

V13745

REPORT NUMBER 301-CAL-01-05

**SAFETY COMPLIANCE TESTING FOR FMVSS 301
FUEL SYSTEM INTEGRITY**

HONDA MOTOR CO
2001 HONDA
CR-V MPV

NHTSA NUMBER C15305

VERIDIAN TEST NUMBER 8606-5

August 7, 2001

VERIDIAN ENGINEERING
P.O BOX 400
BUFFALO, NEW YORK 14225



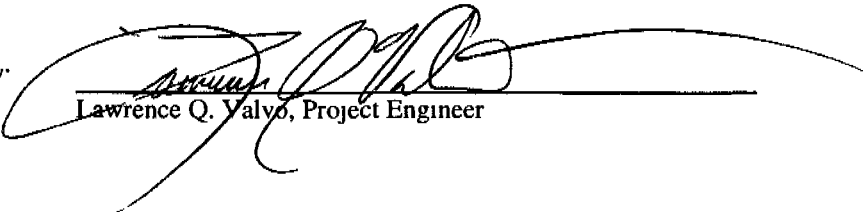
FINAL REPORT

PREPARED FOR

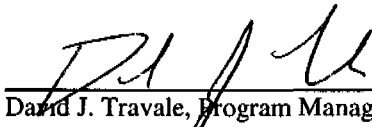
U. S. Department of Transportation
National Highway Traffic Safety Administration
Safety Assurance
Office of Vehicle Safety Compliance
400 Seventh Street, S W.
Room No 6115 (NSA-30)
Washington, DC 20590

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Prepared By:


Lawrence Q. Valvo, Project Engineer

Approved By

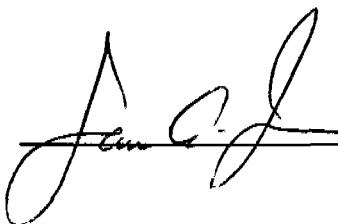

David J. Travale, Program Manager
Transportation Sciences Center

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Accepted By:



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TECHNICAL REPORT STANDARD TITLE PAGE

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		14 Sponsoring Agency Code NSA-30	
15 Supplementary Notes			
16 Abstract Compliance tests were conducted on the subject 2001 Honda CR-V MPV in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-301-01 for the determination of FMVSS 301 compliance. Test failures identified were as follows. The test vehicle appeared to comply with all requirements of FMVSS 301 "Fuel System Integrity."			
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Section I

PURPOSE OF COMPLIANCE TEST

This 30 mph rear moving barrier impact test is part of the Federal Motor Vehicle Safety Standard (FMVSS) 301 Compliance Test Program conducted for the National Highway Traffic Safety Administration (NHTSA) by Veridian Engineering under Contract No. DTNH22-01-C-01025. The purpose of this test was to determine if the subject vehicle, a 2001 Honda CR-V MPV, meets the performance requirements of FMVSS No. 301, "Fuel System Integrity." This compliance test was conducted using the requirements found in the OVSC Laboratory Test Procedure No. TP-301-01, dated March 28, 1994.

Section 2

COMPLIANCE TEST RESULTS SUMMARY FOR C15305

A 3720 pound 2001 Honda CR-V MPV was impacted from the rear by a 3961 pound moving barrier at a velocity of 29.1 mph. The test was performed by Veridian Engineering on August 7, 2001.

One instrumented Part 572 E and one non-instrumented Part 572 B, 50th percentile male Anthropomorphic Test Device (ATD) were placed in the driver and right-front passenger seating positions respectively. Additional ballast (130 pounds) was secured in the vehicle cargo area.

The crash event was recorded by eight high-speed cameras and one real-time camera. Camera locations and other pertinent camera information are found on pages 3-9 and 3-10 of this report. Pre- and post-test photographs of the vehicle can be found in Appendix A. Vehicle and ATD electronic data plots are presented in Appendix B.

The 15.3 gallon fuel tank was filled to 92.5 percent capacity with orange Stoddard fluid prior to the impact. After the impact, there was no fluid leakage for the first 30 minutes nor during any phase of the rollover test. Average vehicle longitudinal crush was 14.4 inches. The vehicle appeared to comply with all the requirements of FMVSS No. 301 "Fuel System Integrity." Section 3 presents the results of these tests.

Table 1

CRASH TEST SUMMARY

Vehicle NHTSA No.. C15305 Test Mode. 30 mph Rear Barrier
 Test Date August 7, 2001 Time 11.04 Temperature. 72 °F
 Vehicle Make/Model/Body Style 2001 Honda CR-V MPV
 Vehicle Test Weight: 3728 lbs Impact Velocity. 29.1 mph

Static Crush:

Left Side. 14.4 inches
 Centerline: 17.9 inches
 Right Side: 10.9 inches
 Average. 14.4 inches

TYPE OF FRONT OCCUPANT RESTRAINT SYSTEM INSTALLED IN TEST VEHICLE:

Driver's DSP. 3-Point Seatbelt, Airbag, Knee Bolster
 Right Passenger's DSP. 3-Point Seatbelt, Airbag, Knee Bolster

VISIBLE DUMMY CONTACT POINTS:

Driver: Back of head to top of head restraint, back to center of seat back
 Passenger: Back of head to top of head restraint, back to center of seat back.

DOOR OPENING DATA:

Closed / Operable - Left Front
Closed / Operable - Right Front

Stoddard Solvent Spillage from Vehicle's Fuel System. None

Remarks: The rear window and rear quarter windows shattered during the impact. The right rear passenger-side door was jammed by the impact and had to be pried open. The driver and right front passenger seat backs reclined approximately 36 degrees during the impact.

Table 2

GENERAL TEST AND VEHICLE PARAMETER DATATEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 2001 Honda CR-V MPV

NHTSA No.: C15305, VIN. JHLRD17401S006495, Color: Silver

Engine Data. 4 cylinders; - CID; 2.0 Liters; - cc

Placement: - Longitudinal or In-Line; X Transverse or Lateral

Transmission Data. 5 speeds, X Manual; - Automatic, - Overdrive

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

Major Options: X A/C; X Power Steering, X Power Brakes

X Power Windows; X Power Door Locks; X Tilt Wheel

Date Received: 3/5/01, Odometer Reading 63 miles

Selling Dealer Ray Laks Honda

& Address: 100 Orchard Park Road, W. Seneca, NY 14224

DATA FROM TIRE VEHICLE'S CERTIFICATION LABEL:

Vehicle Manufactured by: Honda Motor Co.

Date of Manufacture: 1/01

GVWR. 4165 lbs.; GAWR. 2030 lbs FRONT; 2155 lbs. REAR

DATA FROM TIRE PLACARD

Location of Placard on Vehicle. Driver side sill

Tire Pressure with Maximum Capacity Vehicle Load: 35 psi FRONT 35 psi REAR

Recommended Tire Size: P205/70R15

* Recommended Cold Tire Pressure: 26 psi FRONT; 26 psi REAR

Size of Tires on Test Vehicle. P205/70R15 Manufacturer: Bridgestone

Type of Spare Tire: Temporary

Vehicle Capacity Data:

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

Number of Occupants: 2 Front; 3 Rear, 5 Total

Vehicle Capacity Weight (VCW) = 1003 lbs.

No. of Occupants x 150 lbs = 750 lbs

Rated Cargo/Luggage Weight (RCLW) = 253 lbs.

*Tire pressure used for test

Table 2

GENERAL TEST AND VEHICLE PARAMETER DATA (cont.)

WEIGHT OF TEST VEHICLE AS RECEIVED FROM DEALER (with maximum fluids)= UDW.

Right Front	=	<u>859</u>	lbs.	Right Rear =	<u>718</u>	lbs.
Left Front	=	<u>866</u>	lbs.	Left Rear =	<u>719</u>	lbs.
TOTAL FRONT	=	<u>1725</u>	lbs.	TOTAL REAR =	<u>1437</u>	lbs.
TOTAL DELIVERED WEIGHT = <u>3162</u> lbs.						
% of Total Front of Vehicle Weight = <u>54.6%</u>				of Total Rear Weight = <u>45.4%</u>		

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Delivered Weight	=	<u>3162</u>	lbs.
Rated Cargo/Luggage Weight (RCLW)	=	<u>253</u>	lbs.
Weight of 2 p 572 Dummies, 167 & 164 lbs	=	<u>331</u>	lbs.
TARGET TEST WEIGHT	=	<u>3746</u>	lbs.

WEIGHT OF TEST VEHICLE WITH TWO DUMMIES AND 235 POUNDS OF CARGO WEIGHT.

Right Front	=	<u>999</u>	lbs.	Right Rear =	<u>836</u>	lbs.
Left Front	=	<u>1017</u>	lbs.	Left Rear =	<u>876</u>	lbs.
TOTAL FRONT	=	<u>2016</u>	lbs.	TOTAL REAR =	<u>1712</u>	lbs.
TOTAL TEST WEIGHT = <u>3728</u> lbs.						
% of Total Front of Vehicle Weight = <u>54.1%</u>				of Total Rear Weight = <u>45.9%</u>		

* Weight of Ballast Secured in Vehicle Trunk Area = 130 lbs.Type of Ballast: Lead shotMethod of Securing Ballast: Rear seatbelt anchoragesVehicle Components Removed for Weight Reduction: None

VEHICLE ATTITUDE (all dimension in inches):

AS DELIVERED	RF	<u>30.1</u>	LF	<u>30.1</u>	RR	<u>29.8</u>	LR	<u>29.4</u>
AS TESTED	RF	<u>29.2</u>	LF	<u>28.8</u>	RR	<u>28.7</u>	LR	<u>28.3</u>
Vehicle's Wheel Base.		<u>103.4</u>	in					
Location of Vehicle's C.G.		<u>47.5</u>	inches rearward of front wheel center					

FUEL SYSTEM DATA:

Fuel System Capacity From Owner's Manual	=	<u>15.3</u>	gallons
Usable Capacity Figure Furnished by COTR	=	<u>15.3</u>	gallons
Test Volume Range (91 to 94% of Usable Capacity)	=	<u>13.92</u>	to <u>14.38</u> gallons
ACTUAL TEST VOLUME = <u>14.2</u> gallons (with entire fuel system filled)			

* Ballast weight includes the RCLW, the weight of drained vehicle fluids and the weight of any removed vehicle components less the weight of onboard instrumentation, cameras, and hardware.

Table 2

GENERAL TEST AND VEHICLE PARAMETER DATA (cont)

FUEL SYSTEM DATA (continued):

Test Fluid Type:	Stoddard Solution
Test Fluid Specific Gravity:	0.764
Test Fluid Kinematic Viscosity:	0.96 centistokes
Test Fluid Color:	Orange ("red" is preferred)
Type of Vehicle Fuel Pump:	Electric
Electric Fuel Pump Operation with Ignition Switch ON and Engine OFF - Fuel pump operated.	
Details of Fuel System:	Fuel filler is located on the left rear quarter panel above the left rear wheel; Fuel tank is located on the vehicle underbody between the rear wheels; Fuel lines are routed along the left side of the vehicle underbody

Table 3

MOVING BARRIER PARAMETER DATAWEIGHT OF MOVING BARRIER.

Right Front	=	<u>1113</u>	lbs	Right Rear	=	<u>868</u>	lbs.
Left Front	=	<u>1102</u>	lbs	Left Rear	=	<u>878</u>	lbs.
TOTAL FRONT	=	<u>2215</u>	lbs.	TOTAL REAR	=	<u>1746</u>	lbs.
TOTAL BARRIER WEIGHT	=	<u>3961</u>	lbs.				

MOVING BARRIER DIMENSIONS

Barrier Face Height:	<u>60.0</u>	in.
Barrier Face Width:	<u>78.0</u>	in.
Barrier Face		
Ground Clearance:	<u>5.0</u>	in
Tread Width:	<u>59.5</u>	in.
Wheel Base:	<u>120.0</u>	in.
Location of C G ·	X· <u>52.9</u>	inches rearward of front wheel center.
	Y· <u>0.0</u>	inches from longitudinal-vertical plane of symmetry
	Z· <u>16.3</u>	inches above ground

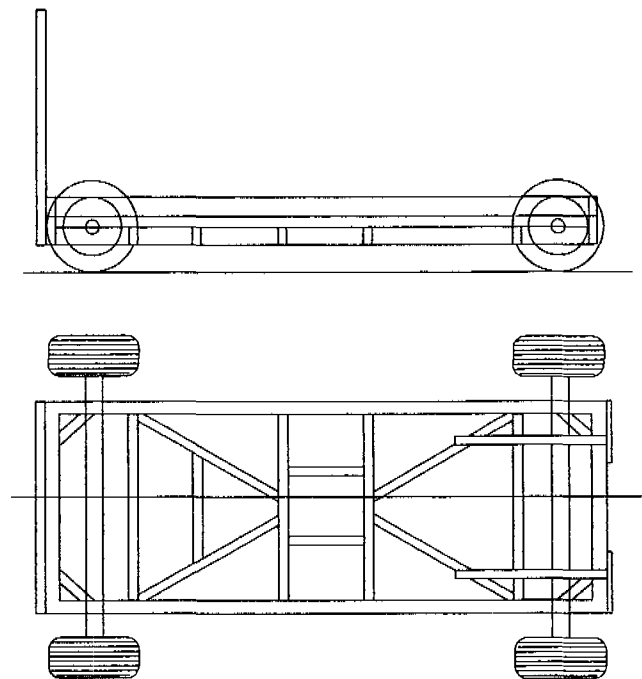


Table 4

POST IMPACT DATATYPE OF TEST:

Type of Test. Rear Barrier Impact Angle 0°
 Test Date: August 7, 2001 Time: 11.04 Temperature: 72 °F
 Vehicle NHTSA No.: C15305
 Required Impact Velocity Range: 28.9 to 29.9 mph

BARRIER IMPACT VELOCITY: (Speed traps within 5 feet of impact plane.)

Trap No. 1 = 29.1 mph; Trap No. 2 = 29.1 mph
 Average Impact Speed = 29.1 mph

VEHICLE STATIC CRUSH:

Vehicle Length.

Pre-Test	Left =	<u>173.6</u>	; C/L =	<u>177.8</u>	Right =	<u>168.6</u>
Post-Test	Left =	<u>159.2</u>	; C/L =	<u>159.9</u>	Right =	<u>157.7</u>
Crush	Left =	<u>14.4</u>	; C/L =	<u>17.9</u>	Right =	<u>10.9</u>
AVERAGE	=	<u>14.4</u>	inches			

Section 3
COMPLIANCE TEST DATA

Figure 1

PART 572 DUMMY IN-VEHICLE POSITION
(FOR REAR IMPACTS ONLY)

DUMMY MEASUREMENT FOR FRONT SEAT PASSENGERS

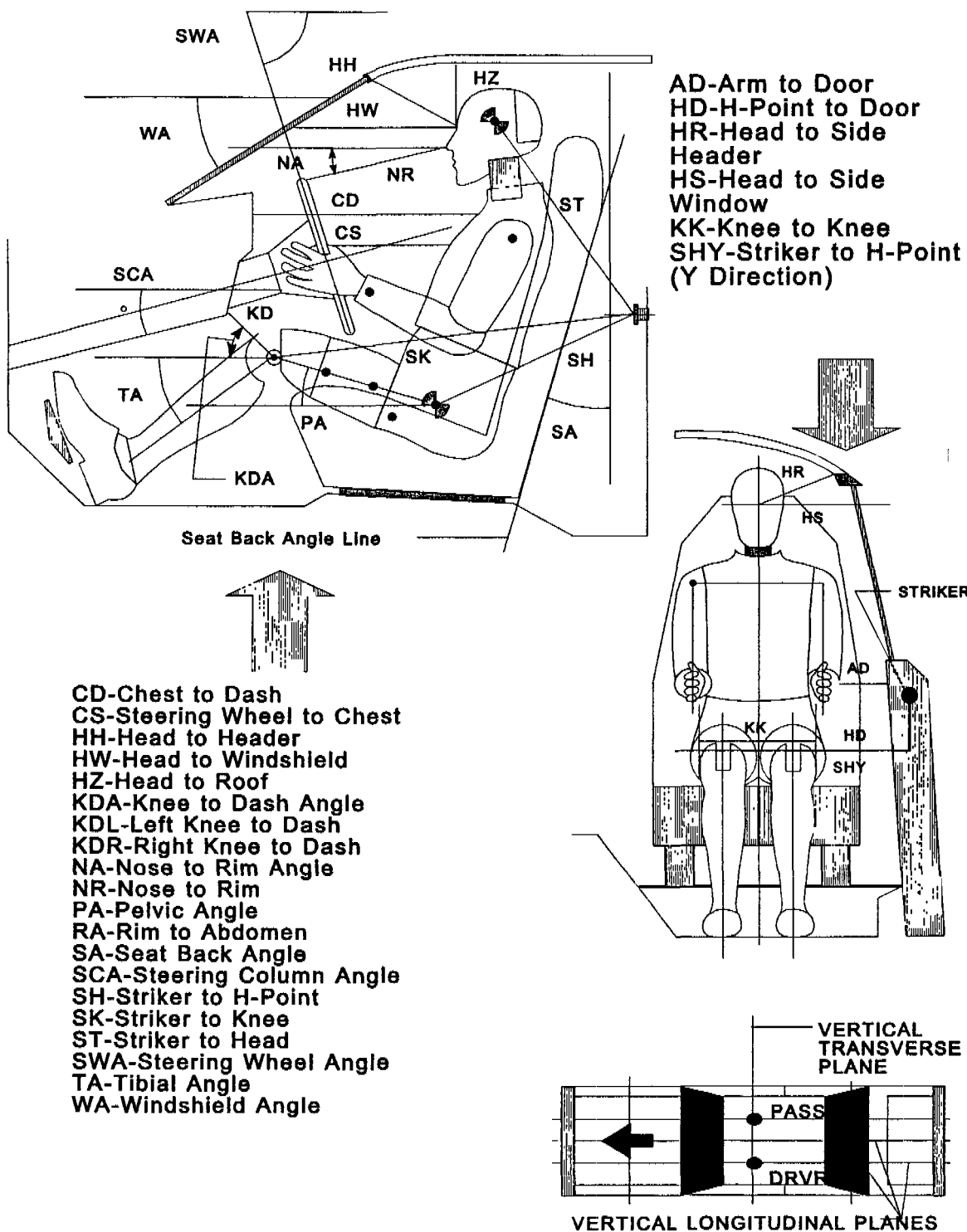


Table 5

FRONT SEAT OCCUPANT MEASUREMENTS
(FOR REAR IMPACT ONLY)

	DRIVER (Serial #116)			
WA°	36		deg.	
SWA°	55		deg.	
SCA°	35		deg.	
SA°	19 2		deg.	
HZ	10.0			
HH	14 2			
HW	23.3			
HR	10 2			
NR	16 4	Angle	13	deg.
CD	21.8			
CS	10.8			
RA	7.3			
KDL	5.3	Angle (KDA)	25	deg.
KDR	5 3			
PA°	22 5 deg.			
TA°	48.9 deg			
KK	9.5			
ST	22 1	Angle	10	deg.
SK	22.5	Angle	87	deg.
SH	7.7	Angle	116	deg.
SHY	8.4			
HS	12.6			
HD	4 9			
AD	4 1			

(Measurements in inches)

Table 6
FUELSYSTEM INTEGRITY POST IMPACT TEST DATA

FMVSS NO.301

TEST VEHICLE NHTSA NO.: C15305 TEST DATE. August 7, 2001

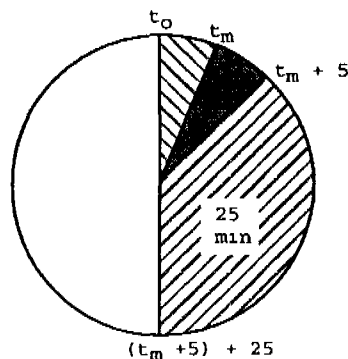
Vehicle Mfgr /Make/Model. 2001 Honda CR-V MPV

Test vehicle fuel tank filled to 91% to 94% of manufacturer's "usable" capacity and with electric fuel pump operating (if it will operate without engine operation). Part 572 test dummies located at each front designated seating position.

TEST VEHICLE IMPACT TYPE:

- Frontal (30 mph)
- Oblique (30 mph) with - ° barrier face first
contacting -
(driver/passenger) side
- X Rear Moving Barrier (30 mph)
- Lateral Moving Barrier (20 mph)

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	1 oz
0	5 oz
0	1 oz /1 min.

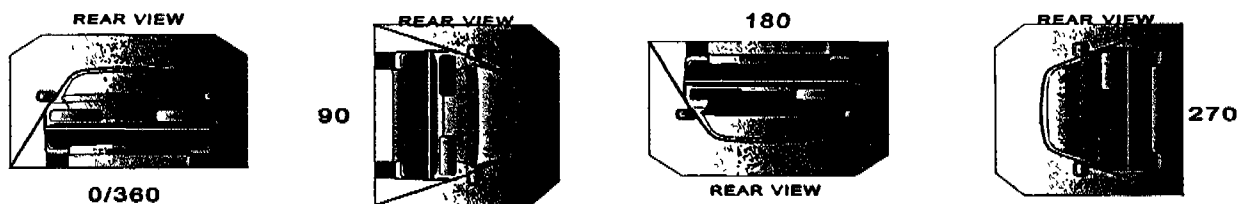
SOLVENT SPILLAGE DETAILS.

None

Table 7 FMVSS NO. 301 - STATIC ROLLOVER DATA SHEET

Vehicle: 2001 Honda CR-V MPV

NHTSA No.: C15305



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	16	seconds	5	minutes	6	minutes	16	seconds	7	minutes
90° - 180°	1	minutes	2	seconds	5	minutes	6	minutes	2	seconds	7	minutes
180°-270°	1	minutes	2	seconds	5	minutes	6	minutes	2	seconds	7	minutes
270°-360°	1	minutes	13	seconds	5	minutes	6	minutes	13	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)
5 ounces	1 ounce	1 ounce	1 ounce

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

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

Figure 2

CAMERA POSITIONS FOR REAR IMPACTS

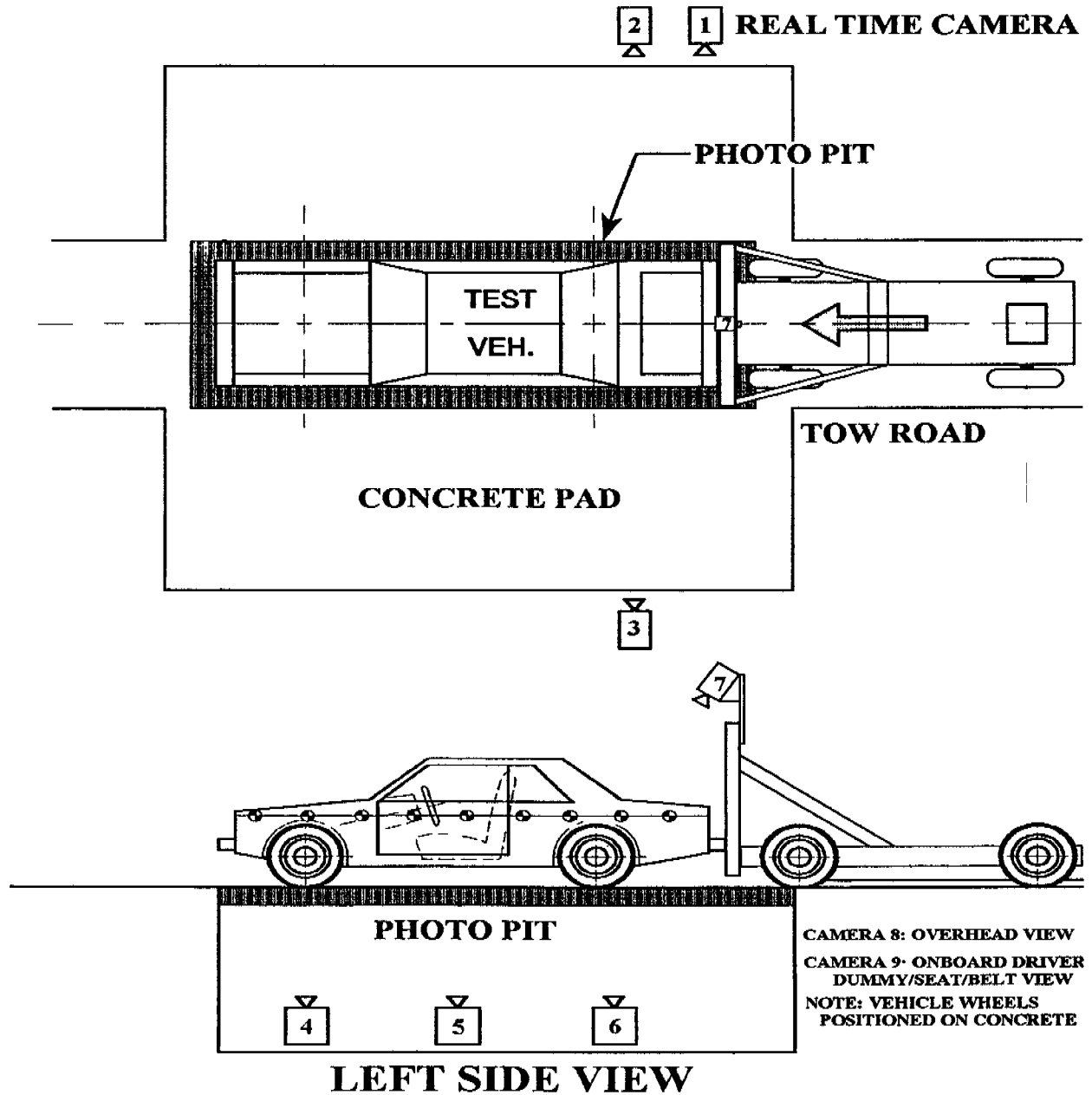


Table 8

HIGH-SPEED CAMERA LOCATIONSNHTSA No. . C15305Vehicle . 2001 Honda CR-V MPV

CAMERA NO	VIEW	CAMERA POSITIONS (inches)*			ANGLE** (degrees)	LENS (mm)	SPEED (fps)
		X	Y	Z			
1	Real-Time Camera	-	-	-	-	-	24
2	Right Side View	-534.0	72.5	43.6	0	13	1000
3	Left Side View	537.5	130.8	50.2	0	13	1000
4	Vehicle Front Underbody View	0	44.5	-77.0	90	13	1000
5	Vehicle Mid-Section Underbody View	0	98.2	-77.0	90	13	1000
6	Vehicle Rear Underbody View	0	139.5	-77.0	90	13	750
7	Moving Barrier View	0	0	99.0	-105	13	1000
8	Overhead Overall View	-20.0	0	386.0	-90	13	1000
9	Onboard Driver Dummy/Seat/Belt View	-	-	-	-	8	1000

* X = film plane to monorail centerline (+ to left of rail)

Y = film plane to impact location (+ ahead of impact location)

Z = film plane to ground (+ above ground)

** = referenced to horizontal plane

Appendix A
PHOTOGRAPHS

LIST OF PHOTOGRAPHS

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Figure A-1: PRE-TEST FRONT VIEW

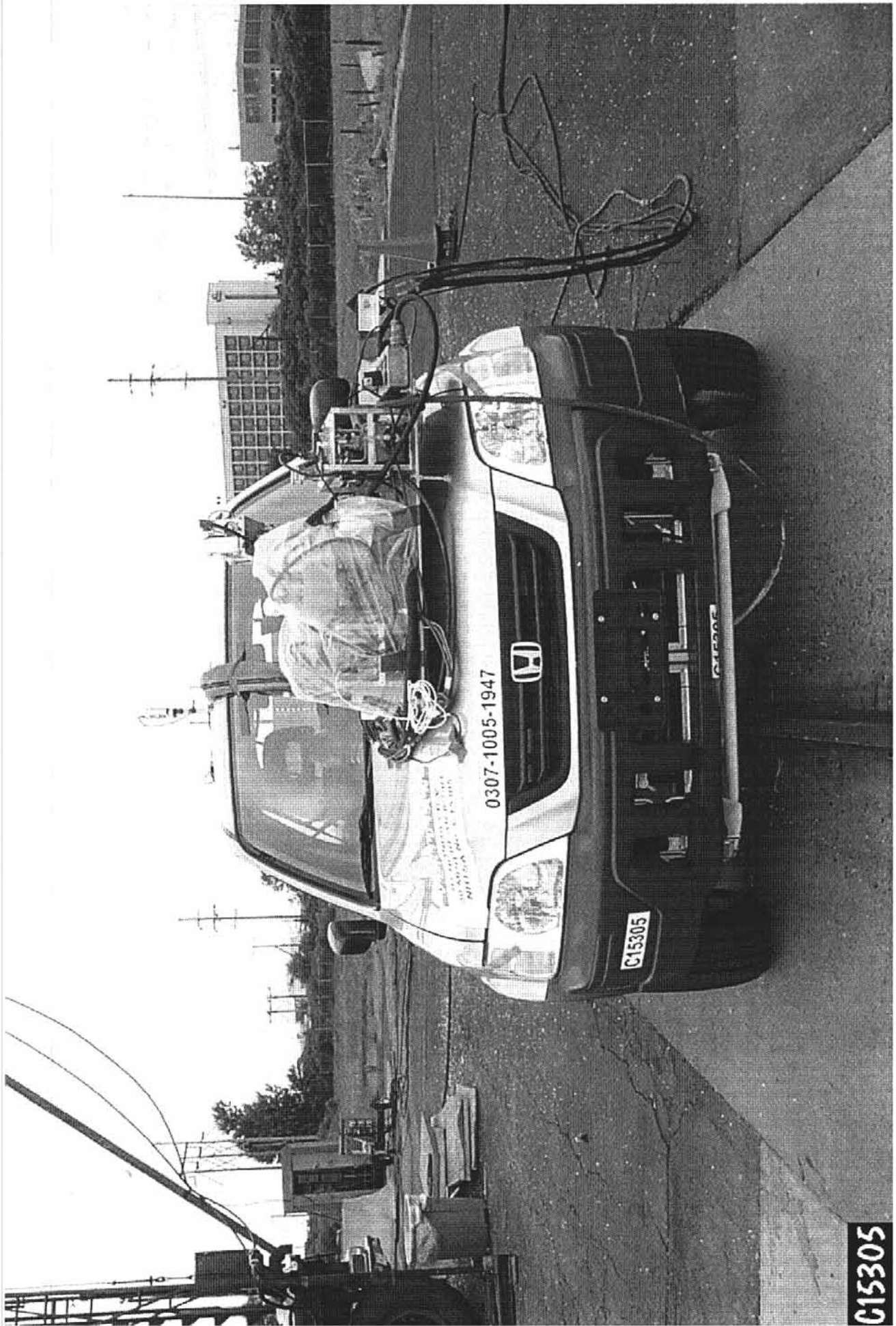


Figure A-2: POST-TEST FRONT VIEW

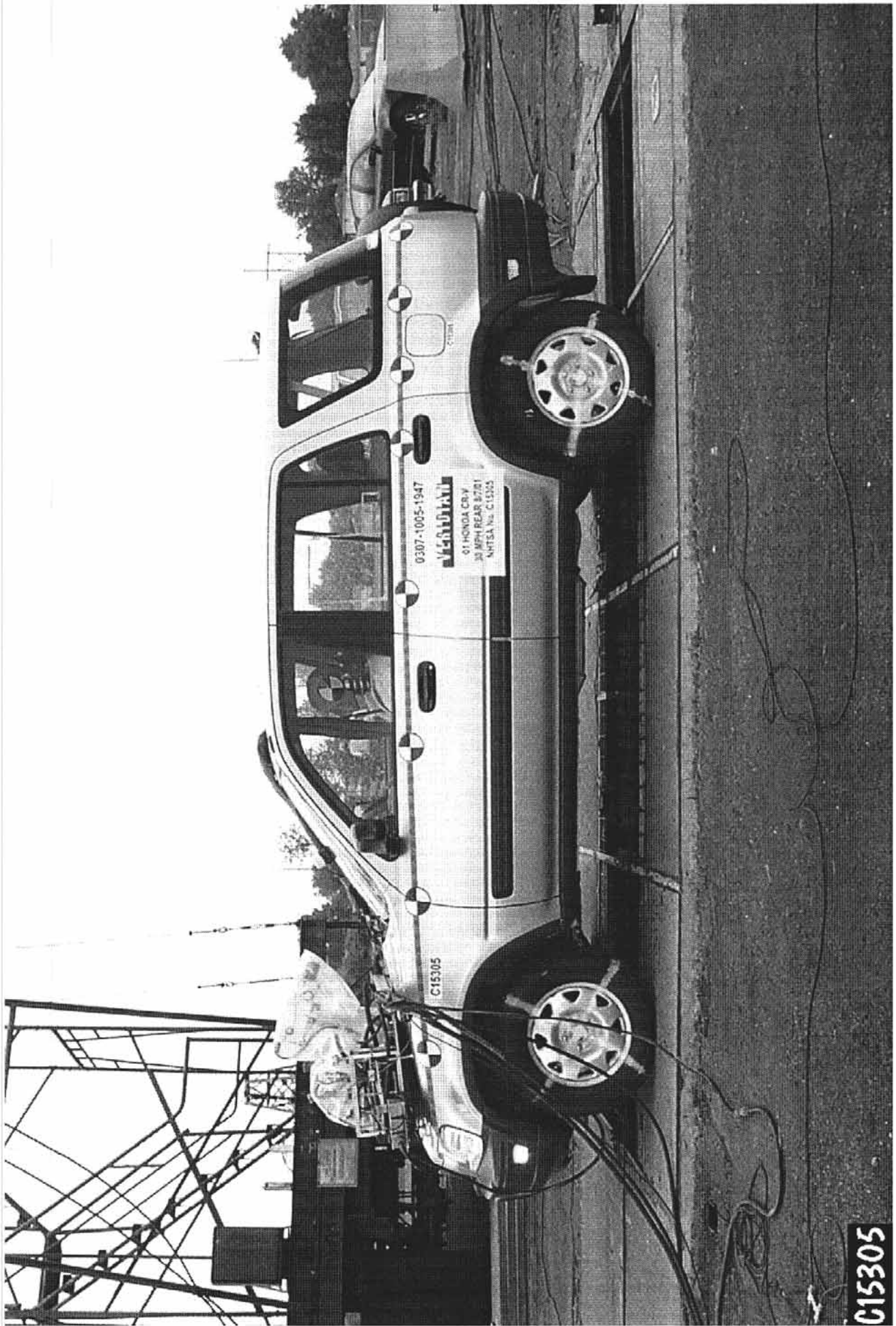


Figure A-3: PRE-TEST LEFT SIDE VIEW

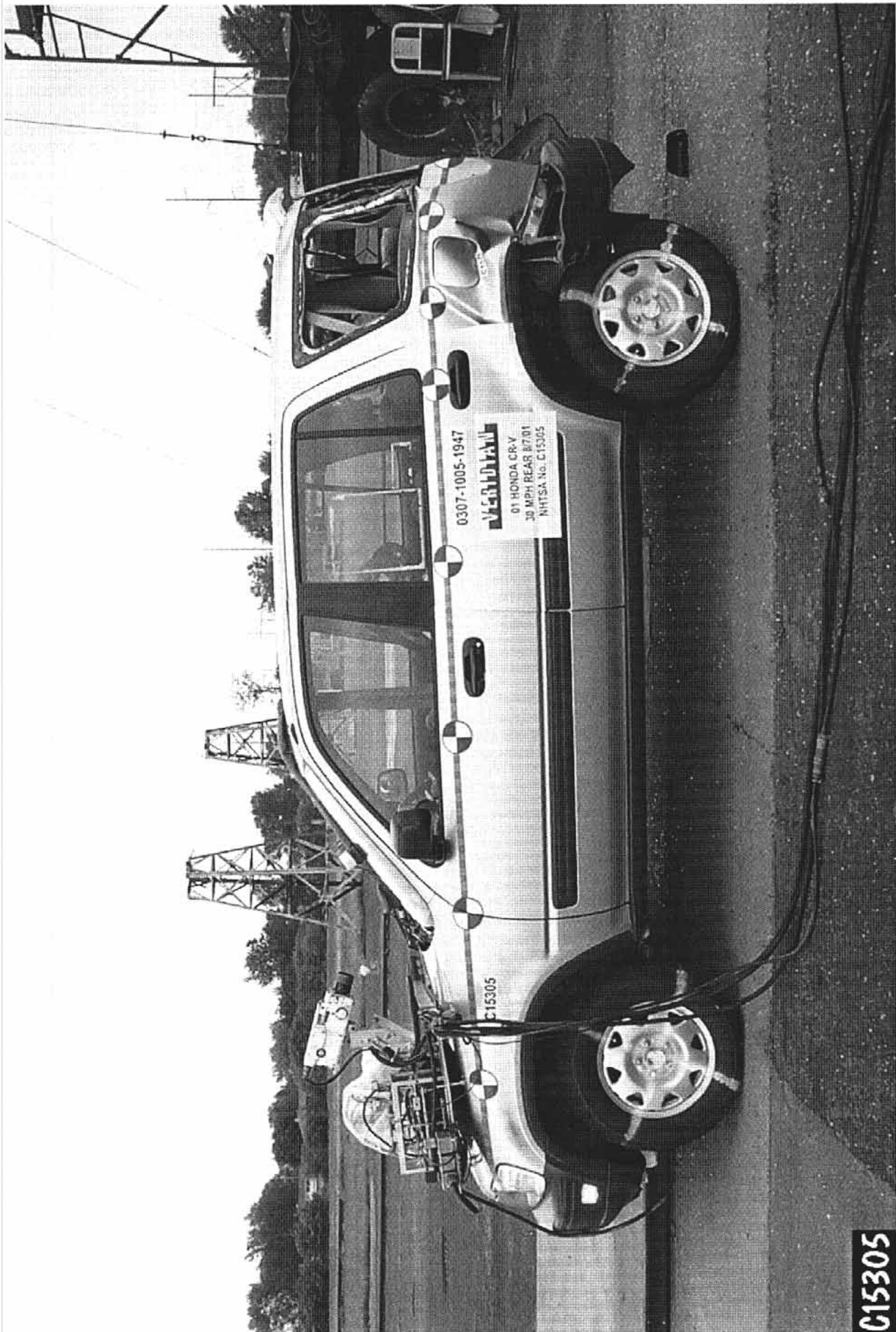


Figure A-4: POST-TEST LEFT SIDE VIEW

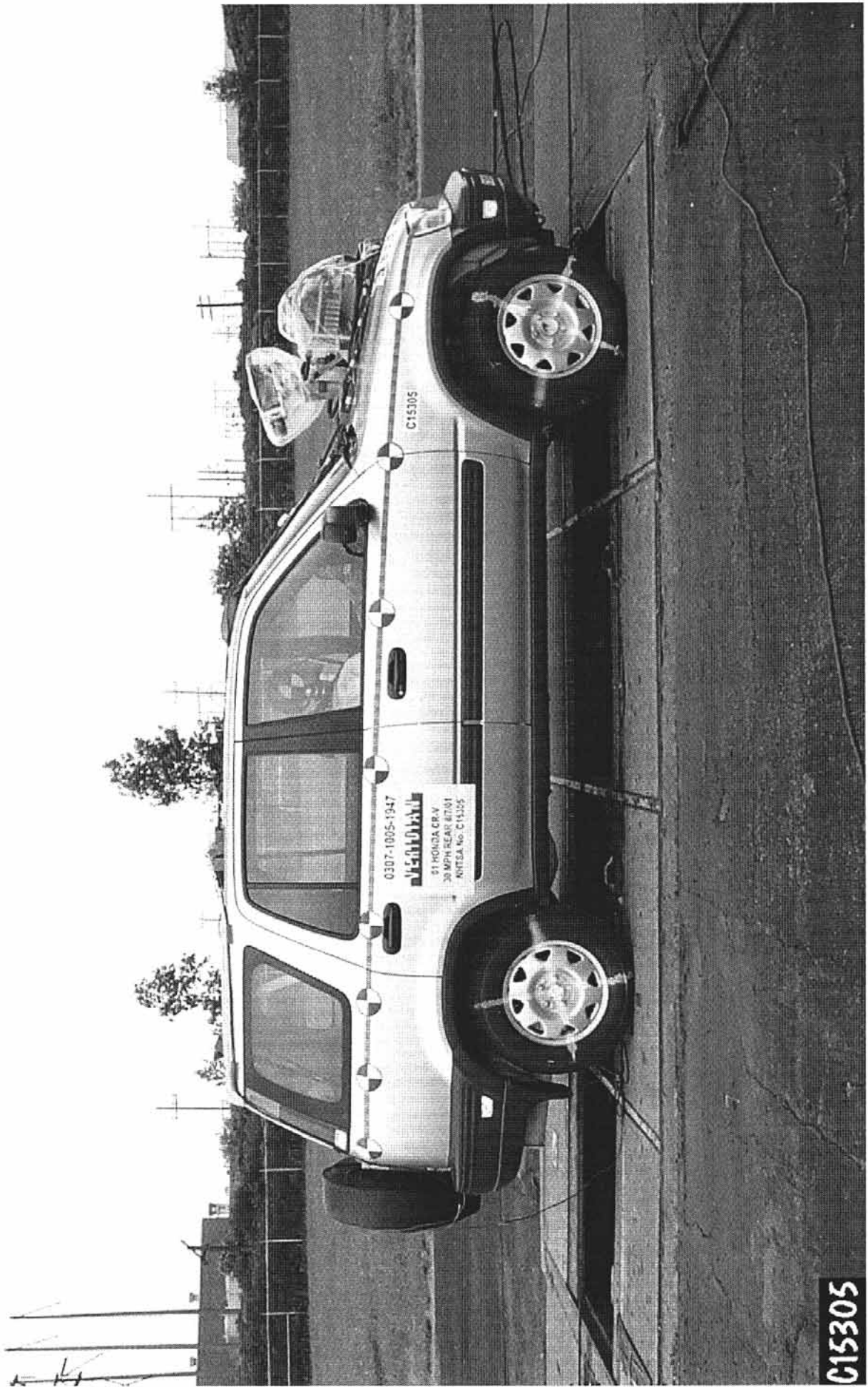


Figure A-5: PRE-TEST RIGHT SIDE VIEW



Figure A-6: POST-TEST RIGHT SIDE VIEW



Figure A-7: PRE-TEST REAR VIEW



Figure A-8: POST-TEST REAR VIEW



Figure A-9: PRE-TEST LEFT FRONT THREE-QUARTER VIEW



Figure A-10: POST-TEST LEFT FRONT THREE-QUARTER VIEW

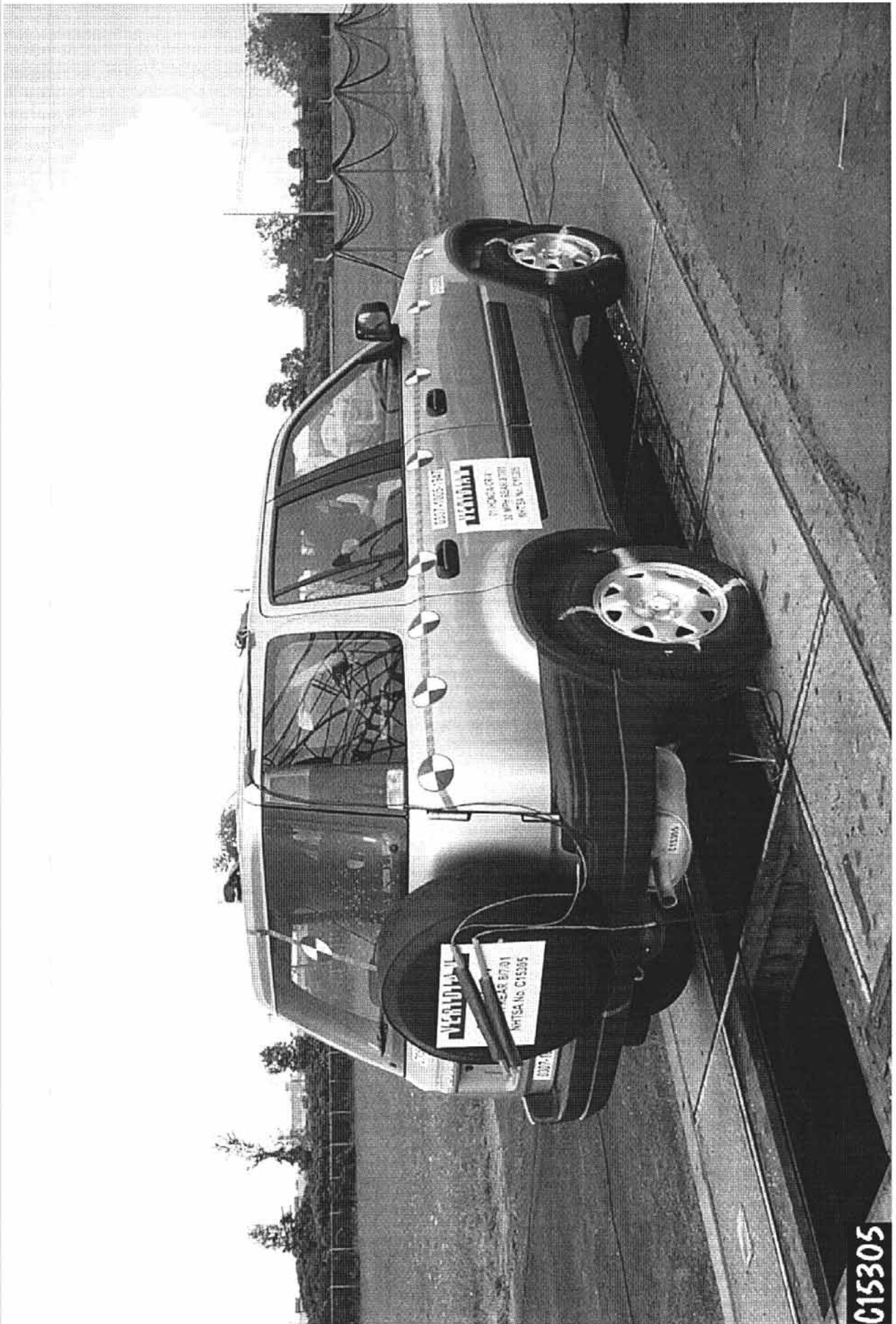


Figure A-11: PRE-TEST RIGHT REAR THREE-QUARTER VIEW



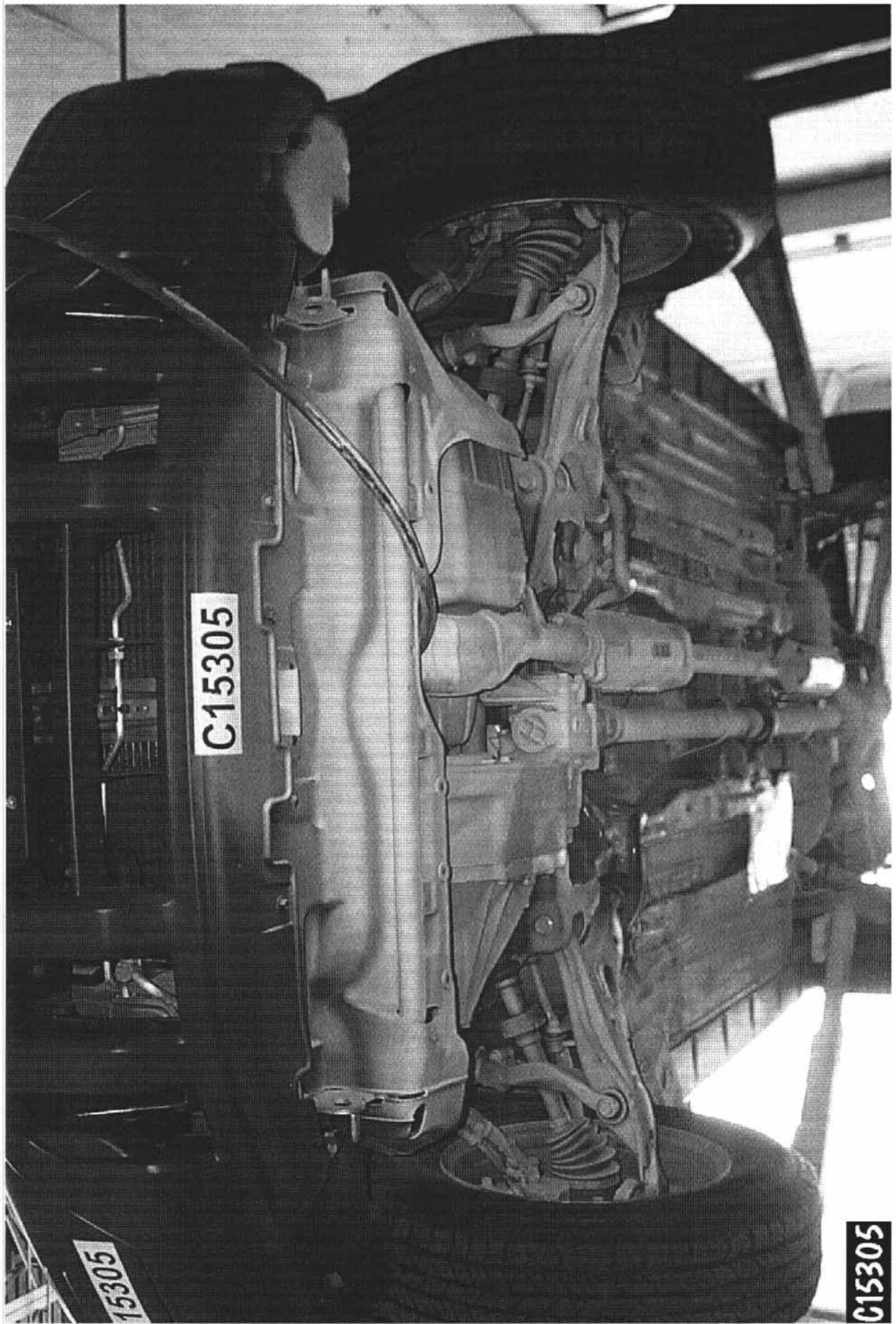


Figure A-13: PRE-TEST FRONT UNDERBODY VIEW

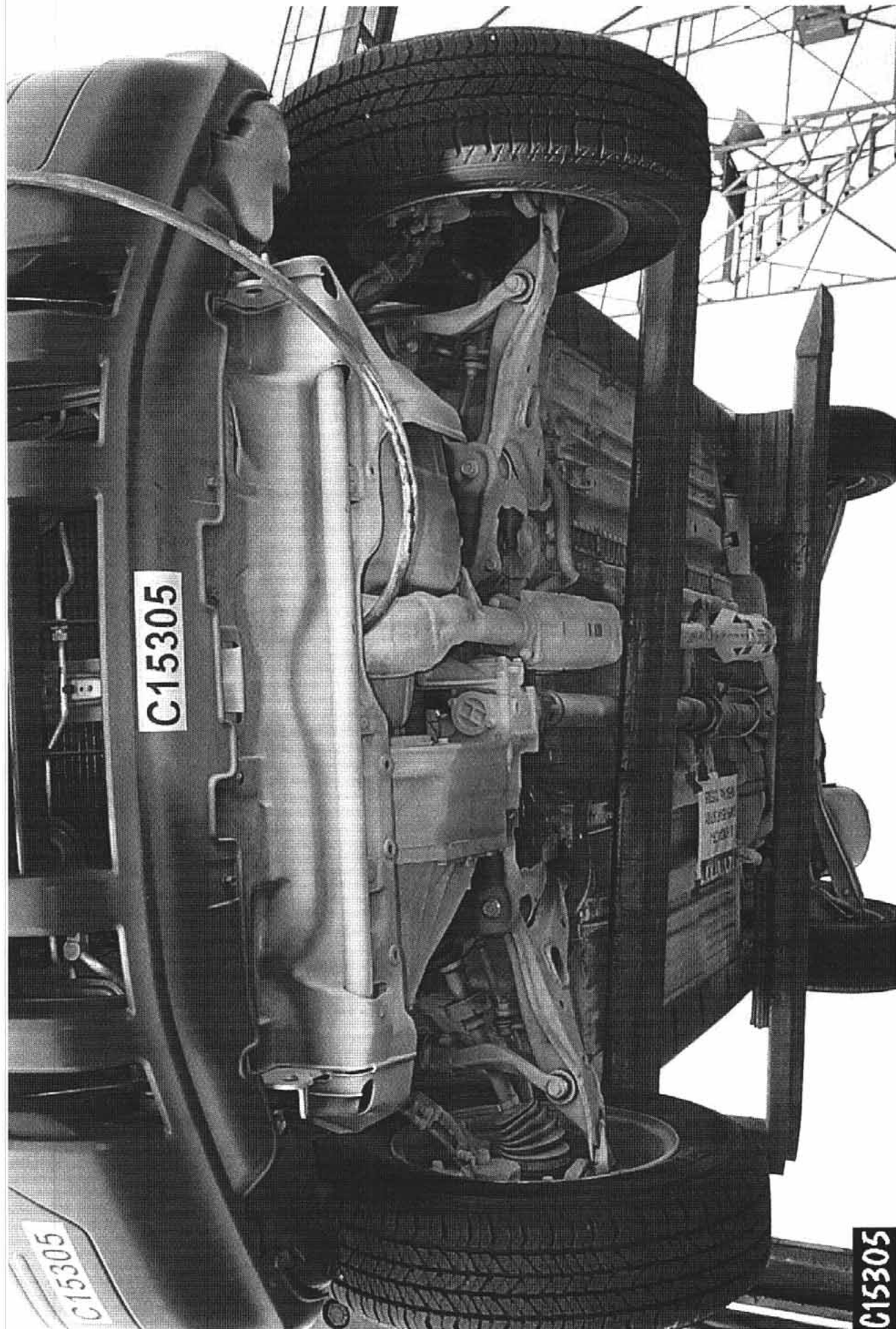


Figure A-14: POST-TEST FRONT UNDERBODY VIEW

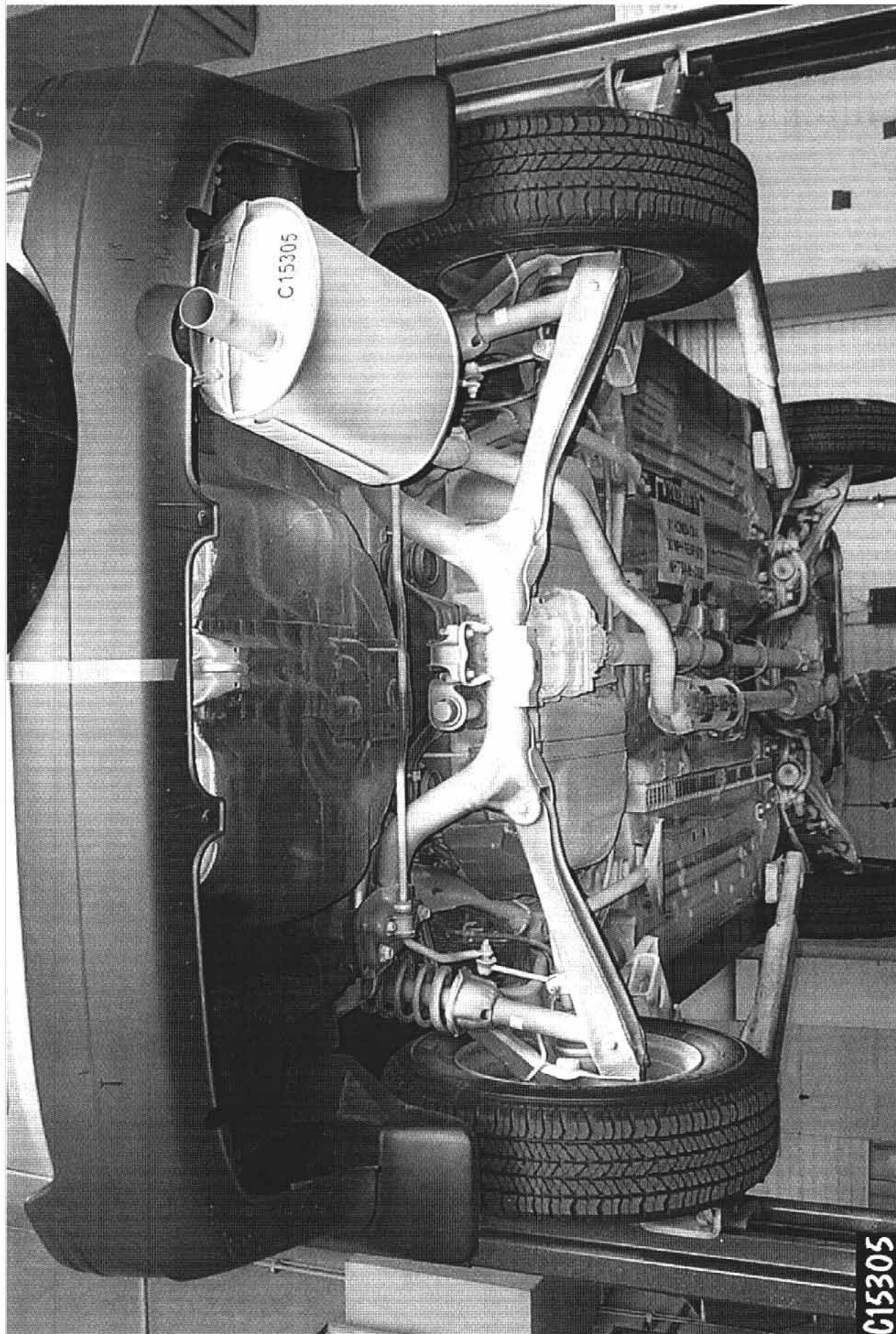


Figure A-15: PRE-TEST REAR UNDERBODY VIEW

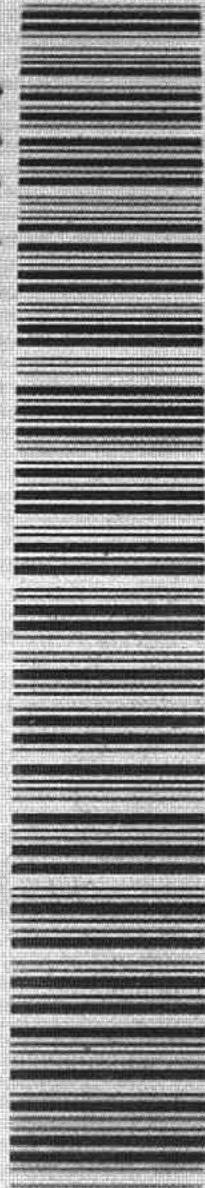


Figure A-16: POST-TEST REAR UNDERBODY VIEW

C15305

MFD. IN JAPAN BY HONDA MOTOR CO., LTD; 1/'01
GVWR 4165LBS GAWR F 2030LBS R 2155LBS
THIS VEHICLE CONFORMS TO ALL APPLICABLE
FEDERAL MOTOR VEHICLE SAFETY,
AND THEFT PREVENTION STANDARDS IN EFFECT
ON THE DATE OF MANUFACTURE SHOWN ABOVE:

V.I.N. JHLRD17401S006495



MPV

C15305

Figure A-17: CERTIFICATION PLACARD

TIRE INFORMATION

GVWR 4165LBS

FRONT REAR

2030LBS 2155LBS

TIRE SIZE 205/70R15 95S

RIM SIZE 15x6JJ

COLD TIRE INFLATION PRESSURE 180KPA, 26PSI

UP TO GAWR

SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION.

Figure A-18: TIRE PLACARD

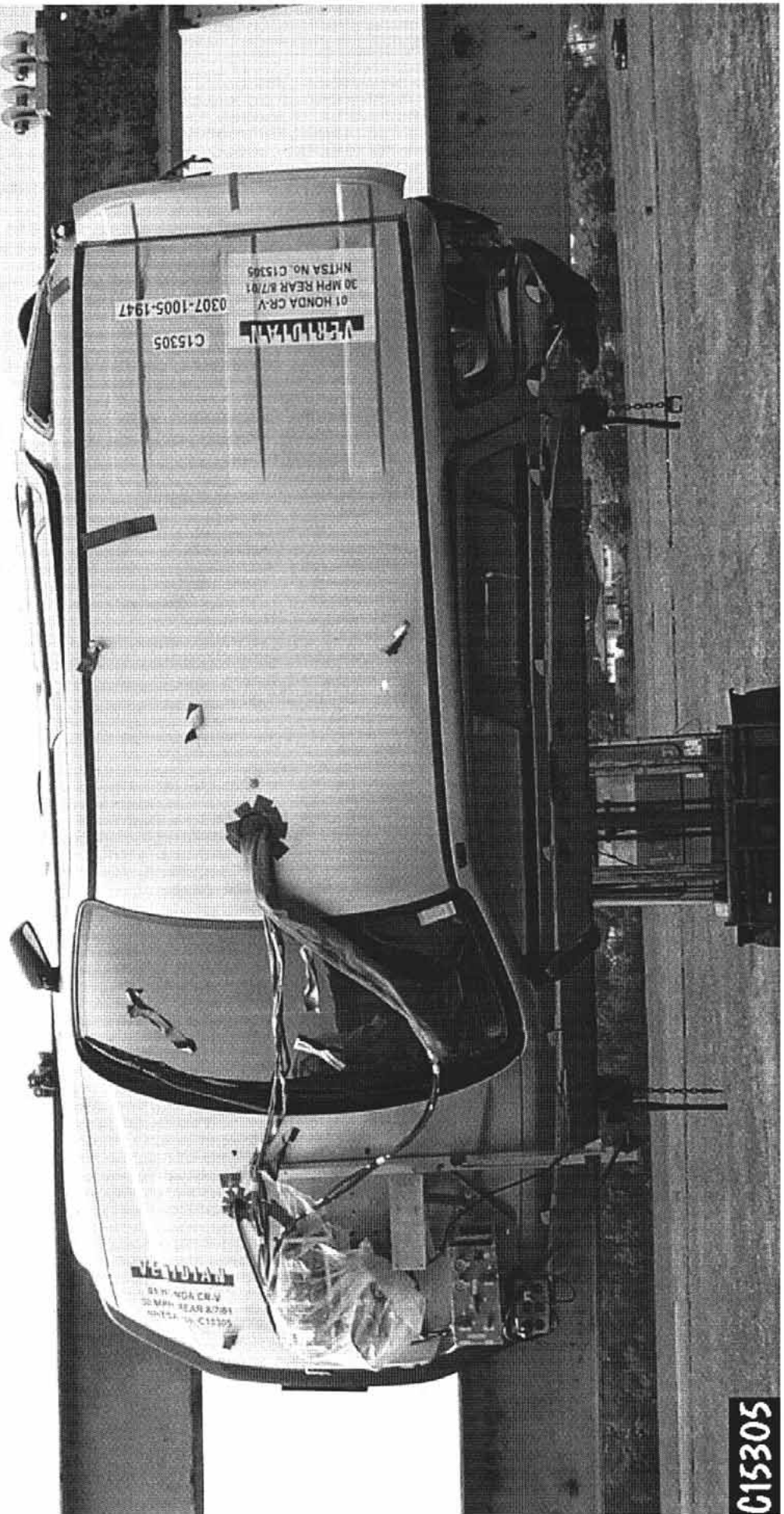


Figure A-19: ROLLOVER 90°

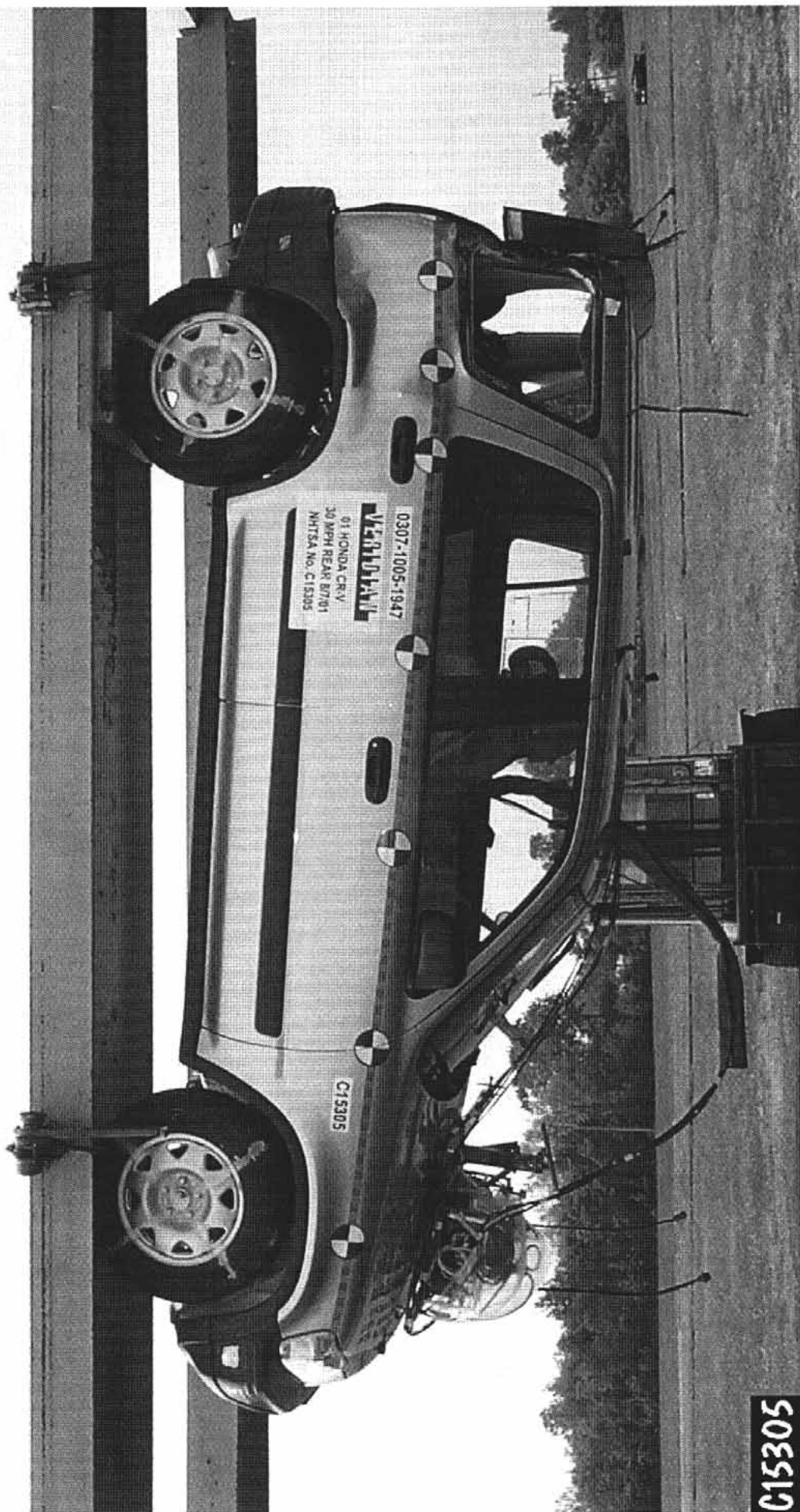


Figure A-20: ROLLOVER 180°

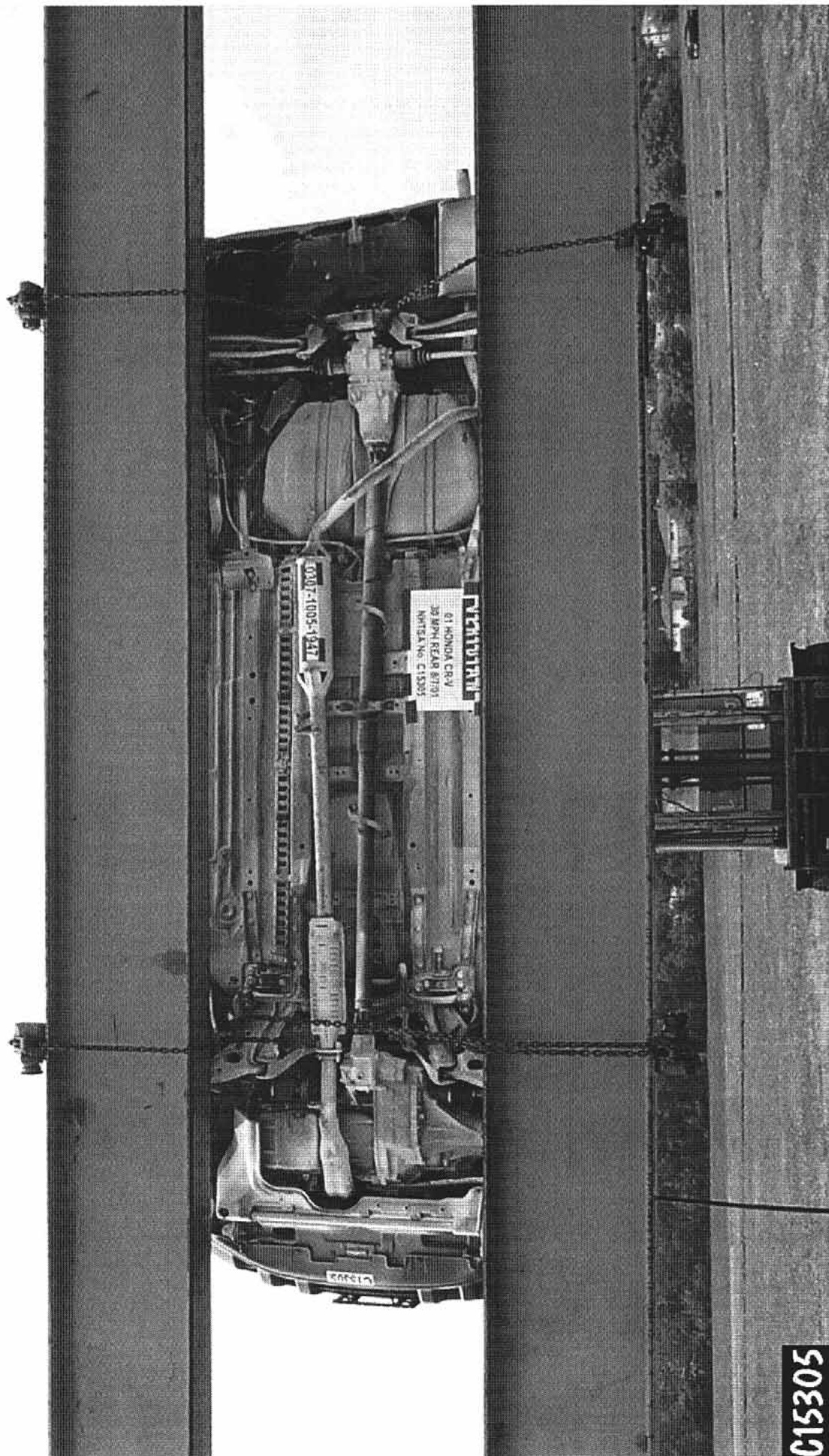


Figure A-21: ROLLOVER 270°

C15305

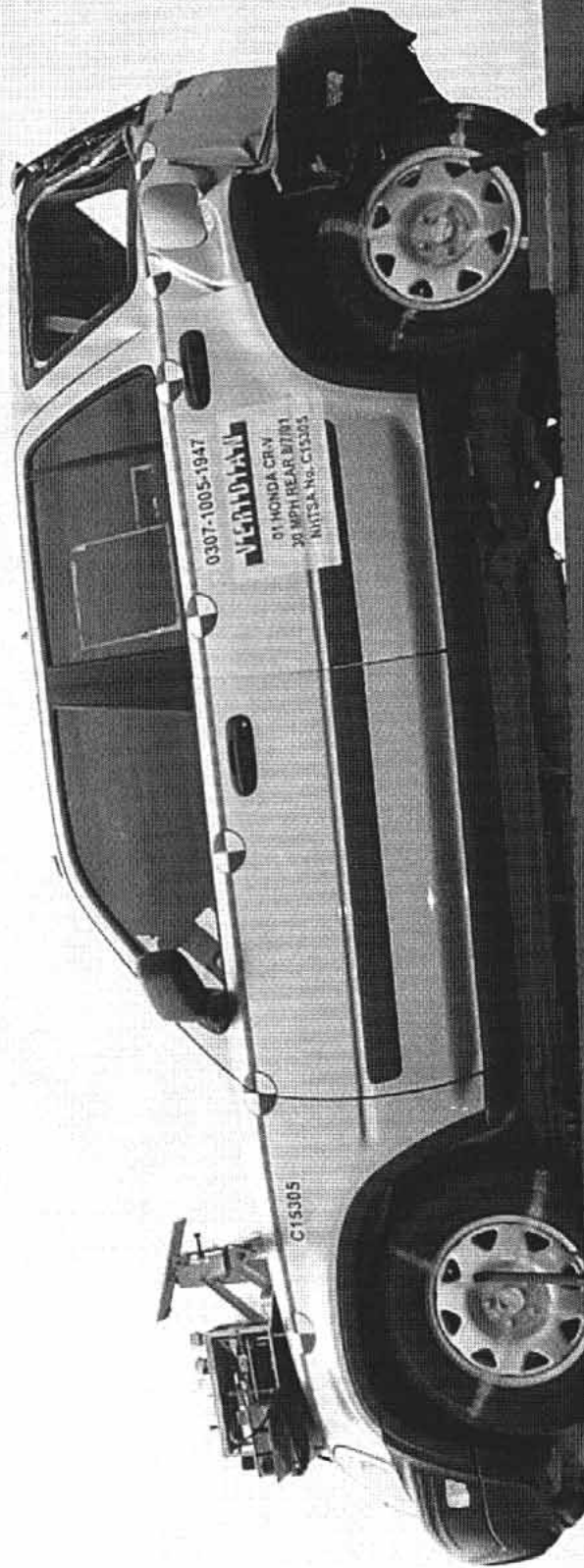


Figure A-22: ROLLOVER 360°

C15305

Appendix B

VEHICLE AND DUMMY RESPONSE DATA

FACILITY: VERF
TEST#: 307-1005-1947

DATE: August 07, 2001

TITLE: NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V C15305

NAME	Unit	Max	msec	Min	msec	Filt
P1 Head x	g	18.9	116.2	-2.1	66.6	CFC_1000
P1 Head y	g	2.0	95.7	-4.0	166.7	CFC_1000
P1 Head z	g	16.9	109.3	-1.5	58	CFC_1000
P1 Head Resultant	g	24.1	115.3	0.0	7.3	CFC_1000
P1 Upper Neck Fx	lbf	30.2	124.1	-18.1	68.5	CFC_1000
P1 Upper Neck Fy	lbf	18.7	103.8	-22.9	151.5	CFC_1000
P1 Upper Neck Fz	lbf	257.9	120.3	-15.7	58.2	CFC_1000
P1 Upper Neck F Resultant	lbf	258.7	120.3	0.0	-30.2	CFC_1000
P1 Upper Neck Mx	in-lb	46.3	93.2	-23.3	81.5	CFC_600
P1 Upper Neck My	in-lb	121.4	86.8	-60.9	313.4	CFC_600
P1 Upper Neck Mz	in-lb	47.2	94.9	-87.5	151.9	CFC_600
P1 Upper Neck M Resultant	in-lb	129.9	89.2	0.0	-5	CFC_600
P1 Chest x	g	12.8	84.4	-0.3	127.2	CFC_180
P1 Chest y	g	1.4	53.2	-2.3	104.8	CFC_180
P1 Chest z	g	7.3	86.2	-0.9	230.7	CFC_180
P1 Chest Resultant	g	14.7	86.1	0.0	-12.3	CFC_180
P1 Chest Compression	in	0.0	143.0	-0.1	105	CFC_600
P1 Pelvic x	g	15.4	73.5	-2.9	134.6	CFC_1000
P1 Pelvic y	g	2.4	101.7	-1.8	75.3	CFC_1000
P1 Pelvic z	g	6.6	82.7	-1.6	221.7	CFC_1000
P1 Pelvic Resultant	g	16.2	73.5	0.0	-35.9	CFC_1000
P1 Left Femur	lbf	51.7	166.0	-117.9	76	CFC_600
P1 Right Femur	lbf	64.0	153.8	-123.1	66.8	CFC_600
P1 Lap Belt	lbf	61.5	59.9	-32.6	80.8	CFC_60
P1 Belt Spoolout	in	0.0	4.1	-4.3	398.7	CFC_180
Acc #1 Left Rear Xm Ax	g	12.8	47.0	-1.0	159.3	CFC_60
Acc #2 Right Rear Xm Ax	g	12.8	71.5	-1.4	151.9	CFC_60
Acc #3 Upper Seatback Ax	g	34.9	69.5	-12.7	77.8	CFC_60
Acc #4 Lower Seatback Ax	g	26.7	67.8	-4.6	61.8	CFC_60
Seatback Angular Position	deg	60.2	399.9	0.0	-50	CFC_180

P1 HIC(36 ms): 56.3

t1: 96.8 msec

t2: 132.8 msec

Duration: 36.0 msec

Average Acceleration: 18.9 g

P1 CLIP(3 ms): 14.1 g

t1: 83.8 msec

t2: 86.8 msec

Duration: 3.0 msec

P1 CSI: 25.4

TEST NO. C15305

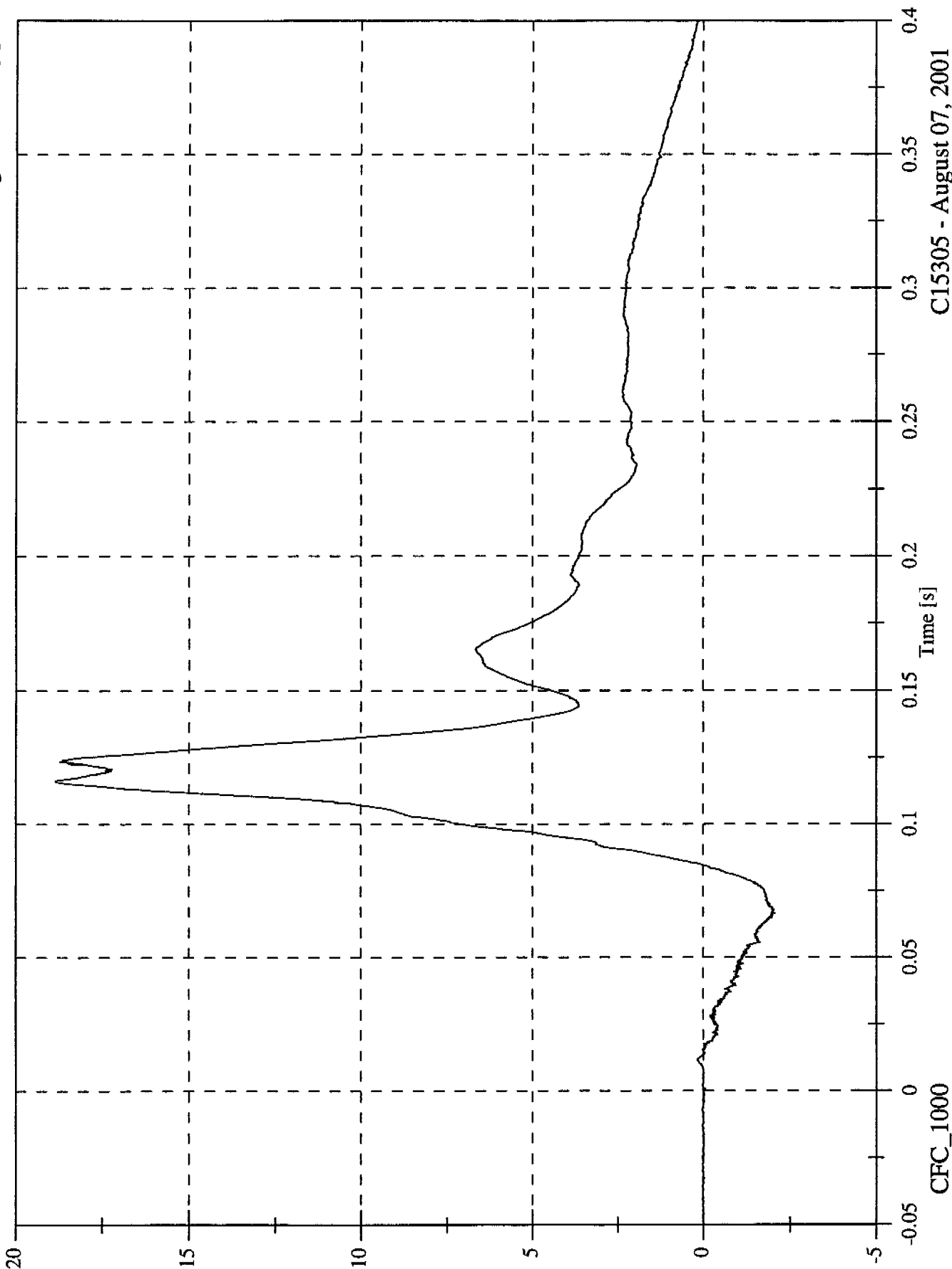
DRIVER DUMMY (Pos 1)	SAE FILTER CHANNEL CLASS
Head Accelerations	1000
Chest Accelerations	180
Pelvic Accelerations	1000
Upper Neck Forces	1000
Upper Neck Moments	600
Belt Forces	60
Belt Spoolout	60
Vehicle	60

Note: Angular seatback position is measured in degrees of rotation from the initial (design) position

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 18.9 [g] at 0.116 [s]
 Min: -2.1 [g] at 0.067 [s]

P1 Head x



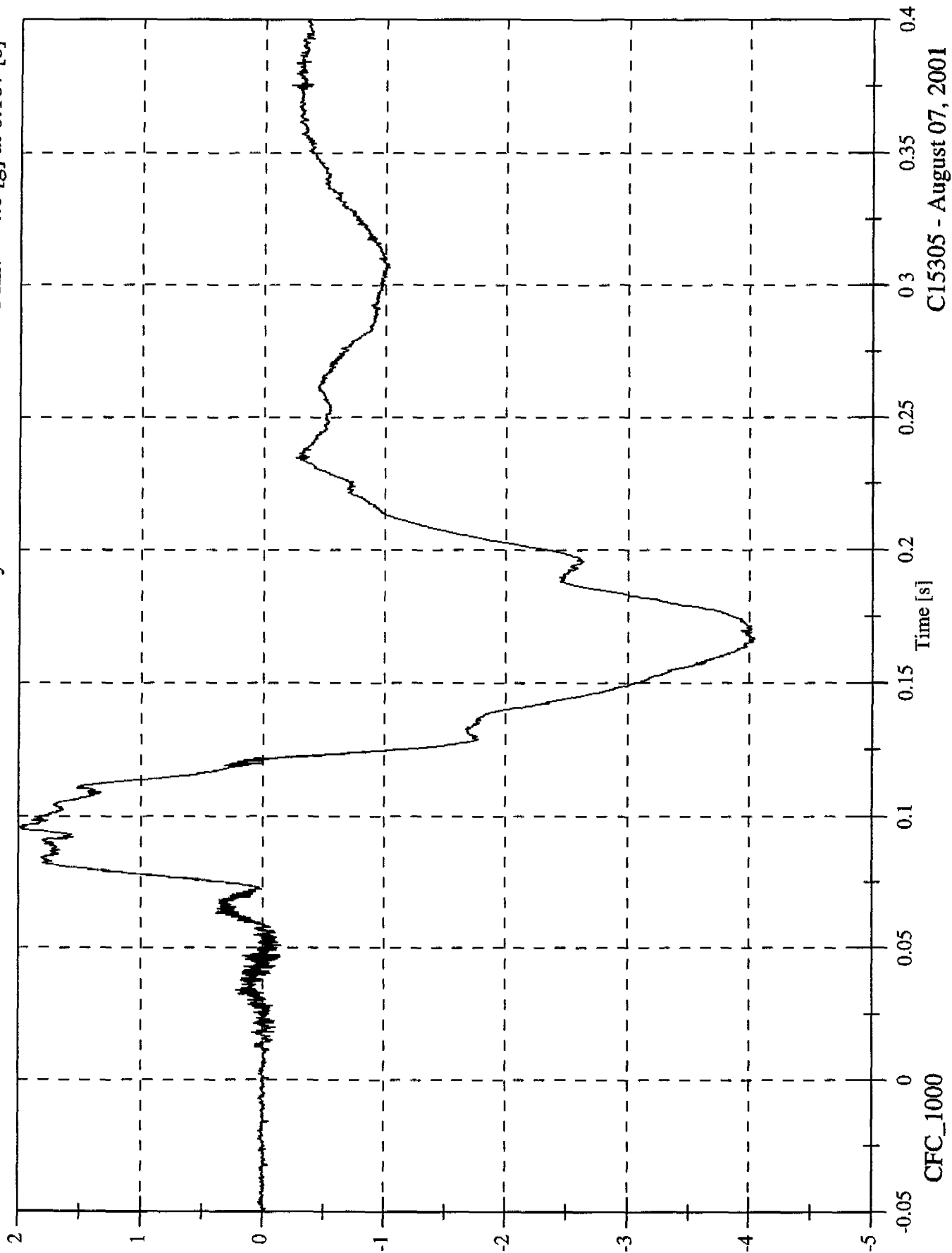
CFC_1000

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NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Head y

Max: 2.0 [g] at 0.096 [s]
Min: -4.0 [g] at 0.167 [s]



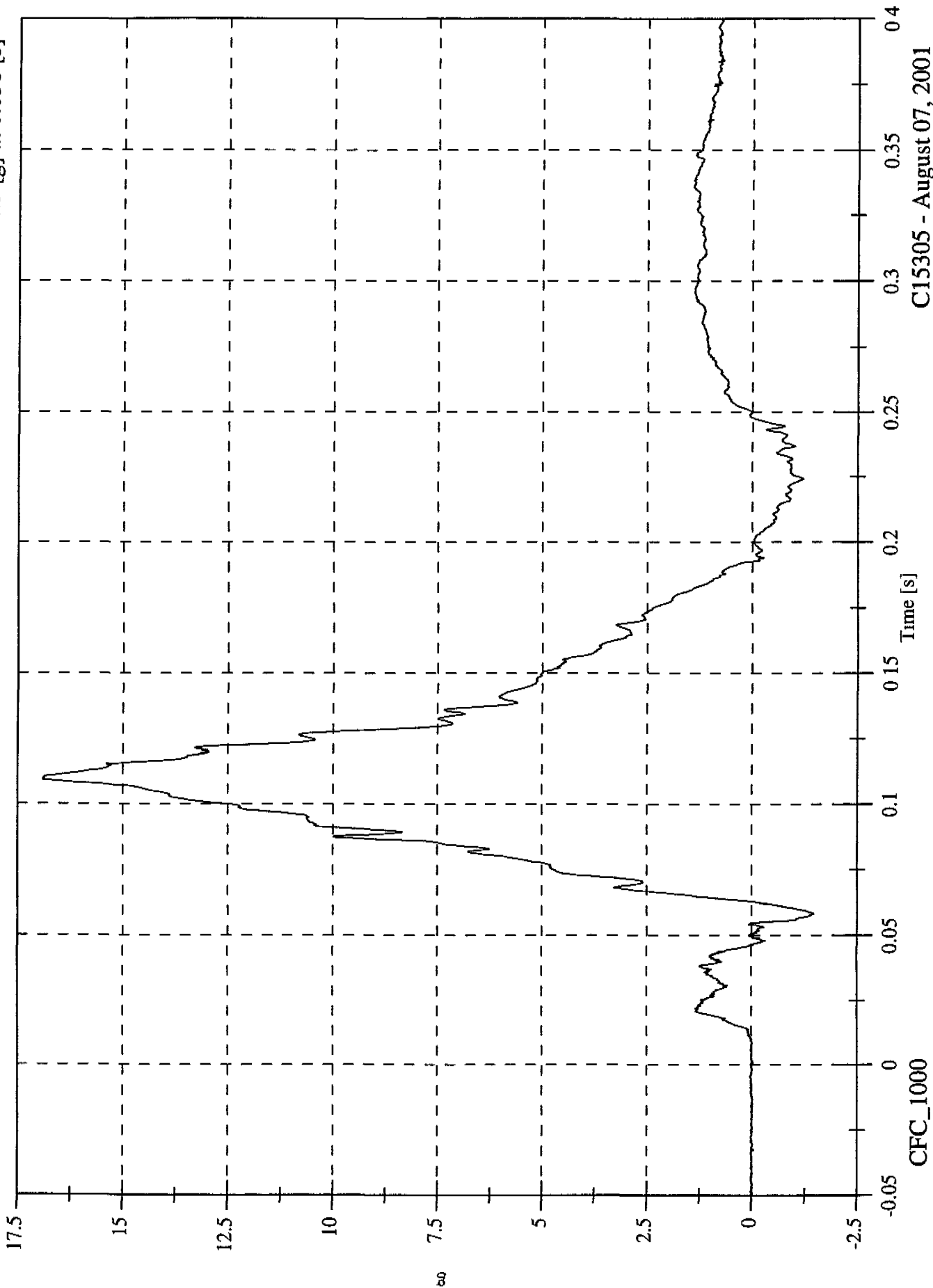
CFC_1000

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NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 16.9 [g] at 0.109 [s]
Min: -1.5 [g] at 0.058 [s]

P1 Head z



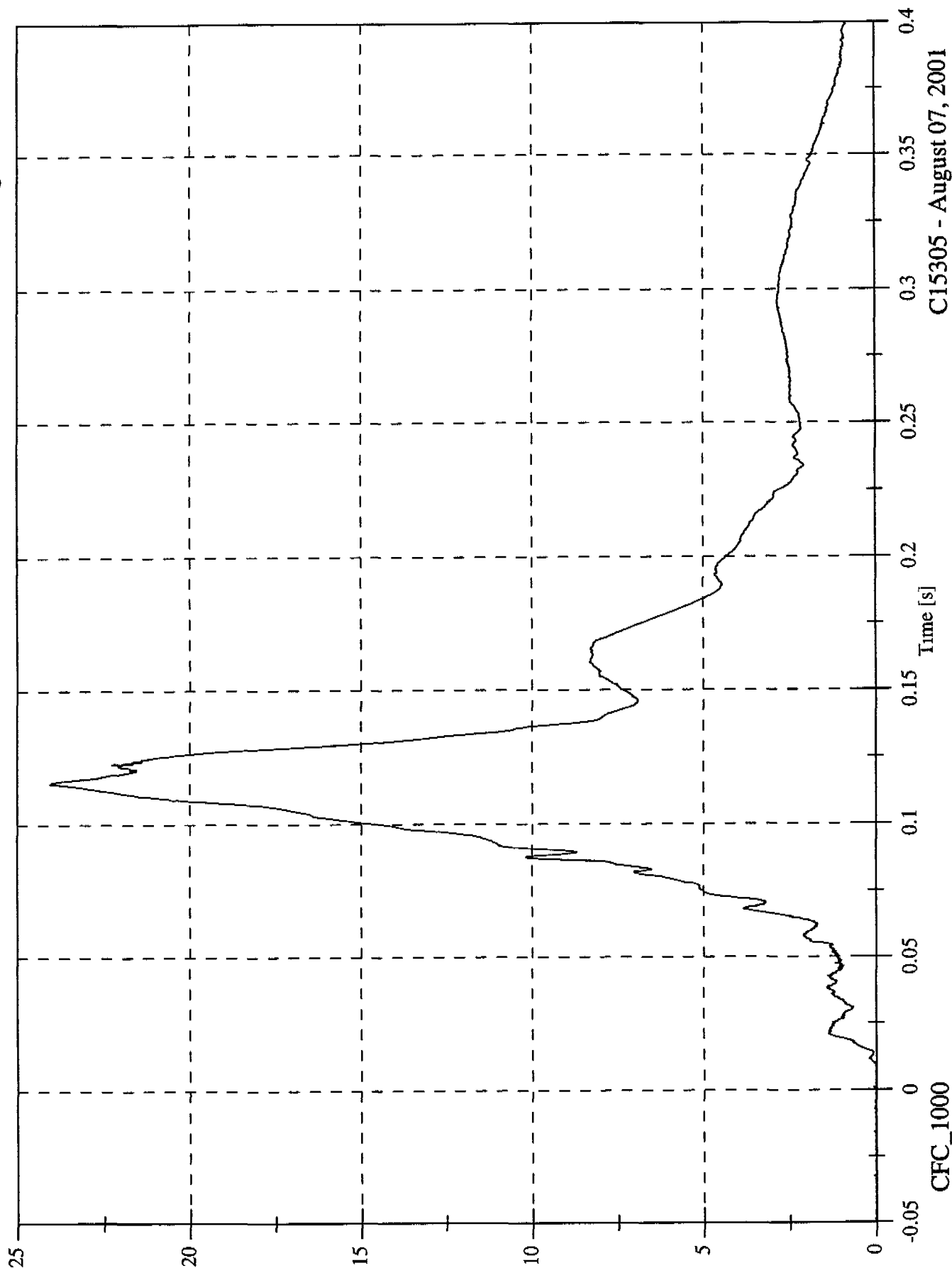
CFC_1000

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 24.1 [g] at 0.115 [s]
Min: 0.0 [g] at 0.007 [s]

P1 Head Resultant



CFC_1000

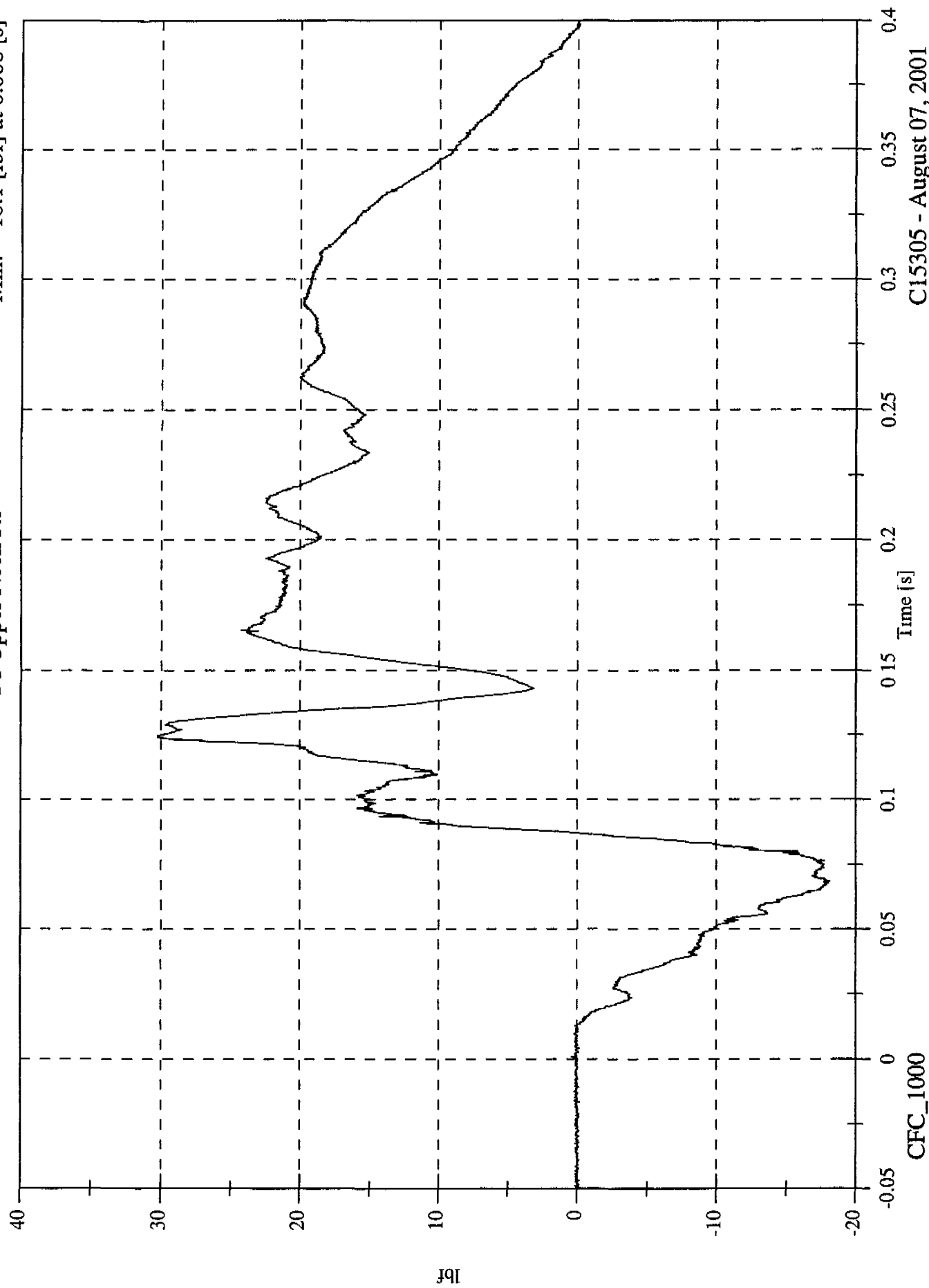
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Max: 30.2 [lbf] at 0.124 [s]

Min: -18.1 [lbf] at 0.068 [s]

P1 Upper Neck Fx



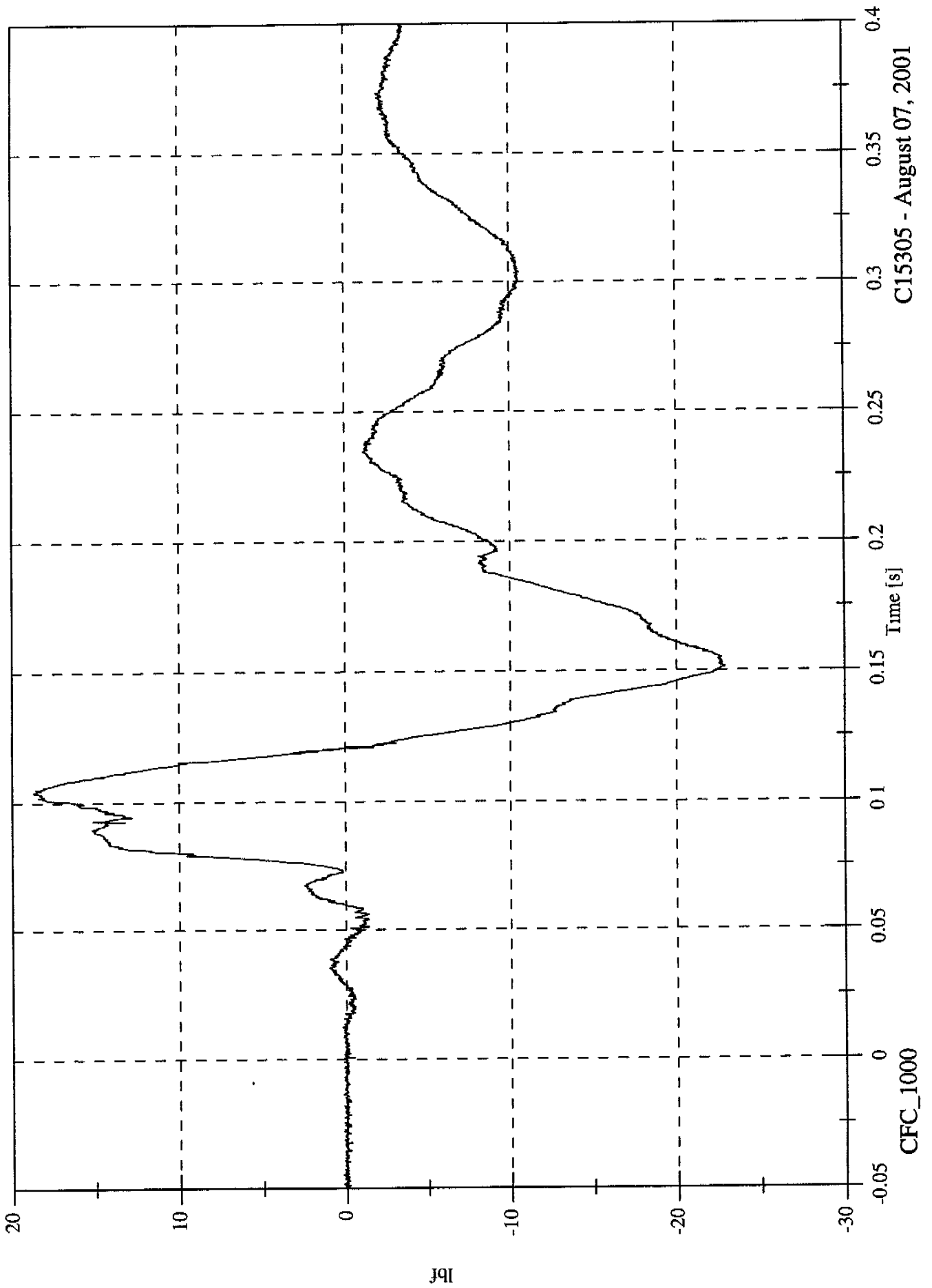
C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Upper Neck Fy

Max: 18.7 [lbf] at 0.104 [s]

Min: -22.9 [lbf] at 0.152 [s]

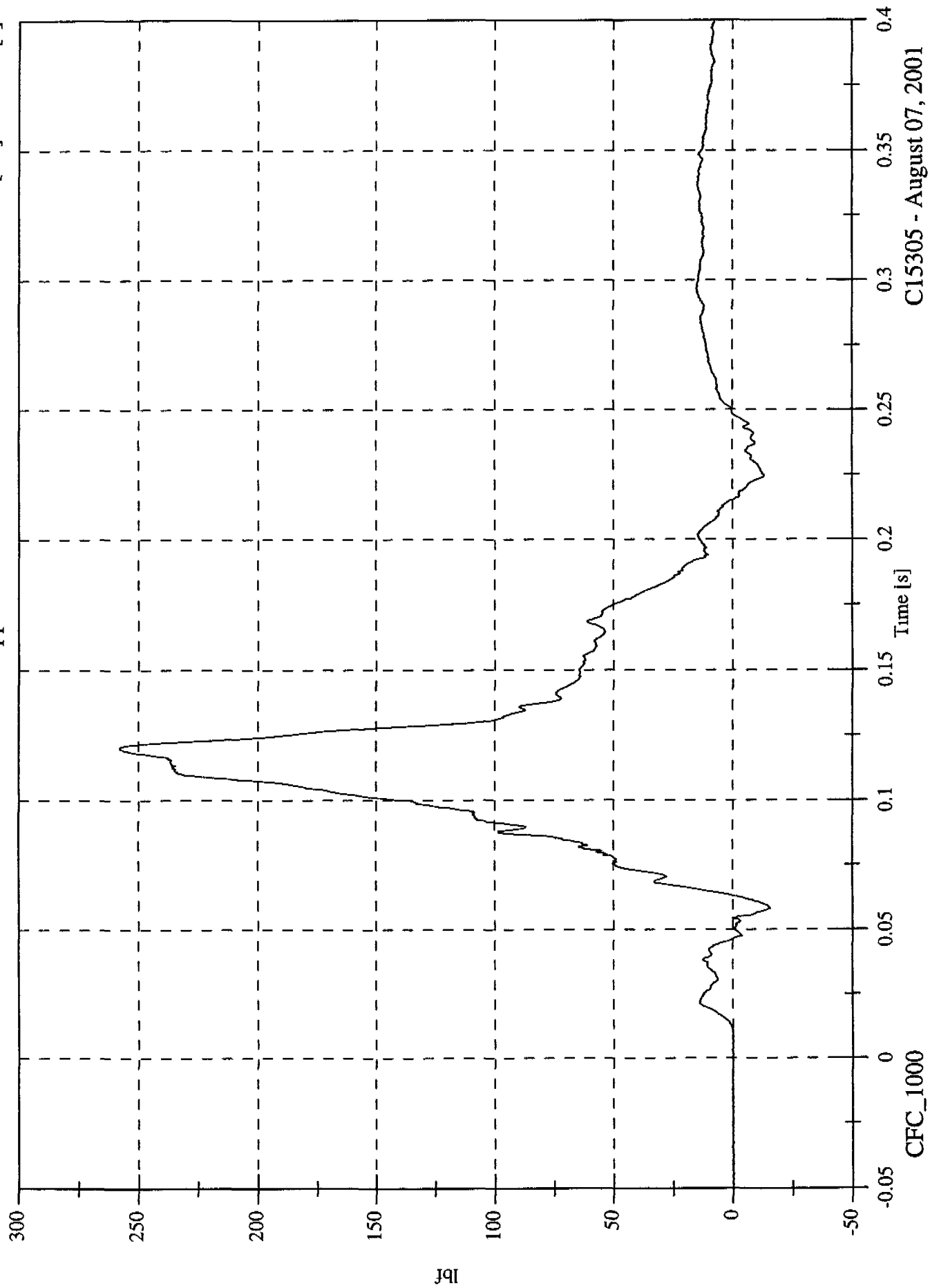


C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Upper Neck Fz

Max: 257.9 [lbf] at 0.120 [s]
Min: -15.7 [lbf] at 0.058 [s]



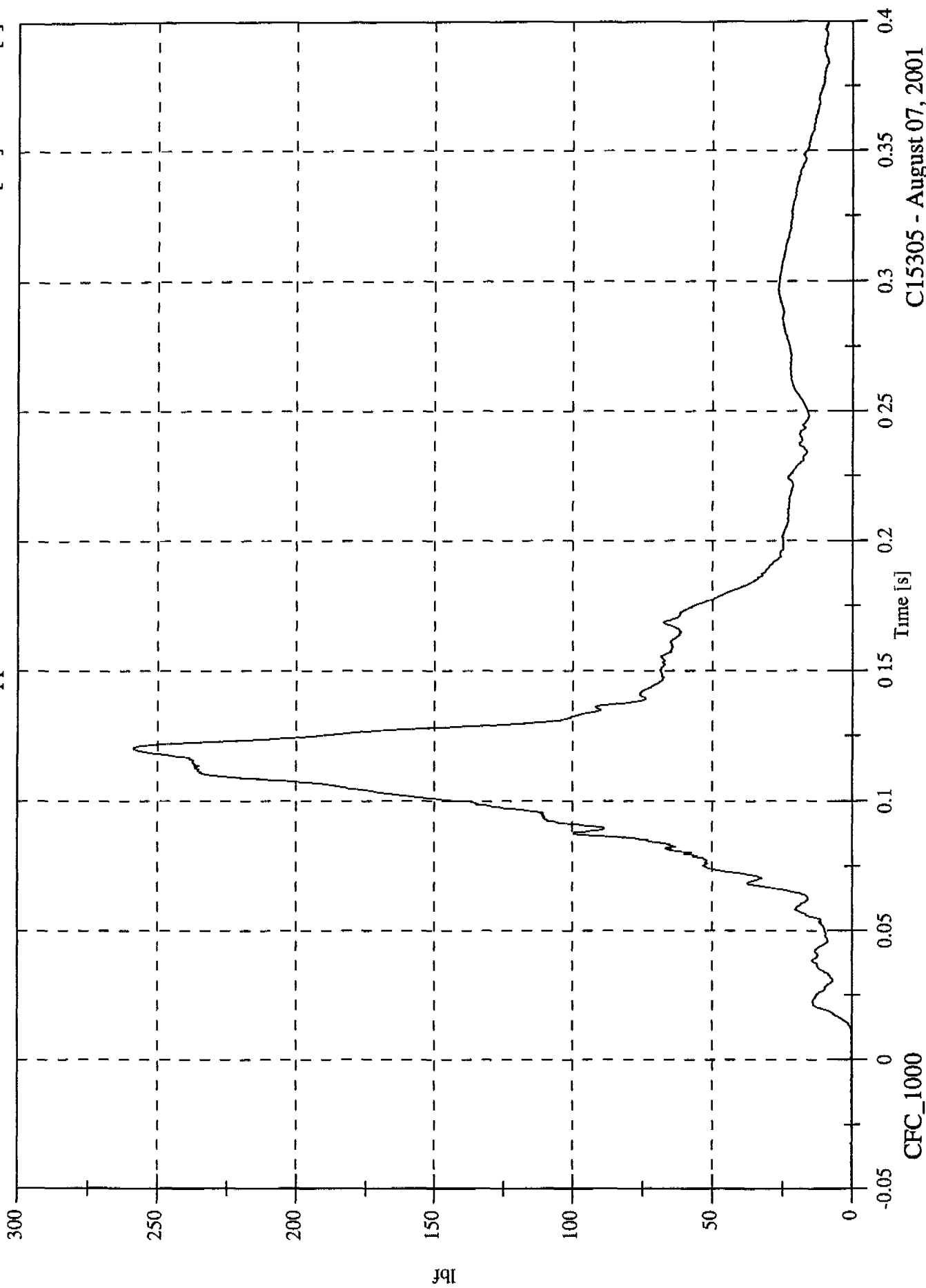
C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 258.7 [lbf] at 0.120 [s]

Min: 0.0 [lbf] at -0.030 [s]

P1 Upper Neck F Resultant



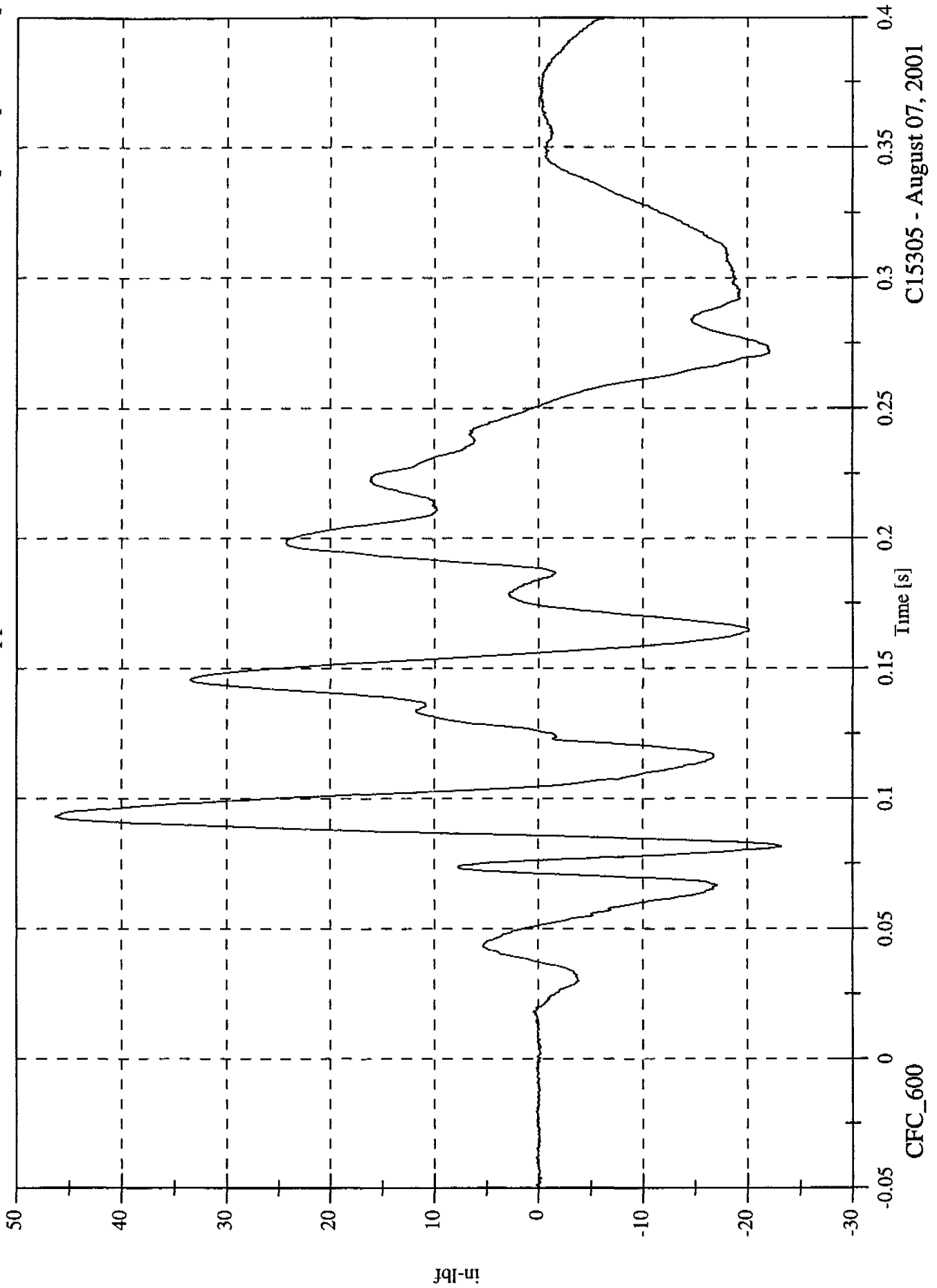
CFC_1000

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NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 46.3 [in-lbf] at 0.093 [s]
Min: -23.3 [in-lbf] at 0.081 [s]

P1 Upper Neck Mx

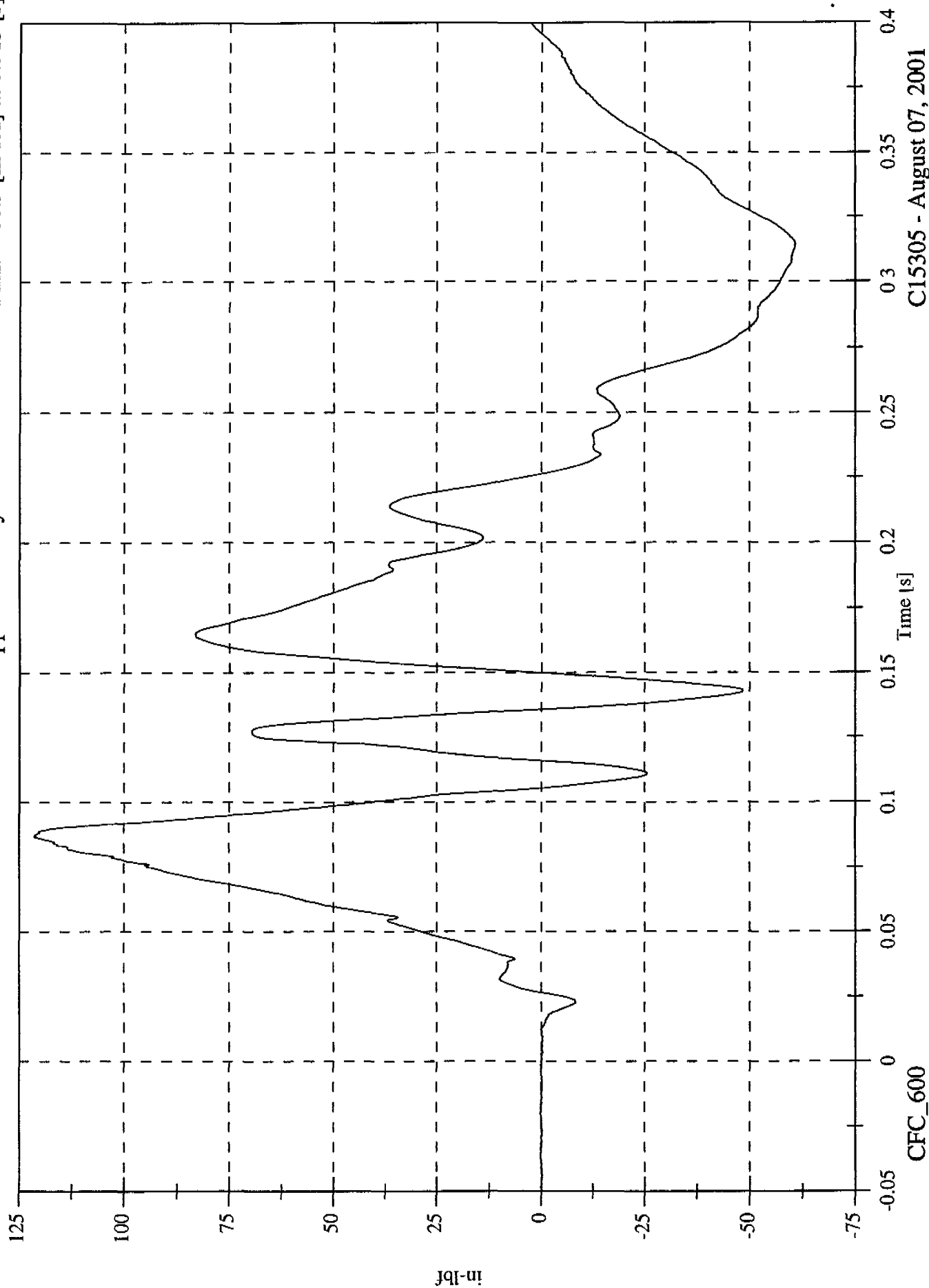


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NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Upper Neck My

Max: 121.4 [in-lbf] at 0.087 [s]
Min: -60.9 [in-lbf] at 0.313 [s]

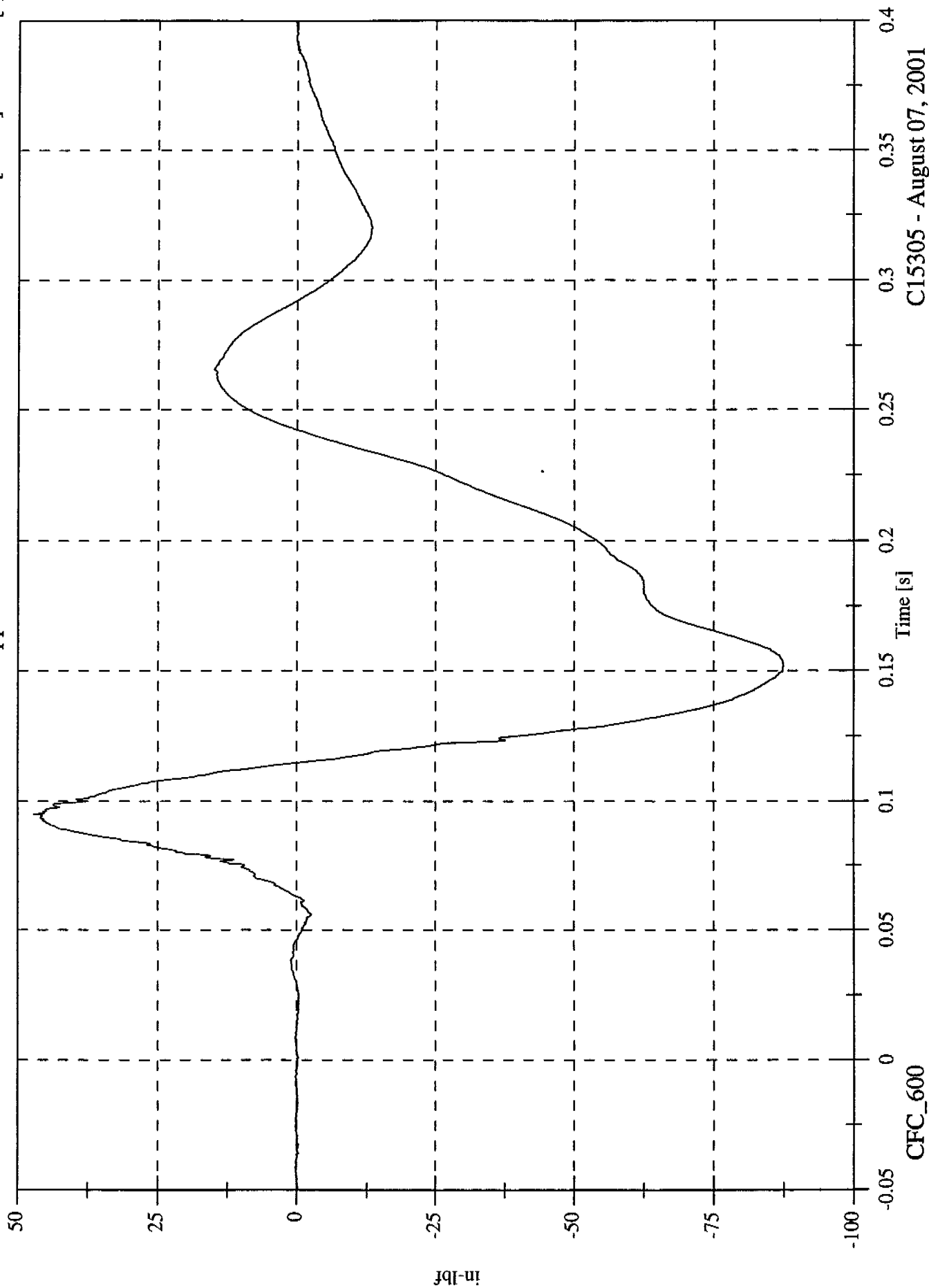


C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Upper Neck Mz

Max: 47.2 [in-lbf] at 0.095 [s]
Min: -87.5 [in-lbf] at 0.152 [s]



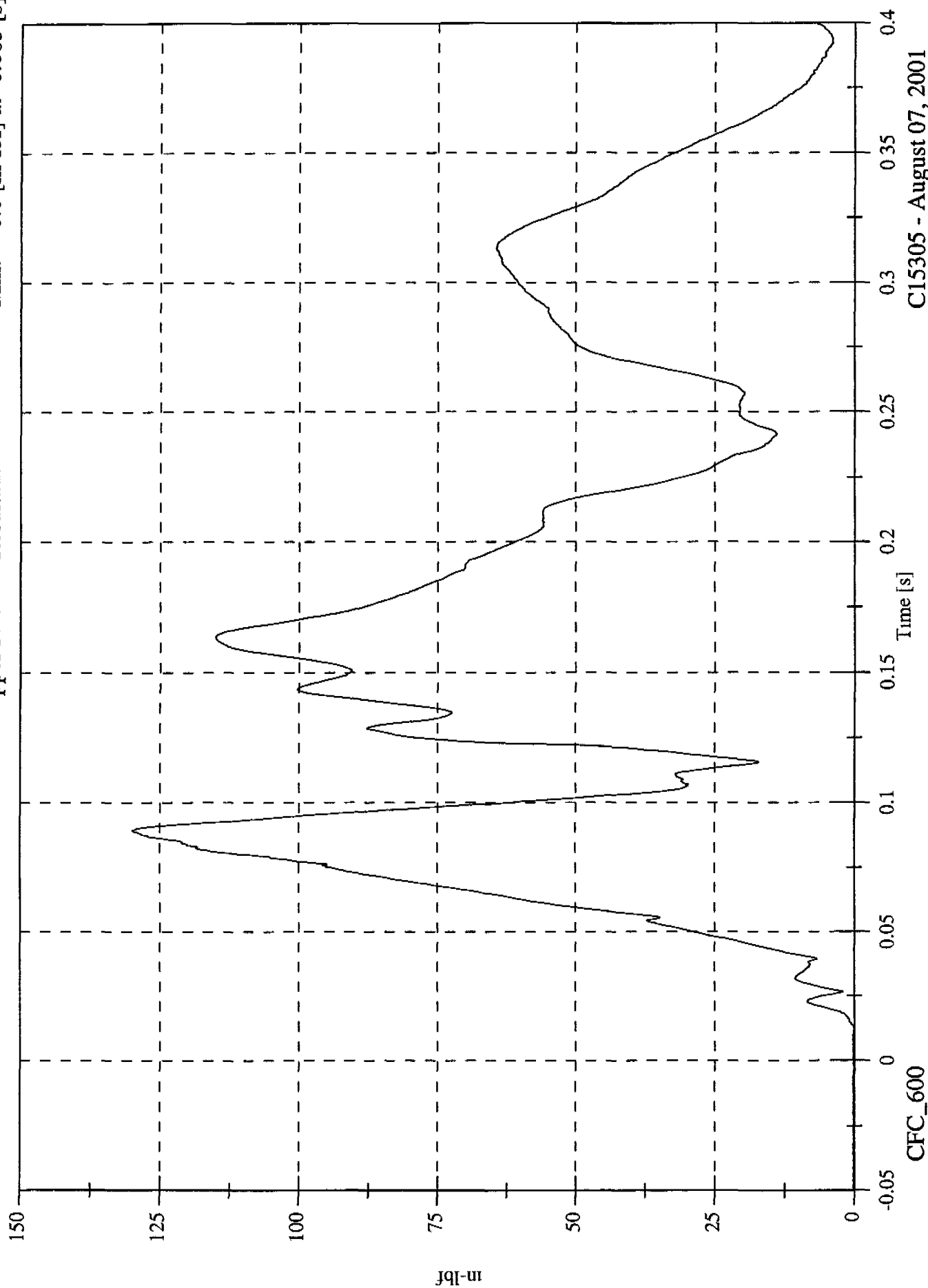
CFC_600

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Upper Neck M Resultant

Max: 129.9 [in-lbf] at 0.089 [s]
Min: 0.0 [in-lbf] at -0.005 [s]



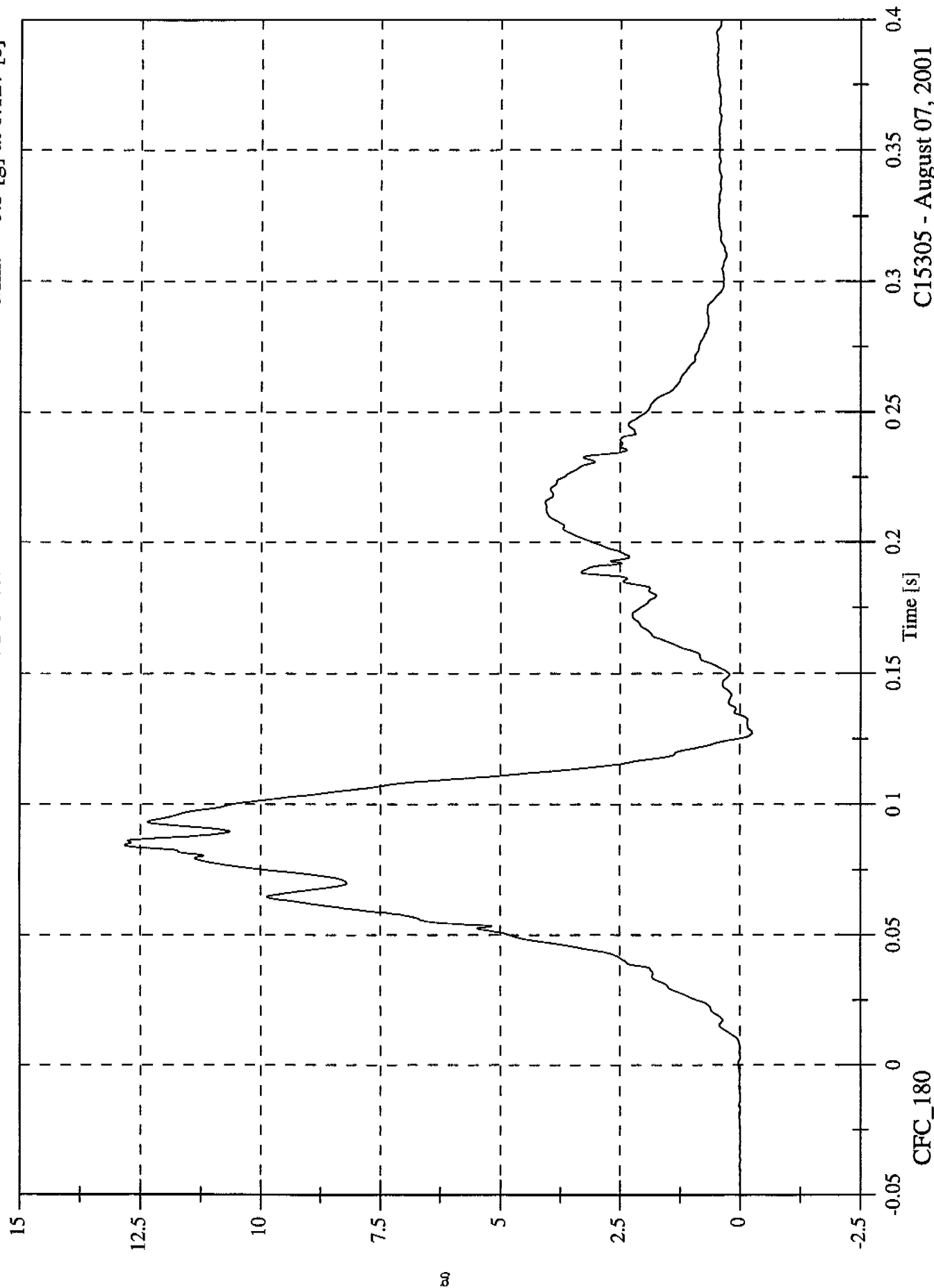
CFC_600

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 12.8 [g] at 0.084 [s]
 Min: -0.3 [g] at 0.127 [s]

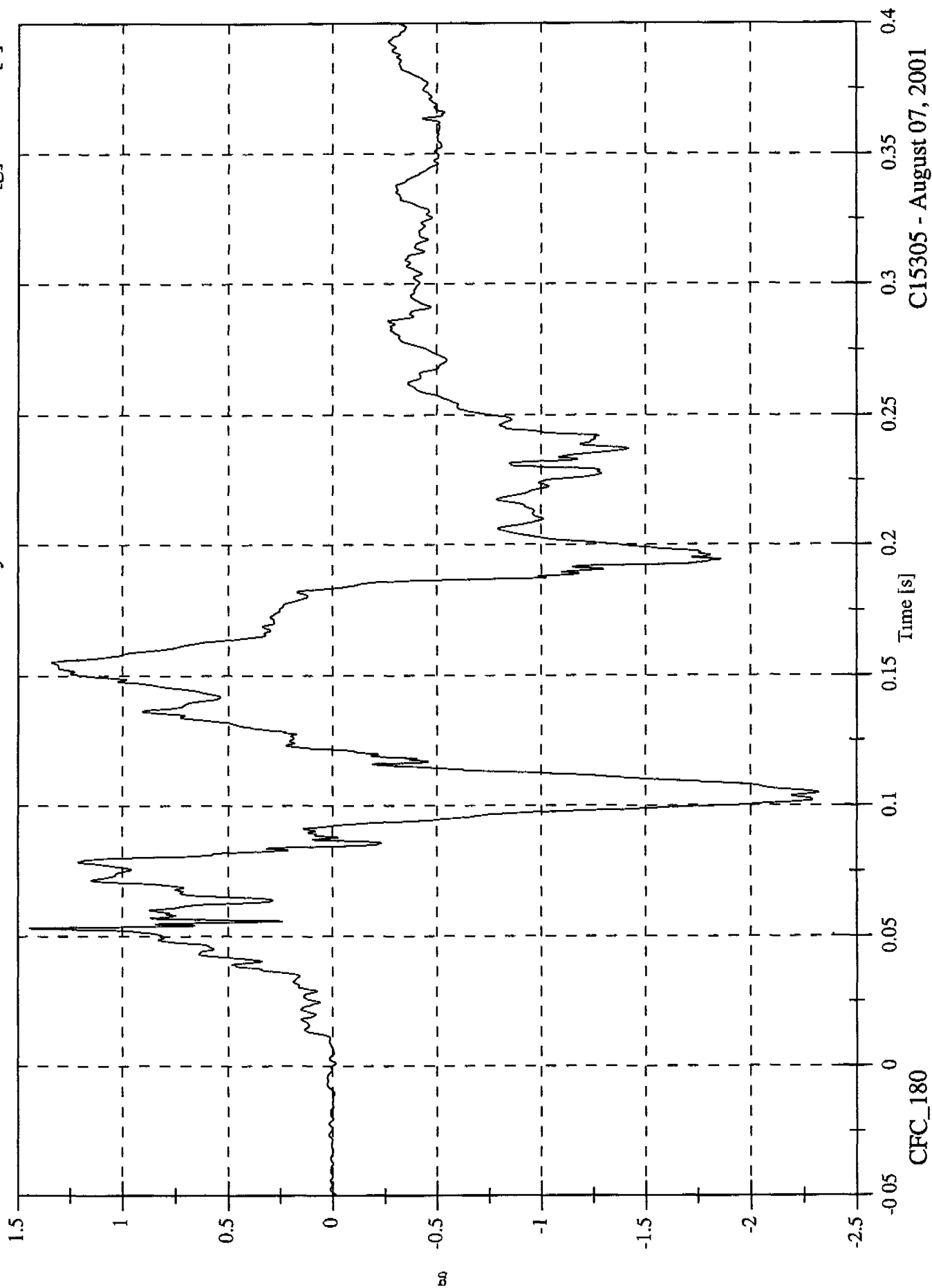
P1 Chest x



NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 1.4 [g] at 0.053 [s]
Min: -2.3 [g] at 0.105 [s]

P1 Chest y



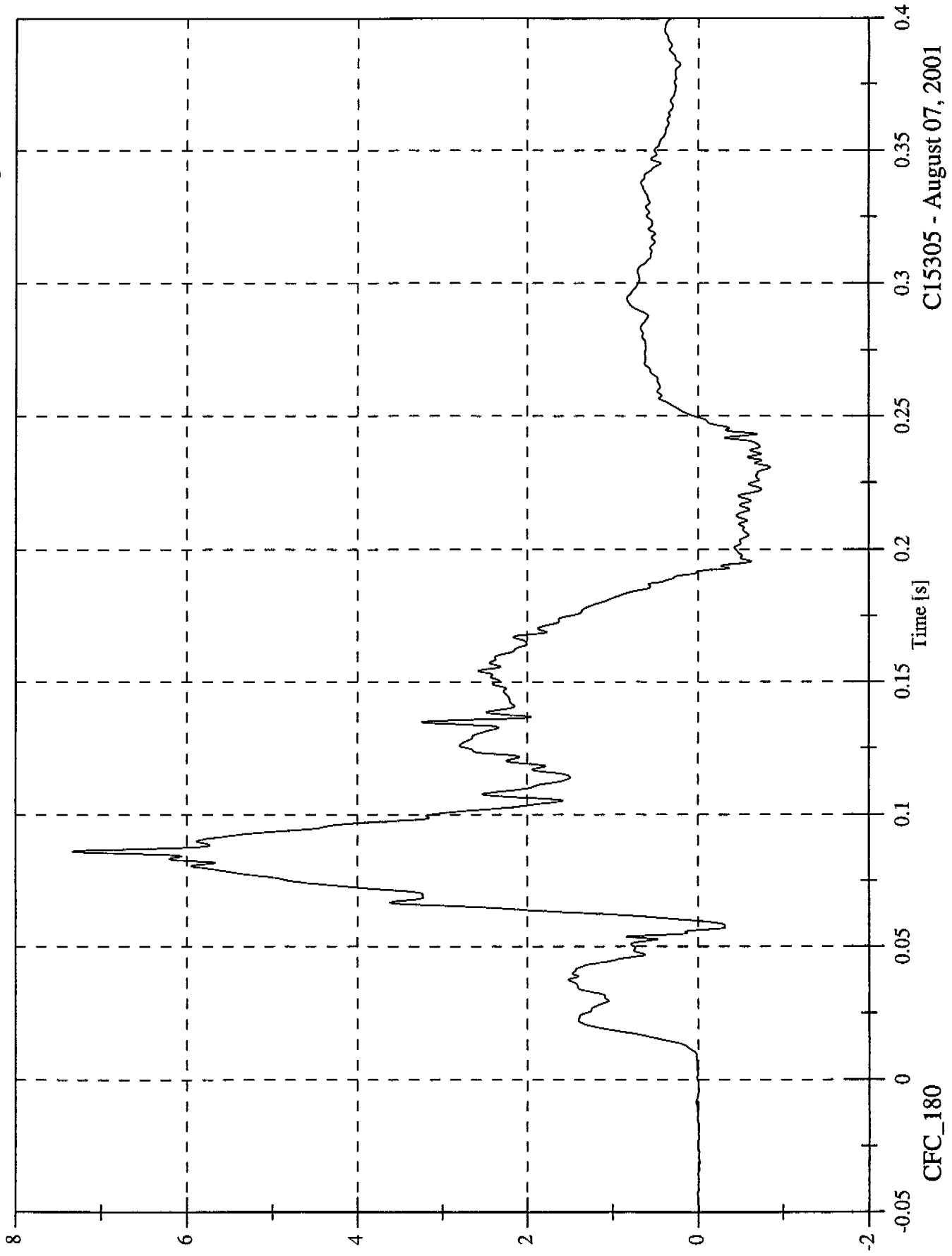
CFC_180

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 7.3 [g] at 0.086 [s]
Min: -0.9 [g] at 0.231 [s]

P1 Chest z

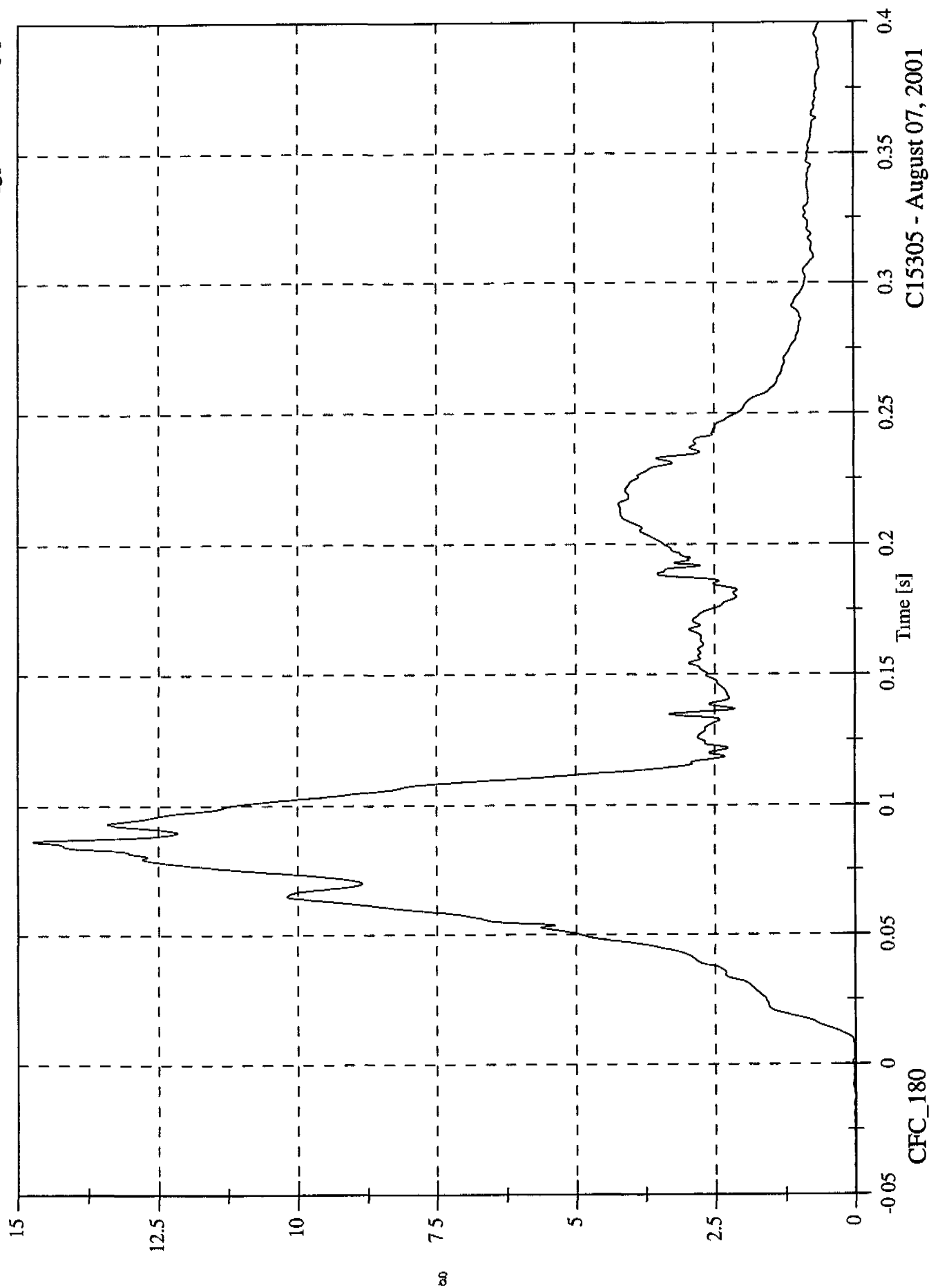


CI5305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Chest Resultant

Max: 14.7 [g] at 0.086 [s]
Min: 0.0 [g] at -0.012 [s]



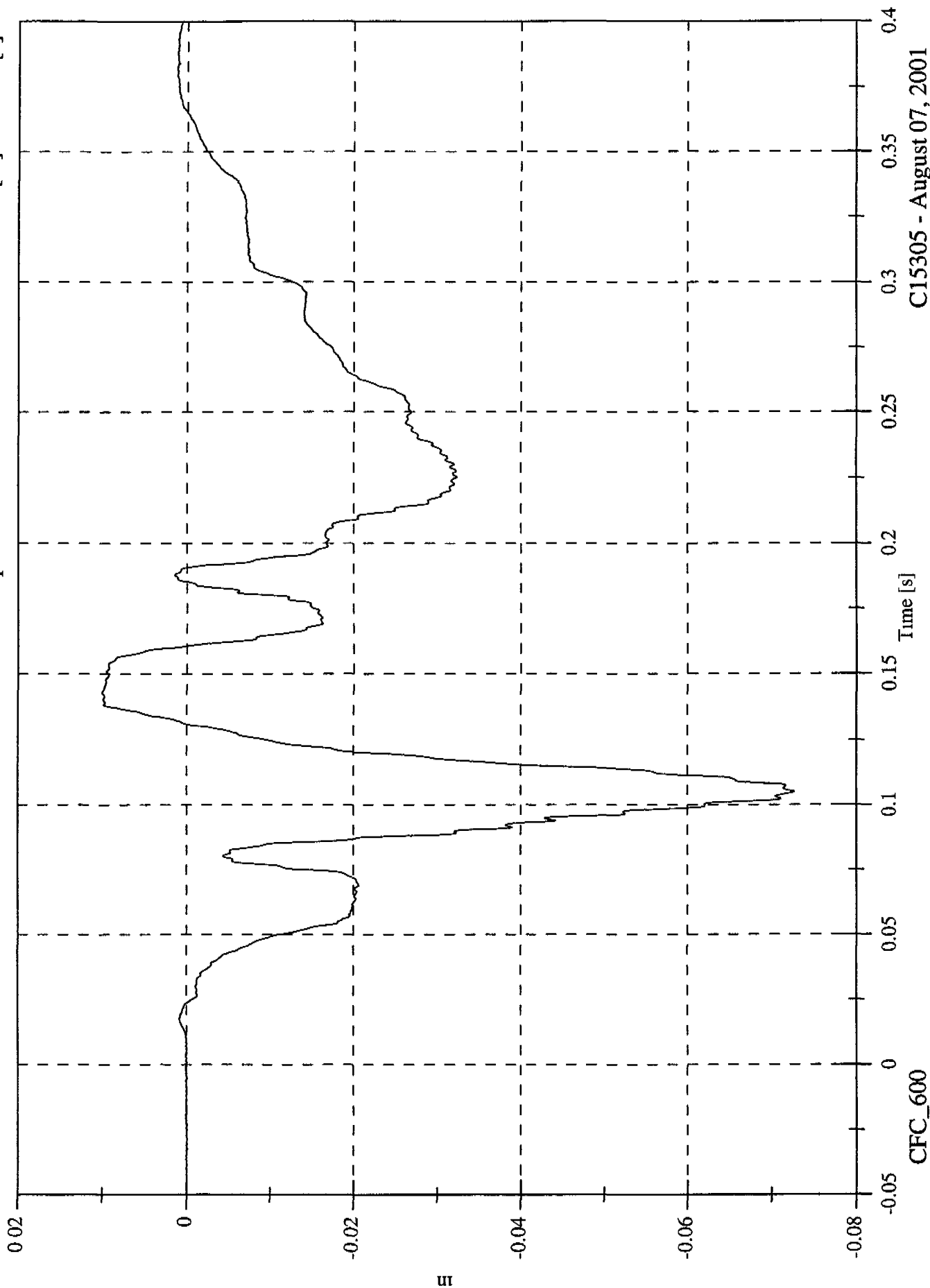
CFC_180

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 0.0 [in] at 0.143 [s]
 Min: -0.1 [in] at 0.105 [s]

P1 Chest Compression



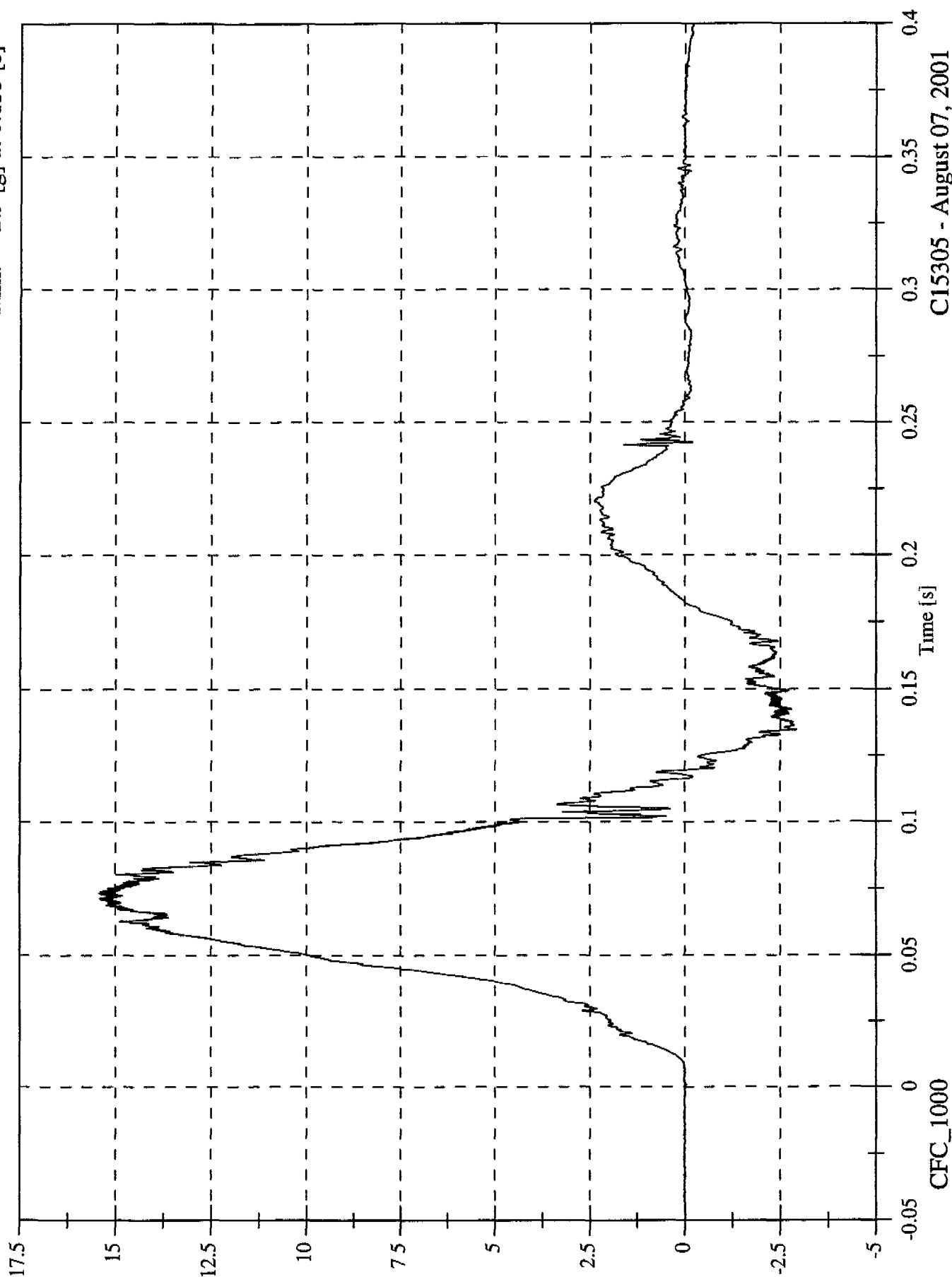
CFC_600

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 15.4 [g] at 0.073 [s]
Min: -2.9 [g] at 0.135 [s]

P1 Pelvic x



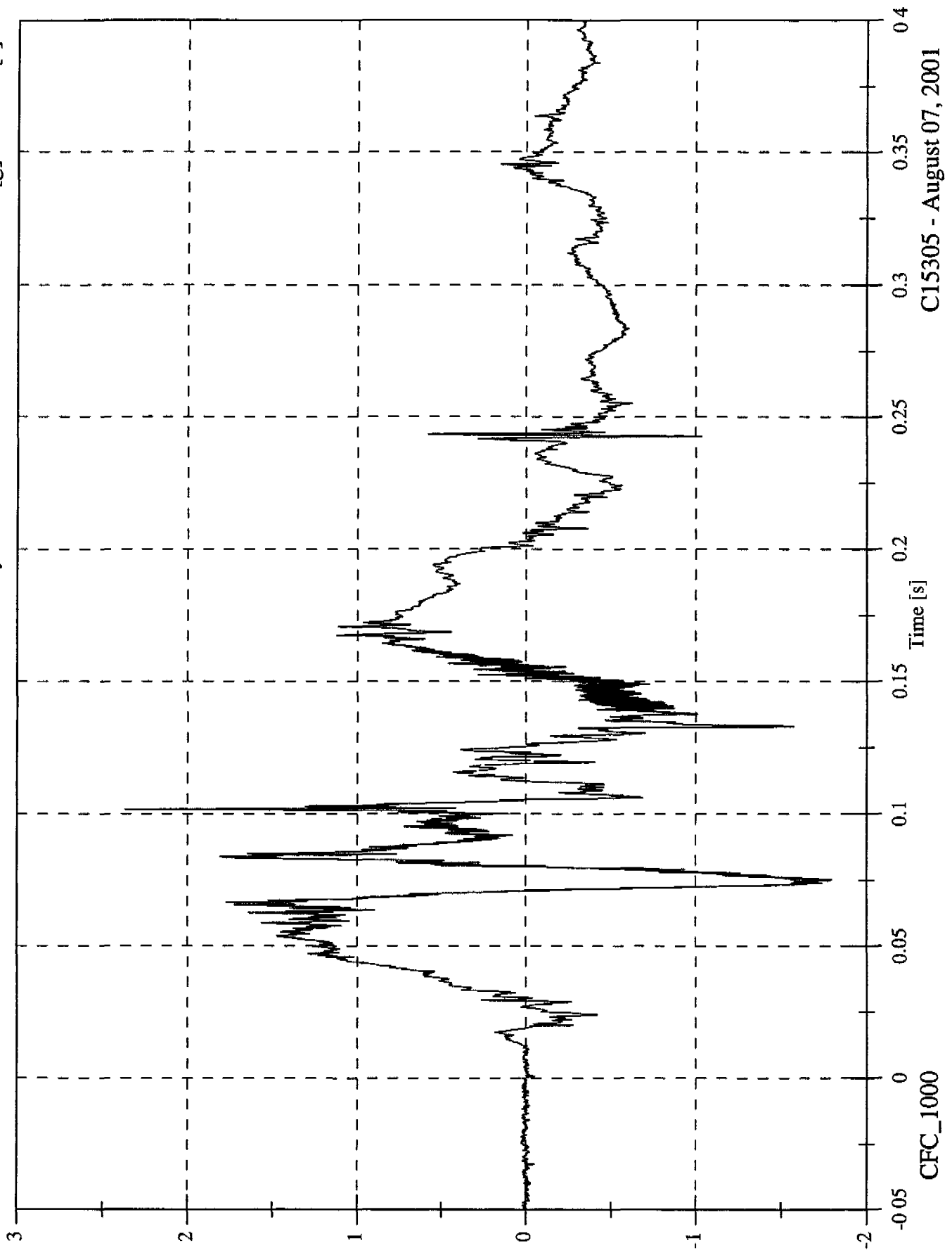
CFC_1000

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 2.4 [g] at 0.102 [s]
 Min: -1.8 [g] at 0.075 [s]

P1 Pelvic y

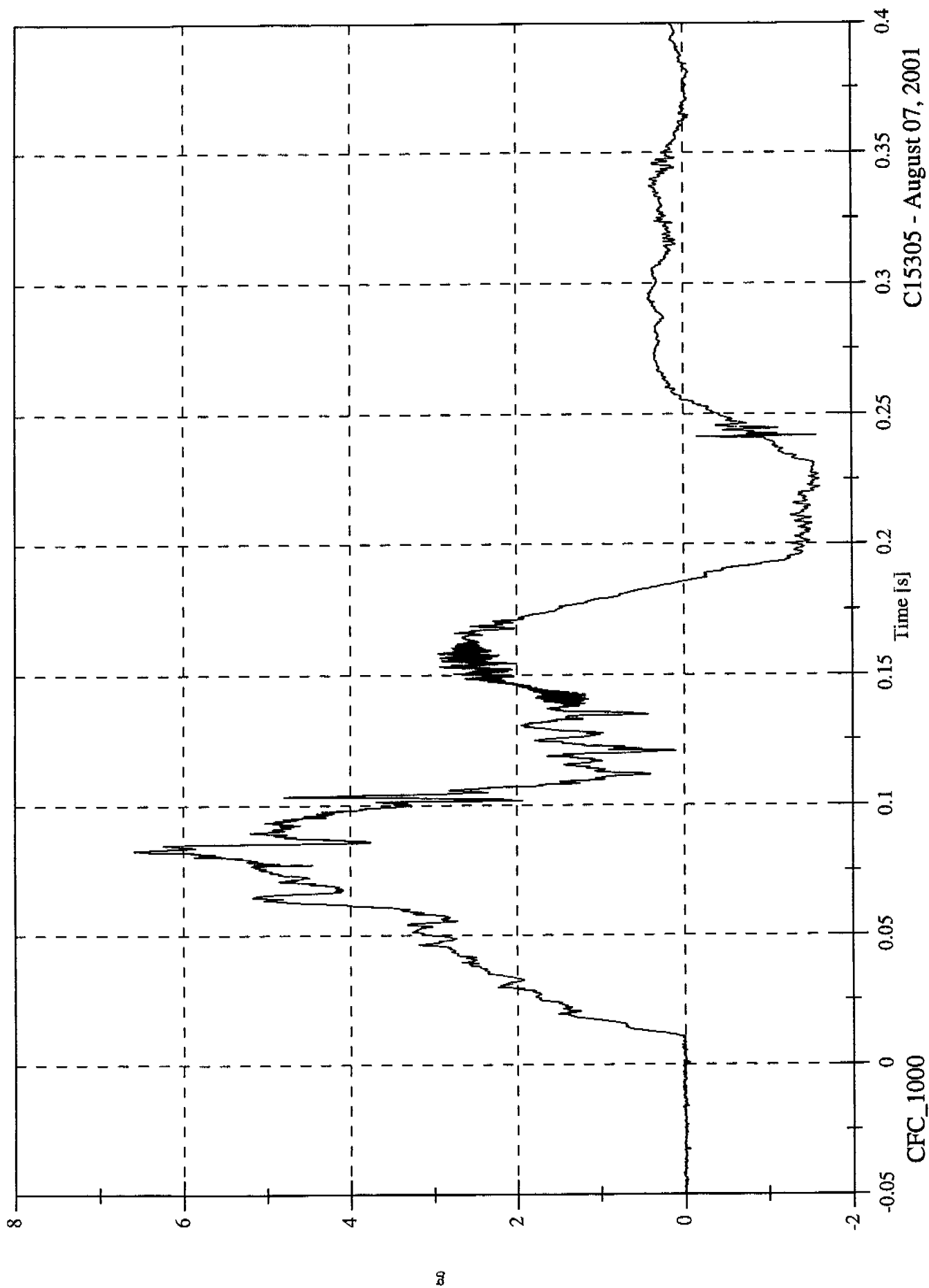


C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 6.6 [g] at 0.083 [s]
Min: -1.6 [g] at 0.222 [s]

P1 Pelvic z



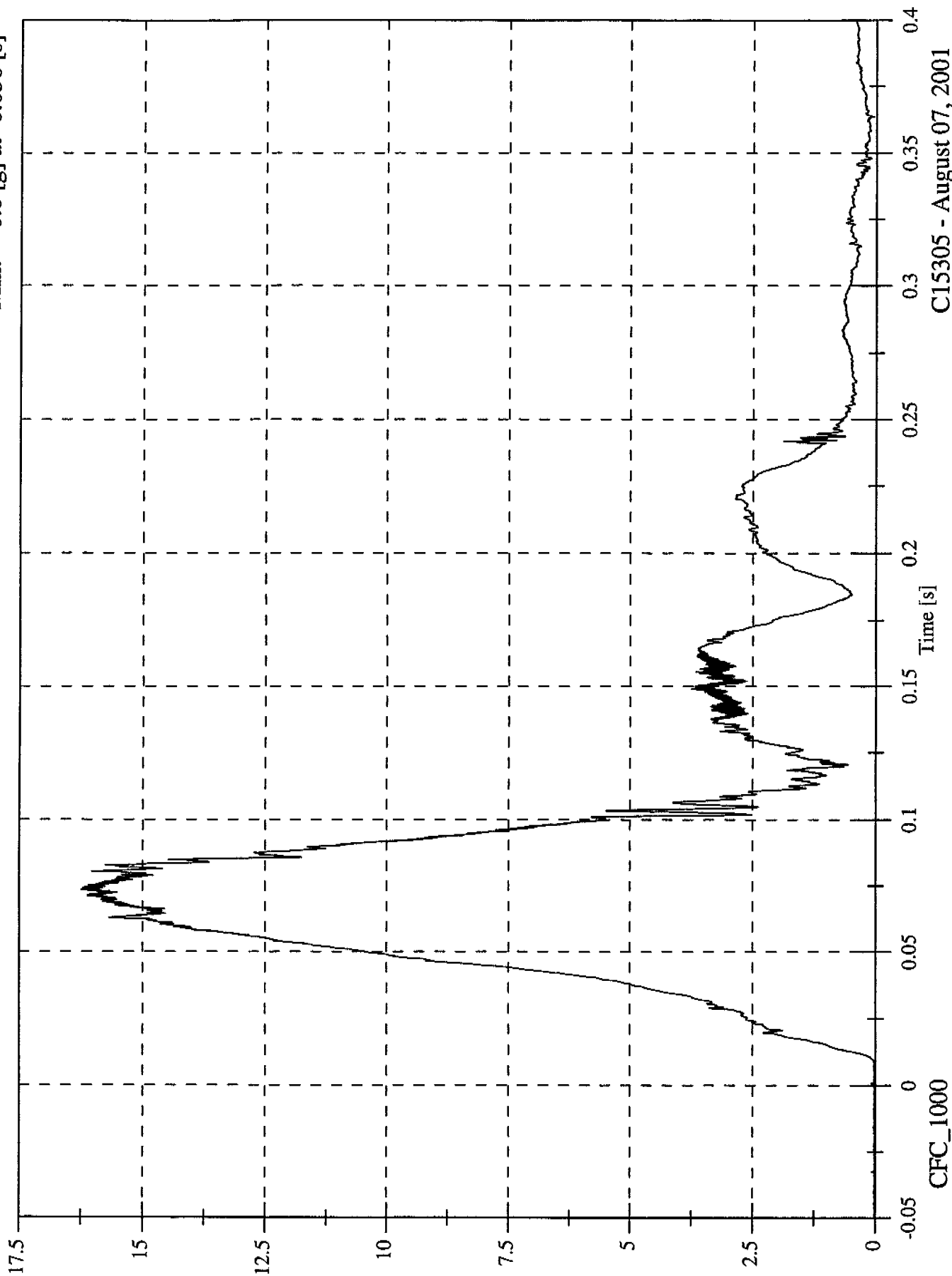
CFC_1000

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Pelvic Resultant

Max: 16.2 [g] at 0.073 [s]
Min: 0.0 [g] at -0.036 [s]



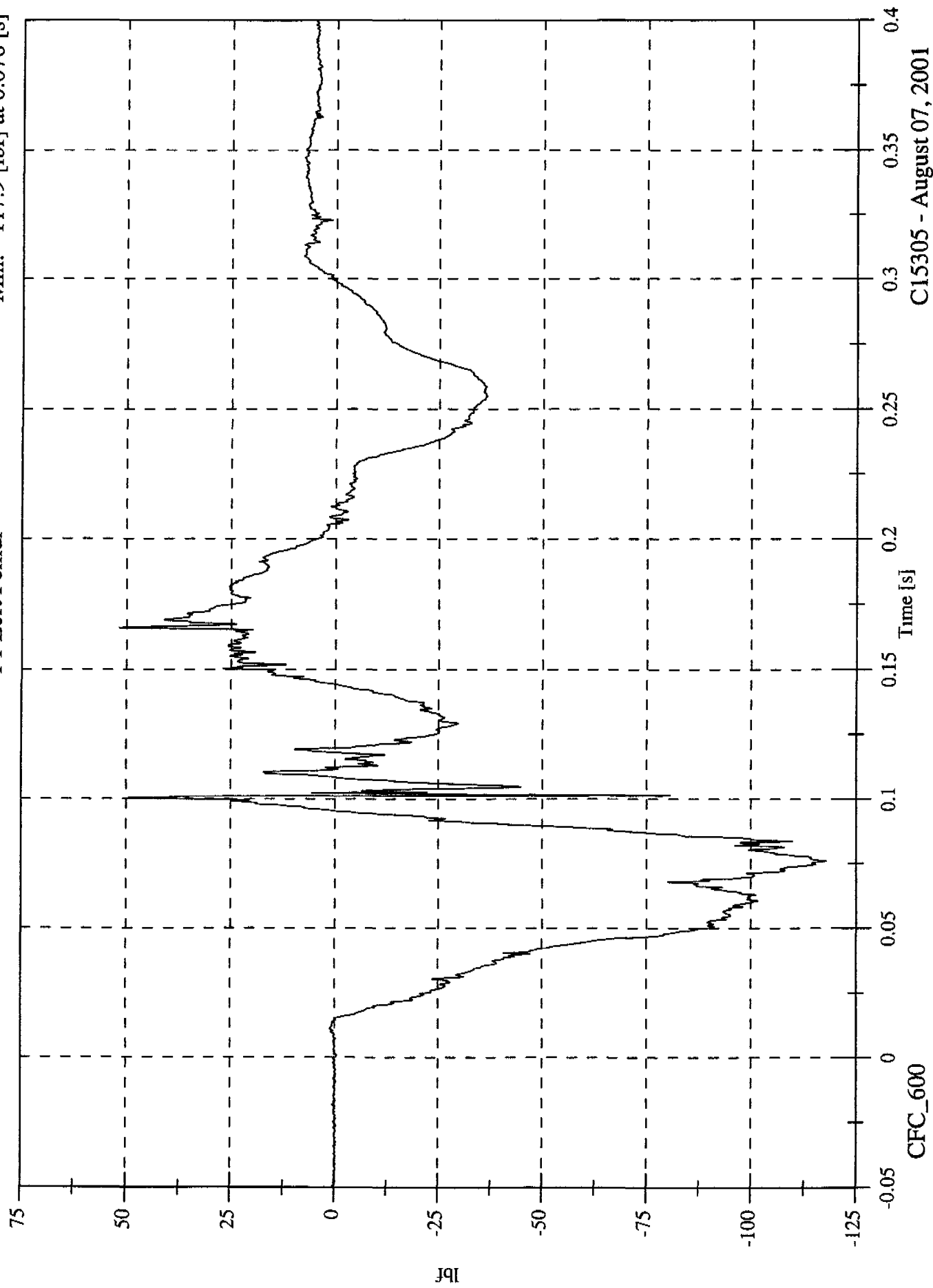
CFC_1000

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Left Femur

Max: 51.7 [lbf] at 0.166 [s]
Min: -117.9 [lbf] at 0.076 [s]

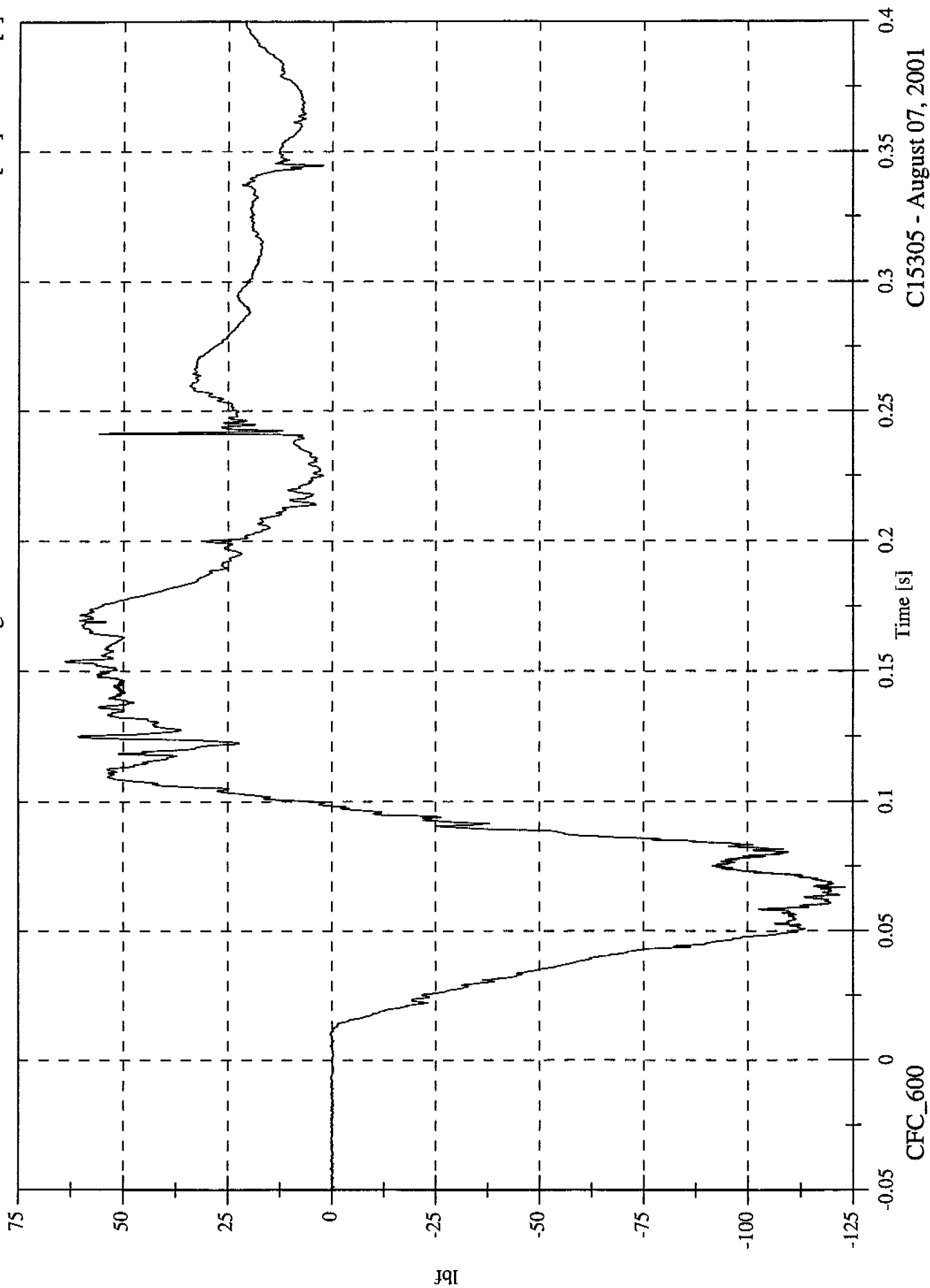


C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Right Femur

Max: 64.0 [lbf] at 0.154 [s]
Min: -123.1 [lbf] at 0.067 [s]



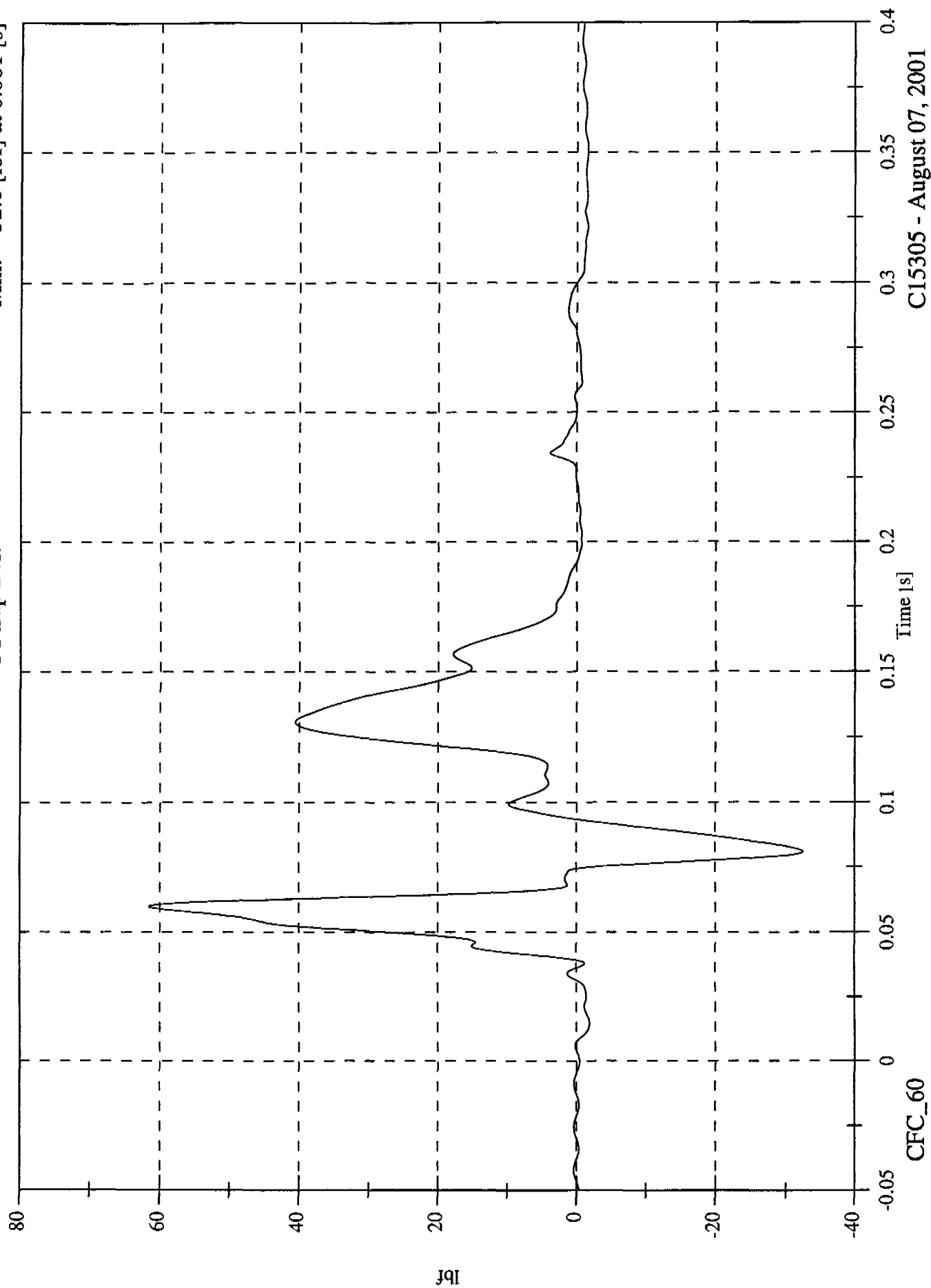
CFC_600

CI5305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Lap Belt

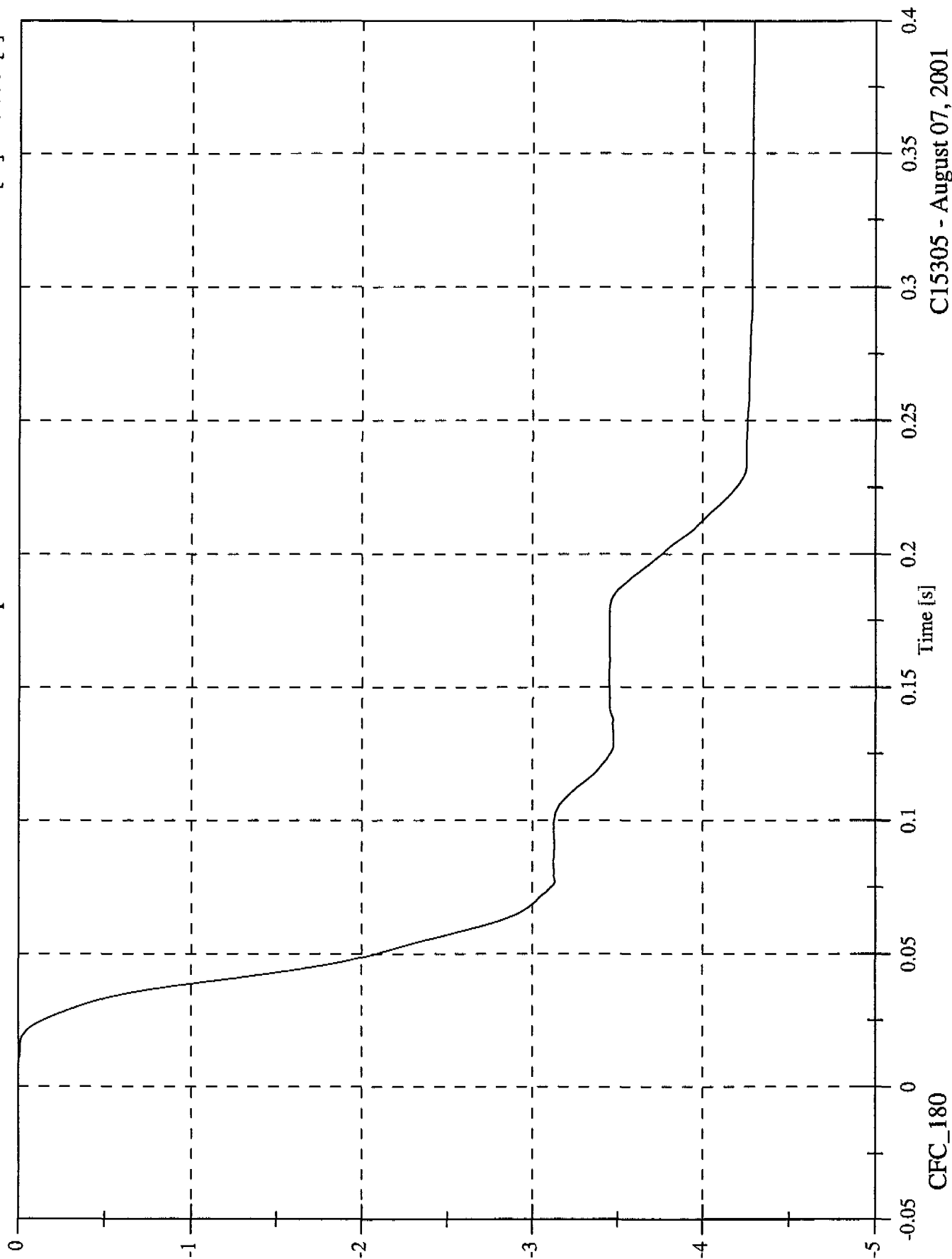
Max: 61.5 [lbf] at 0.060 [s]
Min: -32.6 [lbf] at 0.081 [s]



NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

P1 Belt Spoolout

Max: 0.0 [in] at 0.004 [s]
Min: -4.3 [in] at 0.399 [s]



CFC_180

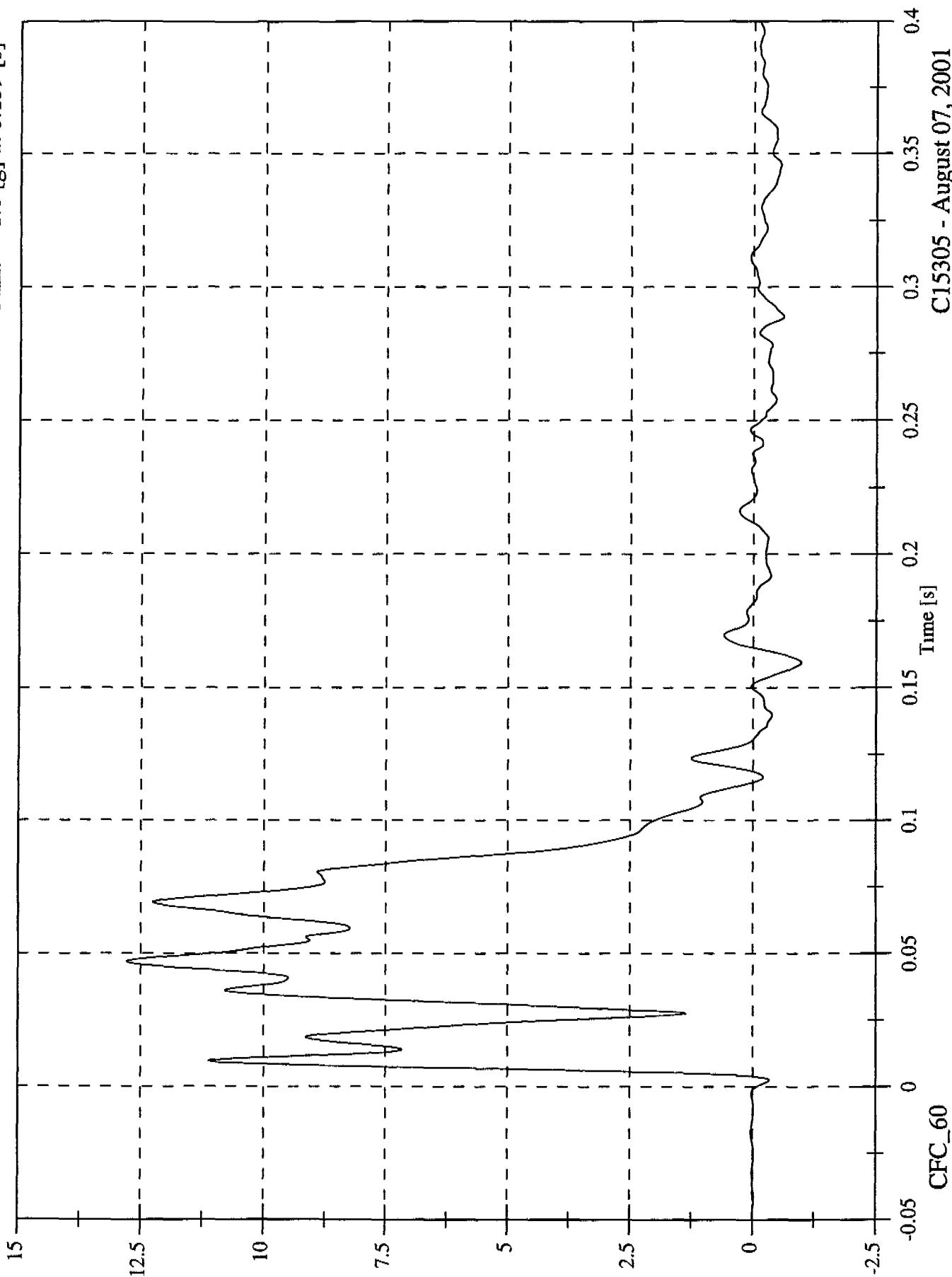
CI5305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Acc #1 Left Rear X_m Ax

Max: 12.8 [g] at 0.047 [s]

Min: -1.0 [g] at 0.159 [s]



CFC_60

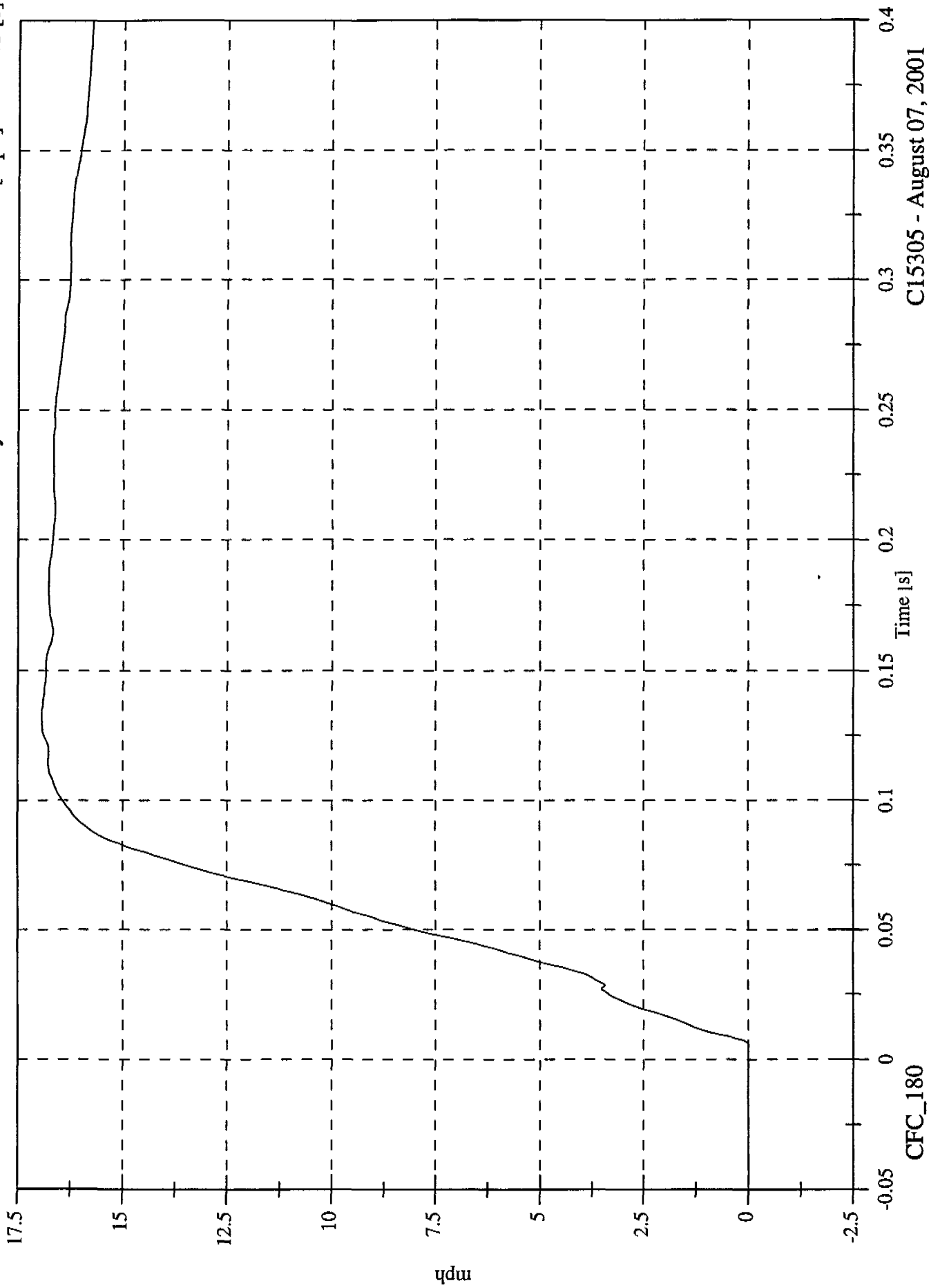
C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 16.9 [mph] at 0.132 [s]

Min: -0.0 [mph] at -0.021 [s]

Acc #1 Left Rear X_m Ax Velocity



CFC_180

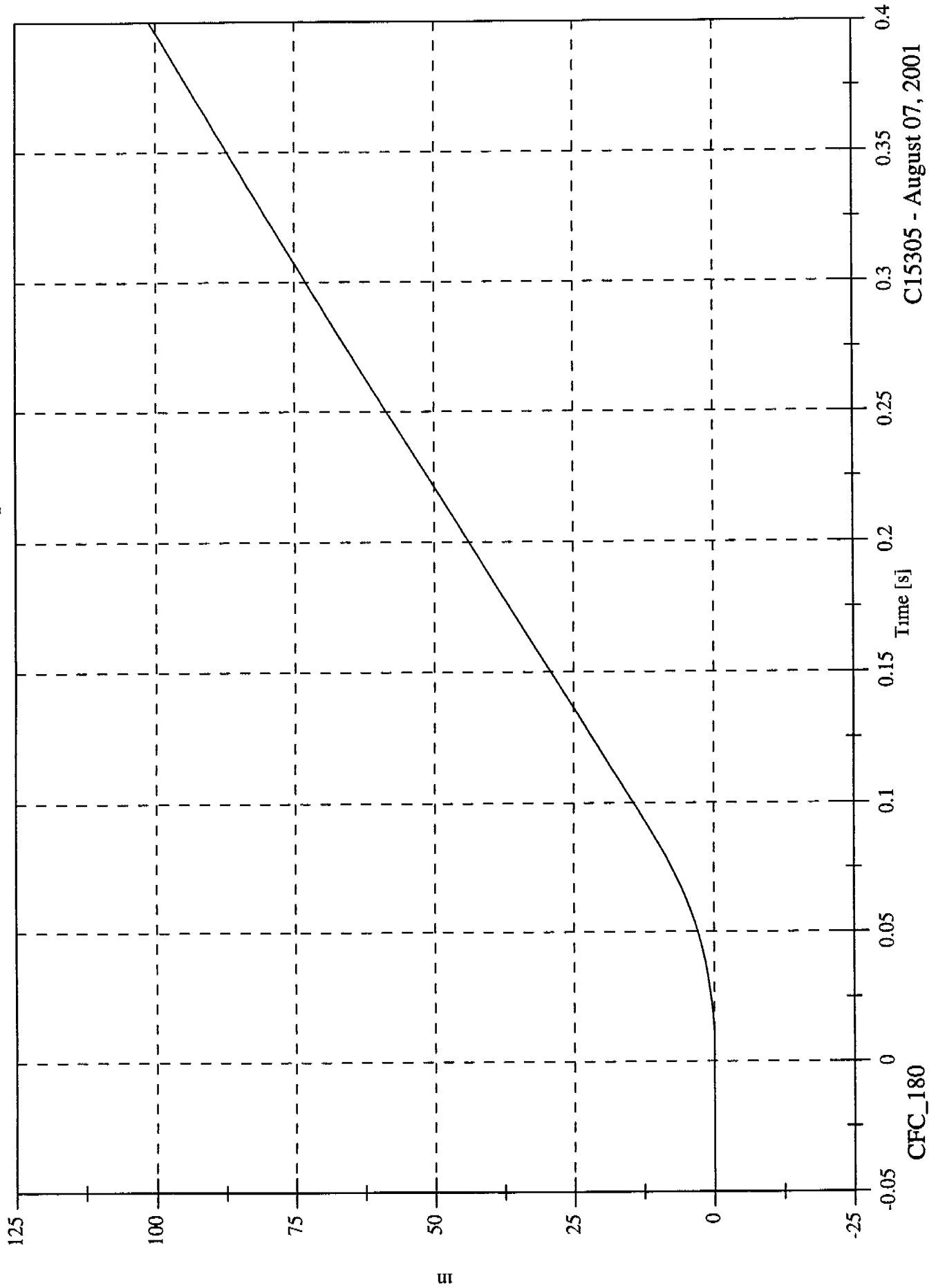
C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 101.1 [in] at 0.400 [s]

Min: -0.0 [in] at 0.000 [s]

Acc #1 Left Rear X_m Ax Displacement



CFC_180

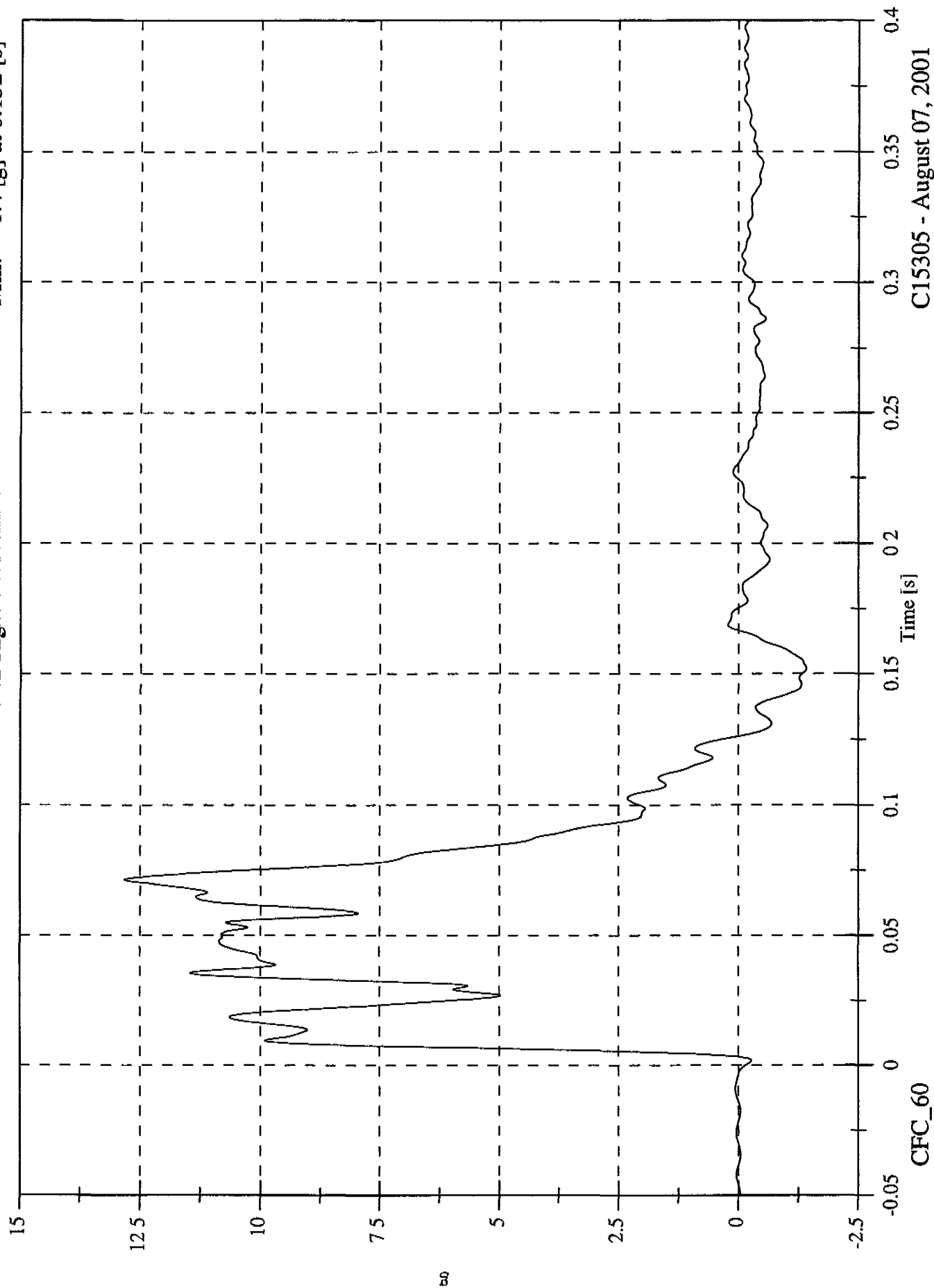
C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Acc #2 Right Rear Xm Ax

Max: 12.8 [g] at 0.071 [s]

Min: -1.4 [g] at 0.152 [s]



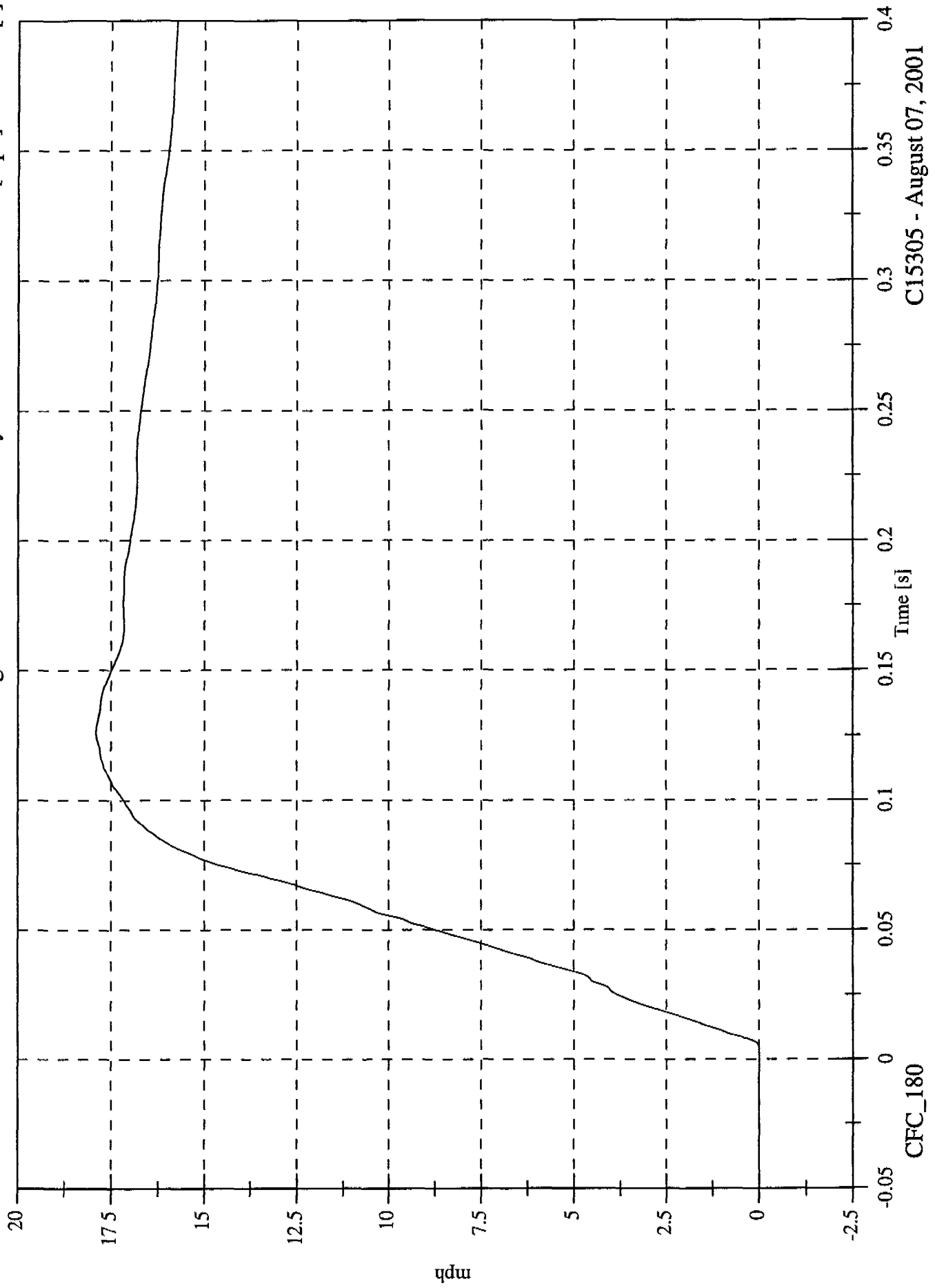
CFC_60

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 17.9 [mph] at 0.126 [s]
Min: -0.0 [mph] at -0.030 [s]

Acc #2 Right Rear Xm Ax Velocity



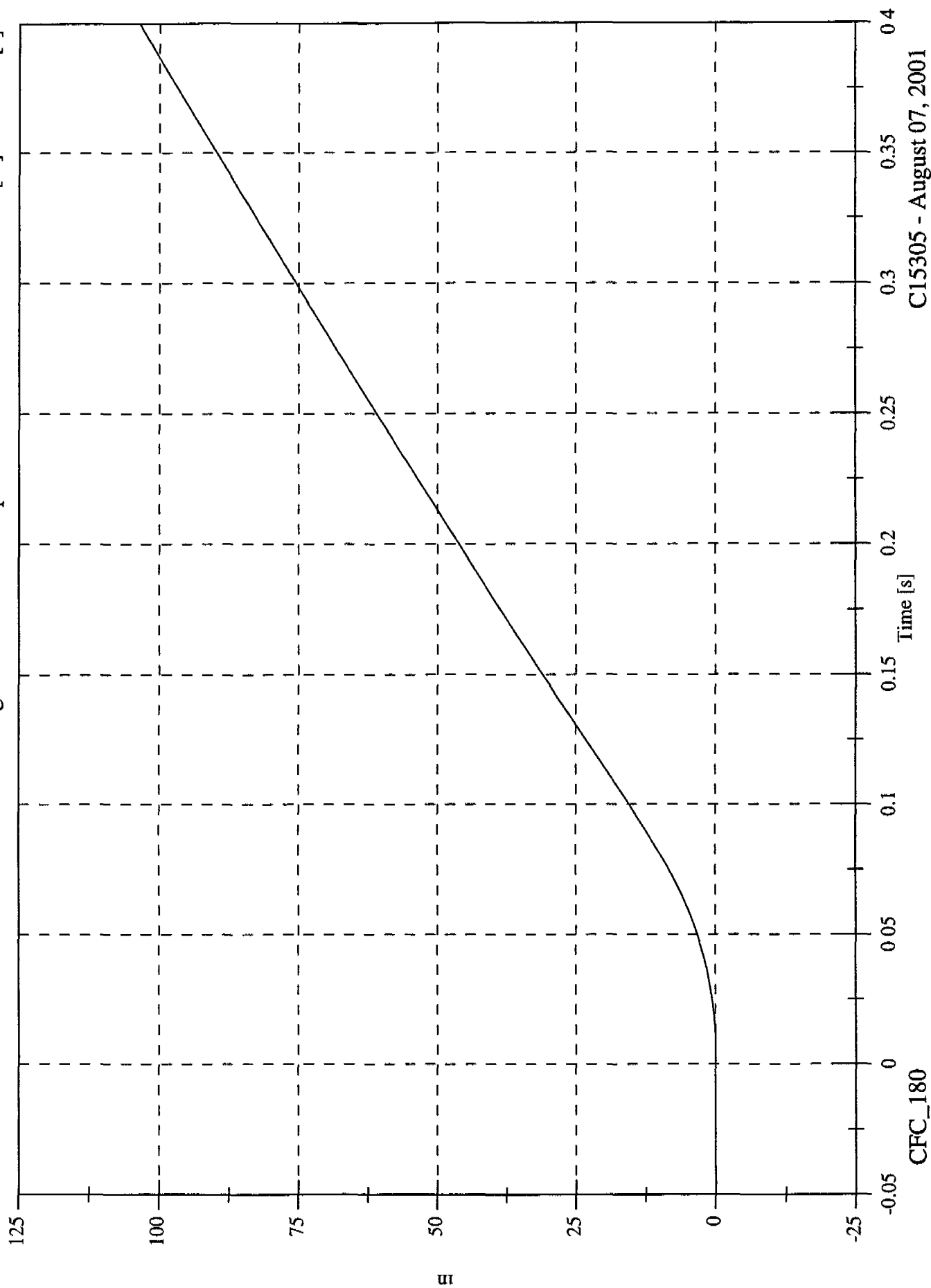
CFC_180

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Acc #2 Right Rear Xm Ax Displacement

Max: 103.6 [in] at 0.400 [s]
Min: -0.0 [in] at -0.010 [s]



CFC_180

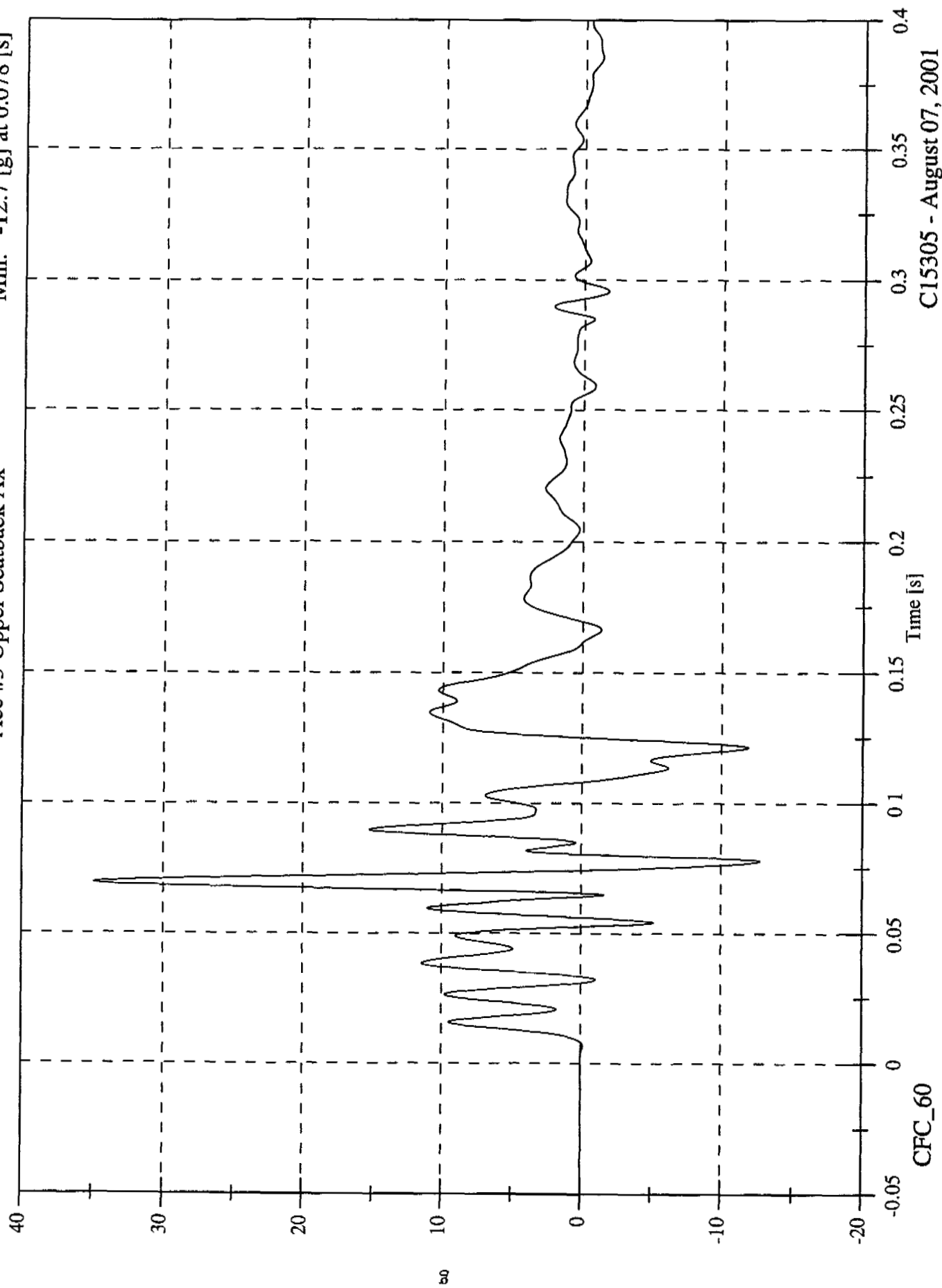
C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Acc #3 Upper Seatback Ax

Max: 34.9 [g] at 0.070 [s]

Min: -12.7 [g] at 0.078 [s]

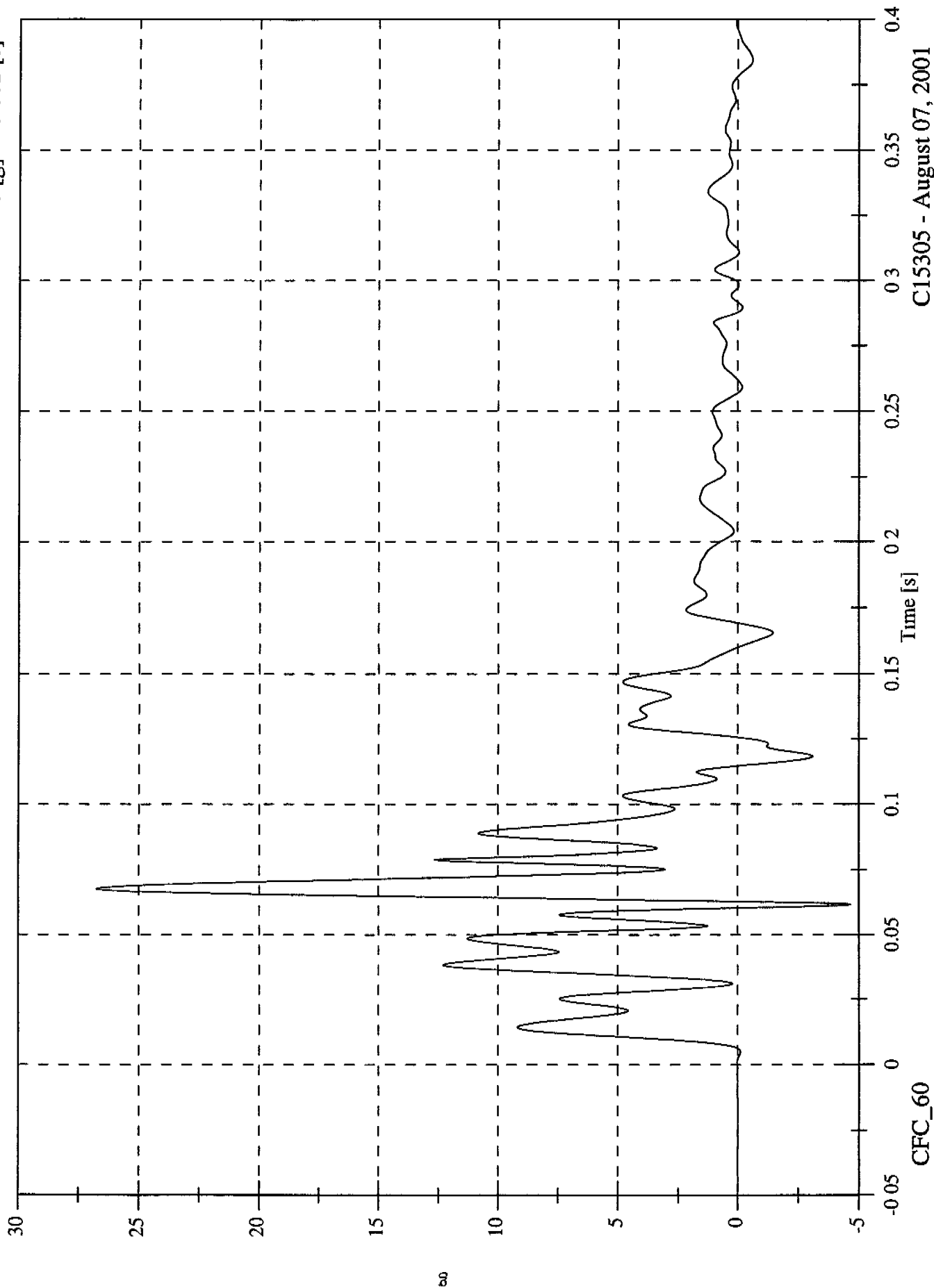


C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Acc #4 Lower Seatback Ax

Max: 26.7 [g] at 0.068 [s]
Min: -4.6 [g] at 0.062 [s]



CFC_60

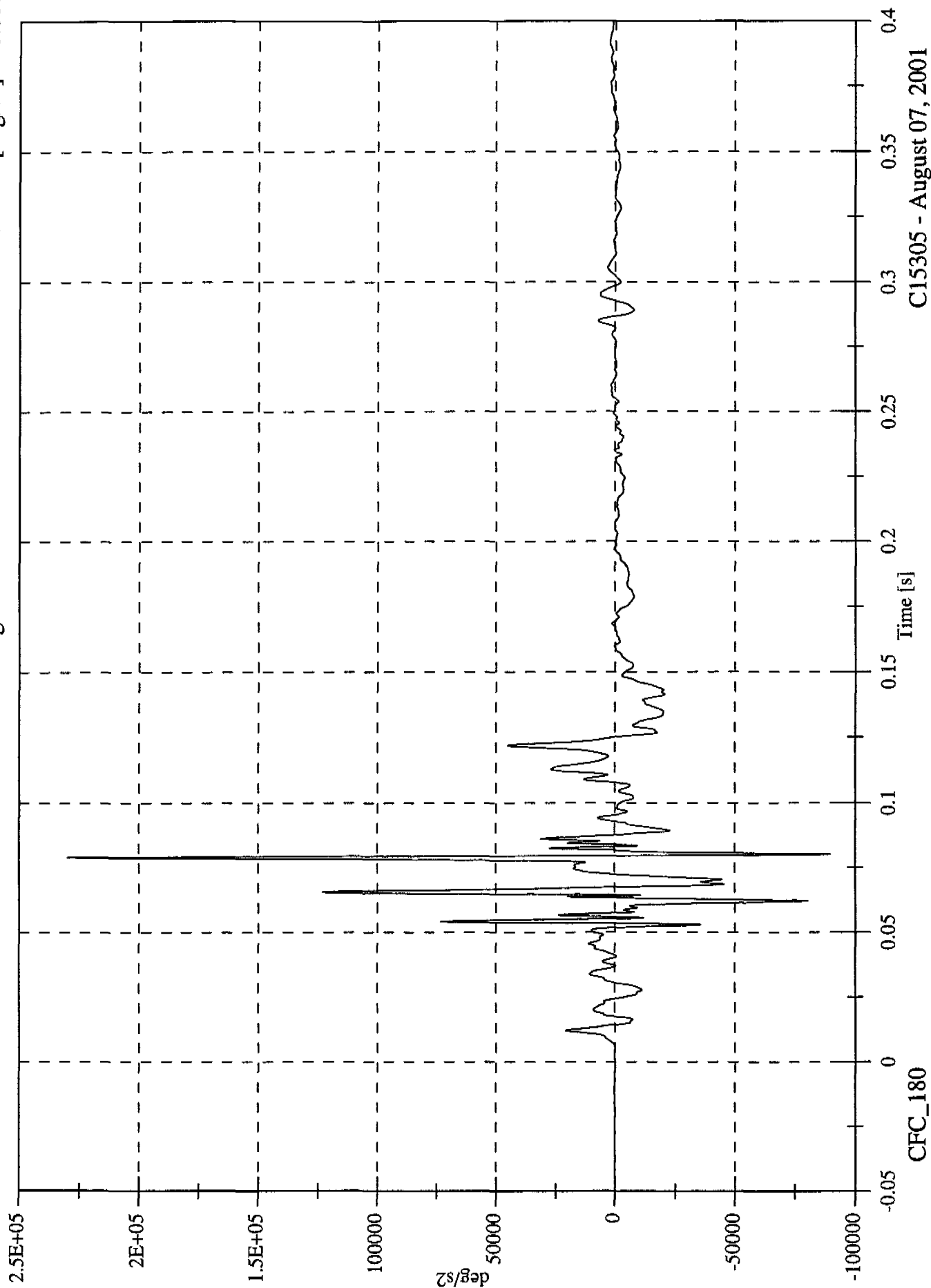
C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 229828.7 [deg/s²] at 0.079 [s]

Seatback Angular Acceleration

Min: -89704.4 [deg/s²] at 0.080 [s]



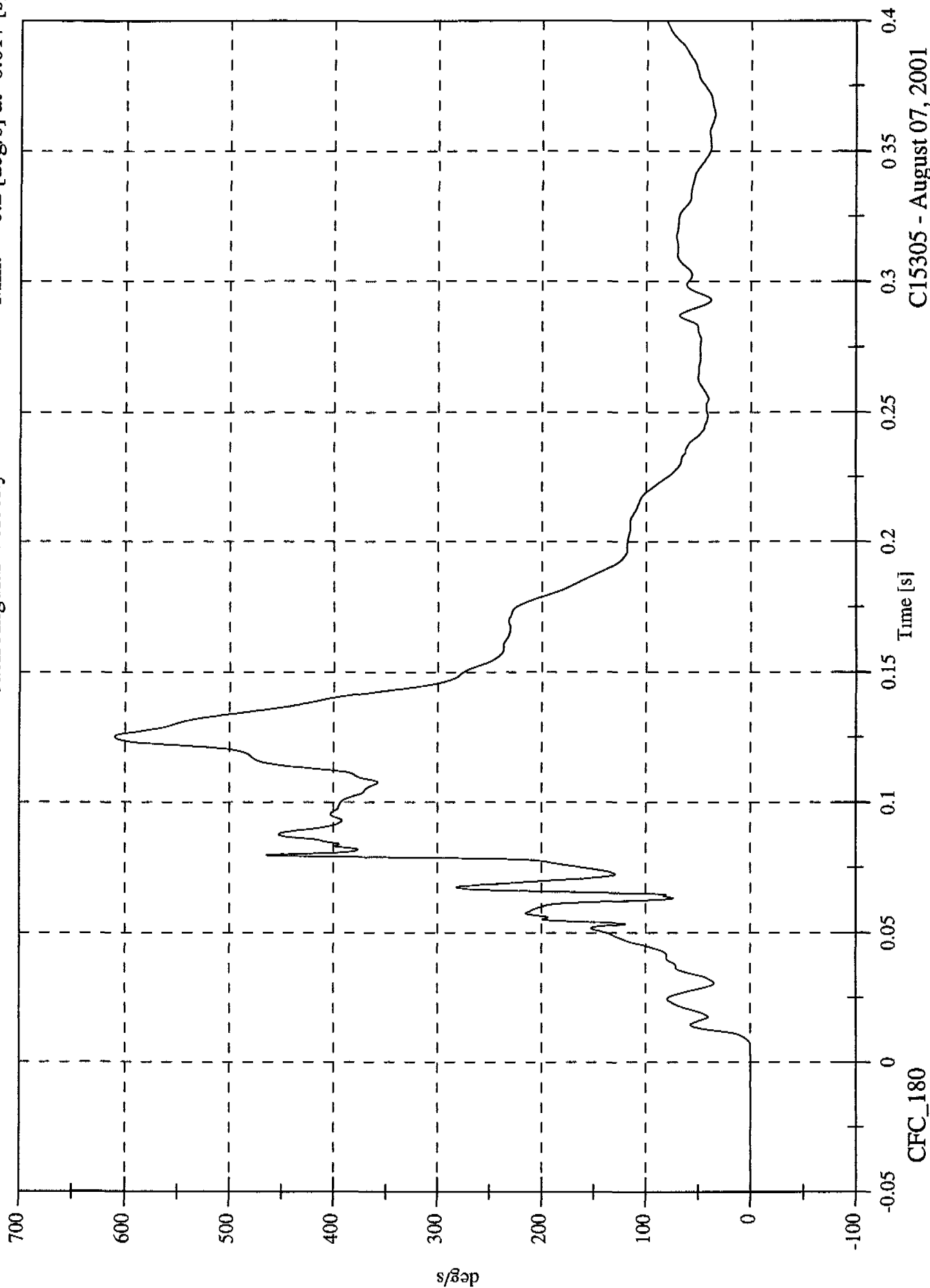
CFC_180

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Max: 609.4 [deg/s] at 0.125 [s]
 Min: -0.2 [deg/s] at -0.017 [s]

Seataback Angular Velocity



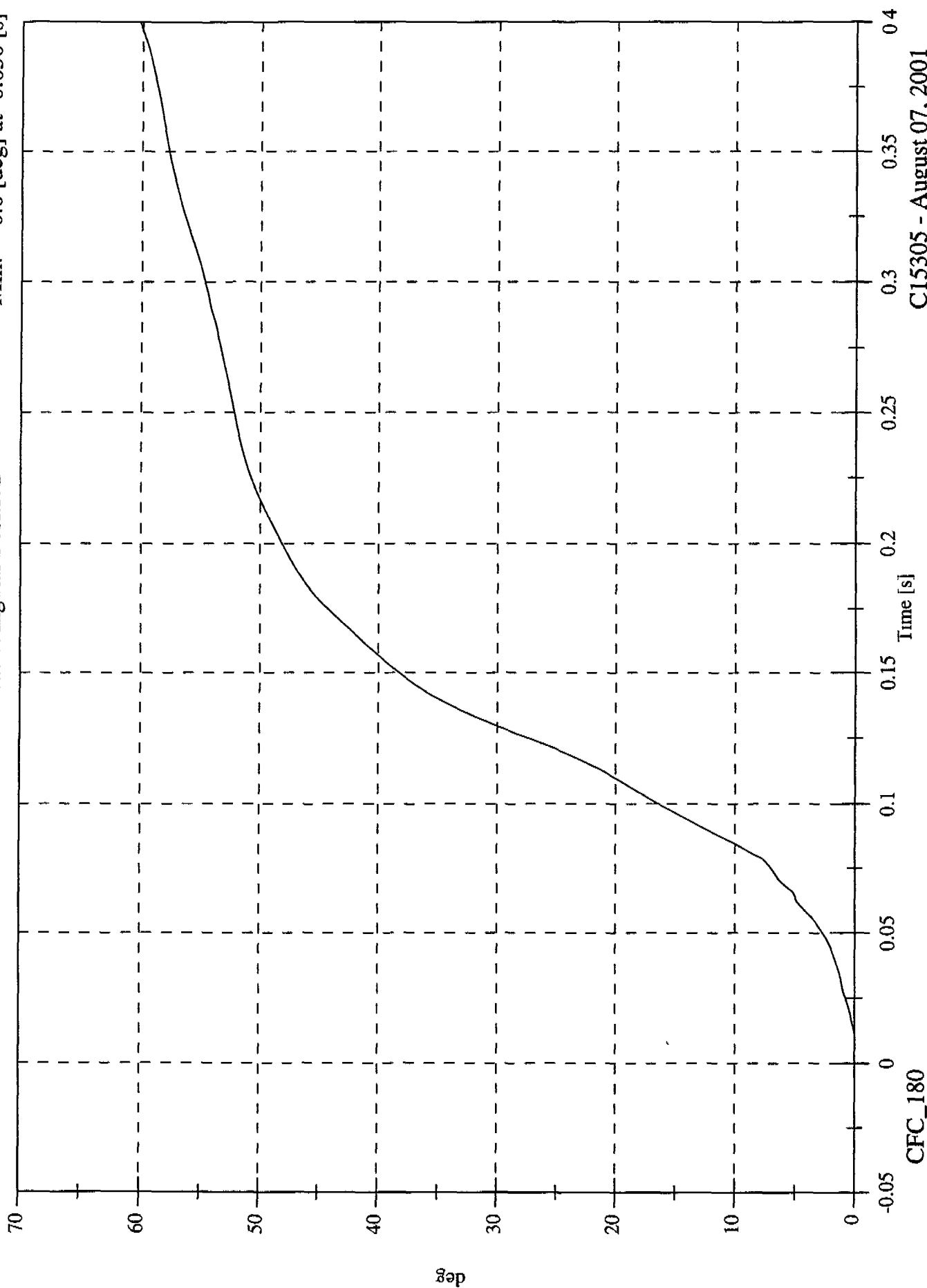
CFC_180

C15305 - August 07, 2001

NHTSA FMVSS 301 Test #5 - 2001 Honda CR-V

Seaback Angular Position

Max: 60.2 [deg] at 0.400 [s]
Min: 0.0 [deg] at -0.050 [s]



CFC_180

C15305 - August 07, 2001