

**NEW CAR ASSESSMENT PROGRAM (NCAP)
FRONTAL BARRIER IMPACT TEST**

**HONDA MOTOR COMPANY, LTD.
1992 HONDA PRELUDE
2 DOOR SEDAN (ACP)
NHTSA NO. MN5303**

**MOBILITY SYSTEMS AND EQUIPMENT COMPANY
9920 LA CIENEGA BOULEVARD SUITE 708
INGLEWOOD, CALIFORNIA 90301**



JUNE 23, 1992

FINAL REPORT

Prepared For:

**U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OFFICE OF MARKET INCENTIVES
400 Seventh Street, S.W.
Room No. 5313 (NRM-22)
Washington, DC 20590**



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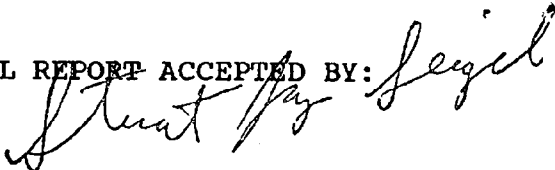
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MOBILITY SYSTEMS AND EQUIPMENT COMPANY

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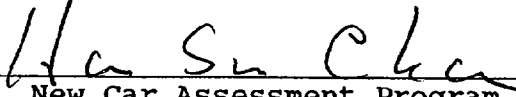
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Manager, New Car Assessment Program

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16. Abstract A 35 mph frontal barrier impact test using a load cell barrier was conducted on a 1992 Honda Prelude, 2 Door Sedan at the Mobility Systems and Equipment Company (MSE) crash test facility in San Bernardino, CA, on June 1, 1992. The barrier impact velocity was 34.68 mph, and the ambient temperature at the barrier face at the time of impact was 86 deg. F. The post-test vehicle crush maximum was 18.6 in. A summary of occupant injury measure data from the test appears below: <table border="1"> <thead> <tr> <th>Injury Criteria Threshold Value</th> <th>Driver Dummy</th> <th>Passenger Dummy</th> </tr> </thead> <tbody> <tr> <td>Head Injury Criterion HIC = 1000</td> <td>510</td> <td>555</td> </tr> <tr> <td>Chest Resultant Peak 60 Gs (3 ms clip)</td> <td>45</td> <td>36</td> </tr> <tr> <td>Femur Load Left</td> <td>748</td> <td>353</td> </tr> <tr> <td>2250 Pounds Right</td> <td>641</td> <td>564</td> </tr> </tbody> </table> TYPE OF RESTRAINT SYSTEM: 3 point continuous webbing system at each front outboard seating position, and driver side airbag.				Injury Criteria Threshold Value	Driver Dummy	Passenger Dummy	Head Injury Criterion HIC = 1000	510	555	Chest Resultant Peak 60 Gs (3 ms clip)	45	36	Femur Load Left	748	353	2250 Pounds Right	641	564
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SECTION 1

PURPOSE AND TEST PROCEDURE

This 35 mph frontal barrier impact test is a part of the FY'92 Vehicle Barrier Impact and Testing Program sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-90-D-32121. The purpose of this test was to obtain vehicle crashworthiness and occupant restraint system performance data for an impact speed in excess of the current 30 mph FMVSS 208/212/219/301-75 requirements.

This 35 mph frontal barrier impact test was conducted in accordance with the Office of Market Incentives (OMI) Laboratory Indicant Test Procedure, dated 01 January 1990.

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SECTION 2

SUMMARY OF FRONTAL BARRIER IMPACT TEST

A barrier was impacted by a 1992 Honda Prelude, 2 Door Sedan, NHTSA No. MN5303, at a velocity of 34.68 mph. The frontal impact test was conducted by Mobility Systems and Equipment Company (MSE) on 01 June 1992. The general test and vehicle description information are presented in Tables 1 and 2. Pretest and posttest photographs of the test vehicle and dummies are shown in Appendix A.

Two (2) Part 572 50th percentile adult male Anthropomorphic Test Devices (ATDs) were placed in the driver and right front passenger designated seating positions (DSP's) according to the NHTSA test requirements.

The ATD's were instrumented with head and chest triaxial accelerometers and right/left femur load cells. In addition, load cells were placed on the driver's and passenger's lap and shoulder belts to measure dummy upper torso and pelvic section belt loading. A summary of dummy configuration and performance verification test data is presented in Appendix C.

The frontal impact event was documented by one (1) real time camera and fifteen (15) high-speed cameras. The camera location data are presented in Table 8.

Sixty (60) channels of crash parameters were recorded using two (2) FM tape recorders and two (2) direct analog to digital acquisition unit and data acquisition computers. Time history plots of all recorded channels are presented in Appendix B.

2.1 GENERAL COMMENTS

The 1992 Honda Prelude, 2 Door Sedan, was equipped with 131.5 cubic inch, 4 cylinder engine and 4 speed automatic transmission. The test weight of the 1992 Honda Prelude, 2 Door Sedan, with two (2) 50th percentile male dummies, instrumentation, and cameras was 3,245 pounds.

The 1992 Honda Prelude, 2 Door Sedan, was involved in a frontal load cell barrier crash at a velocity of 34.68 mph.

The maximum static crush for the vehicle of 18.6 inches occurred 5.5 inches to the right of the centerline of the bumper. The windshield was cracked, but otherwise the vehicle glazing remained intact. Both the driver's and passenger's front doors required a prybar to open.

The driver's head hit the deployed airbag and also hit the ceiling slightly, on rebound. The driver's left and right knees hit the dash panel. The driver ATD had a HIC value of 510, the maximum chest acceleration (resultant clipped) was 45 g's and the maximum femur loads were 748 (left) and 641 (right) pounds.

The top of the passenger ATD's head hit the ceiling, on rebound and his chin contacted his chest. Both of his knees hit the dash panel. The HIC value for the passenger ATD was 555, the maximum chest acceleration (resultant clipped) was 36 g's, and the maximum femur loads were 353 (left) and 564 (right) pounds.

Seat belt spoolout, measured by high-speed film analysis, was 2 inches for both the driver and passenger.

There were no apparent visual indications of any standard solvent leaks or hood contact with the windshield.

Appendix D shows occupant restraint system instructions by the manufacturer and Appendix E shows the instrumentation and calibration data.

Data Table No. 1 Test Vehicle Data

VEHICLE YEAR/MAKE/MODEL/BODY STYLE: 1992/HONDA/PRELUDE/2 DOOR SEDAN

VEHICLE NHTSA NO.: M N 5 3 0 3 VIN: J H M B A 8 2 4 X N C O O 3 3 0 4

VEHICLE BODY COLOR: WHITE; MONTH & YEAR OF MANUFACTURE: 11/91

ENGINE: 4 Cylinders; 131.5 C.I.D.; Liters; 2156 CC
X Gas; Diesel; Turbocharged
PLACEMENT-- Longitudinal; X Transverse (Lateral)

TRANSMISSION: 4 Speed; Manual; X Automatic; X Overdrive
FINAL DRIVE: Front Wheel Drive X Rear Wheel Drive;
 Four Wheel Drive

DATE VEHICLE AVAILABLE FOR 35 MPH CRASH TESTING: 04/09/92

ODOMETER READING: 81 miles; OPTIONS: A/C; X P/S; x P/Wdo.;
X Tilt Whl.; Cruise Control

DATA RECORD FROM VEHICLE'S TIRE PLACARD:

=====

Tire Pressure (at capacity): 30 psi Front; 30 psi Rear
Recommended Tire Size: 185/70 R14
Tires on Vehicle: 185/70 R14; Manufacturer: Bridgestone
Number of Occupants: 2 Front; 2 Rear; N/A 3rd Seat; 4 TOTAL
Type of Front Seats: X Bucket; Bench; Split Bench
Type of Front Seat Back: Fixed; X Adjustable With X Lever
 Rotating Knob

Vehicle Maximum Capacity Loading = 700 lbs. (A)
No. of Occupants x 150 lbs. - - - = 600 lbs. (B)
Cargo Capacity (A - B) - - - - - = 100 lbs.

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

=====

Right Front	=	<u>874</u>	lbs.	
Left Front	=	<u>894</u>	lbs.	TOTAL FRONT = <u>1768</u> lbs. (<u>63.0%</u> of TOTAL)
Right Rear	=	<u>550</u>	lbs.	
Left Rear	=	<u>500</u>	lbs.	
TOTAL WEIGHT	=	<u>2818</u>	lbs.	TOTAL REAR = <u>1050</u> lbs. (<u>37.0%</u> of TOTAL)

Data Table No. 1 (Con't) Test Vehicle Data

CALCULATION OF TEST VEHICLE TARGET WEIGHT:

Total Test Vehicle Delivered Weight With Maximum Fluids =	<u>2818</u>	lbs.
Maximum Cargo Carrying Capacity of Test Vehicle*- - - - -	<u>100</u>	lbs.
Weight of Two P.572 Dummies (2 x 164 lbs.)- - - - -	<u>328</u>	lbs.
TEST VEHICLE TARGET WEIGHT	<u>3246</u>	lbs.

*300 lbs. for light trucks and MPVs

ACTUAL WEIGHT OF TEST VEHICLE WITH 2 DUMMIES AND CARGO:

Right Front =	<u>943</u>	lbs.	TOTAL FRONT =	<u>1905</u>	lbs. (59.0% of TOTAL)
Left Front =	<u>962</u>	lbs.			
Right Rear =	<u>700</u>	lbs.	TOTAL REAR =	<u>1340</u>	lbs. (41.0% of TOTAL)
Left Rear =	<u>640</u>	lbs.			

TOTAL WEIGHT= 3245 lbs. (which includes N/A lbs. of cargo ballast weight placed in the cargo/luggage area)

VEHICLE COMPONENTS REMOVED TO MEET TARGET WEIGHT:

- | | |
|----------------------------------|--|
| 1. <u>X</u> Spare Tire | 3. <u>X</u> Tail lamp hsg. <u>X</u> Rt.Side <u>X</u> Left Side |
| 2. <u>X</u> Rear Bumper Assembly | 4. <u>Rear Seat Assembly, Side Mirrors</u> |

TEST VEHICLE ATTITUDE:

<u>As Delivered</u> ----	Right Front =	<u>26.0</u>	inches
	Left Front =	<u>26.1</u>	inches
	Right Rear =	<u>26.3</u>	inches
	Left Rear =	<u>26.3</u>	inches

<u>Ready For Test</u> --	Right Front =	<u>25.2</u>	inches
	Left Front =	<u>25.6</u>	inches
	Right Rear =	<u>25.1</u>	inches
	Left Rear =	<u>25.2</u>	inches

Test Vehicle Wheelbase: 100.4 inches; C.G.= 41.2 inches rearward of front wheel centerline

Total Vehicle Length:

Right Side =	<u>161.8</u>	inches
Left Side =	<u>161.8</u>	inches
Centerline =	<u>168.3</u>	inches

Data Table No. 2 Post Crash Test Data

DATA OF 35 MPH FRONTAL BARRIER IMPACT RATING TEST: 06/01/92

TIME OF TEST: 4:10 PM: AMBIENT TEMPERATURE AT BARRIER FACE: 86 °F

VEHICLE'S OCCUPANT COMPARTMENT TEMPERATURE: 76 °F

(spec. Range = 66 to 78 F.)

VEHICLE WINDSHIELD MOLDING TEMPERATURE: 76 °F.

VEHICLE IMPACT VELOCITY: Primary Speed Trap = 34.68 mph
Secondary Speed Trap 34.78 mph
(Specified Range = 34.5 to 35.5 mph)

Distance from vehicle's front bumper forwardmost surface to barrier face when--

- (a) entering the speed trap = 5.0 ft
(b) exiting the speed trap = 1.0 ft

VEHICLE STATIC CRUSH:

Vehicle Pre-test Length-Right Side = 161.8"; C/Line=168.3"; Left Side=161.8"
Vehicle Post-test Length-Right Side=146.0"; C/Line=150.2"; Left Side=146.0"
Vehicle Static Crush --- Right Side=15.8"; C/Line=18.1"; Left Side=15.8"

VEHICLE REBOUND FROM BARRIER FACE:

Vehicle Right Side = 18.3 inches
Vehicle Centerline = 14.5 inches
Vehicle Left Side = 18.5 inches

VEHICLE DUMMY CONTACT POINTS:

	DRIVER (I.D. No. 814)			PASSENGER (I.D. No. 183)		
	Strg.Col. Hub	Strg. Wheel	Instru. Panel	Instru. Panel	Knee Assy.	Glove Box Door
HEAD - - - - -	NO	NO	NO	NO	NO	NO
RIGHT KNEE - -	////////	////	YES	YES	////////	YES
LEFT KNEE - -	////////	////	YES	YES	////////	YES

VEHICLE DOOR OPENING INFORMATION:

	RIGHT SIDE		LEFT SIDE	
	OPENED	JAMMED	OPENED	JAMMED
FRONT DOORS - - - - -	YES	YES	YES	YES
REAR DOORS - - - - -	N/A	N/A	N/A	N/A

Data Table No. 2 (Cont'd) Post Crash Test Data

VEHICLE'S FRONT SEAT MOVEMENT DURING CRASH EVENT:

	RIGHT SIDE	LEFT SIDE
Seat Cushion Shift - - - - -	<u>0.0</u> " forward;	<u>0.0</u> " forward
Seat Adjuster Failure- - - -	<u>None</u> ;	<u>None</u>
Details of Any Failure: N/A		

OTHER NOTABLE IMPACT EFFECTS: N/A

SECTION 3

OCCUPANT AND VEHICLE INFORMATION

I. OMI DATA

- Dummy Injury Criteria Data Summary
- Dummy Positioning Data
- Seat Belt Positioning Data
- Seat Belt Performance Assessment Data
- Driver Dummy to Steering Column Dimensions
- Camera Locations

II. OVR DATA

- Load Cell Barrier Data
- Vehicle Accelerometer Data

Data Table No. 3 FMVSS No. 208 Occupant Crash Protection Data Sheet
 VEH. YR./MAKE/MODEL/BODY STYLE: 1992 HONDA PRELUDE, 2 DOOR SEDAN

VEH. NHTSA NO.: MN5303 ; TEST DATE: 06/01/92

MAXIMUM ACCELERATION VALUES:

	DRIVER DUMMY # 814	PASSENGER DUMMY # 183
Head Channel X HEAD X	-42.3	-14.8
Head Channel Y Y	24.8	-23.1
Head Channel Z Z	38.0	53.7
HEAD RESULTANT R	58.3	55.9
Chest Channel X CHEST X	-45.9	-36.5
Chest Channel Y Y	-20.8	-21.6
Chest Channel Z Z	13.0	12.3
CHEST RESULTANT (3 msec clip) R	44.5	35.5
TIME INTERVAL (seconds)	0.0642 - 0.0672	0.0696 - 0.0726

HEAD INJURY CRITERIA (HIC) VALUES:

HIC HIC	510.2	555.0
t_1 (seconds)	0.0635	0.0739
t_2 (seconds)	0.0995	0.1099
Avg. Accel. t_1 to t_2	45.7	47.3

MAXIMUM FEMUR FORCES:

Right Side (lbs.) FR	640.5	-563.5
Left Side (lbs.) FL	748.0	-353.4

MAXIMUM SEAT BELT FORCES:

Lap Belt LAP	1637.4	1062.4
Shoulder Belt SHLDR	1936.9	1936.6

MAXIMUM SEAT BELT WEBBING SPOOL-OUT:

Lap/Shoulder Belt Combination	1.2	1.3
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Data Table No. 4 Test Dummy Positioning Data

PRE-IMPACT DATA:

Make/Model: HONDA PRELUDE

Body Style: 2 DOOR SEDAN

Model Year: 1992

NHTSA No.: MN5303

Color: WHITE

DATA FROM CERTIFICATION LABEL:

Vehicle Manufacturer: HONDA

Date of Manufacture: 11/91; VIN: KMHJF22RXNU099108

GVWR: 3790 lb; GAWR: Front = 2095 lb; Rear = 1805 lb

POST-IMPACT DATA:

Date of Test: 06/01/92 Time: 4:10 PM Temperature: 86 F

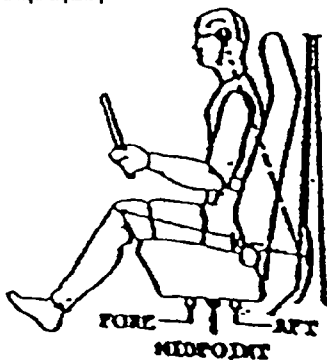
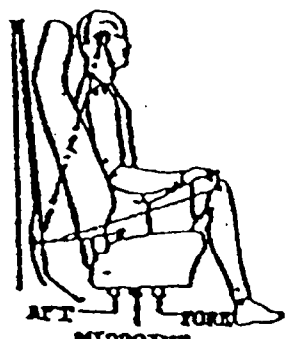
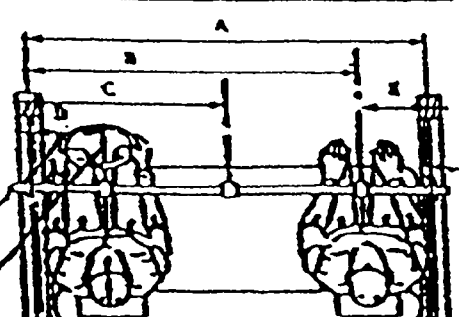
Required Impact Velocity Range: 34.5 to 35.5 mph

Impact Velocity: Primary = 34.68 mph Secondary = 34.78 mph

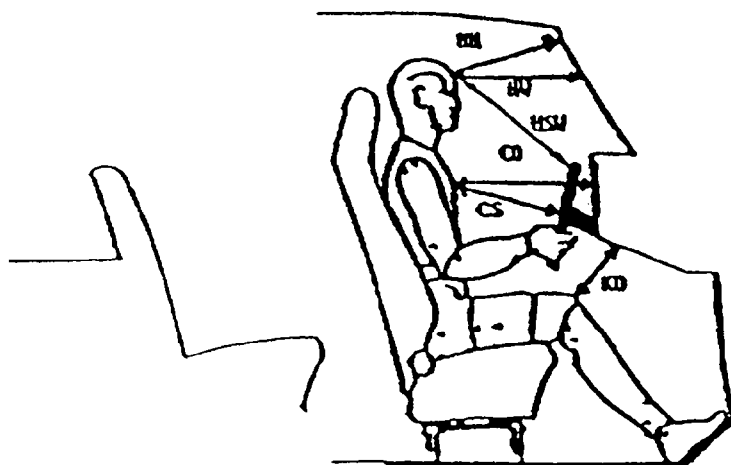
Seat Type: Bucket Adjuster Type: Lever

Bucket Seat Back Type: No Adjustable Headrest

TECHNICIANS: Brian O'keefe, Levi Navarro

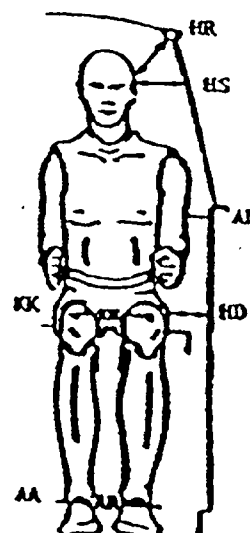
DRIVER DUMMY # <u>814</u>	PASSENGER DUMMY # <u>183</u>
HEAD <u>18.5</u> " TARGET <u>75.0</u> ° KNEE <u>29.4</u> " JOINT <u>-14.0</u> ° APPROX- <u>15.3</u> " IMATE <u>-30.0</u> " "H" POINT	HEAD <u>18.5</u> " TARGET <u>83.0</u> ° KNEE <u>29.0</u> " JOINT <u>-14.0</u> ° APPROX- <u>15.0</u> " MATE <u>-32.0</u> " "H" POINT
 FORE MIDPOINT AFT	 AFT MIDPOINT FORE
A = <u>58.2</u> " B = <u>42.4</u> " C = <u>29.1</u> " D = <u>15.5</u> " E = <u>15.8</u> "	LATERAL BAR ADJUSTABLE POINTER LEFT FRONT DOOR
	
DRIVER DUMMY # <u>814</u>	PASSENGER DUMMY # <u>183</u>

Data Table No. 4 (Cont'd) Test Dummy Positioning Data

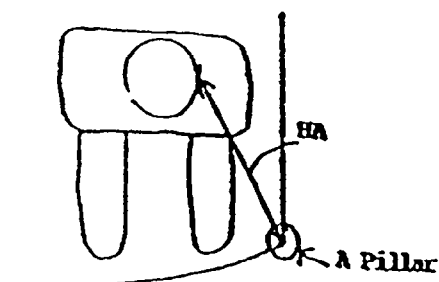


Driver		Passenger	
HH	15.6		17.4
HW	21.3		21.8
CD	31.0		25.4
CS	17.0		N/A
KD	L- 6.8	L-	6.4
KD	R- 8.0	R-	6.4
Torso Angle	22.0	Torso Angle	27.0
Seat Back Angle	N/A	Seat Back Angle	N/A
HSW	22.8		N/A

HSW = Head to Steering Wheel (in.)
 HA = Head Target to A Pillar (in.)
 HH = Head to Windshield Header (in.)
 HW = Head to Windshield (in.)
 CD = Chest to Dash (in.)
 CS = Chest to Steering Wheel (in.)
 HR = Head to Side Roof
 HS = Head to Side Window (in.)
 AD = Arm to Door (in.)
 HD = Hip to Door (in.)
 KK = Knee to Knee (in.)
 Torso and seat back angles
 are relative to vertical. (deg.)

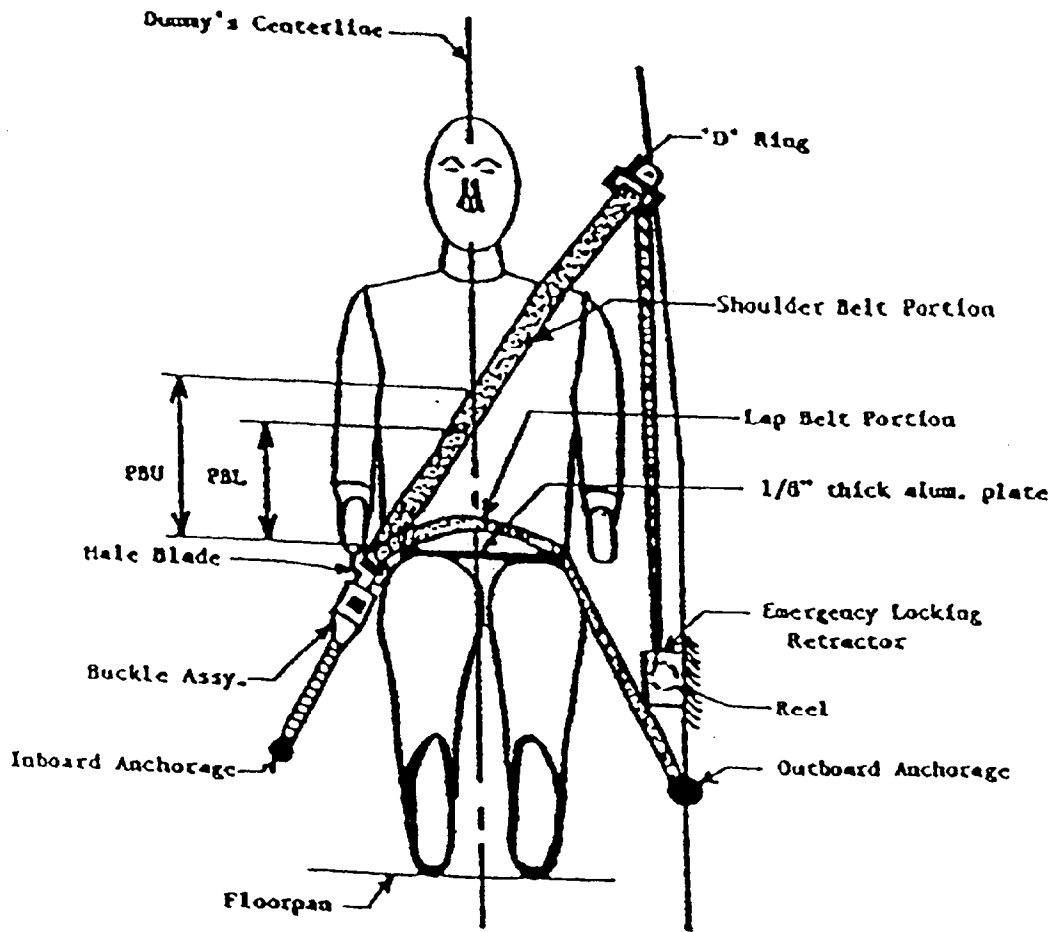


REMARKS



Driver		Passenger	
HR	5.5		5.0
HS	8.5		7.8
AD	4.8		4.1
HD	5.3		5.5
KK	13.3		12.5
AA	13.0		9.0
HA	15.8		16.8

Data Table No. 5 Seat Belt Positioning Data



FRONT VIEW OF DRIVER DUMMY

	DRIVER DUMMY (inches)	PASSENGER DUMMY (inches)
<u>PBU</u> -- Top surface of alum. plate to belt upper edge	12.4	12.4
<u>PBL</u> -- Top surface of alum. plate to belt lower edge	9.5	9.0
<u>LAP BELT TENSION, POUNDS</u>	-	-
<u>SHOULDER BELT TENSION, POUNDS</u>	-	-

Data Table 6 Seat Belt Performance Assessment Test Data

BELT LENGTH DATA:

Total belt length from retractor reel to bolt hole anchor point for continuous webbing systems _____

Retractor reel to 'D' ring as measured on Part 572 _____

Shoulder belt length as measured on Part 572 dummy _____

Lap belt length as measured on Part 572 dummy _____

Remainder of belt webbing left on retractor reel _____

DRIVER SIDE		PASSENGER SIDE	
PRE-TEST	POST-TEST	PRE-TEST	POST-TEST
64.0	64.5	64.0	64.5
6.0	6.0	6.5	6.5
35.5	36.0	35.5	37.0
22.5	22.5	22.0	21.0
28.5	28.0	29.5	29.0

BELT SPOOL-OFF DATA:

As determined by film analysis _____

As determined electronically _____

As determined mechanically _____

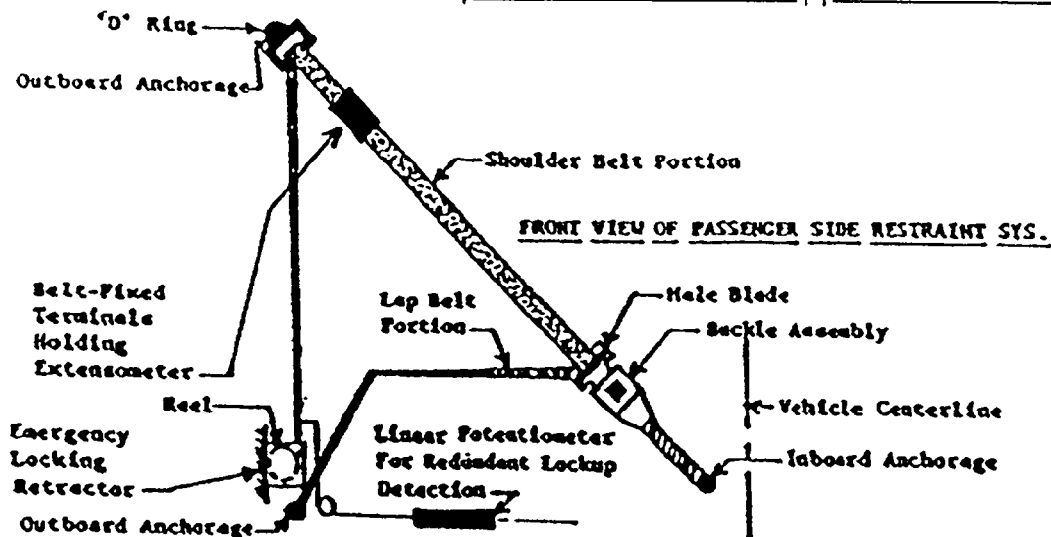
2.0 in	2.0 in
1.2 in	1.3 in
1.8 in	1.3 in

BELT STRAIN DATA:

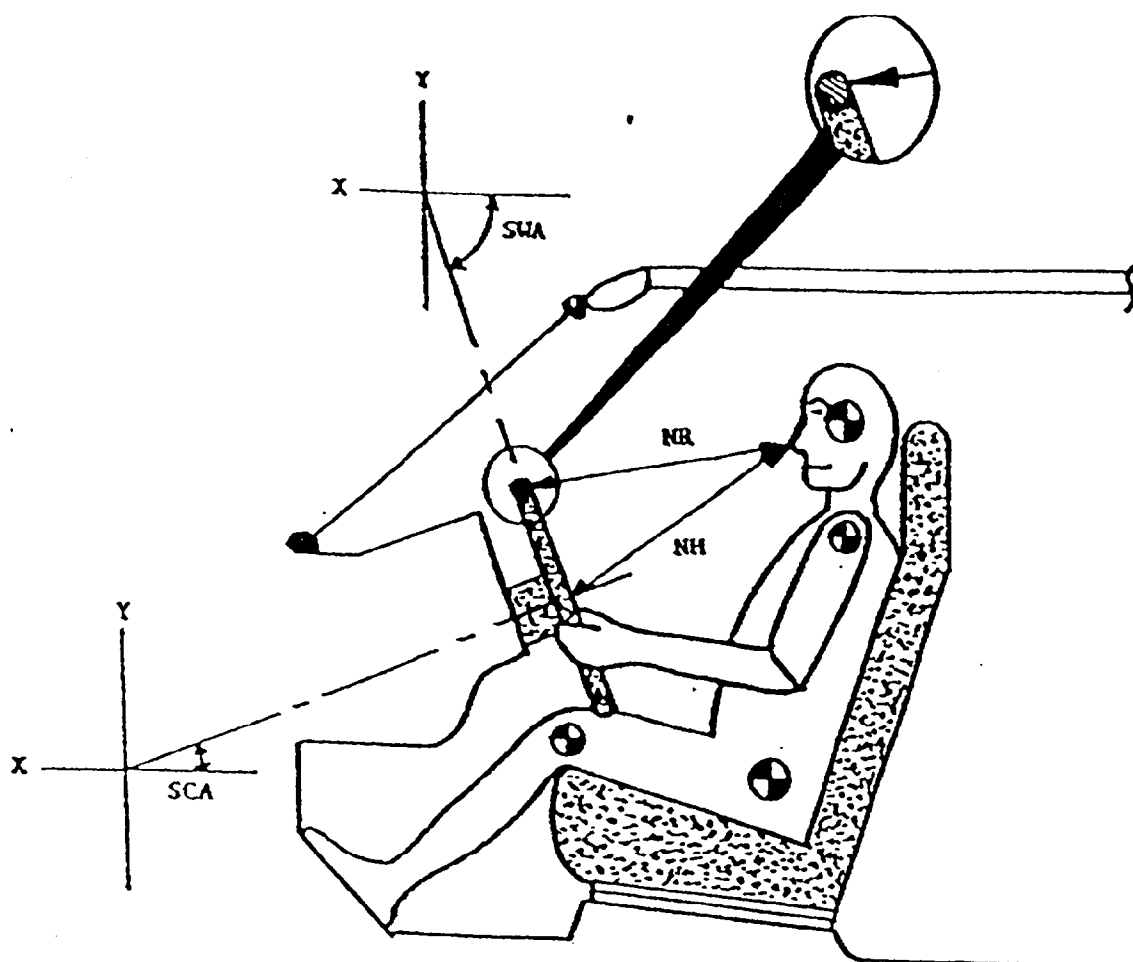
Measured between male blade and 'D' ring, electronically _____

mechanically _____

1.2 Percent	1.0 Percent
0.0 Percent	0.0 Percent



Data Table No. 7 Driver Dummy to Steering Wheel Positioning



LEFT SIDE VIEW

MEASUREMENTS	
<u>NR</u> --Distance from tip of dummy's nose to Top Rear surface of steering wheel rim.	20.6 Inches
<u>NH</u> --Distance from tip of dummy's nose to center of steering column hub.	20.8 Inches
<u>SCA</u> --Angle of steering column relative to the horizontal X axis.	21.0 Degrees
<u>SWA</u> --Angle of steering wheel relative to the horizontal X axis.	70.0 Degrees

Data Table 8 Camera Location Data

VEH. NHTSA NO.: MN5303 ; TEST DATE: 06/01/92 ; TIME: 4.10 PM

VEH. YEAR/MAKE/MODEL/BODY STYLE: 1992/HONDA PRELUDE, 2 DOOR SEDAN

CAMERA NO.	VIEW	CAMERA POS. (in.)			ANGLE (deg)	FILM PLANE TO HEAD TARGET	LENS (mm)	SPEED (fps)
		X	Y	Z				
1	Left Side View	231	565	134	-20	561	15-70 ZOOM	24
2	Right Side View	40	260	40	- 3	252	13	560
3	Left Side View	48	390	68	- 6	379	25	580
4	Overhead	-14	0	159	-65	164	13	665
5	Pit-Engine	25	0	-72	+90	140	13	565
6	Pit-Fuel Tank	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
7	Front-Passenger	-17	15	95	-45	129	16	600
8	Front-Driver	-17	13	95	-46	130	16	600
9	Left Side-Driver	108	111	78	-19	101	16	610
10	Right Side-Passenger	107	109	79	-20	99	16	600
11	Right Side-'A' Post	6	162	45	+1	198	28	650
12	Left Side-'A' Post	25	439	5	- 8	432	50	700
13	Onboard-Left Side	126	8	24	16	32	13	NAV
14	Onboard-Right Side	126	8	24	16	32	13	NAV
15	Left Side-Steering Col.	56	377	129	-17	374	28	605
16	Left Side-Steering Col.	56	377	114	-14	371	28	610
17	Right Side Passenger	79	147	54	- 7	133	16	630

* X = film plane to monorail centerline
 Y = film plane to barrier face
 Z = film plane to ground

2 High-Speed Right Side View

CONCRETE PAD

17 High-Speed Passenger Coverage

11 Right 'A' Post High-Speed

10 High-Speed Passenger Coverage

Umbilical Cable

TOW ROAD

Cable Support

Steel Grating Over Pit Area

Lateral Guidance Dolly

Monorail

Pass. Side High-Speed 7

High-Speed Driver Side 8

OVERHEAD

SCG Wheel

14 Right Onboard High-Speed

ONBOARD SEAT BELT SPOOL-OUT COVERAGE

13 Left Onboard High-Speed

High-Speed Driver Coverage 9

12 Left 'A' Post High-Speed

15

16

BOTH STEERING COLUMN MOVEMENT CAMERAS are high-speed and placed one on top of the other not side-by-side

TOP VIEW

1 Real-Time Left Side View

NOTE: CAMERA FRAME RATES
#1 - 24 fps
#2 thru #17 - 500 fps

NOTE: Roof light placed on veh. centerline behind photo targets for strg. col. motion assessment

Photographic Target

Vehicle's Fuel Tank

"Time Zero" Indicator

Belt Retractor Unit

Engine Compartment High-Speed 5

PHOTOGRAPHIC PIT

Fuel Tank High-Speed 6

LEFT SIDE VIEW

Barrier Mount

BARRIER

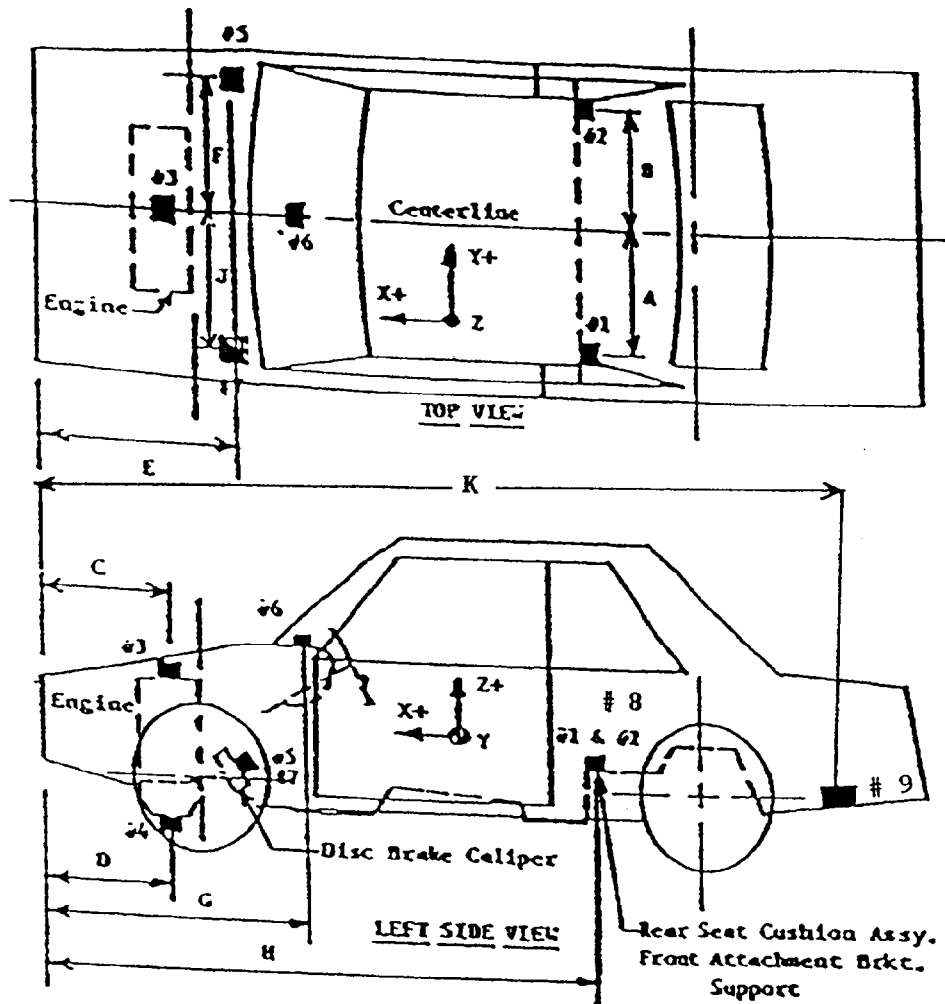
Barrier Face Extension Above Load Cell Assy.

Load Cell Assembly

"Time Zero" Indicator (placed near engine oil pan)

"Time-Zero" Indicator Lights (2)

Data Table No. 9 Vehicle Accelerometer Location and Data Summary



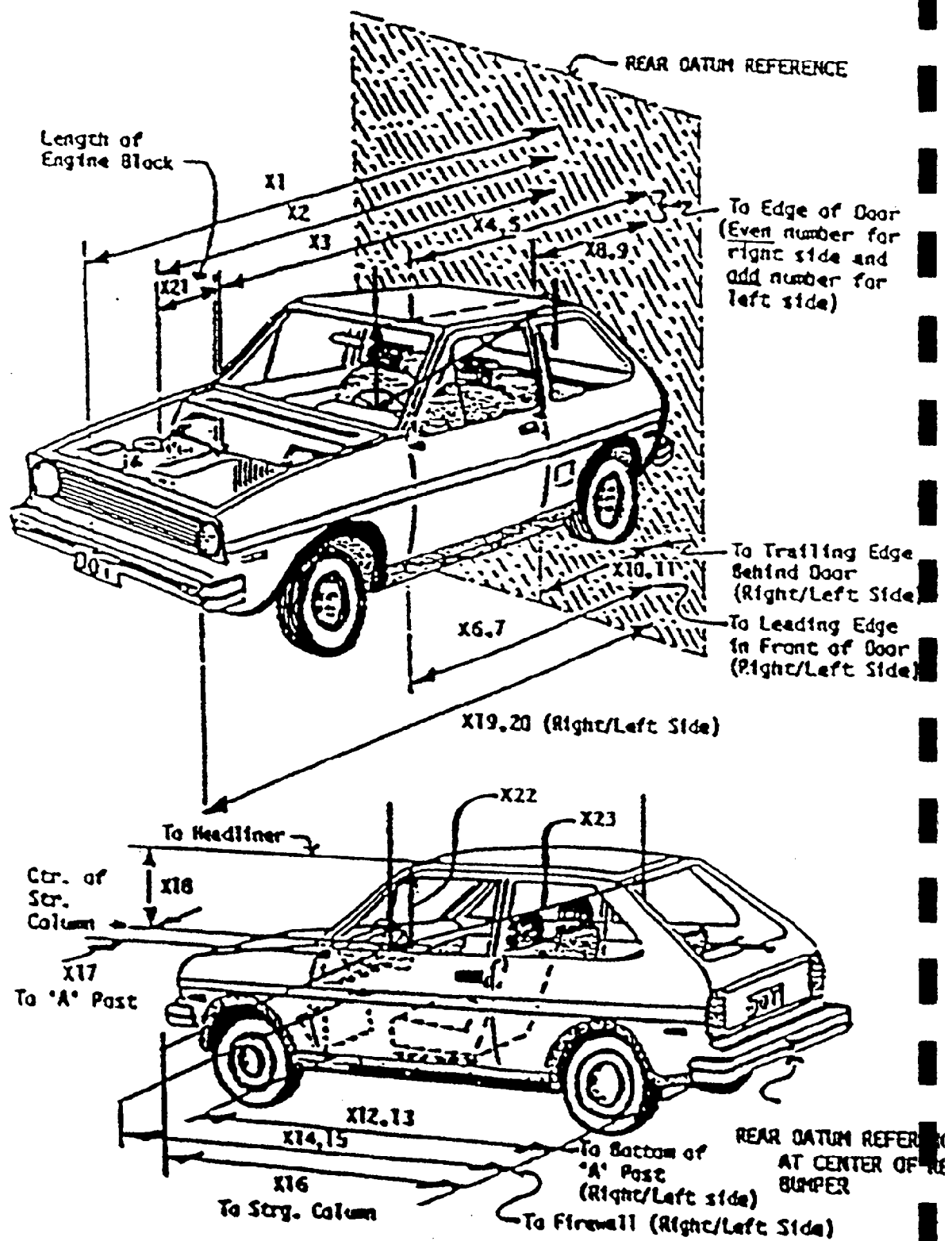
Dimension	Length (in.)
A	19.5
B	19.5
C	30.0
D	28.0
E	34.0
F	27.5
G	51.5
H	107.0
J	27.5
K	165.3

Loc. No.	Description	Maximum Value			
		X-	msec.	X+	msec.
1	Rear seat X-member @ Left Side	33.1	61.5	3.2	138.7
2	Rear seat X-member @ Right Side	31.1	68.9	3.5	138.1
3	Top of Engine Block	149.1	34.6	86.4	43.6
4	Bottom of Engine Block	137.5	32.7	27.0	44.7
5	Disc Brake Caliper Right Side	77.7	42.2	36.8	58.2
6	Instrument Panel	58.1	45.0	14.8	75.9
7	Disc Brake Caliper @Left Side	47.9	34.9	17.2	77.5
Loc. No.		Z-	msec	Z+	msec
8	Center Rear X Member	12.0	51.9	9.6	26.9
9	Vehicle Rear	6.1	92.4	12.6	48.5

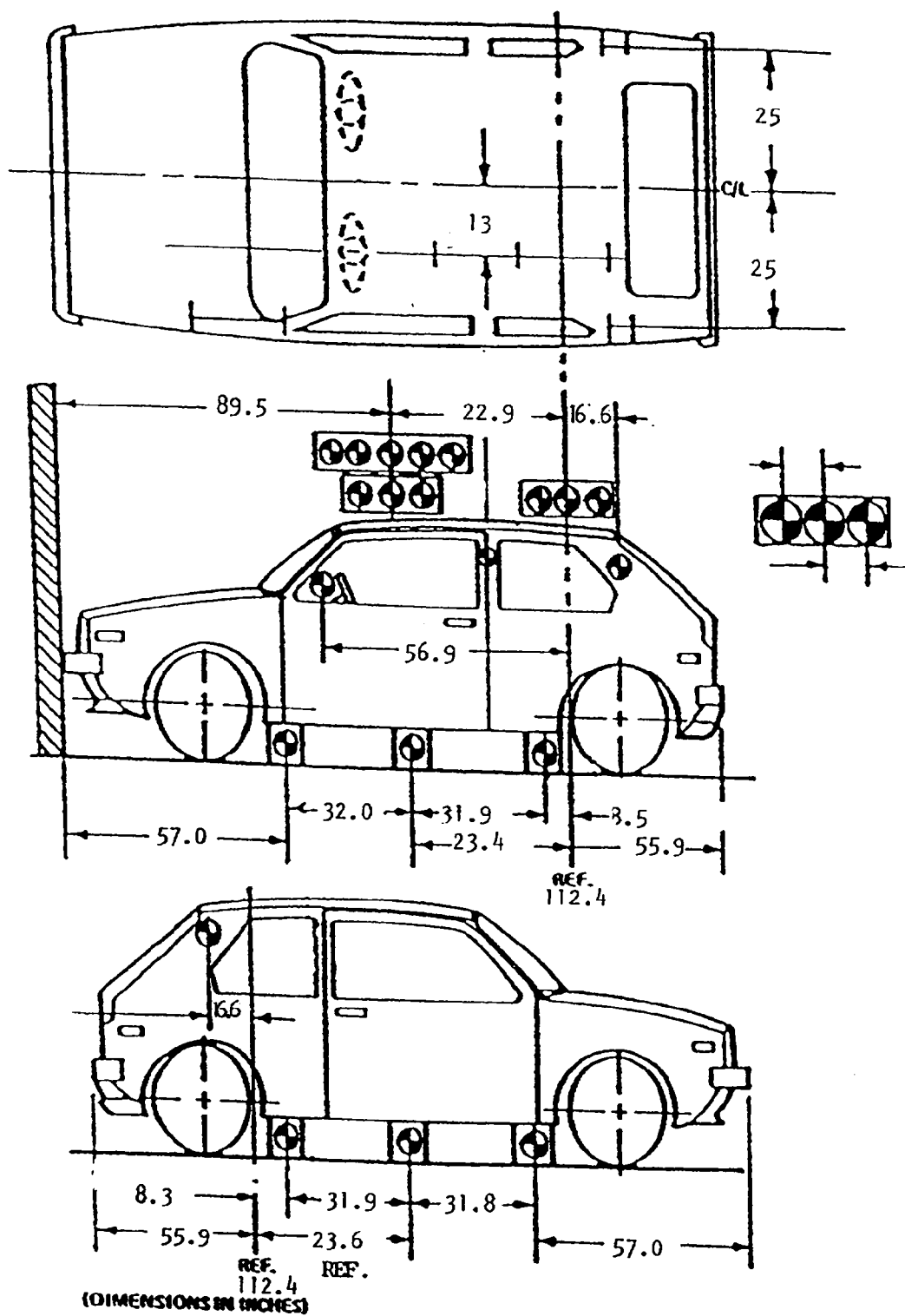
Data Table No. 10 Test Vehicle Measurements

NO.	MEASUREMENT DESCRIPTION	Pre-Test (in.)	Post-Test (in.)	Diff. (in.)
X1	Total Length of Test Vehicle at Centerline	168.3	150.2	18.1
X2	Rear Surface of Vehicle to Front of Engine	145.3	137.2	8.1
X3	Rear Surface of Vehicle to Firewall	118.6	113.2	5.4
X4	Rear Surface to Upr. Leading Edge of Right Door	82.5	82.7	-0.2
X5	Rear Surface to Upr. Leading Edge of Left Door	82.6	82.2	0.4
X6	Rear Surface to Lwr. Leading Edge of Right Door	105.6	105.2	0.4
X7	Rear Surface to Lwr. Leading Edge of Left Door	105.9	105.0	0.9
X8	Rear Surface to Upr. Trailing Edge of Right Door	55.5	56.5	-1.0
X9	Rear Surface to Upr. Trailing Edge of Left Door	56.2	55.1	1.1
X10	Rear Surface to Lwr. Trailing Edge of Right Door	59.0	58.7	0.3
X11	Rear Surface to Lwr. Trailing Edge of Left Door	59.2	58.6	0.6
X12	Rear Surface to Bottom 'A' Post on Right Side	107.4	106.5	0.9
X13	Rear Surface to Bottom 'A' Post on Left Side	108.0	107.0	1.0
X14	Rear Surface to Firewall on Right Side	118.6	112.0	6.6
X15	Rear Surface to Firewall on Left Side	118.6	117.0	1.6
X16	Rear Surface to Steering Column	87.9	84.0	3.9
X17	Center of Steering Column to 'A' Post	18.0	18.0	0.0
X18	Center Steering Column to Headlining	15.5	18.0	-2.5
X19	Rear Surface to Right Side of Front Bumper	161.8	146.0	15.8
X20	Rear Surface to Left Side of Front Bumper	161.8	146.0	15.8
X21	Length of Engine Block	11.0	11.0	0.0

Data Table No. 10 (Cont'd) Test Vehicle Measurements



DATA TABLE No. 11 VEHICLE TARGET LOCATIONS



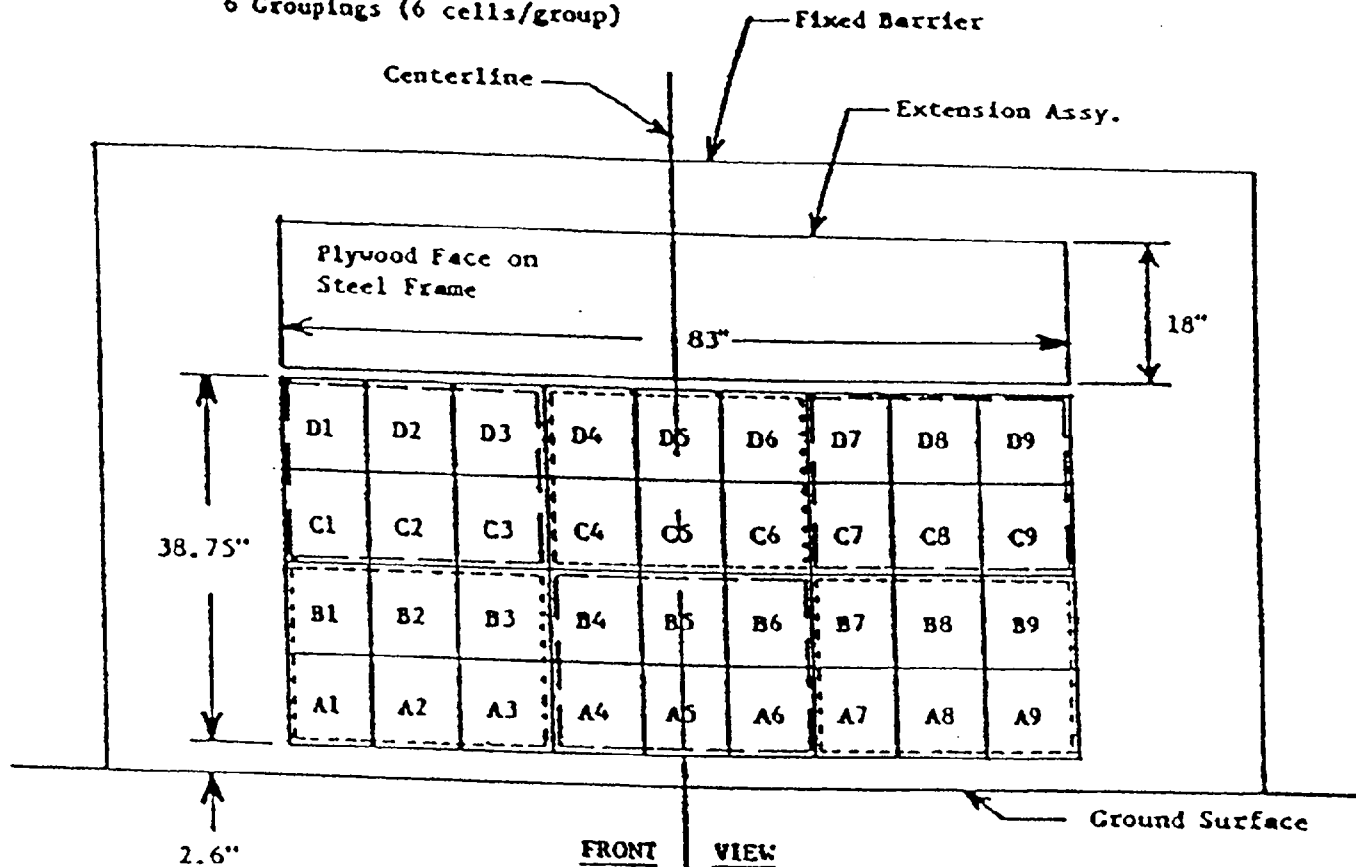
Data Table No. 12 Load Cell Locations on Fixed Barrier

36 Load Cells

4 Rows

9 Columns

6 Groupings (6 cells/group)



6 GROUPINGS OF 6 LOAD CELLS EACH

C1 thru D3	C4 thru D6	C7 thru D9
A1 thru B3	A4 thru B6	A7 thru B9

- DATA REQUIREMENTS:
- (1) Data from 36 individual load cells
 - (2) Total or Sum of 36 individual load cells
 - (3) Data from 6 Groupings shown above (6 cells/group)

ACCIDENT INVESTIGATION DIVISION DATA FOR 35 MPH FRONTAL BARRIER IMPACT

VEHICLE MAKE/MODEL/BODY/STYLE: 1992 HONDA PRELUDE, 2 DOOR SEDAN

VEH. NHTSA NO.: MN5303; VIN: JHMBA824XNC003304

MODEL YEAR: 1992; BUILD DATE: 11/91; TEST DATE: 06/01/92

VEH. SIZE CATEGORY: 2 DOOR SEDAN; TEST WEIGHT: 3245 LB.

VEH. WHEELBASE: 100.4 IN; FRONT OVERHANG: IN; OVERALL WIDTH: 69.5 IN

ACCELEROMETER DATA:

LOCATION: LEFT AND RIGHT SIDE PASSENGER COMPARTMENT

CALIBRATION PROCEDURE: 6 MO.S/DROP TEST

LINEARITY: GOOD; INTEGRATION ALGORITHM: NHTSA STANDARD

VEH. IMPACT SPEED: 34.68 MPH; TIME OF SEPARATION: 78 MSEC

VELOCITY CHANGE: 39.44 MPH (LEFT), 39.12 MPH (RIGHT)

COLLISION DEFORMATION CLASSIFICATION (CDC) CODE: _____

F (FRONTAL)

CRUSH DEPTH C1 = 15.3 INCHES

DIMENSIONS: C2 = 17.0 INCHES

C3 = 18.1 INCHES

C4 = 18.6 INCHES

C5 = 18.2 INCHES

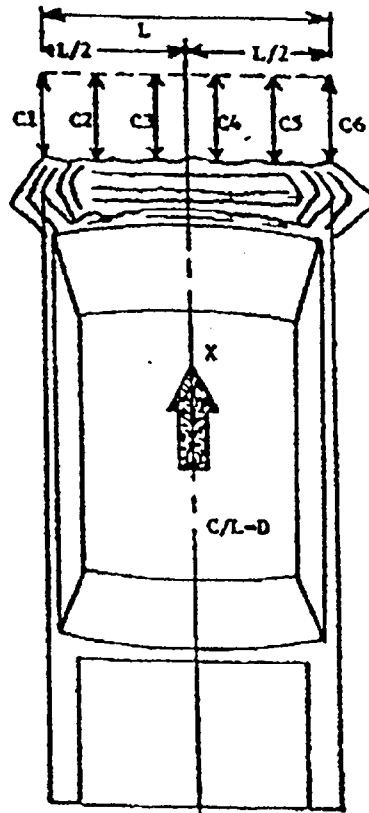
C6 = 16.5 INCHES

MIDPOINT OF DAMAGE:

D = VEHICLE CENTERLINE (LONGITUD.)

LENGTH OF DAMAGED
REGION:

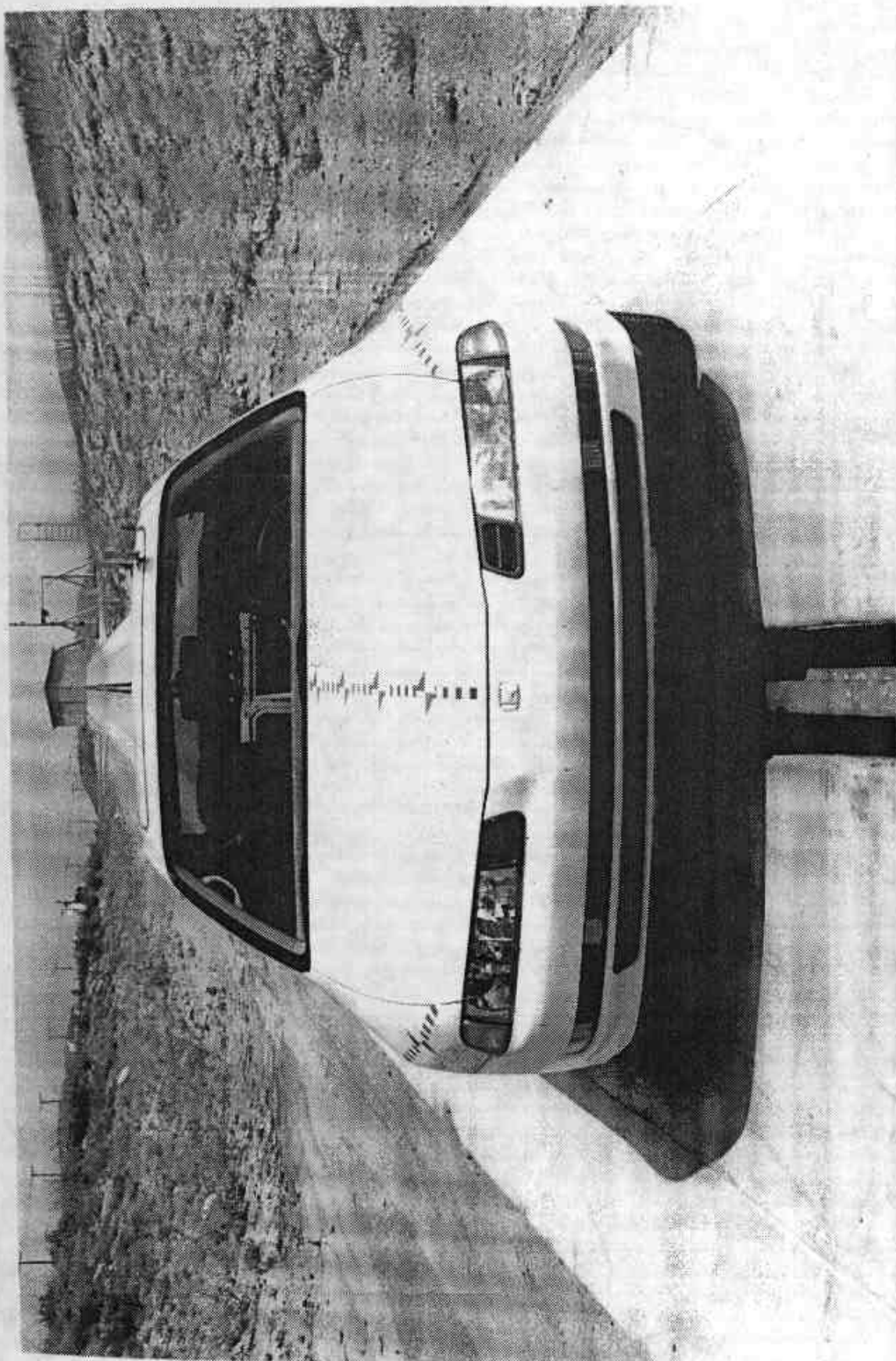
L = 55.0 INCHES



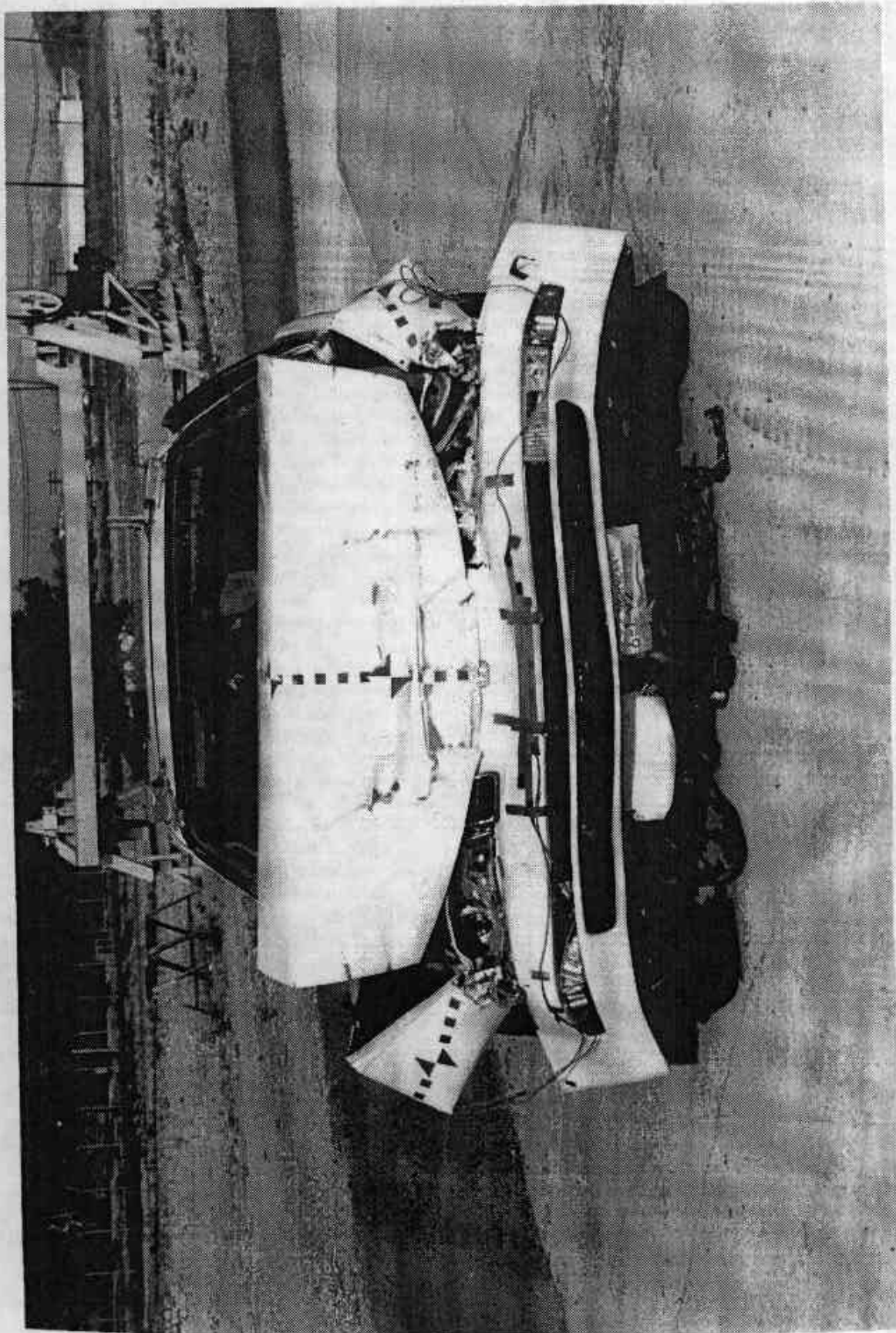
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APPENDIX A
PHOTOGRAPHS

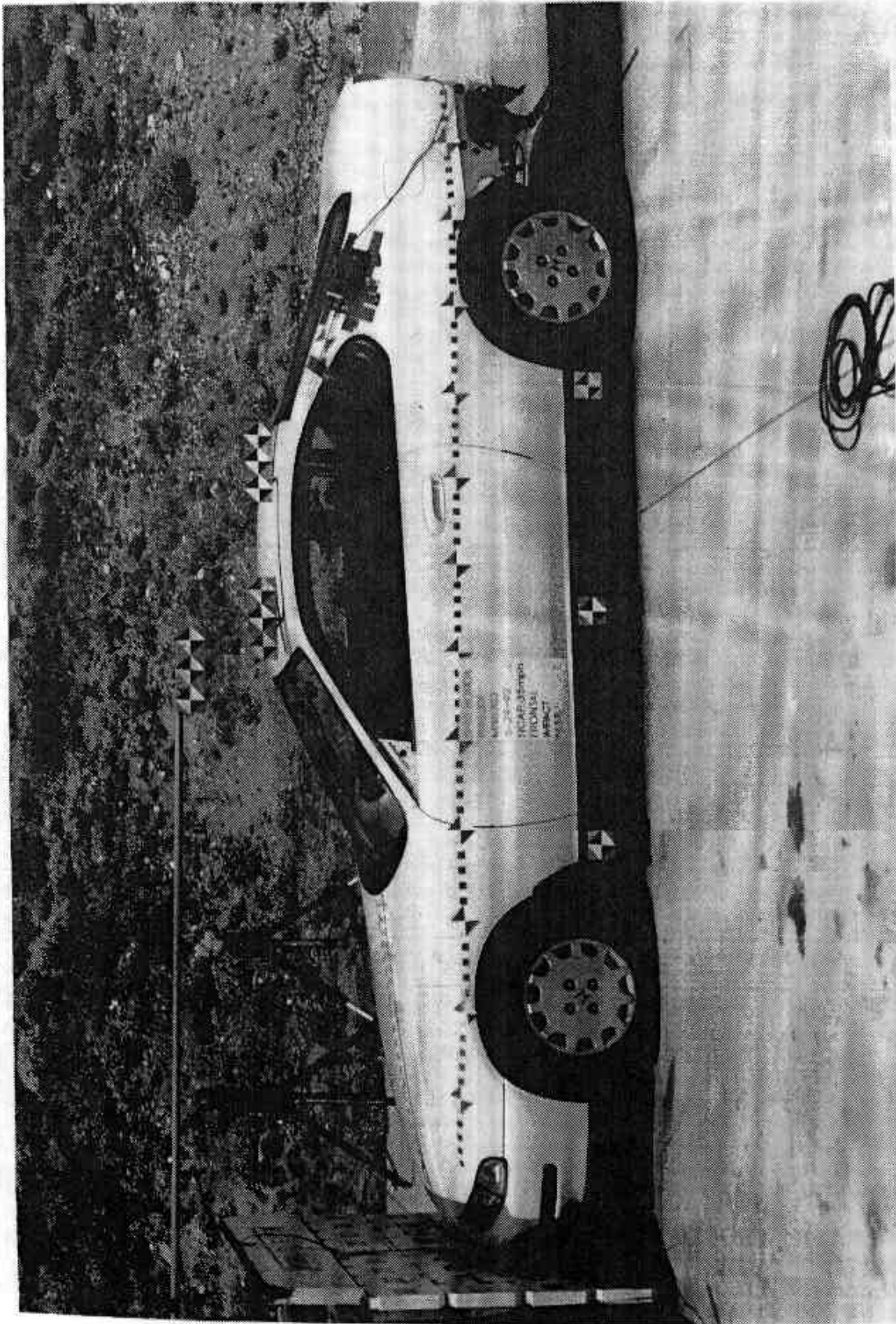
PRETEST FRONT VIEW
POSTTEST FRONT VIEW
PRETEST LEFT SIDE VIEW
POSTTEST LEFT SIDE VIEW
PRETEST RIGHT SIDE VIEW
POSTTEST RIGHT SIDE VIEW
PRETEST RIGHT FRONT 3/4 VIEW
POSTTEST RIGHT FRONT 3/4 VIEW
PRETEST LEFT REAR 3/4 VIEW
POSTTEST LEFT REAR 3/4 VIEW
PRETEST WINDSHIELD VIEW
POSTTEST WINDSHIELD VIEW
PRETEST ENGINE COMPARTMENT VIEW
POSTTEST ENGINE COMPARTMENT VIEW
PRETEST FRONT UNDERBODY VIEW
POSTTEST FRONT UNDERBODY VIEW
PRETEST REAR UNDERBODY VIEW
POSTTEST REAR UNDERBODY VIEW
PRETEST DRIVER DUMMY POSITION VIEW
POSTTEST DRIVER DUMMY POSITION VIEW
PRETEST PASSENGER DUMMY POSITION VIEW
POSTTEST PASSENGER DUMMY POSITION VIEW
PRETEST DRIVER DUMMY & VEHICLE INTERIOR VIEW (Door Open)
POSTTEST DRIVER DUMMY & VEHICLE INTERIOR VIEW (Door Open)
PRETEST PASSENGER DUMMY & VEHICLE INTERIOR VIEW (Door Open)
POSTTEST PASSENGER DUMMY & VEHICLE INTERIOR VIEW (Door Open)
POSTTEST DRIVER DUMMY (ATD) STEERING COLUMN HUB/RIM CONTACT
POSTTEST PASSENGER DUMMY (ATD) KNEE CONTACT AREA



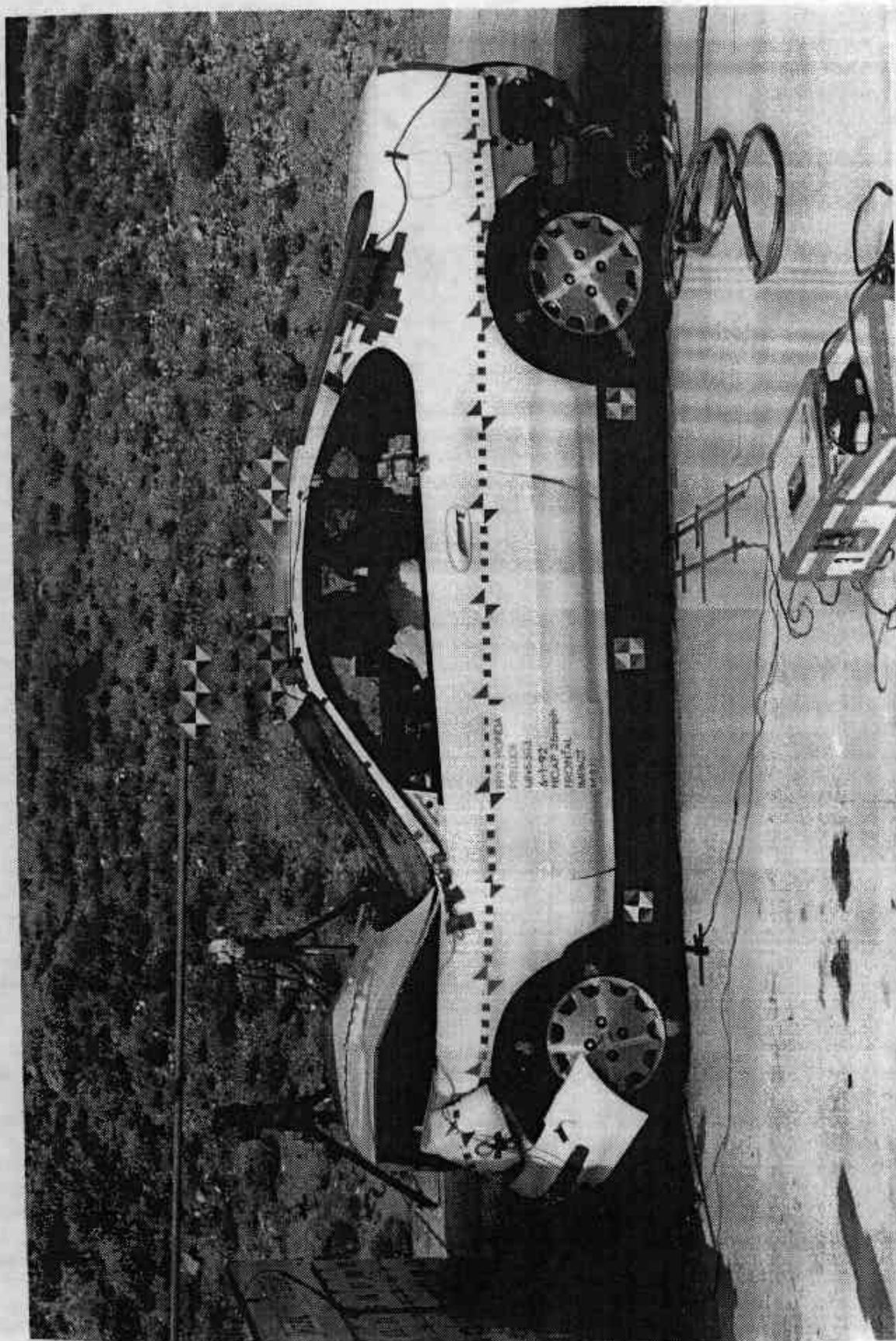
PRETEST FRONT VIEW



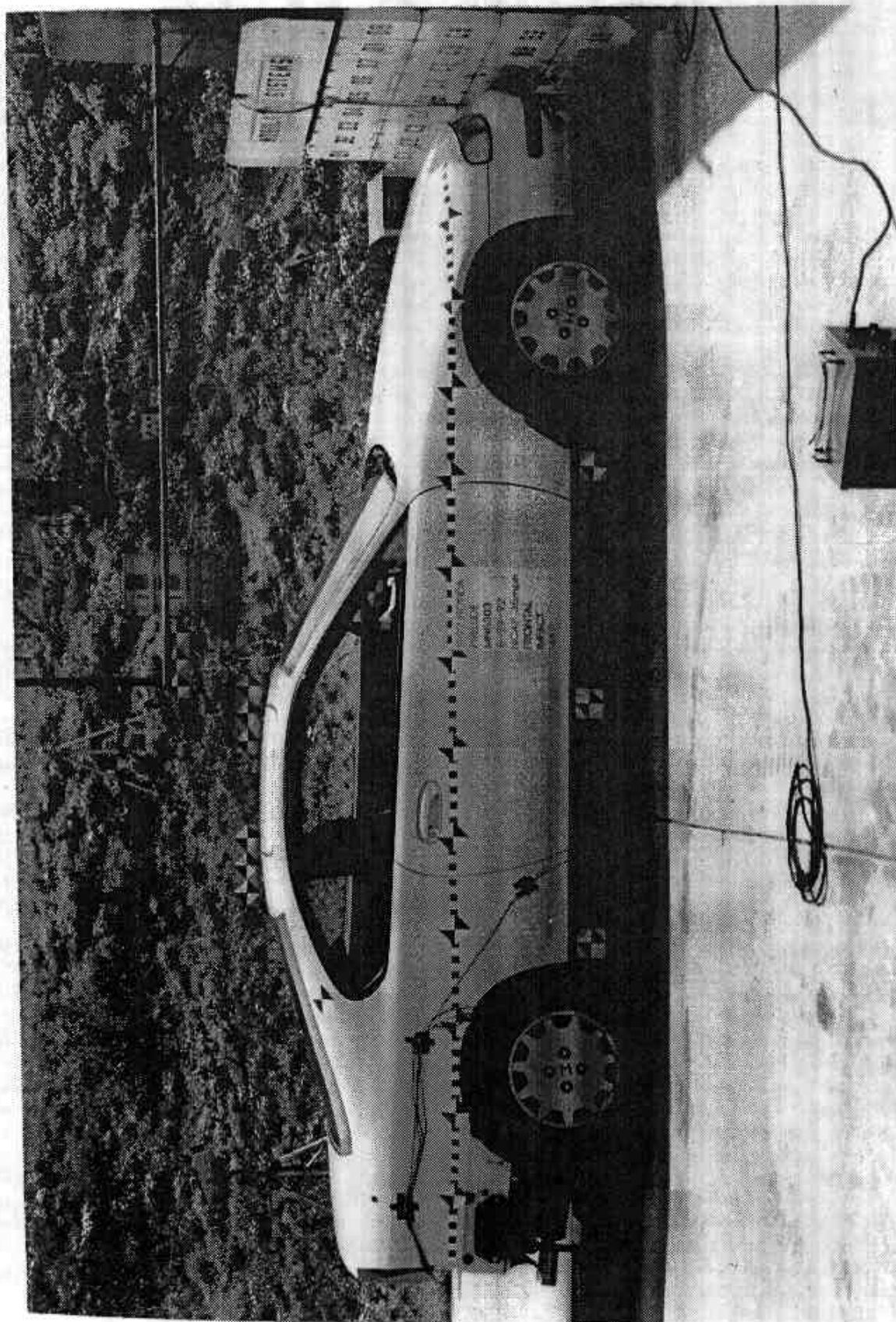
POSTTEST FRONT VIEW



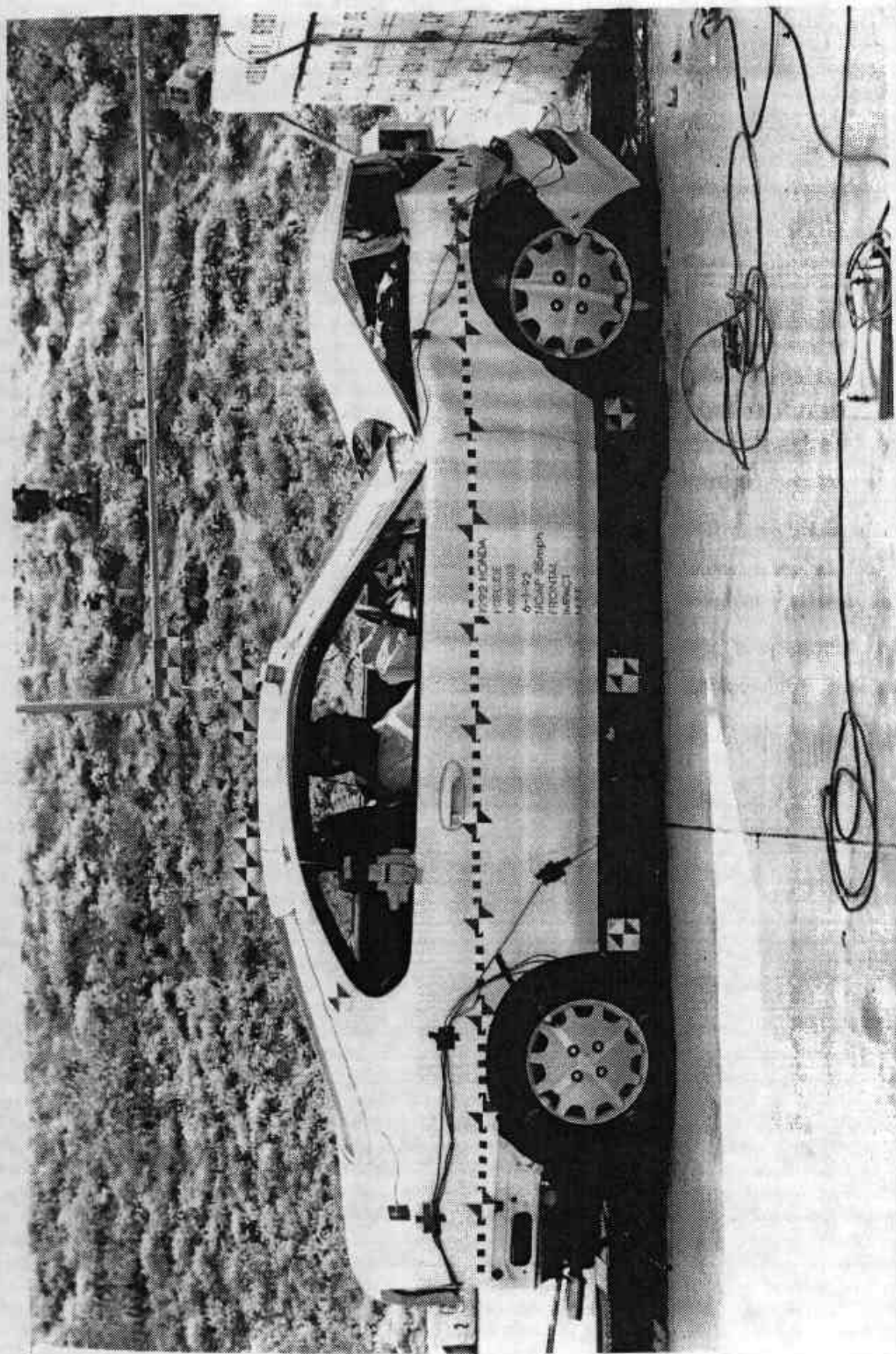
PRETEST LEFT SIDE VIEW

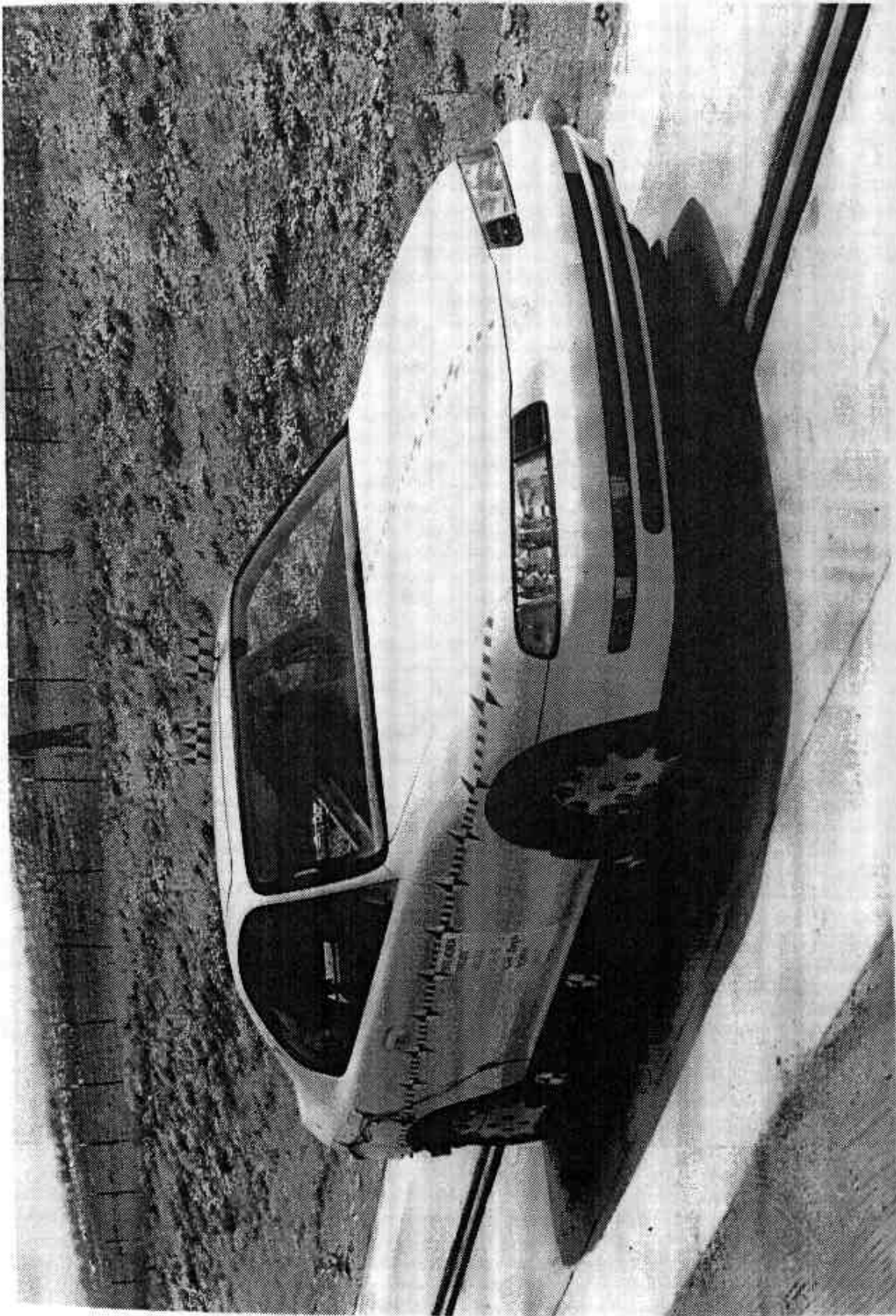


POSTTEST LEFT SIDE VIEW



PRETEST RIGHT SIDE VIEW

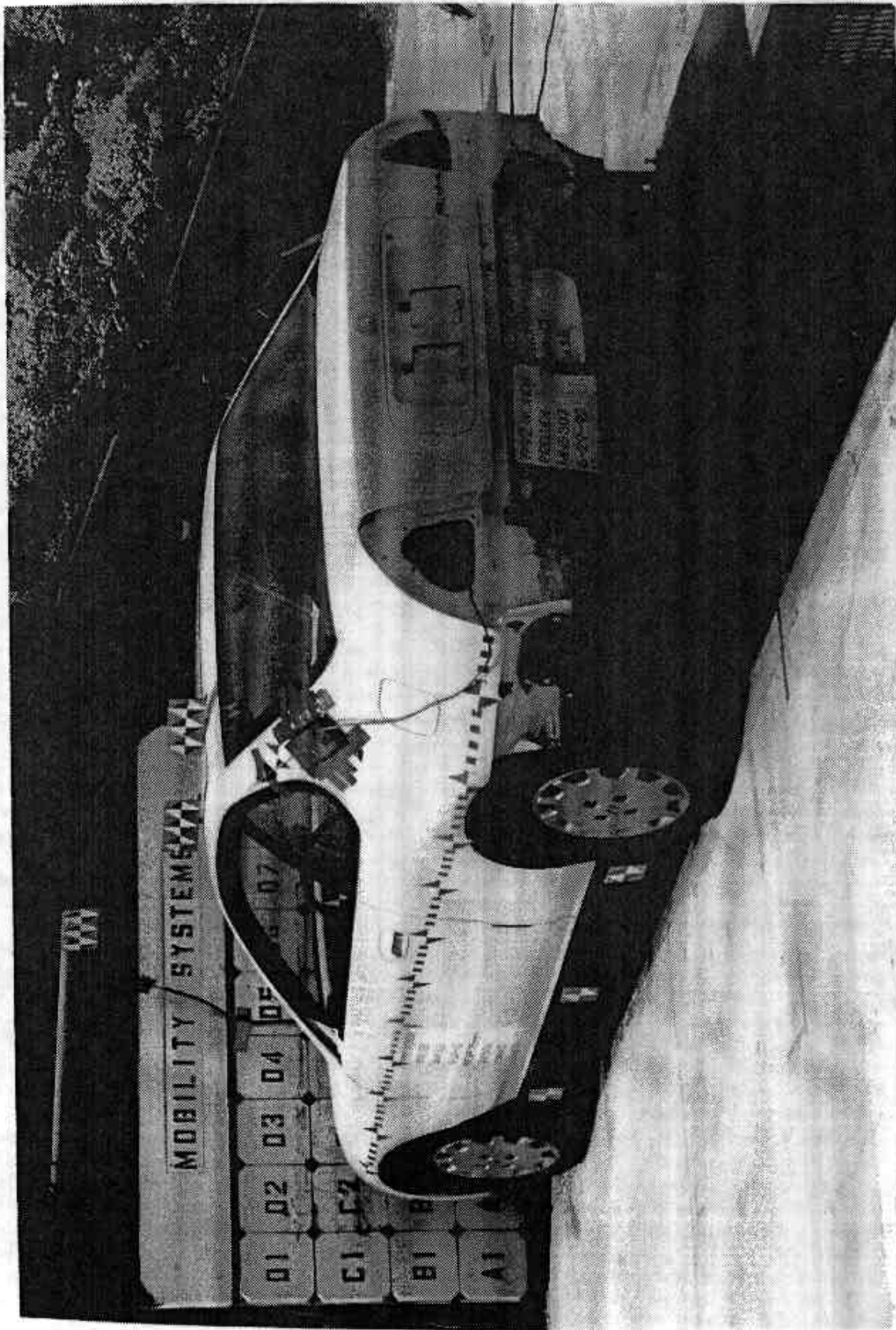




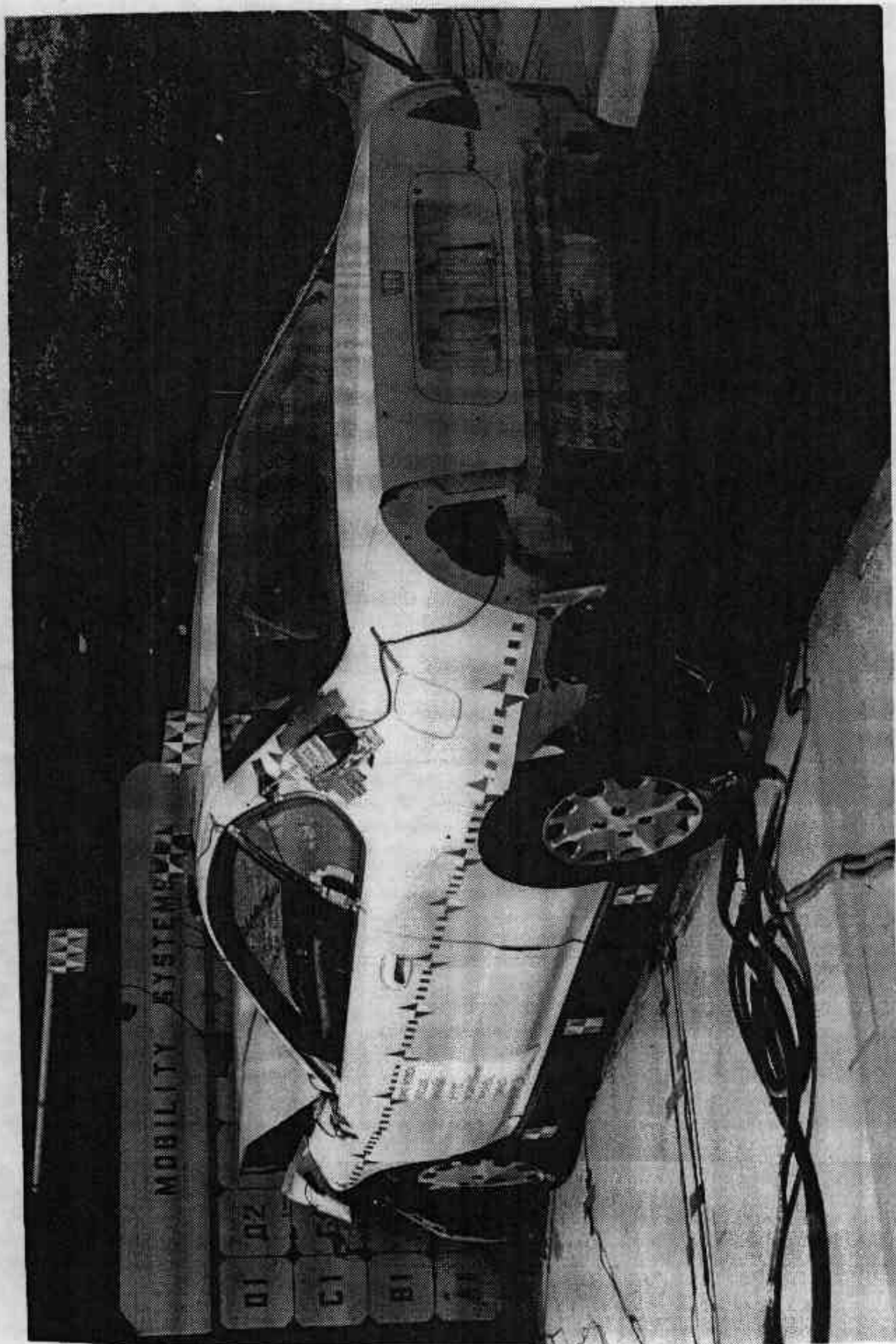
PRETEST RIGHT FRONT 3/4 VIEW



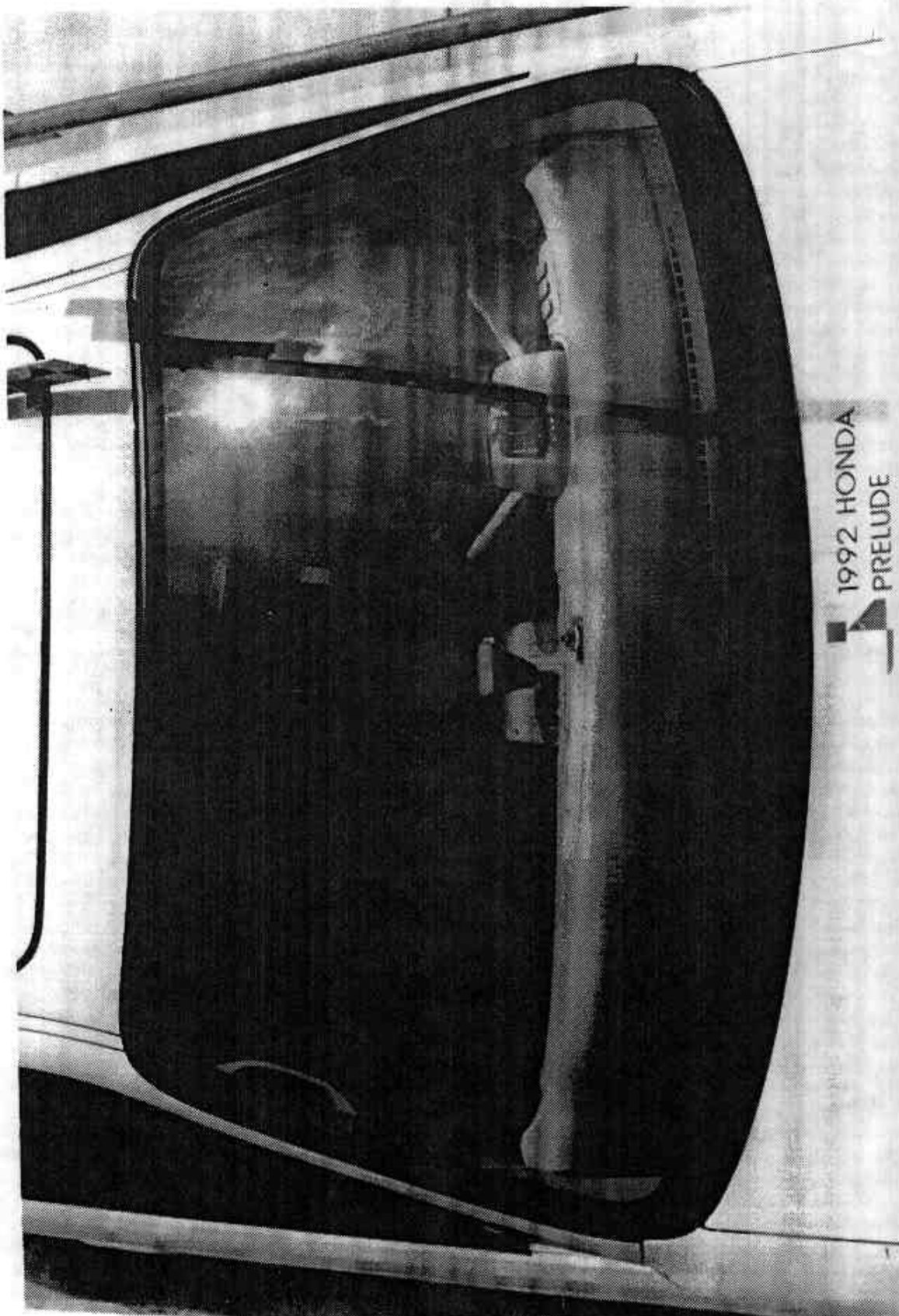
POSTTEST RIGHT FRONT 3/4 VIEW



PRETEST LEFT REAR 3/4 VIEW

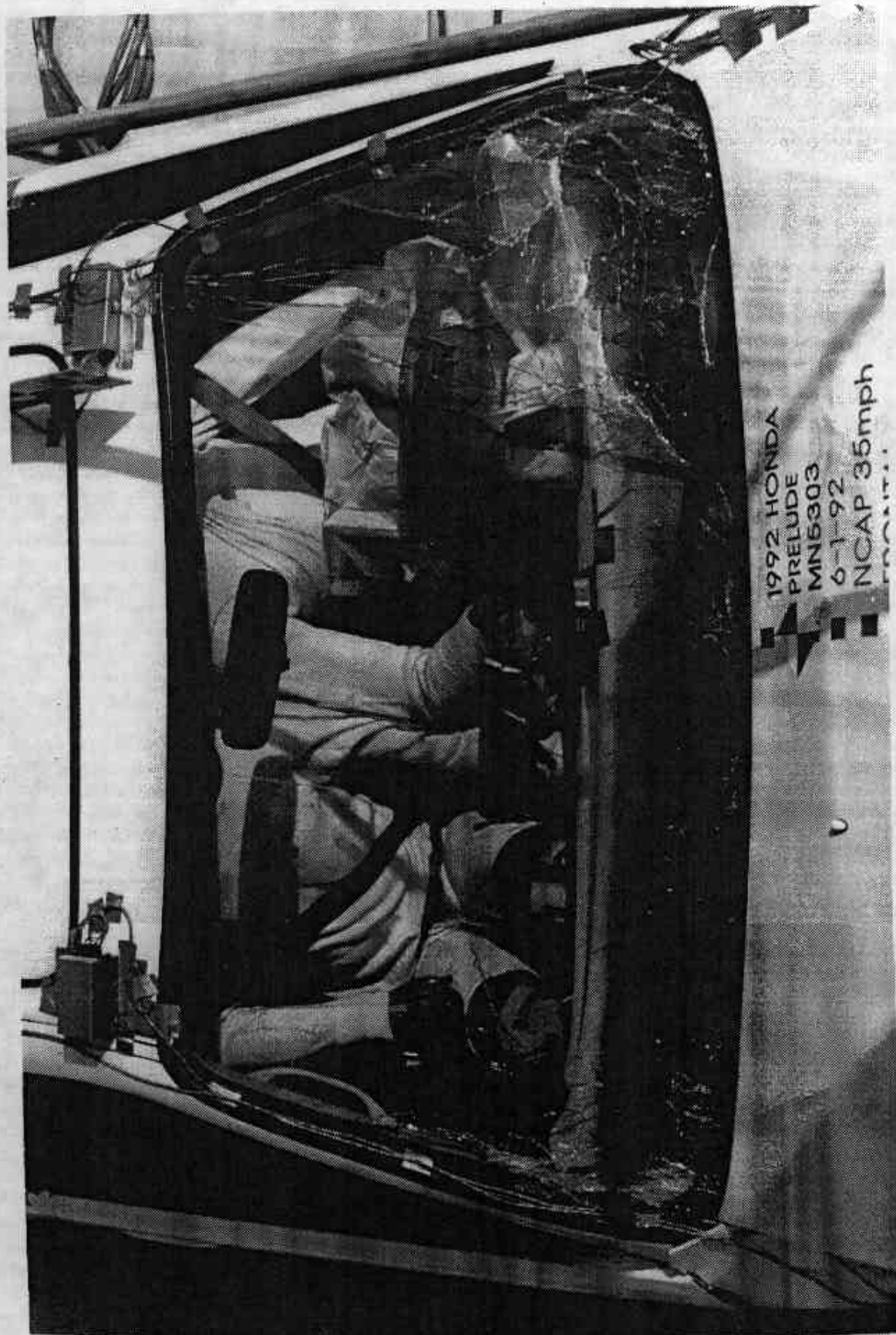


POSTTEST LEFT REAR 3/4 VIEW

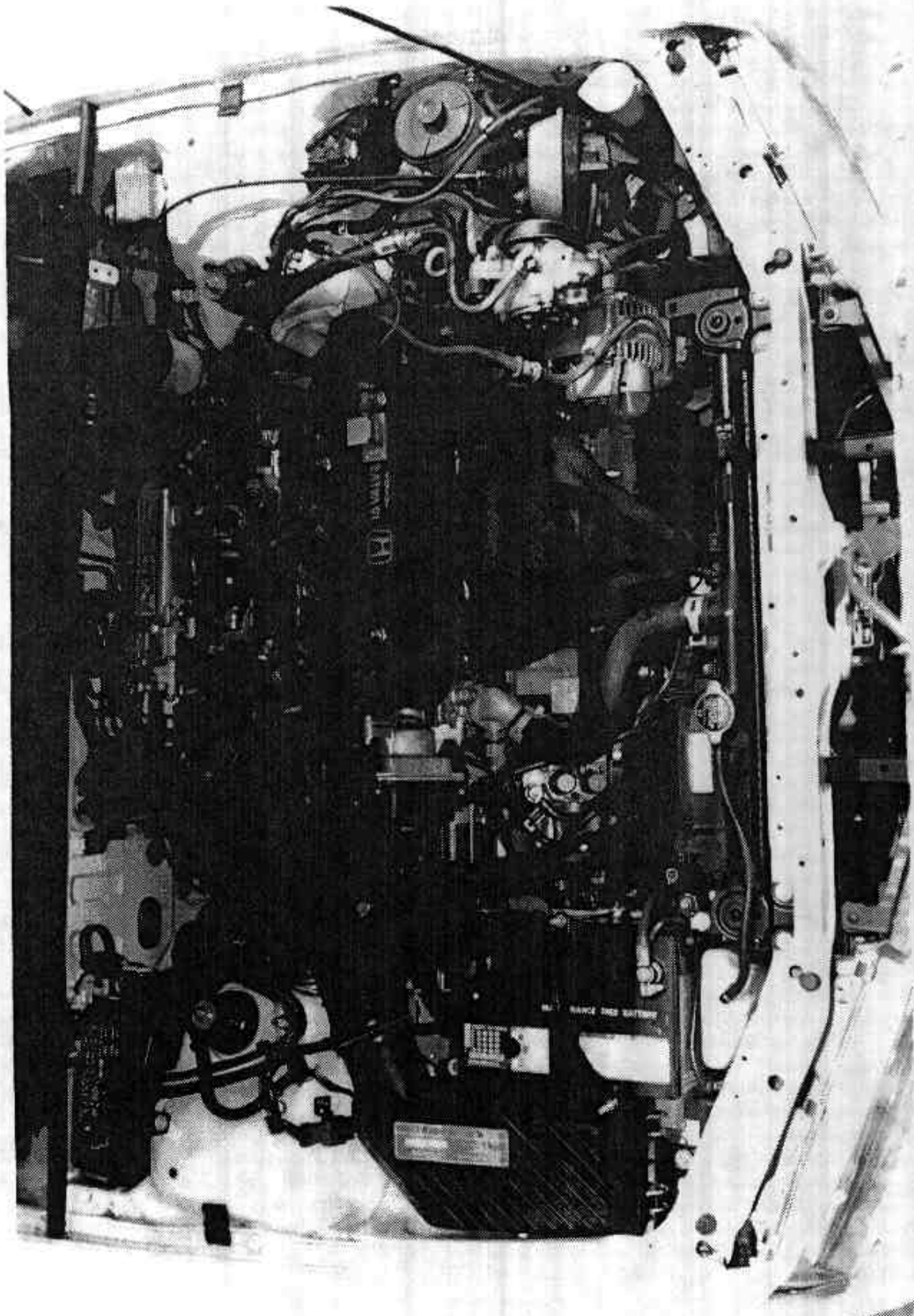


1992 HONDA
PRELUDE

PRETEST WINDSHIELD VIEW



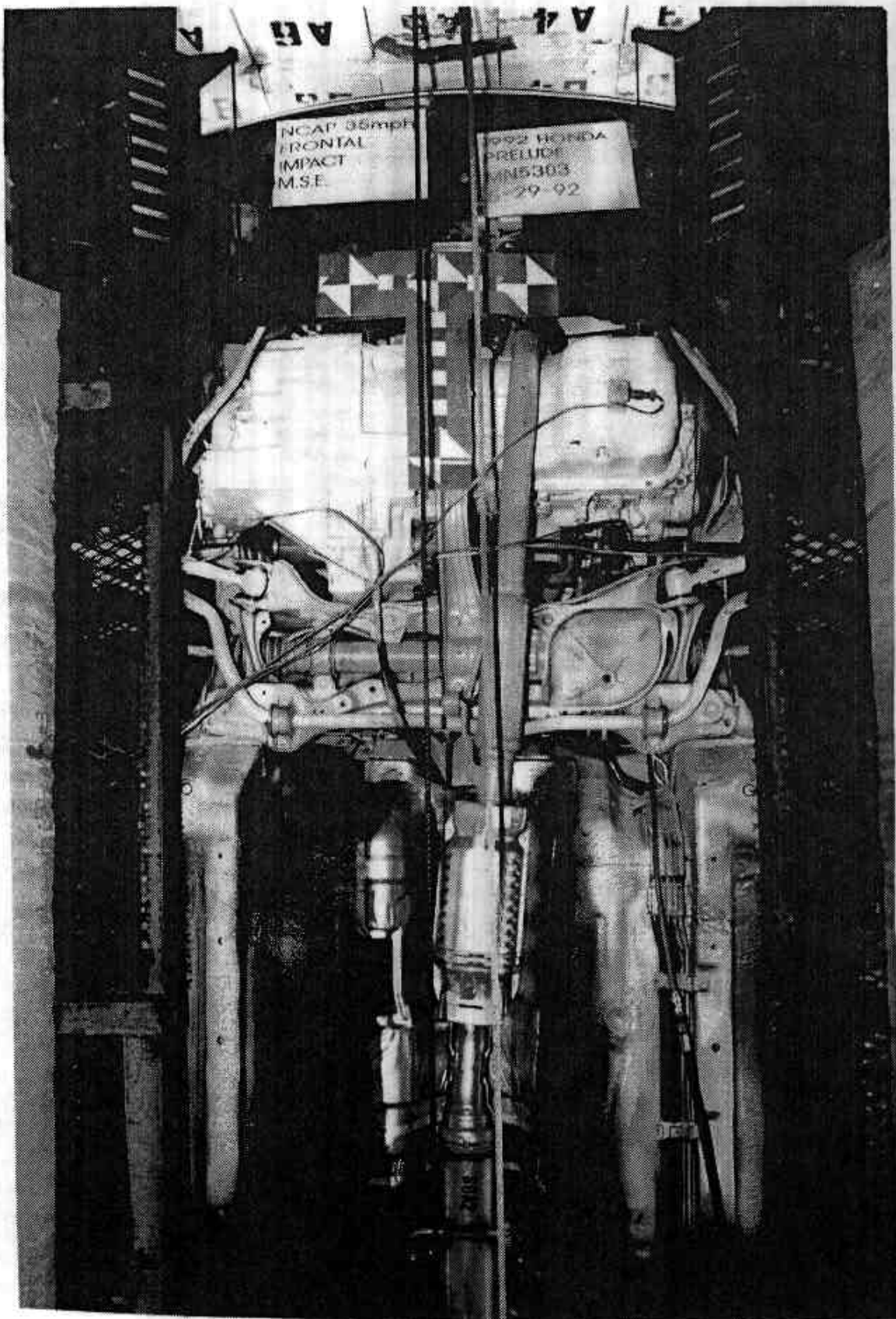
POSTTEST WINDSHIELD VIEW



PRETEST ENGINE COMPARTMENT VIEW

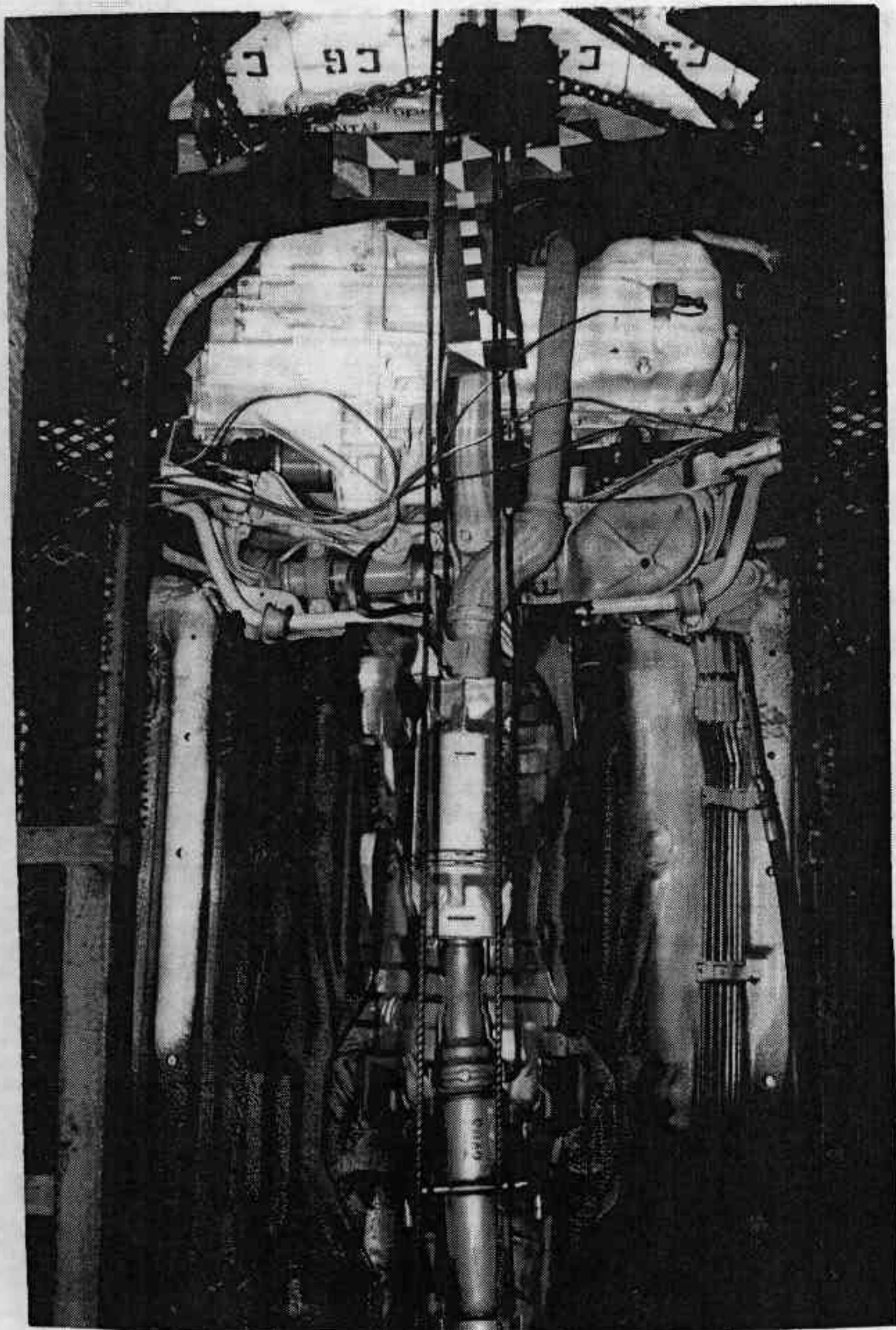


POSTTEST ENGINE COMPARTMENT VIEW



PRETEST FRONT UNDERBODY VIEW
A-15

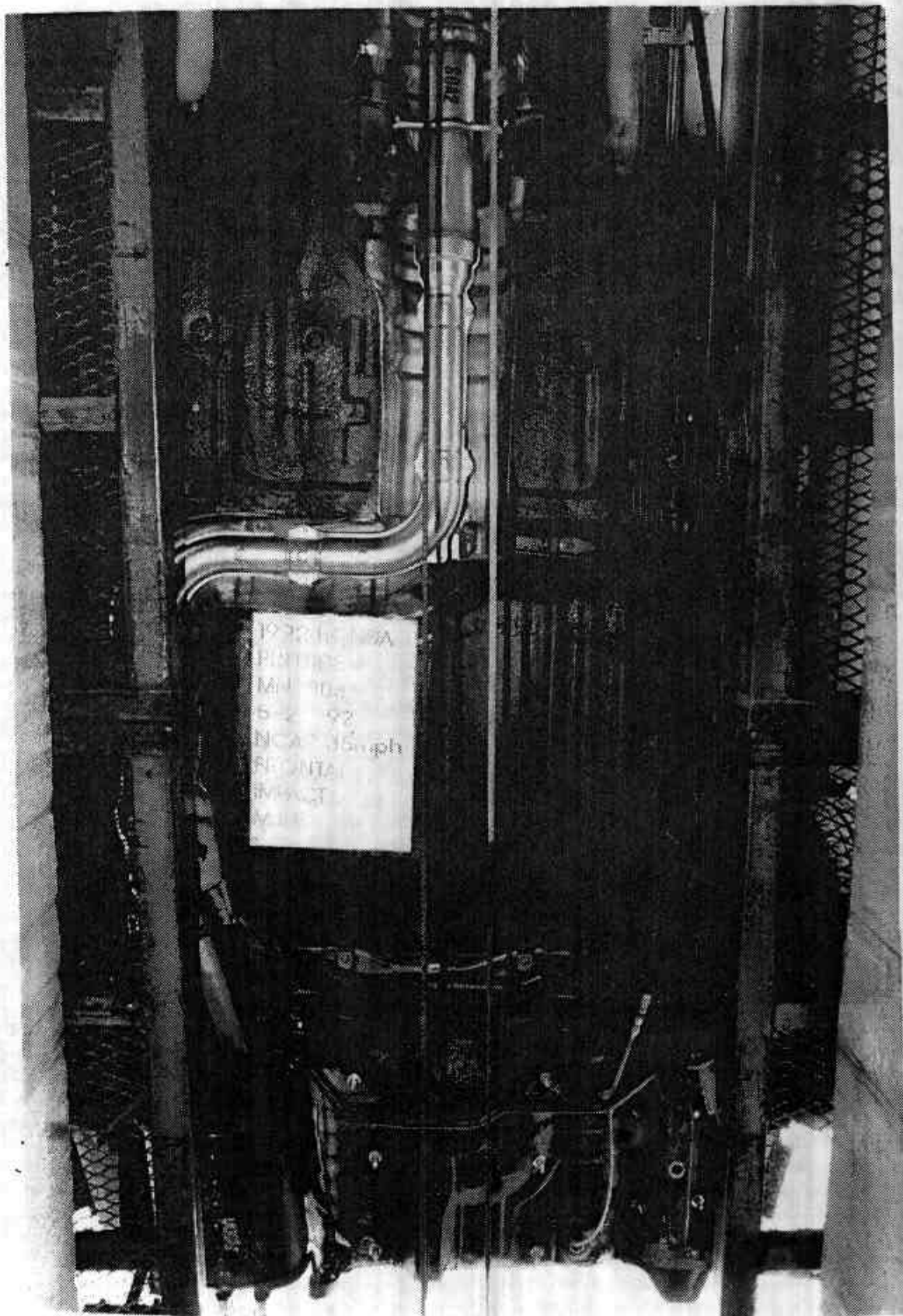
MSE-92-R92027-N05



POSTTEST FRONT UNDERBODY VIEW

A-16

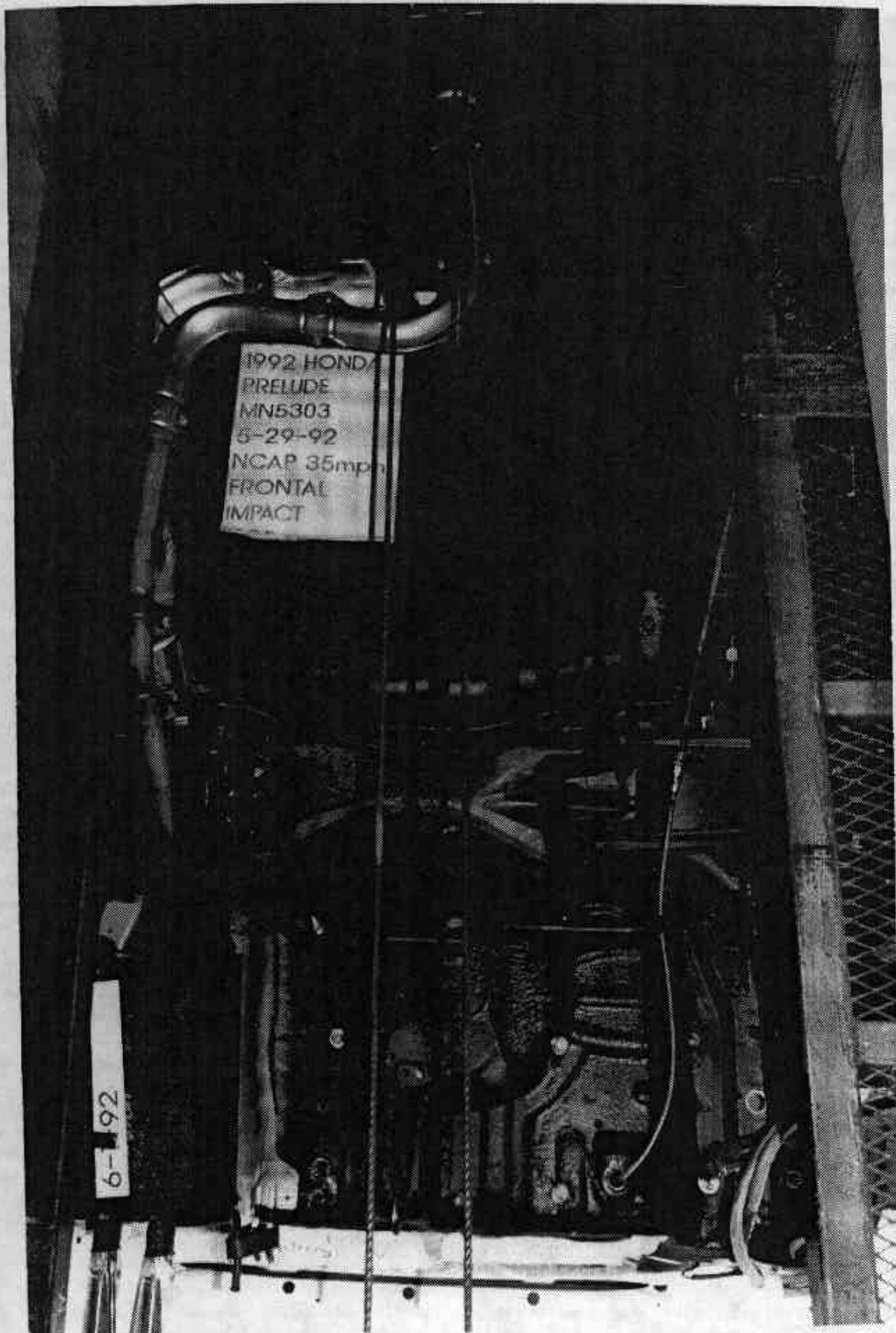
MSE-92-R92027-N05



PRETEST REAR UNDERBODY VIEW

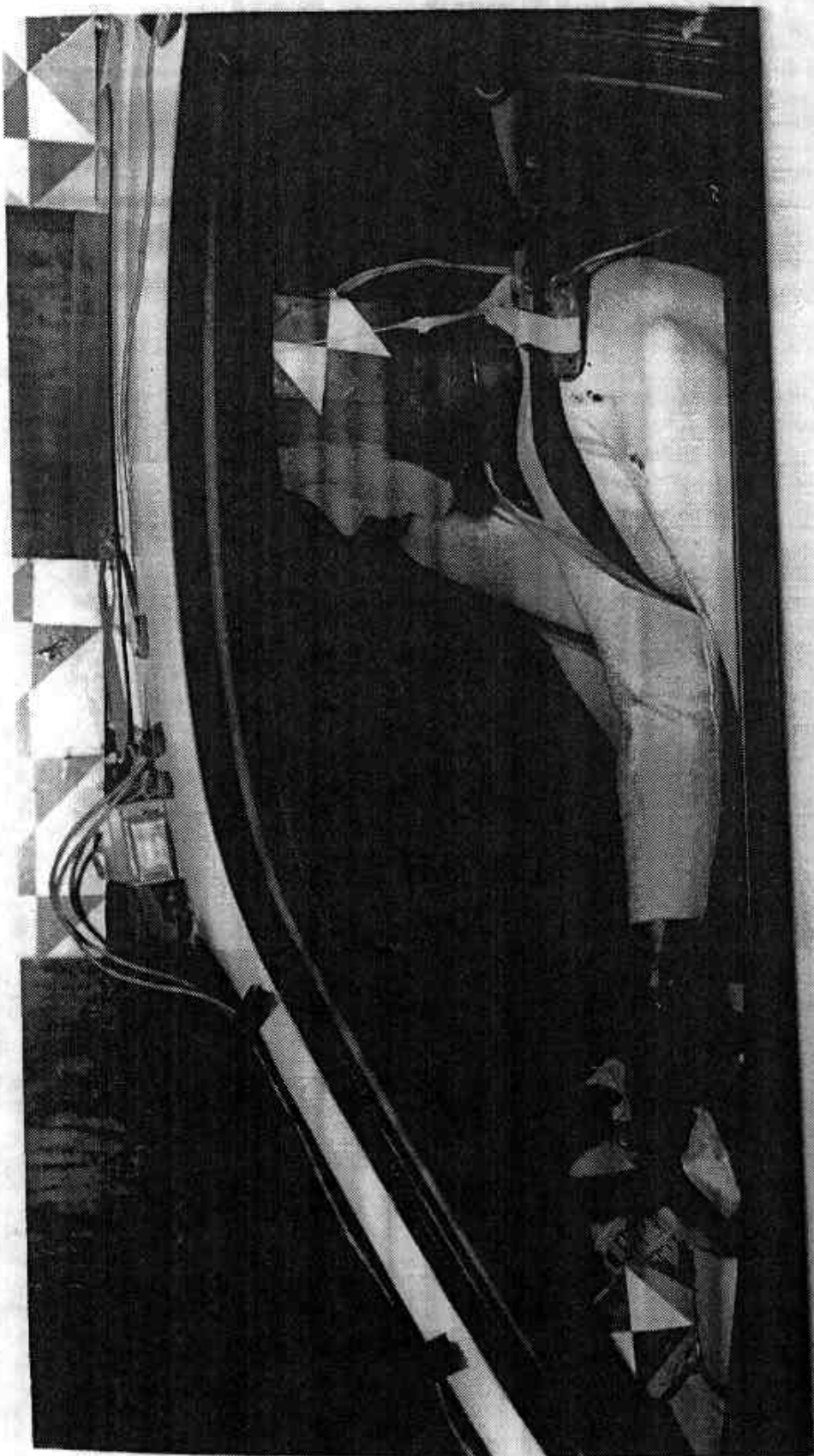
A-17

MSE-92-R92027-N05

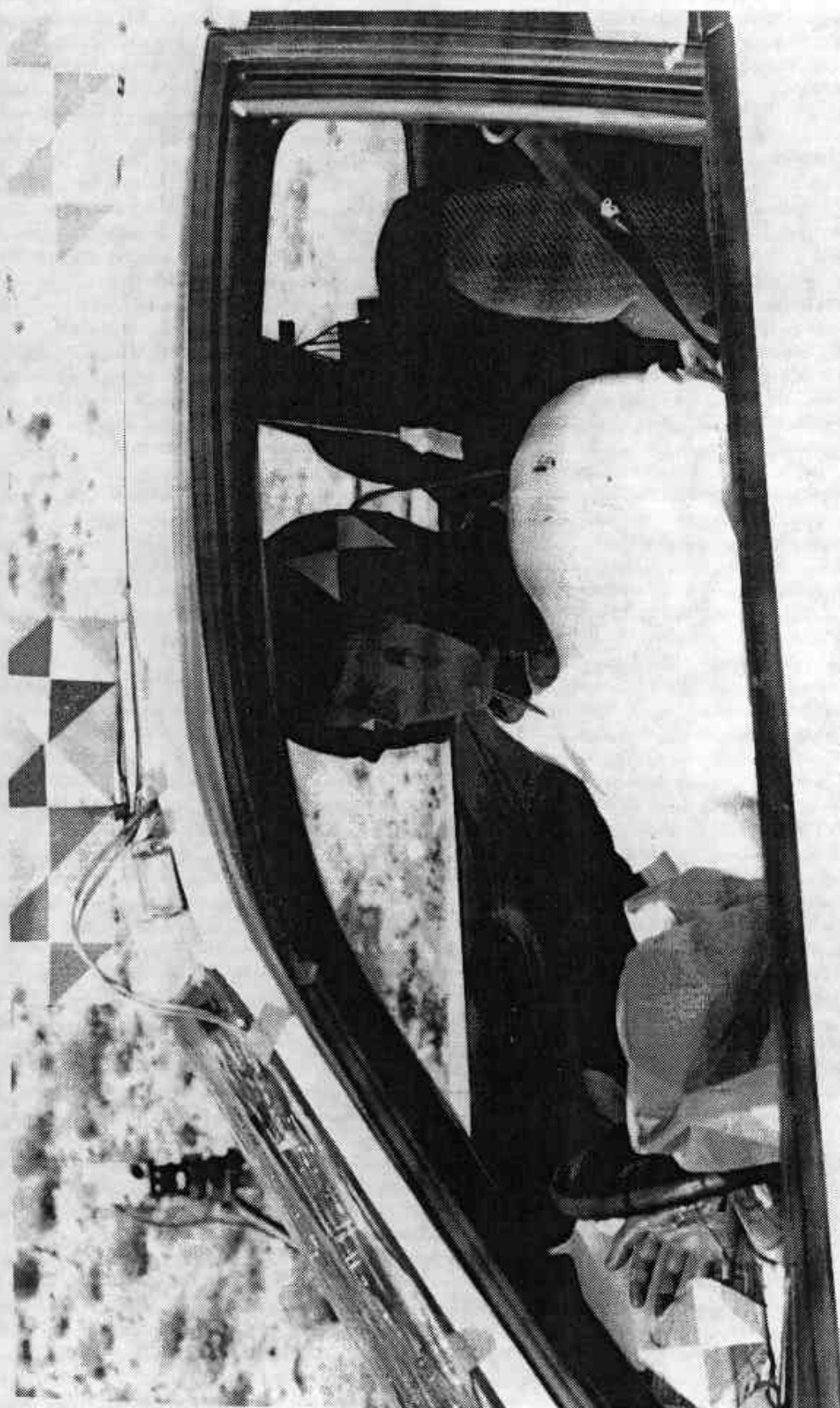


POSTTEST REAR UNDERBODY VIEW
A-18

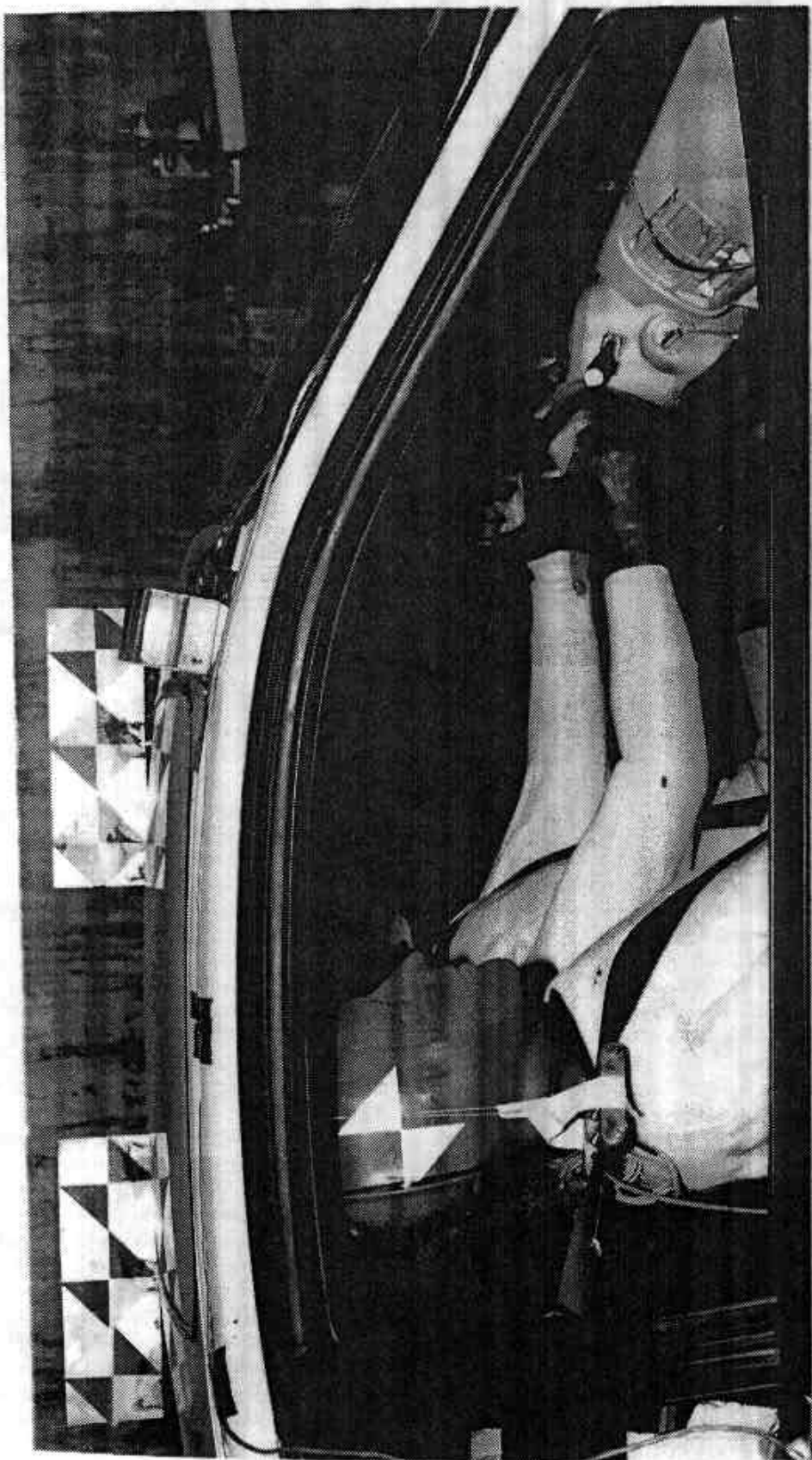
MSE-92-R92027-N05



PRETEST DRIVER DUMMY POSITION VIEW



POSTTEST DRIVER DUMMY POSITION VIEW



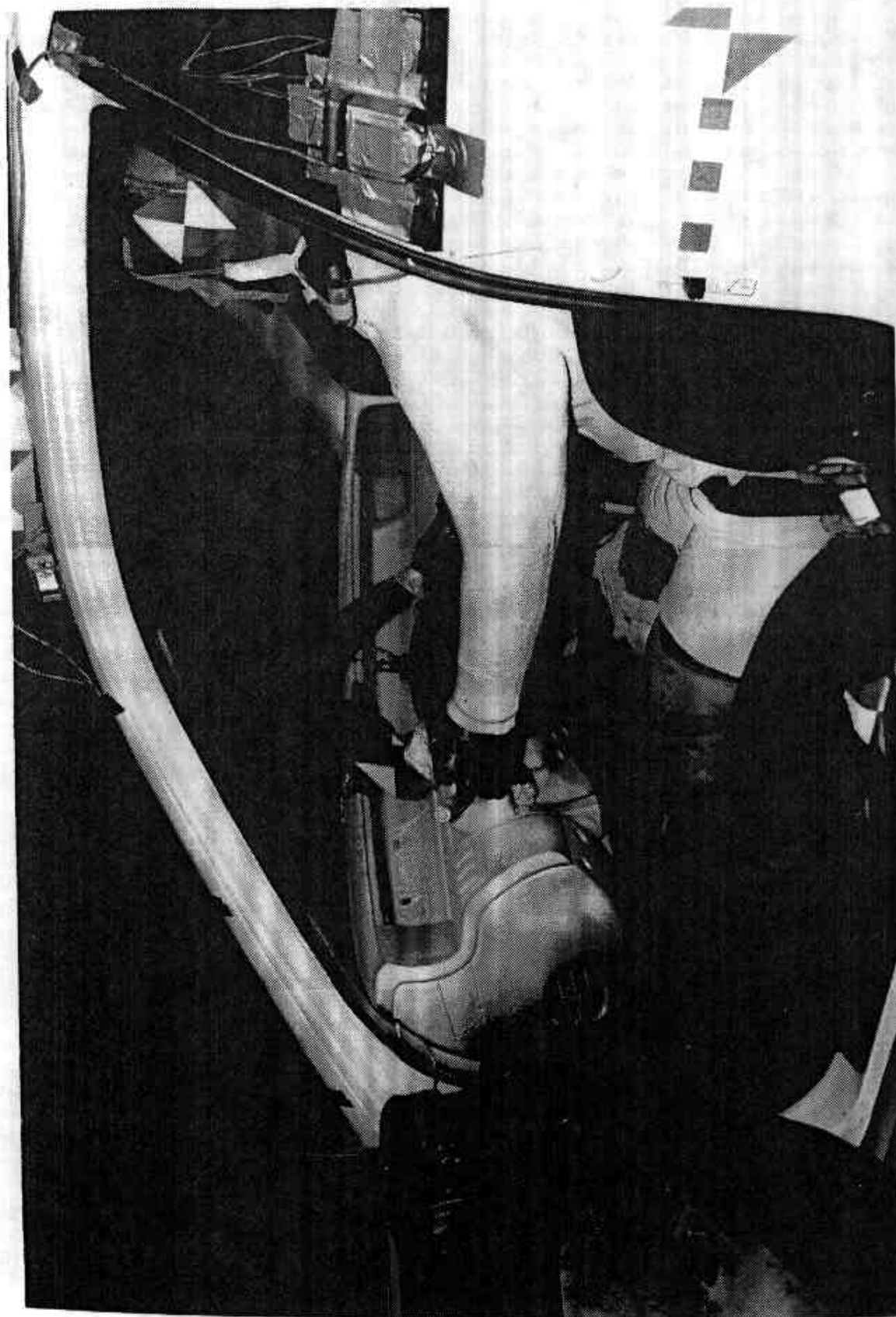
PRETEST PASSENGER DUMMY POSITION VIEW

A-21

MSE-92-R92027-N05



POSTTEST PASSENGER DUMMY POSITION VIEW



PRETEST DRIVER DUMMY & VEHICLE INTERIOR VIEW (Door Open)



POSTTEST DRIVER DUMMY & VEHICLE INTERIOR VIEW (Door Open)



PRETEST PASSENGER DUMMY & VEHICLE INTERIOR VIEW (Door Open)

A-25

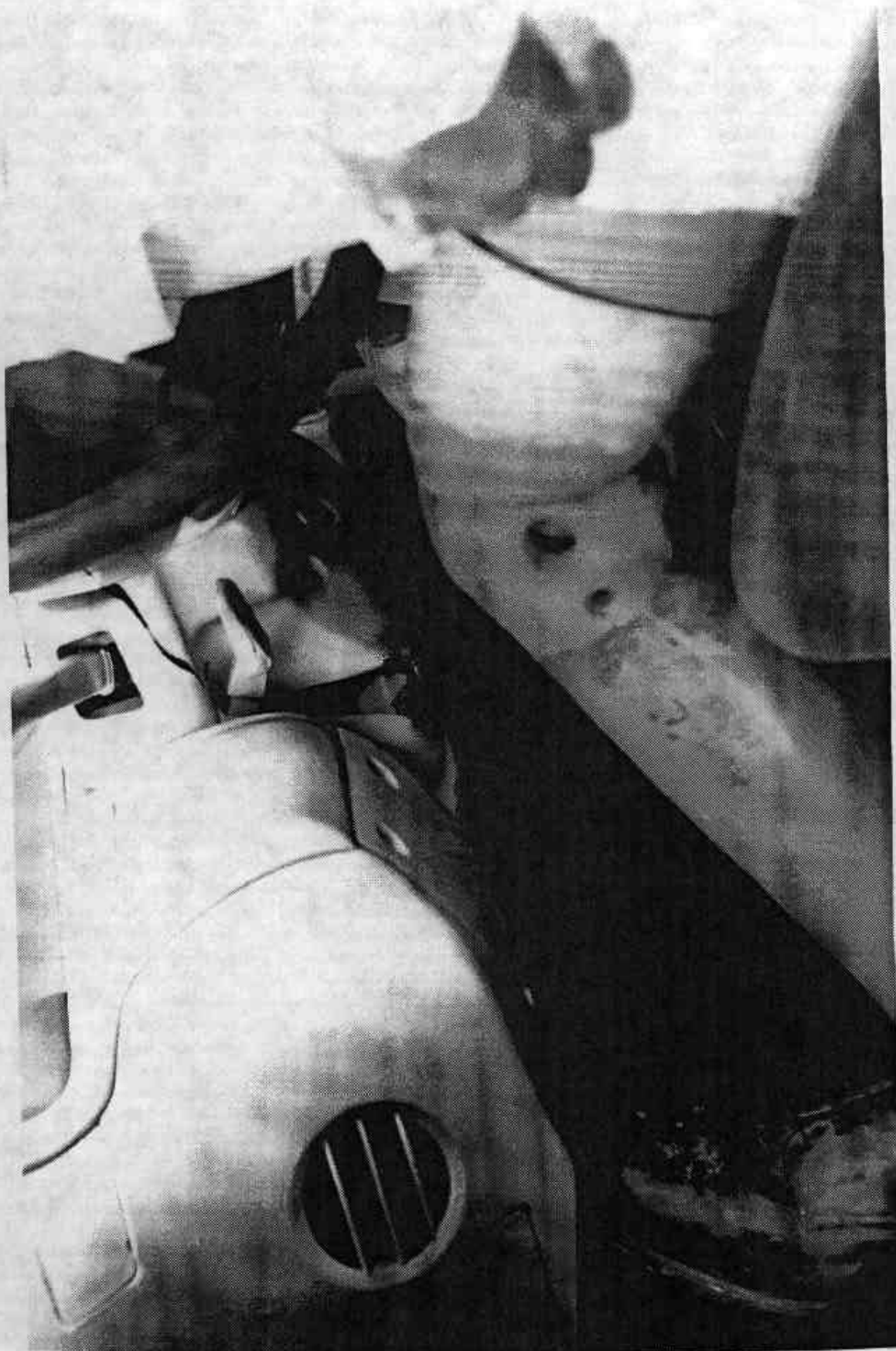
MSE-92-R92027-N05



POSTTEST PASSENGER DUMMY & VEHICLE INTERIOR VIEW (Door Open)



POSTTEST DRIVER DUMMY (ATD) STEERING COLUMN HUB/RIM CONTACT
A-27 MSE-92-R92027-N05



POSTTEST DRIVER DUMMY (ATD) KNEE CONTACT AREA



POSTTEST PASSENGER DUMMY (ATD) KNEE CONTACT AREA

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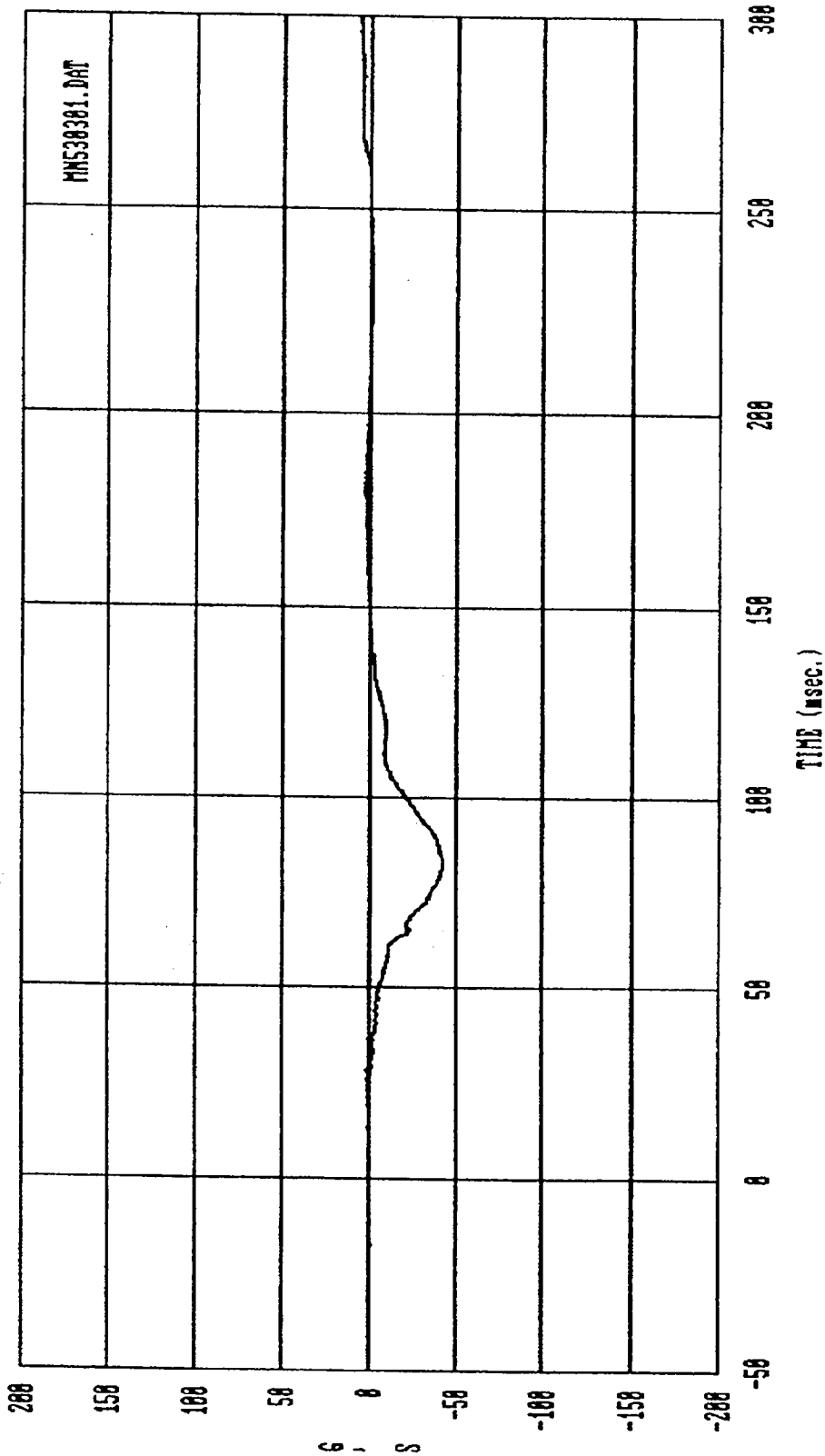
APPENDIX B-1

VEHICLE AND DUMMY (ATD) RESPONSE DATA

DATA FILTERING:

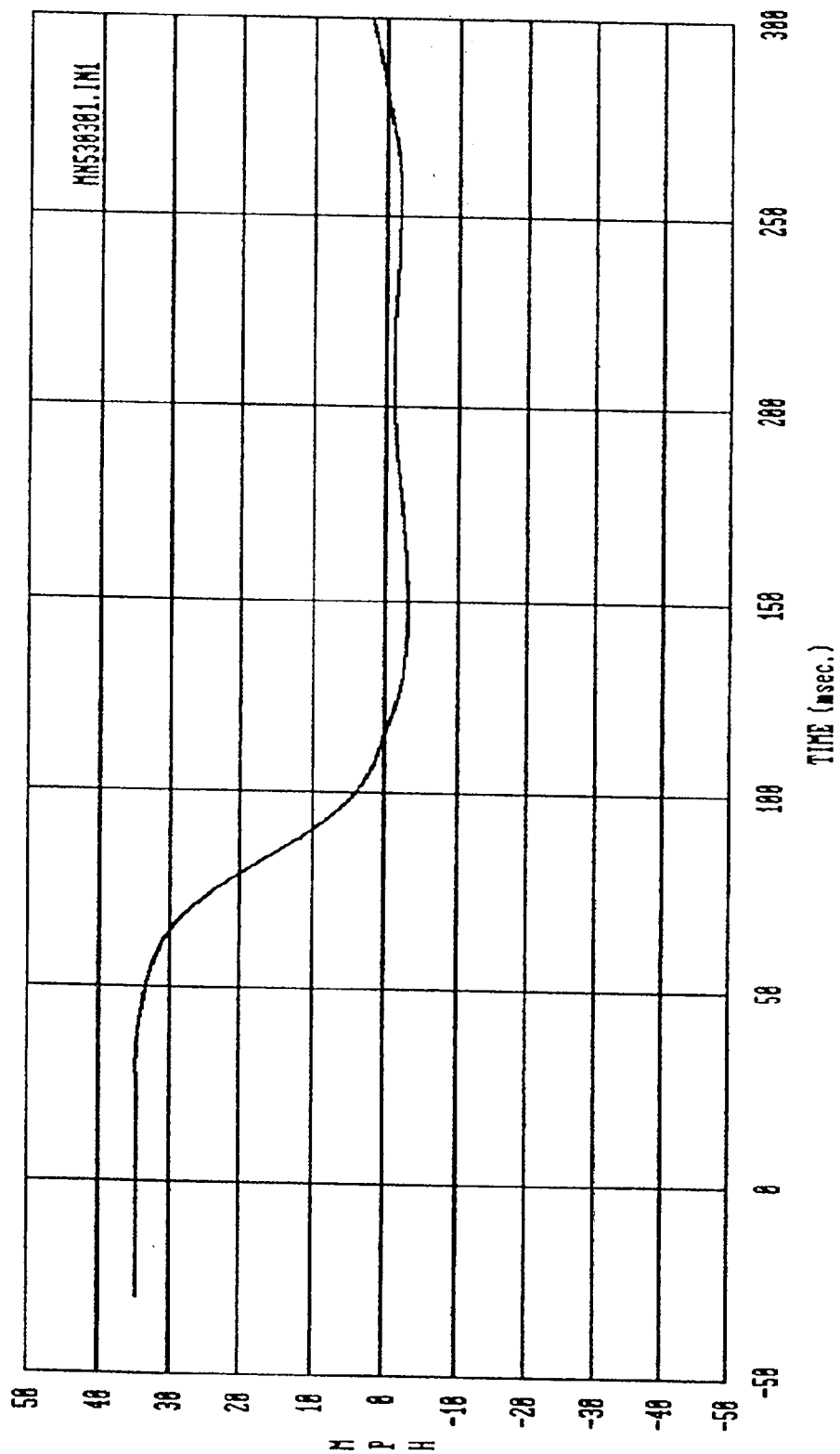
ATD Head Channels	- Class 1000
ATD Chest Channels	- Class 180
ATD Femur Channels	- Class 600
Vehicle Channels	- Class 60

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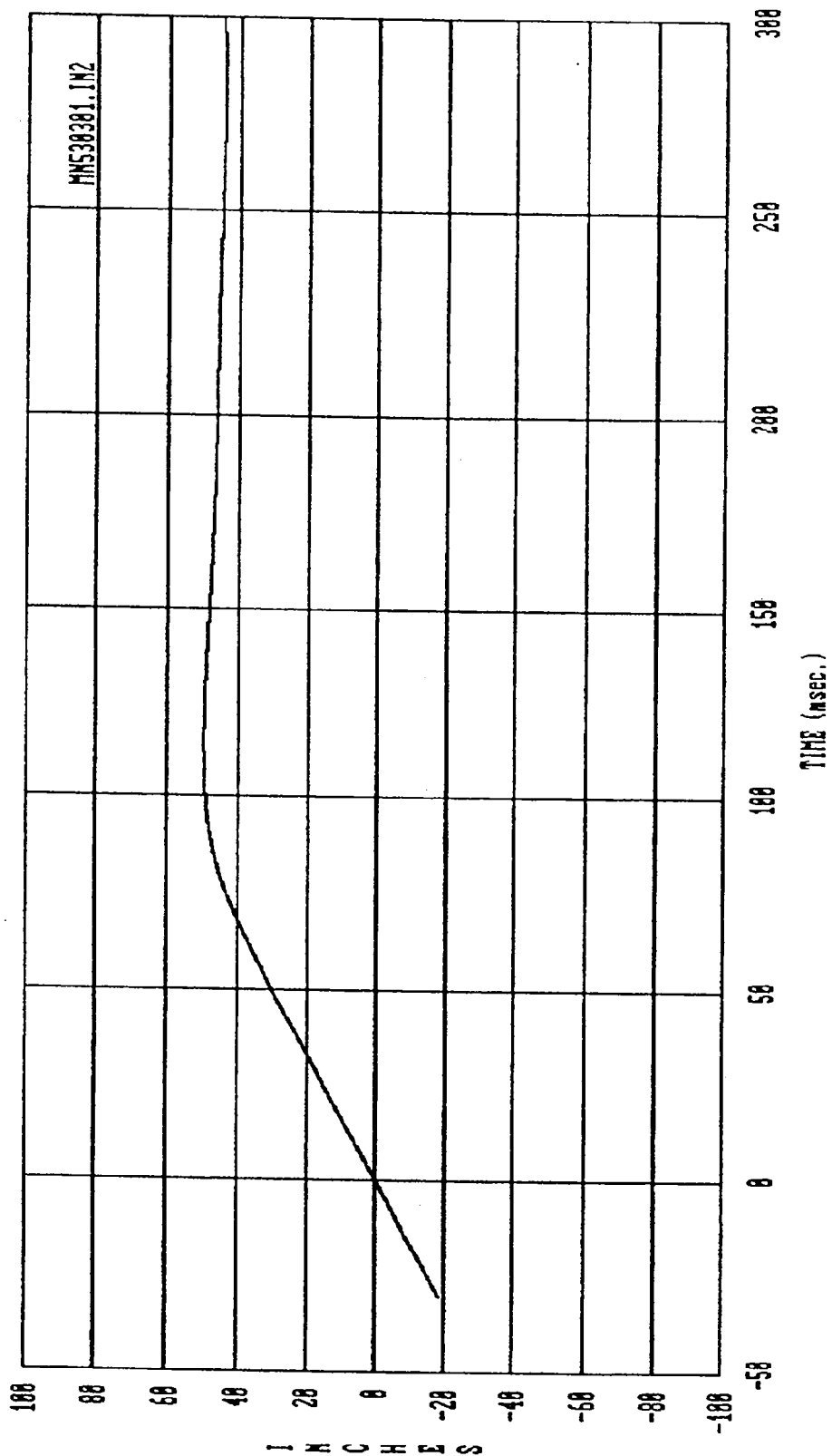


Curve: Driver head acceleration -- X axis Filter: SAE CLASS 1000 Max = 6.3098 Min = -42.252

HST Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

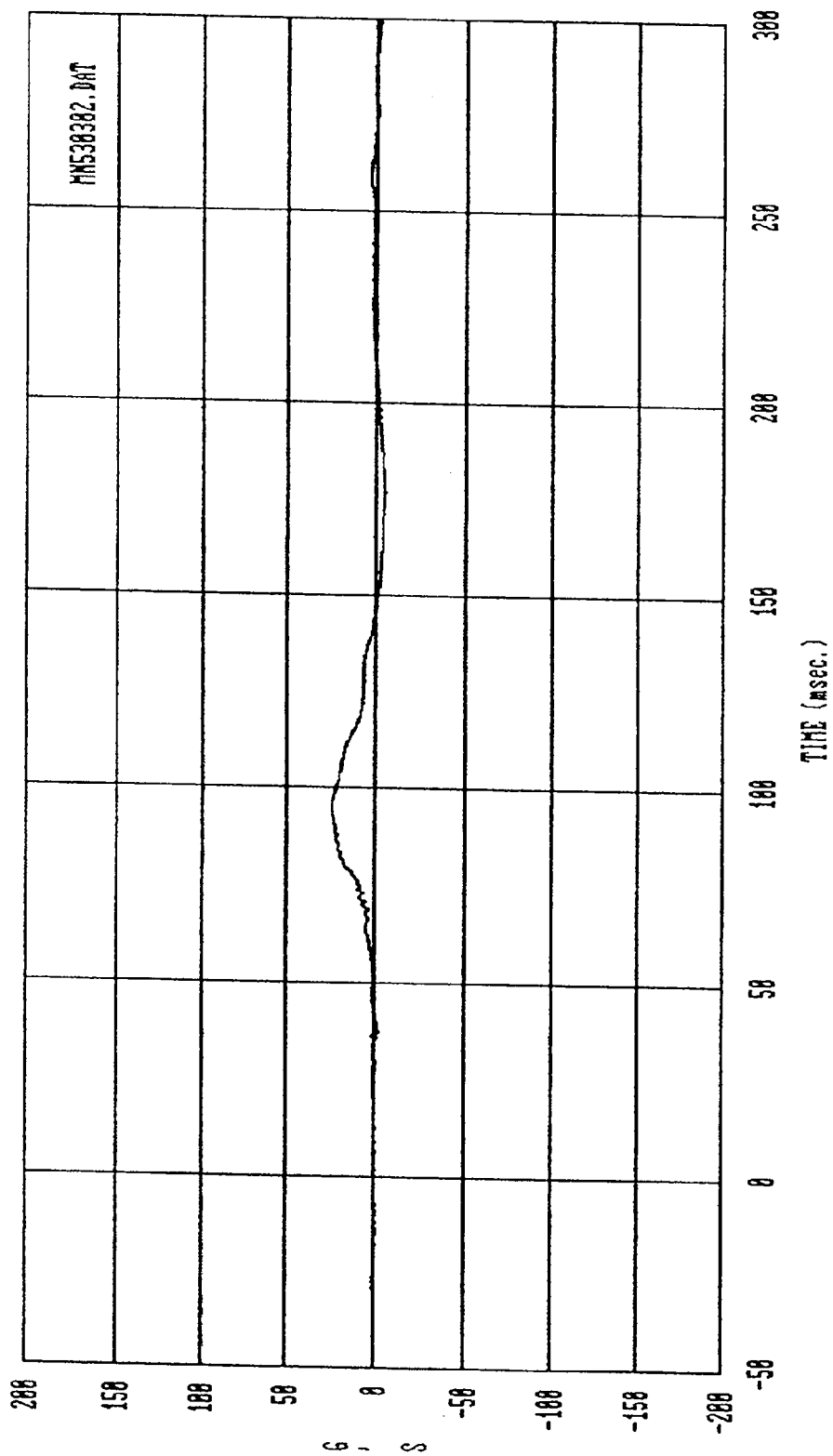


Curve: Driver head delta V -- X axis
 Filter: SAE CLASS 188 Max = 34.982 Min = -3.1817
 Date: 06/01/92 Program: 1992 NCAP - HS Vehicle: 1992 Honda Prelude
 MSE

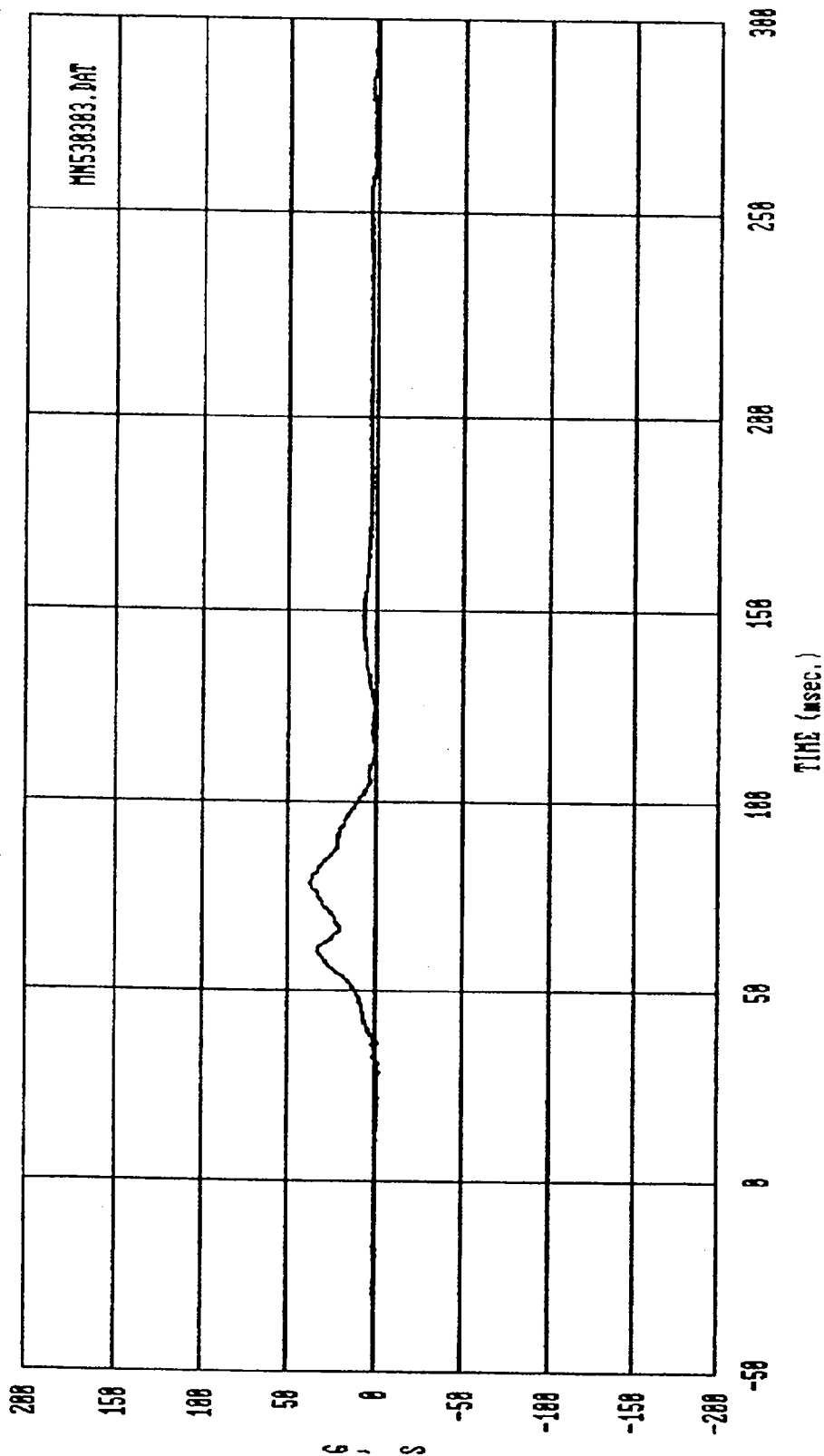


Curve: Driver head displacement -- X axis Filter: SAE CLASS 188 Max = 49.742 Min = 44.431

MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

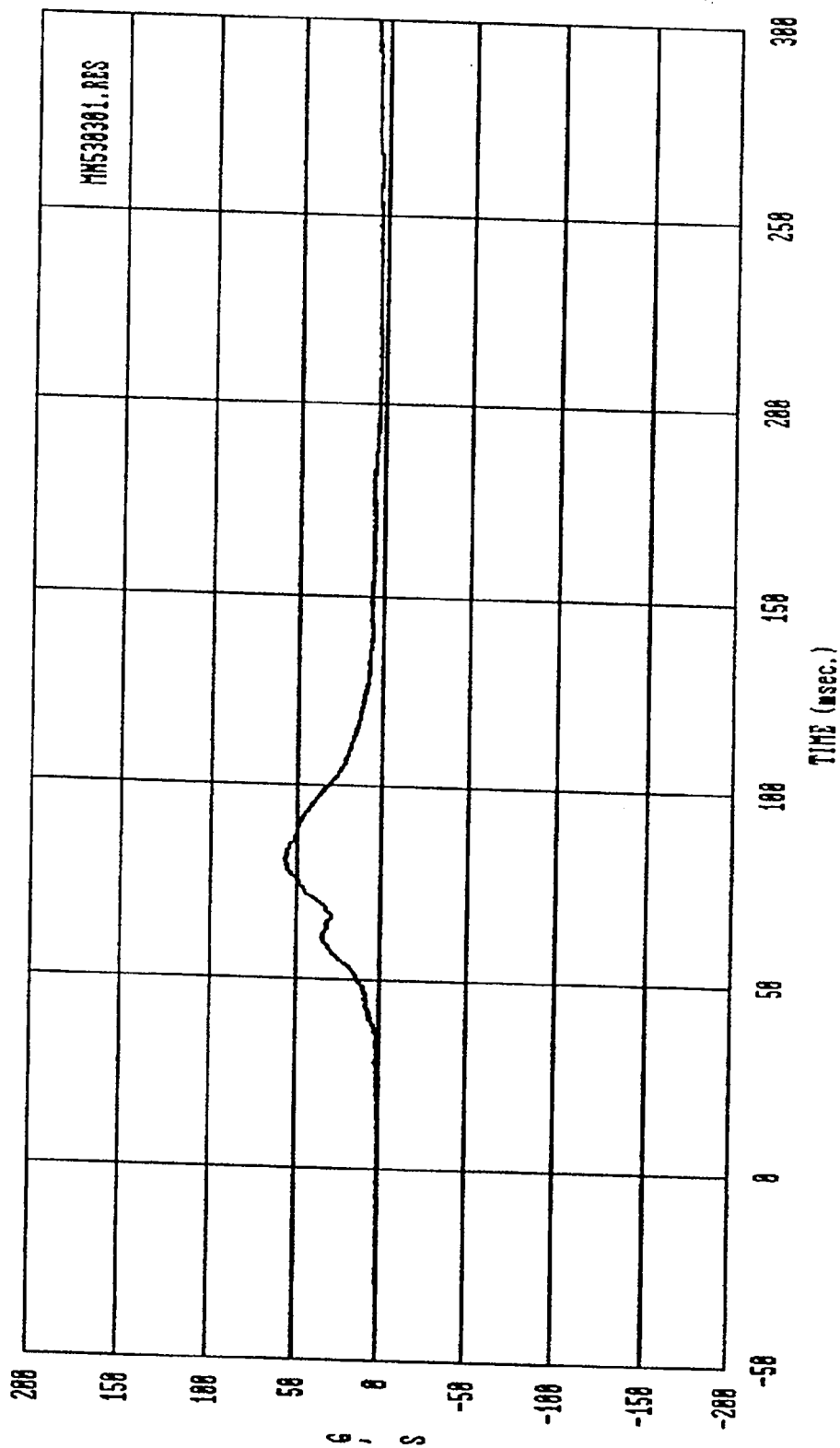


Curve: Driver head acceleration — Y axis Filter: SAE CLASS 1800 Max = 24.781 Min = -6.8763
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

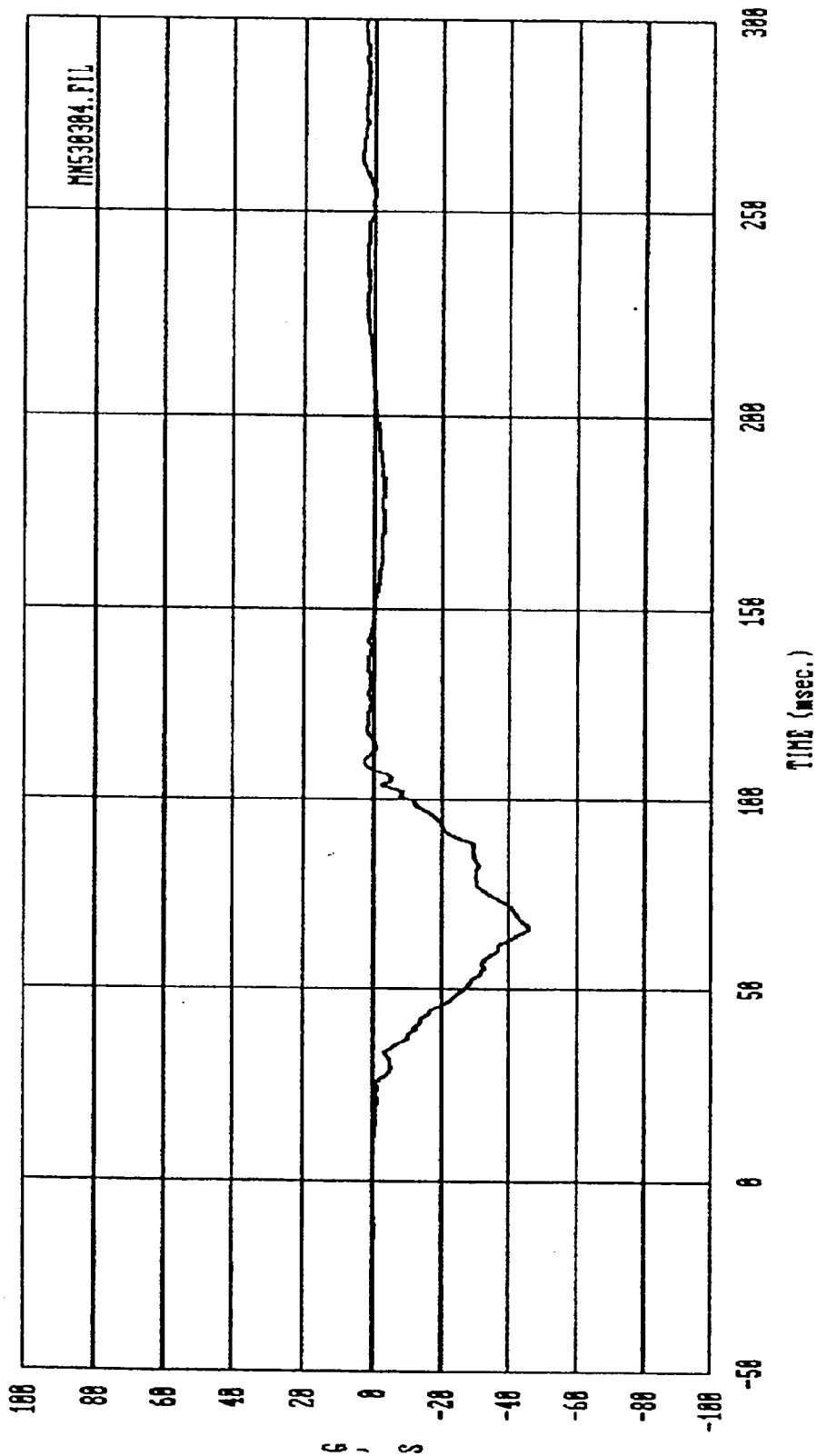


Curve: Driver head acceleration -- Z axis Filter: SAE CLASS 1000 Max = 38.845 Min = -2.4889

MSE Date: 86/01/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude

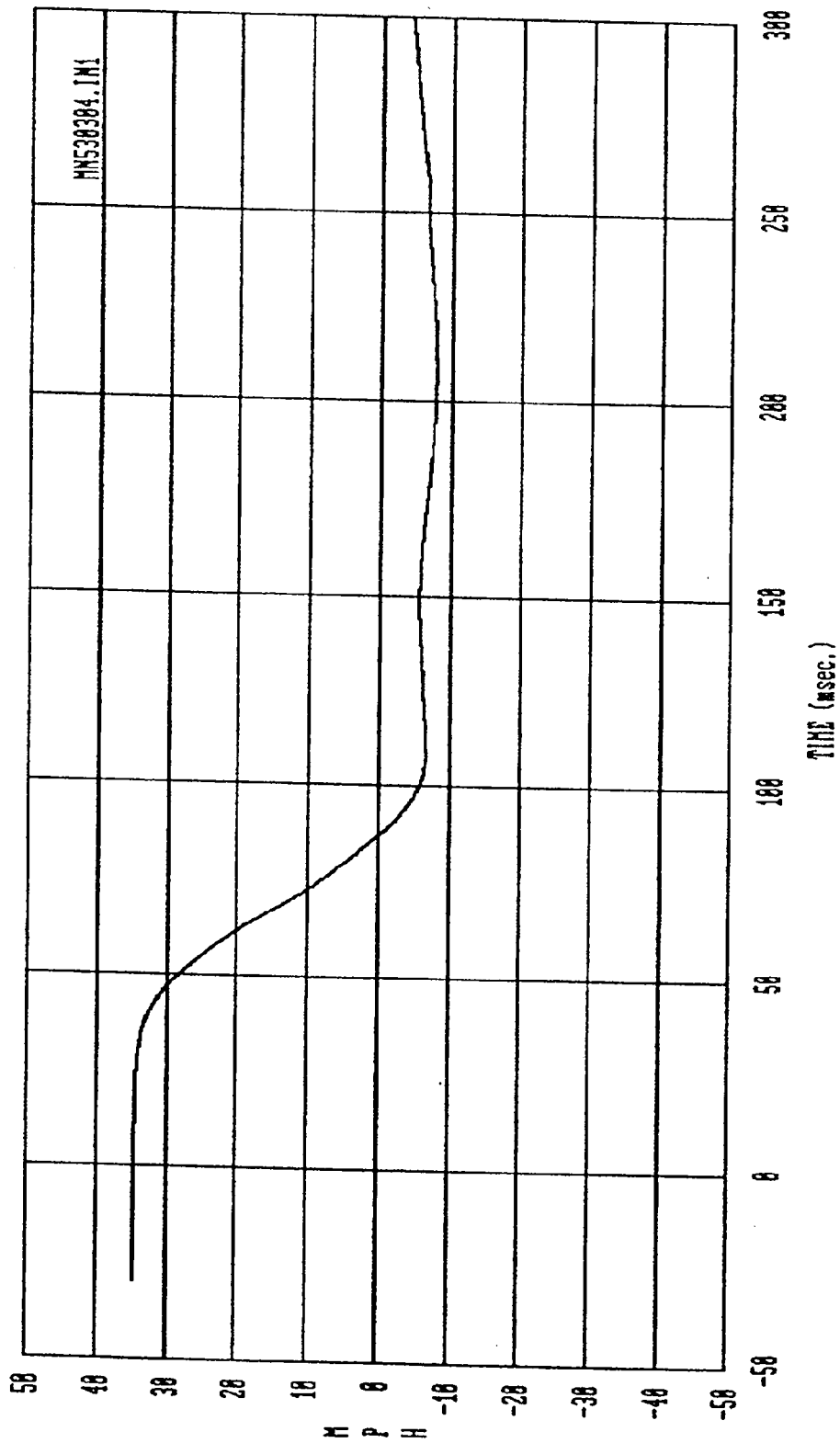


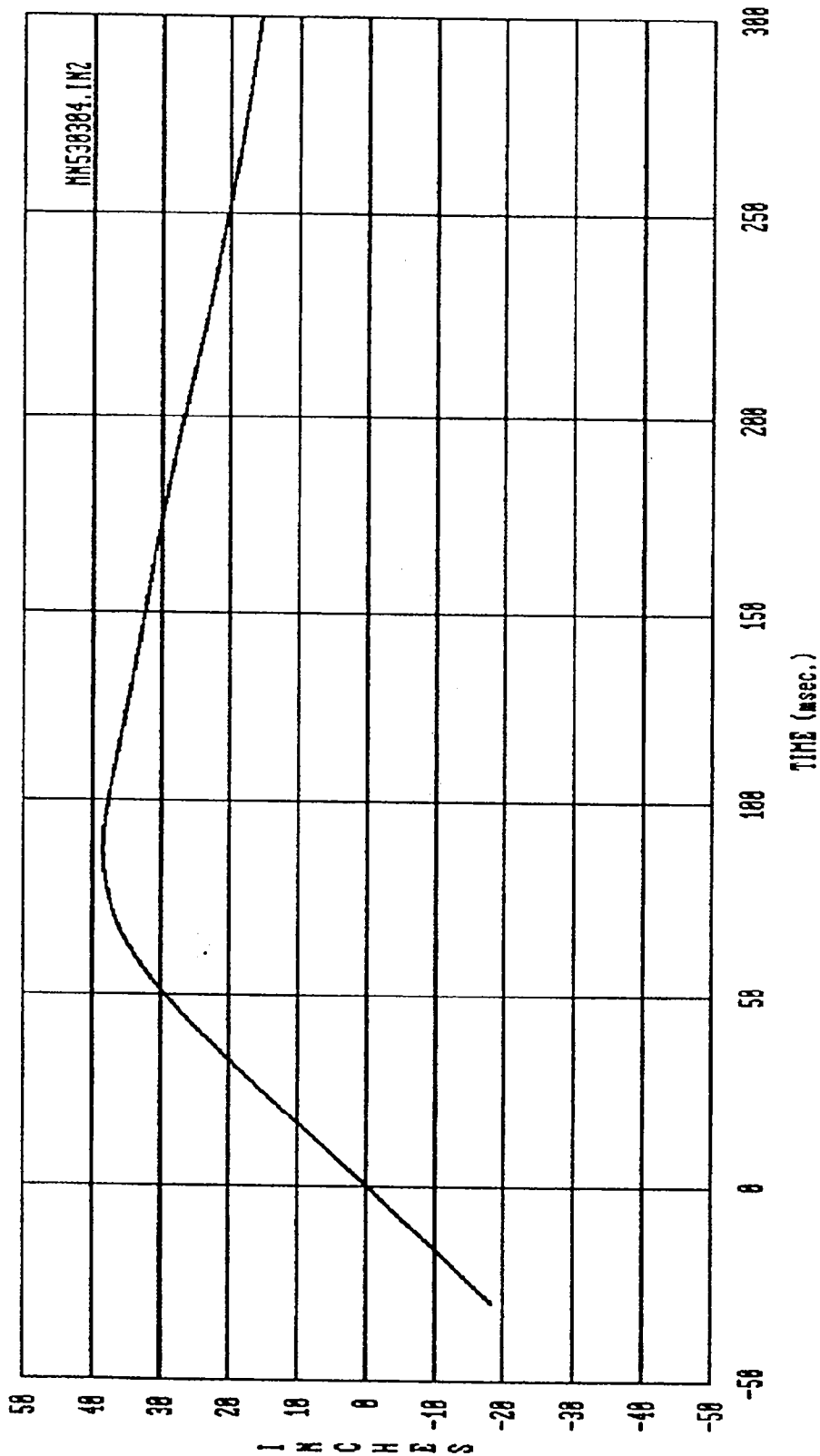
Curve: Driver head acceleration -- Resultant Filter: SAE CLASS 1000 Max = 58.266 Min = .000000
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



Curve: Driver chest acceleration -- X axis Filter: SAE CLASS 180 Max = 3.4645 Min = -45.930

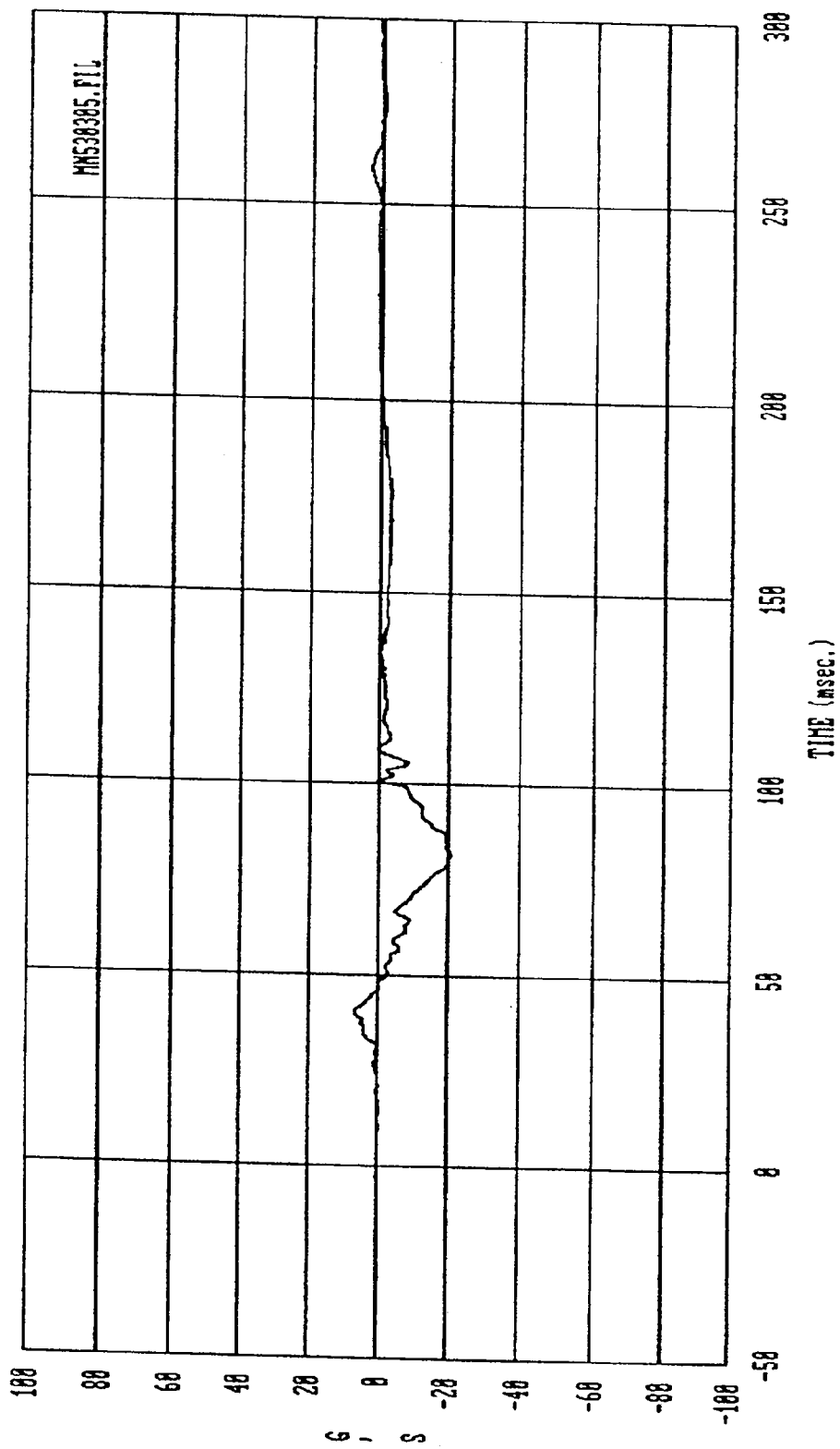
MSE Date: 86/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude





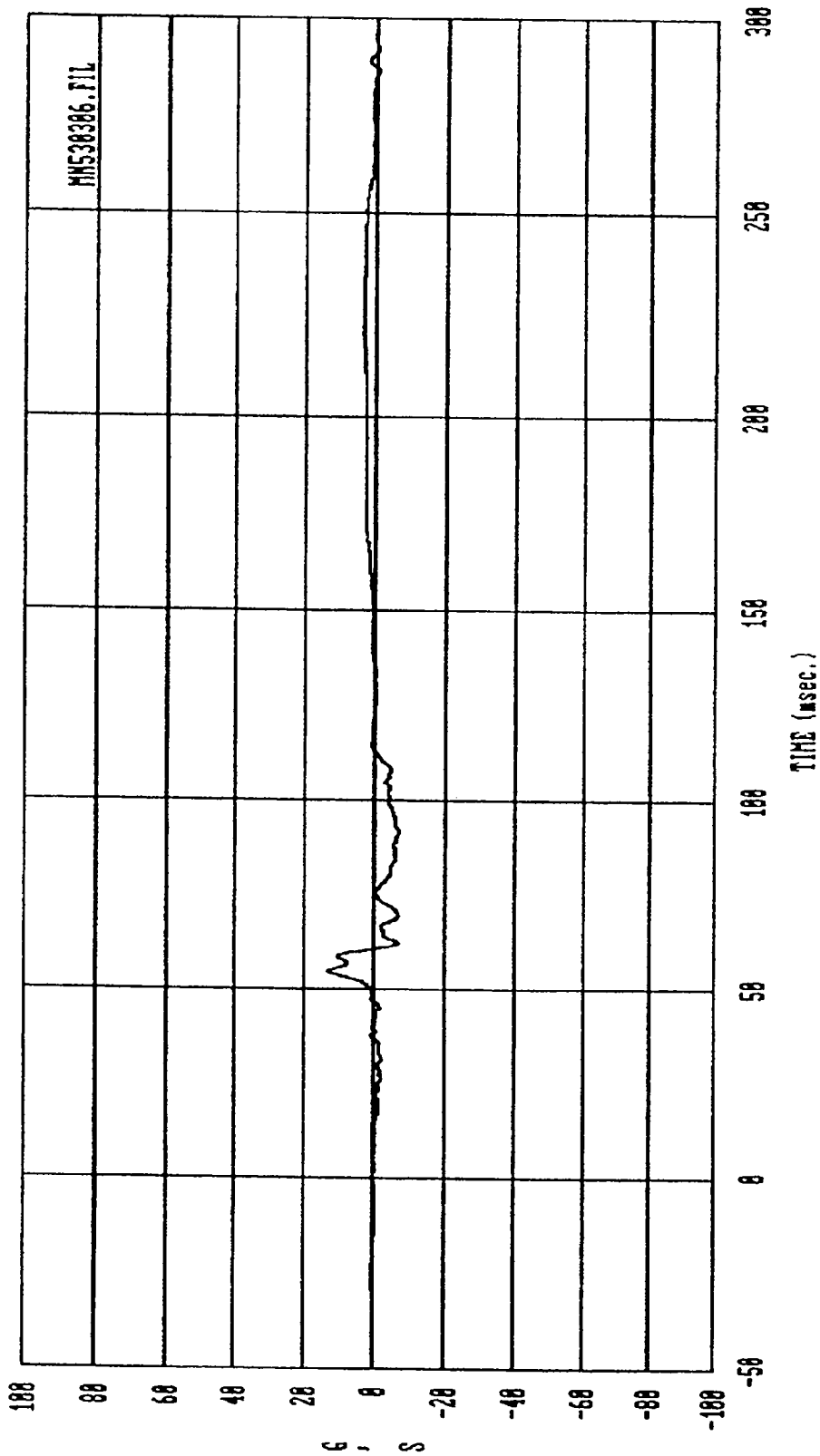
Curve: Driver chest displacement -- X axis Filter: SAE CLASS 180 Max = 38.614 Min = 15.540

MSE Date: 86/81/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



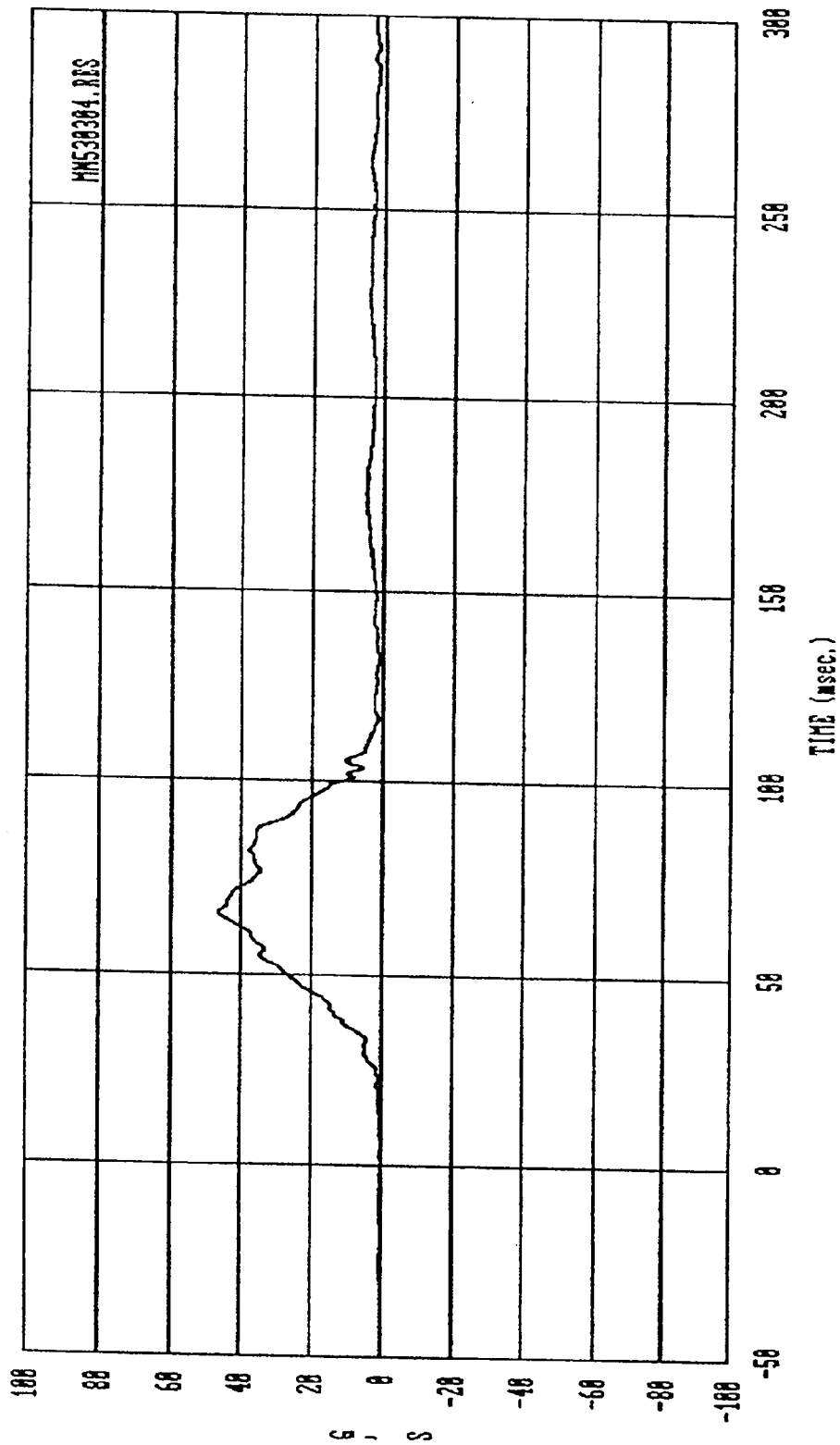
Curve: Driver chest acceleration -- Y axis Filter: SAE CLASS 100 Max = 6.4990 Min = -20.776

MSE Date: 06/01/92 Program: 1992 NCAP - I5 Vehicle: 1992 Honda Prelude

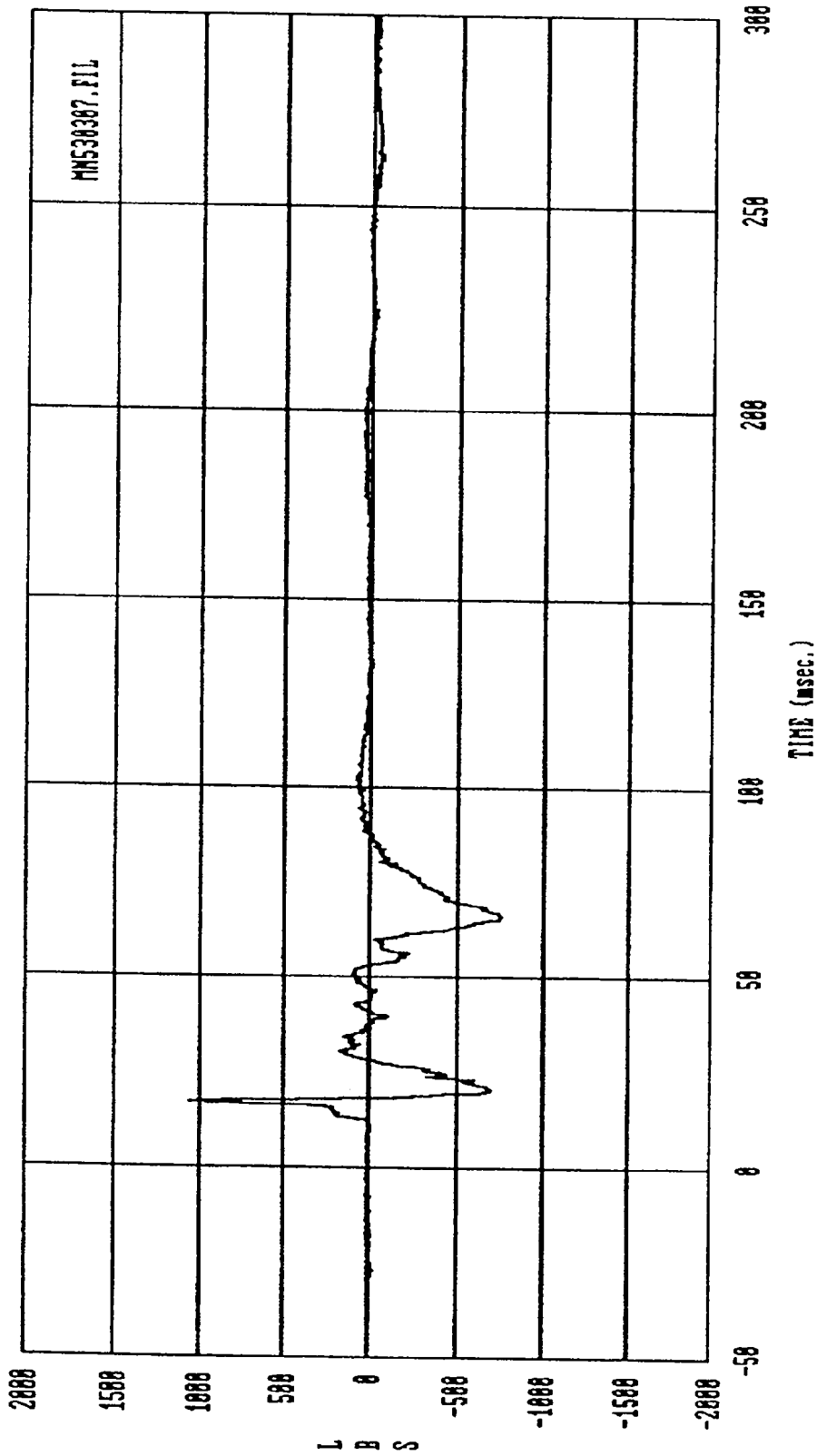


Curve: Driver chest acceleration -- Z axis Filter: SAE CLASS 100 Max = 13.037 Min = -7.0009

MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

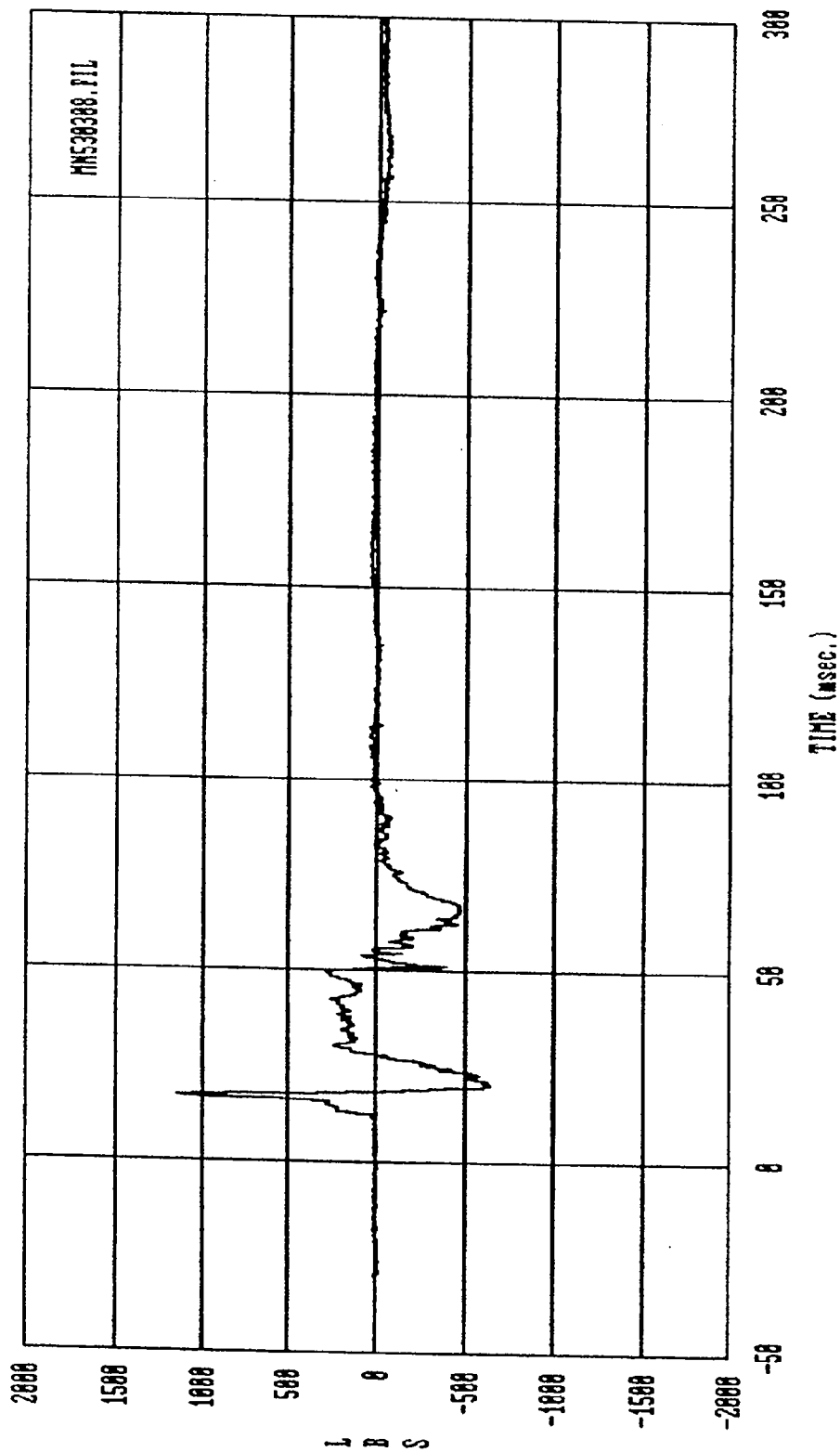


Curve: Driver chest acceleration -- Resultant Filter: SAE CLASS 180 Max = 46.461 Min = .11514
MSE Date: 86/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



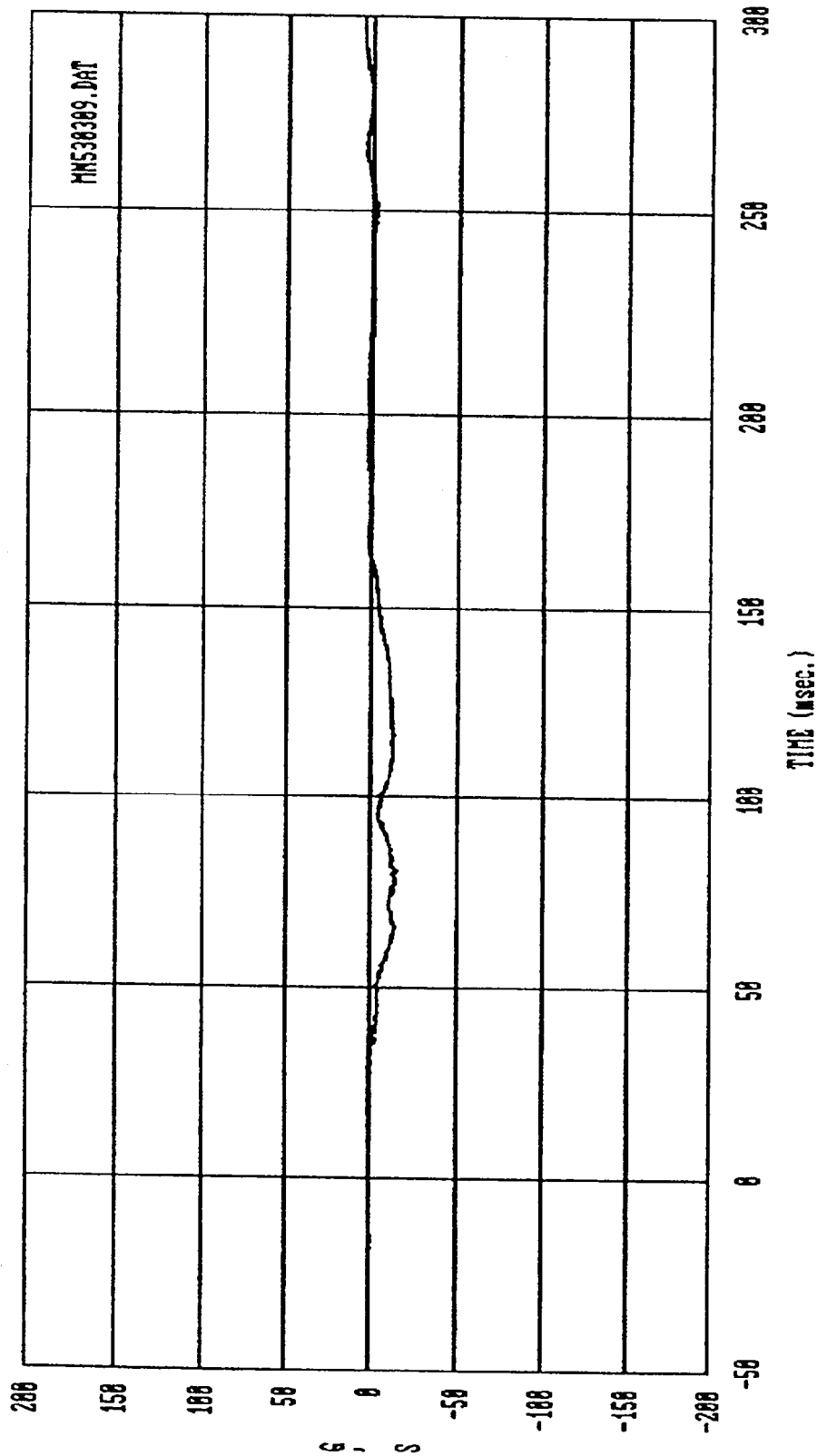
Curve: Driver femur load -- Left femur Filter: SAE CLASS 680 Max = 1865.7 Min = -748.81

MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

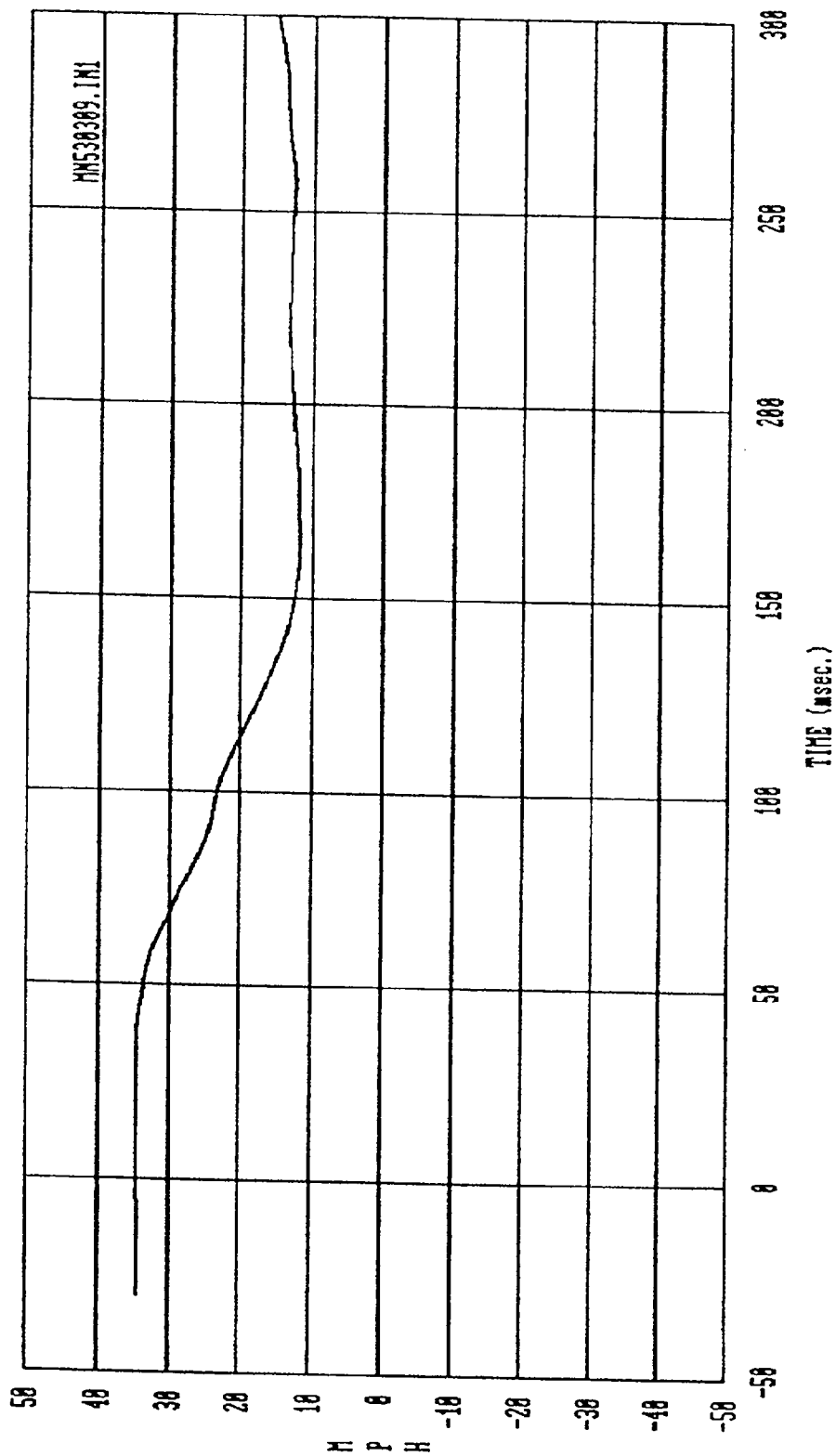


Curve: Driver femur load -- Right femur Filter: SAE CLASS 688 Max = 1144.9 Min = -640.53

MSE Date: 86/01/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude

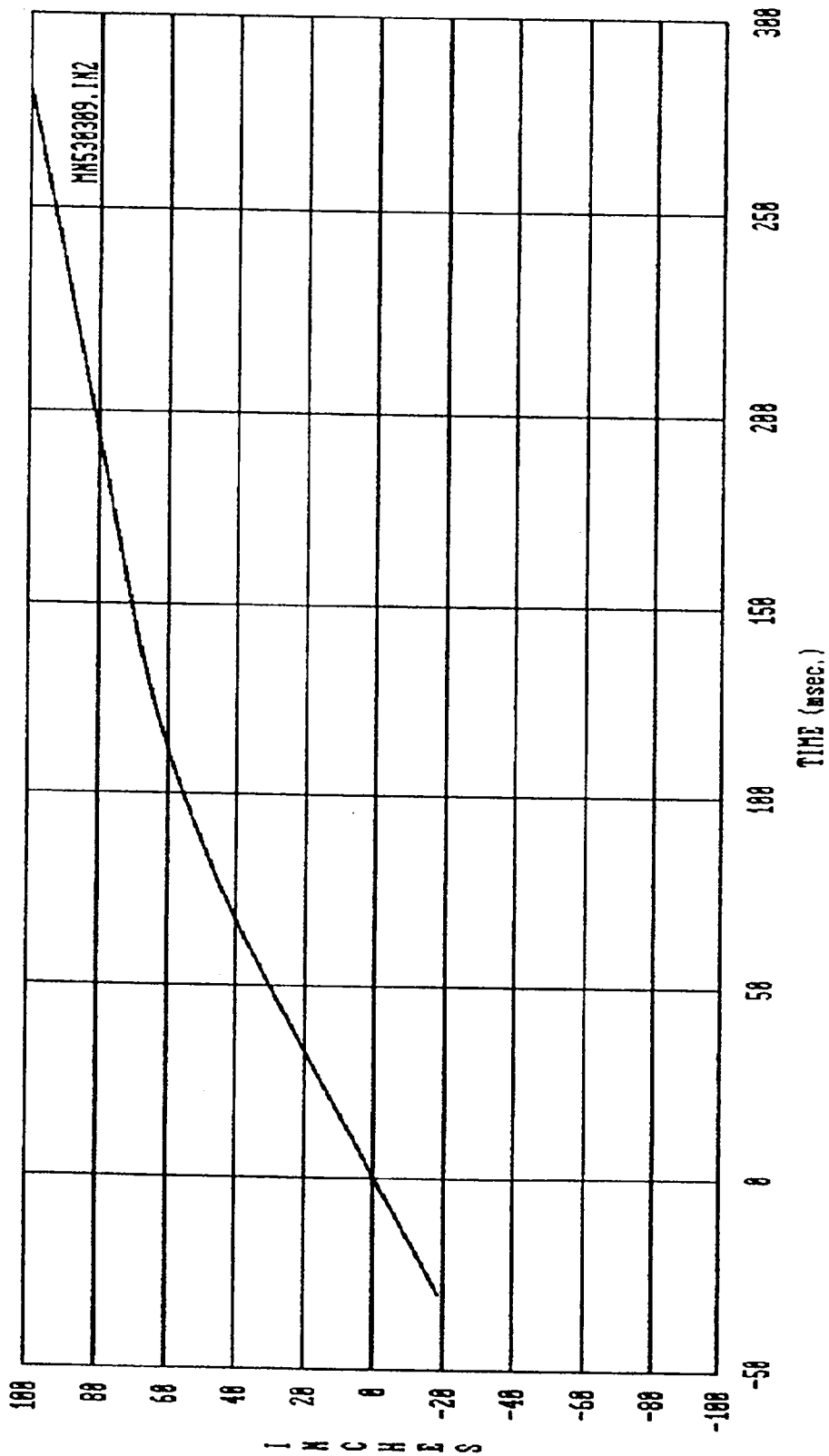


Curve: Passenger head acceleration -- X axis Filter: SAE CLASS 1000 Max = 5.3134 Min = -14.828
MSE Date: 86/01/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude



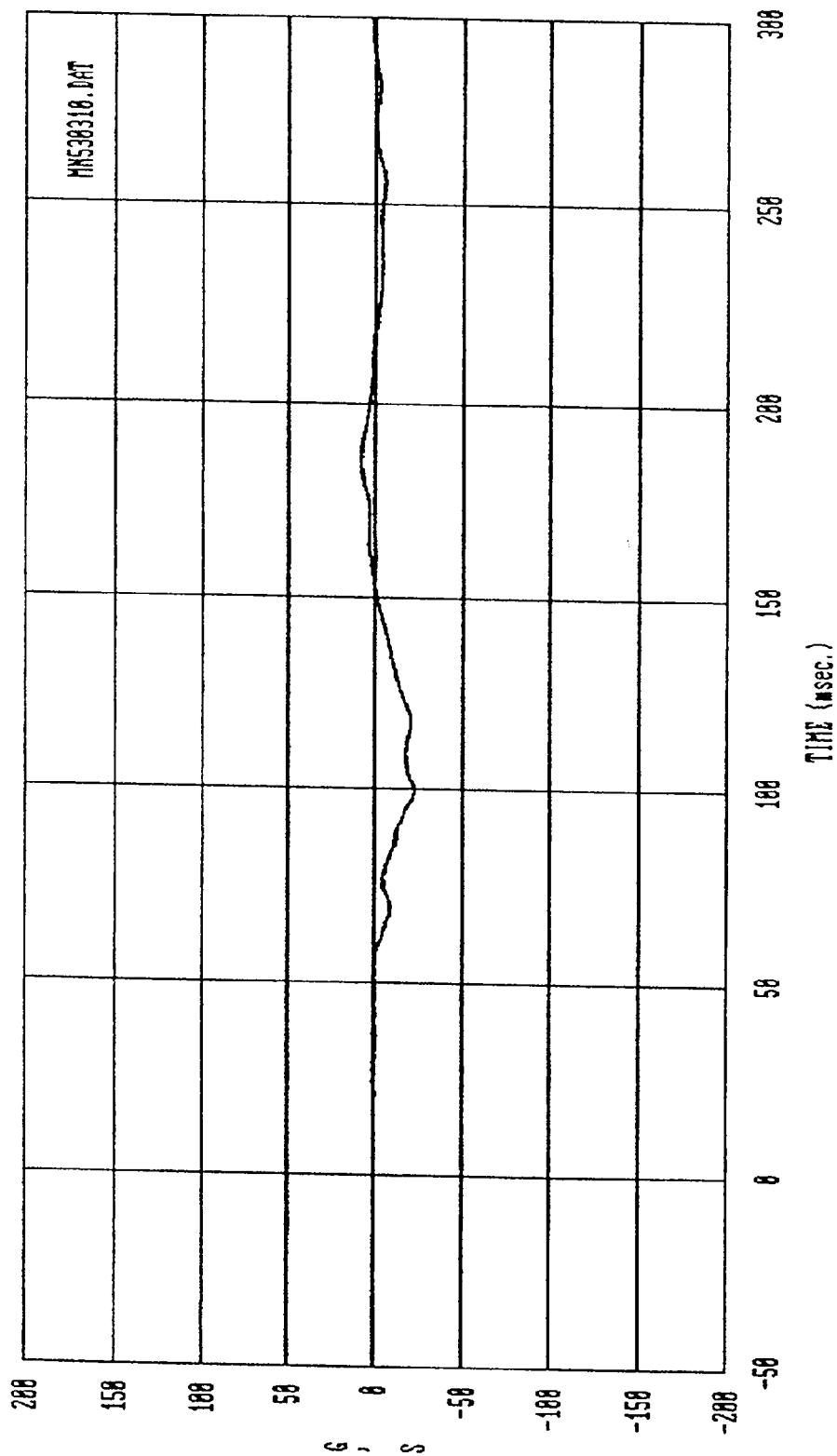
Curve: Passenger head delta V — X axis Filter: SAE CLASS 188 Max = 34.849 Min = 11.788

MSE Date: 86/01/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude



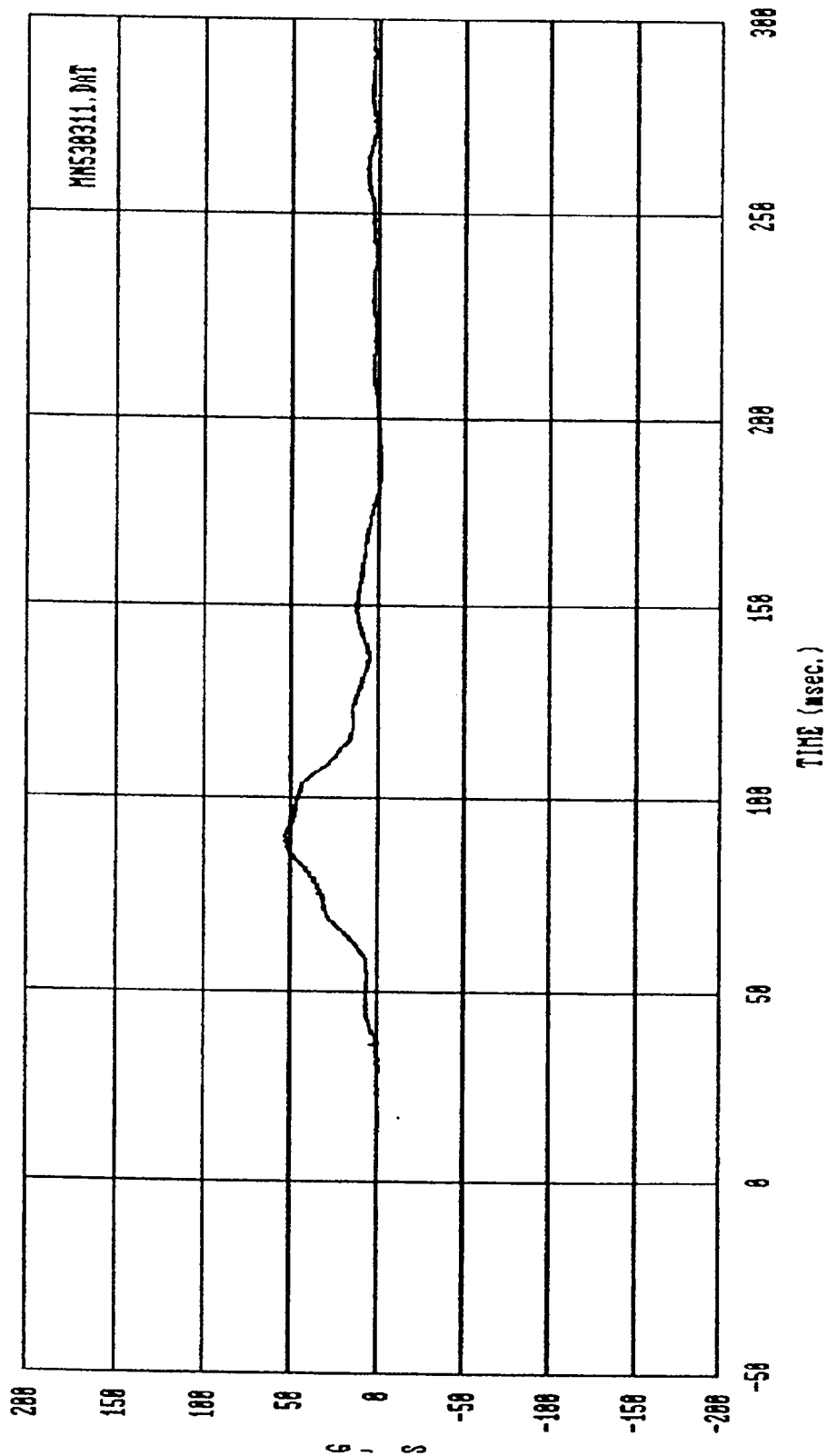
Curve: Passenger head displacement -- X axis Filter: SAE CLASS 180 Max = 105.02 Min = .100000E+11

MSE Date: 06/01/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude



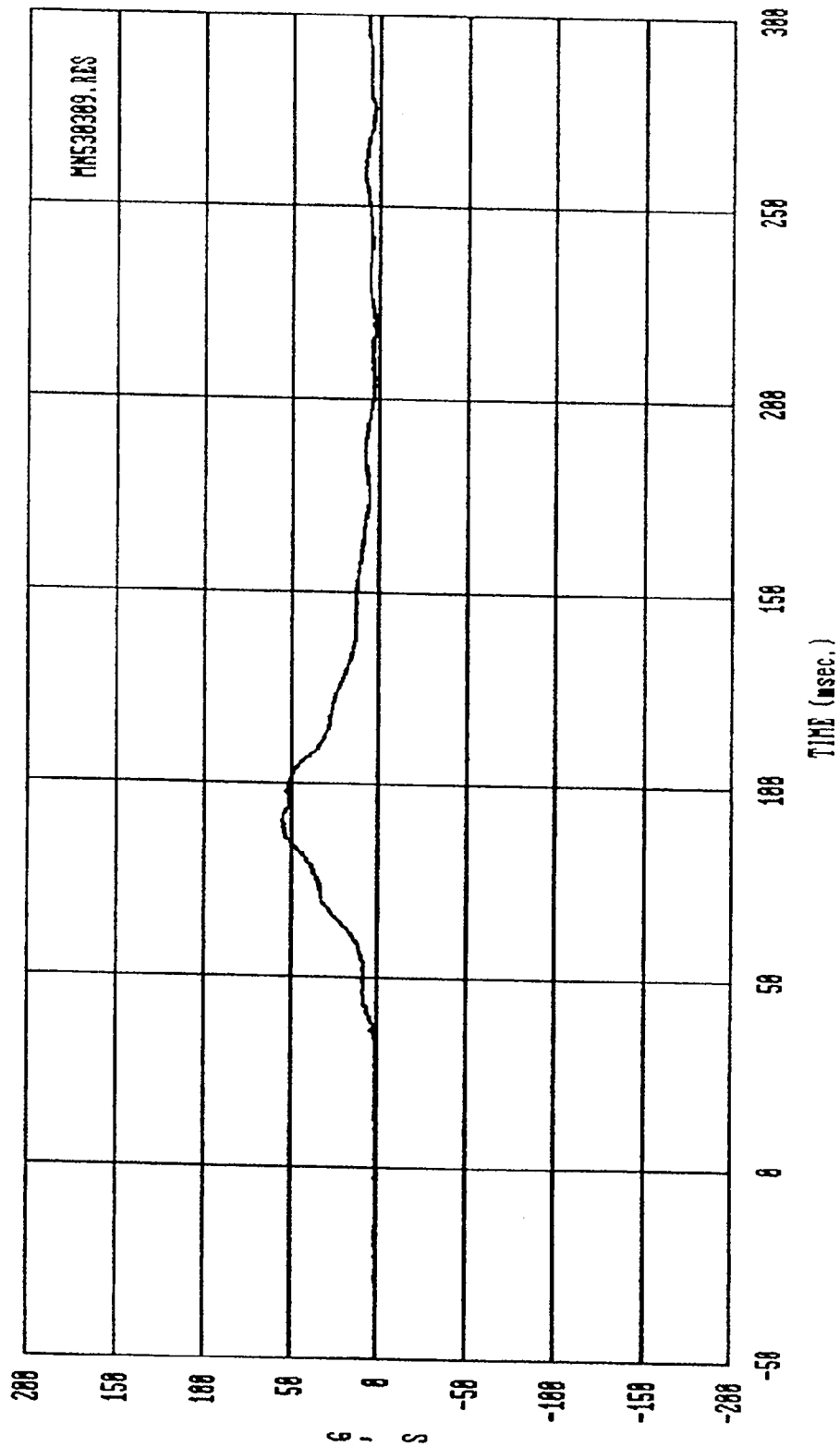
Curve: Passenger head acceleration -- Y axis Filter: SAE CLASS 1000 Max = 8.3319 Min = -23.866

HSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



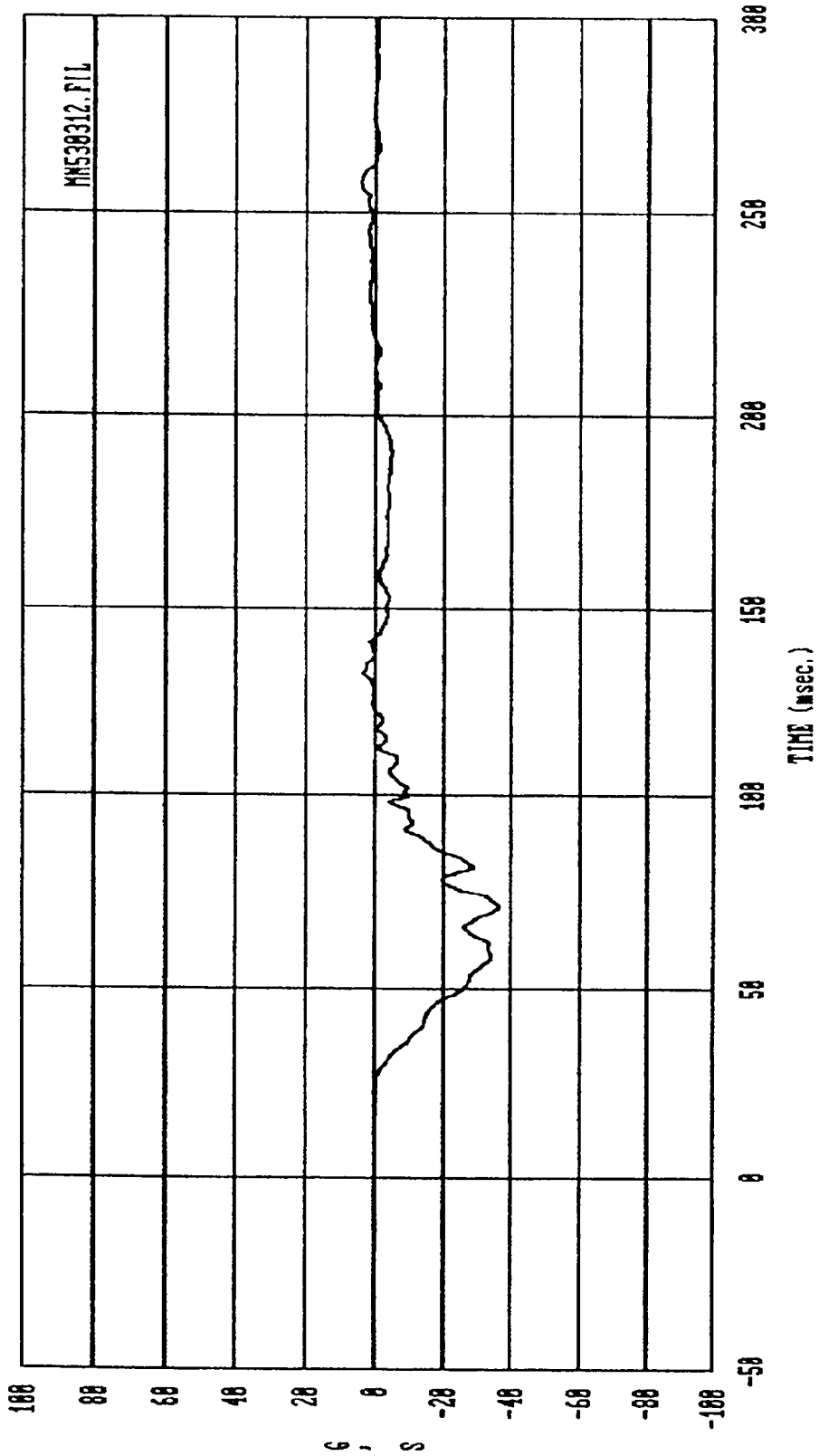
Curve: Passenger head acceleration — Z axis Filter: SAE CLASS 1000 Max = 53.711 Min = -1.8691

MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



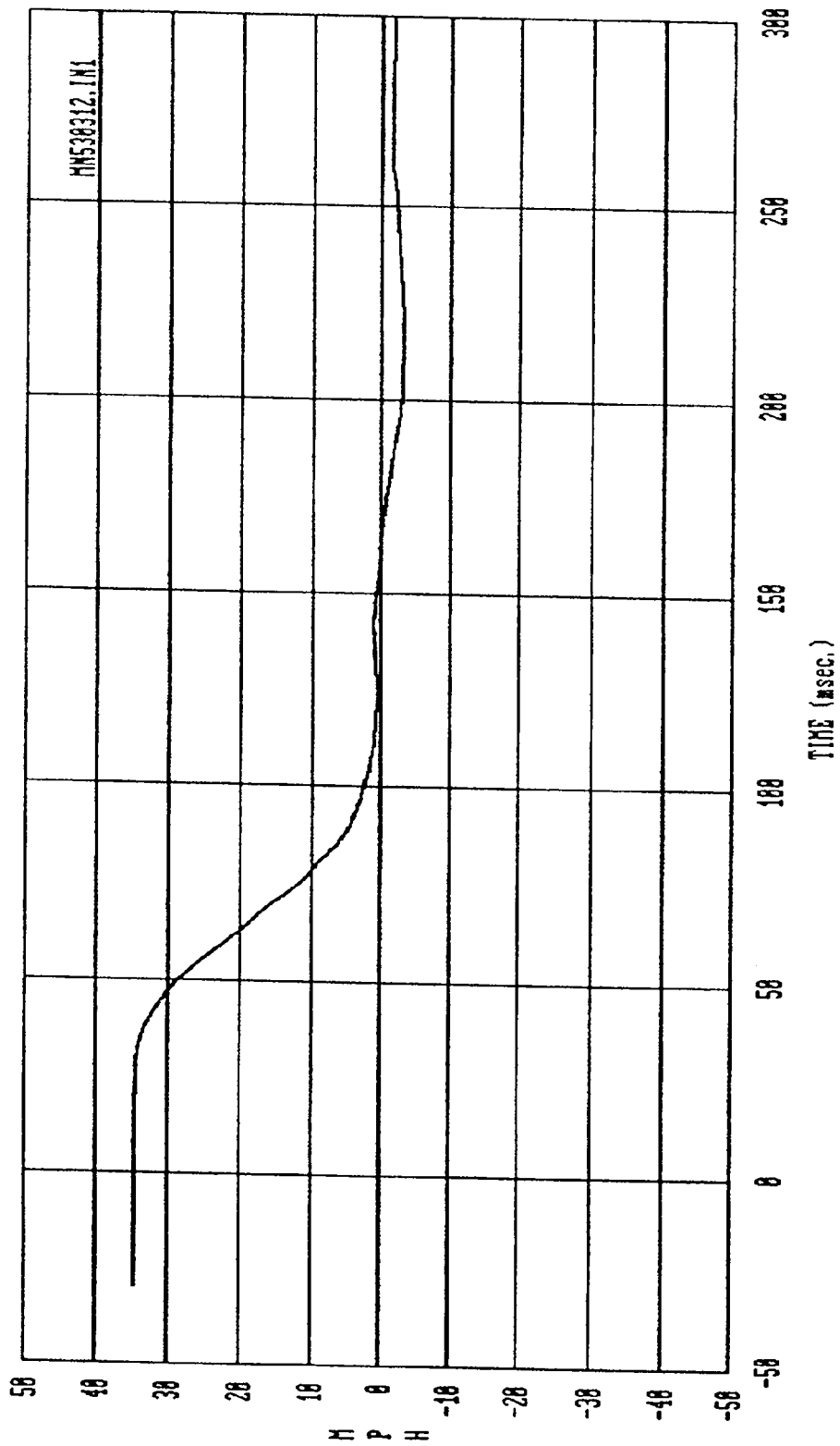
Curve: Passenger head acceleration -- Resultant Filter: SAE CLASS 1800 Max = 55.893 Min = .877842-01

MSE Date: 06/01/92 Program: 1992 NCAP - N5 Vehicle: 1992 Honda Prelude



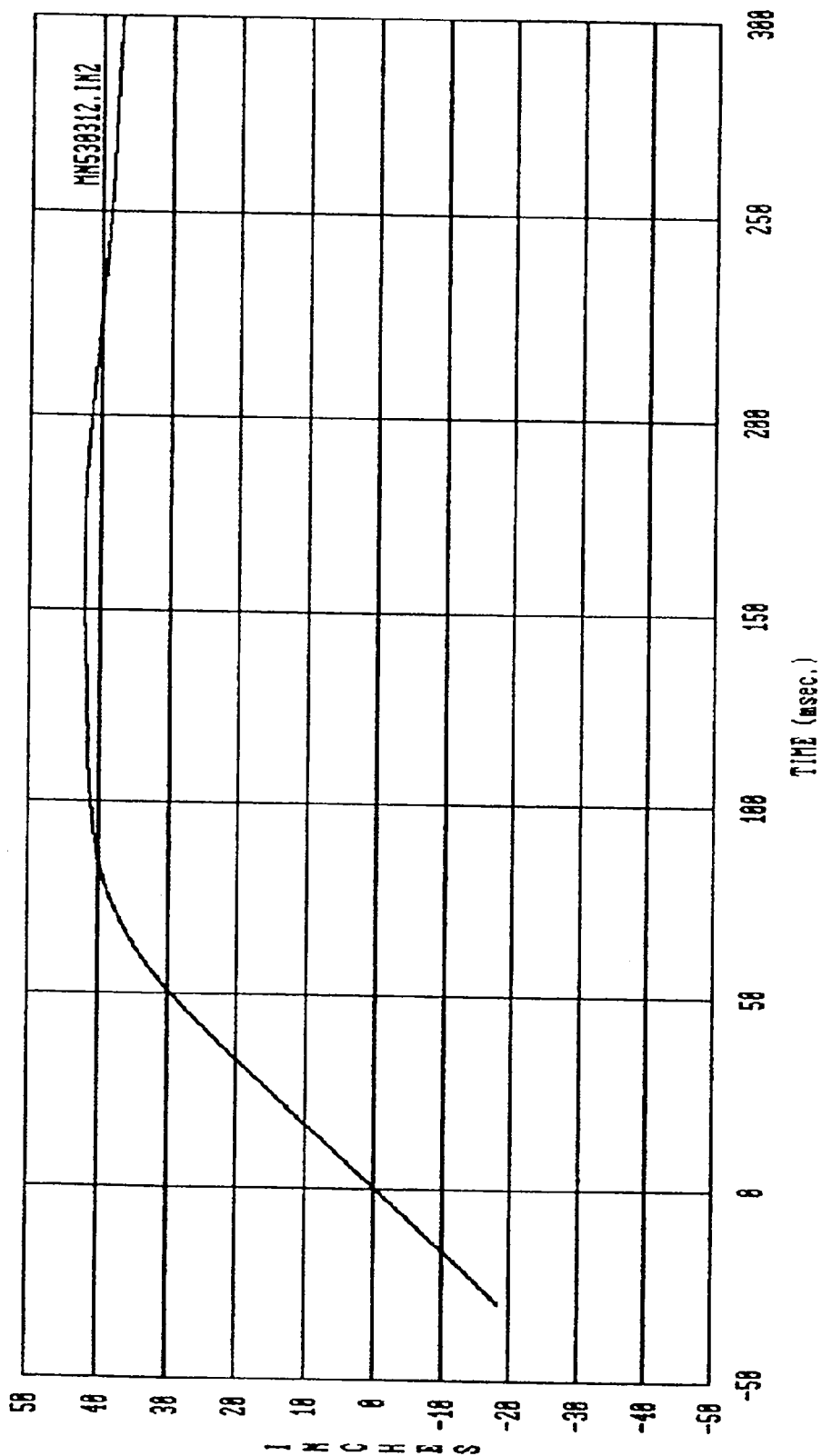
Curve: Passenger chest acceleration -- X axis Filter: SAE CLASS 100 Max = 4.2869 Min = -36.477

MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



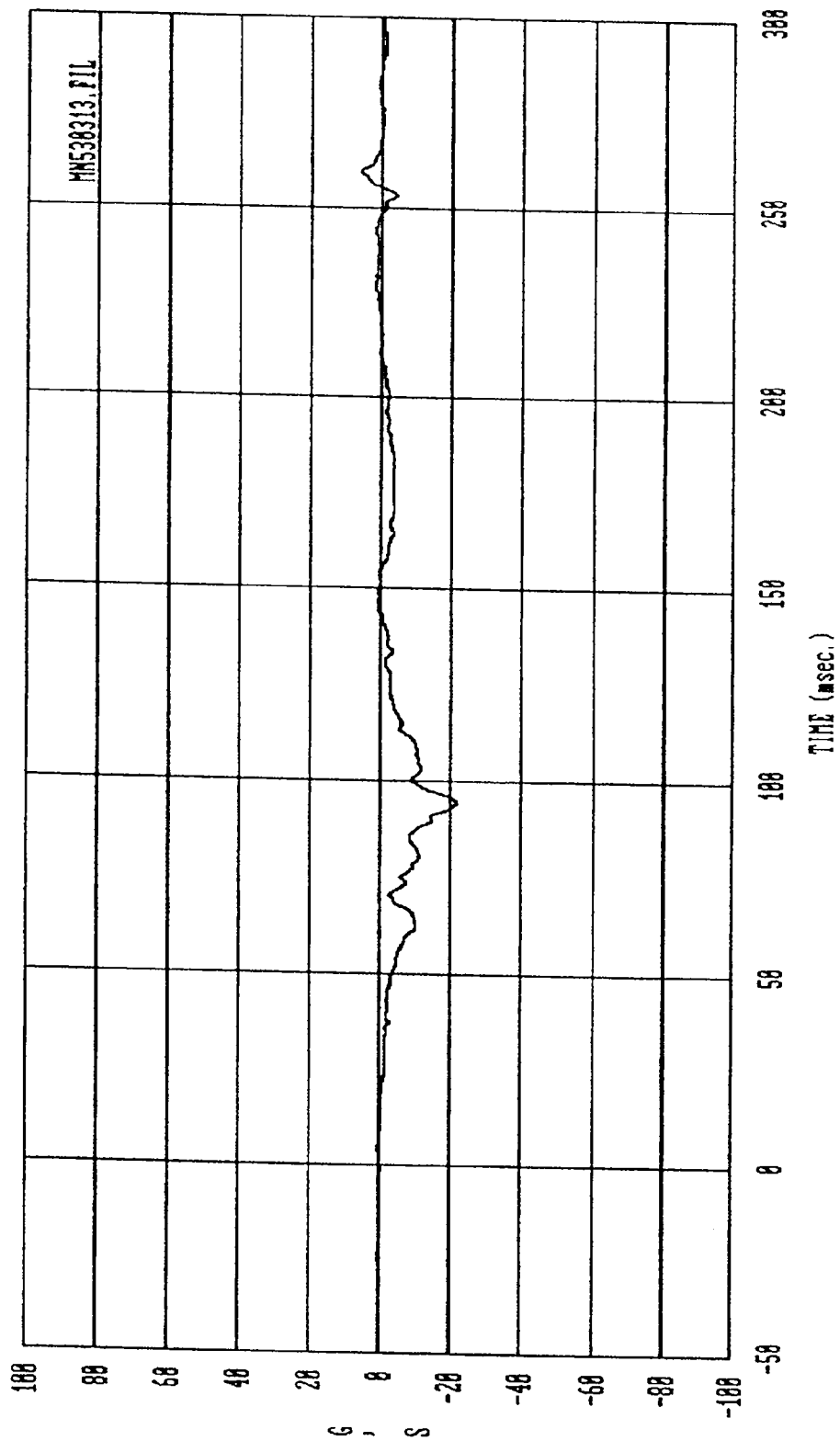
Curve: Passenger chest delta V -- X axis Filter: SAE CLASS 188 Max = 34.714 Min = -3.1346

MSE Date: 06/01/92 Program: 1992 NCAP - F5 Vehicle: 1992 Honda Prelude

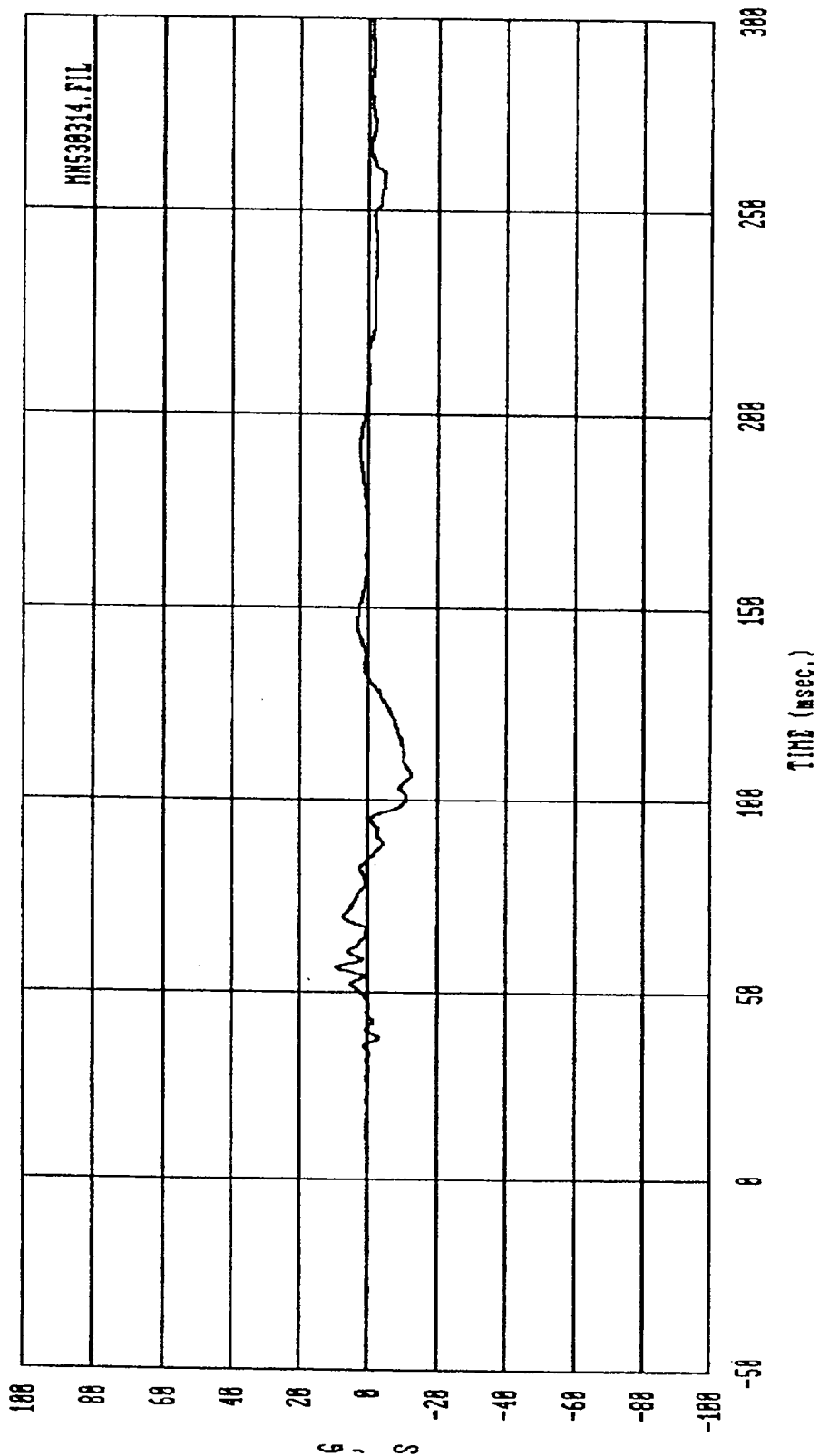


Curve: Passenger chest displacement — X axis Filter: SAE CLASS 100 Max = 42.288 Min = 37.412

MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

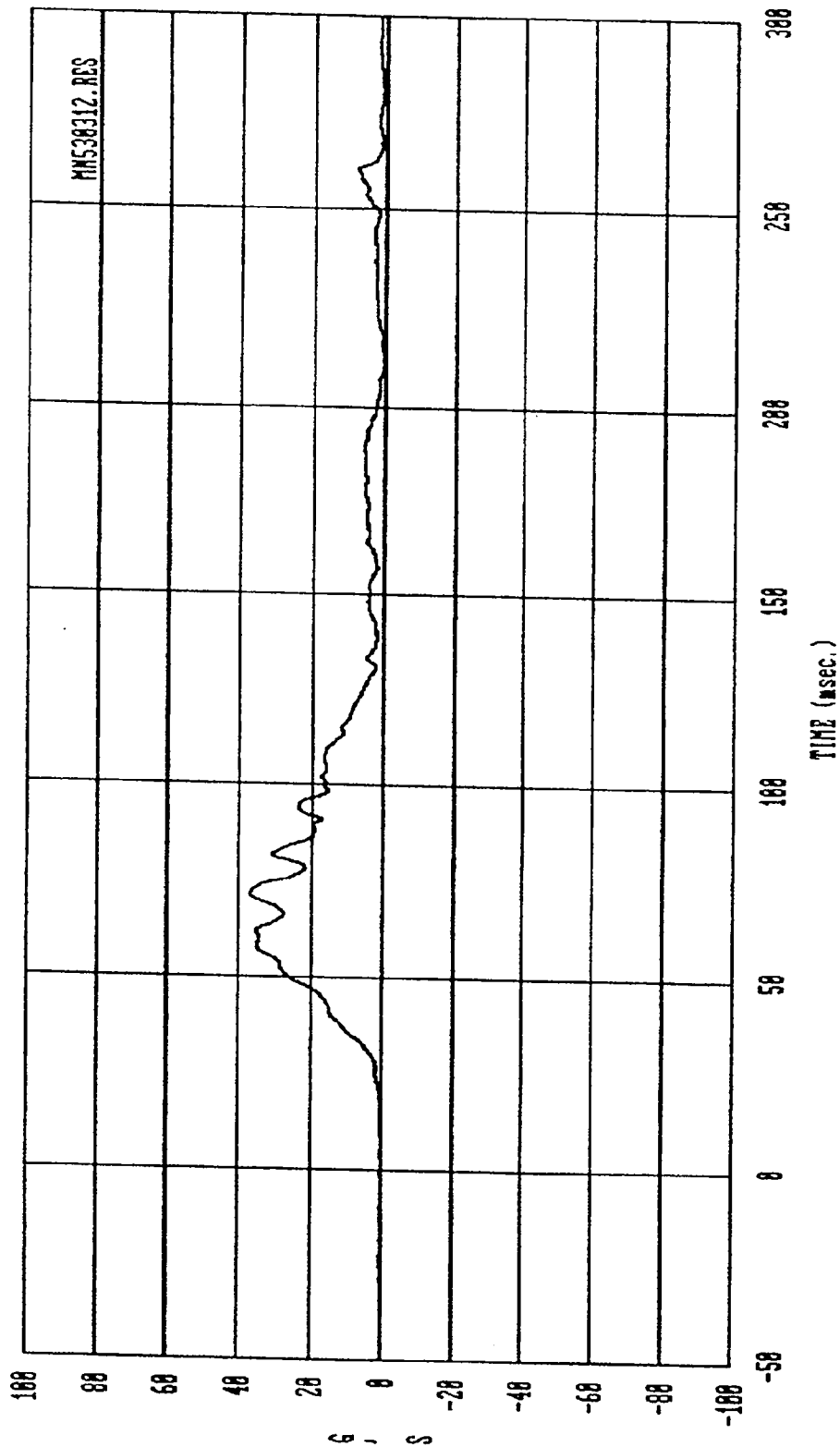


Curve: Passenger chest acceleration -- Y axis Filter: SAE CLASS 100 Max = 6.83% Min = -21.620
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

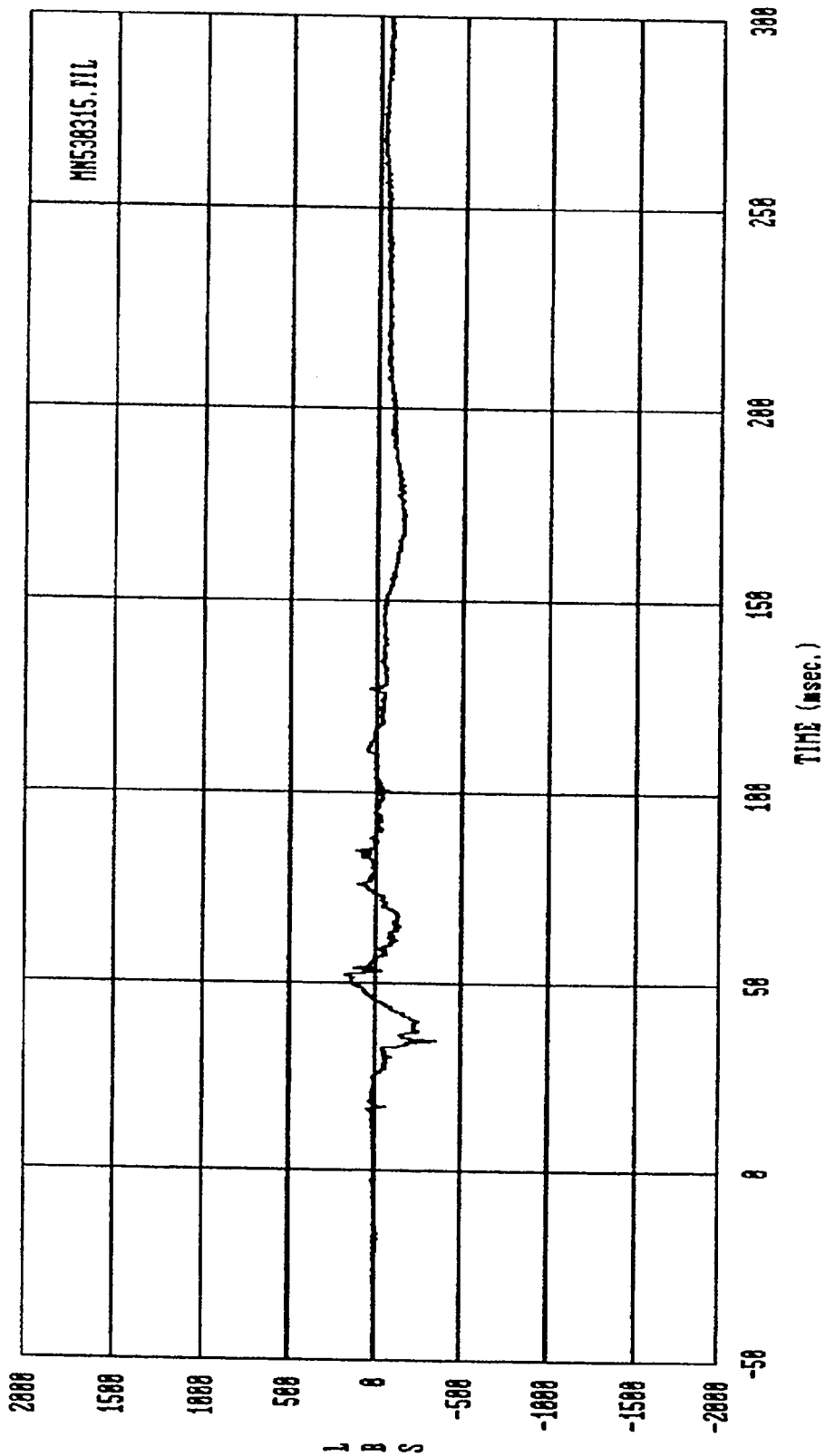


Curve: Passenger chest acceleration -- Z axis Filter: SAE CLASS 180 Max = 9.4551 Min = -12.328

MSE Date: 86/01/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude

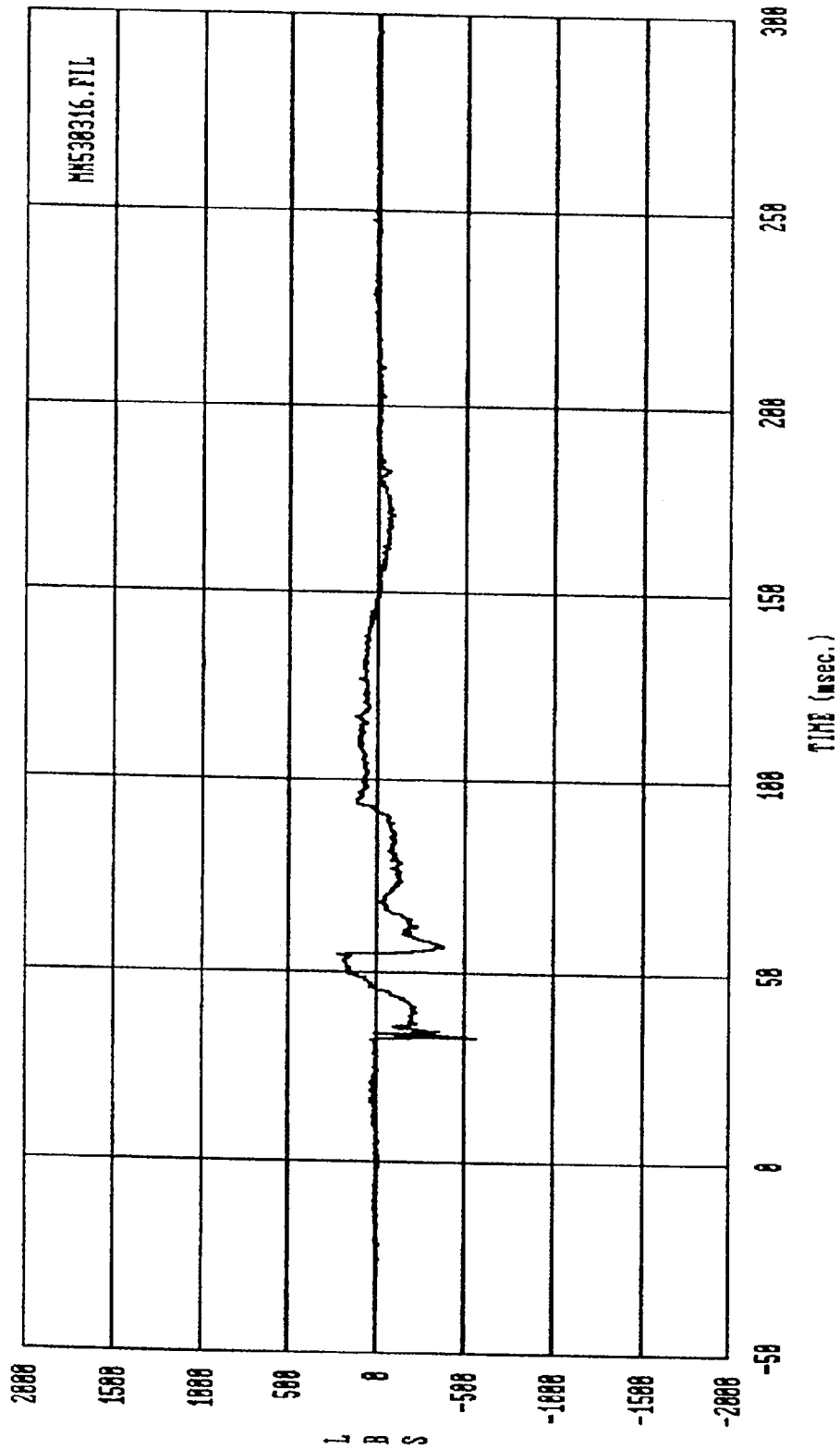


Curve: Passenger chest acceleration -- Resultant Filter: SAE CLASS 100 Max = 37.142 Min = .57561E-01
MSE Date: 06/01/92 Program: 1992 NCAP - B5 Vehicle: 1992 Honda Prelude

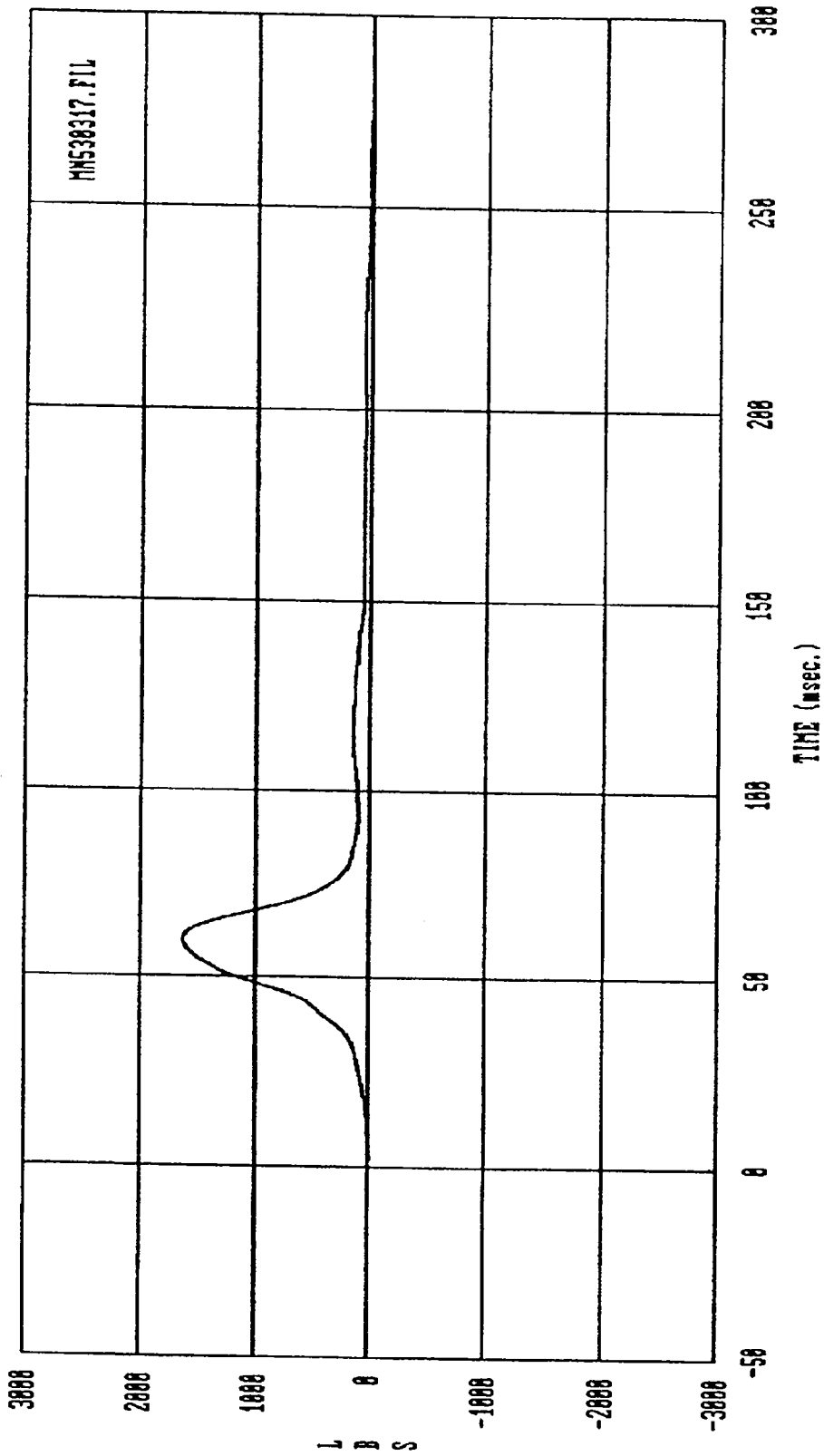


Curve: Passenger femur load - Left femur Filter: SAE CLASS 600 Max = 183.65 Min = -353.43

HSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

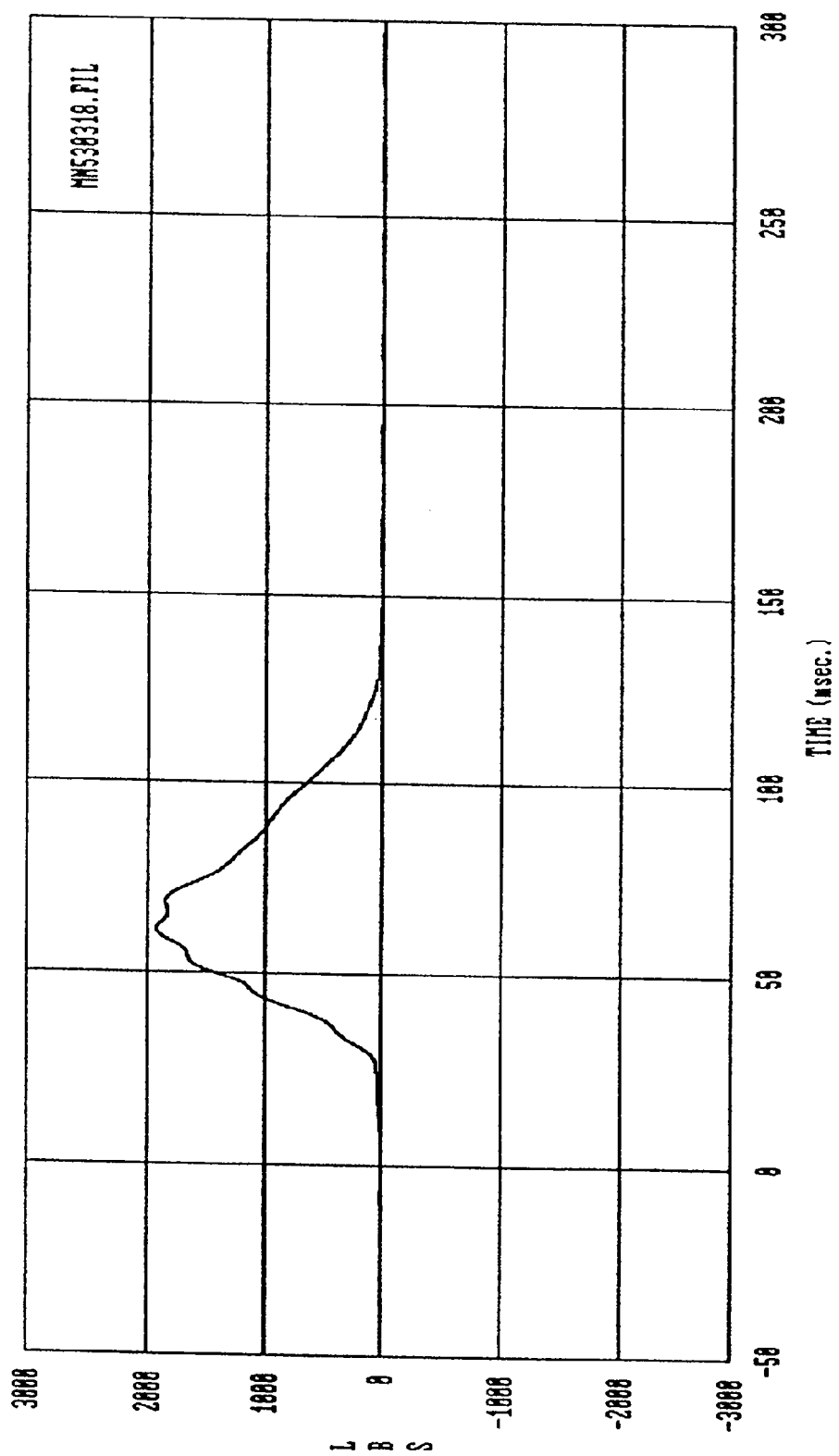


Curve: Passenger femur load -- Right femur Filter: SAE CLASS 600 Max = 228.43 Min = -563.51
 MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

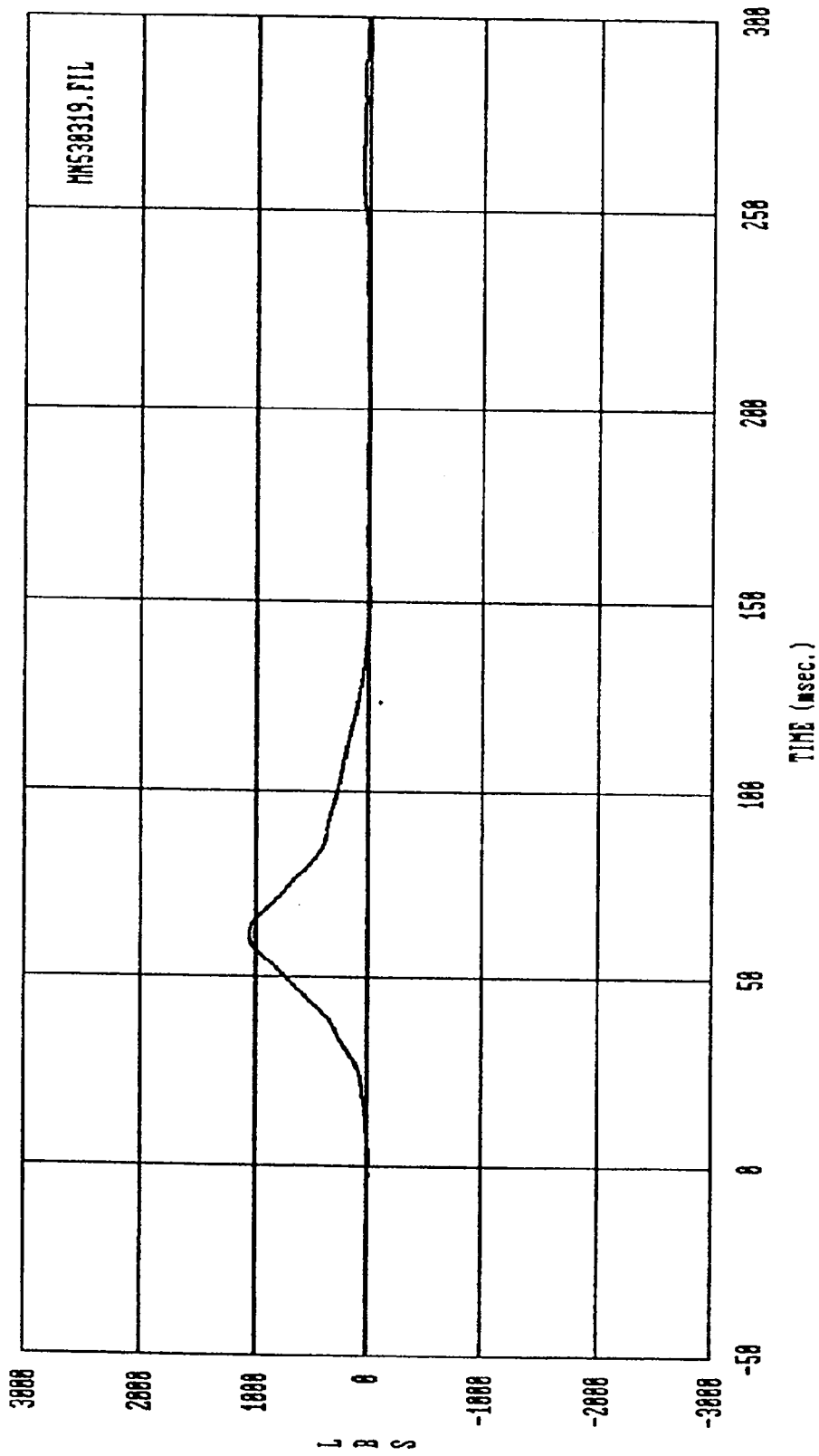


Curve: Driver lap belt load Filter: SAE CLASS 60 Max = 1637.4 Min = -4.9620

MSE Date: 06/01/92 Program: 1992 NCAP - I5 Vehicle: 1992 Honda Prelude

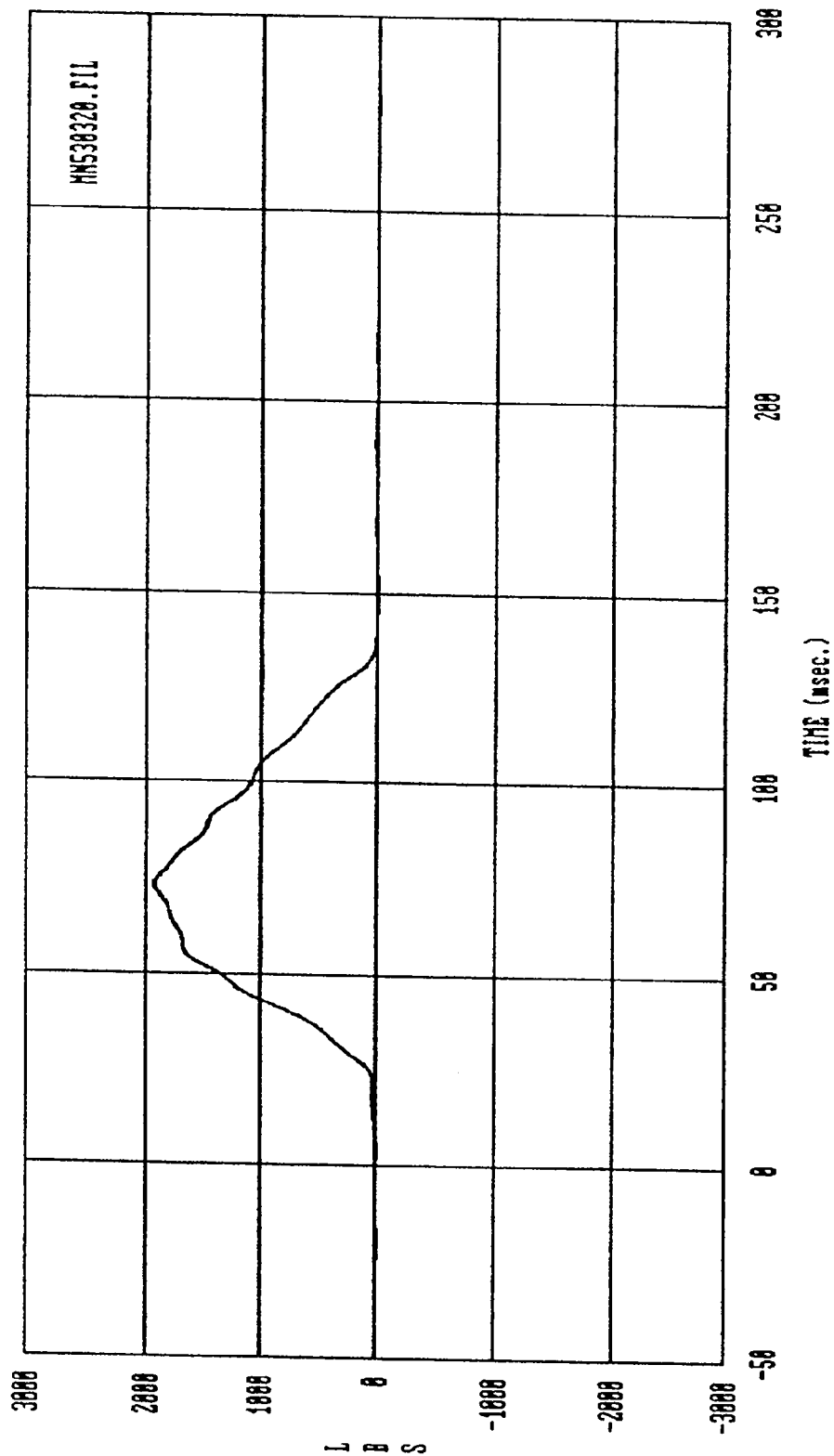


Curve: Driver shoulder belt load
 Filter: SAE CLASS 60 Max = 1936.9 Min = -1.9754
 MSE Date: 86/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



Curve: Passenger lap belt load Filter: SAE CLASS 60 Max: 1862.4 Min: -13.476

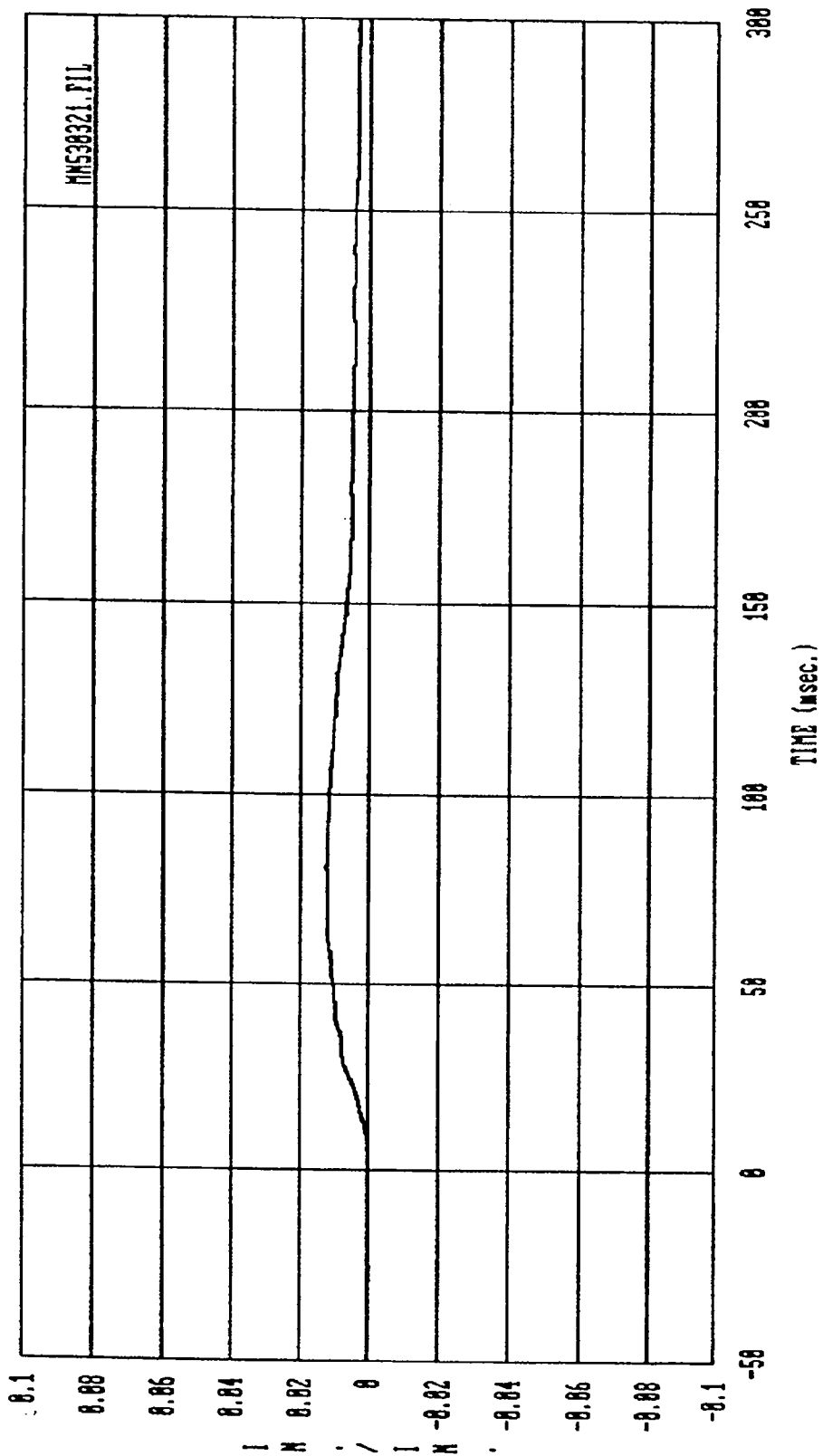
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



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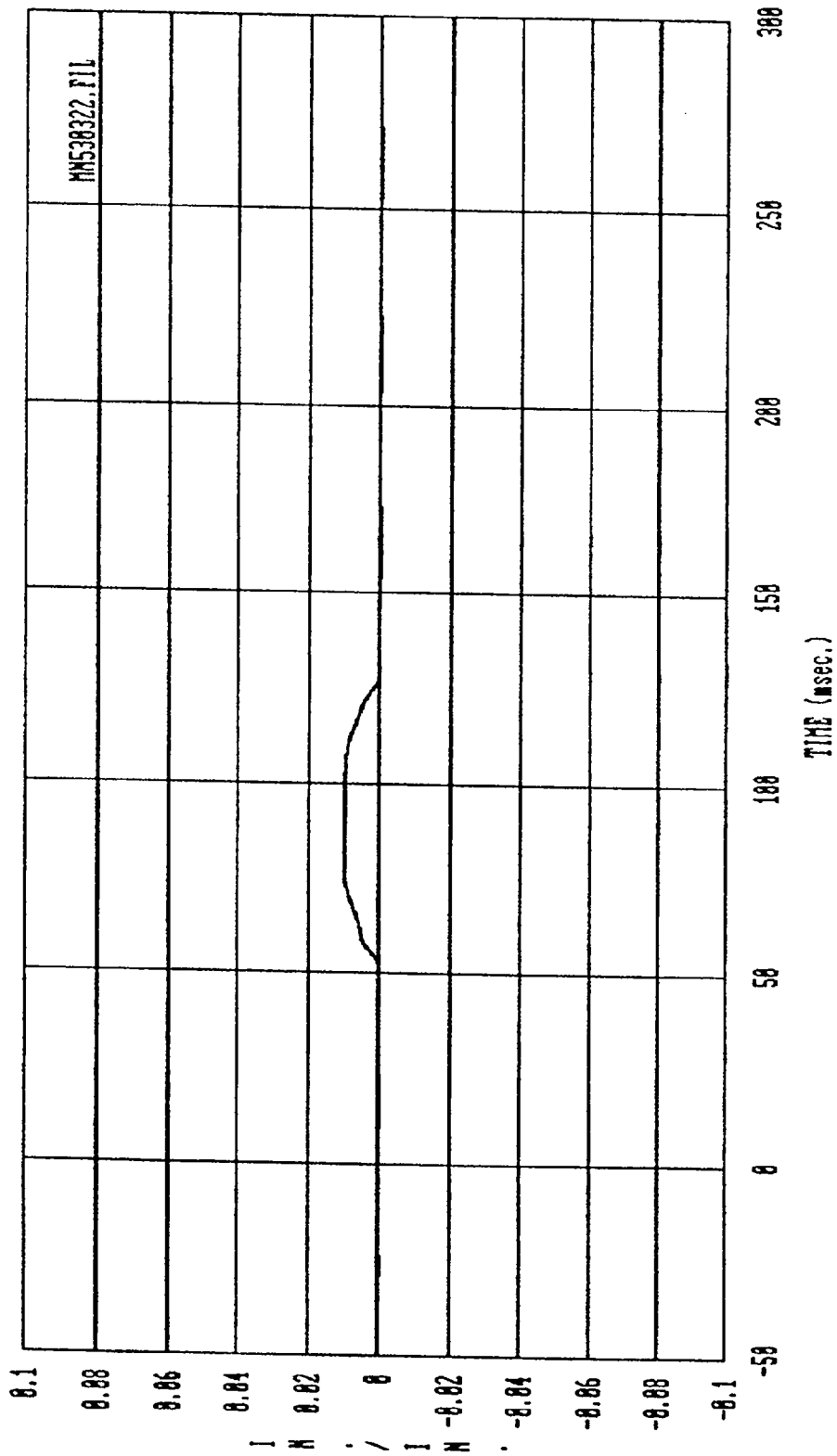
MSE-92-R92027-N05

Curve: Passenger shoulder belt load Filter: SAE CLASS 60 Max = 1936.6 Min = -9.3517
MSE Date: 06/01/92 Program: 1992 NCAP - IS Vehicle: 1992 Honda Prelude



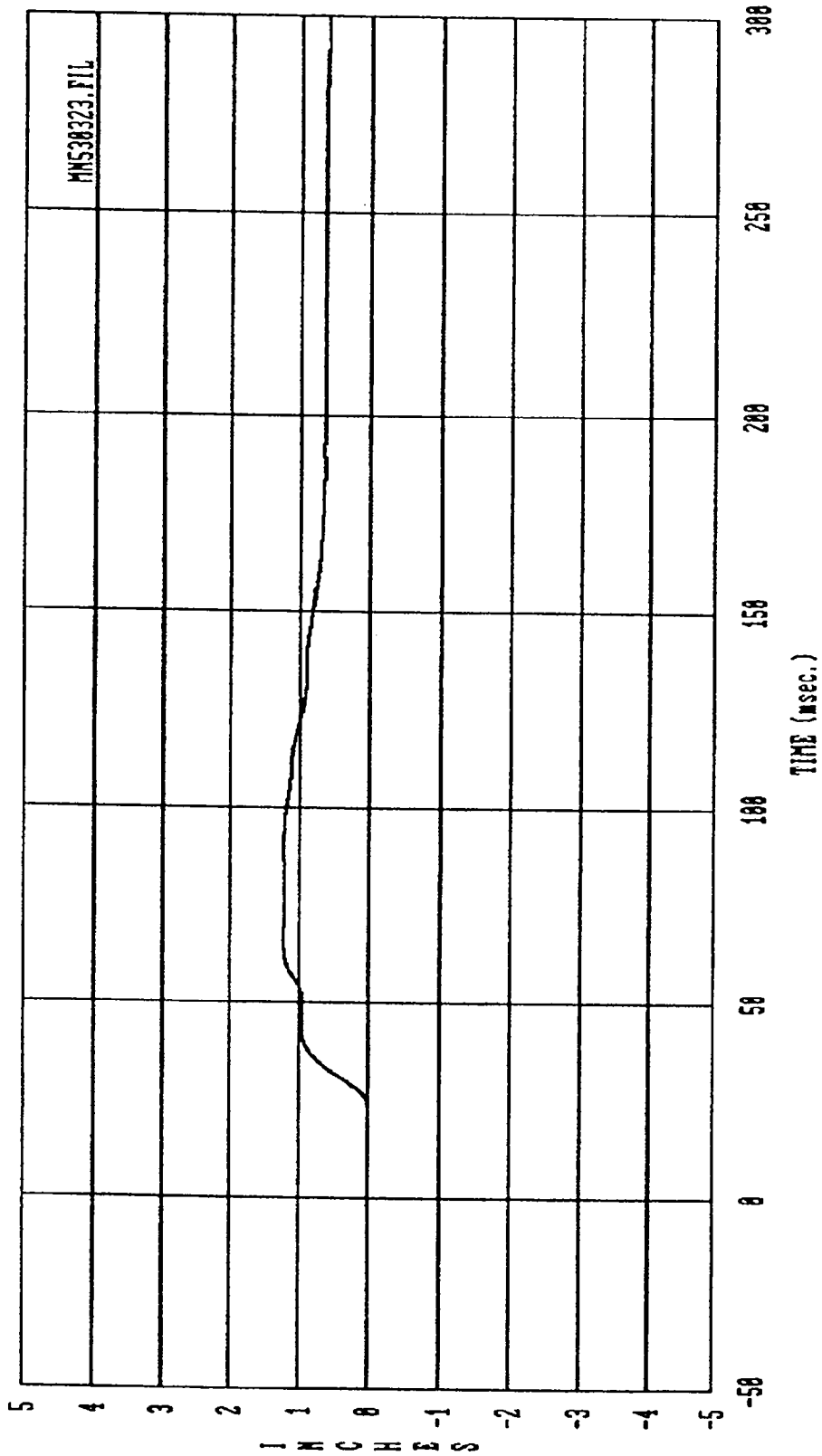
Curve: Driver seat belt elongation Filter: SAE CLASS 60 Max = .12413E-01 Min = -.98473E-04

MSE Date: 86/01/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude

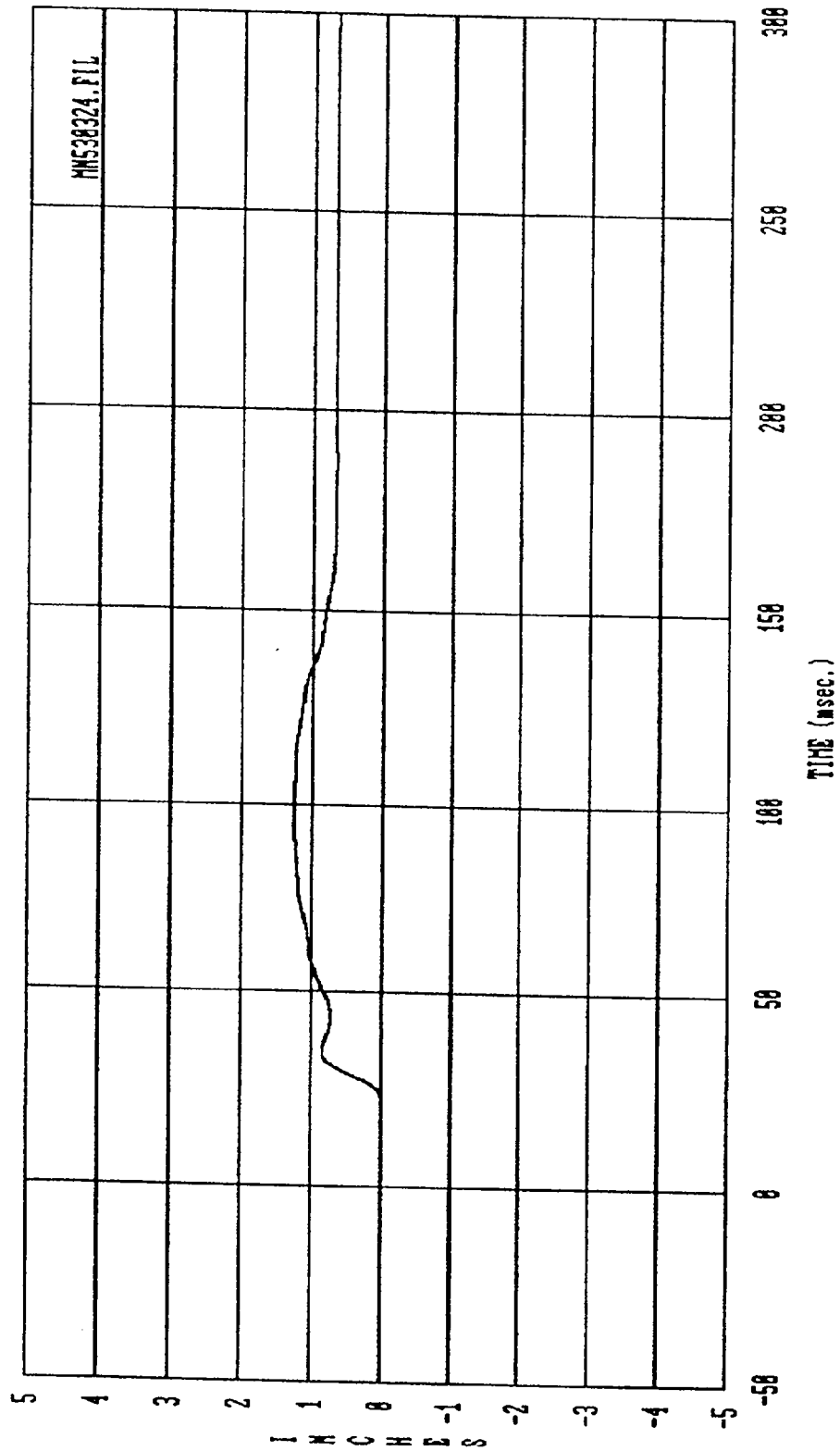


Curve: Passenger seat belt elongation Filter: SAE CLASS 60 Max = .99477E-02 Min = -.47886E-03

MSE Date: 86/81/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude

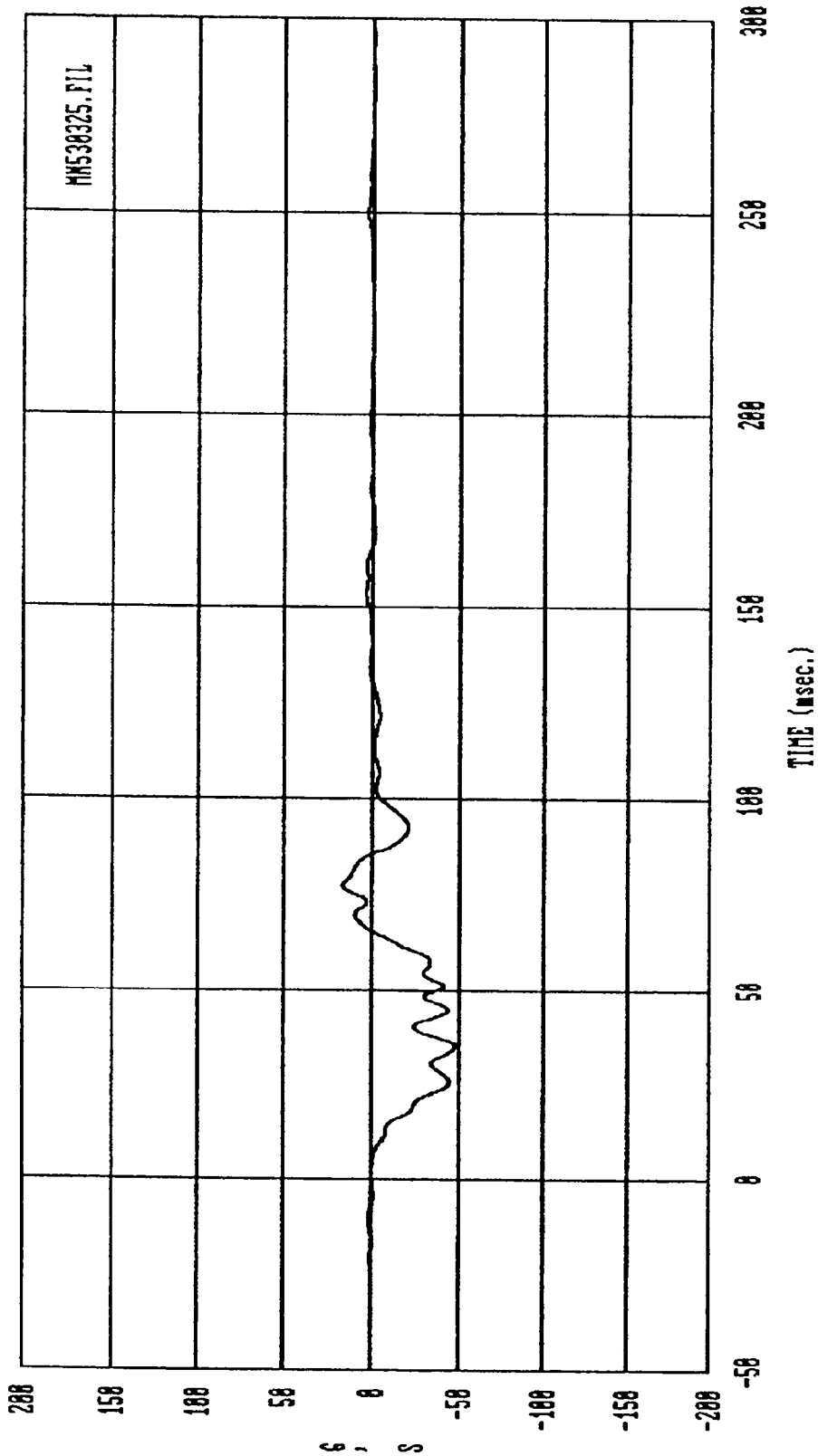


Curve: Driver seat belt pullout
 Filter: SAE CLASS 68 Max = 1.2364 Min = -.81668D-02
 MSE Date: 86/81/92 Program: 1992 NCAP - N5 Vehicle: 1992 Honda Prelude



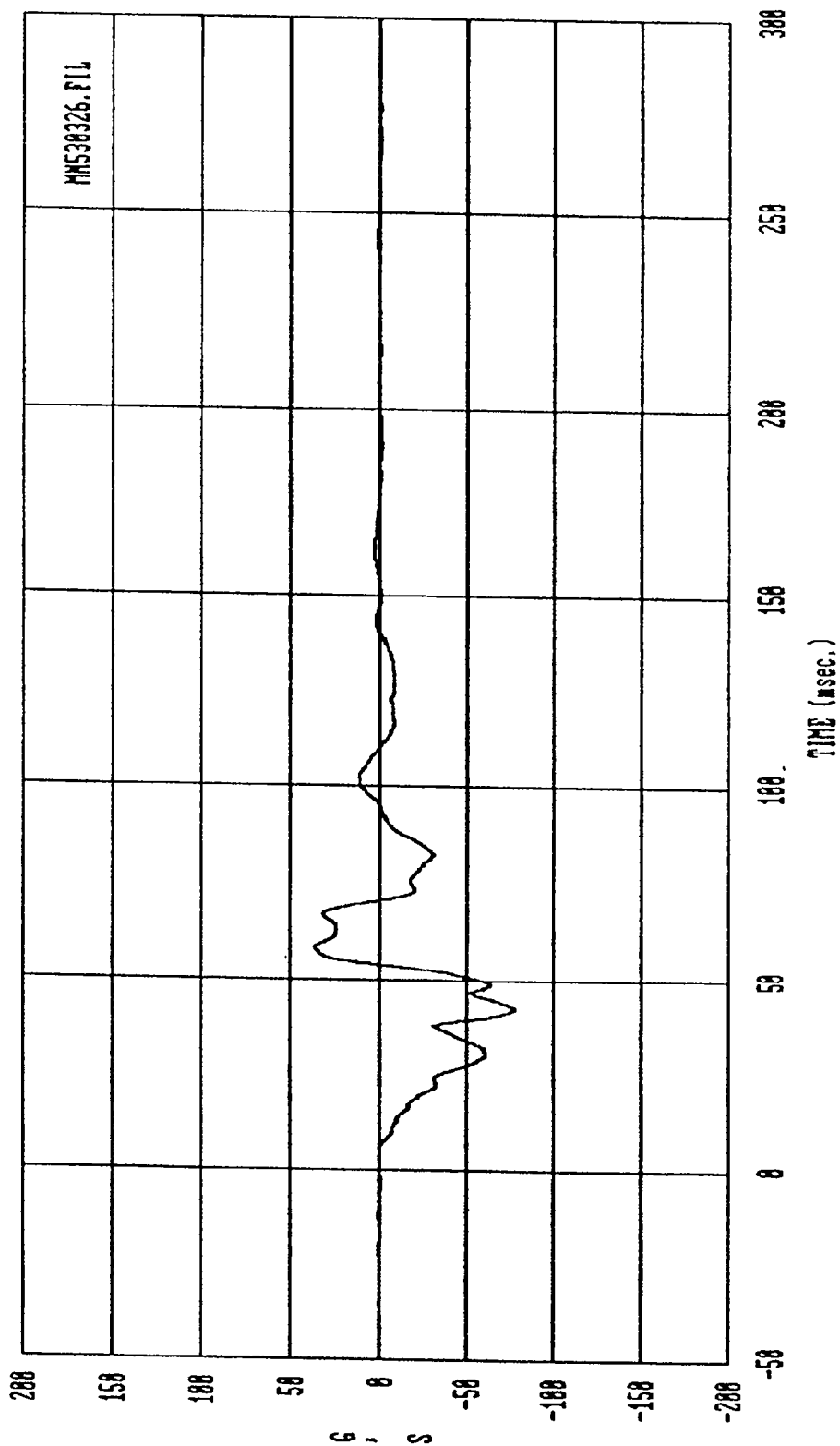
Curve: Passenger seat belt pullout Filter: SAE CLASS 60 Max = 1.2560 Min = -.45495D-02

MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



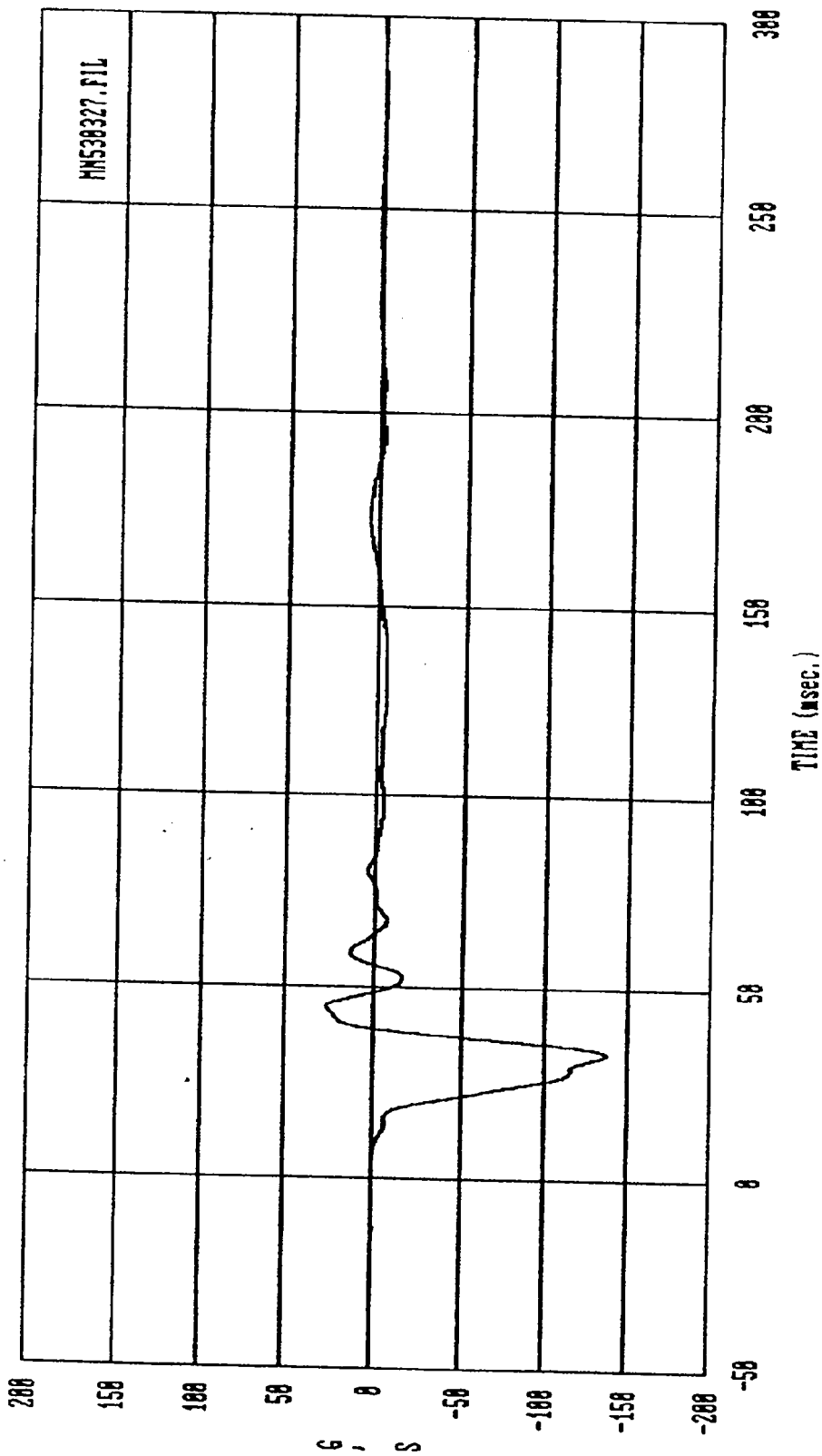
Curve: Left front caliper acceleration -- X axis Filter: SAE CLASS 60 Max = 17.168 Min = -47.862

MSE Date: 86/81/92 Program: 1992 NCAP - I5 Vehicle: 1992 Honda Prelude



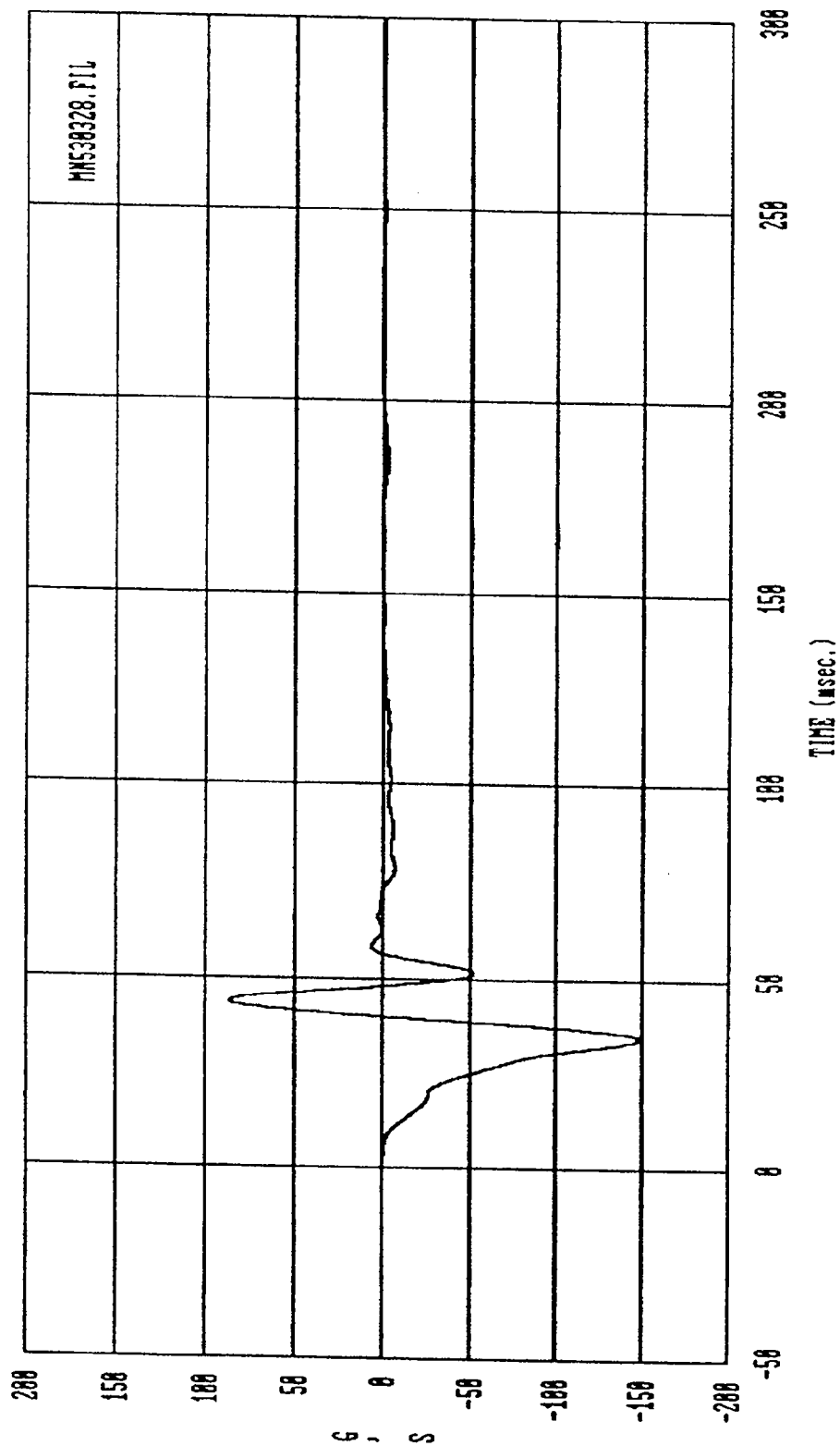
Curve: Right front caliper acceleration -- X axis Filter: SAE CLASS 60 Max = 36.767 Min = -77.699

HSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

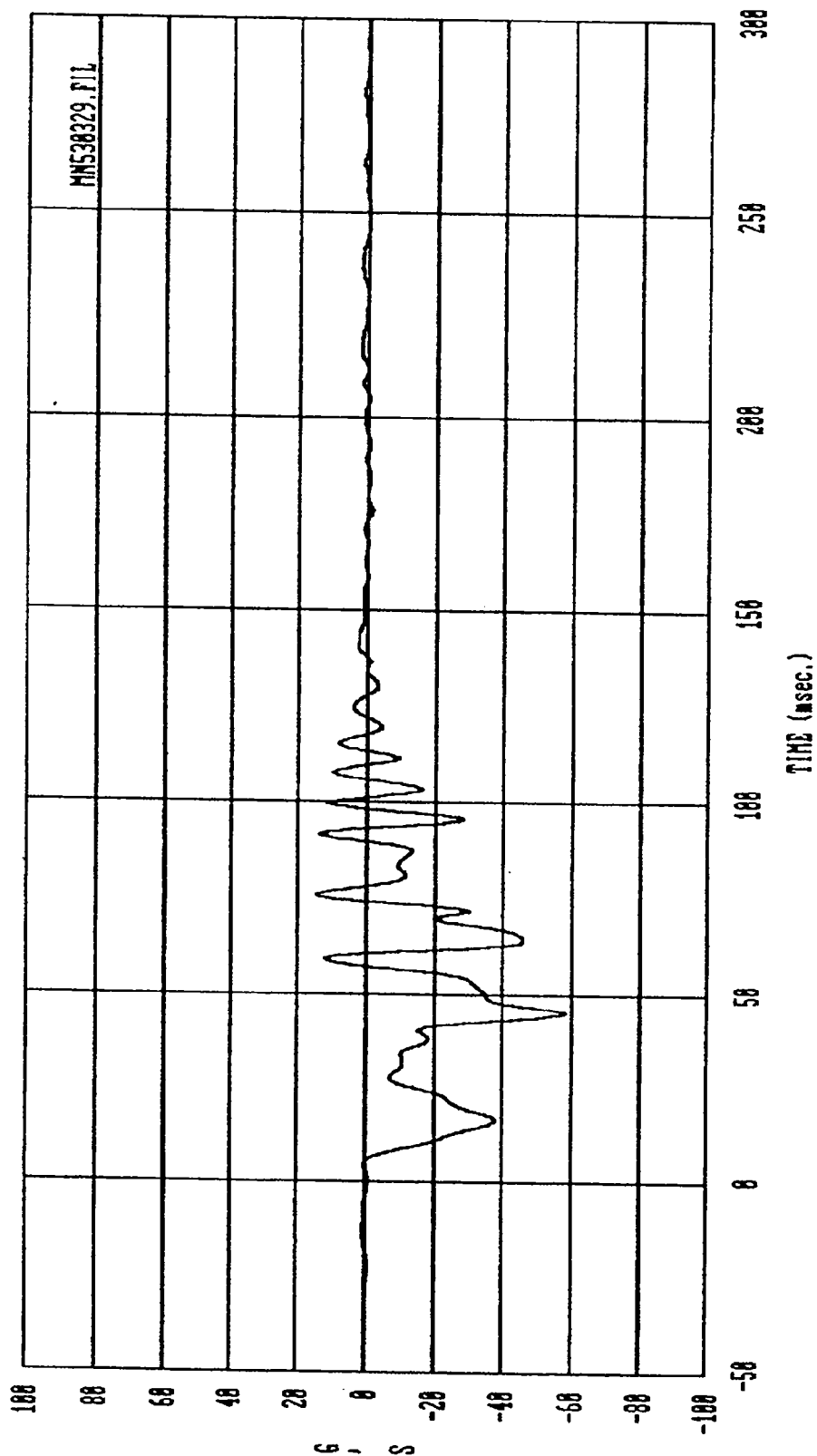


Curve: Engine bottom acceleration — X axis Filter: SAE CLASS 60 Max = 27.024 Min = -137.48

MSE Date: 06/01/92 Program: 1992 NCAP - 45 Vehicle: 1992 Honda Prelude

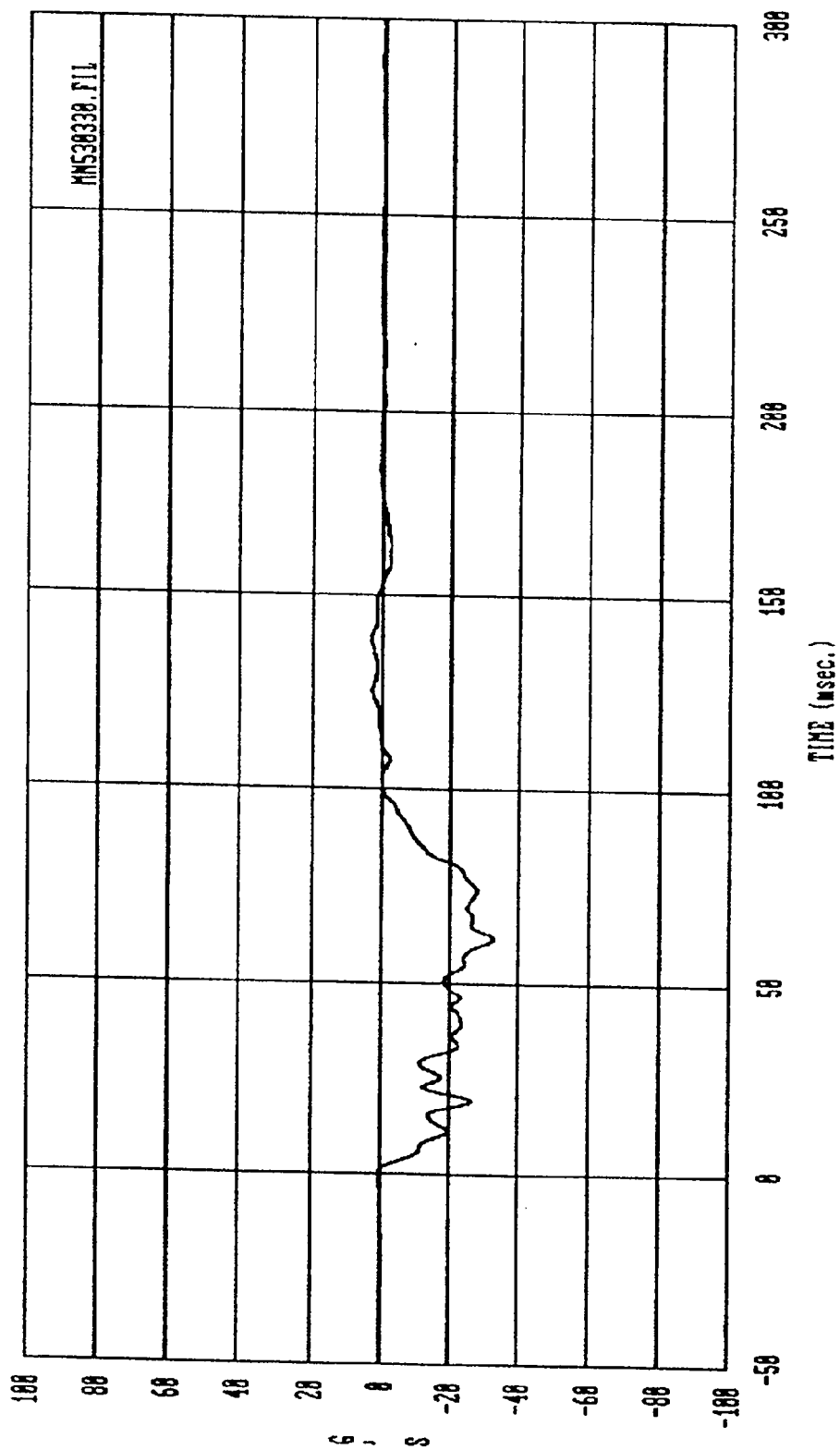


Curve: Engine top acceleration -- X axis Filter: SAE CLASS 60 Max = 86.489 Min = -149.12
MSE Date: 06/01/92 Program: 1992 NCAP - 45 Vehicle: 1992 Honda Prelude

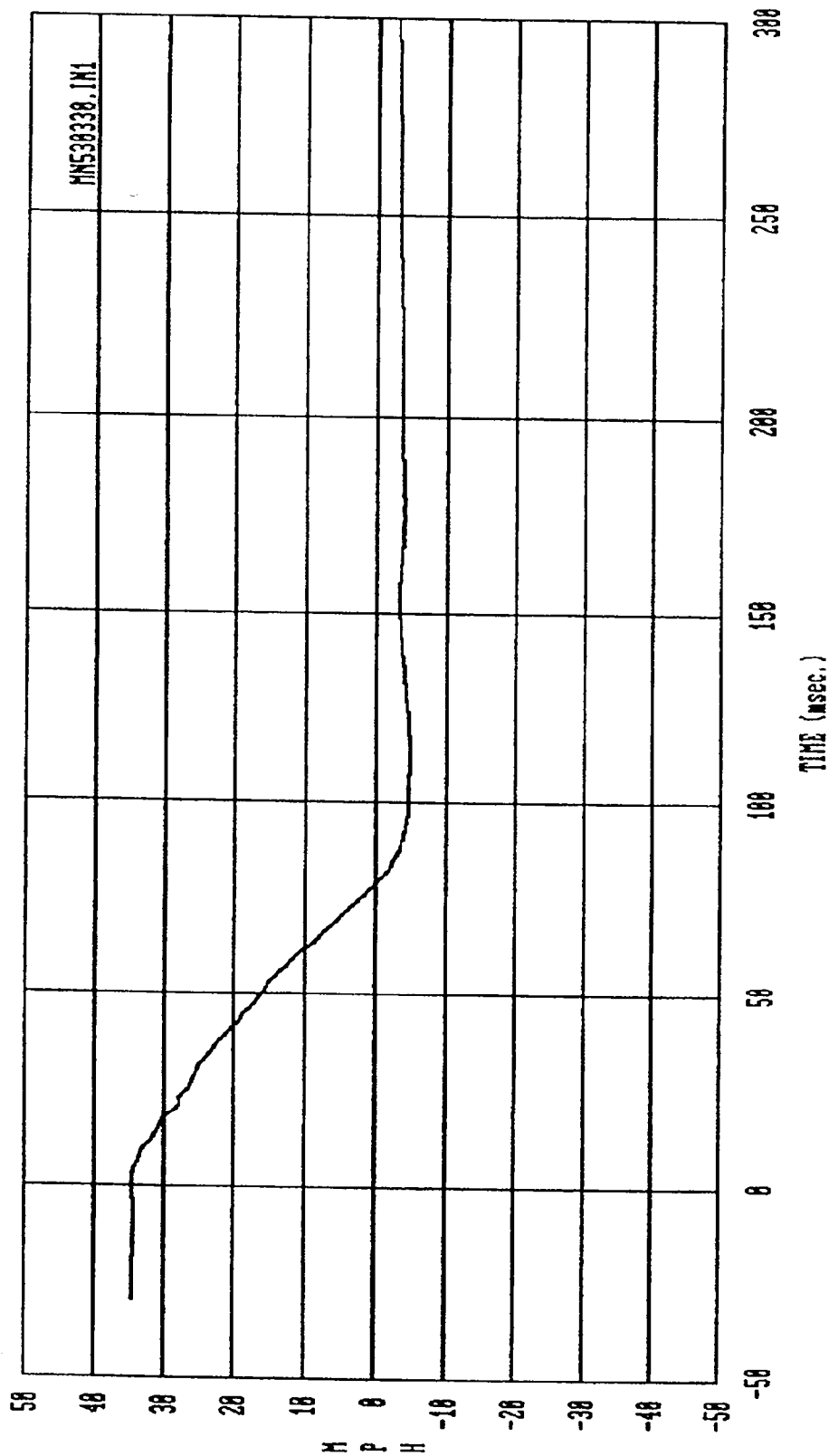


Curve: Dashpanel acceleration -- X axis Filter: SAE CLASS 60 Max = 14.757 Min = -58.878

MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

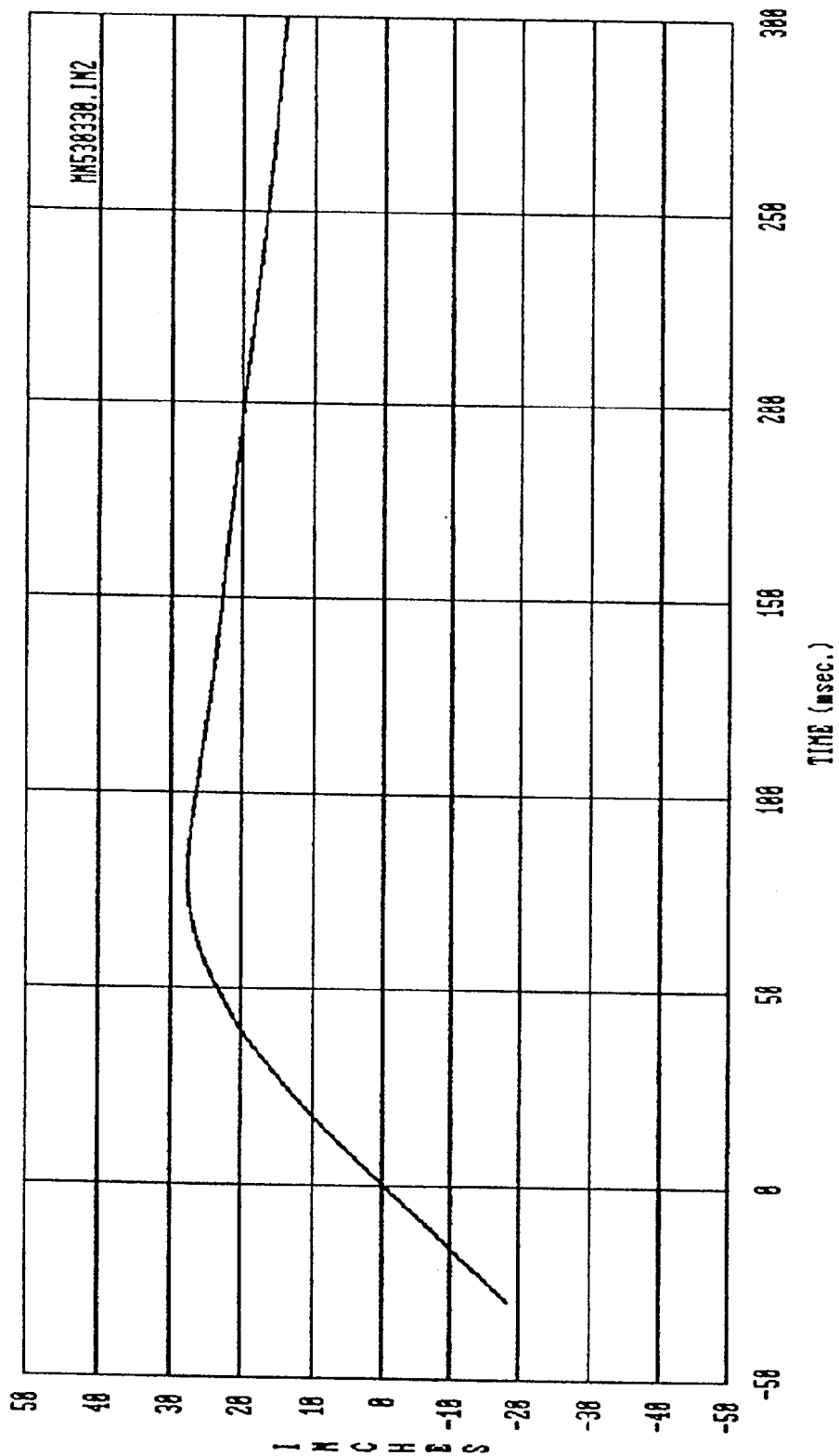


Curve: Left rear cross-member accel. — X axis Filter: SAE CLASS 60 Max = 3.1937 Min = -33.184
MSE Date: 86/81/92 Program: 1992 NCAP - F5 Vehicle: 1992 Honda Prelude



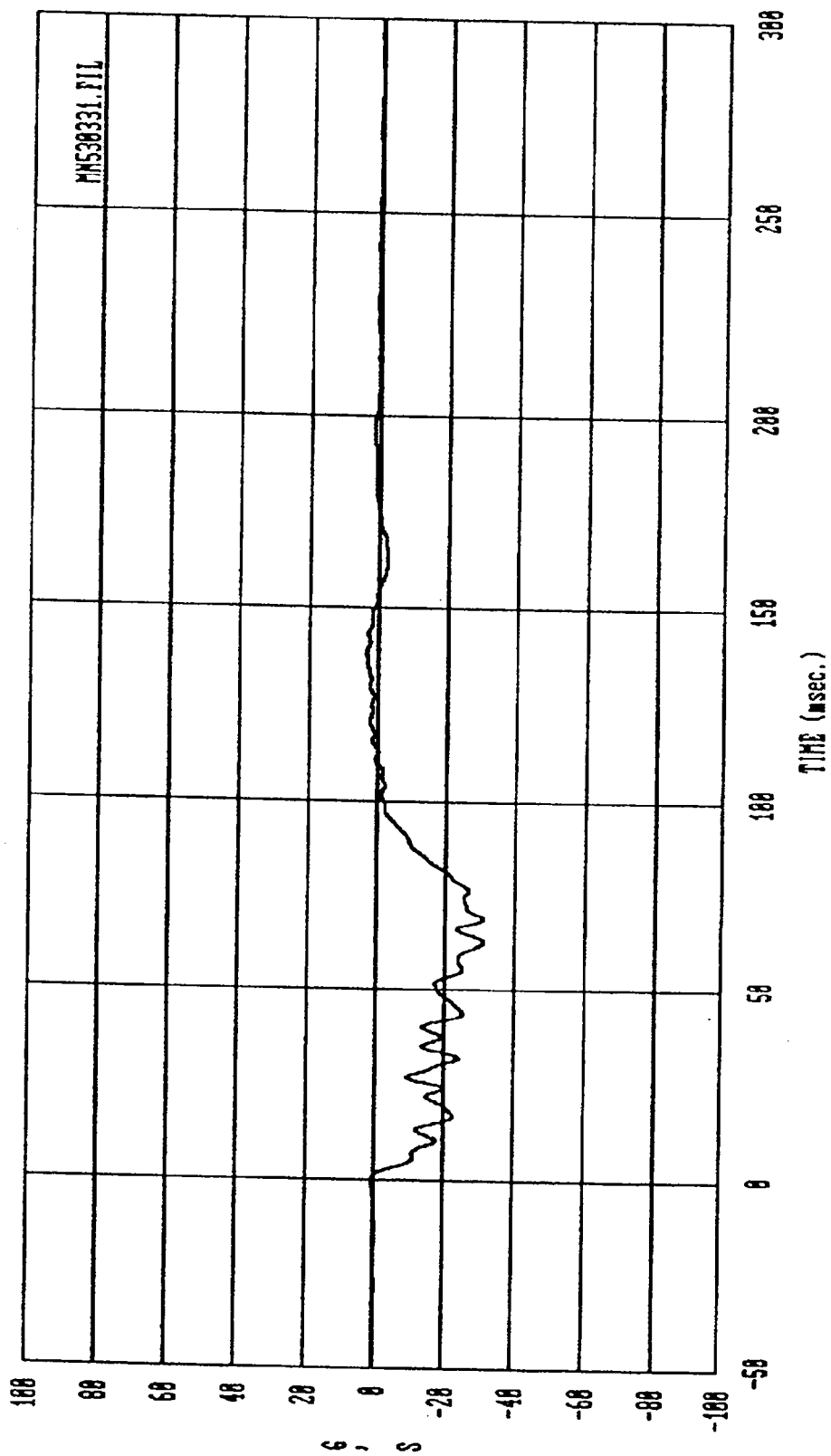
Curve: Left rear seat cross-member delta V -- X axis Filter: SAE CLASS 180 Max: 34.715 Min: -4.7136

MSE Date: 86/81/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



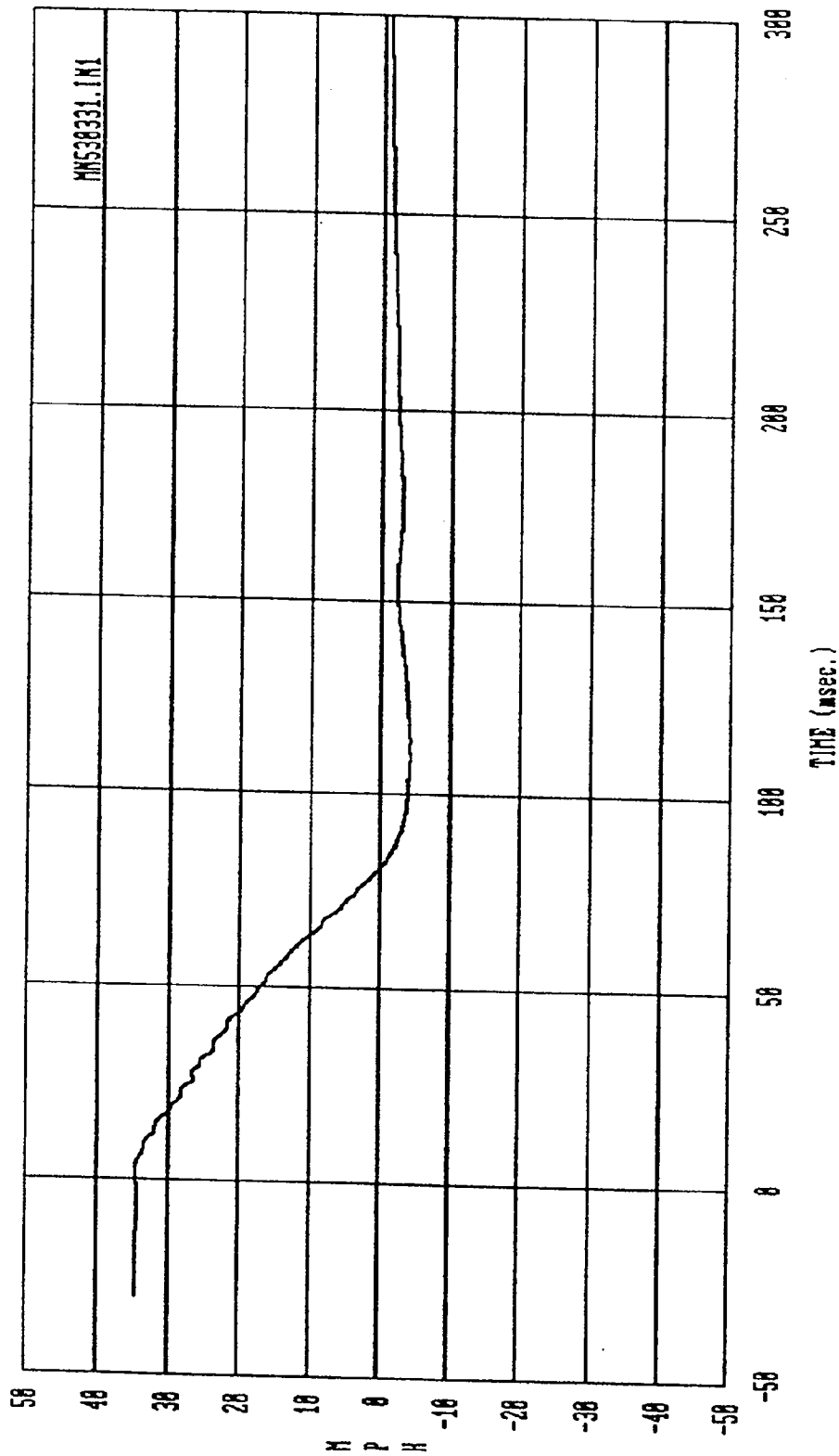
Curve: Left rear seat cross-member disp. -- X axis Filter: SAE CLASS 100 Max = 27.726 Min = 14.152

MSE Date: 86/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



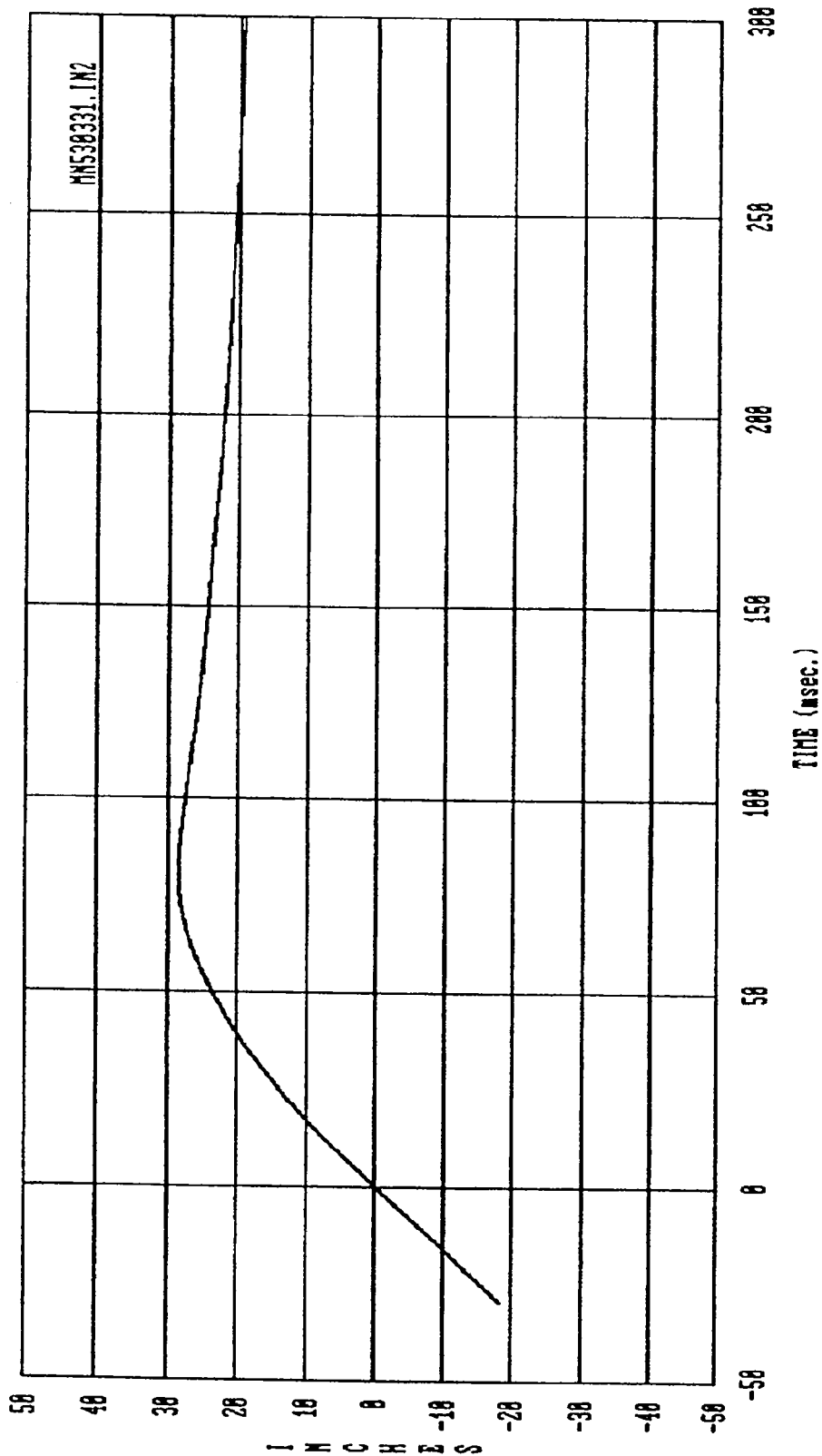
Curve: Right rear cross-member accel. - X axis Filter: SAE CLASS 60 Max = 3.4818 Min = -31.147

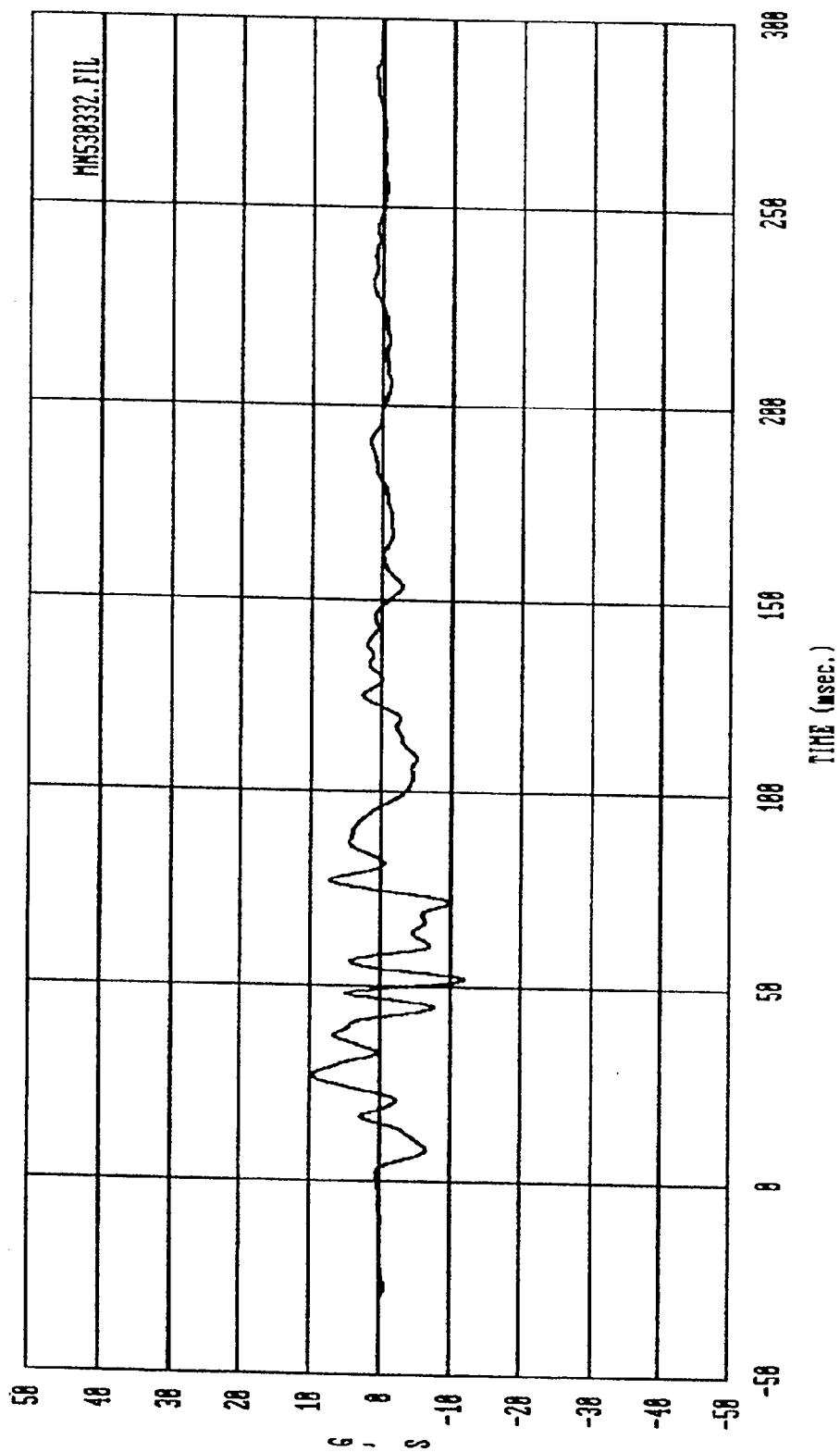
MSE Date: 86/81/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



Curve: Right rear seat cross-member delta V -- X axis Filter: SAE CLASS 180 Max = 34.733 Min = -4.3035

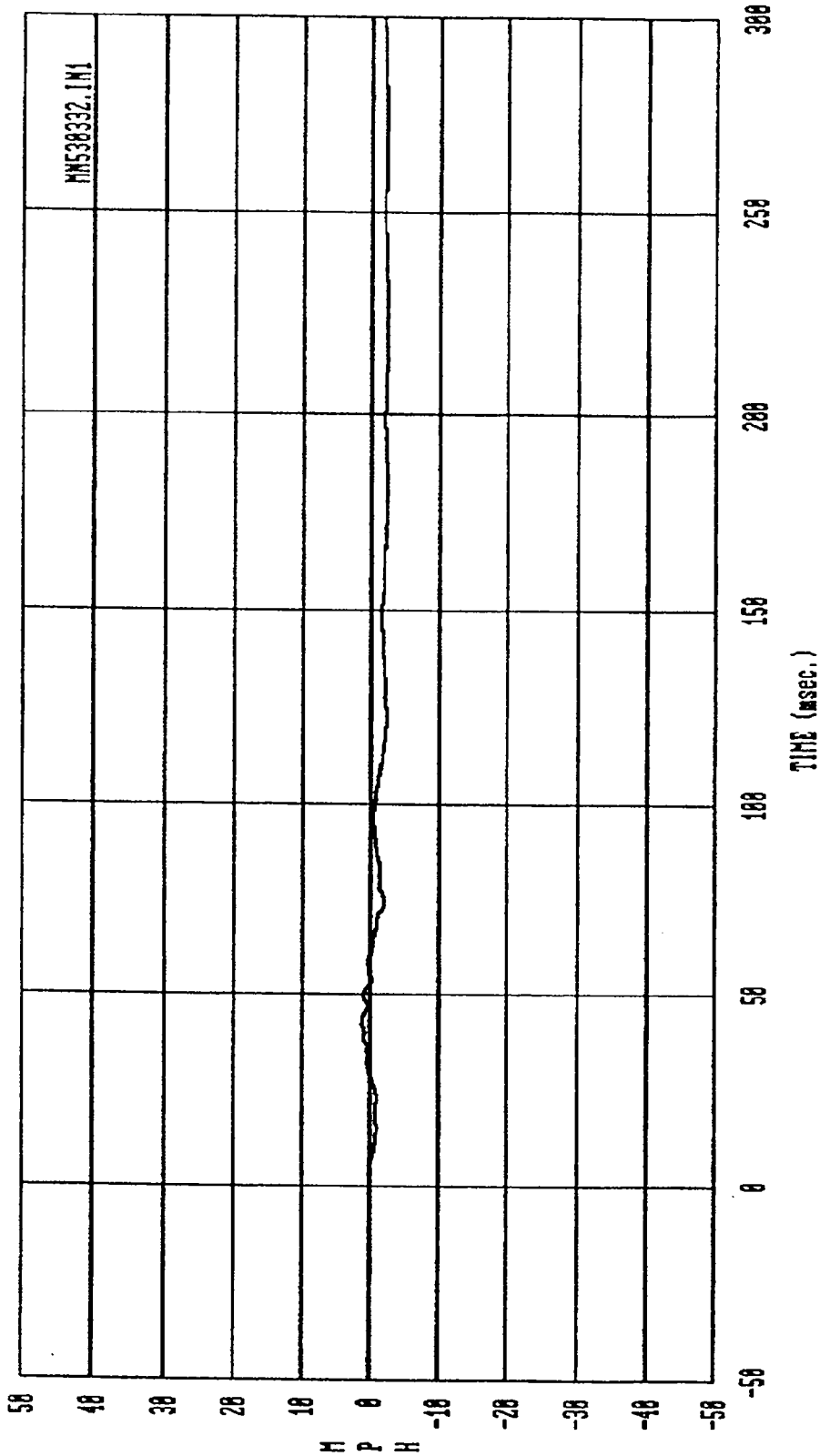
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude





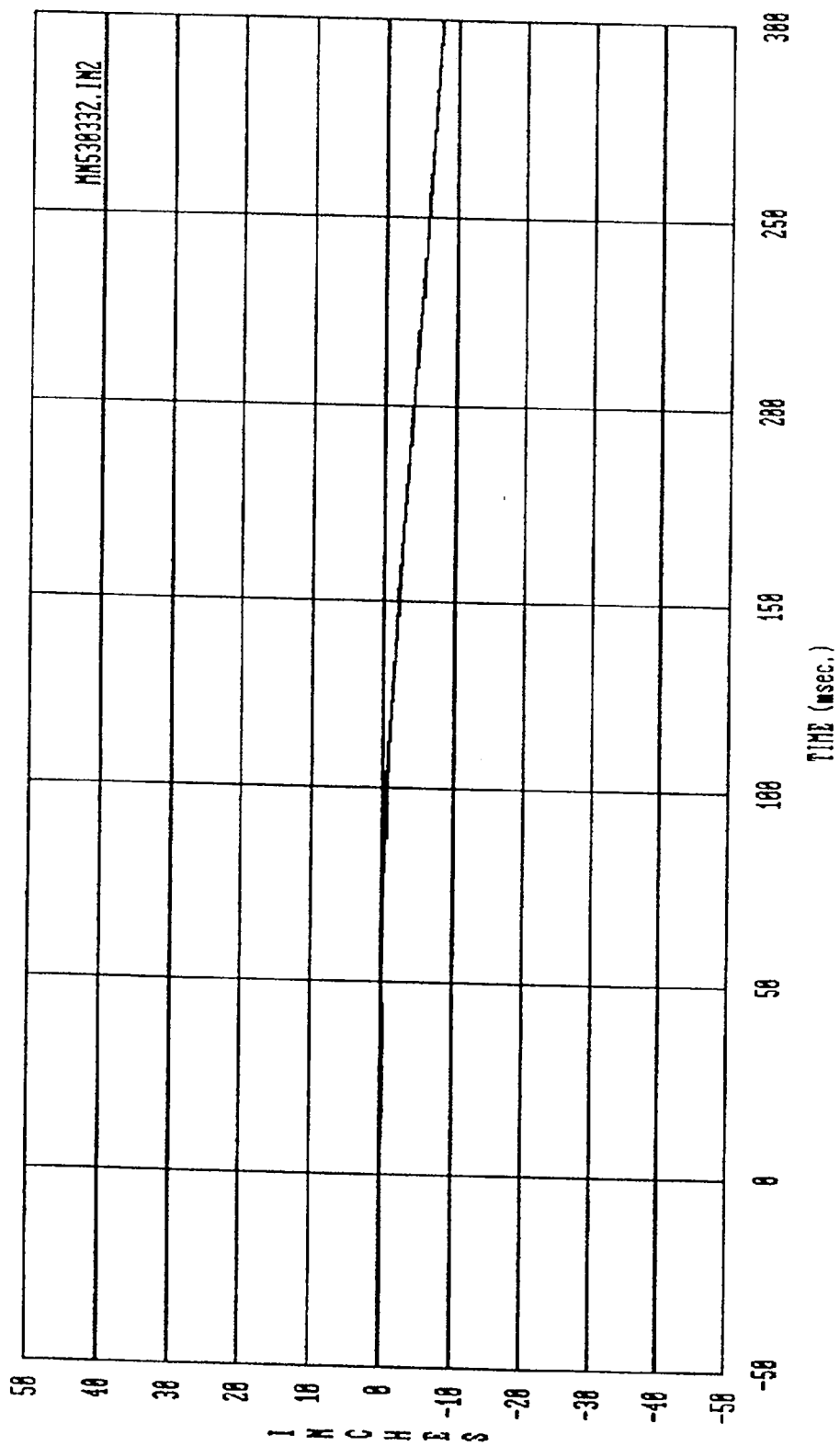
Curve: Center rear cross-member accel. -- Z axis Filter: SAE CLASS 60 Max = 9.6275 Min = -11.981

MSE Date: 86/81/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



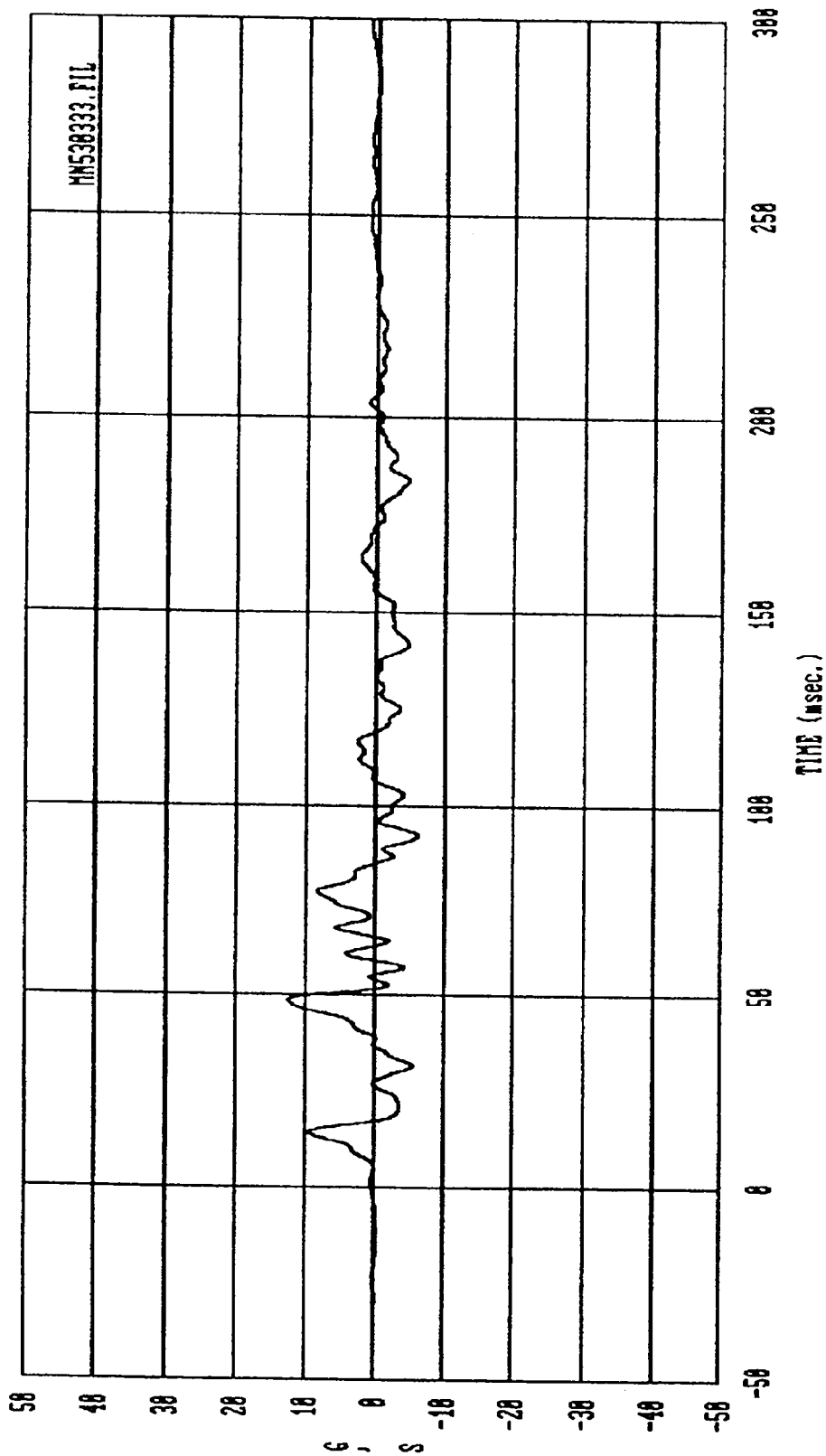
Curve: Center rear seat cross-member delta V - 2 axis Filter: SAE CLASS 180 Max = 1.3026 Min = -2.4344

MSE Date: 86/81/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

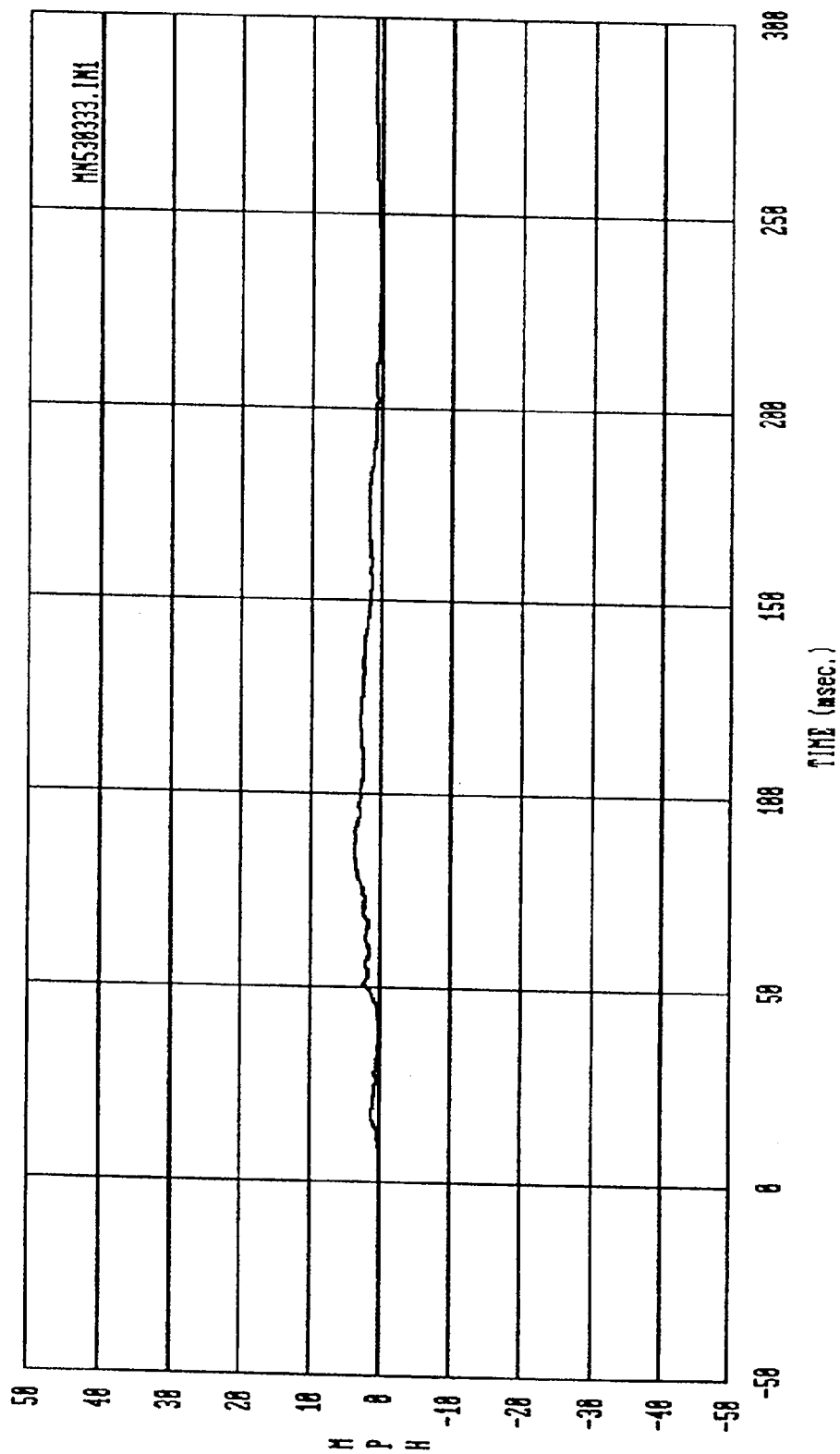


Curve: Center rear seat cross-member disp. -- Z axis Filter: SAE CLASS 180 Max = .55181E-01 Min = -7.7498

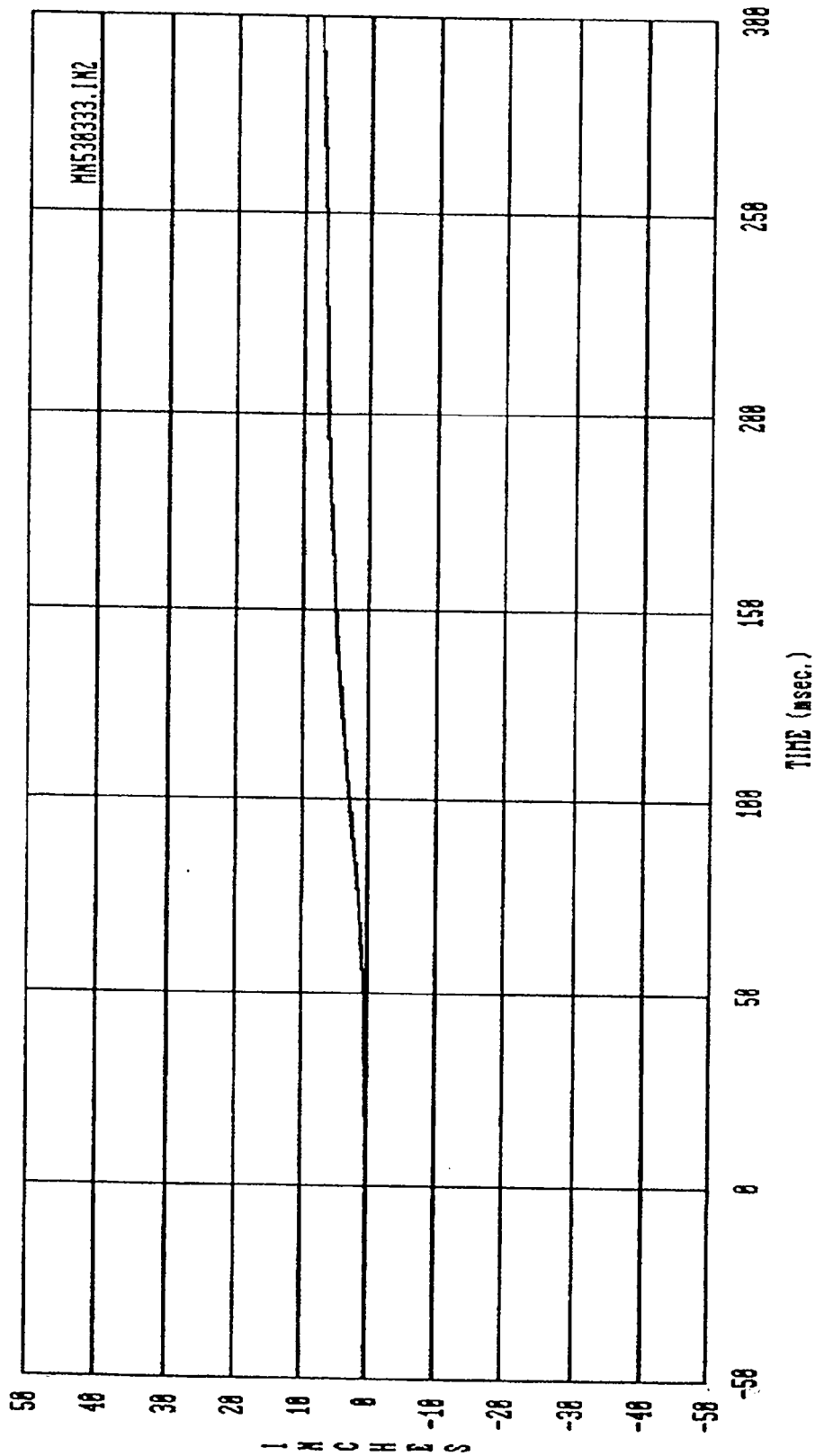
MSE Date: 06/01/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude



Curve: Center rear acceleration -- Z axis Filter: SAE CLASS 60 Max: 12.561 Min: -6.1396
MSE Date: 06/01/92 Program: 1992 NCAP - 45 Vehicle: 1992 Honda Prelude



Curve: Center rear delta V -- Z axis Filter: SAE CLASS 180° Max = 3.7979 Min = .28565E-01
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



Curve: Center rear disp. -- Z axis Filter: SAE CLASS 100 Max = 7.5402 Min = .10000E+11

HSE Date: 06/01/92 Program: 1992 NCAP - I5 Vehicle: 1992 Honda Prelude

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MSE-92-R92027-N05

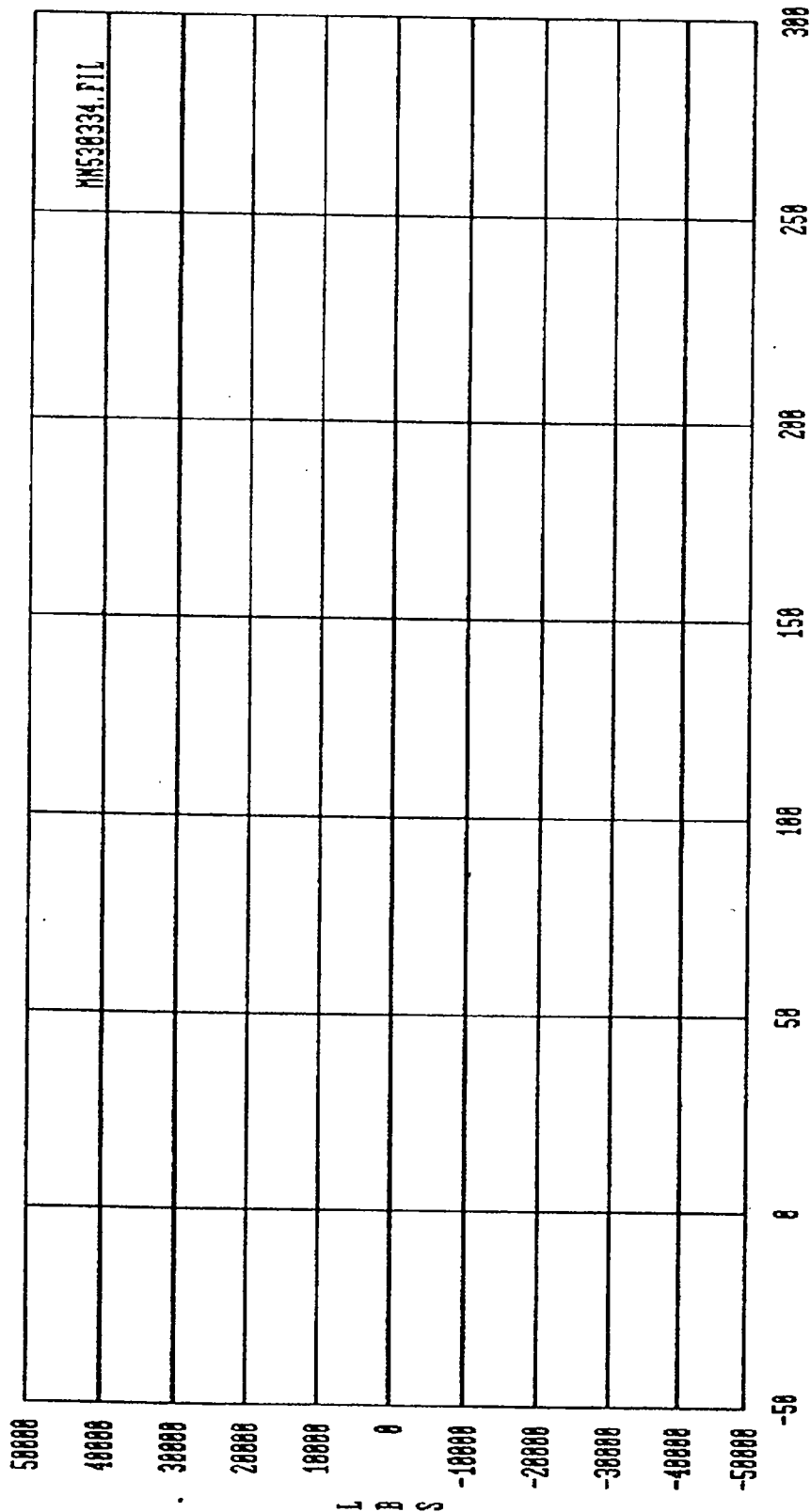
APPENDIX B-2

LOAD CELL BARRIER DATA

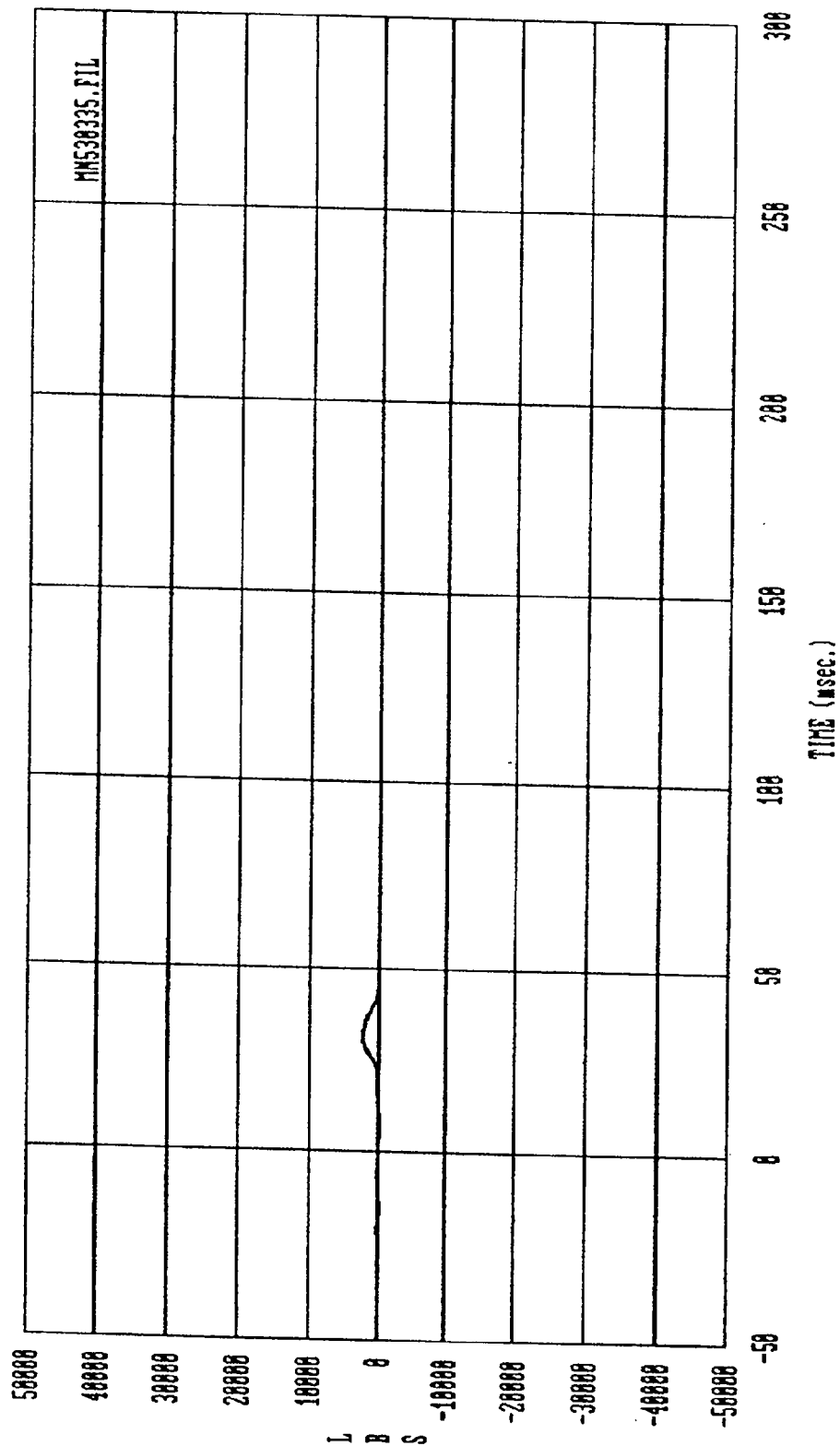
DATA FILTERING:

Load Cell Barrier Channels - Class 60

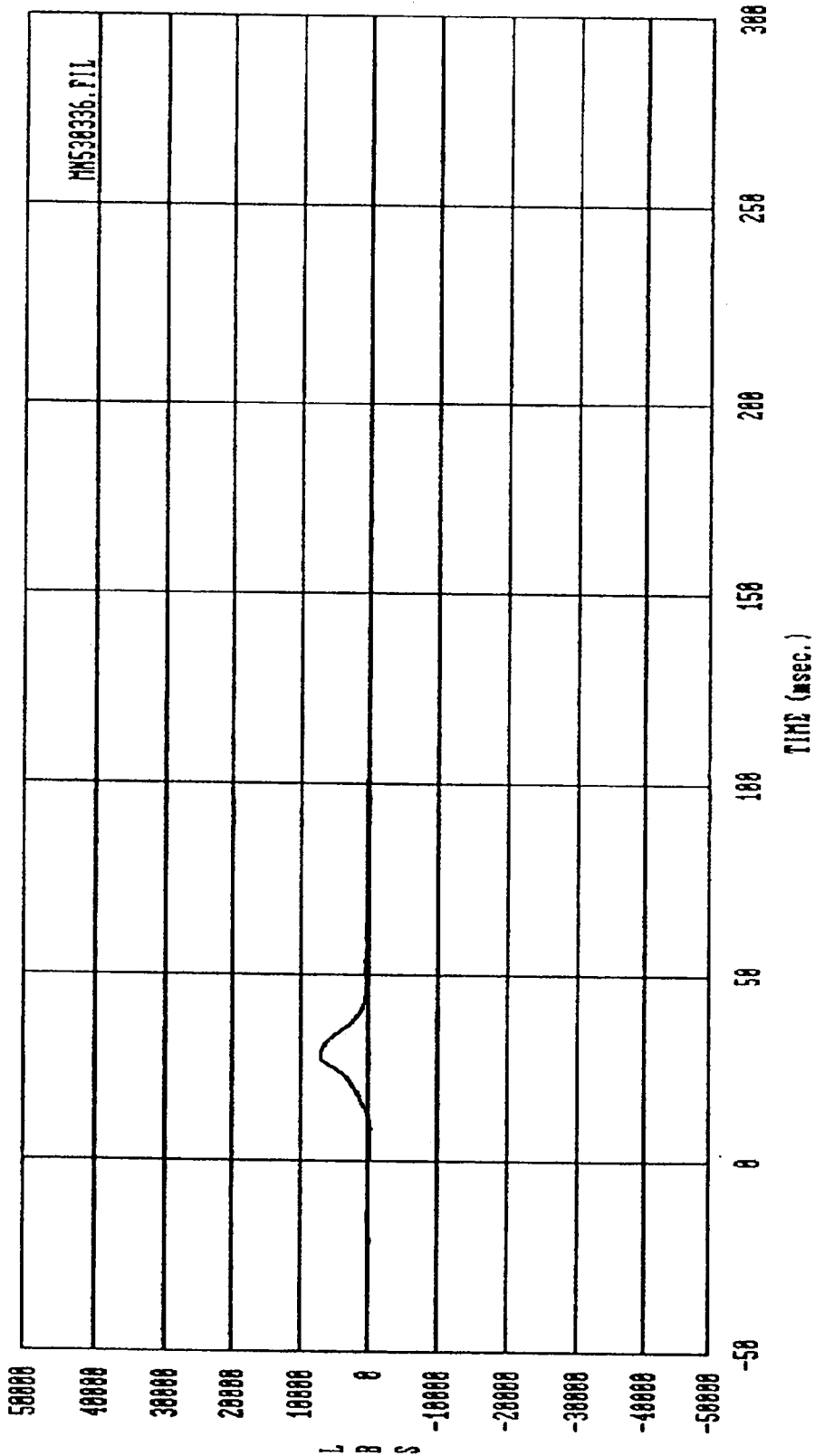
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Curve: Force on Barrier load cell A1 Filter: SAE CLASS 60 Max = .00000 Min = .00000
MSE Date: 86/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

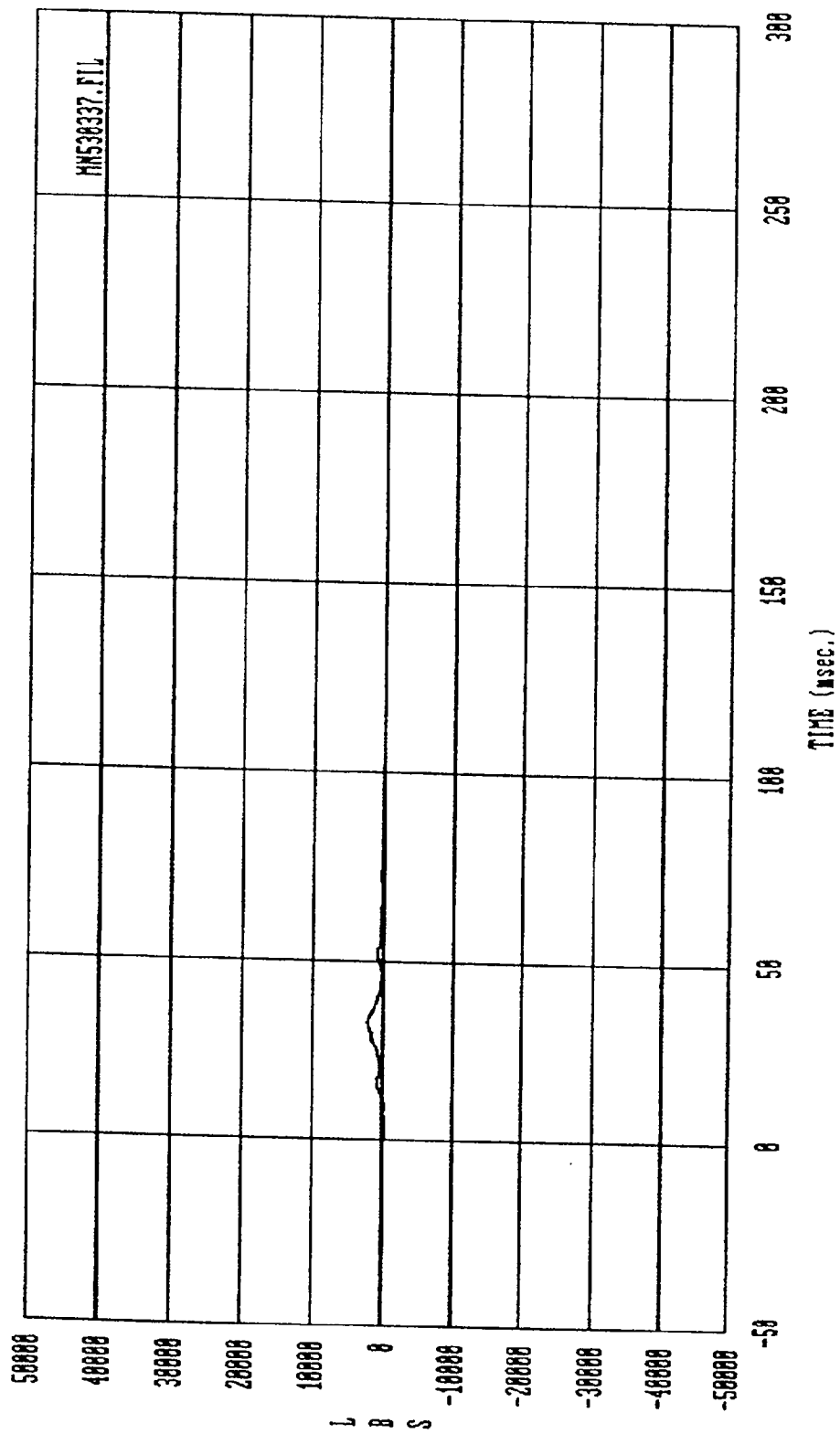


Curve: Force on Barrier load cell A2 Filter: SAE CLASS 68 Max = 2417.1 Min = -183.71
 MSE Date: 06/01/92 Program: 1992 NCAP - 45 Vehicle: 1992 Honda Prelude

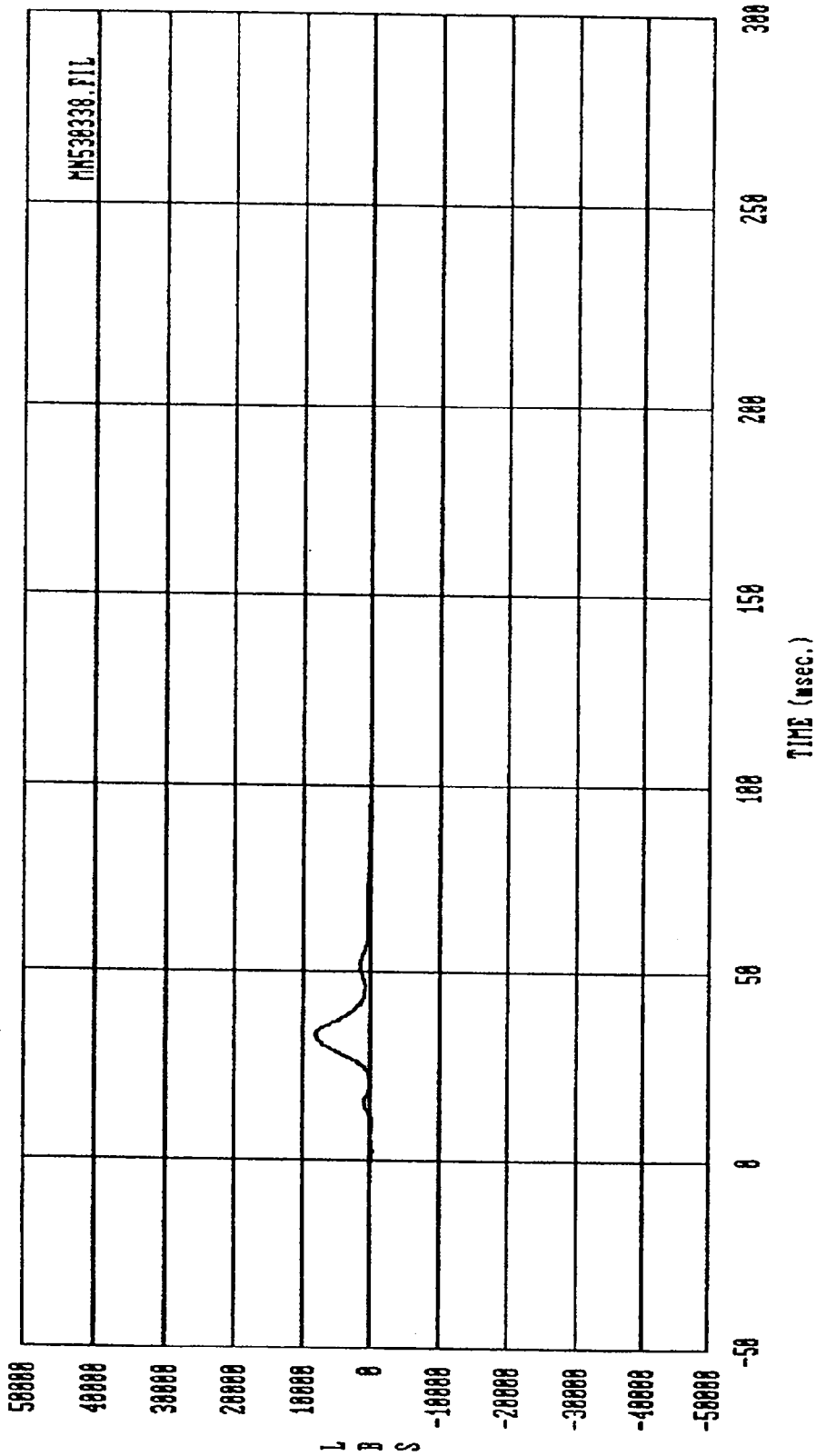


Curve: Force on Barrier load cell A3 Filter: SAE CLASS 60 Max = 7181.8 Min = -278.47

MSE Date: 86/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

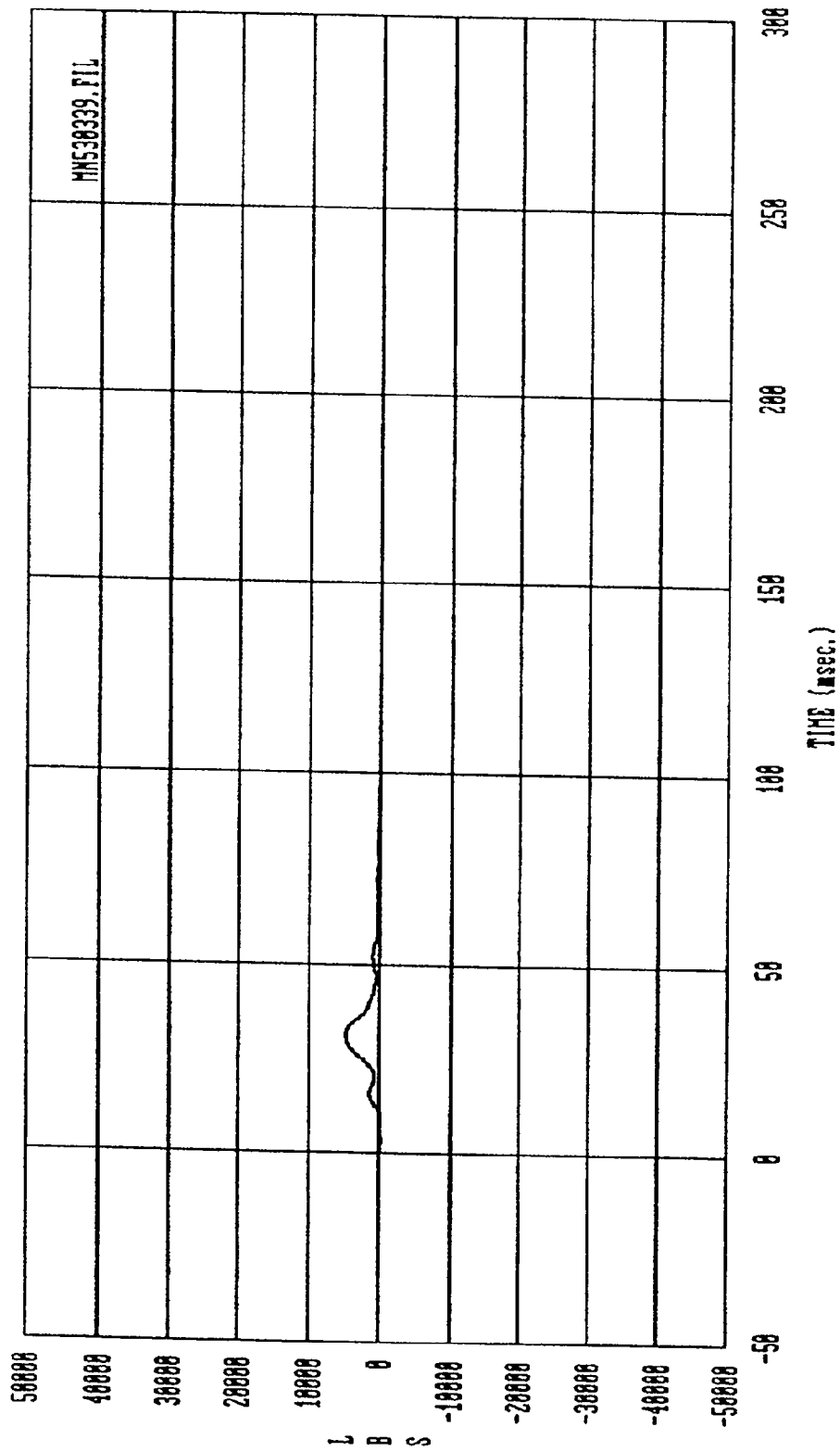


Curve: Force on Barrier load cell A4 Filter: SAE CLASS 68 Max = 2276.2 Min = -271.85
MSE Date: 86/01/92 Program: 1992 NCAP - 45 Vehicle: 1992 Honda Prelude

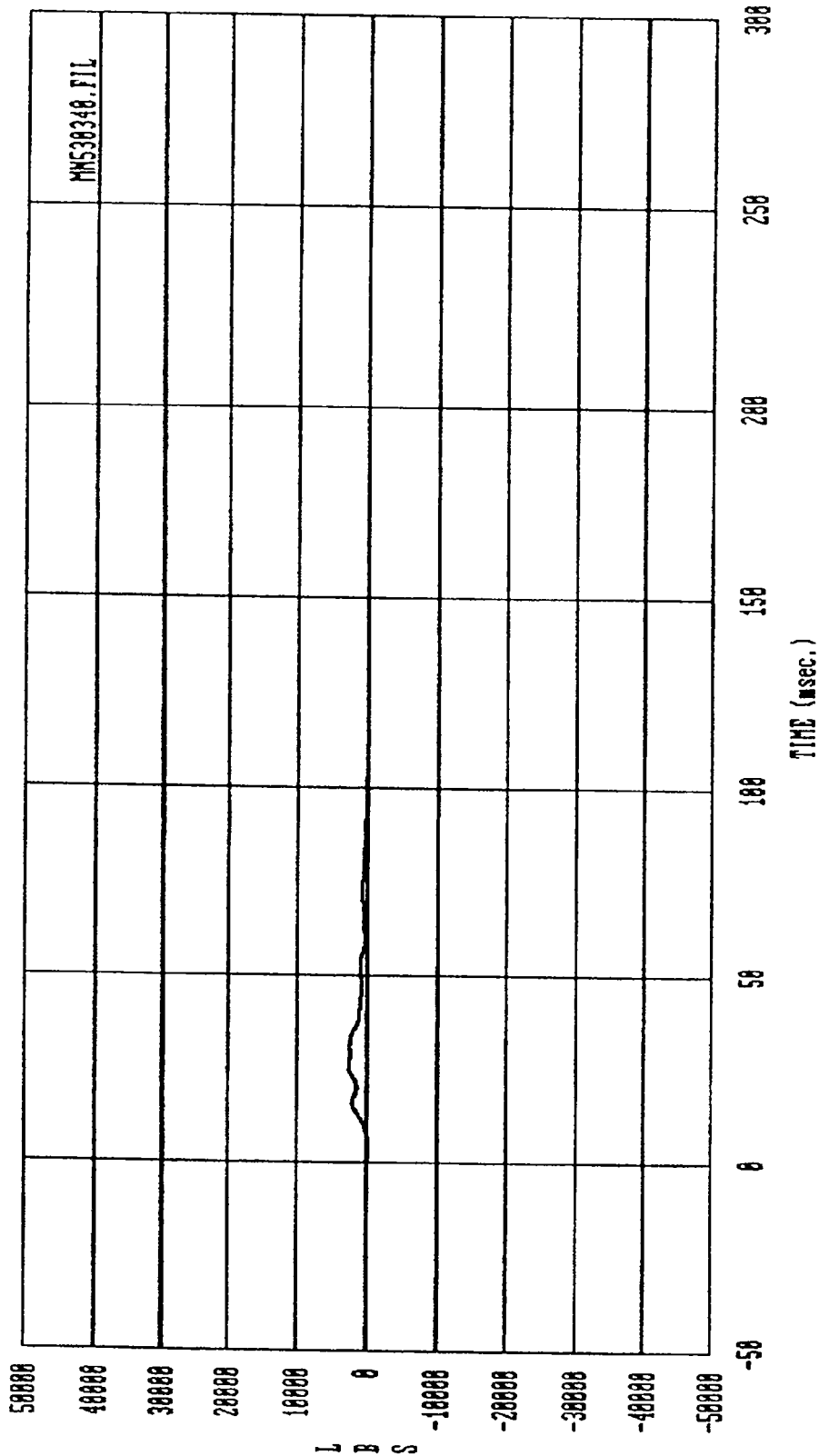


Curve: Force on Barrier load cell A5 Filter: SAE CLASS 60 Max = 8193.9 Min = -283.36

MSE Date: 86/81/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

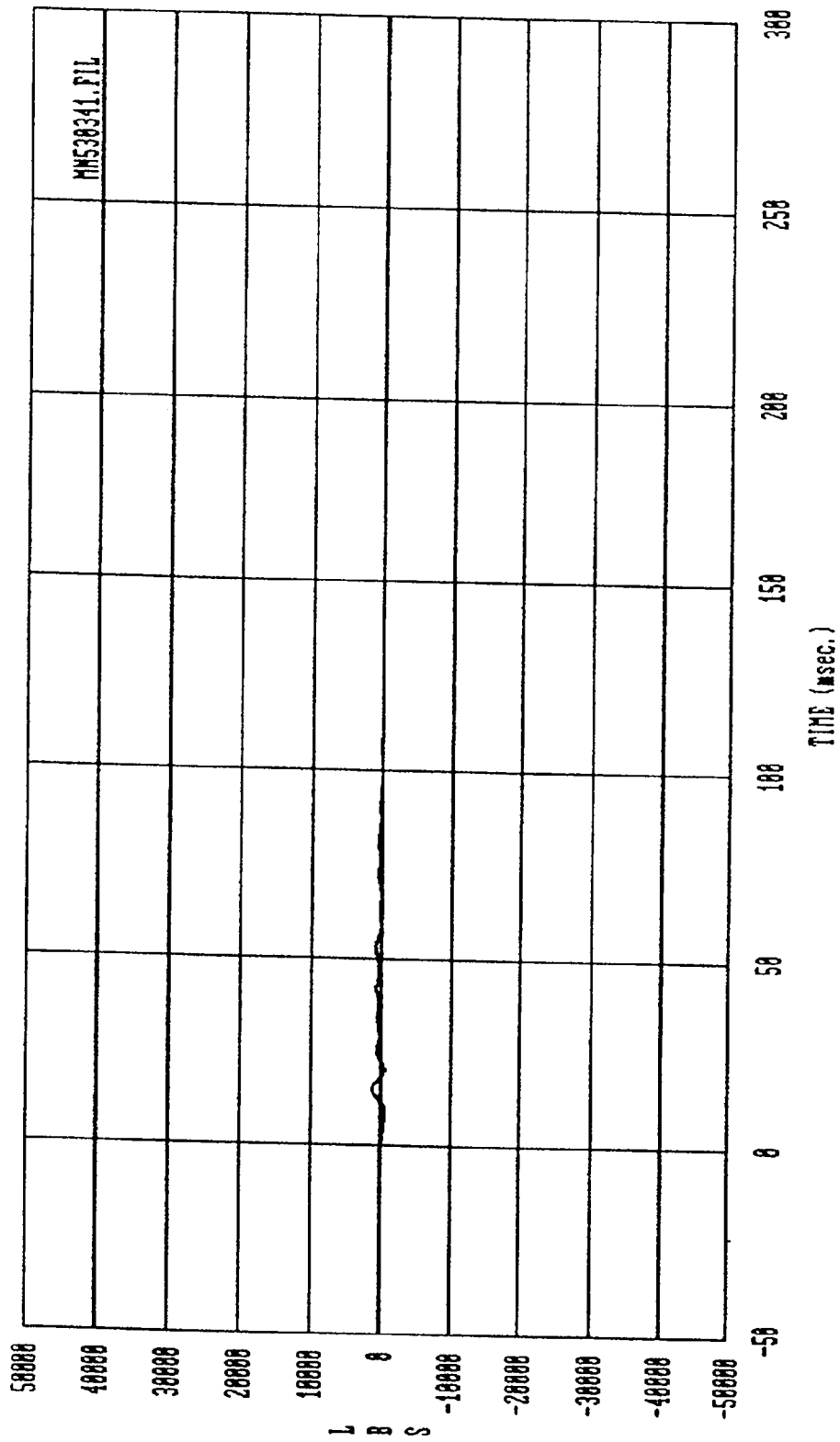


Curve: Force on Barrier load cell A6 Filter: SAE CLASS 60 Max = 4842.8 Min = -287.13
 MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

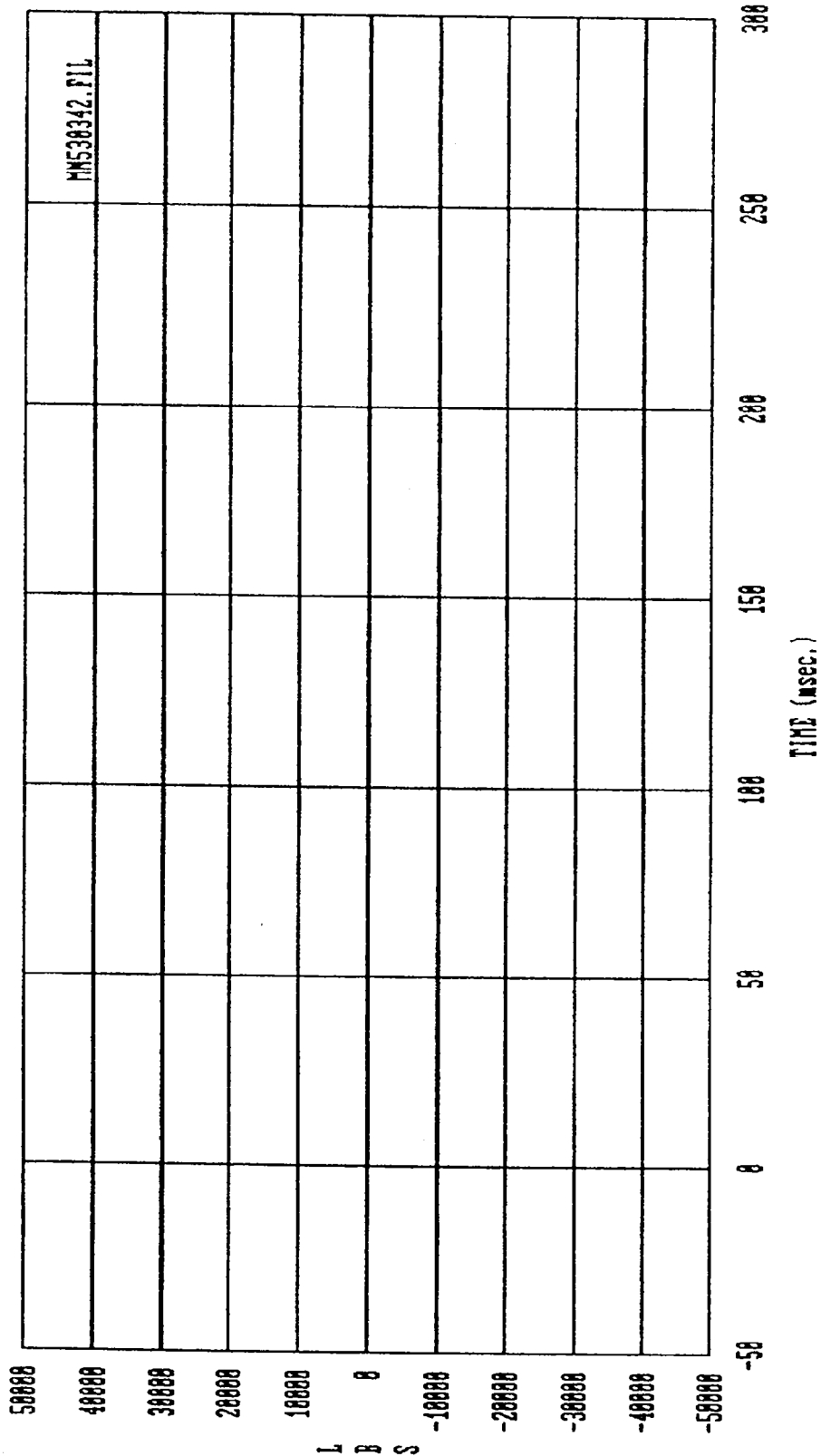


Curve: Force on Barrier load cell A7 Filter: SAE CLASS 60 Max = 2650.0 Min = -192.17

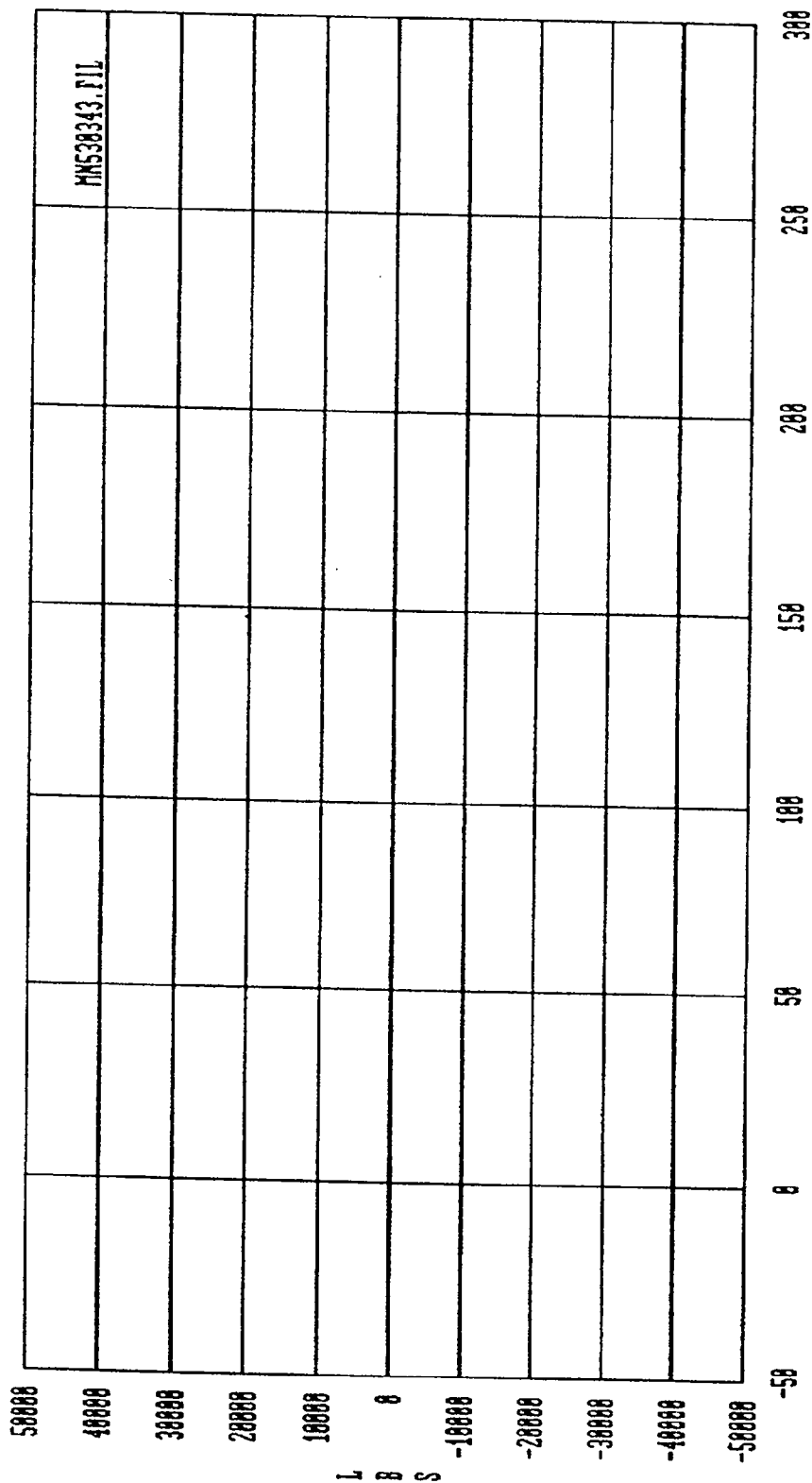
MSE Date: 06/01/92 Program: 1992 NCAP - R5 Vehicle: 1992 Honda Prelude



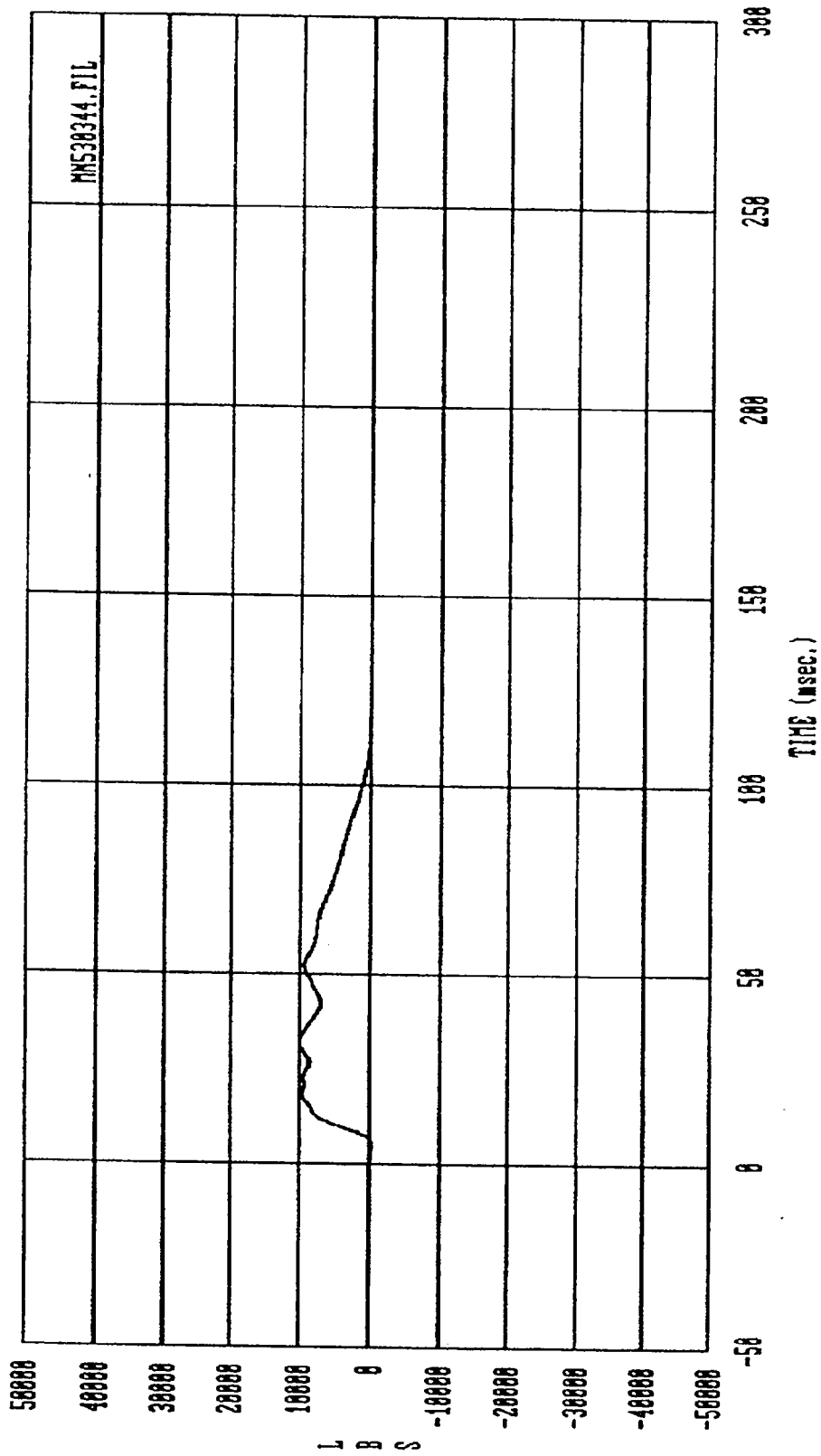
Curve: Force on Barrier load cell A8 Filter: SAE CLASS 68 Max = 1382.5 Min = -688.60
 MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

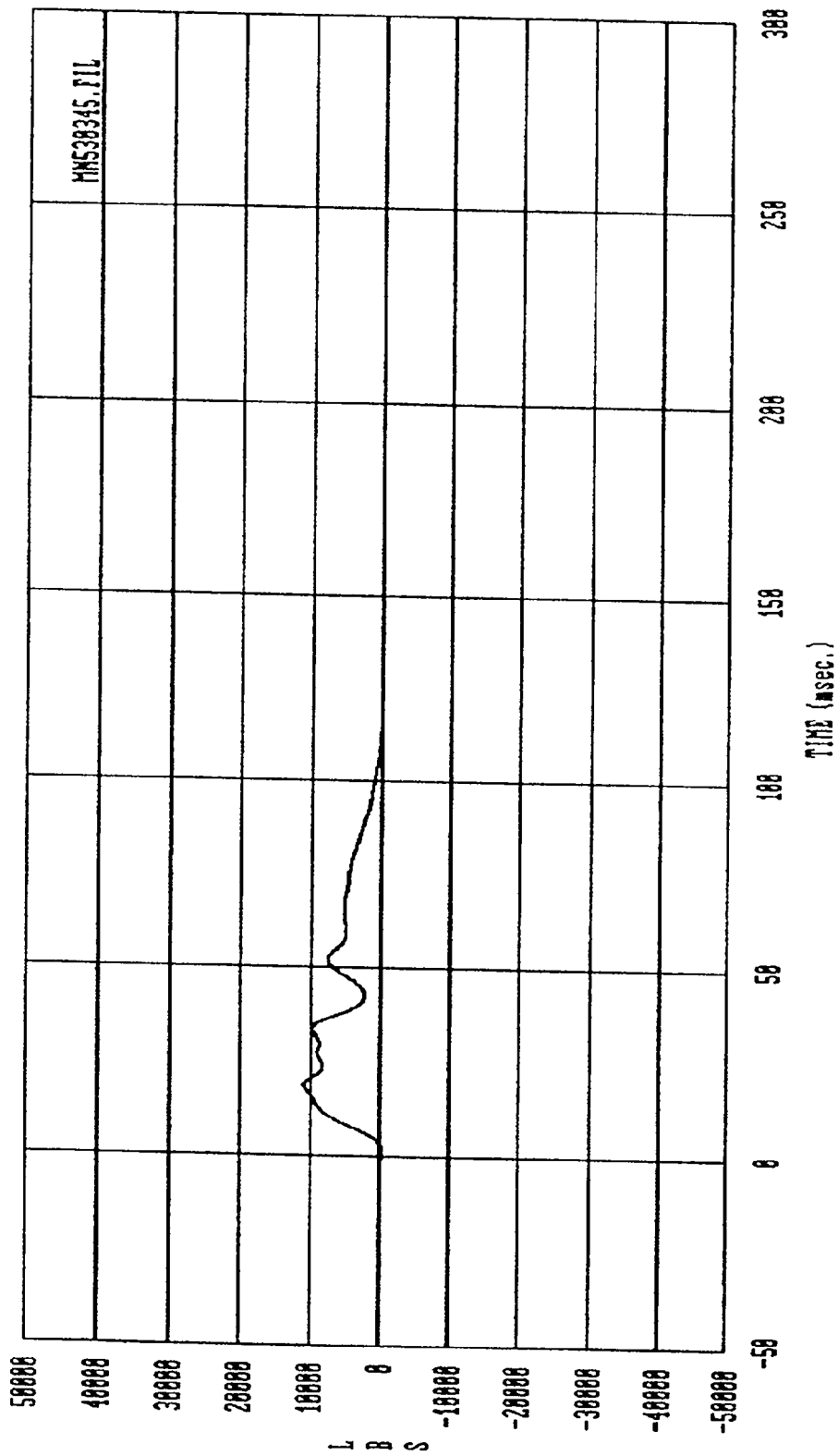


Curve: Force on Barrier load cell A9 Filter: SAE CLASS 60 Max = .00000 Min = .00000
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

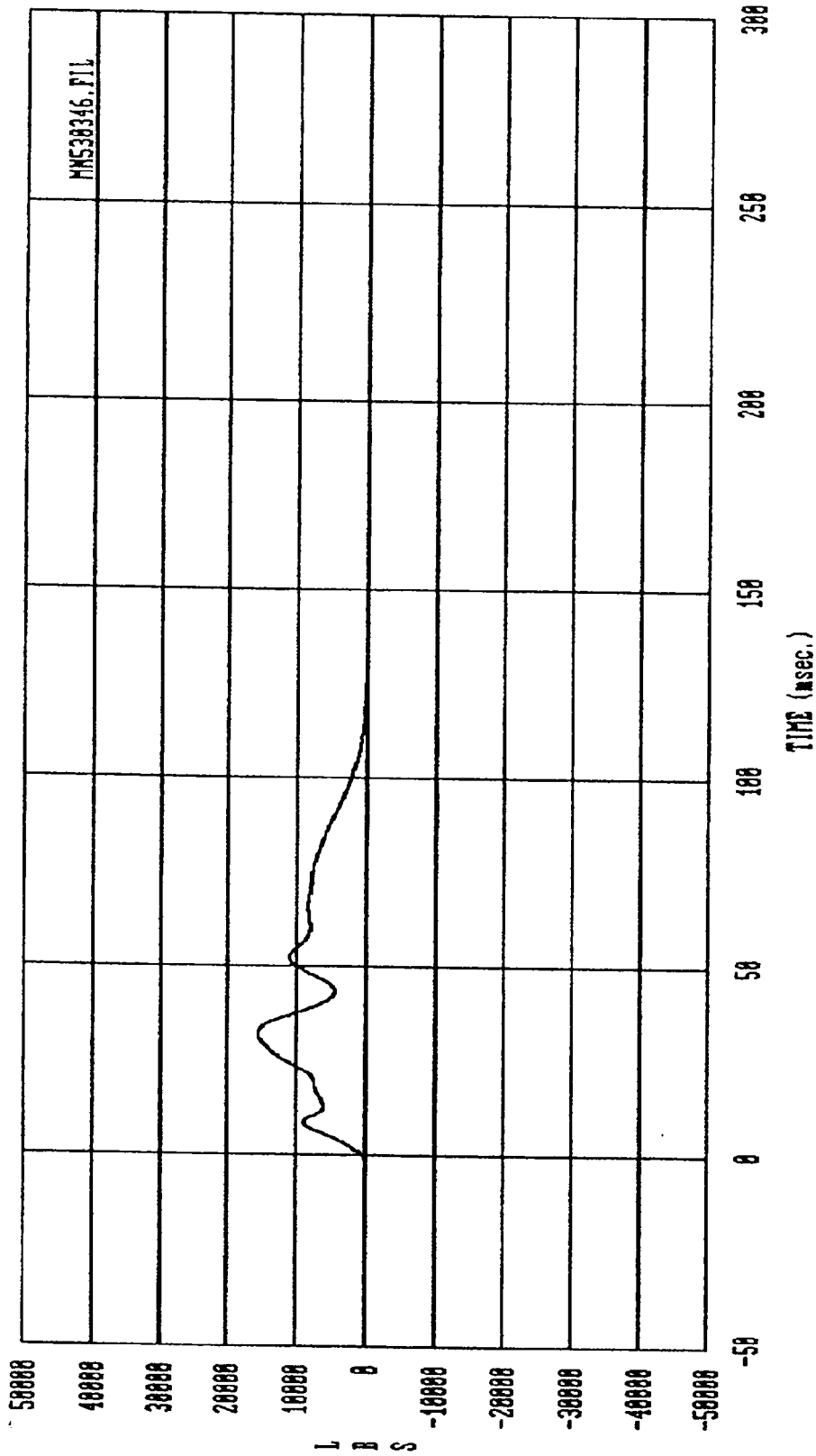


Curve: Force on Barrier load cell B1
 Filter: SAE CLASS 60 Max = .00000 Min = .00000
 Date: 86/01/92 Program: 1992 NCAP - N5 Vehicle: 1992 Honda Prelude
 MSE



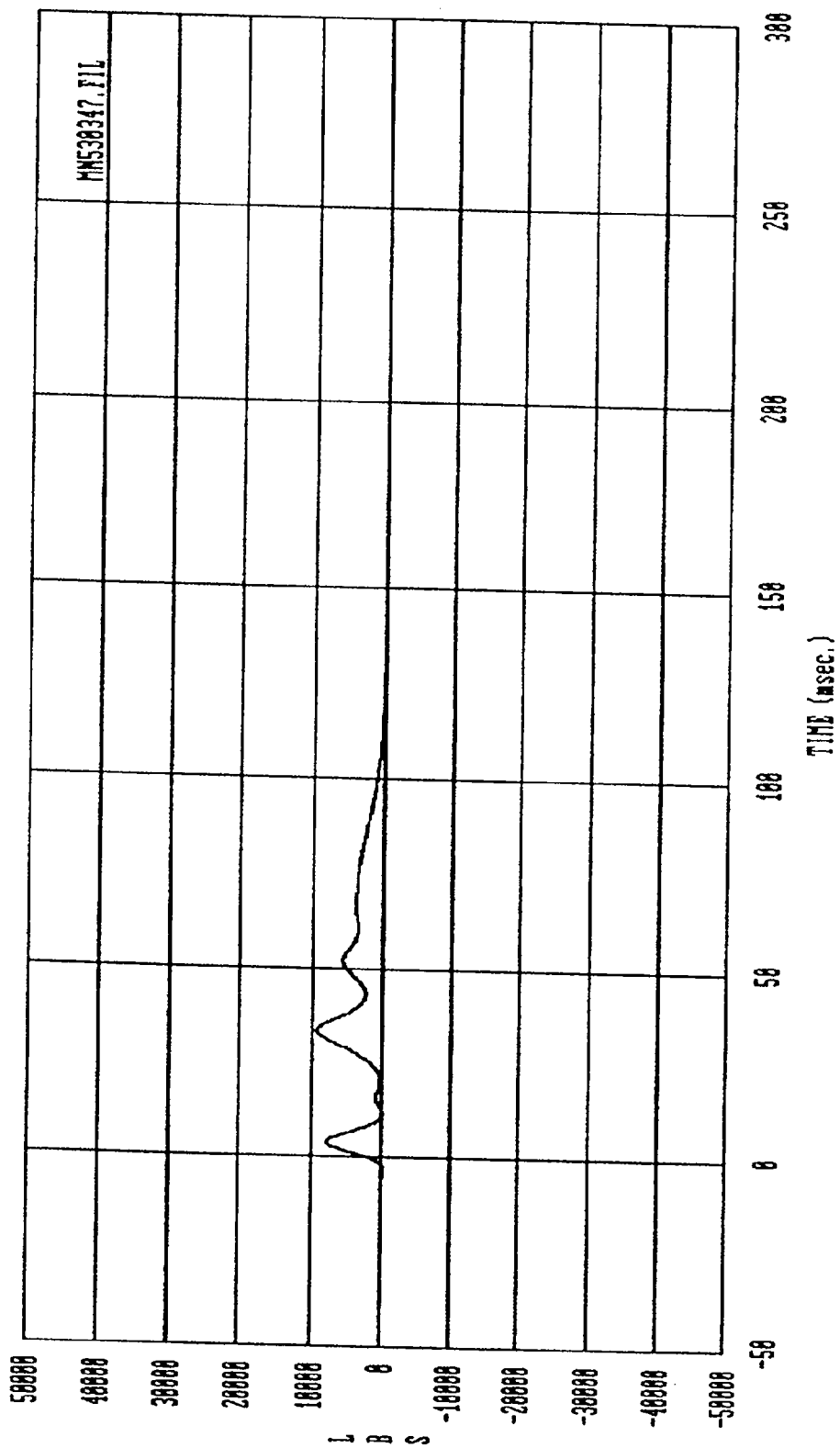


Curve: Force on Barrier load cell B3 Filter: SAE CLASS 60 Max = 18946. Min = -222.41
MSE Date: 86/01/92 Program: 1992 NCAP - B5 Vehicle: 1992 Honda Prelude

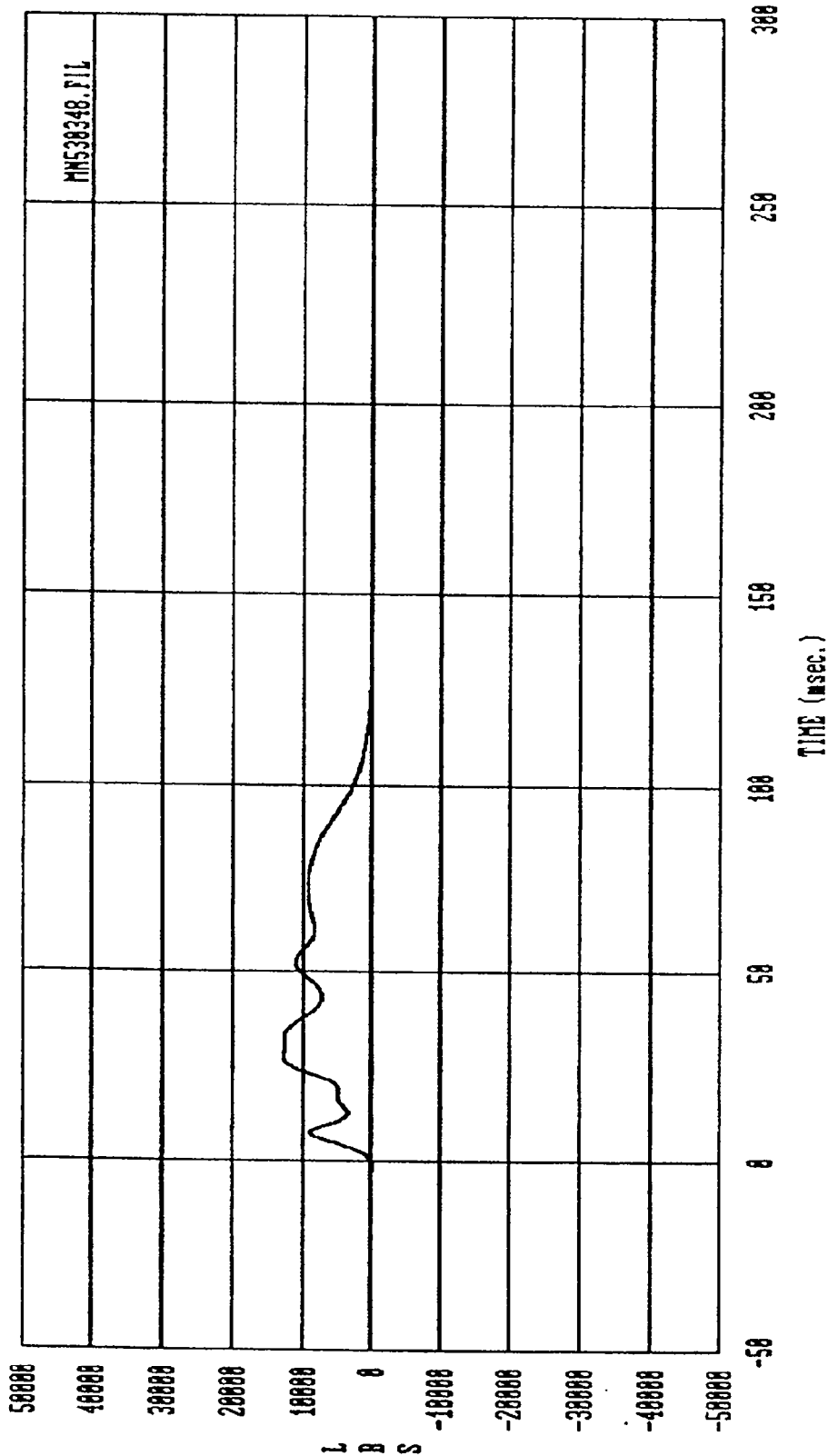


Curve: Force on Barrier load cell B4 Filter: SAE CLASS 60 Max = 15622. Min = -49.488

MSE Date: 86/01/92 Program: 1992 NCAP - I5 Vehicle: 1992 Honda Prelude

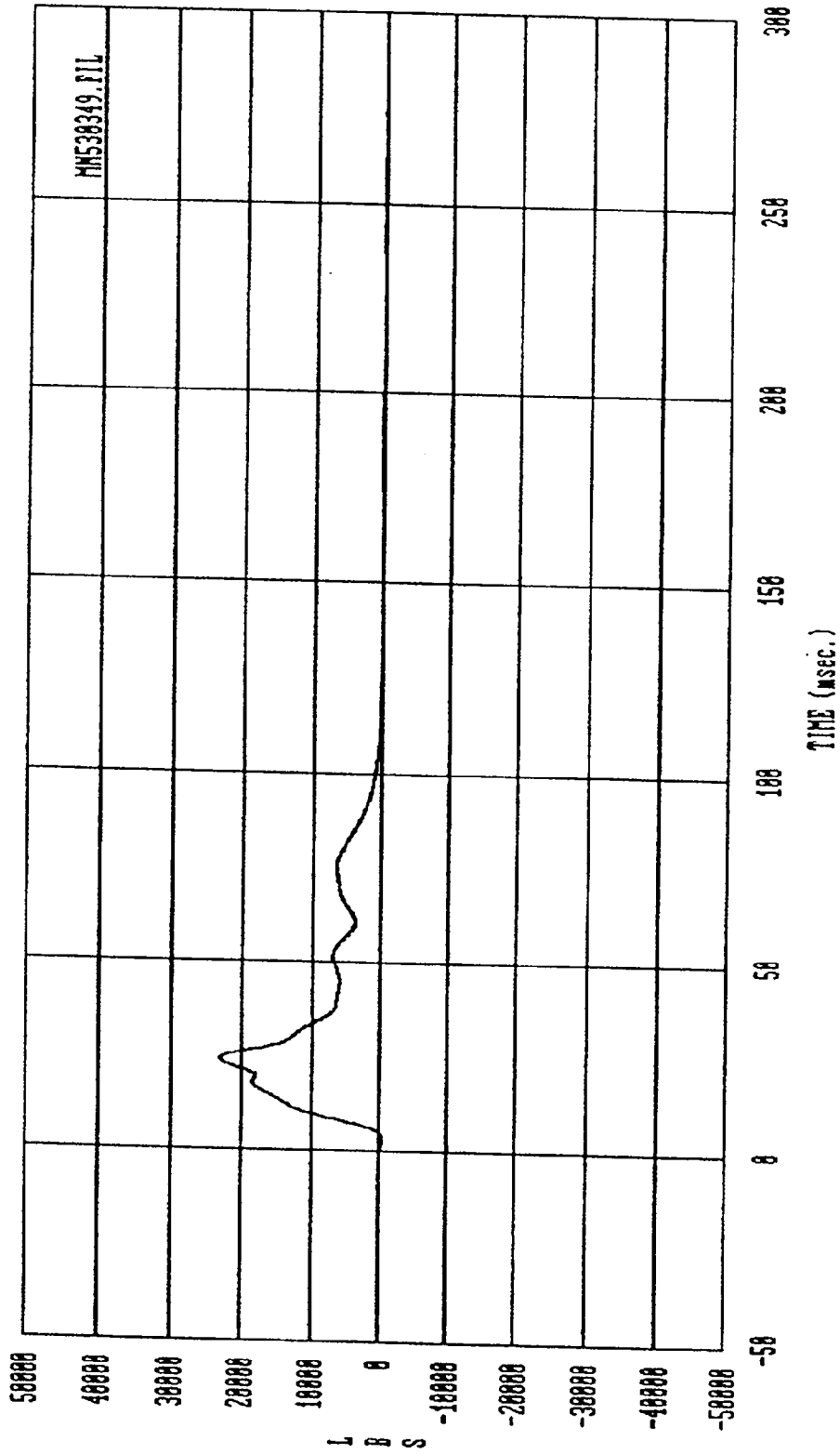


Curve: Force on Barrier load cell B5 Filter: SAE CLASS 60 Max = 9356.0 Min = -95.210
MSE Date: 86/81/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

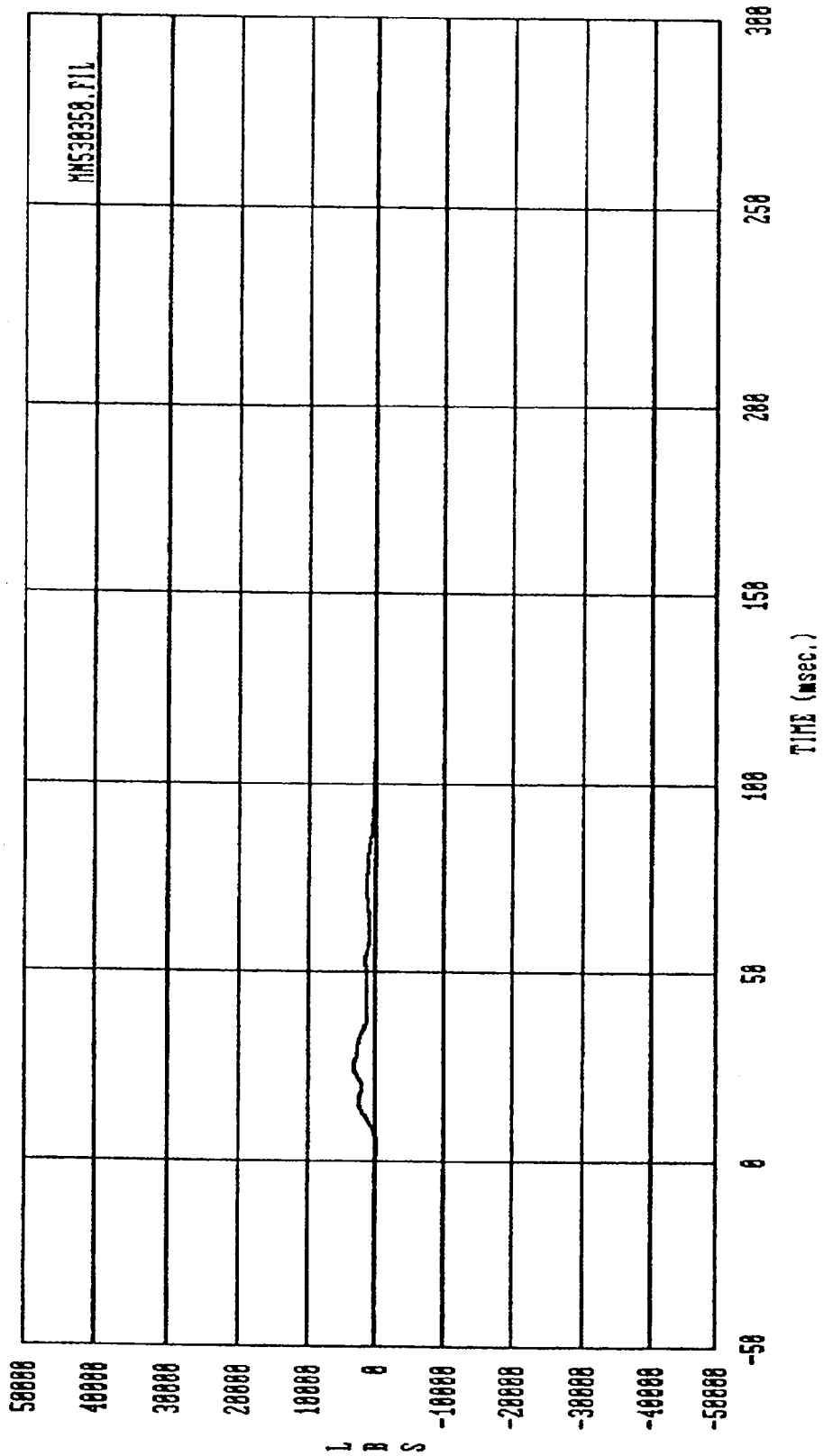


Curve: Force on Barrier load cell B6 Filter: SAE CLASS 60 Max = 12814. Min = -29.885

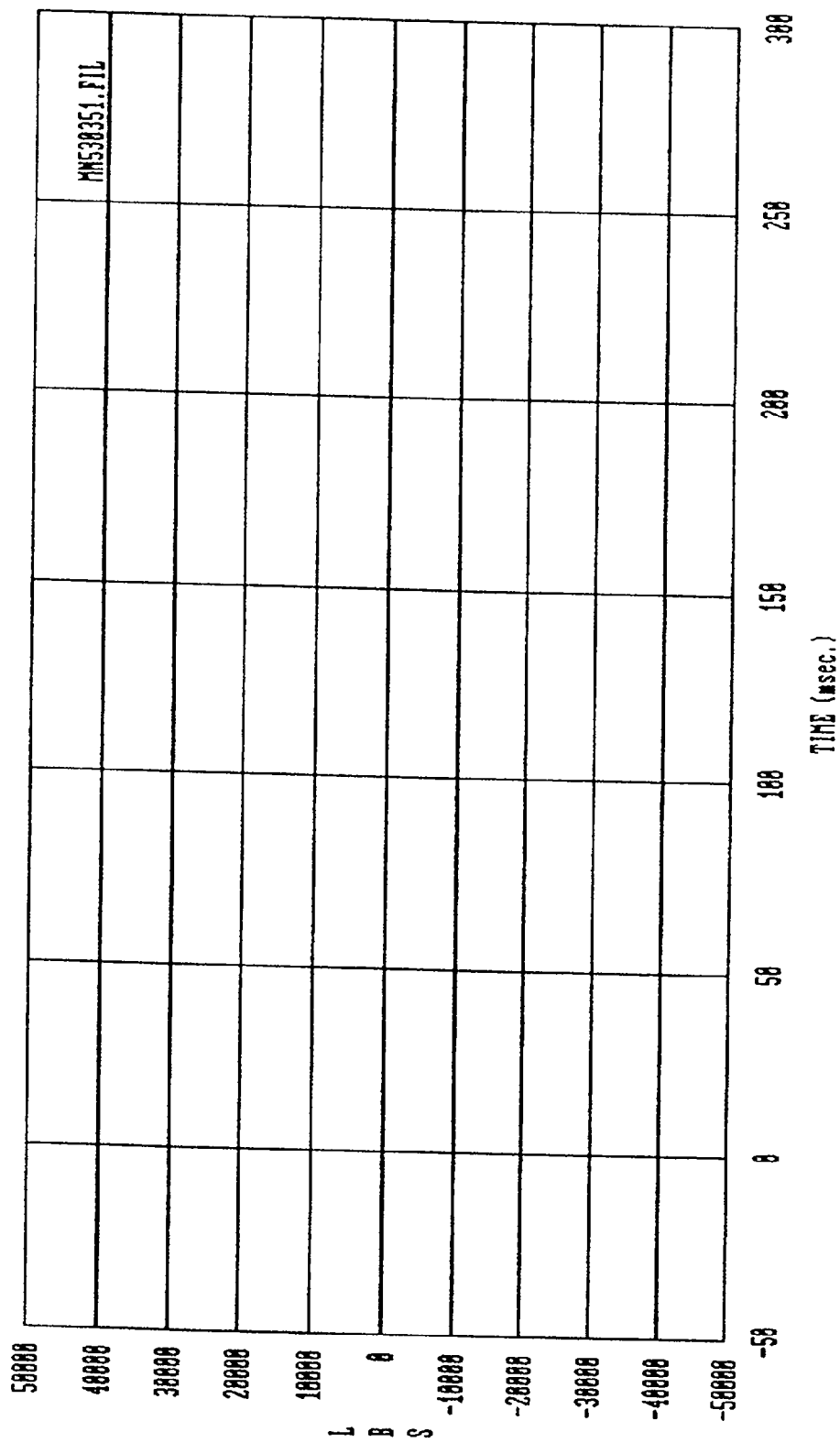
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



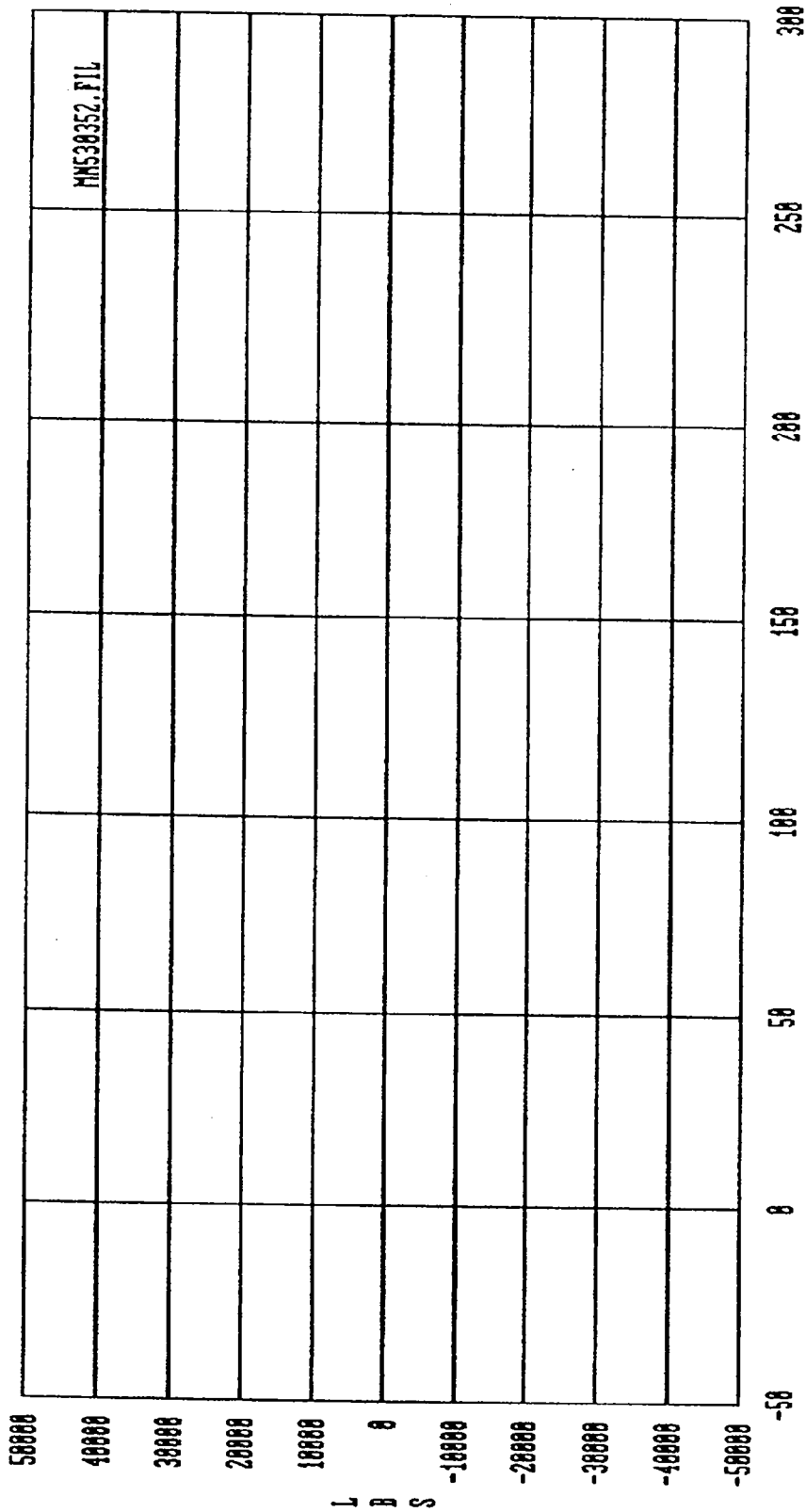
Curve: Force on Barrier load cell B7 Filter: SAE CLASS 60 Max = 23124. Min = -380.75
 MSE Date: 86/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



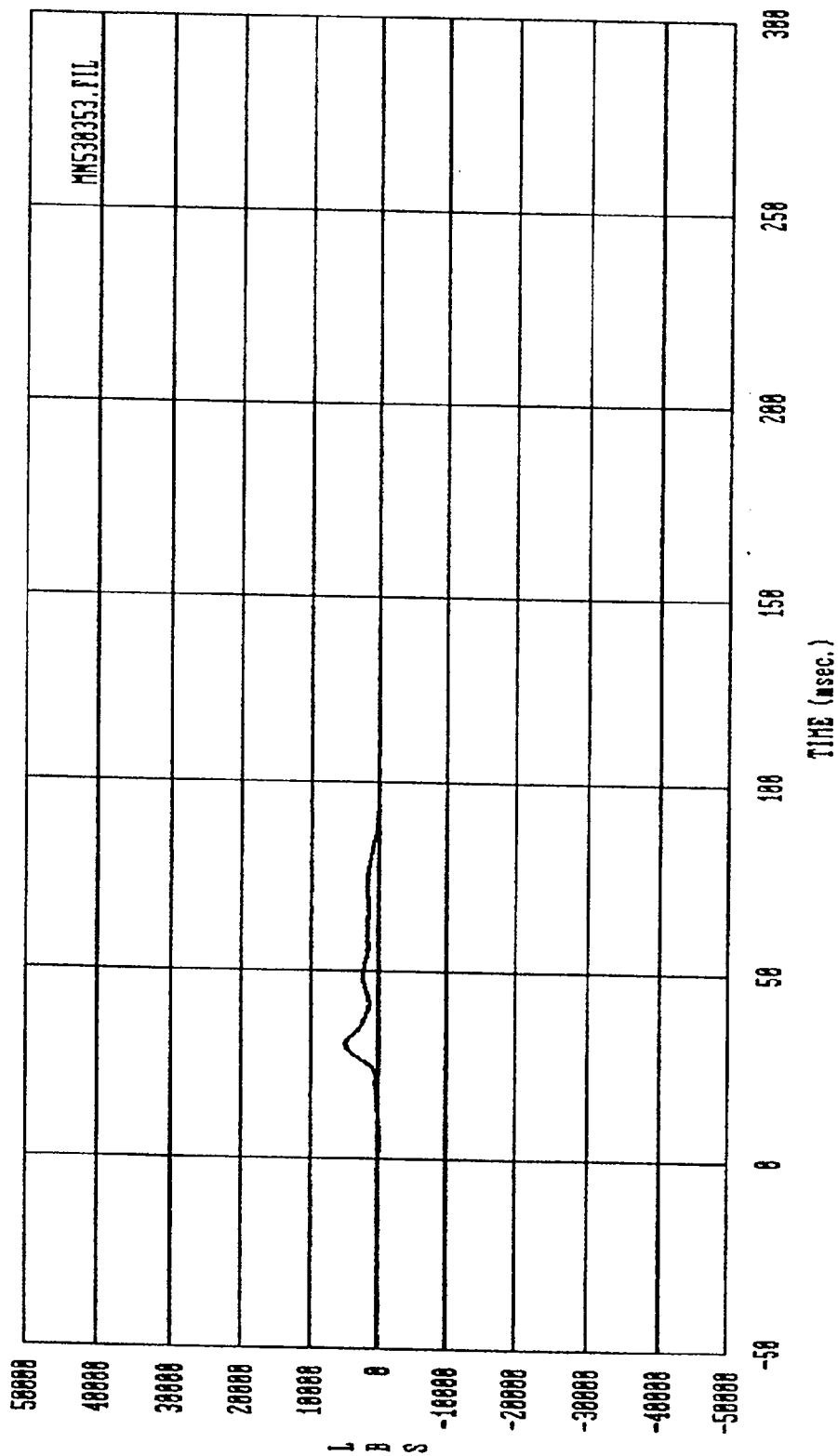
Curve: Force on Barrier load cell B8 Filter: SAE CLASS 68 Max = 3439.6 Min = -186.28
 MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



Curve: Force on Barrier load cell D9
 Filter: SAE CLASS 60 Max = .00000 Min = .00000
 Date: 06/01/92
 Program: 1992 NCAP - N5
 Vehicle: 1992 Honda Prelude

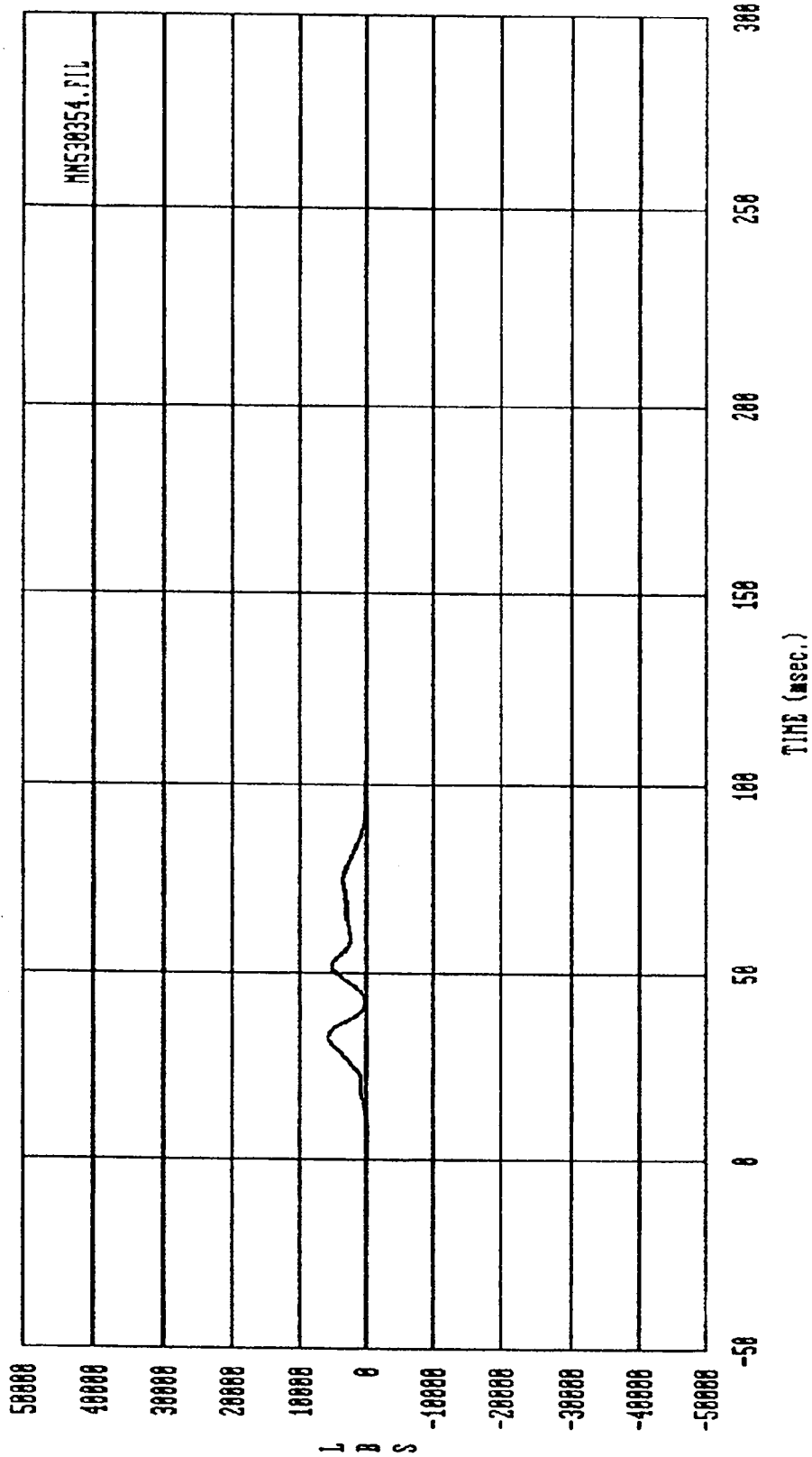


Curve: Force on Barrier load cell C1 Filter: SAE CLASS 60 Max = .00000 Min = .00000
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

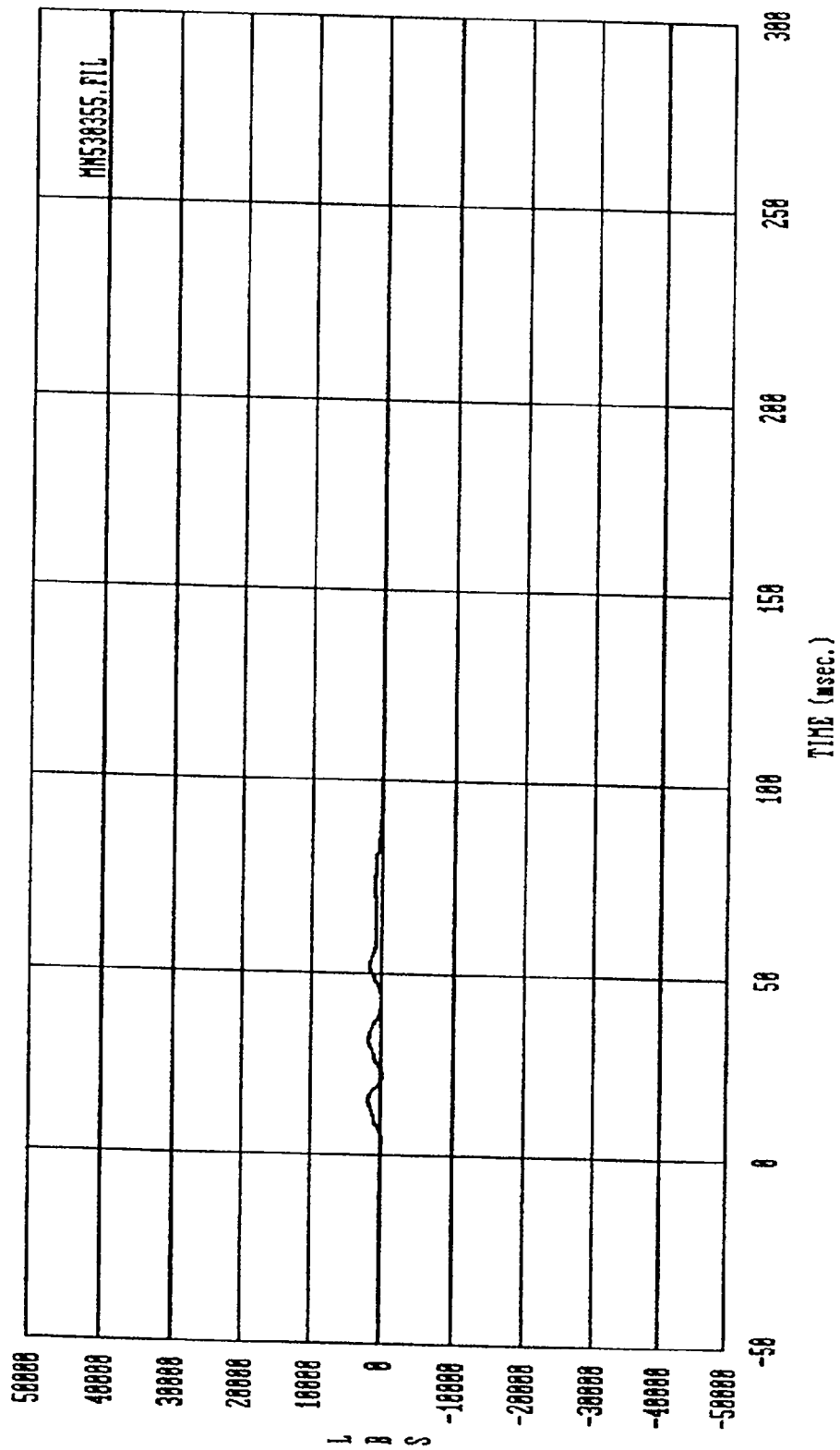


Curve: Force on Barrier load cell C2 Filter: SAE CLASS 60 Max = 5879.8 Min = -113.55

MSE Date: 06/01/92 Program: 1992 NCAP - I5 Vehicle: 1992 Honda Prelude

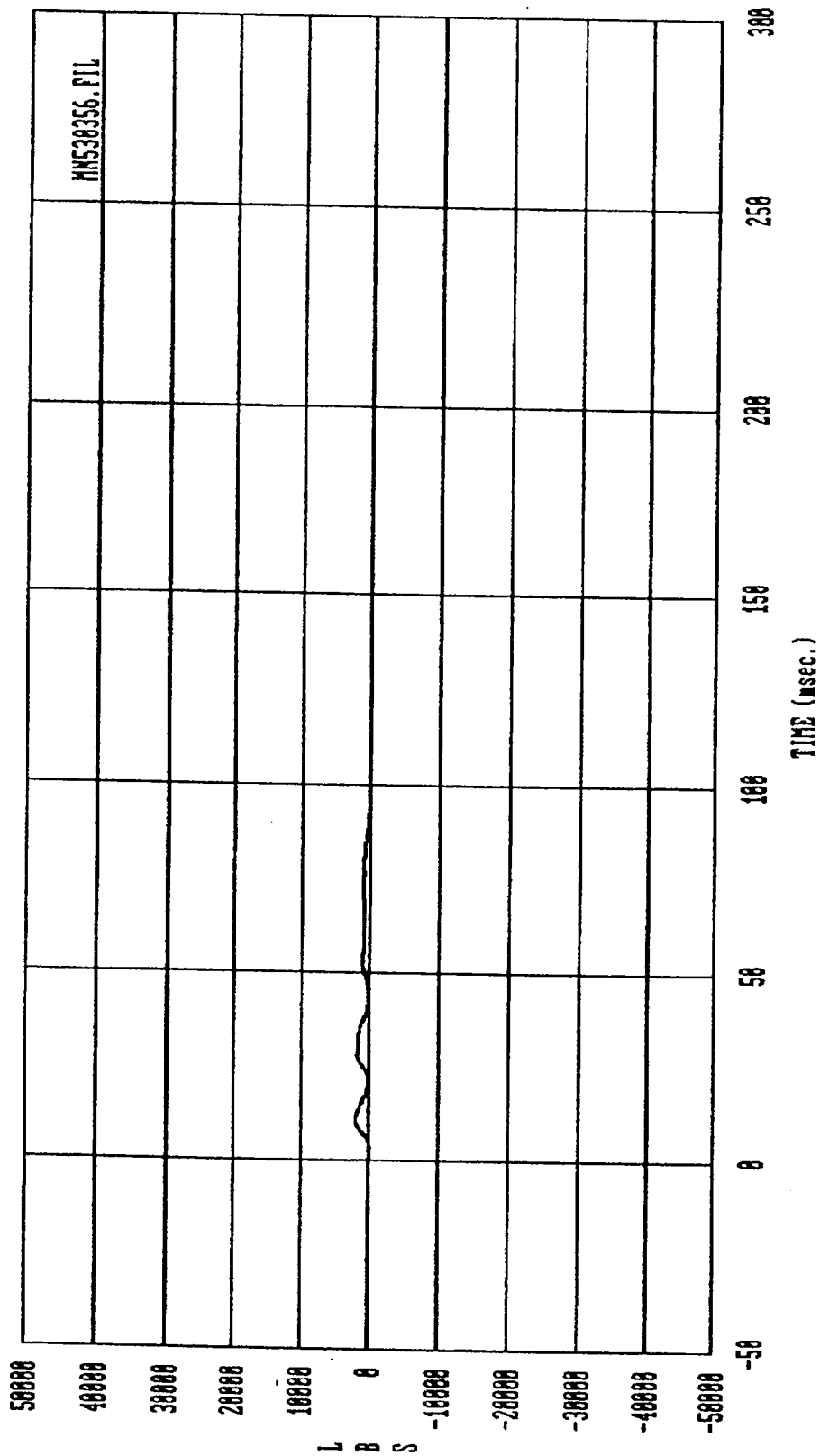


Curve: Force on Barrier load cell C3 Filter: SAE CLASS 60 Max = 5886.0 Min = -164.82
MSE Date: 06/01/92 Program: 1992 NCAP - 45 Vehicle: 1992 Honda Prelude



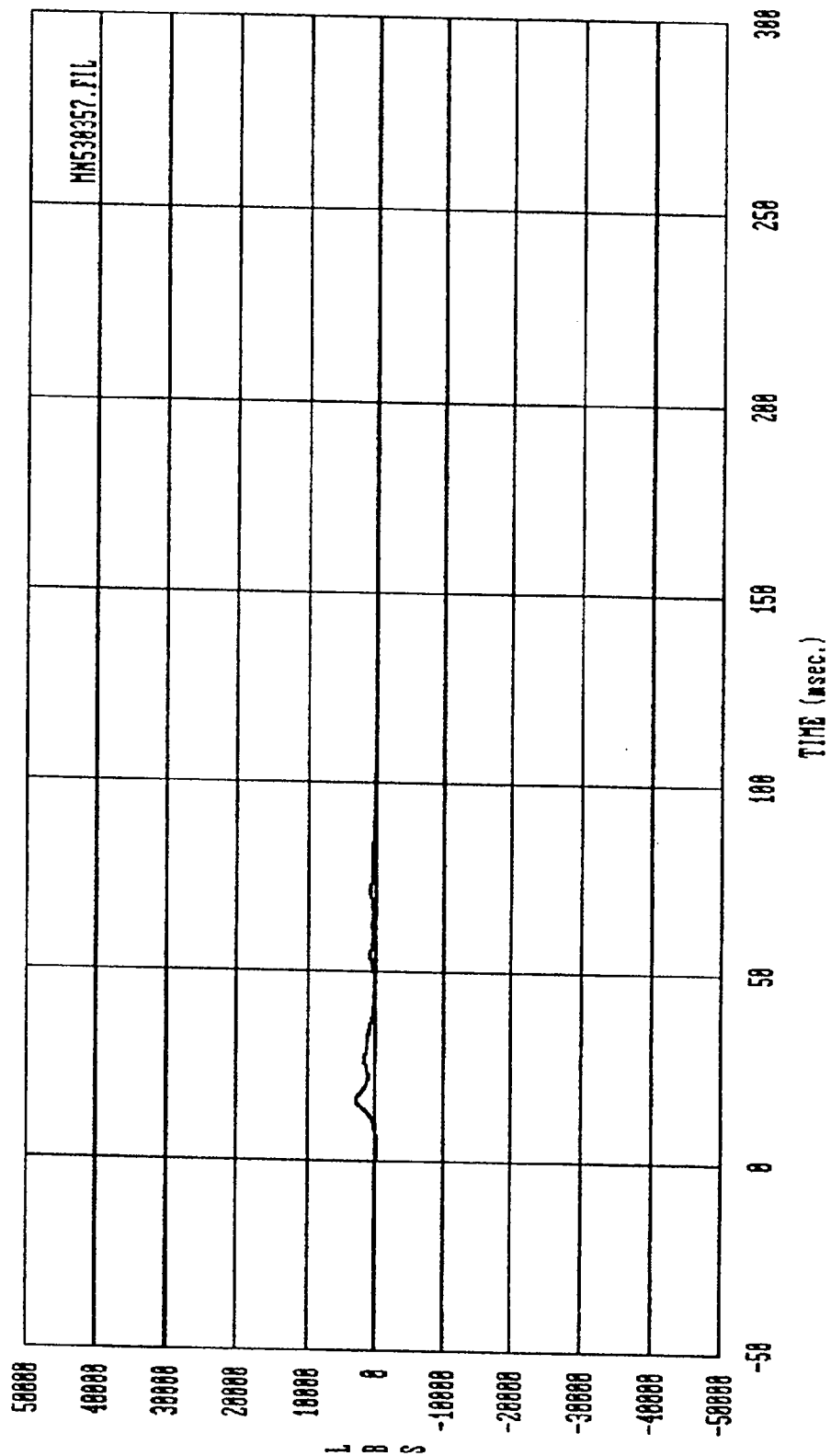
Curve: Force on Barrier load cell C4 Filter: SAE CLASS 60 Max = 1783.9 Min = -282.32

MSE Date: 06/01/92 Program: 1992 NCAP - P5 Vehicle: 1992 Honda Prelude

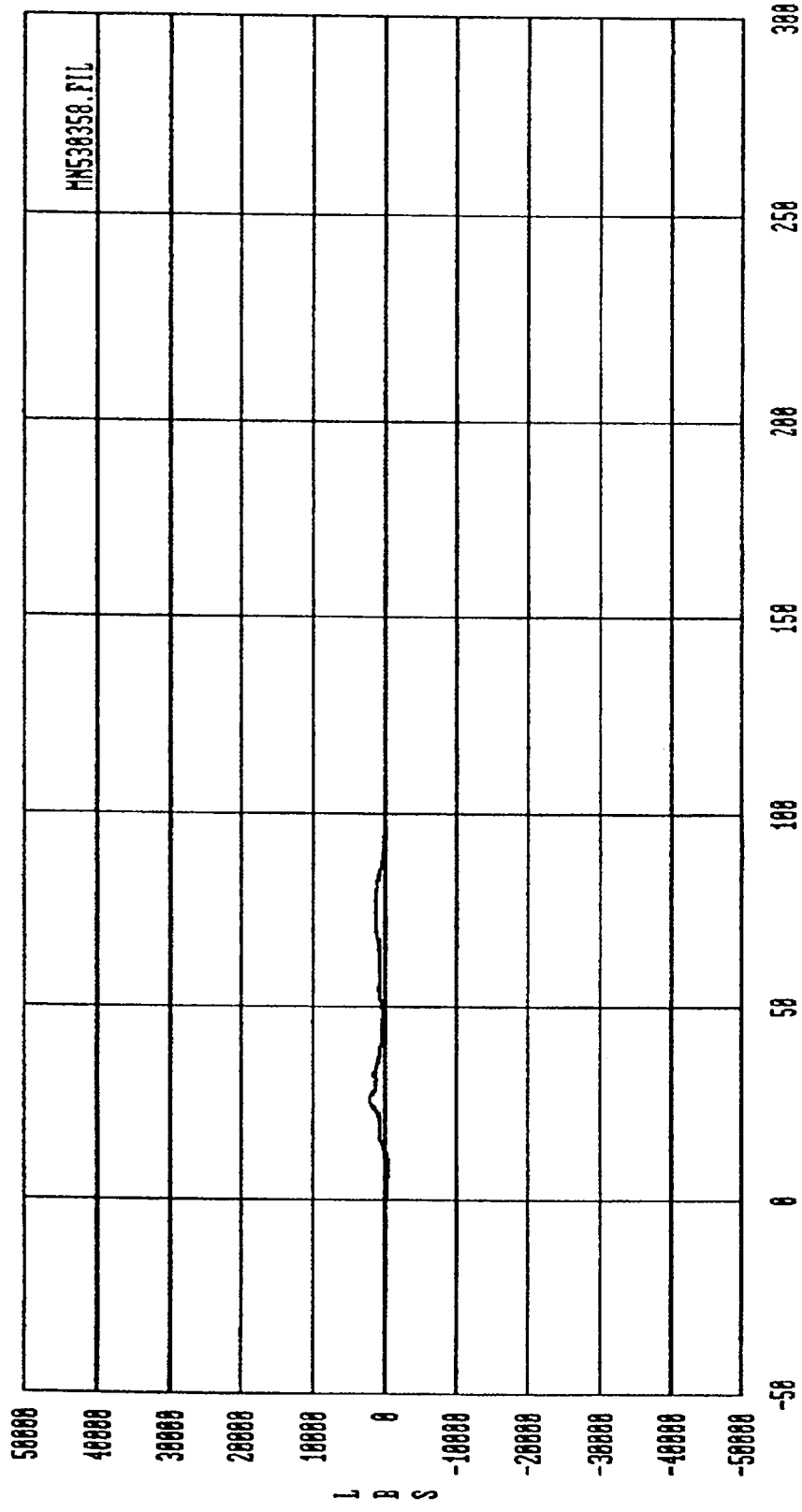


Curve: Force on Barrier load cell C5 Filter: SAE CLASS 60 Max = 1983.5 Min = -176.54

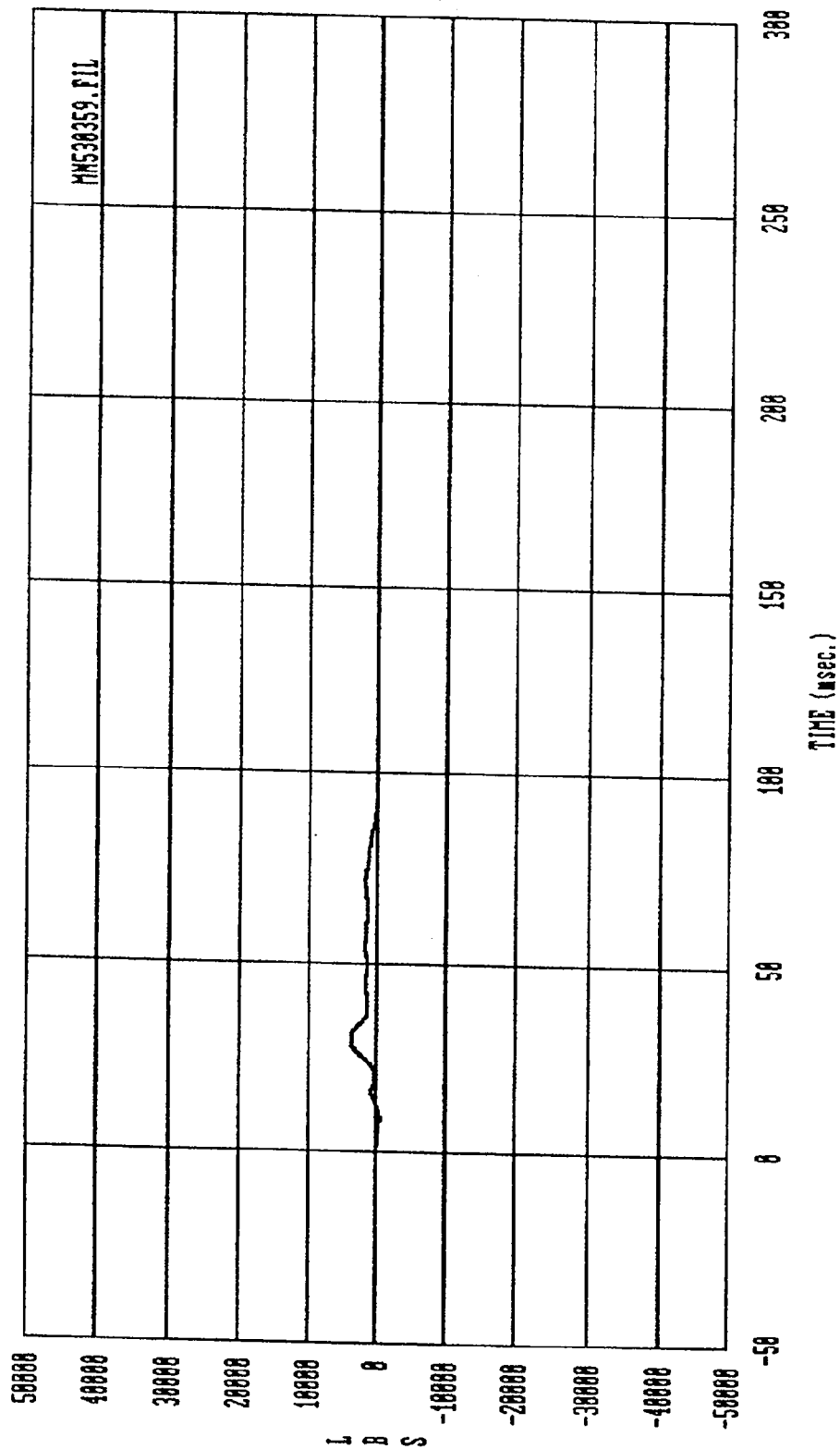
MSE Date: 86/01/92 Program: 1992 NCAP - N5 Vehicle: 1992 Honda Prelude



Curve: Force on Barrier Load Cell C6 Filter: SAE CLASS 60 Max = 2817.9 Min = -167.35
 MSE Date: 06/01/92 Program: 1992 NCAP - 45 Vehicle: 1992 Honda Prelude

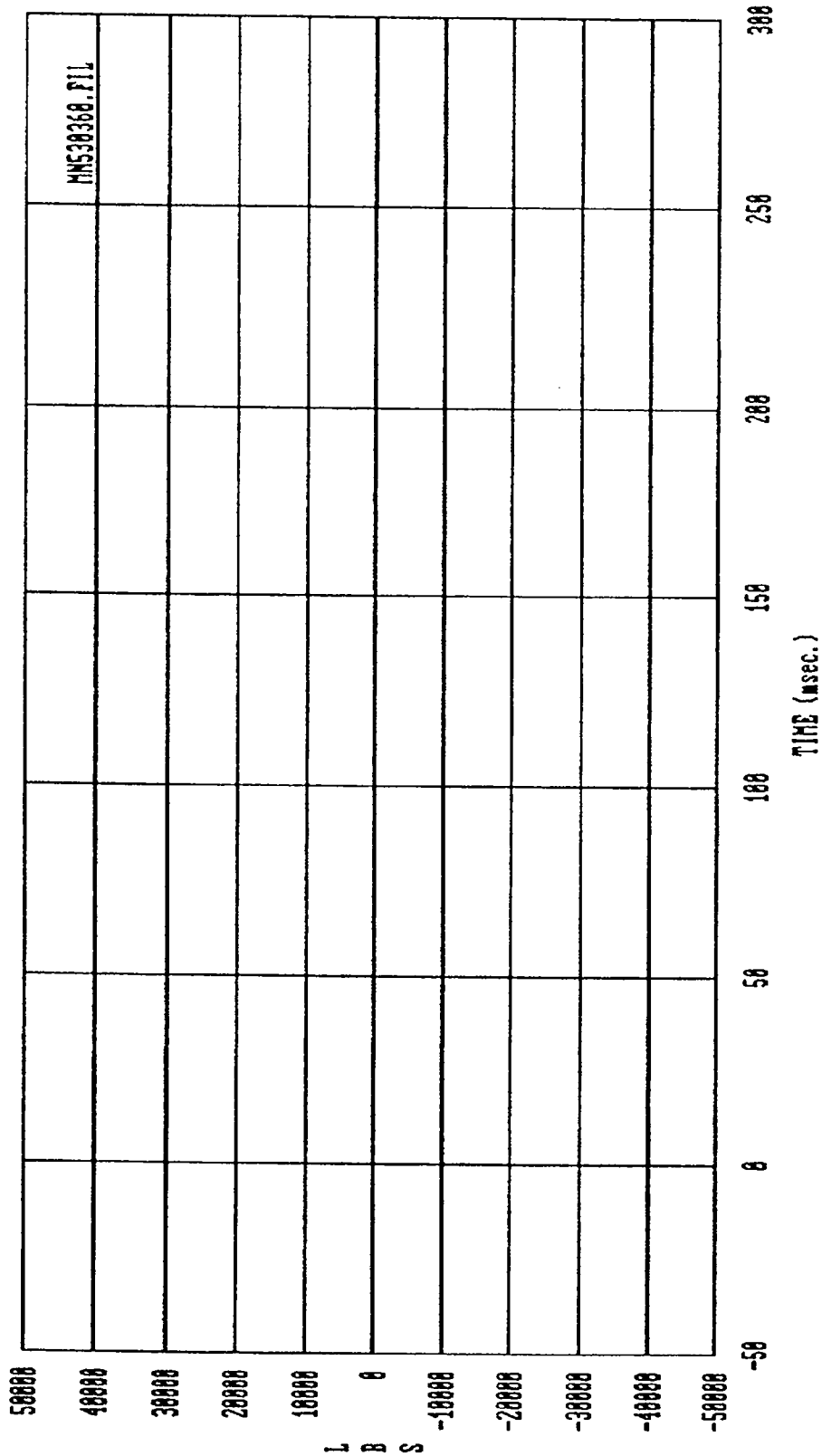


Curve: Force on Barrier load cell C7 Filter: SAE CLASS 60 Max = 2174.0 Min = -368.89
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



Curve: Force on Barrier load cell C8 Filter: SAE CLASS 60 Max = 3831.3 Min = -485.34

MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

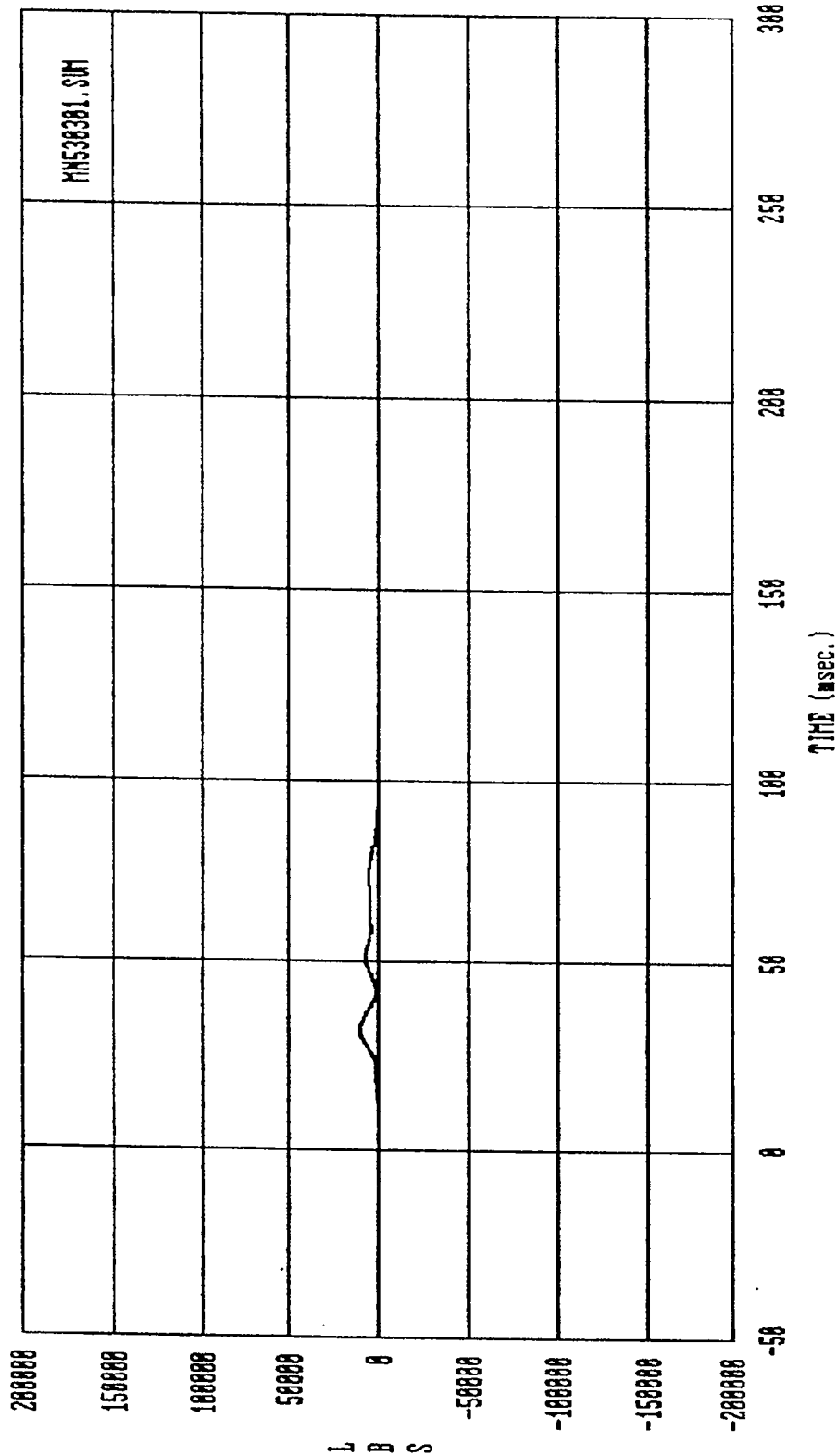


Curve: Force on Barrier load cell C9*

Filter: SAE CLASS 60 Max = .00000 Min = .00000

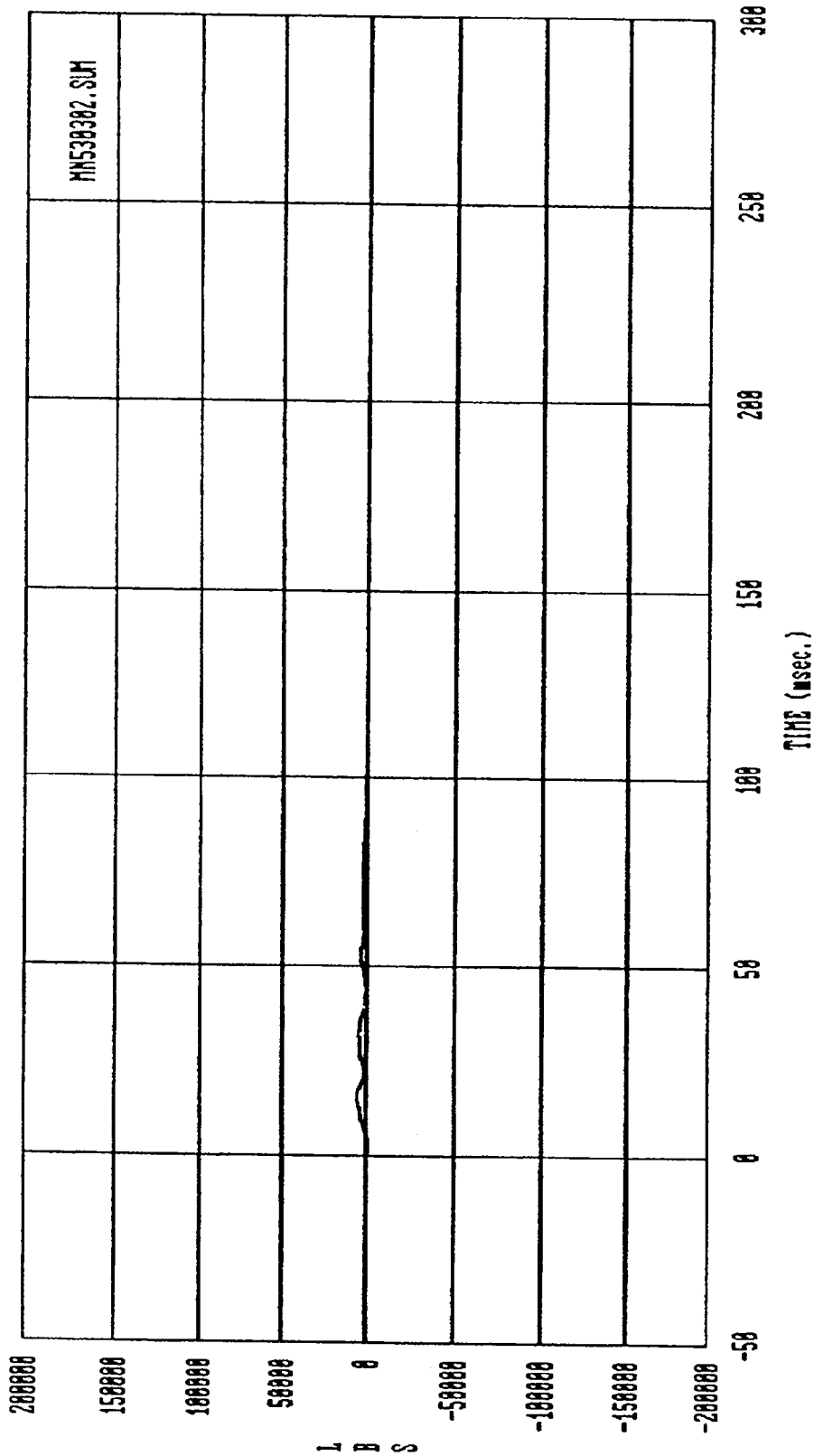
MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude

* ROW D (LOAD CELLS D₁ TO D₉) IS NOT INCLUDED IN THE SUMMATION.



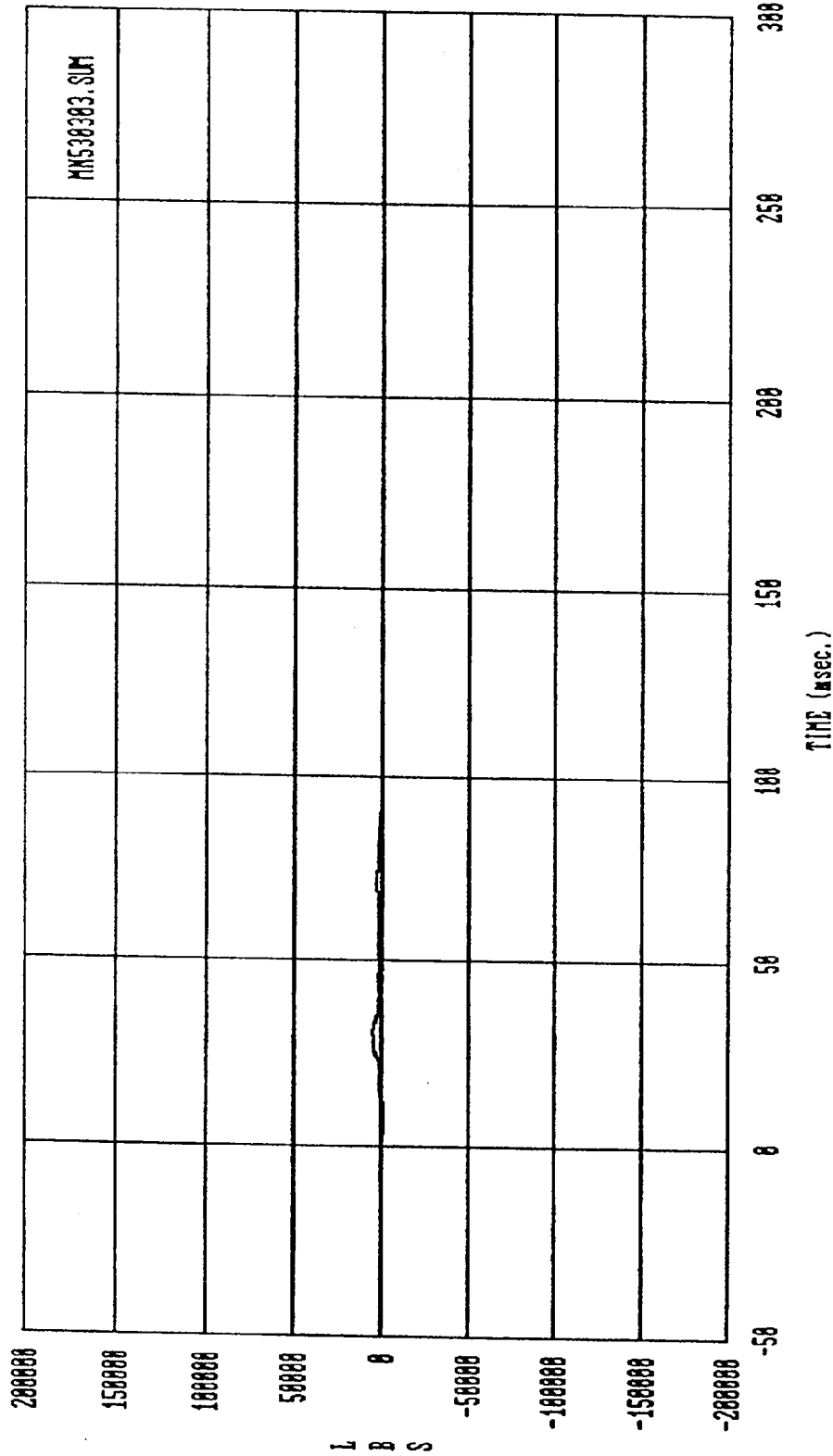
Curve: LCB sum force C1,C2,C3 — Group 1 Filter: SAE CLASS 60 Max = 18683 Min = -276.73

MSE Date: 86/01/92 Program: 1992 NCAP - N5 Vehicle: 1992 Honda Prelude



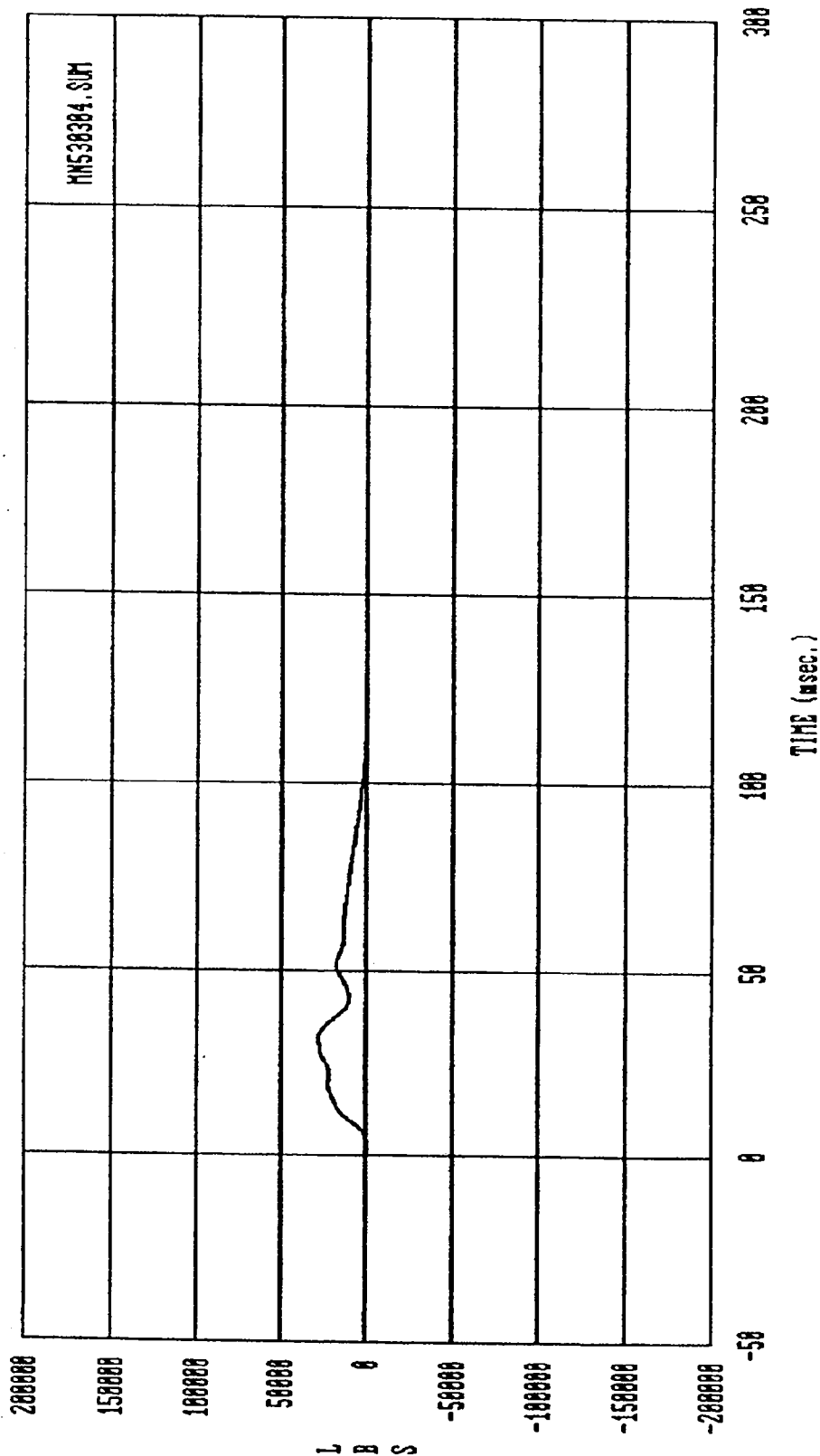
Curve: Fz sum force C4,C5,C6 -- Group 2 Filter: SAE CLASS 60 Max = 5722.8 Min = -489.68

MSE Date: 86/01/92 Program: 1992 NCAP - N5 Vehicle: 1992 Honda Prelude



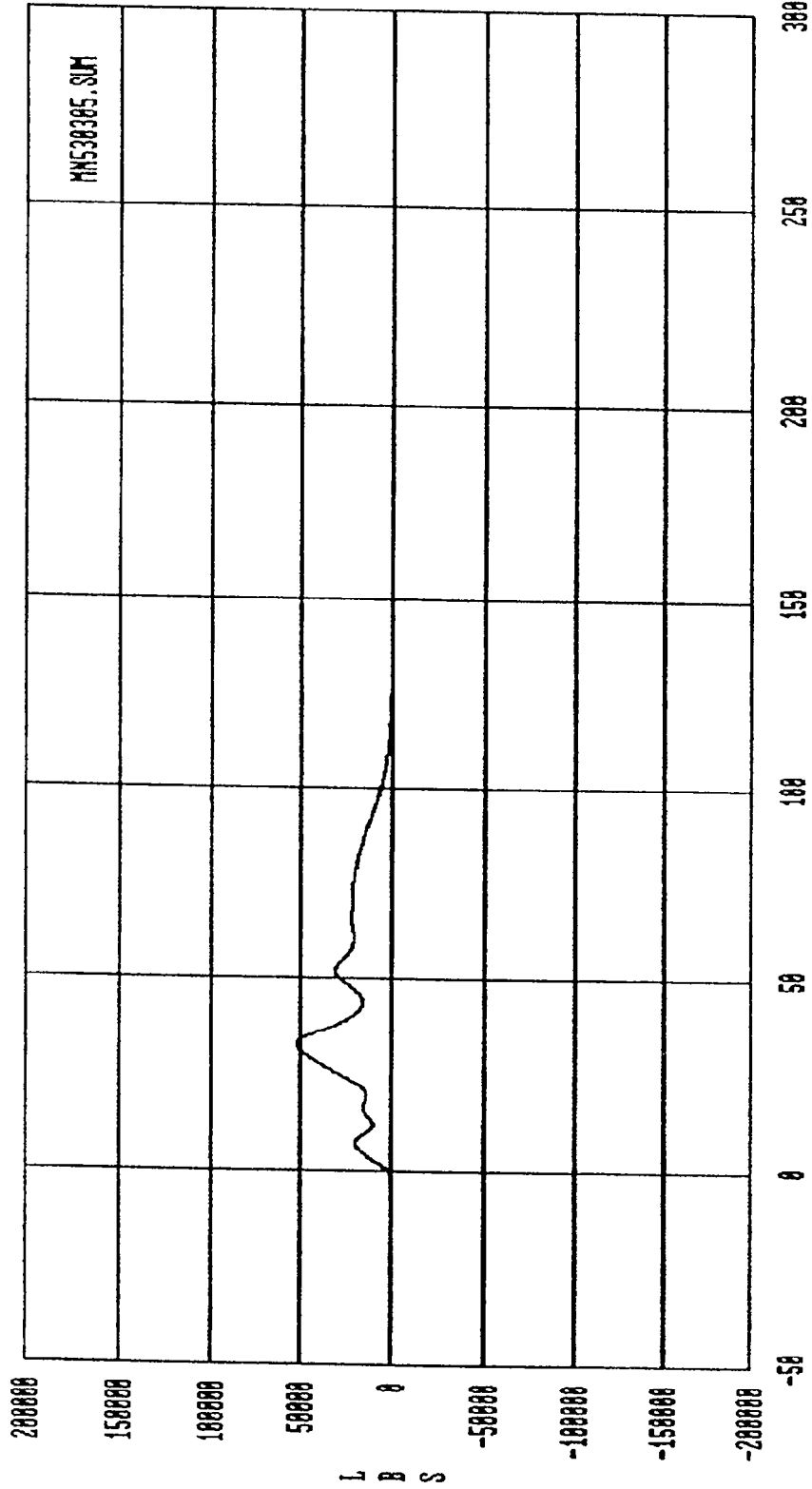
Curve: LCB sum force C7,C8,C9 -- Group 3 Filter: SAE CLASS 60 Max = 5218.2 Min = -852.83

MSE Date: 86/81/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude



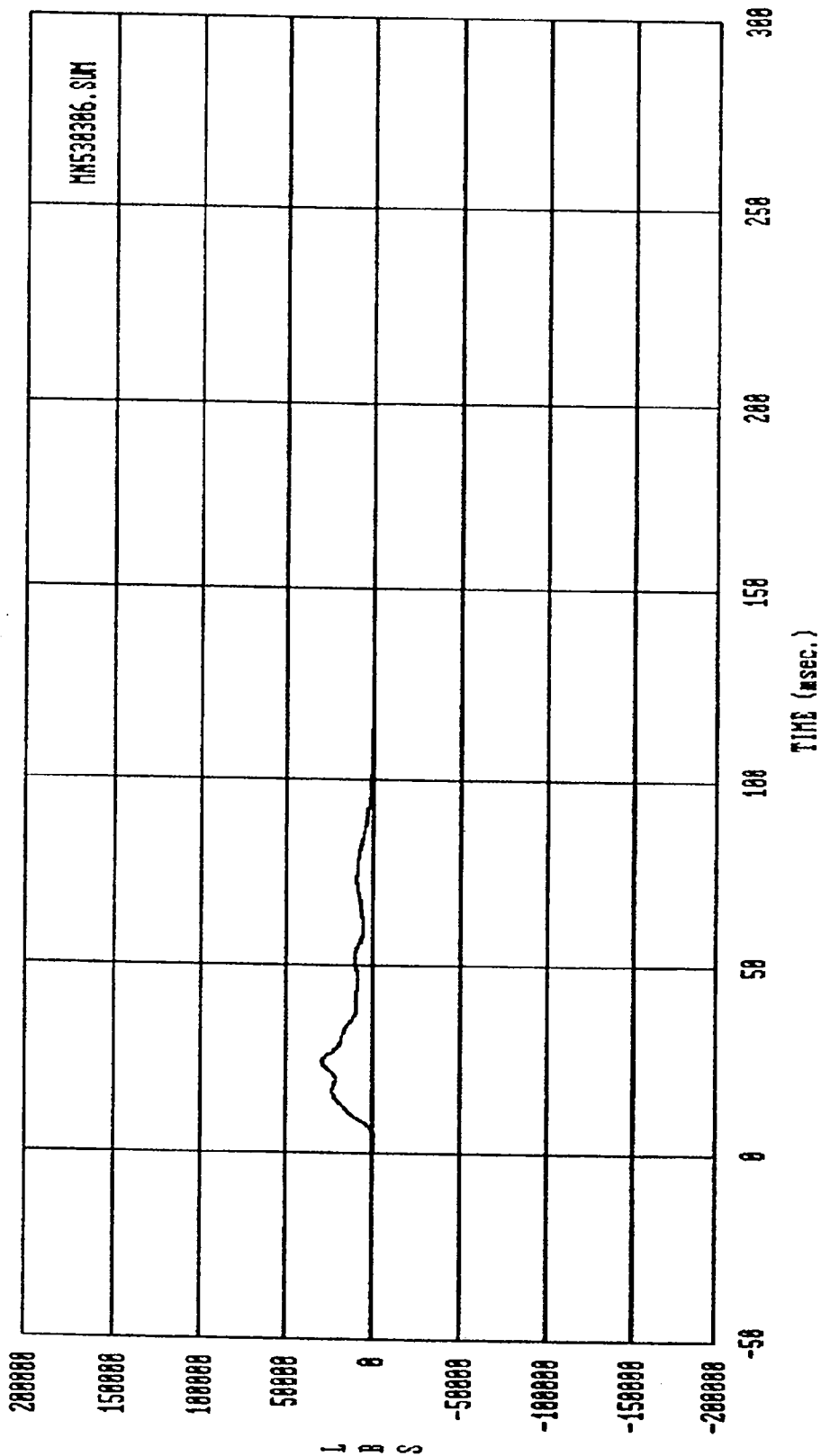
Curve: LCB sum force A1,A2,A3,B1,B2,B3 -- Group 4 Filter: SAE CLASS 60 Max = 28234. Min = -611.33

MSE Date: 06/01/92 Program: 1992 NCAP - 45 Vehicle: 1992 Honda Prelude



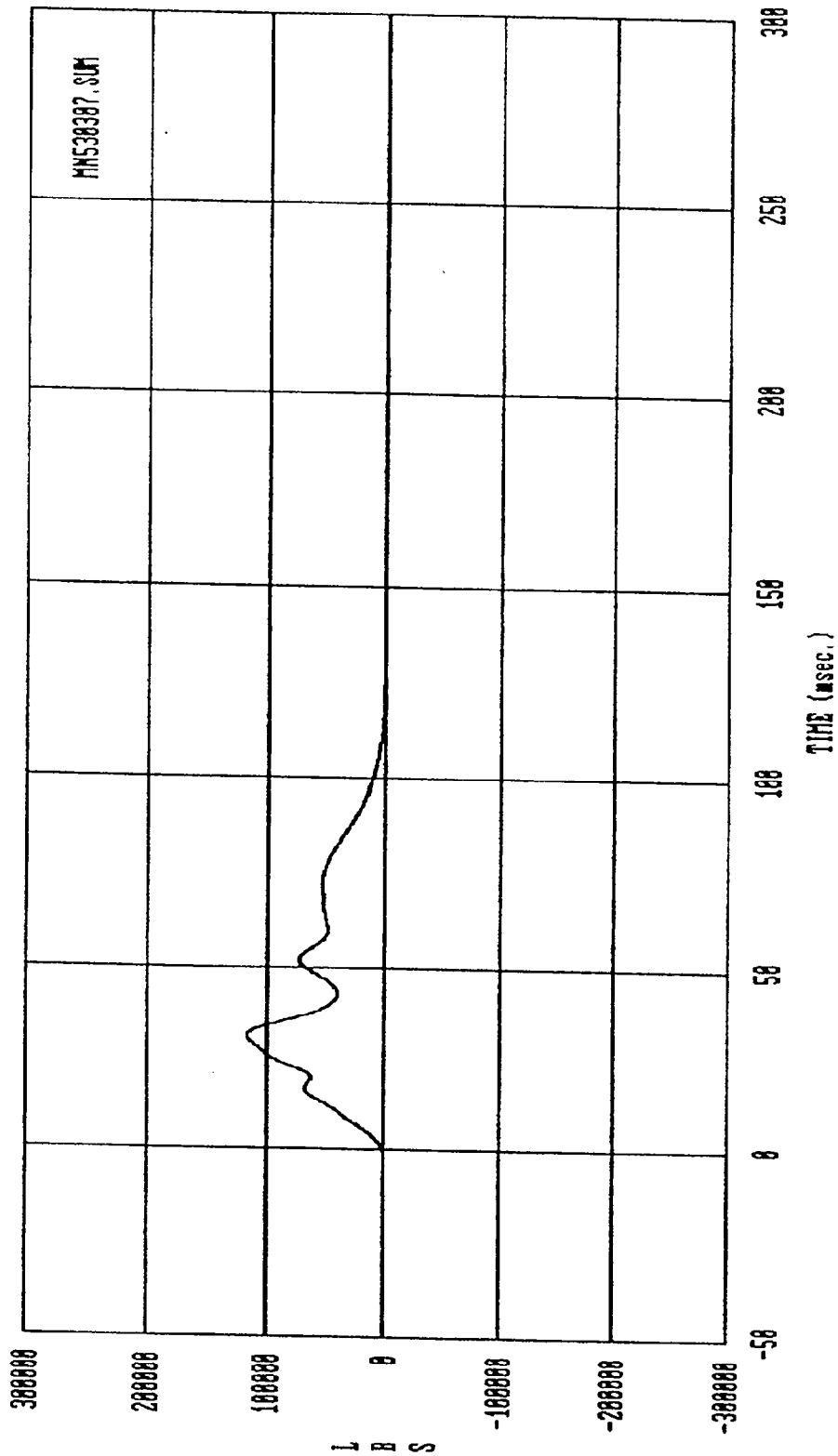
Curve: LCB sum force A4,A5,A6,B4,B5,B6 -- Group 5 Filter: SAE CLASS 60 Max = 52525 Min = -137.92

MSE Date: 06/01/92 Program: 1992 NCAP - 15 Vehicle: 1992 Honda Prelude



Curve: LCB sum force A7,A8,A9,B7,B8,B9 - Group 6 Filter: SAE CLASS 60 Max = 29543. Min = -978.45

MSE Date: 06/01/92 Program: 1992 NCAP - #5 Vehicle: 1992 Honda Prelude



Curve: Load Cell Barrier total force*

Filter: SAE CLASS 60 Max = .11721E+06 Min = -255.34

MSE Date: 06/01/92 Program: 1992 NCAP - I5

Vehicle: 1992 Honda Prelude

* ROW D (LOAD CELLS D₁ TO D₉) IS NOT INCLUDED IN THE SUMMATION.

APPENDIX C

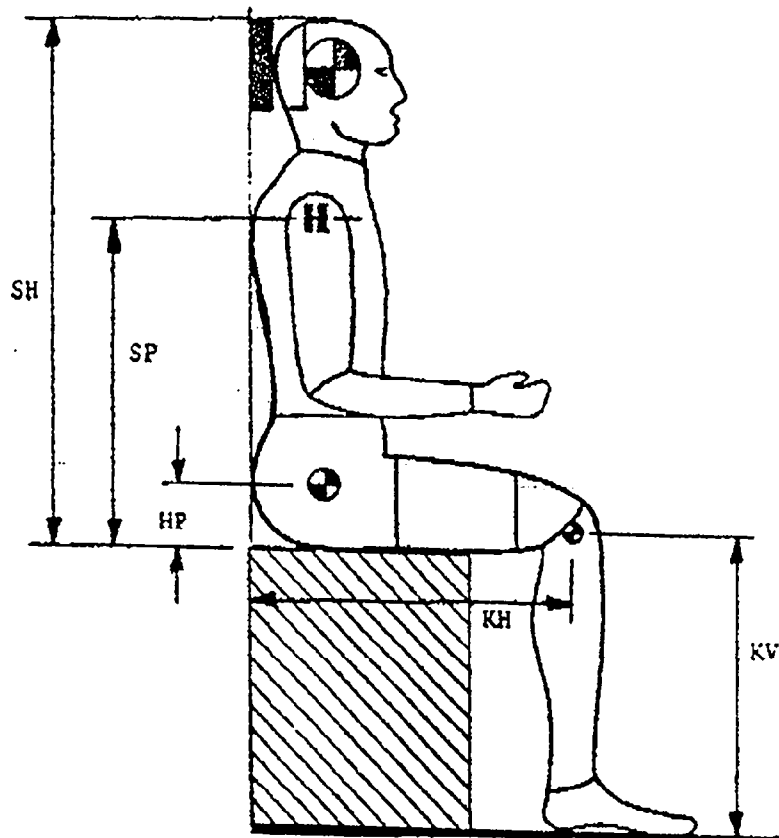
PART 572 DUMMY CONFIGURATION AND
PERFORMANCE VERIFICATION TESTS

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PART 572 DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA

NHTSA DUMMY I.D. NO.: 8 | 1 | 4 |

I. CONFIGURATION VERIFICATION DATA:



	P. 572 SPECIFICATION	PRE-TEST (if required)	POST-TEST (if required)
DATE OF CONFIGURATION VERIFICATION	////////////////	05/17/92	
VERIFICATION NUMBER FOR DUMMY* ---	////////////////	02	
SH - Seated Height- - - - -	35.6 to 35.8"	35.6	
SP - Shoulder Pivot Height- - - -	21.8 to 22.4"	21.9	
HP - Hip Pivot Height - - - - -	3.9 ref.	3.9	
KH - Knee Pivot from back line- -	20.1 to 20.7"	20.5	
KV - Knee Pivot from floor- - - -	19.3 to 19.9"	19.4	
SW - Shoulder Width - - - - -	17.8 to 18.4"	18.1	
HW - Hip Width- - - - -	14.0 to 15.4"	14.5	

TECHNICIAN'S NAME: MR. MARK WALKER

*Sequential number beginning with "1" at the start of each fiscal year's crash test program

DUMMY CONFIG. & PERF. VERIF. DATA....Continued:

II. PERFORMANCE VERIFICATION DATA:

NHTSA DUMMY I.D. NO.: 8 1 4

TECHNICIAN NAME: MR. MARK WALKER

		PRE-TEST (if required)	POST-TEST (if required)
DATE OF PERFORMANCE VERIFICATION-----		05/17/92	
SEQUENTIAL VERIFICATION NUMBER FOR DUMMY*-----		02	
VERIF. LAB. TEMPERATURE (66 to 78 F Range)----		68-78 F	F
VERIF. LAB. HUMIDITY (10 to 70% Range)-----		30-65 %	%
TEST PARAMETER	SPECIFICATION		
1. HEAD DROP TEST--			
a. Peak Resultant Accel.	210 to 260G	225.0	
b. Peak Lateral Accel.-	<10G	3.5	
c. Time above 100G - - -	0.9 to 1.5 ms	1.3	
2. NECK BENDING TEST--			
a. Pendulum Speed- - - -	21.5 to 22.5 fps	22.3	
b. Pend. Avg. Decel. over (t ₃ - t ₂)	20 to 24G	24.0	
c. Peak Resultant Head Acceleration - - - -	26G max.	23.0	
d. Pendulum Decel. (t ₂ - t ₁)	<3 ms	2.8	
e. Pendulum Decel. (t ₃ - t ₂)	25 to 30 ms	28.0	
f. Pendulum Decel. (t ₄ - t ₃)	<10 ms	9.5	
g. Max. Head Rotation -	63 to 73	66.0	
h. Chordal Displacement- Head Rotation Angle-			
0°	Time- -	-2 to 2 ms	0.0
	Displ.-	-.5 to .5"	0.0
30°	Time- -	22.6 to 34 ms	31.0
	Displ.-	2.1 to 3.1"	2.9
60°	Time- -	40.3 to 51.7ms	48.0
	Displ.-	4.3 to 5.3"	5.2
Maximum 0° (66.0)	Time- -	53.2 to 66.8ms	61.0
	Displ.-	5.0 to 6.0"	5.9

*beginning with "1" at the start of each fiscal year's crash test program

DUMMY CONFIG. & PERF. VERIF. DATA....Continued:

II. PERFORMANCE VERIFICATION DATA:

NHTSA DUMMY I.D. NO.: 8 | 1 | 4 |

TECHNICIAN NAME: MR. MARK WALKER

TEST PARAMETER		SPECIFICATION	PRE-TEST (if required)	POST-TEST (if required)
2. NECK BENDING TEST----				
Continued:				
h. Chordal Displacement-				
Head Rotation Angle-				
° 60	Time- -	67.0 to 83.0 ms	75.0	
	Displ.-	4.3 to 5.3 in.	4.8	
° 30	Time- -	85.4 to 104.6 ms	89.0	
	Displ.-	2.1 to 3.1 in.	2.3	
° 0	Time- -	101.0 to 123.0 ms	101.0	
	Displ.-	-.5 to 0.5 in.	0.2	
3. ABDOMINAL COMPRESSION				
TEST: (Preload=10 pounds)				
a. Force @ .5" - - - -		23 to 36 lbs.	30.5	
b. Force @ .75" - - - -		36 to 50 lbs.	42.0	
c. Force @ 1.0"- - - -		50 to 63 lbs.	55.0	
d. Force @ 1.3"- - - -		73 to 88 lbs.	81.0	
4. LUMBAR FLEXION TEST:				
° a. Force @ 20 - - - -		22 to 34 lbs.	27.0	
° b. Force @ 30 - - - -		34 to 46 lbs.	37.0	
° c. Force @ 40 - - - -		46 to 58 lbs.	53.0	
° d. Return Angle- - - -		12 maximum	10.0	
5. CHEST IMPACT TESTS:				
a. High Speed				
(1) Probe Speed - - -		21.78-22.22 fps	22.22	
(2) Peak Deflection -		1.7" maximum	1.7	
(3) Peak Resistive				
Force - - - - -		2250 lbs.maximum	2231.9	
(4) Internal				
Hysteresis		50 to 70%	65.0	
b. Low Speed				
(1) Probe Speed - - -		13.86-14.14 fps	14.1	
(2) Peak Deflection -		1.1" maximum	9.0	
(3) Peak Resistive				
Force - - - - -		1450 lbs.maximum	1175.6	
(4) Internal				
Hysteresis		50 to 70%	60.0	

DUMMY CONFIG. & PERF. VERIF. DATA....Continued:

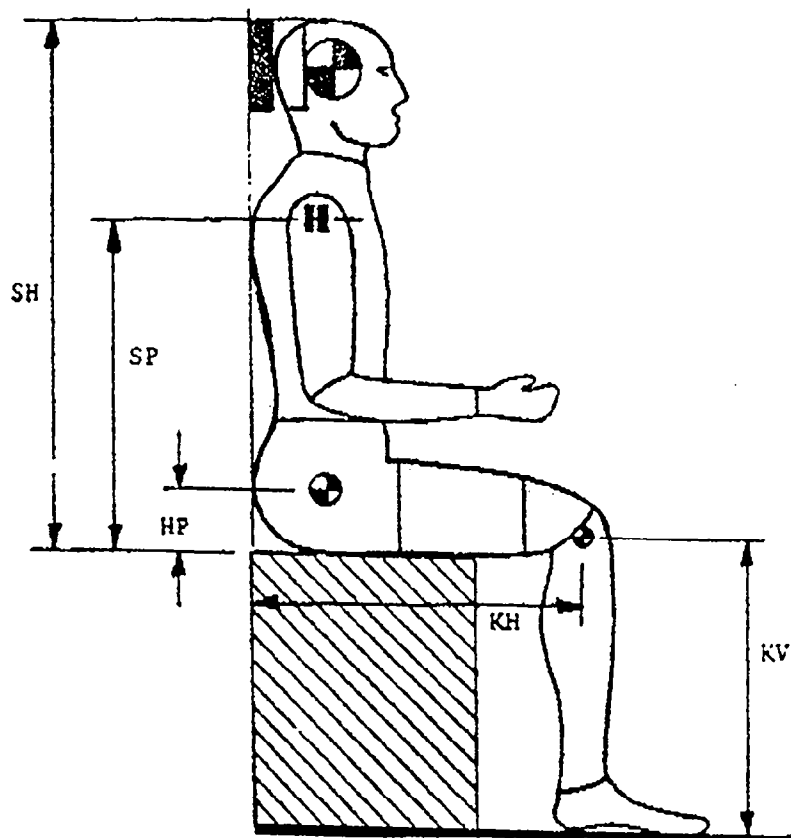
II. PERFORMANCE VERIFICATION DATA:

NHTSA DUMMY I.D. NO.: 8 1 4

TECHNICIAN NAME: MR. MARK WALKER

TEST PARAMETER	SPECIFICATION	PRE-TEST (if required)	POST-TEST (if required)
6. <u>KNEE IMPCT TESTS:</u>			
a. Right Side--			
(1) Probe Speed - - -	6.76 to 7.04 fps	6.9	
(2) Maximum Force - -	1850 to 2500 lbs	2027.7	
(3) Time Above 1000#-	1.7 ms minimum	1.9	
b. Left Side--			
(1) Probe Speed - - -	6.76 to 7.04 fps	6.9	
(2) Maximum Force - -	1850 to 2500 lbs	2033.9	
(3) Time Above 1000#-	1.7 ms minimum	1.9	

PART 572 DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA

NHTSA DUMMY I.D. NO.: 1 8 3I. CONFIGURATION VERIFICATION DATA:

	P. 572 SPECIFICATION	PRE-TEST (if required)	POST-TEST (if required)
DATE OF CONFIGURATION VERIFICATION	////////////////	05/17/92	
VERIFICATION NUMBER FOR DUMMY* ---	////////////////	01	
SH - Seated Height- - - - -	35.6 to 35.8"	35.6	
SP - Shoulder Pivot Height- - - -	21.8 to 22.4"	22.1	
HP - Hip Pivot Height - - - - -	3.9 ref.	3.9	
KH - Knee Pivot from back line- -	20.1 to 20.7"	20.5	
KV - Knee Pivot from floor- - - -	19.3 to 19.9"	19.7	
SW - Shoulder Width - - - - -	17.8 to 18.4"	18.1	
HW - Hip Width- - - - -	14.0 to 15.4"	14.8	

TECHNICIAN'S NAME: MR. MARK WALKER

*Sequential number beginning with "1" at the start of each
fiscal year's crash test program

DUMMY CONFIG. & PERF. VERIF. DATA....Continued:

II. PERFORMANCE VERIFICATION DATA:

NHTSA DUMMY I.D. NO.: 1 8 3

TECHNICIAN NAME: MR. MARK WALKER

		PRE-TEST (if required)	POST-TEST (if required)
DATE OF PERFORMANCE VERIFICATION-----		05/17/92	
SEQUENTIAL VERIFICATION NUMBER FOR DUMMY*-----		01	
VERIF. LAB. TEMPERATURE (66 to 78 F Range)----		68-78 F	F
VERIF. LAB. HUMIDITY (10 to 70% Range)-----		30-65 %	%
TEST PARAMETER	SPECIFICATION		
1. HEAD DROP TEST--			
a. Peak Resultant Accel.	210 to 260G	248.0	
b. Peak Lateral Accel.-	<10G	3.2	
c. Time above 100G - - -	0.9 to 1.5 ms	1.3	
2. NECK BENDING TEST--			
a. Pendulum Speed- - -	21.5 to 22.5 fps	22.3	
b. Pend. Avg. Decel. over (t ₃ - t ₂)	20 to 24G	23.6	
c. Peak Resultant Head Acceleration - - - -	26G max.	23.5	
d. Pendulum Decel.(t ₂ -t ₁)	<3 ms	3.0	
e. Pendulum Decel.(t ₃ -t ₂)	25 to 30 ms	28.5	
f. Pendulum Decel.(t ₄ -t ₃)	<10 ms	9.8	
g. Max. Head Rotation -	63 to 73	69.0	
h. Chordal Displacement- Head Rotation Angle-			
0°	Time- -	-2 to 2 ms	0.0
	Displ.-	-.5 to .5"	0.0
30°	Time- -	22.6 to 34 ms	31.0
	Displ.-	2.1 to 3.1"	2.3
60°	Time- -	40.3 to 51.7ms	46.0
	Displ.-	4.3 to 5.3"	4.9
Maximum 0° (69.0°)	Time- -	53.2 to 66.8ms	59.0
	Displ.-	5.0 to 6.0"	5.6

*beginning with "1" at the start of each fiscal year's crash test program

DUMMY CONFIG. & PERF. VERIF. DATA....Continued:

II. PERFORMANCE VERIFICATION DATA:

NHTSA DUMMY I.D. NO.: 1 | 8 | 3 |

TECHNICIAN NAME: MR. MARK WALKER

TEST PARAMETER		SPECIFICATION	PRE-TEST (if required)	POST-TEST (if required)
2. NECK BENDING TEST----				
Continued:				
h. Chordal Displacement- Head Rotation Angle-				
60°	Time- -	67.0 to 83.0 ms	74.0	
	Displ.-	4.3 to 5.3 in.	5.1	
30°	Time- -	85.4 to 104.6 ms	95.0	
	Displ.-	2.1 to 3.1 in.	2.5	
0°	Time- -	101.0 to 123.0 ms	103.0	
	Displ.-	-.5 to 0.5 in.	0.1	
3. ABDOMINAL COMPRESSION				
TEST: (Preload=10 pounds)				
a. Force @ .5" - - - -		23 to 36 lbs.	31.0	
b. Force @ .75" - - - -		36 to 50 lbs.	44.0	
c. Force @ 1.0" - - - -		50 to 63 lbs.	56.5	
d. Force @ 1.3" - - - -		73 to 88 lbs.	83.0	
4. LUMBAR FLEXION TEST:				
a. Force @ 20° - - - -		22 to 34 lbs.	26.0	
b. Force @ 30° - - - -		34 to 46 lbs.	36.0	
c. Force @ 40° - - - -		46 to 58 lbs.	52.0	
d. Return Angle- - - -		12° maximum	10.0	
5. CHEST IMPACT TESTS:				
a. High Speed				
(1) Probe Speed - - -		21.78-22.22 fps	22.2	
(2) Peak Deflection -		1.7" maximum	1.6	
(3) Peak Resistive Force - - - - -		2250 lbs.maximum	2154.8	
(4) Internal Hysteresis		50 to 70%	64.0	
b. Low Speed				
(1) Probe Speed - - -		13.86-14.14 fps	14.0	
(2) Peak Deflection -		1.1" maximum	1.1	
(3) Peak Resistive Force - - - - -		1450 lbs.maximum	1297.3	
(4) Internal Hysteresis		50 to 70%	60.0	

DUMMY CONFIG. & PERF. VERIF. DATA....Continued:

II. PERFORMANCE VERIFICATION DATA:

NHTSA DUMMY I.D. NO.:

1	8	3
---	---	---

TECHNICIAN NAME: MR. MARK WALKER

TEST PARAMETER	SPECIFICATION	PRE-TEST (if required)	POST-TEST (if required)
=====	=====	=====	=====
6. <u>KNEE IMPCT TESTS:</u>			
a. Right Side--			
(1) Probe Speed - - -	6.76 to 7.04 fps	6.9	
(2) Maximum Force - -	1850 to 2500 lbs	2384.4	
(3) Time Above 1000#-	1.7 ms minimum	1.8	
b. Left Side--			
(1) Probe Speed - - -	6.76 to 7.04 fps	6.9	
(2) Maximum Force - -	1850 to 2500 lbs	2183.0	
(3) Time Above 1000#-	1.7 ms minimum	1.8	

APPENDIX D

VEHICLE OWNER'S MANUAL OCCUPANT RESTRAINT SYSTEM INSTRUCTIONS

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Your Occupant Protection System

Your Honda is equipped with seat belts and other features that work together to protect you and your passengers during a crash.

Seat belts are the most important part of your occupant protection system. When worn properly, seat belts can reduce the chance of serious injury or death in a crash.

For added protection during a severe frontal collision, all Preludes sold in the U.S. and the SR and SR 4WS models in Canada have a Supplemental Restraint System (SRS) with a driver's airbag. The Si 4WS model sold in the U.S. also has a passenger's airbag.

Two indicator lights are also part of your safety system. One reminds you to make sure you and your passengers wear your seat belts. The other alerts you to a possible problem with your supplemental restraint system (see page 14).

The seats, head restraints, and door locks also play a role in occupant safety. For example, reclining the seat back can decrease the effectiveness of your seat belt. Head restraints can help protect your neck and head, especially during rear-end impacts. Door locks help keep your doors from being accidentally opened during a crash.

To get the maximum protection from your occupant protection system, check the following before you drive away:

- Everyone in the car is wearing a seat belt properly (see page 6).
- Both doors are closed and locked (see page 16).
- Seat backs are upright (see page 16).
- There are no loose items that could be thrown around and hurt someone during a crash or sudden stop (see page 17).

By following these guidelines, you can reduce injuries to yourself and your passengers in many crash situations. Remember, however, that no safety system can prevent all injuries or deaths that can occur in severe crashes.

The Seat Belt System and How It Works

Why Wear Seat Belts

Wearing seat belts, and wearing them properly, is fundamental to your safety and the safety of your passengers.

During a crash or emergency stop, seat belts can help keep you from being thrown against the inside of the car, against other occupants, or out of the car.

Of course, seat belts cannot completely protect you in every crash. But, in most cases, seat belts reduce your chance of serious injury. They can even save your life. That is why many states and all Canadian provinces require you to wear seat belts.

WARNING

Not wearing a seat belt increases the chance of being killed or seriously hurt in a crash.

Be sure you and your passengers always wear seat belts and wear them properly.

Important Safety Reminders
Seat belts are designed for adults and larger children. All infants and small children must be properly restrained in child safety seats (see page 18).

A pregnant woman needs to wear a seat belt to protect herself and her unborn child (see page 9).

Two people should never use the same seat belt. If they do, they could be very seriously injured in a crash.

Do not put shoulder belt pads or other accessories on seat belts. They can reduce the effectiveness of the belts and increase the chance of injury.

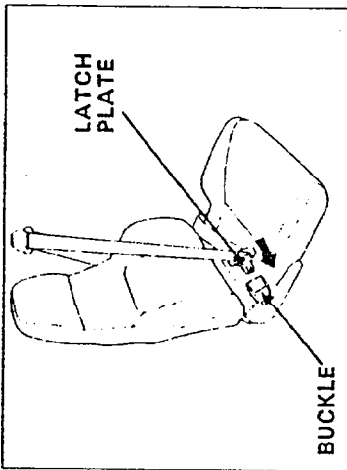
The Seat Belt System and How It Works

Seat Belt System Components
Your Honda has lap/shoulder seat belts in all four seating positions.

Your seat belt system also includes a light on the instrument panel to remind you to fasten your seat belt, and to make sure your passengers fasten theirs. This light comes on when you turn on the ignition if you have not fastened your seat belt. A beeper also sounds for several seconds (see page 33).

The following pages cover more about the seat belt components and how they work.

Lap/Shoulder Belt



This style of seat belt has a single belt that goes over your shoulder, across your chest, and across your hips.

Each lap/shoulder belt has an emergency locking retractor. This lets you move freely in your seat while keeping some tension on the belt. During a collision or sudden stop, the retractor automatically locks.

Wearing Seat Belts Properly
You can increase the effectiveness of your seat belts if you take a little time to read the following pages and make sure you know how to wear seat belts properly.

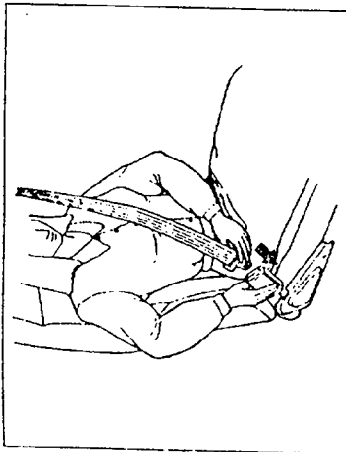
WARNING

Not wearing a seat belt properly increases the chance of serious injury or death in a crash.

Be sure you and your passengers always wear seat belts and wear them properly.

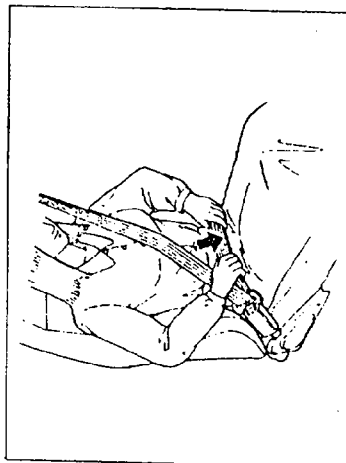
The Seat Belt System and How It Works

Wearing a Lap/Shoulder Belt



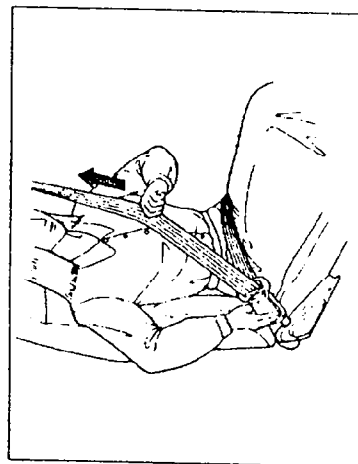
Before putting on a front seat belt, be sure your seat is adjusted forward or backward to a good driving or riding position and the back of your seat is upright (see page 51).

1. Pull the latch plate across your body and insert it into the buckle. Tug on the belt to make sure the latch is securely locked.



2. Check that the belt is not twisted.

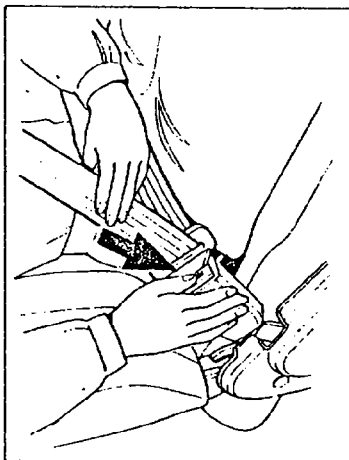
3. Position the lap portion of the belt as low as possible across your hips, not across your stomach. This lets your strong pelvic bones take the force of a crash.



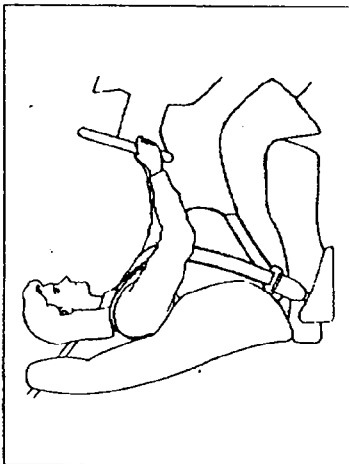
4. Pull up on the shoulder part of the belt to remove any slack. Make sure the belt goes over your collarbone and across your chest. Do not place the belt under your arm or behind your back. This could increase your chance of serious injuries in a crash.

CONTINUED

The Seat Belt System and How It Works



To unlatch the seat belt, push the red PRESS button on the buckle. Guide the belt across your body to the door pillar. If the belt doesn't retract easily, pull it out and check for twists or kinks.



Protecting the mother is the best way to protect her unborn child. Therefore, a pregnant woman should wear a properly-positioned seat belt whenever she drives or rides in a car.

When using the seat belt, remember to keep the lap portion as low as possible (see page 7).

Each time you have a checkup, ask your doctor if it's okay for you to drive and how you should position a lap/shoulder seat belt.

The Seat Belt System and How It Works

Seat Belt Maintenance

For safety, you should check the condition of your seat belts regularly.

Pull out each belt fully and look for frays, cuts, burns, and wear. Check that the latches work smoothly and the lap/shoulder belts retract easily. Any belt not in good condition or not working properly should be replaced.

If a seat belt is worn during a crash, have your dealer replace the belt and check the anchors for damage.

Supplemental Restraint System

All Preludes sold in the U.S. are equipped with a Supplemental Restraint System (SRS). (This system also comes on the SR and SR 4WS models in Canada.)

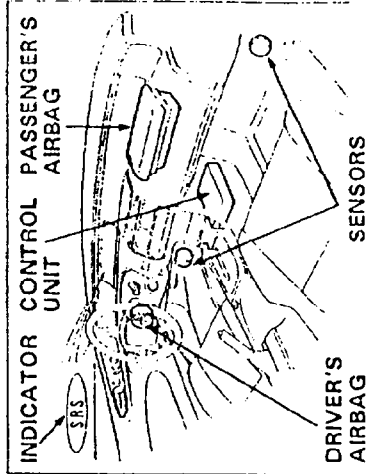
The supplemental restraint system includes an airbag to help protect your head and chest during a severe frontal collision. This system does not replace your seat belt. It supplements, or adds to, the protection offered by your seat belt.

The system on the Si 4WS model in the U.S. also includes a front passenger's airbag.

WARNING

Not wearing a seat belt increases the chance of serious injury or death in a crash, even if you have an airbag.

Be sure you and your passengers always wear seat belts and wear them properly.



The main components in your SRS are:

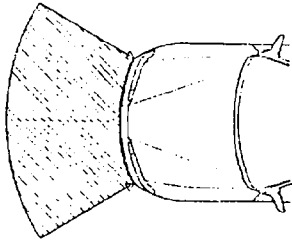
- An airbag in the steering wheel for the driver.
(On Si 4WS model)
An airbag in the dashboard for the passenger.
- A diagnostic system that continually monitors the sensors, control unit, airbag activators and all related wiring while the ignition is ON (II).

Supplemental Restraint System

- An indicator light to warn you of a possible problem with the system.
- Emergency power backup in case your car's electrical system is disconnected in a crash.

Important Safety Reminder

Frontal collision range

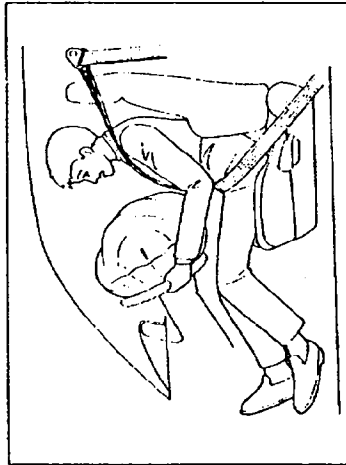


Even with an airbag, you need to wear a seat belt. The reasons are:

- Airbags only inflate in severe frontal collisions. They offer no protection in rear impacts, side impacts, rollovers, or moderate frontal collisions.
- An airbag inflates and deflates very quickly. It cannot protect you during any additional impacts that can occur during a crash.
- A seat belt helps keep you in the proper position when an airbag inflates. An airbag opens with considerable force, and it can hurt you if you are not in the proper position.

Supplemental Restraint System

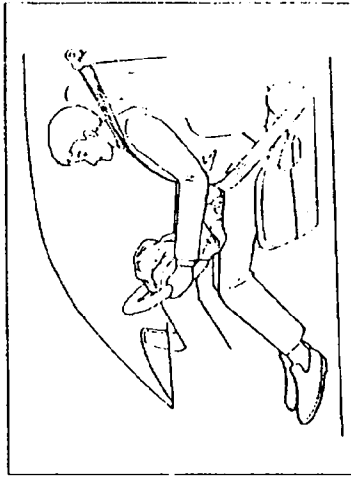
How the Driver's Airbag Works



If you ever have a severe frontal collision, your airbag will instantly inflate to help protect your head and chest.

When the airbag inflates, you may hear a fairly loud noise and you might see smoke and powder. This is normal; it is caused by the inflation of the airbag.

To do its job, the airbag inflates with considerable force. So, while it can reduce serious injuries and even save your life, the airbag might cause some facial or other abrasions.

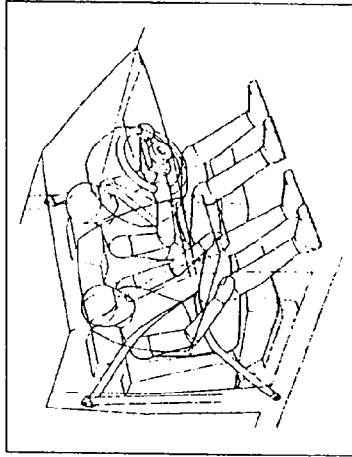


After the bag completely inflates, it immediately starts deflating so it won't interfere with your visibility, ability to steer, or ability to operate other controls.

Supplemental Restraint System

The airbag is stored in the center of the steering wheel. For your safety, do not attach any items to the steering wheel. They could interfere with the proper operation of the airbag. Or, if the airbag inflates, they could be propelled inside the car and hurt someone.

How the Passenger's Airbag Works



If you ever have a severe frontal collision, the passenger's airbag will inflate at the same time as the driver's airbag.

This airbag is quite large and inflates with considerable force. It can seriously hurt an adult who is not in the proper position and wearing the seat belt properly. The bag's force could also hurt a small child who is not properly restrained in a child seat.

Because of the airbag, we strongly recommend that you do not put an infant seat in the front passenger's seat. If the airbag inflates, it can dislodge the infant seat and seriously injure the infant.

CONTINUED

Supplemental Restraint System

The passenger's airbag is stored near the top of the dashboard, under a lid marked SRS. Do not place any objects on top of this lid. If the airbag inflates, those objects can be propelled inside the car and possibly hurt someone.

SRS

How the SRS Indicator Light Works
The purpose of the SRS light on your instrument panel is to alert you of a potential problem with your supplemental restraint system.

Have the system checked if:

- The light does not come on when you turn the ignition ON (II).
- The light stays on after the engine starts.
- The light comes on or flashes while you are driving.

System Service

Your supplemental restraint system is virtually maintenance-free. There are no parts you can safely service.

You must have the system serviced by an authorized Honda dealer in the following situations:

- If your airbag ever inflates. The bag must be replaced. Do not try to remove or discard the airbag by yourself. This must be done by a Honda dealer.
- If the SRS indicator light alerts you of a problem. Have the supplemental restraint system checked as soon as possible. Otherwise, your airbag might not inflate when you need it.
- When the car is ten years old, get the system inspected. The production date is on the driver's door jamb for your convenience.

Supplemental Restraint System

System Service Precautions
Do not modify your steering wheel or any other part of the supplemental restraint system. Modifications could make the system ineffective.

Do not tamper with the system components or wiring. This could cause the airbag to inflate inadvertently, possibly injuring someone very seriously.

Tell anyone who works on your car that you have a supplemental restraint system. Failure to follow the procedures and precautions in the official Honda service manual could result in personal injury or damage to the system.

Scrapping an entire car that has an uninflated airbag can be dangerous. Get assistance from a Honda dealer if your car must be scrapped.

If you sell your car, please be sure to tell the new owner that the car has a supplemental restraint system. Alert them to the information and precautions in this part of the owner's manual.

APPENDIX E
INSTRUMENTATION AND CALIBRATION DATA

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General Test Information

VERSNO: V2 TGID: 1
TITLE: 1992 35 MPH NCAP FRONTAL BARRIER IMPACT
TSTOBJ: ACQUIRE NCAP DATA USING TWO INSTR. DUMMIES AND LOAD CELL BARRIER
TSTDAT: 01/JUN/92 TSTPRF: MSE CONNO: DTNH22-90-D-32121
TSTREF: MW5303 TSTTYP: NCA TSTCFN: VT8
TKSURF: CON TKCOND: DRY TEMP: 78 RECTYP: FMT
LINK: UMB CLSSPD: 34.7 IMPANG: 0 OFFSET: 0.0
IMPPNT: 9999.9 MEASUR: ENG TOTCRV: 60
TSTCOM: NO COMMENTS

Vehicle Information

VGID: 2 VEHNO: 1 MAKE: 23 MODEL: 05 YEAR: 92 BODY: 2S
 VIN: JHMB824XNC003304 ENGINE: 4CTF ENGDISP: 131.5 CID TRANSM: AR
 VEHTWT: 3245 WHLBAS: 100.4 VEHLEN: 168.3 VEHWID: 69.5
 VEHCG: 41.2 STRSEP: NO COLMEC: EMB MOOIND: P
 MODISC: UNMODIFIED

8X

1: 168.3
 2: 145.3
 3: 118.6
 4: 82.5
 5: 82.6
 6: 105.6
 7: 105.9
 8: 55.5
 9: 56.2
 10: 59.0
 11: 59.2
 12: 107.4
 13: 108.0
 14: 118.6
 15: 118.6
 16: 87.9
 17: 18.0
 18: 15.5
 19: 161.8
 20: 161.8
 21: 11.0

VEHSPD: 34.7 CRBANG: 0 PDOF: 0 BMPENG: NA
 SILENG: NA APLENG: NA

DPD

1: 15.3
 2: 17.0
 3: 18.1
 4: 18.6
 5: 18.2
 6: 16.5

VDI: 12FCAW9 LENCNT: 55.0 DAMDST: 0.0 CRHDST: 18.6
 AX

1: 150.2
 2: 137.2
 3: 113.2
 4: 82.7
 5: 82.2
 6: 105.2
 7: 105.0
 8: 56.5
 9: 55.1
 10: 58.7
 11: 58.6
 12: 106.5
 13: 107.0
 14: 112.0
 15: 117.0
 16: 84.0
 17: 18.0
 18: 18.0
 19: 146.0
 20: 146.0
 21: 11.0

CARANG: 999 VEHOR: 999
 VENCOM:

Barrier Information

Barrier ID: 3

BARRIG: R

BARSHP: LCB

BARANG: 0

BARDIA: 999.9

BARCOM: 36 50KLB LOAD CELLS ARRANGED IN A 9 WIDE BY 4 HIGH MATRIX.

Occupant Information

Occupant Group ID: 4 VEHNO: 1
OCCLOC: 01 OCCTYP: P5 OCCAGE: 99 OCCSEX: M OCCHT: 999 OCCWT: 999
MTHCAL: P5 DUMSIZ: 50
DUMMAN: MFG: HUMANOID SYSTEMS, S/N: 814
DUMMOD: UNMODIFIED
DUMDSC: NO COMMENTS
HH: 15.6 HW: 21.3 HR: 5.5 HS: 8.5 CD: 31.0 CS: 17.0 AD: 4.8 HD: 5.3
KD: 8.0 HB: 999.9 NB: 999.9 CB: 999.9 KB: 999.9
RESTR1: 3PT RESTR2: ABG
REXTXT: NO COMMENTS
SEPOSN: CN AIRDEP: DP
CNTRH1: OT CNTRH2: OT CNTRC1: OT CNTRC2: NO CNTRL1: DP CNTRL2: NO
HIC: 510 T1: 63.500 T2: 99.500
CLIP3M: 44.5 LFEM: 748. RFEM: 641. CSI: 398. LBELT: 1637. SBELT: 1937.
OCCCOM: AIRBAG INFLATED DURING IMPACT. DRIVER HEAD AND CHEST CONTACTED AIRBAG.

Occupant Information

Occupant Group 10: 4 VEHNO: 1
OCCLOC: 02 OCCTYP: P5 OCCAGE: 99 OCCSEX: M OCCHT: 999 OCCWT: 999
HTHCAL: P5 DUMSIZ: 50
DUMMAN: MFG: HUMANOID SYSTEMS, S/N: 183
DUMMOD: UNMODIFIED
DUMDESC: NO COMMENTS
HH: 17.4 HW: 21.8 HR: 5.0 HS: 7.8 CD: 25.4 CS: 999.9 AD: 4.1 HD: 5.5
KD: 6.4 HB: 999.9 HB: 999.9 CB: 999.9 KB: 999.9
RESTR1: 3PT RESTR2: NONE
REXTXT: NO COMMENTS
SEPOSN: CN AIRDEP: NA
CNTRH1: NO CNTRH2: NO CNTRC1: NO CNTRC2: NO CNTRL1: DP CNTRL2: OT
HIC: 555. T1: 73.900 T2: 109.900
CLIP3M: 35.5 LFEM: 353. RFEM: 564. CSI: 251. LBELT: 1062. SBELT: 1937.
OCCCON:

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 001	
SENTYP: AC	SENLOC: 01	SENATT: HOCG	
AXIS: XL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200,	S/N: BJ28H		
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 22	INIVEL: 34.7
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 002	
SENTYP: AC	SENLOC: 01	SENATT: HOCG	
AXIS: YL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200,	S/N: BT28H		
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 13	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 003	
SENTYP: AC	SENLOC: 01	SENATT: HOCG	
AXIS: ZL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200,	S/N: AE29		
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 19	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 004	
SENTYP: AC	SENLOC: 01	SENATT: CHST	
AXIS: XL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200,	S/N: B114H		
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 24	INIVEL: 34.7
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 005	
SENTYP: AC	SENLOC: 01	SENATT: CHST	
AXIS: YL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200,	S/N: B119H		
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 20	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 006	
SENTYP: AC	SENLOC: 01	SENATT: CHST	
AXIS: ZL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200,	S/N: B192H		
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 10	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 007	
SENTYP: LC	SENLOC: 01	SENATT: FMRL	
AXIS: XL	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: GSE INC, MODEL: 2430, S/N: 559			
CALDAT: 07/APR/92	INSRAT: 3000	CHLMAX: 38	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 008	
SENTYP: LC	SENLOC: 01	SENATT: FMRR	
AXIS: XL	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: GSE INC, MODEL: 2430, S/N: 710			
CALDAT: 07/APR/92	INSRAT: 3000	CHLMAX: 46	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 009	
SENTYP: AC	SENLOC: 02	SENATT: HDCC	
AXIS: XL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: BJ27H			
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 8	INIVEL: 34.7
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 010	
SENTYP: AC	SENLOC: 02	SENATT: HDCC	
AXIS: YL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: BG78H			
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 12	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 011	
SENTYP: AC	SENLOC: 02	SENATT: HOCG	
AXIS: ZL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: AR39			
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 27	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 012	
SENTYP: AC	SENLOC: 02	SENATT: CHST	
AXIS: XL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: BF83H			
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 20	INIVEL: 34.7
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 013	
SENTYP: AC	SENLOC: 02	SENATT: CHST	
AXIS: YL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: BJ15H			
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 11	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 014	
SENTYP: AC	SENLOC: 02	SENATT: CHST	
AXIS: ZL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: BG29H			
CALDAT: 26/MAR/92	INSRAT: 200	CHLMAX: 8	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 015	
SENTYP: LC	SENLOC: 02	SENATT: FMRL	
AXIS: XL	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: GSE INC, MODEL: 2430, S/N: 634			
CALDAT: 07/APR/92	INSRAT: 3000	CHLMAX: 13	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 016	
SENTYP: LC	SENLOC: 02	SENATT: FMRR	
AXIS: XL	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: GSE INC,	MODEL: 2430, S/N: 550		
CALDAT: 07/APR/92	INSRAT: 3000	CHLMAX: 27	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: CF
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 017	
SENTYP: LC	SENLOC: 01	SENATT: LPBO	
AXIS: OT	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: LEBOW,	MODEL: 3371, S/N: 333		
CALDAT: 09/APR/92	INSRAT: 3500	CHLMAX: 47	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 018	
SENTYP: LC	SENLOC: 01	SENATT: SHBT	
AXIS: OT	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: LEBOW,	MODEL: 3371, S/N: 327		
CALDAT: 09/APR/92	INSRAT: 3500	CHLMAX: 57	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 019	
SENTYP: LC	SENLOC: 02	SENATT: LPBO	
AXIS: OT	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: LEBOW,	MODEL: 3371, S/N: 330		
CALDAT: 09/APR/92	INSRAT: 3500	CHLMAX: 31	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 020	
SENTYP: LC	SENLOC: 02	SENATT: SHBT	
AXIS: OT	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: LEBOW,	MODEL: 3371, S/N: 308		
CALDAT: 09/APR/92	INSRAT: 3500	CHLMAX: 56	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 021	
SENTYP: DS	SENLOC: 01	SENATT: SHBT	
AXIS: OT	UNITS: OTH	PREFIL: 1650	
INSMAN: MFG: ETI,	MODEL: LCP12A-12,	S/N: 1	
CALDAT: 01/JUN/92	INSRAT: 25	CHLMAX: 0	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM: SEAT BELT ELONGATION, UNITS ARE IN./IN.			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 022	
SENTYP: DS	SENLOC: 02	SENATT: SHBT	
AXIS: OT	UNITS: OTH	PREFIL: 1650	
INSMAN: MFG: ETI,	MODEL: LCP12A-12,	S/N: 2	
CALDAT: 01/JUN/92	INSRAT: 25	CHLMAX: 0	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: QD
INSCOM: SEAT BELT ELONGATION, UNITS ARE IN./IN.			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 023	
SENTYP: DS	SENLOC: 01	SENATT: SHBE	
AXIS: OT	UNITS: INS	PREFIL: 1650	
INSMAN: MFG: CELESCO,	MODEL: 20 IN.,	S/N: NA	
CALDAT: 01/JUN/92	INSRAT: 20	CHLMAX: 6	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 024	
SENTYP: DS	SENLOC: 02	SENATT: SHBE	
AXIS: OT	UNITS: INS	PREFIL: 1650	
INSMAN: MFG: MSE,	MODEL: 24 IN. LIN.,	S/N: 112	
CALDAT: 01/JUN/92	INSRAT: 24	CHLMAX: 6	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 025	
SENTYP: AC	SENLOC: NA	SENATT: SULF	
AXIS: XG	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: I.C. SENSOR,	MODEL: 3031-200,	S/N: 25-200	
CALDAT: 10/APR/92	INSRAT: 200	CHLMAX: 56	INIVEL: 34.7
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 031	
SENTYP: AC	SENLOC: NA	SENATT: FLRR	
AXIS: XG	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: I.C. SENSOR, MODEL: 3031-200, S/N: 27-200			
CALDAT: 10/APR/92	INSRAT: 200	CHLMAX: 36	INIVEL: 34.7
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 032	
SENTYP: AC	SENLOC: NA	SENATT: OTHR	
AXIS: XG	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: I.C. SENSOR, MODEL: 3031-200, S/N: 26-200			
CALDAT: 10/APR/92	INSRAT: 200	CHLMAX: 34	INIVEL: 34.7
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 033	
SENTYP: AC	SENLOC: NA	SENATT: TRFC	
AXIS: XG	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: I.C. SENSOR, MODEL: 3031-200, S/N: 29-200			
CALDAT: 10/APR/92	INSRAT: 200	CHLMAX: 35	INIVEL: 34.7
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 034	
SENTYP: LC	SENLOC: NA	SENATT: LCA1	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS, S/N: 19349			
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 0	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 035	
SENTYP: LC	SENLOC: NA	SENATT: LCA2	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS, S/N: 19324			
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 5	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 036	
SENTYP: LC	SENLOC: NA	SENATT: LCA3	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19283		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 19	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 037	
SENTYP: LC	SENLOC: NA	SENATT: LCA3	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19263		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 7	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 038	
SENTYP: LC	SENLOC: NA	SENATT: LCA5	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19265		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 19	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 039	
SENTYP: LC	SENLOC: NA	SENATT: LCA6	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19266		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 11	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 040	
SENTYP: LC	SENLOC: NA	SENATT: LCA7	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19317		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 7	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 041	
SENTYP: LC	SENLOC: NA	SENATT: LCA8	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,			S/N: 19270
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 5	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 042	
SENTYP: LC	SENLOC: NA	SENATT: LCA9	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,			S/N: 19428
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 0	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 043	
SENTYP: LC	SENLOC: NA	SENATT: LCB1	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,			S/N: 19273
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 0	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 044	
SENTYP: LC	SENLOC: NA	SENATT: LCB1	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,			S/N: 19276
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 22	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 045	
SENTYP: LC	SENLOC: NA	SENATT: LCB3	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,			S/N: 19258
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 25	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 046	
SENTYP: LC	SENLOC: NA	SENATT: LC84	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19278		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 32	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 047	
SENTYP: LC	SENLOC: NA	SENATT: LC85	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19279		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 22	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 048	
SENTYP: LC	SENLOC: NA	SENATT: LC86	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19282		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 28	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 049	
SENTYP: LC	SENLOC: NA	SENATT: LC87	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19262		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 53	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 050	
SENTYP: LC	SENLOC: NA	SENATT: LC88	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19285		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 9	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 051	
SENTYP: LC	SENLOC: NA	SENATT: LCB9	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19286		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 0	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 052	
SENTYP: LC	SENLOC: NA	SENATT: LCC1	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19287		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 0	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 053	
SENTYP: LC	SENLOC: NA	SENATT: LCC2	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19288		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 12	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 054	
SENTYP: LC	SENLOC: NA	SENATT: LCC3	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19289		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 13	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 055	
SENTYP: LC	SENLOC: NA	SENATT: LCC4	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19291		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 6	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 056	
SENTYP: LC	SENLOC: NA	SENATT: LCC5	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19324		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 7	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 057	
SENTYP: LC	SENLOC: NA	SENATT: LCC6	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19313		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 8	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 058	
SENTYP: LC	SENLOC: NA	SENATT: LCC7	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19314		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 8	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 059	
SENTYP: LC	SENLOC: NA	SENATT: LCC8	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19315		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 10	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 1	CURNO: 060	
SENTYP: LC	SENLOC: NA	SENATT: LCC9	
AXIS: XG	UNITS: LBS	PREFIL: 1650	
INSMAN: MFG: INTERFACE, MODEL: 1220-FS,	S/N: 19316		
CALDAT: 14/MAY/85	INSRAT: 50000	CHLMAX: 0	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 120	DASTAT: AM
INSCOM:			

CALIBRATION DATA FOR INSTRUMENTATION USED IN DUMMY CALIBRATION

DUMMY INSTRUMENTS	MFR	MODEL	S/N	CAL DATE	CAL DUE DATE
CHEST DEFLECTION POT	BECKMAN	5311	N/A	EACH USE	EACH USE
CHEST IMPACTOR ACCEL	ENTRAN	EGV-1	14N3N-V13-1	03/17/92	09/17/92
NECK PENDULUM ACCEL	"	"	"	"	"
NECK ROTATION NO. 1	BECKMAN	5311	N/A	EACH USE	EACH USE
NECK ROTATION NO. 2	BECKMAN	5311	N/A	EACH USE	EACH USE
NECK EXTENSION POT	BOURNS	80294-20518-1840202	1684-067	EACH USE	EACH USE
ABDOMINAL COMPRESSION LOAD	LEBOW/EATON	3167	1573	03/17/92	09/17/92
LUMBAR FLEXION LOAD	"	"	"	"	"
LUMBAR ROTATION	BOURNS	3590S-2-102	N/A	EACH USE	EACH USE
ABDOMINAL DISPLACEMENT	CELESCO	PT-101-15B	0786551	EACH USE	EACH USE
TIMER	MSE	MSE TIM	#1	02/18/92	08/18/92
TIME TRAP	MSE	1"	#1	02/18/92	08/18/92

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