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**VEHICLE SAFETY COMPLIANCE TESTING FOR OCCUPANT CRASH PROTECTION
WINDSHIELD MOUNTING, WINDSHIELD ZONE INTRUSION (PARTIAL)
AND FUEL SYSTEM INTEGRITY**

**FORD MOTOR COMPANY
1998 FORD ESCORT
4-DOOR SEDAN**

NHTSA NUMBER: CW0210

CALSPAN TEST NUMBER: 8407-2

March 31, 1998

**CALSPAN CORPORATION
P.O. BOX 400
BUFFALO, NEW YORK 14225**



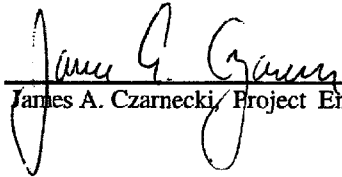
FINAL REPORT

PREPARED FOR:

**U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Safety Assurance
Office of Vehicle Safety Compliance
Mail Code: NSA-30
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Washington, DC 20590**

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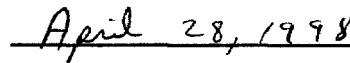
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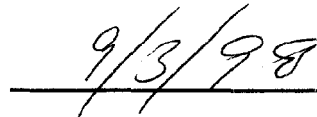

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				6. Performing Organization Code CAL	
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16. Abstract A 30 mph vehicle safety compliance test was conducted on a 1998 Ford Escort 4-Door Sedan. This test was performed at the Calspan Corporation in Buffalo, New York on March 31, 1998. The purpose of this test was to determine compliance with the performance requirements of the following Federal Motor Vehicle Safety Standards: 1. FMVSS No. 208, "Occupant Crash Protection" 2. FMVSS No. 212, "Windshield Mounting" 3. FMVSS No. 219 (partial), "Windshield Zone Intrusion" 4. FMVSS No. 301, "Fuel System Integrity" The test mode was perpendicular (0°) and the impact velocity was 29.6 mph. The ambient temperature at the impact face was 70 °F. The subject test vehicle appears to comply with the requirements of FMVSS Nos. 208, 212, 219 (partial) and 301. <u>Type of Restraint System:</u> The test vehicle was equipped with a driver 3-point belt system with airbag restraint system and a passenger 3-point belt system with airbag restraint system. The manual seat belts were used for this test.					
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Section 1

PURPOSE AND TEST PROCEDURE

This 30 mph frontal barrier impact test is part of the Federal Motor Vehicle Safety Standard (FMVSS) 208, 212, 219 (partial) and 301 compliance test program conducted for the National Highway Traffic Safety Administration (NHTSA) by Calspan Corporation under Contract No. DTNH22-93-D-11089. The purpose of this test was to determine if the subject vehicle, a 1998 Ford Escort 4-Door Sedan, meets the performance requirements of FMVSS 208, "Occupant Crash Protection"; FMVSS No. 212, "Windshield Mounting"; FMVSS No. 219 (partial), "Windshield Zone Intrusion"; and FMVSS No. 301, "Fuel System Integrity". This compliance test was conducted using the requirements found in the OVSC Laboratory Test Procedure No. TP-208-10, dated January 15, 1998.

Section 2

SUMMARY OF TEST NUMBER CW0210

A frontal barrier was impacted by a 1998 Ford Escort 4-Door Sedan at a velocity of 29.6 mph. The test was performed at the Calspan Corporation on March 31, 1998. Pre- and Post-test photographs of the vehicle and dummies can be found in Appendix A.

The frontal barrier impact event was documented by one real-time camera and 14 high-speed cameras. Camera locations and other pertinent camera information can be found in this report.

Two Part 572E, 50th percentile male anthropomorphic test devices (ATDs), were placed in the driver and right-front passenger seating positions according to dummy placement instructions specified in the OVSC Laboratory Test Procedure.

Both ATDs were fully instrumented with head and chest three axis (x, y, and z) accelerometers, chest displacement potentiometers and left/right femur load cells. These ATDs had been certified prior to the test.

The 38 channels of data were recorded on a P.C. based data acquisition system. Appendix B contains the vehicle and dummy response data traces. The driver head and neck pre-zero data appears to be electrical noise which is not filtered when following J211 guidelines.

The driver's HIC was 341.9. The maximum chest deceleration over 3 milliseconds was 47.5 g's with 1.8 inches of deflection. The maximum force on the driver's left femur was -779.1 pounds and -702.5 pounds on the right femur.

The right front passenger's HIC was 471.7. The maximum chest deceleration over 3 milliseconds was 47.2 g's with 0.7 inches of deflection. Loads of -1025.2 and -833.8 pounds were recorded on the left and right femurs respectively.

Note : The rear seat belts were removed from the vehicle prior to the notification that 208 Test Procedure version 10 would be used. Therefore, rear seat belt comfort and convenience and lockability tests could not be performed.

Table 1

CRASH TEST SUMMARY

Vehicle NHTSA No. :	<u>CW0210</u>	Test Mode :	<u>30 mph Frontal Barrier</u>
Test Date :	<u>March 31, 1998</u>	Time:	<u>13:10</u> Temperature : <u>70</u> °F
Vehicle Make/Model/Body Style :	<u>1998 Ford Escort 4-Door Sedan</u>		
Vehicle Test Weight :	<u>2851</u>	lbs	
Vehicle/Barrier Impact Angle :	<u>0</u>	°	
Impact Velocity :	<u>29.6</u>	mph	
Maximum Static Crush :	<u>12.8</u>	inches	
Vehicle Rebound :	<u>15.0</u>	inches	
<u>DUMMIES:</u>	<u>DRIVER</u>	<u>PASSENGER</u>	
Type :	<u>572E</u>	<u>572E</u>	
Restraint System :	<u>3-point belt system with airbag</u>	<u>3-point belt system with airbag</u>	
Number of Data Channels :	<u>38</u>		
Number of Cameras :	<u>1</u>	Real Time	
	<u>14</u>	High Speed	
<u>DOOR OPENING DATA :</u>	<u>Closed/Operable</u>	- Left Front	
	<u>Closed/Operable</u>	- Right Front	
Front Seat(s) Data :	<u>DRIVER</u>	<u>PASSENGER</u>	
Seat Track Failure (inches of shift):	<u>0</u>	<u>0</u>	
Seat Back Failure :	<u>None</u>	<u>None</u>	
<u>VISIBLE DUMMY CONTACT POINTS :</u>	<u>DRIVER</u>	<u>PASSENGER</u>	
Head :	<u>Airbag / Back of head to headrest/ Side of head to B-pillar</u>	<u>Airbag / Back of head to headrest</u>	
Abdomen :	<u>-</u>	<u>-</u>	
Chest	<u>Airbag</u>	<u>Airbag</u>	
Knees	<u>Knee Bolster</u>	<u>Knee Bolster</u>	

Table 2

GENERAL TEST AND VEHICLE PARAMETER DATATEST VEHICLE INFORMATION :

Year/Make/Model/Body Style : 1998 Ford Escort 4-Door Sedan

NHTSA No. : CW0210 ; VIN: 1FAFP10P4WW156367 ; Color : White

Engine Data: 4 cyl cylinders; CID; 2 Liters; cc

Placement : x Longitudinal or In-Line; - Transverse of Lateral

Transmission Data : 5 speeds; x Manual; - Automatic; - Overdrive

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

Major Options : - A/C; x Pwr.Strg.; x Pwr. Brakes

- Pwr. Windows; - Pwr. Door Locks; - Tilt Wheel

Date Received : 2/26/98 ; Odometer Reading 50 miles

Selling Dealer : DeLacy Ford Inc.

& Address: 3061 Transit Rd Elma, N.Y. 14059

DATA FROM TIRE VEHICLE'S CERTIFICATION LABEL:

Vehicle Manufactured by : Ford Motor Company

Date of Manufacture 10/97

GVWR : 3485 lbs.; GAWR: 1911 lbs. FRONT; 1574 lbs. REAR

DATA FROM TIRE PLACARD:

Tire Pressure with Maximum Capacity Vehicle Load : 32 psi FRONT

32 psi REAR

Recommended Tire Size : P185/65R14

* Recommended Cold Tire Pressure : 32 psi FRONT; 32 psi REAR

Size of Tires on Test Vehicle: P185/65R14 ; Manufacturer: Uniroyal

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) = 830 lbs.

No. of Occupants x 150 lbs. = 750 lbs.

Rated Cargo/Luggage Weight (RCLW) = 80 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>772</u>	lbs.	Right Rear	=	<u>454</u>	lbs.
Left Front	=	<u>749</u>	lbs.	Left Rear	=	<u>479</u>	lbs.
TOTAL FRONT	=	<u>1,521</u>	lbs.	TOTAL REAR	=	<u>933</u>	lbs.
TOTAL DELIVERED WEIGHT	=	<u>2,454.0</u>	lbs.				
% of Total Front of Vehicle Weight	=	<u>62.0</u>	%	% of Total Rear Weight	=	<u>38.0</u>	%

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Delivered Weight	=	<u>2,454</u>	lbs.
Rated Cargo/Luggage Weight (RCLW)	=	<u>80</u>	lbs.
Weight of 2 p.572 Dummies @ 167 each	=	<u>334</u>	lbs.
TARGET TEST WEIGHT	=	<u>2,868</u>	lbs.

WEIGHT OF TEST VEHICLE WITH TWO DUMMIES AND 63 POUNDS OF CARGO WEIGHT:

Right Front	=	<u>824</u>	lbs.	Right Rear	=	<u>593</u>	lbs.
Left Front	=	<u>822</u>	lbs.	Left Rear	=	<u>612</u>	lbs.
TOTAL FRONT	=	<u>1,646</u>	lbs.	TOTAL REAR	=	<u>1,205</u>	lbs.
TOTAL TEST WEIGHT	=	<u>2,851.0</u>	lbs.				
% of Total Front Weight	=	<u>57.7</u>	%	% of Total Rear Weight	=	<u>42.3</u>	%
Weight of Ballast Secured in Vehicle Trunk Area	=	<u>0</u>	lbs.				
Vehicle Components Removed for Weight Reduction:		<u>Trunk Lid</u>					

VEHICLE ATTITUDE (all dimension in inches):

AS DELIVERED :	RF	<u>26.6</u>	LF	<u>26.8</u>	RR	<u>25.6</u>	LR	<u>25.2</u>
FULLY LOADED :	RF	<u>26.1</u>	LF	<u>26.3</u>	RR	<u>24.25</u>	LR	<u>24.0</u>
AS TESTED :	RF	<u>26.25</u>	LF	<u>26.5</u>	RR	<u>24.25</u>	LR	<u>24.0</u>
Vehicle's Wheel Base :		<u>98.4</u>	in.					
Location of Vehicle's C.G. :		<u>41.6</u>	inches rearward of front wheel center.					

FUEL SYSTEM DATA :

Fuel System Capacity From Owner's Manual	=	<u>12.7</u>	gallons
Usable Capacity Figure Furnished by COTR	=	<u>12.7</u>	gallons
Test Volume Range (92 to 94% of Usable Capacity)	=	<u>11.68</u> to <u>11.94</u>	gallons
ACTUAL TEST VOLUME=		<u>11.7</u>	gallons (with entire fuel system filled)

Table 3

POST IMPACT DATATYPE OF TEST:

Type of Test : Frontal Barrier Impact Angle : 0°
 Test Date : March 31, 1998 Time: 13:10 Temperature: 70 °F
 Vehicle NHTSA No. : CW0210
 Required Impact Velocity Range : 28.9 to 29.9 mph

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

Trap No. 1 = 29.6 mph; Trap No. 2 = 29.6 mph
 Distance from vehicle to barrier : (1) entering trap = 32 inches
 (2) exiting trap = 12 inches

VEHICLE STATIC CRUSH: (For frontal and rear impacts only.)

Vehicle Length:

Pre-Test Right = 172.5 ; C/L = 174.6 ; Left = 172.5
 Post-Test Right = 159.7 ; C/L = 162.0 ; Left = 162.6
 Crush Right = 12.8 ; C/L = 12.6 ; Left = 9.9
 AVERAGE = 11.8 inches

VEHICLE REBOUND: (From rigid barrier only.)

Distance from front of test vehicle to impact point :

Right = 15.1 ; C/L = 15.4 ; Left = 14.6AVERAGE = 15.0 inchesDOOR OPENING :

	Left	Right
Front	<u>Closed/Operable</u>	<u>Closed/Operable</u>
Rear	<u>Closed/Operable</u>	<u>Closed/Operable</u>

SEAT MOVEMENT :

	Seat Back Failure	Seat Shift
Driver	<u>None</u>	<u>None</u>
Passenger	<u>None</u>	<u>None</u>

Table 3

POST IMPACT (cont.)

GLAZING DAMAGE :

None

OTHER NOTABLE IMPACT FEATURES :

None

Section 3

OCCUPANT AND VEHICLE DATA

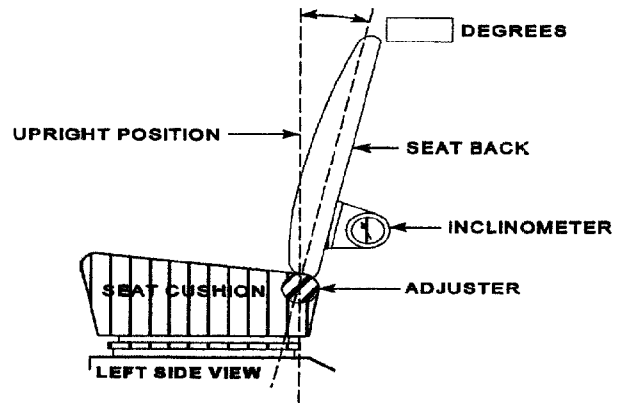
Figure 1

TEST VEHICLE INFORMATION

VEHICLE IDENTIFICATION:

Model Year : 1998 Vehicle Model: Ford Escort Body Style : 4-Door Sedan

1. 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.



Seat back angle for driver's seat : 21

Measurement instructions : Adjusted seat back to the 5th notch from the first notch (zero)

Seat back angle for passenger's seat : 21

Measurement instructions : Adjusted seat back to the 5th notch from the first notch (zero)

2. Seat Fore and Aft Positioning

Positioning of the driver's seat : Found 23 notches, placed seat in 12th position which is mechanical middle

Positioning of the passenger's seat (if applicable) : Found 23 notches, placed seat in 12th position which is mechanical middle

3. Fuel Tank Capacity Data

A. "Usable Capacity" of the standard equipment fuel tank is 12.7 gallons

B. "Usable Capacity" of the optional equipment fuel tank is - gallons

4. Steering Column Position :

Fixed

5. Other:

Placed adjuster in bottom location per manufacturer request.

Figure 2

PART 572 DUMMY IN-VEHICLE POSITION

DUMMY MEASUREMENT FOR FRONT SEAT PASSENGERS

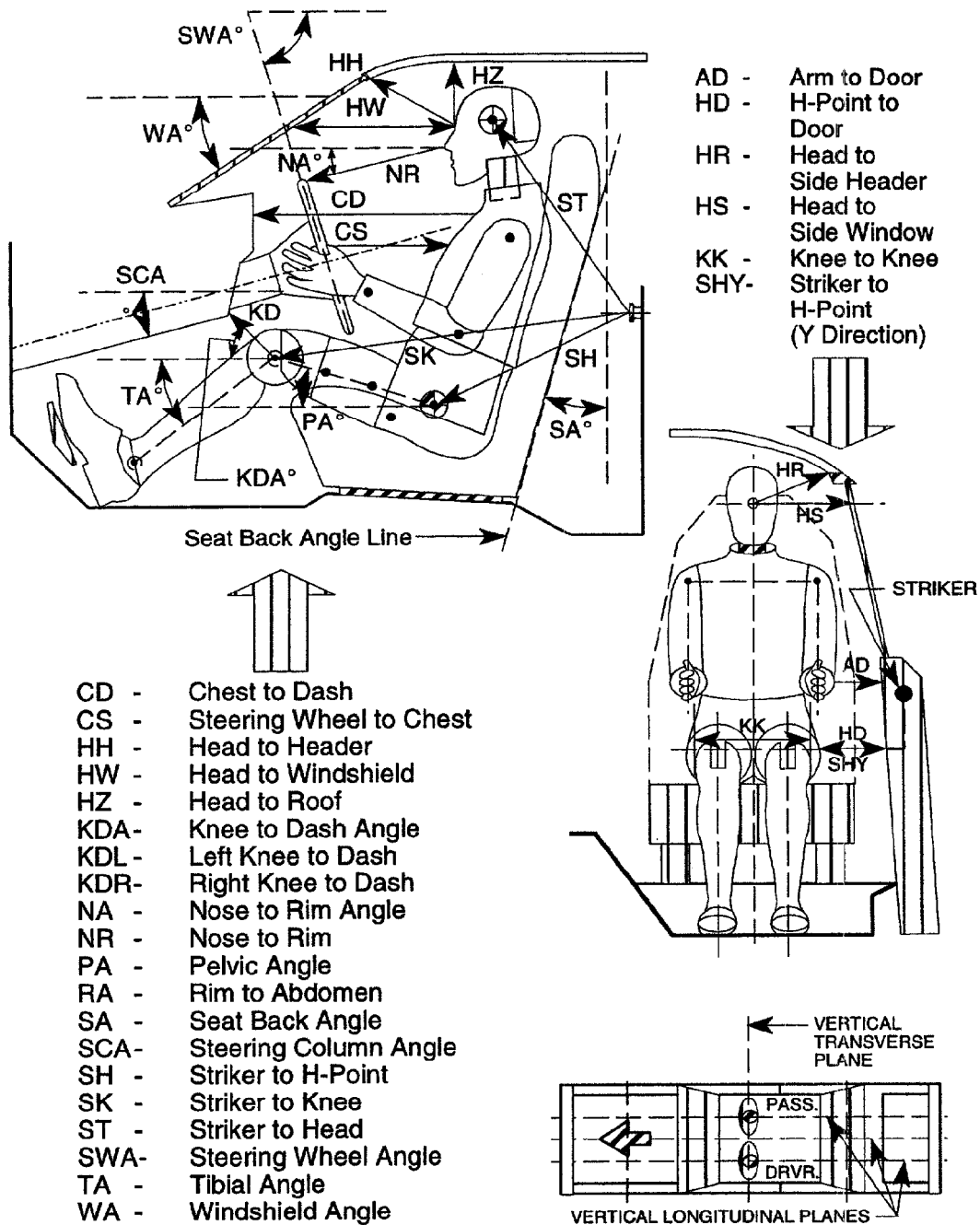


Table 4

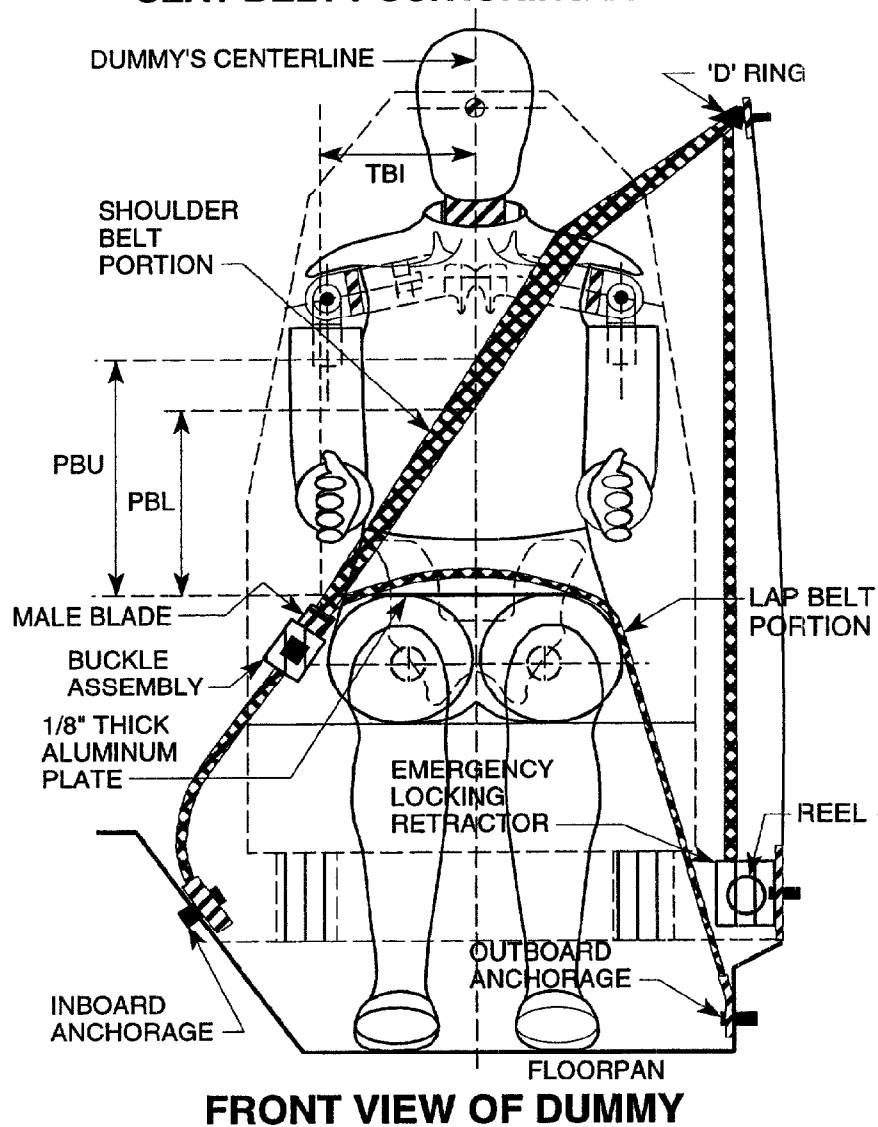
FRONT SEAT OCCUPANT MEASUREMENTS

(All dimensions excluding angles are in inches).

	DRIVER (Serial #341)			PASS. (Serial #342)		
WA°	30 deg.			N/A		
SWA°	66 deg.			N/A		
SCA°	24 deg.			N/A		
SA°	21 deg.			21 deg.		
HZ	6.4			6.4		
HH	11.75			11.6		
HW	20.6			19.9		
HR	9.8			9.7		
NR	15.1	Angle	9 deg.	N/A		
CD	20.9			20.1		
CS	12.5			N/A		
RA	7.7			N/A		
KDL	7.7	Angle (KDA)	32 deg.	6.4		
KDR	7.6			6.4	Angle (KDA)	38 deg.
PA°	24 deg.			24 deg.		
TA°	39 deg.			35 deg.		
KK	12.6			10.7		
ST	21.6	Angle	9 deg.	21.5	Angle	7 deg.
SK	22.4	Angle	89 deg.	22.9	Angle	90 deg.
SH	9.7	Angle	124 deg.	9.4	Angle	130 deg.
SHY	9.8			10.1		
HS	12.6			11.7		
HD	6.3			5.9		
AD	3.3			3.4		

Figure 3

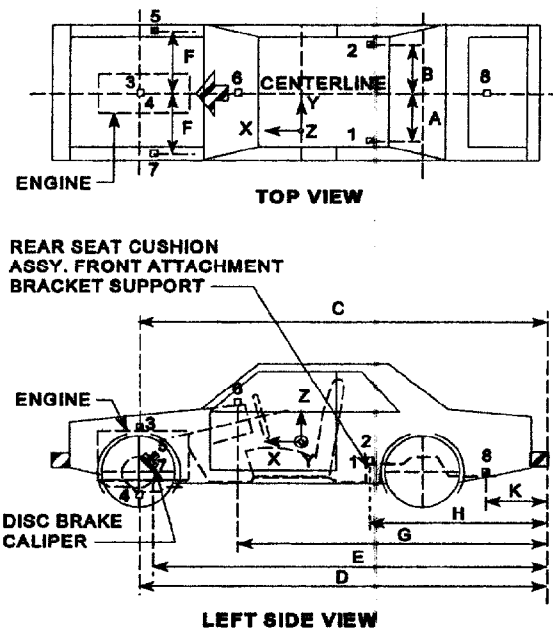
SEAT BELT POSITIONING DATA



	DRIVER DUMMY (inches)	PASSENGER DUMMY (inches)
<u>PBU</u> -- Top surface of alum. plate to upper edge	12.1	12.3
<u>PBL</u> -- Top surface of alum. plate to belt lower edge	9.3	9.2
<u>TBI</u> -- Distance from torso centerline to buckle	9.3	9.3

Figure 4

**VEHICLE ACCELEROMETER LOCATION
AND DATA SUMMARY**



ACCELEROMETER NUMBER*	ACCELEROMETER LOCATION	DIRECTION		
		X	Y	Z
1	Left Rear Seat Crossmember	X		
2	Right Rear Seat Crossmember	X		
3	Top of Engine	X		
4	Bottom of Engine	X		
5	Right Disc Brake Caliper	X		
6	Instrument Panel	X		
7	Left Disc Brake Caliper	X		
8	Trunk Z			X

*The accelerometer pack number can be correlated with the vehicle response data traces found in Appendix B.

Table 5

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

DIMENSION	LENGTH (Inches)		
	PRE-TEST VALUES	POST-TEST VALUES	
A Left Rear Seat Crossmember Y	23.0	23.0	
B Right Rear Seat Crossmember Y	22.8	22.8	
C Top of Engine X	141.3	135.1	
D Bottom of Engine X	148.4	144.0	
E Disc Brake Calipers X	137.5	Left 138.4	Right 135.0
F Disc Brake Calipers Y	22.4 for both	Left 23.1	Right 24.2
G Instrument Panel X	109.8	109.2	
H Rear Seat Crossmembers X	69.6	69.6	
K Trunk X	13.2	13.2	

LOCATION NUMBER	DESCRIPTION	MAXIMUM VALUE			
		Pos.	msec.	Neg.	msec.
1	Rear Seat X-Member @ Left Side	3.2	134.8	-36.2	35.4
2	Rear Seat X-Member @ Right Side	2.0	101.7	-32.1	53.9
3	Top of Engine Block	36.0	38.6	-119.3	31.6
4	Bottom of Engine	6.4	43.1	-68.6	23.3
5	Disc Brake Caliper @ Right Side	48.1	35.5	-63.9	48.9
6	Instrument Panel	25.6	60.2	-61.1	45.9
7	Disc Brake Caliper @ Left Side	9.6	56.3	-79.8	47.3
8	Trunk	18.2	18.7	-16.0	53.7

Figure 5

CAMERA POSITIONS FOR FRONTAL IMPACTS

NOTE: Camera Information shown on Table 6.

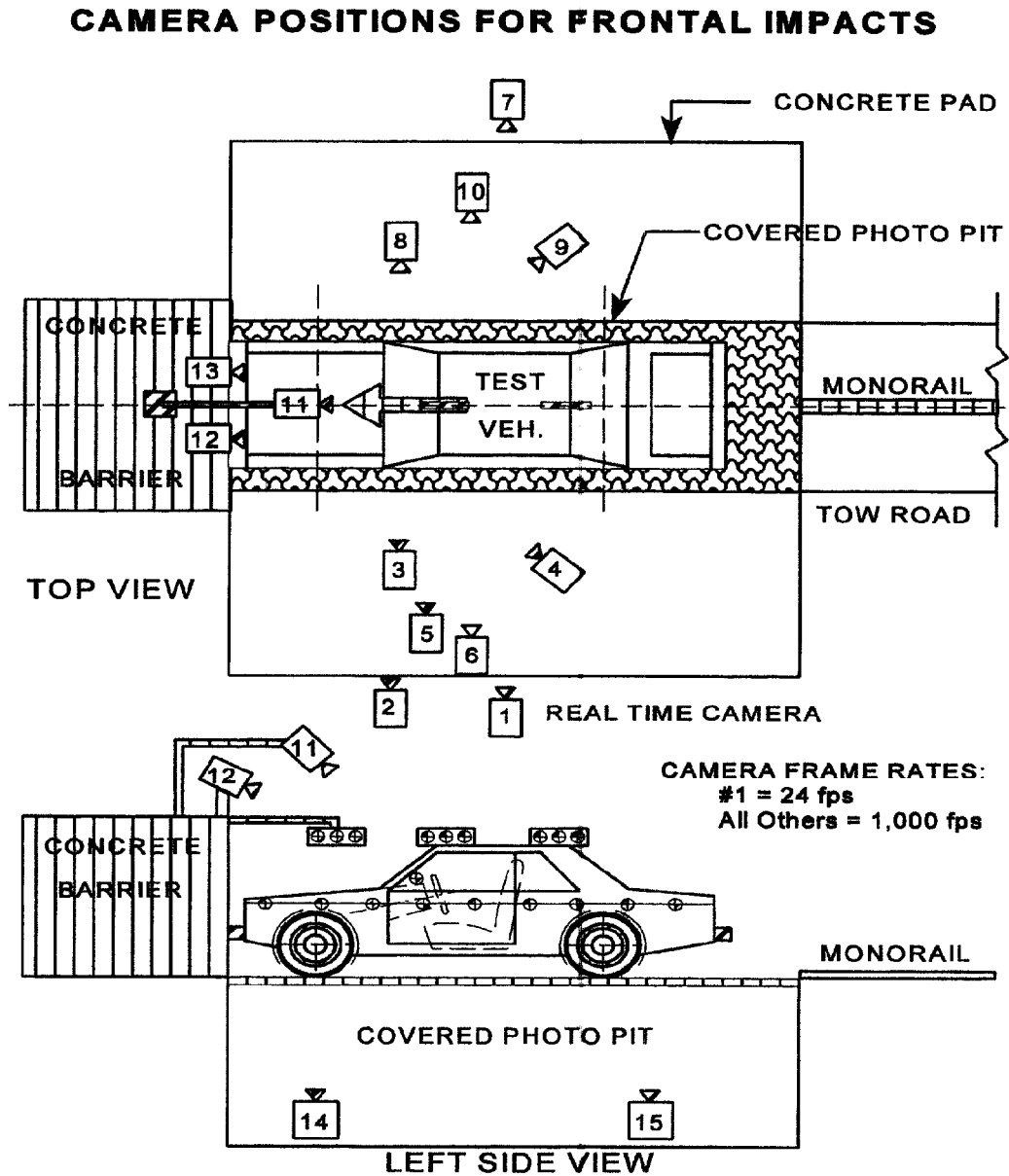


Table 6

HIGH-SPEED CAMERA LOCATIONS

Test No.	CW0210	Vehicle:	1998 Ford Escort 4-Door Sedan					
Camera No.	VIEW	CAMERA POSITIONS (In.)*			ANGLE** (deg)	FILM PLANE TO HEAD TARGET (In.)	LENS (mm)	SPEED (fps)
		X	Y	Z				
1	Real-Time Camera	-	-	-	-	-	-	24
2	Overall Left Side	243.7	66.2	42.6	-4	228.4	12.5	1010
3	Left Side View	300.0	35.4	45.6	-5	284.7	25	1020
4	Driver and Interior View	189.8	103.7	77.1	-12	-	25	1000
5	Steering Column (Bottom)	261.4	72.5	45.9	-5	246.1	25	1010
6	Steering Column (Top)	261.4	72.5	69.8	-11	246.1	25	1010
7	Overall Right Side	257.4	81.7	44.4	-4.5	242.1	13	1020
8	Right Side View	292.8	56.6	43.9	-4	277.5	25	1010
9	Passenger and Interior View	174.7	107.3	79.8	-12	-	25	1010
10	Right Passenger View	295.1	75.2	55.7	-4	-	35	1000
11	Windshield View	21	15	78	-41	-	8	1005
12	Driver Front View	21	15	78	-41	-	8	1010
13	Passenger Front View	0	0	129	-58	-	13	1010
14	Pit View of Engine	36	0	-86	-90	-	13	950
15	Pit View of Fuel Tank	94	0	-86	-90	-	13	980

*X = film plane to monorail centerline
 Y = film plane to impact location
 Z = film plane to ground
 ** = referenced to horizontal plane

Figure 6

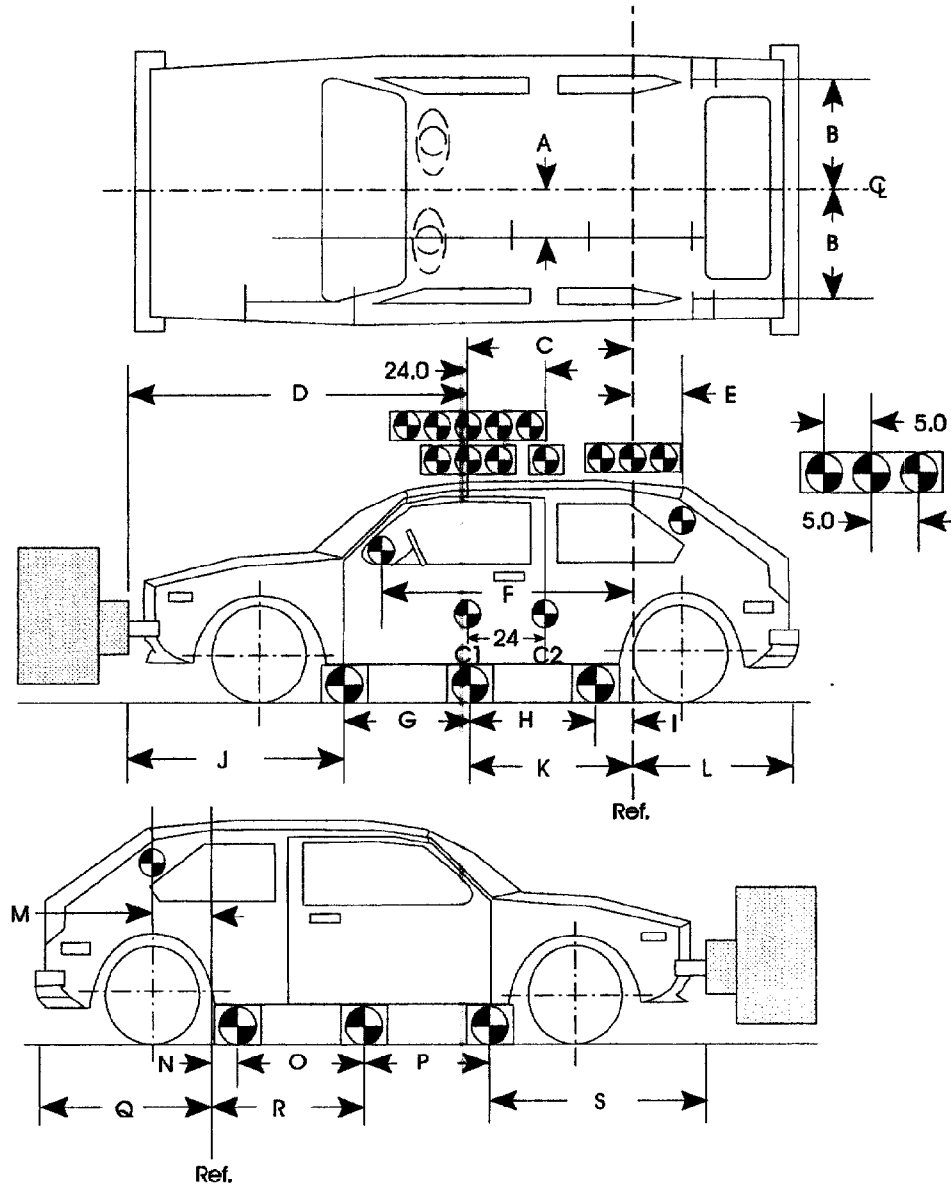
VEHICLE TARGET LOCATIONS
(All dimensions in inches)

Key (Inches)

A =	12.3
B =	45.7

C =	48.0
D =	72.1
E =	11.5
F =	54.6
G =	32.4
H =	32.4
I =	4.1
J =	59.2
K =	36.5
L =	52.9

M =	13.3
N =	2.0
O =	32.4
P =	32.4
Q =	55.0
R =	34.4
S =	59.2



Note: Targets on front fender are 12.0 inches apart. Targets rearward of front fender are 24.0 inches apart.

Figure 7

TEST VEHICLE MEASUREMENTS

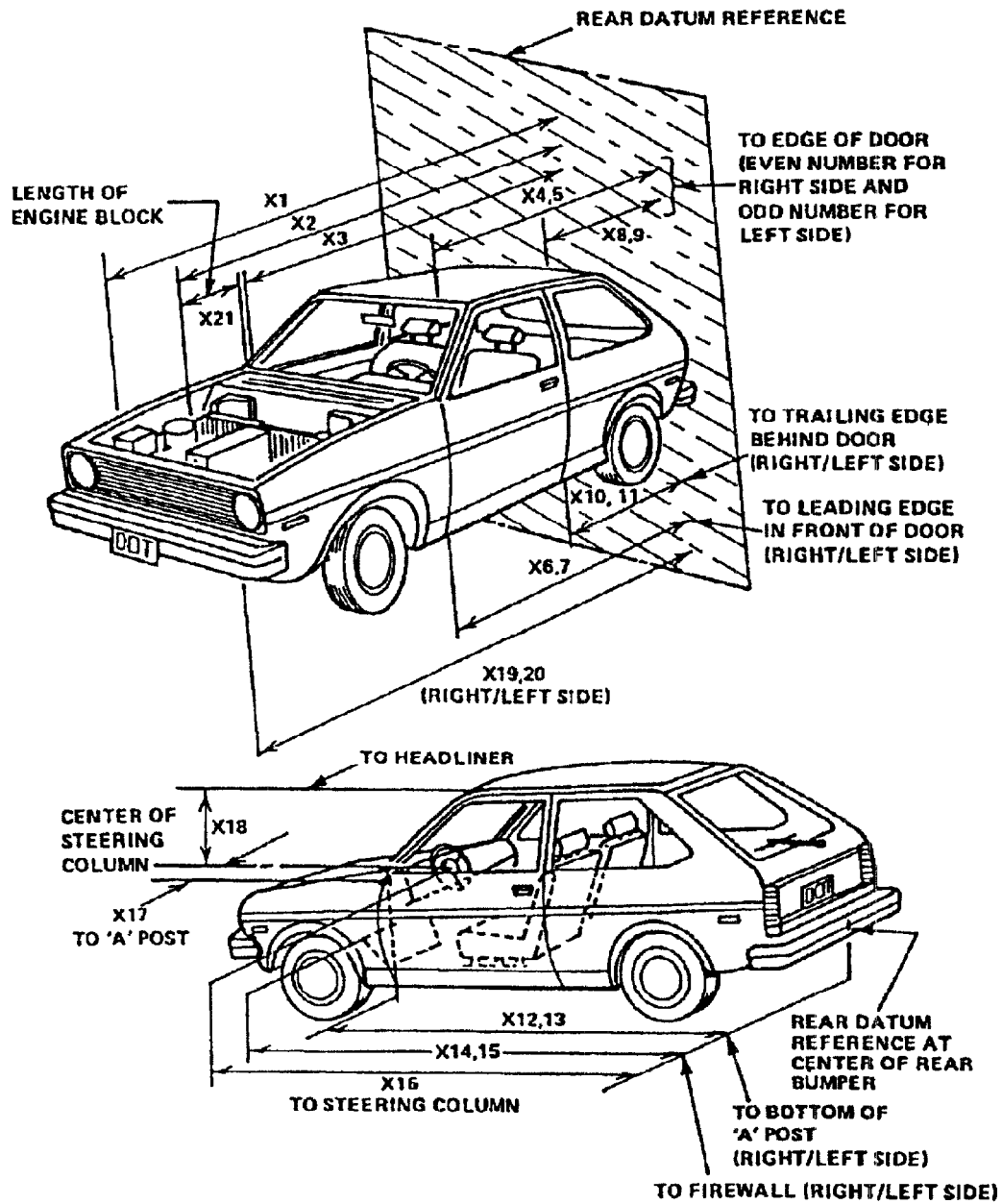


Table 7

VEHICLE MEASUREMENTS

No.		All Dimensions in inches		
		Pre-Test	Post-Test	Differences
X1	Total Length of Vehicle at Centerline	174.6	162.0	12.6
X2	Rear Surface of Vehicle to Front of Engine	152.5	146.5	6.0
X3	Rear Surface of Vehicle to Firewall	133.0	131.0	2.0
X4	Rear Surface of Vehicle to Upper Leading Edge of Right Door	120.5	120.6	-0.1
X5	Rear Surface of Vehicle to Upper Leading Edge of Left Door	121.5	120.9	0.6
X6	Rear Surface of Vehicle to Lower Leading Edge of Right Door	119.8	119.5	0.3
X7	Rear Surface of Vehicle to Lower Leading Edge of Left Door	120.5	120.3	0.2
X8	Rear Surface of Vehicle to Upper Trailing Edge of Right Door	80.9	80.5	0.4
X9	Rear Surface of Vehicle to Upper Trailing Edge of Left Door	81.5	81.0	0.5
X10	Rear Surface of Vehicle to Lower Trailing Edge of Right Door	80.6	80.4	0.2
X11	Rear Surface of Vehicle to Lower Trailing Edge of Left Door	81.3	81.0	0.3
X12	Rear Surface of Vehicle to Bottom of "A" Post of Right Side	120.8	120.4	0.4
X13	Rear Surface of Vehicle to Bottom of "A" Post of Left Side	121.5	121.0	0.5
X14	Rear Surface of Vehicle to Firewall, Right Side	131.7	128.0	3.7
X15	Rear Surface of Vehicle to Firewall, Left Side	131.5	129.5	2.0
X16	Rear Surface of Vehicle to Steering Column	103.6	104.1	-0.5
X17	Center of Steering Column to "A" Post	15.0	15.0	0.0
X18	Center of Steering Column to Headliner	17.0	17.0	0.0
X19	Rear Surface of Vehicle to Right Side of Front Bumper	172.5	159.7	12.8
X20	Rear Surface of Vehicle to Left Side of Front Bumper	172.5	162.6	9.9
X21	Length of Engine Block	18.0	18.0	0.0

Section 4

SUMMARY OF RESULTS OF FMVSS NOS. 208, 212, 219 AND 301

- "Occupant Crash Protection," FMVSS No. 208 Data
- "Windshield Mounting," FMVSS No. 212 Data
- "Windshield Zone Intrusion," FMVSS No. 219 (Partial) Data
- "Fuel System Integrity," FMVSS No. 301

Table 8

DUMMY INJURY CRITERIA VALUESNHTSA No. : CW0210 Vehicle : 1998 Ford Escort 4-Door Sedan

	MAXIMUM ACCELERATION (g's)								
	HEAD				CHEST				
	X	Y	Z	R	X	Y	Z	R*	Displacement
Dummy (1)	-46.1	20.8	27.2	51.5	-47.8	-11.5	-8.6	47.5	1.8
Dummy (2)	-49.3	-20.6	37.7	61.0	7.9	-48.5	9.1	47.2	0.7

	MAXIMUM FORCE - FEMUR LOAD (lbs.)	
	LEFT FEMUR	RIGHT FEMUR
Dummy (1)	-779.1	-702.5
Dummy (2)	-1025.2	-833.8

	HEAD INJURY CRITERIA**			
		36 millisecond Maximum		Avg. Acc (g)
	HIC	t ₁ (msec)	t ₂ (msec)	t ₁ TO t ₂
Dummy (1)	341.9	58.0	94.0	39.0
Dummy (2)	471.7	62.5	96.3	45.5

* Defined as exceeding 0.003 sec. duration

**As defined in FMVSS No. 208

	NECK DATA	
	Dummy (1)	Dummy (2)
Flexion*** (N-m)	35.2	53.7
Extension*** (N-m)	-17.2	-18.9
Tension (N)	1588.5	1163.2
Compression (N)	-761.5	-402.1
Fore Shear Force (N)	689.5	351.0
Aft Shear Force (N)	-331.4	-421.7

***Neck flexion and extension are about the occipital condyle.

Table 9

FMVSS 208 SEAT BELT WARNING SYSTEM CHECK

Year/Make/Model/Body Style: 1998 Ford Escort 4-Door Sedan
 NHTSA NO. CW0210 ; Technician Jim Czarnecki ; Date 3/28/98

Complete the following to determine which seat belt warning system option (S7.3(a)(1) or S7.3(a)(2)) is used.
 (Manufacturers may use either option.)

A. With occupant in driver's position and lap belt in stowed position and ignition switch placed in "Start/On" position:

(1) S7.3(a)(1)

Time duration of audible warning signal = - seconds
 (4 to 8 seconds)

Time duration of reminder light operation = - seconds
 (no less than 60 seconds)

(2) S7.3(a)(2)

Time duration of audible warning signal = 6 seconds
 (4 to 8 seconds)(see 49 USCS @ 30124)

Time duration of reminder light operation = 7 seconds
 (4 to 8 seconds)

B. With occupant in drivers position and lap belt in use and the ignition switch placed in "Start/On" position:

(1) S7.3(a)(1)

Time duration of audible warning signal = - seconds
 (audible warning not required)

Time duration of reminder light operation = - seconds
 (reminder light not required)

(2) S7.3(a)(2)

Time duration of audible warning signal = 0 seconds
 (audible warning not required)

Time duration of reminder light operation = 7 seconds
 (4 to 8 seconds)

C. Note wording of visual warning:

Fasten Seat Belt -

Fasten Belt -

Symbol 101 x

REMARKS:

Table 10

FMVSS 208 READINESS INDICATOR—(S4.5.2)

Year/Make/Model/Body Style: 1998 Ford Escort 4-Door Sedan
 NHTSA NO. CW0210 ; Technician James Czarnecki ; Date 3/28/98

An occupant restraint system that deploys in the event of a crash shall have a monitoring system with a readiness indicator. A totally mechanical system is exempt from this requirement. (11/8/94 legal interpretation)

1. Is the system totally mechanical ? YES - NO x

(If YES this Data Sheet is complete.)

2. Describe the location of the readiness indicator :

The indicator was located in lower left corner of display

3. Is the readiness indicator clearly visible to the driver ? YES x NO -

4. Is a list of the elements in the occupant restraint system, being monitored by the readiness indicator, provided ?

YES x NO -

REMARKS:

Table 11

FMVSS 208 - REAR OUTBOARD SEATING POSITION SEAT BELTS

Year/Make/Model/Body Style: 1998 Ford Escort 4-Door Sedan
NHTSA NO. CW0210 ; Technician James Czarnecki ; Date 3/28/98

Do all rear outboard seating positions have type 2 seat belts? YES x NO -

If NO, describe the seat belt installed, the seat location, and any other information about the seat that would explain why a type 2 belt was not installed.

REMARKS:

Table 12

LAP BELT LOCKABILITY

Passenger cars, trucks, buses, and multipurpose passenger vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

Complete one of these forms for each designated seating position with forward-facing seats, other than the driver's seat, or seats that can be adjusted to forward-facing **and** that has seat belt retractors that are not automatic locking retractors. (S7.1.1.5(c))

NHTSA NO. CW0210 ; Technician James Czarnecki ; Date 3/28/98

DESIGNATED SEATING POSITION: Front Right Side Passenger

1. Record test seat position. Full Rear Position (S7.1.1.5(c)(1))
(Any position is acceptable.)
2. Buckle the seat belt. (S7.1.1.5(c)(1))
3. Complete any procedures recommended in the vehicle owner's manual to activate any locking feature.
(S7.1.1.5(c)(1))
4. Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does **NOT** have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part of the vehicle. (S7.1.1.5(a)) x Yes-Pass; - No-FAIL
5. Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does **NOT** require inverting, twisting or deforming of the belt webbing (S7.1.1.5(a)) x Yes-Pass; - No-FAIL
6. Does the vehicle user need to take some action to activate the locking feature on the lap belt portion of the seat belt in any forward-facing seat or seat that can be adjusted to forward-facing?
x Yes; - No
(NOTE: If yes, go to 6.1. If no, go to 7.)
- 6.1 Does the vehicle owner's manual include a description in words and/or diagrams describing how to activate the locking feature so that the seat belt assembly can tightly secure a child restraint system and how to deactivate the locking feature to remove the child restraint system. (S7.1.1.5(b))
x Yes-Pass; - No-FAIL
7. Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))
8. Locate a reference point B on the attachment hardware or retractor assembly at the other end of the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
9. Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2))
10. Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
Measured distance between A and B 25.0 inches

Table 12 (continued)

11. Readjust the belt system so that the webbing between points A and B is at any length that is 5 inches or more shorter than the maximum length of the webbing. (S7.1.1.5(c)(3))
12. To the lapbelt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle 13 (spec. 5 - 15 degrees)
13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))
Measured distance between A and B 20 inches
14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing.(S7.1.1.5(c)(5))
Record onset rate 25 lb/sec (spec. 10 to 50 lb/sec)
Measured distance between A and B 20 inches (S7.1.1.5(c)(6))
15. Subtract the measurement in 14 from the measurement in 13. Is the difference 2 inches or less?
(S7.1.1.5(c)(7)) 13-14= 0 inches; x Yes-Pass; - No-**FAIL**
16. Subtract the measurement in 10 from the measurement in 14. Is the difference 3 inches or more?
(S7.1.1.5(c)(7)) 10-14= 5 inches; x Yes-Pass; - No-**FAIL**

REMARKS:

Table 13

AIR BAG LABELS

NHTSA NO. CW0210 ; Technician James Czarnecki ; Date 3/28/98

1. Air Bag Maintenance Label and Owner's Manual Instructions: (S4.5.1(a))
 - 1.1 Does the manufacturer recommend periodic maintenance or replacement of the air bag?

- Yes (Go to 1.2) ; x No (Go to 2)
 - 1.2 Does the Vehicle have a maintenance or replacement label?

- Yes-Pass ; - No-FAIL
 - 1.3 Does the label contain one of the following?

- Yes-Pass ; - No-FAIL

Check applicable schedule

- Schedule on label specifies month and year (Record date)

- Schedule on label specifies vehicle mileage (Record mileage)

- Schedule on label specifies interval measured from date on certification label (Record date)
 - 1.4 Is the label permanently affixed within the passenger compartment?

- Yes-Pass ; - No-FAIL
 - 1.5 Is the label lettered in English?

- Yes-Pass ; - No-FAIL
 - 1.6 Is the label in block capitals and numerals?

- Yes-Pass ; - No-FAIL
 - 1.7 Are the letters and numerals at least 3/32 inches high?

- Yes-Pass ; - No-FAIL
 - 1.8 Does the owner's manual set forth the recommended schedule for maintenance or replacement?

- Yes-Pass ; - No-FAIL
2. Does the owner's manual: (S4.5.1(f))
 - 2.1 Include a description of the vehicle's air bag system in an easily understandable format?

x Yes-Pass ; - No-FAIL
 - 2.2 Include a statement that the vehicle is equipped with an air bag and a lap/shoulder belt at the front outboard seating positions?

x Yes-Pass ; - No-FAIL

- 2.3 Include a statement that the air bag is a supplemental restraint at the front outboard seating positions?
☒ Yes-Pass ; ☐ No-FAIL
- 2.4 Emphasize that all occupants, including the driver, should always wear their seat belts whether or not an air bag is also provided at their seating positions to minimize the risk of severe injury or death in the event of a crash?
☒ Yes-Pass ; ☐ No-FAIL
- 2.5 Provide any necessary precautions regarding the proper positioning of occupants, including children, at seating positions equipped with air bags to insure maximum safety protection for those occupants?
☒ Yes-Pass ; ☐ No-FAIL
- 2.6 Explain that no objects should be placed over or near the air bag on the steering wheel or on the instrument panel, because any such objects could cause harm if the vehicle is in a crash severe enough to cause the air bag to inflate?
☒ Yes-Pass ; ☐ No-FAIL
3. Does the vehicle:
- 3.1 Provide an automatic means to ensure that the air bag does not deploy when a child seat or child with a total mass of 30 kg or less is present on the front outboard passenger?
☐ Yes ; ☒ No
- 3.2 Incorporate sensors, other than or in addition to weight sensors, which automatically prevent the passenger air bag from deploying in situations in which it might have an adverse effect on infants in rear-facing child seats, and unbelted or improperly belted children?
☐ Yes ; ☒ No
- 3.3 Have a passenger air bag designed to deploy in a manner that does not create a risk of serious injury to infants in rear-facing child seats, and unbelted or improperly belted children?
☐ Yes ; ☒ No

If yes to 3.1, or 3.2, or 3.3, the vehicle is not required to have a Sun Visor Warning Label (S4.5.1(b)), an air bag alert label (S4.5.1(c) or a label on the dash (S4.5.1(e) and this check sheet is complete. (S4.5.1) If no to 3.1, 3.2 and 3.3, go to 4.

4. Sun Visor Warning Label
- 4.1 Is the label permanently affixed (may be permanent marking or molding) to either side of the sun visor at each front outboard seating position with an air bag? (S4.5.1(b)(2))
- Driver side ☒ Yes-Pass; ☐ No-FAIL
- Passenger side ☐ N/A ☒ Yes-Pass; ☐ No-FAIL

Table 13 (continued)

4.2 Does the label conform in content (**vehicles without back seats may omit the statement: "The BACK SEAT is the SAFEST place for children."** (S4.5.1(b)(2)(v))) to the label shown in either Figure 8a or 8b as appropriate at each front outboard seating position with an air bag? (S4.5.1(b)(2))

4.2.1 Dual air bags - N/A

Driver side x Yes-Pass; - No-FAIL

Passenger side x Yes-Pass; - No-FAIL

4.2.2 Vehicle with driver air bag ONLY - either 4.2.2.1 or 4.2.2.2 is applicable not both. (S4.5.1(b)(2)(iv))

4.2.2.1 Does the label conform in content to the label shown in either Figure 8a or 8b as appropriate?

x N/A

Driver side - Yes-Pass; - No-FAIL -

4.2.2.2 Does the label conform in content to the label shown in Figure 8a where the label can be modified to omit the pictogram and the message text may read:

DEATH or SERIOUS INJURY can occur.

- Sit as far back as possible from the air bag.
- ALWAYS use SEAT BELTS and CHILD RESTRAINTS.
- The BACK SEAT is the SAFEST place for children.

x N/A

Driver side - Yes-Pass; - No-FAIL -

SUN VISOR LABEL VISIBLE WHEN VISOR IS IN DOWN POSITION

LABEL OUTLINE, VERTICAL AND HORIZONTAL LINE BLACK

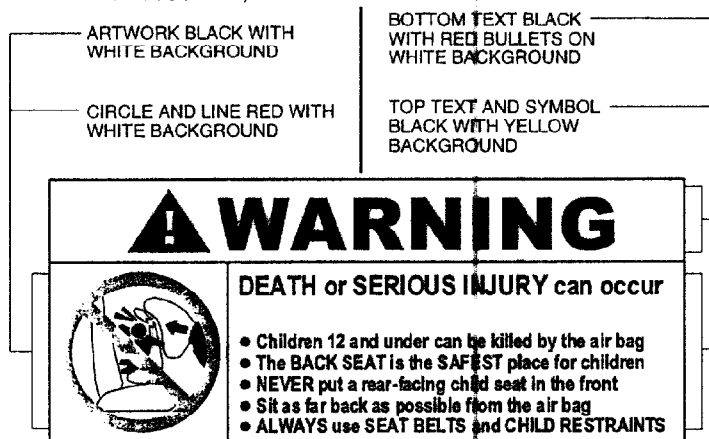


FIGURE 8A

Table 13 (continued)

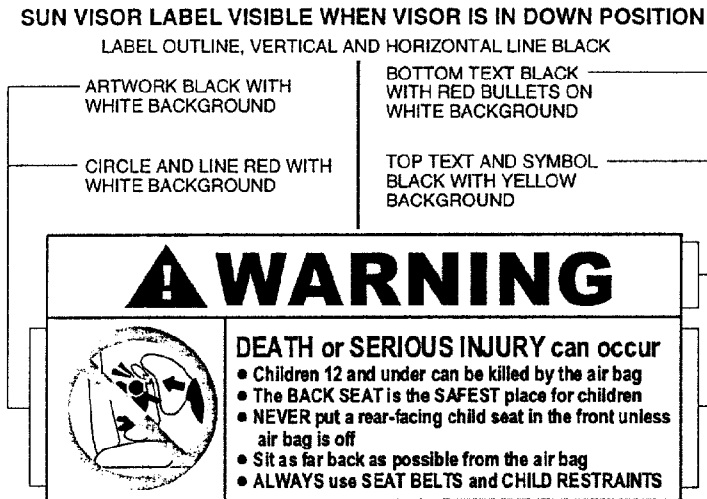


FIGURE 8B

4.3 Is the label heading area yellow with the word “warning” and the alert symbol in black? (S4.5.1(b)(2)(i))

Driver side x Yes-Pass; - **No-FAIL**

Passenger side - No air bag x Yes-Pass; - **No-FAIL**

4.4 Is the message white with black text? (S4.5.1(b)(2)(ii))

Driver side x Yes-Pass; - **No-FAIL**

Passenger side - No air bag x Yes-Pass; - **No-FAIL**

4.5 Is the message area at least 30 cm²? (S4.5.1(b)(2)(ii))

Actual message area 32 cm²

Driver side x Yes-Pass; - **No-FAIL**

Passenger side - No air bag x Yes-Pass; - **No-FAIL**

4.6 Is the pictogram black with a red circle and slash on a white background? (S4.5.1(b)(2)(iii) & (S4.5.1(b)(2)(iv))

For vehicles with driver side air bag ONLY - N/A

Driver side x Yes-Pass; - **No-FAIL**

Passenger side - No air bag x Yes-Pass; - **No-FAIL**

REMARKS:

Table 13 (continued)

- 4.7 Is the pictogram at least 30 mm in diameter? (S4.5.1(b)(2)(iii))
- Actual diameter 30 mm
- For vehicles with driver side air bag ONLY - N/A
- Driver side x Yes-Pass; - **No-FAIL**
- Passenger side - No air bag x Yes-Pass; - **No-FAIL**
- 4.8 Is the same side of the sun visor to which the sun visor label is affixed free of other information with the exception of an air bag maintenance label? (S4.5.1(b)(3))
- Driver side x Yes-Pass; - **No-FAIL**
- Passenger side - No air bag x Yes-Pass; - **No-FAIL**
- 4.9 Is the sun visor free of other information about air bags or the need to wear seat belts with the exception of the air bag alert label or the utility vehicle label? (S4.5.1(b)(3))
- Driver side x Yes-Pass; - **No-FAIL**
- Passenger side - No air bag x Yes-Pass; - **No-FAIL**
5. Air Bag Alert Label
- 5.1 Is the Sun Visor Warning Label visible when the sun visor is in the stowed position? (if yes, go to 6.)
- Driver side x Yes-Pass; - **No-FAIL**
- Passenger side - No air bag x Yes-Pass; - **No-FAIL**
- 5.2 Does the label conform in content to the label shown in Figure 8c? (S4.5.1(c)(2))
- Driver side - Yes-Pass; - **No-FAIL**
- Passenger side - No air bag - Yes-Pass; - **No-FAIL**
- 5.3 Is the message area black with yellow text? (S4.5.1(c)(2)(i))
- Driver side - Yes-Pass; - **No-FAIL**
- Passenger side - No air bag - Yes-Pass; - **No-FAIL**
- 5.4 Is the message area at least 20 cm²? (S4.5.1(c)(2)(i))
- Actual message area - cm²
- Driver side - Yes-Pass; - **No-FAIL**
- Passenger side - No air bag - Yes-Pass; - **No-FAIL**
- 5.5 Is the pictogram black with a red circle and slash on a white background? (S4.5.1(c)(2)(ii))
- For vehicles with driver side air bag ONLY - N/A
- Yes-Pass ; - **No-FAIL**

REMARKS:

Table 13 (continued)

5.6 Is the pictogram at least 20 mm in diameter? (S4.5.1(c)(2)(ii))

Actual diameter _____ mm

For vehicles with driver side air bag ONLY _____ N/A

_____ Yes-Pass ; _____ No-FAIL

SUN VISOR LABEL VISIBLE WHEN VISOR IS IN UP POSITION

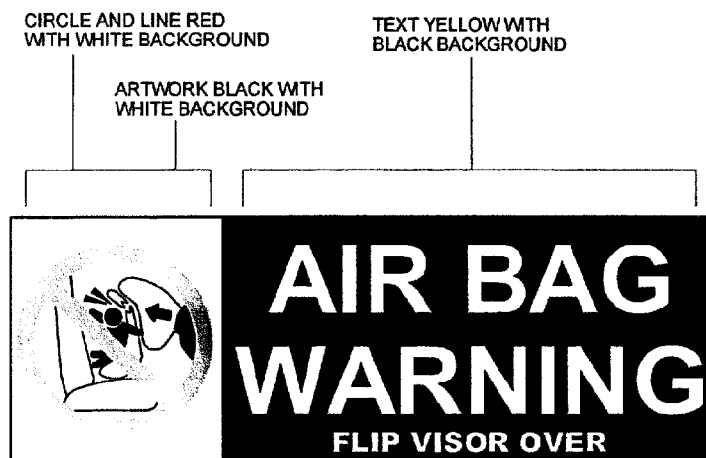


FIGURE 8C

6. Label On the Dash

6.1 Does the vehicle have a passenger side air bag?

 x Yes ; _____ No (If no, this check sheet is complete)

6.2 Does the vehicle have a label on the dash or steering wheel hub? (S4.5.1(e))

 x Yes-Pass ; _____ No-FAIL

6.3 Does the label conform in content (vehicles without back seats may omit the statement: "The back seat is the safest place for children 12 and under." (S4.5.1(e)(iii))) to the label shown in Figure 9?(S4.5.1(e))

 x Yes-Pass ; _____ No-FAIL

6.4 Is the heading area yellow with the word "warning" and the alert symbol in black? (S4.5.1(e)(i))

 x Yes-Pass ; _____ No-FAIL

Table 13 (continued)

6.5 Is the message white with black text? (S4.5.1(e)(ii))

 x Yes-Pass ; - No-FAIL

6.6 Is the message area at least 30 cm²? (S4.5.1(e)(ii))

Actual message area 32 cm²; x Yes-Pass ; - No-FAIL



FIGURE 9

Table 14

FMVSS 208 SEAT BELT COMFORT AND CONVENIENCE TESTS

1. BELT CONTACT FORCE (S7.4.3)

Test Vehicle NHTSA No.:	CW0210
Vehicle Model Year/Make/Model/Body Style:	1998 Ford Escort 4-Door Sedan
Designated Seating Position Tested:	Front Right Side Passenger
Date of Comfort/Convenience Check:	3/28/98
Technician Performing Check:	James Czarnecki
GVWR:	3485

Test all Type 2 seat belts other than those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

1.1 Does the vehicle incorporate a webbing tension-relieving device?

 Yes - go to latchplate access

 x No - continue with this check sheet

1.2 Adjustable seats are in the adjustment position midway between the forward most and rearmost positions. If an adjustment position does not exist midway between the forward most and rearmost positions, the next closest adjustment position to the rear of the midpoint is used. (S8.1.2)

 x CHECK

 - N/A

1.3 If separately adjustable in a vertical direction, the seats are at the lowest position.

 x CHECK

 - N/A

1.4 Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer.

 x CHECK

 - N/A

1.5 Place any adjustable anchorages at the manufacturer's nominal design position for a 50th percentile adult male (50M) occupant. This information will be furnished by the COTR.

 x CHECK

 - N/A

Table 14 (continued)

1. BELT CONTACT FORCE (S7.4.3) (continued)

- 1.6 Place each adjustable head restraint in its highest adjustment position.

 x CHECK
 - N/A

- 1.7 Adjustable lumbar supports are positioned so that the lumbar support is in its lowest adjustment position. (S8.1.3)

 x CHECK
 - N/A

- 1.8 Position the test dummies according to dummy position placement instructions in Appendix B.

 x CHECK

- 1.9 Fasten the seat belt latch. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest, (S10.8) Measure the contact force exerted by the belt webbing on the dummy's chest. Contact the COTR if the contact force exceeds 0.7 pounds.

Contact force 0.2 lb.

 x 0.0 to 0.7 pounds - Pass
 - **greater than 0.7 pounds - FAIL***

* If the seat belts are voluntarily installed by the manufacturer they do not have to comply.

Table 14 (continued)

2. LATCHPLATE ACCESS (S7.4.4)

Test Vehicle NHTSA No.:	CW0210
Vehicle Model Year/Make/Model/Body Style:	1998 Ford Escort 4-Door Sedan
Designated Seating Position Tested:	Front Right Side Passenger
Date of Comfort/Convenience Check:	3/28/98
Technician Performing Check:	James Czarnecki
GVWR:	3485 lbs

Test all front outboard seat belts other than those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

- 2.1 Position the seat in its forward most adjustment position.
☐ CHECK
- 2.2 Position the test dummy using the procedures in Appendix B. (Some modifications to the positioning procedure may need to be made because the seat is in its forward most position.)
☐ CHECK
- 2.3 Position the adjustable seat belt anchorage in the manufacturer's nominal design position for a 50th percentile adult male occupant.
☐ CHECK
- 2.4 Attach the inboard and outboard reach string following the instructions on Figure 1C.
☐ CHECK
- 2.5 Place the latch plate in the stowed position.
☐ CHECK
- 2.6 Extend each line backward and outboard to generate arcs of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?
☐ Yes - Pass ☐ NO - FAIL
- 2.7 Using the clearance test block, specified in Figure 2C, is there sufficient clearance between the vehicle seat and the side of vehicle interior to allow the test block to move unhindered to the latch plate or buckle?
☐ Yes - Pass ☐ NO - FAIL

Table 14 (continued)

3. RETRACTION (S7.4.5)

Test Vehicle NHTSA No.:	CW0210
Vehicle Model Year/Make/Model/Body Style:	1998 Ford Escort 4-Door Sedan
Designated Seating Position Tested:	Front Right Side Passenger
Date of Comfort/Convenience Check:	3/28/98
Technician Performing Check:	James Czarnecki
GVWR:	3485 lbs

Test all front outboard seat belts, except those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

3.1 Is the vehicle a passenger car or walk-in van-type vehicle?

 x Yes - No

If yes, go to seat belt guides and hardware.

3.2 Adjustable seats are in the adjustment position midway between the forward most and rearmost positions. If an adjustment position does not exist midway between the forward most and rearmost positions, the next closest adjustment position to the rear of the midpoint is used. (S8.1.2)

 - CHECK

3.3 If separately adjustable in a vertical direction, the seats are at the lowest position.

 - CHECK

3.3 Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer.

 - CHECK

3.4 Place any adjustable anchorages at the manufacturer's nominal design position for a 50th percentile adult male (50M) occupant. This information will be furnished by the COTR.

 - CHECK

3.5 Place each adjustable head restraint in its highest adjustment position.

 - CHECK

3.6 Adjustable lumbar supports are positioned so that the lumbar support is in its lowest adjustment position. (S8.1.3)

 - CHECK

Table 14 (continued)

3. RETRACTION (S7.4.5) (continued)

- 3.7 Use anthropomorphic test dummies whose arms have been removed and position the dummies in the front outboard designated seating positions according to instructions in Appendix B of TP208-10
- CHECK
- 3.8 Restrain the dummies using the belt systems for the position being tested.
- CHECK
- 3.9 Stow outboard armrests which are capable of being stowed.
- CHECK
- 3.10 Check the statement that applies to this test vehicle:
- (A) The torso and lap belt webbing of the seat belt system automatically retracts to a stowed position when the adjacent vehicle door is in an open position and the seat belt latch plate is released.
- Pass
- (B) The torso and lap belt webbing of the seat belt system automatically retracts when the seat belt latch plate is released.
- Pass
- (C) Neither A or B apply.
- FAIL
- 3.11 With the webbing and hardware in the stowed position are the webbing and hardware prevented from being pinched when the door is closed?
- Yes - Pass - NO - FAIL
- 3.12 If this test vehicle has an open body (without doors) and has a belt system with a tension-relieving device, does the belt system fully retract when the tension-relieving device is deactivated?
- N/A - Yes - Pass - NO - FAIL

Table 14 (continued)

4. SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle NHTSA No.:	CW0210
Vehicle Model Year/Make/Model/Body Style:	1998 Ford Escort 4-Door Sedan
Designated Seating Position Tested:	Right Front Side Passenger
Date of Comfort/Convenience Check:	3/28/98
Technician Performing Check:	James Czarnecki
GVWR:	3485 lbs

Test seat belts except those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

The requirements for accessibility **DO NOT APPLY** to:

- A. Seats whose seat cushions are movable so that the seat back serves a function other than seating (S7.4.6.1(b))
- B. Seats which are removable
- C. Seats which are movable so that the space formerly occupied by the seat can be used for a secondary function

If the seats in this vehicle are different than the criteria above determine the following:

- 4.1 Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back?
☐ Yes: go to 4.2. ☐ No: this form is complete.
- 4.2 Does one of the following three parts, the seat belt latch plate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)?
☐ Yes - Pass ☐ NO - FAIL
- 4.3 Are the remaining two seat belt parts accessible under normal conditions?
☐ Yes - Pass ☐ NO - FAIL

Table 14 (continued)

4. SEAT BELT GUIDES AND HARDWARE (S7.4.6) (continued)

- 4.4. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the following events occur in order:

(A) The belt is completely retracted or, if the belt is nonretractable, the belt is unlatched.

 - CHECK

(B) The seat is moved to any position to which it is designed to be adjusted.

 - CHECK

(C) The seat back, if foldable, is folded forward as far as possible and then moved backward into position.

 - CHECK

Yes - Pass - NO - FAIL

- 4.5. Is the inboard receptacle end of the seat belt assembly, installed in the outboard designated seating position, accessible with the center arm rest in any position to which it can be adjusted (without moving the armrest)?

 - Yes - Pass - NO - FAIL

Figure 10

FMVSS NO. 212 - "WINDSHIELD MOUNTING" DATA SHEET

DETAILS OF WINDSHIELD MOUNTING SUCH AS RETENTION METHOD, TRIM TYPE, ETC. :

The windshield is bonded in place with .75" of rubber molding.

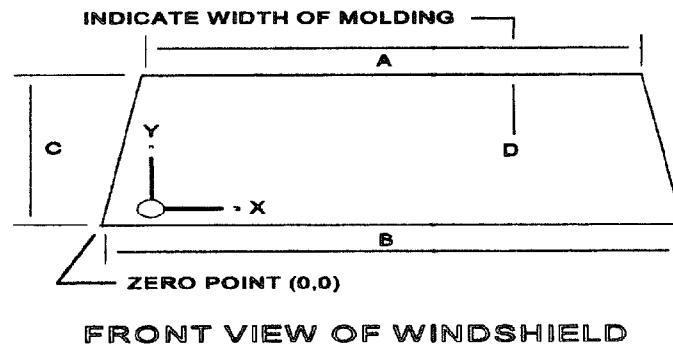
FMVSS 212 REQUIREMENTS :

The Post - Test periphery retention amount must be at least 75% of the Pre - Test periphery measurement for vehicle NOT equipped with automatic restraints, and 50% for each side of windshield for vehicles equipped with automatic restraint systems for front occupants.

FMVSS 212 TEST DATA :

	WINDSHIELD PERIPHERY		PERCENT RETENTION
	PRE - TEST (in.)	POST - TEST (in.)	
RIGHT SIDE	75.25	75.25	100.0
LEFT SIDE	75.25	75.25	100.0
TOTAL	150.5	150.5	100.0

AREA OF RETENTION FAILURE:



FAILURE
DETAILS :

None

Figure 11

FMVSS NO. 219 (PARTIAL) - "WINDSHIELD ZONE INTRUSION" DATA SHEET

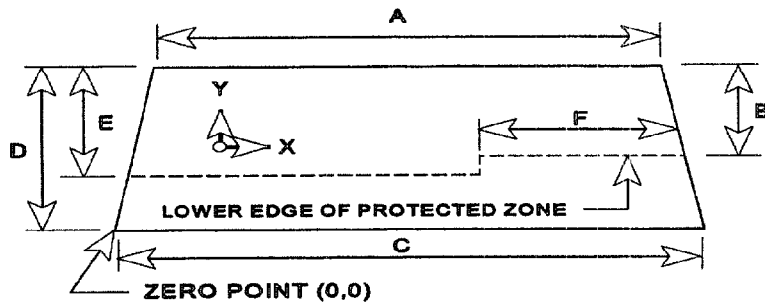
PROTECTED ZONE LOWER EDGE REQUIREMENT :

The lower edge of the protected zone is determined by placing a 6.5" dia. rigid sphere weighing 15 pounds in a position such that it simultaneously contacts the inner surface of the windshield and the top surface of the instrument panel including padding. The locus of points is drawn on the inner surface of the windshield contacted by the sphere across the width of the instrument panel. From the outermost contactable points, extend the locus line horizontally to the edges of the windshield, and then draw a line on the inner surface of the windshield below and 1/2" distant from the locus line. The **LOWER EDGE OF THE PROTECTED ZONE** is the longitudinal projection of this line onto the outer surface of the windshield

FMVSS 219 TEST DATA : (Dimensions in inches.)

KEY (Inches):

A =	42.5
B =	13.1
C =	57.0
D =	25.5
E =	16.3
F =	28.6



FRONT VIEW OF WINDSHIELD

DETAILS OF WINDSHIELD GLASS PENETRATION GREATER THAN 1/4" :

(Show location of penetration on above sketch)

None

COORDINATES		
	X	Y
1		
2		
3		
4		

Table 15

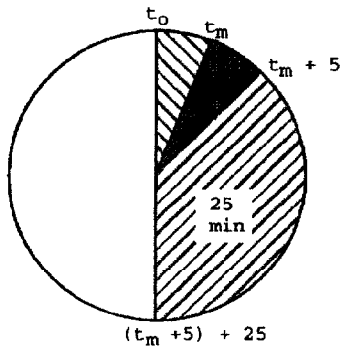
FUEL SYSTEM INTEGRITY POST IMPACT TEST DATA

FMVSS NO. 301

TEST VEHICLE NHTSA NO. : CW0210 TEST DATE : March 31, 1998Vehicle Mfr./Make/Model : 1998 Ford Escort 4-Door Sedan

Test vehicle fuel tank filled to 92% 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 : X Frontal (30 mph)
- Oblique (30 mph) with - ° barrier face first
 contacting -
 (driver/passenger) side
- 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 :

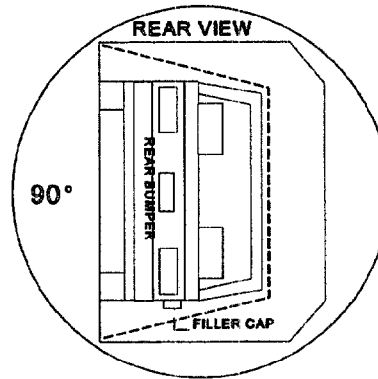
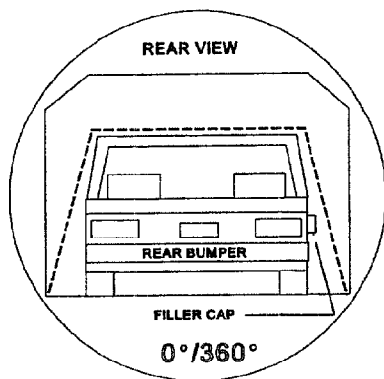
None

Table 16

FMVSS NO. 301 STATIC ROLLOVER DATA SHEETTEST PHASE :0-90 Deg.

Vehicle NHTSA ID No. :

CW0210

I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time
(Spec. Range = 1 to 3 minutes)

1 minutes 12 seconds

FMVSS 301 Position Hold Time +

5 minutes 00 seconds

TOTAL

6 minutes 12 seconds

Next whole minute interval

7 minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. if reqd.
--	----------	----------	----------------------

(2) Maximum Allowable Solvent Spillage

5 ounces	1 ounce	1 ounce	1 ounce
----------	---------	---------	---------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE :

0	0	0	n/a
---	---	---	-----

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

IV. SOLVENT SPILLAGE LOCATION(S) :

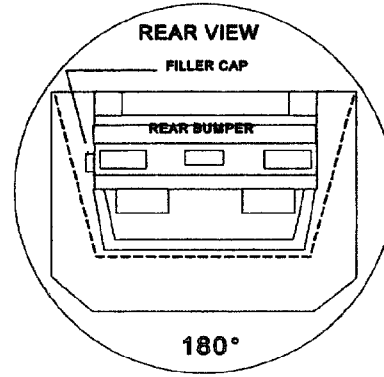
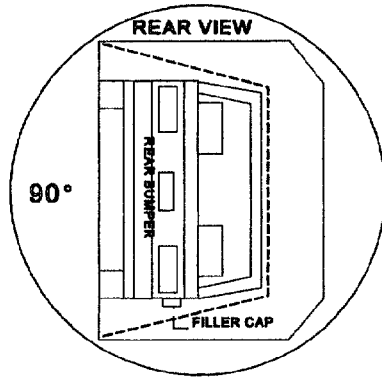
None

Table 16

FMVSS NO. 301 STATIC ROLLOVER DATA SHEET (cont.)

TEST PHASE :
90-180 Deg.

Vehicle NHTSA ID No. :
CW0210

I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time
(Spec. Range = 1 to 3 minutes)

1 minutes 3 seconds

FMVSS 301 Position Hold Time +

5 minutes 00 seconds

TOTAL

6 minutes 3 seconds

Next whole minute interval

7 minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. if reqd.
--	----------	----------	----------------------

(2) Maximum Allowable Solvent Spillage

5 ounces	1 ounce	1 ounce	1 ounce
----------	---------	---------	---------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE :

0	0	0	n/a
---	---	---	-----

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

IV. SOLVENT SPILLAGE LOCATION(S) :

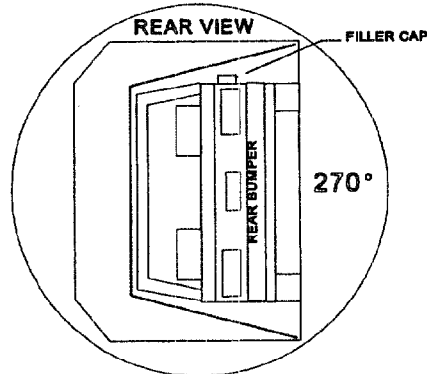
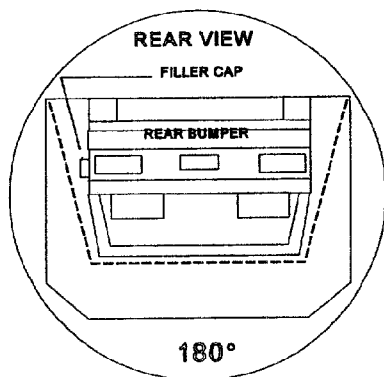
None

Table 16

FMVSS NO. 301 STATIC ROLLOVER DATA SHEET (cont.)TEST PHASE :180-270 Deg.

Vehicle NHTSA ID No. :

CW0210

I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time
(Spec. Range = 1 to 3 minutes)

1 minutes 10 seconds

FMVSS 301 Position Hold Time +

5 minutes 00 seconds

TOTAL

6 minutes 10 seconds

Next whole minute interval

7 minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. if reqd.
--	----------	----------	----------------------

(2) Maximum Allowable Solvent Spillage

5 ounces	1 ounce	1 ounce	1 ounce
----------	---------	---------	---------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE :

0	0	0	n/a
---	---	---	-----

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

IV. SOLVENT SPILLAGE LOCATION(S) :

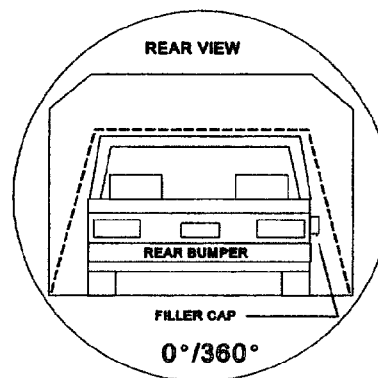
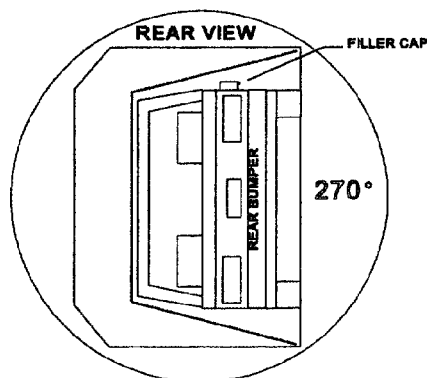
None

Table 16

FMVSS NO. 301 STATIC ROLLOVER DATA SHEET (cont.)

TEST PHASE :
270-360 Deg.

Vehicle NHTSA ID No. :
CW0210

**I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :**

Rollover Fixture 90° Rotation Time
 (Spec. Range = 1 to 3 minutes)

1 minutes 10 seconds

FMVSS 301 Position Hold Time +

5 minutes 00 seconds

TOTAL

6 minutes 10 seconds

Next whole minute interval

7 minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. if reqd.
--	----------	----------	----------------------

(2) Maximum Allowable Solvent Spillage

5 ounces	1 ounce	1 ounce	1 ounce
----------	---------	---------	---------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE :

0	0	0	n/a
---	---	---	-----

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

IV. SOLVENT SPILLAGE LOCATION(S) :

None

Table 17

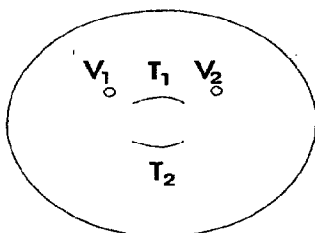
POST TEST AIR BAG DATANHTSA No.: CW0210; Test Date: March 31, 1998; Technician: LQVVehicle Model Year/Make/Model: 1998 Ford Escort

- A. No. of vent holes: 2 -Driver 2 -Passenger
- B. Size of vent holes: (In.²) 1.1 -Driver 3.0 -Passenger
- C. Total vent area: (In.²) 2.2 -Driver 6.0 -Passenger
- D. Deflated air bag length and width dimensions or, if round, diameter. (In inches)
- Driver: 16.9 -Length; 20.7 -Width; 13.2 -Diameter
- Passenger: 28.9 -Height; 31.5 -Width; 33.5 -Depth
- E. Is the air bag tethered?
- Driver: x -Yes; - -No; If yes, record length of tether- 10.6
- Passenger: - -Yes; x -No; If yes, record length of tether- -

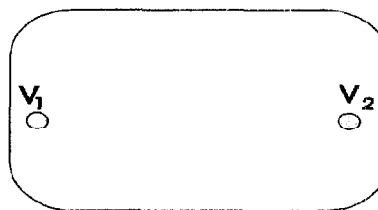
Sketch the air bag showing the location of the vent holes, how the bag is tethered, and where the bag is tethered. Also describe how the tethers are attached to the bag and the steering wheel.

(Note: Not to scale; V_n = Vent hole_n, T_n = Tether_n).

DRIVER
vents underneath bag



PASSENGER
vents underneath bag



- F. Record part numbers and manufacturer name of the air bag and gas generator.

Driver: Air bag: -

Generator: 1Z2R281K0453 DP 1200975C

Passenger: Air bag: -

Generator: 18824 266 L1 6913 235 L2 6000 237 L2

- G. Cut out a 6 inch by 6 inch swatch of the bag material and at least one tether from each bag, mark the vehicle's NHTSA number on the swatch, and send these parts to the COTR with the test report.

Table 18

ACCIDENT INVESTIGATION DIVISION DATA

VEHICLE YEAR/MAKE/MODEL/BODY STYLE: 1998 Ford Escort 4-Door Sedan

VEHICLE NHTSA NO. : CW0210 VIN NO. : 1FAFP10P4WW156367

WHEELBASE: 98.4 in. BUILD DATE: 10/97 TEST DATE: March 31, 1998

VEH SIZE CATEGORY: Sedan TEST WEIGHT: 2851 lbs.

FRONT OVERHANG: 59.2 in. OVERALL WIDTH: 66.2 in.

COLLISION DEFORMATION (CDC) CODE: 12FDEW2

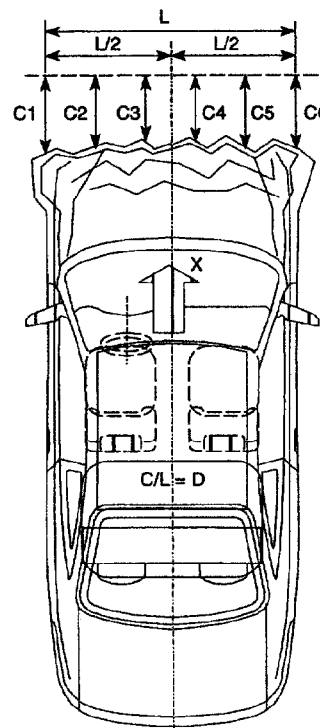
IMPACT MODE: 30 mph zero degree frontal barrier.

CRUSH DEPTH DIMENSIONS: (Inches)

	PRE	POST	DIFF
C1 =	168.0	159.5	-8.5
C2 =	173.0	162.7	-10.3
C3 =	174.5	162.5	-12
C4 =	174.5	161.0	-13.5
C5 =	172.7	159.5	-13.2
C6 =	167.5	157.2	-10.3

MIDPOINT OF DAMAGE: D=
(Vehicle Longitudinal Centerline) 59.0

LENGTH OF DAMAGE
REGION: L= 29.5



Remarks: _____

Table 19

TEST VEHICLE NONCOMPLIANCE NOTICE

NHTSA Contract Lab : Calspan Corporation
Lab Project Manager & Telephone No. : David J. Travale (716) 632 - 7500
Date of Test : March 31, 1998 Vehicle NHTSA No. : CW0210
Vehicle Manufacturer : Ford Motor Company
Model Year : 1998 VIN : 1FAFP10P4WW156367
Model : Escort Body Style: 4-Door Sedan Build Date : 10/97
Dummy Stabilized Temperature at Time of Test : 71 °F (Spec. = 69 - 72 °F)
Impact Velocity : 29.6 mph; Time of Test : 13:10
Type of Automatic Restraint System :
Driver : 3-point belt system with airbag
Passenger : 3-point belt system with airbag

Failure Details :

The vehicle as tested, appears to comply with the requirements of FMVSS Nos. 208, 212, 219(partial), and 301.

Requirements :

Approximate date that final test report will be made available to CTM:

Date Mfg. Rep. Notified : _____ Rep. Name: _____

Remarks: _____

Date of Proposed Joint Inspection of Test Vehicle : _____

NHTSA CMT : _____ CIR No.: _____ Date : _____

Appendix A
PHOTOGRAPHS

LIST OF PHOTOGRAPHS

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A-4	POST -TEST LEFT SIDE VIEW	A-6
A-5	PRE-TEST RIGHT SIDE VIEW	A-7
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A-22	TIRE PLACARD	A-24
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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

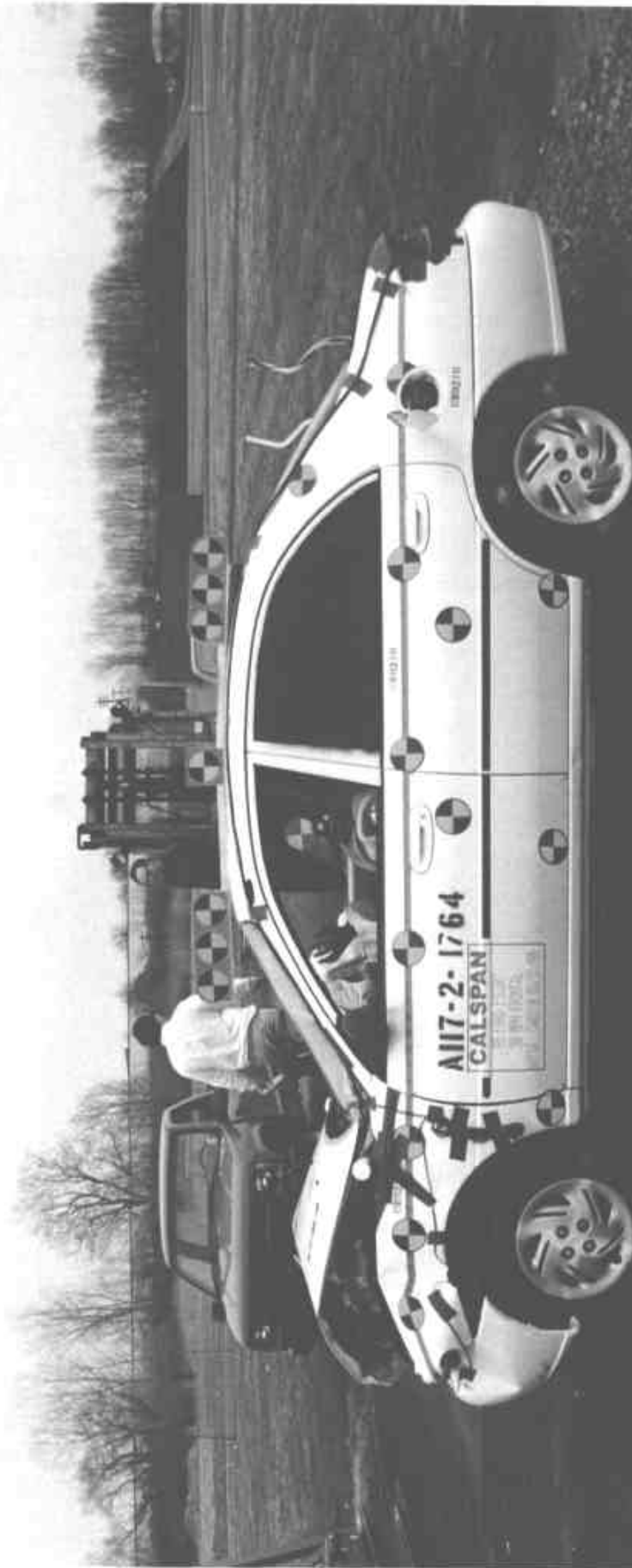


Figure A-4 POST-TEST LEFT SIDE VIEW

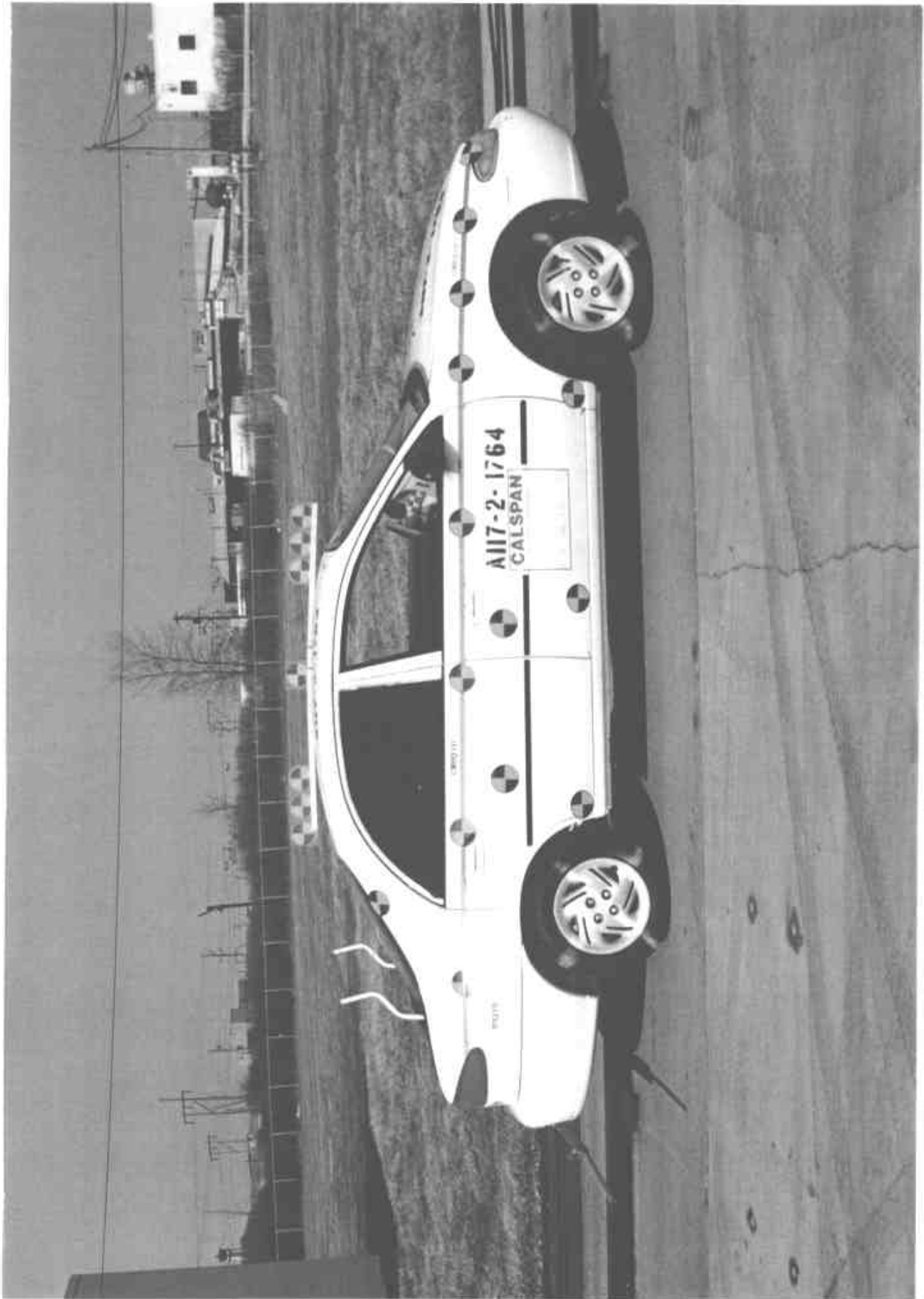


Figure A-5 PRE-TEST RIGHT SIDE VIEW



Figure A-6 POST-TEST RIGHT SIDE VIEW

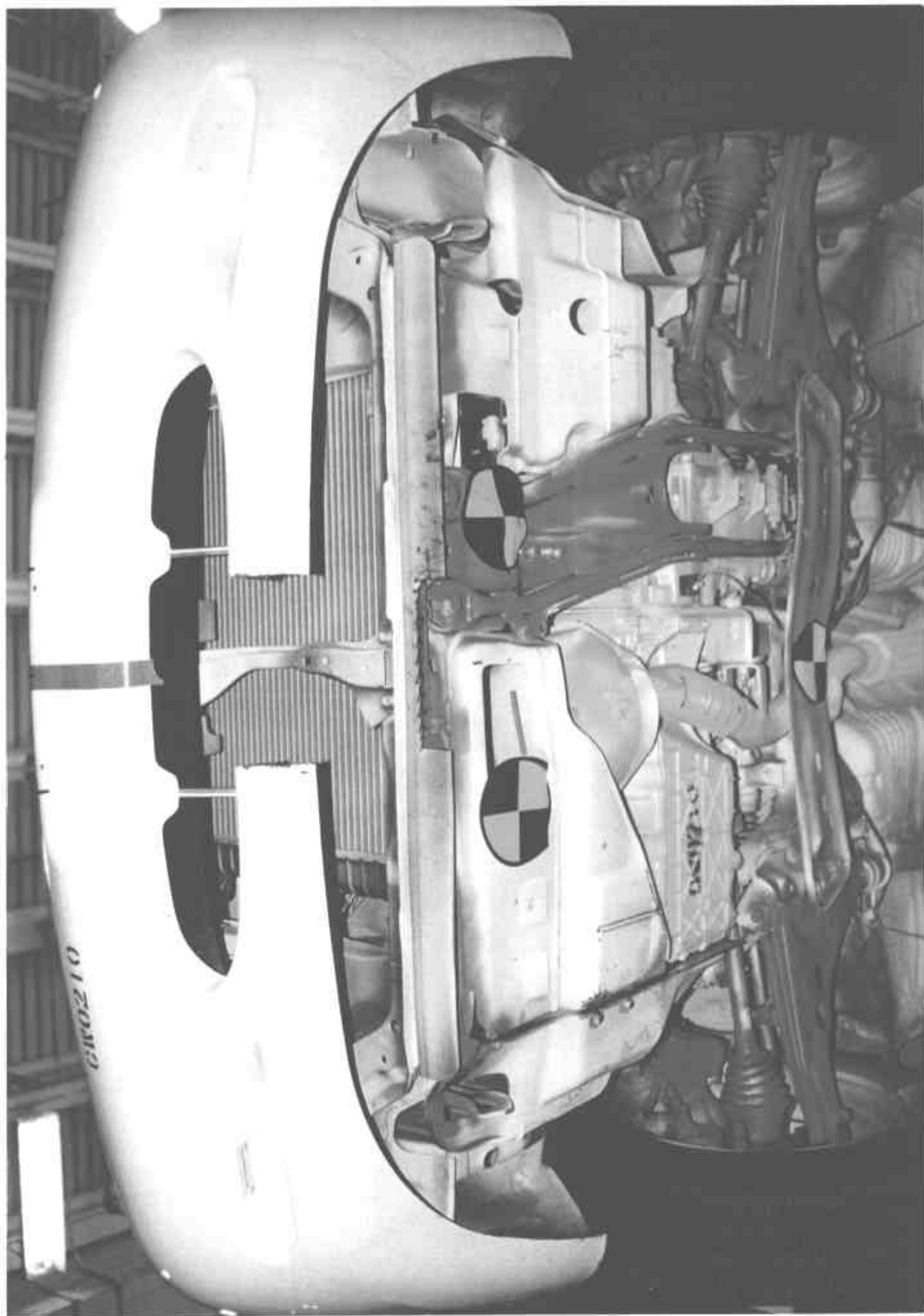


Figure A-7 PRE-TEST FRONT UNDERBODY VIEW



Figure A-8 POST-TEST FRONT UNDERBODY VIEW

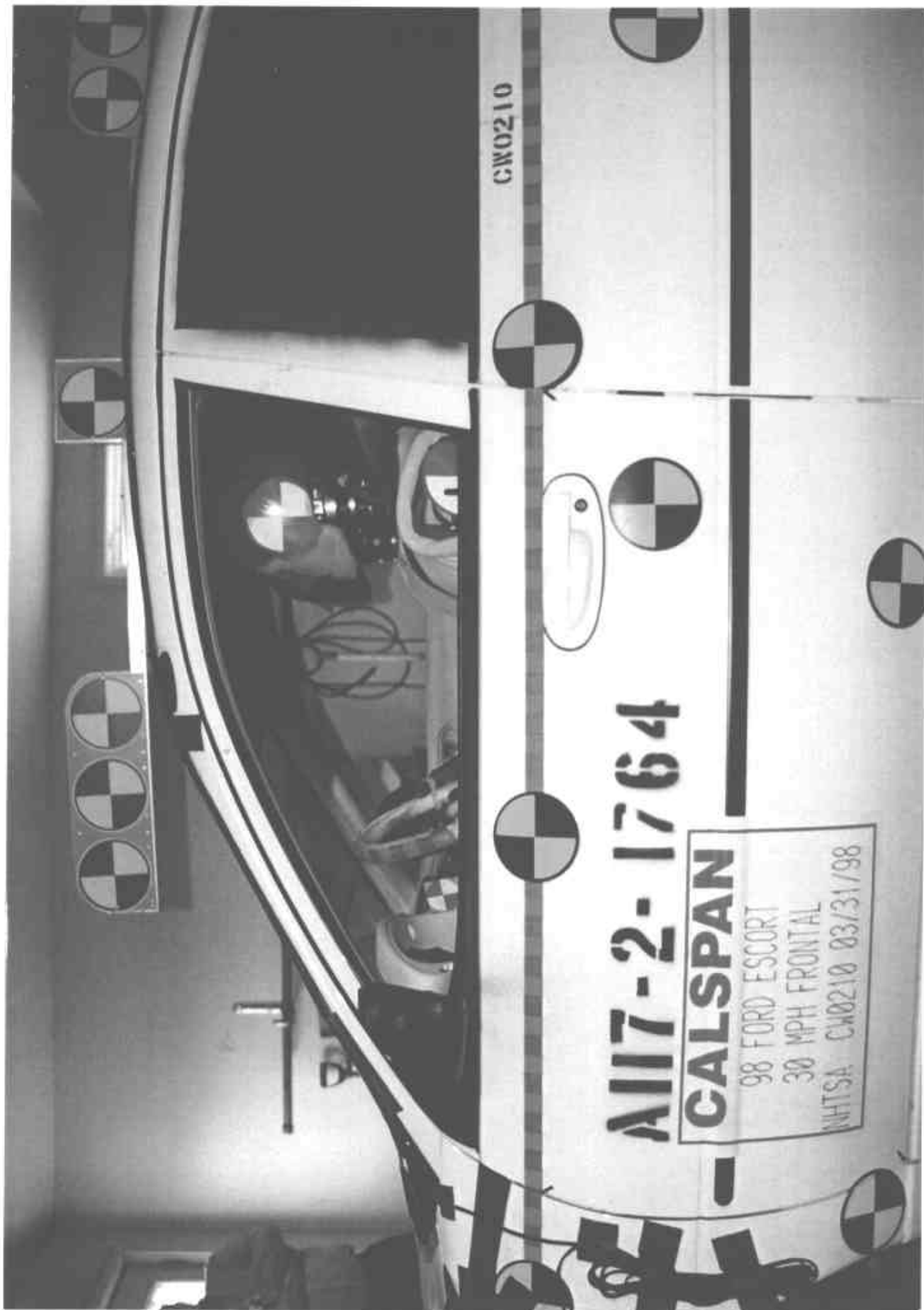


Figure A-9 PRE-TEST DRIVER SIDE VIEW

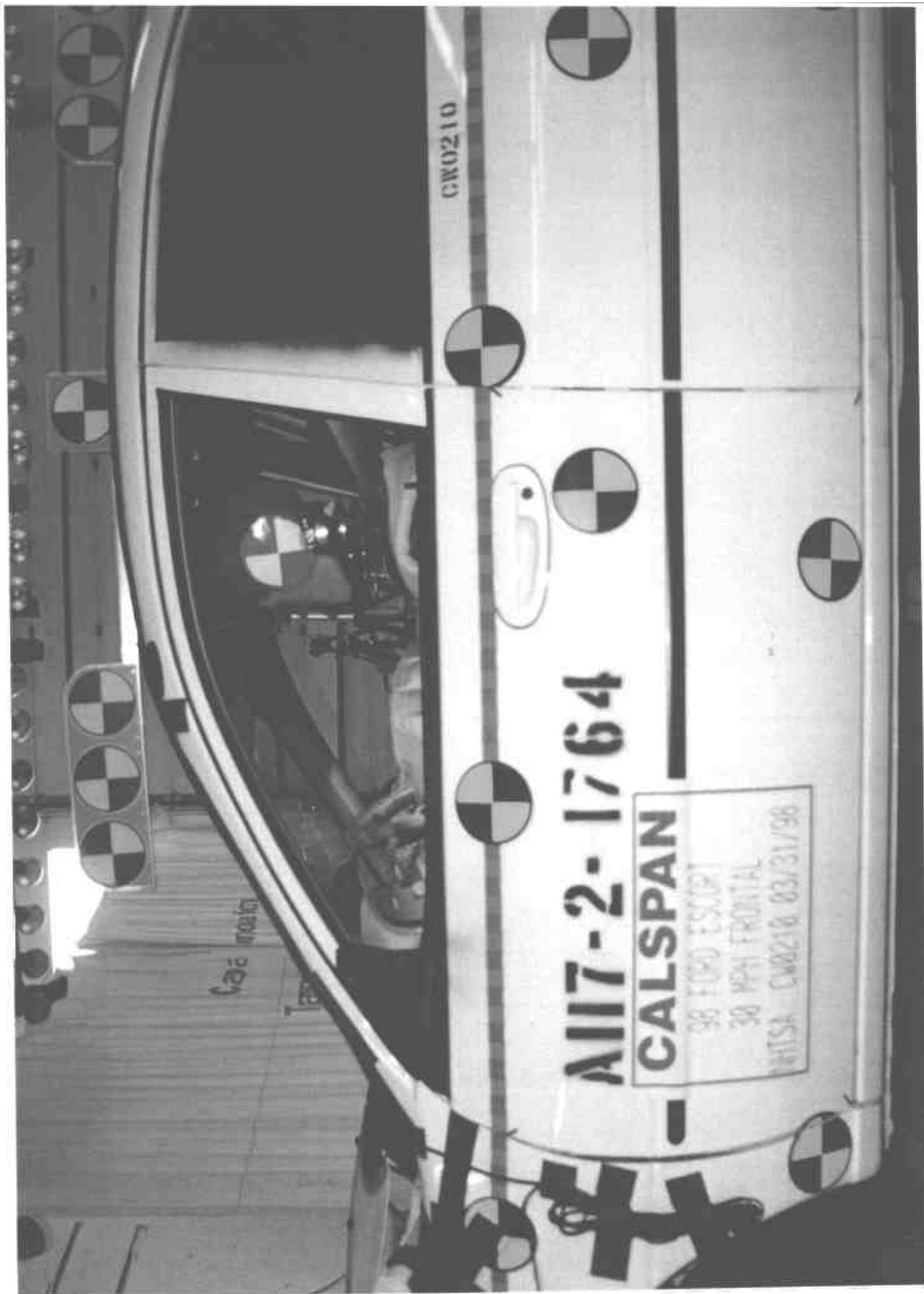


Figure A-10 POST-TEST DRIVER SIDE VIEW

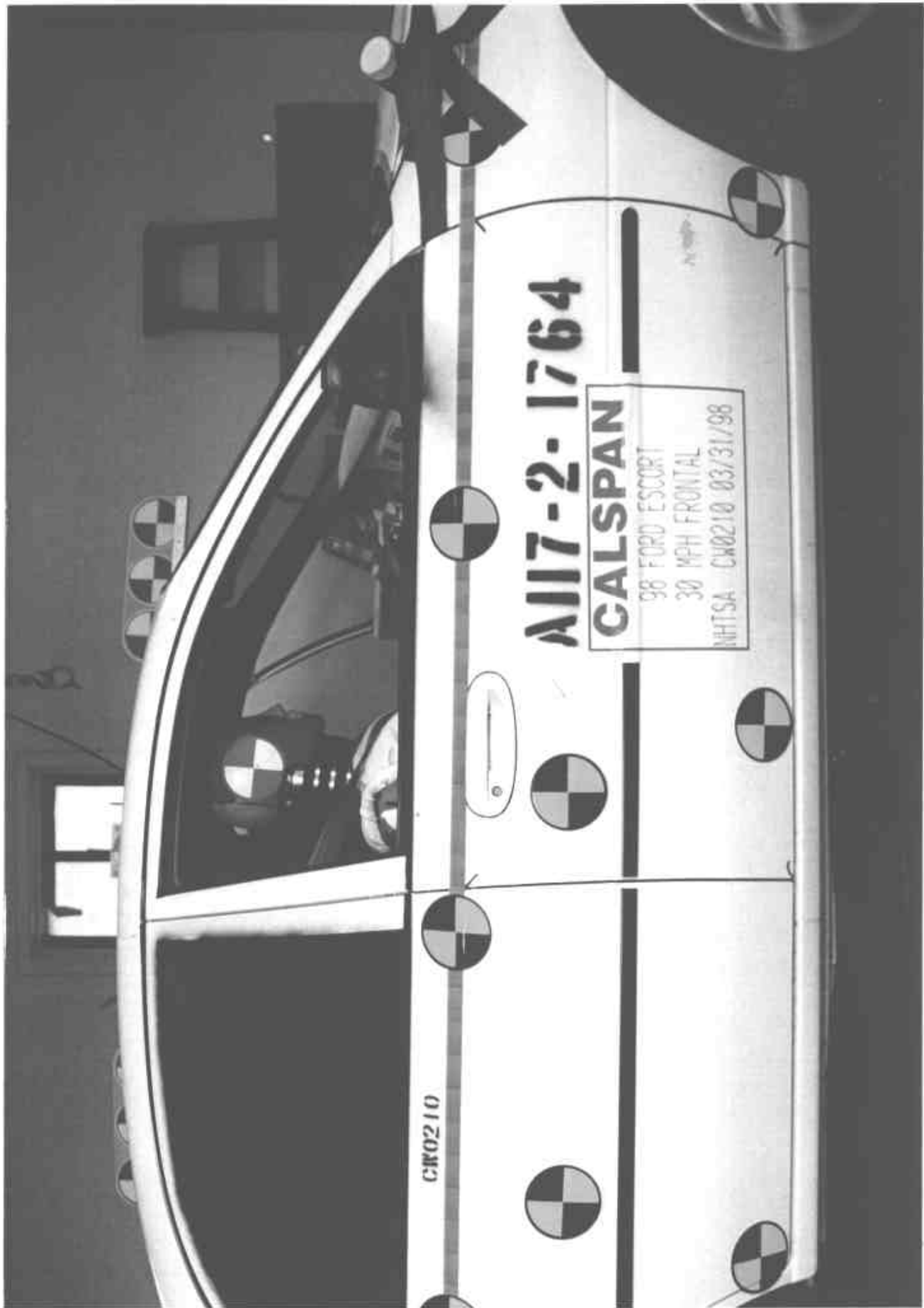


Figure A-11 PRE-TEST PASSENGER SIDE VIEW



Figure A-12. POST-TEST PASSENGER SIDE VIEW



Figure A-13 PRE-TEST DRIVER KNEE BOLSTER

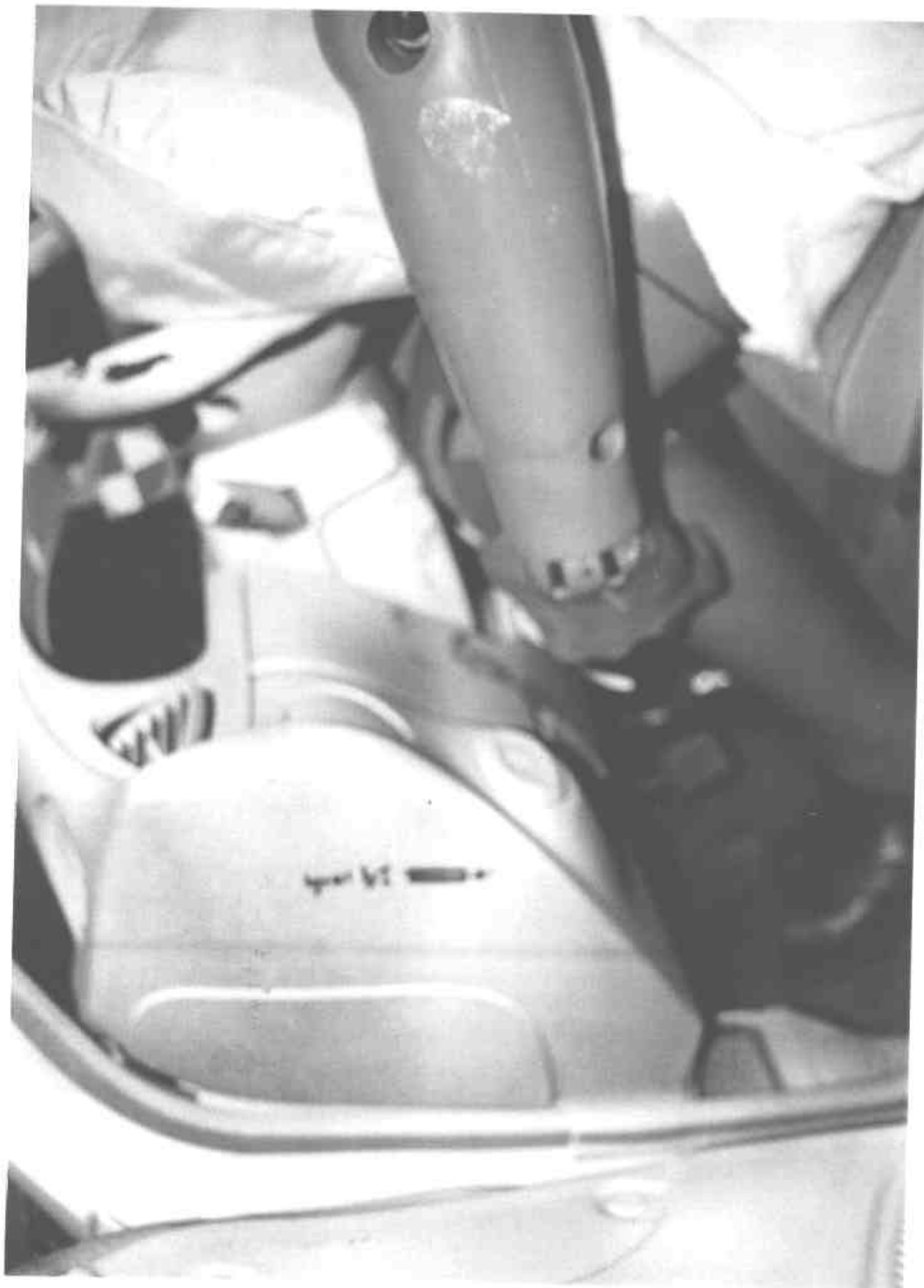


Figure A-14 POST-TEST DRIVER KNEE BOLSTER



Figure A-15 PRE-TEST PASSENGER KNEE BOLSTER



Figure A-16 POST-TEST PASSENGER KNEE BOLSTER



Figure A-17 PRE-TEST UNDERBODY STEERING SHAFT



Figure A-18 POST-TEST UNDERBODY STEERING SHAFT



Figure A-19 PRE-TEST STEERING COLUMN/FIREWALL INSIDE VIEW

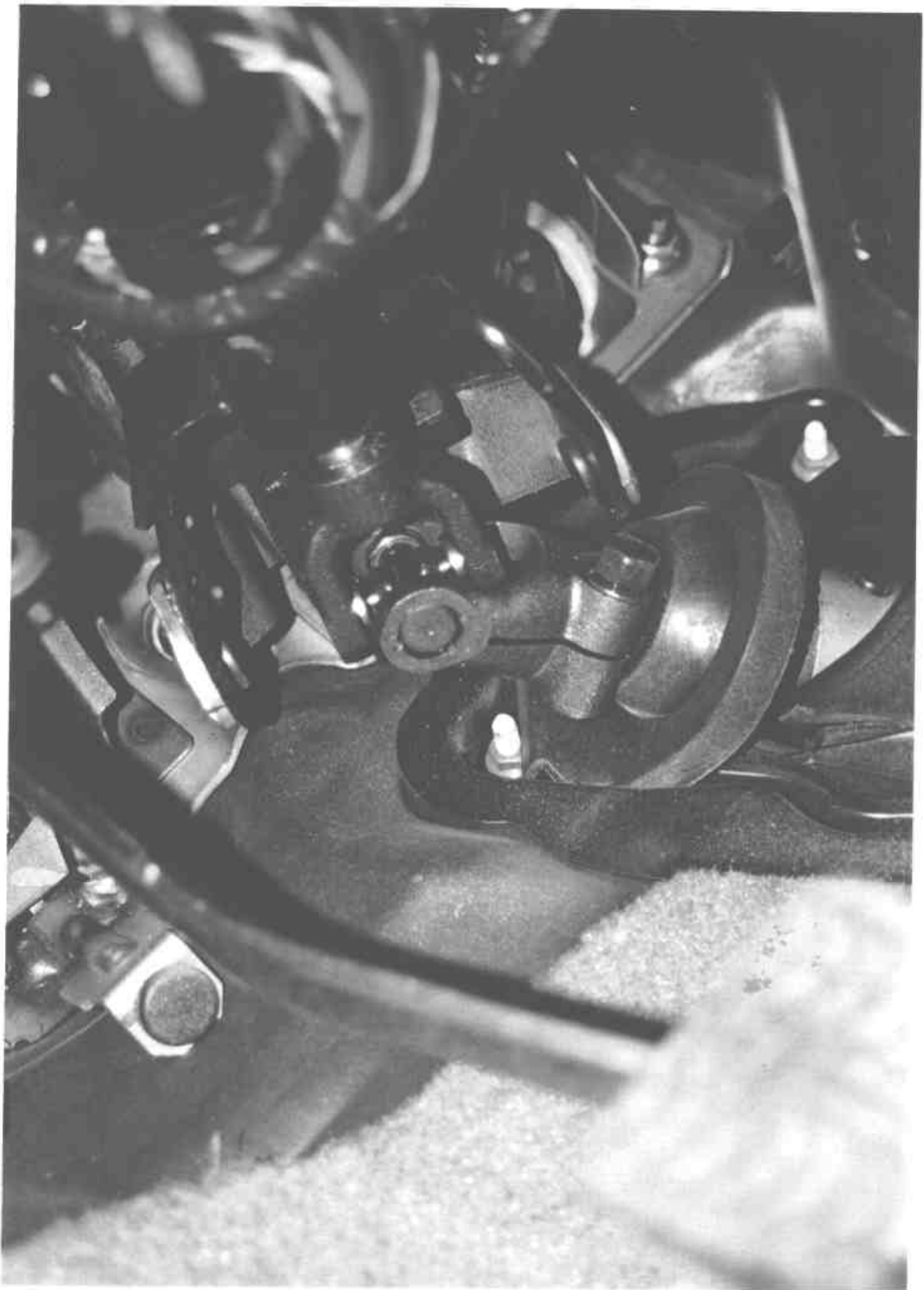
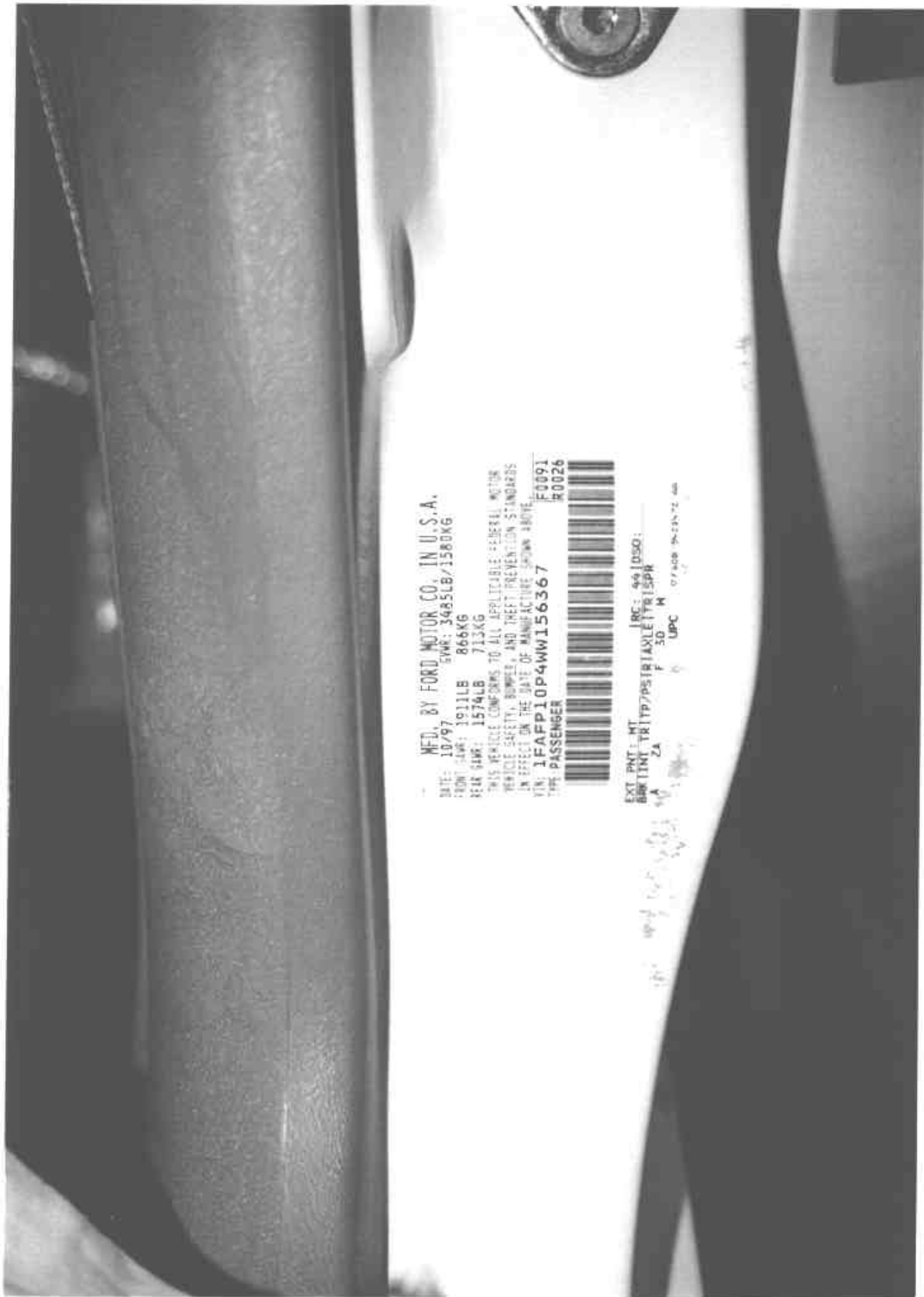


Figure A-20 POST-TEST STEERING COLUMN/FIREWALL INSIDE VIEW



FORD MOTOR CO. IN U.S.A.

DATE: 10/97 GWR: 3485LB/1580KG

FRONT GAW: 1911LB 866KG

REAR GAW: 1574LB 713KG

THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY, BUMPER, AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE

VIN: 1FAPF10P4WW156367

TYPE: PASSENGER



F0091

F0026

EXT	PNT	MT	JRC	99	DSO
BENTINT	TR	TP	PS	BIA	VLE
A	ZA	F	SD	W	UPC
07408 24-23N72 440					

Figure A-21 CERTIFICATION PLACARD



Figure A-22 TIRE PLACARD

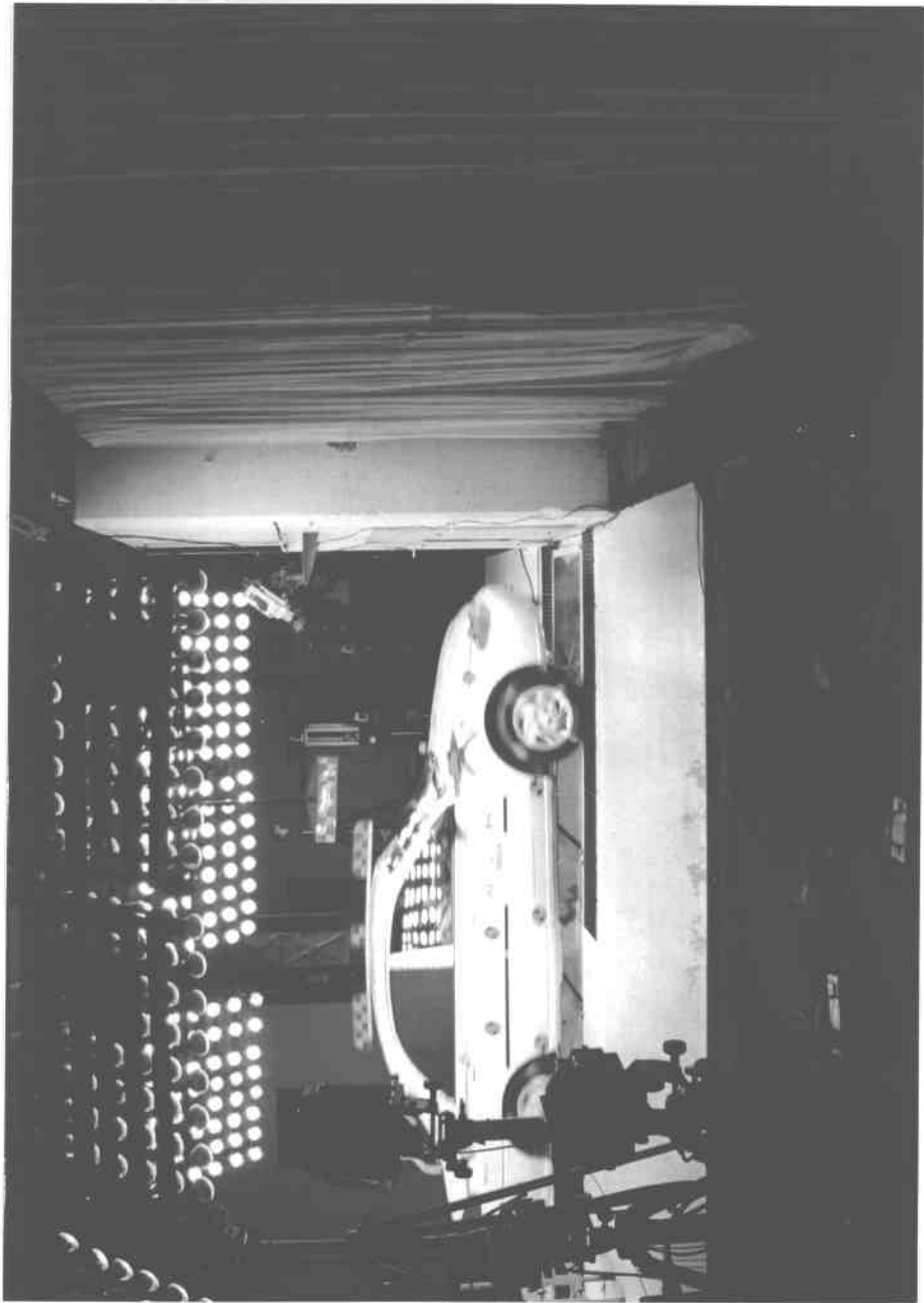


Figure A-23 VEHICLE IMPACT



Figure A-24 POST-TEST DRIVER AIRBAG VIEW



Figure A-25 POST-TEST PASSENGER AIRBAG VIEW

Appendix B
VEHICLE AND DUMMY RESPONSE DATA

NOTE : Data trace scales are automatically scaled at the
request of the COTR. Use caution when
reviewing data.

FACILITY: track TEST DATE: 31 Mar 1998
 RUN #: 1764 TEST TIME: 13:10:34
 SERIES #: 1 BOARD: a

TITLE: 208 Test #2 - 1998 Ford Escort

CHANNEL NUMBER	DESCRIPTION	ENGR UNIT	MAXIMUM		MINIMUM		FILTER CLASS
			AMP	msec	AMP	msec	
1	Pos. 1 Head X	Gs	28.4	223.0	-46.1	81.9	1000.0
2	Pos. 1 Head Y	Gs	20.8	222.8	-8.3	6.6	1000.0
3	Pos. 1 Head Z	Gs	27.2	63.7	-9.7	6.6	1000.0
4	Pos. 1 Left Femur	lbs	142.4	53.6	-779.1	62.8	600.0
5	Pos. 1 Chest X	Gs	5.3	236.3	-47.8	64.2	180.0
6	Pos. 1 Chest Y	Gs	2.4	115.8	-11.5	79.2	180.0
7	Pos. 1 Chest Z	Gs	7.0	225.1	-8.6	80.9	180.0
8	Pos. 1 Right Femur	lbs	198.7	6.7	-702.5	59.7	600.0
9	Pos. 2 Head X	Gs	10.6	264.4	-49.3	80.4	1000.0
10	Pos. 2 Head Y	Gs	11.3	.3	-20.6	84.9	1000.0
11	Pos. 2 Head Z	Gs	37.7	66.2	-2.1	102.3	1000.0
12	Pos. 2 Left Femur	lbs	220.1	6.6	-1025.2	59.5	600.0
13	Pos. 2 Chest Y	Gs	7.9	88.6	-2.3	82.3	180.0
14	Pos. 2 Chest X	Gs	3.0	268.9	-48.5	76.9	180.0
15	Pos. 2 Chest Z	Gs	9.1	65.1	-8.7	99.8	180.0
16	Pos. 2 Right Femur	lbs	67.8	93.4	-833.8	54.0	600.0
17	Pos. 1 Head Resultant	Gs	51.5	81.6	.0	-25.3	1000.0
18	Pos. 1 Chest Resultant	Gs	48.6	64.3	.0	-13.6	180.0
19	Pos. 2 Head Resultant	Gs	61.0	78.3	.1	-21.4	1000.0
20	Pos. 2 Chest Resultant	Gs	49.0	77.0	.0	-36.4	180.0

V2 36 ms Fixed Duration HIC SUMMARY: Pos. 1 Head Resultant

hic: 341.90
 t1 = 58.000 msec
 t2 = 94.000 msec
 Average G's Over Hic Duration = 39.00

V2 36 ms Fixed Duration HIC SUMMARY: Pos. 2 Head Resultant

hic: 471.70
 t1 = 62.500 msec
 t2 = 96.300 msec
 Average G's Over Hic Duration = 45.49

CLIP V2.1 SUMMARY: Pos. 1 Chest Resultant

Peak Resultant (3 ms CLIPPED DURATION) = 47.531 G's
 Tstart = 62.5763 ms
 Tend = 65.5763 ms
 CSI = 387.285

CLIP V2.1 SUMMARY: Pos. 2 Chest Resultant

Peak Resultant (3 ms CLIPPED DURATION) = 47.230 G's
 Tstart = 75.8931 ms
 Tend = 78.8931 ms
 CSI = 331.349

FACILITY: track TEST DATE: 31 Mar 1998
 RUN #: 1764 TEST TIME: 13:10:34
 SERIES #: 1 BOARD: b

TITLE: 208 Test #2 -- 1998 Ford Escort

CHANNEL NUMBER	DESCRIPTION	ENGR UNIT	MAXIMUM		MINIMUM		FILTER CLASS
			AMP	msec	AMP	msec	
1	Pos.1 Upper Neck Fx	N	689.5	117.6	-331.4	226.2	1000.0
2	Pos.1 Upper Neck Fy	N	136.0	359.9	-314.1	98.2	1000.0
3	Pos.1 Upper Neck Fz	N	1588.4	67.8	-761.6	225.8	1000.0
4	Pos.1 Chest Displacement	ins	.0	.3	-1.8	79.9	600.0
5	Pos.1 Upper Neck Mx	N-m	16.2	89.0	-18.3	228.0	600.0
6	Pos.1 Upper Neck My	N-m	47.2	113.9	-18.7	212.1	600.0
7	Pos.1 Upper Neck Mz	N-m	8.6	116.7	-16.6	77.5	600.0
8	Pos.2 Chest Displacement	ins	.0	15.4	-.7	78.7	600.0
9	Pos.2 Upper Neck Fx	N	350.9	127.1	-421.8	77.5	1000.0
10	Pos.2 Upper Neck Fy	N	216.9	359.9	-218.6	35.8	1000.0
11	Pos.2 Upper Neck Fz	N	1163.3	65.9	-402.0	86.5	1000.0
12	Trunk Z	Gs	18.2	18.7	-16.0	53.7	60.0
13	Pos.2 Upper Neck Mx	N-m	10.4	117.3	-30.7	86.7	600.0
14	Pos.2 Upper Neck My	N-m	46.9	78.3	-17.7	278.5	600.0
15	Pos.2 Upper Neck Mz	N-m	38.4	97.8	-17.8	154.7	600.0
16	NULL	ins	.0	359.9	.0	359.9	1000.0
17	Pos.1 Neck Force Res.	N	1595.6	67.8	4.3	23.6	1000.0
18	Pos.1 Neck Moment Res.	N-m	49.8	113.8	.0	-31.1	600.0
19	Pos.2 Neck Force Res.	N	1170.4	65.9	5.1	-5.9	1000.0
20	Pos.2 Neck Moment Res.	N-m	56.0	85.4	.0	-31.2	600.0

FACILITY: track TEST DATE: 31 Mar 1998
 RUN #: 1764 TEST TIME: 13:10:34
 SERIES #: 1 BOARD: c

TITLE: 208 Test #2 - 1998 Ford Escort

CHANNEL NUMBER	DESCRIPTION	ENGR UNIT	MAXIMUM		MINIMUM		FILTER CLASS
			AMP	msec	AMP	msec	
1	Left Rear X-member X	Gs	3.2	134.8	-36.2	35.4	60.0
2	Right Rear X-member X	Gs	2.0	101.7	-32.1	53.9	60.0
3	Engine Top X	Gs	36.0	38.6	-119.3	31.6	60.0
4	Engine Bottom X	Gs	6.4	43.1	-68.6	23.3	60.0
5	Right Brake Caliper X	Gs	48.1	35.5	-63.9	48.9	60.0
6	Left Brake Caliper X	Gs	9.6	56.3	-79.8	47.3	60.0
7	Instrument Panel X	Gs	25.6	60.2	-61.1	45.9	60.0
8	NULL	Gs	.0	359.9	.0	359.9	1000.0

TEST NO. CW0210

VEHICLE

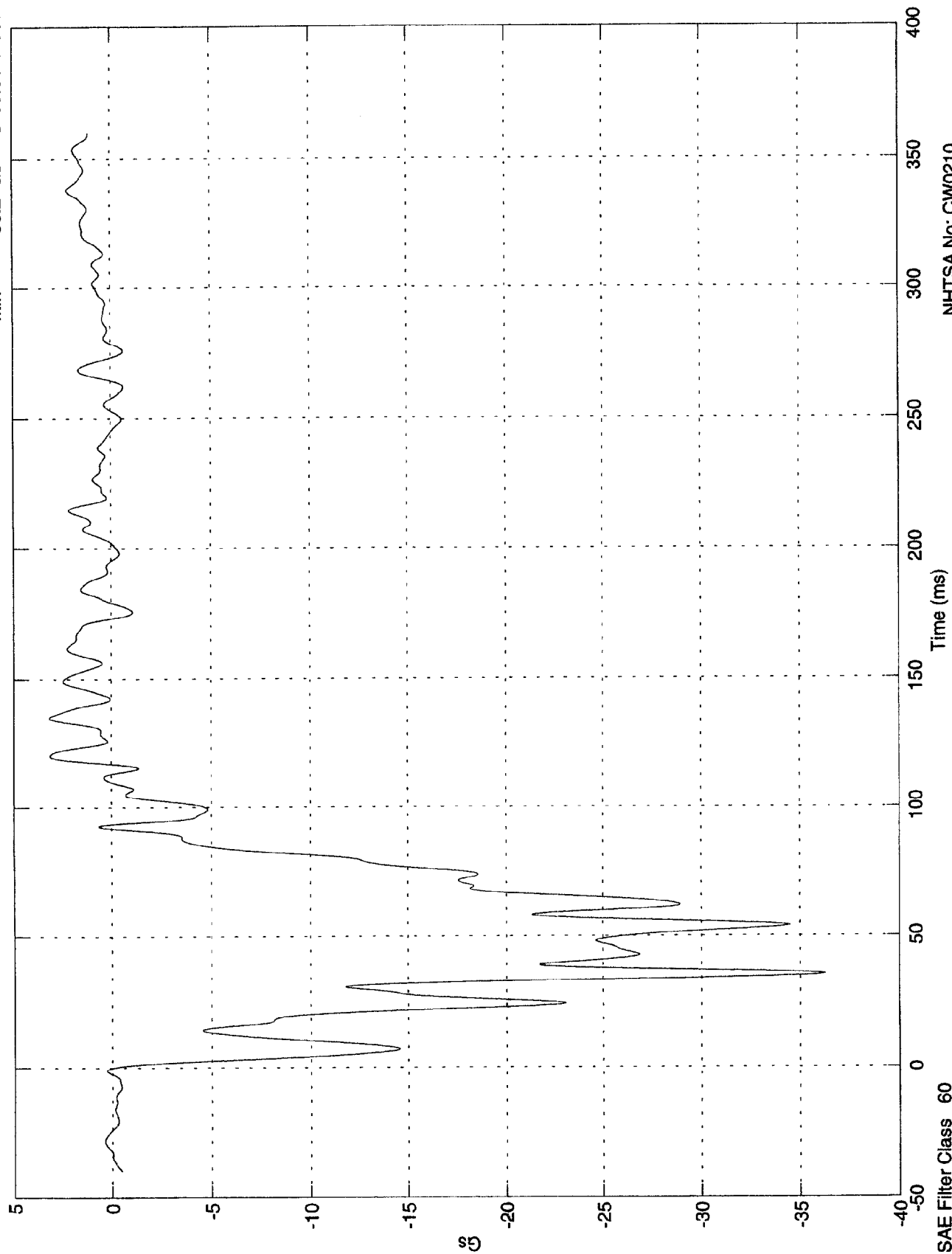
SAE FILTER CHANNEL CLASS

60

208 Test #2 - 1998 Ford Escort

Max = 3.17 Gs @ 134.90 msec
Min = -36.2 Gs @ 35.50 msec

Left Rear X-member X



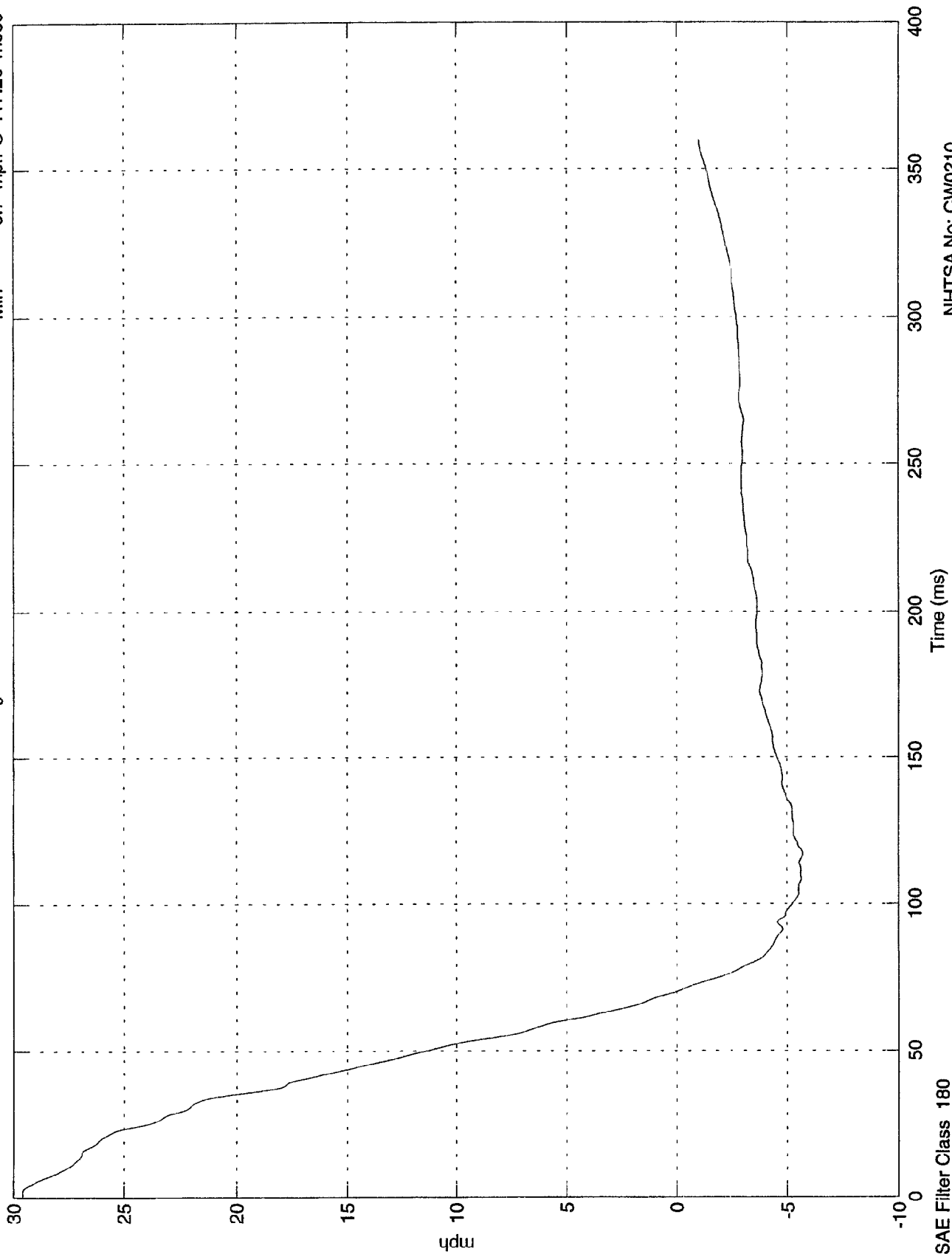
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 60

208 Test #2 - 1998 Ford Escort

Max = 29.6 mph @ 0.00 msec
Min = -5.7 mph @ 117.20 msec

1st Integral Left Rear X-member X

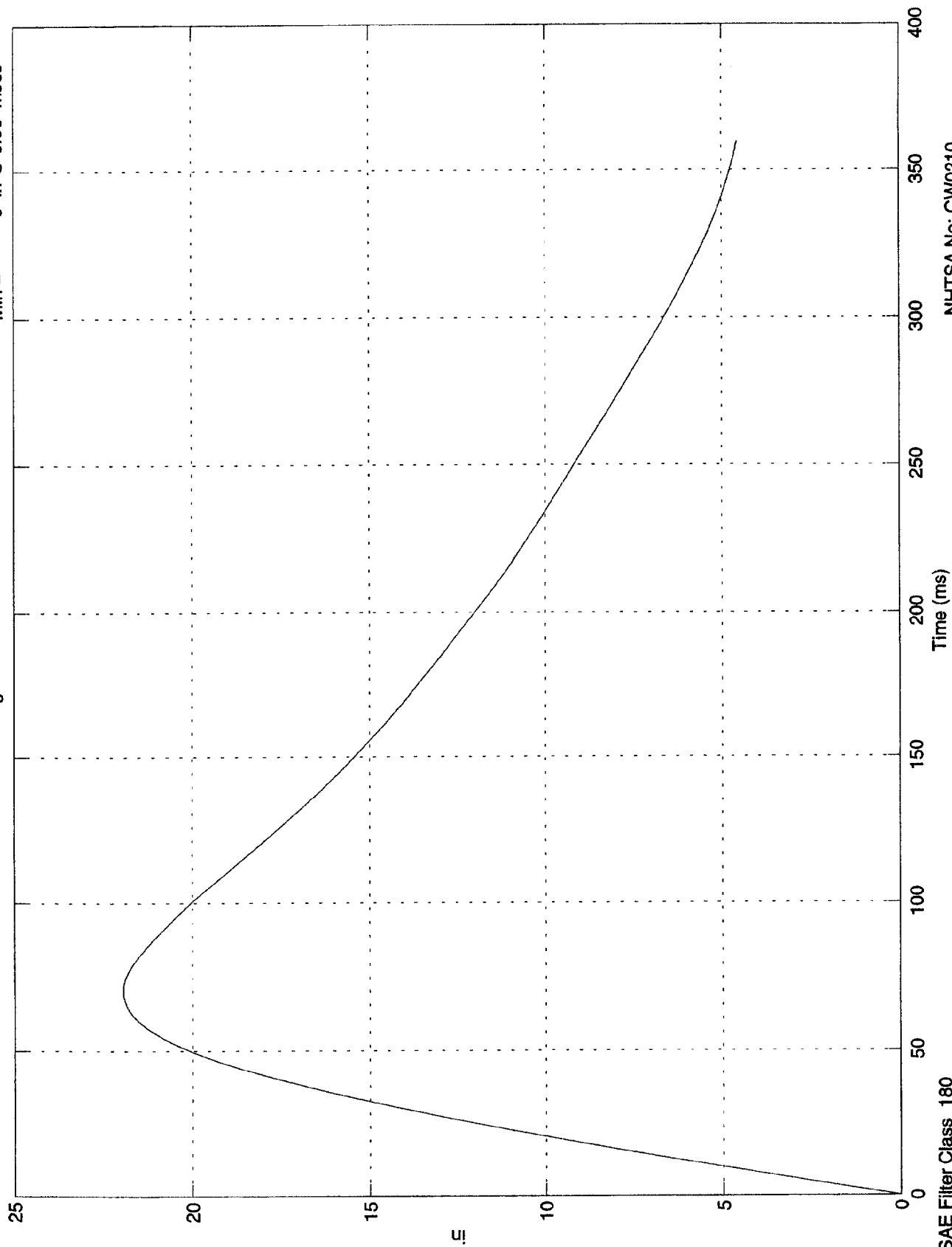


NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 180

Max = 21.9 in @ 70.30 msec
Min = 0 in @ 0.00 msec

2nd Integral Left Rear X-member X



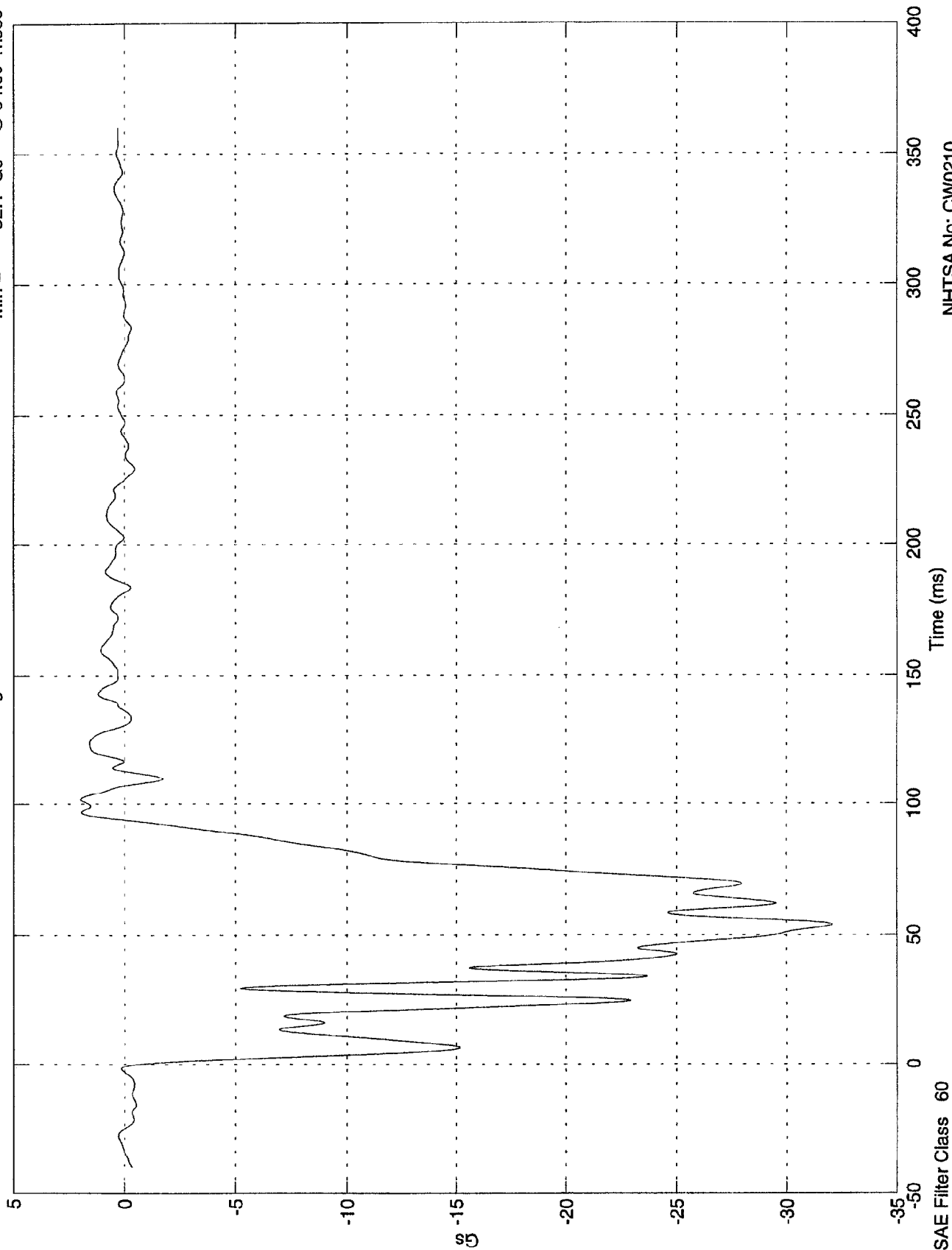
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 180

208 Test #2 - 1998 Ford Escort

Max = 1.96 Gs @ 101.80 msec
Min = -32.1 Gs @ 54.00 msec

Right Rear X-member X

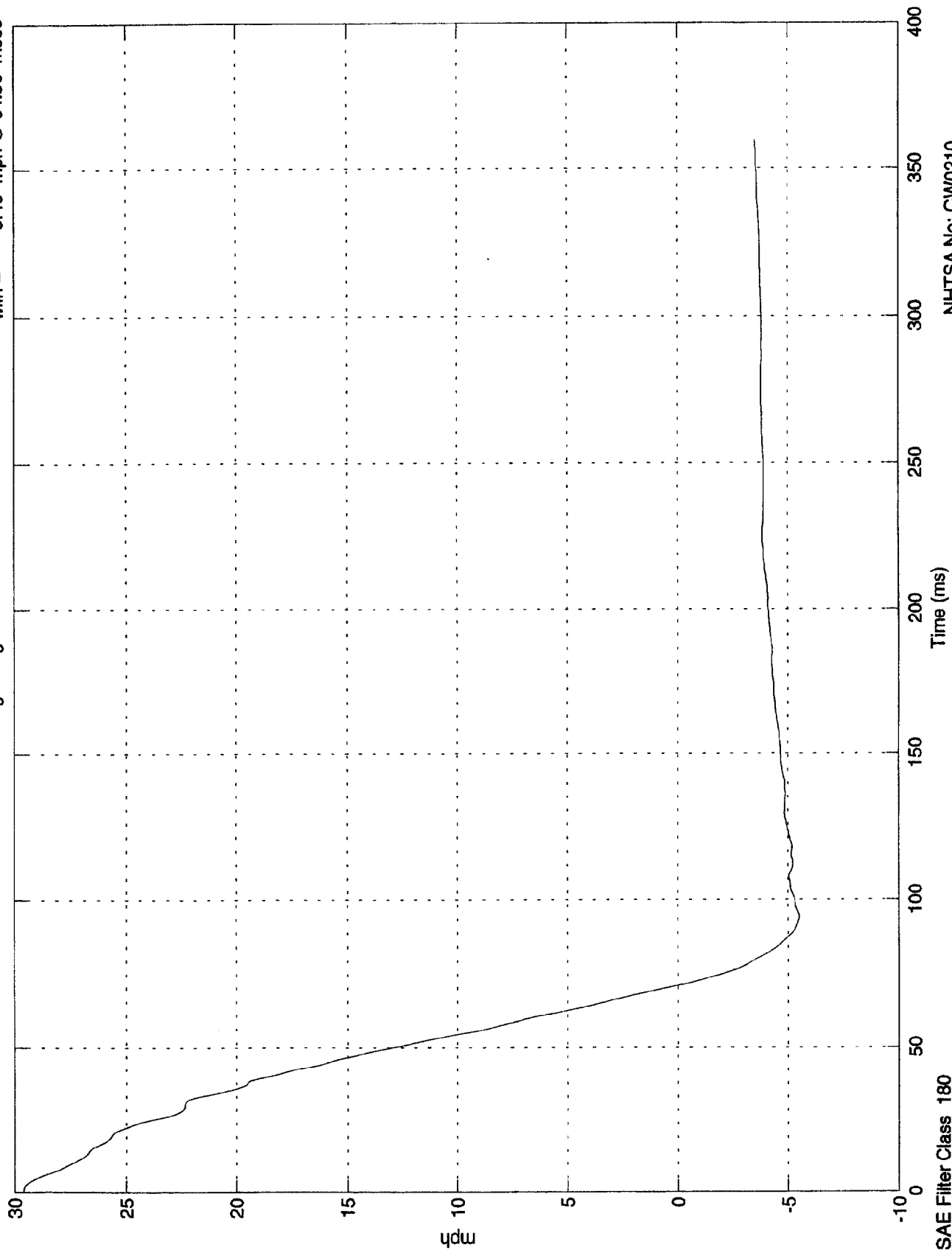


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 29.6 mph @ 0.50 msec
Min = -5.49 mph @ 94.30 msec

1st Integral Right Rear X-member X



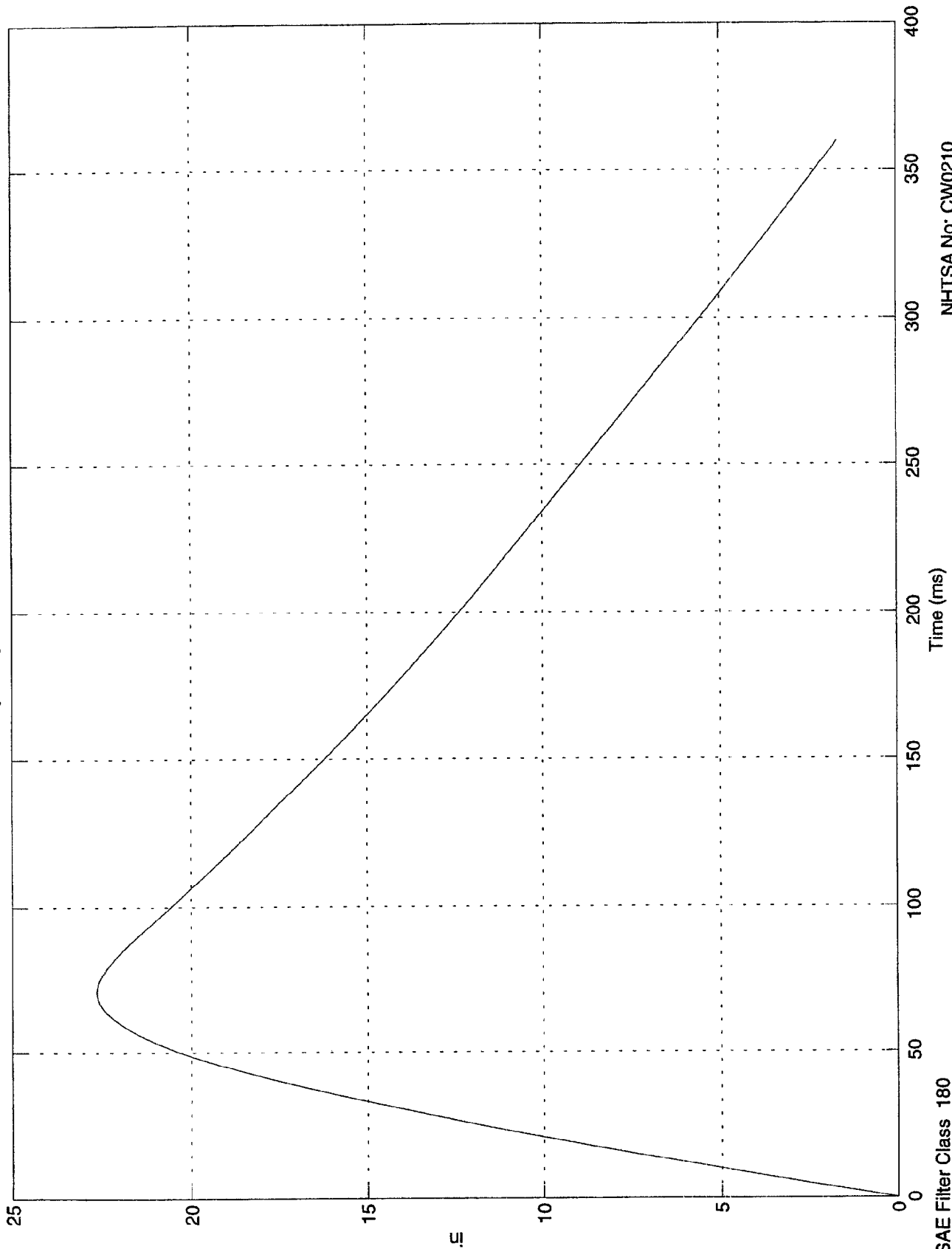
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 180

208 Test #2 - 1998 Ford Escort

Max = 22.7 in @ 71.00 msec
Min = 0 in @ 0.00 msec

2nd Integral Right Rear X-member X

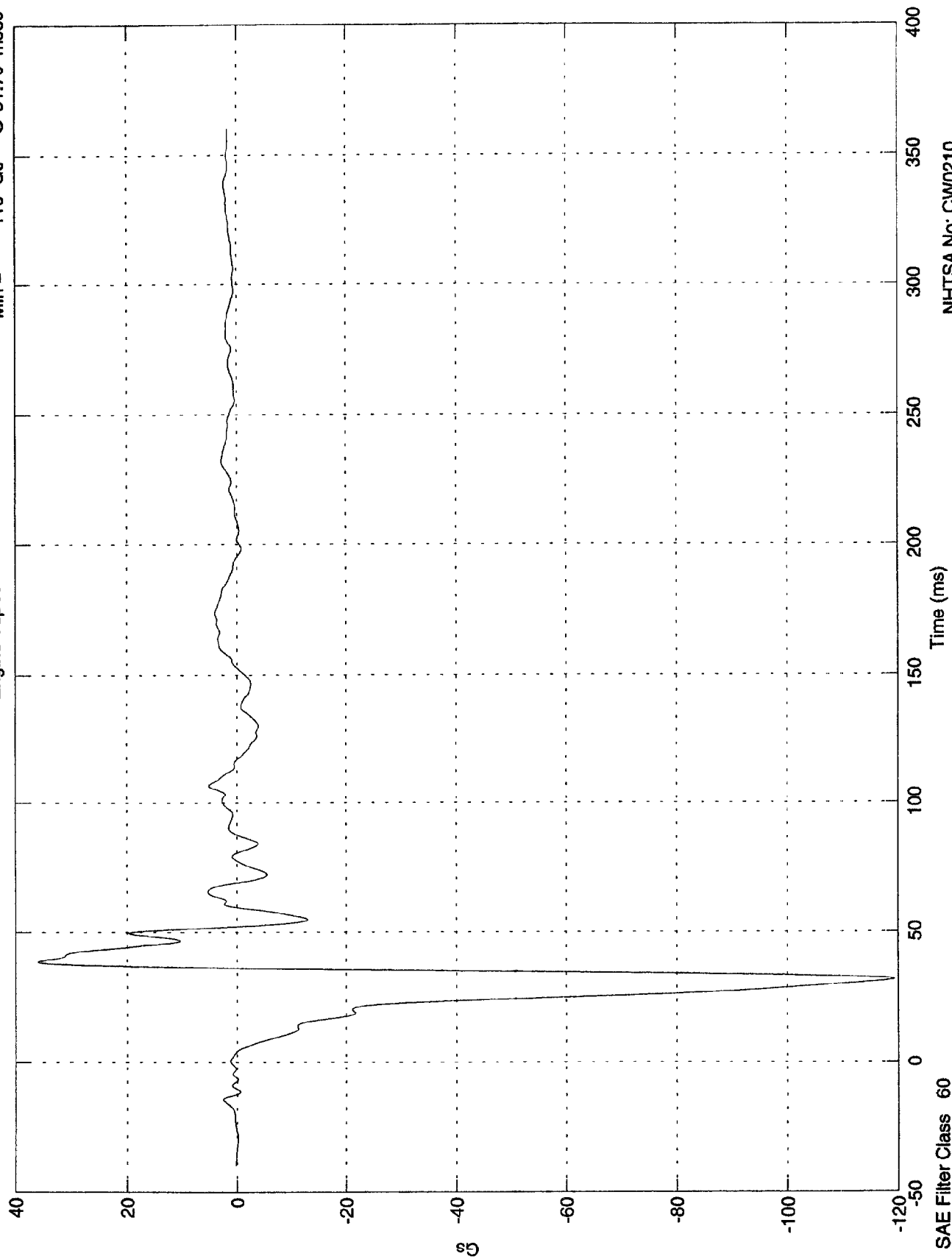


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 36 Gs @ 38.70 msec
Min = -119 Gs @ 31.70 msec

Engine Top X



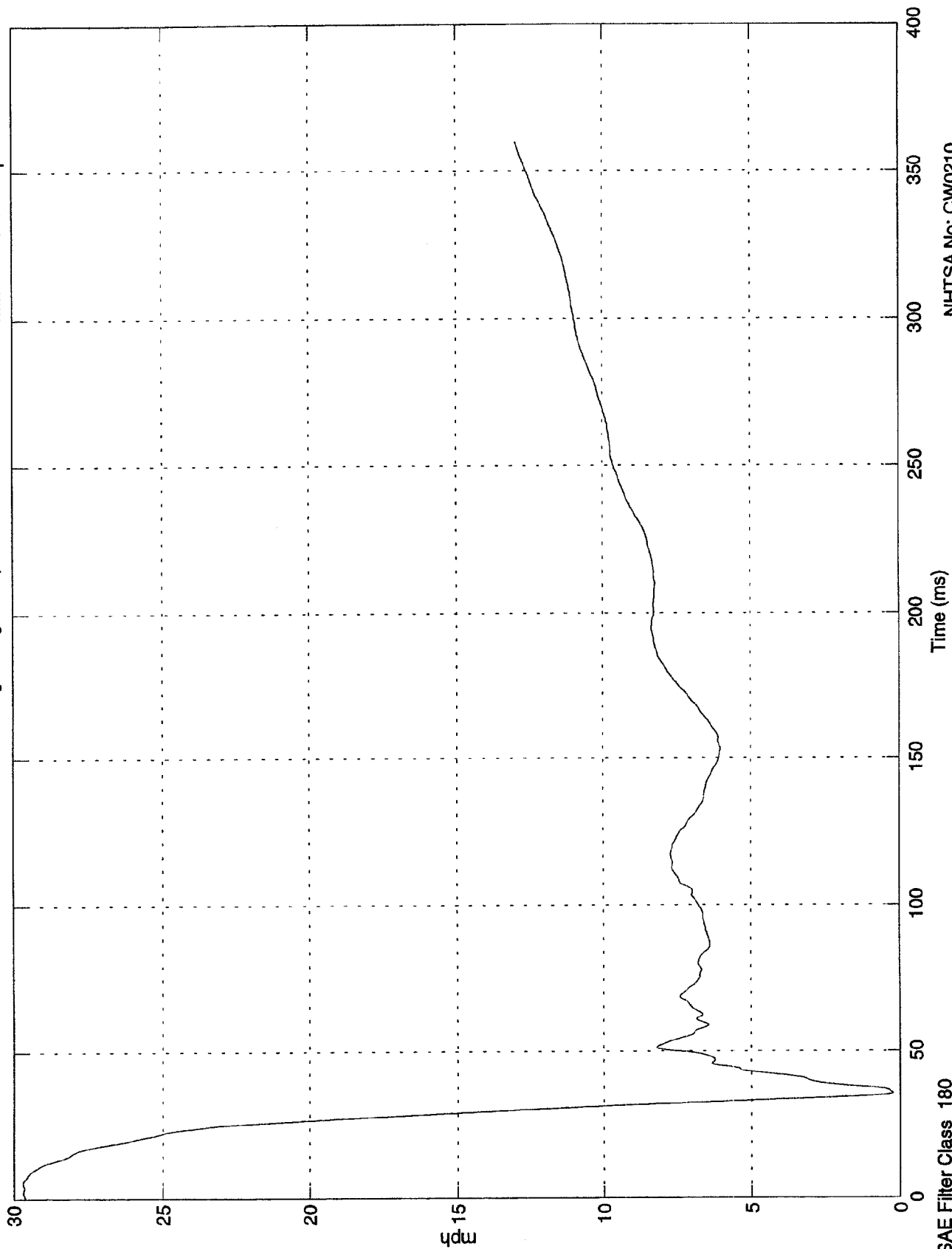
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 60

208 Test #2 - 1998 Ford Escort

1st Integral Engine Top X

Max = 29.7 mph @ 5.40 msec
Min = 0.241 mph @ 35.50 msec

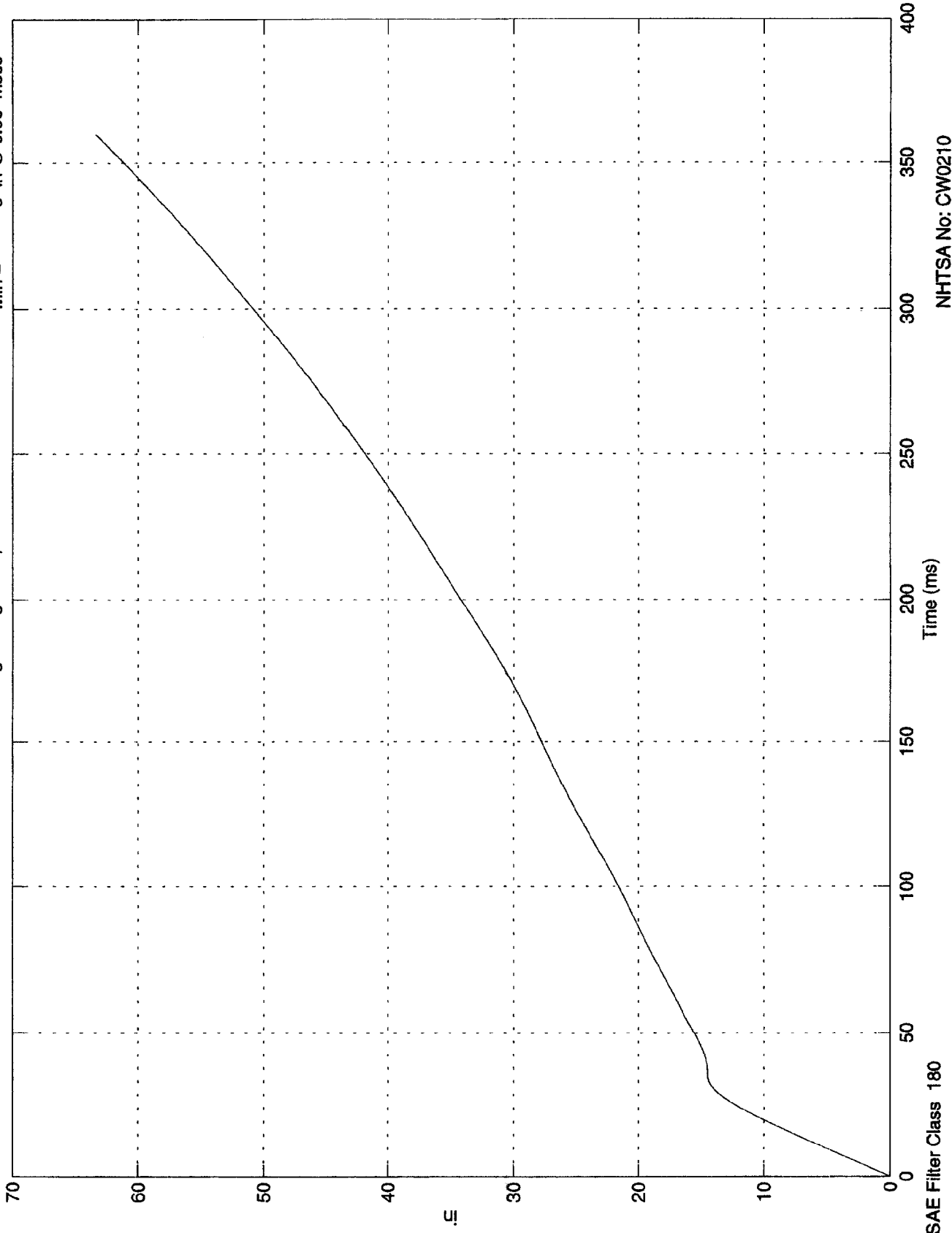


SAE Filter Class 180

NHTSA No: CW0210
Date: 31 Mar 1998

Max = 63.4 in @ 360.00 msec
Min = 0 in @ 0.00 msec

2nd Integral Engine Top X



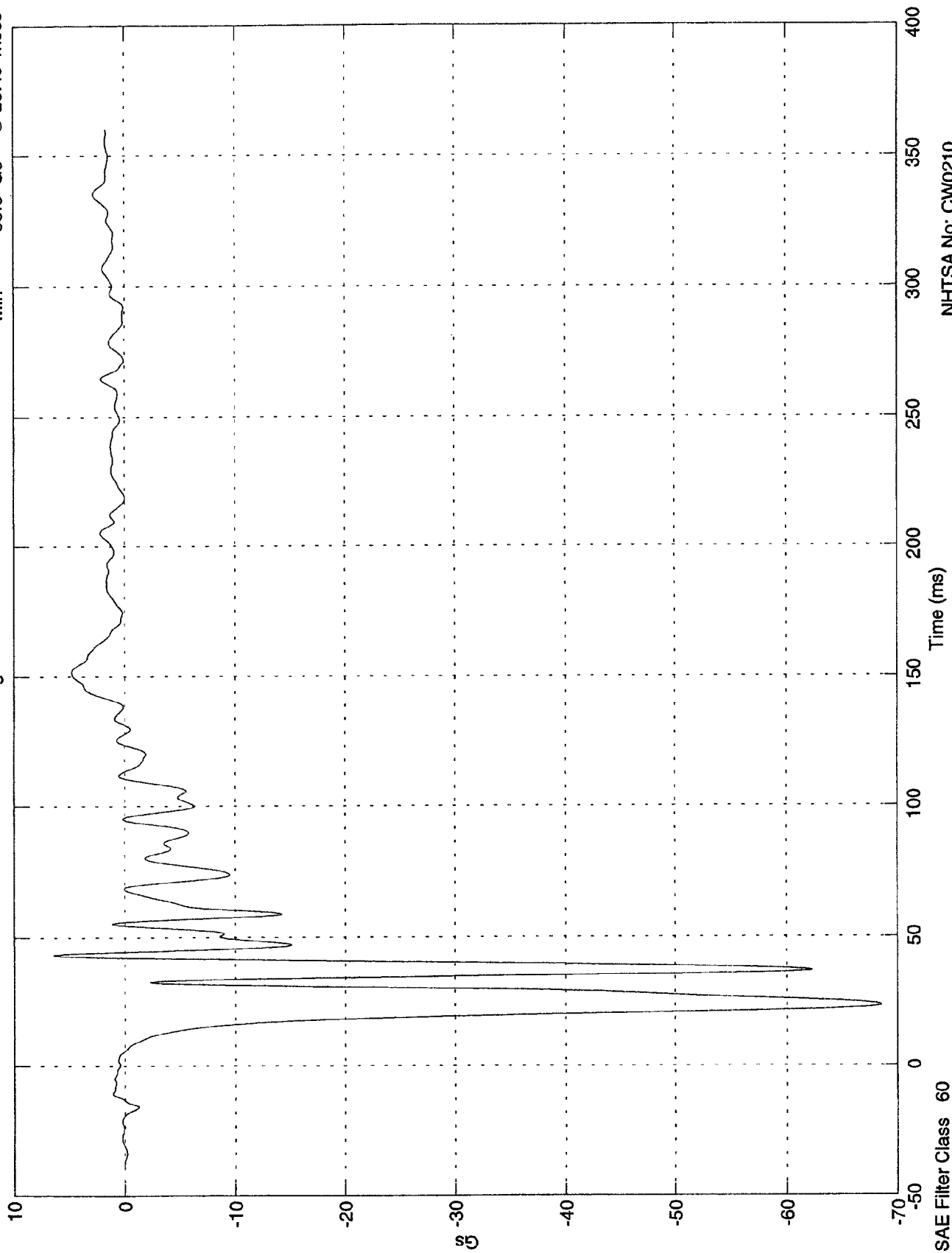
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 180

208 Test #2 - 1998 Ford Escort

Max = 6.42 Gs @ 43.20 msec
Min = -68.6 Gs @ 23.40 msec

Engine Bottom X



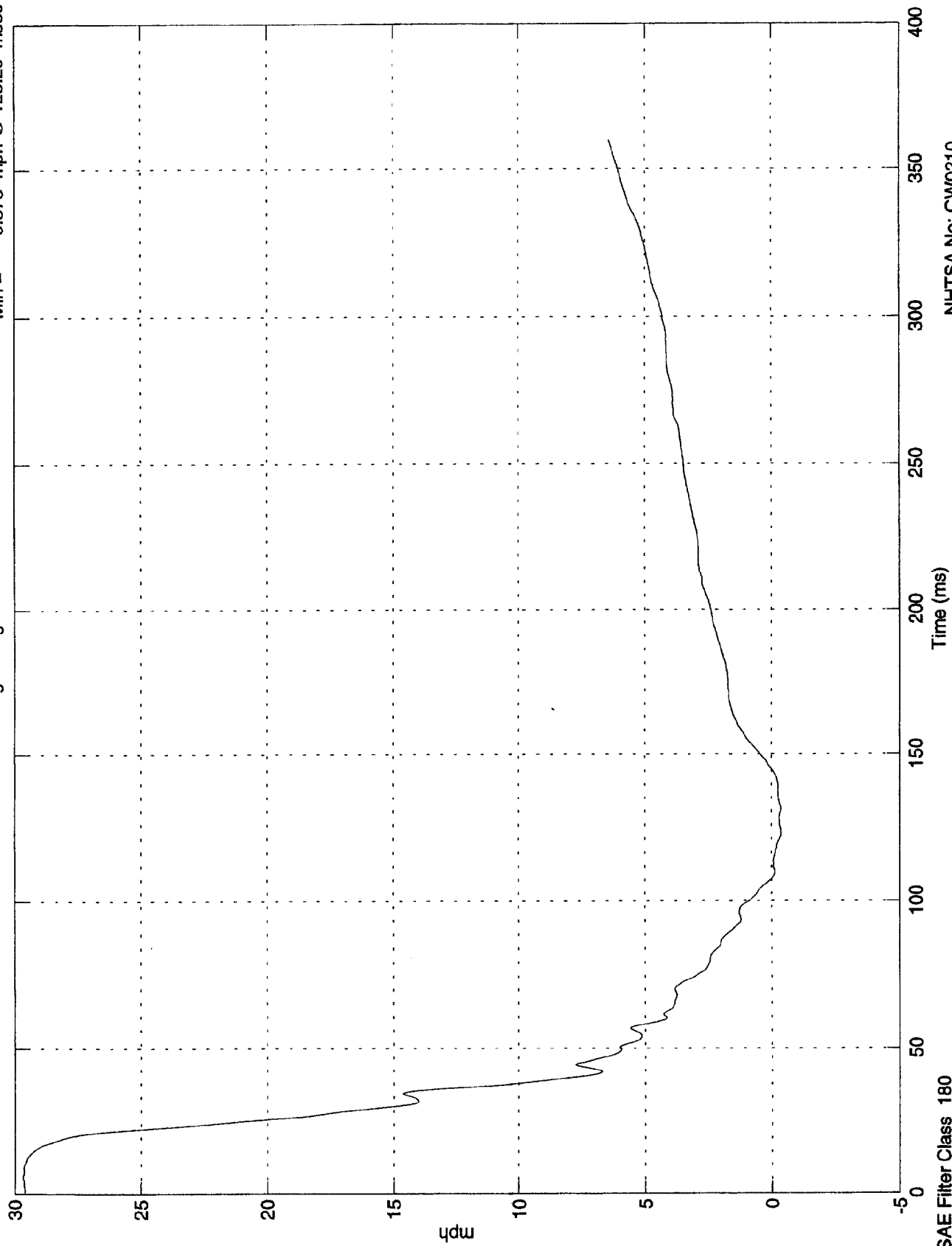
SAE Filter Class 60

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 29.7 mph @ 5.60 msec
Min = -0.373 mph @ 123.20 msec

1st Integral Engine Bottom X



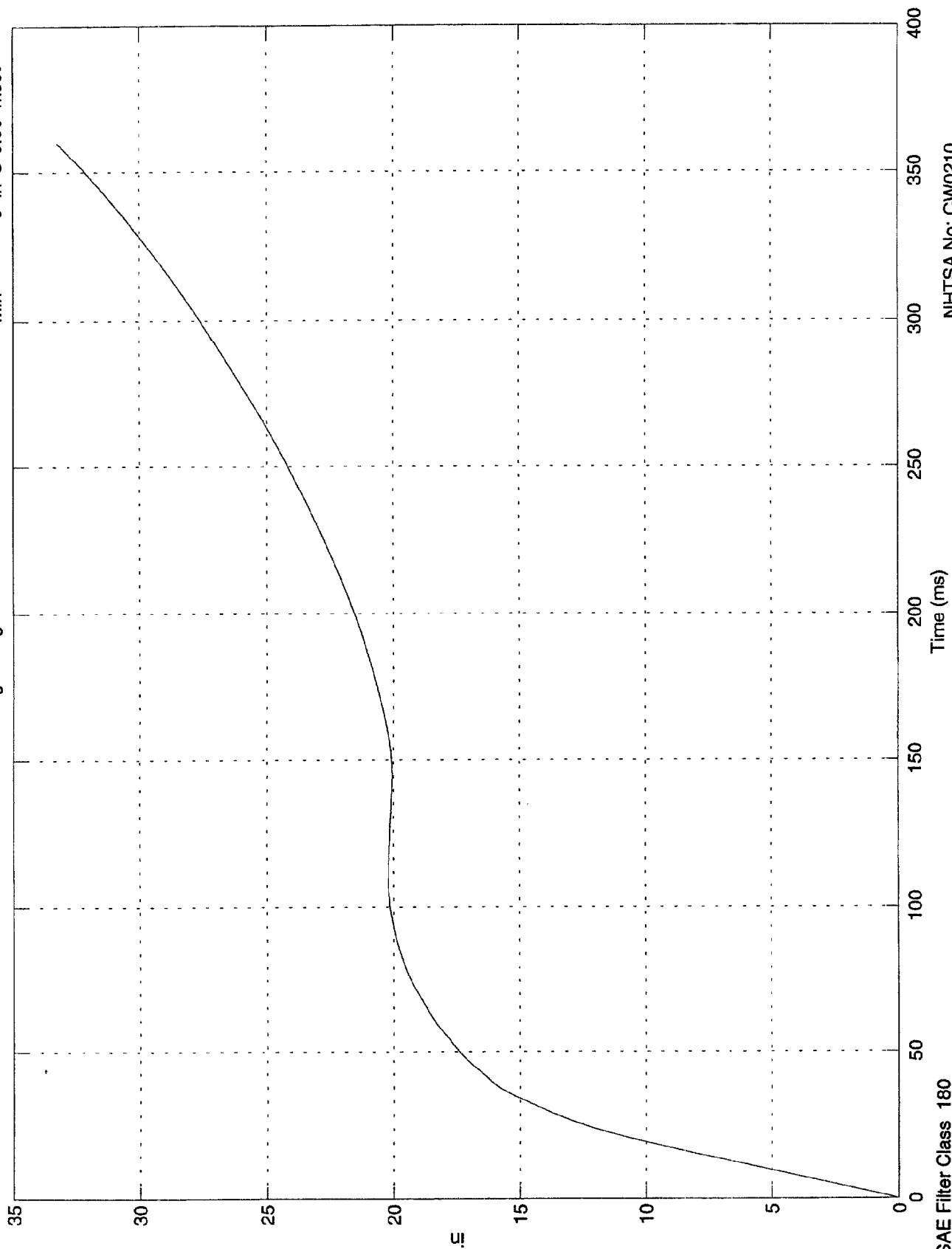
SAE Filter Class 180

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

2nd Integral Engine Bottom X

Max = 33.2 in @ 360.00 msec
Min = 0 in @ 0.00 msec



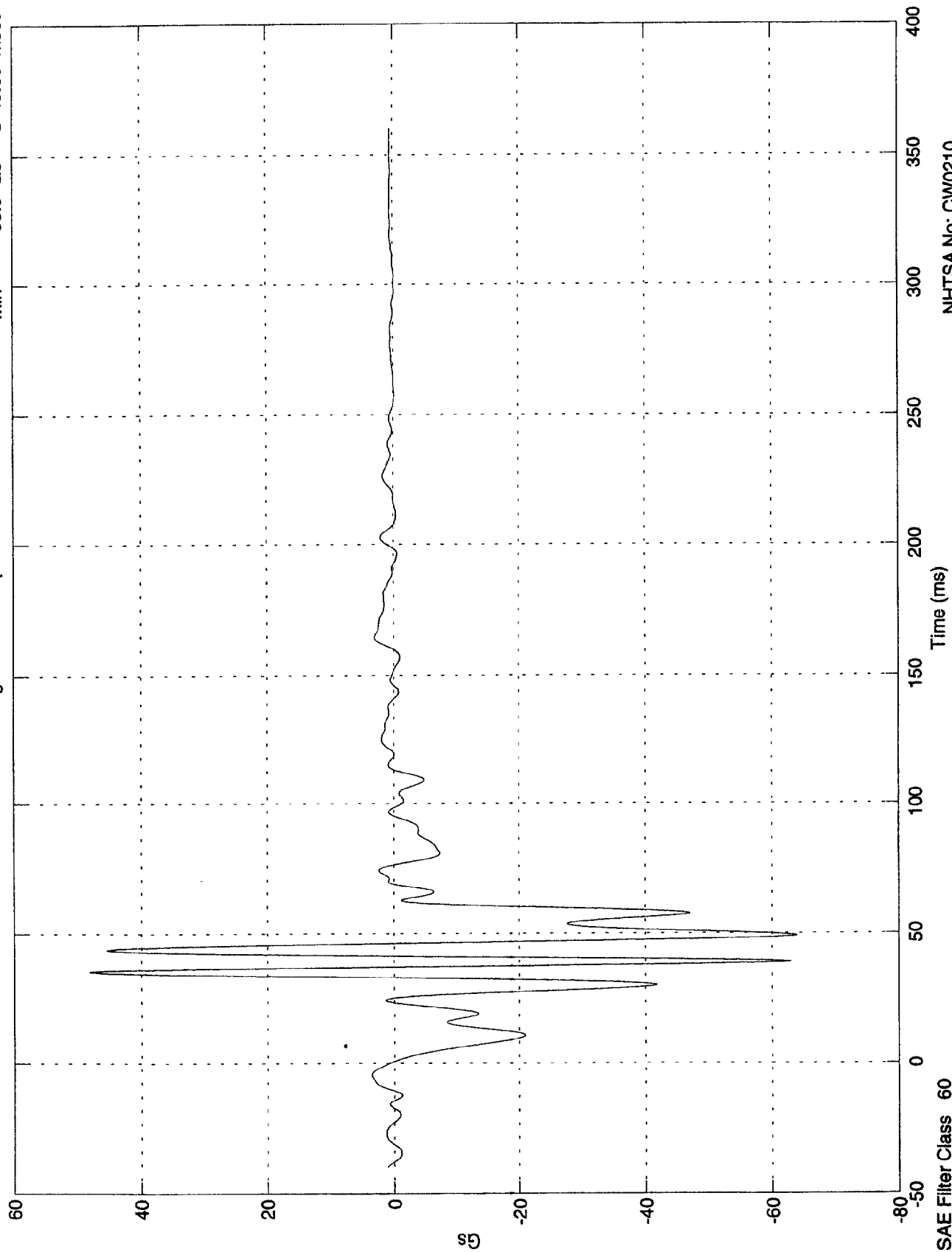
SAE Filter Class 180

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 48.1 Gs @ 35.60 msec
Min = -63.9 Gs @ 49.00 msec

Right Brake Caliper X



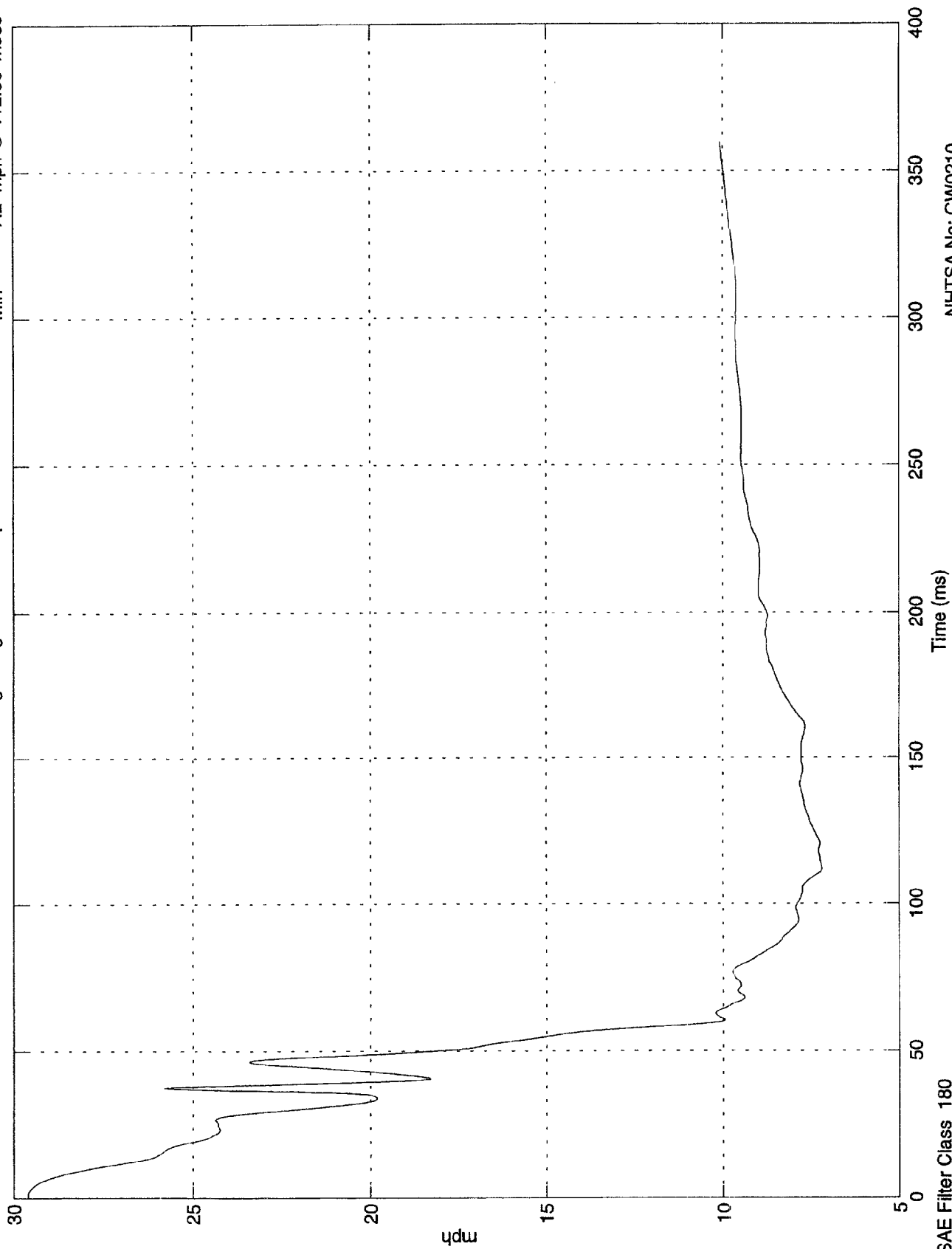
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 60

208 Test #2 - 1998 Ford Escort

Max = 29.6 mph @ 0.80 msec
Min = 7.2 mph @ 112.30 msec

1st Integral Right Brake Caliper X



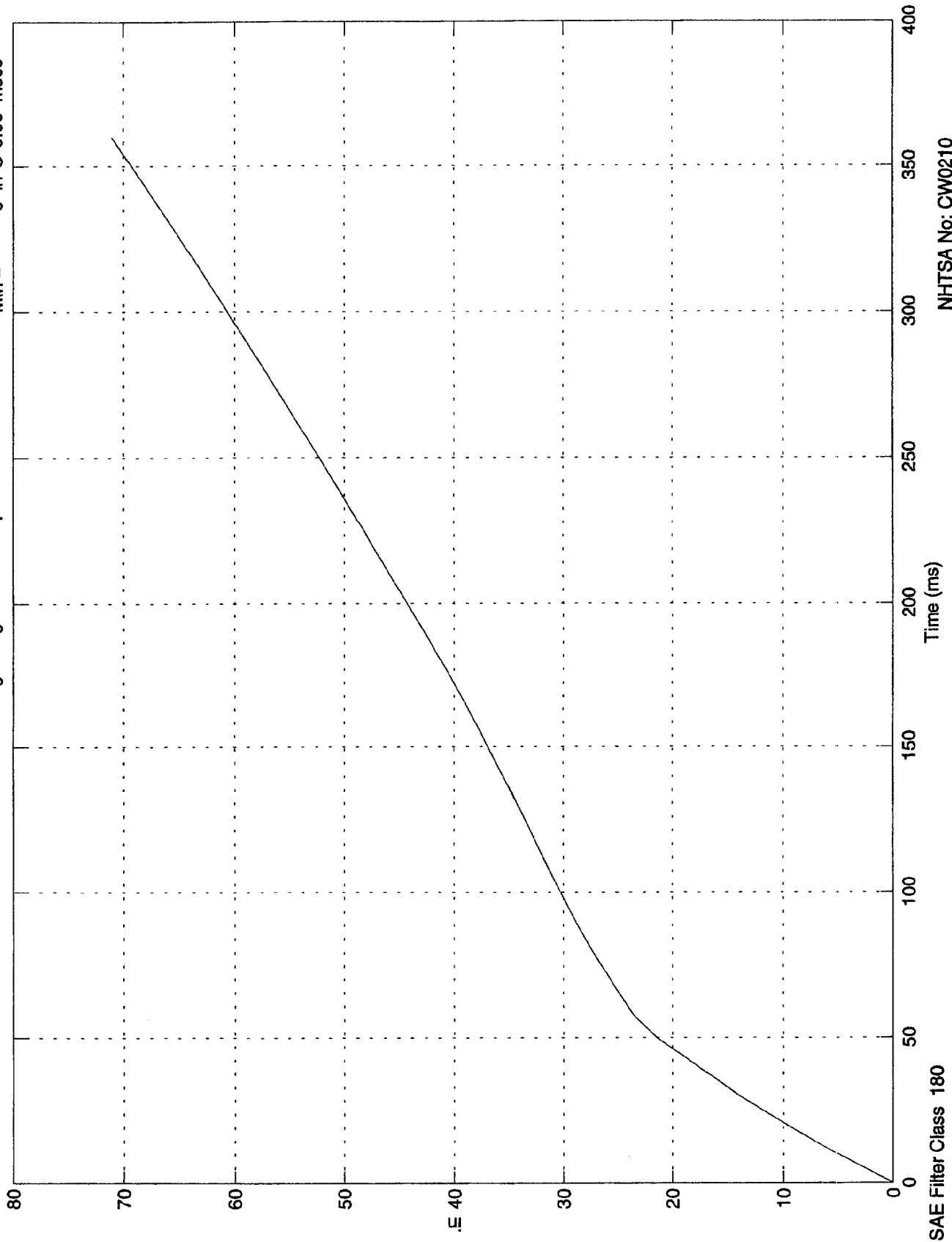
SAE Filter Class 180

Time (ms)

NHTSA No: CW0210
Date: 31 Mar 1998

Max = 71 in @ 360.00 msec
Min = 0 in @ 0.00 msec

2nd Integral Right Brake Caliper X

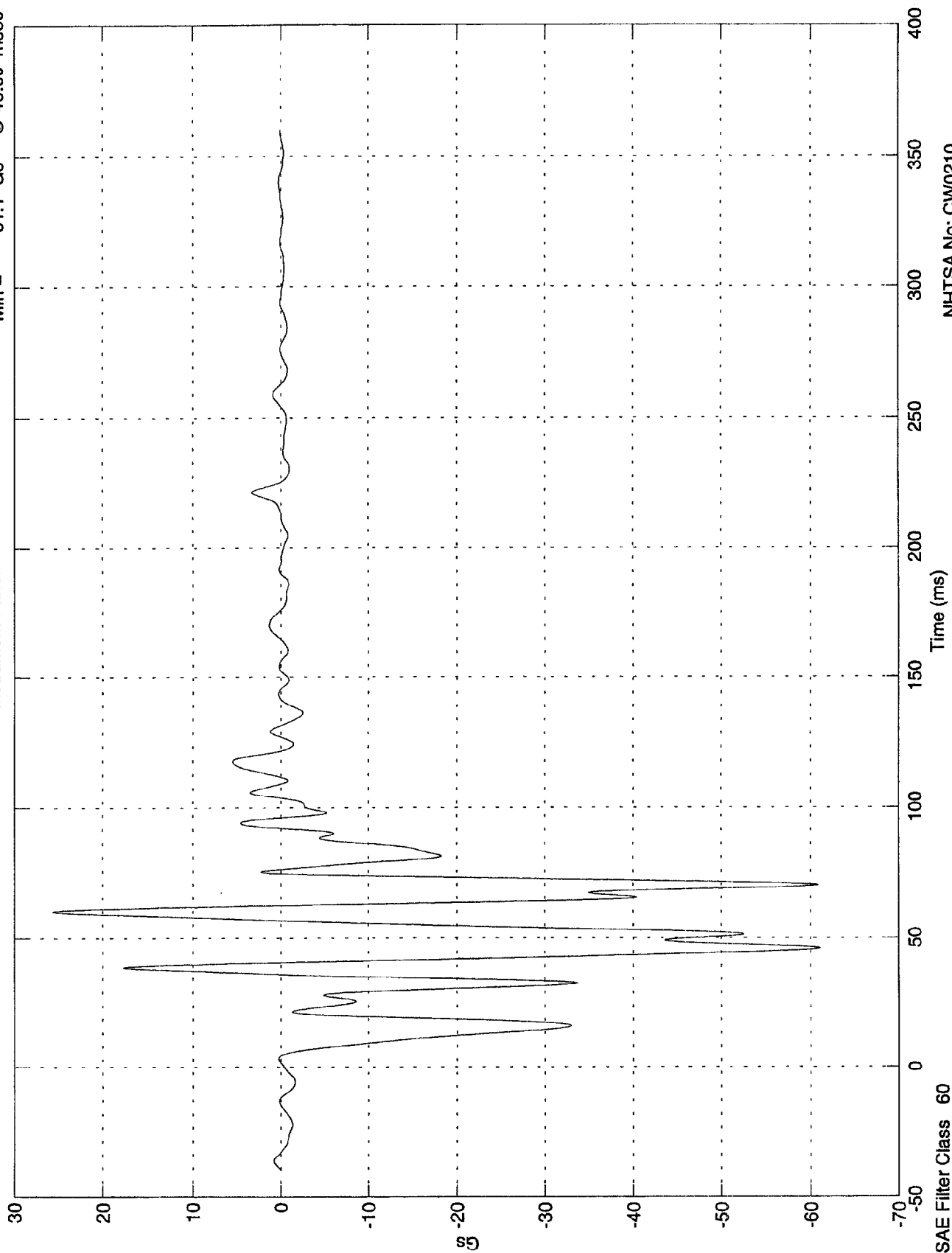


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Instrument Panel X

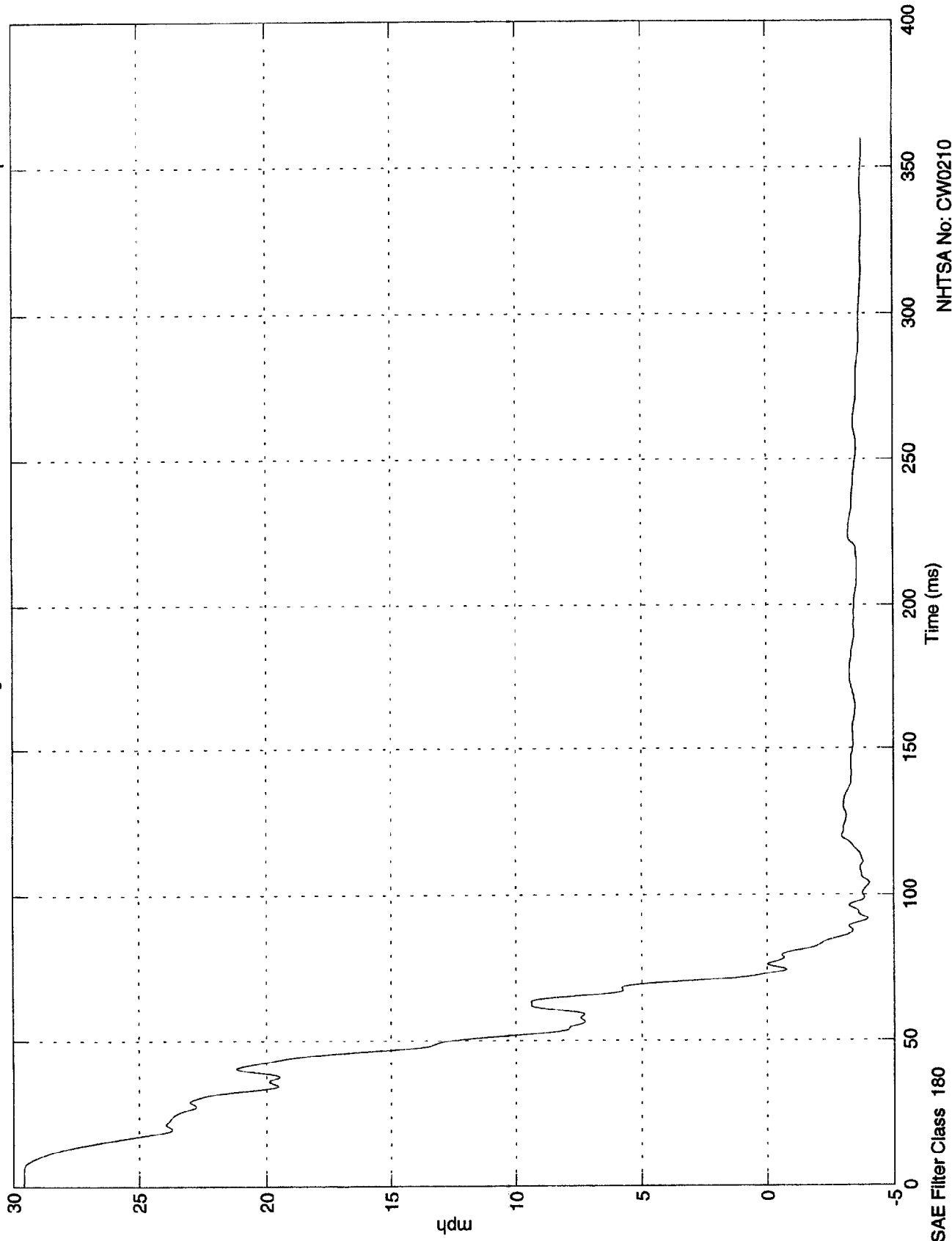
Max = 25.6 Gs @ 60.30 msec
Min = -61.1 Gs @ 46.00 msec



NHTSA No: CW0210
Date: 31 Mar 1998

Max = 29.6 mph @ 0.00 msec
Min = -4.02 mph @ 104.10 msec

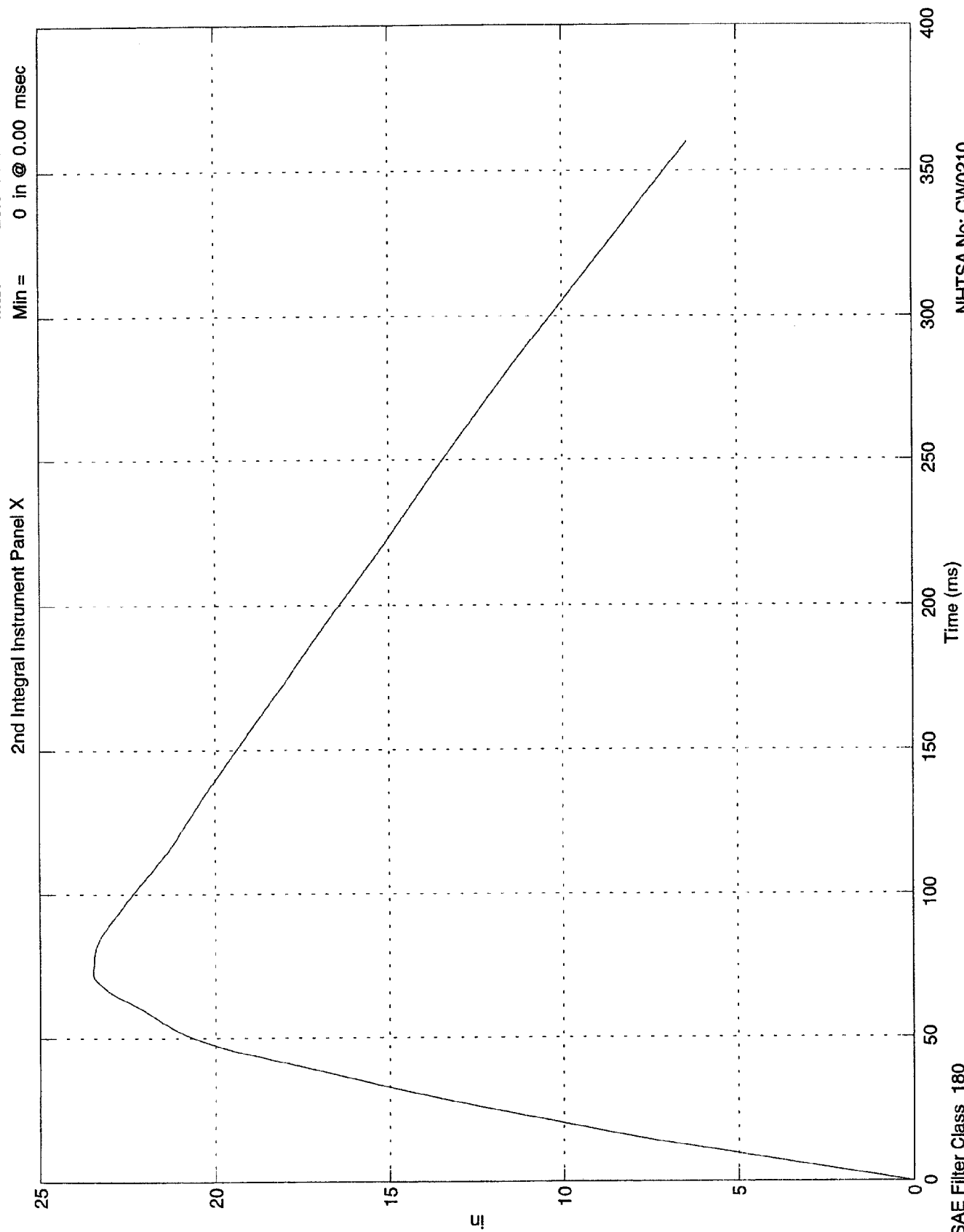
1st Integral Instrument Panel X



NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 180

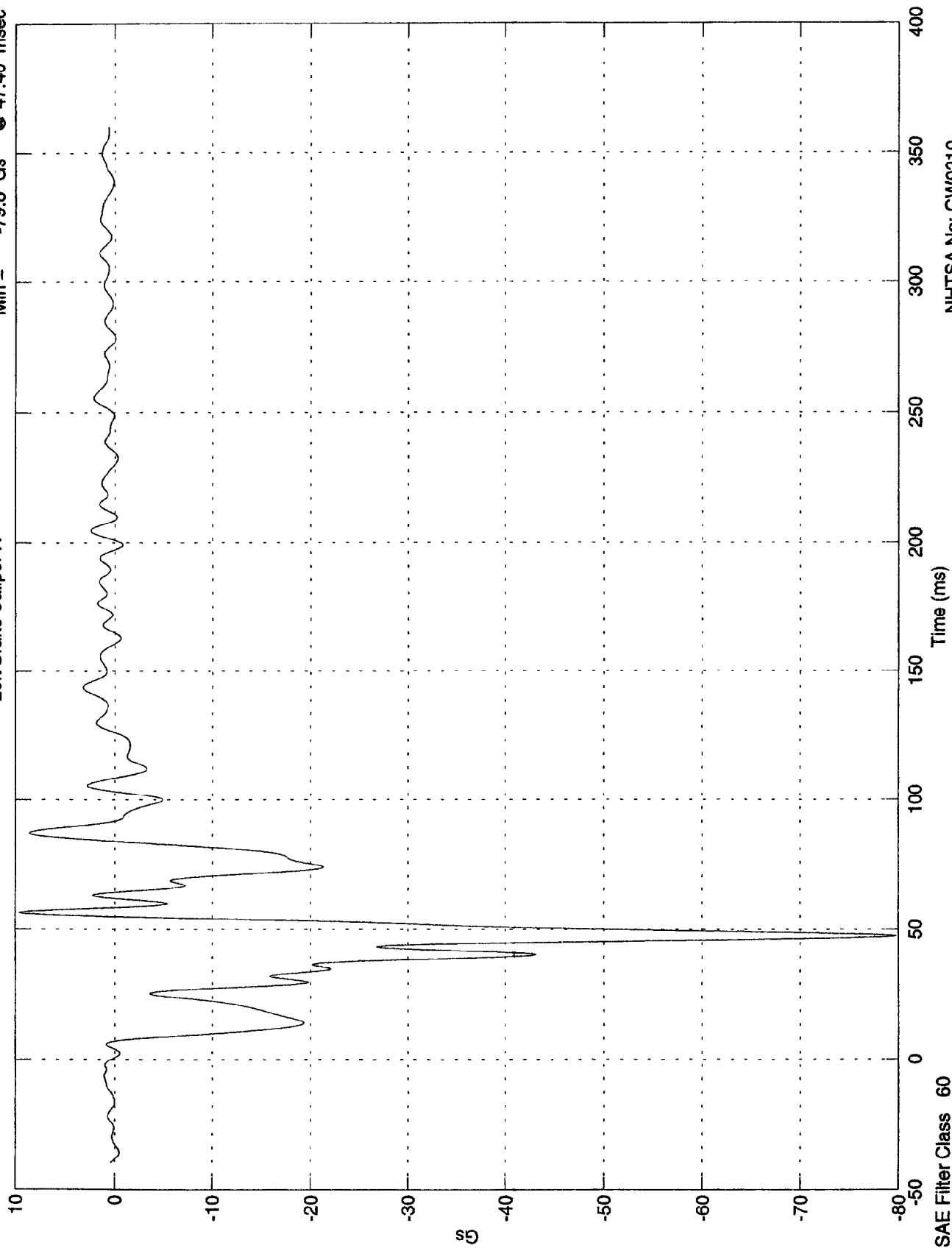
208 Test #2 - 1998 Ford Escort



NHTSA No: CW0210
Date: 31 Mar 1998

Max = 9.63 Gs @ 56.40 msec
Min = -79.8 Gs @ 47.40 msec

Left Brake Caliper X

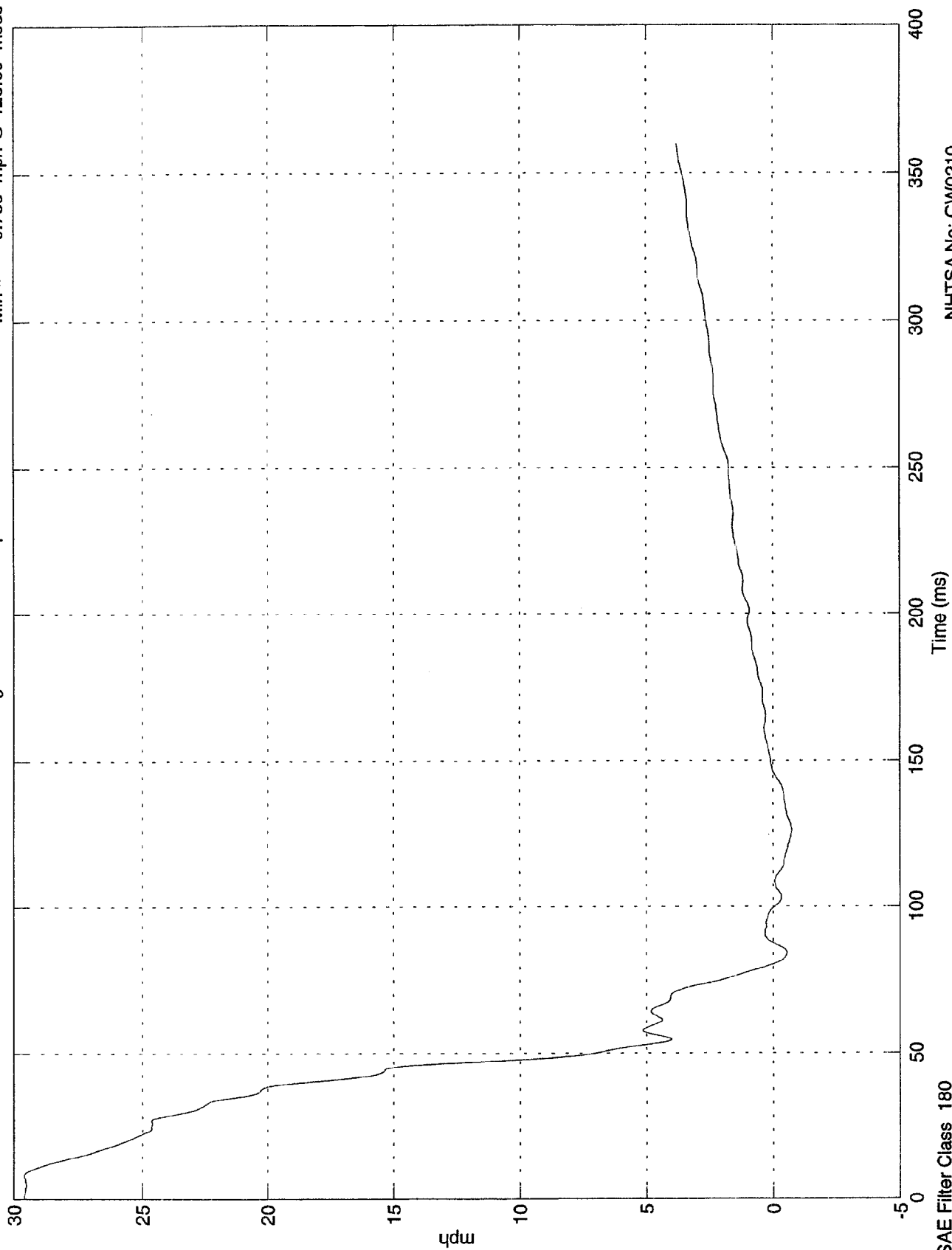


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 29.6 mph @ 8.00 msec
Min = -0.739 mph @ 126.00 msec

1st Integral Left Brake Caliper X

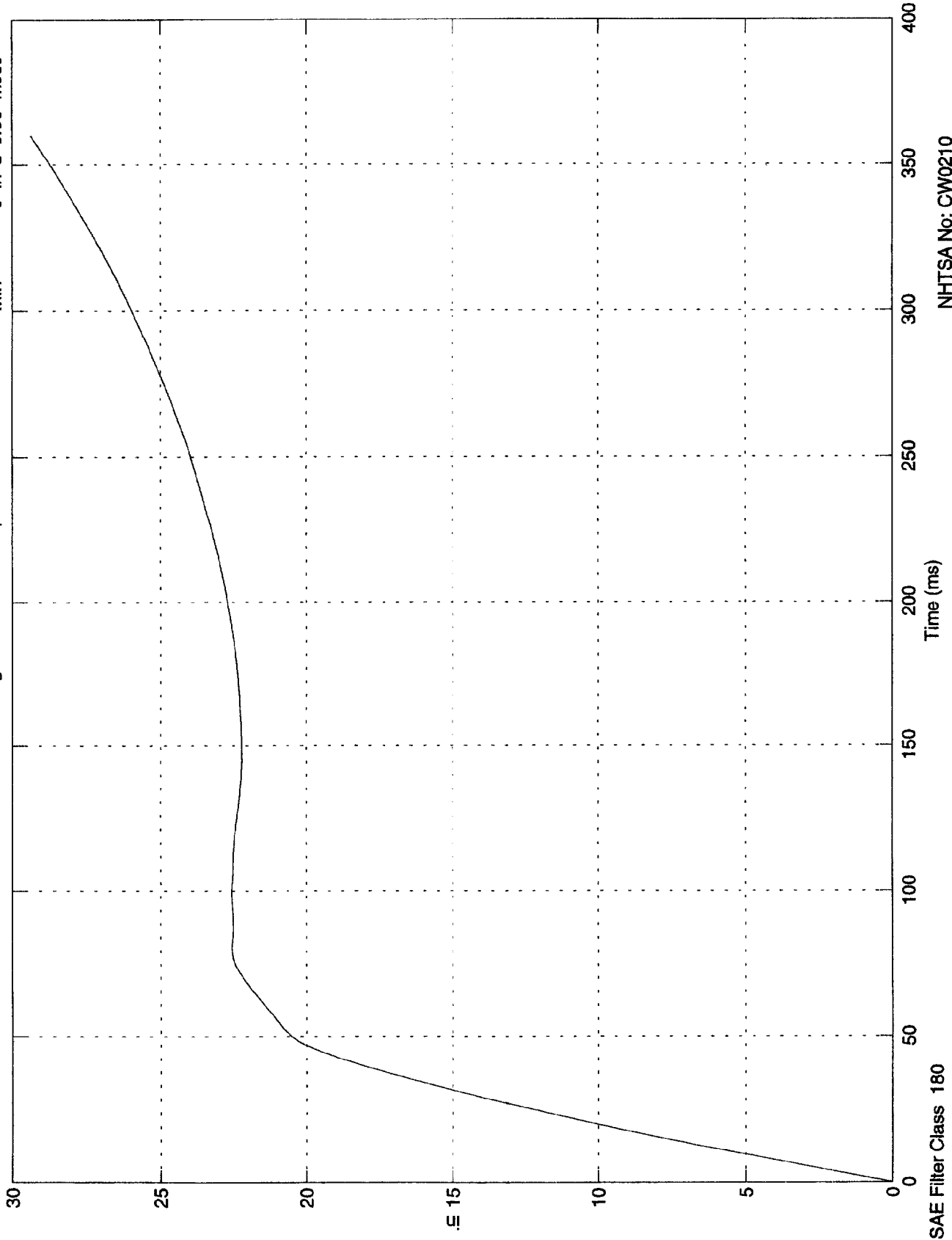


SAE Filter Class 180

NHTSA No: CW0210
Date: 31 Mar 1998

Max = 29.4 in @ 360.00 msec
Min = 0 in @ 0.00 msec

2nd Integral Left Brake Caliper X

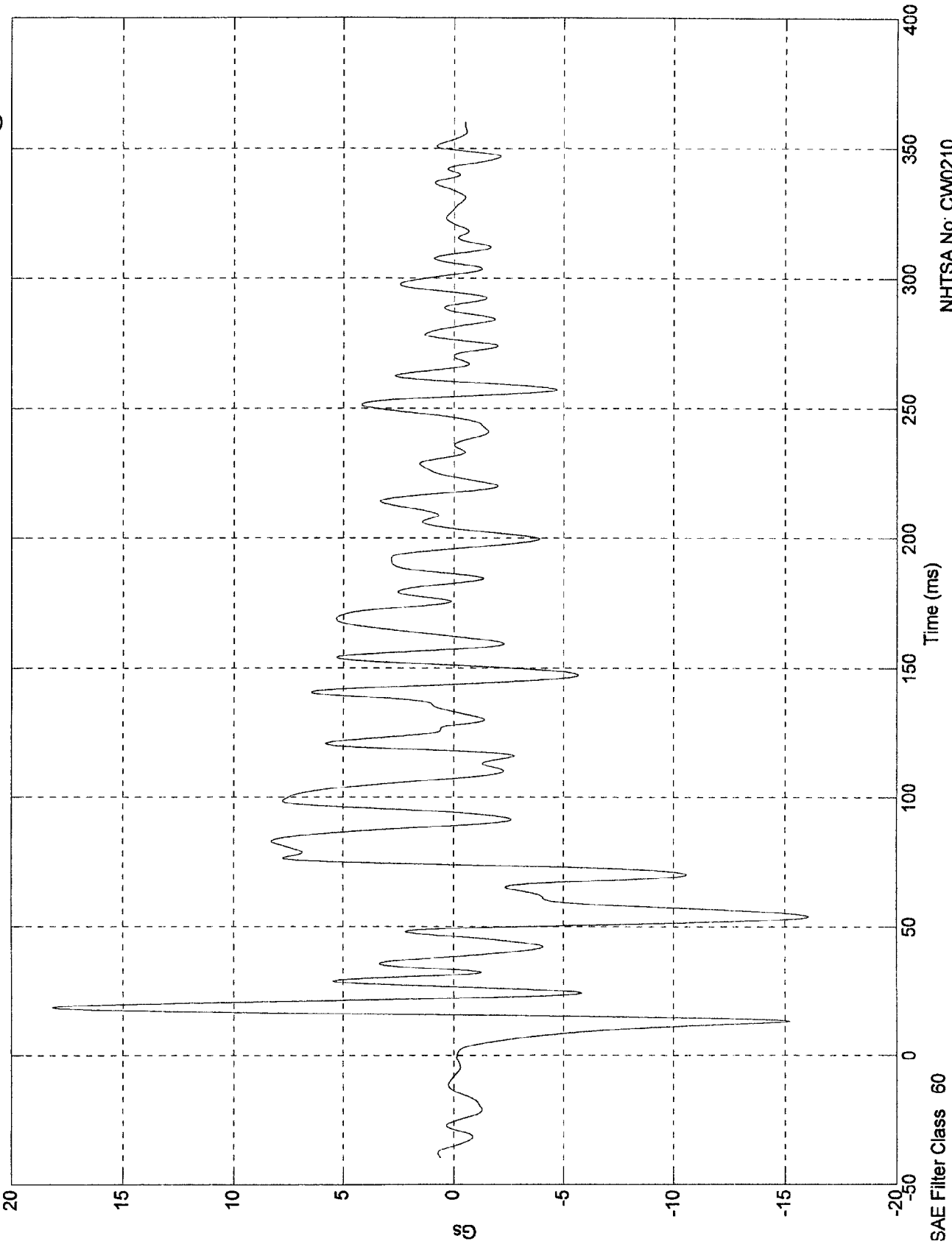


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 18.2 Gs @ 18.80 msec
Min = -16 Gs @ 53.80 msec

Trunk Z

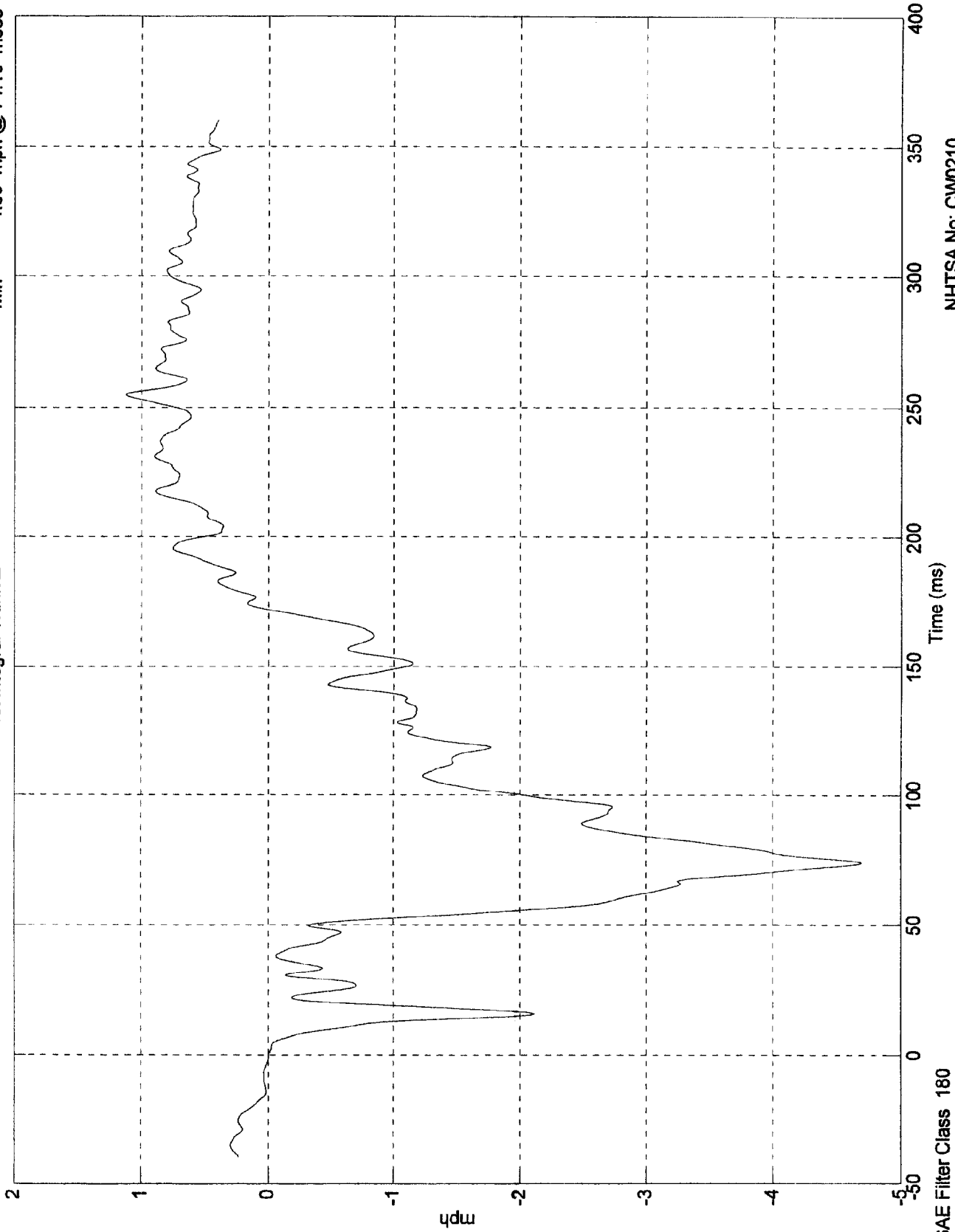


SAE Filter Class 60

NHTSA No: CW0210
Date: 31 Mar 1998

Max = 1.12 mph @ 254.80 msec
Min = -4.69 mph @ 74.10 msec

1st Integral Trunk Z



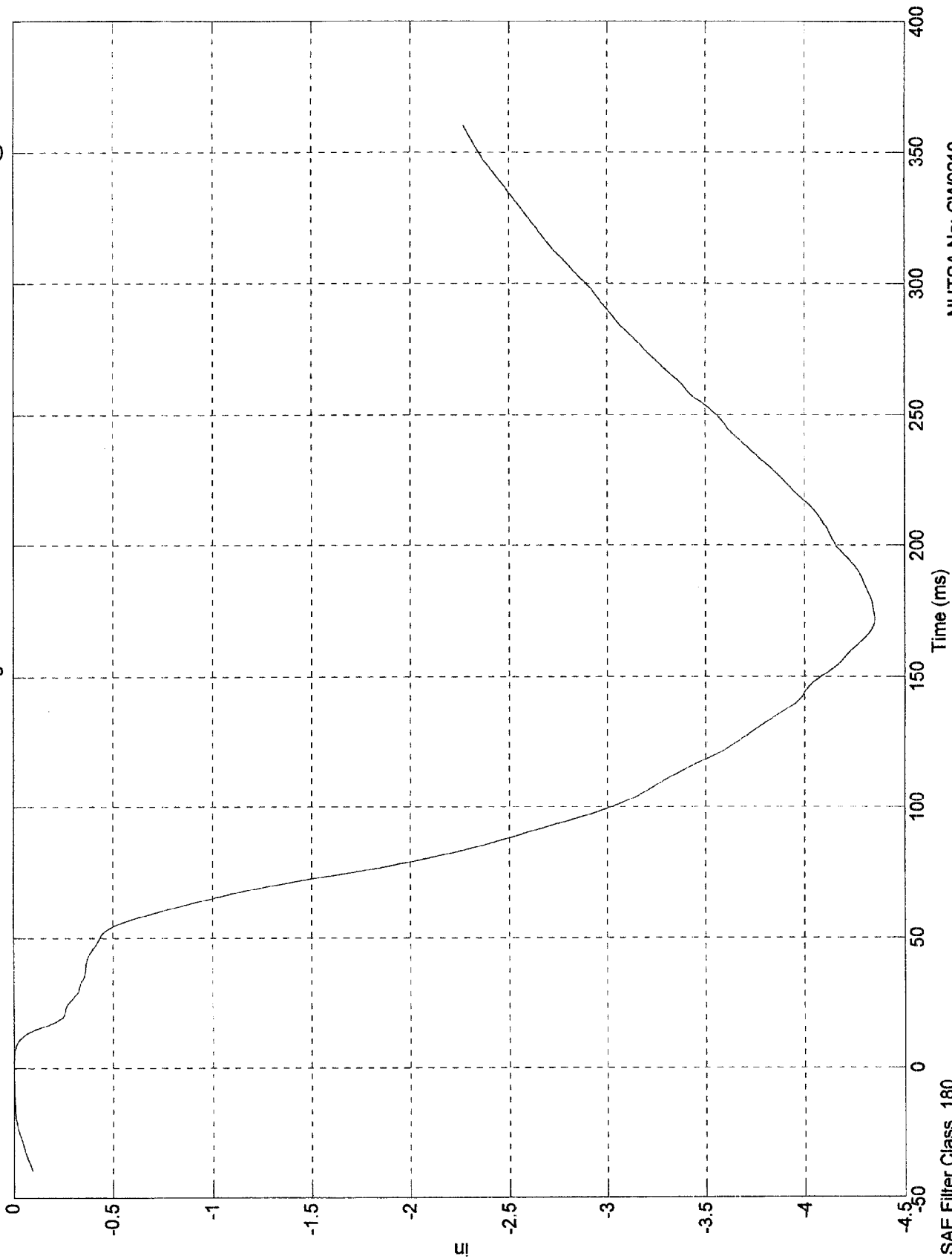
SAE Filter Class 180

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 0 in @ 0.00 msec
Min = -4.35 in @ 172.00 msec

2nd Integral Trunk Z



SAE Filter Class 180

NHTSA No: CW0210
Date: 31 Mar 1998

TEST NO. CW0210

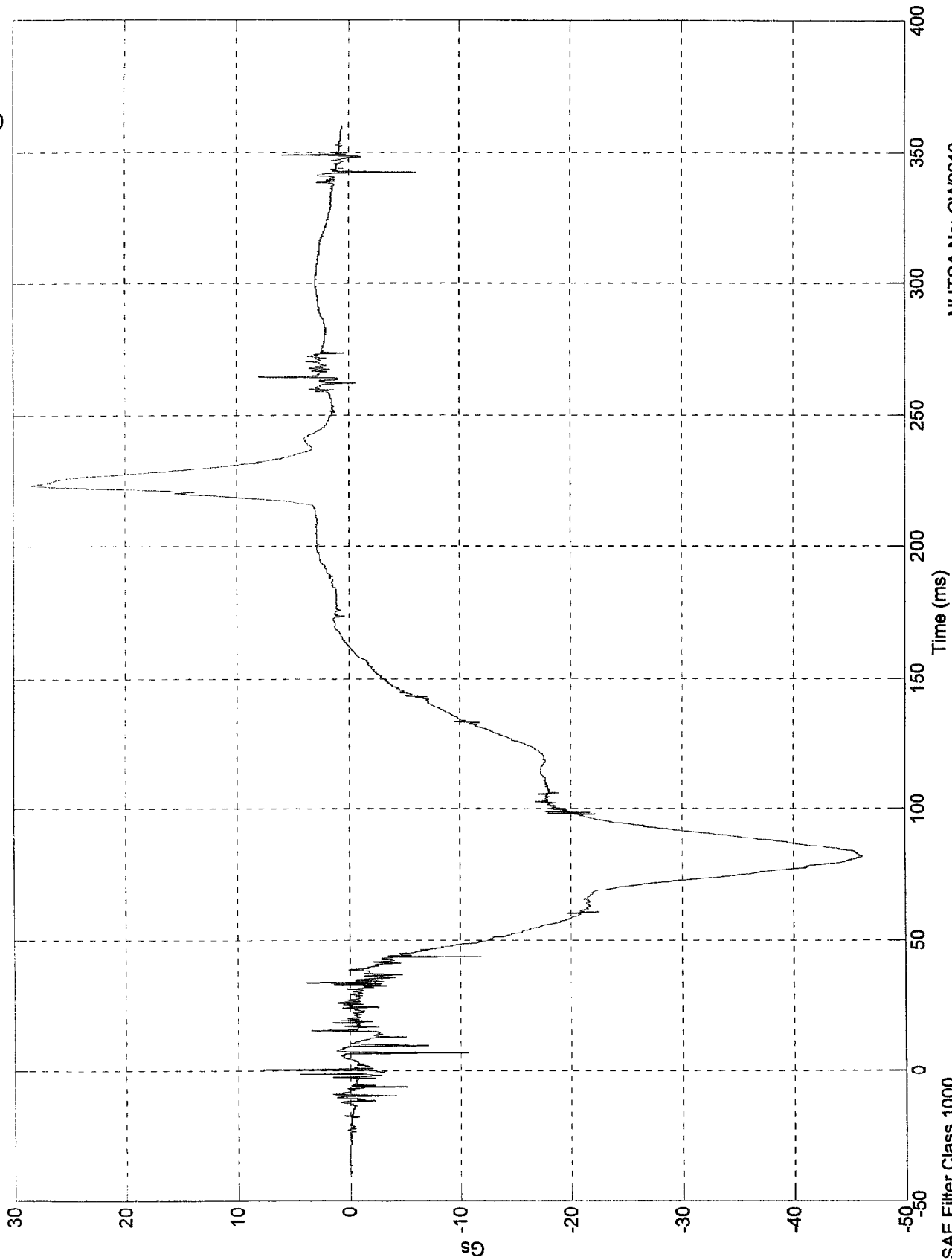
<u>DUMMY</u>	<u>SAE FILTER CHANNEL CLASS</u>
Head Accelerations	1000
Chest Accelerations	180
Neck Forces	1000
Neck Moments	600
Femur Forces	600

The driver head and neck pre-zero data appears to be electrical noise which is not filtered when following J211 guidelines.

208 Test #2 - 1998 Ford Escort

Pos. 1 Head X

Max = 28.4 Gs @ 223.00 msec
Min = -46.1 Gs @ 81.90 msec

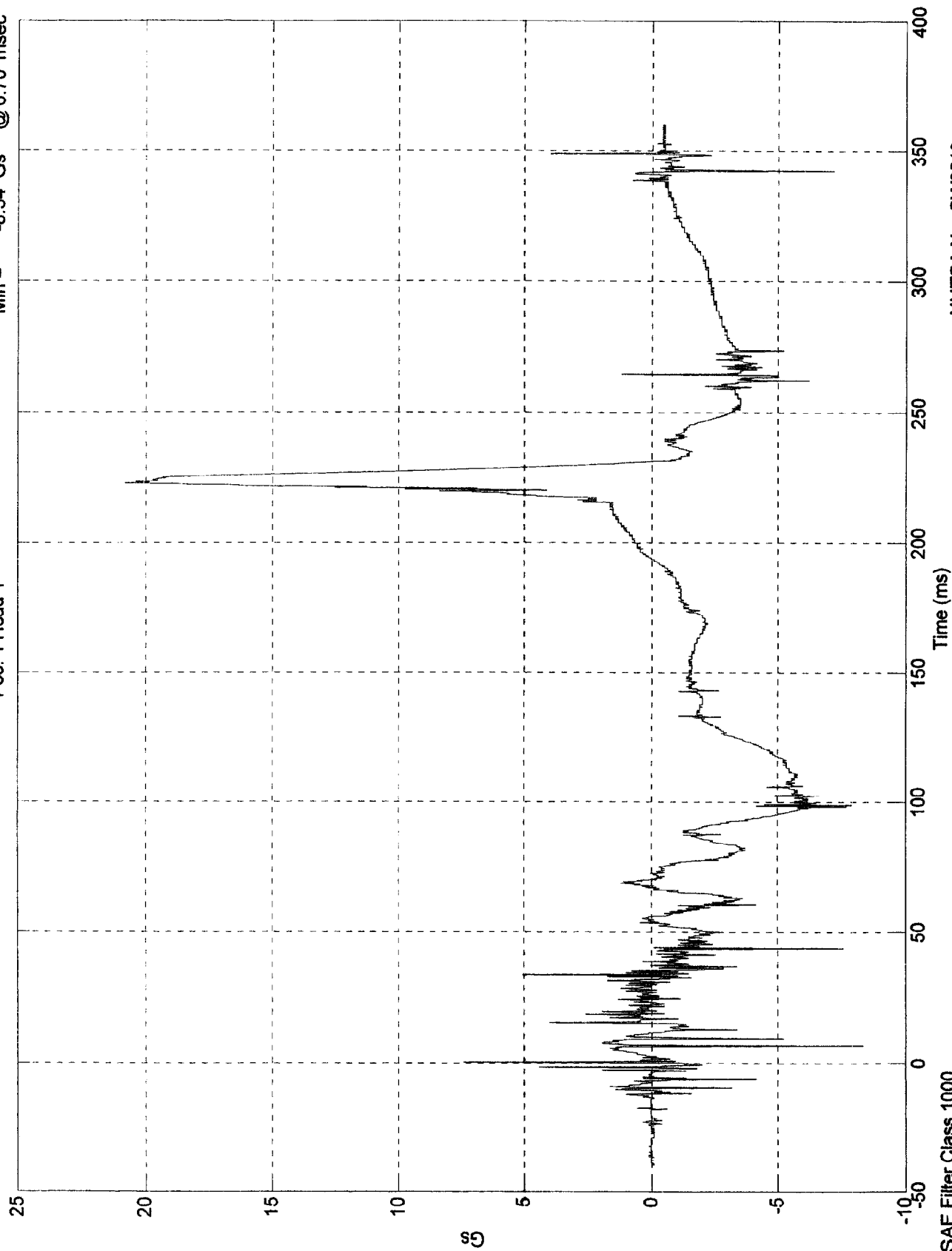


NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 1000

Pos. 1 Head Y

Max = 20.8 Gs @ 222.90 msec
Min = -8.34 Gs @ 6.70 msec



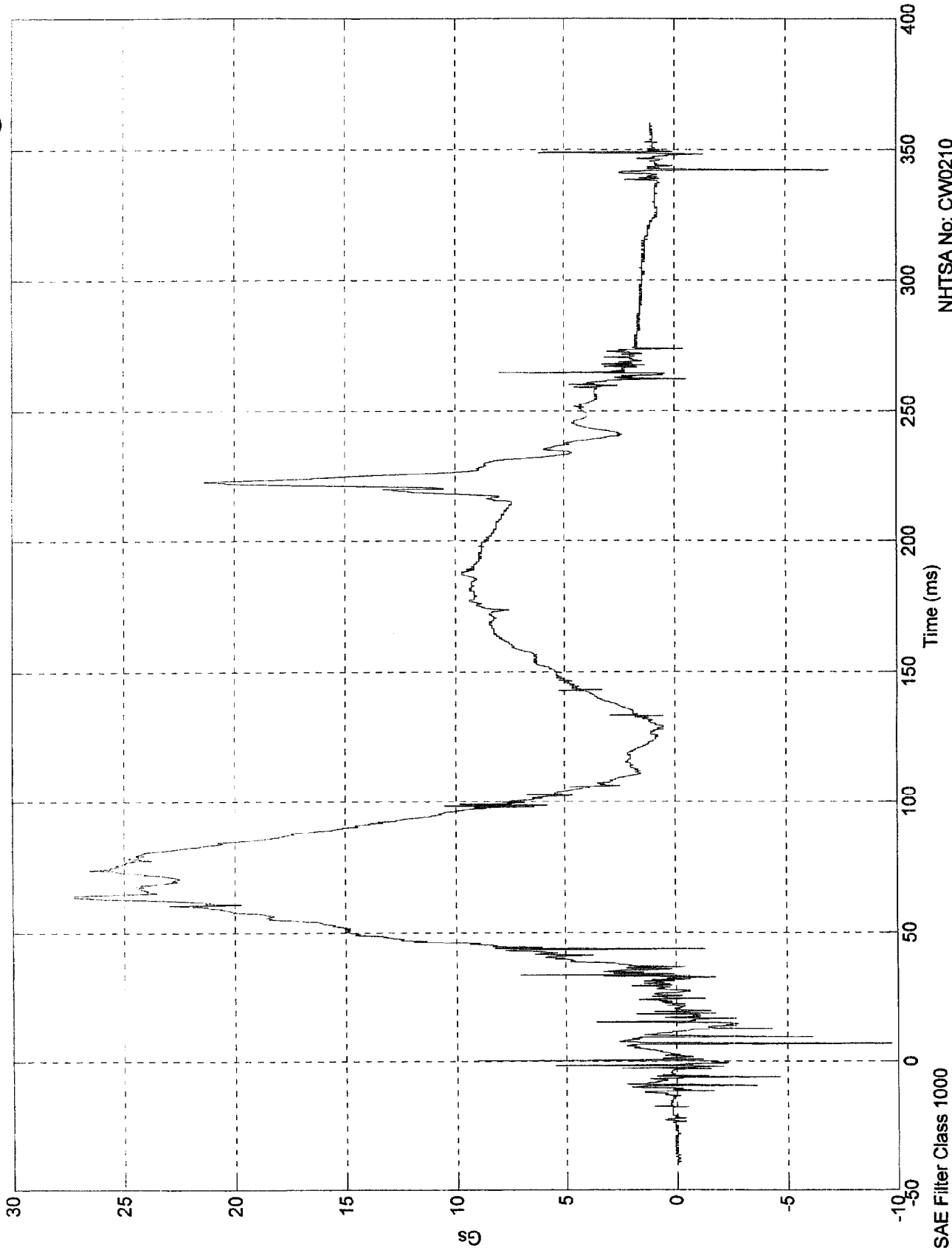
SAE Filter Class 1000

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 27.2 Gs @ 63.30 msec
Min = -9.7 Gs @ 6.70 msec

Pos. 1 Head Z

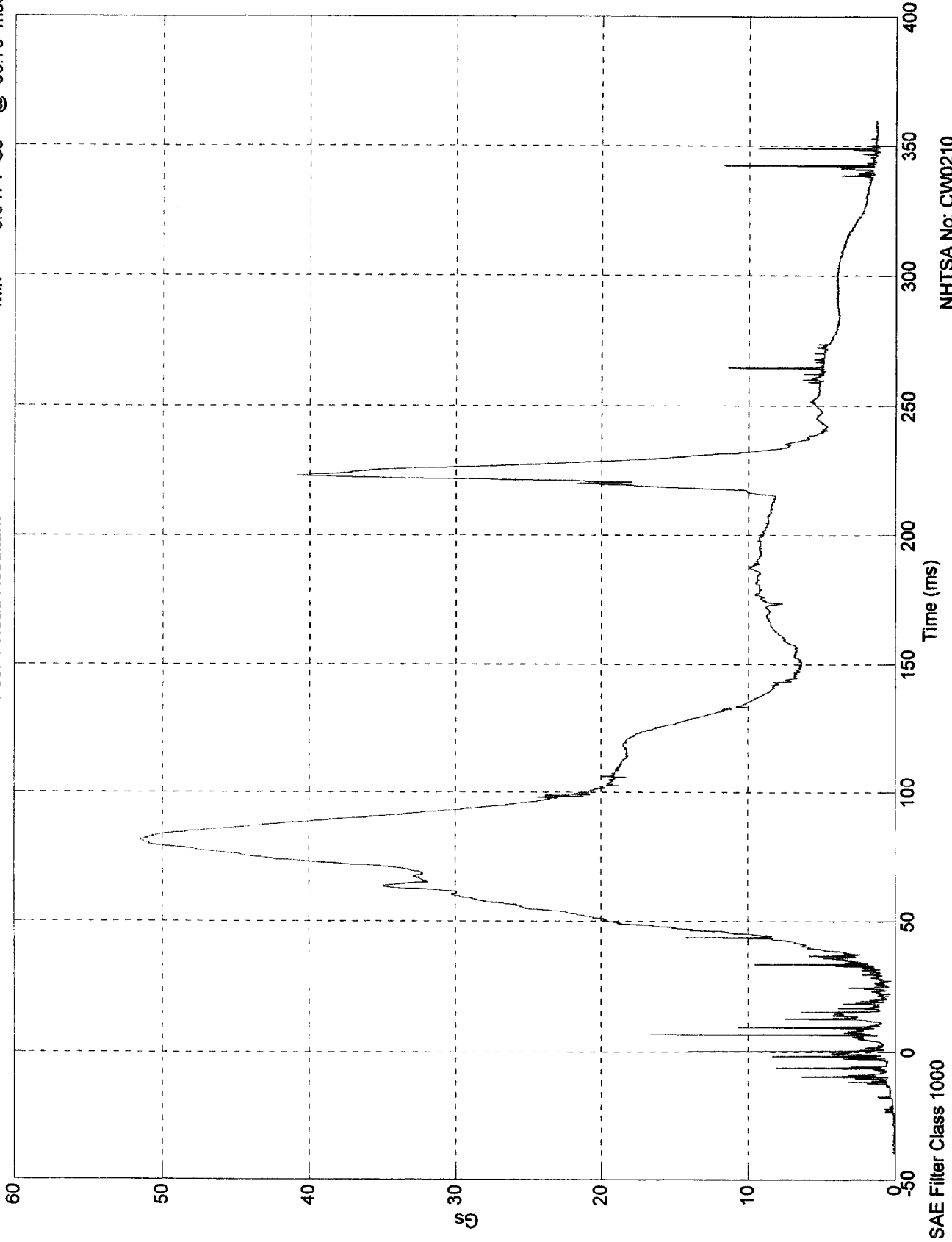


NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 1000

Max = 51.5 Gs @ 81.70 msec
Min = 0.0474 Gs @ -39.70 msec

Pos. 1 Head Resultant

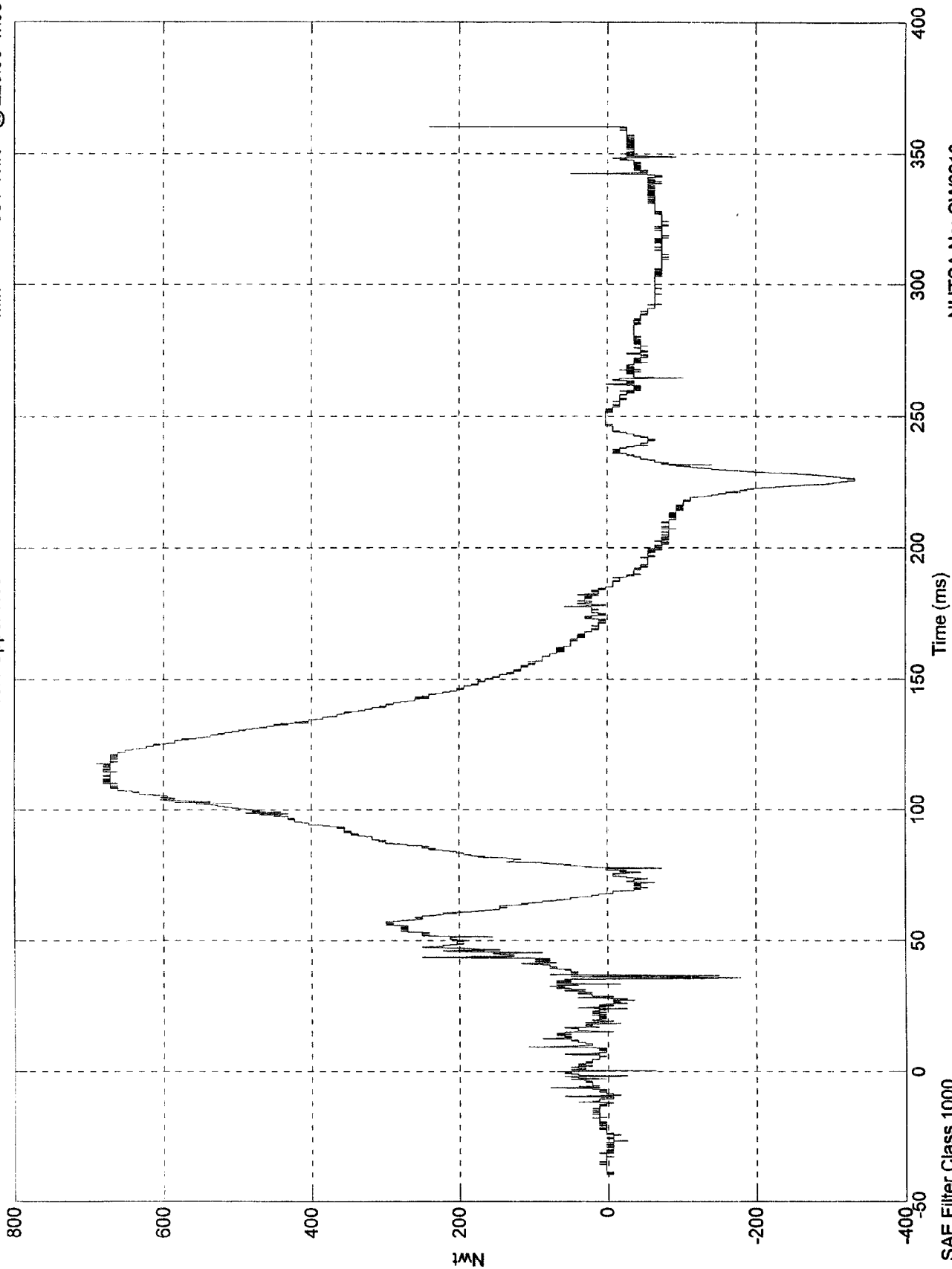


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Pos.1 Upper Neck Fx

Max = 690 Nwt @ 117.70 msec
Min = -331 Nwt @ 225.50 msec

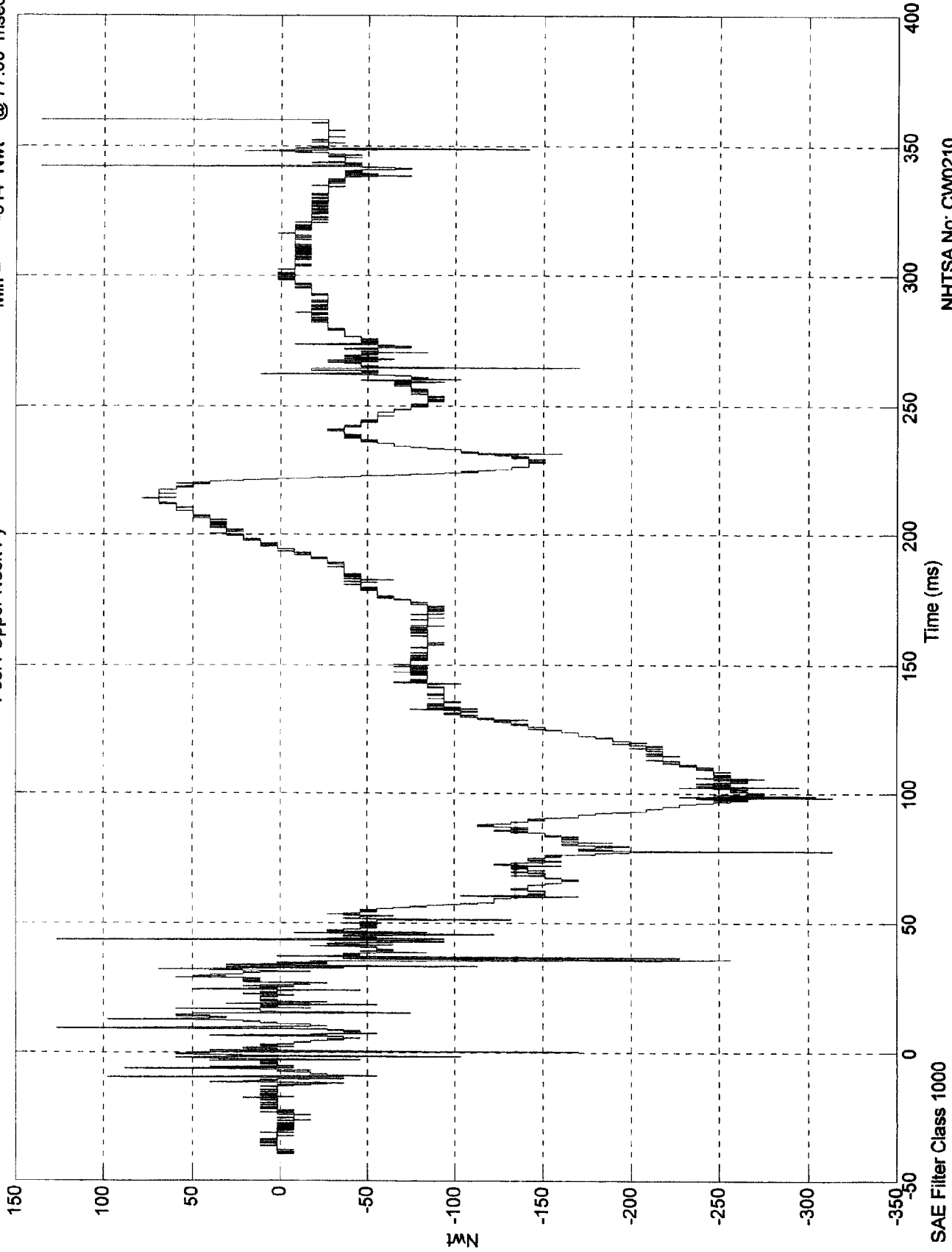


NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 1000

Max = 136 Nwt @ 342.00 msec
Min = -314 Nwt @ 77.60 msec

Pos.1 Upper Neck Fy

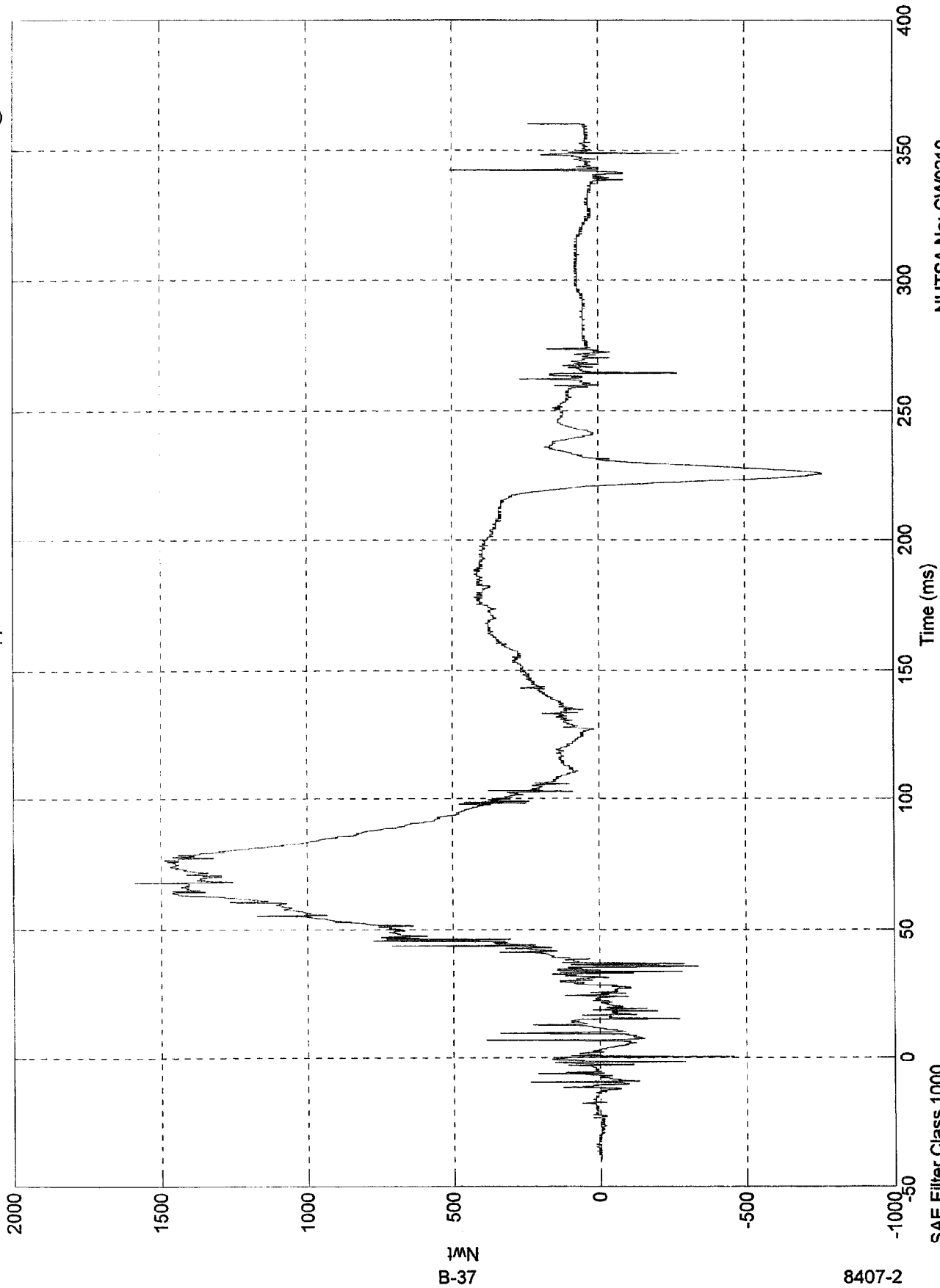


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 1.59e+003 Nwt @ 67.90 msec
Min = -762 Nwt @ 225.50 msec

Pos.1 Upper Neck Fz

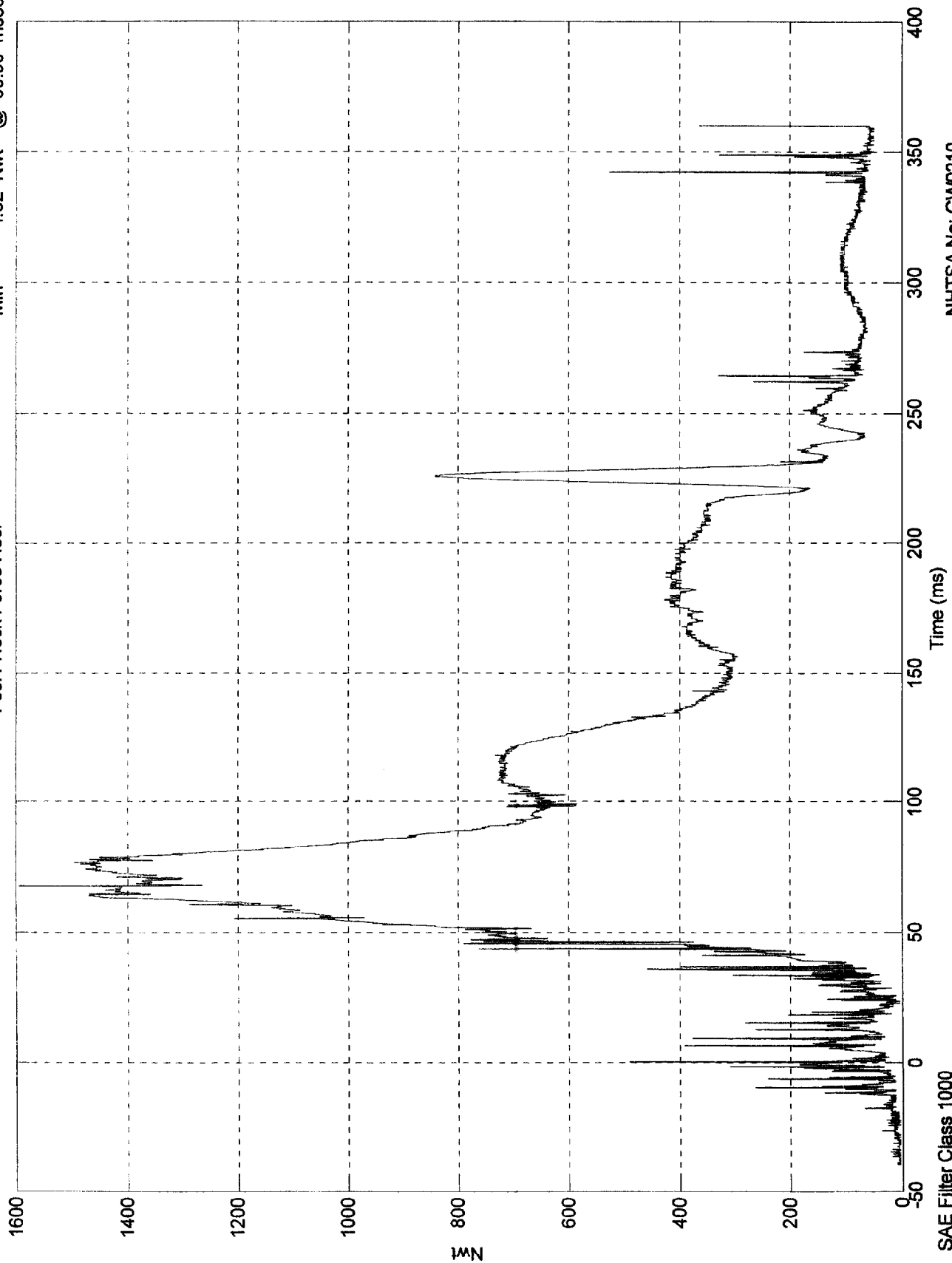


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 1.6e+003 Nwt @ 67.90 msec
Min = 4.32 Nwt @ -39.90 msec

Pos.1 Neck Force Res.

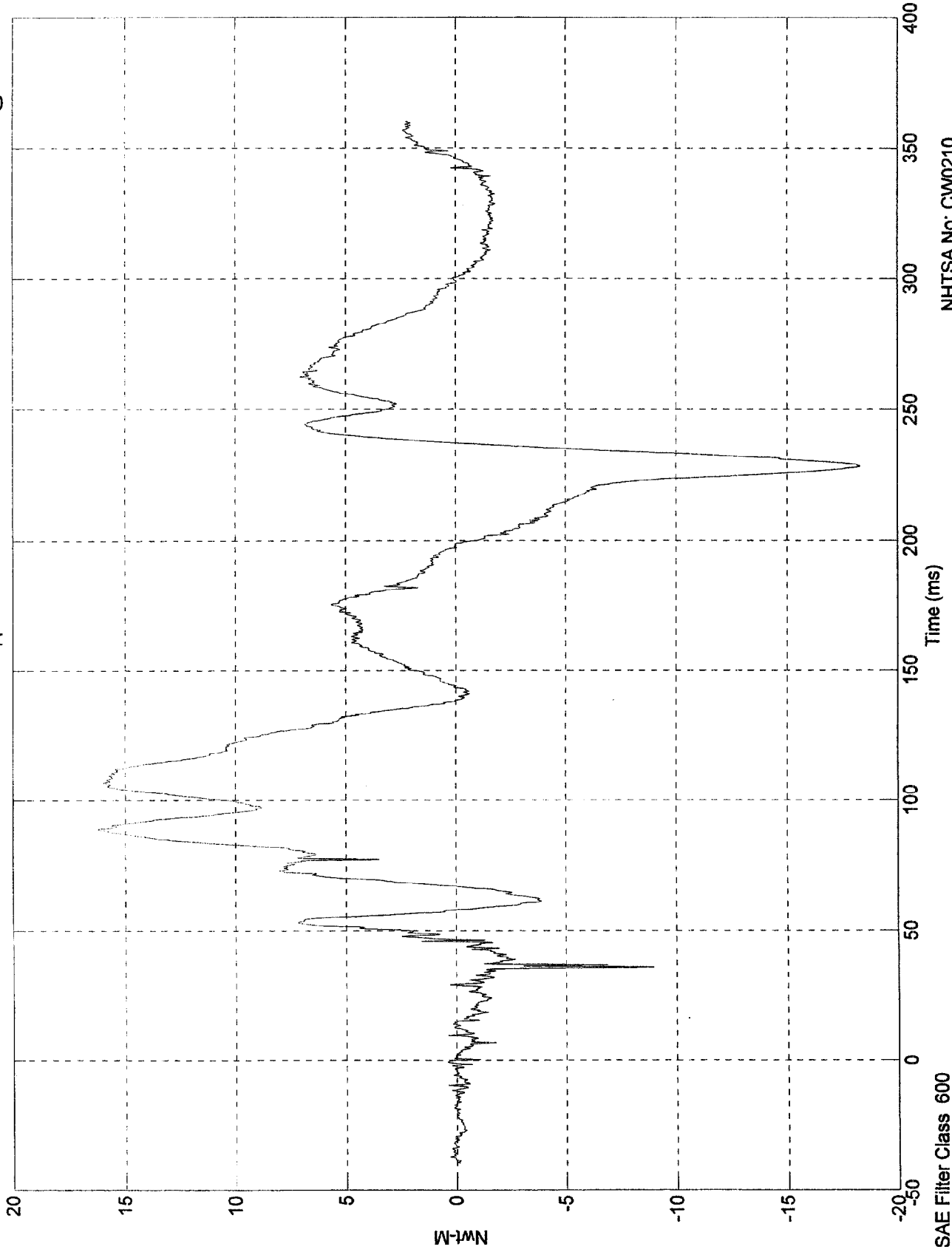


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Pos.1 Upper Neck Mx

Max = 16.2 Nwt-M @ 89.10 msec
Min = -18.3 Nwt-M @ 228.10 msec



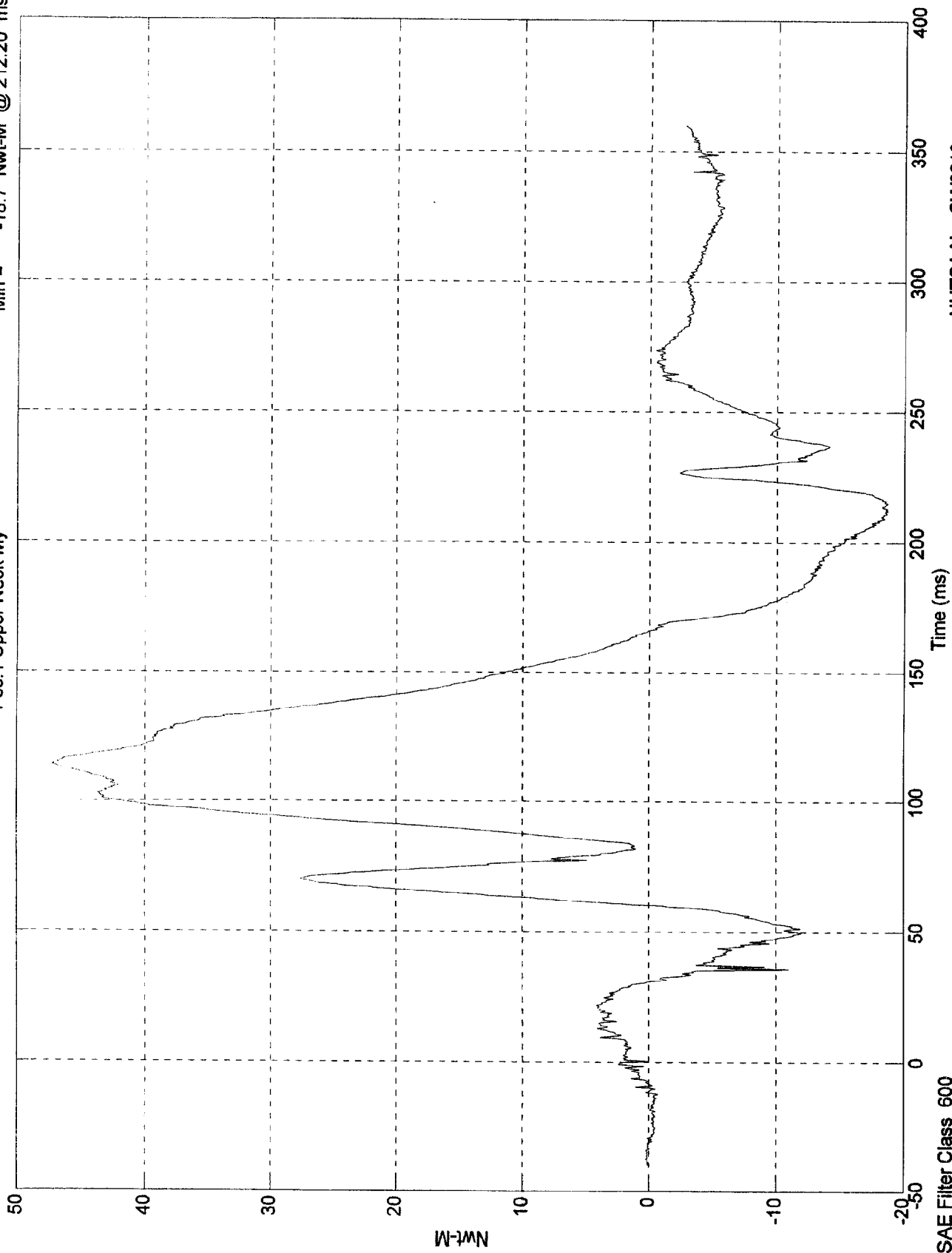
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 600

208 Test #2 - 1998 Ford Escort

Max = 47.2 Nwt-M @ 114.00 msec
Min = -18.7 Nwt-M @ 212.20 msec

Pos.1 Upper Neck My



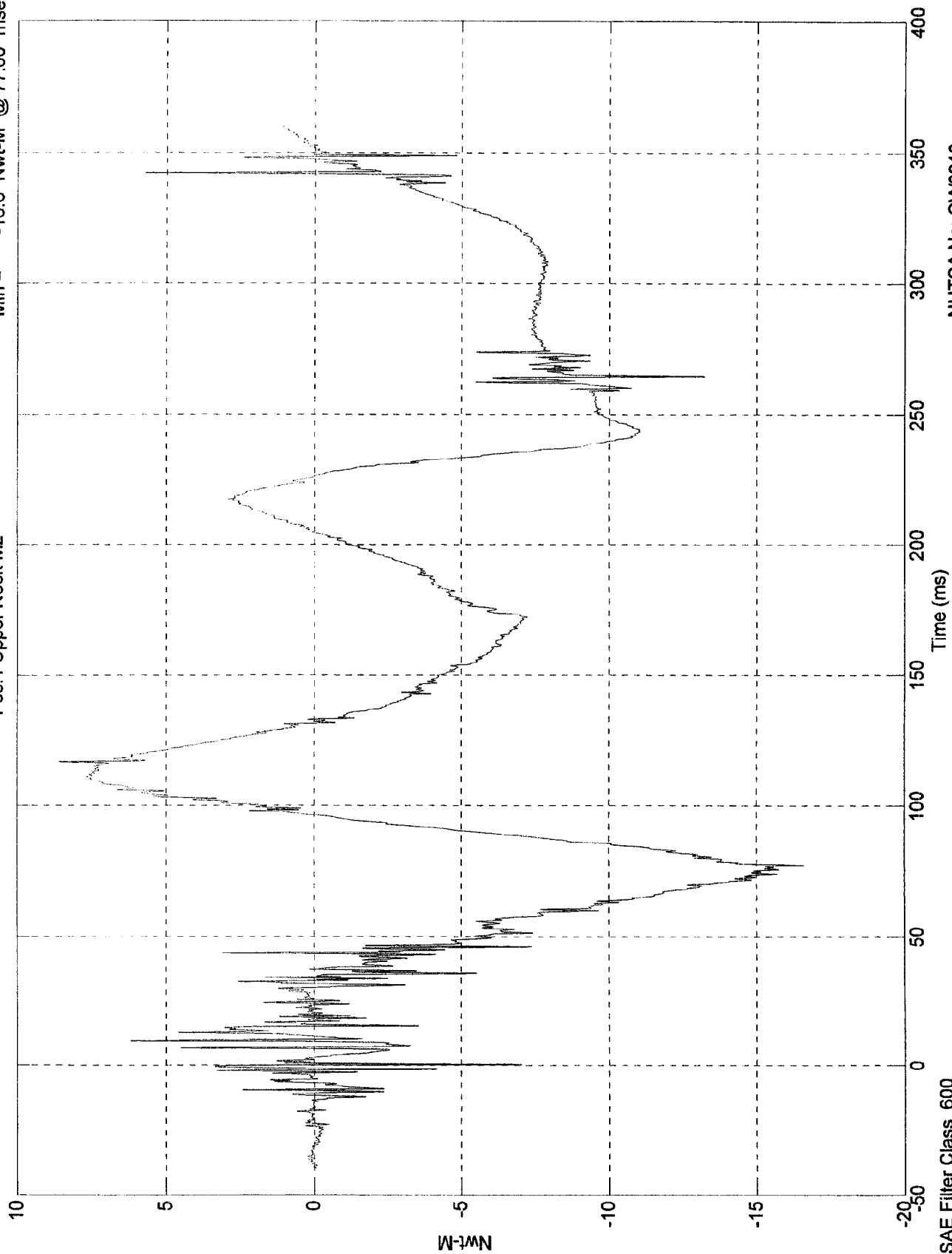
SAE Filter Class 600

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 8.59 Nwt-M @ 116.80 msec
Min = -16.6 Nwt-M @ 77.60 msec

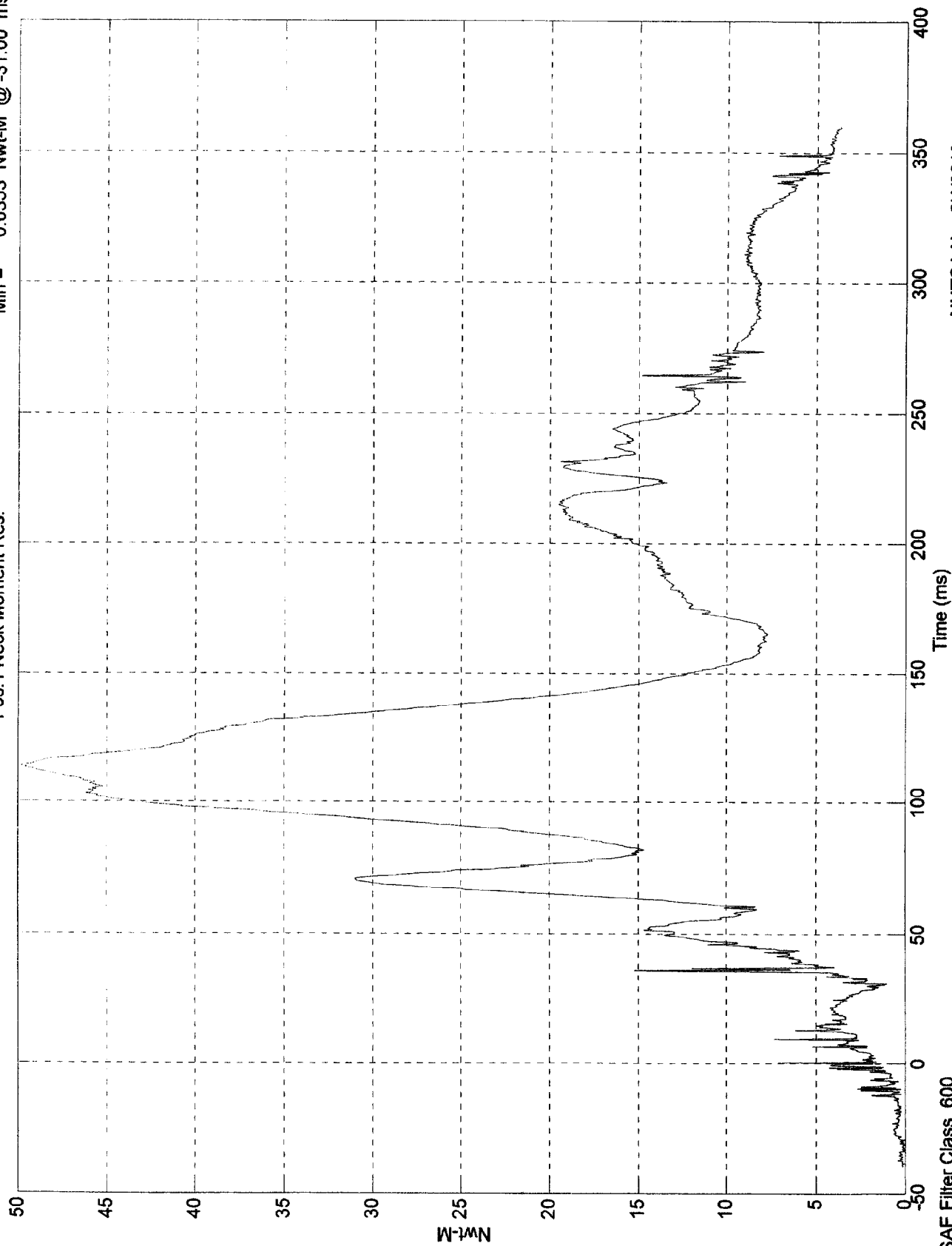
Pos.1 Upper Neck Mz



NHTSA No: CW0210
Date: 31 Mar 1998

Max = 49.8 Nwt-M @ 113.90 msec
 Min = 0.0353 Nwt-M @ -31.00 msec

Pos.1 Neck Moment Res.

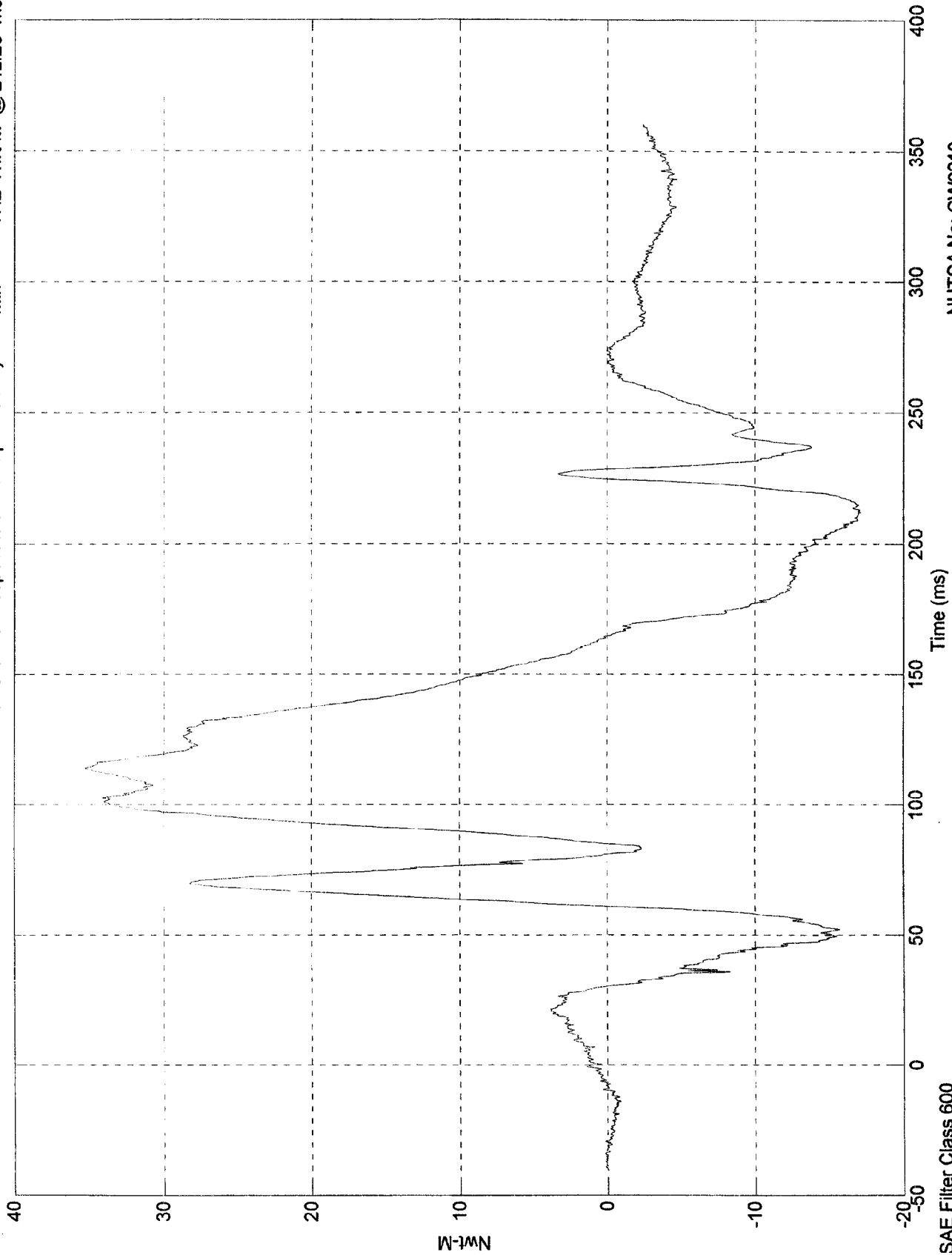


SAE Filter Class 600

NHTSA No: CW0210
 Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

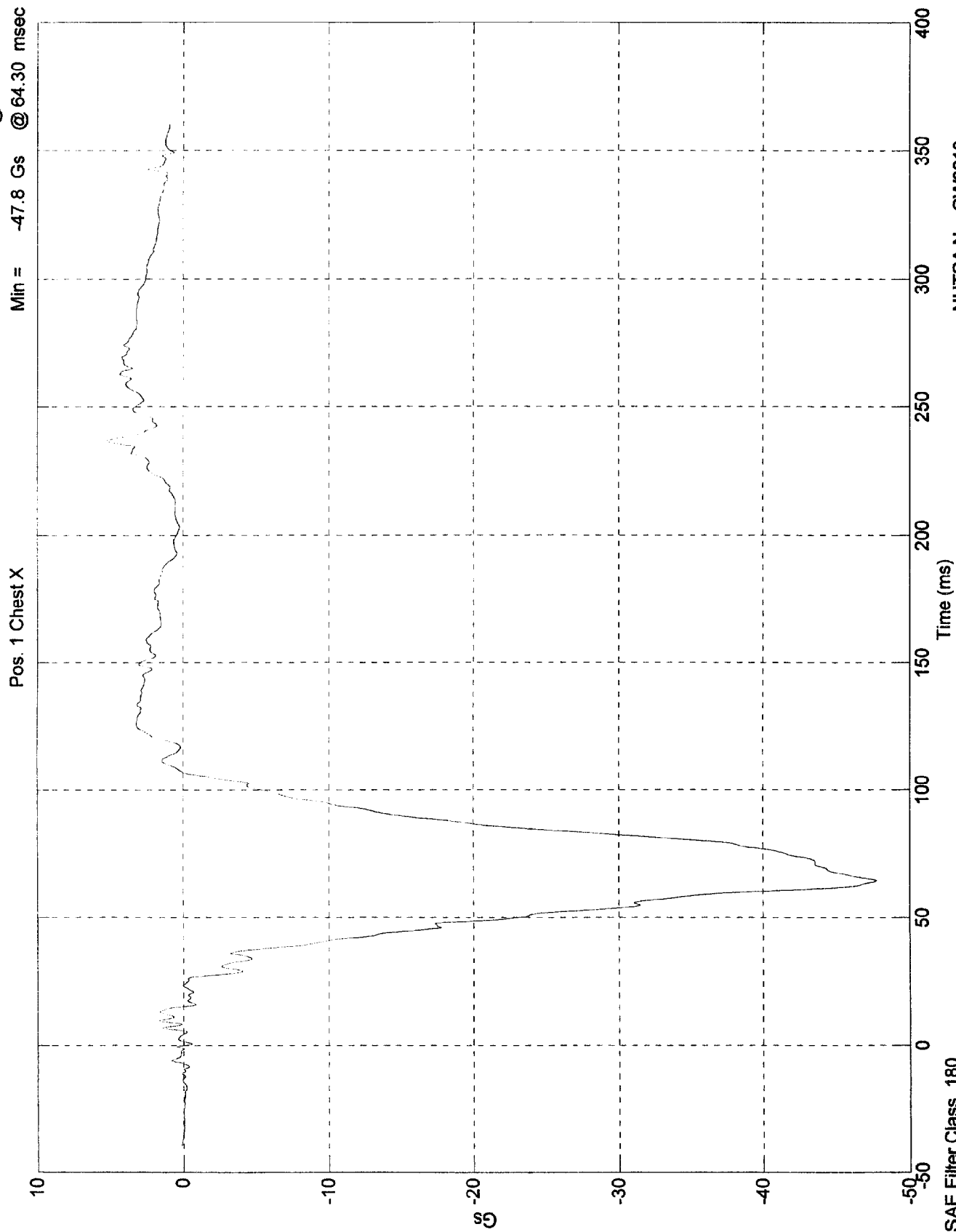
Position 1 Head Y Moment With Respect to the Occipital Condyles
Max = 35.2 Nwt-M @ 114.00 msec
Min = -17.2 Nwt-M @ 212.20 msec



SAE Filter Class 600

NHTSA No: CW0210
Date: 31 Mar 1998

Max = 5.31 Gs @ 236.40 msec
Min = -47.8 Gs @ 64.30 msec

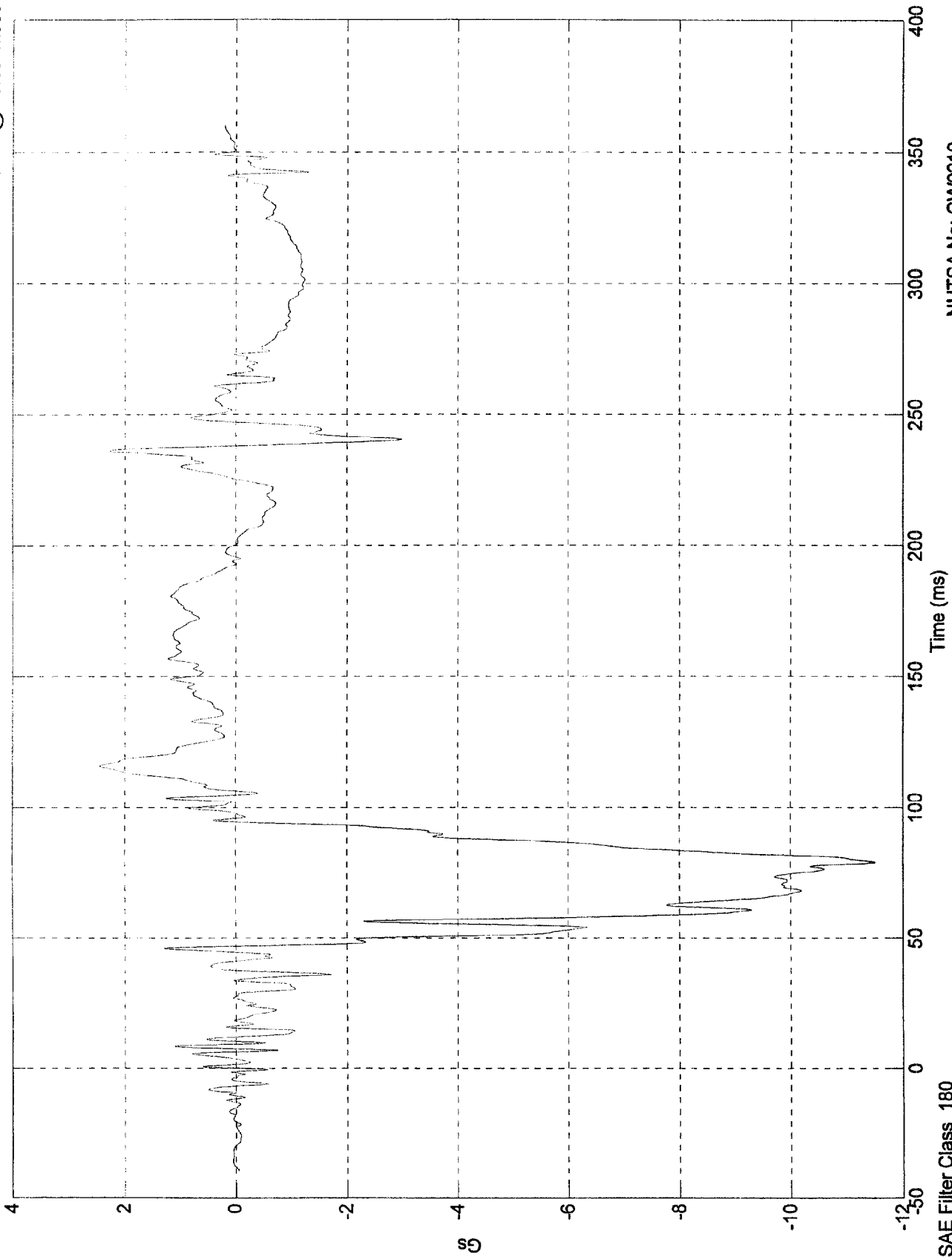


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 2.44 Gs @ 115.90 msec
Min = -11.5 Gs @ 79.30 msec

Pos. 1 Chest Y



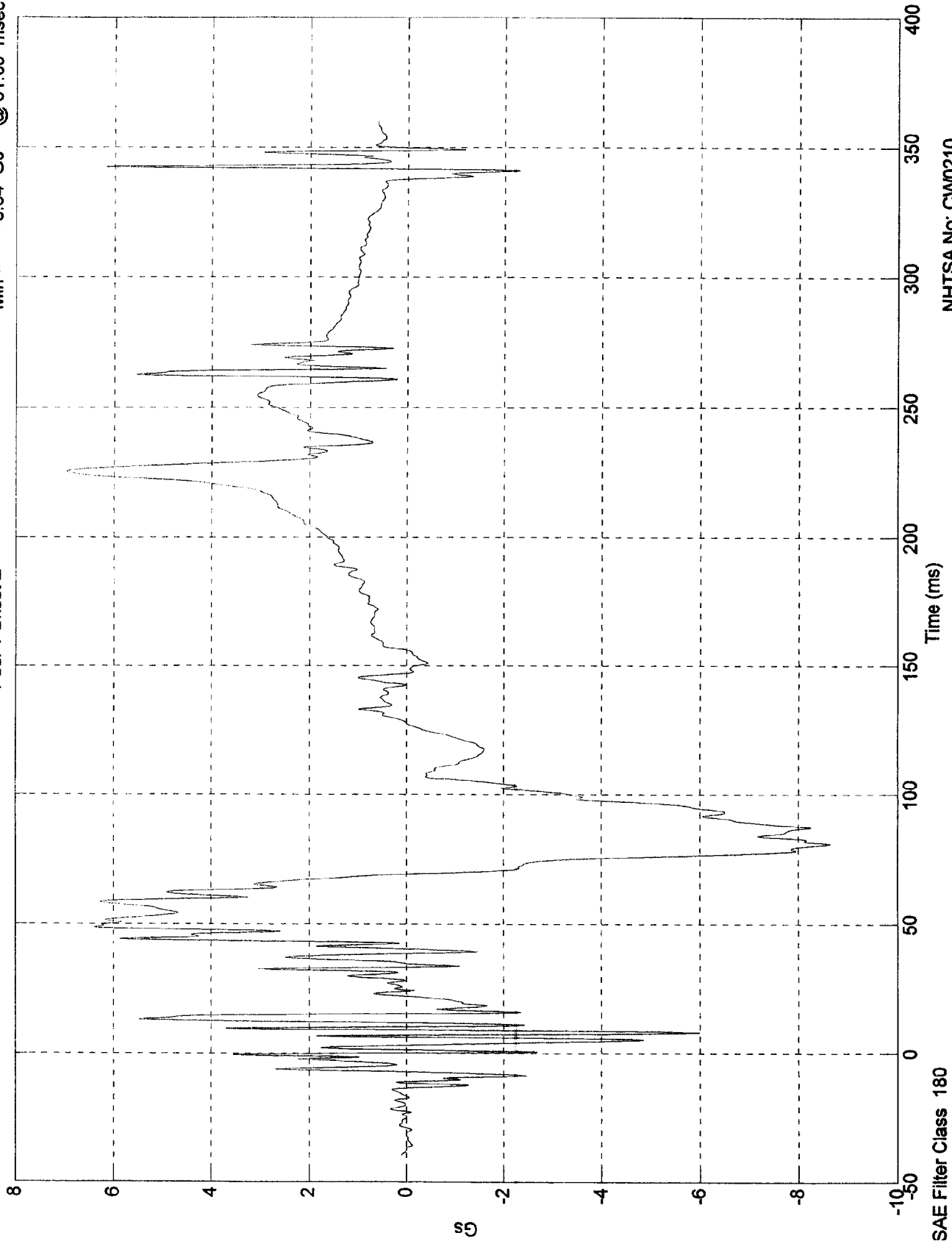
SAE Filter Class 180

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 6.95 Gs @ 225.20 msec
Min = -8.64 Gs @ 81.00 msec

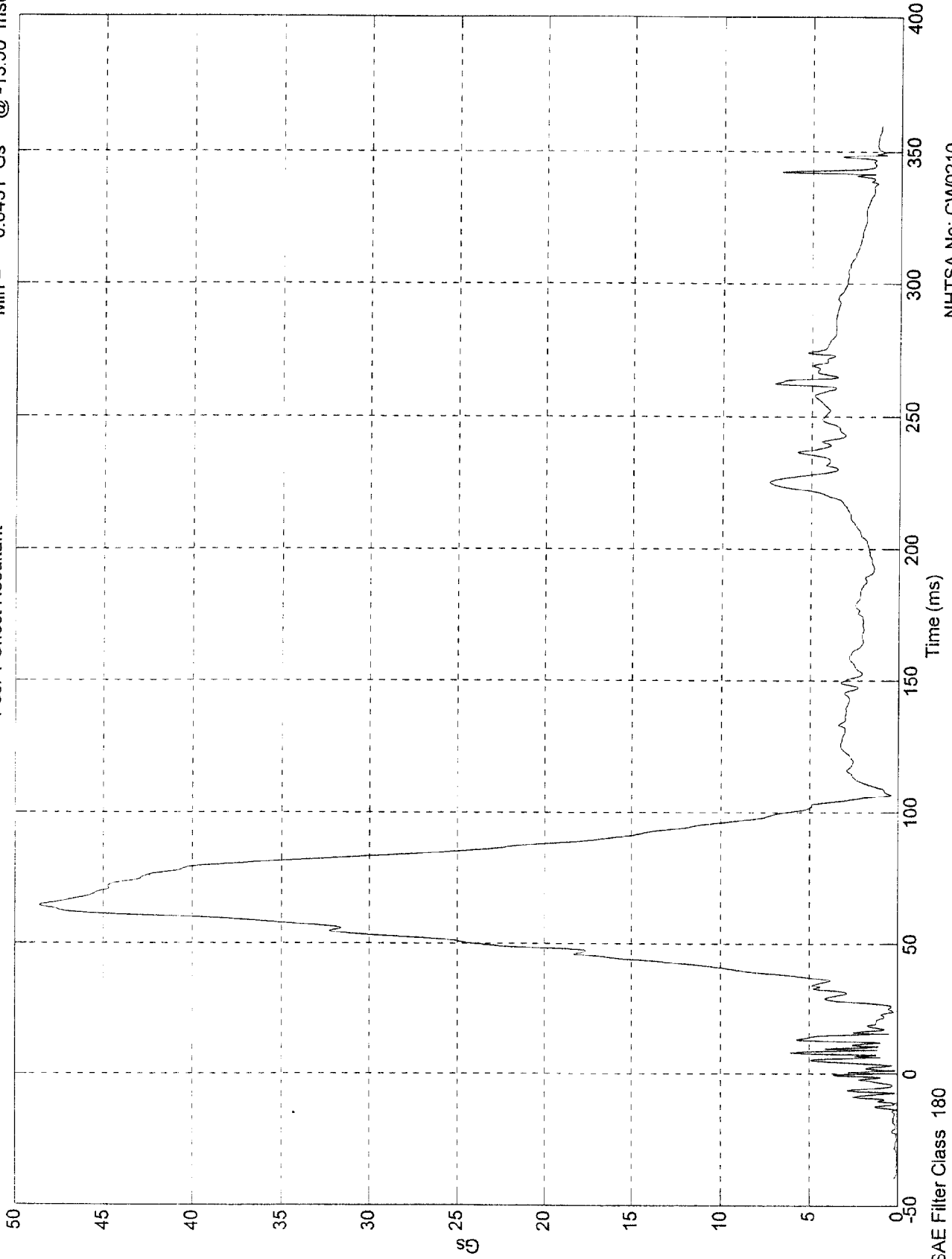
Pos. 1 Chest Z



NHTSA No: CW0210
Date: 31 Mar 1998

Max = 48.6 Gs @ 64.40 msec
Min = 0.0431 Gs @ -13.50 msec

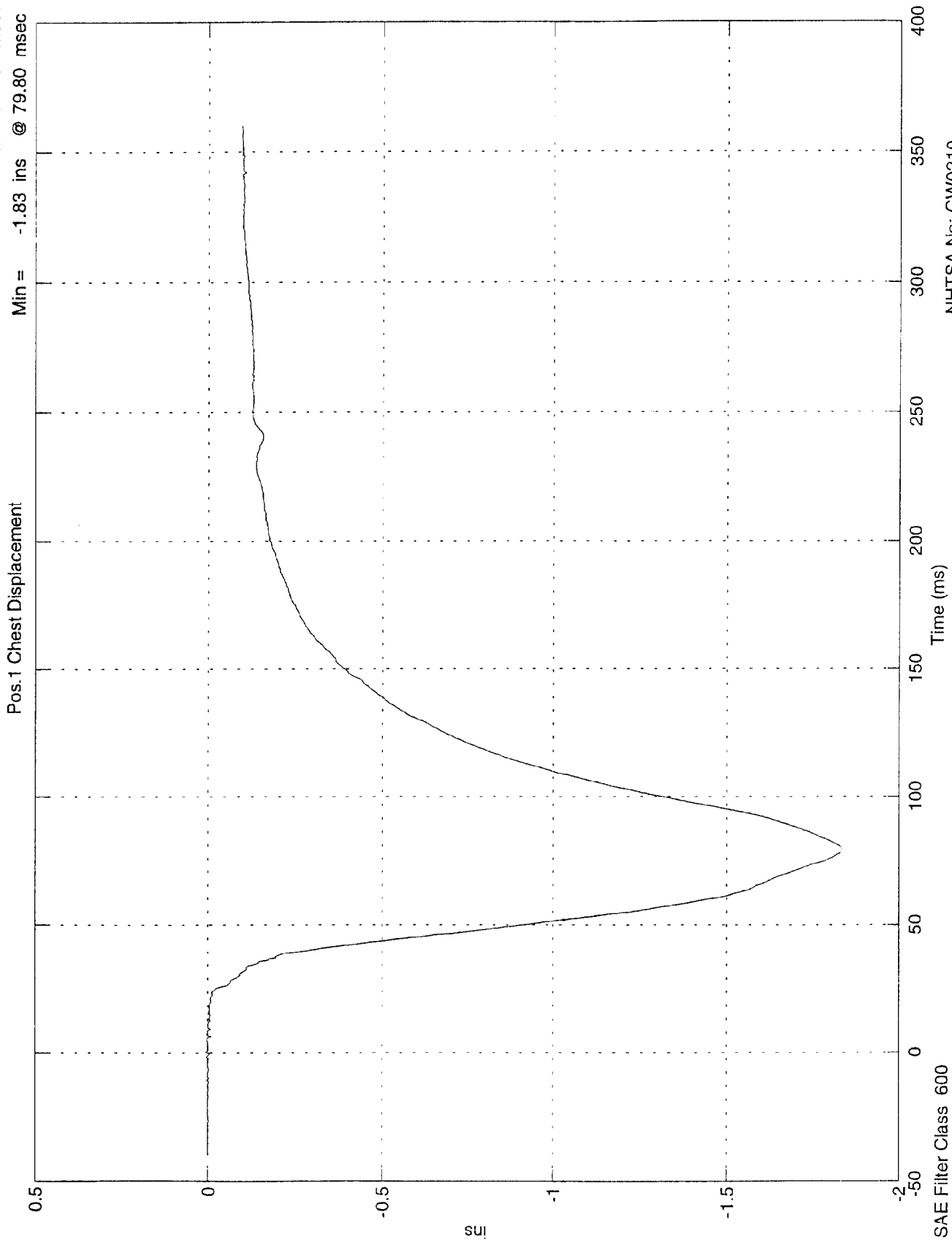
Pos. 1 Chest Resultant



SAE Filter Class 180

NHTSA No: CW0210
Date: 31 Mar 1998

Max = 0.00746 ins @ 0.40 msec
Min = -1.83 ins @ 79.80 msec

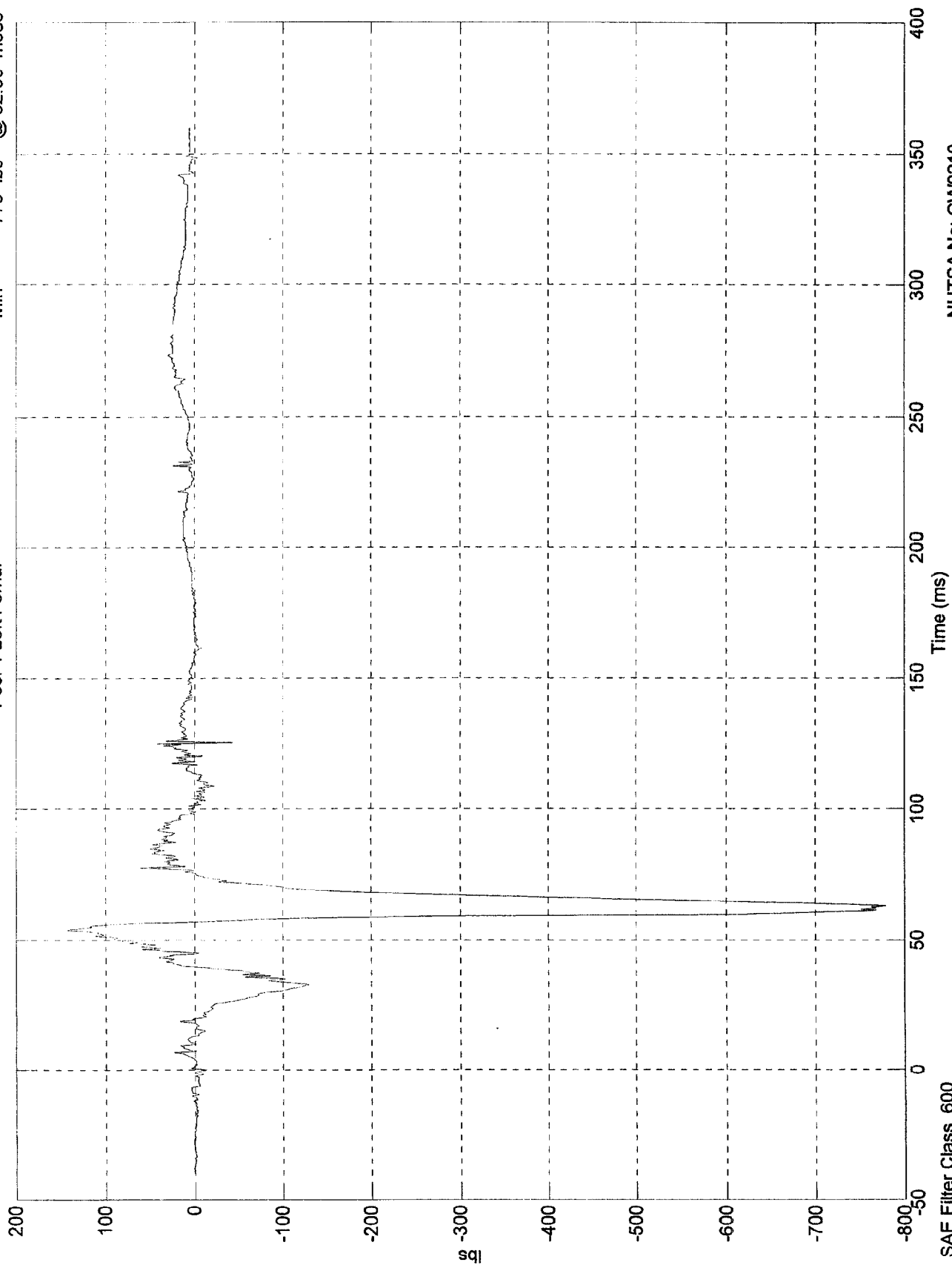


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Pos. 1 Left Femur

Max = 142 lbs @ 53.70 msec
Min = -779 lbs @ 62.90 msec

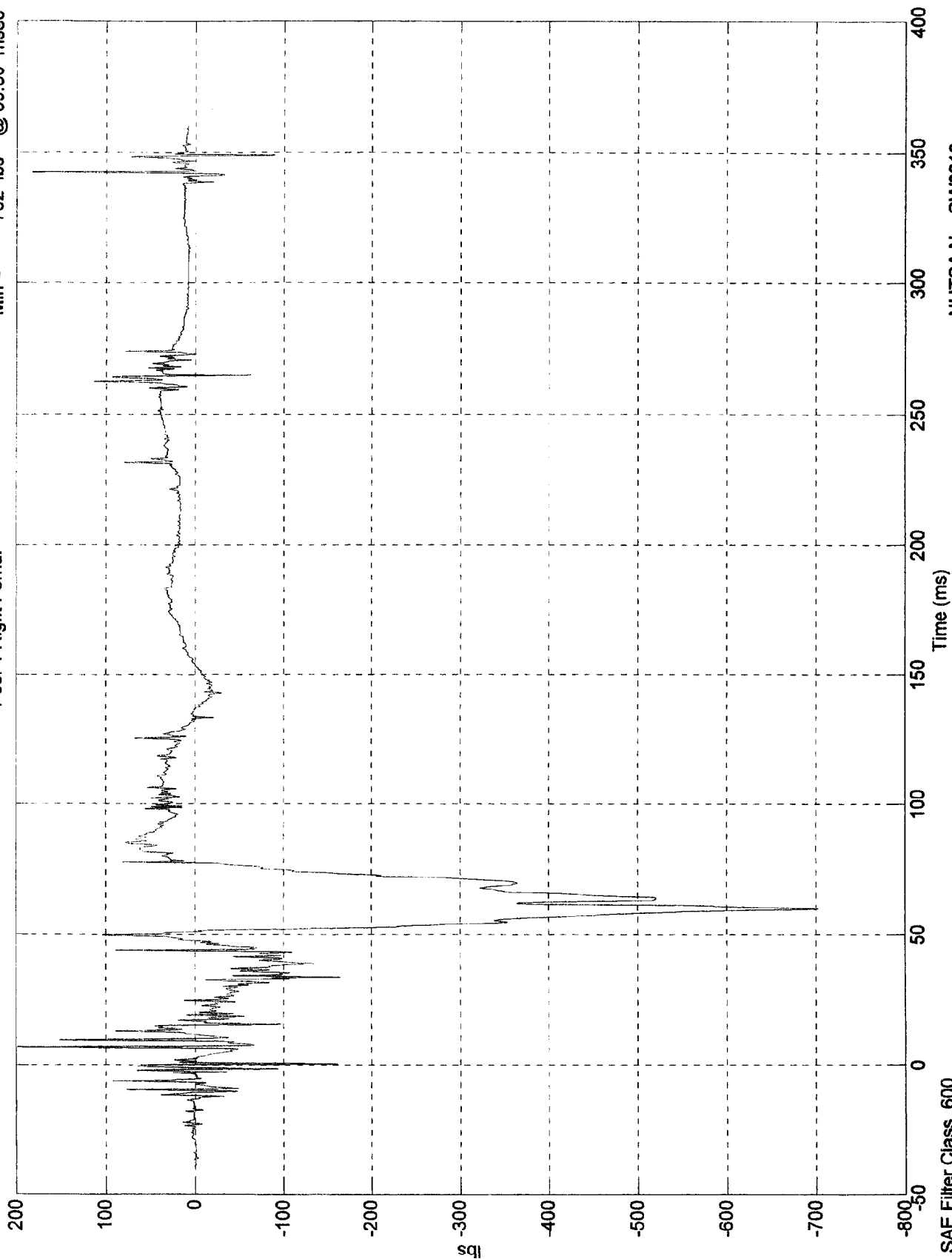


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 199 lbs @ 6.80 msec
Min = -702 lbs @ 59.80 msec

Pos. 1 Right Femur



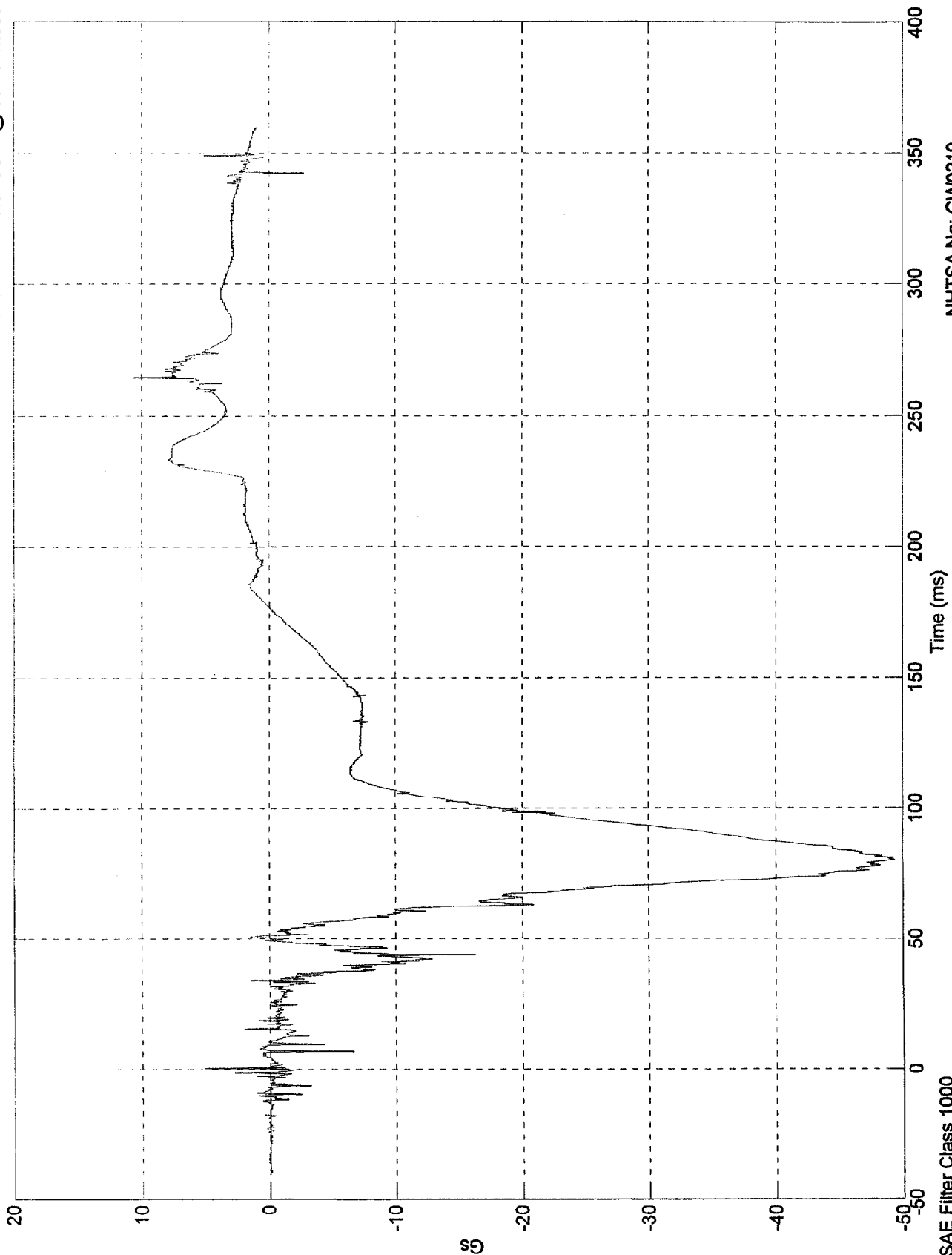
SAE Filter Class 600

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Pos. 2 Head X

Max = 10.6 Gs @ 264.50 msec
Min = -49.3 Gs @ 80.40 msec



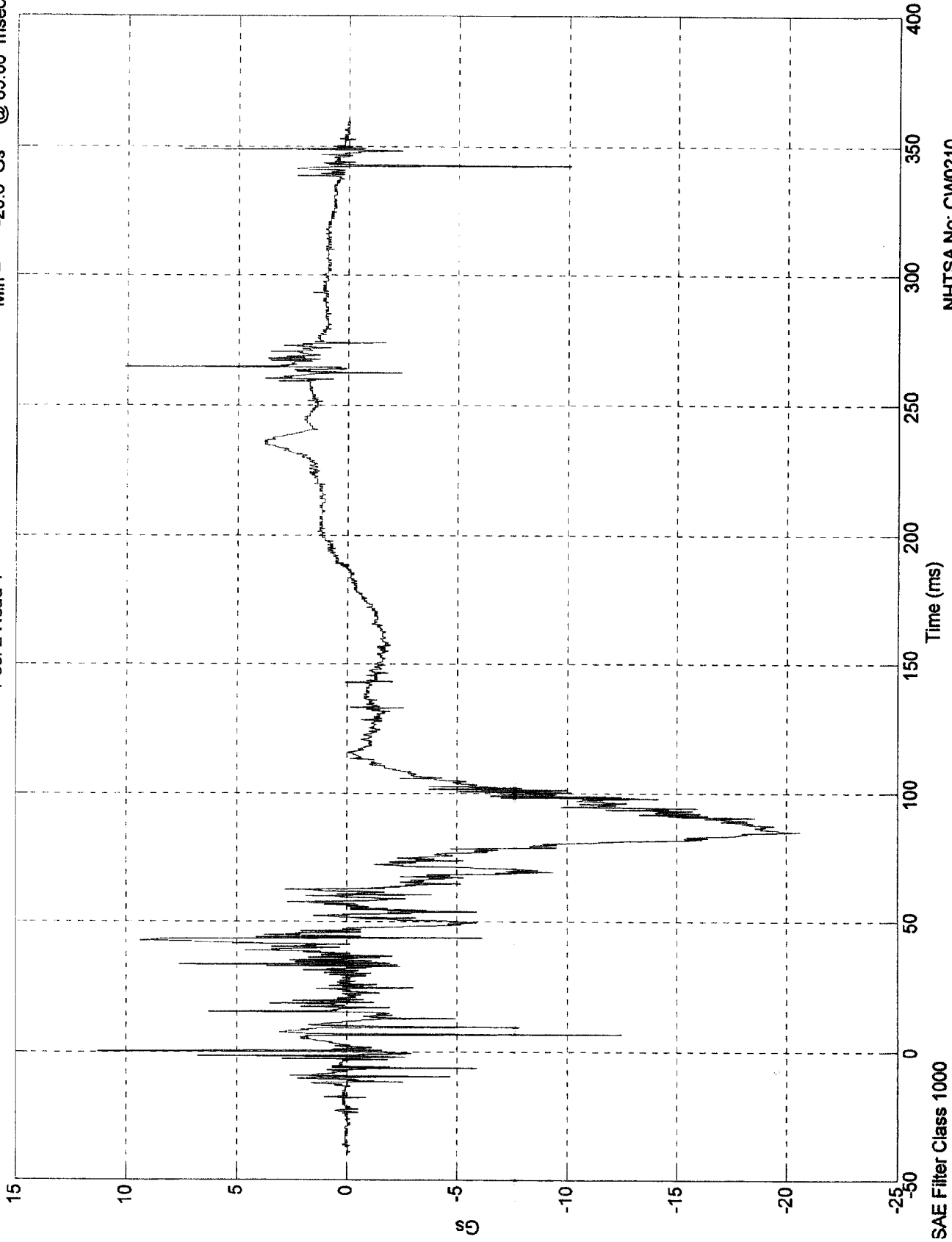
SAE Filter Class 1000

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 11.3 Gs @ 0.40 msec
Min = -20.6 Gs @ 85.00 msec

Pos. 2 Head Y



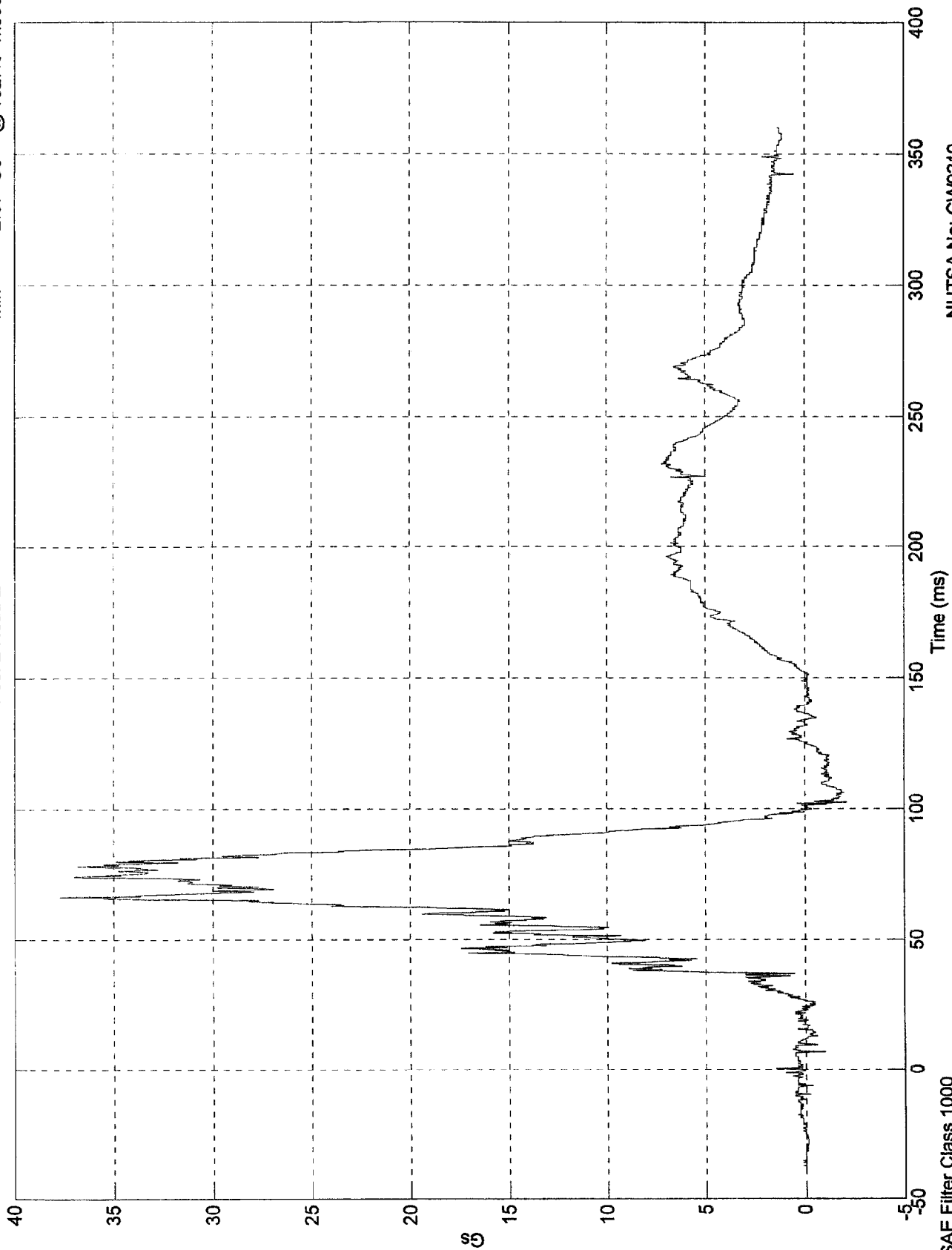
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 1000

208 Test #2 - 1998 Ford Escort

Pos. 2 Head Z

Max = 37.7 Gs @ 66.30 msec
Min = -2.07 Gs @ 102.40 msec

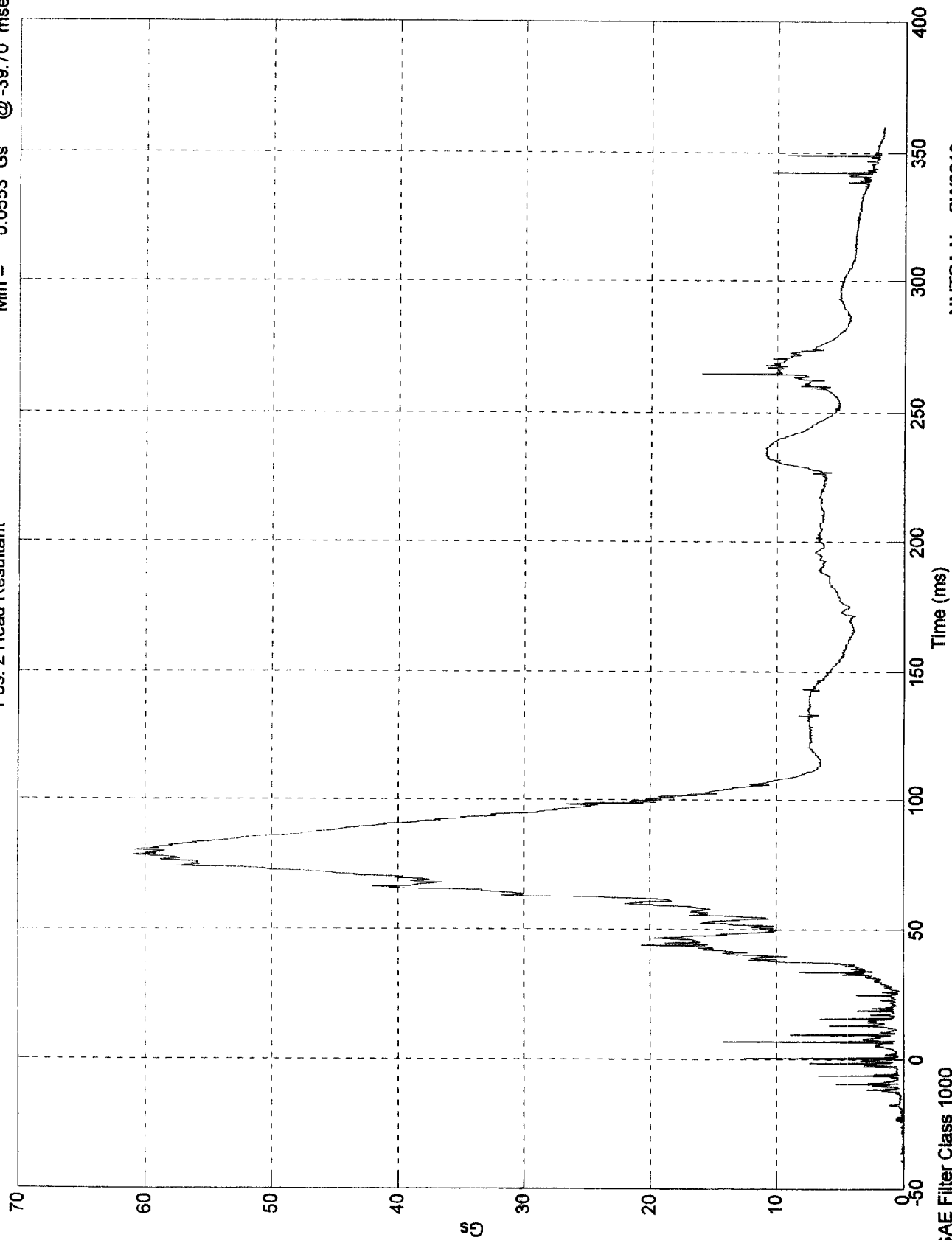


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 61 Gs @ 78.40 msec
Min = 0.0553 Gs @ -39.70 msec

Pos. 2 Head Resultant



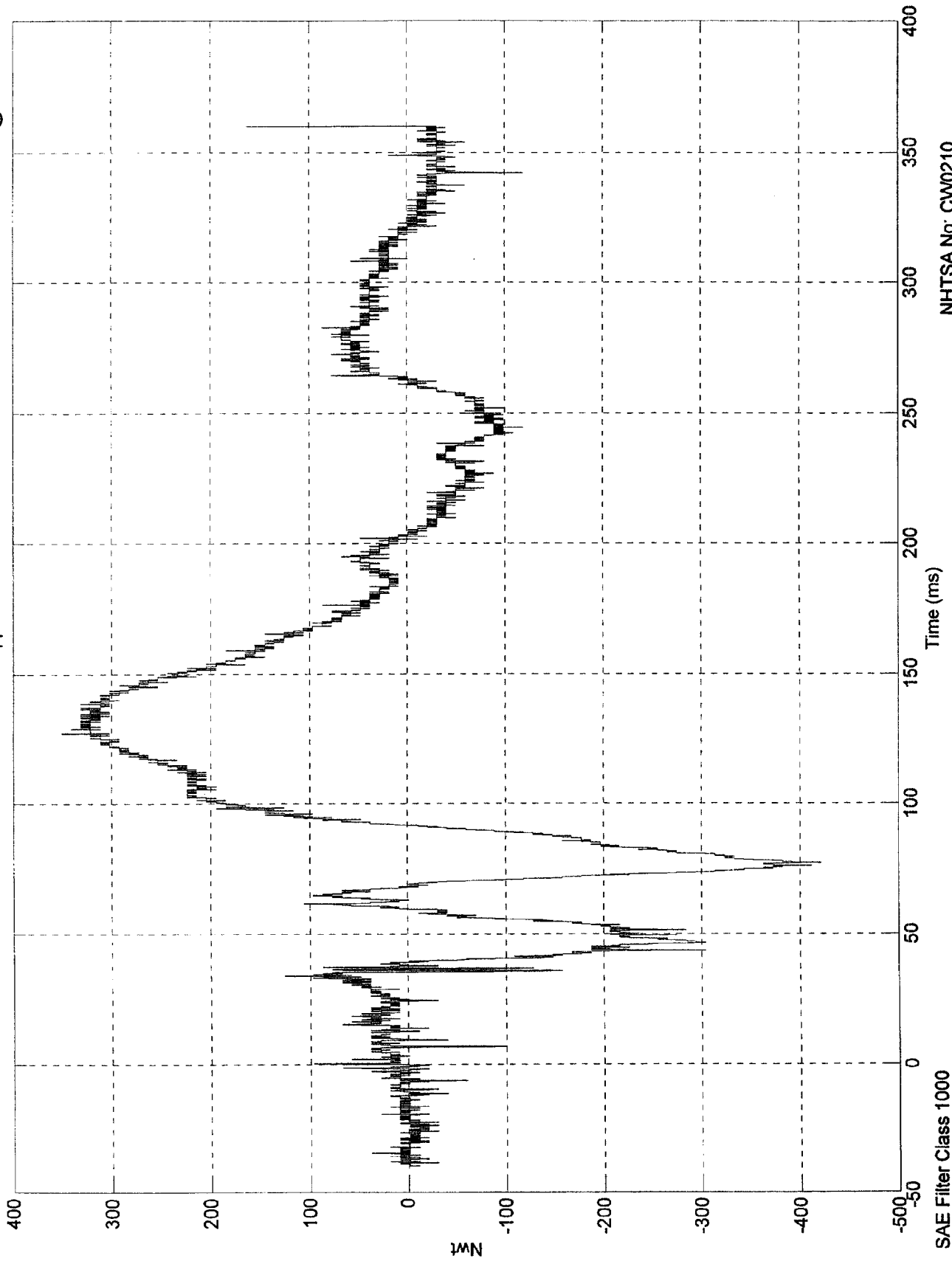
SAE Filter Class 1000

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 351 Nwt @ 127.20 msec
Min = -422 Nwt @ 77.60 msec

Pos.2 Upper Neck Fx



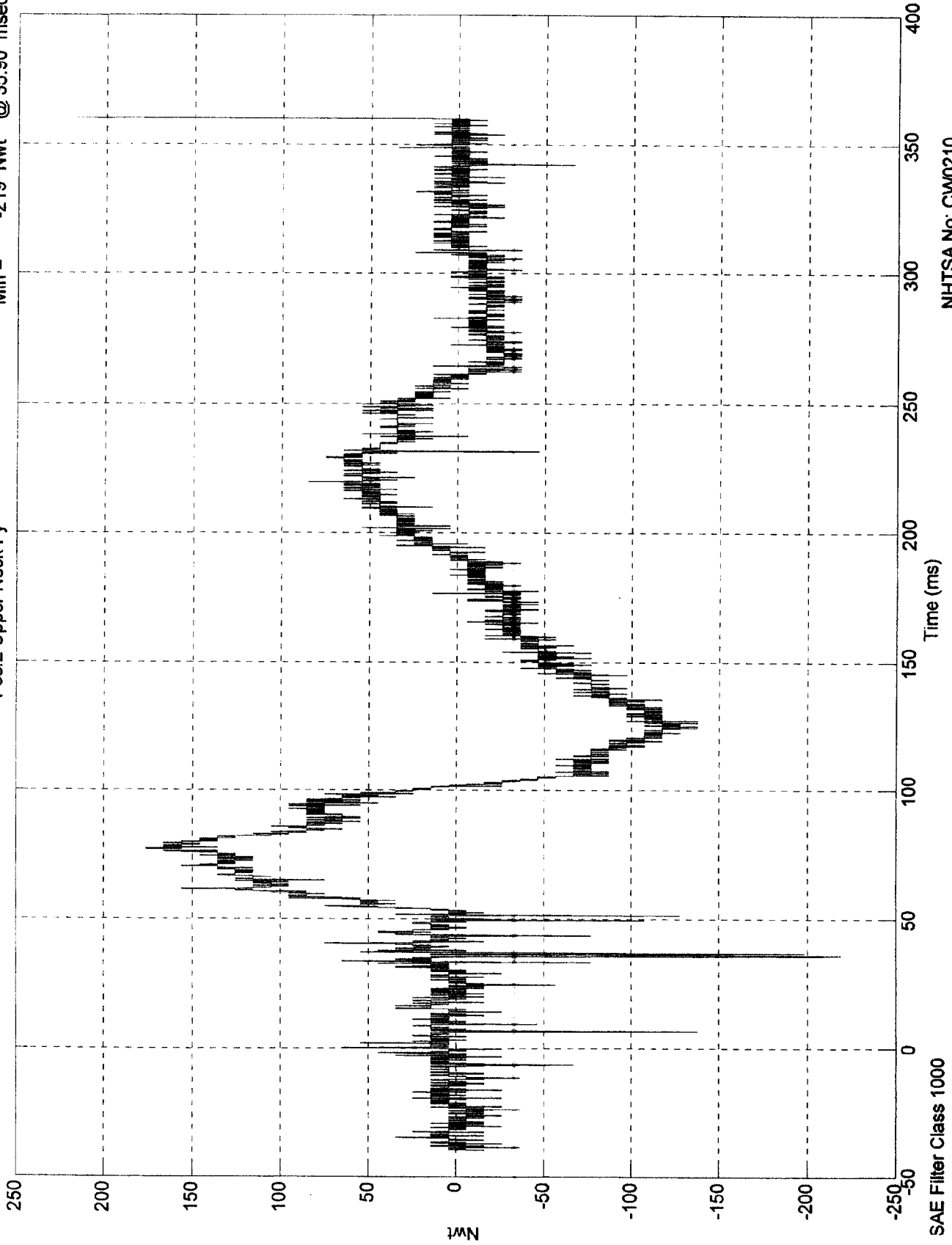
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 1000

208 Test #2 - 1998 Ford Escort

Max = 217 Nwt @ 360.00 msec
Min = -219 Nwt @ 35.90 msec

Pos.2 Upper Neck Fy

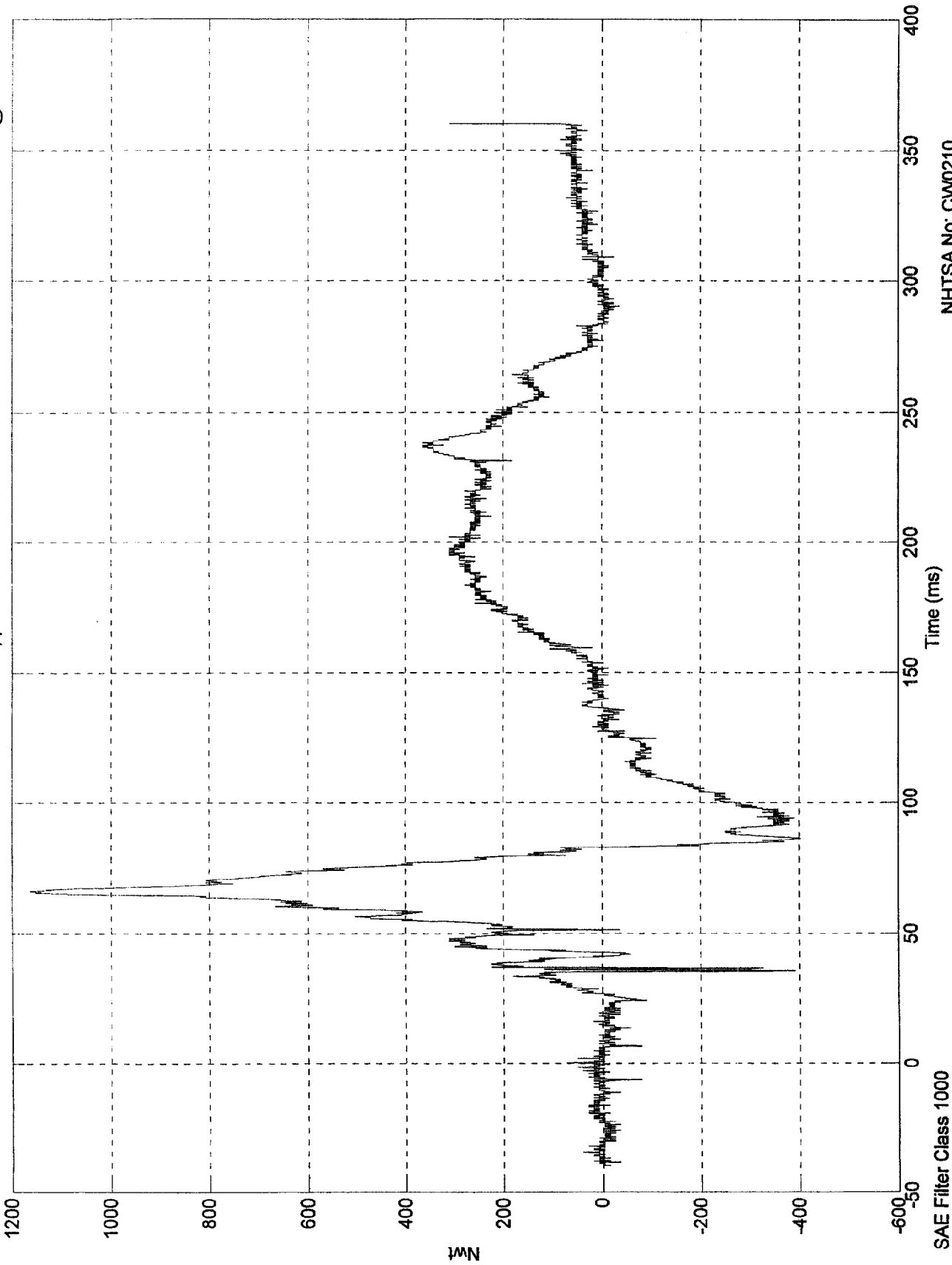


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 1.16e+003 Nwt @ 66.00 msec
Min = -402 Nwt @ 86.30 msec

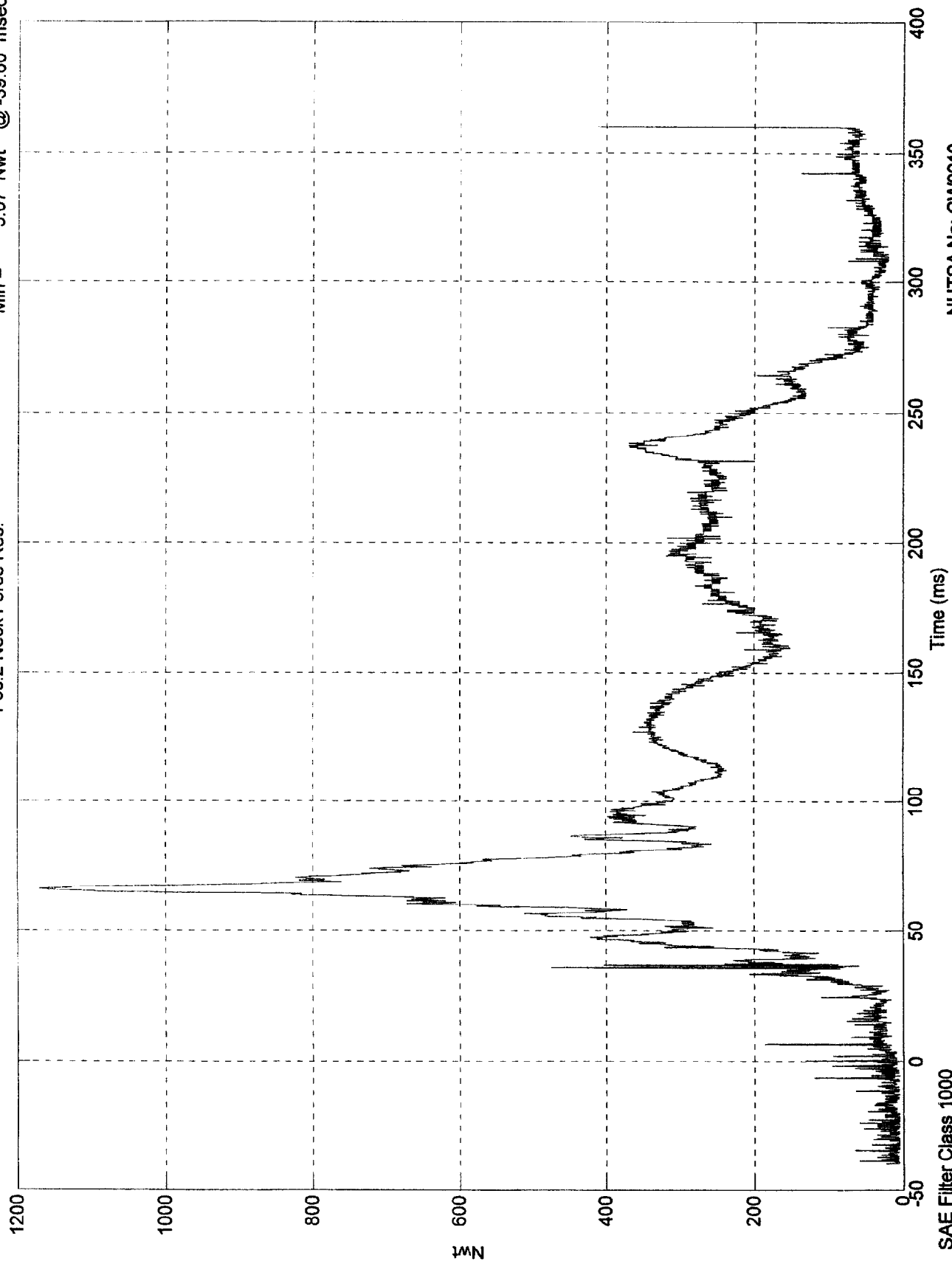
Pos.2 Upper Neck Fz



NHTSA No: CW0210
Date: 31 Mar 1998

Max = 1.17e+003 Nwt @ 66.00 msec
Min = 5.07 Nwt @ -39.60 msec

Pos.2 Neck Force Res.

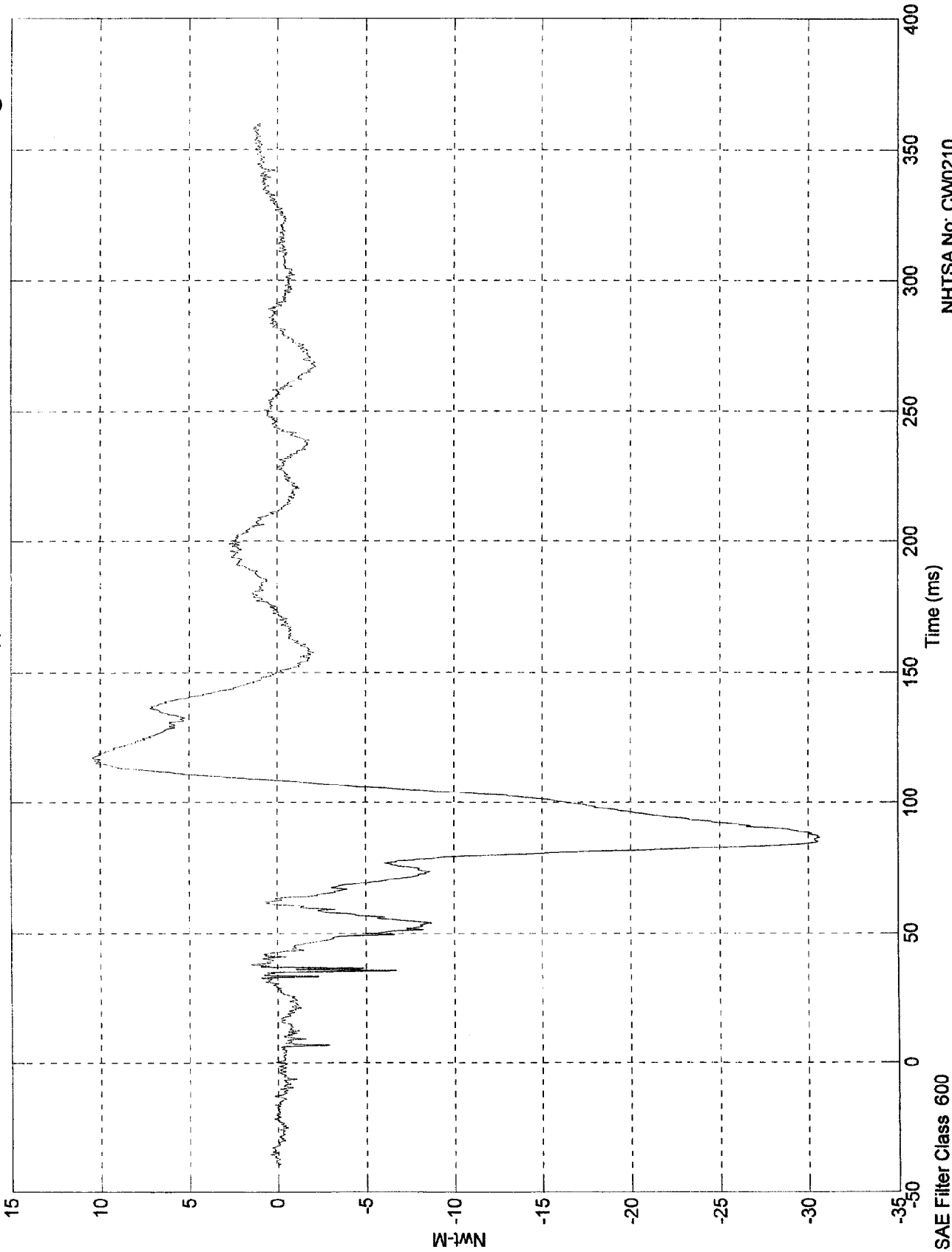


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Max = 10.4 Nwt-M @ 117.40 msec
Min = -30.7 Nwt-M @ 86.80 msec

Pos.2 Upper Neck Mx



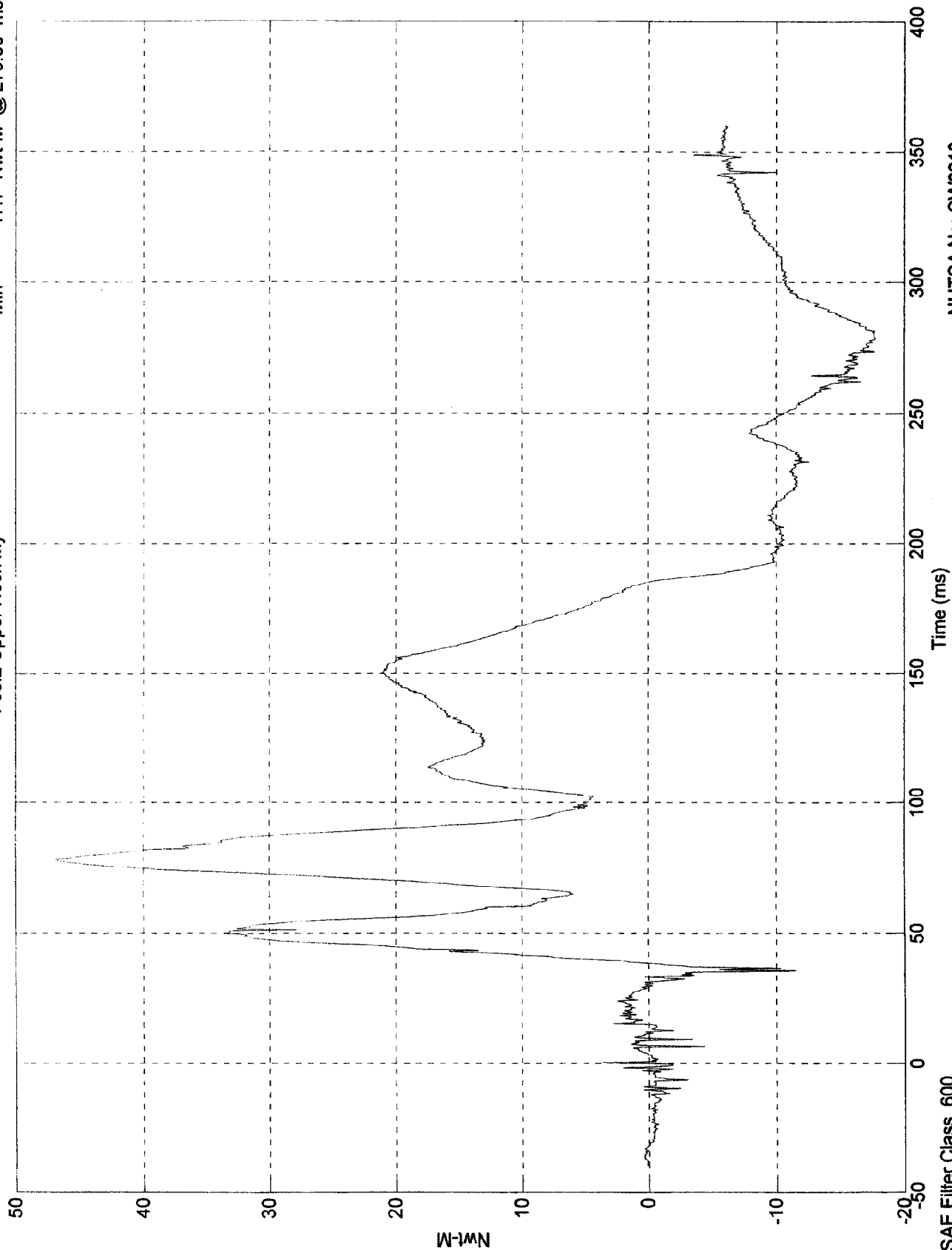
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 600

208 Test #2 - 1998 Ford Escort

Max = 46.9 Nwt-M @ 78.40 msec
Min = -17.7 Nwt-M @ 278.60 msec

Pos.2 Upper Neck My



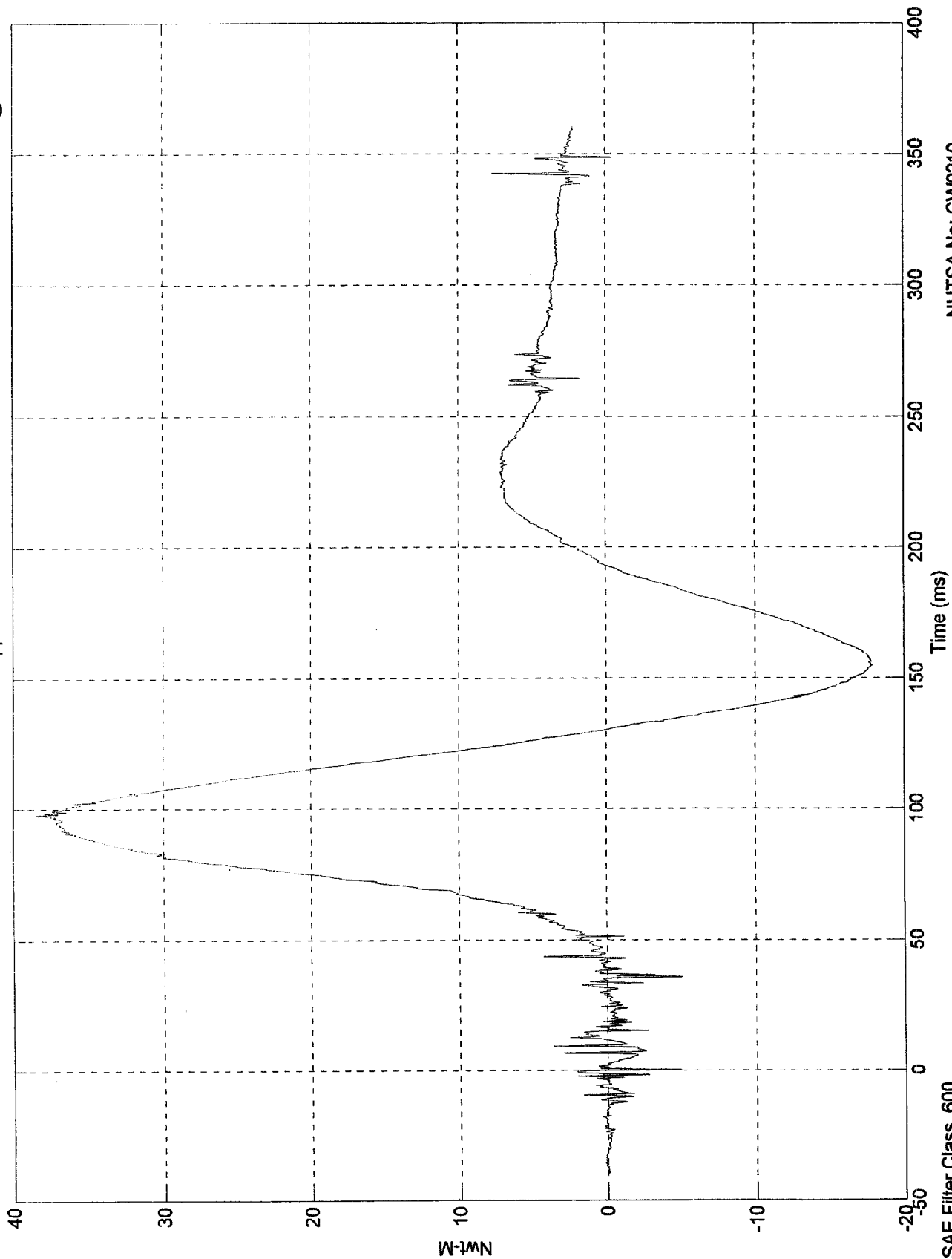
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 600

208 Test #2 - 1998 Ford Escort

Pos.2 Upper Neck Mz

Max = 38.4 Nwt-M @ 97.90 msec
Min = -17.8 Nwt-M @ 154.80 msec



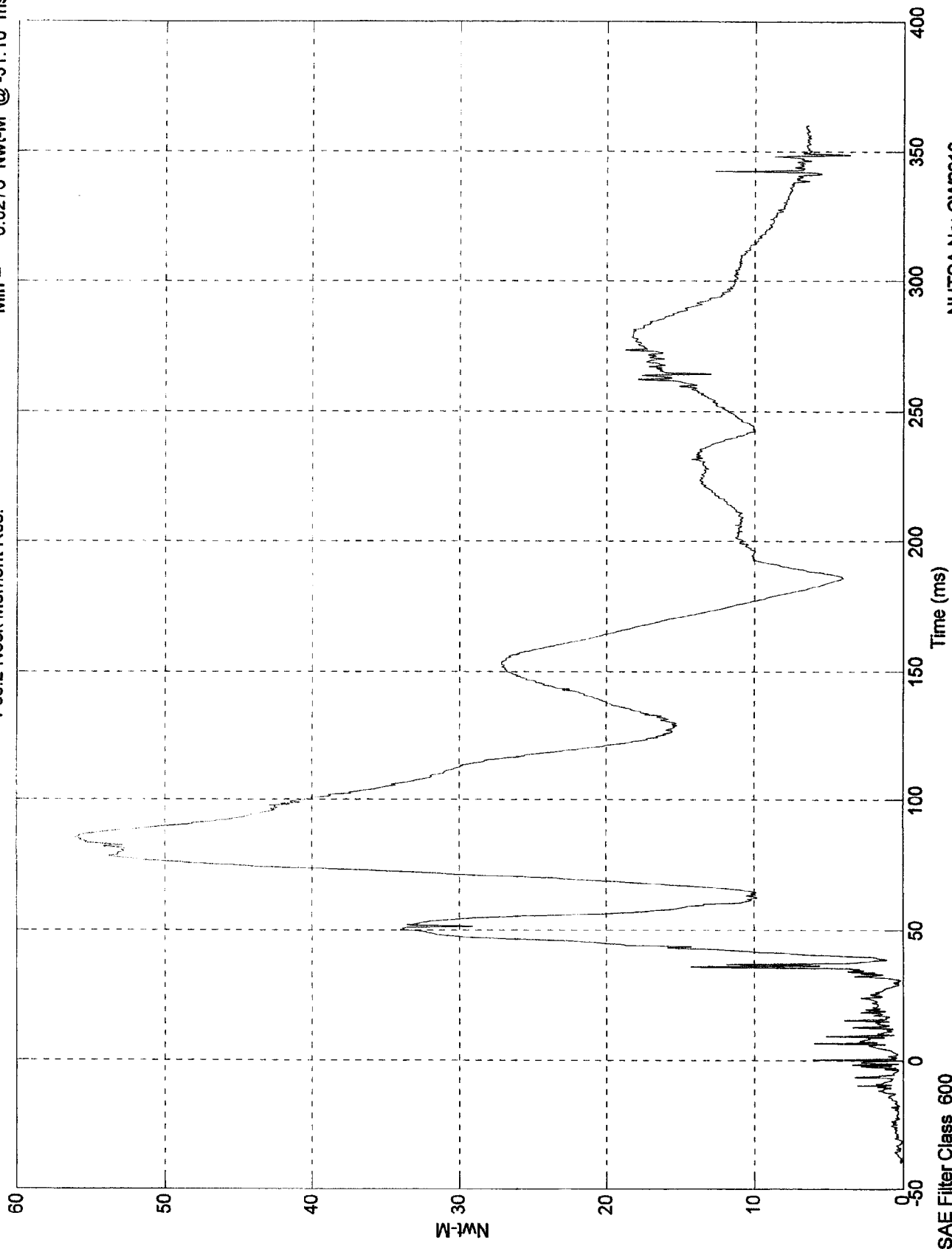
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 600

208 Test #2 - 1998 Ford Escort

Max = 56 Nwt-M @ 85.50 msec
Min = 0.0276 Nwt-M @ -31.10 msec

Pos.2 Neck Moment Res.

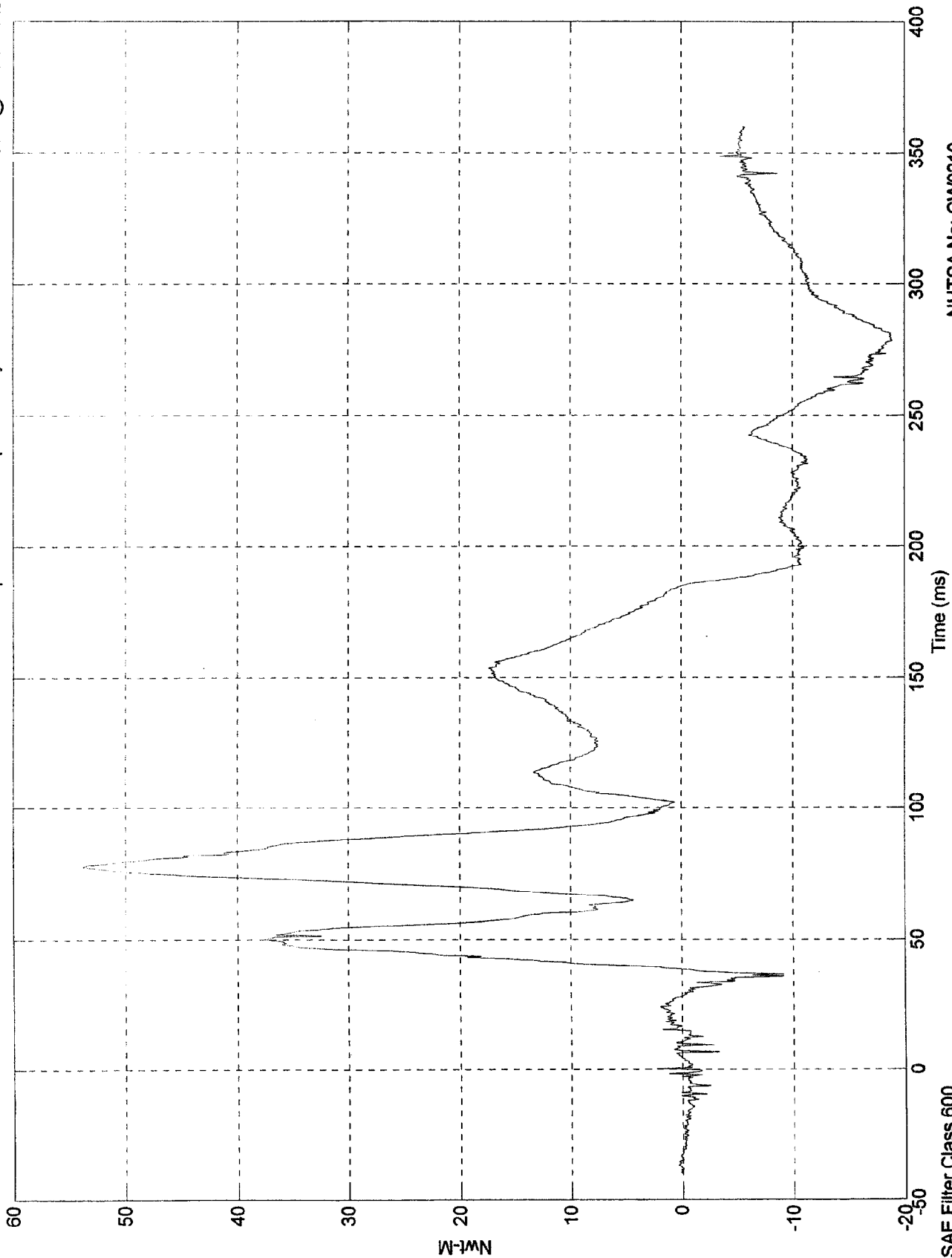


SAE Filter Class 600

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Position 2 Head Y Moment With Respect to the Occipital Condyles
Max = 53.7 Nwt-M @ 77.80 msec
Min = -18.9 Nwt-M @ 278.60 msec



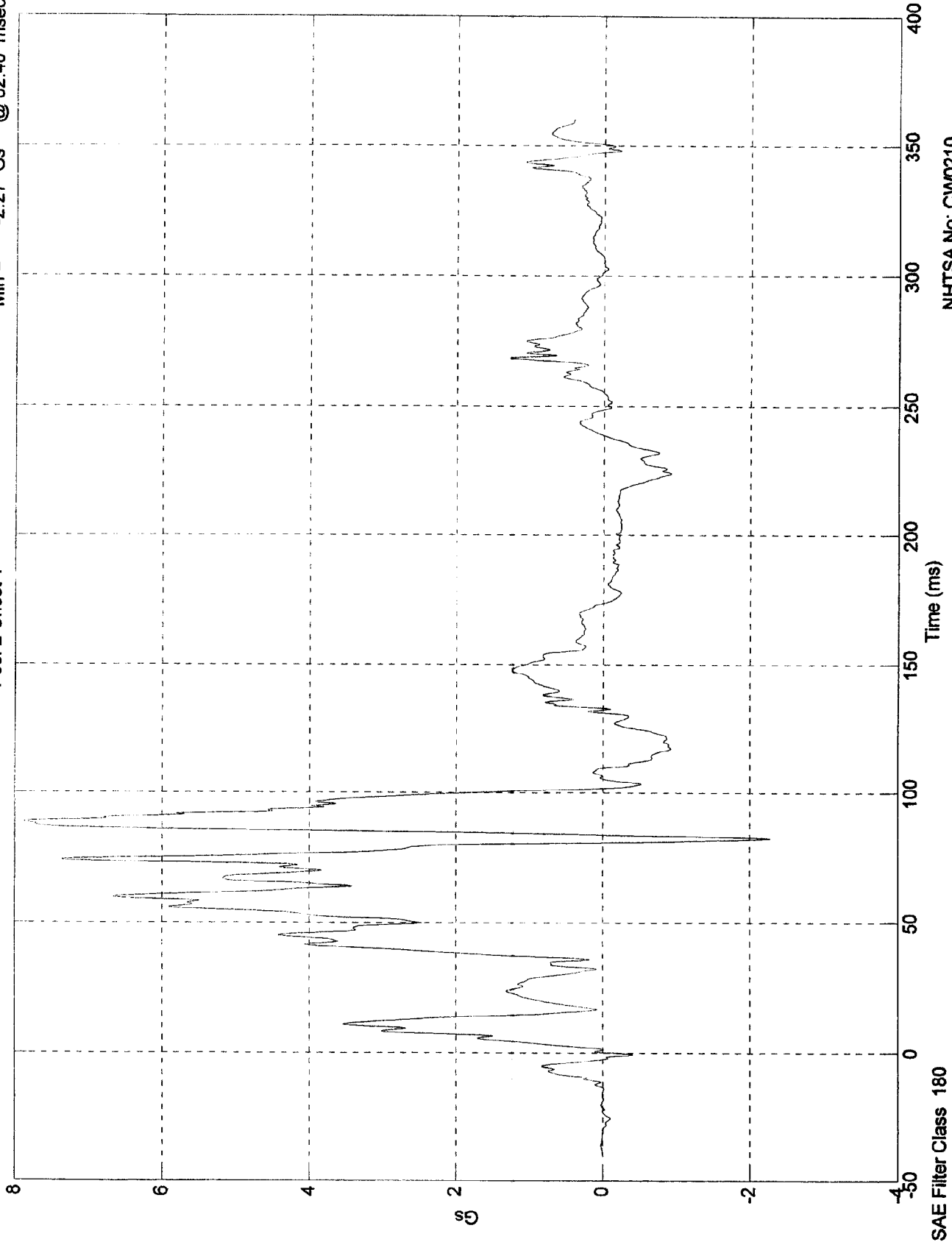
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 600

208 Test #2 - 1998 Ford Escort

Max = 7.87 Gs @ 88.70 msec
Min = -2.27 Gs @ 82.40 msec

Pos. 2 Chest Y

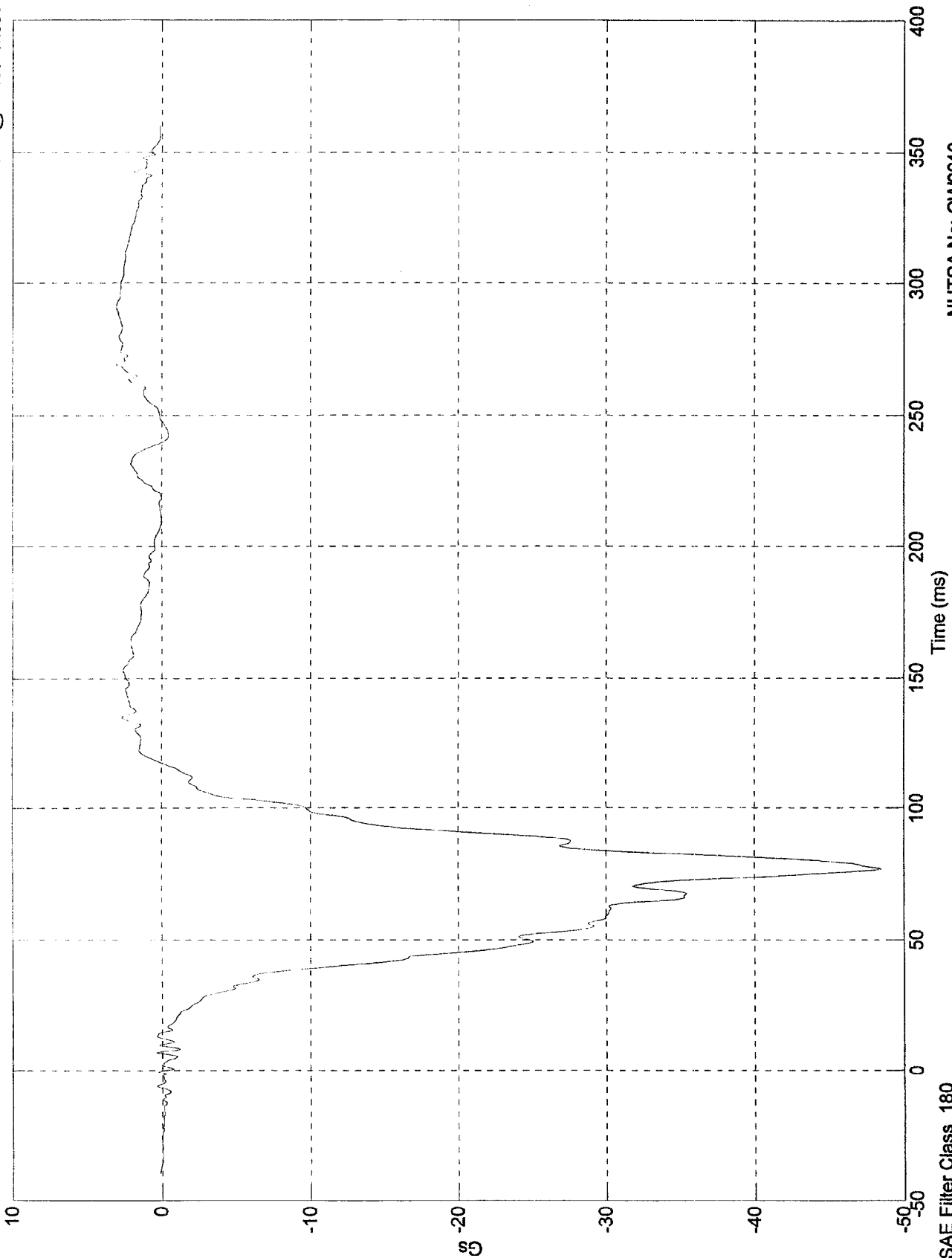


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Pos. 2 Chest X

Max = 3.04 Gs @ 269.00 msec
Min = -48.5 Gs @ 77.00 msec



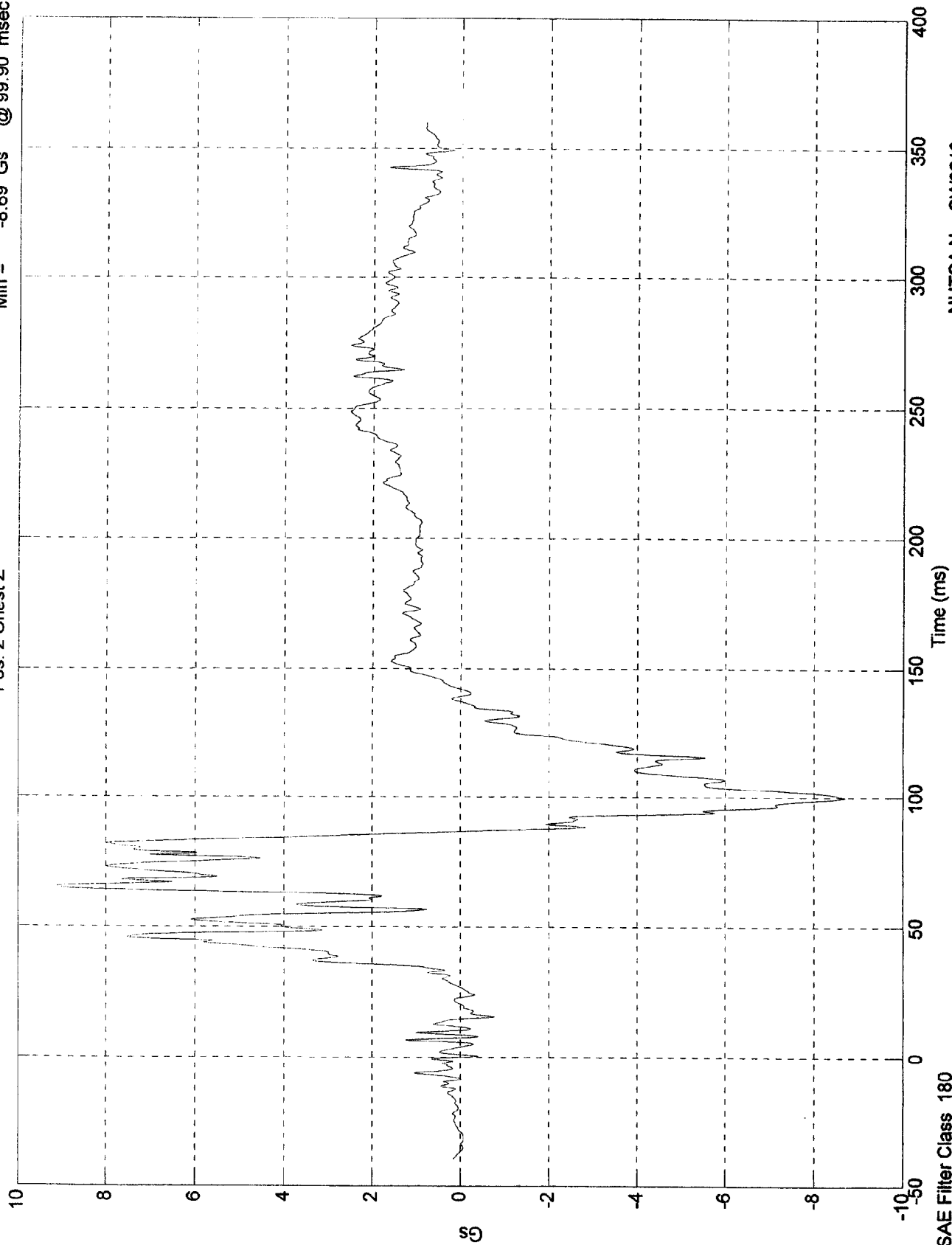
NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 180

208 Test #2 - 1998 Ford Escort

Max = 9.09 Gs @ 65.20 msec
Min = -8.69 Gs @ 99.90 msec

Pos. 2 Chest Z



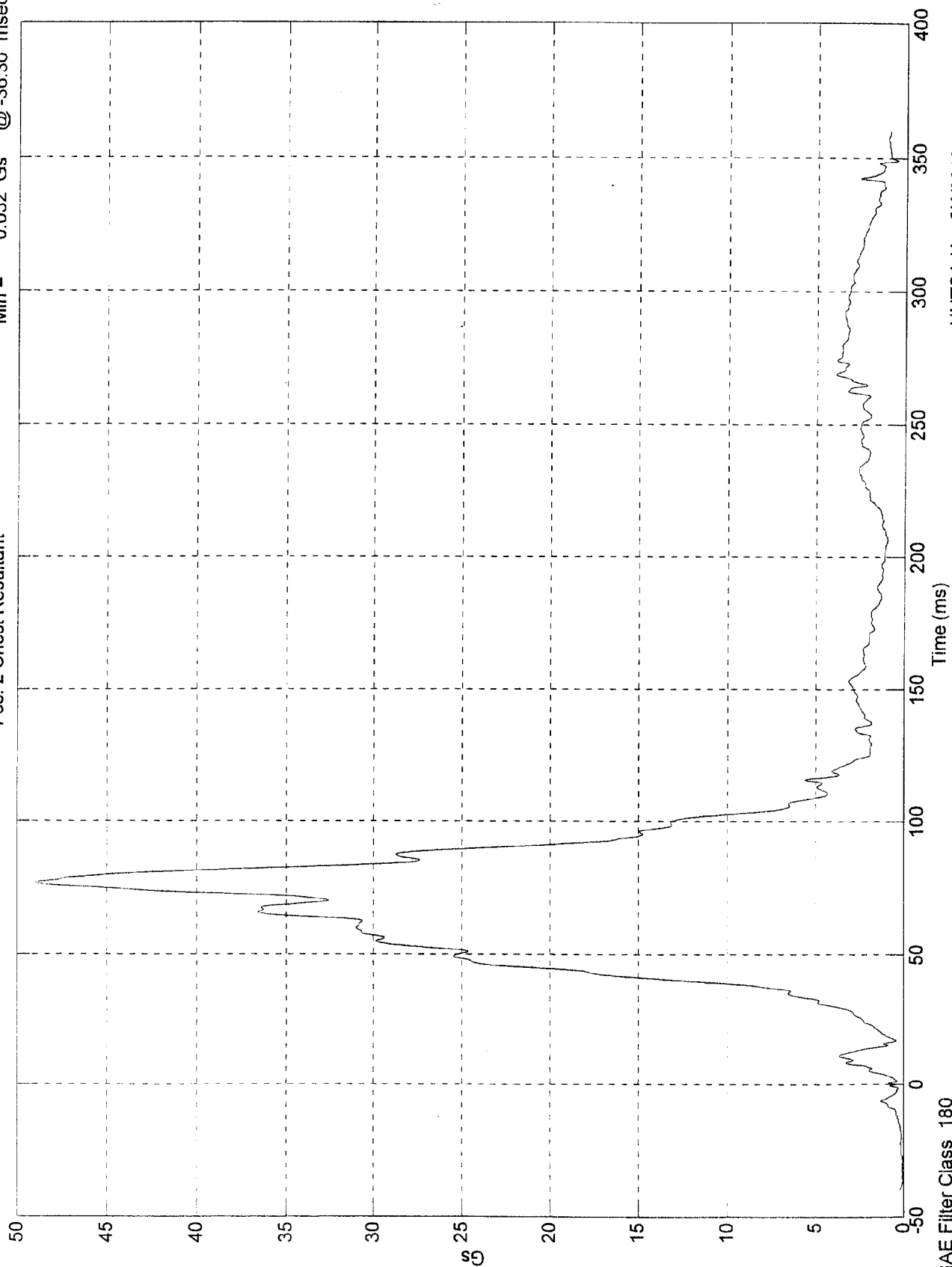
SAE Filter Class 180

NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Pos. 2 Chest Resultant

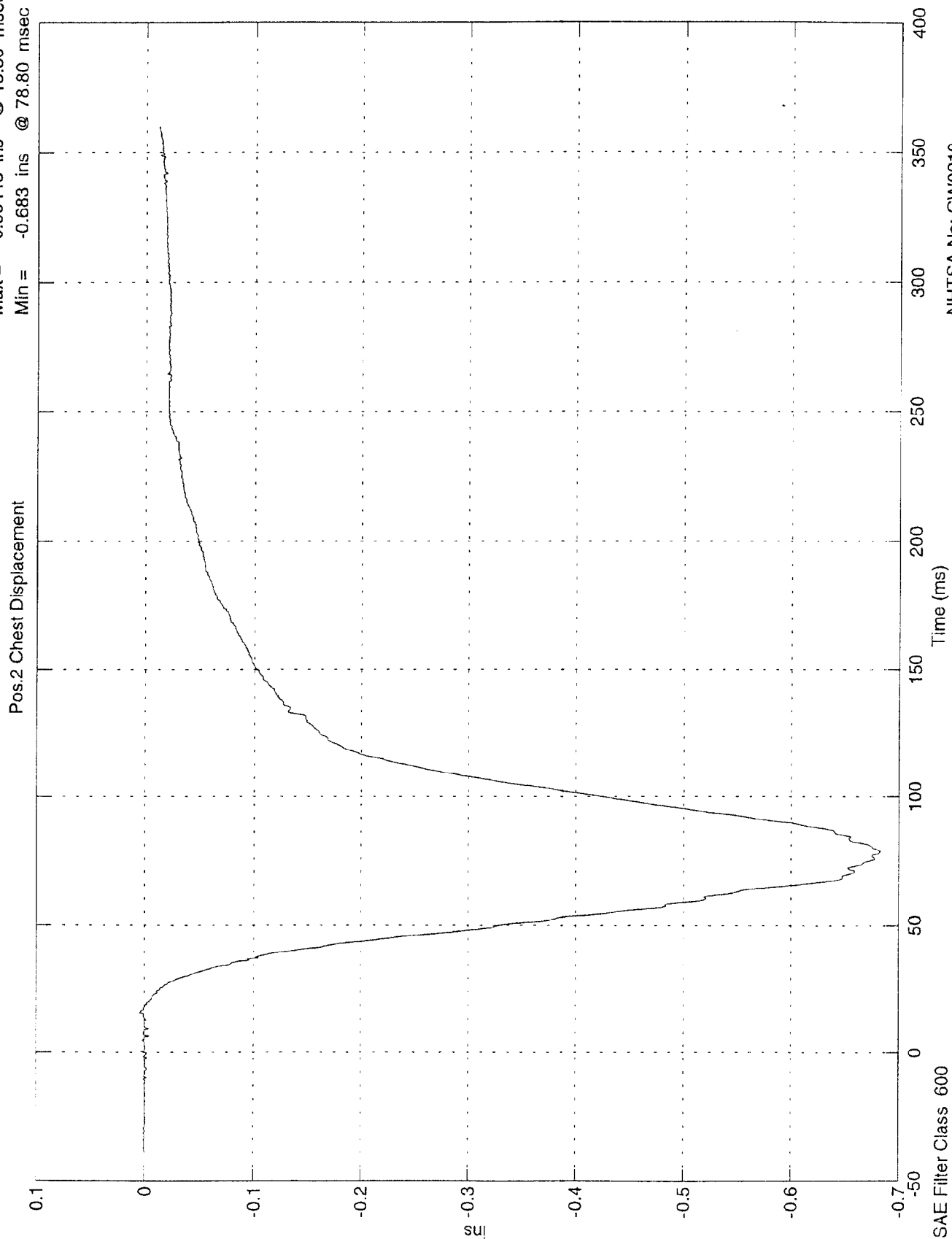
Max = 49 Gs @ 77.10 msec
Min = 0.032 Gs @ -36.30 msec



SAE Filter Class 180

NHTSA No: CW0210
Date: 31 Mar 1998

Max = 0.00446 ins @ 15.50 msec
Min = -0.683 ins @ 78.80 msec

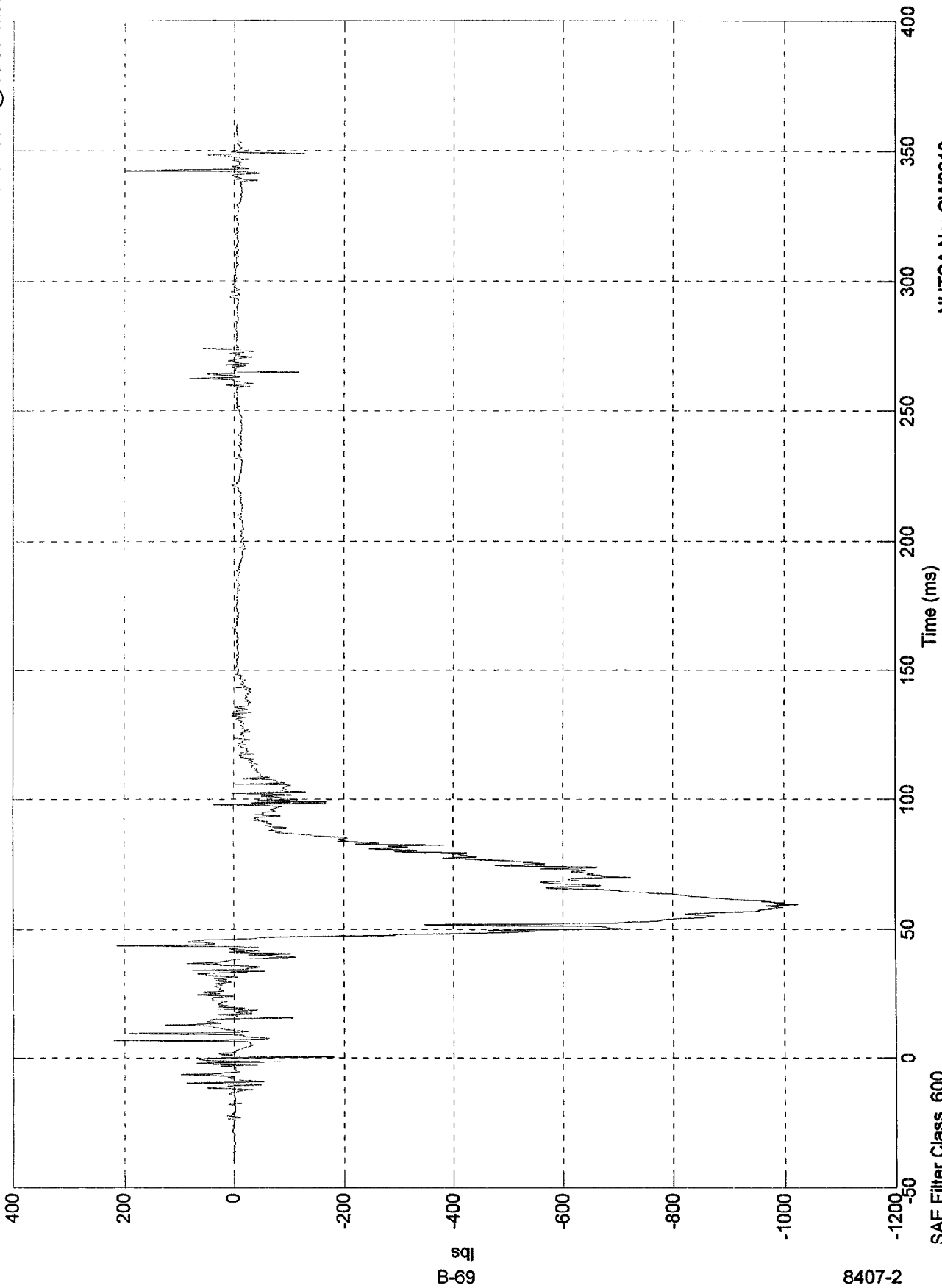


NHTSA No: CW0210
Date: 31 Mar 1998

208 Test #2 - 1998 Ford Escort

Pos. 2 Left Femur

Max = 220 lbs @ 6.70 msec
Min = -1.03e+003 lbs @ 59.60 msec



NHTSA No: CW0210
Date: 31 Mar 1998

SAE Filter Class 600

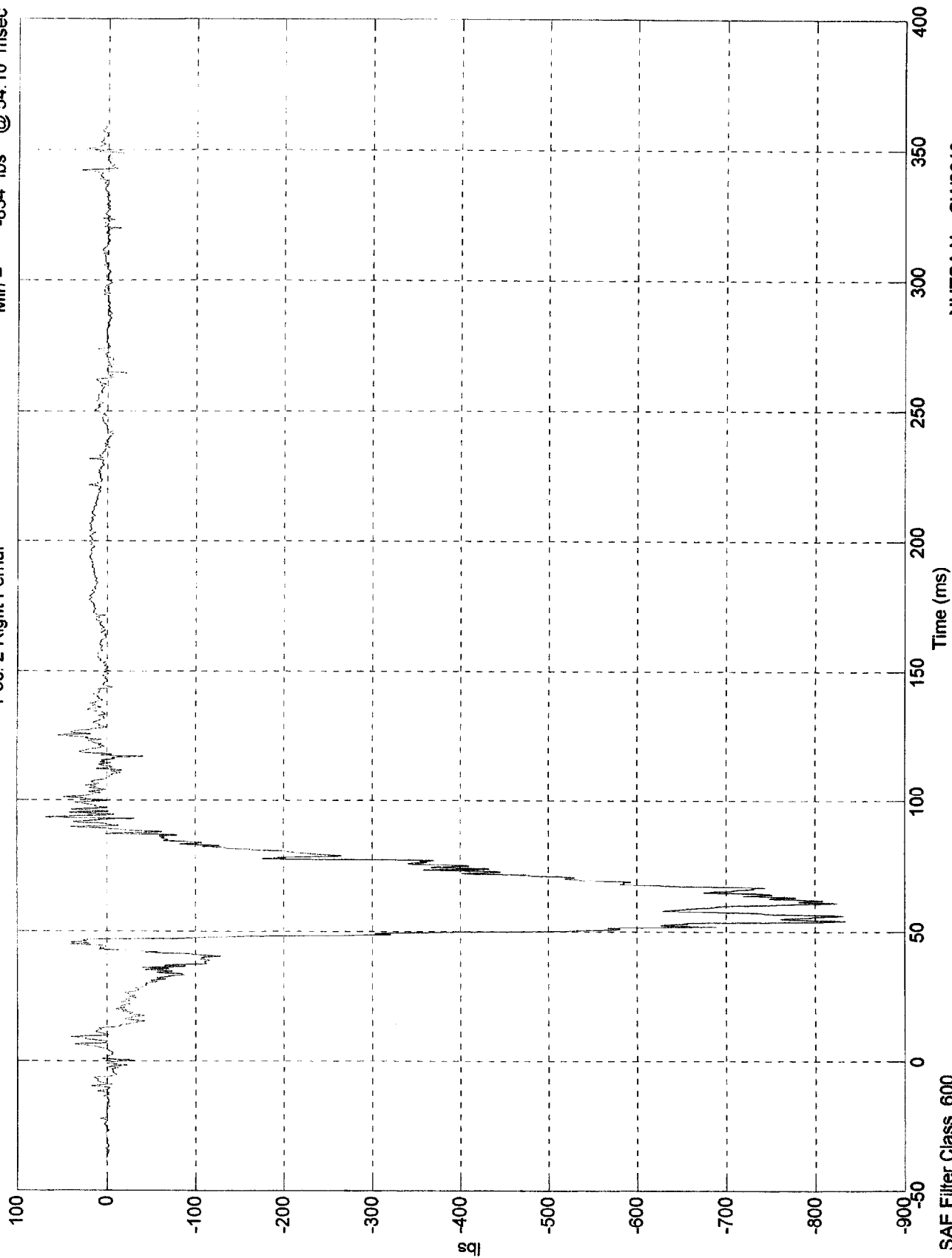
B-69

8407-2

208 Test #2 - 1998 Ford Escort

Max = 67.8 lbs @ 93.50 msec
Min = -834 lbs @ 54.10 msec

Pos. 2 Right Femur



SAE Filter Class 600

NHTSA No: CW0210
Date: 31 Mar 1998

Appendix C

VEHICLE OWNERS MANUAL OCCUPANT RESTRAINT SYSTEM INSTRUCTIONS

Seating and safety restraints

SAFETY RESTRAINTS

Safety restraints precautions

⚠ Always drive and ride with your seatback upright and the lap belt snug and low across the hips.

⚠ To prevent the risk of injury, make sure children sit where they can be properly restrained.

⚠ Never let a passenger hold a child on his or her lap while the vehicle is moving. The passenger cannot protect the child from injury in a collision.

⚠ All occupants of the vehicle, including the driver, should always wear their safety belts.

⚠ It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and safety belts. Be sure everyone in your vehicle is in a seat and using a safety belt properly.

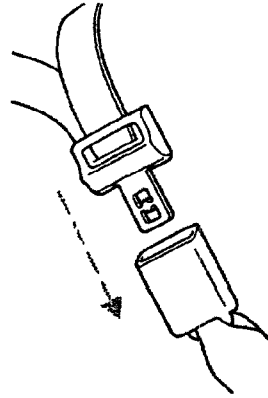
Seating and safety restraints

⚠ Each seating position in your vehicle has a specific safety belt assembly which is made up of one buckle and one tongue that are designed to be used as a pair. 1) Use the shoulder belt on the outside shoulder only. Never wear the shoulder belt under the arm. 2) Never swing it around your neck over the inside shoulder. 3) Never use a single belt for more than one person.

⚠ The ZX2 Coupe was designed to accommodate up to four people. Do not attempt to carry more occupants. All designed seating positions are equipped with safety belts. All occupants should be properly restrained. Failure to follow this warning could result in serious personal injury or death.

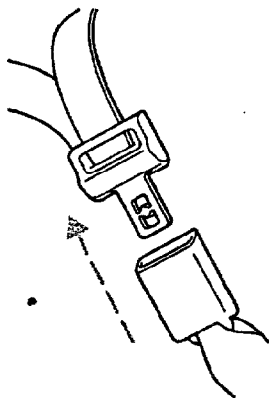
Combination lap and shoulder belts

1. To fasten, insert the tongue into the slot in the buckle.



Seating and safety restraints

2. To unfasten, push the red release button and remove the tongue from the buckle.



The front and rear outboard safety restraints in the vehicle are combination lap and shoulder belts. The front and rear seat passenger outboard safety belts have two types of locking modes described below:

Automatic locking mode

In this mode, the shoulder belt is automatically pre-locked. The belt will still retract to remove any slack in the shoulder belt.

The automatic locking mode is not available on the driver safety belt.

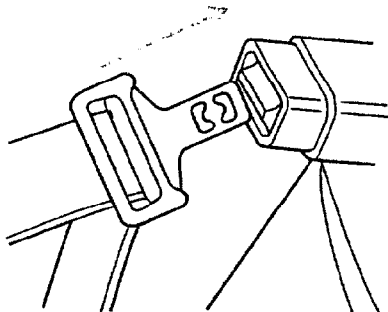
When to use the automatic locking mode

- When a tight lap/shoulder fit is desired.
- Anytime a child safety seat is installed in the vehicle. Refer to *Safety Restraints for Children* or *Safety Seats for Children* later in this chapter.

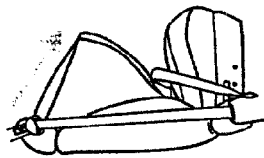
Seating and safety restraints

How to use the automatic locking mode

- Buckle the combination lap and shoulder belt.



- Grasp the shoulder portion and pull downward until the entire belt is extracted.



- Allow the belt to retract. As the belt retracts, you will hear a clicking sound. This indicates the safety belt is now in the automatic locking mode.

How to disengage the automatic locking mode

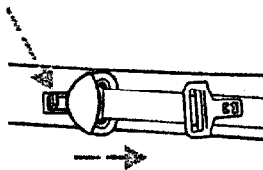
Disconnect the combination lap/shoulder belt and allow it to retract completely to disengage the automatic locking mode and activate the vehicle sensitive (emergency) locking mode.

Seating and safety restraints

Front safety belt height adjustment

Your vehicle has safety belt height adjustments for the driver and front passenger. Adjust the height of the shoulder belt so the belt rests across the middle of your shoulder.

To lower the shoulder belt height, push the button and slide the height control down. To raise the height of the shoulder belt, slide the height adjuster up. Pull down on the height adjustment assembly to make sure it is locked in place.



! Position the shoulder belt height adjuster so that the belt rests across the middle of your shoulder. ~~Failure to adjust~~ the safety belt properly could reduce the effectiveness of the safety belt and increase the risk of injury in a collision.

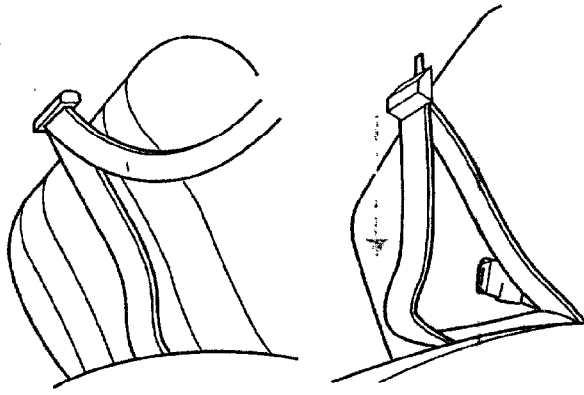
Lap belts

Adjusting the lap belt

The lap belt does not adjust automatically. Adjust to fit snugly and as low as possible around your hips. Do not wear the lap belt around your waist.

Seating and safety restraints

Insert the tongue into the correct buckle. To lengthen the belt, turn the tongue at a right angle to the belt and pull across your lap until it reaches the buckle. To tighten the belt, pull the loose end of the belt through the tongue until it fits snugly across the hips.



Shorten and fasten the belt when not in use.

Safety belt extension assembly

If the safety belt assembly is too short, even when fully extended, 20 cm (8 inches) can be added to the safety belt assembly by adding a safety belt extension assembly (part number 611C22). Safety belt extension assemblies can be obtained from your dealer at no cost.

Use only extensions manufactured by the same supplier as the safety belt. Manufacturer identification is located at the end of the webbing on the label. Also, use the safety

Seating and safety restraints

belt extension only if the safety belt is too short for you when fully extended. Do not use extensions to change the fit of the shoulder belt across the torso.

Safety belt warning light and indicator chime

The seat belt warning light illuminates in the instrument cluster and a chime sounds to remind the occupants to fasten their safety belts.

Conditions of operation

If...	Then...
The driver's safety belt is not buckled before the ignition key is turned to ON...	The safety belt warning light illuminates for one to two minutes and the warning chime sounds for four to eight seconds.
The driver's safety belt is buckled while the indicator light is illuminated and the warning chime is sounding...	The safety belt warning light turns off.
The driver's safety belt is buckled before the ignition key is turned to ON...	The safety belt warning light remains off.

Safety belt maintenance

Check the safety belt systems periodically to make sure they work properly and are not damaged. Check the safety belts to make sure there are no nicks, wears or cuts. All safety belt assemblies, including retractors, buckles, front seat belt buckle assemblies (slide bar) (if

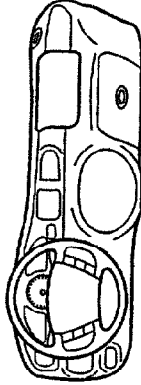
Seating and safety restraints

equipped), shoulder belt height adjusters (if equipped), child safety seat tether bracket assemblies (if equipped), and attaching hardware, should be inspected after a collision. Ford recommends that all safety belt assemblies used in vehicles involved in a collision be replaced. However, if the collision was minor and a qualified technician finds that the belts do not show damage and continue to operate properly, they do not need to be replaced. Safety belt assemblies not in use during a collision should also be inspected and replaced if either damage or improper operation is noted.

! Failure to replace the safety belt assembly under the above conditions could result in severe personal injuries in the event of a collision.

Refer to *Cleaning and maintaining the safety belts* in the *Maintenance and care* section.

AIR BAG SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

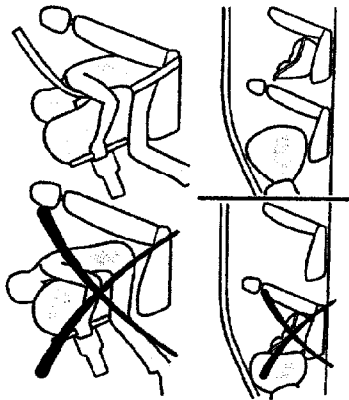


Seating and safety restraints

Important supplemental restraint system (SRS) precautions

The supplemental restraint system is designed to:

- work with the safety belt to protect the driver and right front passenger
- reduce certain upper body injuries



! Failure to follow these instructions will affect the performance of the safety belts and increase the risk of personal injury.

! The right front passenger air bag is not designed to restrain occupants in the center front seating position.

! All occupants of the vehicle including the driver should always wear their safety belts even when air bag SRS is provided.

Seating and safety restraints

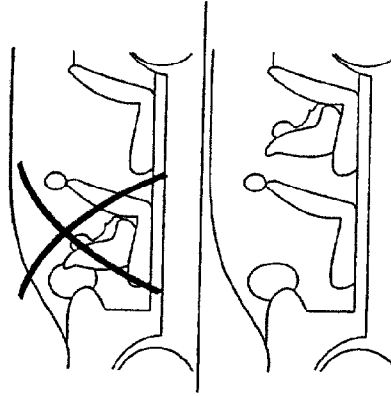
! Do not place objects or mount equipment on or near the air bag cover on the steering wheel or in front seat areas that may come into contact with a deploying air bag. Failure to follow this instruction may increase the risk of personal injury in the event of a collision.

! Do not attempt to service, repair, or modify the Air Bag Supplemental Restraint System or its fuses. See your Ford or Lincoln-Mercury dealer.

Children and air bags

For additional important safety information, read all information on safety restraints in this guide. Children should always wear their safety belts. Failure to follow these instructions may increase the risk of injury in a collision.

! Air bag can kill or injure a child in a child seat. If you must use a forward-facing child seat in the front seat, move seat all the way back.

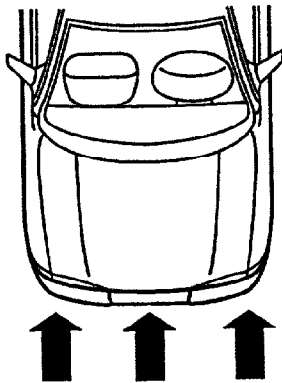


Seating and safety restraints

How does the air bag supplemental restraint system work?

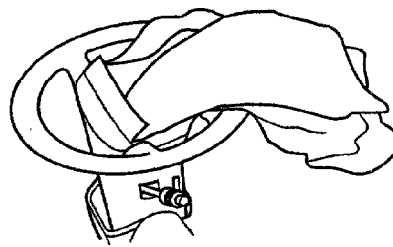
The SRS is designed to activate when the vehicle sustains sufficient longitudinal deceleration.

The fact that the air bags did not inflate in a collision does not mean that something is wrong with the system. Rather, it means the forces were not of the type sufficient to cause activation.



The air bags inflate and deflate rapidly upon activation.

After air bag deployment, it is normal to notice a smoke-like, powdery residue or smell the burnt propellant. This may consist of cornstarch, talcum powder (to lubricate the bag) or sodium compounds (e.g., baking soda) that result from the combustion process that inflates the air bag. Small amounts of sodium hydroxide may be present which may irritate the skin and eyes, but none of the residue is toxic.



! Several air bag system components get hot after inflation. Do not touch them after inflation.

Seating and safety restraints

! If the air bag is inflated, the air bag will not function again and must be replaced immediately. If the air bag is not replaced, the unrepared area will increase the risk of injury in a collision.

The SRS consists of:

- driver and passenger air bag modules (which include the inflators and air bags),
- one or more impact and safing sensors,
- a readiness light and tone
- and the electrical wiring which connects the components.

The diagnostic module monitors its own internal circuits and the supplemental air bag electrical system warning (including the impact sensors), the system wiring, the air bag system readiness light, the air bag back up power and the air bag igniters.

Determining if the system is operational

The SRS uses a readiness light in the instrument cluster or a tone to indicate the condition of the system. Refer to the *Air bag readiness* section in the *Instrumentation* chapter. Routine maintenance of the air bag is not required.

Seating and safety restraints

A difficulty with the system is indicated by one or more of the following:

- The readiness light will either flash or stay lit.
- The readiness light will not illuminate immediately after ignition is turned on.
- A series of five beeps will be heard. The tone pattern will repeat periodically until the problem and light are repaired.

If any of these things happen, even intermittently, have the SRS serviced at your dealership or by a qualified technician immediately. Unless serviced, the system may not function properly in the event of a collision.

Disposal of air bags and air bag equipped vehicles

For disposal of air bags or air bag equipped vehicles, see your local dealership or qualified technician. Air bags **MUST BE** disposed of by qualified personnel.

SAFETY RESTRAINTS FOR CHILDREN

Important child restraint precautions

You are required by law to use safety restraints for children in the U.S. and Canada. If small children ride in your vehicle (generally children who are four years old or younger and who weigh 18 kg [40 lbs] or less), you must put



Seating and safety restraints

them in safety seats made especially for children. Check your local and state or provincial laws for specific requirements regarding the safety of children in your vehicle.

 Never let a passenger hold a child on his or her lap while the vehicle is moving. The passenger cannot protect the child from injury in a collision.

Always follow the instructions and warnings that come with any infant or child restraint you might use.

When possible, place children in the rear seat of your vehicle. Accident statistics suggest that children are safer when properly **restrained in the rear seating** positions than in the front seating position.

Children and safety belts

Children who are too large for child safety seats (as specified by your child safety seat manufacturer) should always wear safety belts.

Follow all the important safety restraint and air bag precautions that apply to adult passengers in your vehicle.

If the shoulder belt portion of a combination lap and shoulder belt can be positioned so it does not cross or rest in front of the child's face or neck, the child should wear the lap and shoulder belt. Moving

Seating and safety restraints

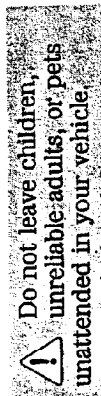
the child closer to the center of the vehicle may help provide a good shoulder belt fit.

If the shoulder belt cannot be properly positioned:

- move the child to one of the seats with a lap belt only (if equipped)

OR

- if the child is the proper size, restrain the child in a safety seat.



To improve the fit of lap and shoulder belts on children who have outgrown child safety seats, Ford recommends use of a belt-positioning booster seat that is labelled as conforming to all Federal motor vehicle safety standards. Belt-positioning booster seats raise the child and provide a shorter, firmer seating cushion that encourages safer seating posture and better fit of lap and shoulder belts on the child. A belt-positioning booster should be used if the shoulder belt rests in front of the child's face or neck, or if the lap belt does not fit snugly on both thighs, or if the thighs are too short to let the child sit all the way back on the seat cushion when the lower legs hang over the edge of the seat cushion. You may wish to discuss the special needs

Seating and safety restraints

of your child with your pediatrician.

SAFETY SEATS FOR CHILDREN

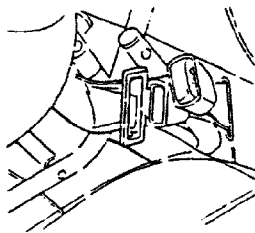
Child and infant or child safety seats

Use a safety seat that is recommended for the size and weight of the child. Carefully follow all of the manufacturer's instructions with the safety seat you put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.

When installing a child safety seat:

- Use the correct safety belt buckle for that seating position.
- Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.
- Place seat back in upright position.
- Put the safety belt in the automatic locking mode. Refer to *Automatic locking mode*.

Ford recommends the use of a child safety seat having a top tether strap. Install the child safety seat in a seating position which is capable of providing a tether anchorage. For more information on top tether straps, refer to



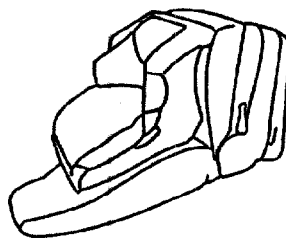
Seating and safety restraints

Attaching safety seats with tether straps.

! Carefully follow all of the manufacturer's instructions included with the safety seat you put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.

Installing child safety seats in combination lap and shoulder belt seating positions

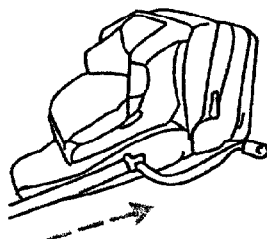
1. Position the child safety seat in a seat with a combination lap and shoulder belt.



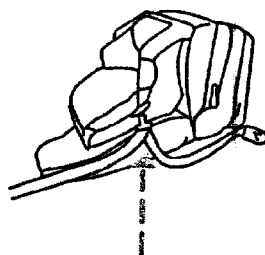
! Air bag can kill or injure a child in a child seat. If you must use a forward-facing child seat in the front seat, move seat all the way back.

Seating and safety restraints

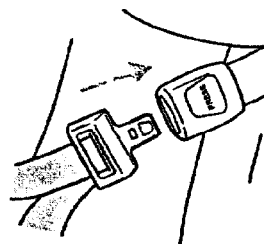
2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.



3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.

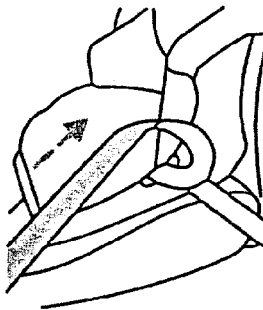


4. Insert the belt tongue into the proper buckle for that seating position until you hear and feel the latch engage. Make sure the tongue is latched securely by pulling on it.



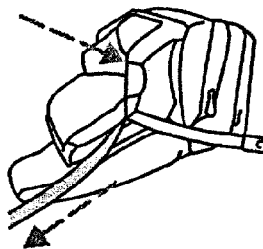
Seating and safety restraints

5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is extracted and a click is heard.



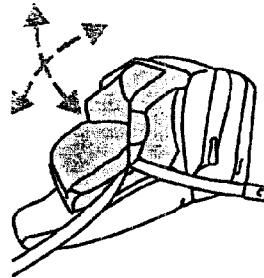
6. Allow the belt to retract. The belt will click as it retracts to indicate it is in the automatic locking mode.

7. Pull the lap belt portion across the child seat toward the buckle and pull up on the shoulder belt while pushing down with your knee on the child seat.



8. Allow the safety belt to retract to remove any slack in the belt.

9. Before placing the child in the seat, forcibly tilt the seat forward and back to make sure the seat is securely held in place.



10. Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode (you should not be

Seating and safety restraints

able to pull more belt out). If the retractor is not locked, unbuckle the belt and repeat steps two through nine.

Check to make sure the child seat is properly secured before each use.

Attaching safety seats with tether straps

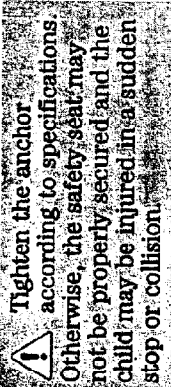
Some manufacturers make safety seats that include a tether strap that goes over the back of the vehicle seat and attaches to an anchoring point. Other manufacturers offer the tether strap as an accessory. Contact the manufacturer of your child safety seat for information about ordering a tether strap.

Tether anchorage hardware (Coupe)

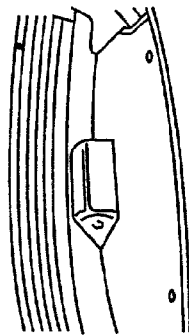
Attachment holes (at each rear outboard seating position) have been provided in your vehicle to attach anchor hardware, if required. Tether anchorage hardware kits (part number 613D74) including instructions, may be obtained at no charge from any Ford or Lincoln-Mercury dealer. All vehicles built for sale in Canada include a tether anchor hardware kit.

Be sure to follow the child safety seat manufacturer's instructions.

Seating and safety restraints



1. Install the child safety seat in the rear right or rear left seat position. For instructions on how to install the seat, refer to *Installing child safety seats in combination lap and shoulder belt seating positions* in this chapter.



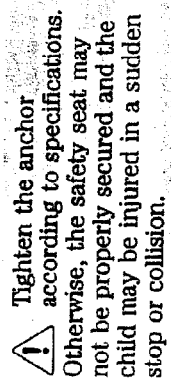
2. Refer to the instructions provided in the tether anchor kit.
3. Refer to the instructions provided with your child safety seat to **securely attach the child** safety seat by tether to the tether strap anchor location.

Tether anchorage hardware (Sedan/Wagon)

Attachment holes (at each rear seating position) have been provided in your vehicle to attach anchor hardware, if required. Tether anchorage hardware kits including instructions, may be obtained at no charge from any Ford or Lincoln-Mercury dealer. All vehicles built for sale in Canada include a tether anchor hardware kit.

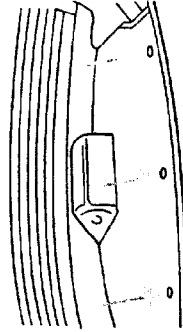
Be sure to follow the child safety seat manufacturer's instructions.

Seating and safety restraints



1. Install the child safety seat in the rear right, rear left or rear center seat position. For instructions on how to install the seat, refer to *Installing child safety seats in combination lap and shoulder belt seating positions* in this chapter.
2. Refer to the instructions provided in the tether anchor kit.
3. Refer to the instructions provided with your child safety seat to **securely attach the child** safety seat by tether to the tether strap anchor location.

- Sedan



- Wagon

