REPORT NUMBER: 201P-CAL-07-01

SAFETY COMPLIANCE TESTING FOR FMVSS 201
RIGID POLE SIDE IMPACT TEST

DAIMLERCHRYSLER CORPORATION
2007 JEEP COMPASS
SUV

NHTSA NUMBER: C70311

CALSPAN TEST NUMBER: 8832-F201P-01

CALSPAN
TRANSPORTATION SCIENCES CENTER
P.O. BOX 400
BUFFALO, NEW YORK 14225

Test Date: August 15, 2007

FINAL REPORT

PREPARED FOR:

U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Enforcement
Office of Vehicle Safety Compliance
Mail Code: NVS-220, West Building 4th Floor
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Washington, DC 20590

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Approval Date: _____

FINAL REPORT ACCEPTANCE BY:

_____

NHTSA, Office of Vehicle Safety Compliance

_____

Date of Report Acceptance

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4. Title and Subtitle Final Report of FMVSS 201 Safety Compliance Rigid Pole Side Impact Test of a 2007 Jeep Compass SUV, NHTSA No: C70311		*5. Report Date* August 15, 2007
		6. Performing Organization Code CAL
7. Author(s) Michael J. Kilgallon, Program Manager Vincent M. Paolini, Project Engineer		*8. Performing Organization Report No.* 8832-F201P-01
9. Performing Organization Name and Address Calspan 4455 Genesee Street Buffalo, New York 14225		*10. Work Unit No.*
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15. Supplementary Notes

16. Abstract

A rigid pole side impact test was conducted on the subject 2007 Jeep Compass SUV in accordance with FMVSS 201, "Occupant Protection in Interior Impact, S6.2(b)(3) and the Office of Vehicle Safety Compliance Test Procedure No. TP-201P-02 "Rigid Pole Side Impact Test". The test was conducted at the Calspan's facility in Buffalo, New York on 8/15/07. The impact velocity of the vehicle was 27.5 kph, and the ambient temperature at the struck side of the target vehicle at the time of impact was 22°C. The post test maximum crush was 511 mm at level 5. The test vehicle's performance follows:

Measurement Description	**Threshold**	**(Driver)**
Head Injury Criteria (HIC- 36 ms)	1000	379.8

Test Failures: None

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

17. Key Words Compliance Testing Rigid Pole Side Impact Test FMVSS 201	*18. Distribution Statement* Copies of this report are available from: NHTSA Technical Information Services National Highway Traffic Safety Admin. 1200 New Jersey Avenue, SE Washington, DC 20590		
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Form DOT F1700.7 (8-69)

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SECTION 1

PURPOSE AND TEST PROCEDURE

This side impact test is part of the FY2007 FMVSS 201 “Occupant protection in interior impact” compliance test program sponsored by the National Highway Traffic Safety Administration (NHTSA), under contract No. DTNH22-06-C-00031. The purpose of this test was to evaluate the dynamic head protection system in a 2007 Jeep Compass SUV, NHTSA Number: C70311. The rigid pole side impact test was conducted in accordance with the Office of Vehicle Safety Compliance's Laboratory Test Procedure (TP-201P-02, dated October 21, 2001).

SECTION 2

SUMMARY OF RIGID POLE SIDE IMPACT TEST

A rigid pole side impact test was conducted on a 2007 Jeep Compass SUV. The subject vehicle was towed into the rigid pole at a velocity of 27.5 kph for a left side impact. The test was conducted by Calspan in Buffalo, New York, on August 15, 2007.

Pretest and post test photographs of the test vehicle, and the side impact dummy (SID/HIII) are included in Appendix A of this report.

One SID/HIII was placed in the left front outboard designated seating position according to instructions specified in TP201P-02 dated (October 21, 2001). The side impact event was documented by twelve (12) high-speed and one real time cameras. Camera locations and other pertinent camera information are included in this report.

The SID/HIII was instrumented with the following accelerometers:

1. Head CG triaxial accelerometers (X,Y, and Z direction)
2. Upper neck 6 channel load cell (X,Y and Z force and moment)
3. Left Upper Rib (LUR) uniaxial accelerometer (Y-direction)
4. Left Lower Rib (LLR) uniaxial accelerometer (Y-direction)
5. Lower Thoracic Spine (T12) uniaxial accelerometer (Y-direction)
6. Pelvic (PEV) section uniaxial accelerometer (Y-direction)

Appendix B contains the vehicle and dummy response data traces. A summary of the side impact dummy (SID/HIII) configuration and performance verification test data is shown in Appendix C. Dummy and vehicle calibration data can be found in Appendix D of this report.

The following table summarizes the results of the test.

INJURY CRITERIA	SID/HIII (S/N: 269)
HIC (≤1000)	379.8
TTI (g)[1]	61
Pelvic (g)[1]	43
Neck X Force (N)[1]	-302.1
Neck Y Force (N)[1]	-515.2
Neck Z Force (N)[1]	704.1
Neck X Moment (N-m)[1]	-99.4
Neck Y Moment (N-m)[1]	-27.4
Neck Z Moment (N-m)[1]	19.3

[1] Information purposes only.

SECTION 3

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

DATA SHEET 1
GENERAL TEST AND VEHICLE PARAMETER DATA

TEST VEHICLE INFORMATION:

Vehicle Manufacturer: DaimlerChrysler Corporation

Year/Make/Model/Body Style: 2007 Jeep Compass SUV

Vehicle Body Color: Blue VIN: 1J8FT47W77D413919

Vehicle NHTSA No.: C70311 Month & Year of Manufacture:

Engine Data: 4 Cylinders; - CID; 2.4 Liters; - cc

Engine Placement: - Longitudinal; or X Lateral

Transmission: 5 Speed; X Manual; - Automatic; - Overdrive

Final Drive: - Rear Wheel Drive; X Front Wheel Drive; - Four Wheel Drive

Odometer Reading 402 km

Options: X A/C; X Power Steering; X Power Brakes; - Power Windows

DATA FROM TIRE PLACARD

Tire Pressure* (at capacity); 220 kPa FRONT

220 kPa REAR

Recommended Tire Size: P215/60R17

Tires on Test Vehicle: P215/60R17 95T ; Manufacturer: Firestone

Vehicle Capacity Data:

Number of Occupants: 2 Front; 3 Rear; - 3rd Seat; 5 Total

Type of Front Seats: X Bucket; - Bench; - Split Bench

Type of Front Seat Back: - Fixed; X Adjustable with X Lever or - Knob

Vehicle Max Capacity Loading = 419.0 kg (A)

No. of Occupants x 68.04 kg = 340.2 kg (B)

Vehicle Cargo Capacity = 78.80 kg (A-B)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

	LEFT SIDE (kg)	RIGHT SIDE (kg)	TOTAL (kg)	PERCENT
FRONT =	405.0	410.5	815.5	58.2%
REAR=	297.5	288.5	586.0	41.8%

TOTAL DELIVERED WEIGHT (UDW) : 1401.5 kg

* Tire pressure used in test.

DATA SHEET 1
GENERAL TEST AND VEHICLE PARAMETER DATA (Continued)

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight with Max. Fluids	=	1401.5	kg (A)
Maximum Cargo Carrying Capacity of Test Vehicle	=	78.8	kg (B)
Weight of instrumented SID/HIII (81.2 kg)	=	81.2	kg (C)
TEST VEHICLE TARGET WEIGHT:	=	1561.5	kg (A+B+C)

FULLY LOADED TEST VEHICLE (UDVW + SID H3 + CARGO):

	LEFT SIDE (kg)	**RIGHT SIDE (kg)**	**TOTAL (kg)**	**PERCENT**
FRONT =	432.5	423.0	855.5	54.7%
REAR=	370.5	337.0	707.5	45.3%

TOTAL FULLY LOADED WEIGHT : 1563.0 kg

AS TESTED WEIGHT OF TEST VEHICLE (1 SID H3 + CARGO + EQUIPMENT & INSTRUMENTATION

	LEFT SIDE	RIGHT SIDE (kg)	TOTAL (kg)	PERCENT
FRONT =	419.0	432.5	851.5	54.8%
REAR=	363.5	339.5	703.0	45.2%

TOTAL TEST WEIGHT: 1554.5 kg

TEST VEHICLE ATTITUDE;

	As Delivered	Fully Loaded	Ready for Test
Left Front (mm)	776	765	771
Left Rear (mm)	804	778	783
Right Front (mm)	776	773	773
Right Rear (mm)	804	784	785
Front Bumper Angle (deg)	-0.5	-0.3	0.0
Left Door Sill Angle (deg)	1.3	0.9	0.5
Rear Bumper Angle (deg)	0.3	0.4	0.2
Right Door Sill Angle (deg)	0.5	0.1	0.4

Test Vehicle Wheelbase: 2634 millimeters

C.G. = 1191 millimeters rearward of front wheel centerline

DATA SHEET 1
GENERAL TEST AND VEHICLE PARAMETER DATA (Continued)

TOTAL VEHICLE LENGTH: (Pre Test)

Right Side = 4301 mm
Centerline = 4404 mm
Left Side = 4303 mm

FRONT SEAT CUSHION PLACEMENT:

Total Length of Adjustment Travel = 260 mm
Total Number of Adjustment Positions or Detents = 39

As-Tested Position:

Detent: 15*
Distance from full forward: 95* mm

* To achieve the 50 mm back of head to door daylight opening the seat track was moved 5 detents forward of mid-position

FRONT SEAT BACK ADJUSTMENT POSITION:

Seat Back Torso Angle = 14 degrees

As-Tested Position:

Seat Back Torso Angle = 10** degrees

** To achieve the 50 mm back of head to door daylight opening the seat back adjustment was moved 2 detents forward of nominal position

ADJUSTABLE STEERING COLUMN POSITION:

Detent: Not Applicable
Test Angle: 25 deg

WINDOW POSITIONS:

Right Front= Open Right Rear= Open
Left Front = Open Left Rear = Open

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

Capacity= 51.5 L
Test Volume = 47.3 L (92% to 94% of Useable Capacity)

LOCATION OF IMPACT POINT ON TEST VEHICLE SIDE TO BE IMPACTED:

Wheelbase = 2634 mm
Impact Reference Line is 1341 mm rearward of front axle centerline

DATA SHEET 2
TEST VEHICLE SUMMARY OF RESULTS

VEHICLE IDENTIFICATION:

Vehicle Year/Make/Model: 2007 Jeep Compass

Body Style: SUV VIN: 1J8FT47W77D413919

NHTSA No.: 1J8FT47W77D413919 Test Date: 8/15/07

Overall Length = 4404 millimeters; Overall Width = 1766 millimeters

VEHICLE TEST WEIGHT (Pre-Test):

Left Front	=	419.0 kg	Left Rear	=	363.5 kg
Right Front	=	432.5 kg	Right Rear	=	339.5 kg
TOTAL FRONT	=	851.5 kg	TOTAL REAR	=	703.0 kg

TOTAL VEHICLE WEIGHT 1554.5 kg

Wheelbase = 2595 millimeters

Longitudinal C.G. from Center of Front Axle = 1174 millimeters

Impact Angle with Respect to Impactor = 90 degrees

ACTUAL IMPACT POINT

Actual Impact Point is 5 mm forward of nominal impact ref. line (Lateral)

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (	341 mm above ground)	=	239 millimeters
2. LEVEL 2 (	612 mm above ground)	=	310 millimeters
3. LEVEL 3 (	686 mm above ground)	=	315 millimeters
4. LEVEL 4 (	980 mm above ground)	=	303 millimeters
5. LEVEL 5 (	1539 mm above ground)	=	511 millimeters

Maximum Post-Test Intrusion = 511 millimeters

OCCUPANTS: Left Front

Dummy Identification SID/HIII

Restraints Used 3-Point Belt, SRS Side Curtain, Head Restraint

INSTRUMENTATION:

Number of Vehicle Data Channels:		=	39
Number of Cameras:	Onboard	=	3
	Offboard	=	10
	TOTAL	=	13

DATA SHEET 3
POST TEST OBSERVATIONS

Test Vehicle: 2007 Jeep Compass SUV NHTSA No. C70311

VISIBLE DUMMY CONTACT POINTS:

	SID HIII
Head:	Side curtain Airbag
Upper Torso:	Left side Door
Lower Torso:	Left Side Door
Left Knee:	Left Side door
Right Knee:	No Contact

DOOR OPENING:

	LEFT DOOR	RIGHT DOOR
Front:	Closed, Tools required	Closed, operable, No tools required
Rear:	Closed, Operable, No tools required	Closed, operable, No tools required

ARM REST LOCATIONS:

Front: Inboard

Rear: Inboard

SEAT MOVEMENT:

Front: Lateral movement

Rear: None

GLAZING DAMAGE:

Windshield: Severe cracking on upper left portion

Window: Not Applicable

PILLAR PERFORMANCE:

No Separation

SILL SEPARATION:

No Separation

AIR BAG DEPLOYMENT STATUS:

	DRIVER	FRONT PASSENGER	REAR PASSENGER
FRONT	Did not deploy	Did not deploy	Not Applicable
SIDE	Deployed	Did not deploy	Deployed

OTHER NOTABLE IMPACT EFFECTS:

None

SECTION 4

OCCUPANT AND VEHICLE INFORMATION

DATA SHEET 4
SID/HIII INSTRUMENTATION DATA

Test Vehicle: 2007 Jeep Compass SUV NHTSA No. C70311

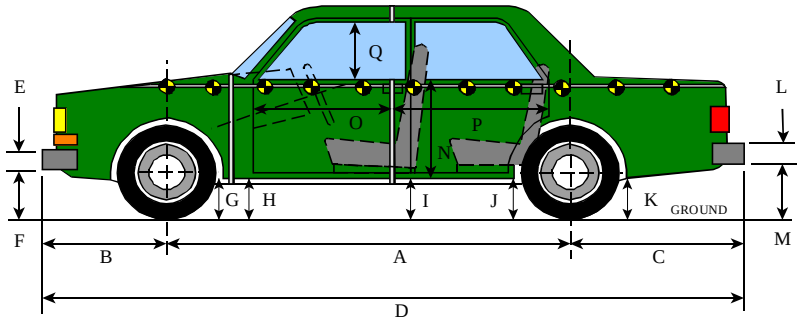
	Left Front Dummy ID# 269			
	Pos. Direction		Neg. Direction	
	Max	Time	Max	Time
HEAD ACCELERATIONS:	(g)	(msec)	(g)	(msec)
Longitudinal X	3.5	210.1	-8.9	51.0
Lateral Y	64.1	55.5	-6.1	195.4
Vertical Z	11.4	27.1	-16.5	56.3
Resultant R	65.9	55.8	0.0	-66.8
HIC	379.8			
NECK LOADS:	(N)	(msec)	(N)	(msec)
Longitudinal X	124.9	207.3	-302.1	58.5
Lateral Y	299.4	53.5	-515.2	70.3
Vertical Z	704.1	50.2	-327.6	56.3
Resultant R	800.4	50.2	1.2	-66.8
NECK MOMENTS:	(N-m)	(msec)	(N-m)	(msec)
Longitudinal X	18.5	123.2	-99.4	54.5
Lateral Y	20.9	115.5	-27.4	53.4
Vertical Z	19.3	62.2	-12.1	134.2
Resultant R	103.6	54.5	0.1	-65.9
RIB ACCELERATIONS:	(g)	(msec)	(g)	(msec)
Upper Rib Lateral Y	54.7	41.9	-8.8	136.2
Upper Rib Lateral Y(R)	54.2	41.9	-8.6	136.2
Lower Rib Lateral Y	63.4	43.1	-8.6	135.6
Lower Rib Lateral Y(R)	63.2	43.1	-8.5	135.6
SPINE ACCELERATIONS:	(g)	(msec)	(g)	(msec)
Lower Lateral Y	57.9	46.9	-7.3	108.1
Lower Lateral Y(R)	57.8	46.9	-7.4	108.1
PELVIC ACCELERATIONS:	(g)	(msec)	(g)	(msec)
Lateral Y	43.2	50.0	-5.0	91.2
Lateral Y(R)	43.1	50.0	-4.9	91.2

REFERENCE: Positive Direction –
Longitudinal (X) = forward
Lateral (Y) = to right
Vertical (Z) = down

Note: Above data has been FIR filtered, Y(R) denotes redundant Y direction accelerometer.
Head Accelerations are filtered at SAE Class 1000, Neck Force uses Class 1000, Neck Moment uses Class 600

DATA SHEET 5
VEHICLE SIDE MEASUREMENTS

Test Vehicle: 2007 Jeep Compass SUV NHTSA No. C70311



LEFT SIDE VIEW

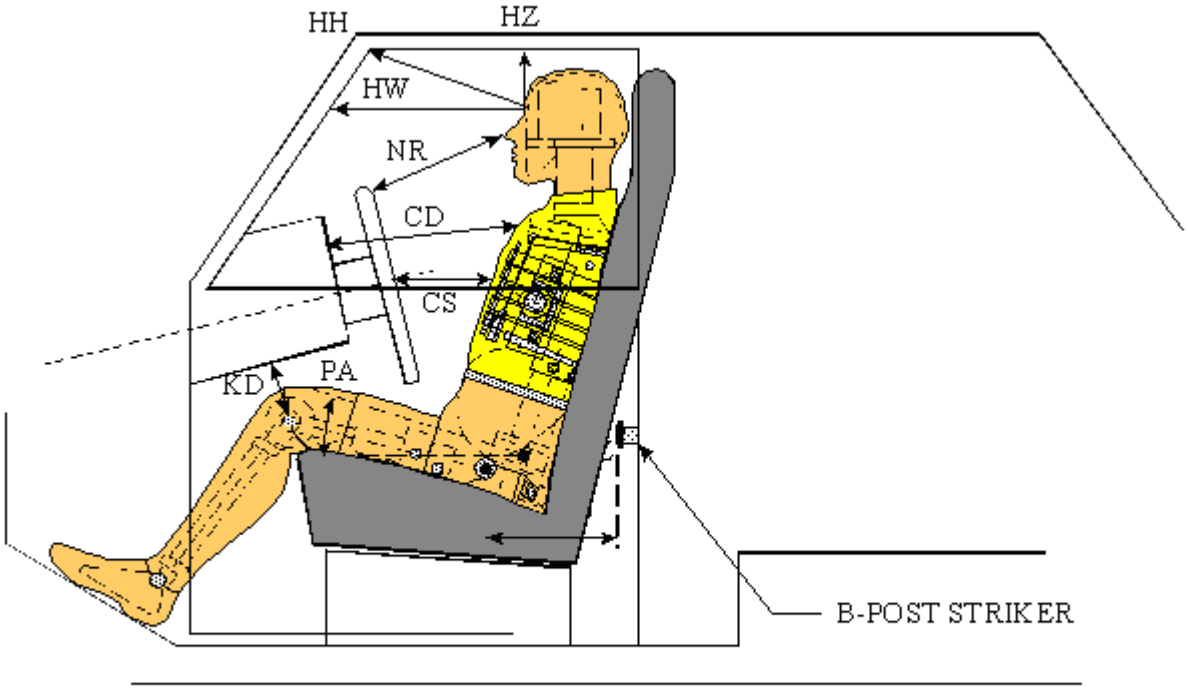
NOTE: all dimensions are in millimeters with tolerance of ±3 mm

	PRE-TEST (as delivered)	PRE-TEST (as tested)	POST-TEST (as tested)	∆ CHANGE
A	2634	2595	2568	-27
B	876	894	875	-19
C	893	804	901	97
D	4404	4292	4381	-23
E	290	290	240	-50
F	260	258	265	7
G	230	228	232	4
H	260	256	234	-22
I	270	266	244	-22
J1	246	240	258	18
J2	278	270	251	-19
K	319	318	318	0
L	325	290	325	0
M	380	369	375	6
N	761	761	758	-3
O	828	828	820	-8
P	1005	1005	1005	0
Q	439	439	426	-13
R	4301	4301	4298	-3
S	4303	4303	4250	-53
T	1766	1766	1580	-186

D = Length at Centerline E&L = Bumper Thickness R = Right Side Length S = Left Side Length
T = Width at B-Pillar J1 = To Pinch Weld J2 = To Sill

DATA SHEET 6
SID/HIII LONGITUDINAL CLEARANCE DIMENSIONS

Test Vehicle: 2007 Jeep Compass SUV NHTSA No. C70311



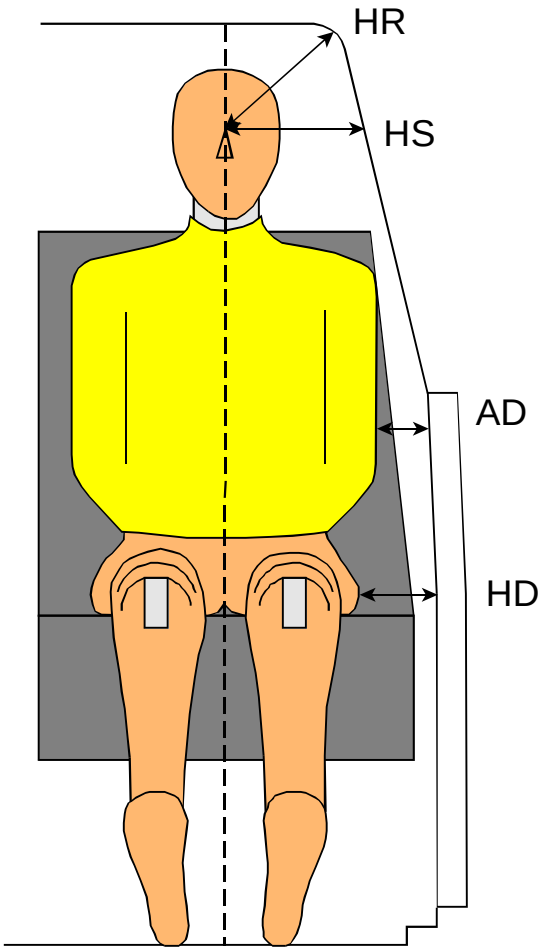
LEFT SIDE VIEW

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

	SID/HIII ID# 269
HH	412
HW	562
HZ	190
NR	345
CD	482
CS	286
KDL(KDA°)/KBL(KDA°)	135 / (31.4°)
KDR(KBA°)/KBR(KBA°)	125 / (32.0°)
PA°	14°
PHX	219
PHZ	130

DATA SHEET 7
SID/HIII LATERAL CLEARANCE DIMENSIONS

Test Vehicle: 2007 Jeep Compass SUV NHTSA No. C70311

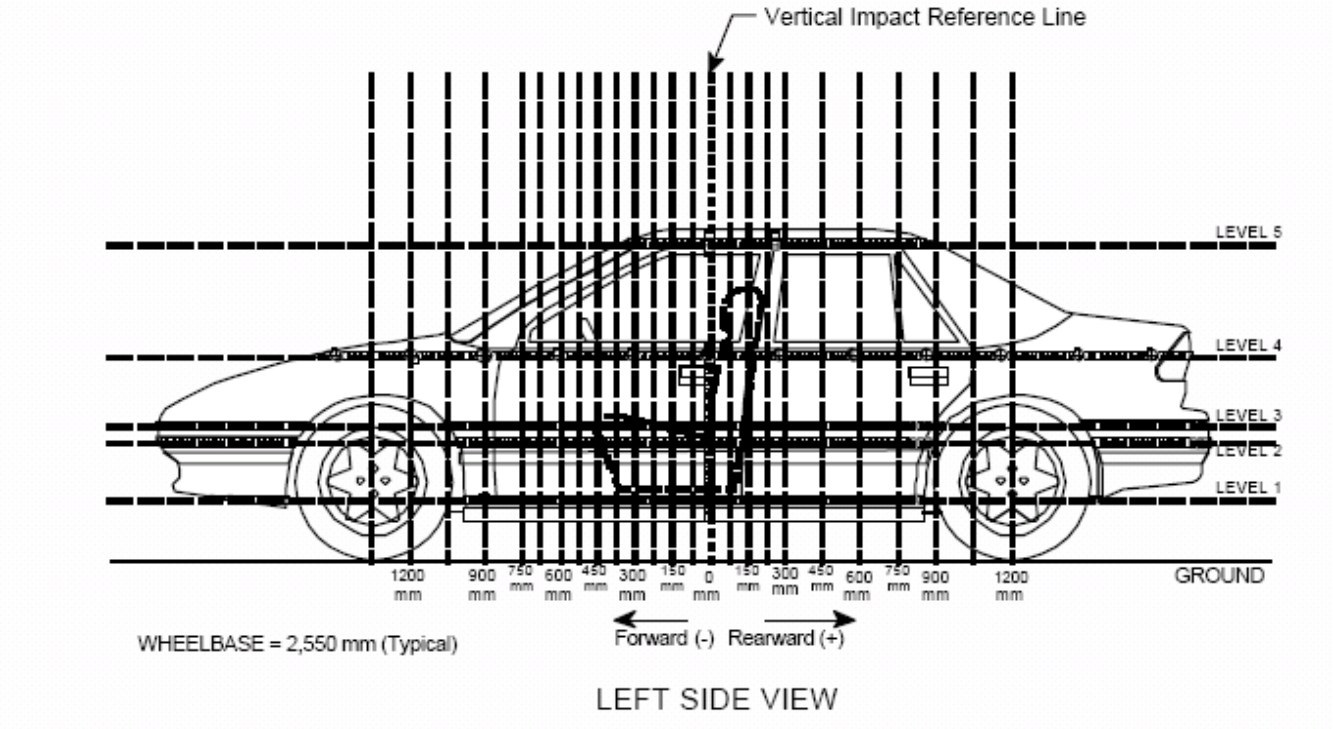


NOTE: All dimensions are in millimeters with tolerance of ±3 mm

	SID/HIII ID # 269
HR	192
HS	345
AD	100
HD	140

DATA SHEET 8
VEHICLE SIDE MEASUREMENTS

Test Vehicle: 2007JeepCompassSUV NHTSA No. C70311



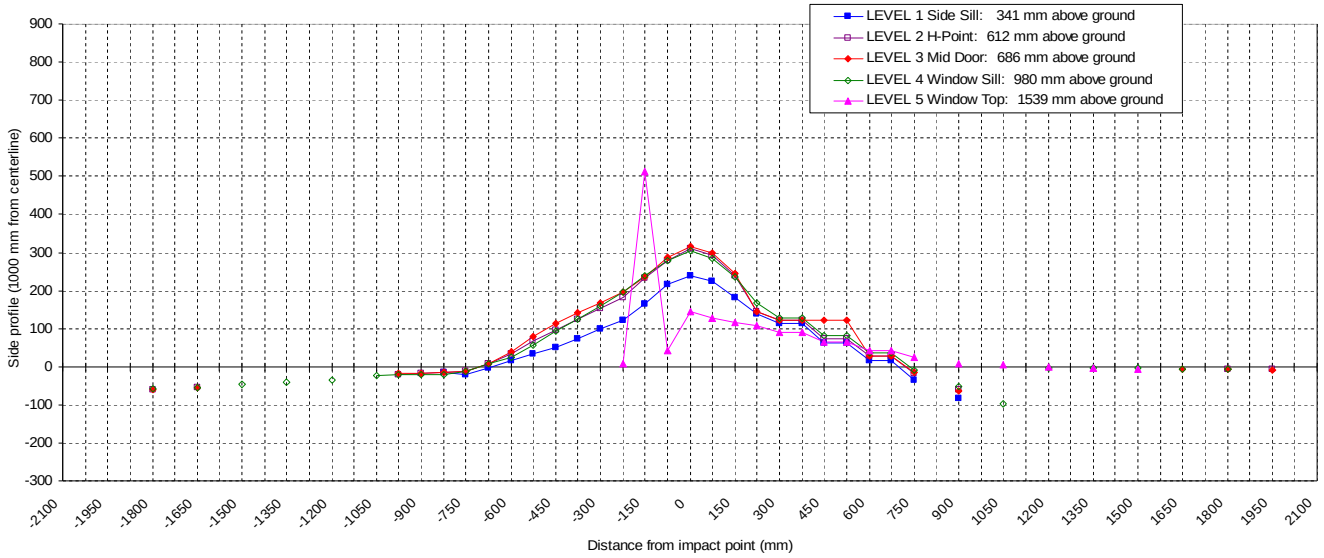
MEASUREMENTS ARE TAKEN WHEN THE VEHICLE IS IN THE "AS TESTED" CONFIGURATION.

Measurements Along the Vertical 0 mm Line Shown Above:

Level 5 @ Window Top	=	1539	millimeters
Level 4 @ Window Sill	=	980	millimeters
Level 3 @ Mid Door	=	686	millimeters
Level 2 @ Occupant H-Point	=	612	millimeters
Level 1 @ Sill Top Height	=	239	millimeters

DATA SHEET 9
VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Test Vehicle: 2007 Jeep Compass SUV NHTSA No. C70311



-1800	-1725	-1650	-1575	-1500	-1425	-1350	-1275	-1200	-1125	-1050	-975	-900	-825	-750	-675	-600	-525	-450	-375	-300	-225	-150	-75	0	75	150	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	1275	1350	1425	1500	1575	1650	1725	1800
--	--	--	--	--	--	--	--	--	--	--	--	--	181	179	180	179	177	176	174	173	172	171	171	170	170	171	170	171	--	172	--	172	--	175	--	182	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	166	159	177	194	211	227	247	273	295	337	386	409	394	353	309	283	--	235	--	189	--	141	--	99	--	--	--	--	--	--	--	--	--	--	--	--	--
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-15	-20	-3	15	34	51	73	100	123	166	215	239	224	182	139	112	N/A	63	N/A	17	N/A	-34	N/A	-83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
147	--	130	--	--	--	--	--	--	--	--	116	113	118	125	126	125	124	123	122	121	120	120	119	119	119	118	118	119	--	119	--	120	--	117	--	105	--	--	--	--	--	--	--	--	--	--	--	--	130
86	--	75	--	--	--	--	--	--	--	--	96	96	102	114	134	158	192	219	246	274	303	352	397	429	411	356	262	240	--	193	--	148	--	99	--	44	--	--	--	--	--	--	--	--	--	--	--	--	124
-61	N/A	-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-20	-17	-16	-11	8	33	68	96	124	153	183	232	278	310	292	238	144	121	N/A	74	N/A	28	N/A	-18	N/A	-61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-6
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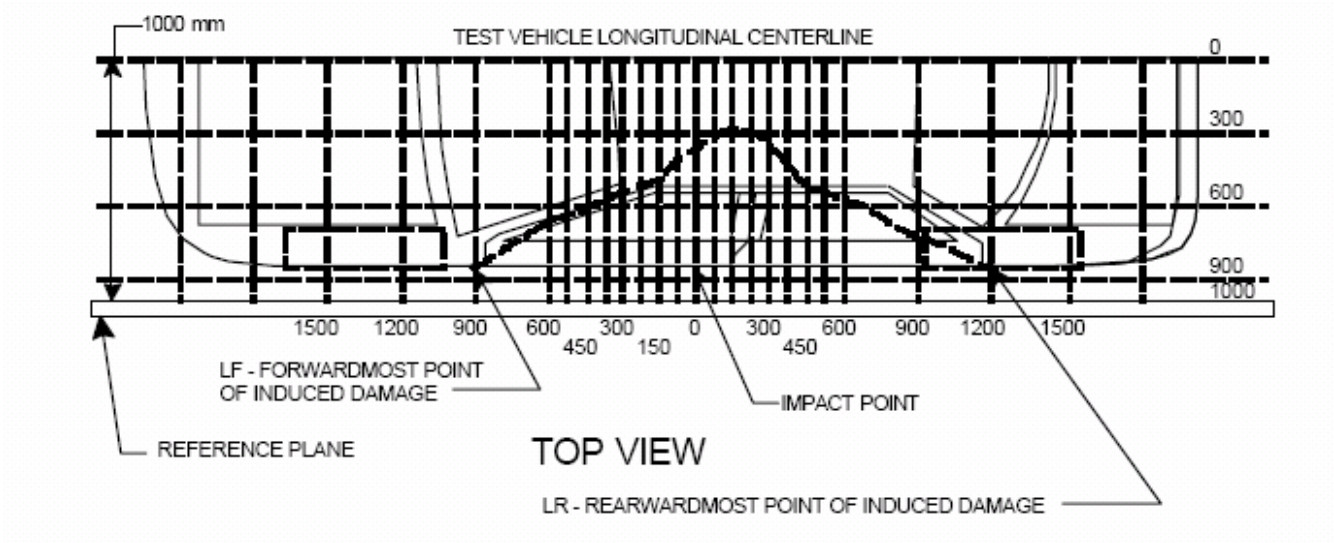
85	--	74	--	--	--	--	--	--	--	--	87	91	100	112	134	162	201	234	262	288	315	355	403	432	415	360	261	238	--	238	--	145	--	96	--	35	--	--	--	--	--	--	--	--	--	104	--	120
-60	N/A	-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-19	-17	-15	-12	9	38	79	113	141	168	196	237	286	315	299	245	146	123	N/A	122	N/A	29	N/A	-16	N/A	-62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-5	N/A	-7
343	--	295	--	263	--	242	--	227	--	210	205	200	188	184	176	170	165	159	156	153	151	150	148	147	145	143	142	143	--	141	--	141	--	140	--	123	--	117	--	116	--	118	--	126	--	135	--	148
284	--	241	--	216	--	201	--	191	--	186	184	180	166	173	183	194	222	251	280	312	348	390	426	450	429	378	310	271	--	224	--	177	--	130	--	70	--	19	--	113	--	115	--	123	--	129	--	141
-59	N/A	-54	N/A	-47	N/A	-41	N/A	-36	N/A	-24	-21	-20	-22	-11	7	24	57	92	124	159	197	240	278	303	284	235	168	128	N/A	83	N/A	36	N/A	-10	N/A	-53	N/A	-98	N/A	-3	N/A	-3	N/A	-3	N/A	-6	N/A	-7
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	514	407	399	386	380	375	372	372	--	371	--	372	--	372	--	374	--	377	--	385	--	399	--	420	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	523	918	441	530	508	490	480	463	--	437	--	415	--	396	--	383	--	381	--	383	--	395	--	414	--	--	--	--
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9	511	42	144	128	115	108	91	N/A	66	N/A	43	N/A	24	N/A	9	N/A	4	N/A	-2	N/A	-4	N/A	-6	N/A	N/A	N/A	N/A

DATA SHEET 10
VEHICLE DAMAGE PROFILE DISTANCES

Test Vehicle: 2007 Jeep Compass SUV NHTSA No. C70311



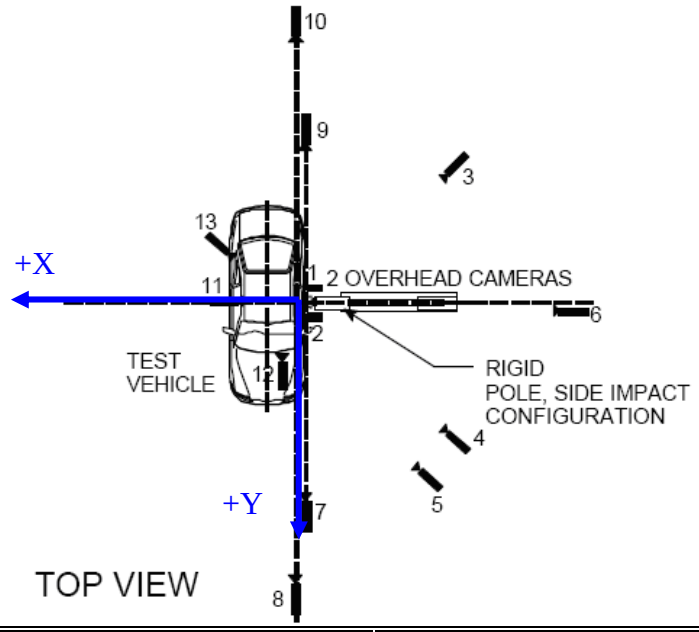
MEASUREMENT CONVENTIONS:
Forward of the impact point (towards front of vehicle) is considered negative (-).
Rearward of the impact point (toward rear of vehicle) is considered positive (+).

NOTE: All dimensions are in millimeters with tolerance of ±3 mm.

DPD MEASUREMENTS (mm)		POST TEST (mm)	PRETEST (mm)	STATIC CRUSH (mm)
1 (LR)	700	409	372	37
2	425	238	116	122
3	150	360	115	245
4	-125	759	404	355
5	-400	253	121	132
6 (LF)	-675	134	125	9

DATA SHEET 11
HIGH SPEED CAMERA LOCATIONS AND DATA

Test Vehicle: 2007 Jeep Compass SUV NHTSA No. C70311



Camera No.	View	Coordinates (millimeters)			Angle (deg.)	Lens (mm)	Film Speed (fps)
		X*	Y*	Z*			
1	Overhead view of test vehicle	970	180	-4375	90	8	1000
2	Overhead closeup view of impact plane	390	180	-4375	90	28	1000
3	Left side 45° – rearward pole view	-1870	-3825	1430	-6	24	1000
4	Left side 45° – forward pole view	-1870	3200	1715	-11	24	1000
5	Real time (30 fps) film coverage of test	-	-	-	-	-	30
6	Left side – rear pole view	-1670	620	2200	-26	24	1000
7	Front ground level – vehicle/pole impact	455	9290	775	-2	24	1000
8	Front ground level – vehicle roof targets and vehicle/pole impact	710	7820	1175	1	50	1000
9	Rear ground level – vehicle/pole impact	300	-10575	820	-1	50	1000
10	Rear ground level – view of rear roof tragets	900	-9565	1073	-1	28	1000
11	Test vehicle onboard -- side view of SID H3	2525	170	1210	-8	12	1000
12	Test vehicle onboard– front view of SID H3	1325	1370	1380	-11	25	1000
13	Test vehicle onboard– 3/4 rear view of SID H3	2525	-590	1260	-8	12.5	1000

* Reference (from point of impact); all measurements accurate to within ±6 mm.

+X = Film plane to impact location
+Y = Film plane to monorail centerline
+Z = film plane to ground (excluding moving cart height)

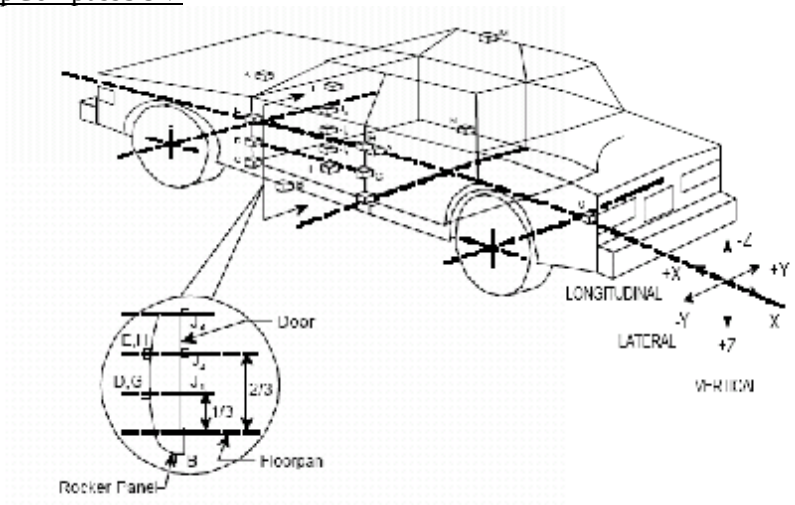
DATA SHEET 12
DUMMY DAMAGE CHECKLIST – SID/HIII

Dummy Serial No. 269 Date: 7-15-07

OK	Damaged	(Begin with general cleaning)
X	-	Outer skin on entire dummy (gashes, rips, etc.)
X	-	Head - Check that ballast is secure
X	-	Gashes, rips, general appearances, etc
X	-	Neck - Broken or cracks in rubber
X	-	Check that upper neck bracket is firmly attached to lower neck
X	-	Check for looseness at the condyle joint
X	-	Nodding blocks – cracked or out of position
X	-	Spine - Broken or cracks in rubber
X	-	Ribs - Check all ribs and rib supports for damage (bent or broken)
X	-	Check damping material or separation or cracks
X	-	Three rubber bumpers in place
X	-	Lateral Shock Absorber - Bent or broken
X	-	Transducer Leads - Torn cables
X	-	Accelerometer Mountings - (head, ribs, spine, and pelvis) - Check for secure mounting).
X	-	Knees- Check outer skin, insert and casting (without removing insert)
X	-	Limbs- Check for normal movement and adjustment
X	-	Head / Neck bracket attachment - Check to see if cracked or broken

DATA SHEET 13
TEST VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY

Test Vehicle: 2007JeepCompassSUV NHTSA No. C70311



Accelerometer Location		Pre-Test (mm)			Post Test (mm)		
		X	Y	Z	X	Y	Z
A	Vehicle CG X,Y,Z	2339	-22	-443	2327	7	-449
B	Struck Side Front Sill Y	2601	-652	-331	2538	-635	-335
C	Struck Side A-Pillar Sill Y	2973	-653	-535	2910	-665	-433
D	Struck Side Lower A-Pillar Y	3439	-680	-922	3385	-714	-925
E	Struck Side Middle A-Pillar Y	2959	-631	-1112	2915	-645	-1110
F	Struck Side B-Pillar Sill Y	2062	-696	-470	2038	-538	-469
G	Struck Side Lower B-Pillar Y	2056	-705	-722	2041	-540	-724
H	Struck Side Middle B-Pillar Y	2017	-706	-995	2013	-555	-993
I	Front Outboard Seat Track Y at H-point X	2285	-545	-451	2274	-522	-470
J	Front Door Y (3) – 480 mm forward of impact	-	-	-	-	-	-
K	Top of Engine X,Y	3514	93	-798	3503	44	-847
L	Center of Firewall Y	3472	-22	-963	3450	-53	-976
M	Unstruck Side Roof Rail Y at impact line	1924	538	-1561	1919	523	-1599
N	Unstuck Side Floor Sill Y at impact line	2103	627	-361	2103	625	-347
O	Rear Axle Floorpan X,Y	174	14	-607	170	-16	-605

*Reference: X - Rear Bumper (Positve Forward)
Y - Vehicle Centerline (Positive To Right)
Z - Ground Level (Positive Down)

DATA SHEET 13
TEST VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY (Continued)

Test Vehicle: 2007 Jeep Compass SUV NHTSA No. C70311

		Longitudinal		Lateral		Vertical		Resultant	
Accelerometer		Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
A	Pos.	9.2	67.3	83.1	32.0	24.8	67.4	83.5	32.1
	Neg.	-8.2	42.3	-45.8	50.0	-42.7	41.8	-	-
B	Pos.	-	-	34.7	17.5	-	-	-	-
	Neg.	-	-	-7.3	22.0	-	-	-	-
C	Pos.	-	-	18.8	60.8	-	-	-	-
	Neg.	-	-	-17.2	37.5	-	-	-	-
D	Pos.	-	-	13.1	85.5	-	-	-	-
	Neg.	-	-	-1.2	367.2	-	-	-	-
E	Pos.	-	-	21.2	33.4	-	-	-	-
	Neg.	-	-	-10.7	36.8	-	-	-	-
F	Pos.	-	-	65.6	12.2	-	-	-	-
	Neg.	-	-	-15.9	23.3	-	-	-	-
G	Pos.	-	-	48.5	12.0	-	-	-	-
	Neg.	-	-	-11.4	35.1	-	-	-	-
H	Pos.	-	-	51.6	15.4	-	-	-	-
	Neg.	-	-	-5.7	35.0	-	-	-	-
I	Pos.	-	-	49.0	26.1	-	-	-	-
	Neg.	-	-	-17.7	40.7	-	-	-	-
J	Pos.	-	-	-	-	-	-	-	-
	Neg.	-	-	-	-	-	-	-	-
K	Pos.	14.9	109.3	24.0	100.1	-	-	-	-
	Neg.	-16.7	54.5	-6.0	198.9	-	-	-	-
L	Pos.	-	-	13.1	85.3	-	-	-	-
	Neg.	-	-	-1.3	365.4	-	-	-	-
M	Pos.	-	-	15.0	35.8	-	-	-	-
	Neg.	-	-	-1.9	392.8	-	-	-	-
N	Pos.	-	-	17.2	75.5	-	-	-	-
	Neg.	-	-	-1.6	178.9	-	-	-	-
O	Pos.	6.0	25.9	21.8	81.4	-	-	-	-
	Neg.	-14.2	88.5	-11.6	74.1	-	-	-	-

SECTION 5

FMVSS NO. 301 DATA

DATA SHEET 14
SUMMARY OF FMVSS NO. 301 DATA

NHTSA TEST No.: C70311 TEST DATE: 8/15/07

VEHICLE MAKE/MODEL: 2007 Jeep Compass SUV

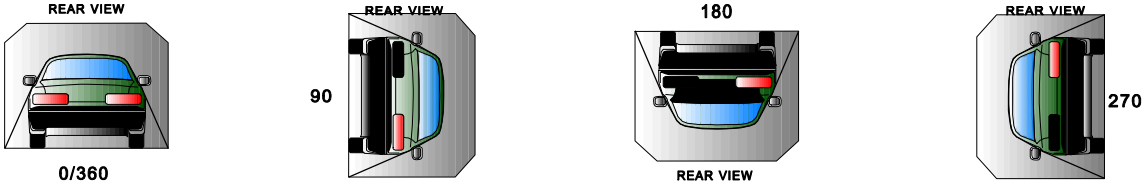
FMVSS 301 FUEL SYSTEM INTEGRITY POST IMPACT DATA

FUEL SPILLAGE MEASUREMENT:

Time Interval	Amount	Maximum Allowable Spillage
Impact Until Motion Ceases	0	**28 g**
First Five Minutes Following Impact	0	**142 g**
Next 25 Minutes	0	**28 g / 1 minute**

SOLVENT SPILLAGE DETAILS: None

FMVSS 301 STATIC ROLLOVER DATA



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Stage	Rotation Time (spec. 1 -3 min)				FMVSS 301 Hold Time		Total Time				Next Whole Minute Interval	
0º - 90º	1	minutes	03	seconds	5	minutes	6	minutes	3	seconds	7	minutes
90º - 180º	1	minutes	04	seconds	5	minutes	6	minutes	4	seconds	7	minutes
180º-270º	1	minutes	00	seconds	5	minutes	6	minutes	0	seconds	7	minutes
270º-360º	1	minutes	02	seconds	5	minutes	6	minutes	2	seconds	7	minutes

II. FMVSS 301 REQUIREMENTS: (Maximum allowable solvent spillage):

First 5 minutes from onset of rotation	6th min.	7th min.	8th min. (if required)
142 g	28 g	28 g	28 g

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

Rollover Stage	First 5 minutes from onset of rotation (g)	6th min. (g)	7th min. (g)	8th min. (if required) (g)
0º - 90º	0	0	0	N/A
90º - 180º	0	0	0	N/A
180º-270º	0	0	0	N/A
270º-360º	0	0	0	N/A

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S):

Rollover Stage	Spillage Location
0º - 90º	None
90º - 180º	None
180º-270º	None
270º-360º	None

APPENDIX A

PHOTOGRAPHS

TABLE OF PHOTOGRAPHS

TABLE OF PHOTOGRAPHS (continued)

Figure A-1: As Received Left Front ¾ View

Figure A-2: As Received Right Rear ¾ View

Figure A-3: Vehicle Certification Label

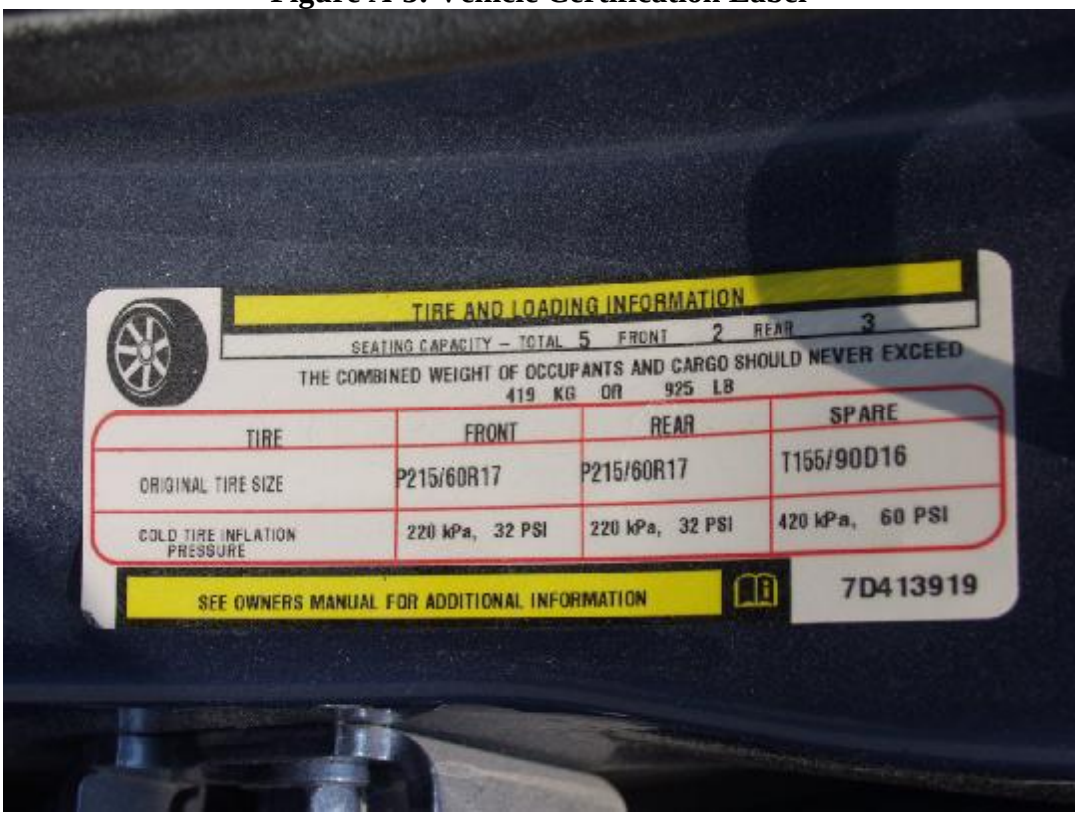


Figure A-4: Vehicle Tire Placard Label

Figure A-5: Pre-Test Front View

Figure A-6: Post-Test Front View

Figure A-7: Pre-Test Left Front ¾ View

Figure A-8: Post-Test Left Front ¾ View

Figure A-9: Pre-Test Left Side View

Figure A-10: Post-Test Left Side View

Figure A-11: Pre-Test Left Rear ¾ View

Figure A-12: Post-Test Left Rear ¾ View

Figure A-13: Pre-Test Rear View

Figure A-14: Post-Test Rear View

Figure A-15: Pre-Test Right Rear ¾ View

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

Figure A-17: Pre-Test Right Side View

Figure A-18: Post-Test Right Side View

Figure A-19: Pre-Test Right Front ¾ View

Figure A-20: Post-Test Right Front ¾ View

Figure A-21: Pre-Test Left Side View of Aligned Vehicle and Pole

Not Available

Figure A-22: Pre-Test Right Side View of Aligned Vehicle and Pole

Figure A-23: Pre-Test Overhead View of Aligned Vehicle and Pole

Not Available

Figure A-24: Post-Test Overhead View of Vehicle and Pole

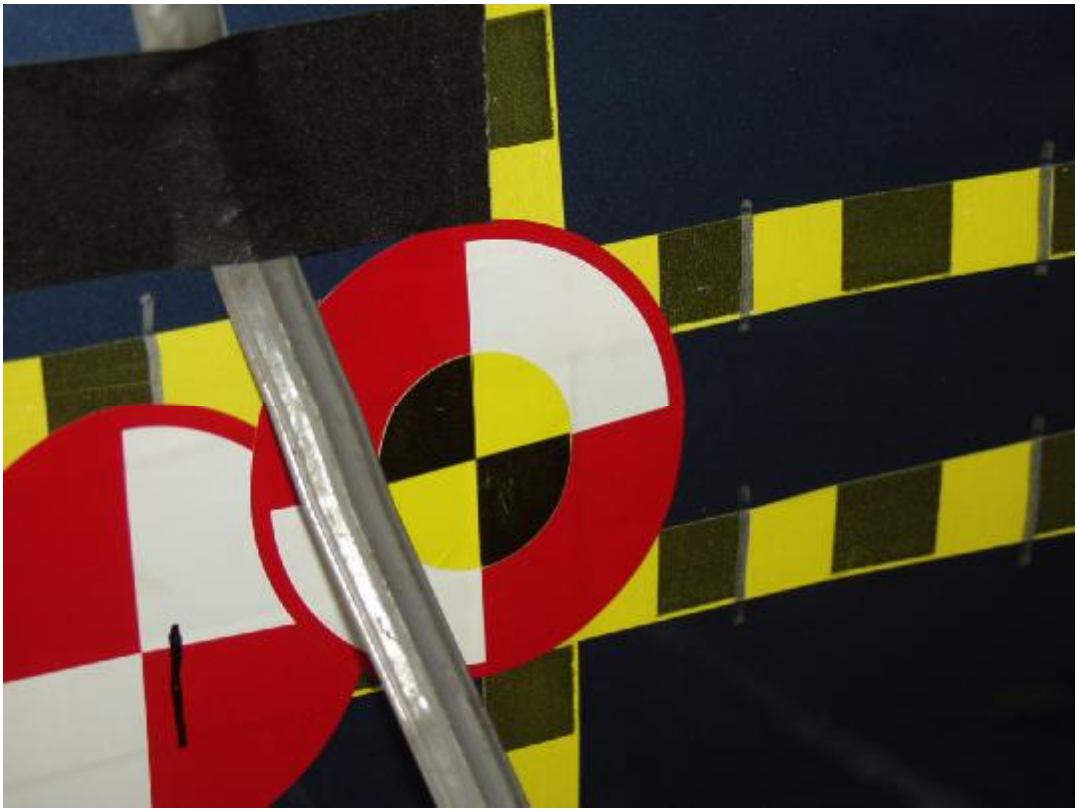


Figure A-25: Pre-Test Close-Up View of Impact Point Target

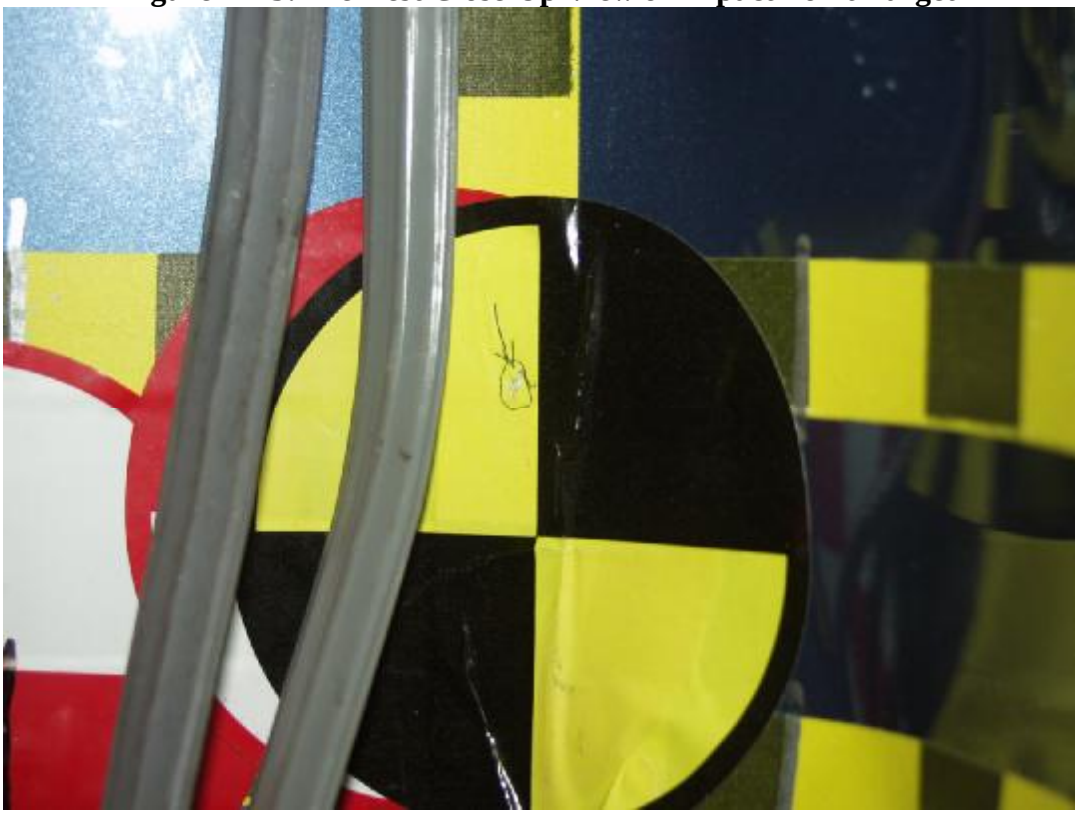


Figure A-26: Post-Test Close-Up View of Impact Point Target
(Note: The impact point was moved approximately 22 mm rearward of initial pre-test Target location)

Figure A-27: Pre-Test Opposite Side View of SID/HIII

Figure A-28: Post-Test Opposite Side View of SID/HIII

Figure A-29: Pre-Test Impact Side View of SID/HIII with Door Open

Not Available

Figure A-30: Pre-Test Impact Side View of SID/HIII

Figure A-31: Post-Test Impact Side View of SID/HIII

Figure A-32: Pre-Test Dummy Shoulder and Door Top View

Figure A-33: Post-Test Dummy Shoulder and Door Top View

Figure A-34: Pre-Test Impact Side Front Interior Trim

Figure A-35: Post-Test Impact Side Front Interior Trim

Figure A-36: Pre-Test Left Front ¾ View of Impact Zone

Figure A-37: Post-Test Left Front ¾ View of Impact Zone

Figure A-38: Pre-Test Left Rear ¾ View of Impact Zone

Figure A-39: Post-Test Left Rear ¾ View of Impact Zone

Figure A-40: Rollover 90 Degrees

Figure A-41: Rollover 180 Degrees

Figure A-42: Rollover 270 Degrees

Not Available

Figure A-43: Rollover 360 Degrees

Figure A-44: Impact Photo

APPENDIX B

SID/HIII AND VEHICLE RESPONSE DATA

(SAE sign convention)

DATA CHANNEL FILTER CLASS SUMMARY

Data Type	SAE Filter Class
Dummy Head Accelerations	CFC 1000
Rib Accelerations	FIR 100
Spine Accelerations	FIR 100
Pelvis Accelerations	FIR 100

DATA CHANNEL TITLE KEY

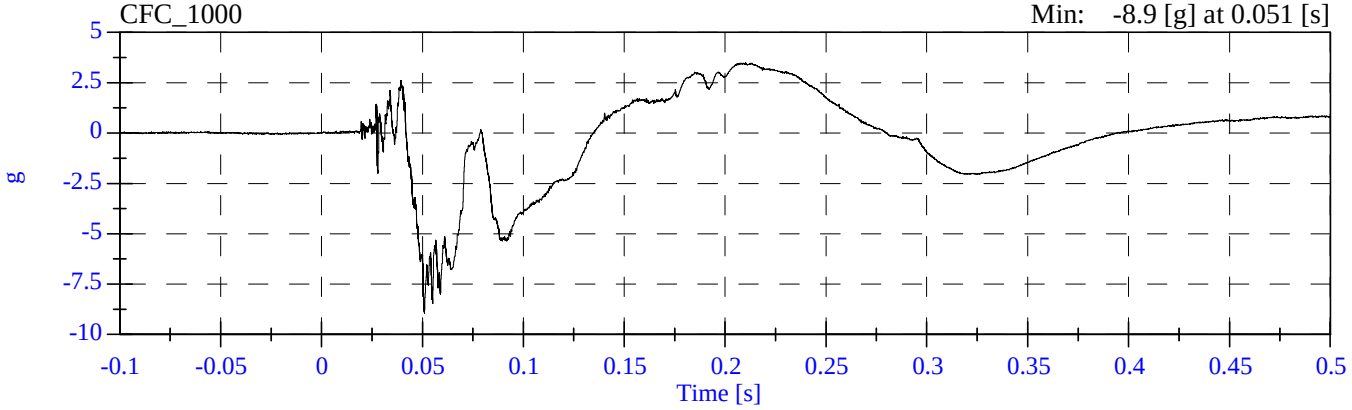
Prefix	Suffix
V1 = Vehicle 1 (Moving Barrier)	Ax = Acceleration, X-direction
V2 = Vehicle 2 (Test Vehicle)	Ay = Acceleration, Y-direction
P1 = Left Front Seating Position (Driver)	Az = Acceleration, Z-direction
A1-A17 = Accelerometer Location Number	Fx = Force, X-direction
	Fy = Force, Y-direction
	Fz = Force, Z-direction
	Mx = Moment about X
	My = Moment about Y
	Mz = Moment about Z
	Vx = Velocity, X-direction
	Vy = Velocity, Y-direction
	Vz = Velocity, Z-direction
	R = Redundant

TABLE OF DATA PLOTS

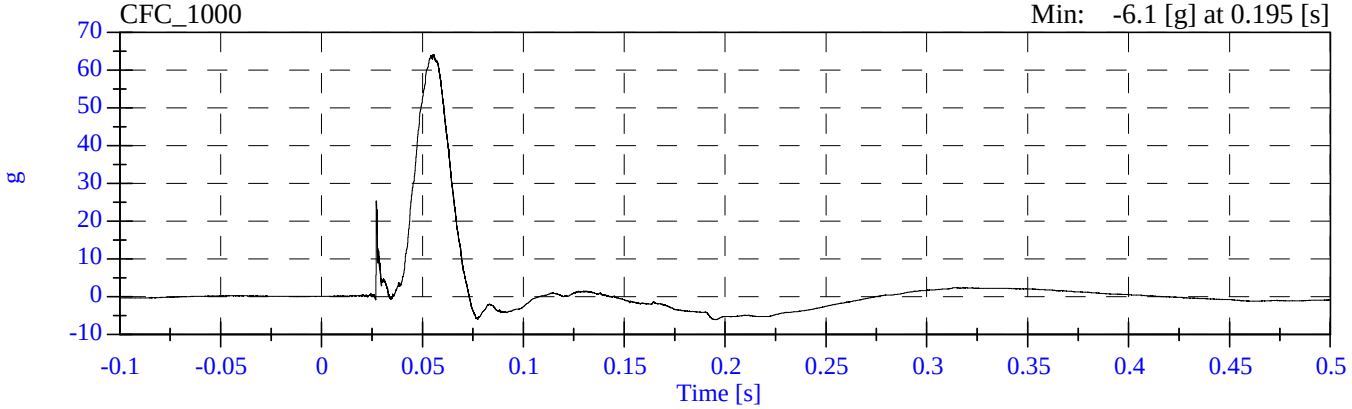
TABLE OF DATA PLOTS (continued)

2007 FMVSS 201P Test 1 2007 Jeep Compass
C70311 - August 15, 2007

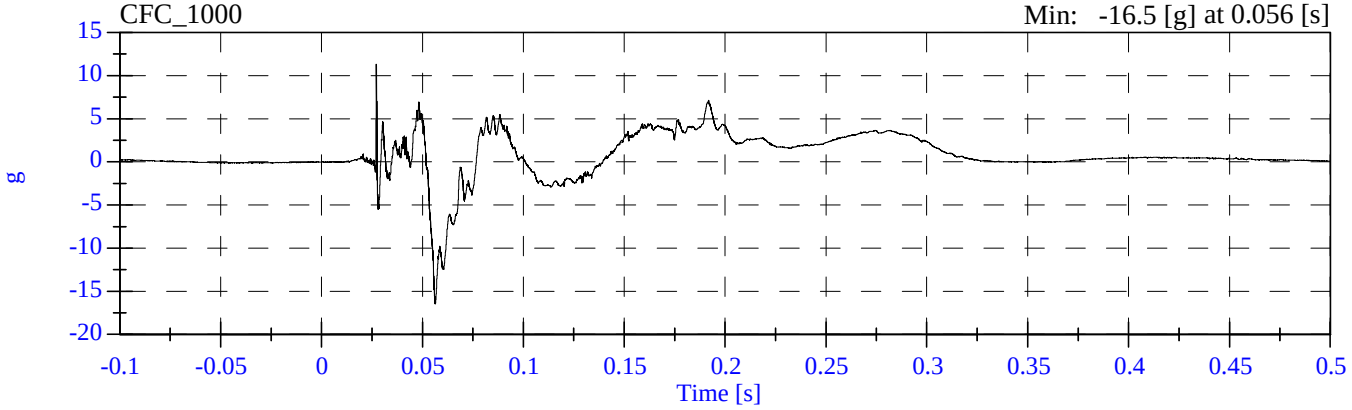
V1P1 Head x
CFC_1000
Max: 3.5 [g] at 0.210 [s]
Min: -8.9 [g] at 0.051 [s]



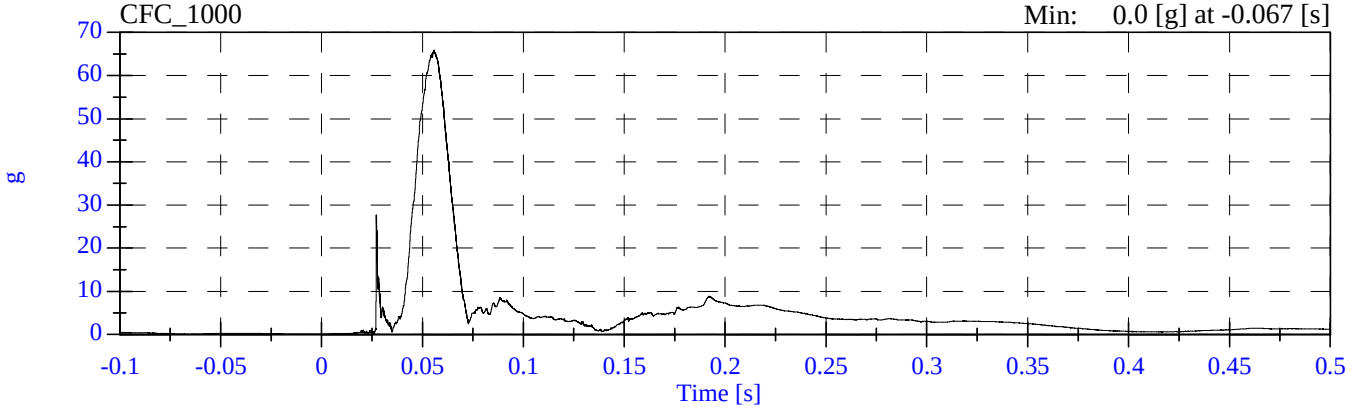
V1P1 Head y
CFC_1000
Max: 64.1 [g] at 0.055 [s]
Min: -6.1 [g] at 0.195 [s]



V1P1 Head z
CFC_1000
Max: 11.4 [g] at 0.027 [s]
Min: -16.5 [g] at 0.056 [s]

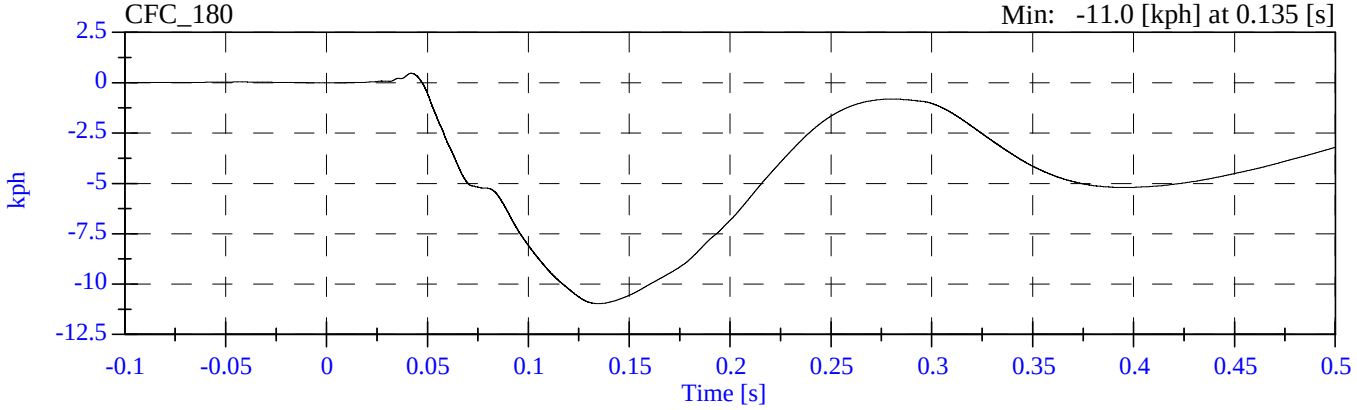


V1P1 Head Resultant
CFC_1000
Max: 65.9 [g] at 0.056 [s]
Min: 0.0 [g] at -0.067 [s]

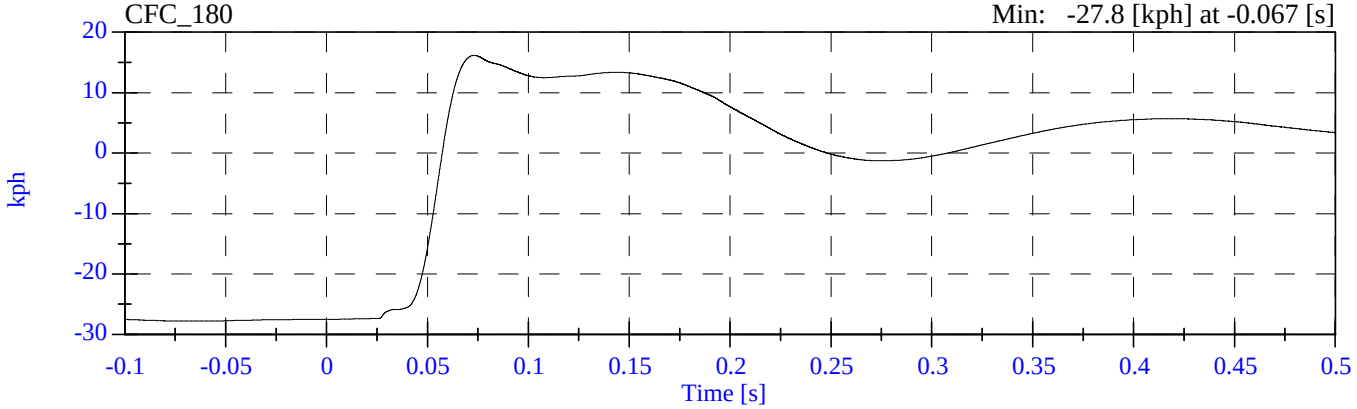


2007 FMVSS 201P Test 1 2007 Jeep Compass
C70311 - August 15, 2007

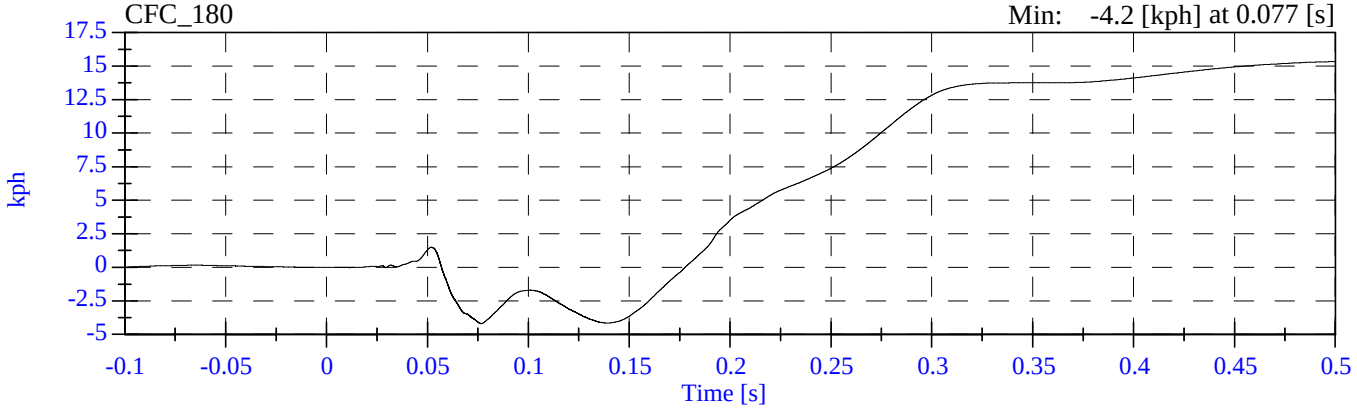
V1P1 Head x Velocity
CFC_180
Max: 0.5 [kph] at 0.042 [s]
Min: -11.0 [kph] at 0.135 [s]



V1P1 Head y Velocity
CFC_180
Max: 16.2 [kph] at 0.073 [s]
Min: -27.8 [kph] at -0.067 [s]

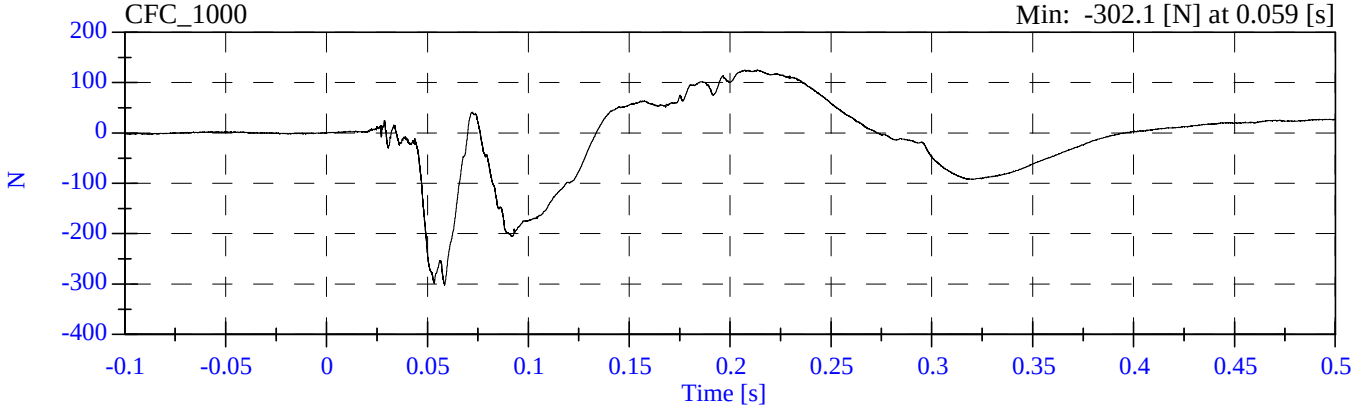


V1P1 Head z Velocity
CFC_180
Max: 15.3 [kph] at 0.500 [s]
Min: -4.2 [kph] at 0.077 [s]

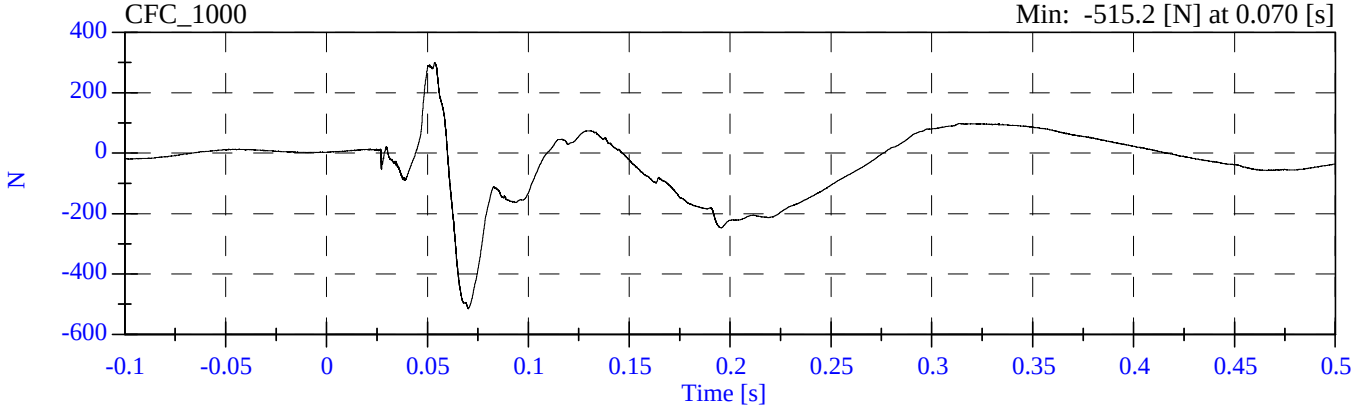


2007 FMVSS 201P Test 1 2007 Jeep Compass
C70311 - August 15, 2007

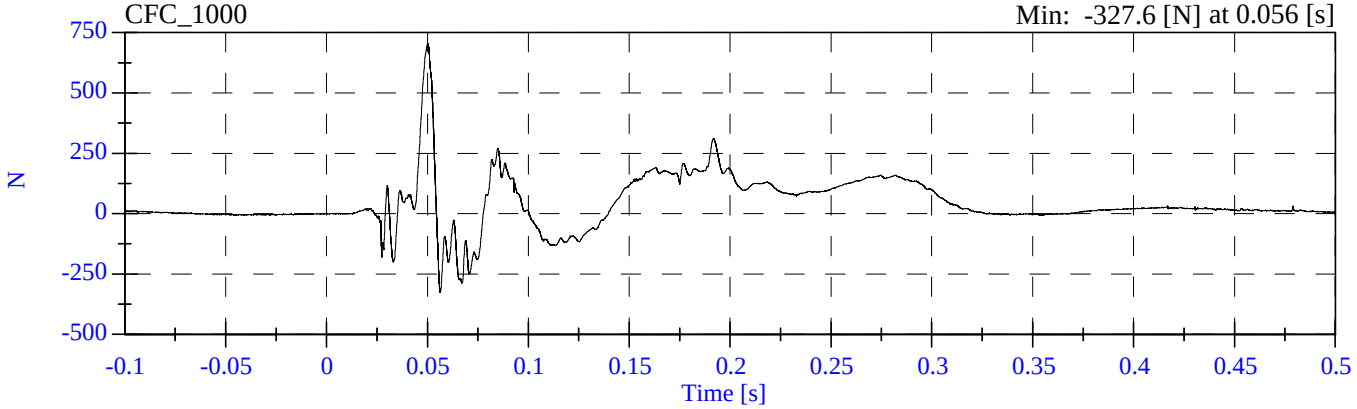
V1P1 Upper Neck Fx
CFC_1000
Max: 124.9 [N] at 0.207 [s]
Min: -302.1 [N] at 0.059 [s]



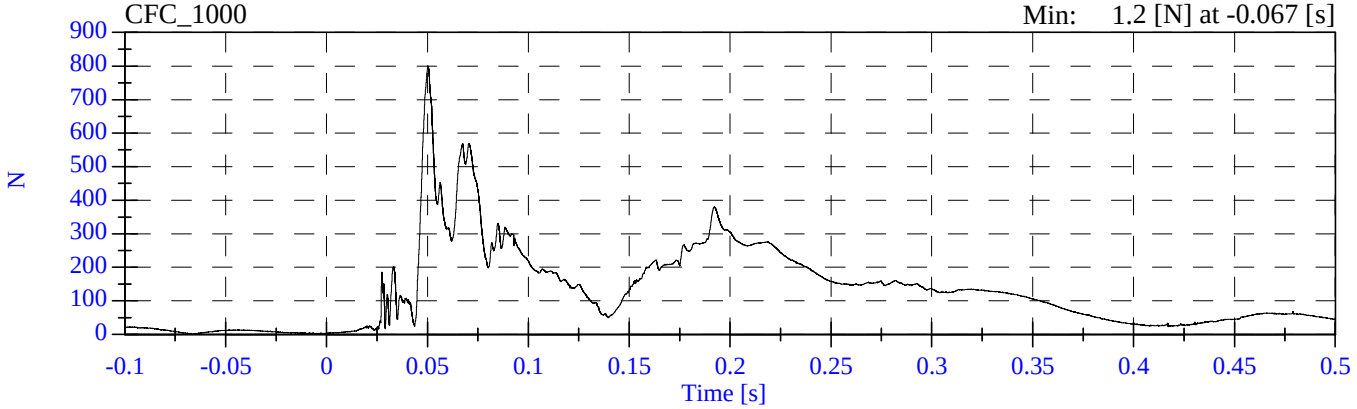
V1P1 Upper Neck Fy
CFC_1000
Max: 299.4 [N] at 0.053 [s]
Min: -515.2 [N] at 0.070 [s]



V1P1 Upper Neck Fz
CFC_1000
Max: 704.1 [N] at 0.050 [s]
Min: -327.6 [N] at 0.056 [s]

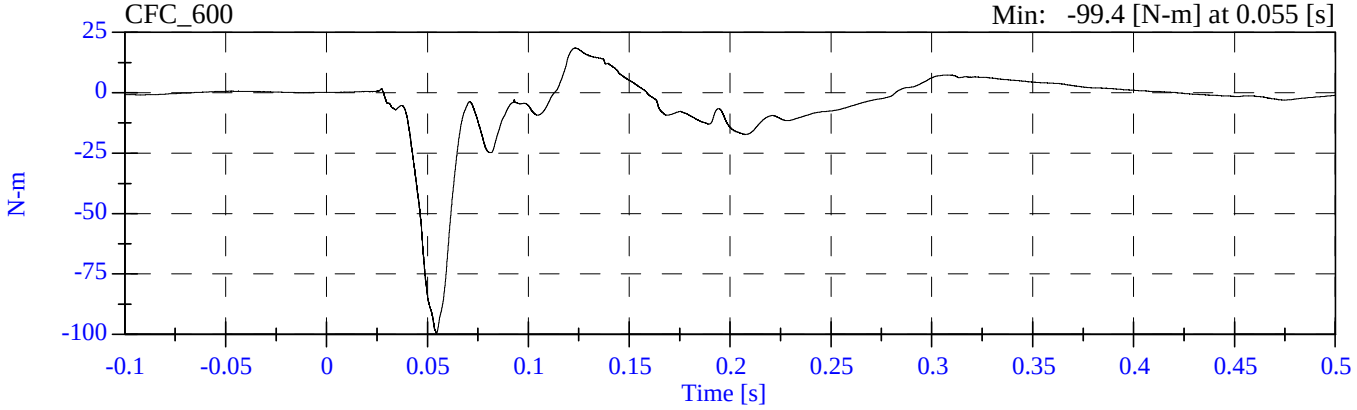


V1P1 Upper Neck F Resultant
CFC_1000
Max: 800.4 [N] at 0.050 [s]
Min: 1.2 [N] at -0.067 [s]

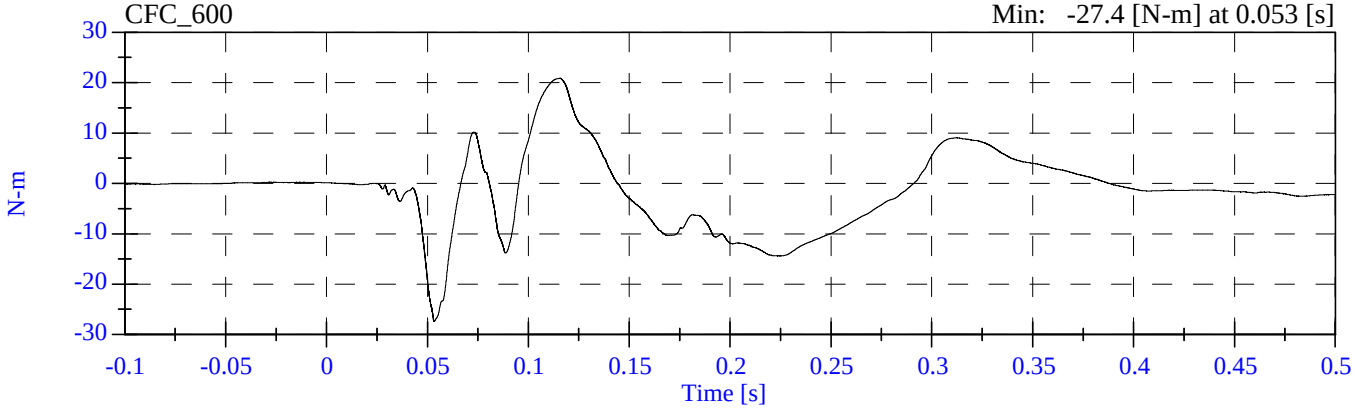


2007 FMVSS 201P Test 1 2007 Jeep Compass
C70311 - August 15, 2007

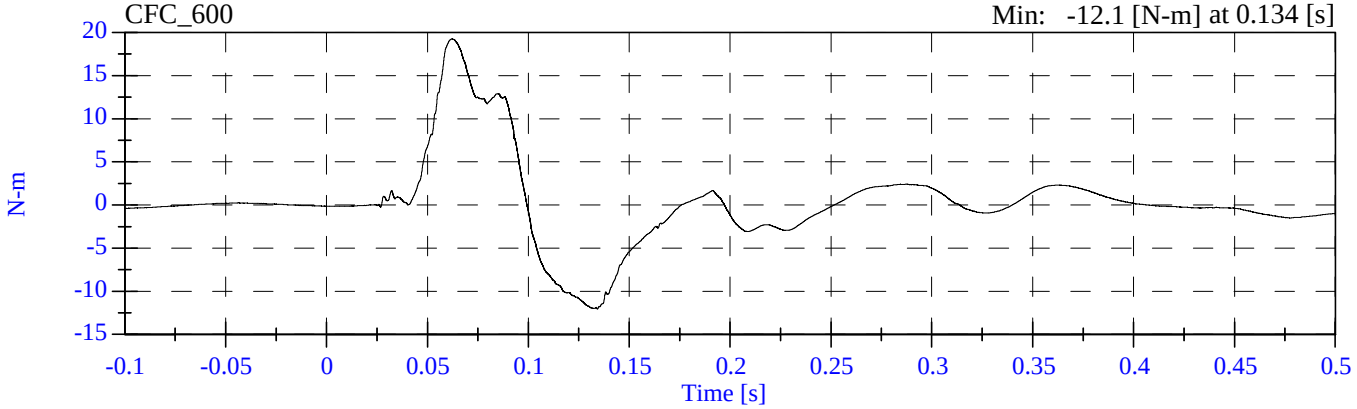
V1P1 Upper Neck Mx
CFC_600
Max: 18.5 [N-m] at 0.123 [s]
Min: -99.4 [N-m] at 0.055 [s]



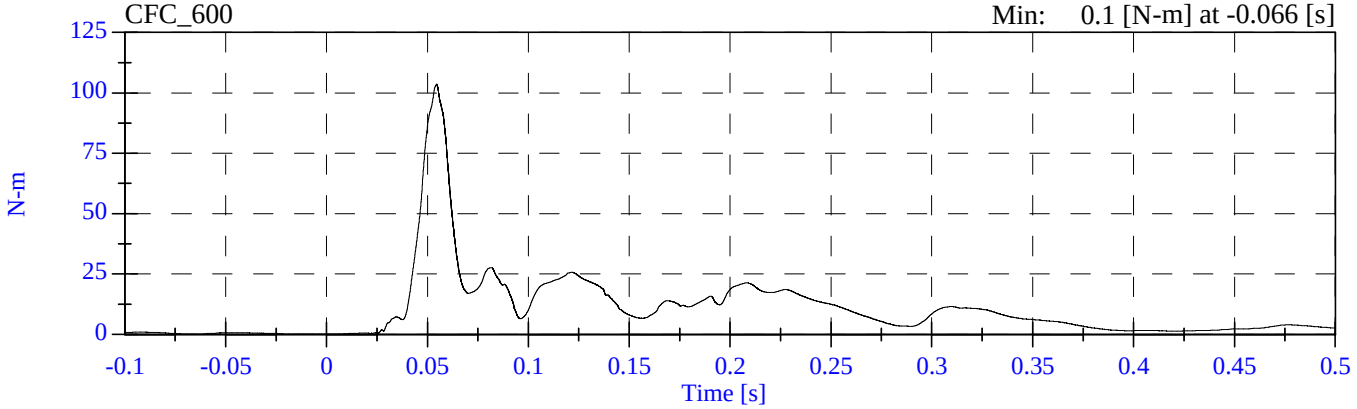
V1P1 Upper Neck My
CFC_600
Max: 20.9 [N-m] at 0.116 [s]
Min: -27.4 [N-m] at 0.053 [s]



V1P1 Upper Neck Mz
CFC_600
Max: 19.3 [N-m] at 0.062 [s]
Min: -12.1 [N-m] at 0.134 [s]



V1P1 Upper Neck M Resultant
CFC_600
Max: 103.6 [N-m] at 0.055 [s]
Min: 0.1 [N-m] at -0.066 [s]



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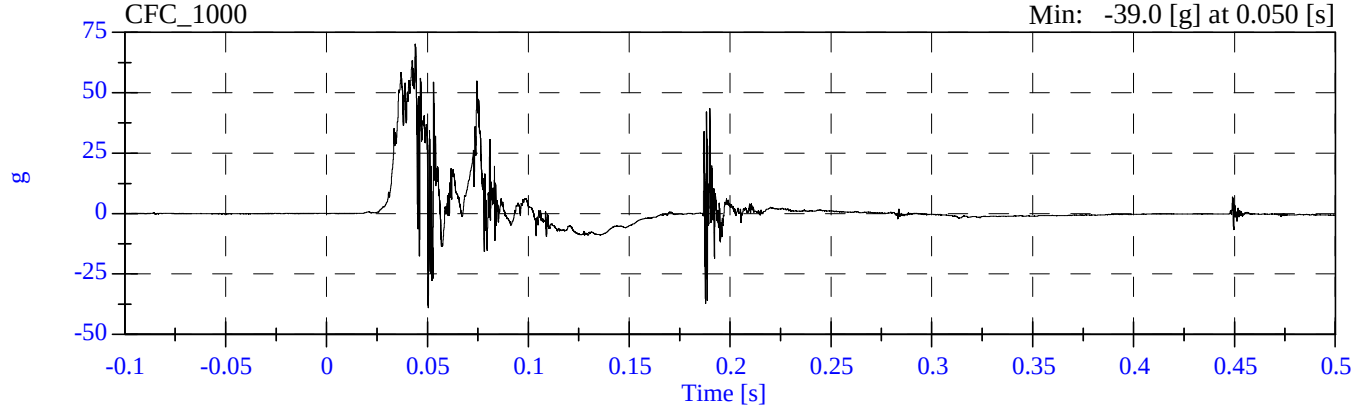
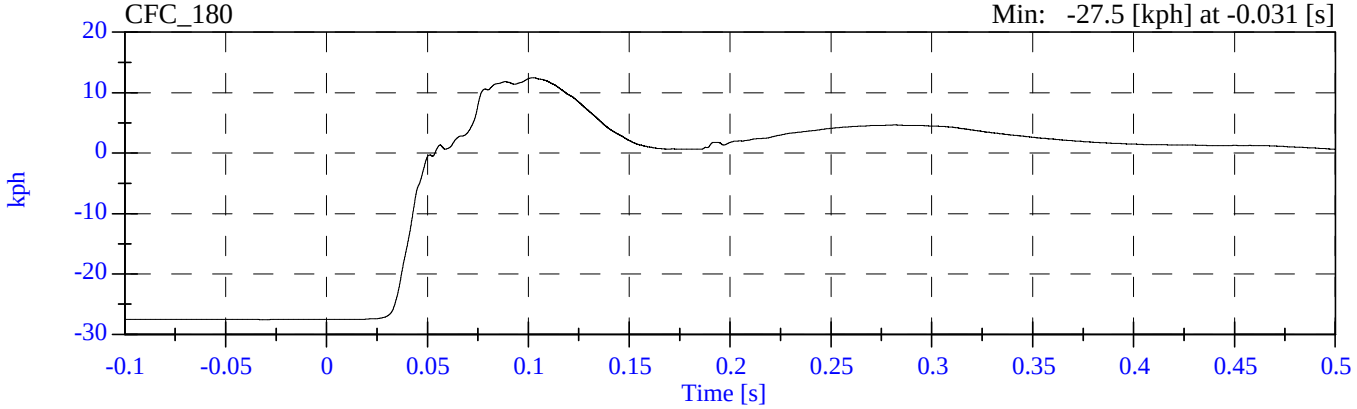
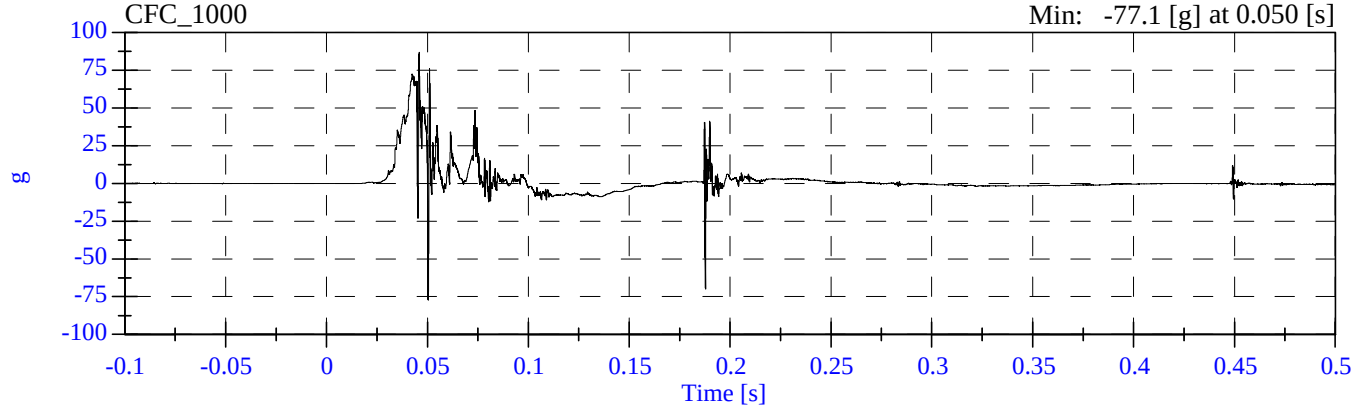
V1P1 Upper Rib y
CFC_1000
Max: 70.1 [g] at 0.044 [s]
Min: -39.0 [g] at 0.050 [s]



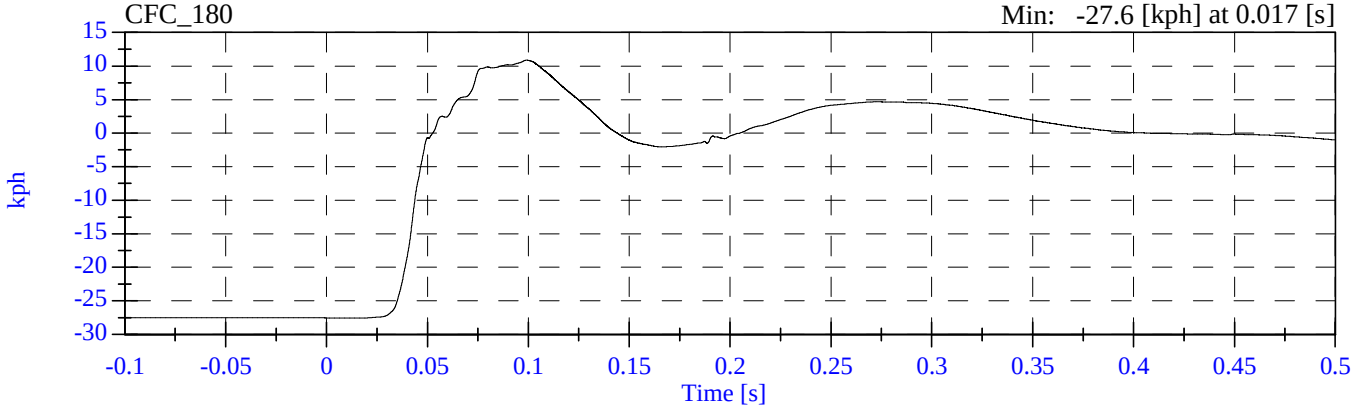
V1P1 Upper Rib y Velocity
CFC_180
Max: 12.5 [kph] at 0.102 [s]
Min: -27.5 [kph] at -0.031 [s]



V1P1 Lower Rib y
CFC_1000
Max: 86.8 [g] at 0.046 [s]
Min: -77.1 [g] at 0.050 [s]



V1P1 Lower Rib y Velocity
CFC_180
Max: 10.9 [kph] at 0.099 [s]
Min: -27.6 [kph] at 0.017 [s]



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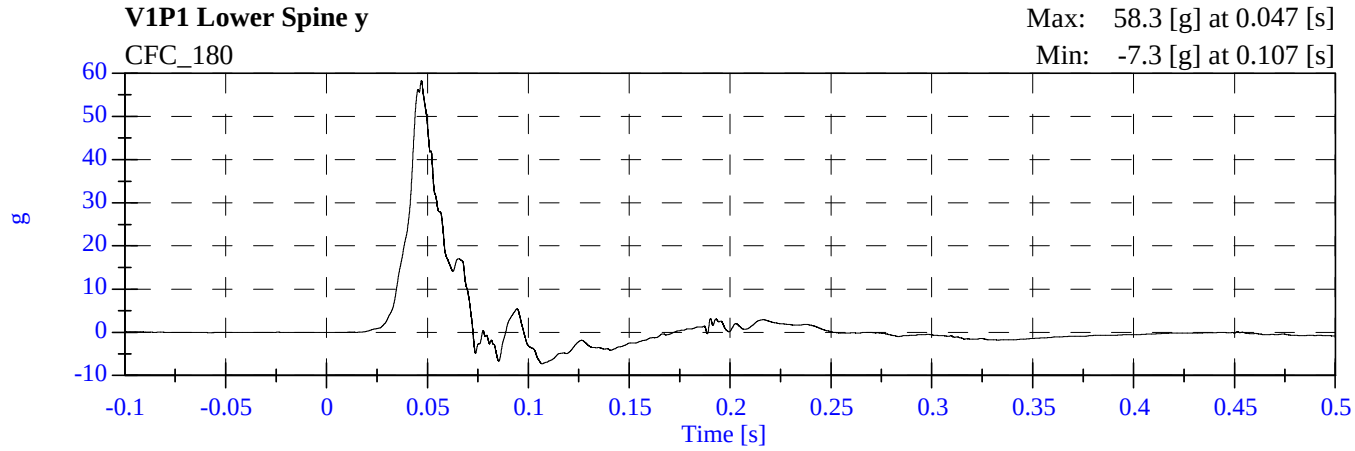

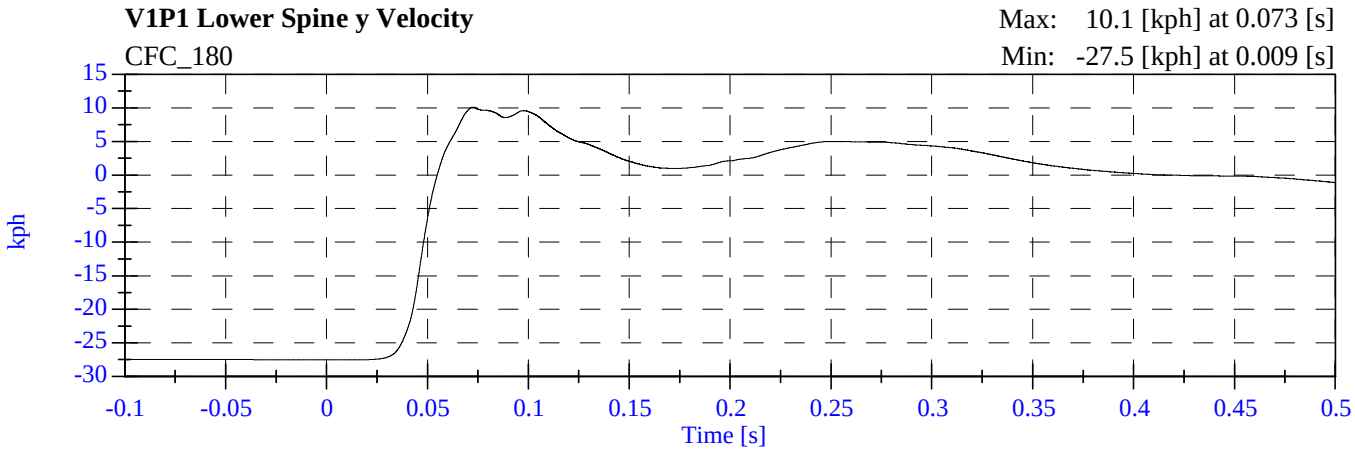

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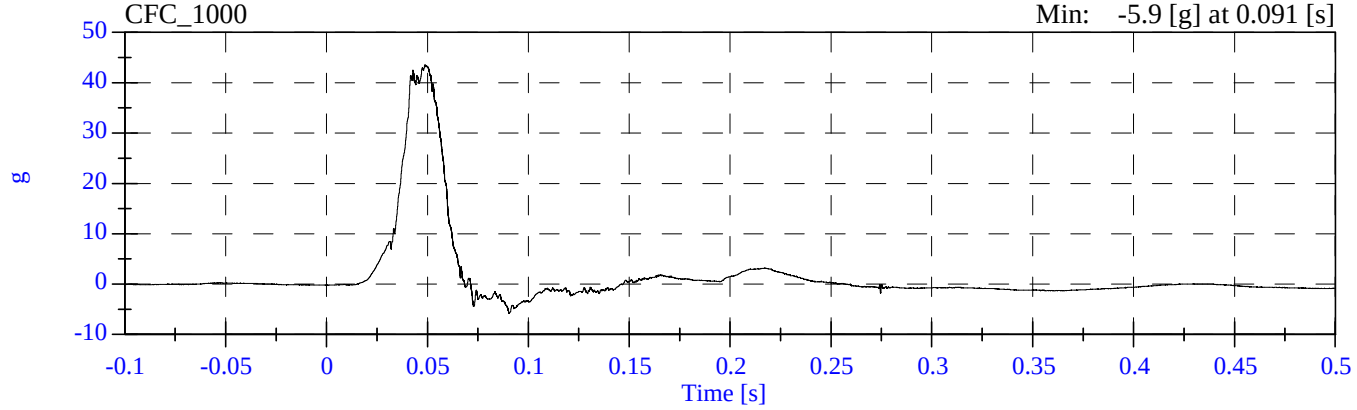
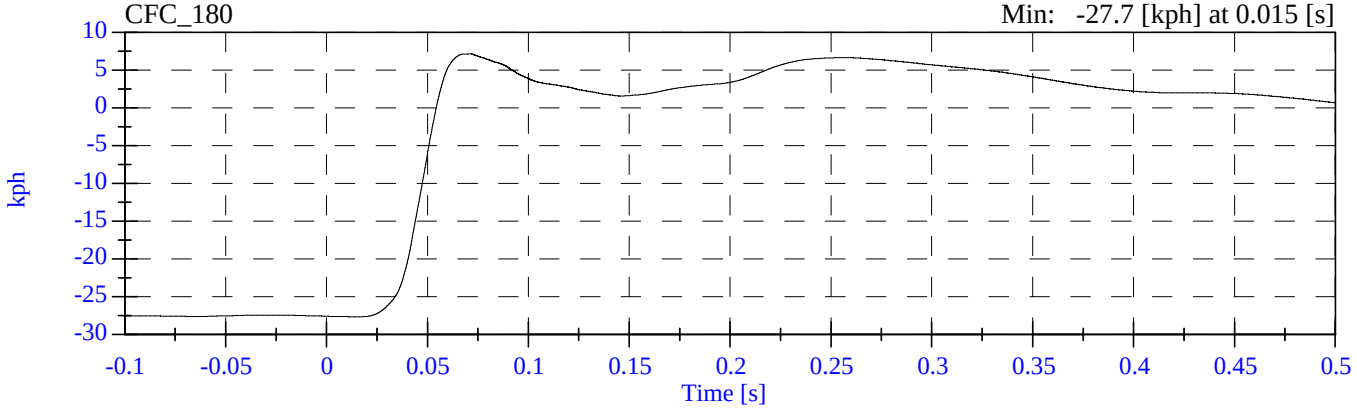
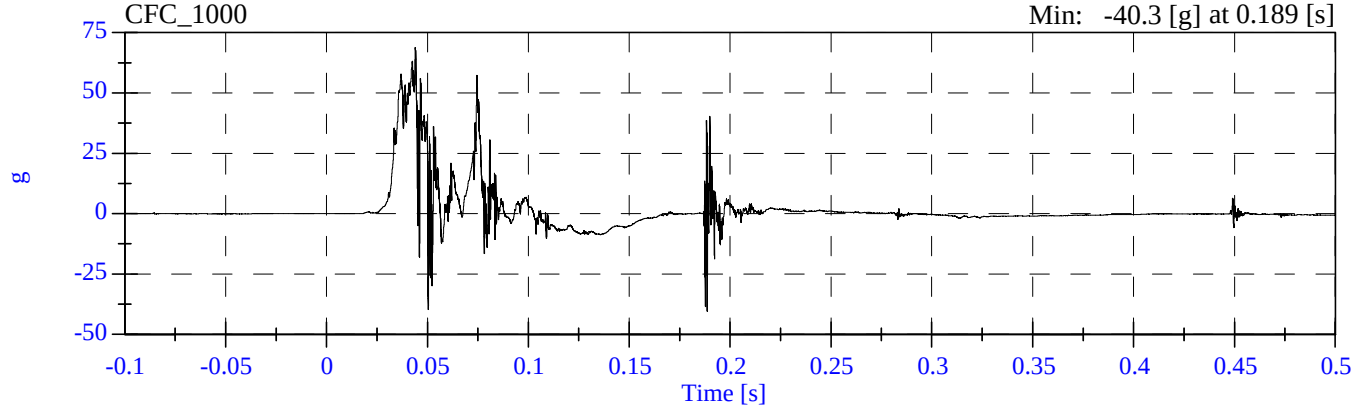
V1P1 Pelvic y
CFC_1000
Max: 43.5 [g] at 0.049 [s]
Min: -5.9 [g] at 0.091 [s]



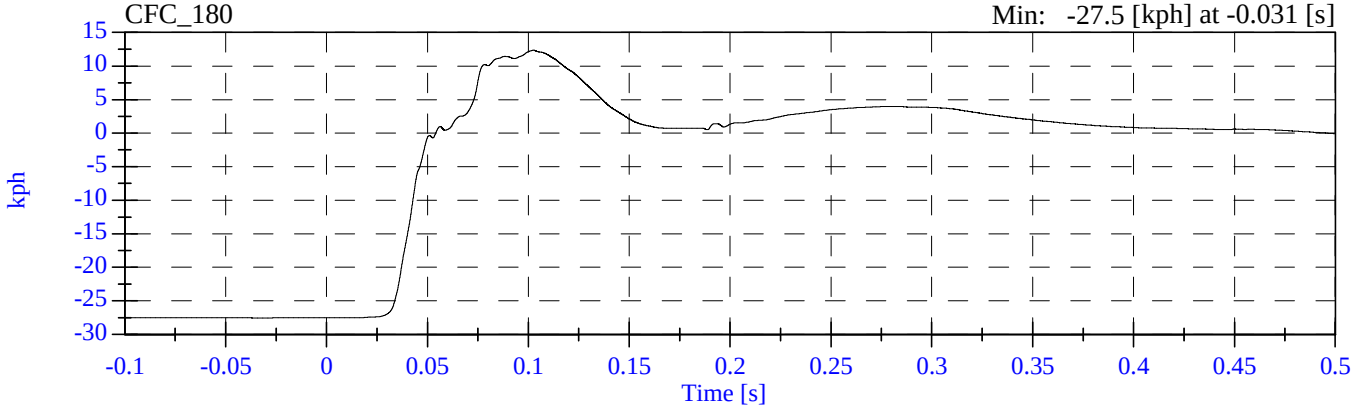
V1P1 Pelvic y Velocity
CFC_180
Max: 7.2 [kph] at 0.071 [s]
Min: -27.7 [kph] at 0.015 [s]



V1P1 Upper Rib Ry
CFC_1000
Max: 68.8 [g] at 0.044 [s]
Min: -40.3 [g] at 0.189 [s]



V1P1 Upper Rib Ry Velocity
CFC_180
Max: 12.3 [kph] at 0.103 [s]
Min: -27.5 [kph] at -0.031 [s]



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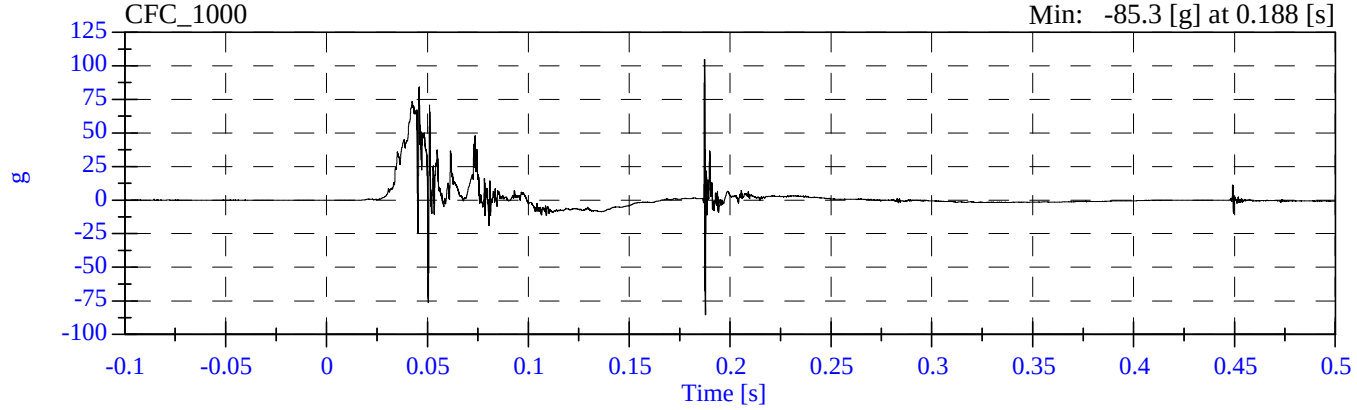
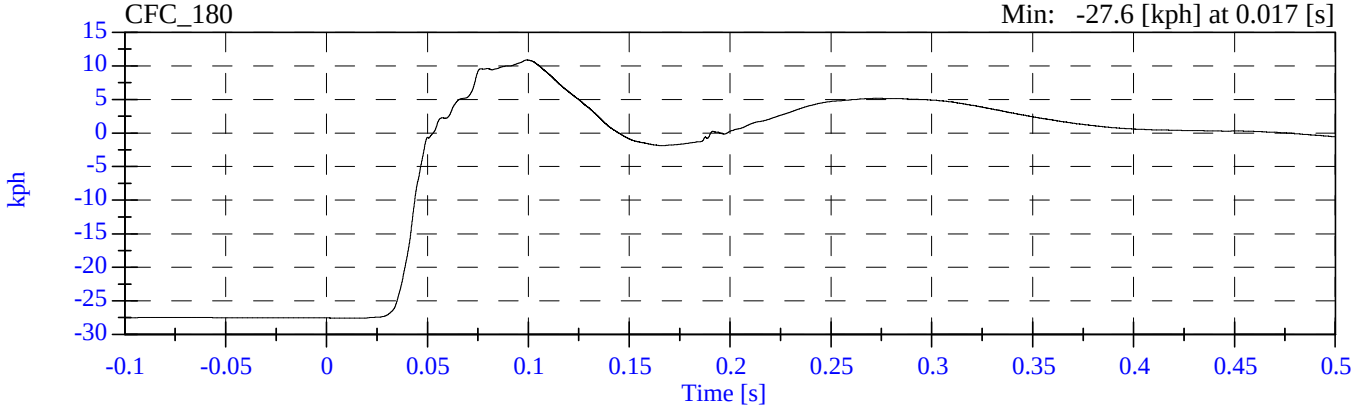
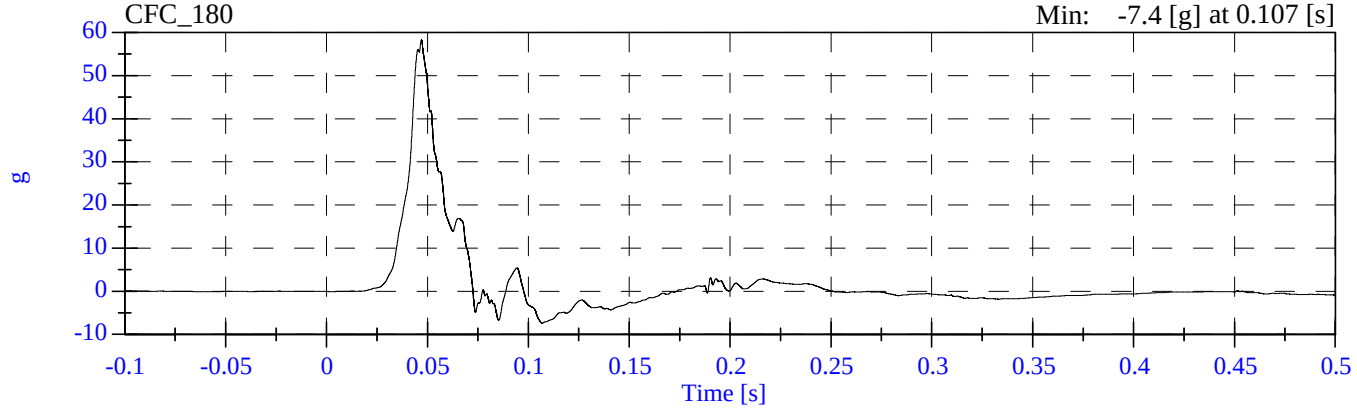
V1P1 Lower Rib Ry
CFC_1000
Max: 104.8 [g] at 0.187 [s]
Min: -85.3 [g] at 0.188 [s]



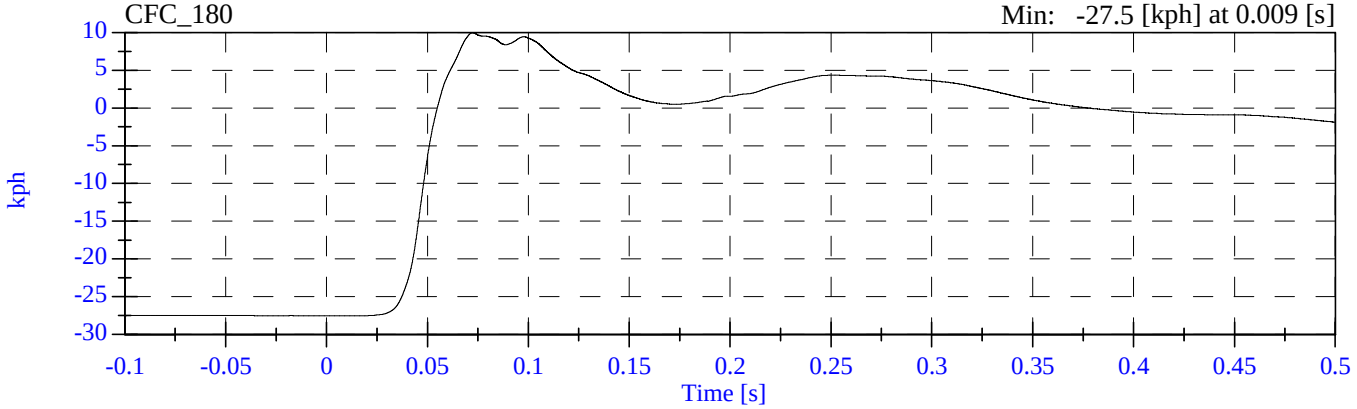
V1P1 Lower Rib Ry Velocity
CFC_180
Max: 10.9 [kph] at 0.099 [s]
Min: -27.6 [kph] at 0.017 [s]



V1P1 Lower Spine Ry
CFC_180
Max: 58.3 [g] at 0.047 [s]
Min: -7.4 [g] at 0.107 [s]



V1P1 Lower Spine Ry Velocity
CFC_180
Max: 10.0 [kph] at 0.073 [s]
Min: -27.5 [kph] at 0.009 [s]



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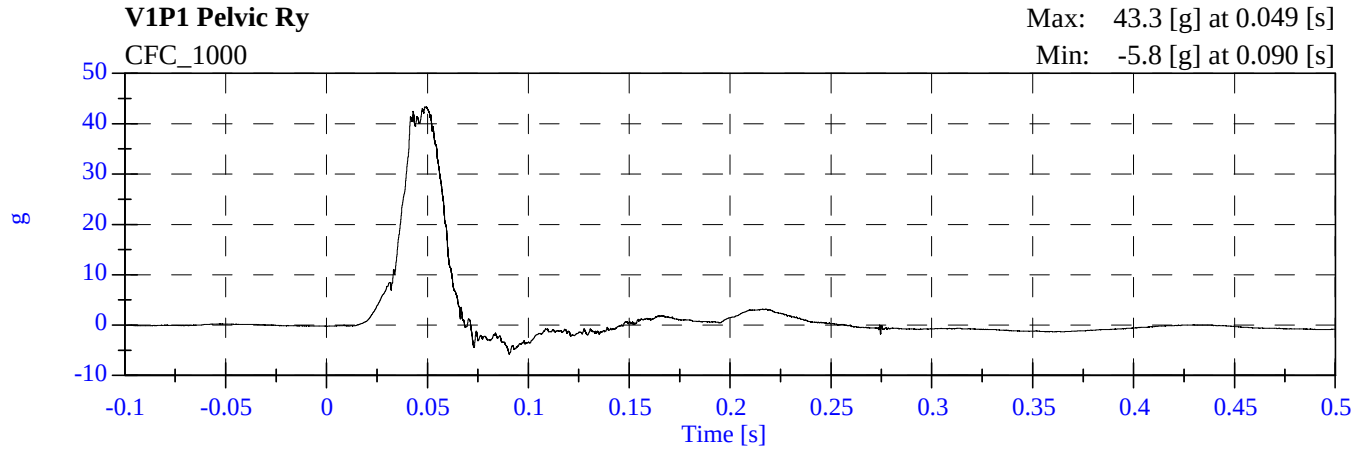

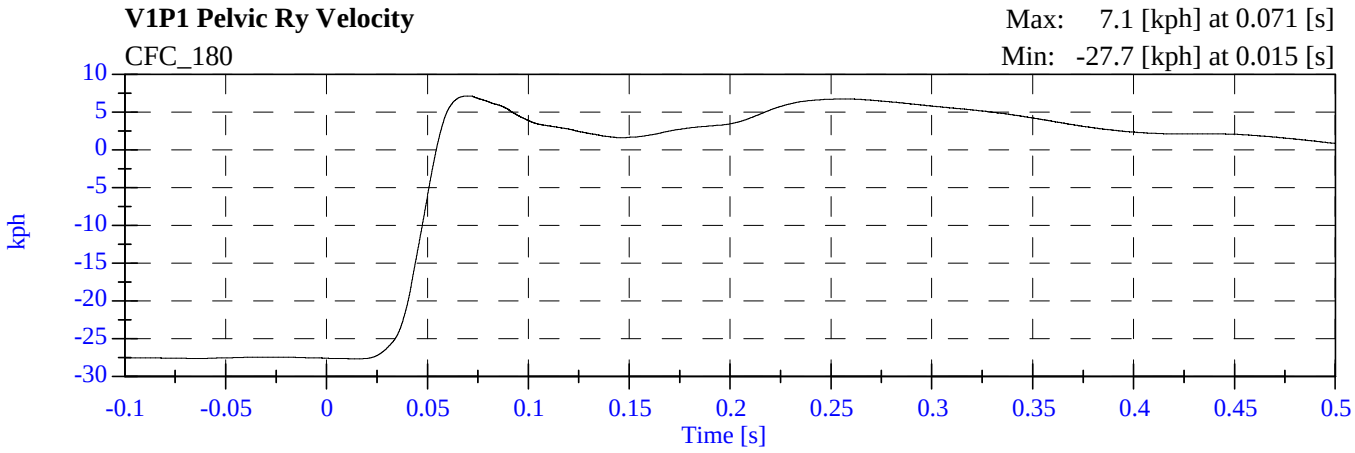

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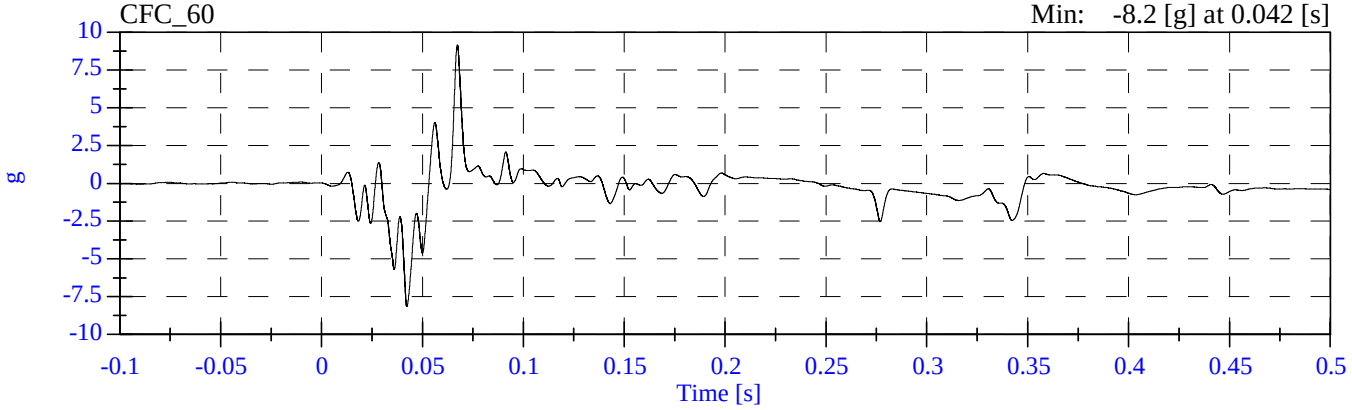
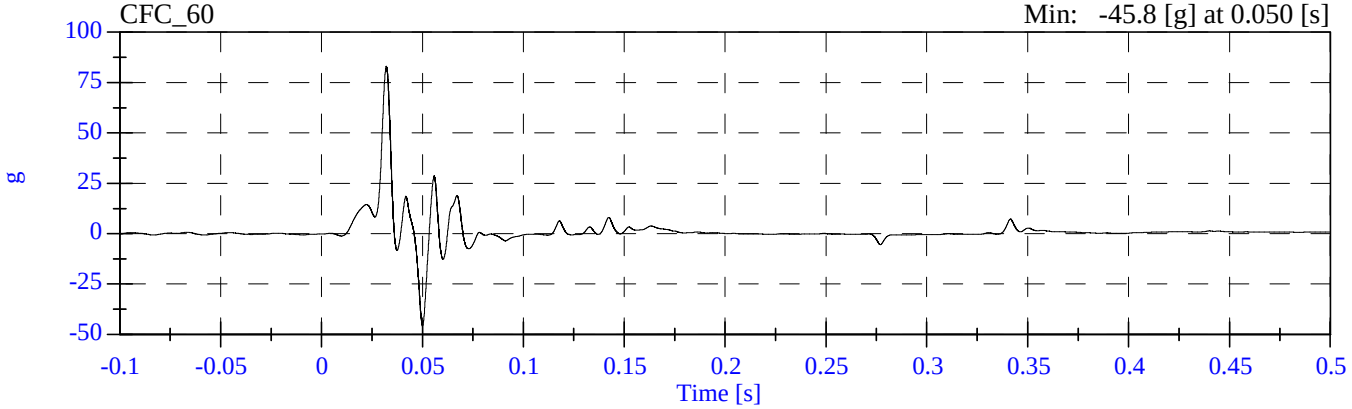
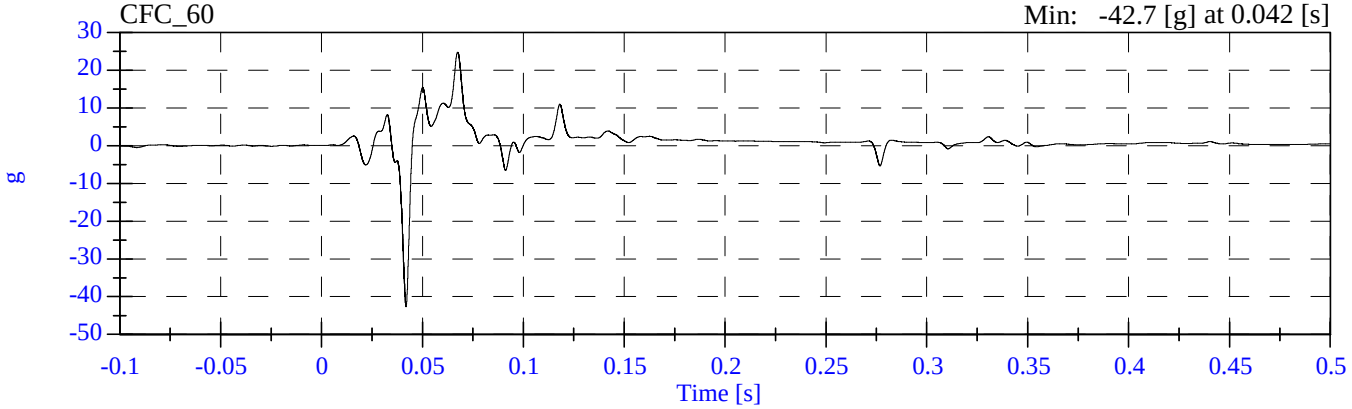
V1 A1 Vehicle CG x
CFC_60
Max: 9.2 [g] at 0.067 [s]
Min: -8.2 [g] at 0.042 [s]



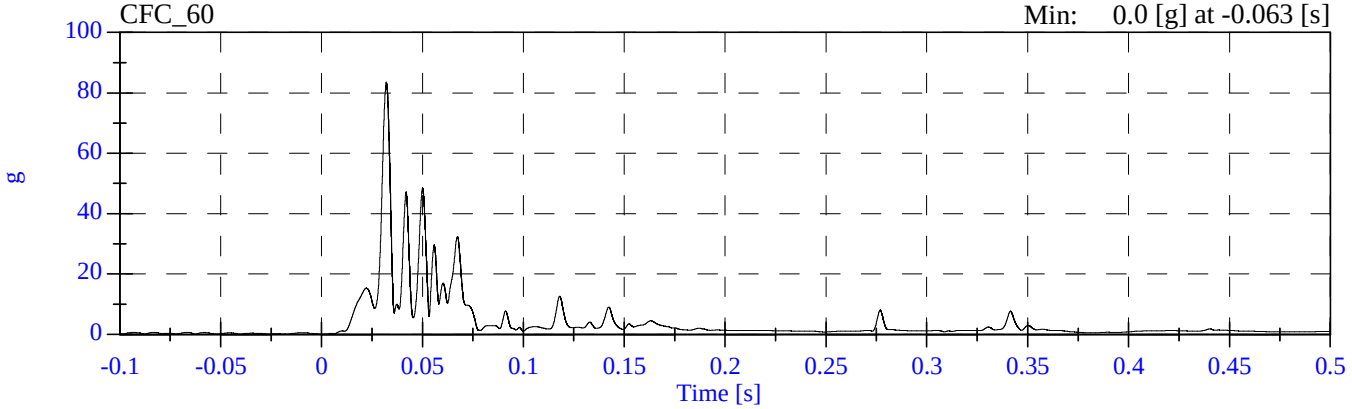
V1 A1 Vehicle CG y
CFC_60
Max: 83.1 [g] at 0.032 [s]
Min: -45.8 [g] at 0.050 [s]



V1 A1 Vehicle CG z
CFC_60
Max: 24.8 [g] at 0.067 [s]
Min: -42.7 [g] at 0.042 [s]



V1 A1 Vehicle CG Resultant
CFC_60
Max: 83.5 [g] at 0.032 [s]
Min: 0.0 [g] at -0.063 [s]



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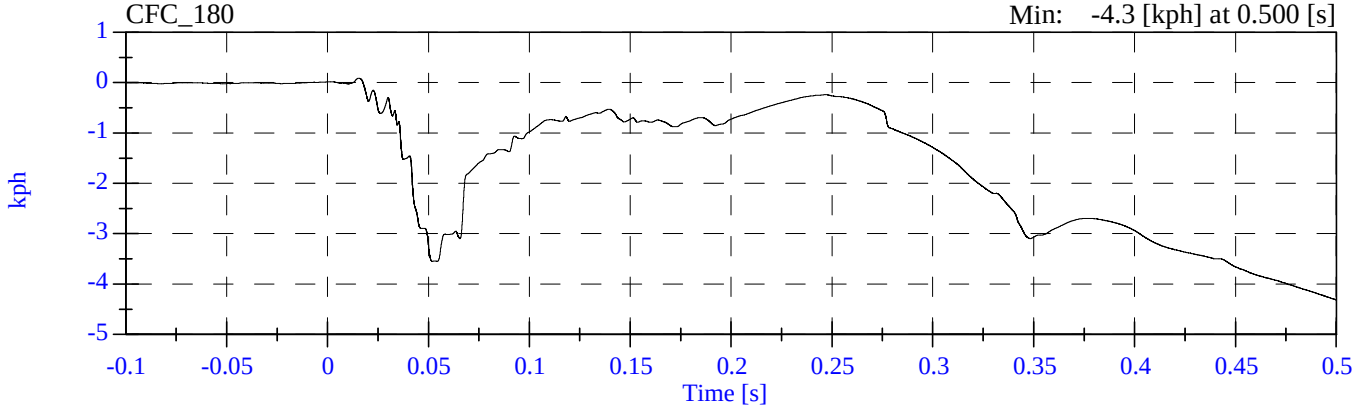
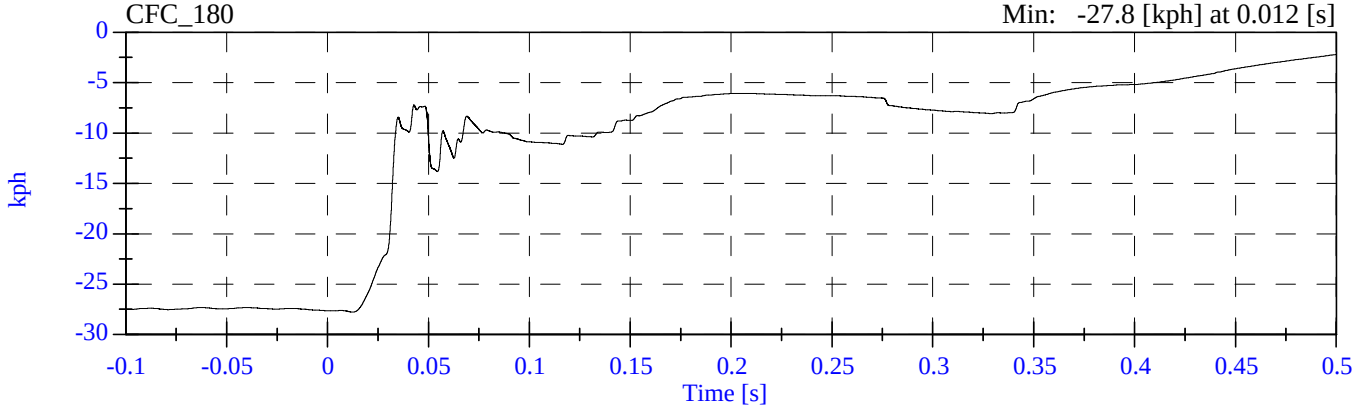
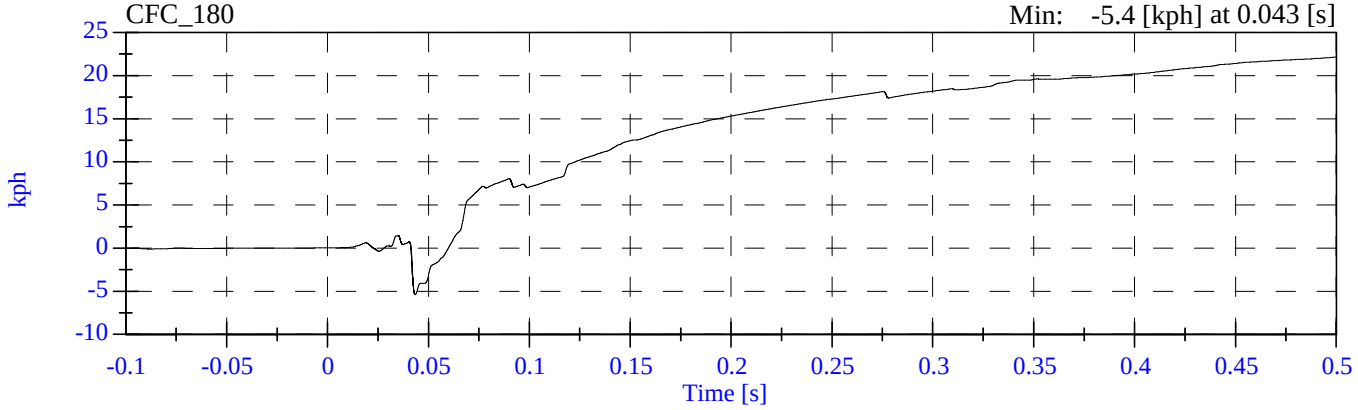
V1 A1 Vehicle CG x Velocity
CFC_180
Max: 0.1 [kph] at 0.015 [s]
Min: -4.3 [kph] at 0.500 [s]



V1 A1 Vehicle CG y Velocity
CFC_180
Max: -2.2 [kph] at 0.500 [s]
Min: -27.8 [kph] at 0.012 [s]



V1 A1 Vehicle CG z Velocity
CFC_180
Max: 22.1 [kph] at 0.500 [s]
Min: -5.4 [kph] at 0.043 [s]



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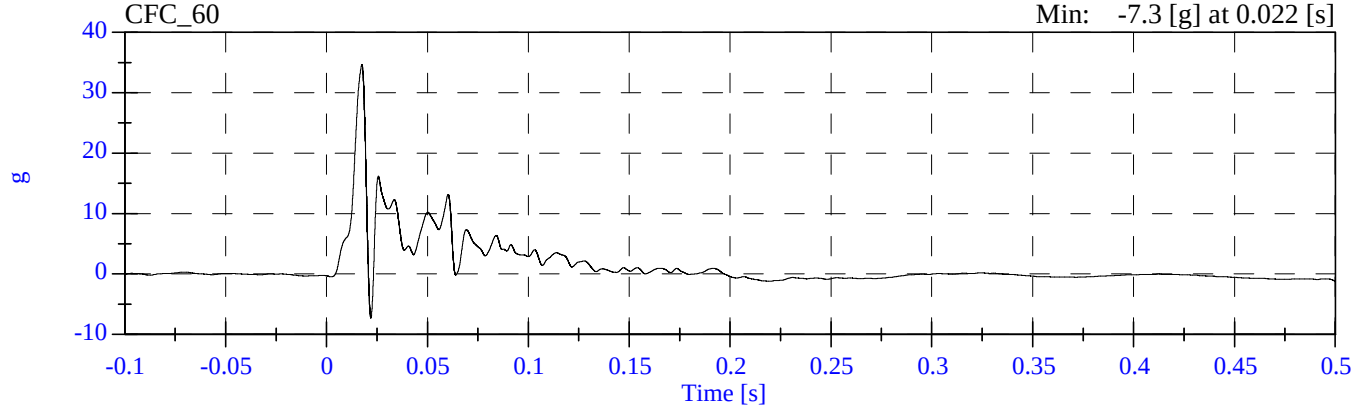
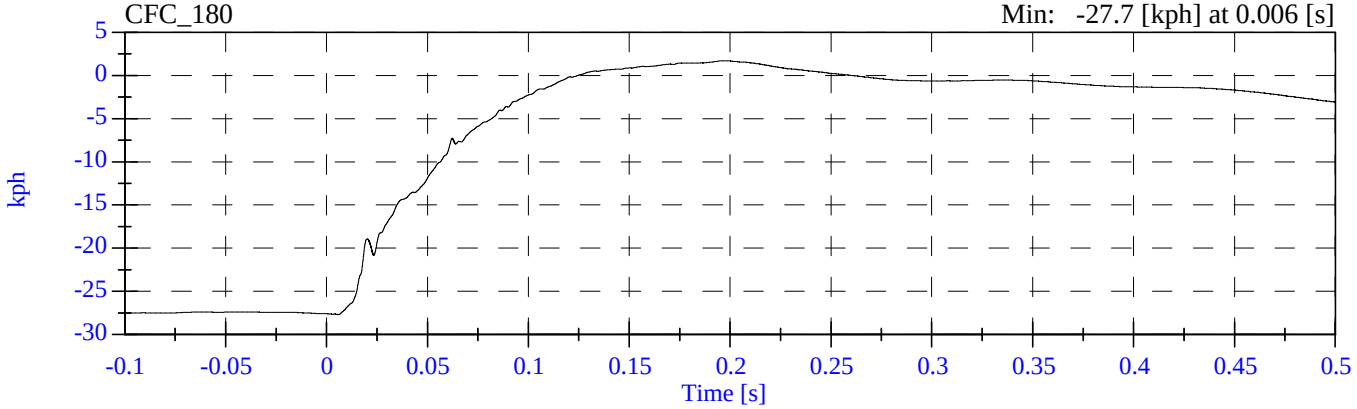
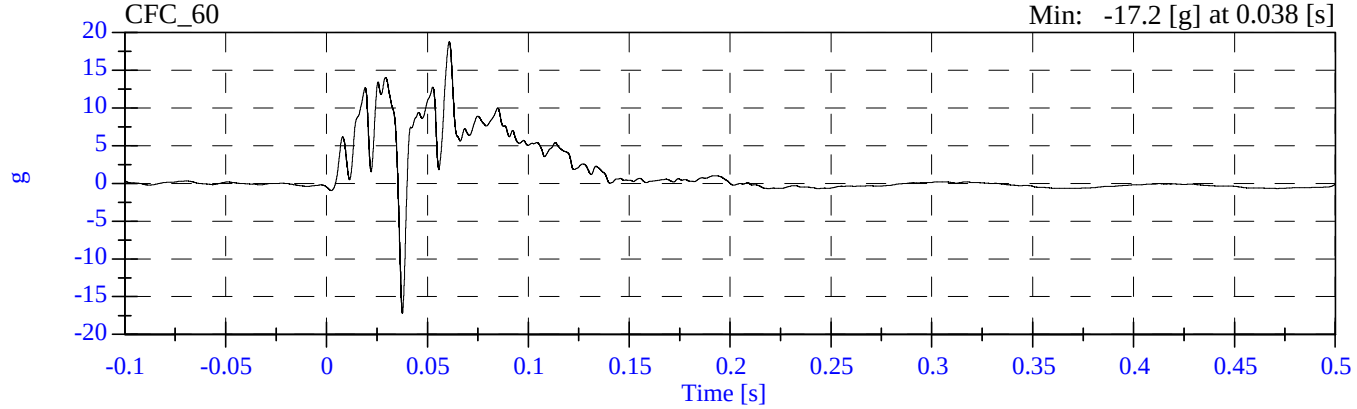
V1 A3 Left Sill y
CFC_60
Max: 34.7 [g] at 0.018 [s]
Min: -7.3 [g] at 0.022 [s]



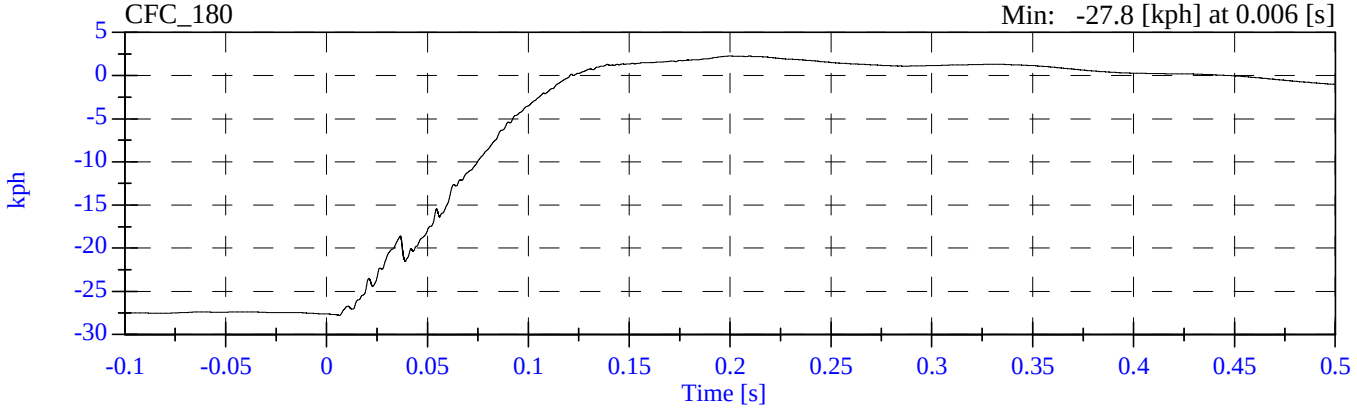
V1 A3 Left Sill y Velocity
CFC_180
Max: 1.7 [kph] at 0.196 [s]
Min: -27.7 [kph] at 0.006 [s]



V1 A4 Left Sill A Pillar y
CFC_60
Max: 18.8 [g] at 0.061 [s]
Min: -17.2 [g] at 0.038 [s]



V1 A4 Left Sill A Pillar y Velocity
CFC_180
Max: 2.3 [kph] at 0.210 [s]
Min: -27.8 [kph] at 0.006 [s]



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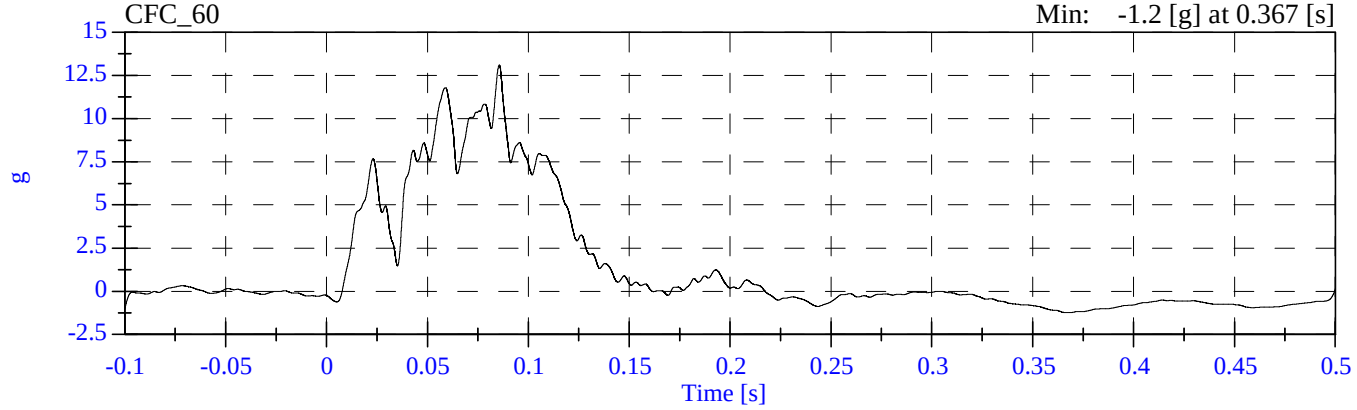
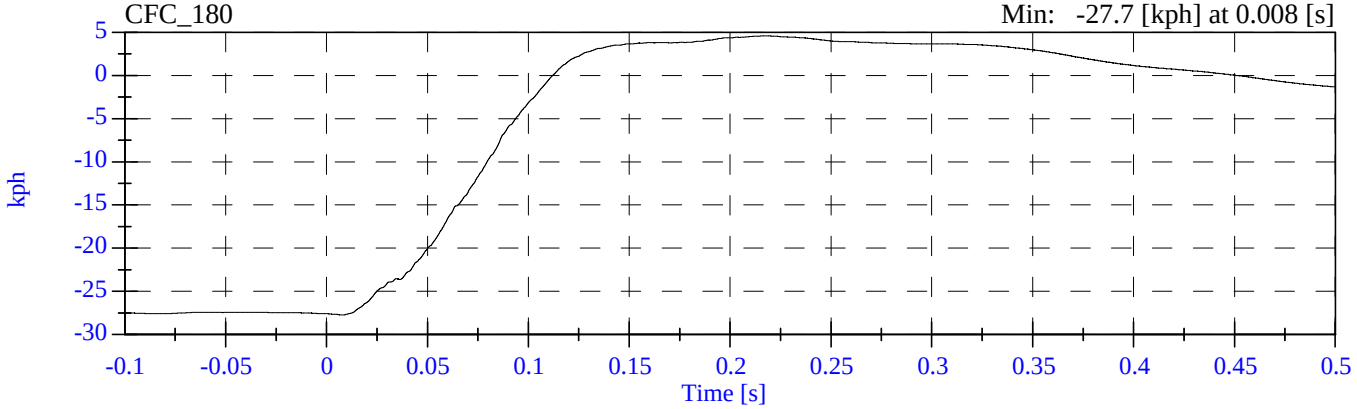
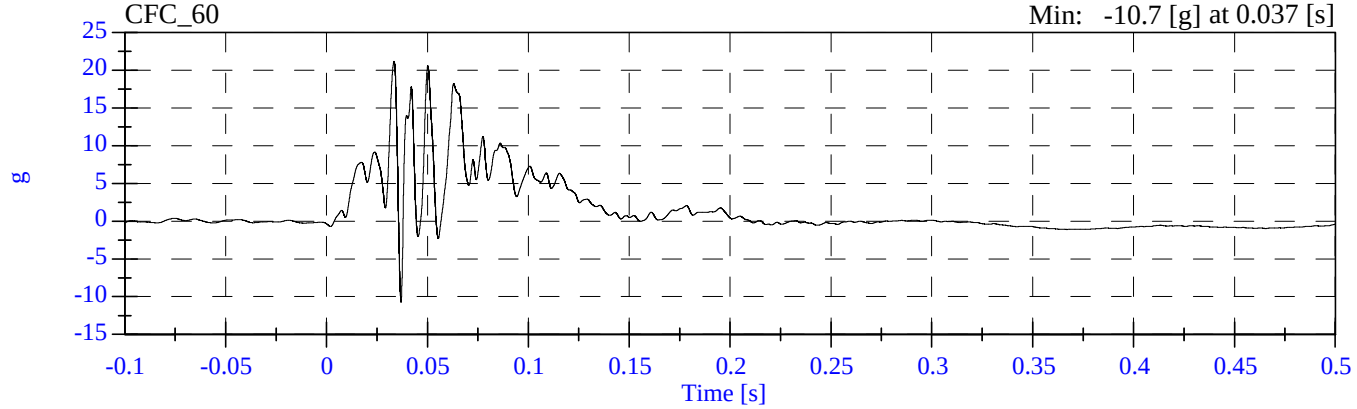
V1 A5 Left Lower A Pillar y
CFC_60
Max: 13.1 [g] at 0.086 [s]
Min: -1.2 [g] at 0.367 [s]



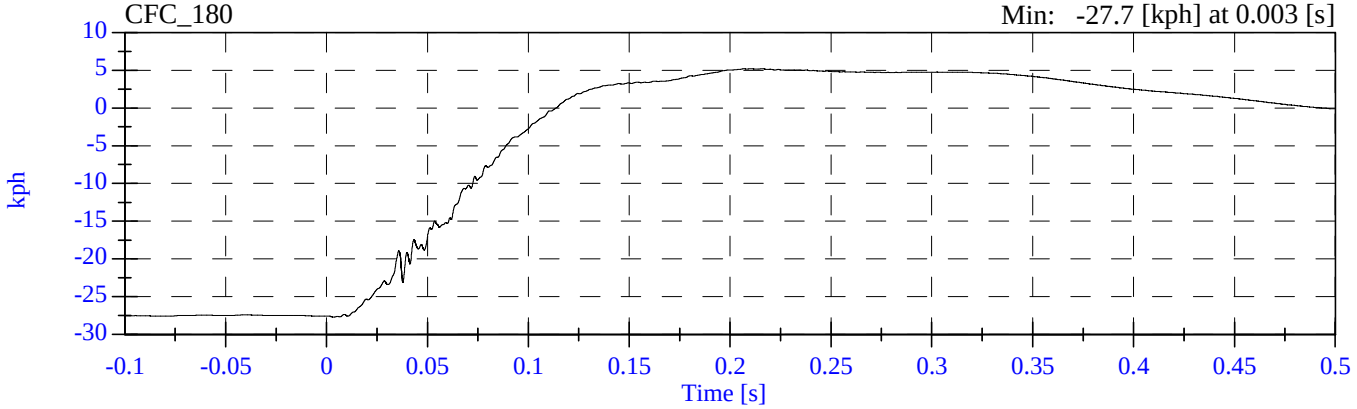
V1 A5 Left Lower A Pillar y Velocity
CFC_180
Max: 4.6 [kph] at 0.217 [s]
Min: -27.7 [kph] at 0.008 [s]



V1 A6 Left Mid A Pillar y
CFC_60
Max: 21.2 [g] at 0.033 [s]
Min: -10.7 [g] at 0.037 [s]



V1 A6 Left Mid A Pillar y Velocity
CFC_180
Max: 5.2 [kph] at 0.210 [s]
Min: -27.7 [kph] at 0.003 [s]



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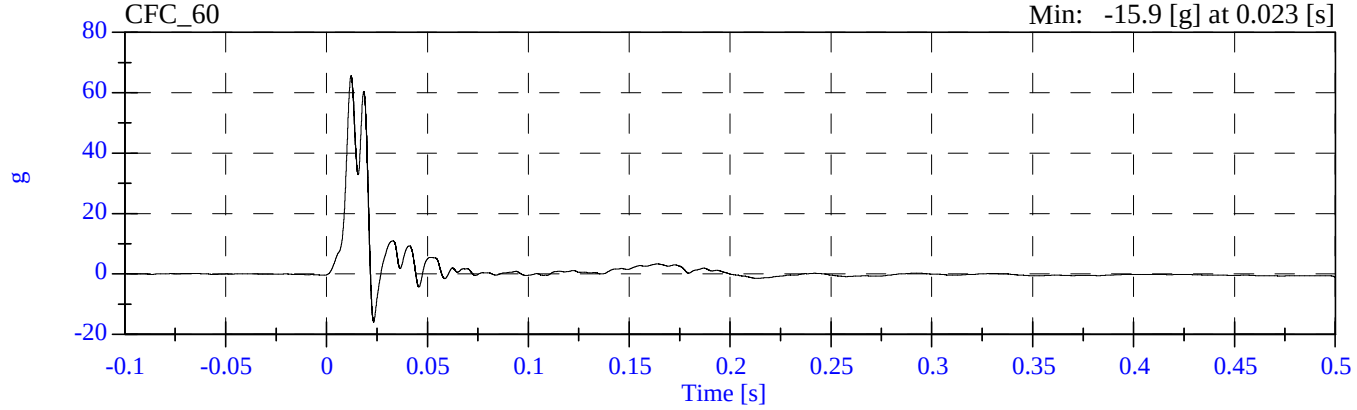
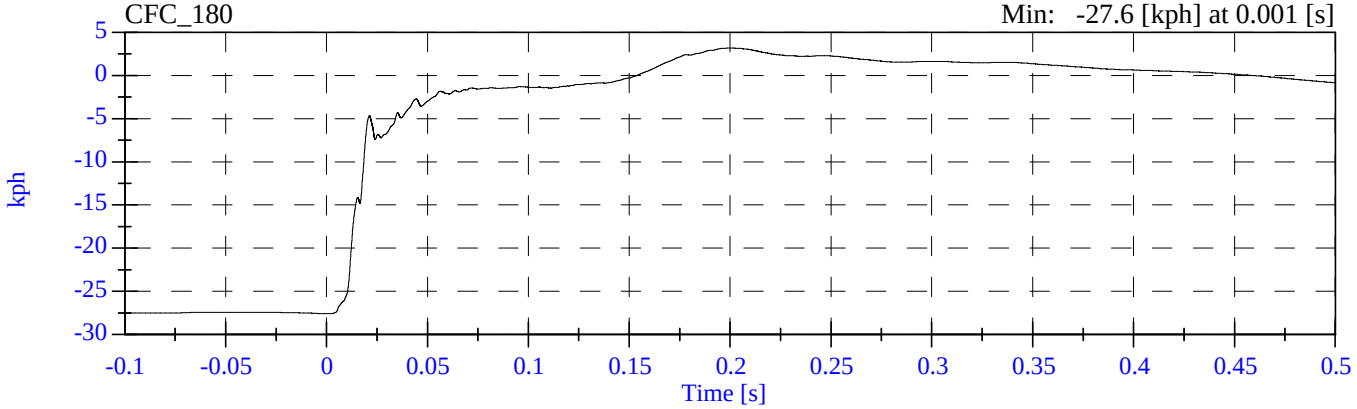
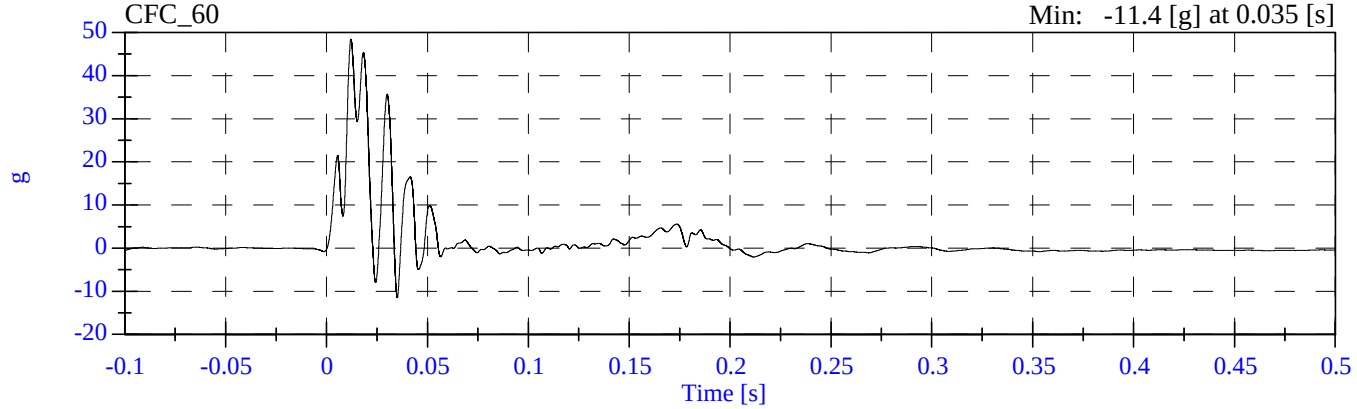
V1 A7 B Pillar Sill y
CFC_60
Max: 65.6 [g] at 0.012 [s]
Min: -15.9 [g] at 0.023 [s]



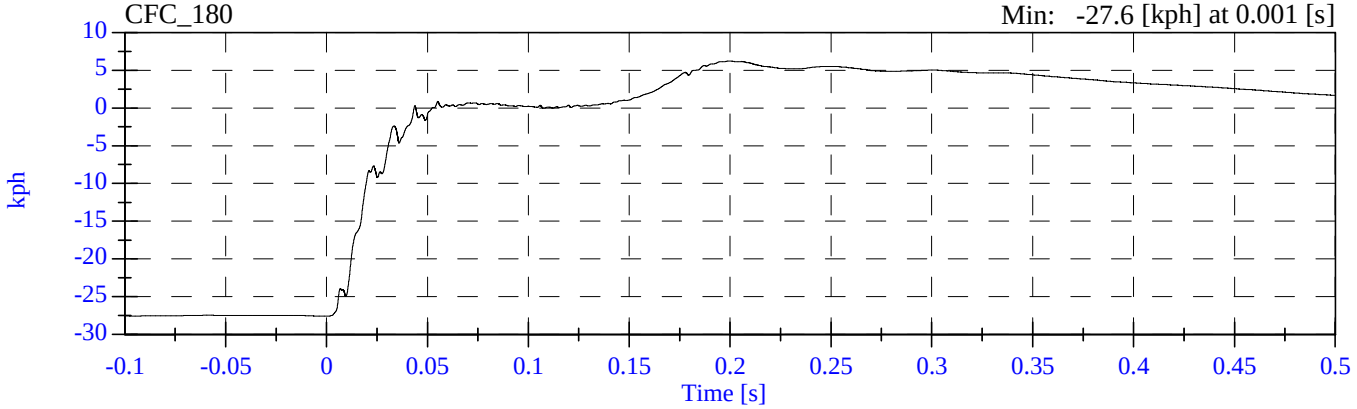
V1 A7 B Pillar Sill y Velocity
CFC_180
Max: 3.2 [kph] at 0.200 [s]
Min: -27.6 [kph] at 0.001 [s]



V1 A8 B Pillar Lower y
CFC_60
Max: 48.5 [g] at 0.012 [s]
Min: -11.4 [g] at 0.035 [s]



V1 A8 B Pillar Lower y Velocity
CFC_180
Max: 6.2 [kph] at 0.199 [s]
Min: -27.6 [kph] at 0.001 [s]



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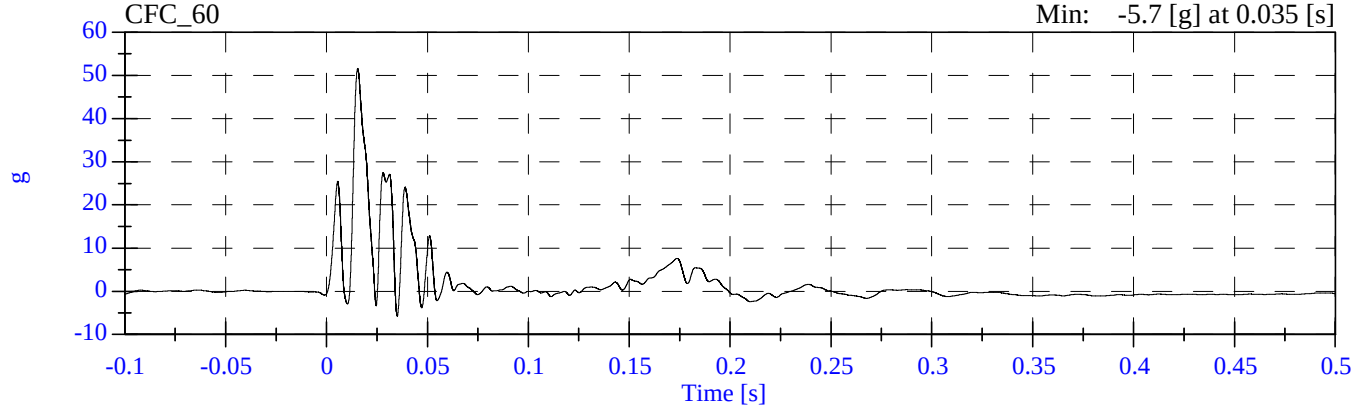
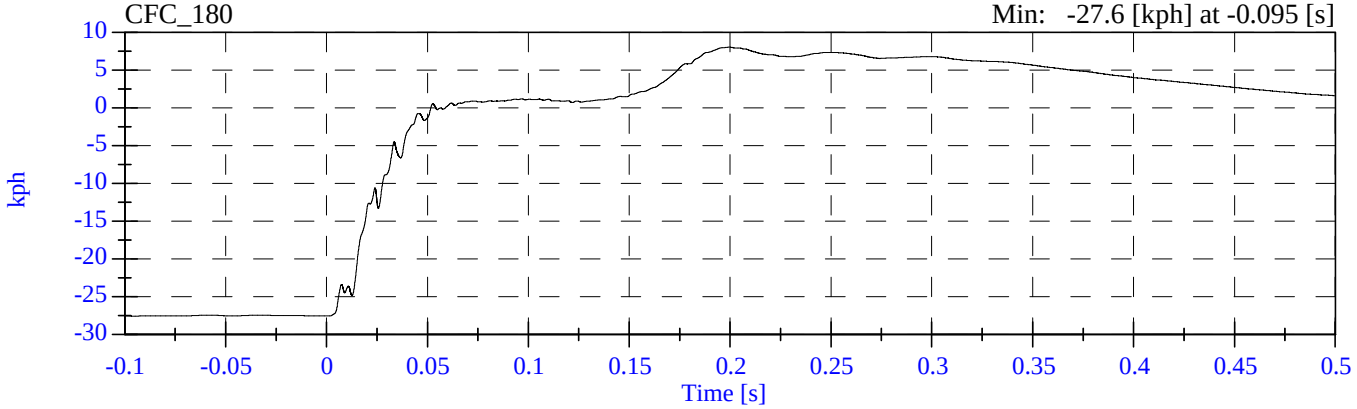
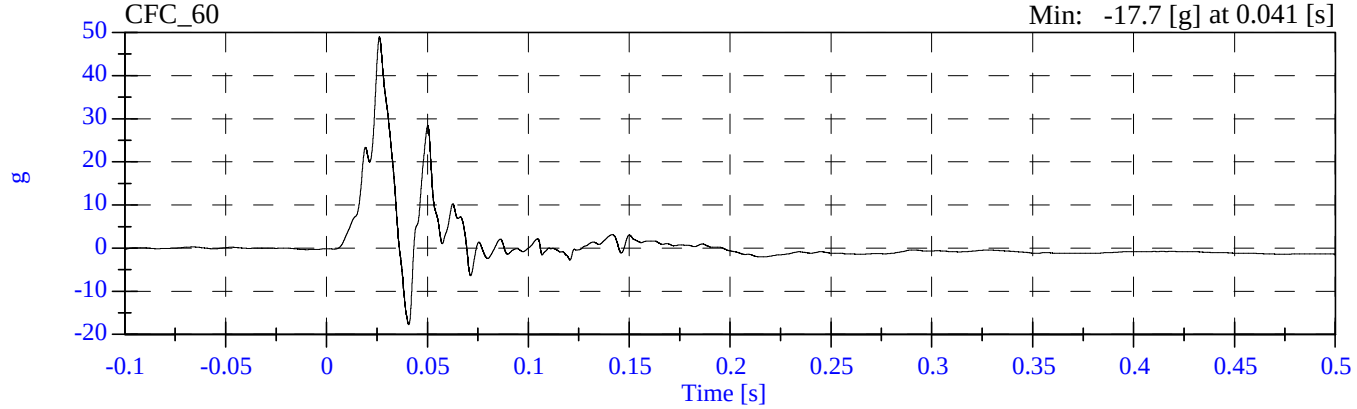
V1 A9 B Pillar Mid y
CFC_60
Max: 51.6 [g] at 0.015 [s]
Min: -5.7 [g] at 0.035 [s]



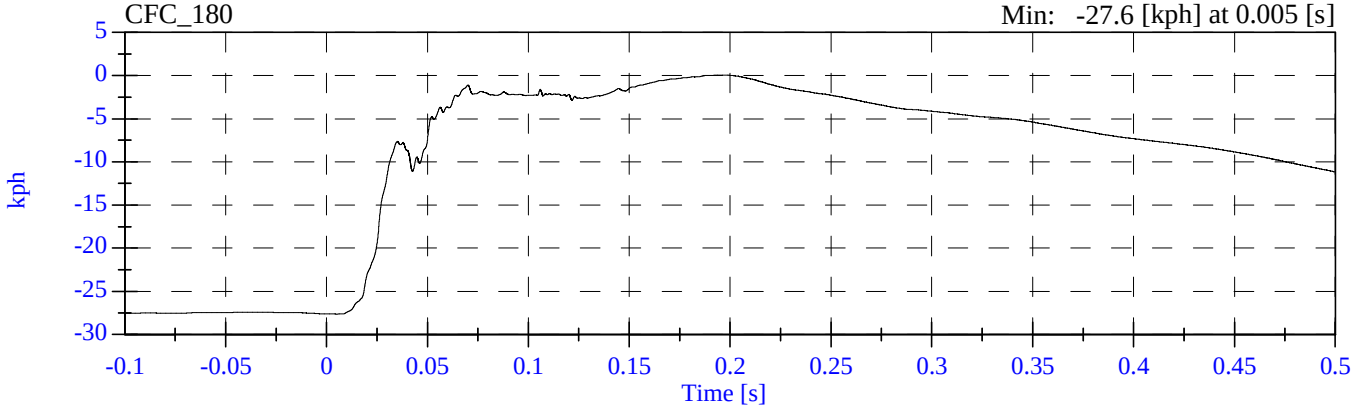
V1 A9 B Pillar Mid y Velocity
CFC_180
Max: 8.0 [kph] at 0.200 [s]
Min: -27.6 [kph] at -0.095 [s]



V1 A10 Driver Seat y
CFC_60
Max: 49.0 [g] at 0.026 [s]
Min: -17.7 [g] at 0.041 [s]



V1 A10 Driver Seat y Velocity
CFC_180
Max: 0.1 [kph] at 0.197 [s]
Min: -27.6 [kph] at 0.005 [s]



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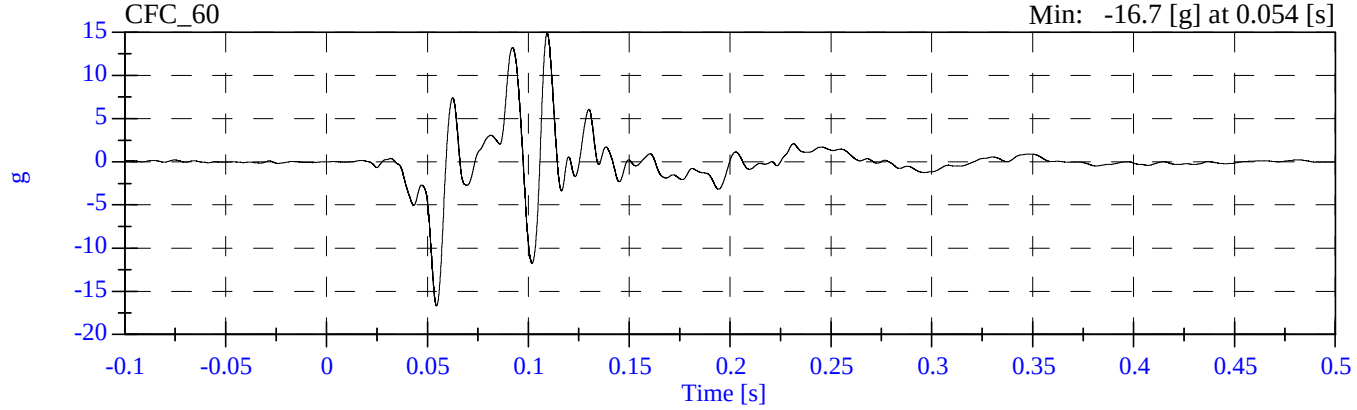
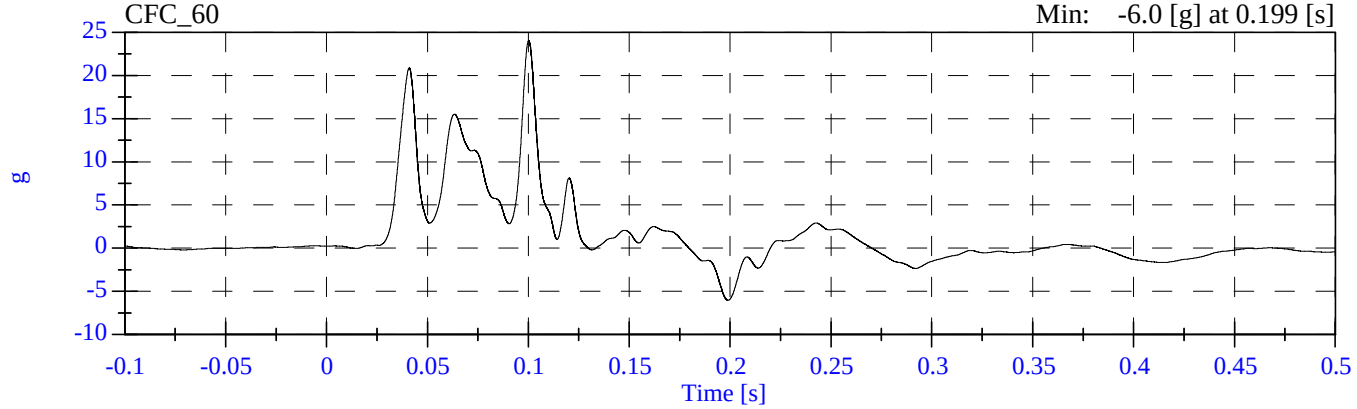
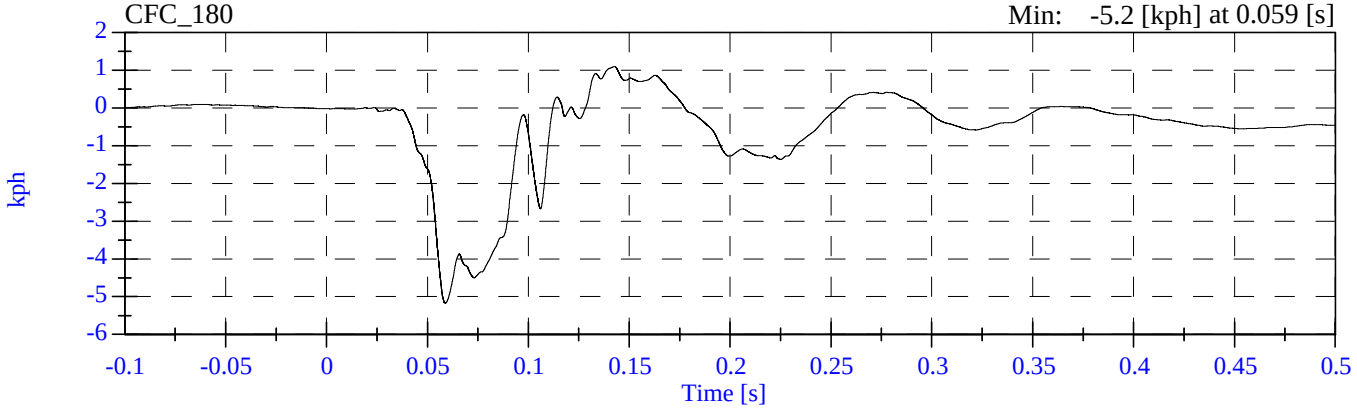
V1 A11 Engine Top x
CFC_60
Max: 14.9 [g] at 0.109 [s]
Min: -16.7 [g] at 0.054 [s]



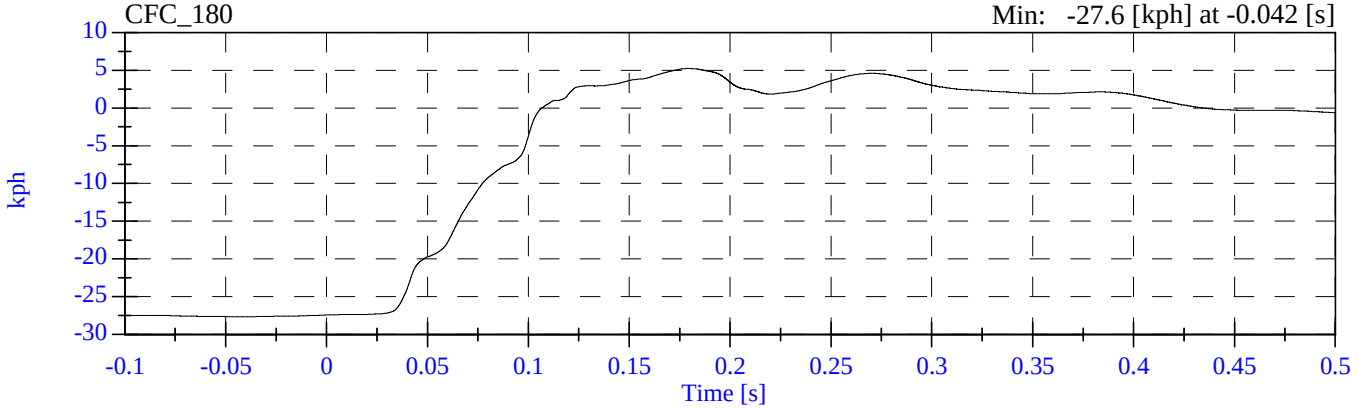
V1 A11 Engine Top y
CFC_60
Max: 24.0 [g] at 0.100 [s]
Min: -6.0 [g] at 0.199 [s]



V1 A11 Engine Top x Velocity
CFC_180
Max: 1.1 [kph] at 0.143 [s]
Min: -5.2 [kph] at 0.059 [s]



V1 A11 Engine Top y Velocity
CFC_180
Max: 5.2 [kph] at 0.179 [s]
Min: -27.6 [kph] at -0.042 [s]



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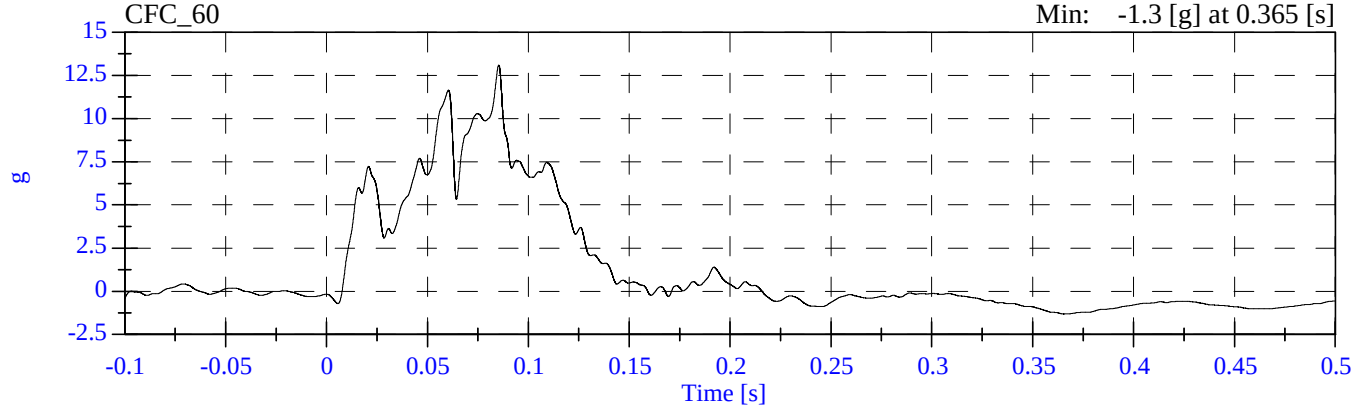
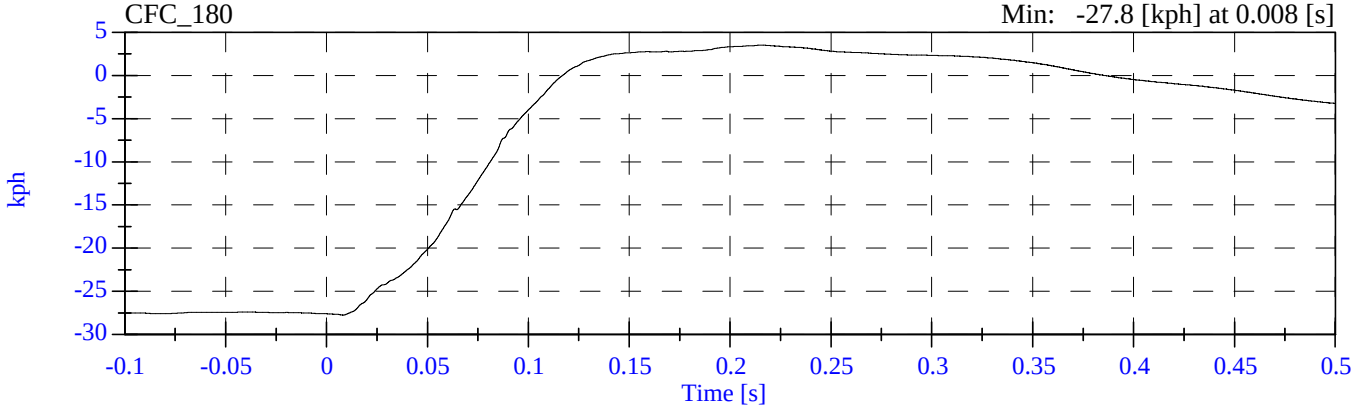
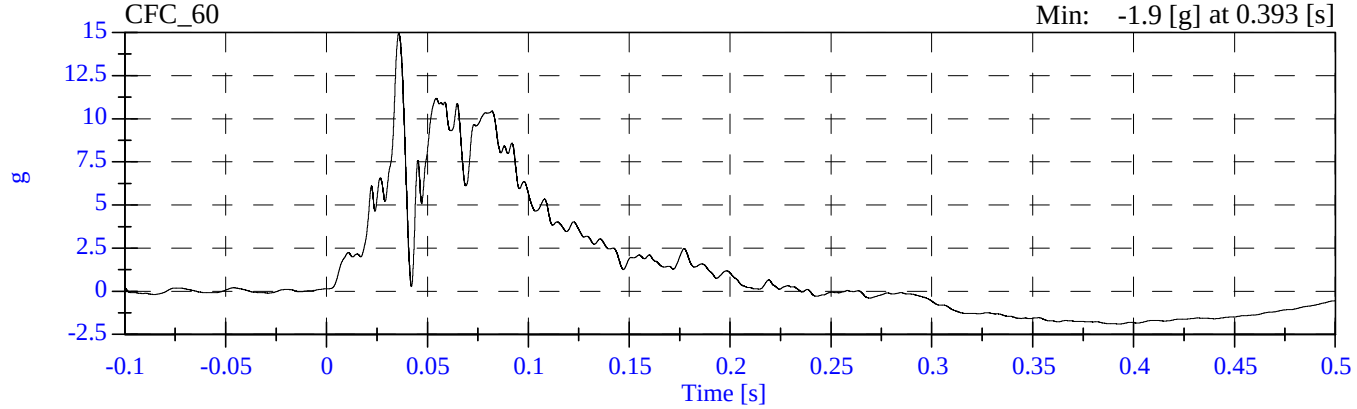
V1 A12 Firewall Center y
CFC_60
Max: 13.1 [g] at 0.085 [s]
Min: -1.3 [g] at 0.365 [s]



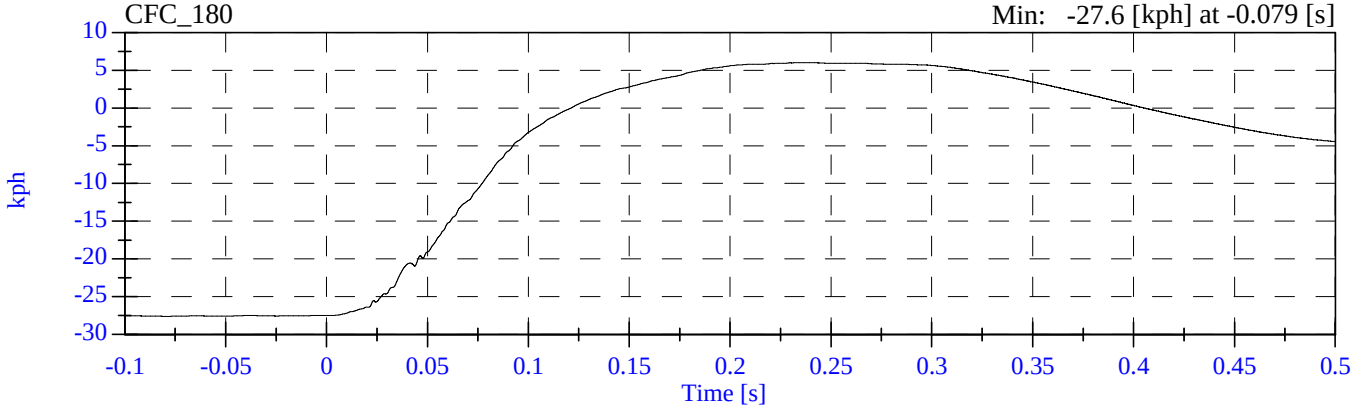
V1 A12 Firewall Center y Velocity
CFC_180
Max: 3.5 [kph] at 0.216 [s]
Min: -27.8 [kph] at 0.008 [s]



V1 A13 Right Roof y
CFC_60
Max: 15.0 [g] at 0.036 [s]
Min: -1.9 [g] at 0.393 [s]



V1 A13 Right Roof y Velocity
CFC_180
Max: 6.0 [kph] at 0.240 [s]
Min: -27.6 [kph] at -0.079 [s]



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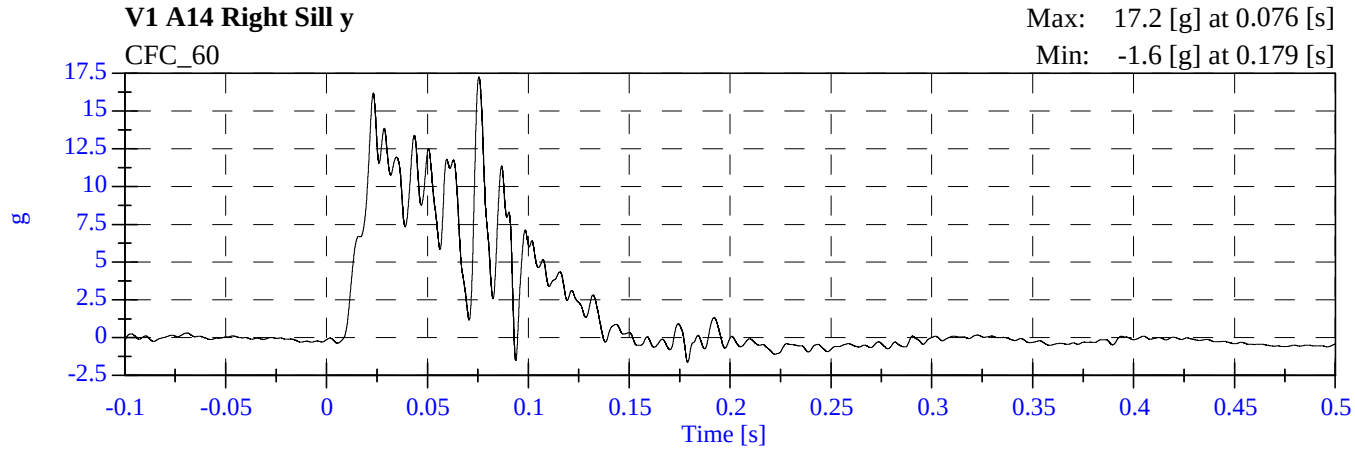

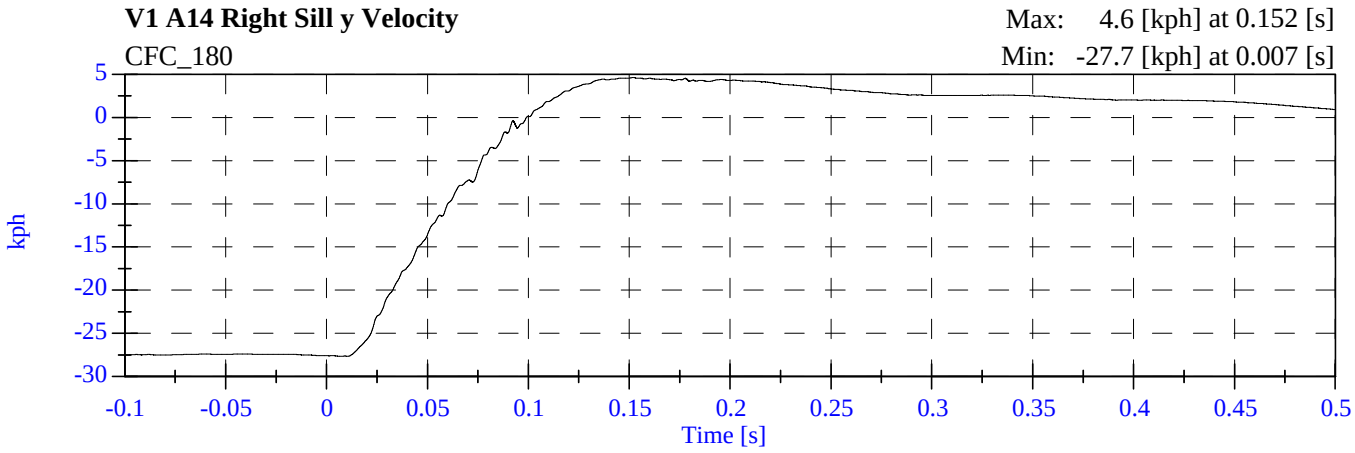

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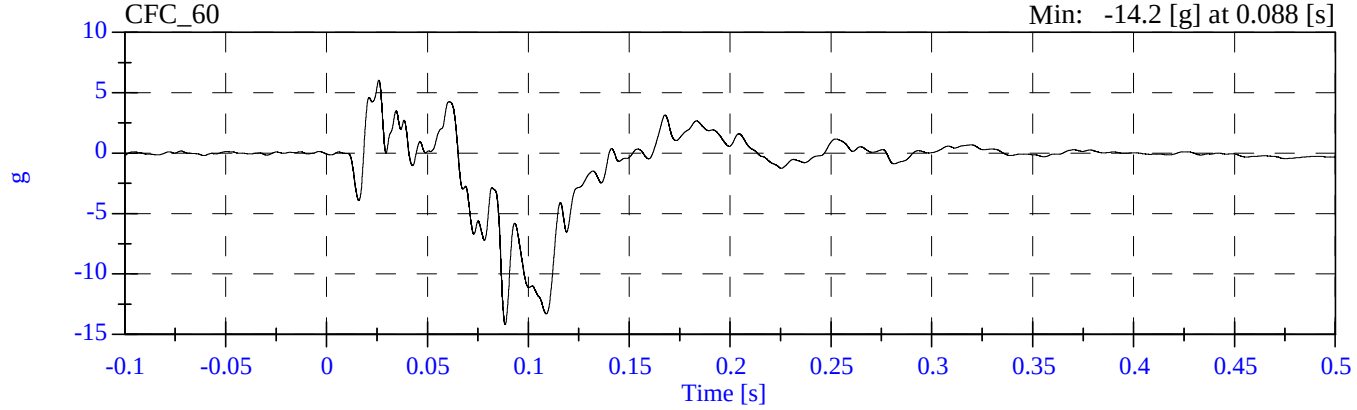
V1 A15 Rear Deck x

Max: 6.0 [g] at 0.026 [s]

CFC_60

Min: -14.2 [g] at 0.088 [s]

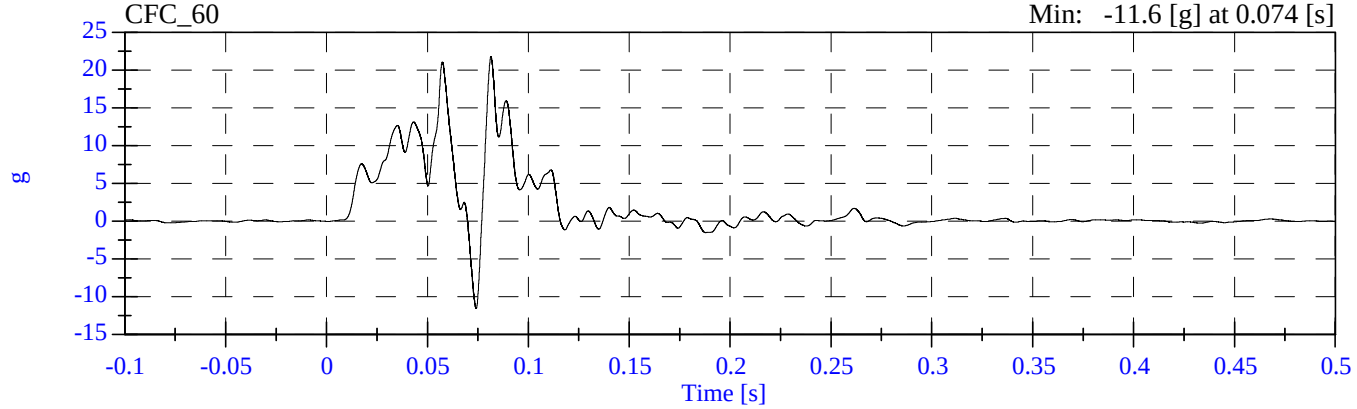


V1 A15 Rear Deck y

Max: 21.8 [g] at 0.081 [s]

CFC_60

Min: -11.6 [g] at 0.074 [s]

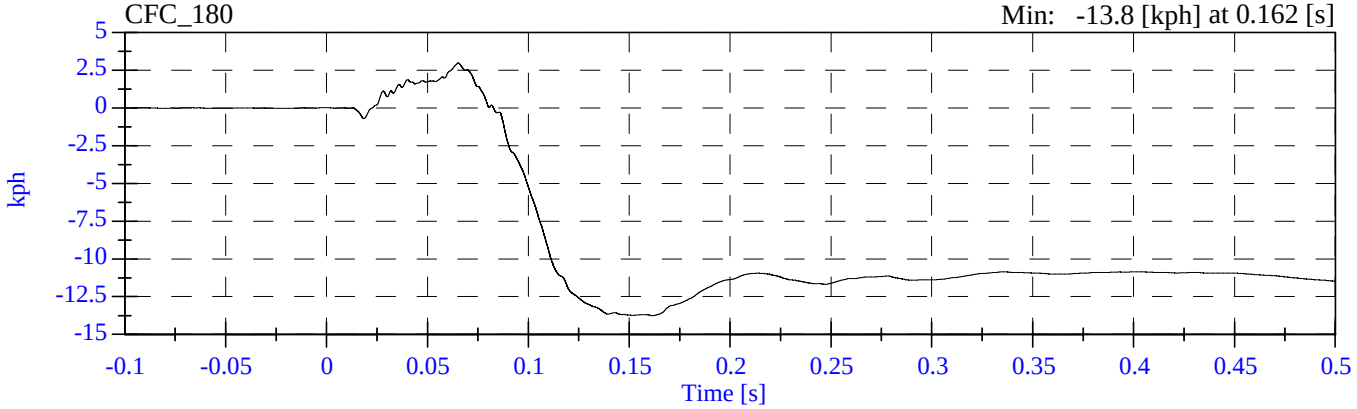


V1 A15 Rear Deck x Velocity

Max: 3.0 [kph] at 0.065 [s]

CFC_180

Min: -13.8 [kph] at 0.162 [s]

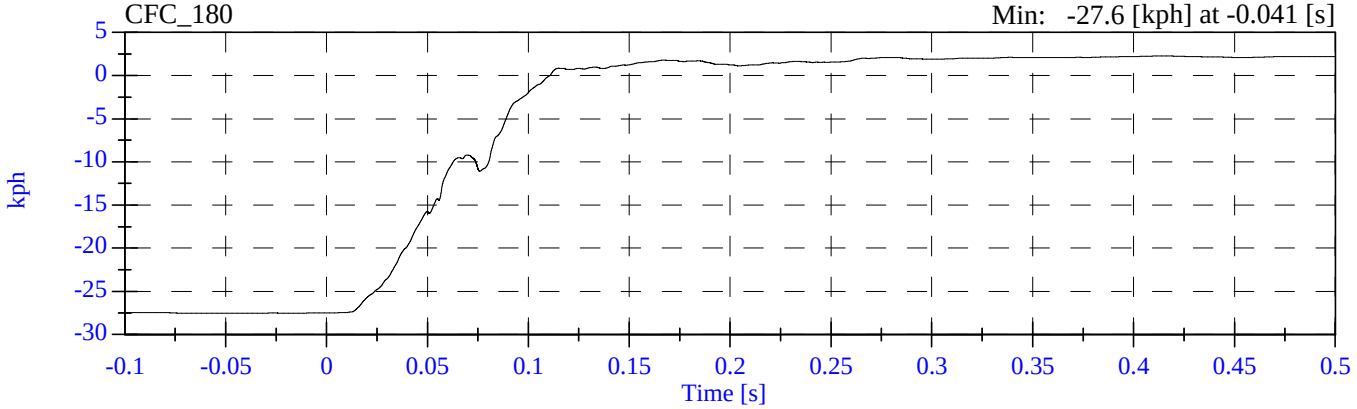


V1 A15 Rear Deck y Velocity

Max: 2.3 [kph] at 0.416 [s]

CFC_180

Min: -27.6 [kph] at -0.041 [s]



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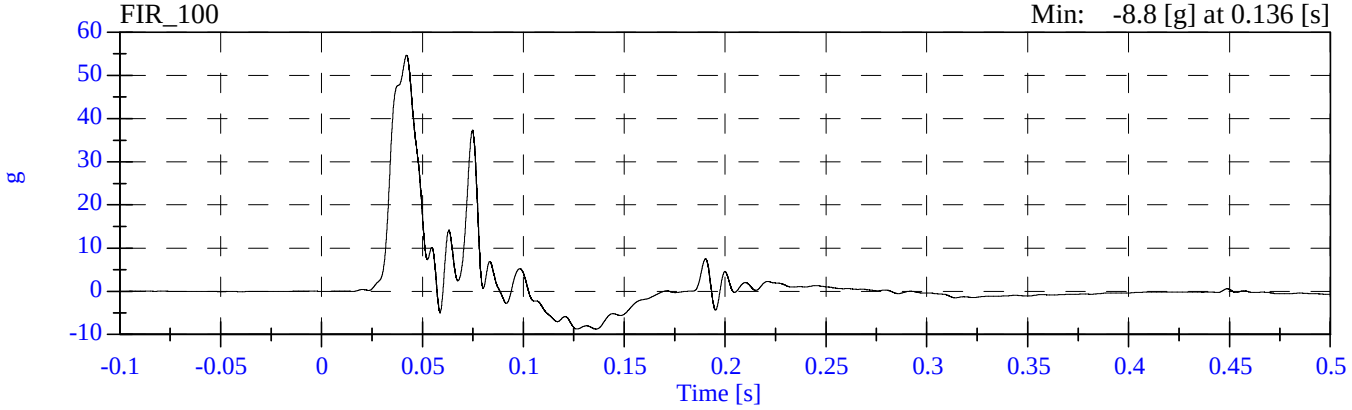
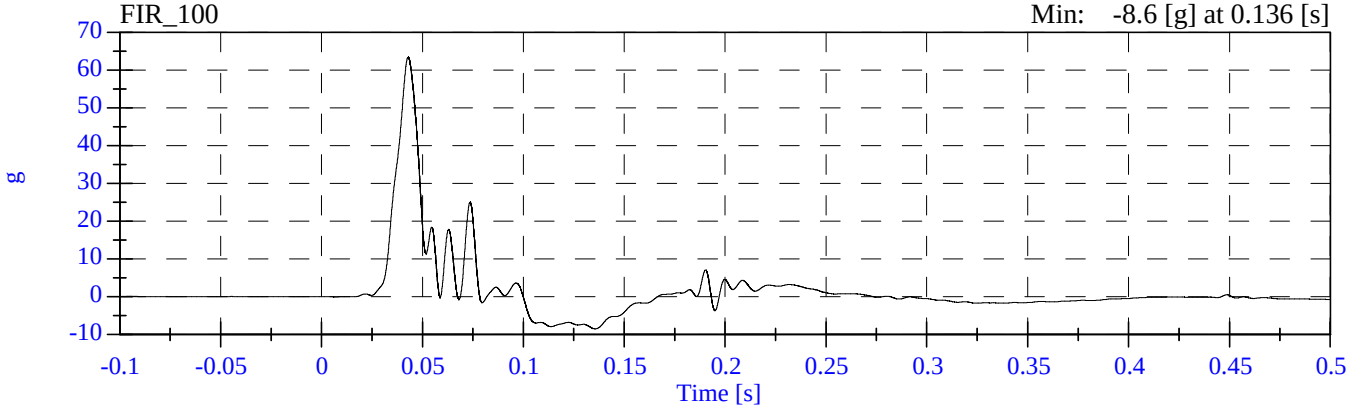
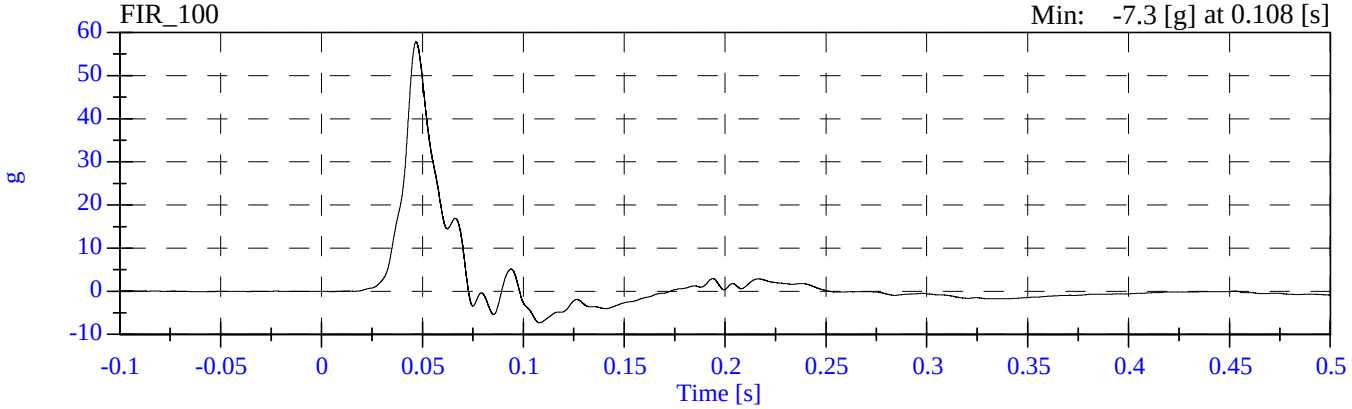
V1P1 Upper Rib y
FIR_100
Max: 54.7 [g] at 0.042 [s]
Min: -8.8 [g] at 0.136 [s]



V1P1 Lower Rib y
FIR_100
Max: 63.4 [g] at 0.043 [s]
Min: -8.6 [g] at 0.136 [s]

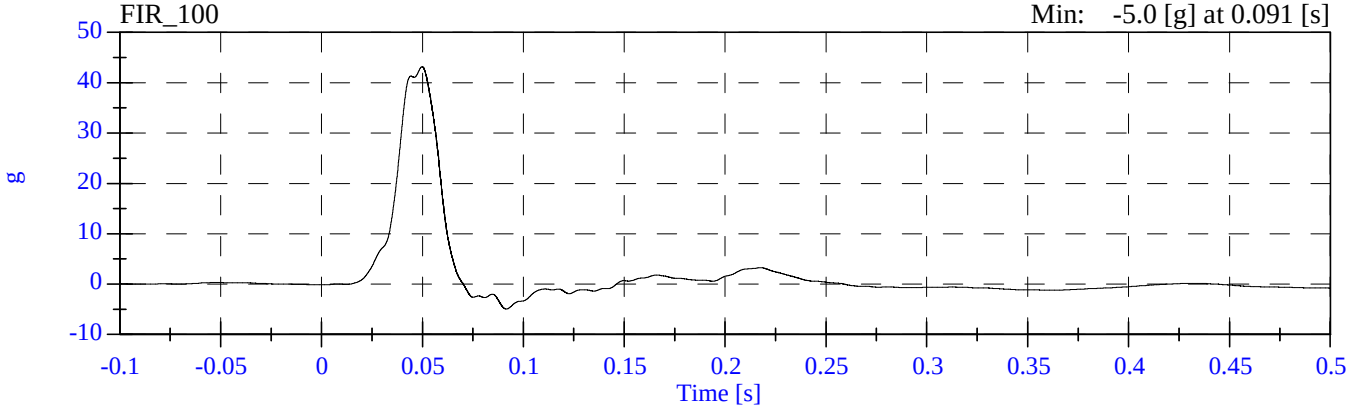


V1P1 Lower Spine y
FIR_100
Max: 57.9 [g] at 0.047 [s]
Min: -7.3 [g] at 0.108 [s]

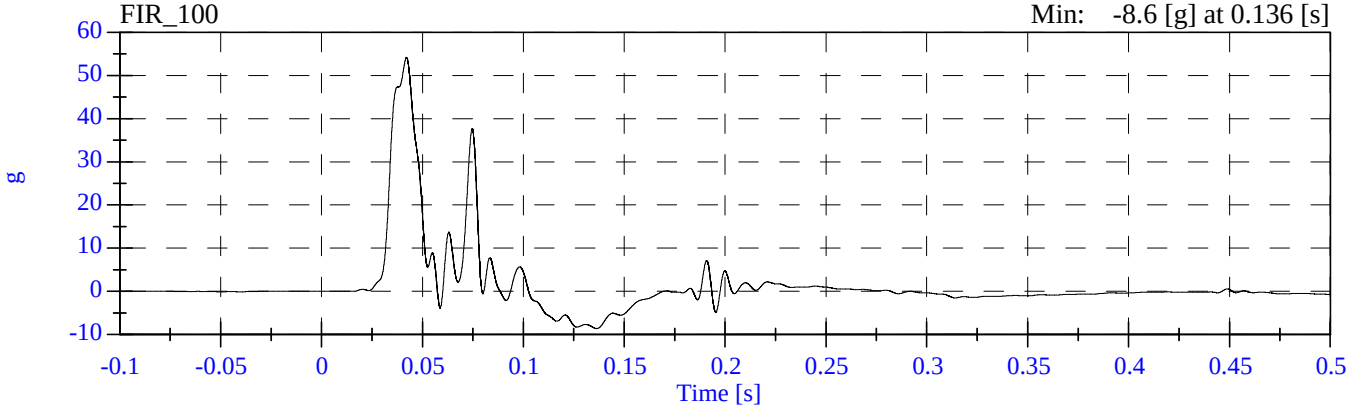


2007 FMVSS 201P Test 1 2007 Jeep Compass
C70311 - August 15, 2007

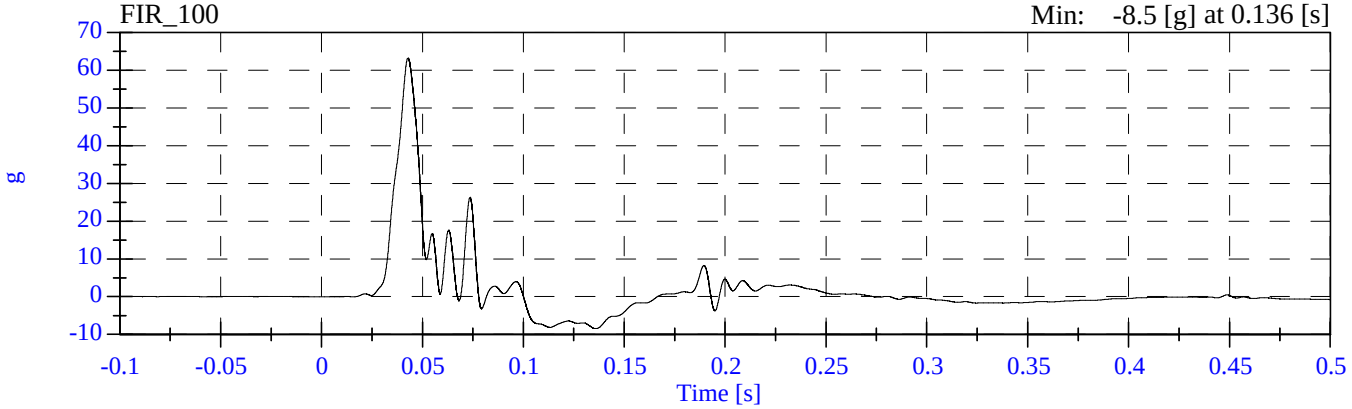
V1P1 Pelvic y
FIR_100
Max: 43.2 [g] at 0.050 [s]
Min: -5.0 [g] at 0.091 [s]



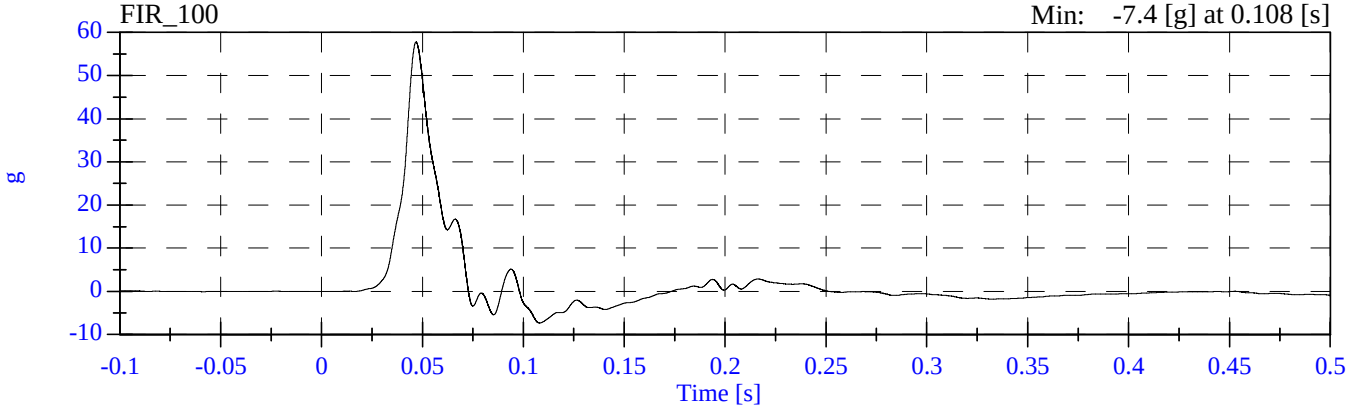
V1P1 Upper Rib Ry
FIR_100
Max: 54.2 [g] at 0.042 [s]
Min: -8.6 [g] at 0.136 [s]



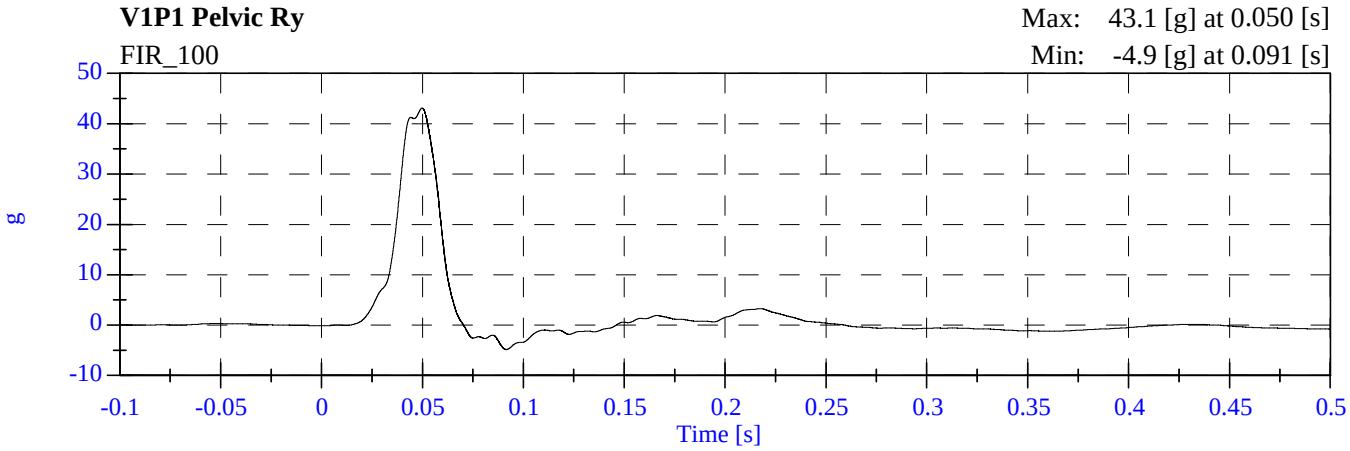
V1P1 Lower Rib Ry
FIR_100
Max: 63.2 [g] at 0.043 [s]
Min: -8.5 [g] at 0.136 [s]



V1P1 Lower Spine Ry
FIR_100
Max: 57.8 [g] at 0.047 [s]
Min: -7.4 [g] at 0.108 [s]



2007 FMVSS 201P Test 1 2007 Jeep Compass
C70311 - August 15, 2007



APPENDIX C

DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA

SUMMARY
SID H3 PRE & POST TEST CALIBRATION

CONFIGURED FOR LEFT SIDE IMPACT

Date: 7/19/07 Sequential Test Number: 1
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	SID H3 NO.: 269 PRE TEST	SID H3 NO.: 269 POST TEST
SH- Seated Height (mm)	889 - 909	899	899
RH- Rib Height (mm)	501 - 520	508	508
HP- Hip Pivot Height (mm)	99 ref.	99	99
RD- Rib from Back Line (mm)	229 - 241	234	234
KH- Knee Pivot from Back Line (mm)	511 - 526	518	518
KV- Knee Pivot to Floor (mm)	490 - 505	493	493
HW- Hip Width (mm)	356 - 391	384	384
HEAD DROP			
TEMPERATURE (C)	18.9 - 25.6	21.1	21.1
RELATIVE. HUMIDITY (%)	10 -70	33.0	31.0
PEAK RESULTANT ACCELERATION.	120-150 Gs	143.56	137.39
PEAK LATERAL ACCELERATION	15 Gs Max	6.34	4.08
CURVE PERCENT NONMODAL	< 15%	5.39	2.31
NECK TEST			
TEMPERATURE (C^o)	20.6 – 22.2	21.1	21.1
HUMIDITY (%)	10-70%	33.0	35.0
IMPACT VELOCITY (m/s)	6.89-7.13	6.99	6.99
PENDULUM DELTA V			
DELTA V at 10 ms.	1.96-2.55 m/s	2.06	2.15
DELTA V at 20 ms.	4.12-5.10 m/s	4.24	4.44
DELTA V at 30 ms.	5.73-7.01 m/s	6.11	6.42
DELTA V between 40-70 ms.	6.27-7.64 m/s	7.12	7.14

SUMMARY (cont'd)
SID H3 PRE & POST TEST CALIBRATION

D PLANE ROTATION			
MAXIMUM ROTATION (deg.)	66.0-82.0	72.09	70.31
ROTATION ANGLE DECAY	58.0-67.0 ms	60.10	60.90
MOMENT ABOUT THE OCCIPITAL CONDYLE			
MAX OCCIPITAL MOMENT	73.0-88.0 N-m	83.45	86.92
OCCIPITAL MOMENT DECAY	49.0-64.0 ms	55.70	56.40
HEAD ROTATION TIME WITH RESPECT TO OCCIPITAL CONDYLE MOMENT			
MOMENT TO ROTATION PEAK	2.0-16.0 ms	8.70	8.00
THORAX IMPACTS			
TEMPERATURE (C)	18.9 - 25.5	21.1	21.1
RELATIVE. HUMIDITY (%)	10 -70	29.0	34.0
PROBE SPEED (m/s)	4.27 - 4.33	4.32	4.27
UPPER RIB (g's)	37 - 46	41.5	40.0
LOWER RIB (g's)	37 - 46	43.5	40.5
LOWER SPINE (g's)	15 -22	18.4	18.1
PELVIS IMPACT			
TEMPERATURE (C)	18.9 - 25.5	21.1	21.1
RELATIVE HUMIDITY (%)	10 - 70	29	35
PROBE SPEED (m/s)	4.27 - 4.33	4.27	4.28
PELVIS (g's)	40 -60	51.6	55.4

REMARKS: None

CALIBRATION TEST RESULTS

PRE-TEST

SID/HIII NO.: 269

CONFIGURED FOR LEFT SIDE IMPACT

CALIBRATION TEST RESULTS SUMMARY
PRE-TEST

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.:	269	Sequential Test Number:	1
Date:	7/20/07	Laboratory Technician:	B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
HEAD DROP TEST	Passed all requirements.
LATERAL NECK BEND TEST	Passed all requirements.
THORACIC SHOCK ABSORBER TEST	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
ABDOMINAL COMPRESSION TEST	Passed all requirements.
LUMBAR FLEXION TEST	Passed all requirements.

REMARKS: None

EXTERNAL DIMENSIONS
PRE-TEST

CONFIGURED FOR LEFT SIDE IMPACT

SID/HIII Serial No.:	269	Sequential Test Number:	1
Date:	7/16/07	Laboratory Technician:	B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 – 909	899
RH- Rib Height (mm)	502 – 520	508
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 – 241	234
KH- Knee Pivot from Back Line (mm)	511 – 526	518
KV- Knee Pivot to Floor (mm)	490 – 505	493
HW- Hip Width (mm)	356 - 391	384

REMARKS: None

Shock Low (3.05 m/s)

PRE TEST

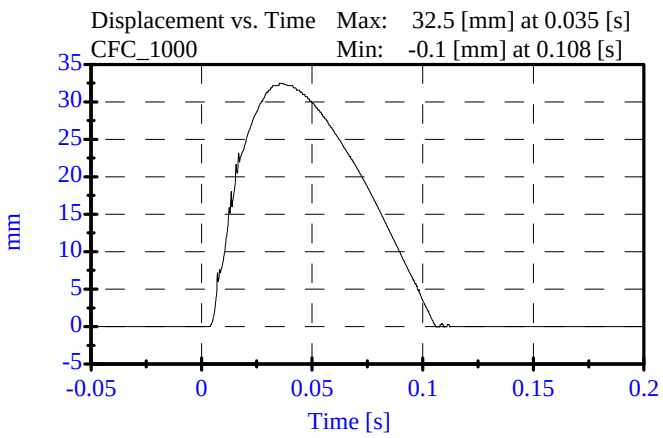
CONFIGURED FOR LEFT SIDE IMPACT

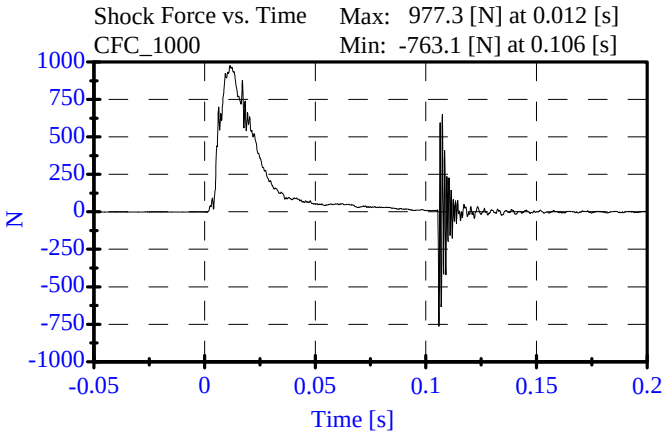
ATD Serial No: 269 Sequential Test Number: 1 File: 269-10 07-19-07

Date: 07-19-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	31.00 %	Passed
Displacement:	30.00-35.00 mm	32.51 mm	Passed
Maximum Force:	836.00-1125.00 N	977.33 N	Passed

Impact Test Velocity: 3.05 m/s
Damper Identification: 269
Damper Setting: 5





Shock Med (4.27 m/s)

PRE TEST

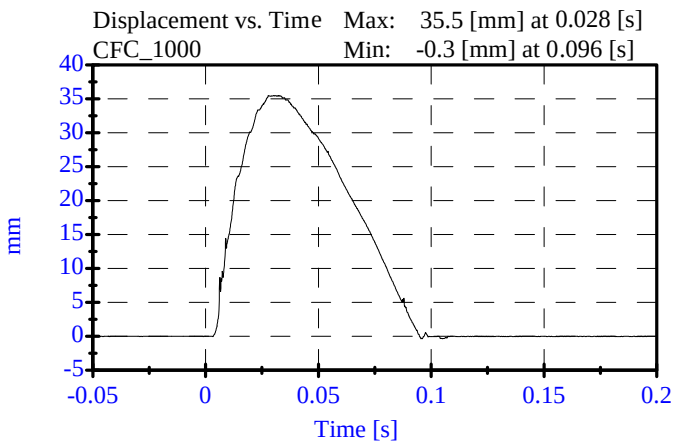
CONFIGURED FOR LEFT SIDE IMPACT

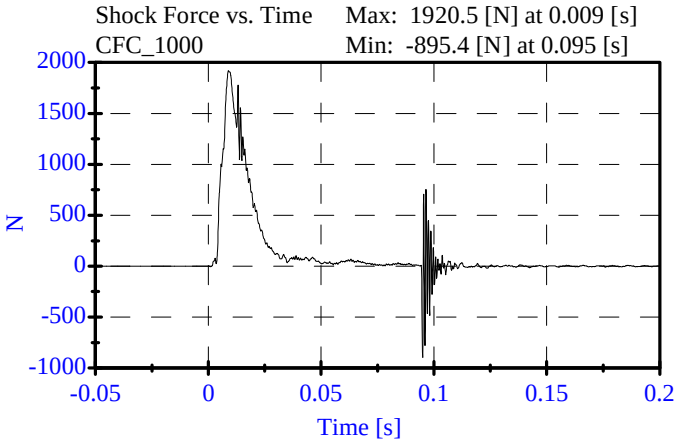
ATD Serial No: 269 Sequential Test Number: 1 File: 269-14 07-19-07

Date: 07-19-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	31.00 %	Passed
Displacement:	32.00-37.00 mm	35.46 mm	Passed
Maximum Force:	1730.00-2099.00 N	1920.51 N	Passed

Impact Test Velocity: 4.27 m/s
Damper Identification: 269
Damper Setting: 5





Shock High (6.10 m/s)

PRE TEST

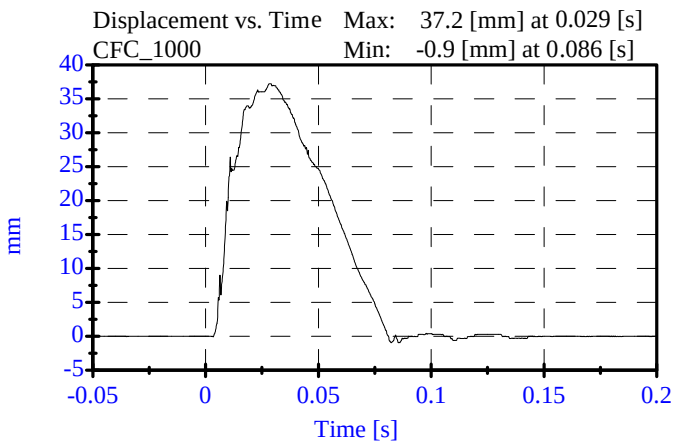
CONFIGURED FOR LEFT SIDE IMPACT

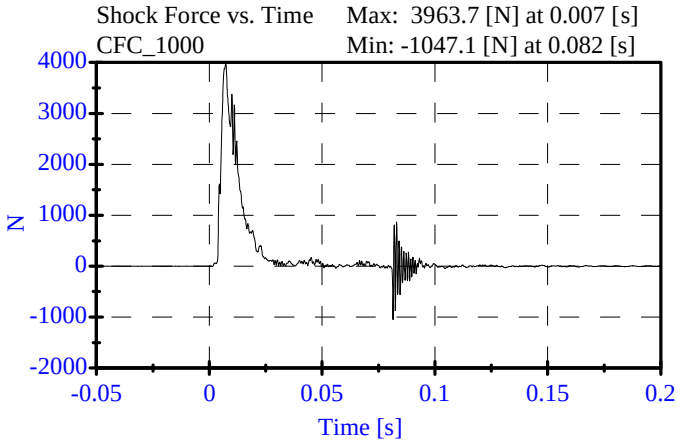
ATD Serial No: 269 Sequential Test Number: 1 File: 269-20 07-19-07

Date: 07-19-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	31.00 %	Passed
Displacement:	33.00-40.00 mm	37.23 mm	Passed
Maximum Force:	3741.00-4448.00 N	3963.68 N	Passed

Impact Test Velocity: 6.10 m/s
Damper Identification: 269
Damper Setting: 5





Thorax Impact

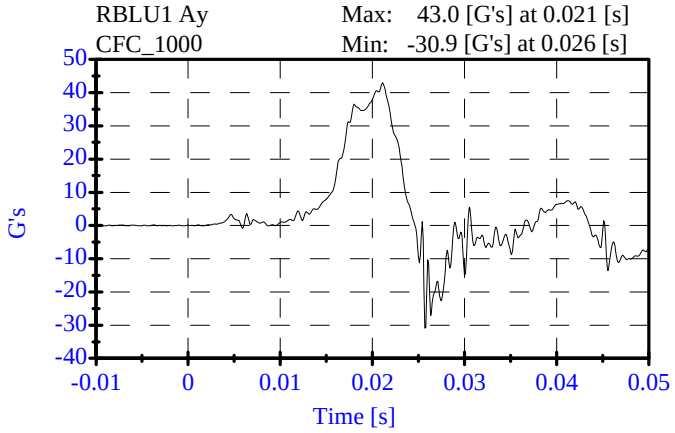
Pre-Test

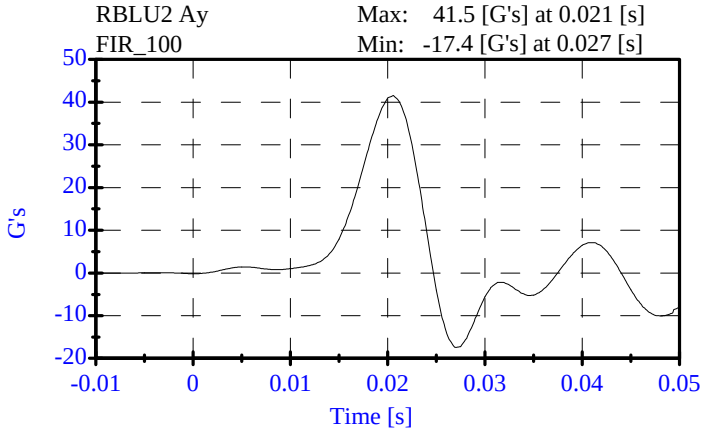
CONFIGURED FOR LEFT SIDE IMPACT

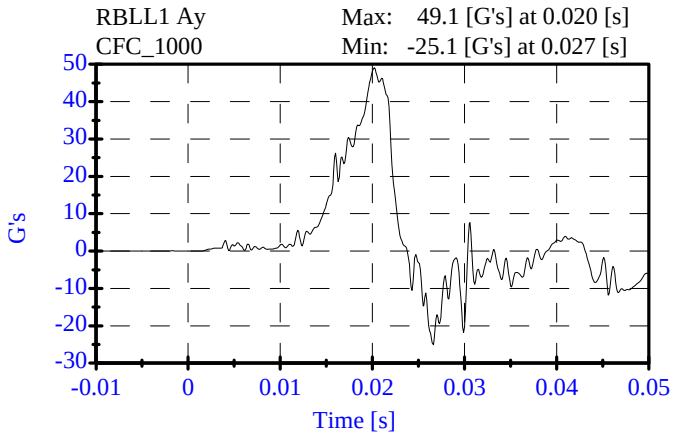
ATD Serial No: 269 Sequential Test Number: 1 File: 269T 07-20-07

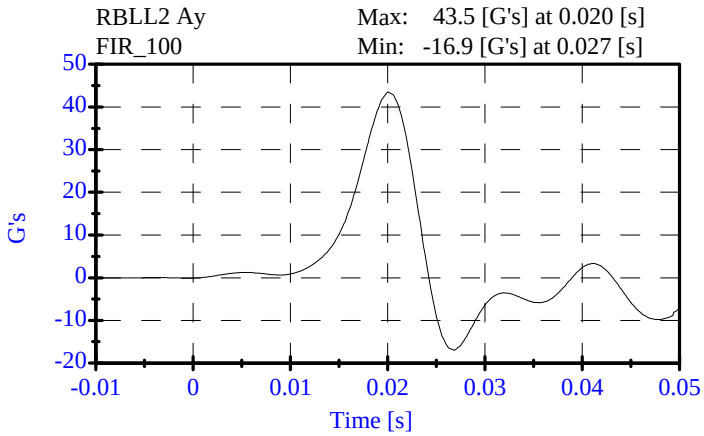
Date: 07-20-07 Laboratory Technician: B. Swiecicki

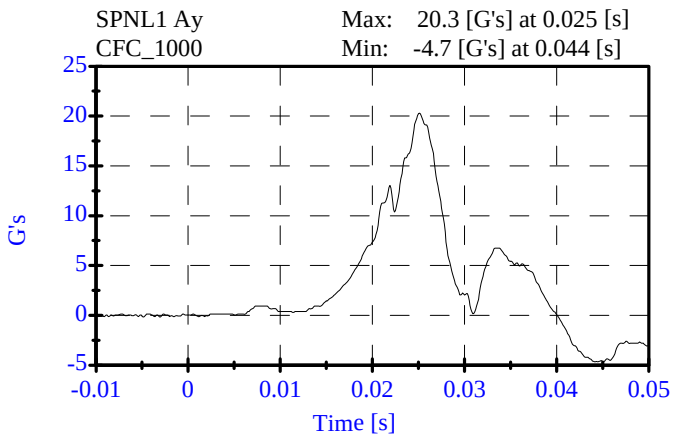
TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	29.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.32 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	41.53 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	43.53 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	18.44 G's	Passed

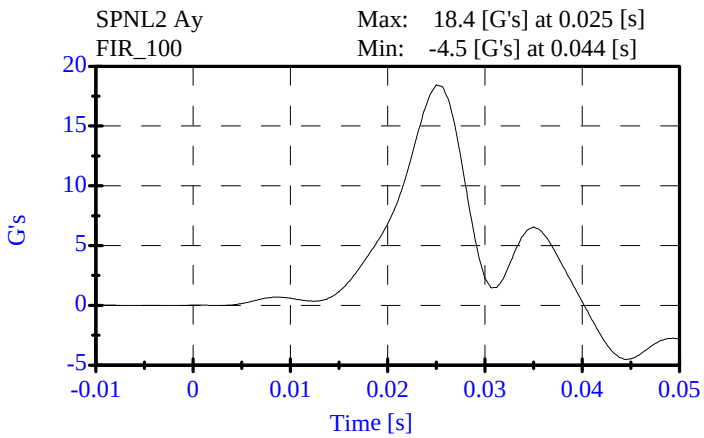












Pelvic Impact

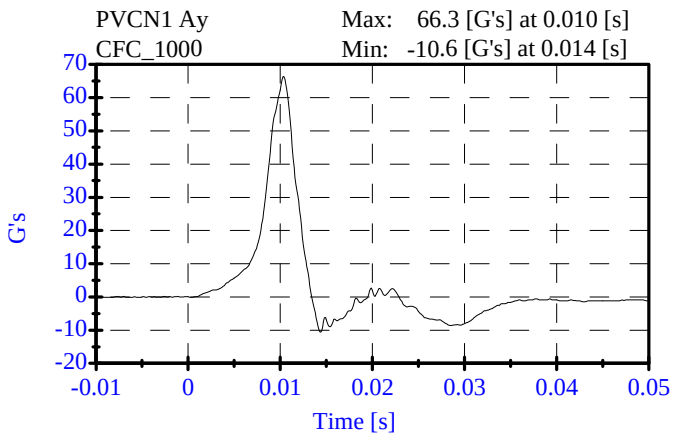
Pre-Test

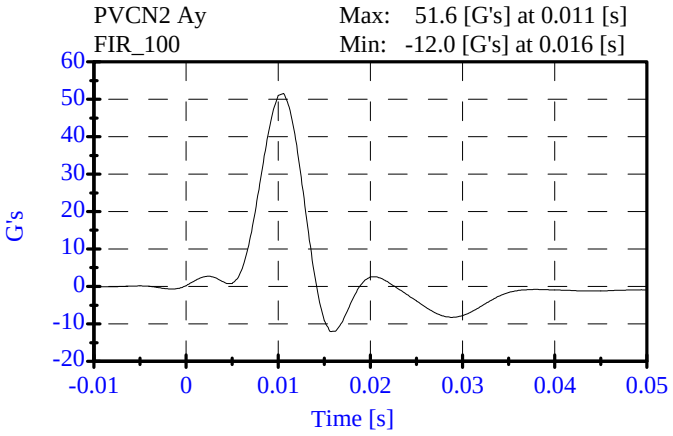
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269 Sequential Test Number: 1 File: 269P 07-20-07

Date: 07-20-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	29.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.27 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	51.58 G's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.5 ms	Passed





Head Drop

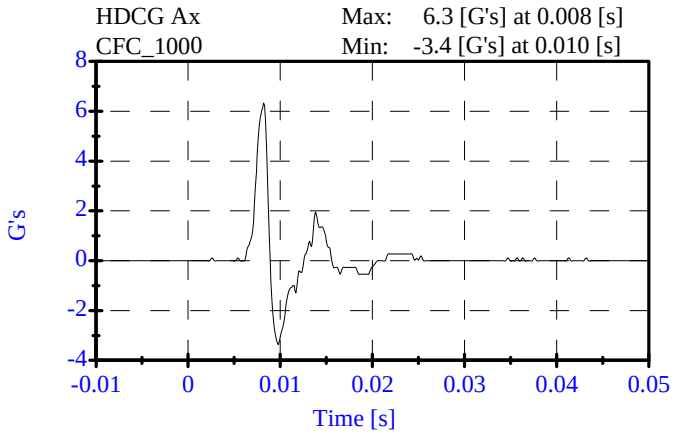
Pre-Test

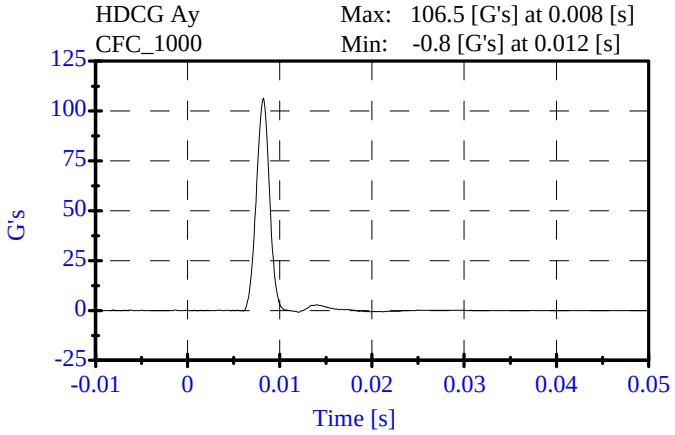
CONFIGURED FOR LEFT SIDE IMPACT

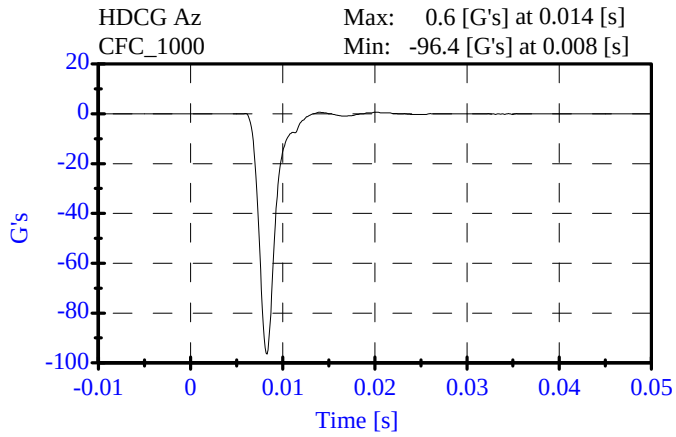
ATD Serial No: 269 Sequential Test Number: 1 File: 269H 07-16-07

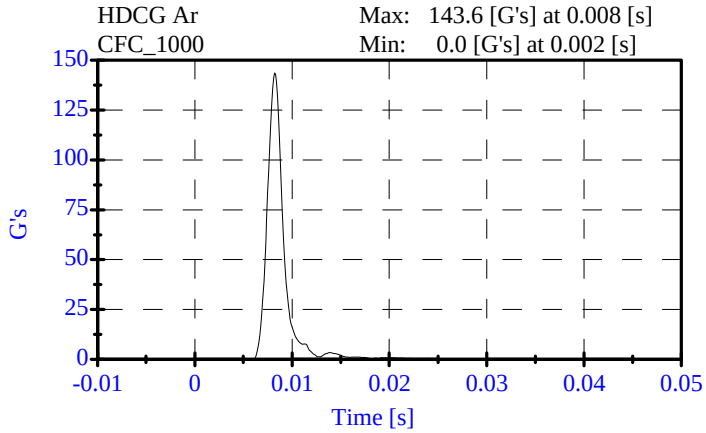
Date: 07-16-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Peak Resultant Accel.:	120-150 Gs	143.56 Gs	Passed
Peak Lateral Accel.:	15 Gs Max	6.34 Gs	Passed
Curve PerCent NonModal:	< 15%	5.39 %	Passed









Neck Test

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269 Sequential Test Number: 1 File: 269N 07-16-07

Date: 07-16-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Impact Velocity:	6.89- 7.13 m/s	6.99 m/s	Passed
PENDULUM DELTA V			
Delta V at 10 ms:	1.96- 2.55 m/s	2.06 m/s	Passed
Delta V at 20 ms:	4.12- 5.10 m/s	4.24 m/s	Passed
Delta V at 30 ms:	5.73- 7.01 m/s	6.11 m/s	Passed
Delta V between 40-70 ms:	6.27- 7.64 m/s	7.12 m/s	Passed
D PLANE ROTATION			
Maximum Rotation:	66.0-82.0 Deg	72.09 Deg	Passed
Rotation Angle Decay:	58.0-67.0 ms	60.10 ms	Passed
MOMENT ABOUT THE OCCIPITAL CONDYLE			
Max Occipital Moment:	73.00- 88.00 N-m	83.45 N-m	Passed
Occiptal Moment Decay:	49.0-64.0 ms	55.70 ms	Passed
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT			
Moment to Rotation Peak:	2.0-16.0 ms	8.70 ms	Passed

Neck Test

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

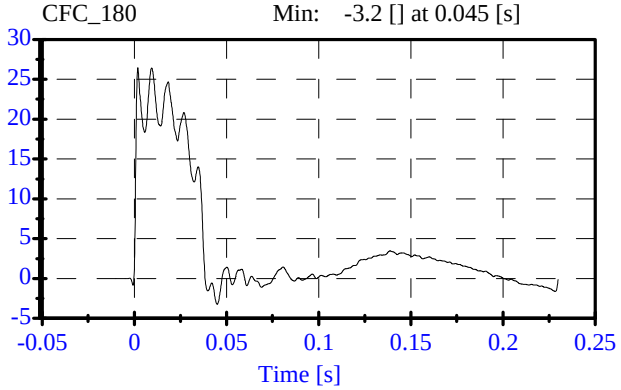
ATD Serial No: 269

Sequential Test Number: 1 File: 269N 07-16-07

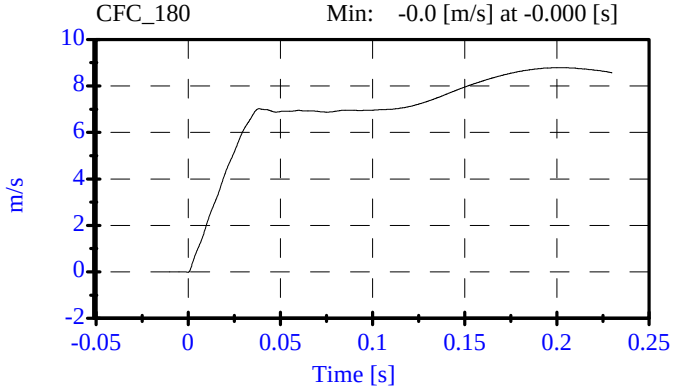
Date: 07-16-07

Laboratory Technician: B. Swiecicki

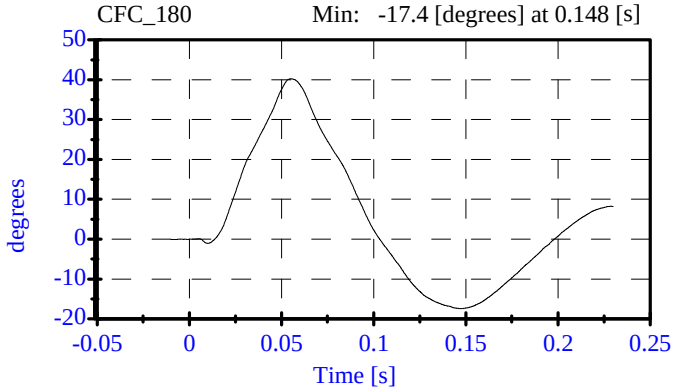
Pend Ax Max: 26.5 [] at 0.002 [s]
CFC_180 Min: -3.2 [] at 0.045 [s]



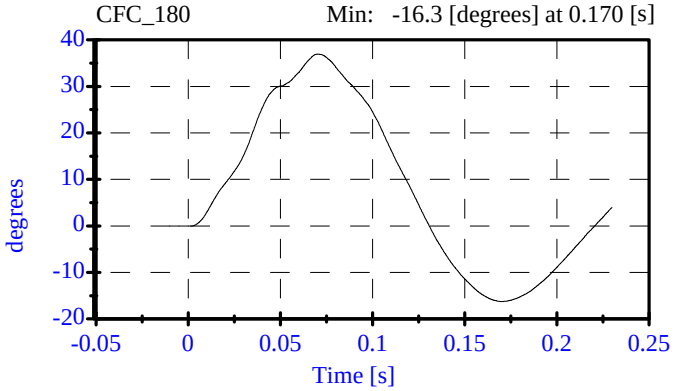
Pend Vx Max: 8.8 [m/s] at 0.200 [s]
CFC_180 Min: -0.0 [m/s] at -0.000 [s]



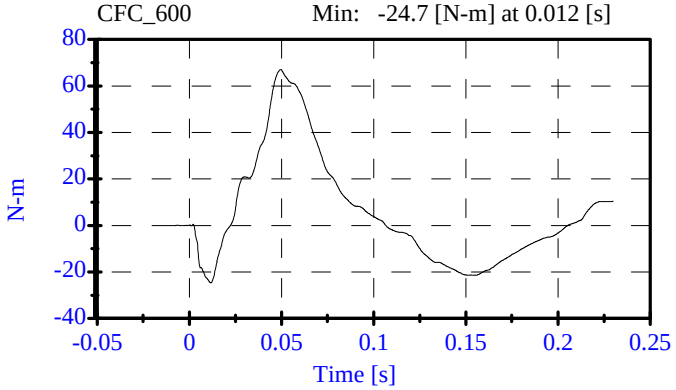
Head Rot Max: 40.2 [degrees] at 0.055 [s]
CFC_180 Min: -17.4 [degrees] at 0.148 [s]



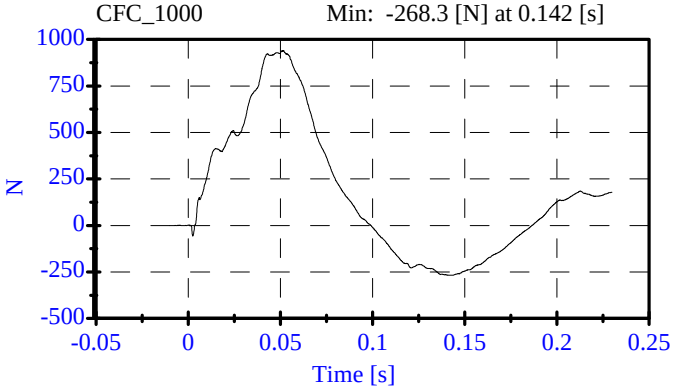
Arm Rot Max: 36.9 [degrees] at 0.070 [s]
CFC_180 Min: -16.3 [degrees] at 0.170 [s]



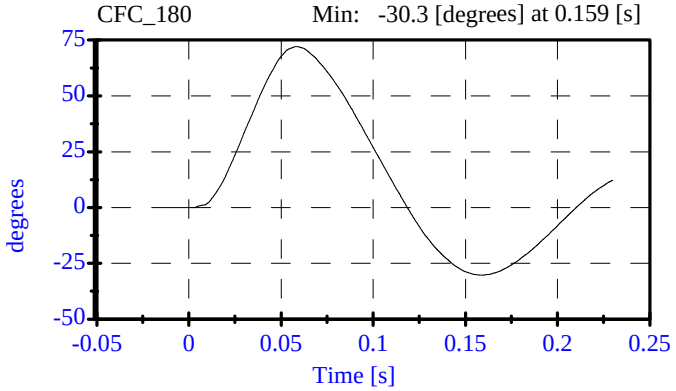
Neck Mx Max: 67.0 [N-m] at 0.050 [s]
CFC_600 Min: -24.7 [N-m] at 0.012 [s]



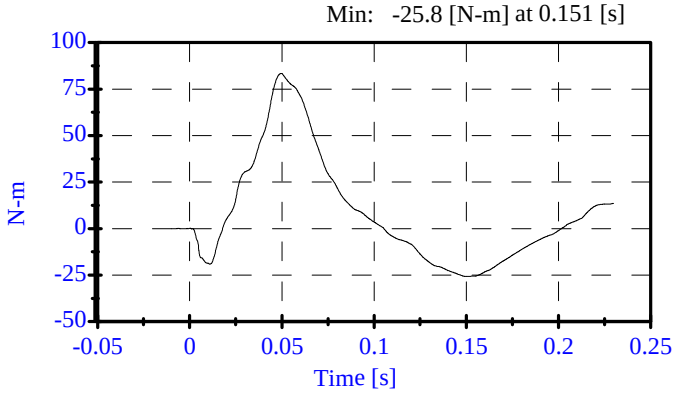
Neck Fy Max: 939.3 [N] at 0.051 [s]
CFC_1000 Min: -268.3 [N] at 0.142 [s]



Tot Rot Max: 72.1 [degrees] at 0.058 [s]
CFC_180 Min: -30.3 [degrees] at 0.159 [s]



MOCX Max: 83.4 [N-m] at 0.050 [s]
Min: -25.8 [N-m] at 0.151 [s]



Abdomen Test

Pre-Test

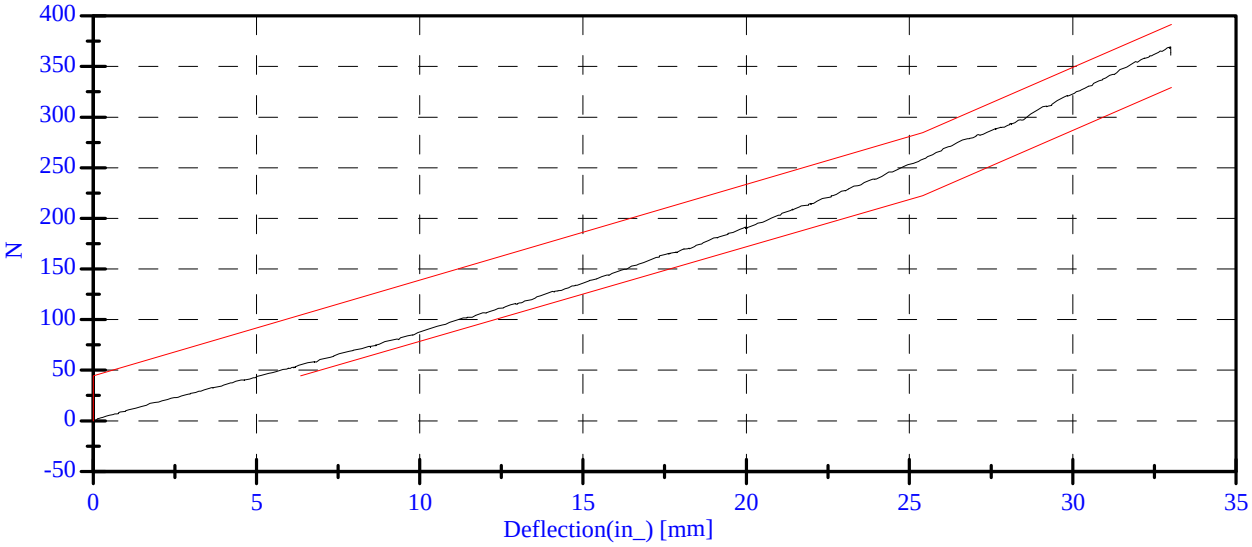
CONFIGURED FOR LEFT SIDE IMPACT

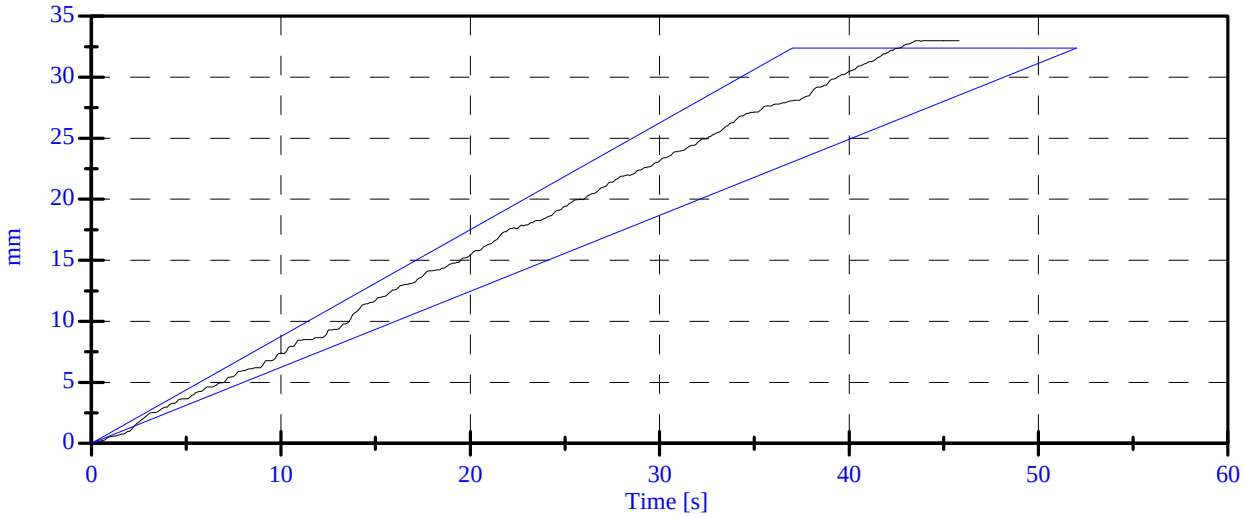
ATD Serial No: 269 Sequential Test Number: 1 File: 269Ab 07-20-07

Date: 07-20-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	115.80 N	Passed
Force at 19.05 mm :	162.98-220.99 N	180.68 N	Passed
Force at 25.40 mm :	221.97-280.02 N	258.61 N	Passed
Force at 33.02 mm :	324.99-391.00 N	369.17 N	Passed

ABDOMINAL COMPRESSION TEST





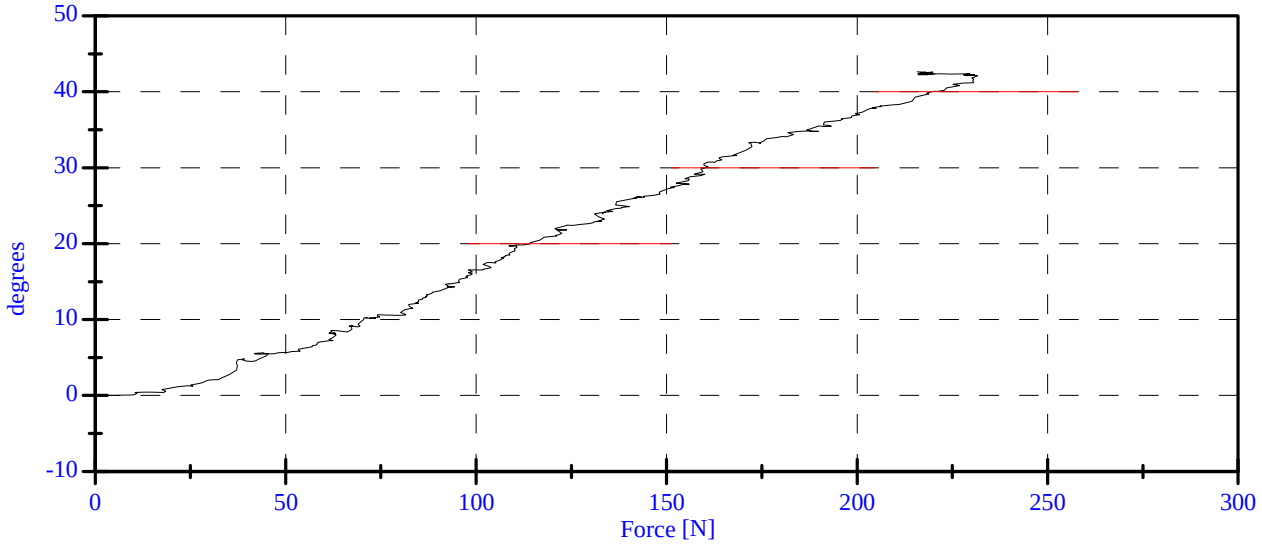
Spine Test
Pre-Test

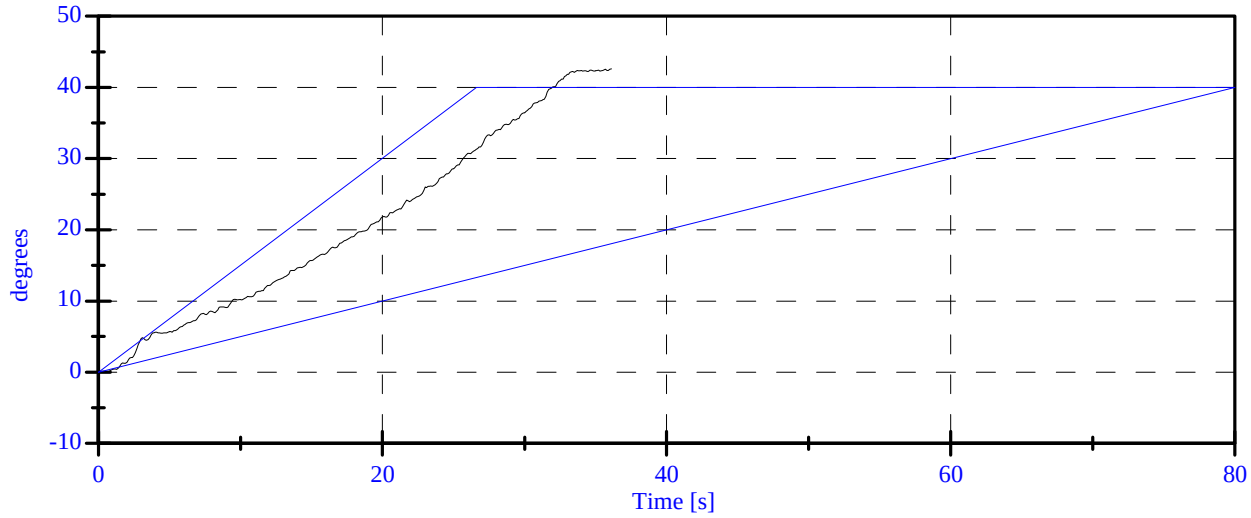
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269 Sequential Test Number: 1 File: 269SP 07-20-07
Date: 07-20-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	3.39 N	Passed
Force at 20 Deg:	97.86-151.24 N	114.12 N	Passed
Force at 30 Deg	151.24-204.62 N	160.87 N	Passed
Force at 40 Deg	204.62-258.00 N	220.15 N	Passed
Return Angle	12 Deg Max	5.15 deg	Passed

LUMBAR SPINE FLEXION TEST





PRE-TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID/HIII Serial No.:	269	Sequential Test Number:	1
Date:	7/16/07	Laboratory Technician:	B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

CALIBRATION TEST RESULTS

POST TEST

SID/HIII NO.: 269

CONFIGURED FOR LEFT SIDE IMPACT

CALIBRATION TEST RESULTS SUMMARY
POST TEST

CONFIGURED FOR LEFT SIDE IMPACT

SID/HIII Serial No.:	269	Sequential Test Number:	1
Date:	8/30/07	Laboratory Technician:	B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
HEAD DROP TEST	Passed all requirements.
LATERAL NECK BEND TEST	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
ABDOMINAL COMPRESSION TEST	Passed all requirements.
LUMBAR FLEXION TEST	Passed all requirements.

REMARKS: None

EXTERNAL DIMENSIONS
POST TEST

CONFIGURED FOR LEFT SIDE IMPACT

SID/HIII Serial No.: 269 Sequential Test Number: 1
Date: 8/23/07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	899
RH- Rib Height (mm)	502 - 520	508
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	234
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	493
HW- Hip Width (mm)	356 - 391	384

REMARKS: None

Thorax Impact

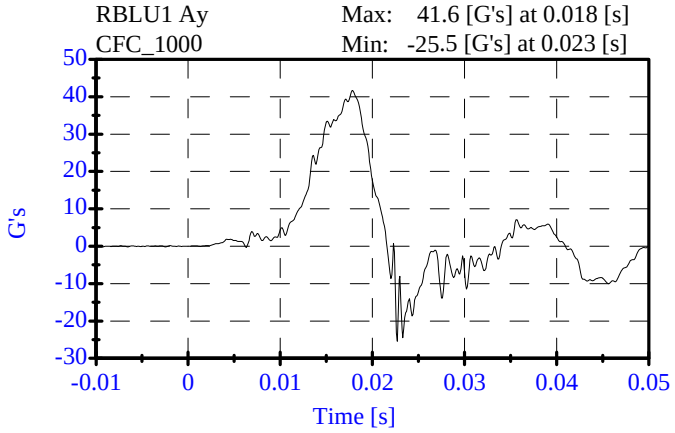
Post-Test

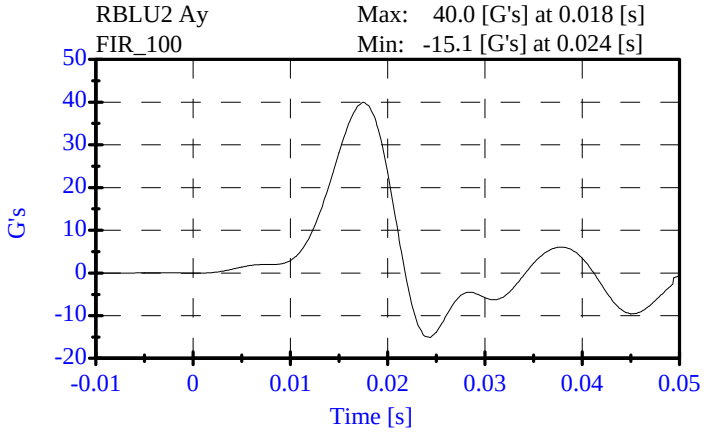
CONFIGURED FOR LEFT SIDE IMPACT

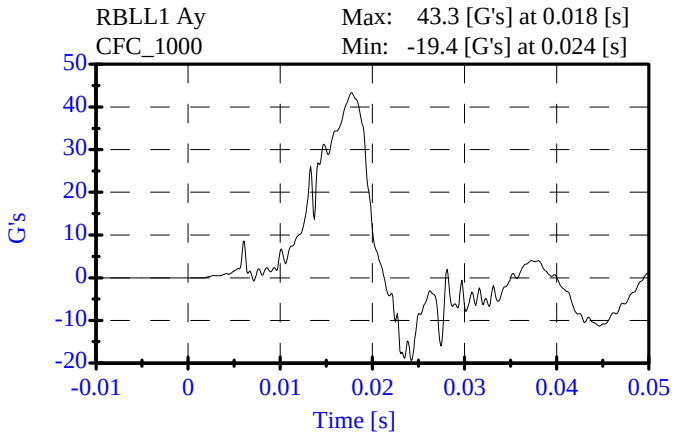
ATD Serial No: 269 Sequential Test Number: 1 File: 269T 08-28-07

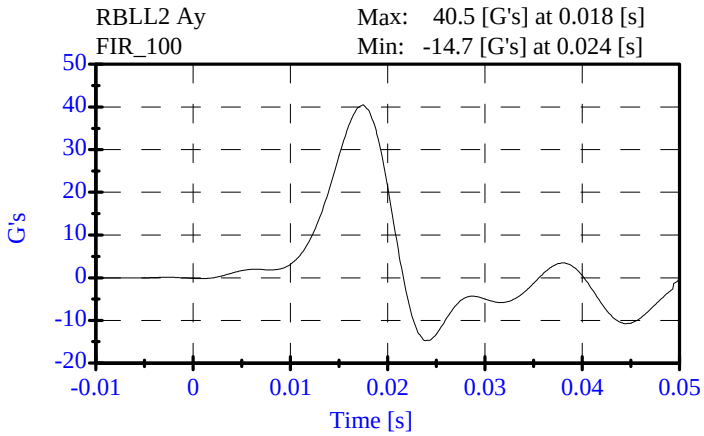
Date: 08-28-07 Laboratory Technician: B. Swiecicki

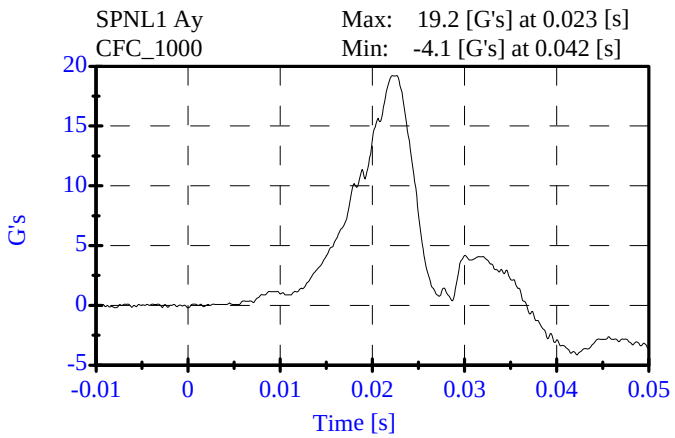
TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	34.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.27 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	40.02 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	40.51 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	18.07 G's	Passed

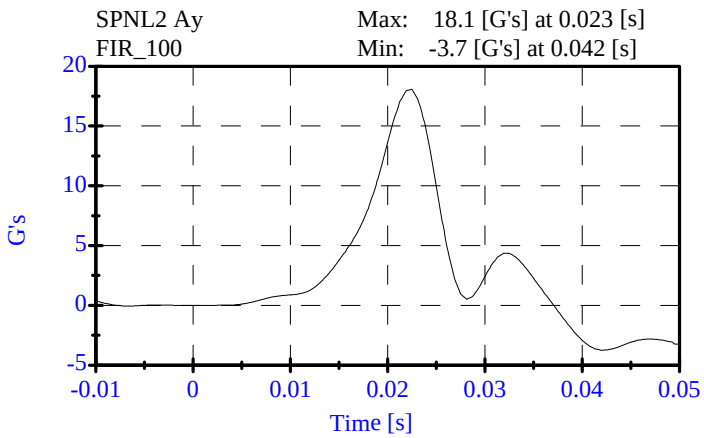












Pelvic Impact

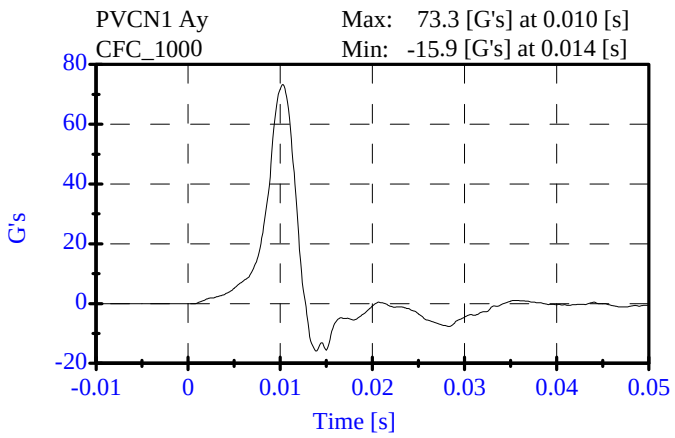
Post-Test

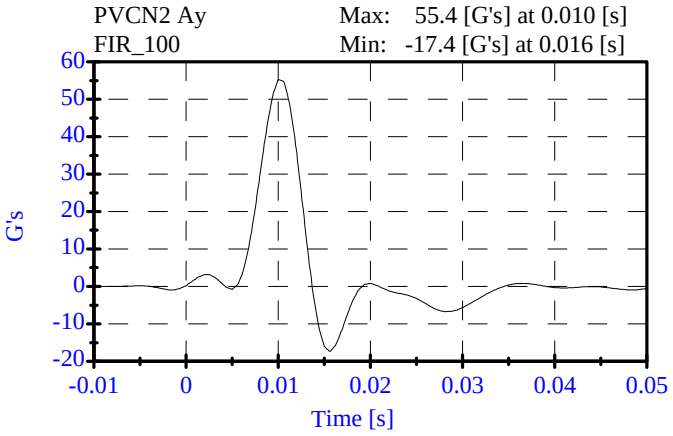
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269 Sequential Test Number: 1 File: 269P 08-28-07

Date: 08-28-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.28 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	55.35 G's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.3 ms	Passed





Head Drop

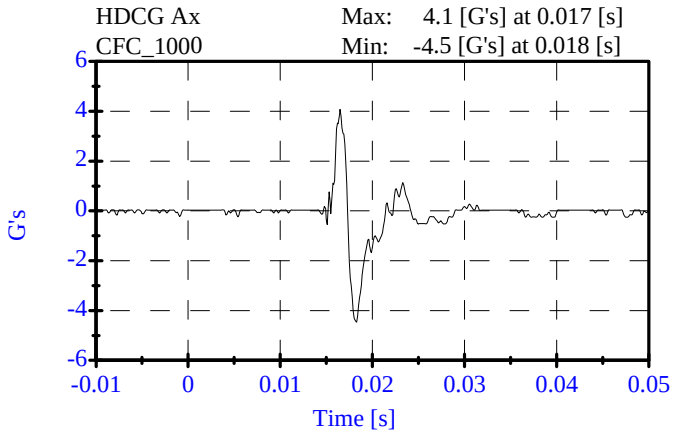
Post-Test

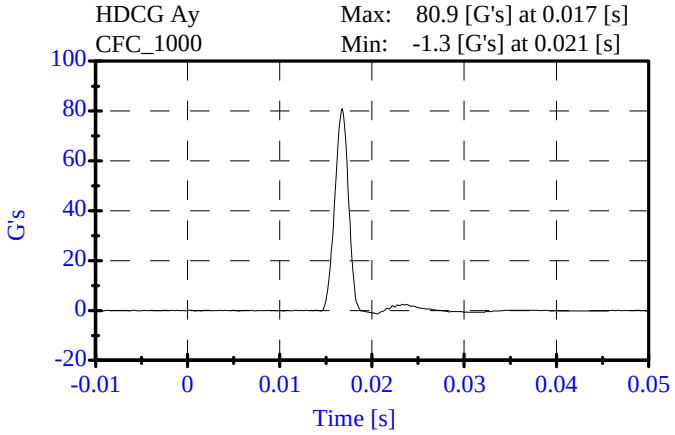
CONFIGURED FOR LEFT SIDE IMPACT

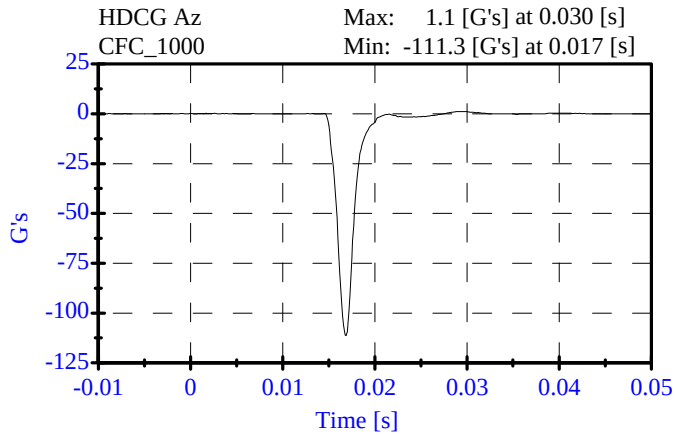
ATD Serial No: 269 Sequential Test Number: 1 File: 269HD1 08-24-07

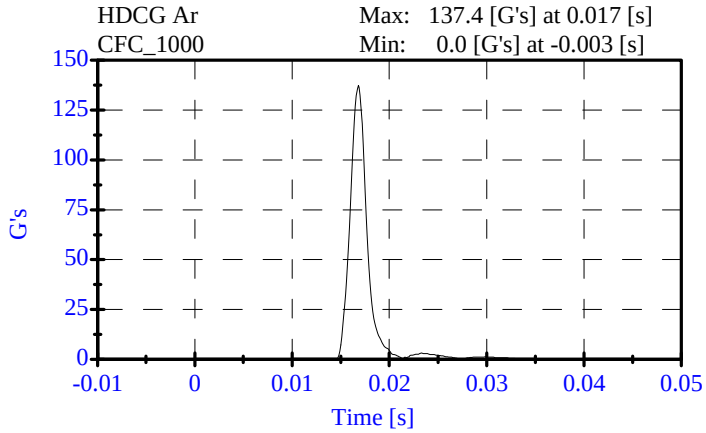
Date: 08-24-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	31.00 %	Passed
Peak Resultant Accel.:	120-150 Gs	137.39 Gs	Passed
Peak Lateral Accel.:	15 Gs Max	4.08 Gs	Passed
Curve PerCent NonModal:	< 15%	2.31 %	Passed









Neck Test

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269 Sequential Test Number: 1 File: 269Neck 08-27-07

Date: 08-27-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Impact Velocity:	6.89- 7.13 m/s	6.99 m/s	Passed
PENDULUM DELTA V			
Delta V at 10 ms:	1.96- 2.55 m/s	2.15 m/s	Passed
Delta V at 20 ms:	4.12- 5.10 m/s	4.44 m/s	Passed
Delta V at 30 ms:	5.73- 7.01 m/s	6.42 m/s	Passed
Delta V between 40-70 ms:	6.27- 7.64 m/s	7.14 m/s	Passed
D PLANE ROTATION			
Maximum Rotation:	66.0-82.0 Deg	70.31 Deg	Passed
Rotation Angle Decay:	58.0-67.0 ms	60.90 ms	Passed
MOMENT ABOUT THE OCCIPITAL CONDYLE			
Max Occipital Moment:	73.00- 88.00 N-m	86.92 N-m	Passed
Occiptal Moment Decay:	49.0-64.0 ms	56.40 ms	Passed
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT			
Moment to Rotation Peak:	2.0-16.0 ms	8.00 ms	Passed

Neck Test

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

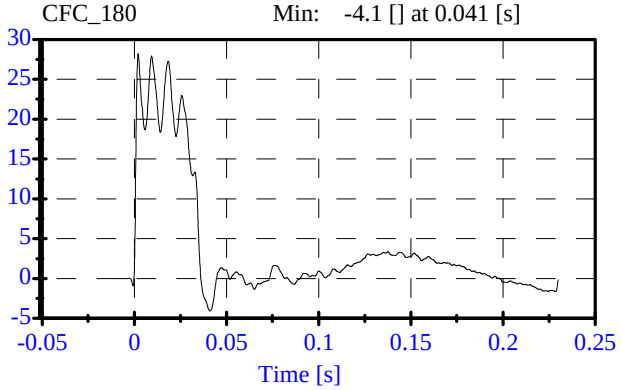
ATD Serial No: 269

Sequential Test Number: 1 File: 269Neck 08-27-07

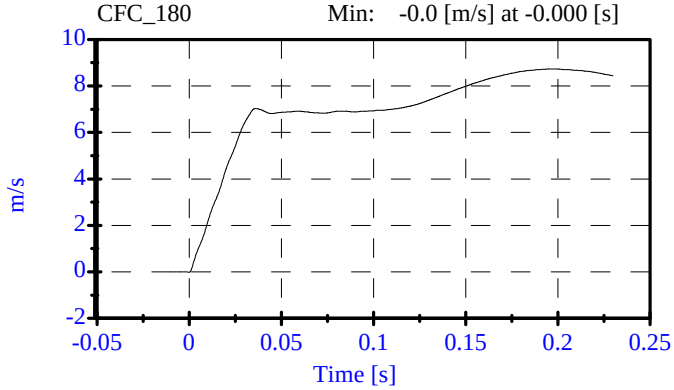
Date: 08-27-07

Laboratory Technician: B. Swiecicki

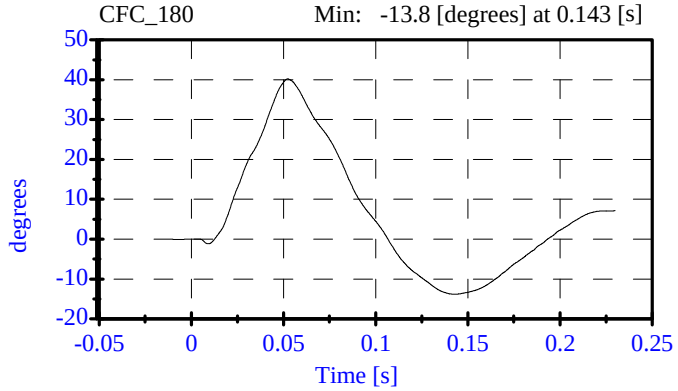
Pend Ax
CFC_180
Max: 28.2 [] at 0.002 [s]
Min: -4.1 [] at 0.041 [s]



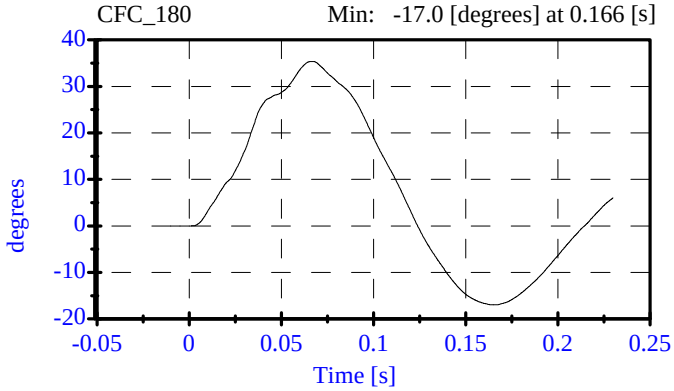
Pend Vx
CFC_180
Max: 8.7 [m/s] at 0.199 [s]
Min: -0.0 [m/s] at -0.000 [s]



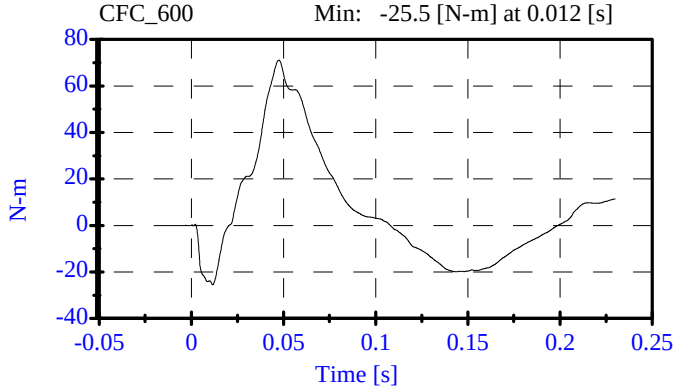
Head Rot
CFC_180
Max: 40.2 [degrees] at 0.052 [s]
Min: -13.8 [degrees] at 0.143 [s]



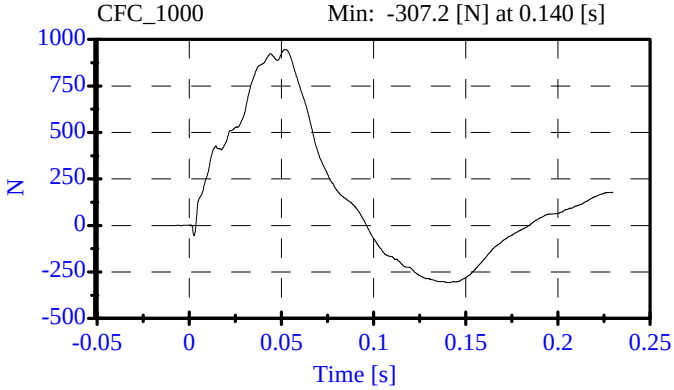
Arm Rot
CFC_180
Max: 35.4 [degrees] at 0.067 [s]
Min: -17.0 [degrees] at 0.166 [s]



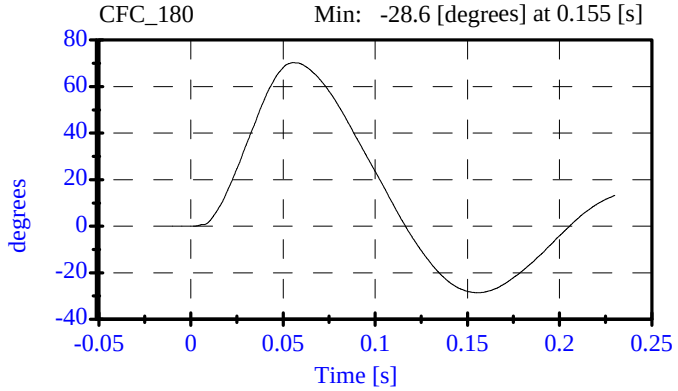
Neck Mx
CFC_600
Max: 71.1 [N-m] at 0.048 [s]
Min: -25.5 [N-m] at 0.012 [s]



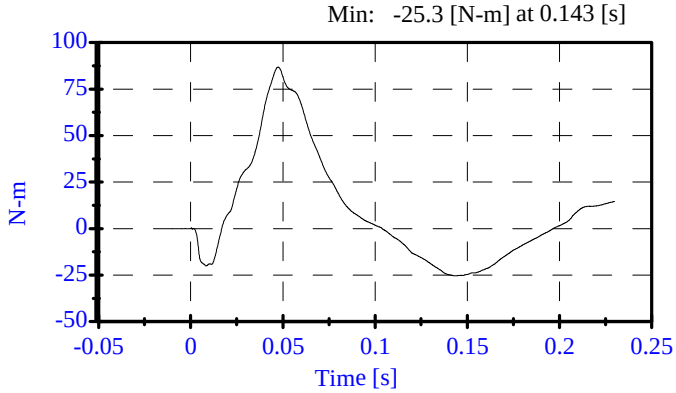
Neck Fy
CFC_1000
Max: 945.7 [N] at 0.052 [s]
Min: -307.2 [N] at 0.140 [s]



Tot Rot
CFC_180
Max: 70.3 [degrees] at 0.055 [s]
Min: -28.6 [degrees] at 0.155 [s]



MOCX
Max: 86.9 [N-m] at 0.048 [s]
Min: -25.3 [N-m] at 0.143 [s]



Abdomen Test

Post-Test

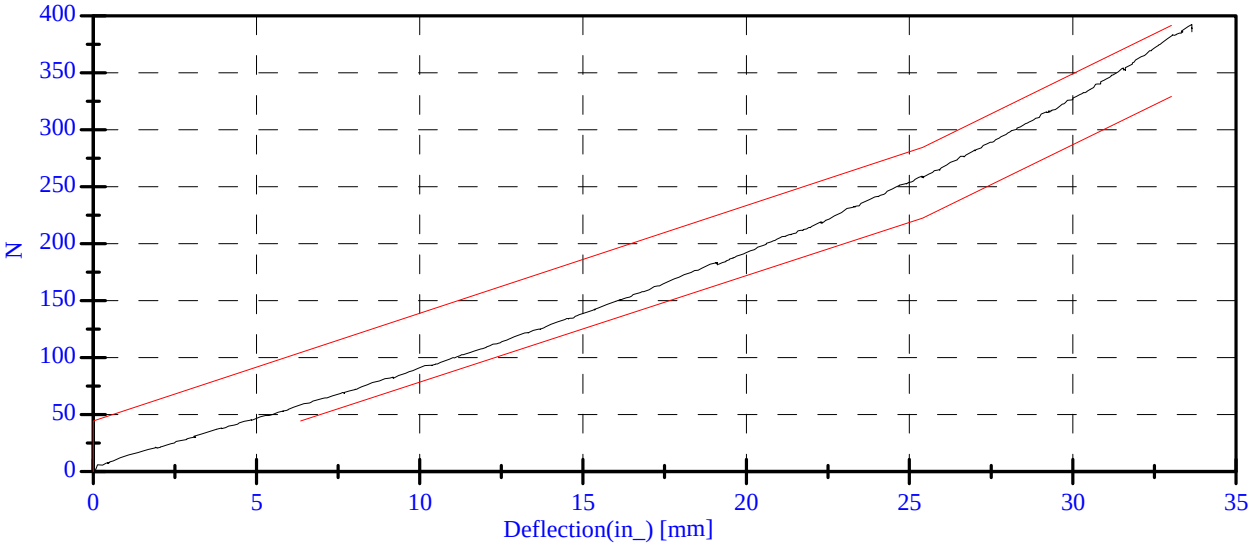
CONFIGURED FOR LEFT SIDE IMPACT

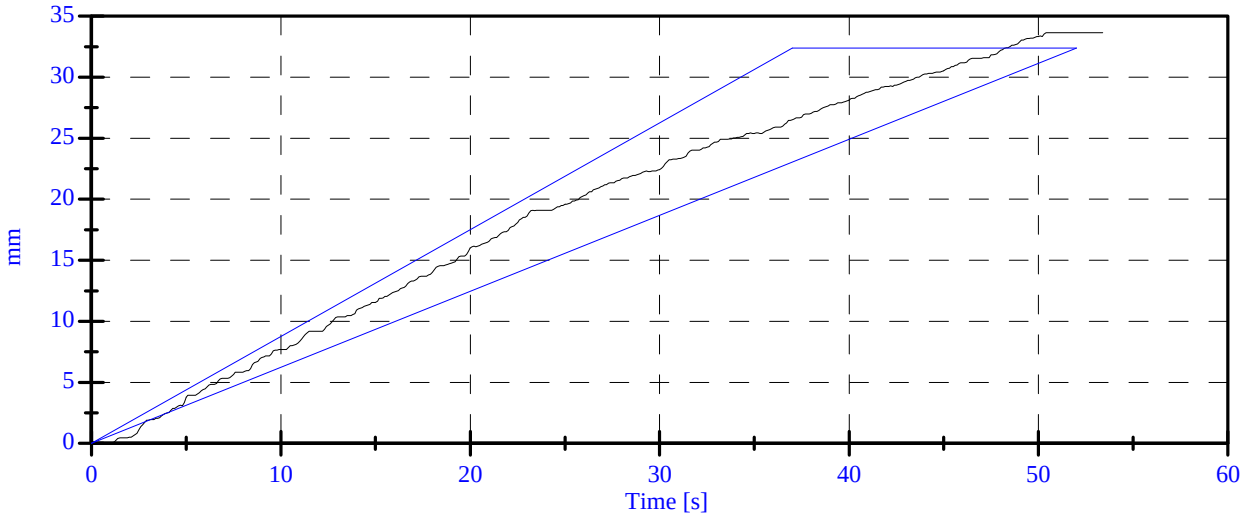
ATD Serial No: 269 Sequential Test Number: 1 File: 269AB 08-30-07

Date: 08-30-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	118.33 N	Passed
Force at 19.05 mm :	162.98-220.99 N	183.22 N	Passed
Force at 25.40 mm :	221.97-280.02 N	259.34 N	Passed
Force at 33.02 mm :	324.99-391.00 N	382.95 N	Passed

ABDOMINAL COMPRESSION TEST





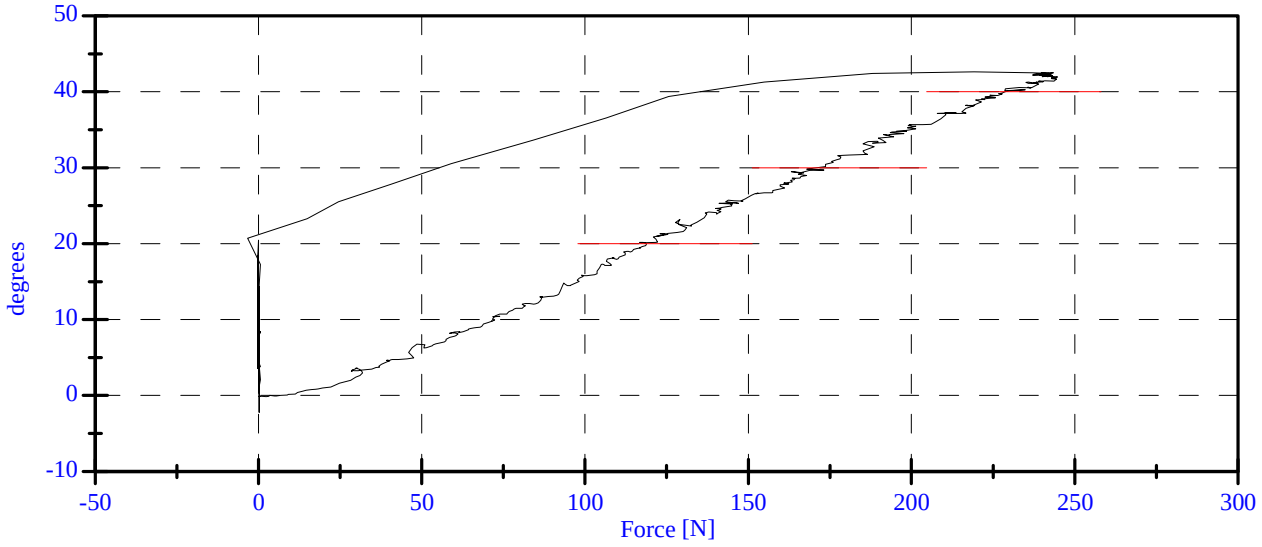
Spine Test
Post-Test

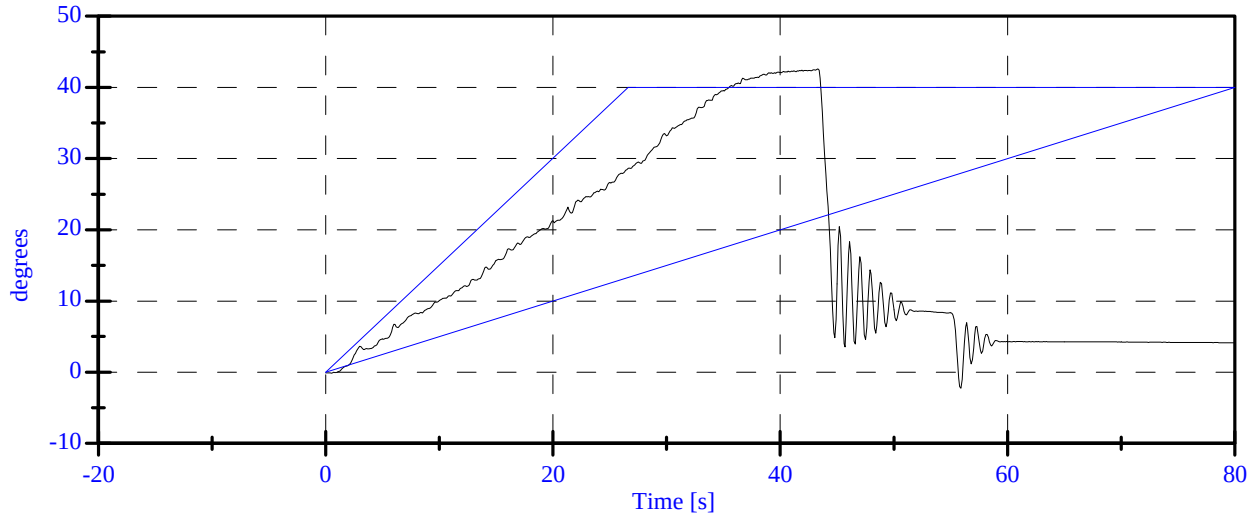
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269 Sequential Test Number: 1 File: 269SP 08-30-07
Date: 8-30-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	36.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	3.39 N	Passed
Force at 20 Deg:	97.86-151.24 N	118.82 N	Passed
Force at 30 Deg	151.24-204.62 N	173.67 N	Passed
Force at 40 Deg	204.62-258.00 N	228.77 N	Passed
Return Angle	12 Deg Max	4.09 deg	Passed

LUMBAR SPINE FLEXION TEST





POST TEST DUMMY INSPECTION LIST

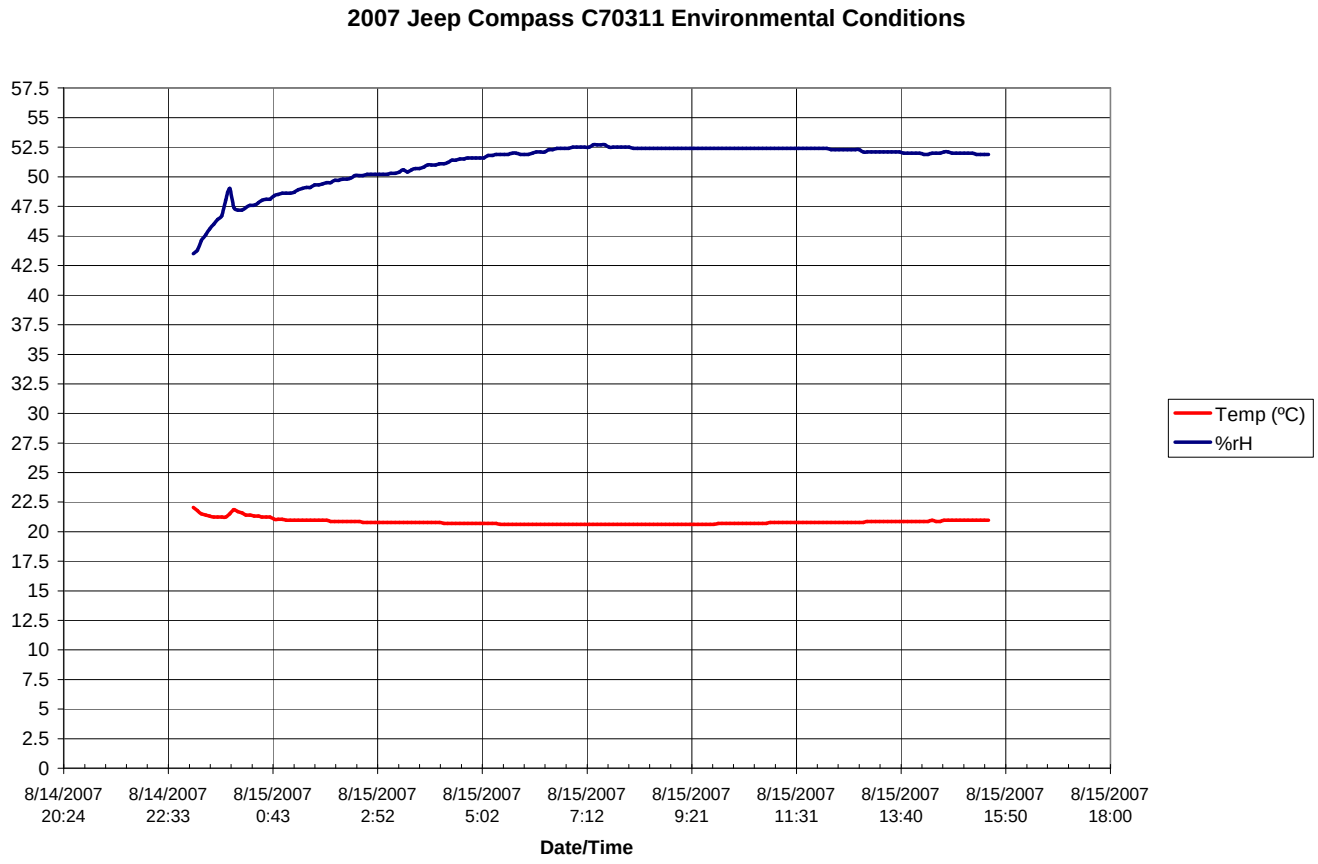
CONFIGURED FOR LEFT SIDE IMPACT

SID/HIII Serial No.: 269 Sequential Test Number: 1
Date: 8/23/07 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

TEMPERATURE TRACE (16 HR)



APPENDIX D

TEST EQUIPMENT AND CALIBRATION INFORMATION

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

SID/HIII INSTRUMENTATION

	SID/HIII NO.: 269		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-P22943	ENDEVCO	11-Jul-07
HEAD AY	AC-P35789	ENDEVCO	11-Jul-07
HEAD AZ	AC-P13323	ENDEVCO	11-Jul-07
UPPER NECK FX	LC-442Fx	DENTON	08-Sep-06
UPPER NECK FY	LC-442Fy	DENTON	08-Sep-06
UPPER NECK FZ	LC-442Fz	DENTON	08-Sep-06
UPPER NECK MX	LC-442Mx	DENTON	08-Sep-06
UPPER NECK MY	LC-442My	DENTON	08-Sep-06
UPPER NECK MZ	LC-442Mz	DENTON	08-Sep-06
UPPER RIB	AC-P39731	ENDEVCO	11-Jul-07
LOWER RIB	AC-P38896	ENDEVCO	11-Jul-07
LOWER SPINE	AC-P38188	ENDEVCO	11-Jul-07
PELVIS	AC-P38132	ENDEVCO	11-Jul-07
UPPER RIB REDUNDANT	AC-P39740	ENDEVCO	11-Jul-07
LOWER RIB REDUNDANT	AC-P35786	ENDEVCO	11-Jul-07
LOWER SPINE REDUNDANT	AC-P38216	ENDEVCO	11-Jul-07
PELVIS REDUNDANT	AC-P35757	ENDEVCO	11-Jul-07

REMARKS: None

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

VEHICLE INSTRUMENTATION

	VEHICLE AND MDB INSTRUMENTS		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
VEHICLE CG (AX)	AC-P16625	ENDEVCO	09-Aug-07
VEHICLE CG (AY)	AC-J32838	ENDEVCO	09-Aug-07
VEHICLE CG (AZ)	AC-P17237	ENDEVCO	09-Aug-07
VEHICLE CG RATE (VX)	MHD-209Rx	ATA	13-Aug-07
VEHICLE CG RATE (VY)	MHD-209Rz	ATA	13-Aug-07
VEHICLE CG RATE (VZ)	MHD-209Ry	ATA	13-Aug-07
STRUCK SIDE SILL (AY)	AC-P17242	ENDEVCO	09-Aug-07
A-PILLAR SILL (AY)	AC-P23960	ENDEVCO	03-Apr-07
A-PILLAR LOWER (AY)	AC-FA2481	ICS	21-Feb-07
A-PILLAR MIDDLE (AY)	AC-J37854	ENDEVCO	10-Aug-07
B-PILLAR SILL (AY)	AC-FA2492	ICS	08-Aug-07
B-PILLAR LOWER (AY)	AC-FA2485	ICS	08-Aug-07
B-PILLAR MIDDLE (AY)	AC-FA2477	ICS	08-Aug-07
SEAT TRACK HP (AY)	AC-J33071	ENDEVCO	10-Aug-07
DOOR LOWER (AY)	AC-FA2491	ICS	21-Feb-07
DOOR MIDDLE (AY)	AC-FA2490	ICS	21-Feb-07
DOOR UPPER (AY)	AC-FA2488	ICS	21-Feb-07
ENGINE (AX)	AC-P23788	ENDEVCO	24-Apr-07
ENGINE (AY)	AC-FA2482	ICS	21-Feb-07
FIREWALL (AY)	AC-FA2493	ICS	25-Apr-07
OPPOSITE SIDE ROOF (AY)	AC-FA2471	ICS	21-Feb-07
OPPOSITE SIDE SILL (AY)	AC-P16625	ENDEVCO	09-Aug-07
TRUNK (AX)	AC-J32838	ENDEVCO	09-Aug-07
TRUNK (AY)	AC-P17237	ENDEVCO	09-Aug-07

REMARKS: # The Angular rate sensors did not record properly during the vehicle impact.