

637215

REPORT NUMBER: 214-CAL-04-07

**SAFETY COMPLIANCE TESTING FOR FMVSS 214
SIDE IMPACT PROTECTION
INDICANT**

**DAIMLERCHRYSLER CORPORATION
2004 CHRYSLER CROSSFIRE
THREE-DOOR HATCHBACK**

NHTSA NUMBER: C40305

ADVANCED INFORMATION ENGINEERING SERVICES TEST NUMBER: 8675-F214-17

**GENERAL DYNAMICS
ADVANCED INFORMATION ENGINEERING SERVICES
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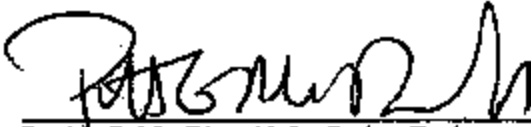
April 20, 2004

FINAL REPORT

**U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Enforcement
Office of Vehicle Safety Compliance
400 Seventh Street, SW
Room 6111 (NVS-220)
Washington, DC 20590**

This Final Test Report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, under Contract No. DTNH22-02-D-01114. This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufactures' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

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16. Abstract A 55/28 kph 90° Side Impact (Moving Deformable Barrier) Inducant Test was conducted on the subject Chrysler Crossfire Three-Door Hatchback. This test was performed at the New Car Assessment Program (NCAP) target test velocity of 62.0 kph, which is 8 kph faster than the target velocity required by the Office of Vehicle Safety Compliance's Laboratory Test Procedure (TP-214D-06, dated July 26, 2001). This test was conducted at the Advanced Information Engineering Services Crash Test Facility in Buffalo, New York, on April 20, 2004. The impact velocity of the Moving Deformable Barrier (MDB) was 61.96 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 207 mm at level 2. The test or target vehicle's performance is given below: <table border="0"> <tr> <td></td> <td align="center"><u>Front SID H3</u></td> <td></td> </tr> <tr> <td>Left Upper Rib Acceleration:</td> <td align="center">43.1</td> <td align="right">g's</td> </tr> <tr> <td>Left Lower Rib Acceleration:</td> <td align="center">47.9</td> <td align="right">g's</td> </tr> <tr> <td>Lower Spine Acceleration:</td> <td align="center">65.3</td> <td align="right">g's</td> </tr> <tr> <td>Thoracic Trauma Index (TTI):</td> <td align="center">57</td> <td align="right">g's</td> </tr> <tr> <td>Pelvis Acceleration (PEV):</td> <td align="center">73</td> <td align="right">g's</td> </tr> </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 H3</u>		Left Upper Rib Acceleration:	43.1	g's	Left Lower Rib Acceleration:	47.9	g's	Lower Spine Acceleration:	65.3	g's	Thoracic Trauma Index (TTI):	57	g's	Pelvis Acceleration (PEV):	73	g's
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17. Key Words Compliance Testing Side Impact Protection FMVSS 214 Side Impact Dummy H3 (SID H3)		18. Distribution Statement Copies of this report are available from: National Highway Traffic Safety Administration Technical Reference Division (TIS) Room 5108 (NPO-230) 400 Seventh St., S.W. Washington, D.C. 20590 Telephone No. (202) 366-4946																			
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SECTION 1

PURPOSE AND TEST PROCEDURE

This side impact test is part of the FMVSS 214 Side Impact Protection Compliance Test Program sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-02-D-01114. The purpose of this indicant test was to evaluate side impact protection in a 2004 Chrysler Crossfire Three-Door Hatchback when tested at the New Car Assessment Program (NCAP) target test velocity of 62.0 kph, which is 8 kph faster than the target velocity required by the Office of Vehicle Safety Compliance's Laboratory Test Procedure (TP-214D-06, dated July 26, 2001).

SECTION 2

SUMMARY OF SIDE IMPACT TEST

This Side Impact Protection Indicant Test was performed at the New Car Assessment Program (NCAP) target test velocity of 62.0 kph, which is 8 kph faster than the target velocity required by the Office of Vehicle Safety Compliance's Laboratory Test Procedure (TP-214D-06, dated July 26, 2001).

A 2004 Chrysler Crossfire Three-Door Hatchback was impacted on the left or driver's side by a Moving Deformable Barrier (MDB) which was moving forward in a 27° crabbed position to the monorail at a velocity of 61.96 kph (38.5 mph). The target vehicle was stationary and was positioned at an angle of 63° to the line of forward motion. The side impact test was conducted by the Advanced Information Engineering Services Transportation Sciences Center in Buffalo, New York on April 20, 2004. Pre- and post-test photographs of the test vehicle, the moving deformable barrier (MDB), and the Side Impact Hybrid III Dummy (SID H3) are included in Appendix A.

One restrained Side Impact Hybrid III Dummy (SID H3) was placed in the driver (Pos. #1) designated seating position according to the instructions specified in the OCWS Side Impact Laboratory Test Procedure which is dated July, 1997. The side impact test was documented by one real-time camera and 8 high-speed cameras. Camera locations and other pertinent camera information are included in this report.

The SID H3 was instrumented with the following accelerometers:

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

A summary of the Side Impact Hybrid III Dummy (SID H3) configuration and verification test data can be found in Appendix C. A total of 42 channels of data were recorded. Appendix B contains the vehicle, MDB and dummy response data traces.

The following table summarizes the results of the test.

Injury Criteria	Front SID H3
TTI (g)	57
PEV (g)	73

AIR BAG DEPLOYMENT STATUS

	DRIVER	FRONT PASSENGER
Front Air Bag	No	No
Knee Bolster Bag	N/A	N/A
Side Air Bag	Yes**	No
Side Curtain Bag	N/A	N/A

** Airbag deployed but did not appear to properly inflate.

ADL Equipped Test Vehicle:	No
ADL Activation Status:	N/A
Struck Side Door Lock Condition:	Unlocked

SECTION 3

SUMMARY OF TEST RESULTS

DATA SHEET 1

GENERAL TEST AND VEHICLE PARAMETER DATA

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 2004 Chrysler Crossfire Three-Door Hatchback
 Vehicle Body Color: White VIN: 1C3AN69L34X000260
 Vehicle NHTSA No.: C40303 Month & Year of Manufacture: 04/03
 Engine Data: 6 Cylinders; - CID; 3.2 Liters; - cc
 Engine Placement: X Longitudinal; or - Lateral
 Transmission: 6 Speed; X Manual; - Automatic; X Overdrive
 Final Drive: X Rear Wheel Drive; - Front Wheel Drive; - Four Wheel Drive
 Odometer Reading 85 km
 Supplemental Airbag Restraints:
 Front Occupant: X Frontal; - Knee; X Side; - Curtain
 Rear Occupant: N/A Frontal; N/A Knee; N/A Side; N/A Curtain
 Options:
X ADL; X A/C; X Power Steering; X Power Brakes; X Power Windows

DATA FROM TIRE PLACARD

Recommended Tire Size: Front: P225/40R18 88W Rear: P255/35R19 92W
 *Recommended Cold Tire Pressure: 220 kpa FRONT; 227 kpa REAR

DATA FROM TIRE SIDEWALL:

Size of Tires on Test Vehicle: Front: P225/40ZR18 92Y Rear: P255/35ZR19 96Y Manufacturer: Michelin
 Tire Pressure with Maximum Capacity Vehicle Load: Front: 275 kPa; Rear: 275 kPa
 Treadwear: 220; Traction: AA; Temperature: A

VEHICLE CAPACITY DATA:

Number of Occupants: 2 Front; - Rear; - 3rd Seat; 2 Total
 Type of Front Seats: X Bucket; - Bench; - Split Bench;
 Type of Rear Seats: N/A Bucket; N/A Bench; N/A Split Bench; N/A Contoured
 Type of Front Seat Back: - Fixed; X Adjustable with X Lever or - Knob
 Type of Rear Seat Back: N/A Fixed; N/A Adjustable with N/A Lever or N/A Knob
 Vehicle Max Capacity Loading = 188.0 kg (A)
 No. of Occupants x 68.04 kg. = 136.08 kg (B)
 Vehicle Cargo Capacity = 51.92 kg (A-B)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

Left Front = 378.0 kg Left Rear = 312.0 kg
 Right Front = 373.0 kg Right Rear = 325.0 kg
 TOTAL FRONT = 751.0 kg TOTAL REAR = 637.0 kg
 % of Total Weight = 54.1% % % of Total Weight = 45.9 %
 TOTAL WEIGHT = 1388.0 kg

* Tire pressure used in test.

DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight with Max. Fluids	=	<u>1388.0</u>	kg (A)
Maximum Cargo Carrying Capacity of Test Vehicle	=	<u>51.92</u>	kg (B)
Weight of instrumented SID H3 Dummies (1 X 81.2 kg)	=	<u>81.2</u>	kg (C)
TEST VEHICLE TARGET WEIGHT:	=	<u>1521.12</u>	kg (A+B+C)

FULLY LOADED TEST VEHICLE (UDVW + 1 SID H3 + CARGO):

Left Front	=	<u>405.0</u>	kg	Left Rear	=	<u>375.0</u>	kg
Right Front	=	<u>374.0</u>	kg	Right Rear	=	<u>370.0</u>	kg
TOTAL FRONT	=	<u>779.0</u>	kg	TOTAL REAR	=	<u>745.0</u>	kg
% of Total Weight	=	<u>51.1%</u>	%	% of Total Weight	=	<u>48.9%</u>	%
TOTAL TEST WEIGHT =		<u>1524.0</u>	kg				

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

Left Front	=	<u>408.0</u>	kg	Left Rear	=	<u>368.0</u>	kg
Right Front	=	<u>373.0</u>	kg	Right Rear	=	<u>366.0</u>	kg
TOTAL FRONT	=	<u>781.0</u>	kg	TOTAL REAR	=	<u>734.0</u>	kg
% of Total Weight	=	<u>51.6%</u>	%	% of Total Weight	=	<u>48.4%</u>	%
TOTAL TEST WEIGHT =		<u>1515.0</u>	kg				

TEST VEHICLE ATTITUDE (all dimensions in millimeters):

AS DELIVERED:

Left Front	<u>682</u>	Right Front	<u>683</u>	Left Rear	<u>729</u>	Right Rear	<u>729</u>
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FULLY LOADED:

Left Front	<u>670</u>	Right Front	<u>674</u>	Left Rear	<u>702</u>	Right Rear	<u>705</u>
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READY FOR TEST:

Left Front	<u>673</u>	Right Front	<u>678</u>	Left Rear	<u>705</u>	Right Rear	<u>707</u>
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Test Vehicle Wheelbase: 2394 millimeters

C.G. = 1159.87 millimeters rearward of front wheel centerline

TOTAL VEHICLE LENGTH:

Right Side =	<u>3905</u>	millimeters
Left Side =	<u>3905</u>	millimeters
Centerline =	<u>4060</u>	millimeters

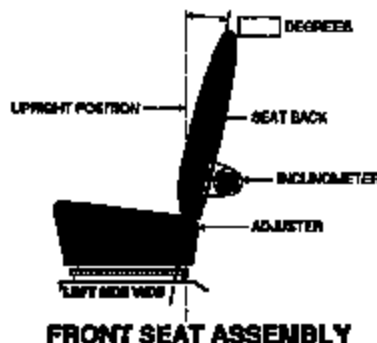
DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305

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: Lowest position at mid angle (13.45°) at mid seat track (97.5 mm)

Total Length of Adjustment Travel: 195 millimeters

Total Number of Adjustment Positions or Detents: Electronic Adjuster

FRONT SEAT BACK ADJUSTMENT POSITION: Positioned to 25° torso angle using the H-point machine

Seat Back Torso Angle: 25 degrees

SECOND POSITION SEAT:

Total Length of Fore/Aft Adjustment Travel: N/A millimeters

Seat Back Adjustment Position: N/A

ADJUSTABLE STEERING COLUMN POSITION: Placed in mid telescope position (20 mm)

WINDOW POSITIONS: Left Front: Closed Left Rear: Fixed
Right Front: Open Right Rear: Fixed

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

AUTOMATIC DOOR LOCKS: Is test vehicle equipped with ADLs? - Yes X No

Does vehicle owner's manual describe how to deactivate ADLs? - Yes - No X N/A

Comments: None

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

60 liters (Fuel Tank Usable Capacity)

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

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

Wheelbase = 2394 Millimeters

Impact Point is 257 millimeters rearward of front axle centerline

(which is 940 millimeters forward of the wheelbase midpoint)

Actual Impact Point is 254 millimeters rearward of front axle centerline

DATA SHEET 2

TEST VEHICLE SUMMARY OF RESULTS

VEHICLE IDENTIFICATION:

Vehicle Year/Make/Model: 2004 Chrysler Crossfire

Body Style: Three-Door Hatchback

VIN: 1C3AN69L34X000260

NHTSA No.: C40305

Test Date: April 20, 2004

Overall Length = 4060 millimeters; Overall Width = 1760 millimeters

VEHICLE TEST WEIGHT (Pre-Test):

Left Front	=	<u>408.0</u>	kg	Left Rear	=	<u>368.0</u>	kg
Right Front	=	<u>373.0</u>	kg	Right Rear	=	<u>366.0</u>	kg
TOTAL FRONT	=	<u>781.0</u>	kg	TOTAL REAR	=	<u>734.0</u>	kg
TOTAL VEHICLE WEIGHT		<u>1515.0</u>	kg				

Wheelbase = 2394 millimeters

Longitudinal C.G. from Center of Front Axle = 1159.87 millimeters

Impact Angle with Respect to Impactor = 90 degrees

ACTUAL IMPACT POINT

Actual Impact Point is 3 mm forward of nominal impact ref. line (Lateral)

Actual Impact Point is 0 mm on the nominal impact point (Vertical)

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (	<u>234</u>	mm above ground)	=	<u>64</u>	millimeters
2. LEVEL 2 (	<u>406</u>	mm above ground)	=	<u>207</u>	millimeters
3. LEVEL 3 (	<u>624</u>	mm above ground)	=	<u>179</u>	millimeters
4. LEVEL 4 (	<u>844</u>	mm above ground)	=	<u>145</u>	millimeters
5. LEVEL 5 (	<u>1204</u>	mm above ground)	=	<u>3</u>	millimeters

Maximum Post-Test Intrusion = 207 millimeters

OCCUPANTS:

Front Passenger:

Dummy Identification SID H3/269

Restraints Used Three-point safety belt and door mounted airbag.

INSTRUMENTATION:

Number of Vehicle Data Channels:	=	<u>20</u>
Number of Cameras:		
Onboard	=	<u>2</u>
Offboard	=	<u>6</u>
TOTAL	=	<u>8</u>

DATA SHEET 3

MOVING DEFORMABLE BARRIER (MDB) SUMMARY

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305

MDB FACE MANUFACTURER AND SERIAL NUMBER:

Plascore, Inc. 115A0204 071B0304-3

POSITION OF IMPACT (MDB) ON MONORAIL:

Crabbed 27° to left

MDB DETAILS:

Overall Width of Framework Carriage	=	<u>1250</u>	millimeters
Overall Length of MDB (incl. honeycomb impact face)	=	<u>4120</u>	millimeters
Wheelbase of Framework Carriage	=	<u>2590</u>	millimeters
Tread of Framework Carriage (Front & Rear)	=	<u>1875</u>	millimeters
C.G. Location Rearward of Front Axle	=	<u>1104</u>	millimeters

MDB WEIGHT:

Left Front	=	<u>409.5</u>	kg	Left Rear	=	<u>281.5</u>	kg
Right Front	=	<u>372.5</u>	kg	Right Rear	=	<u>299.0</u>	kg
TOTAL FRONT =		<u>782.0</u>	kg	TOTAL REAR =		<u>580.5</u>	kg
TOTAL MDB WEIGHT =		<u>1362.5</u>	kg				
Impact Angle (MDB C/L to Target Vehicle C/L)	=	<u>90</u>	degrees				
Impact Speed	=	<u>61.96</u>	kph				

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

1. Row A at Center of Bumper Level	=	<u>174</u>	millimeters
2. Row B at Top of Bumper Level	=	<u>128</u>	millimeters
3. Row C at Mid Level	=	<u>132</u>	millimeters
4. Row D at Top of Stack Level	=	<u>156</u>	millimeters

INSTRUMENTATION:

Number of MDB Data Channels = 5

DATA SHEET 4

POST-TEST OBSERVATIONS

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305

TEST DUMMY INFORMATION AND CONTACT POINTS:

DESCRIPTION	FRONT SEAT
ATD Type/Serial No.	SID H3/269
Head Contact:	The top of the head to the side roof rail.
Upper Torso Contact:	Interior door trim panel
Lower Torso Contact:	Airbag
Left Knee Contact:	Interior door trim panel
Right Knee Contact:	Left knee

POST TEST DOOR OPENING AND SEAT TRACK INFORMATION

DESCRIPTION	FRONT	REAR
Left Side Doors	Closed, latched and operable without tools	N/A
Right Side Doors	Closed, latched and operable without tools	N/A
Hatch/Other Door	N/A	Closed, latched and operable without tools
Seat Movement (mm)	0	N/A
Seat Back Failure	None	N/A

POST TEST STRUCTURAL OBSERVATIONS

CRITICAL AREAS OF PERFORMANCE	
Pillar Performance	The A-pillar was moved inboard during the event with no visible tears or separations
SH Separation	No visible tears or separations were present.
Windshield Damage	The windshield was cracked along the left A-Pillar
Window Damage	The left side door window glass shattered during the event
Other Notable Effects	The driver side airbag did not appear to properly inflate.

AIR BAG DEPLOYMENT STATUS:

	DRIVER	FRONT PASSENGER
Front Air Bag	No	No
Knee Bolster Bag	N/A	N/A
Side Air Bag	Yes**	No
Side Curtain Bag	N/A	N/A

** Airbag deployed but did not appear to properly inflate.

MDB LEFT EDGE IMPACT DATA

Measured Parameter	Units	Requirement	Value
Horizontal Offset	mm	± 50 mm	3 mm forward
Vertical Offset	mm	± 20 mm	0

SECTION 4

OCCUPANT AND VEHICLE INFORMATION

DATA SHEET 5

SID H3 INSTRUMENTATION DATA

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305

		Front Dummy ID# 269			
		Pos. Direction		Neg. Direction	
		Max (g)	Time (msec)	Max (g)	Time (msec)
HEAD ACCELERATIONS					
Longitudinal	X	3.8	68.9	-27.0	47.9
Lateral	Y	91.3	44.3	-3.9	77.2
Vertical	Z	19.3	39.3	-11.1	52.1
Resultant	R	94.7	44.3	0.0	-15.5
HIC		487.8			
NECK FORCES					
Longitudinal	X	111.3	69.8	-127.2	39.5
Lateral	Y	810.3	45.2	-162.4	74.7
Vertical	Z	666.5	39.0	-1551.1	48.4
Resultant	R	1710.2	48.4	0.1	-18.6
NECK MOMENTS					
X		16.9	111.0	-128.7	48.6
Y		22.8	105.6	-37.9	51.5
Z		10.9	98.7	-12.5	50.8
Resultant	R	133.4	48.7	0.0	-18.0
RIB ACCELERATIONS					
Upper Rib Lateral	Y	43.1	41.2	-6.3	76.8
Upper Rib Lateral	Y(R)	43.2	41.2	-6.5	91.2
Lower Rib Lateral	Y	47.9	41.2	-8.9	90.7
Lower Rib Lateral	Y(R)	47.7	41.2	-8.9	91.2
SPINE ACCELERATIONS					
Lower Lateral	Y	65.3	40.7	-10.2	70.0
Lower Lateral	Y(R)	65.4	40.7	-10.3	69.4
PELVIS ACCELERATIONS					
Lateral	Y	73.0	36.9	-7.1	61.2
Lateral	Y(R)	74.1	36.9	-7.6	61.2

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

Note: Rib, Spine and Pelvis data has been FIR filtered, Y(R) denotes redundant Y direction accelerometer.

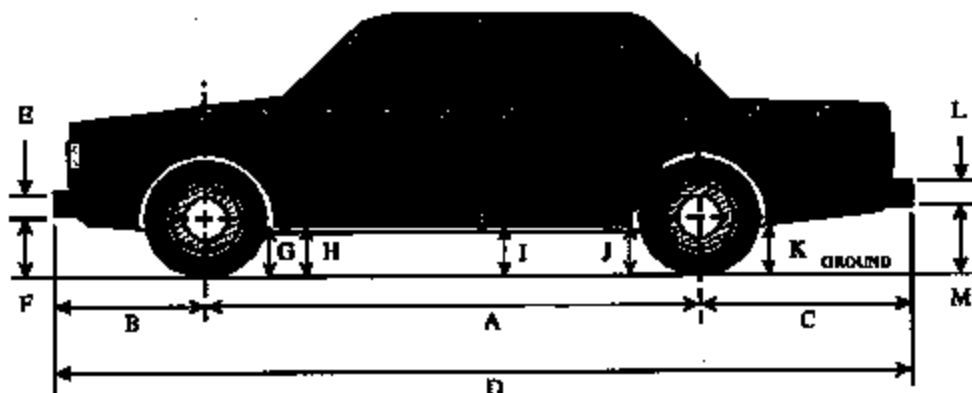
Head Accelerations and Neck Forces are filtered at SAE Class 1000, Neck Moments are filtered at SAE Class 600.

DATA SHEET 6

VEHICLE SIDE MEASUREMENTS

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305



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	2400	2394	2374	-20
B	825	-	829	4
C	835	-	852	17
D	4060	-	4055	-5
E	192	-	192	0
F	130	110	210	100
G	153	135	188	33
H	161	140	178	38
I	168	152	178	26
J1	175	152	190	38
J2	175	152	190	38
K	237	210	218	8
L	160	-	160	0
M	388	364	374	10
N	650	-	610	-40
O	359	-	354	-5
P	903	-	882	-21
Q	317	-	287	-30
R	3905	-	3910	5
S	3905	-	3900	-5
T	1760	-	1700	-60

D = Length at Centerline

E&L = Bumper Thickness

R = Right Side Length

S = Left Side Length

T = Width at B-Pillar

J1 = To Pinch Weld

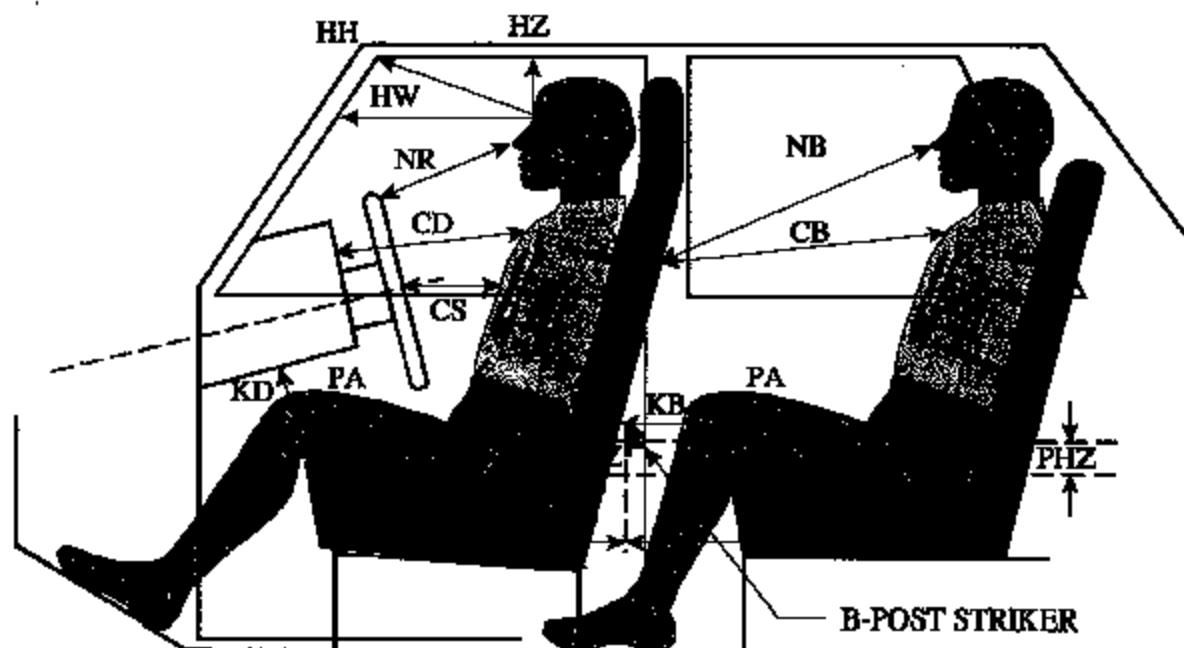
J2 = To Sill

DATA SHEET 7

SID H3 LONGITUDINAL CLEARANCE DIMENSIONS

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305



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# 269	
HH	515
HW	607
HZ	132
NR/NB	463
CD/CB	550
CS	310
KDL(KDA°)/KBL(KBA°)	177 / (25.6 °)
KDR(KHA°)/KBR(KBA°)	176 / (32 °)
PA°	23 °
PHX	378
PHZ	279

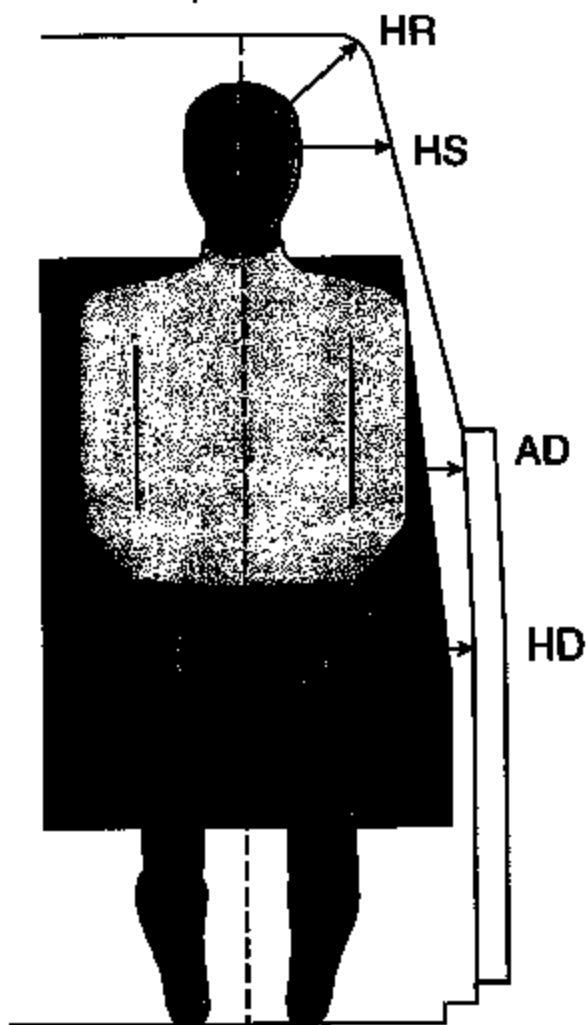
Note: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as a reference point.

DATA SHEET 8

SID H3 LATERAL CLEARANCE DIMENSIONS

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305



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

DRIVER ID # 269			
HR	136		
HS	249		
AD*	LOWER:	73	UPPER: 69
HD	162		

* Lower measurement is taken laterally at the center of the lower rib accelerometer height from the SID H3 arm segment to the closest part of the vehicle side.

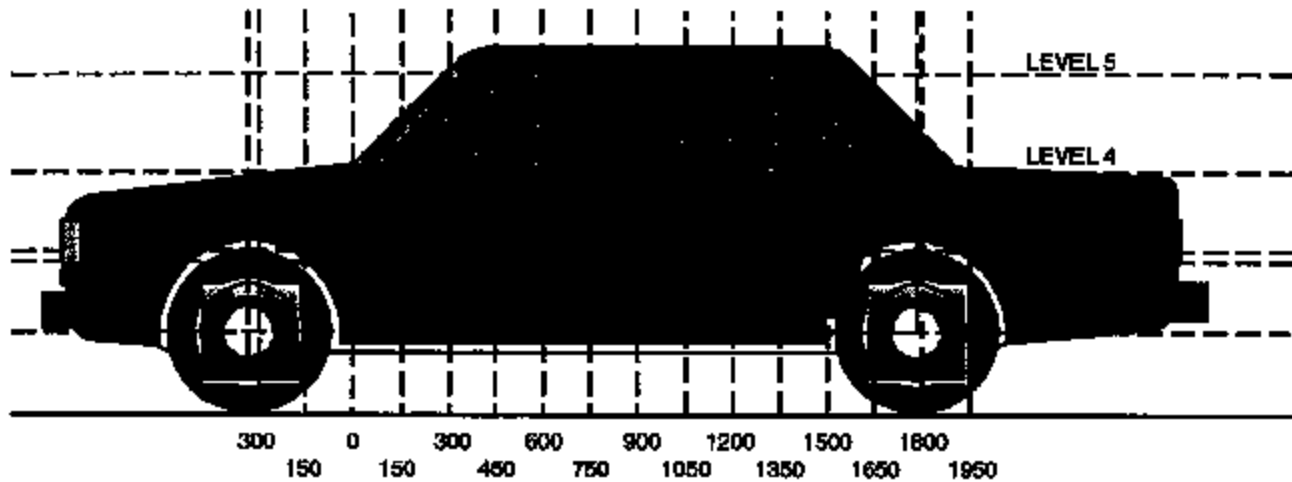
Upper measurement is taken laterally at the center of the upper rib accelerometer height from the SID H3 arm segment to the closest part of the vehicle side.

DATA SHEET 9

VEHICLE SIDE MEASUREMENTS

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305



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:

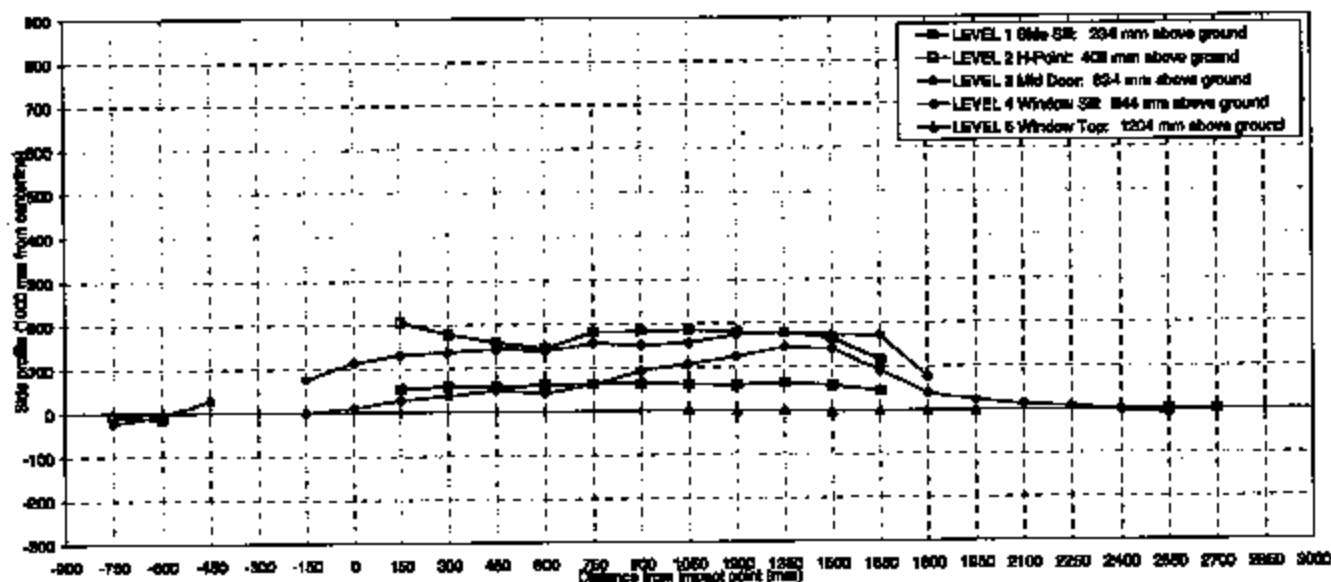
Level 5 @ Window Top	=	<u>1204</u>	millimeters
Level 4 @ Window Sill	=	<u>844</u>	millimeters
Level 3 @ Mid Door	=	<u>624</u>	millimeters
Level 2 @ Occupant H-Point	=	<u>406</u>	millimeters
Level 1 @ Axle Centerline Height (or Sill Top Height)	=	<u>234</u>	millimeters

DATA SHEET 10

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305



NOTE: All dimensions are in millimeters with a tolerance of ± 5 mm.

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

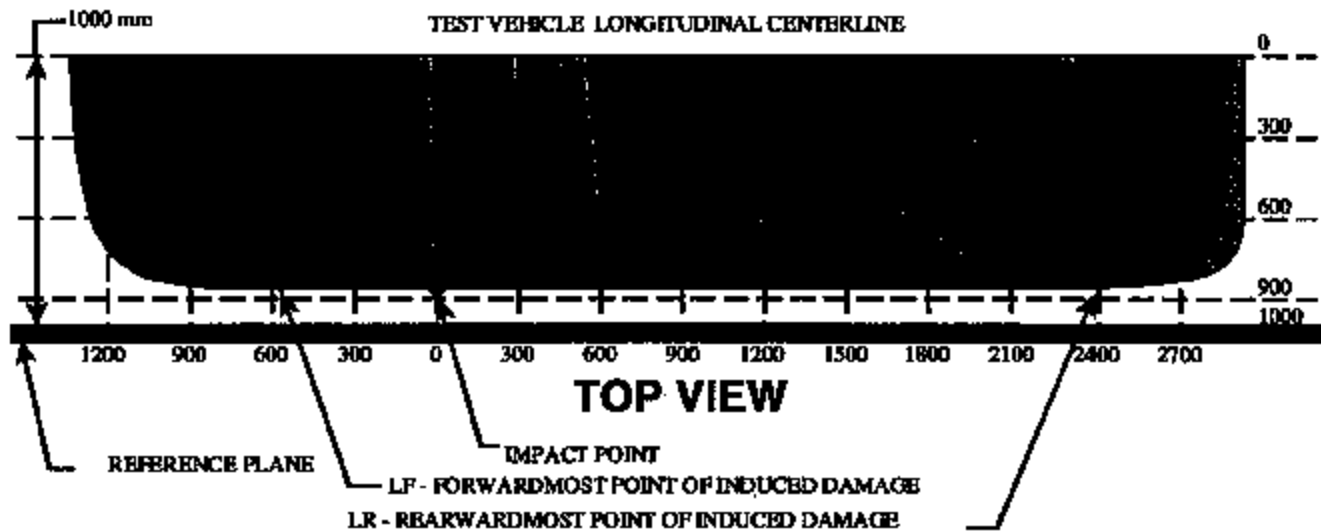
		DISTANCE IN MILLIMETERS (mm) FROM IMPACT POINT																												
LEVEL	HEIGHT (mm)		900	750	600	450	300	150	130	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000		
LEVEL 1 SIDE BELL	234	FRONT	---	---	---	---	---	---	368	182	163	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161		
		REAR	---	---	---	---	---	---	222	221	219	223	223	224	222	220	226	223	220	---	---	---	---	---	---	---	---	---		
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	94	59	56	61	63	63	61	59	64	57	44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
LEVEL 2 H POINT	406	FRONT	---	194	156	---	---	---	140	157	153	150	147	146	143	147	149	148	147	---	---	---	---	---	---	158	210	---	---	
		REAR	---	188	153	---	---	---	347	334	311	286	327	329	330	327	327	313	282	---	---	---	---	---	---	157	209	---	---	
		CRUSH	N/A	6	13	N/A	N/A	N/A	207	177	159	146	180	183	183	180	176	165	113	N/A	N/A	N/A	N/A	N/A	N/A	4	1	N/A	N/A	
LEVEL 3 MID DOOR	624	FRONT	---	234	180	147	---	151	154	153	146	139	136	133	133	132	132	131	129	124	---	---	---	---	---	134	133	240	---	---
		REAR	---	212	175	175	---	228	206	292	290	278	291	283	289	306	311	303	299	202	---	---	---	---	---	151	133	235	---	---
		CRUSH	N/A	22	3	28	N/A	77	132	137	144	139	157	153	156	174	179	172	170	76	N/A	N/A	N/A	3	2	2	N/A	N/A		
LEVEL 4 WINDOW BELL	844	FRONT	---	---	---	---	---	433	221	214	207	203	198	196	196	183	182	172	171	170	170	169	168	162	229	---	---	---		
		REAR	---	---	---	---	---	432	240	251	237	245	259	261	304	318	327	313	261	208	192	181	175	184	218	---	---	---		
		CRUSH	N/A	N/A	N/A	N/A	N/A	1	28	37	30	42	61	63	108	125	143	141	90	38	22	12	7	0	11	N/A	N/A	N/A		
LEVEL 5 WINDOW TOP	1204	FRONT	---	---	---	---	---	---	---	---	---	---	---	---	443	435	433	438	432	479	546	---	---	---	---	---	---	---		
		REAR	---	---	---	---	---	---	---	---	---	---	---	---	446	435	436	434	431	475	543	---	---	---	---	---	---	---		
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3	0	1	-2	-1	-3	-3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

DATA SHEET 11

VEHICLE DAMAGE PROFILE DISTANCES

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305



MEASUREMENT CONVENTIONS:

Forward of the impact point (towards front of vehicle) is considered negative (—).
Rearward of the impact point (toward rear of vehicle) is considered positive (+).

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

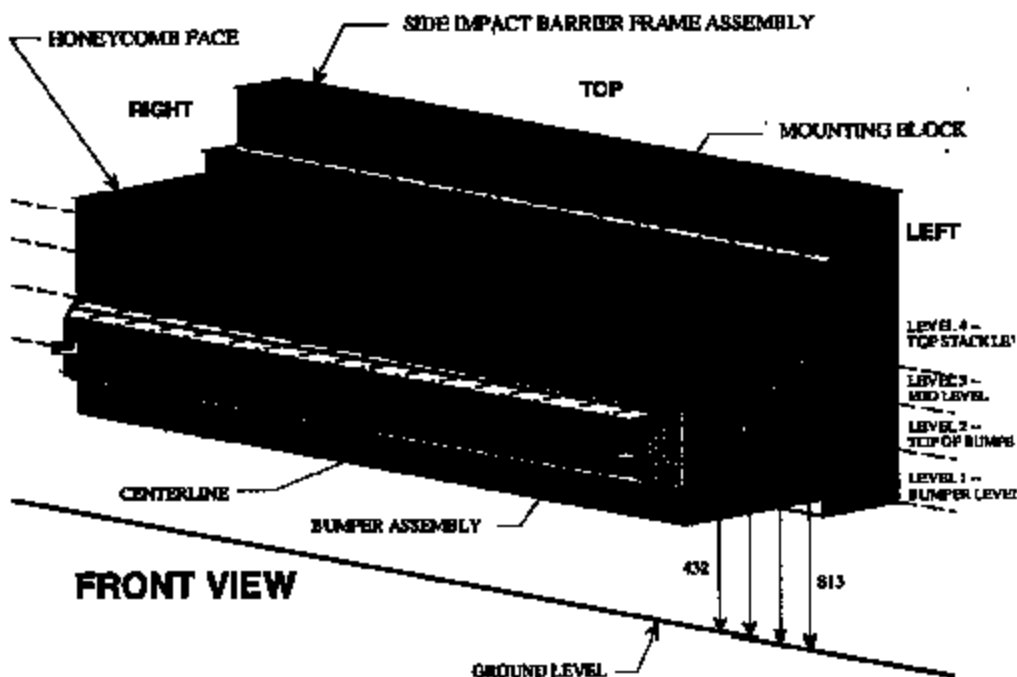
DPD MEASUREMENTS		POST TEST (mm)	PRETEST (mm)	STATIC CRUSH (mm)
1	(LR = 2400 mm)	182	182	0
2	1805	207	170	37
3	1210	327	147	180
4	615	299	150	149
5	20	256	139	117
6	(LF = -575 mm)	175	175	0

DATA SHEET 12

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305



NOTE: Dimensions are shown in millimeters, mm

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

LEVEL	HEIGHT AT CL (mm)*		DISTANCE RIGHT OF CENTER (mm)								DISTANCE LEFT OF CENTER (mm)							
			800	700	600	500	400	300	200	100	100	200	300	400	500	600	700	800
LEVEL 4 TOP STACK	813	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	775	718	671	639	633	637	646	654	688	723	744	731	688	690	701	711
		CRUSH	156	99	32	20	14	18	27	35	69	102	123	112	69	71	82	92
LEVEL 3 MID LEVEL	686	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	751	698	658	648	646	644	641	642	660	680	712	725	690	680	683	693
		CRUSH	132	79	39	29	27	25	22	23	41	61	93	106	71	61	64	74
LEVEL 2 TOP BUMPER	333	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	747	729	719	704	697	683	701	704	717	722	731	731	726	727	728	725
		CRUSH	128	110	100	85	78	76	82	83	98	103	112	112	107	108	109	106
LEVEL 1 MID BUMPER	432	PRE	535	519	518	518	518	518	518	518	518	518	518	518	518	518	519	535
		POST	709	680	662	646	635	632	633	639	642	656	677	665	654	650	649	664
		CRUSH	174	161	144	128	117	114	115	117	124	138	159	147	136	132	130	125

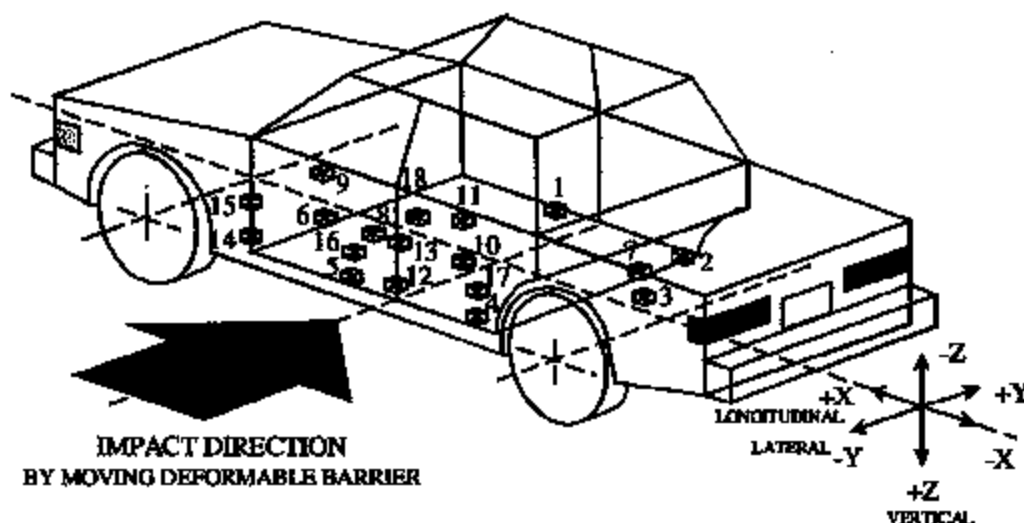
*Height measured above ground level.

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305



- 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

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305

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)
1	Right Side Sill at Front Seat	2202	670	-274	pos. 3.2	54.3	25.7	15.4	2.9	27.1	26.2
					neg. -7.2	19.6	-3.1	76.4	-11.1	9.4	0.0
2	Right Side Sill at Rear Seat	846	458	-536	pos. 5.9	53.3	25.6	29.7	7.1	27.3	26.4
					neg. -7.3	5.7	-2.6	76.2	-4.1	55.1	0.0
3	Rear Floorpan Above Axle	846	10	-426	pos. 2.0	77.1	24.6	30.1	5.0	8.4	24.6
					neg. -7.6	17.7	-2.2	111.0	-8.8	20.5	0.0
4	Left Side Sill at Rear Seat	846	-458	-536	pos. -	-	24.6	27.8	-	-	-
					neg. -	-	-2.3	110.6	-	-	-
5	Left Side Sill at Front Seat	2270	-648	-244	pos. -	-	§	§	-	-	-
					neg. -	-	§	§	-	-	-
6	Left Front Door on Centerline	-	-	-	pos. -	-	-	-	-	-	-
					neg. -	-	-	-	-	-	-
7	Right Rear Occupant Compartment	846	427	-426	pos. -	-	23.8	23.7	-	-	-
					neg. -	-	-2.6	76.2	-	-	-
8	Midrear of Left Front Door	-	-	-	pos. -	-	-	-	-	-	-
					neg. -	-	-	-	-	-	-
9	Left Front Door Upper Centerline	-	-	-	pos. -	-	-	-	-	-	-
					neg. -	-	-	-	-	-	-
10	Midrear of Left Rear Door	-	-	-	pos. -	-	-	-	-	-	-
					neg. -	-	-	-	-	-	-
11	Left Rear Door Upper Centerline	-	-	-	pos. -	-	-	-	-	-	-
					neg. -	-	-	-	-	-	-

*Reference: X - Rear Bumper (+ Forward)

Y - Vehicle Centerline (+ To Right)

Z - Ground Level (+ Down)

§ - Data is questionable after 5 ms.

**Accelerometer was not requested by COTR.

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305

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	1325	-572	-504	-	-	74.1	9.1	-	-	-	-
					-	-	-36.1	18.8	-	-	-	-
13	Left Middle B-Pillar	1055	-469	-878	-	-	28.0	22.5	-	-	-	-
					-	-	-2.4	109.8	-	-	-	-
14	Left Lower A-Pillar	2452	-655	-339	-	-	†	†	-	-	-	-
					-	-	†	†	-	-	-	-
15	Left Middle A-Pillar	2326	-614	-903	-	-	68.0	10.8	-	-	-	-
					-	-	-44.2	7.5	-	-	-	-
16	Front Seat Track	1488	-556	-213	-	-	37.9	4.7	-	-	-	-
					-	-	-2.7	119.8	-	-	-	-
17	Rear Seat Track	-	-	-	-	-	-	-	-	-	-	-
					-	-	-	-	-	-	-	-
18	Vehicle CG	1570	74	-440	4.1	45.4	32.3	29.9	12.0	31.0	35.4	29.9
					-8.8	29.4	-3.8	52.5	-16.3	23.4	0.0	-10.7

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

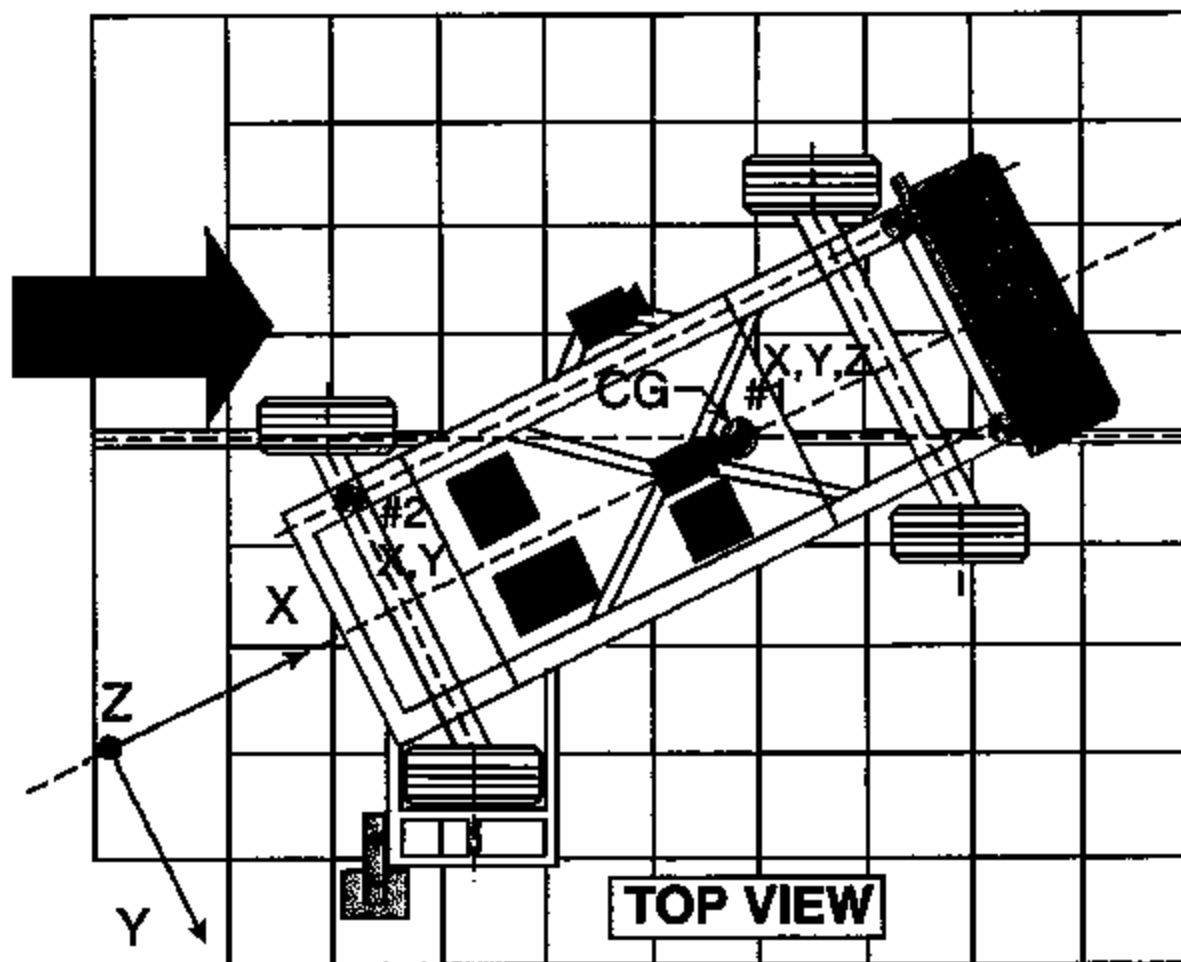
† - Data is questionable

DATA SHEET 14

MDB ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305



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	1.4	74.9	-22.9	26.8
	Lateral..... Y				0.2	61.0	-7.5	20.3
	Vertical..... Z				7.9	53.9	-13.0	16.3
	Resultant..... R				23.4	38.4	0.3	182.4
2	Rear Frame Member							
	Longitudinal... X	386	-660	-660	1.9	97.8	-25.2	33.5
	Lateral..... Y				4.6	21.2	-1.7	119.6

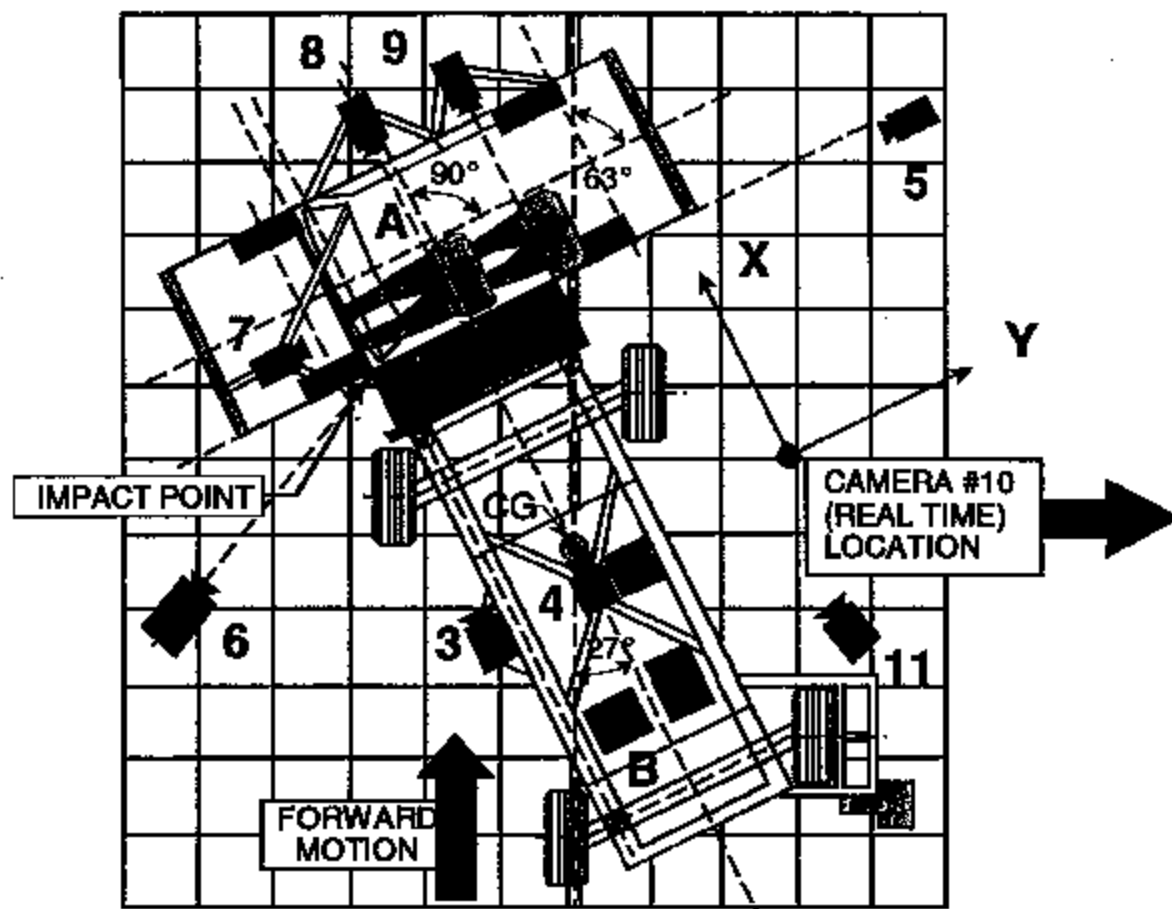
*Reference: X = Rear Bumper (+ Forward)
 Y = Vehicle Centerline (+ To Right)
 Z = Ground Level (+ Down)
 All measurements accurate to within ± 3 mm.

DATA SHEET 15

HIGH SPEED CAMERA LOCATIONS AND DATA SUMMARY

Vehicle: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No. C40305



Camera No.	View	Coordinates (millimeters)			Angle (deg.)	Lens (mm)	Film Speed (fps)
		X*	Y*	Z*			
1	Overhead view of test vehicle	222	828	-4880	-90	8	1045
2	Overhead closeup view of impact plane	332	872	-4880	-90	12.5	1020
3	MDB onboard closeup view of impact point	-1470	0	-847	0	13	1015
4	MDB onboard view of driver dummy	-1140	838	-1586	-17	7.5	1025
5	Right side ground level overall view	-805	8692	-1101	-3	25	1025
6	Left side ground level overall view	-1824	-1500	-1040	-15	13	1000
7	Test vehicle onboard driver front view	578	0	-1950	-7	13	1005
8	Test vehicle onboard driver side view	1730	1278	-1050	-10	8	1000
9	Test vehicle onboard passenger side view	-	-	-	-	-	-
10	Real time film coverage of test	-	-	-	-	-	24

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

X = (Impact Point) + Forward

Y = (Impact Point) + To Right

Z = (Ground Level) + Down

SECTION 5

FUEL SYSTEM INTEGRITY

DATA SHEET 16

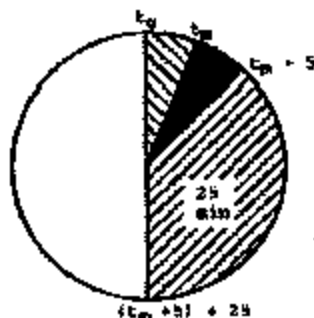
FMVSS 301 FUEL SYSTEM INTEGRITY DATA

NHTSA No.: C40305 TEST DATE: April 20, 2004
 Vehicle Mfg./Make/Model: DaimlerChrysler Corporation 2004 Chrysler Crossfire Three-Door Hatchback

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: 2004 Chrysler Crossfire Three-Door Hatchback

NHTSA No.: C40305



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Stage	Rotation Time (spec. 1 - 3 min)				FMVSS 301 Hold Time		Total Time				Next Whole Minute Interval	
0° - 90°	1	minutes	12	seconds	5	minutes	6	minutes	12	seconds	7	minutes
90° - 180°	1	minutes	08	seconds	5	minutes	6	minutes	8	seconds	7	minutes
180°-270°	1	minutes	04	seconds	5	minutes	6	minutes	4	seconds	7	minutes
270°-360°	1	minutes	10	seconds	5	minutes	6	minutes	10	seconds	7	minutes

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

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

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

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

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

IV. SOLVENT SPILLAGE LOCATION(S):

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

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Figure A- 35	CLOSE-UP VIEW OF VEHICLE'S TIRE PLACARD LABEL	A- 37
Figure A- 36	IMPACT PHOTO	A- 38
Figure A- 37	ROLLOVER 90 DEGREES	A- 39
Figure A- 38	ROLLOVER 180 DEGREES	A- 40
Figure A- 39	ROLLOVER 270 DEGREES	A- 41
Figure A- 40	ROLLOVER 360 DEGREES	A- 42

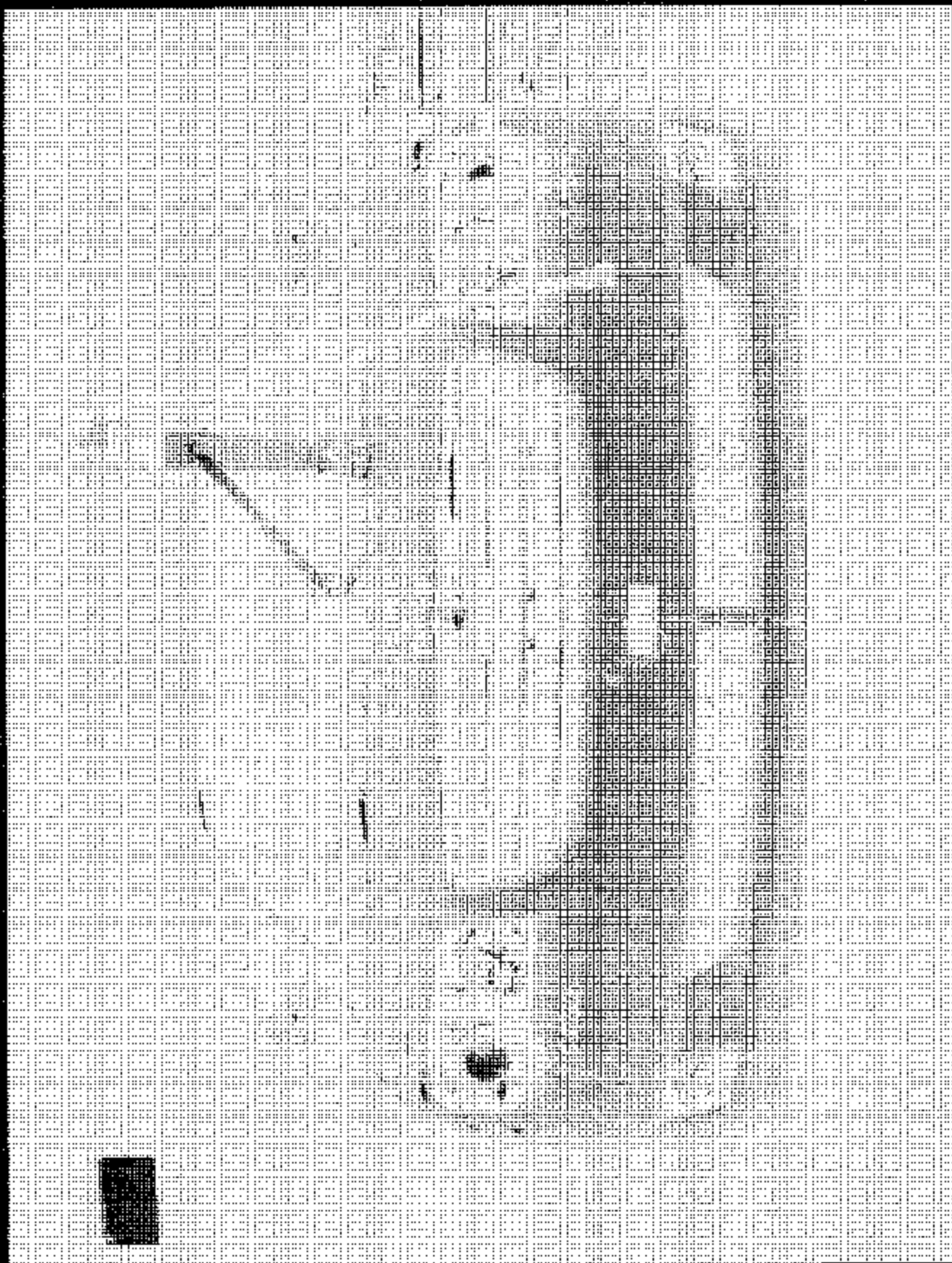


Figure A-1 PRE-TEST FRONTAL VIEW OF TEST VEHICLE

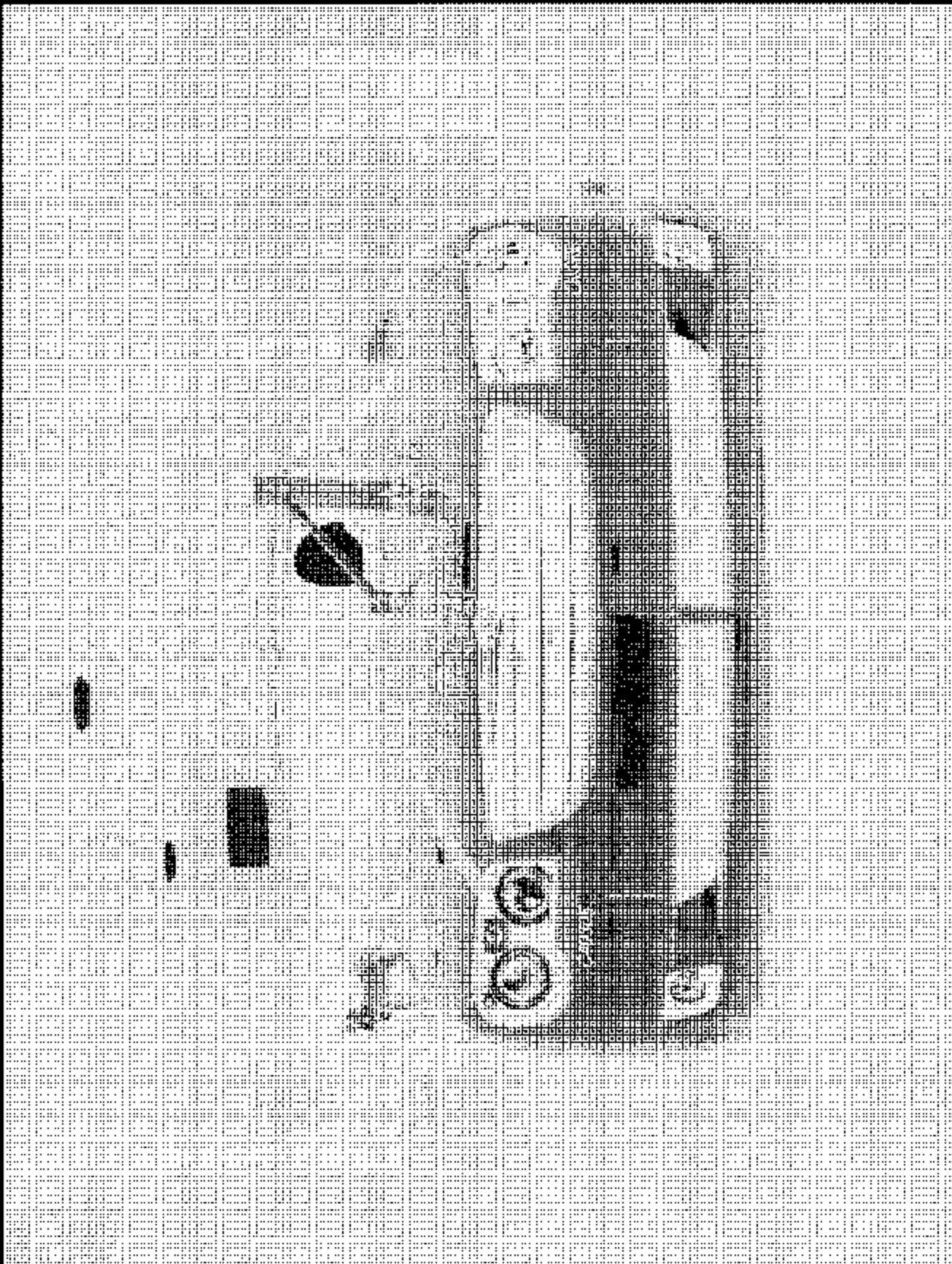


Figure A-2 Front-Test Frontal View of Test Vehicle

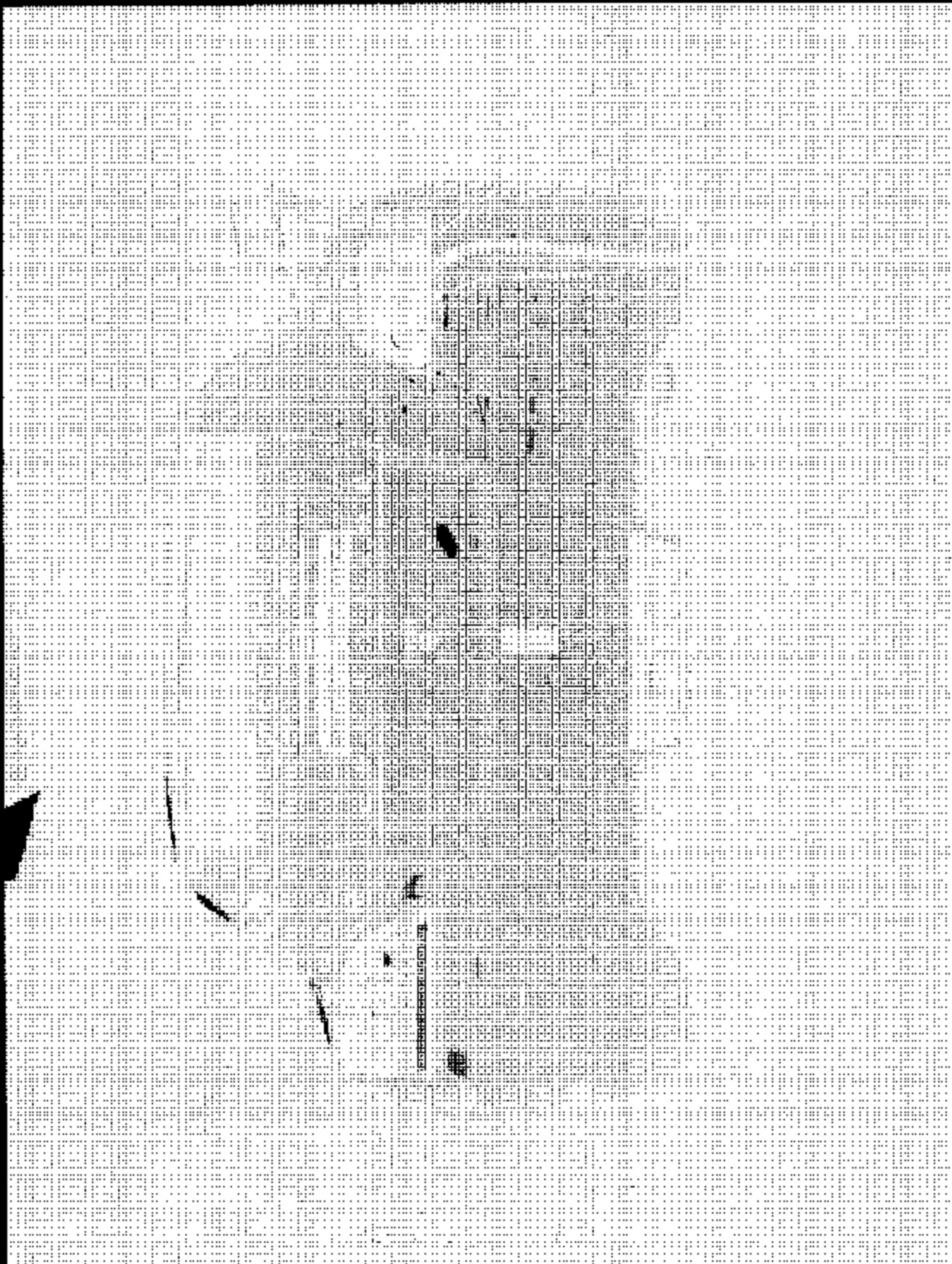


Figure A-3 PRE-TEST REAR VIEW OF TEST VEHICLE



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

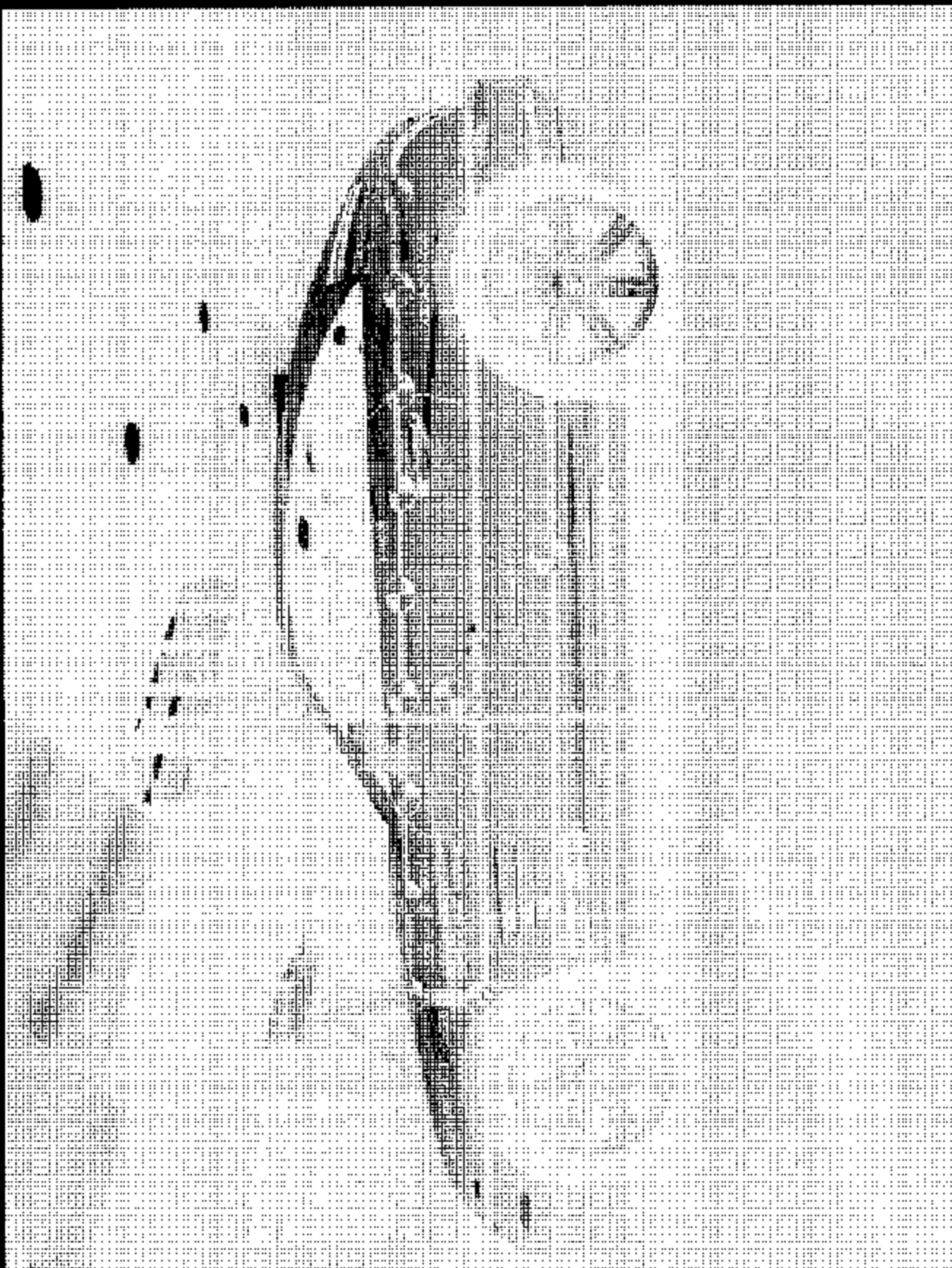


FIGURE A-5 PRE-TEST IMPACTED SIDE VIEW OF TEST VEHICLE

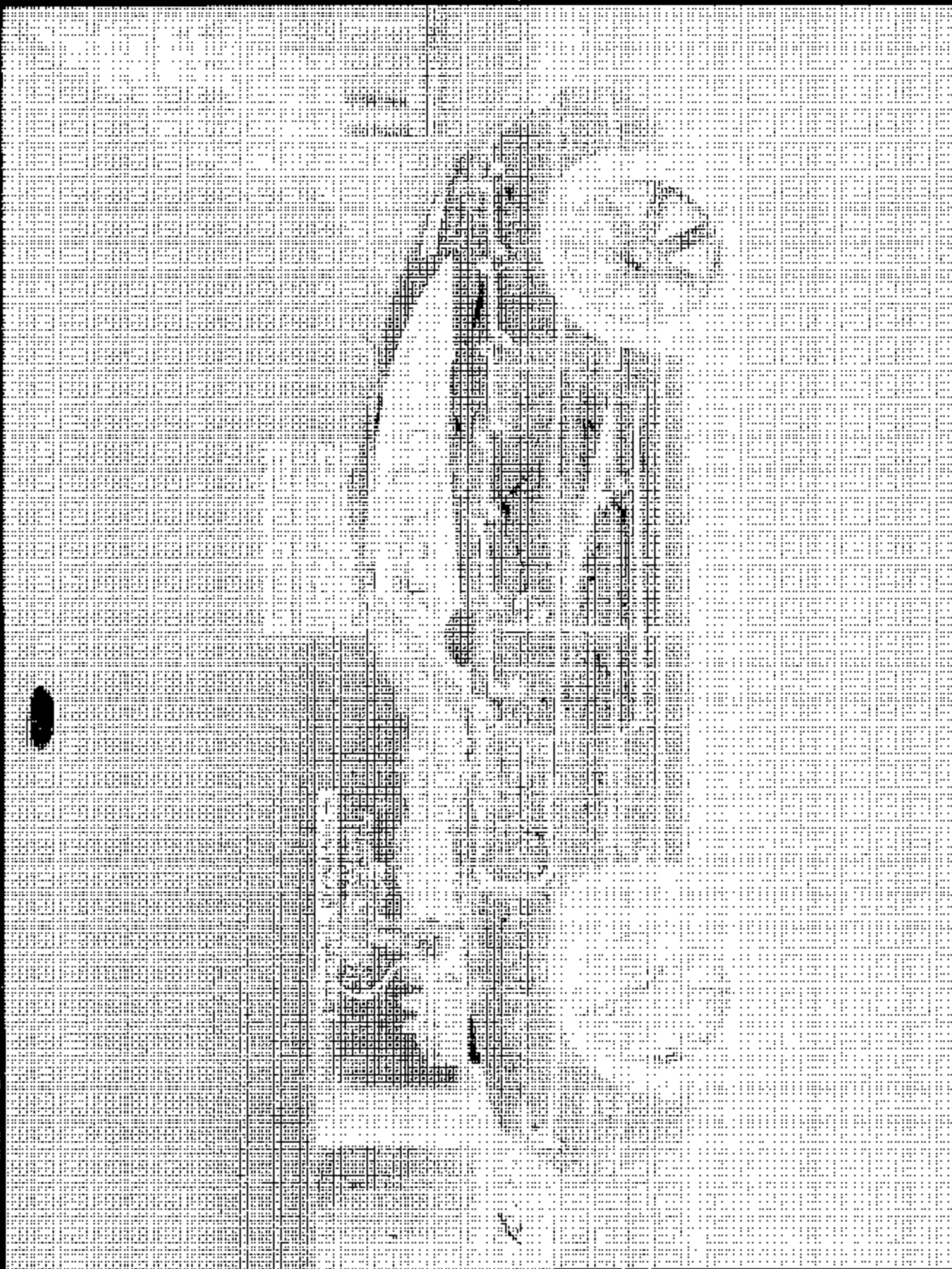


Figure A-6 POST-TEST IMPACTED SIDE VIEW OF TEST VEHICLE

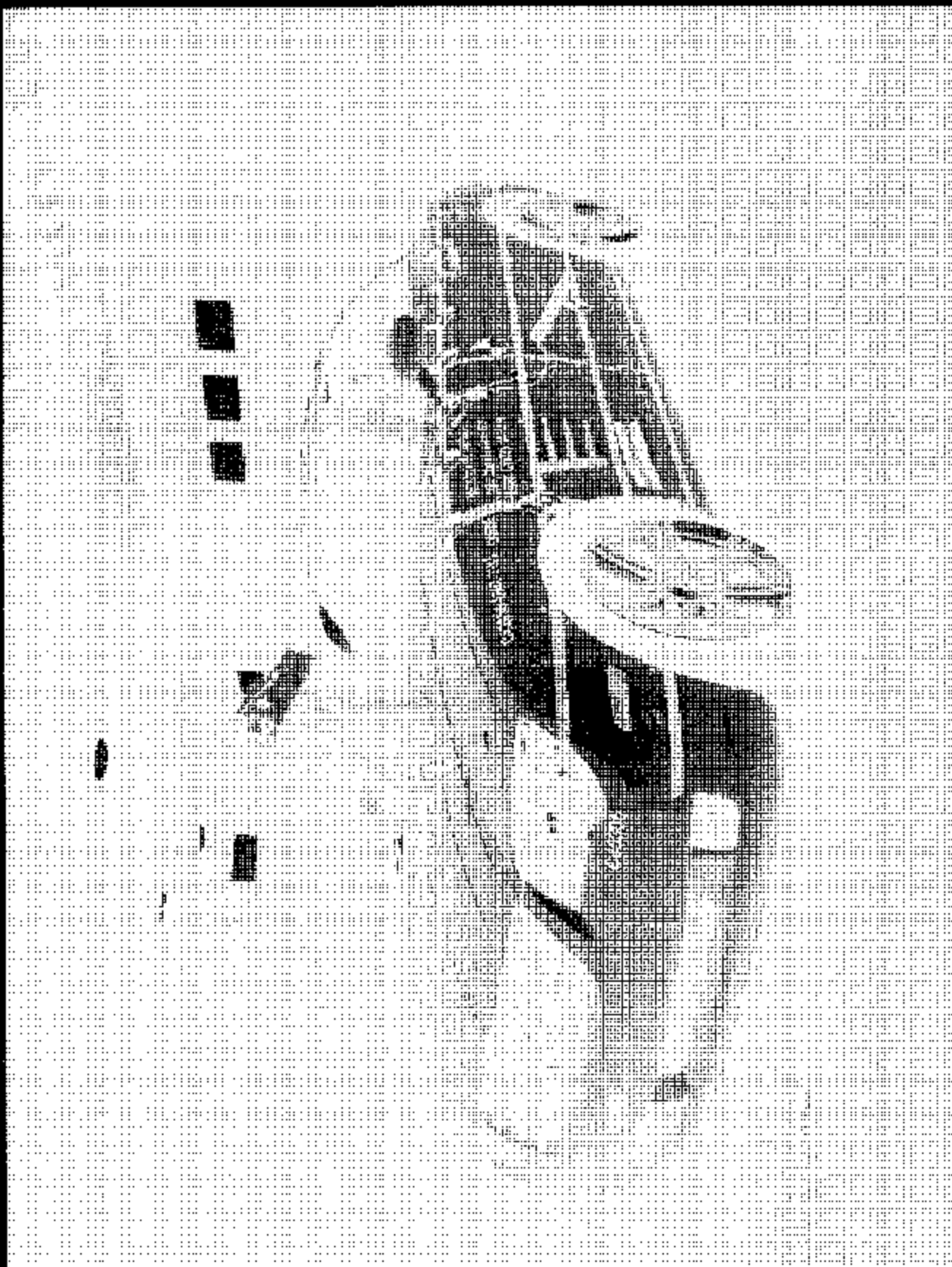


Figure A-7 PRE-TEST LEFT FRONT VIEW OF TEST VEHICLE

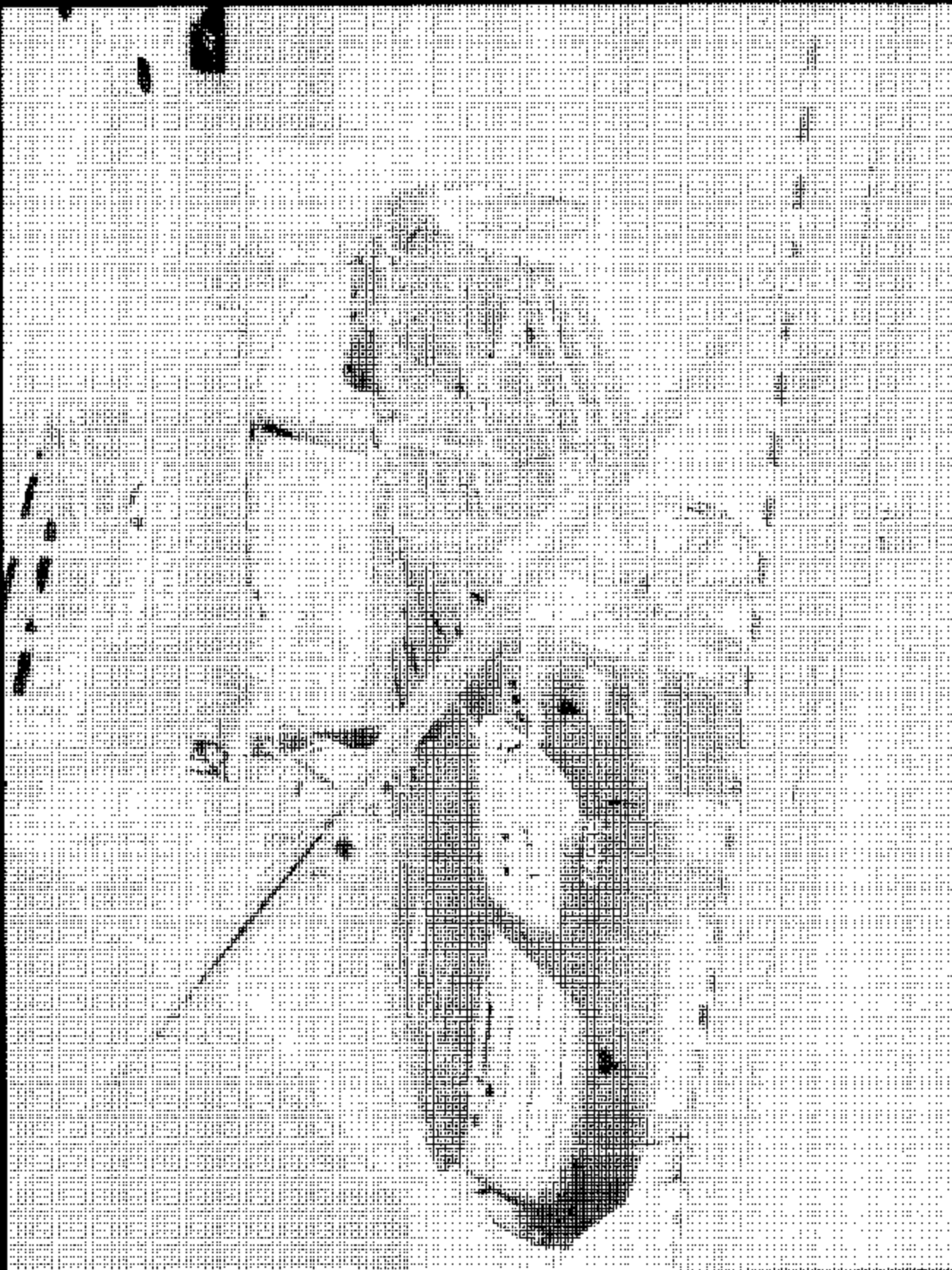


Figure A-8 POST-TEST LEFT FRONT VIEW OF TEST VEHICLE

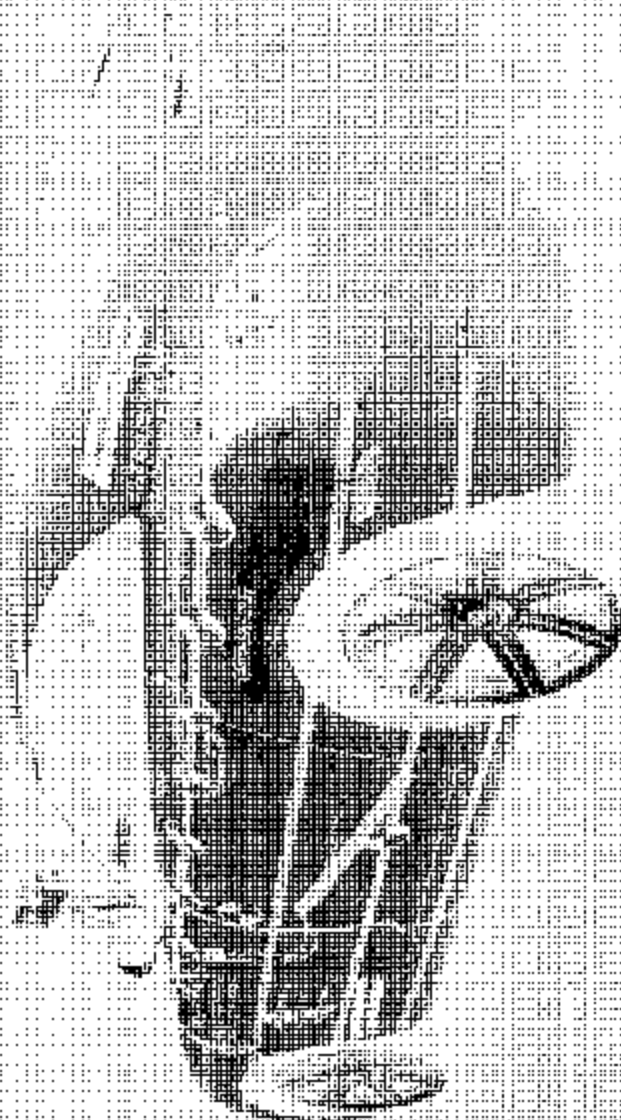


Figure A-9 PRE-TEST LEFT REAR VIEW OF TEST VEHICLE



Figure A-10 POST-TEST LEFT REAR VIEW OF TEST VEHICLE

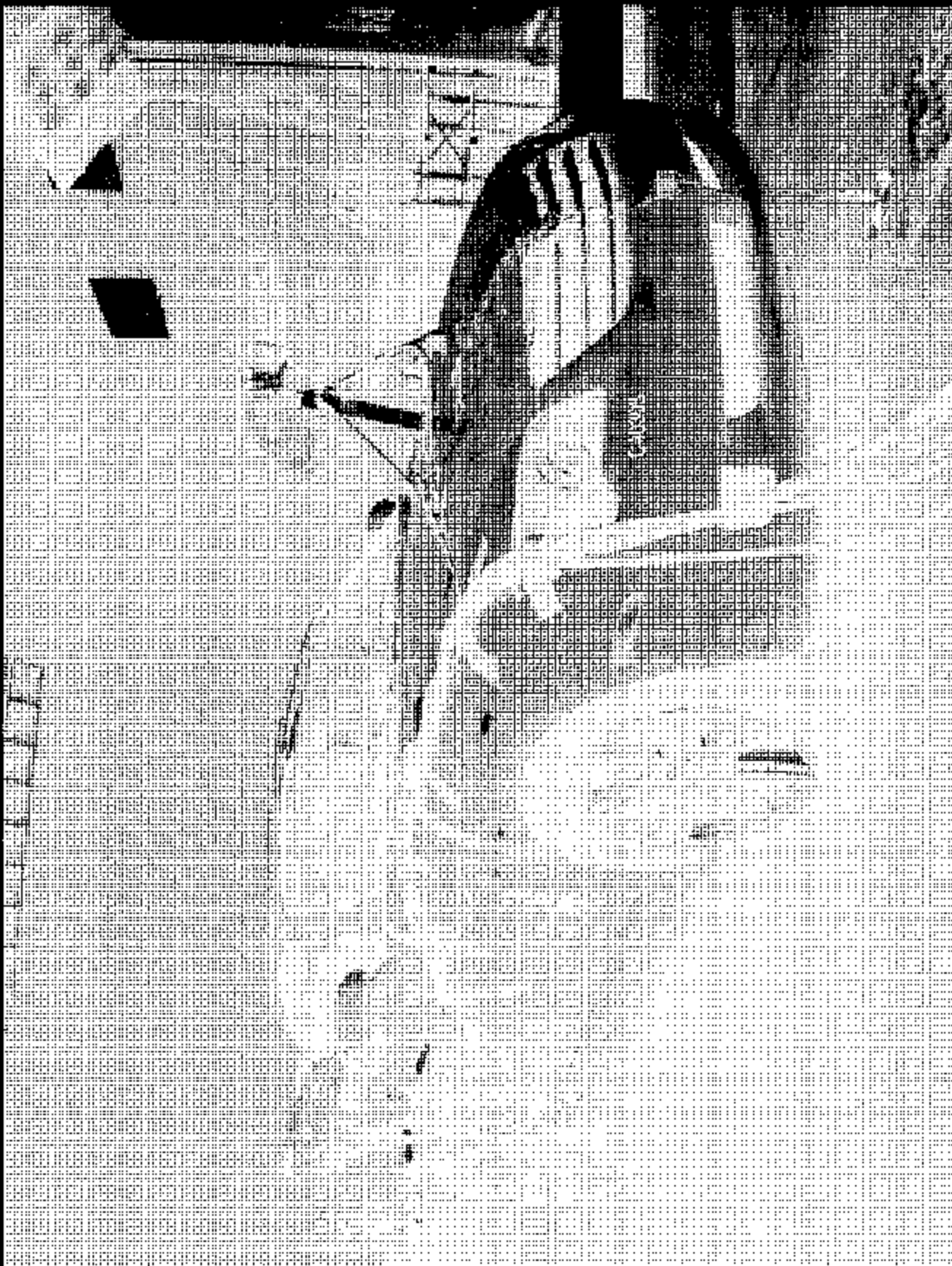


Figure A-11 PRE-TEST RIGHT FRONT VIEW OF TEST VEHICLE



Figure A-12 POST-TEST RIGHT FRONT VIEW OF TEST VEHICLE



Figure A-13 PRE-TEST RIGHT NEAR VIEW OF TEST VEHICLE



Figure A-14 POST-TEST RIGHT REAR VIEW OF TEST VEHICLE

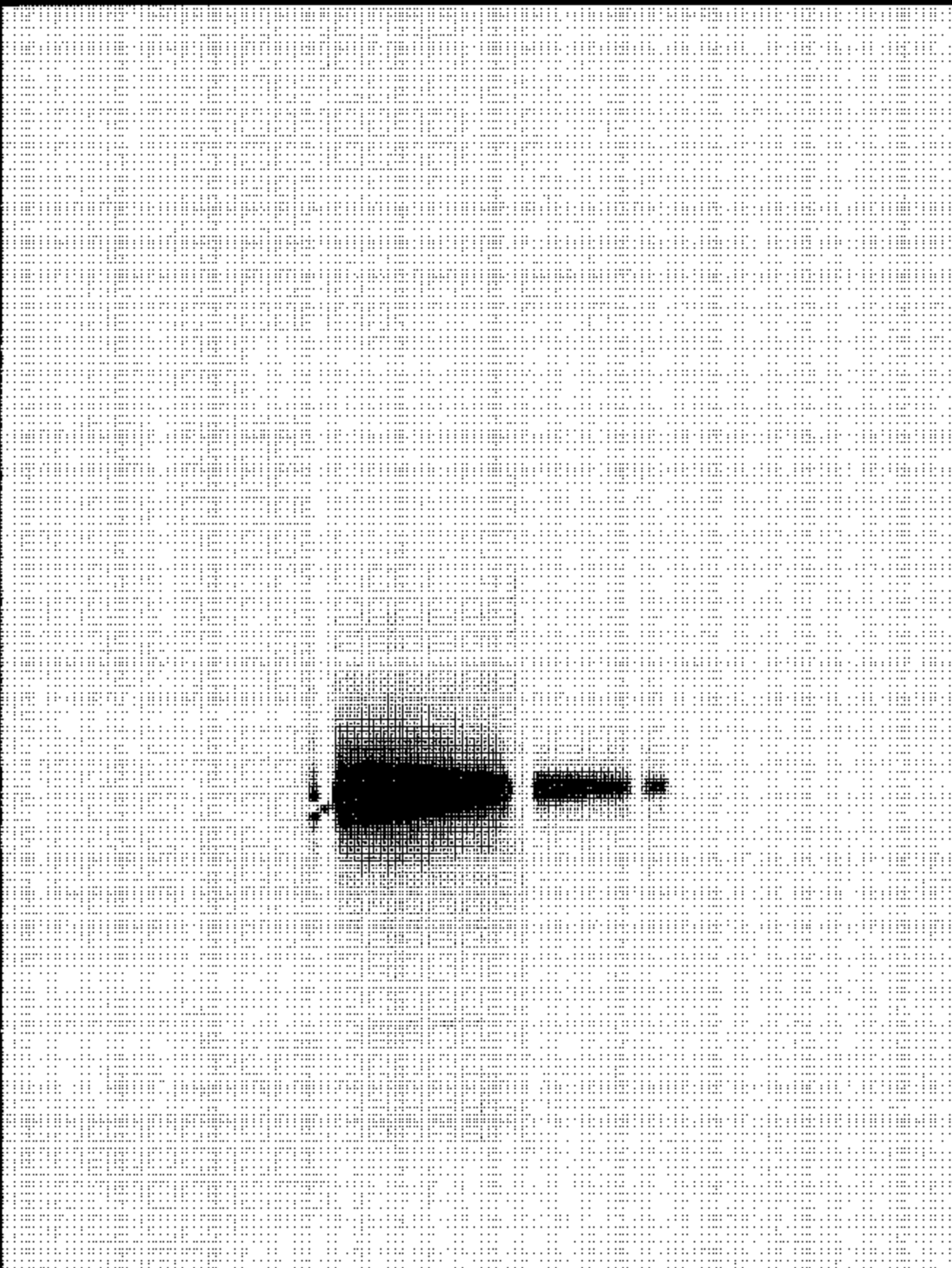


Figure A-15 PRE-TEST FRONTAL VIEW OF IMPACTOR FACE

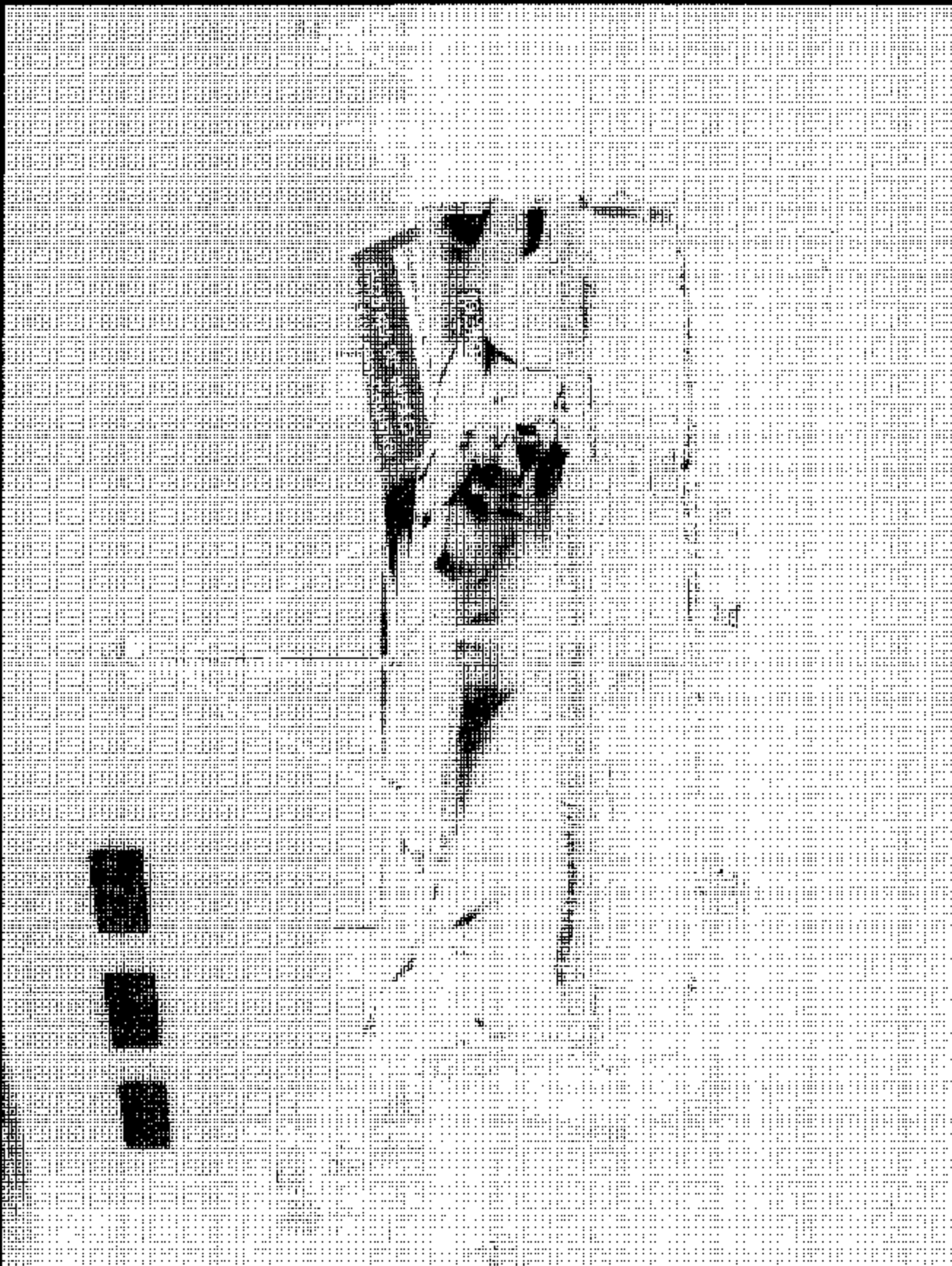


Figure A-16 POST-TEST FRONTAL VIEW OF IMPACTOR FACE

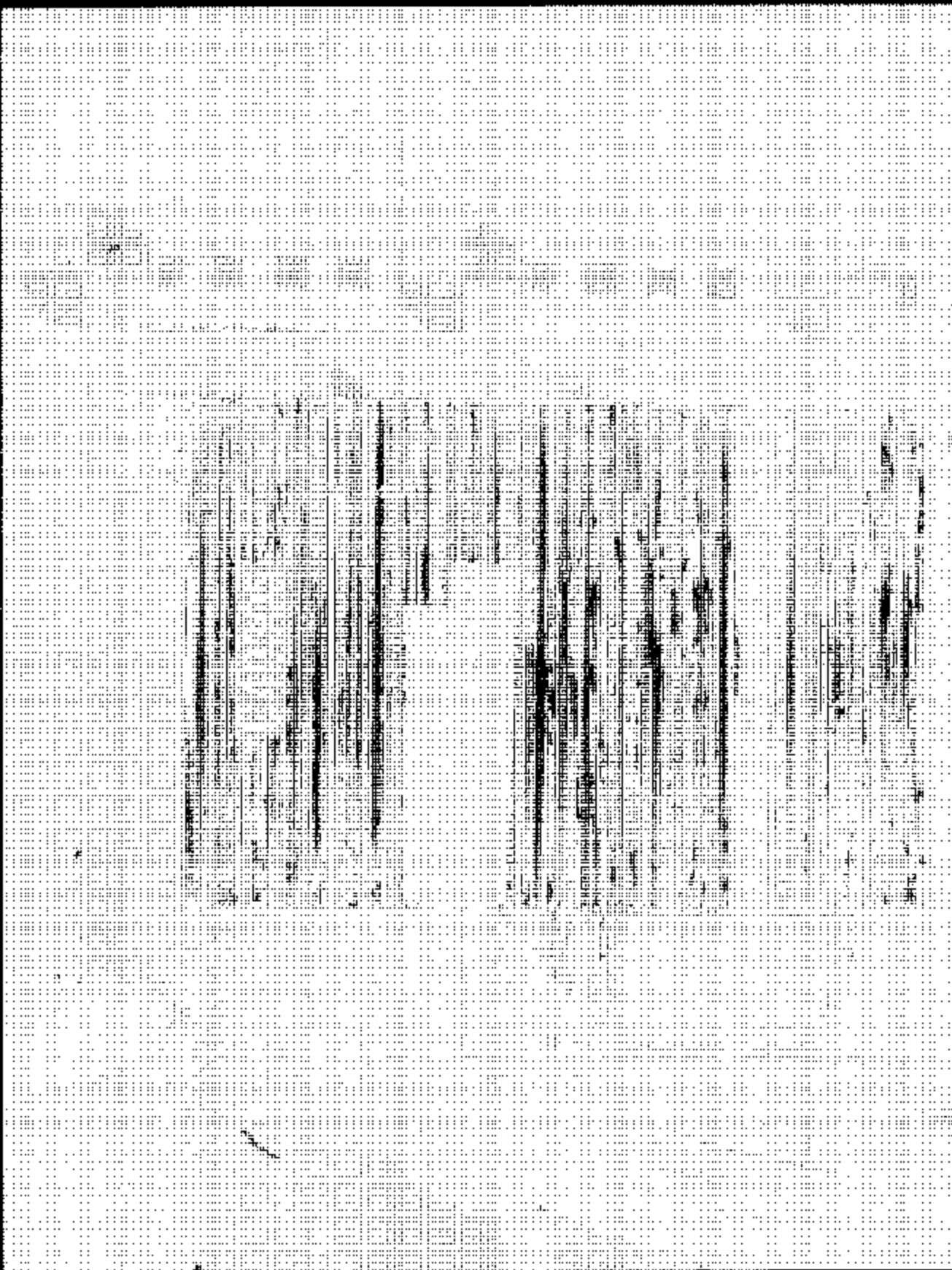


Fig. A-17 PRE-TEST LEFT SIDE VIEW OF IMPACTOR FACE

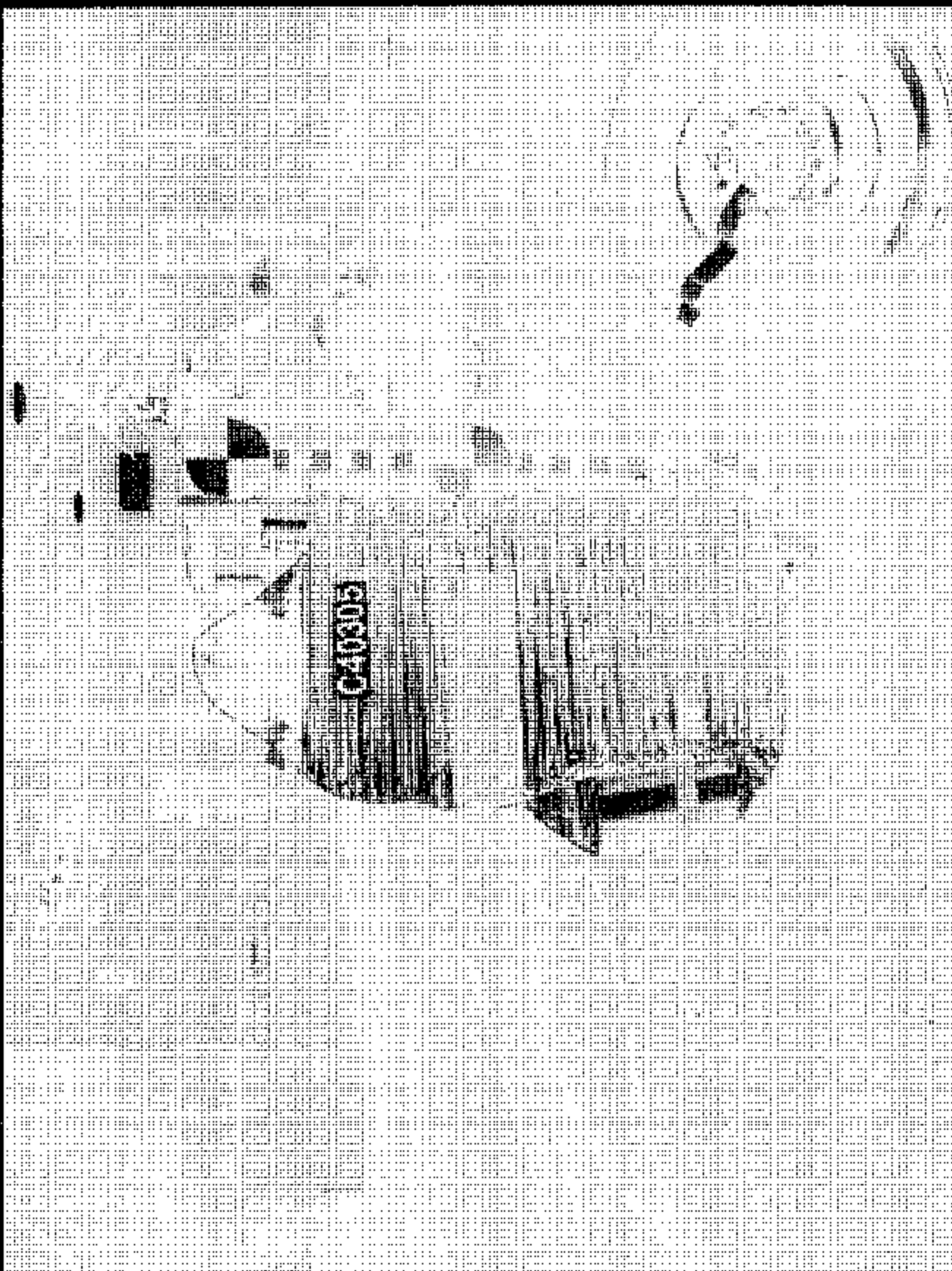


Figure A-18 POST-TEST LEFT SIDE VIEW OF IMPACTOR FACE

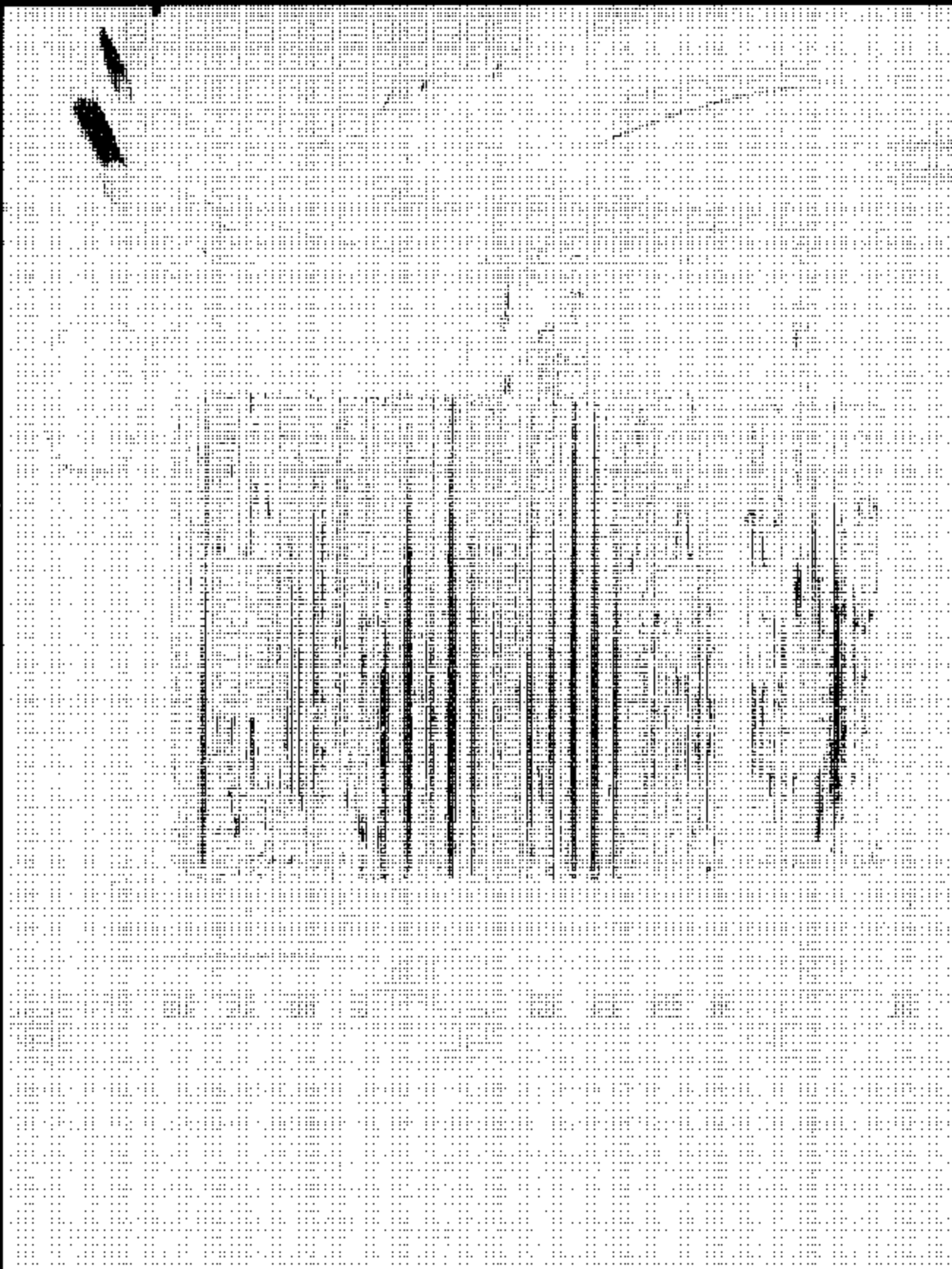


FIGURE A-19 PRE-TEST RIGHT SIDE VIEW OF IMPACTOR FACE



Figure A-20 POST-TEST RIGHT SIDE VIEW OF IMPACTOR FACE

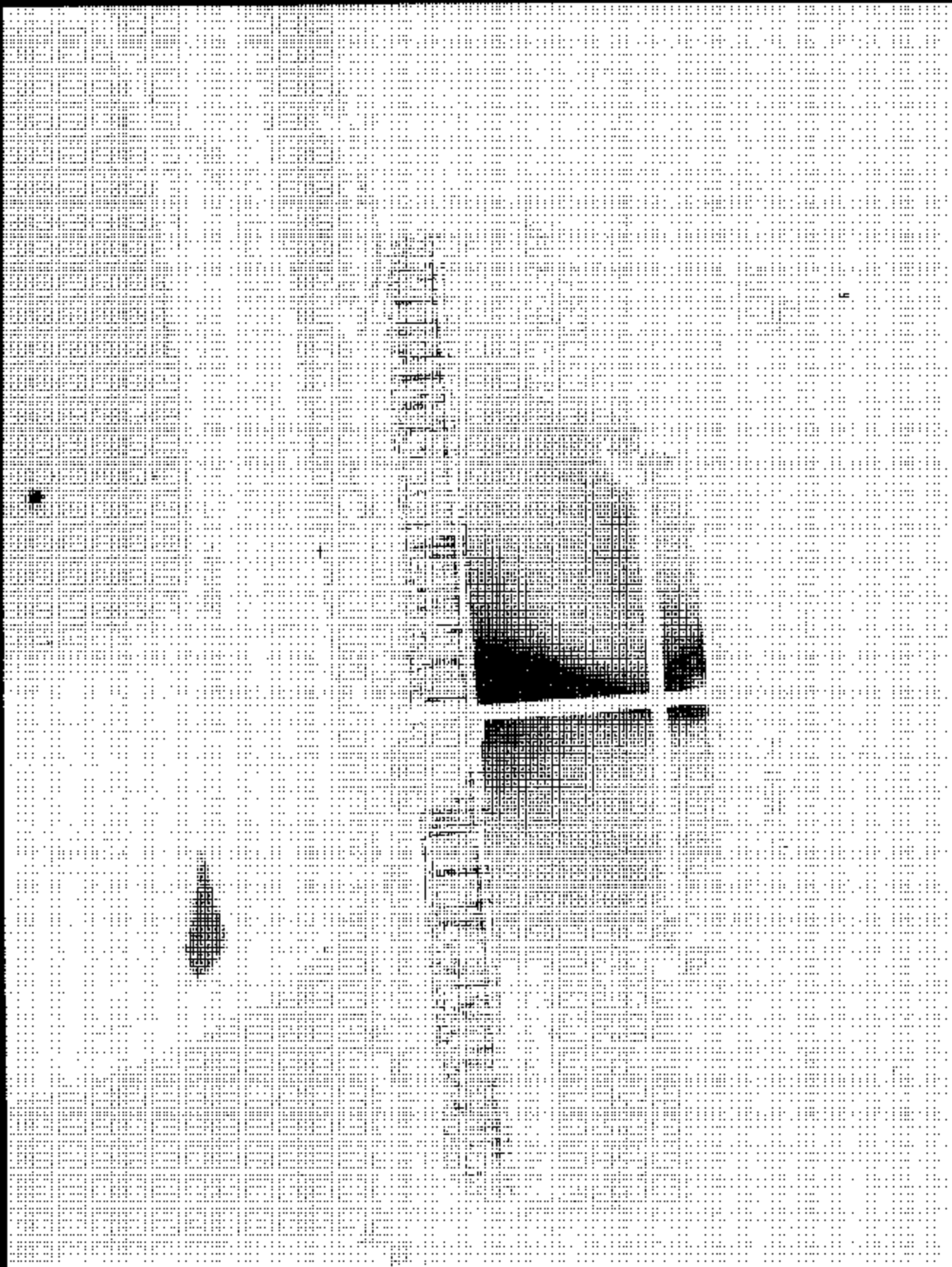


Figure A-21 PRE-TEST TOP VIEW OF IMPACTOR FACE

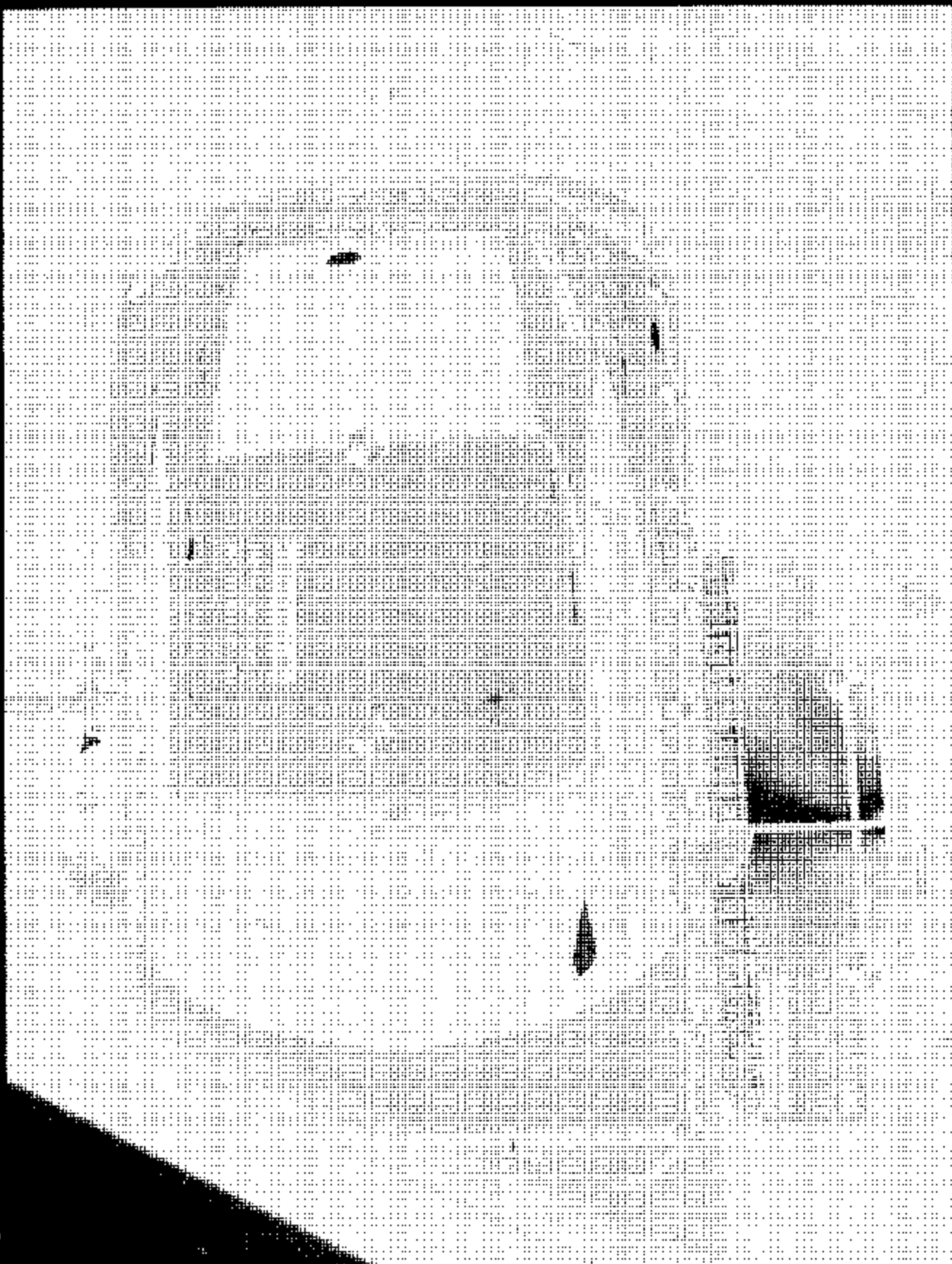


Figure A-23 PRE-TEST OVERHEAD VIEW OF ALIGNED MDB AND VEHICLES

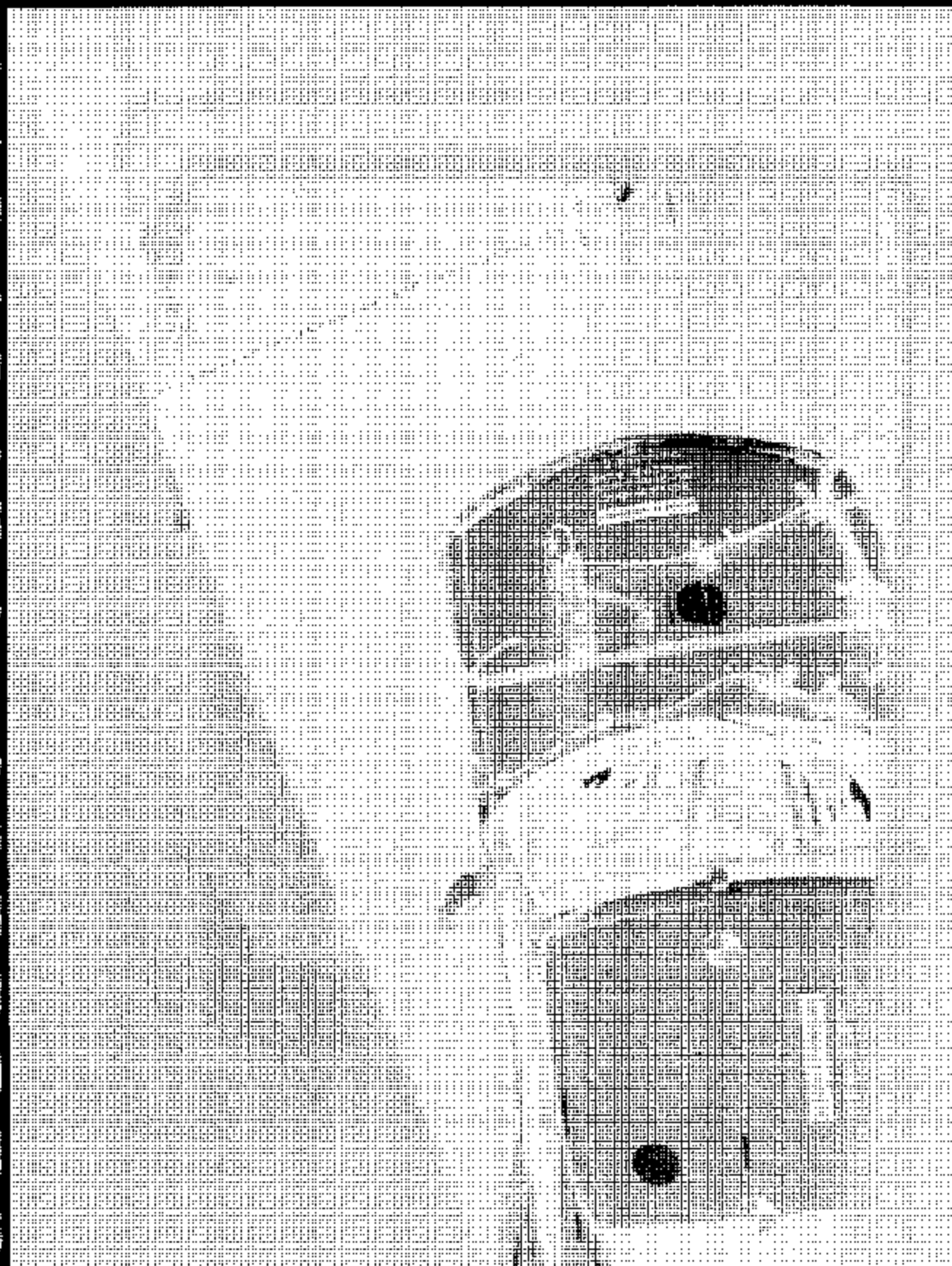


Figure A-24 POST-TEST OVERHEAD VIEW OF MDB AND VEHICLE



Figure A-25 PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID H3

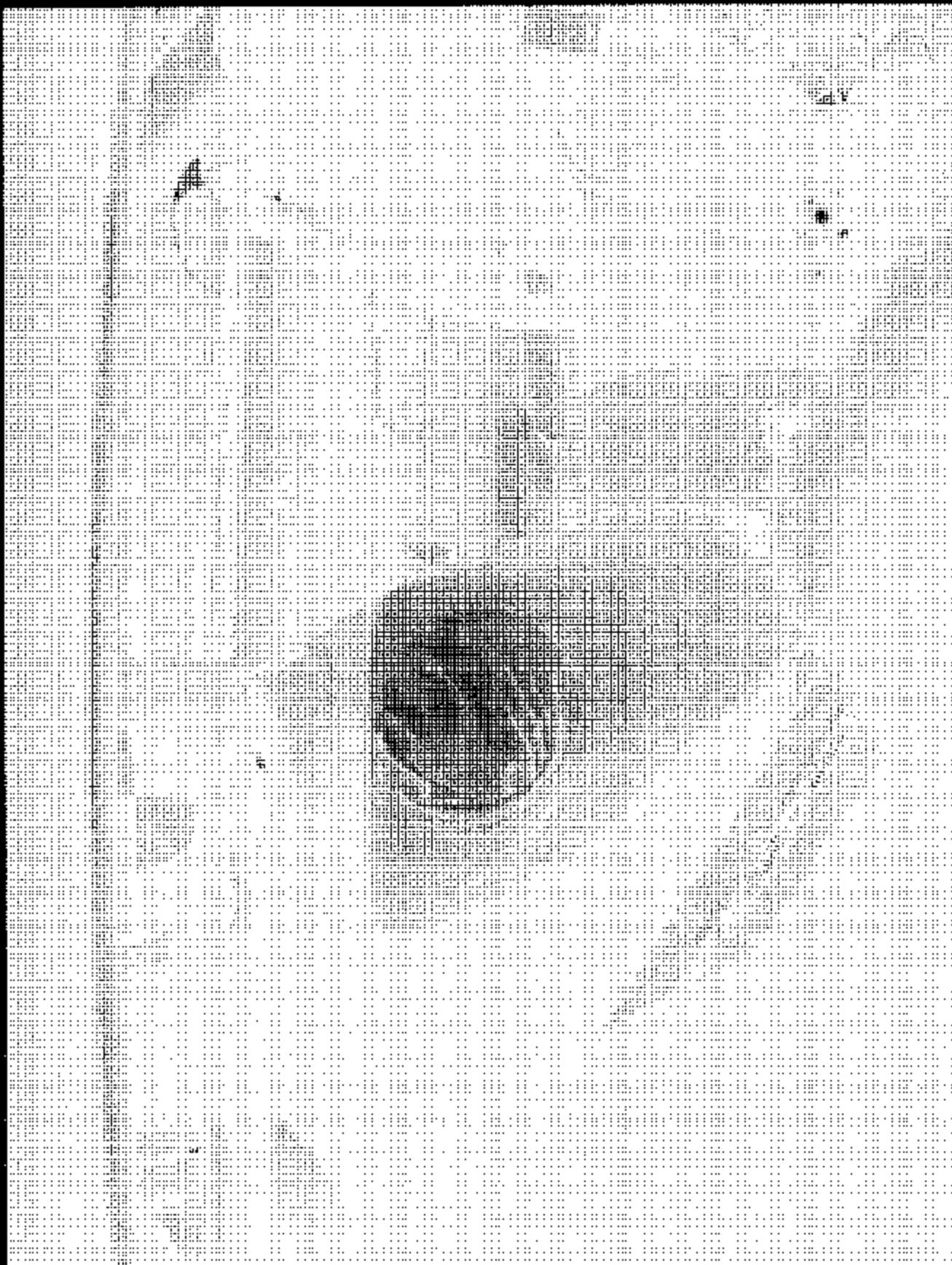


Figure A-26 POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID H3



Figure A-27 PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SED H3

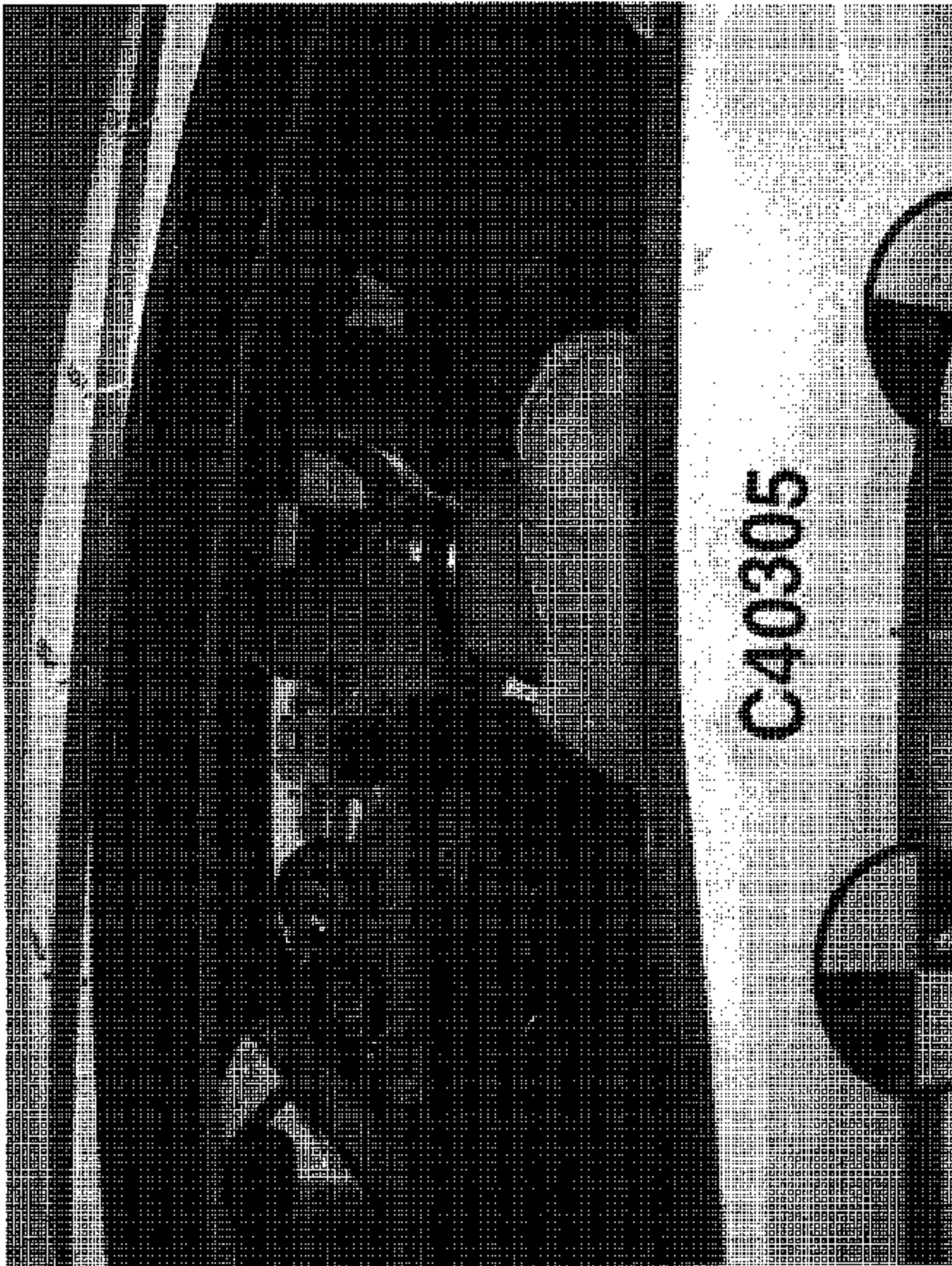


Figure A-28 POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID HS



Figure A-29 PRE-TEST INTERIOR OF FRONT DOOR



Figure A-30 POST-TEST INTERIOR OF FRONT DOOR SHOWING SID. H3 IMPACT LOCATIONS

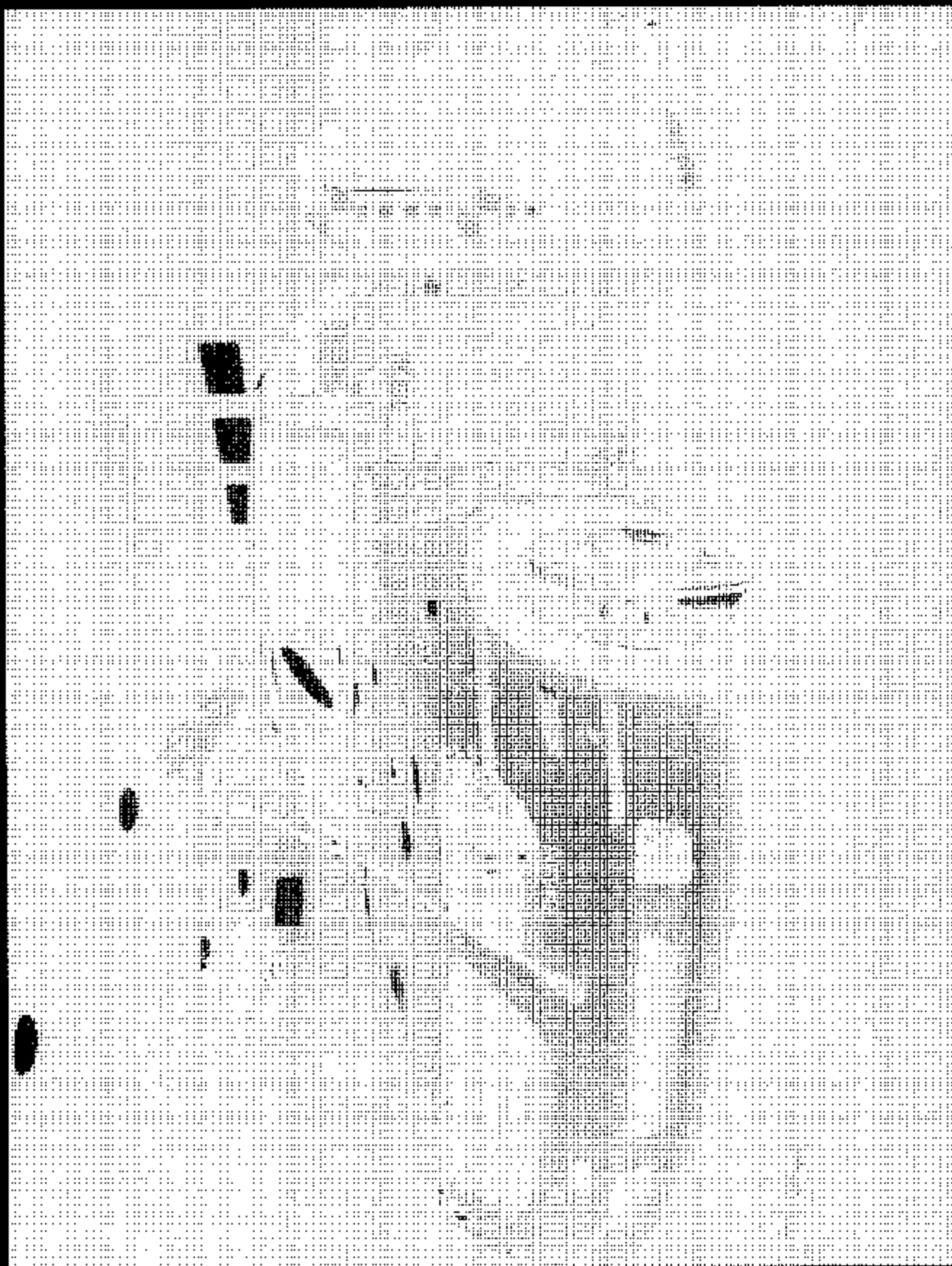


Figure A-31 PRE-TEST LEFT SIDE VIEW OF MDH WITH IMPACTOR FACE IN POSITION



Figure A-32 PRE-TEST RIGHT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION

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Figure A-33 POST-TEST CLOSE-UP VIEW OF IMPACT POINT TARGET

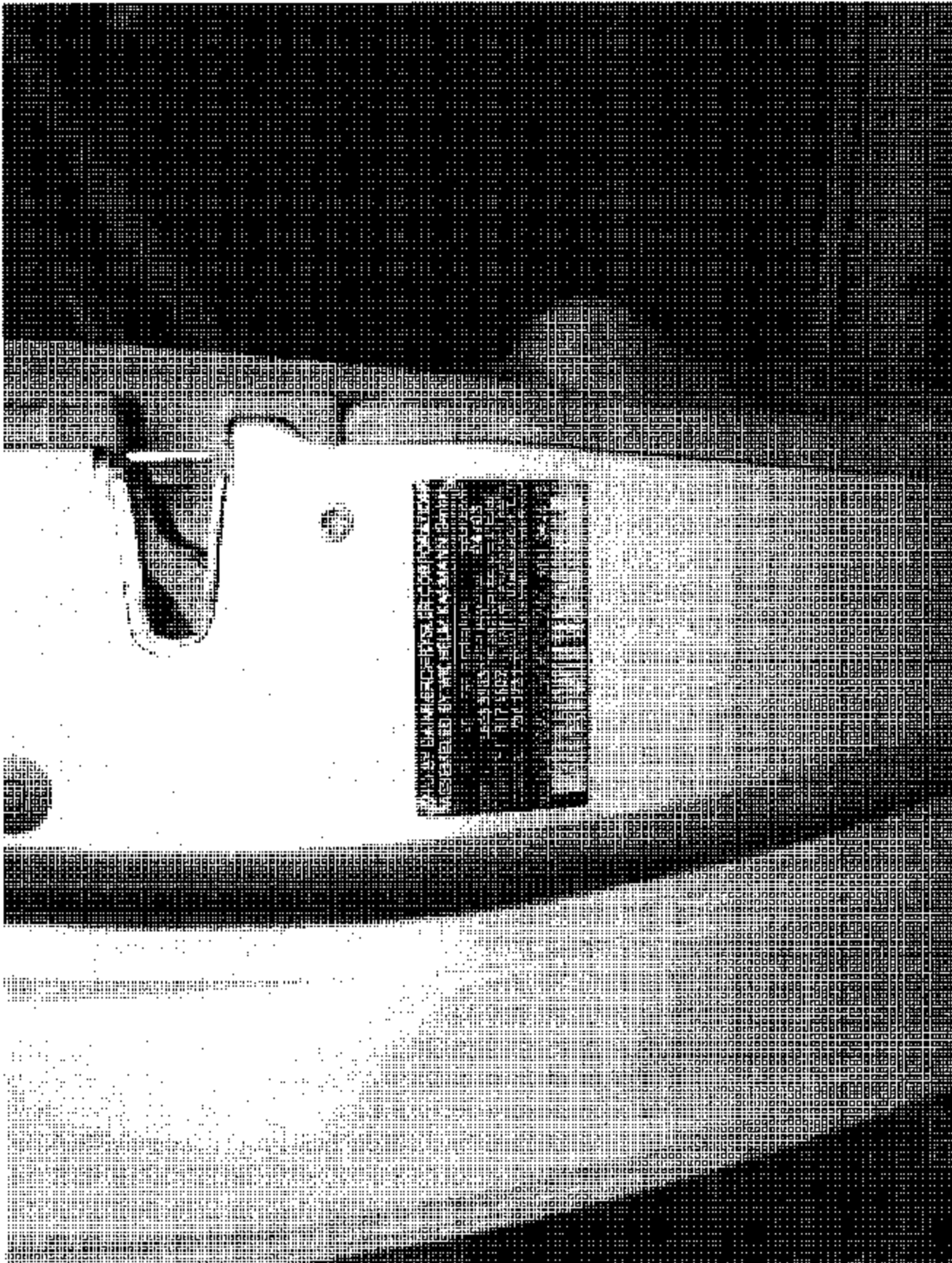


Figure A-34 CLOSE-UP VIEW OF VEHICLE'S CERTIFICATION LABEL

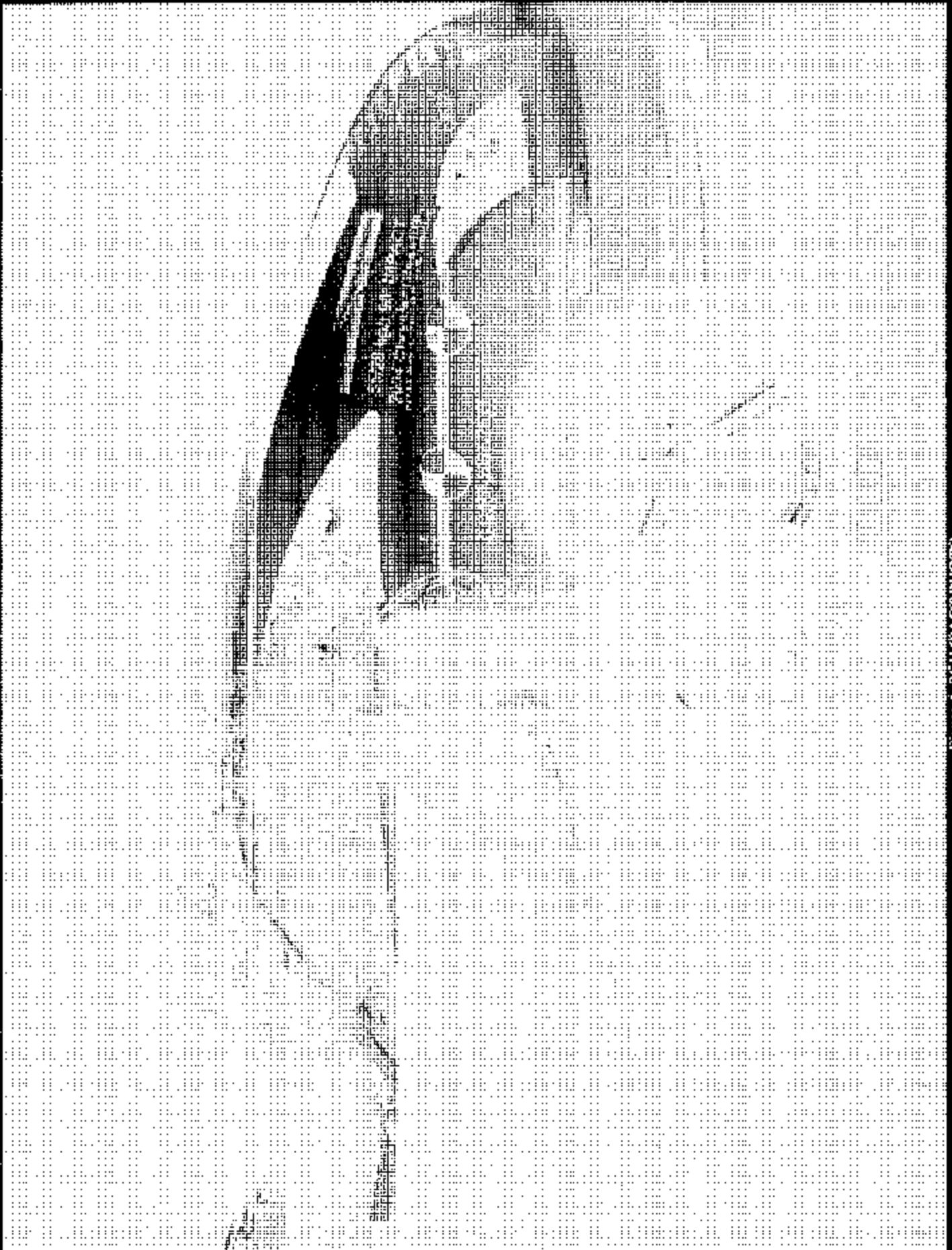


Figure A-35 IMPACT PHOTO



Figure A-37 ROLLOVER 90 DEGREES



Figure A-36 ROLLOVER 180 DEGREES



Figure A-39 ROLL-OVER, 270 DEGREES

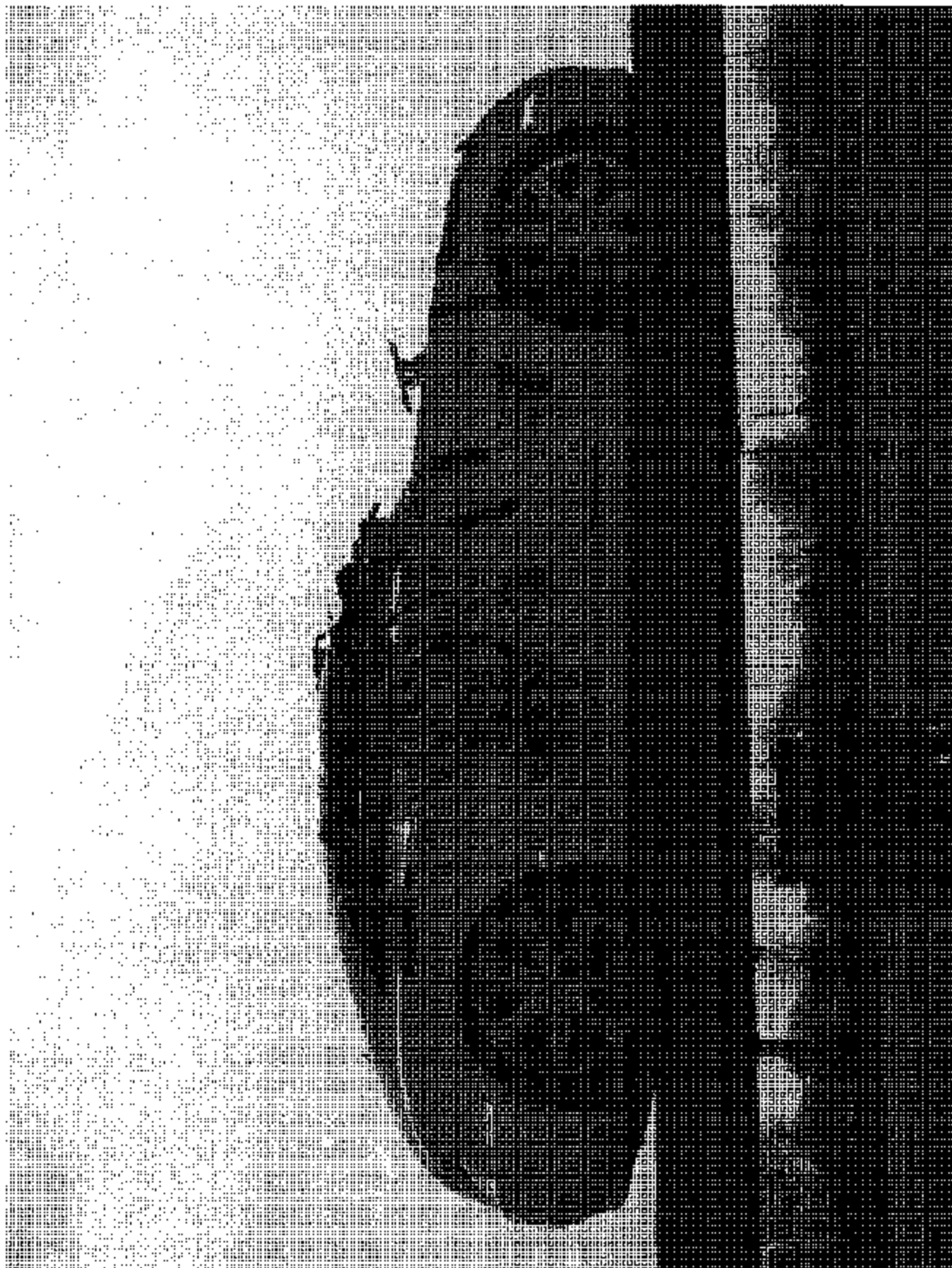


Figure A-40 ROLLOVER 360 DEGREES

APPENDIX B

VEHICLE, MDB AND SID HYBRID III RESPONSE DATA

TABLE OF DATA PLOTS

DRIVER DUMMY INSTRUMENTATION PLOTS

ACCELERATION, FORCE AND MOMENT 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 NECK (X) FORCE VS TIME	B- 13
9	DRIVER UPPER NECK (Y) FORCE VS TIME	B- 14
10	DRIVER UPPER NECK (Z) FORCE VS TIME	B- 15
11	DRIVER UPPER NECK RESULTANT FORCE VS TIME	B- 16
12	DRIVER UPPER NECK (X) MOMENT VS TIME	B- 17
13	DRIVER UPPER NECK (Y) MOMENT VS TIME	B- 18
14	DRIVER UPPER NECK (Z) MOMENT VS TIME	B- 19
15	DRIVER UPPER NECK RESULTANT MOMENT VS TIME	B- 20
16	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 21
17	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 22
18	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 23
19	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 24
20	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 25
21	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 26
22	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 27
23	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 28

DRIVER DUMMY INSTRUMENTATION PLOTS

ACCELERATION DATA - FIR FILTERED

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
24	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 29
25	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 30
26	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 31
27	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 32

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>
28	RIGHT SIDE SILL AT FRONT SEAT (X) ACCELERATION VS TIME	B- 33
29	RIGHT SIDE SILL AT FRONT SEAT (X) VELOCITY VS TIME	B- 34
30	RIGHT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 35
31	RIGHT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 36
32	RIGHT SIDE SILL AT FRONT SEAT (Z) ACCELERATION VS TIME	B- 37
33	RIGHT SIDE SILL AT FRONT SEAT (Z) VELOCITY VS TIME	B- 38
34	RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION VS TIME	B- 39
35	RIGHT SIDE SILL AT REAR SEAT (X) ACCELERATION VS TIME	B- 40
36	RIGHT SIDE SILL AT REAR SEAT (X) VELOCITY VS TIME	B- 41
37	RIGHT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 42
38	RIGHT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 43
39	RIGHT SIDE SILL AT REAR SEAT (Z) ACCELERATION VS TIME	B- 44
40	RIGHT SIDE SILL AT REAR SEAT (Z) VELOCITY VS TIME	B- 45
41	RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION VS TIME	B- 46
42	REAR FLOORPAN ABOVE AXLE (X) ACCELERATION VS TIME	B- 47
43	REAR FLOORPAN ABOVE AXLE (X) VELOCITY VS TIME	B- 48
44	REAR FLOORPAN ABOVE AXLE (Y) ACCELERATION VS TIME	B- 49
45	REAR FLOORPAN ABOVE AXLE (Y) VELOCITY VS TIME	B- 50
46	REAR FLOORPAN ABOVE AXLE (Z) ACCELERATION VS TIME	B- 51
47	REAR FLOORPAN ABOVE AXLE (Z) VELOCITY VS TIME	B- 52
48	REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION VS TIME	B- 53
49	LEFT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 54
50	LEFT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 55
51	LEFT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 56
52	LEFT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 57
53	RIGHT REAR OCCUPANT COMPARTMENT (Y) ACCELERATION VS TIME	B- 58
54	RIGHT REAR OCCUPANT COMPARTMENT (Y) VELOCITY VS TIME	B- 59
55	LOWER B-POST (Y) ACCELERATION VS TIME	B- 60
56	LOWER B-POST (Y) VELOCITY VS TIME	B- 61
57	UPPER B-POST (Y) ACCELERATION VS TIME	B- 62
58	UPPER B-POST (Y) VELOCITY VS TIME	B- 63
59	LOWER A-POST (Y) ACCELERATION VS TIME	B- 64
60	LOWER A-POST (Y) VELOCITY VS TIME	B- 65
61	UPPER A-POST (Y) ACCELERATION VS TIME	B- 66
62	UPPER A-POST (Y) VELOCITY VS TIME	B- 67
63	FRONT SEAT TRACK (Y) ACCELERATION VS TIME	B- 68
64	FRONT SEAT TRACK (Y) VELOCITY VS TIME	B- 69
65	VEHICLE CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 70
66	VEHICLE CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 71
67	VEHICLE CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 72
68	VEHICLE CENTER OF GRAVITY (Y) VELOCITY VS TIME	B- 73
69	VEHICLE CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 74
70	VEHICLE CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 75
71	VEHICLE CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 76

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>
72	MDB CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 77
73	MDB CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 78
74	MDB CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 79
75	MDB CENTER OF GRAVITY (Y) VELOCITY VS TIME	B- 80
76	MDB CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 81
77	MDB CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 82
78	MDB CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 83
79	MDB REAR (X) ACCELERATION VS TIME	B- 84
80	MDB REAR (X) VELOCITY VS TIME	B- 85
81	MDB REAR (Y) ACCELERATION VS TIME	B- 86
82	MDB REAR (Y) VELOCITY VS TIME	B- 87

DRIVER 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>
83	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 88
84	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 89
85	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 90
86	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 91
87	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 92
88	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 93
89	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 94
90	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 95

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

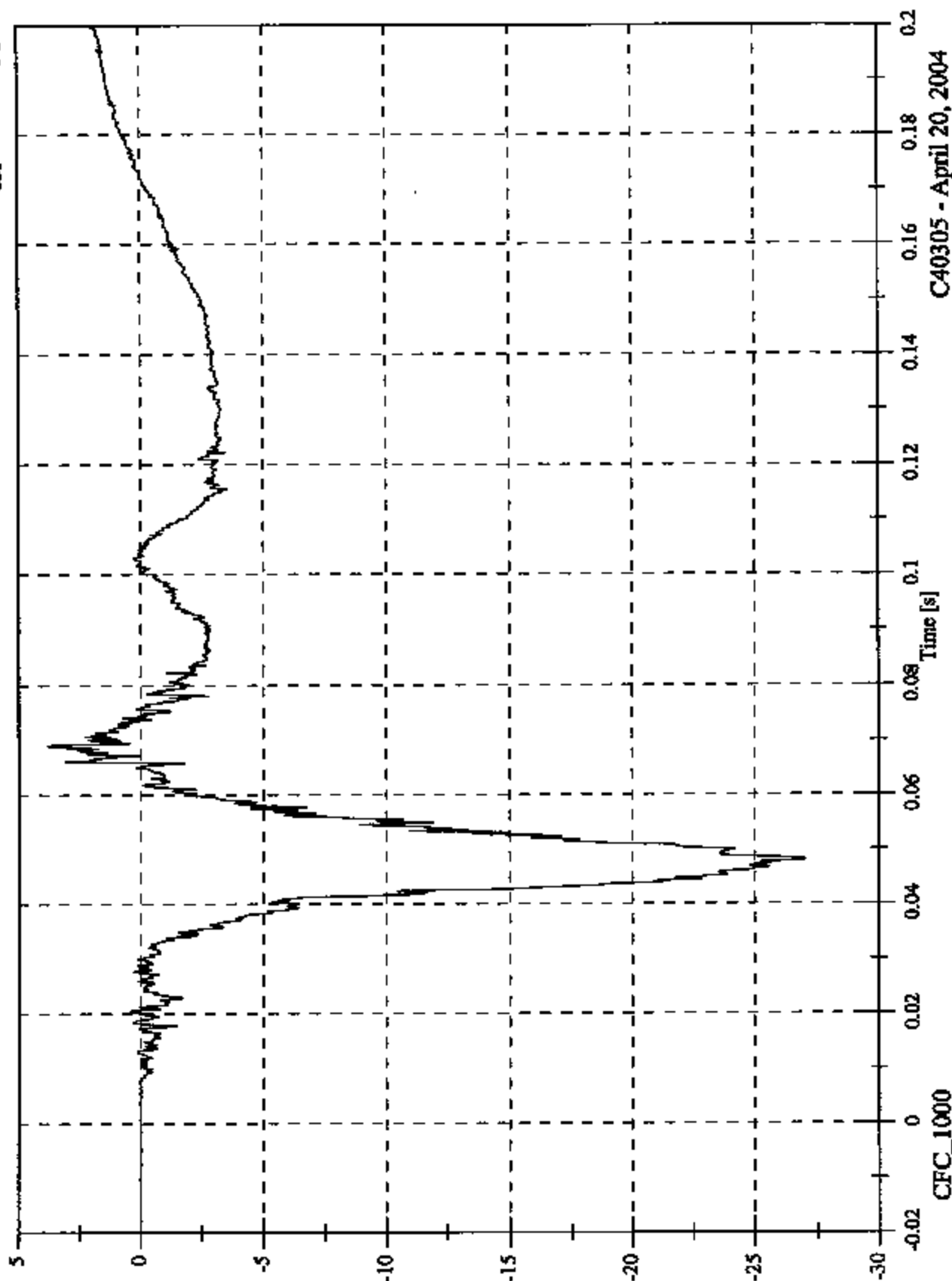
<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
91	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 96
92	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 97
93	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 98
94	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 99

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

Max: 3.8 [g] at 0.069 [s]

Min: -27.0 [g] at 0.048 [s]

V2P1 Head x

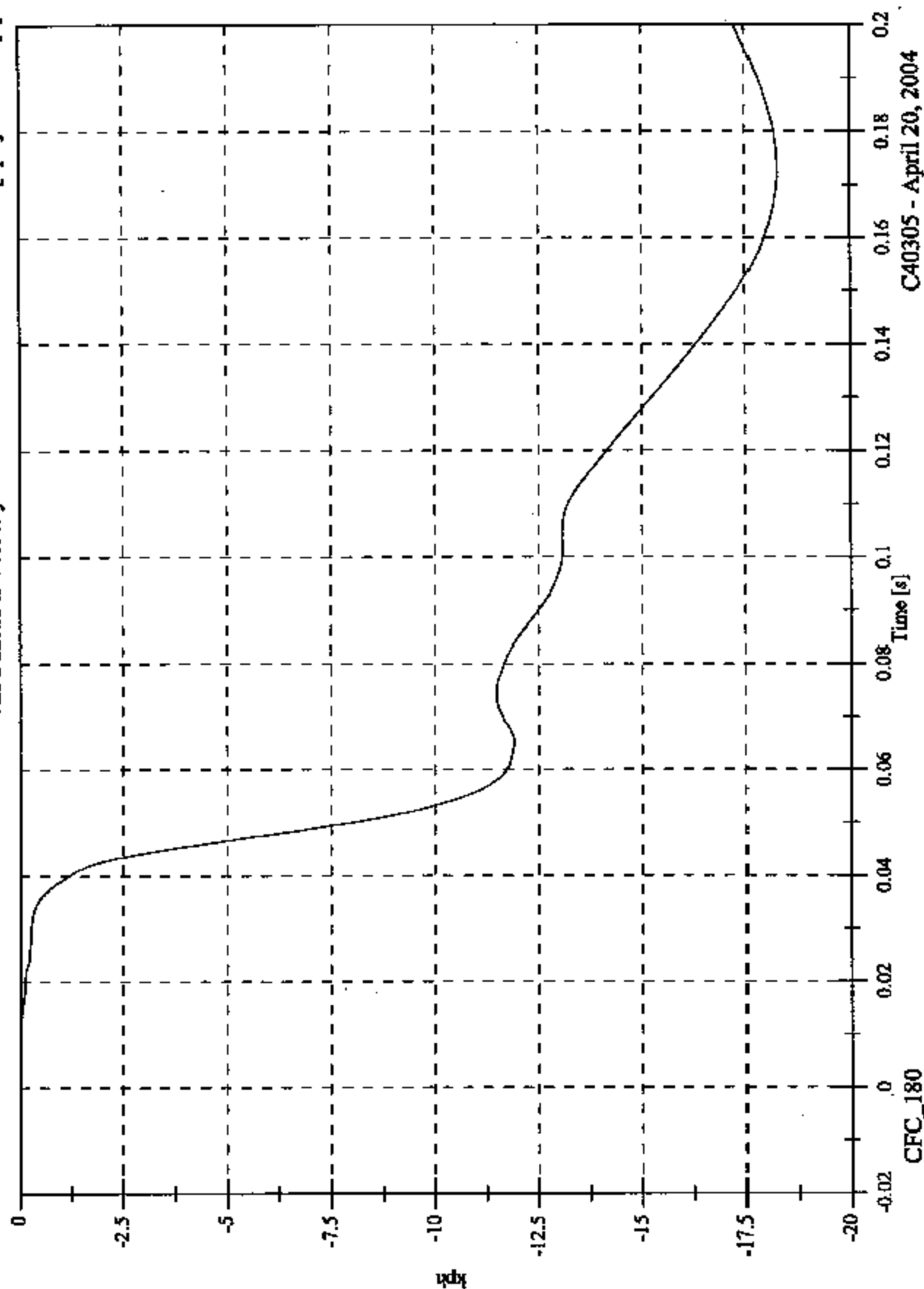


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2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Head x Velocity

Max: 0.0 [kph] at 0.008 [s]
Min: -18.3 [kph] at 0.173 [s]



CFC_180

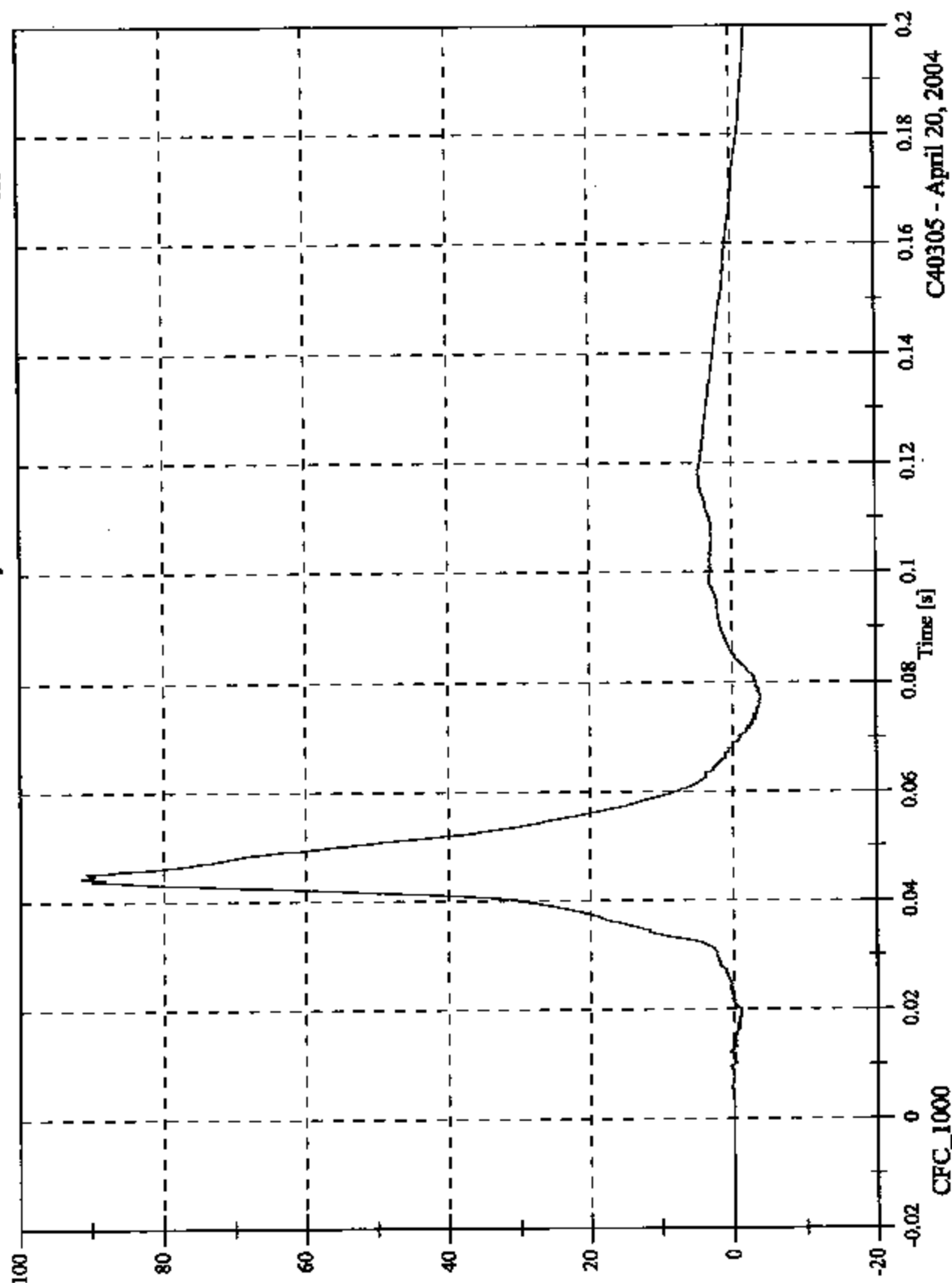
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2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

Max: 91.3 [g] at 0.044 [s]

Min: -3.9 [g] at 0.077 [s]

V2P1 Head y

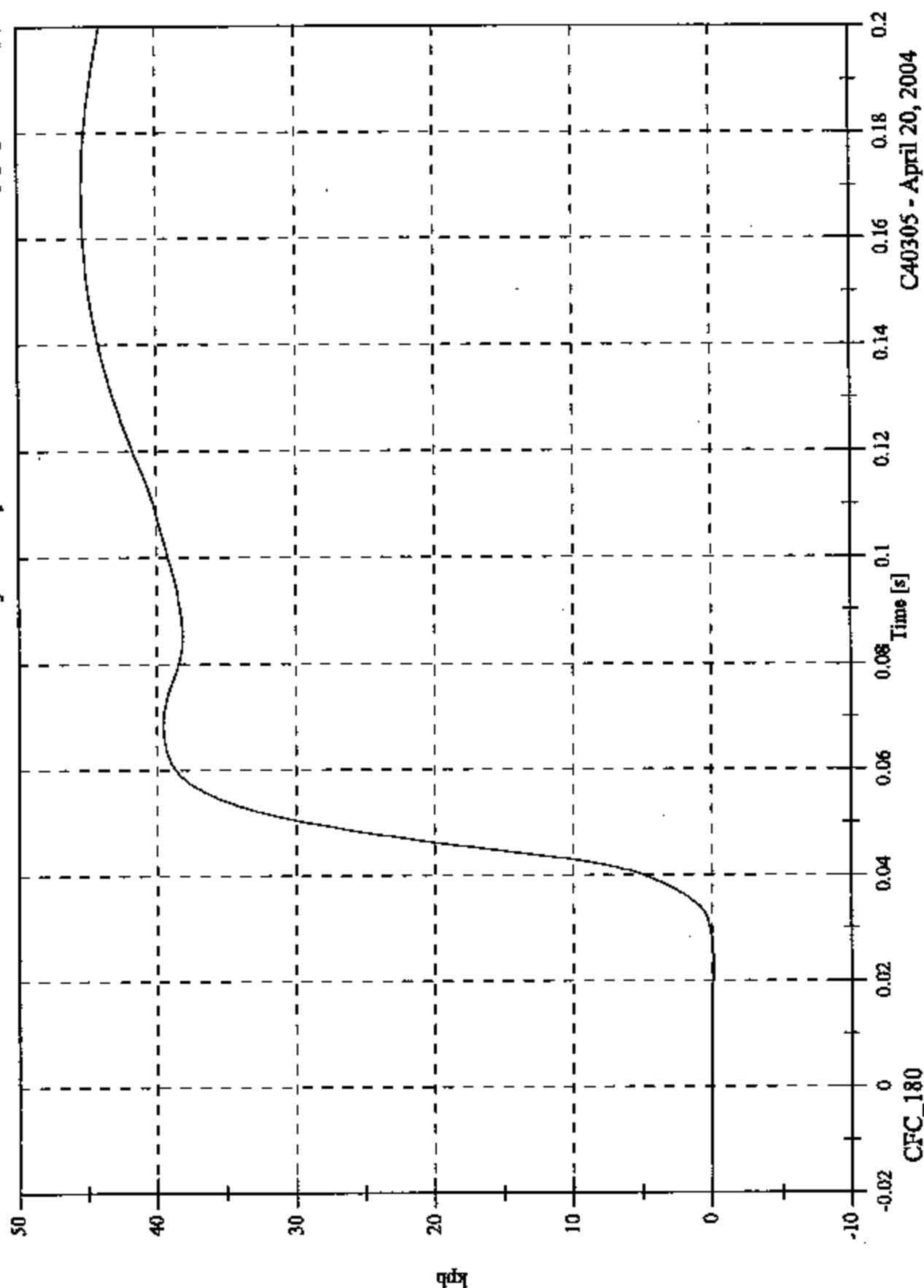


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2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Head y Velocity

Max: 45.4 [kph] at 0.167 [s]
Min: -0.1 [kph] at 0.022 [s]



CFC_180

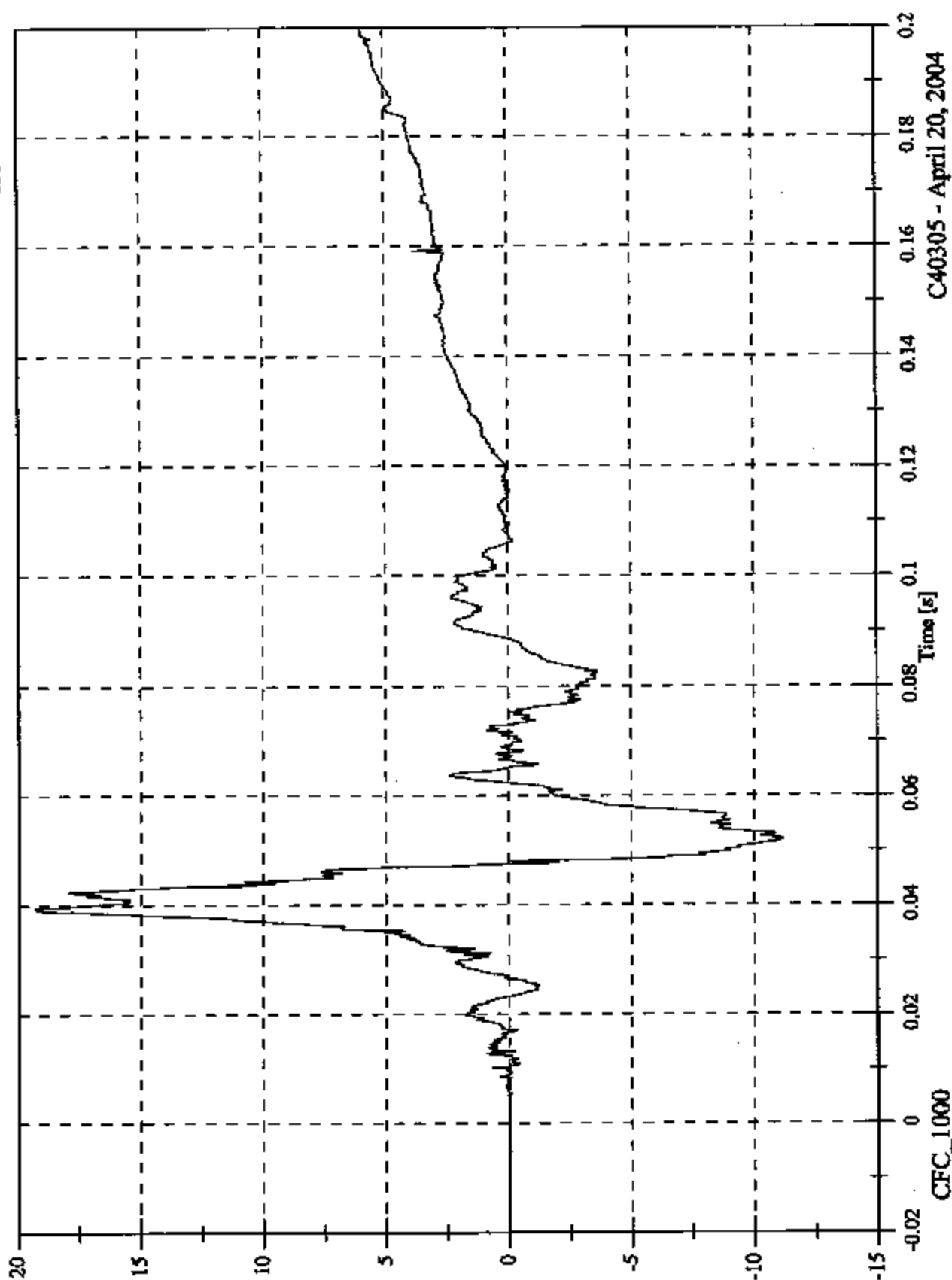
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2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

Max: 19.3 [g] at 0.039 [s]

Min: -11.1 [g] at 0.052 [s]

V2P1 Head z

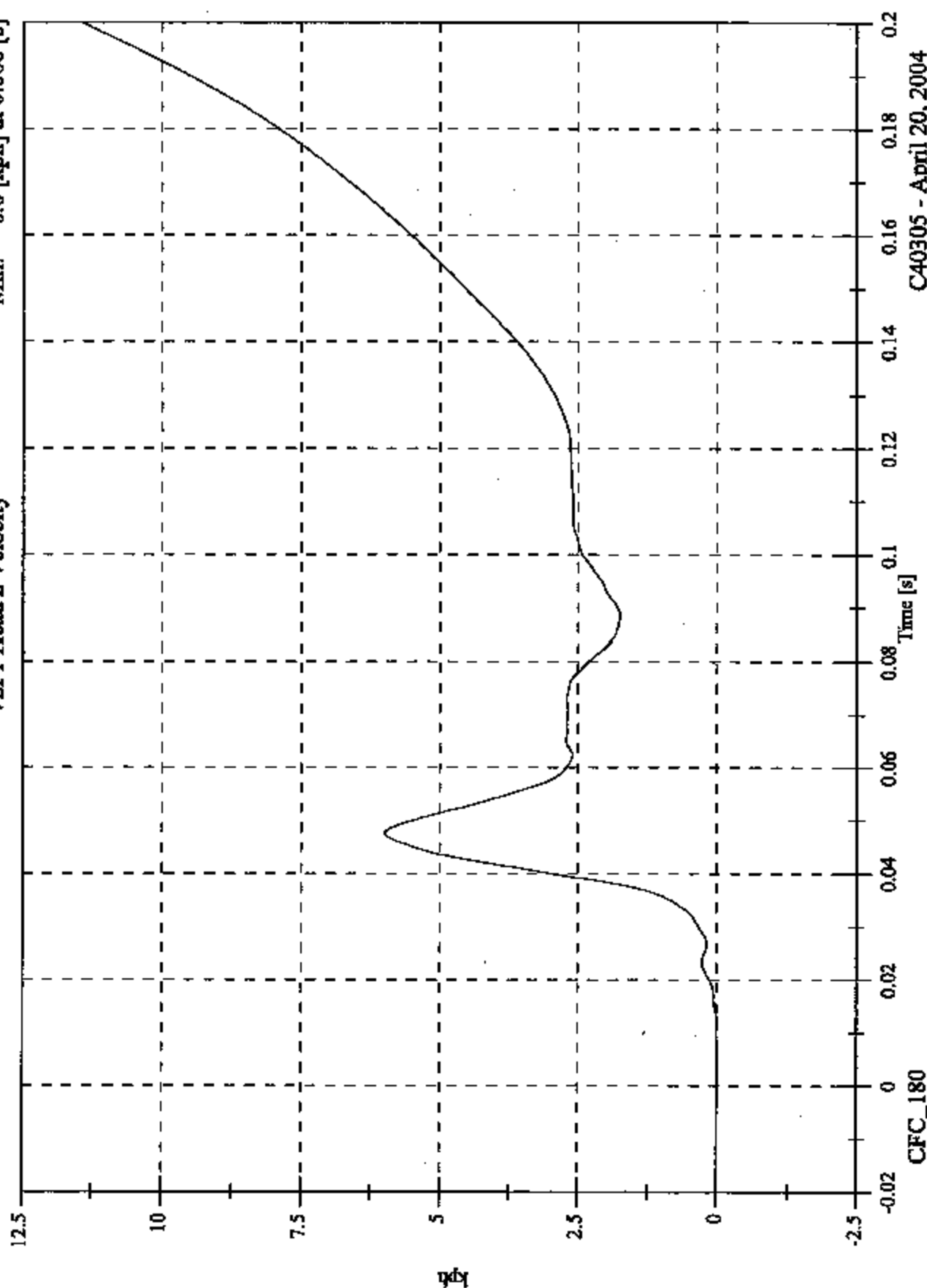


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2004 F4VSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Head z Velocity

Max: 11.4 [kph] at 0.200 [s]
Min: -0.0 [kph] at 0.006 [s]

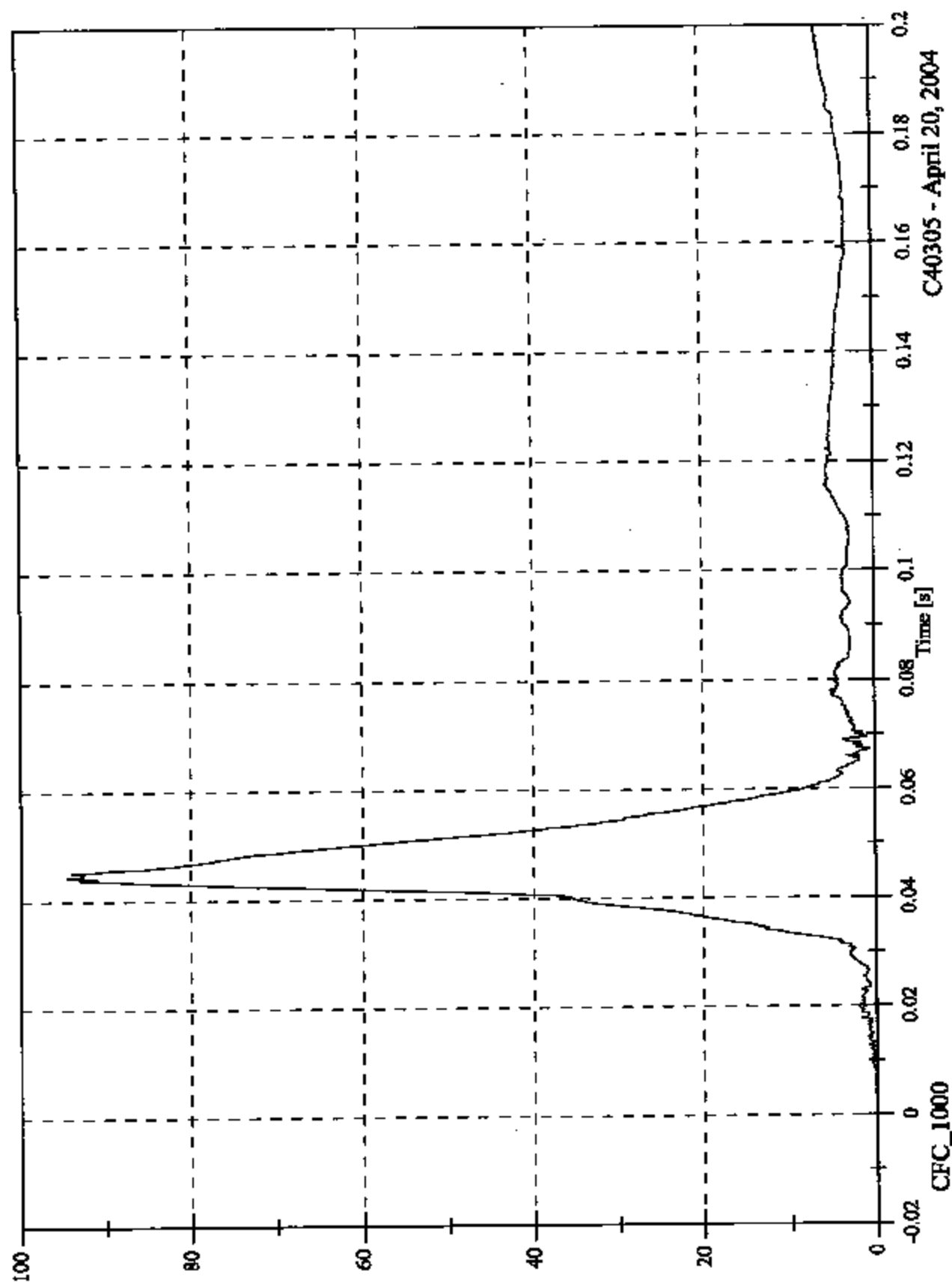


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2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Head Resultant

Max: 94.7 [g] at 0.044 [s]
Min: 0.0 [g] at -0.015 [s]

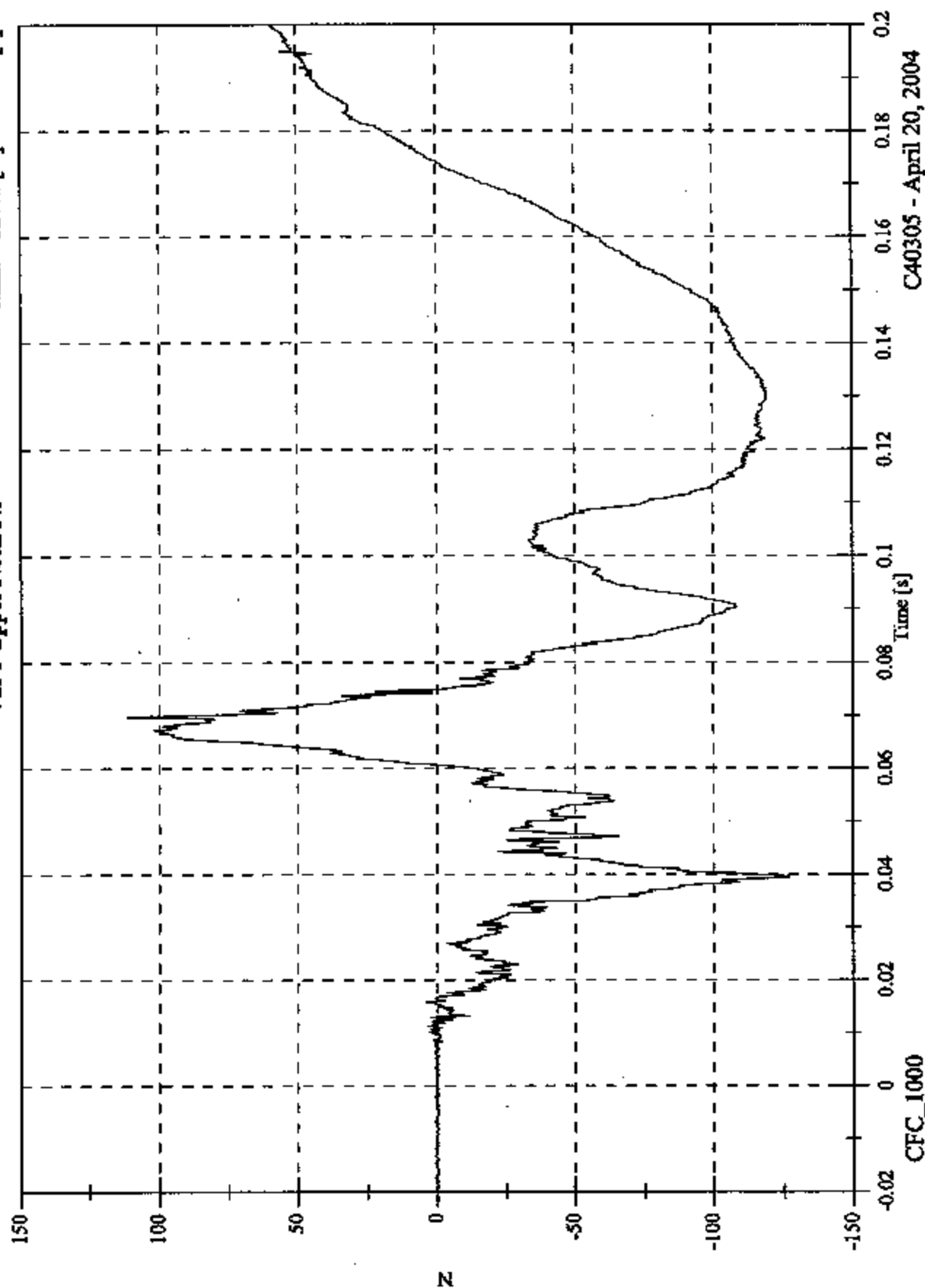


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2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2PI Upper Neck Fix

Max: 111.3 [N] at 0.070 [s]
Min: -127.2 [N] at 0.039 [s]

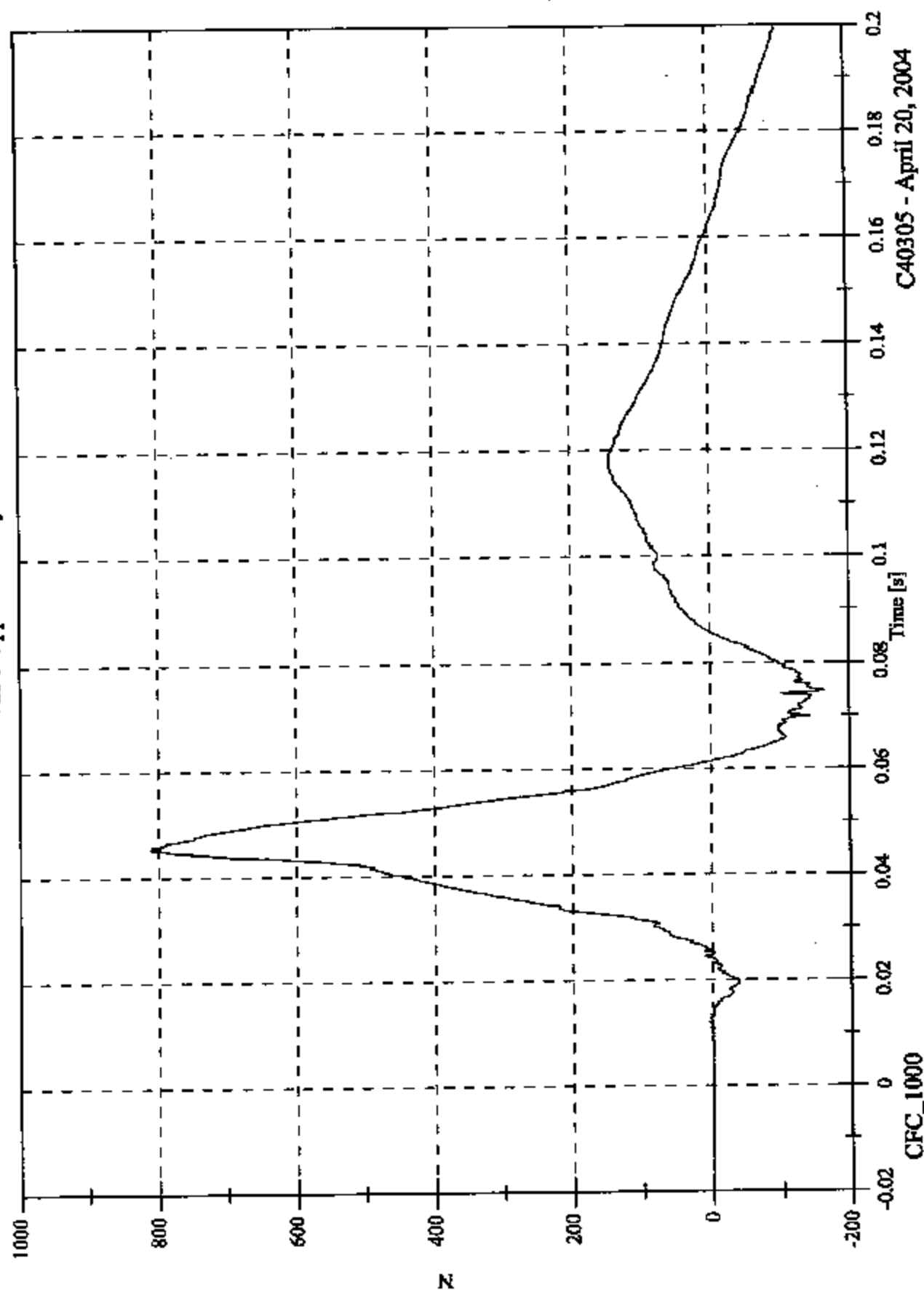


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2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Neck Fy

Max: 810.3 [N] at 0.045 [s]
Min: -162.4 [N] at 0.075 [s]

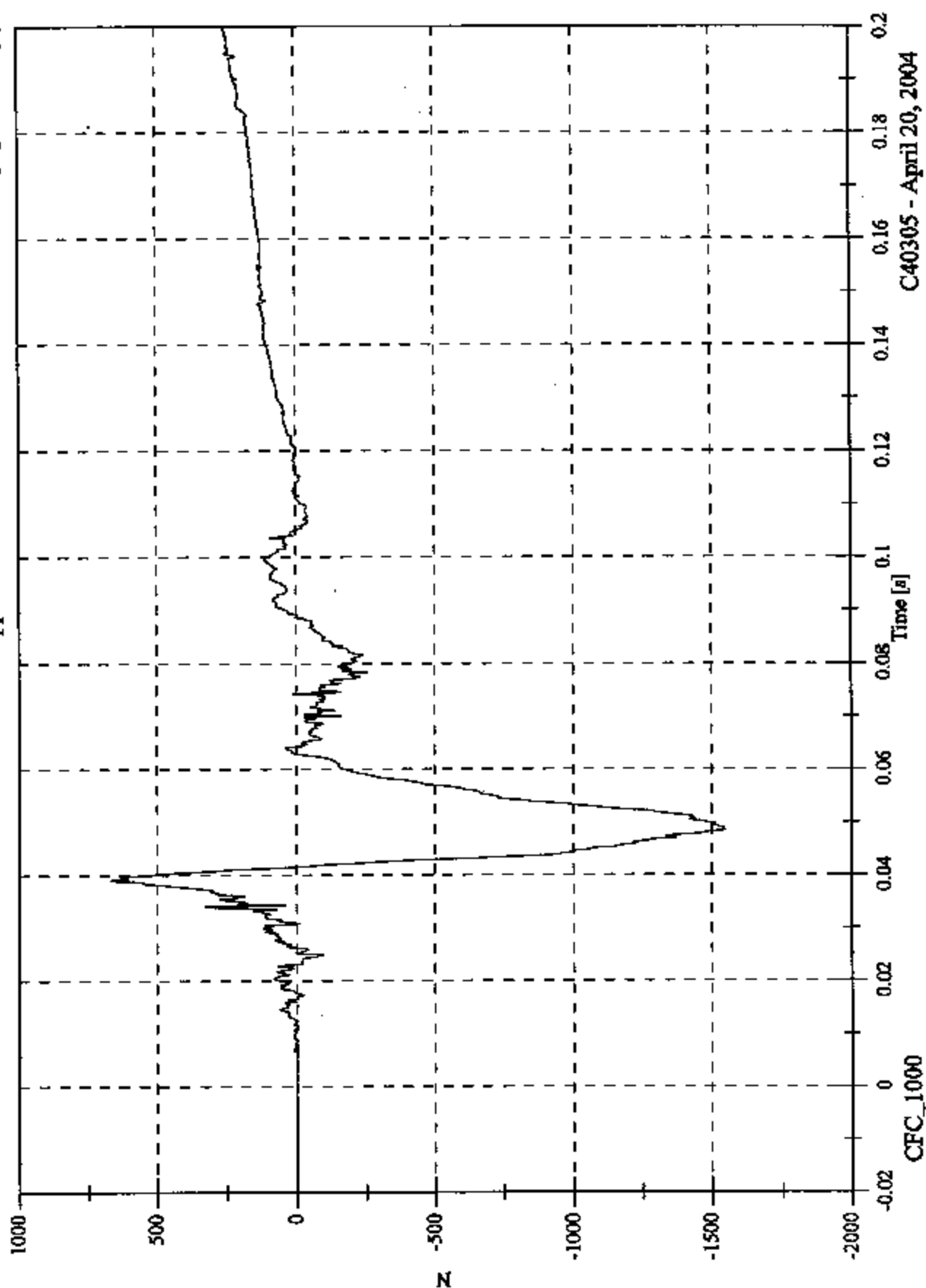


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2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Neck Fz

Max: 666.5 [N] at 0.039 [s]
Min: -1551.1 [N] at 0.048 [s]

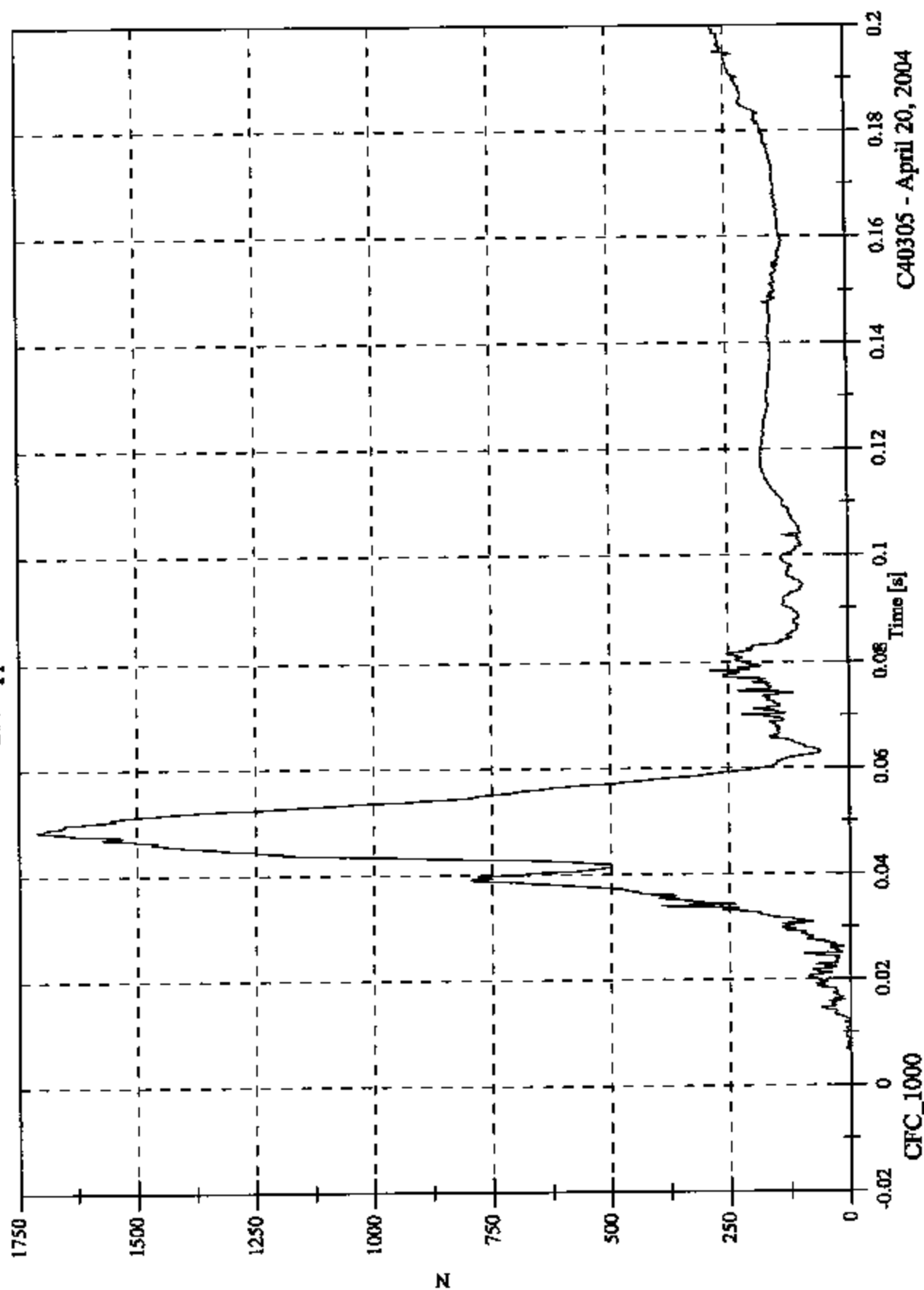


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2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Neck F Resultant

Max: 1710.2 [N] at 0.048 [s]
Min: 0.1 [N] at -0.019 [s]

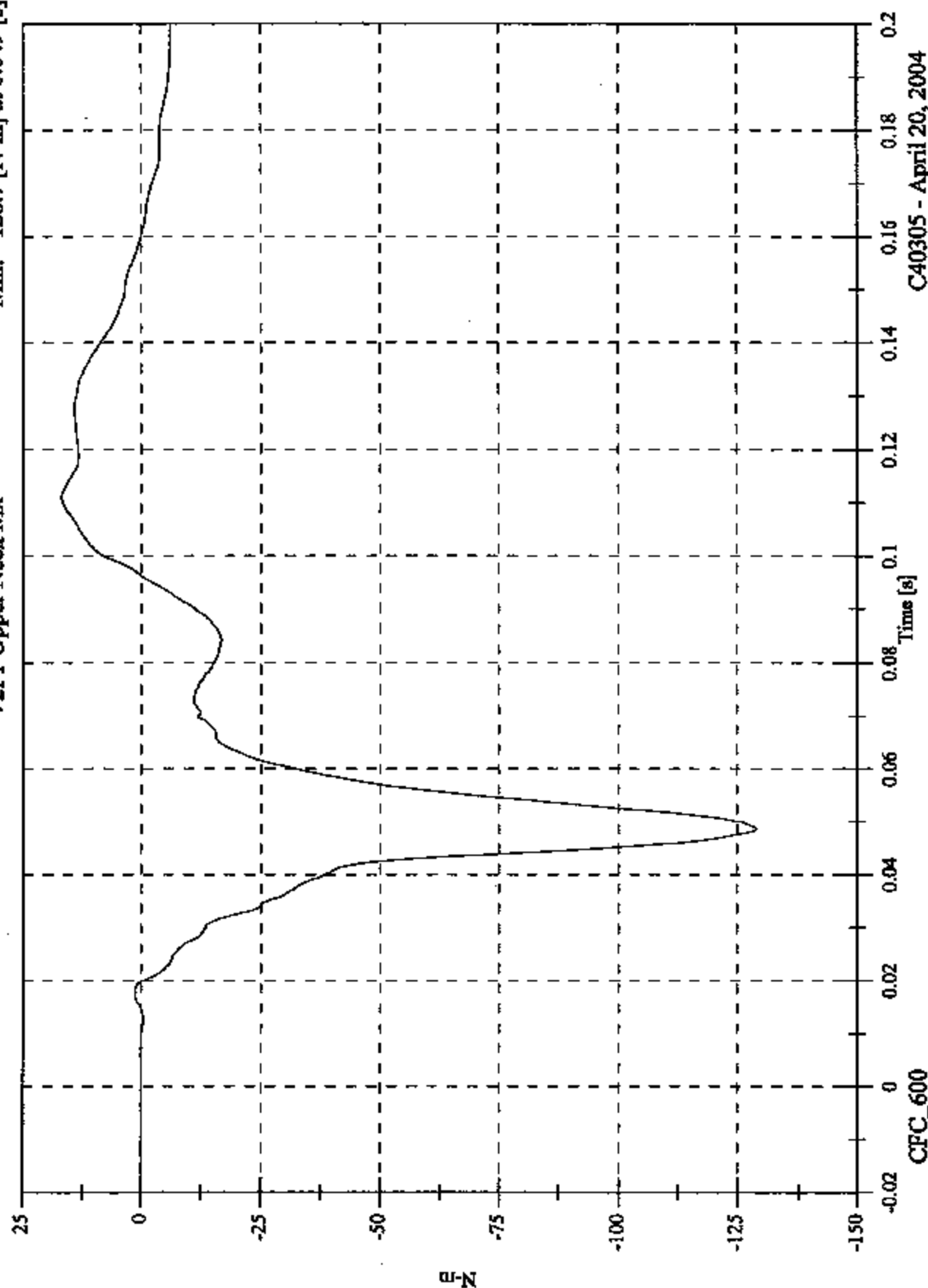


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2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Neck Mx

Max: 16.9 [N-m] at 0.111 [s]
Min: -128.7 [N-m] at 0.049 [s]

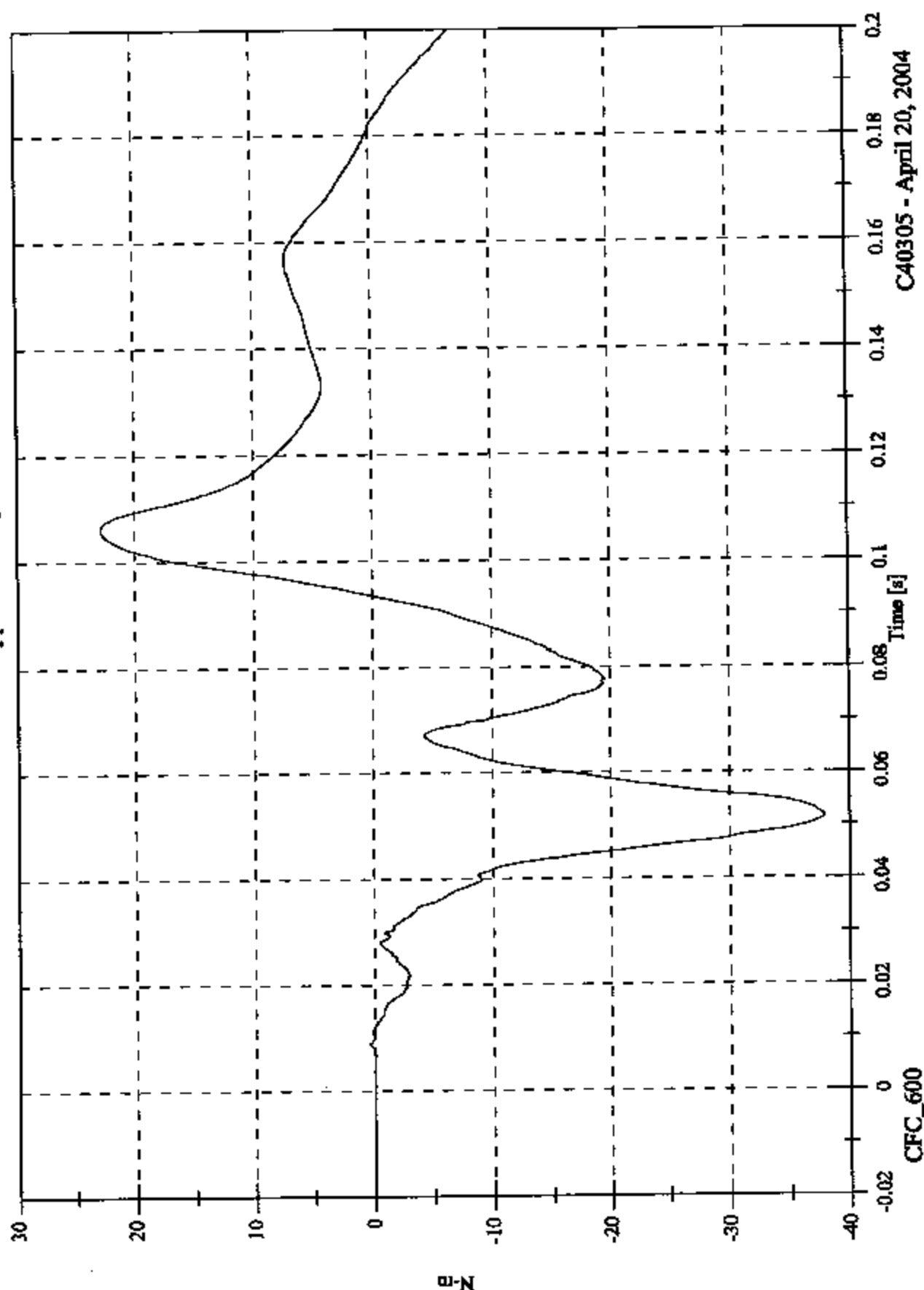


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2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Neck My

Max: 22.8 [N-m] at 0.106 [s]
Min: -37.9 [N-m] at 0.052 [s]

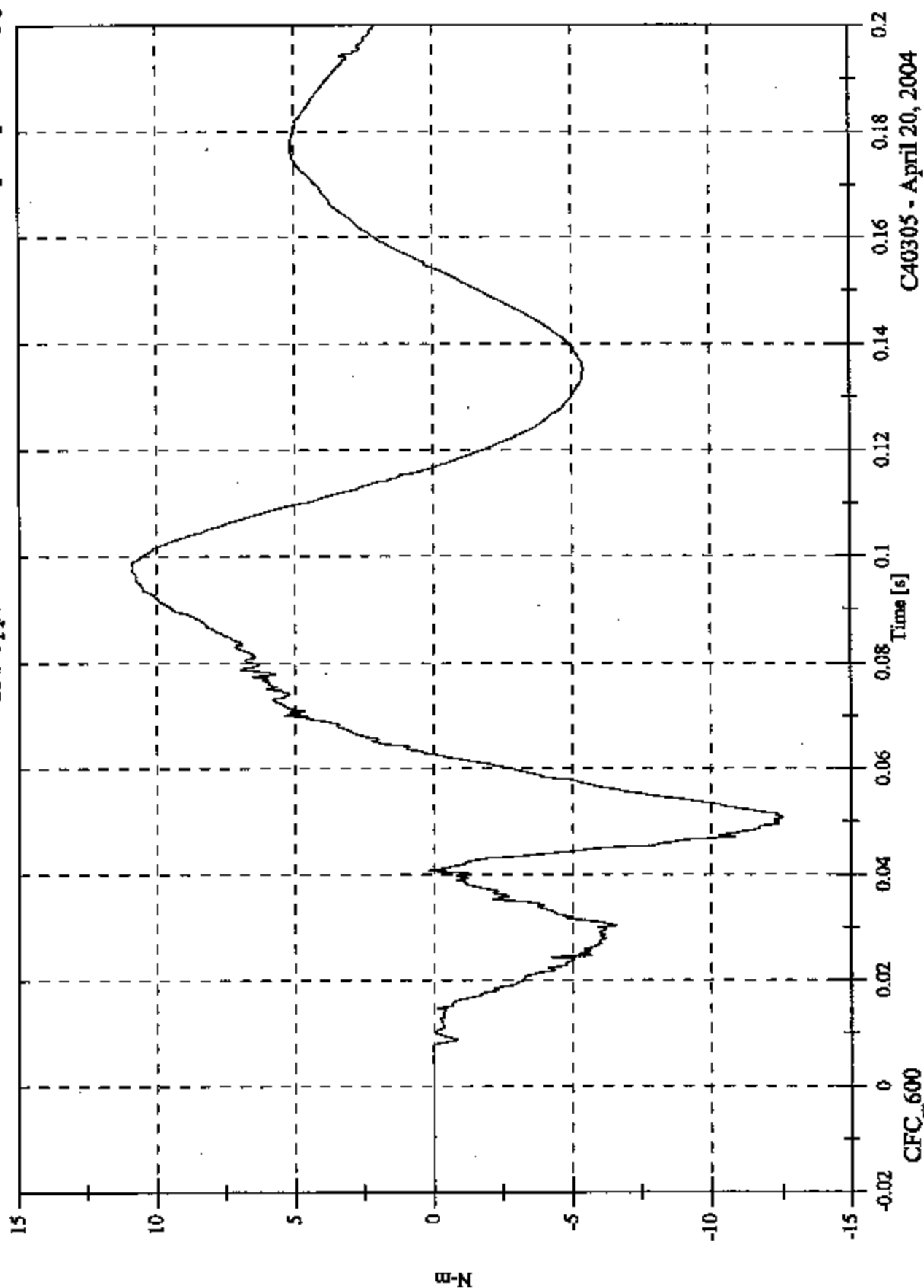


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2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Neck Mz

Max: 10.9 [N-m] at 0.099 [s]
Min: -12.5 [N-m] at 0.051 [s]



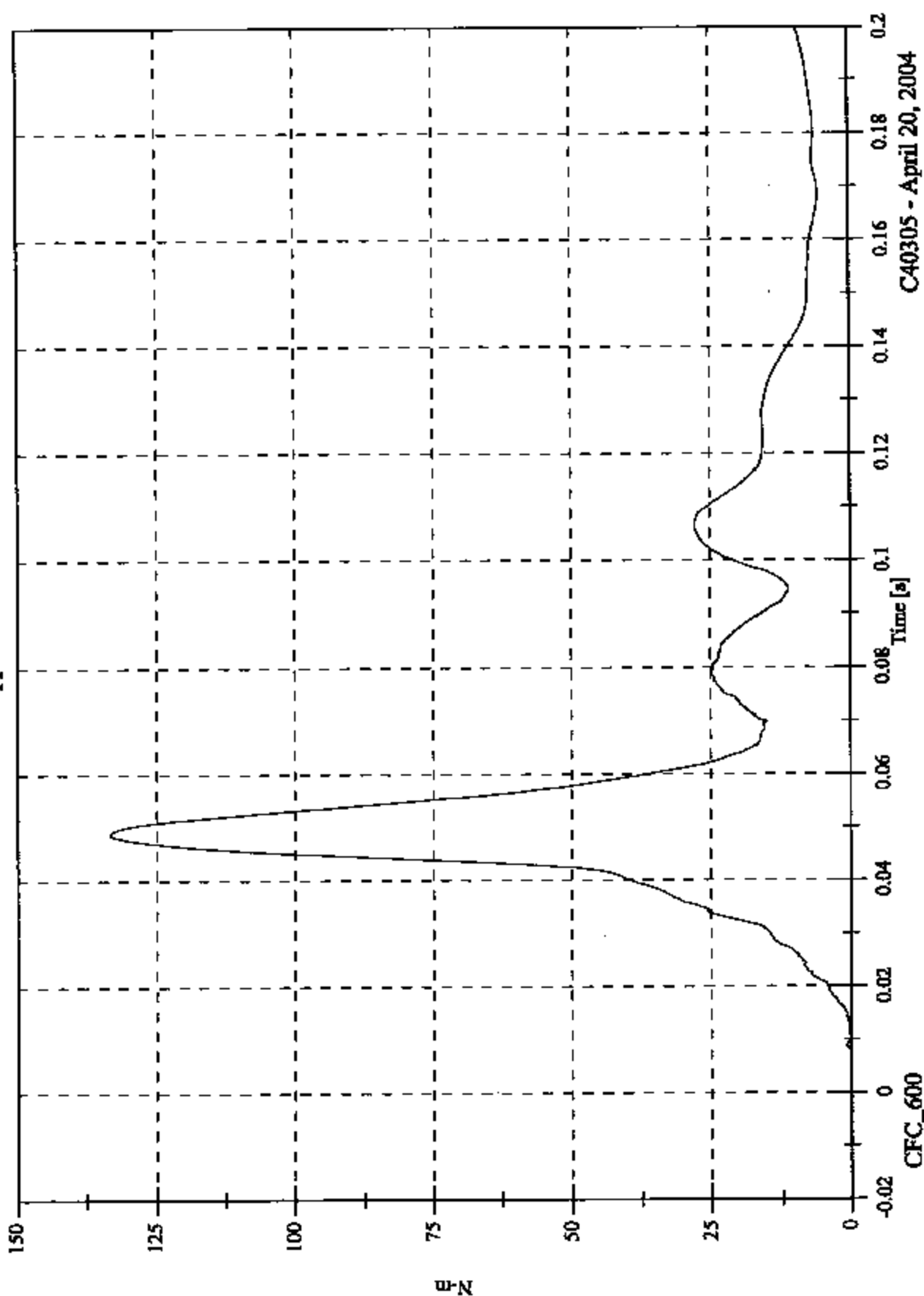
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

Max: 133.4 [N-m] at 0.049 [s]

Min: 0.0 [N-m] at -0.018 [s]

V2P1 Upper Neck M Resultant

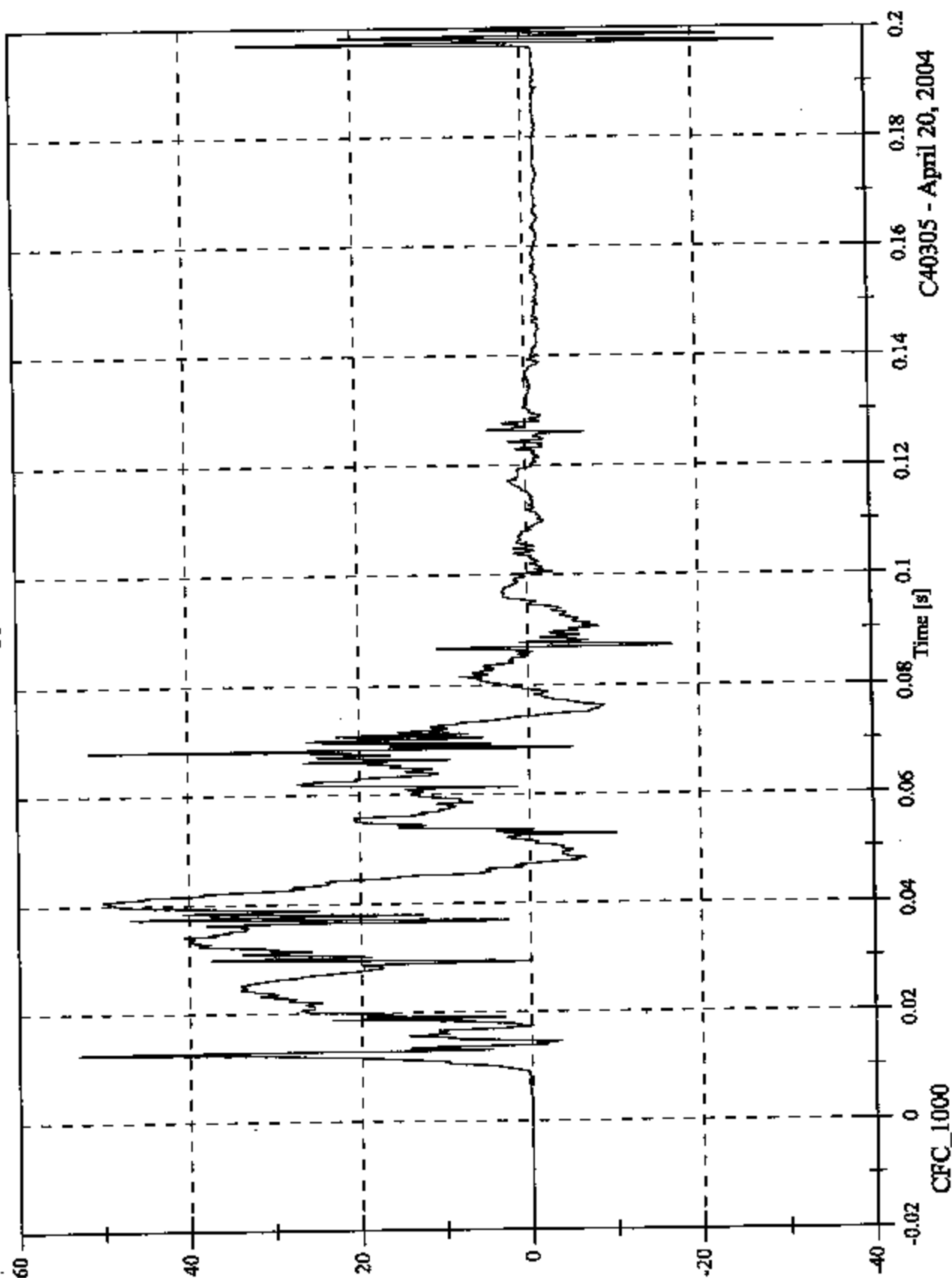


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2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

VZP1 Upper Rib y

Max: 53.0 [g] at 0.013 [s]
Min: -29.6 [g] at 0.198 [s]

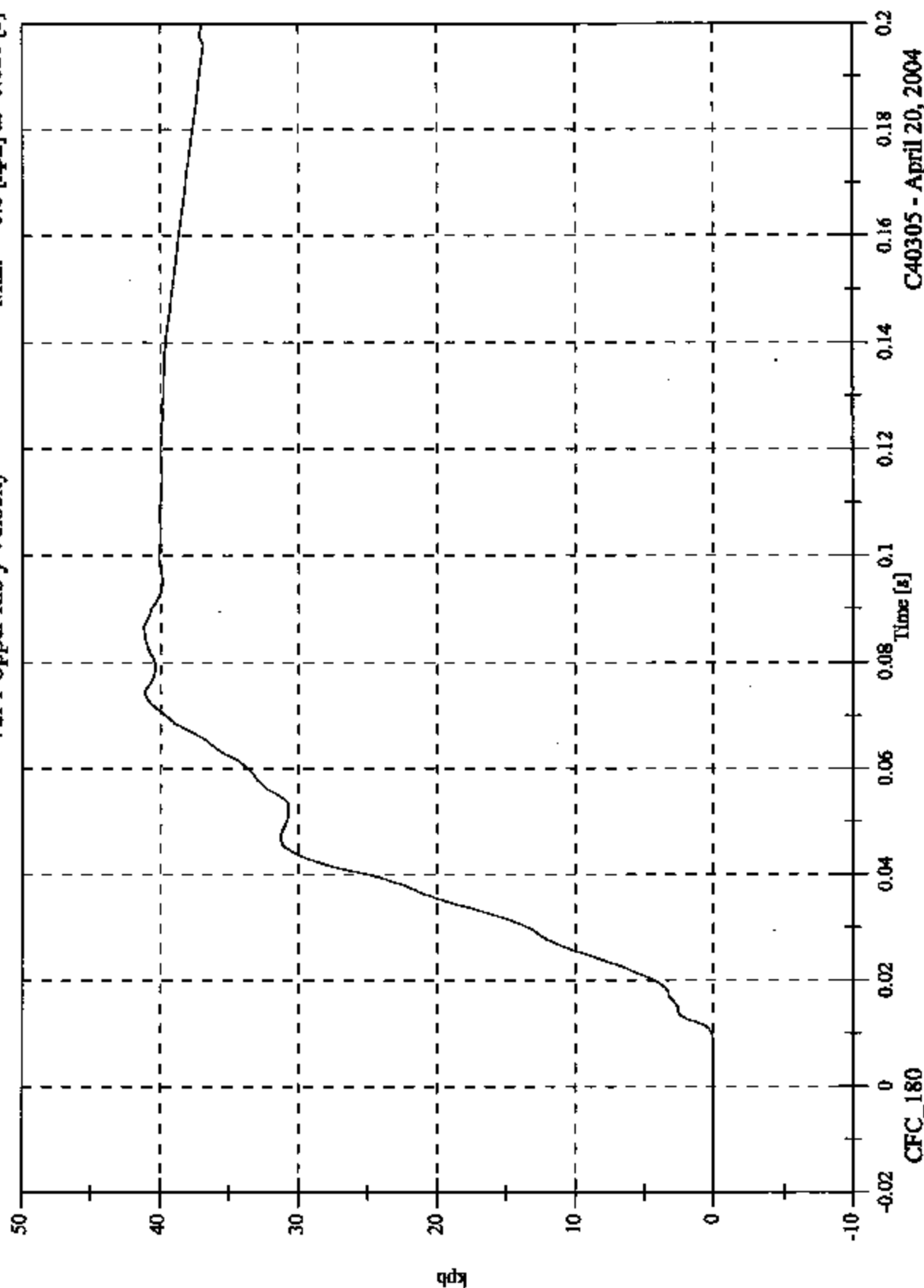


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Rib y Velocity

Max: 41.2 [kph] at 0.086 [s]
Min: -0.0 [kph] at -0.020 [s]

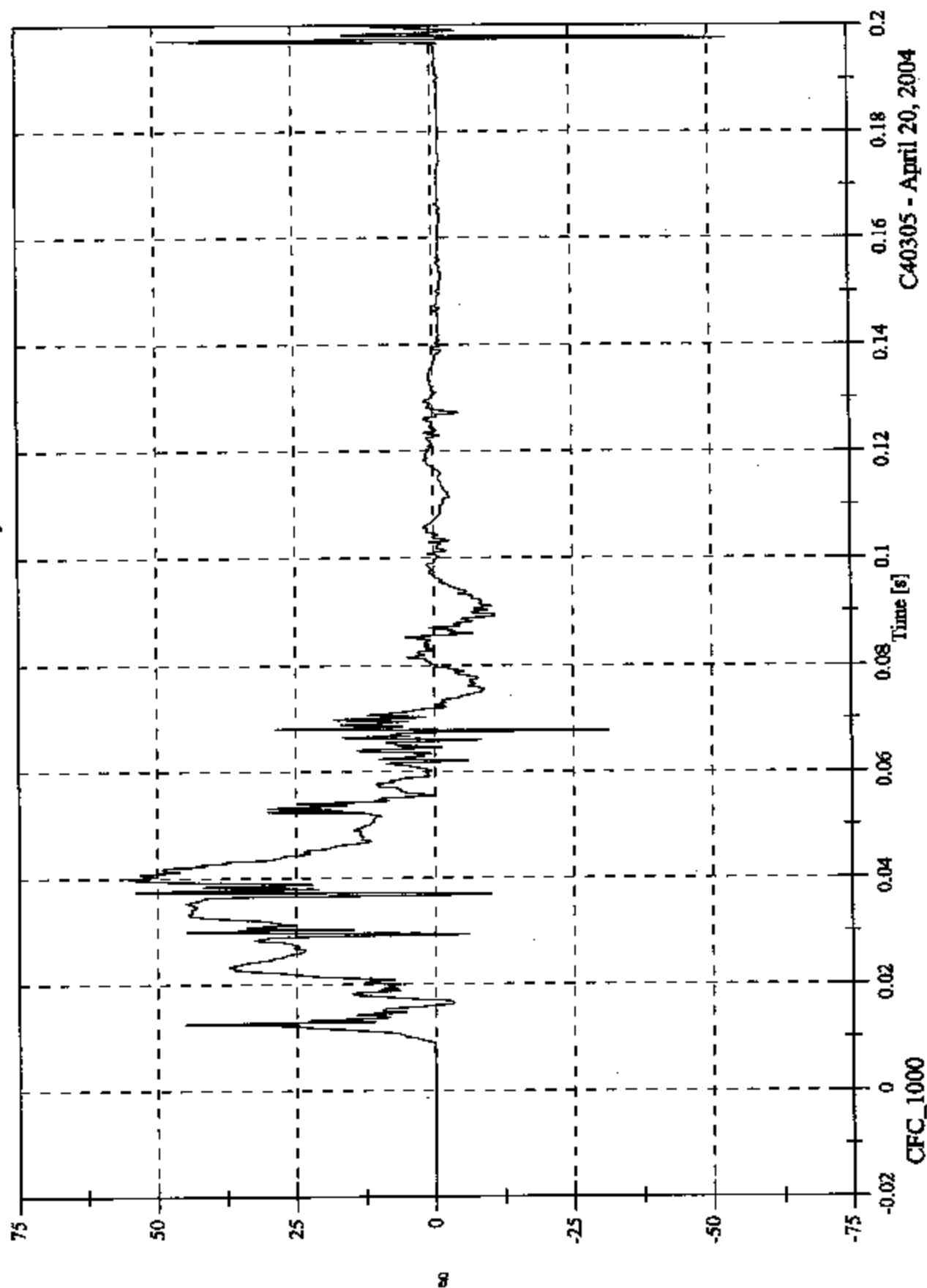


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Lower Rib y

Max: 55.2 [g] at 0.040 [s]
Min: -53.4 [g] at 0.198 [s]



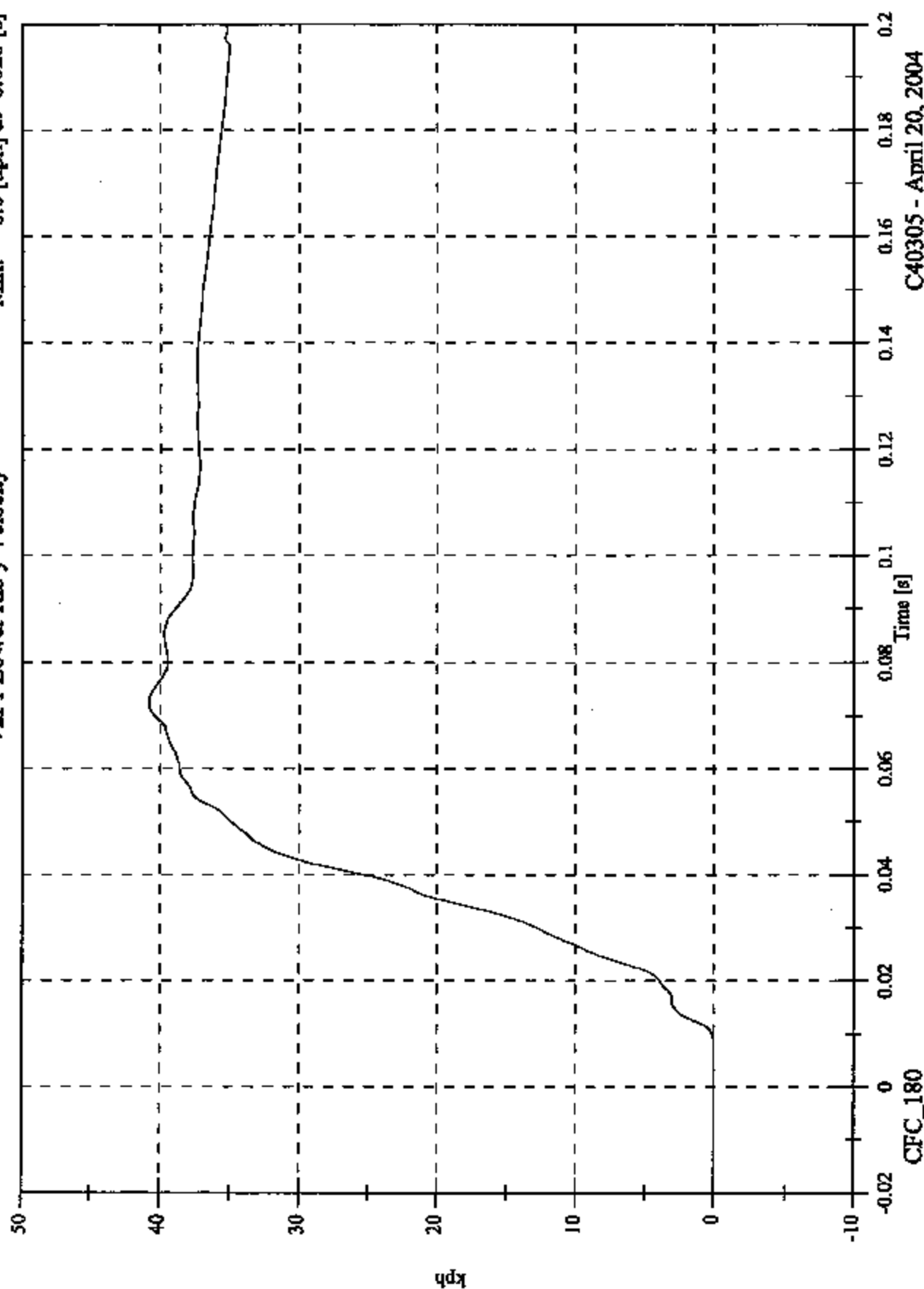
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Lower Rib y Velocity

Max: 40.8 [kph] at 0.072 [s]

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

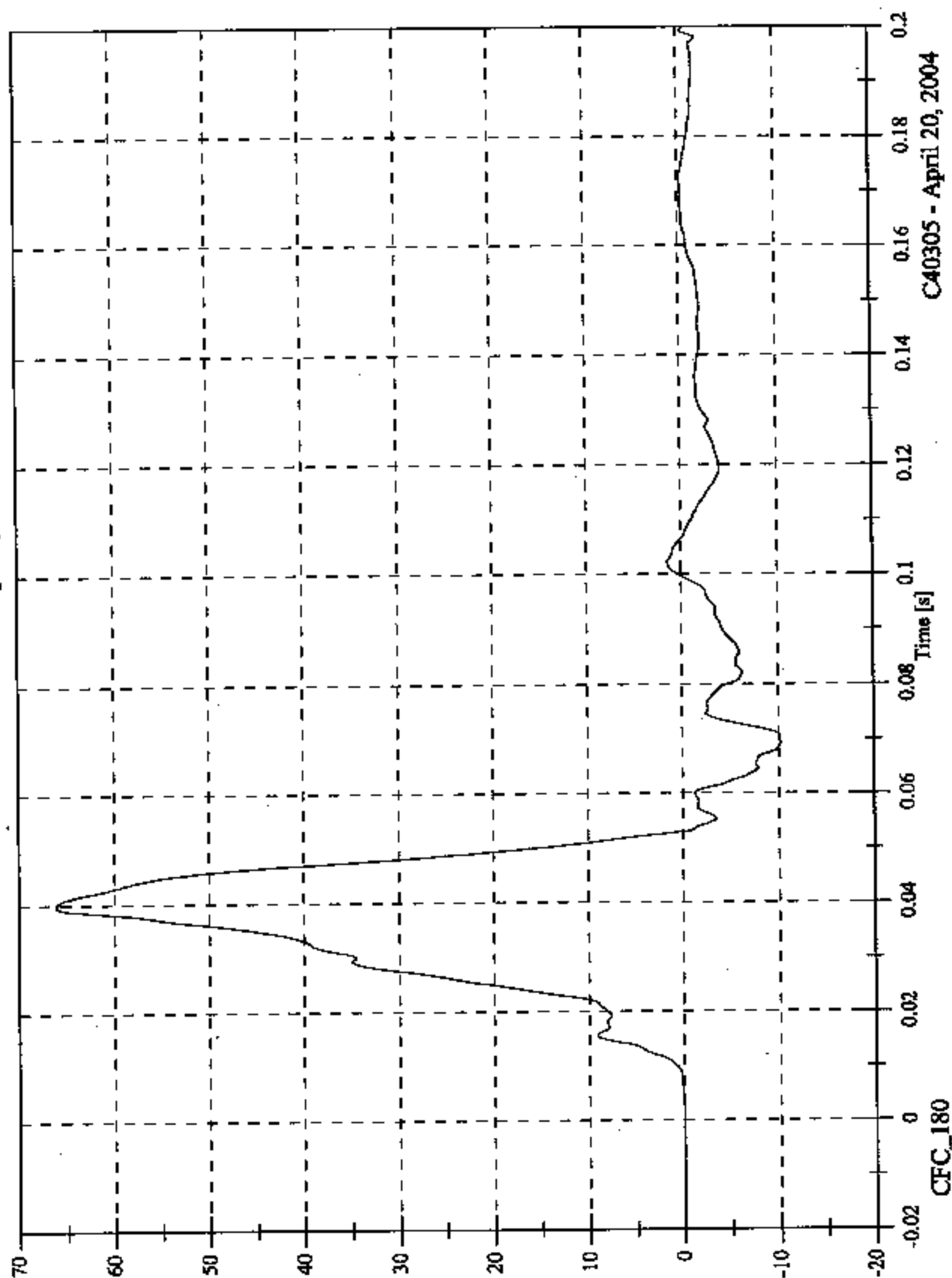


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Lower Spine y

Max: 66.2 [g] at 0.040 [s]
Min: -10.2 [g] at 0.069 [s]

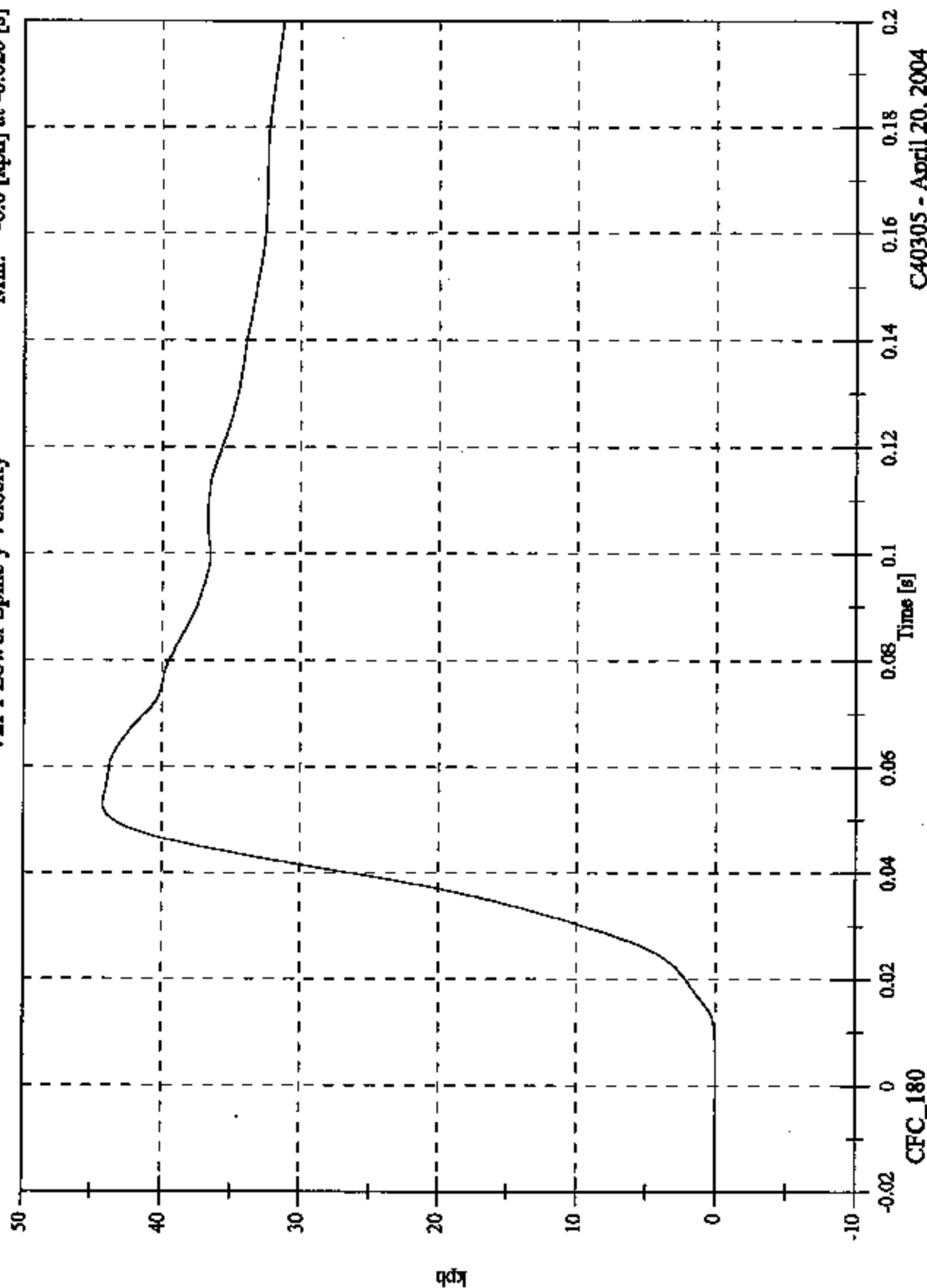


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

Max: 44.2 [kph] at 0.053 [s]
 Min: -0.0 [kph] at -0.020 [s]

V2P1 Lower Spine y Velocity



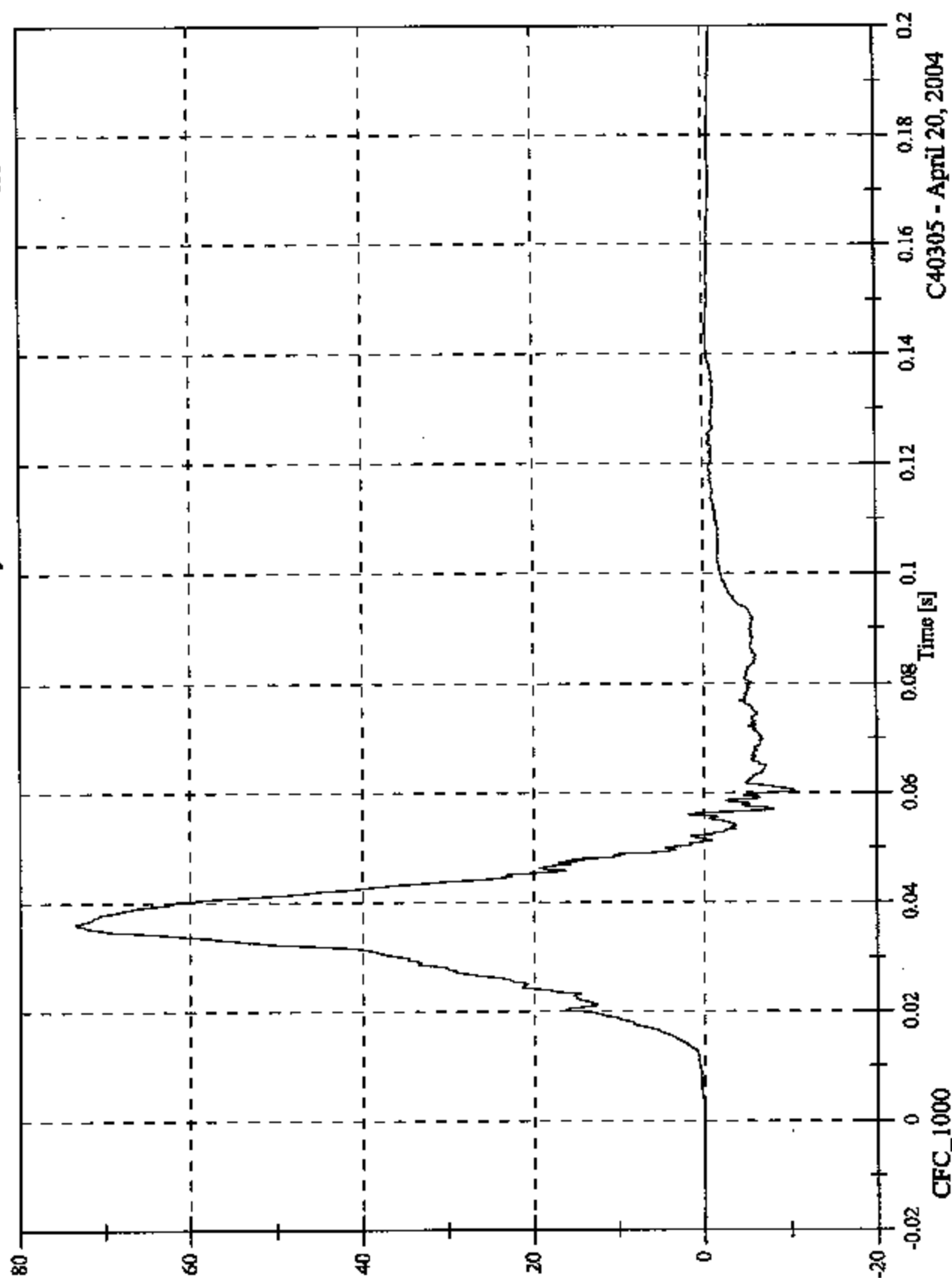
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Pelvic y

Max: 73.5 [g] at 0.036 [s]

Min: -10.4 [g] at 0.060 [s]

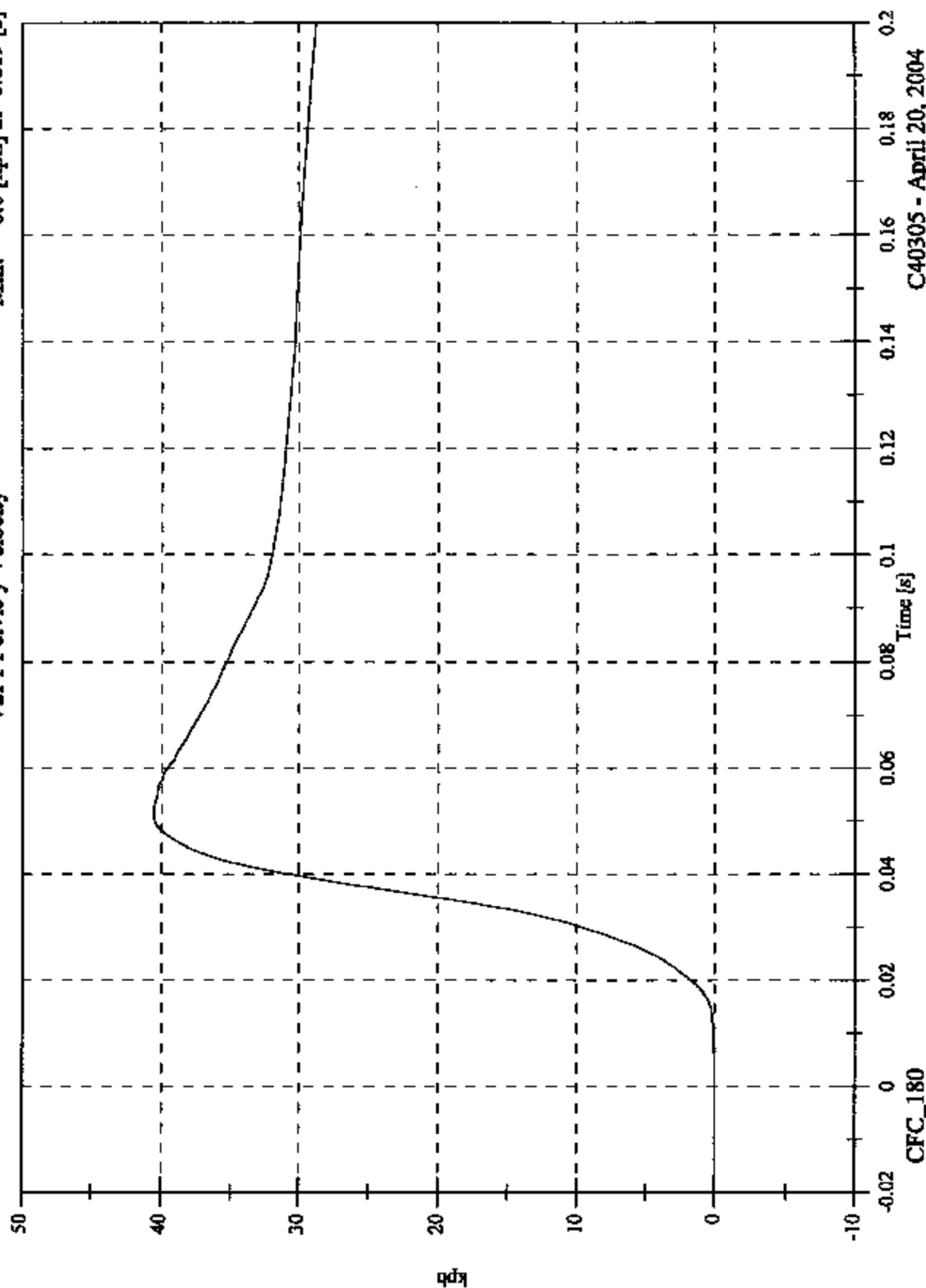


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Pelvic y Velocity

Max: 40.5 [kph] at 0.052 [s]
Min: -0.0 [kph] at -0.019 [s]

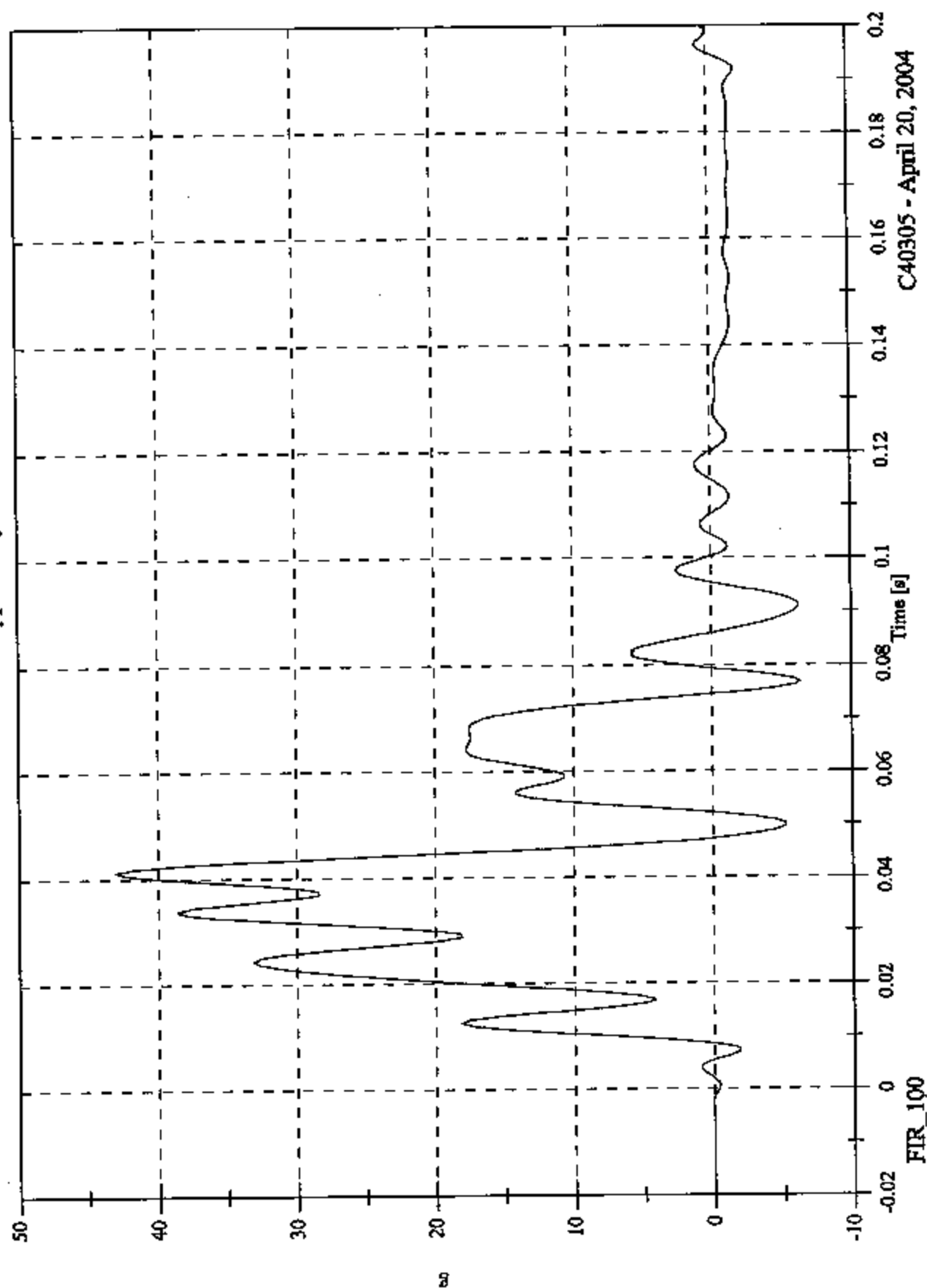


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Rib y

Max: 43.1 [g] at 0.041 [s]
Min: -6.3 [g] at 0.077 [s]



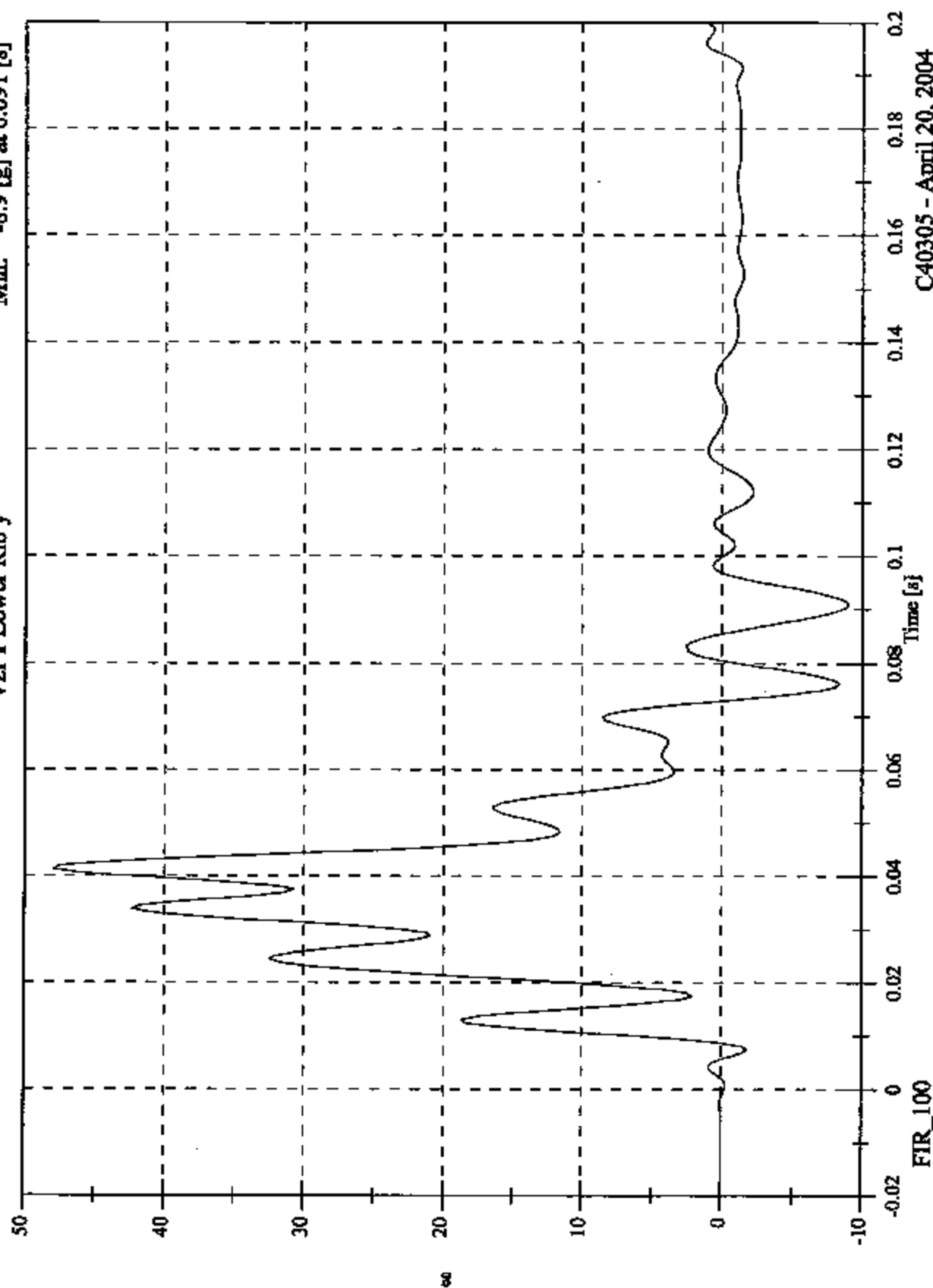
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2PI Lower Rib y

Max: 47.9 [g] at 0.041 [s]

Min: -8.9 [g] at 0.091 [s]

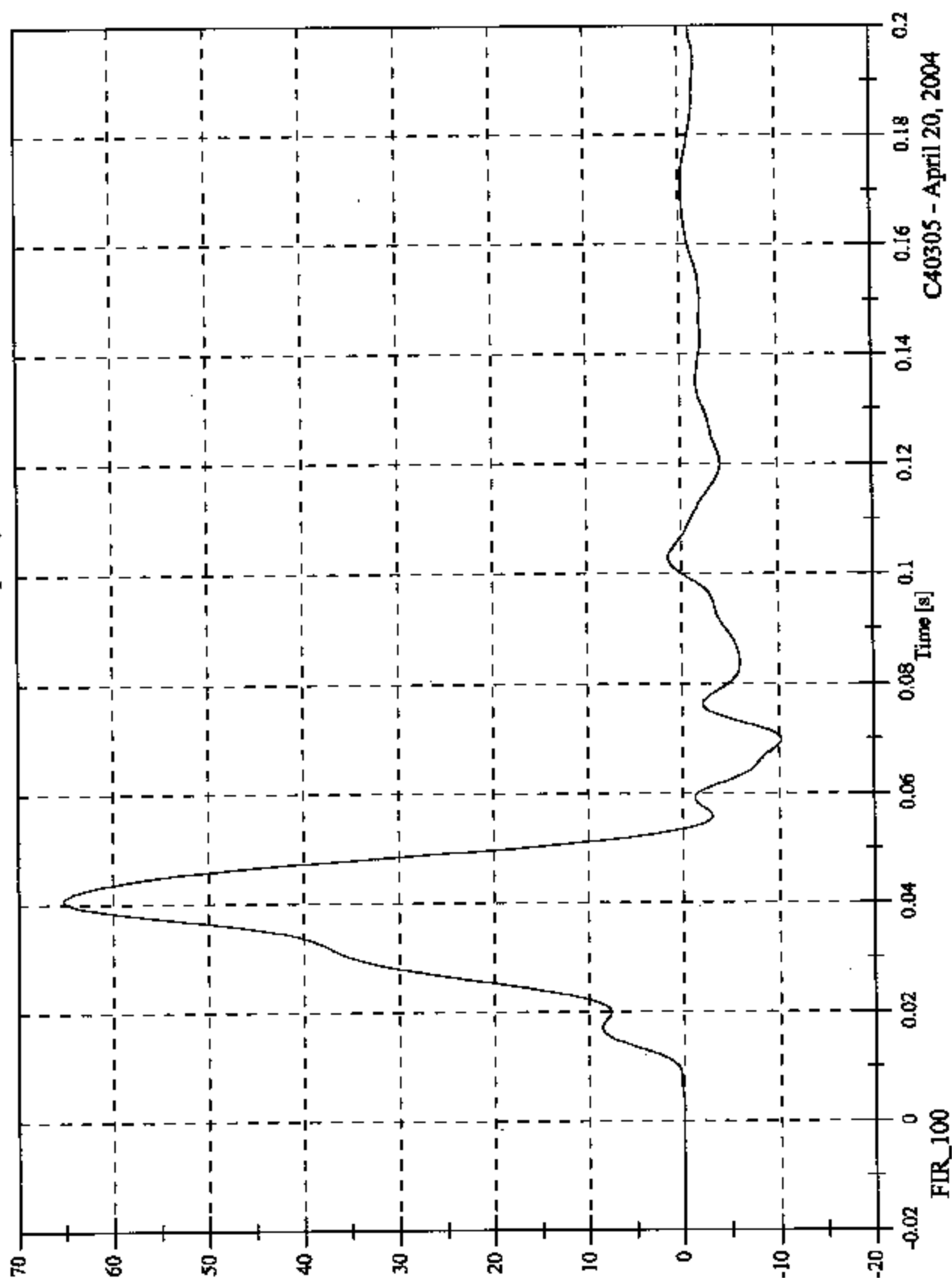


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Lower Spine y

Max: 65.3 [g] at 0.041 [s]
Min: -10.2 [g] at 0.070 [s]



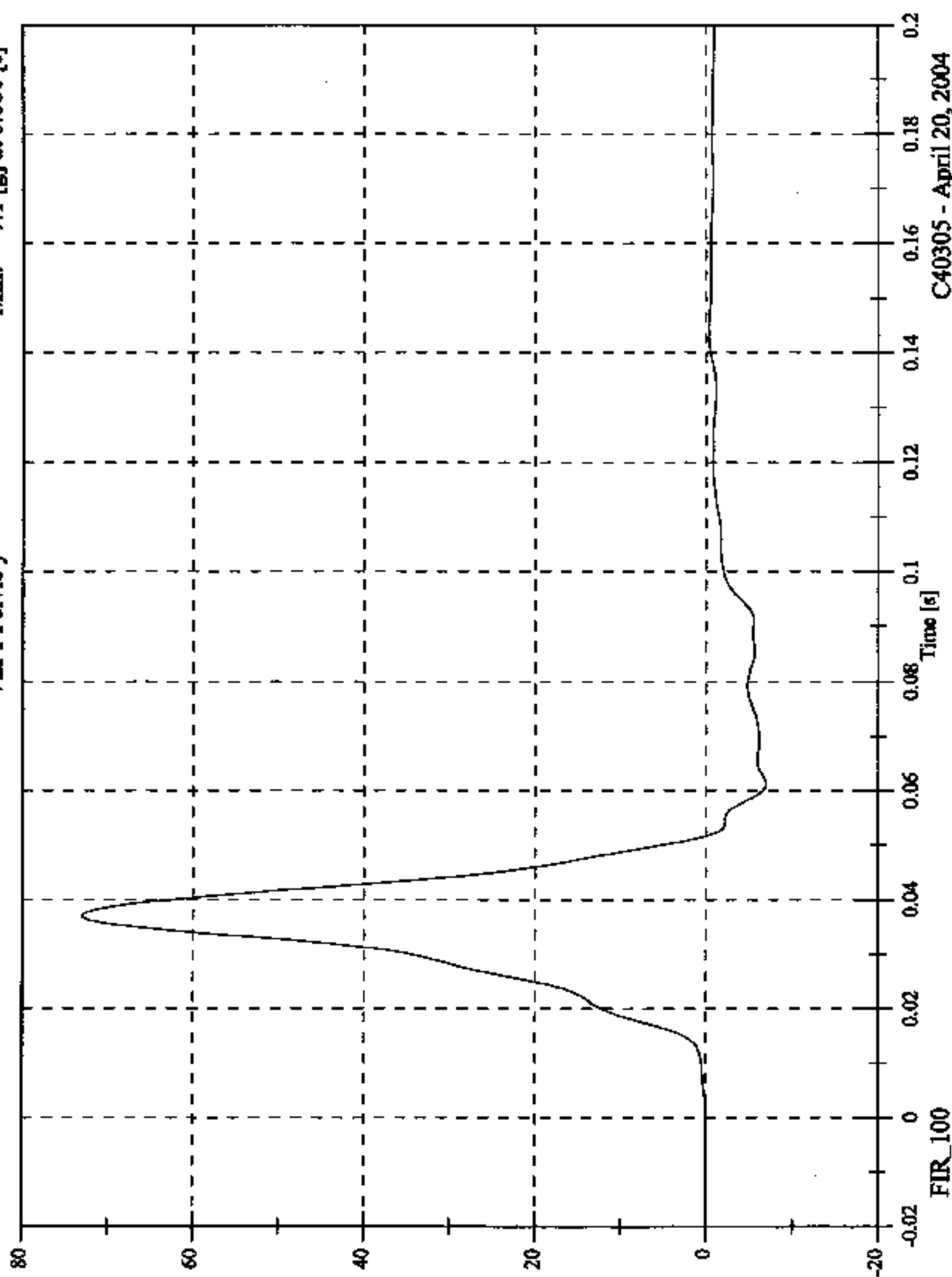
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Pelvic y

Max: 73.0 [g] at 0.037 [s]

Min: -7.1 [g] at 0.061 [s]

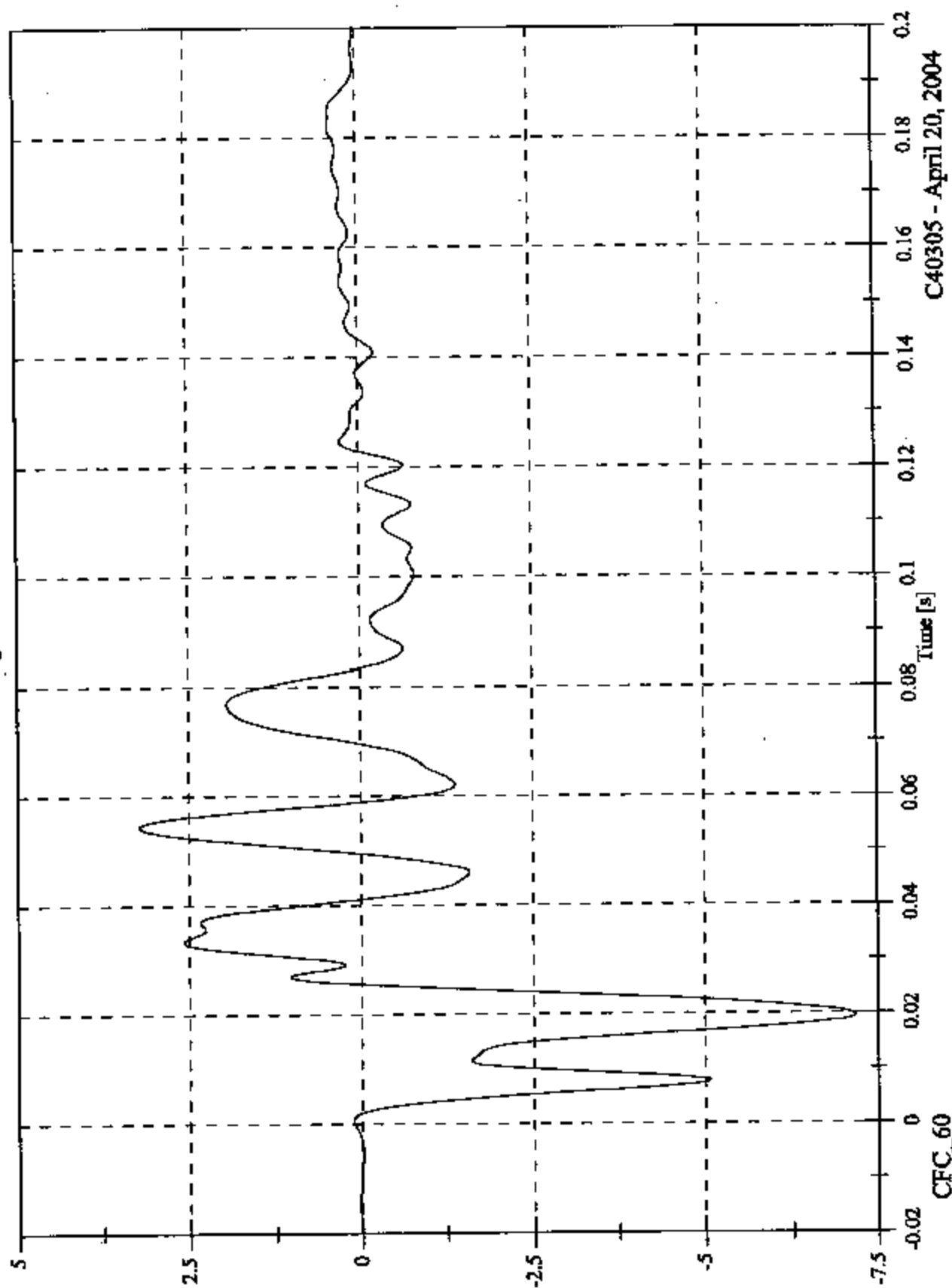


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A1 Right Front Sill x

Max: 3.2 [g] at 0.054 [s]
Min: -7.2 [g] at 0.020 [s]

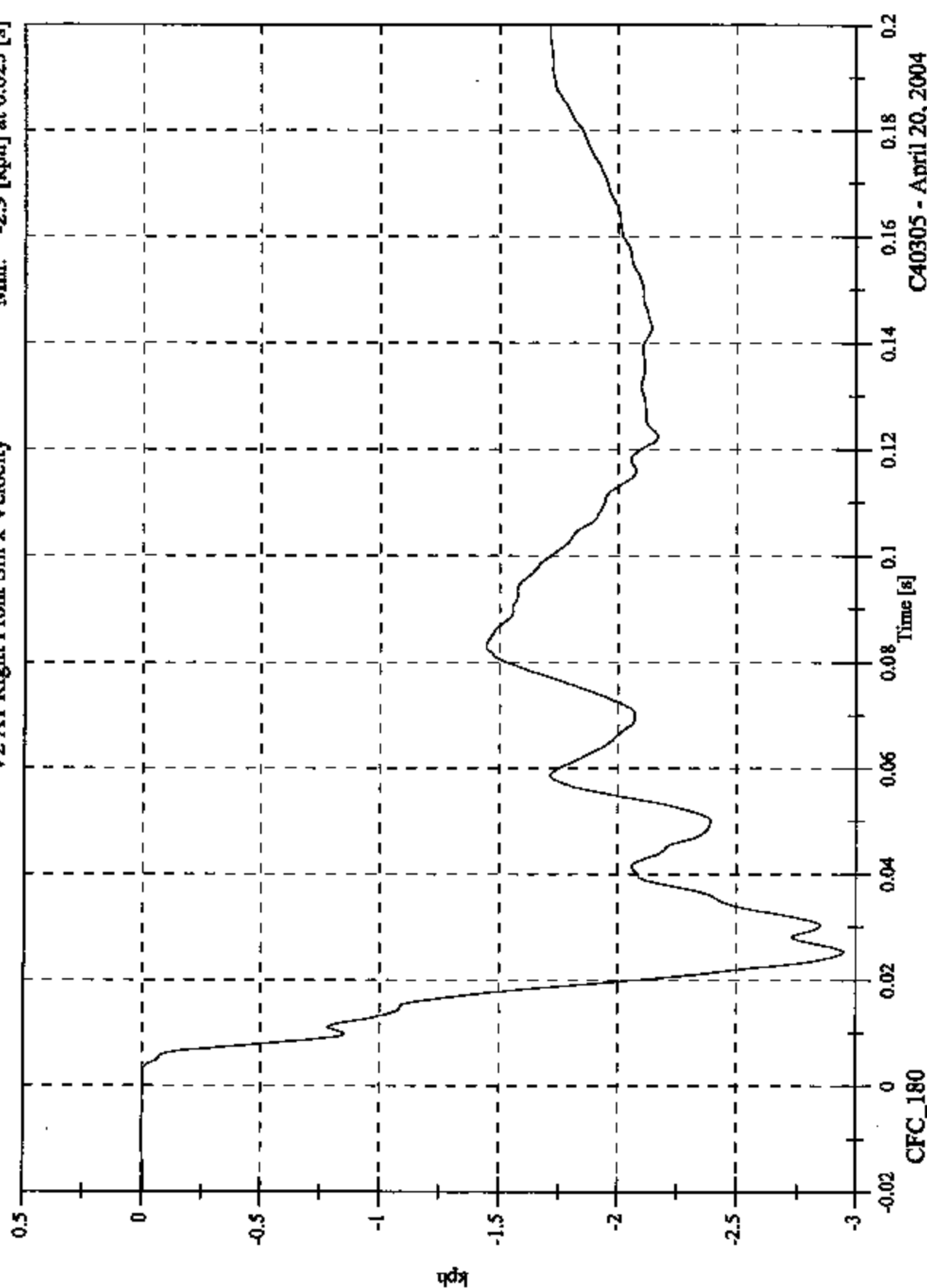


C40305 - April 20, 2004

2004 FIMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A1 Right Front Sill x Velocity

Max: 0.0 [kph] at -0.007 [s]
Min: -2.9 [kph] at 0.025 [s]

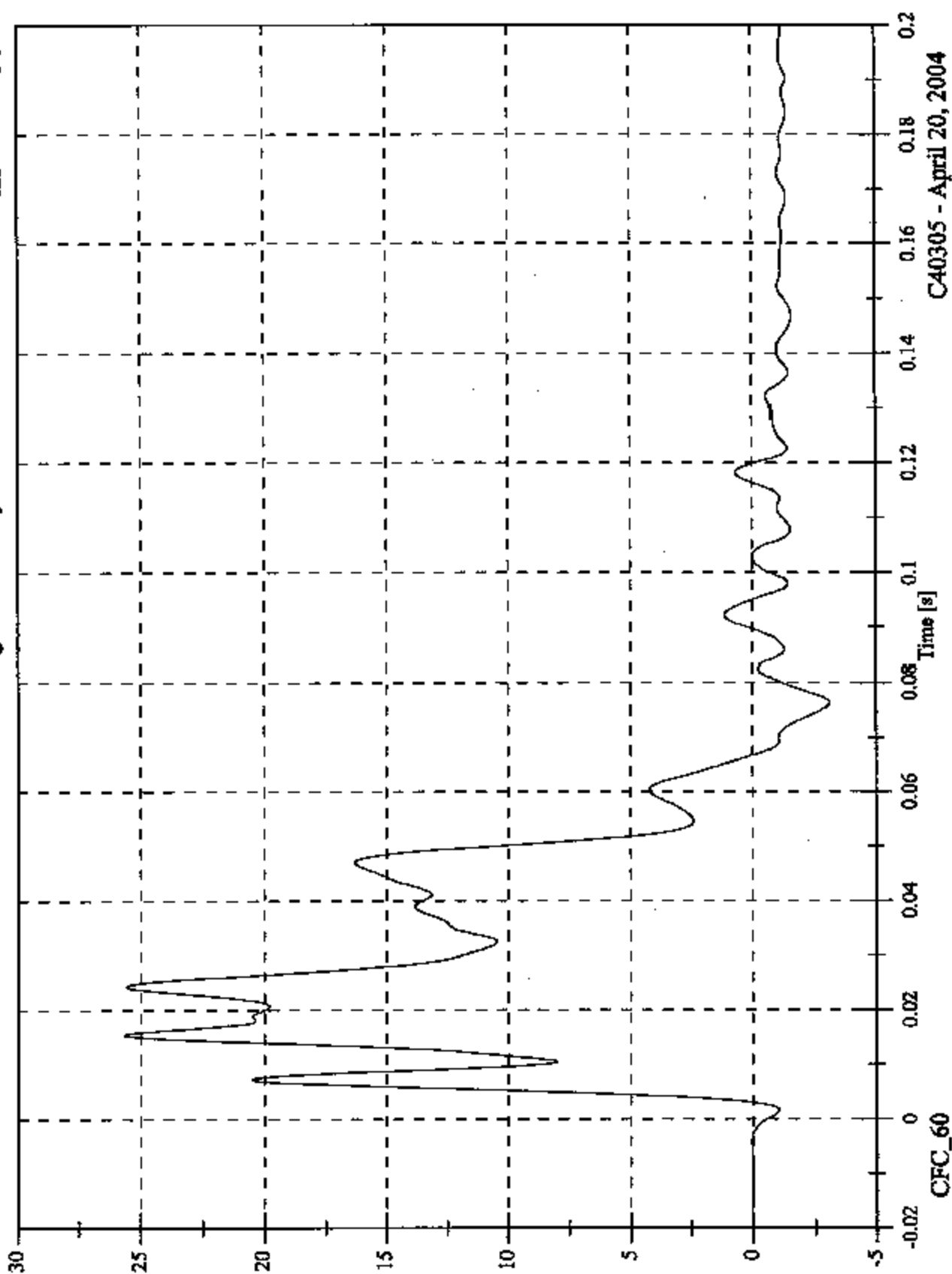


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A1 Right Front Sill y

Max: 25.7 [g] at 0.015 [s]
Min: -3.1 [g] at 0.076 [s]



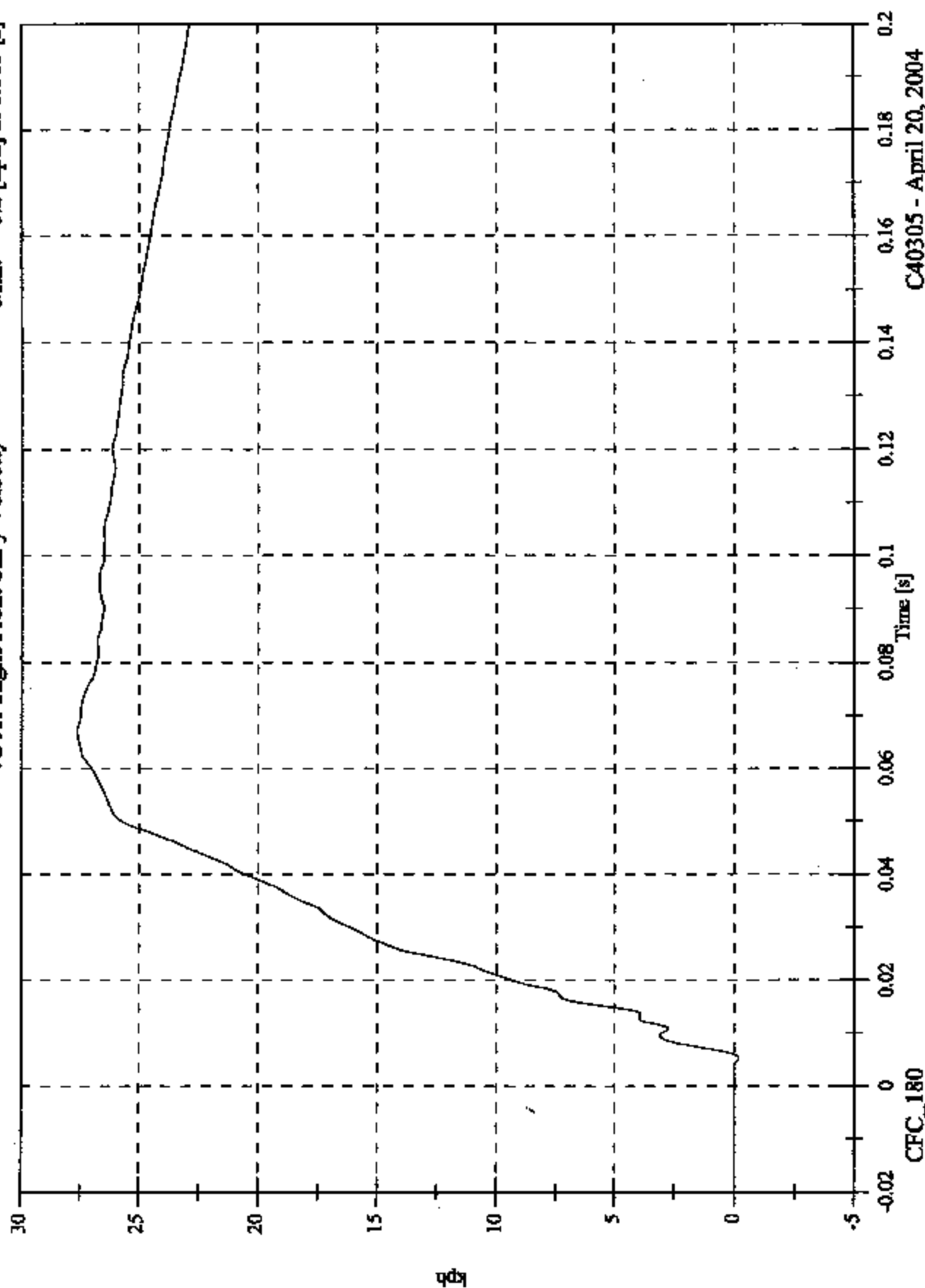
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A1 Right Front Sill y Velocity

Max: 27.6 [kph] at 0.067 [s]

Min: -0.2 [kph] at 0.005 [s]



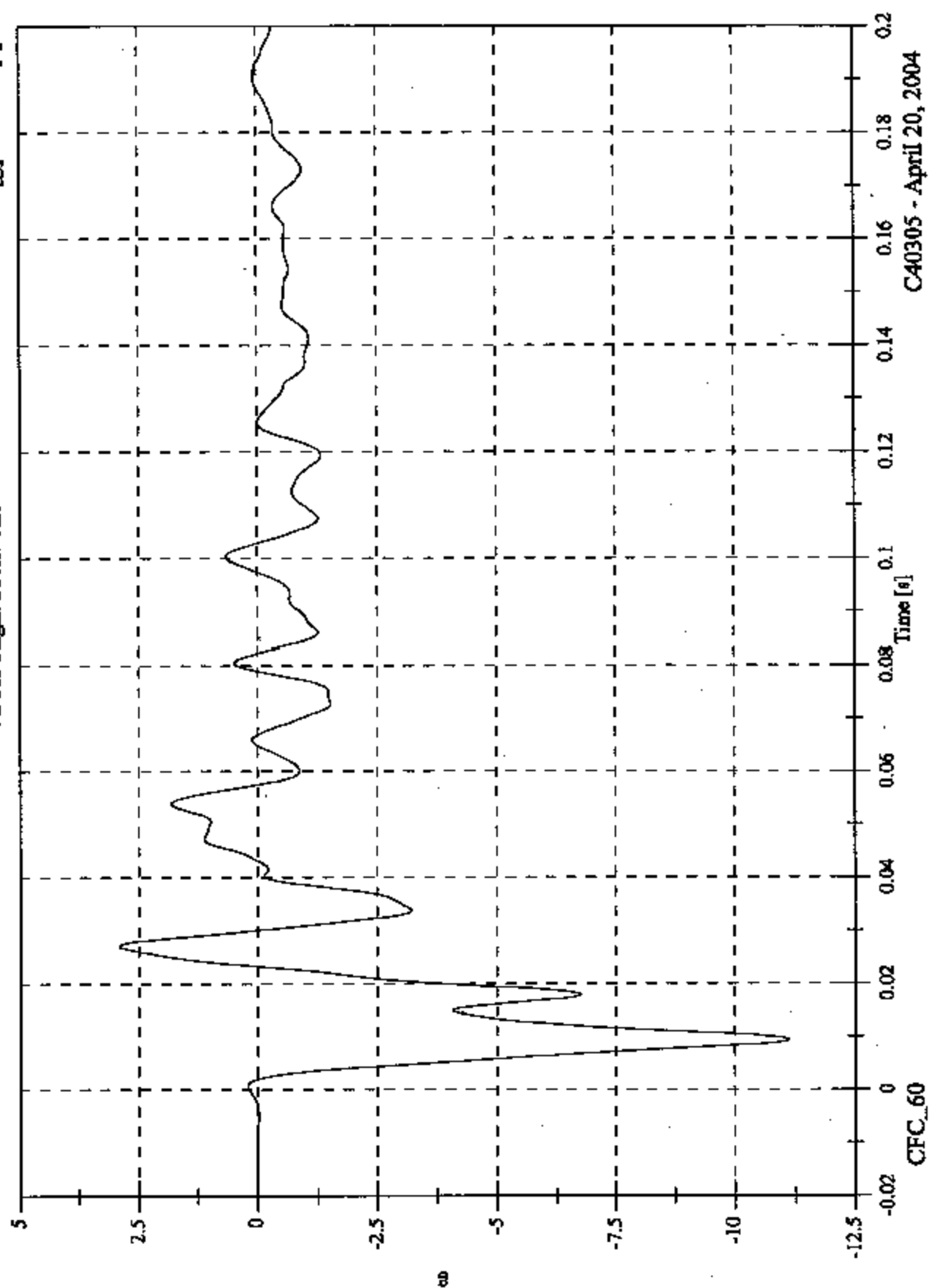
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A1 Right Front Sill z

Max: 2.9 [g] at 0.027 [s]

Min: -11.1 [g] at 0.009 [s]



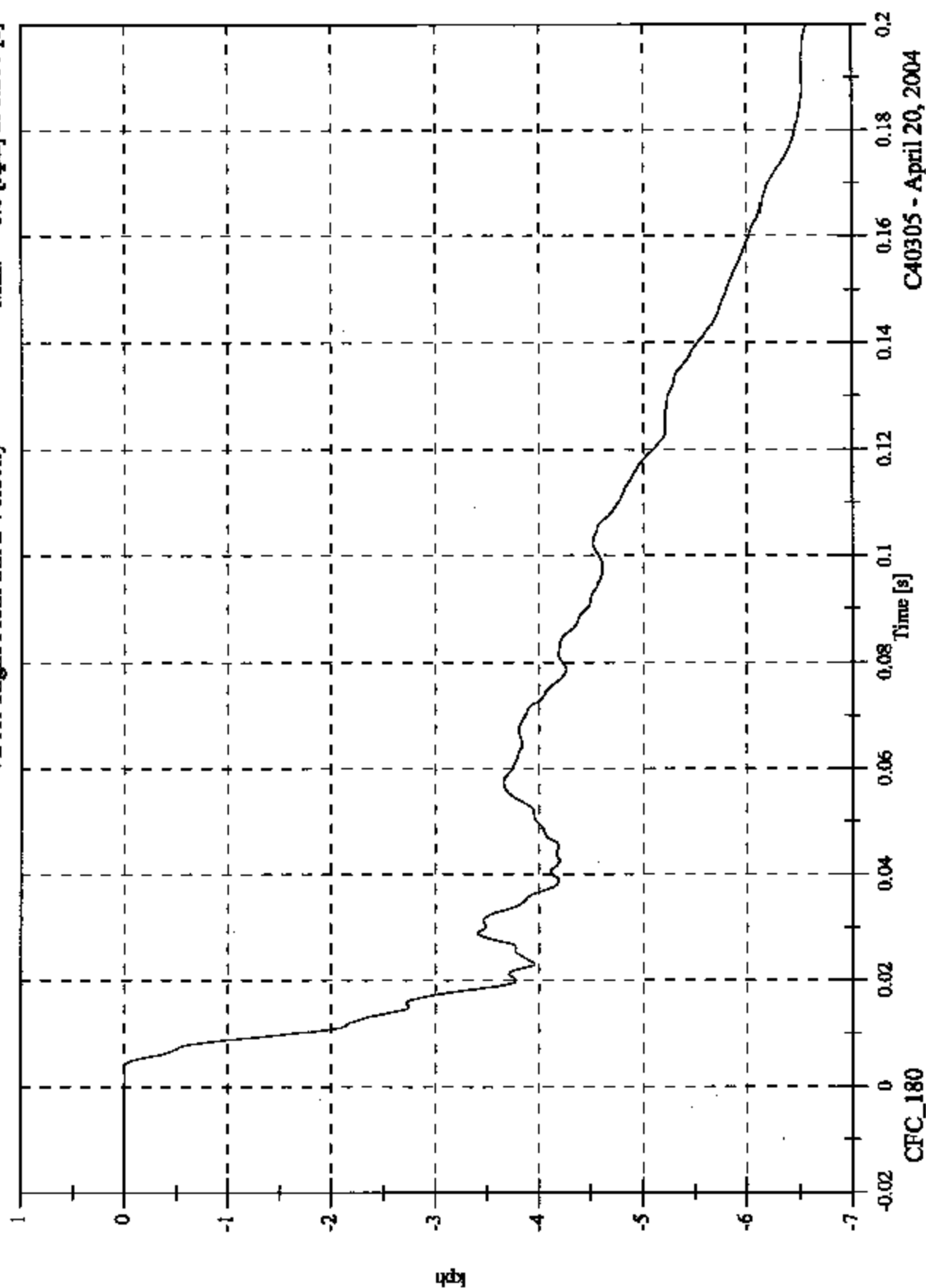
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A1 Right Front Sill z Velocity

Max: 0.0 [kph] at 0.004 [s]

Min: -6.6 [kph] at 0.200 [s]



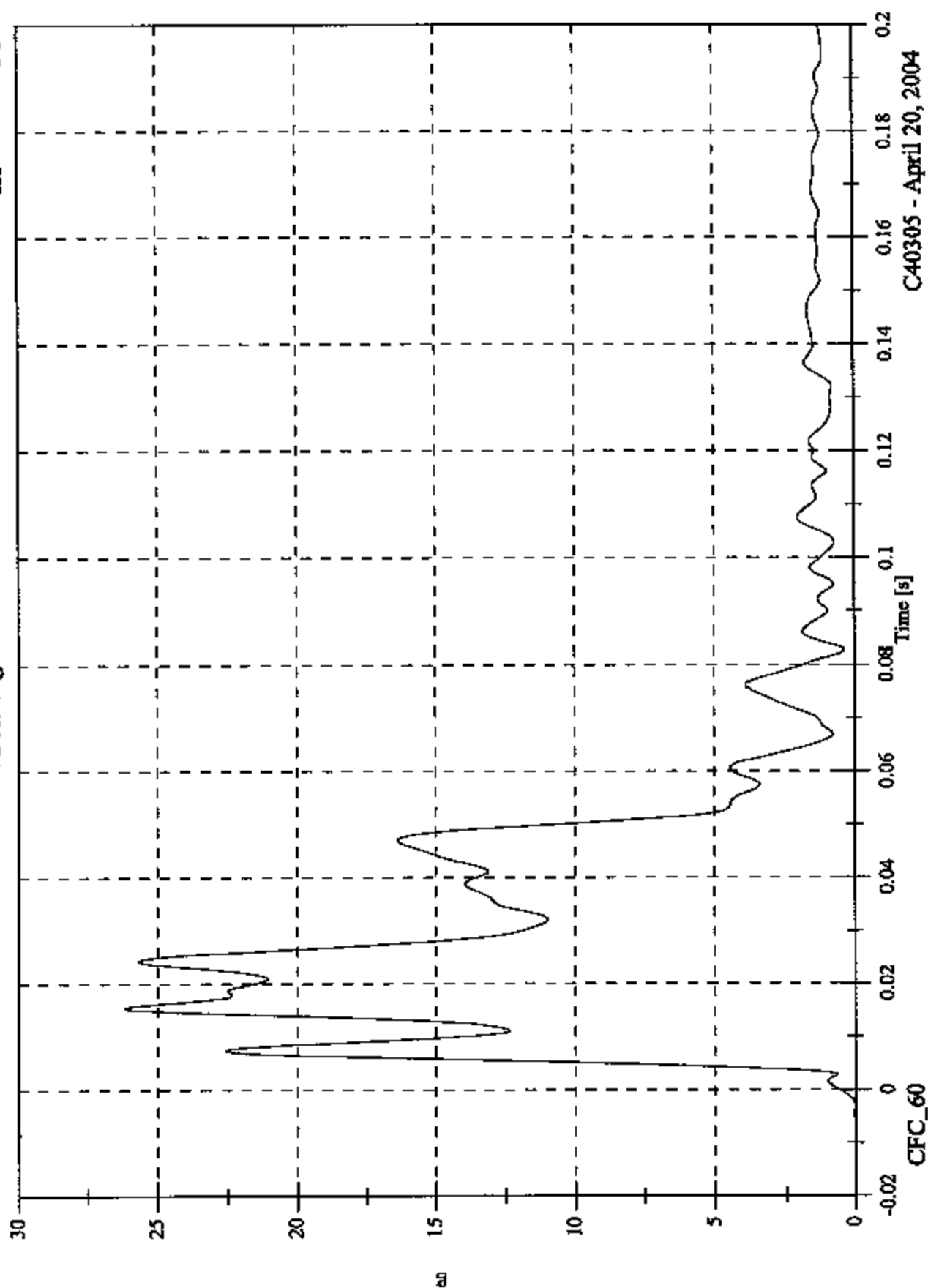
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A1 Right Front Sill Resultant

Max: 26.2 [g] at 0.015 [s]

Min: 0.0 [g] at -0.010 [s]

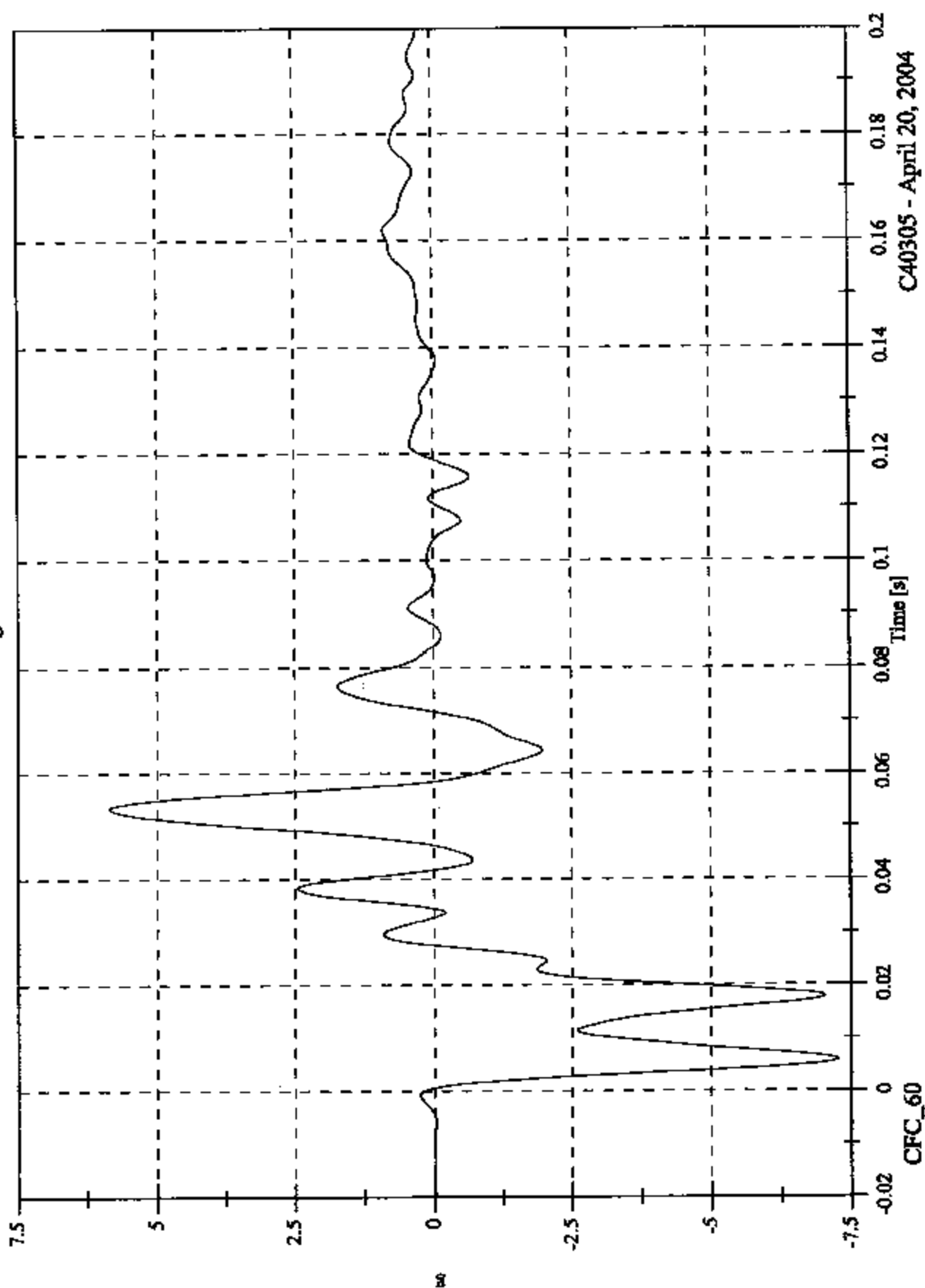


2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A2 Right Rear Sill x

Max: 5.9 [g] at 0.053 [s]

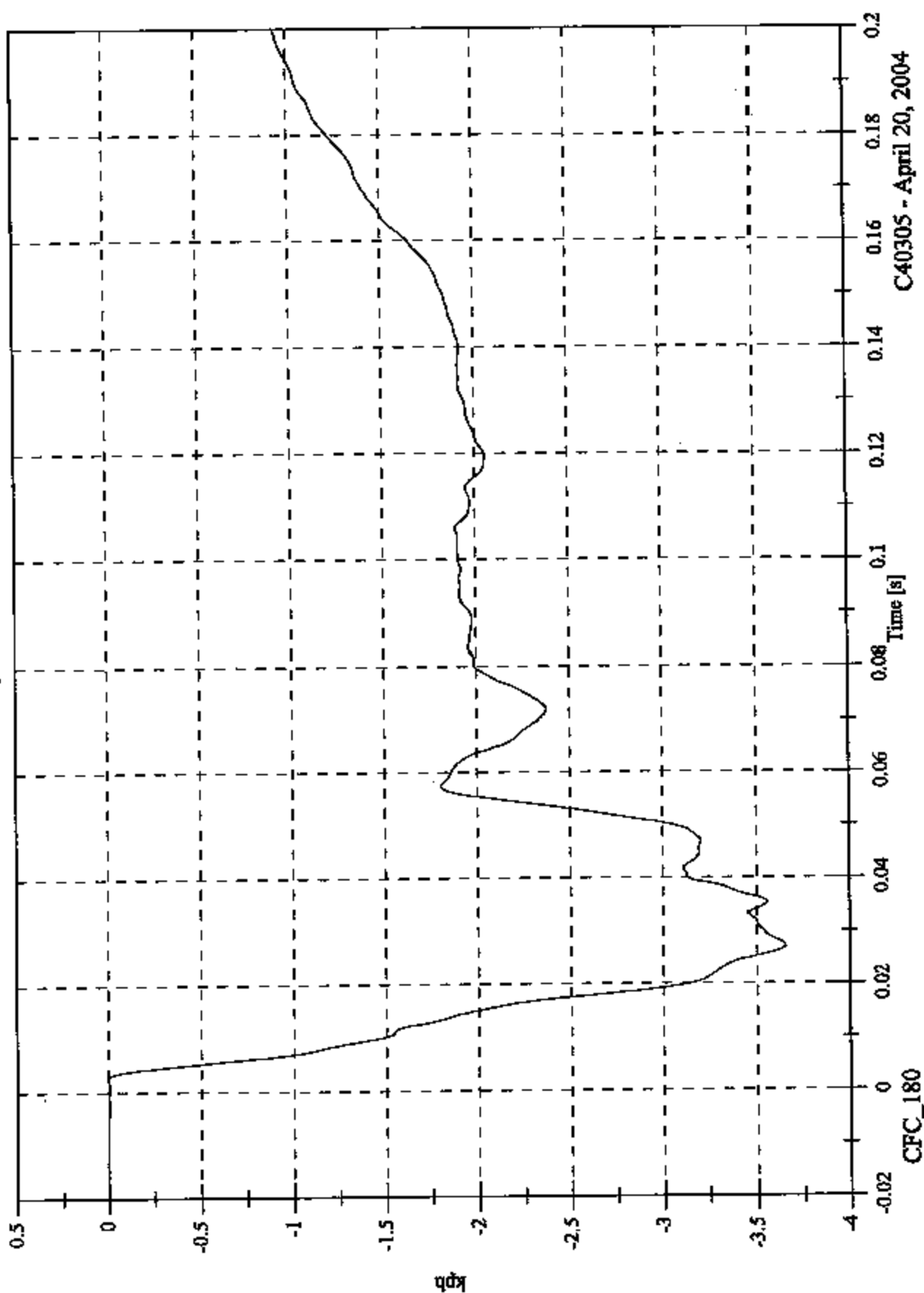
Min: -7.3 [g] at 0.006 [s]



C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire
V2 A2 Right Rear Sill x Velocity

Max: 0.0 [kph] at -0.020 [s]
Min: -3.7 [kph] at 0.027 [s]

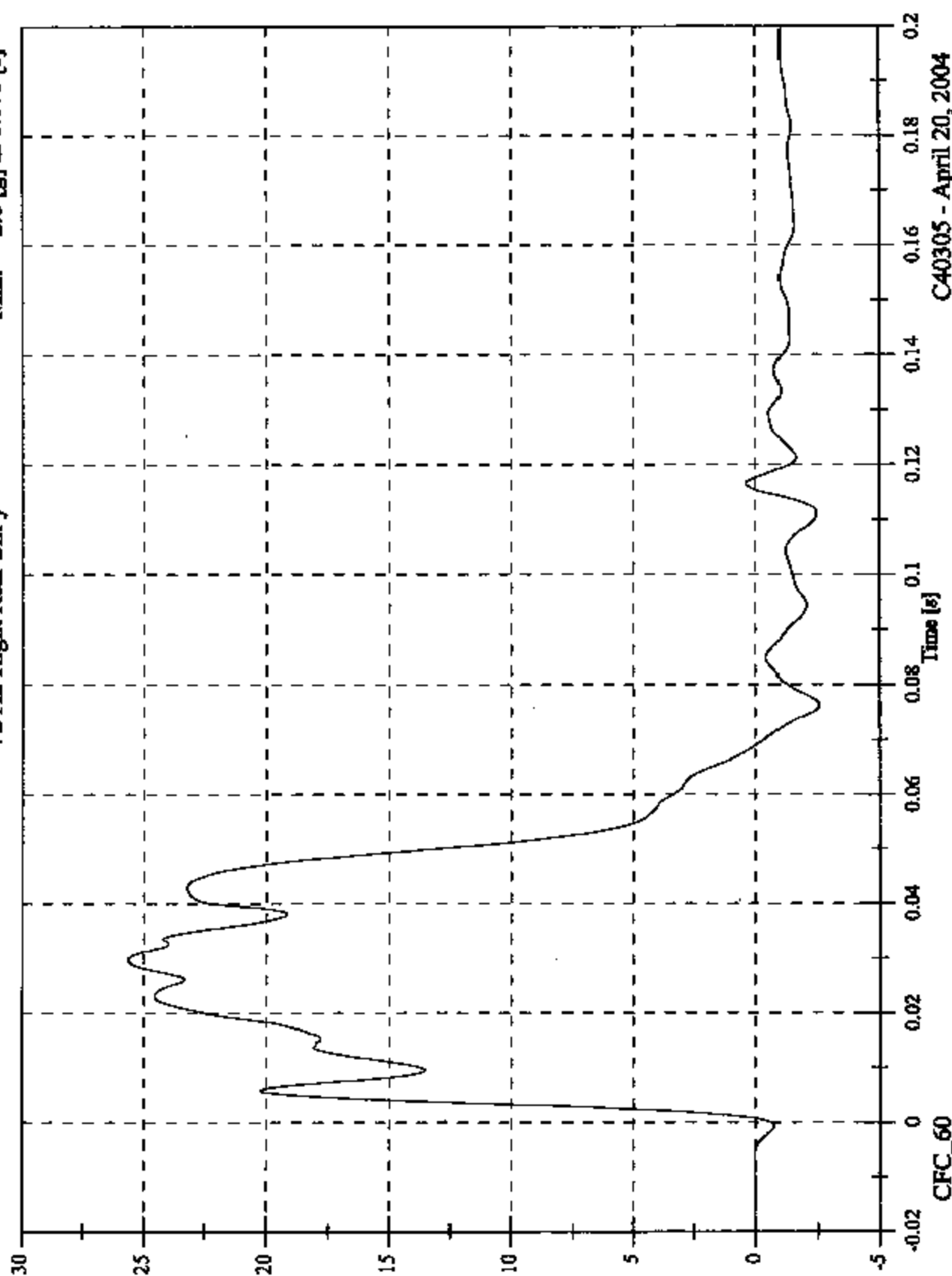


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A2 Right Rear Sill y

Max: 25.6 [g] at 0.030 [s]
Min: -2.6 [g] at 0.076 [s]



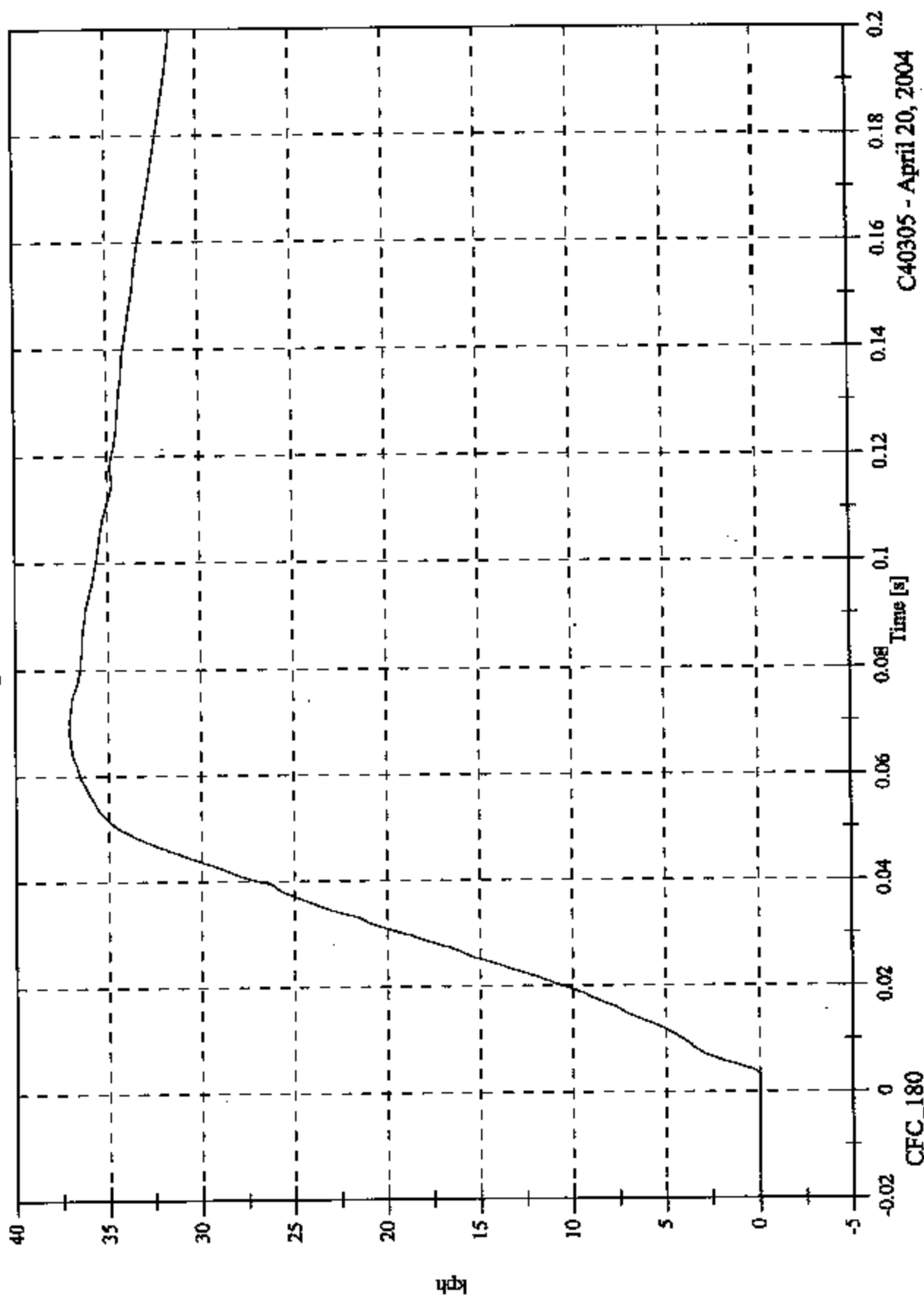
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A2 Right Rear Sill y Velocity

Max: 37.1 [kph] at 0.068 [s]

Min: -0.0 [kph] at 0.003 [s]



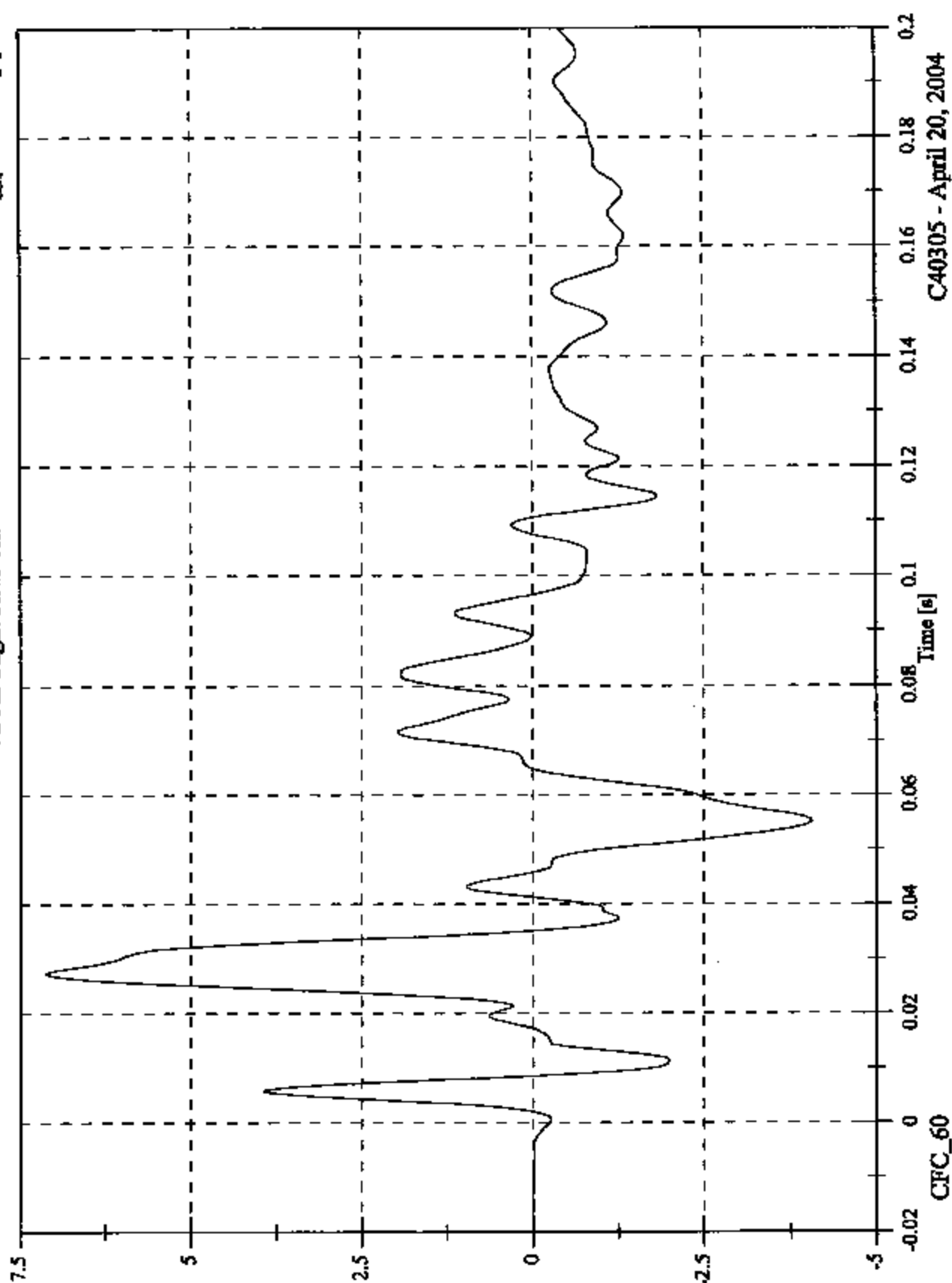
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A2 Right Rear Sill z

Max: 7.1 [g] at 0.027 [s]

Min: -4.1 [g] at 0.055 [s]



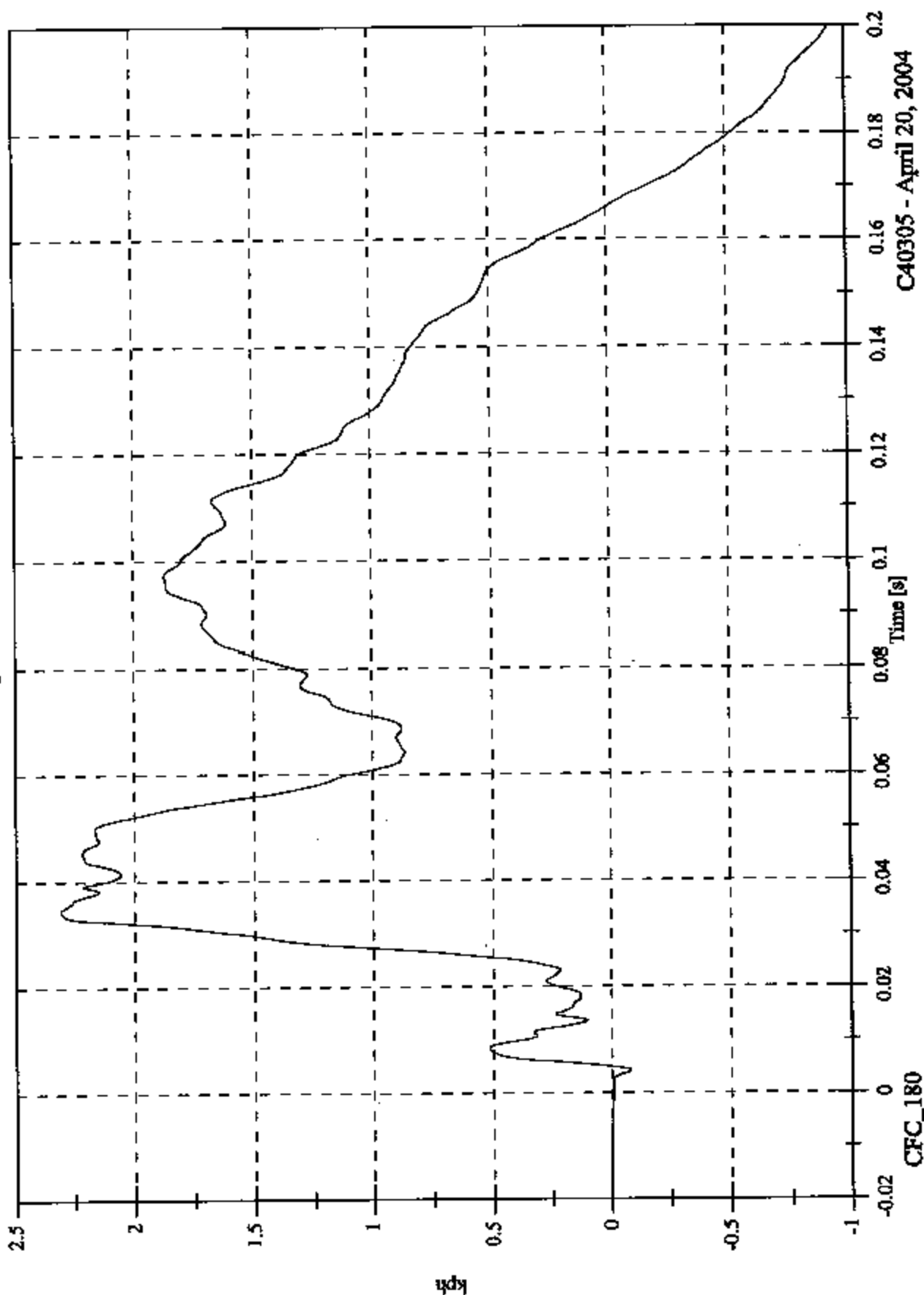
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A2 Right Rear Sill z Velocity

Max: 2.3 [kph] at 0.034 [s]

Min: -0.9 [kph] at 0.200 [s]



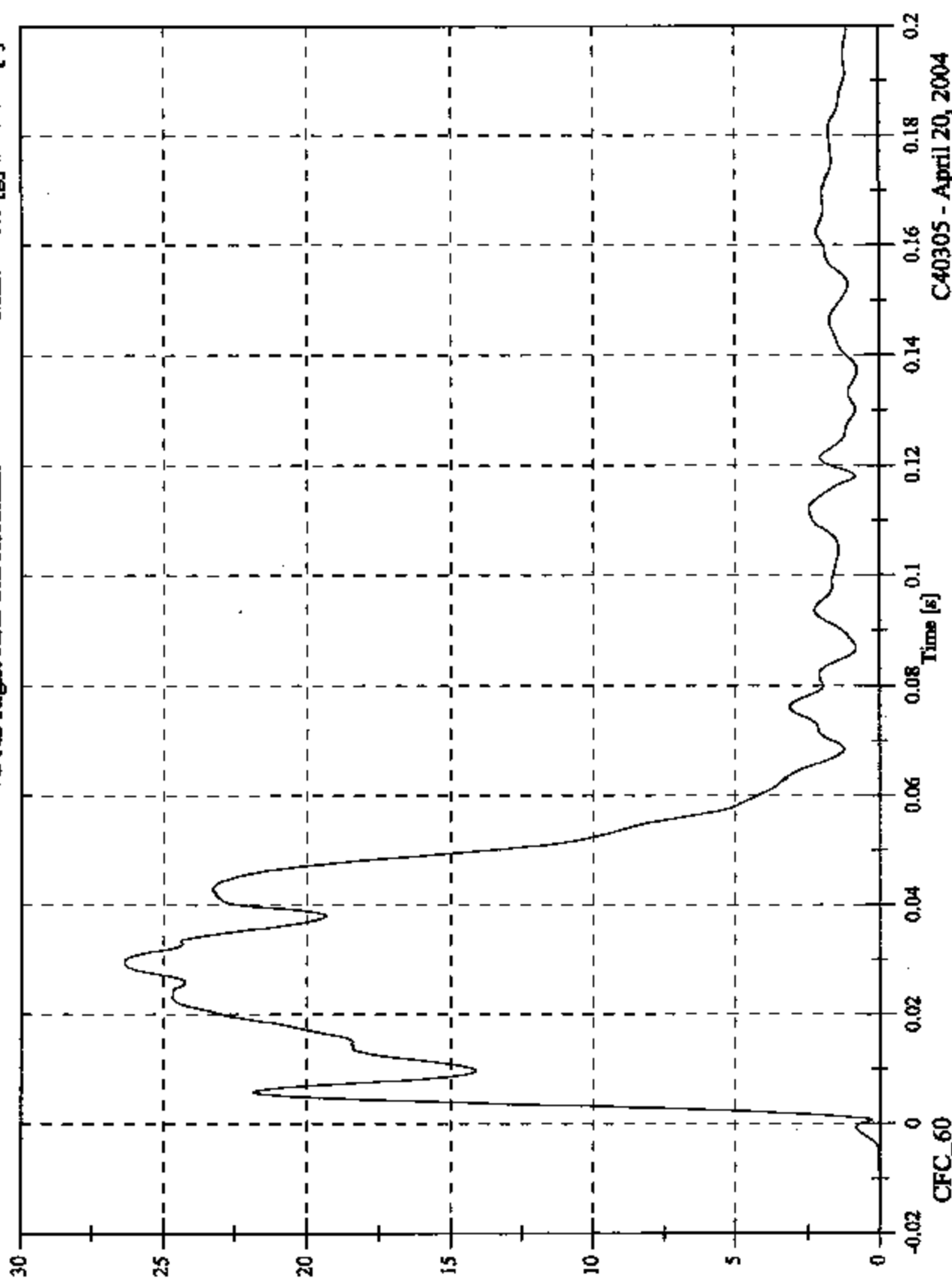
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A2 Right Rear Sill Resultant

Max: 26.4 [g] at 0.030 [s]

Min: 0.0 [g] at -0.015 [s]

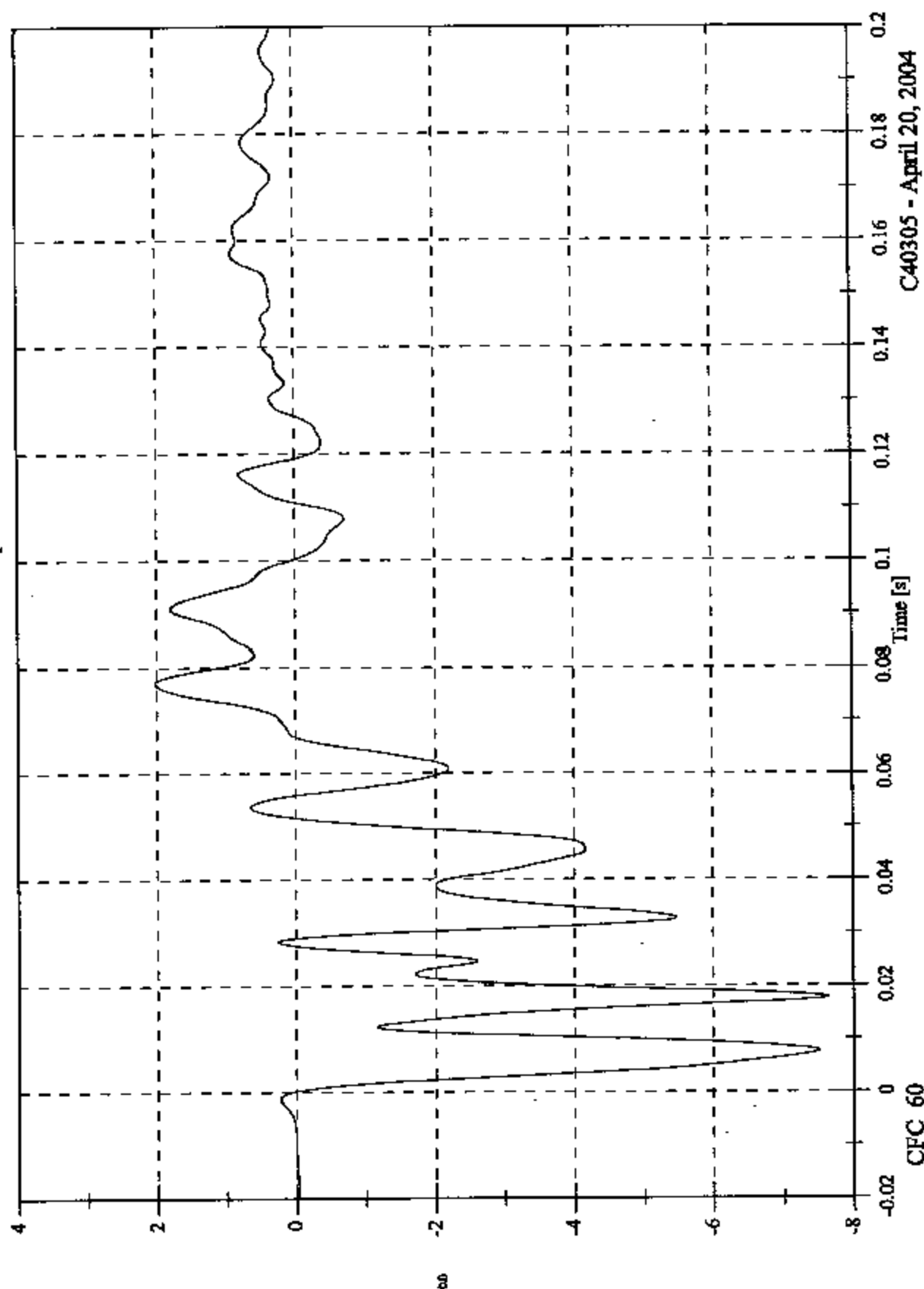


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A3 Rear Floorpan x

Max: 2.0 [g] at 0.077 [s]
Min: -7.6 [g] at 0.018 [s]

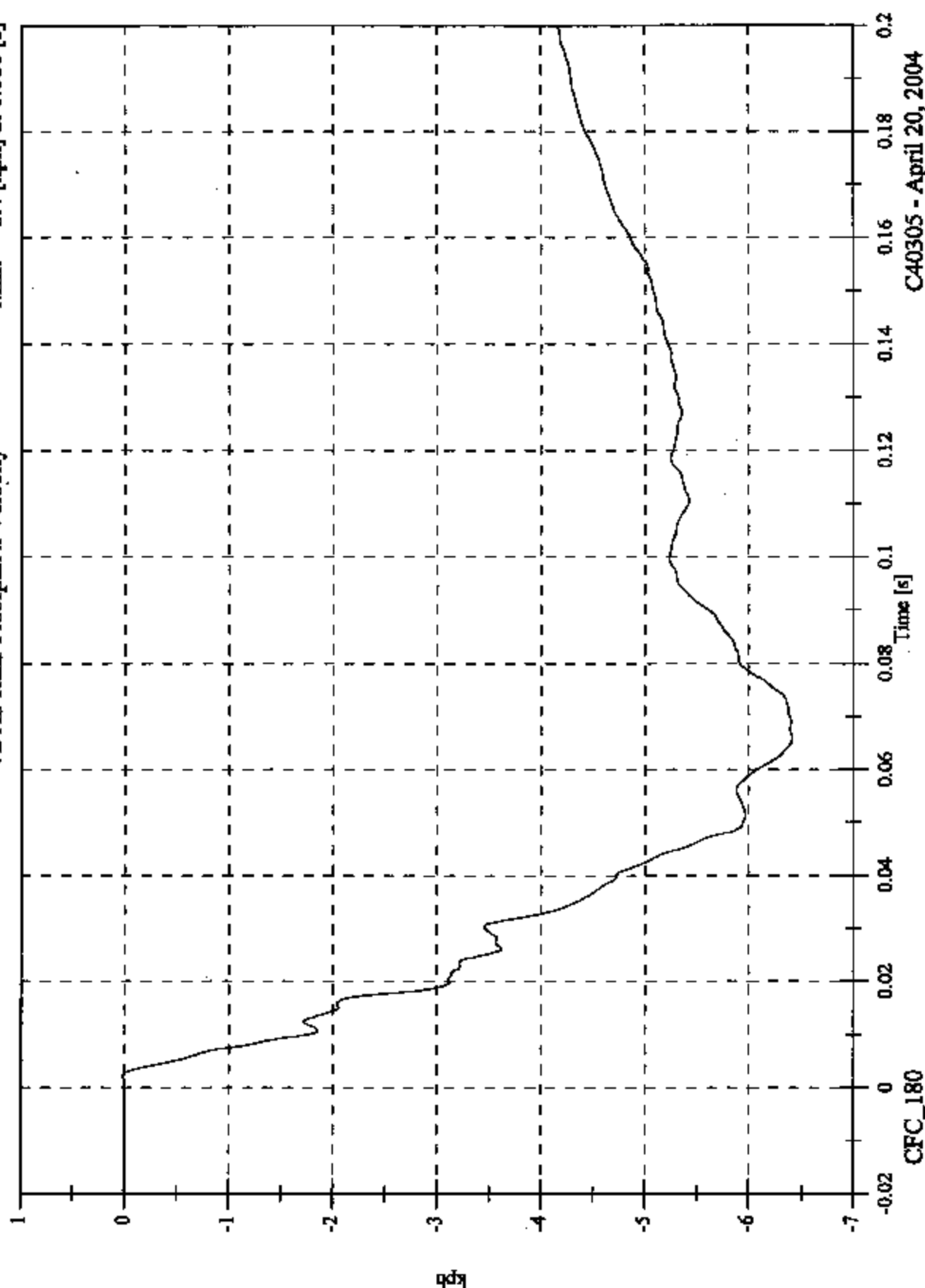


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A3 Rear Floorpan x Velocity

Max: 0.0 [kph] at 0.002 [s]
Min: -6.4 [kph] at 0.066 [s]

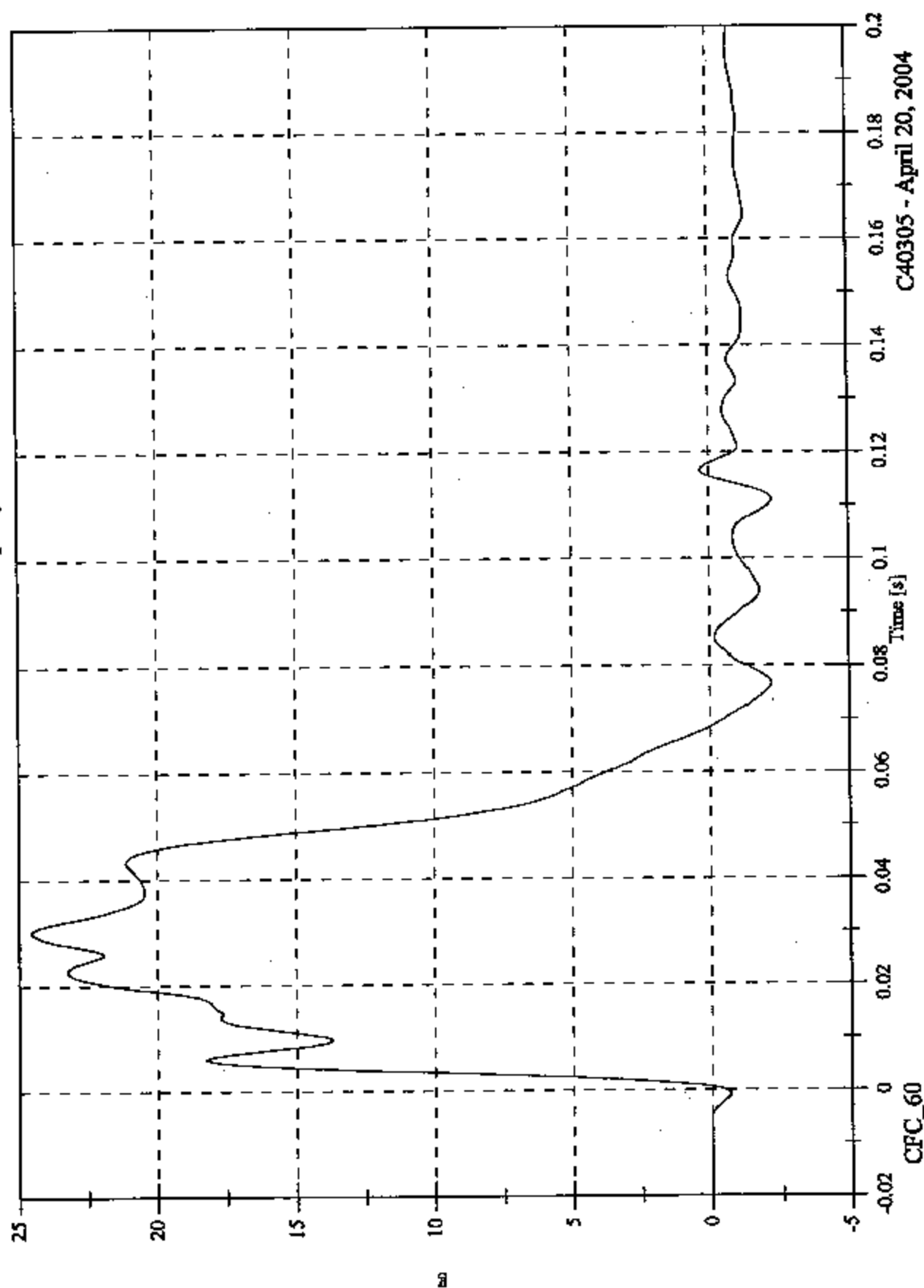


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A3 Rear Floorpan y

Max: 24.6 [g] at 0.030 [s]
Min: -2.2 [g] at 0.111 [s]

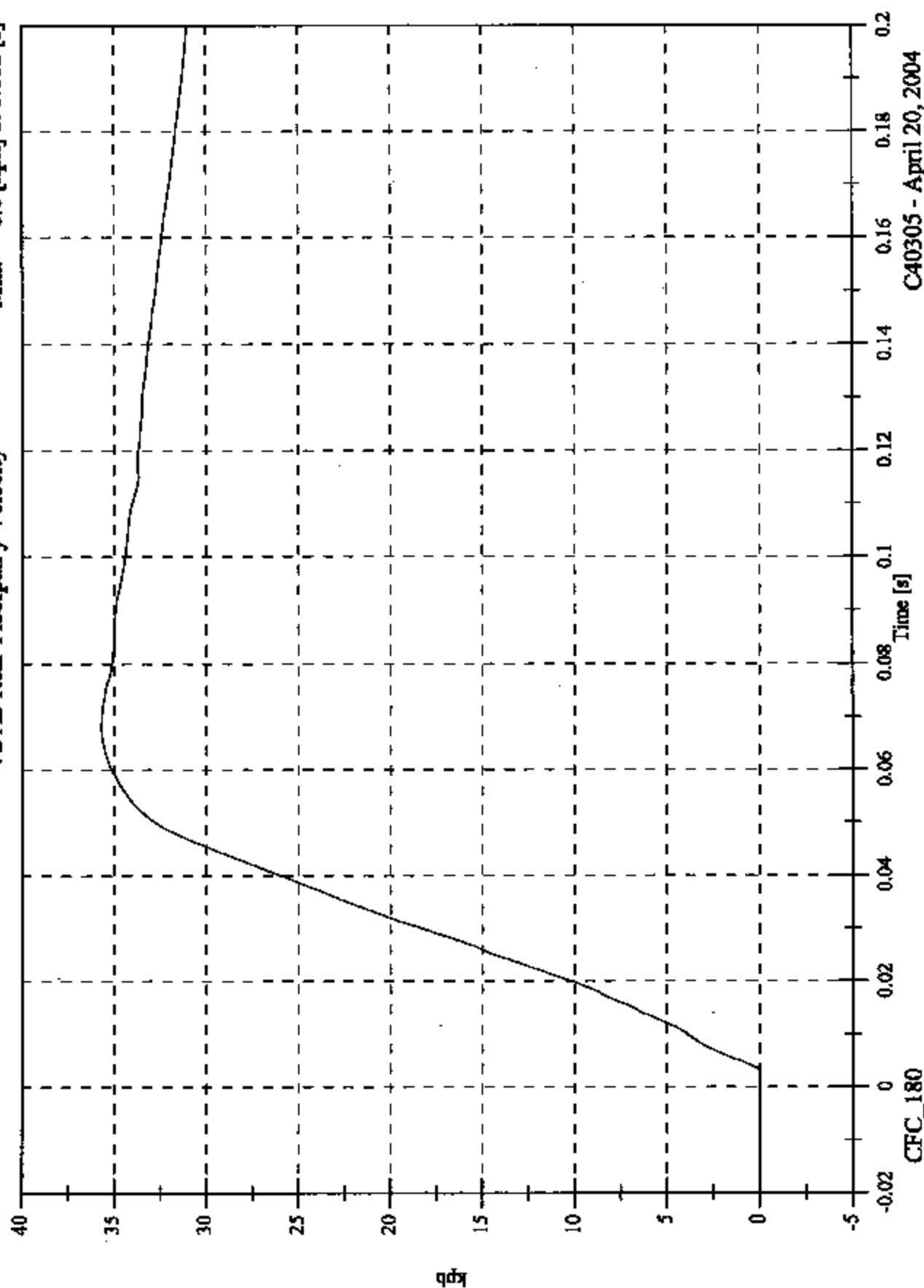


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A3 Rear Floorpan y Velocity

Max: 35.7 [kph] at 0.068 [s]
Min: -0.0 [kph] at 0.002 [s]



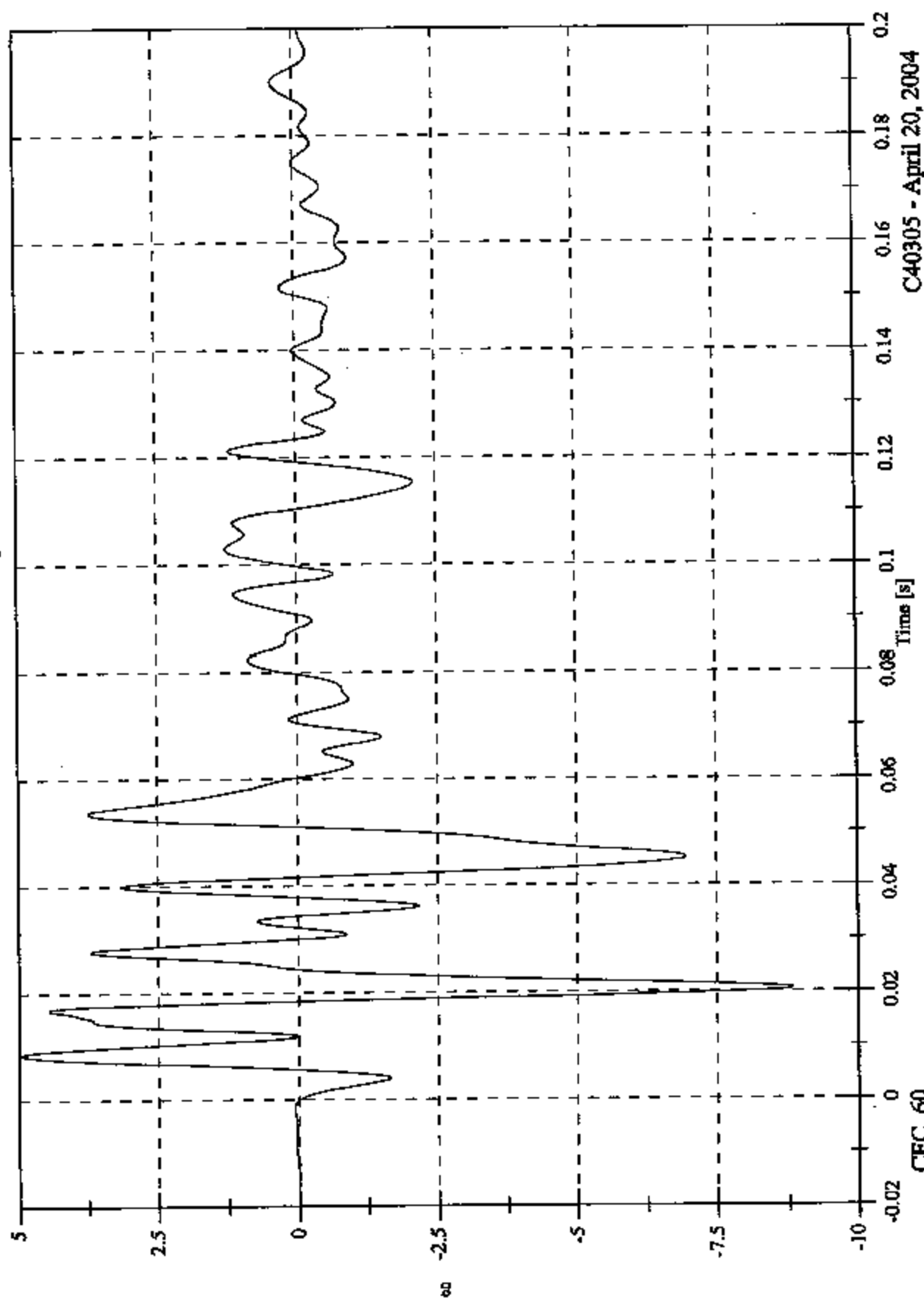
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A3 Rear Floorpan z

Max: 5.0 [g] at 0.008 [s]

Min: -8.8 [g] at 0.021 [s]

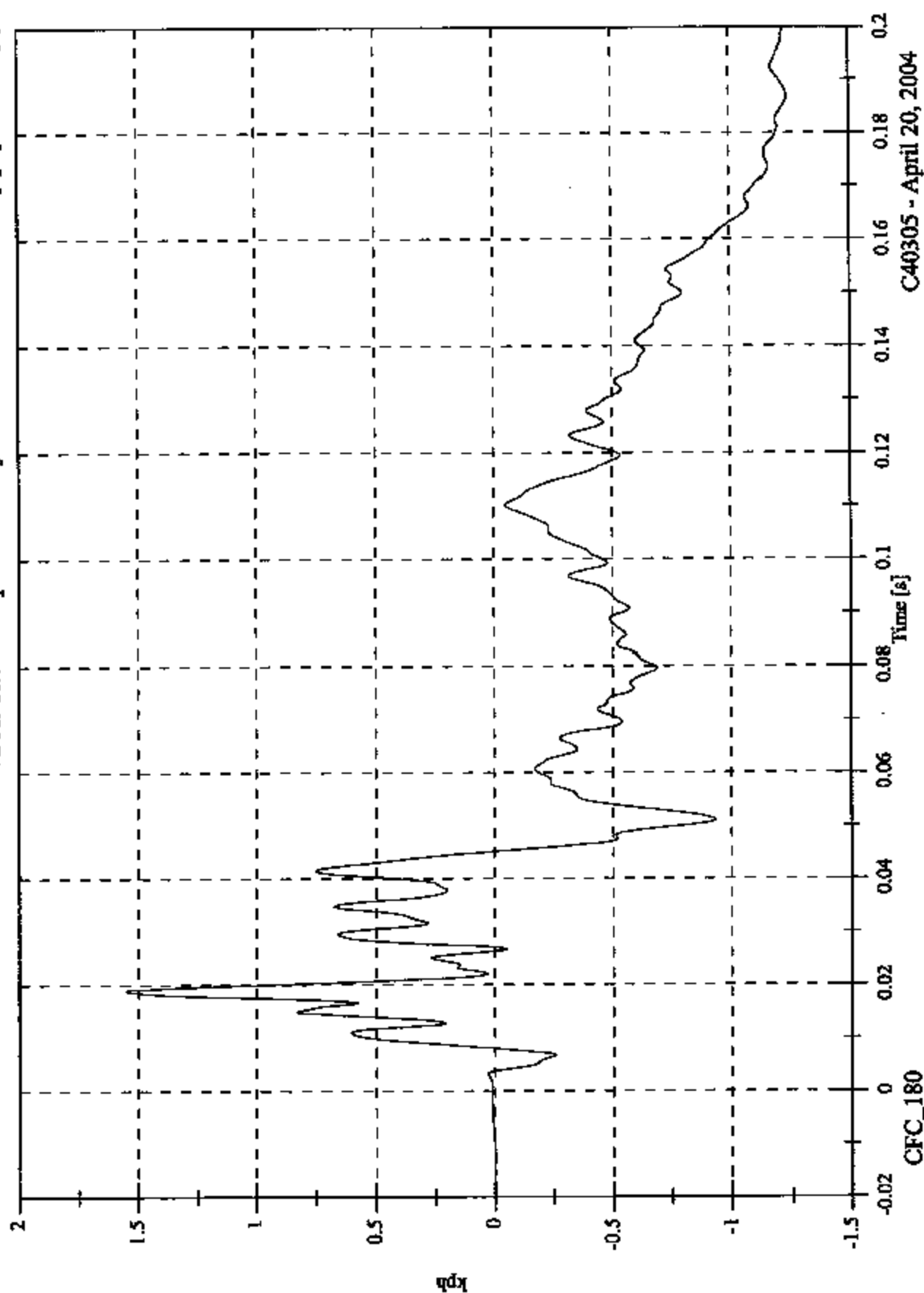


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A3 Rear Floorpan z Velocity

Max: 1.6 [kph] at 0.019 [s]
Min: -1.2 [kph] at 0.187 [s]



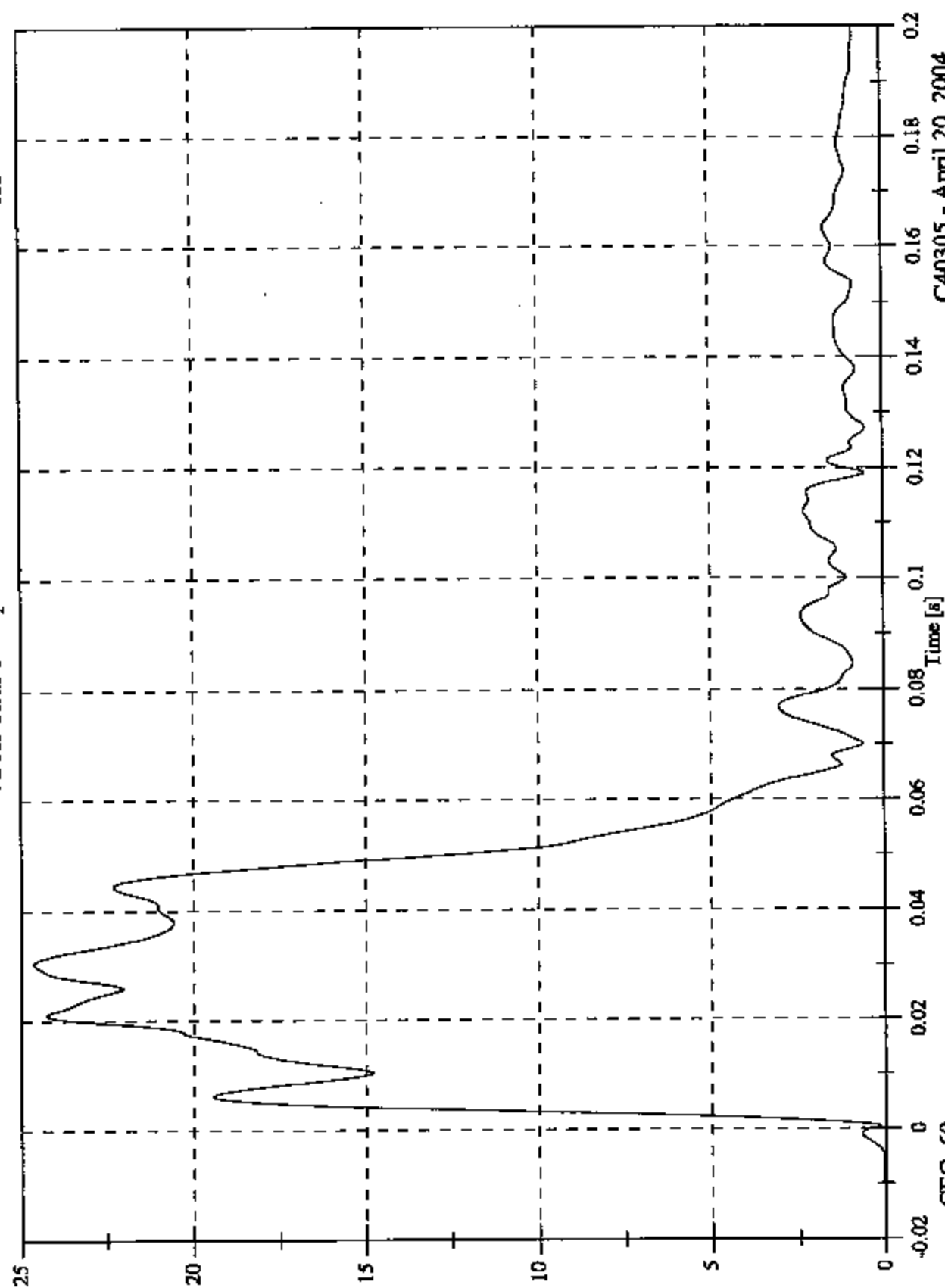
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A3 Rear Floorpan Resultant

Max: 24.6 [g] at 0.030 [s]

Min: 0.0 [g] at -0.013 [s]



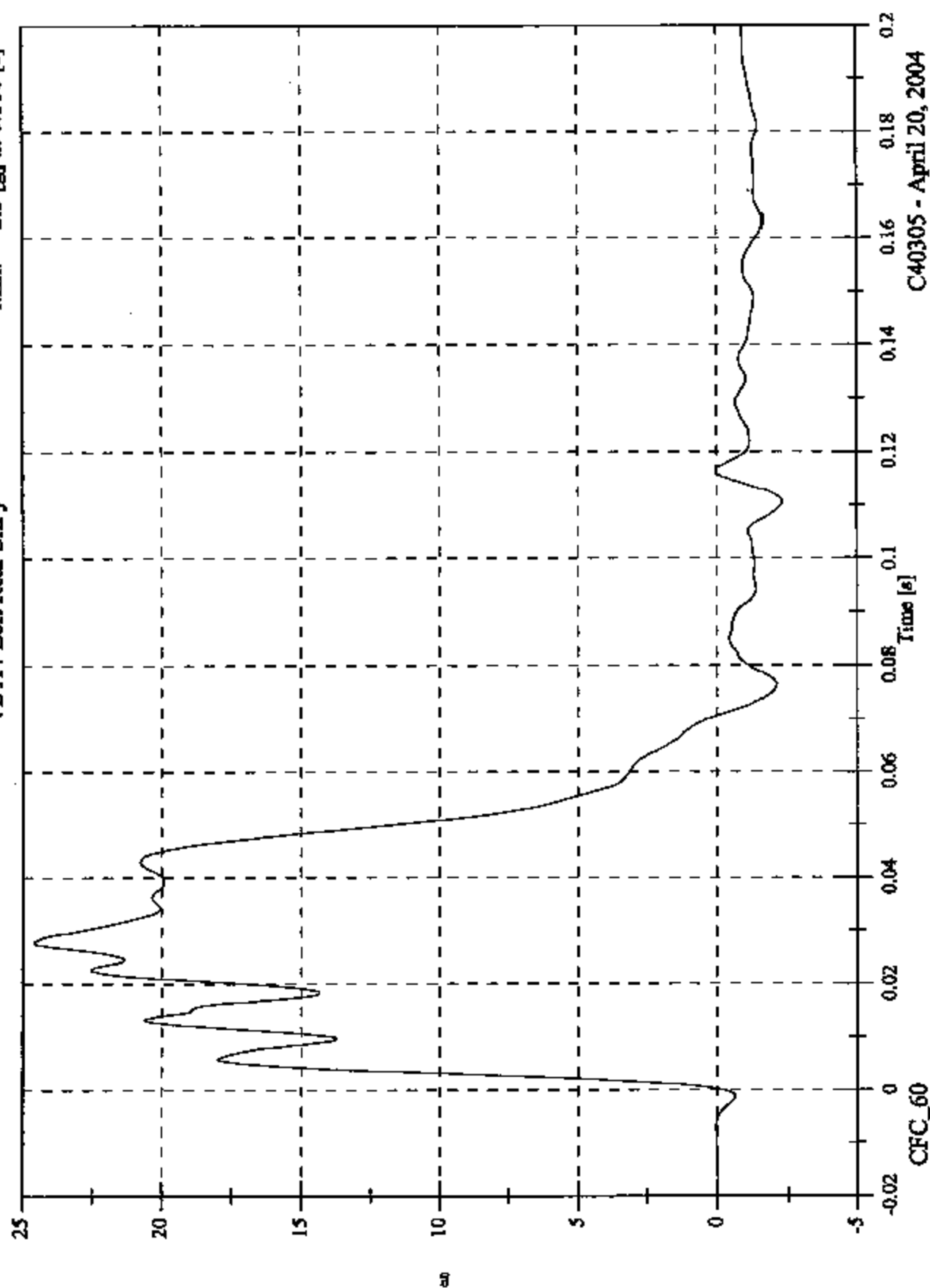
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

Max: 24.6 [g] at 0.028 [s]

Min: -2.3 [g] at 0.111 [s]

V2 A4 Left Rear Sill y



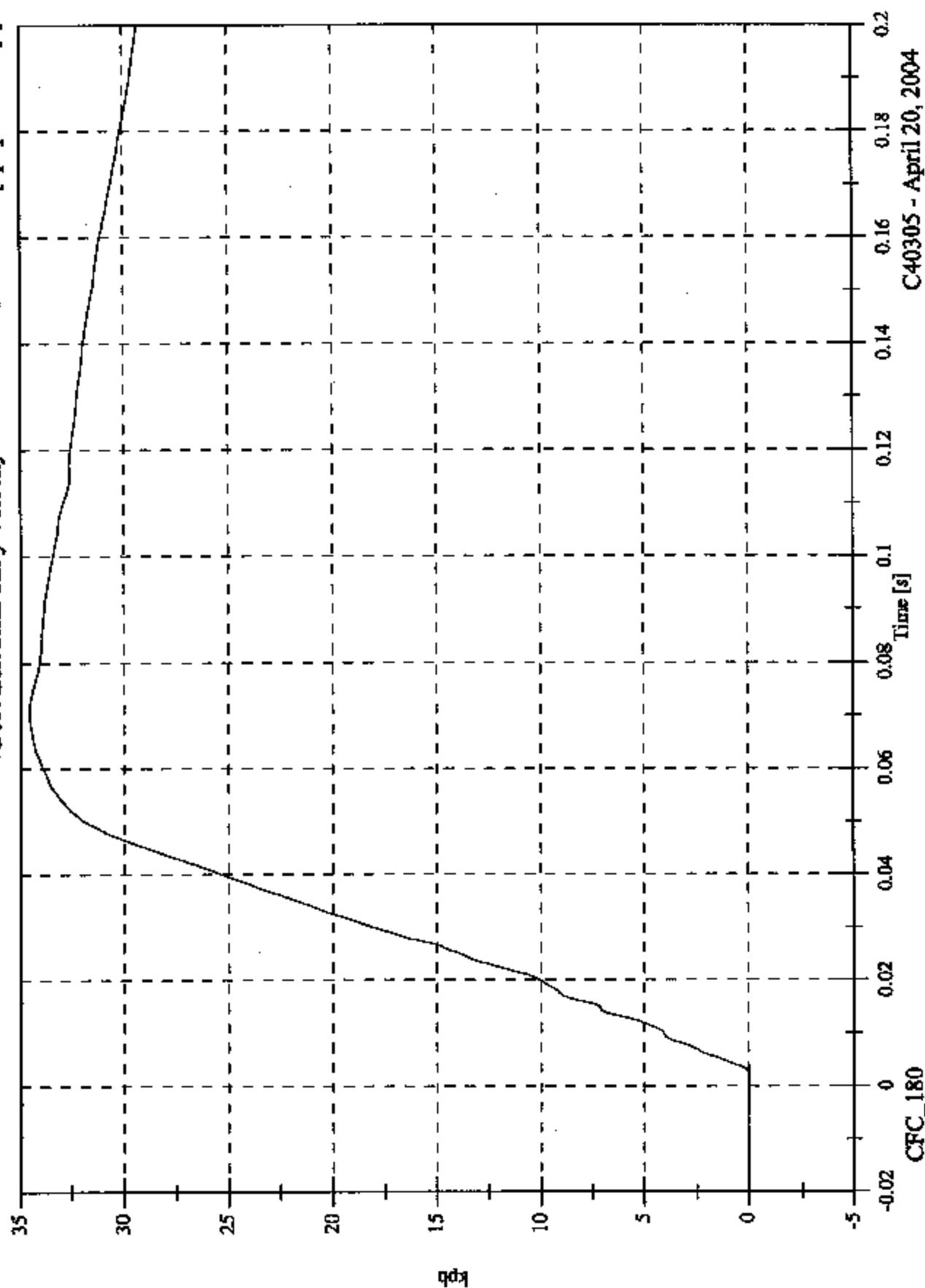
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A4 Left Rear Sill y Velocity

Max: 34.6 [kph] at 0.071 [s]

Min: -0.0 [kph] at 0.002 [s]

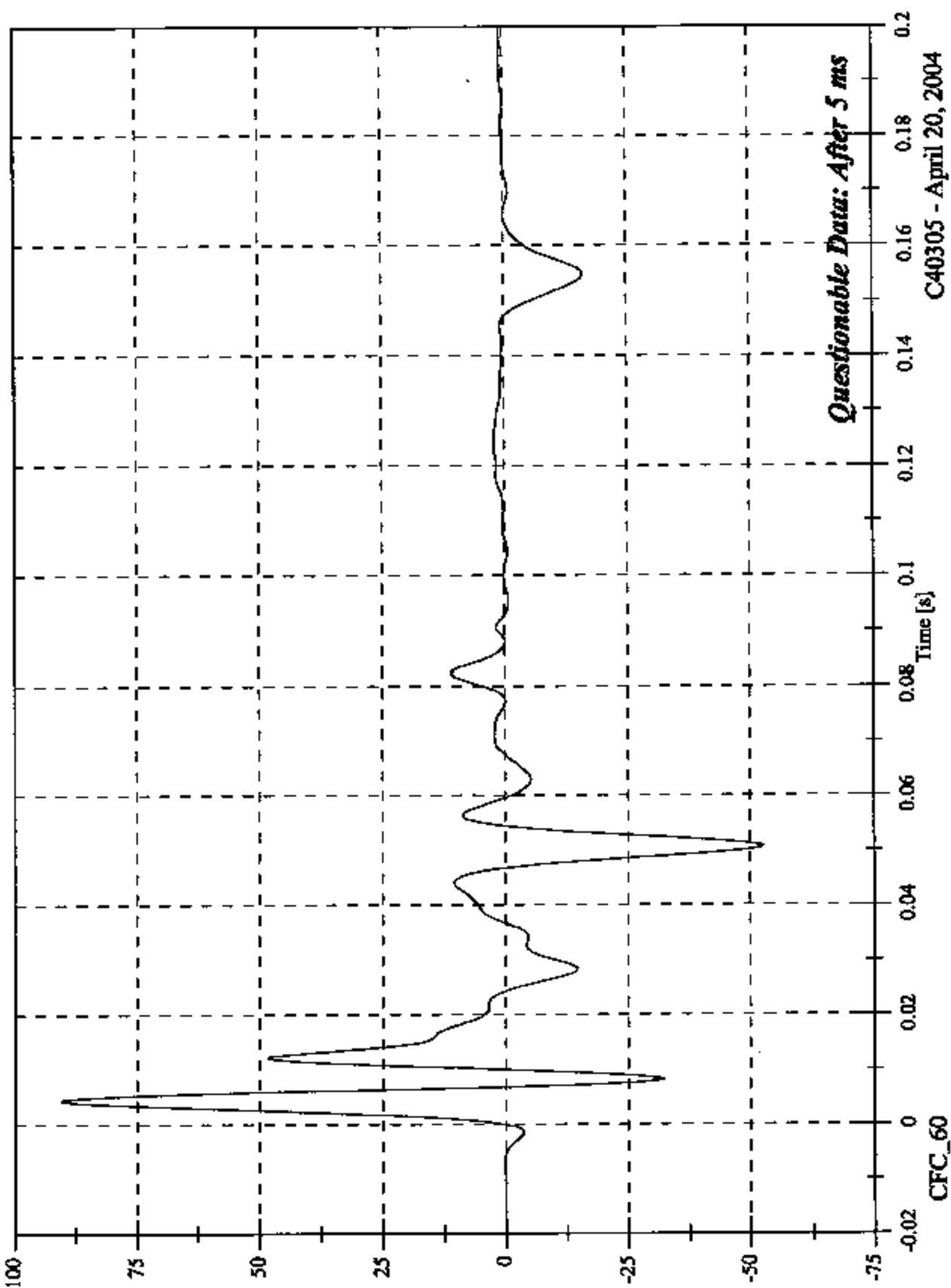


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A5 Left Front Sill y

Max: 90.6 [g] at 0.004 [s]
Min: -52.7 [g] at 0.051 [s]



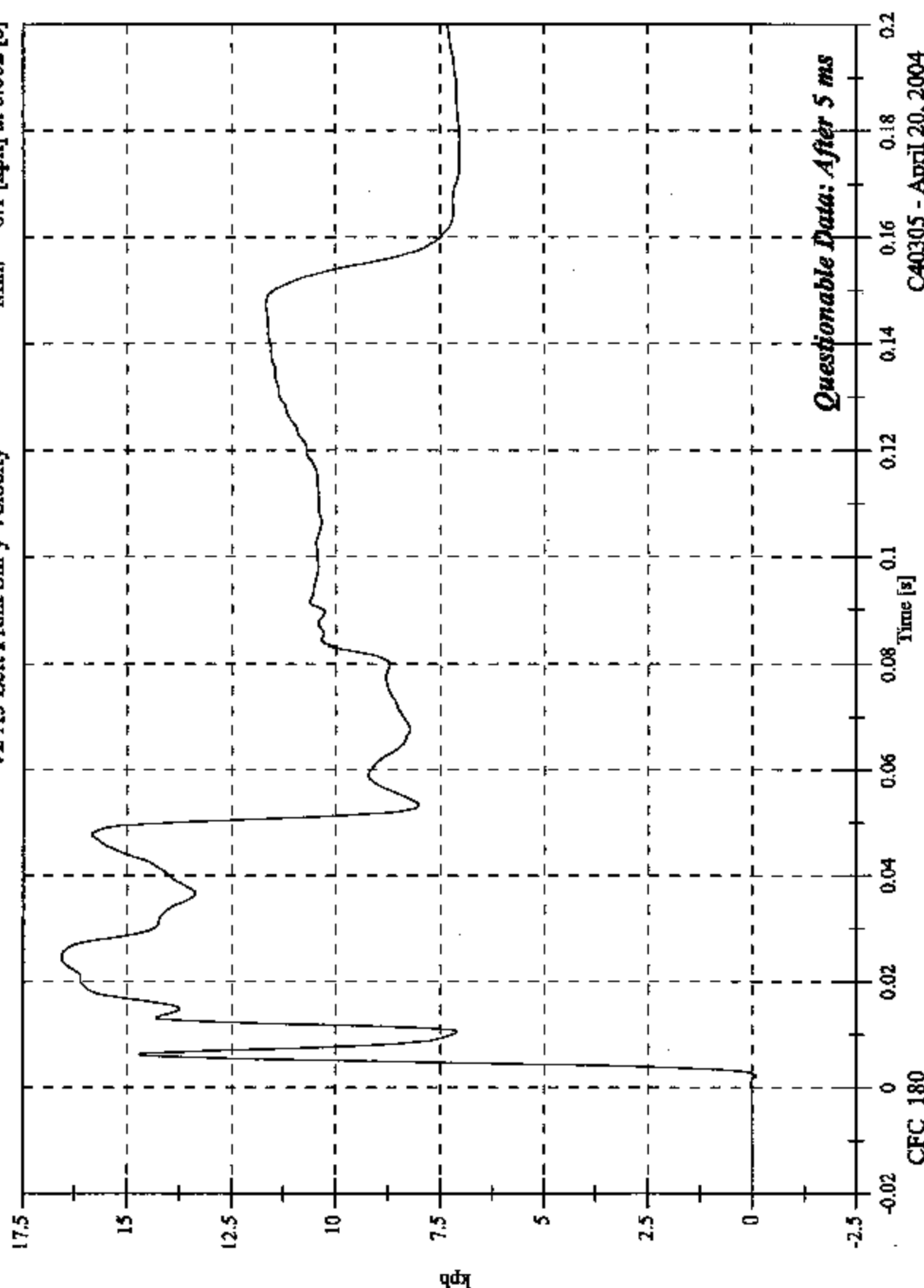
CFC_60

C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A.5 Left Front Sill y Velocity

Max: 16.6 [kph] at 0.025 [s]
Min: -0.1 [kph] at 0.002 [s]



Questionable Data: After 5 ms

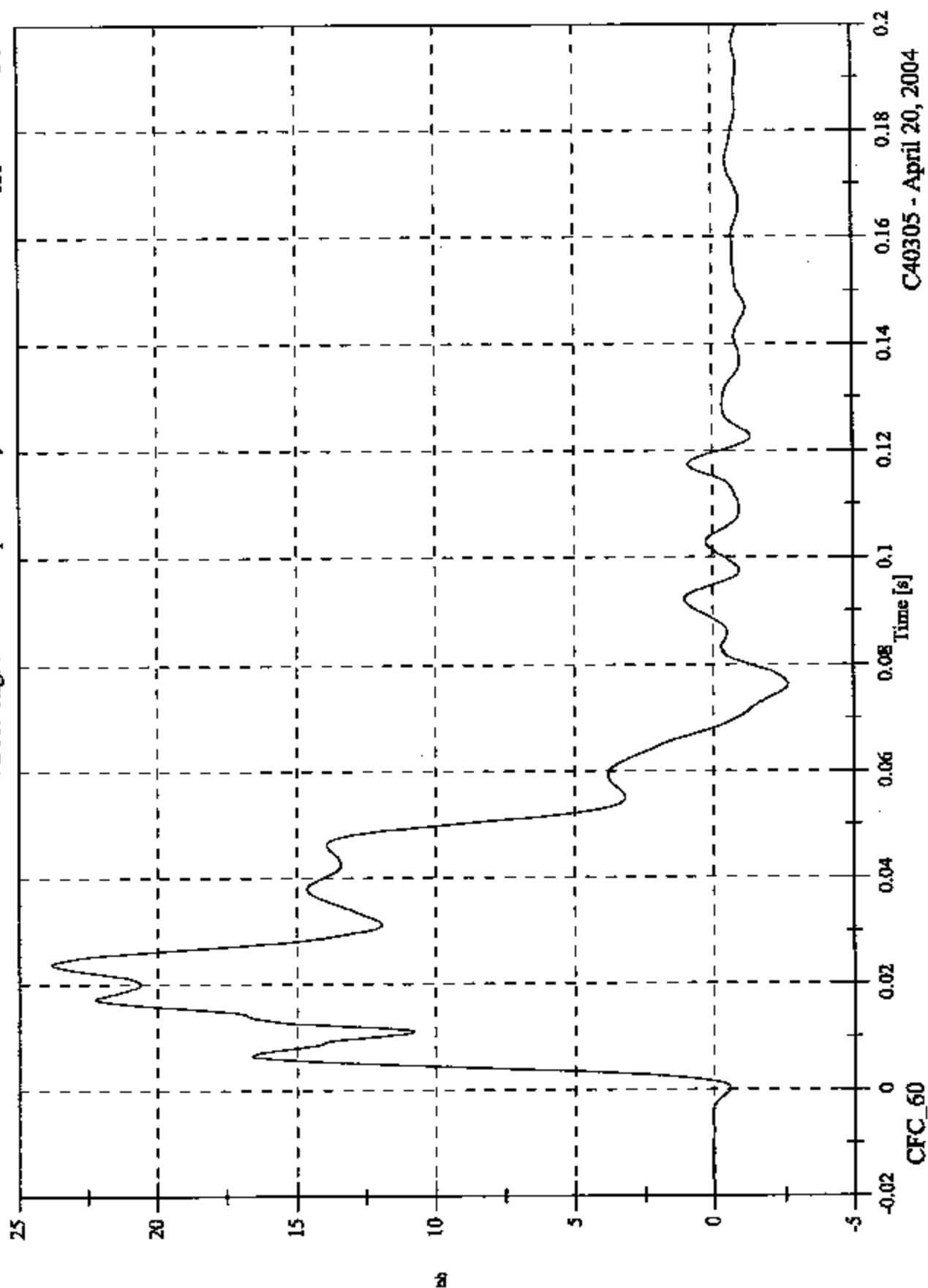
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A7 Right Rear Compartment y

Max: 23.8 [g] at 0.024 [s]

Min: -2.6 [g] at 0.076 [s]



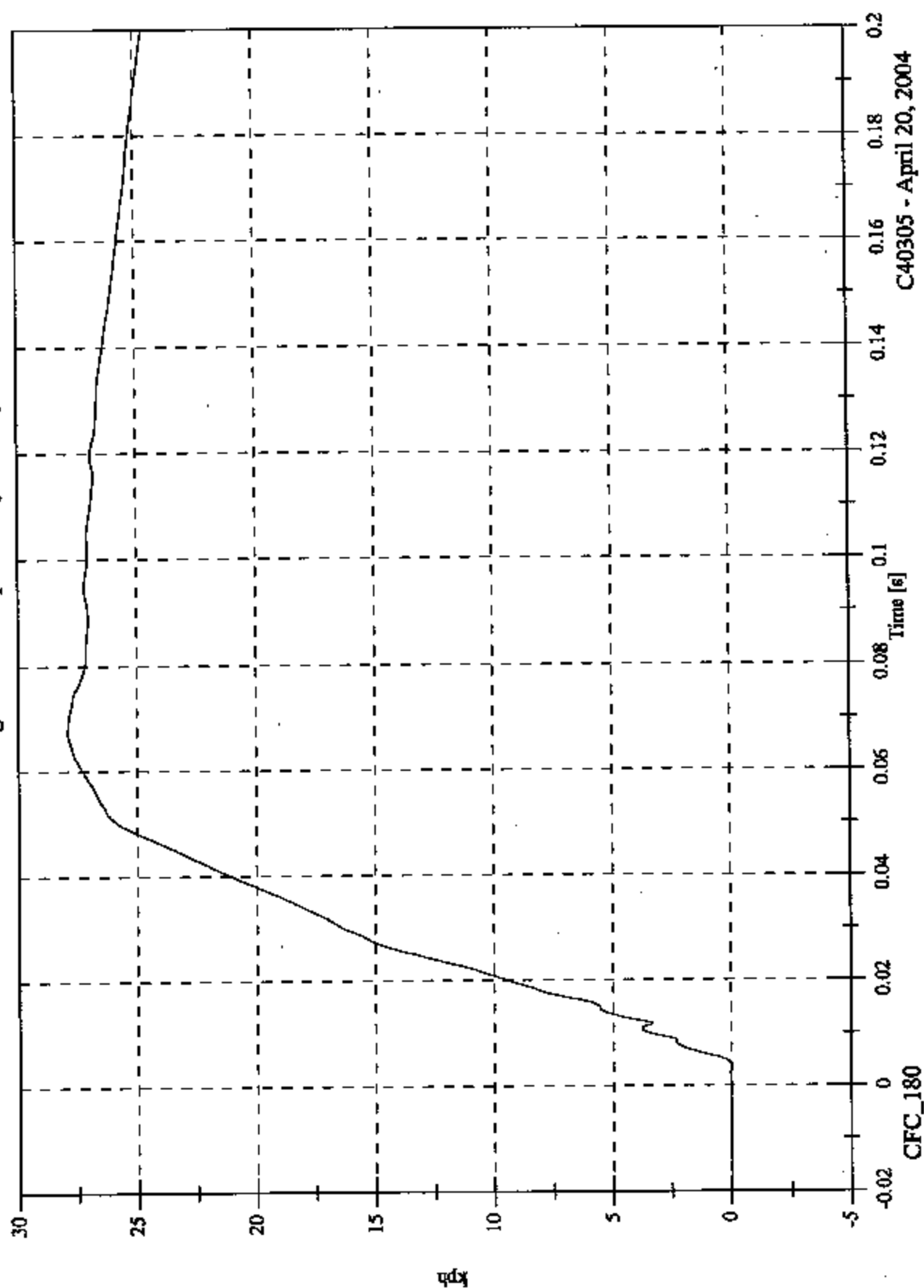
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A7 Right Rear Compartment y Velocity

Max: 27.9 [kph] at 0.067 [s]

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



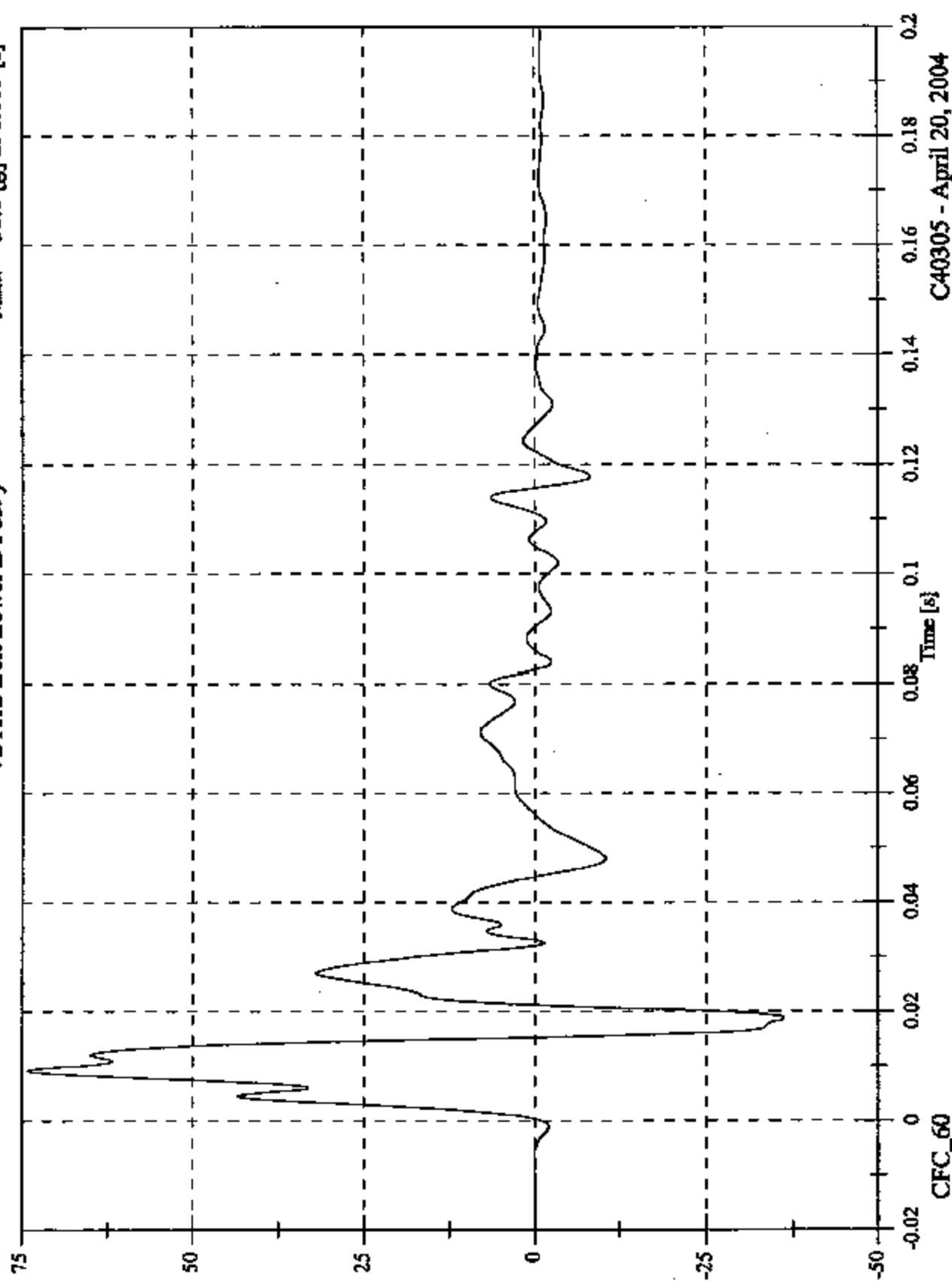
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A12 Left Lower B Post y

Max: 74.1 [g] at 0.009 [s]

Min: -36.1 [g] at 0.019 [s]

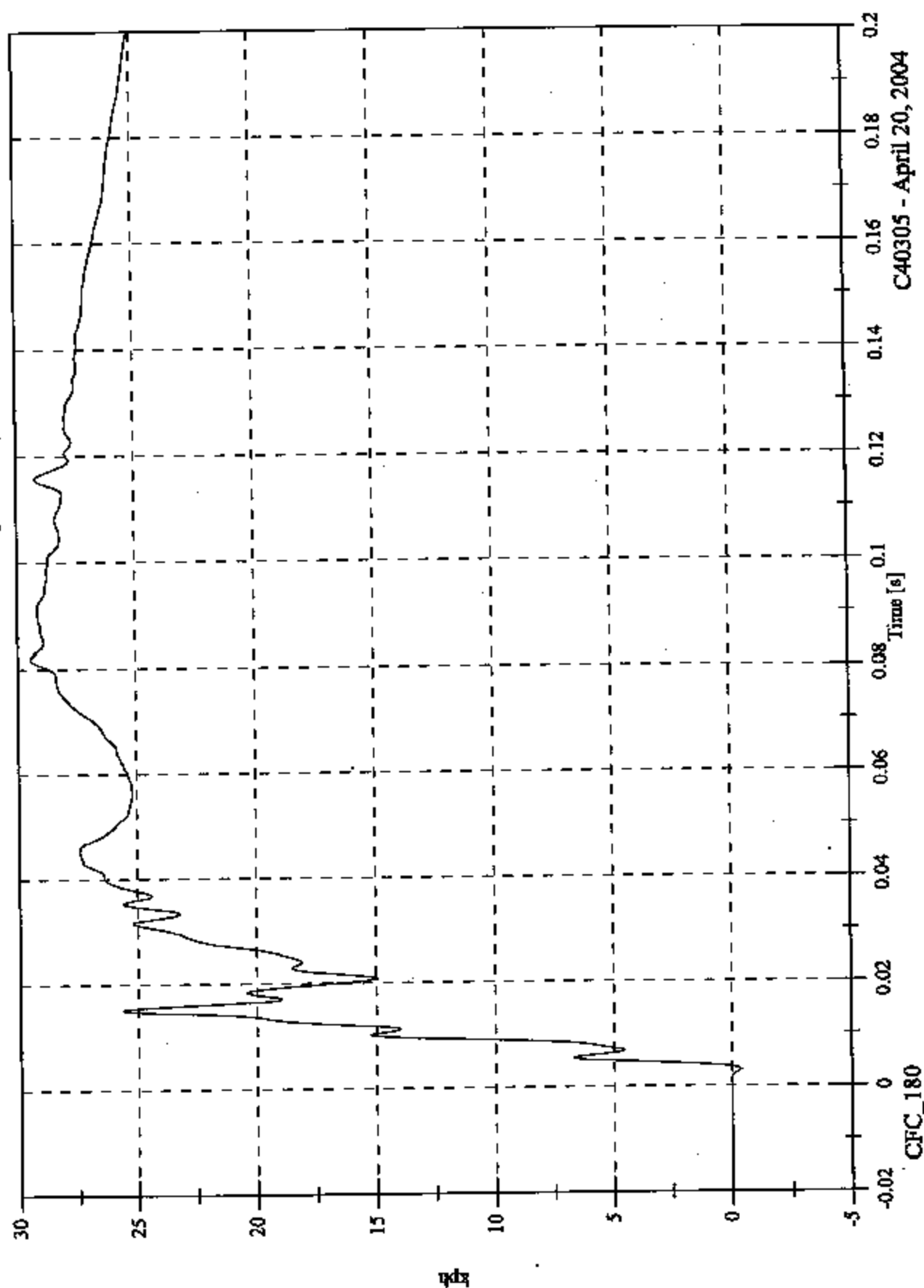


C40305 - April 20, 2004

2004 FNVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A12 Left Lower B Post y Velocity

Max: 29.5 [kph] at 0.082 [s]
Min: -0.3 [kph] at 0.003 [s]



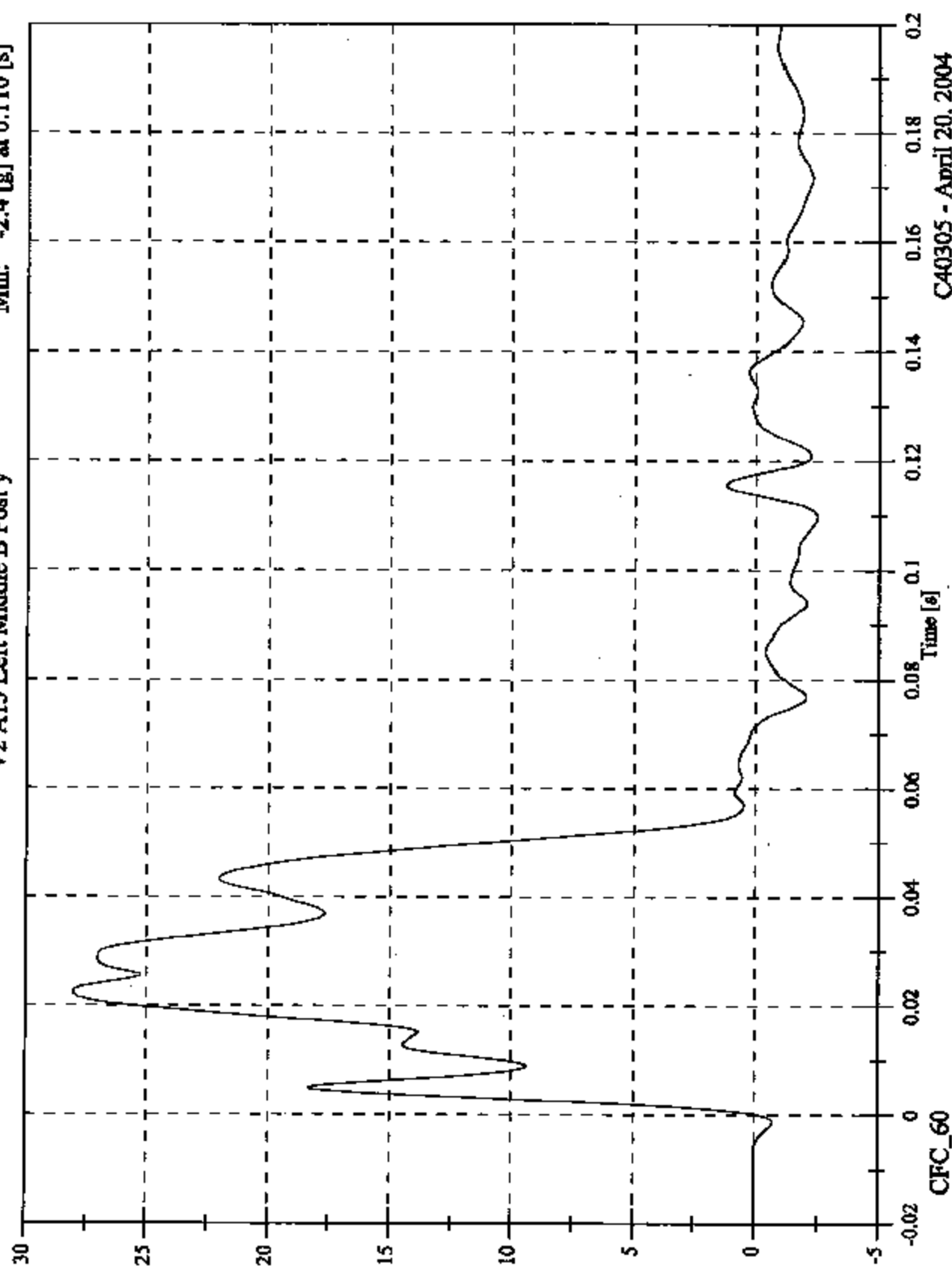
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A13 Left Middle B Post y

Max: 28.0 [g] at 0.022 [s]

Min: -2.4 [g] at 0.110 [s]

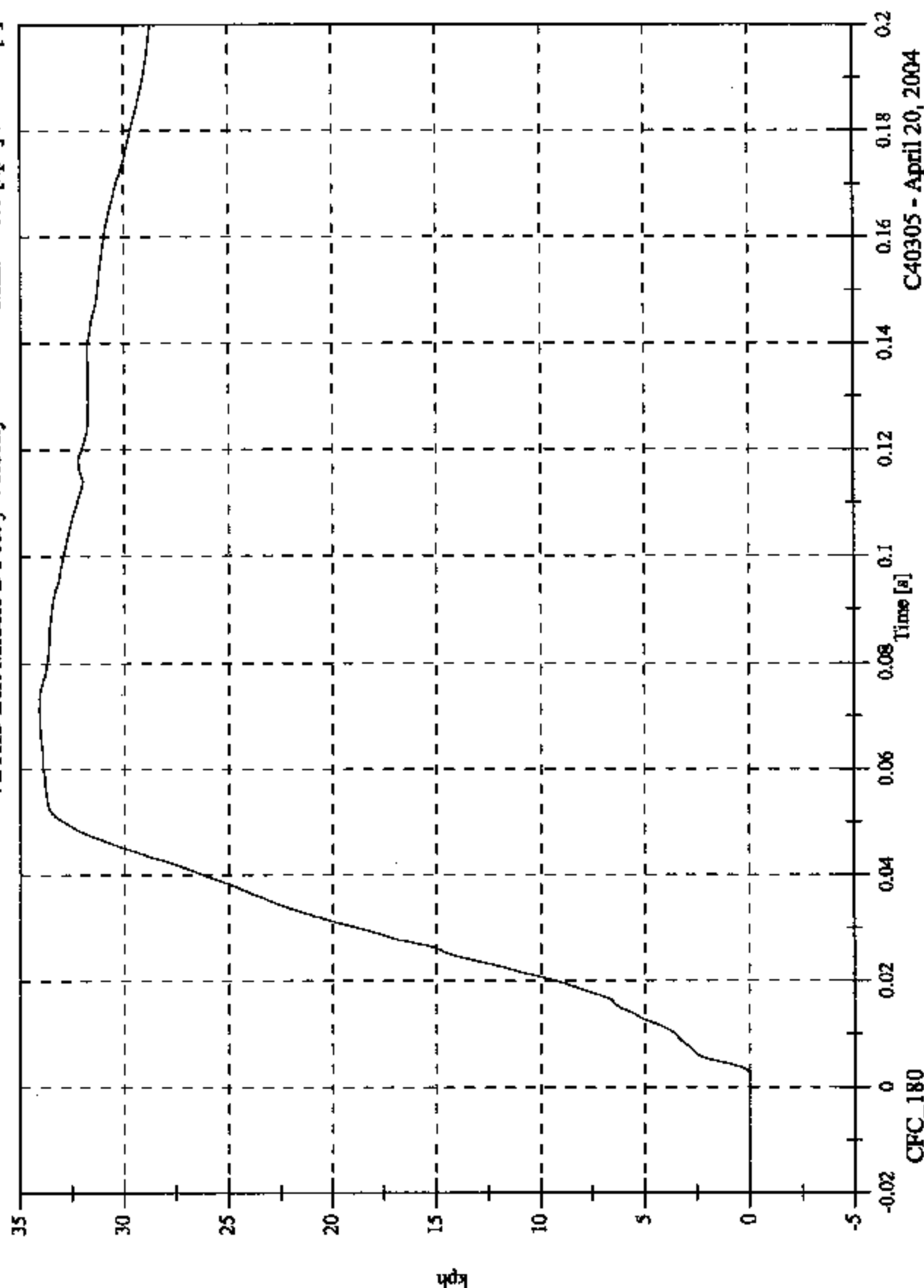


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A13 Left Middle B Post y Velocity

Max: 34.1 [kph] at 0.071 [s]
Min: -0.0 [kph] at 0.002 [s]



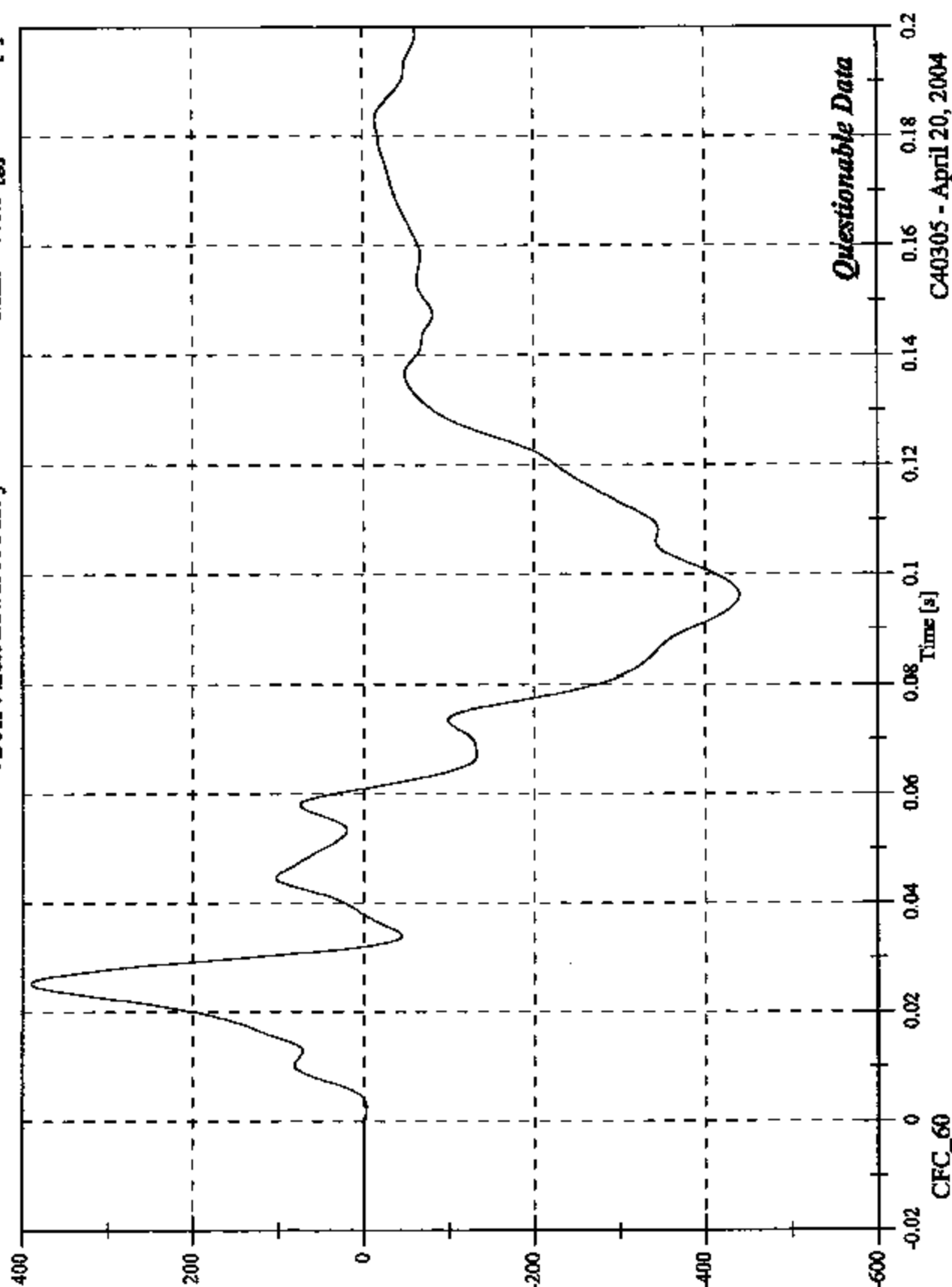
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A14 Left Lower A Post y

Max: 389.3 [g] at 0.025 [s]

Min: -440.5 [g] at 0.096 [s]



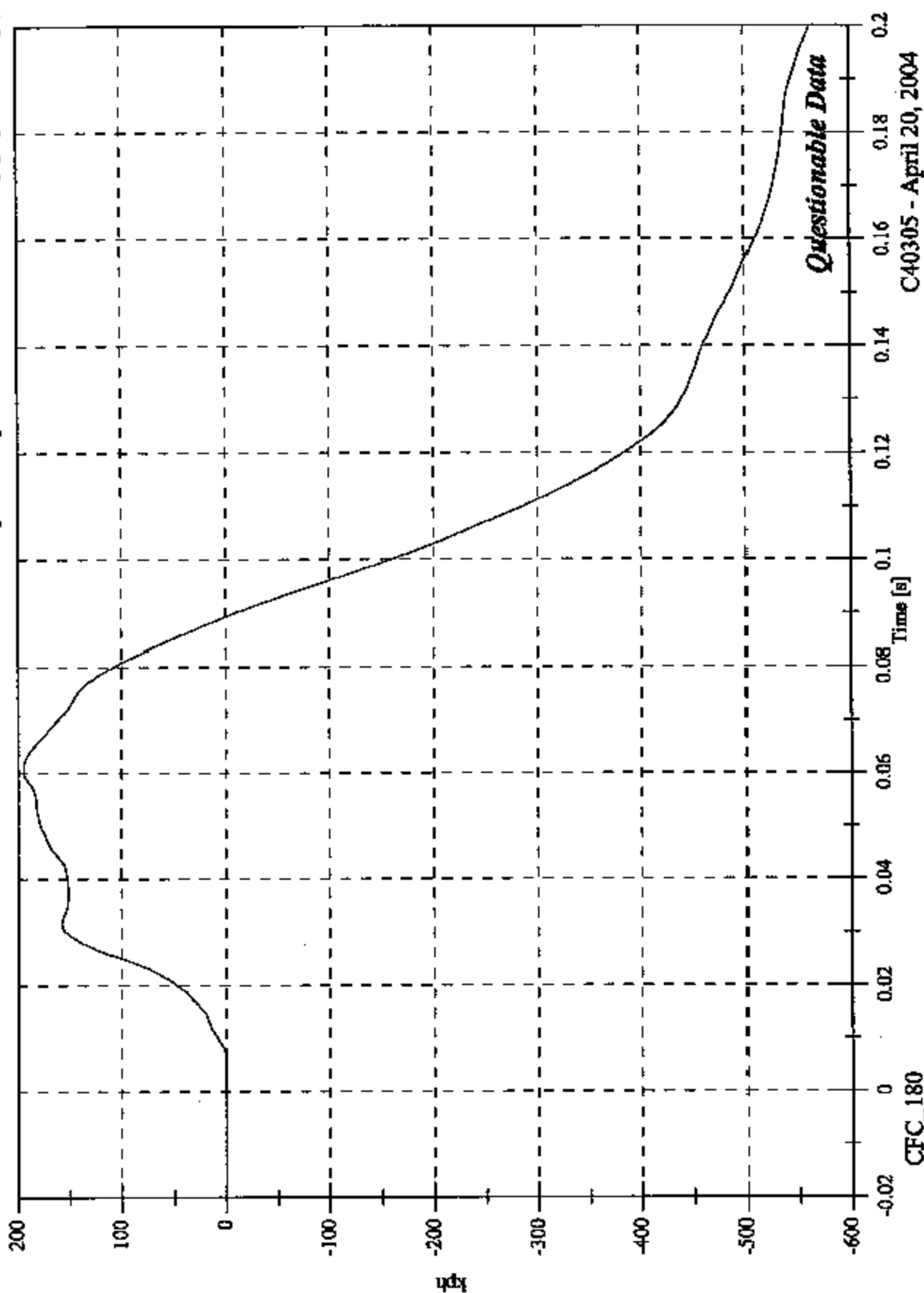
Questionable Data

C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A14 Left Lower A Post y Velocity

Max: 194.7 [kph] at 0.061 [s]
Min: -562.5 [kph] at 0.200 [s]



Questionable Data

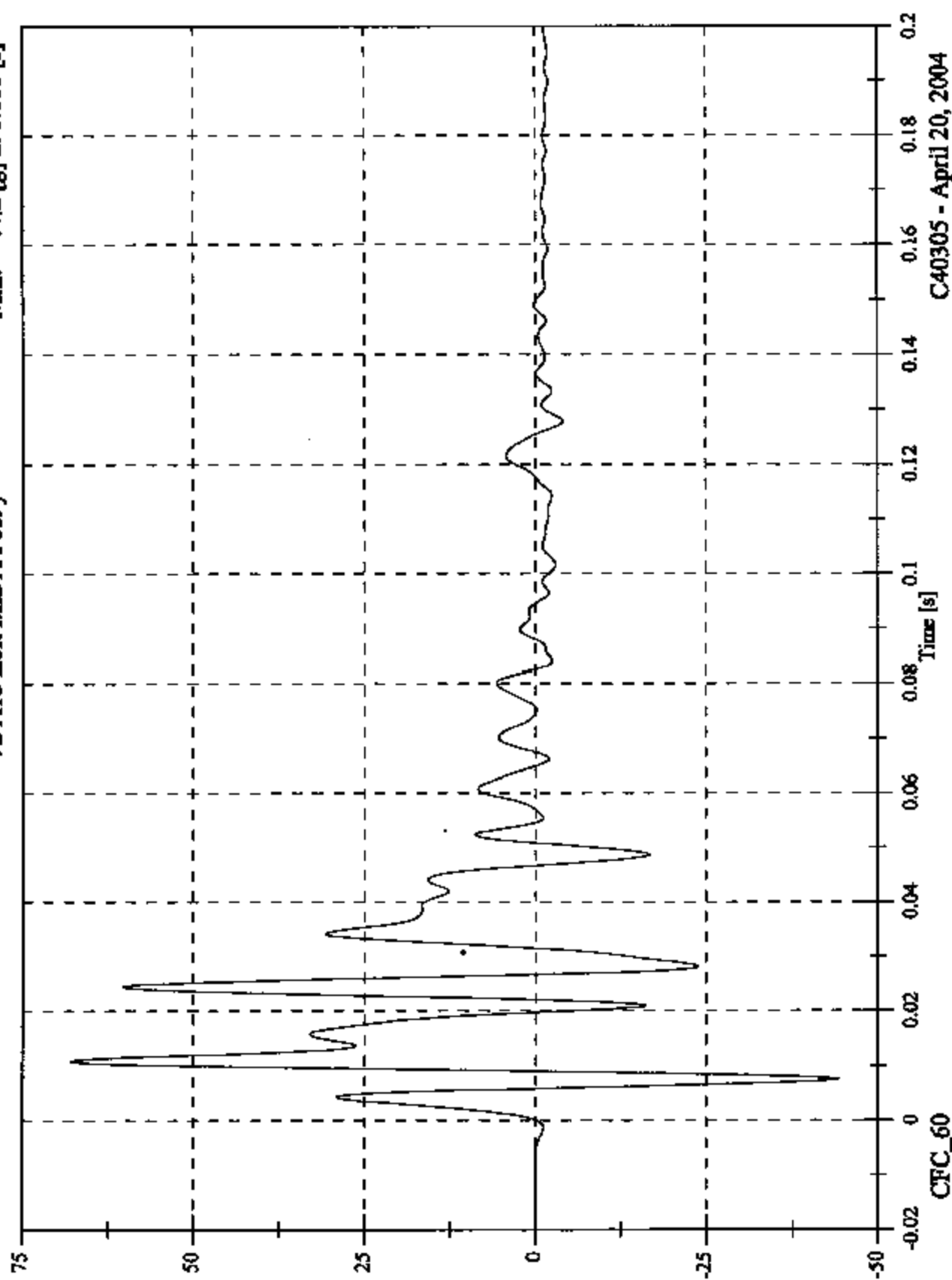
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A15 Left Mid A Post y

Max: 68.0 [g] at 0.011 [s]

Min: -44.2 [g] at 0.008 [s]

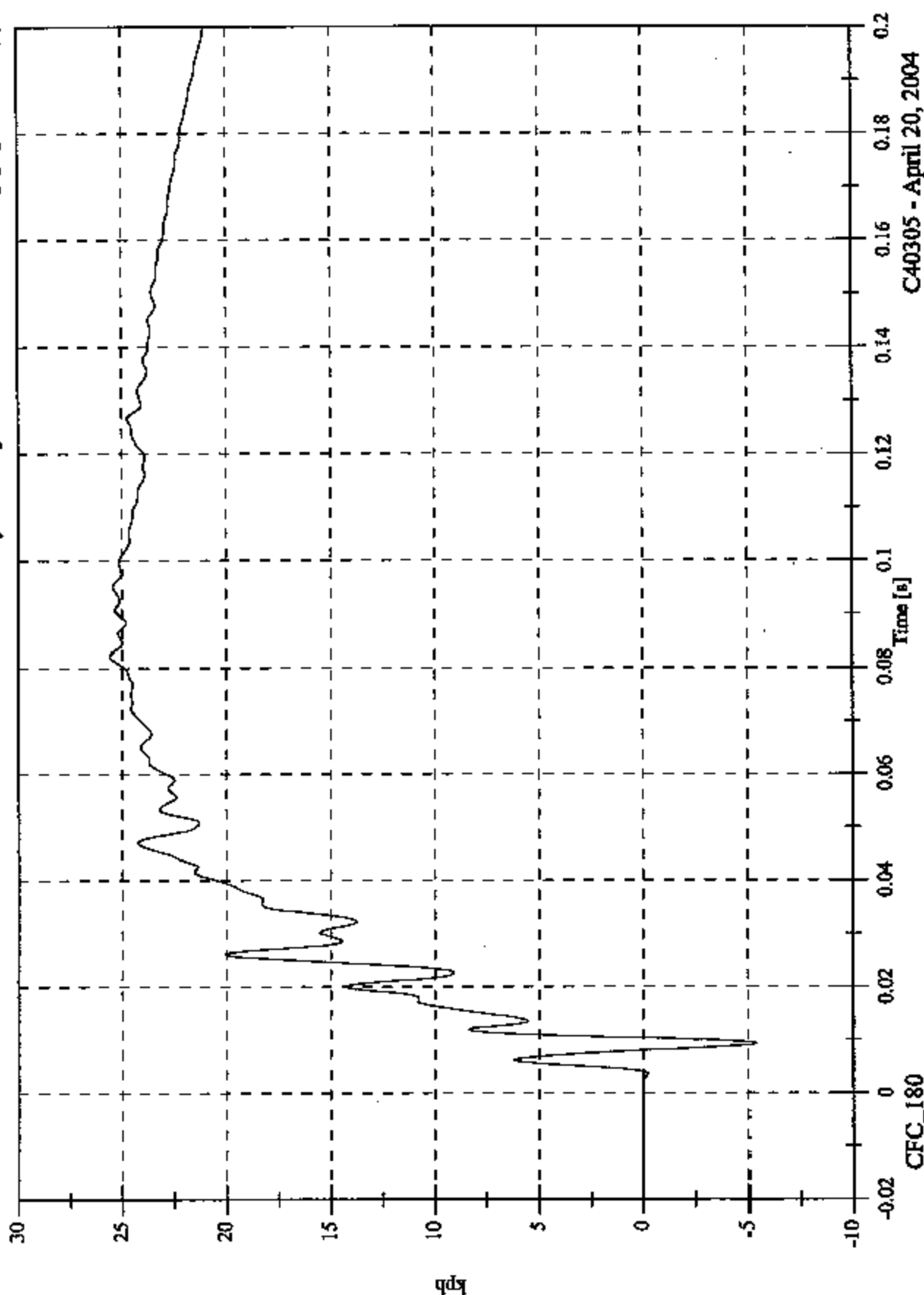


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A15 Left Mid A Post y Velocity

Max: 25.6 [kph] at 0.082 [s]
Min: -5.3 [kph] at 0.009 [s]



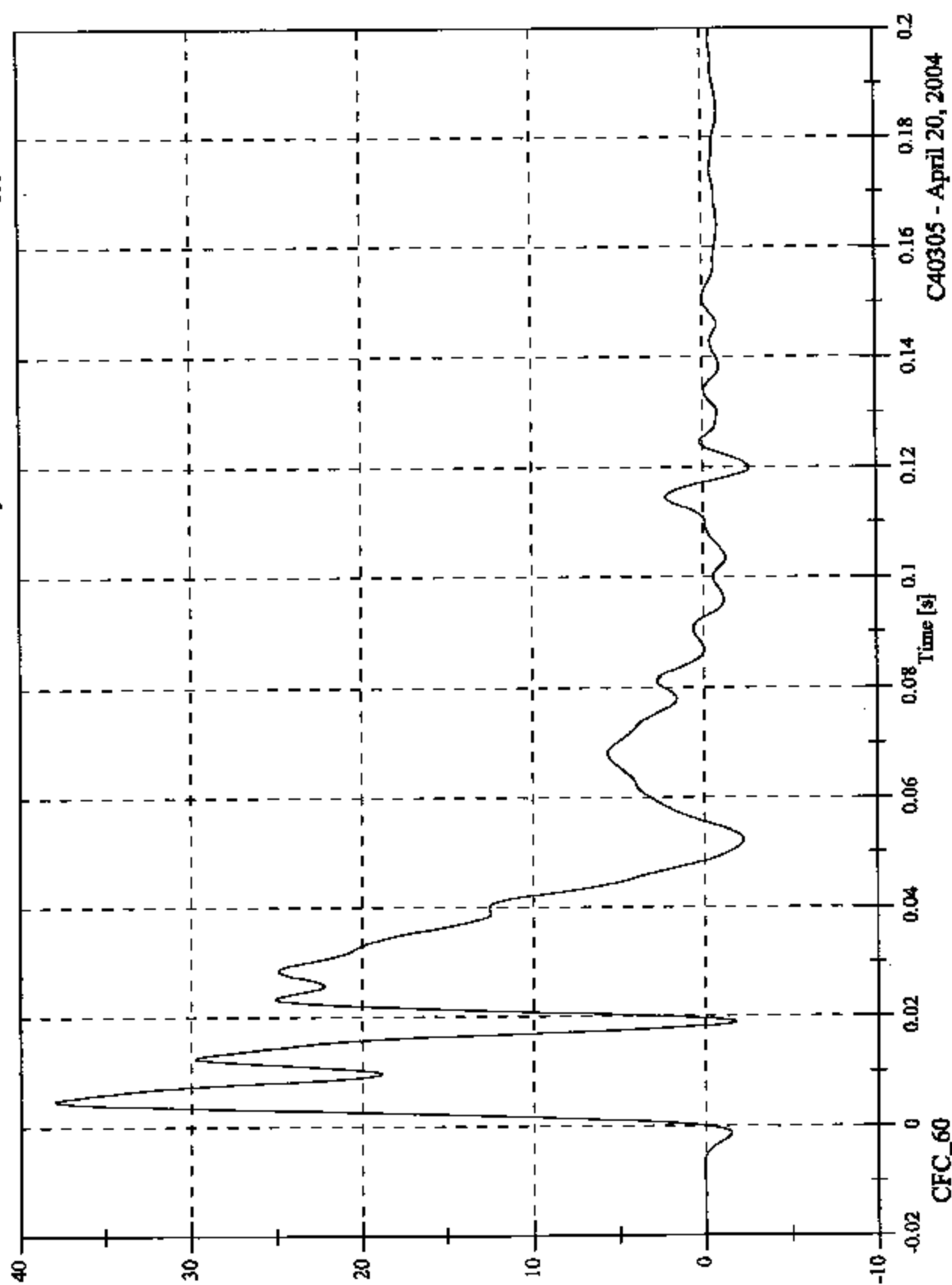
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A16 Front Seat Track y

Max: 37.9 [g] at 0.005 [s]

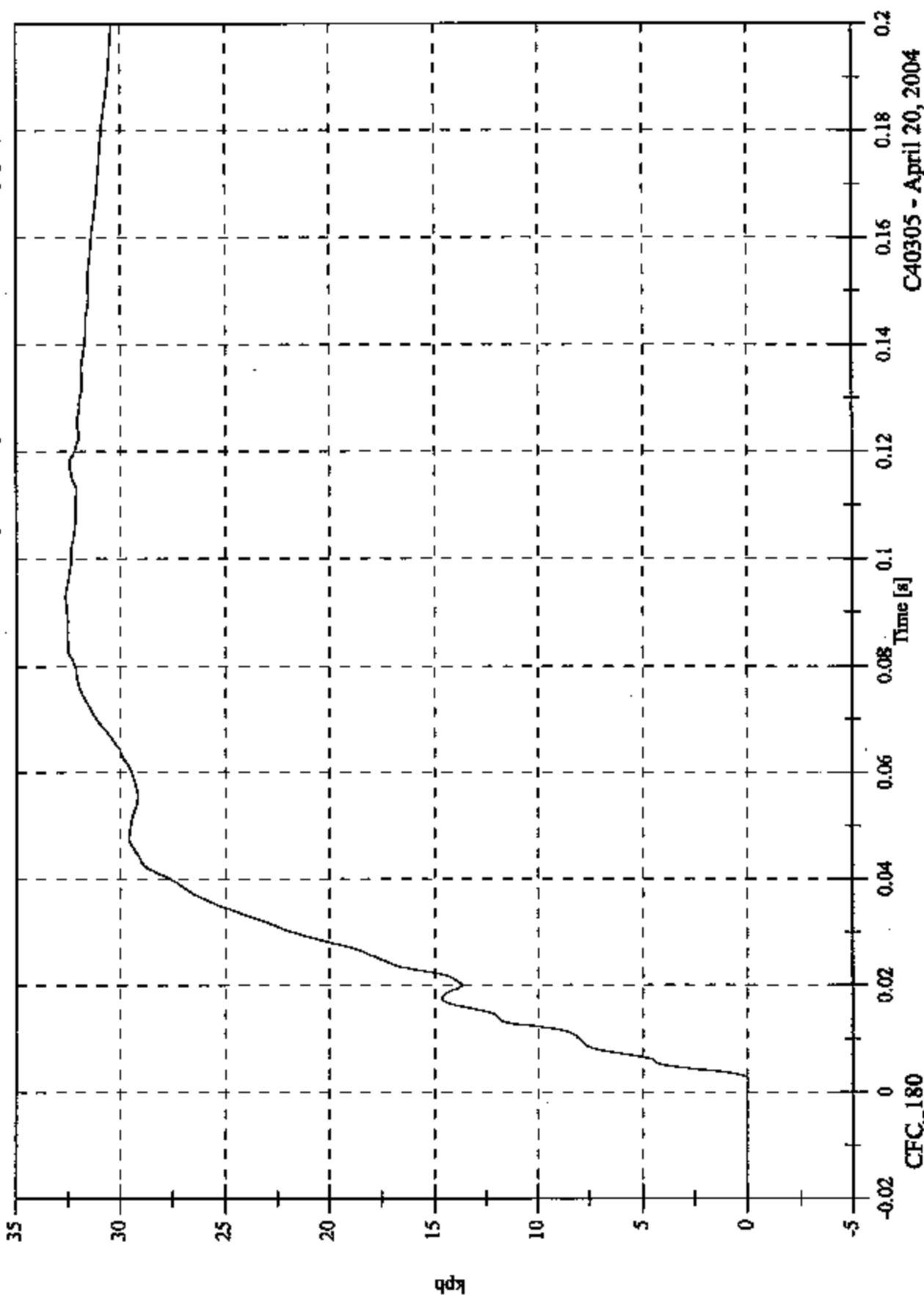
Min: -2.7 [g] at 0.120 [s]



C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire
V2 A16 Front Seat Track y Velocity

Max: 32.6 [kph] at 0.093 [s]
Min: -0.1 [kph] at 0.002 [s]

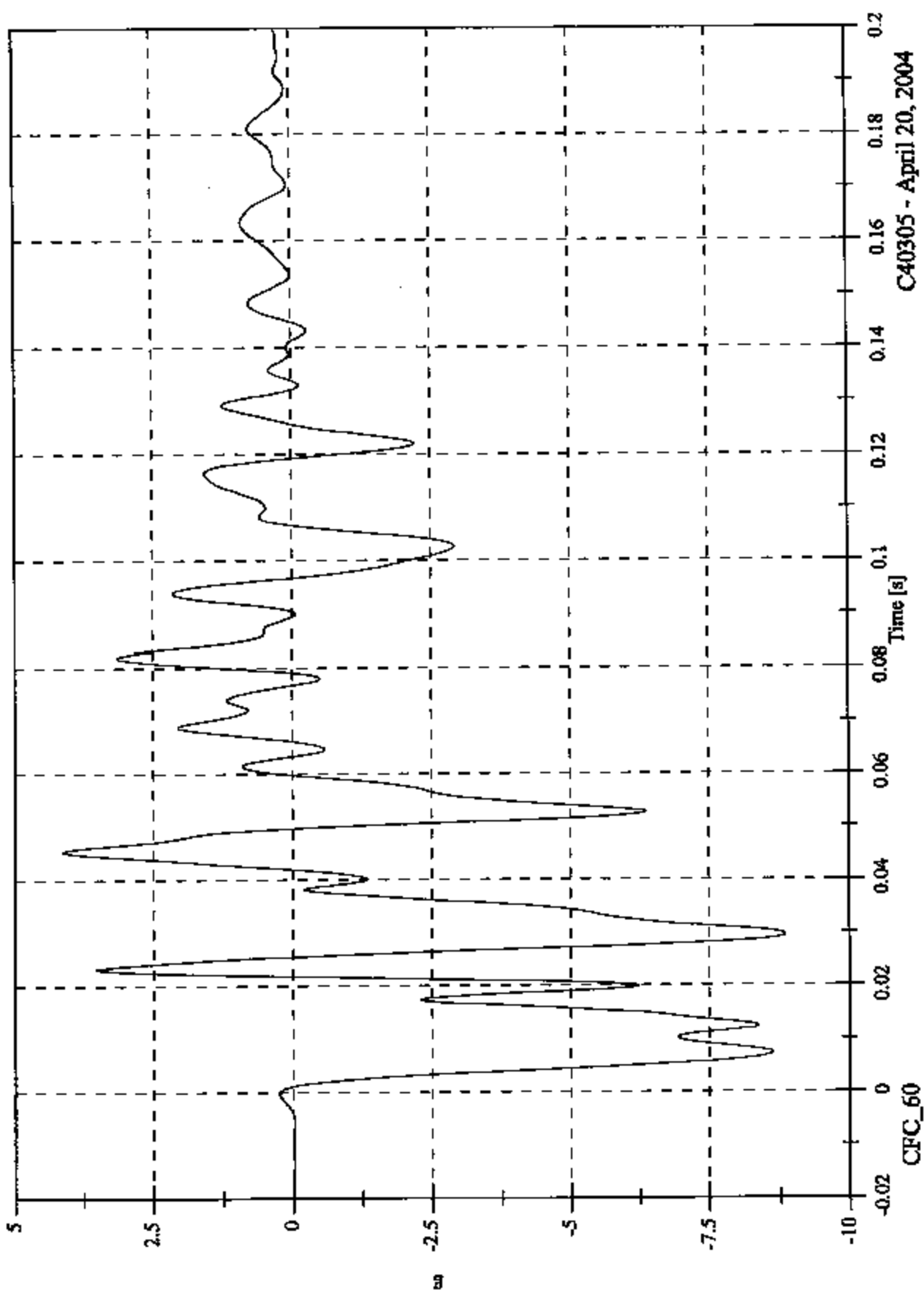


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A18 Target CG x

Max: 4.1 [g] at 0.045 [s]
Min: -8.8 [g] at 0.029 [s]

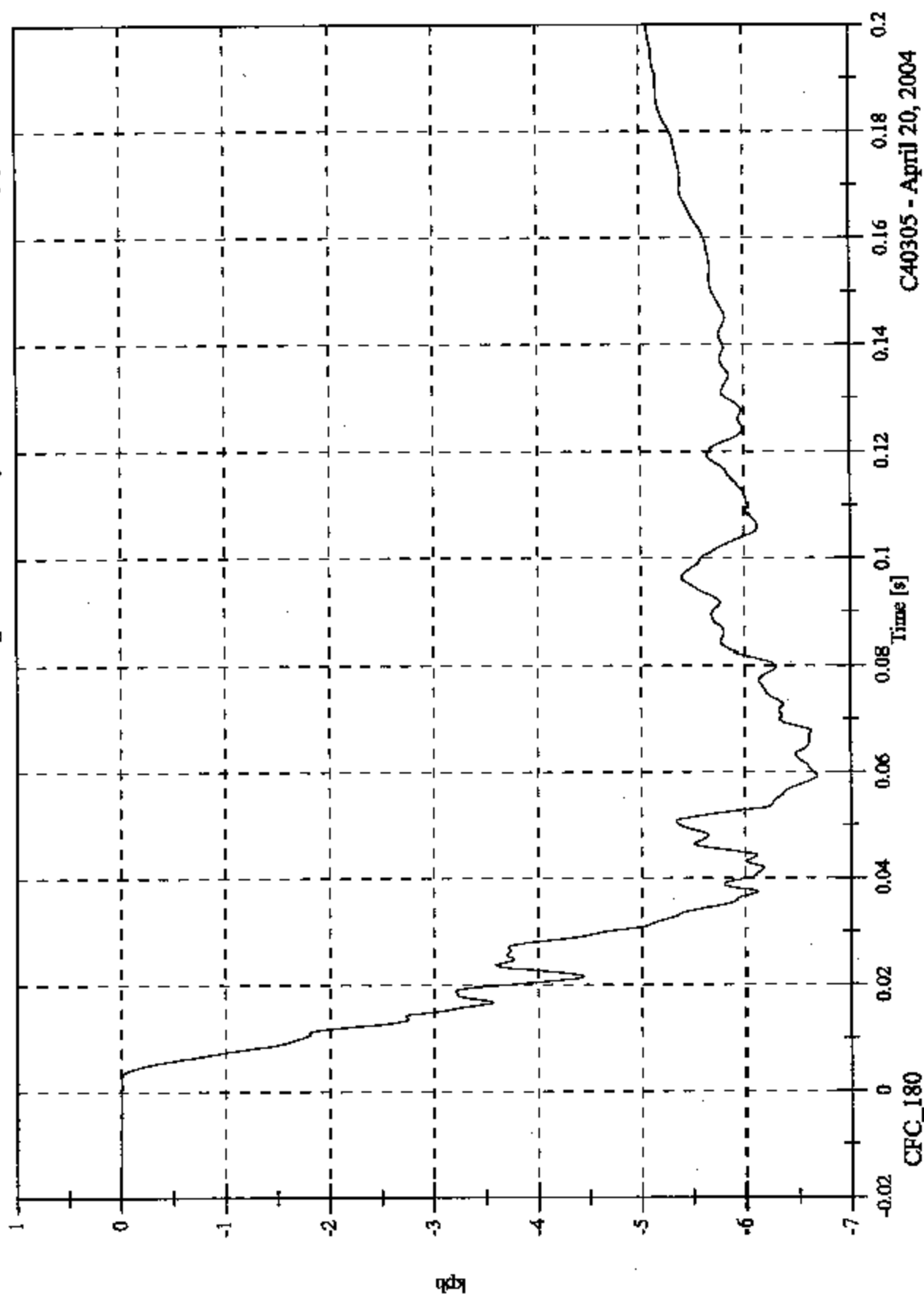


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A18 Target CG x Velocity

Max: 0.0 [kph] at -0.016 [s]
Min: -6.7 [kph] at 0.059 [s]



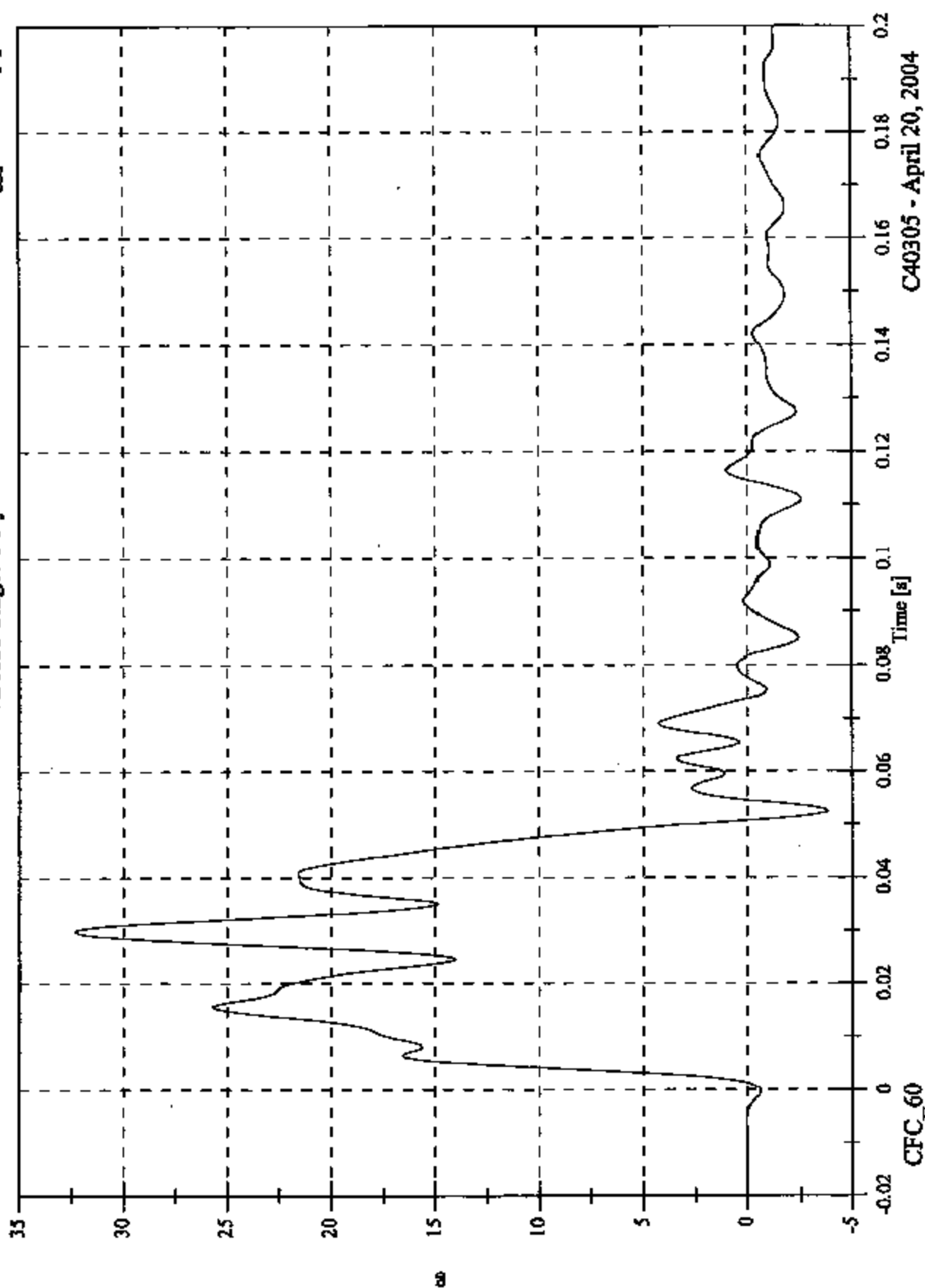
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A18 Target CG y

Max: 32.3 [g] at 0.030 [s]

Min: -3.8 [g] at 0.052 [s]

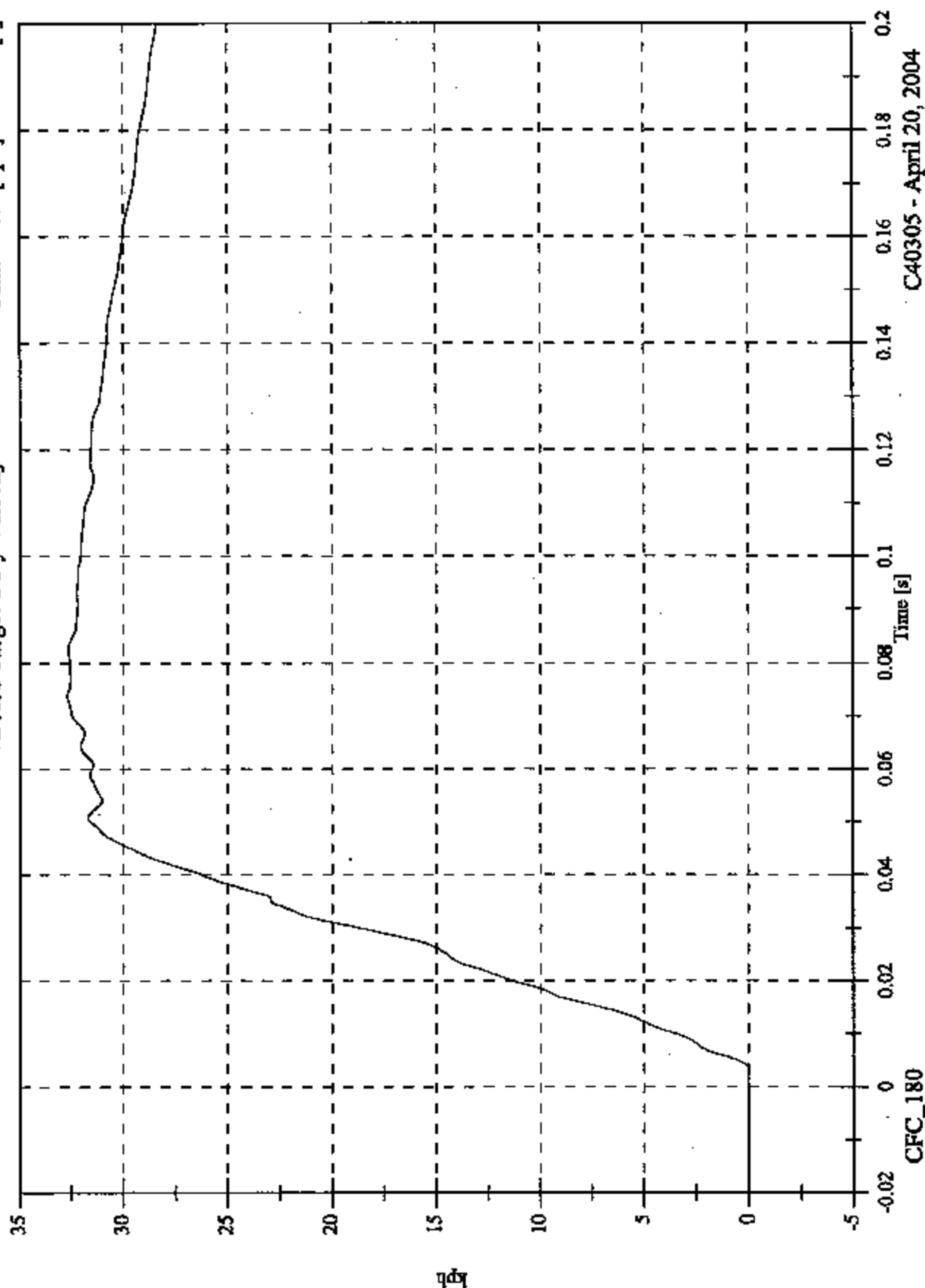


C40305 - April 20, 2004

2004 FNVSS 214D Test 7 - 2004 Chrysler Crossfire

V2 A18 Target CG y Velocity

Max: 32.7 [kph] at 0.074 [s]
Min: -0.0 [kph] at 0.003 [s]



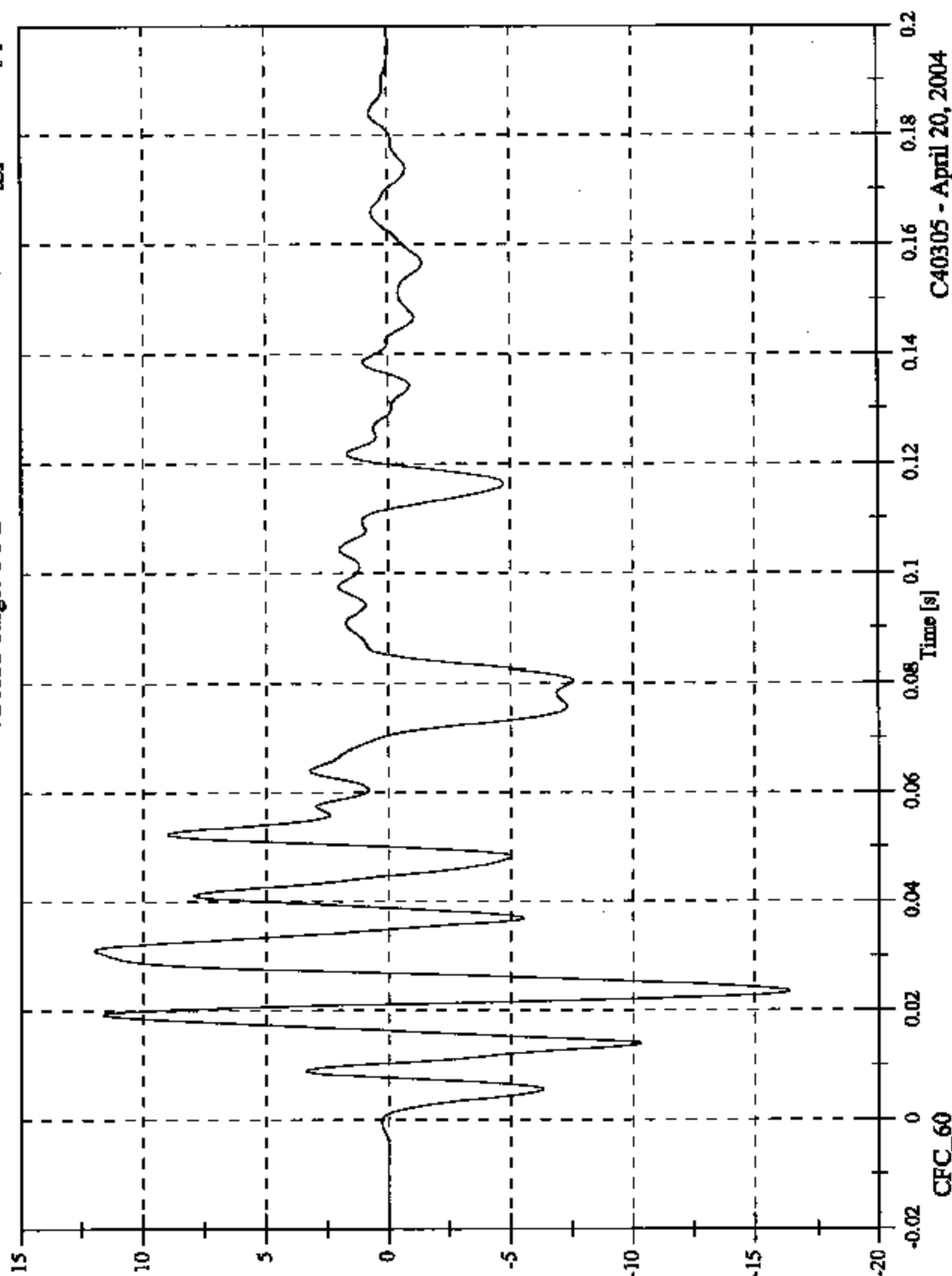
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

Max: 12.0 [g] at 0.031 [s]

Min: -16.3 [g] at 0.023 [s]

V2 A18 Target CG z

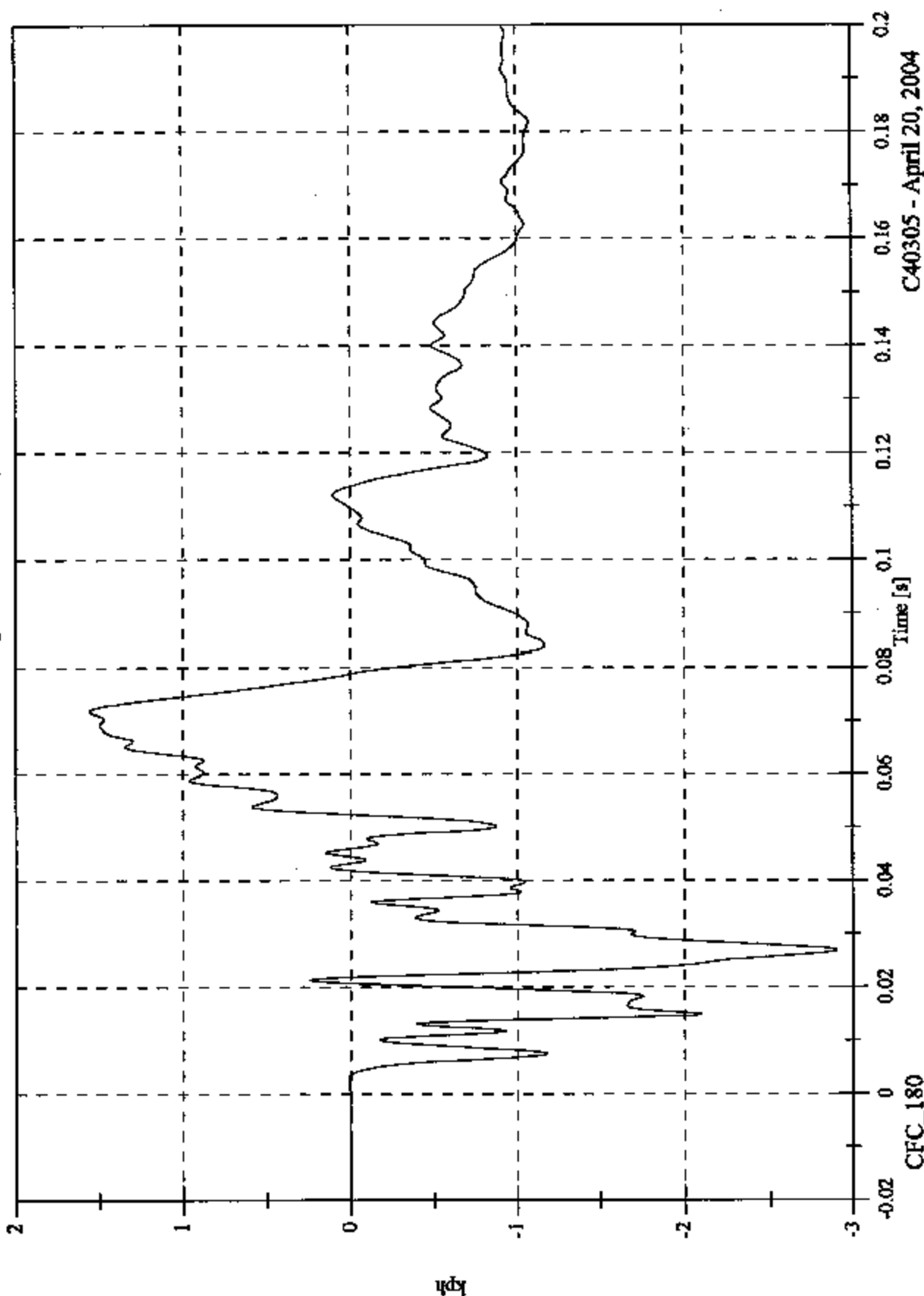


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

VZ A18 Target CG z Velocity

Max: 1.6 [kph] at 0.072 [s]
Min: -2.9 [kph] at 0.027 [s]



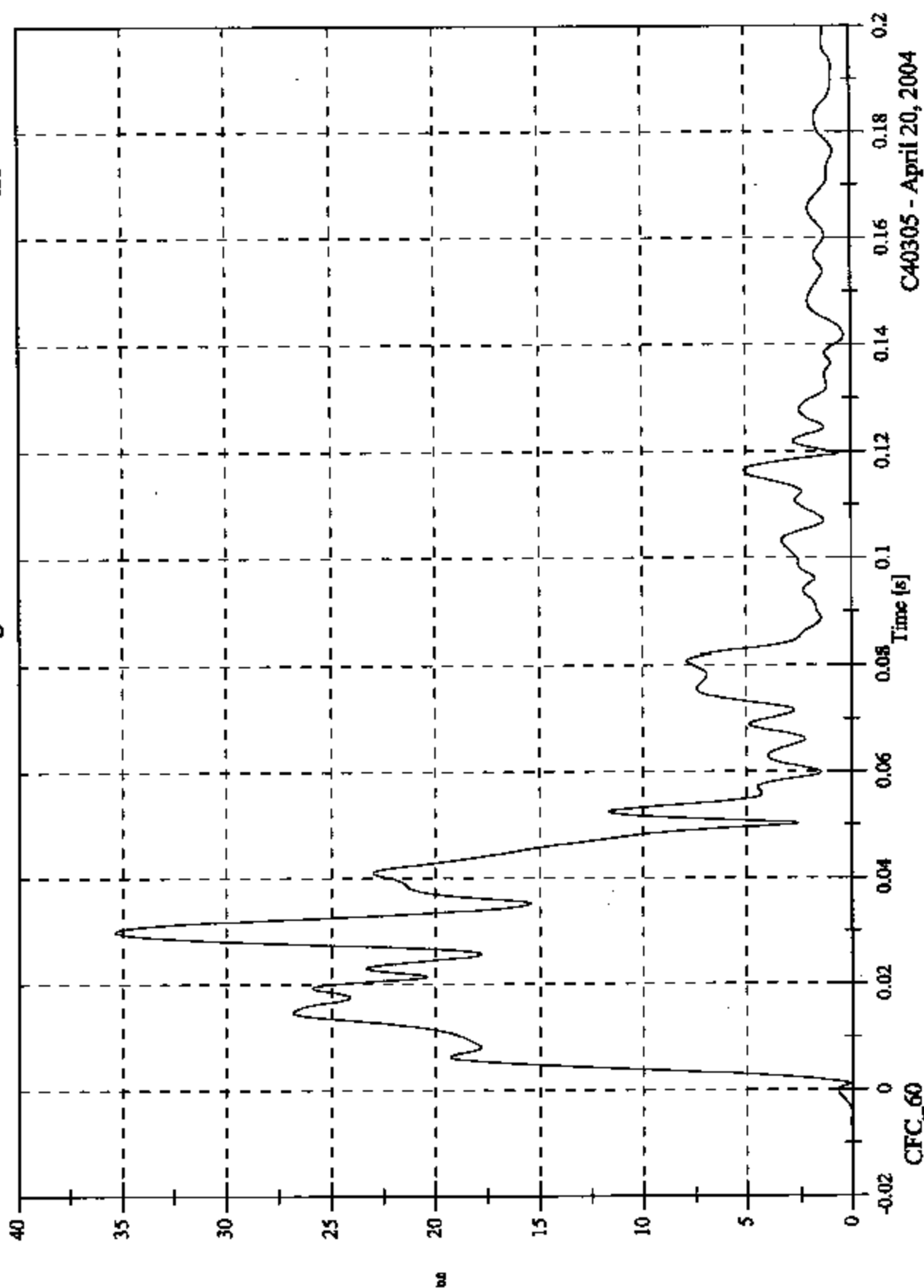
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

Max: 35.4 [g] at 0.030 [s]

V2 A18 Target CG Resultant

Min: 0.0 [g] at -0.011 [s]

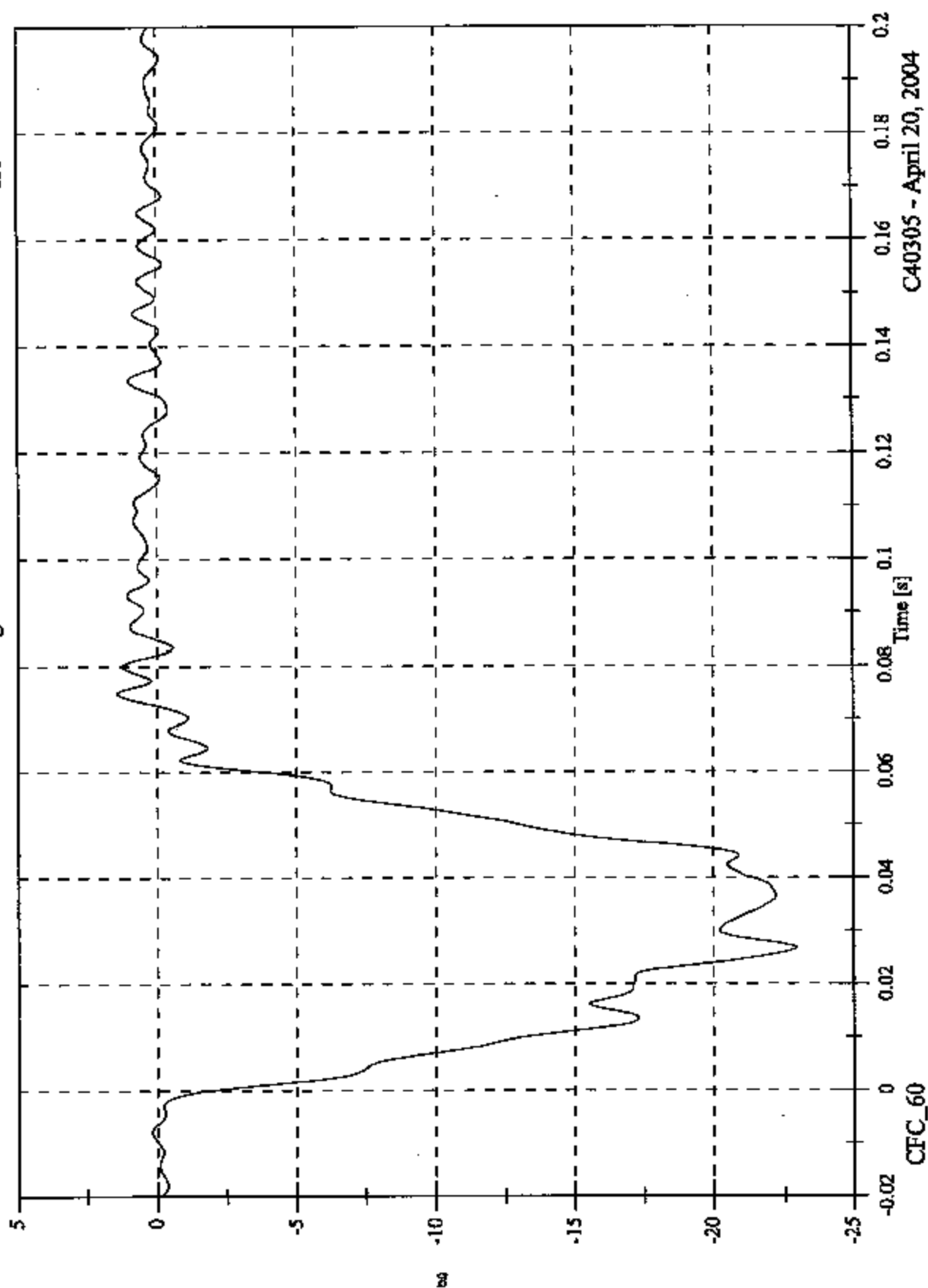


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V1 Moving Barrier CG X

Max: 1.4 [g] at 0.075 [s]
Min: -22.9 [g] at 0.027 [s]

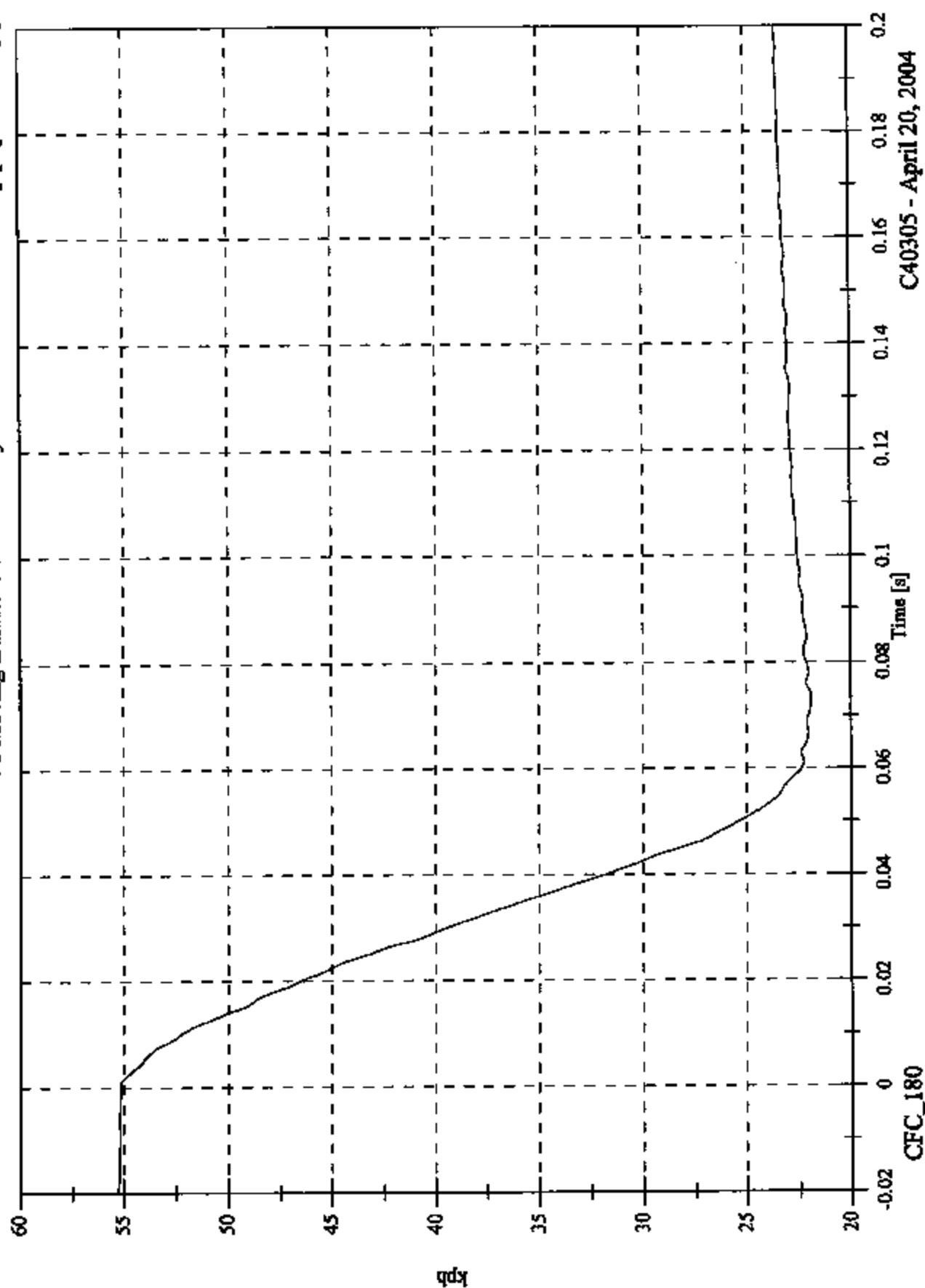


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V1 Moving Barrier CG X Velocity

Max: 55.3 [kph] at -0.019 [s]
Min: 21.9 [kph] at 0.073 [s]

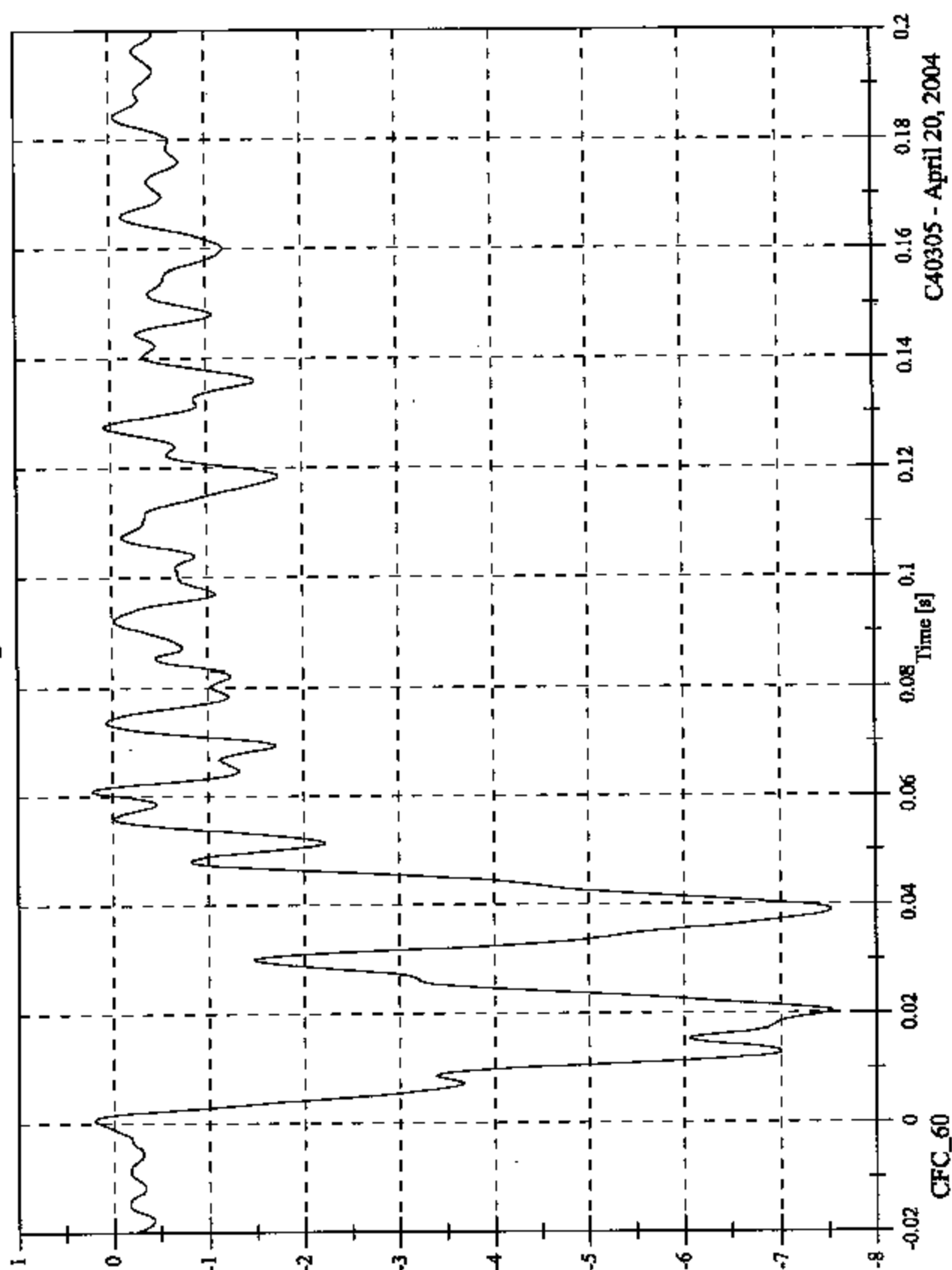


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V1 Moving Barrier CG Y

Max: 0.2 [g] at 0.061 [s]
Min: -7.5 [g] at 0.020 [s]



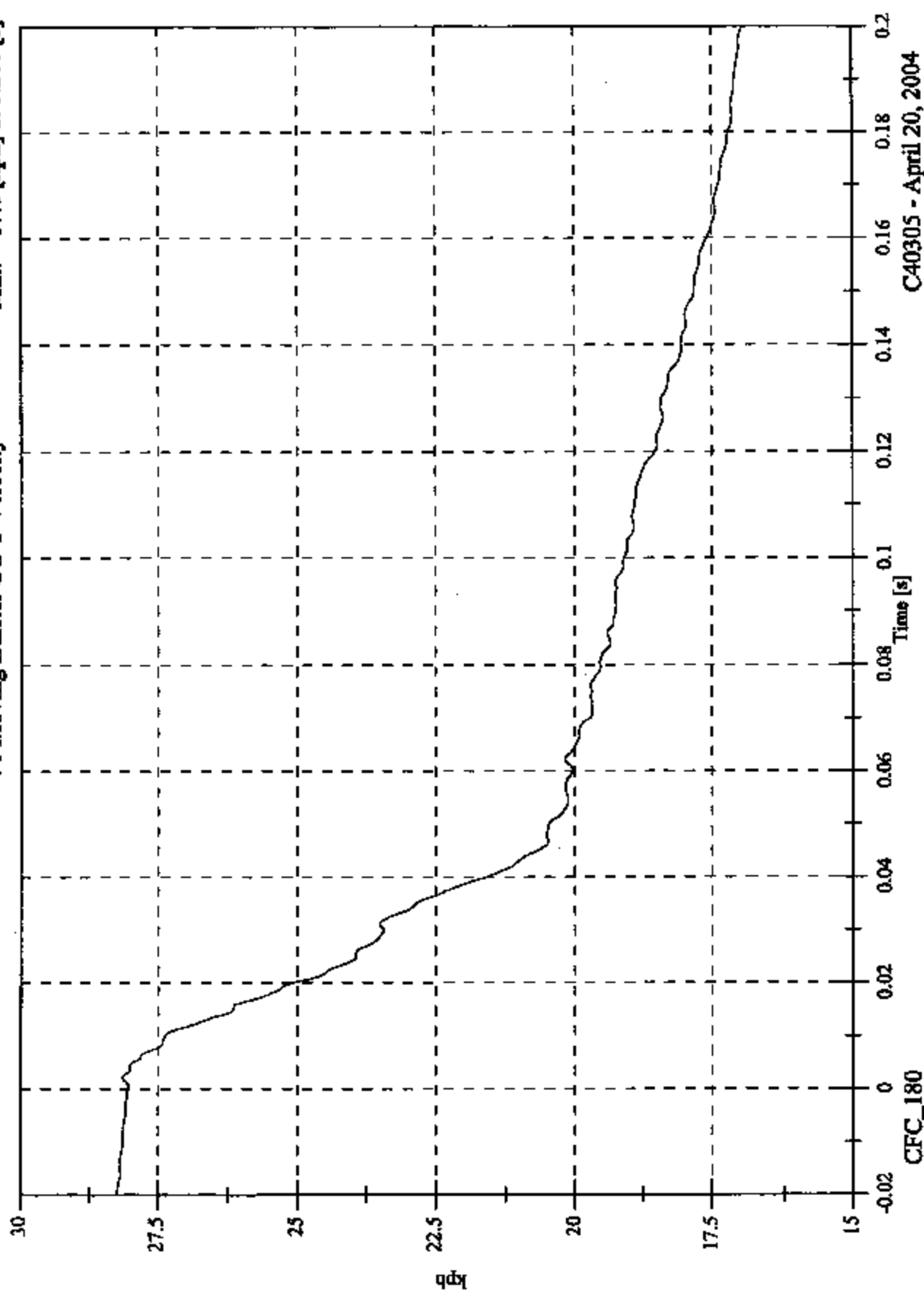
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

Max: 28.3 [kph] at -0.020 [s]

Min: 17.0 [kph] at 0.200 [s]

V1 Moving Barrier CG Y Velocity



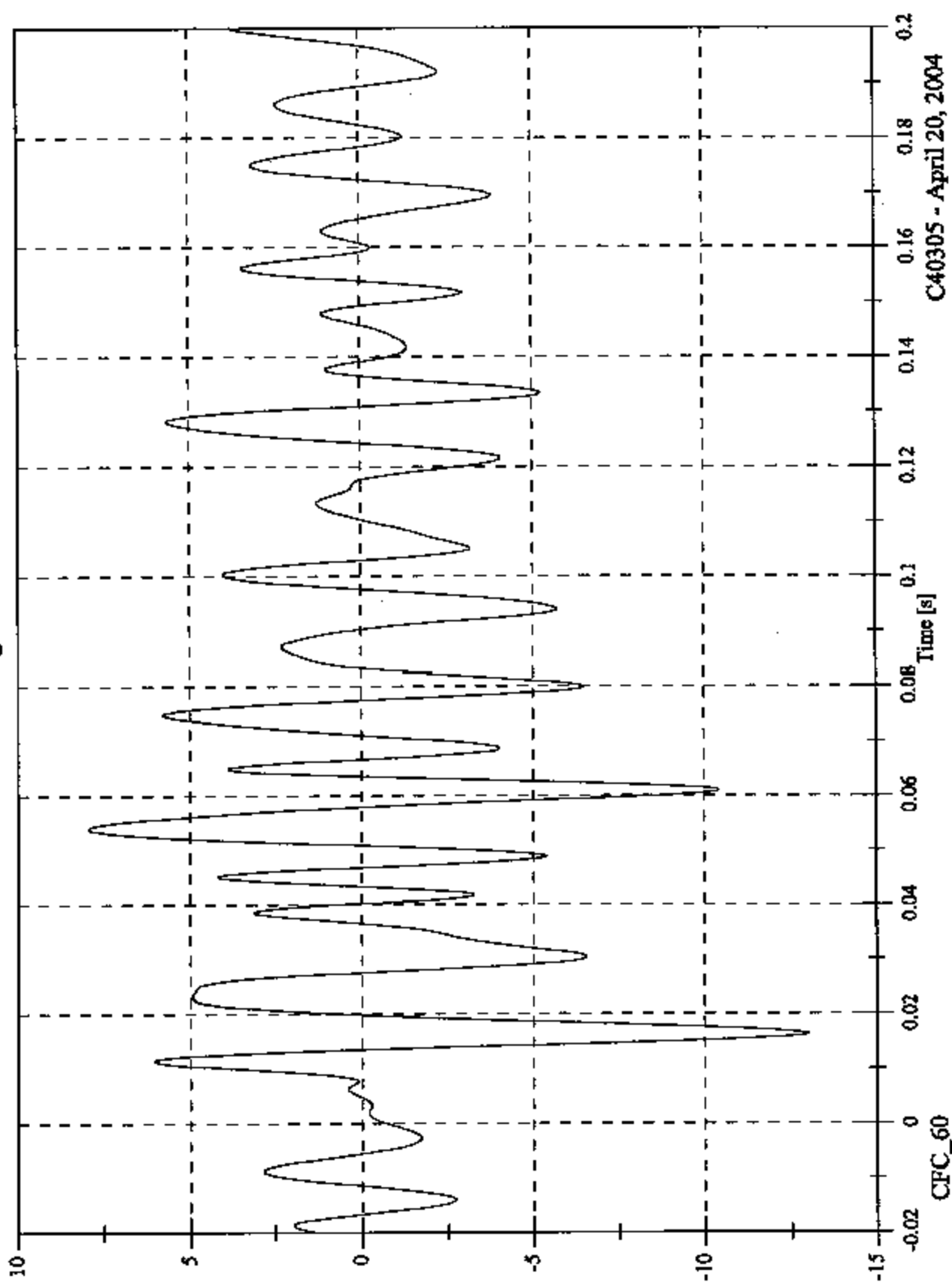
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V1 Moving Barrier CG Z

Max: 7.9 [g] at 0.054 [s]

Min: -13.0 [g] at 0.016 [s]



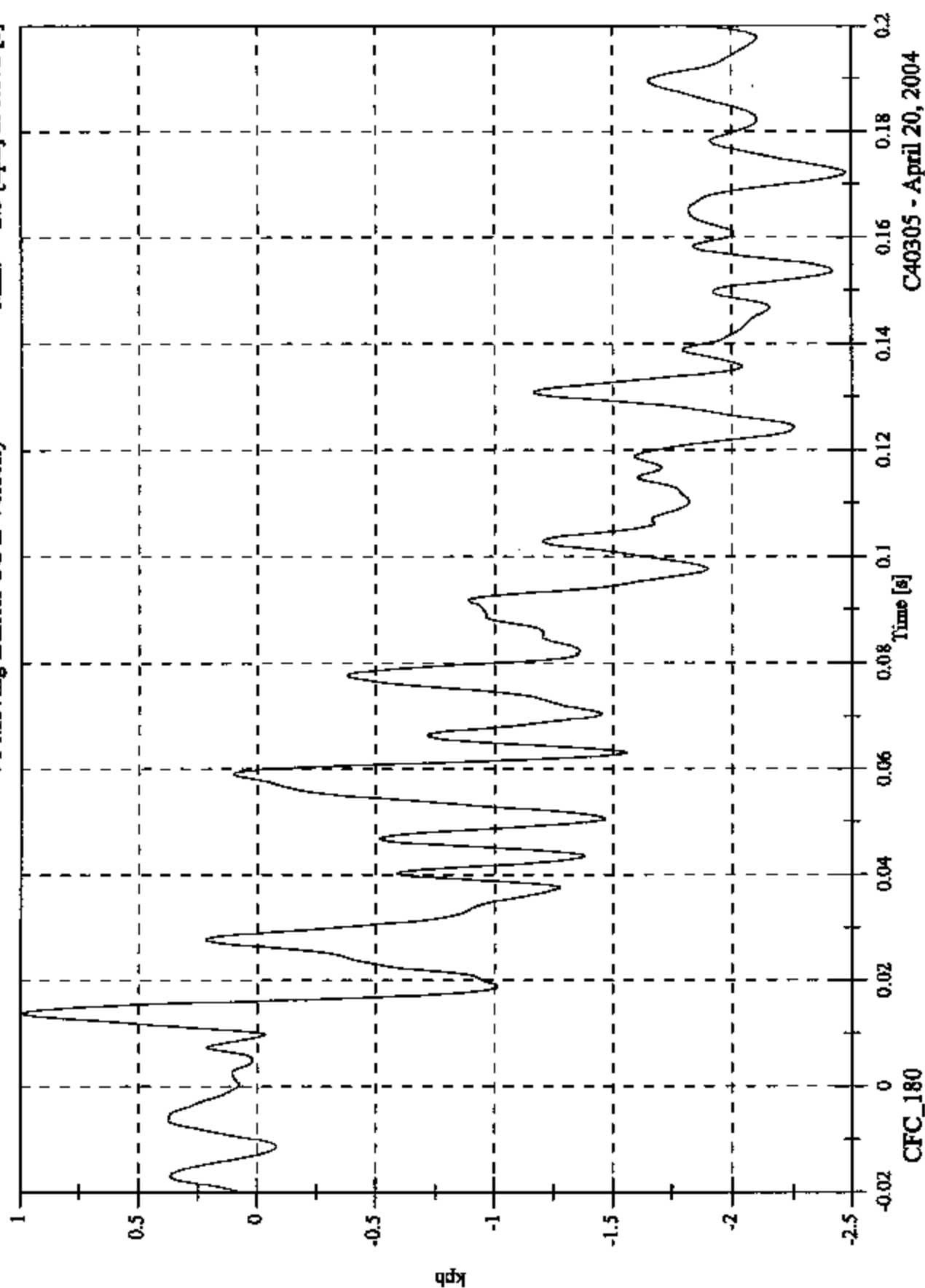
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V1 Moving Barrier CG Z Velocity

Max: 1.0 [kph] at 0.014 [s]

Min: -2.5 [kph] at 0.172 [s]



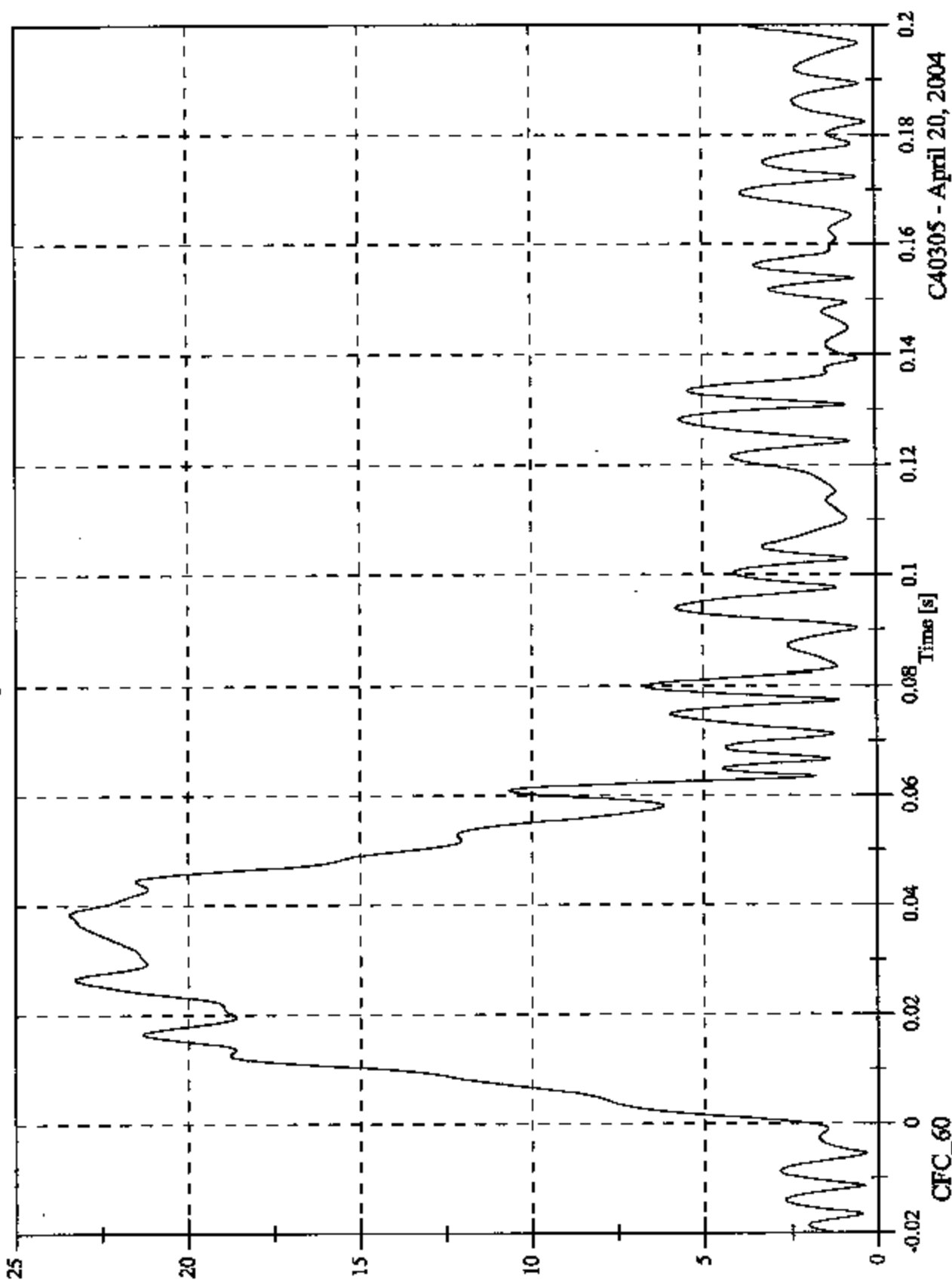
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V1 Moving Barrier CG Resultant

Max: 23.4 [g] at 0.038 [s]

Min: 0.3 [g] at 0.182 [s]



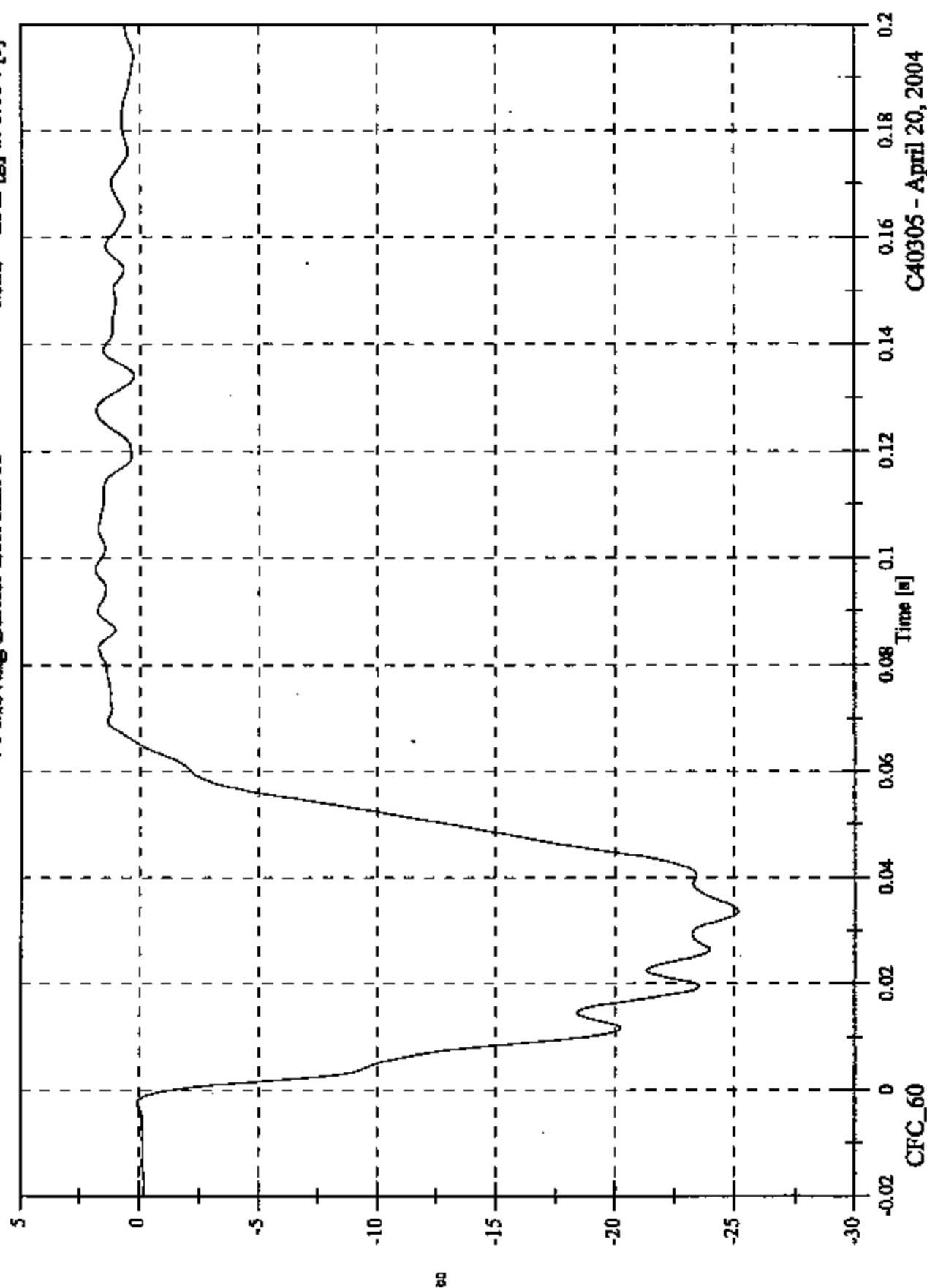
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V1 Moving Barrier Left Rail X

Max: 1.9 [g] at 0.098 [s]

Min: -25.2 [g] at 0.034 [s]

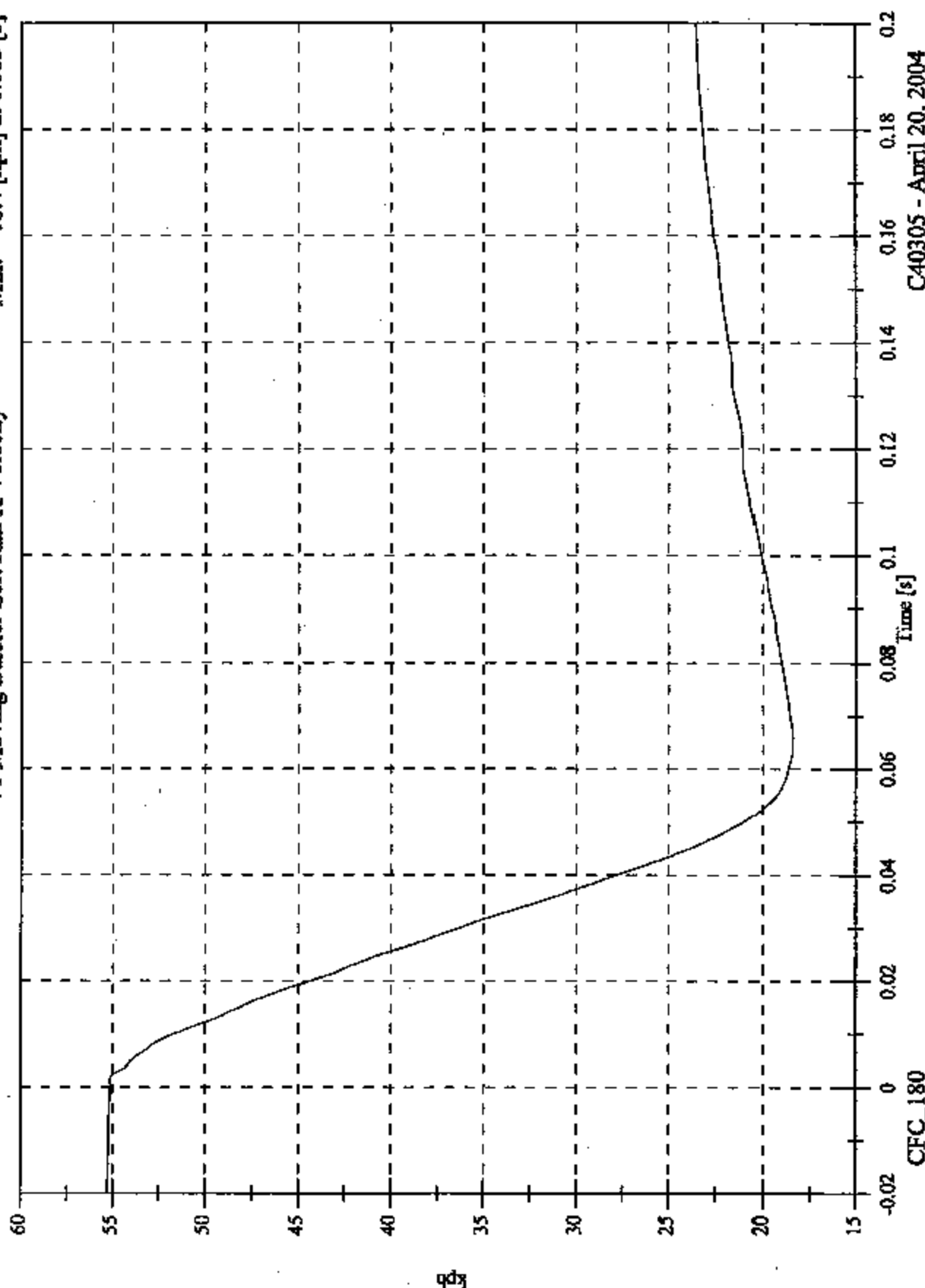


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V1 Moving Barrier Left Rail X Velocity

Max: 55.3 [kph] at -0.020 [s]
Min: 18.4 [kph] at 0.063 [s]



CFC_180

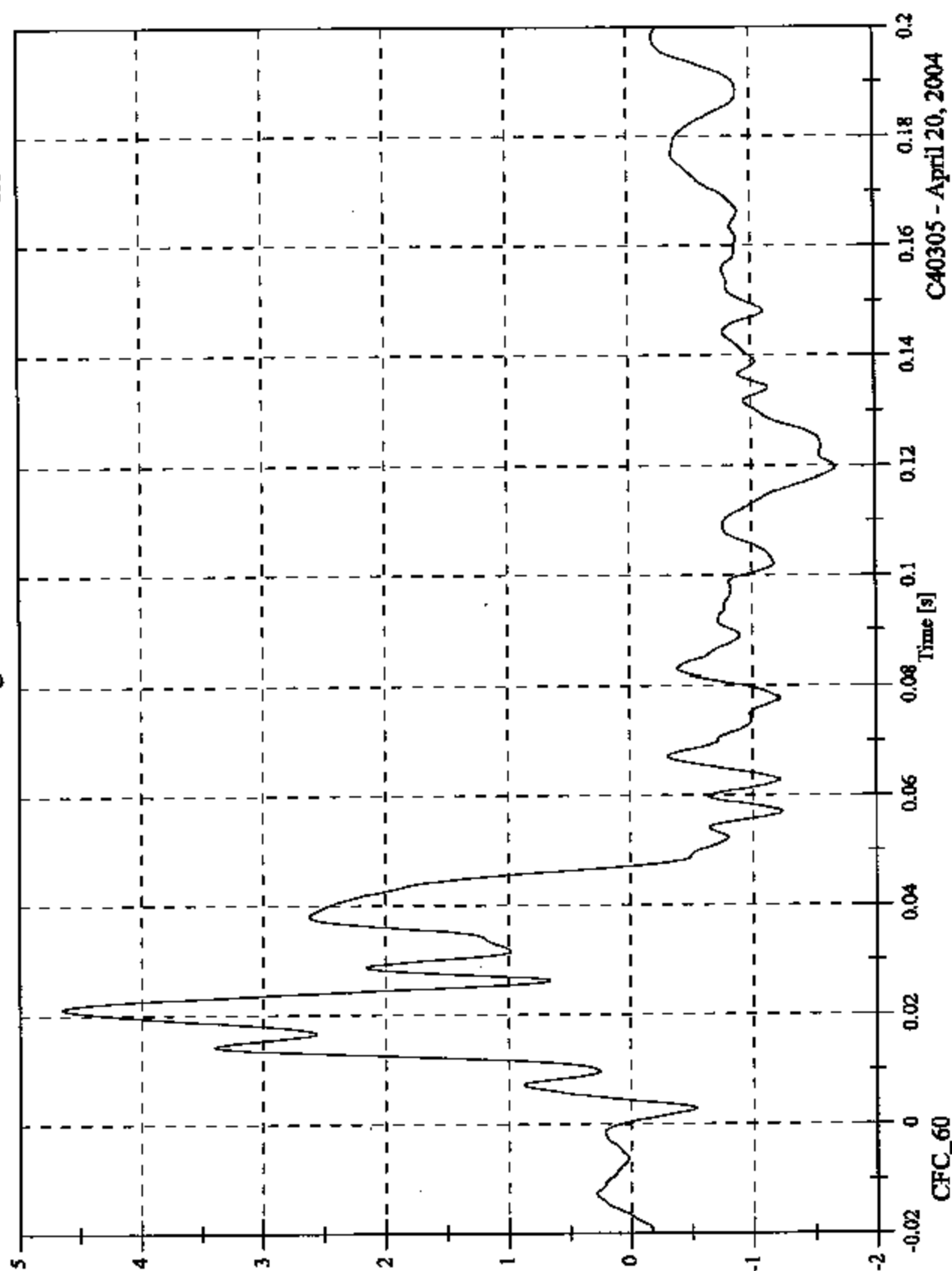
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V1 Moving Barrier Left Rail Y

Max: 4.6 [g] at 0.021 [s]

Min: -1.7 [g] at 0.120 [s]

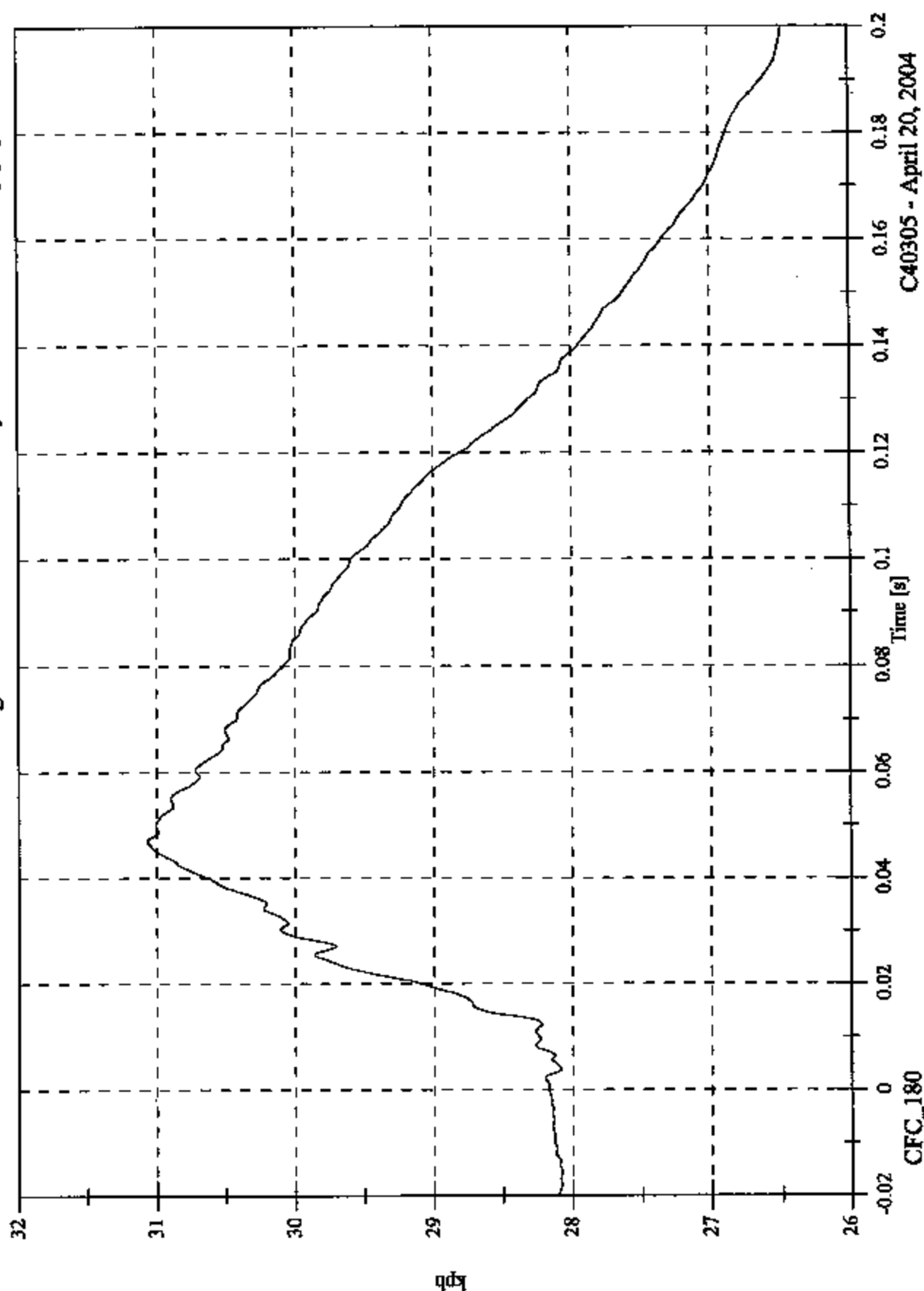


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V1 Moving Barrier Left Rail Y Velocity

Max: 31.1 [kph] at 0.047 [s]
Min: 26.5 [kph] at 0.200 [s]

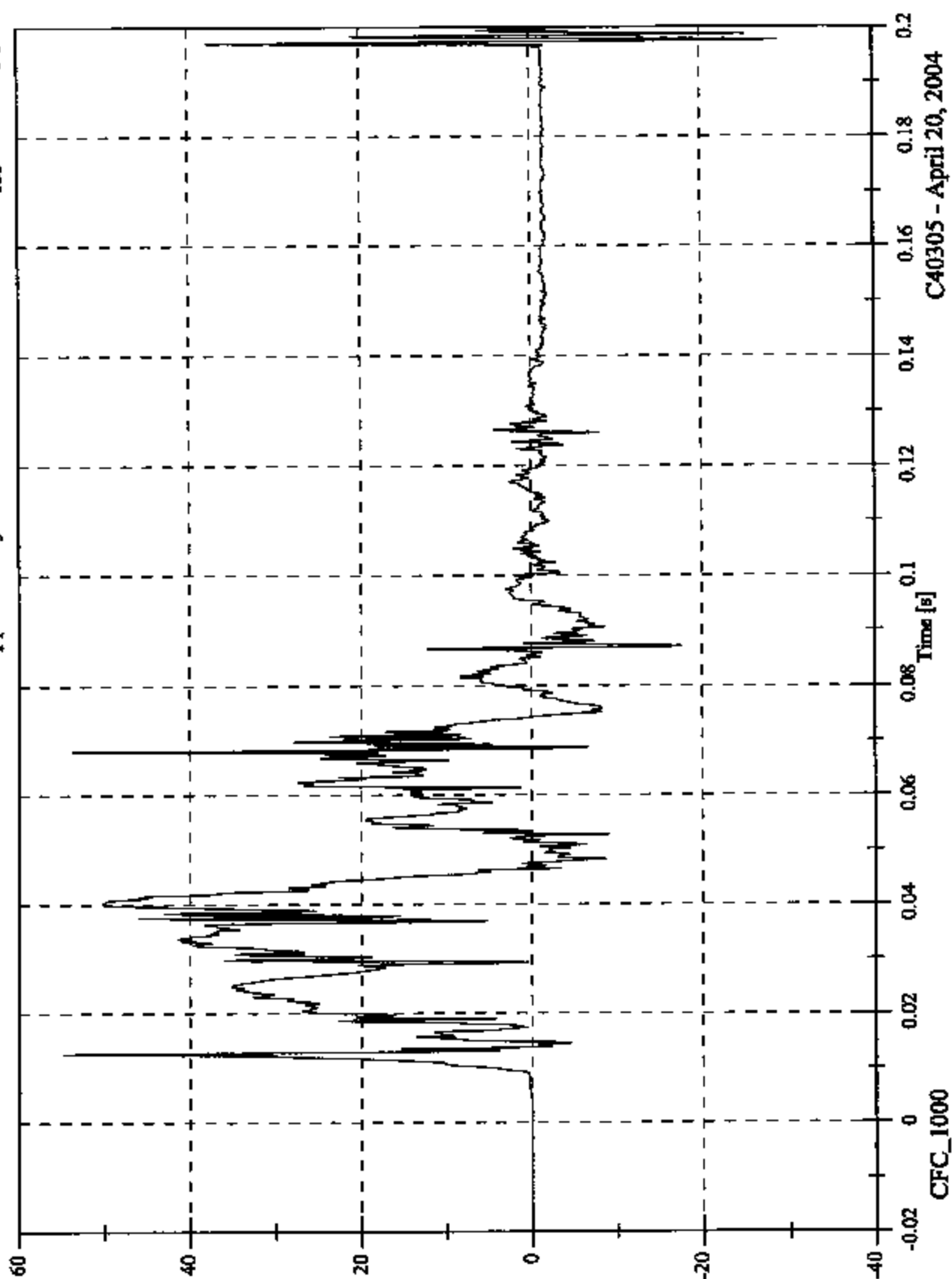


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Rib Ry

Max: 54.7 [g] at 0.013 [s]
Min: -29.0 [g] at 0.198 [s]



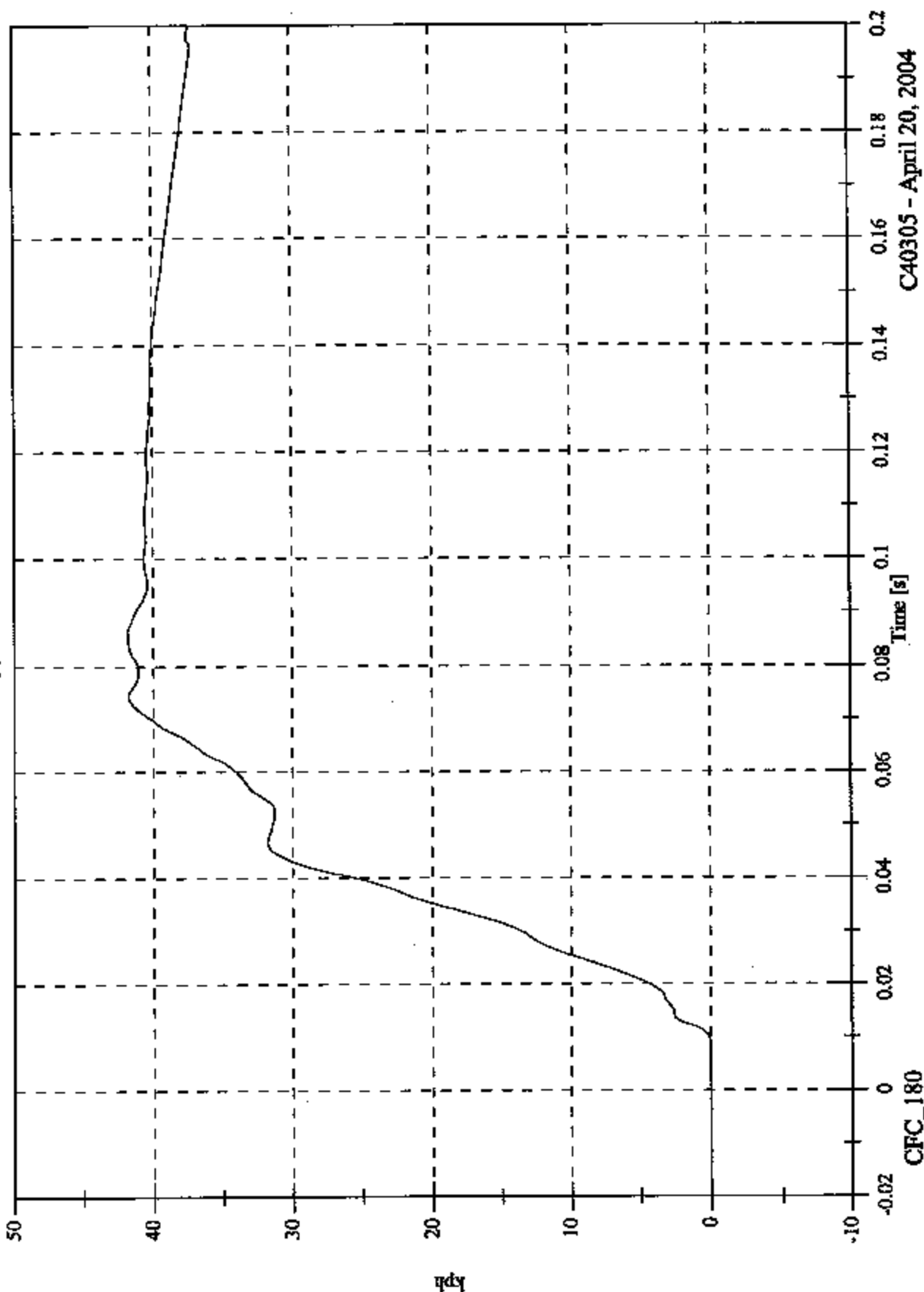
C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Rib Ry Velocity

Max: 41.8 [kph] at 0.086 [s]

Min: -0.0 [kph] at -0.012 [s]

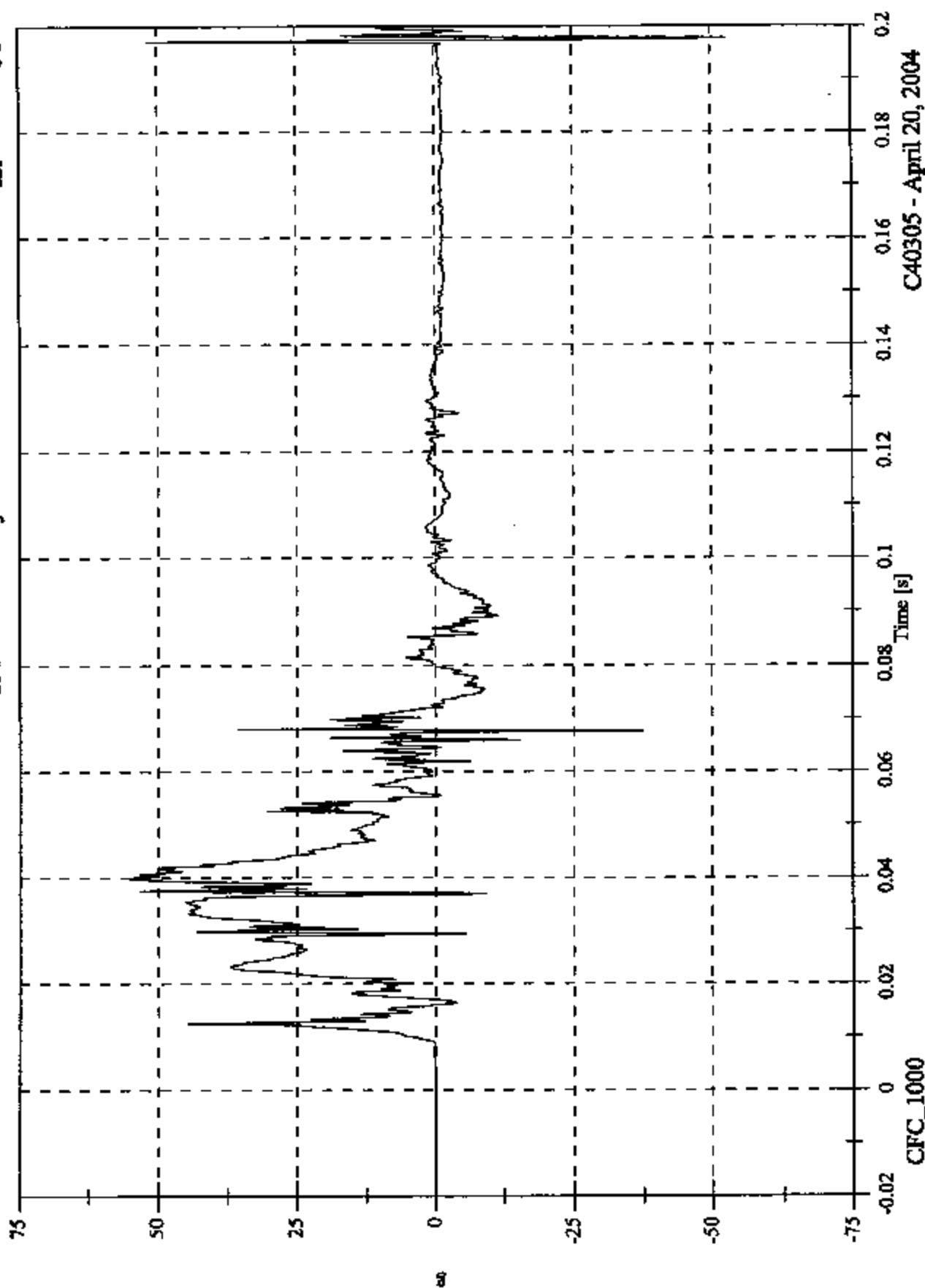


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Lower Rib Ry

Max: 55.4 [g] at 0.040 [s]
Min: -53.0 [g] at 0.198 [s]

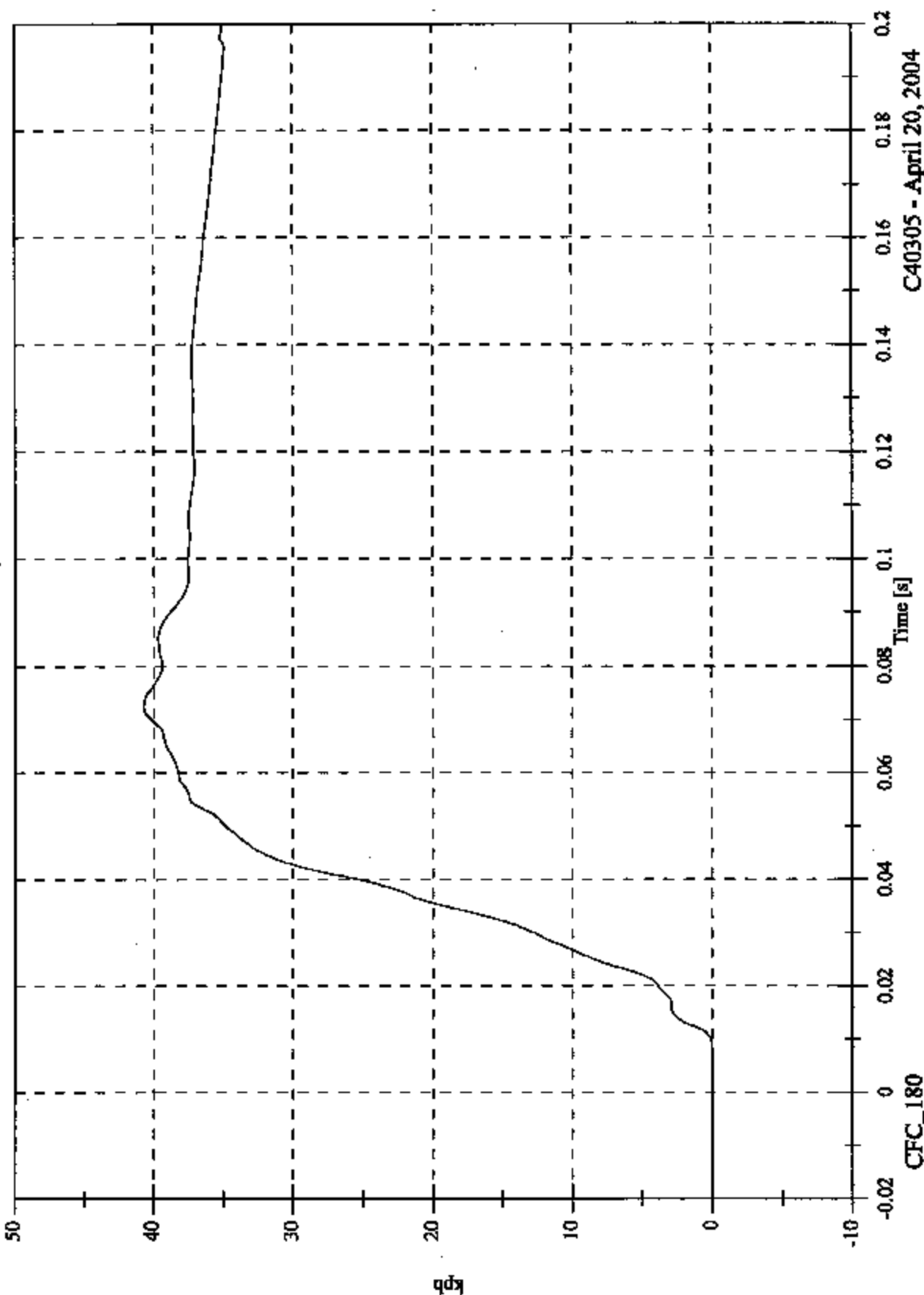


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2PI Lower Rib Ry Velocity

Max: 40.7 [kph] at 0.072 [s]
Min: -0.0 [kph] at -0.020 [s]

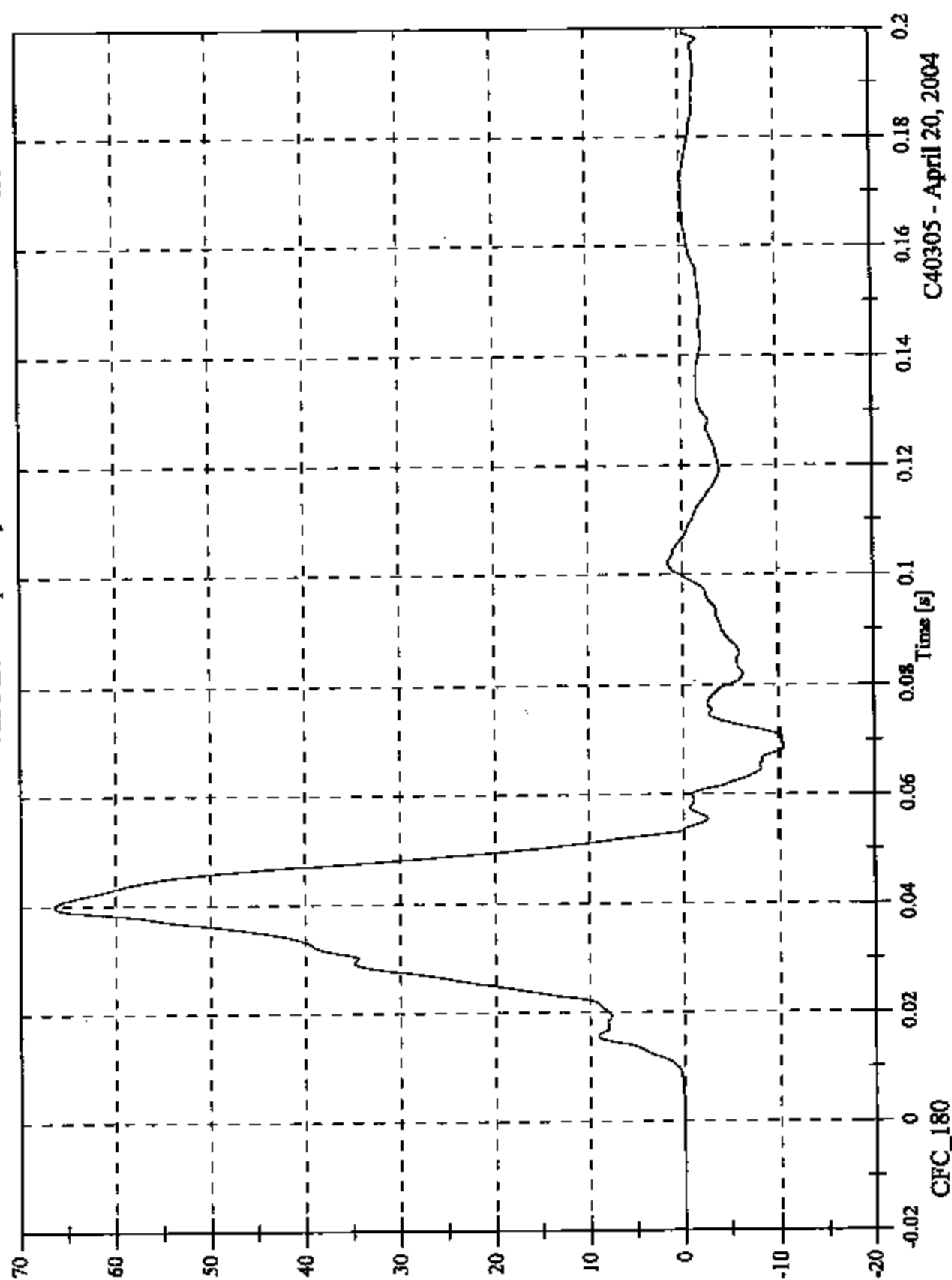


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Lower Spine Ry

Max: 66.4 [g] at 0.040 [s]
Min: -10.4 [g] at 0.069 [s]



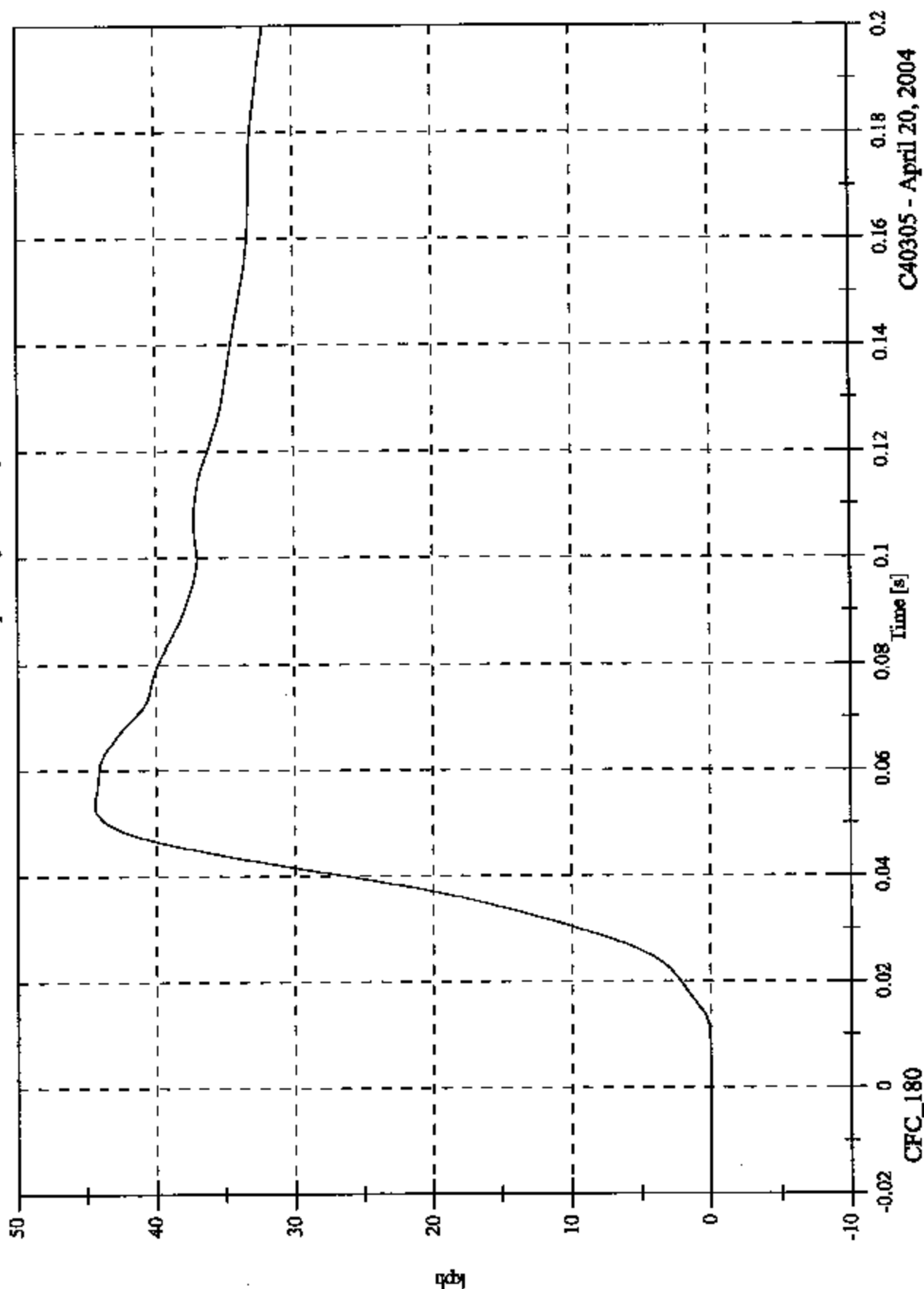
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Lower Spine Ry Velocity

Max: 44.4 [kph] at 0.053 [s]

Min: -0.0 [kph] at -0.012 [s]

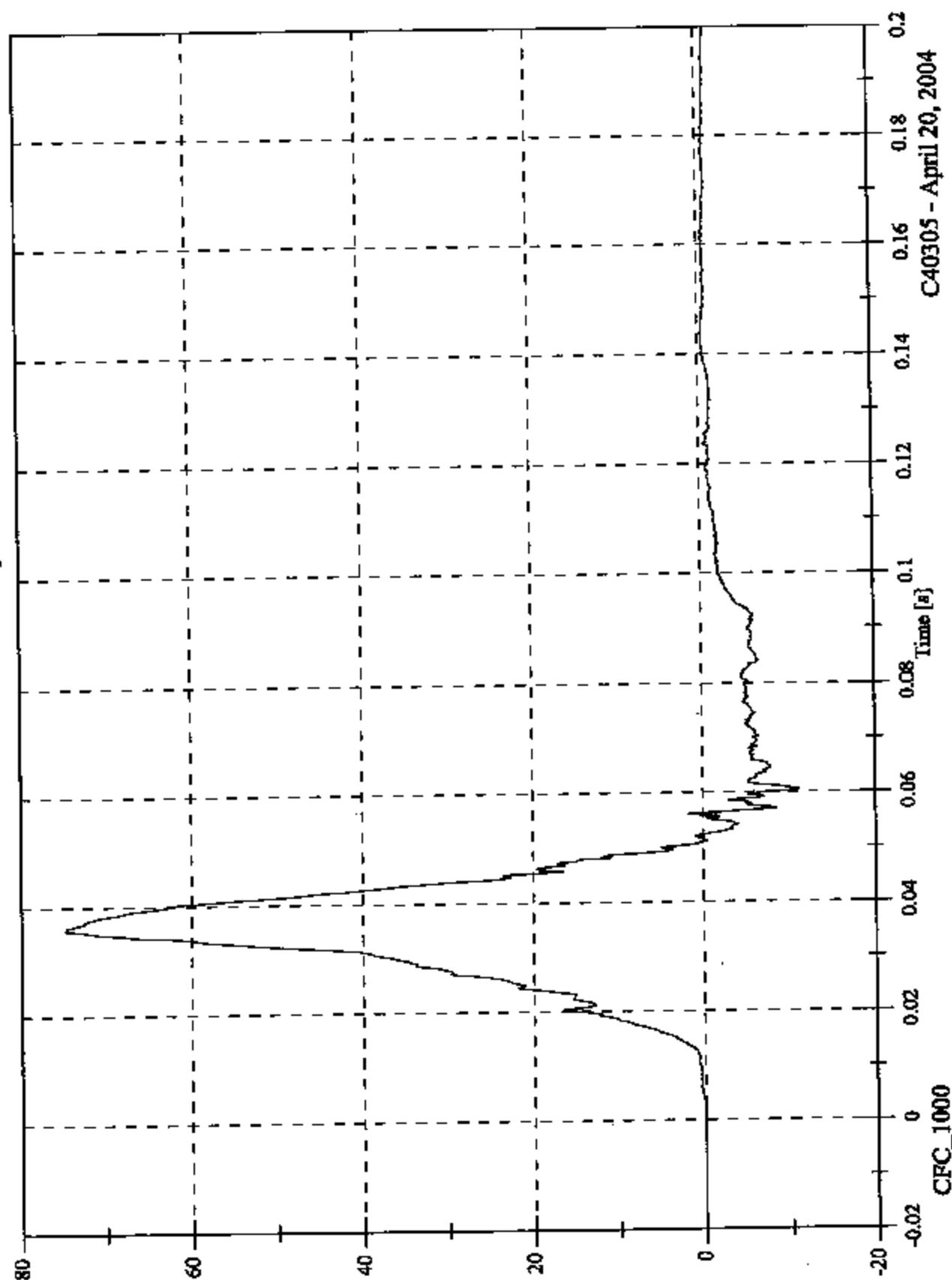


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Pelvic Ry

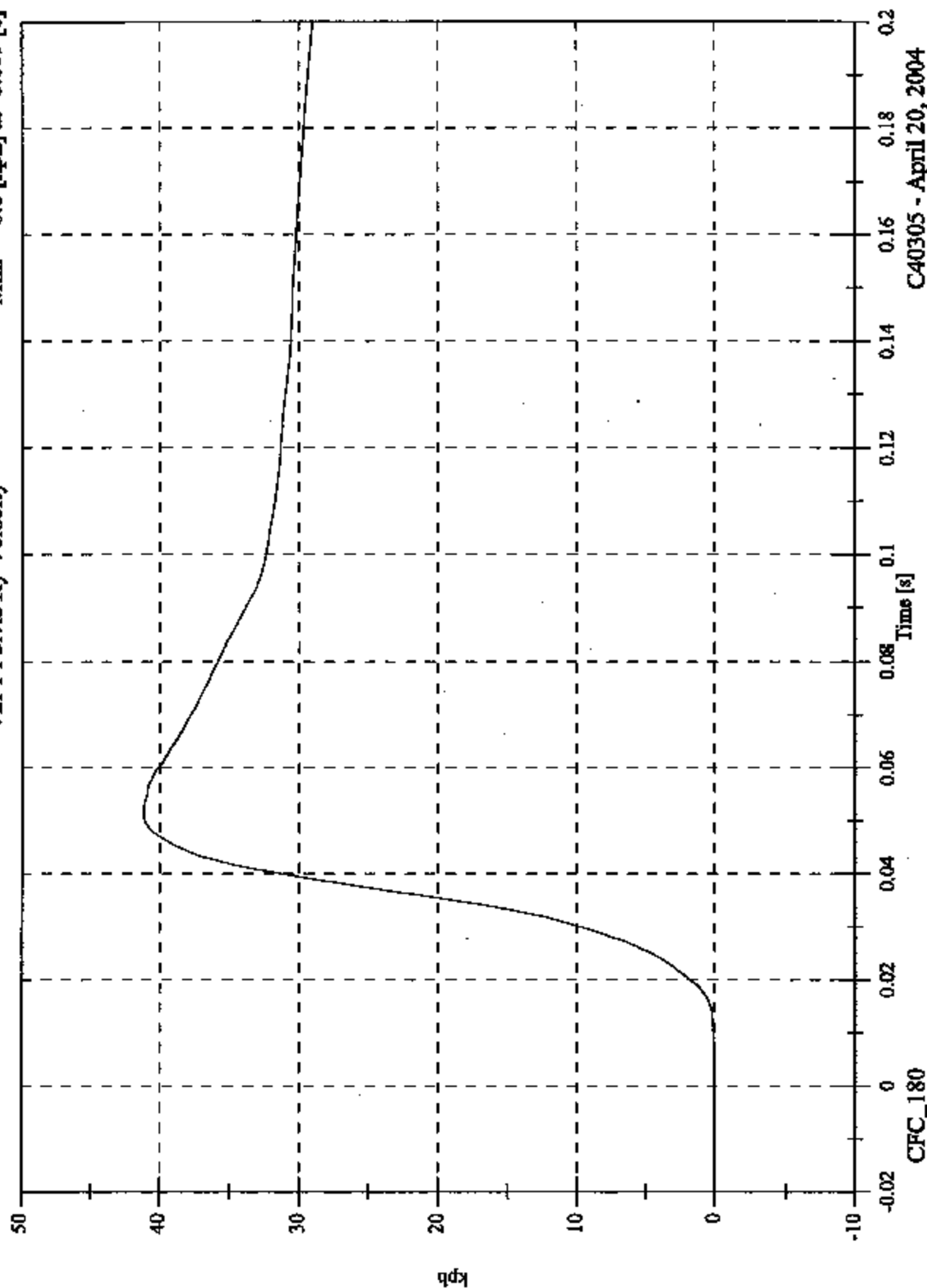
Max: 74.8 [g] at 0.036 [s]
Min: -11.1 [g] at 0.060 [s]



2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Pelvic Ry Velocity

Max: 41.2 [kph] at 0.052 [s]
Min: -0.0 [kph] at -0.019 [s]



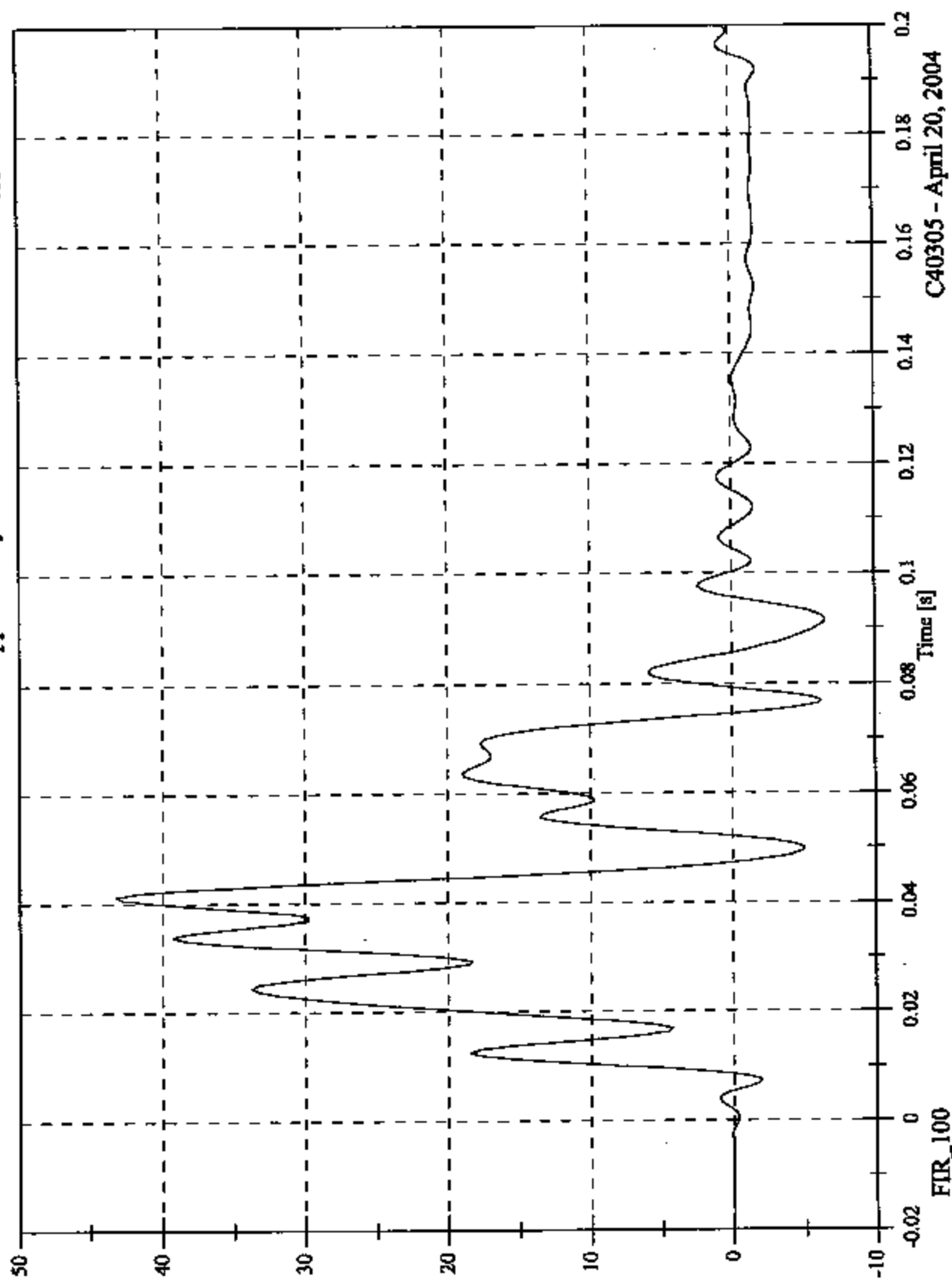
C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Upper Rib Ry

Max: 43.2 [g] at 0.041 [s]

Min: -6.5 [g] at 0.091 [s]

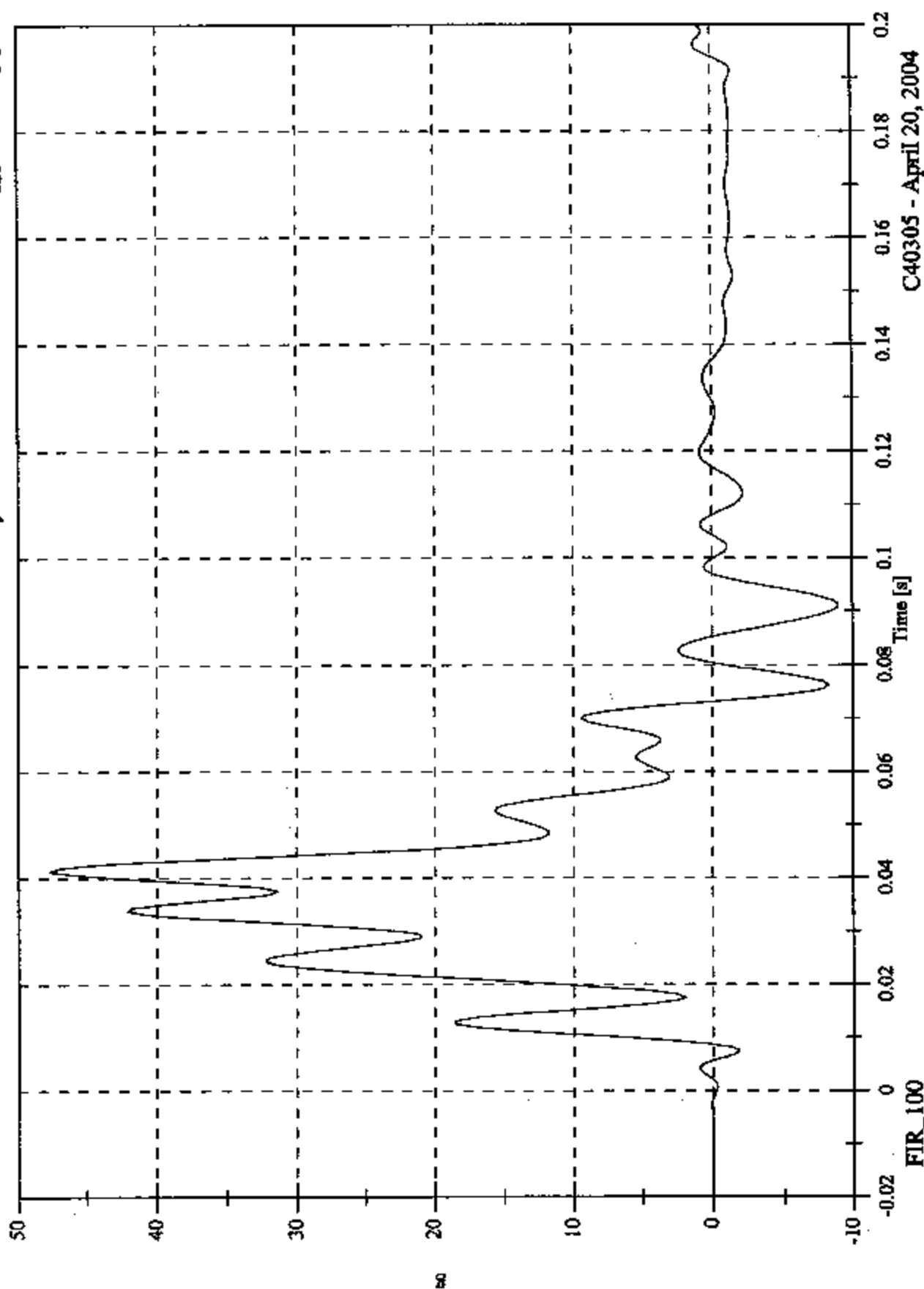


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Lower Rib Ry

Max: 47.7 [g] at 0.041 [s]
Min: -8.9 [g] at 0.091 [s]

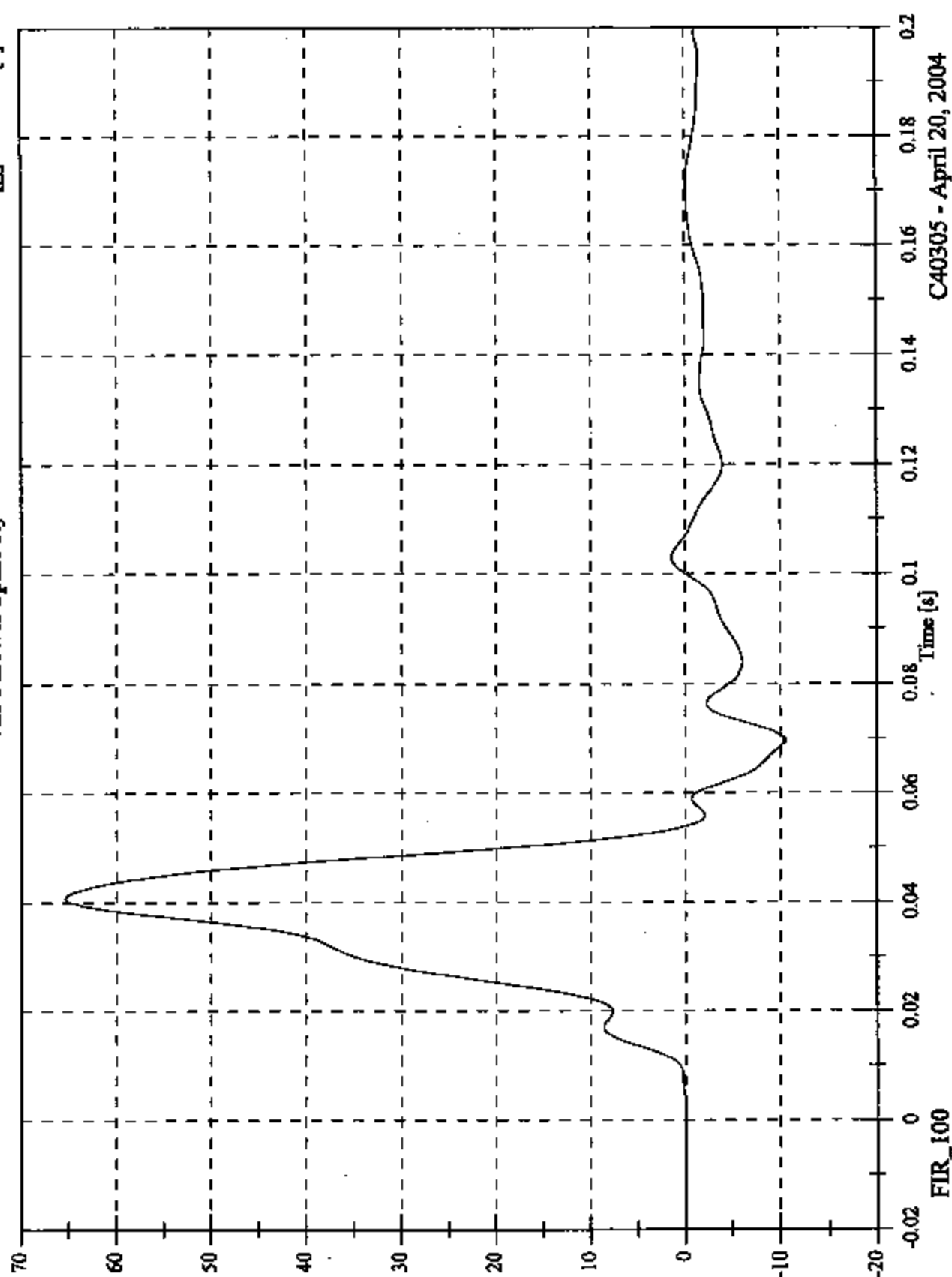


C40305 - April 20, 2004

2004 FMYSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Lower Spine Ry

Max: 65.4 [g] at 0.041 [s]
Min: -10.3 [g] at 0.069 [s]

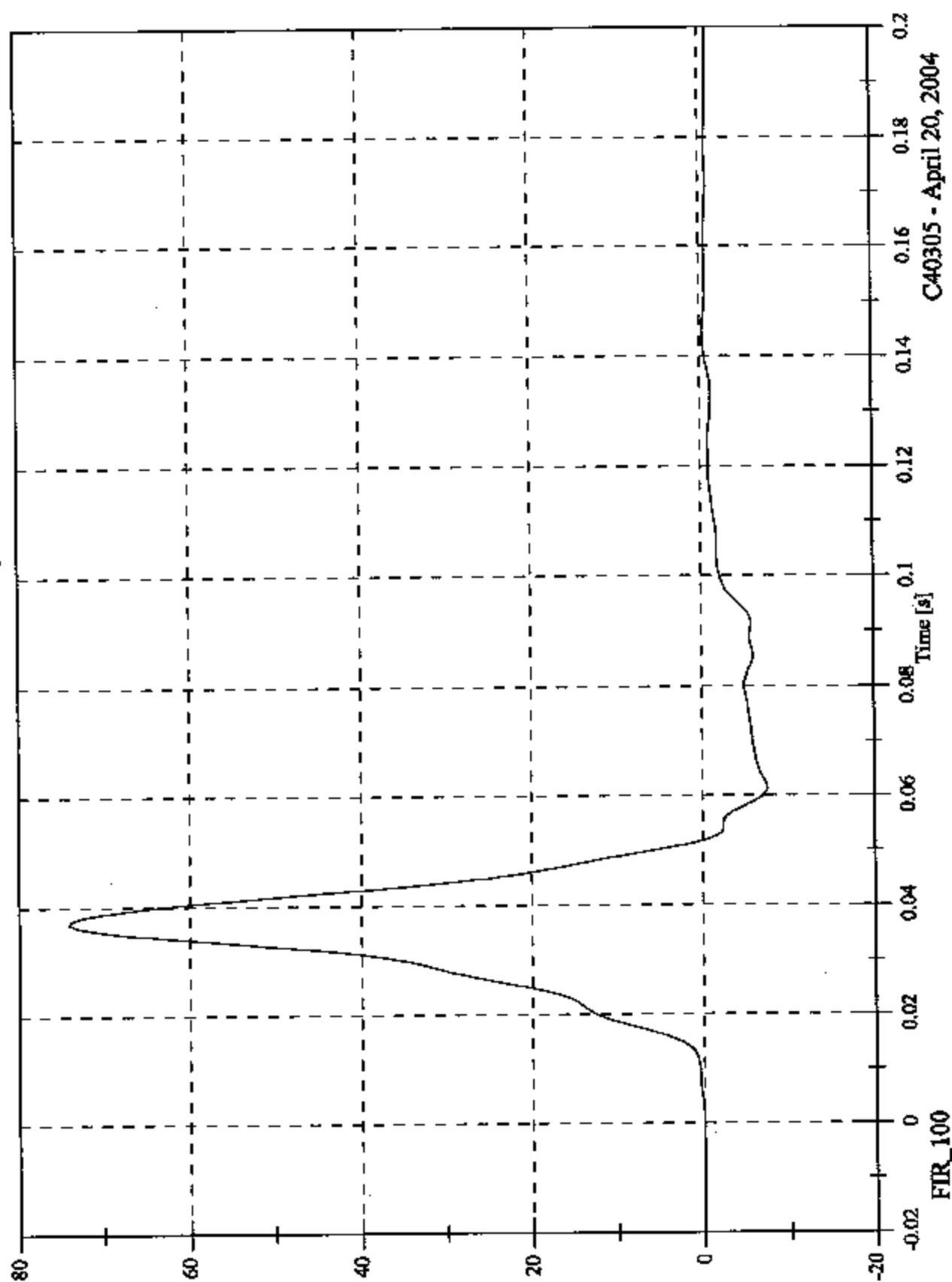


C40305 - April 20, 2004

2004 FMVSS 214D Test 7 - 2004 Chrysler Crossfire

V2P1 Pelvic Ry

Max: 74.1 [g] at 0.037 [s]
Min: -7.6 [g] at 0.061 [s]



C40305 - April 20, 2004

APPENDIX C

SID HYBRID III CONFIGURATION AND PERFORMANCE VERIFICATION DATA

SUMMARY
SID H3 PRE & POST TEST CALIBRATION
CONFIGURED FOR LEFT SIDE IMPACT

Date: April 5, 2004; April 23, 2004

Sequential Test Number:
 Laboratory Technician:

3; 1
B. Swiecicki

TEST PARAMETER	SPECIFICATION	SID H3 NO.: 269	
		PRE TEST	POST TEST
SH- Seated Height (mm)	889 - 909	904	904
RH- Rib Height (mm)	501 - 521	506	503
HP- Hip Pivot Height (mm)	99 ref.	99	99
RD- Rib from Back Line (mm)	229 - 241	234	234
KV- Knee Pivot from Back Line (mm)	511 - 526	518	518
SW- Knee Pivot to Floor (mm)	490 - 505	495	495
HW- Hip Width (mm)	356 - 391	371	371
THORAX IMPACTS			
TEMPERATURE (°C)	18.9 - 25.5	21.1	21.1
RELATIVE HUMIDITY (%)	10 - 70	33.00	35.00
PROBE SPEED (m/s)	4.27 - 4.33	4.27	4.31
UPPER RIB (g's)	37 - 46	38.93	38.60
LOWER RIB (g's)	37 - 46	37.95	39.43
LOWER SPINE (g's)	15 - 22	19.30	20.12
PELVIS IMPACT			
TEMPERATURE (°C)	18.9 - 25.5	21.1	21.1
RELATIVE HUMIDITY (%)	10 - 70	37.00	35.00
PROBE SPEED (m/s)	4.27 - 4.33	4.33	4.31
PELVIS (g's)	40 - 60	50.95	59.41

REMARKS: None

CALIBRATION TEST RESULTS

PRE-TEST

SID H3 NO.: 269

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269

Sequential Test Number: 3

Date: April 5, 2004

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.
LATERAL NECK BEND 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 H3 Serial No.: 269

Sequential Test Number:

3

Date: April 5, 2004

Laboratory Technician:

B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	904
RH- Rib Height (mm)	502 - 520	506
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	234
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	495
HW- Hip Width (mm)	356 - 391	371

REMARKS: None

Shock Impact (3.05 m/s)

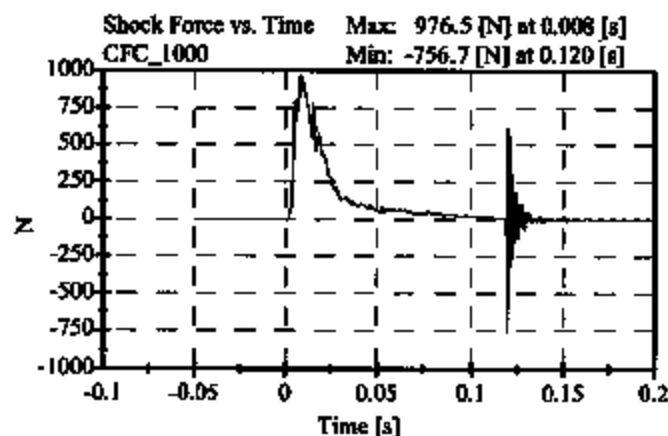
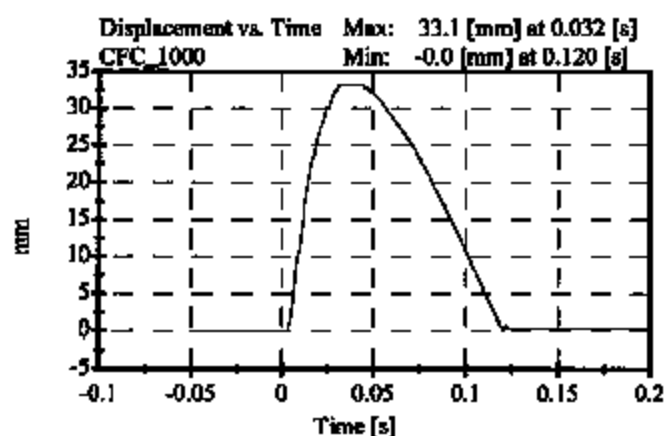
PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: March 18, 2004

Sequential Test Number: 1 File: 269SL 03-18-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Displacement:	30.00-35.00 mm	33.13 mm	Passed
Maximum Force:	836.00-1125.00 N	976.52 N	Passed
Impact Test Velocity:	3.05 m/s		
Damper Identification:	269		
Damper Setting:	5		



Shock Impact (4.27 m/s)

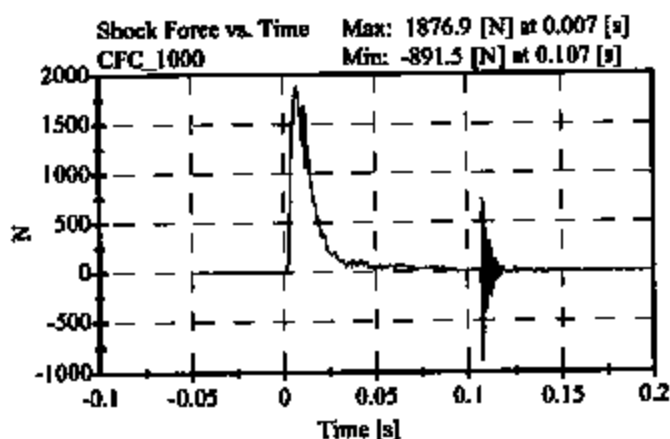
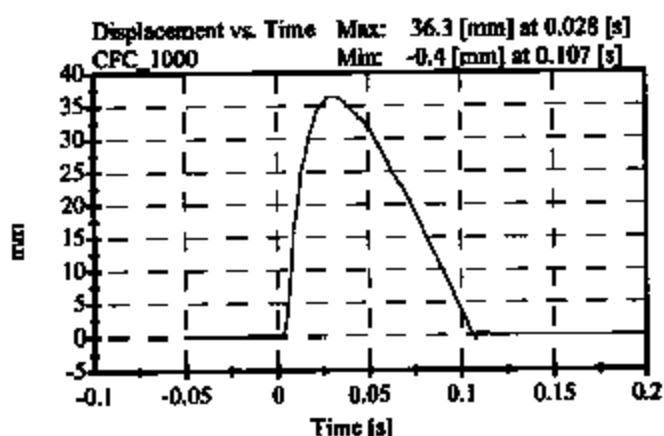
PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: March 18, 2004

Sequential Test Number: 1 File: 269SM 03-18-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Displacement:	32.00-37.00 mm	36.33 mm	Passed
Maximum Force:	1730.00-2099.00 N	1876.91 N	Passed
Impact Test Velocity:	4.27 m/s		
Damper Identification:	269		
Damper Setting:	5		



Shock Impact (6.10 m/s)

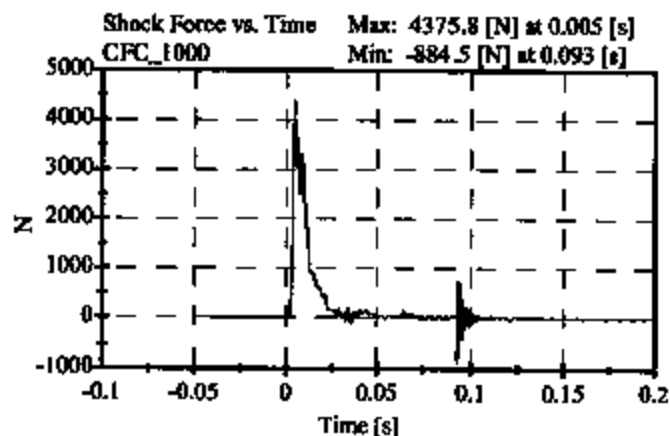
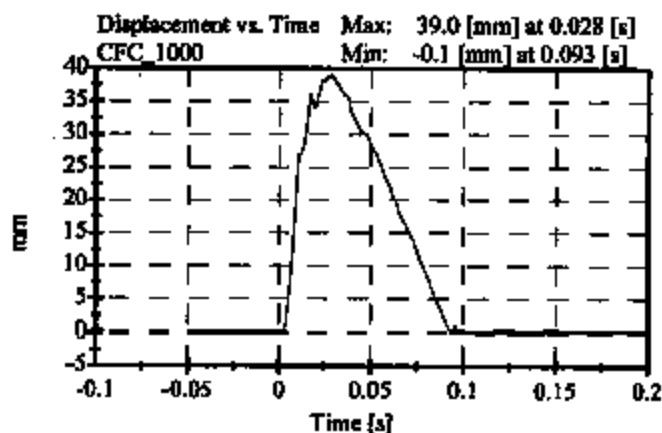
PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: March 18, 2004

Sequential Test Number: 1 File: 269SH 03-18-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Displacement:	33.00-40.00 mm	38.99 mm	Passed
Maximum Force:	3741.00-4448.00 N	4375.75 N	Passed
Impact Test Velocity:	6.10 m/s		
Damper Identification:	269		
Damper Setting:	5		

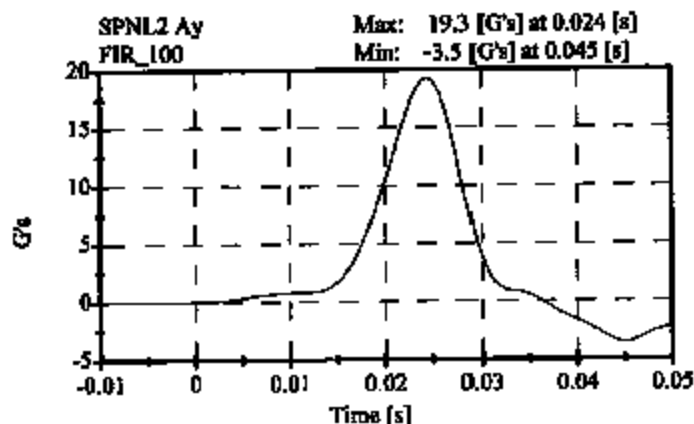
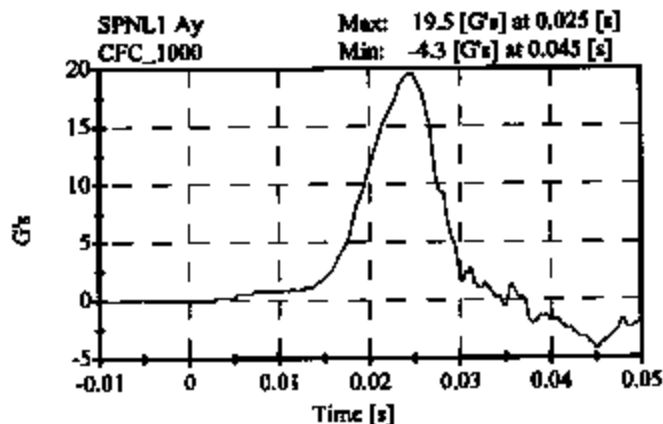
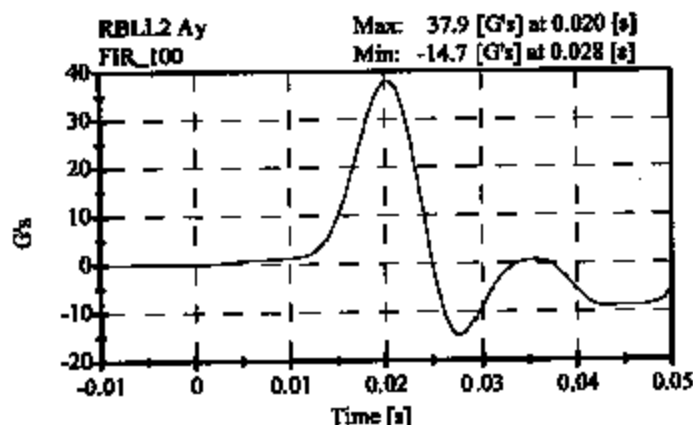
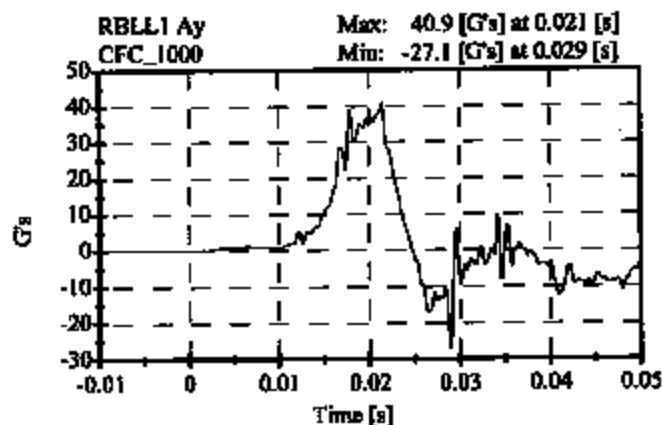
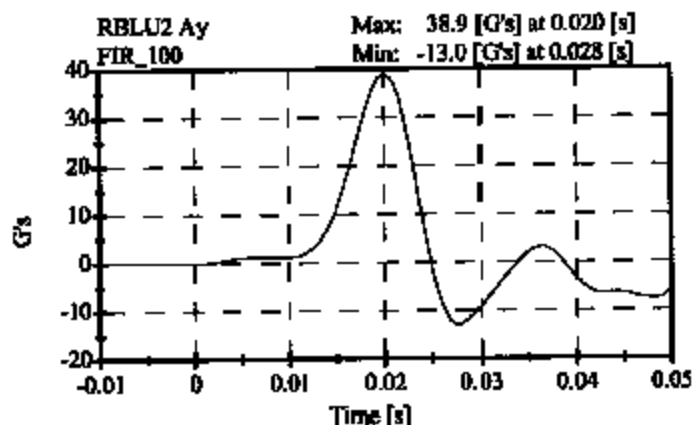
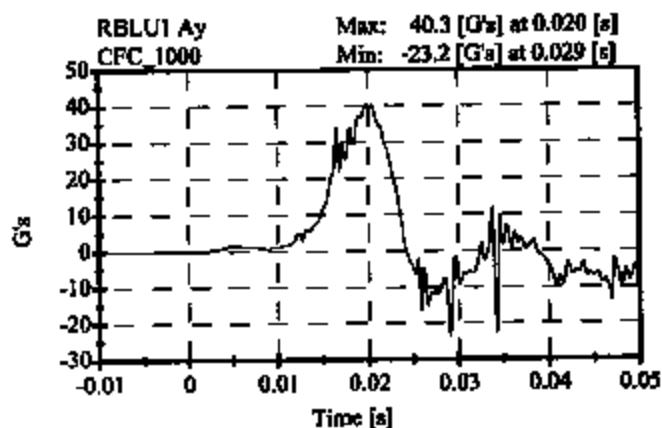


Thorax Impact
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
 Date: April 5, 2004

Sequential Test Number: 1 File: 269T 04-05-04
 Laboratory Technician: B. Swieczki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.27 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	38.93 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	37.95 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	19.30 G's	Passed

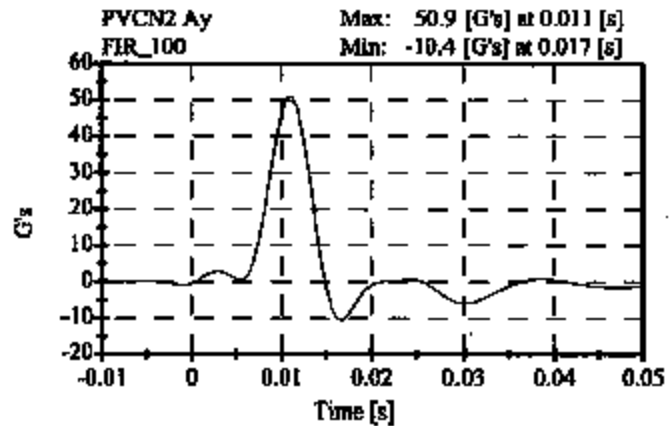
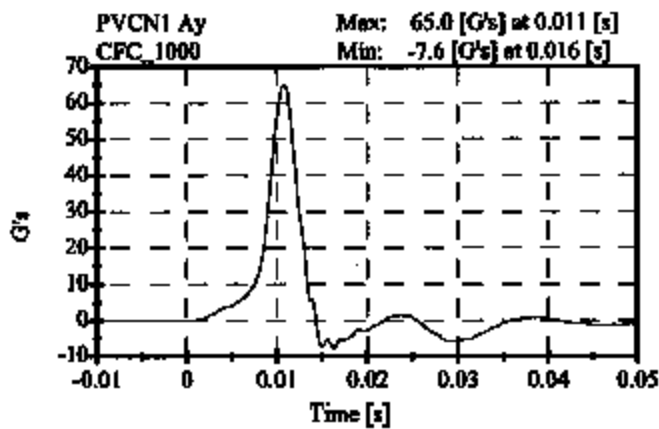


**Pelvic Impact
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 269
Date: April 2, 2004

Sequential Test Number: 1 File: 269P 04-02-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Probe Velocity:	4.27-4.33 m/s	4.33 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	50.95 G's	Passed

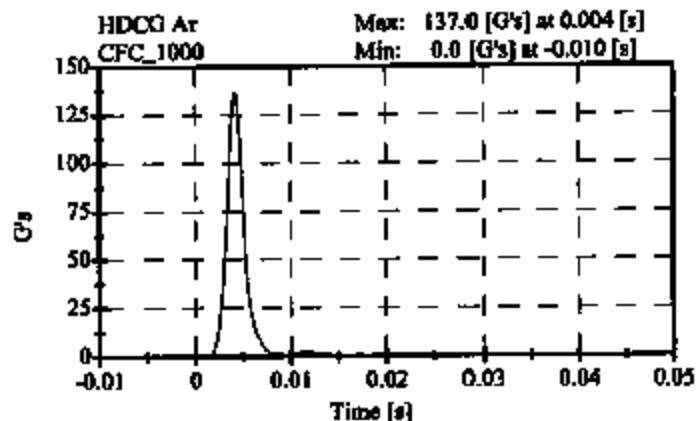
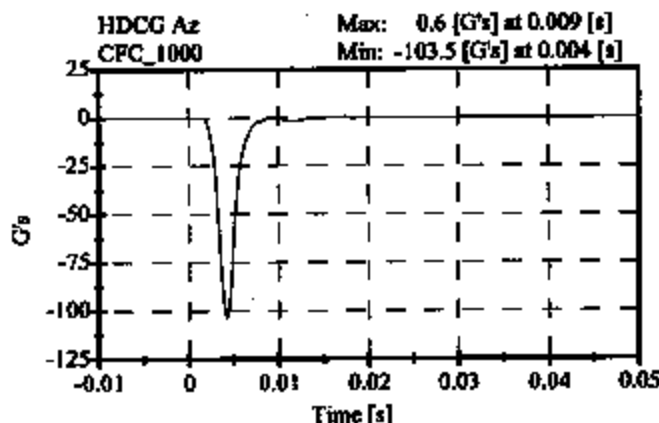
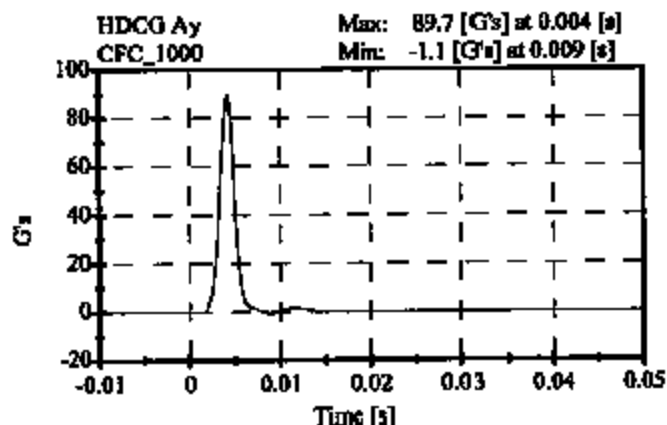
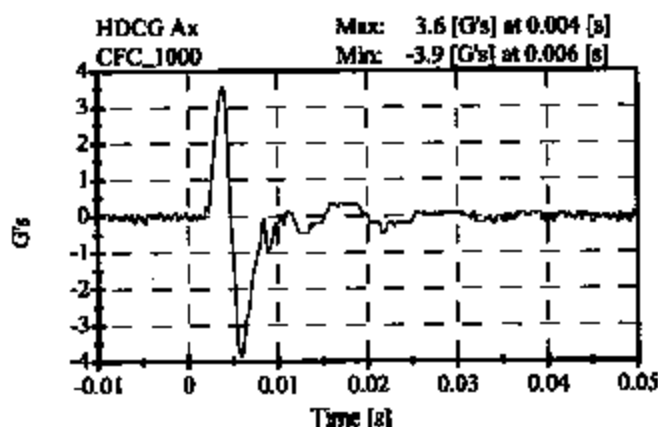


**Head Drop
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 269
Date: April 1, 2004

Sequential Test Number: 1 Pile: 269H 04-01-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Peak Resultant Accel.:	120-150 Gs	137.01 Gs	Passed
Peak Lateral Accel.:	15 Gs Max	3.58 Gs	Passed
Curve PerCent NonModal:	< 15%	1.87 %	Passed



Neck Test

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269

Date: April 1, 2004

Sequential Test Number: 1 File: 269N 04-01-04

Laboratory Technician: B. Swieczicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Impact Velocity:	6.89- 7.13 m/s	7.01 m/s	Passed
PENDULUM DELTA V			
Delta V at 10 ms:	1.96- 2.55 m/s	2.13 m/s	Passed
Delta V at 20 ms:	4.12- 5.10 m/s	4.25 m/s	Passed
Delta V at 30 ms:	5.73- 7.01 m/s	5.99 m/s	Passed
Delta V between 40-70 ms:	6.27- 7.64 m/s	7.06 m/s	Passed
D PLANE ROTATION			
Maximum Rotation:	64.0-78.0 Deg	73.57 Deg	Passed
Rotation Angle Decay:	50.0-70.0 ms	58.20 ms	Passed
MOMENT ABOUT THE OCCIPITAL CONDYLE			
Max Occipital Moment:	88.00-108.00 N-m	89.72 N-m	Passed
Occipital Moment Decay:	40.0-60.0 ms	54.10 ms	Passed
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT			
Moment to Rotation Peak:	0.0-20.0 ms	9.60 ms	Passed

Neck Test Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

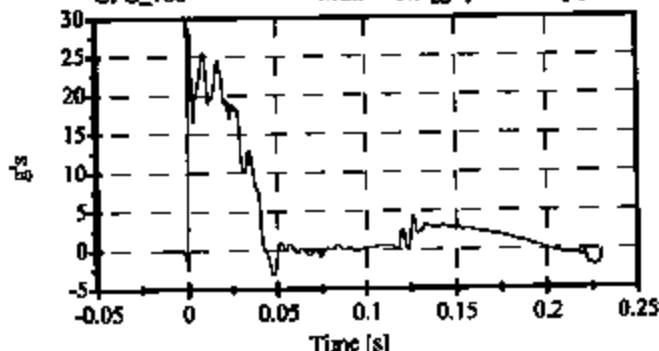
ATD Serial No: 269

Date: April 1, 2004

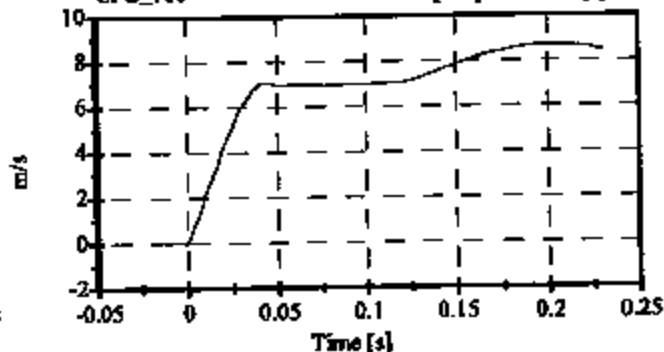
Sequential Test Number: 1 File: 269N 04-01-04

Laboratory Technician: B. Swiecicki

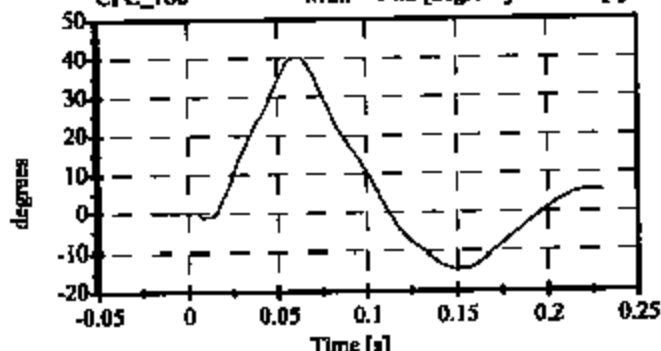
Pend Ax
CFC_180
Max: 28.8 [g's] at 0.001 [s]
Min: -3.2 [g's] at 0.048 [s]



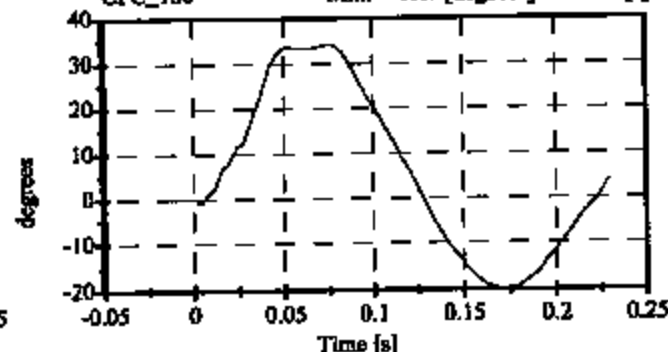
Pend Vx
CFC_180
Max: 8.7 [m/s] at 0.202 [s]
Min: -0.0 [m/s] at -0.001 [s]



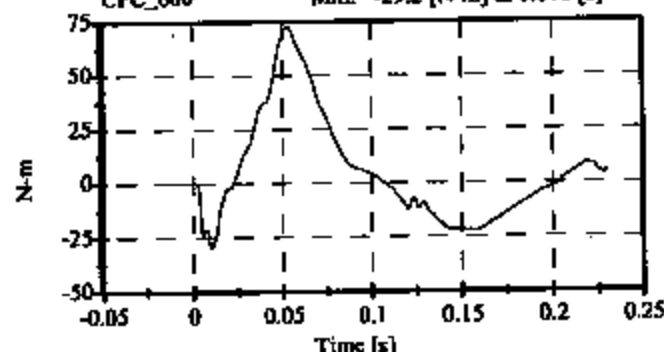
Head Rot
CFC_180
Max: 40.2 [degrees] at 0.063 [s]
Min: -14.2 [degrees] at 0.155 [s]



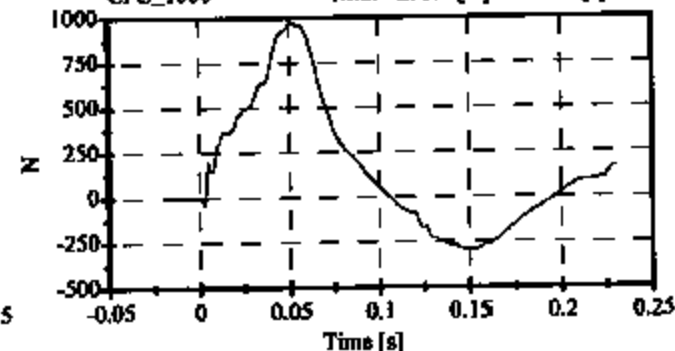
Arm Rot
CFC_180
Max: 34.1 [degrees] at 0.076 [s]
Min: -19.7 [degrees] at 0.171 [s]



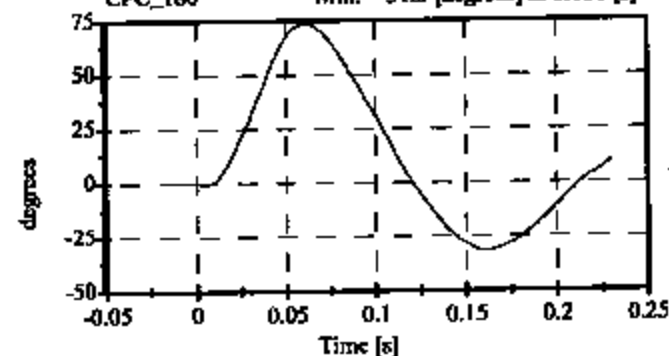
Neck Mx
CFC_600
Max: 72.6 [N-m] at 0.053 [s]
Min: -29.2 [N-m] at 0.010 [s]



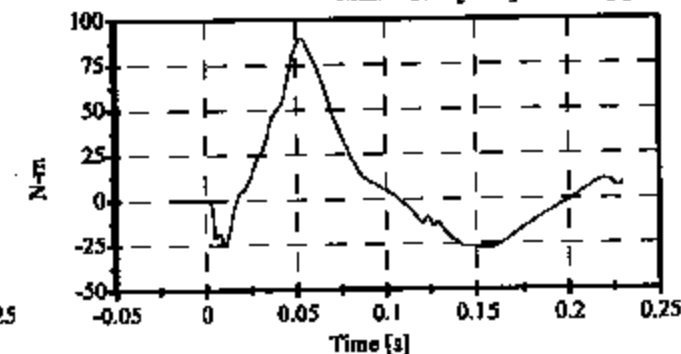
Neck Fy
CFC_1000
Max: 970.7 [N] at 0.052 [s]
Min: -293.0 [N] at 0.152 [s]



Tot Rot
CFC_180
Max: 73.6 [degrees] at 0.063 [s]
Min: -31.5 [degrees] at 0.161 [s]



Mocv
Max: 89.7 [N-m] at 0.053 [s]
Min: -27.5 [N-m] at 0.153 [s]



ABDOMINAL COMPRESSION TEST
PRE-TEST
 (Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269

Sequential Test Number:

3

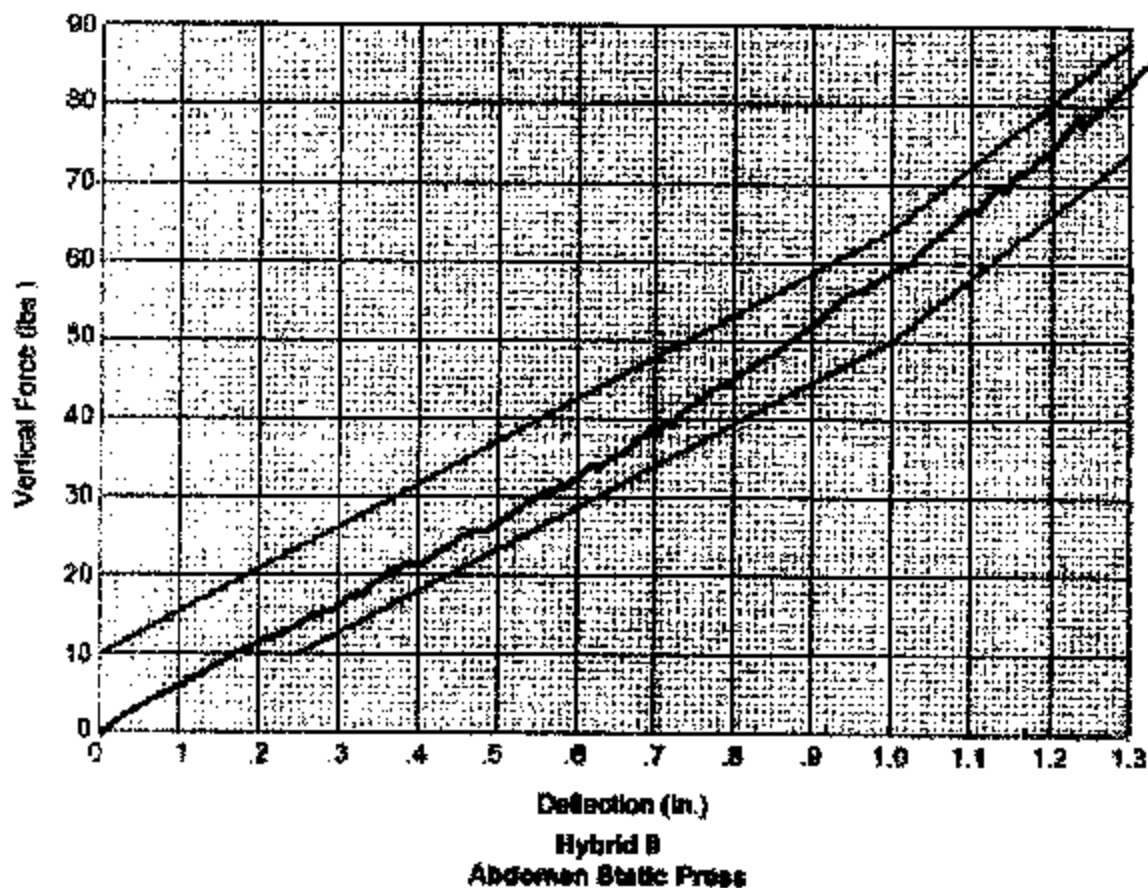
Date: April 5, 2004

Laboratory Technician:

B. Swiacicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	33.0
FORCE @ 13 mm (N)	104 - 162	123.7
FORCE @ 19 mm (N)	163 - 221	181.5
FORCE @ 25 mm (N)	222 - 280	262.4
FORCE @ 33 mm (N)	325 - 391	368.3

REMARKS: None



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

CONFIGURED FOR LEFT SIDE IMPACT

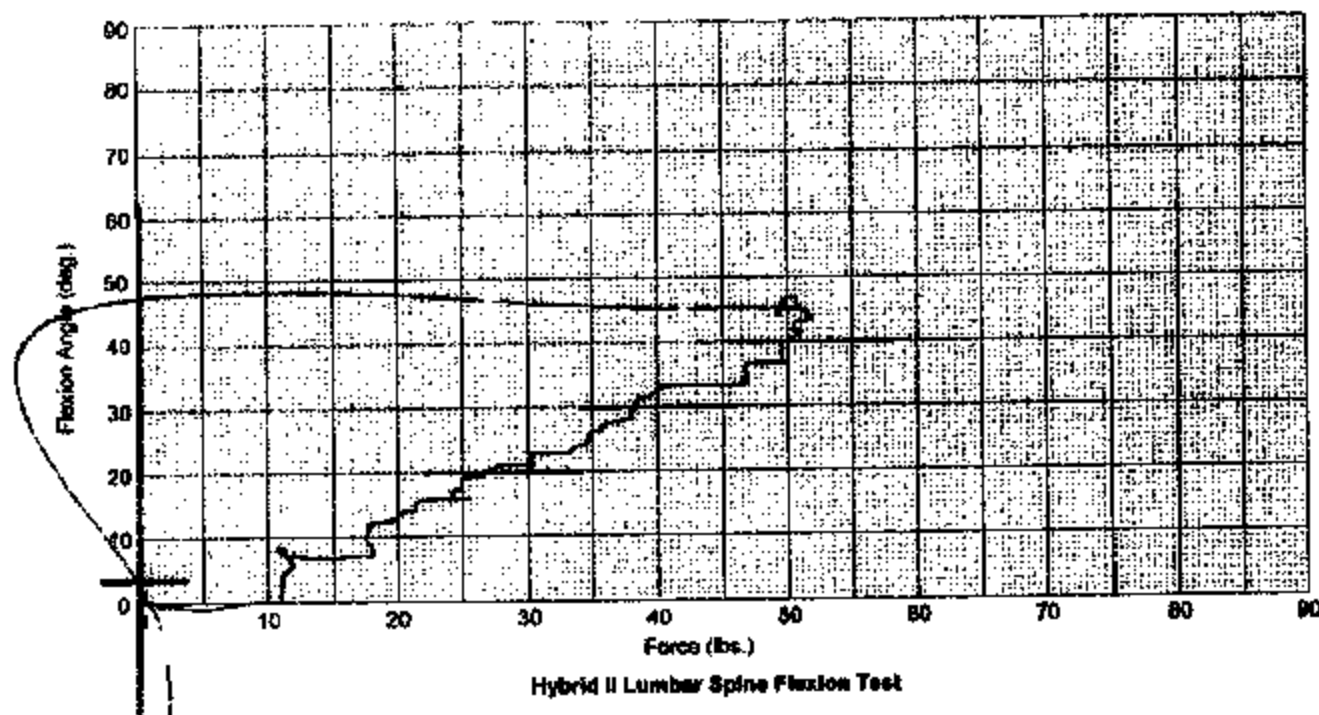
SID H3 Serial No.: 269
Date: April 5, 2004

Sequential Test Number: _____
Laboratory Technician: _____

3
B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	33.0
FORCE @ 0° (N)	0 - 26.7	0.0
FORCE @ 20° (N)	97.8 - 151.2	117.9
FORCE @ 30° (N)	151.2 - 204.6	169.0
FORCE @ 40° (N)	204.6 - 258	220.2
RETURN ANGLE	12° max.	3.5°

REMARKS: None



PRE-TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269

Sequential Test Number:

3

Date: April 5, 2004

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 H3 NO.: 269

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269

Sequential Test Number:

1

Date: April 23, 2004

Laboratory Technician:

B. Swlecicki

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.
LATERAL NECK BEND 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 H3 Serial No.: 269

Sequential Test Number:

1

Date: April 23, 2004

Laboratory Technician:

B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	904
RH- Rib Height (mm)	502 - 520	503
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	234
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	495
HW- Hip Width (mm)	356 - 391	371

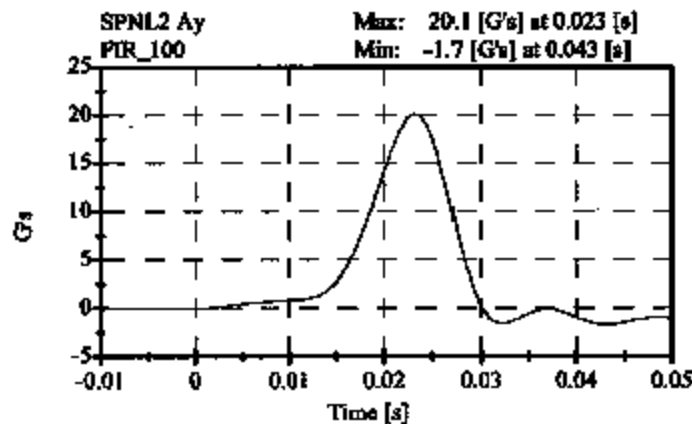
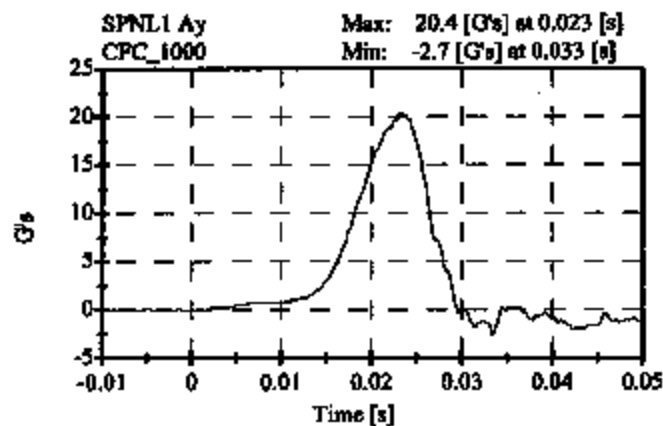
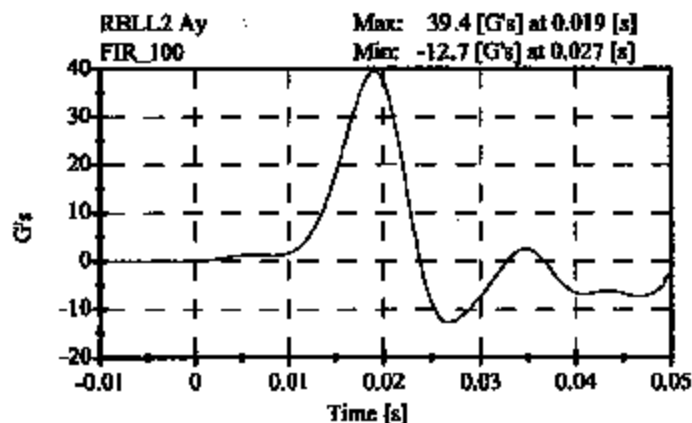
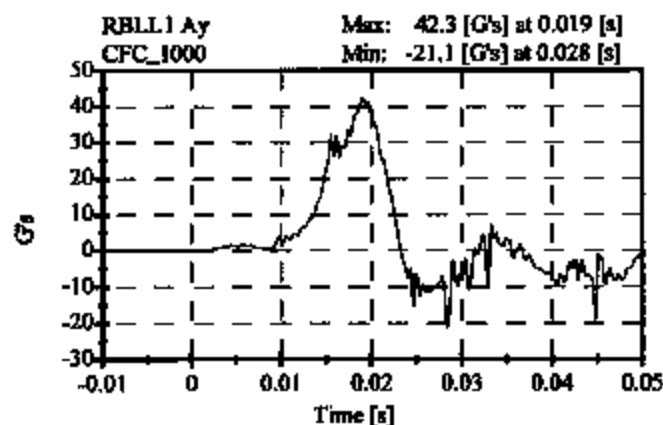
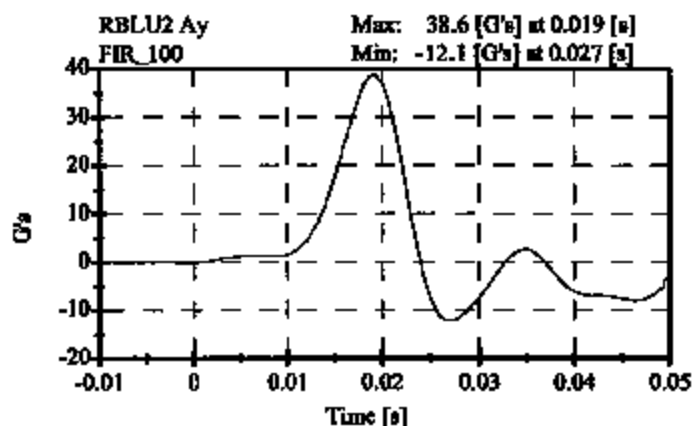
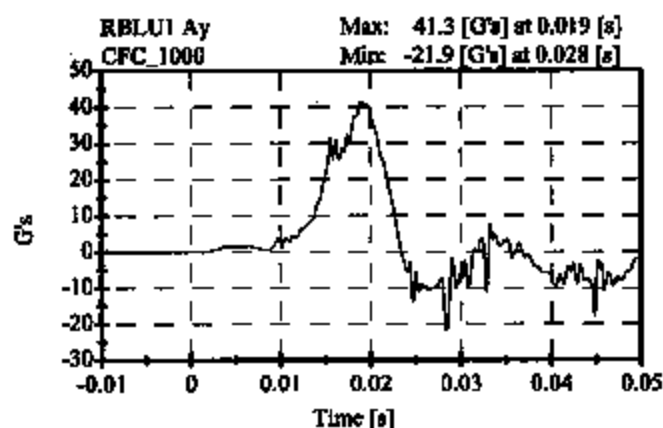
REMARKS: None

**Thorax Impact
Post-Test
CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 269
Date: April 23, 2004

Sequential Test Number: 1 File: 269T 04-23-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.31 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	38.60 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	39.43 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	20.12 G's	Passed



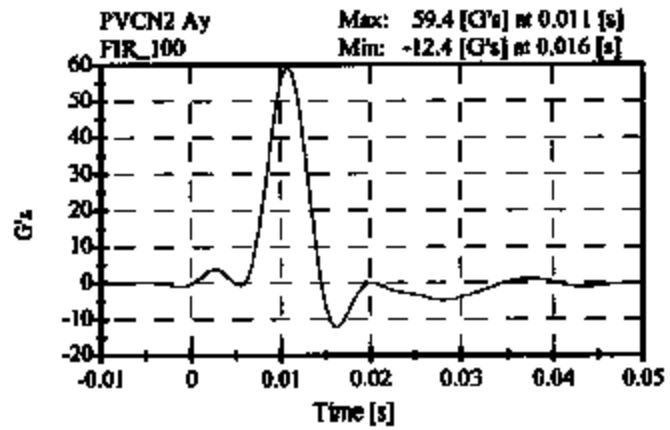
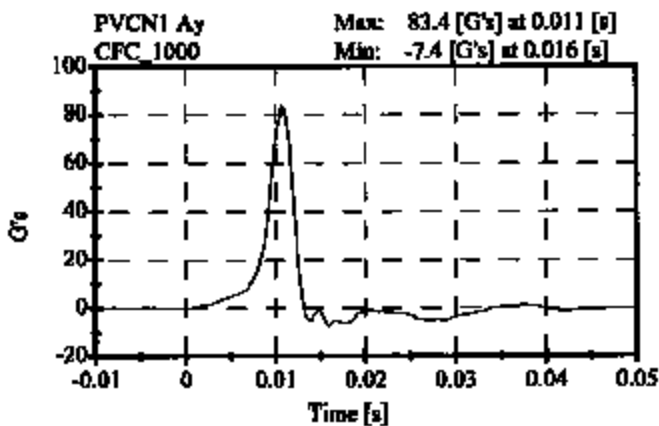
Pelvic Impact
Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: April 23, 2004

Sequential Test Number: 1 File: 269P 04-23-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.31 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	59.41 G's	Passed



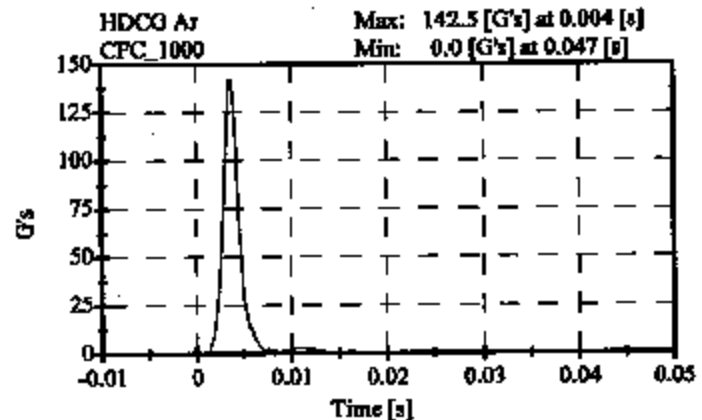
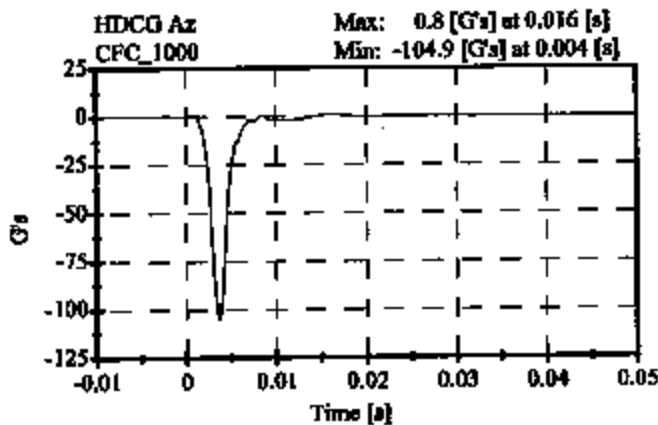
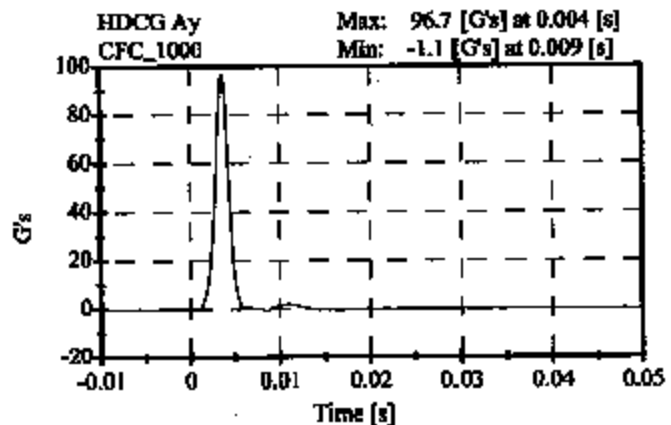
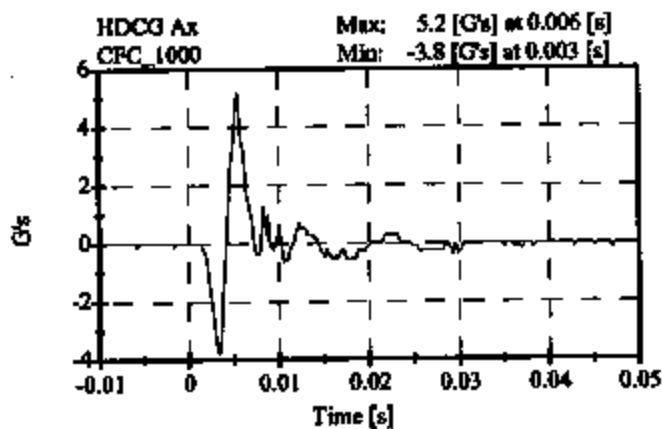
**Head Drop
Post-Test**

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: April 22, 2004

Sequential Test Number: 1 File: 269H1 04-22-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Peak Resultant Accel.:	120-150 Gs	142.46 Gs	Passed
Peak Lateral Accel.:	15 Gs Max	5.17 Gs	Passed
Curve PerCent NonModal:	< 15%	2.09 %	Passed



Neck Test

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269

Date: April 23, 2004

Sequential Test Number: 1 File: 269N 04-23-04

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Impact Velocity:	6.89- 7.13 m/s	6.98 m/s	Passed
PENDULUM DELTA V			
Delta V at 10 ms:	1.96- 2.55 m/s	2.16 m/s	Passed
Delta V at 20 ms:	4.12- 5.10 m/s	4.40 m/s	Passed
Delta V at 30 ms:	5.73- 7.01 m/s	6.20 m/s	Passed
Delta V between 40-70 ms:	6.27- 7.64 m/s	7.00 m/s	Passed
D PLANE ROTATION			
Maximum Rotation:	64.0-78.0 Deg	75.58 Deg	Passed
Rotation Angle Decay:	50.0-70.0 ms	60.20 ms	Passed
MOMENT ABOUT THE OCCIPITAL CONDYLE			
Max Occipital Moment:	88.00-108.00 N-m	89.21 N-m	Passed
Occipital Moment Decay:	40.0-60.0 ms	57.20 ms	Passed
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT			
Moment to Rotation Peak:	0.0-20.0 ms	10.50 ms	Passed

**Neck Test
Post-Test**

CONFIGURED FOR LEFT SIDE IMPACT

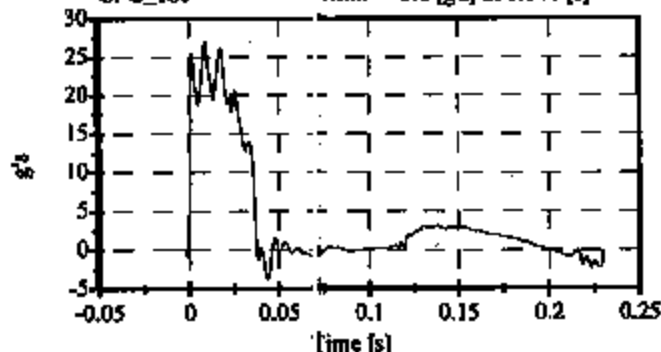
ATD Serial No: 269

Date: April 23, 2004

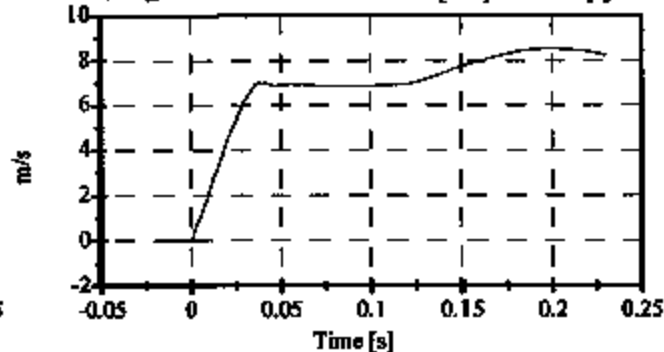
Sequential Test Number: 1 File: 269N 04-23-04

Laboratory Technician: B. Swiecicki

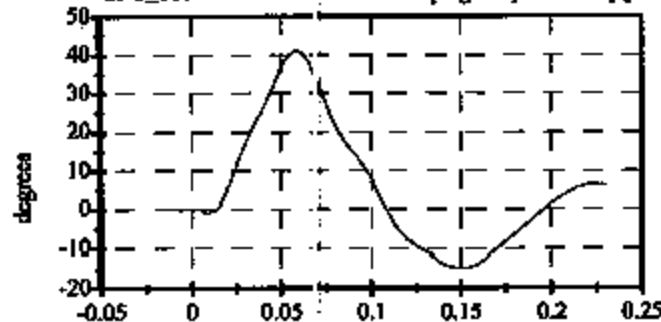
Pend Ax
CFC_180
Max: 27.1 [g/s] at 0.009 [s]
Min: -3.8 [g/s] at 0.044 [s]



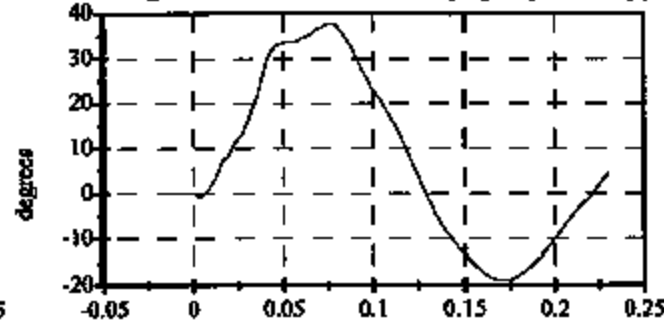
Pend Vx
CFC_180
Max: 8.5 [m/s] at 0.199 [s]
Min: -0.0 [m/s] at -0.001 [s]



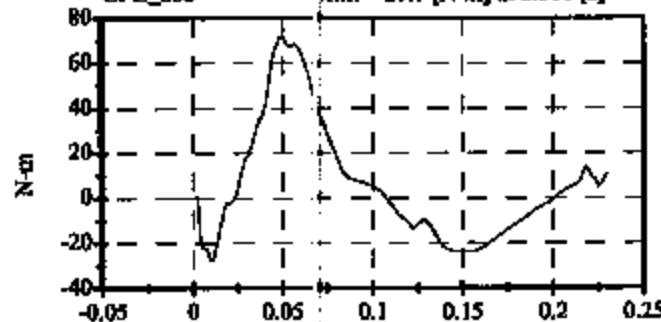
Head Rot
CFC_180
Max: 41.1 [degrees] at 0.059 [s]
Min: -15.0 [degrees] at 0.149 [s]



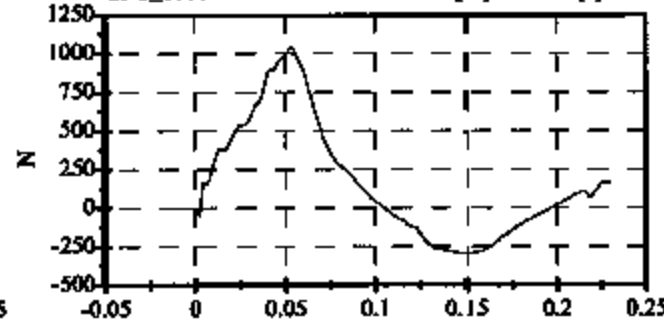
Arm Rot
CFC_180
Max: 37.6 [degrees] at 0.077 [s]
Min: -18.9 [degrees] at 0.170 [s]



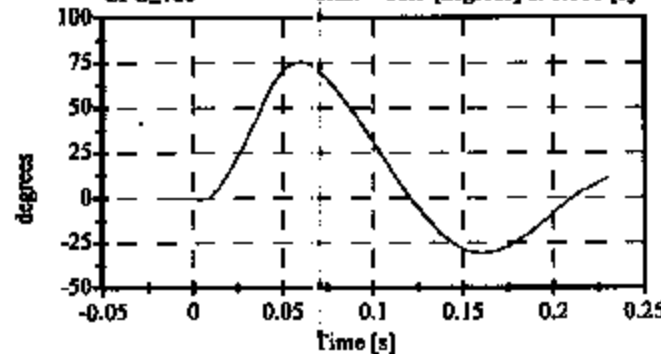
Neck Mx
CFC_600
Max: 71.8 [N-m] at 0.050 [s]
Min: -27.7 [N-m] at 0.010 [s]



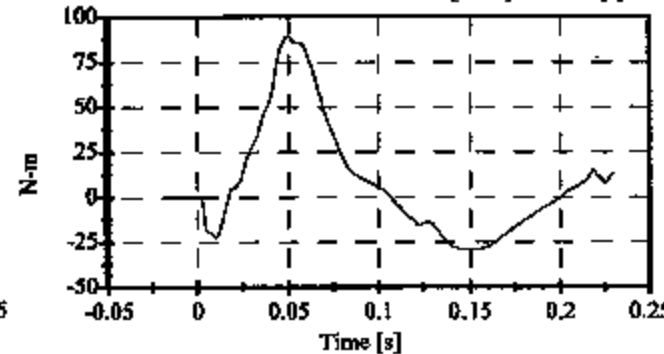
Neck Fy
CFC_1000
Max: 1036.7 [N] at 0.053 [s]
Min: -299.3 [N] at 0.150 [s]



Tot Rot
CFC_180
Max: 75.6 [degrees] at 0.060 [s]
Min: -30.9 [degrees] at 0.161 [s]



Mocx
Max: 89.2 [N-m] at 0.050 [s]
Min: -28.8 [N-m] at 0.149 [s]



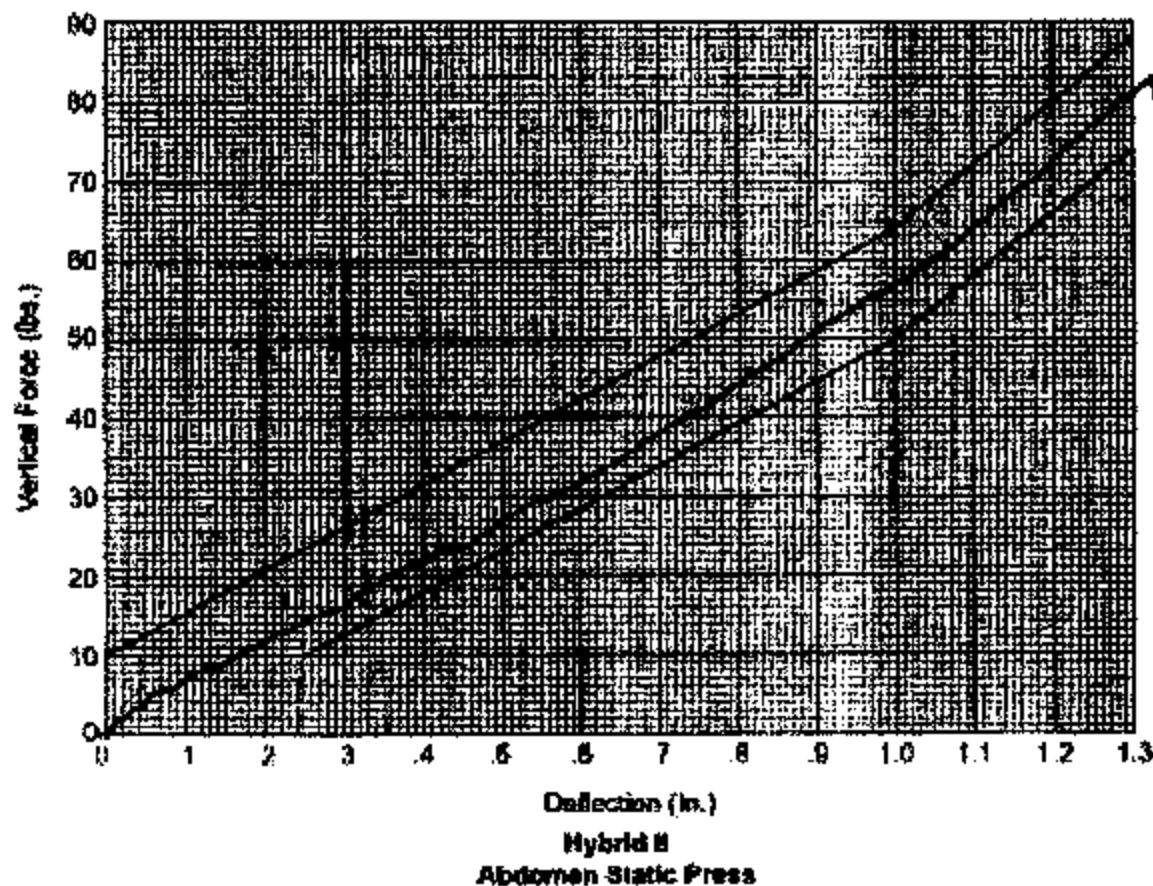
**ABDOMINAL COMPRESSION TEST
POST TEST**
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269 Sequential Test Number: 1
Date: April 23, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	35.00
FORCE @ 13 mm (N)	104 - 162	124.6
FORCE @ 19 mm (N)	163 - 221	182.4
FORCE @ 25 mm (N)	222 - 280	253.5
FORCE @ 33 mm (N)	325 - 391	360.3

REMARKS: None



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

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269

Sequential Test Number:

1

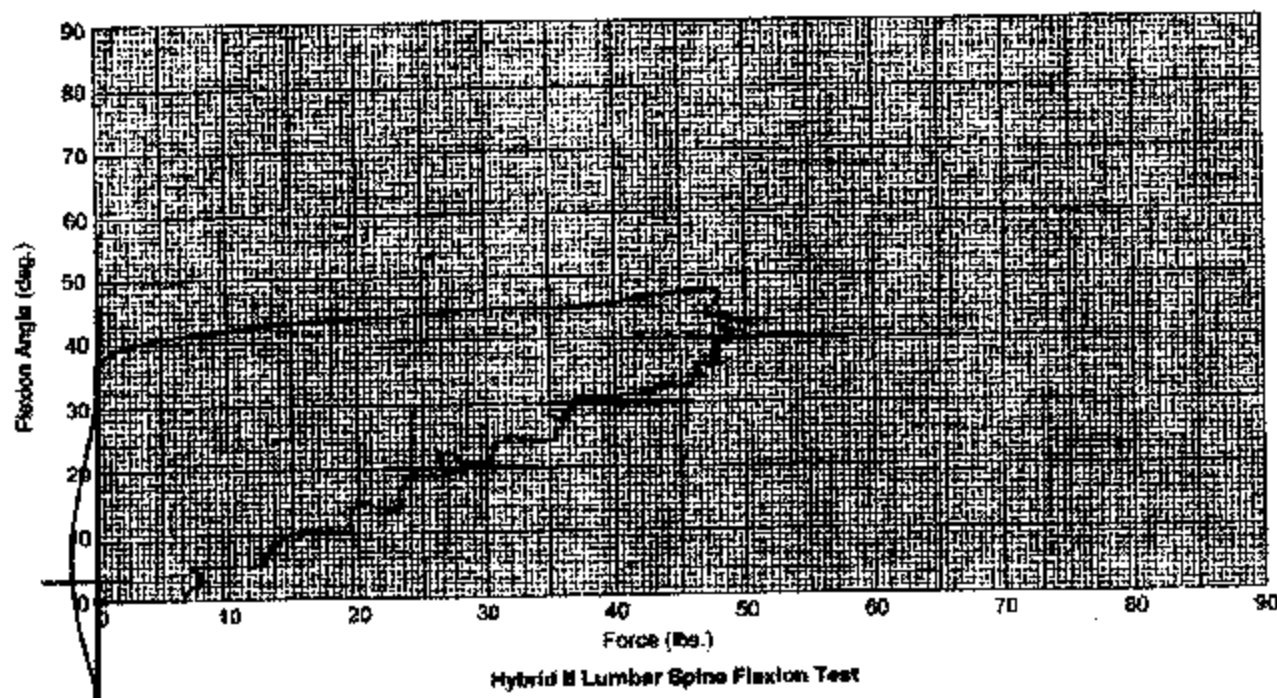
Date: April 23, 2004

Laboratory Technician:

B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	35.00
FORCE @ 0° (N)	0 - 26.7	0.00
FORCE @ 20° (N)	97.8 - 151.2	120.1
FORCE @ 30° (N)	151.2 - 204.6	164.6
FORCE @ 40° (N)	204.6 - 258	215.7
RETURN ANGLE	12° max.	3°

REMARKS: None



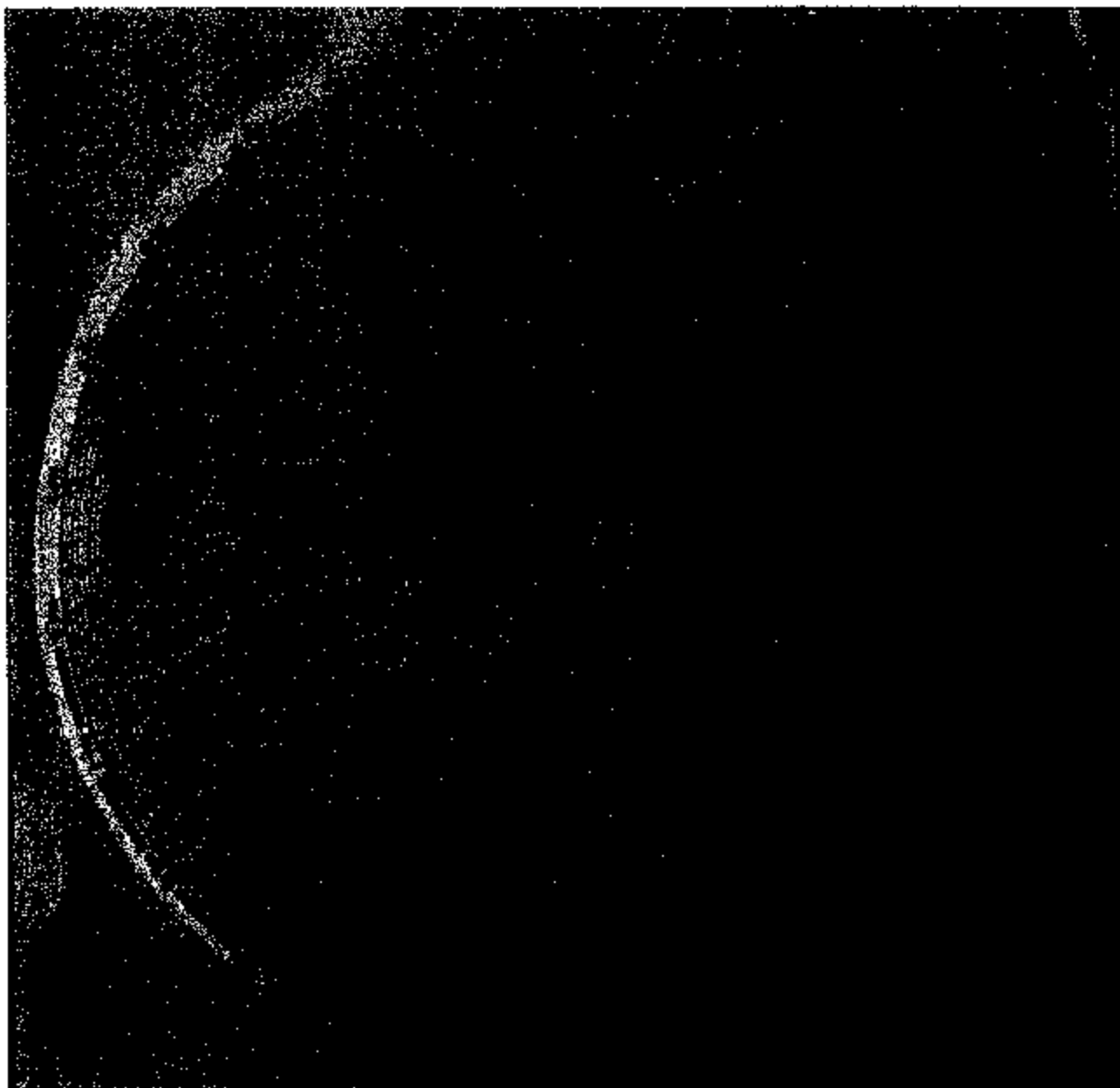
POST TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269 Sequential Test Number: 1
 Date: April 23, 2004 Laboratory Technician: B. Swiecicki

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

REMARKS: None

TEMPERATURE TRACE



APPENDIX D

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

SID INSTRUMENTATION

	FRONT SID NO.: 269		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-P23161	ENDEVCO	30-Mar-04
HEAD AY	AC-P24011	ENDEVCO	30-Mar-04
HEAD AZ	AC-P19111	ENDEVCO	30-Mar-04
UPPER NECK FX	LC-440Fx	DENTON	18-Jun-03
UPPER NECK FY	LC-440Fy	DENTON	18-Jun-03
UPPER NECK FZ	LC-440Fz	DENTON	18-Jun-03
UPPER NECK MX	LC-440Mx	DENTON	18-Jun-03
UPPER NECK MY	LC-440My	DENTON	18-Jun-03
UPPER NECK MZ	LC-440Mz	DENTON	18-Jun-03
UPPER RIB	AC-P16862	ENDEVCO	30-Mar-04
LOWER RIB	AC-P16656	ENDEVCO	30-Mar-04
LOWER SPINE	AC-P16866	ENDEVCO	30-Mar-04
PELVIS	AC-P16676	ENDEVCO	30-Mar-04
UPPER RIB REDUNDANT	AC-P23156	ENDEVCO	30-Mar-04
LOWER RIB REDUNDANT	AC-P16645	ENDEVCO	30-Mar-04
LOWER SPINE REDUNDANT	AC-P19343	ENDEVCO	30-Mar-04
PELVIS REDUNDANT	AC-P16843	ENDEVCO	30-Mar-04

REMARKS: None

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

VEHICLE AND MDB INSTRUMENTATION

	VEHICLE AND MDB INSTRUMENTS		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
RIGHT FRONT SILL (X)	AC-P19246	ENDEVCO	16-Jan-04
RIGHT FRONT SILL (Y)	AC-J31034	ENDEVCO	22-Jan-04
RIGHT FRONT SILL (Z)	AC-P23873	ENDEVCO	16-Jan-04
RIGHT REAR SILL (X)	AC-P16575	ENDEVCO	17-Mar-04
RIGHT REAR SILL (Y)	AC-P14388	ENDEVCO	18-Mar-04
RIGHT REAR SILL (Z)	AC-P21135	ENDEVCO	18-Mar-04
REAR FLOORPAN ABOVE AXLE (X)	AC-J37980	ENDEVCO	22-Mar-04
REAR FLOORPAN ABOVE AXLE (Y)	AC-J37854	ENDEVCO	22-Mar-04
REAR FLOORPAN ABOVE AXLE (Z)	AC-J38127	ENDEVCO	22-Mar-04
LEFT REAR SILL (Y)	AC-J33843	ENDEVCO	22-Mar-04
LEFT FRONT SILL (Y)	AC-9440-006	GS SENSORS	16-Dec-03
LEFT FRONT DOOR CENTERLINE (Y)	-	-	-
RIGHT REAR SEAT OCCUPANT COMP. (Y)	AC-J33198	ENDEVCO	22-Mar-04
MID REAR OF LEFT FRONT DOOR (Y)	-	-	-
LEFT FRONT DOOR UPPER CL (Y)	-	-	-
MID REAR OF LEFT REAR DOOR (Y)	-	-	-
LEFT REAR DOOR UPPER CL (Y)	-	-	-
LOWER LEFT B-PILLAR (Y)	AC-A13513	ENDEVCO	31-Mar-04
MIDDLE LEFT B-PILLAR (Y)	AC-9444-038	GS SENSORS	03-Dec-03
LOWER LEFT A-PILLAR (Y)	AC-BB14	ENDEVCO	31-Mar-04
UPPER LEFT A-PILLAR (Y)	AC-P32269	ENDEVCO	17-Feb-04
FRONT SEAT TRACK (Y)	AC-B11408	ENDEVCO	31-Mar-04
REAR SEAT TRACK (Y)	-	-	-
VEHICLE CG (X)	AC-P23939	ENDEVCO	22-Mar-04
VEHICLE CG (Y)	AC-P23993	ENDEVCO	22-Mar-04
VEHICLE CG (Z)	AC-P23999	ENDEVCO	22-Mar-04
MDB CG (X)	AC-C16433	ENDEVCO	12-Feb-04
MDB CG (Y)	AC-C16416	ENDEVCO	12-Feb-04
MDB CG (Z)	AC-C16499	ENDEVCO	12-Feb-04
MDB REAR FRAME MEMBER (X)	AC-C14948	ENDEVCO	12-Feb-04
MDB REAR FRAME MEMBER (Y)	AC-C16680	ENDEVCO	12-Feb-04

REMARKS: None