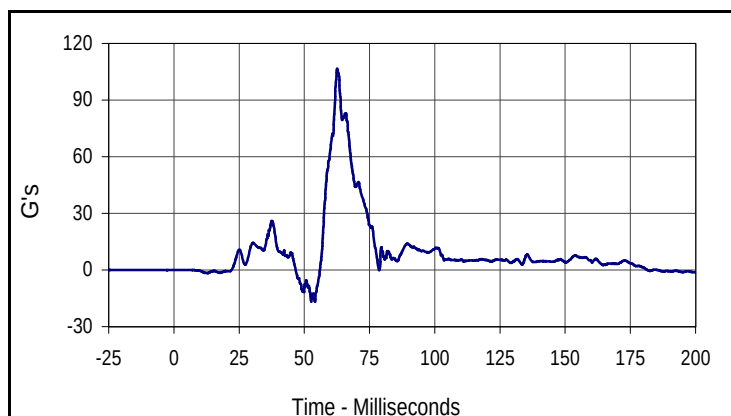
Test Date: 7/22/04
 NHTSA No.: F50201



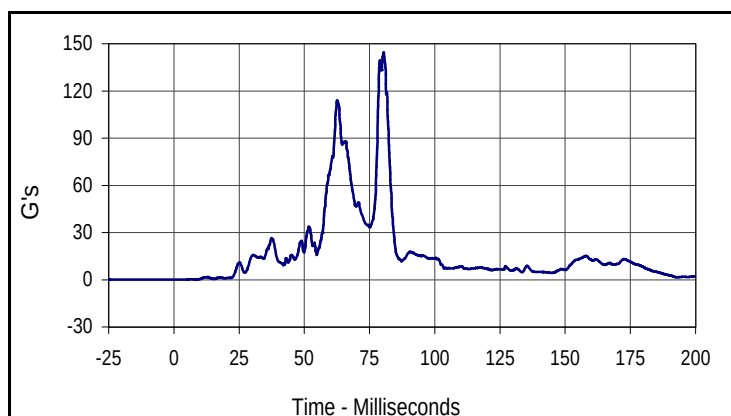
Curve Description			
Passenger Head X Primary			
CURNO	Type	SAE Class	Units
023	FIL	1000	G's
Max	Time	Min	Time
11.3	158.5	-60.6	80.4



Curve Description			
Passenger Head Y Primary			
CURNO	Type	SAE Class	Units
024	FIL	1000	G's
Max	Time	Min	Time
131.2	80.5	-9.3	35.7



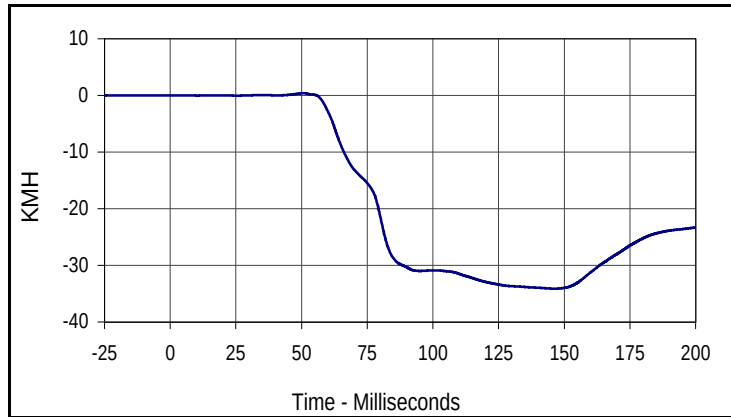
Curve Description			
Passenger Head Z Primary			
CURNO	Type	SAE Class	Units
025	FIL	1000	G's
Max	Time	Min	Time
106.6	62.6	-16.7	54.1



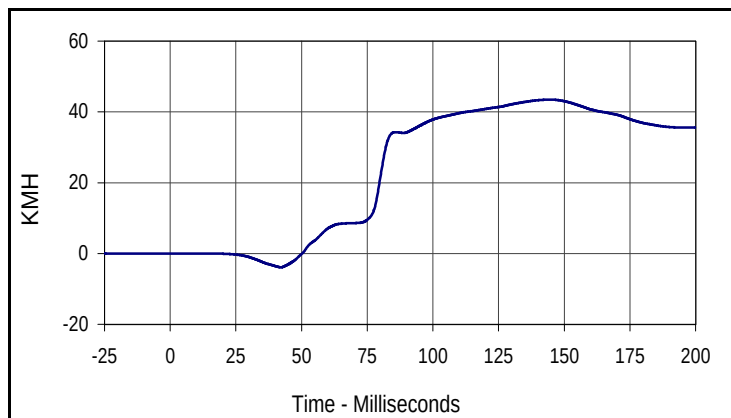
Curve Description			
Passenger Head Resultant Primary			
CURNO	Type	SAE Class	Units
023	RES	1000	G's
Max	Time	Min	Time
144.5	80.4	0.0	2.6

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

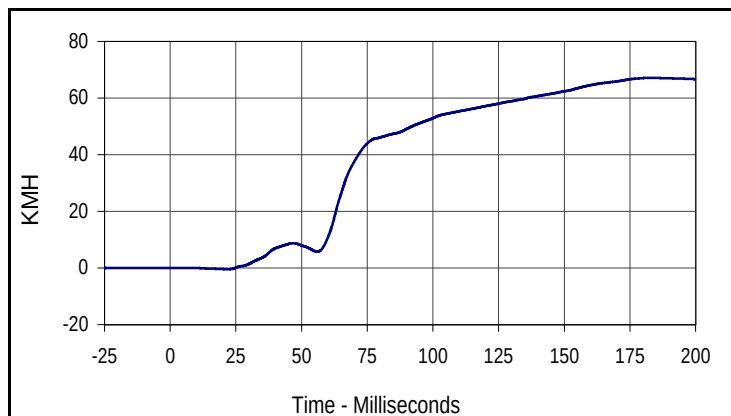
Test Date: 7/22/04
 NHTSA No.: F50201



Curve Description			
Passenger Head Primary X Velocity			
CURNO	Type	SAE Class	Units
023	IN1	180	KMH
Max	Time	Min	Time
0.4	50.7	-34.1	146.4



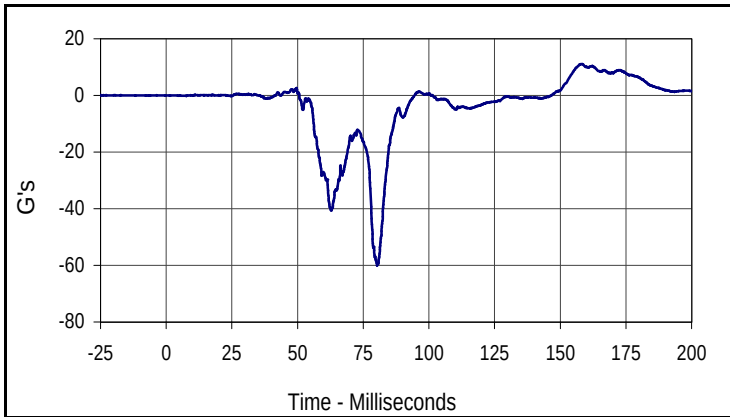
Curve Description			
Passenger Head Primary Y Velocity			
CURNO	Type	SAE Class	Units
024	IN1	180	KMH
Max	Time	Min	Time
43.5	144.9	-3.9	42.1



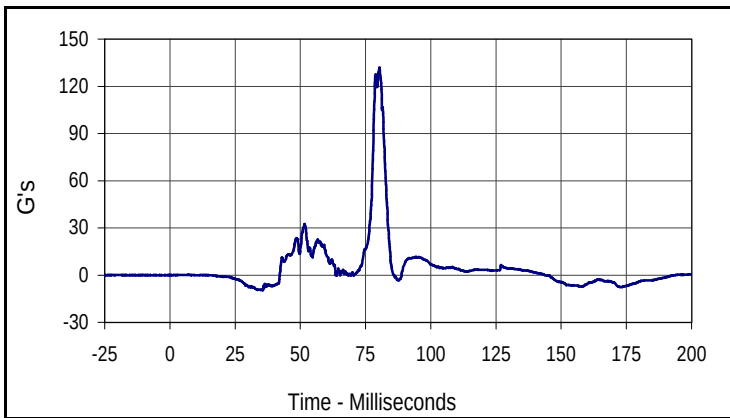
Curve Description			
Passenger Head Primary Z Velocity			
CURNO	Type	SAE Class	Units
025	IN1	180	KMH
Max	Time	Min	Time
67.1	181.5	-0.4	22.1

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

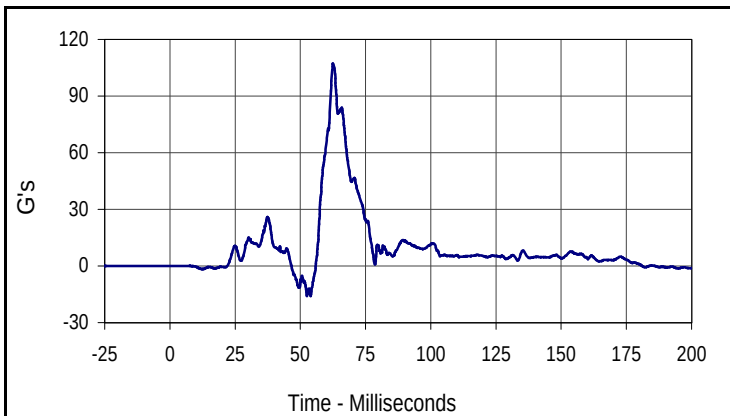
Test Date: 7/22/04
 NHTSA No.: F50201



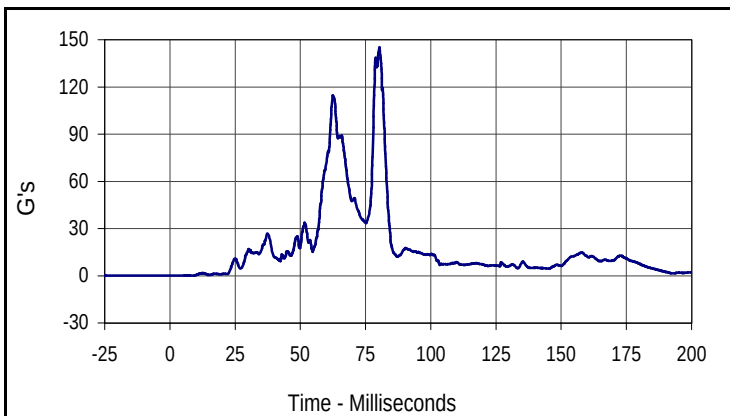
Curve Description			
Passenger Head X Redundant			
CURNO	Type	SAE Class	Units
026	FIL	1000	G's
Max	Time	Min	Time
11.1	158.3	-60.1	80.3



Curve Description			
Passenger Head Y Redundant			
CURNO	Type	SAE Class	Units
027	FIL	1000	G's
Max	Time	Min	Time
131.9	80.4	-9.7	35.6



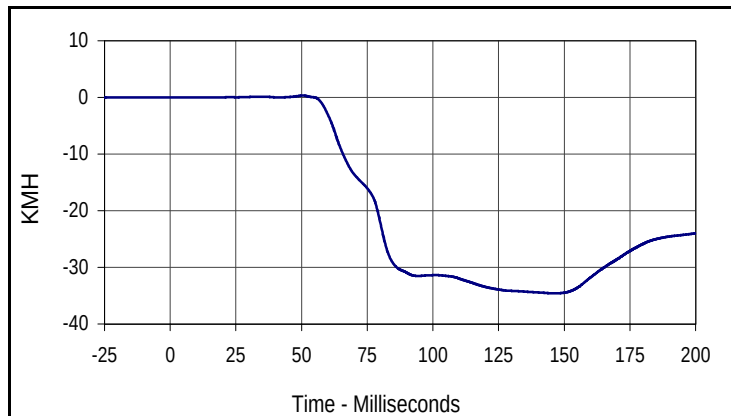
Curve Description			
Passenger Head Z Redundant			
CURNO	Type	SAE Class	Units
028	FIL	1000	G's
Max	Time	Min	Time
107.3	62.5	-15.9	54.0



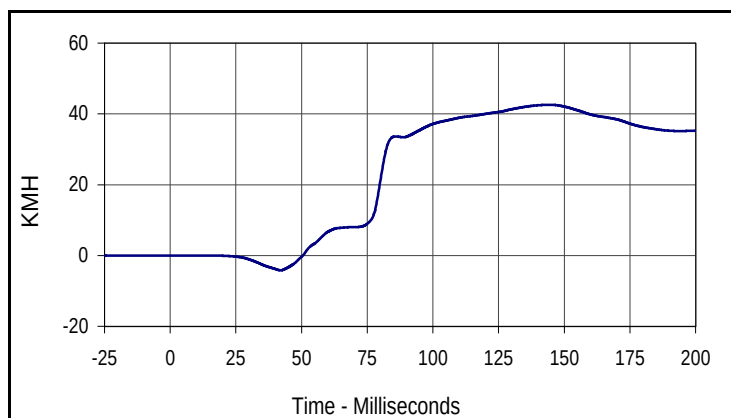
Curve Description			
Passenger Head Resultant Redundant			
CURNO	Type	SAE Class	Units
026	RES	1000	G's
Max	Time	Min	Time
145.1	80.4	0.0	3.0

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

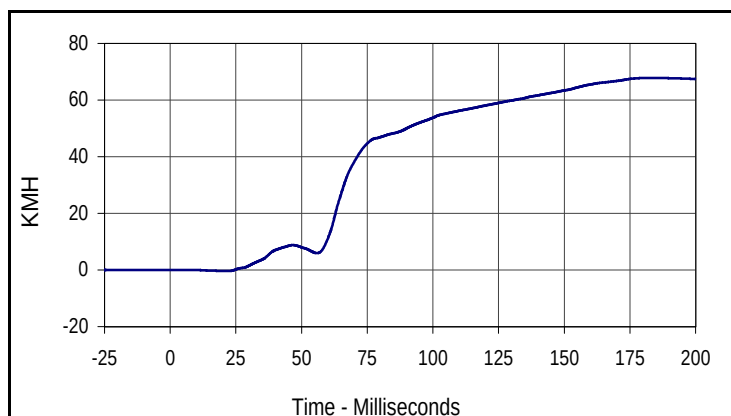
Test Date: 7/22/04
 NHTSA No.: F50201



Curve Description			
Passenger Head Redundant X Velocity			
CURNO	Type	SAE Class	Units
026	IN1	180	KMH
Max	Time	Min	Time
0.3	50.5	-34.6	146.6



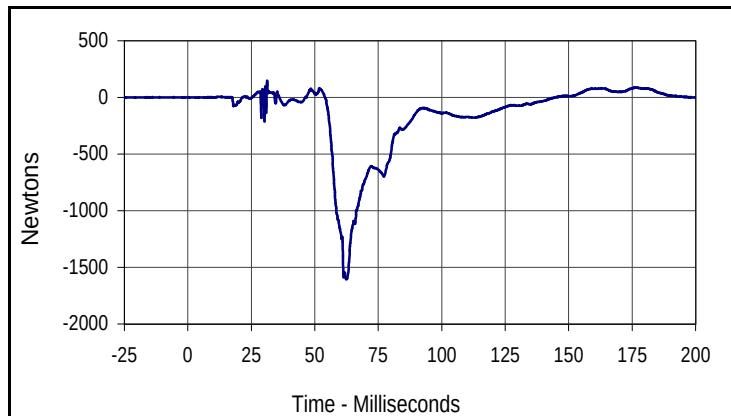
Curve Description			
Passenger Head Redundant Y Velocity			
CURNO	Type	SAE Class	Units
027	IN1	180	KMH
Max	Time	Min	Time
42.6	143.9	-4.2	42.1



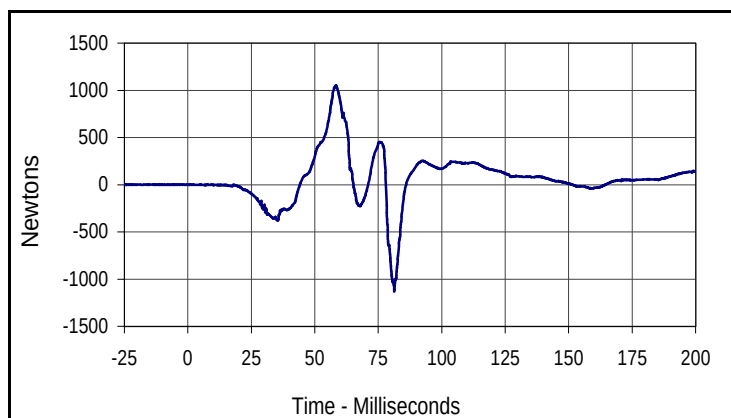
Curve Description			
Passenger Head Redundant Z Velocity			
CURNO	Type	SAE Class	Units
028	IN1	180	KMH
Max	Time	Min	Time
67.8	181.0	-0.4	22.0

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

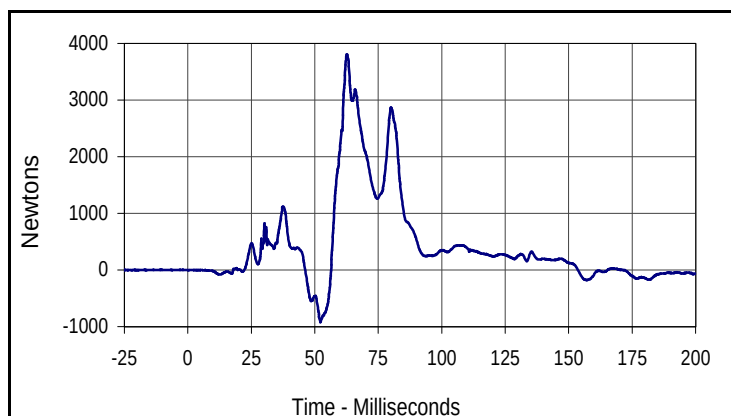
Test Date: 7/22/04
 NHTSA No.: F50201



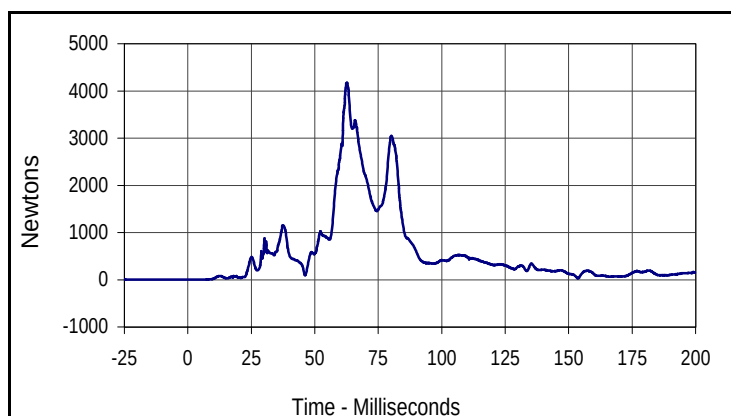
Curve Description			
Passenger Upper Neck Force X			
CURNO	Type	SAE Class	Units
029	FIL	1000	Newtons
Max	Time	Min	Time
145.7	31.2	-1605.1	62.6



Curve Description			
Passenger Upper Neck Force Y			
CURNO	Type	SAE Class	Units
030	FIL	1000	Newtons
Max	Time	Min	Time
1052.4	58.3	-1132.1	81.3



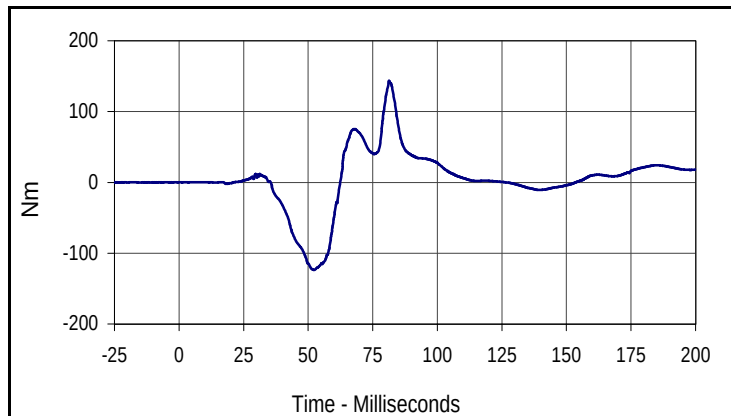
Curve Description			
Passenger Upper Neck Force Z			
CURNO	Type	SAE Class	Units
031	FIL	1000	Newtons
Max	Time	Min	Time
3807.0	62.7	-923.7	52.3



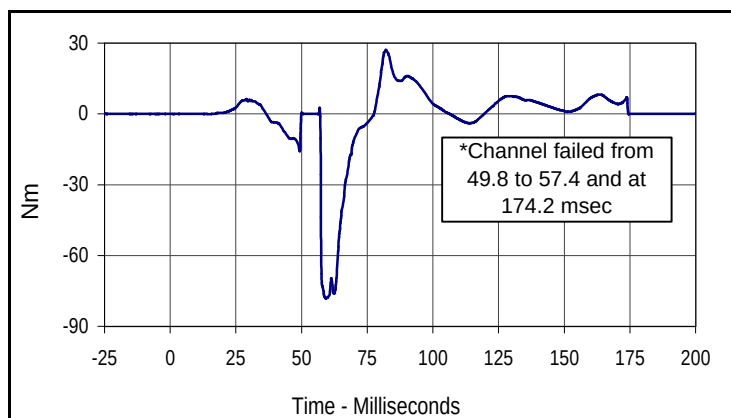
Curve Description			
Passenger Upper Neck Force Resultant			
CURNO	Type	SAE Class	Units
029	RES	1000	Newtons
Max	Time	Min	Time
4175.6	62.6	0.4	5.3

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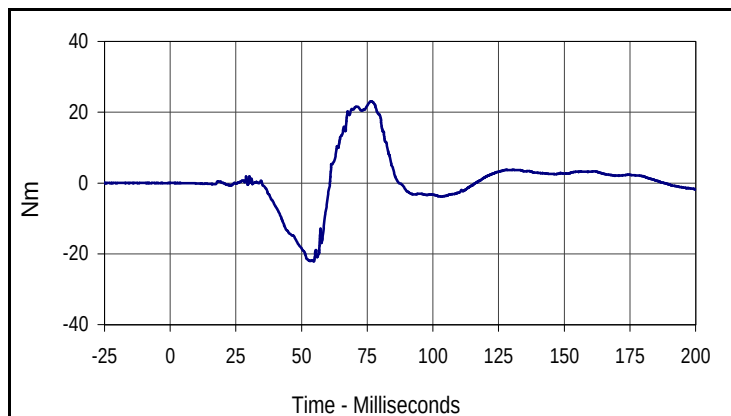


Curve Description			
Passenger Upper Neck Moment X			
CURNO	Type	SAE Class	Units
032	FIL	600	Nm
Max	Time	Min	Time
143.3	81.3	-123.8	52.4

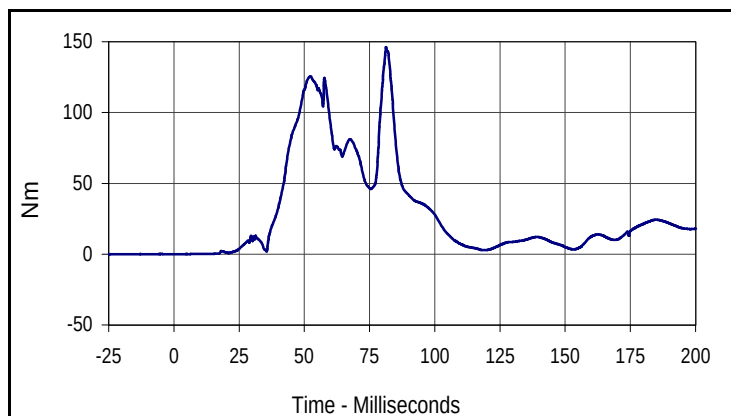


Curve Description			
Passenger Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
033	FIL	600	Nm
Max	Time	Min	Time
27.1	82.1	-78.2	59.2

*Channel failed from 49.8 to 57.4 and at 174.2 msec



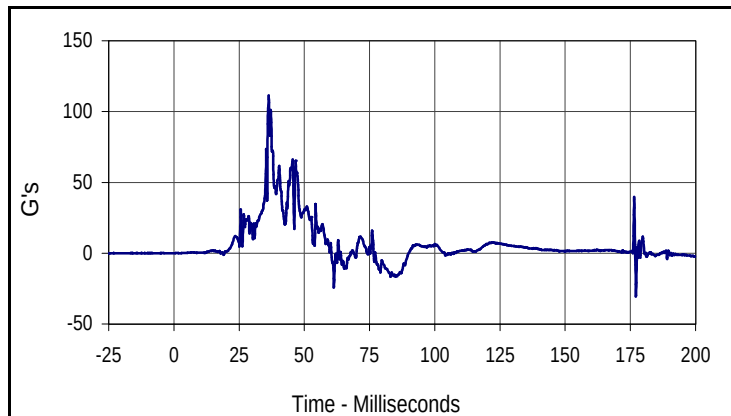
Curve Description			
Passenger Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
034	FIL	600	Nm
Max	Time	Min	Time
23.1	76.4	-22.2	54.7



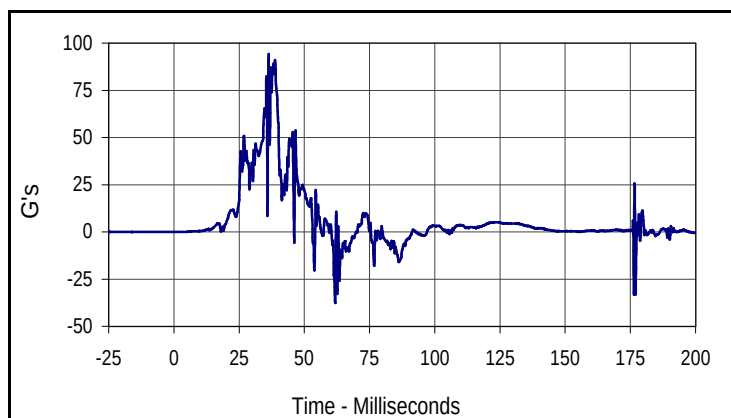
Curve Description			
Passenger Upper Neck Moment Resultant			
CURNO	Type	SAE Class	Units
032	RES	600	Nm
Max	Time	Min	Time
146.3	81.3	0.0	3.9

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

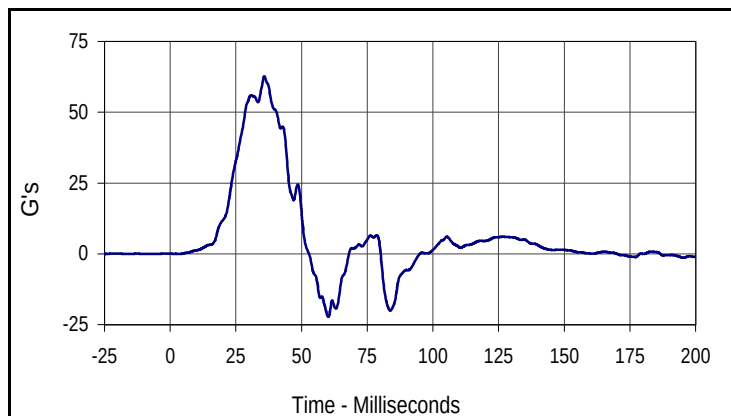
Test Date: 7/22/04
 NHTSA No.: F50201



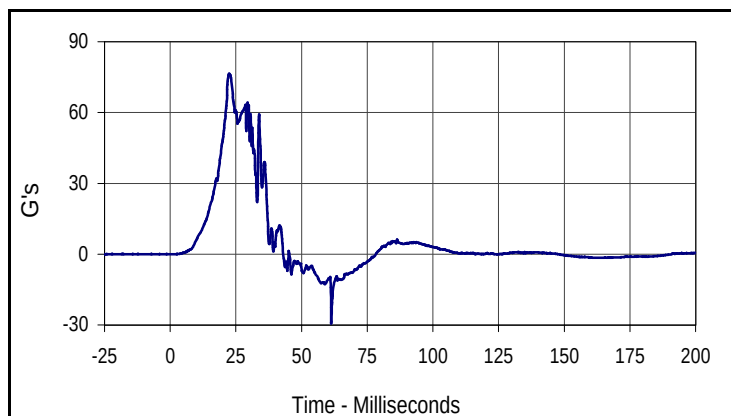
Curve Description			
Passenger Upper Rib Primary Y			
CURNO	Type	SAE Class	Units
035	FIL	1000	G's
Max	Time	Min	Time
111.4	36.4	-30.5	177.1



Curve Description			
Passenger Lower Rib Primary Y			
CURNO	Type	SAE Class	Units
036	FIL	1000	G's
Max	Time	Min	Time
94.3	36.3	-37.4	61.8



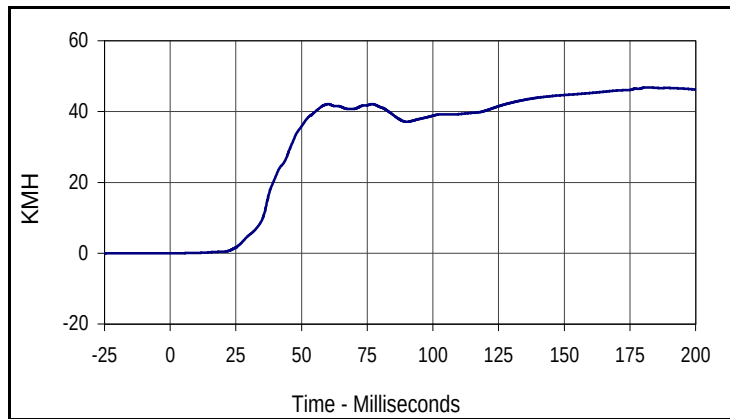
Curve Description			
Passenger Lower Spine Primary Y			
CURNO	Type	SAE Class	Units
037	FIL	180	G's
Max	Time	Min	Time
62.7	35.9	-22.3	60.2



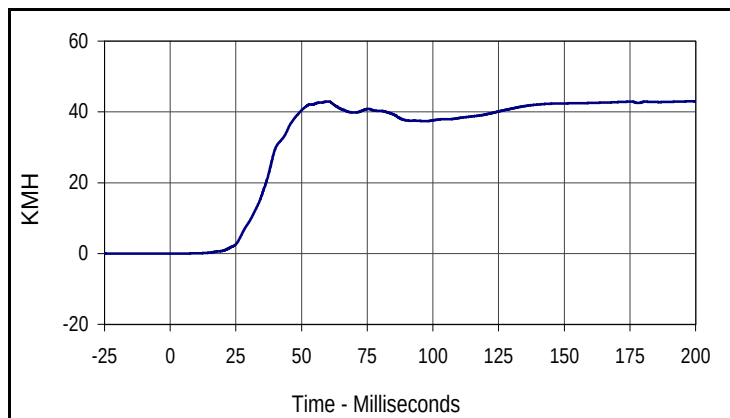
Curve Description			
Passenger Pelvis Primary Y			
CURNO	Type	SAE Class	Units
038	FIL	1000	G's
Max	Time	Min	Time
76.5	22.5	-29.2	61.3

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

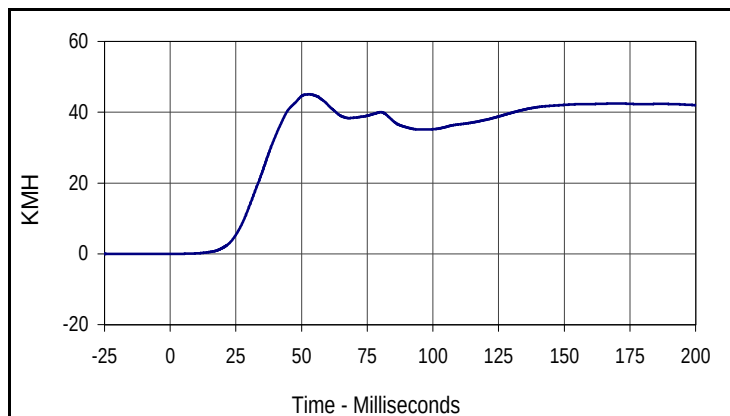
Test Date: 7/22/04
 NHTSA No.: F50201



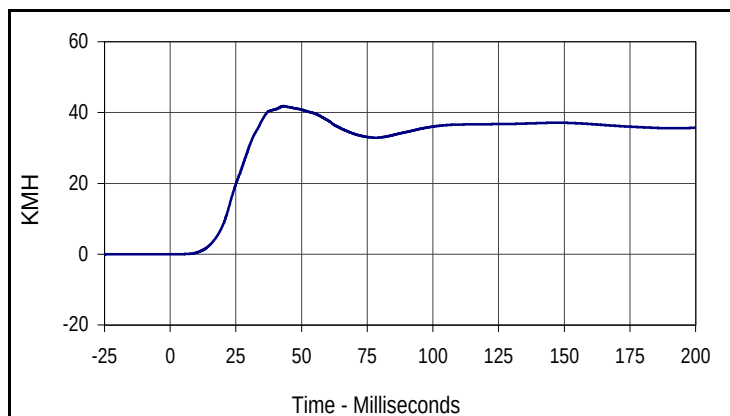
Curve Description			
Passenger Upper Rib Primary Y Velocity			
CURNO	Type	SAE Class	Units
035	IN1	180	KMH
Max	Time	Min	Time
46.8	180.9	0.0	0.3



Curve Description			
Passenger Lower Rib Primary Y Velocity			
CURNO	Type	SAE Class	Units
036	IN1	180	KMH
Max	Time	Min	Time
43.0	197.5	0.0	0.0



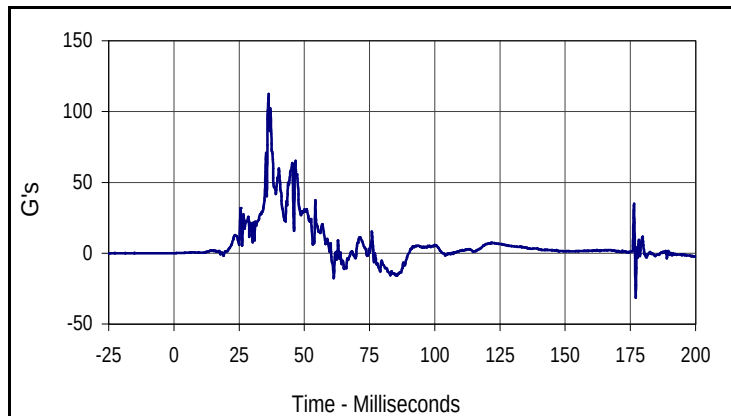
Curve Description			
Passenger Lower Spine Primary Y Velocity			
CURNO	Type	SAE Class	Units
037	IN1	180	KMH
Max	Time	Min	Time
45.1	52.8	0.0	0.0



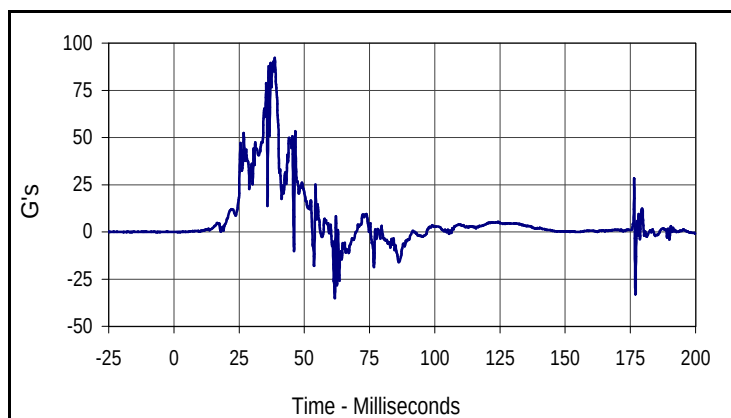
Curve Description			
Passenger Pelvis Primary Y Velocity			
CURNO	Type	SAE Class	Units
038	IN1	180	KMH
Max	Time	Min	Time
41.8	43.1	0.0	2.3

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

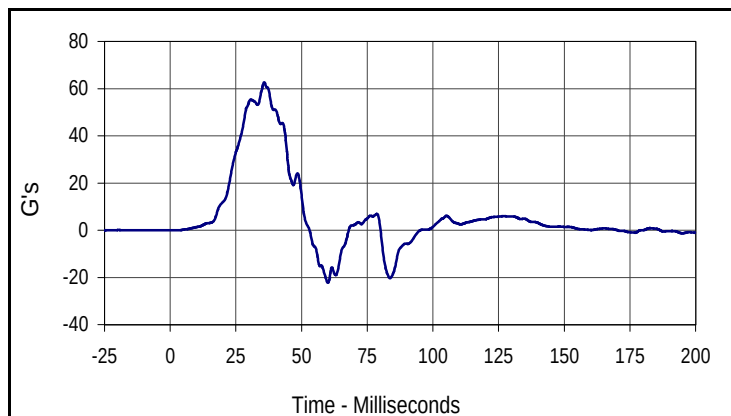
Test Date: 7/22/04
 NHTSA No.: F50201



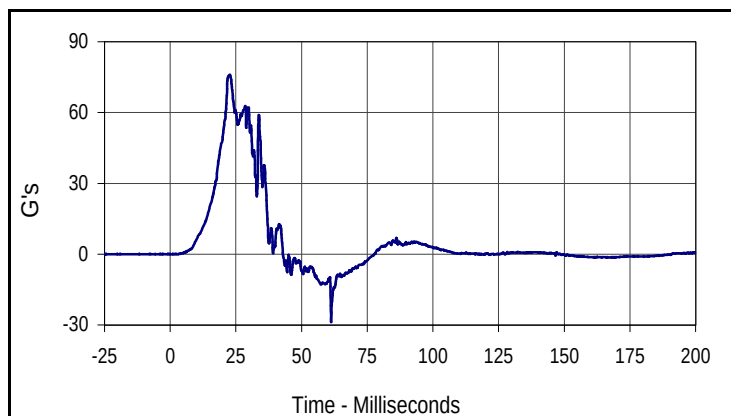
Curve Description			
Passenger Upper Rib Redundant Y			
CURNO	Type	SAE Class	Units
039	FIL	1000	G's
Max	Time	Min	Time
112.5	36.3	-31.5	177.0



Curve Description			
Passenger Lower Rib Redundant Y			
CURNO	Type	SAE Class	Units
040	FIL	1000	G's
Max	Time	Min	Time
92.2	38.7	-35.0	61.7



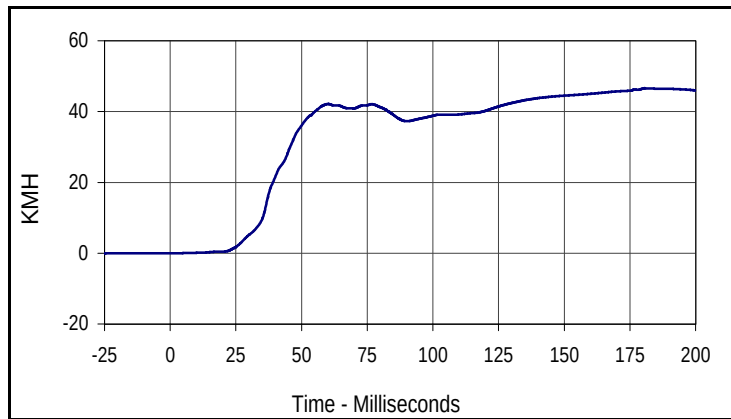
Curve Description			
Passenger Lower Spine Redundant Y			
CURNO	Type	SAE Class	Units
041	FIL	180	G's
Max	Time	Min	Time
62.6	35.7	-22.3	60.0



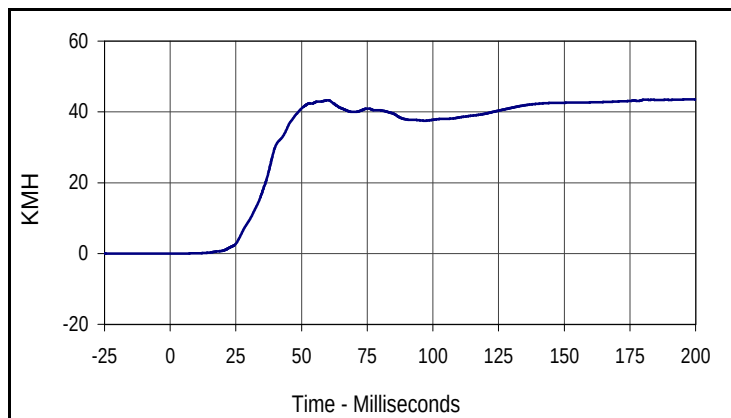
Curve Description			
Passenger Pelvis Redundant Y			
CURNO	Type	SAE Class	Units
042	FIL	1000	G's
Max	Time	Min	Time
76.0	22.7	-28.7	61.3

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

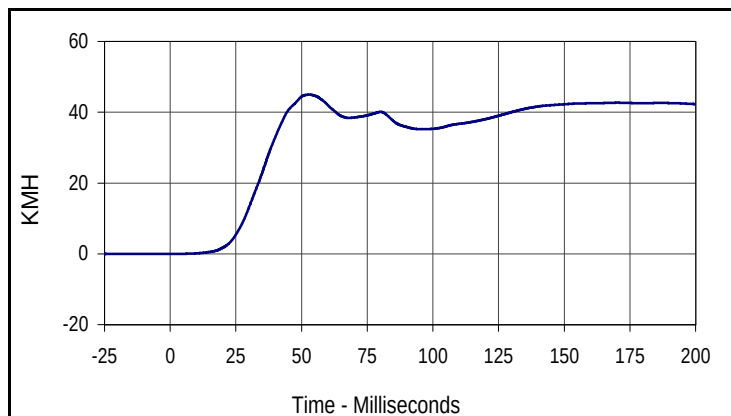
Test Date: 7/22/04
 NHTSA No.: F50201



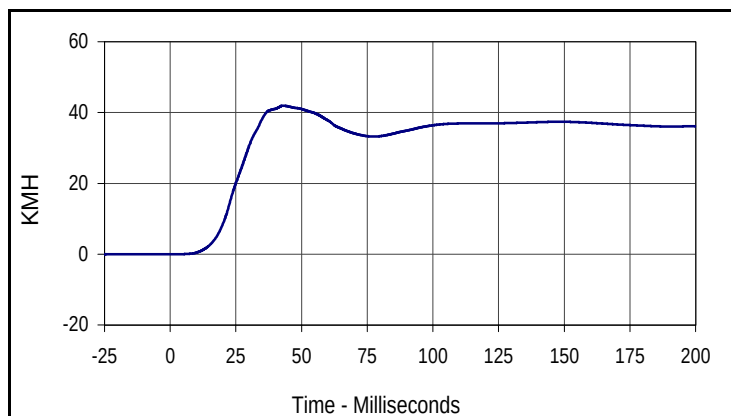
Curve Description			
Passenger Upper Rib Redundant Y Velocity			
CURNO	Type	SAE Class	Units
039	IN1	180	KMH
Max	Time	Min	Time
46.6	180.7	0.0	0.1



Curve Description			
Passenger Lower Rib Redundant Y Velocity			
CURNO	Type	SAE Class	Units
040	IN1	180	KMH
Max	Time	Min	Time
43.5	197.3	0.0	2.9



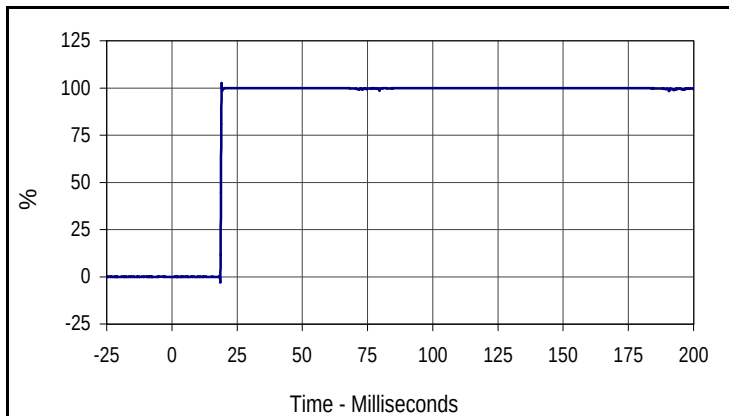
Curve Description			
Passenger Lower Spine Redundant Y Velocity			
CURNO	Type	SAE Class	Units
041	IN1	180	KMH
Max	Time	Min	Time
45.0	53.1	0.0	0.0



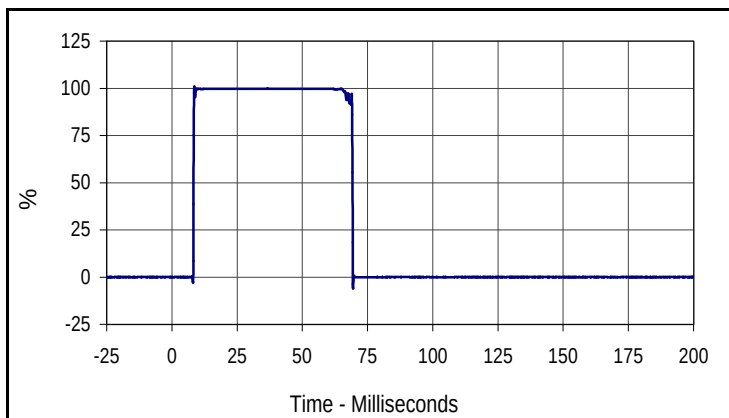
Curve Description			
Passenger Pelvis Redundant Y Velocity			
CURNO	Type	SAE Class	Units
042	IN1	180	KMH
Max	Time	Min	Time
42.0	43.1	0.0	0.0

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 7/22/04
 NHTSA No.: F50201



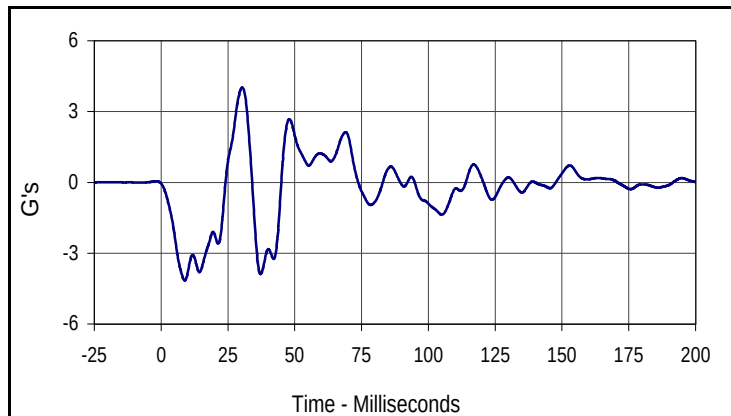
Curve Description			
Passenger Thorax Contact			
CURNO	Type	SAE Class	Units
043	FIL	1000	%
Max	Time	Cross %	Time
102.6	19.1	50.0	18.5



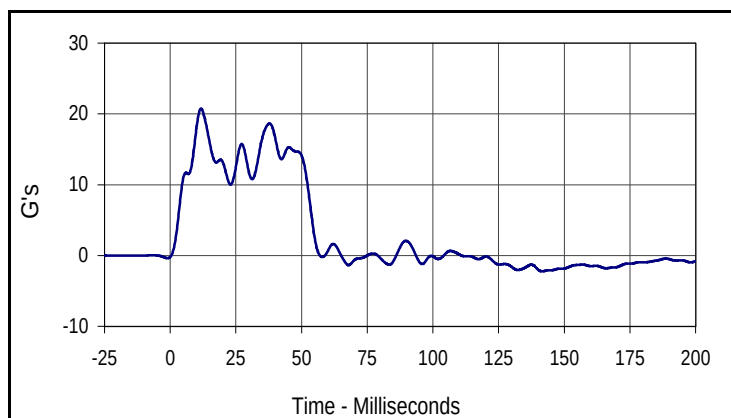
Curve Description			
Passenger Pelvis Contact			
CURNO	Type	SAE Class	Units
044	FIL	1000	%
Max	Time	Cross %	Time
101.0	8.6	50.0	8.0

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

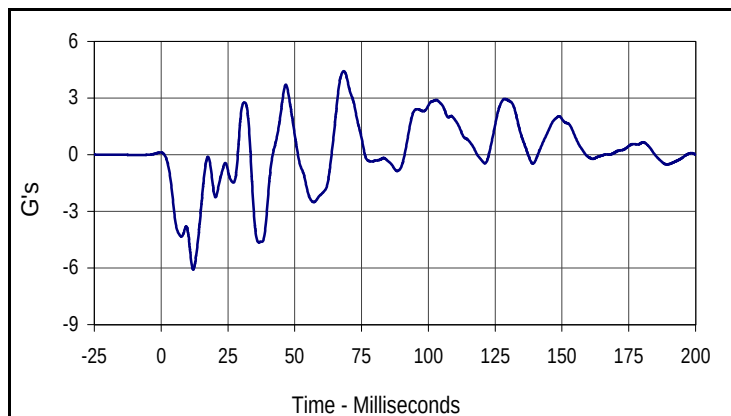
Test Date: 7/22/04
 NHTSA No.: F50201



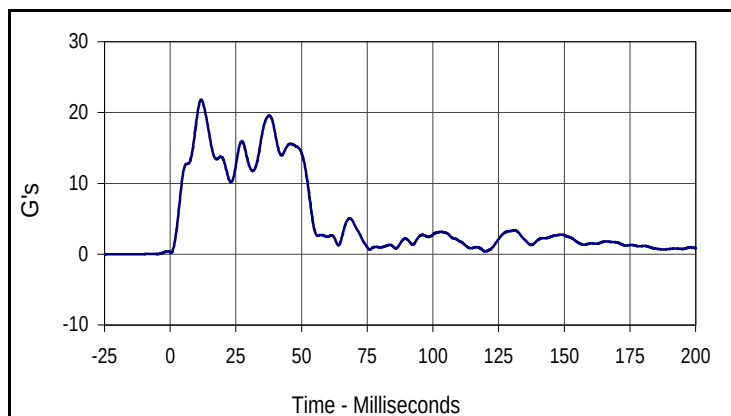
Curve Description			
Vehicle Right Sill at Front Seat X			
CURNO	Type	SAE Class	Units
045	FIL	60	G's
Max	Time	Min	Time
4.0	30.3	-4.2	8.8



Curve Description			
Vehicle Right Sill at Front Seat Y			
CURNO	Type	SAE Class	Units
046	FIL	60	G's
Max	Time	Min	Time
20.7	11.7	-2.2	141.6



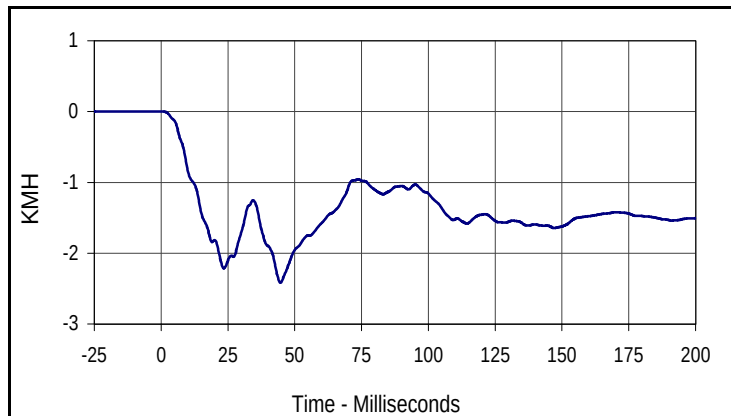
Curve Description			
Vehicle Right Sill at Front Seat Z			
CURNO	Type	SAE Class	Units
047	FIL	60	G's
Max	Time	Min	Time
4.4	68.4	-6.1	12.0



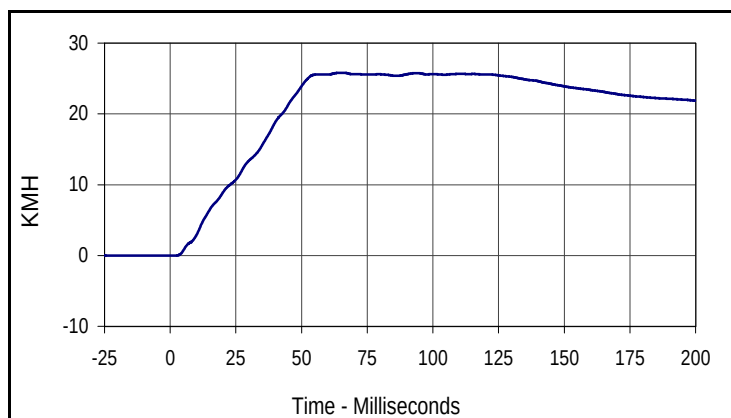
Curve Description			
Vehicle Right Sill Front Seat Resultant			
CURNO	Type	SAE Class	Units
045	RES	60	G's
Max	Time	Min	Time
21.8	11.8	0.2	0.4

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

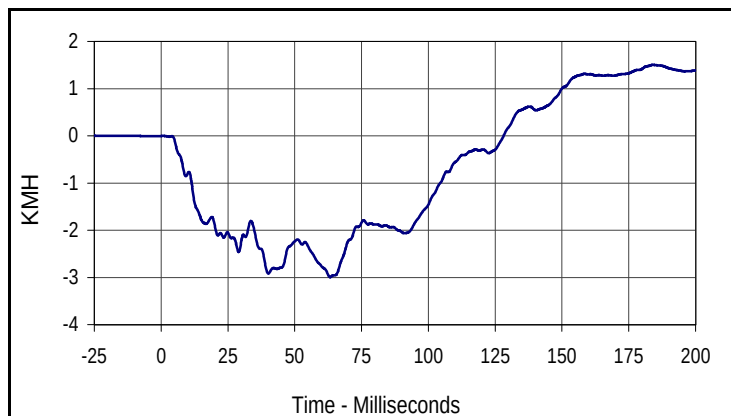
Test Date: 7/22/04
 NHTSA No.: F50201



Curve Description			
Vehicle Right Sill at Front Seat X Velocity			
CURNO	Type	SAE Class	Units
045	IN1	180	KMH
Max	Time	Min	Time
0.0	0.5	-2.4	44.7



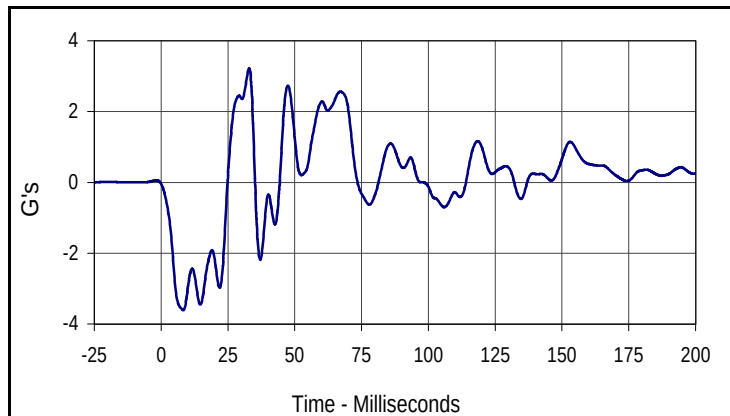
Curve Description			
Vehicle Right Sill at Front Seat Y Velocity			
CURNO	Type	SAE Class	Units
046	IN1	180	KMH
Max	Time	Min	Time
25.8	64.2	0.0	1.9



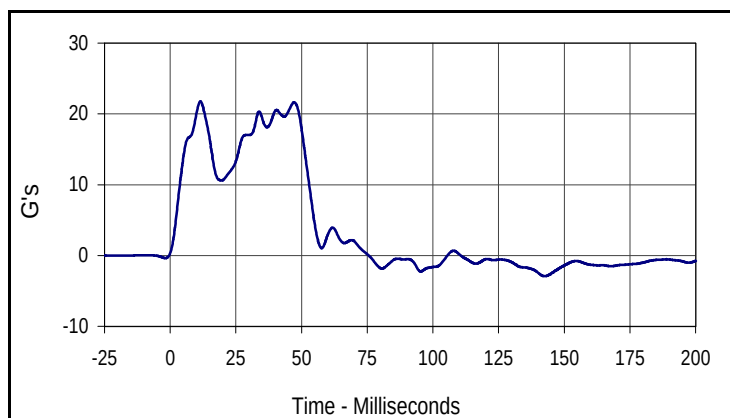
Curve Description			
Vehicle Right Sill at Front Seat Z Velocity			
CURNO	Type	SAE Class	Units
047	IN1	180	KMH
Max	Time	Min	Time
1.5	184.1	-3.0	63.2

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

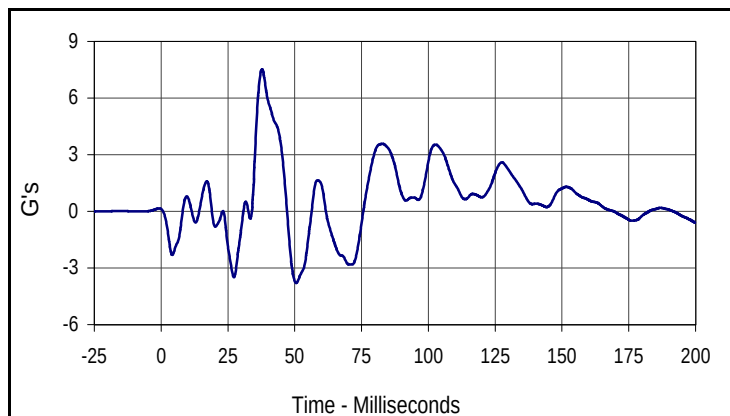
Test Date: 7/22/04
 NHTSA No.: F50201



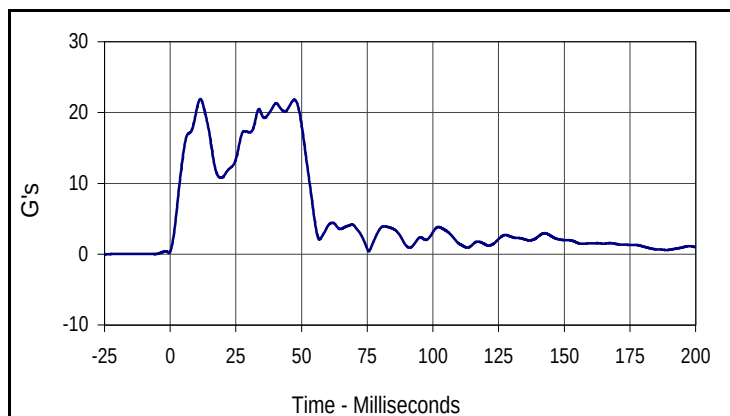
Curve Description			
Vehicle Right Sill at Rear Seat X			
CURNO	Type	SAE Class	Units
048	FIL	60	G's
Max	Time	Min	Time
3.2	32.9	-3.6	8.3



Curve Description			
Vehicle Right Sill at Rear Seat Y			
CURNO	Type	SAE Class	Units
049	FIL	60	G's
Max	Time	Min	Time
21.8	11.5	-2.9	142.5



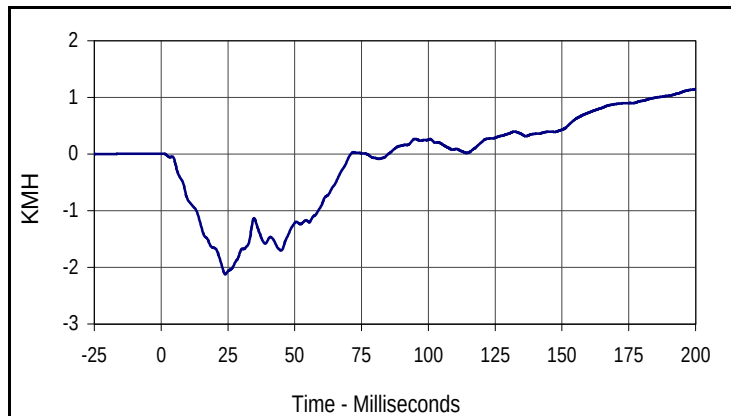
Curve Description			
Vehicle Right Sill at Rear Seat Z			
CURNO	Type	SAE Class	Units
050	FIL	60	G's
Max	Time	Min	Time
7.5	37.8	-3.8	50.5



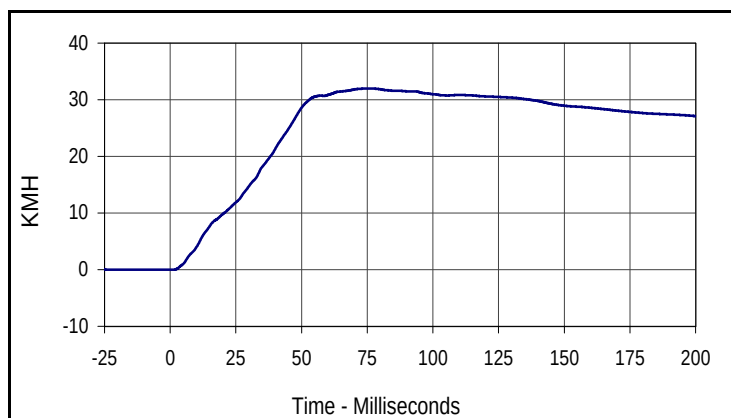
Curve Description			
Vehicle Right Sill Rear Seat Resultant			
CURNO	Type	SAE Class	Units
048	RES	60	G's
Max	Time	Min	Time
21.9	11.5	0.4	0.0

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

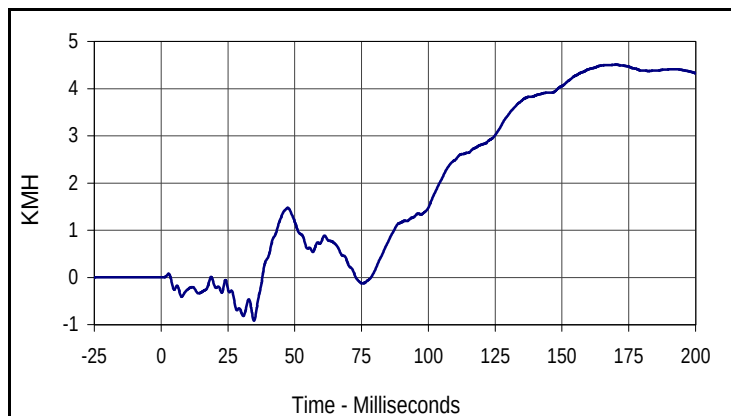
Test Date: 7/22/04
 NHTSA No.: F50201



Curve Description			
Vehicle Right Sill at Rear Seat X Velocity			
CURNO	Type	SAE Class	Units
048	IN1	180	KMH
Max	Time	Min	Time
1.1	200.0	-2.1	24.0



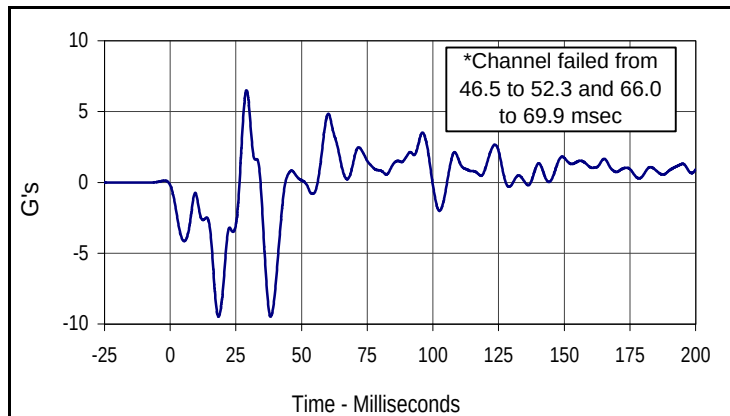
Curve Description			
Vehicle Right Sill at Rear Seat Y Velocity			
CURNO	Type	SAE Class	Units
049	IN1	180	KMH
Max	Time	Min	Time
32.0	75.3	0.0	1.2



Curve Description			
Vehicle Right Sill at Rear Seat Z Velocity			
CURNO	Type	SAE Class	Units
050	IN1	180	KMH
Max	Time	Min	Time
4.5	170.3	-0.9	34.8

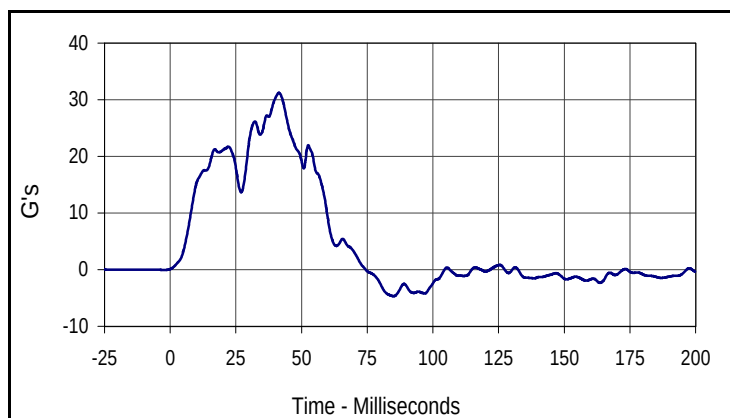
Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 7/22/04
 NHTSA No.: F50201

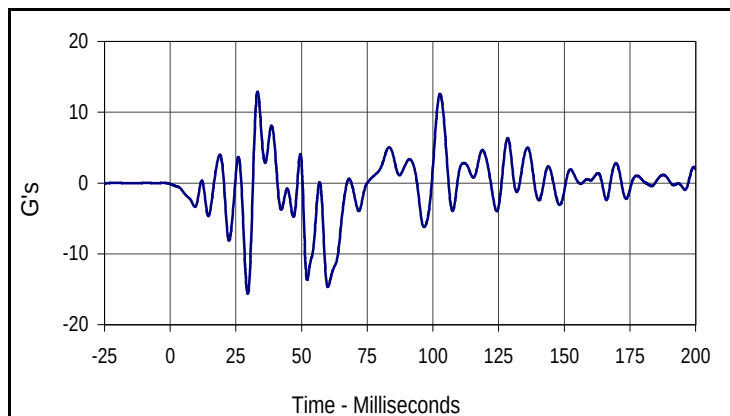


Curve Description			
Vehicle Rear Floor Above Axle X			
CURNO	Type	SAE Class	Units
051	FIL	60	G's
Max	Time	Min	Time
6.5	29.1	-9.5	38.2

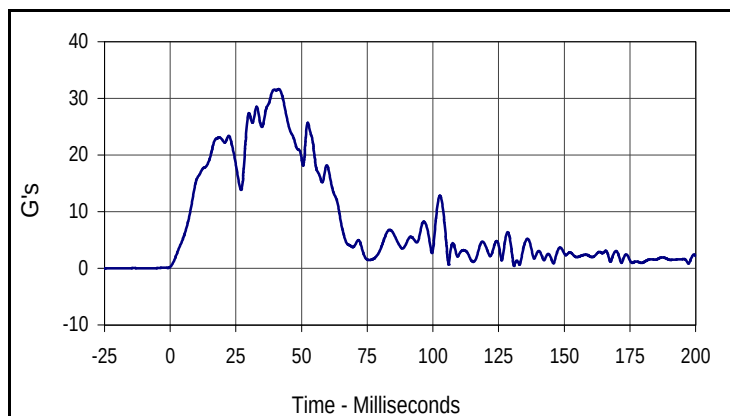
*Channel failed from 46.5 to 52.3 and 66.0 to 69.9 msec



Curve Description			
Vehicle Rear Floor Above Axle Y			
CURNO	Type	SAE Class	Units
052	FIL	60	G's
Max	Time	Min	Time
31.2	41.4	-4.7	85.1



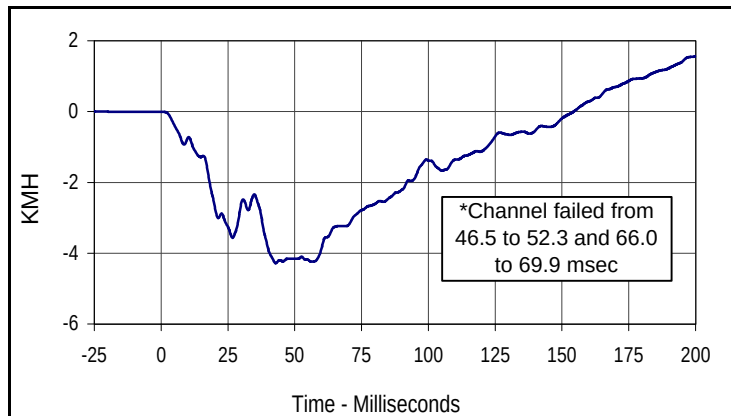
Curve Description			
Vehicle Rear Floor Above Axle Z			
CURNO	Type	SAE Class	Units
053	FIL	60	G's
Max	Time	Min	Time
12.9	33.3	-15.6	29.5



Curve Description			
Vehicle Rear Floor Above Axle Resultant			
CURNO	Type	SAE Class	Units
051	RES	60	G's
Max	Time	Min	Time
31.6	41.3	0.3	0.0

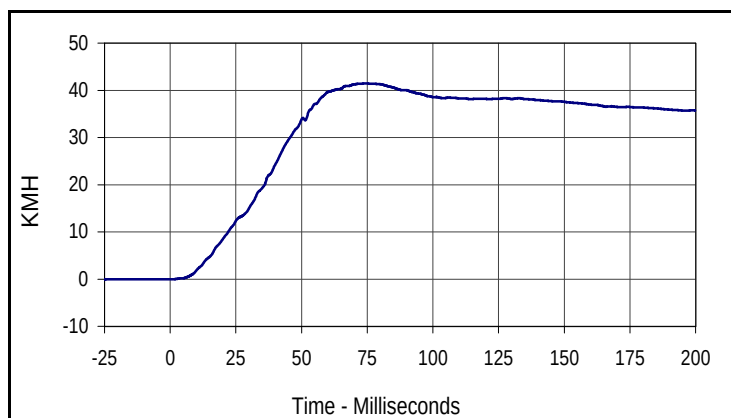
Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 7/22/04
 NHTSA No.: F50201

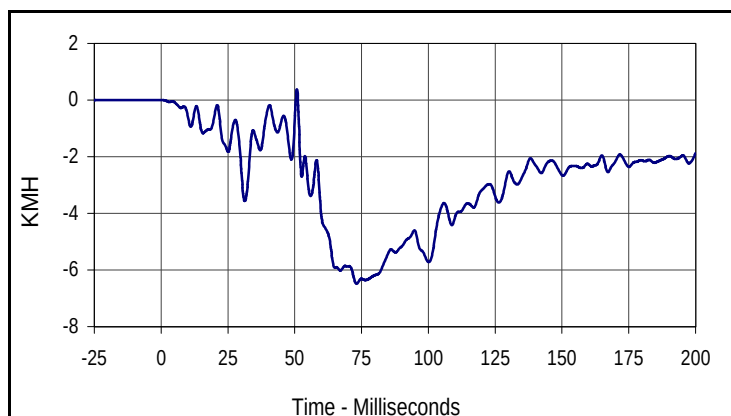


Curve Description			
Vehicle Rear Floor Above Axle X Velocity			
CURNO	Type	SAE Class	Units
051	FIL	180	KMH
Max	Time	Min	Time
1.6	200.0	-4.3	42.9

*Channel failed from 46.5 to 52.3 and 66.0 to 69.9 msec



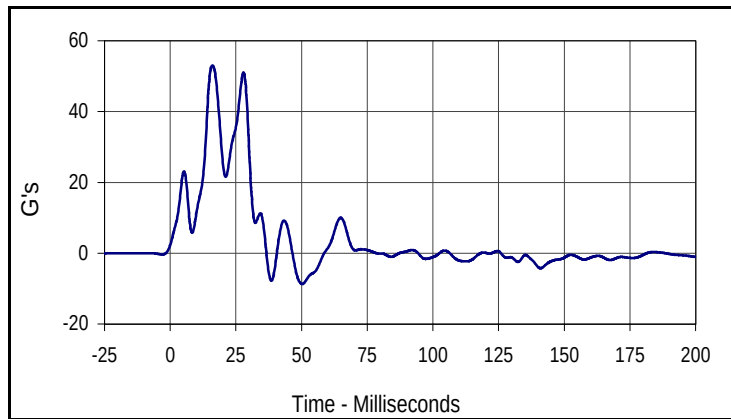
Curve Description			
Vehicle Rear Floor Above Axle Y Velocity			
CURNO	Type	SAE Class	Units
052	FIL	180	KMH
Max	Time	Min	Time
41.5	74.4	0.0	1.3



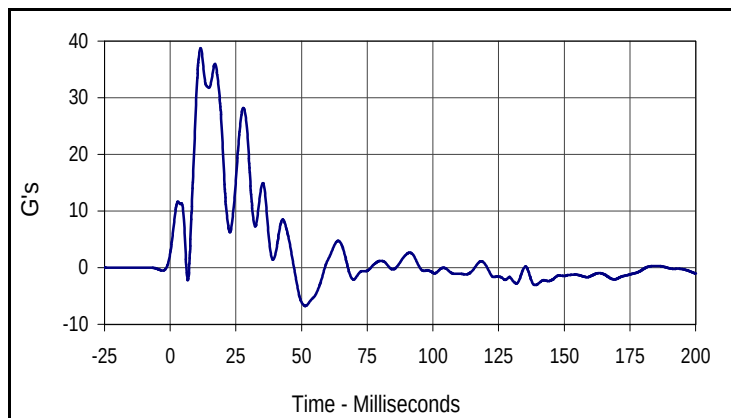
Curve Description			
Vehicle Rear Floor Above Axle Z Velocity			
CURNO	Type	SAE Class	Units
053	FIL	180	KMH
Max	Time	Min	Time
0.4	50.8	-6.5	73.2

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

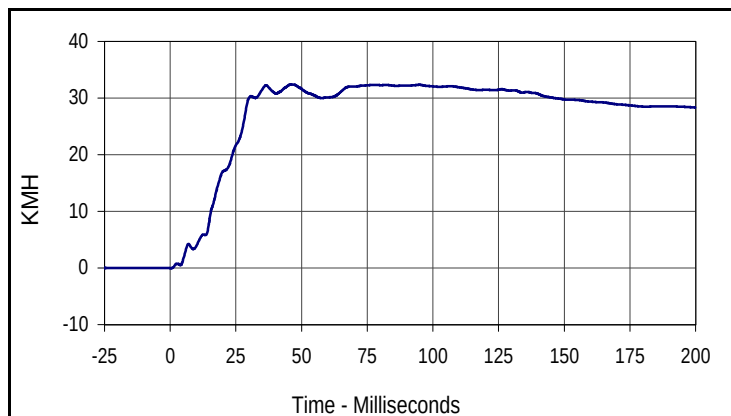
Test Date: 7/22/04
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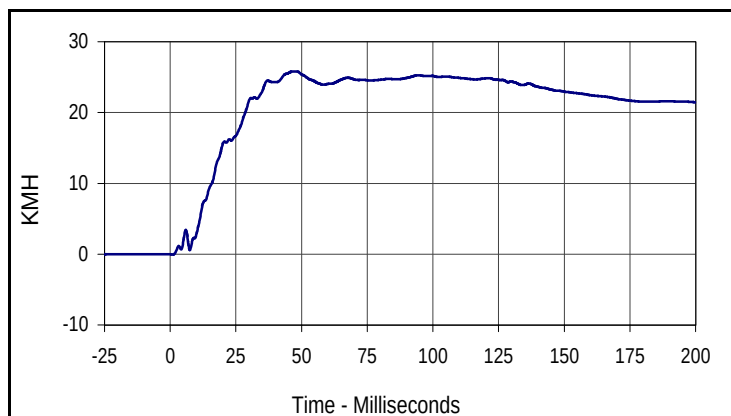
Curve Description			
Vehicle Left Sill at Rear Door Y			
CURNO	Type	SAE Class	Units
054	FIL	60	G's
Max	Time	Min	Time
53.0	16.1	-8.7	50.2



Curve Description			
Vehicle Left Sill at Front Door Y			
CURNO	Type	SAE Class	Units
055	FIL	60	G's
Max	Time	Min	Time
38.8	11.6	-6.8	51.4



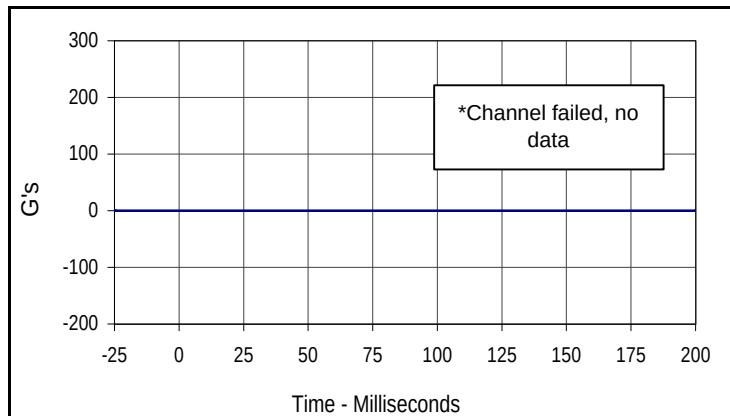
Curve Description			
Vehicle Left Sill at Rear Door Y Velocity			
CURNO	Type	SAE Class	Units
054	IN1	180	KMH
Max	Time	Min	Time
32.4	46.0	0.0	0.3



Curve Description			
Vehicle Left Sill at Front Door Y Velocity			
CURNO	Type	SAE Class	Units
055	IN1	180	KMH
Max	Time	Min	Time
25.8	46.4	-0.1	0.9

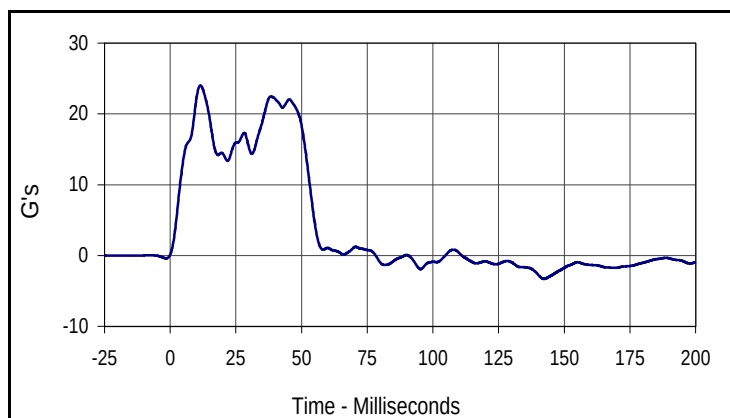
Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 7/22/04
 NHTSA No.: F50201

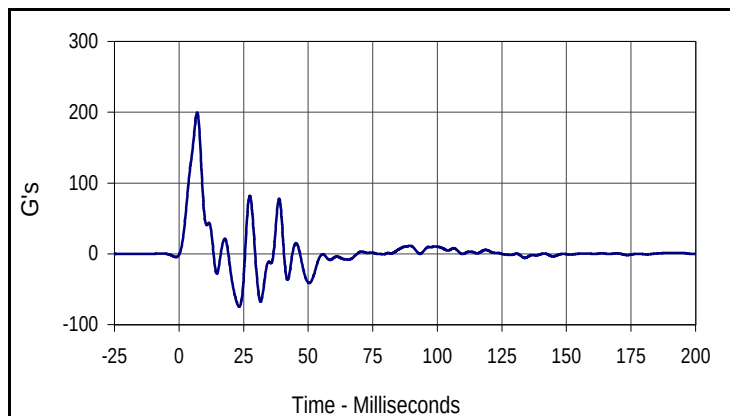


Curve Description			
Vehicle Left Front Door CL Y			
CURNO	Type	SAE Class	Units
056	FIL	60	G's
Max	Time	Min	Time
0.0	0.0	0.0	0.0

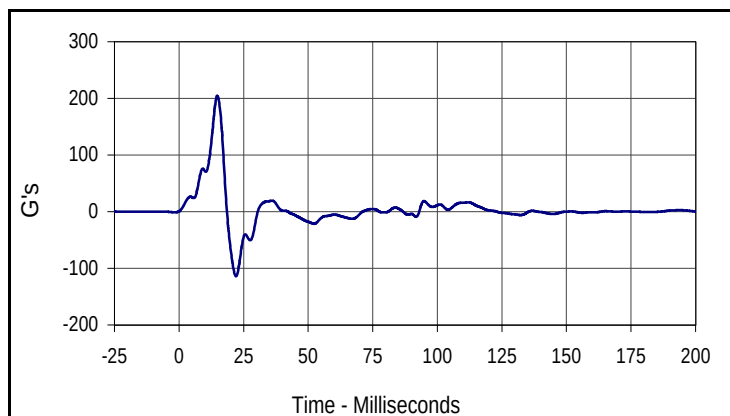
*Channel failed, no data



Curve Description			
Vehicle Right Rear Occupant Compartment			
CURNO	Type	SAE Class	Units
057	FIL	60	G's
Max	Time	Min	Time
24.0	11.5	-3.3	142.3



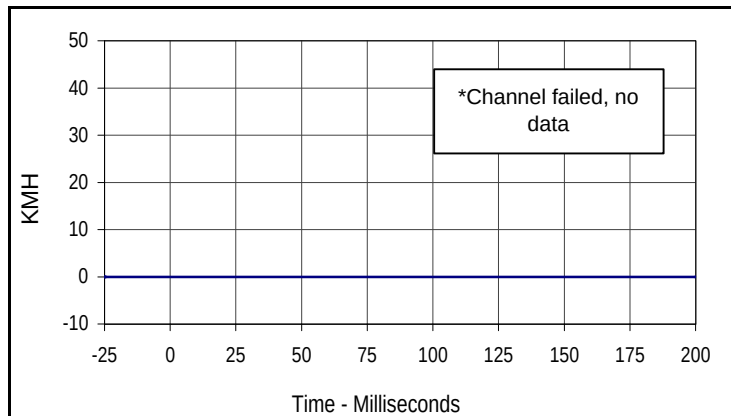
Curve Description			
Vehicle Left Front Door Mid Rear Y			
CURNO	Type	SAE Class	Units
058	FIL	60	G's
Max	Time	Min	Time
199.7	7.0	-74.5	23.3



Curve Description			
Vehicle Left Front Door Upper CL Y			
CURNO	Type	SAE Class	Units
059	FIL	60	G's
Max	Time	Min	Time
204.3	14.8	-114.0	22.1

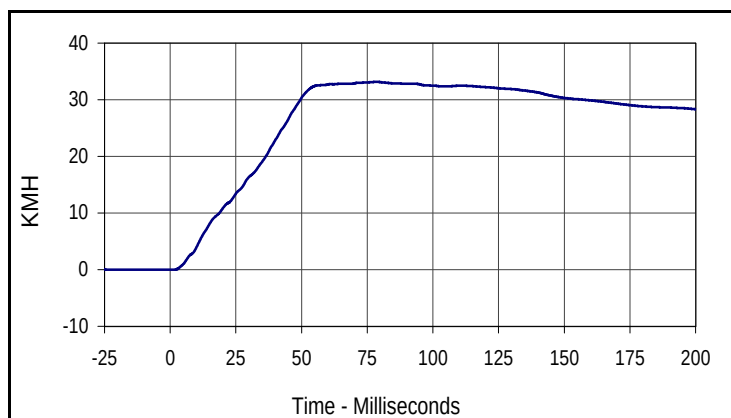
Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 7/22/04
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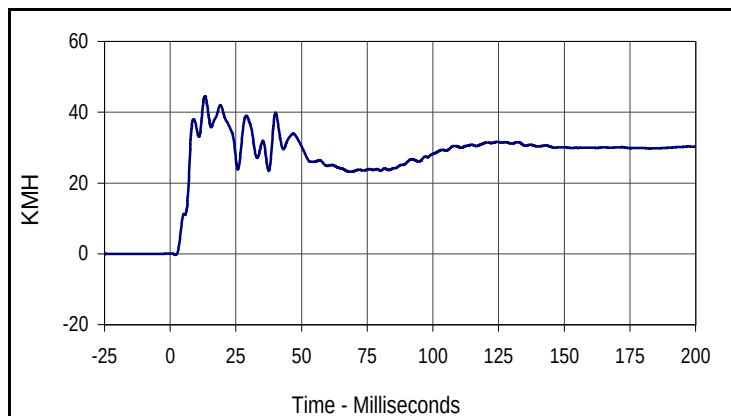


Curve Description			
Vehicle Left Front Door CL Y Velocity			
CURNO	Type	SAE Class	Units
056	IN1	180	KMH
Max	Time	Min	Time
0.0	0.0	0.0	0.0

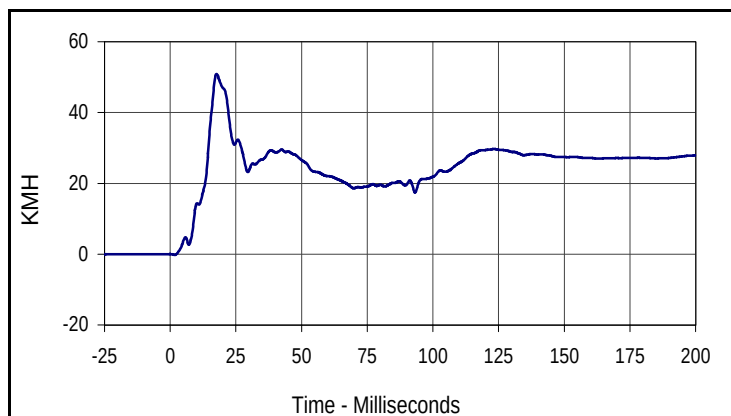
*Channel failed, no data



Curve Description			
Vehicle Right Rear Occupant Compartment Y Velocity			
CURNO	Type	SAE Class	Units
057	IN1	180	KMH
Max	Time	Min	Time
33.2	78.7	0.0	1.4



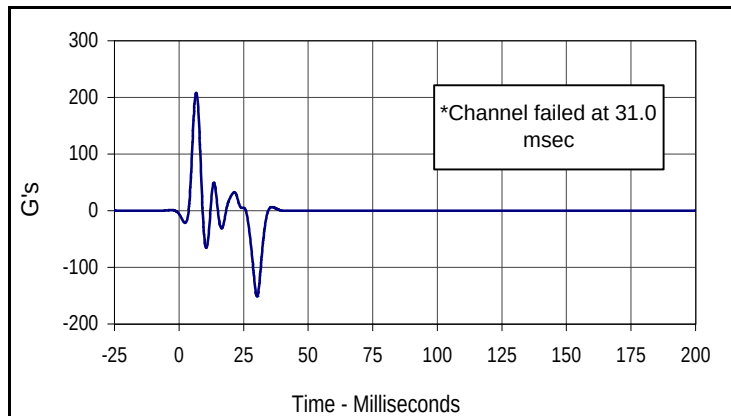
Curve Description			
Vehicle Left Front Door Mid Rear Y Velocity			
CURNO	Type	SAE Class	Units
058	IN1	180	KMH
Max	Time	Min	Time
44.5	13.2	-0.3	2.1



Curve Description			
Vehicle Left Front Door Upper CL Y Velocity			
CURNO	Type	SAE Class	Units
059	IN1	180	KMH
Max	Time	Min	Time
50.9	17.6	-0.2	1.7

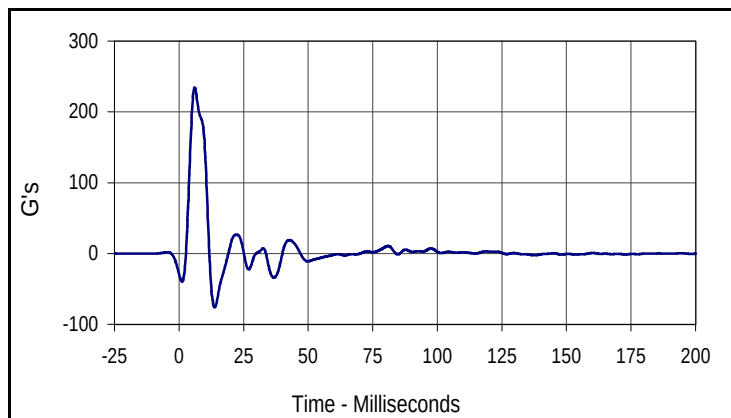
Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 7/22/04
 NHTSA No.: F50201

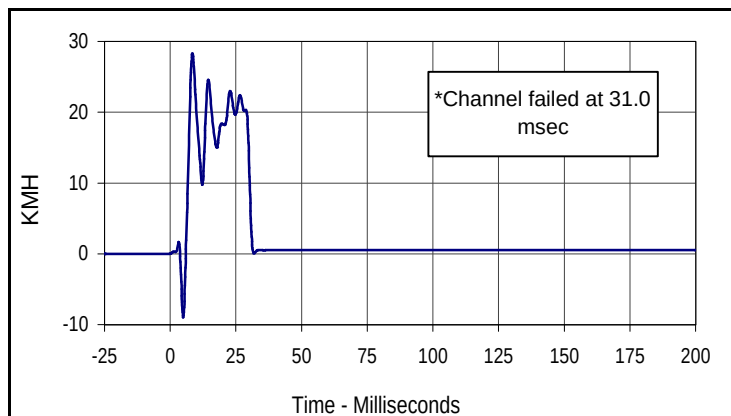


Curve Description			
Vehicle Left Rear Door Mid Rear Y			
CURNO	Type	SAE Class	Units
060	FIL	60	G's
Max	Time	Min	Time
208.0	6.7	-150.9	30.2

*Channel failed at 31.0 msec

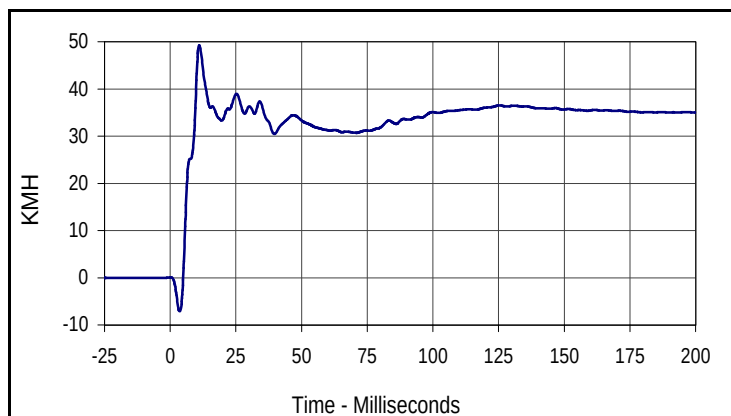


Curve Description			
Vehicle Left Rear Door Upper CL Y			
CURNO	Type	SAE Class	Units
061	FIL	60	G's
Max	Time	Min	Time
234.6	6.0	-76.1	13.8



Curve Description			
Vehicle Left Rear Door Mid Rear Y Velocity			
CURNO	Type	SAE Class	Units
060	IN1	180	KMH
Max	Time	Min	Time
28.3	8.5	-8.9	5.0

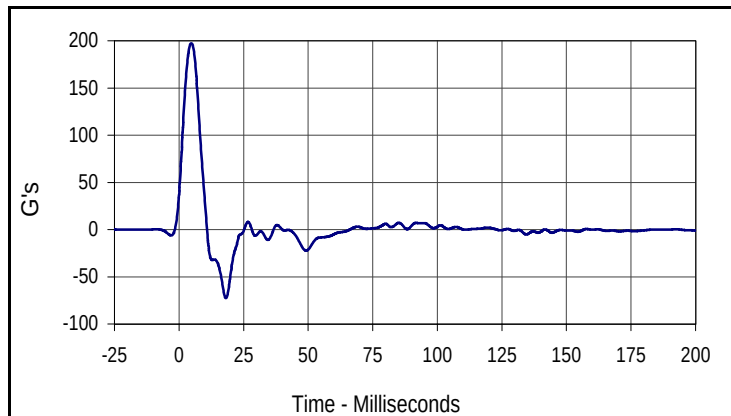
*Channel failed at 31.0 msec



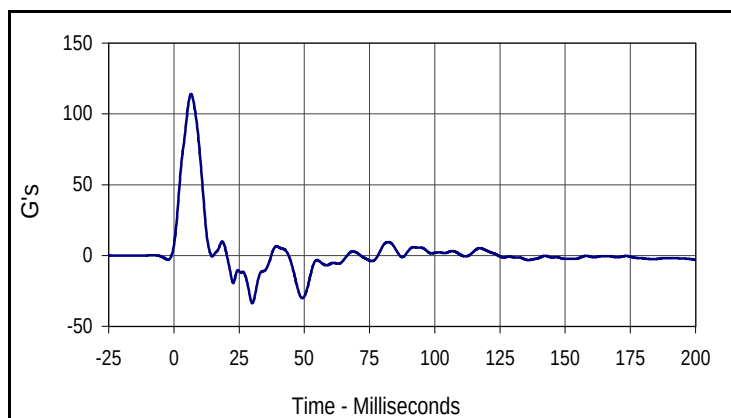
Curve Description			
Vehicle Left Rear Door Upper CL Y Velocity			
CURNO	Type	SAE Class	Units
061	IN1	180	KMH
Max	Time	Min	Time
49.2	11.0	-7.1	3.6

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

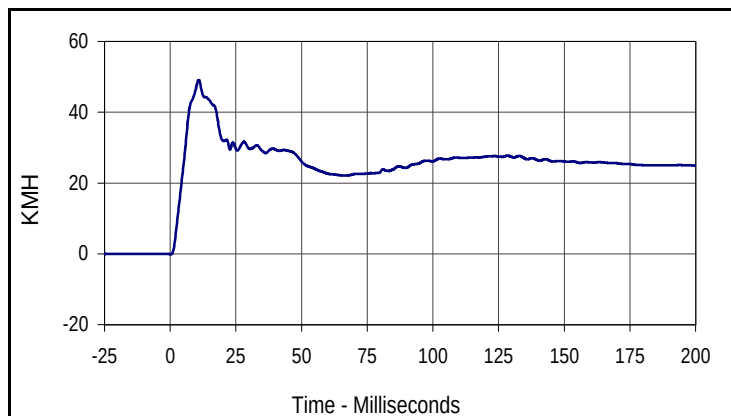
Test Date: 7/22/04
 NHTSA No.: F50201



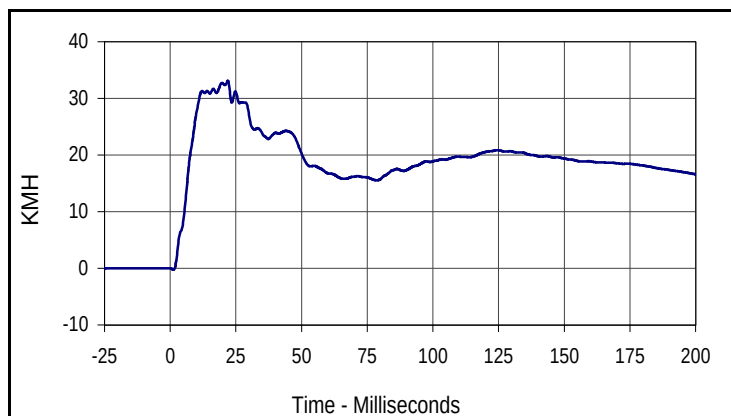
Curve Description			
Vehicle B-Post Lower Y			
CURNO	Type	SAE Class	Units
062	FIL	60	G's
Max	Time	Min	Time
197.4	4.8	-72.7	18.1



Curve Description			
Vehicle B-Post Middle Y			
CURNO	Type	SAE Class	Units
063	FIL	60	G's
Max	Time	Min	Time
114.0	6.6	-33.7	30.1



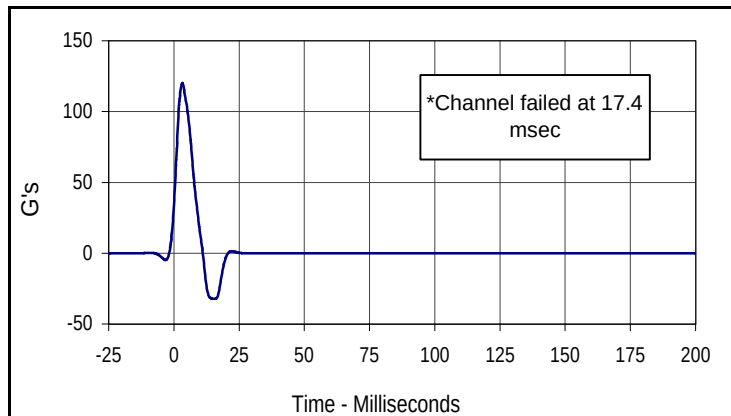
Curve Description			
Vehicle B-Post Lower Y Velocity			
CURNO	Type	SAE Class	Units
062	IN1	180	KMH
Max	Time	Min	Time
49.1	10.9	-0.1	0.1



Curve Description			
Vehicle B-Post Middle Y Velocity			
CURNO	Type	SAE Class	Units
063	IN1	180	KMH
Max	Time	Min	Time
33.1	21.9	-0.2	1.2

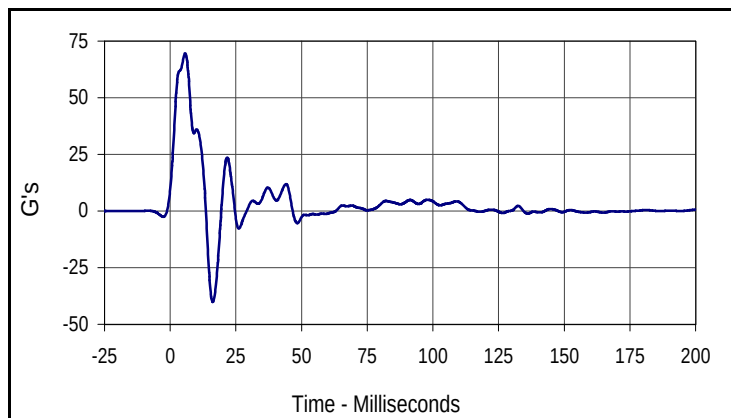
Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 7/22/04
 NHTSA No.: F50201

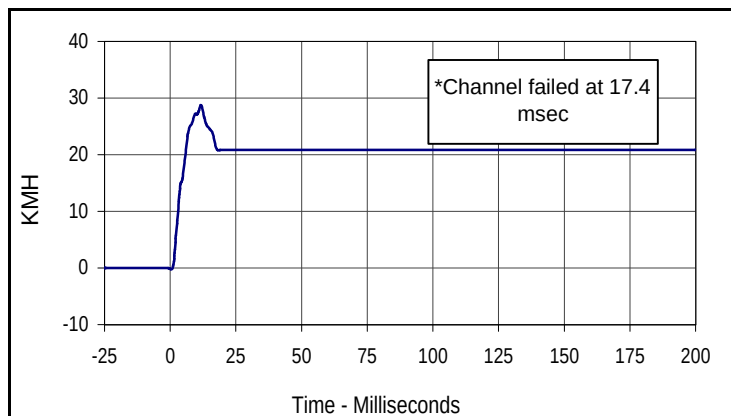


Curve Description			
Vehicle A-Post Lower Y			
CURNO	Type	SAE Class	Units
064	FIL	60	G's
Max	Time	Min	Time
120.1	3.2	-32.2	15.8

*Channel failed at 17.4 msec

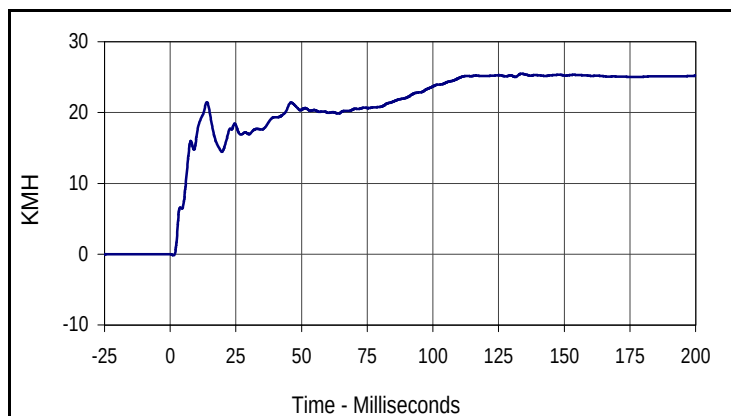


Curve Description			
Vehicle A-Post Middle Y			
CURNO	Type	SAE Class	Units
065	FIL	60	G's
Max	Time	Min	Time
69.6	5.7	-40.1	16.2



Curve Description			
Vehicle A-Post Lower Y Velocity			
CURNO	Type	SAE Class	Units
064	IN1	180	KMH
Max	Time	Min	Time
28.7	11.7	-0.2	0.4

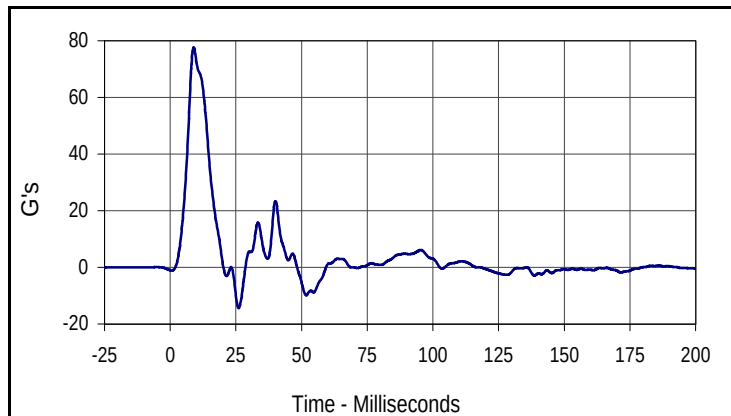
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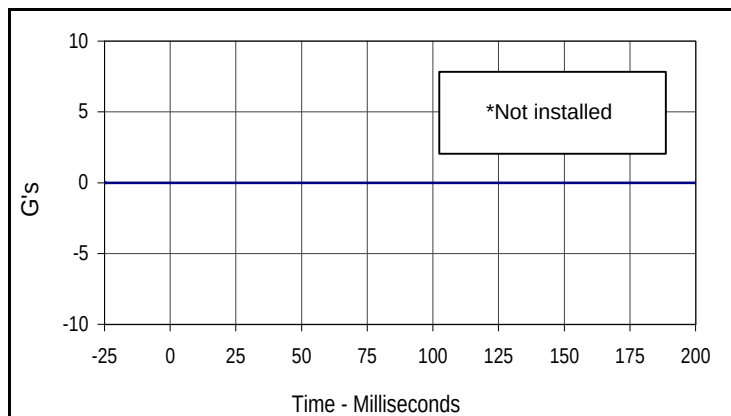
Curve Description			
Vehicle A-Post Middle Y Velocity			
CURNO	Type	SAE Class	Units
065	IN1	180	KMH
Max	Time	Min	Time
25.5	133.7	-0.2	1.3

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 7/22/04
 NHTSA No.: F50201

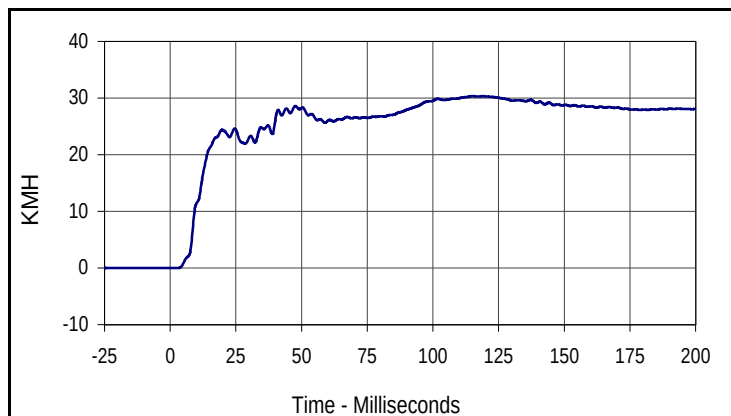


Curve Description			
Vehicle Left Front Seat Track			
CURNO	Type	SAE Class	Units
066	FIL	60	G's
Max	Time	Min	Time
77.7	8.9	-14.4	26.0

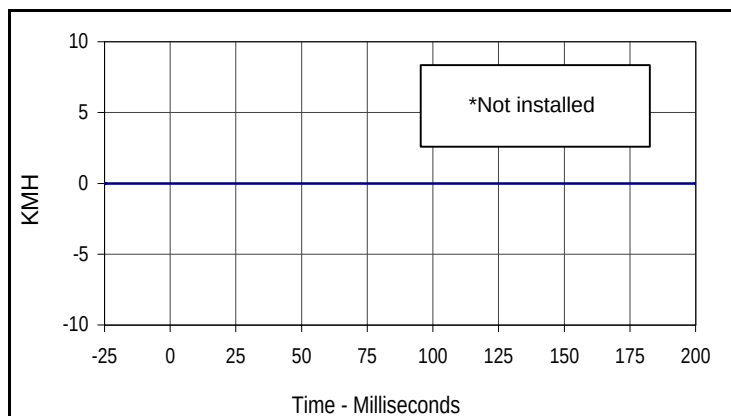


Curve Description			
Vehicle Rear Seat Structure			
CURNO	Type	SAE Class	Units
067	FIL	60	G's
Max	Time	Min	Time
0.0	0.0	0.0	0.0

*Not installed



Curve Description			
Vehicle Left Front Seat Track Y Velocity			
CURNO	Type	SAE Class	Units
066	IN1	180	KMH
Max	Time	Min	Time
30.3	115.1	0.0	2.7

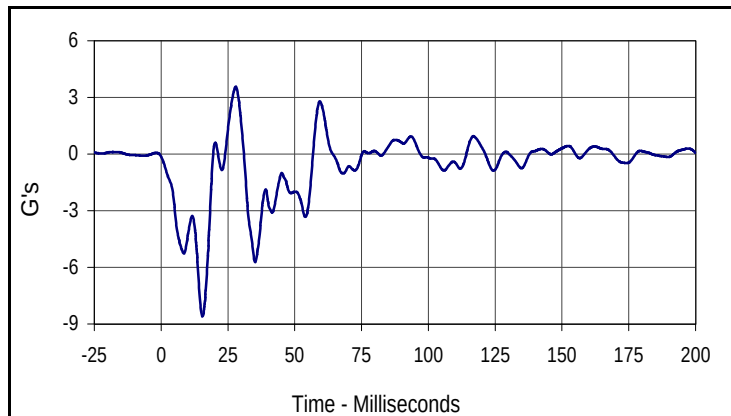


Curve Description			
Vehicle Rear Seat Structure Y Velocity			
CURNO	Type	SAE Class	Units
067	IN1	180	KMH
Max	Time	Min	Time
0.0	0.0	0.0	0.0

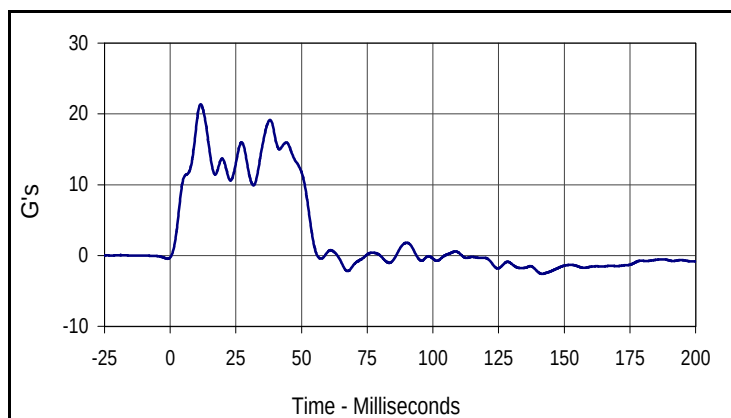
*Not installed

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

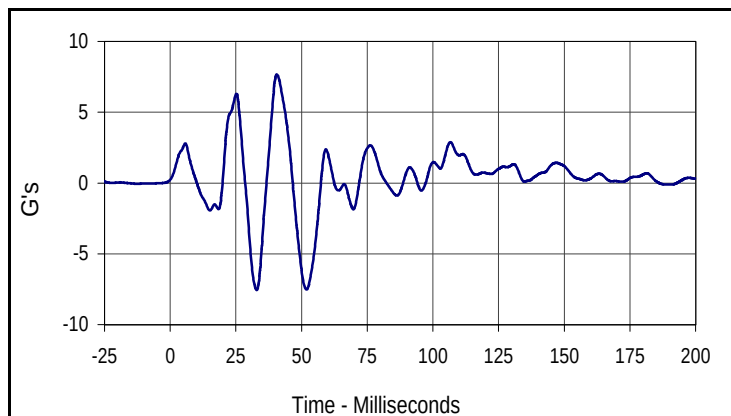
Test Date: 7/22/04
 NHTSA No.: F50201



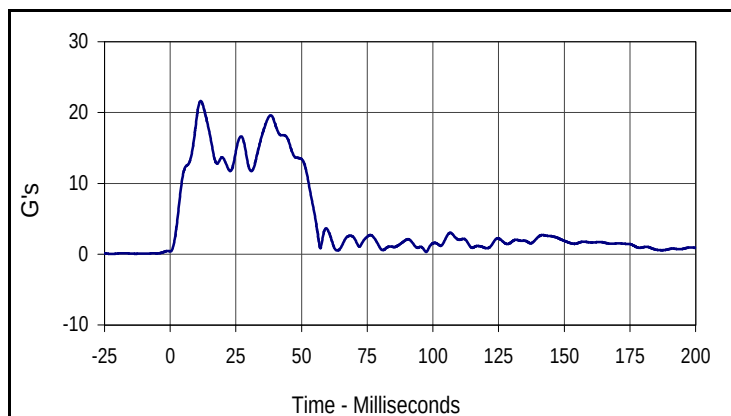
Curve Description			
Vehicle CG X			
CURNO	Type	SAE Class	Units
068	FIL	60	G's
Max	Time	Min	Time
3.6	27.9	-8.6	15.5



Curve Description			
Vehicle CG Y			
CURNO	Type	SAE Class	Units
069	FIL	60	G's
Max	Time	Min	Time
21.4	11.6	-2.6	141.6



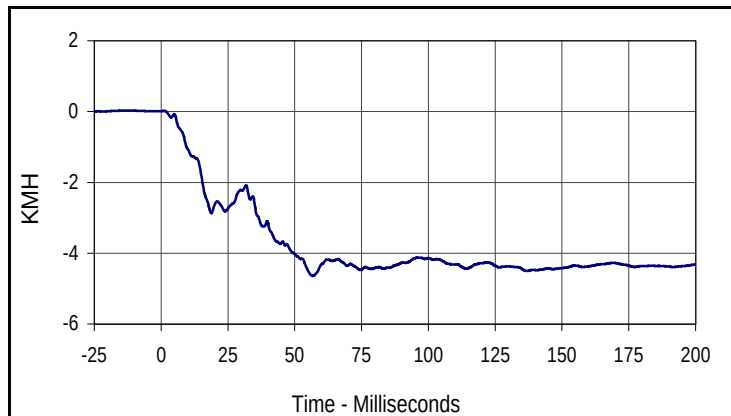
Curve Description			
Vehicle CG Z			
CURNO	Type	SAE Class	Units
070	FIL	60	G's
Max	Time	Min	Time
7.7	40.6	-7.6	32.9



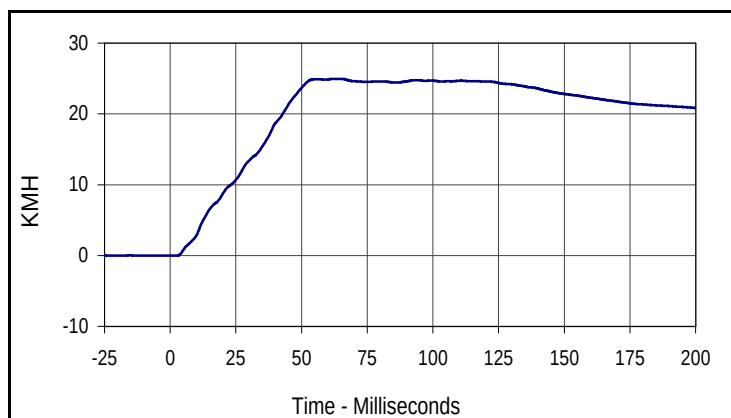
Curve Description			
Vehicle CG Resultant			
CURNO	Type	SAE Class	Units
068	RES	60	G's
Max	Time	Min	Time
21.6	11.6	0.3	97.4

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

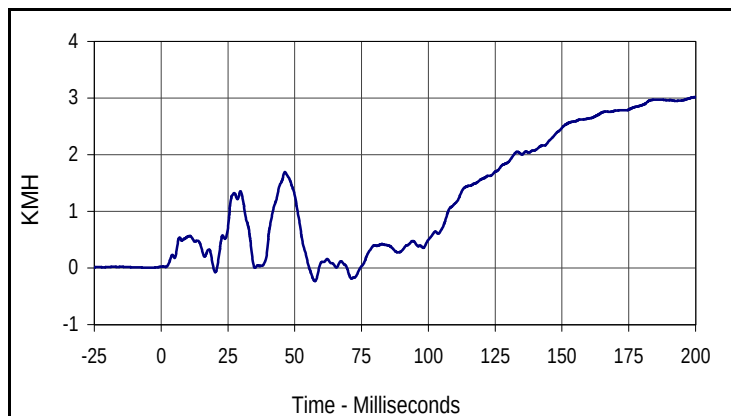
Test Date: 7/22/04
 NHTSA No.: F50201



Curve Description			
Vehicle CG X Velocity			
CURNO	Type	SAE Class	Units
068	IN1	180	KMH
Max	Time	Min	Time
0.0	1.2	-4.6	56.6



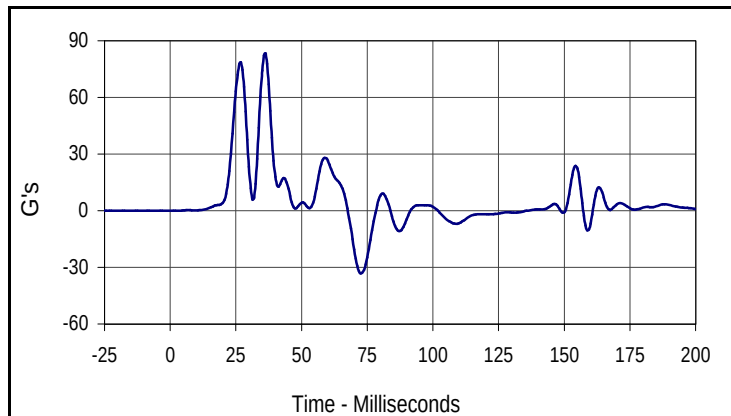
Curve Description			
Vehicle CG Y Velocity			
CURNO	Type	SAE Class	Units
069	IN1	180	KMH
Max	Time	Min	Time
25.0	63.6	0.0	2.2



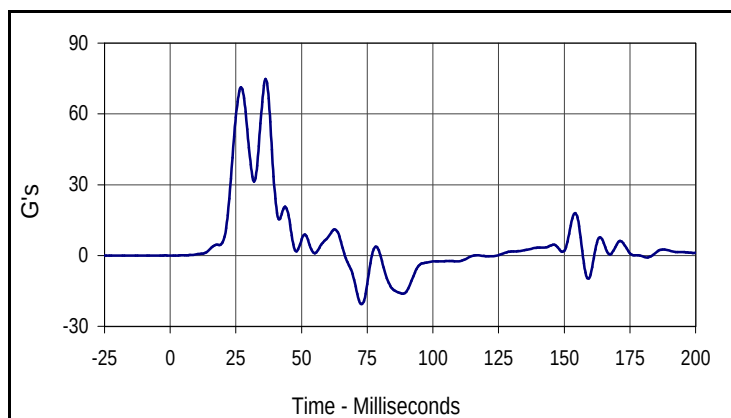
Curve Description			
Vehicle CG Z Velocity			
CURNO	Type	SAE Class	Units
070	IN1	180	KMH
Max	Time	Min	Time
3.0	200.0	-0.2	57.6

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

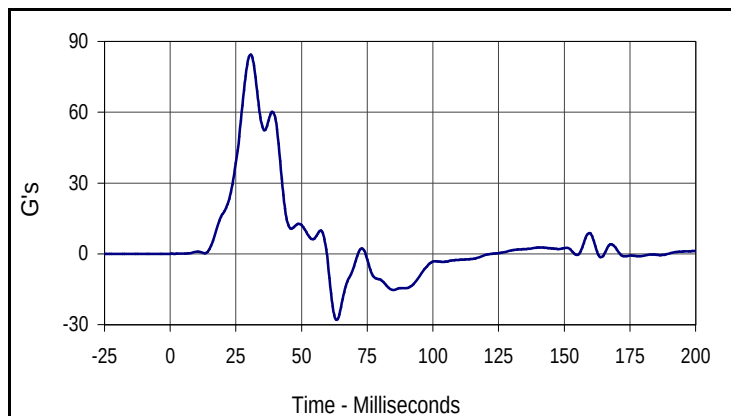
Test Date: 7/22/04
 NHTSA No.: F50201



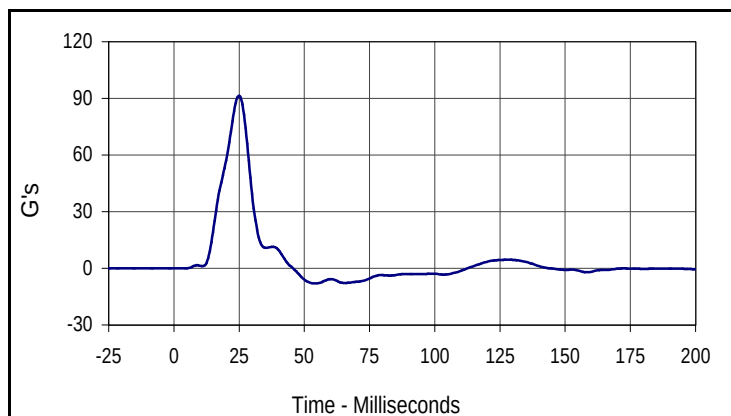
Curve Description			
Driver Upper Rib Primary Y			
CURNO	Type	SAE Class	Units
013	FIR	FIR100	G's
Max	Time	Min	Time
83.5	36.3	-33.2	72.5



Curve Description			
Driver Lower Rib Primary Y			
CURNO	Type	SAE Class	Units
014	FIR	FIR100	G's
Max	Time	Min	Time
74.9	36.3	-20.6	73.1



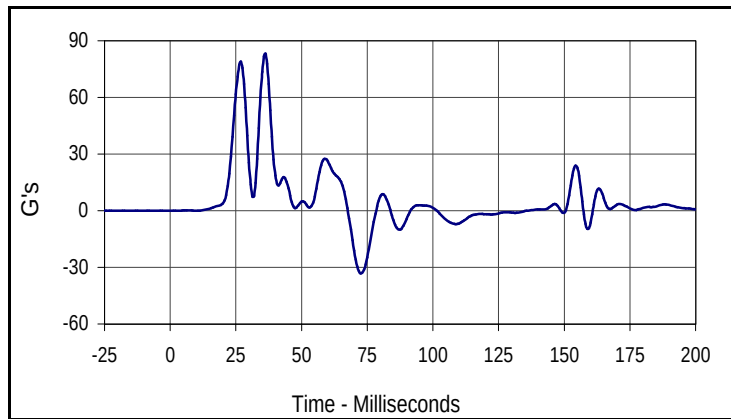
Curve Description			
Driver Lower Spine Primary Y			
CURNO	Type	SAE Class	Units
015	FIR	FIR100	G's
Max	Time	Min	Time
84.5	30.6	-27.8	63.1



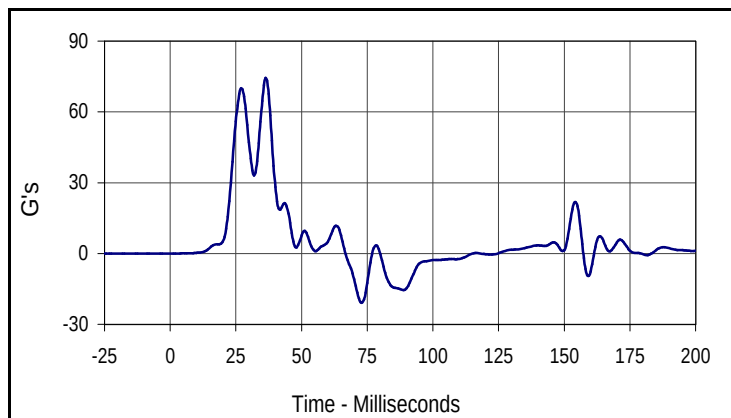
Curve Description			
Driver Pelvis Primary Y			
CURNO	Type	SAE Class	Units
016	FIR	FIR100	G's
Max	Time	Min	Time
91.4	25.0	-8.0	54.4

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

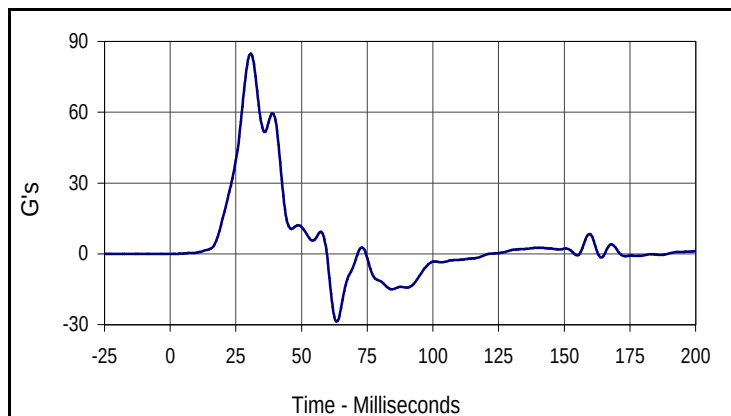
Test Date: 7/22/04
 NHTSA No.: F50201



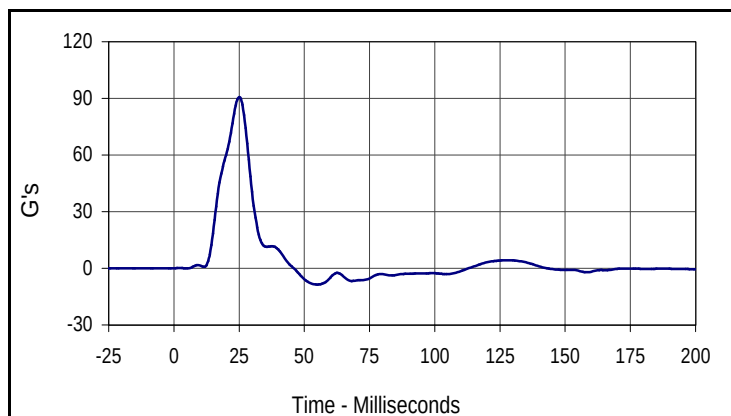
Curve Description			
Driver Upper Rib Redundant Y			
CURNO	Type	SAE Class	Units
017	FIR	FIR100	G's
Max	Time	Min	Time
83.1	36.3	-33.2	72.5



Curve Description			
Driver Lower Rib Redundant Y			
CURNO	Type	SAE Class	Units
018	FIR	FIR100	G's
Max	Time	Min	Time
74.5	36.3	-20.8	73.1



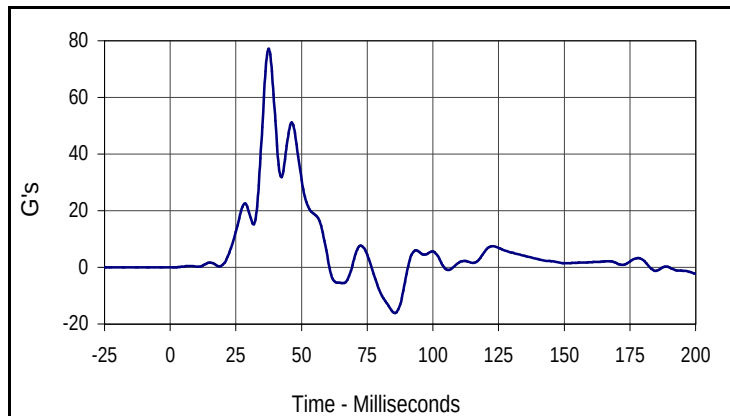
Curve Description			
Driver Lower Spine Redundant Y			
CURNO	Type	SAE Class	Units
019	FIR	FIR100	G's
Max	Time	Min	Time
84.8	30.6	-28.5	63.1



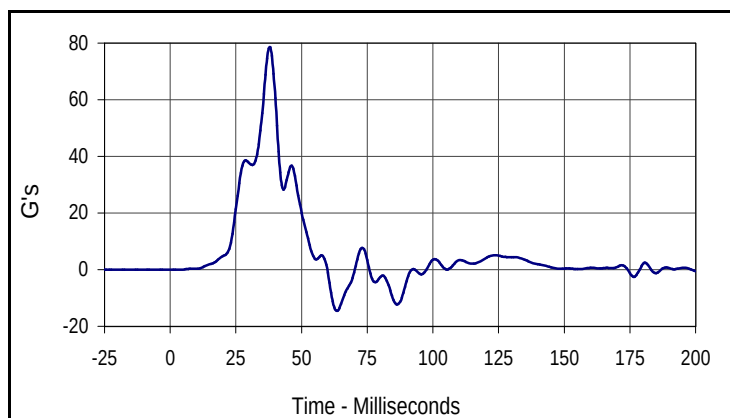
Curve Description			
Driver Pelvis Redundant Y			
CURNO	Type	SAE Class	Units
020	FIR	FIR100	G's
Max	Time	Min	Time
90.7	25.0	-8.6	55.0

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

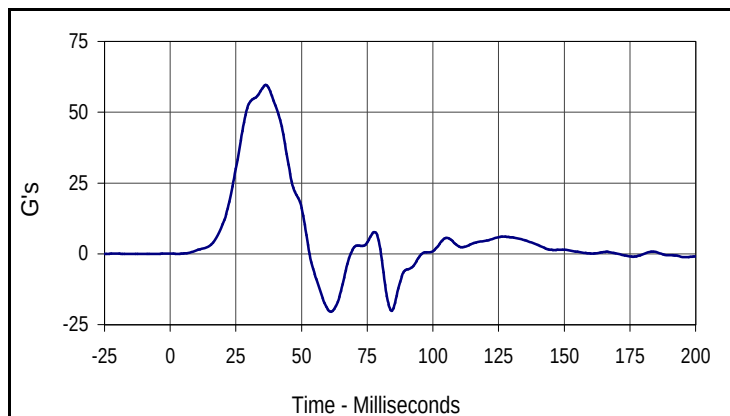
Test Date: 7/22/04
 NHTSA No.: F50201



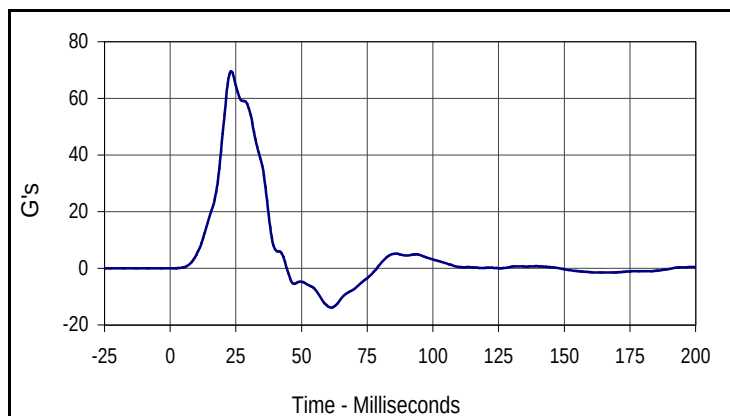
Curve Description			
Passenger Upper Rib Primary Y			
CURNO	Type	SAE Class	Units
035	FIR	FIR100	G's
Max	Time	Min	Time
77.2	37.5	-16.1	85.6



Curve Description			
Passenger Lower Rib Primary Y			
CURNO	Type	SAE Class	Units
036	FIR	FIR100	G's
Max	Time	Min	Time
78.5	38.1	-14.4	63.8



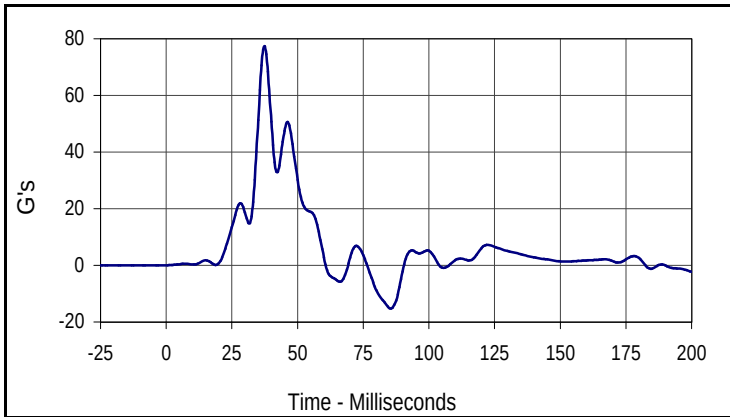
Curve Description			
Passenger Lower Spine Primary Y			
CURNO	Type	SAE Class	Units
037	FIR	FIR100	G's
Max	Time	Min	Time
59.6	36.3	-20.5	61.3



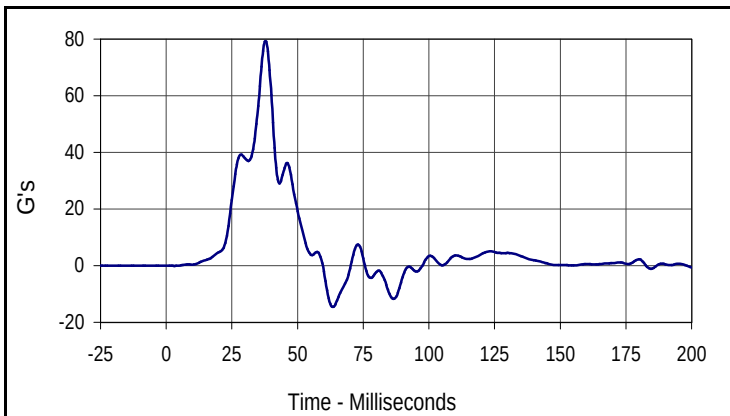
Curve Description			
Passenger Pelvis Primary Y			
CURNO	Type	SAE Class	Units
038	FIR	FIR100	G's
Max	Time	Min	Time
69.6	23.1	-13.9	61.3

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

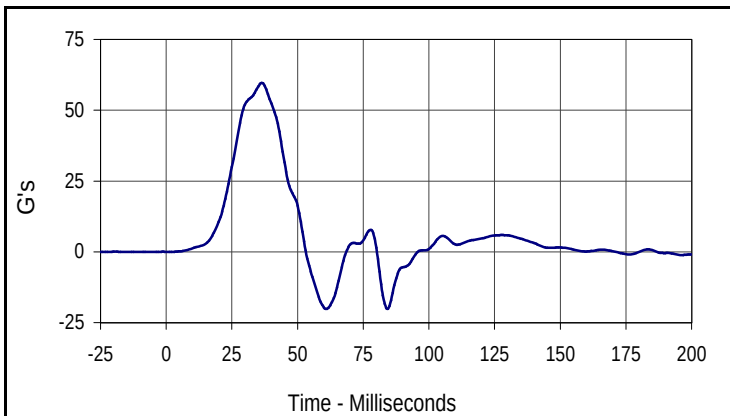
Test Date: 7/22/04
 NHTSA No.: F50201



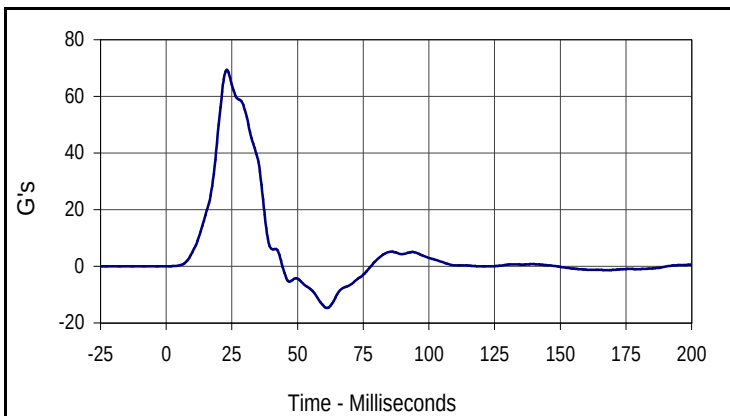
Curve Description			
Passenger Upper Rib Redundant Y			
CURNO	Type	SAE Class	Units
039	FIR	FIR100	G's
Max	Time	Min	Time
77.4	37.5	-15.3	85.6



Curve Description			
Passenger Lower Rib Redundant Y			
CURNO	Type	SAE Class	Units
040	FIR	FIR100	G's
Max	Time	Min	Time
79.1	38.1	-14.4	63.1



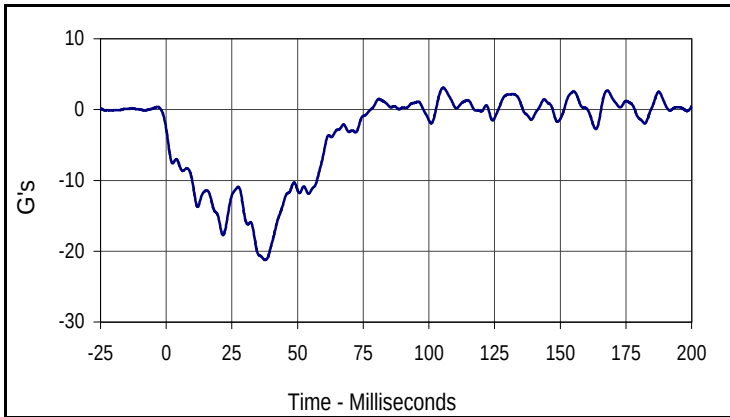
Curve Description			
Passenger Lower Spine Redundant Y			
CURNO	Type	SAE Class	Units
041	FIR	FIR100	G's
Max	Time	Min	Time
59.7	36.3	-20.1	84.4



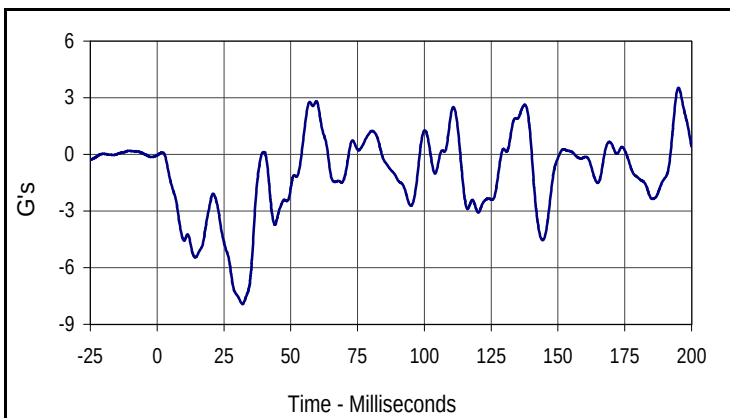
Curve Description			
Passenger Pelvis Redundant Y			
CURNO	Type	SAE Class	Units
042	FIR	FIR100	G's
Max	Time	Min	Time
69.4	23.1	-14.7	61.3

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

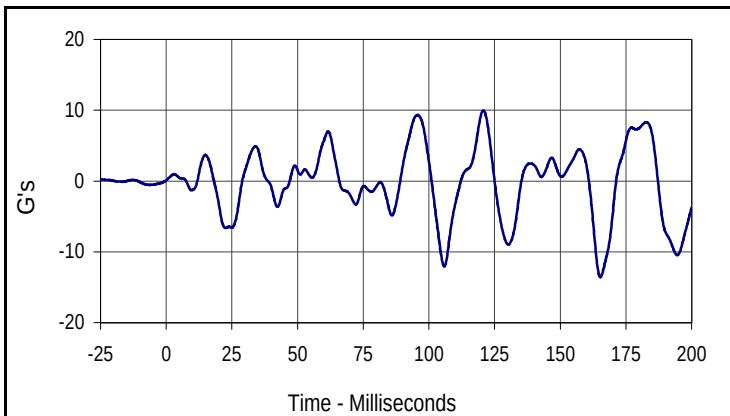
Test Date: 7/22/04
 NHTSA No.: F50201



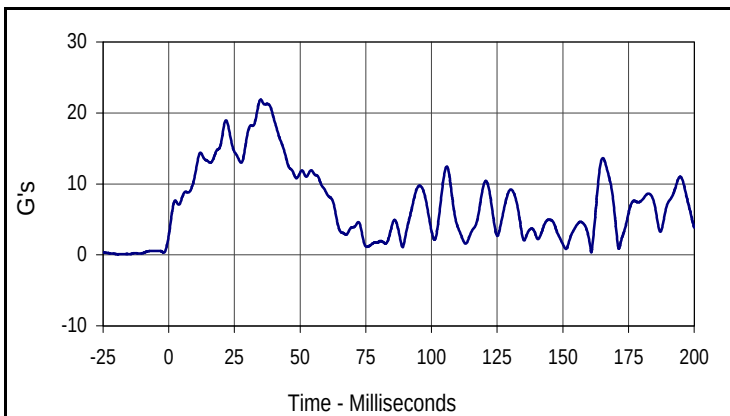
Curve Description			
MDB CG X			
CURNO	Type	SAE Class	Units
071	FIL	60	G's
Max	Time	Min	Time
3.1	105.4	-21.2	37.7



Curve Description			
MDB CG Y			
CURNO	Type	SAE Class	Units
072	FIL	60	G's
Max	Time	Min	Time
3.5	195.1	-7.9	32.0



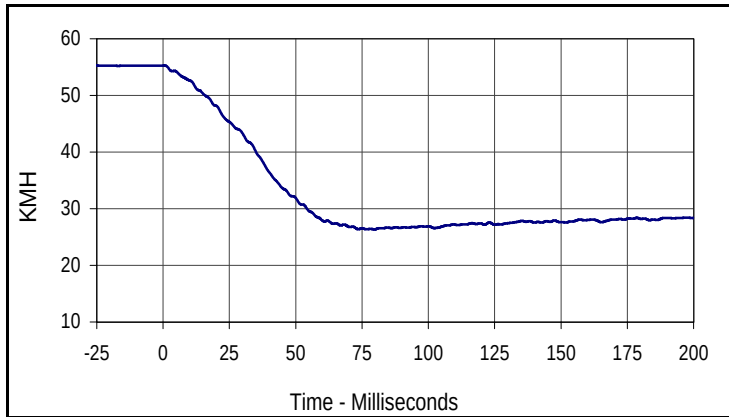
Curve Description			
MDB CG Z			
CURNO	Type	SAE Class	Units
073	FIL	60	G's
Max	Time	Min	Time
10.0	120.7	-13.6	165.3



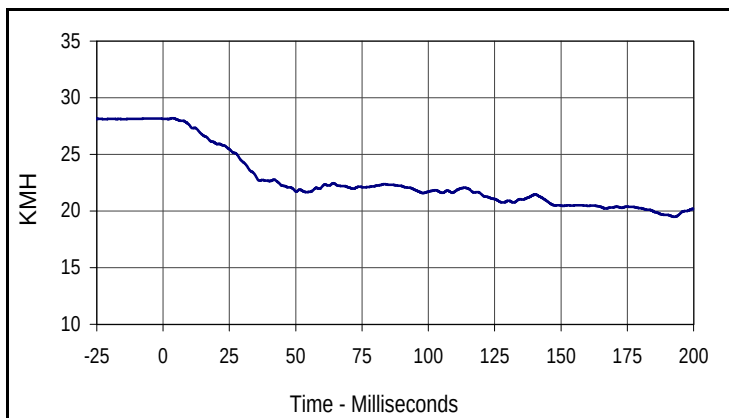
Curve Description			
CG Resultant			
CURNO	Type	SAE Class	Units
071	RES	60	G's
Max	Time	Min	Time
21.9	35.0	0.4	160.9

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

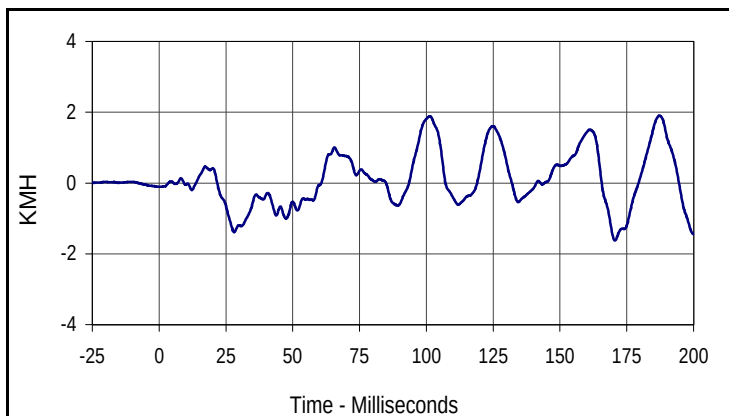
Test Date: 7/22/04
 NHTSA No.: F50201



Curve Description			
MDB CG X Velocity			
CURNO	Type	SAE Class	Units
071	IN1	180	KMH
Max	Time	Min	Time
55.3	0.4	26.3	79.7



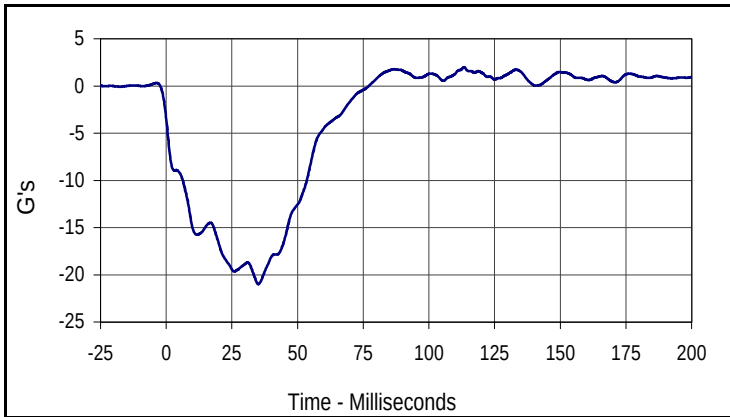
Curve Description			
MDB CG Y Velocity			
CURNO	Type	SAE Class	Units
072	IN1	180	KMH
Max	Time	Min	Time
28.2	3.6	19.5	192.7



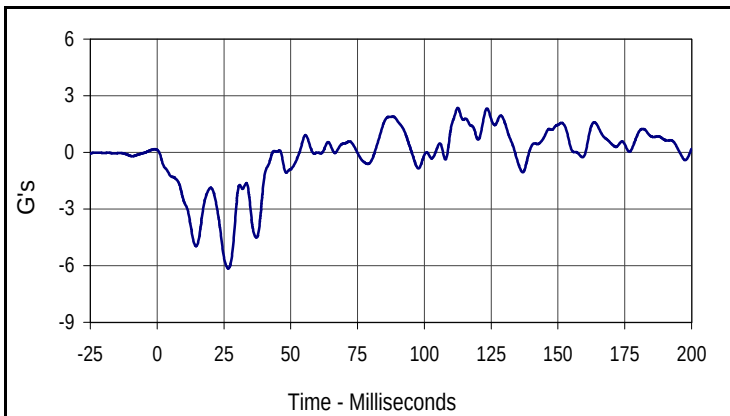
Curve Description			
MDB CG Z Velocity			
CURNO	Type	SAE Class	Units
073	IN1	180	KMH
Max	Time	Min	Time
1.9	187.3	-1.6	170.6

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

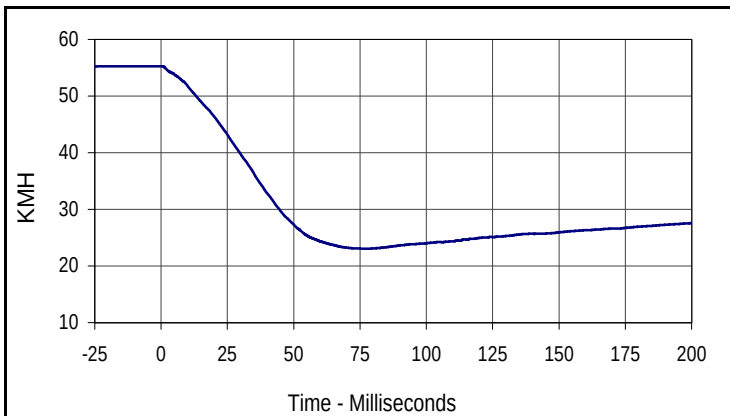
Test Date: 7/22/04
 NHTSA No.: F50201



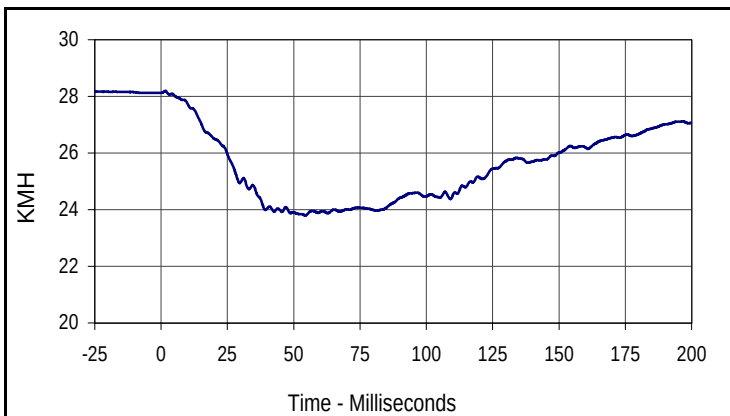
Curve Description			
MDB Rear X			
CURNO	Type	SAE Class	Units
074	FIL	60	G's
Max	Time	Min	Time
2.0	113.3	-21.0	35.1



Curve Description			
MDB Rear Y			
CURNO	Type	SAE Class	Units
075	FIL	60	G's
Max	Time	Min	Time
2.4	112.5	-6.1	26.6



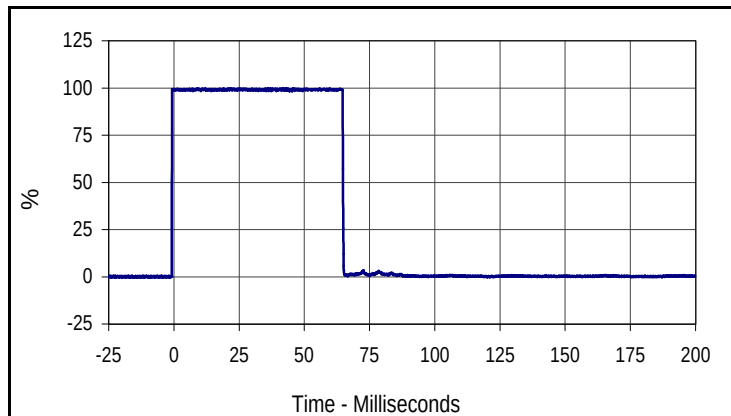
Curve Description			
MDB Rear X Velocity			
CURNO	Type	SAE Class	Units
074	IN1	180	KMH
Max	Time	Min	Time
55.3	0.0	23.0	77.0



Curve Description			
MDB Rear Y Velocity			
CURNO	Type	SAE Class	Units
075	IN1	180	KMH
Max	Time	Min	Time
28.2	1.6	23.8	54.4

Test Vehicle: 2005 Ford Focus 3 Door Hatchback
 Test Program: 55/28 km/h Side Impact NCAP

Test Date: 7/22/04
 NHTSA No.: F50201



Curve Description			
MDB Right Bumper Contact			
CURNO	Type	SAE Class	Units
076	FIL	1000	%
Max	Time	Cross %	Time
100.0	36.1	50.0	-0.7

APPENDIX C
SID/HIII CONFIGURATION AND PERFORMANCE VERIFICATION DATA

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



Calibration Data Sheet Side Impact Hybrid Dummy (SID/HIII) External Measurements

ATD Serial No.: 274

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
SH- Seated Height	mm	889 to 909	905	Pass
HP- Hip Point Height	mm	99 (reference)	99	Pass
RH- Rib Height	mm	502 to 520	507	Pass
KH- Knee Pivot From Back Line	mm	511 to 526	518	Pass
KV- Knee Pivot From Floor	mm	490 to 505	501	Pass
HW- Hip Width	mm	356 to 391	390	Pass
Overall Test Results				Pass

Laboratory Technician

July 16, 2004
Test Date



Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Thorax Lateral Impact

ATD Serial No.: 274

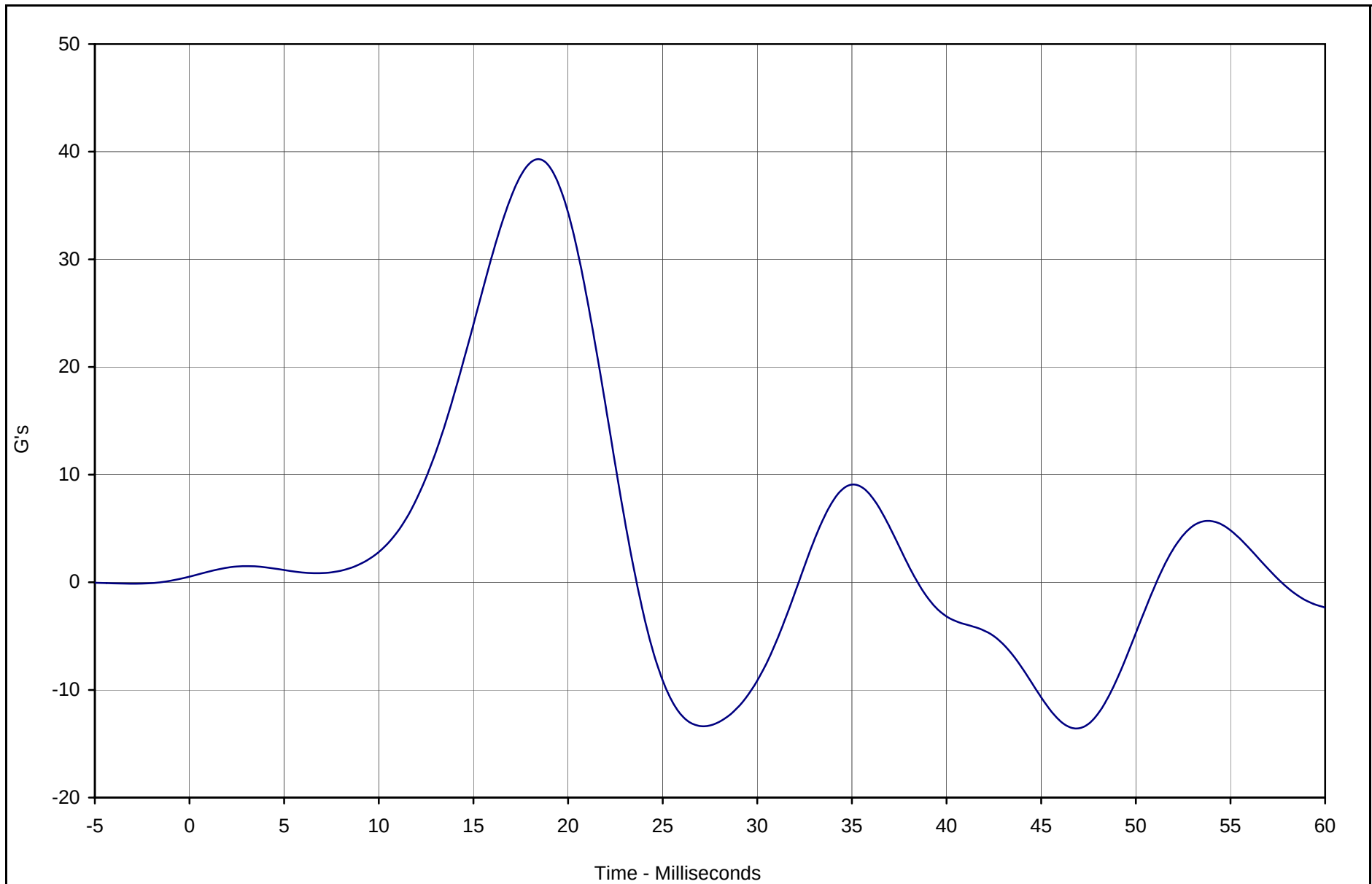
Test I.D.: TH07A

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.30	Pass
Upper Rib Acceleration	G's	37.0 to 46.0	39.1	Pass
Lower Rib Acceleration	G's	37.0 to 46.0	38.2	Pass
Thoracic Spine Acceleration	G's	15.0 to 22.0	19.9	Pass
Overall Test Results			Pass	

Laboratory Technician

July 15, 2004

Test Date



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Upper Rib Y Acceleration	001	FIL	G's	39.1	18.1	-13.6	46.9	FIR100

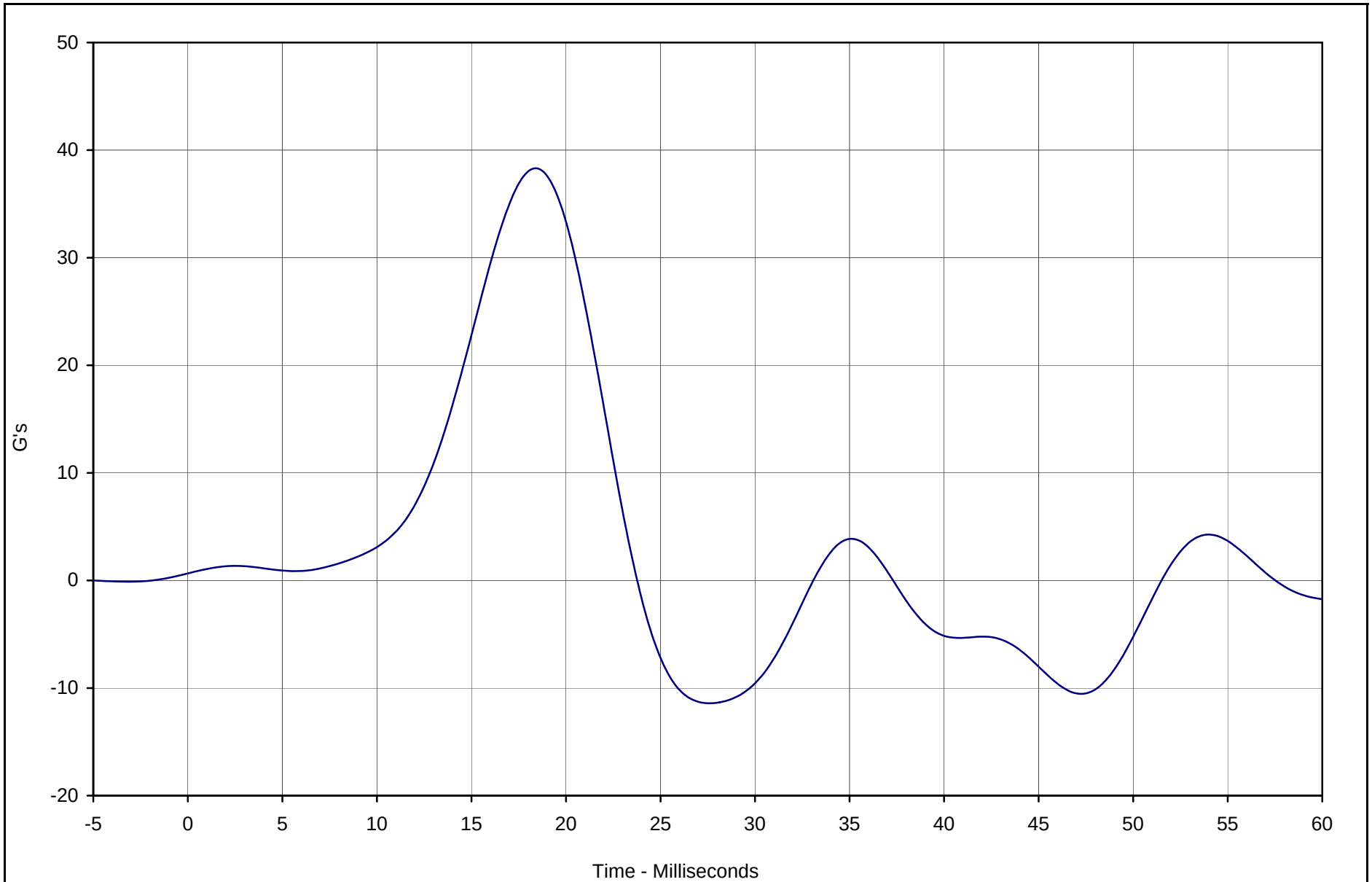


Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 274

Test Date: 7/15/04

Test I.D.: TH07A



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Lower Rib Y Acceleration	002	FIL	G's	38.2	18.1	-11.4	27.5	FIR100

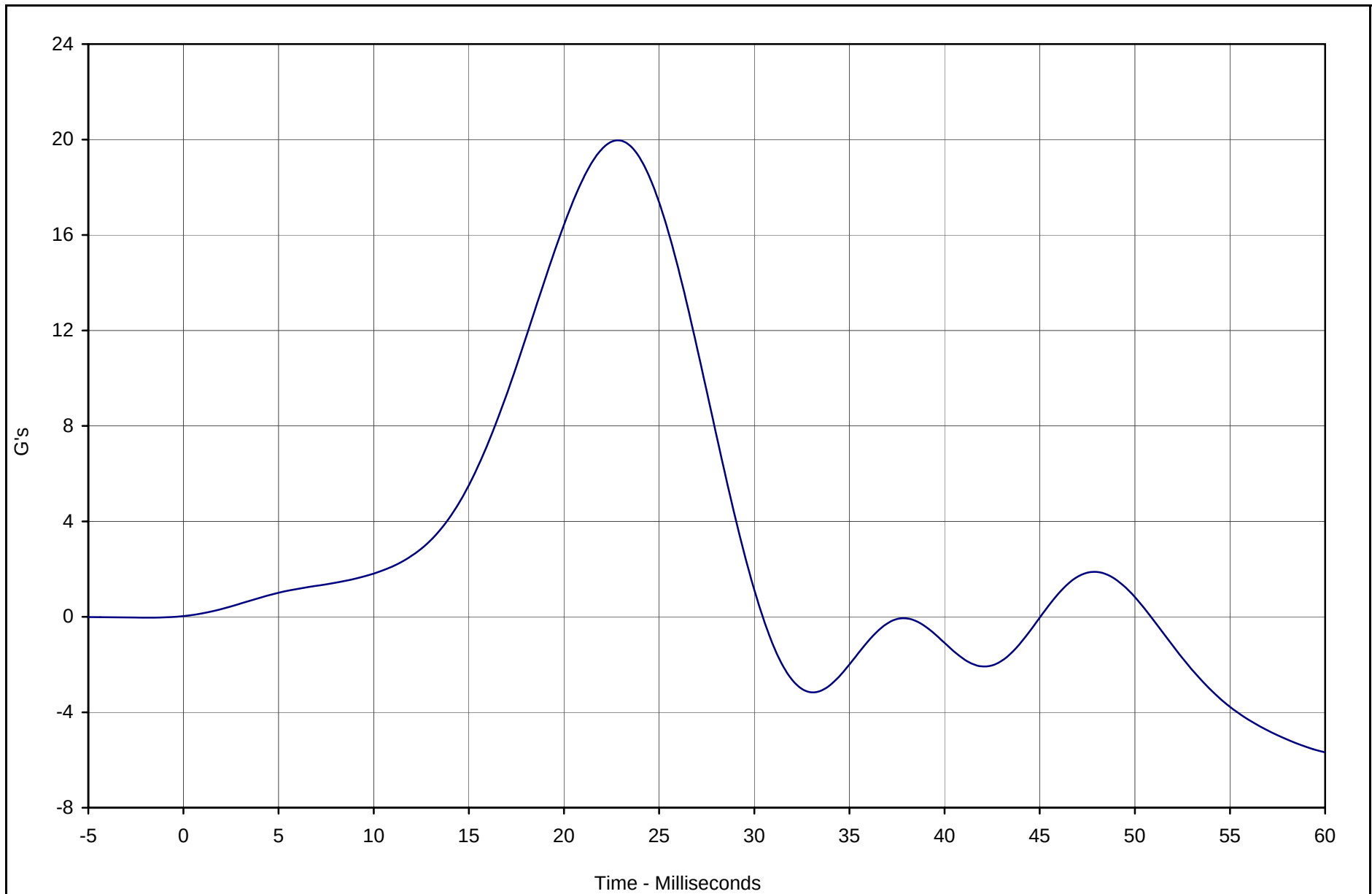


Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 274

Test Date: 7/15/04

Test I.D.: TH07A



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Lower Spine Y Acceleration	003	FIL	G's	19.9	23.1	-5.7	60.0	FIR100



Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 274

Test Date: 7/15/04

Test I.D.: TH07A



Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Pelvis Lateral Impact

ATD Serial No.: 274

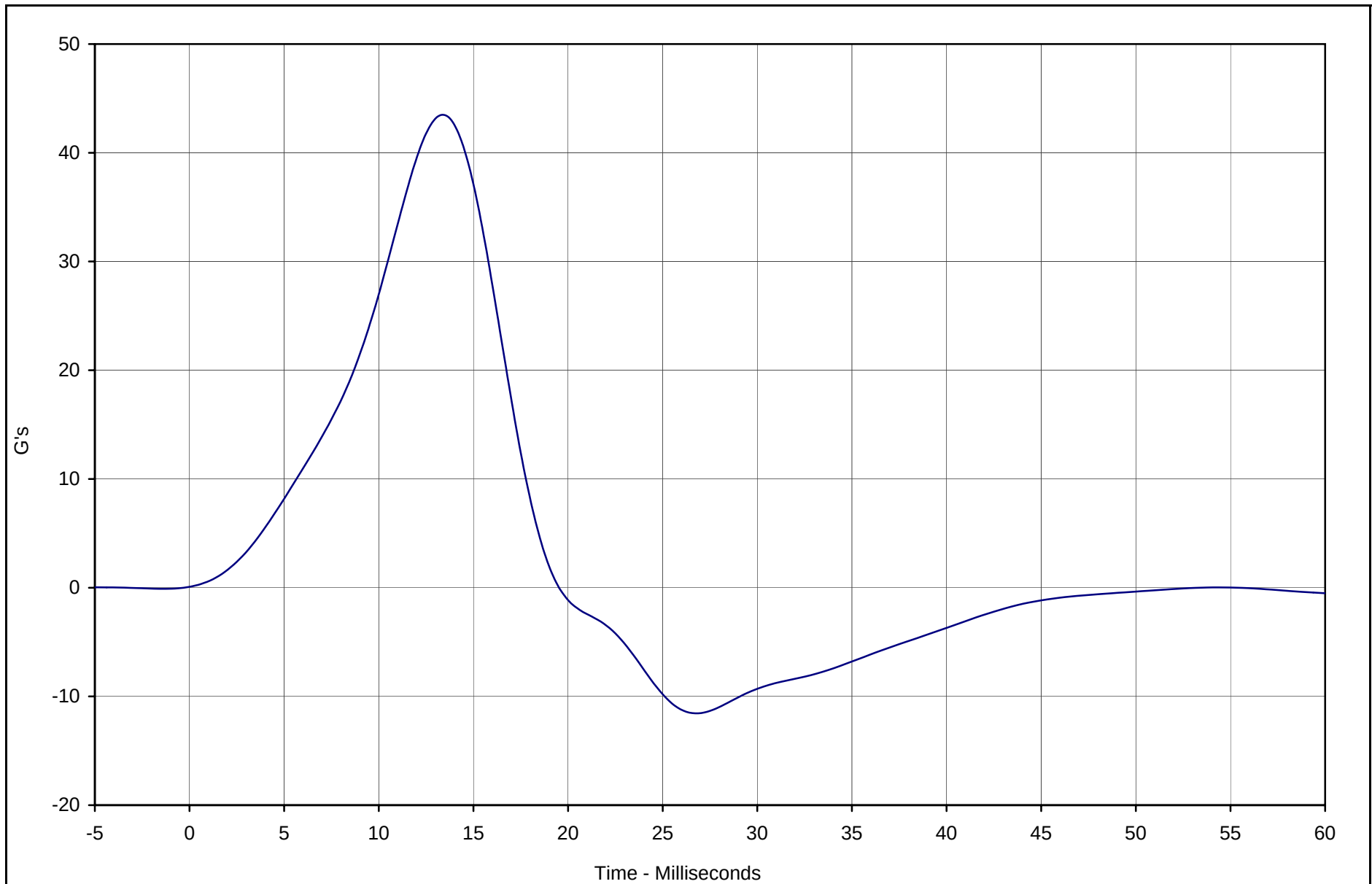
Test I.D.: PL07A

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.31	Pass
Peak Pelvis Acceleration	G's	40.0 to 60.0	43.3	Pass
Acceleration Time Above 20 G's	Msec.	3.0 to 7.0	6.9	Pass
Overall Test Results				Pass

Laboratory Technician

71/5/04

Test Date



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Pelvis Y Acceleration	001	FIL	G's	43.3	13.1	-11.6	26.9	FIR100



Test Vehicle: Side Impact Dummy (SID) Pelvis Lateral Impact

SID Serial No.: 274

Test Date: 71/5/04

Test I.D.: PL07A



Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Head Drop Lateral Impact Test

ATD Serial No.: 274

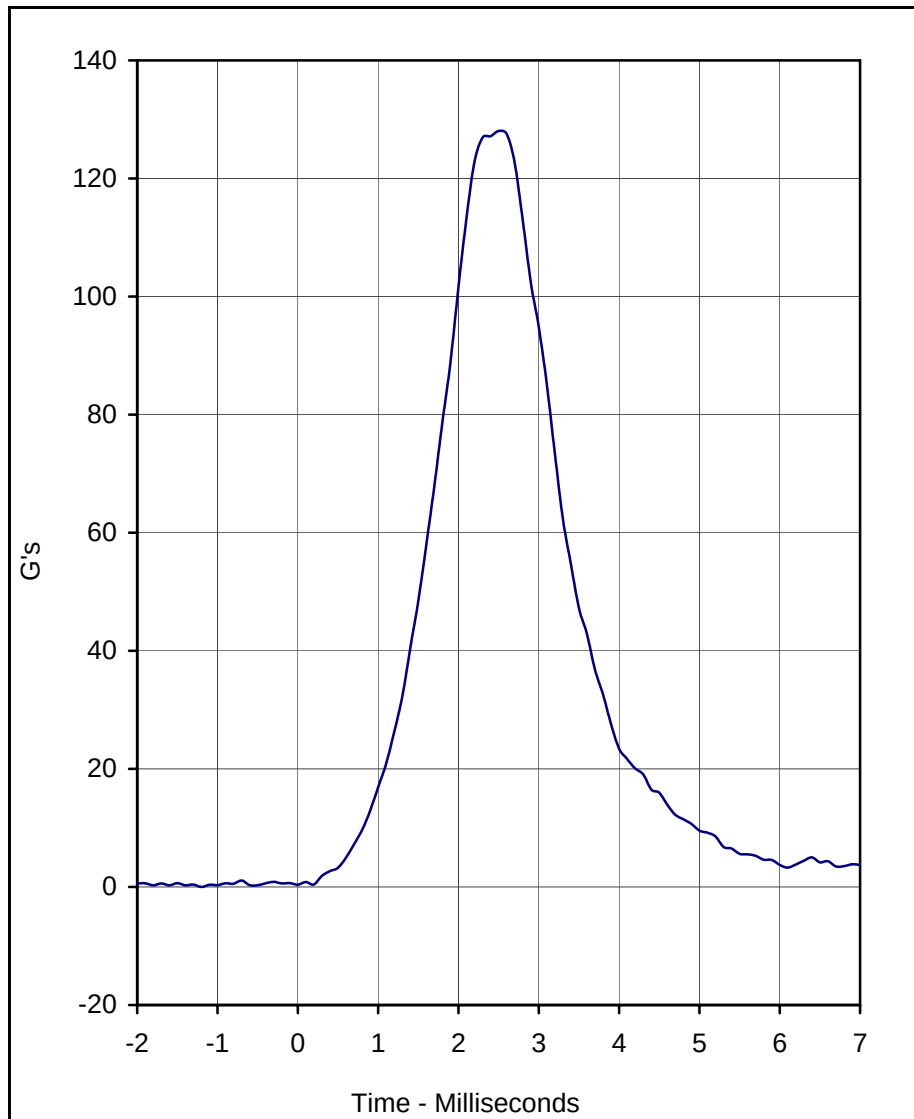
Test I.D.: HD07H

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	120.0 to 150.0	128.1	Pass
Peak Longitudinal Acceleration	G's	≤15.0	7.1	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Oscillations After Main Pulse	%	<10	7.4	Pass
Overall Test Results			Pass	

Laboratory Technician

July 16, 2004

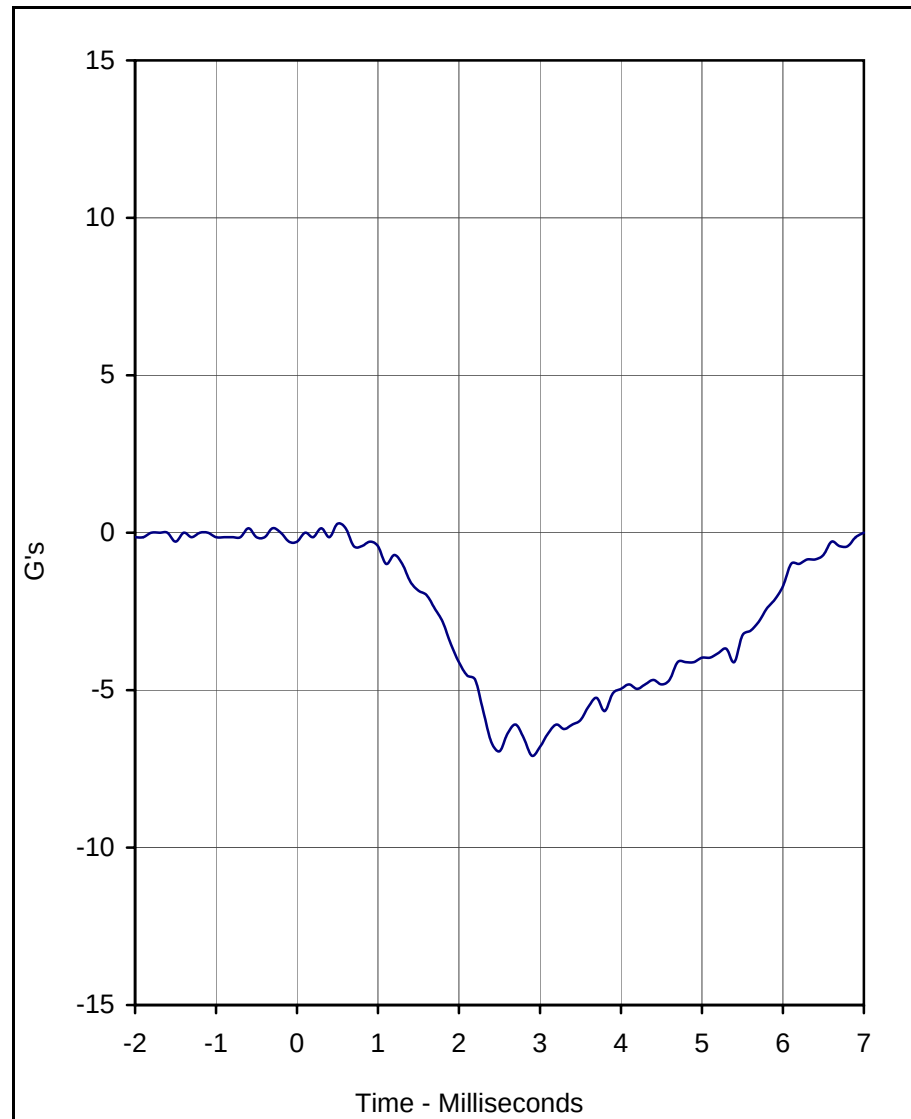
Test Date



Curve Description	CURNO	Type
Head Resultant	001	RES

Units	Max	Time	Min	Time	SAE Class
G's	128.1	2.5	0.0	-1.2	1000

Test Program: SID / HIII Head Drop Lateral Impact Test
 Test Date: 7/16/04



Curve Description	CURNO	Type
Head X	002	FIL

Units	Max	Time	Min	Time	SAE Class
G's	0.3	0.5	-7.1	2.9	1000

A.T.D. Serial No.: 274
 Test I.D.: HD07H





Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Neck Pendulum Lateral Test

ATD Serial No.: 274

Test I.D.: NB07F

Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	7.04	Pass
Pendulum Deceleration	10	Msec.	1.96 to 2.55	2.21	Pass
	20	Msec.	4.12 to 5.10	4.17	Pass
	30	Msec.	5.73 to 7.01	5.74	Pass
	40 to 70	Msec.	6.27 to 7.64	7.62	Pass
Maximum "D" Plane Rotation		Degrees	66.0 to 82.0	67.9	Pass
Maximum "D" Plane Rotation Time After Peak Moment		Msec.	2.0 to 15.0	7.0	Pass
"D" Plane Rotation Decay Time From Peak Angle to Zero Angle		Msec.	58.0 to 67.0	59.8	Pass
Calculated Moment About Occipital Condyle		N•m	73.0 to 88.0	74.8	Pass
Moment About Occipital Condyle Decay, Time From Positive Peak Value To 0 N•m		Msec.	49.0 to 64.0	56.6	Pass
Overall Test Results					Pass

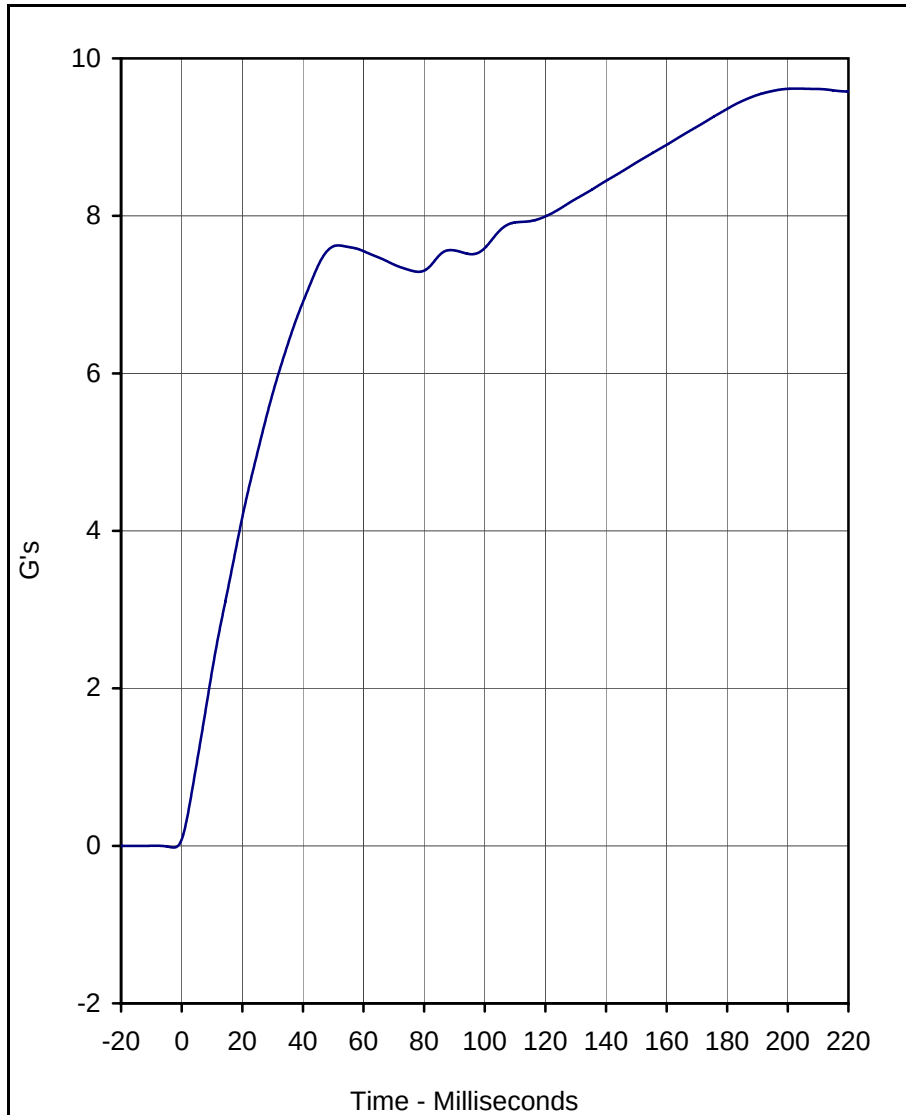
Laboratory Technician

July 15, 2004

Test Date

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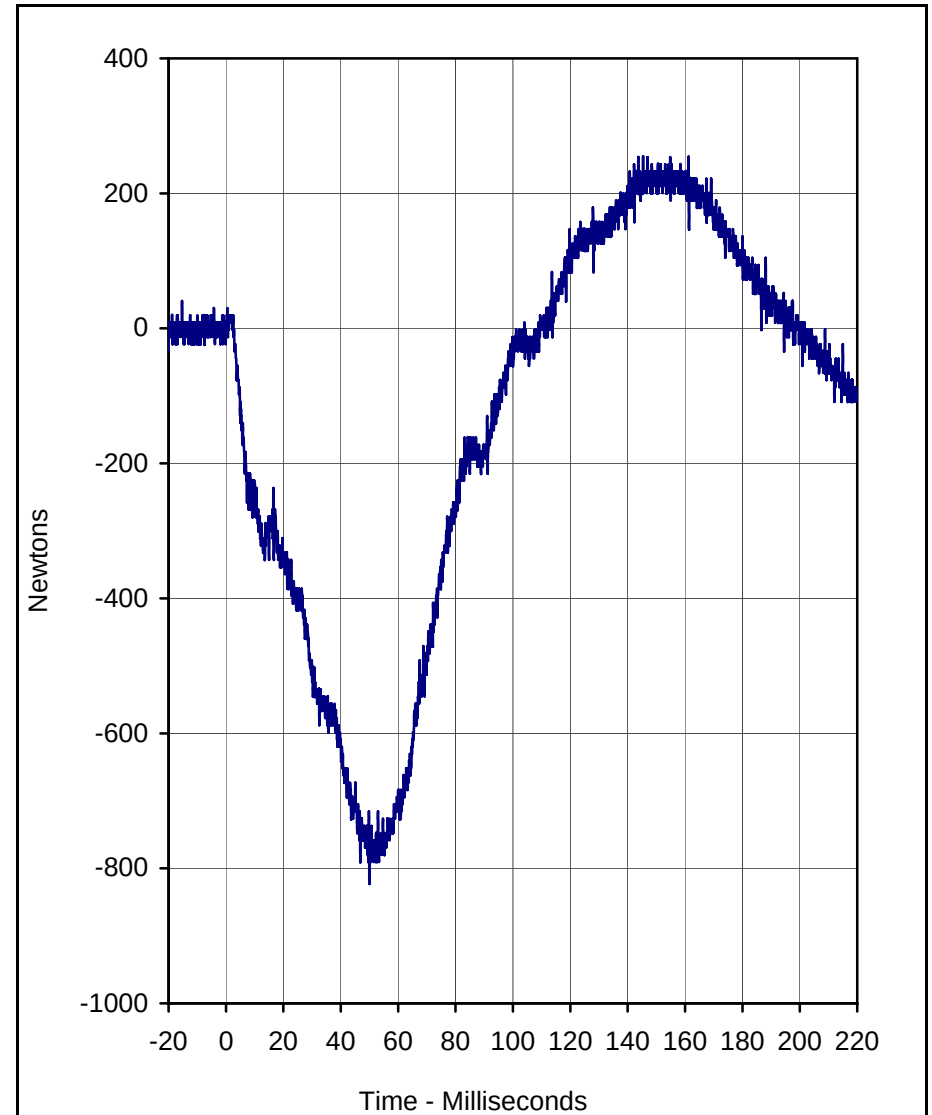
TR-P24118-01-NC



Curve Description	CURNO	Type
Pendulum Velocity	001	FIL

Units	Max	Time	Min	Time	SAE Class
G's	9.6	202.9	0.0	-2.6	60

Test Program: SID / HIII Neck Pendulum Lateral Test
 Test Date: 7/15/04

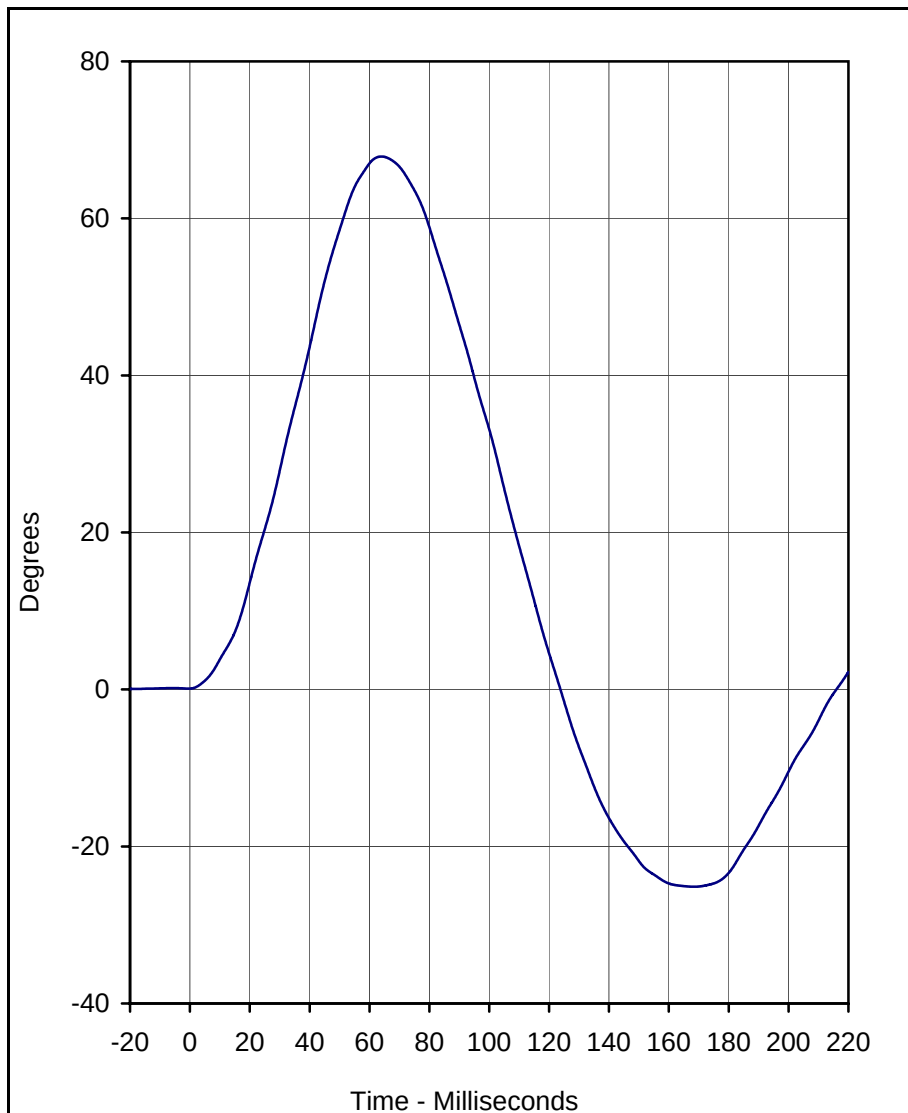


Curve Description	CURNO	Type
Neck Force Y	002	FIL

Units	Max	Time	Min	Time	SAE Class
Newtons	253.7	143.7	-822.4	50.0	1000

A.T.D. Serial No.: 274
 Test I.D.: NB07F



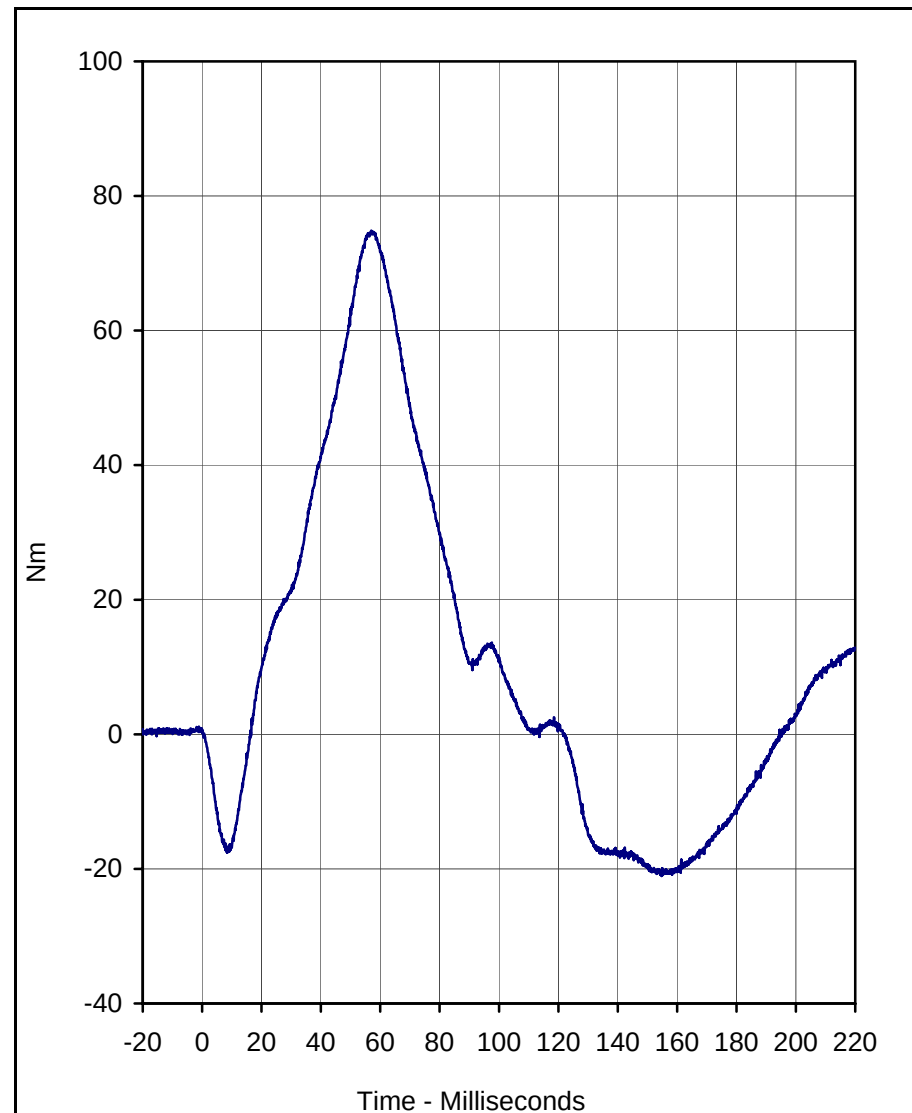


Curve Description	CURNO	Type
"D" Plane Rotation	003	FIL

Units	Max	Time	Min	Time	SAE Class
Degrees	67.9	64.0	-25.1	168.4	60

Test Program: SID / HIII Neck Pendulum Lateral Test

Test Date: 7/15/04



Curve Description	CURNO	Type
Moment About Occipital Condyle	004	FIL

Units	Max	Time	Min	Time	SAE Class
Nm	74.8	57.0	-21.0	154.8	60

A.T.D. Serial No.: 274

Test I.D.: NB07F





Calibration Data Sheet Side Impact Hybrid Dummy (SID/HIII) External Measurements

ATD Serial No.: 275

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
SH- Seated Height	mm	889 to 909	900	Pass
HP- Hip Point Height	mm	99 (reference)	99	Pass
RH- Rib Height	mm	502 to 520	516	Pass
KH- Knee Pivot From Back Line	mm	511 to 526	515	Pass
KV- Knee Pivot From Floor	mm	490 to 505	500	Pass
HW- Hip Width	mm	356 to 391	365	Pass
Overall Test Results				Pass

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Laboratory Technician

July 16, 2004

Test Date



Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Thorax Lateral Impact

ATD Serial No.: 275

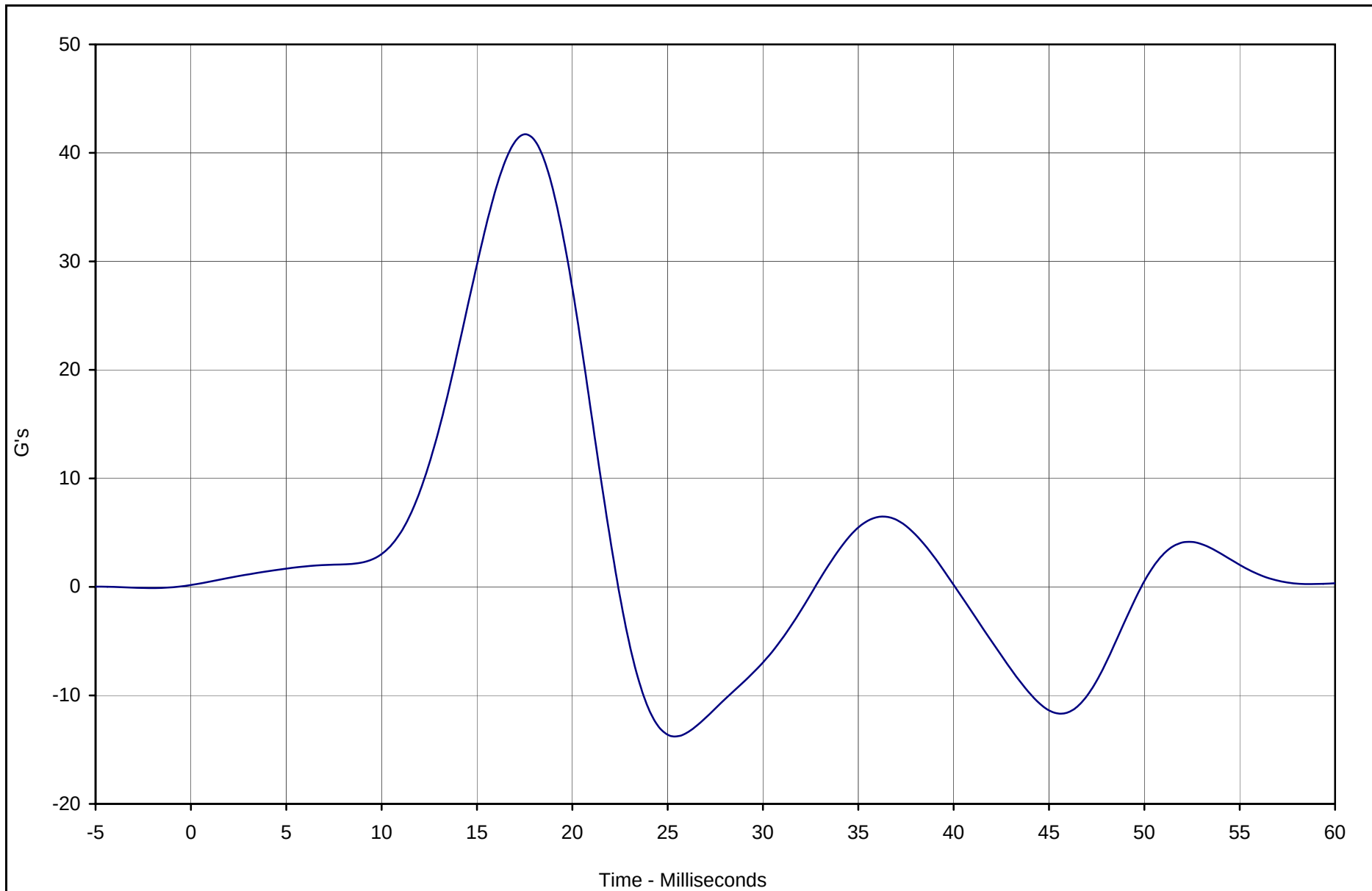
Test I.D.: TH07B

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.25	Pass
Upper Rib Acceleration	G's	37.0 to 46.0	41.7	Pass
Lower Rib Acceleration	G's	37.0 to 46.0	40.9	Pass
Thoracic Spine Acceleration	G's	15.0 to 22.0	21.0	Pass
Overall Test Results			Pass	

Laboratory Technician

July 15, 2004

Test Date



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Upper Rib Y Acceleration	001	FIL	G's	41.7	17.5	-13.7	25.6	FIR100

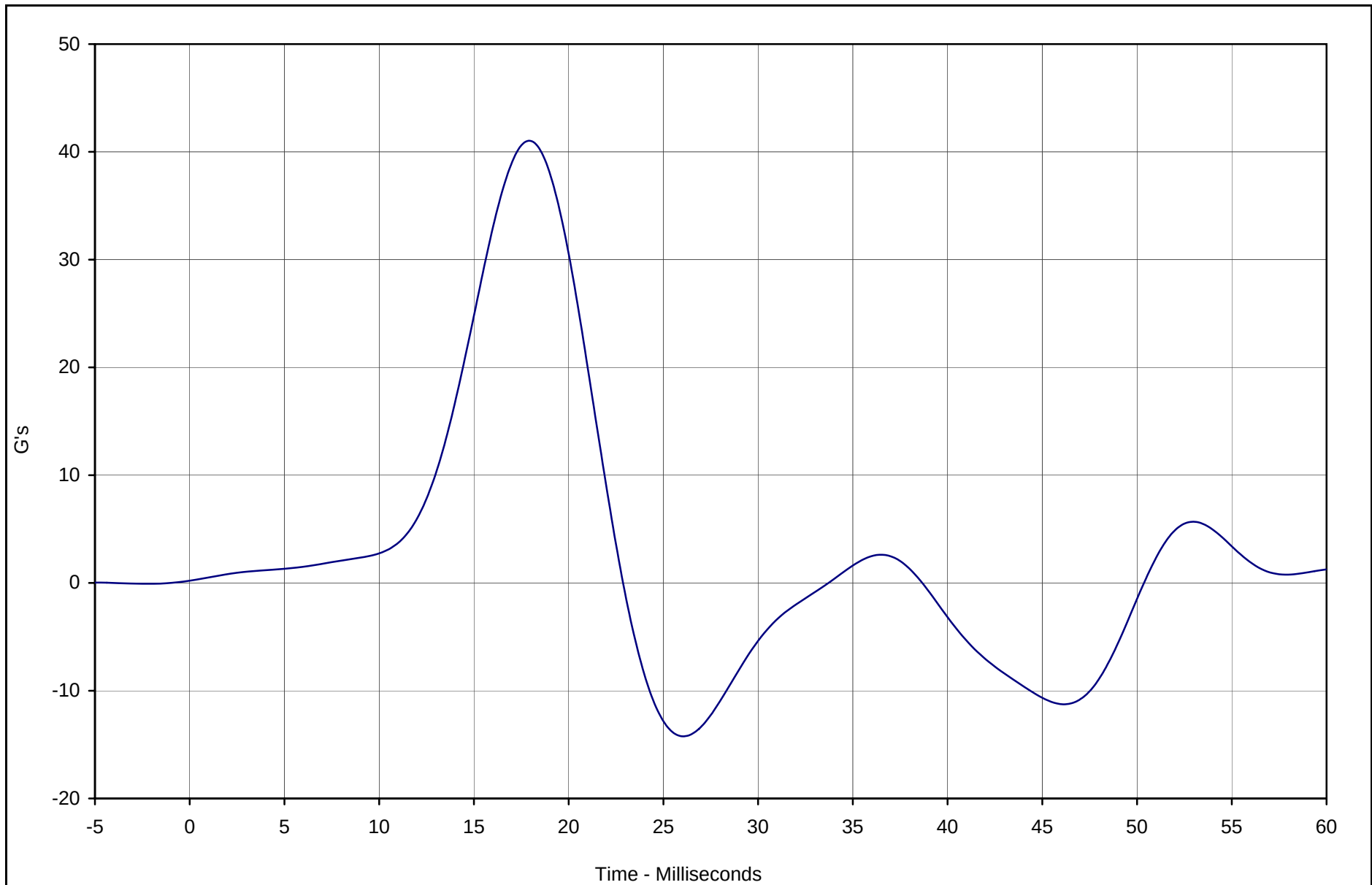


Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 275

Test Date: 7/15/04

Test I.D.: TH07B



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Lower Rib Y Acceleration	002	FIL	G's	40.9	18.1	-14.2	26.3	FIR100

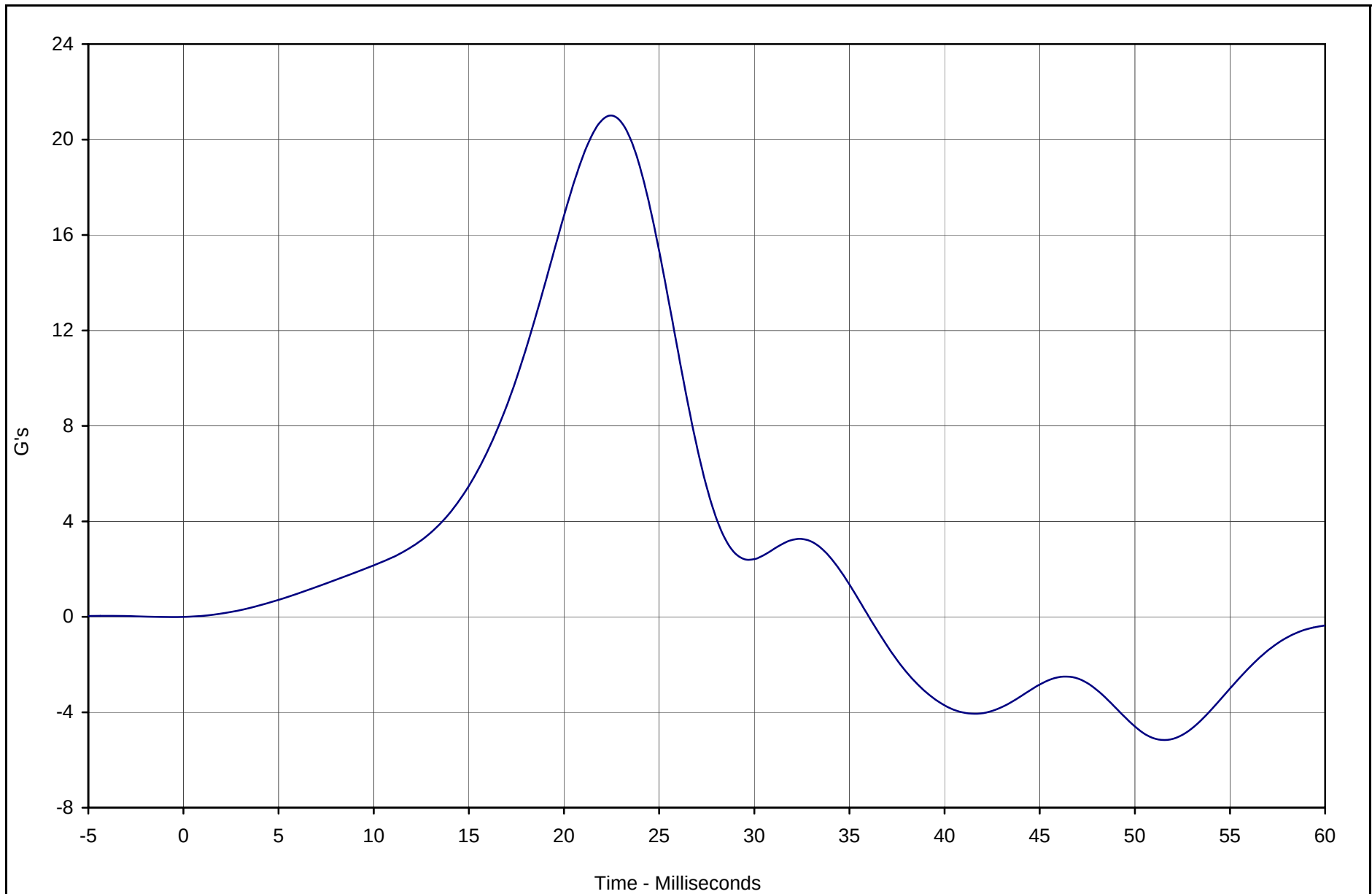


Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 275

Test Date: 7/15/04

Test I.D.: TH07B



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Lower Spine Y Acceleration	003	FIL	G's	21.0	22.5	-5.1	51.3	FIR100



Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 275

Test Date: 7/15/04

Test I.D.: TH07B



Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Pelvis Lateral Impact

ATD Serial No.: 275

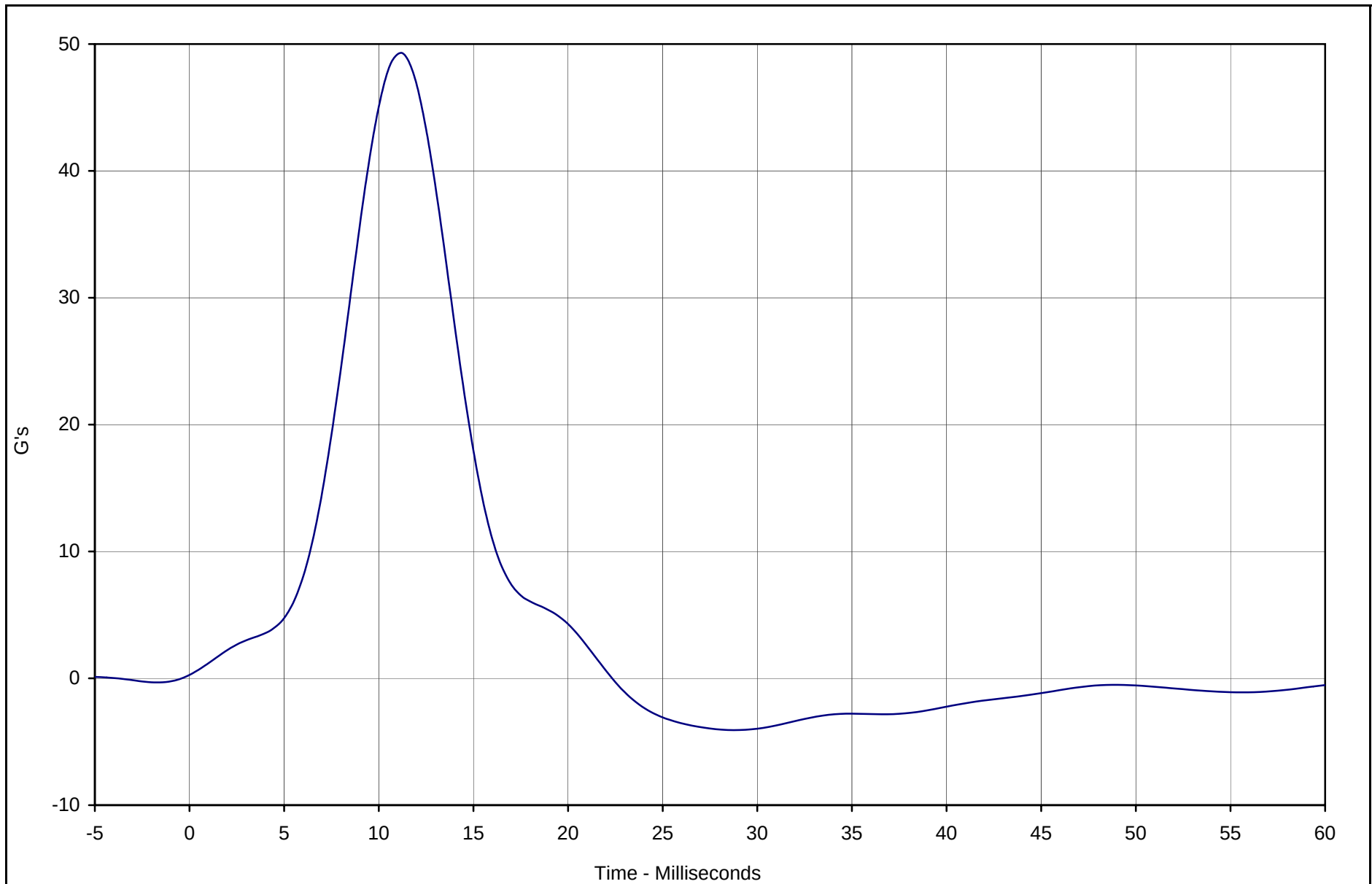
Test I.D.: PL07C

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.27	Pass
Peak Pelvis Acceleration	G's	40.0 to 60.0	49.3	Pass
Acceleration Time Above 20 G's	Msec.	3.0 to 7.0	6.9	Pass
Overall Test Results				Pass

Laboratory Technician

July 15, 2004

Test Date



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Pelvis Y Acceleration	001	FIL	G's	49.3	11.3	-4.1	28.8	FIR100



Test Vehicle: Side Impact Dummy (SID) Pelvis Lateral Impact

SID Serial No.: 275

Test Date: 7/15/04

Test I.D.: PL07C



Calibration Data Sheet Side Impact Hybrid Dummy (SID/HIII) Head Drop Lateral Impact Test

ATD Serial No.: 275

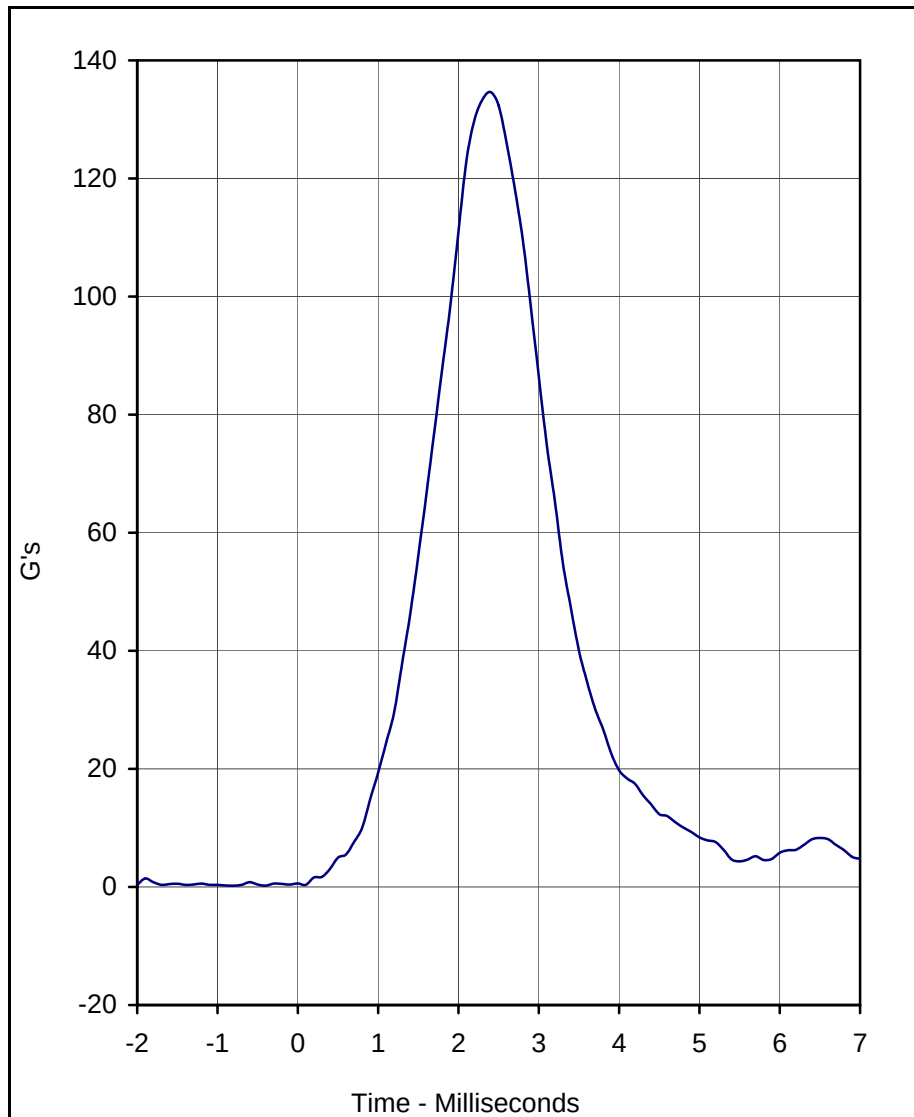
Test I.D.: HD07A

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	120.0 to 150.0	134.6	Pass
Peak Longitudinal Acceleration	G's	≤15.0	7.7	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Oscillations After Main Pulse	%	<10	6.2	Pass
Overall Test Results			Pass	

Laboratory Technician

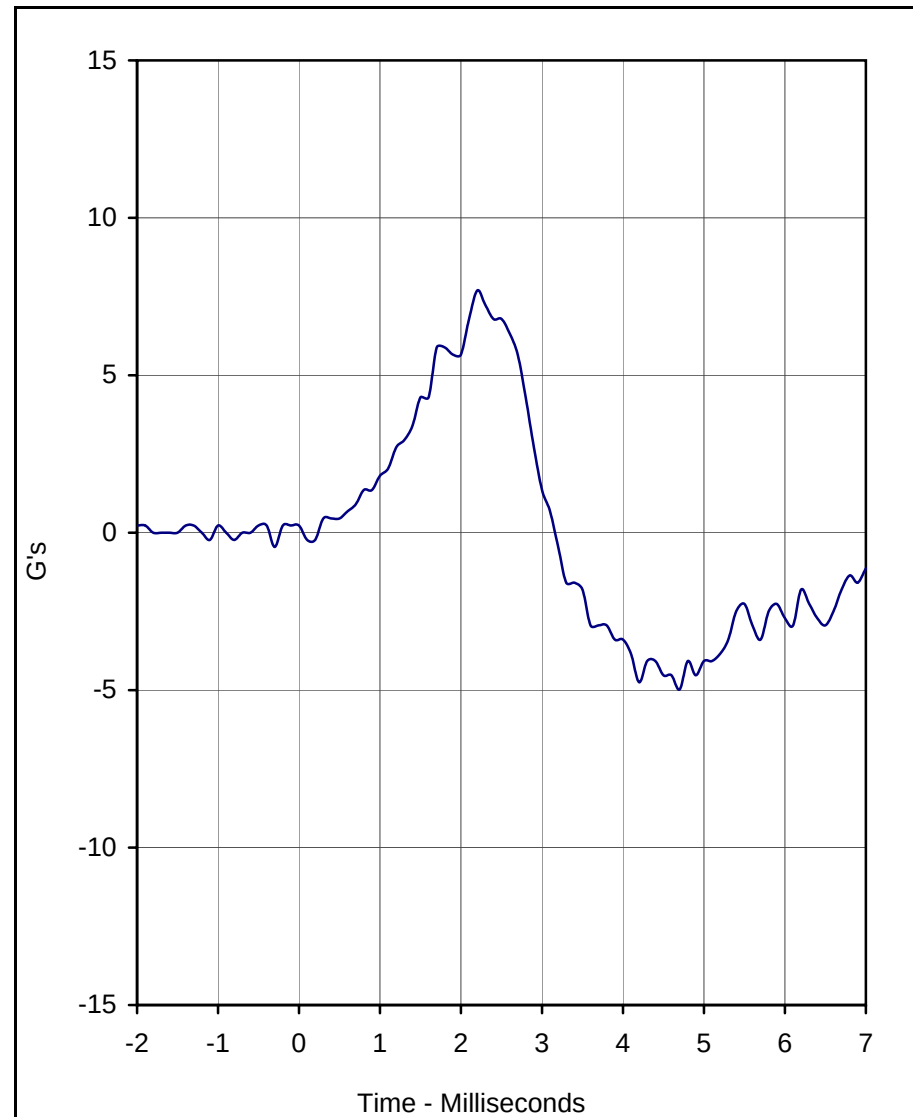
July 16, 2004

Test Date



Curve Description	CURNO	Type
Head Resultant	001	RES

Units	Max	Time	Min	Time	SAE Class
G's	134.6	2.4	0.2	-0.8	1000



Curve Description	CURNO	Type
Head X	002	FIL

Units	Max	Time	Min	Time	SAE Class
G's	7.7	2.2	-5.0	4.7	1000

Test Program: SID / HIII Head Drop Lateral Impact Test
 Test Date: 7/16/04

A.T.D. Serial No.: 275
 Test I.D.: HD07A





Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Neck Pendulum Lateral Test

ATD Serial No.: 275

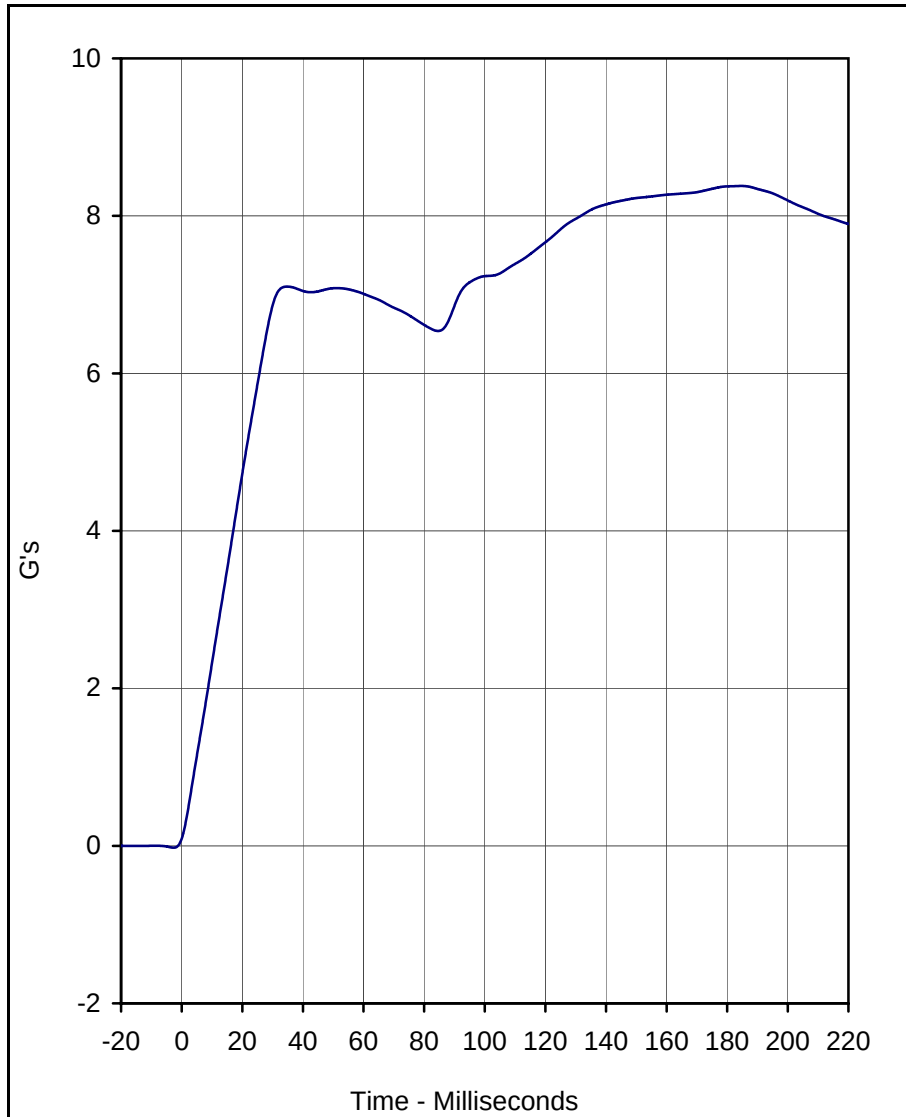
Test I.D.: NB07A

Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	7.04	Pass
Pendulum Deceleration	10	Msec.	1.96 to 2.55	2.32	Pass
	20	Msec.	4.12 to 5.10	4.73	Pass
	30	Msec.	5.73 to 7.01	6.86	Pass
	40 to 70	Msec.	6.27 to 7.64	7.08	Pass
Maximum "D" Plane Rotation		Degrees	66.0 to 82.0	78.0	Pass
Maximum "D" Plane Rotation Time After Peak Moment		Msec.	2.0 to 15.0	7.0	Pass
"D" Plane Rotation Decay Time From Peak Angle to Zero Angle		Msec.	58.0 to 67.0	59.7	Pass
Calculated Moment About Occipital Condyle		N•m	73.0 to 88.0	79.5	Pass
Moment About Occipital Condyle Decay, Time From Positive Peak Value To 0 N•m		Msec.	49.0 to 64.0	49.9	Pass
Overall Test Results					Pass

Laboratory Technician

July 15, 2004

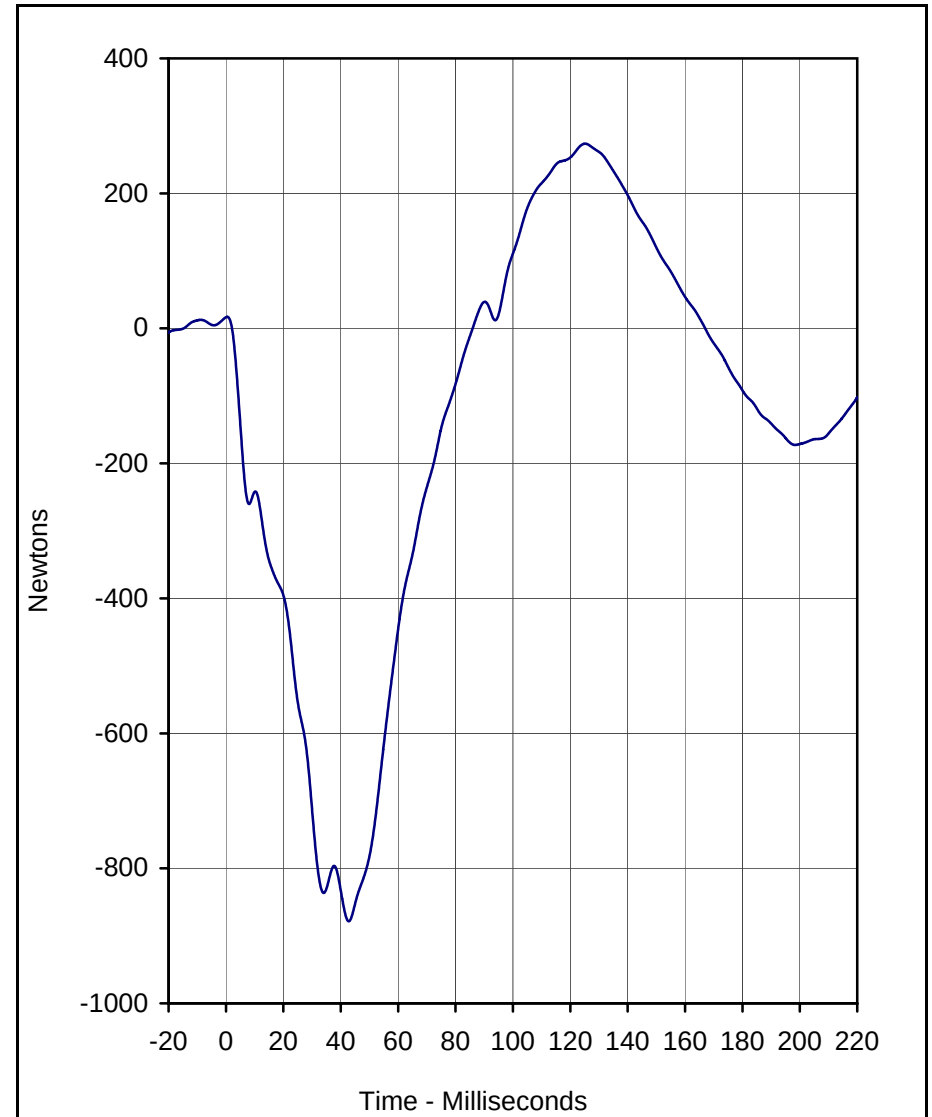
Test Date



Curve Description	CURNO	Type
Pendulum Velocity	001	FIL

Units	Max	Time	Min	Time	SAE Class
G's	8.4	184.6	0.0	-2.6	60

Test Program: SID / HIII Neck Pendulum Lateral Test
 Test Date: 7/15/04

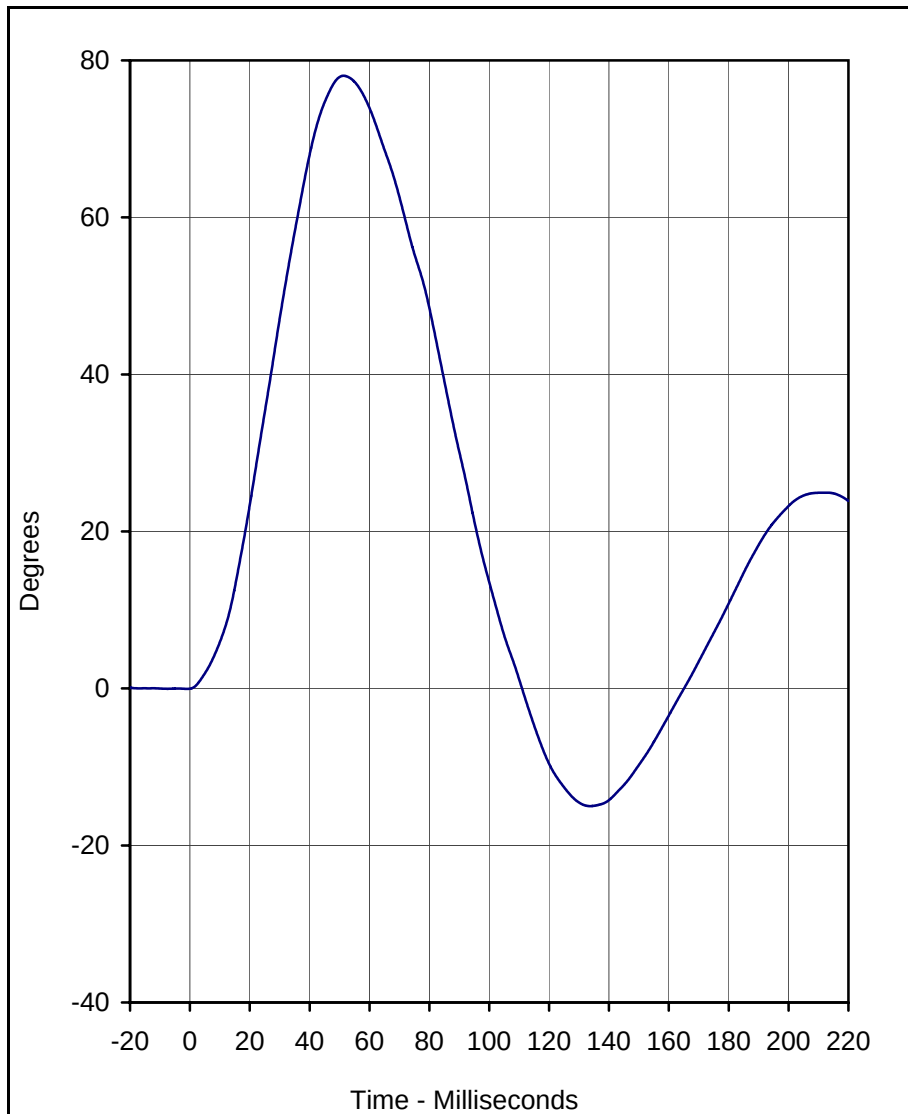


Curve Description	CURNO	Type
Neck Force Y	002	FIL

Units	Max	Time	Min	Time	SAE Class
Newtons	273.6	125.2	-878.4	42.8	60

A.T.D. Serial No.: 275
 Test I.D.: NB07A



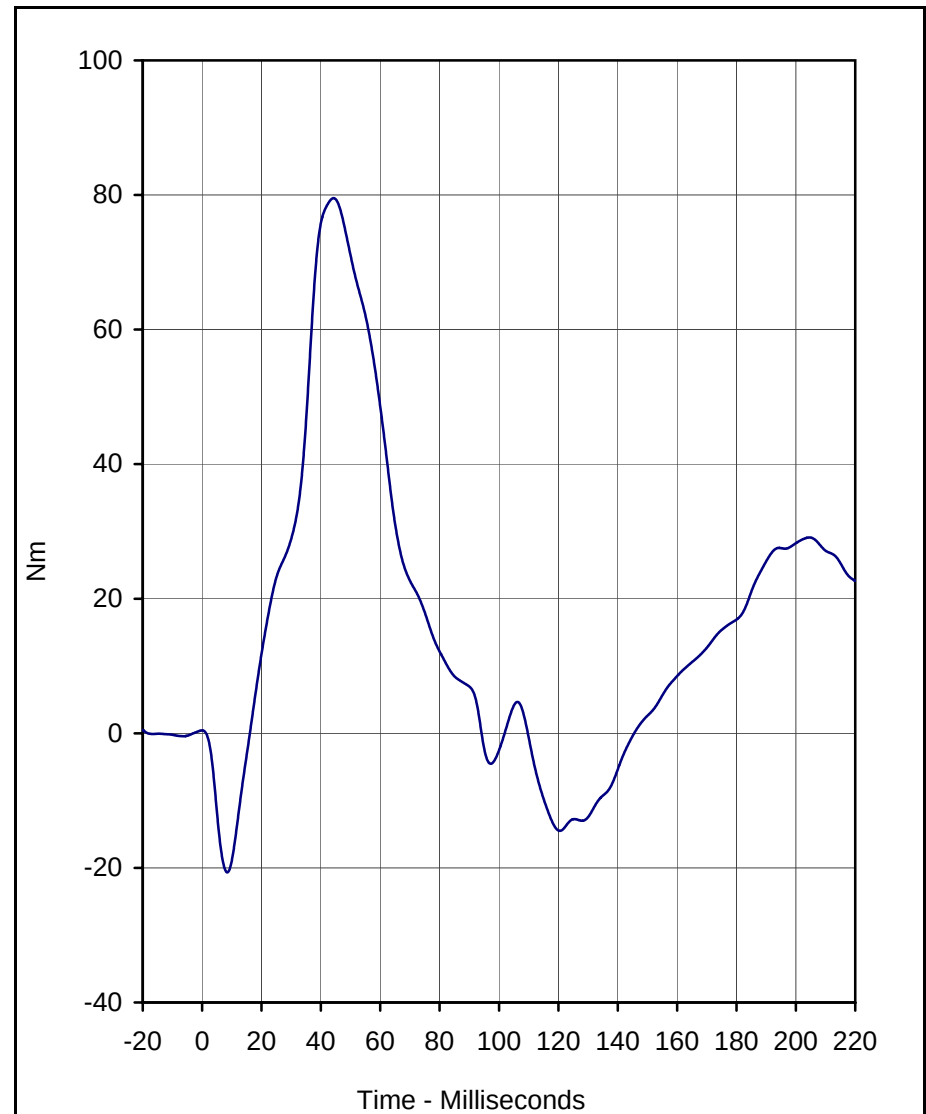


Curve Description	CURNO	Type
"D" Plane Rotation	003	FIL

Units	Max	Time	Min	Time	SAE Class
Degrees	78.0	51.3	-15.0	133.7	60

Test Program: SID / HIII Neck Pendulum Lateral Test

Test Date: 7/15/04



Curve Description	CURNO	Type
Moment About Occipital Condyle	004	FIL

Units	Max	Time	Min	Time	SAE Class
Nm	79.5	44.3	-20.7	8.5	60

A.T.D. Serial No.: 275

Test I.D.: NB07A



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



Calibration Data Sheet Side Impact Hybrid Dummy (SID/HIII) External Measurements

ATD Serial No.: 274

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
SH- Seated Height	mm	889 to 909	900	Pass
HP- Hip Point Height	mm	99 (reference)	99	Pass
RH- Rib Height	mm	502 to 520	505	Pass
KH- Knee Pivot From Back Line	mm	511 to 526	514	Pass
KV- Knee Pivot From Floor	mm	490 to 505	498	Pass
HW- Hip Width	mm	356 to 391	386	Pass
Overall Test Results				Pass

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Laboratory Technician

July 29, 2004

Test Date



Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Thorax Lateral Impact

ATD Serial No.: 274

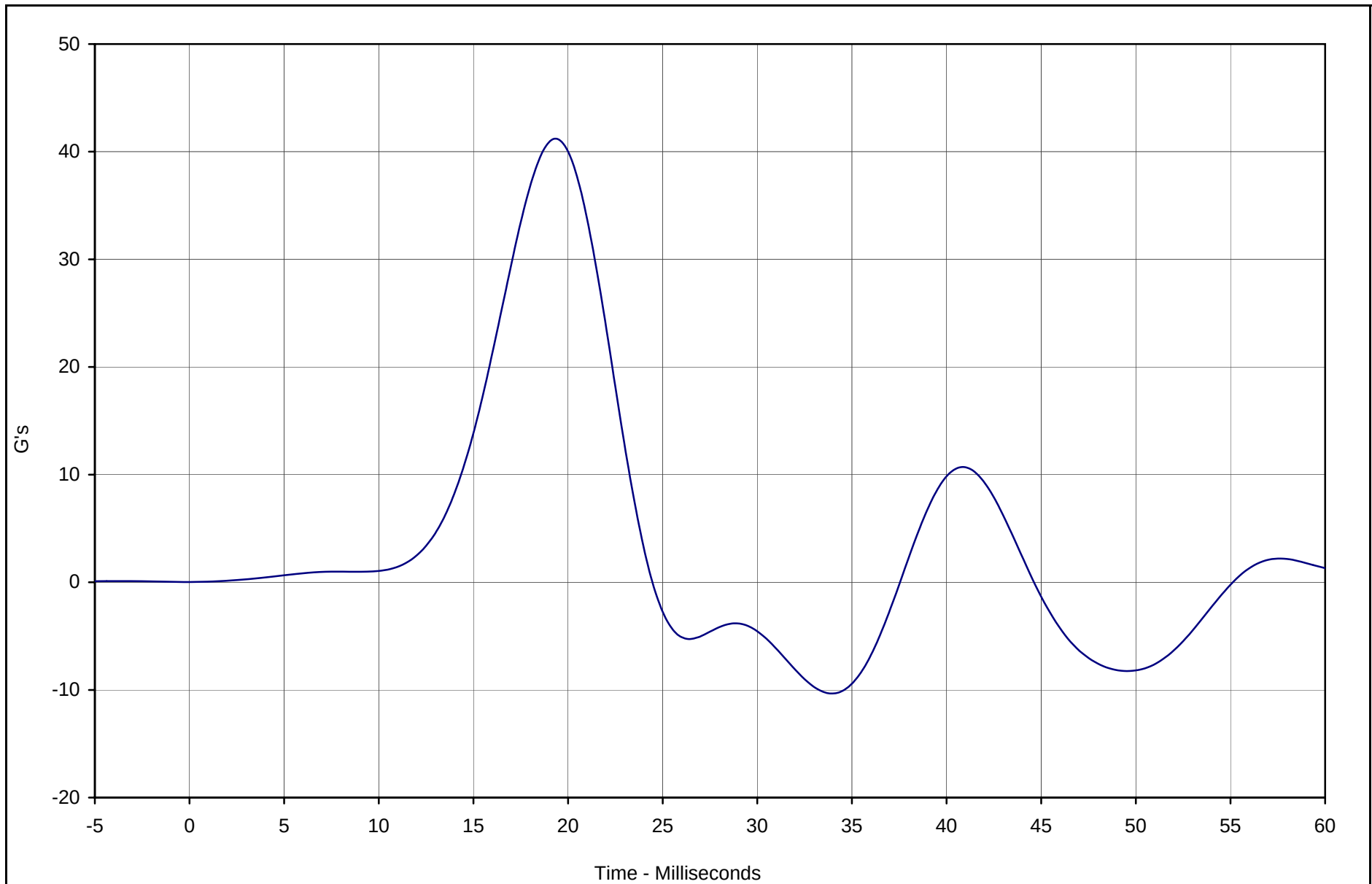
Test I.D.: TH07C

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.26	Pass
Upper Rib Acceleration	G's	37.0 to 46.0	41.2	Pass
Lower Rib Acceleration	G's	37.0 to 46.0	41.2	Pass
Thoracic Spine Acceleration	G's	15.0 to 22.0	18.5	Pass
Overall Test Results				Pass

Laboratory Technician

July 29, 2004

Test Date



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Upper Rib Y Acceleration	001	FIL	G's	41.2	19.4	-10.3	33.8	FIR100

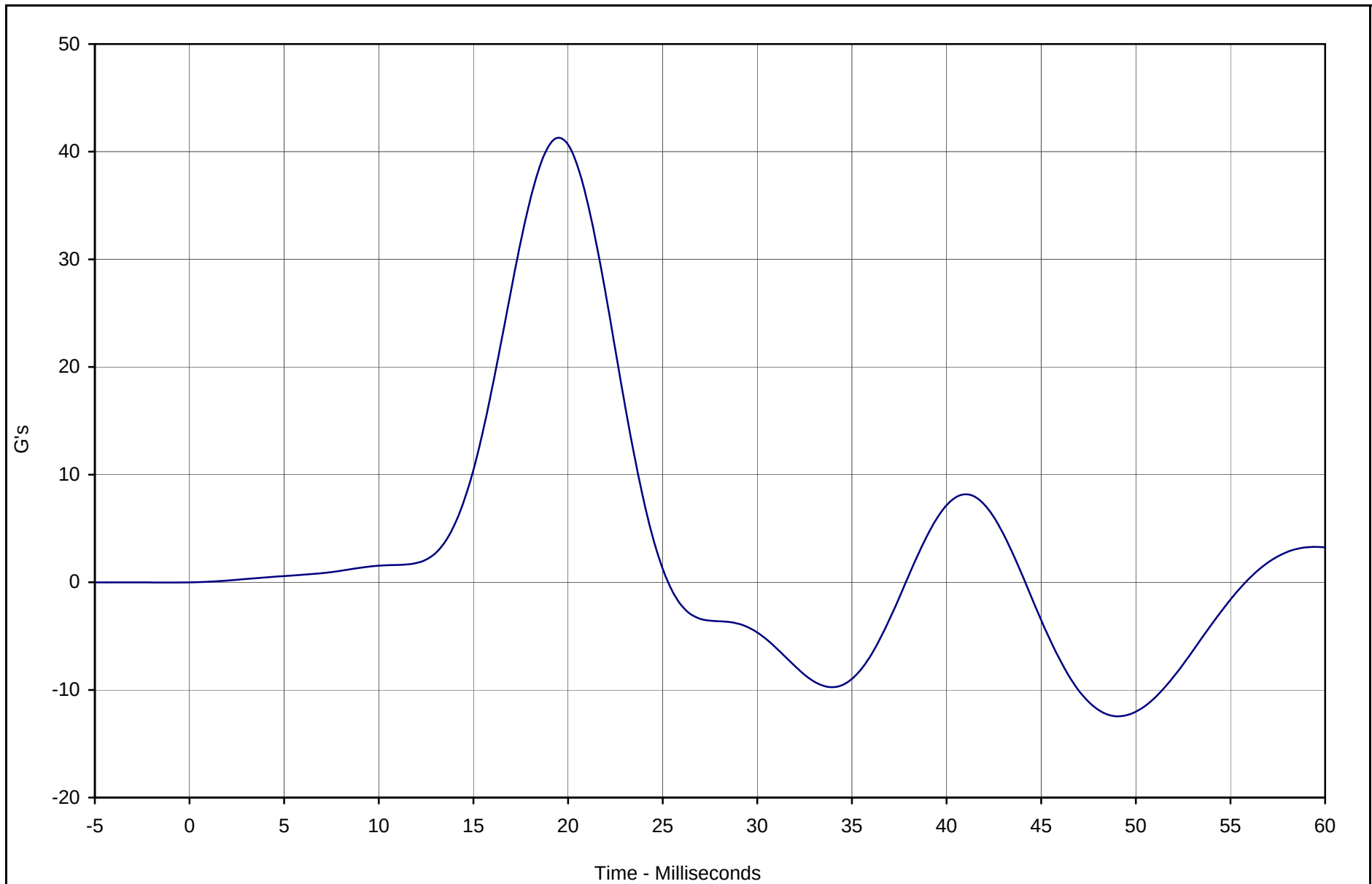


Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 274

Test Date: 7/29/04

Test I.D.: TH07C



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Lower Rib Y Acceleration	002	FIL	G's	41.2	19.4	-12.4	49.4	FIR100

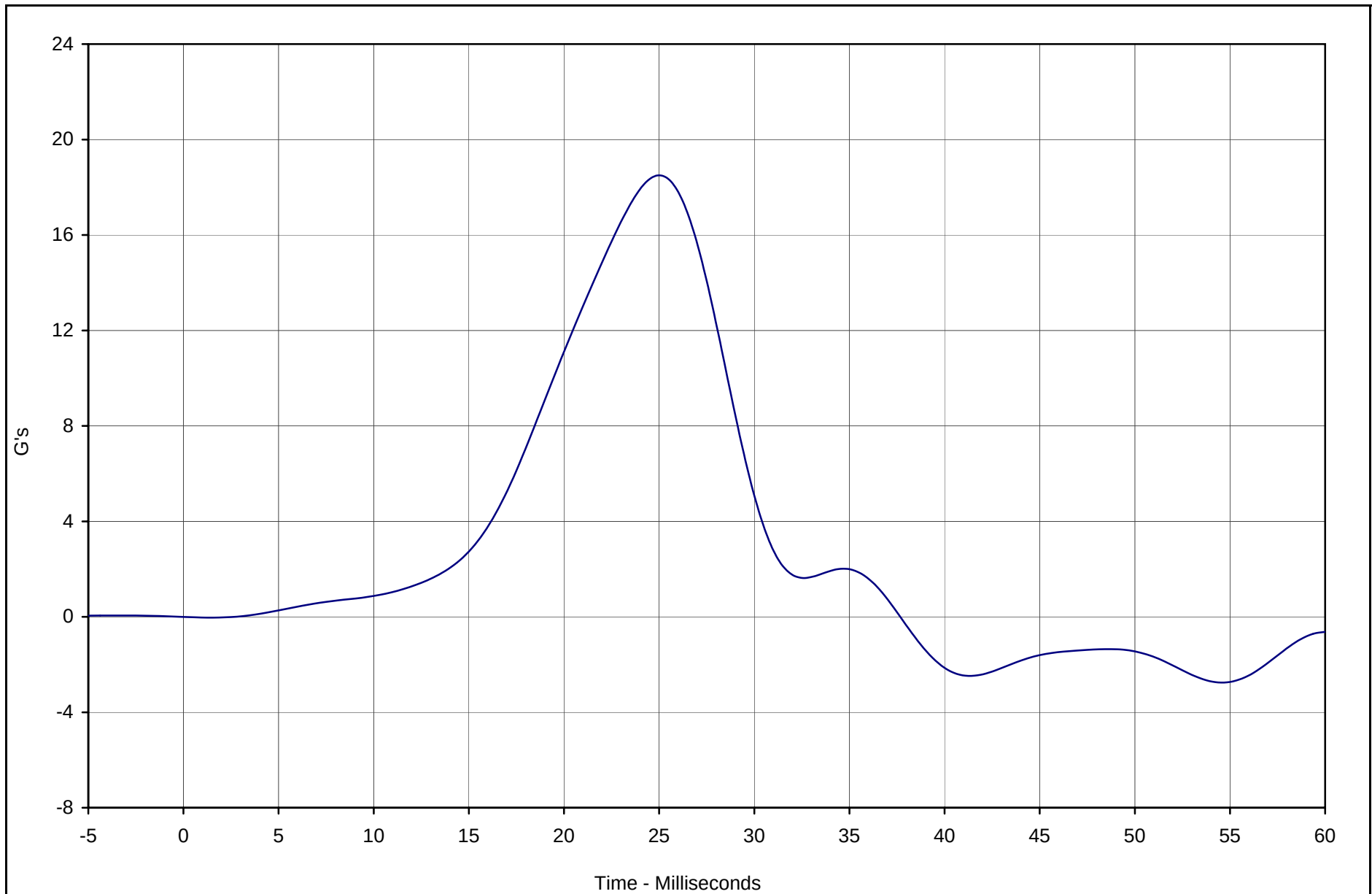


Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 274

Test Date: 7/29/04

Test I.D.: TH07C



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Lower Spine Y Acceleration	003	FIL	G's	18.5	25.0	-2.7	54.4	FIR100



Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 274

Test Date: 7/29/04

Test I.D.: TH07C



Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Pelvis Lateral Impact

ATD Serial No.: 274

Test I.D.: PL07B

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.24	Pass
Peak Pelvis Acceleration	G's	40.0 to 60.0	43.8	Pass
Acceleration Time Above 20 G's	Msec.	3.0 to 7.0	6.9	Pass
Overall Test Results				Pass

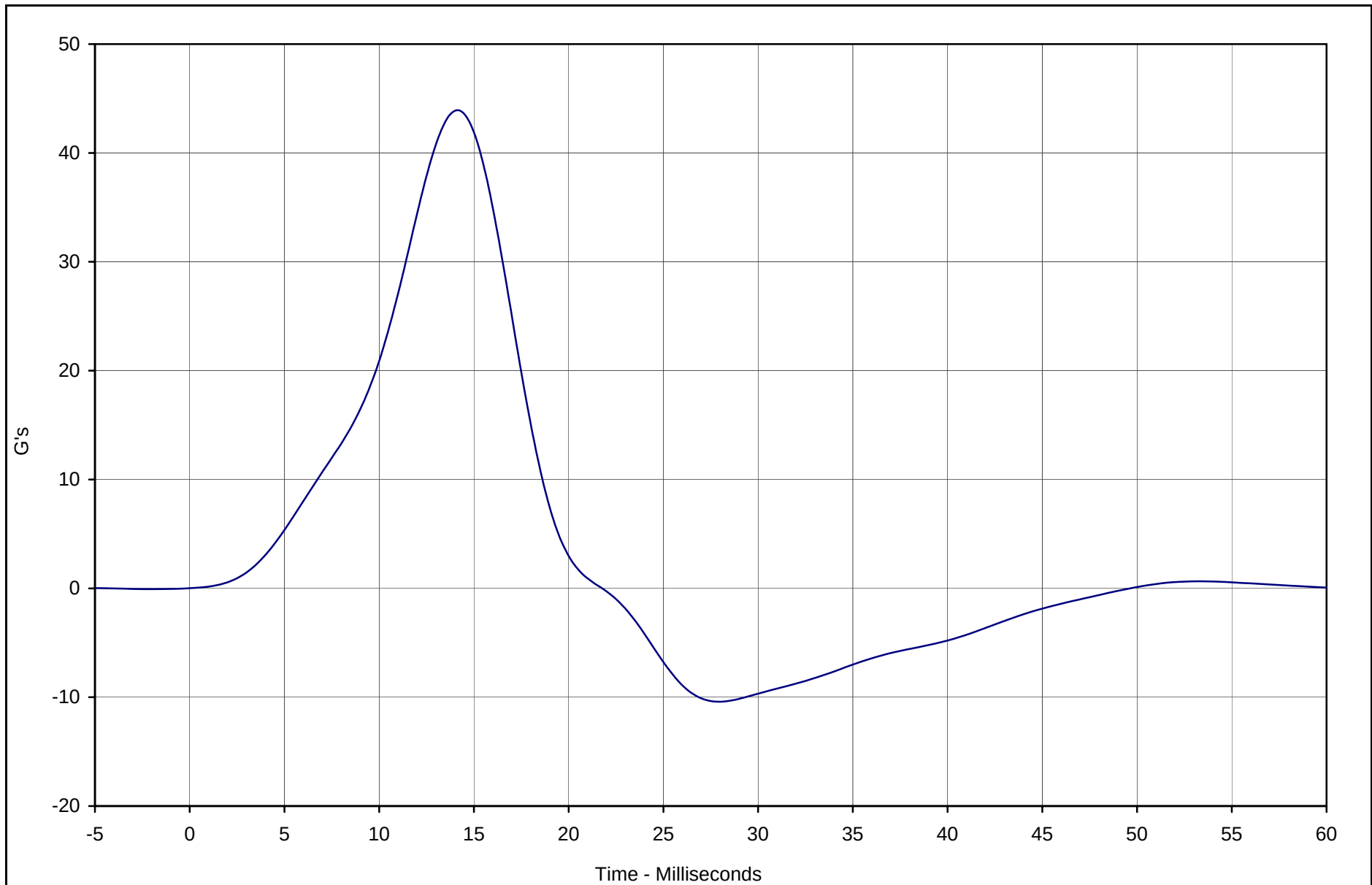
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Laboratory Technician

July 28, 2004

Test Date



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Pelvis Y Acceleration	001	FIL	G's	43.8	14.4	-10.4	28.1	FIR100



Test Vehicle: Side Impact Dummy (SID) Pelvis Lateral Impact

SID Serial No.: 274

Test Date: 7/28/04

Test I.D.: PL07B



Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Head Drop Lateral Impact Test

ATD Serial No.: 274

Test I.D.: HD07I

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	120.0 to 150.0	122.3	Pass
Peak Longitudinal Acceleration	G's	≤15.0	10.5	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Oscillations After Main Pulse	%	<10	10.0	Pass
Overall Test Results			Pass	

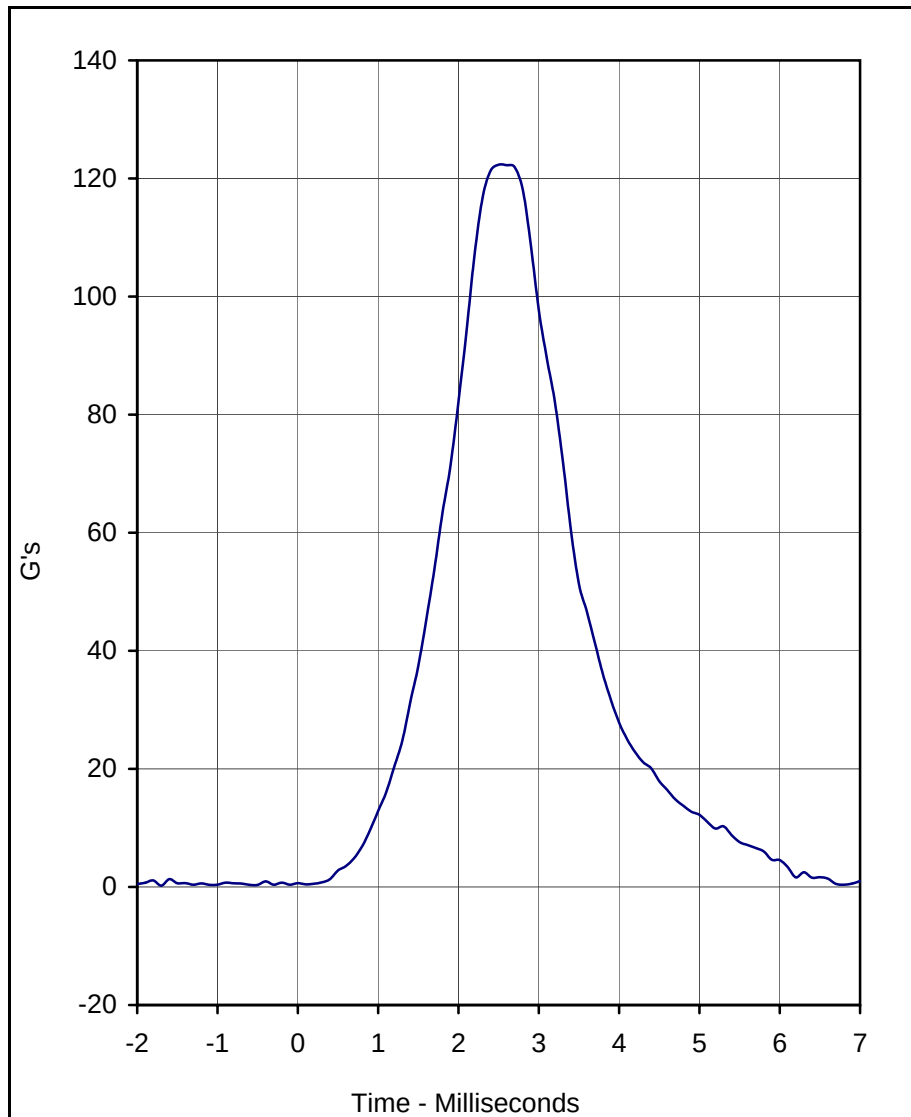
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Laboratory Technician

July 28, 2004

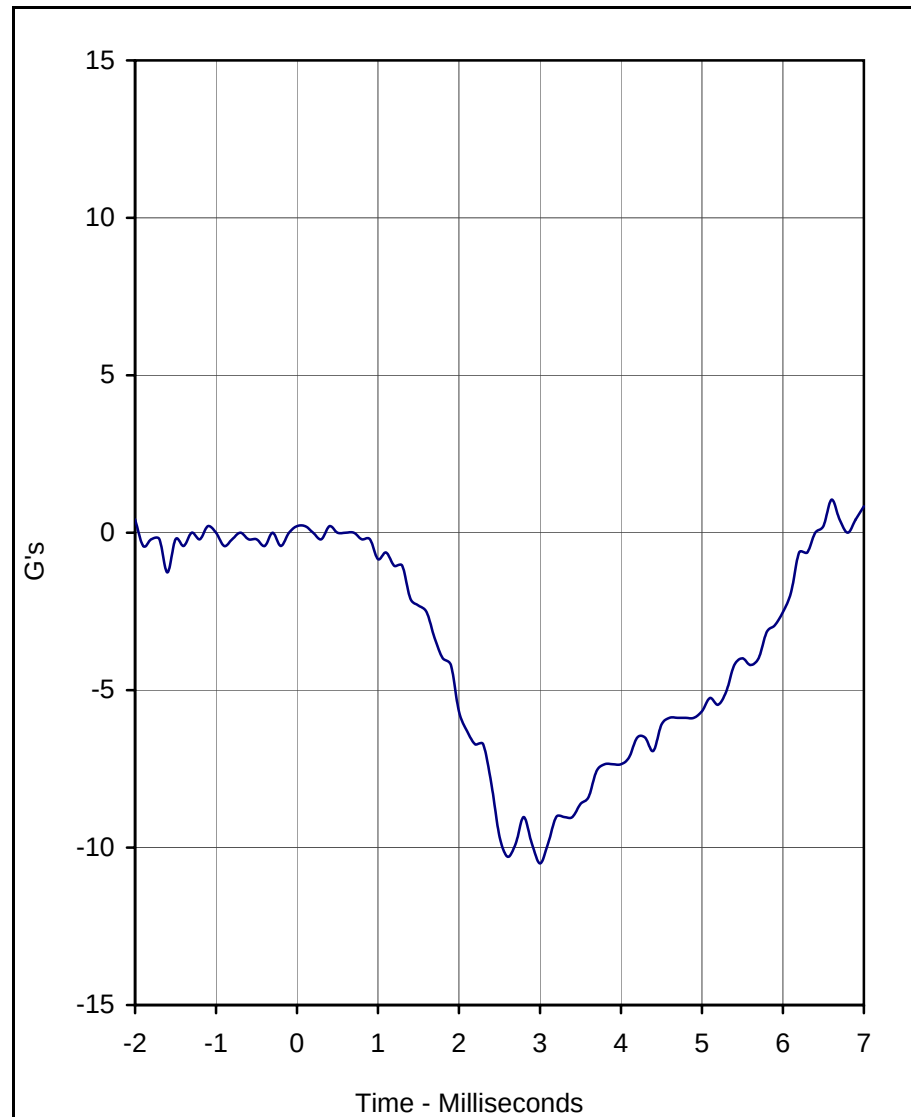
Test Date



Curve Description	CURNO	Type
Head Resultant	001	RES

Units	Max	Time	Min	Time	SAE Class
G's	122.3	2.5	0.2	-1.7	1000

Test Program: SID / HIII Head Drop Lateral Impact Test
 Test Date: 7/28/04



Curve Description	CURNO	Type
Head X	002	FIL

Units	Max	Time	Min	Time	SAE Class
G's	1.1	6.6	-10.5	3.0	1000

A.T.D. Serial No.: 274
 Test I.D.: HD07I





Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Neck Pendulum Lateral Test

ATD Serial No.: 274

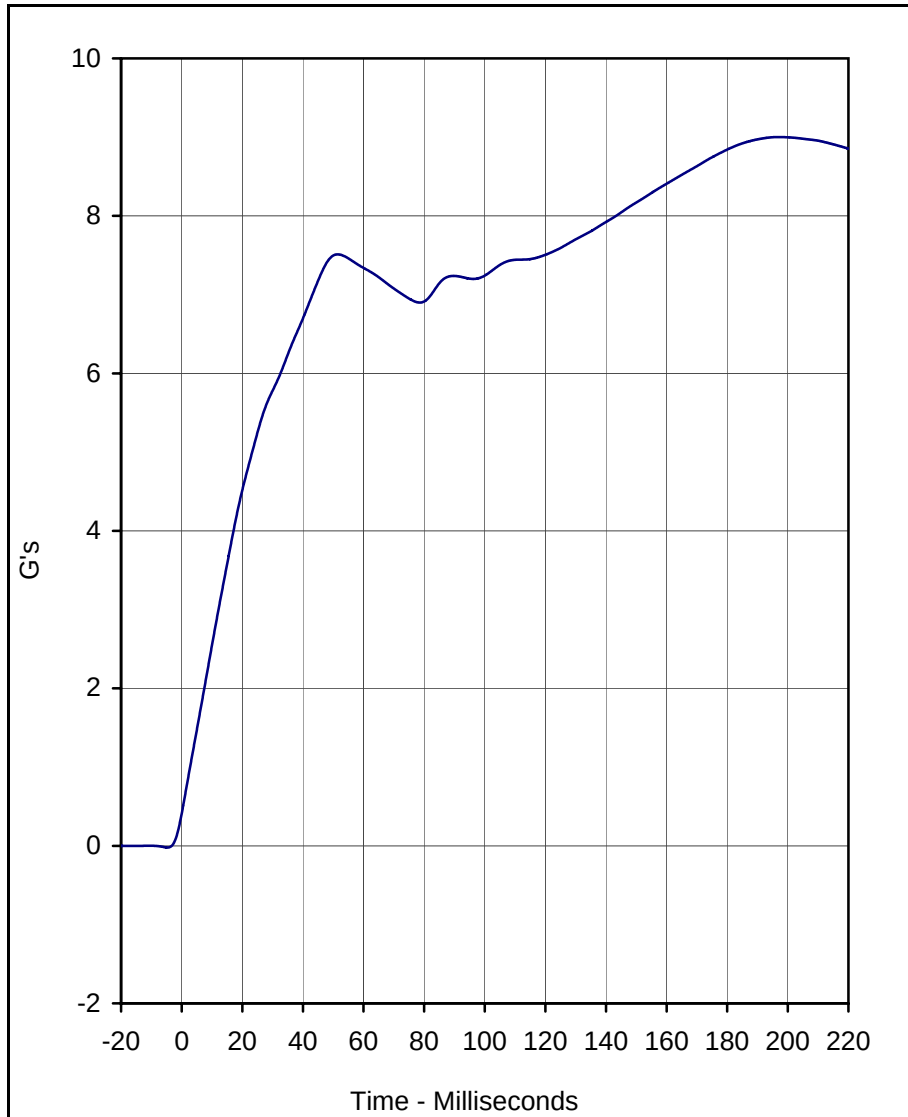
Test I.D.: NB07G

Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	7.04	Pass
Pendulum Deceleration	10	Msec.	1.96 to 2.55	2.55	Pass
	20	Msec.	4.12 to 5.10	4.52	Pass
	30	Msec.	5.73 to 7.01	5.78	Pass
	40 to 70	Msec.	6.27 to 7.64	7.51	Pass
Maximum "D" Plane Rotation		Degrees	66.0 to 82.0	66.4	Pass
Maximum "D" Plane Rotation Time After Peak Moment		Msec.	2.0 to 15.0	5.0	Pass
"D" Plane Rotation Decay Time From Peak Angle to Zero Angle		Msec.	58.0 to 67.0	60.3	Pass
Calculated Moment About Occipital Condyle		N•m	73.0 to 88.0	74.3	Pass
Moment About Occipital Condyle Decay, Time From Positive Peak Value To 0 N•m		Msec.	49.0 to 64.0	49.3	Pass
Overall Test Results					Pass

Laboratory Technician

July 29, 2004

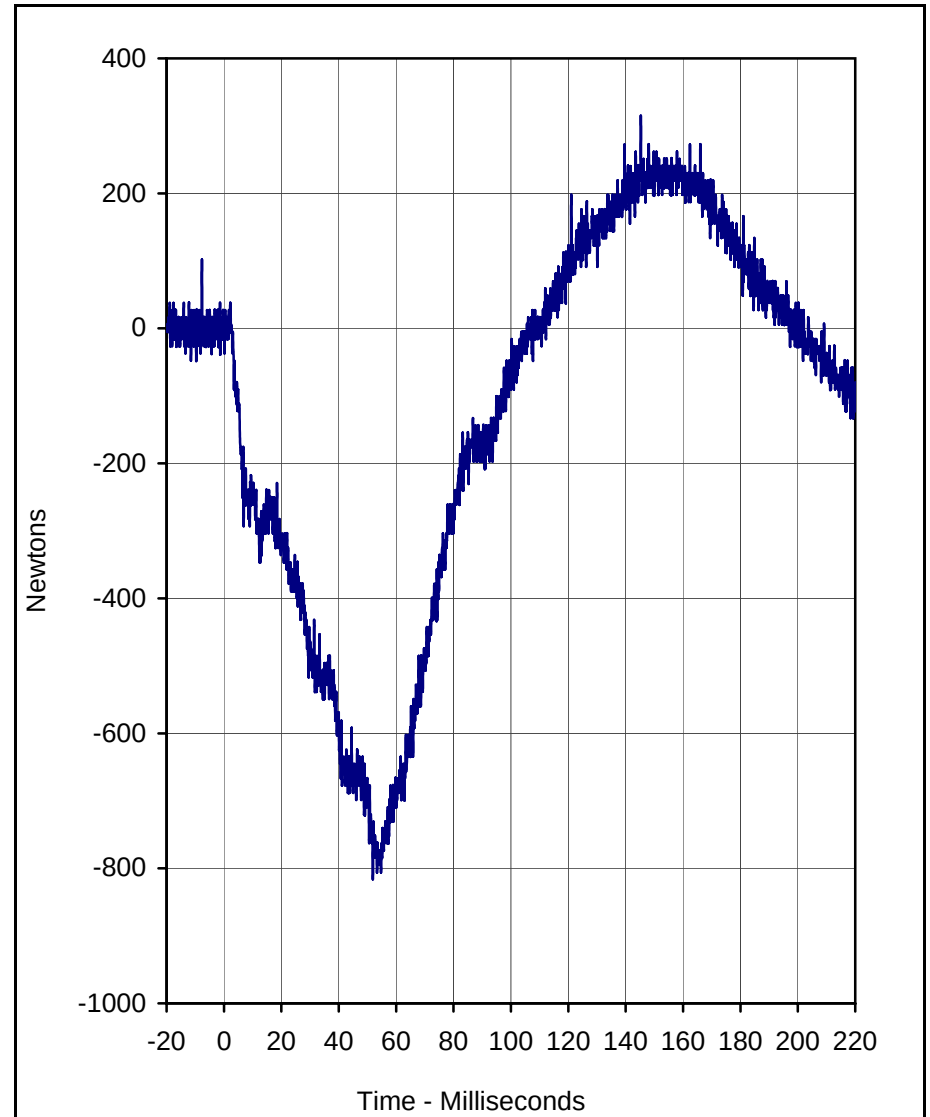
Test Date



Curve Description	CURNO	Type
Pendulum Velocity	001	FIL

Units	Max	Time	Min	Time	SAE Class
G's	9.0	197.0	0.0	-4.7	60

Test Program: SID / HIII Neck Pendulum Lateral Test
 Test Date: 7/29/04

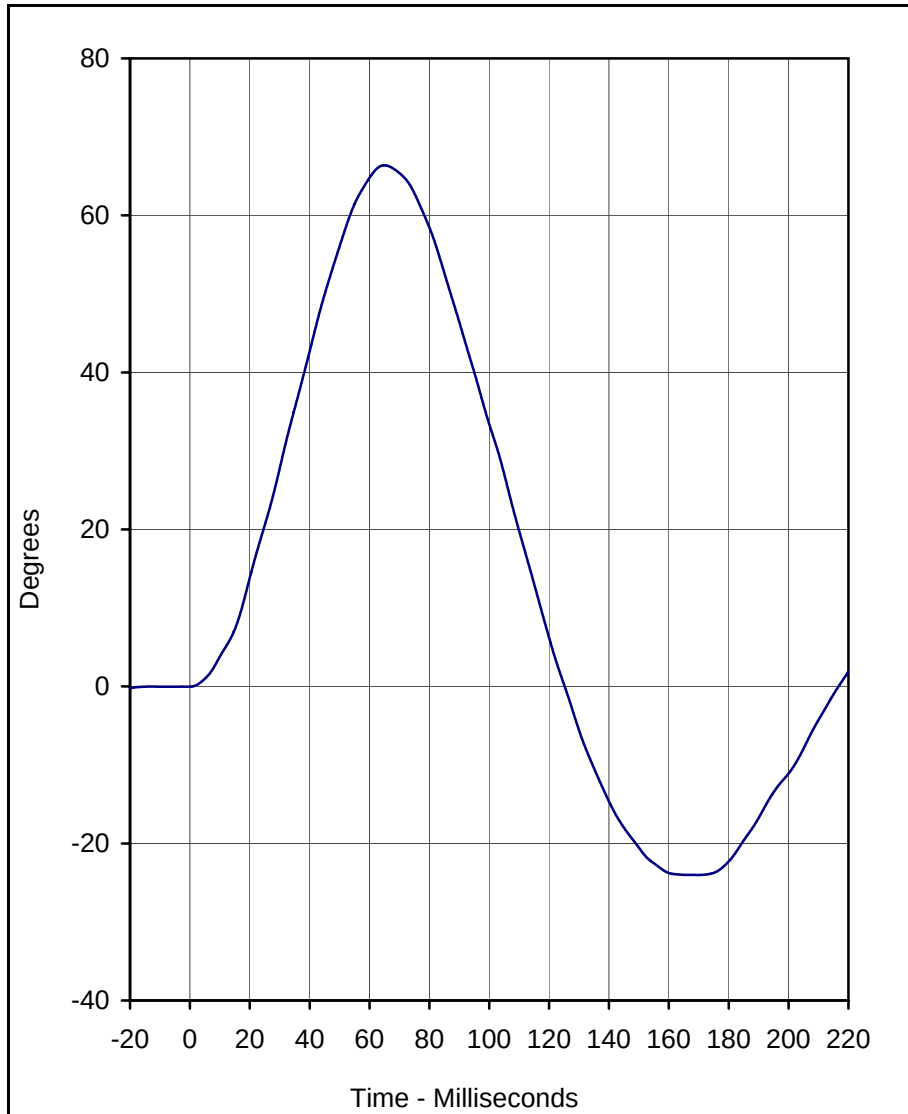


Curve Description	CURNO	Type
Neck Force Y	002	FIL

Units	Max	Time	Min	Time	SAE Class
Newtons	315.1	145.3	-816.0	51.9	1000

A.T.D. Serial No.: 274
 Test I.D.: NB07G

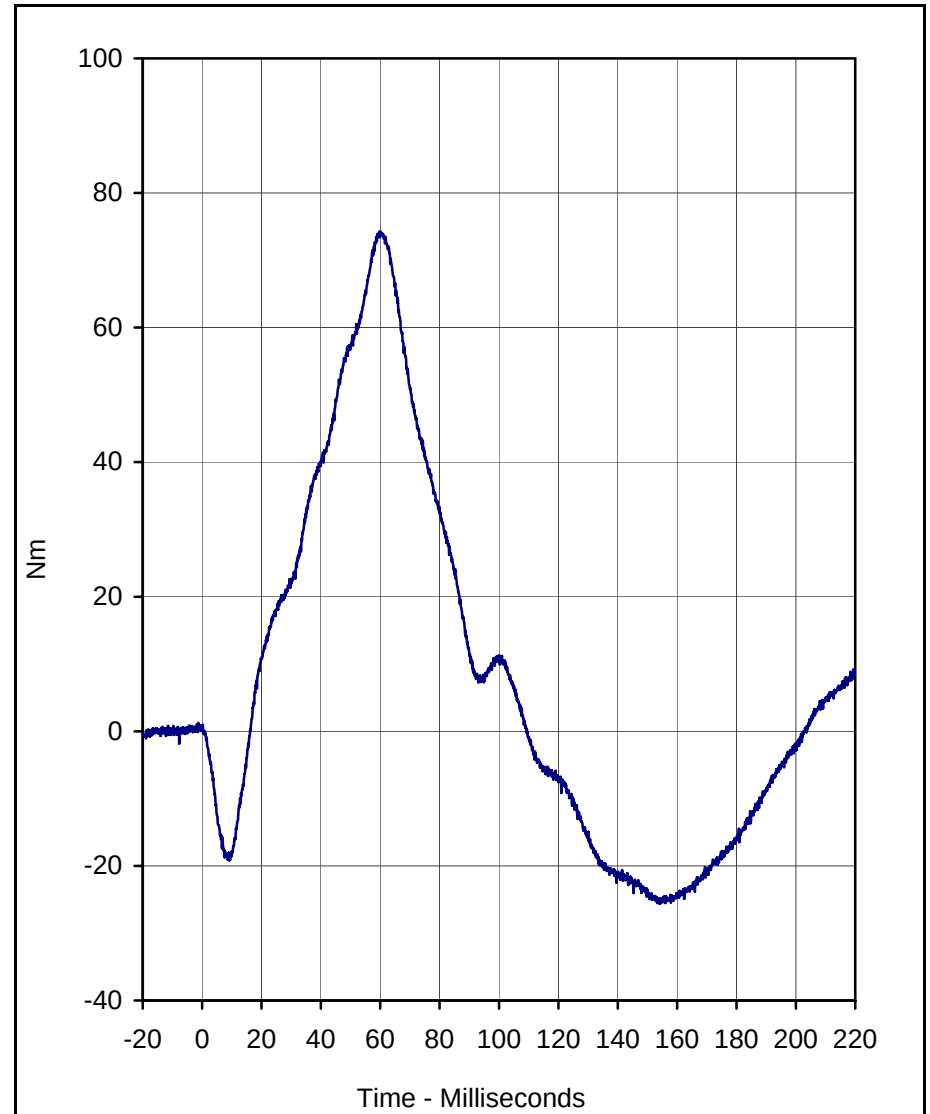




Curve Description	CURNO	Type
"D" Plane Rotation	003	FIL

Units	Max	Time	Min	Time	SAE Class
Degrees	66.4	65.0	-24.0	169.8	60

Test Program: SID / HIII Neck Pendulum Lateral Test
 Test Date: 7/29/04



Curve Description	CURNO	Type
Moment About Occipital Condyle	004	FIL

Units	Max	Time	Min	Time	SAE Class
Nm	74.3	60.0	-25.6	154.3	60

A.T.D. Serial No.: 274
 Test I.D.: NB07G





Calibration Data Sheet Side Impact Hybrid Dummy (SID/HIII) External Measurements

ATD Serial No.: 275

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

Laboratory Technician

July 29, 2004
Test Date



Calibration Data Sheet Side Impact Hybrid Dummy (SID/HIII) Thorax Lateral Impact

ATD Serial No.: 275

Test I.D.: TH07D

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.30	Pass
Upper Rib Acceleration	G's	37.0 to 46.0	41.4	Pass
Lower Rib Acceleration	G's	37.0 to 46.0	40.9	Pass
Thoracic Spine Acceleration	G's	15.0 to 22.0	19.6	Pass
Overall Test Results				Pass

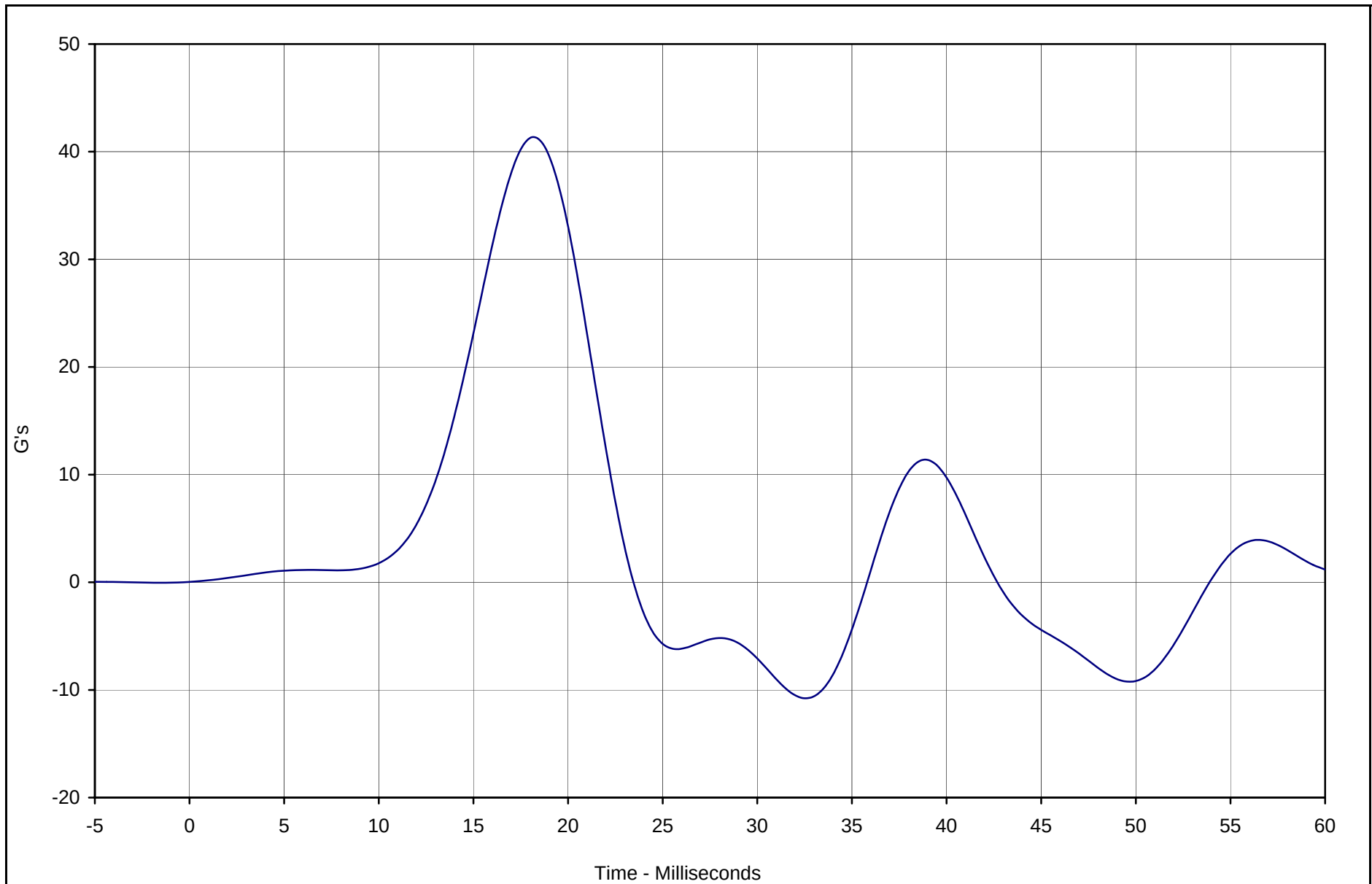
C-38

TR-P24118-01-NC

Laboratory Technician

July 29, 2004

Test Date



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Upper Rib Y Acceleration	001	FIL	G's	41.4	18.1	-10.8	32.5	FIR100

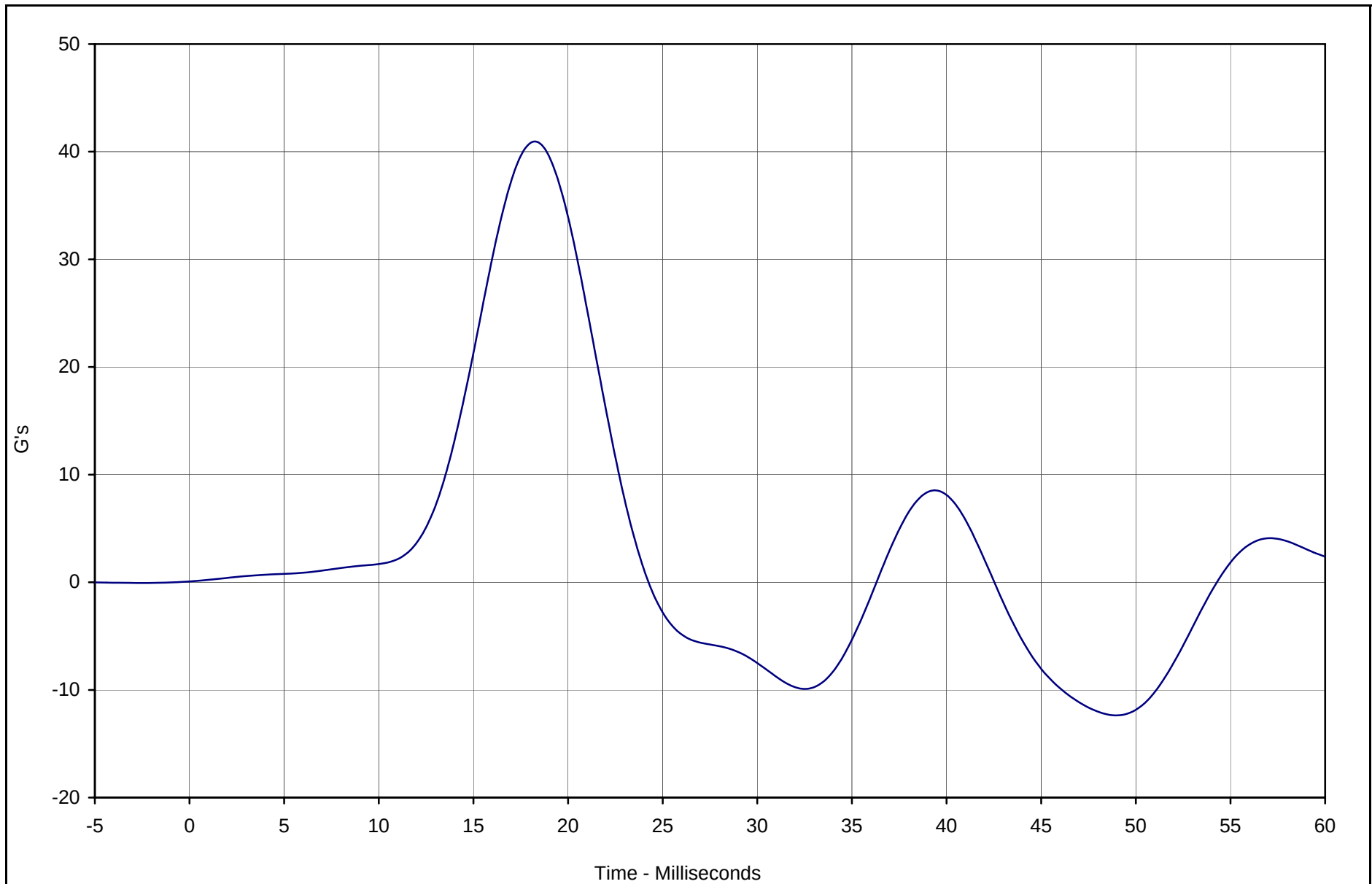


Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 275

Test Date: 7/29/04

Test I.D.: TH07D



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Lower Rib Y Acceleration	002	FIL	G's	40.9	18.1	-12.3	48.8	FIR100



Test Vehicle: SID / HIII Thorax Lateral Impact

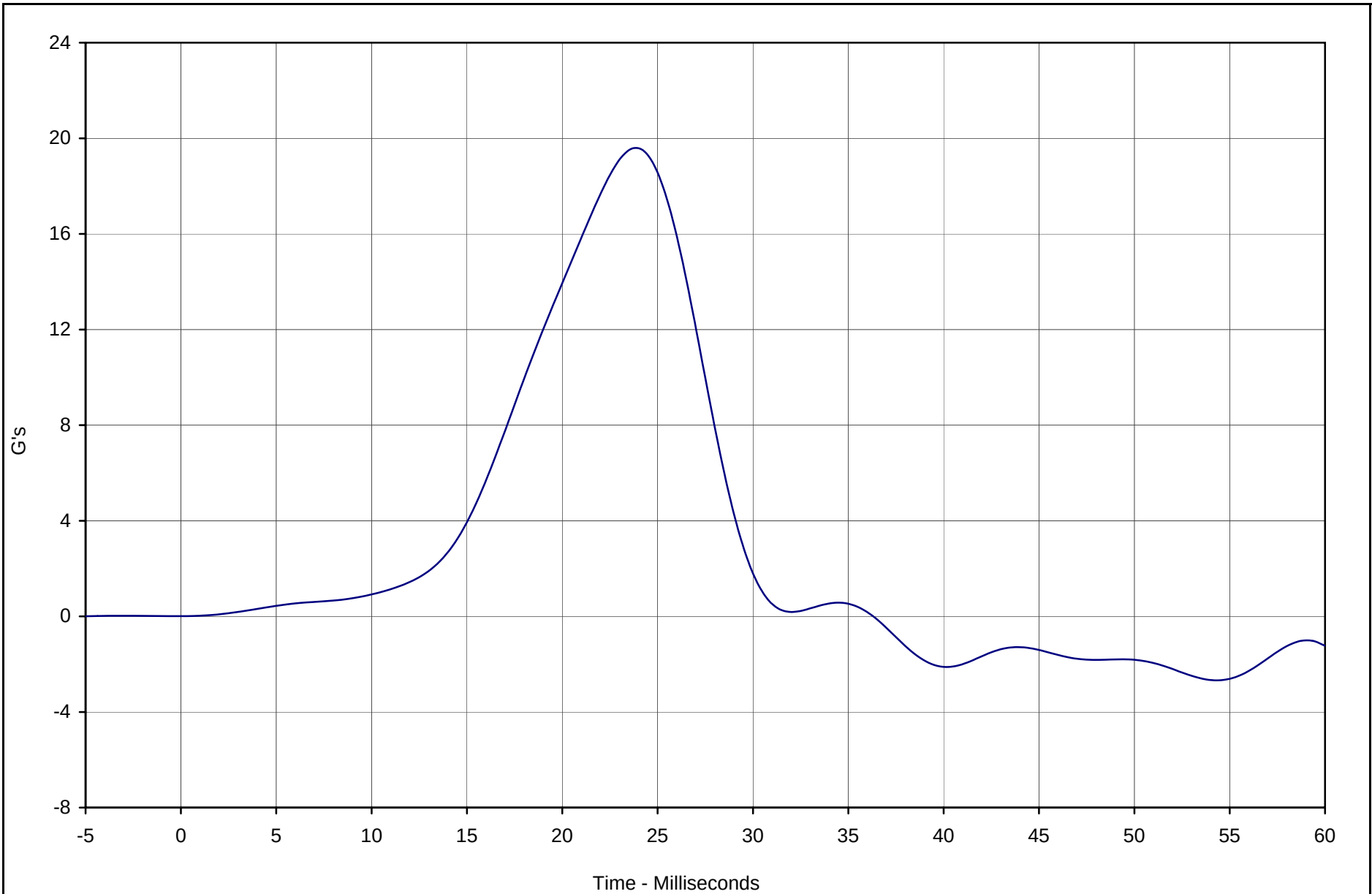
SID Serial No.: 275

Test Date: 7/29/04

Test I.D.: TH07D

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TR-P24118-01-NC



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Lower Spine Y Acceleration	003	FIL	G's	19.6	23.8	-2.7	54.4	FIR100



Test Vehicle: SID / HIII Thorax Lateral Impact

SID Serial No.: 275

Test Date: 7/29/04

Test I.D.: TH07D



Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Pelvis Lateral Impact

ATD Serial No.: 275

Test I.D.: PL07D

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.21 to 4.33	4.26	Pass
Peak Pelvis Acceleration	G's	40.0 to 60.0	42.6	Pass
Acceleration Time Above 20 G's	Msec.	3.0 to 7.0	6.9	Pass
Overall Test Results				Pass

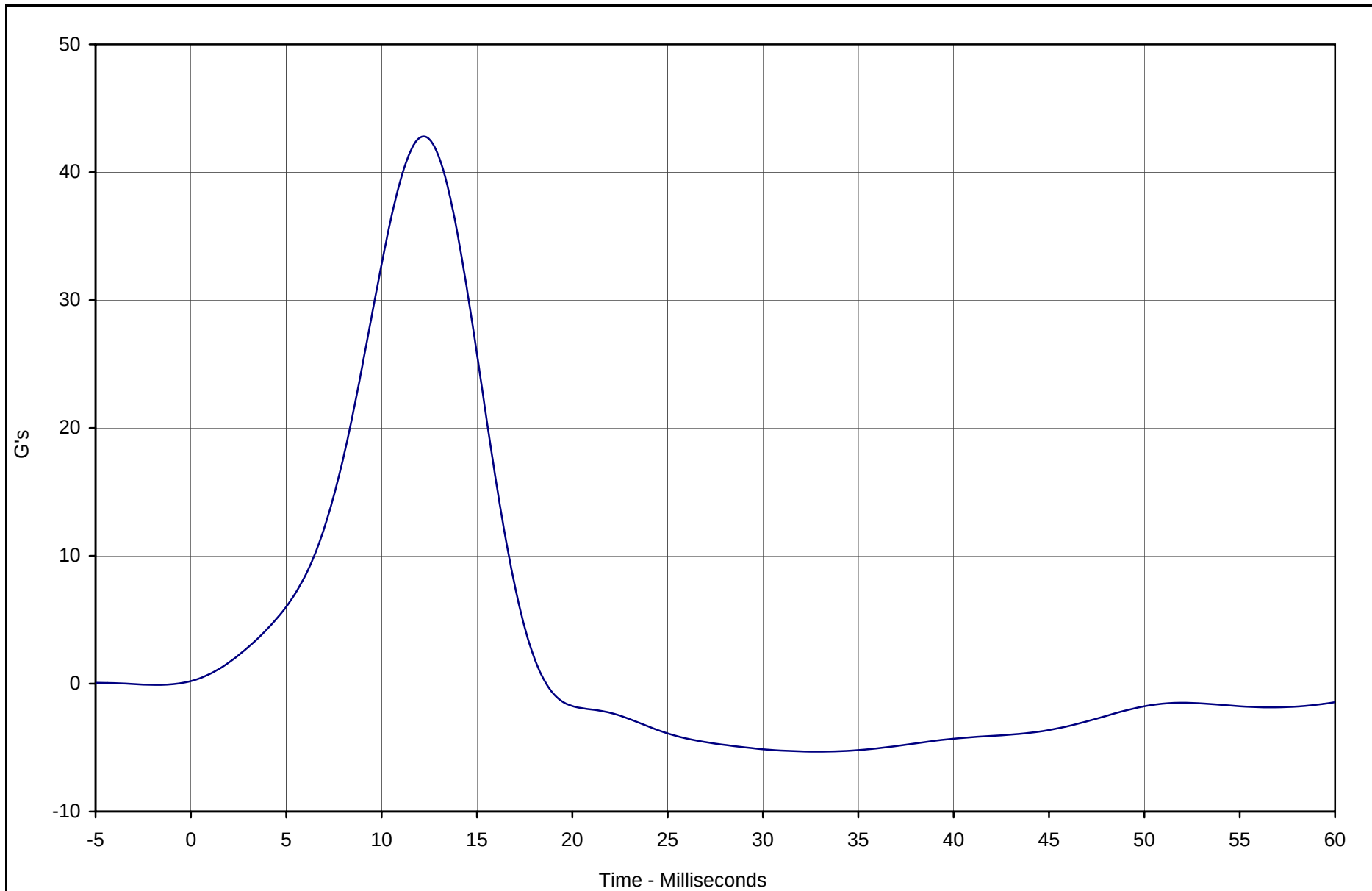
C-42

TR-P24118-01-NC

Laboratory Technician

July 29, 2004

Test Date



Curve Description	CURNO	Type	Units	Max	Time	Min	Time	SAE Class
Pelvis Y Acceleration	001	FIL	G's	42.6	12.5	-5.3	33.1	FIR100



Test Vehicle: Side Impact Dummy (SID) Pelvis Lateral Impact

SID Serial No.: 275

Test Date: 7/29/04

Test I.D.: PL07D



Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Head Drop Lateral Impact Test

ATD Serial No.: 275

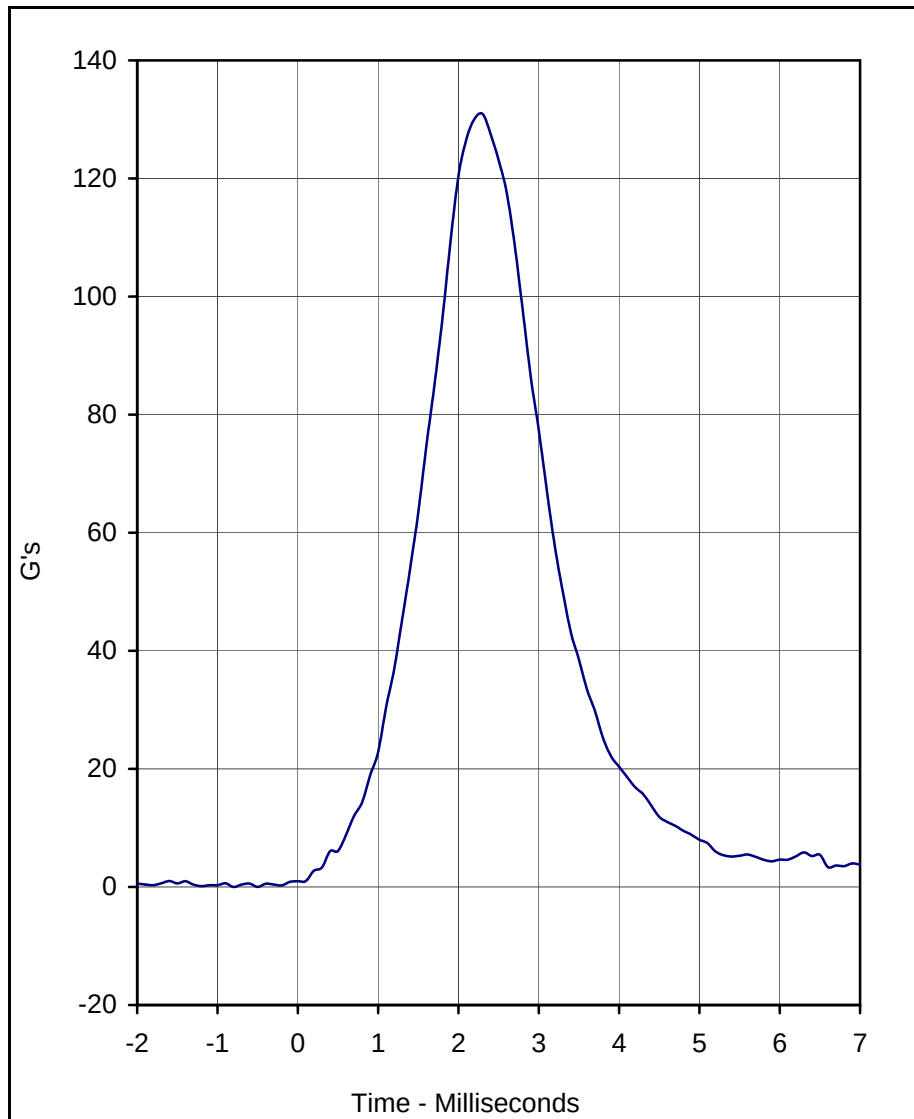
Test I.D.: HD07B

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	120.0 to 150.0	130.9	Pass
Peak Longitudinal Acceleration	G's	≤15.0	4.8	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Oscillations After Main Pulse	%	<10	6.1	Pass
Overall Test Results			Pass	

Laboratory Technician

July 28, 2004

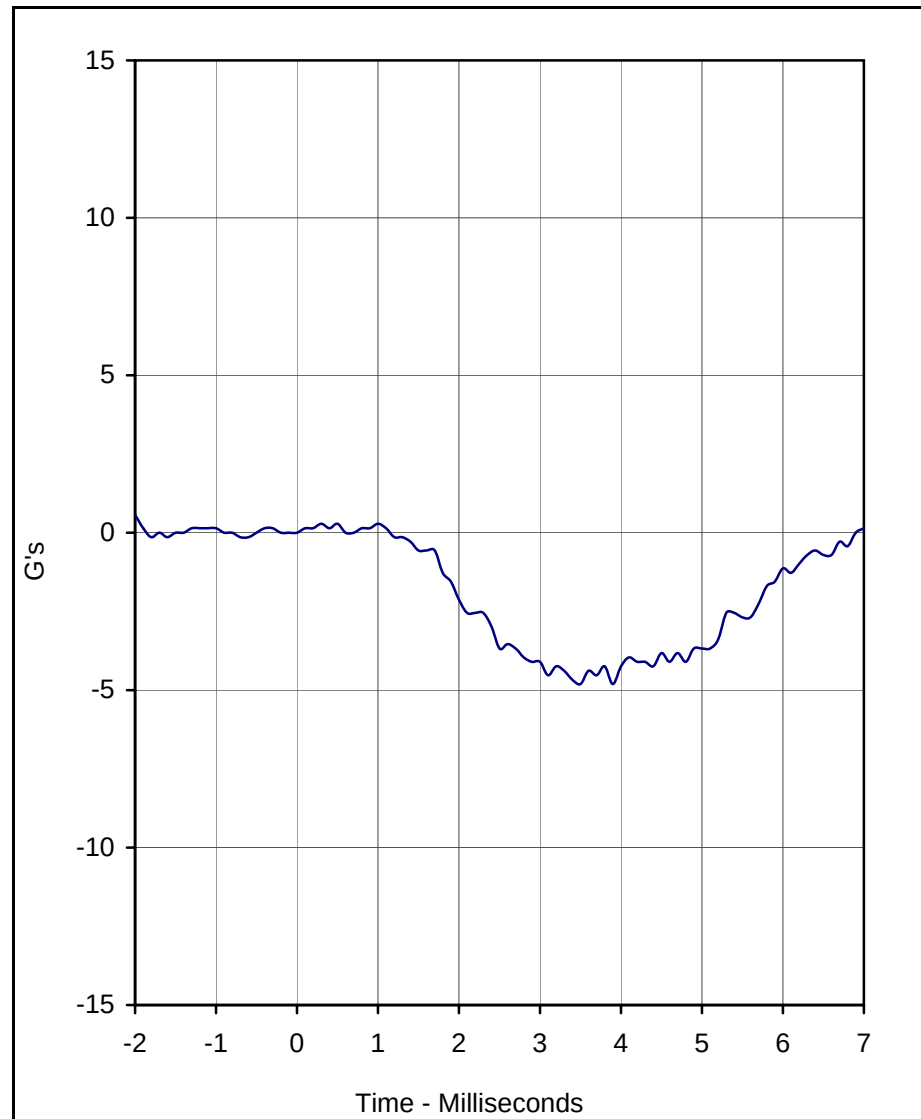
Test Date



Curve Description	CURNO	Type
Head Resultant	001	RES

Units	Max	Time	Min	Time	SAE Class
G's	130.9	2.3	0.0	-0.8	1000

Test Program: SID / HIII Head Drop Lateral Impact Test
 Test Date: 7/28/04



Curve Description	CURNO	Type
Head X	002	FIL

Units	Max	Time	Min	Time	SAE Class
G's	0.6	-2.0	-4.8	3.5	1000

A.T.D. Serial No.: 275
 Test I.D.: HD07B





Calibration Data Sheet

Side Impact Hybrid Dummy (SID/HIII)

Neck Pendulum Lateral Test

ATD Serial No.: 275

Test I.D.: NB07B

Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	7.04	Pass
Pendulum Deceleration	10	Msec.	1.96 to 2.55	2.17	Pass
	20	Msec.	4.12 to 5.10	4.56	Pass
	30	Msec.	5.73 to 7.01	6.75	Pass
	40 to 70	Msec.	6.27 to 7.64	7.11	Pass
Maximum "D" Plane Rotation		Degrees	66.0 to 82.0	77.7	Pass
Maximum "D" Plane Rotation Time After Peak Moment		Msec.	2.0 to 15.0	4.2	Pass
"D" Plane Rotation Decay Time From Peak Angle to Zero Angle		Msec.	58.0 to 67.0	59.1	Pass
Calculated Moment About Occipital Condyle		N•m	73.0 to 88.0	79.4	Pass
Moment About Occipital Condyle Decay, Time From Positive Peak Value To 0 N•m		Msec.	49.0 to 64.0	50.1	Pass
Overall Test Results					Pass

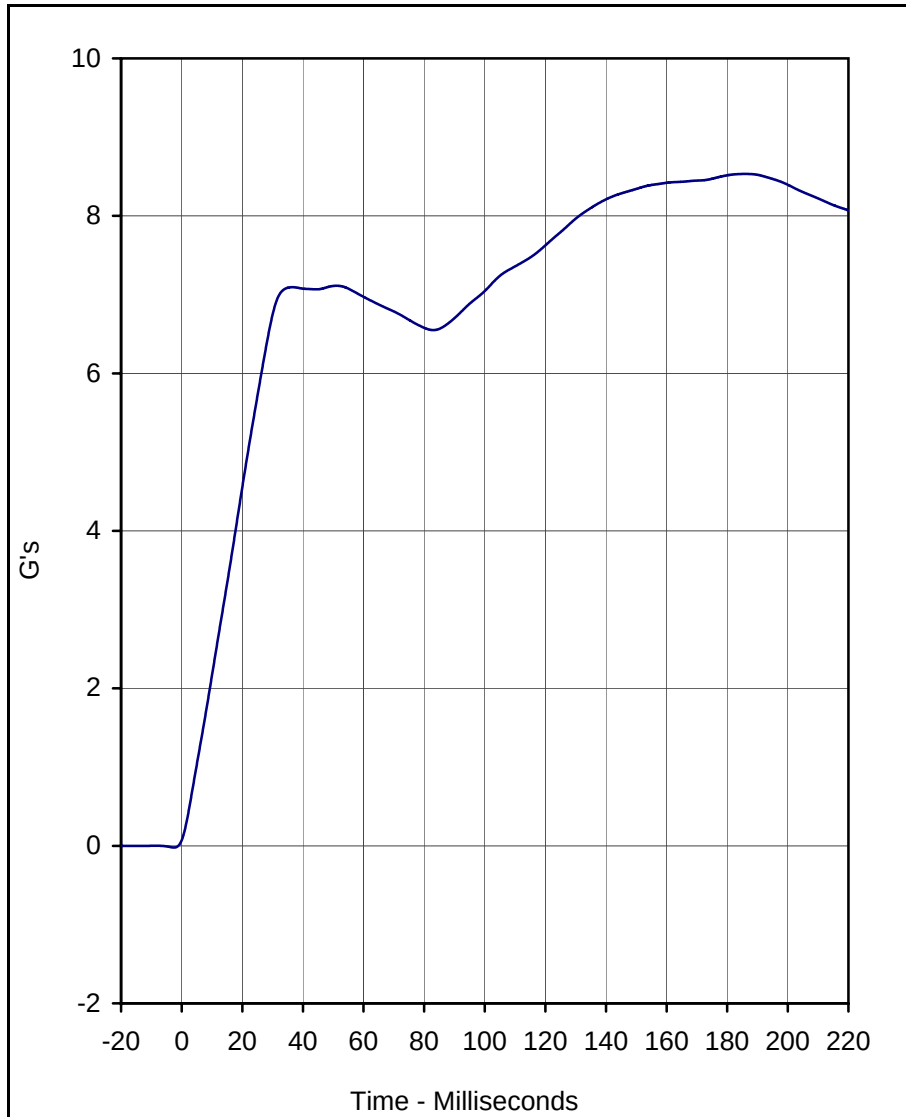
Laboratory Technician

July 29, 2004

Test Date

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TR-P24118-01-NC

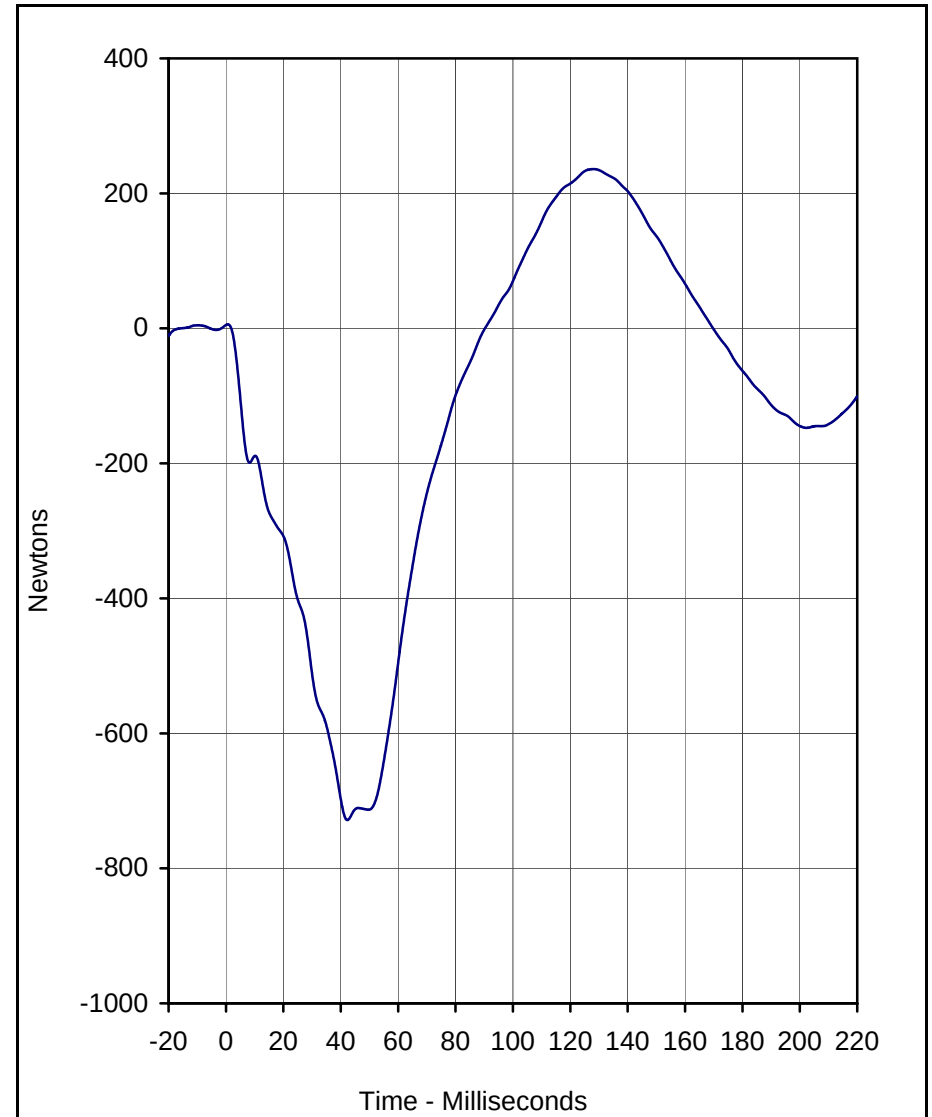


Curve Description	CURNO	Type
Pendulum Velocity	001	FIL

Units	Max	Time	Min	Time	SAE Class
G's	8.5	185.9	0.0	-2.5	60

Test Program: SID / HIII Neck Pendulum Lateral Test

Test Date: 7/29/04



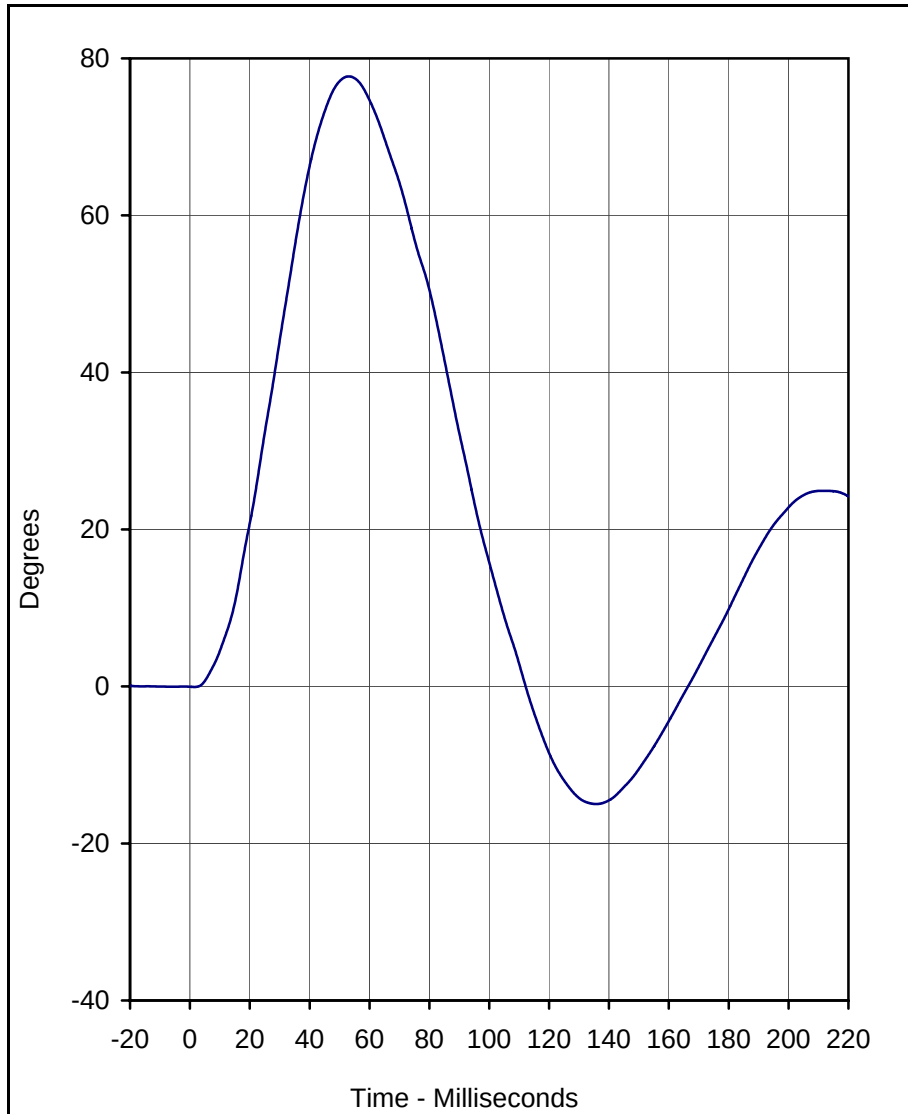
Curve Description	CURNO	Type
Neck Force Y	002	FIL

Units	Max	Time	Min	Time	SAE Class
Newtons	236.0	128.1	-728.5	42.3	60

A.T.D. Serial No.: 275

Test I.D.: NB07B





Curve Description	CURNO	Type
"D" Plane Rotation	003	FIL

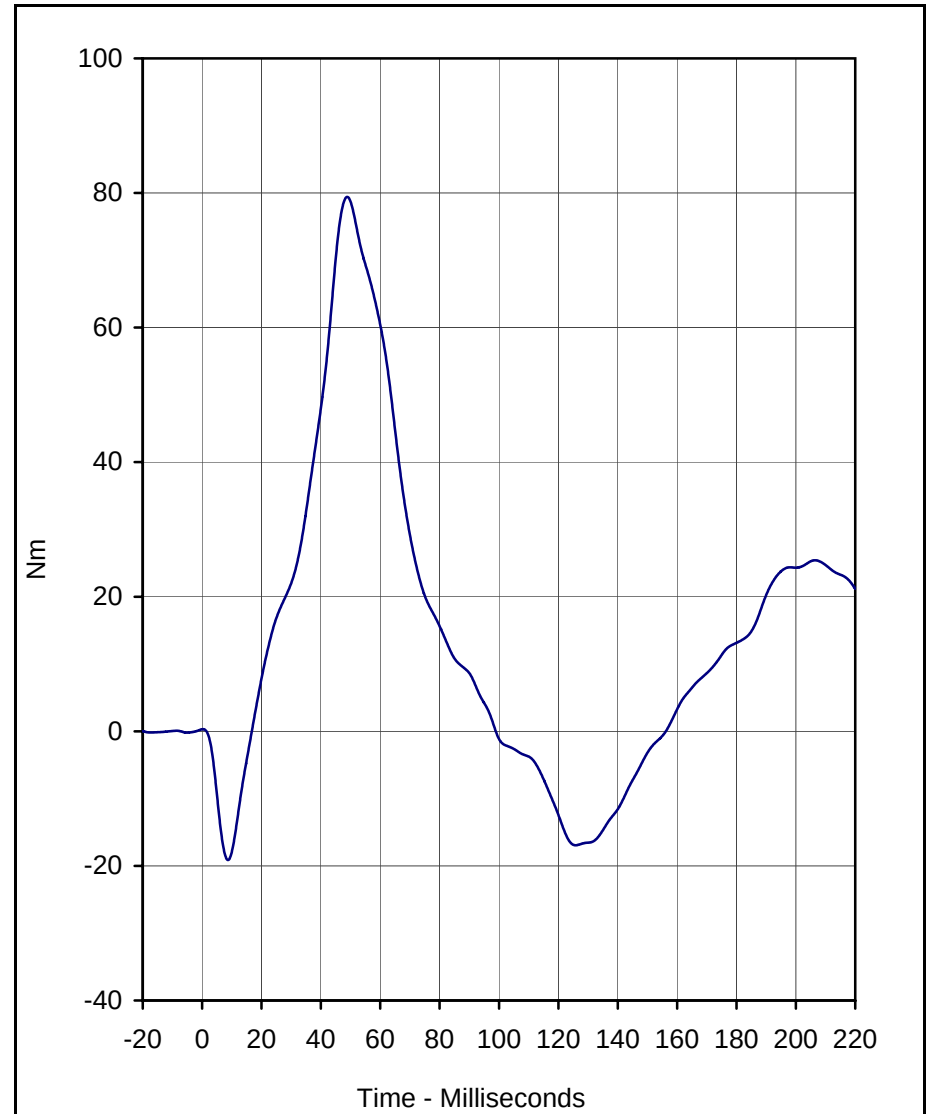
Units	Max	Time	Min	Time	SAE Class
Degrees	77.7	53.1	-15.0	135.7	60

Test Program:

SID / HIII Neck Pendulum Lateral Test

Test Date:

7/29/04



Curve Description	CURNO	Type
Moment About Occipital Condyle	004	FIL

Units	Max	Time	Min	Time	SAE Class
Nm	79.4	48.9	-19.1	8.7	60

A.T.D. Serial No.:

275

Test I.D.:

NB07B



APPENDIX D
TEST EQUIPMENT LIST

55/28 km/h Side Impact NCAP
Instrumentation Data Channel Assignments
Driver SID/HIII Serial Number 274
7/22/04
2005 Ford Focus 3 Door Hatchback

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

55/28 km/h Side Impact NCAP
Instrumentation Data Channel Assignments
Passenger SID/HII Serial Number 275
7/22/04
2005 Ford Focus 3 Door Hatchback

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

55/28 km/h Side Impact NCAP
Instrumentation Data Channel Assignments
Vehicle Accelerometers
7/22/04

2005 Ford Focus 3 Door Hatchback

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

**55/28 km/h Side Impact NCAP
Instrumentation Data Channel Assignments
Moving Deformable Barrier
7/22/04
2005 Ford Focus 3 Door Hatchback**

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