

REPORT NUMBER: SNCAP-CAL-00-7

**NEW CAR ASSESSMENT PROGRAM
SIDE IMPACT TEST**

VOLKSWAGEN AG
2000 VOLKSWAGEN PASSAT
4-DOOR SEDAN

NHTSA NUMBER: MY5804

VERIDIAN ENGINEERING TEST NUMBER: 8506-12

VERIDIAN ENGINEERING
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March 2, 2000

FINAL REPORT

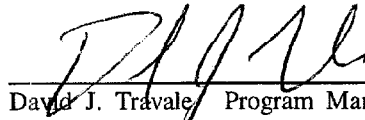
U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Safety Performance Standards
Office of Crashworthiness Standards
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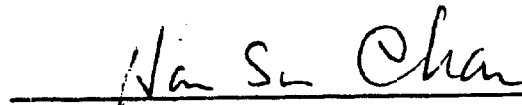

David J. Travale, Program Manager
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				14. Sponsoring Agency Code NPS-10																															
15. Supplementary Notes																																			
16. Abstract A 55/28 kph 90° Impact Moving Deformable Barrier NCAP Side Impact Test was conducted on the subject 2000 Volkswagen Passat 4-Door Sedan in accordance with the specifications of the Office of Crashworthiness Standards Test Procedure for the generation of consumer information on vehicle side crash protection. This test was conducted at the Veridian Engineering Crash Test Facility in Buffalo, New York, on March 2, 2000. The impact velocity of the Moving Deformable Barrier (MDB) was 62.28 kph, and the ambient temperature at the struck (driver's) side of the target vehicle at the time of impact was 21 °C. The target vehicle post-test maximum crush was 335 mm at level 2. The test or target vehicle's performance is given below: <table border="0"> <thead> <tr> <th></th> <th align="center"><u>Front SID</u></th> <th></th> <th align="center"><u>Rear SID</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Left Upper Rib Acceleration:</td> <td align="center"><u>62</u></td> <td align="center">g's</td> <td align="center"><u>53</u></td> <td align="center">g's</td> </tr> <tr> <td>Left Lower Rib Acceleration:</td> <td align="center"><u>47</u></td> <td align="center">g's</td> <td align="center"><u>76</u></td> <td align="center">g's</td> </tr> <tr> <td>Lower Spine Acceleration:</td> <td align="center"><u>71</u></td> <td align="center">g's</td> <td align="center"><u>69</u></td> <td align="center">g's</td> </tr> <tr> <td>Thoracic Trauma Index (TTI):</td> <td align="center"><u>66</u></td> <td align="center">g's</td> <td align="center"><u>72</u></td> <td align="center">g's</td> </tr> <tr> <td>Pelvis Acceleration (PEV):</td> <td align="center"><u>87</u></td> <td align="center">g's</td> <td align="center"><u>85</u></td> <td align="center">g's</td> </tr> </tbody> </table> The two doors on the struck side of the vehicle did not separate from the body at the hinges or latches and the opposite doors did not open during the side impact event.							<u>Front SID</u>		<u>Rear SID</u>		Left Upper Rib Acceleration:	<u>62</u>	g's	<u>53</u>	g's	Left Lower Rib Acceleration:	<u>47</u>	g's	<u>76</u>	g's	Lower Spine Acceleration:	<u>71</u>	g's	<u>69</u>	g's	Thoracic Trauma Index (TTI):	<u>66</u>	g's	<u>72</u>	g's	Pelvis Acceleration (PEV):	<u>87</u>	g's	<u>85</u>	g's
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17. Key Words New Car Assessment Program (NCAP) Side Impact MDB Side Impact Dummy (SID)			18. Distribution Statement <u>Copies of this report are available from:</u> National Highway Traffic Safety Administration Technical Reference Division Room 5108 (NAD-52) 400 Seventh St., S.W. Washington, D.C. 20590 Telephone No. (202) 366-4946 ATTN: Robert Hornicle																																
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SECTION 1

PURPOSE AND TEST PROCEDURE

This side impact test is part of the FY2000 New Car Assessment Program Side Impact Protection sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-98-C-02001. The purpose of this test was to generate comparative side impact performance in a 2000 Volkswagen Passat 4-Door Sedan. The test was conducted in accordance with the Office of Crashworthiness Standards's Laboratory Test Procedure dated July, 1997.

SECTION 3

SUMMARY OF TEST RESULTS

DATA SHEET 1

GENERAL TEST AND VEHICLE PARAMETER DATA

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 2000 Volkswagen Passat 4-Door Sedan
 Vehicle Body Color: Green VIN: WVWMA23BXYE205279
 Vehicle NHTSA No.: MY5804 Month & Year of Manufacture: 11/99
 Engine Data: 4 Cylinders; - CID; 1.8 Liters; - cc
 Engine Placement: X Longitudinal; or - Lateral
 Transmission: 5 Speed; - Manual; X Automatic; X Overdrive
 Final Drive: - Rear Wheel Drive; X Front Wheel Drive; - Four Wheel
 Odometer Reading 109 km
 Options: X A/C; X Power Steering; X Pwr.Brakes; X Pwr. Windows

DATA FROM TIRE PLACARD

Tire Pressure* (at capacity); 207 kPa FRONT
269 kPa REAR

Recommended Tire Size: P195/65R15
 Tires on Test Vehicle: P195/65R15 ; Manufacturer: Continental

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 - Lever or X Knob
 Vehicle Max Capacity Loading = 453.6 kg (A)
 No. of Occupants x 68.04 kg. = 340.2 kg (B)
 Vehicle Cargo Capacity = 113.4 kg (A-B)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

Left Front	=	<u>438.0</u> kg	Left Rear	=	<u>280.0</u> kg
Right Front	=	<u>447.5</u> kg	Right Rear	=	<u>279.5</u> kg
TOTAL FRONT	=	<u>885.5</u> kg	TOTAL REAR	=	<u>559.5</u> kg
% of Total Weight	=	<u>61.3</u> %	% of Total Weight	=	<u>38.7</u> %
TOTAL WEIGHT	=	<u>1445.0</u> kg			

* Tire pressure used in test.

DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight with Max. Fluids	=	<u>1445.0</u>	kg (A)
Maximum Cargo Carrying Capacity of Test Vehicle	=	<u>113.4</u>	kg (B)
Weight of instrumented Side Impact Dummies	=	<u>162.4</u>	kg (C)
TEST VEHICLE TARGET WEIGHT:	=	<u>1720.8</u>	kg (A+B+C)

FULLY LOADED TEST VEHICLE (UDVW + 2 SIDs + CARGO):

Left Front	=	<u>485.5</u>	kg	Left Rear	=	<u>412.0</u>	kg
Right Front	=	<u>454.5</u>	kg	Right Rear	=	<u>368.0</u>	kg
TOTAL FRONT	=	<u>940.0</u>	kg	TOTAL REAR	=	<u>780.0</u>	kg
% of Total Weight	=	<u>54.7</u>	%	% of Total Weight	=	<u>45.3</u>	%
TOTAL TEST WEIGHT	=	<u>1720.0</u>	kg				

AS TESTED WEIGHT OF TEST VEHICLE (2 SIDs + CARGO + EQUIPMENT & INSTRUMENTATION):

Left Front	=	<u>477.5</u>	kg	Left Rear	=	<u>406.5</u>	kg
Right Front	=	<u>451.0</u>	kg	Right Rear	=	<u>377.5</u>	kg
TOTAL FRONT	=	<u>928.5</u>	kg	TOTAL REAR	=	<u>784.0</u>	kg
% of Total Weight	=	<u>54.2</u>	%	% of Total Weight	=	<u>45.8</u>	%
TOTAL TEST WEIGHT	=	<u>1712.5</u>	kg				

TEST VEHICLE ATTITUDE (all dimensions in millimeters):

AS DELIVERED:

Left Front	<u>703</u>	Right Front	<u>704</u>	Left Rear	<u>710</u>	Right Rear	<u>711</u>
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FULLY LOADED:

Left Front	<u>683</u>	Right Front	<u>694</u>	Left Rear	<u>658</u>	Right Rear	<u>668</u>
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READY FOR TEST:

Left Front	<u>692</u>	Right Front	<u>699</u>	Left Rear	<u>659</u>	Right Rear	<u>672</u>
------------	------------	-------------	------------	-----------	------------	------------	------------

Test Vehicle Wheelbase: 2704 millimeters

C.G. = 1237.9 millimeters rearward of front wheel centerline

TOTAL VEHICLE LENGTH:

Right Side	=	<u>4530</u>	millimeters
Left Side	=	<u>4530</u>	millimeters
Centerline	=	<u>4670</u>	millimeters

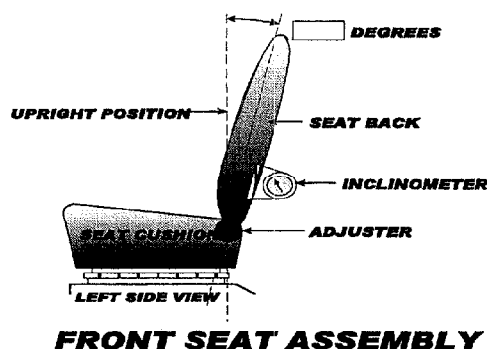
DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

Nominal Design Riding Position for adjustable driver and passenger seat backs. Please describe how to position the inclinometer to measure the seat back angle. Include description of the location of the adjustment latch detent, if applicable.



FRONT SEAT CUSHION PLACEMENT: Place in 7th position rearward from foremost detent (0)

Total Length of Adjustment Travel: 235 millimeters

Total Number of Adjustment Positions or Detents: 14

FRONT SEAT BACK ADJUSTMENT POSITION: Recline seat to measure 15° on rear center vertical of seat back

Seat Back Torso Angle: 15 degrees

SECOND POSITION SEAT:

Total Length of Fore/Aft Adjustment Travel: 0 millimeters

Seat Back Adjustment Position: N/A

ADJUSTABLE STEERING COLUMN POSITION: Mid-position vertical and horizontal

WINDOW POSITIONS: Left Front: Closed Left Rear: Closed

Right Front: Removed Right Rear: Removed

Note: Windows will be in closed position on struck side of test vehicle and in open position on opposite side.

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

62.1 liters (Fuel Tank Usable Capacity)

57.1 liters used for test (92%-94% of Fuel Tank Usable Capacity)

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

Wheelbase = 2704 millimeters

Impact Point is 412 millimeters rearward of front axle centerline

(which is 940 millimeters forward of the wheelbase midpoint)

Actual Impact Point is 410.5 millimeters rearward of front axle centerline

DATA SHEET 2

TEST VEHICLE SUMMARY OF RESULTS

VEHICLE IDENTIFICATION:

Vehicle Year/Make/Model: 2000 Volkswagen Passat

Body Style: 4-Door Sedan

VIN: WVWMA23BXYE205279

NHTSA No.: MY5804

Test Date: March 2, 2000

Overall Length = 4670 millimeters; Overall Width = 1718 millimeters

VEHICLE TEST WEIGHT (Pre-Test):

Left Front	=	<u>477.5</u> kg	Left Rear	=	<u>406.5</u> kg
Right Front	=	<u>451.0</u> kg	Right Rear	=	<u>377.5</u> kg
TOTAL FRONT	=	<u>928.5</u> kg	TOTAL REAR	=	<u>784.0</u> kg
TOTAL VEHICLE WEIGHT		<u>1712.5</u> kg			
Wheelbase	=	<u>2704</u> millimeters			
Longitudinal C.G. from Center of Front Axle	=	<u>1237.9</u> millimeters			
Impact Angle with Respect to Impactor	=	<u>90</u> degrees			

ACTUAL IMPACT POINT

Actual Impact Point is 1.5 mm forward of nominal impact ref. line (Lateral)

Actual Impact Point is 1.5 mm above nominal impact point (Vertical)

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (	<u>290</u> mm above ground)	=	<u>242</u> millimeters
2. LEVEL 2 (	<u>475</u> mm above ground)	=	<u>335</u> millimeters
3. LEVEL 3 (	<u>578</u> mm above ground)	=	<u>322</u> millimeters
4. LEVEL 4 (	<u>869</u> mm above ground)	=	<u>282</u> millimeters
5. LEVEL 5 (	<u>1360</u> mm above ground)	=	<u>62</u> millimeters
Maximum Post-Test Intrusion		=	<u>335</u> millimeters

OCCUPANTS:

Front Passenger:

Rear Passenger:

Dummy Identification	<u>016</u>	<u>268</u>
Restraints Used	<u>Seatbelt, Side Airbag</u>	<u>Seatbelt</u>

INSTRUMENTATION:

Number of Vehicle Data Channels:	=	<u>48</u>
Number of Cameras:	Onboard	= <u>3</u>
	Offboard	= <u>8</u>
	TOTAL	= <u>11</u>

DATA SHEET 5

SID INSTRUMENTATION DATA

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

	Front Dummy ID# 016				Rear Dummy ID# 268			
	Pos. Direction		Neg. Direction		Pos. Direction		Neg. Direction	
	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
HEAD ACCELERATIONS:								
Longitudinal X	10.8	165.0	-60.0	65.8	23.7	151.4	-15.3	54.8
Lateral Y	120.4	65.8	-8.4	148.1	158.4	51.7	-17.4	153.8
Vertical Z	55.9	54.4	-0.6	15.5	23.1	76.4	-50.5	58.1
Resultant R	134.6	65.8	0.0	-4.1	159.8	51.7	0.0	1.9
HIC	833.2				1216.9			
RIB ACCELERATIONS:								
Upper Rib Lateral . . Y	61.5	23.1	-21.3	78.8	53.4	39.4	-8.8	100.0
Upper Rib Lateral . . Y(R)	63.7	23.1	-21.4	78.8	51.4	39.4	-8.9	100.0
Lower Rib Lateral . . Y	47.1	20.7	-20.1	78.8	75.9	39.4	-20.8	68.2
Lower Rib Lateral . . Y(R)	49.1	21.3	-20.4	78.8	72.0	39.4	-21.1	68.2
SPINE ACCELERATIONS:								
Lower Lateral Y	71.3	24.4	-22.9	74.4	68.9	35.6	-41.4	61.9
Lower Lateral Y(R)	71.3	24.4	-23.6	74.4	68.2	35.6	-41.3	61.9
PELVIC ACCELERATIONS:								
Lateral Y	87.0	25.6	-21.9	66.9	85.4	30.7	-16.7	65.6
Lateral Y(R)	86.3	25.6	-22.4	66.9	95.5	30.7	-18.3	65.7

REFERENCE: Positive Direction - Longitudinal (X) = forward
 Lateral (Y) = to right
 Vertical (Z) = up
 Negative Direction - Longitudinal (X) = rearward
 Lateral (Y) = to left
 Vertical (Z) = down

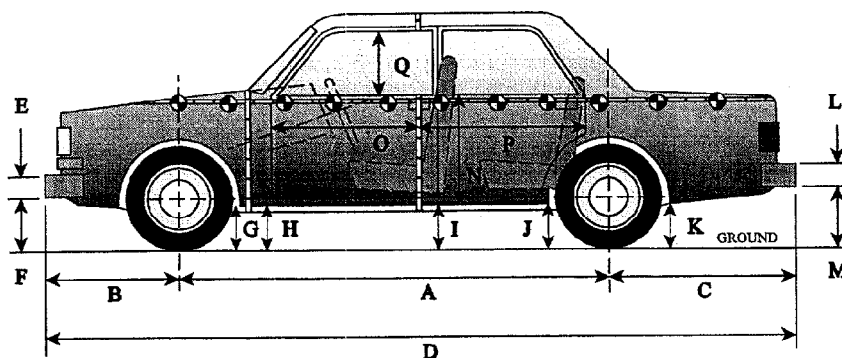
Note: Above data has been FIR filtered, Y(R) denotes redundant Y direction accelerometer.
 Head Accelerations are filtered at SAE Class 1000.

DATA SHEET 6

VEHICLE SIDE MEASUREMENTS

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804



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)	Δ CHANGE
A	2704	-	2640	-64
B	943	-	987	44
C	1017	-	1010	-7
D	4670	-	4637	-33
E	137	-	137	0
F	395	395	438	43
G	193	170	232	62
H	206	178	241	63
I	218	178	267	89
J1	207	152	169	17
J2	229	177	177	0
K	245	179	187	8
L	209	-	209	0
M	435	377	391	14
N	635	-	622	-13
O	786	-	750	-36
P	1220	-	1092	-128
Q	460	-	430	-30
R	4530	-	4530	0
S	4530	-	4482	-48
T	1718	-	1522	-196

D = Length at Centerline
T = Width at B-Pillar

E&L = Bumper Thickness
J1 = To Pinch Weld

R = Right Side Length
J2 = To Sill

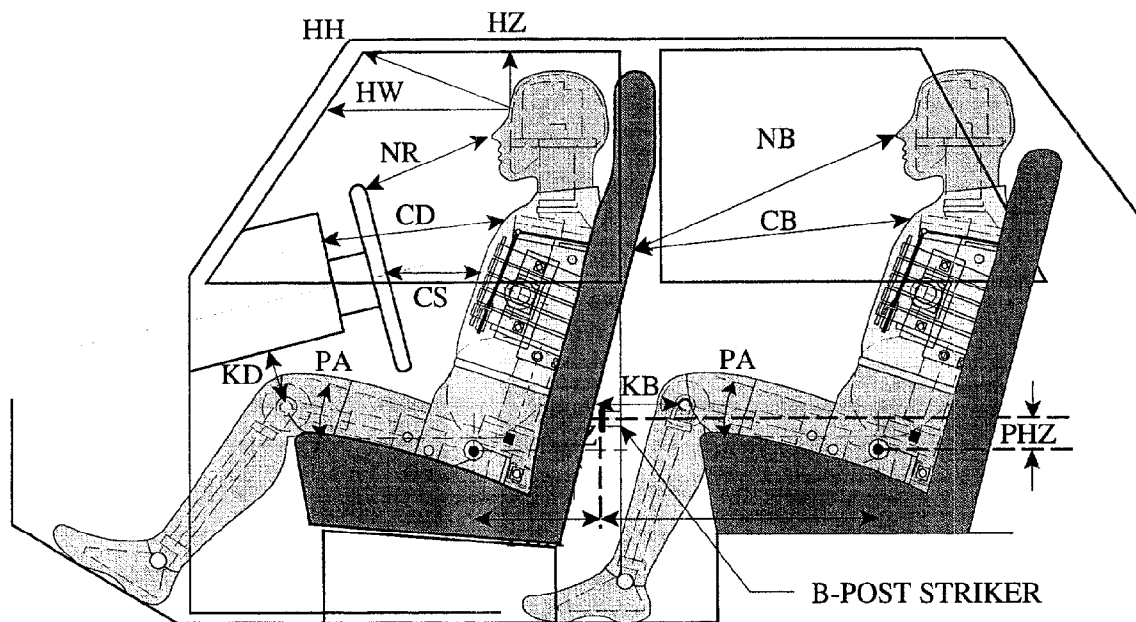
S = Left Side Length

DATA SHEET 7

SID LONGITUDINAL CLEARANCE DIMENSIONS

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804



LEFT SIDE VIEW

NOTE: 2-DOOR VEHICLE SHOWN.
REAR DUMMY PHX & PHZ
MEASUREMENTS FOR A 4-DOOR
VEHICLE WOULD USE THE C-POST
STRIKER AS A REFERENCE POINT

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

	DRIVER ID# <u>016</u>	LEFT REAR PASS. ID# <u>268</u>
HH	387	N/A
HW	665	N/A
HZ	216	173
NR/NB	409	610
CD/CB	509	535
CS	307	N/A
KDL(KDA°)/KBL(KDA°)	221 / (28 °)	247 / (25 °)
KDR(KBA°)/KBR(KBA°)	185 / (38 °) *center of dash	245 / (21 °)
PA°	23.6 °	24.2 °
PHX	206	239
PHZ	243	206

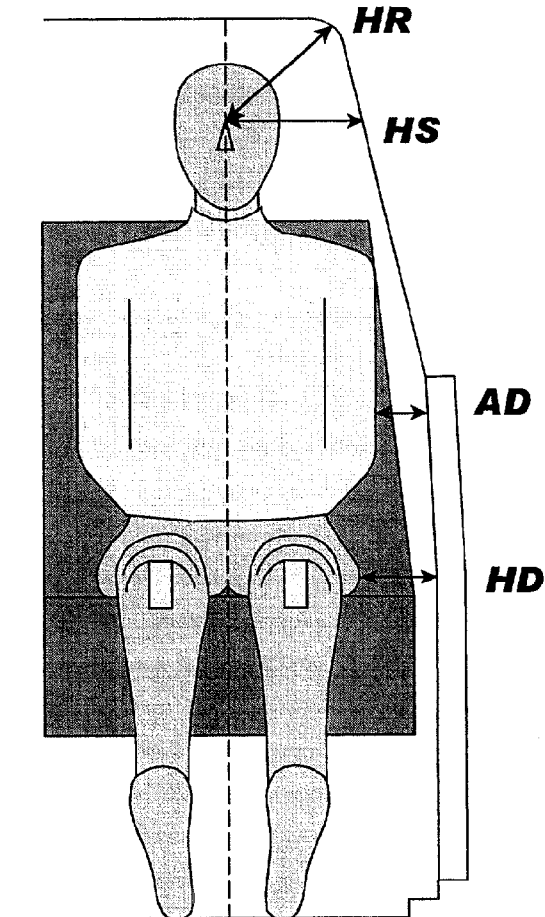
Note: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as a reference point.

DATA SHEET 8

SID LATERAL CLEARANCE DIMENSIONS

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804



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

	DRIVER ID # <u>016</u>		LEFT REAR PASS. ID # <u>268</u>	
HR	236		190	
HS	353		334	
AD*	LOWER: 146	UPPER: 136	LOWER: 123	UPPER: 114
HD	179		152	

* Lower measurement is taken laterally at the center of the lower rib accelerometer height from the SID arm segment to the closest part of the vehicle side.

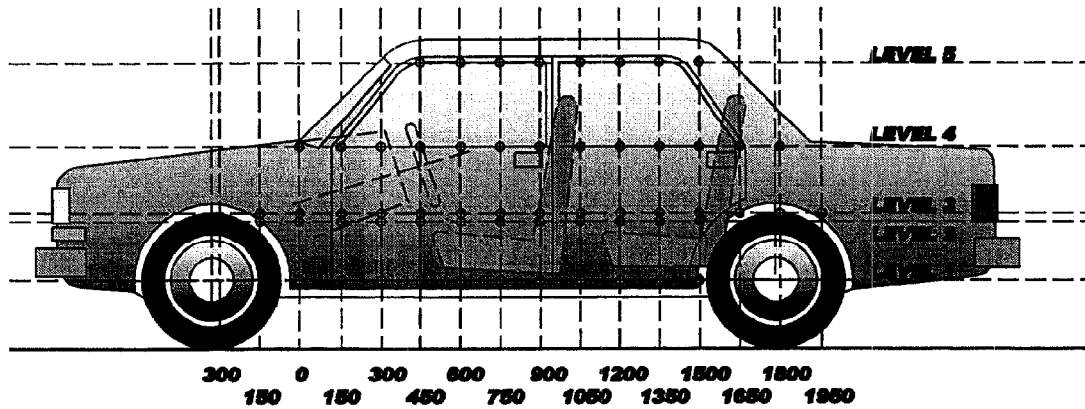
Upper measurement is taken laterally at the center of the upper rib accelerometer height from the SID arm segment to the closest part of the vehicle side.

DATA SHEET 9

VEHICLE SIDE MEASUREMENTS

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804



LEFT SIDE VIEW

NOTE: All measurements are in millimeters (mm)

LEVEL 5 - WINDOW TOP

LEVEL 4 - WINDOW SILL

LEVEL 3 - MID-DOOR

LEVEL 2 - OCCUPANT H-POINT

LEVEL 1 - AXLE CENTERLINE HEIGHT OR SILL TOP HEIGHT

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

Measurements Along the Vertical 750 mm Line Shown Above:

Level 5 @ Window Top	=	<u>1360</u>	millimeters
Level 4 @ Window Sill	=	<u>869</u>	millimeters
Level 3 @ Mid Door	=	<u>578</u>	millimeters
Level 2 @ Occupant H-Point	=	<u>475</u>	millimeters
Level 1 @ Axle Centerline Height (or Sill Top Height)	=	<u>290</u>	millimeters

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

NHTSA No. MY5804

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

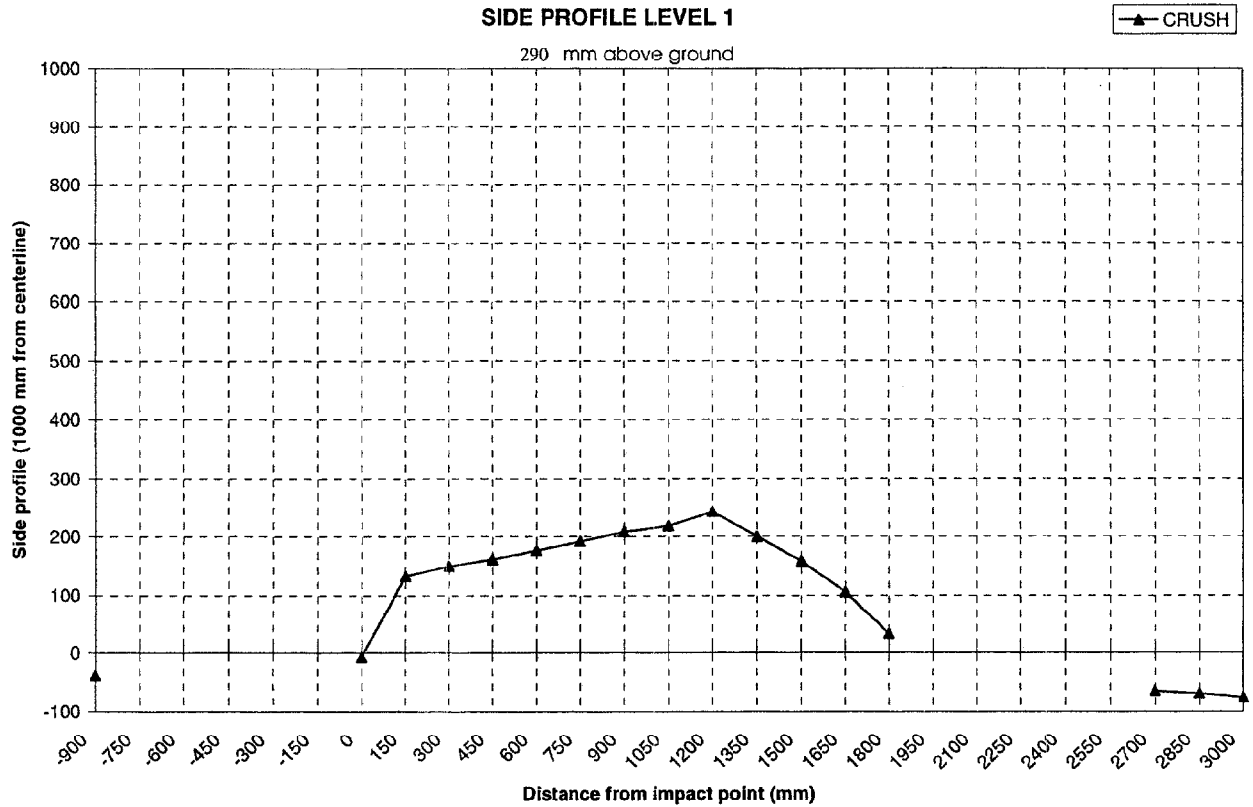
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DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES

Vehicle: 2000 Volkswagen Passat

NHTSA No. No.

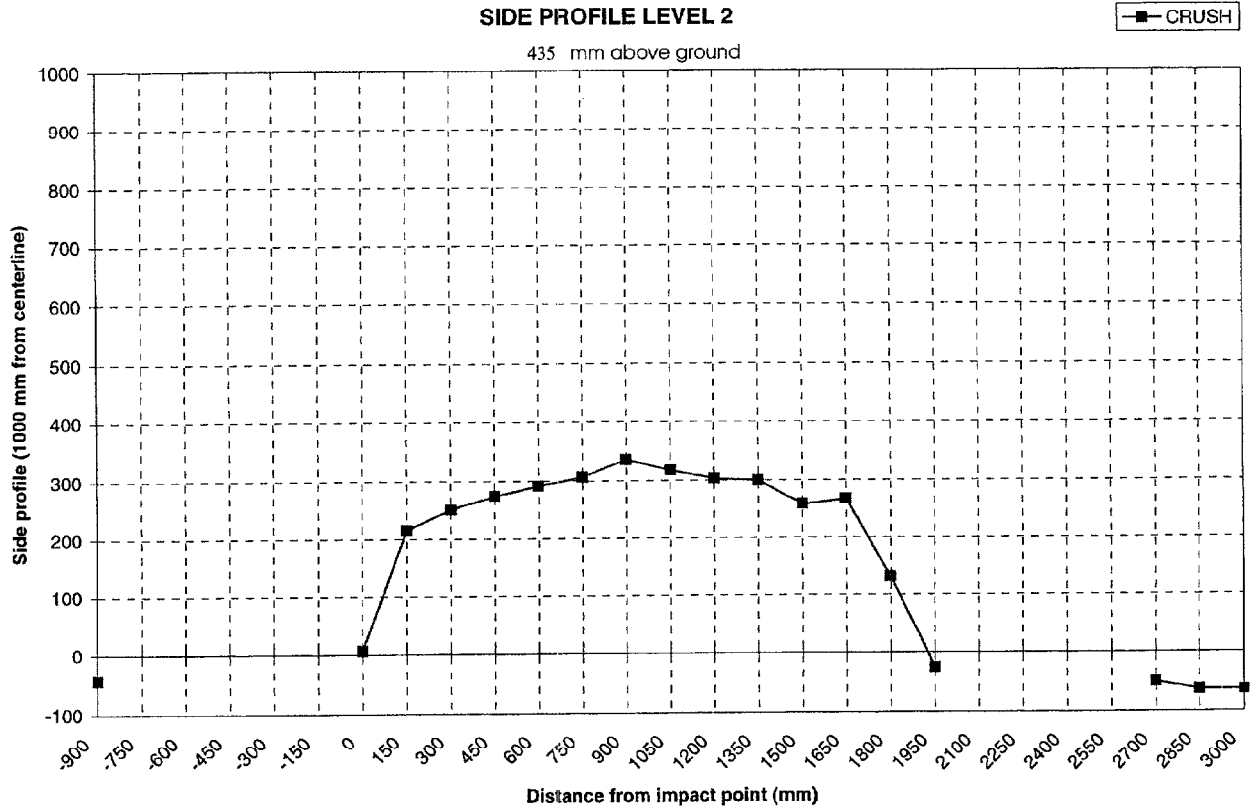


DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

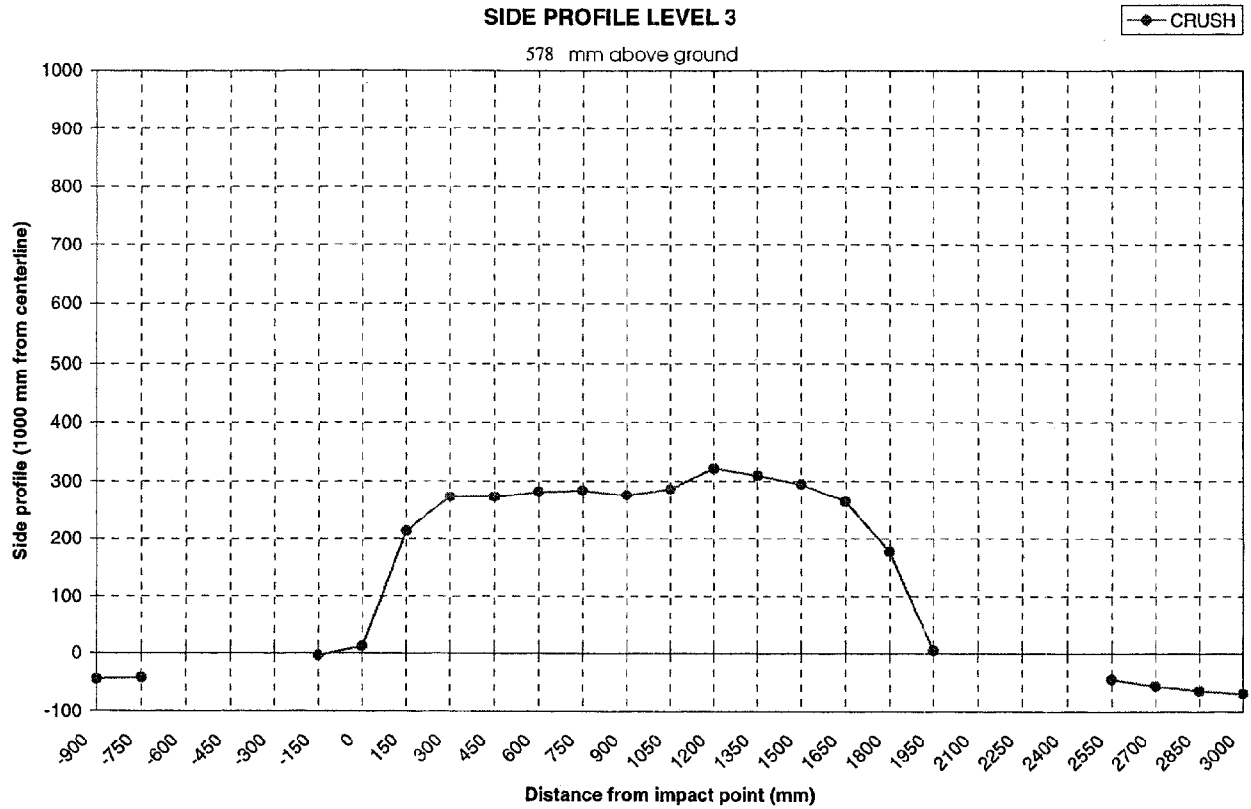


DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

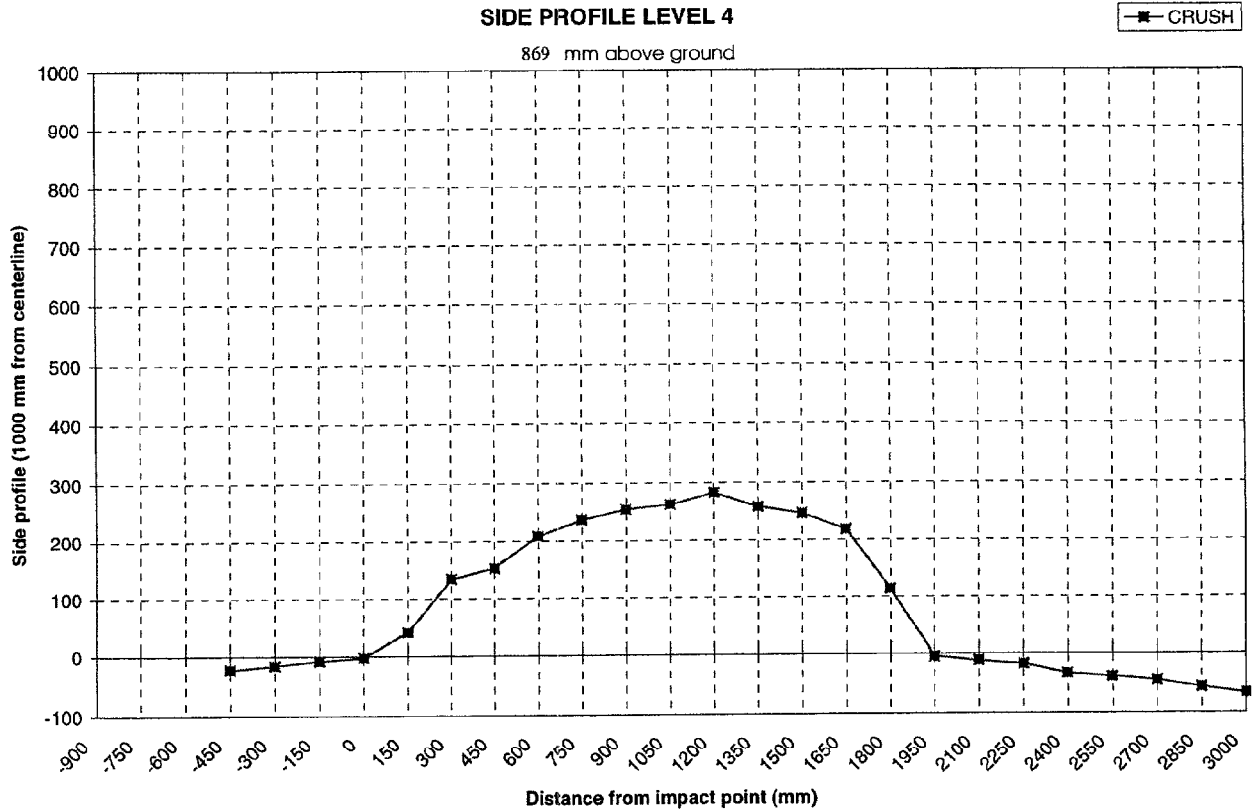


DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

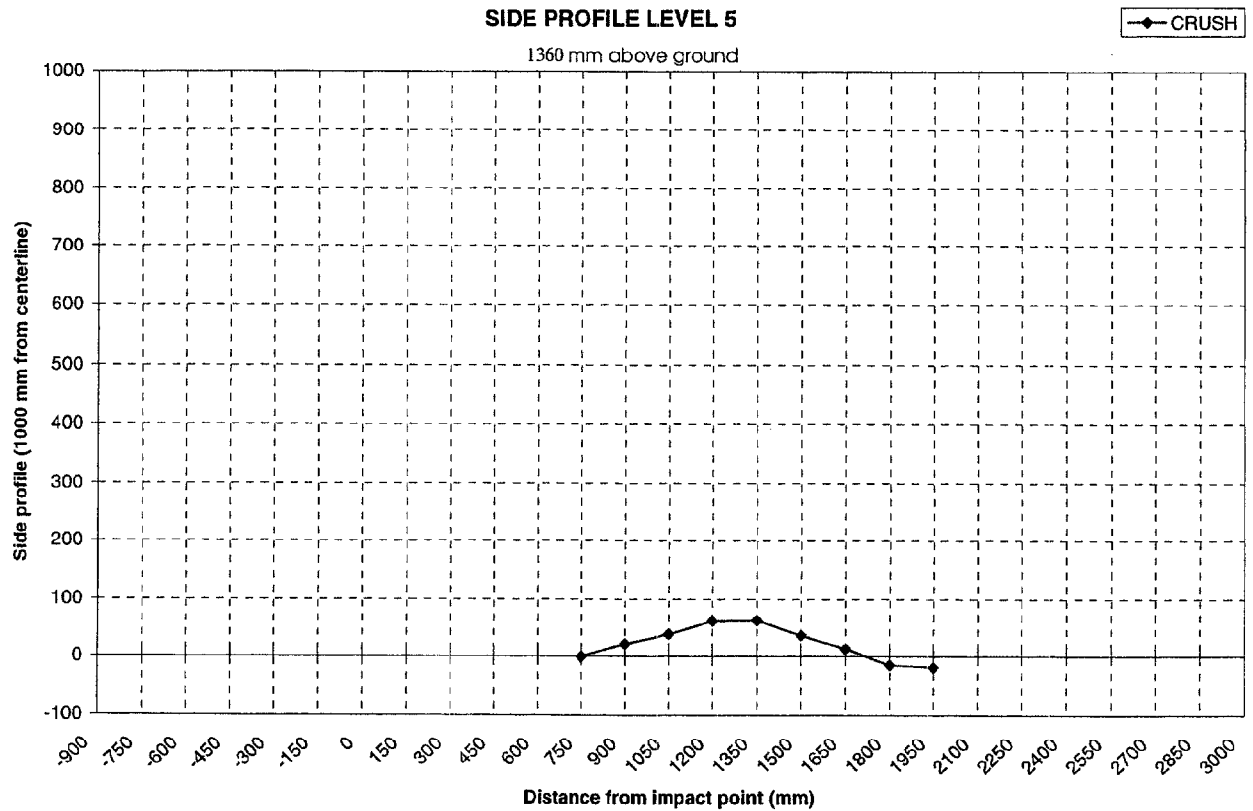


DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

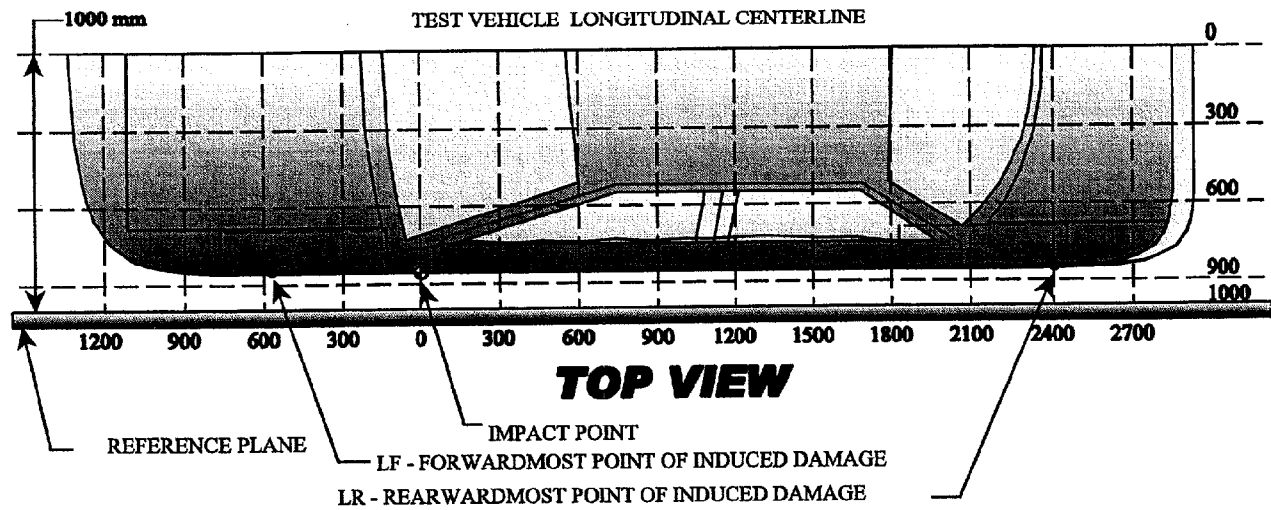


DATA SHEET 11

VEHICLE DAMAGE PROFILE DISTANCES

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804



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

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

DPD MEASUREMENTS		POST TEST (mm)	PRETEST (mm)	STATIC CRUSH (mm)
1	(LF = <u>-150</u> mm)	242	250	-8
2	270	422	162	260
3	690	460	160	300
4	1110	474	163	311
5	1530	445	157	288
6	(LR = <u>1950</u> mm)	138	164	-26

DATA SHEET 12

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE
(Grid as looking at MDB from front)

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

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

			DISTANCE RIGHT OF CENTER (mm)									DISTANCE LEFT OF CENTER (mm)							
LEVEL	HEIGHT AT CL (mm)*		800	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	800
LEVEL 4	813		619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
TOP		PRE	685	621	606	604	605	611	623	619	620	620	624	633	645	666	695	738	792
STACK		CRUSH	66	2	-13	-15	-14	-8	4	0	1	1	5	14	26	47	76	119	173
LEVEL 3	686		619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
MID		PRE	656	616	612	611	612	615	622	618	618	617	618	621	626	634	642	666	716
LEVEL		POST	37	-3	-7	-8	-7	-4	3	-1	-1	-2	-1	2	7	15	23	47	97
LEVEL 2	533		619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
TOP		PRE	698	672	653	652	648	647	645	640	640	643	637	641	646	652	657	667	682
BUMPER		POST	79	53	34	33	29	28	26	21	21	24	18	22	27	33	38	48	63
LEVEL 1	432		535	519	518	518	518	518	518	518	518	518	518	518	518	518	518	519	535
MID		PRE	708	655	623	601	586	586	577	574	576	575	568	576	575	574	581	588	637
BUMPER		POST	168	136	105	83	68	68	59	56	58	57	50	58	57	56	63	69	102

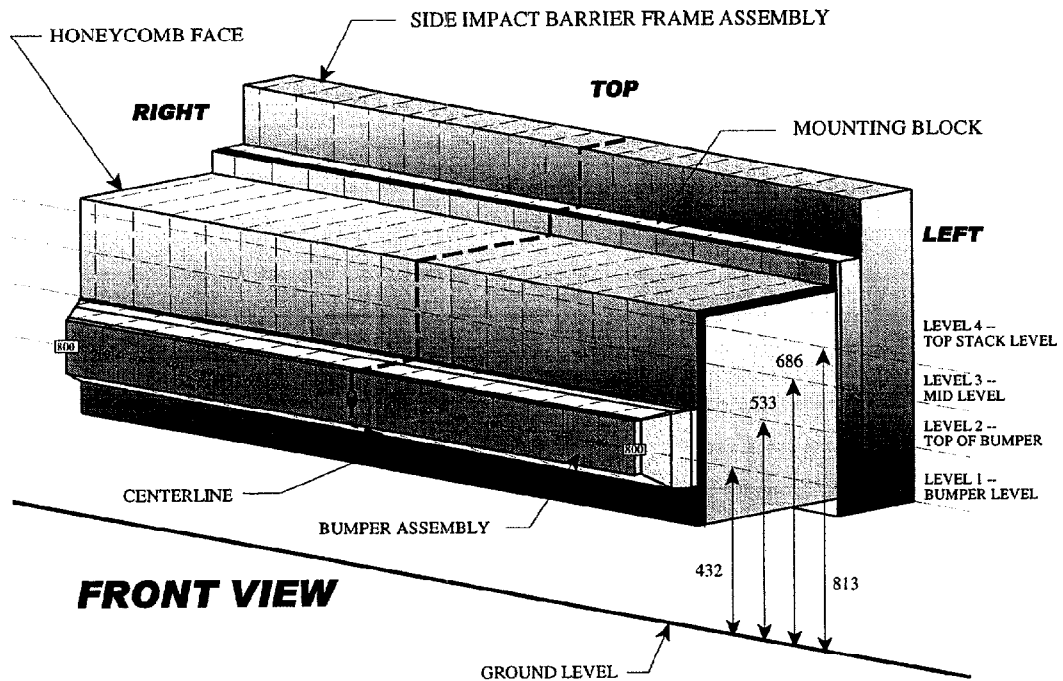
*Heights measured above ground level.

DATA SHEET 12 (continued)

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804



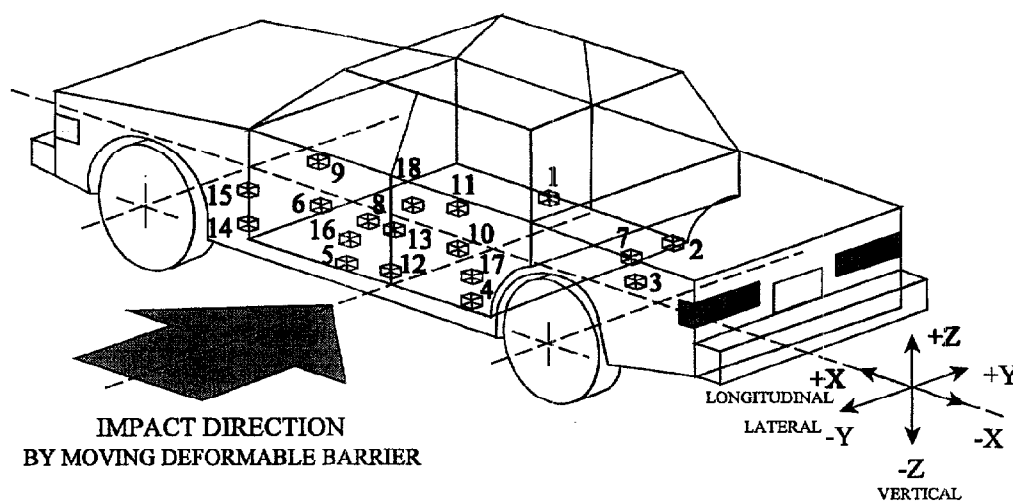
NOTE: Dimensions are shown in millimeters, mm

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804



- 1-Right Side Sill @ Front Seat
- 2-Right Side Sill @ Rear Seat
- 3-Rear Floorpan Above Axle
- 4-Left Side Sill @ Rear Seat
- 5-Left Side Sill @ Front Seat
- 6-Left Front Door on Centerline
- 7-Right Rear Occupant Compartment
- 8-Midrear of Left Front Door
- 9-Left Front Door Upper Centerline

- 10-Midrear of Left Rear Door
- 11-Left Rear Door Upper Centerline
- 12-Left Lower B-Pillar
- 13-Left Middle B-Pillar
- 14-Left Lower A-Pillar
- 15-Left Middle A-Pillar
- 16-Front Seat Track
- 17-Rear Seat Track
- 18-Vehicle CG

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

NHTSA No. MY5804

Vehicle: 2000 Volkswagen Passat

Accel. No.	Location	Coordinates (mm)±3			Long. (x)		Lat. (y)		Vert. (z)		Resultant	
		X*	Y*	Z*	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
1	Right Side Sill at Front Seat	3032	663	343	pos. 3.5	64.5	23.1	19.5	4.3	123.2	23.3	19.5
					neg. -5.7	14.4	-4.3	162.8	-8.8	23.9	0.0	-11.0
2	Right Side Sill at Rear Seat	2003	674	287	pos. 4.3	63.4	19.1	25.5	3.8	31.2	19.7	25.6
					neg. -5.3	14.9	-3.0	122.8	-10.1	20.7	0.0	-18.0
3	Rear Floorpan Above Axle	979	0	492	pos. 4.0	28.6	24.0	7.9	11.1	6.5	26.2	9.1
					neg. -3.7	22.3	-3.5	120.6	-15.2	9.5	0.0	-18.0
4	Left Side Sill at Rear Seat	2003	-674	290	pos. -	-	67.6	3.9	-	-	-	-
					neg. -	-	-44.0	21.5	-	-	-	-
5	Left Side Sill at Front Seat	3032	-663	345	pos. -	-	78.5	4.2	-	-	-	-
					neg. -	-	-33.8	16.0	-	-	-	-
6	Left Front Door on Centerline	2768	-767	675	pos. -	-	114.1	7.1	-	-	-	-
					neg. -	-	-77.3	25.3	-	-	-	-
7	Right Rear Occupant Compartment	2057	224	200	pos. -	-	19.5	25.7	-	-	-	-
					neg. -	-	-3.0	122.2	-	-	-	-
8	Midrear of Left Front Door	2388	-757	610	pos. -	-	123.4	4.6	-	-	-	-
					neg. -	-	-35.1	23.3	-	-	-	-
9	Left Front Door Upper Centerline	2673	-733	944	pos. -	-	166.7	14.4	-	-	-	-
					neg. -	-	-50.9	23.4	-	-	-	-
10	Midrear of Left Rear Door	1573	-765	676	pos. -	-	147.5	3.3	-	-	-	-
					neg. -	-	-66.0	23.4	-	-	-	-
11	Left Rear Door Upper Centerline	1693	-730	974	pos. -	-	102.9	12.2	-	-	-	-
					neg. -	-	-71.2	27.4	-	-	-	-

*Reference: X - Rear Bumper (+ Forward) Y - Vehicle Centerline (+ To Right) Z - Ground Level (+ Up)

4-17 8506-12

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

Accel. No.	Location	Coordinates (mm)±3 mm			Long. (x)		Lat. (y)		Vert. (z)		Resultant	
		X*	Y*	Z*	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
12	Left Lower B-Pillar	2163	-676	309	pos. neg.	- -	59.9 -32.5	11.5 20.3	- -	- -	- -	- -
13	Left Middle B-Pillar	2095	-699	1039	pos. neg.	- -	122.4 -44.6	4.6 33.9	- -	- -	- -	- -
14	Left Lower A-Pillar	3192	-685	625	pos. neg.	- -	97.1 -40.3	3.3 179.6	- -	- -	- -	- -
15	Left Middle A-Pillar	3478	-668	845	pos. neg.	- -	11.5 -2.9	30.3 177.2	- -	- -	- -	- -
16	Front Seat Track	2303	-566	284	pos. neg.	- -	109.2 -66.1	13.5 19.8	- -	- -	- -	- -
17	Rear Seat Track	1069	-502	652	pos. neg.	- -	20.1 -2.5	23.3 122.3	- -	- -	- -	- -
18	Vehicle CG	2568	-4	440	pos. neg.	9.2 -15.1	87.5 -62.9	21.1 26.8	32.6 -27.0	21.3 25.5	93.9 0.0	21.1 -6.8

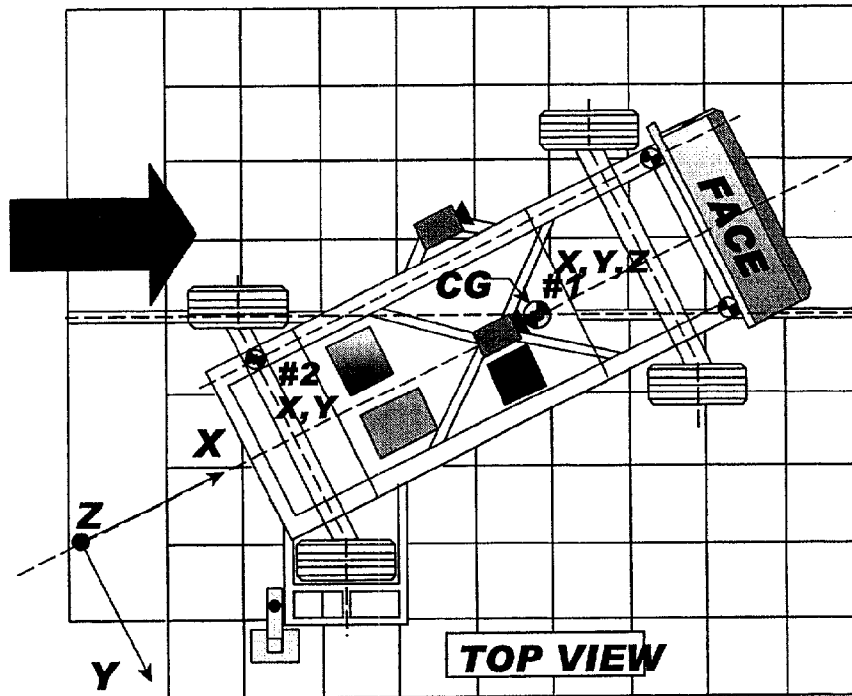
*Reference: X - Rear Bumper (+ Forward) Y - Vehicle Centerline (+ To Right) Z - Ground Level (+ Up)

DATA SHEET 14

MDB ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804



Accel. No.	Location	Coordinates (millimeters)			Pos. Direct.		Neg. Direct.	
		X*	Y*	Z*	Max (g)	Time (msec)	Max (g)	Time (msec)
1	MDB Center of Gravity							
	Longitudinal... X	1859	0	330	1.6	155.8	-20.0	42.4
	Lateral..... Y				0.9	56.3	-9.0	30.7
	Vertical..... Z				12.9	84.7	-15.6	78.8
	Resultant..... R				22.6	41.8	0.2	106.4
2	Rear Frame Member							
	Longitudinal... X	386	-660	660	1.9	158.7	-20.1	33.3
	Lateral..... Y				3.7	30.1	-2.3	77.4

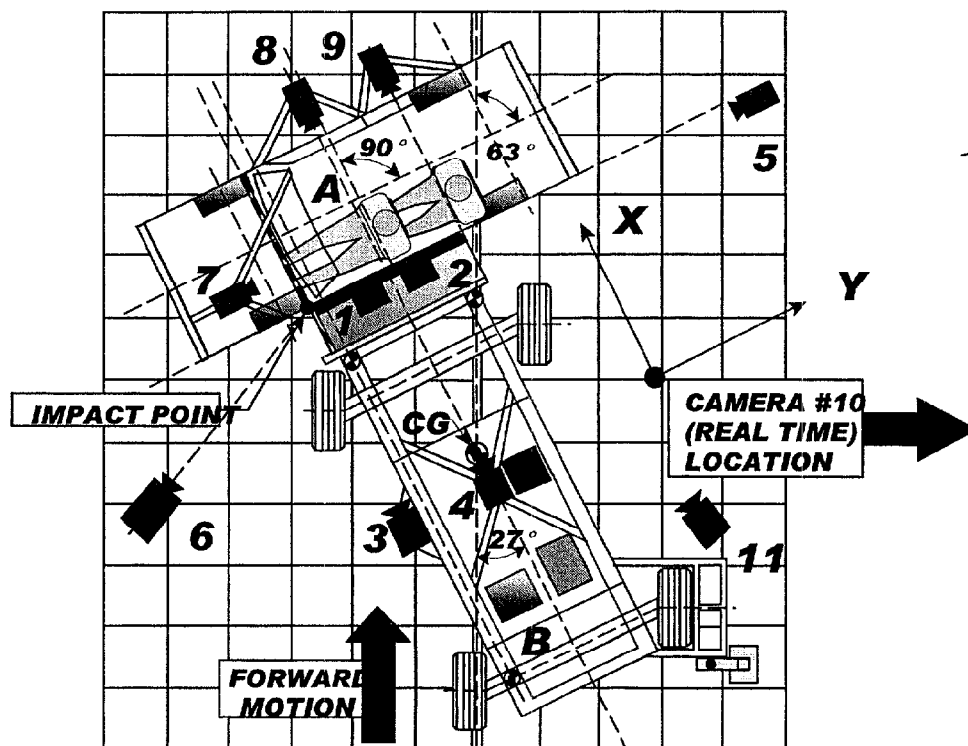
*Reference: X = Rear Bumper (+ Forward)
Y = Vehicle Centerline (+ To Right)
Z = Ground Level (+ Up)
All measurements accurate to within ± 3 mm.

DATA SHEET 15

HIGH SPEED CAMERA LOCATIONS AND DATA SUMMARY

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804



Camera No.	View	Coordinates (millimeters)			Angle (deg.)	Lens (mm)	Film Speed (fps)
		X*	Y*	Z*			
1	Overhead view of test vehicle	361	913	4880	-90	8	1000
2	Overhead closeup view of impact plane	12	753	4880	-90	12.5	1000
3	MDB onboard closeup view of impact point	1470	0	847	0	13	1000
4	MDB onboard view of driver dummy	1140	838	1586	-17	7.5	1050
5	Right side ground level overall view	118	9038	1025	-2.0	25	1020
6	Left side ground level overall view	-1862	-1583	1033	-7.2	13	1050
7	Test vehicle onboard driver front view	496	-347	1282	-15.0	13	900
8	Test vehicle onboard driver side view	1680	718	1050	-10.2	8	1000
9	Test vehicle onboard passenger side view	1664	1661	1045	-12.2	8	1000
10	Real time film coverage of test	-	-	-	-	-	24
11	Secondary impact point view	-4179	3718	1082	-4.8	25	1000

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

+X = Forward

+Y = To Right

+Z = Upward

SECTION 5

FUEL SYSTEM INTEGRITY

DATA SHEET 16

FMVSS 301 FUEL SYSTEM INTEGRITY DATA

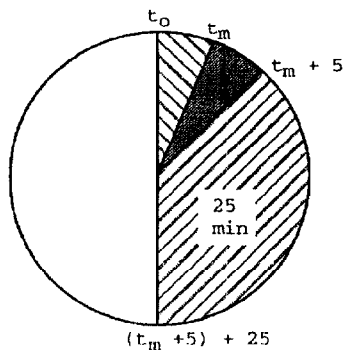
NHTSA No.: MY5804 TEST DATE: March 2, 2000

Vehicle Mfgr./Make/Model : 2000 Volkswagen Passat 4-Door Sedan

TEST VEHICLE IMPACT TYPE :

- Frontal (48.28 kph)
- Oblique (48.28 kph) with - barrier face first
contacting the - side
(driver/passenger)
- Rear Moving Barrier (48.28 kph)
- Lateral Moving Barrier (32.19 kph)
- X Side Impact Moving Deformable Barrier (62.0 kph)
contacting the driver side side
(driver/passenger)

FUEL SPILLAGE MEASUREMENT:



1. From impact until vehicle motion ceases
2. For five minute period after vehicle motion ceases
3. For next 25 minutes

ACTUAL	MAX ALLOWED
0 g	28 g
0 g	142 g
0 g	28 g/1 min.

SOLVENT SPILLAGE DETAILS :

None

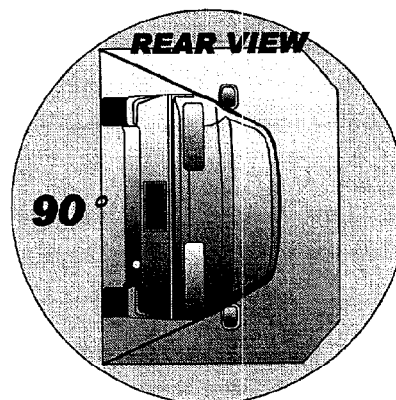
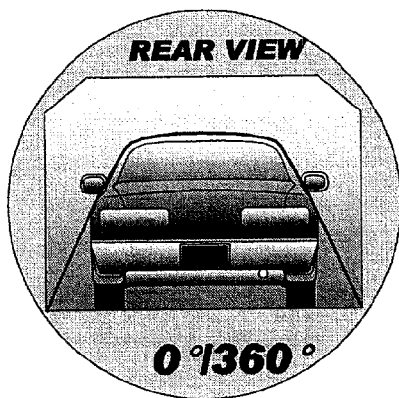
DATA SHEET 17

ROLLOVER DATA

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

0 - 90 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time	<u>1</u> minutes <u>37</u> seconds
(Spec. Range = 1 to 3 minutes)	
FMVSS 301 Position Hold Time +	<u>5</u> minutes <u>0</u> seconds
TOTAL	<u>6</u> minutes <u>37</u> seconds
Next whole minute interval	<u>7</u> minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

0 g	0 g	0 g	N/A
-----	-----	-----	-----

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

IV. SOLVENT SPILLAGE LOCATION(S) :

None

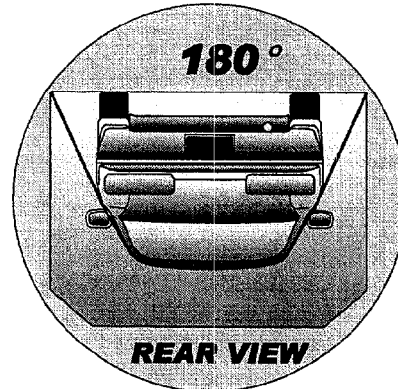
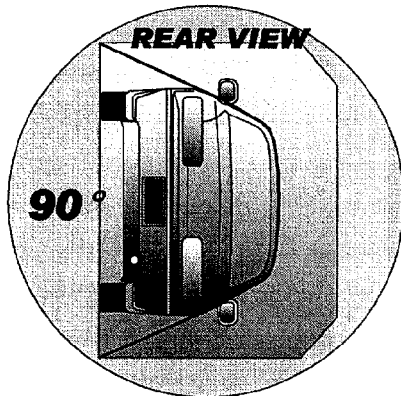
DATA SHEET 17 (continued)

ROLLOVER DATA

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

90 - 180 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time	<u>1</u> minutes <u>12</u> seconds
(Spec. Range = 1 to 3 minutes)	
FMVSS 301 Position Hold Time +	<u>5</u> minutes <u>0</u> seconds
TOTAL	<u>6</u> minutes <u>12</u> seconds
Next whole minute interval	<u>7</u> minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

0 g	0 g	0 g	N/A
-----	-----	-----	-----

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

IV. SOLVENT SPILLAGE LOCATION(S) :

None

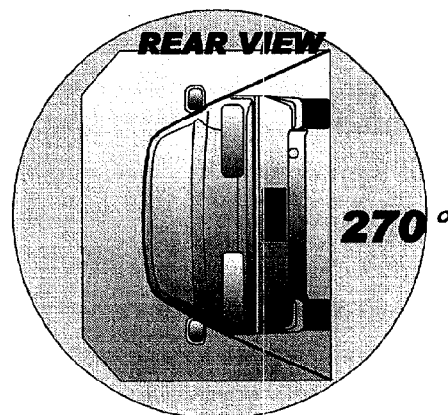
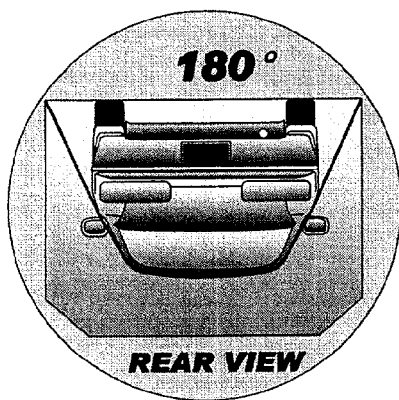
DATA SHEET 17 (continued)

ROLLOVER DATA

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

180 - 270 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time	<u>1</u> minutes <u>03</u> seconds
(Spec. Range = 1 to 3 minutes)	
FMVSS 301 Position Hold Time +	<u>5</u> minutes <u>0</u> seconds
TOTAL	<u>6</u> minutes <u>3</u> seconds
Next whole minute interval	<u>7</u> minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

0 g	0 g	0 g	N/A
-----	-----	-----	-----

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

IV. SOLVENT SPILLAGE LOCATION(S) :

None

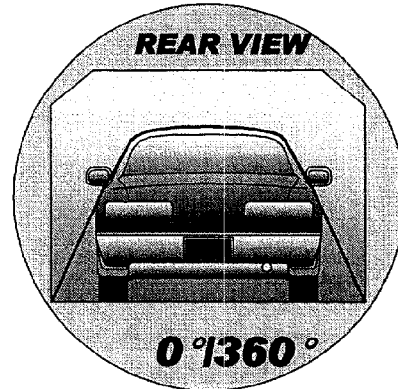
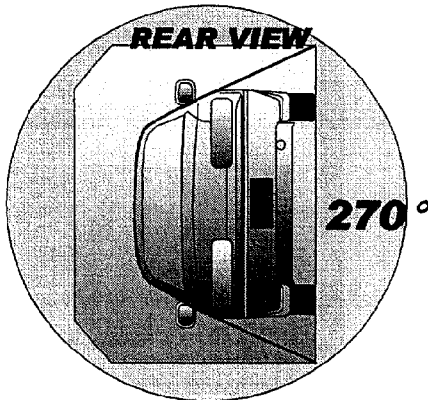
DATA SHEET 17 (continued)

ROLLOVER DATA

Vehicle: 2000 Volkswagen Passat

NHTSA No. MY5804

270 - 360 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time	<u>1</u> minutes <u>08</u> seconds
(Spec. Range = 1 to 3 minutes)	
FMVSS 301 Position Hold Time +	<u>5</u> minutes <u>0</u> seconds
TOTAL	<u>6</u> minutes <u>8</u> seconds
Next whole minute interval	<u>7</u> minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

0 g	0 g	0 g	N/A
-----	-----	-----	-----

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

IV. SOLVENT SPILLAGE LOCATION(S) :

None

APPENDIX A

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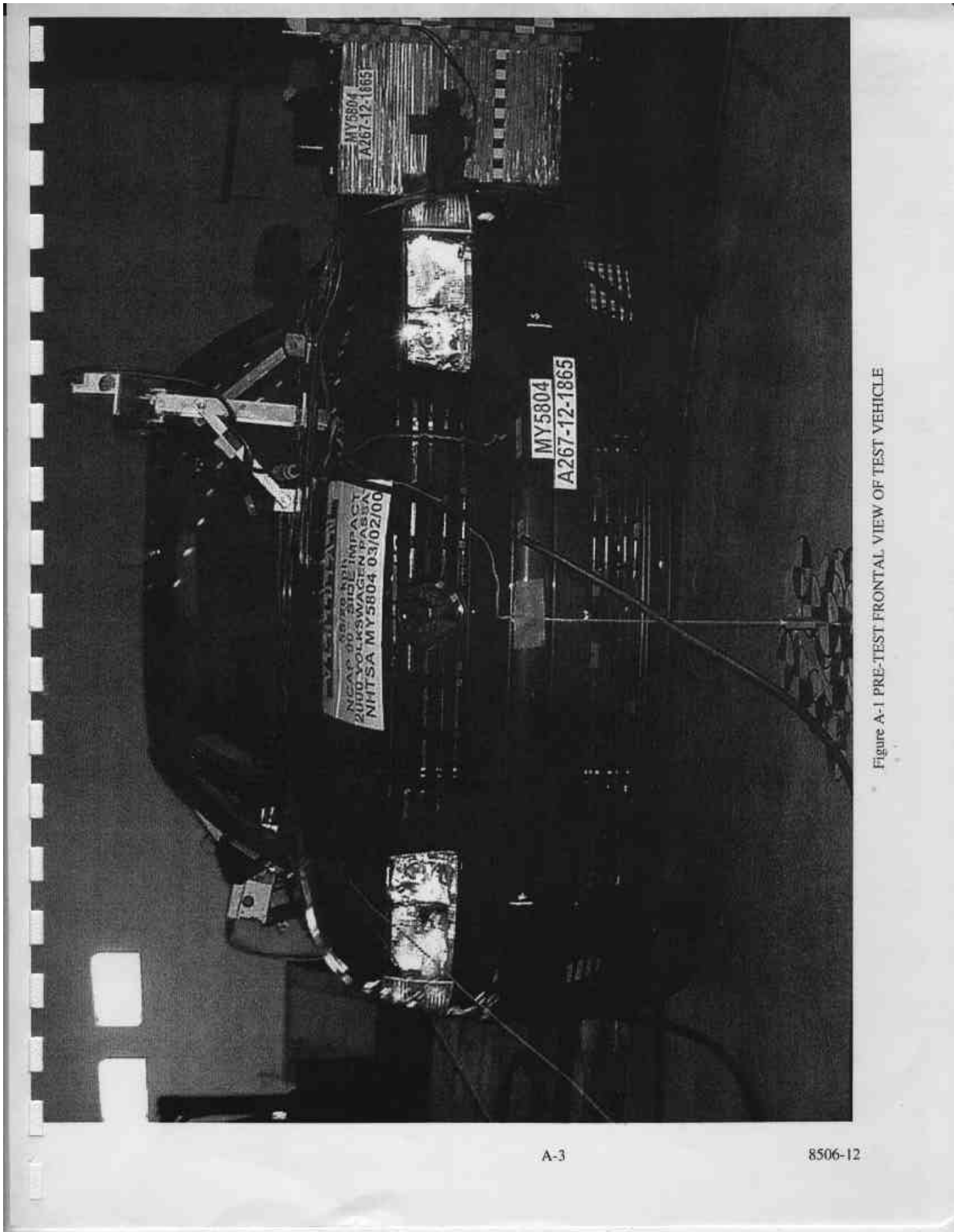


Figure A-1 PRE-TEST FRONTAL VIEW OF TEST VEHICLE

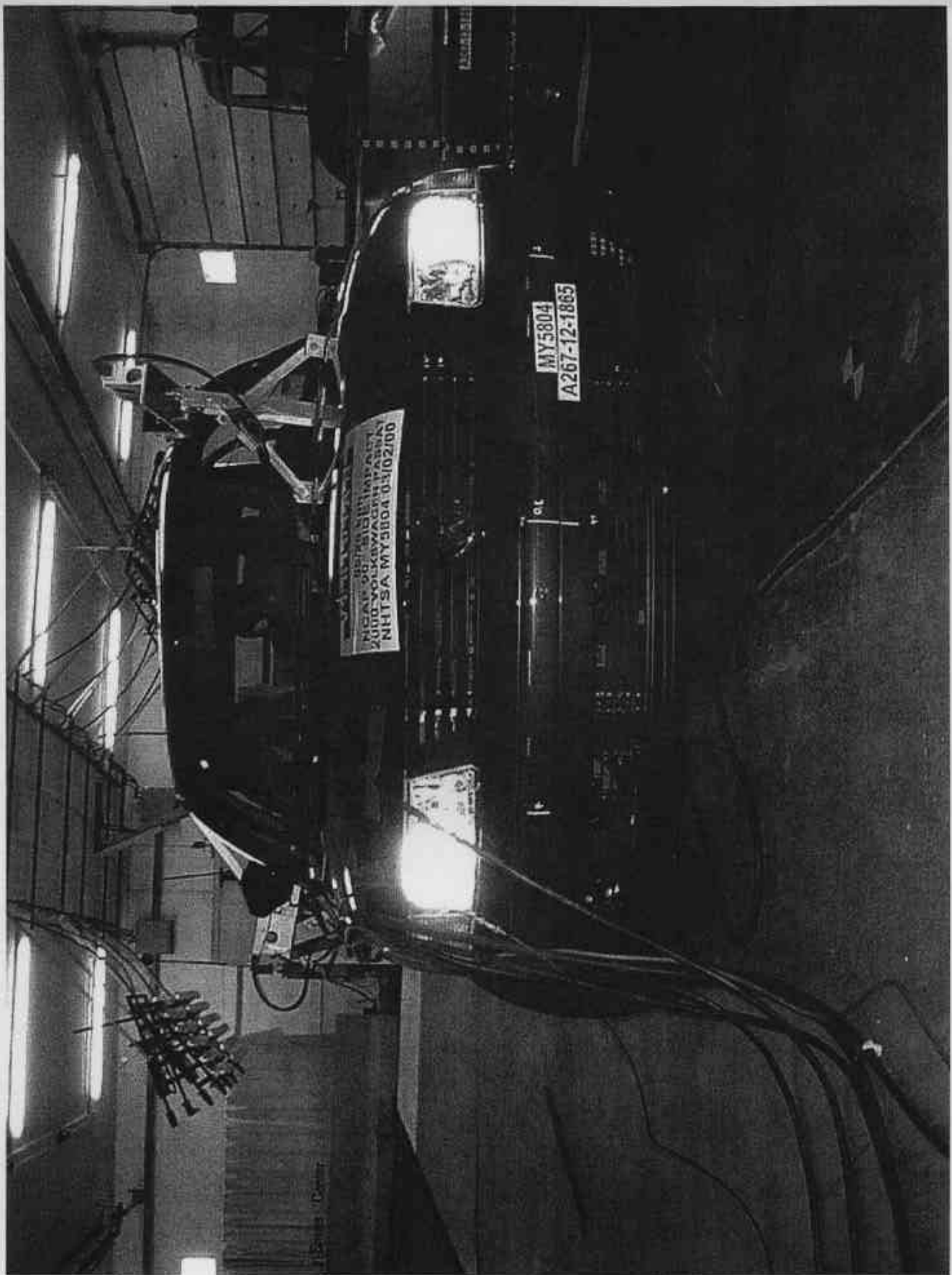


Figure A-2 POST-TEST FRONTAL VIEW OF TEST VEHICLE



Figure A-3 PRE-TEST REAR VIEW OF TEST VEHICLE

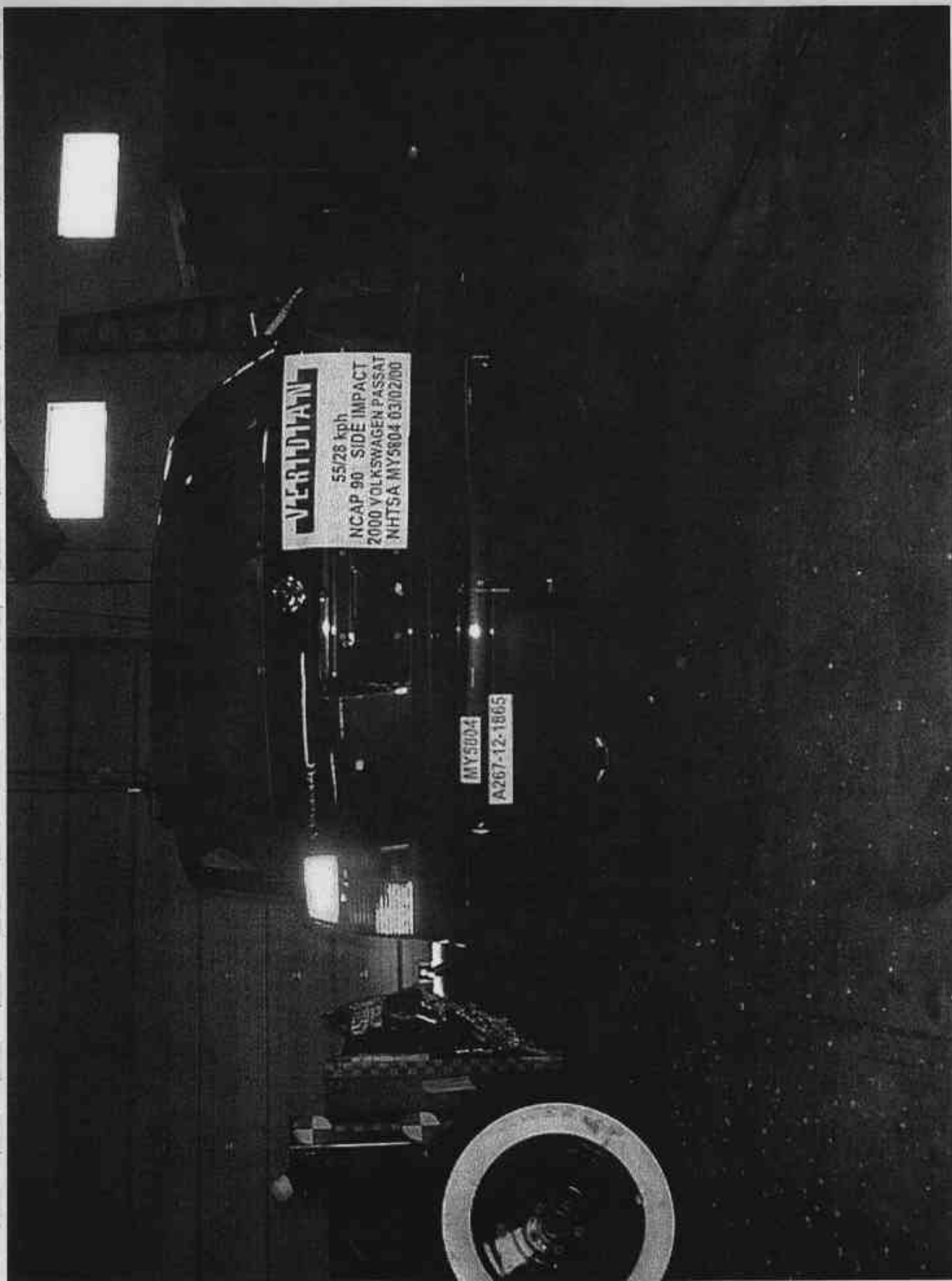


Figure A-4 POST-TEST REAR VIEW OF TEST VEHICLE

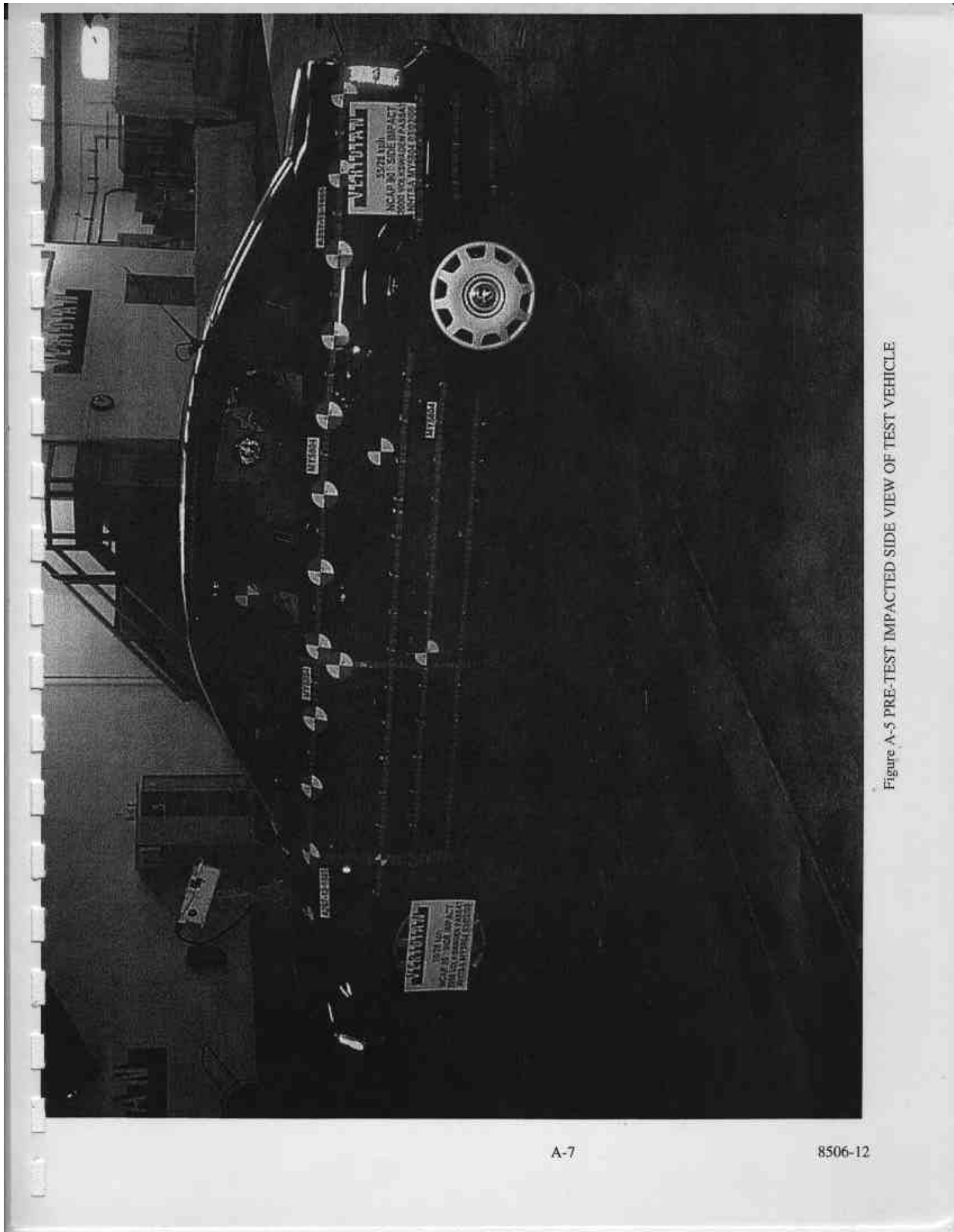


Figure A-5 PRE-TEST IMPACTED SIDE VIEW OF TEST VEHICLE

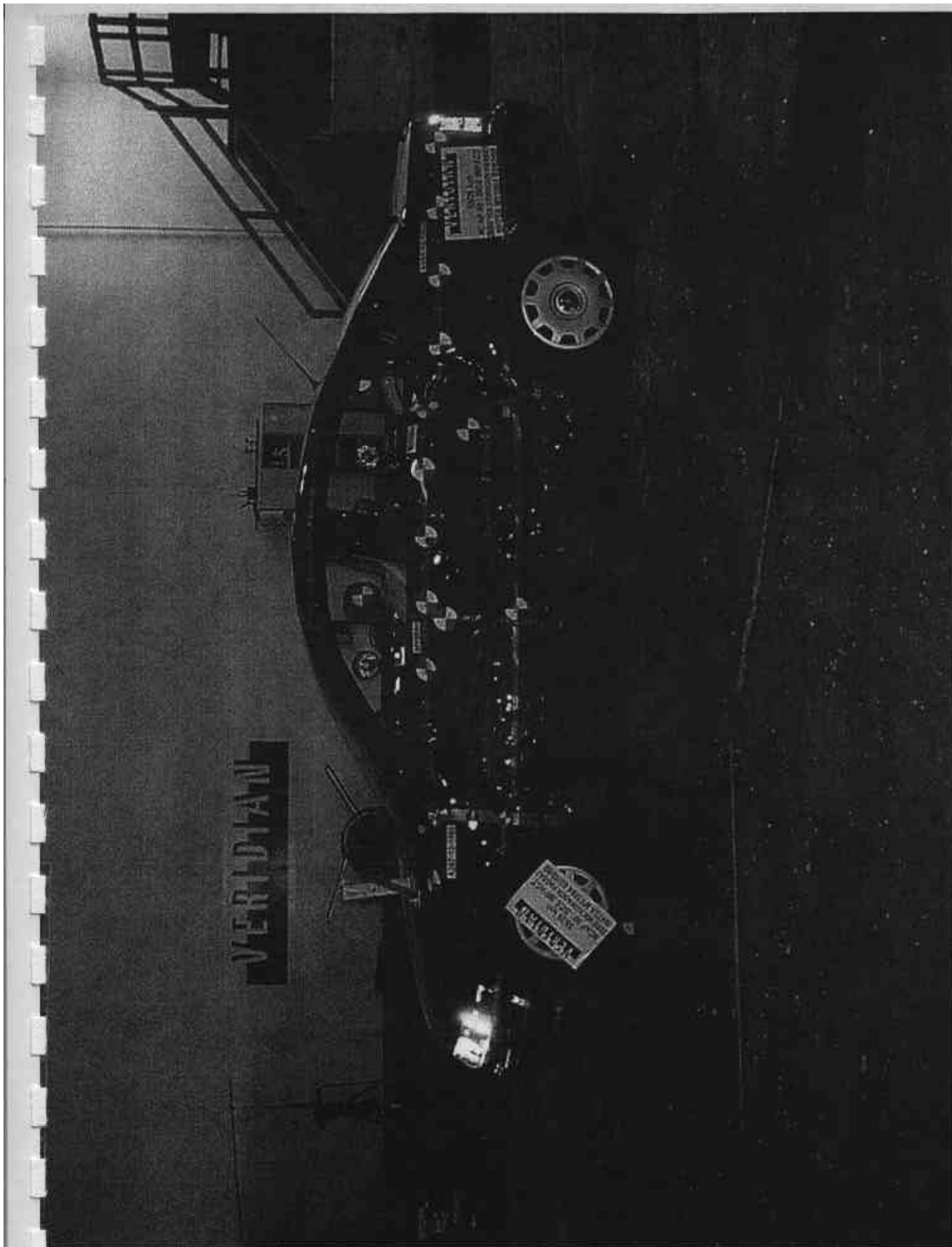


Figure A-6 POST-TEST IMPACTED SIDE VIEW OF TEST VEHICLE

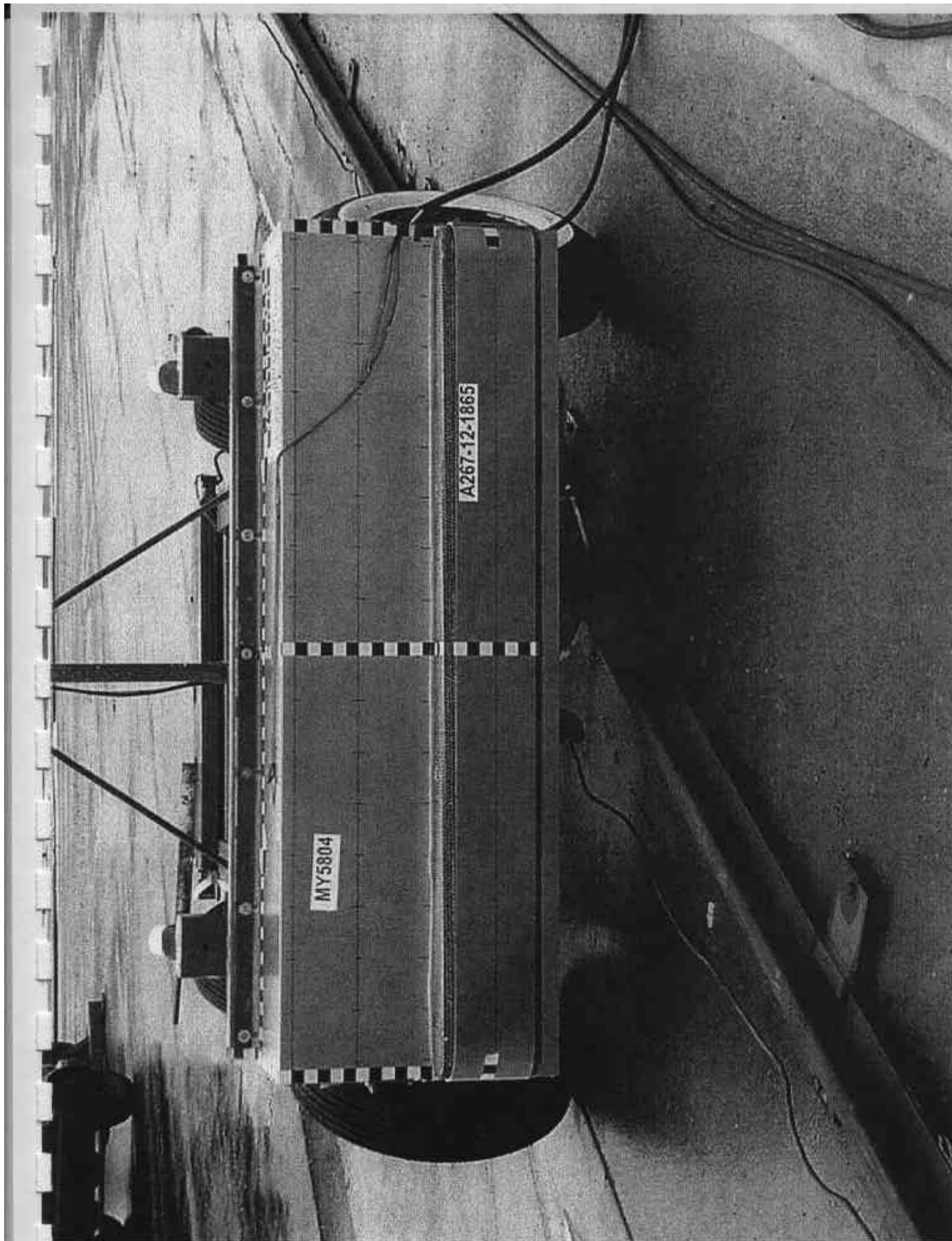


Figure A-7 PRE-TEST FRONTAL VIEW OF IMPACTOR FACE

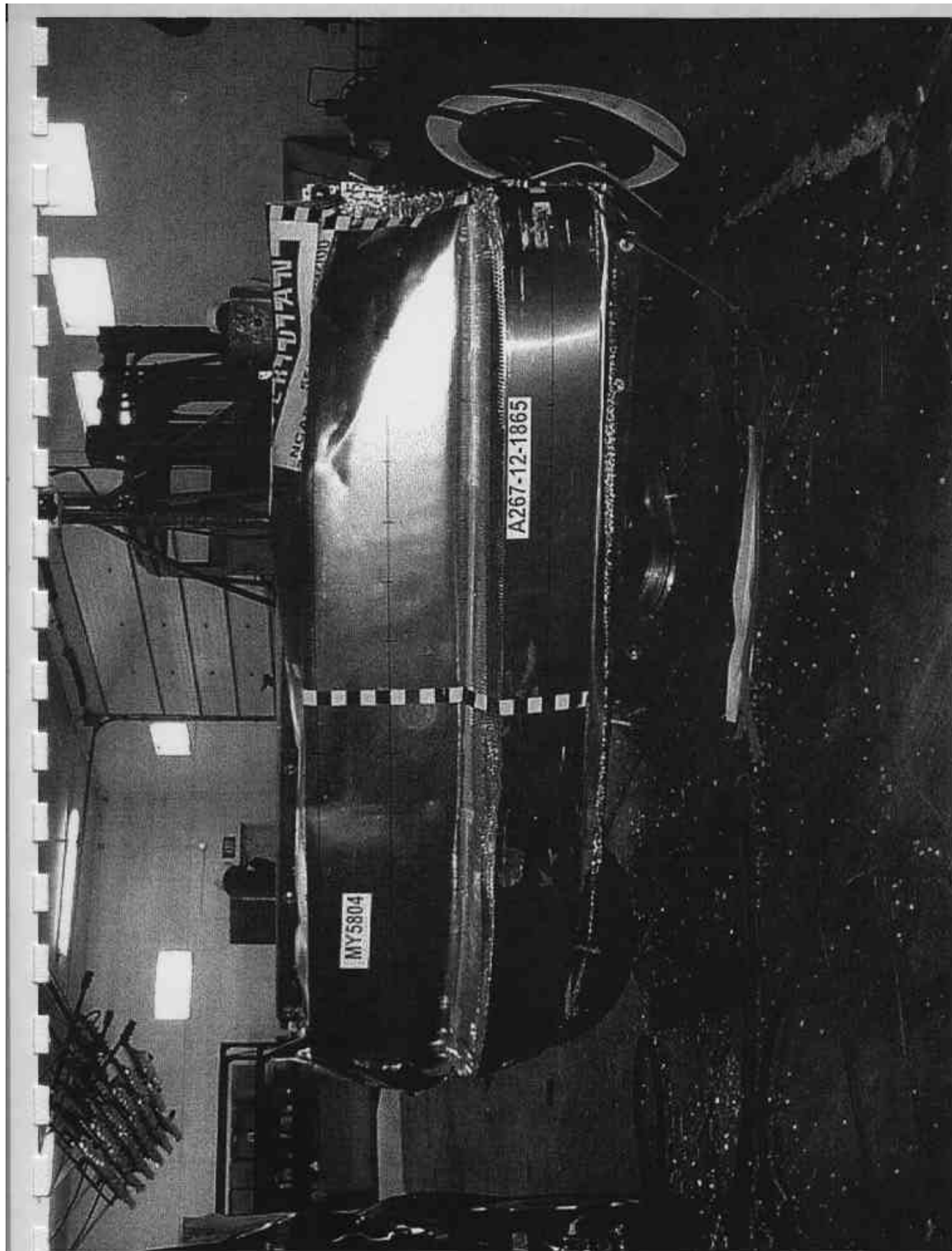


Figure A-8 POST-TEST FRONTAL VIEW OF IMPACTOR FACE



Figure A-9 PRE-TEST LEFT SIDE VIEW OF IMPACTOR FACE

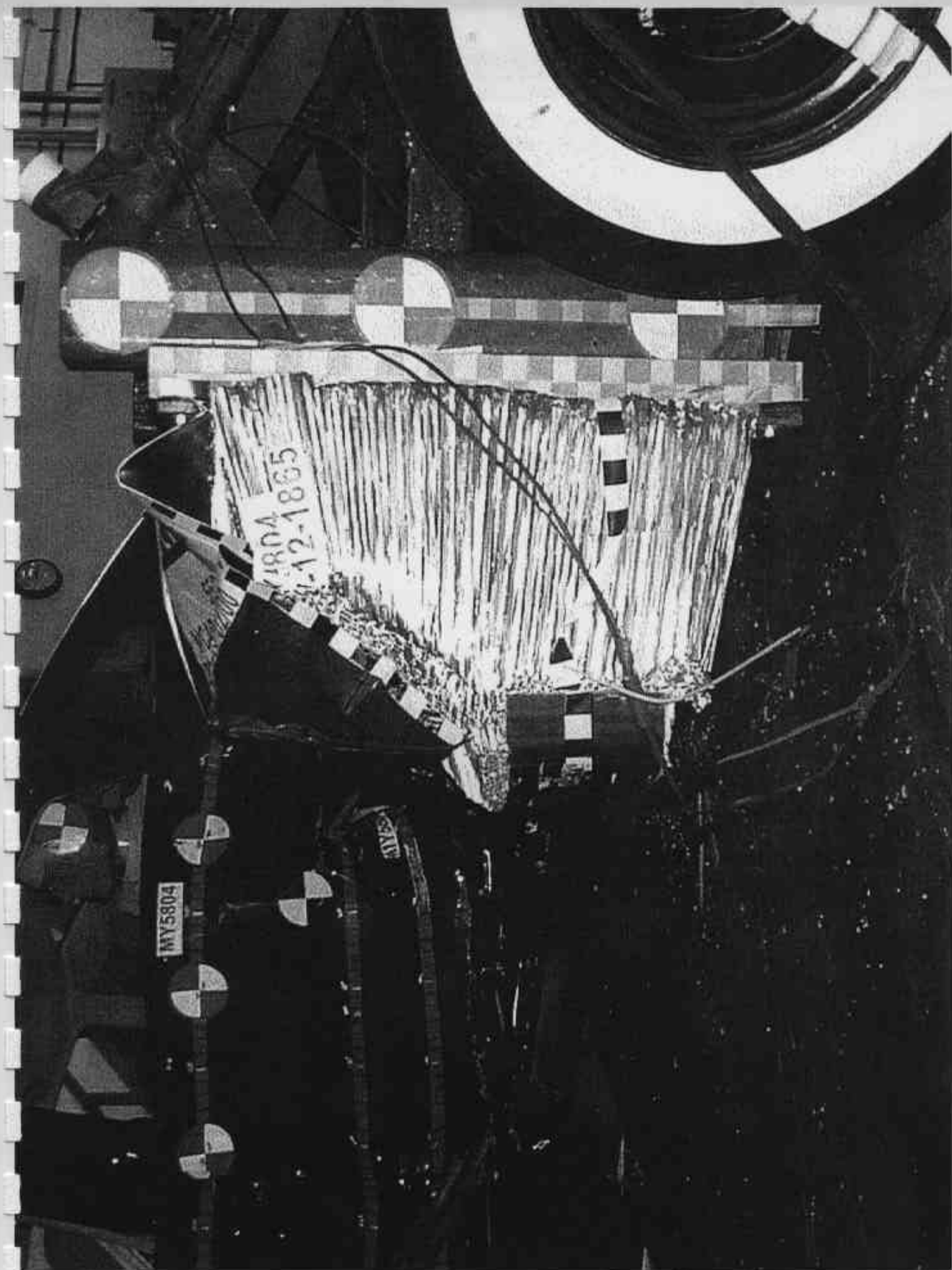


Figure A-10 POST-TEST LEFT SIDE VIEW OF IMPACTOR FACE

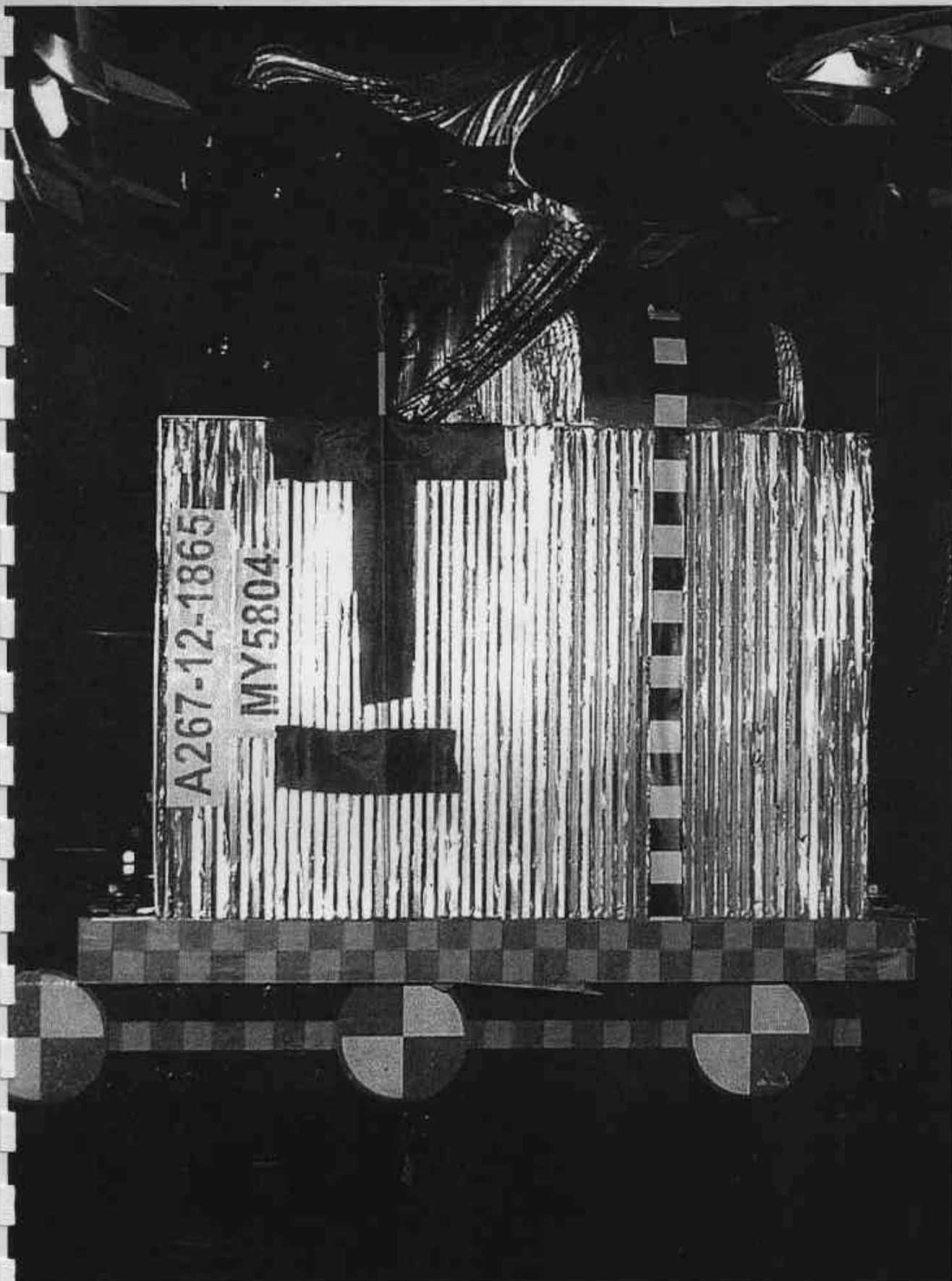


Figure A-11 PRE-TEST RIGHT SIDE VIEW OF IMPACTOR FACE

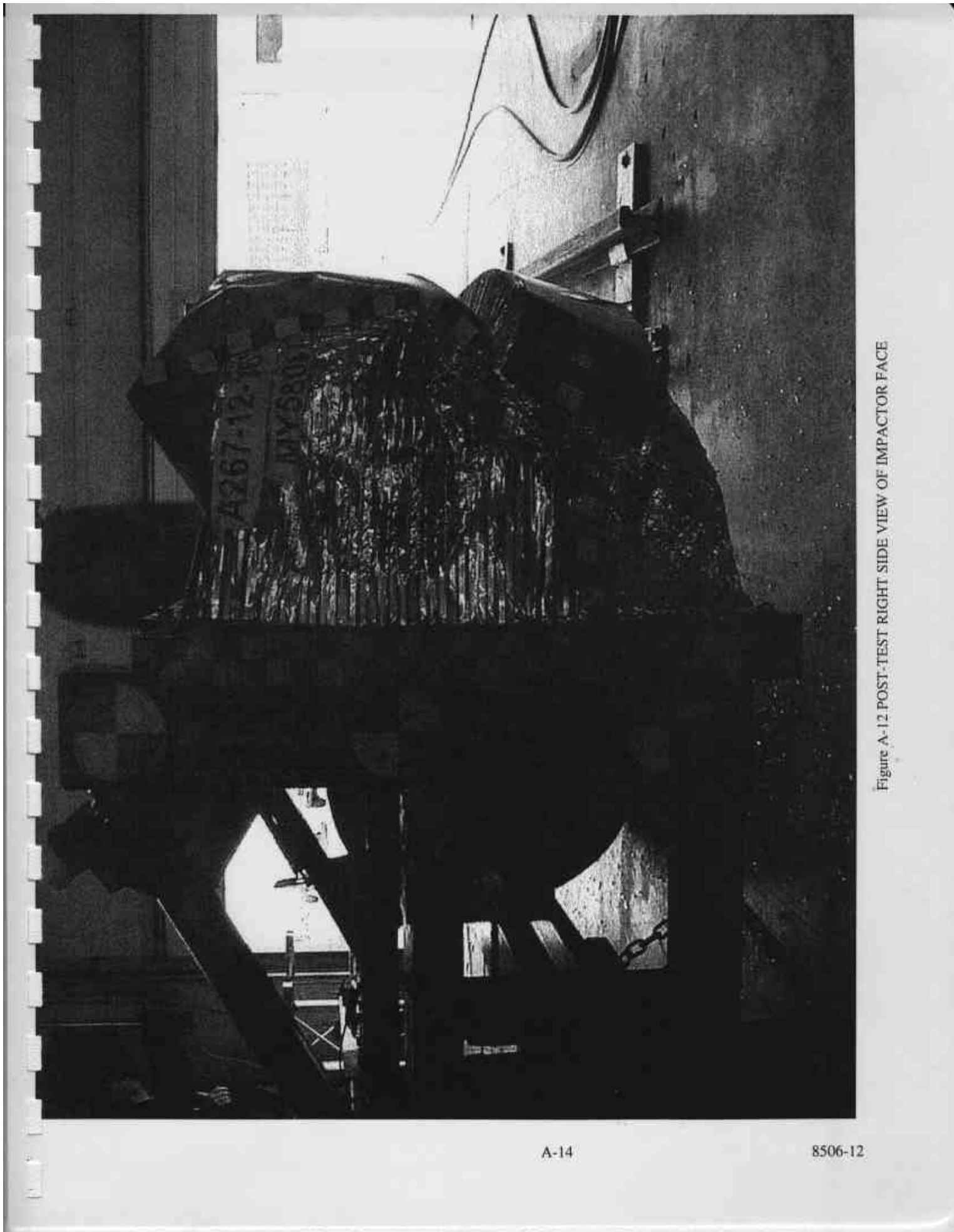


Figure A-12 POST-TEST RIGHT SIDE VIEW OF IMPACTOR FACE

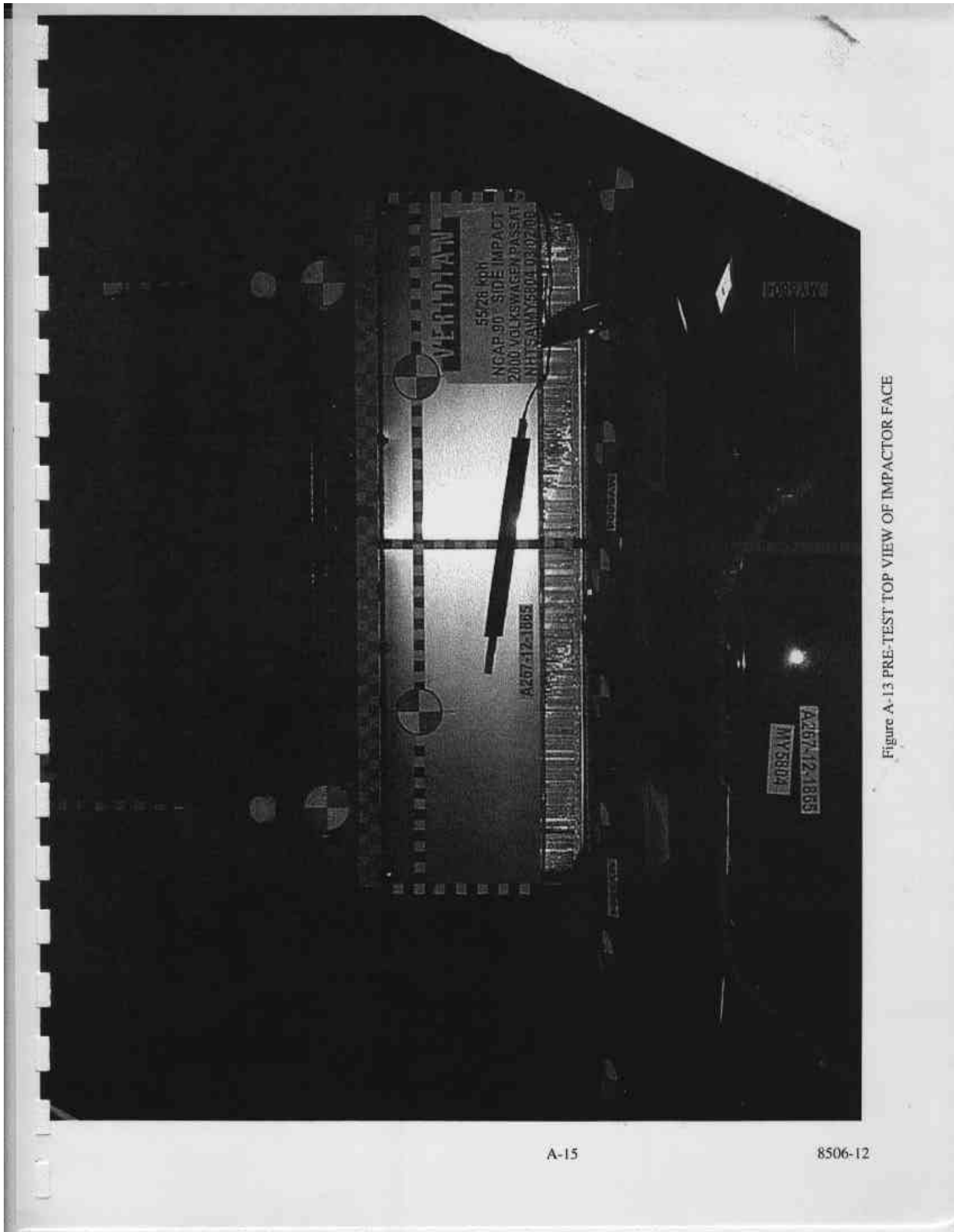


Figure A-13 PRE-TEST TOP VIEW OF IMPACTOR FACE

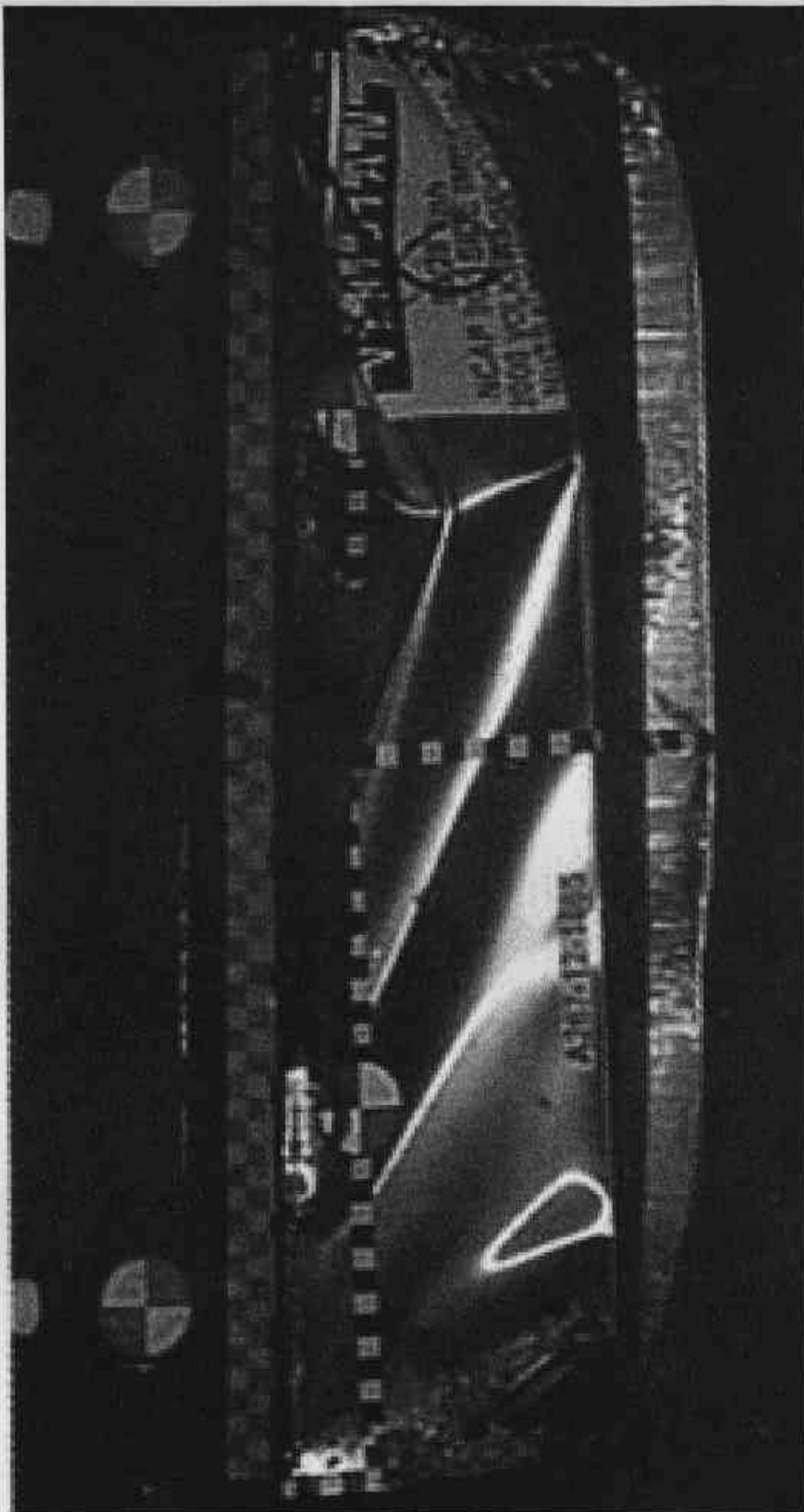


Figure A-14 POST-TEST TOP VIEW OF IMPACTOR FACE



Figure A-17 PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID

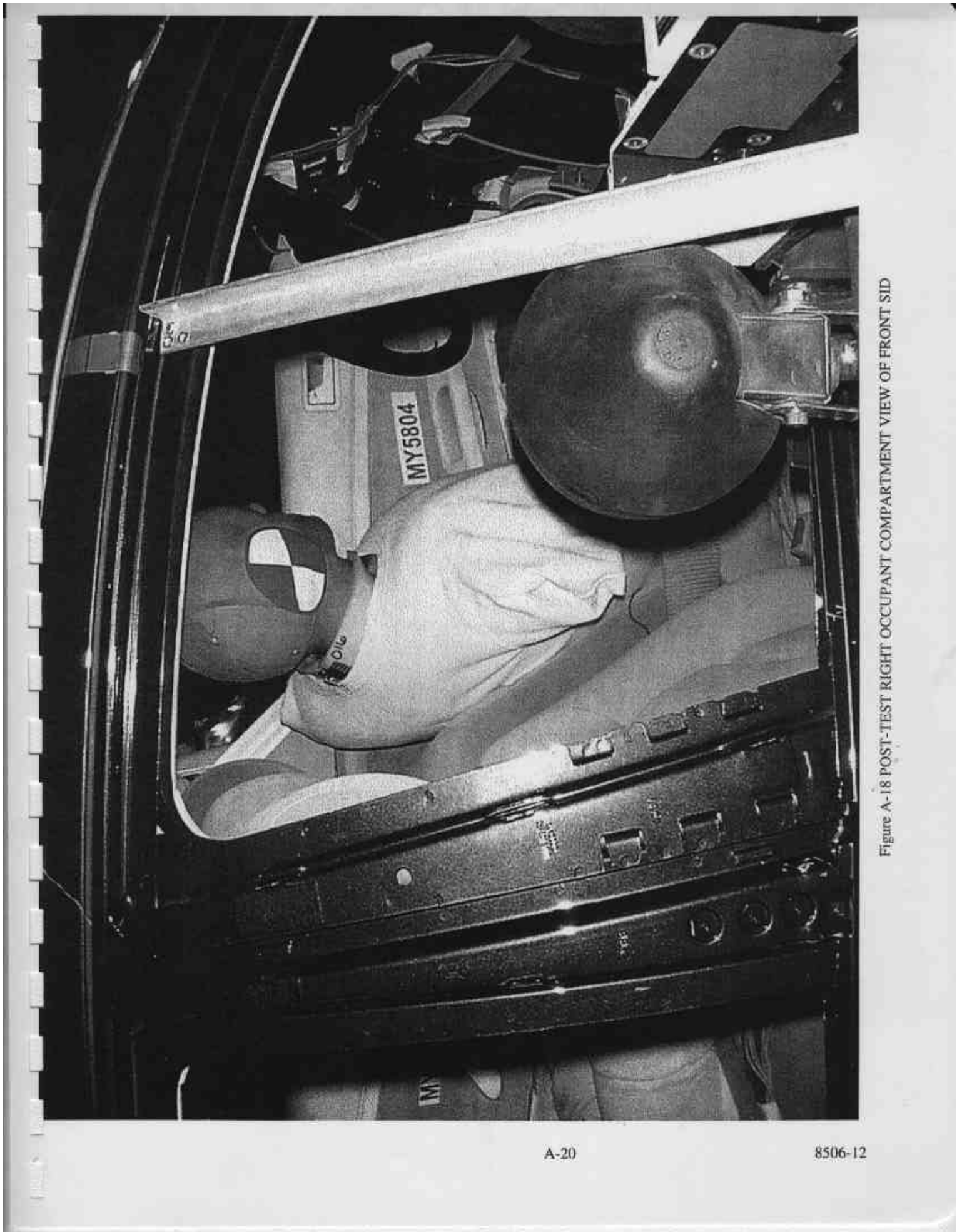


Figure A-18 POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID

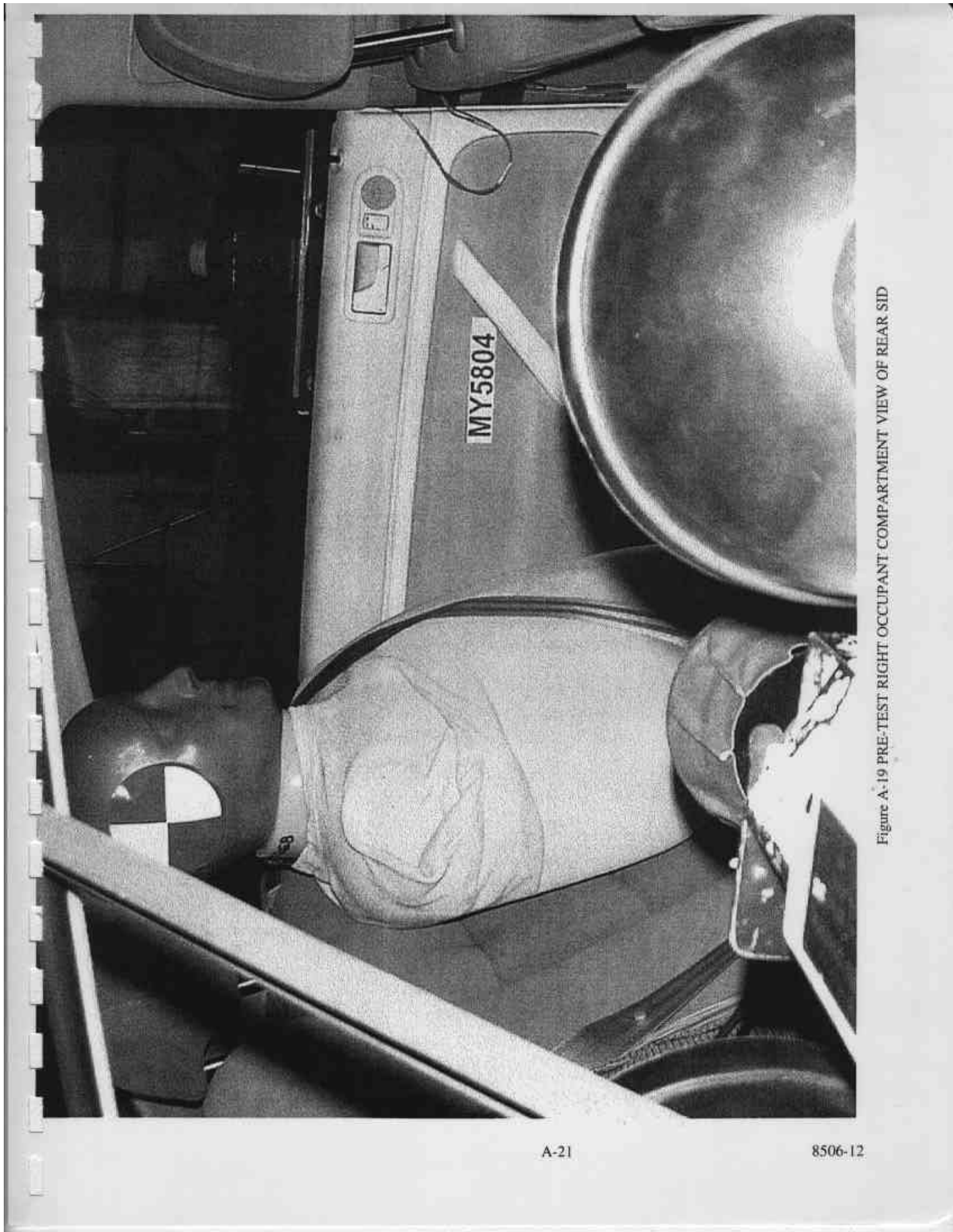


Figure A-19 PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID

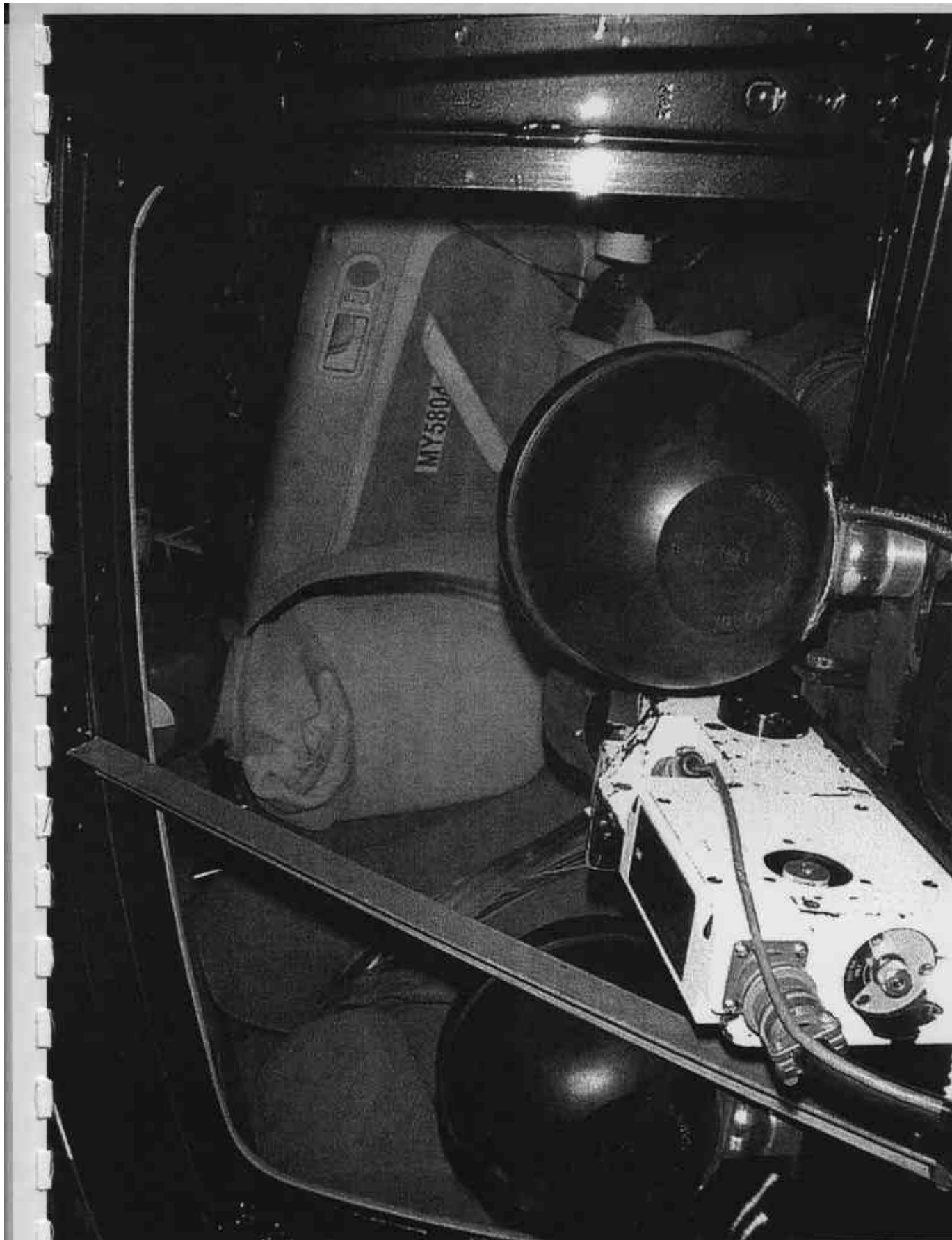


Figure A-20 POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID



Figure A-21 PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID

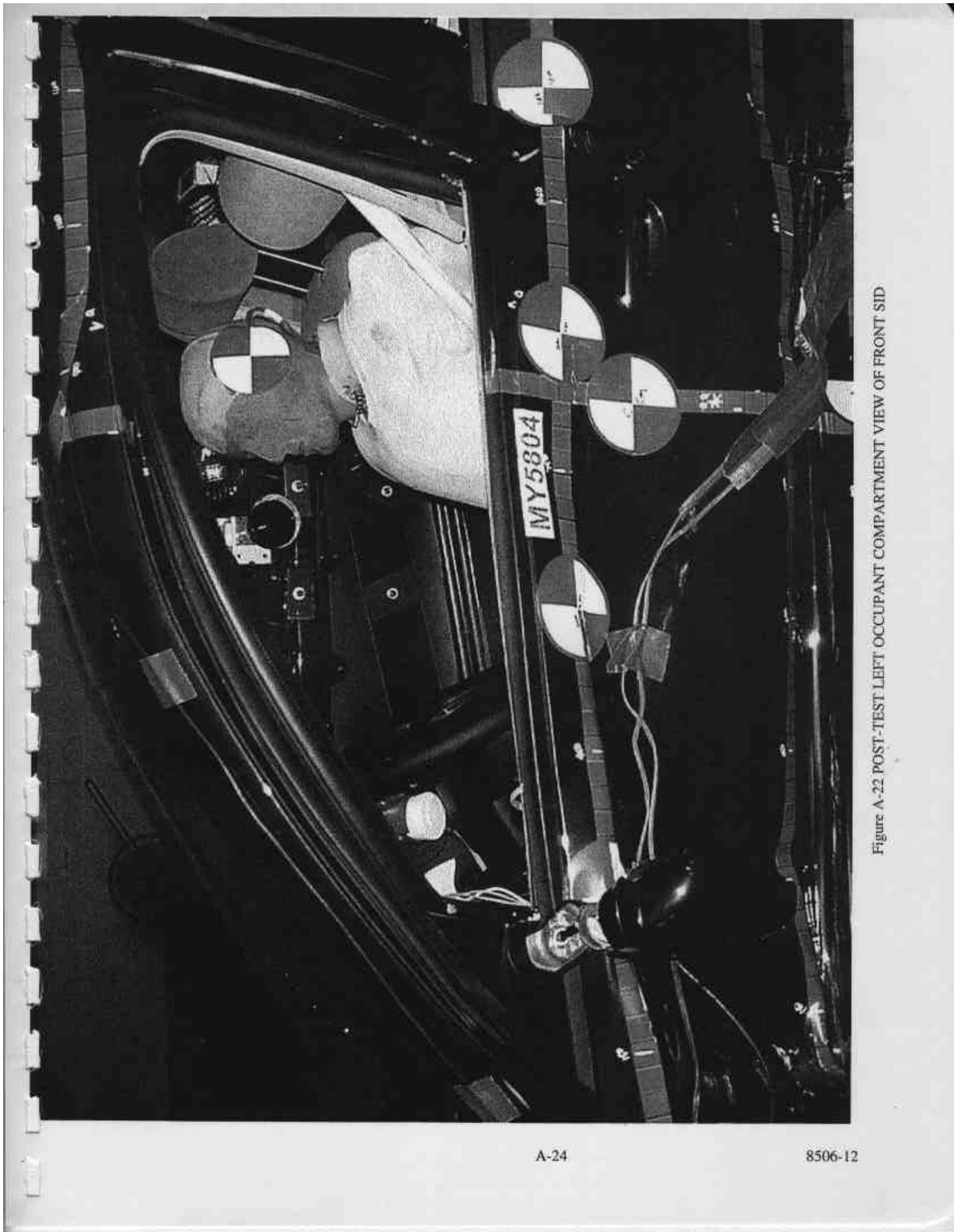


Figure A-22 POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID



Figure A-23 PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID



Figure A-24 POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID

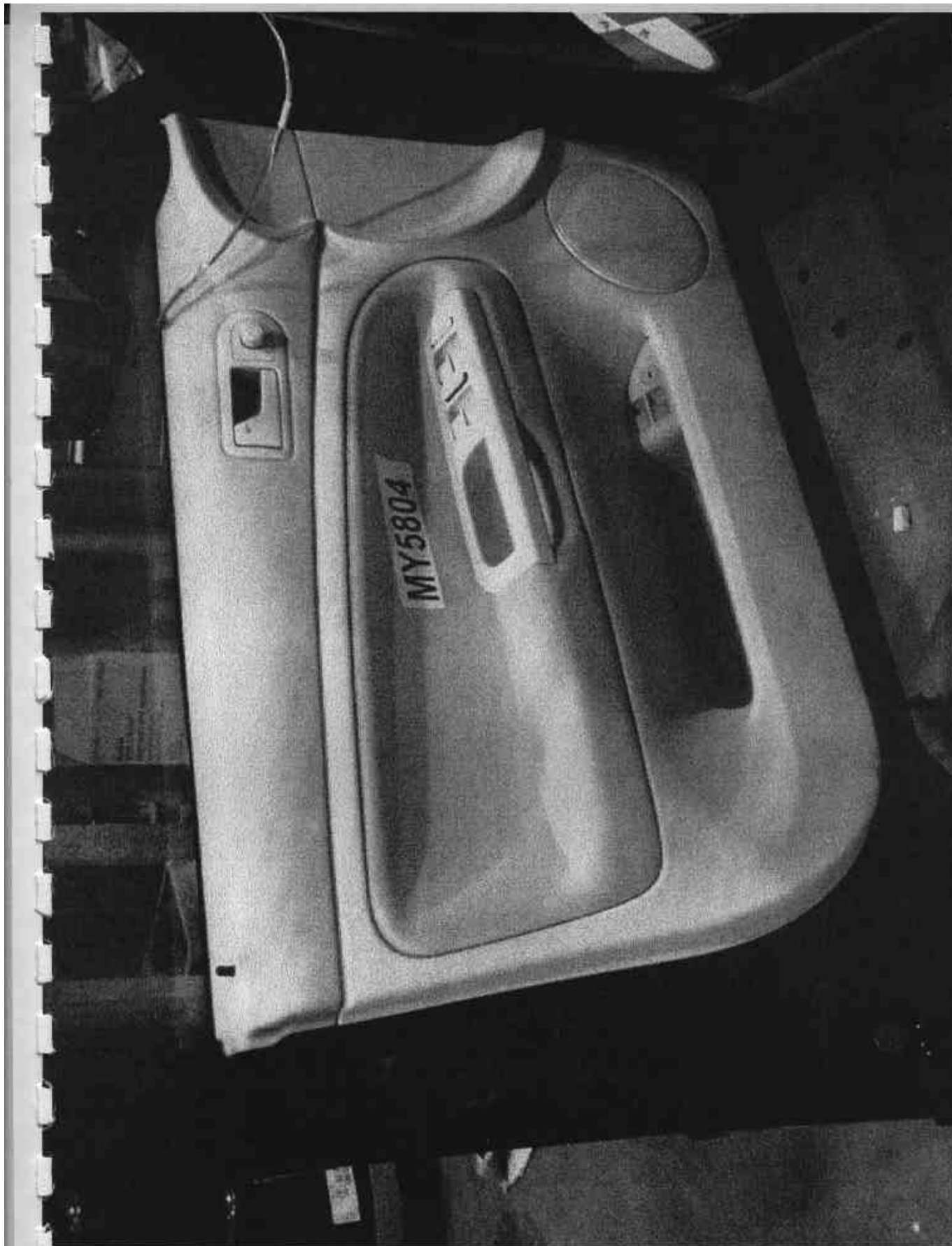


Figure A-25 PRE-TEST INTERIOR OF FRONT DOOR

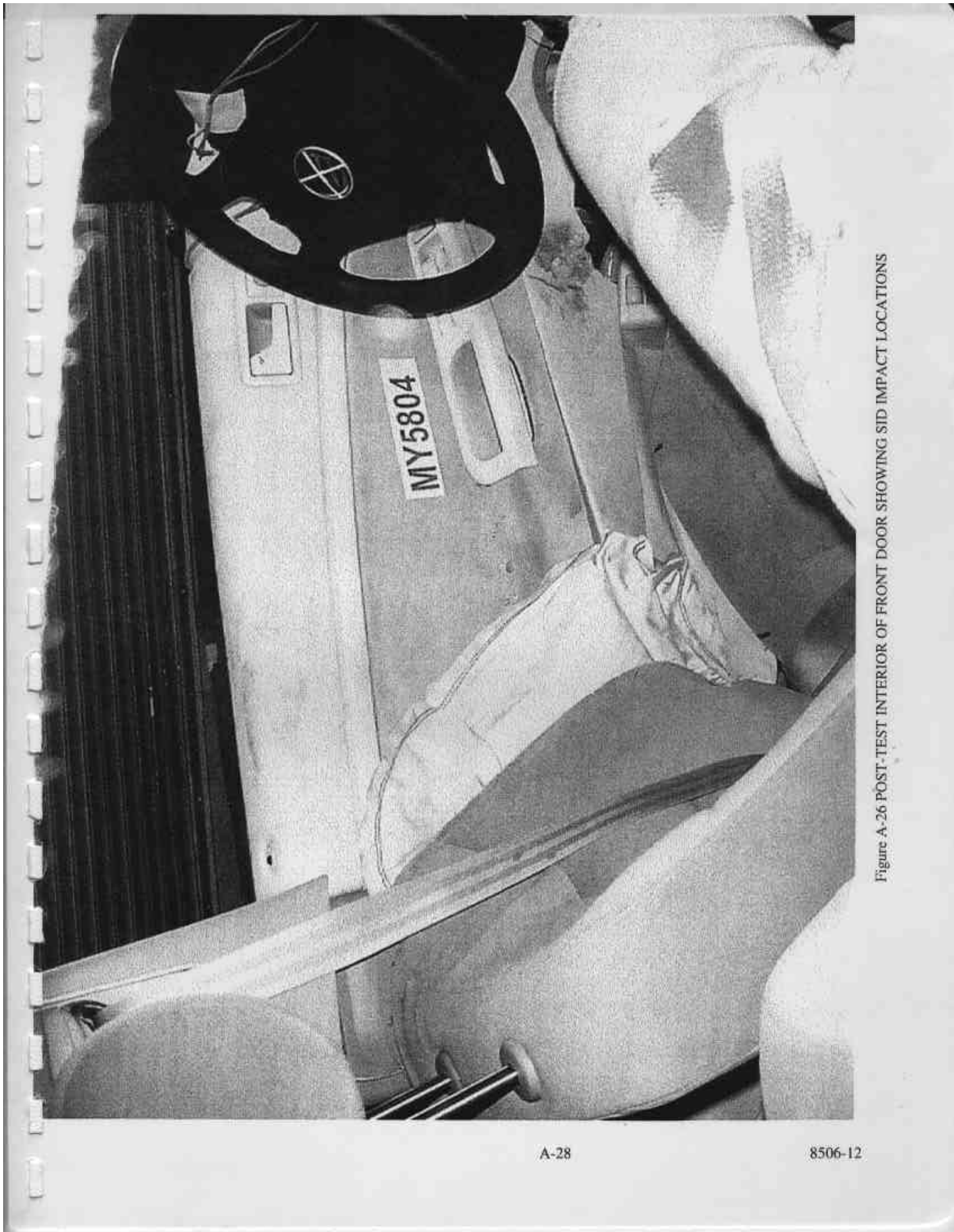


Figure A-26 POST-TEST INTERIOR OF FRONT DOOR SHOWING SID IMPACT LOCATIONS

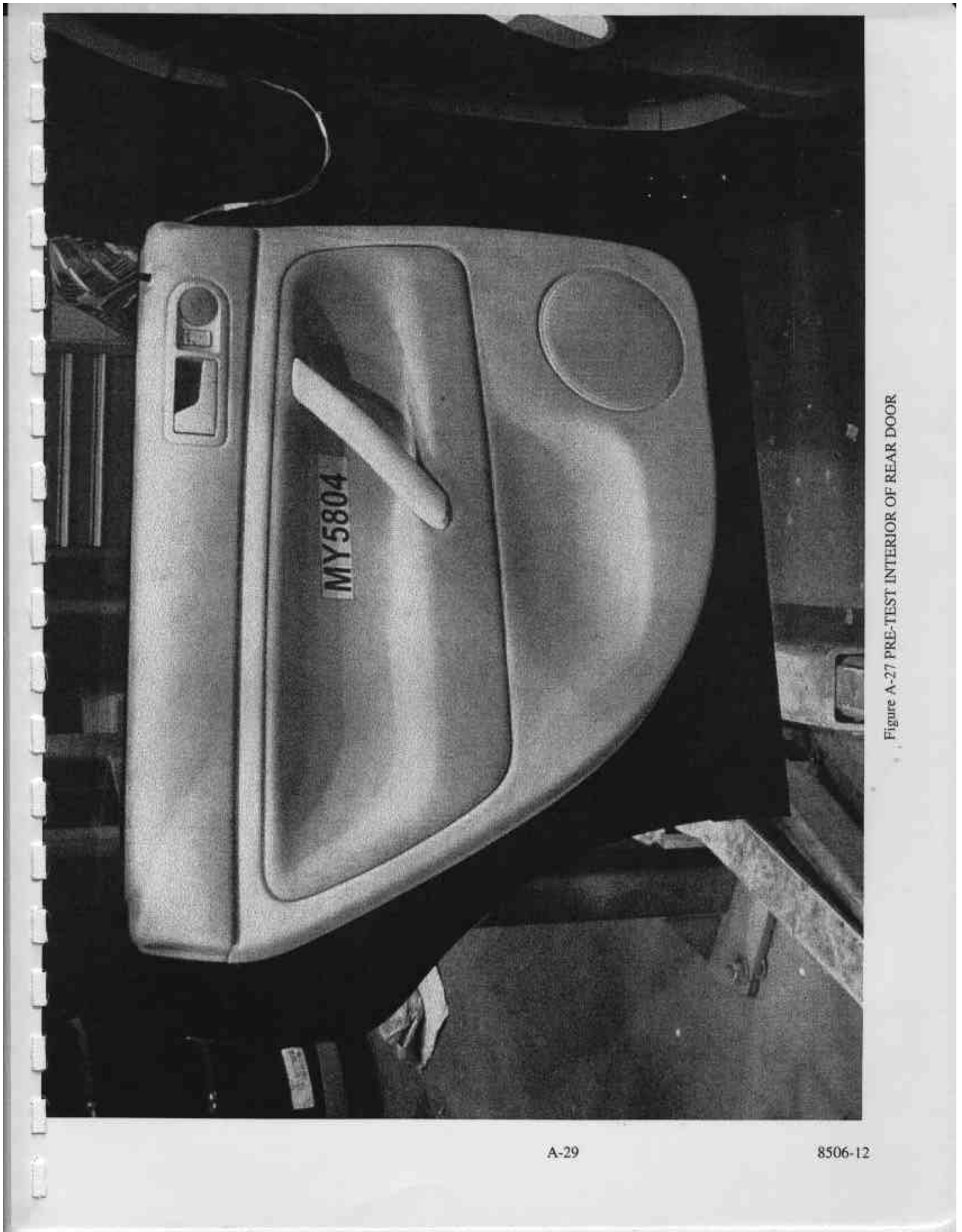


Figure A-27 PRE-TEST INTERIOR OF REAR DOOR



Figure A-28 POST-TEST INTERIOR OF REAR DOOR SHOWING SID IMPACT LOCATIONS

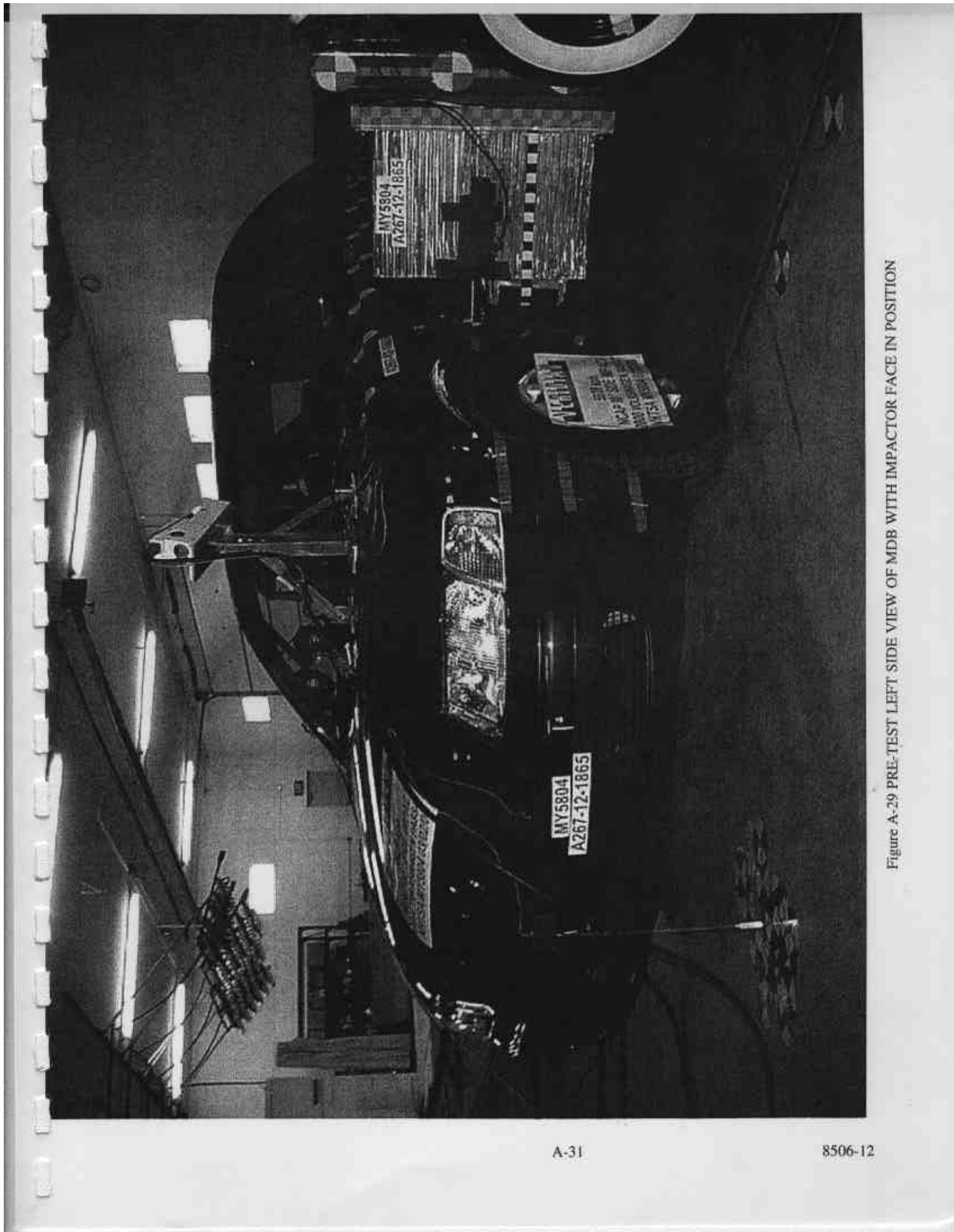


Figure A-29 PRE-TEST LEFT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION

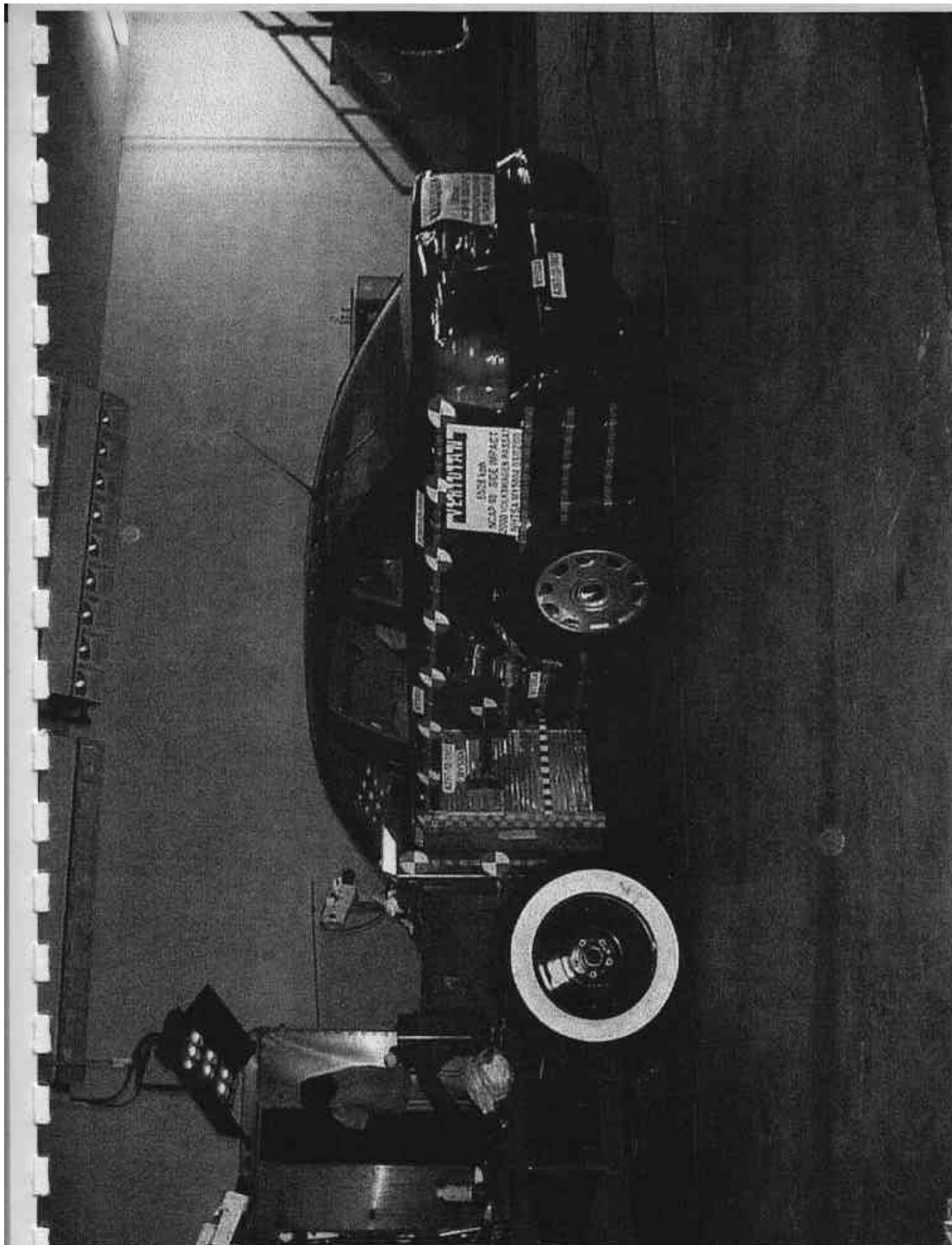


Figure A-30 PRE-TEST RIGHT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION

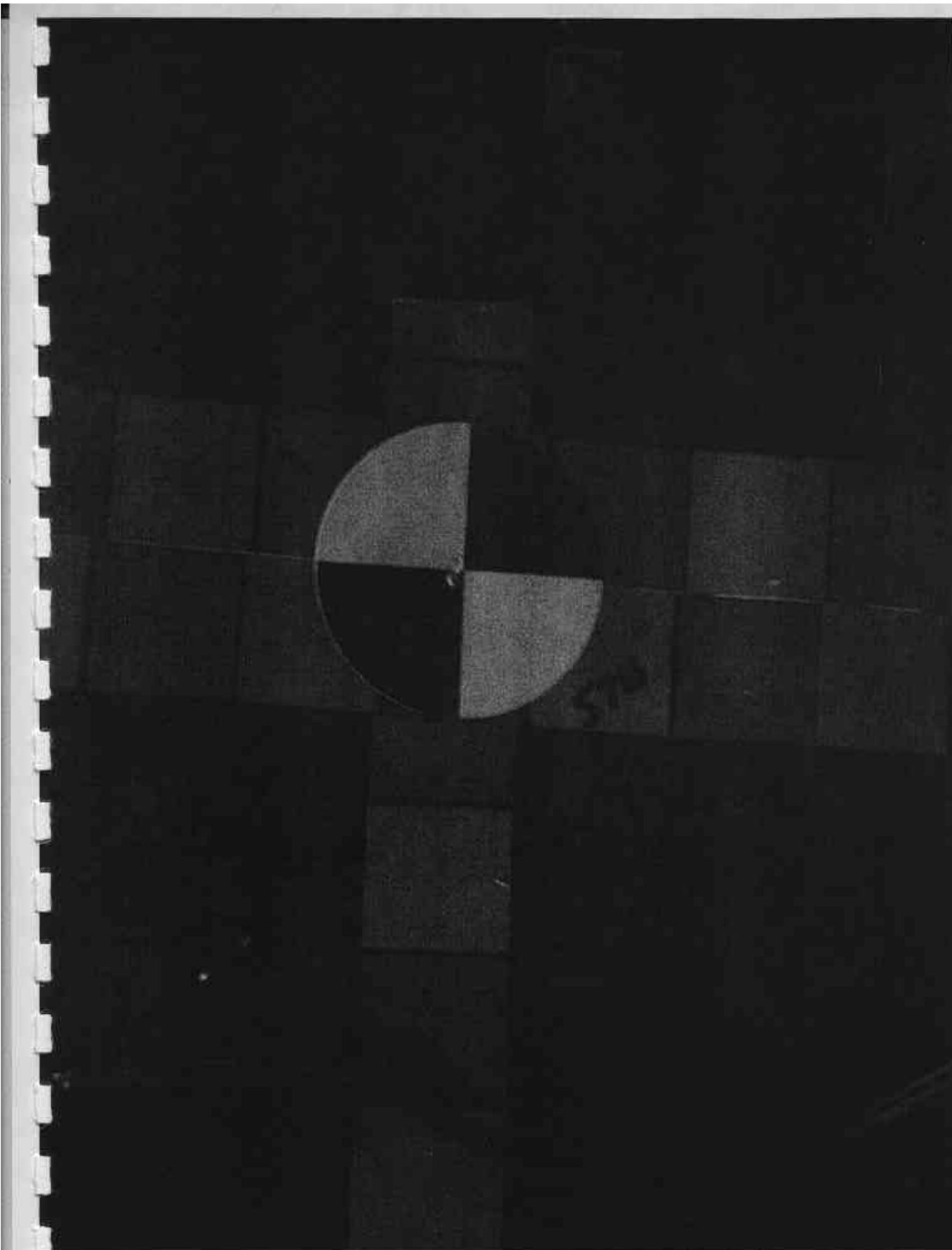


Figure A-31 POST-TEST CLOSE-UP VIEW OF IMPACT POINT TARGET

1075 4630013 -

MADE BY VOLKSWAGEN AG 11799 GVWR LBS 4322 GVWR LBS FRONT 2315/REAR 2117
THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S. FEDERAL MOTOR VEHICLE SAFETY, BUMPER
AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE

WVWMA238XYE205279

PASSENGER CAR

GERMANY - F.R.



Figure A-32 CLOSE-UP VIEW OF VEHICLE'S CERTIFICATION LABEL

UNLEADED FUEL ONLY 91
 PREMIUM MIN.(R+M)/2
 CARBURANT SANS PLOMB
 SUPER MIN. RON 95

MAX. LOAD (VEHICLE CAPACITY WEIGHTS)

Shift	1	2	3	4	5	6	7	8	9	10	11	12
lbs	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

DESIGNATED SEATING CAPACITY 5 2 front/3 rear

GOLD TIRE INFLATION PRESSURE

Tire size	RIM	front	rear	max. load
195/65 R15 91H	8.5	28	30	39
205/60 R15 91H	7.5	28	30	39
205/55 R16 91H	7.5	28	30	39
up to	100 miles/h	30	28	33
more than	100 miles/h	30	28	33

Figure A-33 CLOSE-UP VIEW OF VEHICLE'S TIRE PLACARD LABEL

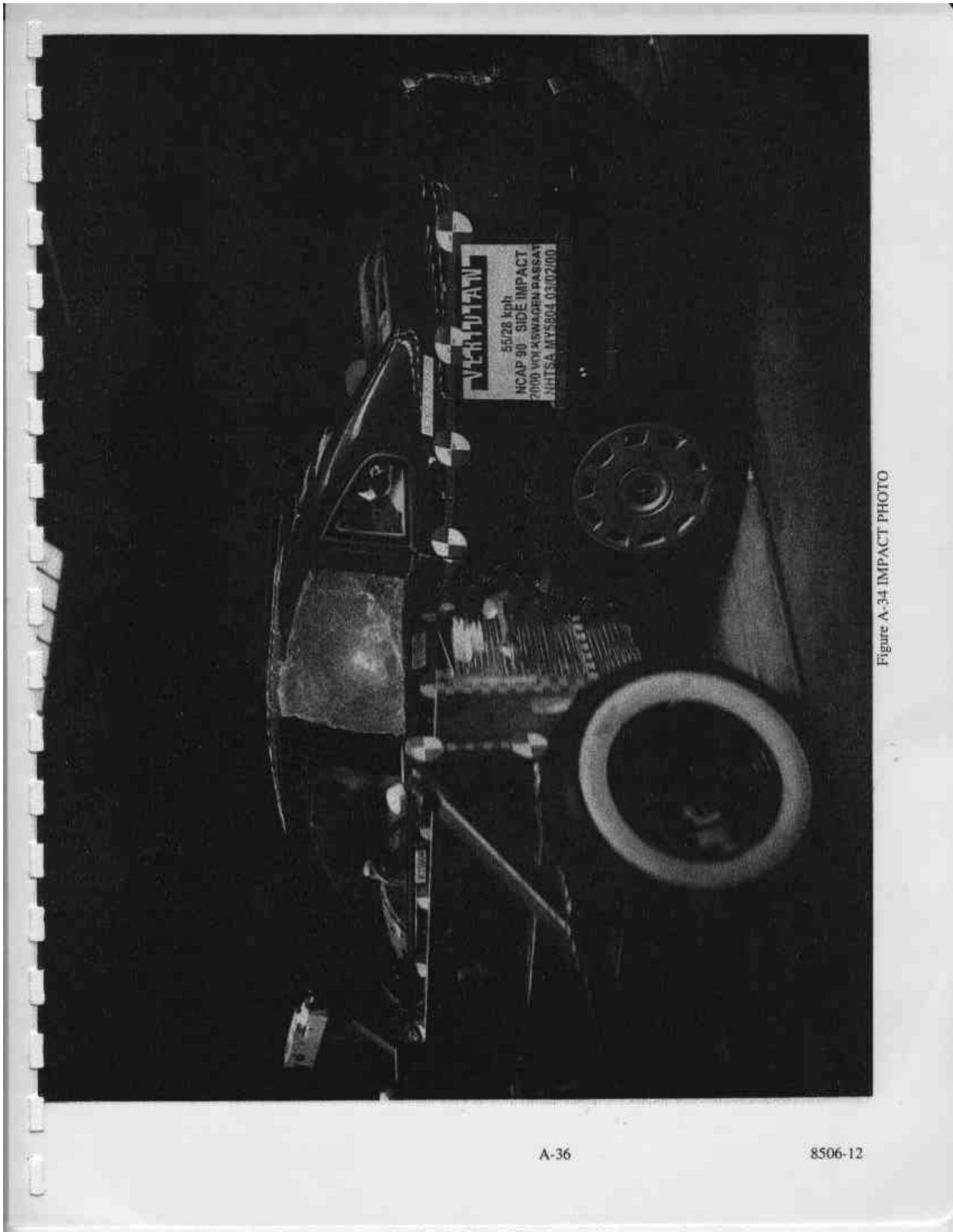


Figure A-34 IMPACT PHOTO



Figure A-35 ROLLOVER 90 DEGREES



Figure A-36 ROLLOVER 180 DEGREES



Figure A-37 ROLLOVER 270 DEGREES

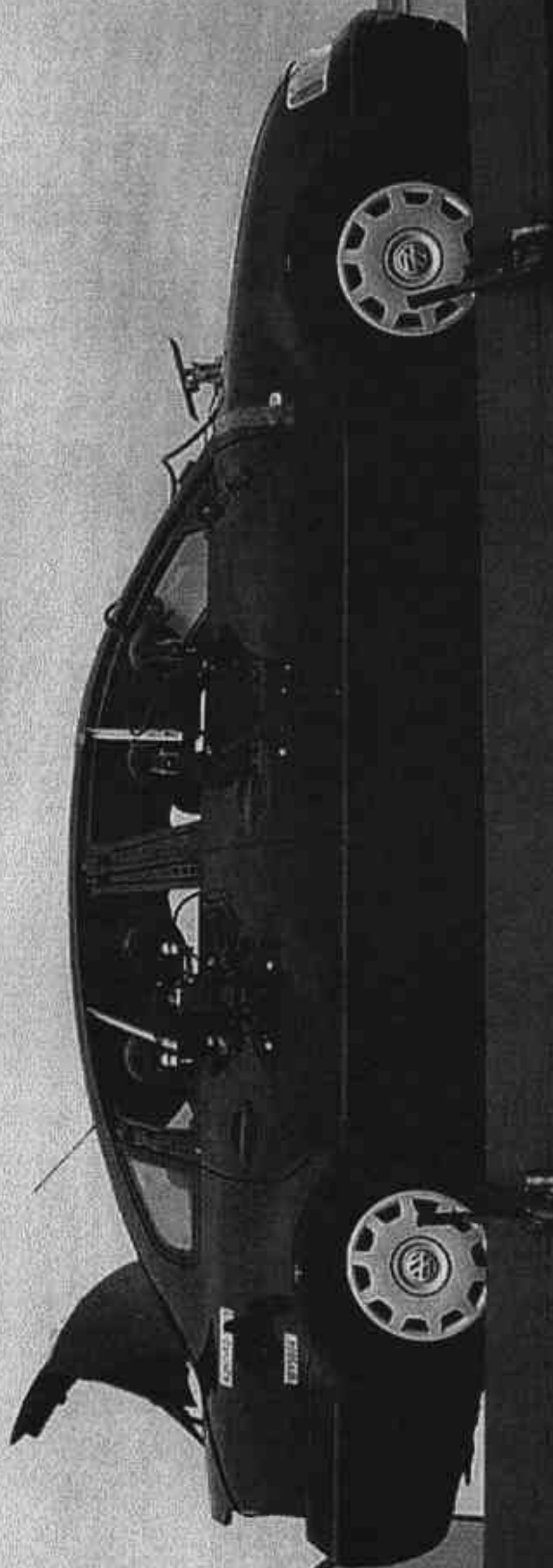


Figure A-38 ROLLOVER 360 DEGREES

APPENDIX B

VEHICLE, MDB AND SID RESPONSE DATA

TABLE OF DATA PLOTS

DRIVER AND PASSENGER DUMMY INSTRUMENTATION PLOTS ACCELERATION DATA - FILTER CLASS 1000, LOWER SPINE - FILTER CLASS 180 INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
1	DRIVER HEAD (X) ACCELERATION VS TIME	B- 6
2	DRIVER HEAD (X) VELOCITY VS TIME	B- 7
3	DRIVER HEAD (Y) ACCELERATION VS TIME	B- 8
4	DRIVER HEAD (Y) VELOCITY VS TIME	B- 9
5	DRIVER HEAD (Z) ACCELERATION VS TIME	B- 10
6	DRIVER HEAD (Z) VELOCITY VS TIME	B- 11
7	DRIVER HEAD RESULTANT ACCELERATION VS TIME	B- 12
8	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 13
9	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 14
10	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 15
11	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 16
12	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 17
13	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 18
14	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 19
15	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 20
16	PASSENGER HEAD (X) ACCELERATION VS TIME	B- 21
17	PASSENGER HEAD (X) VELOCITY VS TIME	B- 22
18	PASSENGER HEAD (Y) ACCELERATION VS TIME	B- 23
19	PASSENGER HEAD (Y) VELOCITY VS TIME	B- 24
20	PASSENGER HEAD (Z) ACCELERATION VS TIME	B- 25
21	PASSENGER HEAD (Z) VELOCITY VS TIME	B- 26
22	PASSENGER HEAD RESULTANT ACCELERATION VS TIME	B- 27
23	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 28
24	PASSENGER UPPER RIB (Y) VELOCITY VS TIME	B- 29
25	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 30
26	PASSENGER LOWER RIB (Y) VELOCITY VS TIME	B- 31
27	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 32
28	PASSENGER LOWER SPINE (Y) VELOCITY VS TIME	B- 33
29	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 34
30	PASSENGER PELVIC (Y) VELOCITY VS TIME	B- 35

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS ACCELERATION DATA - FIR FILTERED

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
31	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 36
32	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 37
33	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 38
34	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 39
35	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 40
36	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 41
37	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 42
38	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 43

TEST VEHICLE INSTRUMENTATION PLOTS
ACCELERATION DATA - FILTER CLASS 60
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
39	RIGHT SIDE SILL AT FRONT SEAT (X) ACCELERATION VS TIME	B- 44
40	RIGHT SIDE SILL AT FRONT SEAT (X) VELOCITY VS TIME	B- 45
41	RIGHT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 46
42	RIGHT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 47
43	RIGHT SIDE SILL AT FRONT SEAT (Z) ACCELERATION VS TIME	B- 48
44	RIGHT SIDE SILL AT FRONT SEAT (Z) VELOCITY VS TIME	B- 49
45	RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION VS TIME	B- 50
46	RIGHT SIDE SILL AT REAR SEAT (X) ACCELERATION VS TIME	B- 51
47	RIGHT SIDE SILL AT REAR SEAT (X) VELOCITY VS TIME	B- 52
48	RIGHT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 53
49	RIGHT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 54
50	RIGHT SIDE SILL AT REAR SEAT (Z) ACCELERATION VS TIME	B- 55
51	RIGHT SIDE SILL AT REAR SEAT (Z) VELOCITY VS TIME	B- 56
52	RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION VS TIME	B- 57
53	REAR FLOORPAN ABOVE AXLE (X) ACCELERATION VS TIME	B- 58
54	REAR FLOORPAN ABOVE AXLE (X) VELOCITY VS TIME	B- 59
55	REAR FLOORPAN ABOVE AXLE (Y) ACCELERATION VS TIME	B- 60
56	REAR FLOORPAN ABOVE AXLE (Y) VELOCITY VS TIME	B- 61
57	REAR FLOORPAN ABOVE AXLE (Z) ACCELERATION VS TIME	B- 62
58	REAR FLOORPAN ABOVE AXLE (Z) VELOCITY VS TIME	B- 63
59	REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION VS TIME	B- 64
60	LEFT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 65
61	LEFT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 66
62	LEFT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 67
63	LEFT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 68
64	LEFT FRONT DOOR ON CENTERLINE (Y) ACCELERATION VS TIME	B- 69
65	LEFT FRONT DOOR ON CENTERLINE (Y) VELOCITY VS TIME	B- 70
66	RIGHT REAR OCCUPANT COMPARTMENT (Y) ACCELERATION VS TIME	B- 71
67	RIGHT REAR OCCUPANT COMPARTMENT (Y) VELOCITY VS TIME	B- 72
68	MID REAR OF LEFT FRONT DOOR (Y) ACCELERATION VS TIME	B- 73
69	MID REAR OF LEFT FRONT DOOR (Y) VELOCITY VS TIME	B- 74
70	LEFT FRONT DOOR UPPER CENTERLINE (Y) ACCELERATION VS TIME	B- 75
71	LEFT FRONT DOOR UPPER CENTERLINE (Y) VELOCITY VS TIME	B- 76
72	MID REAR OF LEFT REAR DOOR (Y) ACCELERATION VS TIME	B- 77
73	MID REAR OF LEFT REAR DOOR (Y) VELOCITY VS TIME	B- 78
74	LEFT REAR DOOR UPPER CENTERLINE (Y) ACCELERATION VS TIME	B- 79
75	LEFT REAR DOOR UPPER CENTERLINE (Y) VELOCITY VS TIME	B- 80
76	LOWER B-POST (Y) ACCELERATION VS TIME	B- 81
77	LOWER B-POST (Y) VELOCITY VS TIME	B- 82
78	UPPER B-POST (Y) ACCELERATION VS TIME	B- 83
79	UPPER B-POST (Y) VELOCITY VS TIME	B- 84
80	LOWER A-POST (Y) ACCELERATION VS TIME	B- 85

TEST VEHICLE INSTRUMENTATION PLOTS
ACCELERATION DATA - FILTER CLASS 60
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
81	LOWER A-POST (Y) VELOCITY VS TIME	B- 86
82	UPPER A-POST (Y) ACCELERATION VS TIME	B- 87
83	UPPER A-POST (Y) VELOCITY VS TIME	B- 88
84	FRONT SEAT TRACK (Y) ACCELERATION VS TIME	B- 89
85	FRONT SEAT TRACK (Y) VELOCITY VS TIME	B- 90
86	REAR SEAT TRACK (Y) ACCELERATION VS TIME	B- 91
87	REAR SEAT TRACK (Y) VELOCITY VS TIME	B- 92
88	VEHICLE CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 93
89	VEHICLE CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 94
90	VEHICLE CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 95
91	VEHICLE CENTER OF GRAVITY (Y) VELOCITY ACCELERATION VS TIME	B- 96
92	VEHICLE CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 97
93	VEHICLE CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 98
94	VEHICLE CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 99

MDB INSTRUMENTATION PLOTS
ACCELERATION DATA - FILTER CLASS 60
INTEGRATION DATA - FILTER CLASS 180

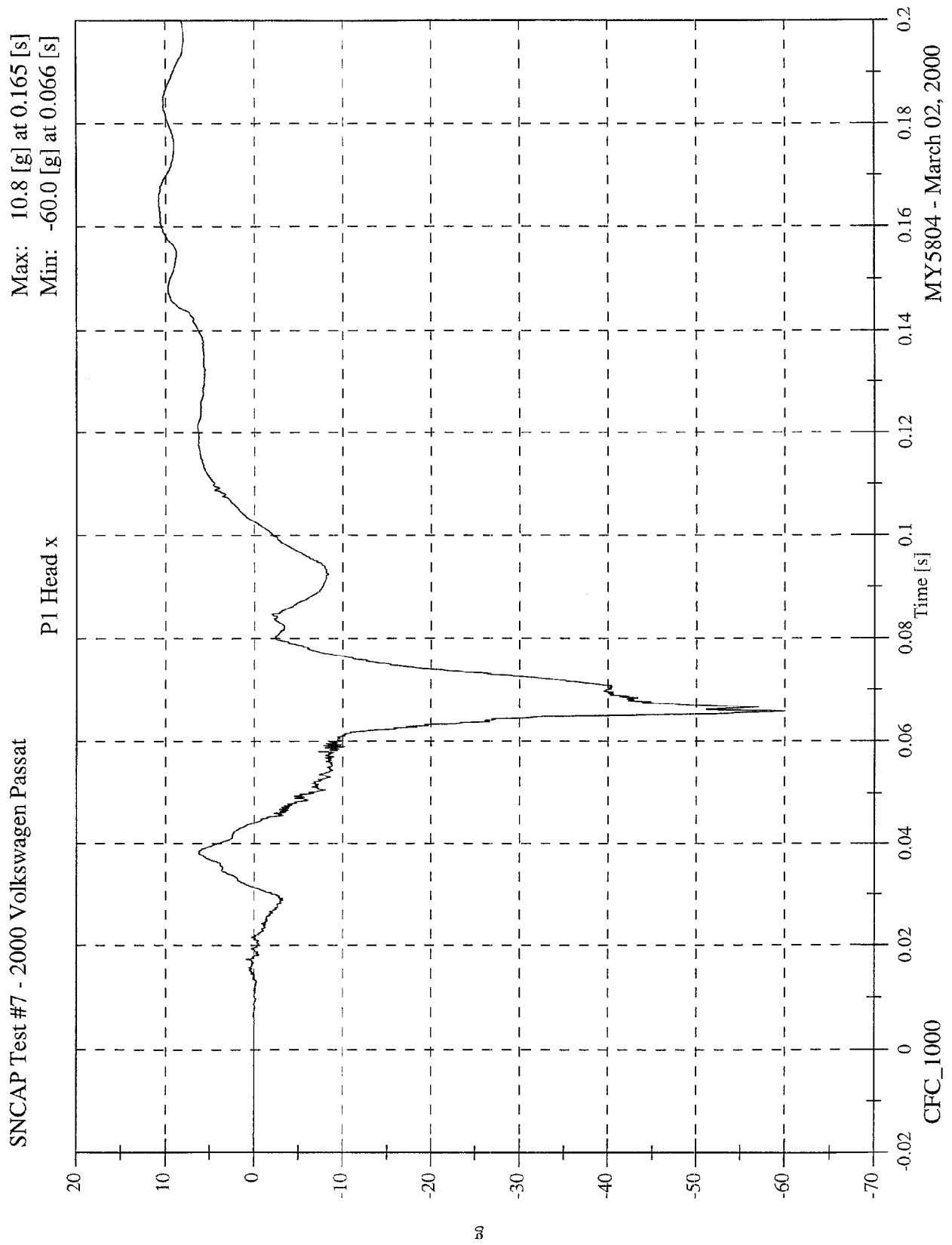
<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
95	MDB CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 100
96	MDB CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 101
97	MDB CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 102
98	MDB CENTER OF GRAVITY (Y) VELOCITY VS TIME	B- 103
99	MDB CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 104
100	MDB CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 105
101	MDB CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 106
102	MDB REAR (X) ACCELERATION VS TIME	B- 107
103	MDB REAR (X) VELOCITY VS TIME	B- 108
104	MDB REAR (Y) ACCELERATION VS TIME	B- 109
105	MDB REAR (Y) VELOCITY VS TIME	B- 110

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS (REDUNDANT)
ACCELERATION DATA - FILTER CLASS 1000, LOWER SPINE - FILTER CLASS 180
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
106	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 111
107	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 112
108	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 113
109	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 114
110	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 115
111	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 116
112	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 117
113	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 118
114	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 119
115	PASSENGER UPPER RIB (Y) VELOCITY VS TIME	B- 120
116	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 121
117	PASSENGER LOWER RIB (Y) VELOCITY VS TIME	B- 122
118	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 123
119	PASSENGER LOWER SPINE (Y) VELOCITY VS TIME	B- 124
120	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 125
121	PASSENGER PELVIC (Y) VELOCITY VS TIME	B- 126

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS (REDUNDANT)
ACCELERATION DATA - FIR FILTERED

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
122	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 127
123	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 128
124	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 129
125	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 130
126	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 131
127	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 132
128	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 133
129	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 134



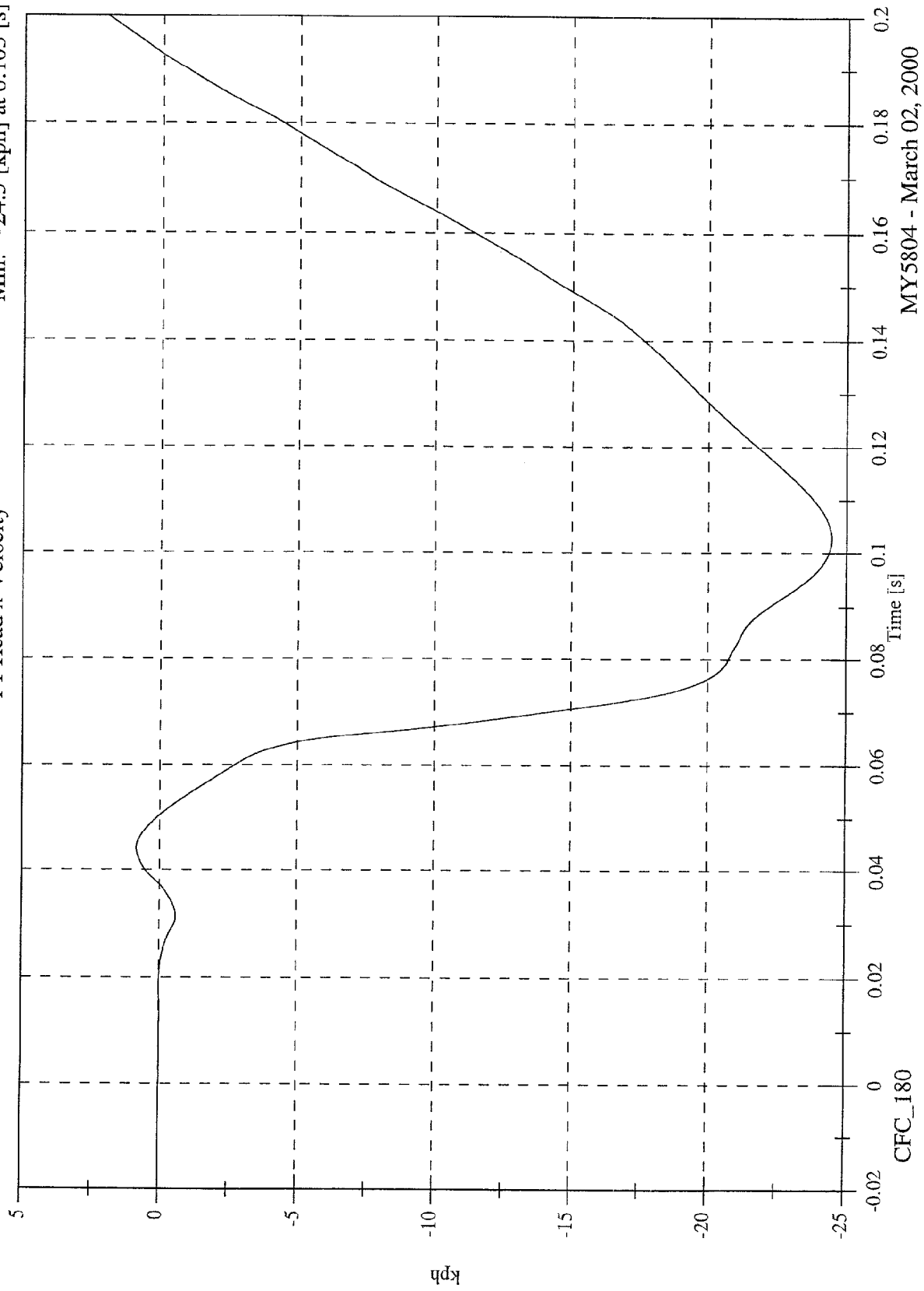
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 2.0 [kph] at 0.200 [s]

Min: -24.5 [kph] at 0.103 [s]

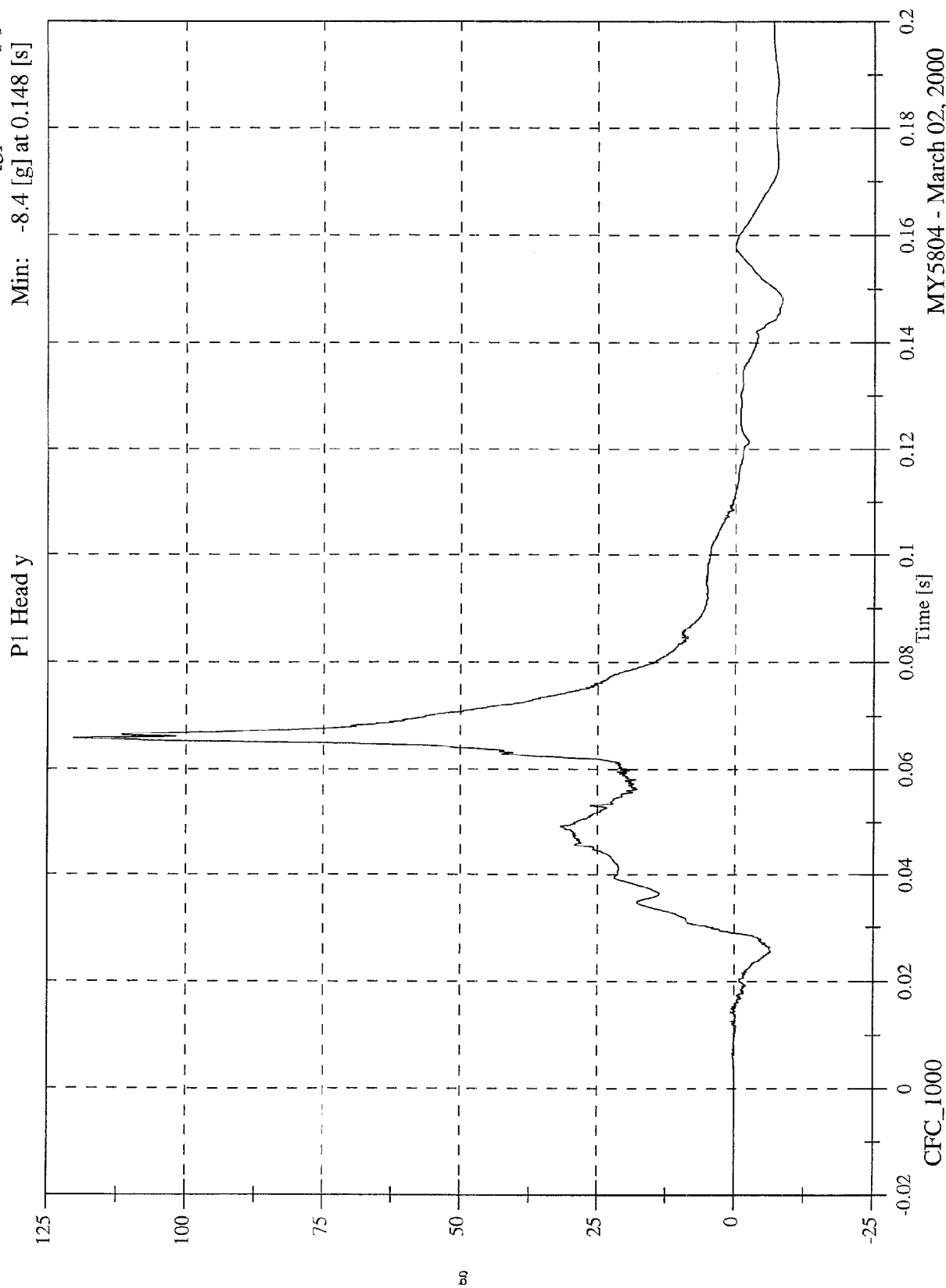
P1 Head x Velocity



MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

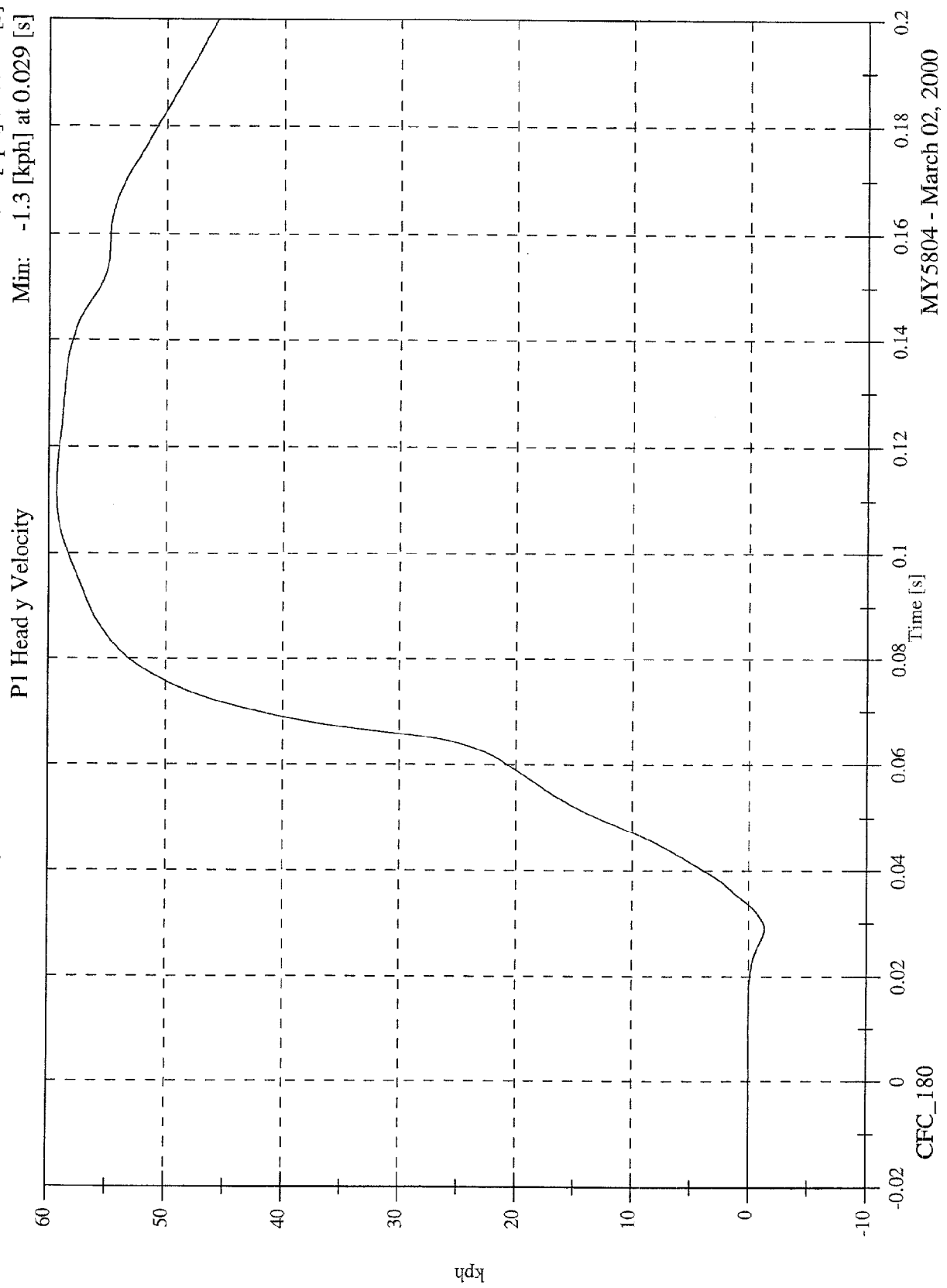
Max: 120.4 [g] at 0.066 [s]
 Min: -8.4 [g] at 0.148 [s]



MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

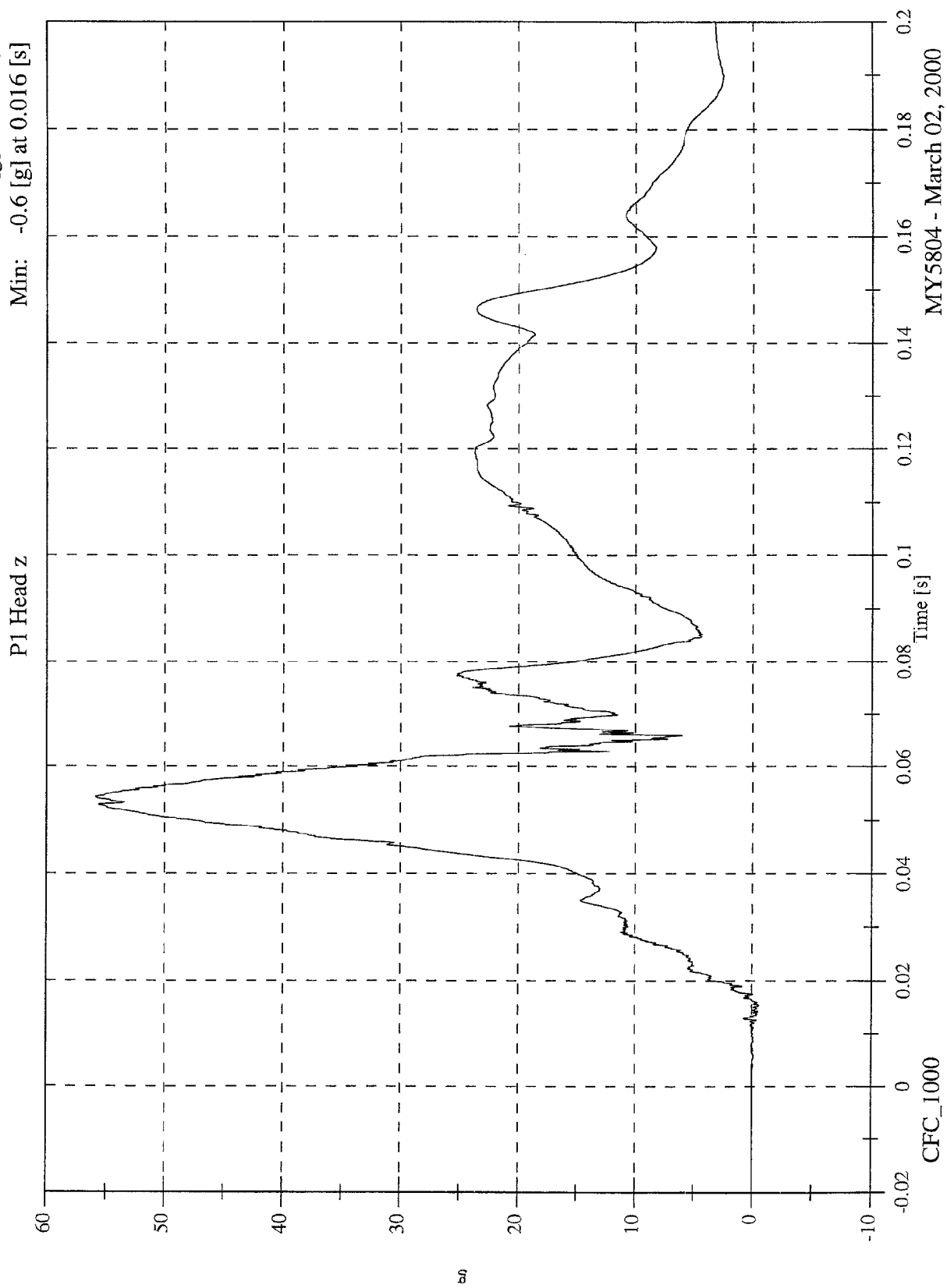
Max: 59.3 [kph] at 0.112 [s]
Min: -1.3 [kph] at 0.029 [s]



MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

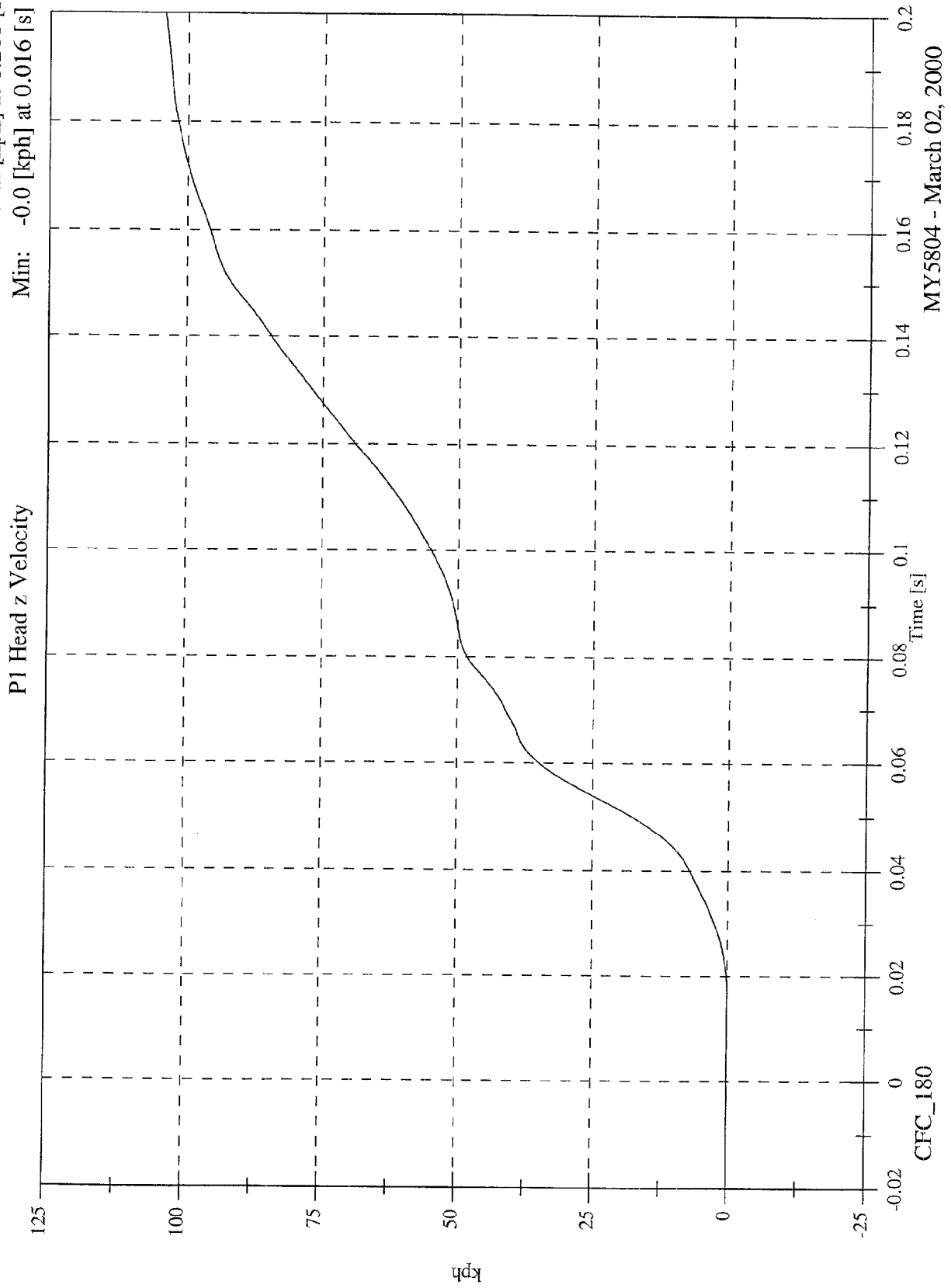
Max: 55.9 [g] at 0.054 [s]
 Min: -0.6 [g] at 0.016 [s]



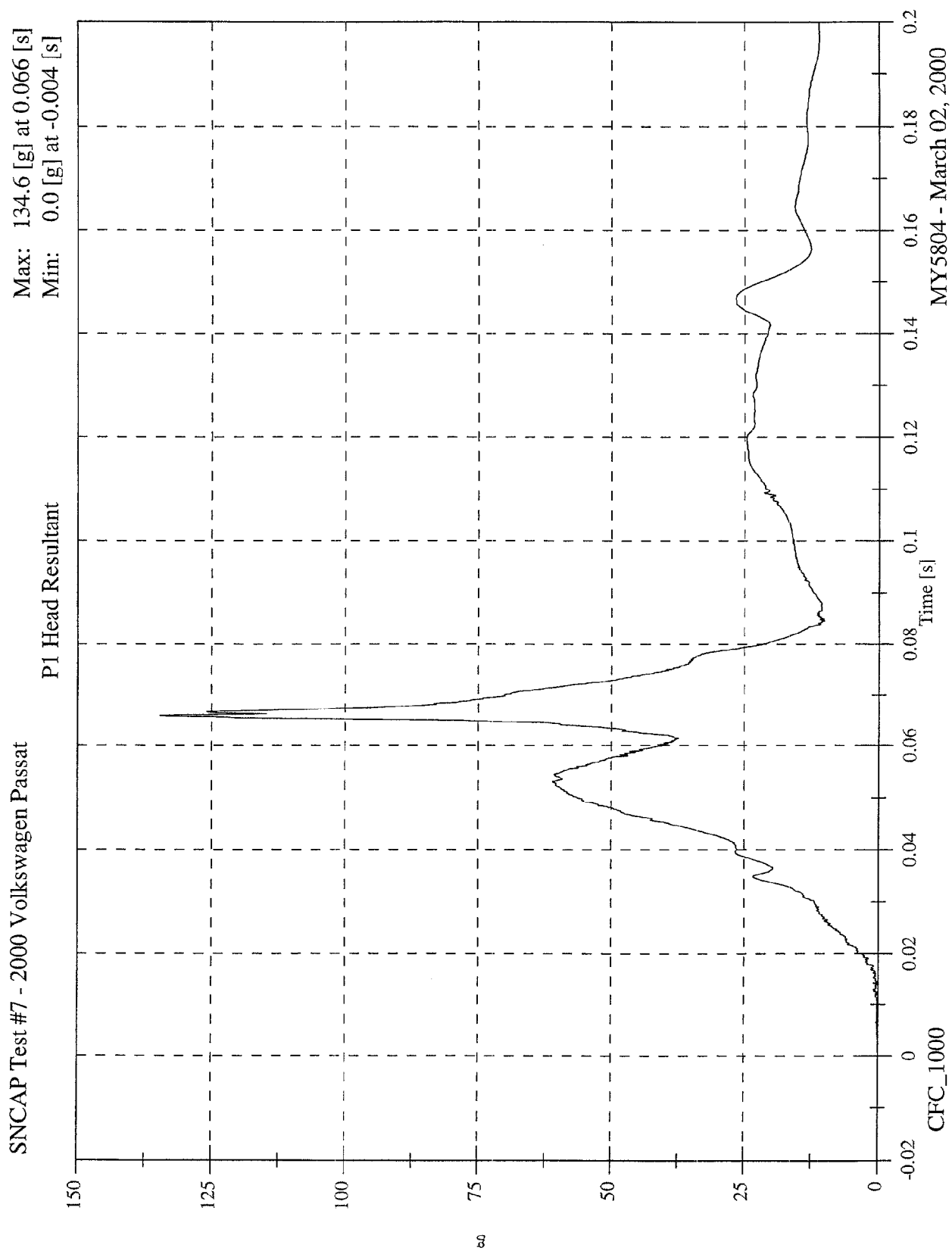
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 104.2 [kph] at 0.200 [s]
Min: -0.0 [kph] at 0.016 [s]

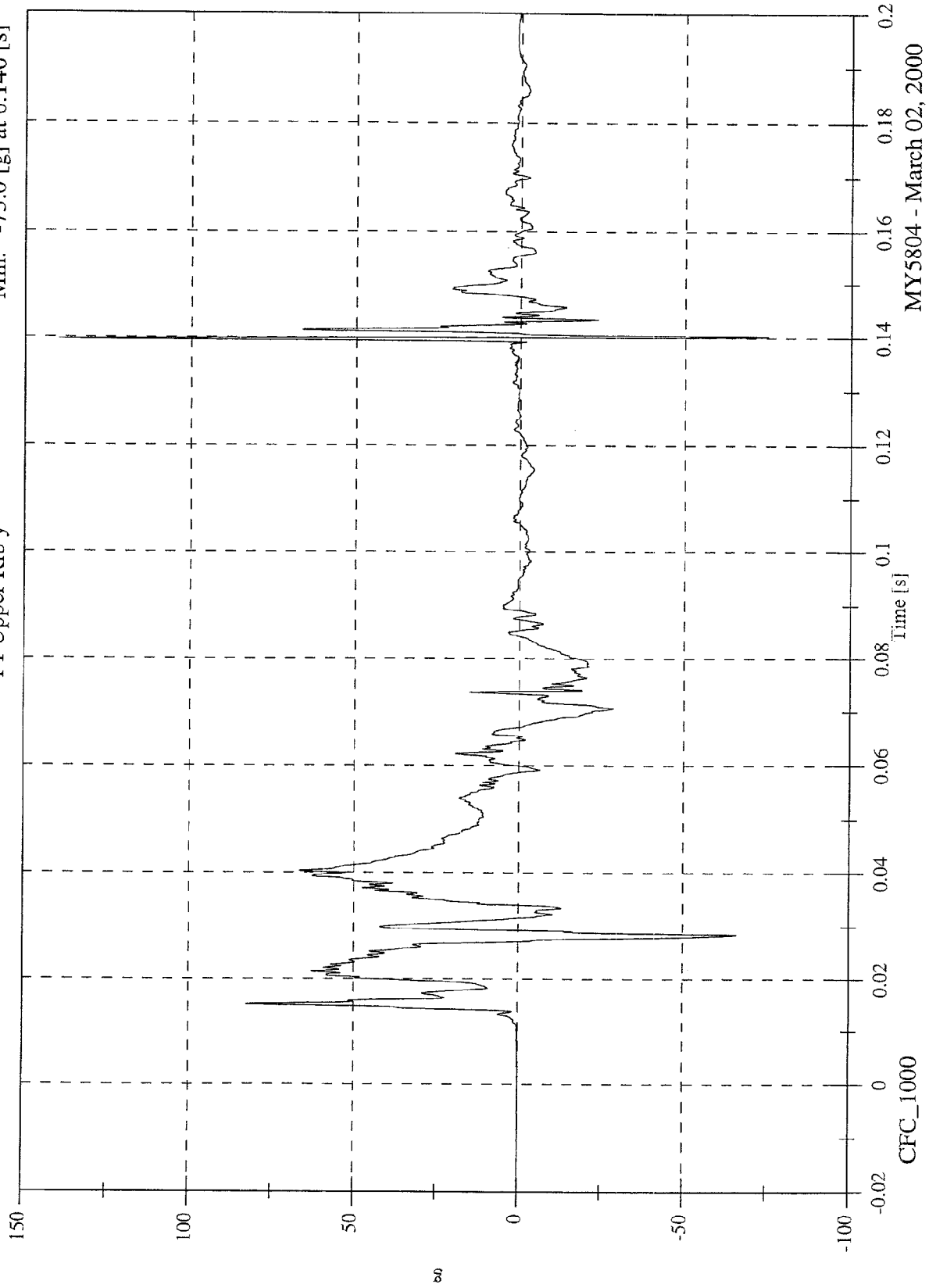


MY5804 - March 02, 2000



SNCAP Test #7 - 2000 Volkswagen Passat

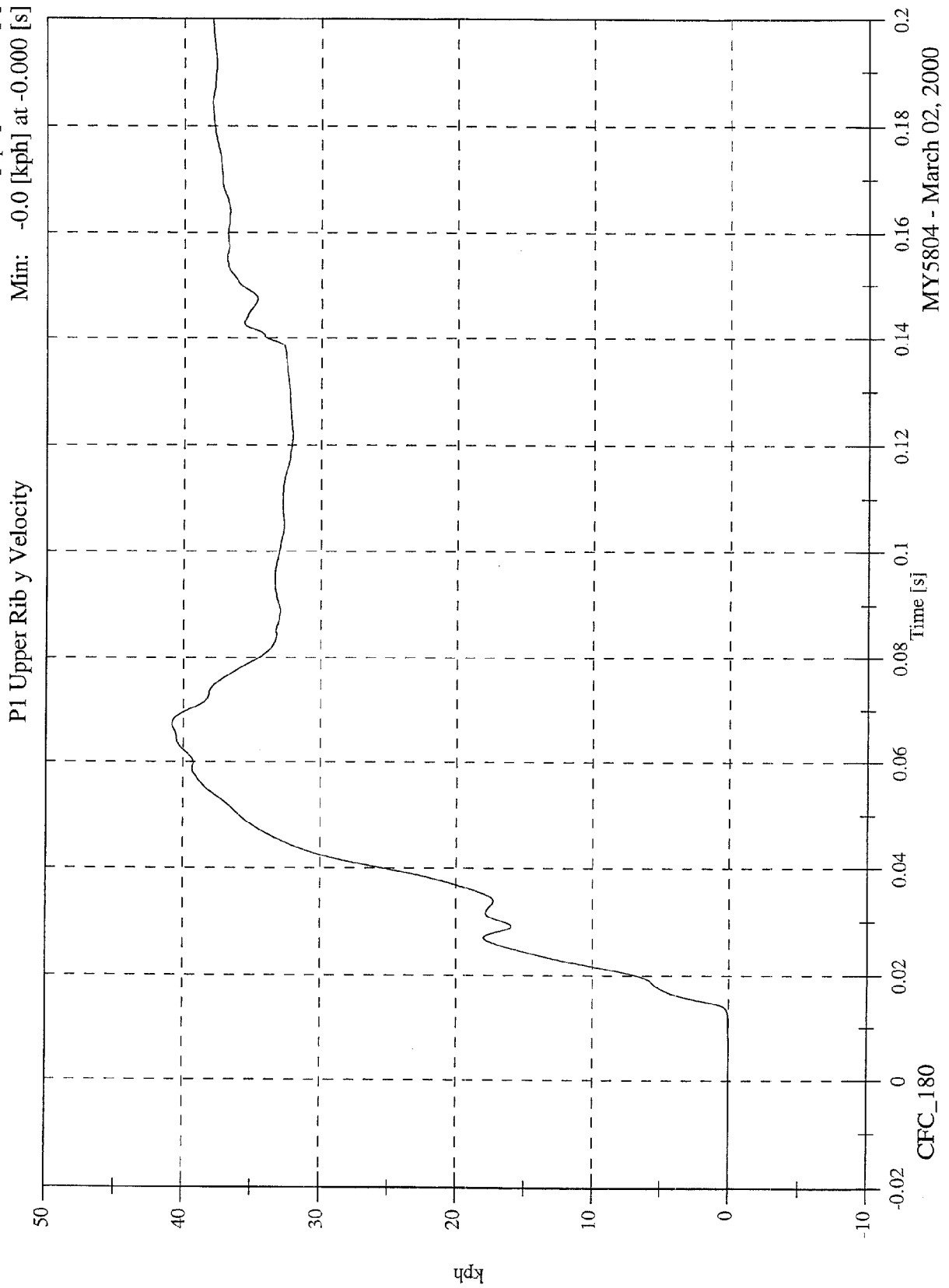
P1 Upper Rib y
Max: 139.7 [g] at 0.140 [s]
Min: -75.0 [g] at 0.140 [s]



MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 40.8 [kph] at 0.067 [s]
Min: -0.0 [kph] at -0.000 [s]

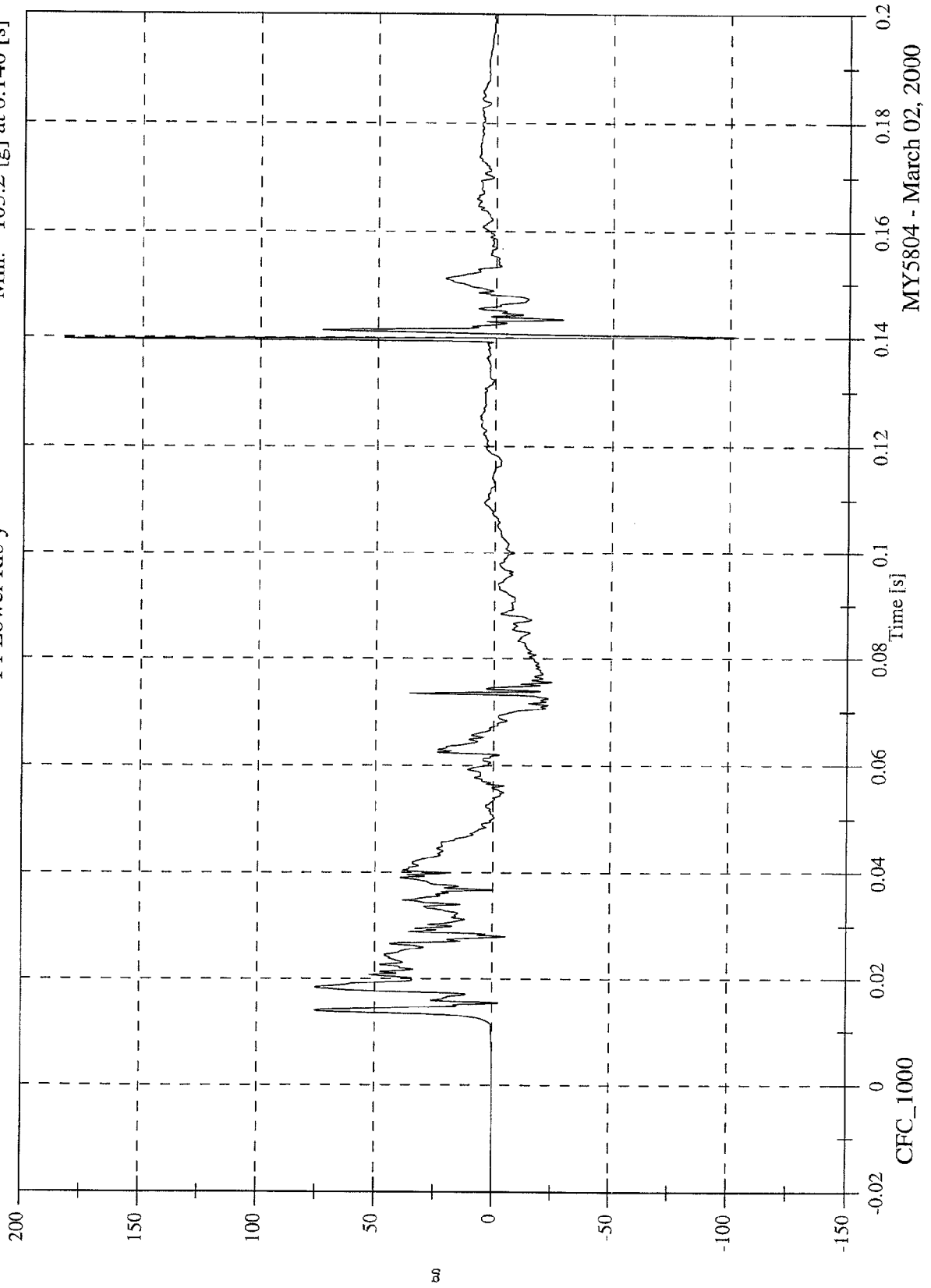


MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

P1 Lower Rib y

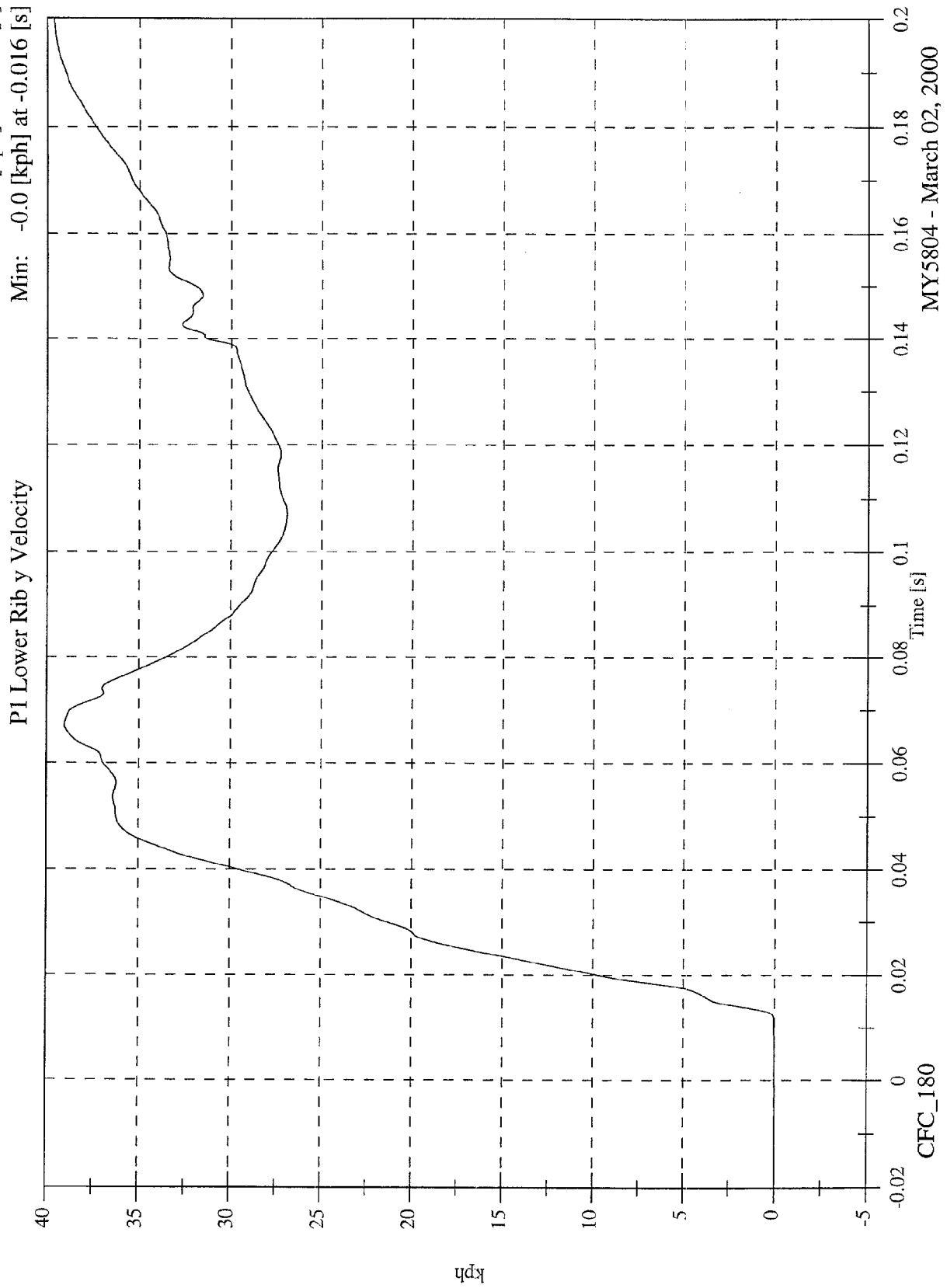
Max: 182.9 [g] at 0.140 [s]
Min: -103.2 [g] at 0.140 [s]



MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

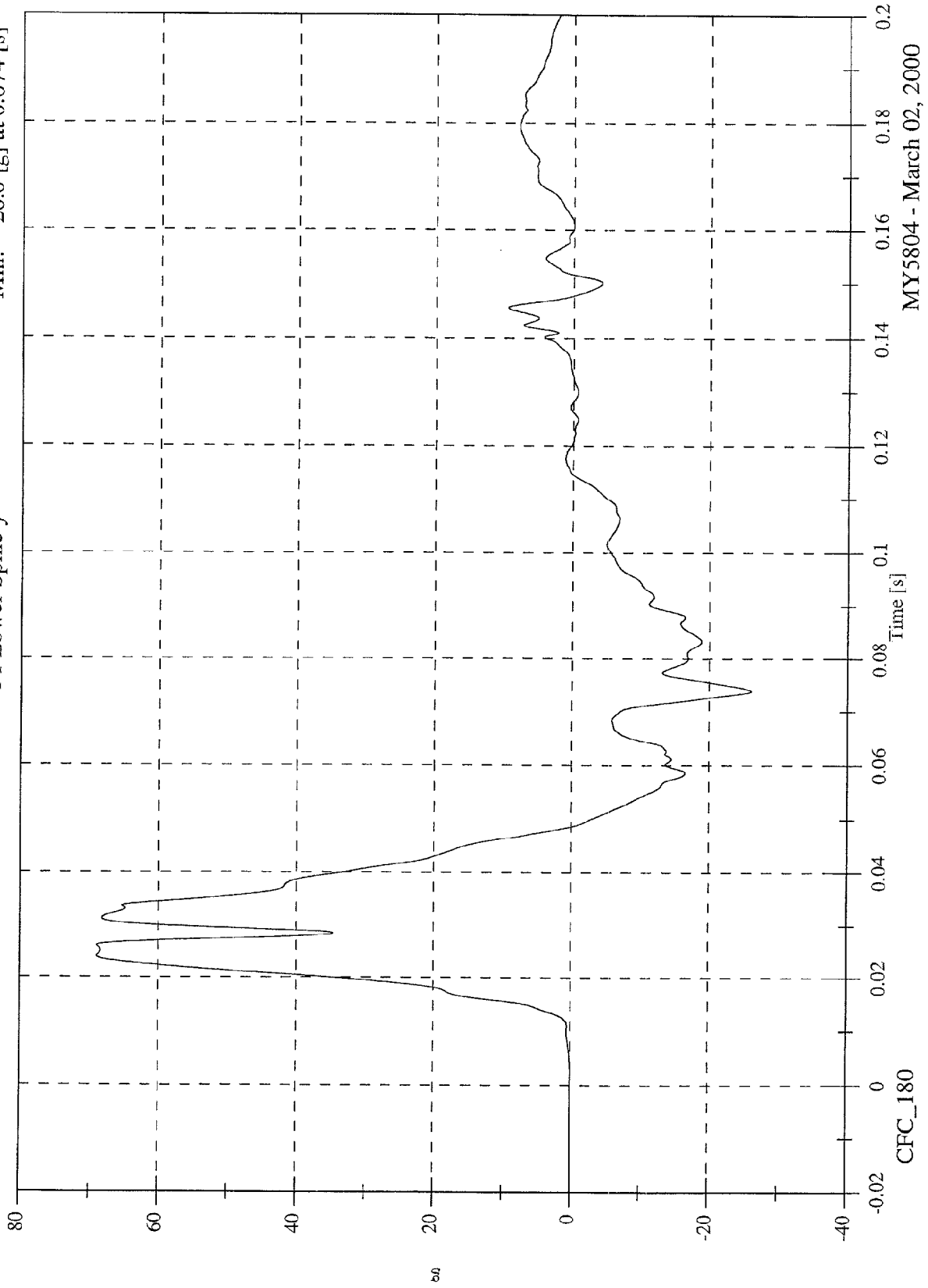
Max: 39.6 [kph] at 0.200 [s]
Min: -0.0 [kph] at -0.016 [s]



SNCAP Test #7 - 2000 Volkswagen Passat

Max: 69.0 [g] at 0.024 [s]
Min: -26.0 [g] at 0.074 [s]

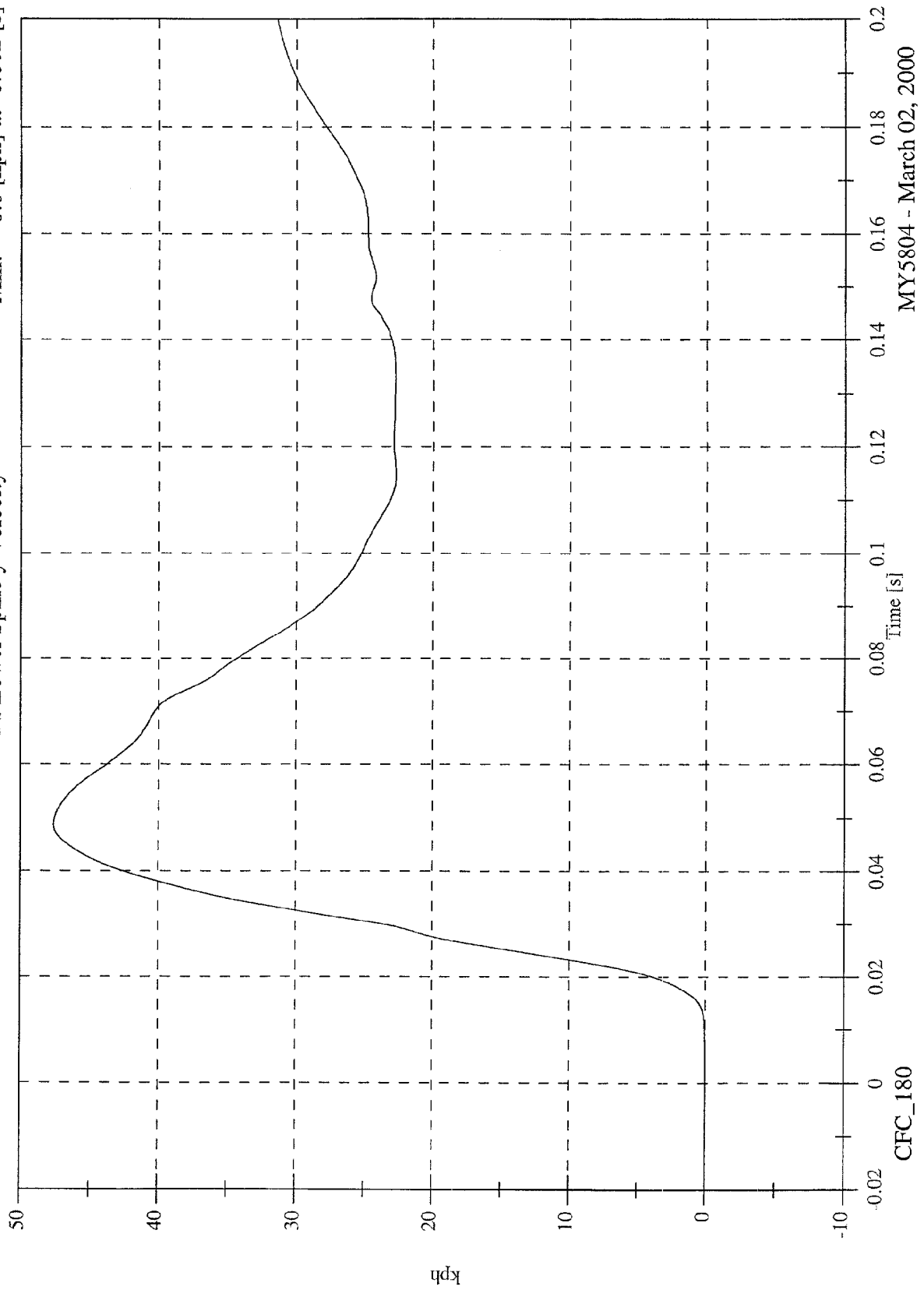
P1 Lower Spine y



SNCAP Test #7 - 2000 Volkswagen Passat

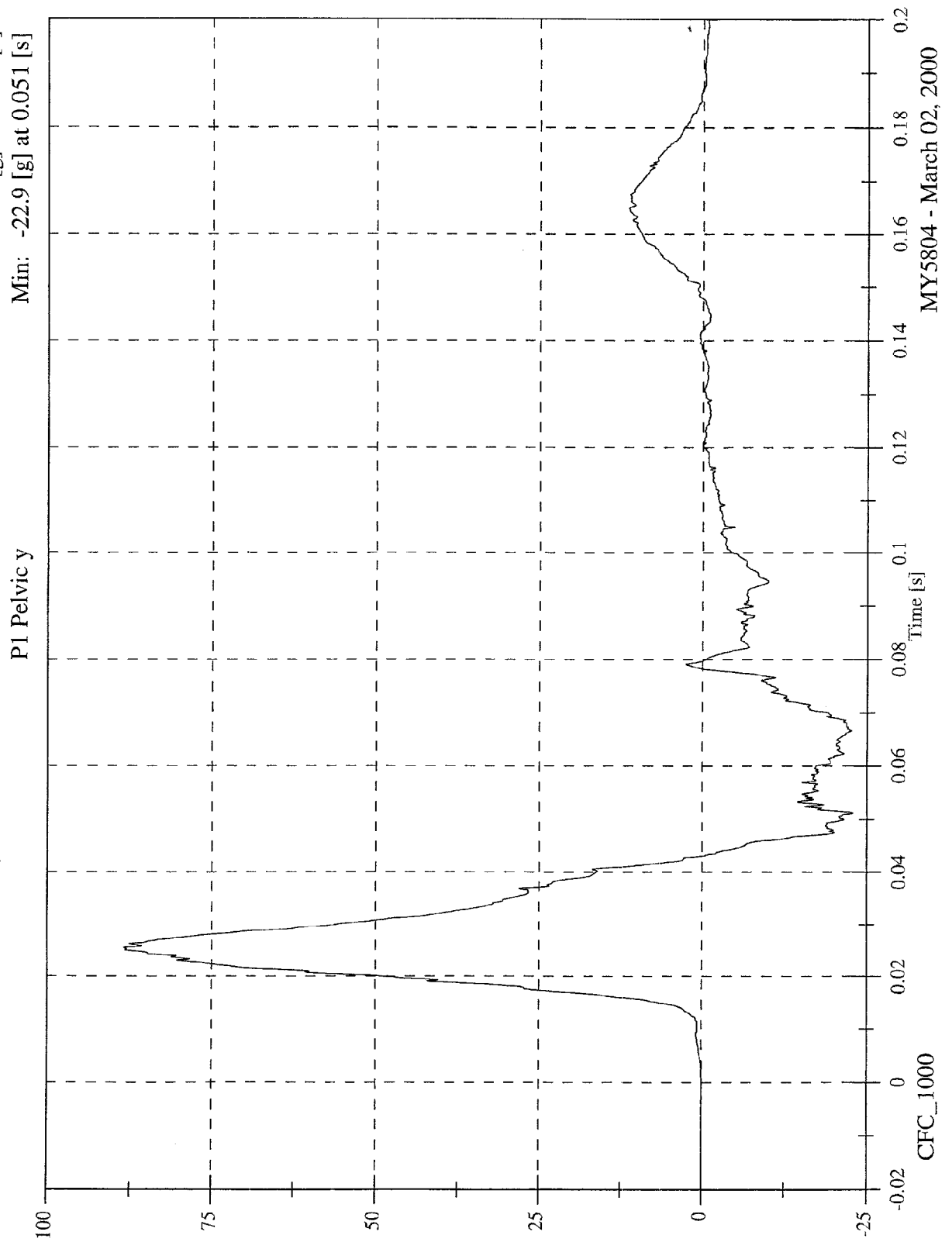
Max: 47.6 [kph] at 0.049 [s]
Min: -0.0 [kph] at -0.002 [s]

P1 Lower Spine y Velocity



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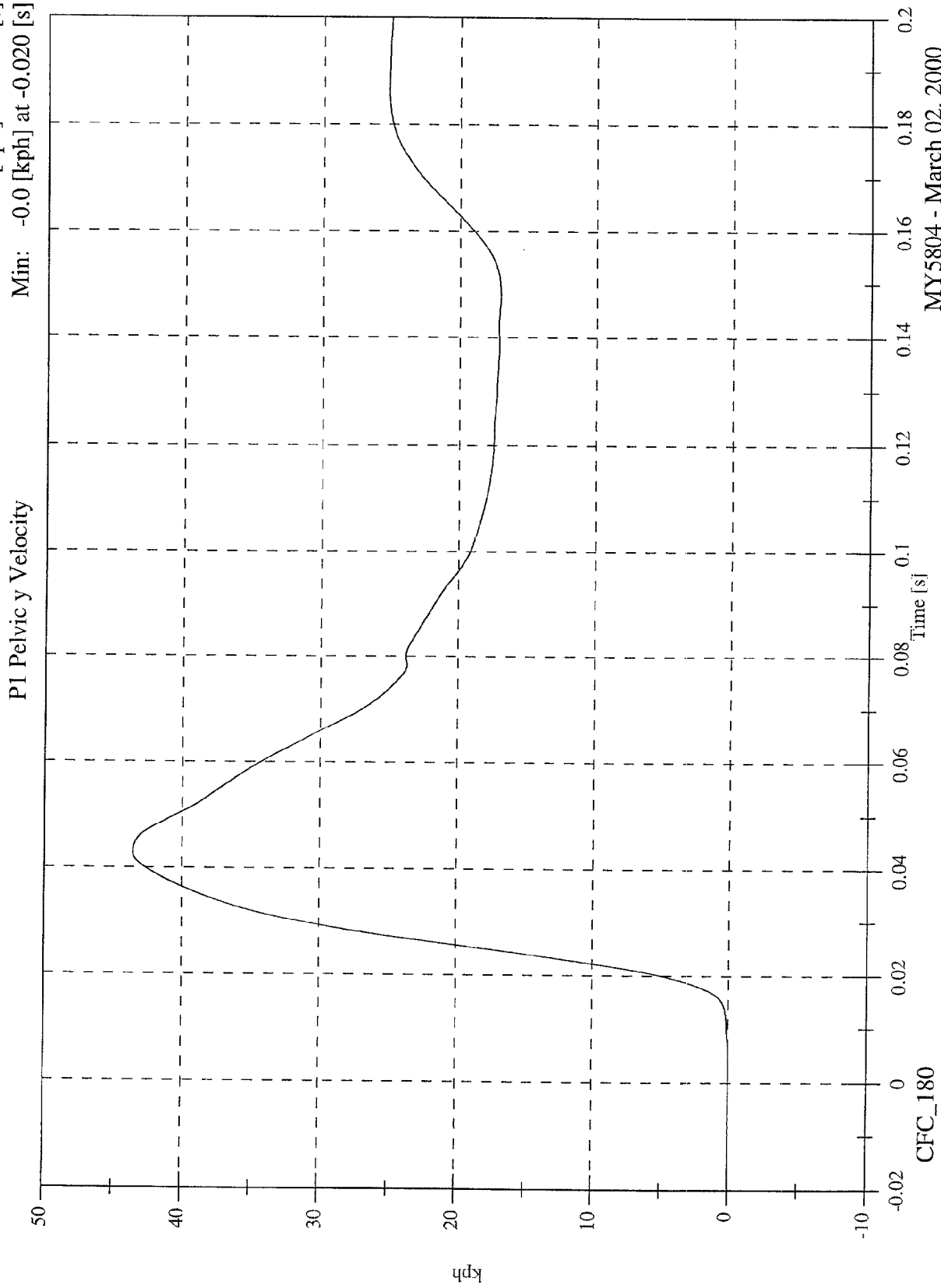
SNCAP Test #7 - 2000 Volkswagen Passat



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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 43.6 [kph] at 0.043 [s]
Min: -0.0 [kph] at -0.020 [s]



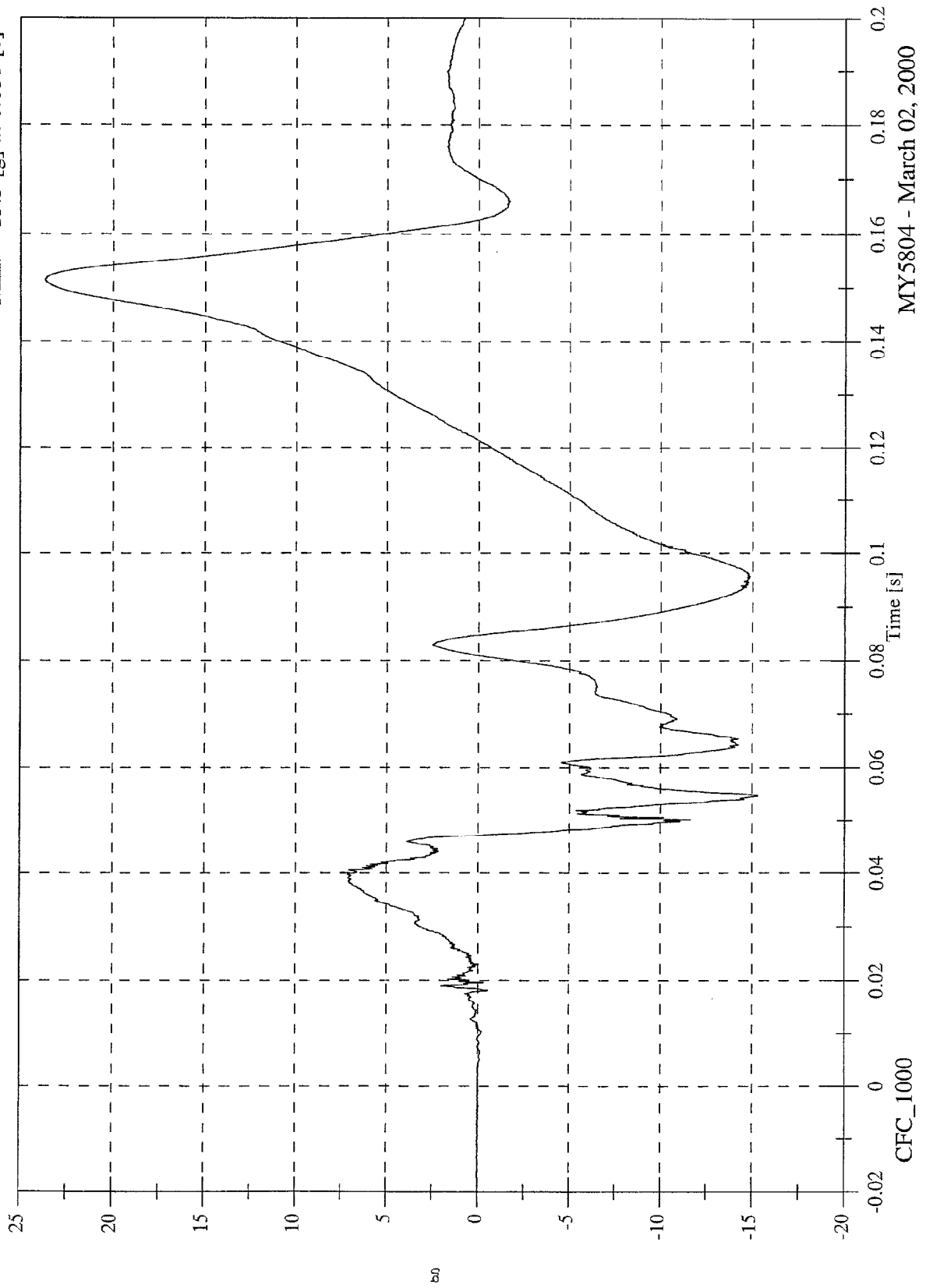
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 23.7 [g] at 0.151 [s]

Min: -15.3 [g] at 0.055 [s]

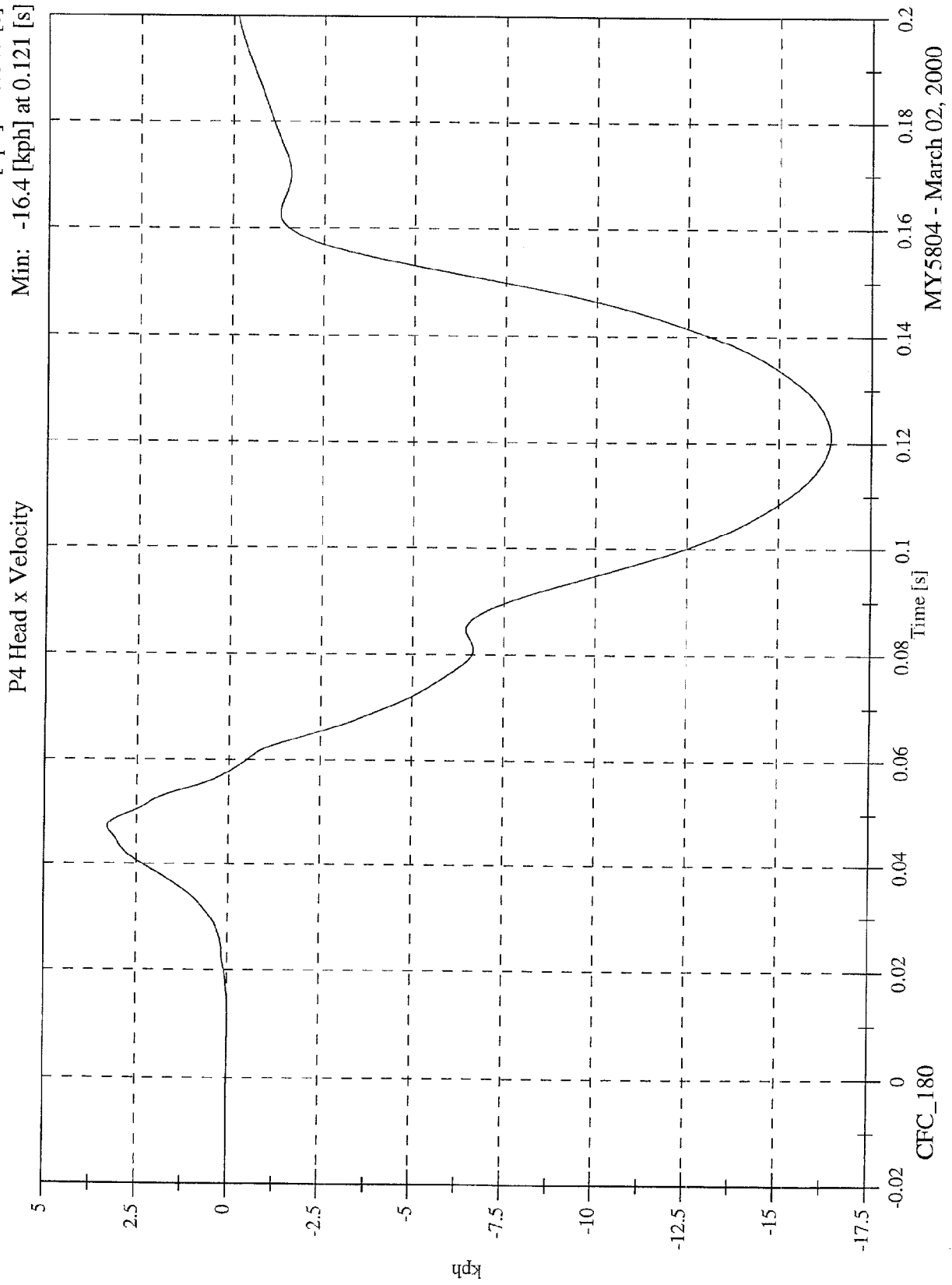
P4 Head x



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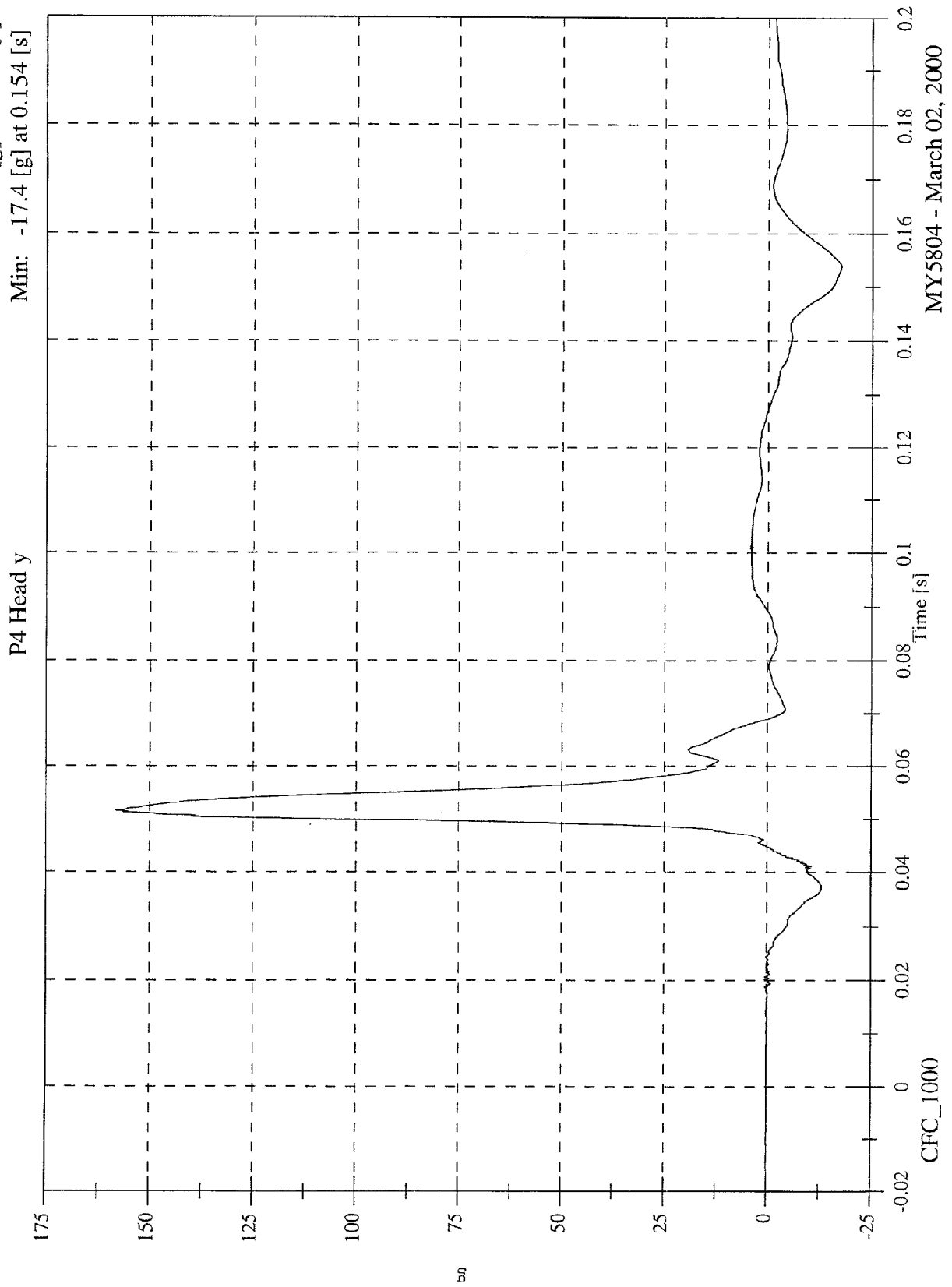
SNCAP Test #7 - 2000 Volkswagen Passat

Max: 3.3 [kph] at 0.047 [s]
Min: -16.4 [kph] at 0.121 [s]



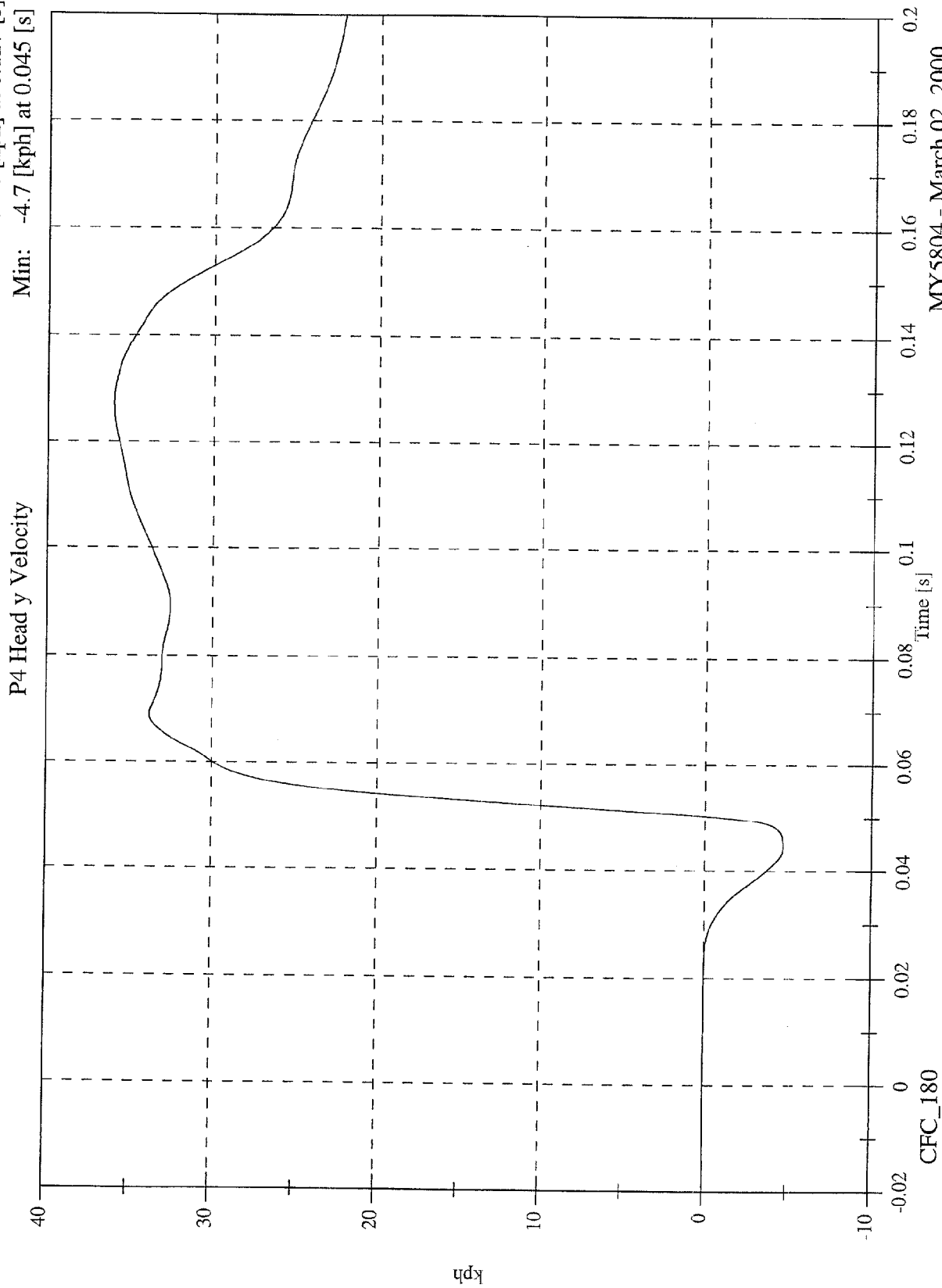
SNCAP Test #7 - 2000 Volkswagen Passat

Max: 158.4 [g] at 0.052 [s]
Min: -17.4 [g] at 0.154 [s]



SNCAP Test #7 - 2000 Volkswagen Passat

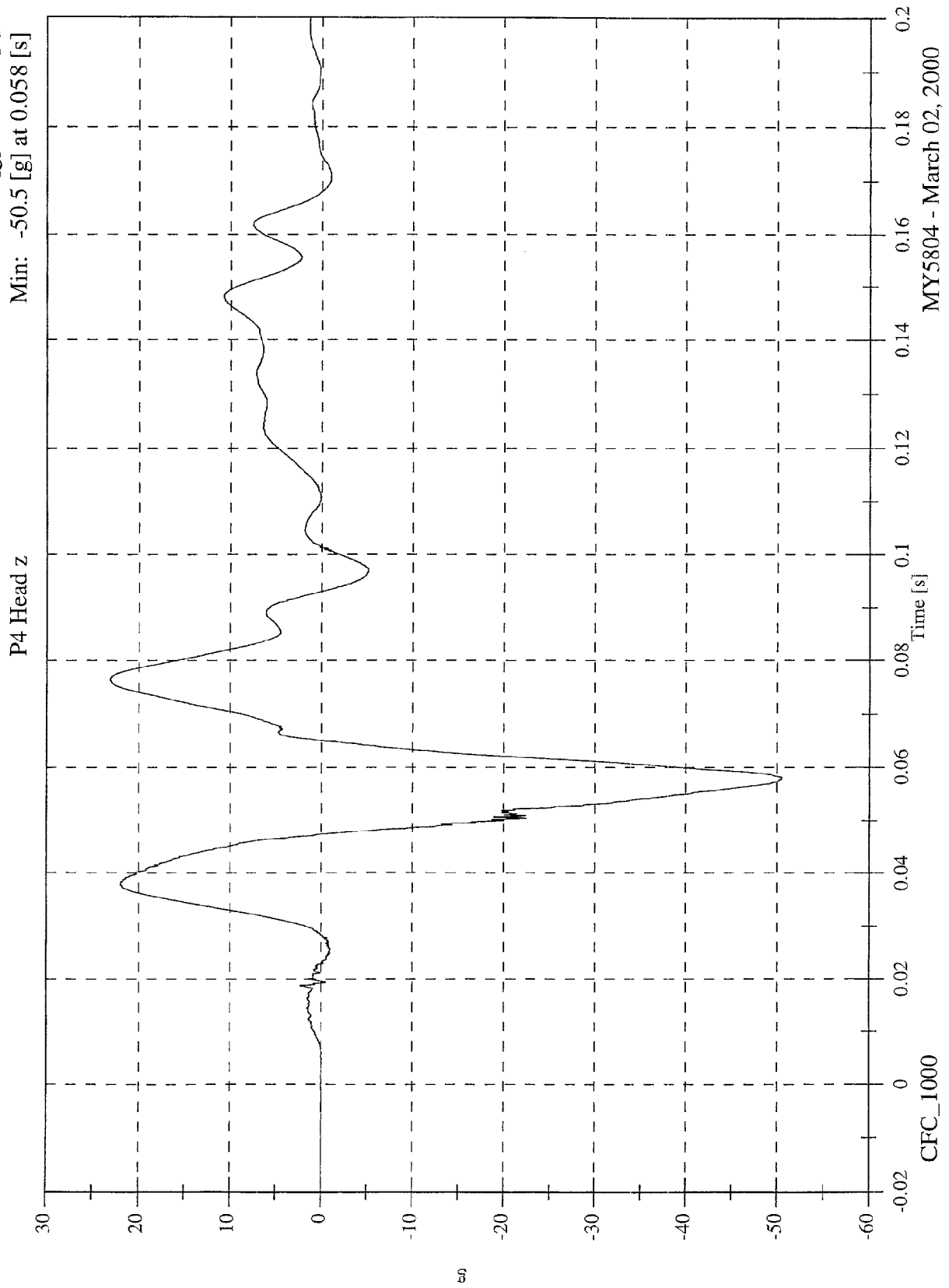
Max: 36.0 [kph] at 0.127 [s]
 Min: -4.7 [kph] at 0.045 [s]



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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 23.1 [g] at 0.076 [s]
Min: -50.5 [g] at 0.058 [s]

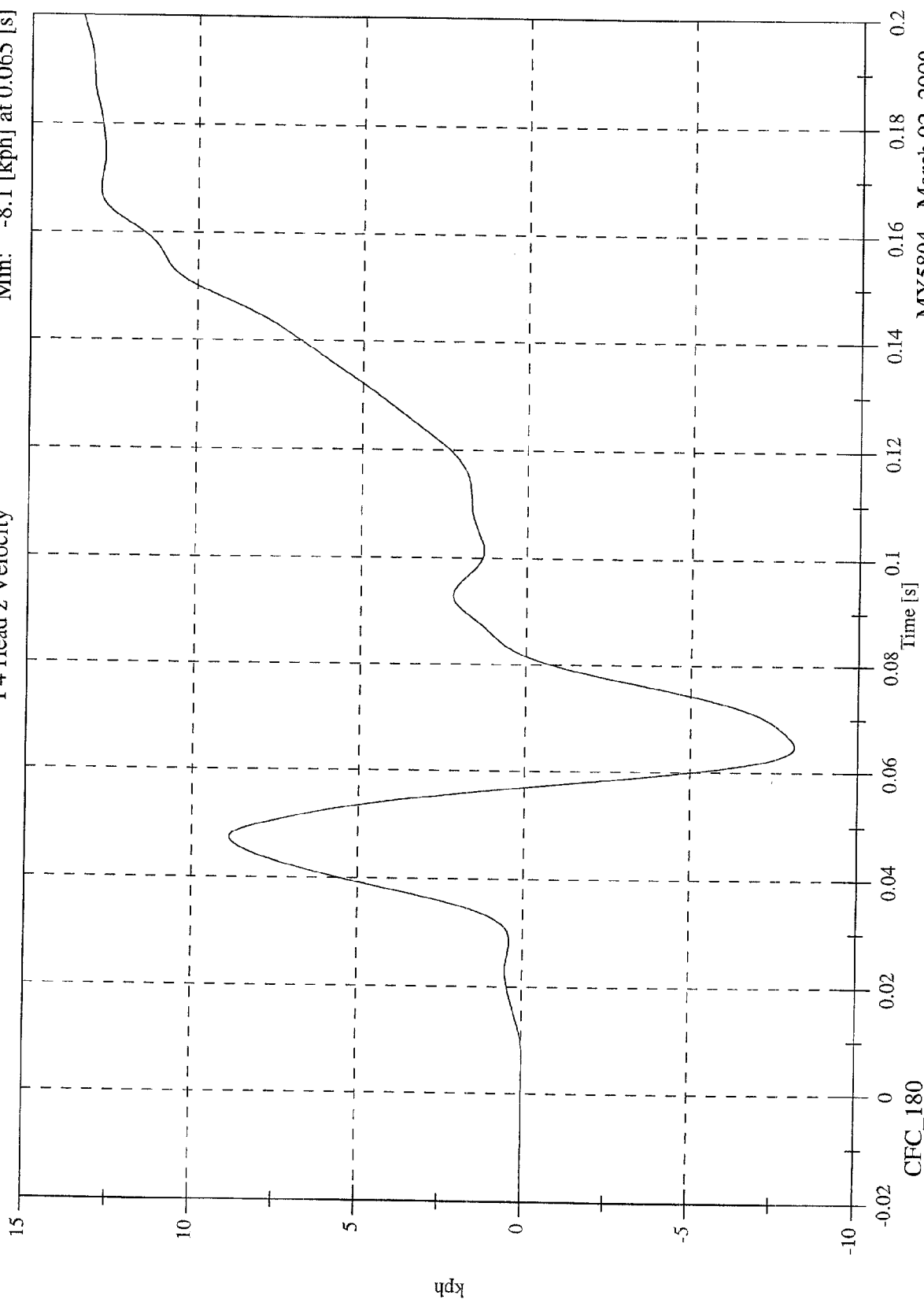


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 13.5 [kph] at 0.200 [s]
 Min: -8.1 [kph] at 0.065 [s]

P4 Head z Velocity



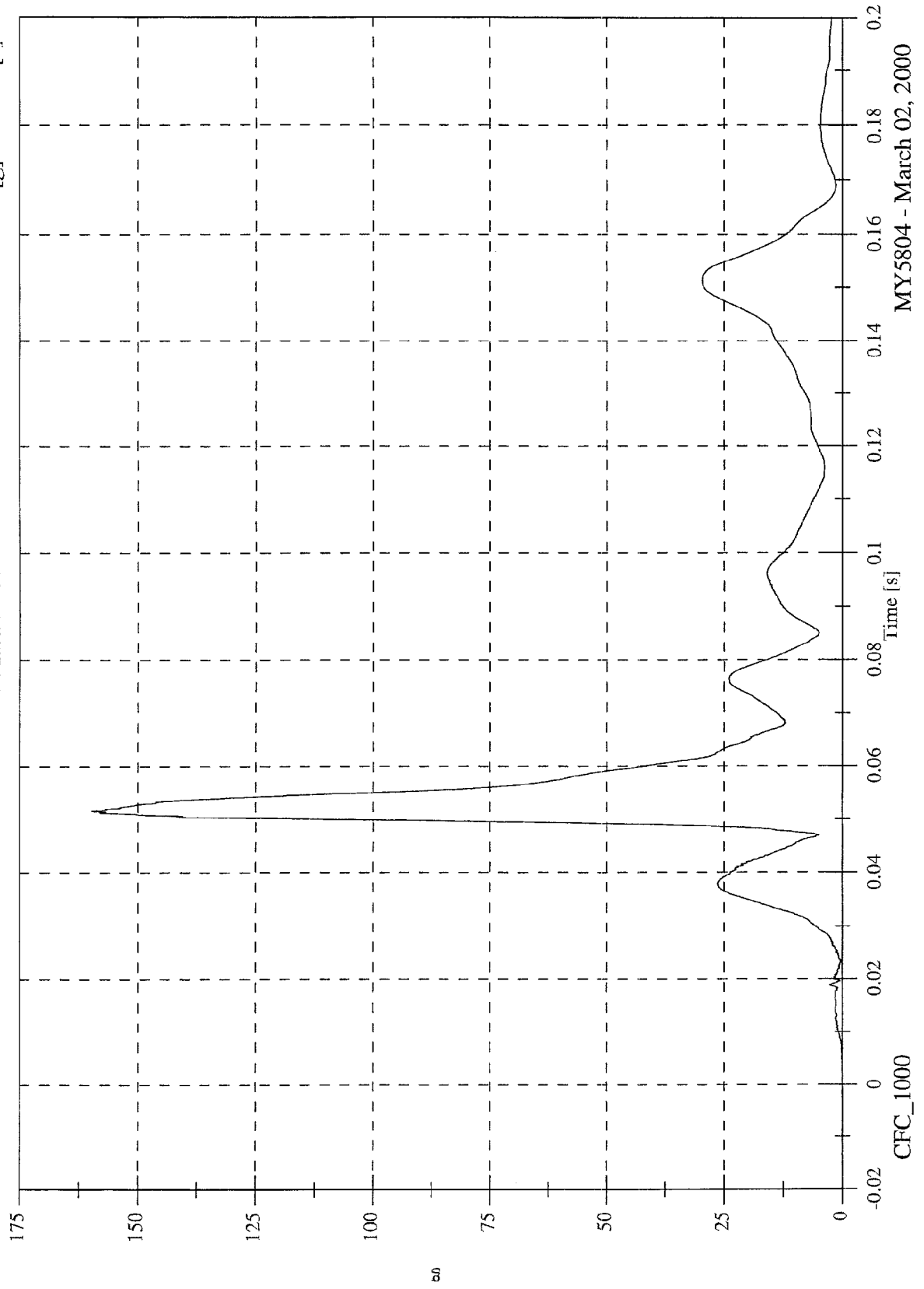
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 159.8 [g] at 0.052 [s]

Min: 0.0 [g] at 0.002 [s]

P4 Head Resultant

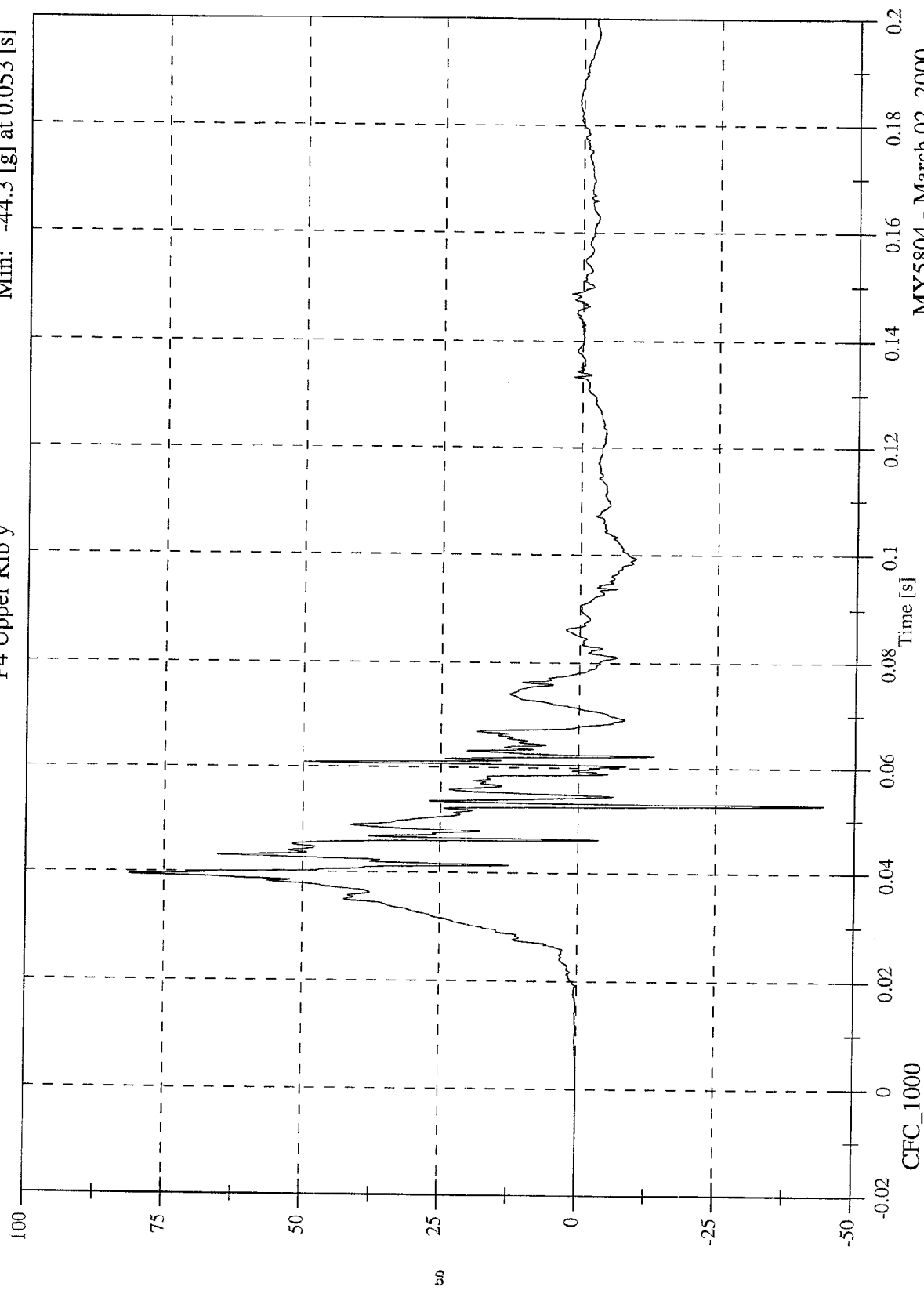


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 81.4 [g] at 0.039 [s]
 Min: -44.3 [g] at 0.053 [s]

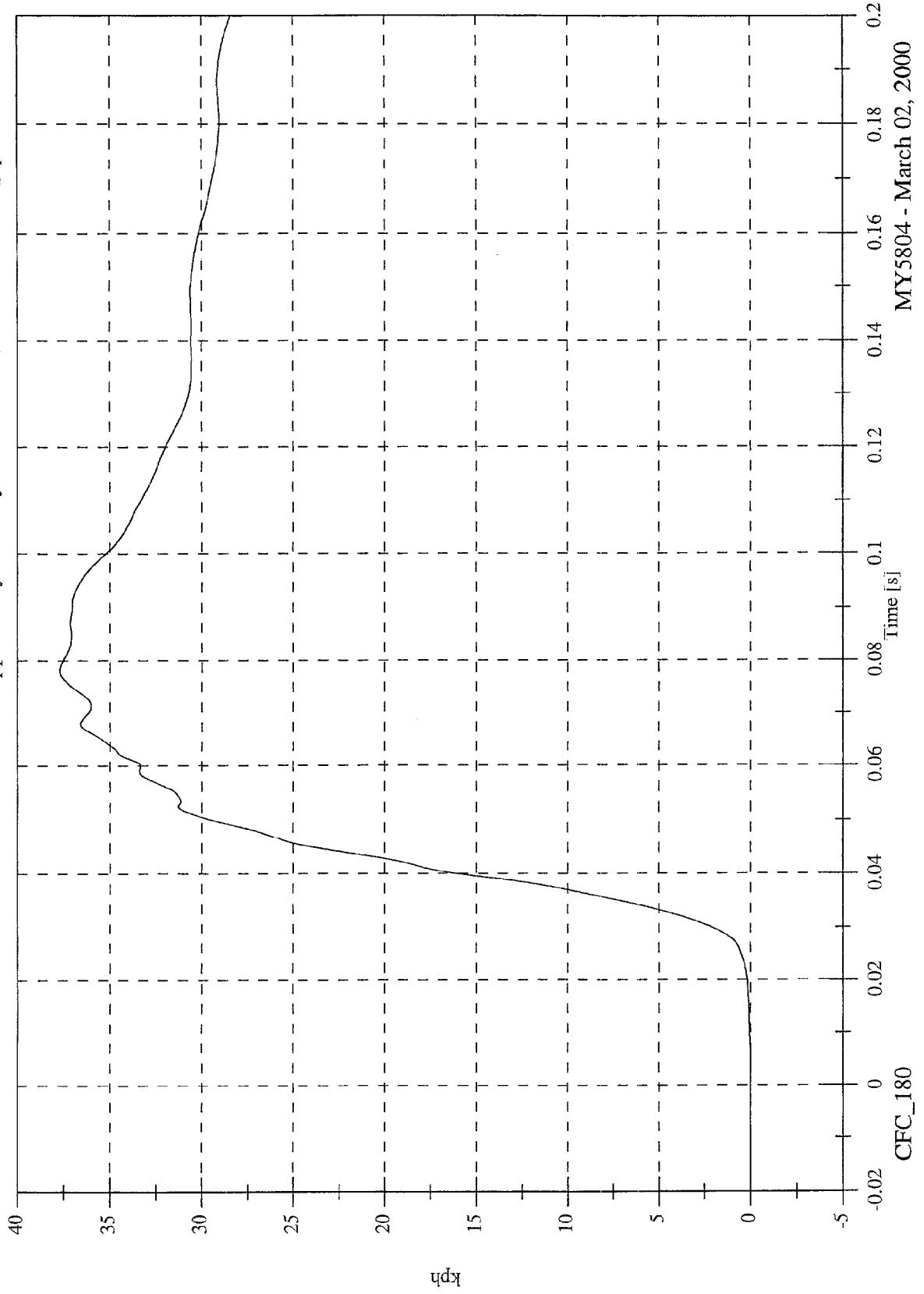
P4 Upper Rib y



SNCAP Test #7 - 2000 Volkswagen Passat

Max: 37.7 [kph] at 0.078 [s]
Min: -0.0 [kph] at -0.017 [s]

P4 Upper Rib y Velocity

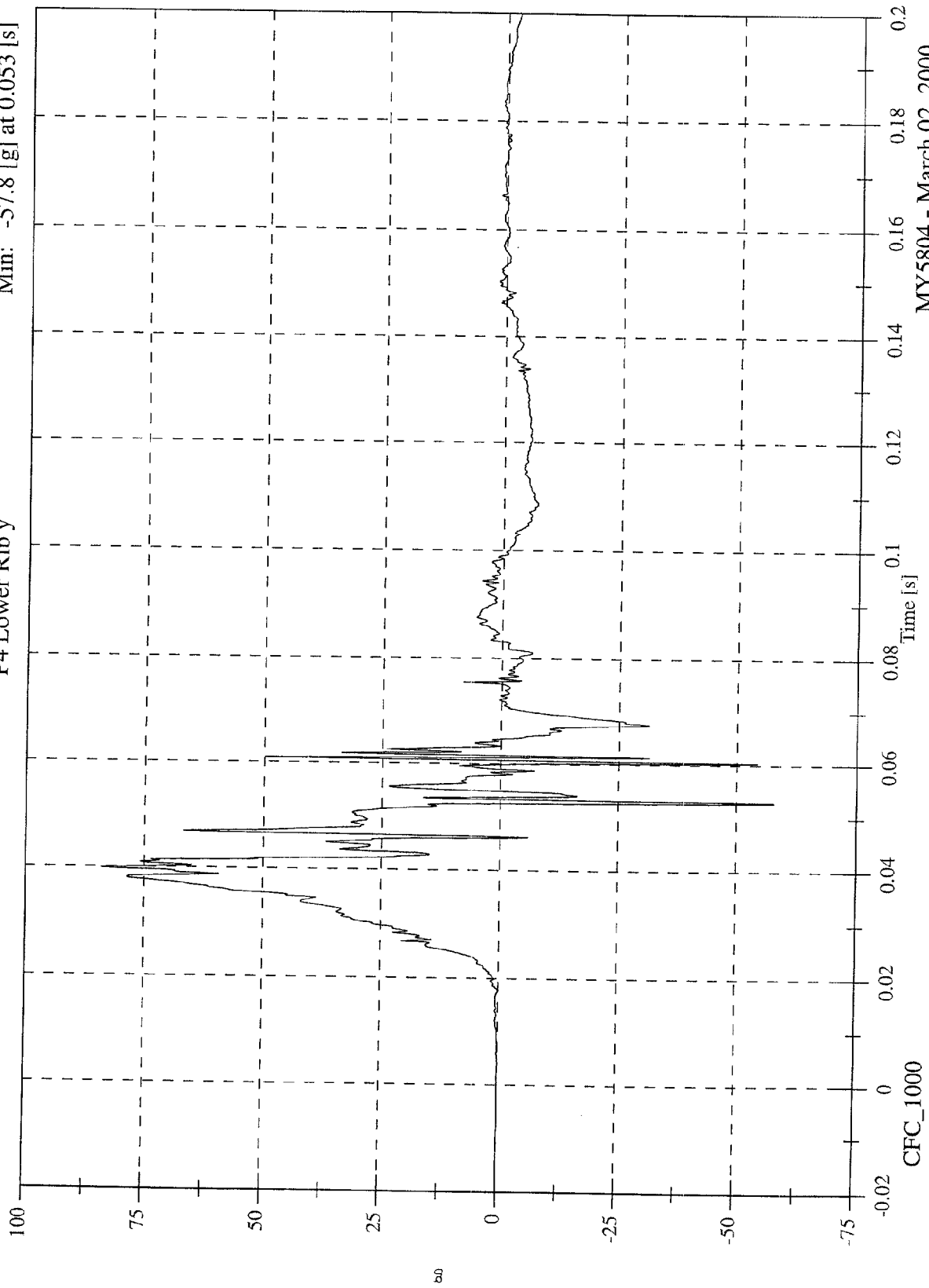


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SNCAP Test #7 - 2000 Volkswagen Passat

P4 Lower Rib y

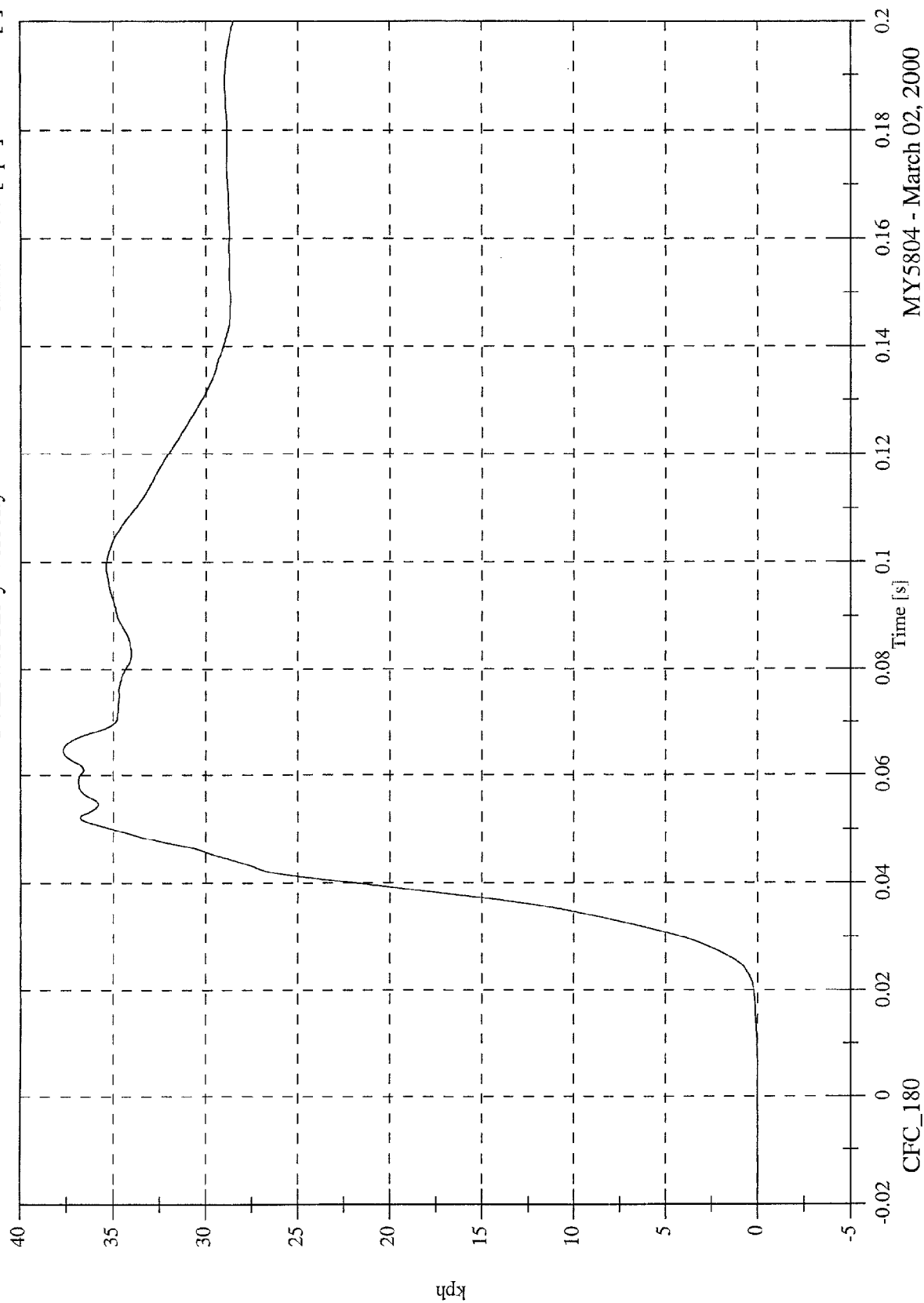
Max: 84.0 [g] at 0.040 [s]
Min: -57.8 [g] at 0.053 [s]



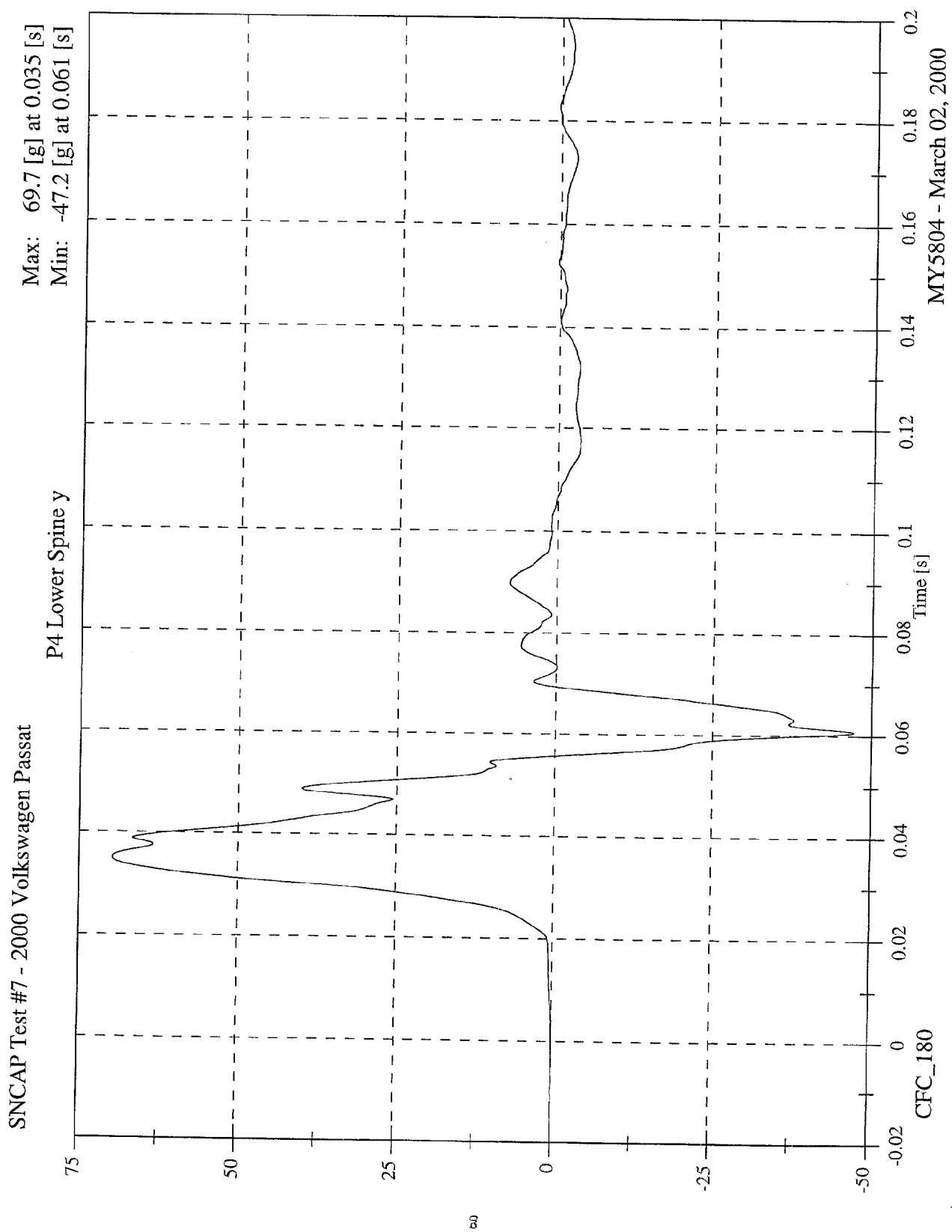
SNCAP Test #7 - 2000 Volkswagen Passat

Max: 37.7 [kph] at 0.065 [s]
Min: -0.0 [kph] at -0.020 [s]

P4 Lower Rib y Velocity



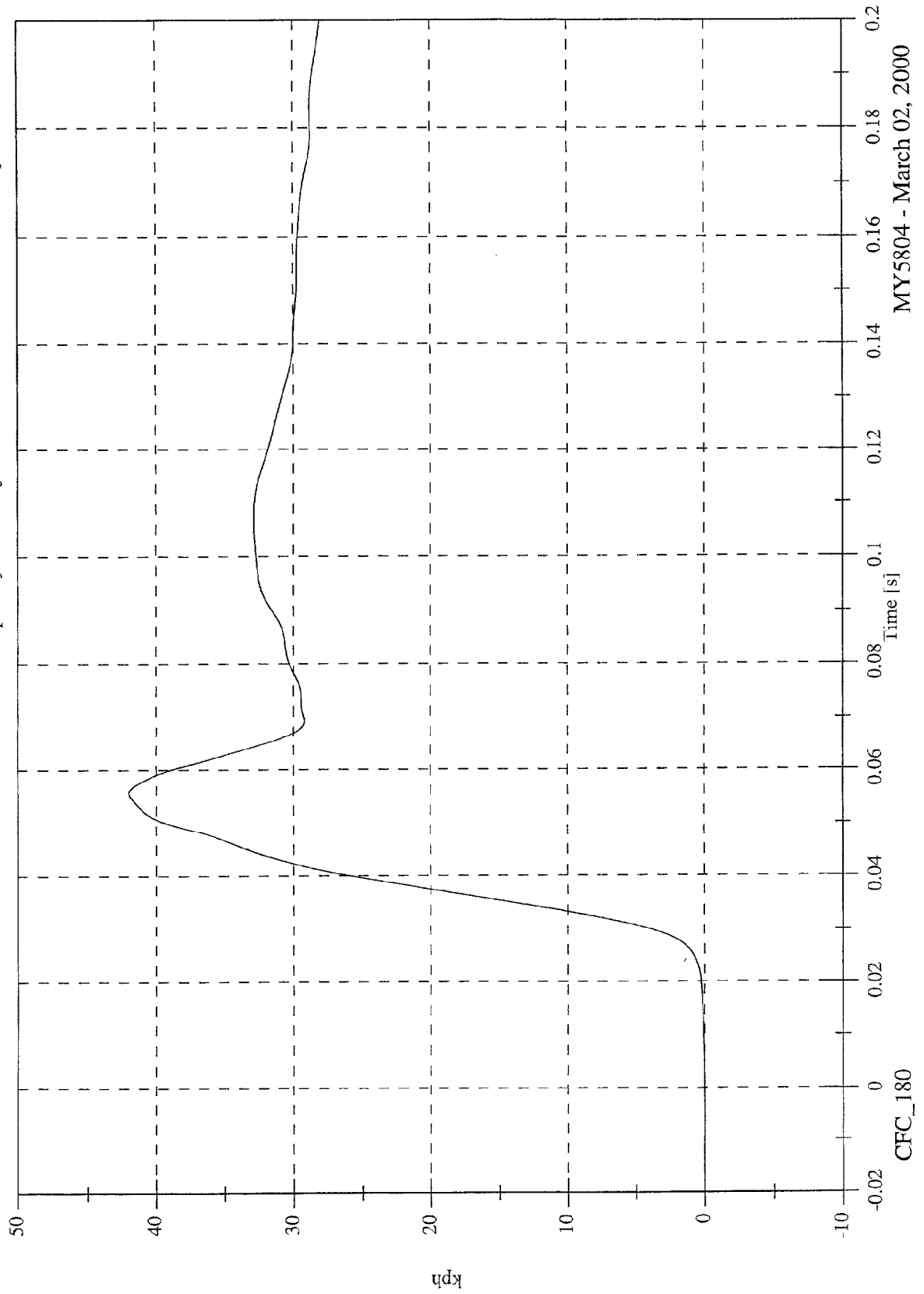
MY5804 - March 02, 2000



SNCAP Test #7 - 2000 Volkswagen Passat

Max: 42.0 [kph] at 0.056 [s]
Min: -0.0 [kph] at -0.015 [s]

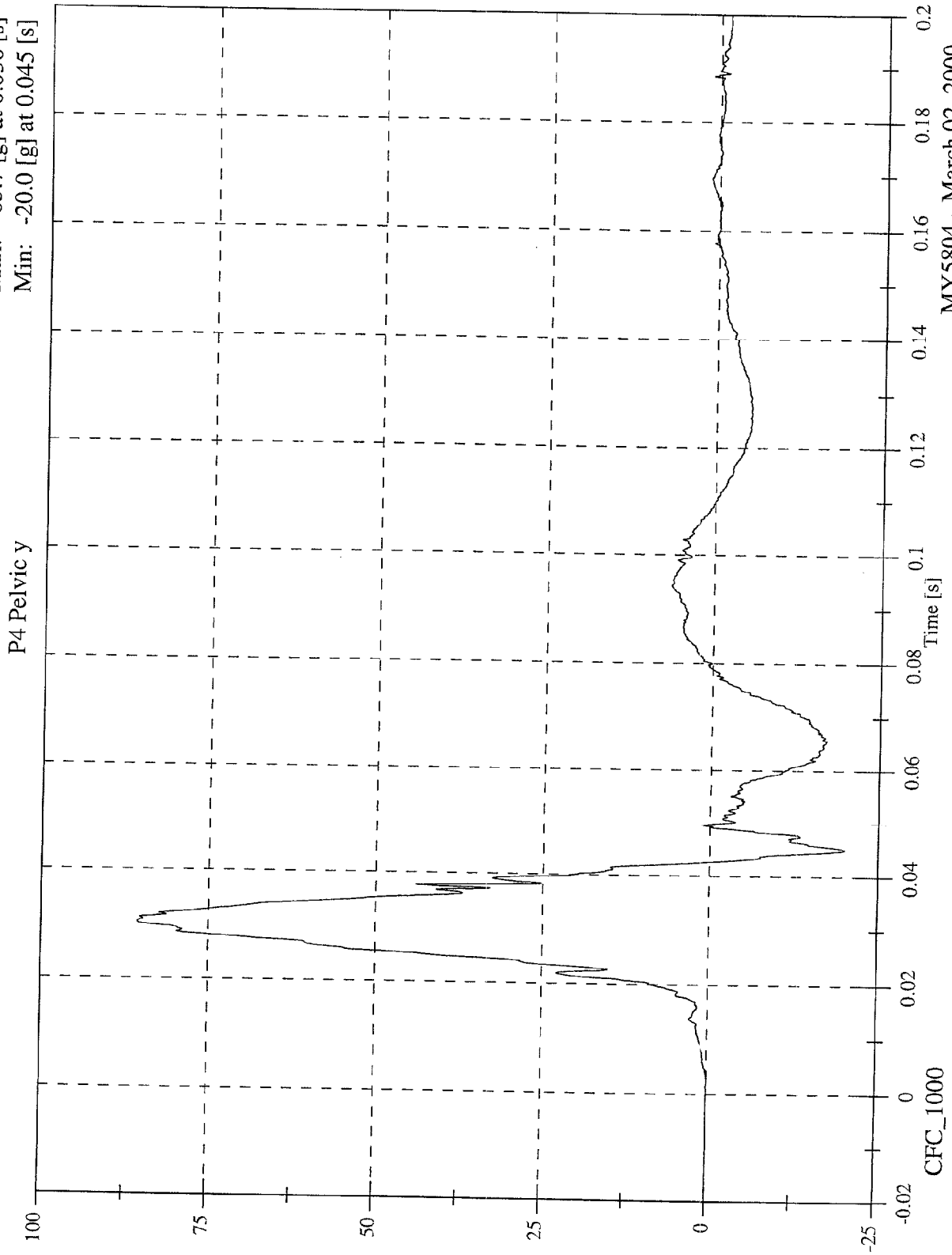
P4 Lower Spine y Velocity



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SNCAP Test #7 - 2000 Volkswagen Passat

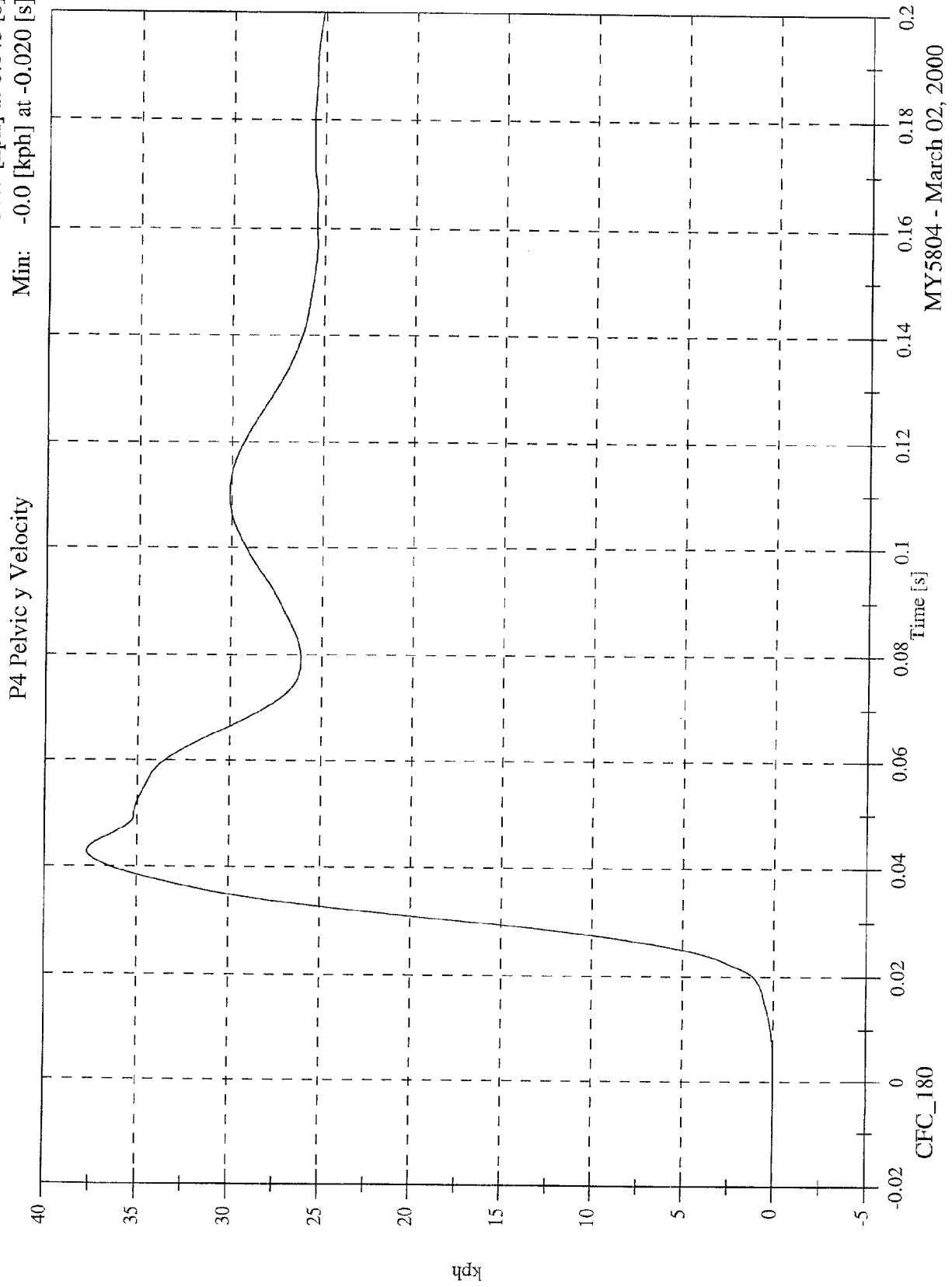
Max: 85.7 [g] at 0.030 [s]
 Min: -20.0 [g] at 0.045 [s]



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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 37.7 [kph] at 0.043 [s]
Min: -0.0 [kph] at -0.020 [s]

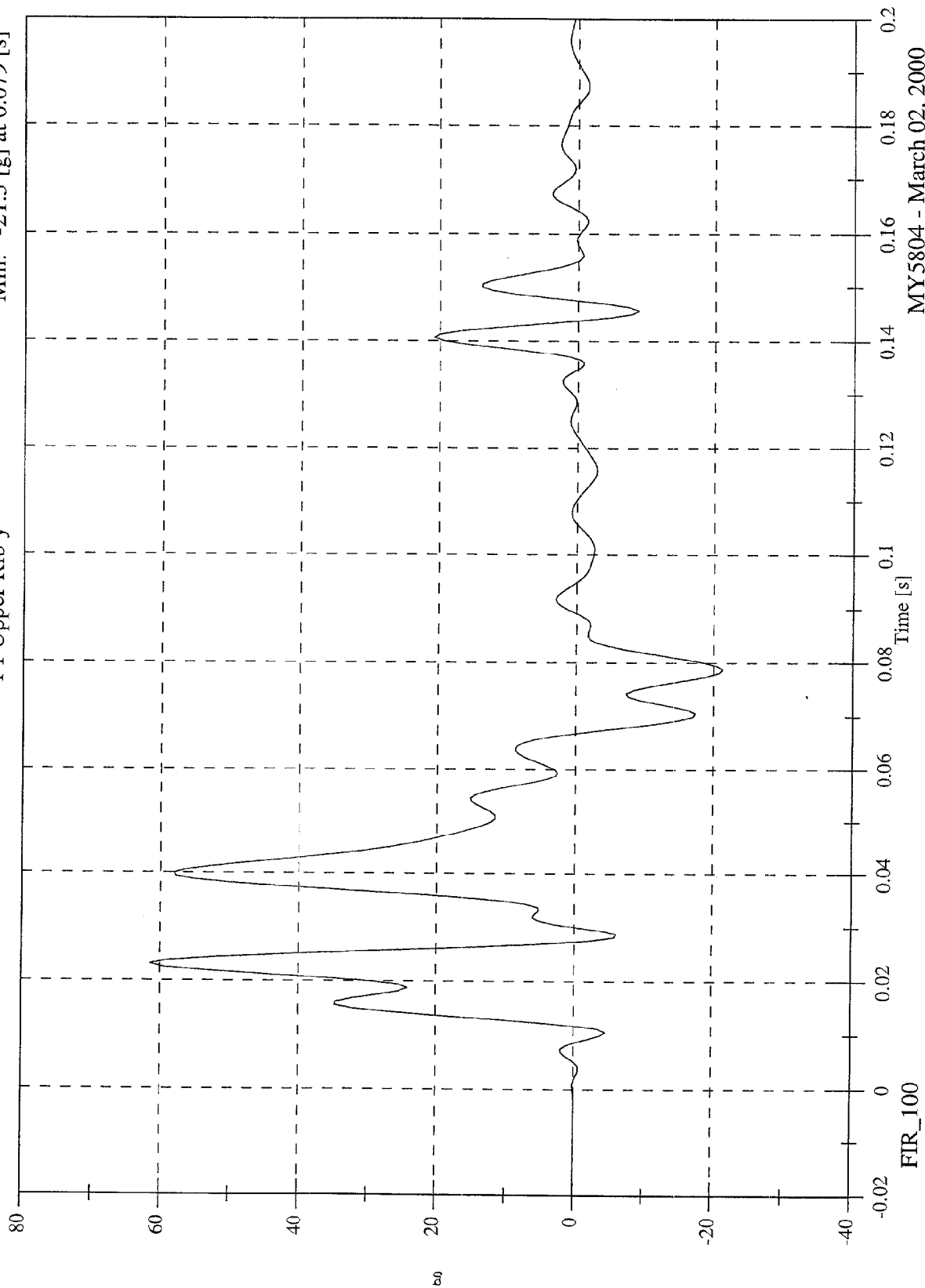


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SNCAP Test #7 - 2000 Volkswagen Passat

P1 Upper Rib y

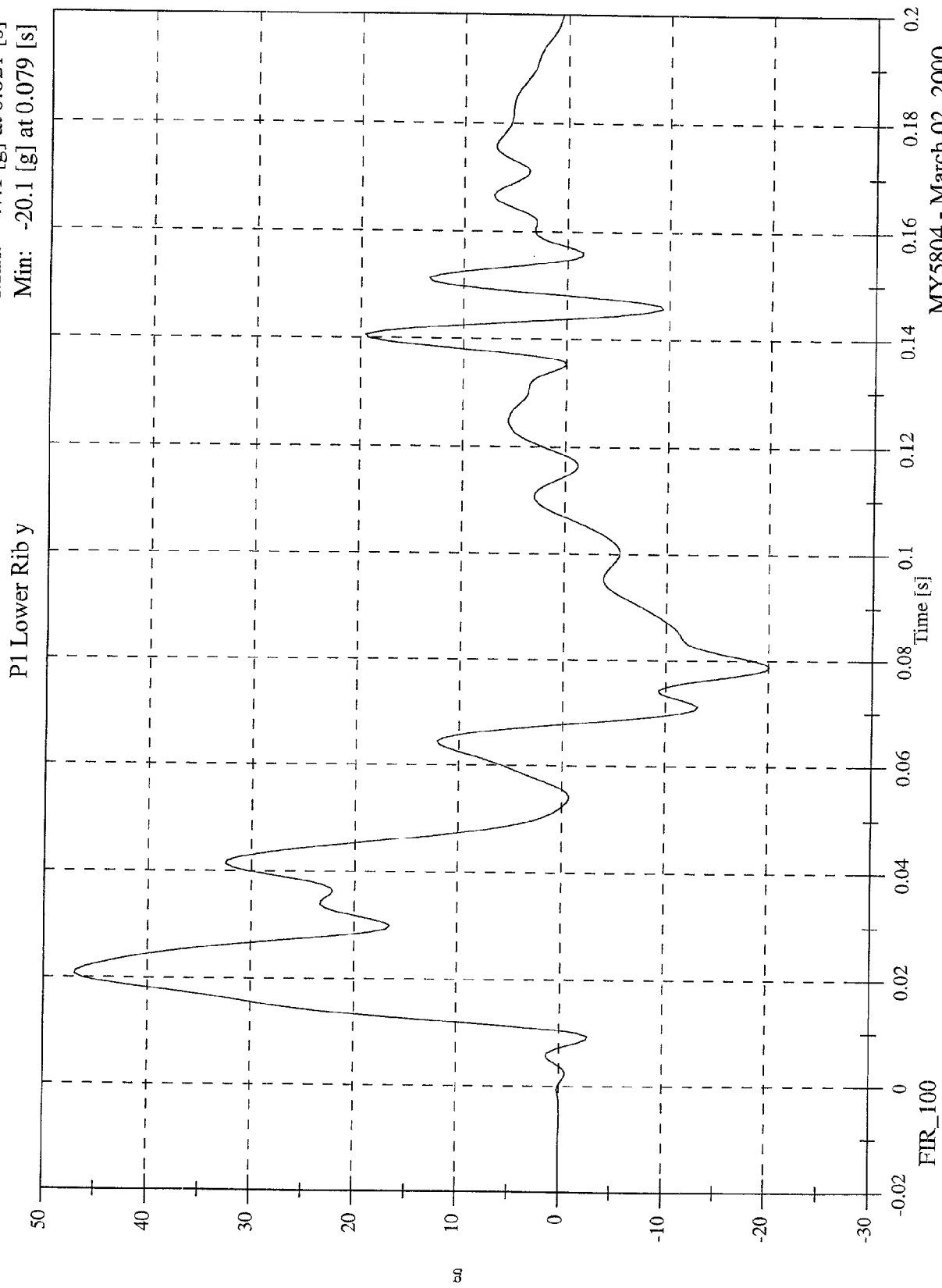
Max: 61.5 [g] at 0.023 [s]
Min: -21.3 [g] at 0.079 [s]



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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 47.1 [g] at 0.021 [s]
 Min: -20.1 [g] at 0.079 [s]

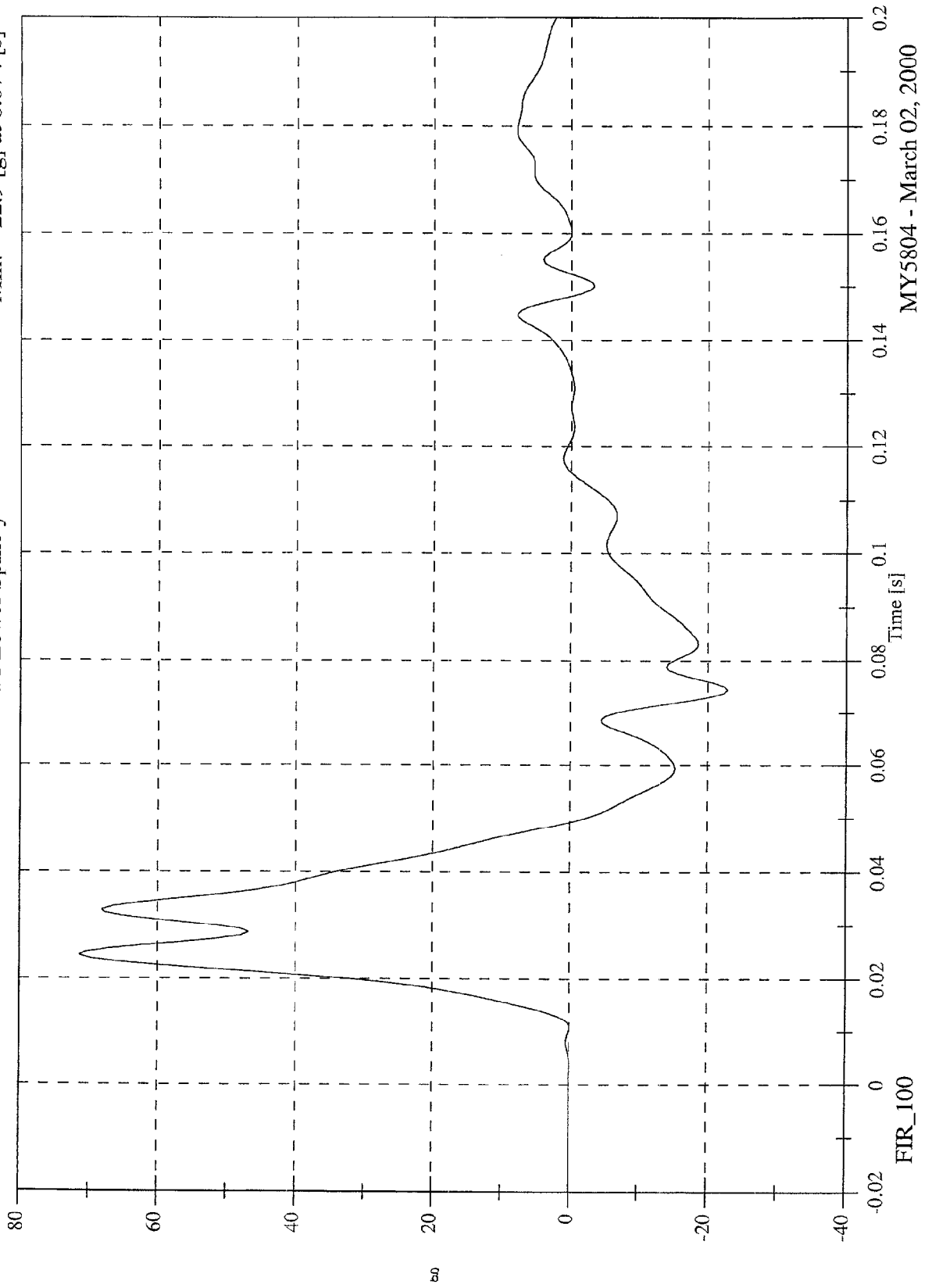


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SNCAP Test #7 - 2000 Volkswagen Passat

P1 Lower Spine y

Max: 71.3 [g] at 0.024 [s]
Min: -22.9 [g] at 0.074 [s]

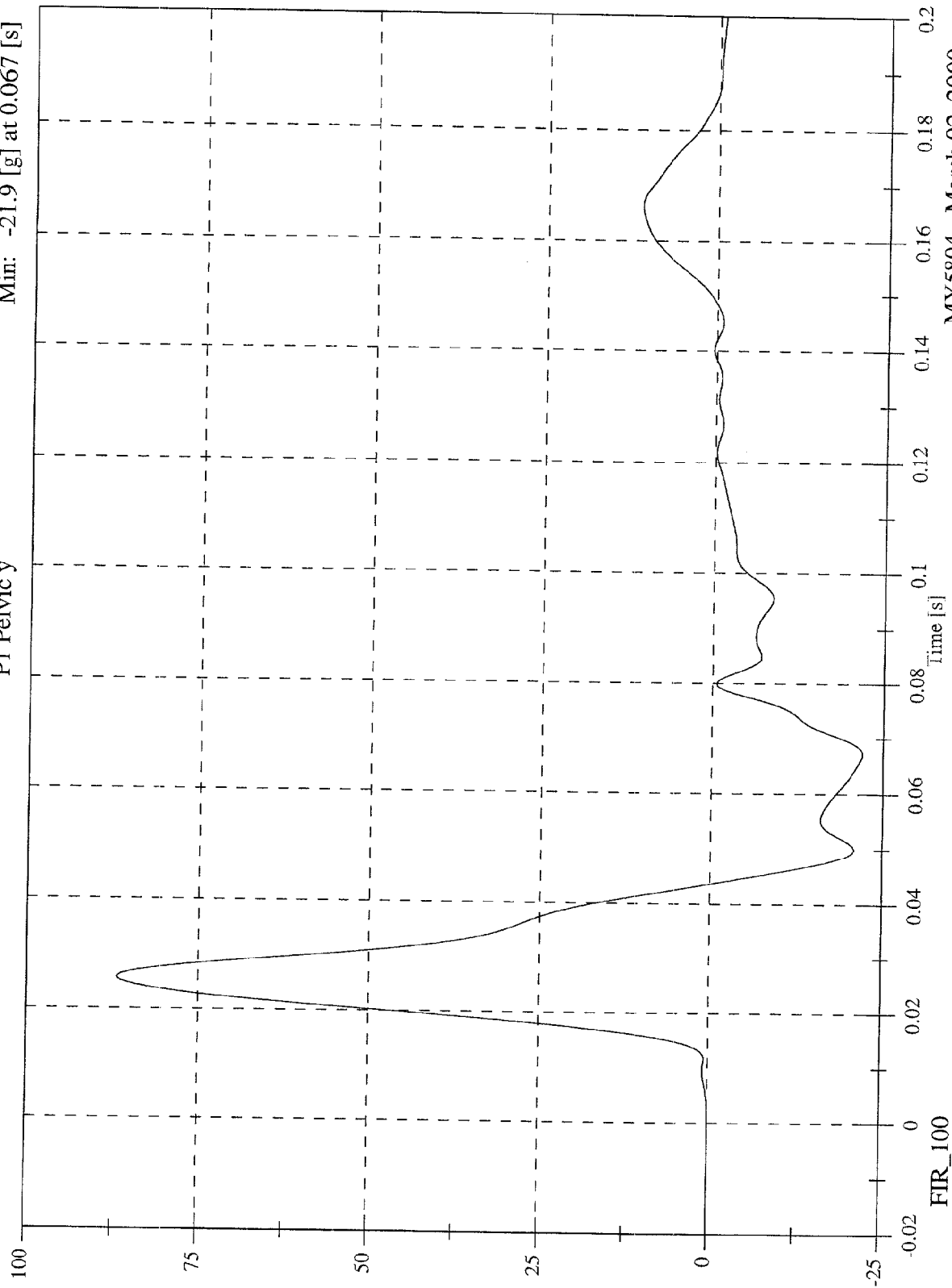


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 87.0 [g] at 0.026 [s]
 Min: -21.9 [g] at 0.067 [s]

P1 Pelvic y

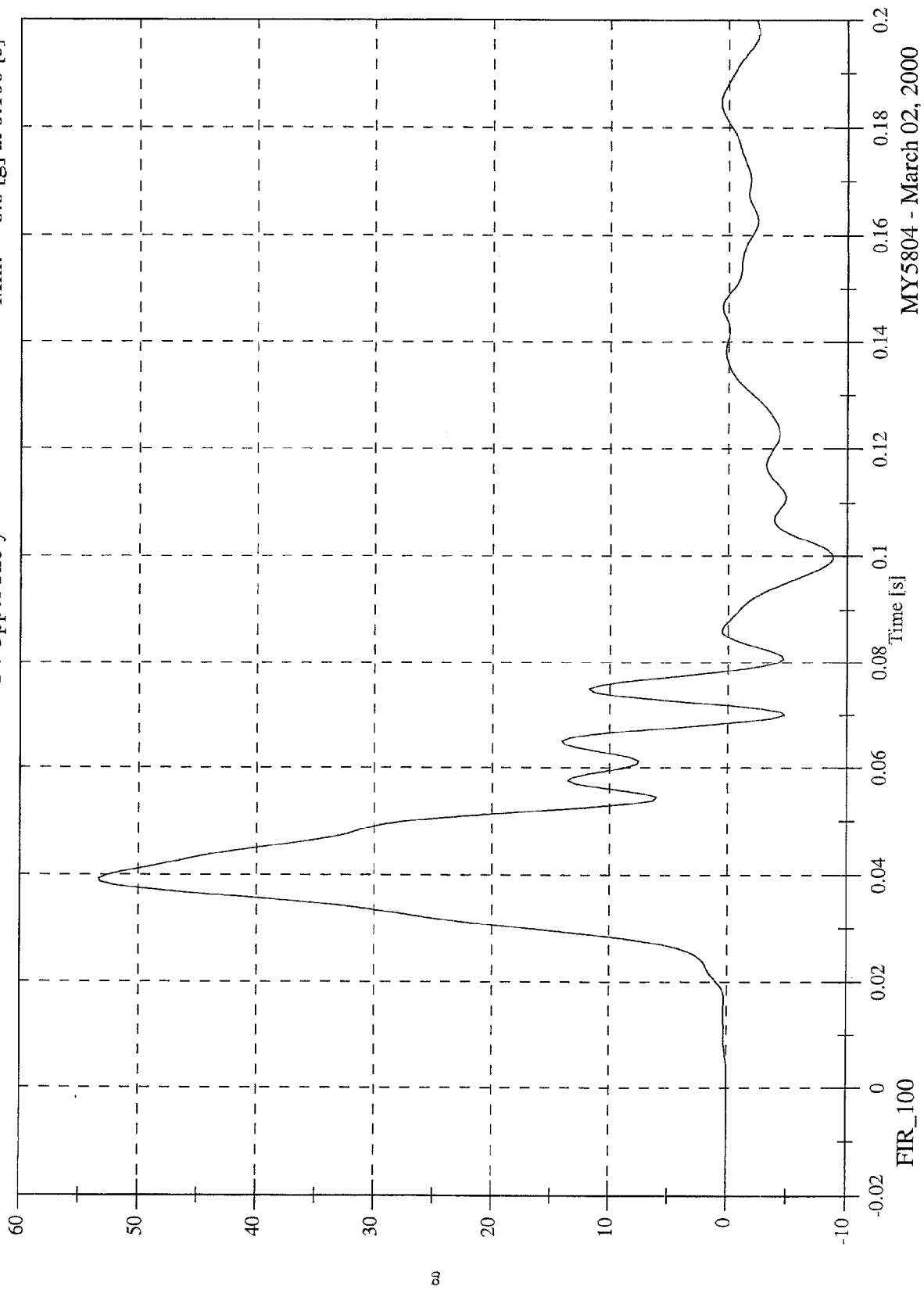


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SNCAP Test #7 - 2000 Volkswagen Passat

P4 Upper Rib y

Max: 53.4 [g] at 0.039 [s]
Min: -8.8 [g] at 0.100 [s]

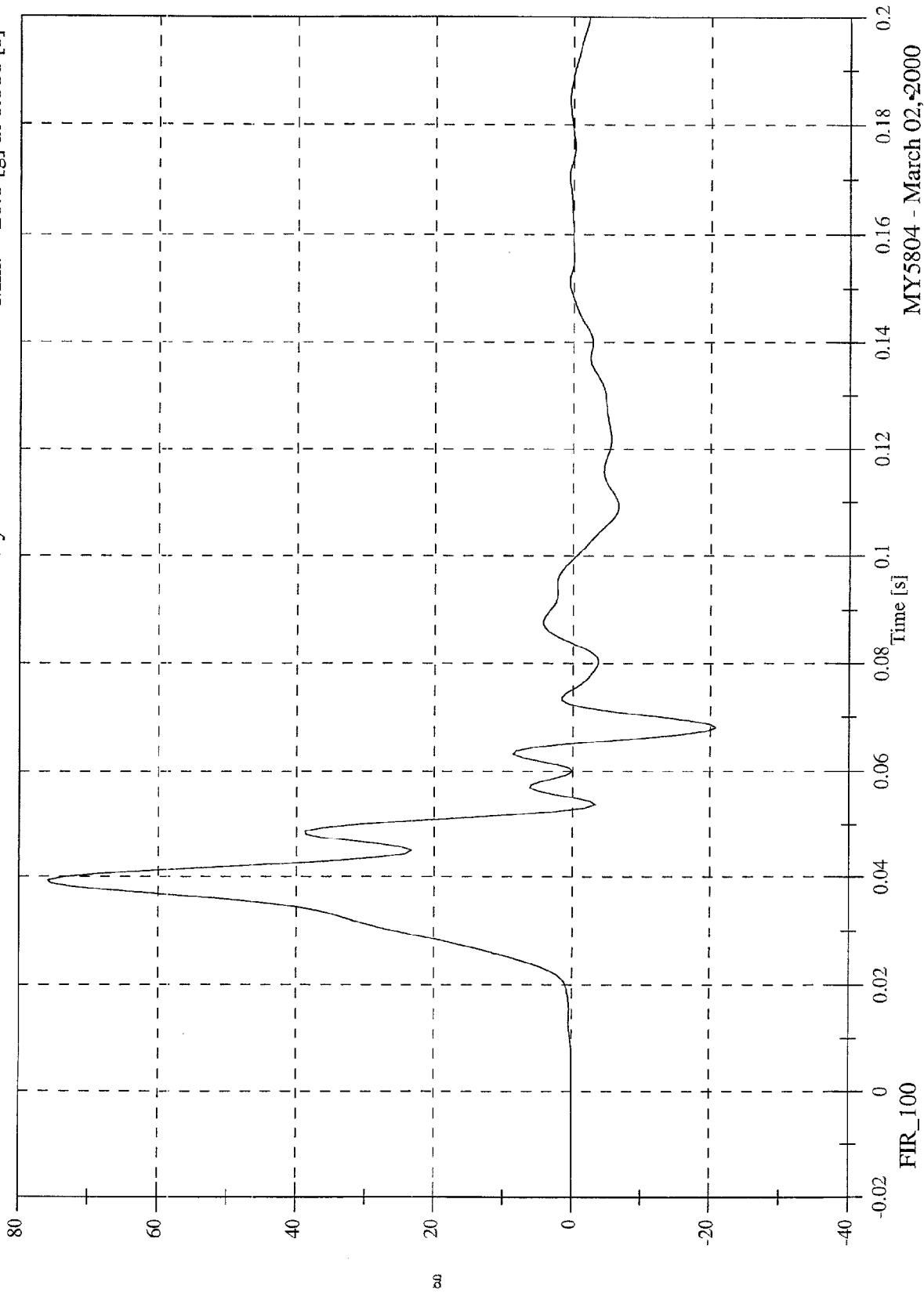


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SNCAP Test #7 - 2000 Volkswagen Passat

P4 Lower Rib y

Max: 75.9 [g] at 0.039 [s]
Min: -20.8 [g] at 0.068 [s]

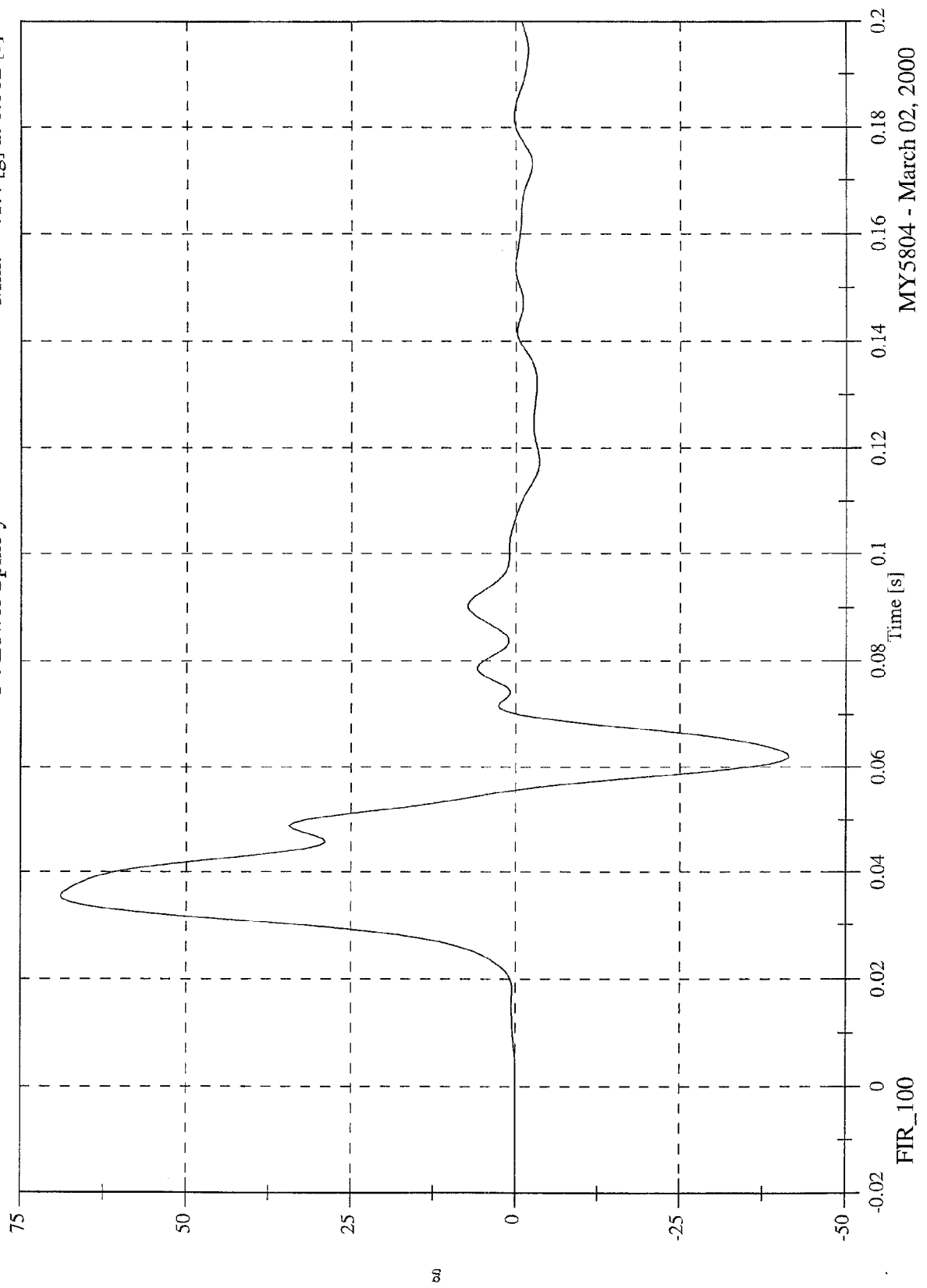


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 68.9 [g] at 0.036 [s]
Min: -41.4 [g] at 0.062 [s]

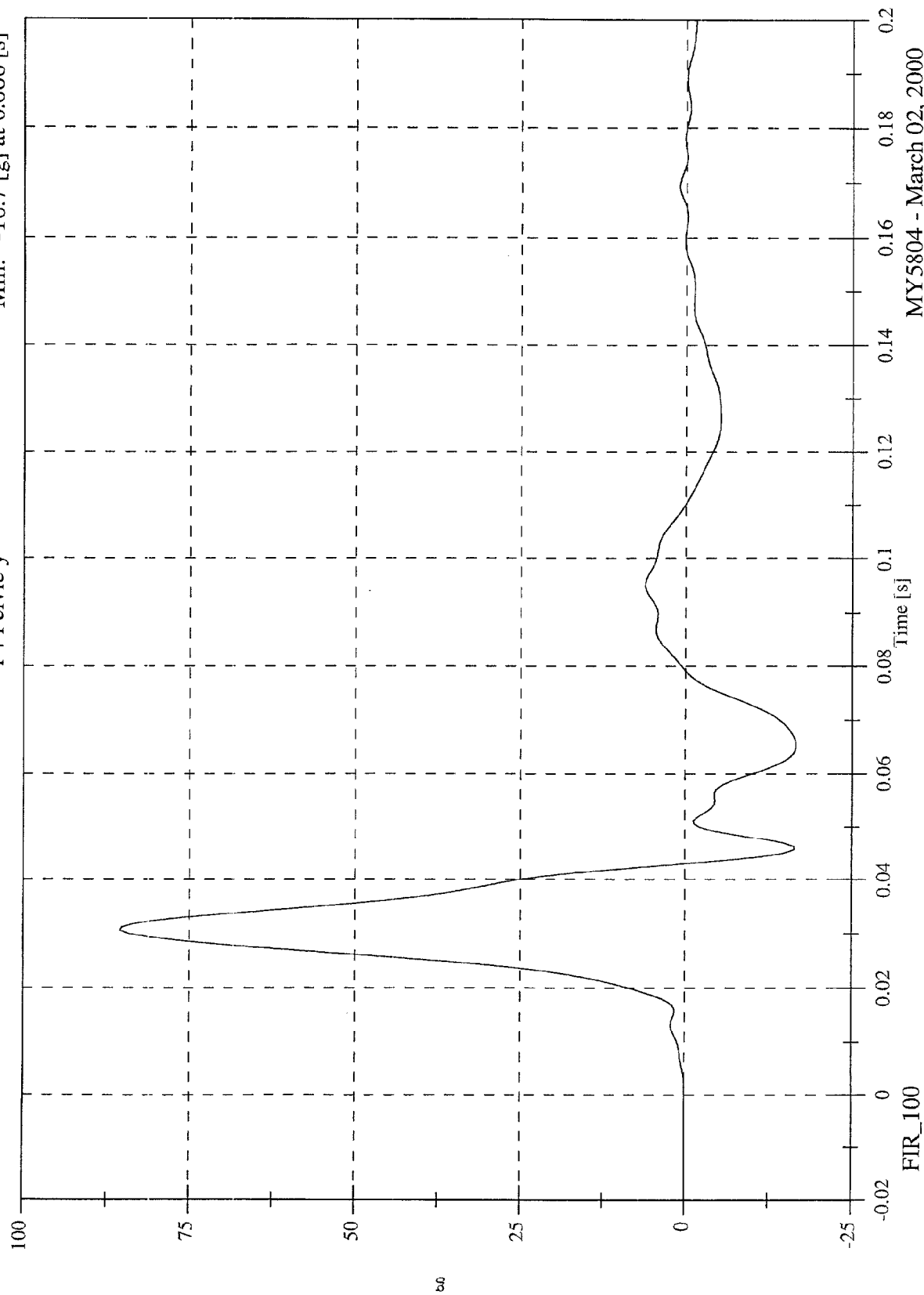
P4 Lower Spine y



SNCAP Test #7 - 2000 Volkswagen Passat

Max: 85.4 [g] at 0.031 [s]
Min: -16.7 [g] at 0.066 [s]

P4 Pelvic y



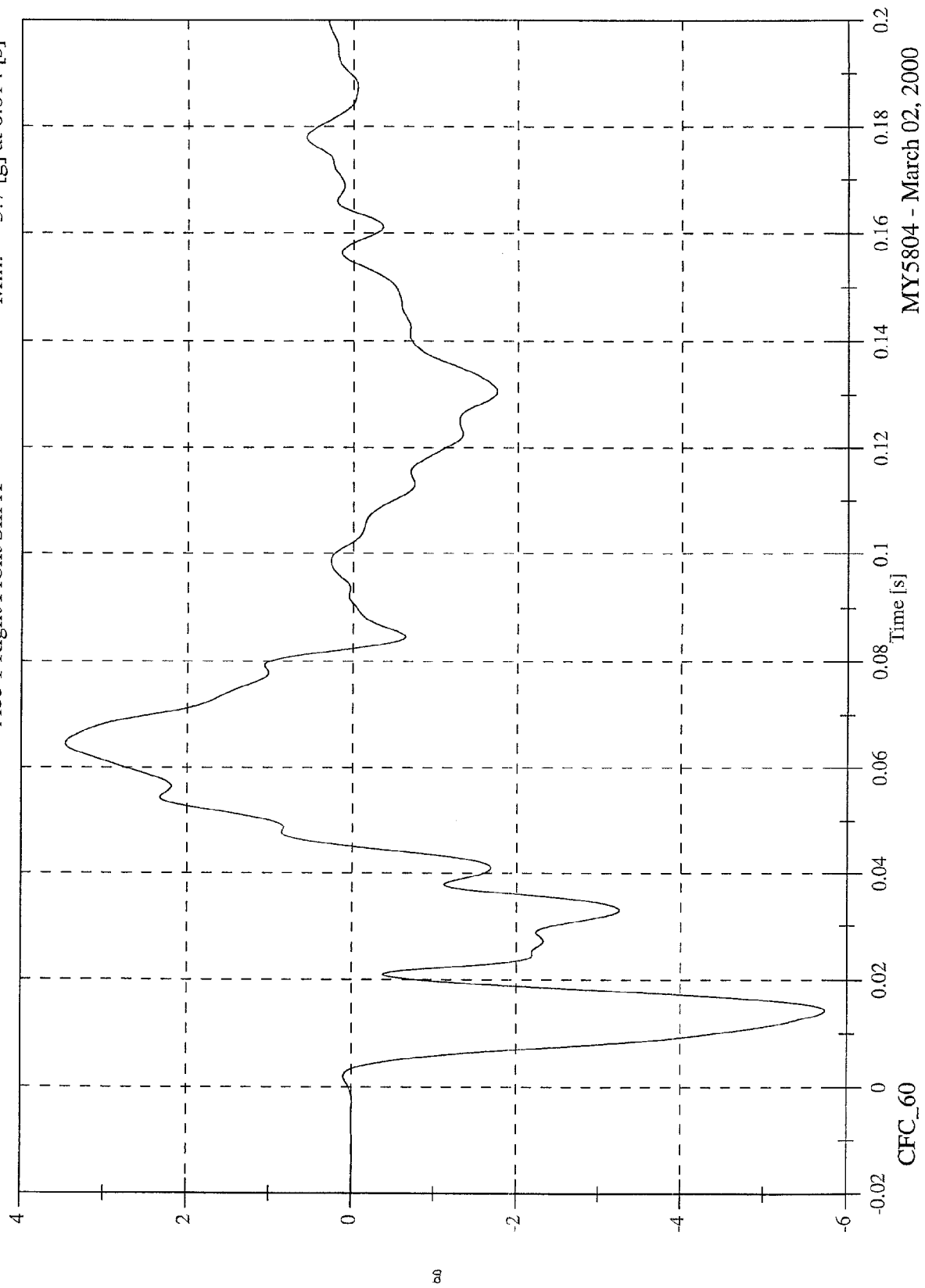
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SNCAP Test #7 - 2000 Volkswagen Passat

Acc 1 Right Front Sill X

Max: 3.5 [g] at 0.064 [s]

Min: -5.7 [g] at 0.014 [s]

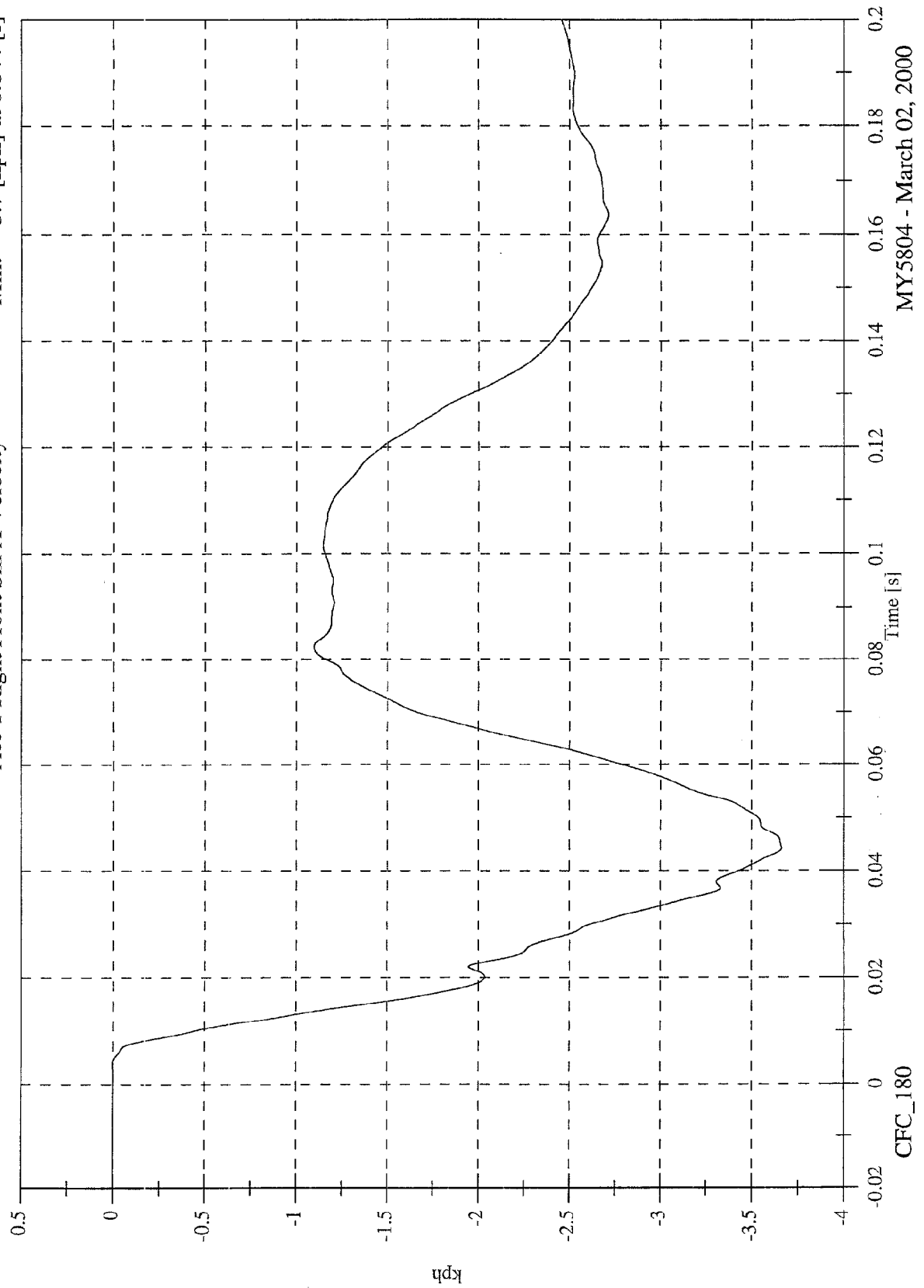


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 0.0 [kph] at 0.004 [s]
 Min: -3.7 [kph] at 0.044 [s]

Acc 1 Right Front Sill X Velocity

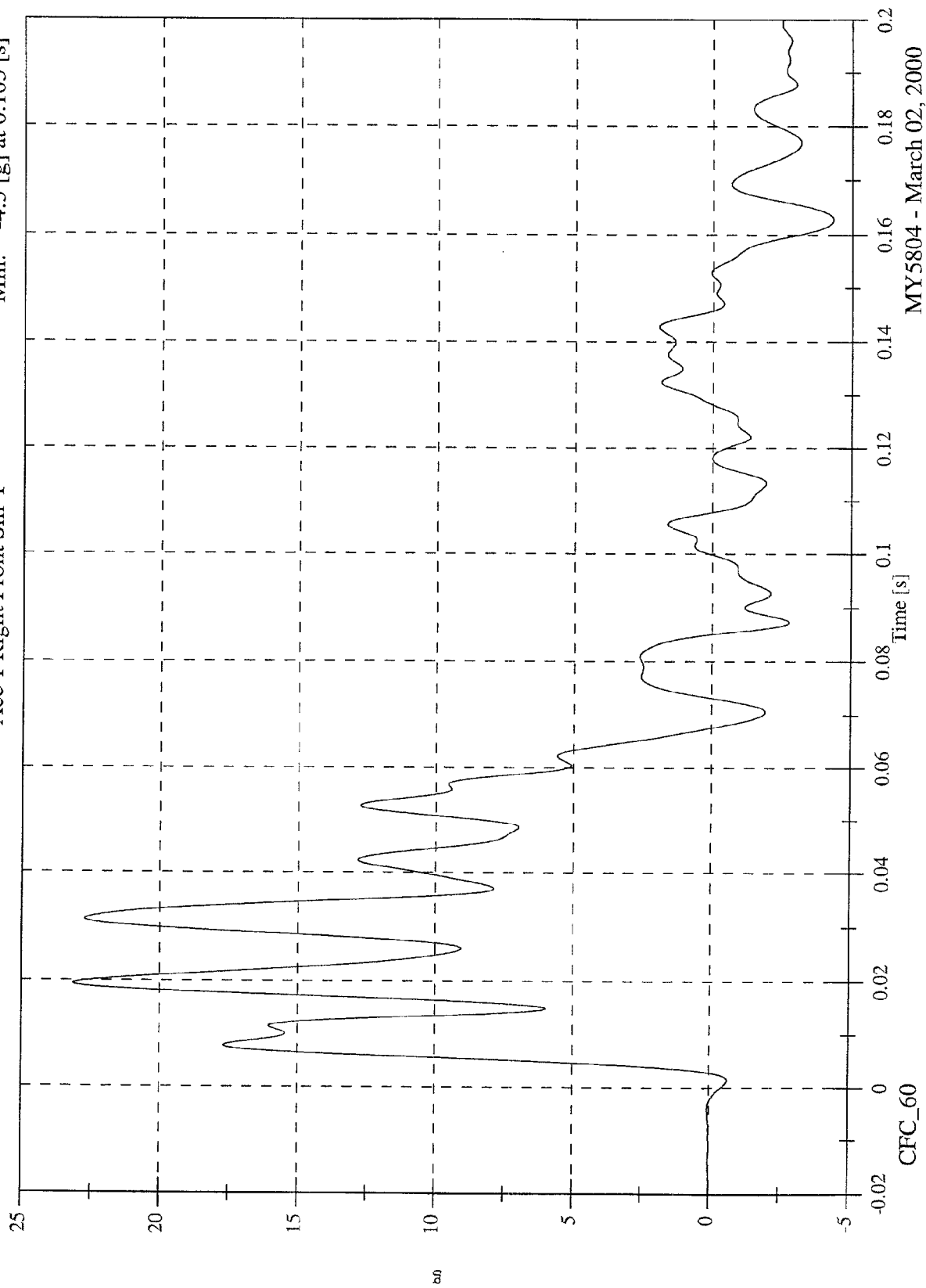


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SNCAP Test #7 - 2000 Volkswagen Passat

Acc 1 Right Front Sill Y

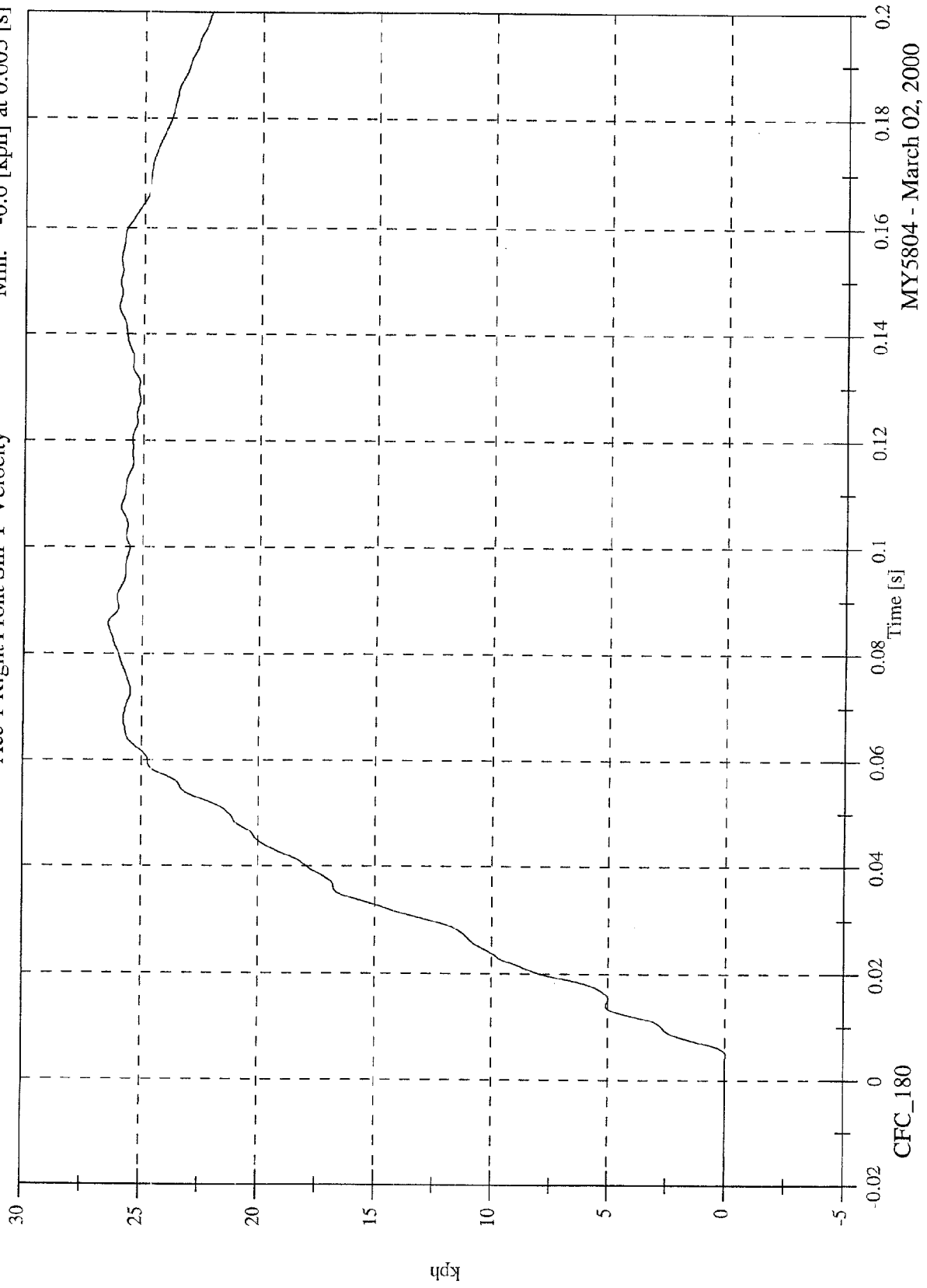
Max: 23.1 [g] at 0.019 [s]
Min: -4.3 [g] at 0.163 [s]



SNCAP Test #7 - 2000 Volkswagen Passat

Max: 26.5 [kph] at 0.086 [s]
 Min: -0.0 [kph] at 0.005 [s]

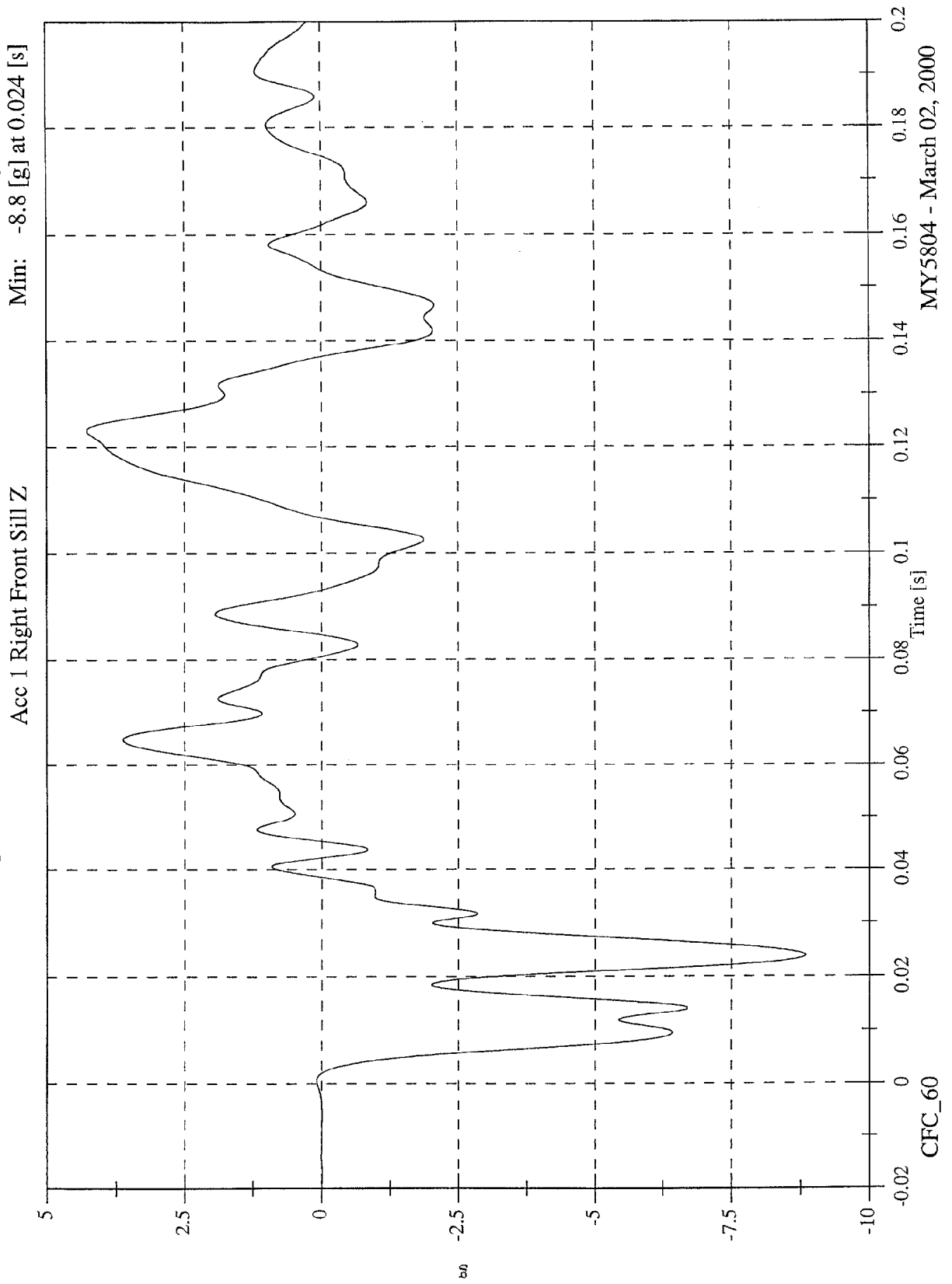
Acc 1 Right Front Sill Y Velocity



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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 4.3 [g] at 0.123 [s]
 Min: -8.8 [g] at 0.024 [s]

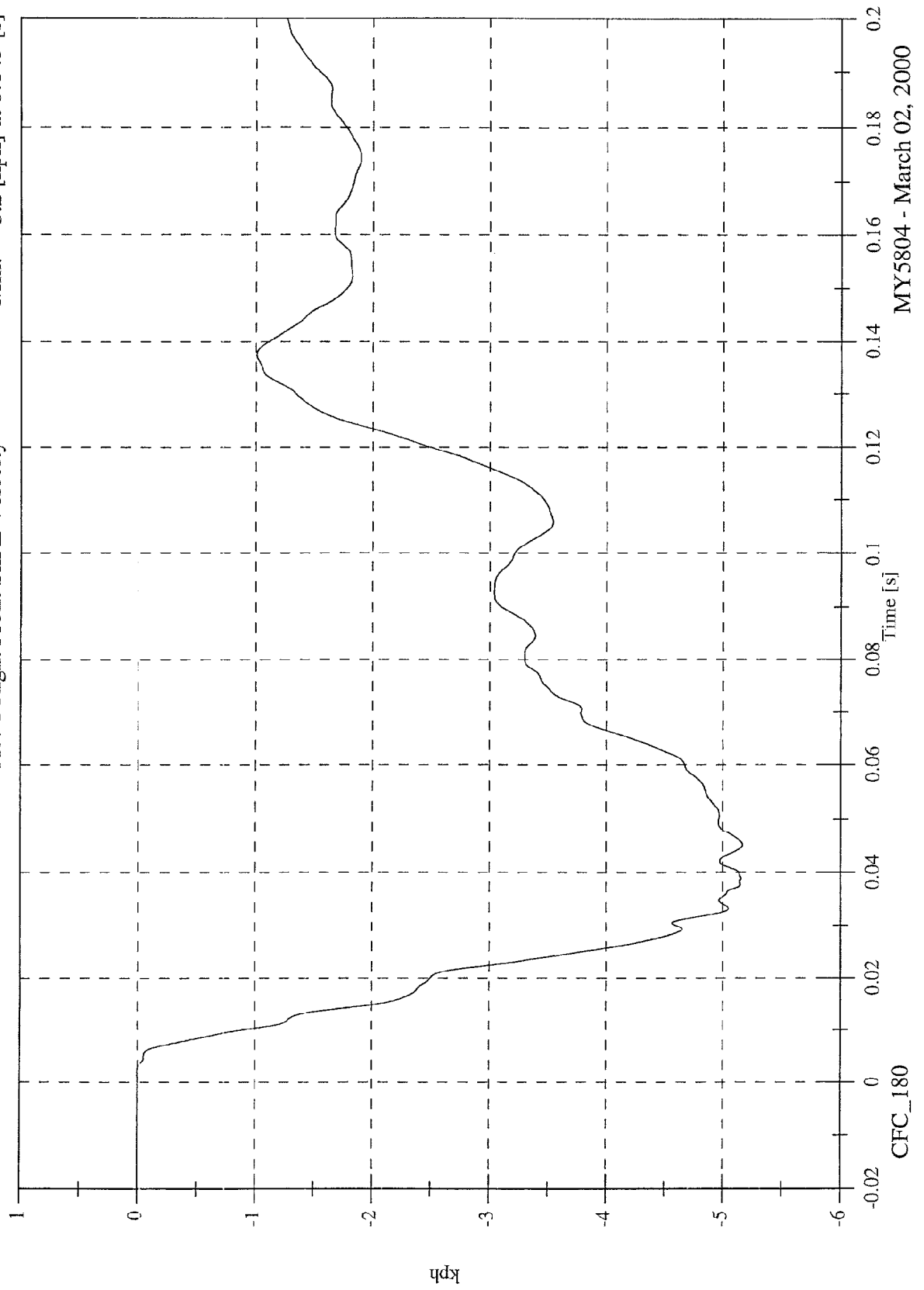


SNCAP Test #7 - 2000 Volkswagen Passat

Max: 0.0 [kph] at 0.002 [s]

Min: -5.2 [kph] at 0.045 [s]

Acc 1 Right Front Sill Z Velocity

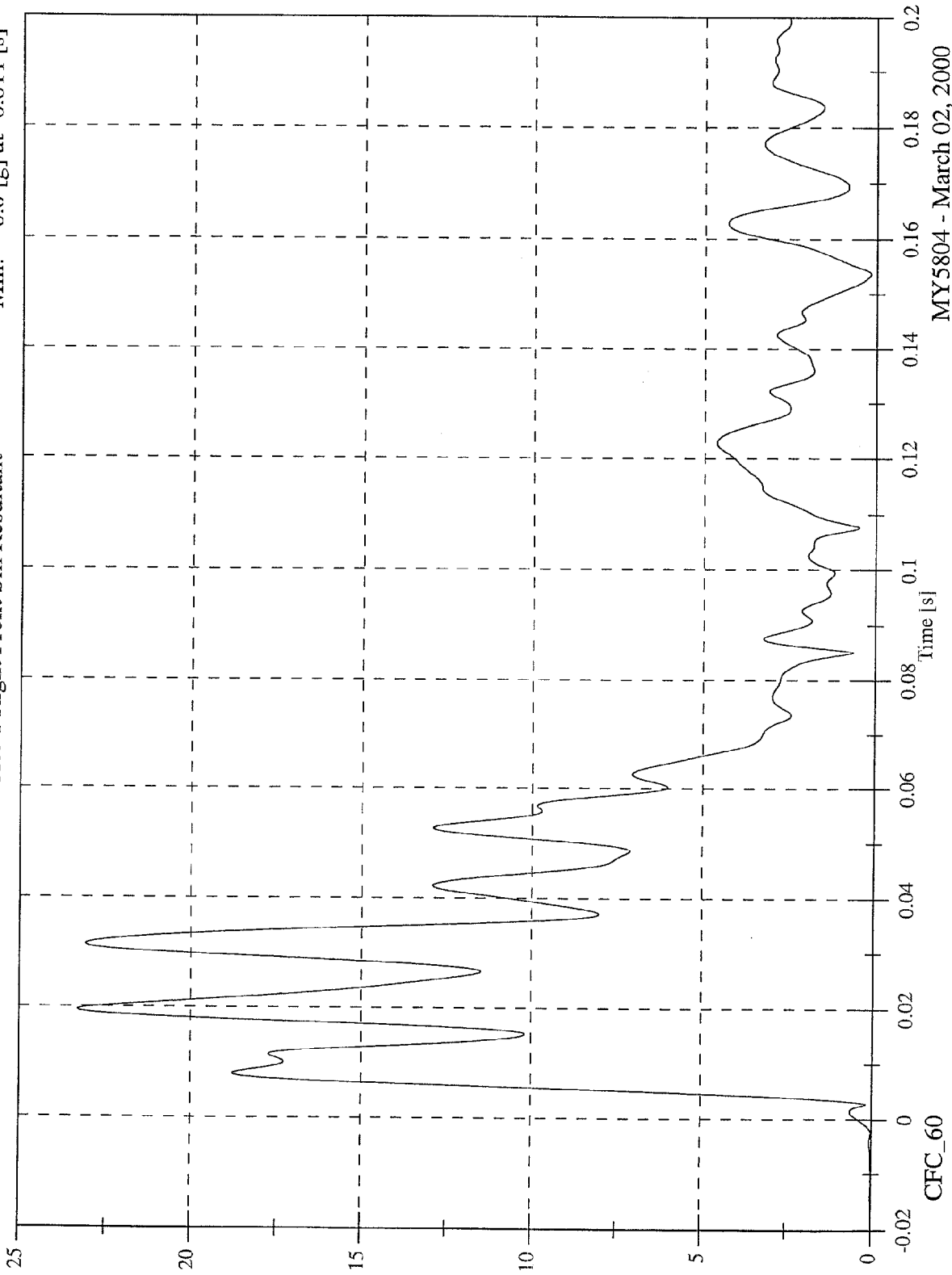


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SNCAP Test #7 - 2000 Volkswagen Passat

Acc 1 Right Front Sill Resultant

Max: 23.3 [g] at 0.019 [s]
Min: 0.0 [g] at -0.011 [s]

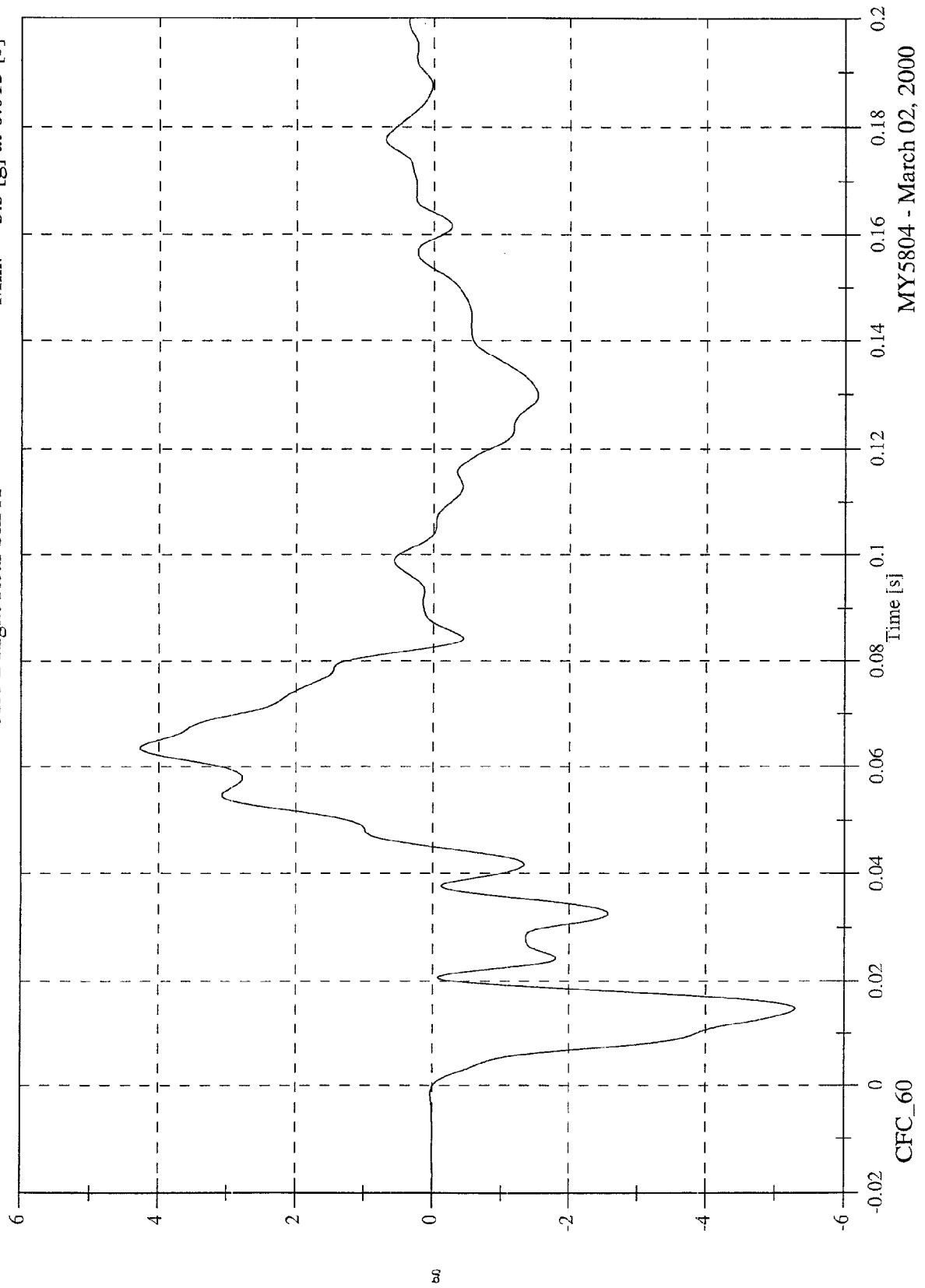


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 4.3 [g] at 0.063 [s]
 Min: -5.3 [g] at 0.015 [s]

Acc 2 Right Rear Sill X

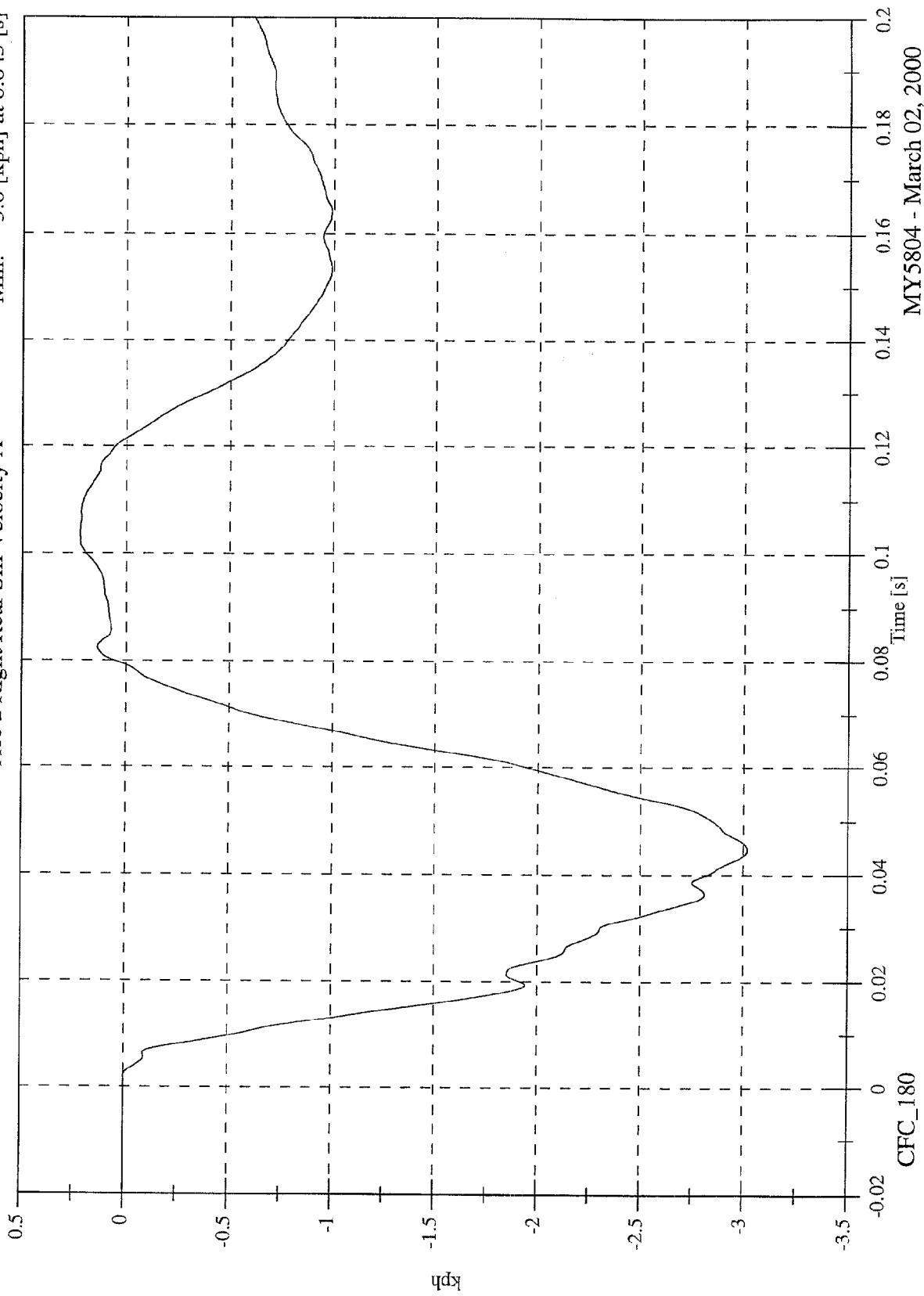


SNCAP Test #7 - 2000 Volkswagen Passat

Max: 0.2 [kph] at 0.104 [s]

Min: -3.0 [kph] at 0.045 [s]

Acc 2 Right Rear Sill Velocity X

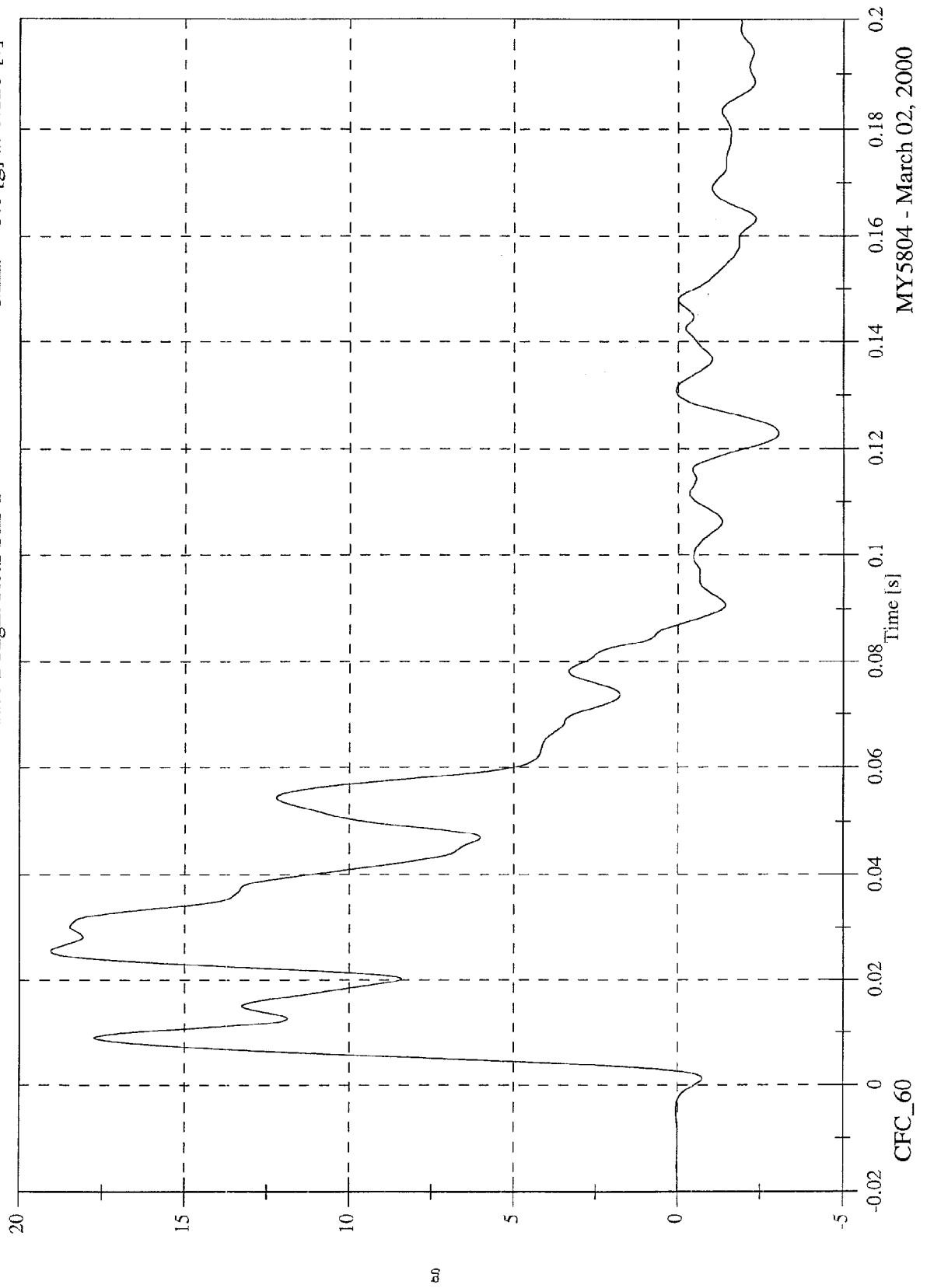


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SNCAP Test #7 - 2000 Volkswagen Passat

Acc 2 Right Rear Sill Y

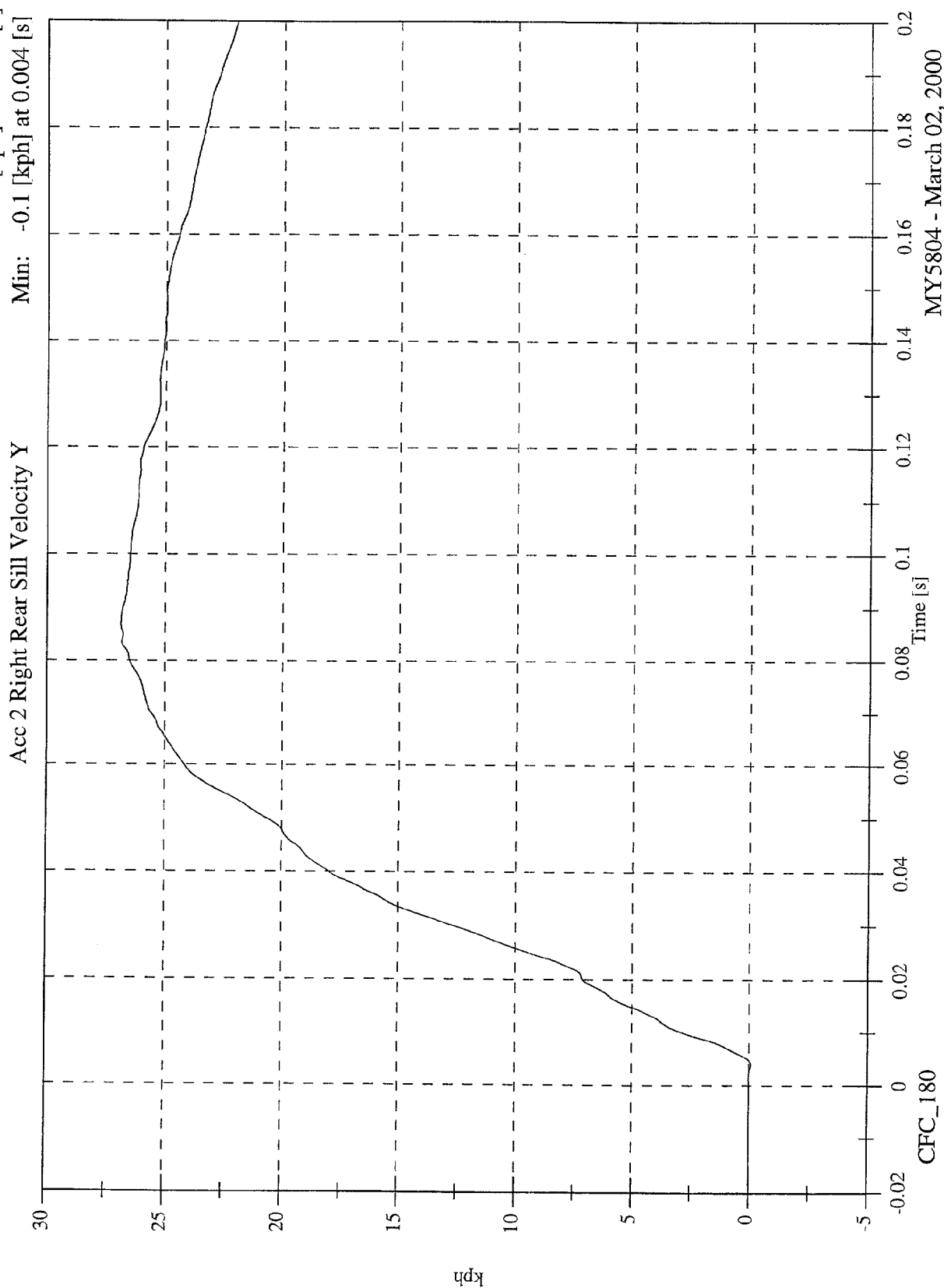
Max: 19.1 [g] at 0.025 [s]
Min: -3.0 [g] at 0.123 [s]



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SNCAP Test #7 - 2000 Volkswagen Passat

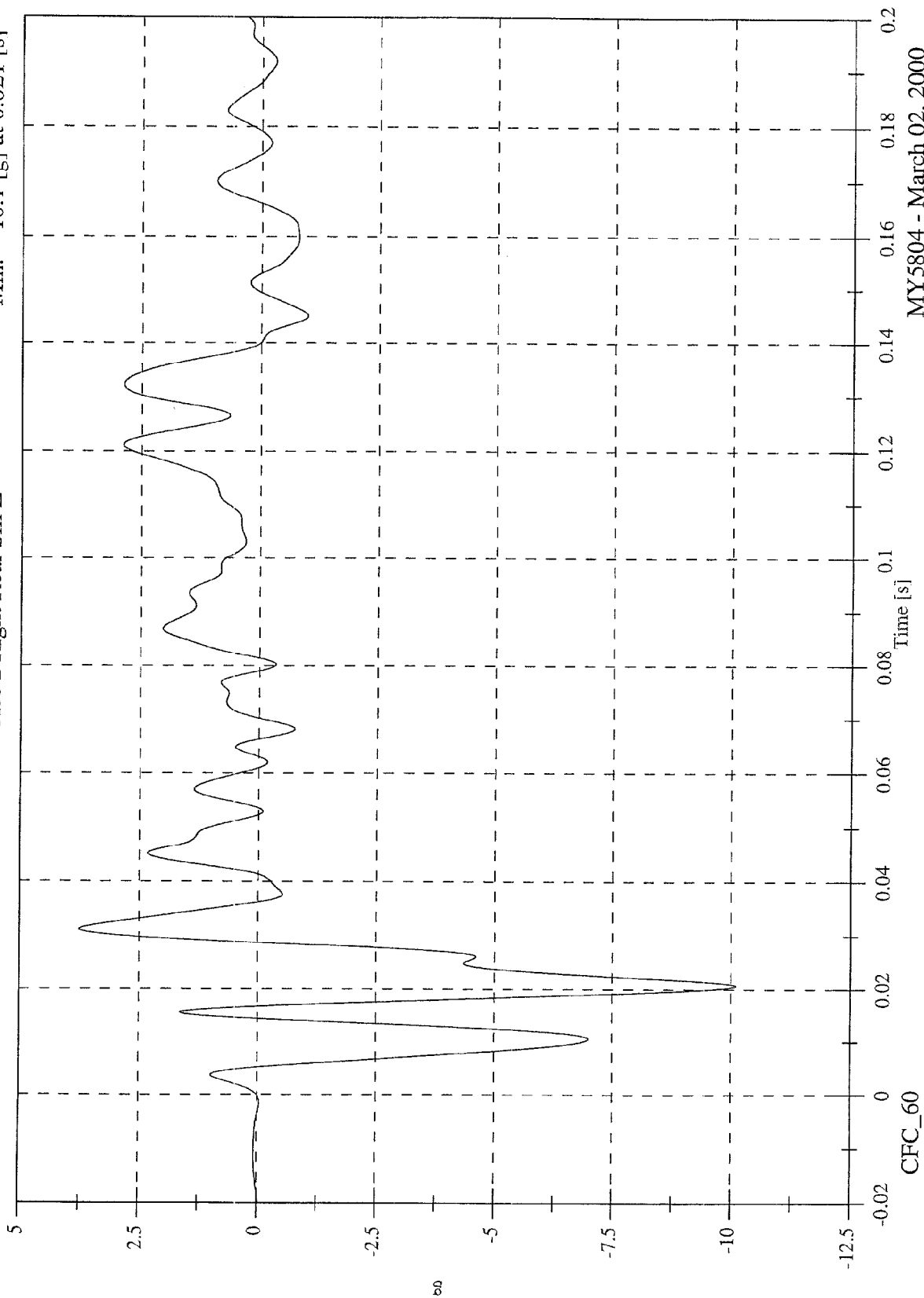
Max: 26.9 [kph] at 0.087 [s]
Min: -0.1 [kph] at 0.004 [s]



SNCAP Test #7 - 2000 Volkswagen Passat

Max: 3.8 [g] at 0.031 [s]
 Min: -10.1 [g] at 0.021 [s]

Acc 2 Right Rear Sill Z



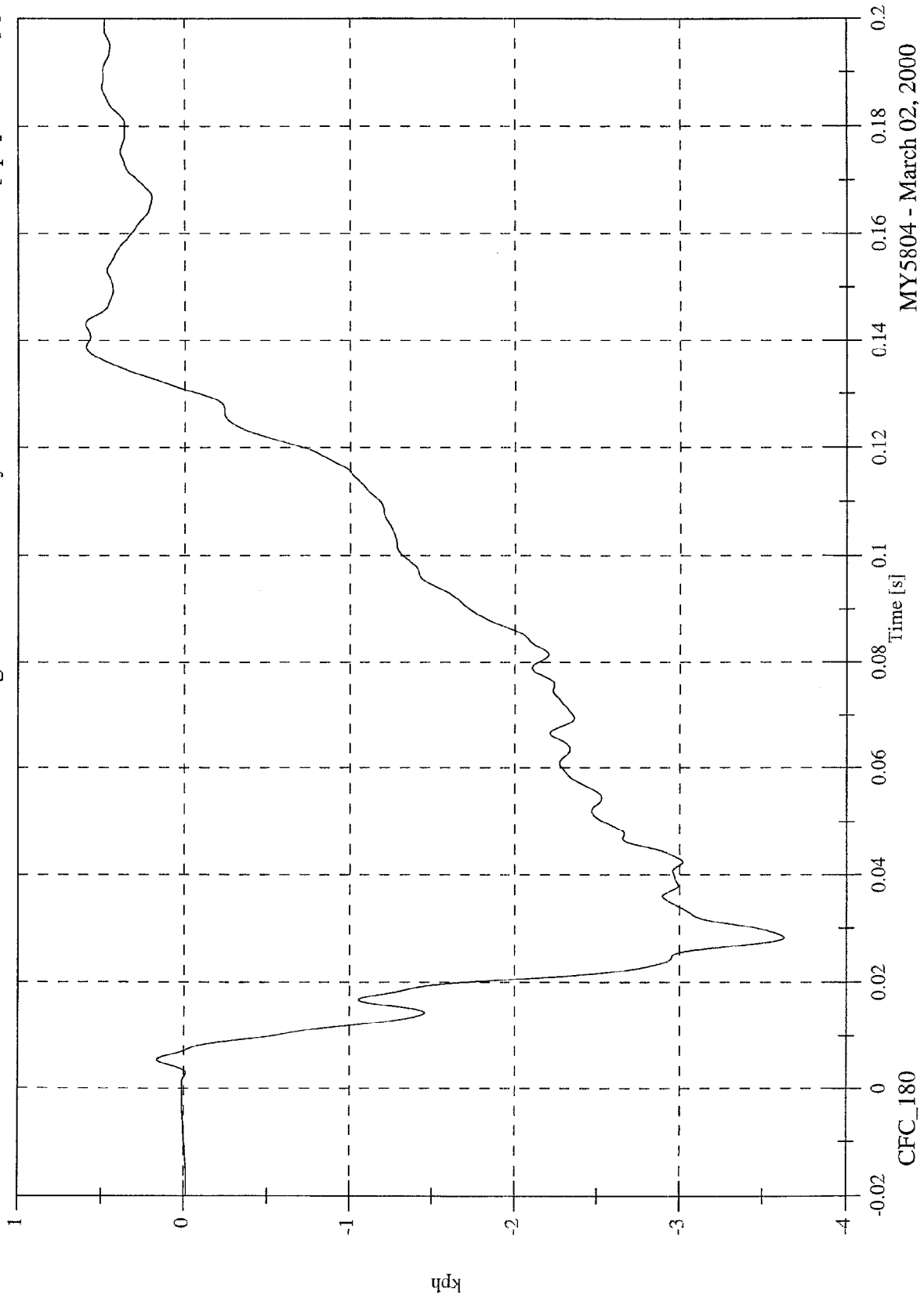
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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 0.6 [kph] at 0.143 [s]

Min: -3.6 [kph] at 0.028 [s]

Acc 2 Right Rear Sill Velocity Z

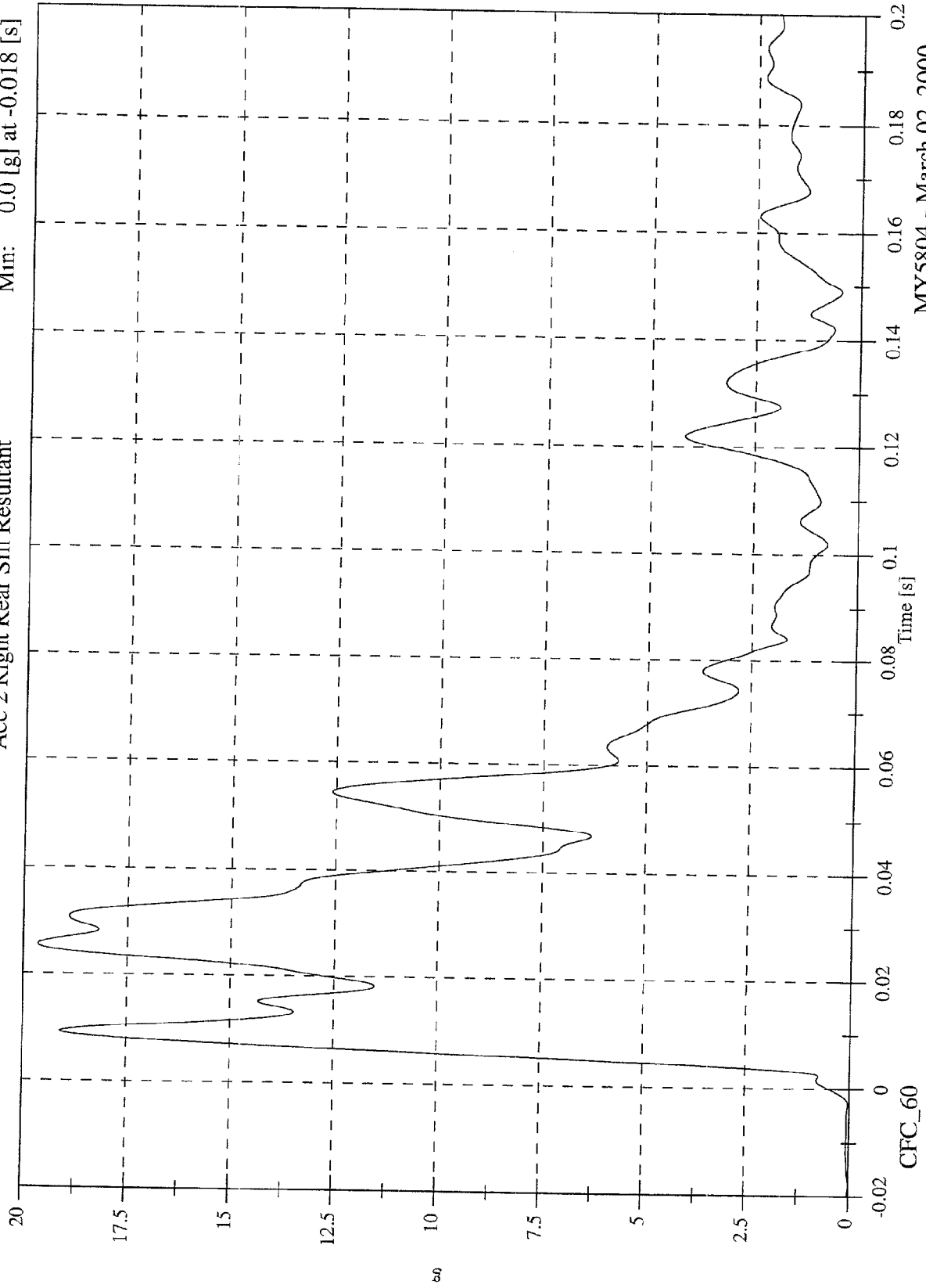


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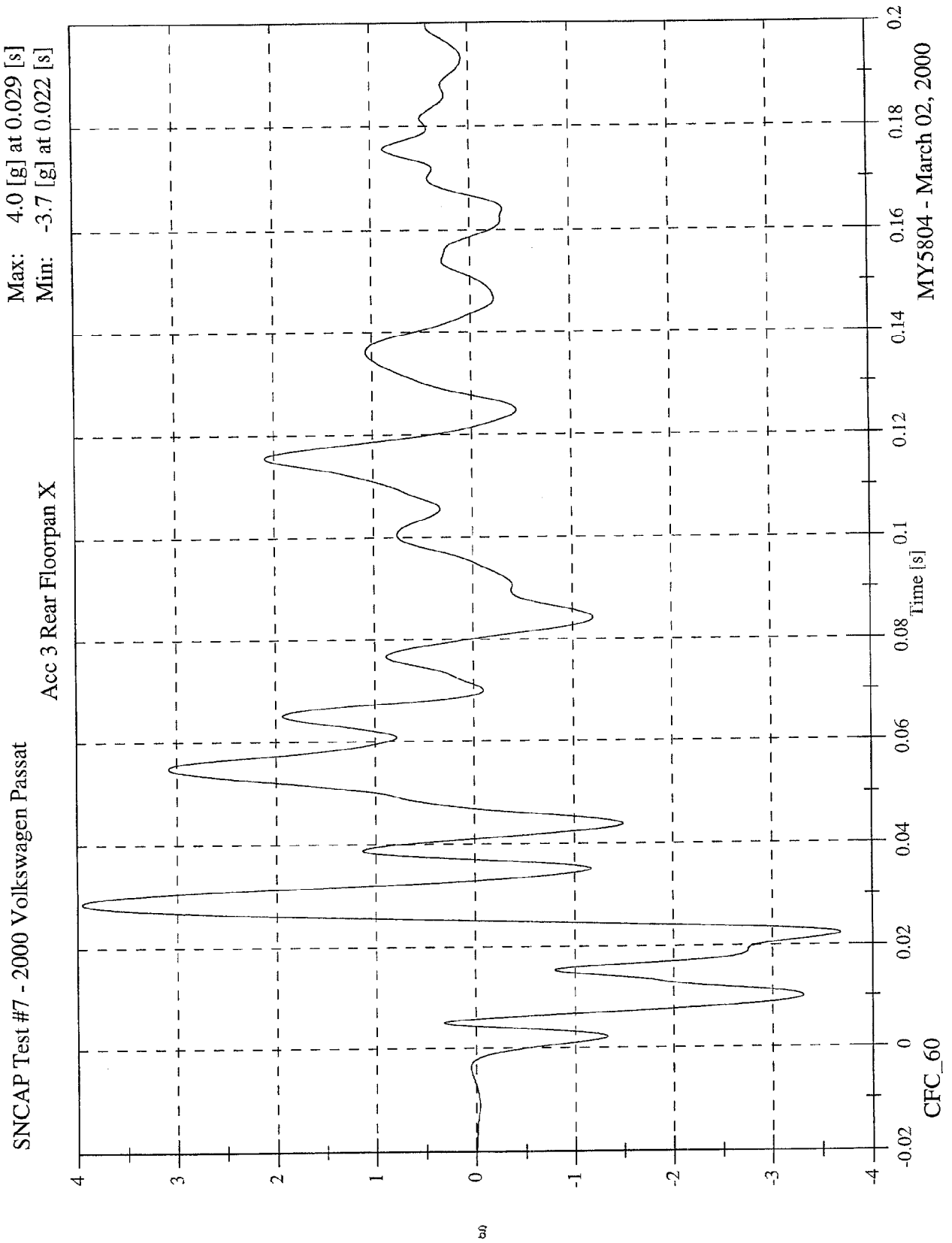
SNCAP Test #7 - 2000 Volkswagen Passat

Max: 19.7 [g] at 0.026 [s]
 Min: 0.0 [g] at -0.018 [s]

Acc 2 Right Rear Sill Resultant



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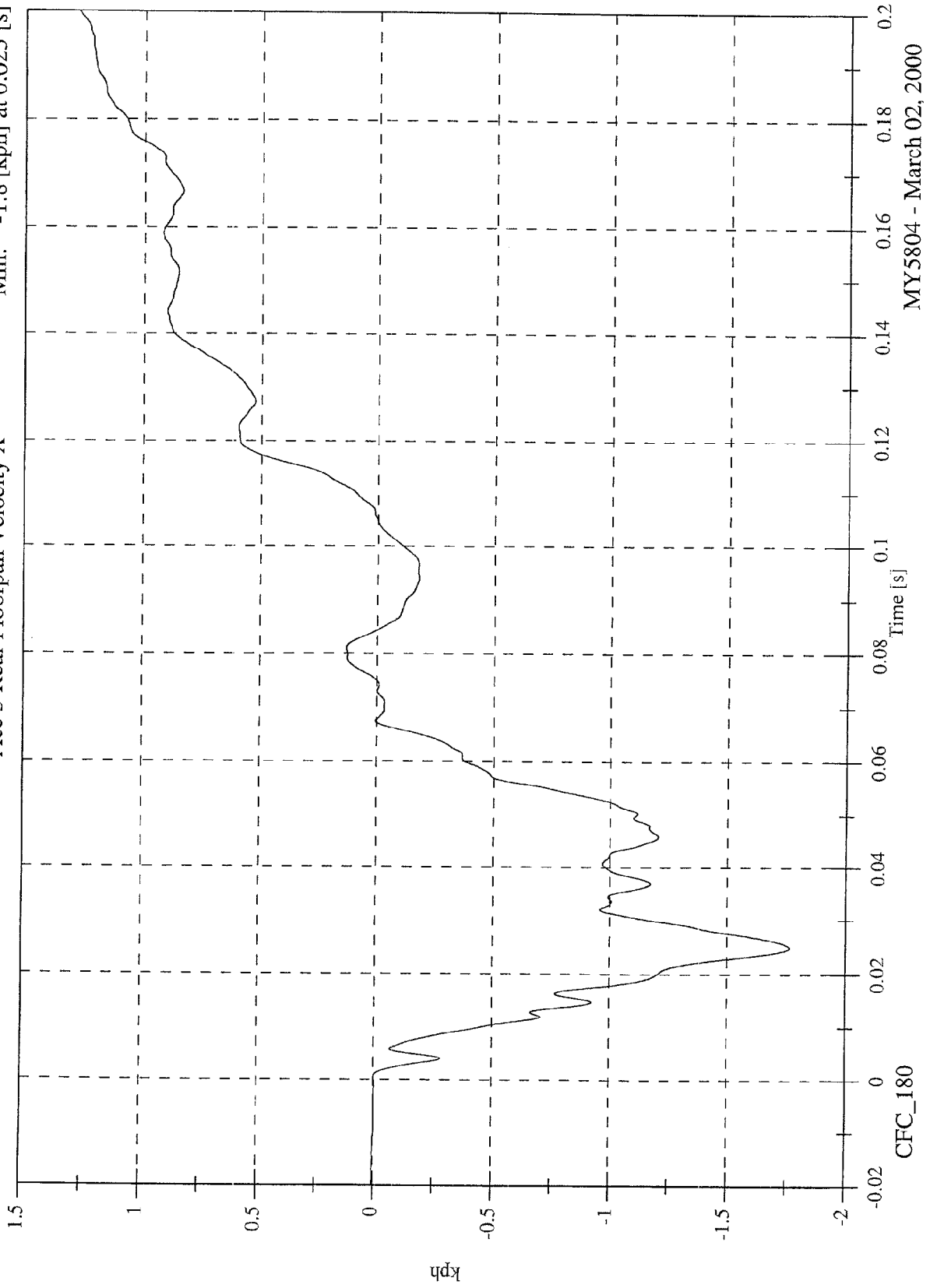


SNCAP Test #7 - 2000 Volkswagen Passat

Max: 1.3 [kph] at 0.200 [s]

Min: -1.8 [kph] at 0.025 [s]

Acc 3 Rear Floorpan Velocity X

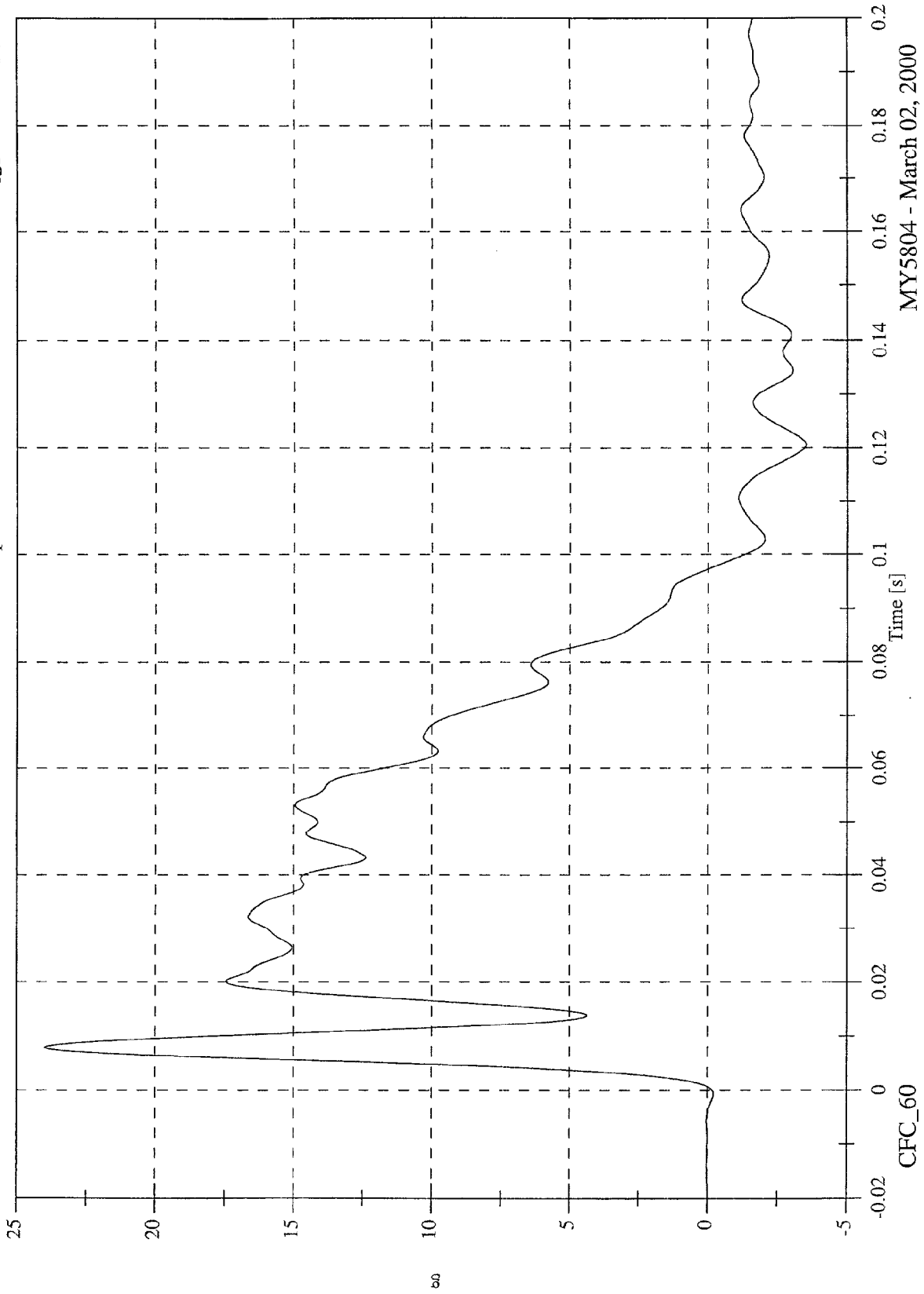


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SNCAP Test #7 - 2000 Volkswagen Passat

Acc 3 Rear Floorpan Y

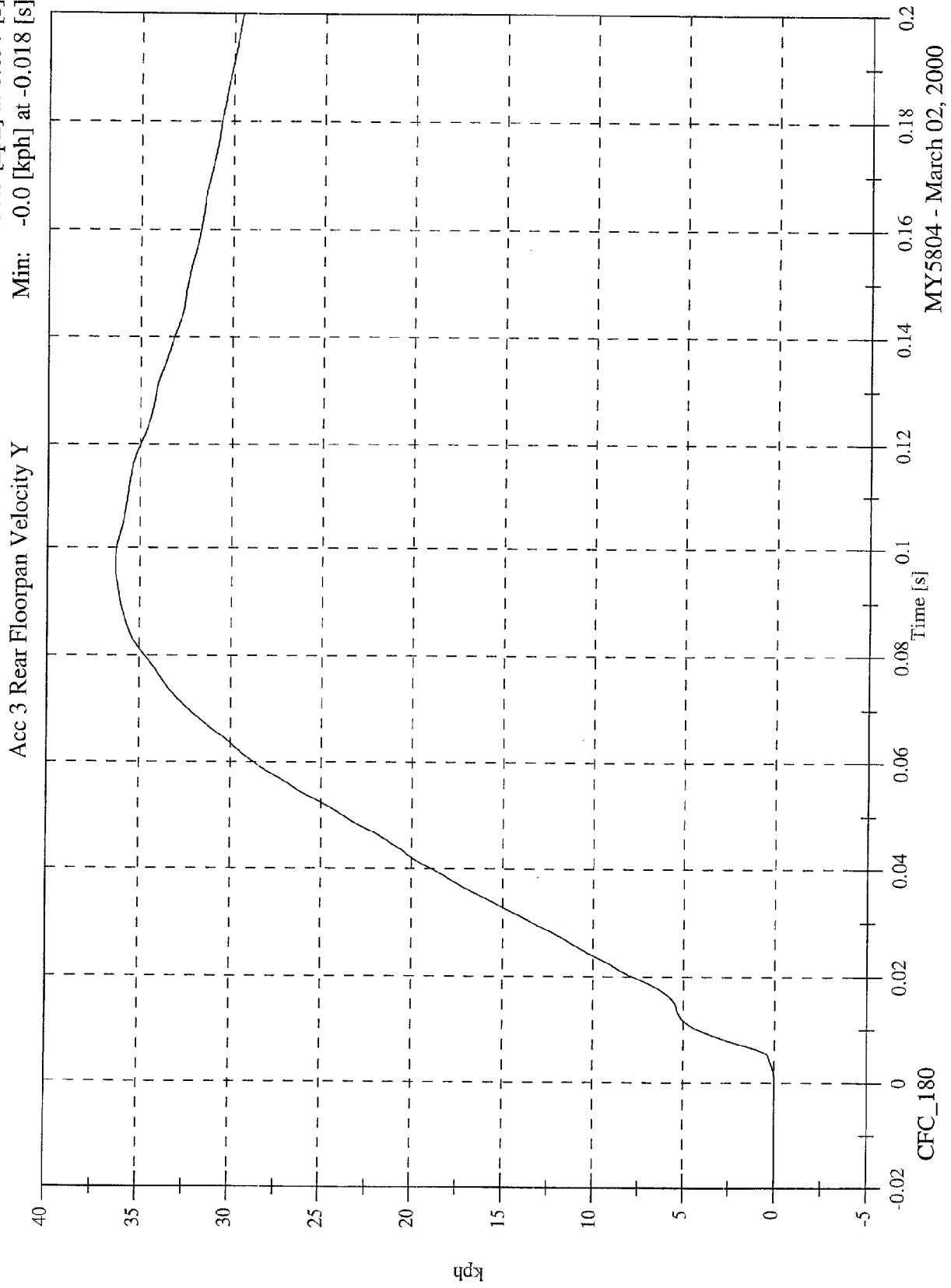
Max: 24.0 [g] at 0.008 [s]
Min: -3.5 [g] at 0.121 [s]



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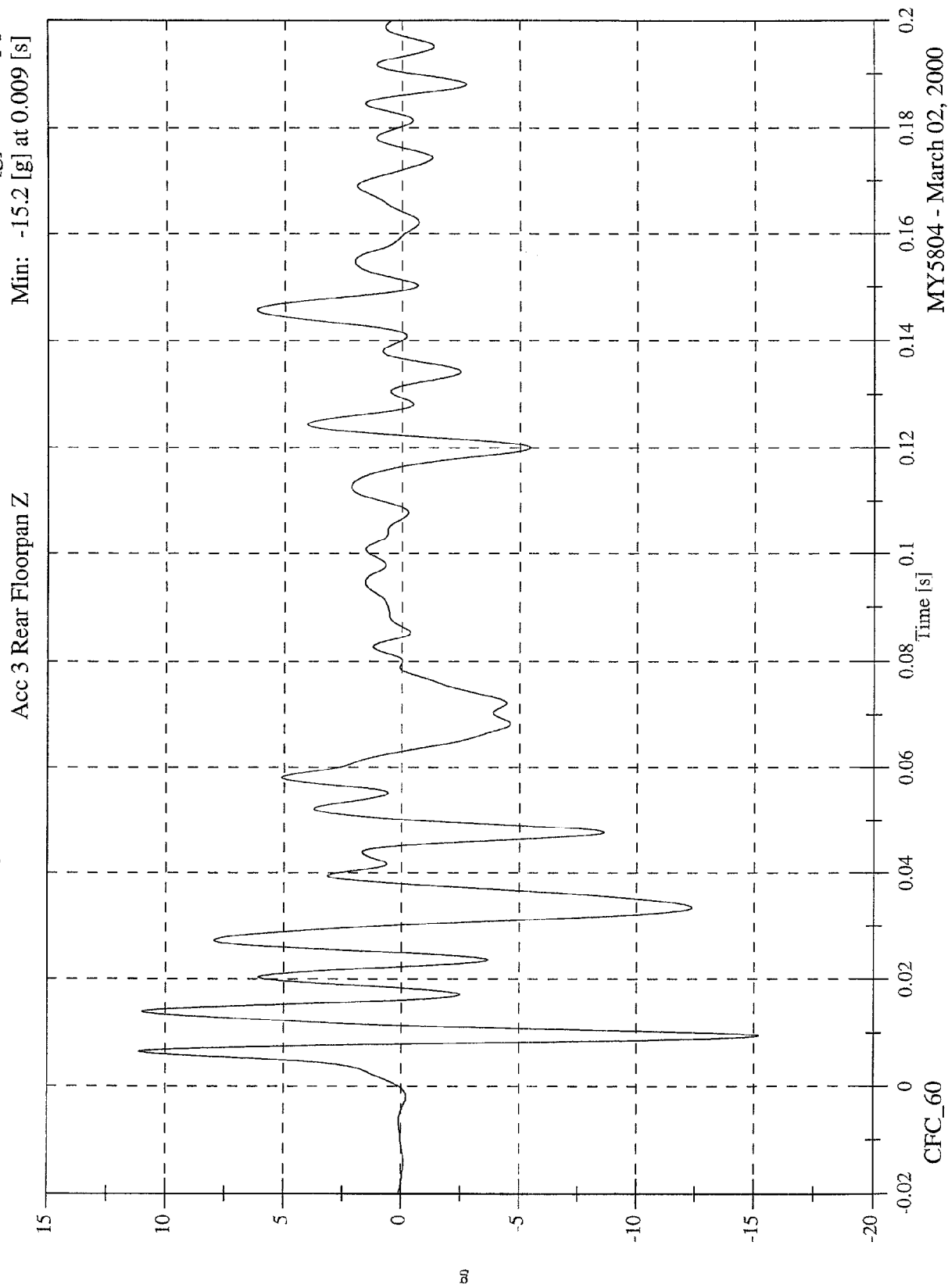
SNCAP Test #7 - 2000 Volkswagen Passat

Max: 36.3 [kph] at 0.097 [s]
Min: -0.0 [kph] at -0.018 [s]



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SNCAP Test #7 - 2000 Volkswagen Passat

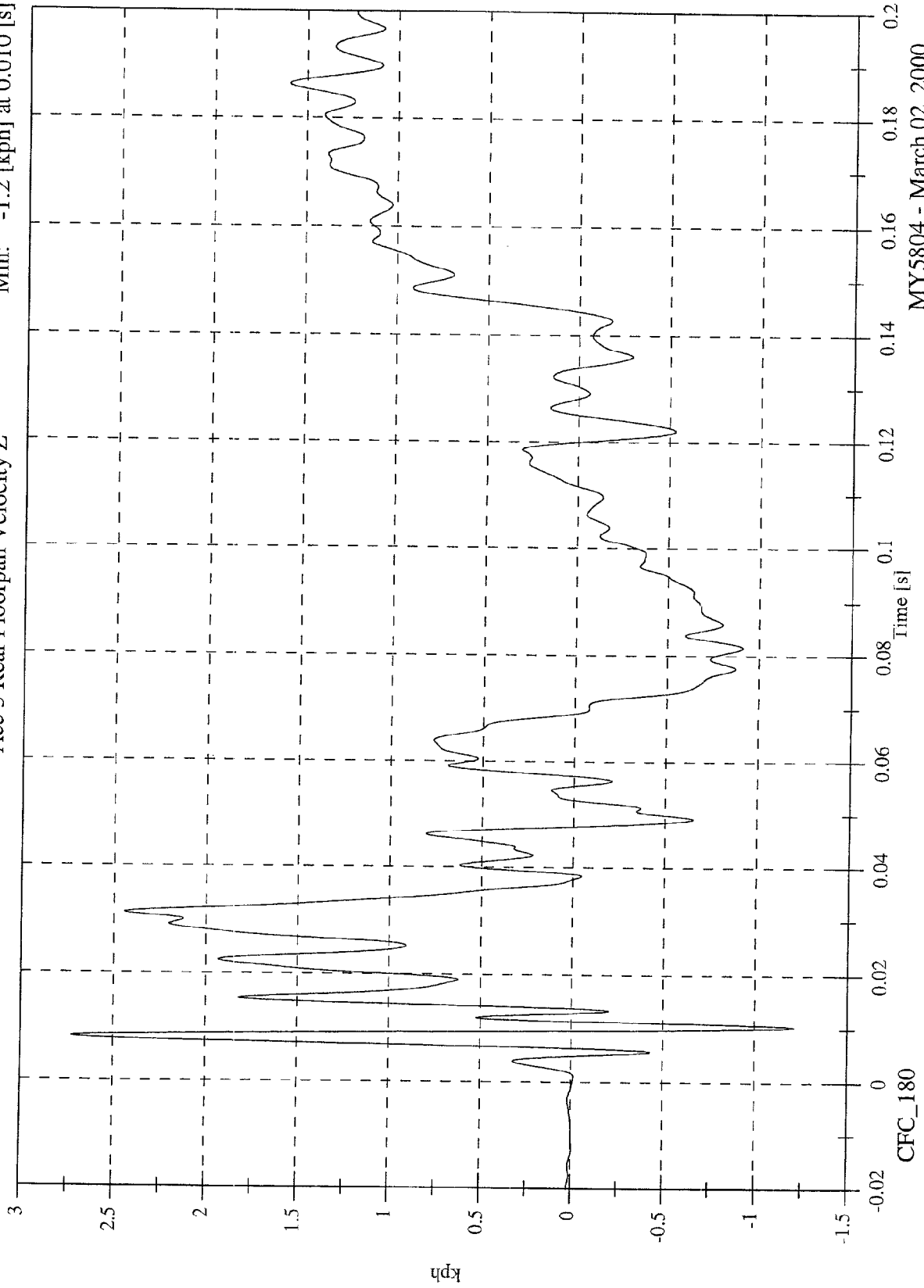


SNCAP Test #7 - 2000 Volkswagen Passat

Max: 2.7 [kph] at 0.008 [s]

Min: -1.2 [kph] at 0.010 [s]

Acc 3 Rear Floorpan Velocity Z

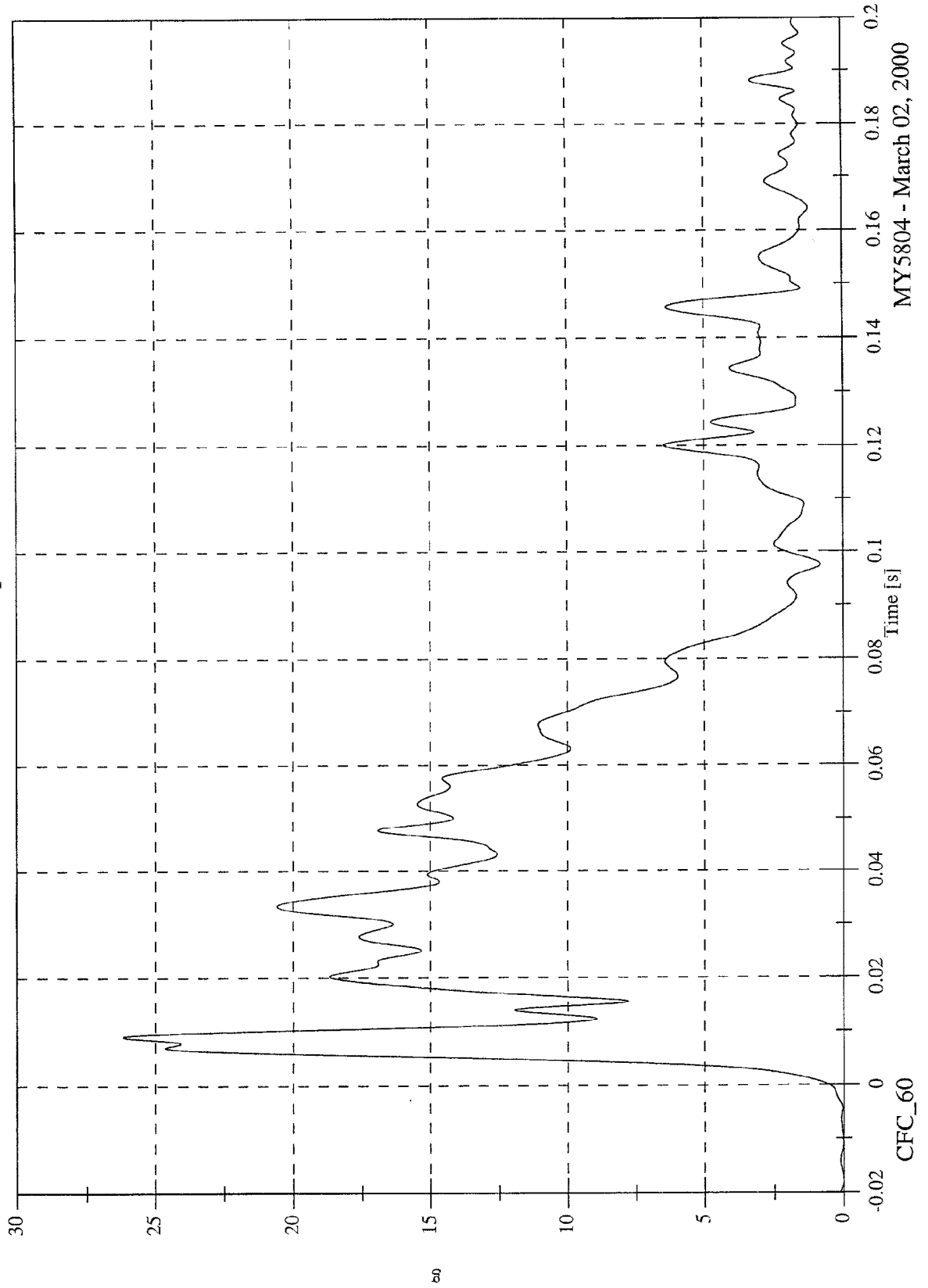


MY5804 - March 02, 2000

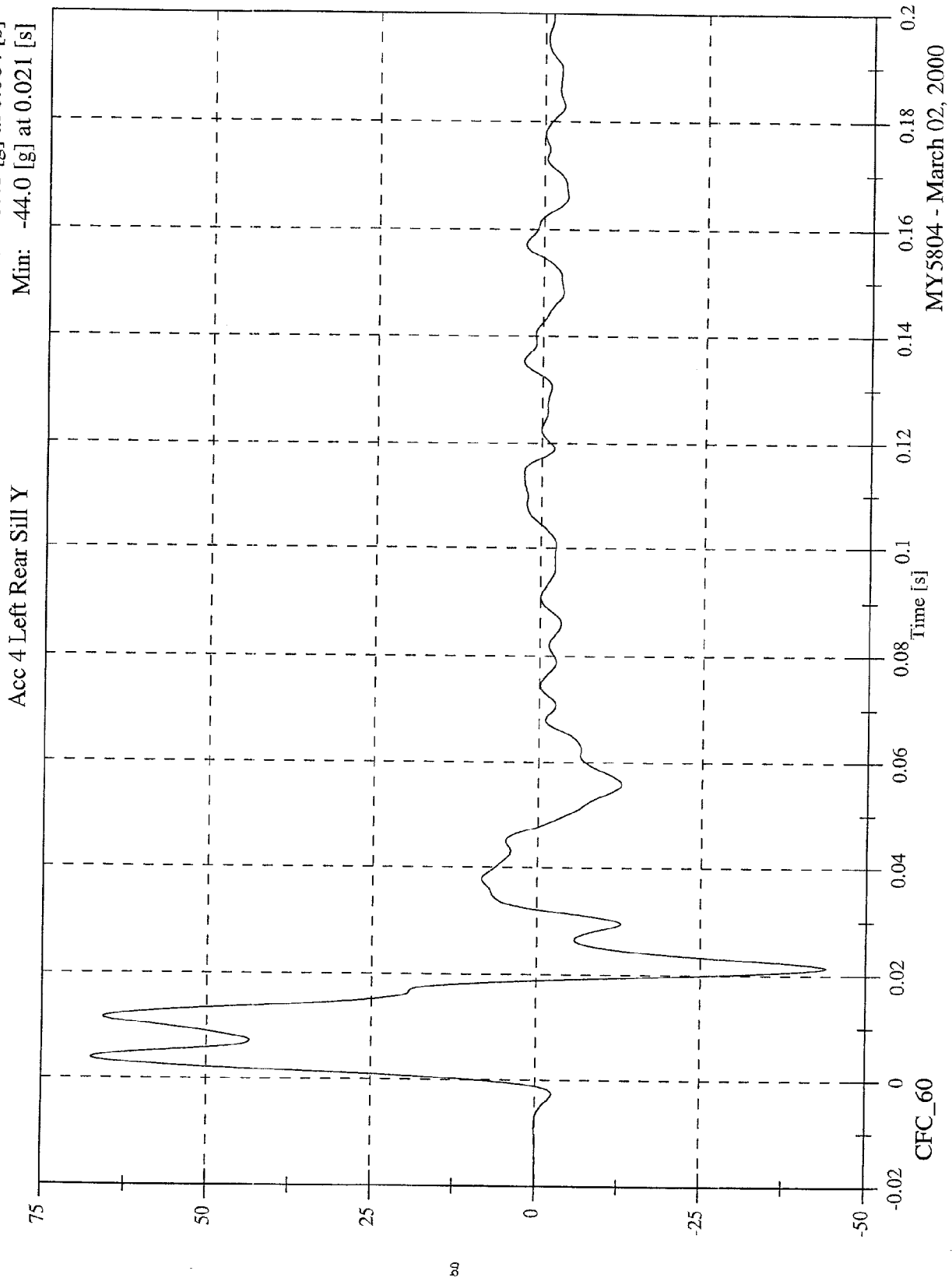
SNCAP Test #7 - 2000 Volkswagen Passat

Acc 3 Rear Floorpan Resultant

Max: 26.2 [g] at 0.009 [s]
Min: 0.0 [g] at -0.018 [s]



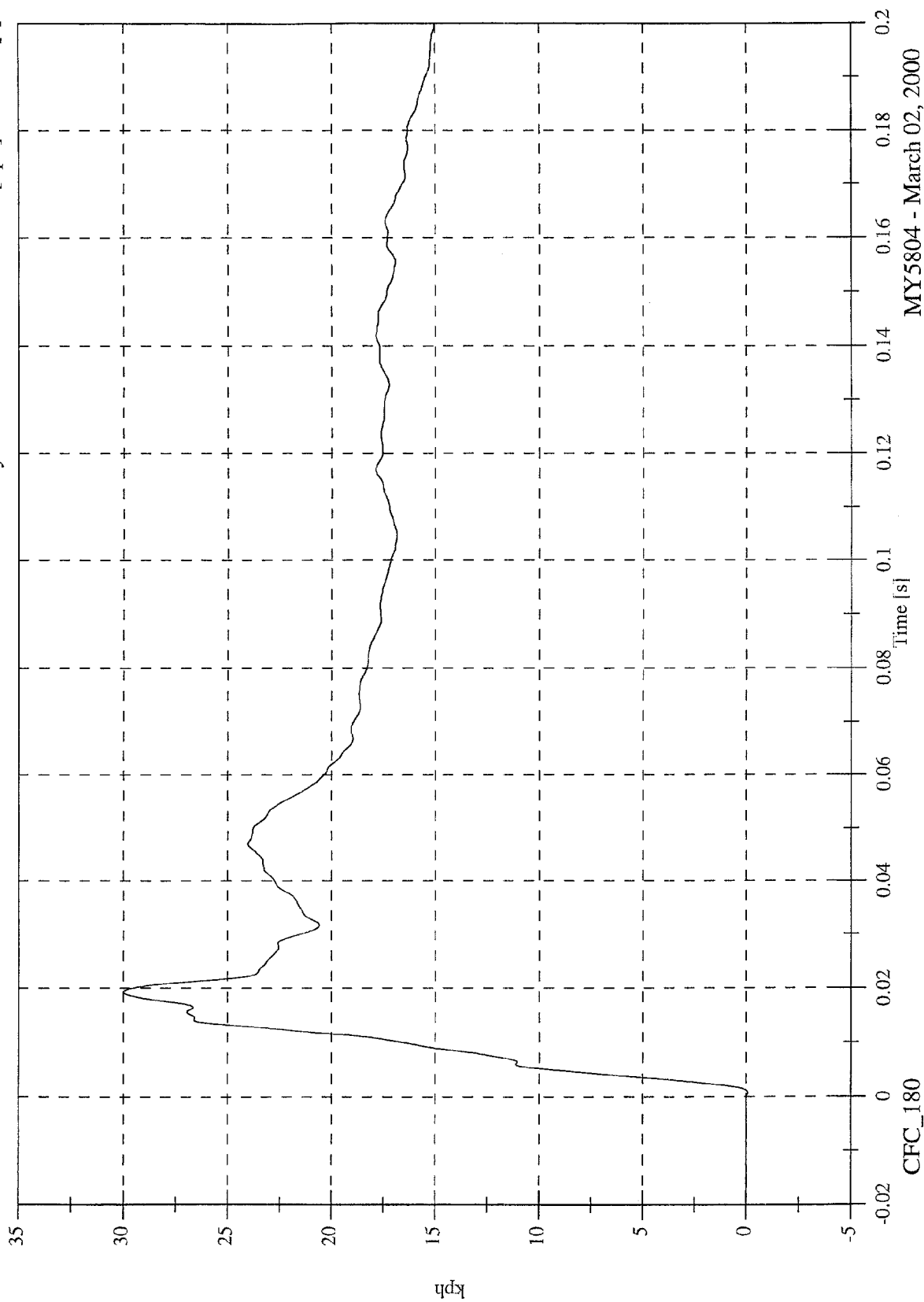
SNCAP Test #7 - 2000 Volkswagen Passat



SNCAP Test #7 - 2000 Volkswagen Passat

Max: 30.0 [kph] at 0.019 [s]
Min: -0.1 [kph] at 0.001 [s]

Acc 4 Left Rear Sill Y Velocity



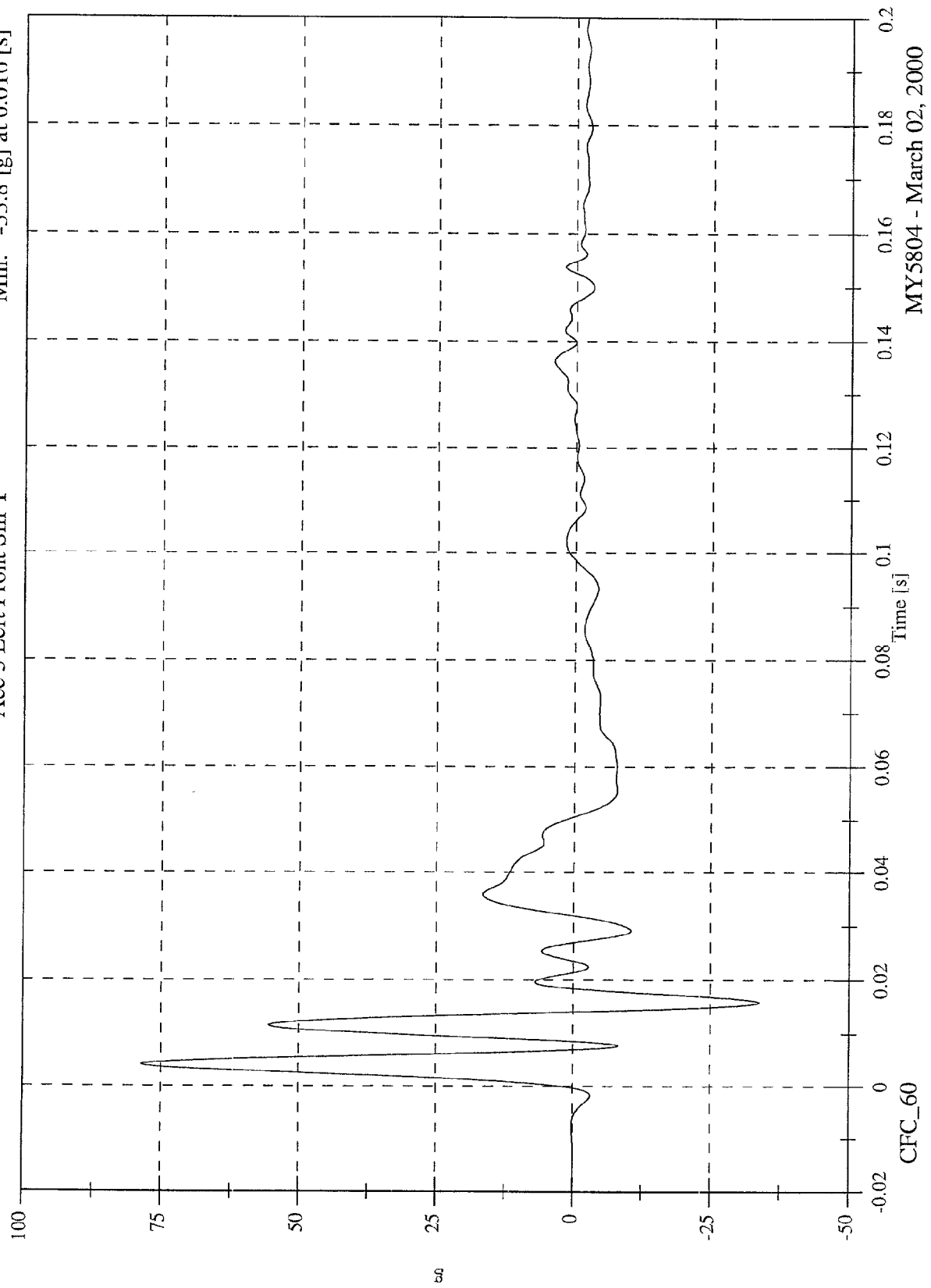
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SNCAP Test #7 - 2000 Volkswagen Passat

Acc 5 Left Front Sill Y

Max: 78.5 [g] at 0.004 [s]

Min: -33.8 [g] at 0.016 [s]

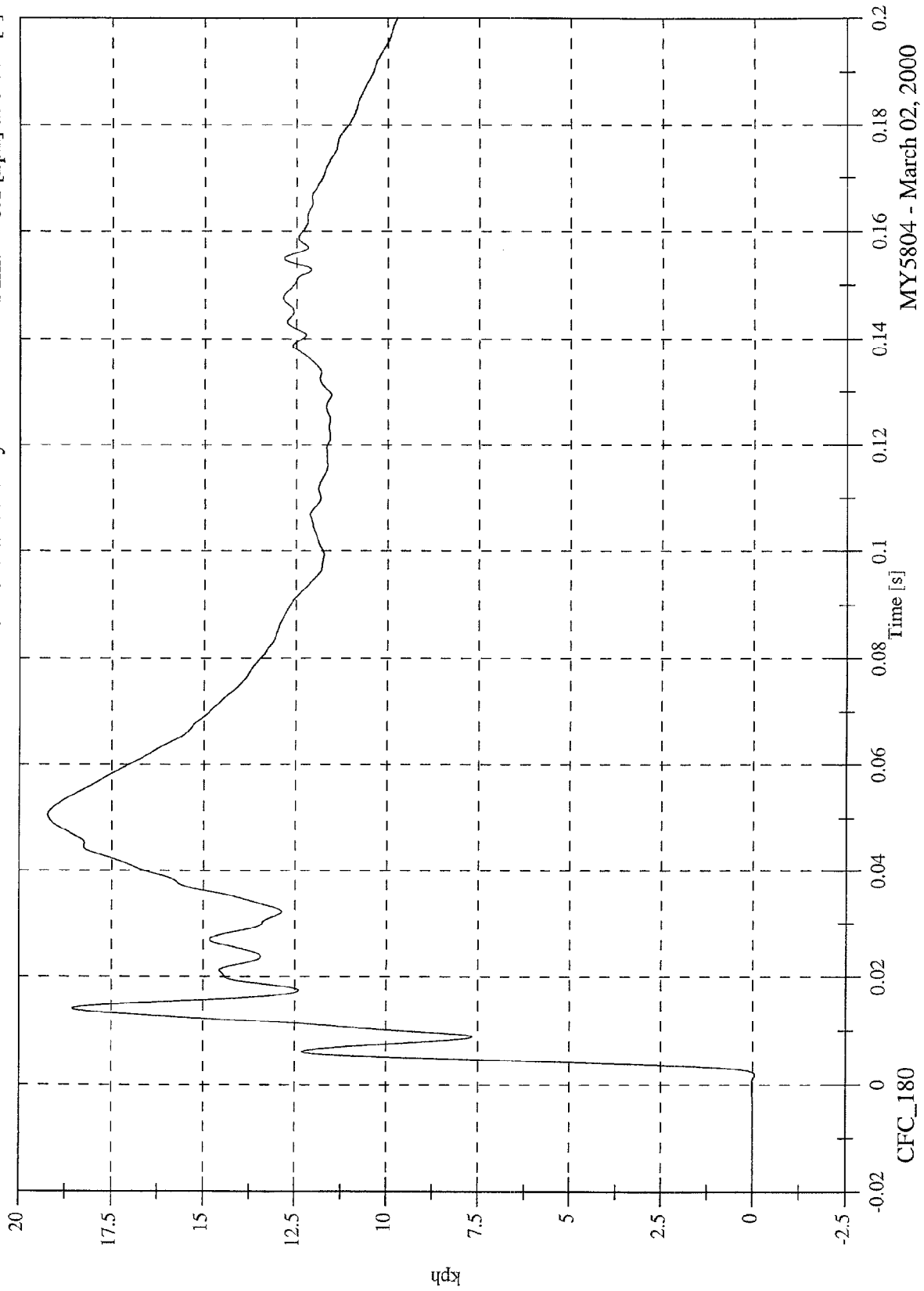


MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 19.2 [kph] at 0.051 [s]
Min: -0.1 [kph] at 0.002 [s]

Acc 5 Left Front Sill Y Velocity

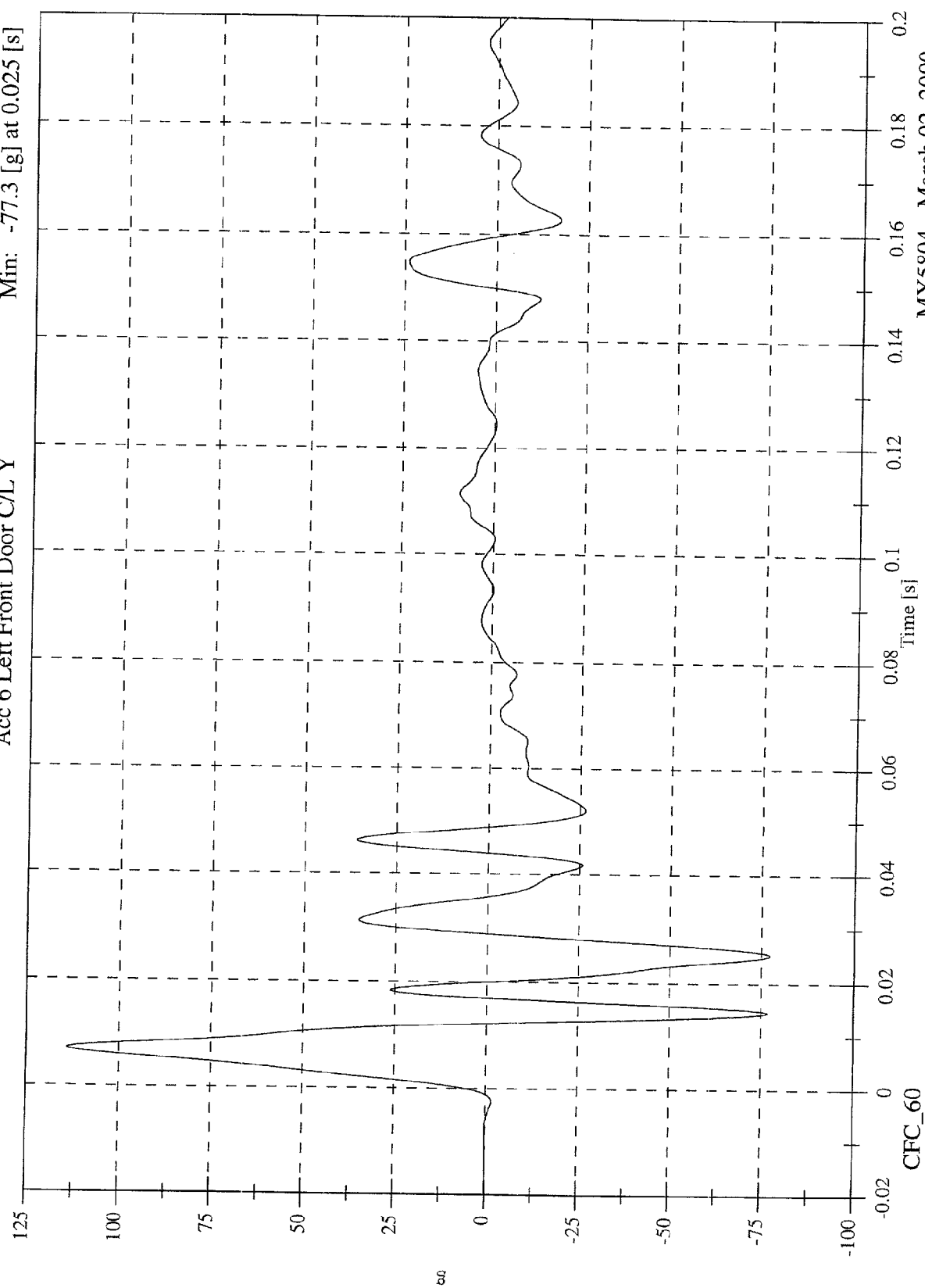


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 114.1 [g] at 0.007 [s]
 Min: -77.3 [g] at 0.025 [s]

Acc 6 Left Front Door C/L Y



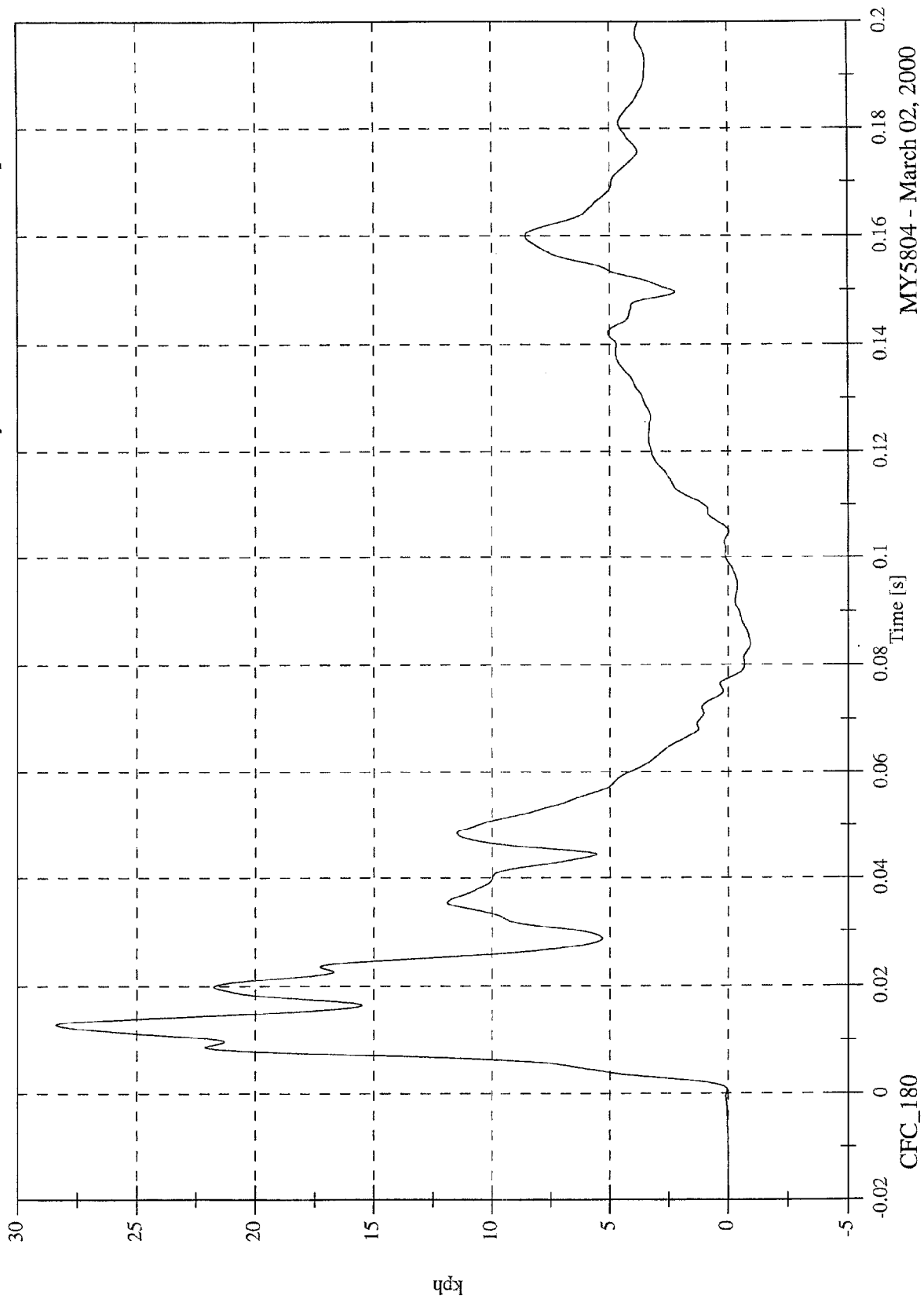
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Acc 6 Left Front Door C/L Y Velocity

Max: 28.4 [kph] at 0.013 [s]

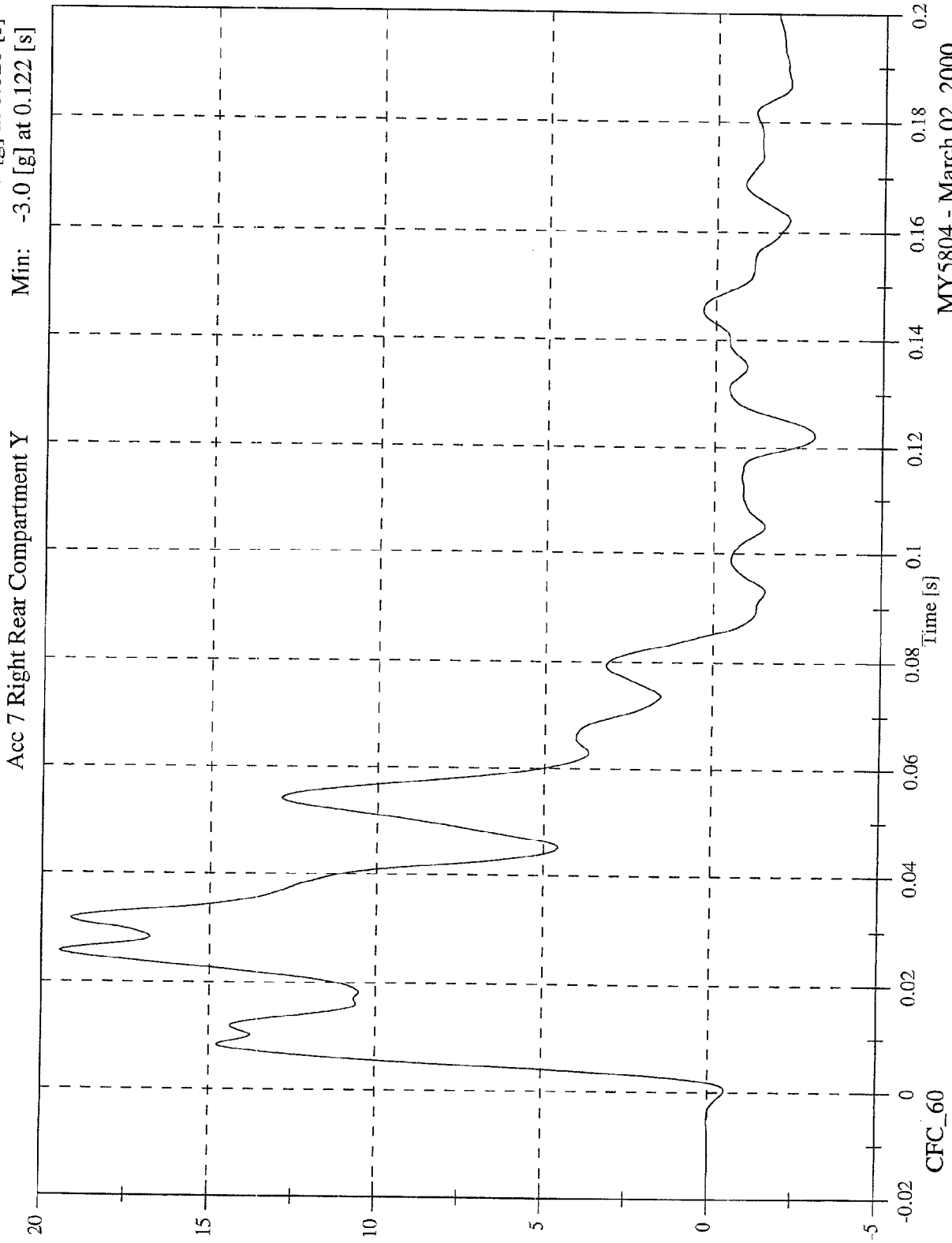
Min: -0.9 [kph] at 0.084 [s]



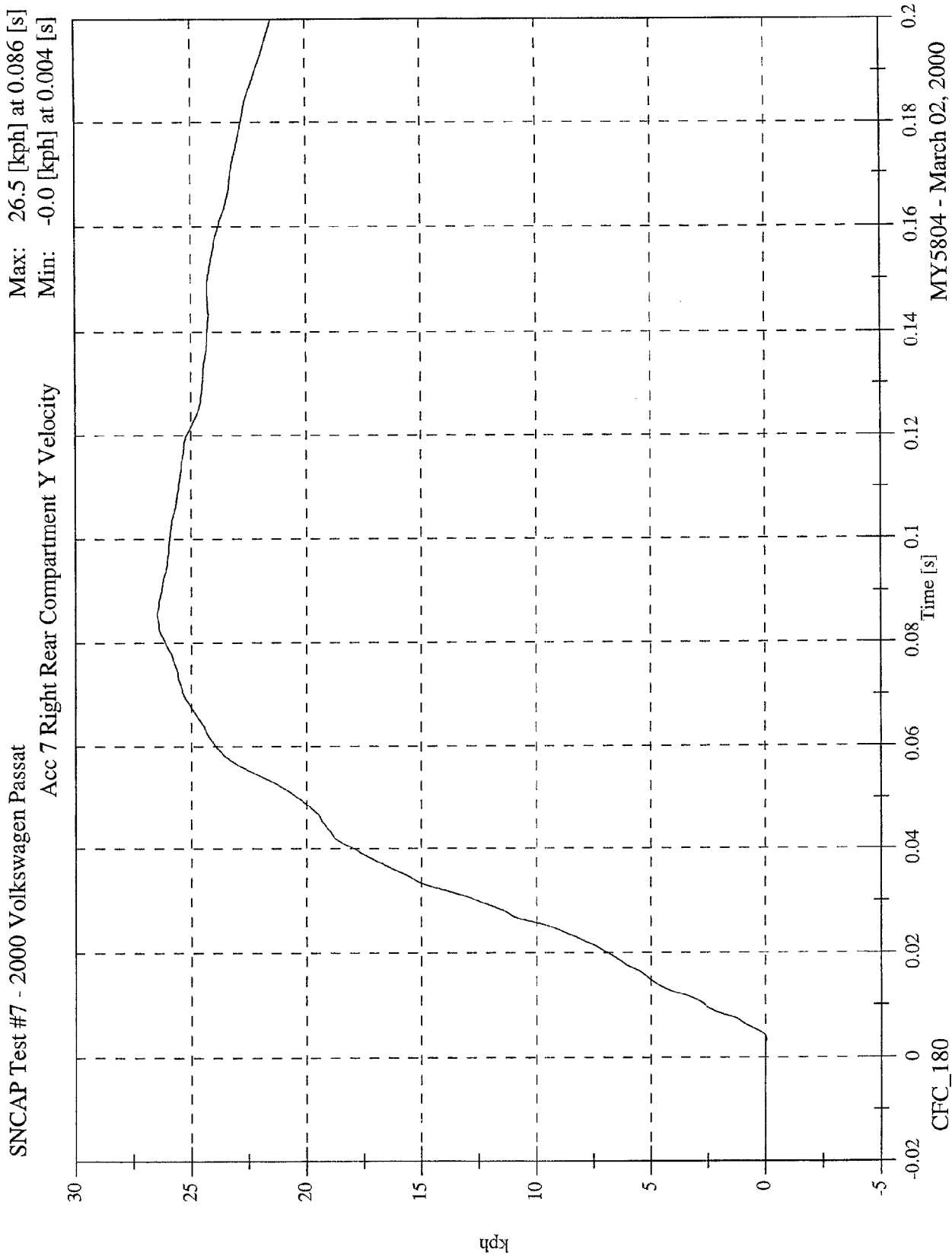
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 19.5 [g] at 0.026 [s]
 Min: -3.0 [g] at 0.122 [s]



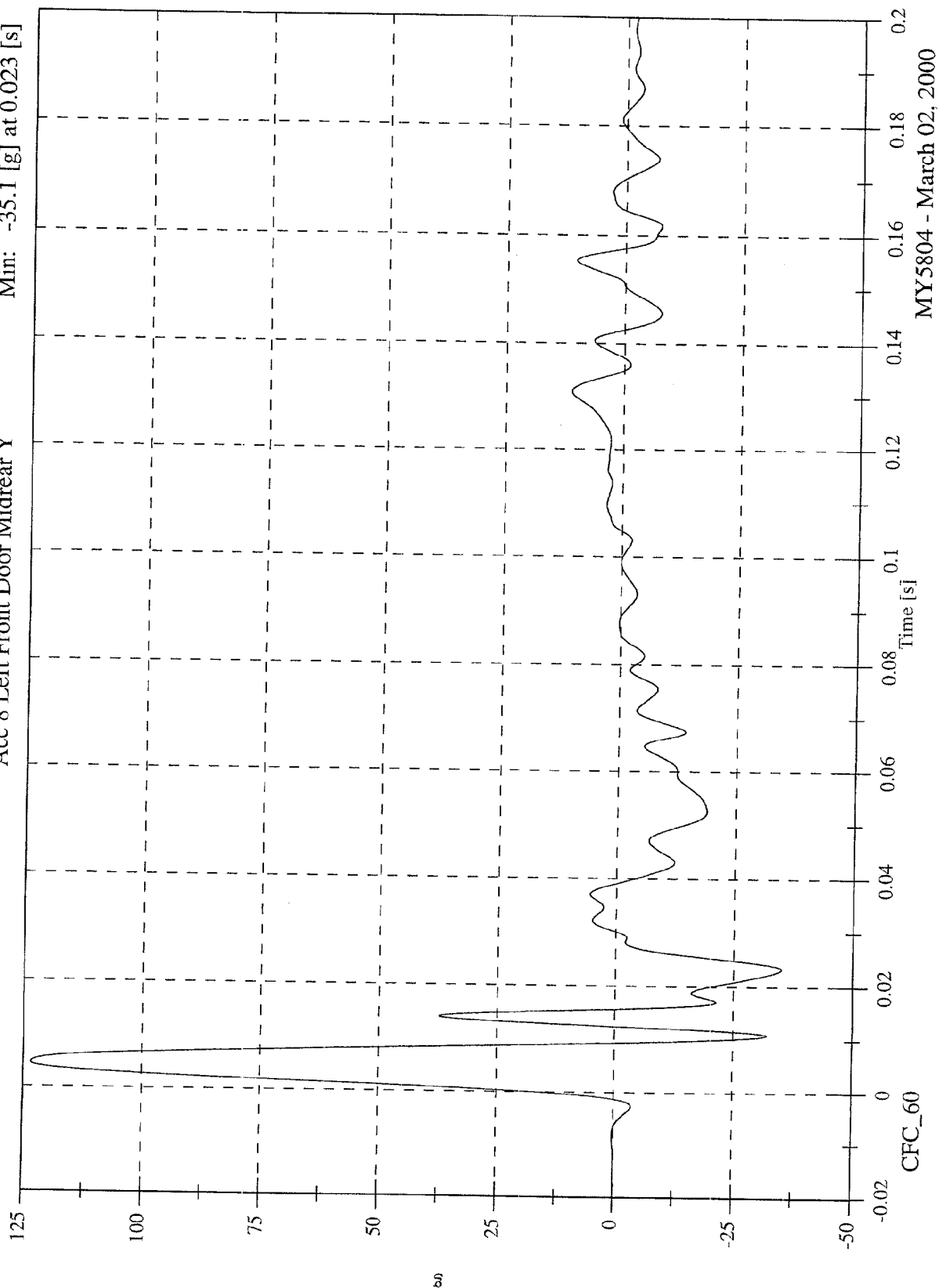
MY5804 - March 02, 2000



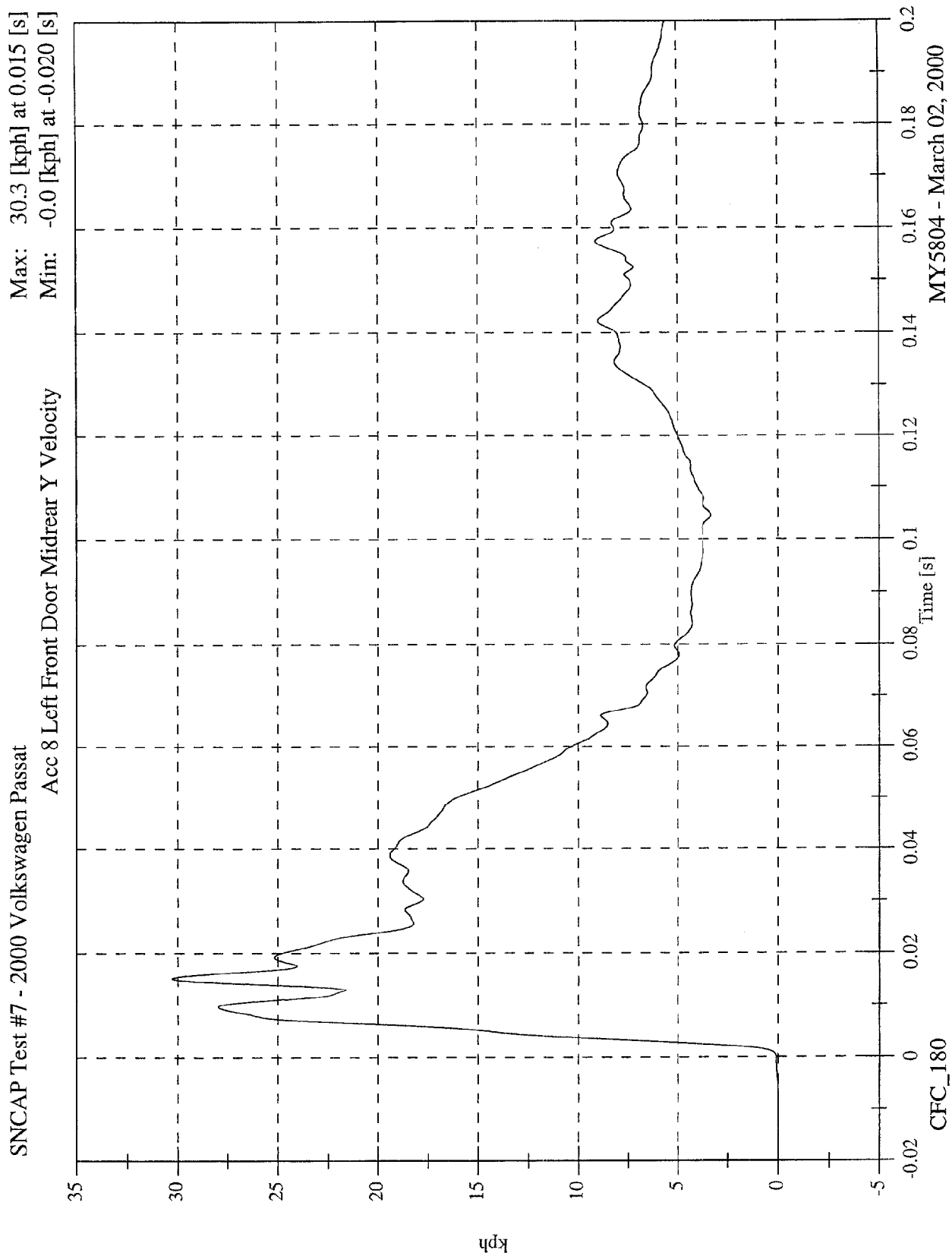
SNCAP Test #7 - 2000 Volkswagen Passat

Max: 123.4 [g] at 0.005 [s]
 Min: -35.1 [g] at 0.023 [s]

Acc 8 Left Front Door Midrear Y



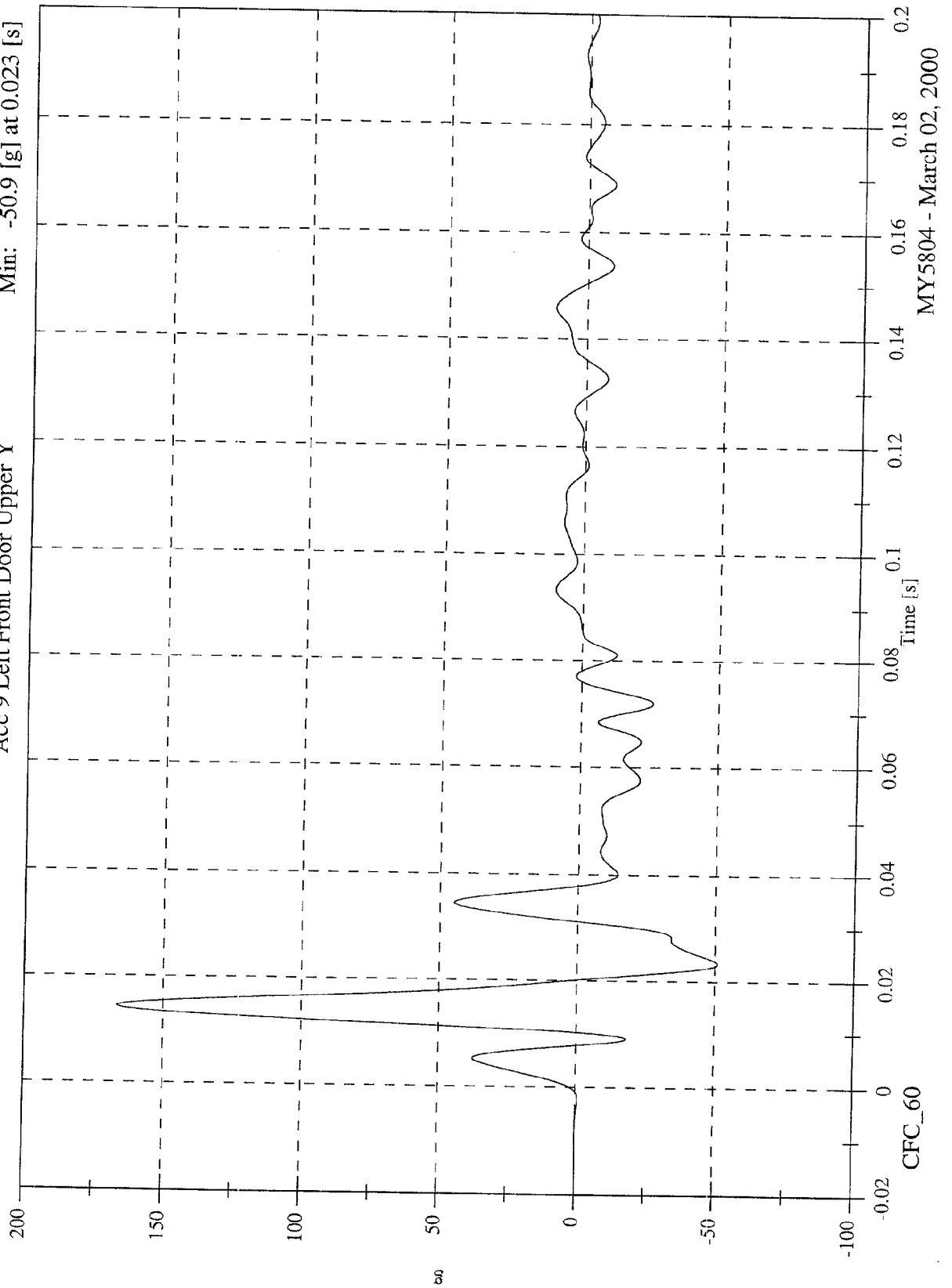
MY5804 - March 02, 2000



SNCAP Test #7 - 2000 Volkswagen Passat

Max: 166.7 [g] at 0.014 [s]
 Min: -50.9 [g] at 0.023 [s]

Acc 9 Left Front Door Upper Y

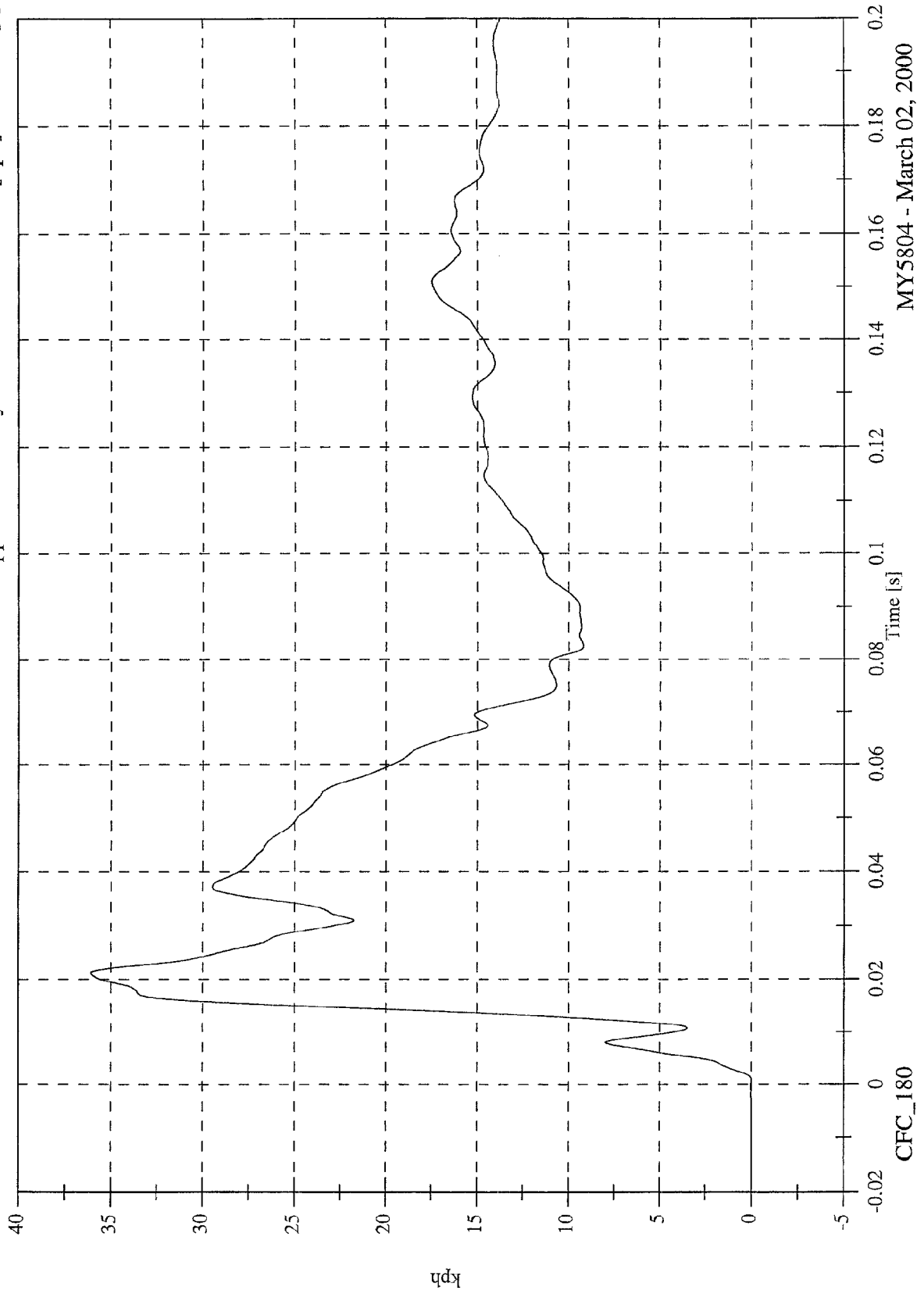


MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 36.1 [kph] at 0.021 [s]
 Min: -0.0 [kph] at -0.020 [s]

Acc 9 Left Front Door Upper Y Velocity

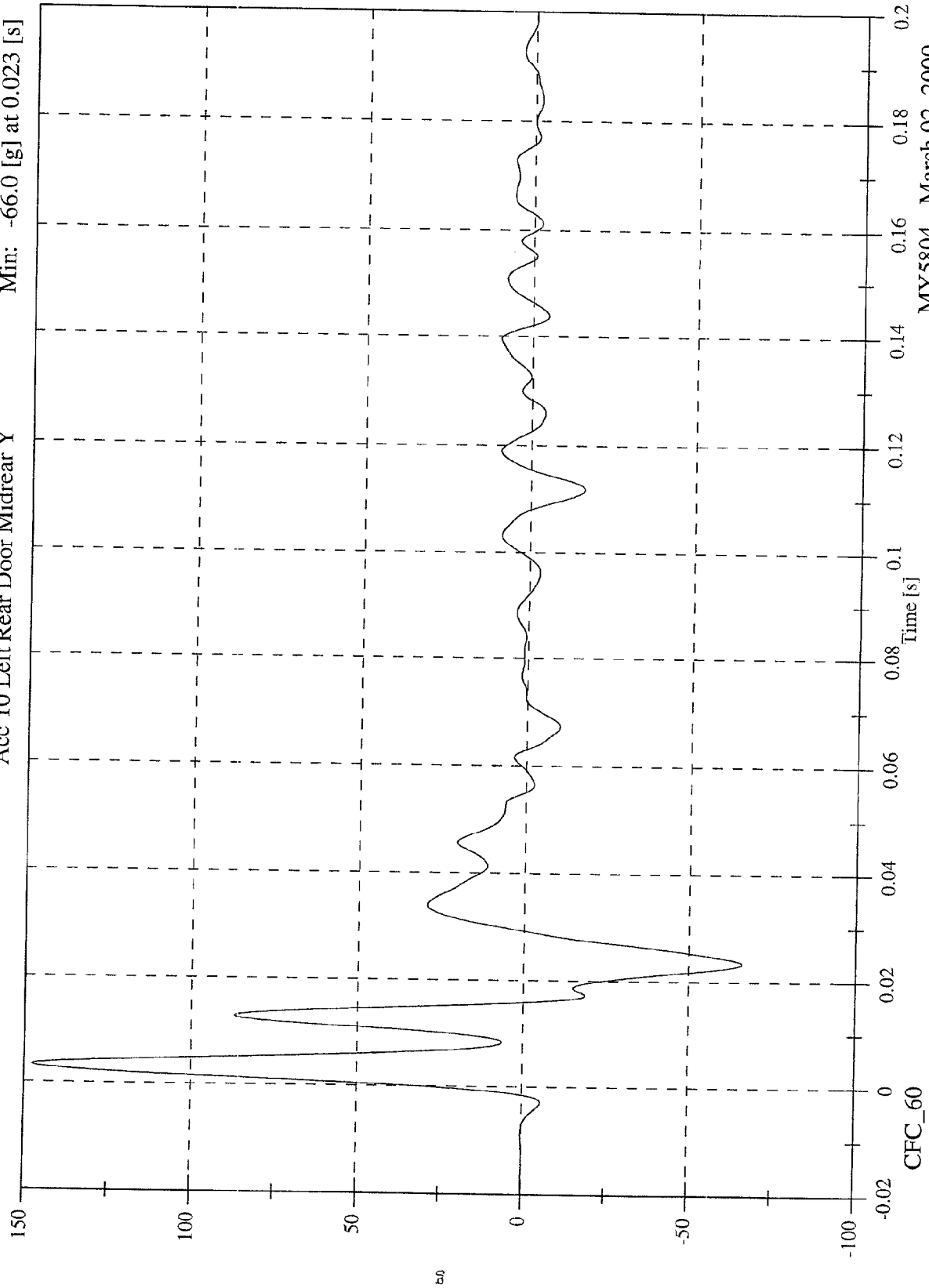


MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Acc 10 Left Rear Door Midrear Y

Max: 147.5 [g] at 0.003 [s]
Min: -66.0 [g] at 0.023 [s]

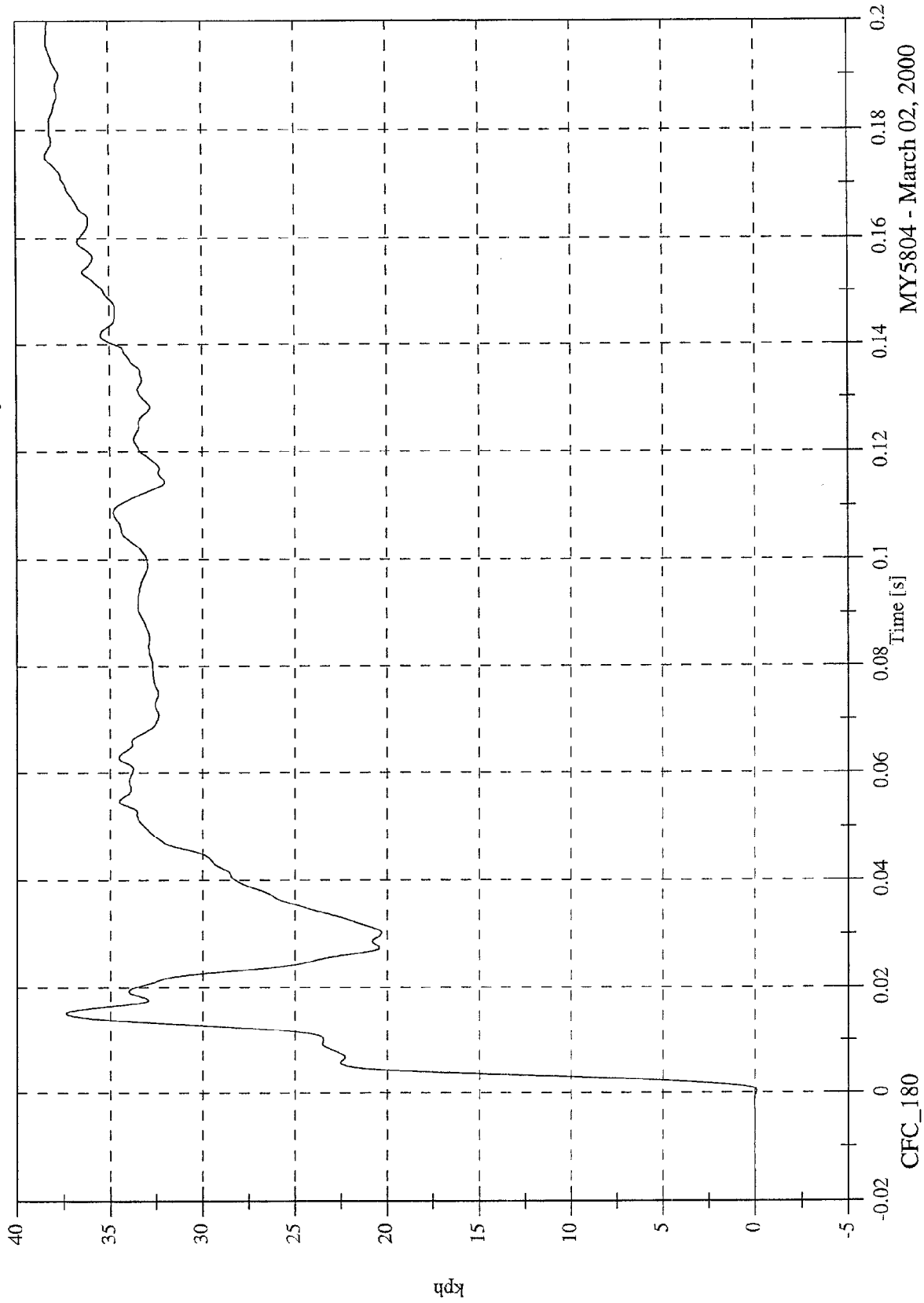


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 38.4 [kph] at 0.175 [s]
 Min: -0.1 [kph] at 0.000 [s]

Acc 10 Left Rear Door Midrear Y Velocity

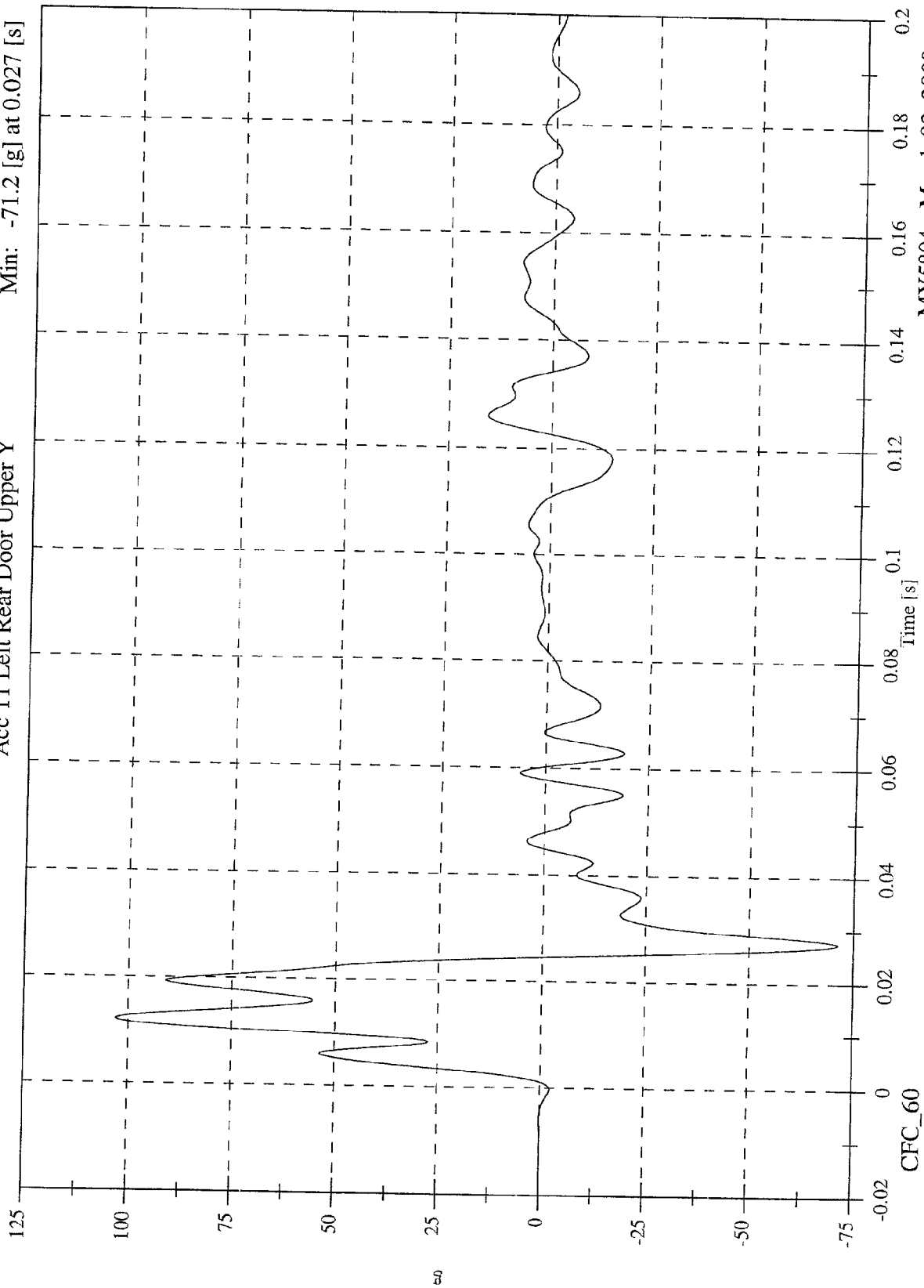


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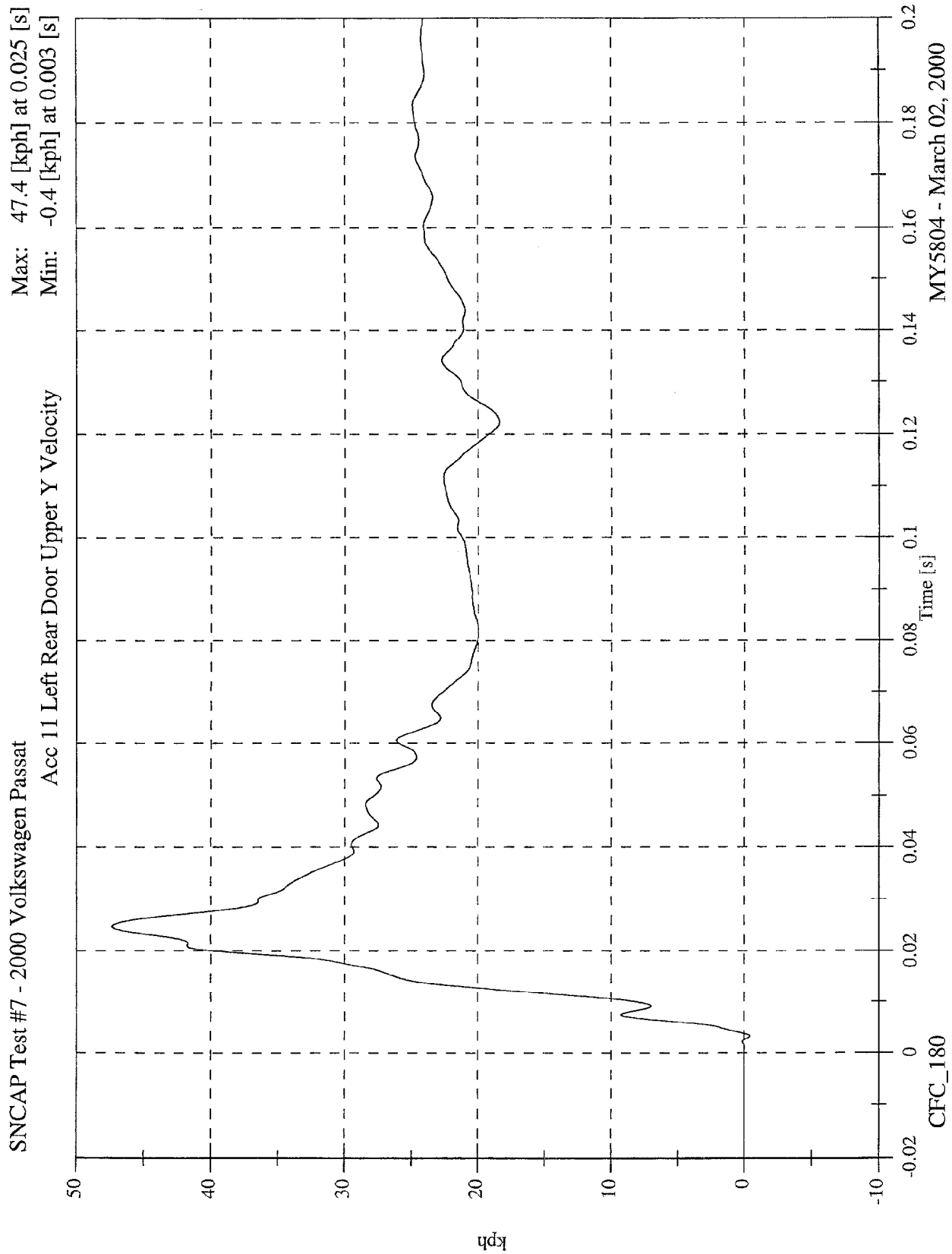
SNCAP Test #7 - 2000 Volkswagen Passat

Max: 102.9 [g] at 0.012 [s]
Min: -71.2 [g] at 0.027 [s]

Acc 11 Left Rear Door Upper Y



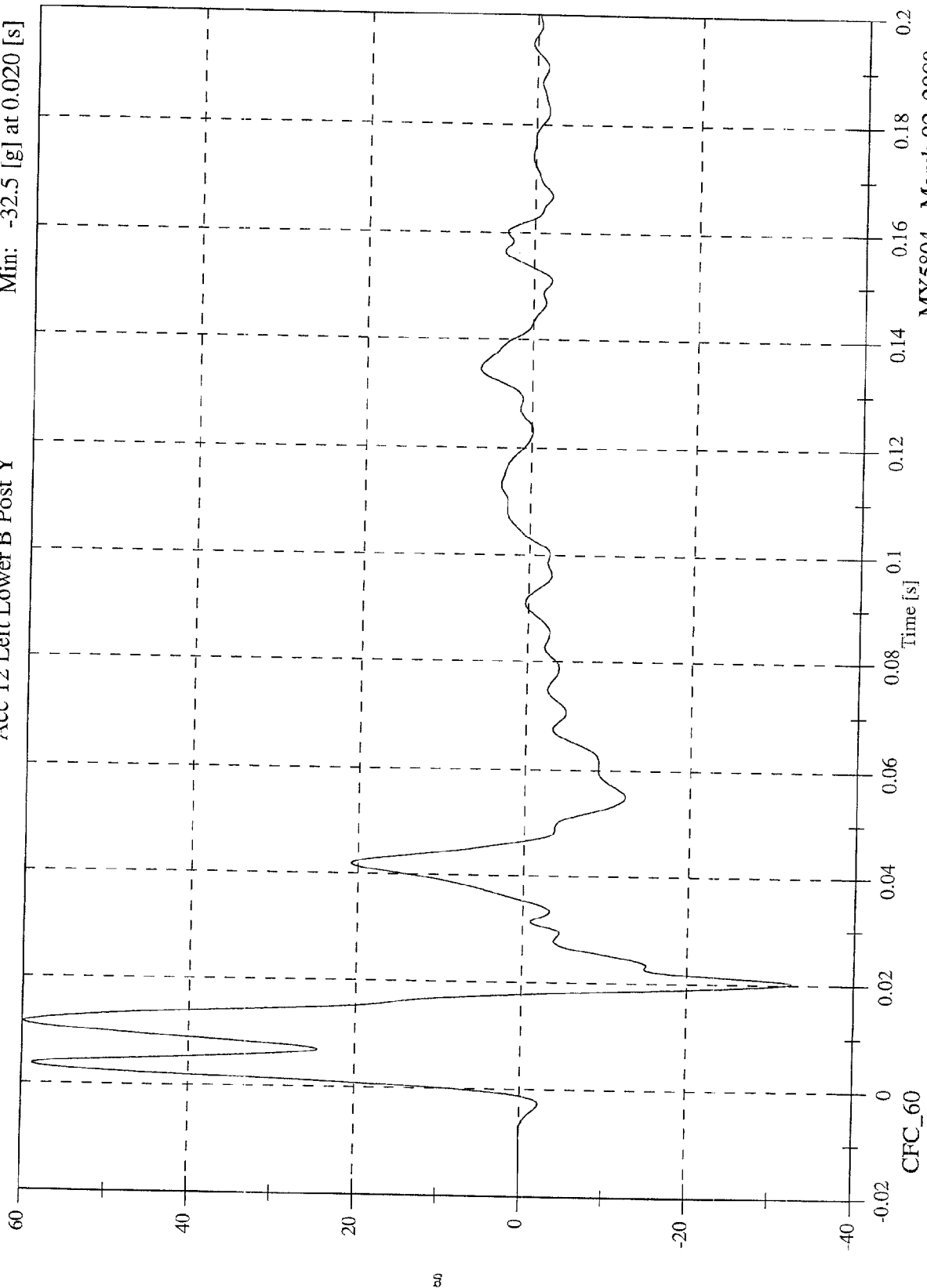
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SNCAP Test #7 - 2000 Volkswagen Passat

Acc 12 Left Lower B Post Y

Max: 59.9 [g] at 0.012 [s]
Min: -32.5 [g] at 0.020 [s]



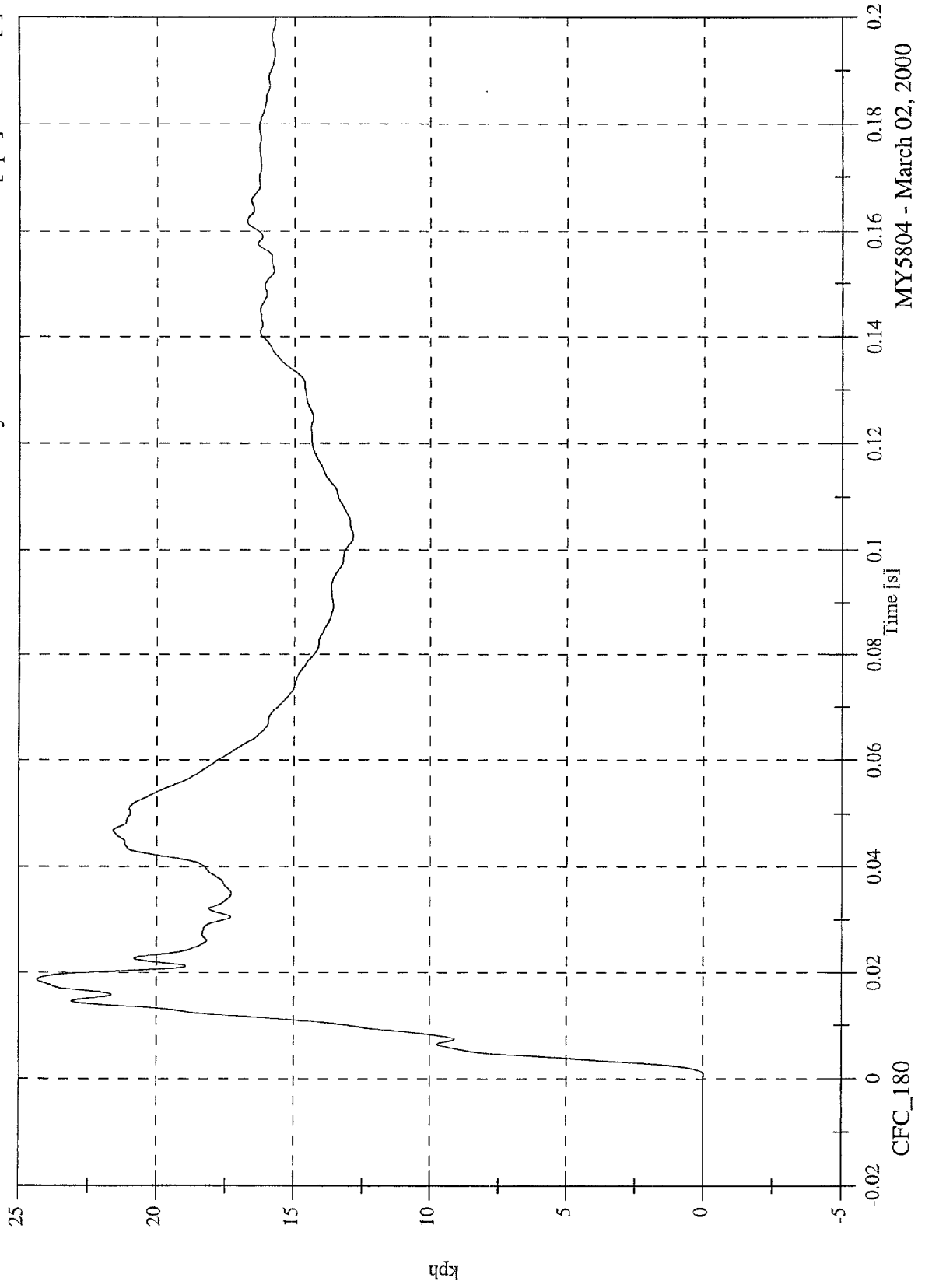
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 24.3 [kph] at 0.019 [s]

Min: -0.0 [kph] at 0.001 [s]

Acc 12 Left Lower B Post Y Velocity

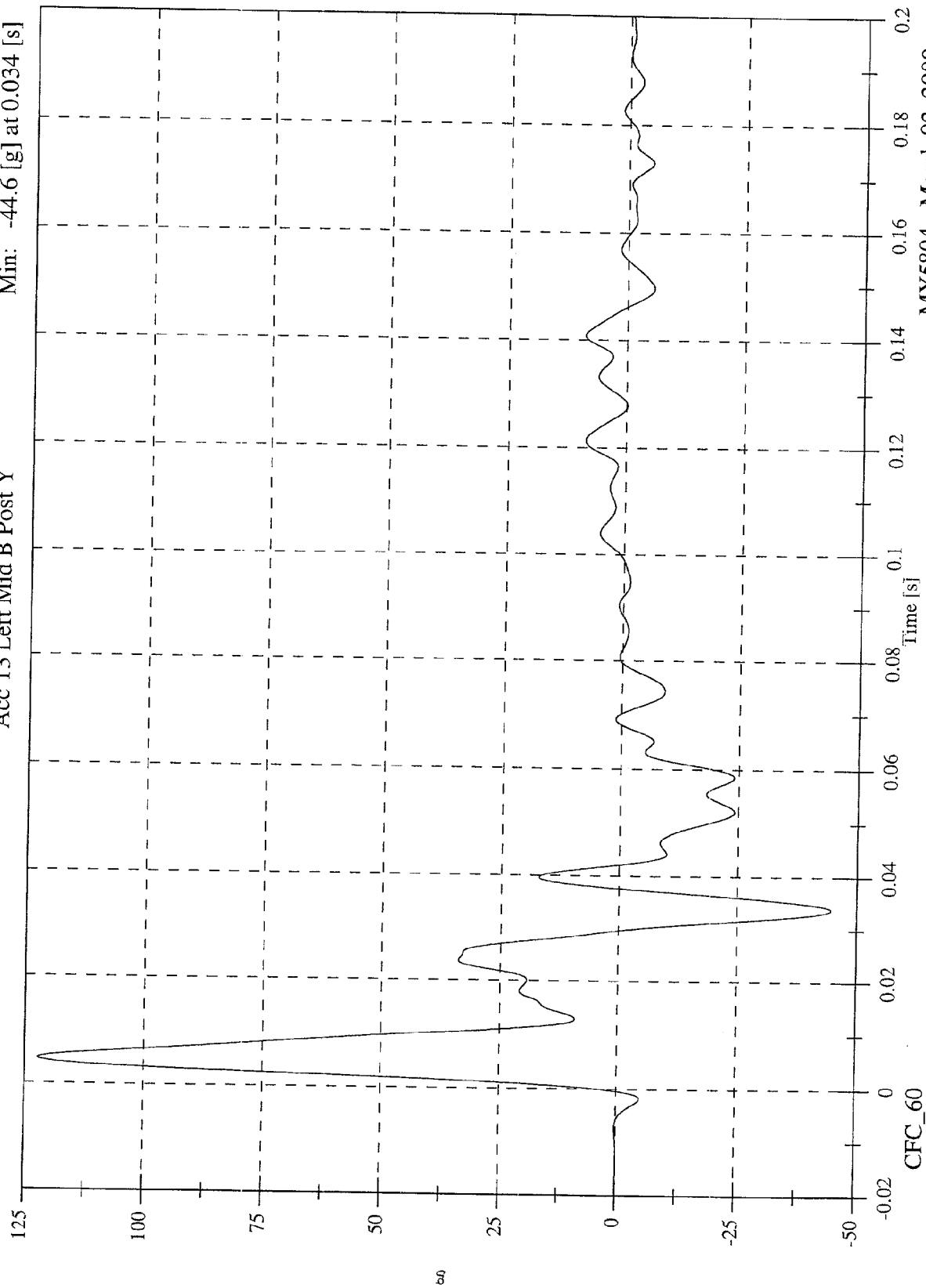


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 122.4 [g] at 0.005 [s]
Min: -44.6 [g] at 0.034 [s]

Acc 13 Left Mid B Post Y



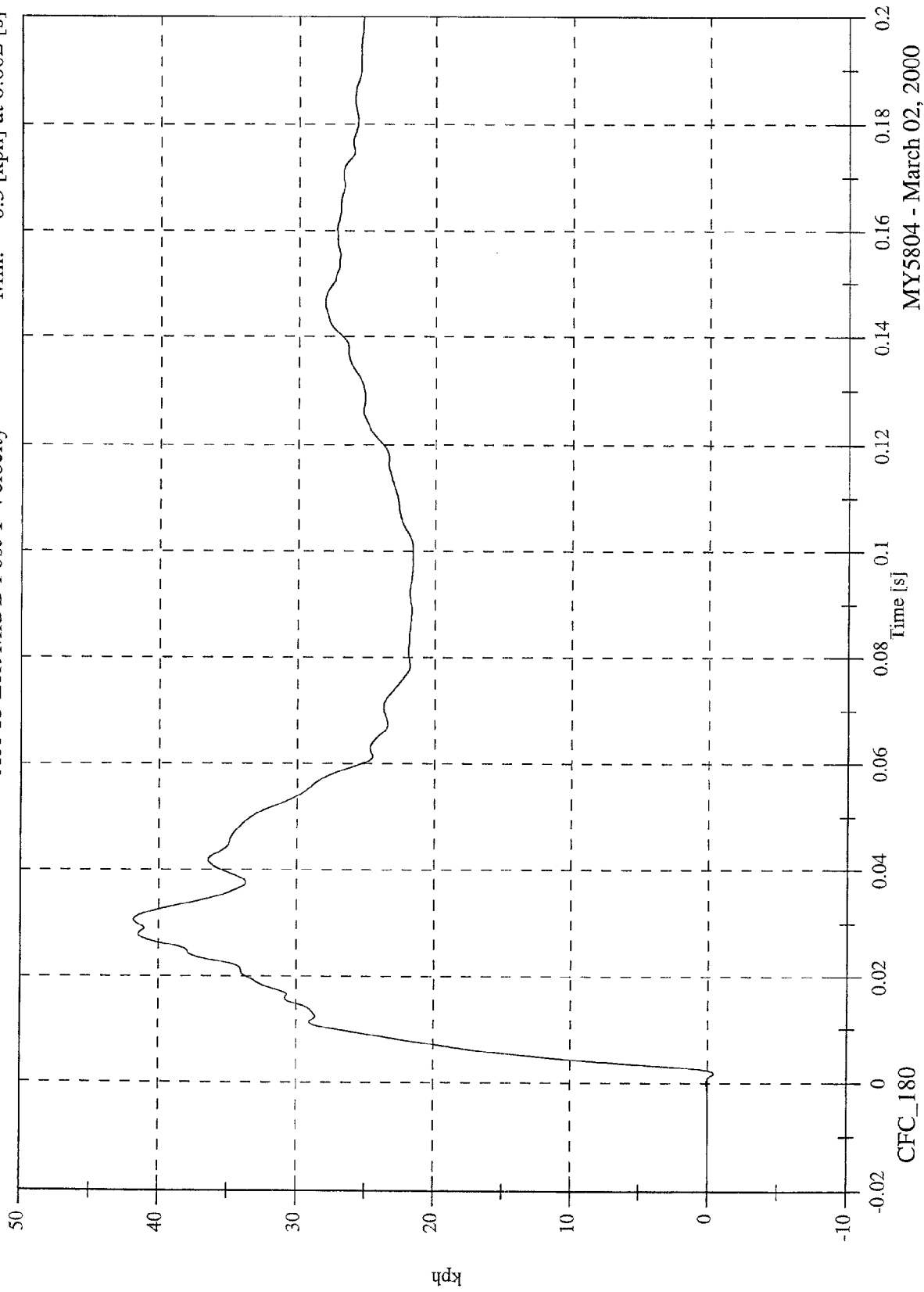
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Acc 13 Left Mid B Post Y Velocity

Max: 41.8 [kph] at 0.031 [s]

Min: -0.5 [kph] at 0.002 [s]

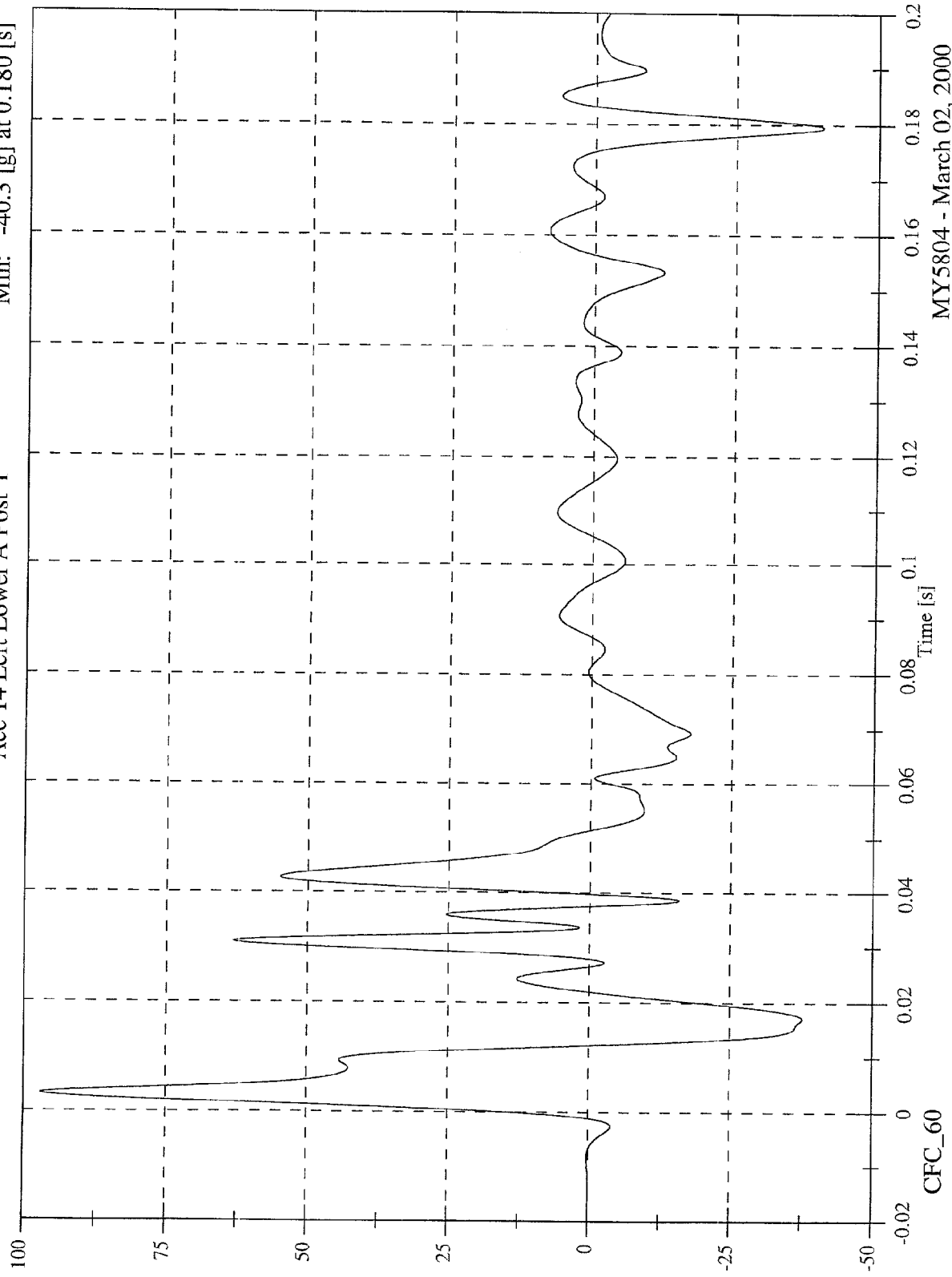


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 97.1 [g] at 0.003 [s]
 Min: -40.3 [g] at 0.180 [s]

Acc 14 Left Lower A Post Y

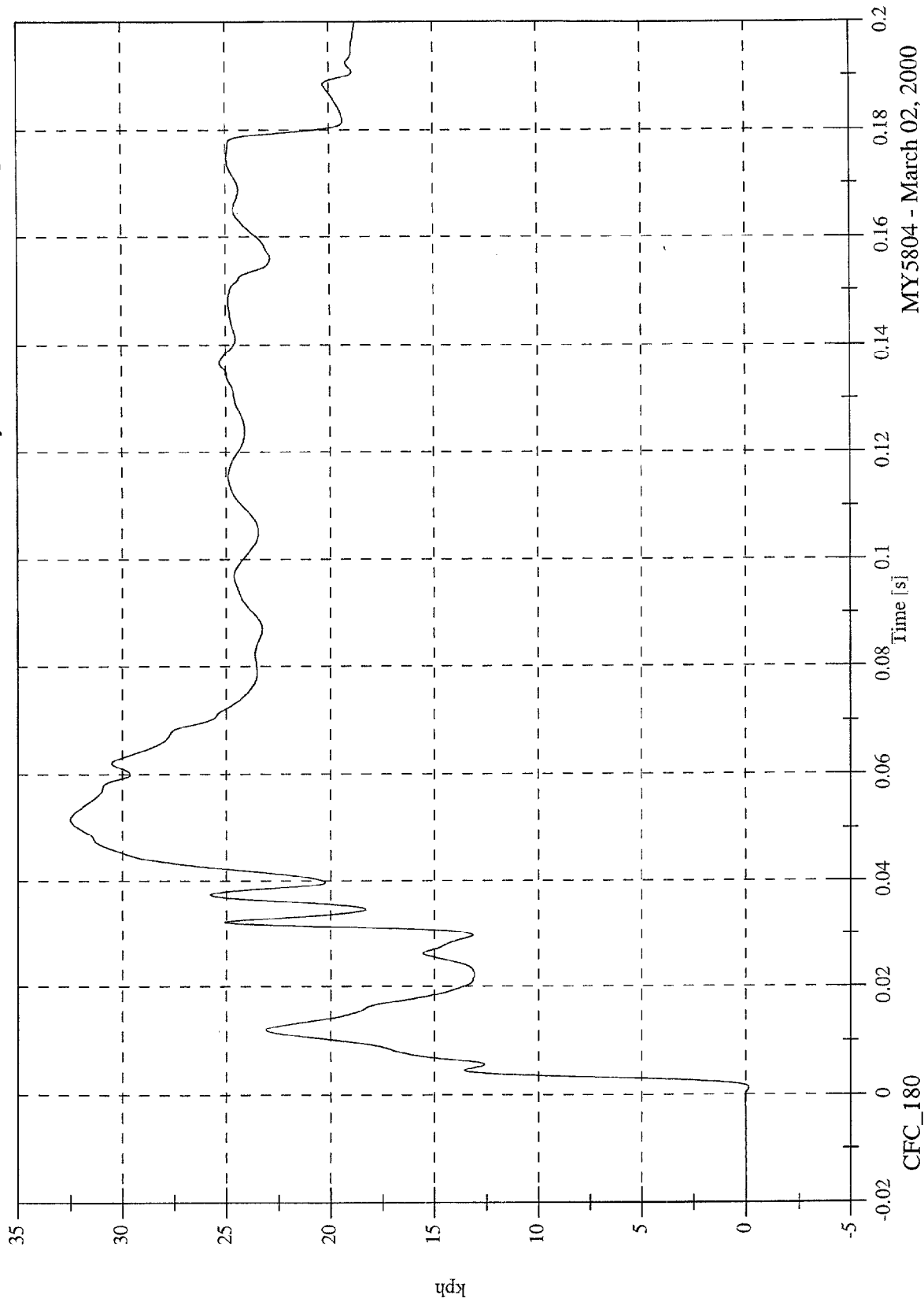


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SNCAP Test #7 - 2000 Volkswagen Passat

Acc 14 Left Lower A Post Y Velocity

Max: 32.5 [kph] at 0.052 [s]
Min: -0.1 [kph] at 0.001 [s]

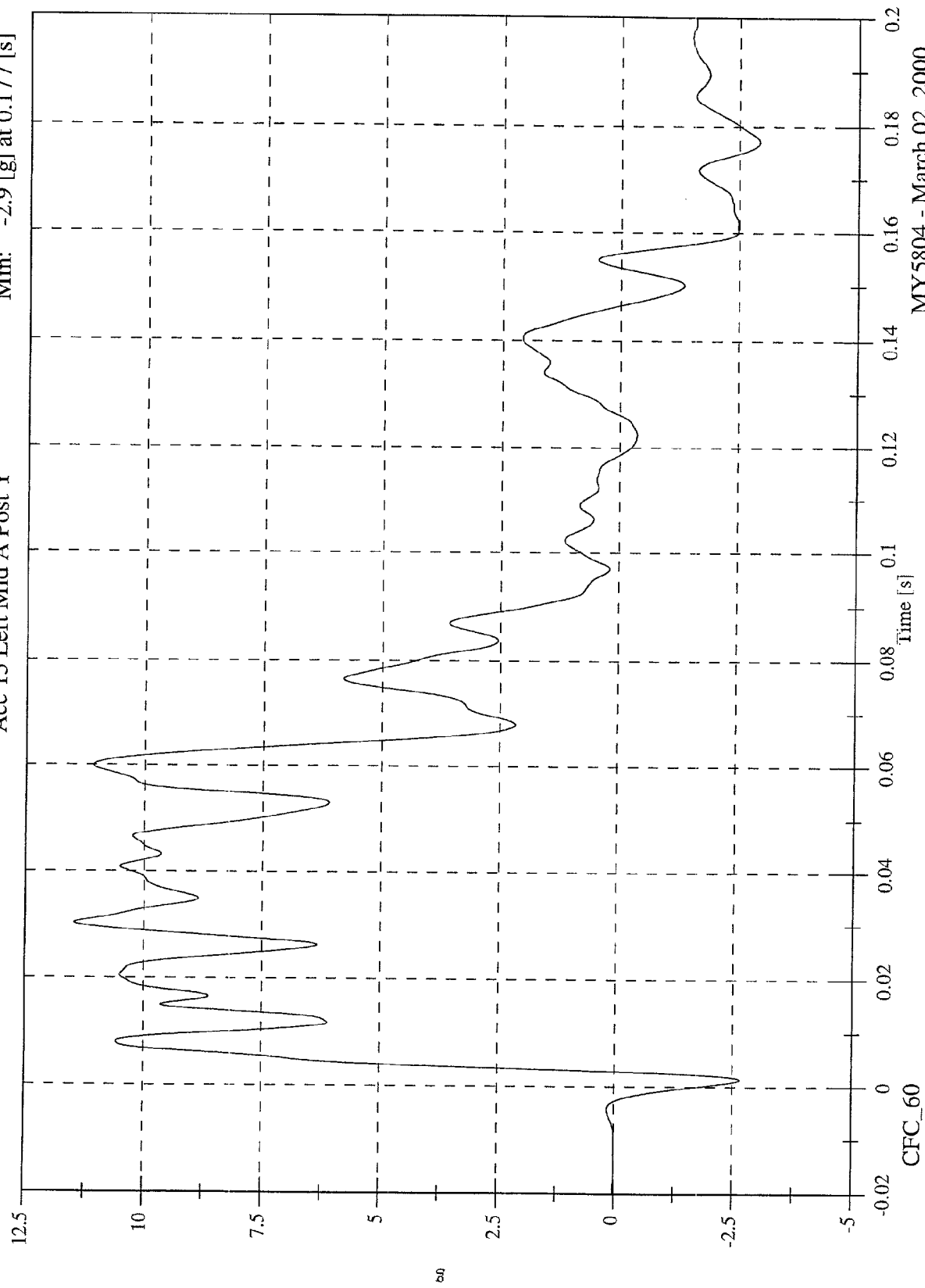


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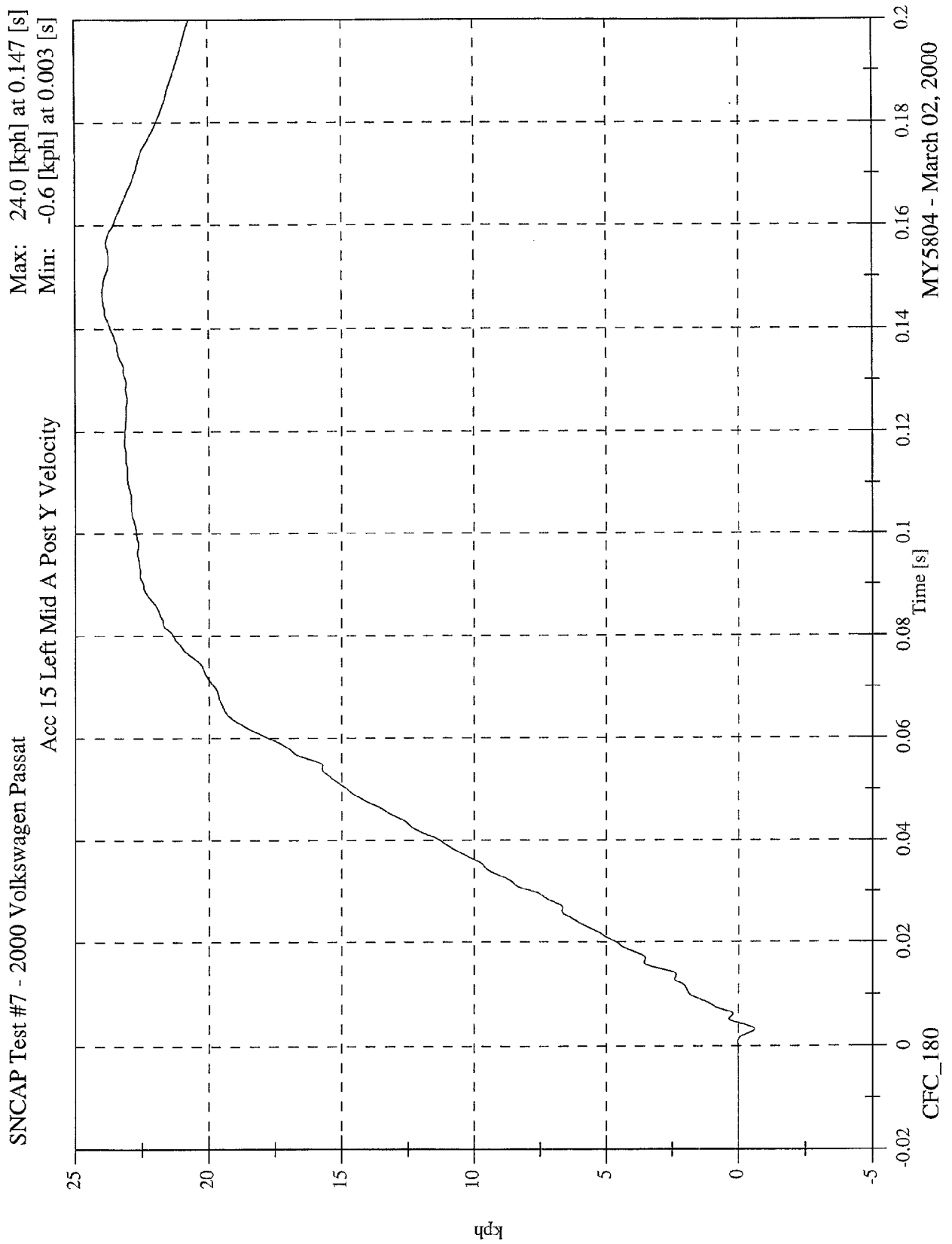
SNCAP Test #7 - 2000 Volkswagen Passat

Acc 15 Left Mid A Post Y

Max: 11.5 [g] at 0.030 [s]
Min: -2.9 [g] at 0.177 [s]



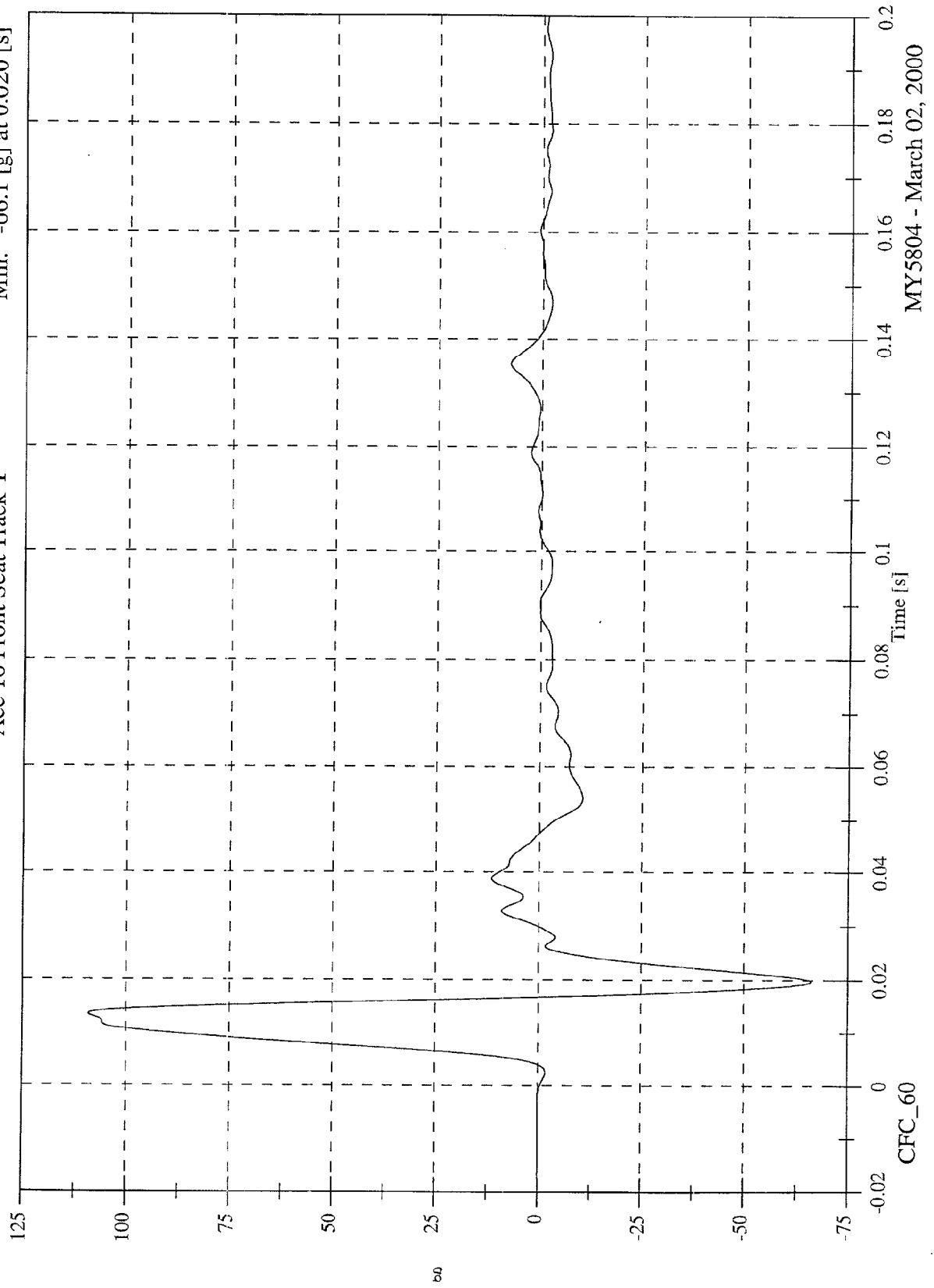
MY5804 - March 02, 2000



SNCAP Test #7 - 2000 Volkswagen Passat

Acc 16 Front Seat Track Y

Max: 109.2 [g] at 0.014 [s]
Min: -66.1 [g] at 0.020 [s]



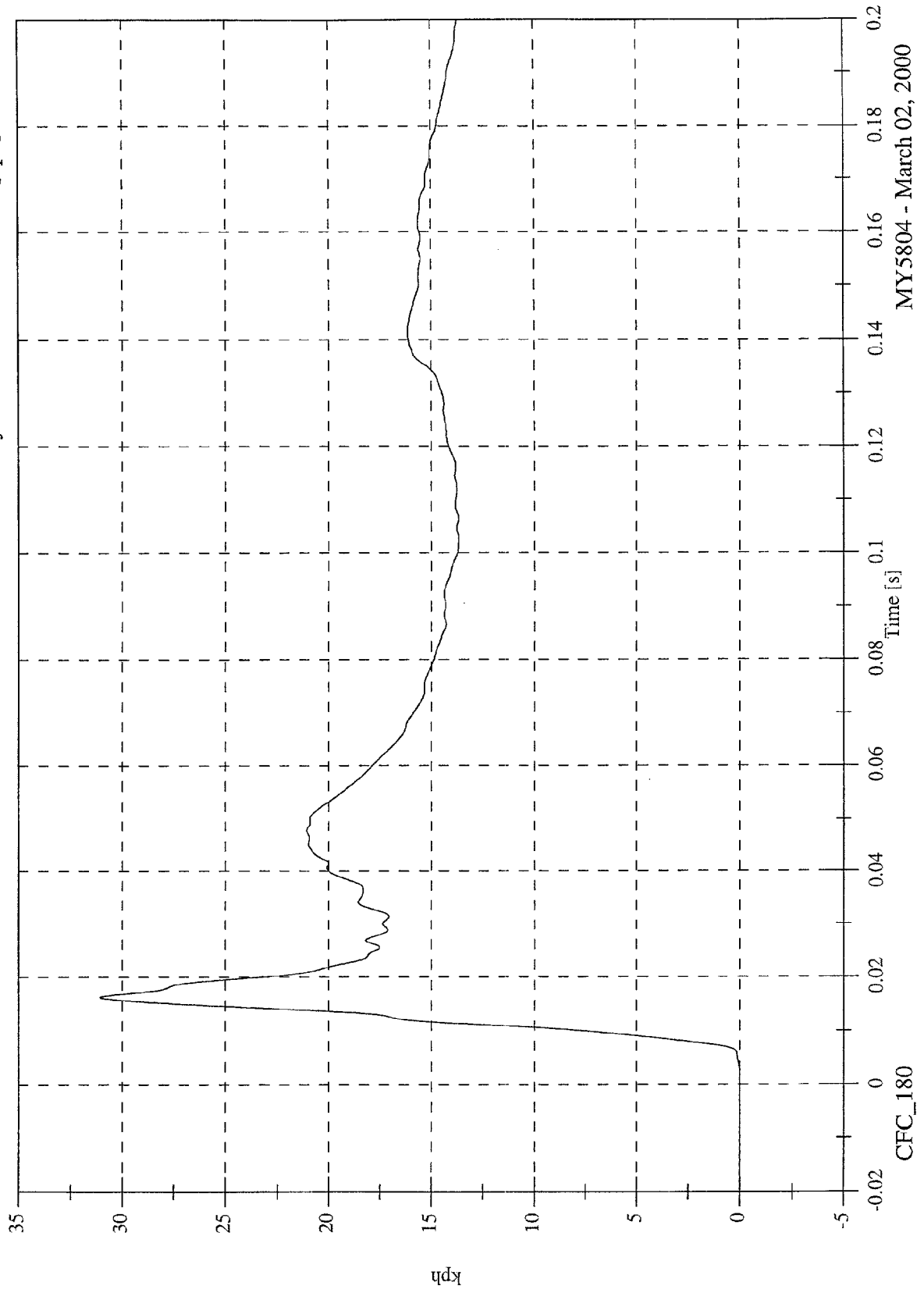
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Acc 16 Front Seat Track Y Velocity

Max: 31.1 [kph] at 0.016 [s]

Min: -0.0 [kph] at -0.019 [s]

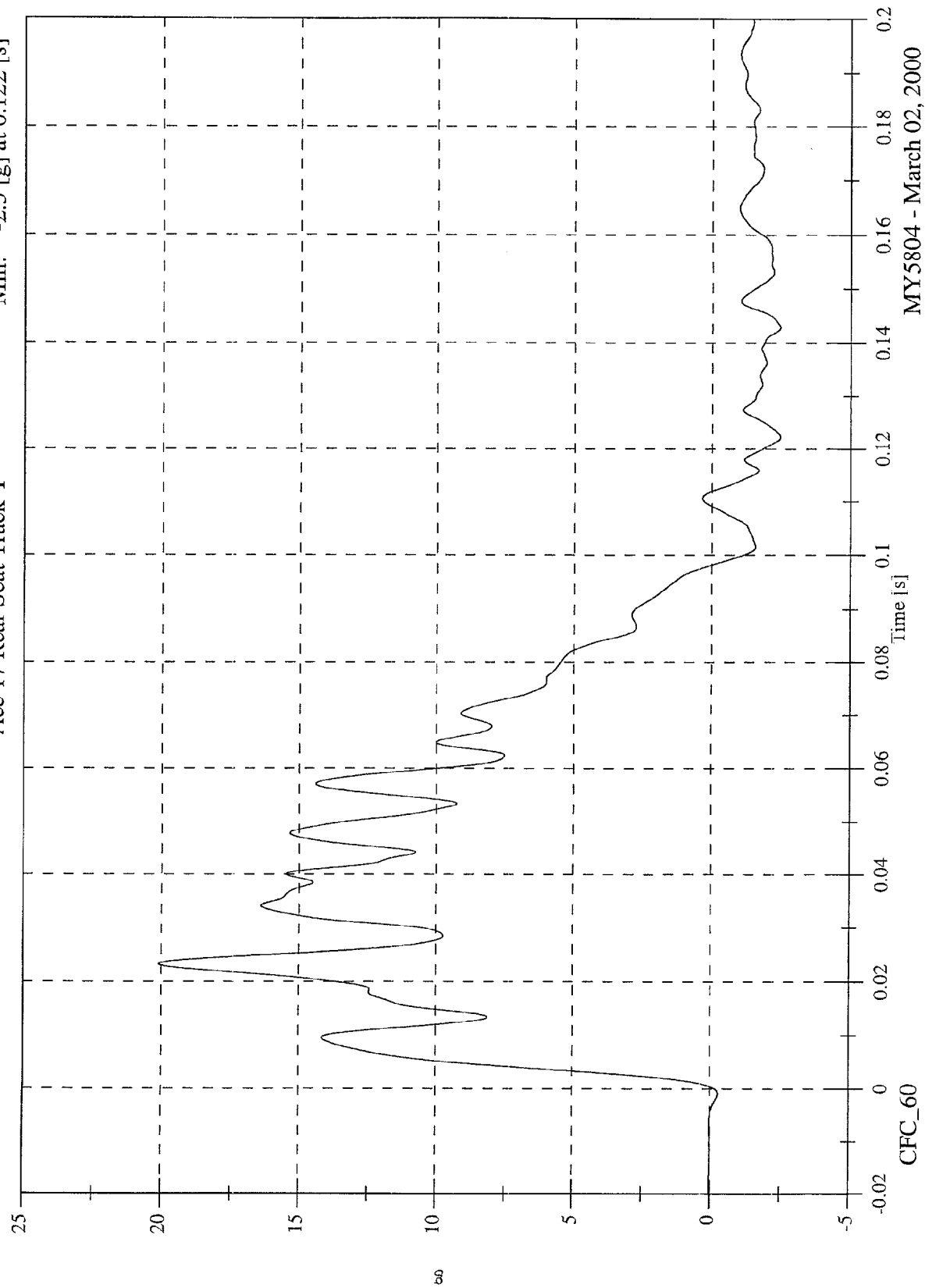


MY5804 - March 02, 2000

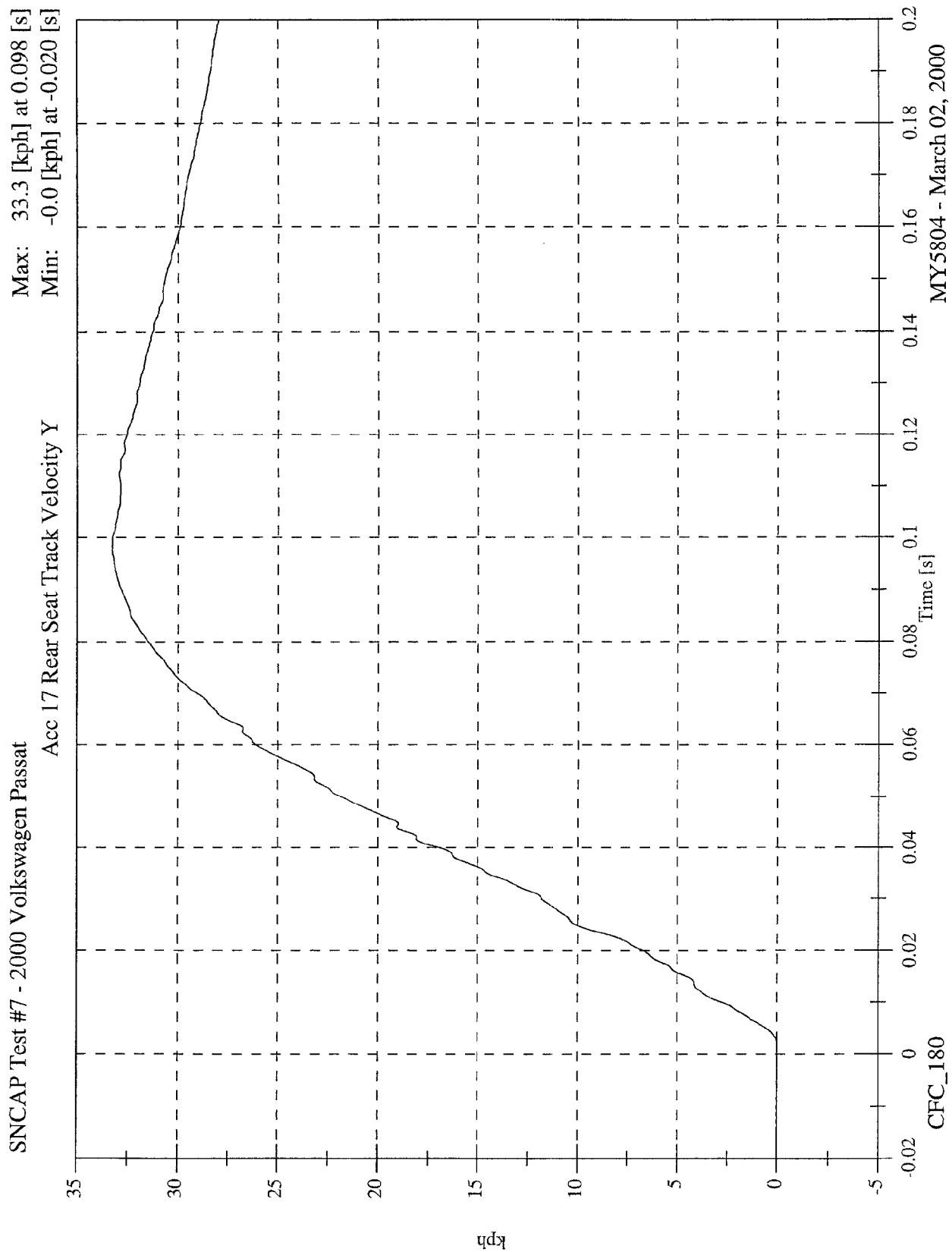
SNCAP Test #7 - 2000 Volkswagen Passat

Max: 20.1 [g] at 0.023 [s]
 Min: -2.5 [g] at 0.122 [s]

Acc 17 Rear Seat Track Y



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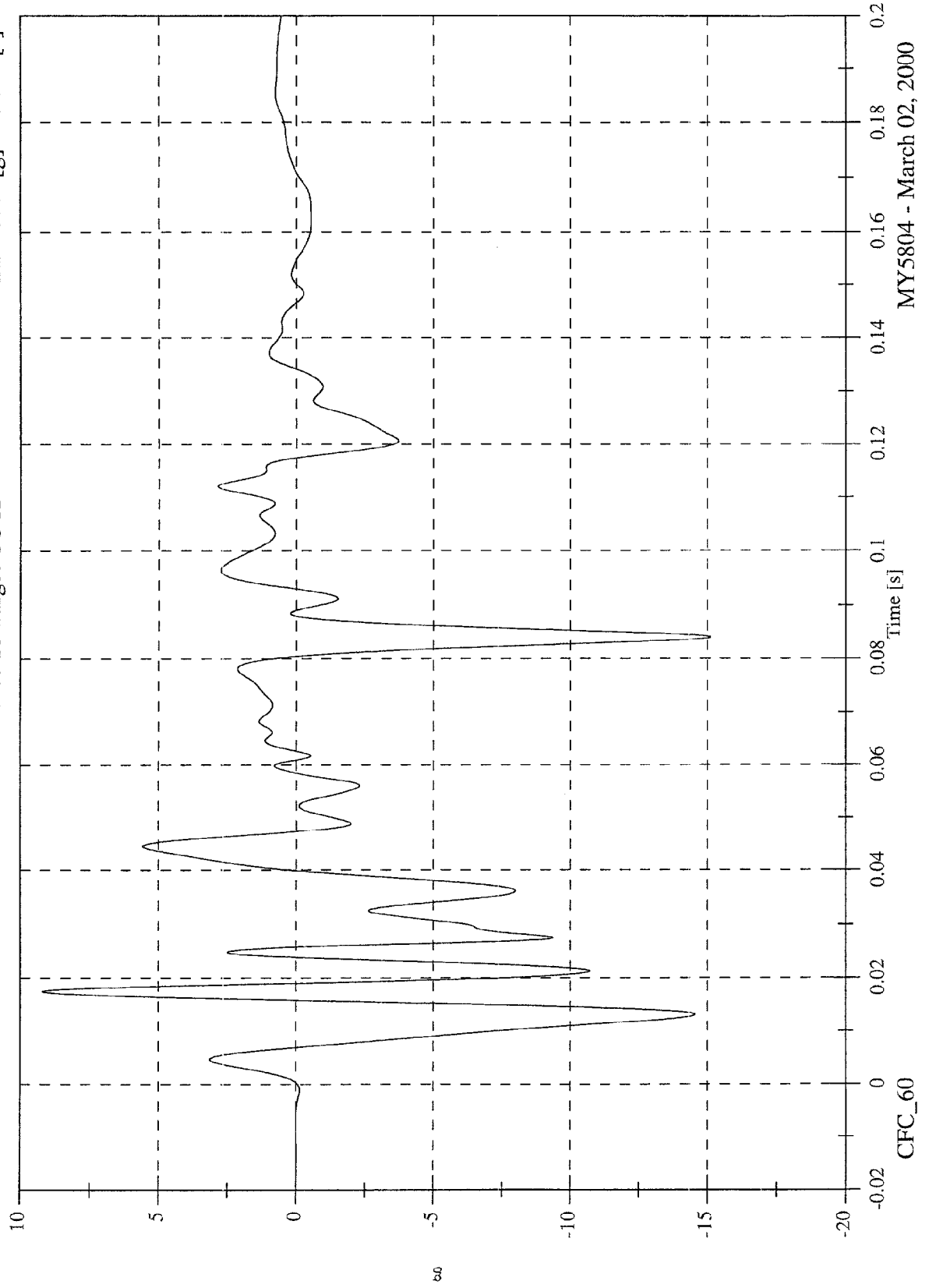


SNCAP Test #7 - 2000 Volkswagen Passat

Acc 18 Target CG X

Max: 9.2 [g] at 0.017 [s]

Min: -15.1 [g] at 0.084 [s]



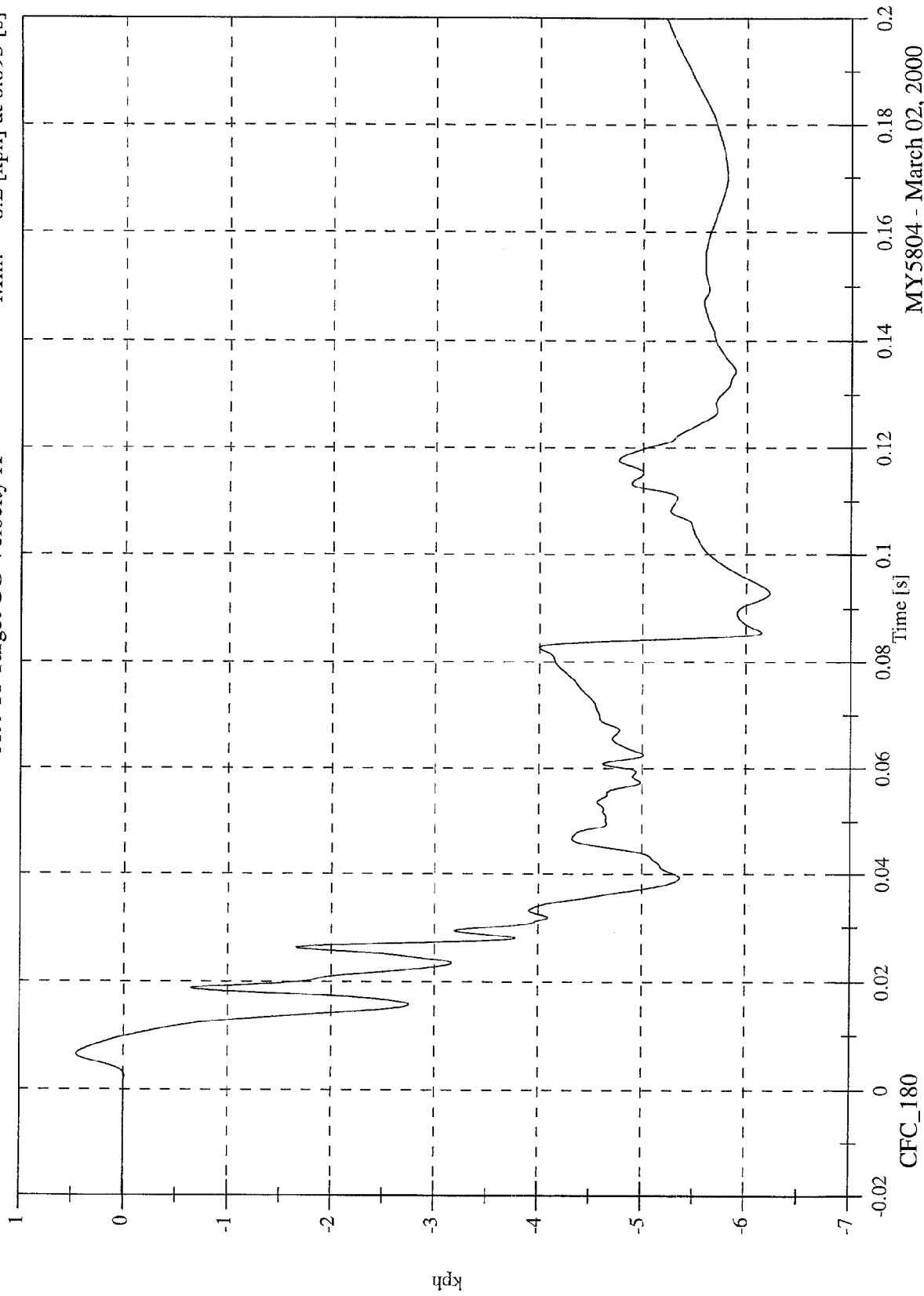
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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 0.5 [kph] at 0.007 [s]

Min: -6.2 [kph] at 0.093 [s]

Acc 18 Target CG Velocity X

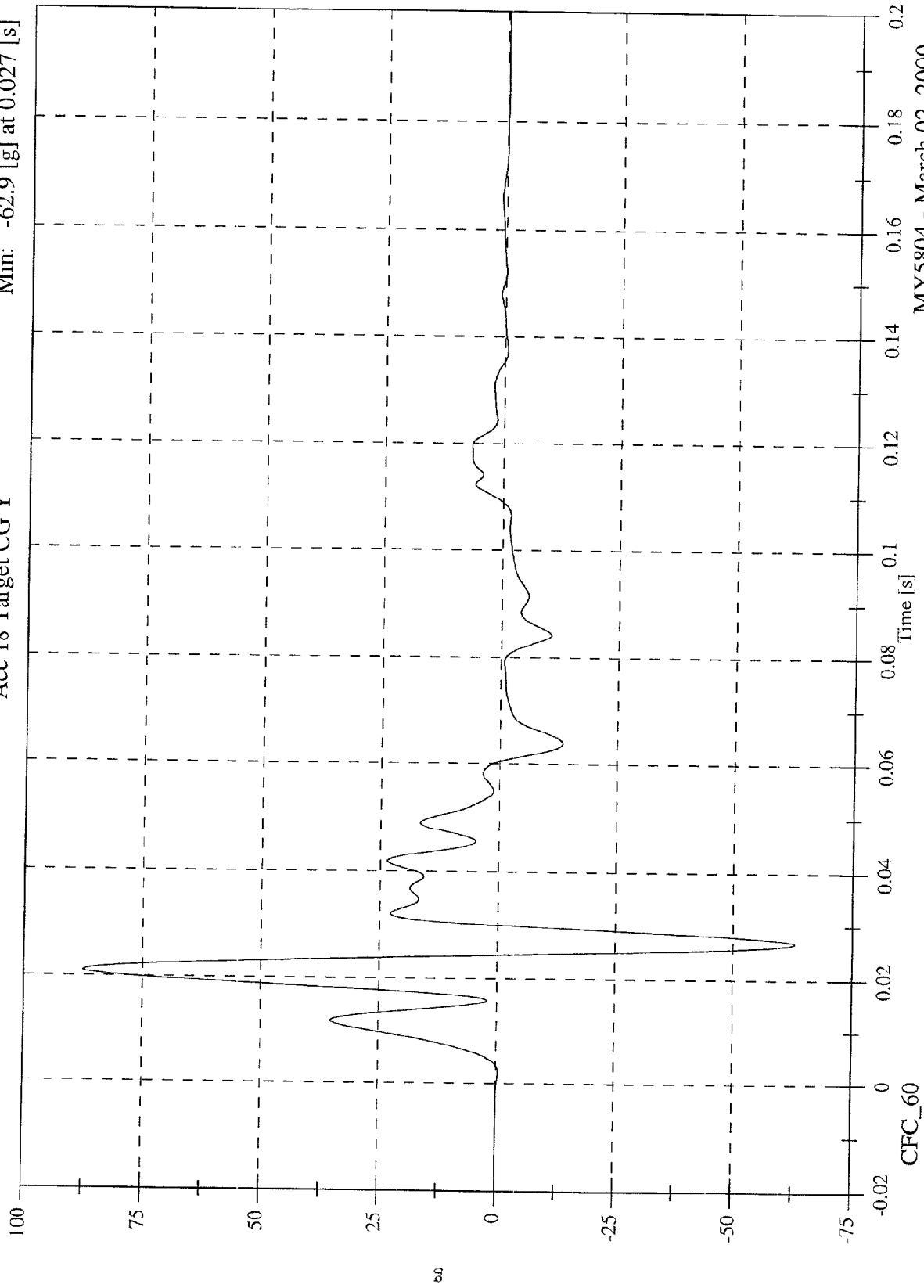


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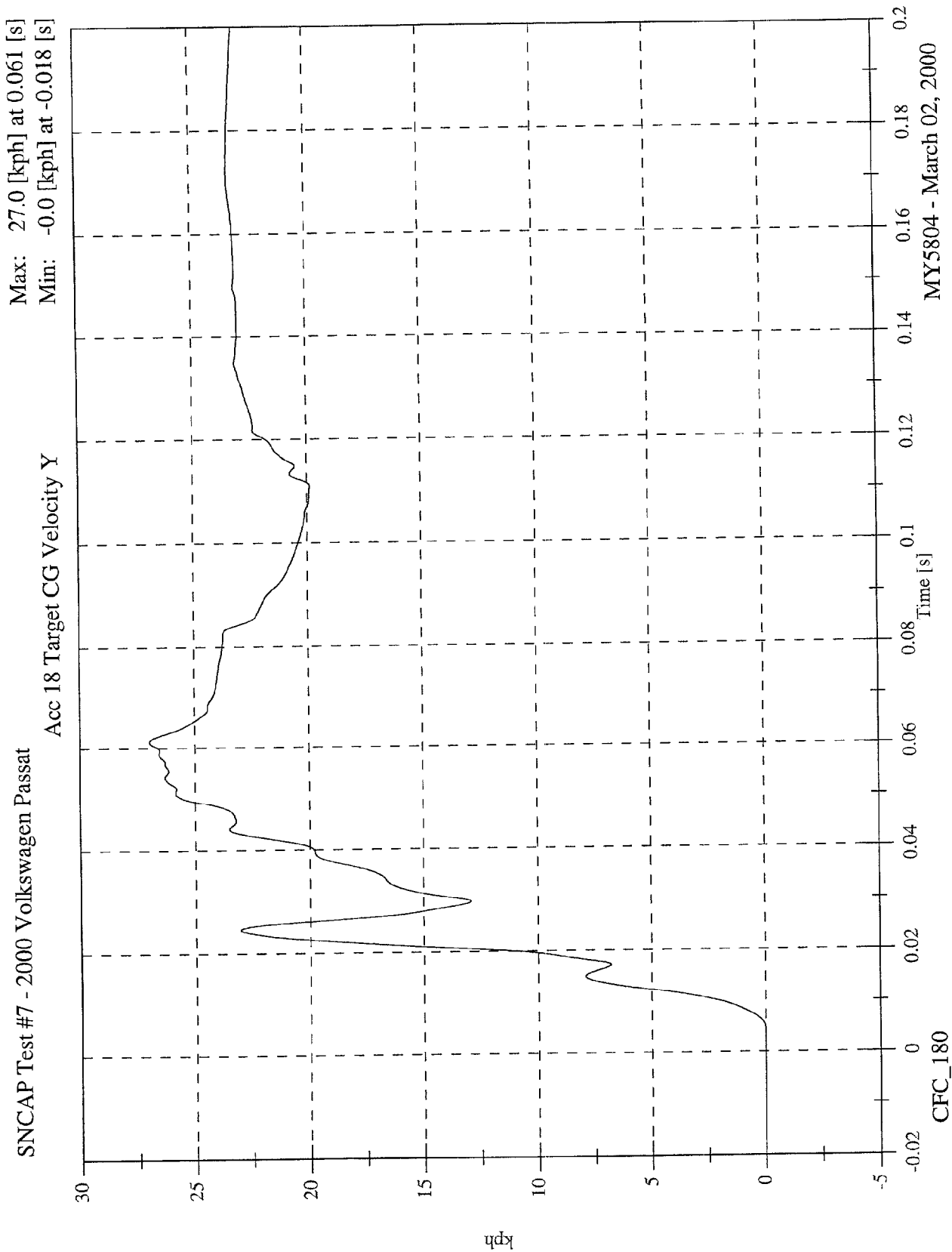
SNCAP Test #7 - 2000 Volkswagen Passat

Max: 87.5 [g] at 0.021 [s]
 Min: -62.9 [g] at 0.027 [s]

Acc 18 Target CG Y



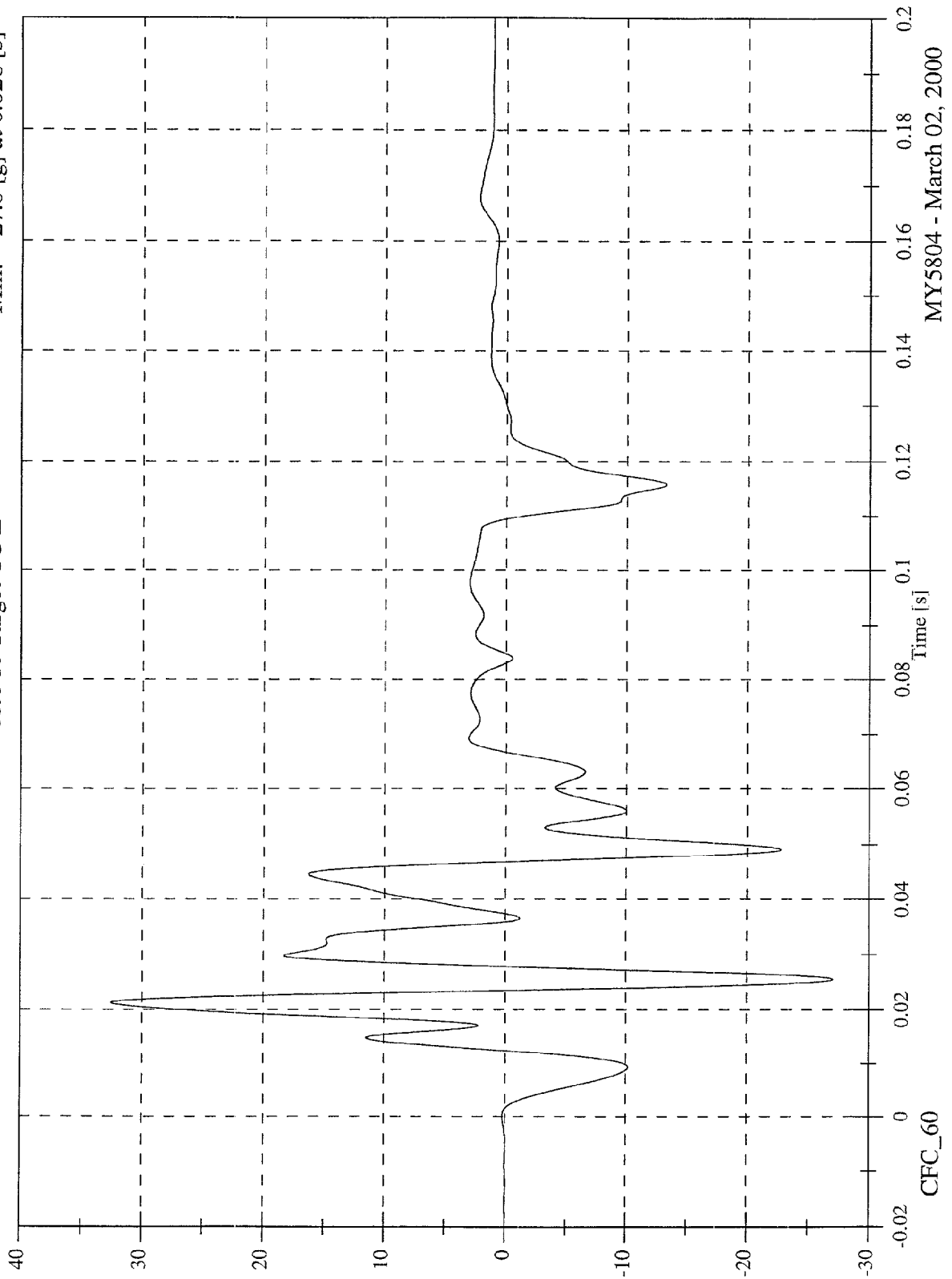
MY5804 - March 02, 2000



SNCAP Test #7 - 2000 Volkswagen Passat

Max: 32.6 [g] at 0.021 [s]
 Min: -27.0 [g] at 0.026 [s]

Acc 18 Target CG Z



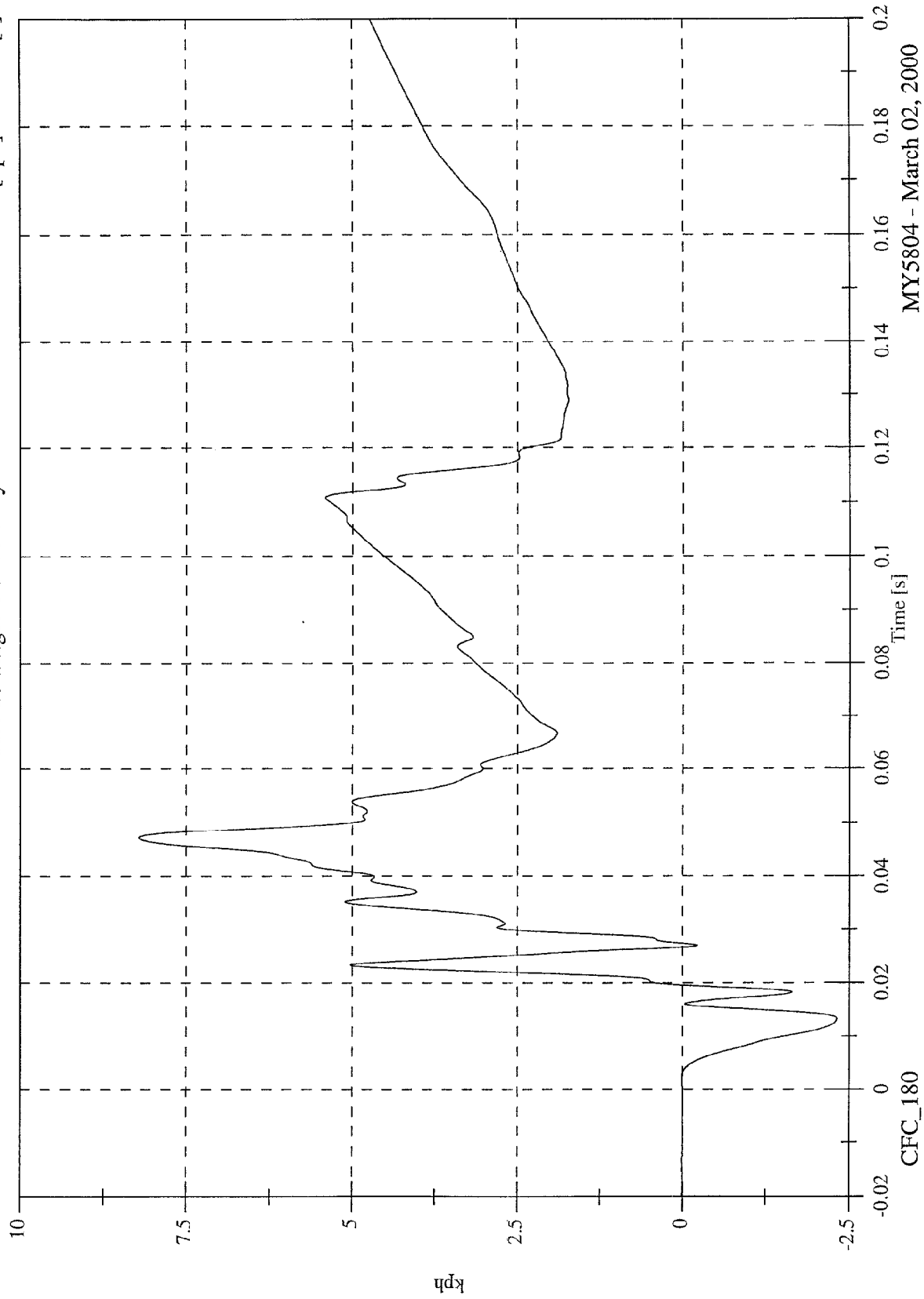
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 8.2 [kph] at 0.047 [s]

Min: -2.3 [kph] at 0.013 [s]

Acc 18 Target CG Velocity Z

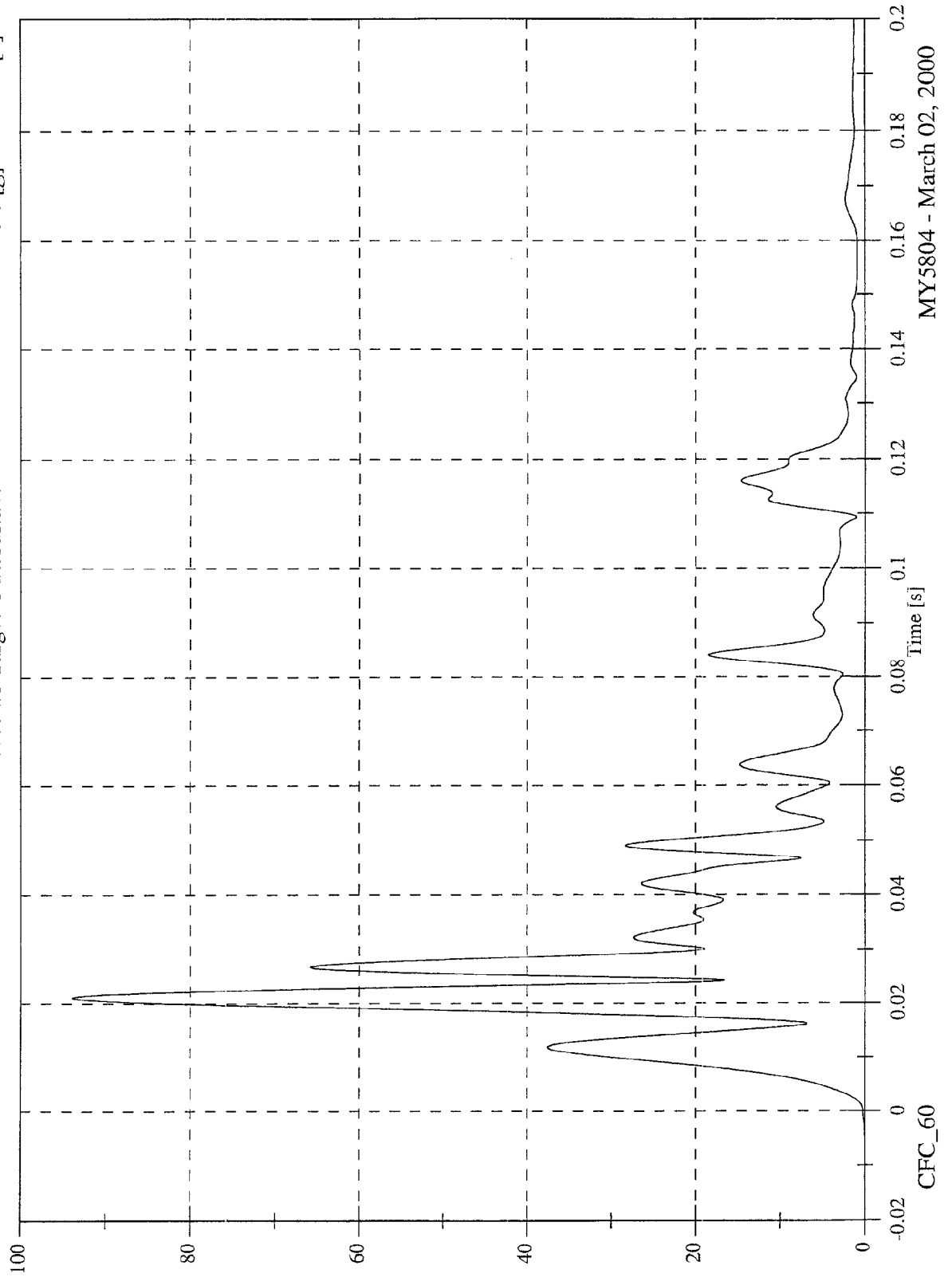


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 93.9 [g] at 0.021 [s]
 Min: 0.0 [g] at -0.007 [s]

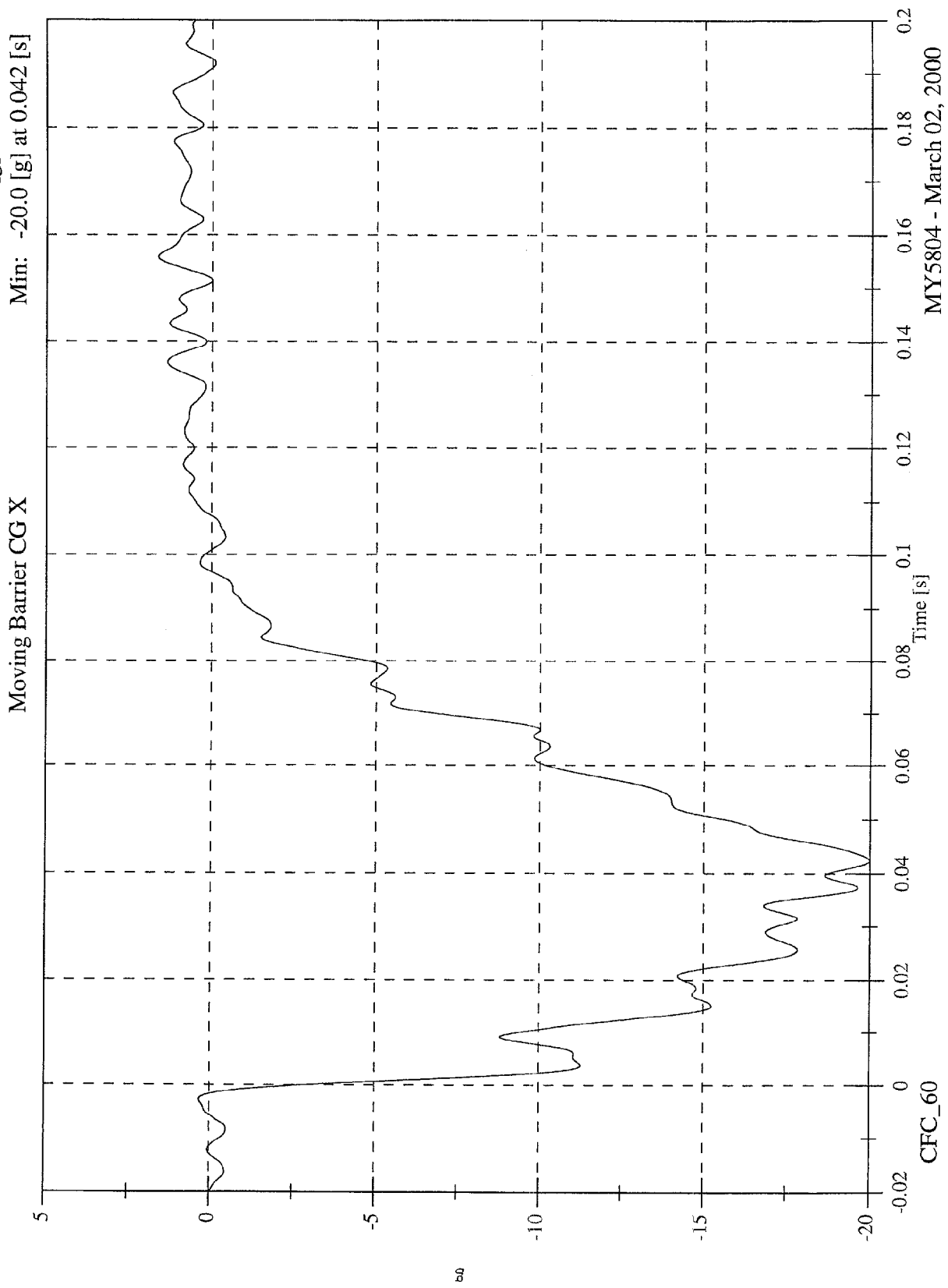
Acc 18 Target C Resultant



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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 1.6 [g] at 0.156 [s]
Min: -20.0 [g] at 0.042 [s]

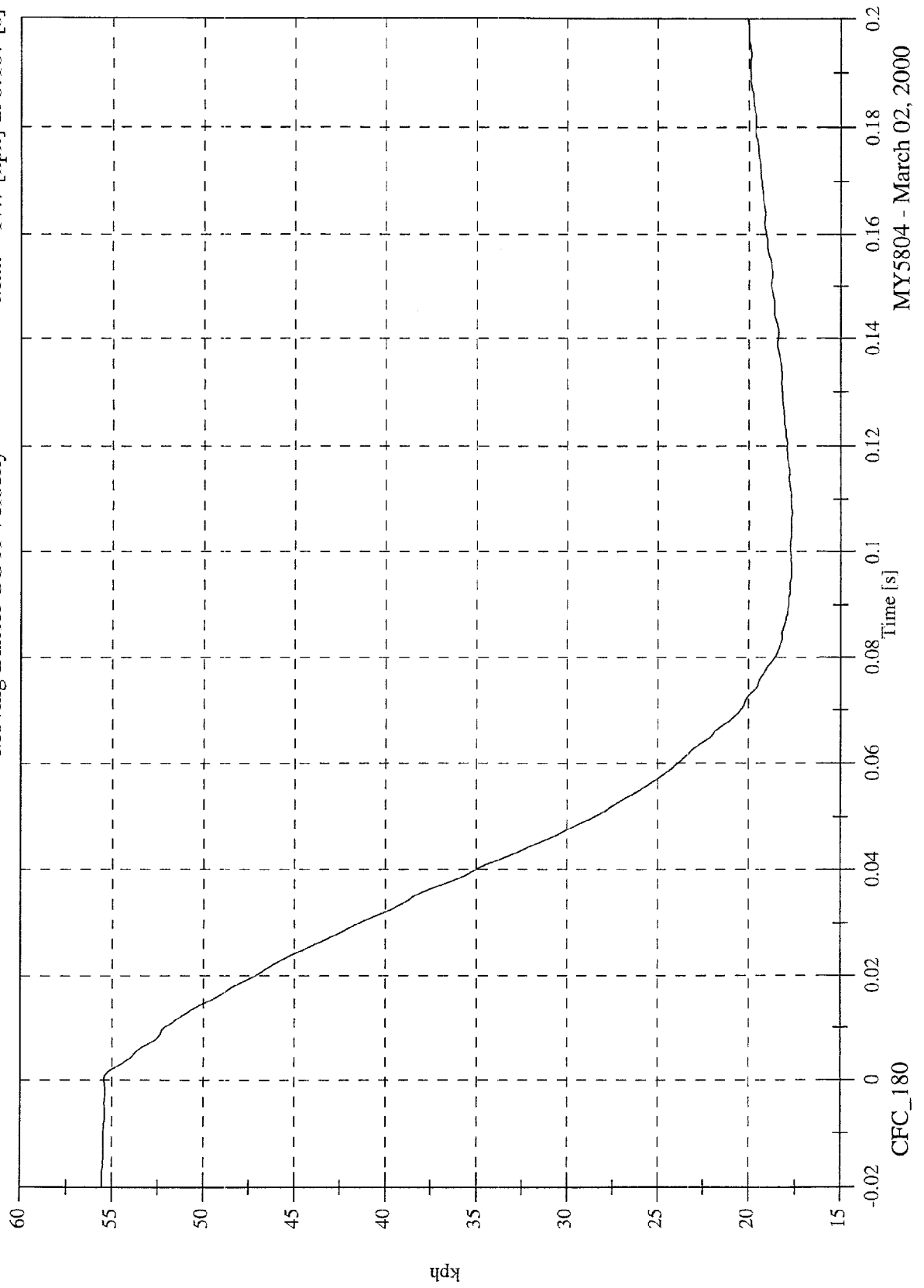


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 55.5 [kph] at -0.020 [s]
 Min: 17.7 [kph] at 0.107 [s]

Moving Barrier CG X Velocity

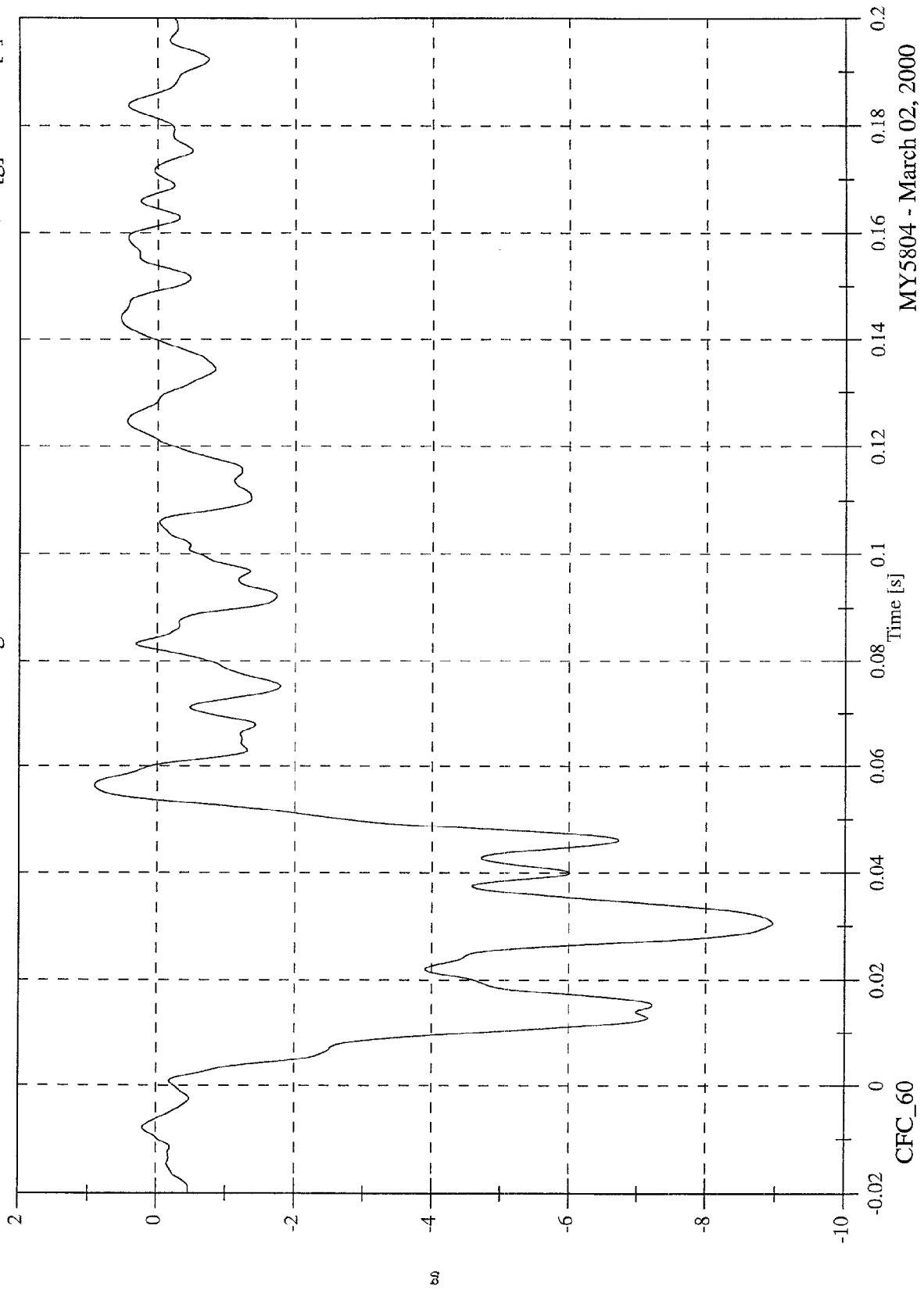


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 0.9 [g] at 0.056 [s]
Min: -9.0 [g] at 0.031 [s]

Moving Barrier CG Y

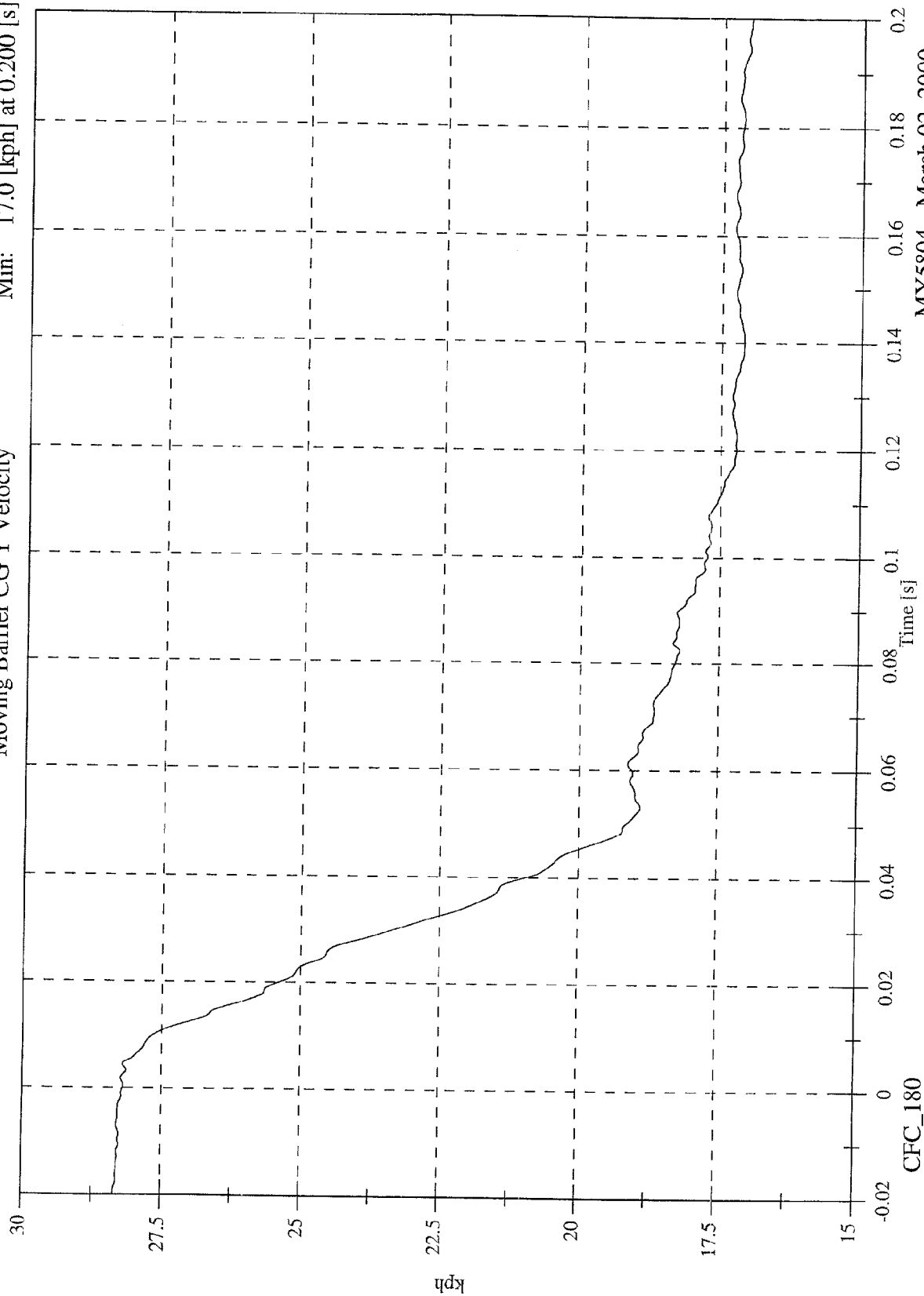


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 28.4 [kph] at -0.020 [s]
Min: 17.0 [kph] at 0.200 [s]

Moving Barrier CG Y Velocity

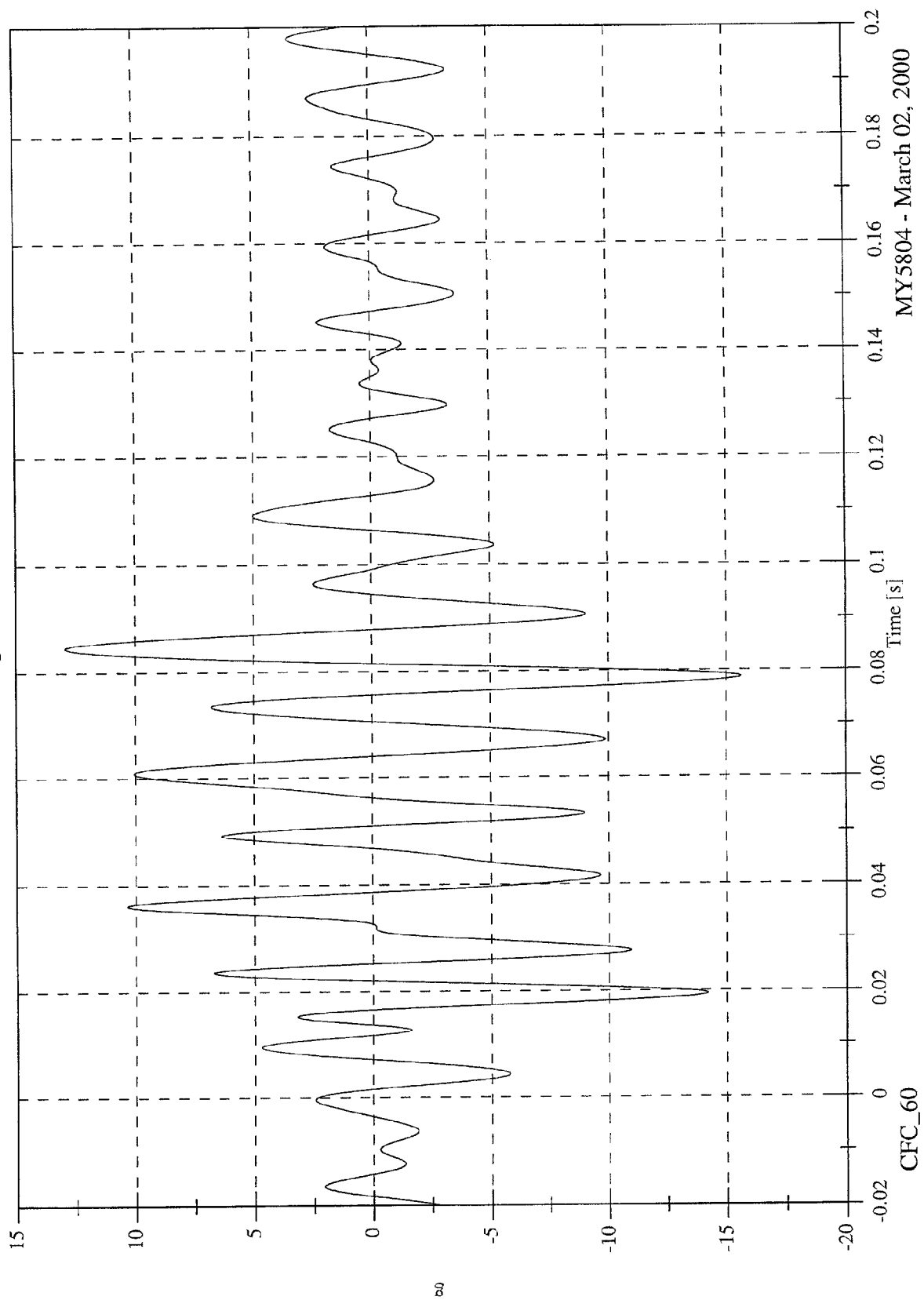


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 12.9 [g] at 0.085 [s]
 Min: -15.6 [g] at 0.079 [s]

Moving Barrier CG Z



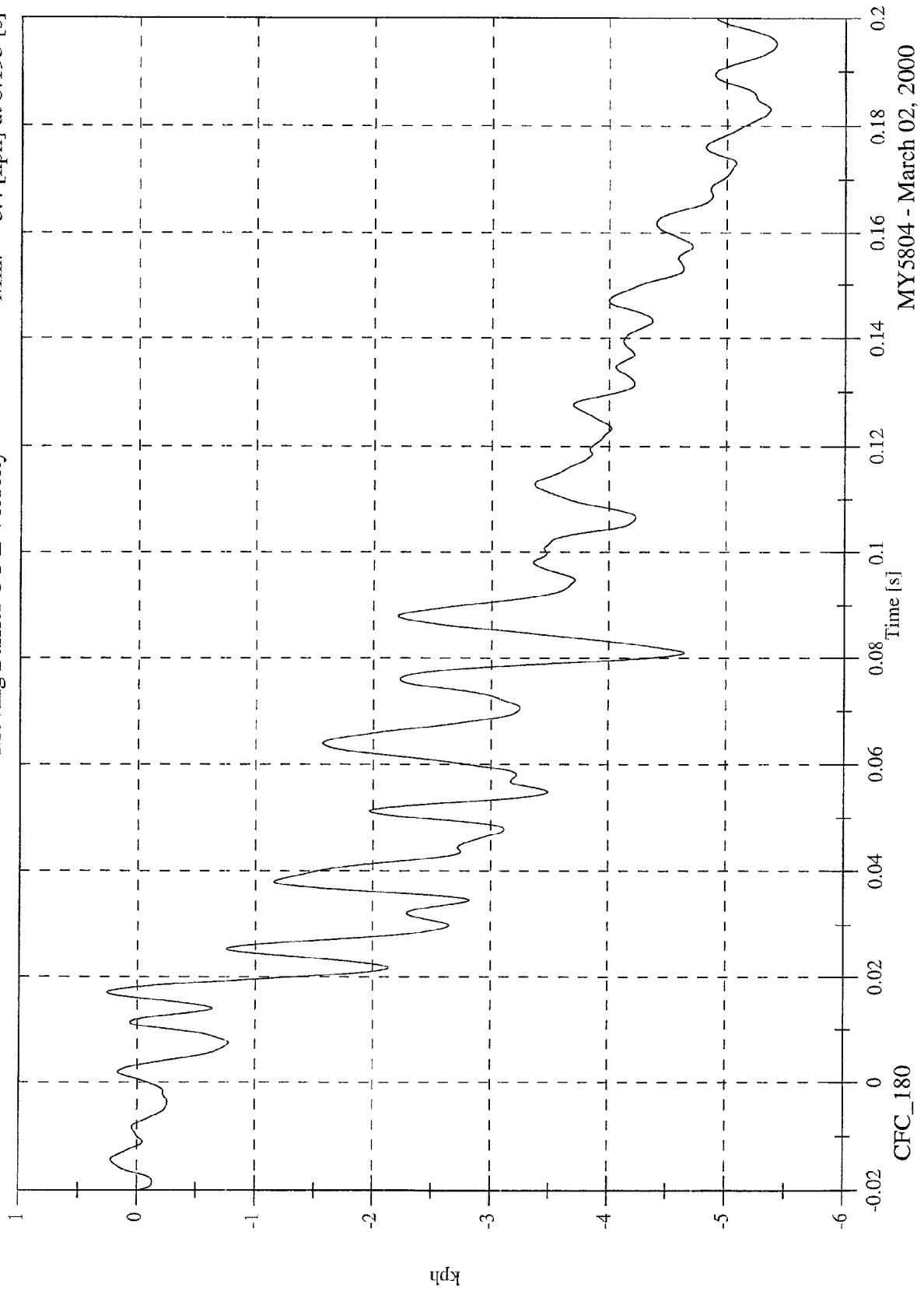
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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 0.3 [kph] at 0.017 [s]

Min: -5.4 [kph] at 0.195 [s]

Moving Barrier CG Z Velocity



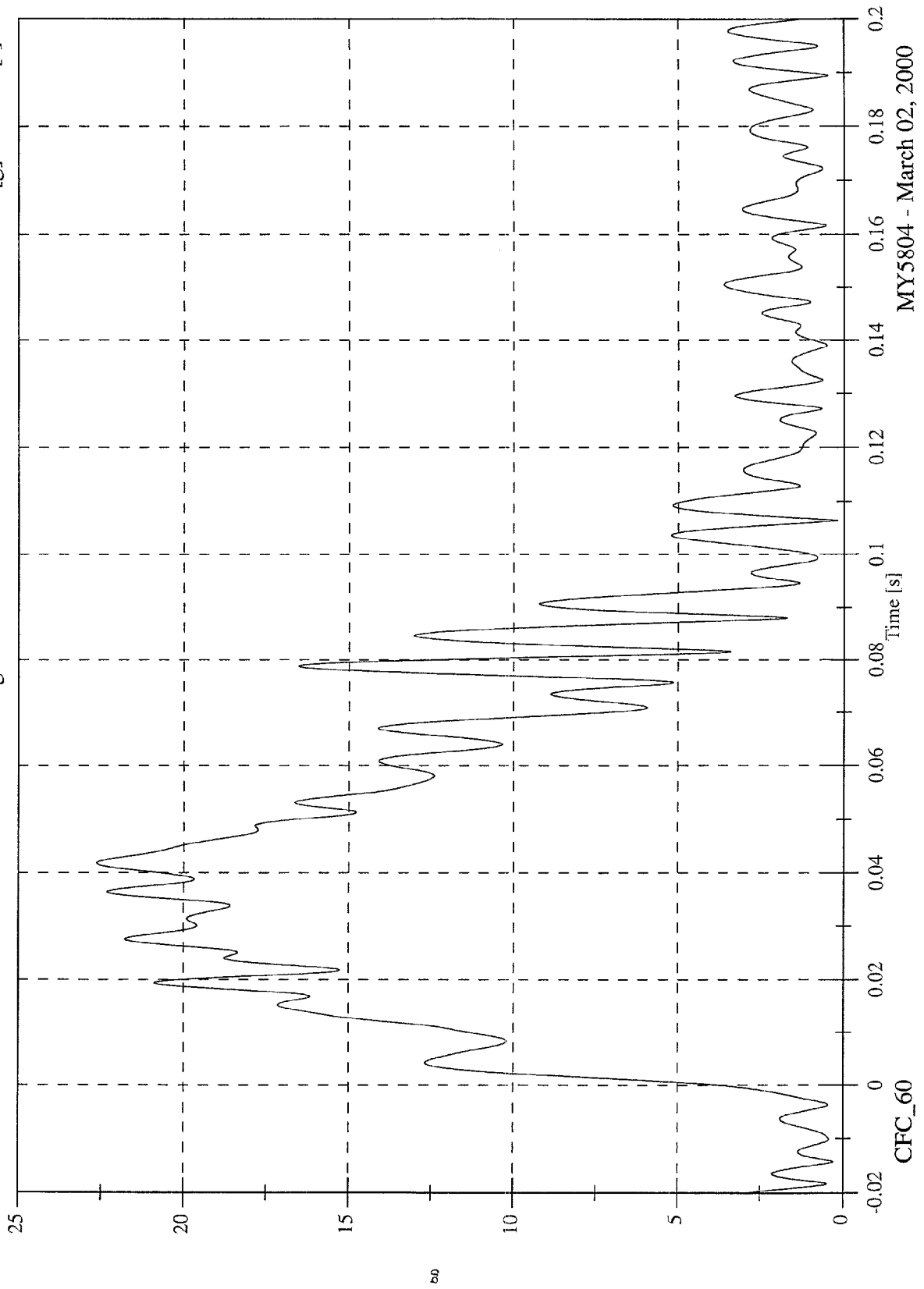
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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 22.6 [g] at 0.042 [s]

Min: 0.2 [g] at 0.106 [s]

Moving Barrier CG Resultant

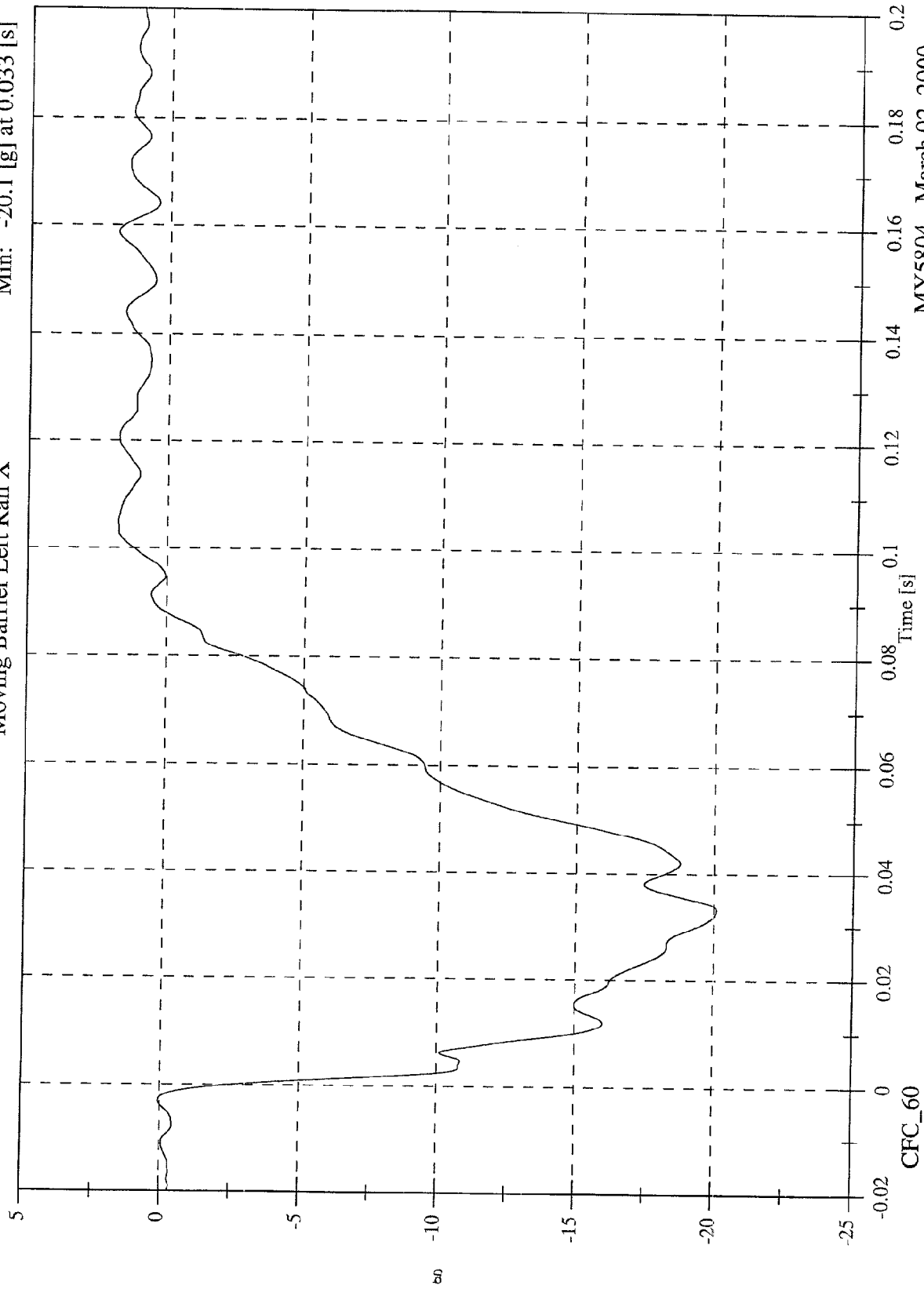


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SNCAP Test #7 - 2000 Volkswagen Passat

Moving Barrier Left Rail X

Max: 1.9 [g] at 0.159 [s]
Min: -20.1 [g] at 0.033 [s]



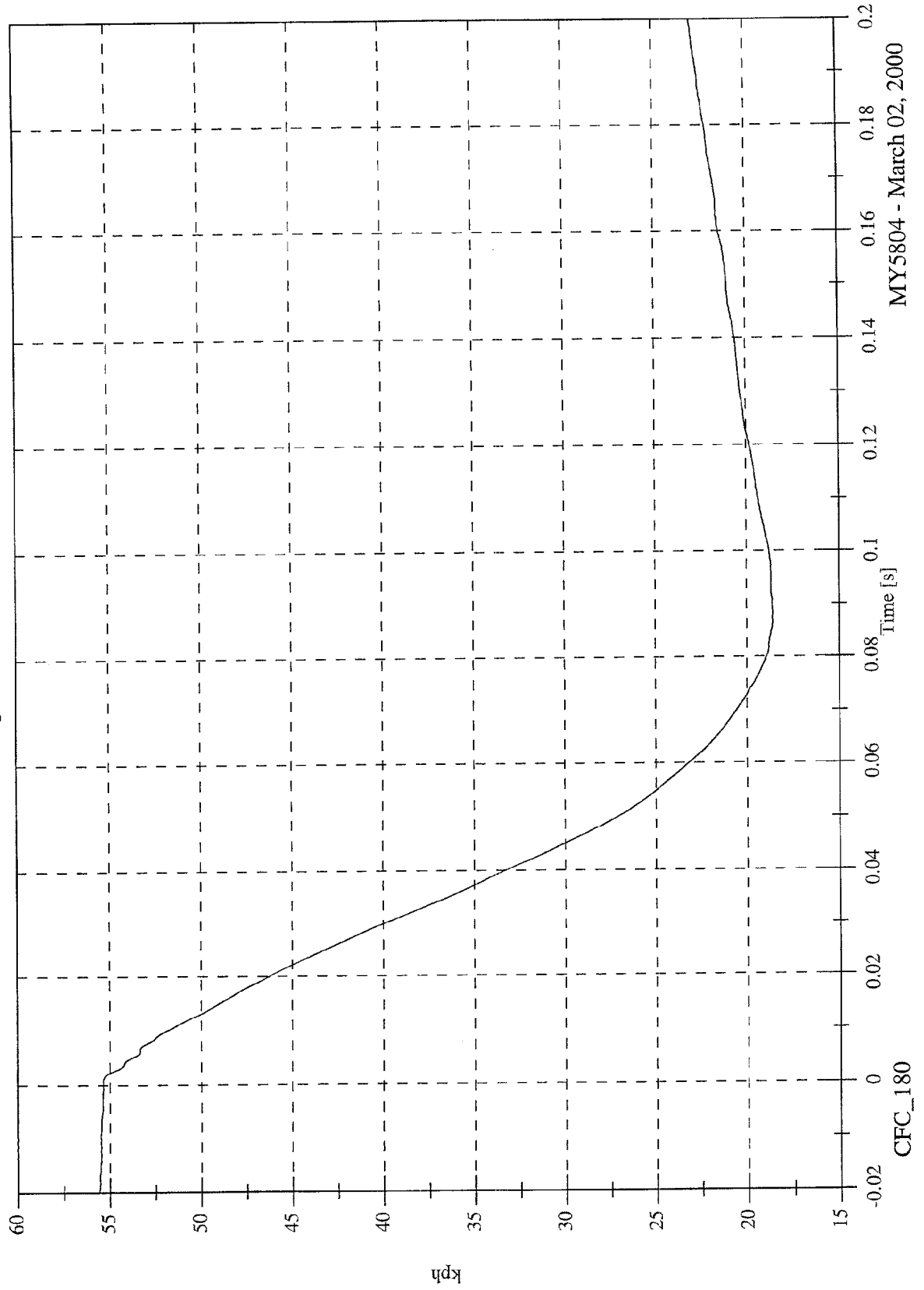
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

Max: 55.6 [kph] at -0.020 [s]

Min: 18.6 [kph] at 0.088 [s]

Moving Barrier Left Rail X Velocity

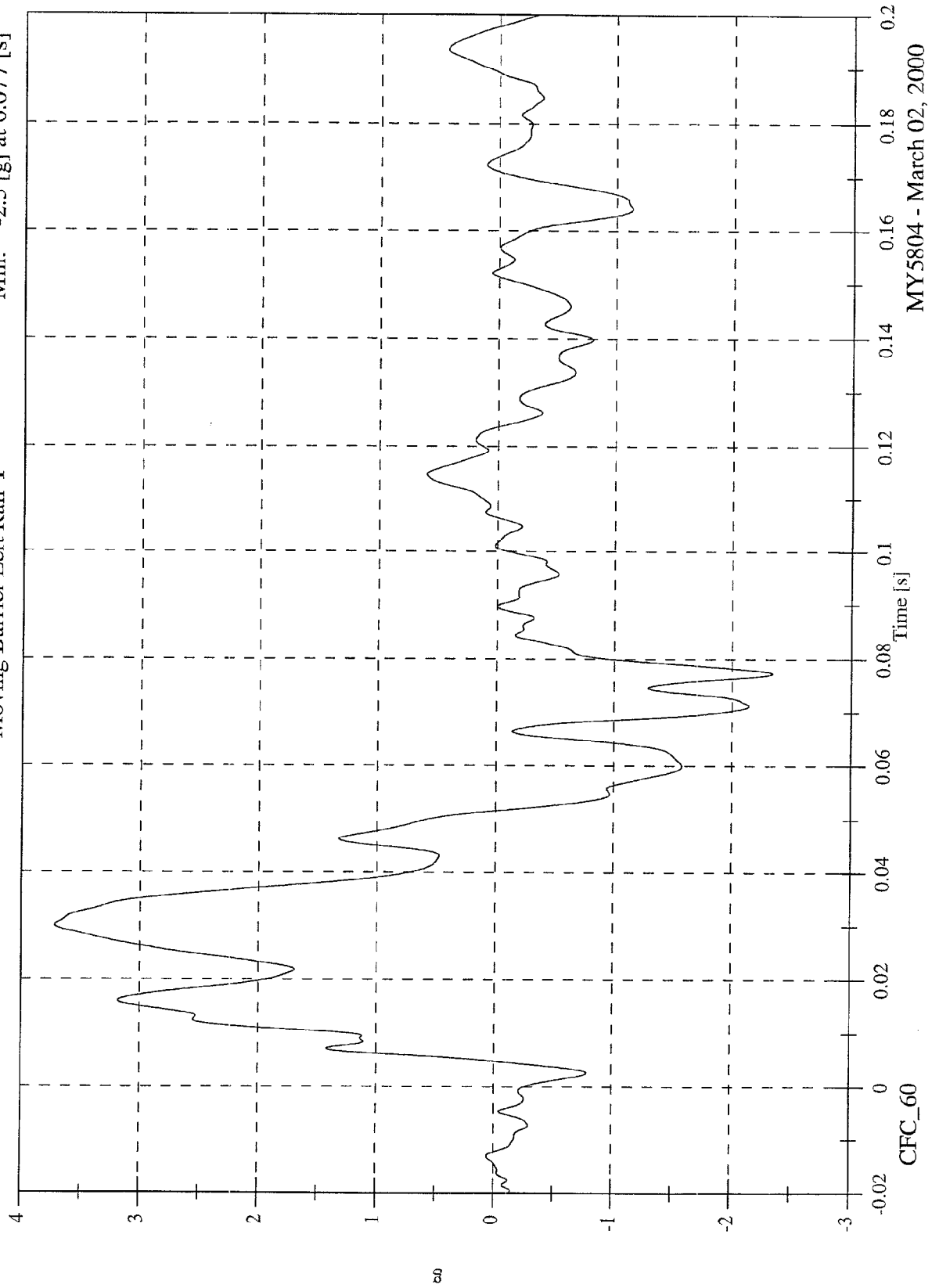


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 3.7 [g] at 0.030 [s]
 Min: -2.3 [g] at 0.077 [s]

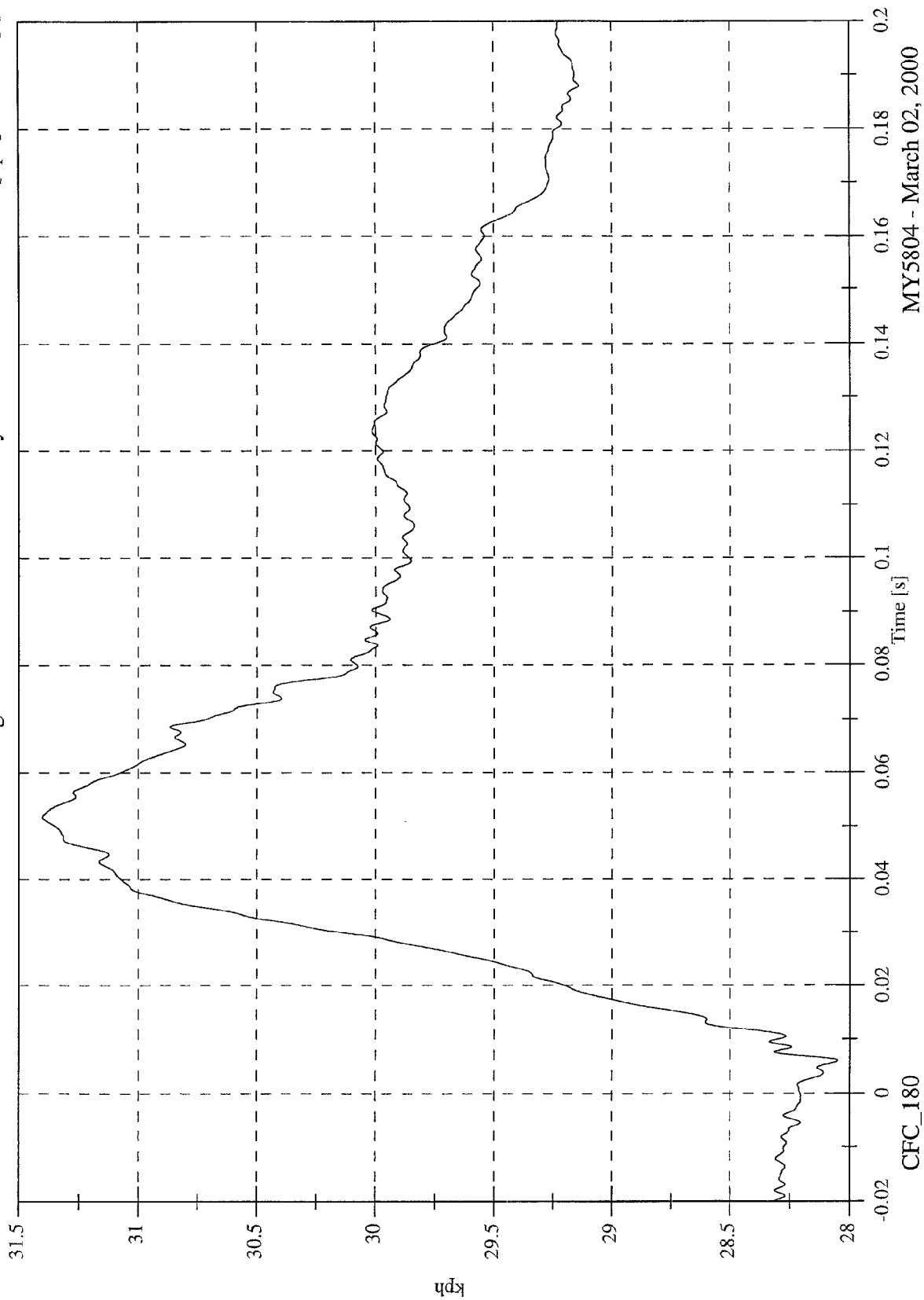
Moving Barrier Left Rail Y



SNCAP Test #7 - 2000 Volkswagen Passat

Max: 31.4 [kph] at 0.052 [s]
Min: 28.0 [kph] at 0.006 [s]

Moving Barrier Left Rail Y Velocity

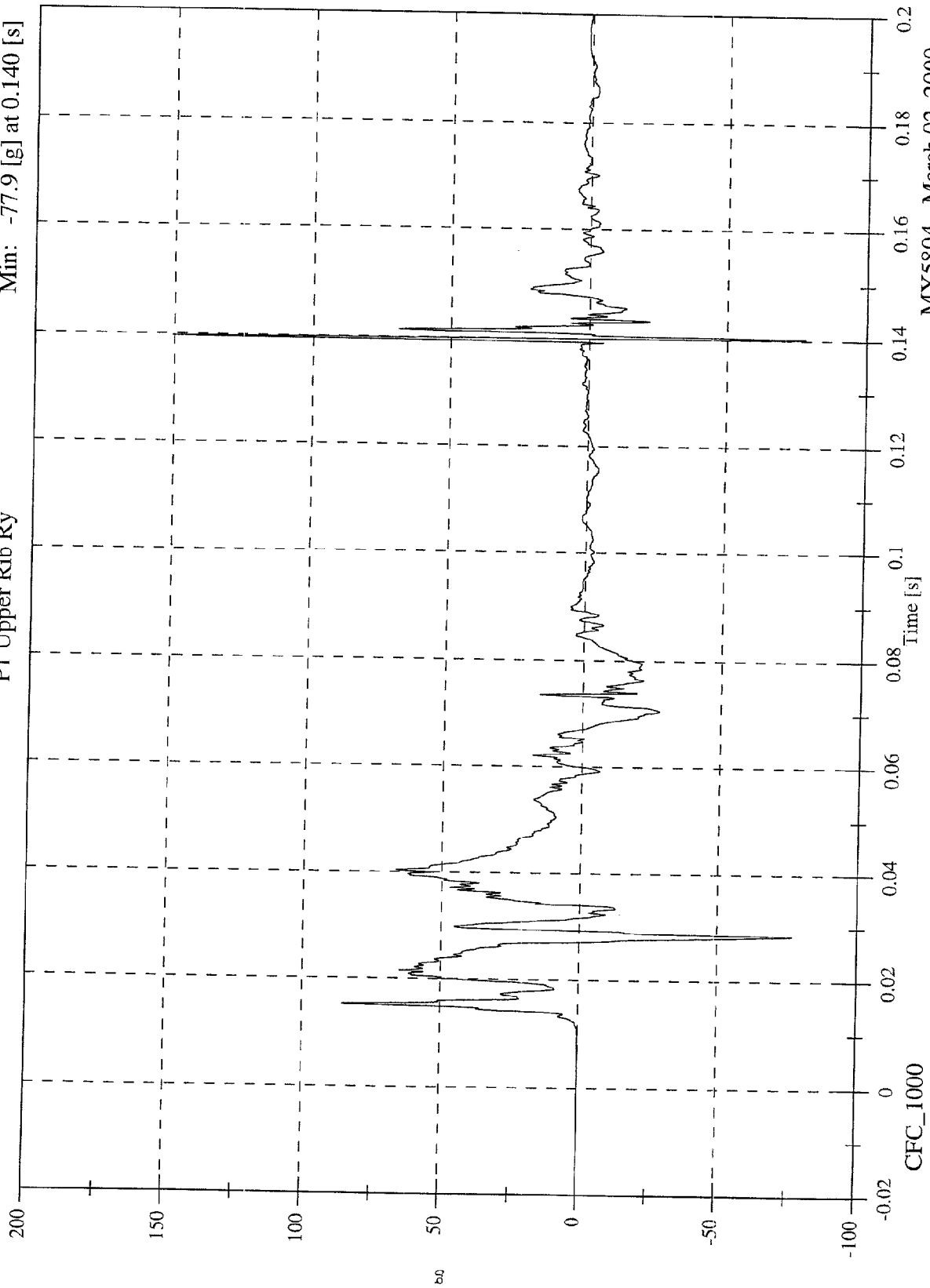


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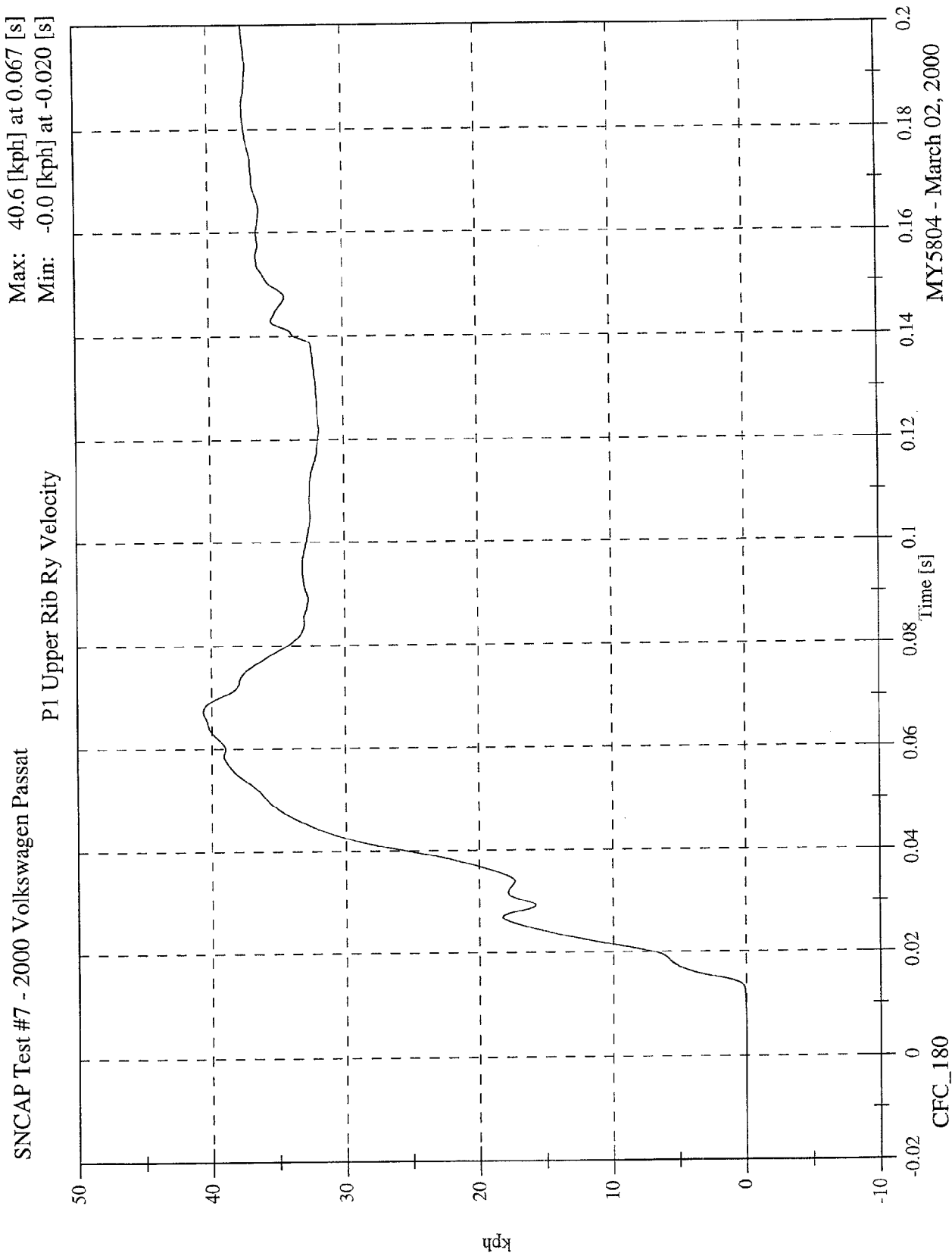
SNCAP Test #7 - 2000 Volkswagen Passat

P1 Upper Rib Ry

Max: 150.8 [g] at 0.140 [s]
Min: -77.9 [g] at 0.140 [s]



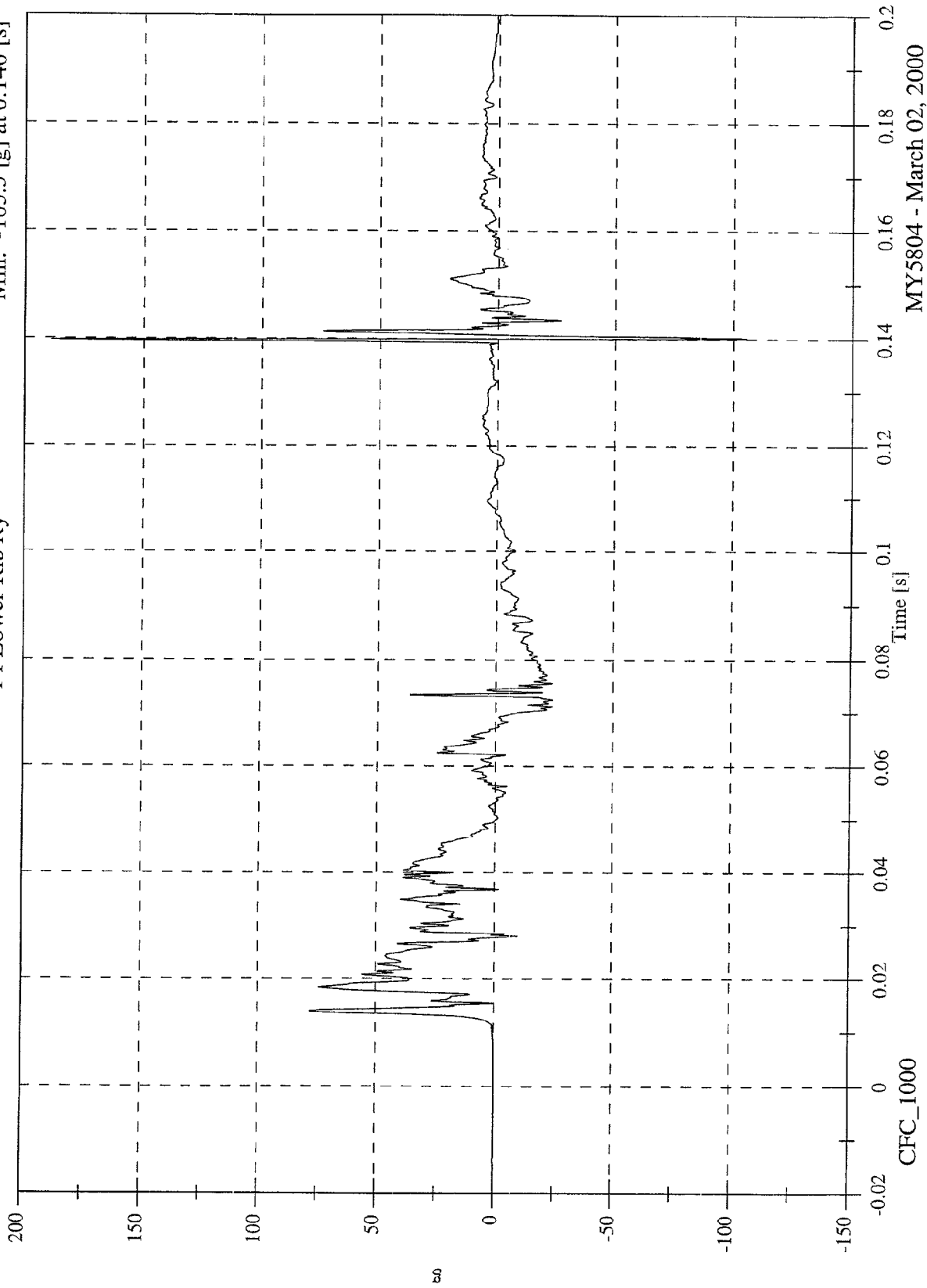
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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 188.8 [g] at 0.140 [s]
 Min: -105.5 [g] at 0.140 [s]

P1 Lower Rib Ry

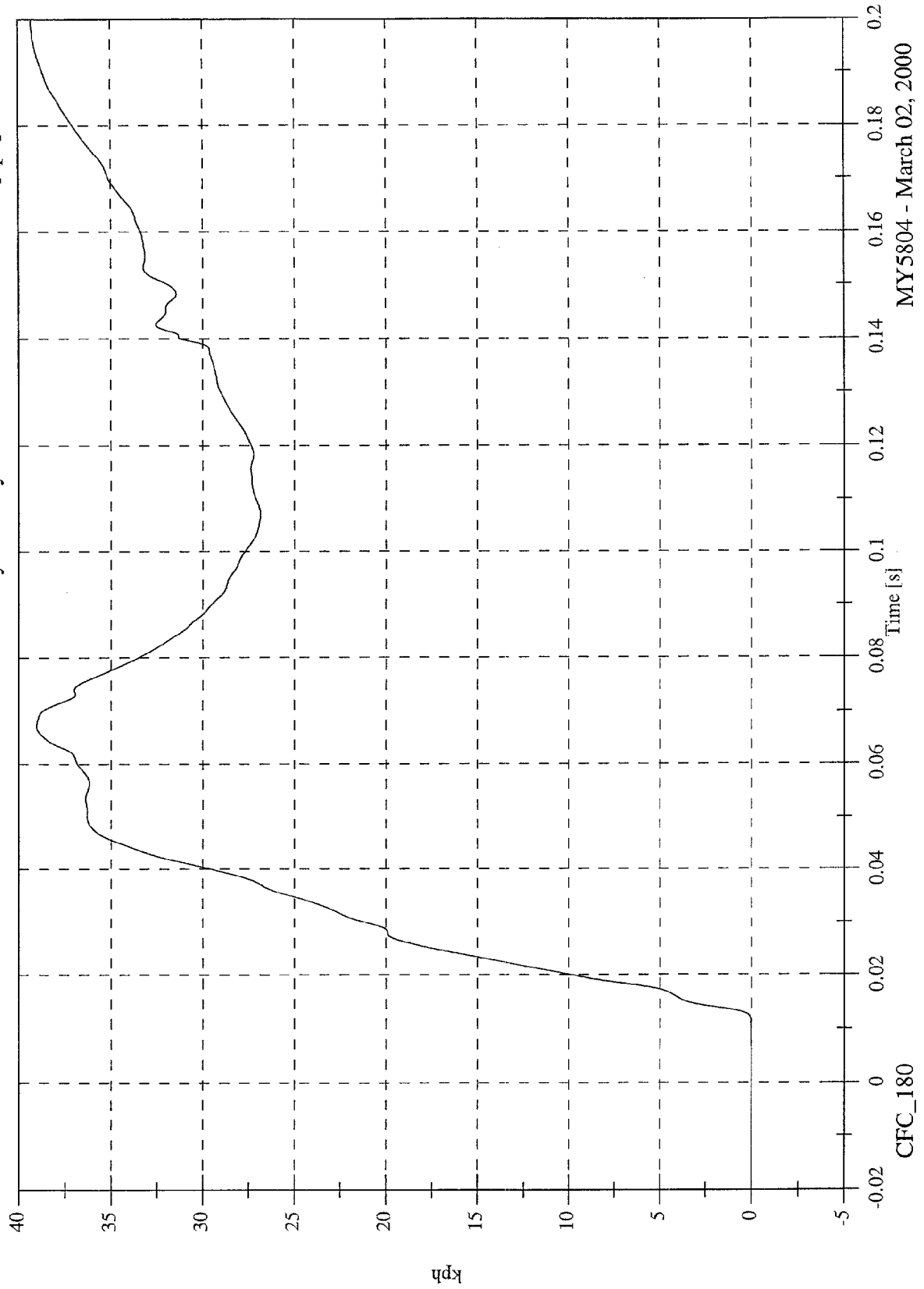


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 39.3 [kph] at 0.200 [s]
 Min: -0.0 [kph] at -0.008 [s]

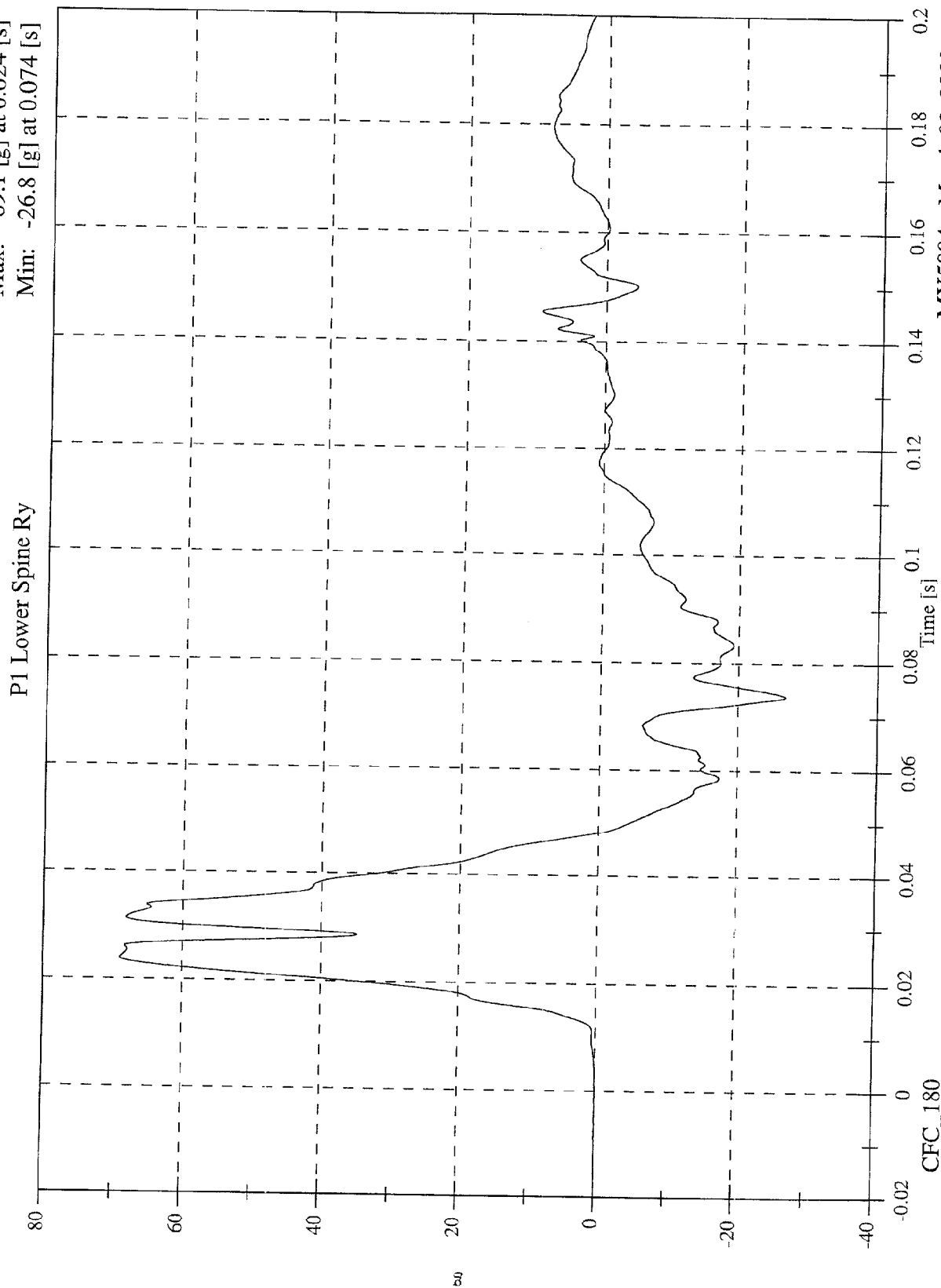
P1 Lower Rib Ry Velocity



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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 69.1 [g] at 0.024 [s]
Min: -26.8 [g] at 0.074 [s]



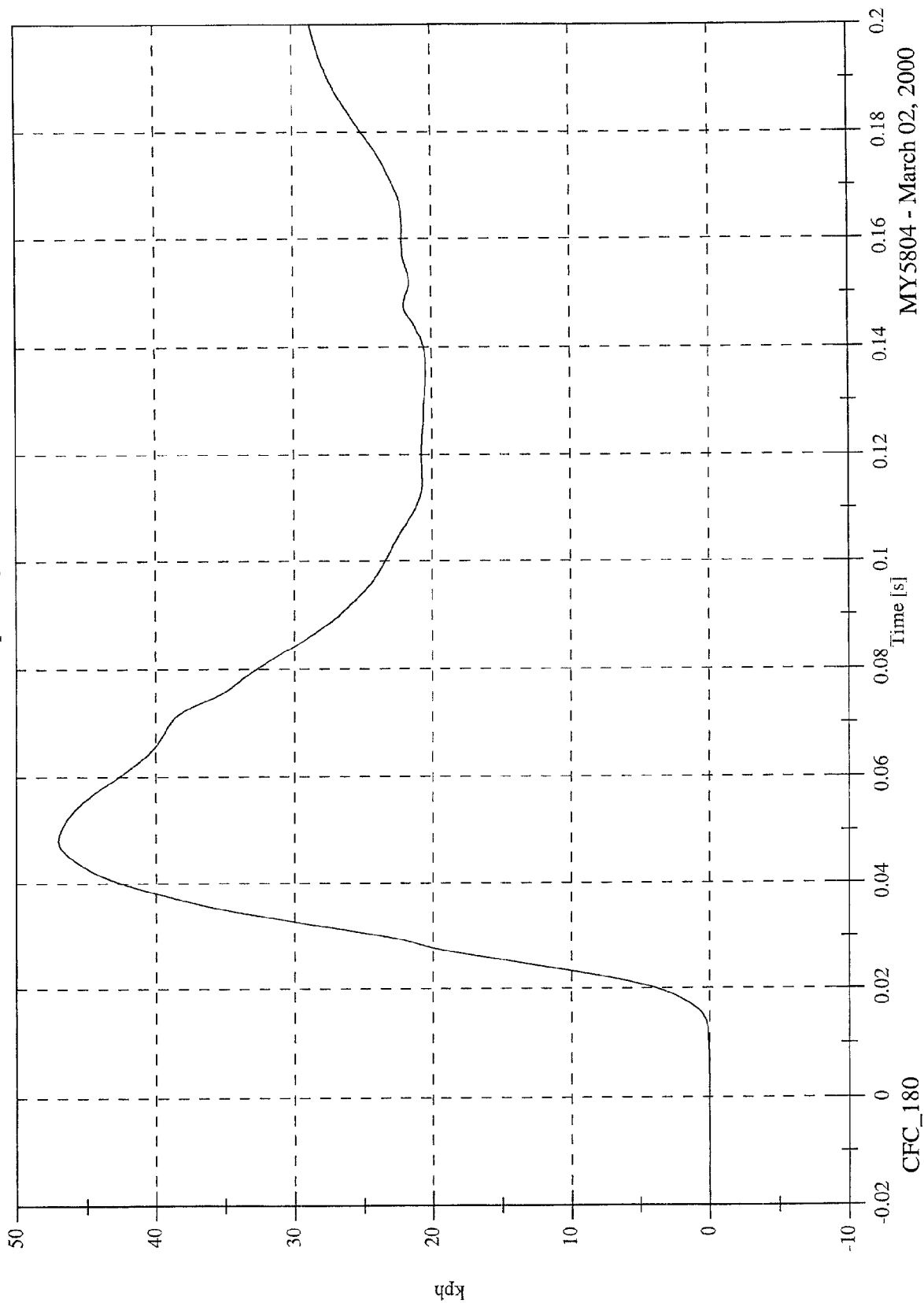
MY5804 - March 02, 2000

SNCAP Test #7 - 2000 Volkswagen Passat

P1 Lower Spine Ry Velocity

Max: 47.0 [kph] at 0.048 [s]

Min: -0.0 [kph] at -0.020 [s]

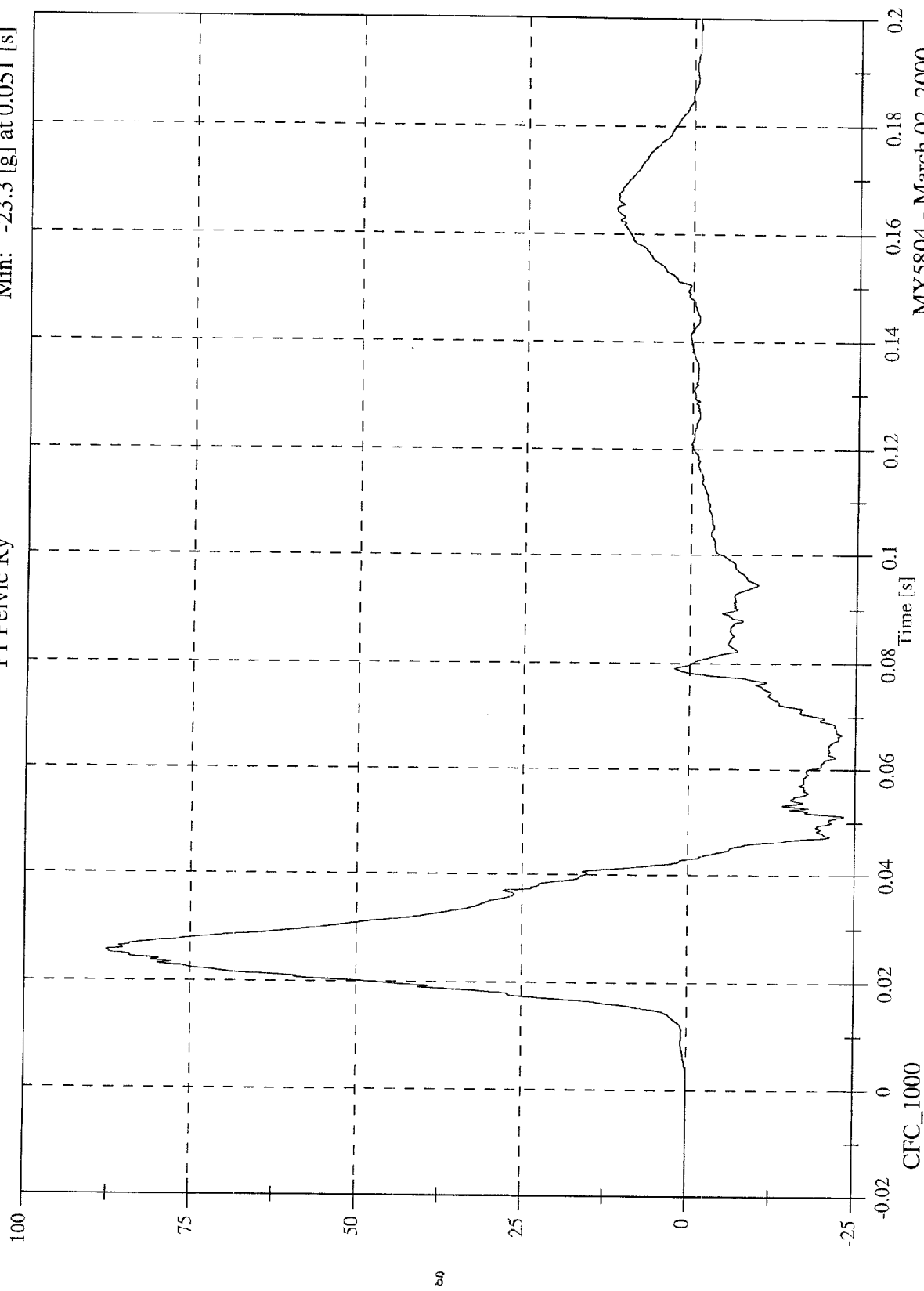


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 87.8 [g] at 0.026 [s]
 Min: -23.3 [g] at 0.051 [s]

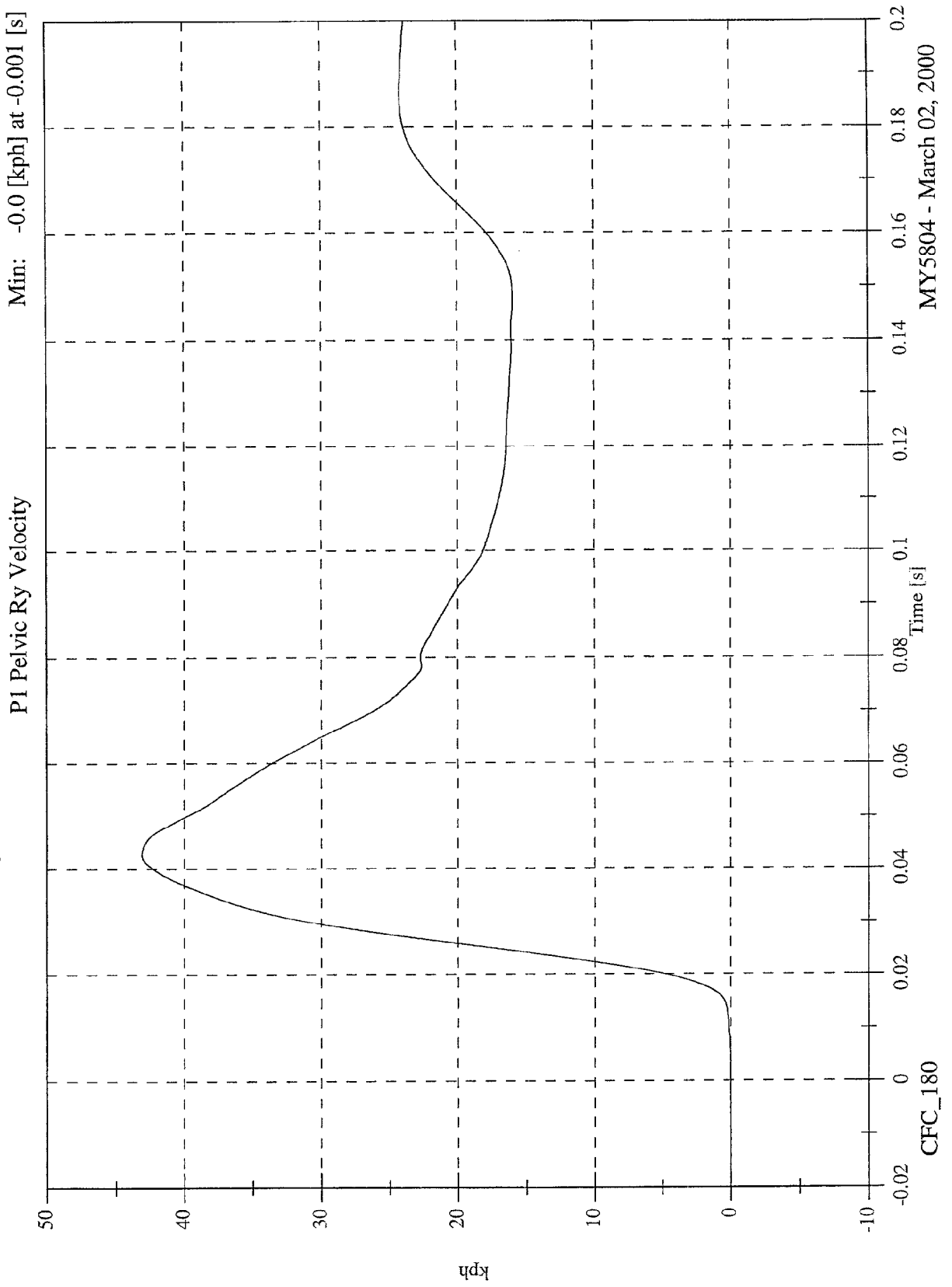
P1 Pelvic Ry

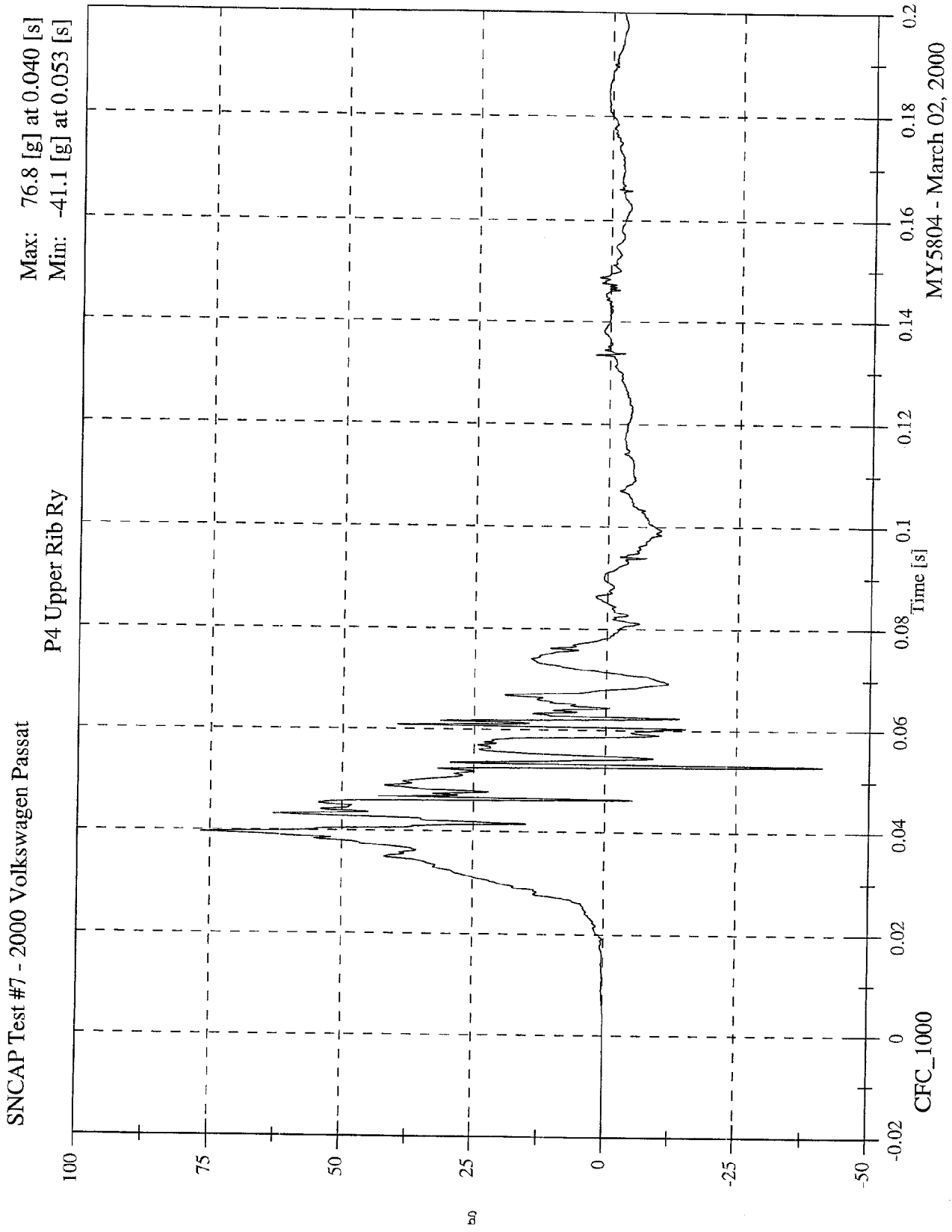


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 43.1 [kph] at 0.043 [s]
Min: -0.0 [kph] at -0.001 [s]



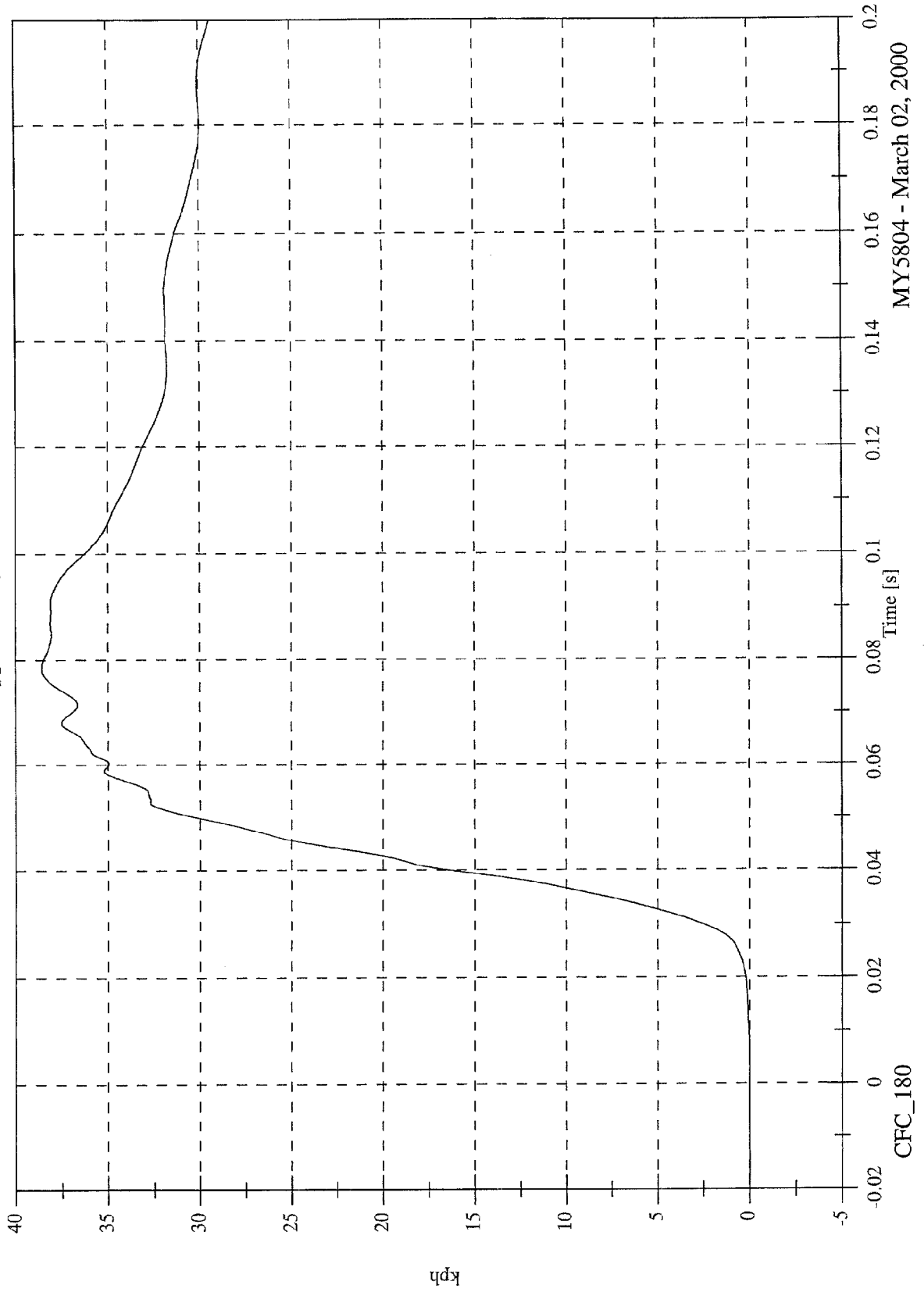


SNCAP Test #7 - 2000 Volkswagen Passat

P4 Upper Rib Ry Velocity

Max: 38.6 [kph] at 0.078 [s]

Min: -0.0 [kph] at -0.018 [s]



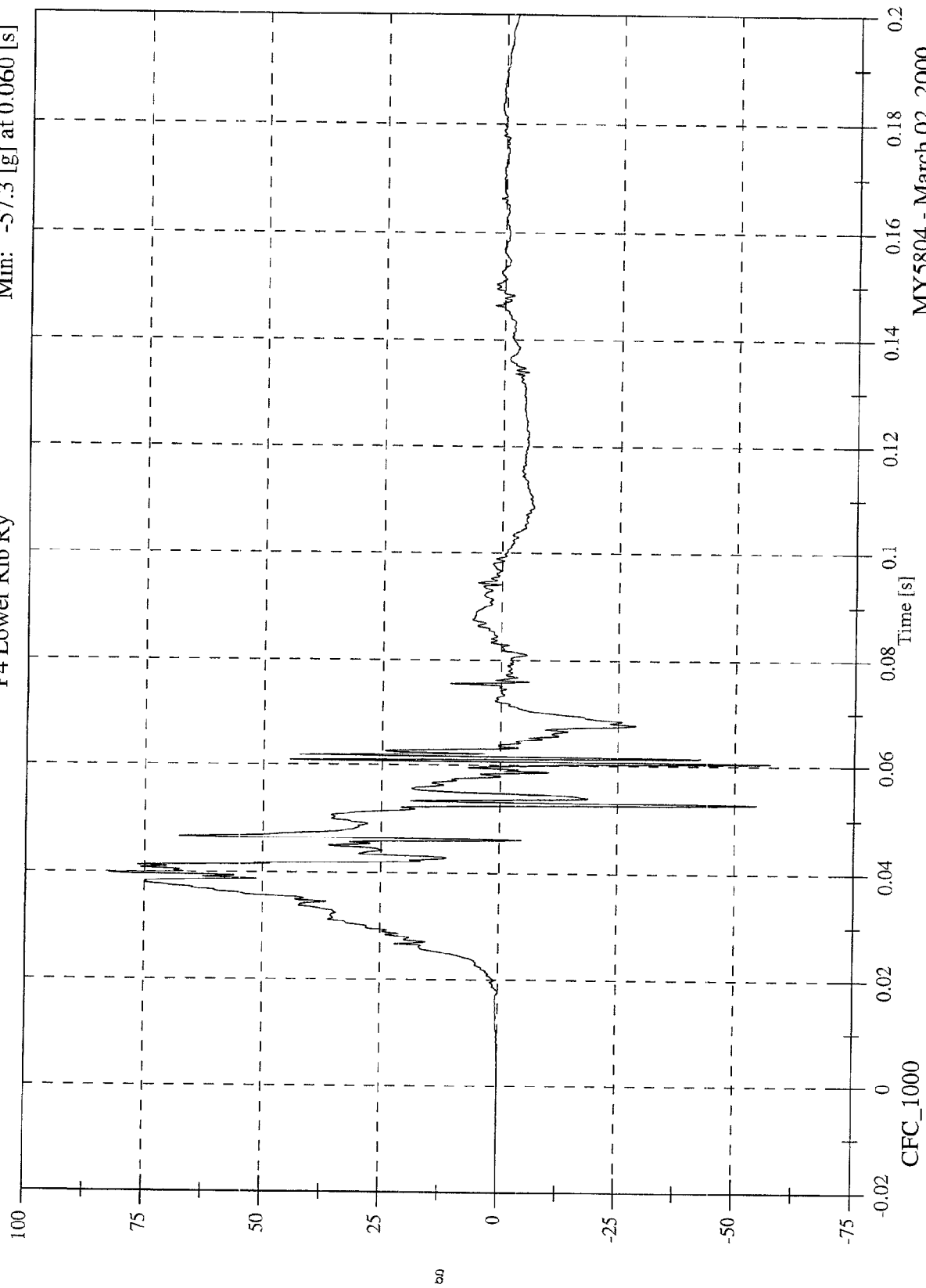
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SNCAP Test #7 - 2000 Volkswagen Passat

P4 Lower Rib Ry

Max: 82.5 [g] at 0.040 [s]

Min: -57.3 [g] at 0.060 [s]

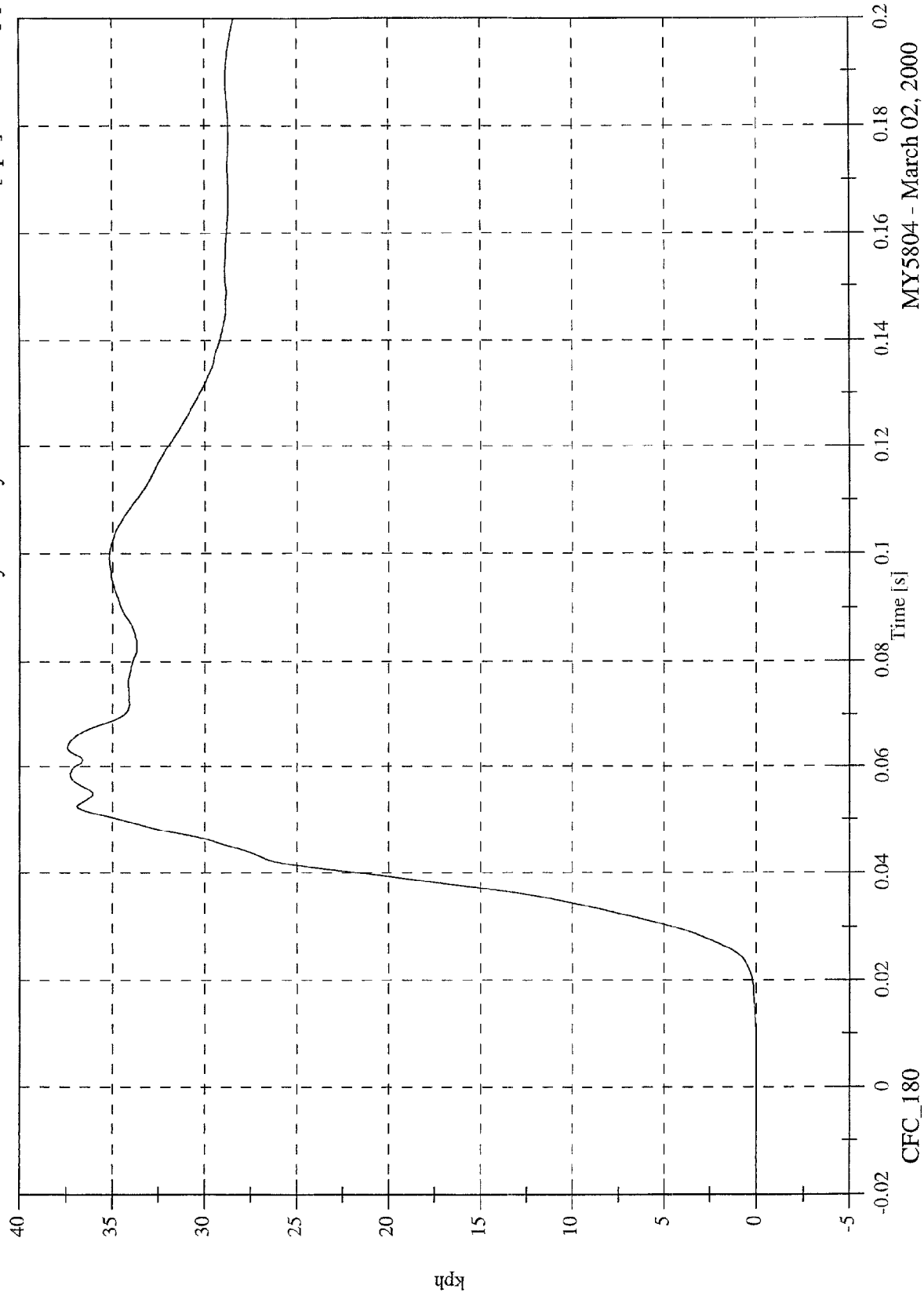


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 37.4 [kph] at 0.064 [s]
Min: -0.0 [kph] at -0.020 [s]

P4 Lower Rib Ry Velocity

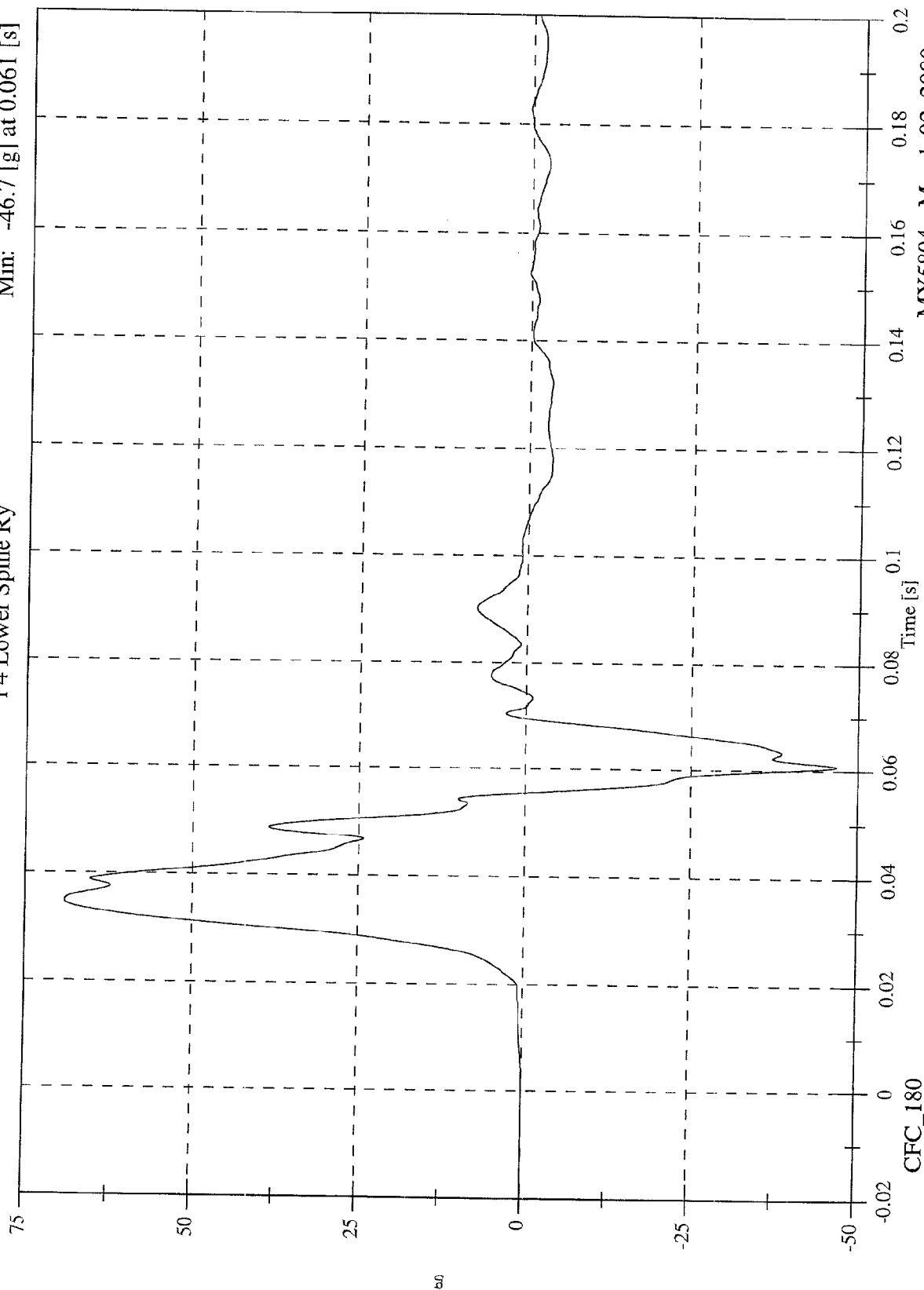


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 69.1 [g] at 0.035 [s]
 Min: -46.7 [g] at 0.061 [s]

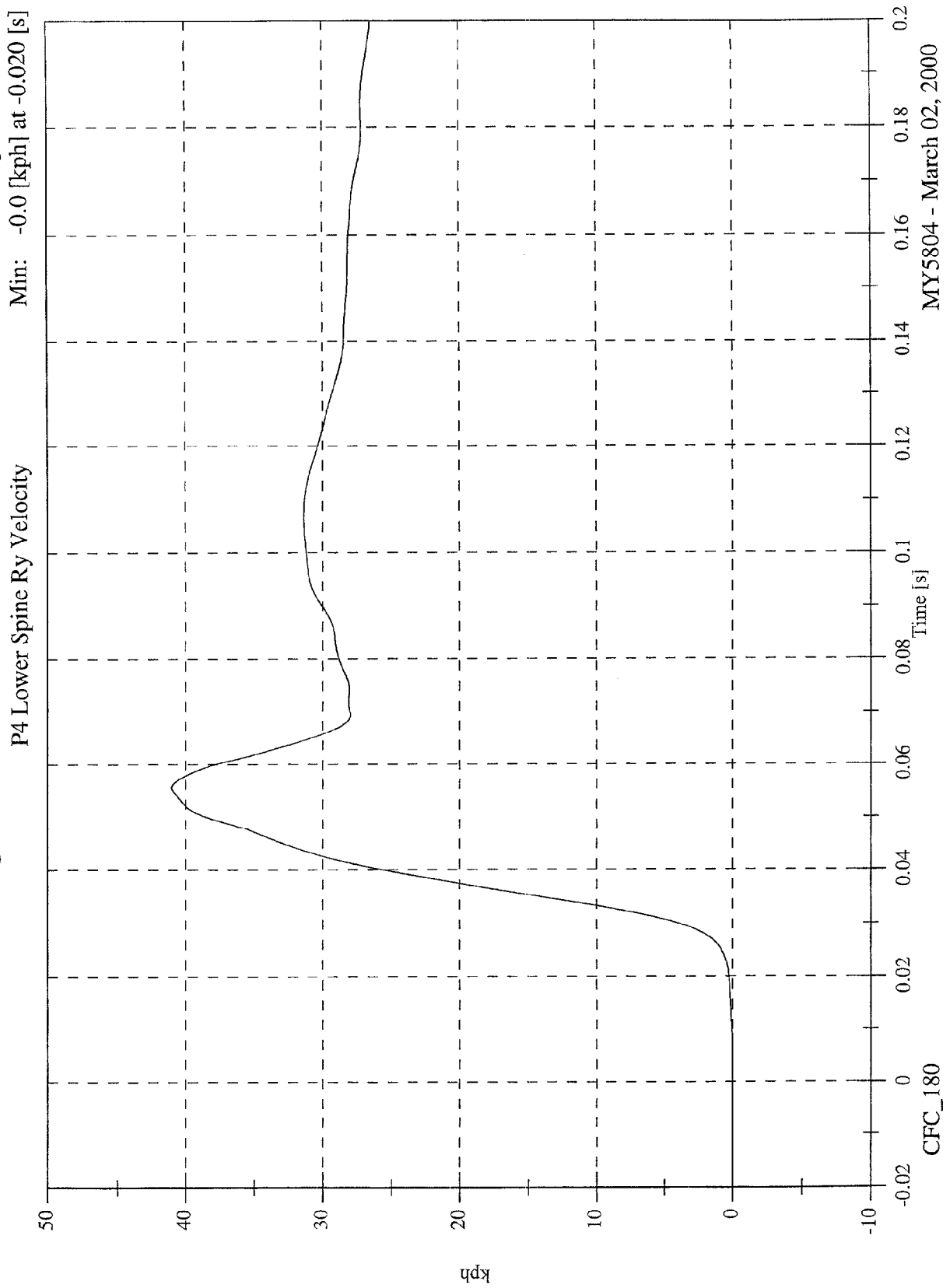
P4 Lower Spine Ry



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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 41.0 [kph] at 0.056 [s]
Min: -0.0 [kph] at -0.020 [s]

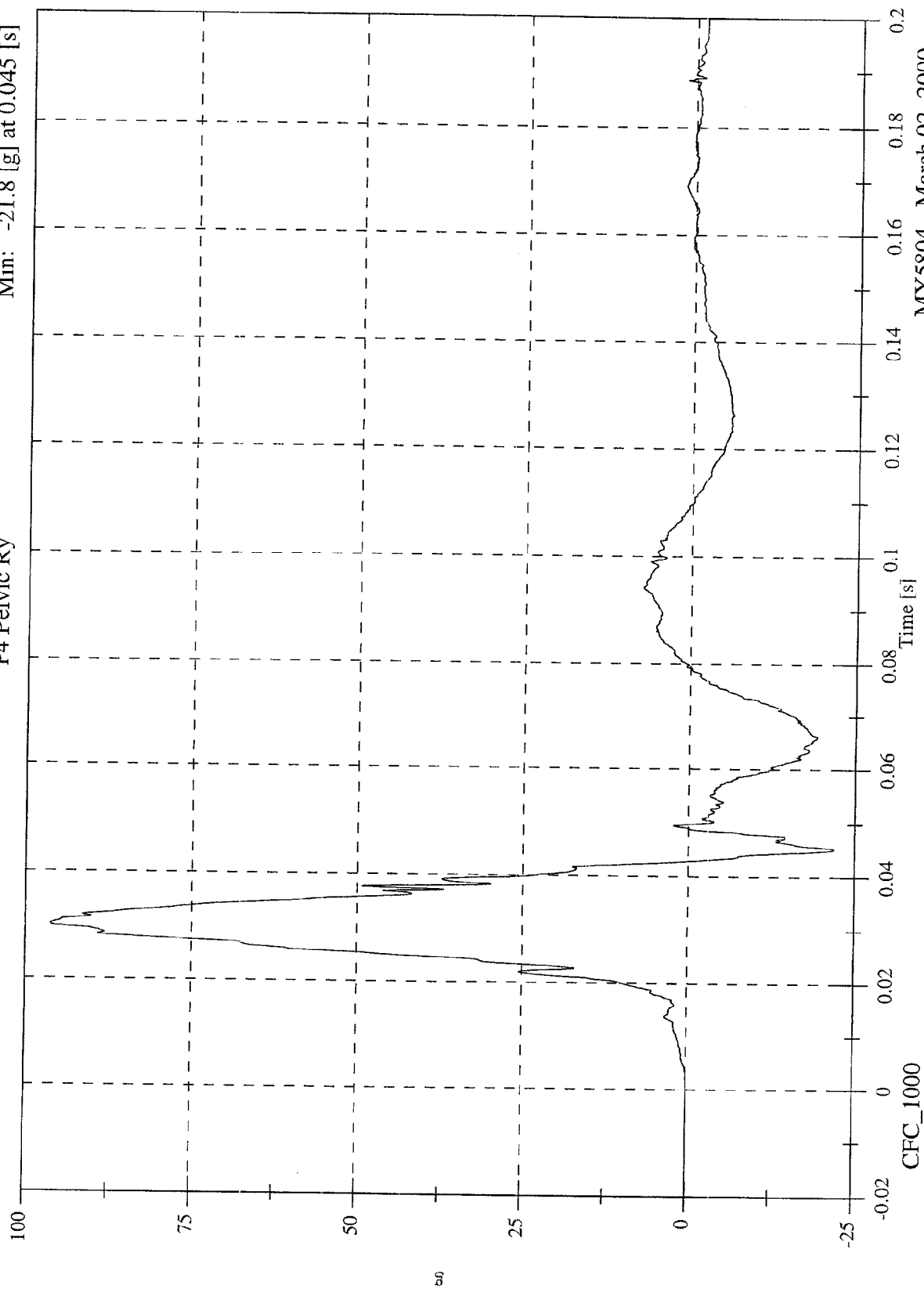


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 96.2 [g] at 0.030 [s]
 Min: -21.8 [g] at 0.045 [s]

P4 Pelvic Ry

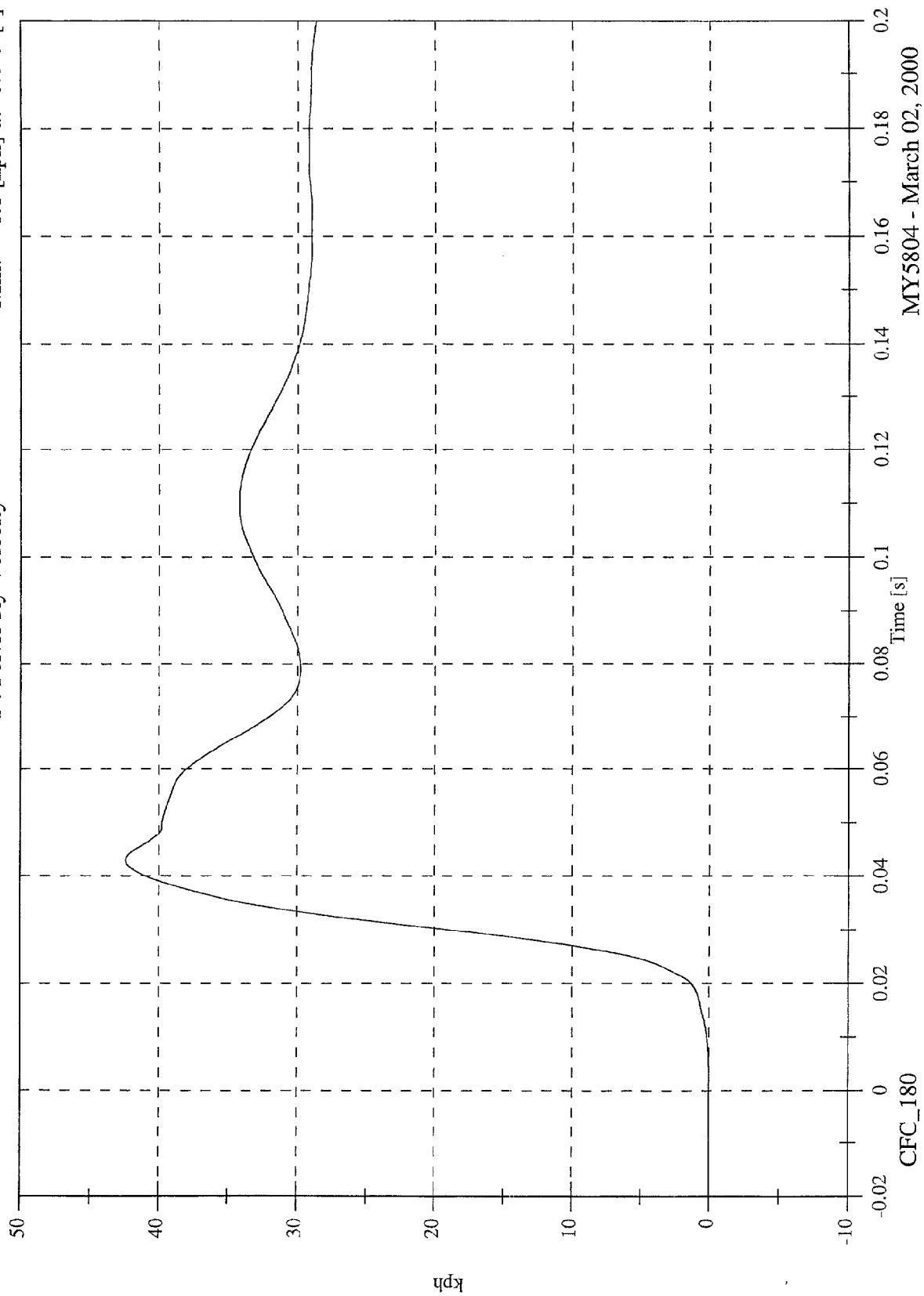


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 42.4 [kph] at 0.043 [s]
Min: -0.0 [kph] at -0.019 [s]

P4 Pelvic Ry Velocity

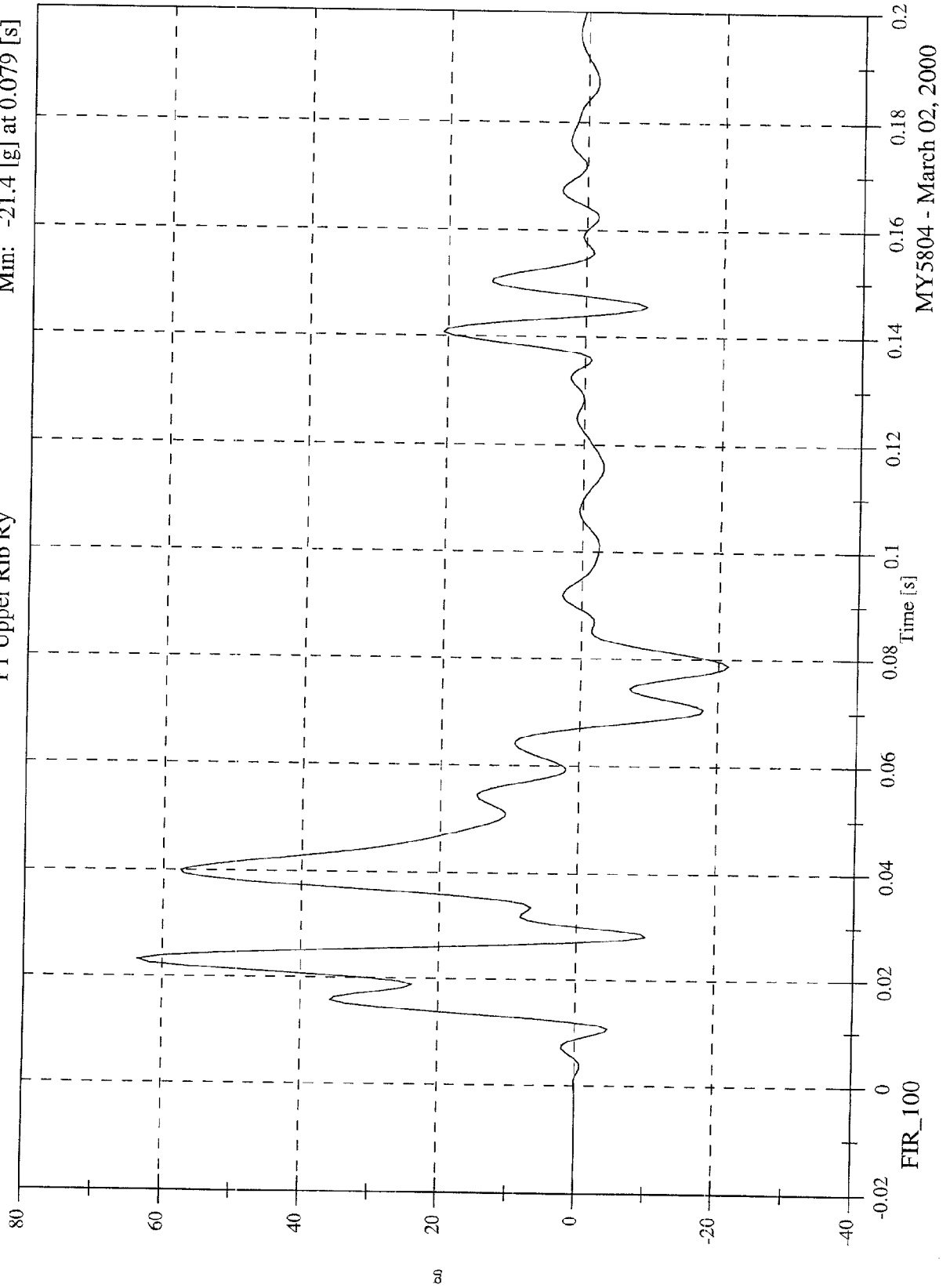


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SNCAP Test #7 - 2000 Volkswagen Passat

P1 Upper Rib Ry

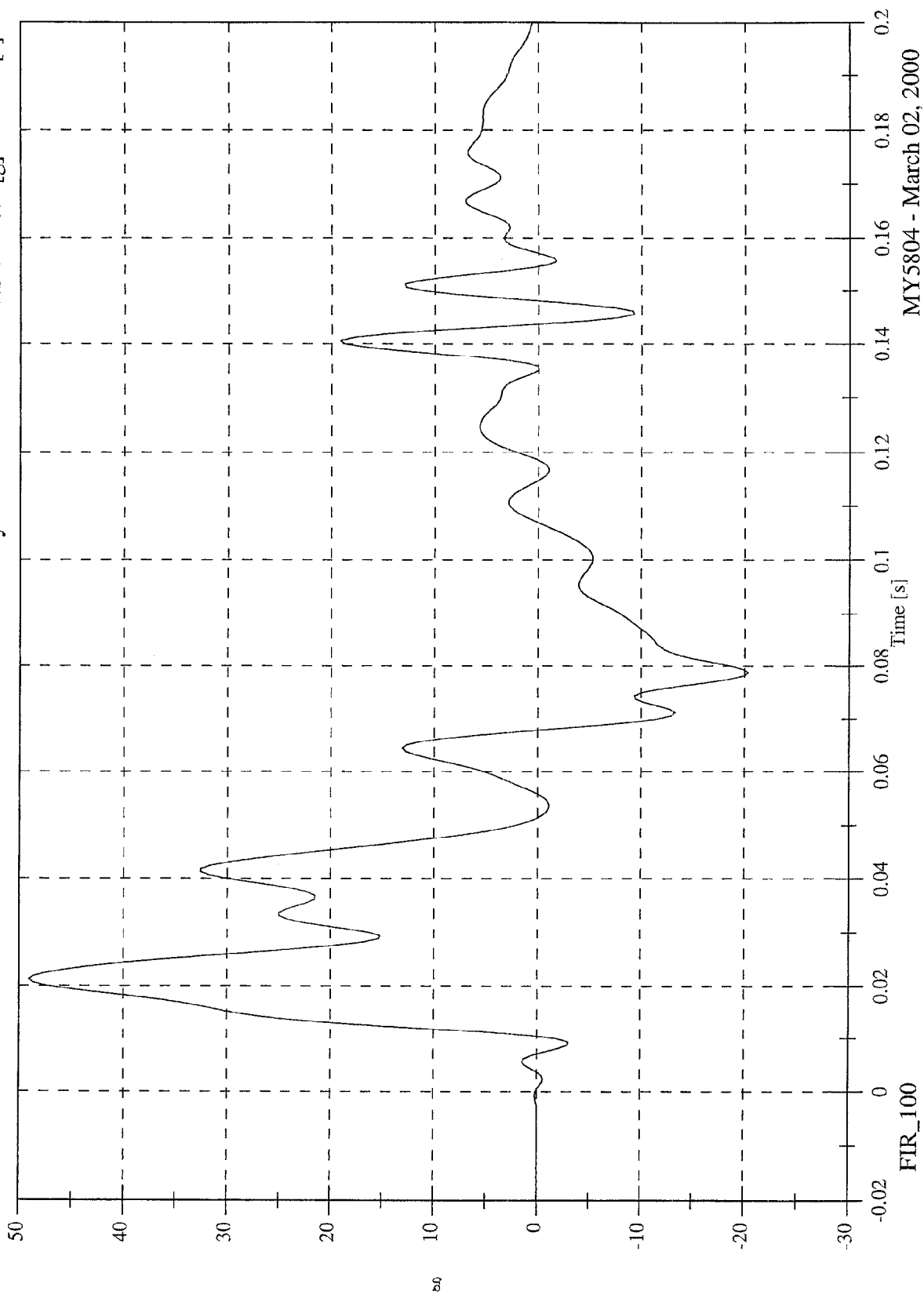
Max: 63.7 [g] at 0.023 [s]
Min: -21.4 [g] at 0.079 [s]



SNCAP Test #7 - 2000 Volkswagen Passat

P1 Lower Rib Ry

Max: 49.1 [g] at 0.021 [s]
Min: -20.4 [g] at 0.079 [s]

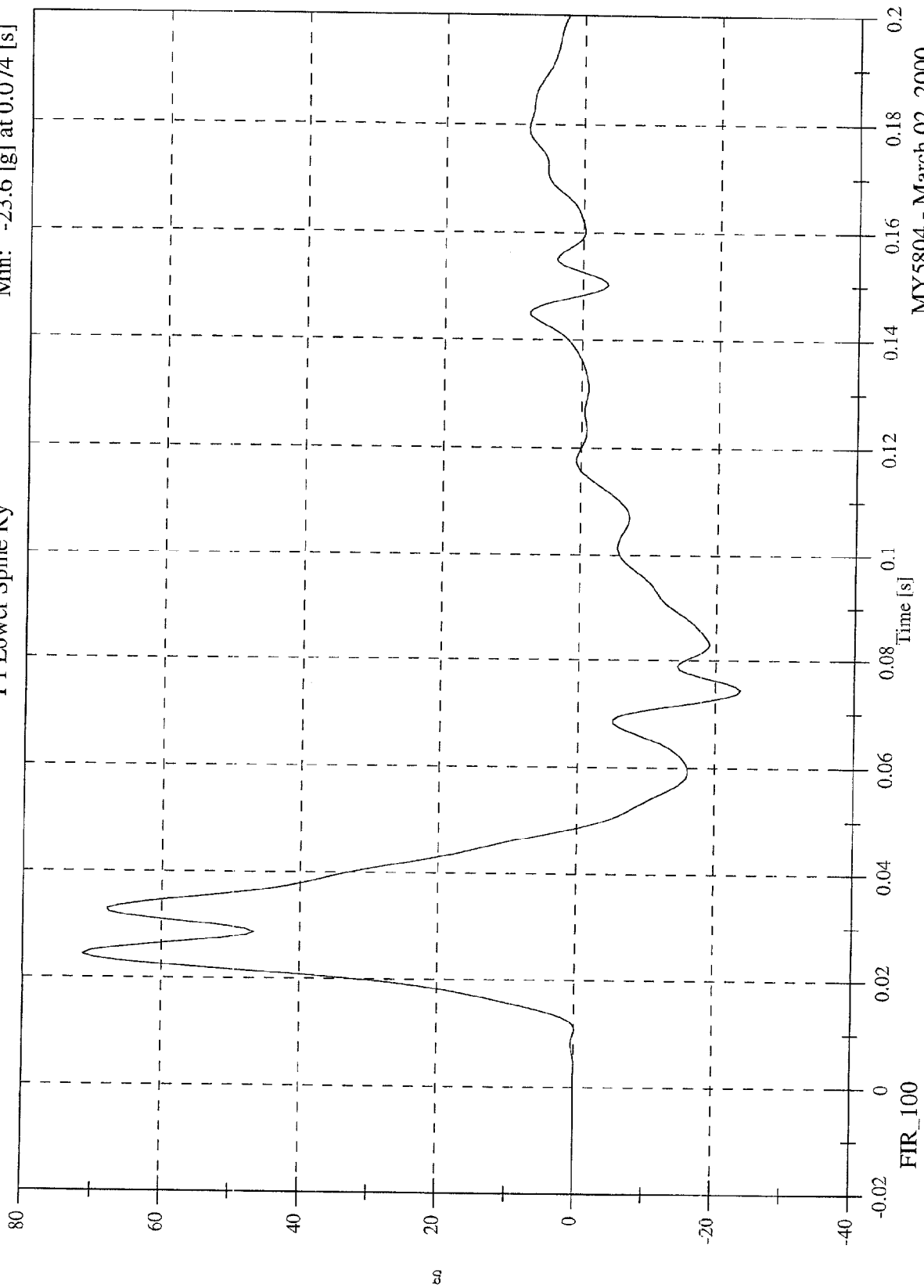


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SNCAP Test #7 - 2000 Volkswagen Passat

P1 Lower Spine Ry

Max: 71.3 [g] at 0.024 [s]
Min: -23.6 [g] at 0.074 [s]

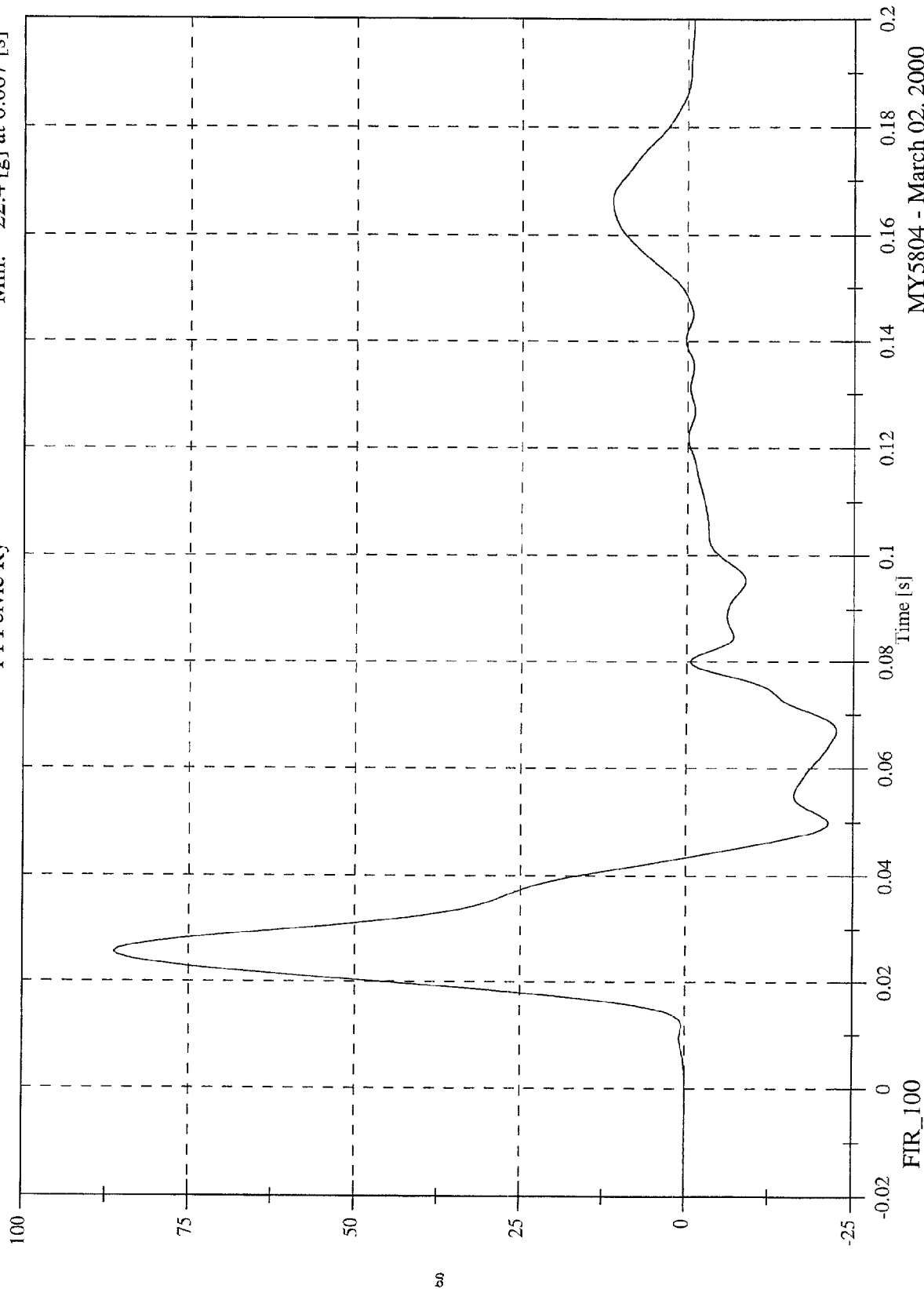


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SNCAP Test #7 - 2000 Volkswagen Passat

P1 Pelvic Ry

Max: 86.3 [g] at 0.026 [s]
Min: -22.4 [g] at 0.067 [s]

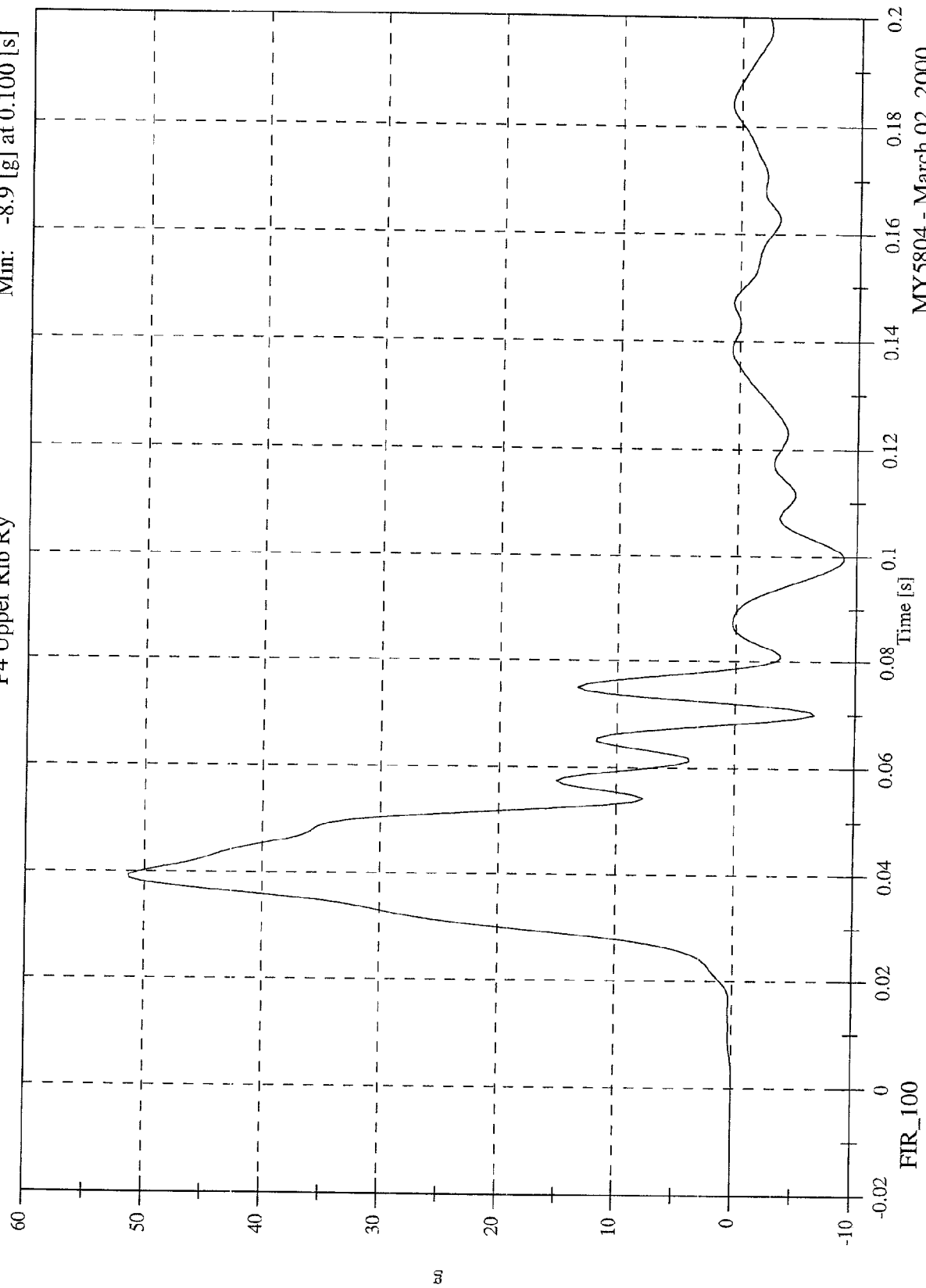


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SNCAP Test #7 - 2000 Volkswagen Passat

P4 Upper Rib Ry

Max: 51.4 [g] at 0.039 [s]
Min: -8.9 [g] at 0.100 [s]

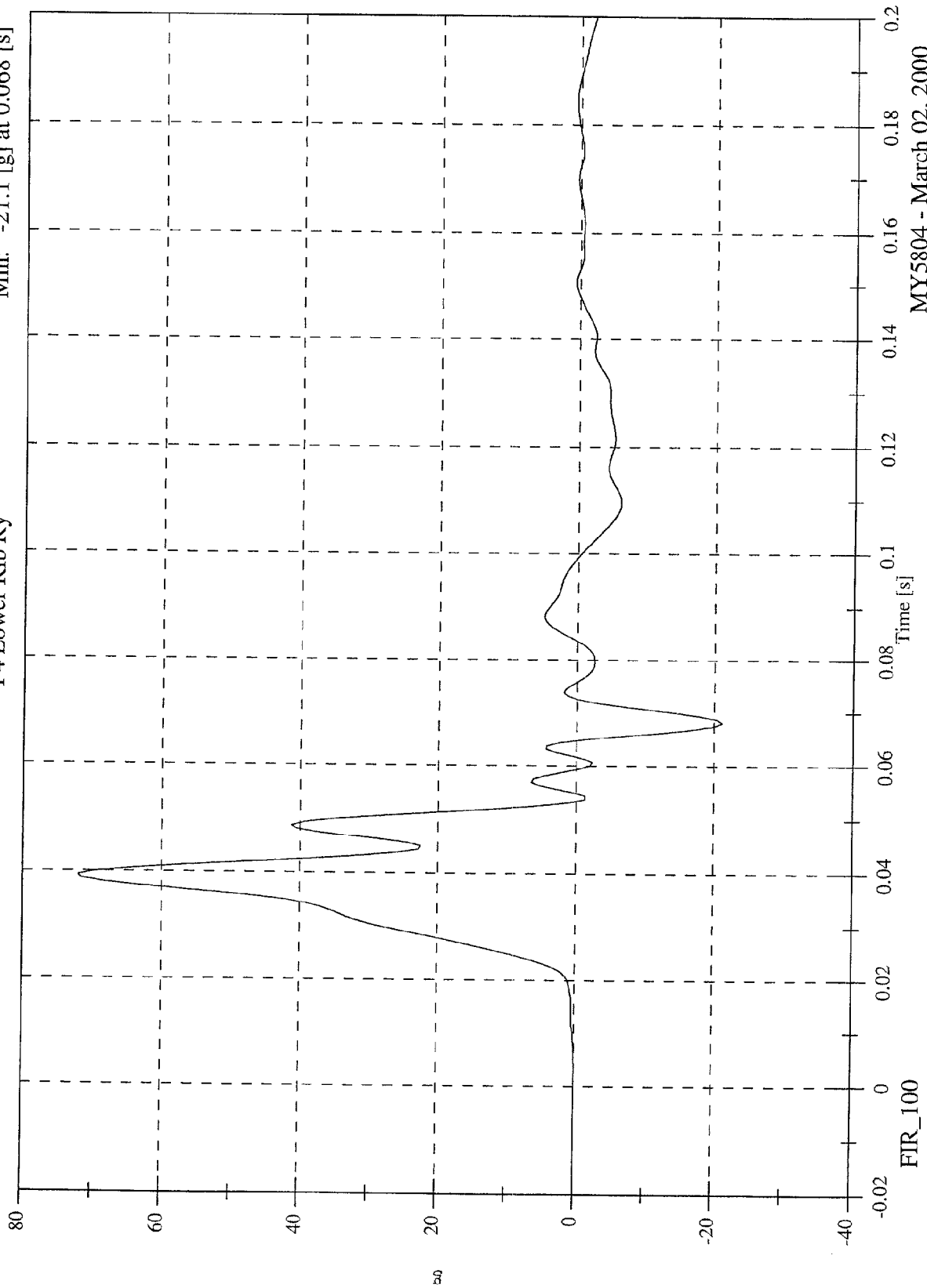


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SNCAP Test #7 - 2000 Volkswagen Passat

P4 Lower Rib Ry

Max: 72.0 [g] at 0.039 [s]
Min: -21.1 [g] at 0.068 [s]

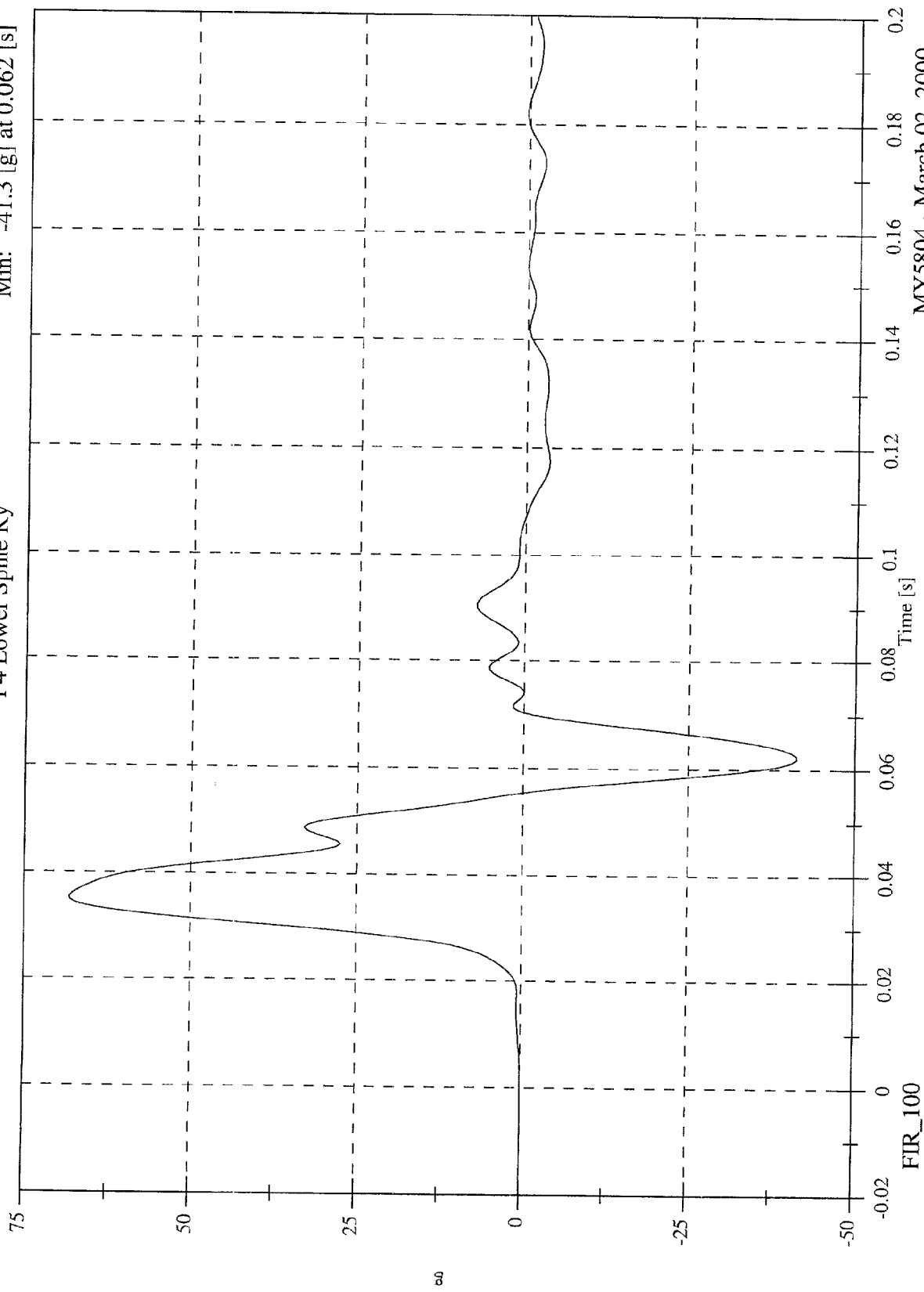


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SNCAP Test #7 - 2000 Volkswagen Passat

P4 Lower Spine Ry

Max: 68.2 [g] at 0.036 [s]
Min: -41.3 [g] at 0.062 [s]

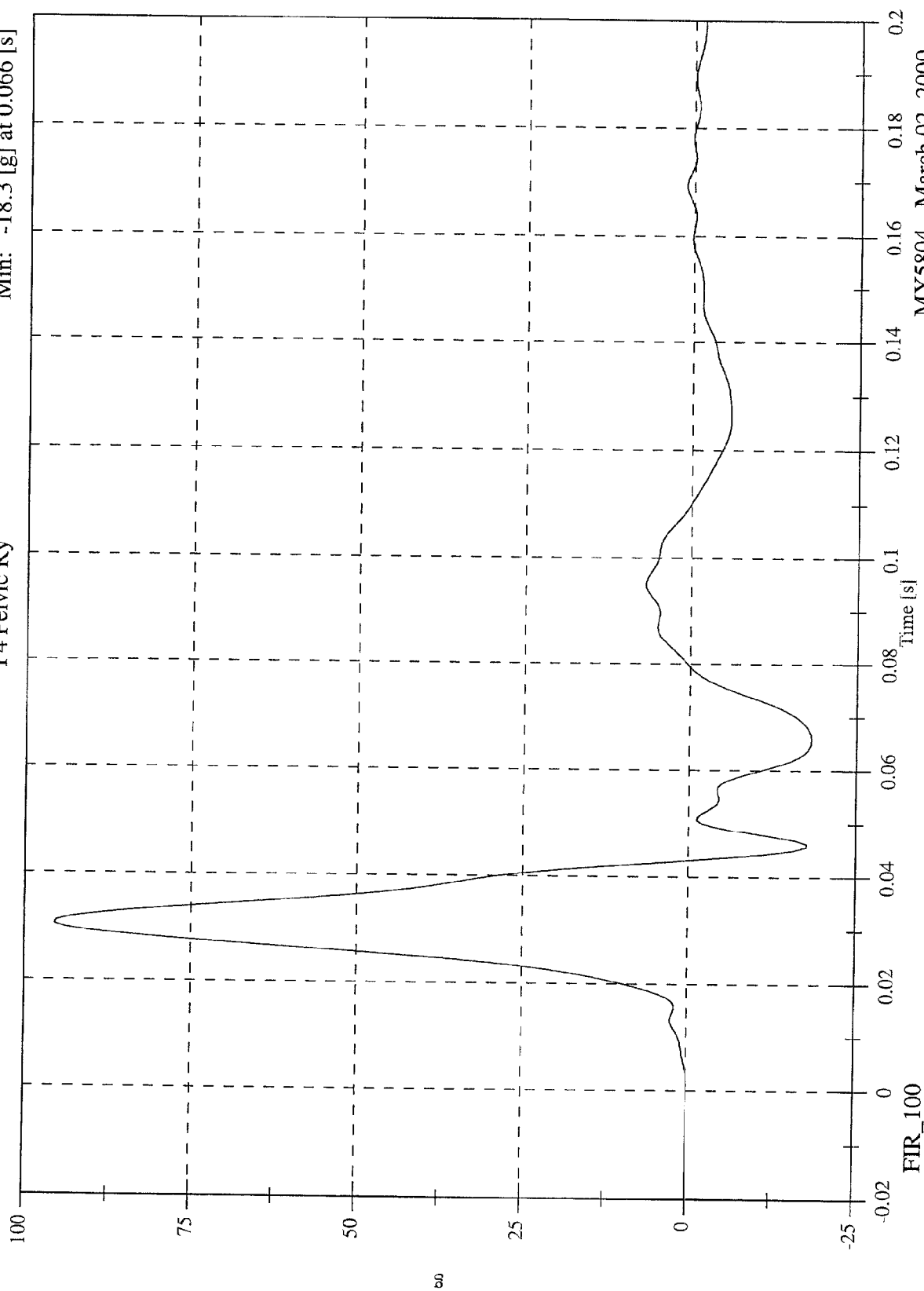


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SNCAP Test #7 - 2000 Volkswagen Passat

Max: 95.5 [g] at 0.031 [s]
 Min: -18.3 [g] at 0.066 [s]

P4 Pelvic Ry



MY5804 - March 02, 2000

APPENDIX C

SID CONFIGURATION AND PERFORMANCE VERIFICATION DATA

SUMMARY
SID PRE & POST TEST CALIBRATION

CONFIGURED FOR LEFT SIDE IMPACT

Date: February 28, 2000; March 7, 2000 Sequential Test Number: 2,3; 3,4
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	SID NO.: 016		SID NO.: 268	
		PRE TEST	POST TEST	PRE TEST	POST TEST
SH- Seated Height (mm)	889 - 909	902	902	899	899
RH- Rib Height (mm)	501 - 521	513	511	513	513
HP- Hip Pivot Height (mm)	99 ref.	99	99	99	99
RD- Rib from Back Line (mm)	229 - 241	239	239	236	236
KV- Knee Pivot from Back Line (mm)	511 - 526	526	526	518	518
SW- Knee Pivot to Floor (mm)	490 - 505	494	494	495	495
HW- Hip Width (mm)	356 - 391	362	363	376	376
THORAX IMPACTS					
TEMPERATURE (°C)	18.9 - 25.5	21.1	21.1	21.1	21.1
RELATIVE HUMIDITY (%)	10 - 70	29	30	29	30
PROBE SPEED (m/s)	4.27 - 4.33	4.31	4.32	4.29	4.32
UPPER RIB (g's)	37 - 46	40.2	43.6	38.6	39.8
LOWER RIB (g's)	37 - 46	41.3	42.6	37.2	37.6
LOWER SPINE (g's)	15 - 22	20.6	21.1	19.2	20.0
PELVIS IMPACT					
TEMPERATURE (°C)	18.9 - 25.5	21.1	21.1	21.1	21.1
RELATIVE HUMIDITY (%)	10 - 70	29	30	29	30
PROBE SPEED (m/s)	4.27 - 4.33	4.30	4.32	4.28	4.31
PELVIS (g's)	40 - 60	46.4	50.3	54.0	54.7

REMARKS: None

**CALIBRATION TEST RESULTS
PRE-TEST**

SID NO.: 016

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 2
Date: February 28, 2000 Laboratory Technician: B. Swiecicki

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

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 2
Date: February 28, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	513
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	239
KH- Knee Pivot from Back Line (mm)	511 - 526	526
KV- Knee Pivot to Floor (mm)	490 - 505	494
HW- Hip Width (mm)	356 - 391	362

REMARKS: None

THORACIC SHOCK ABSORBER TESTS
PRE-TEST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 2
Date: February 1, 2000 Laboratory Technician: B. Swiecicki

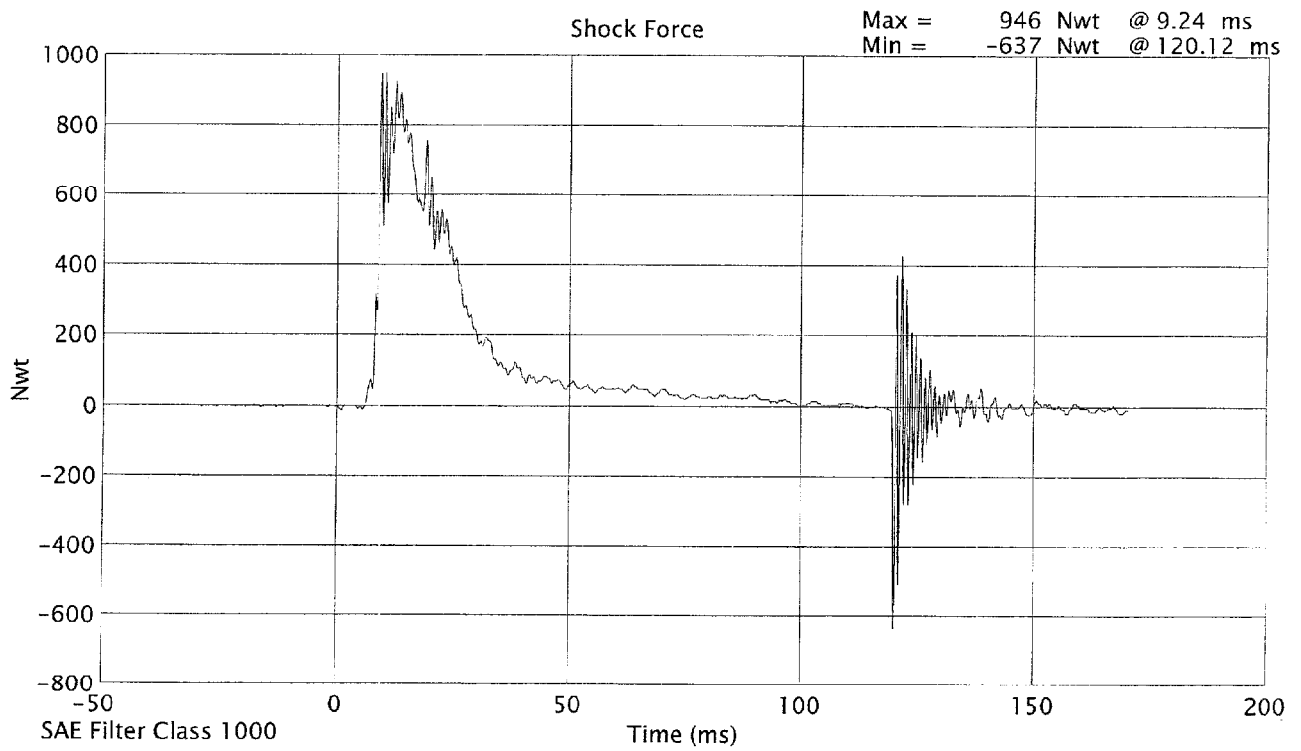
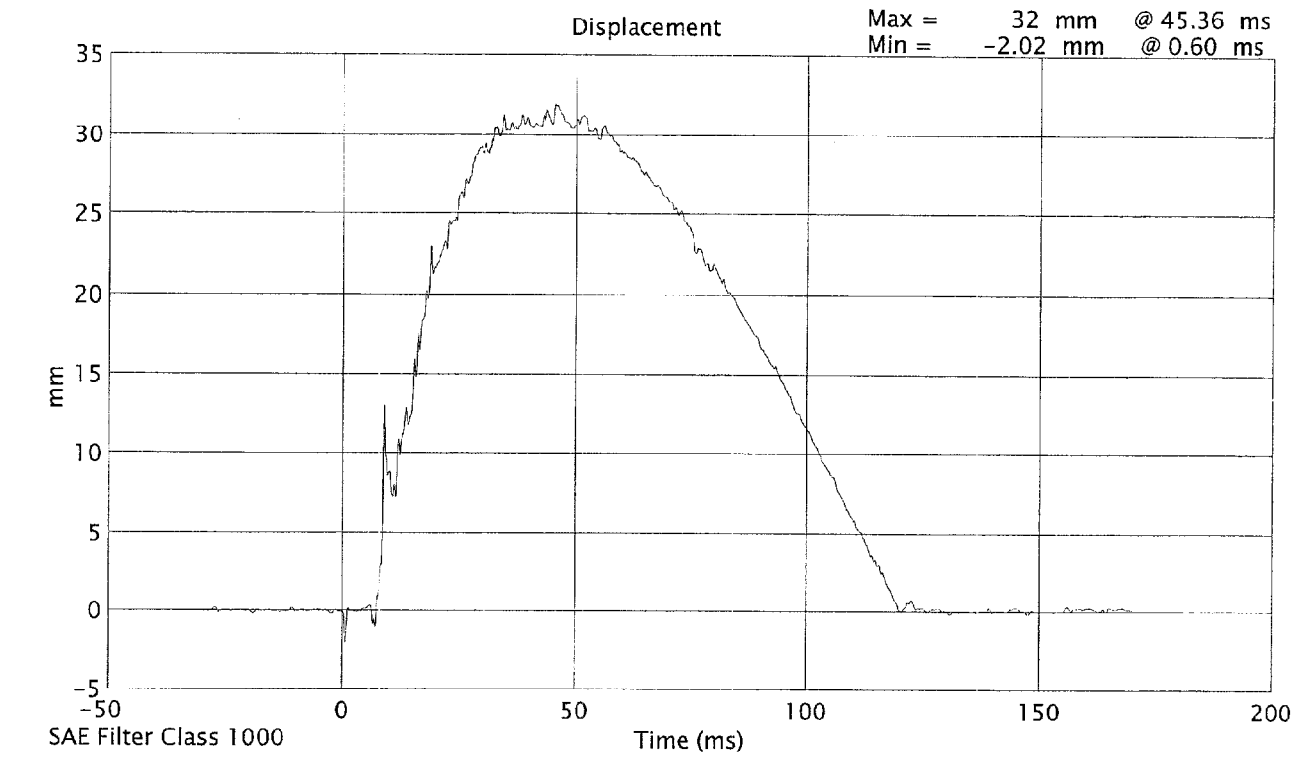
DAMPER IDENTIFICATION: 016

TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)		18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)		10 - 70	31
VELOCITY 3.05 m/s	FORCE (N)	836 - 1125	946.4
	DISPLACEMENT (mm)	30 - 35	32.0
VELOCITY 4.27 m/s	FORCE (N)	1730 - 2099	1798.6
	DISPLACEMENT (mm)	32 - 37	34.6
VELOCITY 6.10 m/s	FORCE (N)	3741 - 4448	3836.7
	DISPLACEMENT (mm)	33 - 40	35.9

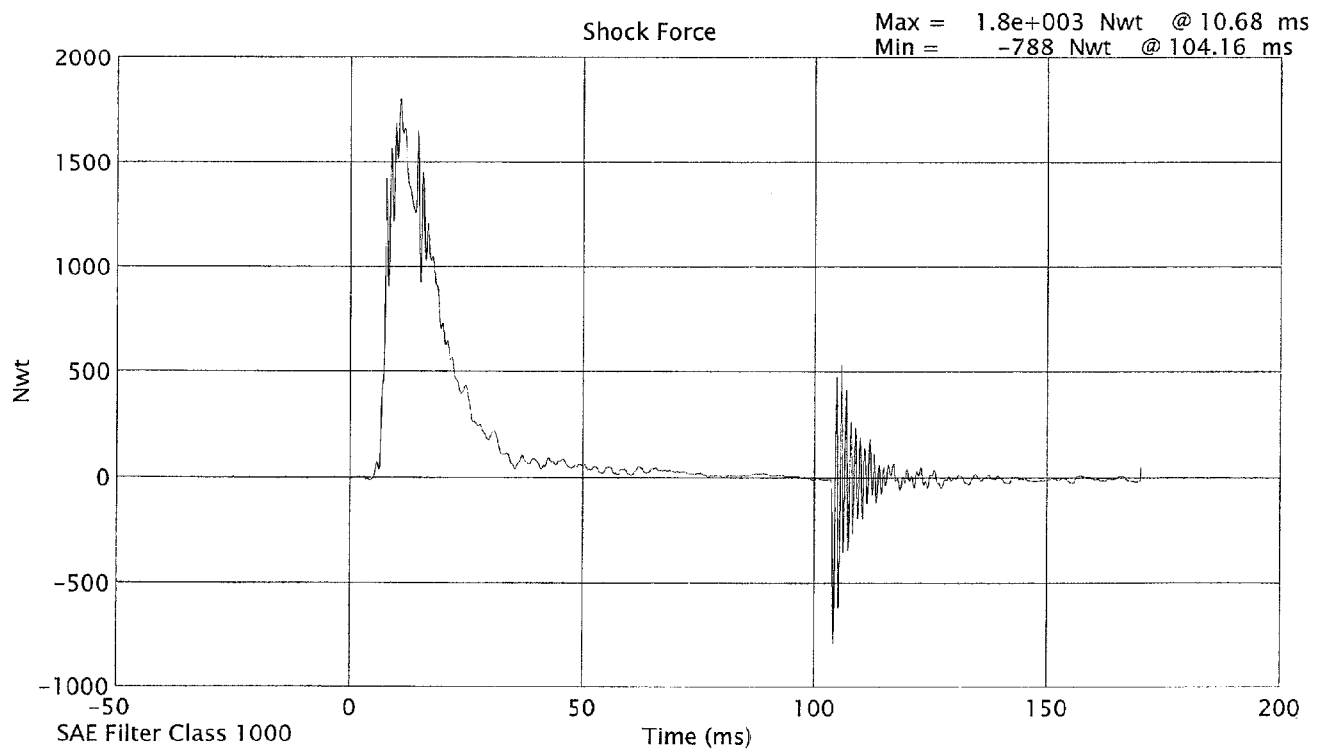
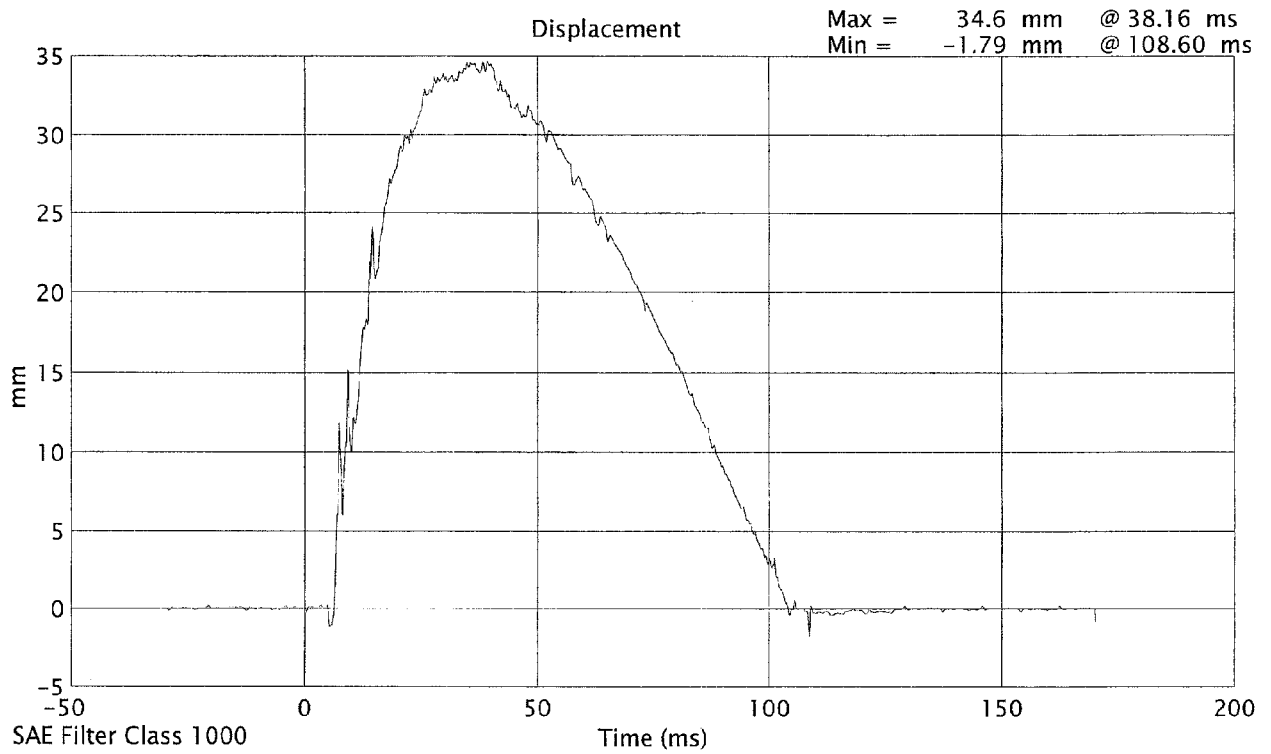
DAMPER SETTING: 5

REMARKS: None

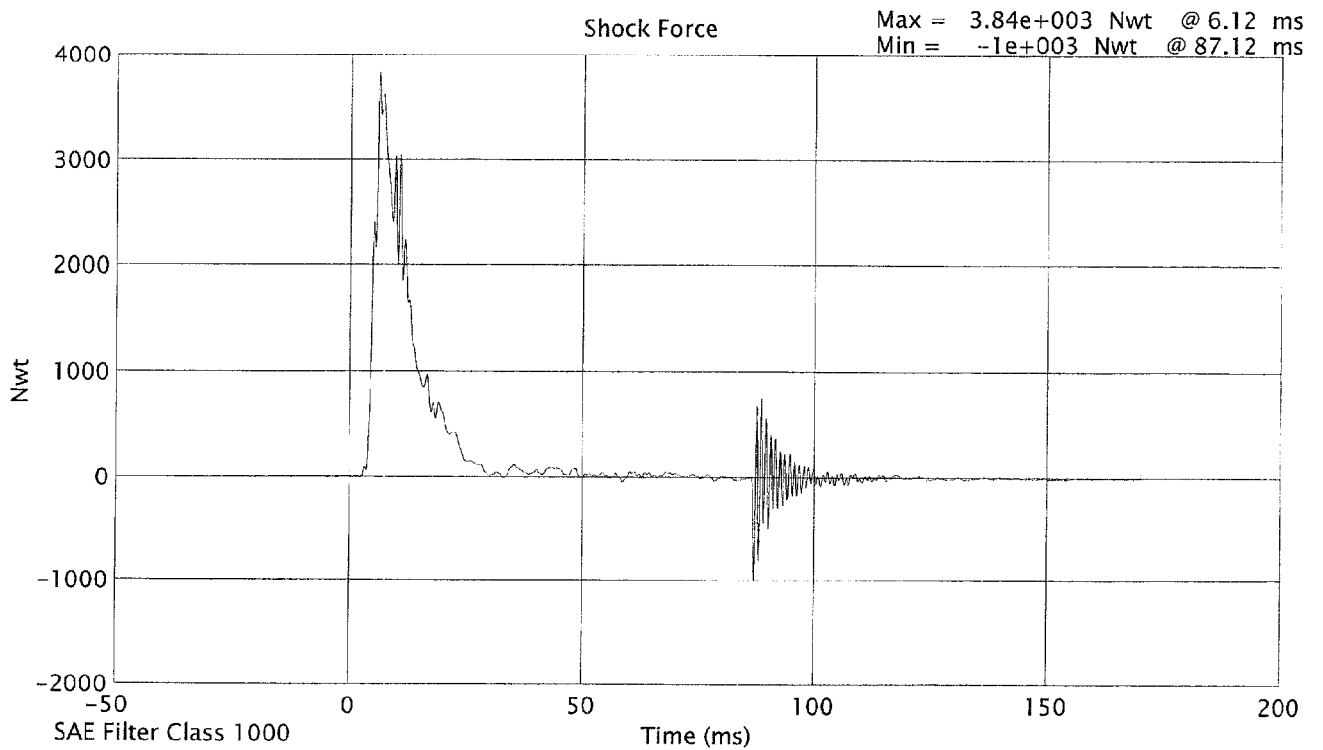
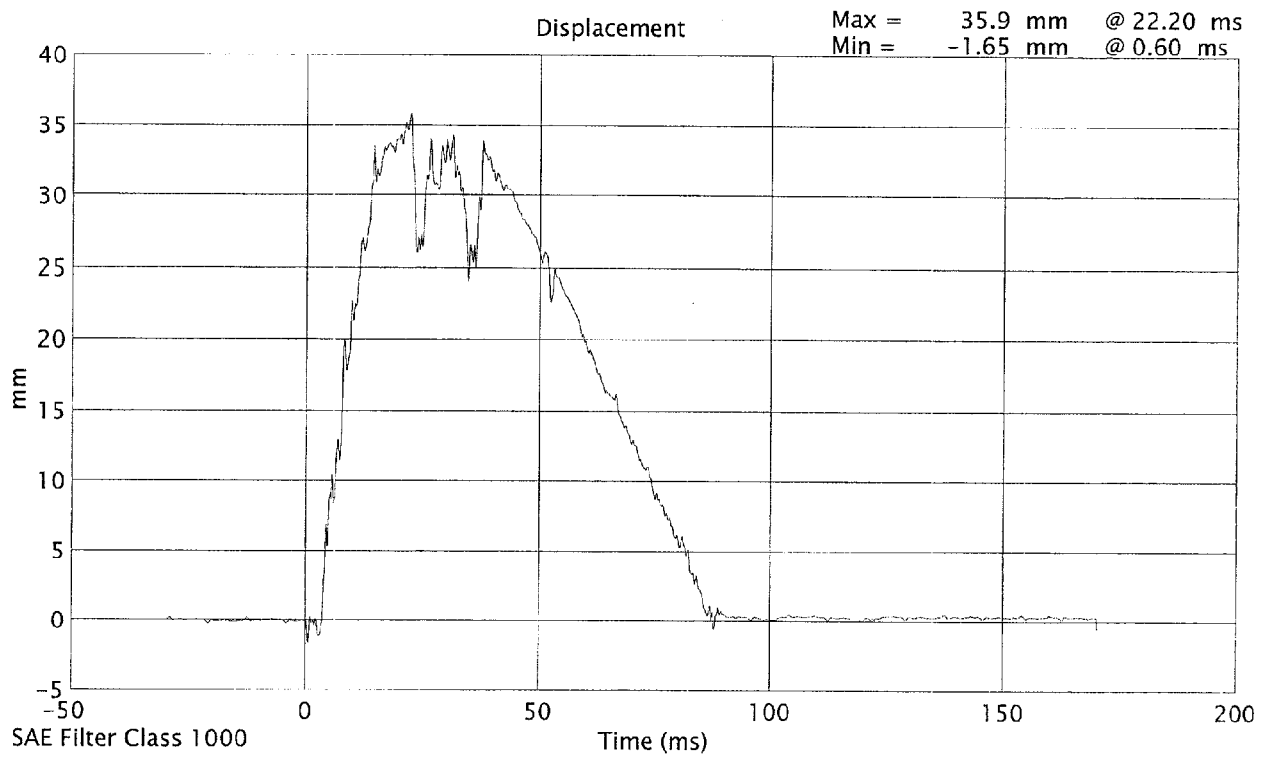
SID 016 Shock Absorber Impact Test @ 3.048 m/s



SID 016 Shock Absorber Impact Test @ 4.2672 m/s



SID 016 Shock Absorber Impact Test @ 6.096 m/s



**LATERAL THORAX IMPACT TEST
PRE-TEST**

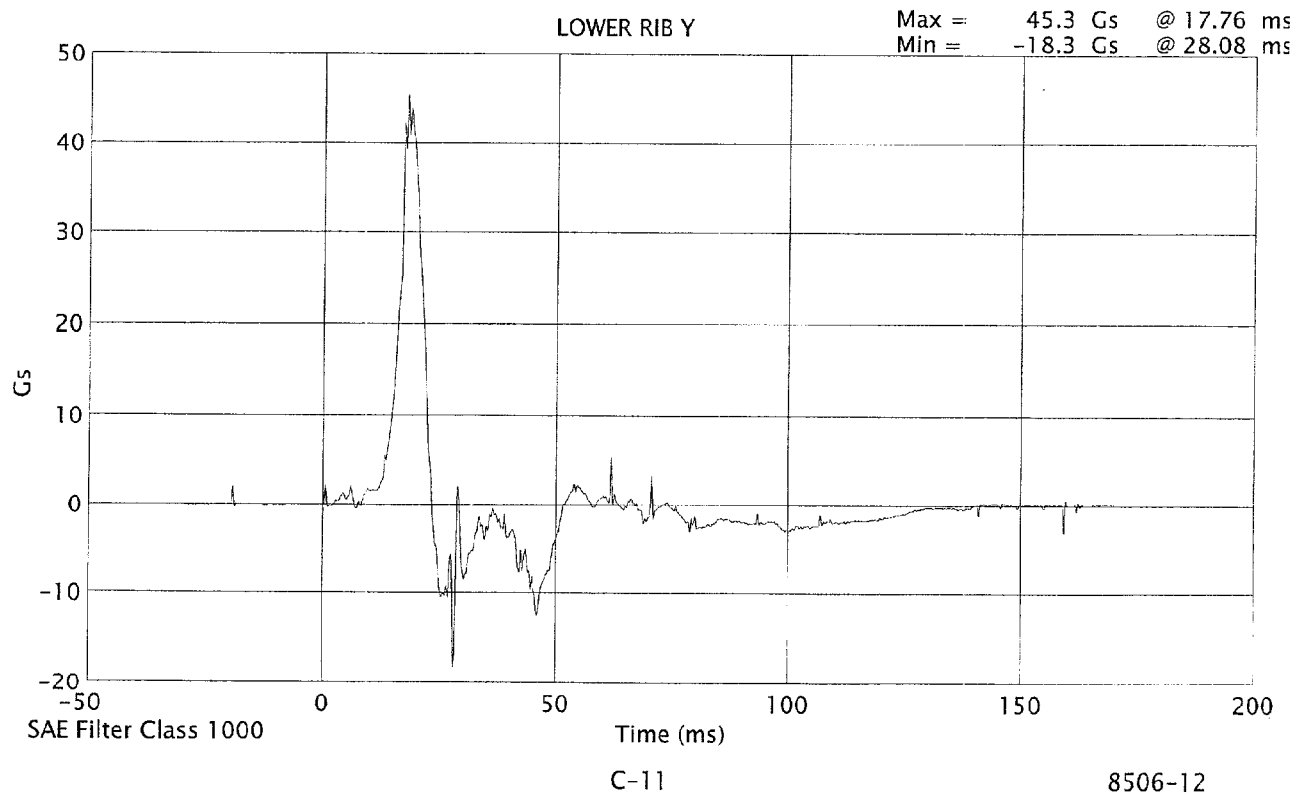
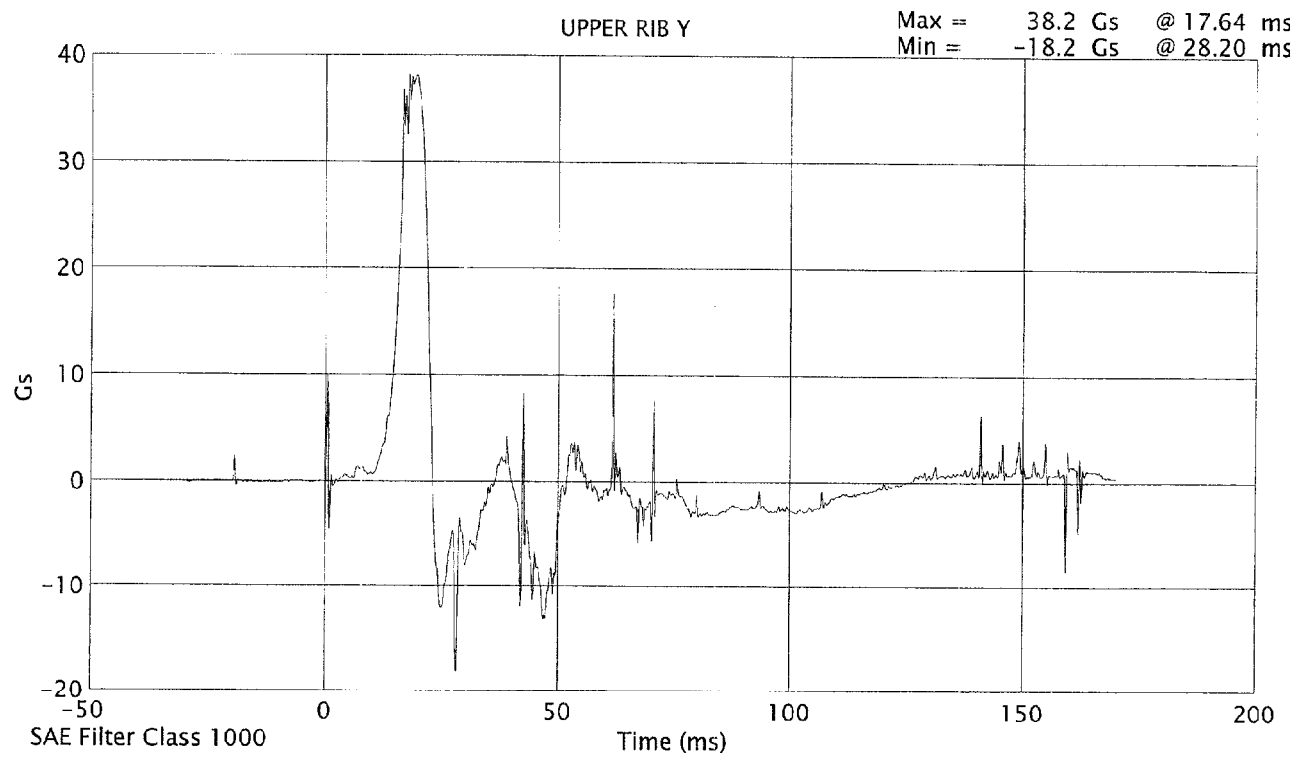
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 2
Date: February 22, 2000 Laboratory Technician: B. Swiecicki

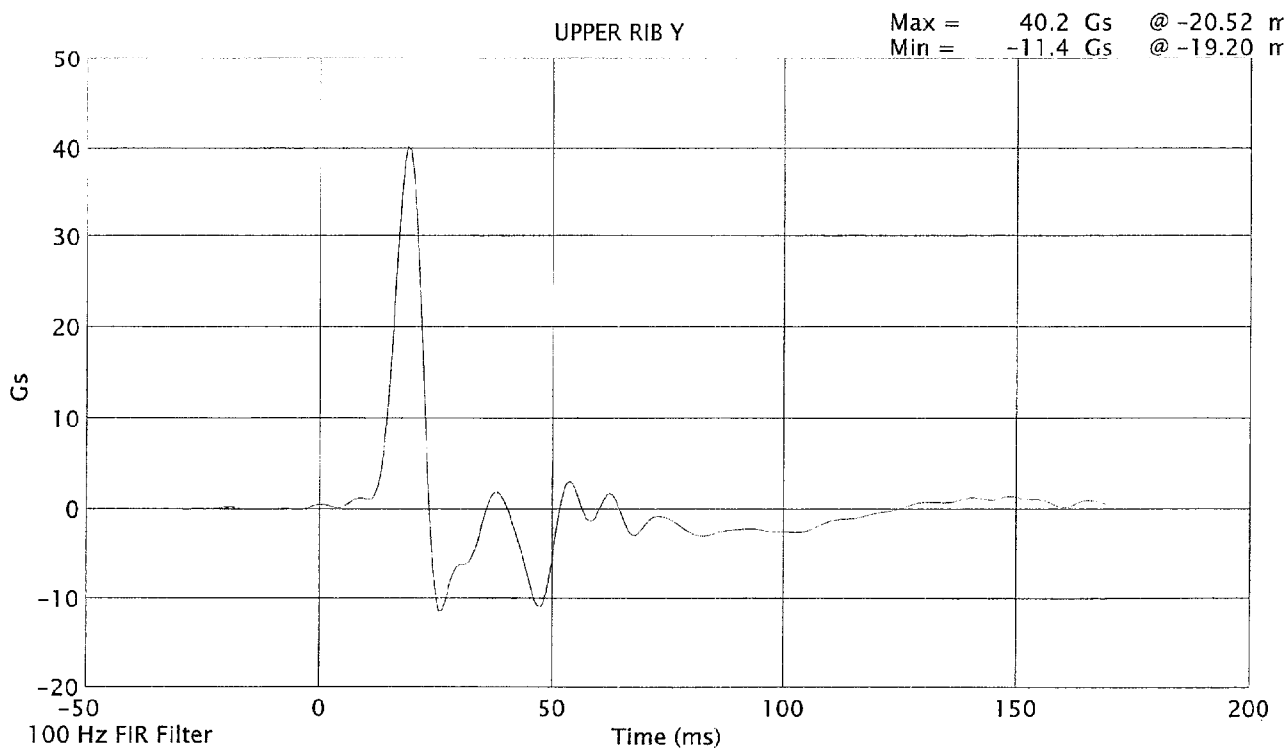
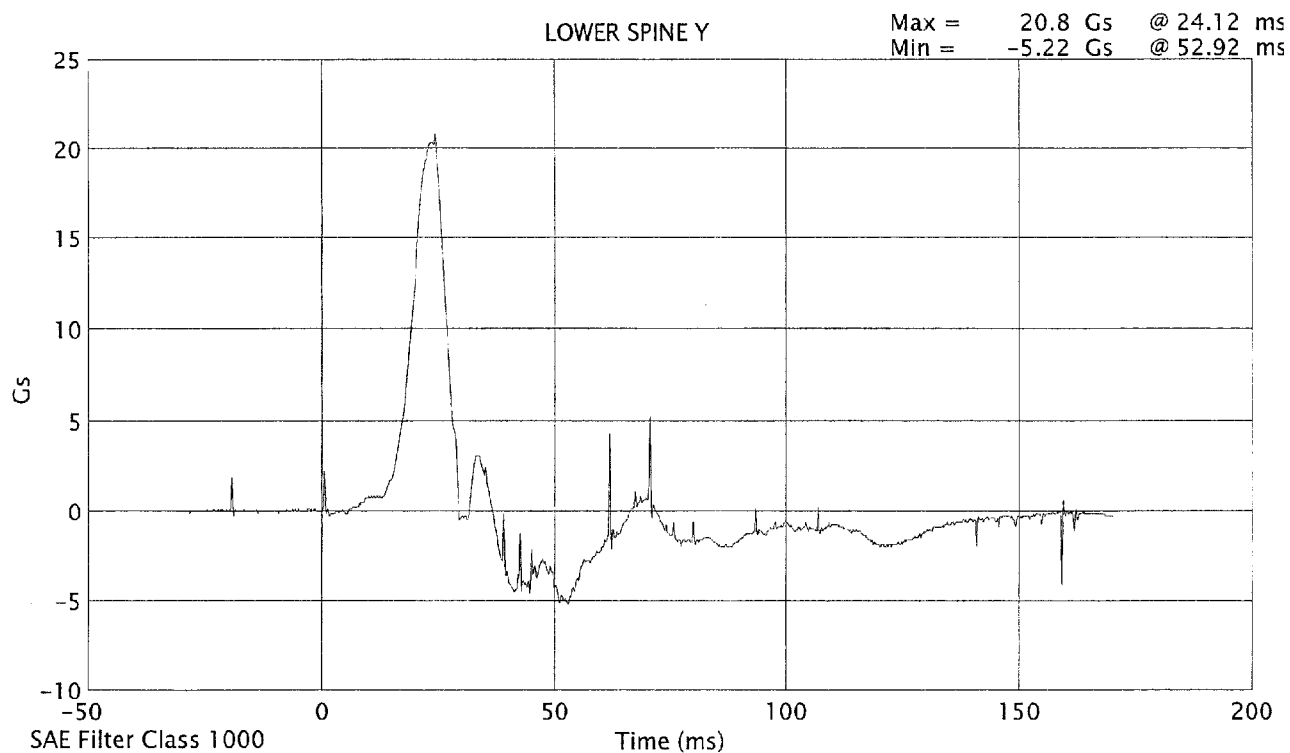
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	29
PROBE SPEED (m/s)	4.27 - 4.33	4.31
UPPER RIB (g's)	37 - 46	40.2
LOWER RIB (g's)	37 - 46	41.3
LOWER SPINE (g's)	15 - 22	20.6

REMARKS: None

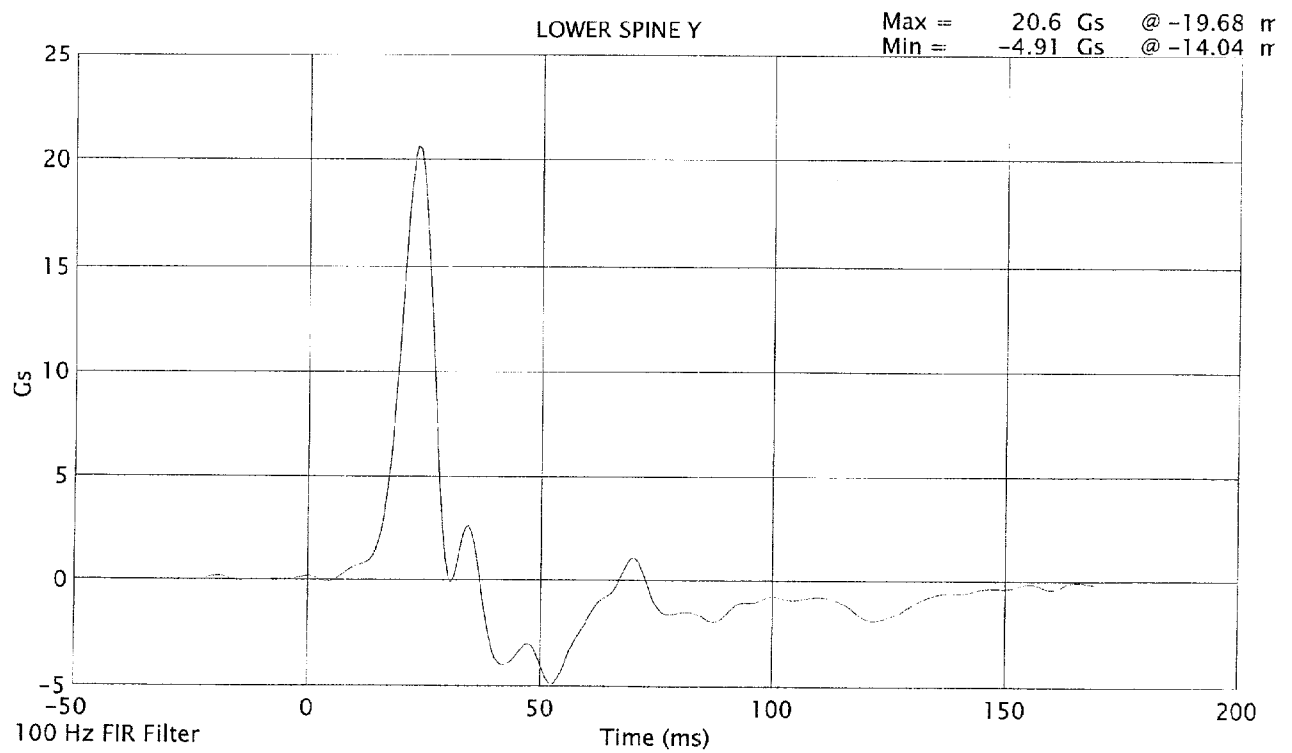
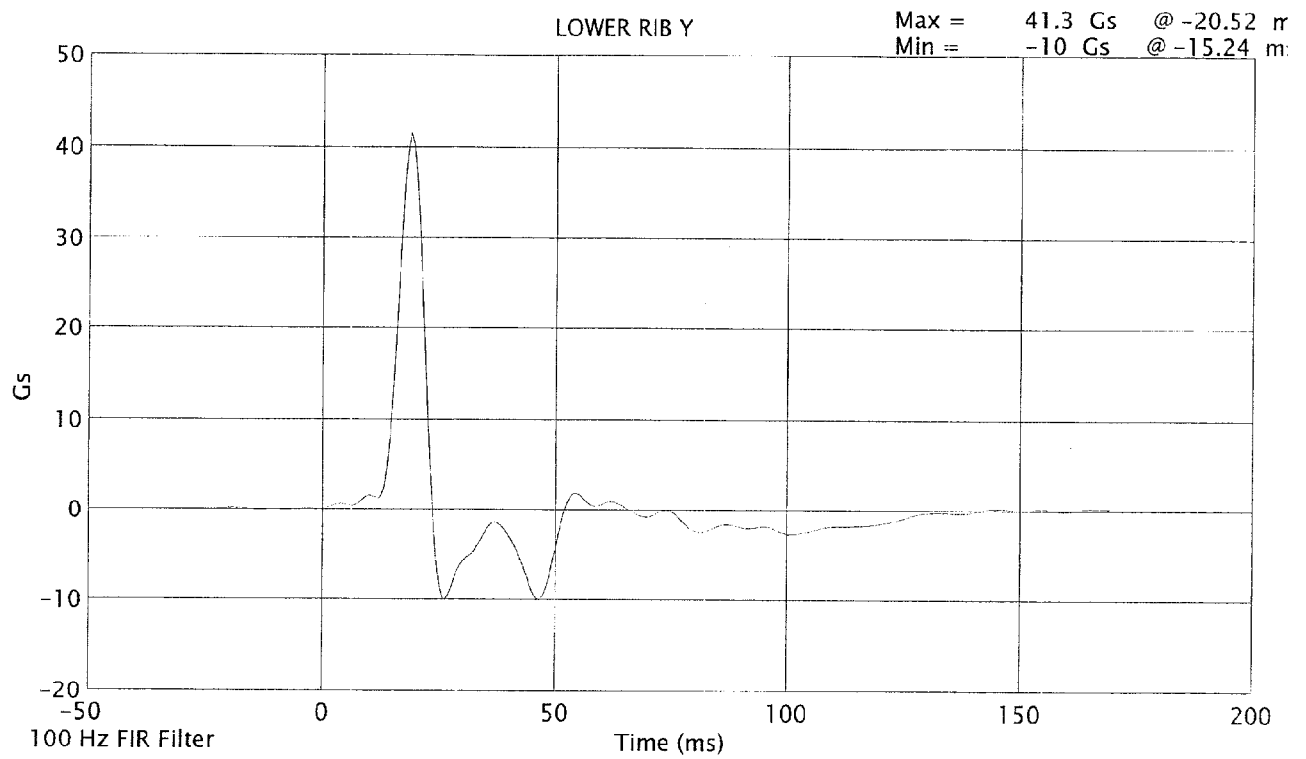
SID 016 Thorax Impact Test @ 4.3129 m/s



SID 016 Thorax Impact Test @ 4.3129 m/s



SID 016 Thorax Impact Test @ 4.3129 m/s



C-13

8506-12

**LATERAL PELVIS IMPACT TEST
PRE-TEST**

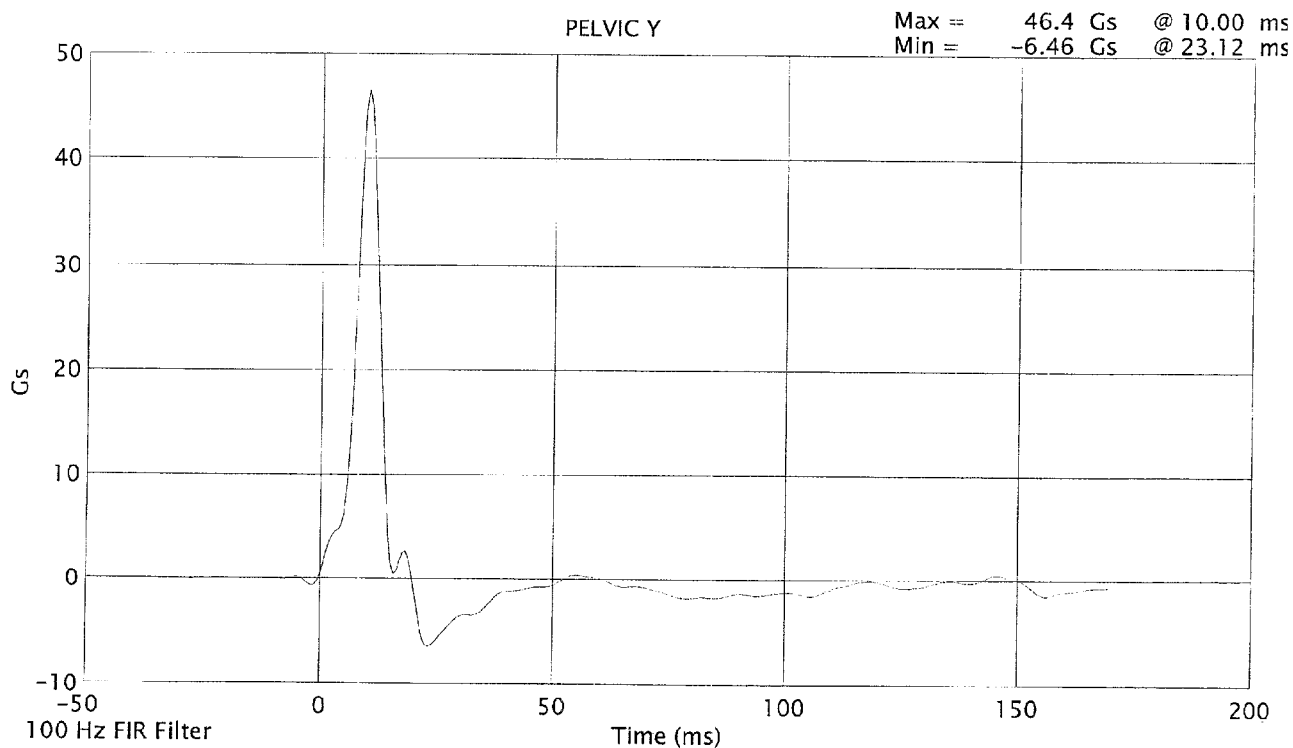
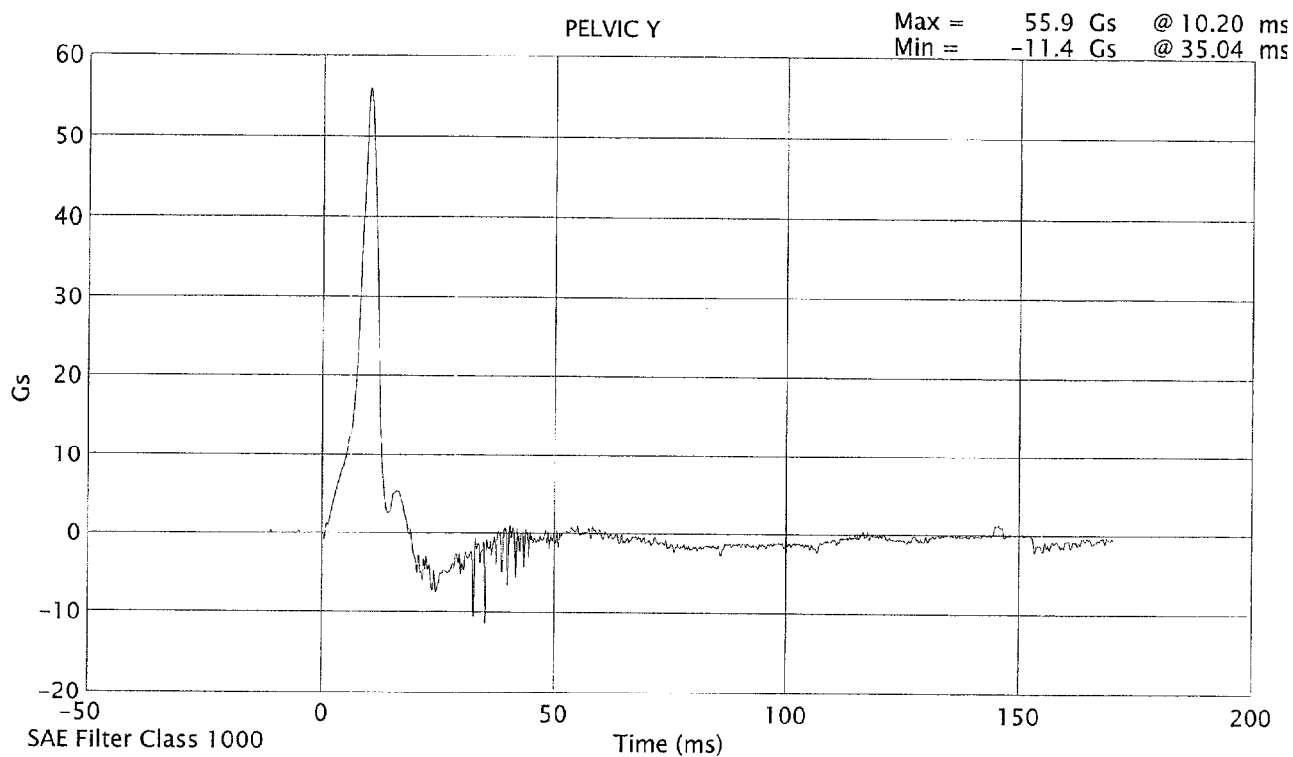
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 2
Date: February 22, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	29
PROBE SPEED (m/s)	4.27 - 4.33	4.30
PELVIS ACCELERATION (g's)	40 - 60	46.4

REMARKS: None

SID 016 Pelvic Impact Test @ 4.3038 m/s



HEAD DROP TEST

PRE-TEST

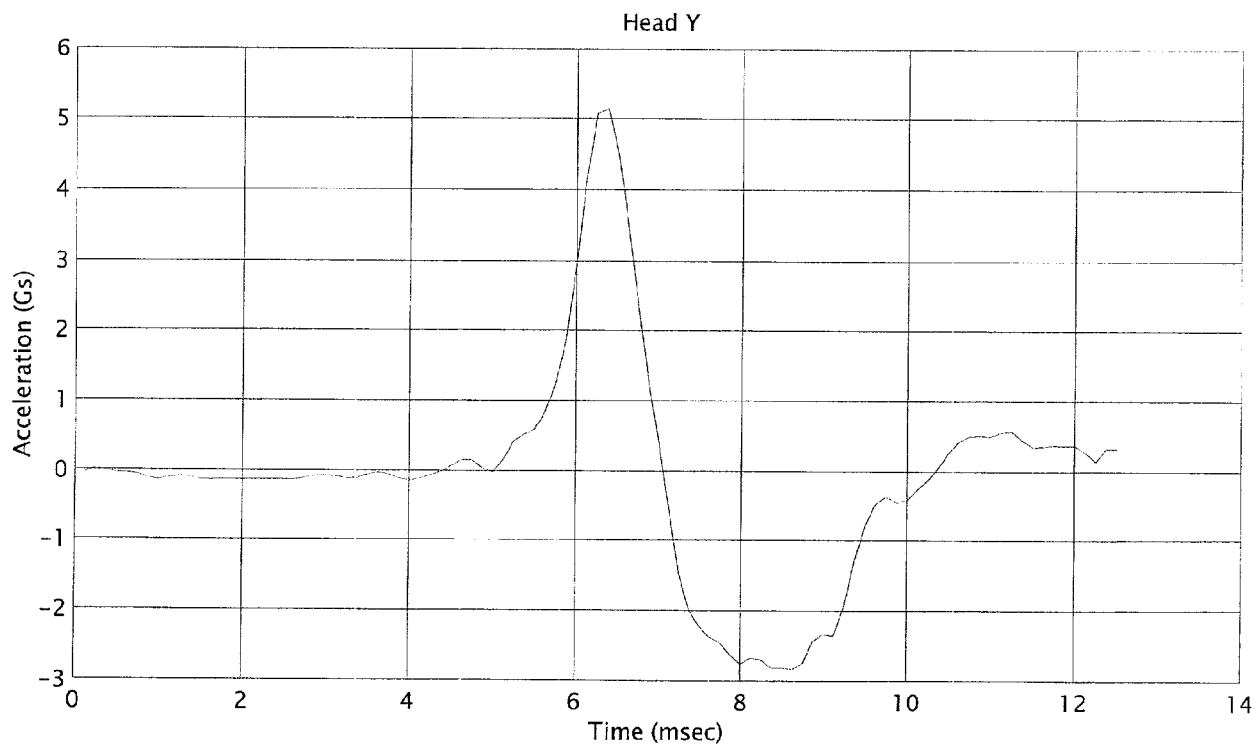
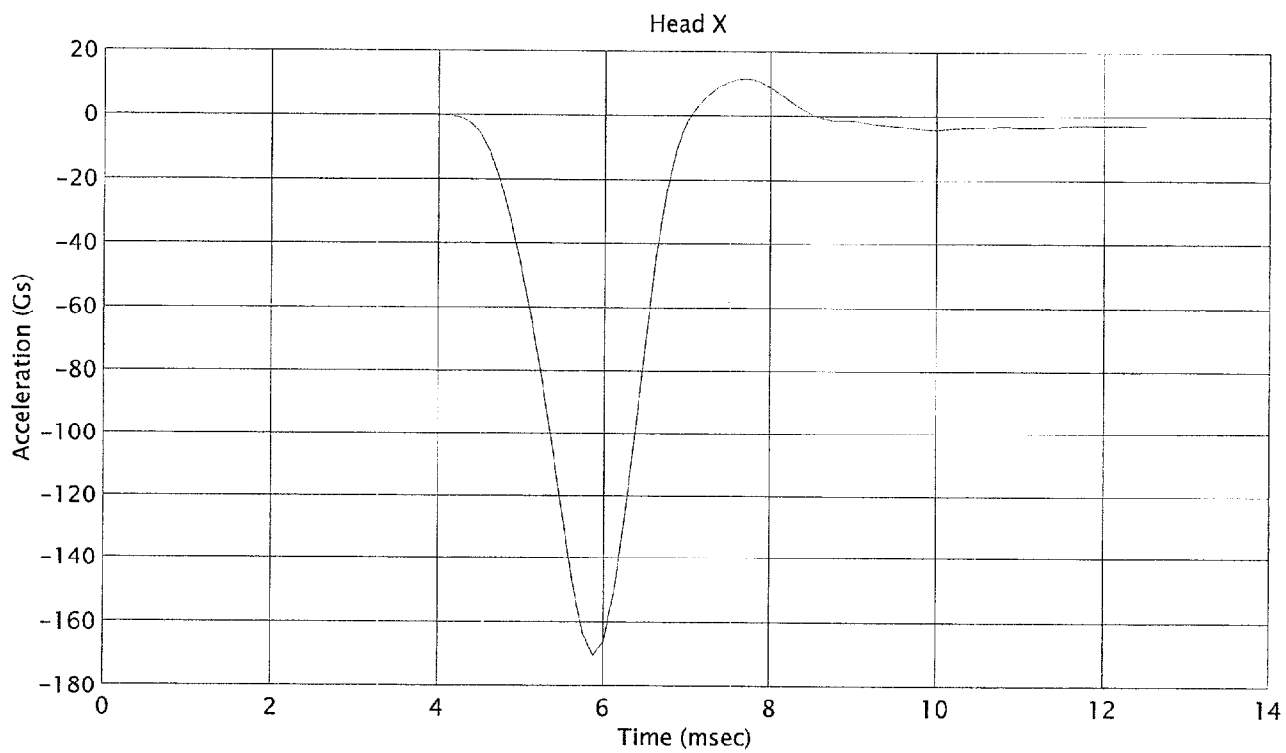
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

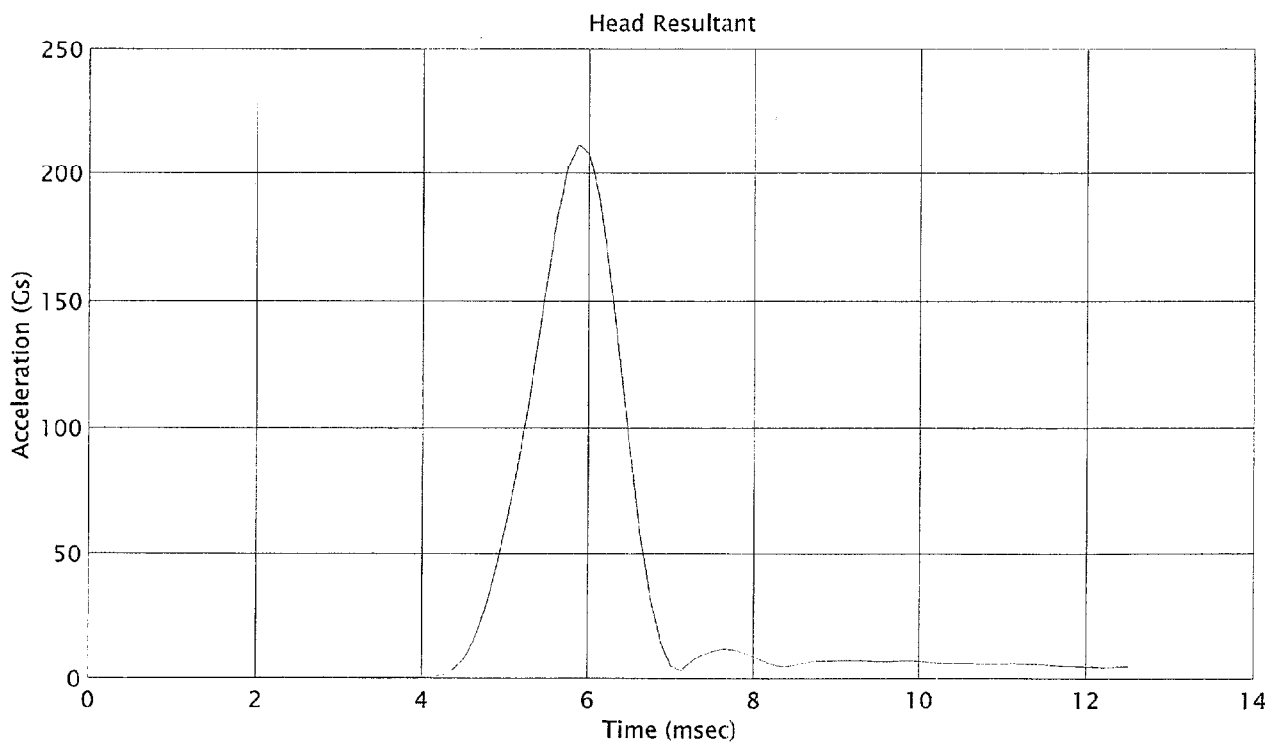
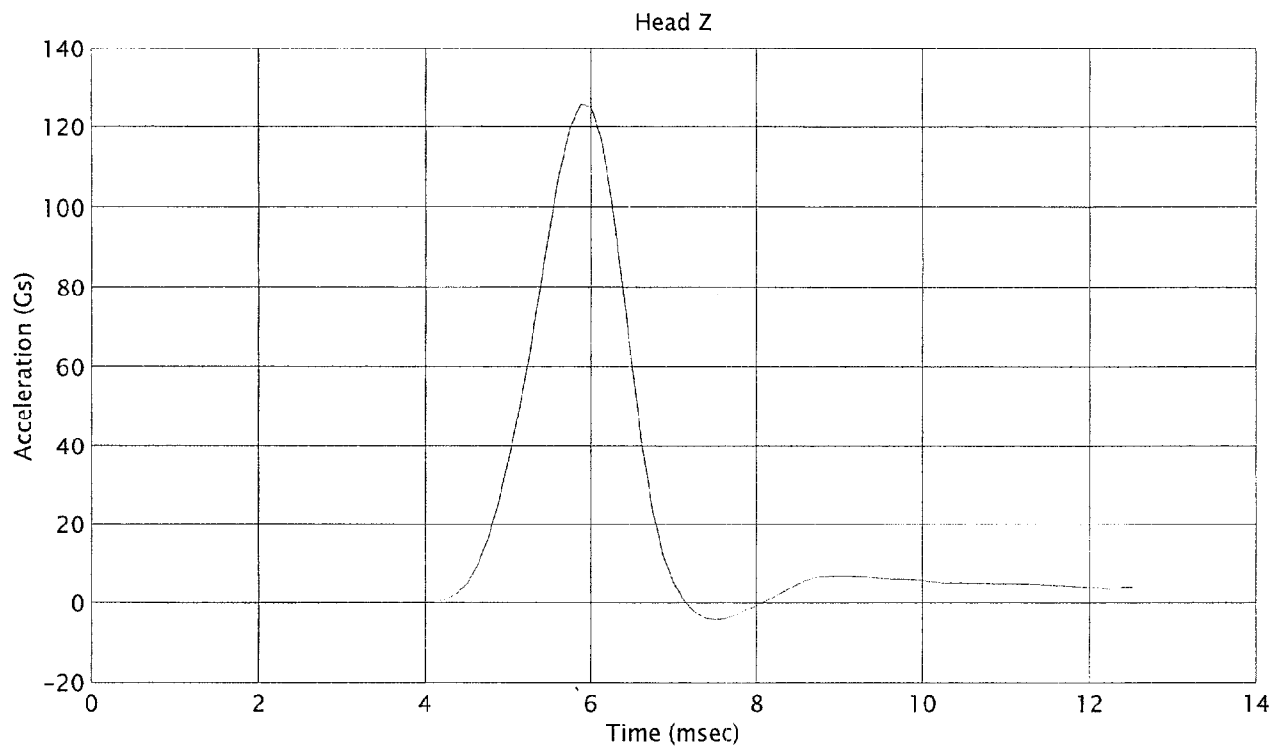
SID Serial No.: 016 Sequential Test Number: 2
Date: February 22, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	29
PEAK RESULTANT ACCELERATION (Gs)	210 - 260	211.56
PEAK LATERAL ACCELERATION (Gs)	Not to Exceed 10	5.14
UNIMODAL CRITERIA ABOVE 100 Gs (ms)	0.9 - 1.5	1.25

REMARKS: None



Hybrid II Head Drop Calibration 016300.hdp



ABDOMINAL COMPRESSION TEST**PRE-TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 2
Date: February 28, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	32
FORCE @ 13 mm (N)	104 - 162	115.7
FORCE @ 19 mm (N)	163 - 221	175.7
FORCE @ 25 mm (N)	222 - 280	249.1
FORCE @ 33 mm (N)	325 - 391	351.4

REMARKS: None

Dummy S/N 516

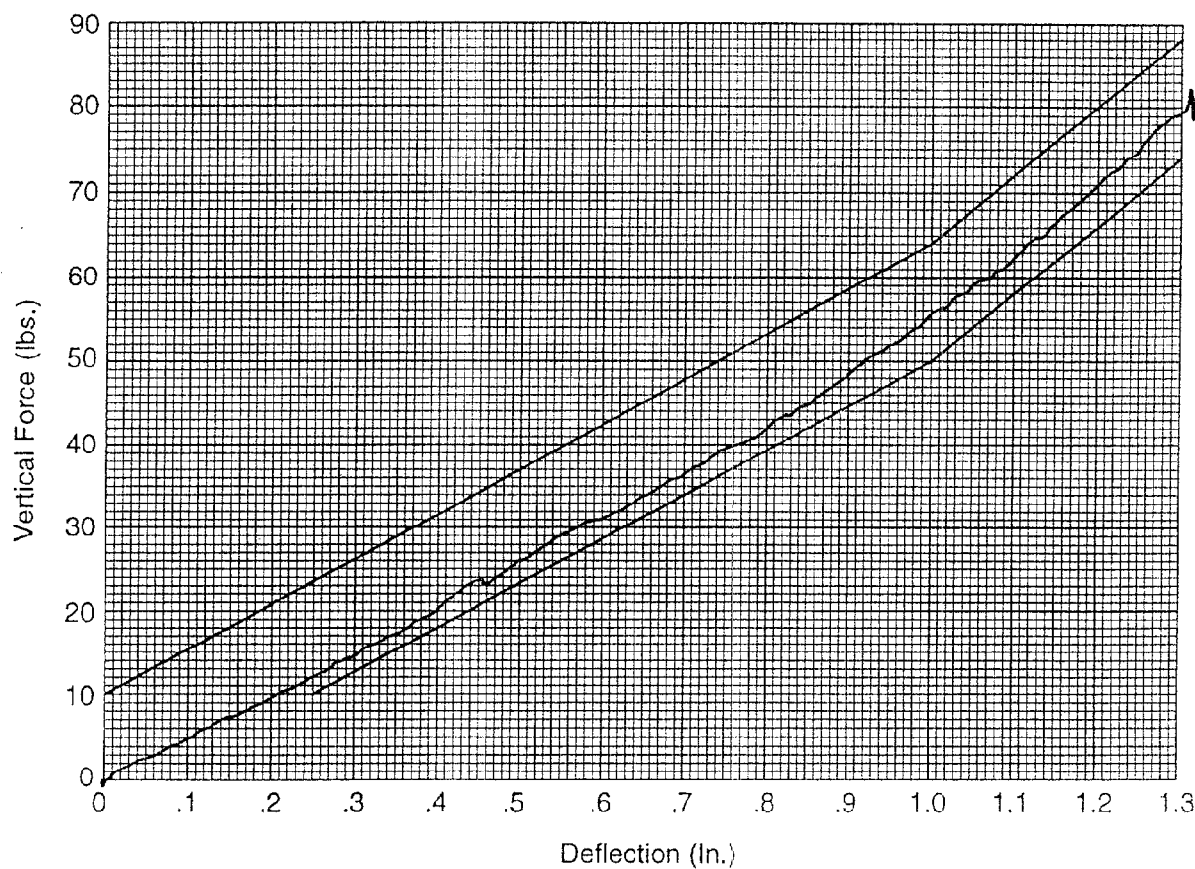
W/A _____

Date 2-28-2000

Performed By BS

Temp. 71°

Humidity 32°



Hybrid II
Abdomen Static Press

LUMBAR FLEXION TEST
PRE-TEST
(Test not required for SID certification)

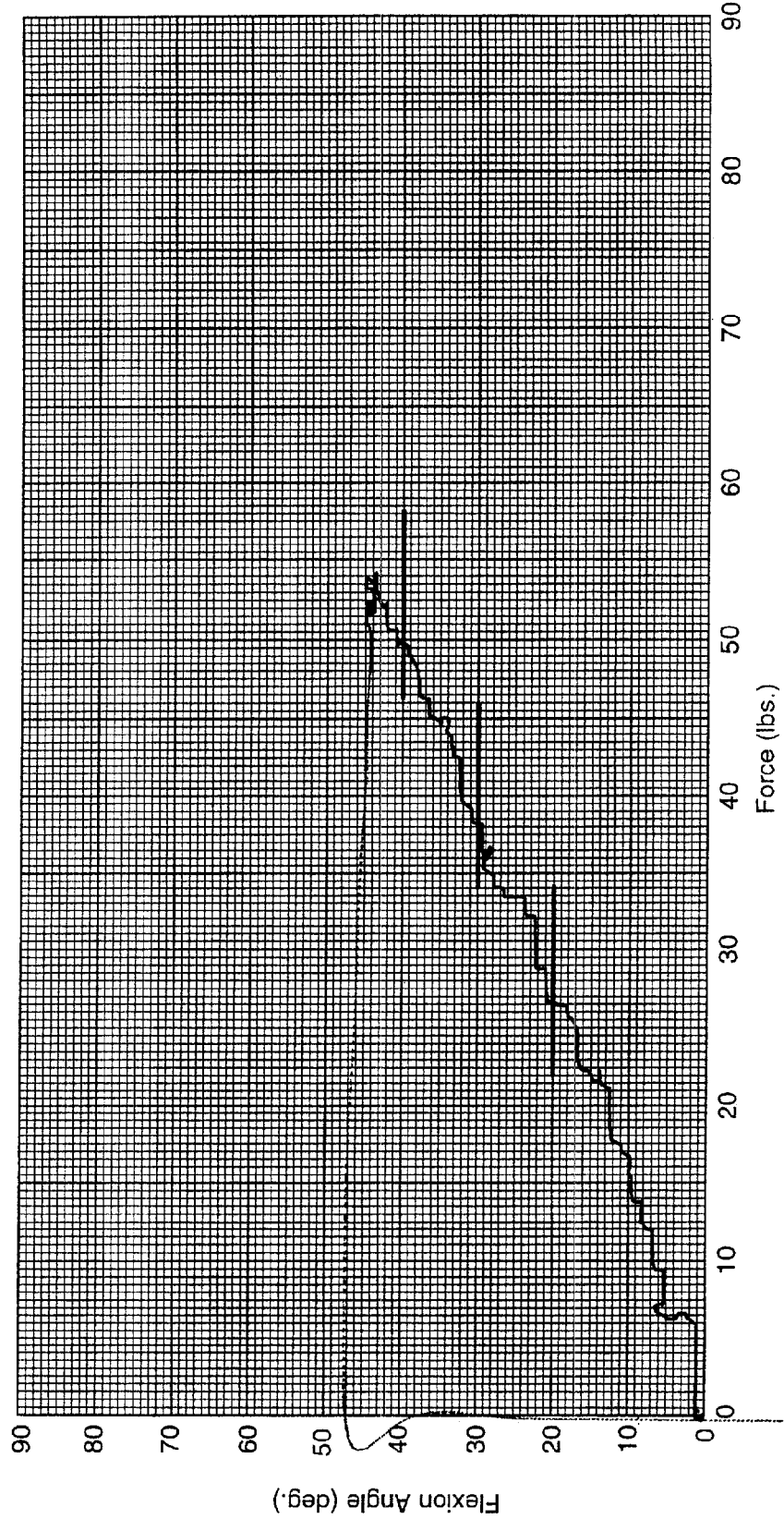
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 2
Date: February 28, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	32
FORCE @ 0° (N)	0 - 26.7	0
FORCE @ 20° (N)	97.8 - 151.2	117.9
FORCE @ 30° (N)	151.2 - 204.6	170.1
FORCE @ 40° (N)	204.6 - 258	221.3
RETURN ANGLE	12° max.	8

REMARKS: None

Dummy S/N 016
 W/A _____
 Date 2-28-2000
 Performed By BD
 Temp. 70°
 Humidity 32°



Hybrid II Lumbar Spine Flexion Test

FM-052-CERT-005-R00

PC32/052 ISO Forms

PRE-TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016
Date: February 28, 2000

Sequential Test Number: 2
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
PRE-TEST**

SID NO.: 268

CONFIGURED FOR LEFT SIDE IMPACT

CALIBRATION TEST RESULTS SUMMARY
PRE-TEST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 3
Date: February 28, 2000 Laboratory Technician: B. Swiecicki

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

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 3
Date: February 28, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	899
RH- Rib Height (mm)	502 - 520	513
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	236
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	495
HW- Hip Width (mm)	356 - 391	376

REMARKS: None

**THORACIC SHOCK ABSORBER TESTS
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 3
Date: January 21, 2000 Laboratory Technician: B. Swiecicki

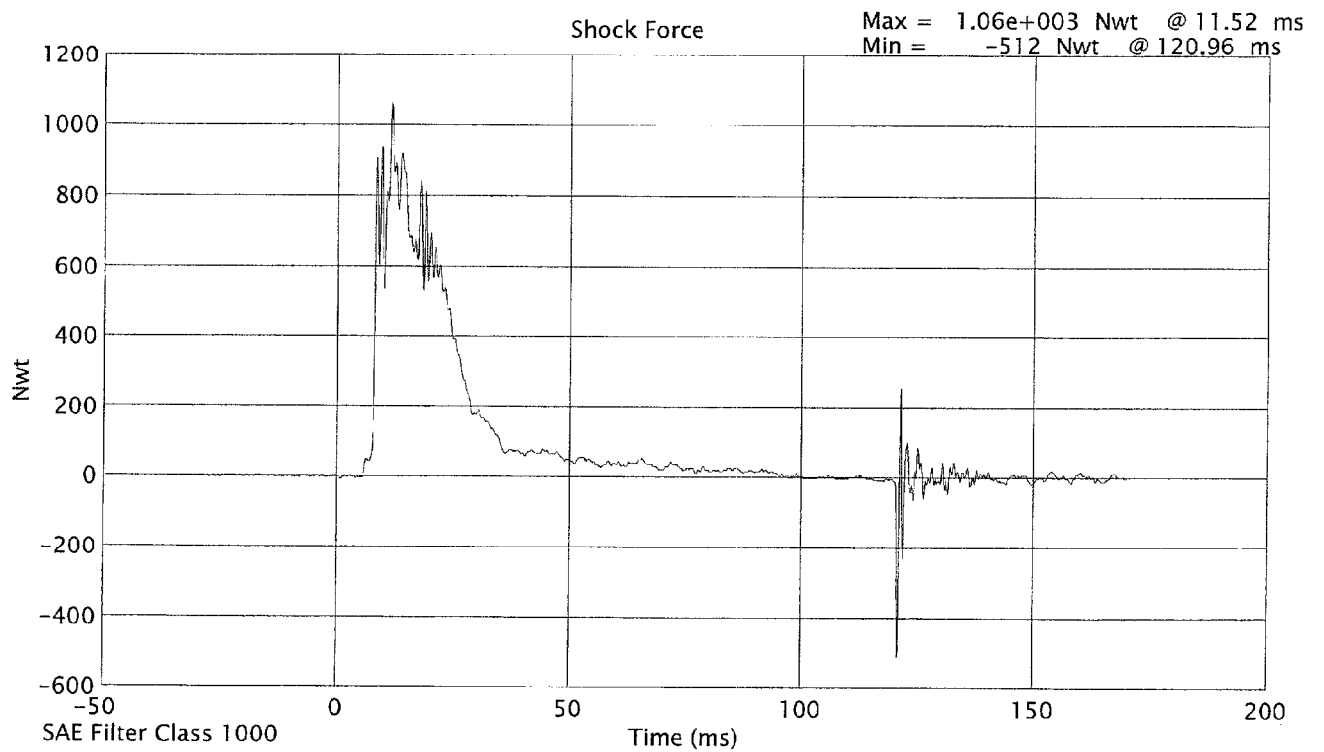
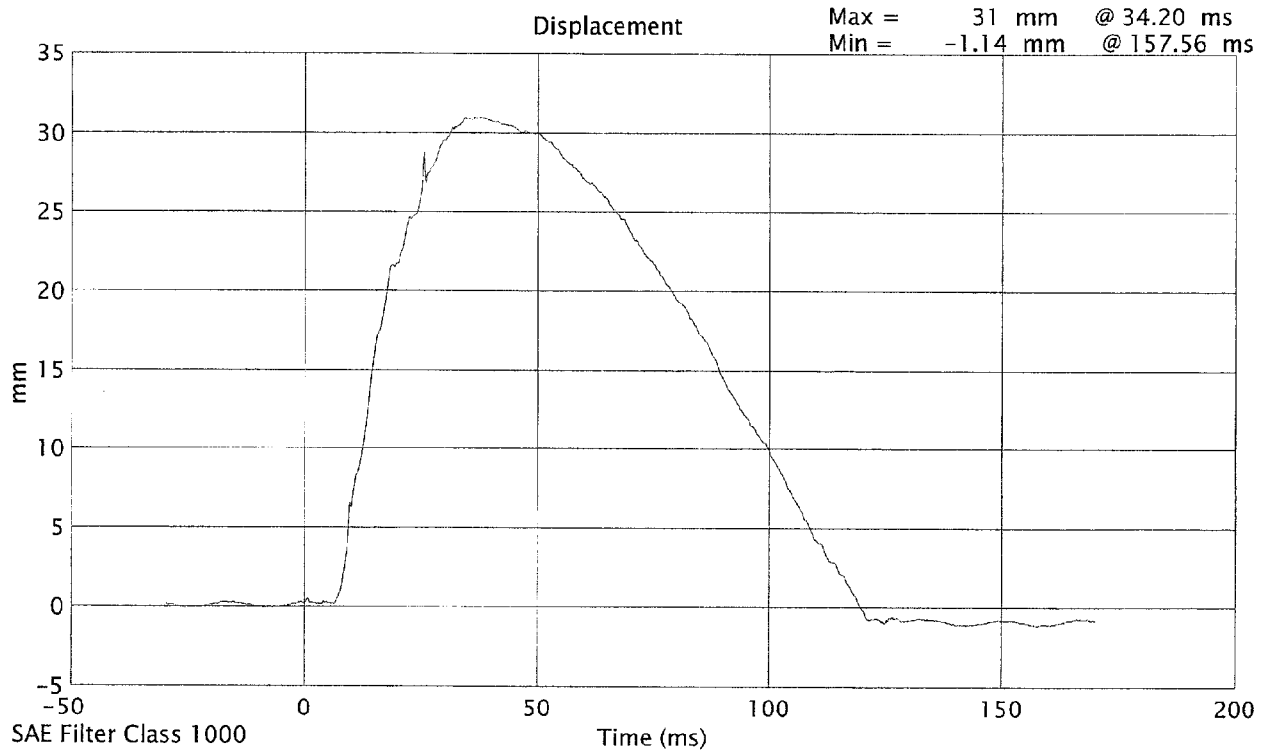
DAMPER IDENTIFICATION: 268

TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)		18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)		10 - 70	30
VELOCITY 3.05 m/s	FORCE (N)	836 - 1125	1063.0
	DISPLACEMENT (mm)	30 - 35	31.0
VELOCITY 4.27 m/s	FORCE (N)	1730 - 2099	2047.1
	DISPLACEMENT (mm)	32 - 37	34.3
VELOCITY 6.10 m/s	FORCE (N)	3741 - 4448	3898.8
	DISPLACEMENT (mm)	33 - 40	37.2

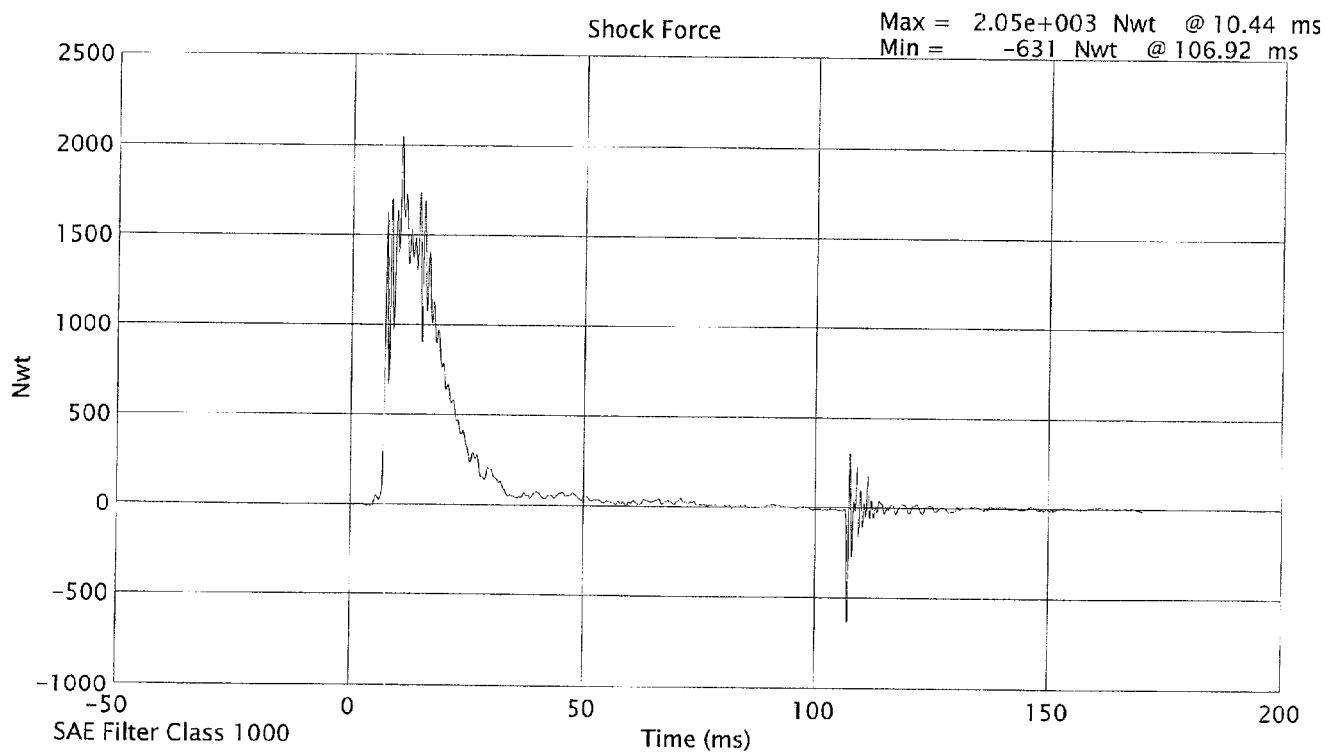
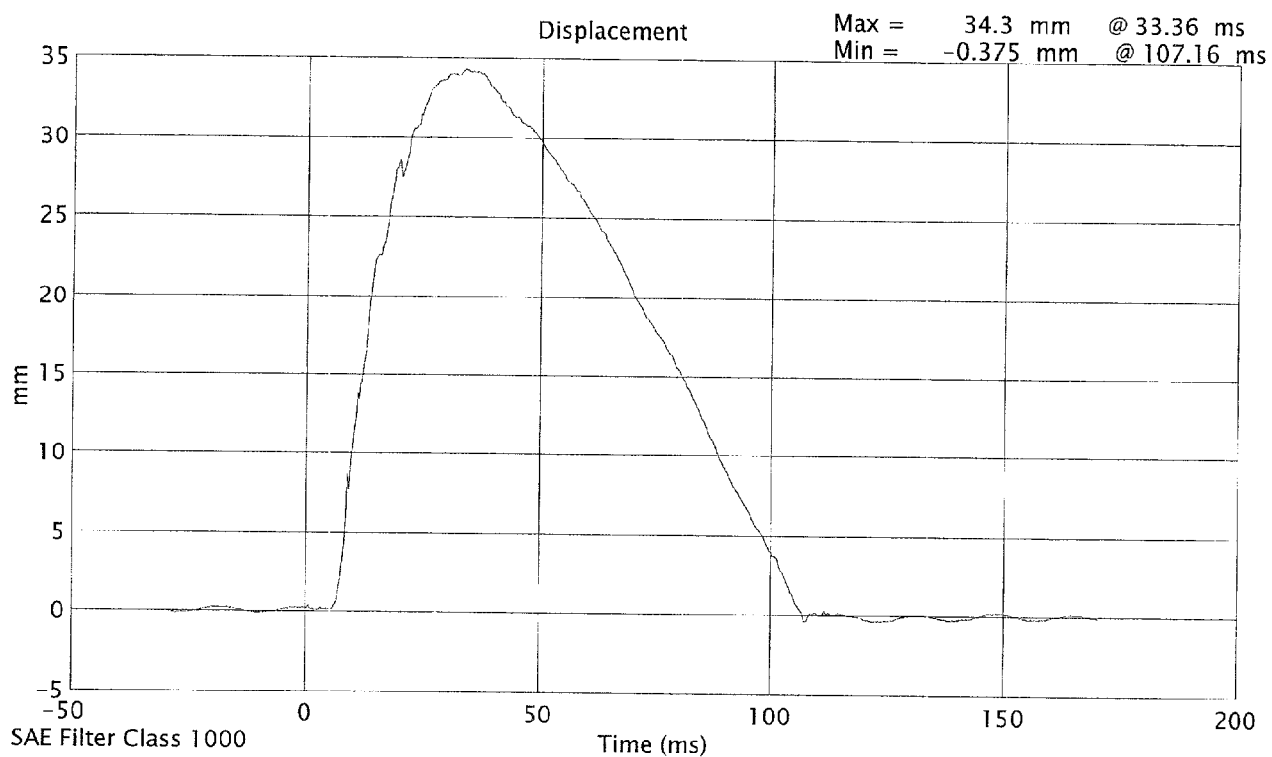
DAMPER SETTING: 5

REMARKS: None

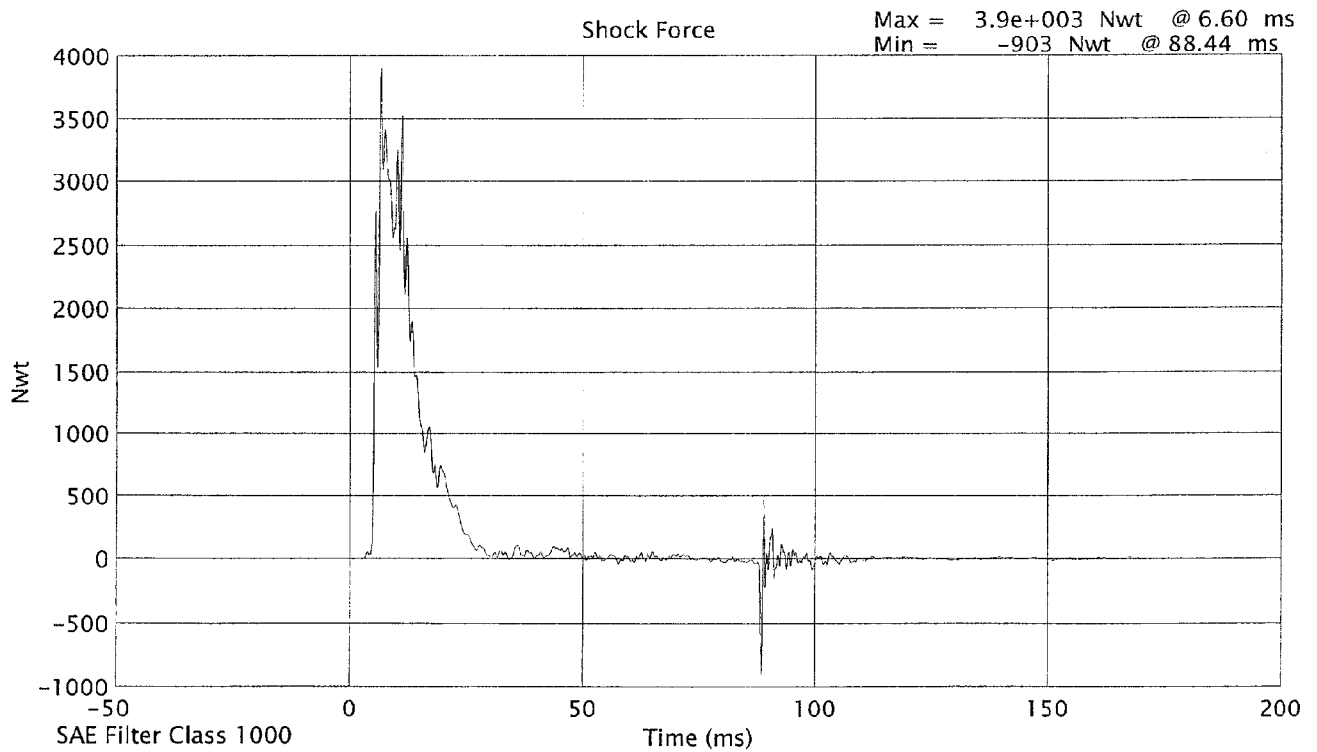
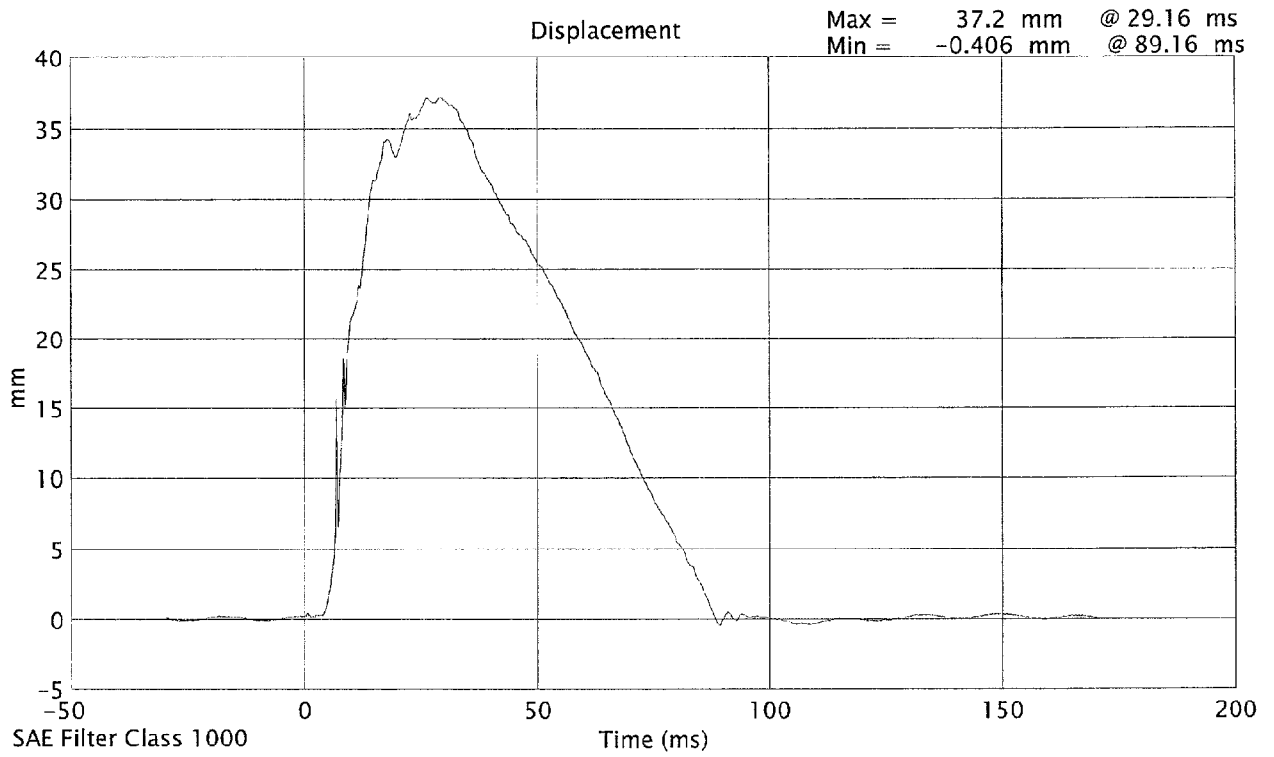
SID 268 Shock Absorber Impact Test @ 3.048 m/s



SID 268 Shock Absorber Impact Test @ 4.2672 m/s



SID 268 Shock Absorber Impact Test @ 6.096 m/s



**LATERAL THORAX IMPACT TEST
PRE-TEST**

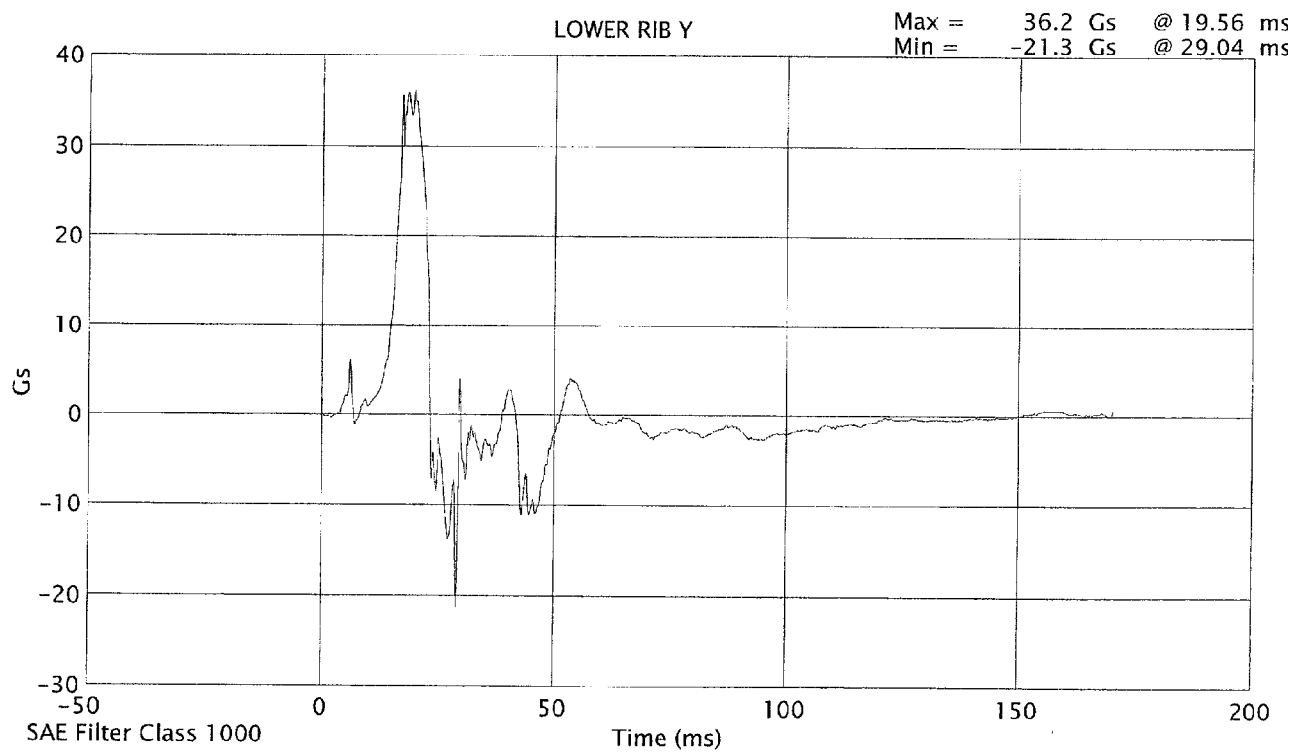
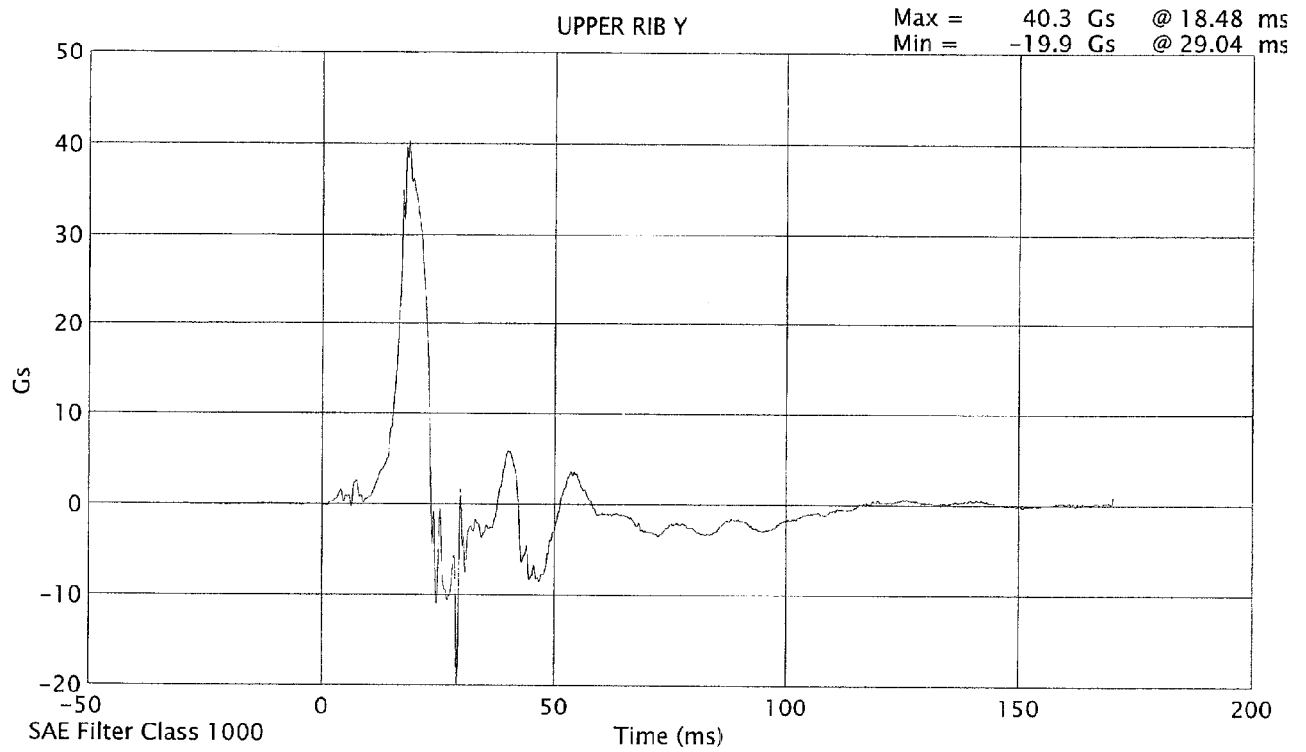
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 3
Date: February 22, 2000 Laboratory Technician: B. Swiecicki

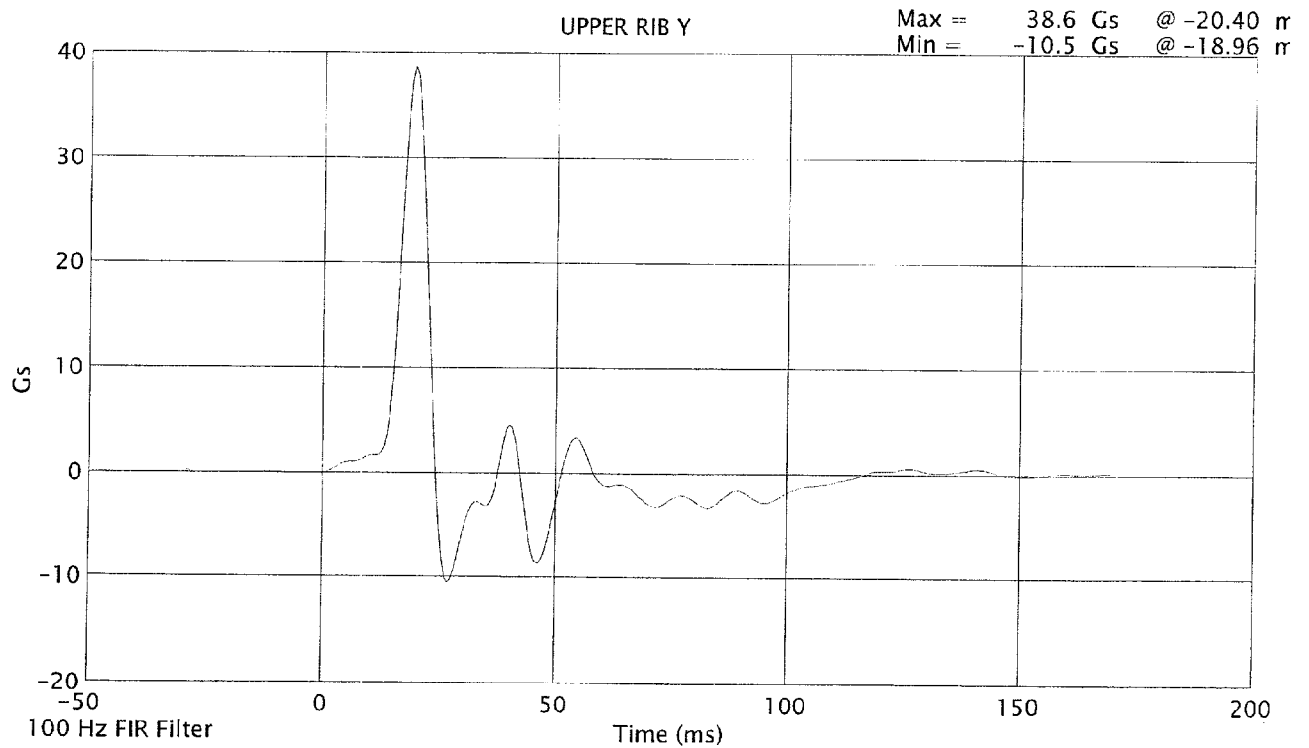
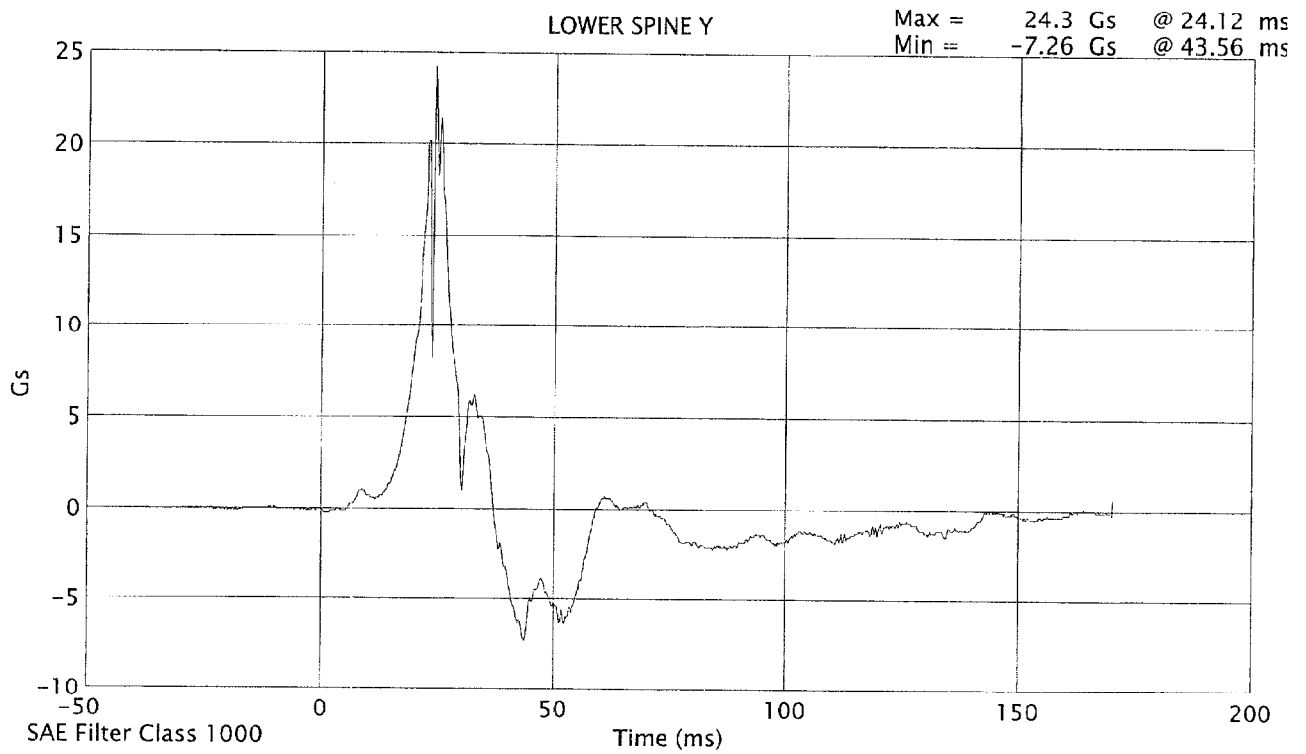
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	29
PROBE SPEED (m/s)	4.27 - 4.33	4.29
UPPER RIB (g's)	37 - 46	38.6
LOWER RIB (g's)	37 - 46	37.2
LOWER SPINE (g's)	15 - 22	19.2

REMARKS: None

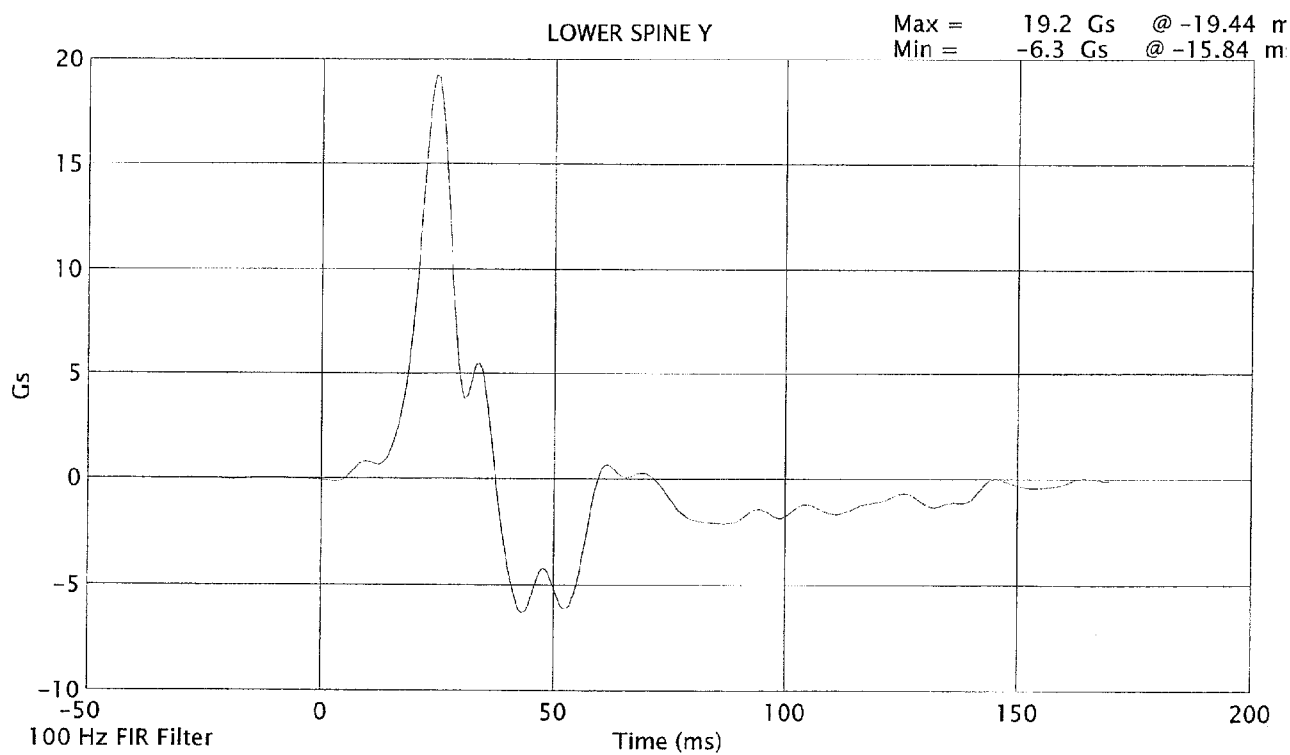
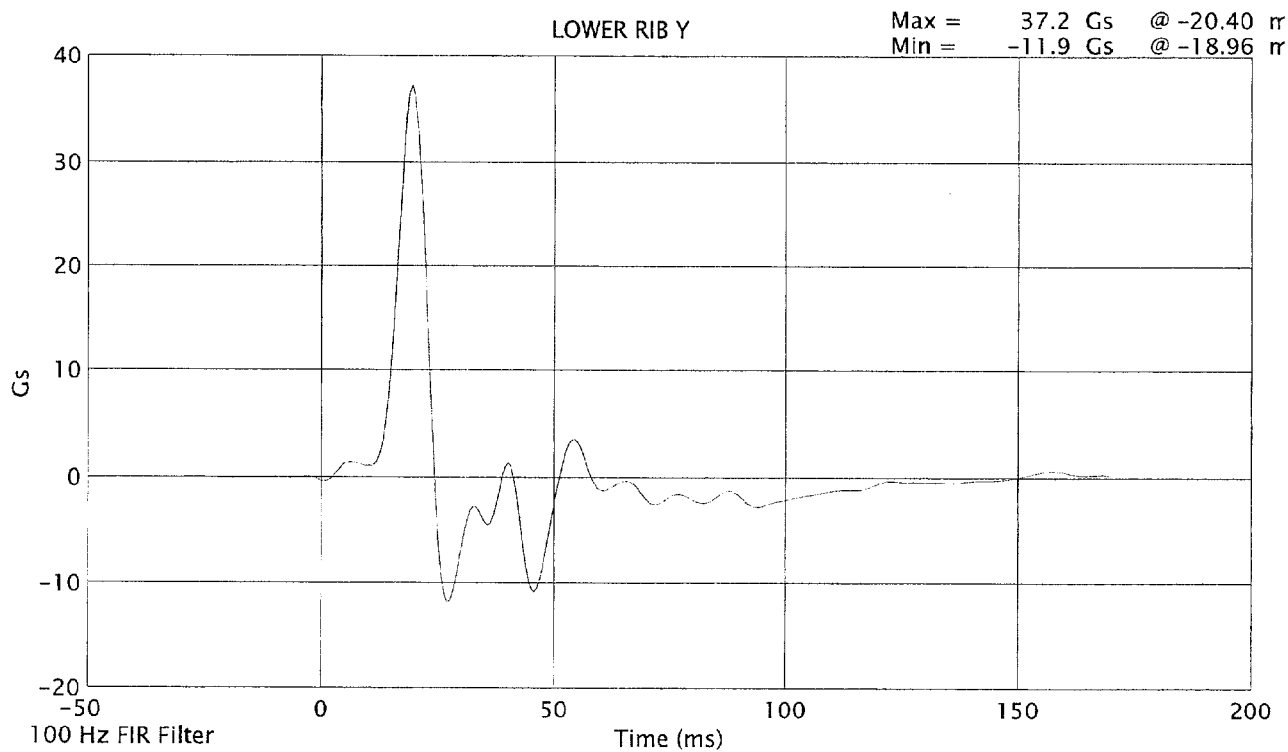
SID 268 Thorax Impact Test @ 4.2916 m/s



SID 268 Thorax Impact Test @ 4.2916 m/s



SID 268 Thorax Impact Test @ 4.2916 m/s



**LATERAL PELVIS IMPACT TEST
PRE-TEST**

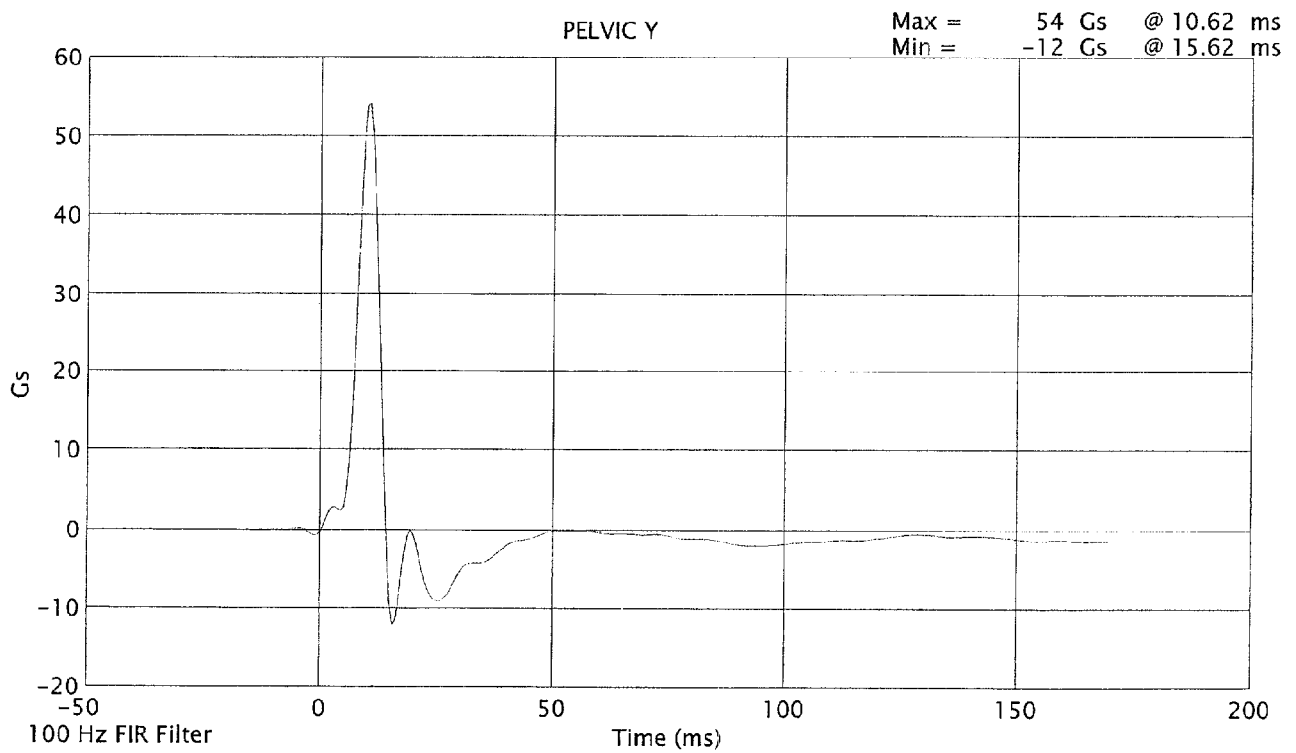
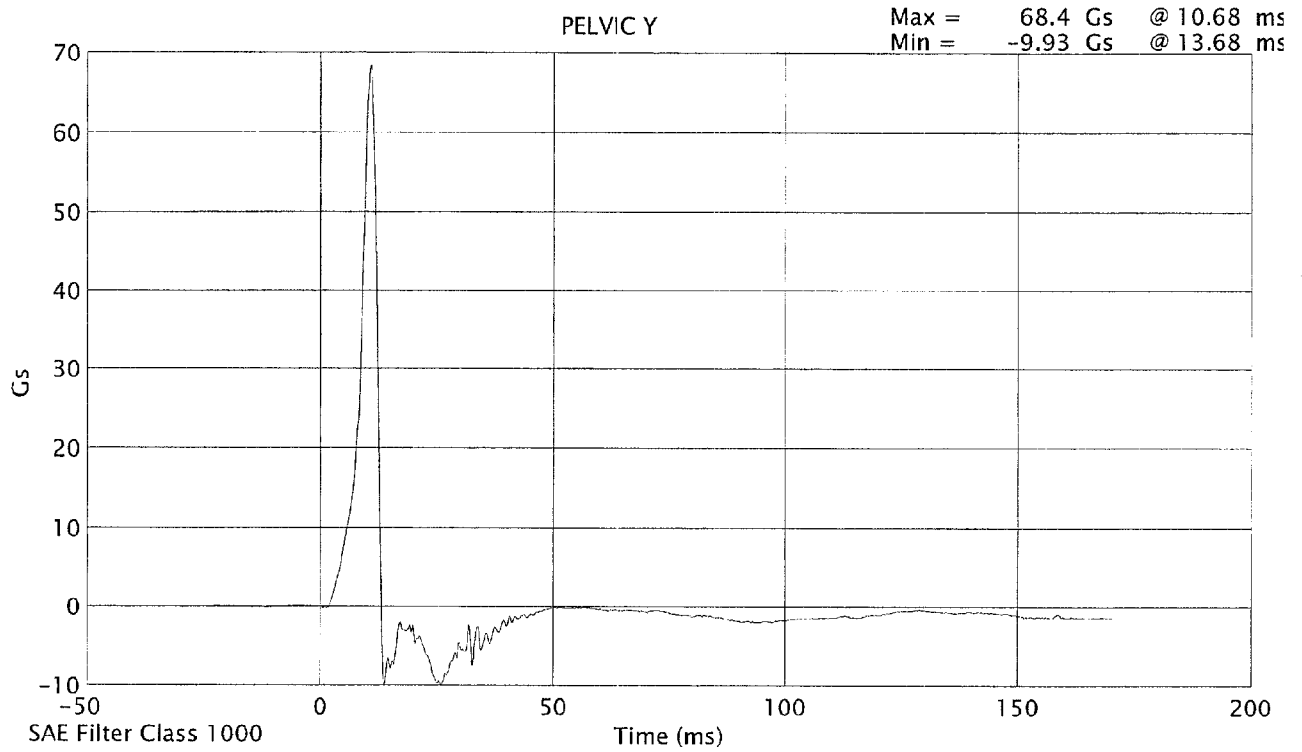
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 3
Date: February 22, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	29
PROBE SPEED (in/s)	4.27 - 4.33	4.28
PELVIS ACCELERATION (g's)	40 - 60	54.0

REMARKS: None

SID 268 Pelvic Impact Test @ 4.2794 m/s



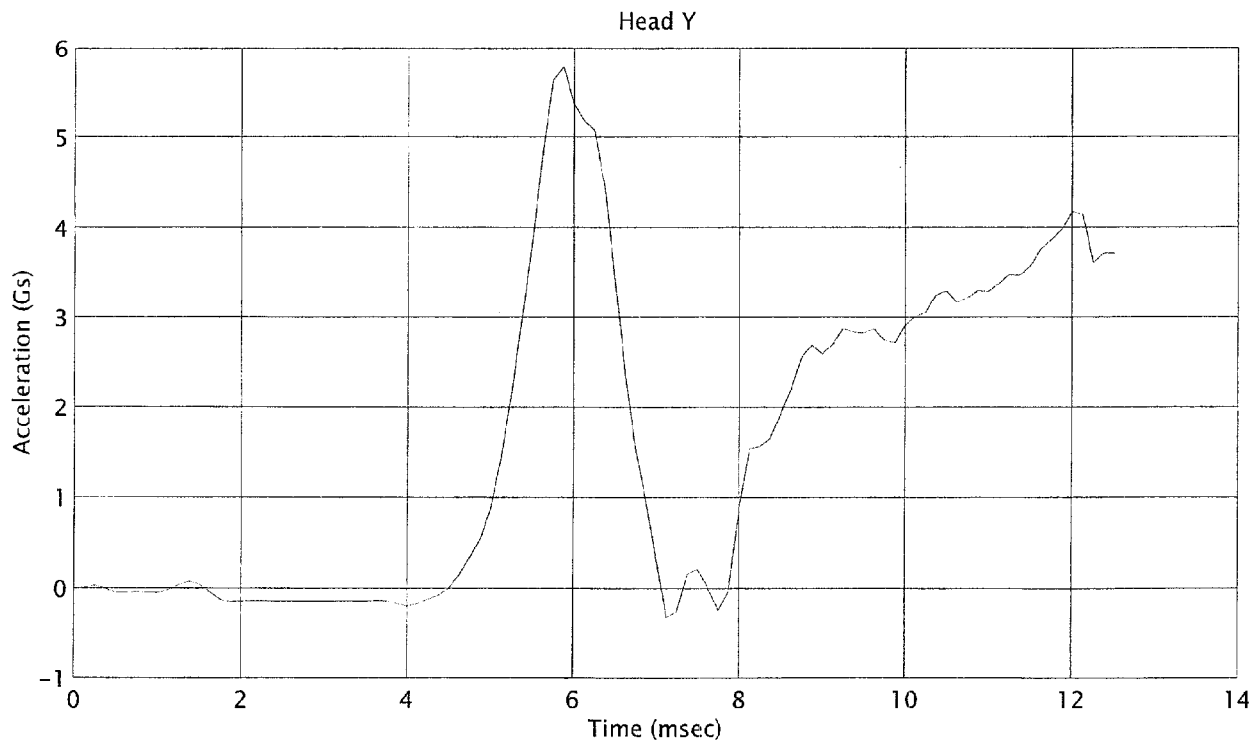
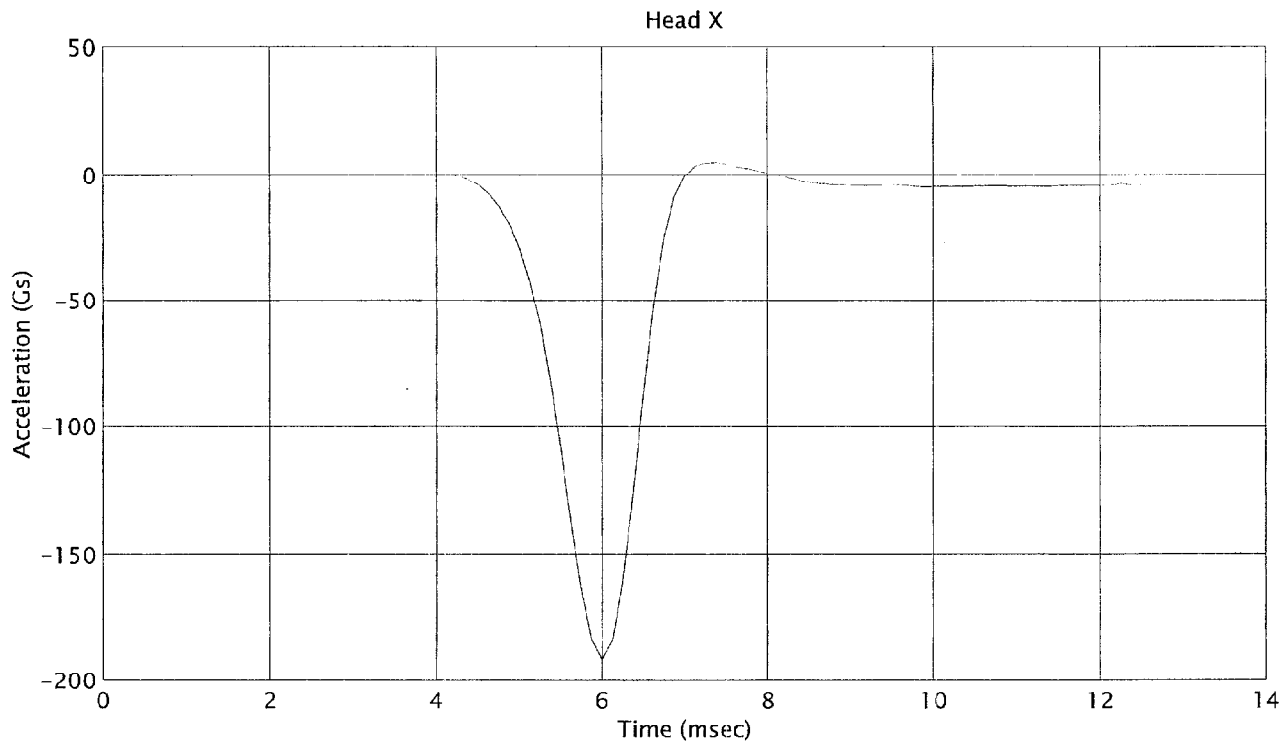
HEAD DROP TEST
PRE-TEST
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

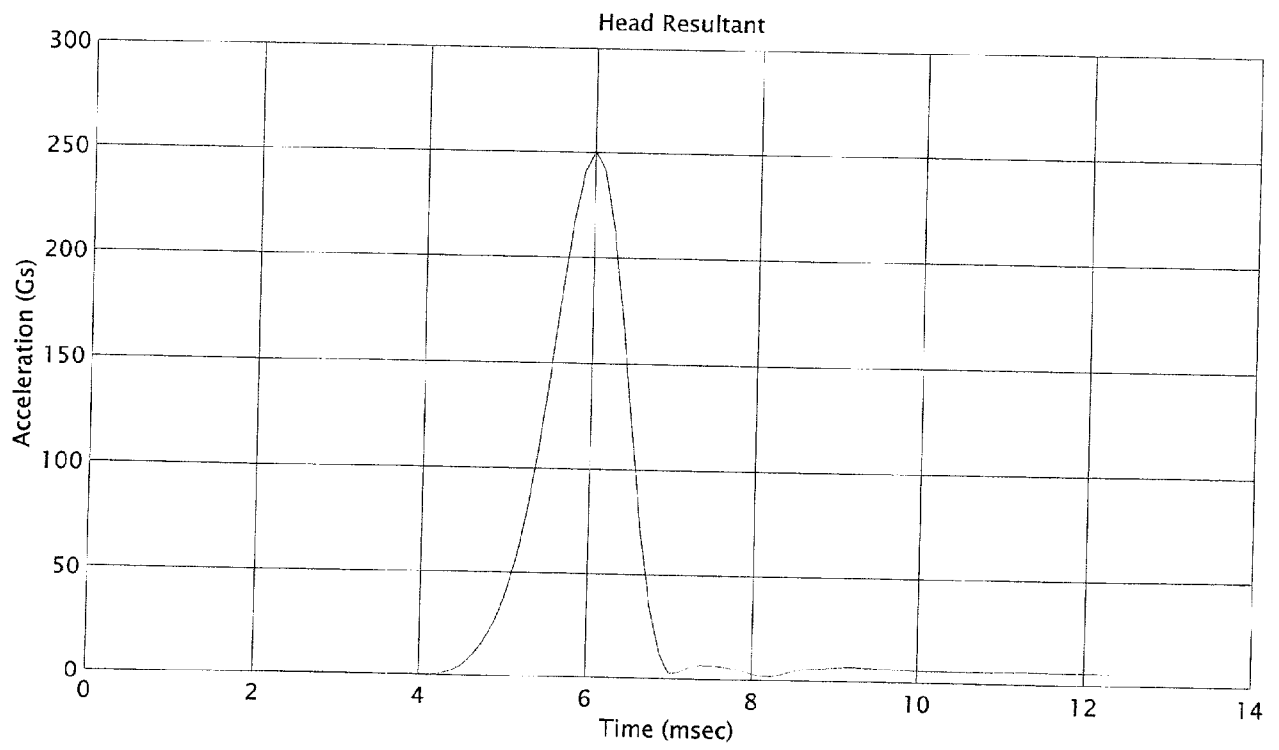
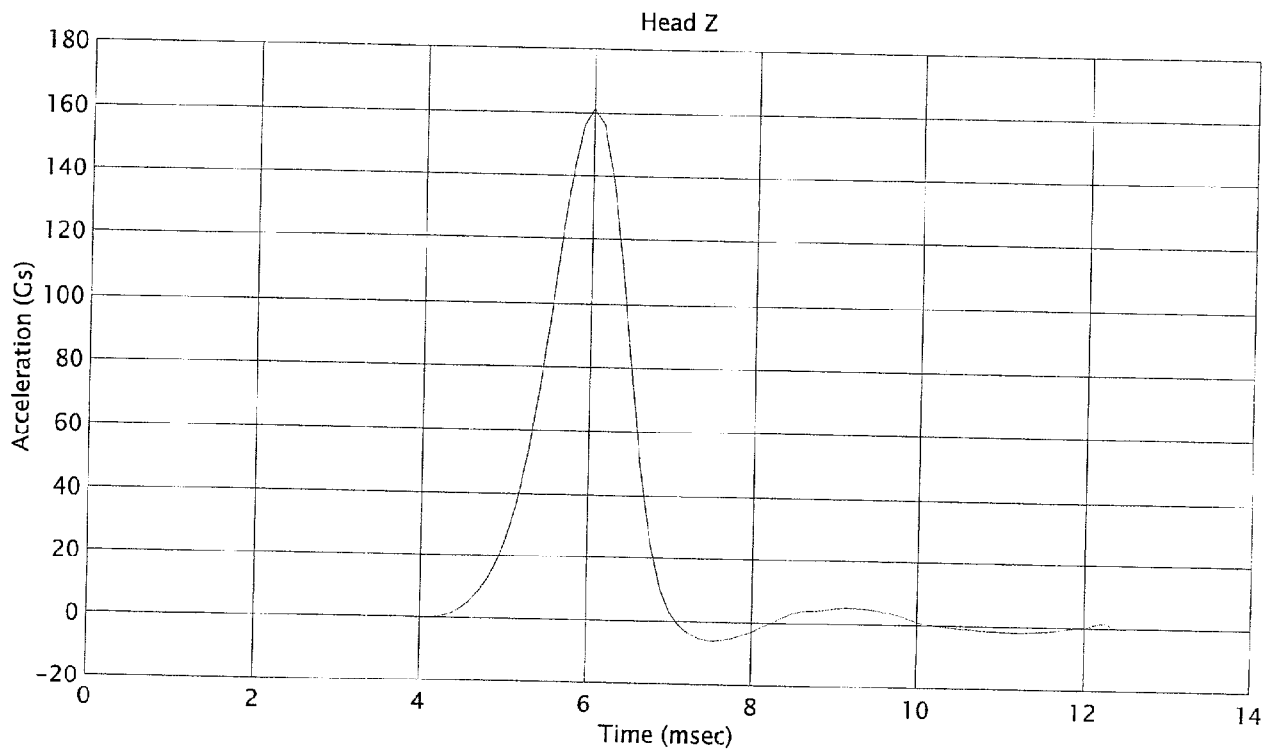
SID Serial No.: 268 Sequential Test Number: 3
Date: February 22, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	29
PEAK RESULTANT ACCELERATION (Gs)	210 - 260	250.64
PEAK LATERAL ACCELERATION (Gs)	Not to Exceed 10	5.79
UNIMODAL CRITERIA ABOVE 100 Gs (ms)	0.9 - 1.5	1.12

REMARKS: None



Hybrid II Head Drop Calibration 268400.hdp



ABDOMINAL COMPRESSION TEST**PRE-TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 3
Date: February 28, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	32
FORCE @ 13 mm (N)	104 - 162	115.7
FORCE @ 19 mm (N)	163 - 221	173.5
FORCE @ 25 mm (N)	222 - 280	275.8
FORCE @ 33 mm (N)	325 - 391	349.2

REMARKS: None

Dummy S/N 268

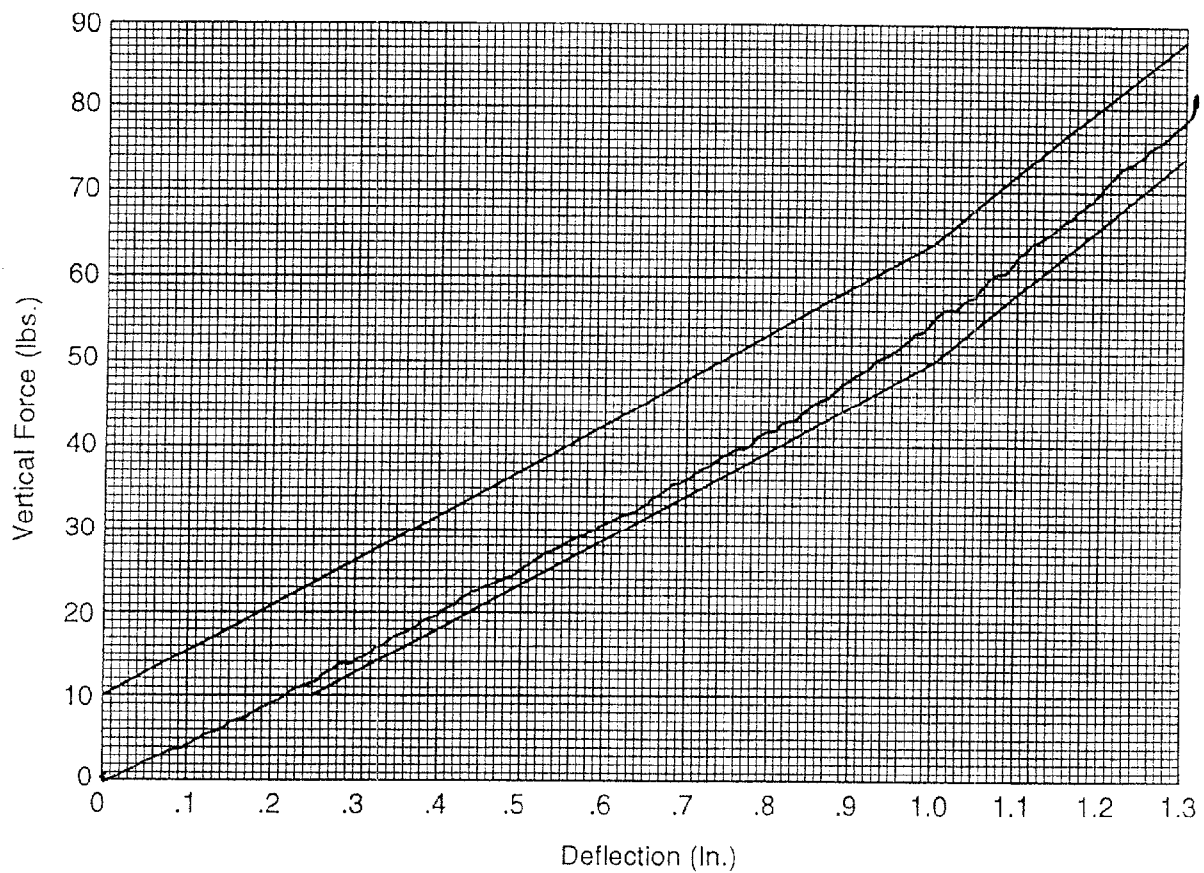
W/A _____

Date 2-28-2000

Performed By BT

Temp. 71°

Humidity 32°



Hybrid II
Abdomen Static Press

LUMBAR FLEXION TEST**PRE-TEST**

(Test not required for SID certification)

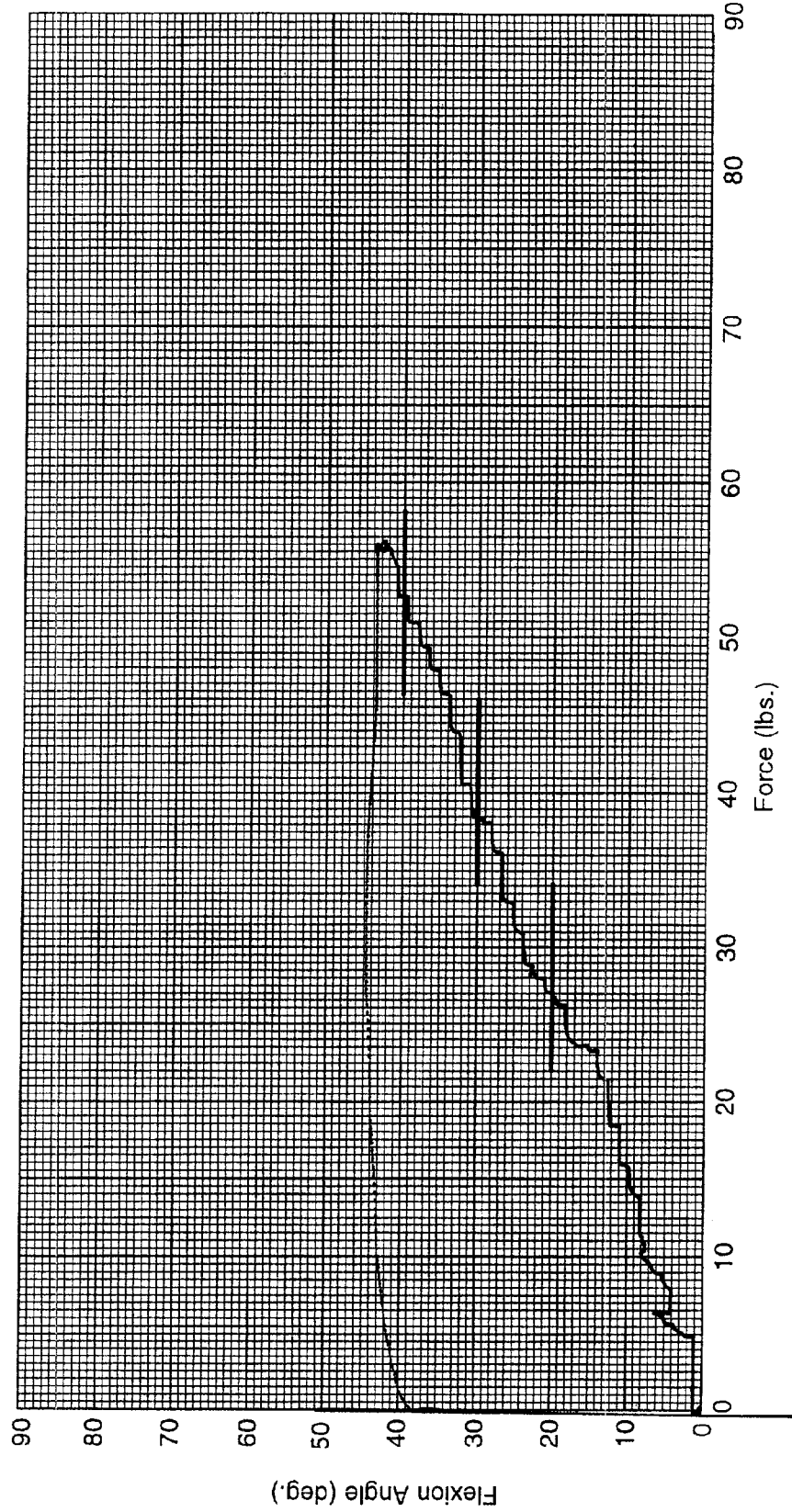
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 3
Date: February 28, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	32
FORCE @ 0° (N)	0 - 26.7	0
FORCE @ 20° (N)	97.8 - 151.2	117.9
FORCE @ 30° (N)	151.2 - 204.6	171.3
FORCE @ 40° (N)	204.6 - 258	233.5
RETURN ANGLE	12° max.	6

REMARKS: None

Dummy S/N 268
 W/A _____
 Date 2-28-2000
 Performed By BZ
 Temp. 70°
 Humidity 32°



Hybrid II Lumbar Spine Flexion Test

PRE-TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 3
 Date: February 28, 2000 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 NO.: 016

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 3
Date: March 7, 2000 Laboratory Technician: B. Swiecicki

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

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 3
Date: March 7, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	511
IIP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	239
KH- Knee Pivot from Back Line (mm)	511 - 526	526
KV- Knee Pivot to Floor (mm)	490 - 505	494
HW- Hip Width (mm)	356 - 391	363

REMARKS: None

**LATERAL THORAX IMPACT TEST
POST TEST**

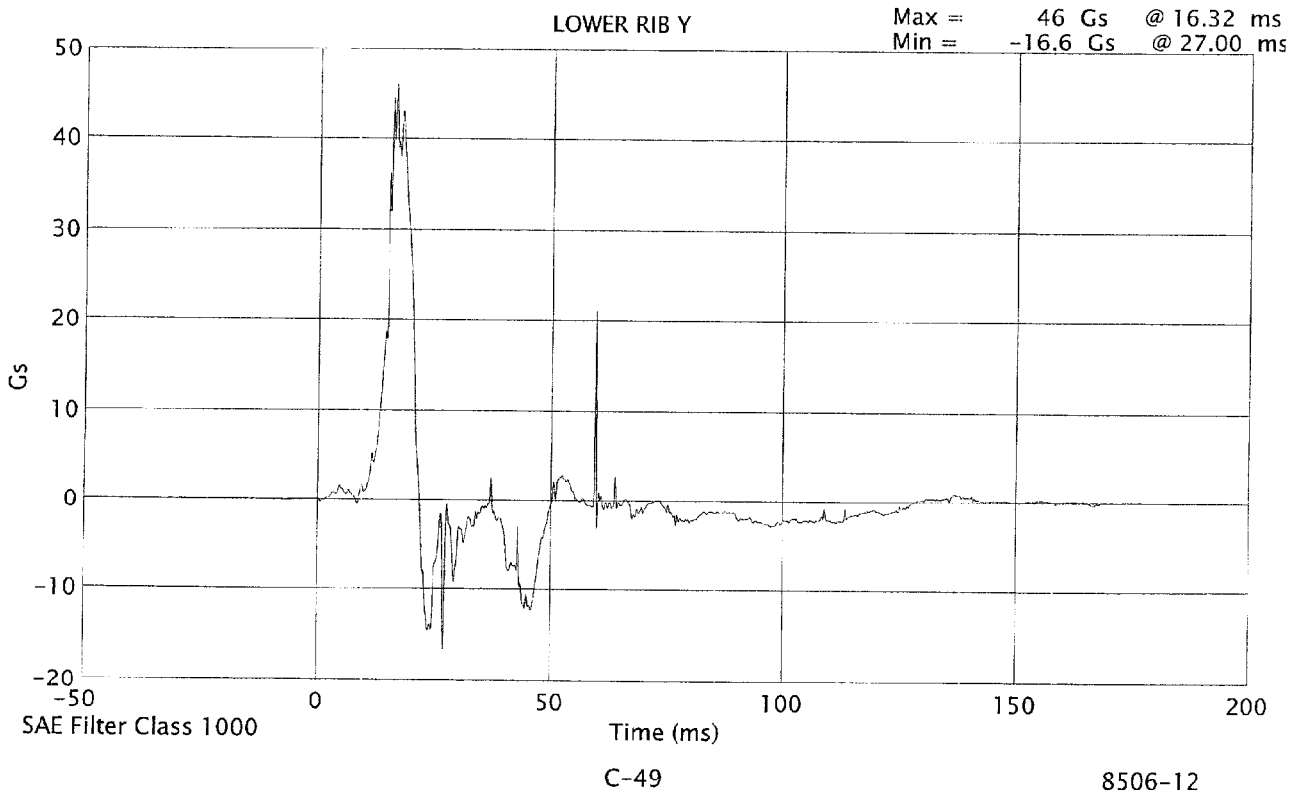
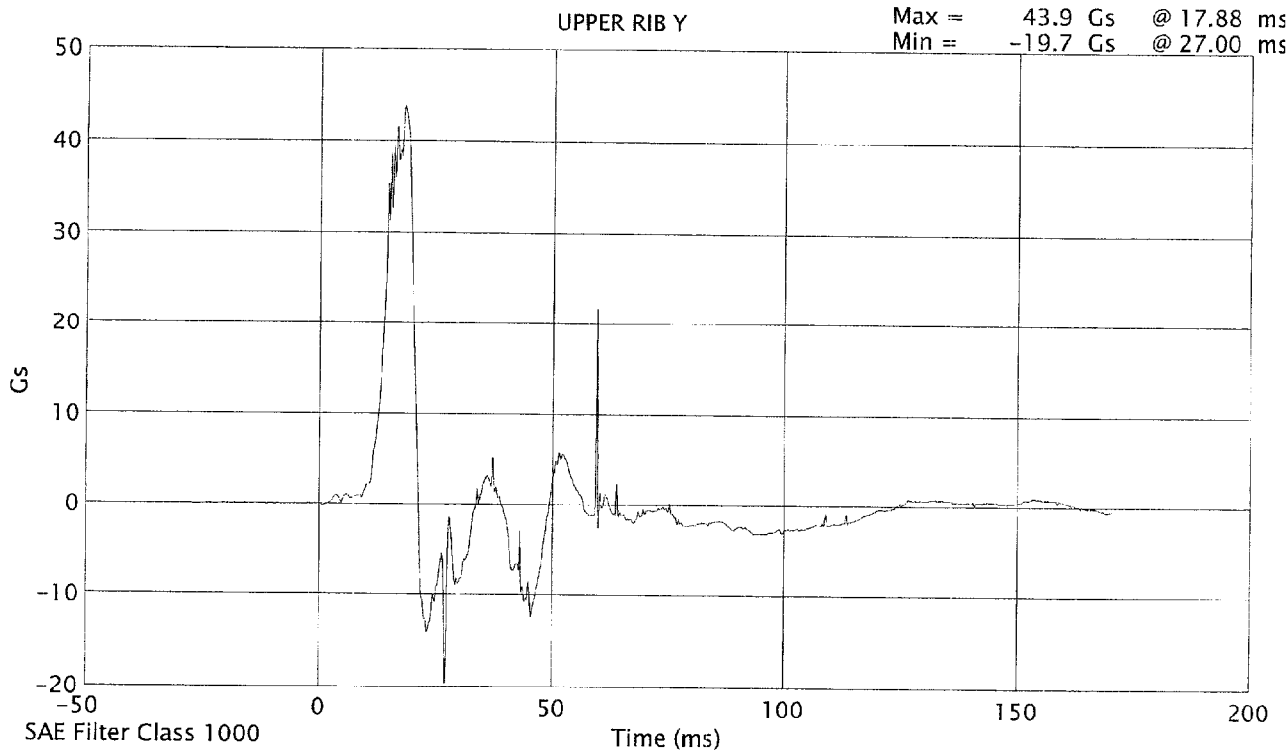
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 3
Date: March 6, 2000 Laboratory Technician: B. Swiecicki

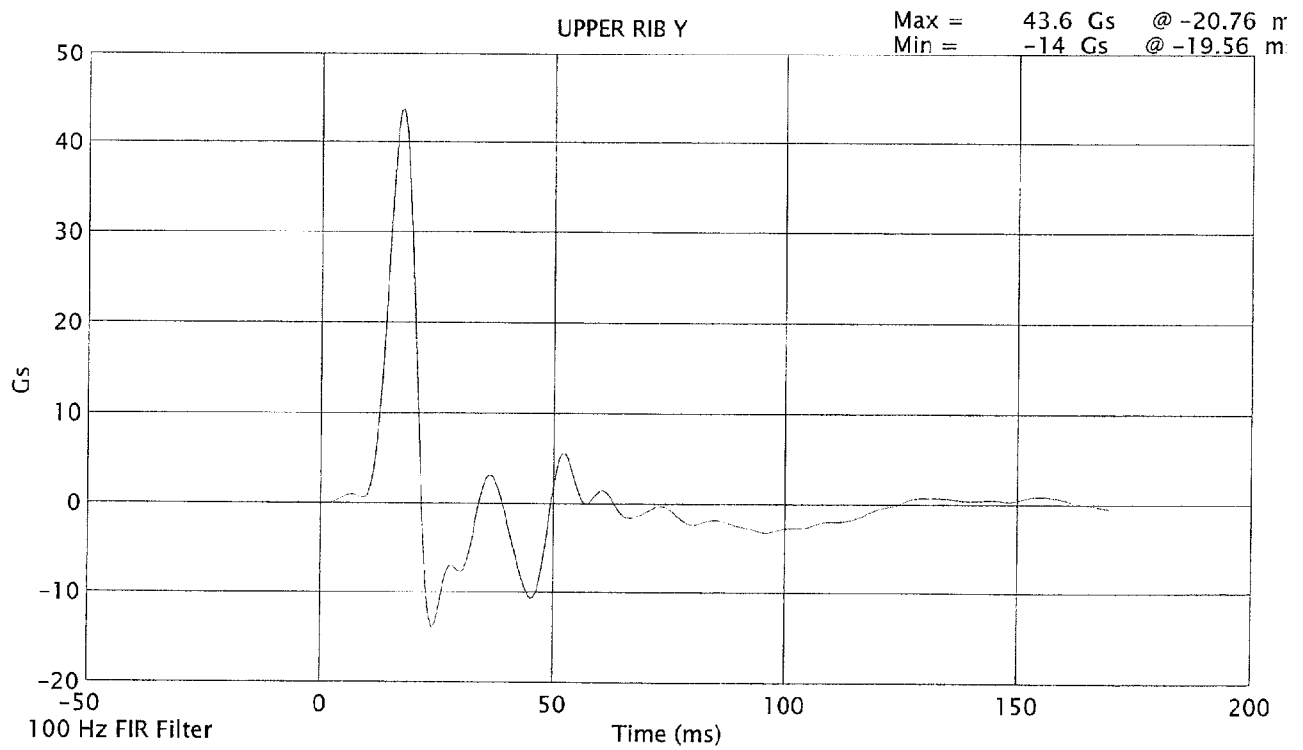
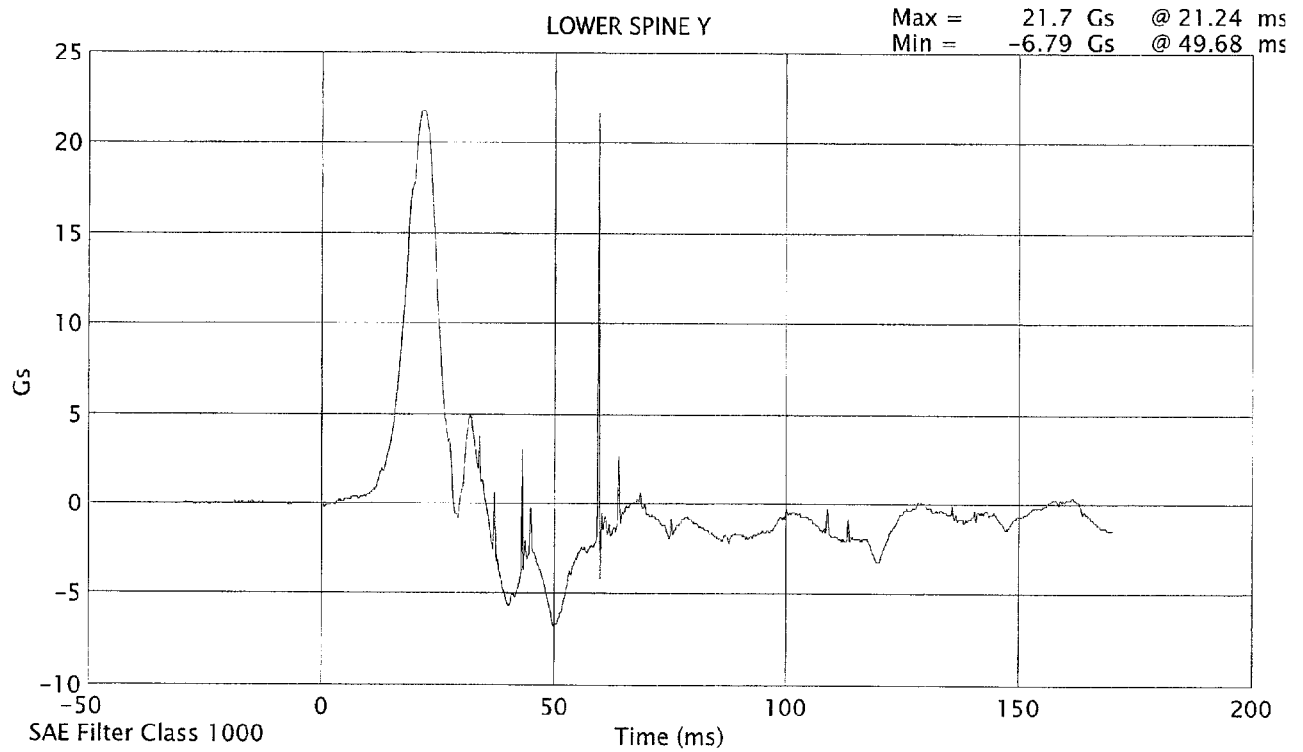
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	30
PROBE SPEED (m/s)	4.27 - 4.33	4.32
UPPER RIB (g's)	37 - 46	43.57
LOWER RIB (g's)	37 - 46	42.56
LOWER SPINE (g's)	15 - 22	21.45

REMARKS: None

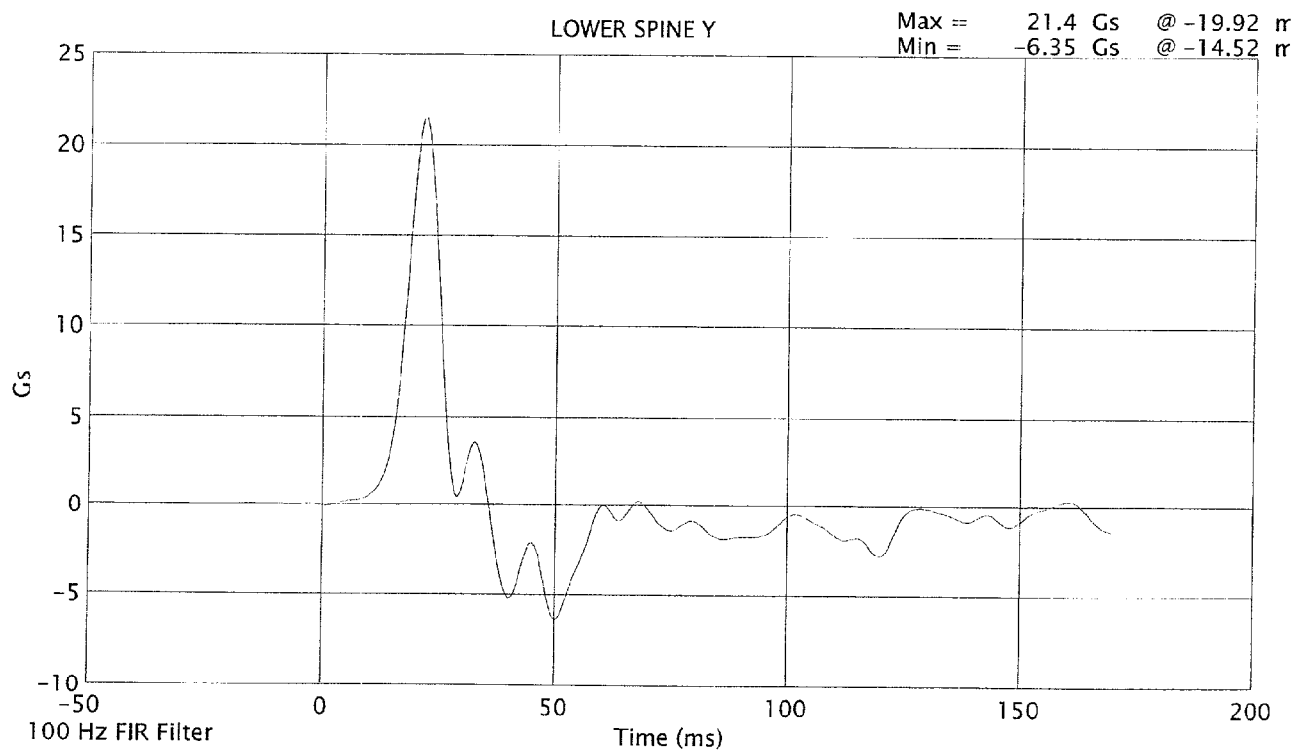
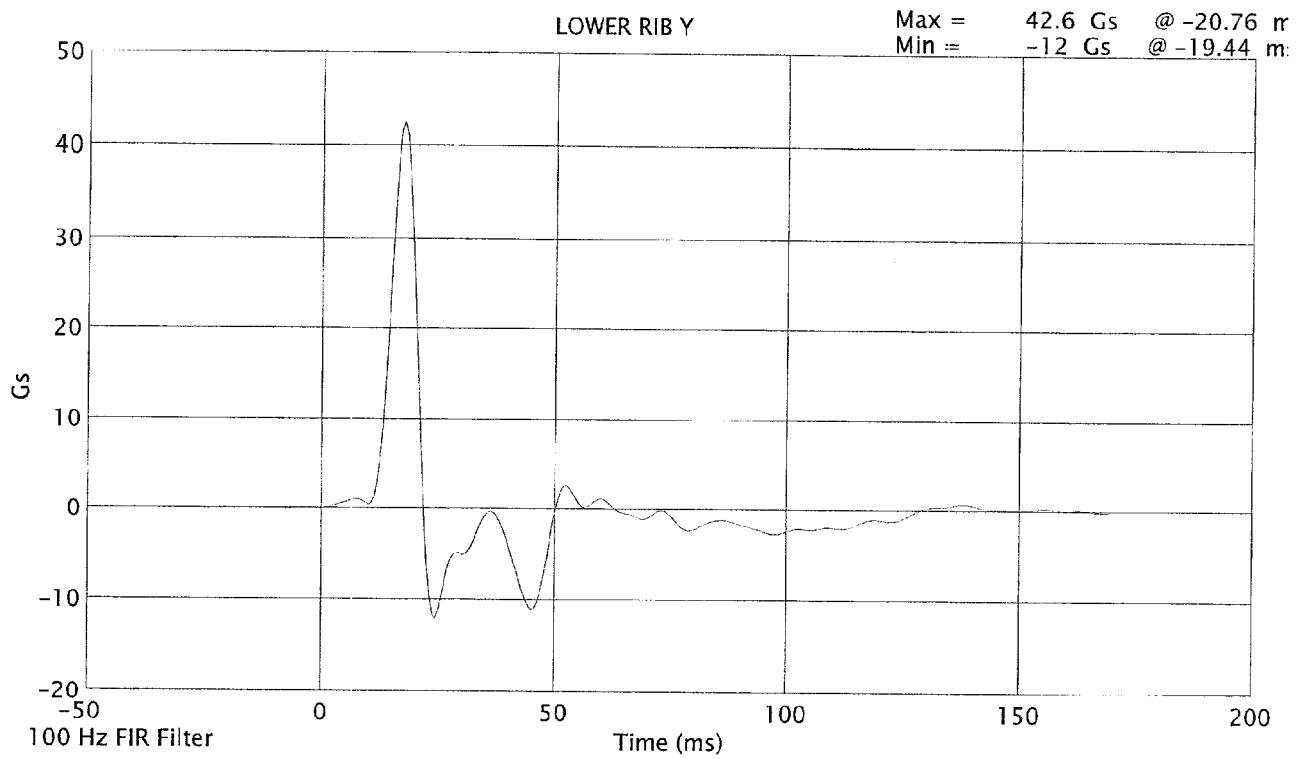
SID 016 Thorax Impact Test @ 4.3221 m/s



SID 016 Thorax Impact Test @ 4.3221 m/s



SID 016 Thorax Impact Test @ 4.3221 m/s



C-51

8506-12

**LATERAL PELVIS IMPACT TEST
POST TEST**

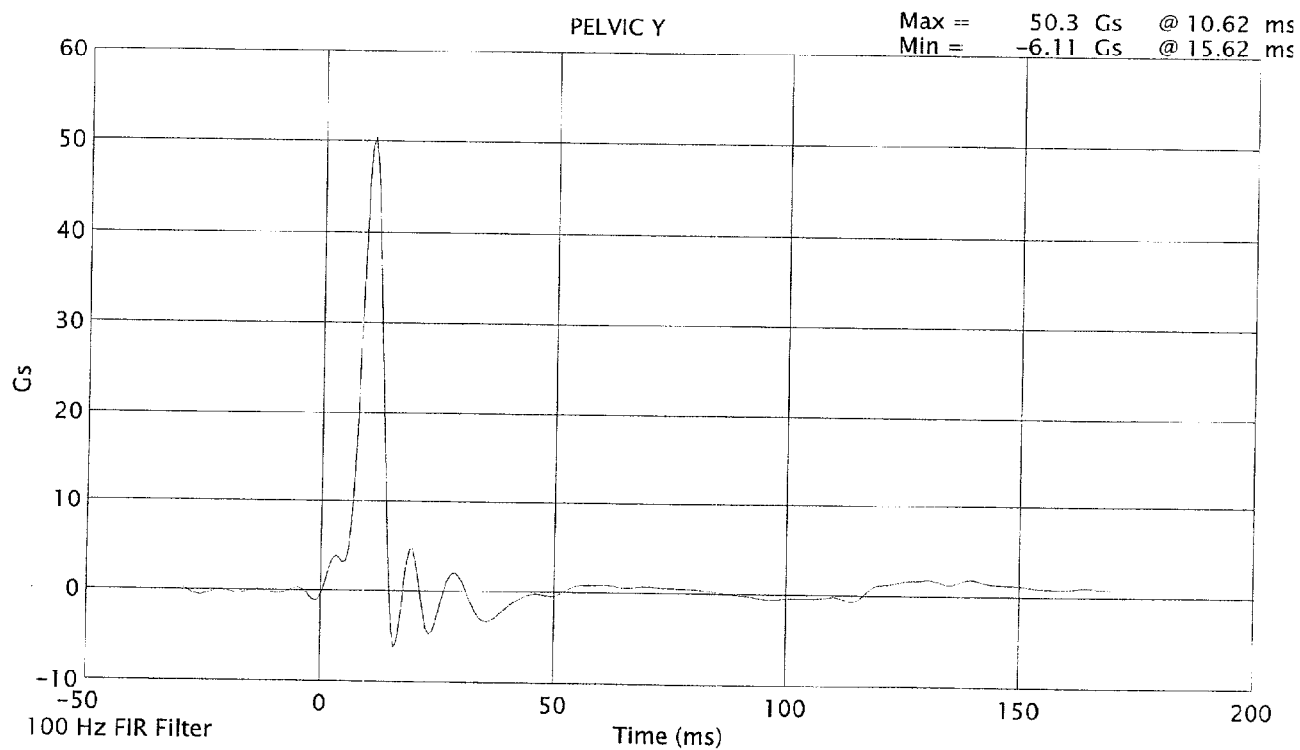
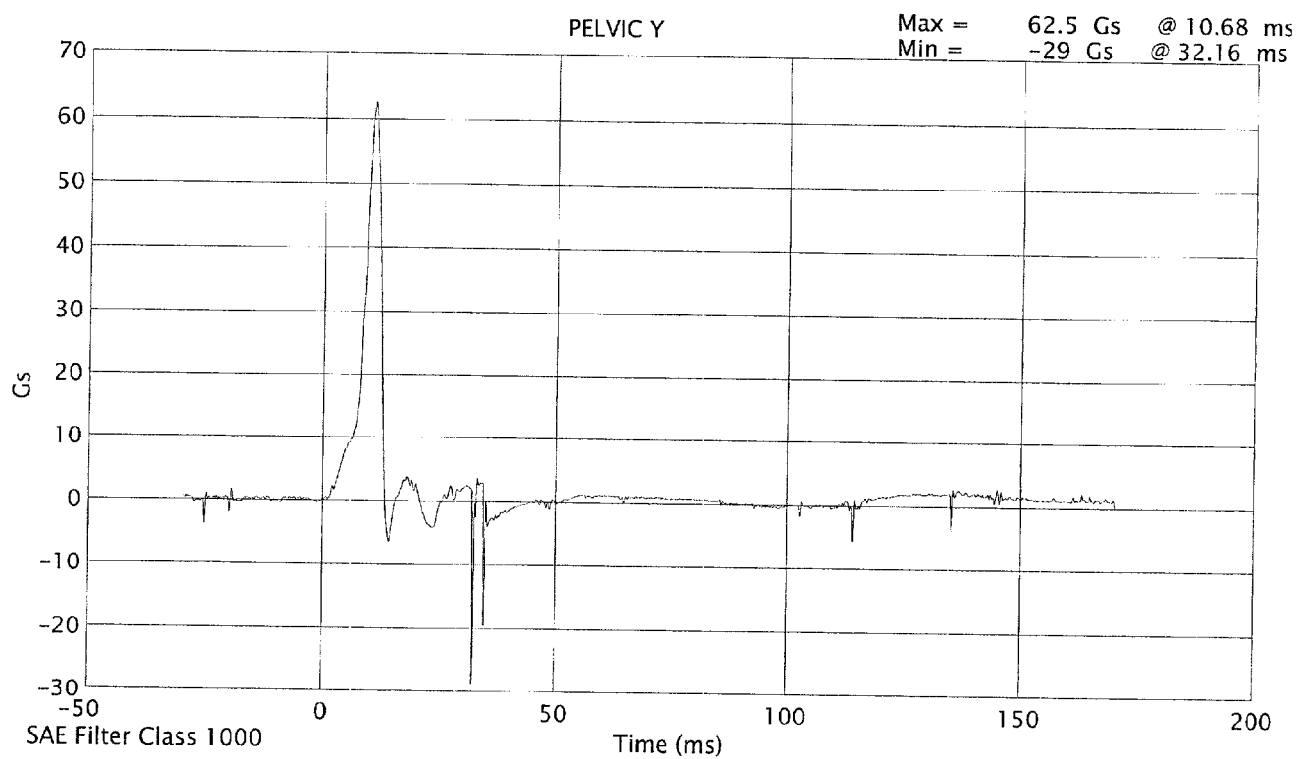
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 3
Date: March 6, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	30
PROBE SPEED (m/s)	4.27 - 4.33	4.32
PELVIS ACCELERATION (g's)	40 - 60	50.34

REMARKS: None

SID 016 Pelvic Impact Test @ 4.319 m/s



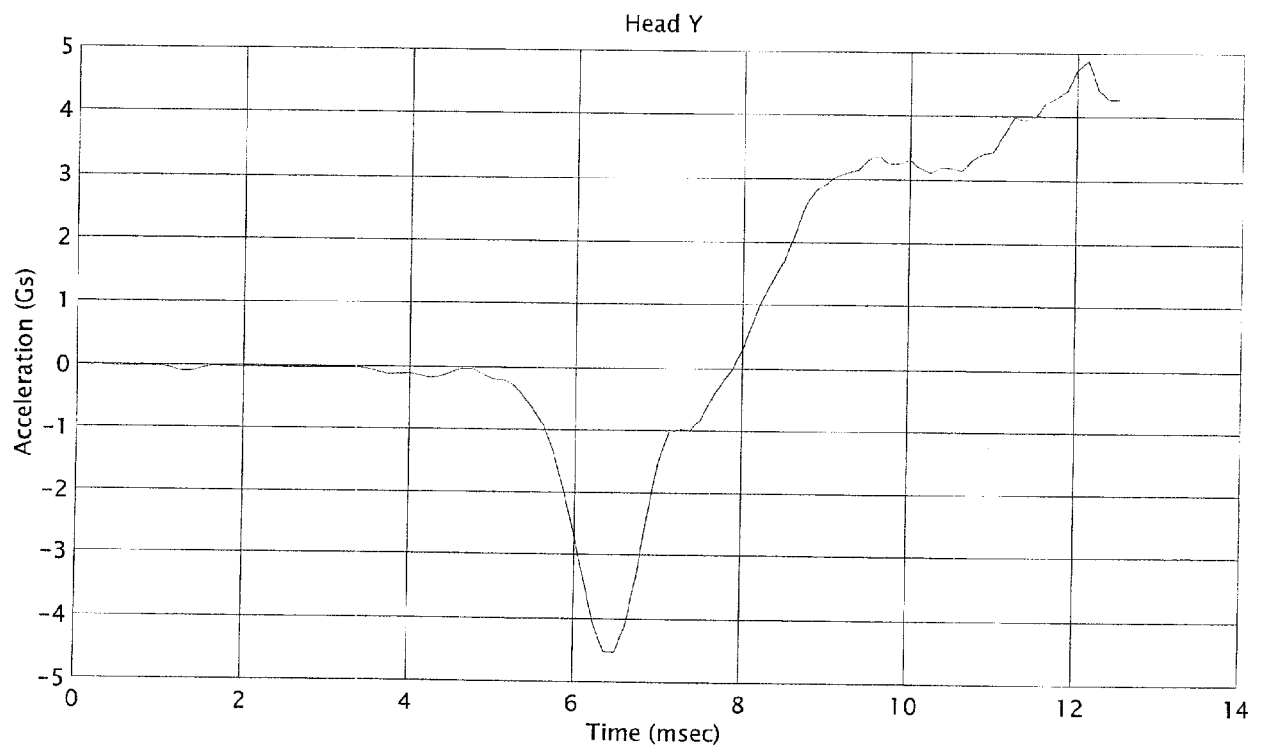
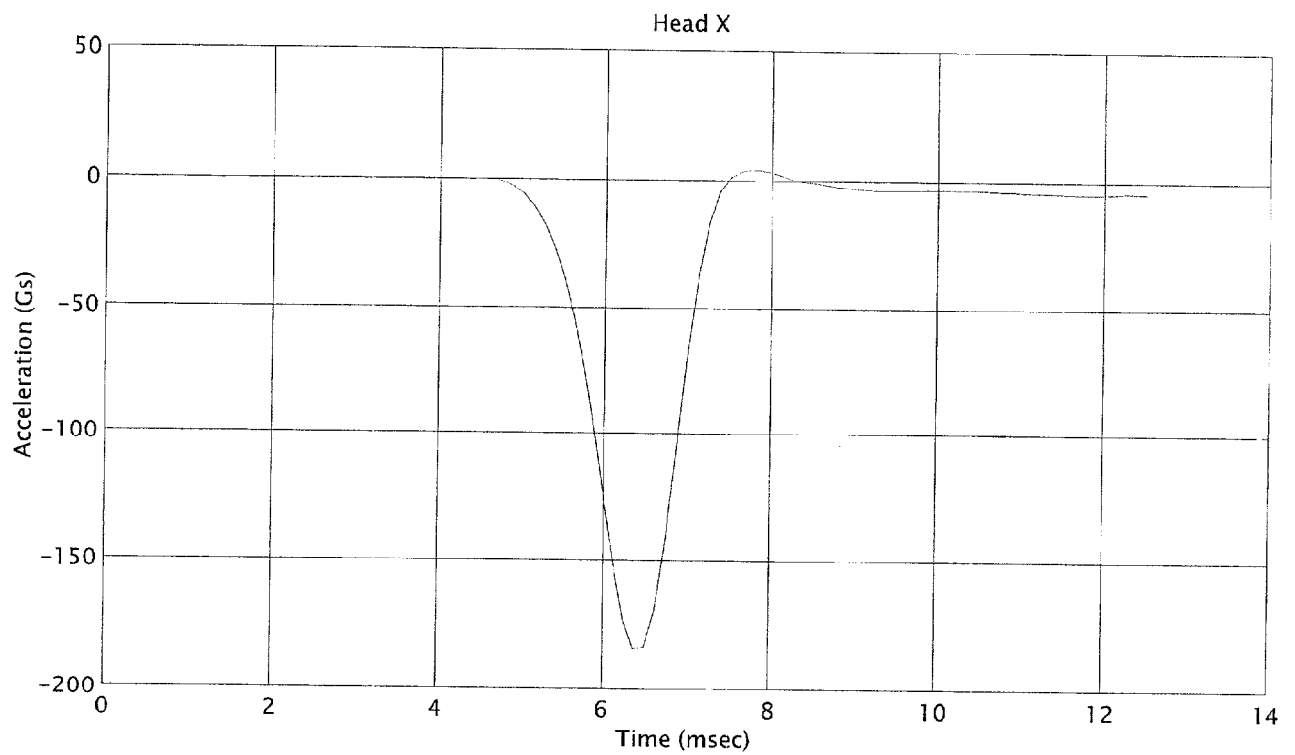
HEAD DROP TEST
POST-TEST
(Test not required for SID certification)

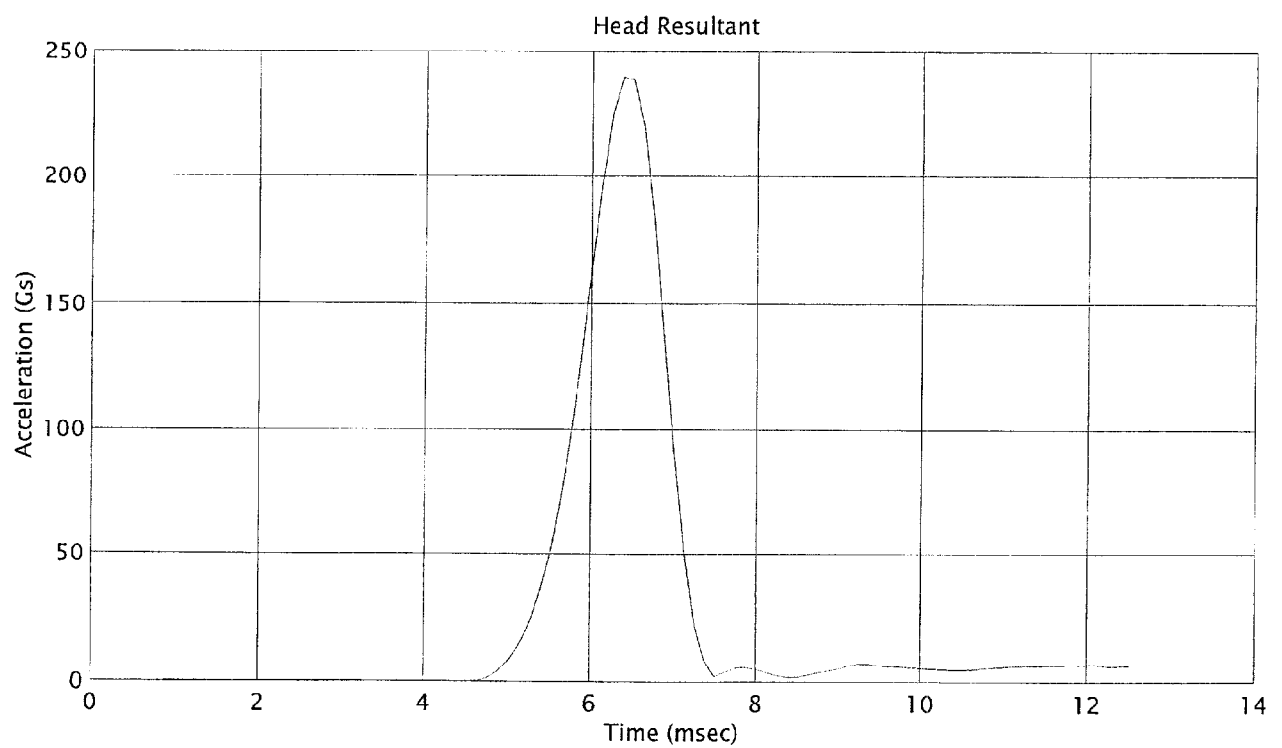
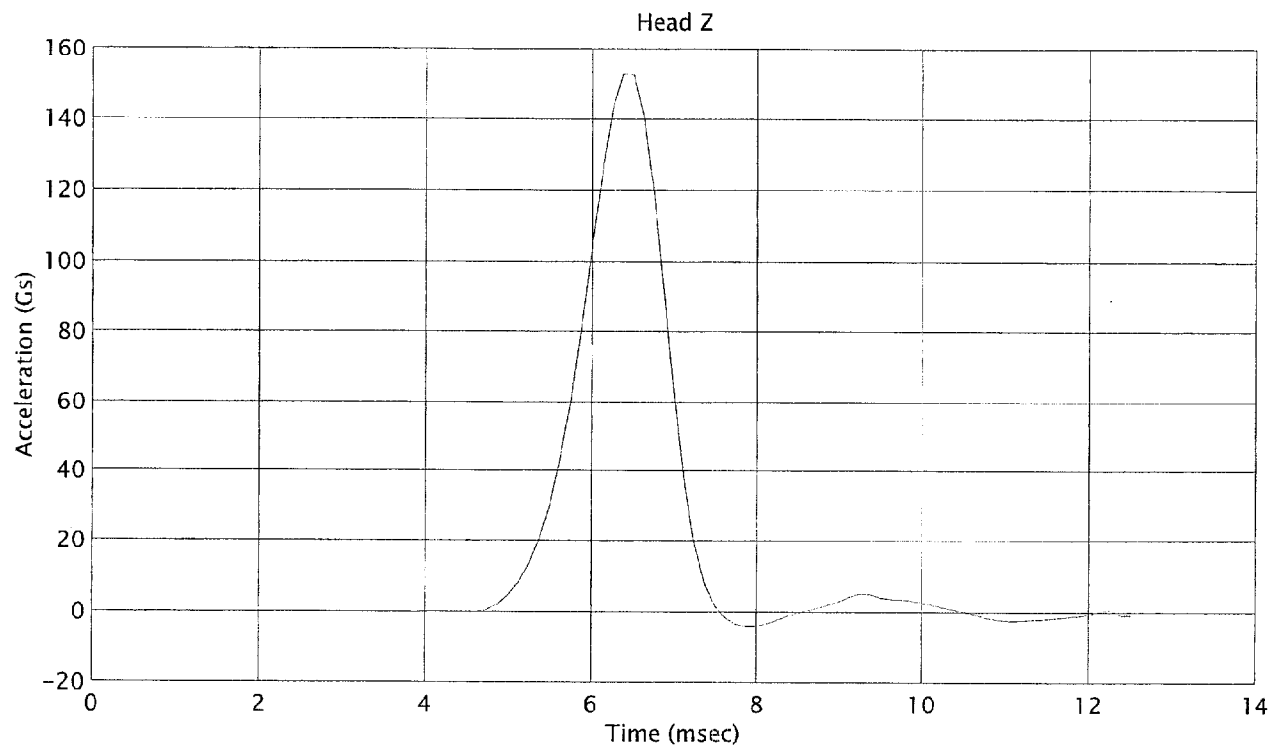
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 3
Date: March 6, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	30
PEAK RESULTANT ACCELERATION (Gs)	210 - 260	239.61
PEAK LATERAL ACCELERATION (Gs)	Not to Exceed 10	4.87
UNIMODAL CRITERIA ABOVE 100 Gs (ms)	0.9 - 1.5	1.25

REMARKS: None





**ABDOMINAL COMPRESSION TEST
POST TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 3
Date: March 6, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	31
FORCE @ 13 mm (N)	104 - 162	122.3
FORCE @ 19 mm (N)	163 - 221	177.9
FORCE @ 25 mm (N)	222 - 280	249.1
FORCE @ 33 mm (N)	325 - 391	349.2

REMARKS: None

Dummy S/N 016

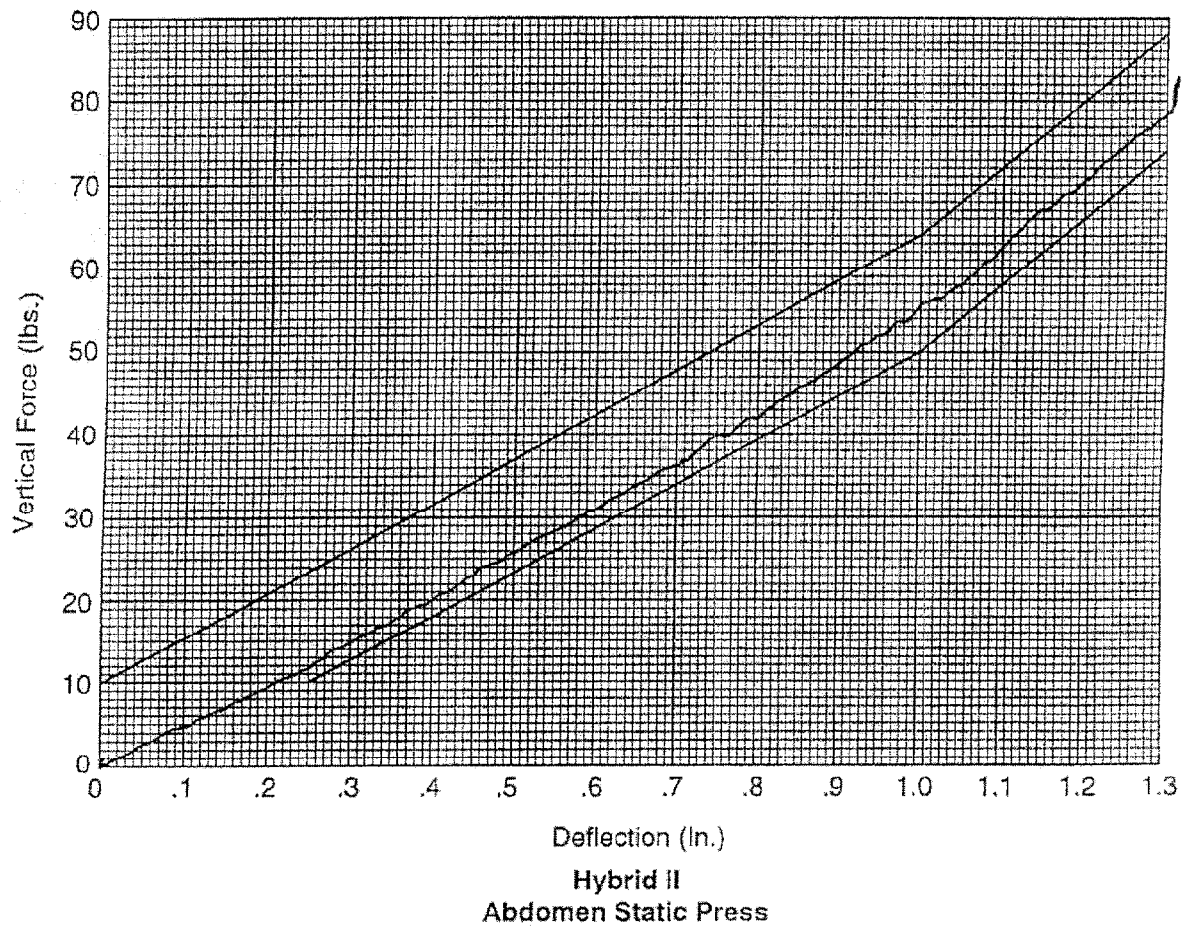
W/A _____

Date 3-6-2000

Performed By BS

Temp. 70°

Humidity 31%



LUMBAR FLEXION TEST
POST TEST
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 3
Date: March 6, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	31
FORCE @ 0° (N)	0 - 26.7	0
FORCE @ 20° (N)	97.8 - 151.2	133.4
FORCE @ 30° (N)	151.2 - 204.6	159.0
FORCE @ 40° (N)	204.6 - 258	215.7
RETURN ANGLE	12° max.	7°

REMARKS: None

Dummy S/N 016

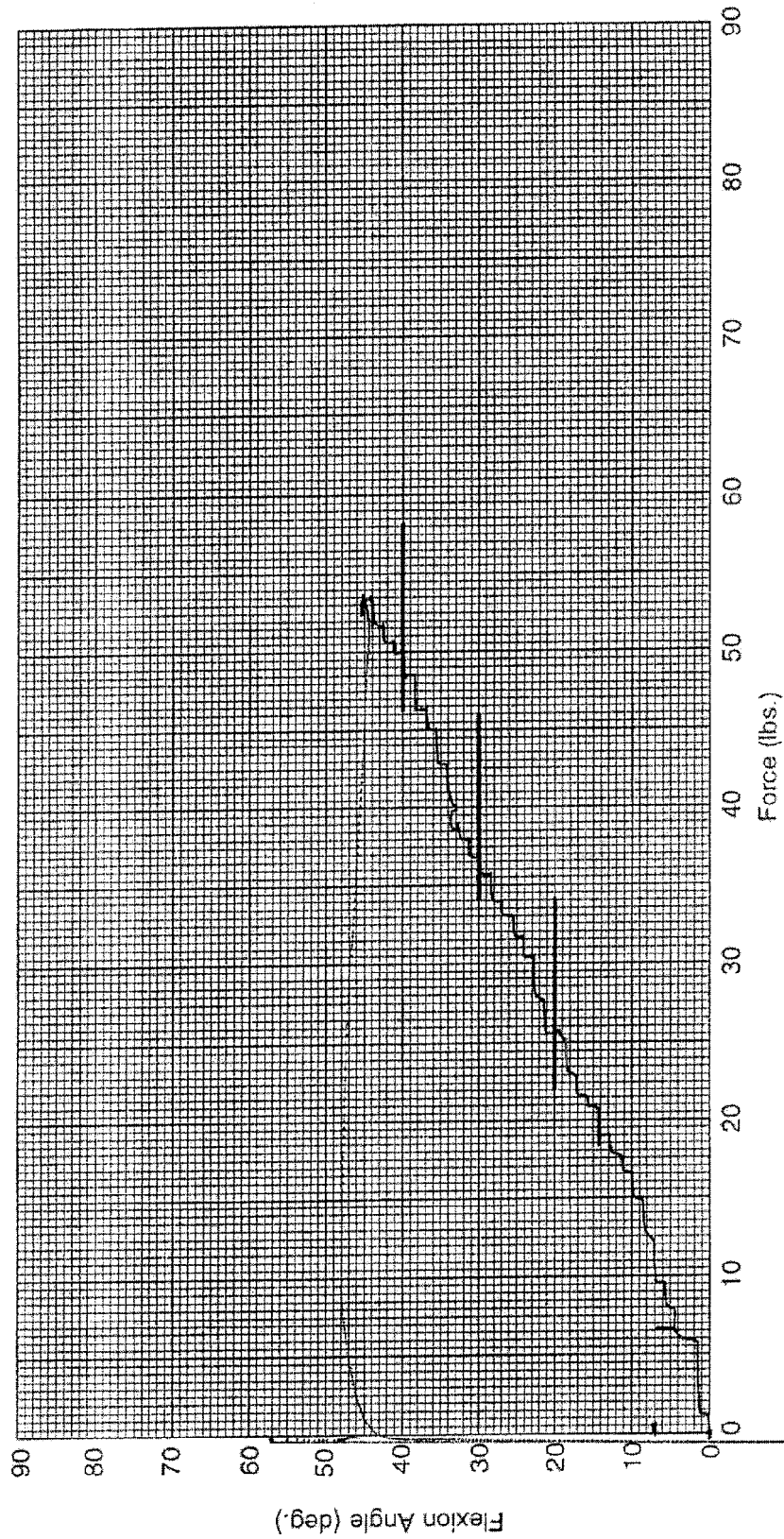
W/A

Date 3-6-2000

Performed By [Signature]

Temp. 71°

Humidity 31%



Hybrid II Lumbar Spine Flexion Test

POST TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 016 Sequential Test Number: 3
 Date: March 7, 2000 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 NO.: 268

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 4
Date: March 7, 2000 Laboratory Technician: B. Swiecicki

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

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 4
Date: March 7, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	899
RH- Rib Height (mm)	502 - 520	513
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	236
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	495
HW- Hip Width (mm)	356 - 391	376

REMARKS: None

**LATERAL THORAX IMPACT TEST
POST TEST**

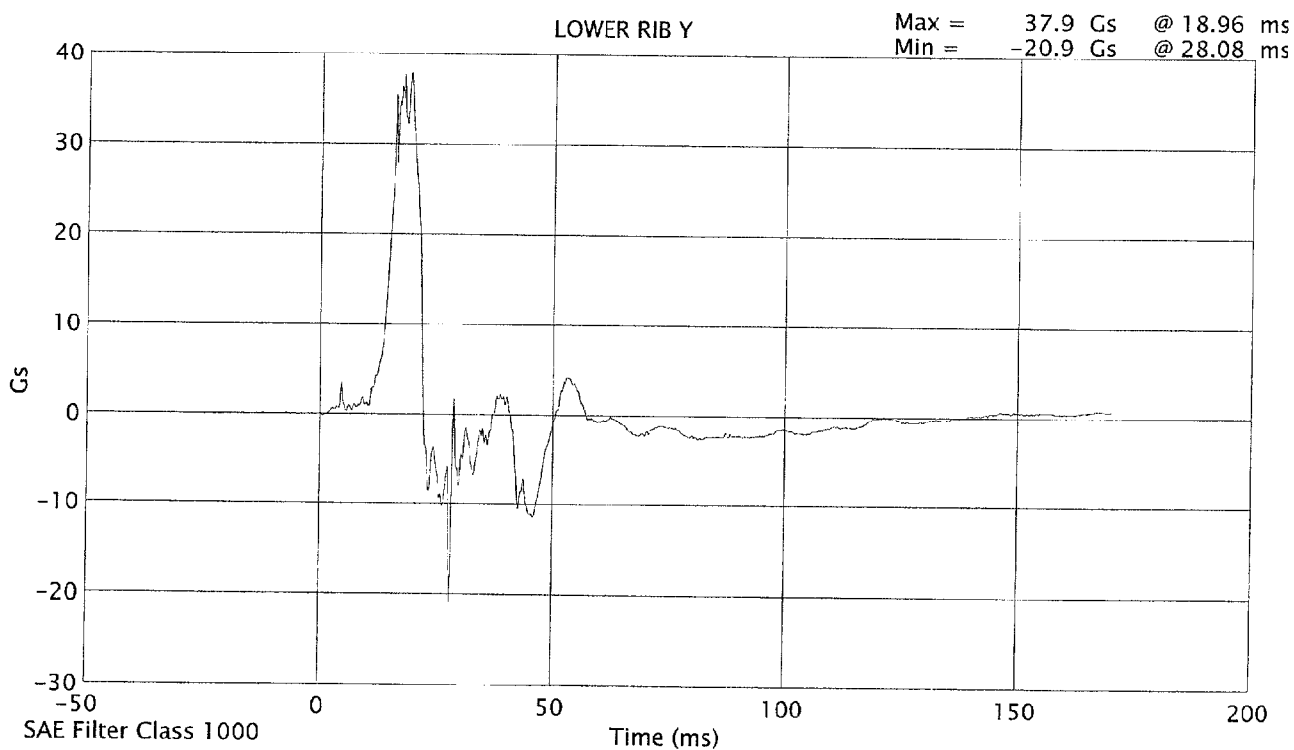
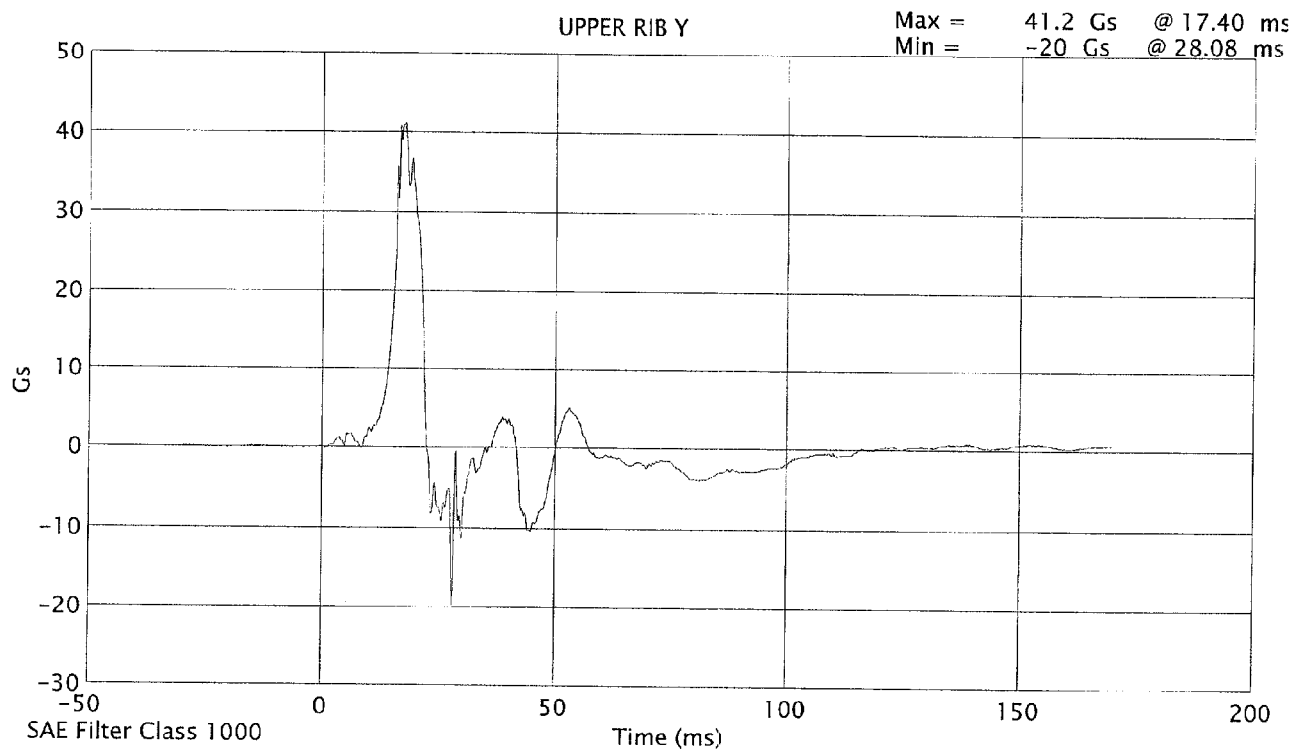
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 4
Date: March 6, 2000 Laboratory Technician: B. Swiecicki

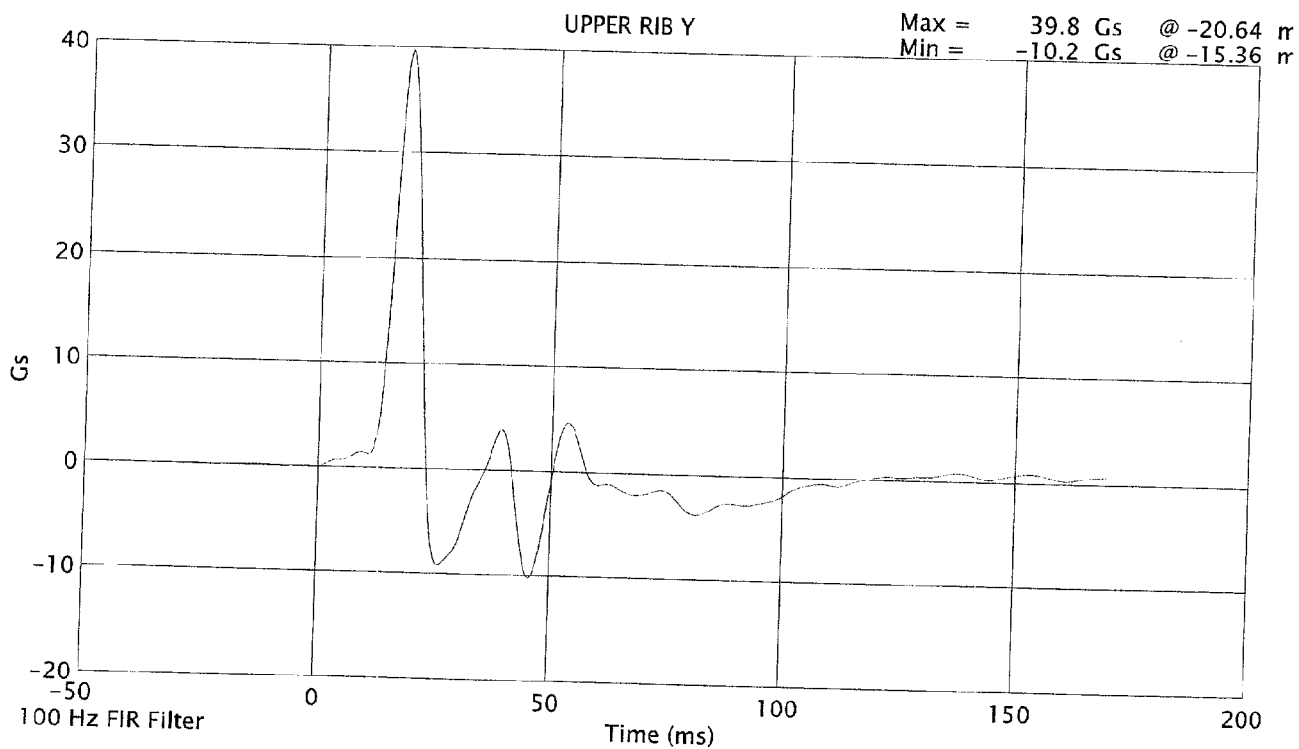
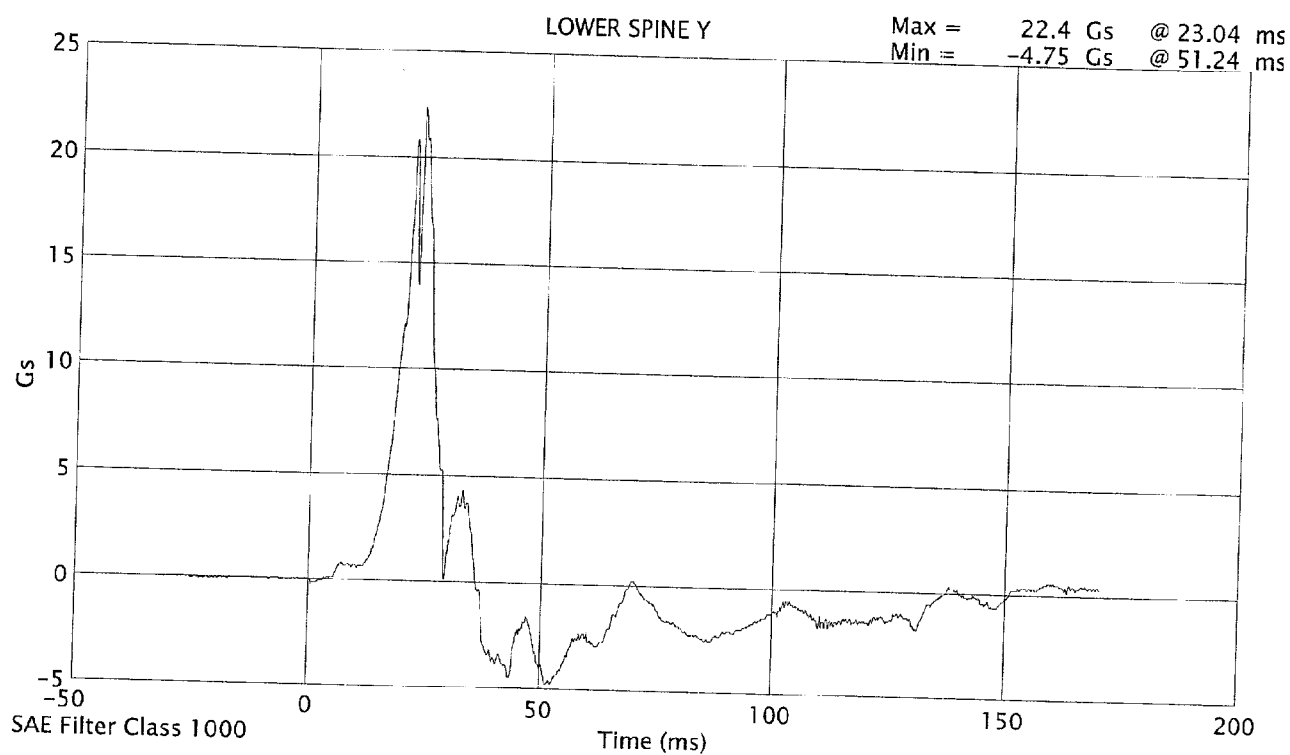
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	30
PROBE SPEED (m/s)	4.27 - 4.33	4.32
UPPER RIB (g's)	37 - 46	39.76
LOWER RIB (g's)	37 - 46	37.61
LOWER SPINE (g's)	15 - 22	19.99

REMARKS: None

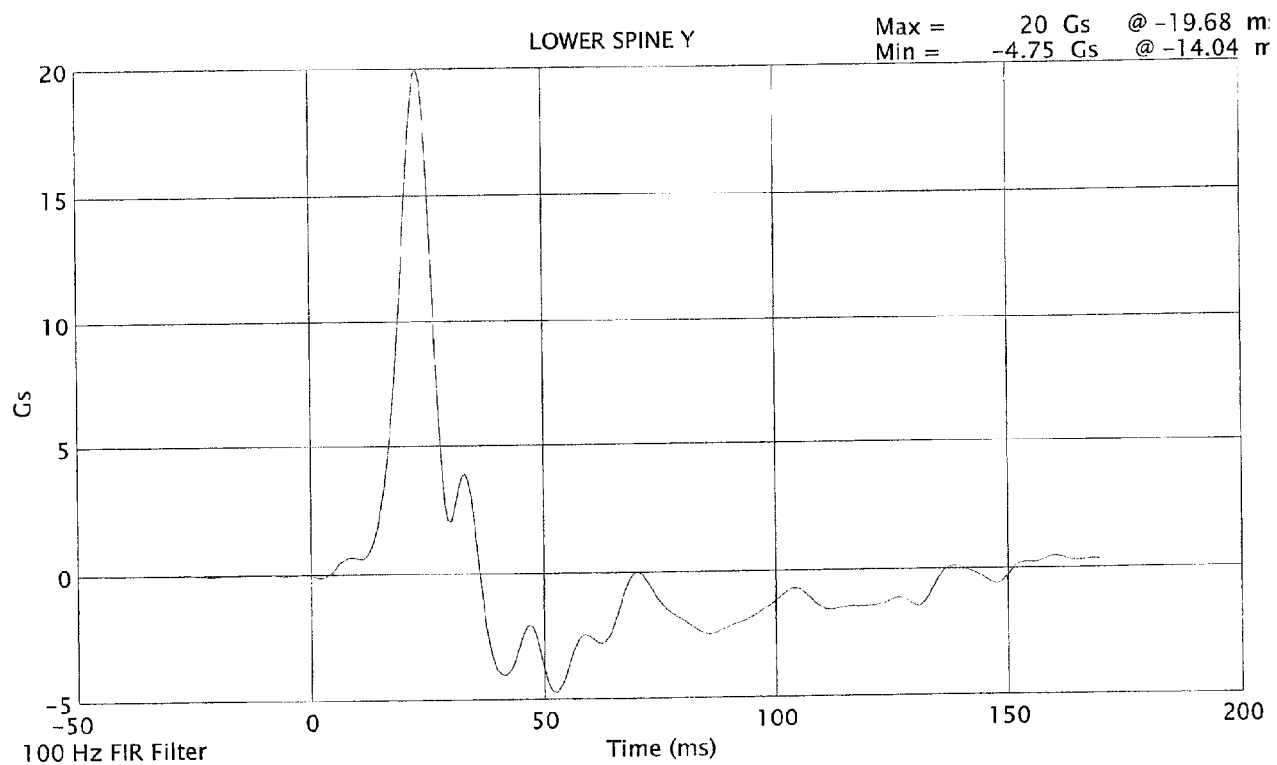
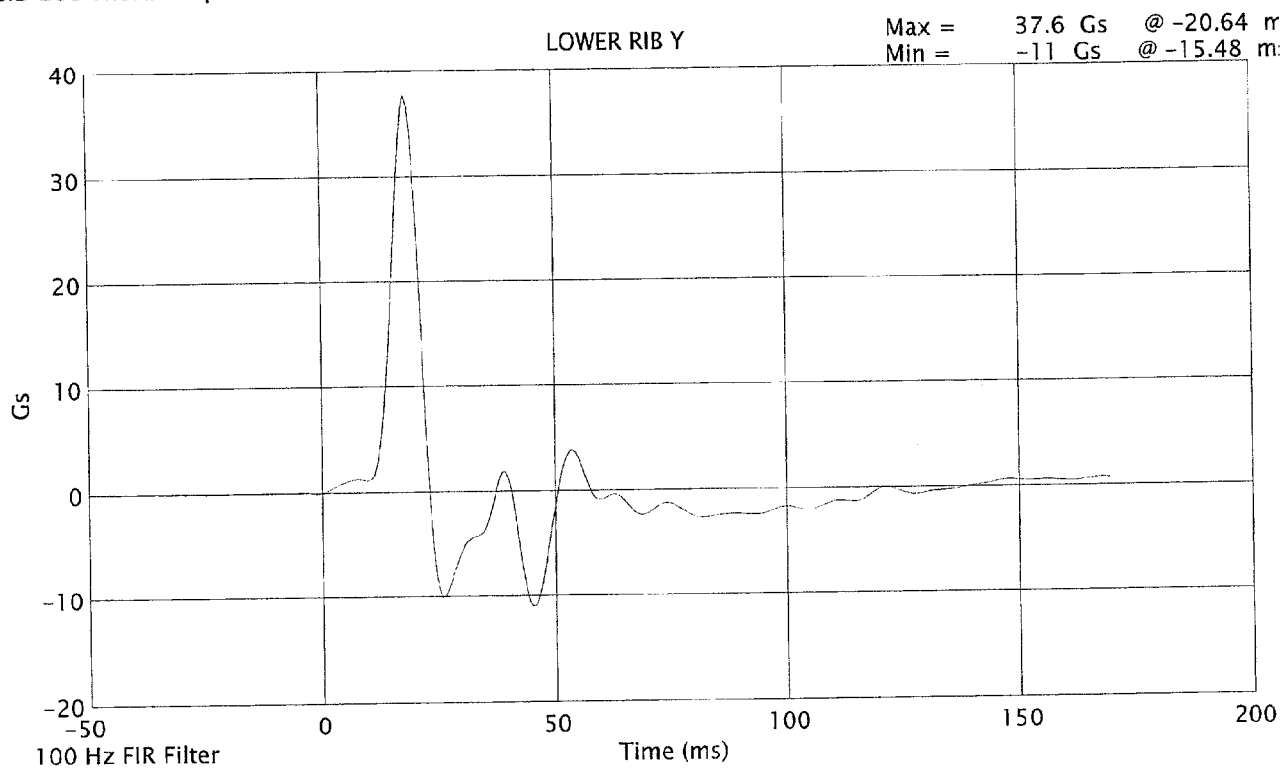
SID 268 Thorax Impact Test @ 4.3221 m/s



SID 268 Thorax Impact Test @ 4.3221 m/s



SID 268 Thorax Impact Test @ 4.3221 m/s



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8506-12

**LATERAL PELVIS IMPACT TEST
POST TEST**

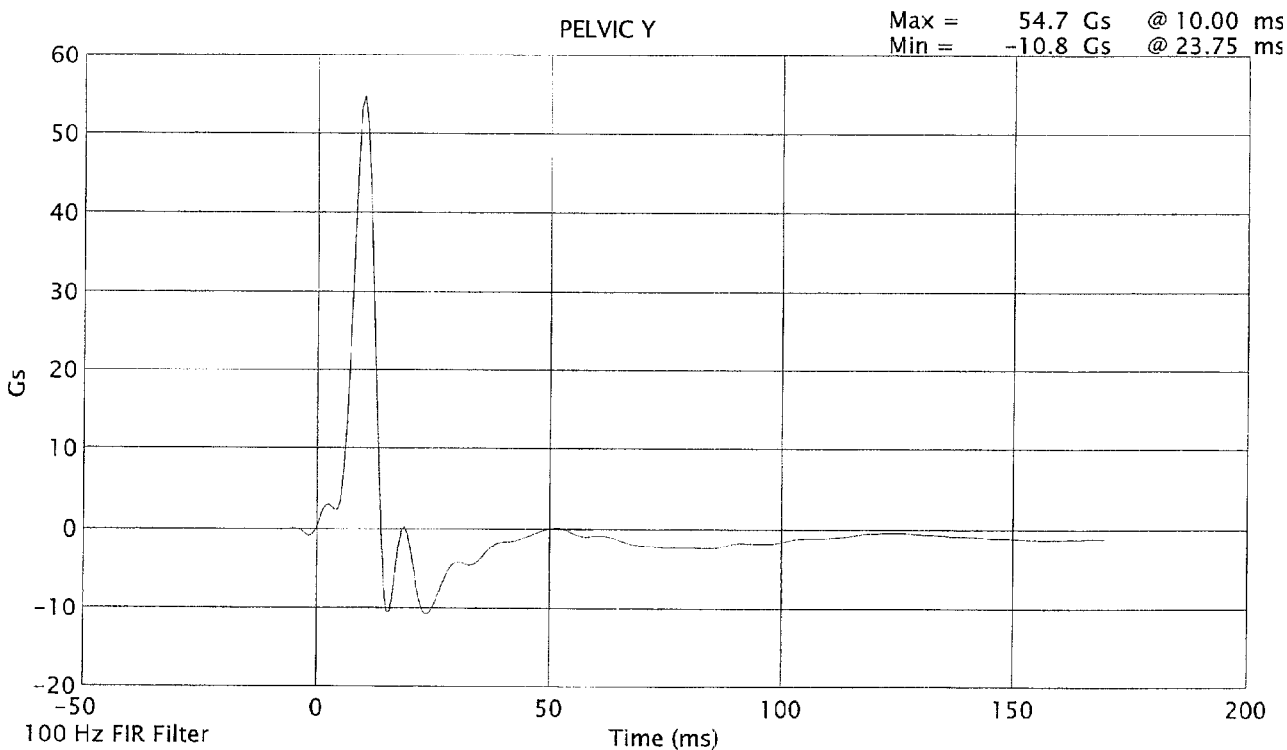
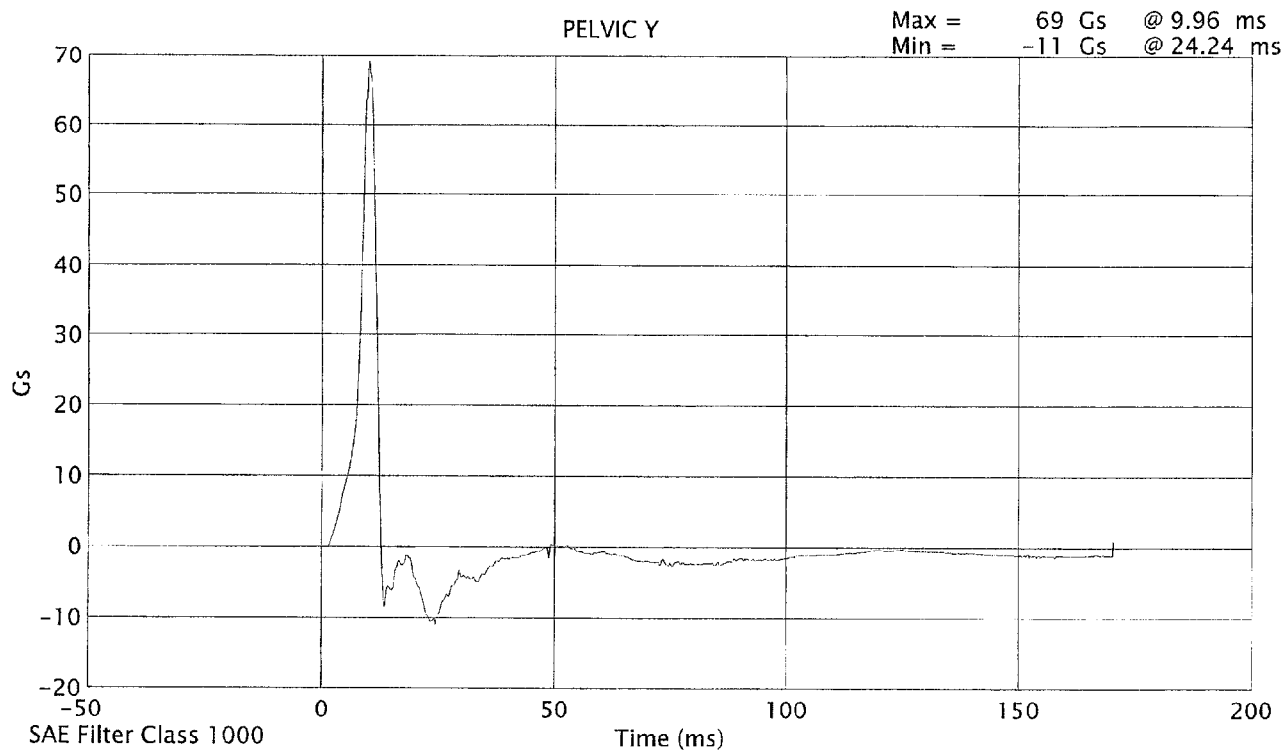
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 4
Date: March 6, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	30
PROBE SPEED (m/s)	4.27 - 4.33	4.31
PELVIS ACCELERATION (g's)	40 - 60	54.70

REMARKS: None

SID 268 Pelvic Impact Test @ 4.3129 m/s



HEAD DROP TEST
POST-TEST
(Test not required for SID certification)

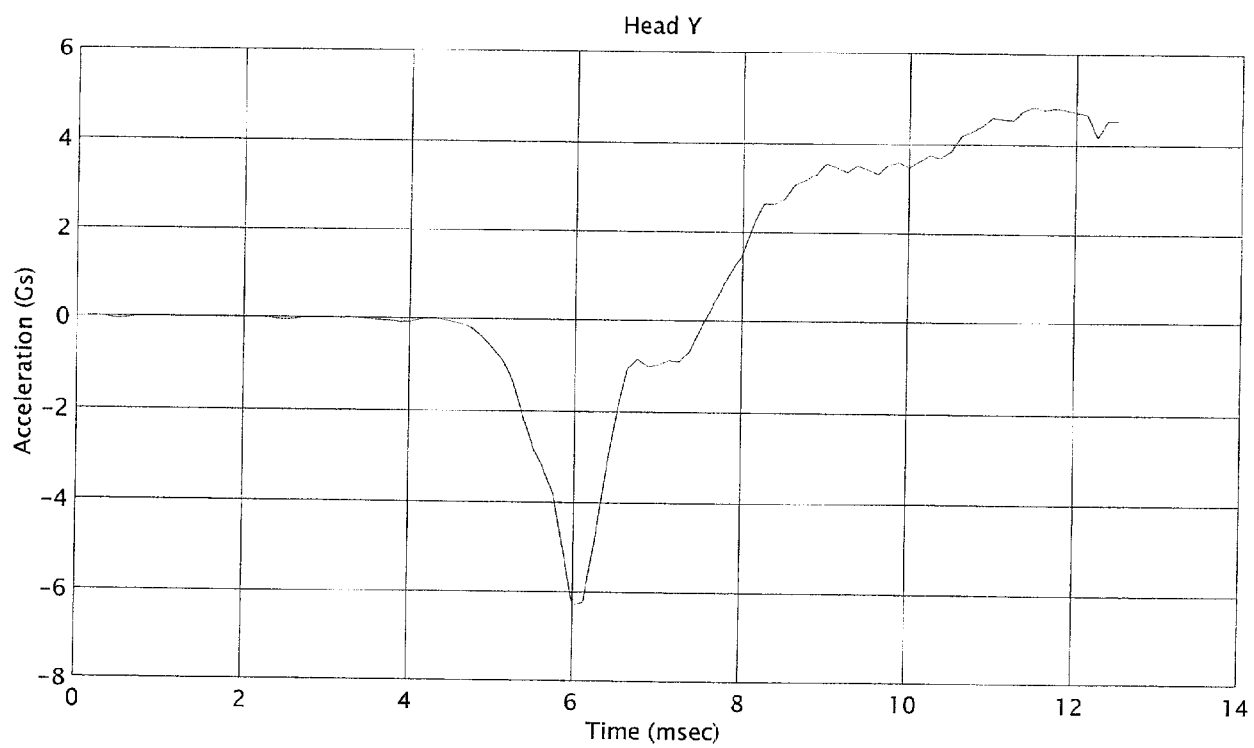
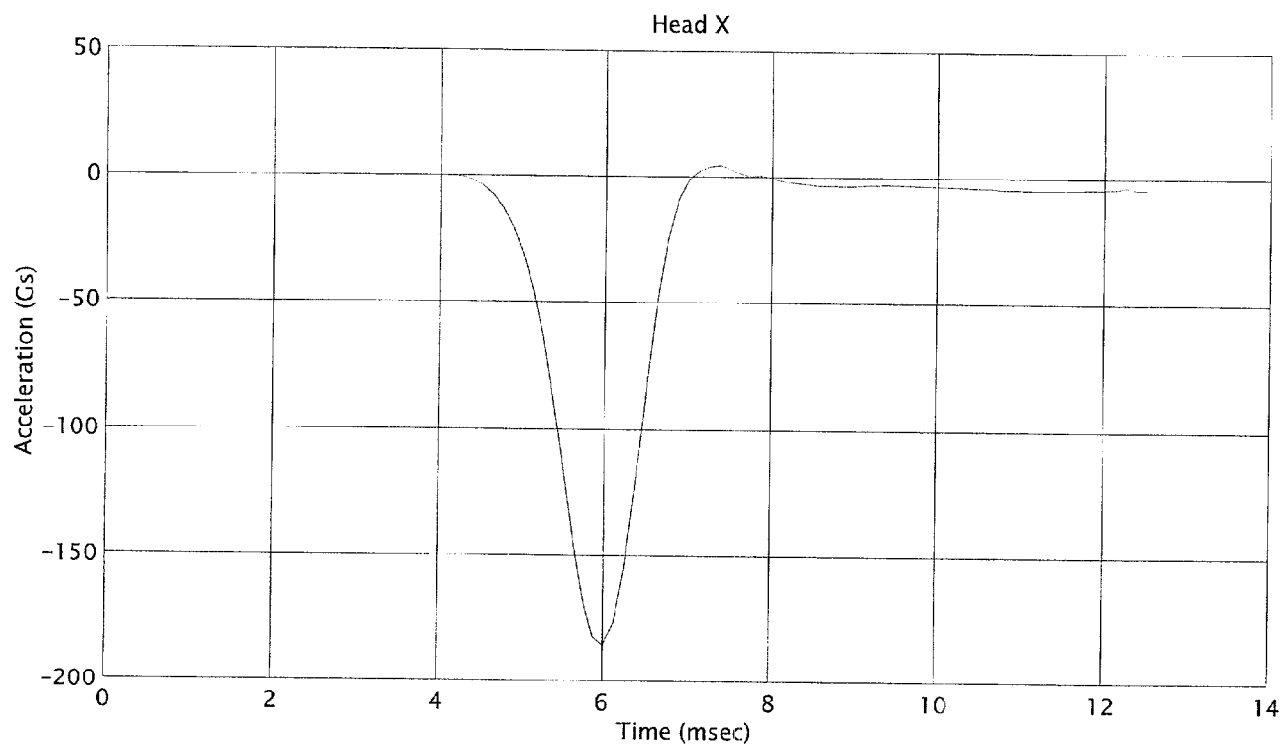
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 4
Date: March 6, 2000 Laboratory Technician: B. Swiecicki

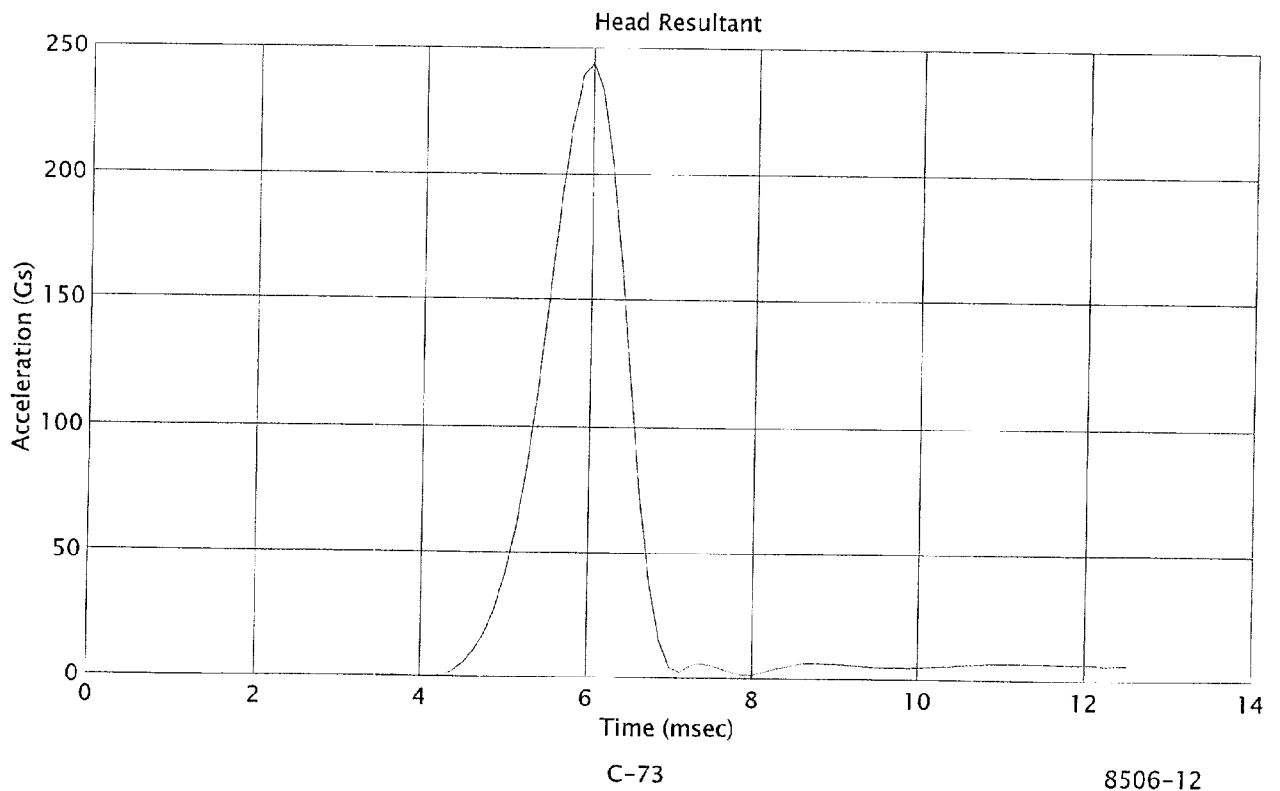
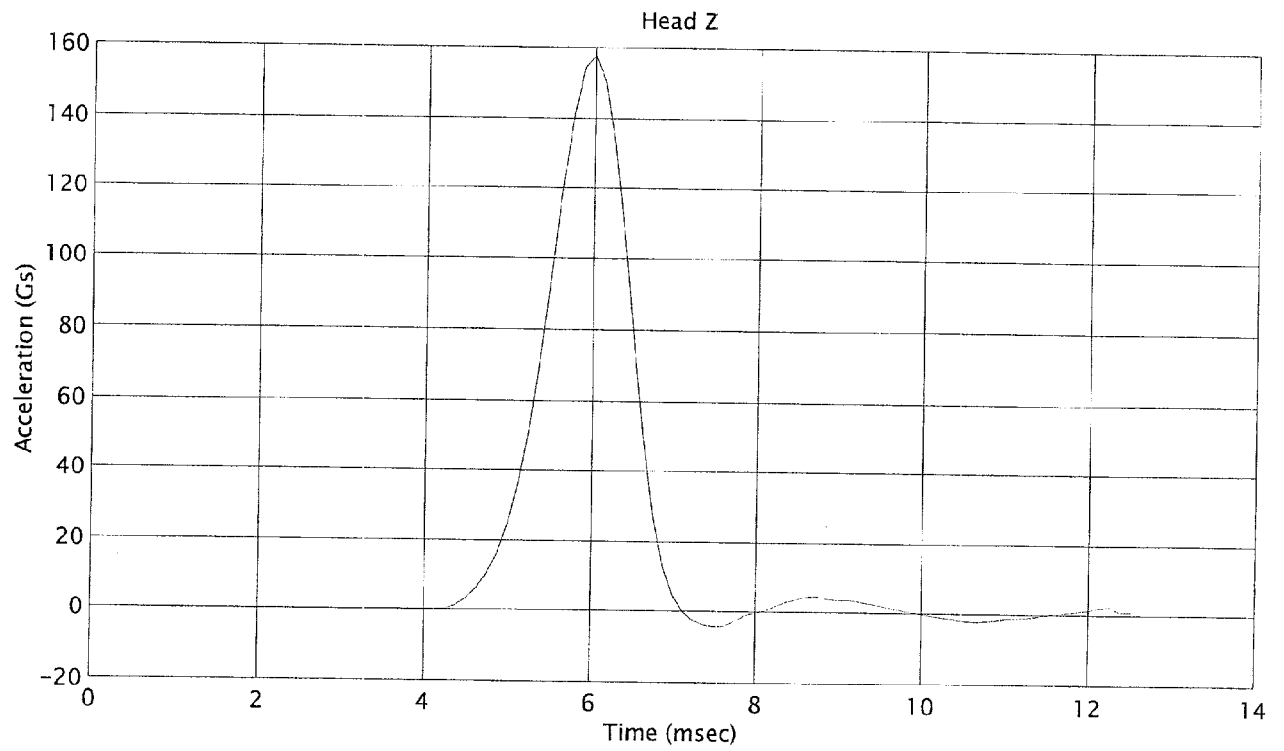
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	30
PEAK RESULTANT ACCELERATION (Gs)	210 - 260	243.68
PEAK LATERAL ACCELERATION (Gs)	Not to Exceed 10	6.29
UNIMODAL CRITERIA ABOVE 100 Gs (ms)	0.9 - 1.5	1.12

REMARKS: None

Hybrid II Head Drop Calibration 268500.hdp



Hybrid II Head Drop Calibration 268500.hdp



ABDOMINAL COMPRESSION TEST

POST TEST

(Test not required for SID certification)

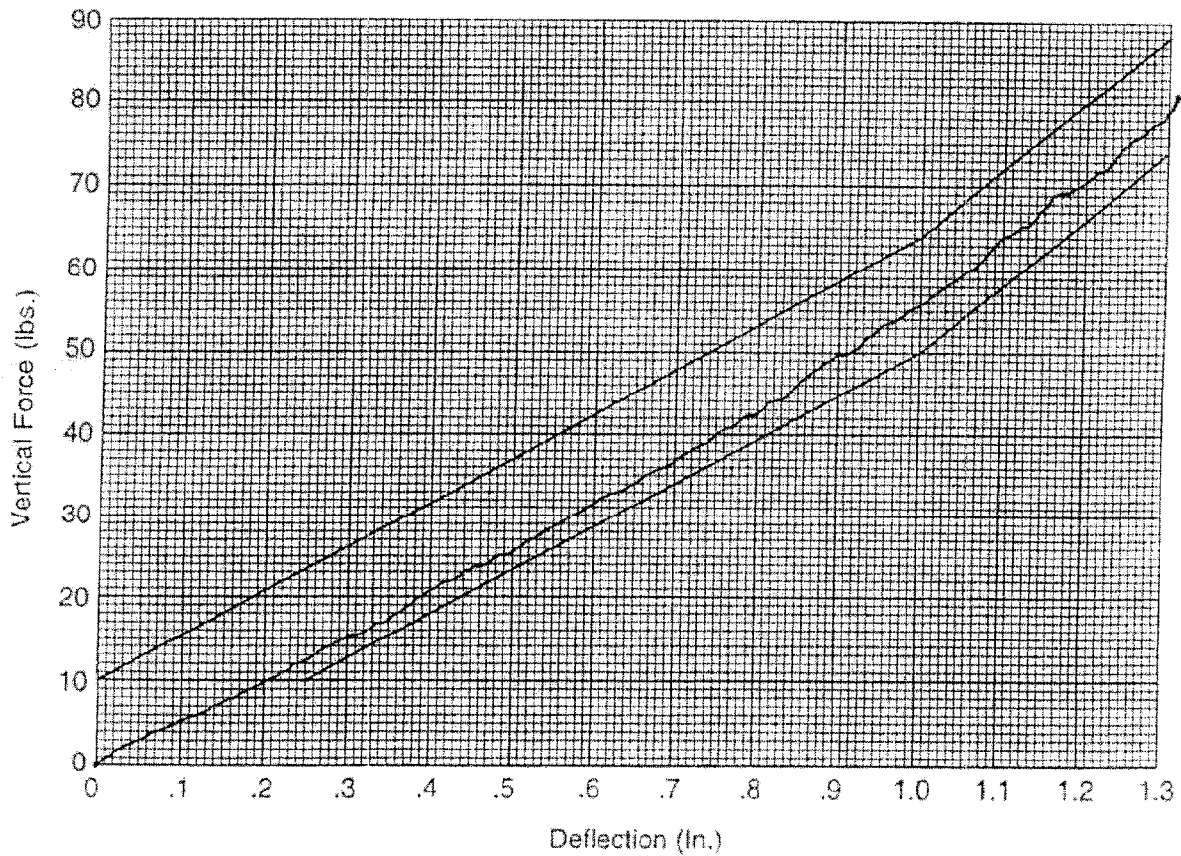
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 4
Date: March 6, 2000 Laboratory Technician: B. Swiccicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	31
FORCE @ 13 mm (N)	104 - 162	116.5
FORCE @ 19 mm (N)	163 - 221	177.9
FORCE @ 25 mm (N)	222 - 280	249.1
FORCE @ 33 mm (N)	325 - 391	349.2

REMARKS: None

Dummy S/N 268
W/A _____
Date 3-6-2000
Performed By BR
Temp. 70°
Humidity 31%



Hybrid II
Abdomen Static Press

LUMBAR FLEXION TEST
POST TEST
(Test not required for SID certification)

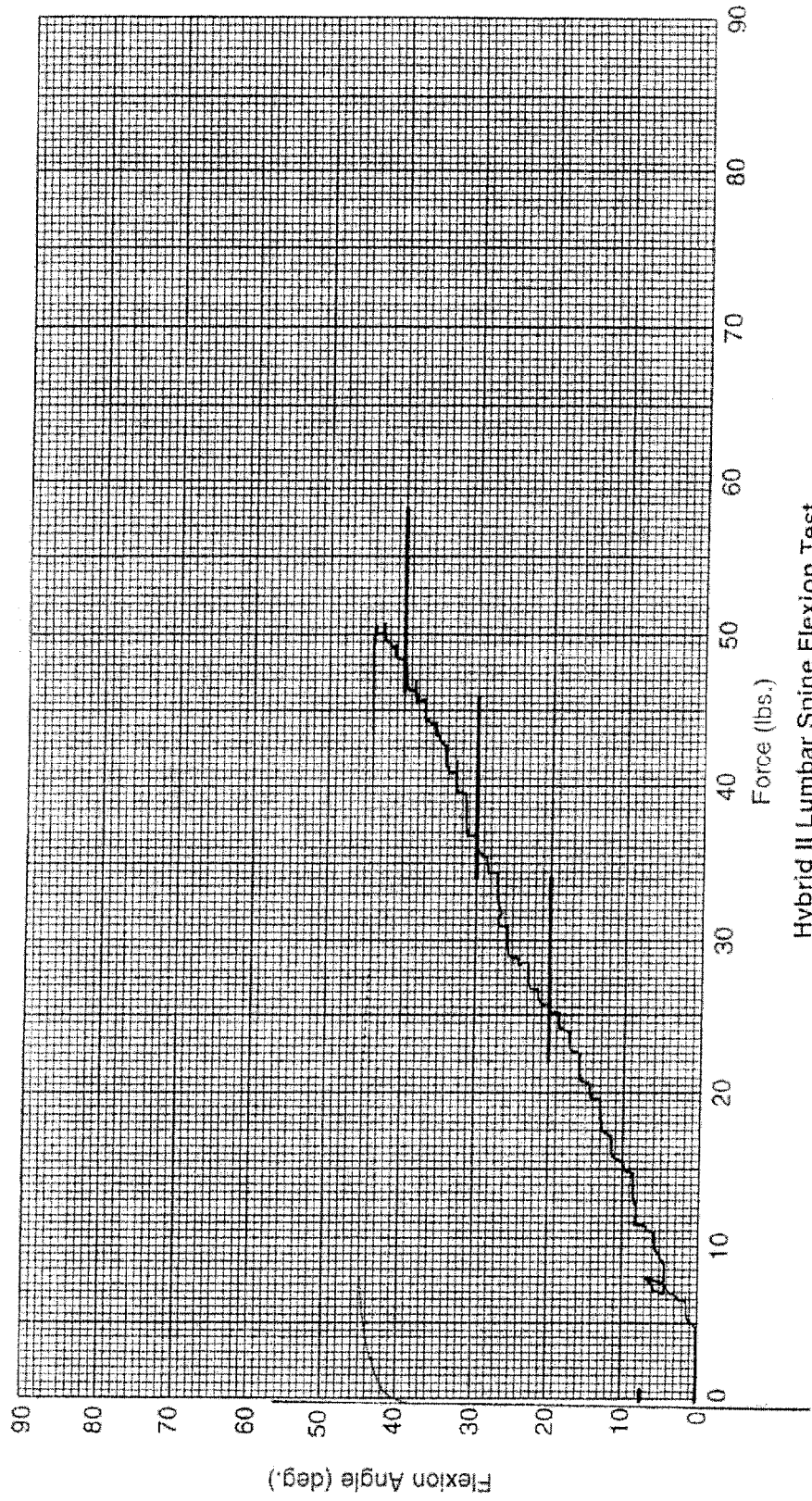
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 4
Date: March 6, 2000 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	31
FORCE @ 0° (N)	0 - 26.7	0
FORCE @ 20° (N)	97.8 - 151.2	111.2
FORCE @ 30° (N)	151.2 - 204.6	160.1
FORCE @ 40° (N)	204.6 - 258	215.7
RETURN ANGLE	12° max.	7.5°

REMARKS: None

Dummy S/N 268
W/A _____
Date 3-6-2000
Performed By BS
Temp. 71°
Humidity 31%



Hybrid II Lumbar Spine Flexion Test

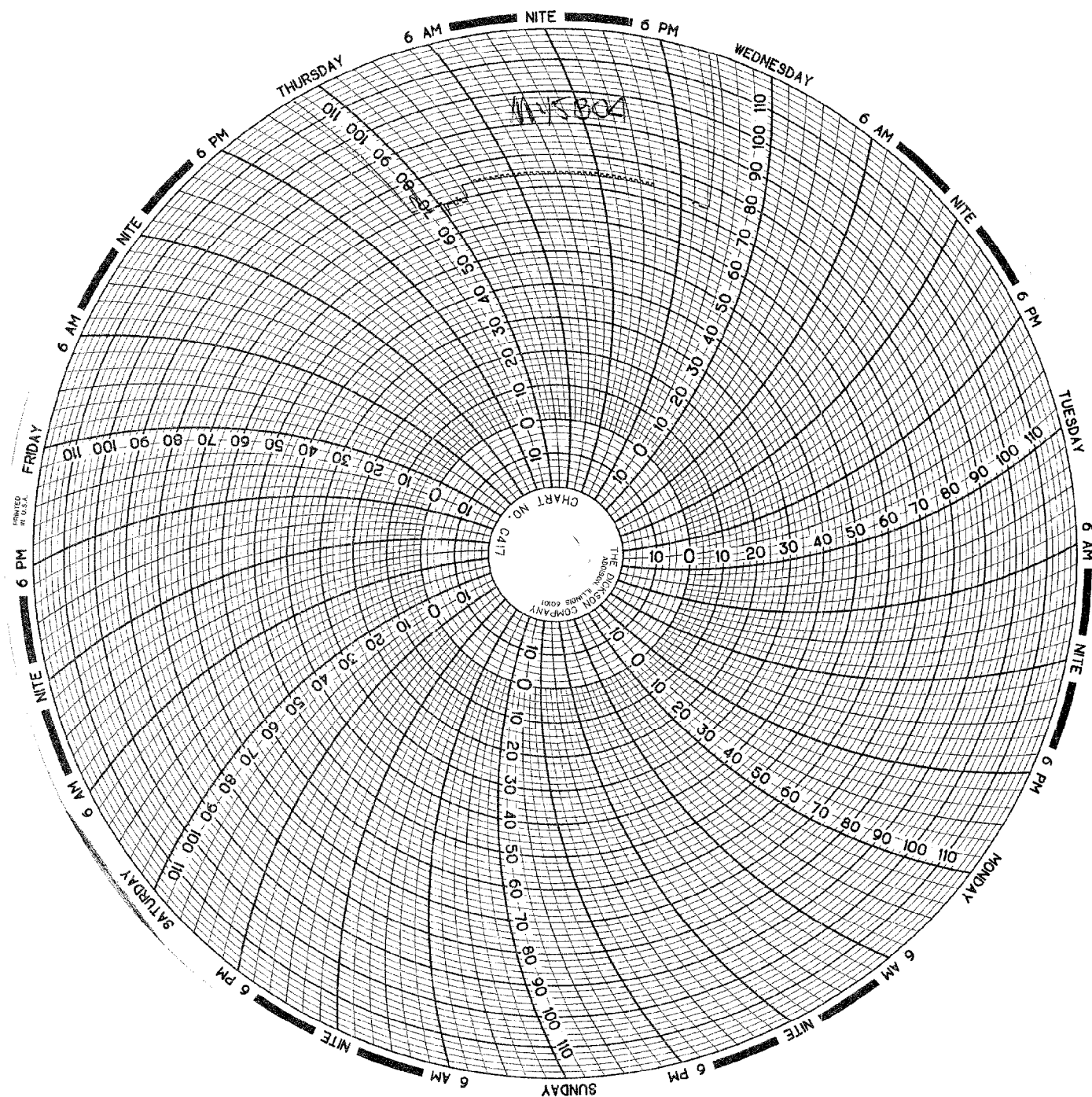
POST TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 268 Sequential Test Number: 4
 Date: March 7, 2000 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



APPENDIX D

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

VEHICLE AND MDB INSTRUMENTATION

	VEHICLE AND MDB INSTRUMENTS		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
RIGHT FRONT SILL (X)	AC-ACC06	ENDEVCO	7-Feb-00
RIGHT FRONT SILL (Y)	AC-B10481	ENDEVCO	7-Feb-00
RIGHT FRONT SILL (Z)	AC-B11351	ENDEVCO	7-Feb-00
RIGHT REAR SILL (X)	AC-J18622	ENDEVCO	4-Feb-00
RIGHT REAR SILL (Y)	AC-APBB6	ENDEVCO	4-Feb-00
RIGHT REAR SILL (Z)	AC-J18649	ENDEVCO	4-Feb-00
REAR FLOORPAN ABOVE AXLE (X)	AC-AP1A2	ENDEVCO	7-Feb-00
REAR FLOORPAN ABOVE AXLE (Y)	AC-B11073	ENDEVCO	7-Feb-00
REAR FLOORPAN ABOVE AXLE (Z)	AC-B10954	ENDEVCO	7-Feb-00
LEFT REAR SILL (Y)	AC-D75	ICS	28-Feb-00
LEFT FRONT SILL (Y)	AC-J18436	ENDEVCO	7-Oct-99
LEFT FRONT DOOR CENTERLINE (Y)	AC-AY03	ENDEVCO	24-Sep-99
RIGHT REAR SEAT OCCUPANT COMP. (Y)	AC-X86	ICS	28-Feb-00
MID REAR OF LEFT FRONT DOOR (Y)	AC-J31026	ENDEVCO	29-Feb-00
LEFT FRONT DOOR UPPER C/L (Y)	AC-BA80	ENDEVCO	24-Sep-99
MID REAR OF LEFT REAR DOOR (Y)	AC-B10951	ENDEVCO	7-Oct-99
LEFT REAR DOOR UPPER C/L (Y)	AC-BC48	ENDEVCO	14-Sep-99
LOWER LEFT B-PILLAR (Y)	AC-Z02	ENTRAN	6-Dec-99
MIDDLE LEFT B-PILLAR (Y)	AC-AC7W8	ENDEVCO	6-Dec-99
LOWER LEFT A-PILLAR (Y)	AC-J18400	ENDEVCO	4-Feb-00
UPPER LEFT A-PILLAR (Y)	AC-AY60	ENDEVCO	14-Sep-99
FRONT SEAT TRACK (Y)	AC-BA65	ENDEVCO	3-Sep-99
REAR SEAT TRACK (Y)	AC-Y171	ICS	23-Nov-99
VEHICLE CG (X)	AC-AP064	ENDEVCO	4-Feb-00
VEHICLE CG (Y)	AC-BB14	ENDEVCO	4-Feb-00
VEHICLE CG (Z)	AC-B10955	ENDEVCO	4-Feb-00
MDB CG (X)	AC-CL60	ENDEVCO	4-Jan-00
MDB CG (Y)	AC-CJ54	ENDEVCO	4-Jan-00
MDB CG (Z)	AC-GK12	ENDEVCO	4-Jan-00
MDB REAR FRAME MEMBER (X)	AC-CX05	ENDEVCO	4-Jan-00
MDB REAR FRAME MEMBER (Y)	AC-A27F	ENDEVCO	4-Jan-00

REMARKS: None

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

SID INSTRUMENTATION

	FRONT SID NO.: 016		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-AE8T7	ENDEVCO	17-Dec-99
HEAD AY	AC-AD4A9	ENDEVCO	17-Dec-99
HEAD AZ	AC-A27A	ENDEVCO	17-Nov-99
UPPER RIB	AC-J33019	ENDEVCO	19-Jan-00
LOWER RIB	AC-J33018	ENDEVCO	19-Jan-00
LOWER SPINE	AC-J33032	ENDEVCO	19-Jan-00
PELVIS	AC-J33030	ENDEVCO	19-Jan-00
UPPER RIB REDUNDANT	AC-J34019	ENDEVCO	19-Jan-00
LOWER RIB REDUNDANT	AC-J32783	ENDEVCO	19-Jan-00
LOWER SPINE REDUNDANT	AC-J33021	ENDEVCO	19-Jan-00
PELVIS REDUNDANT	AC-J32782	ENDEVCO	19-Jan-00

	REAR SID NO.: 268		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-AL6C4	ENDEVCO	4-Feb-00
HEAD AY	AC-GD52	ENDEVCO	4-Feb-00
HEAD AZ	AC-AH5M9	ENDEVCO	4-Feb-00
UPPER RIB	AC-A13599	ENDEVCO	8-Dec-99
LOWER RIB	AC-A14131	ENDEVCO	8-Dec-99
LOWER SPINE	AC-A14381	ENDEVCO	8-Dec-99
PELVIS	AC-A14307	ENDEVCO	8-Dec-99
UPPER RIB REDUNDANT	AC-A14314	ENDEVCO	8-Dec-99
LOWER RIB REDUNDANT	AC-A13883	ENDEVCO	8-Dec-99
LOWER SPINE REDUNDANT	AC-A14510	ENDEVCO	8-Dec-99
PELVIS REDUNDANT	AC-A14126	ENDEVCO	8-Dec-99

REMARKS: None

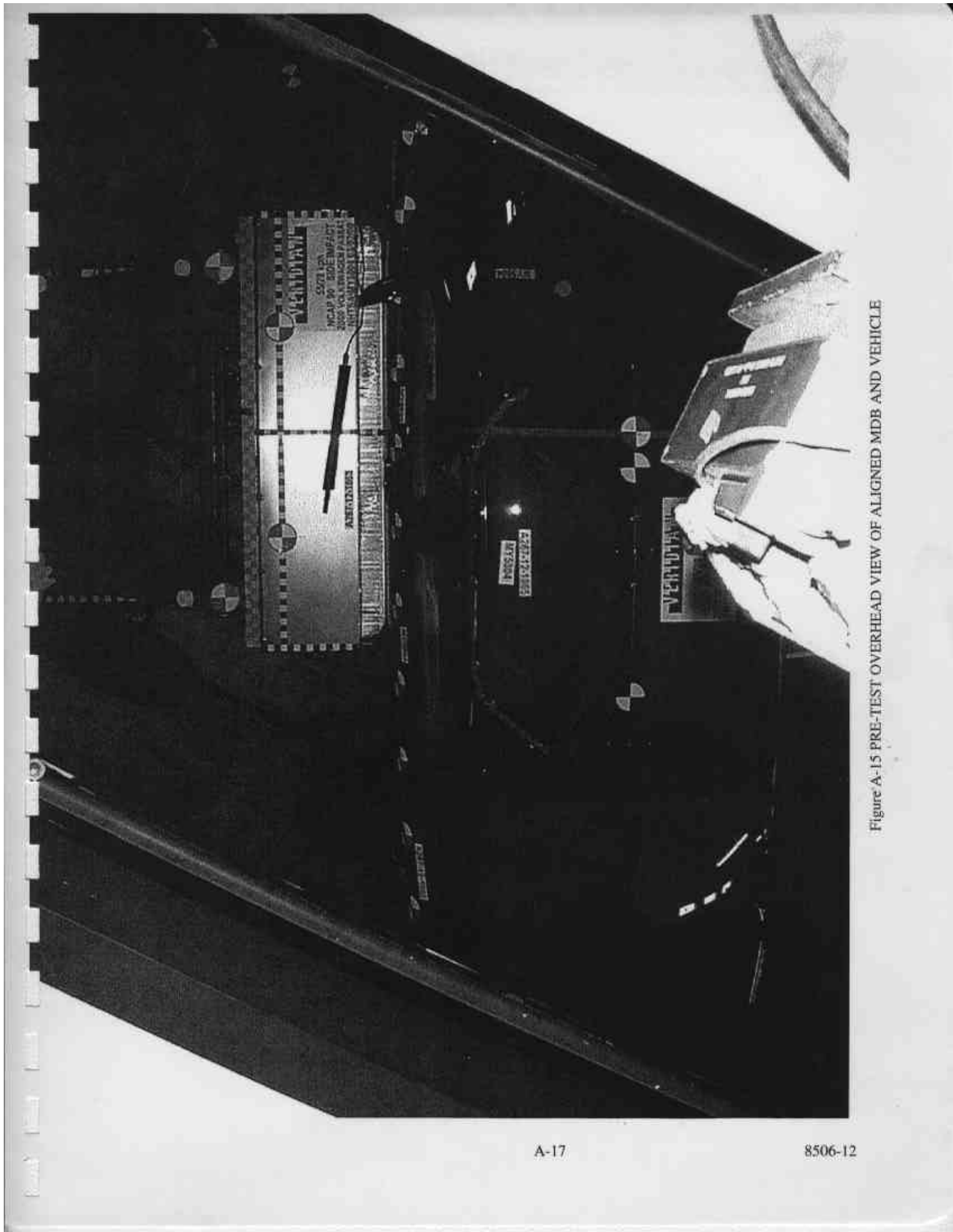


Figure A-15 PRE-TEST OVERHEAD VIEW OF ALIGNED MDB AND VEHICLE

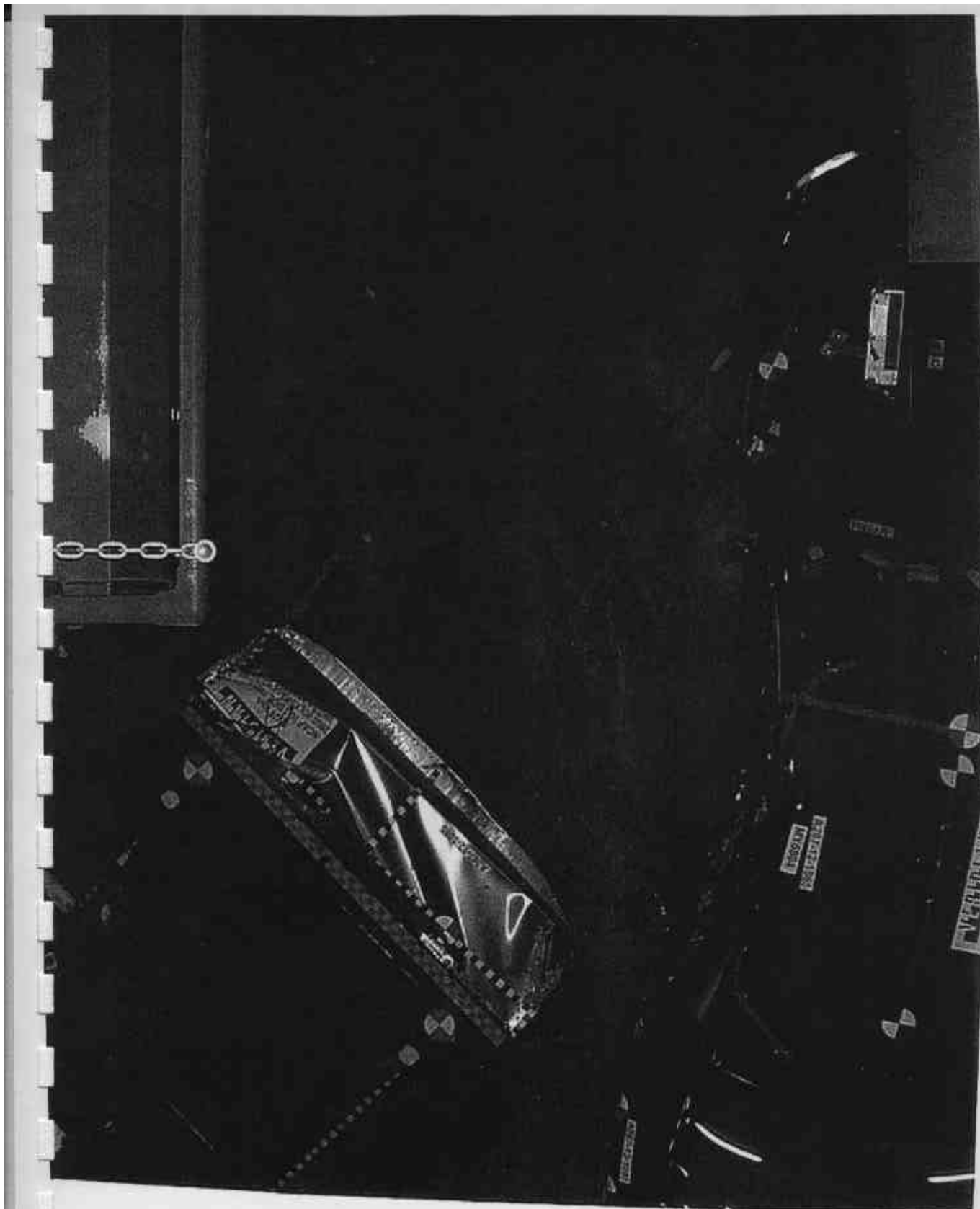


Figure A-16 POST-TEST OVERHEAD VIEW OF MDB AND VEHICLE