REPORT NO.: MSE-92-03-TR92038-03 V1862 R92038-03

OFFICE OF MARKET INCENTIVES
SIDE IMPACT PROTECTION STUDY
PASSENGER CARS

1992 NISSAN SENTRA, 4 DOOR SEDAN

NHTSA NO. MN5202

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

06 JULY 1992

FINAL REPORT

Prepared Under Contract No. DTNH22-87-C-07168, D.O. #4

For

U.S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Rulemaking
Office of Market Incentives
400 Seventh Street, S.W.
Washington, DC 20590

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Prepared by Mr. Jerry Kratzke/Mr. Pat Puzzuto/
Mr. Brian O'Keefe

Approved by: _____
Dr. Anil V. Khadilkar

Date: 06 July 1992

Report Accepted by OMI:

Accepted by:_____

Acceptance Date:_____

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FINAL REPORT SIDE IMPACT PROTECTION TESTING OF 1992 NISSAN SENTRA, 4 DOOR SEDAN NHTSA NO. MN5202	06 JULY 1992
	6. Performing Organization Code MSE
7. Author(s) DR. ANIL V. KHADILKAR/MR. JERRY KRATZKE/ MR. BRIAN O'KEEFE/MR. PAT PUZZUTO	8. Performing Organization Report No. R92038-03
9. Performing Organization Name and Address MOBILITY SYSTEMS AND EQUIPMENT COMPANY 9920 LA CIENEGA BOULEVARD, SUITE 708 INGLEWOOD, CALIFORNIA 90301	10. Work Unit No. (TRAIS)
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15. Supplementary Notes

16. Abstract

A 30/15 mph 90° Impact (Moving Deformable Barrier) Test was conducted on the subject 1992 Nissan Sentra, 4-Door Sedan in accordance with the specifications of the Office of Market Incentives "Side Impact Protection Study" Test Procedure. The test was conducted at the MSE facility in San Bernardino, on June 17, 1992.

The impact velocity of the Moving Deformable Barrier (MDB) was 32.95 mph, and the ambient temperature at the struck side (driver's) of the target vehicle at the time of impact was 85 °F. The target vehicle post test maximum crush was 17.30 inches at level 2. The test vehicle's performance follows:

	DRIVER	PASS
Left Upper Rib (LUR) Accel., g	80.3	69.0
Left Lower Rib (LLR) Accel., g	52.7	82.6
Lower Spine (T_{12}) Accel., g	101.3	90.6
Thoracic Trauma Index (TTI)	90.8	86.6
Pelvis (PEV) Accel., g	101.2	172.5

The two doors on the struck side of the vehicle did not separate from the body at the hinges or latches and the opposite doors did not open during side impact event.

17. Key Words	18. Distribution Statement
OMI SIDE IMPACT PROTECTION STUDY SIDE IMPACT DUMMY (SID) 1992 NISSAN SENTRA	COPIES OF THIS REPORT ARE AVAILABLE FROM: NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN. TECHNICAL REFERENCE DIVISION DOCKET SECTION, RM. 5108 (DOC. NO.91-02) 400 7TH ST., SW, WASHINGTON, DC 20590 (202) 366-4949

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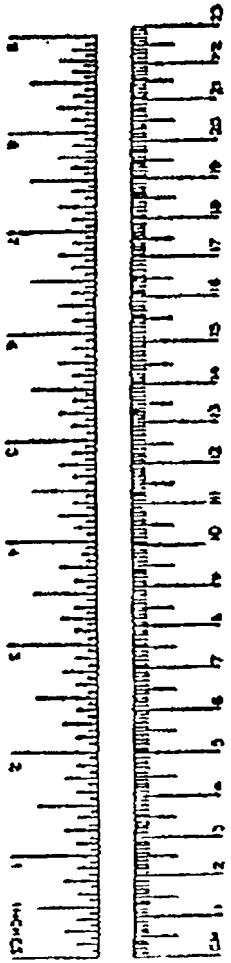
METRIC CONVERSION FACTORS

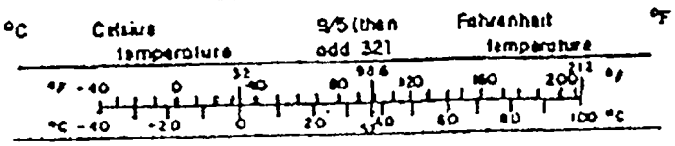
APPROXIMATE CONVERSIONS FROM METRIC MEASURES

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
	LENGTH			
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
	AREA			
in^2	square inches	6.5	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.6	square meters	m^2
mi^2	square miles	2.6	square kilometers	km^2
	acres	0.4	hectares	ha
	MASS (weight)			
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
	VOLUME			
tsp	teaspoons	5	milliliters	ml
tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft^3	cubic feet	0.03	cubic meters	m^3
yd^3	cubic yards	0.76	cubic meters	m^3
	TEMPERATURE (exact)			
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C



APPROXIMATE CONVERSIONS FROM METRIC MEASURES

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
	LENGTH			
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
	AREA			
cm^2	square centimeters	0.16	square inches	in^2
m^2	square meters	1.2	square yards	yd^2
km^2	square kilometers	0.4	square miles	mi^2
ha	hectares ($10,000 m^2$)	2.5	acres	
	MASS (weight)			
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
	VOLUME			
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m^3	cubic meters	36	cubic feet	ft^3
m^3	cubic meters	1.3	cubic yards	yd^3
	TEMPERATURE (exact)			
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



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SECTION 1

PURPOSE OF TEST

A 1992 Nissan Sentra, 4-door sedan was impacted on the left or driver's side by a Moving Deformable Barrier (MDB) which was moving forward in 27 degree crabbed position to the tow road guidance system at a velocity of 32.95 mph. The target vehicle was stationary and was positioned at an angle of 63 degree to the line of forward motion. The side impact test was conducted by the Mobility Systems and Equipment Co., on June 17, 1992. Pretest and posttest photographs of the test vehicle, the MDB and the side impact dummies (SIDs) are included in this report.

Two SIDs were placed in the driver and left rear designated seating positions according to instructions specified in the OMI Side Impact Protection Study Laboratory Test Procedure which is dated December 1991. The side impact event was documented by 10 cameras. Camera locations and other pertinent camera information are included in this report.

The SIDs were instrumented with the following accelerometers:

1. Left Upper Rib (LUR) uniaxial accelerometer (Y-direction) (Primary and Redundant)

2. Left Lower Rib (LLR) uniaxial accelerometer (Y-direction) (Primary and Redundant)

3. Lower Thoracic Spine (T_{12}) uniaxial accelerometer (Y-direction) (Primary and Redundant)

4. Pelvic (PEV) section uniaxial accelerometer (Y-direction).

In addition, the following transducers were included for each SID.

5. Upper Thoracic Spine (T_{01}) uniaxial accelerometer (Y-direction) (Primary and Redundant)

6. Triaxial Accelerometer in SID Head

7. Lap Belt Load Cell

8. Shoulder Belt Load Cell

Total number of transducers per SID were:

12	Accelerometers
2	Belt Load cells
14	Total

SECTION 2

DATA SUMMARY

A 1992 Nissan Sentra, NHTSA No. MN5202 was subjected to a side impact test at Mobility Systems and Equipment Co. on June 17, 1992. This section provides a summary of test results from the test. The results are presented in Data Sheet No. 1.

This testing program is a part of an investigation and evaluation of side impact protection in production passenger cars. The test is specifically intended to simulate a 90 deg. intersection collision with the striking vehicle moving at 30 mph and the struck vehicle moving at 15 mph. This is accomplished by towing a Moving Deformable Barrier (MDB) crabbed in a stationary position. The velocity of the MDB is to be 33.0 $\pm$ 0.5 mph. The target impact point of the MDB is to be: the left edge of the MDB face to impact a point on the struck vehicle 37 $\pm$ 2 inches ahead of the midpoint of the wheelbase of the vehicle.

The actual test speed was 32.95 mph. The actual impact point was 0.9 in. forward of the target impact point.

DATA SHEET NO. 1

SUMMARY OF RESULTS

VEH. MOD.YR/MAKE/MODEL: 1992 NISSAN SENTRA

VEH. BODY STYLE: 4 DOOR SEDAN VIN: 1N4EB31P3NC761744

VEH. NHTSA NO.: MN5202 VEH. BUILD DATE: 01/92

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.

TEST RESULTS:

Vehicle Overall Length = 170.5 inches; Vehicle Overall Width 65.7 inches

Vehicle Test Weight: 838.0 lbs. Left Front 633.0 lbs. Left Rear

776.0 lbs. Right Front 566.0 lbs. Right Rear

1614.0 lbs. TOTAL FRONT 1199.0 lbs. TOTAL REAR

1199
913

Wheelbase = 95.7 inches

Longitudinal C.G. from center of front axle = 40.9 inches

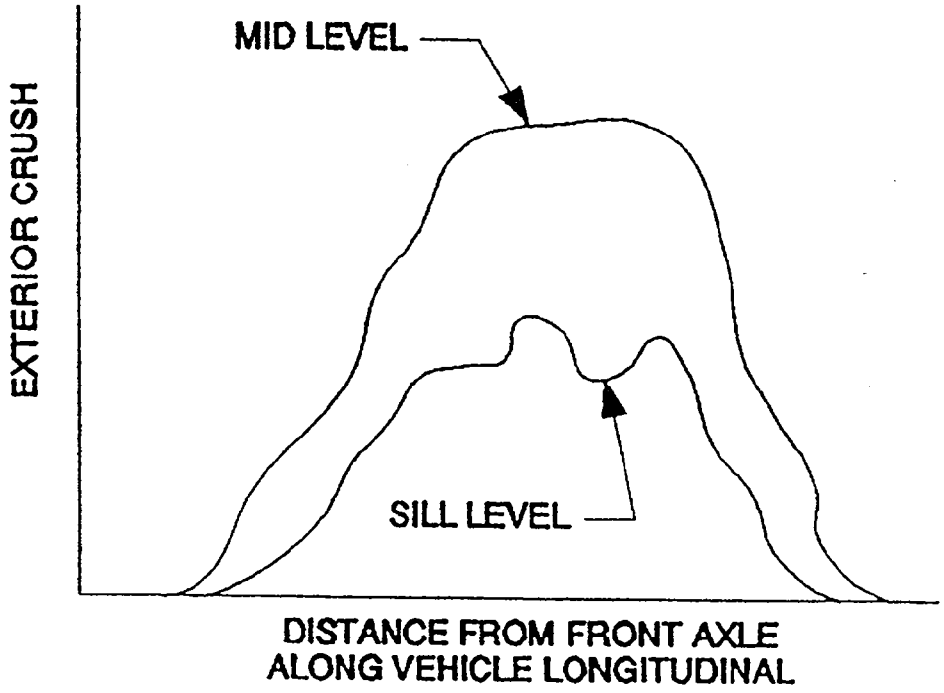
Impact Angle with respect to impactor = 90 degrees

Maximum Exterior Static Crush (provide External Damage Profile on next page):

1. LEVEL 1 (10.7 inches above ground) = 8.5 inches
2. LEVEL 2 (19.4 inches above ground) = 17.3 inches
3. LEVEL 3 (24.3 inches above ground) = 15.1 inches
4. LEVEL 4 (36.0 inches above ground) = 10.7 inches
5. LEVEL 5 (51.5 inches above ground) = 3.4 inches

Maximum Post Test Intrusion = 17.3 inches

External Lateral Damage Profile (sample shown below)



Occupants:	DRIVER	PASS. (LEFT REAR)
Dummy Identification	SID # 136	SID # 137
Restraint Used	Auto Belts	Manual Belts
Instrumentation:	Auto shoulder belt manual lap belt	Manual 3-point continuous webbing belt

Number of Data Channels = 50

Number of Cameras: Onboard = 3 HIGH SPEED

Offboard = 6 HIGH SPEED (2 on MDB), 1 Real Time

Door Opening:	LEFT SIDE	RIGHT SIDE
FRONT --	No	No
REAR --	No	No

Arm Rest Location: Front -- N/A

Rear -- N/A

Front Seat Cushion Movement: MOVED TO THE RIGHT

Front Seat Back Movement: MOVED TO THE RIGHT

Glazing Breakage: BOTH SLIDING WINDOWS ON IMPACT SIDE OF VEHICLE SHATTERED.
WINDSHIELD CRACKED, BUT REMAINED INTACT.

Pillar Failure: NONE

Sill Separation: NONE

Other Notable Impact Effect: NONE

MOVING DEFORMABLE BARRIER (MDB) RESULTS:

Overall Width of Framework Carriage = 52.5 inches

Overall Length of MDB = 162.0 inches (including honey comb impact face)

Wheelbase of Frame work Carriage (front and Rear) = 102.0 inches

C.G. Location of Rearward of Front Axle = 44.5 inches

MDB Weight:

835 lbs. Left Front	645 Left Rear
835 lbs. Right Front	645 Right Rear
1670 lbs. TOTAL FRONT	1290 TOTAL REAR

TOTAL WEIGHT OF MDB = 2960 lbs.

Impact Angle (MDB Centerline to Target Vehicle Centerline) = 27 degrees

Impact Speed = 32.95 mph

Maximum Static Crush of Honeycomb Impact Face:

1. ROW A at bumper level = 1.8 inches
2. ROW B at midstack level = 0.8 inches
3. ROW C at top of stack level = 4.4 inches

Instrumentation:

Number of MDB Data Channels = 5

SIDE IMPACT DUMMY (SID) RESULTS

Location of B-Post Upper Anchorage Bolt or Side Rail (Auto. Belts) for Head Contact Analysis:
SLIDE RAIL RUNS ALONG A-PILLAR TO ROOF AND TO B-PILLAR

FINAL POSITION IS 20.7 INCHES ABOVE B-POST STRIKER

Visible Dummy Contact Points--	FRONT SID	REAR SID
HEAD	B-PILLAR, SEAT BELT ANCHOR	C-PILLAR
SHOULDER	B-PILLAR, DOOR	DOOR
HIP	DOOR	DOOR, SEAT
LEFT KNEE	DOOR, STEERING WHEEL	DOOR, FRONT SEAT
RIGHT KNEE	BOTTOM OF STEERING COLUMN	FRONT SEAT

	FRONT SID # 136				REAR SID # 137			
	+DIRECT		-DIRECT		+DIRECT		-DIRECT	
	MaxG	ms	MaxG	ms	MaxG	ms	MaxG	ms
RIB ACCELERATIONS:								
Upper Rib Lateral Y	80.3	25.6	17.1	77.5	69.0	41.3	11.2	99.4
Lower Rib Lateral Y	52.7	25.6	20.2	79.4	82.6	41.9	21.8	70.6
SPINE ACCELERATIONS:								
Lower Lateral Y	101.3	28.1	20.2	86.3	90.6	38.8	23.1	74.4
PELVIS ACCELERATIONS:								
Lateral Y	101.2	34.4	25.2	76.3	172.5	34.4	18.2	77.5

REFERENCE: (+) DIRECTION Lateral Y = to the right
(-) DIRECTION Lateral Y = to the left

REMARKS:

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/24/92

APPROVED BY: 

SIDE IMPACT DUMMY (SID) TEST DATA SUMMARY
1992 NISSAN SENTRA, 4-DOOR SEDAN, NHTSA NO. MN5202

TEST DATE: 04/16/92	FRONT DUMMY -- ID # 136				REAR DUMMY -- ID # 137			
	POS. DIRECT		NEG. DIRECT		POS. DIRECT		NEG. DIRECT	
	MAX (g)	TIME (msec)	MAX (g)	TIME (msec)	MAX (g)	TIME (msec)	MAX (g)	TIME (msec)
HEAD ACCELERATIONS:								
Longitudinal --- X	23.0	46.6	77.5	38.3	20.6	58.1	9.2	61.5
Lateral -------- Y	215.6	38.3	7.9	58.8	167.8	58 0	17.0	40.5
Vertical ------- Z	23.2	43.0	57.8	38.2	18.7	76.2	45.9	65.1
RESULTANT ------ R	233.2	38.3	0.0	1.4	168.8	58.0	0.0	1.4
HIC ----------	1194.8				1088.3			
(TIME INTERVAL, SEC.)	(0.0377 TO 0.0405)				(0.0562 TO 0.0625)			
RIB ACCELERATIONS:								
1.Upper Rib Lateral Y	80.3	25.6	17.1	77.5	69.0	41.3	11.2	99.4
2.Upper Rib Lateral Y	82.1	25.6	19.4	76.9	66.9	41.3	13.4	99.4
1.Lower Rib Lateral Y	52.7	25.6	20.2	79.4	82.6	41.9	21.8	70.6
2.Lower Rib Lateral Y	57.3	25.6	19.1	79.4	78.9	41.9	22.7	71.3
SPINE ACCELERATIONS:								
1.Upper Spine LateralY	87.4	28.1	14.3	68.8	65.2	46.9	25.7	76.3
2.Upper Spine LateralY	81.8	28.8	32.6	52.5	N/AV	N/AV	N/AV	N/AV
1.Lower Spine LateralY	101.3	28.1	20.2	86.3	90.6	38.8	23.1	74.4
2.Lower Spine LateralY	96.1	28.1	20.2	68.8	92.2	39.4	20.8	68.1
PELVIS ACCELERATIONS:								
Lateral Y	101.2	34.4	25.2	76.3	172.5	34.4	18.2	77.5
RIB DEFLECTION:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
THORACIC TRAUMA INDEX (TTI (d)), G's	90.8				86.6			

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

Negative Direction -- Longitudinal (X) = rearward
Lateral (Y) = to left
Vertical (Z) = up

SECTION 3

SIDE IMPACT DUMMY (SID) AND VEHICLE TEST DATA

This section provides the test results and data for SID and the test vehicle. The data sheets are arranged as shown below:

Data Sheet No. 2: Pretest and Posttest Measurements (vehicle)

Data Sheet No. 3: SID Longitudinal Clearance Dimension

Data Sheet No. 4: SID Lateral Clearance Dimension

Data Sheet No. 5: Vehicle Side Measurements

Data Sheet No. 6A to 6E: Pretest and Posttest Vehicle Exterior Profile at Levels 1 to 5

Data Sheet No.6F: Summary of Vehicle Exterior Profile Static Crush

Data Sheet No. 7: Exterior Static Crush for Side Impactor

Data Sheet No. 8: Test Vehicle Accelerometer Locations and Data Summary

Data Sheet No. 9: Moving Deformable Barrier (MDB) Accelerometer Locations and Data Summary

Data Sheet No.10: High Speed Camera Locations and Data

Data Sheet No.11: Test Vehicle Data

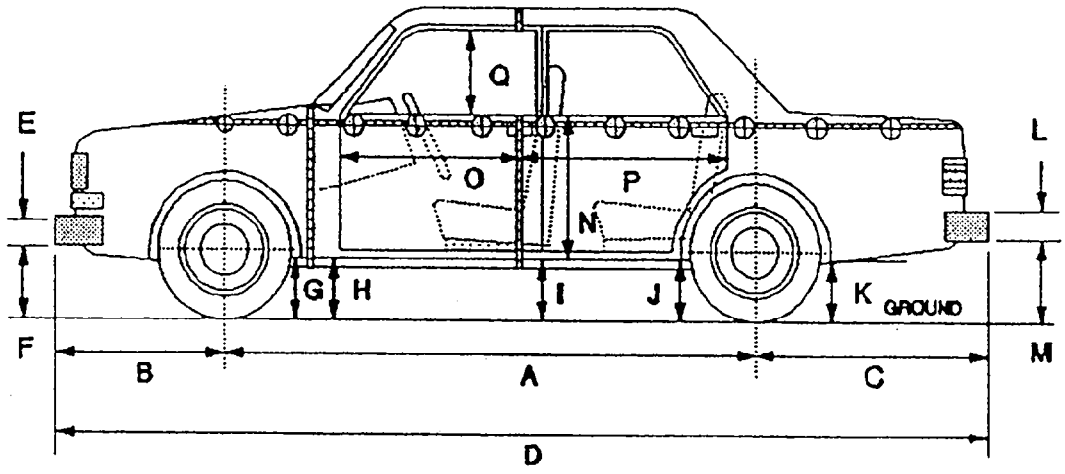
DATA SHEETS NO. 2

PRETEST AND POST TEST MEASUREMENTS

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



LEFT SIDE VIEW

	Pretest (inches)	Post Test (inches)	Change		Pretest (inches)	Post Test (inches)	Change
A	95.7	95.8	0.1	J	8.8	8.7	0.1
B	34.5	32.7	1.8	K	12.1	12.1	0.0
C	40.3	41.0	0.7	L	9.6	9.6	0.0
D	170.5	169.5	1.0	M	12.8	12.8	0.0
E	5.5	5.5	0.0	N	27.1	25.8	1.3
F	15.5	16.0	0.5	O	25.6	25.2	0.4
G	7.9	8.7	0.8	P	51.8	48.0	3.8
H	8.5	10.1	1.6	Q	16.5	15.5	1.0
I	8.6	10.1	1.5				

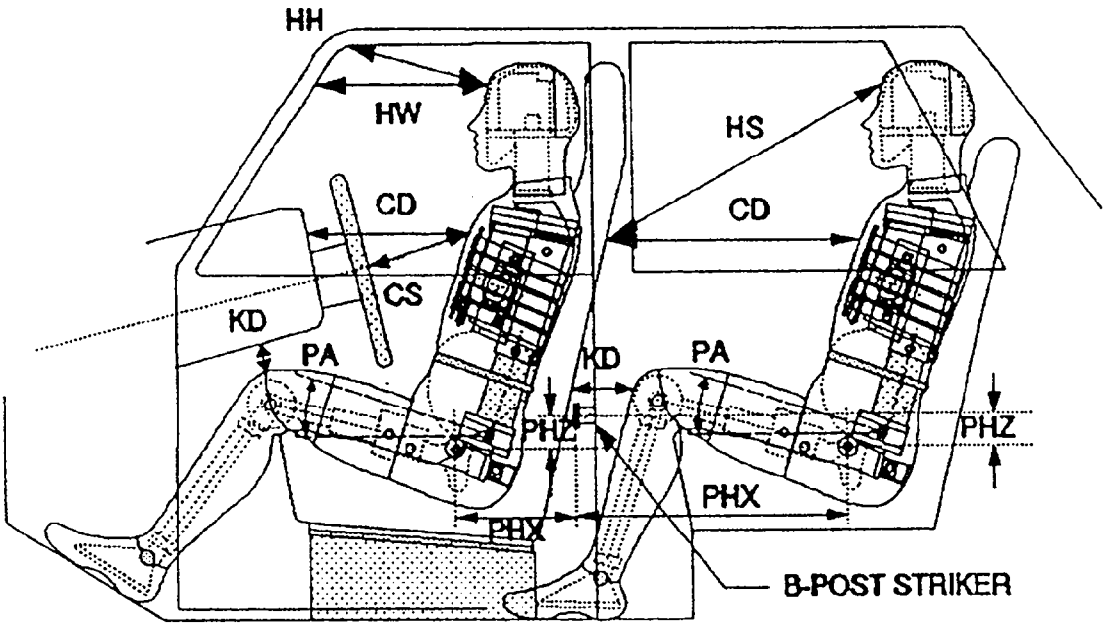
DATA SHEET NO. 3

SID LONGITUDINAL CLEARANCE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO



LEFT SIDE VIEW

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

	DRIVER SID ID# 136		REAR SID ID# 137	
HH	17.5	inches	N/A	inches
HW	26.5	inches	N/A	inches
HS	23.6	inches	24.5	inches
CD	27.0	inches	16.0	inches
CS	16.0	inches	N/A	inches
KDL	2.3	inches	0.0	inches
KDR	2.7	inches	0.4	inches
PA	24.0	degrees	24.0	degrees
PHX	7.6	inches	12.5	inches
PHY	5.5	inches	12.9	inches

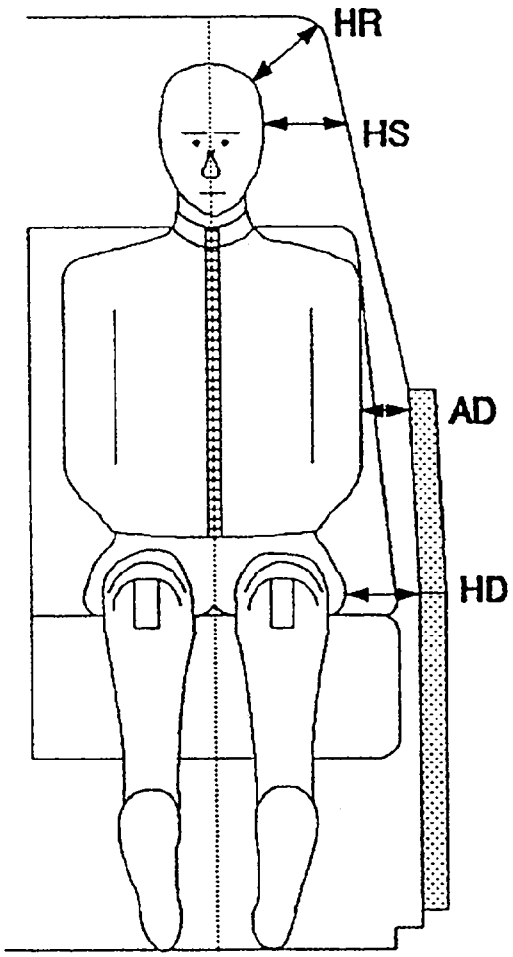
DATA SHEET NO. 4

SID LATERAL CLEARANCE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



	DRIVER SID ID# 136		REAR SID ID# 137	
HR	4.5	inches	7.0	inches
HS	6.5	inches	6.5	inches
AD	3.0	inches	4.5	inches
HD	5.5	inches	7.5	inches

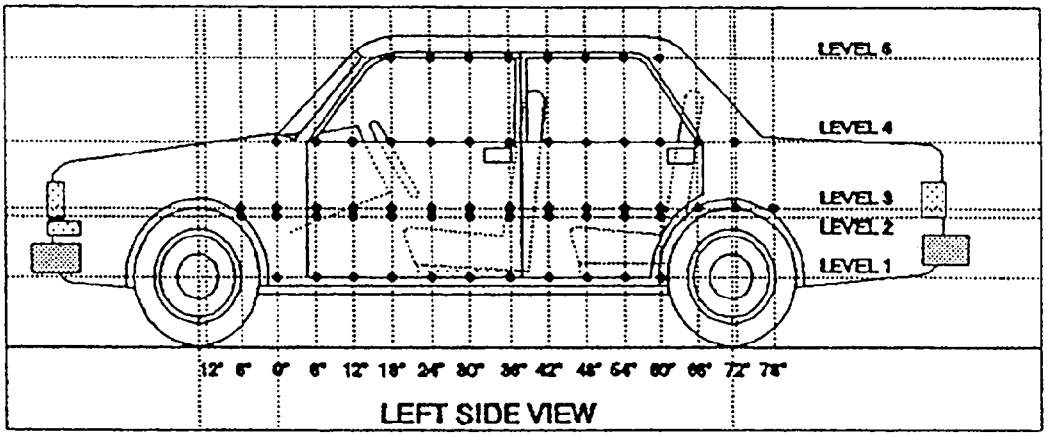
DATA SHEET NO. 5

VEHICLE SIDE MEASUREMENT

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



LEVEL 5 - WINDOW TOP
LEVEL 4 - WINDOW SILL
LEVEL 3 - MID-DOOR
LEVEL 2 - OCCUPANT H-POINT
LEVEL 1 - AXLE CENTERLINE HEIGHT or SILL TOP HEIGHT

MEASUREMENTS ALONG THE VERTICAL 30" LINE SHOWN ABOVE:

LEVEL 5 @ Window Top = 51.1 inches

LEVEL 4 @ Window Sill = 36.0 inches

LEVEL 3 @ Mid Door = 24.3 inches

LEVEL 2 @ Occupant H-Point = 19.4 inches

LEVEL 1 @ Axle Centerline Height = 10.7 inches
(or Sill Top Height)

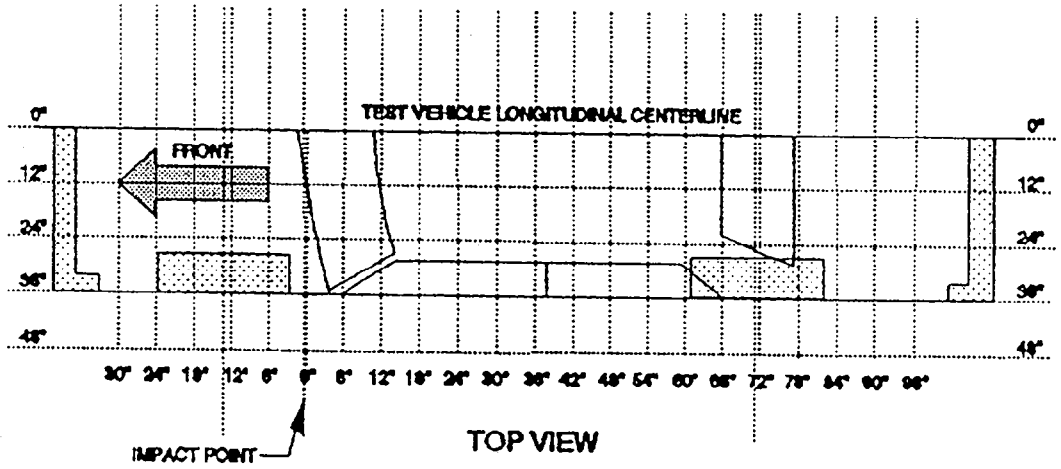
DATA SHEET NO. 6A

PRETEST AND POST TEST VEHICLE EXTERIOR PROFILES

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



TOP VIEW

LEVEL 1 AT AXLE CENTERLINE or TOP SIDE SILL

10.7 INCHES ABOVE GROUND LEVEL AT THE DOOR 30" LINE

ADD PROFILE INFORMATION ON THE NEXT PAGE

NOTE: ALL TEST VEHICLE EXTERIOR PROFILES TAKEN FROM REFERENCE PLANE WHICH IS PARALLEL TO AND 48 INCHES FROM TEST VEHICLE LONGITUDINAL CENTERLINE

LEVEL 1 AT AXLE CENTERLINE

	POST TEST (inches)	PRETEST (inches)	STATIC CRUSH (inches)
-6inches	N/A	N/A	N/A
0 inch (impact point)	N/A	N/A	N/A
6 inches	21.7	18.5	3.2
12 inches	23.3	18.5	4.7
18 inches	24.2	18.6	5.6
24 inches	24.9	18.6	6.3
30 inches	25.8	18.6	7.2
36 inches	26.2	18.6	7.6
42 inches	27.2	18.7	8.5
48 inches	25.7	18.8	6.9
54 inches	24.0	18.9	5.1
60 inches	22.4	18.9	3.5
66 inches	20.5	19.0	1.5
72 inches	N/A	N/A	N/A

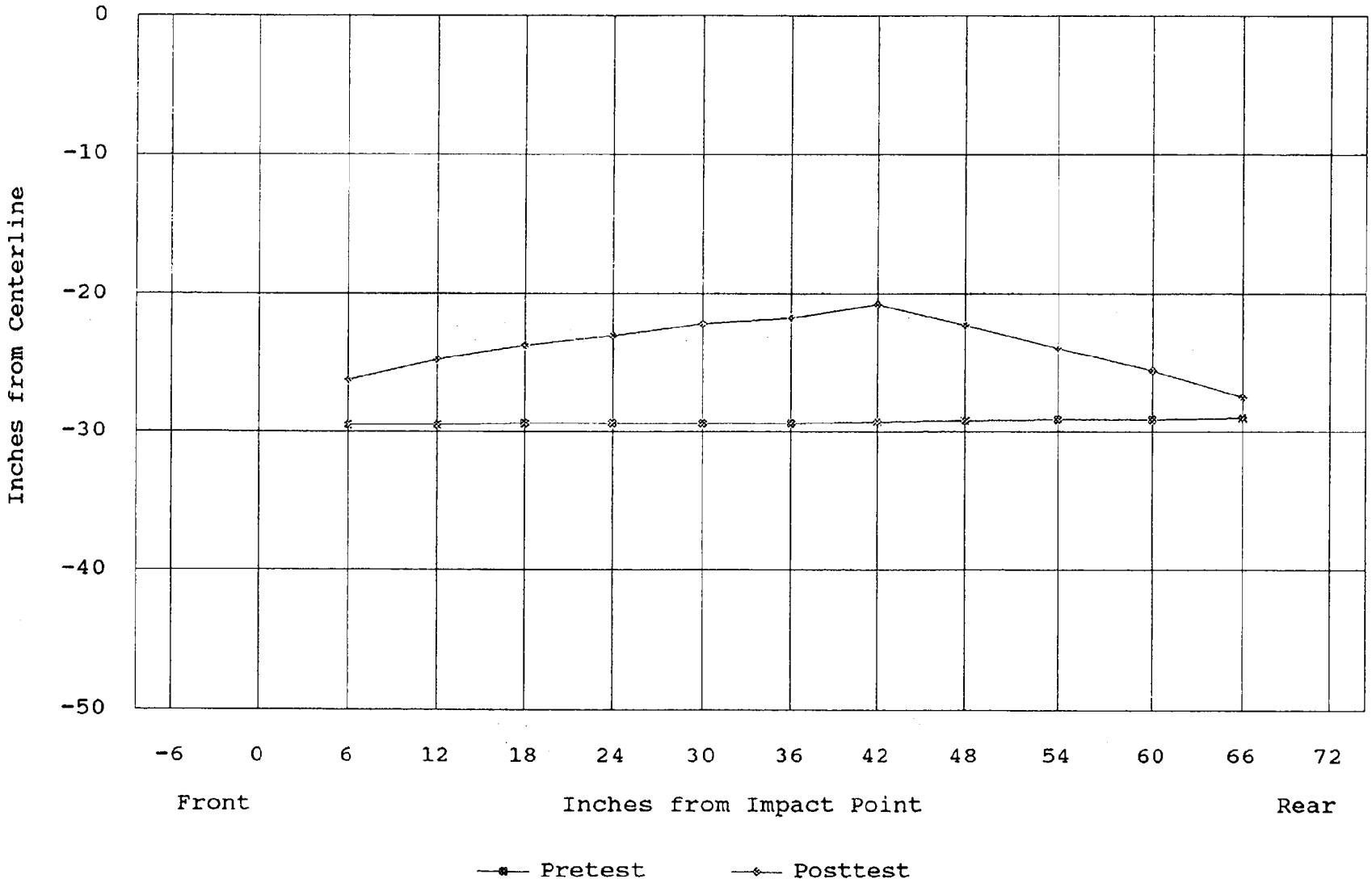
REMARKS:

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/18/92

APPROVED BY: [signature] DATE: 07-06-92

Pretest and Posttest Exterior Profile

Level 1 - Axle Centerline - 10.7" Above Ground Level



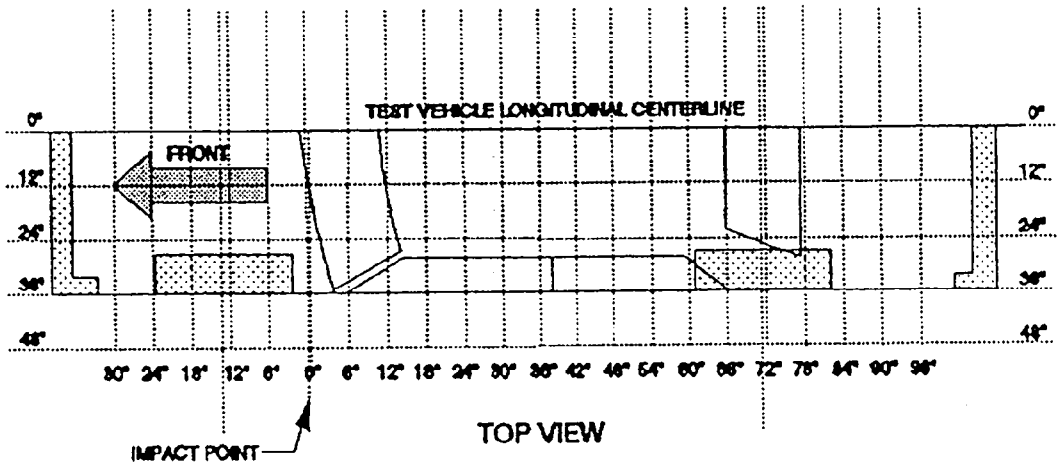
DATA SHEET NO. 6B

PRETEST AND POST TEST VEHICLE EXTERIOR PROFILES

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



TOP VIEW

LEVEL 2 AT OCCUPANT H-POINT

19.4 INCHES ABOVE GROUND LEVEL AT THE DOOR 30" LINE

ADD PROFILE INFORMATION ON THE NEXT PAGE

NOTE: ALL TEST VEHICLE EXTERIOR PROFILES TAKEN FROM REFERENCE PLANE WHICH IS PARALLEL TO AND 48 INCHES FROM TEST VEHICLE LONGITUDINAL CENTERLINE

LEVEL 2 AT OCCUPANT H-POINT

	POST TEST (inches)	PRETEST (inches)	STATIC CRUSH (inches)
-6inches	16.3	15.0	1.3
0 inch (impact point)	N/A	N/A	N/A
6 inches	N/A	N/A	N/A
12 inches	24.4	15.0	9.4
18 inches	26.3	14.9	11.4
24 inches	27.4	14.9	12.5
30 inches	28.5	14.9	13.6
36 inches	29.3	14.9	14.4
42 inches	30.1	14.9	15.2
48 inches	31.0	14.9	16.1
54 inches	31.8	14.9	16.9
60 inches	32.2	14.9	17.3
66 inches	32.1	15.0	17.1
72 inches	18.1	15.1	3.0

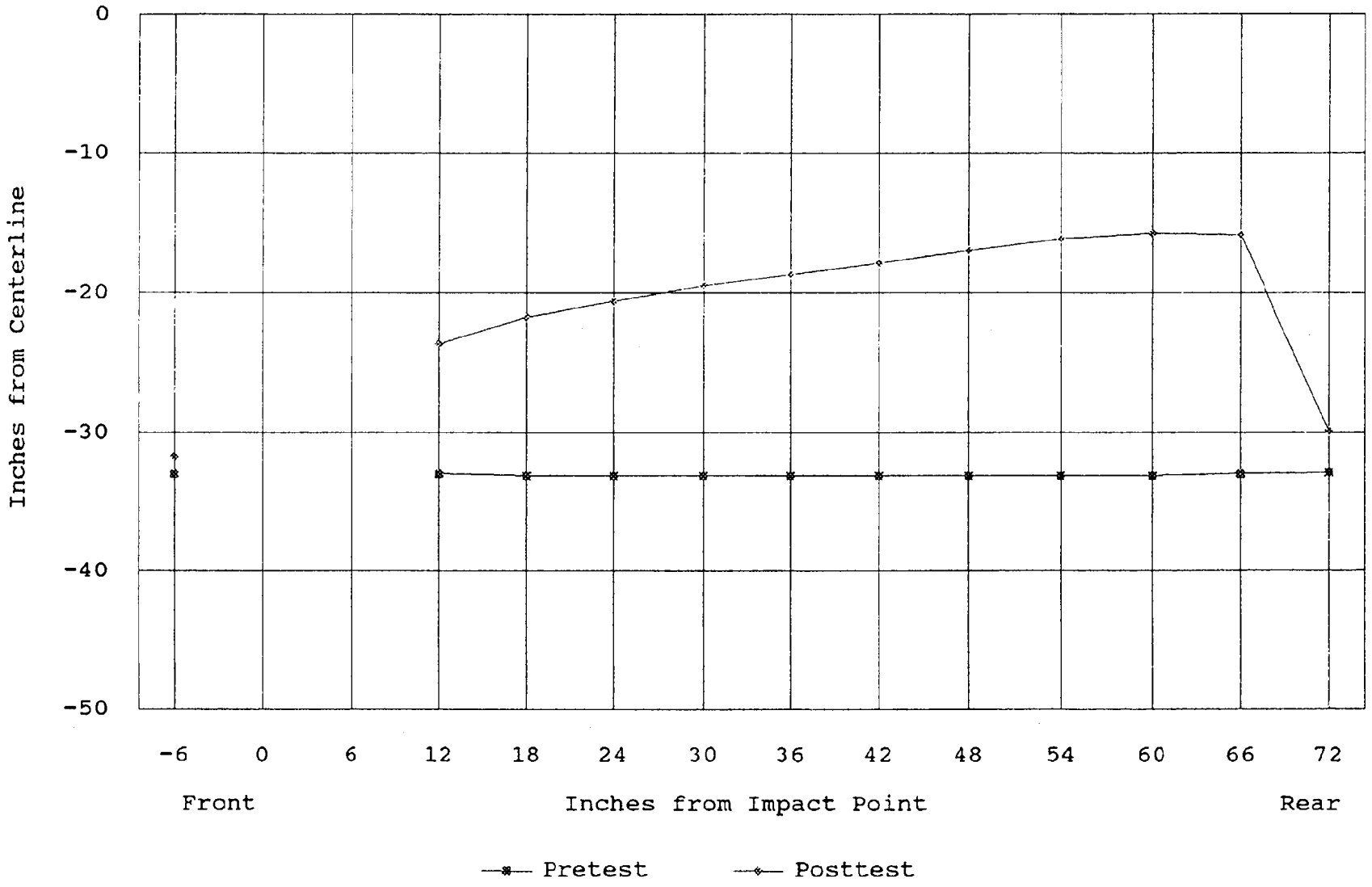
REMARKS:

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/18/92

APPROVED BY: [signature] DATE: 07/06/92

Pretest and Posttest Exterior Profile

Level 2 - Occupant H-point - 19.4' Above Ground Level



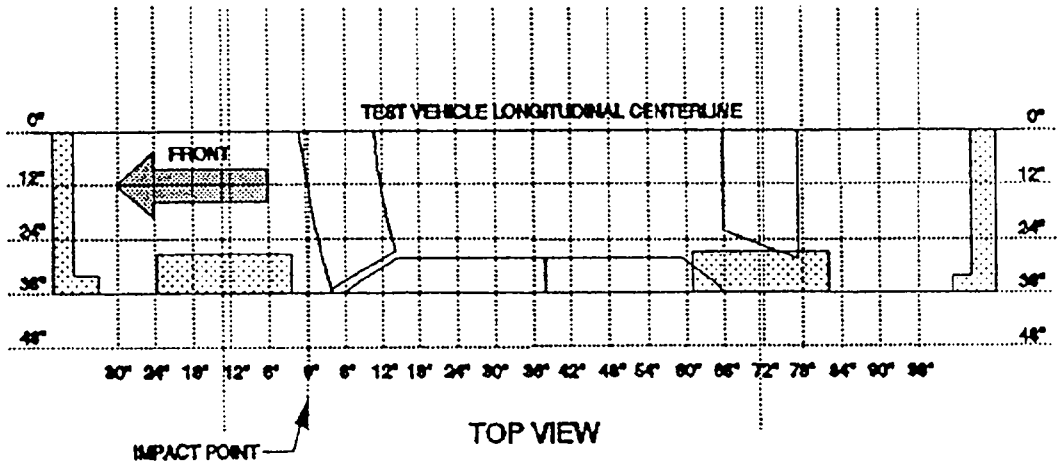
DATA SHEET NO. 6C

PRETEST AND POST TEST VEHICLE EXTERIOR PROFILES

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



TOP VIEW

LEVEL 3 AT MID DOOR

24.3 INCHES ABOVE GROUND LEVEL AT THE DOOR 30" LINE

ADD PROFILE INFORMATION ON THE NEXT PAGE

NOTE: ALL TEST VEHICLE EXTERIOR PROFILES TAKEN FROM REFERENCE PLANE WHICH IS PARALLEL TO AND 48 INCHES FROM TEST VEHICLE LONGITUDINAL CENTERLINE

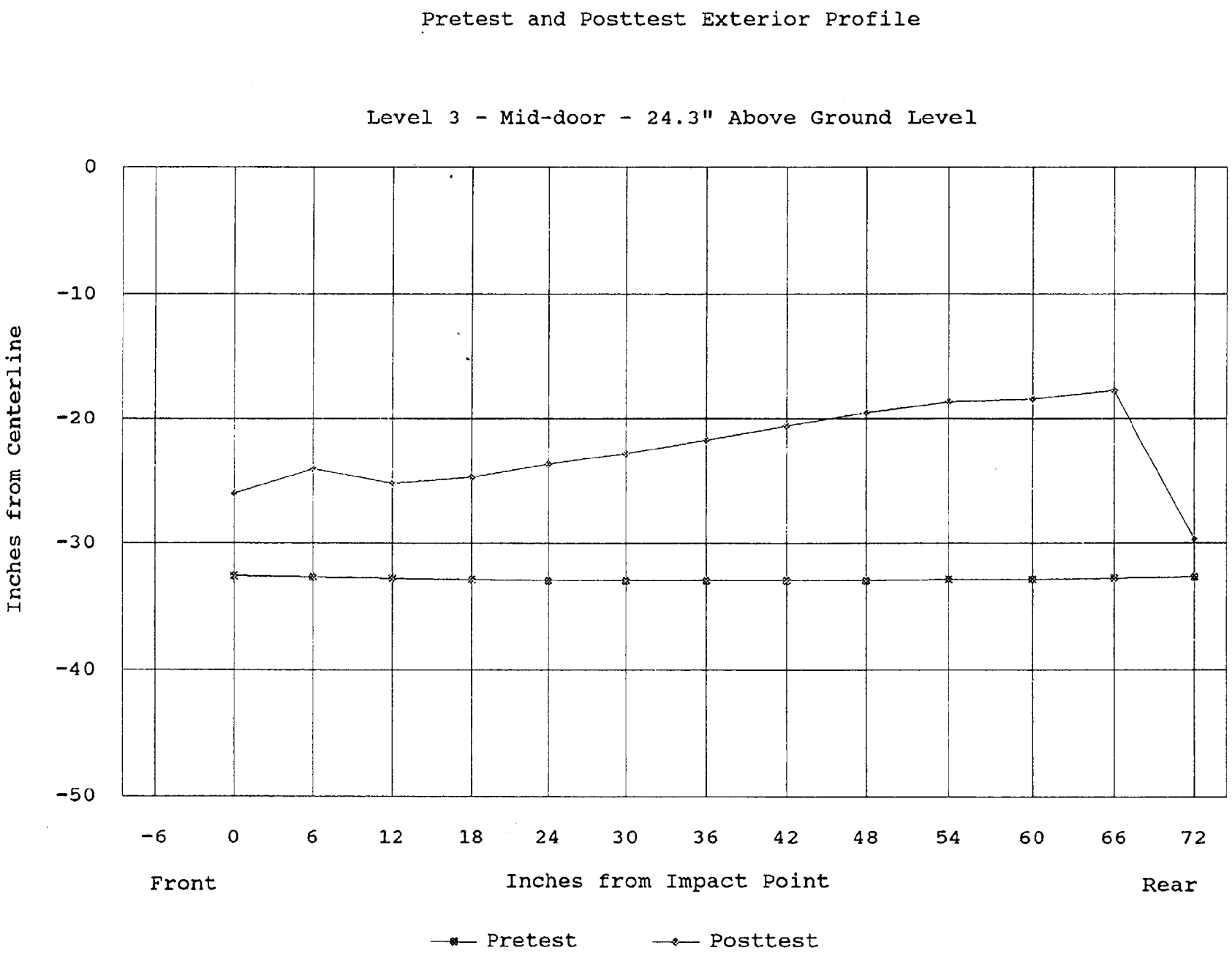
LEVEL 3 AT MID-DOOR

	POST TEST (inches)	PRETEST (inches)	STATIC CRUSH (inches)
-6inches	N/A	N/A	N/A
0 inch (impact point)	22.0	15.4	6.6
6 inches	24.0	15.3	8.7
12 inches	22.8	15.2	7.6
18 inches	23.3	15.1	8.2
24 inches	24.4	15.0	9.4
30 inches	25.2	15.0	10.2
36 inches	26.3	15.0	11.3
42 inches	27.4	15.0	12.4
48 inches	28.5	15.0	13.5
54 inches	29.4	15.1	14.3
60 inches	29.6	15.1	14.5
66 inches	30.3	15.2	15.1
72 inches	18.3	15.3	3.0

REMARKS:

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/18/92

APPROVED BY: _____ DATE: 07/06/92


Pretest and Posttest Exterior Profile
Level 3 - Mid-door - 24.3" Above Ground Level
Inches from Centerline
0
-10
-20
-30
-40
-50
-6
0
6
12
18
24
30
36
42
48
54
60
66
72
Front
Inches from Impact Point
Rear
Pretest
Posttest

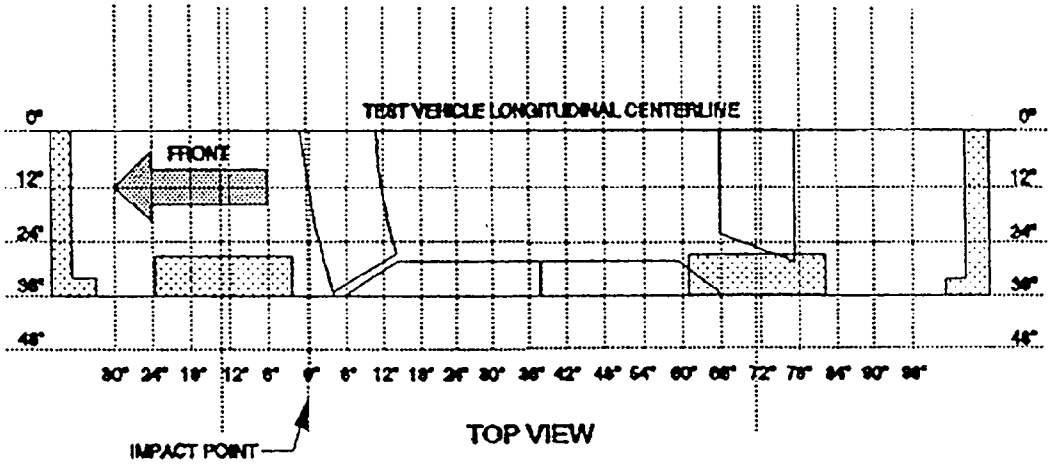
DATA SHEET NO. 6D

PRETEST AND POST TEST VEHICLE EXTERIOR PROFILES

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



LEVEL 4 AT WINDOW SILL

36.0 INCHES ABOVE GROUND LEVEL AT THE DOOR 30" LINE

ADD PROFILE INFORMATION ON THE NEXT PAGE

NOTE: ALL TEST VEHICLE EXTERIOR PROFILES TAKEN FROM REFERENCE PLANE WHICH IS PARALLEL TO AND 48 INCHES FROM TEST VEHICLE LONGITUDINAL CENTERLINE

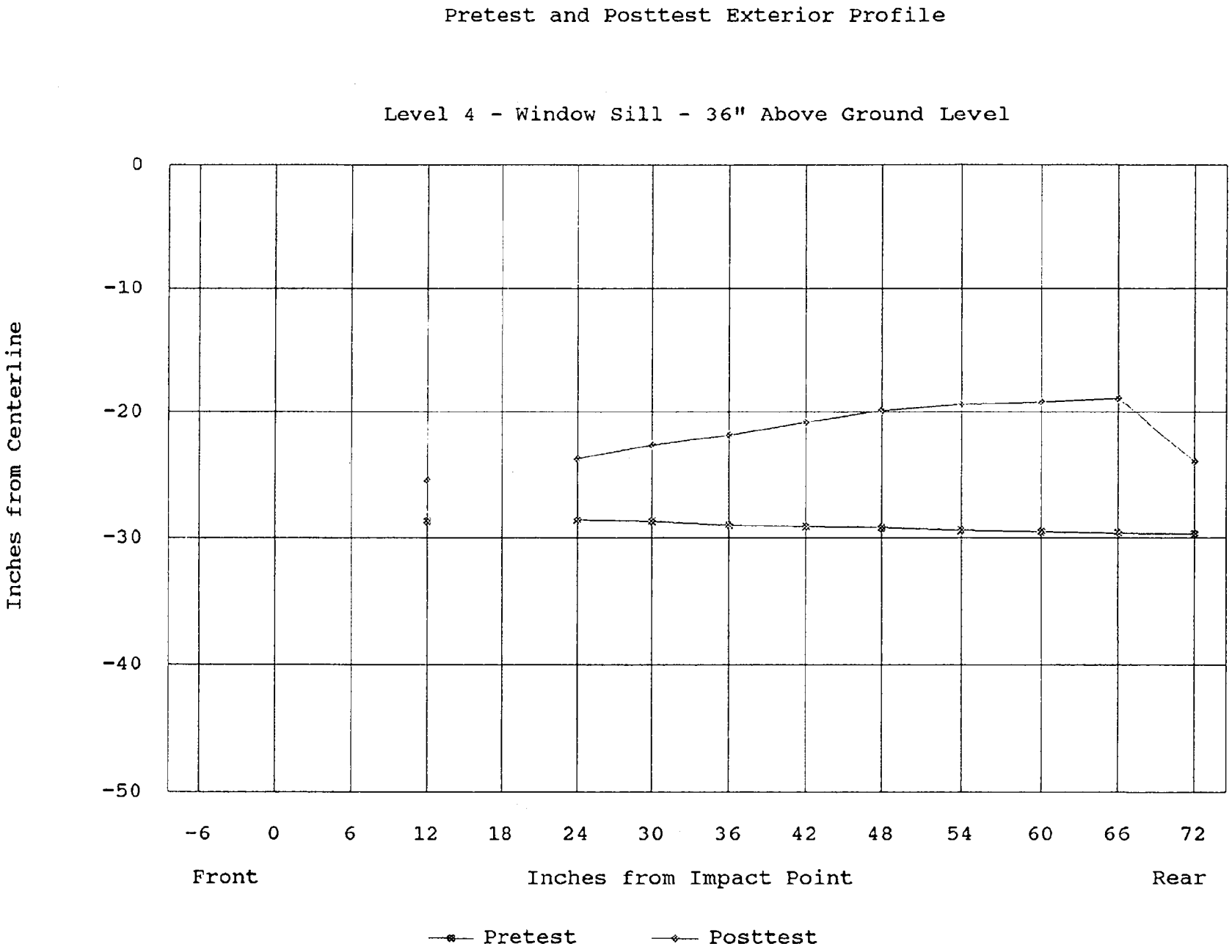
LEVEL 4 AT WINDOW SILL

	POST TEST (inches)	PRETEST (inches)	STATIC CRUSH (inches)
-6inches	N/A	N/A	N/A
0 inch (impact point)	N/A	N/A	N/A
6 inches	N/A	N/A	N/A
12 inches	22.6	19.3	3.3
18 inches	N/A	N/A	N/A
24 inches	24.3	19.4	4.9
30 inches	25.4	19.3	6.1
36 inches	26.2	19.0	7.2
42 inches	27.2	18.9	8.3
48 inches	28.1	18.8	9.3
54 inches	28.6	18.6	10.0
60 inches	28.8	18.5	10.3
66 inches	29.1	18.4	10.7
72 inches	24.1	18.3	5.8

REMARKS:

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/18/92

APPROVED BY: [signature] DATE: 07/06/92


Pretest and Posttest Exterior Profile
Level 4 - Window Sill - 36" Above Ground Level
Inches from Centerline
0
-10
-20
-30
-40
-50
-6
0
6
12
18
24
30
36
42
48
54
60
66
72
Front
Inches from Impact Point
Rear
Pretest
Posttest

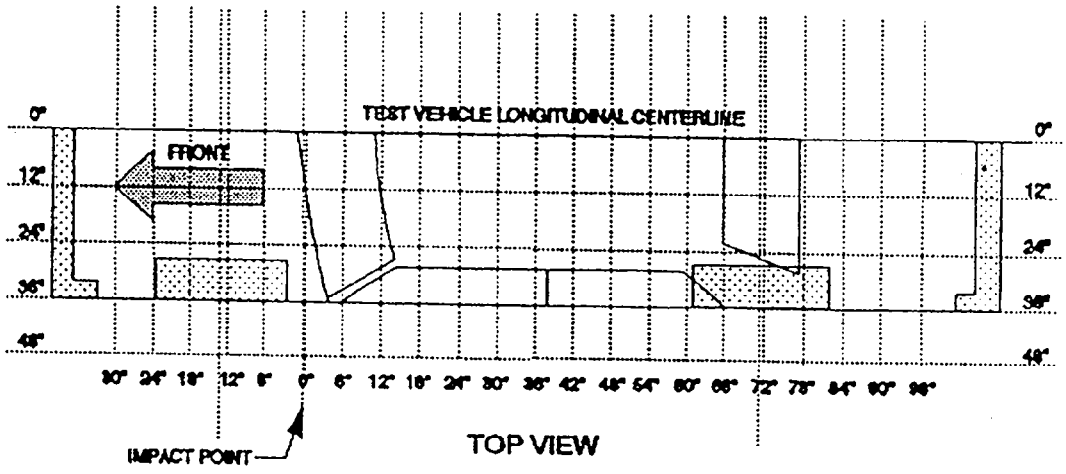
DATA SHEET NO. 6E

PRETEST AND POST TEST VEHICLE EXTERIOR PROFILES

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



TOP VIEW

LEVEL 5 AT WINDOW TOP

51.1 INCHES ABOVE GROUND LEVEL AT THE DOOR 30" LINE

ADD PROFILE INFORMATION ON THE NEXT PAGE

NOTE: ALL TEST VEHICLE EXTERIOR PROFILES TAKEN FROM REFERENCE PLANE WHICH IS PARALLEL TO AND 48 INCHES FROM TEST VEHICLE LONGITUDINAL CENTERLINE

LEVEL 5 AT WINDOW TOP

	POST TEST (inches)	PRETEST (inches)	STATIC CRUSH (inches)
-6inches	N/A	N/A	N/A
0 inch (impact point)	N/A	N/A	N/A
6 inches	N/A	N/A	N/A
12 inches	N/A	N/A	N/A
18 inches	N/A	N/A	N/A
24 inches	N/A	N/A	N/A
30 inches	N/A	N/A	N/A
36 inches	25.0	26.0	-1.0
42 inches	26.8	26.0	0.8
48 inches	28.2	26.3	1.9
54 inches	29.4	26.0	3.4
60 inches	27.6	26.3	1.3
66 inches	25.0	26.1	-1.1
72 inches	22.8	26.3	-3.5

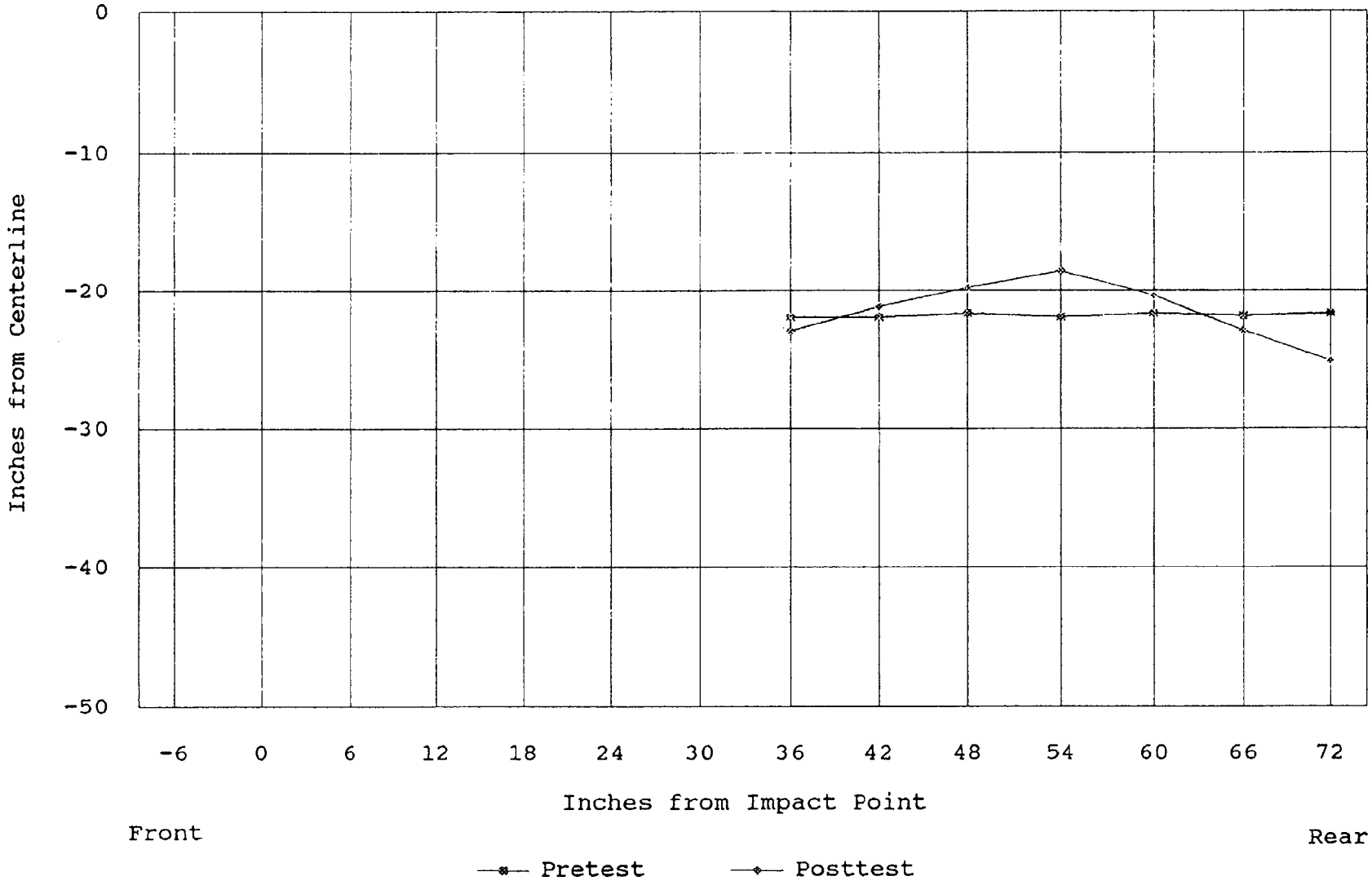
REMARKS:

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/18/92

APPROVED BY: [signature] DATE: 07/01/92

Pretest and Posttest Exterior Profile

Level 5 - Window Top - 51.1" Above Ground Level



DATA SHEET NO. 6F

SUMMARY OF VEHICLE EXTERIOR PROFILE STATIC CRUSH

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.

POSITION	LEVEL 1 (inches)	LEVEL 2 (inches)	LEVEL 3 (inches)	LEVEL 4 (inches)	LEVEL 5 (inches)
-6 inches	N/A	1.3	N/A	N/A	N/A
0 inch Impact Point	N/A	N/A	6.6	N/A	N/A
6 inches	3.2	N/A	8.7	N/A	N/A
12 inches	4.7	9.4	7.6	3.3	N/A
18 inches	5.6	11.4	8.2	N/A	N/A
24 inch	6.3	12.5	9.4	4.9	N/A
30 inches	7.2	13.6	10.2	6.1	N/A
36 inches	7.6	14.4	11.3	7.2	-1.0
42 inches	8.5	15.2	12.4	8.3	0.8
48 inches	6.9	16.1	13.5	9.3	1.9
54 inches	5.1	16.9	14.3	10.0	3.4
60 inches	3.5	17.3	14.5	10.3	1.3
66 inches	1.5	17.1	15.1	10.7	-1.1
72 inches	N/A	3.0	3.0	5.8	-3.5

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/18/92

APPROVED BY: [signature] DATE: 07/06/92

DATA SHEET NO. 7

EXTERIOR STATIC CRUSH FOR SIDE IMPACTOR

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.

LOCATION	TOP OF STACK LEVEL	MID-STACK LEVEL	BUMPER LEVEL
HEIGHT AT CENTERLINE*	32 inches	22 inches	17 inches
DISTANCES RIGHT OF CENTER**	(inches)	(inches)	(inches)
32 inches	4.4	0.8	1.8
28 inches	4.2	0.5	1.5
24 inches	3.0	0.0	1.2
20 inches	1.1	-0.1	0.9
16 inches	0.3	-0.2	0.8
12 inches	-0.1	-0.1	0.7
8 inches	-0.1	-0.1	0.7
4 inches	-0.1	-0.1	0.6
0 inches	-0.1	-0.1	0.6

DATA SHEET NO. 7 (Cont.)

LOCATION	TOP OF STACK LEVEL	MID-STACK LEVEL	BUMPER LEVEL
HEIGHT AT CENTERLINE*	32 inches	22 inches	17 inches
DISTANCES LEFT OF CENTER**	(inches)	(inches)	(inches)
4 inches	-0.1	-0.1	0.6
8 inches	-0.1	-0.1	0.6
12 inches	0.0	-0.1	0.5
16 inches	-0.2	-0.1	0.7
20 inches	-0.2	-0.1	0.5
24 inches	-0.2	-0.1	0.5
28 inches	0.0	0.0	0.5
32 inches	0.7	0.1	0.6

* Heights, in inches, measured above ground level
** Impact side

REMARKS: ** Right of center towards front of test vehicle

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/19/92

APPROVED BY: [signature] DATE: 07/06/92

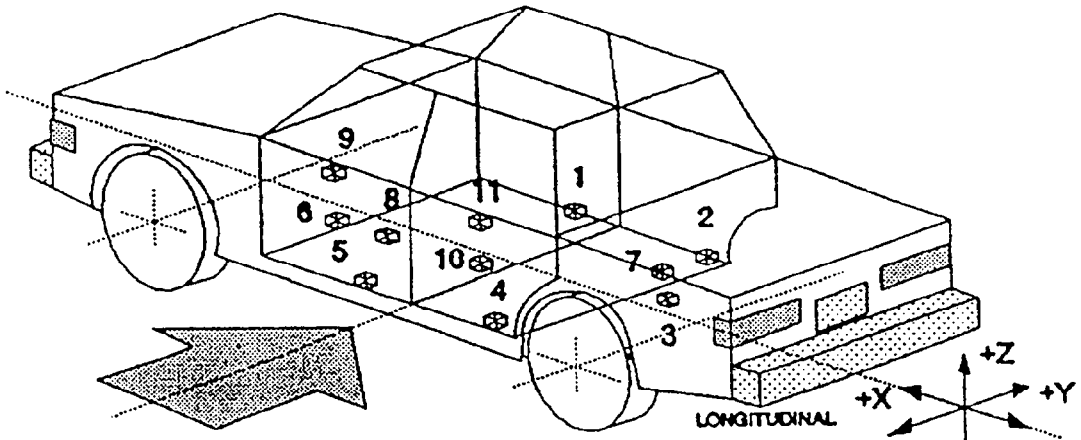
DATA SHEET NO. 8

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



IMPACT DIRECTION
BY MOVING DEFORMABLE BARRIER

SILL
1-Rt. Side Sill @ Frt Seat
2-Rt. Side Sill @ Rr. Seat
3-Rr. Floorpan Above Axle
SILL
4-Left Side Sill @ Rr. Seat
5-Left Side Sill @ Frt. Seat
DOOR
6-Left Frt. Door On Centerline

VERTICAL
7-Rt. Rr. Occ. Compartment
8-Midrear of Left Frt. Door
9-Left Frt. Door Upper Centerline
10-Midrear of Left Rear Door
11-Left Rear Door Upper Centerline
DOOR

NO.	COORDINATES X (in.)	Y (in.)	Z (in.)	LONG.-X (+/-) MaxG	ms	LAT.-Y(+/-) MaxG	ms	VERT.-Z(+/-) MaxG	ms	RES.-R(+/-) MaxG	ms
1	107	21	8	-4.7	21.2	19.3	37.7	10.3	36.4	31.8	24.8
2	75	22	8	N/AV	N/AV	18.2	22.3	10.7	35.8	19.0	34.9
3	34	-3	12	-5.9	14.0	18.6	27.4	-13.6	31.8	46.8	32.1
4	71	-26	11	-	-	66.3	10.9	-	-	-	-
5	105	-26	11	-	-	40.7	12.9	-	-	-	-
6	94	-28	25	-	-	71.9	9.5	-	-	-	-

DR
BFC

DATA SHEET NO. 8 (Cont.)

NO.	COORDINATES X (in.)	Y (in.)	Z (in.)	LONG.-X (+/-) MaxG	ms	LAT.-Y(+/-) MaxG	ms	VERT.-Z(+/-) MaxG	ms	RES.-R(+/-) MaxG	ms
7	75	16	7	-4.2	31.9	-	-	---	--	---	--
8	85	-28	25	---	--	134.0	13.5	---	--	---	--
9	96	-28	29	---	--	81.1	38.0	---	--	---	--
10	60	-28	27	---	--	N/AV	-	---	--	---	--
11	57	-28	32	---	--	147.0	18.4	---	--	---	--

REFERENCE: X - Rear Bumper (+ = Forward)
Y - Vehicle Centerline (+ = To the Right)
Z - Ground Level (+ = Upward)

REMARKS:

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/24/92

APPROVED BY: [signature] DATE: 07/06/92

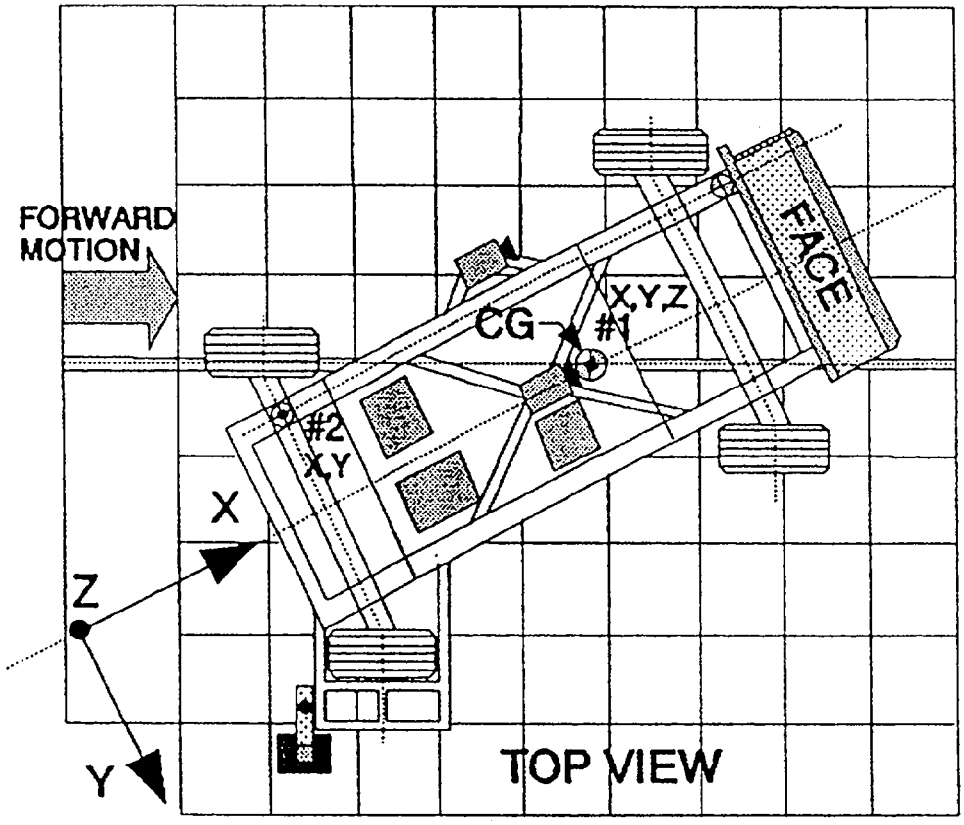
DATA SHEET NO. 9

MOVING DEFORMABLE BARRIER (MDB) ACCELEROMETER LOCATIONS AND SAMPLE DATA SUMMARY

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



ACCELEROMETER LOCATIONS:

1 - MDB Center of Gravity (CG)

2 - Rear Frame Member

DATA SHEET NO. 9 (Cont.)

NO.	COORDINATES X* (in.)	Y* (in.)	Z* (in.)	POS. DIRECTION MaxG	ms	NEG. DIRECTION MaxG	ms
1 Longitudinal X	73	0	12	3.0	116.4	17.0	40.0
1 Lateral Y	73	0	12	6.7	32.6	3.5	43.4
1 Vertical Z	73	0	12	15.3	40.2	17.8	45.8
1 Resultant R	73	0	12	33.8	40.5	0.4	180.1
2 Longitudinal X	12	-19	17	2.8	118.1	19.2	36.2
2 Lateral Y	12	-19	17	7.0	21.9	1.7	133.2

REFERENCE: X - Rear Bumper (+ = Forward)
Y - Vehicle Centerline (+ = To the Right)
Z - Ground Level (+ = Upward)

REMARKS:

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/24/92

APPROVED BY: [signature] DATE: 07/06/92

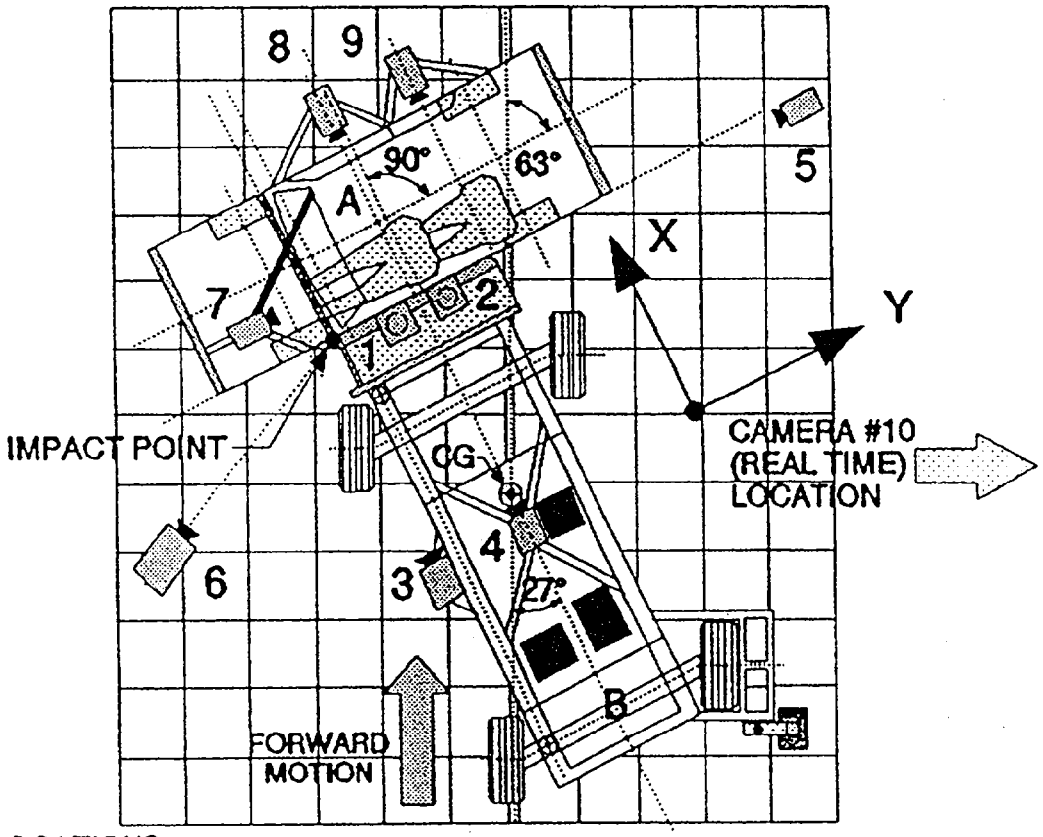
DATA SHEET NO. 10

HIGH SPEED CAMERA LOCATIONS AND DATA

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

TEST DATE: 06/17/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT CO.



CAMERA LOCATIONS:

No. 1	Overhead view of test vehicle
No. 2	Overhead closeup view of impact plane
No. 3	MDB onboard closeup view of impact point
No. 4	MDB onboard view of driver dummy kinematics
No. 5	Right side ground level -- overall view
No. 6	Left side ground level -- overall view
No. 7	Test vehicle onboard driver dummy front view kinematics
No. 8	Test vehicle onboard driver dummy side view kinematics
No. 9	Test vehicle onboard passenger side view kinematics
No. 10	Real time (24 fps) film coverage of pretest, test and post test events

DATA SHEET NO. 10 (Cont.)

NO.	TYPE	LENS (mm)	SPEED (fps)	COORDINATES X*	Y*	Z*
1	FASTAX II	16	600	12	12	236
2	FASTAX II	28	600	-12	12	236
3	HIMAX	28	525	-121	-37	50
4	HIMAX	16	600	-151	0	72
5	PHOTOSONIC	13	600	-147	564	48
6	FASTAX II	28	605	-80	-480	48
7	FASTAX II	16	570	16	-41	47
8	FASTAX II	16	600	69	34	39
9	FASTAX II	16	600	68	77	40
10	ARRIFLEX	15-70 ZOOM	24	-	-	-

* REFERENCE (from point of impact)
  +X = Forward
  +Y = To The Right
  +Z = Upward

REMARKS:

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/24/92

APPROVED BY: [signature] DATE: 07/06/92

DATA SHEET NO. 11

TEST VEHICLE DATA

VEH. MOD YR/MAKE/MODEL/BODY: 1992 NISSAN SENTRA, 4 DOOR SEDAN

VEH. NHTSA NO.: MN5202 VIN.: 1N4EB31P3NC761744

VEH. BUILD DATE: 01/92 TEST DATE: 06/17/92

TEST LABORATORY: MOBILITY SYSTEMS AND EQUIPMENT COMPANY

OBSERVERS: MR. JAMES JONES, MR. ROBERT HELMUTH

Upon receipt, the vehicle will be examined visually for completeness, function, and damage. The roof and supporting structures such as the doors and windows should be checked for proper operation and any discrepancies which may influence the testing. The vehicle will be weighed.

DATA RECORDED FROM VEHICLE'S TIRE PLACARD:

Tire Pressure (at capacity): 33 psi Front; 29 psi Rear

Recommended Tire Size: P155/80R13 79S

Size of Tires Installed on Test Vehicle: P155/80R13 79S

Tire Manufacturer: GENERAL

Number of Occupants: 2 Front; 3 Rear; 5 TOTAL

Type of Front Seat(s): X Buckets; ____ Bench; ____ Split Bench

Type of Front Seat Back: ____ Fixed; X Adjustable with X Lever or ____ Knob

Vehicle Maximum Capacity Loading = 825 lbs. (A)

Number of Occupants x 150 lbs. = 750 lbs. (B)

Vehicle Cargo Capacity = 75 lbs. (A - B)

DATA SHEET NO. 11 (Cont.)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:
Front: Right = 706 lbs.; Left = 742 lbs.; Front Total = 1448 lbs.

(61 % of TOTAL shown below)

Rear: Right = 478 lbs.; Left = 443 lbs.; Front Total = 921 lbs.

(39 % of TOTAL shown below)

Front Total + Rear Total = TOTAL DELV. = 2369 lbs.

CALCULATION OF TEST VEHICLE TARGET WEIGHT:

Total Test Vehicle Delivered Weight With Maximum Fluids = 2369 lbs. (A)

Maximum Cargo Carry Capacity of Test Vehicle = 75 lbs. (B)

Weight of Two Side Impact Dummies (2 X 164 lbs.) = 328 lbs. (C)

Test Vehicle Target Weight = 2772 (A + B + C)

ACTUAL WEIGHT OF TEST VEHICLE WITH TWO SIDs AND CARGO:

Front: Right = 776 lbs.; Left = 838 lbs.; Front Total = 1614 lbs.

(57 % of TOTAL shown below)

Rear: Right = 566 lbs.; Left = 633 lbs.; Front Total = 1199 lbs.

(43 % of TOTAL shown below)

Front Total + Rear Total = TOTAL ACTUAL = 2813 lbs. (which includes - lbs. of cargo ballast weight)

TEST VEHICLE ATTITUDE:

As Delivered	Ready For Test
26.0 inches Right Front	24.7 inches Right Front
25.7 inches Left Front	24.9 inches Left Front
25.2 inches Right Rear	23.6 inches Right Rear
25.3 inches Left Rear	23.3 inches Left Rear

DATA SHEET NO. 11 (Cont.)

Test Vehicle Wheelbase = 95.7 inches

C.G. = 40.9 inches Rearward of Front Wheel Centerline

Total Vehicle Length: 159.7 inches Right Side

161.3 inches Left Side

170.5 inches Centerline

Arm Rest Location: N/A

Seat Belt Upper Anchorage Location: Auto belt final position is 20.7" above B-post striker

FRONT SEAT CUSHION PLACEMENT: mid-point of fore/aft travel

Total Length of Seat Adjustment Travel = 8 inches

Total Number of Seat Adjustment Positions or Detents = 18

Front Seat Back Adjustment Position: 25°

Front Seat Back Torso Angle = 25 degrees

Front Seat Cushion Vertical Position: full down

DATA SHEET NO. 11 (Cont.)

ADJUSTABLE STEERING COLUMN POSITION: N/A
(using data supplied by the vehicle manufacturer)

WINDOW POSITIONS: Closed Left Front Closed Left Rear

Open Right Front Open Right Rear

Windows shall be in CLOSED position on the STRUCK side of the vehicle and in the OPEN position on the OPPOSITE side of the vehicle.

AMOUNT OF STODDARD SOLVENT IN FUEL TANK: 12.3 gallons (92-94% of UC)
(Usable Capacity (UC) supplied by the vehicle manufacturer)

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

Wheelbase = 95.7 inches

Impact Point 10.9 is inches rearward of front axle centerline (which is 37" forward of the wheelbase midpoint)

REMARKS: Actual Impact point is 10.0 inches rearward of front axle centerline.

RECORDED BY: MR. BRIAN O'KEEFE DATE: 06/17/92

APROVED BY: [signature] DATE: 07/06/92

SECTION 4

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

This section shows full list of Test Equipment and the calibration dates.

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 1
SENTYP: AC SENLOC: 01 SENATT: HDCG
AXIS: XL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: BJ27H
CALDAT: 26/MAR/92 INSRAT: 200 CHLMAX: 39 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 2
SENTYP: AC SENLOC: 01 SENATT: HDCG
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: BG78H
CALDAT: 26/MAR/92 INSRAT: 200 CHLMAX: 108 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 3
SENTYP: AC SENLOC: 01 SENATT: HDCG
AXIS: ZL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: AR39
CALDAT: 26/MAR/92 INSRAT: 200 CHLMAX: 29 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 4
SENTYP: AC SENLOC: 01 SENATT: SPNU
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BF59J
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 6 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 5
SENTYP: AC SENLOC: 01 SENATT: SPNU
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: AN93
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 6 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: QD
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 6
SENTYP: AC SENLOC: 01 SENATT: RBLU
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: AB97
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 5 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 7
SENTYP: AC SENLOC: 01 SENATT: RBLU
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BE33J
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 5 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 8
SENTYP: AC SENLOC: 01 SENATT: RBLL
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BY89H
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 4 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 9
SENTYP: AC SENLOC: 01 SENATT: RBLL
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BL93H
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 4 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 10
SENTYP: AC SENLOC: 01 SENATT: SPNL
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BF50J
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 6 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 11
SENTYP: AC SENLOC: 01 SENATT: SPNL
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BH69J
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 6 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 12
SENTYP: AC SENLOC: 01 SENATT: PVCN
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BM73J
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 6 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 13
SENTYP: LC SENLOC: 01 SENATT: LPBO
AXIS: NA UNITS: LBS PREFIL: 1650
INSMAN: MFG: LEBOW, MODEL: 3371, S/N: 333
CALDAT: 09/APR/92 INSRAT: 3500 CHLMAX: 26 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 14
SENTYP: LC SENLOC: 01 SENATT: SHBT
AXIS: NA UNITS: LBS PREFIL: 1650
INSMAN: MFG: LEBOW, MODEL: 3371, S/N: 327
CALDAT: 09/APR/92 INSRAT: 3500 CHLMAX: 71 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 15
SENTYP: AC SENLOC: 04 SENATT: HDCG
AXIS: XL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: BJ28H
CALDAT: 26/MAR/92 INSRAT: 200 CHLMAX: 11 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 16
SENTYP: AC SENLOC: 04 SENATT: HDCG
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: BT28H
CALDAT: 26/MAR/92 INSRAT: 200 CHLMAX: 84 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 17
SENTYP: AC SENLOC: 04 SENATT: HDCG
AXIS: ZL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: AE29
CALDAT: 26/MAR/92 INSRAT: 200 CHLMAX: 23 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 18
SENTYP: AC SENLOC: 04 SENATT: SPNU
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BY98H
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 4 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 19
SENTYP: AC SENLOC: 04 SENATT: SPNU
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BH27J
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 0 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 20
SENTYP: AC SENLOC: 04 SENATT: RBLU
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: AN03
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 6 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 21
SENTYP: AC SENLOC: 04 SENATT: RBLU
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: AR17
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 5 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 22
SENTYP: AC SENLOC: 04 SENATT: RBLL
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: AK29
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 5 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 23
SENTYP: AC SENLOC: 04 SENATT: RBLL
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BA93
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 5 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 24
SENTYP: AC SENLOC: 04 SENATT: SPNL
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BD12J
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 7 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 25
SENTYP: AC SENLOC: 04 SENATT: SPNL
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BE91J
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 6 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 26
SENTYP: AC SENLOC: 04 SENATT: PVCN
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-2000, S/N: BC98J
CALDAT: 02/JAN/92 INSRAT: 2000 CHLMAX: 19 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 27
SENTYP: LC SENLOC: 04 SENATT: LPBO
AXIS: NA UNITS: LBS PREFIL: 1650
INSMAN: MFG: LEBOW, MODEL: 3371, S/N: 330
CALDAT: 09/APR/92 INSRAT: 3500 CHLMAX: 8 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 28
SENTYP: LC SENLOC: 04 SENATT: SHBT
AXIS: NA UNITS: LBS PREFIL: 1650
INSMAN: MFG: LEBOW, MODEL: 3371, S/N: 308
CALDAT: 09/APR/92 INSRAT: 3500 CHLMAX: 24 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 29
SENTYP: AC SENLOC: 02 SENATT: DSRF
AXIS: XG UNITS: G'S PREFIL: 1650
INSMAN: MFG: BELL & HOWELL, MODEL: 4-202-0001, S/N: 21051
CALDAT: 10/APR/92 INSRAT: 250 CHLMAX: 12 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 30
SENTYP: AC SENLOC: 02 SENATT: DSRF
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: BELL & HOWELL, MODEL: 4-202-0001, S/N: 20839
CALDAT: 10/APR/92 INSRAT: 250 CHLMAX: 19 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 31
SENTYP: AC SENLOC: 02 SENATT: DSRF
AXIS: ZG UNITS: G'S PREFIL: 1650
INSMAN: MFG: BELL & HOWELL, MODEL: 4-202-0001, S/N: 19428
CALDAT: 10/APR/92 INSRAT: 250 CHLMAX: 14 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 32
SENTYP: AC SENLOC: 03 SENATT: DSRR
AXIS: XG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 1X-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 0 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: NO
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 33
SENTYP: AC SENLOC: 03 SENATT: DSRR
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 1Y-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 17 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 34
SENTYP: AC SENLOC: 03 SENATT: DSRR
AXIS: ZG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 1Z-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 17 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 35
SENTYP: AC SENLOC: 03 SENATT: FLRR
AXIS: XG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 2X-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 7 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 36
SENTYP: AC SENLOC: 03 SENATT: FLRR
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 2Y-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 21 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 37
SENTYP: AC SENLOC: 03 SENATT: FLRR
AXIS: ZG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 2Z-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 26 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 38
SENTYP: AC SENLOC: 04 SENATT: DSLR
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 20-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 69 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 39
SENTYP: AC SENLOC: 01 SENATT: DSLF
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSOR, MODEL: 3031-200, S/N: 24-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 89 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 40
SENTYP: AC SENLOC: 01 SENATT: DRLF
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 27-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 215 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 41
SENTYP: AC SENLOC: OT SENATT: FLRR
AXIS: XG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 22-200
CALDAT: 10/APR/92 INSRAT: 250 CHLMAX: 9 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 42
SENTYP: AC SENLOC: OT SENATT: DRLF
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 30-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 224 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 43
SENTYP: AC SENLOC: NA SENATT: DRLF
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 26-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 151 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 44
SENTYP: AC SENLOC: NA SENATT: DRLR
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 29-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 0 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: NO
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 45
SENTYP: AC SENLOC: NA SENATT: DRLR
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 23-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 160 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 1 CURNO: 46
SENTYP: AC SENLOC: OT SENATT: IMCG
AXIS: XG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 28-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 35 INIVEL: 29.4
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 1 CURNO: 47
SENTYP: AC SENLOC: OT SENATT: IMCG
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 31-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 14 INIVEL: 15.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 1 CURNO: 48
SENTYP: AC SENLOC: NA SENATT: IMCG
AXIS: ZG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-200, S/N: 32-200
CALDAT: 10/APR/92 INSRAT: 200 CHLMAX: 31 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 1 CURNO: 49
SENTYP: AC SENLOC: NA SENATT: IMCR
AXIS: XG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-100, S/N: 7Z-100
CALDAT: 10/APR/92 INSRAT: 100 CHLMAX: 56 INIVEL: 29.4
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 1 CURNO: 50
SENTYP: AC SENLOC: NA SENATT: IMCR
AXIS: YG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSORS, MODEL: 3031-100, S/N: 7X-100
CALDAT: 10/APR/92 INSRAT: 100 CHLMAX: 52 INIVEL: 15.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

SECTION 5

PHOTOGRAPHS

The photographs listed on this page are included in this section.

1. Pretest Frontal View of Test Vehicle (Target Vehicle)
2. Posttest Frontal View of Test Vehicle
3. Pretest Rear View of Test Vehicle
4. Posttest Rear View of Test Vehicle
5. Pretest Struck Side View of Test Vehicle
6. Posttest Struck Side View of Test Vehicle
7. Pretest Frontal View of MDB Impact Face
8. Posttest Frontal View of MDB Impact Face
9. Pretest Left Side view of MDB Impact Face
10. Posttest Left Side View of MDB Impact Face
11. Pretest Right Side View of MDB Impact Face
12. Posttest Right Side View of MDB Impact Face
13. Pretest Top View of MDB Impact Face
14. Posttest Top View of MDB Impact Face
15. Pretest Overhead View of MDB Positioned Against Struck Side of Test Vehicle at Impact Locations
16. Posttest Overhead View of MDB Positioned Against Struck Side of Test Vehicle at Impact Locations
17. Pretest Occupant Compartment Left Side Showing Driver SID
18. Pretest Occupant Compartment Driver SID
19. Posttest Occupant Compartment Driver SID
20. Pretest Occupant Compartment Left Side View Showing Passenger SID
21. Pretest Occupant Compartment Right Side view Showing Passenger SID
22. Posttest Occupant Compartment View Showing Passenger SID
23. Pretest Right Side View of MDB with Impact Face in Position
24. Pretest Left Side View of MDB with Impact Face in Position
25. Tire Placard & Manufacturer's Certification Label
26. Driver Door Accelerometer Locations
27. Passenger Door Accelerometer Locations
28. Driver Door Accelerometers Installed, Door Panel in Place - Pretest
29. Passenger Door Accelerometers Installed, Door Panel in Place - Pretest
30. Driver Seating Position - Posttest
31. Passenger Seating Position - Posttest
32. 1992 Nissan Sentra, B-Pillar Cutout - View No. 1
33. 1992 Nissan Sentra, B-Pillar Cutout - View No. 2
34. 1992 Nissan Sentra, B-Pillar Cutout - View No. 3
35. 1992 Nissan Sentra, B-Pillar Cutout - View No. 4

FIGURE 5-1 PRETEST FRONTAL VIEW OF TEST VEHICLE (TARGET VEHICLE)

FIGURE 5-2 POSTTEST FRONTAL VIEW OF TEST VEHICLE

FIGURE 5-3 PRETEST REAR VIEW OF TEST VEHICLE

FIGURE 5-4 POSTTEST REAR VIEW OF TEST VEHICLE

FIGURE 5-5 PRETEST STRUCK SIDE VIEW OF TEST VEHICLE

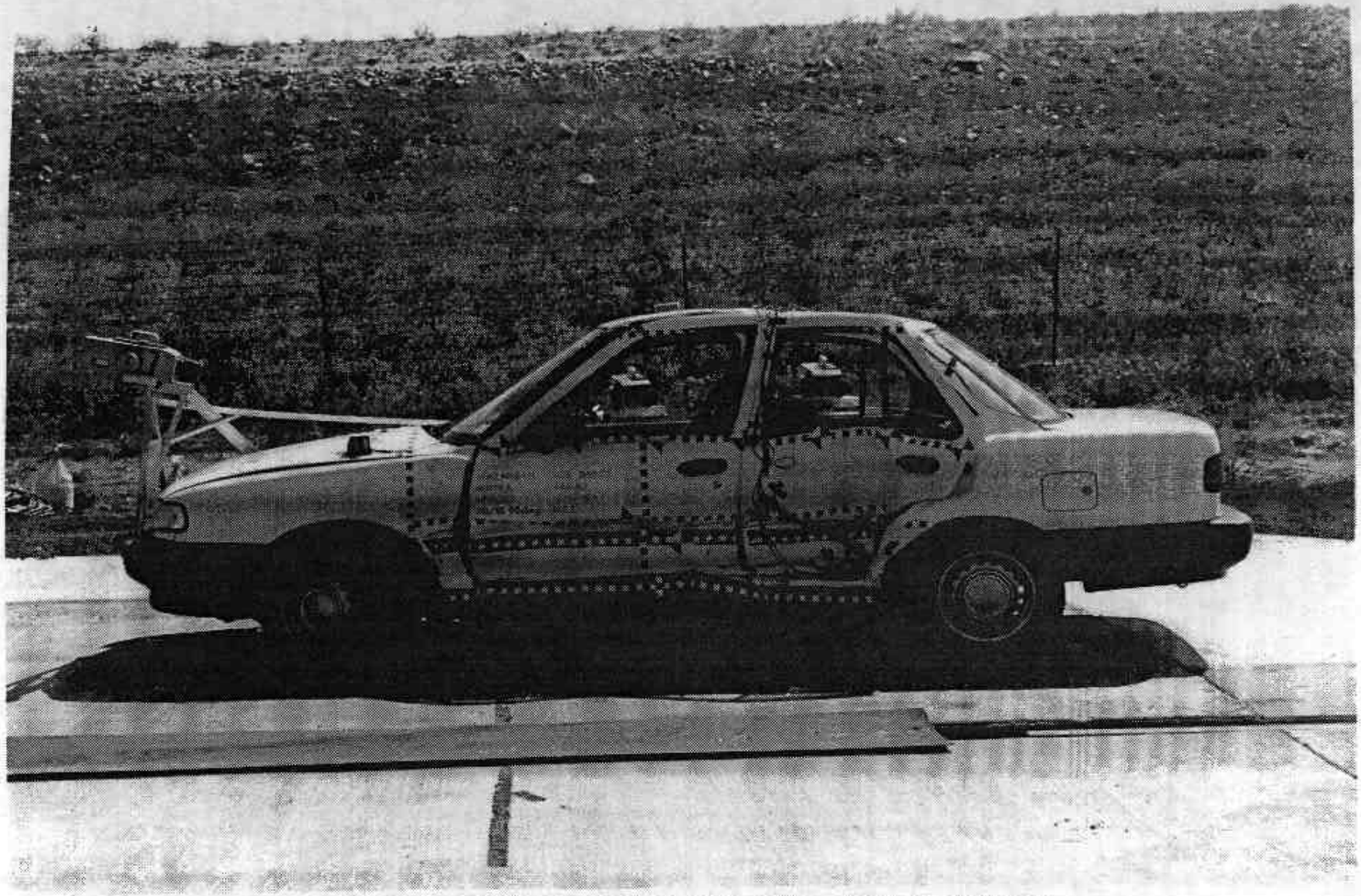


FIGURE 5-6 POSTTEST STRUCK SIDE VIEW OF TEST VEHICLE

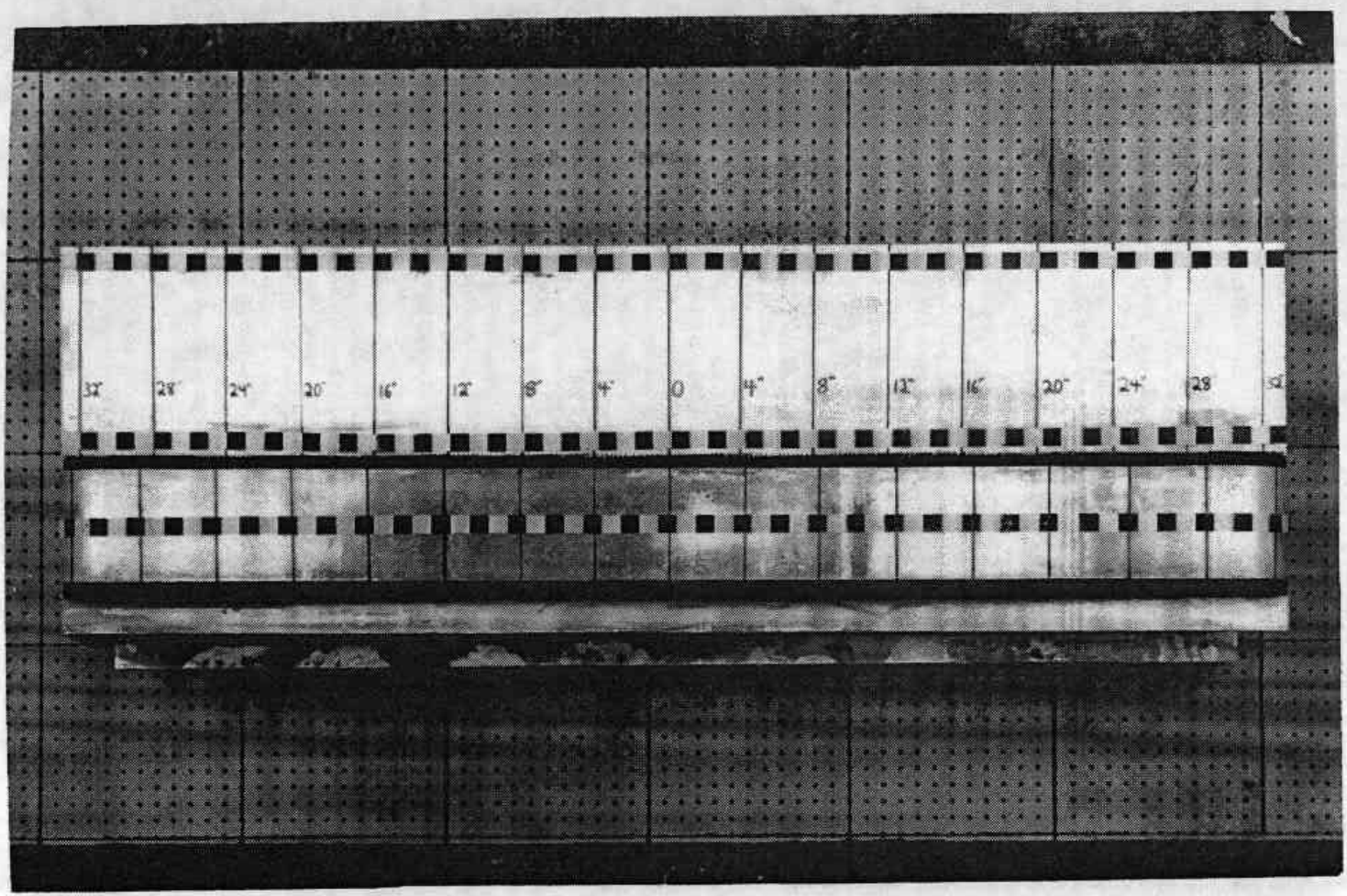


FIGURE 5-7 PRETEST FRONTAL VIEW OF MDB IMPACT FACE

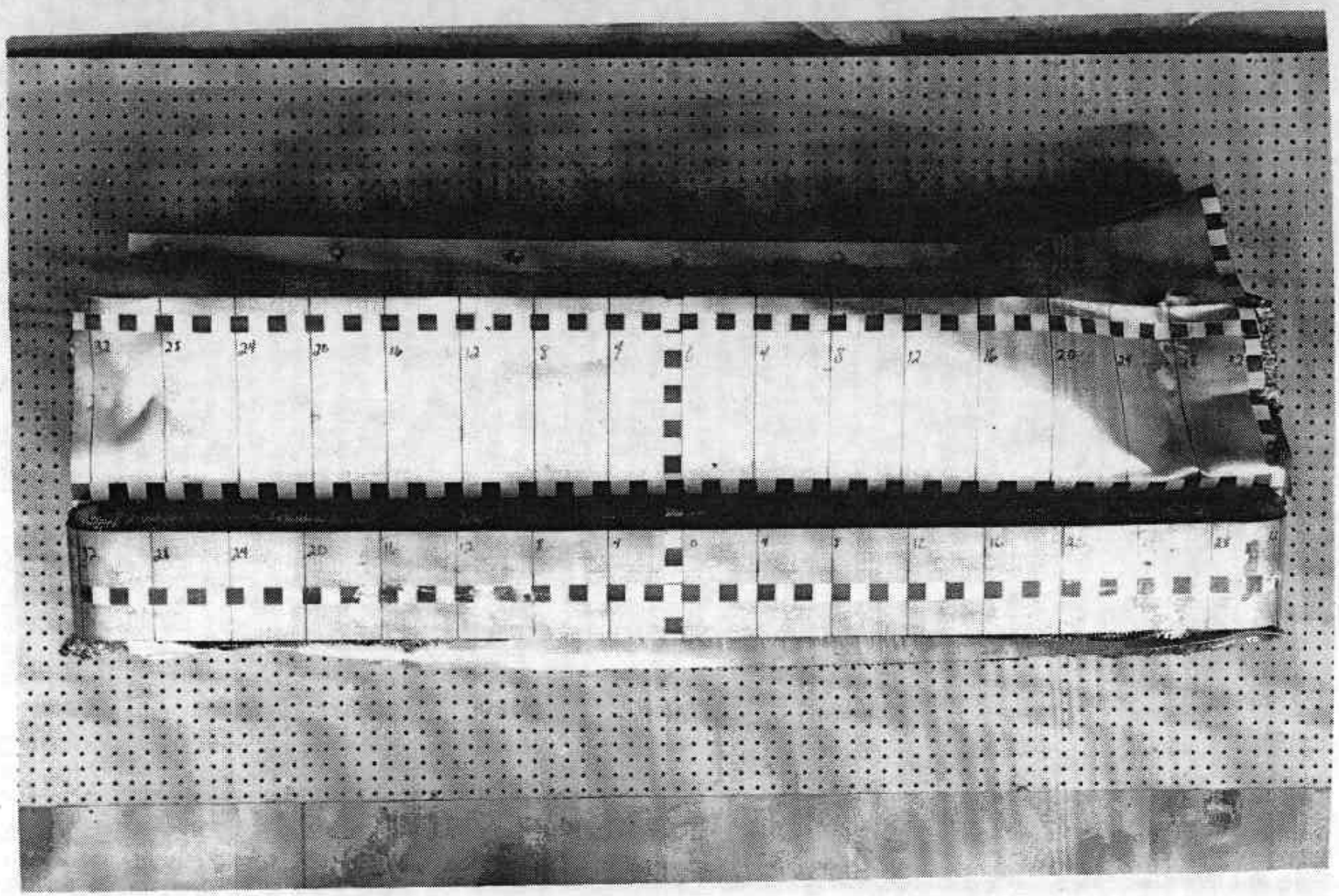


FIGURE 5-8 POSTTEST FRONTAL VIEW OF MDB IMPACT FACE

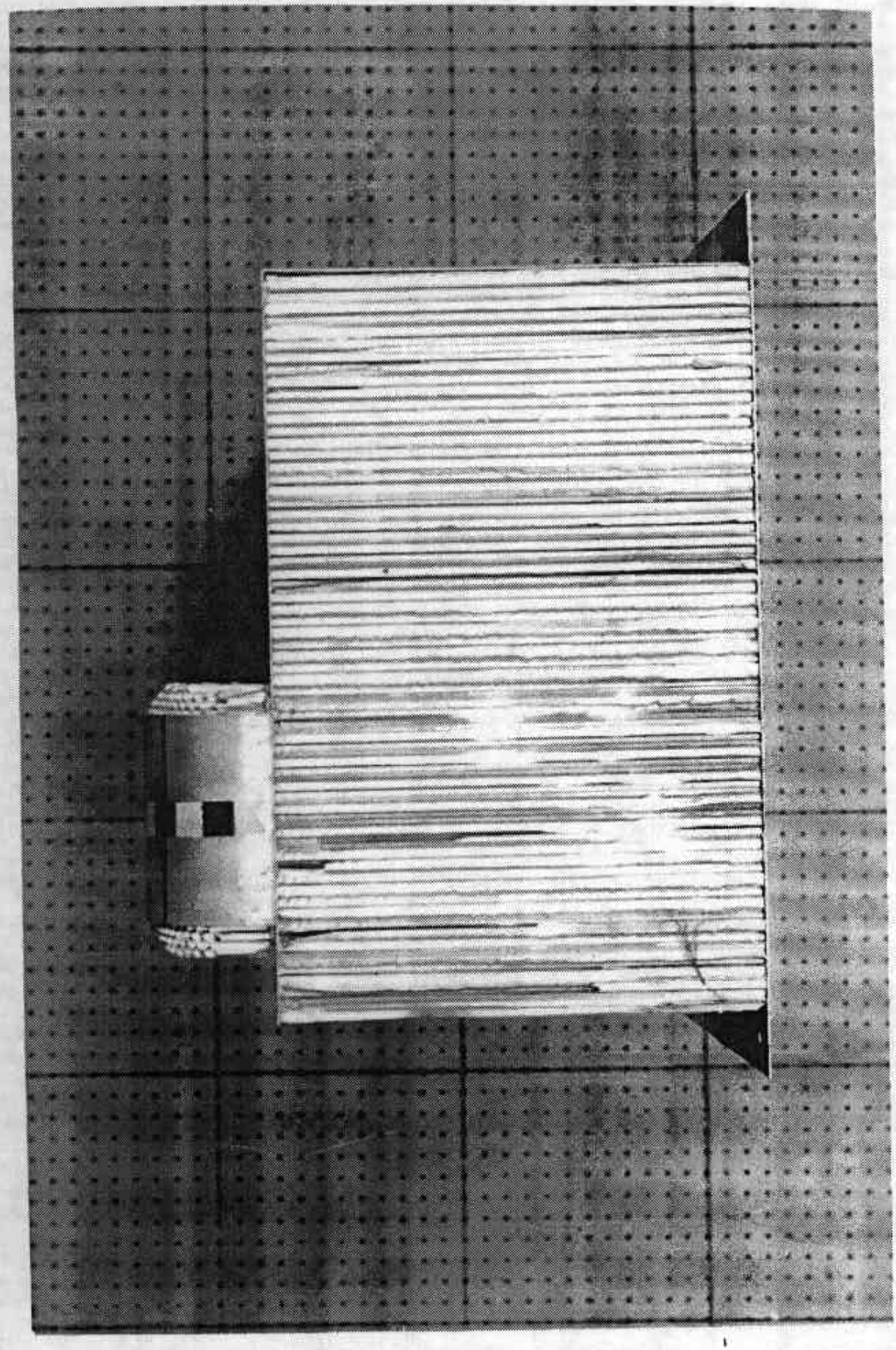


FIGURE 5-9 PRETEST LEFT SIDE VIEW OF MDB IMPACT FACE

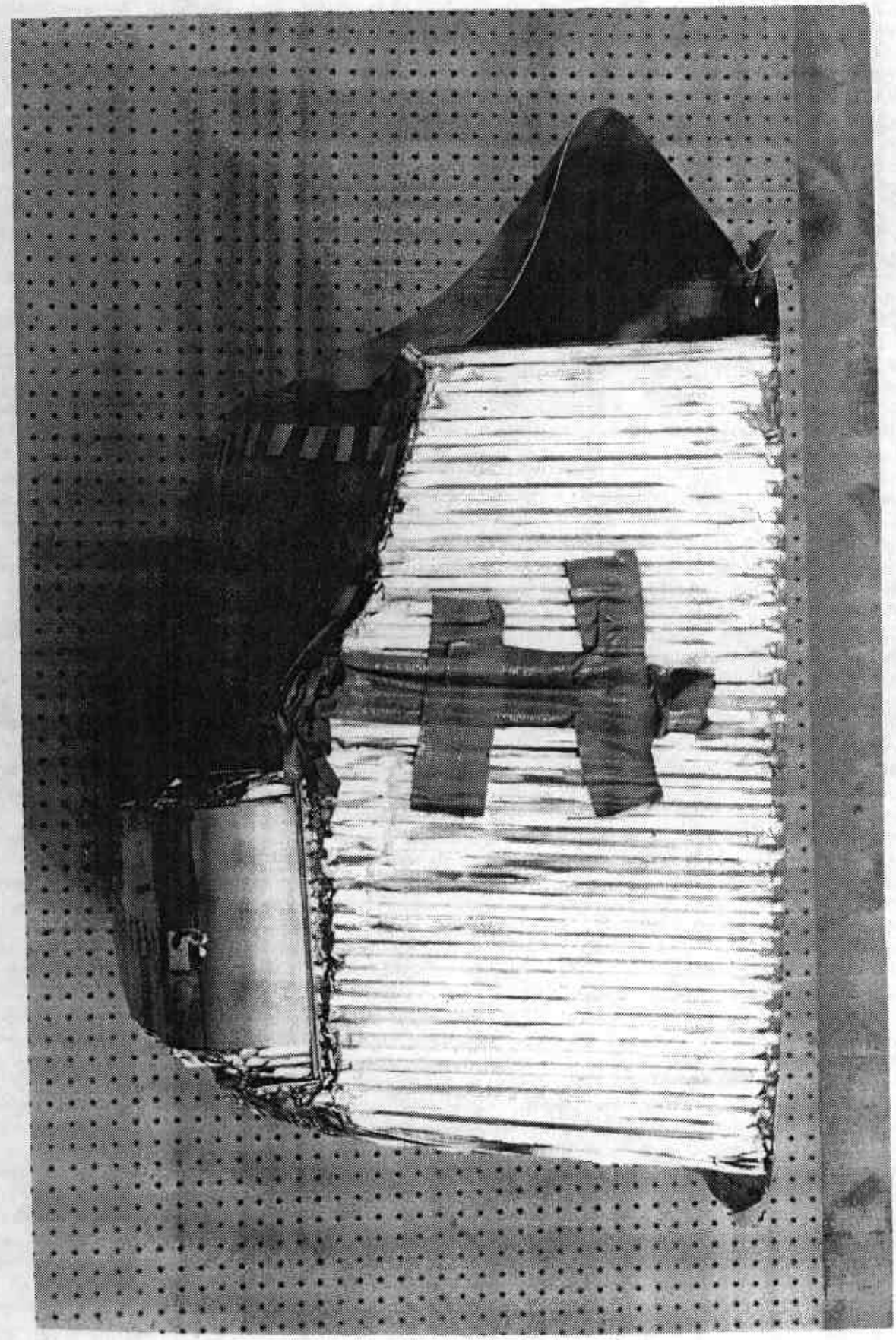


FIGURE 5-10 POSTTEST LEFT SIDE VIEW OF MDB IMPACT FACE

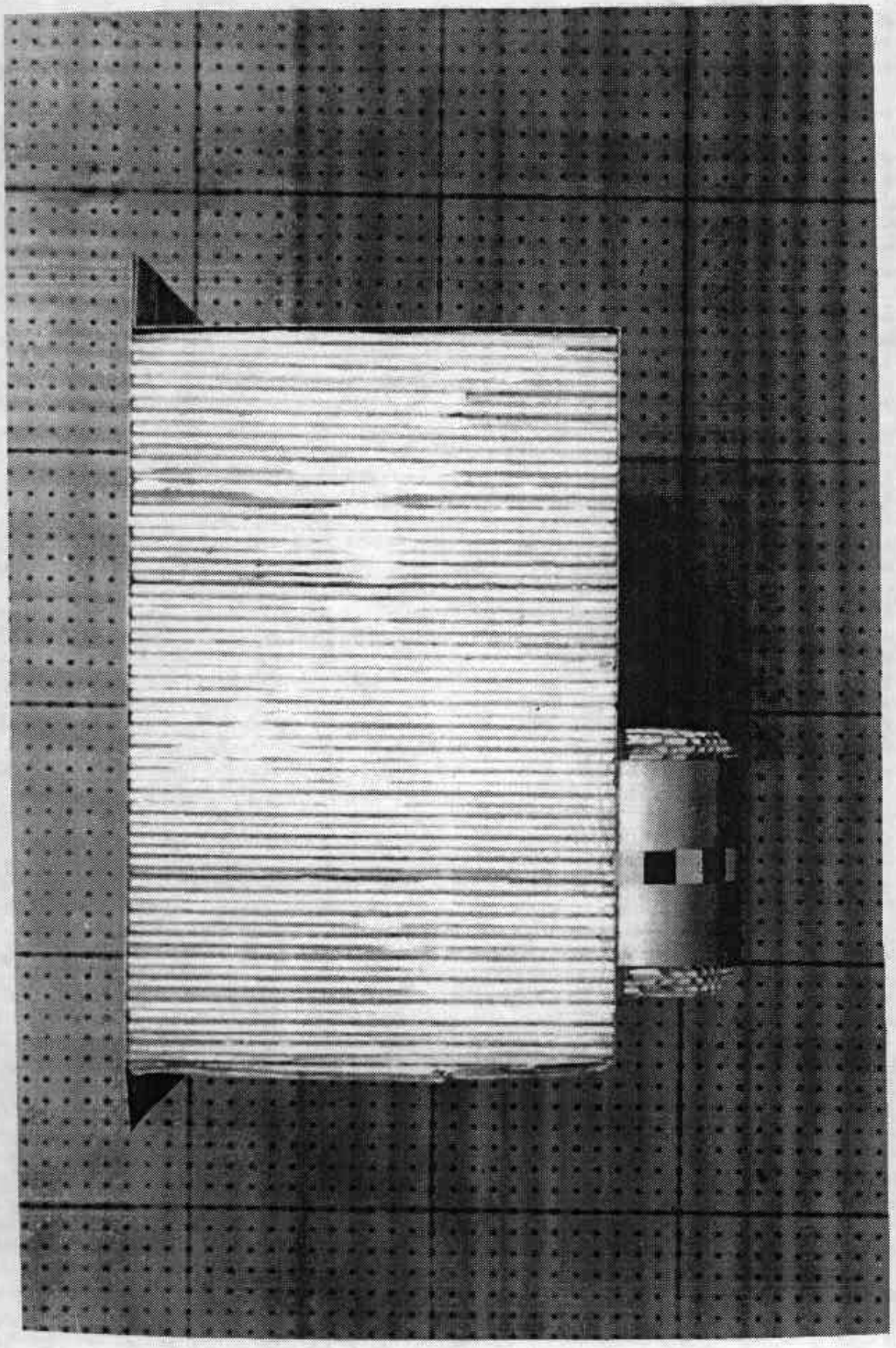


FIGURE 5-11 PRETEST RIG T SIDE VIEW OF MDB IMPACT FACE

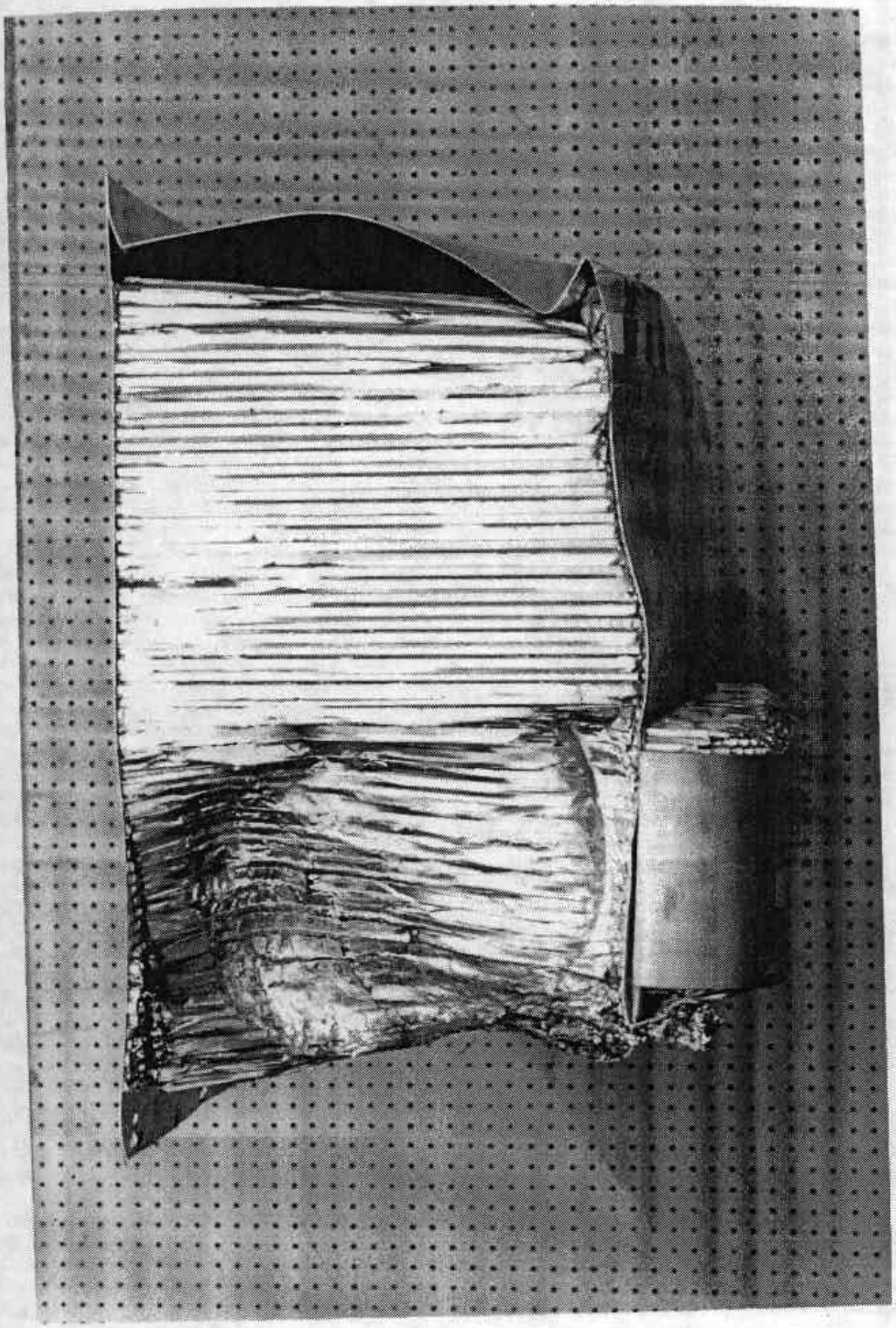


FIGURE 5-12 POSTTEST RIGHT SIDE VIEW OF MDB IMPACT FACE

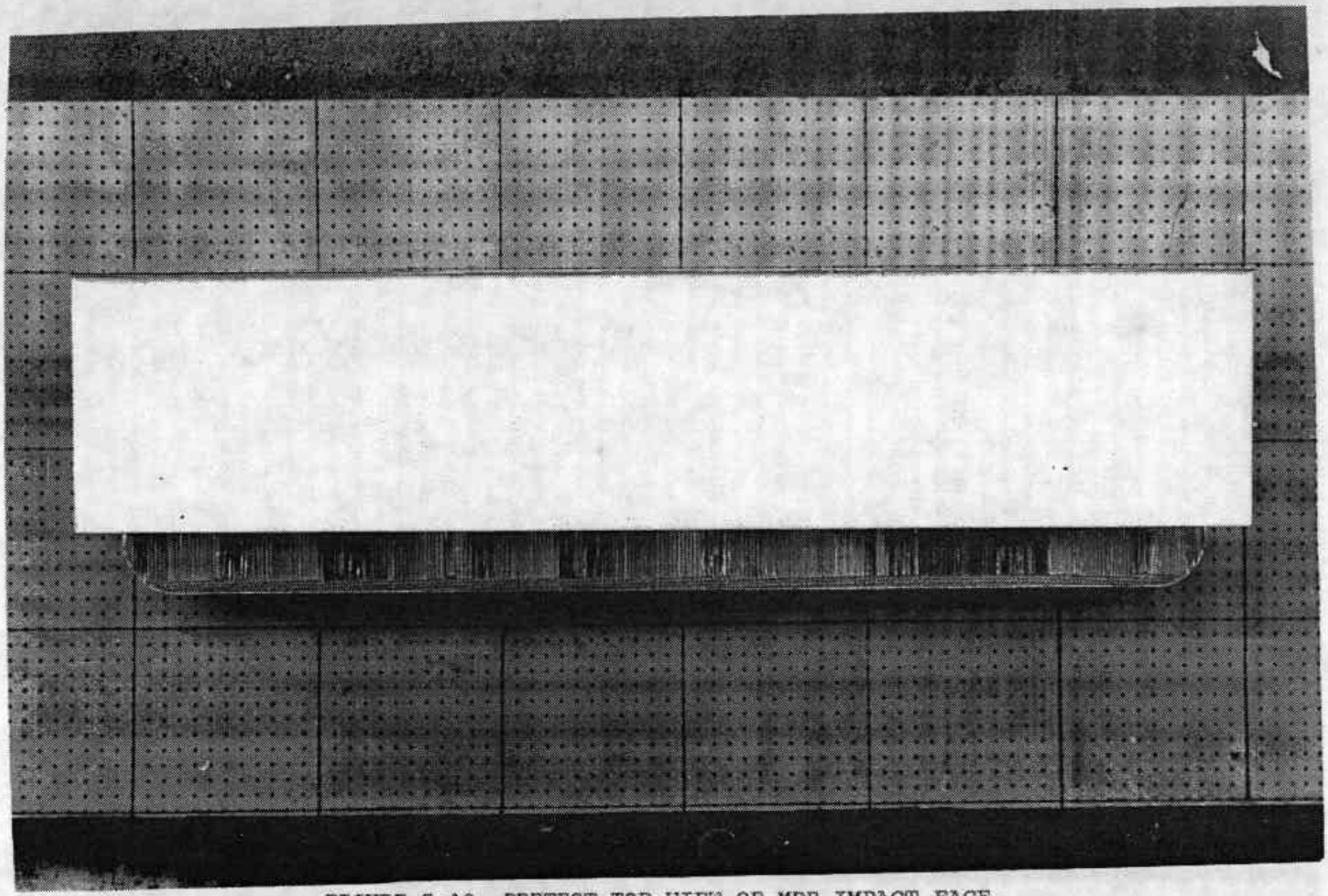


FIGURE 5-13 PRETEST TOP VIEW OF MDB IMPACT FACE

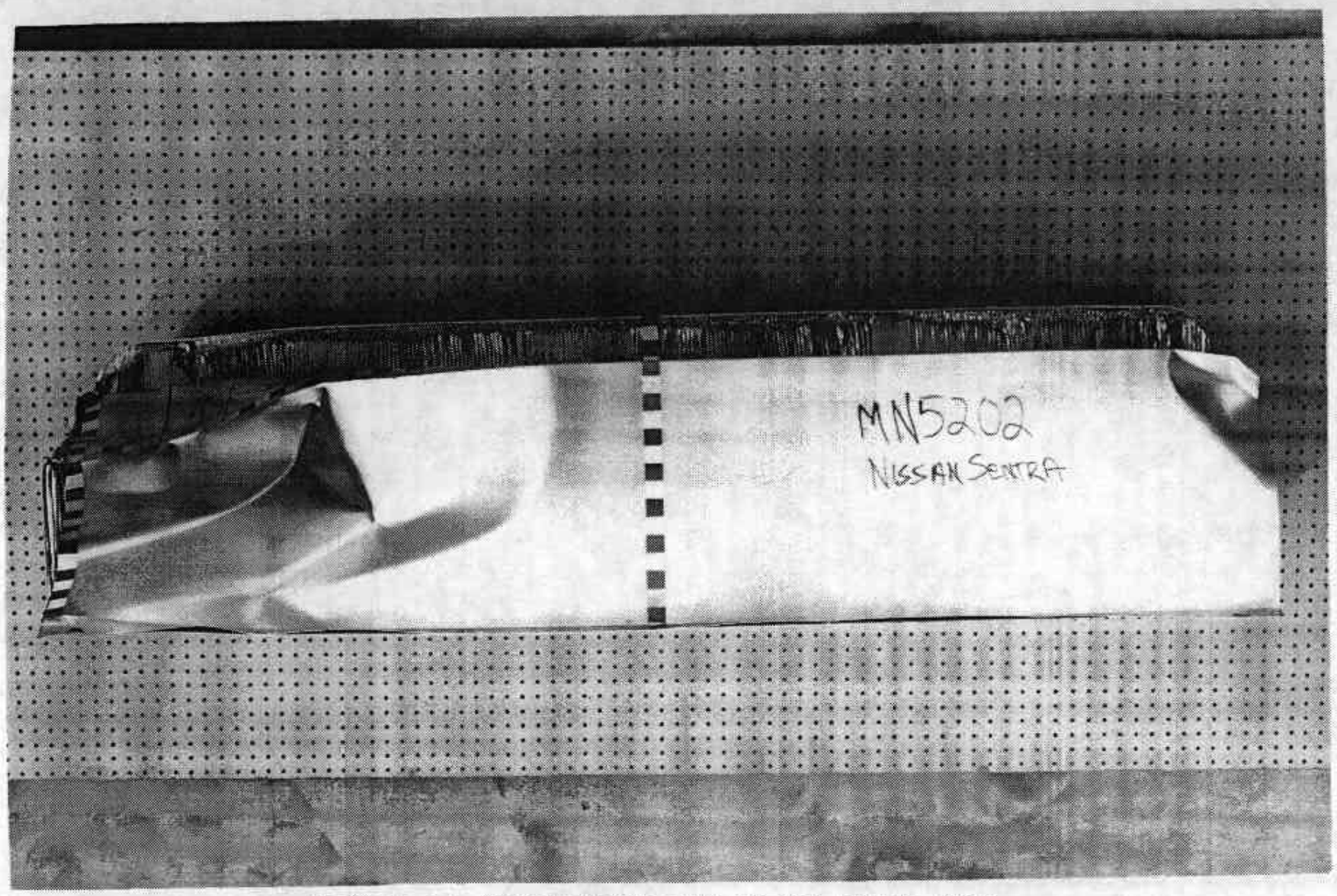


FIGURE 5-14 POSTTEST TOP VIEW OF MDB IMPACT FACE

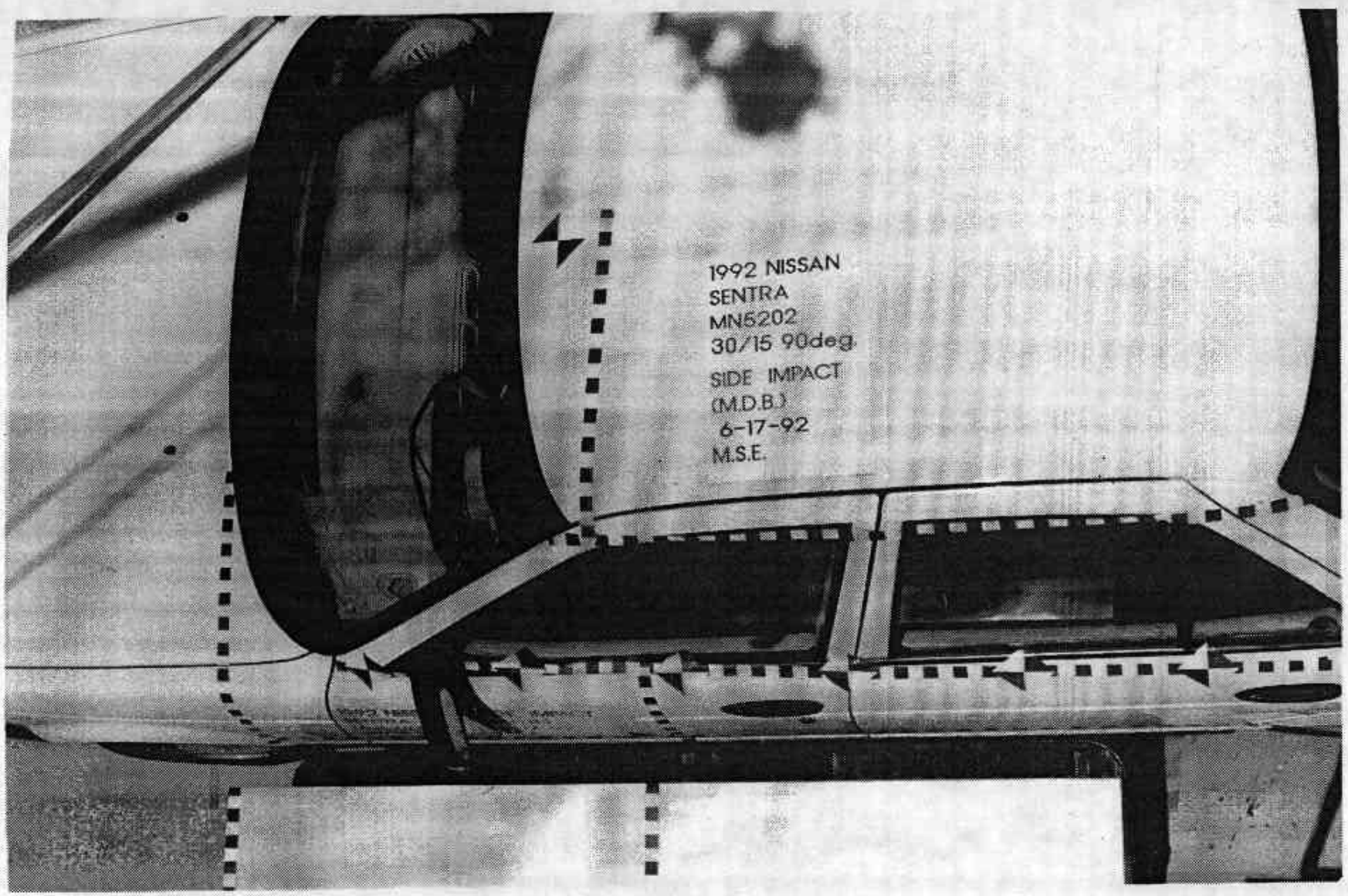


FIGURE 5-15 PRETEST OVERHEAD VIEW OF MDB POSITIONED AGAINST STRUCK SIDE OF TEST VEHICLE AT IMPACT LOCATION

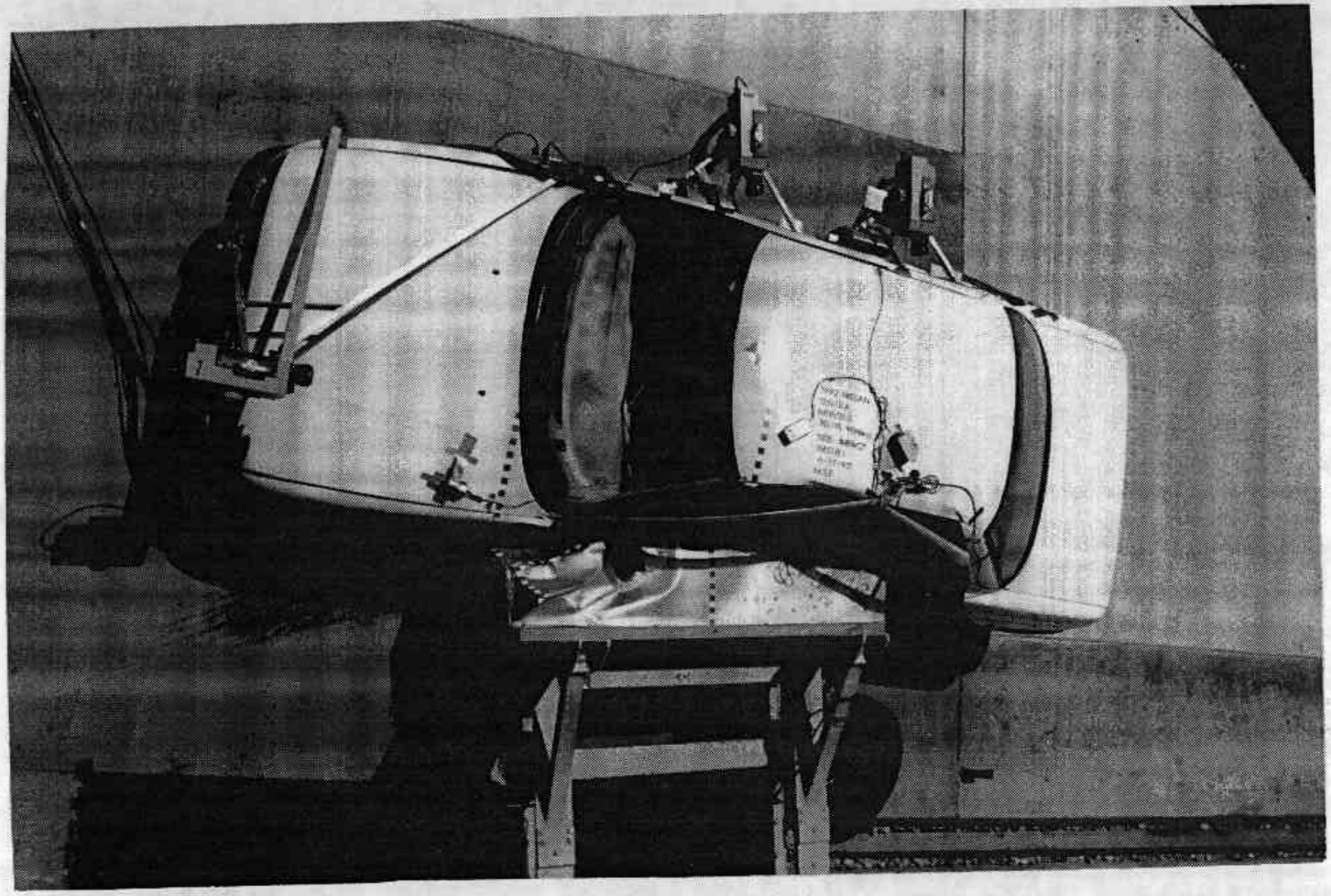


FIGURE 5-16 POSTTEST OVERHEAD VIEW OF MDB POSITIONED AGAINST STRUCK SIDE OF TEST VEHICLE AT IMPACT LOCATION

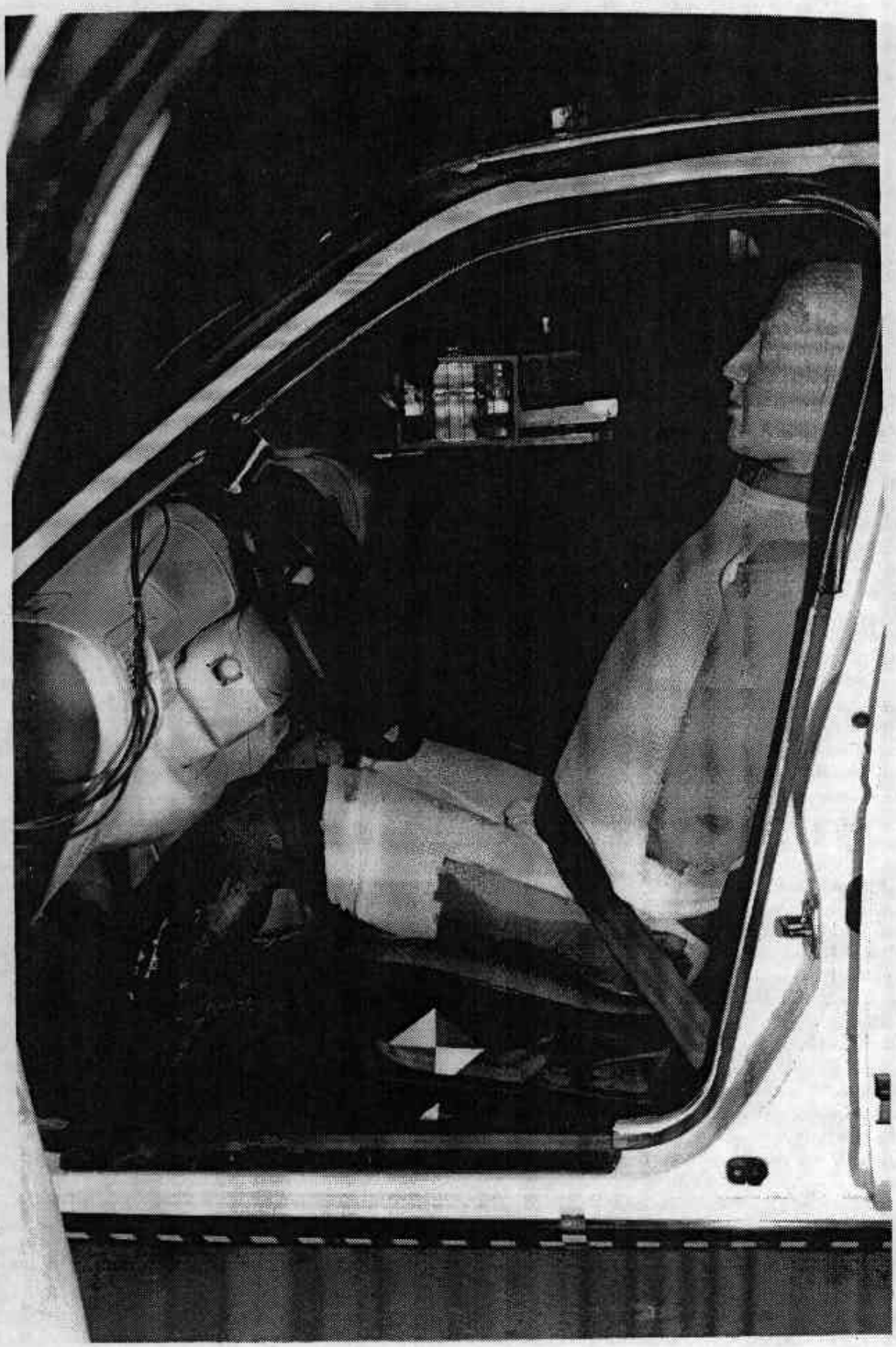


FIGURE 5-17 PRETEST OCCUPANT COMPARTMENT LEFT SIDE SHOWING DRIVER SID

FIGURE 5-18 PRETEST OCCUPANT COMPARTMENT DRIVER SID

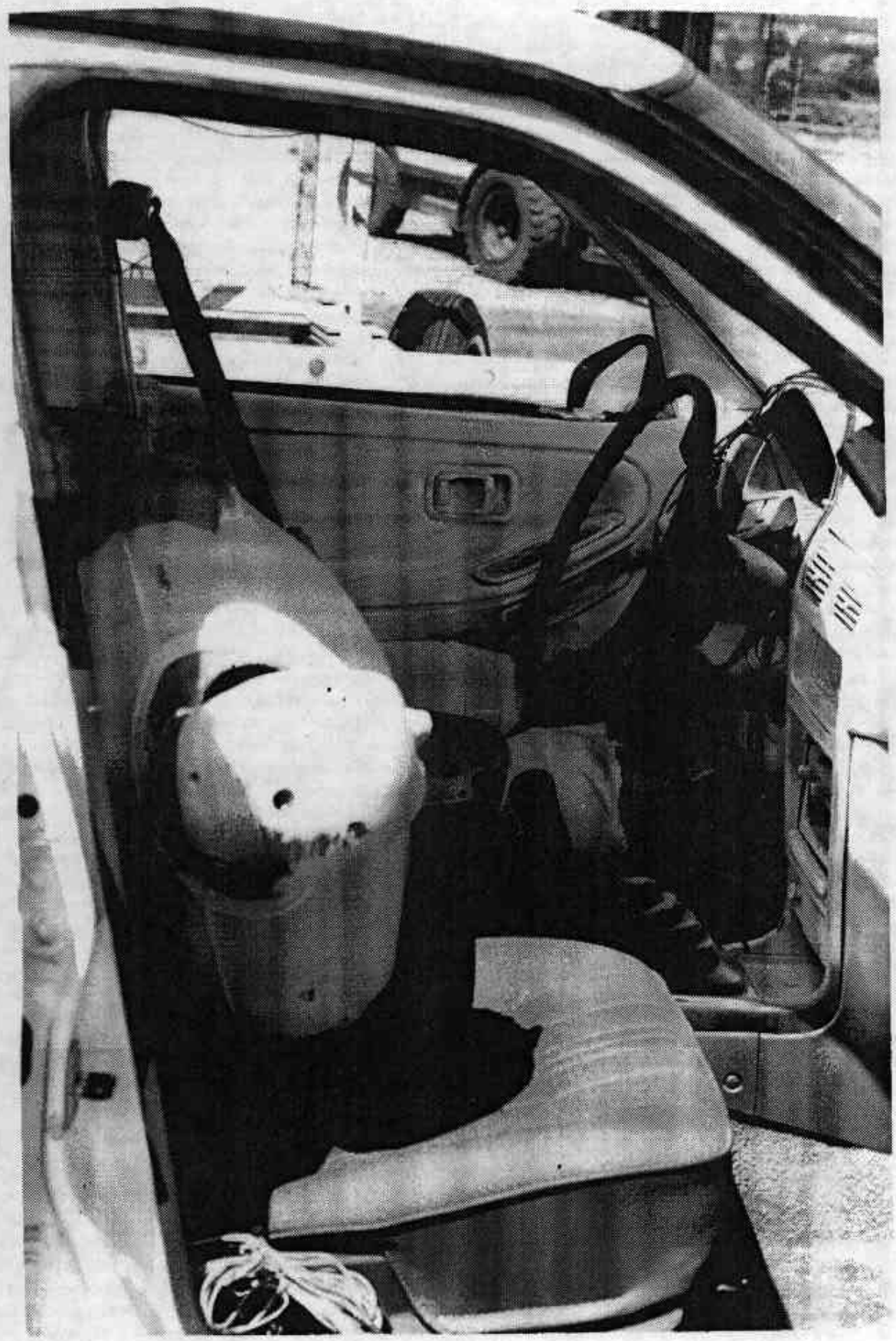


FIGURE 5-19 POSTTEST OCCUPANT COMPARTMENT DRIVER SID

FIGURE 5-20 PRETEST OCCUPANT COMPARTMENT LEFT SIDE VIEW SHOWING PASSENGER SID

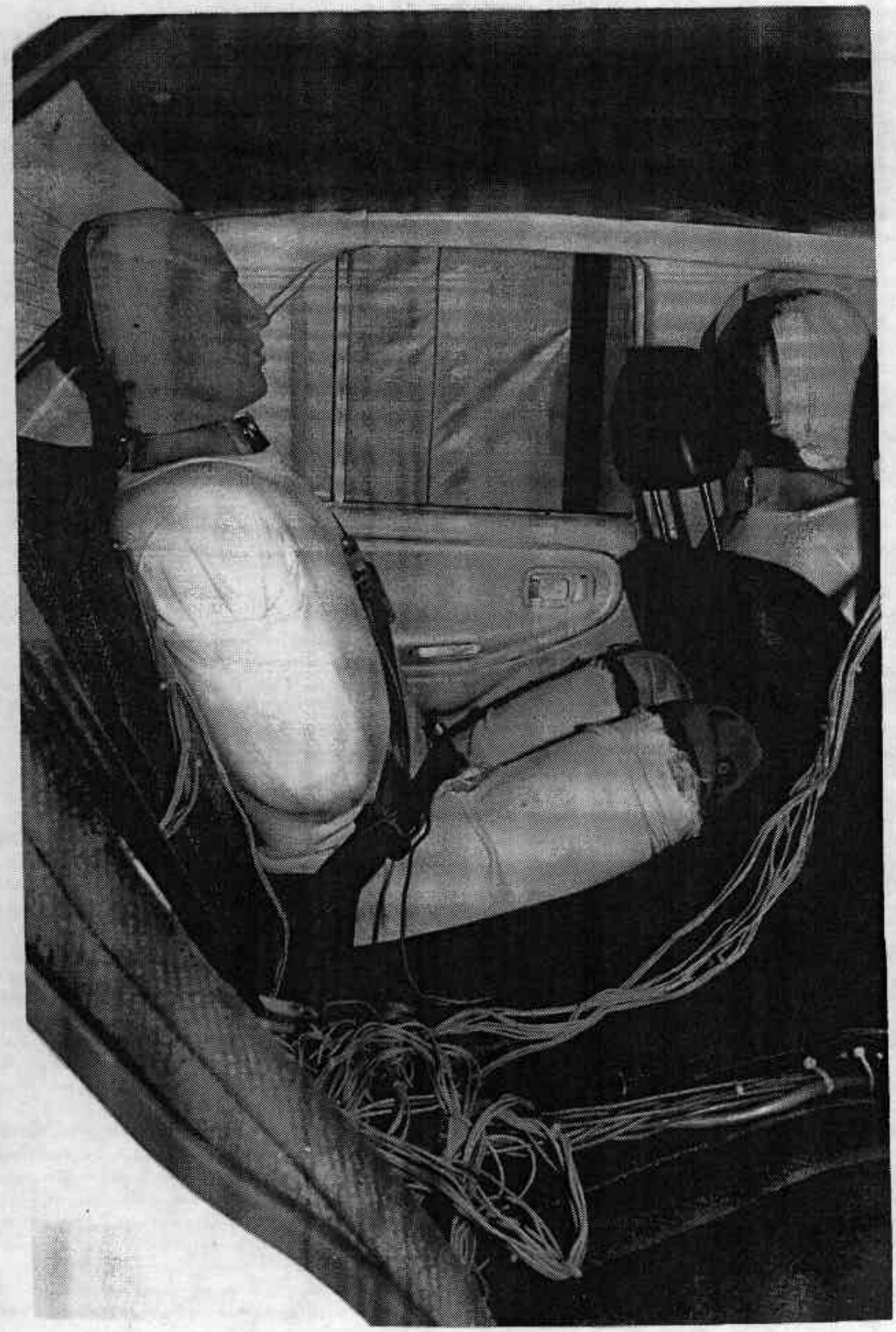


FIGURE 5-21 PRETEST OCCUPANT COMPARTMENT RIGHT SIDE VIEW SHOWING PASSENGER SID

FIGURE 5-22 POSTTEST OCCUPANT COMPARTMENT VIEW SHOWING PASSENGER SID

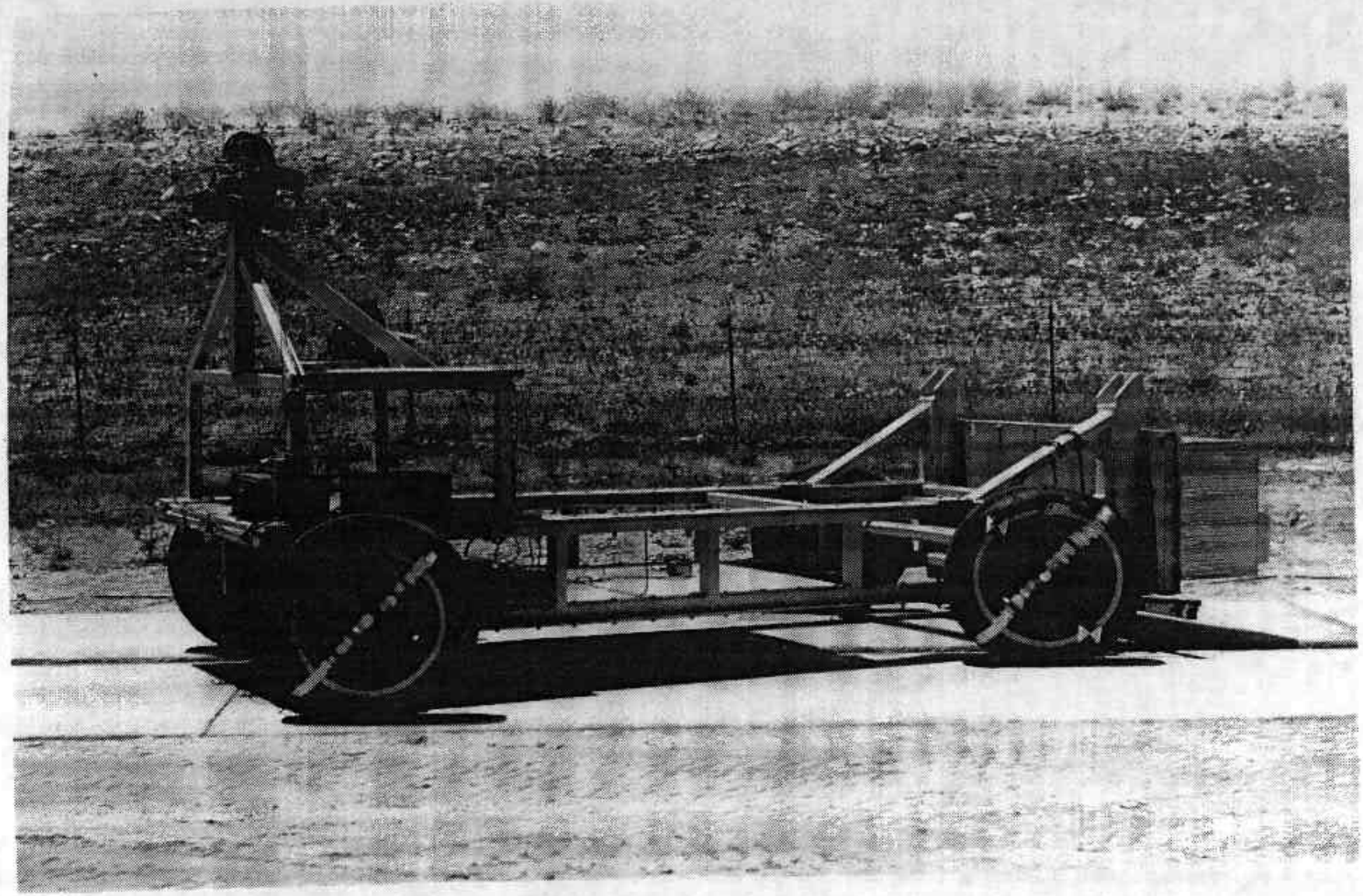


FIGURE 5-23 PRETEST RIGHT SIDE VIEW OF MDB WITH IMPACT FACE IN POSITION

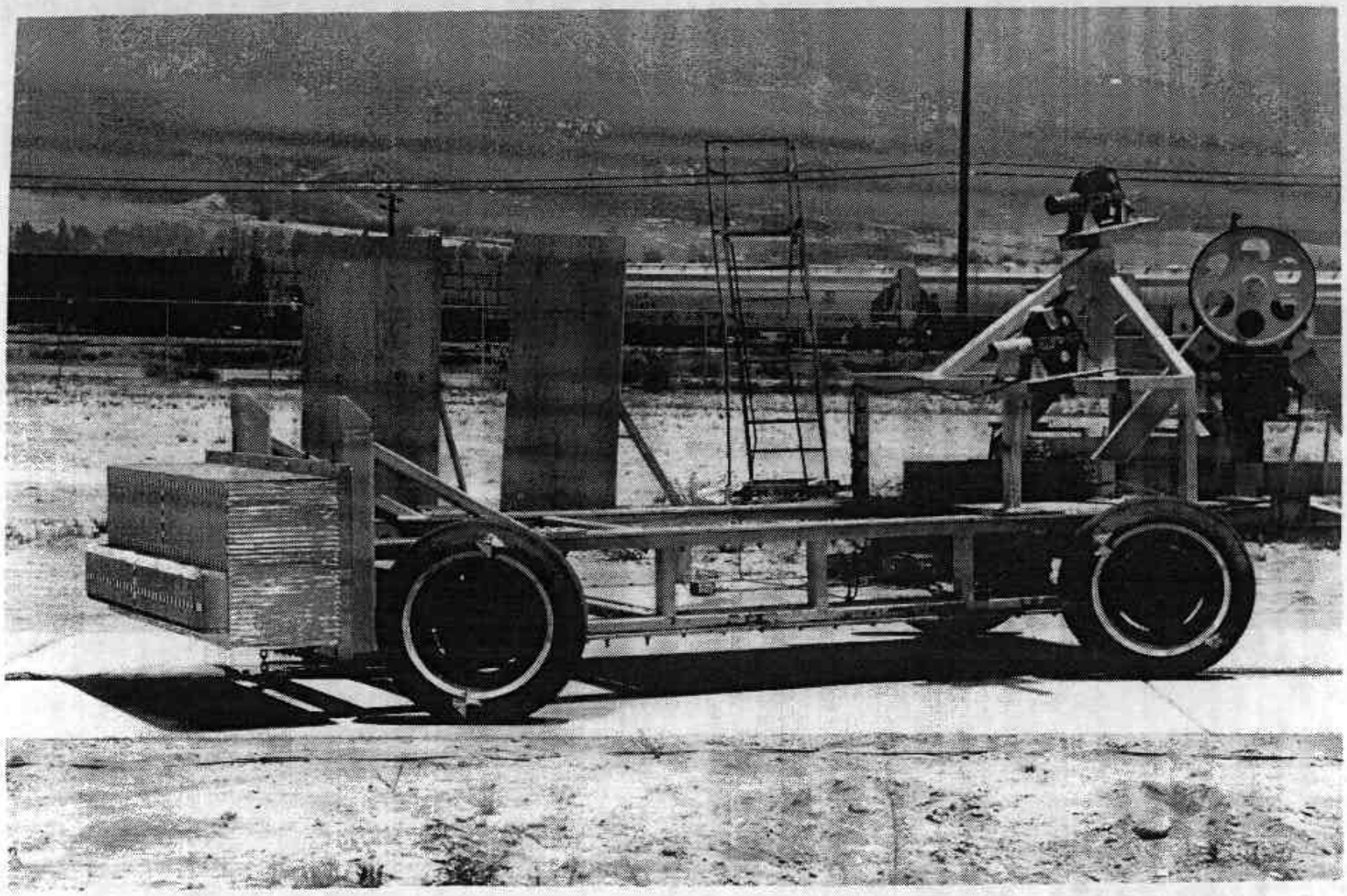


FIGURE 5-24 PRETEST LEFT SIDE VIEW OF MDB WITH IMPACT FACE IN POSITION

FIGURE 5-25 TIRE PLACARD & MANUFACTURER'S CERTIFICATION LABEL

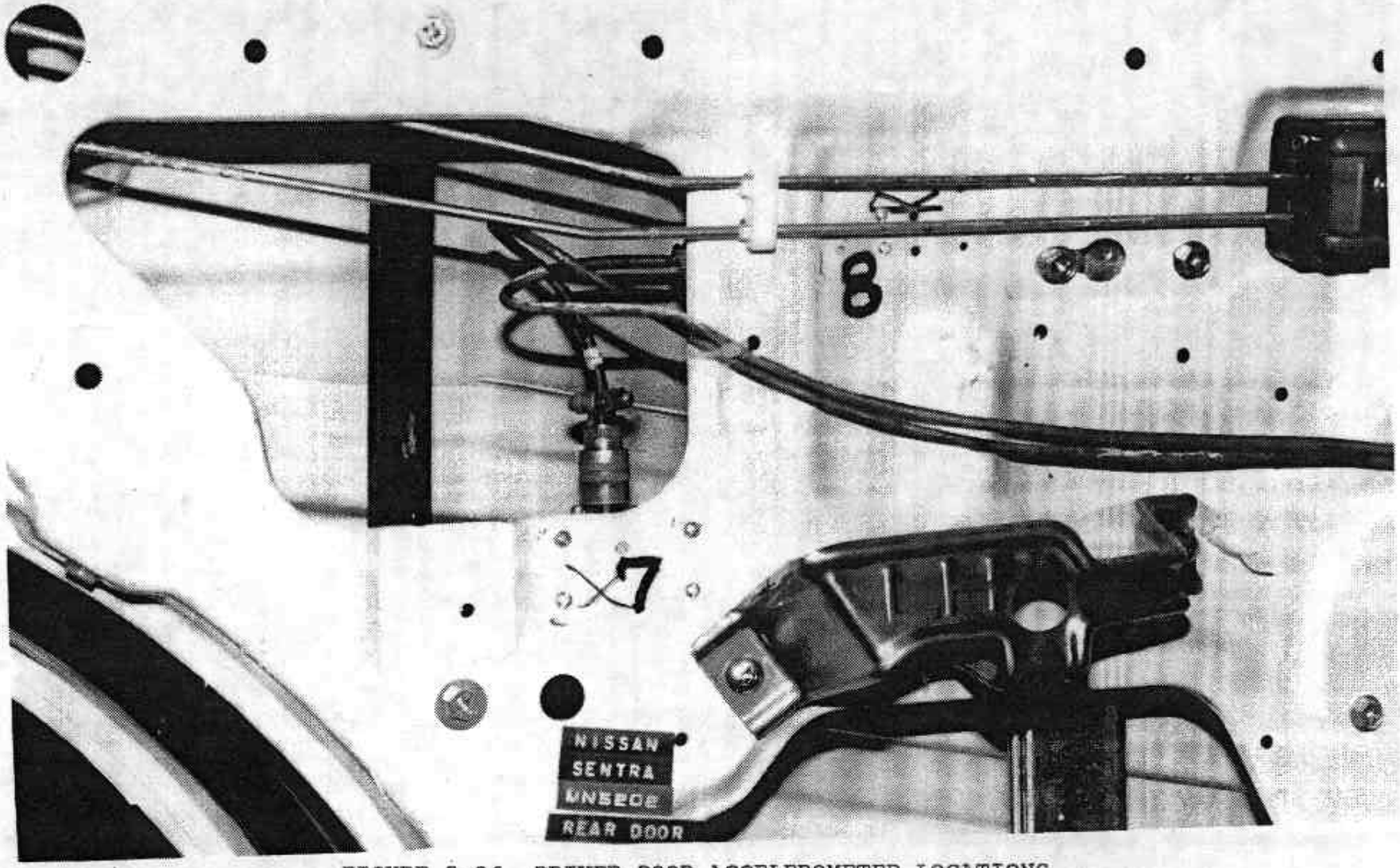


FIGURE 5-26 DRIVER DOOR ACCELEROMETER LOCATIONS

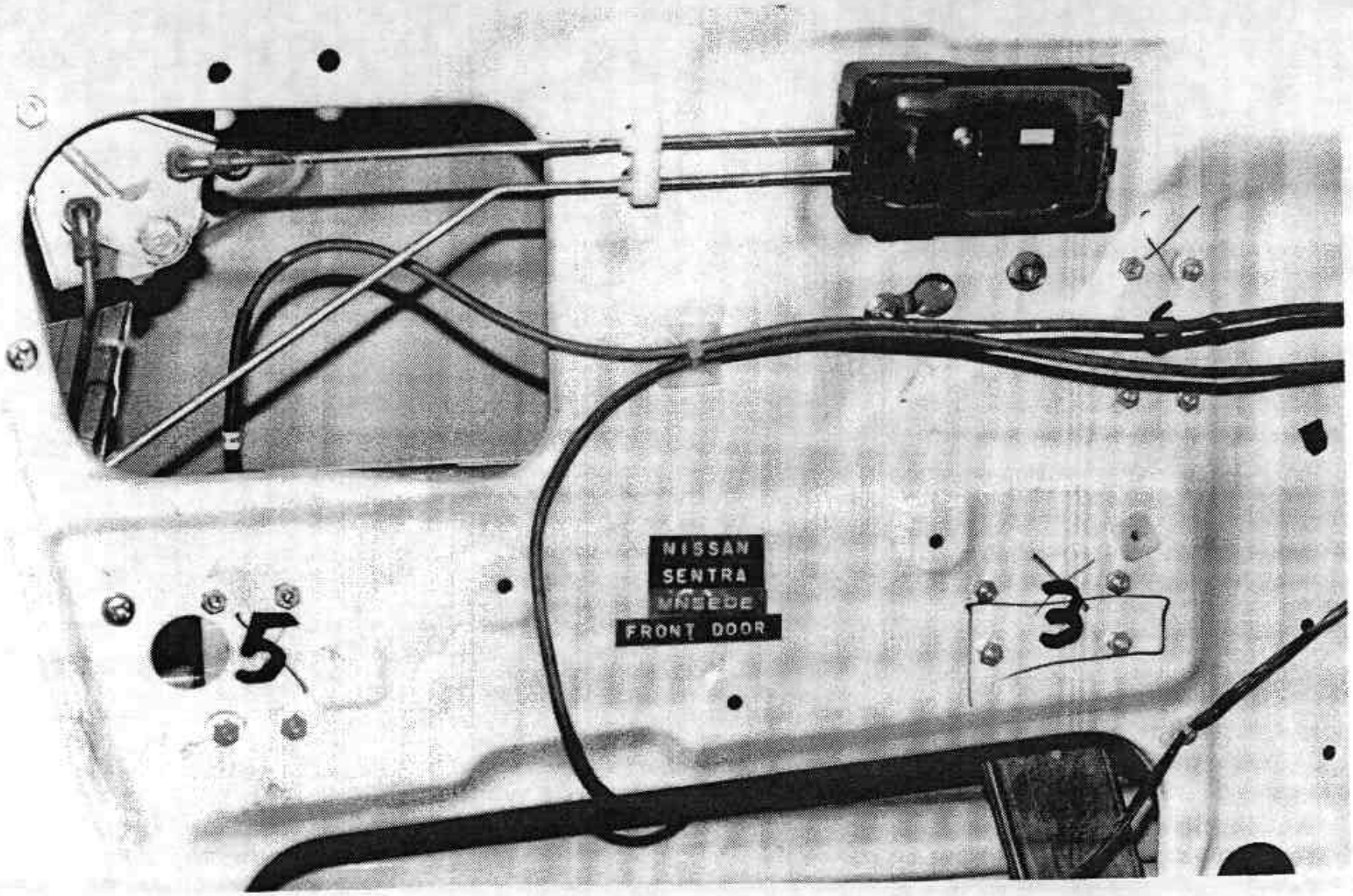


FIGURE 5-27 PASSENGER DOOR ACCELEROMETER LOCATIONS

FIGURE 5-28 DRIVER DOOR ACCELEROMETERS INSTALLED, DOOR PANEL IN PLACE - PRETEST

FIGURE 5-29 PASSENGER DOOR ACCELEROMETERS INSTALLED, DOOR PANEL IN PLACE - PRETEST

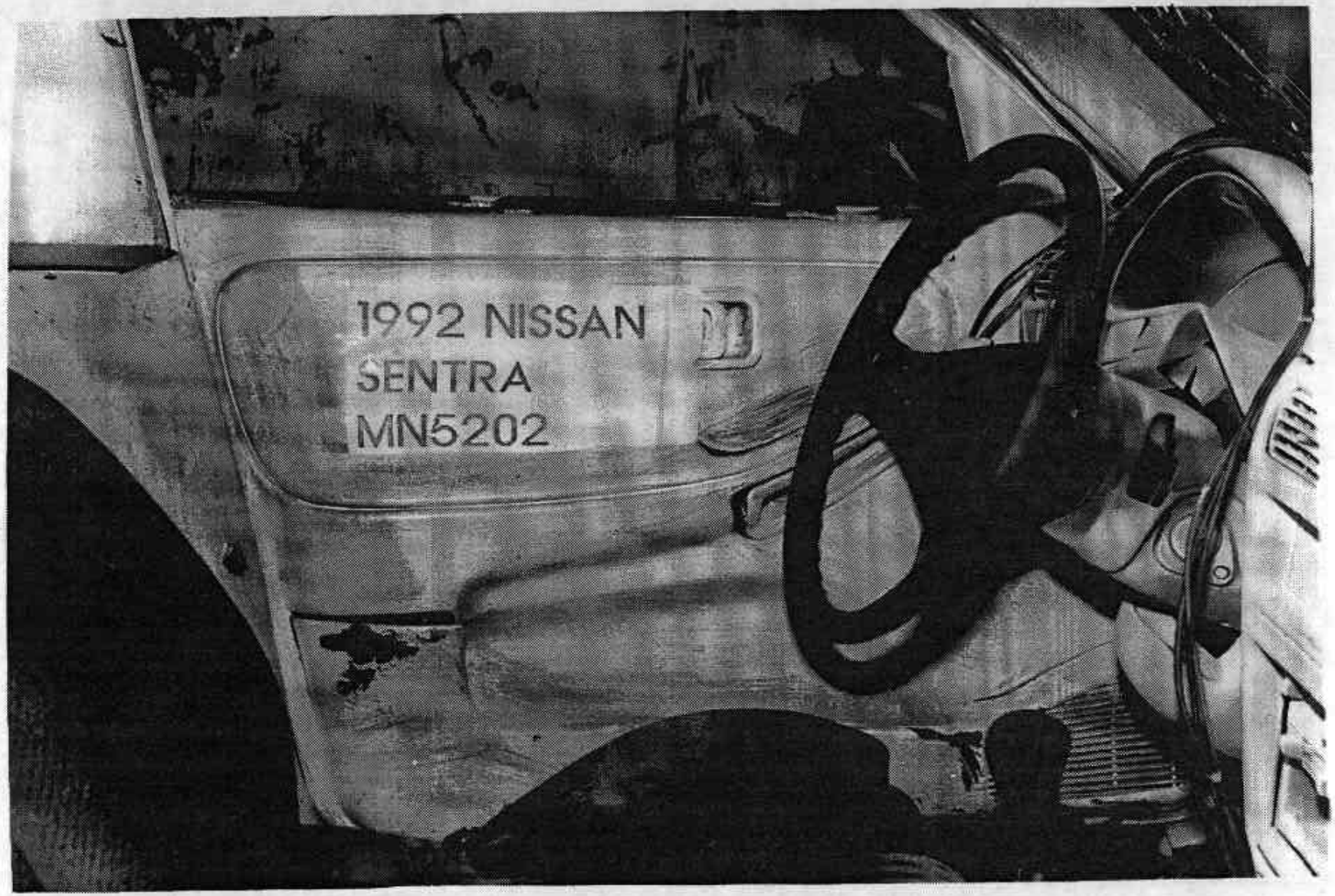


FIGURE 5-30 DRIVER SEATING POSITION - POSTTEST

FIGURE 5-31 PASSENGER SEATING POSITION - POSTTEST

FIGURE 5-32 1992 NISSAN SENTRA, B-PILLAR CUTOUT - VIEW NO. 1

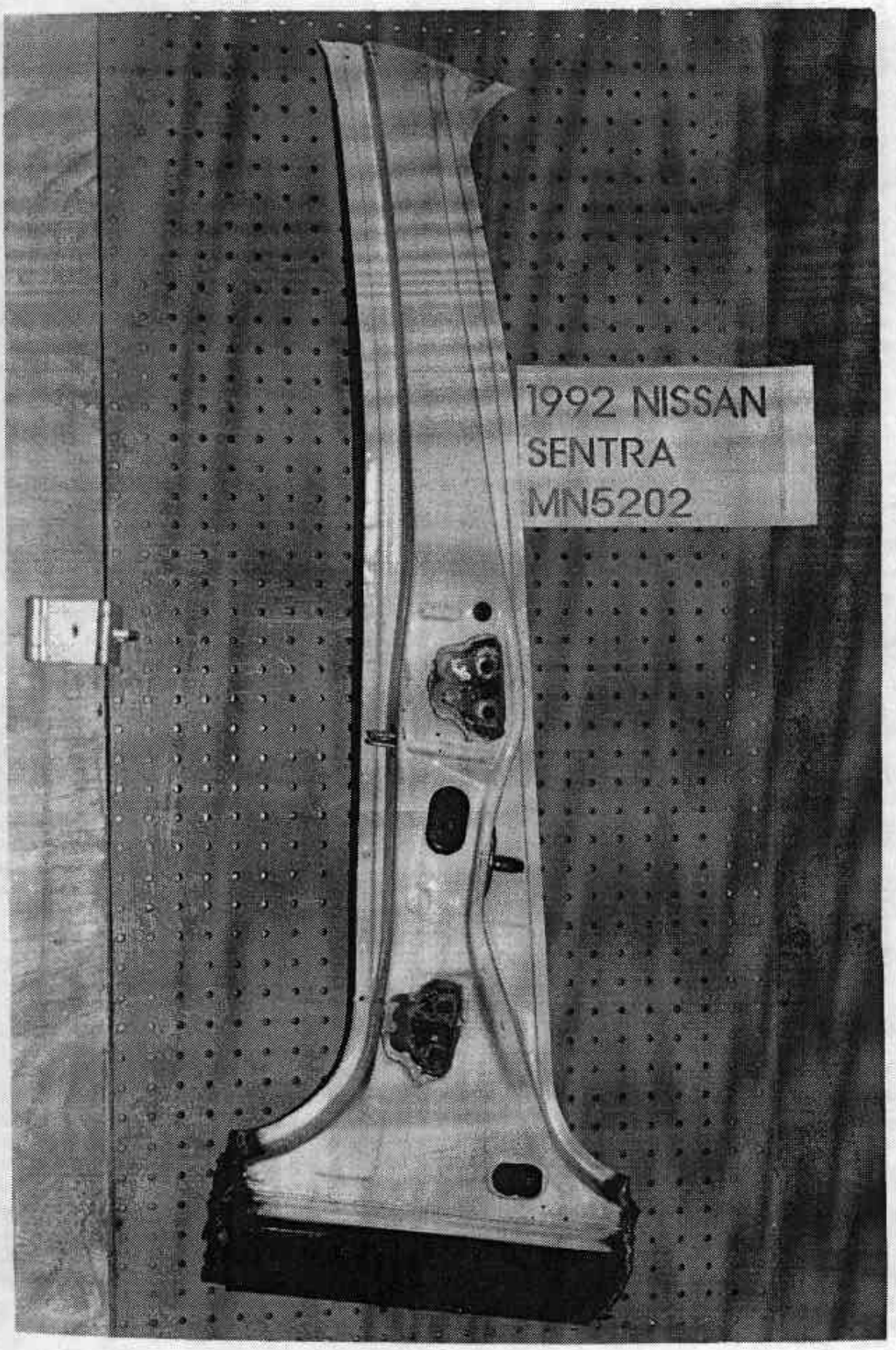


FIGURE 5-33 1992 NISSAN SENTRA, B-PILLAR CUTOUT - VIEW NO. 2

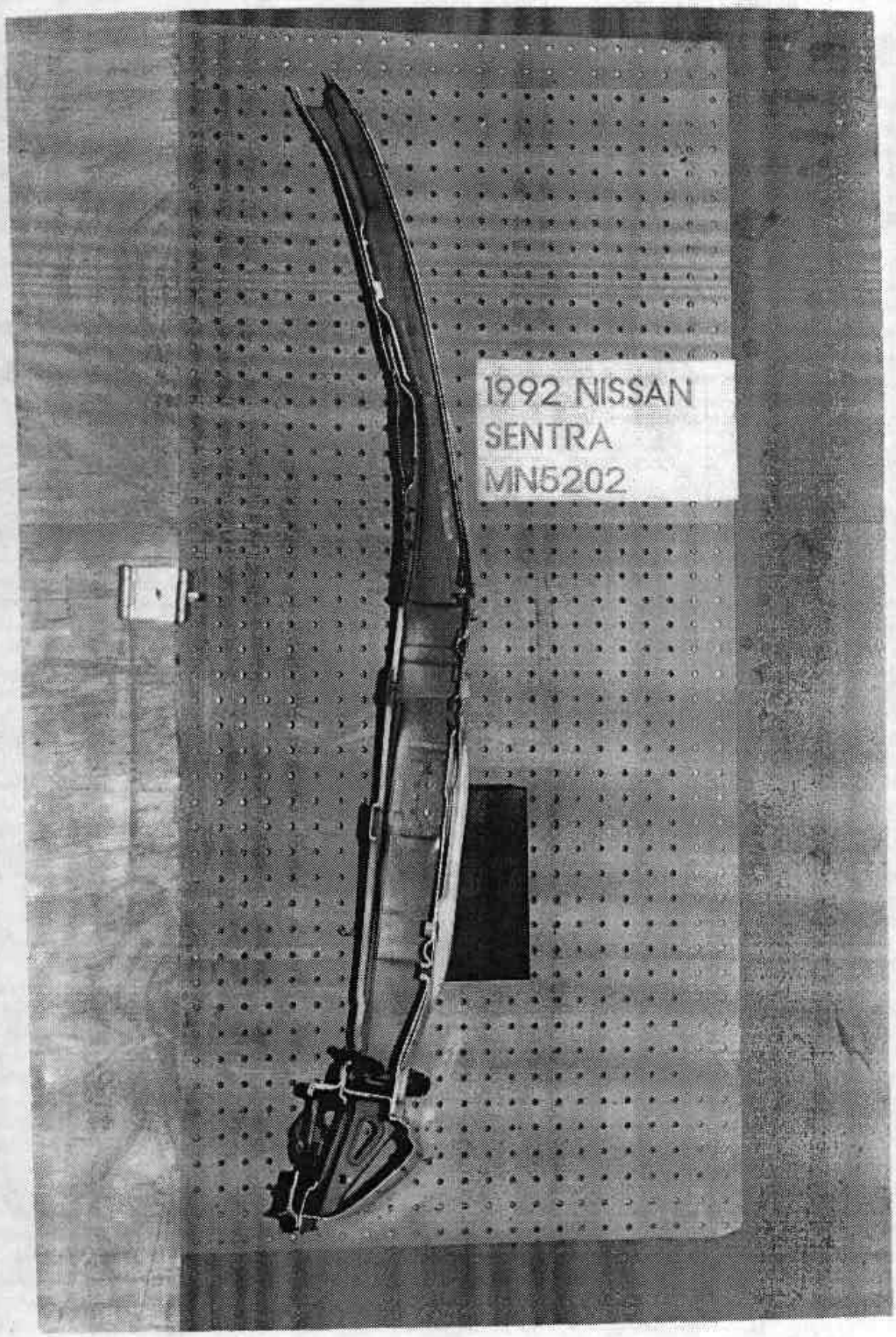


FIGURE 5-34 1992 NISSAN SENTRA, B-PILLAR CUTOUT - VIEW NO. 3

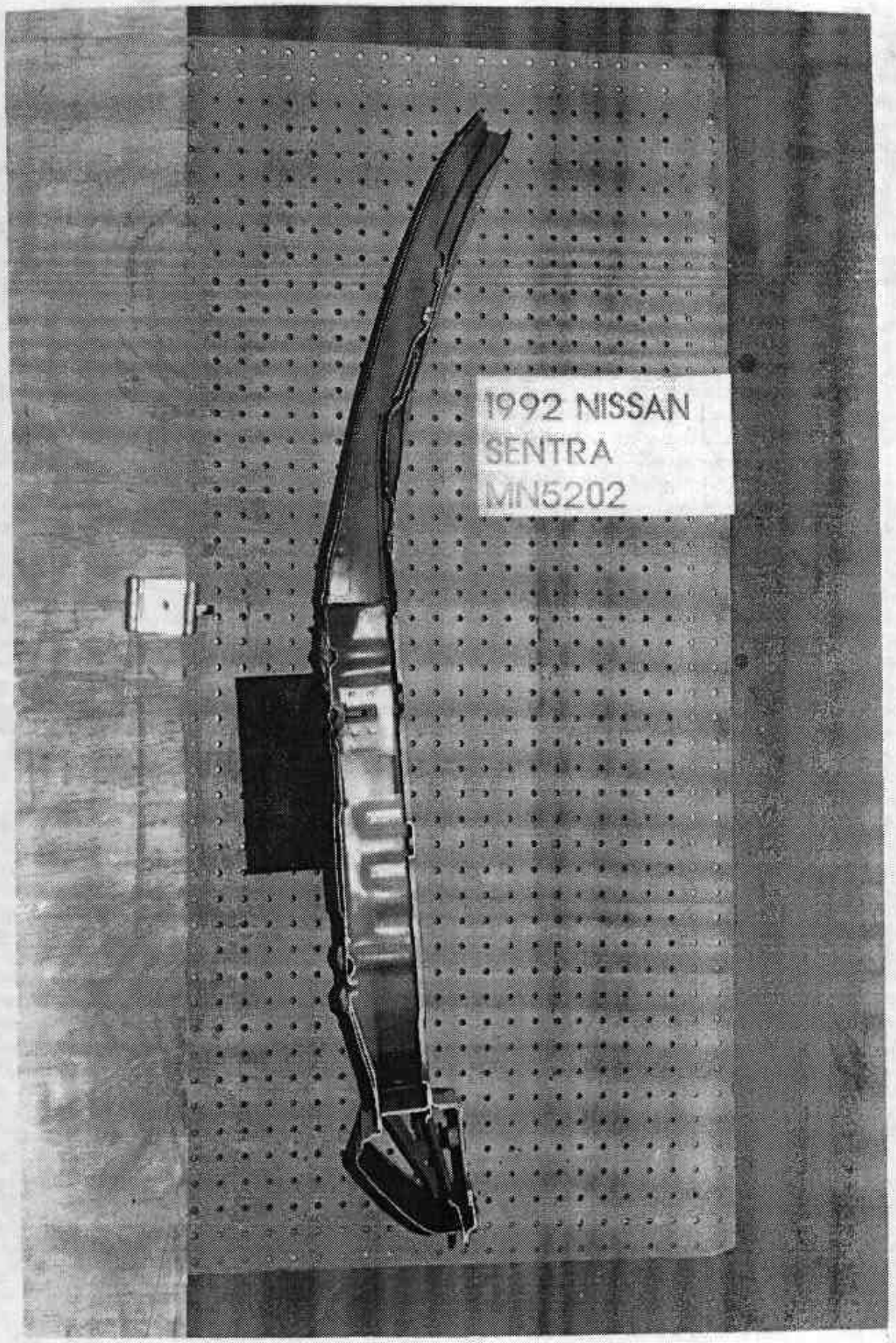


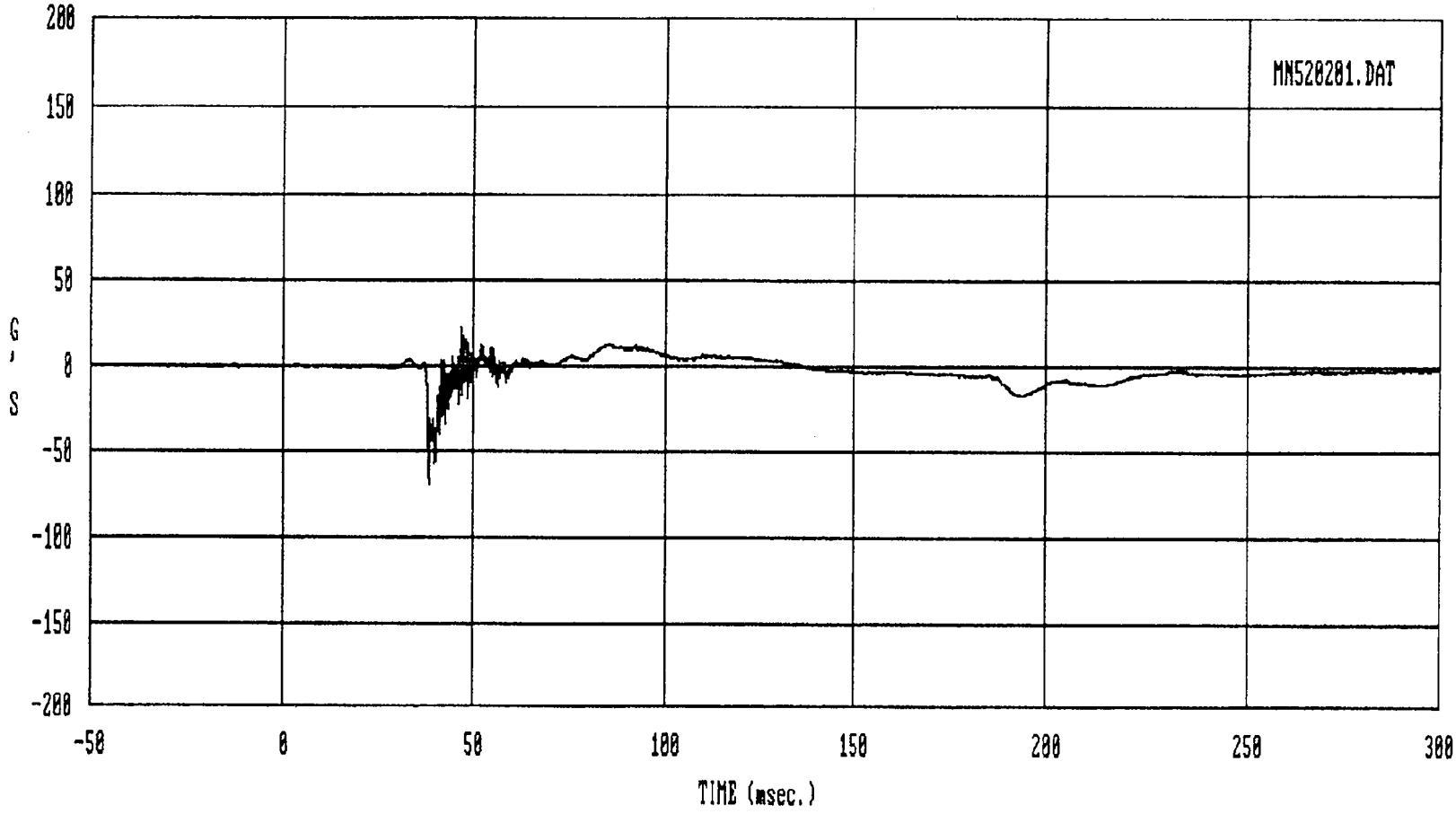
FIGURE 5-35 1992 NISSAN SENTRA, B-PILLAR CUTOUT - VIEW NO. 4

SECTION 6

VEHICLE AND SID RESPONSE DATA

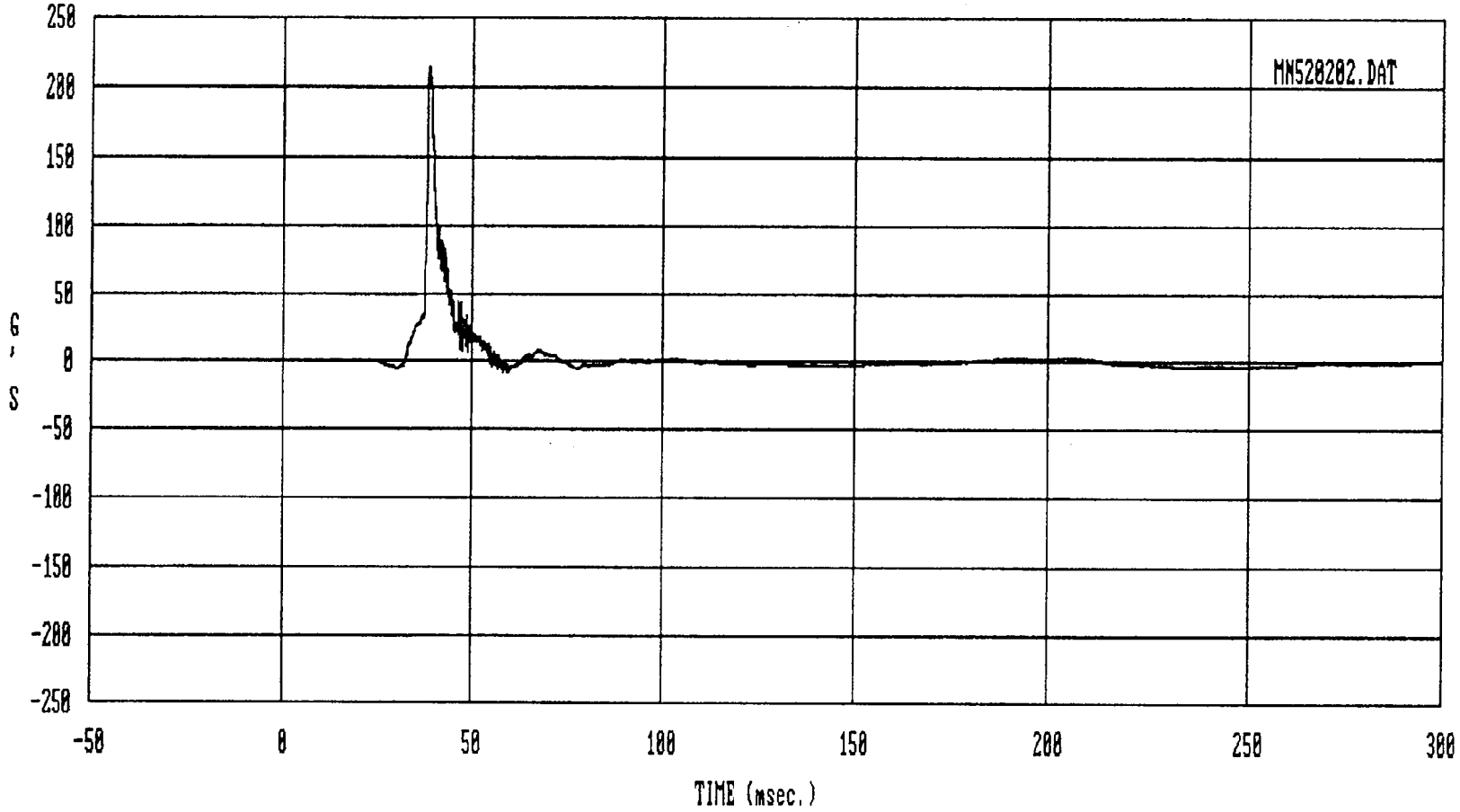
The dataplots from the side impact test are presented in this section.

SID DATA



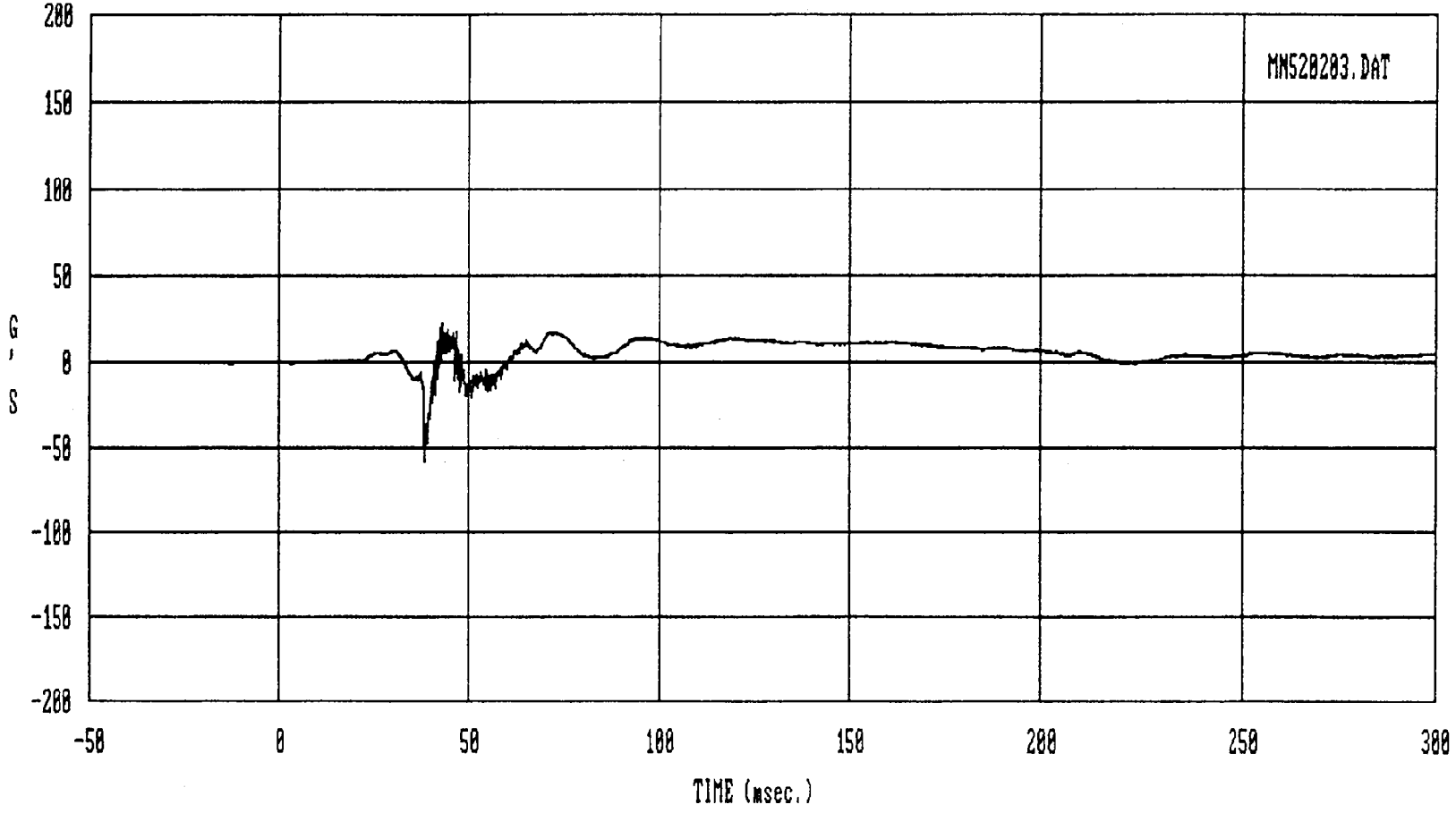
Curve: Driver Head acceleration -- X axis Filter: SAE CLASS 1000 Max = 22.975 Min = -77.495

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



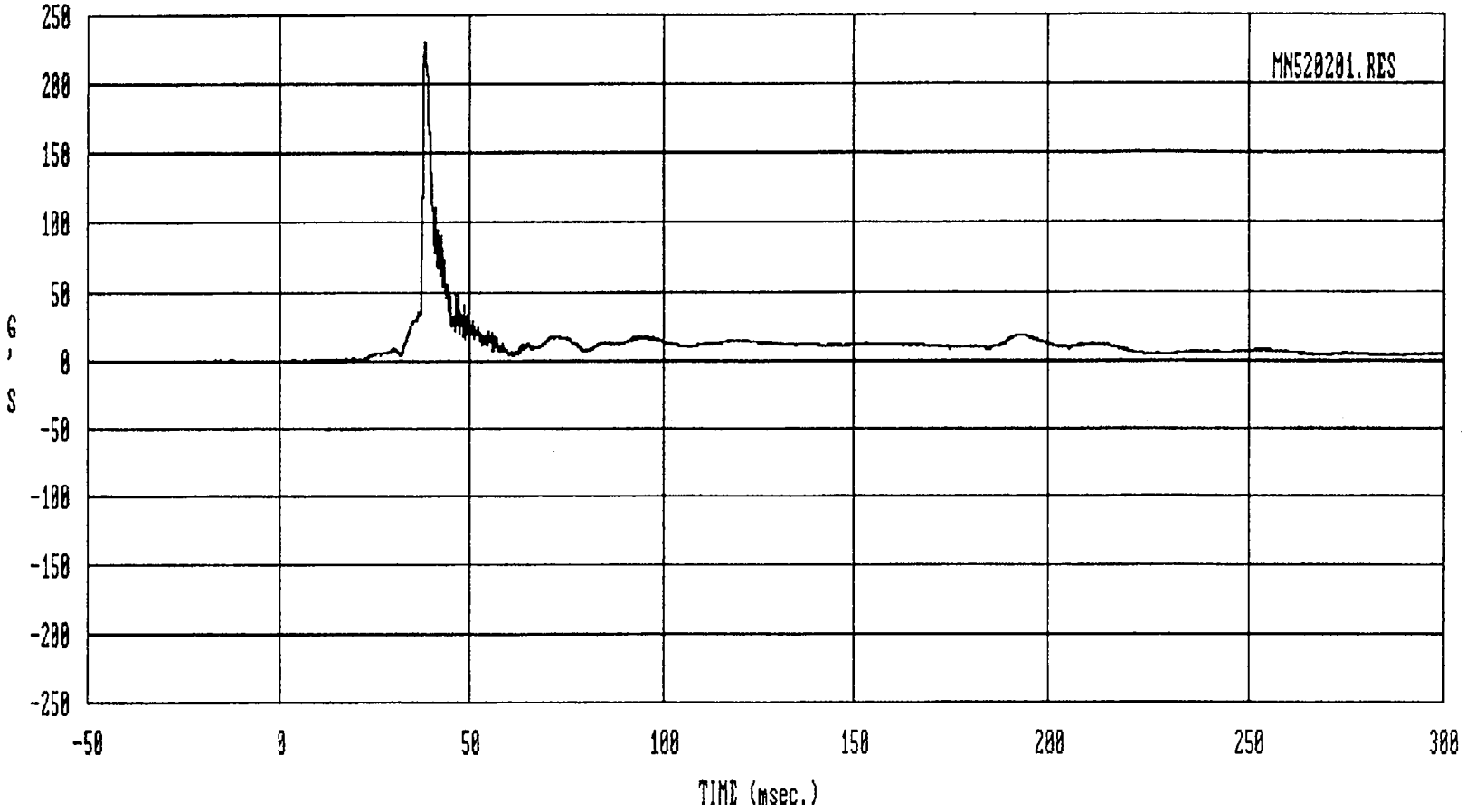
Curve: Driver Head acceleration -- Y axis Filter: SAE CLASS 1000 Max = 215.57 Min = -7.8748

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



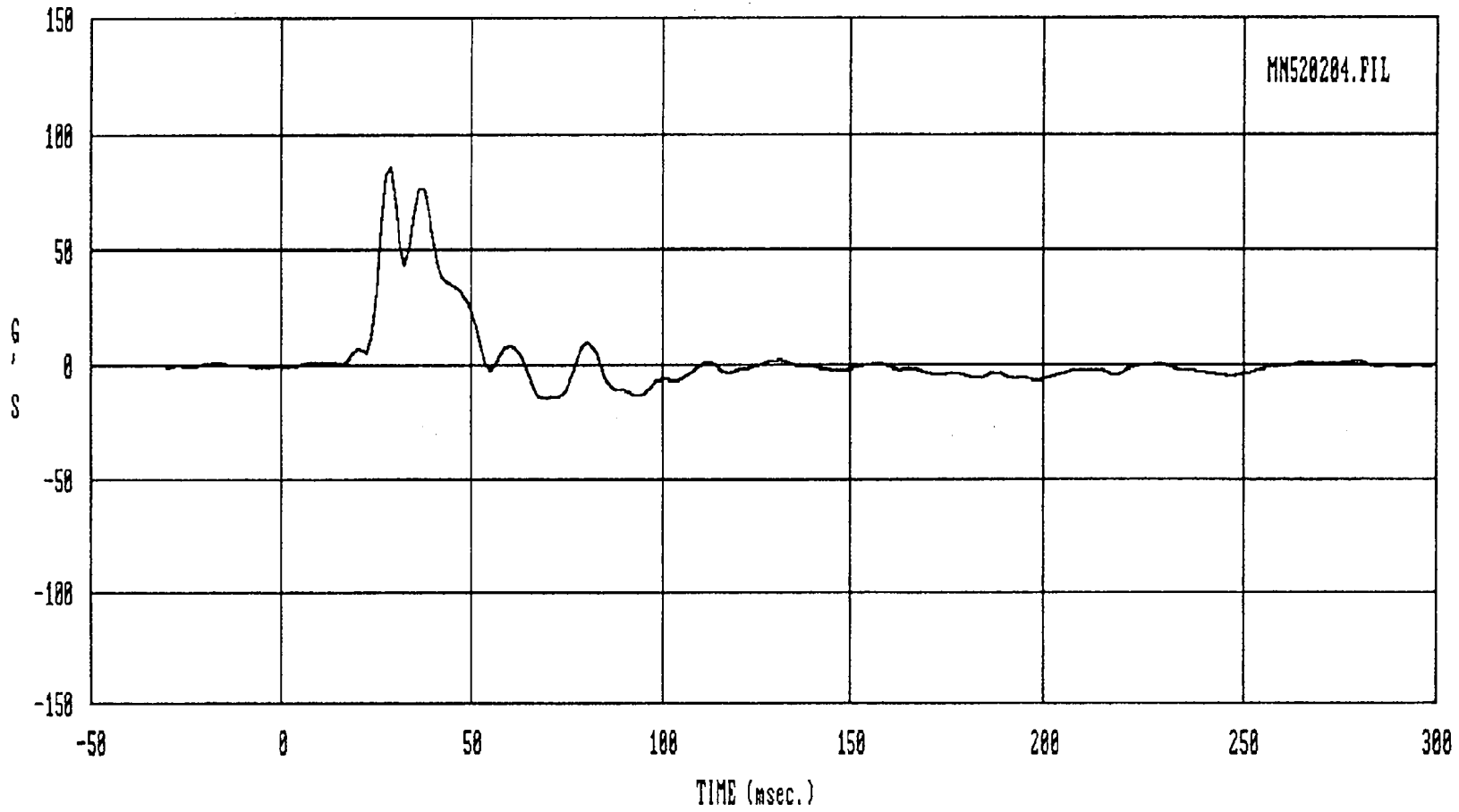
Curve: Driver Head acceleration -- Z axis Filter: SAE CLASS 1000 Max = 23.241 Min = -57.845

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



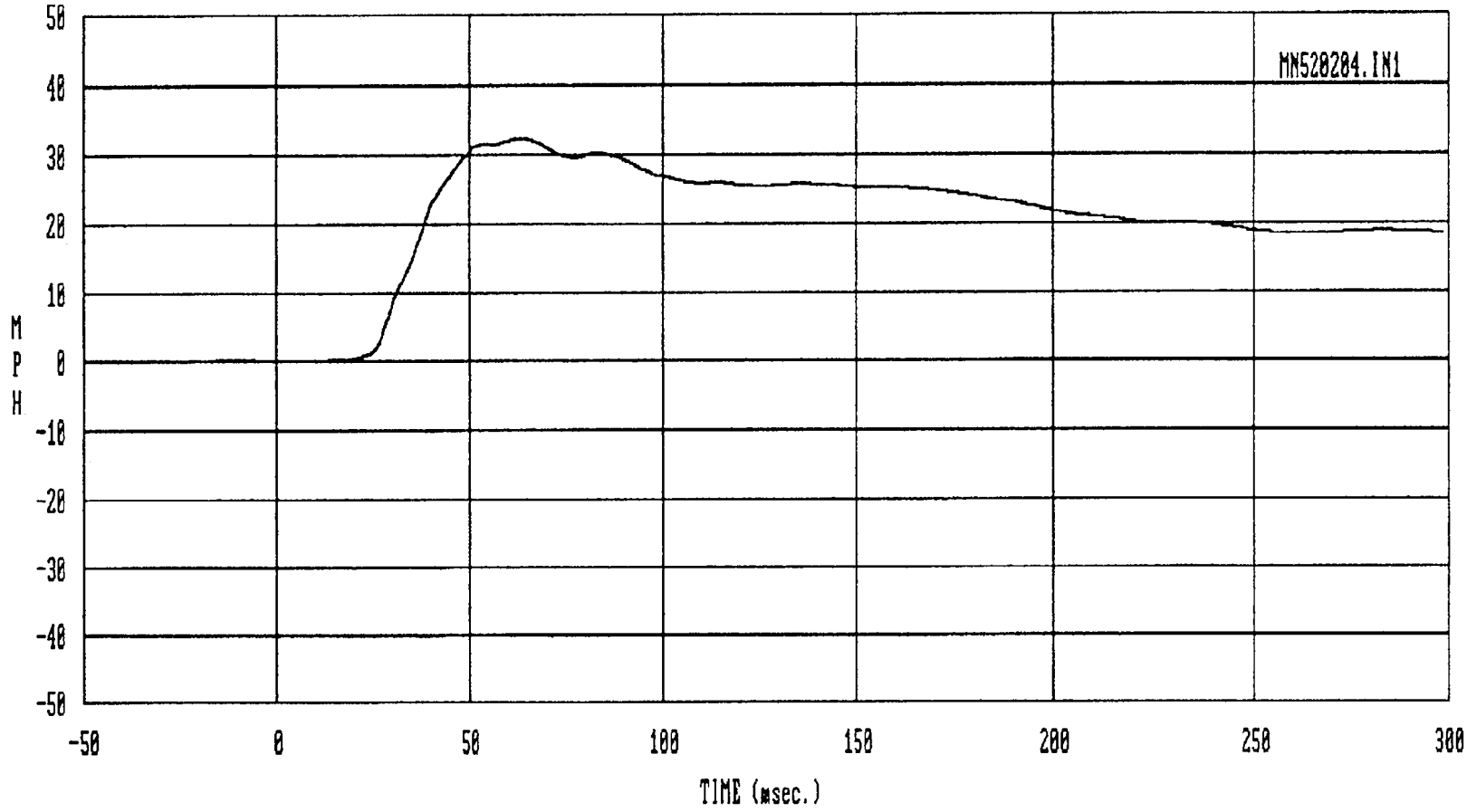
Curve: Driver head resultant acceleration Filter: SAE CLASS 1000 Max = 233.18 Min = .00000

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



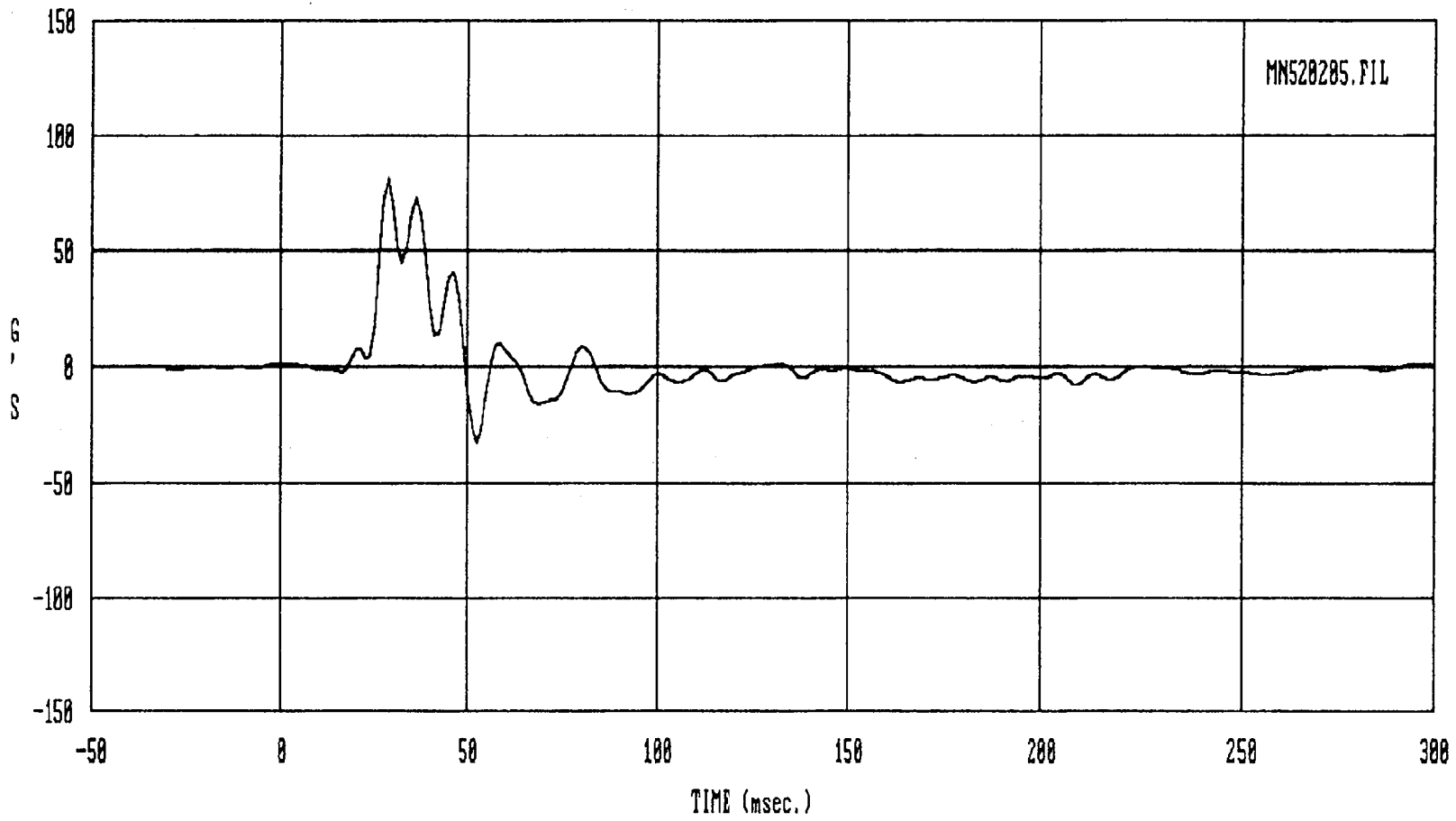
Curve: Driver upper spine acceleration -- Primary Filter: FIR 100 Max = 87.398 Min = -14.327

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



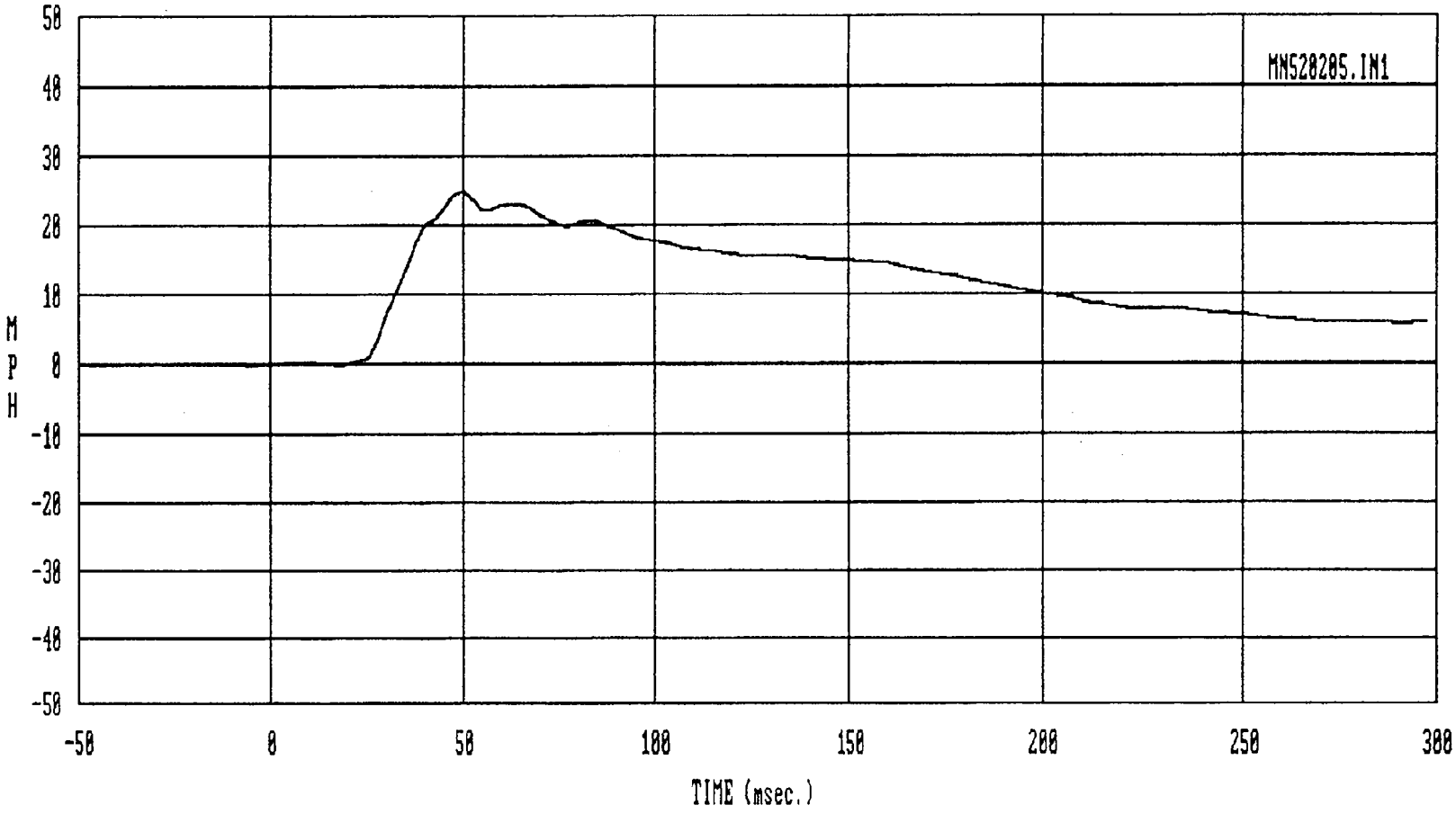
Curve: Driver upper spine delta V — Primary Filter: FIR 100 Max = 32.511 Min = -.61799E-01

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



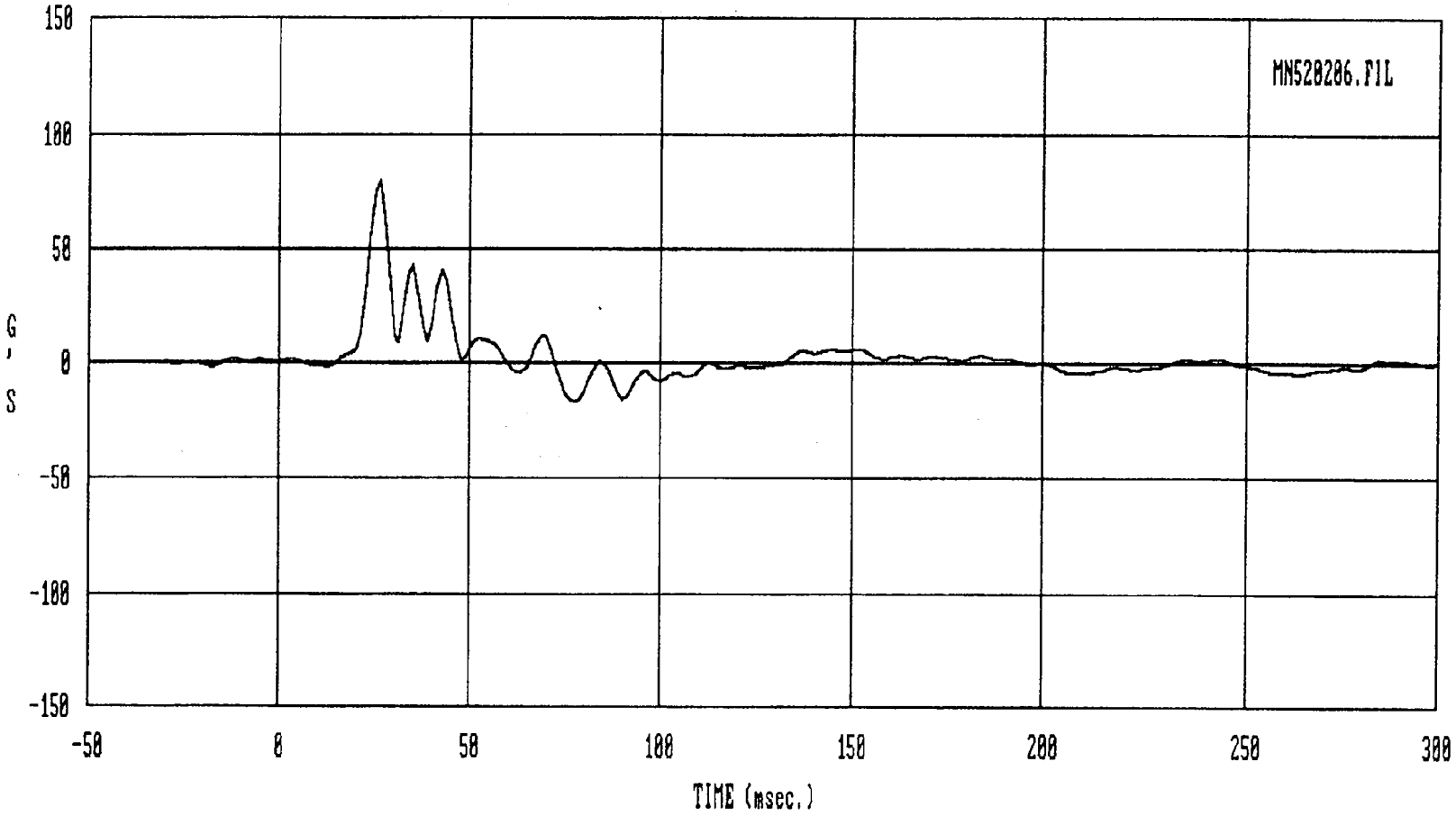
Curve: Driver upper spine acceleration -- Redundant Filter: FIR 100 Max = 81.841 Min = -32.568

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



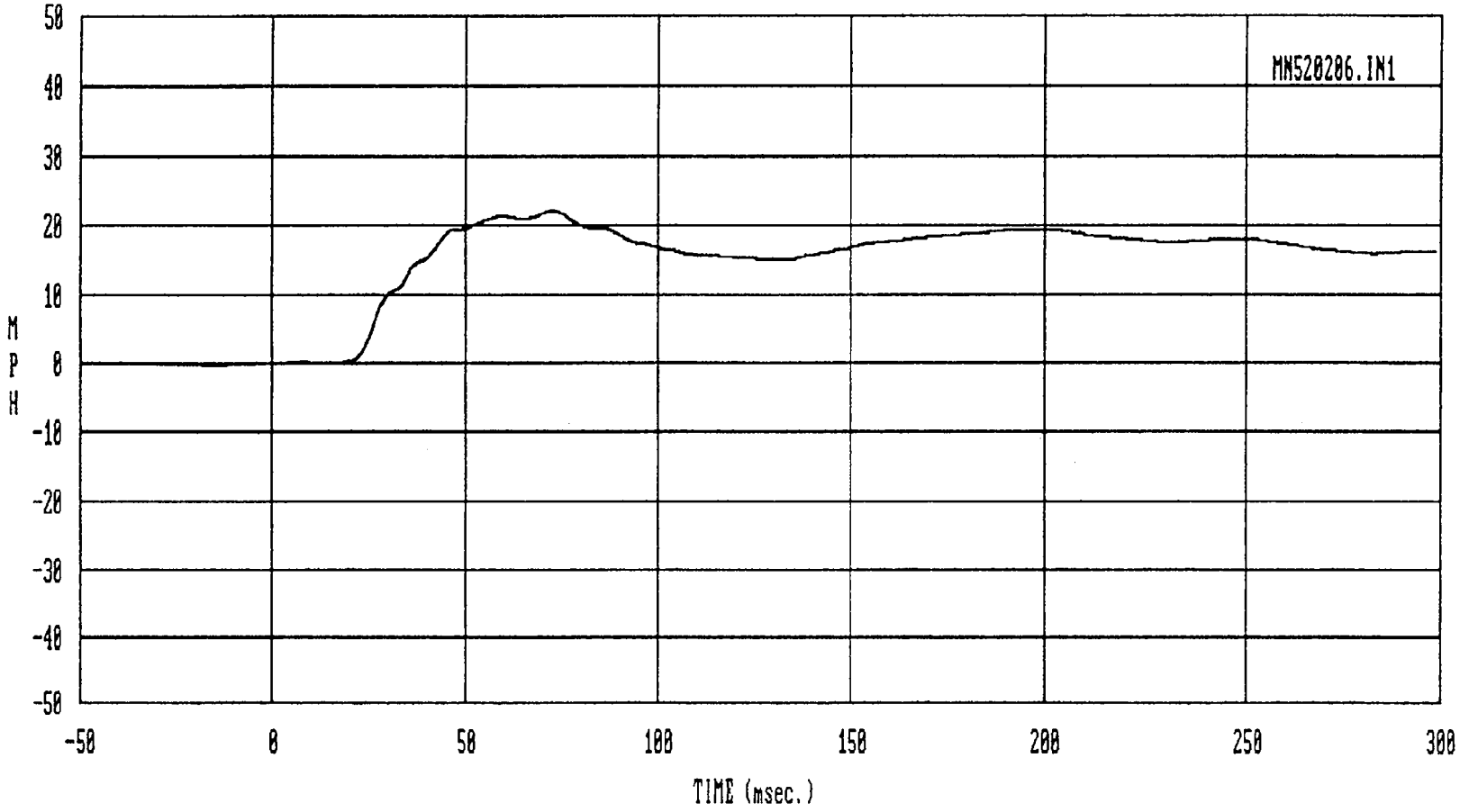
Curve: Driver upper spine delta V -- Redundant Filter: FIR 100 Max = 25.101 Min = -.92359E-01

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



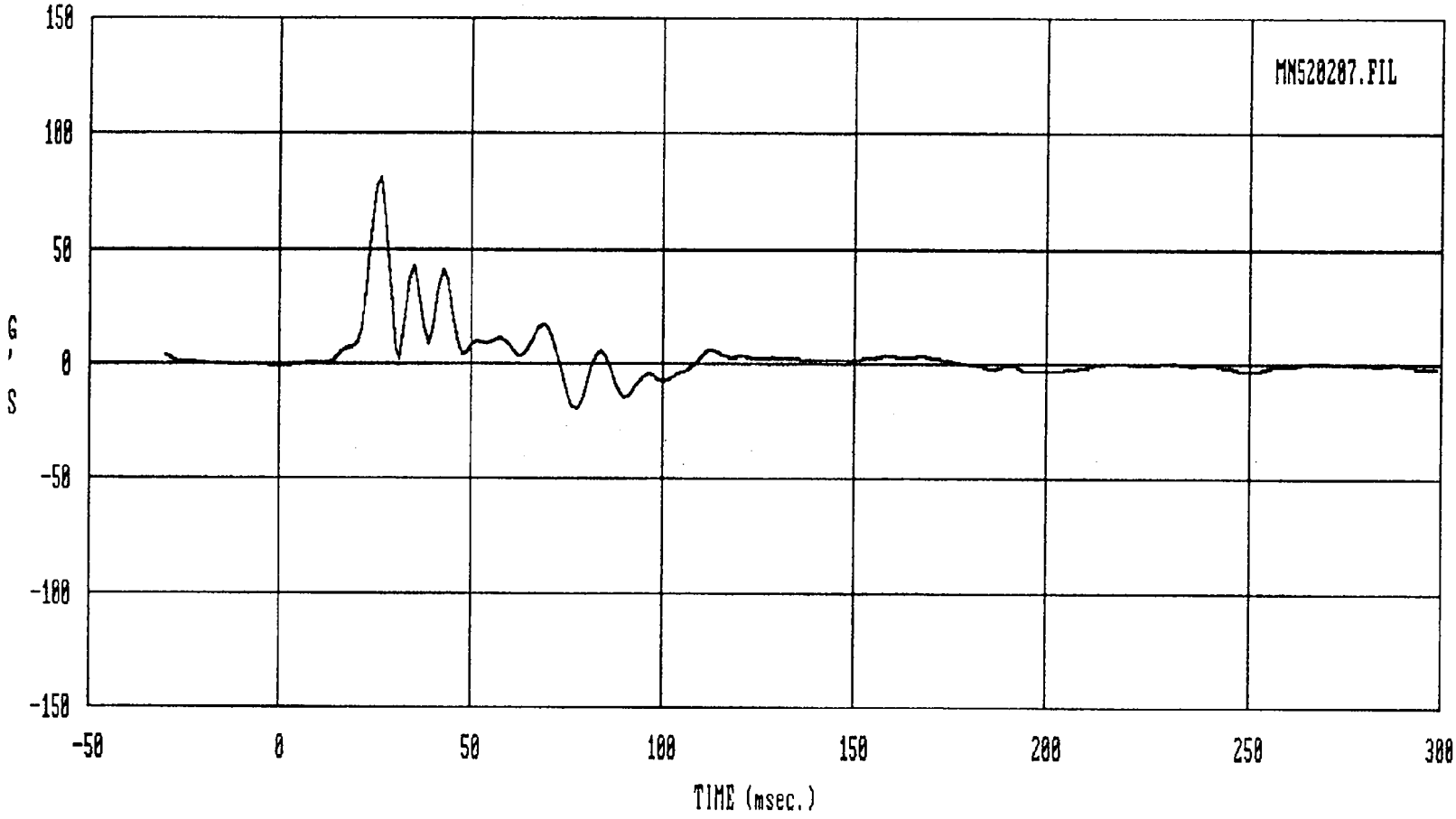
Curve: Driver upper rib acceleration -- Primary Filter: FIR 100 Max = 80.342 Min = -17.117

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



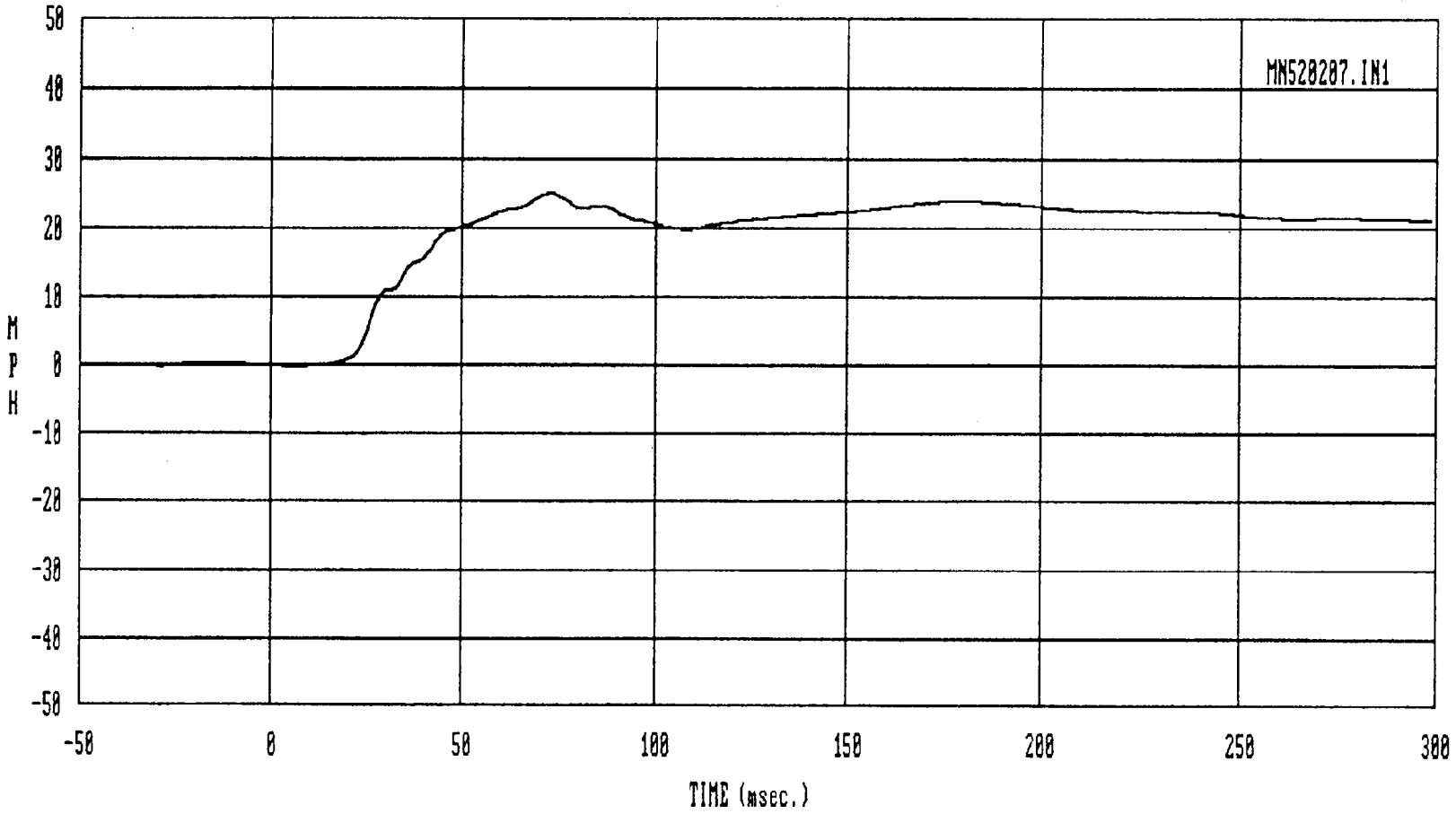
Curve: Driver upper rib delta V -- Primary Filter: FIR 100 Max = 22.119 Min = -.28667E-01

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



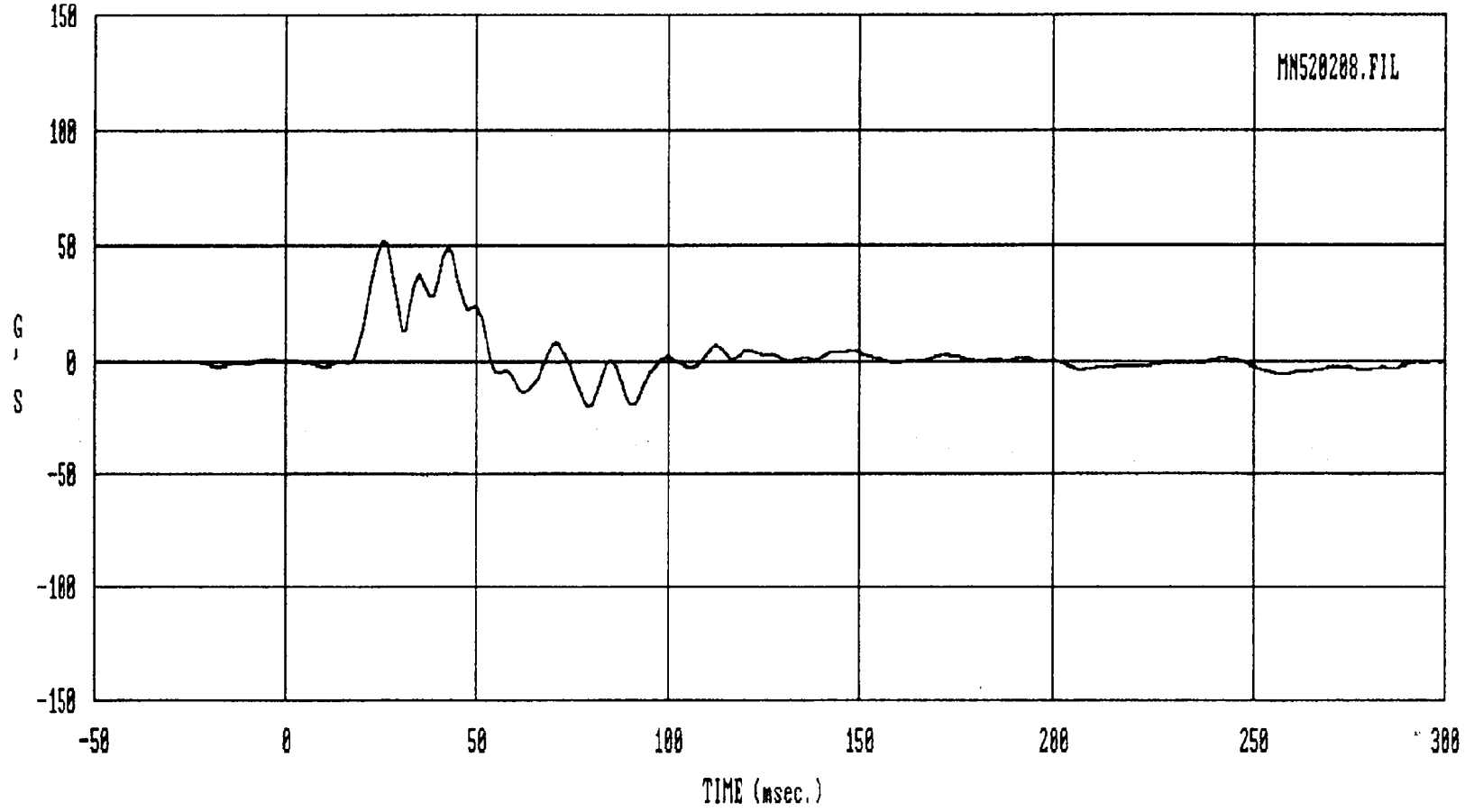
Curve: Driver upper rib acceleration -- Redundant Filter: FIR 100 Max = 82.060 Min = -19.420

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



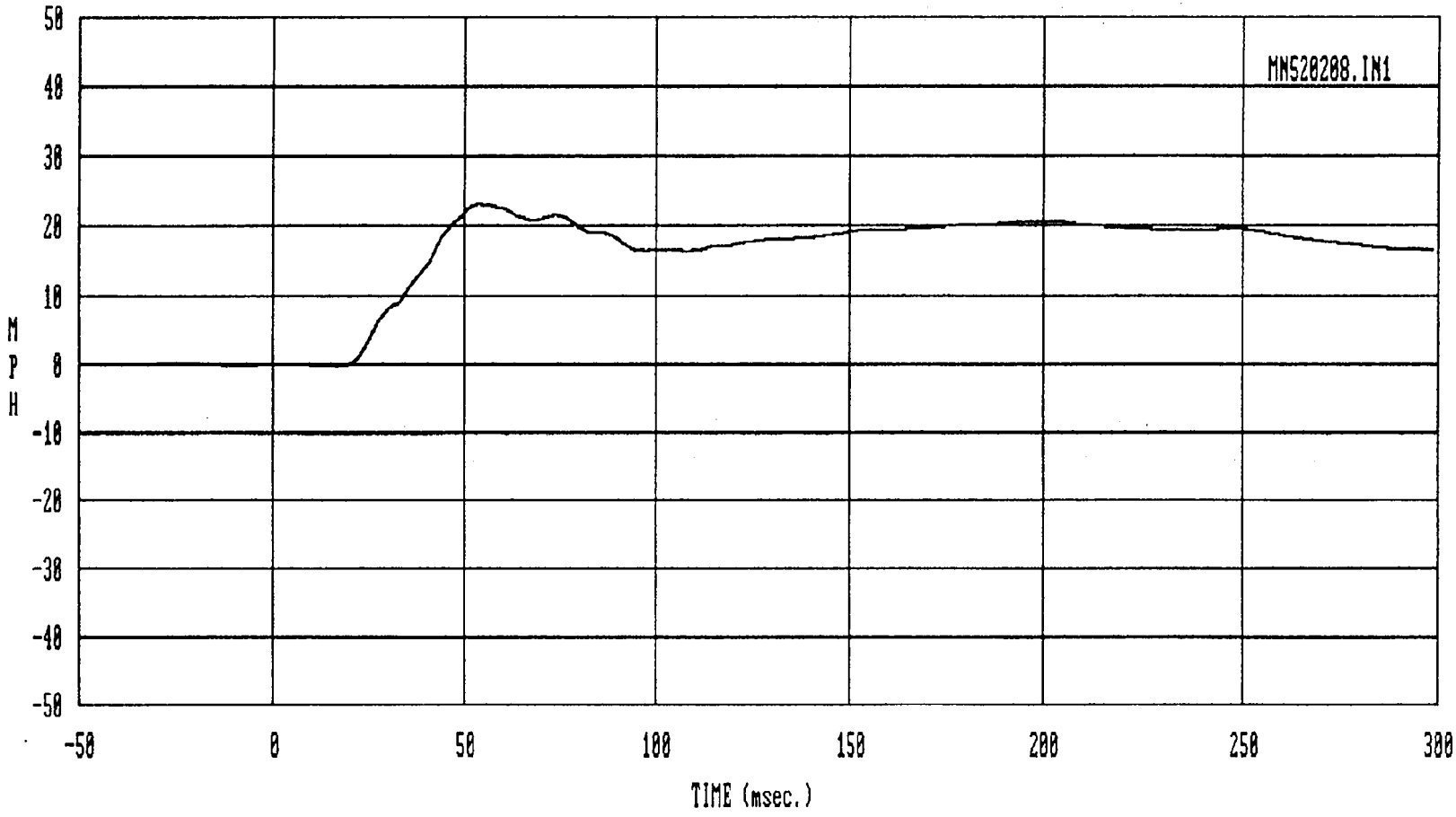
Curve: Driver upper rib delta V -- Redundant Filter: FIR 100 Max = 25.180 Min = -.11855

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



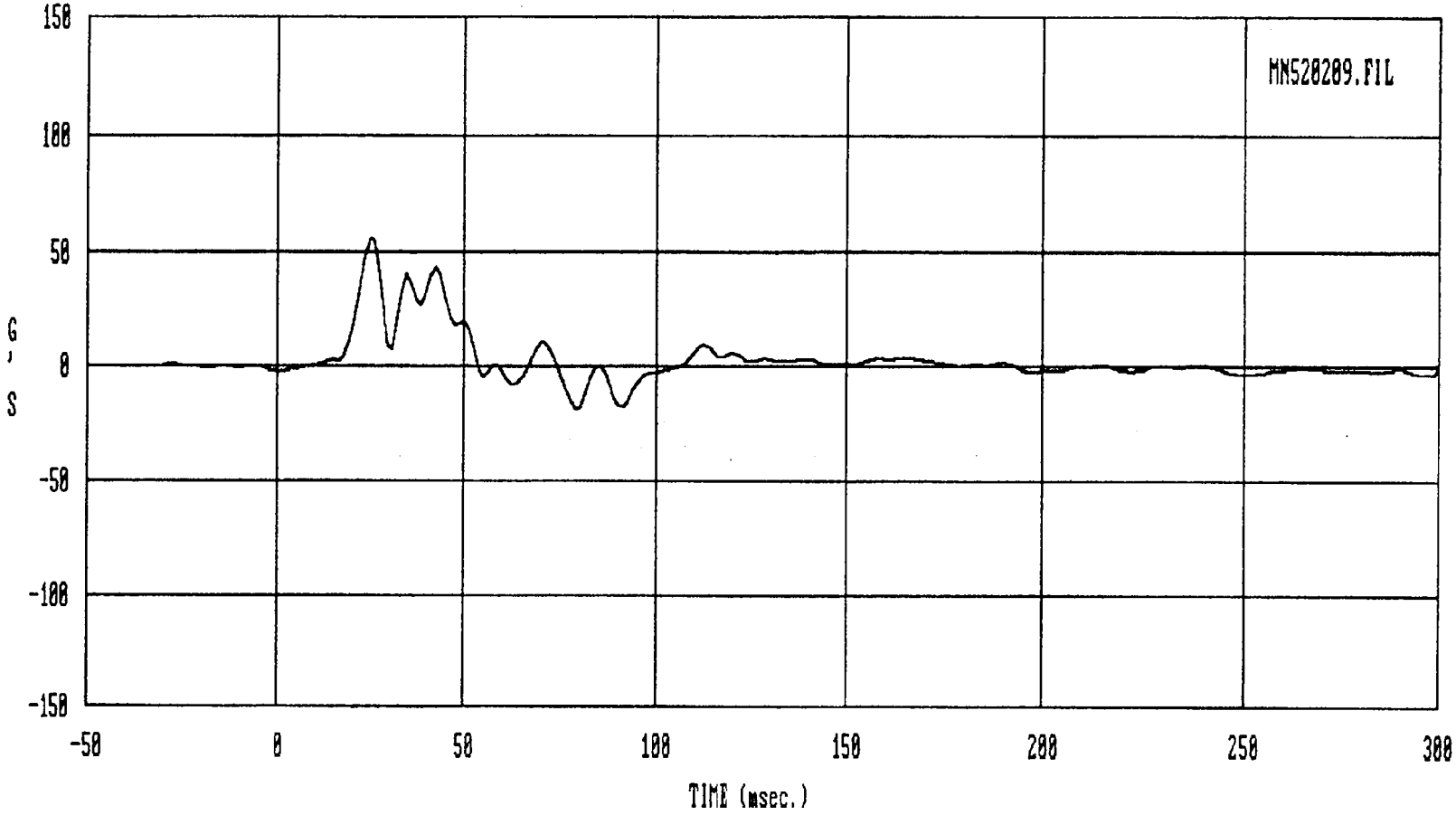
Curve: Driver lower rib acceleration -- Primary Filter: FIR 100 Max = 52.727 Min = -20.240

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



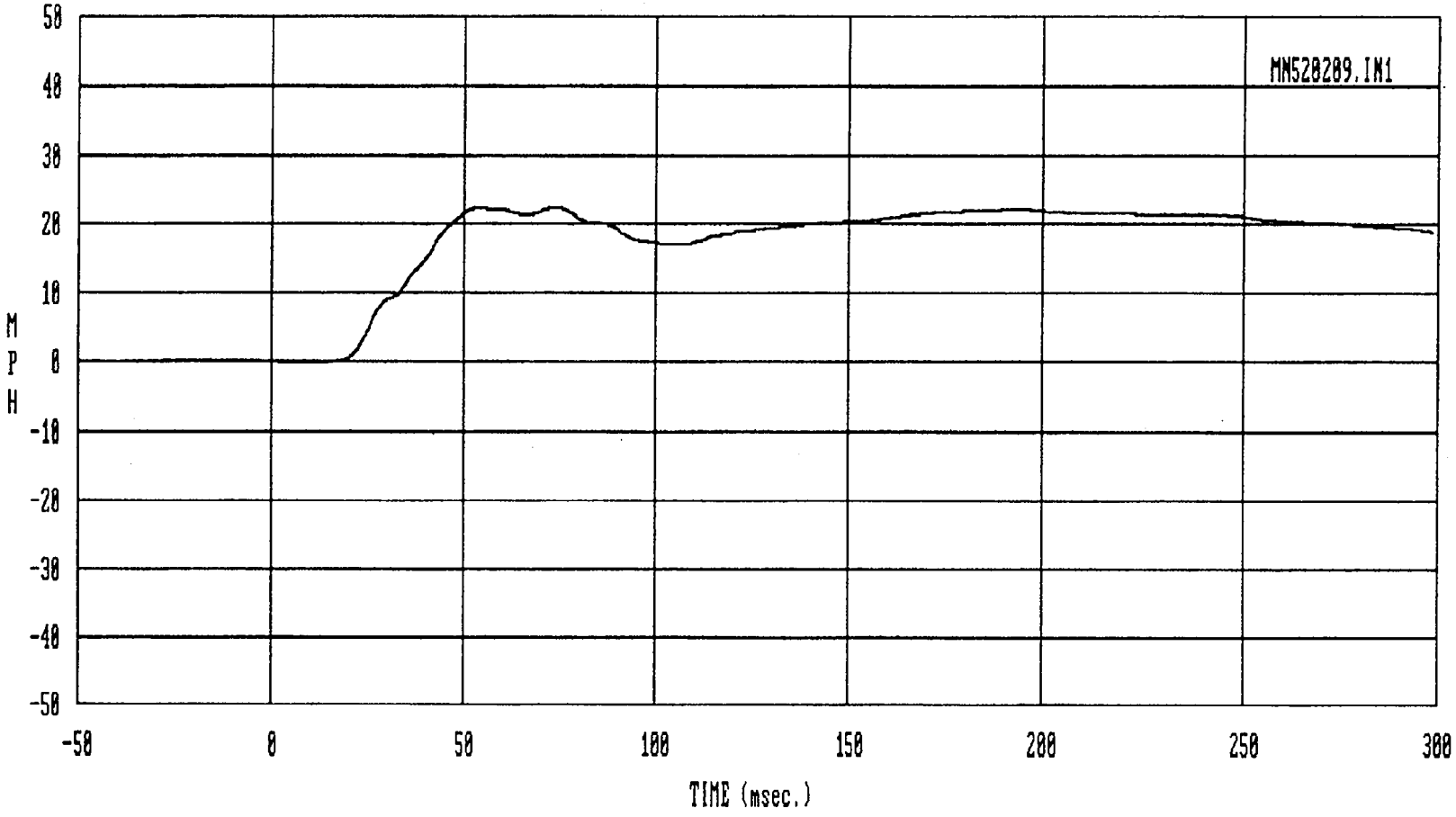
Curve: Driver lower rib delta V -- Primary Filter: FIR 100 Max = 23.117 Min = -.20277

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



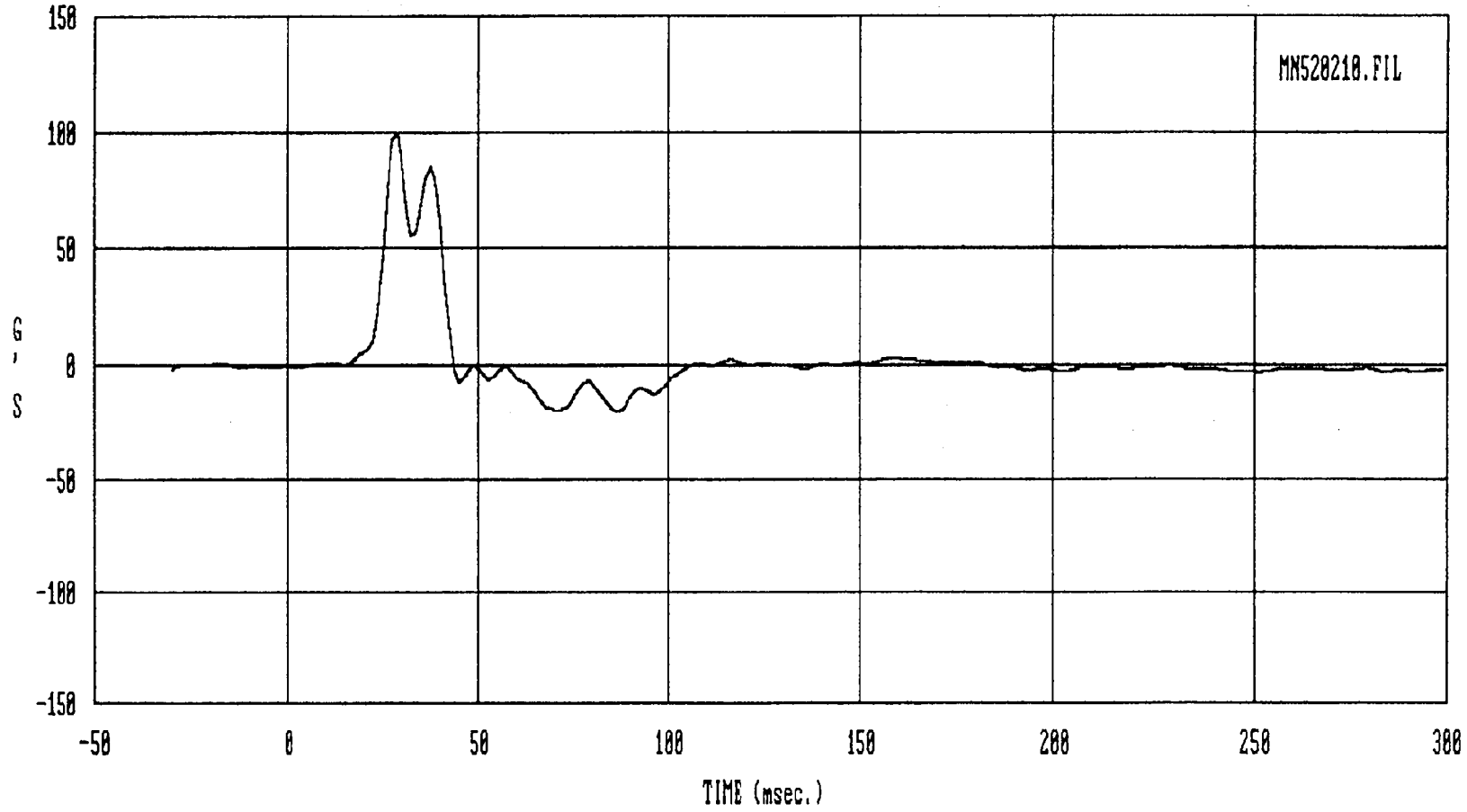
Curve: Driver lower rib acceleration -- Redundant Filter: FIR 100 Max = 57.335 Min = -19.096

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



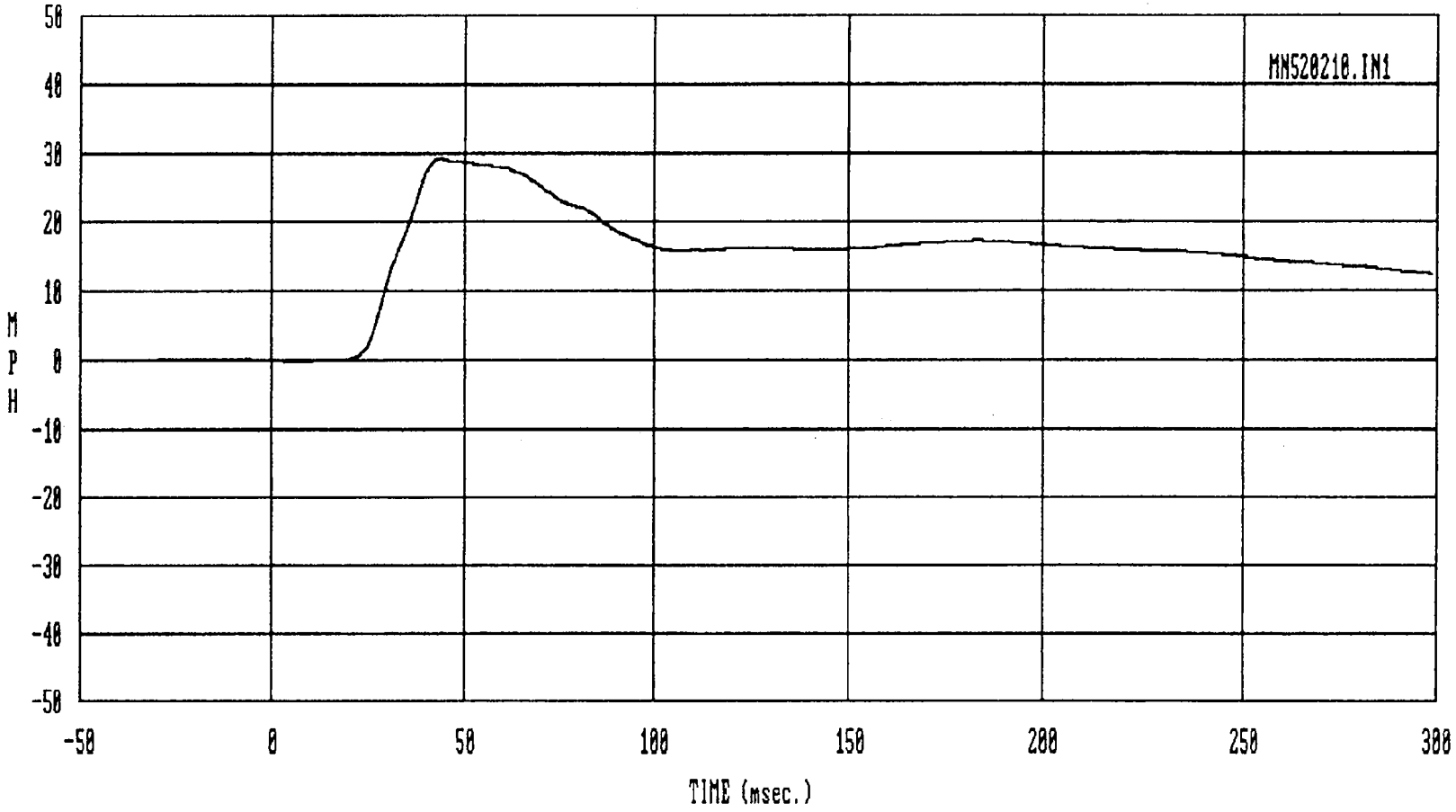
Curve: Driver lower rib delta V -- Redundant Filter: FIR 100 Max = 22.495 Min = -.22978

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



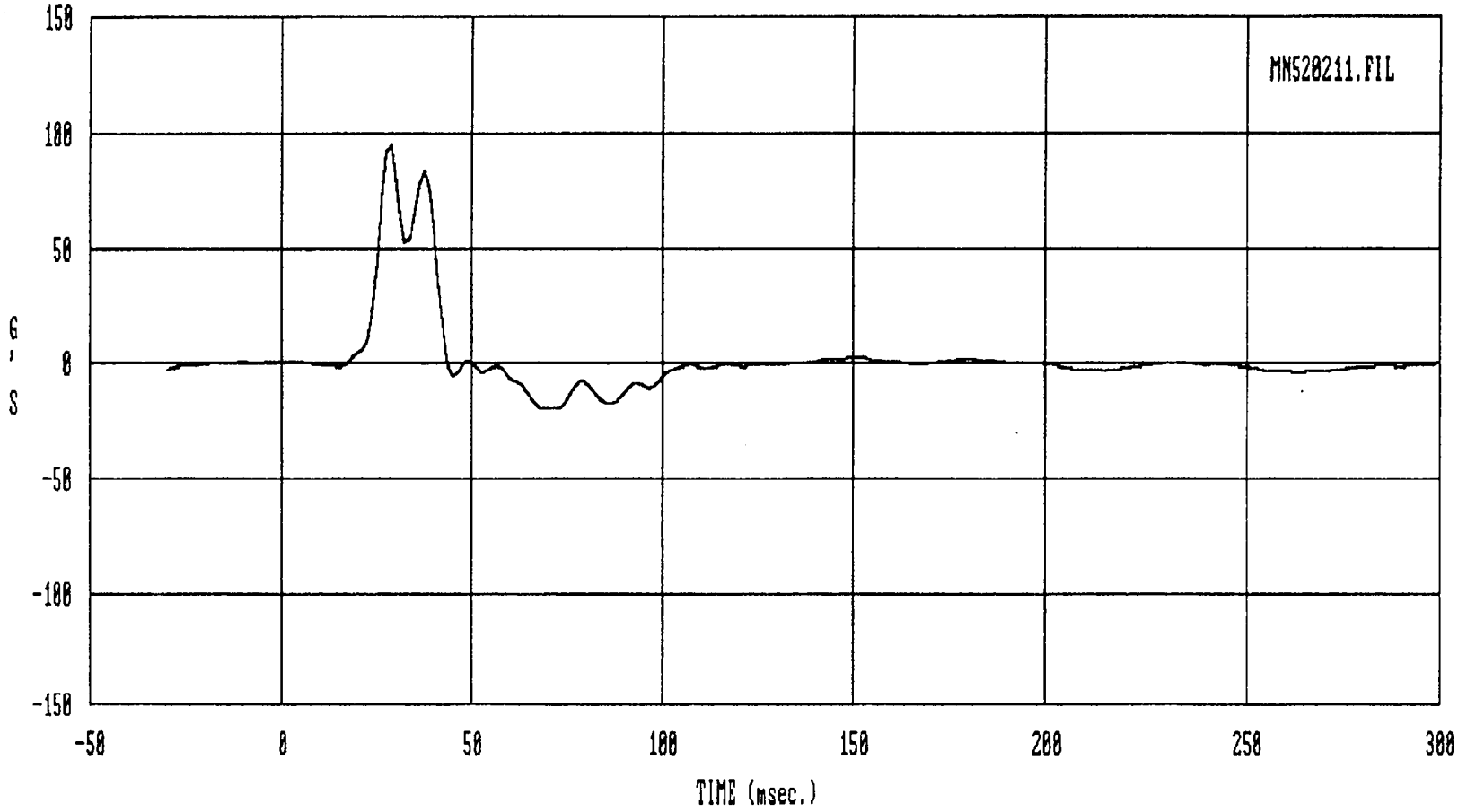
Curve: Driver lower spine acceleration -- Primary Filter: FIR 100 Max = 101.26 Min = -28.234

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



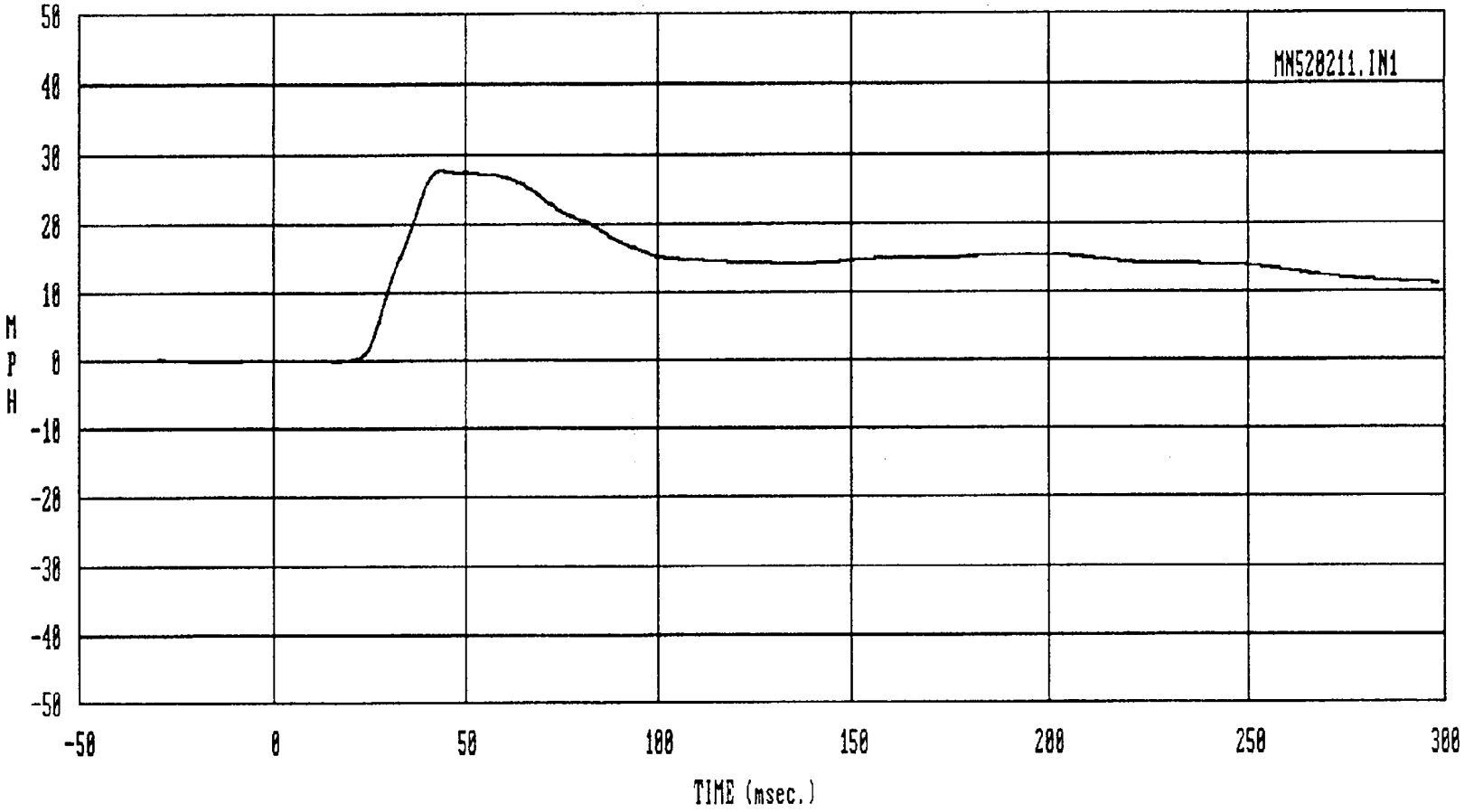
Curve: Driver lower spine delta V -- Primary Filter: FIR 100 Max = 29.223 Min = -.13017

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



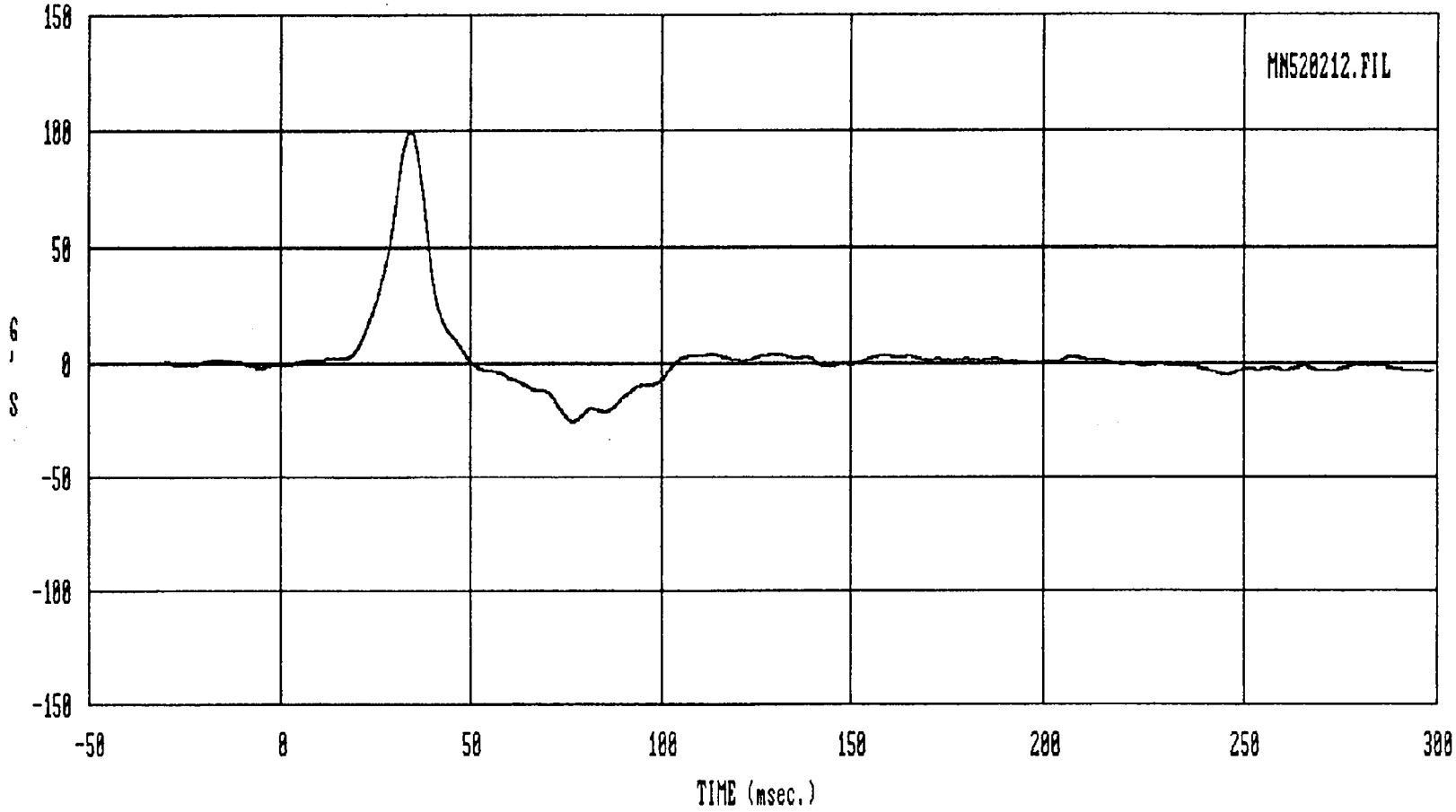
Curve: Driver lower spine acceleration -- Redundant Filter: FIR 100 Max = 96.113 Min = -20.180

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



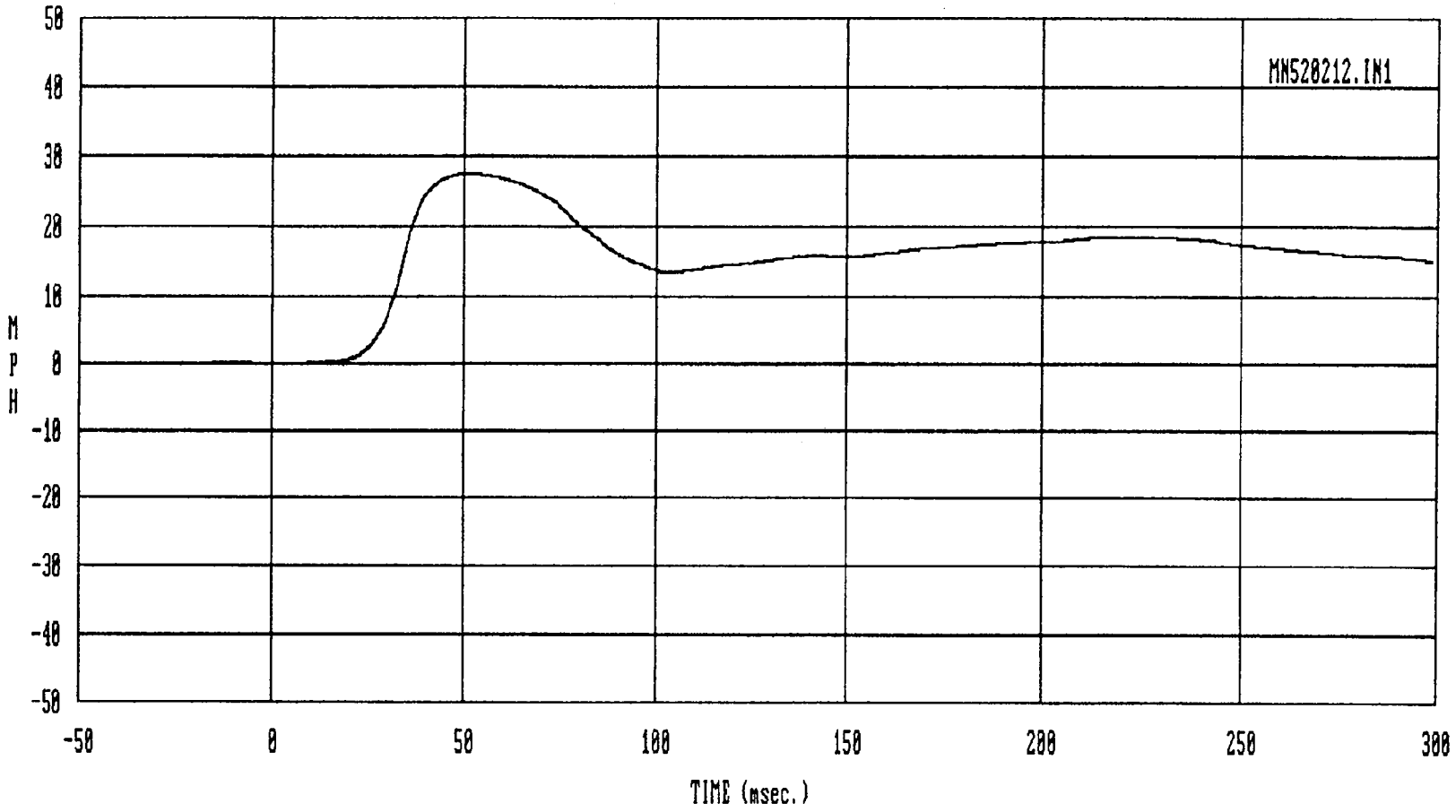
Curve: Driver lower spine delta V — Redundant Filter: FIR 100 Max = 27.898 Min = -.11775

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



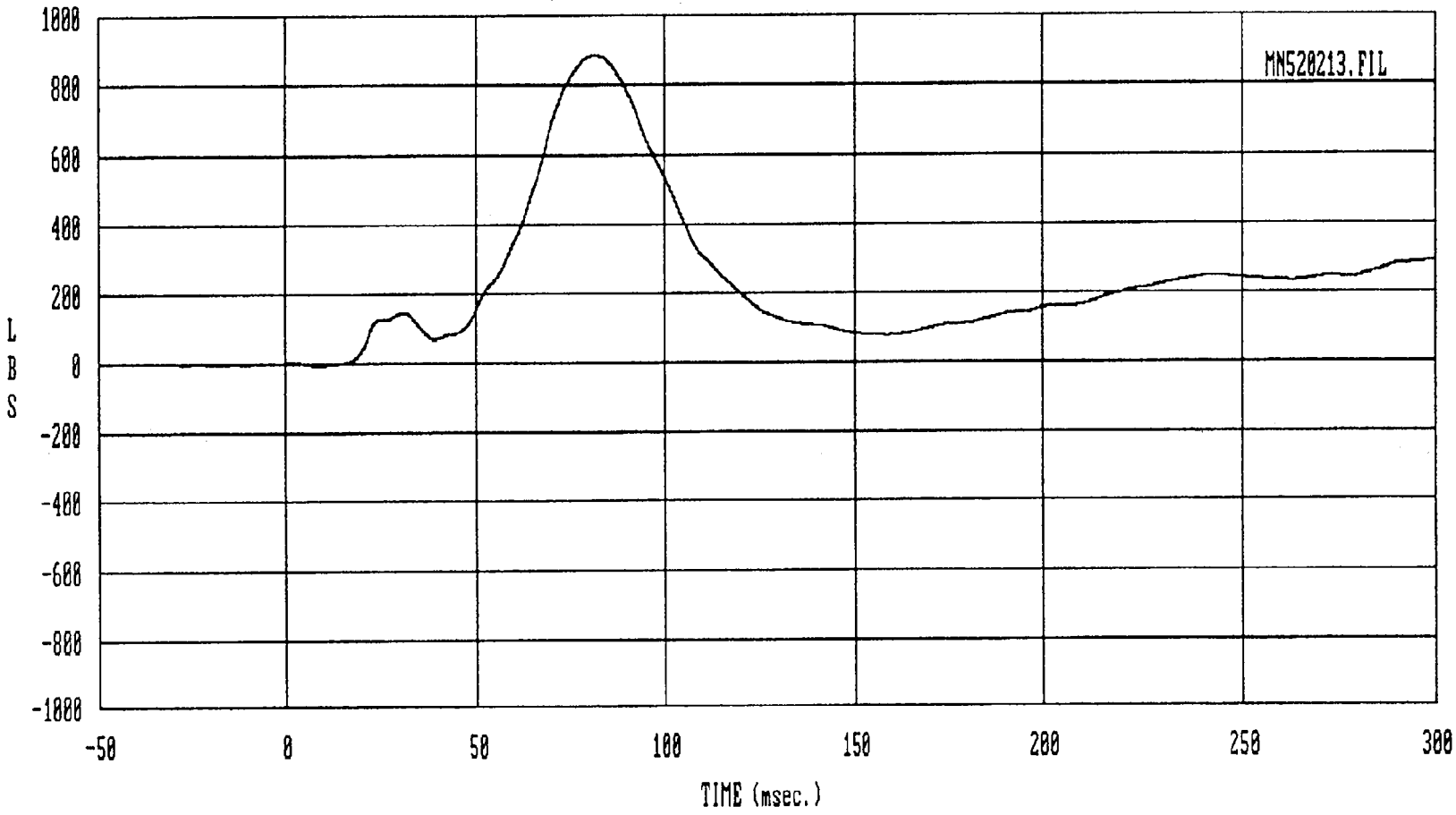
Curve: Driver pelvis acceleration Filter: FIR 100 Max = 101.19 Min = -25.183

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



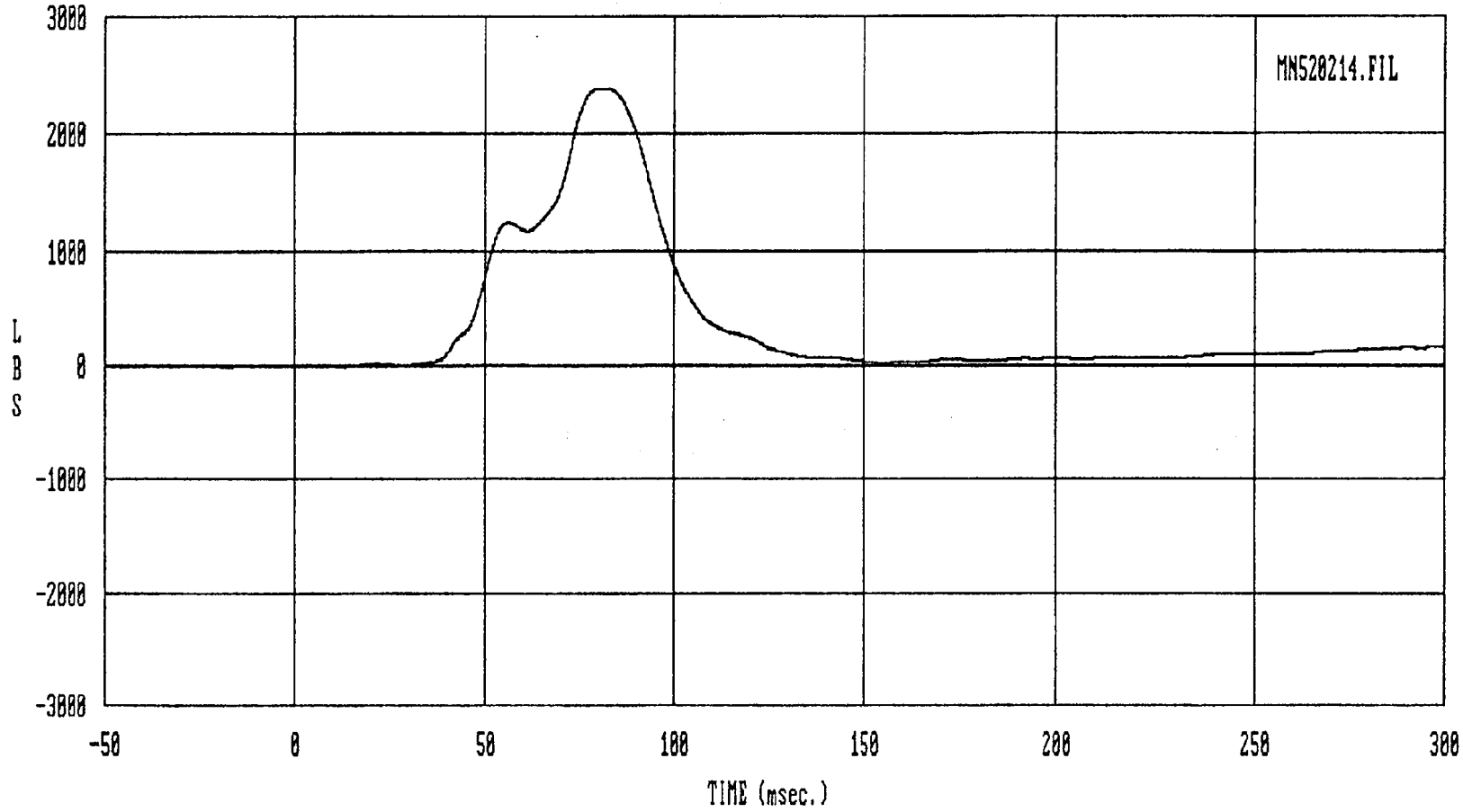
Curve: Driver pelvis delta V Filter: FIR 100 Max = 27.598 Min = -.49727E-01

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



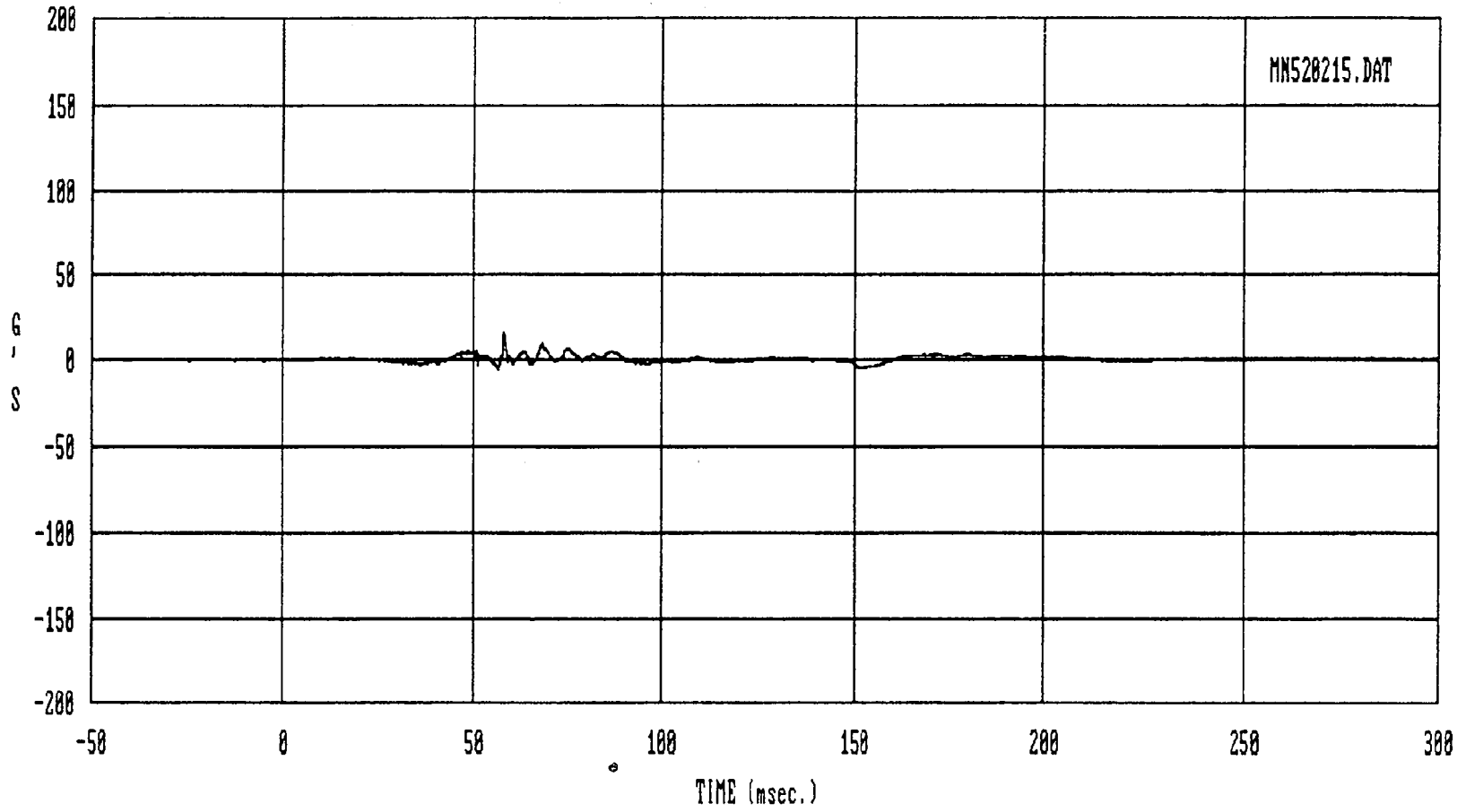
Curve: Driver lap belt load Filter: SAE CLASS 60 Max = 884.10 Min = -6.4455

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



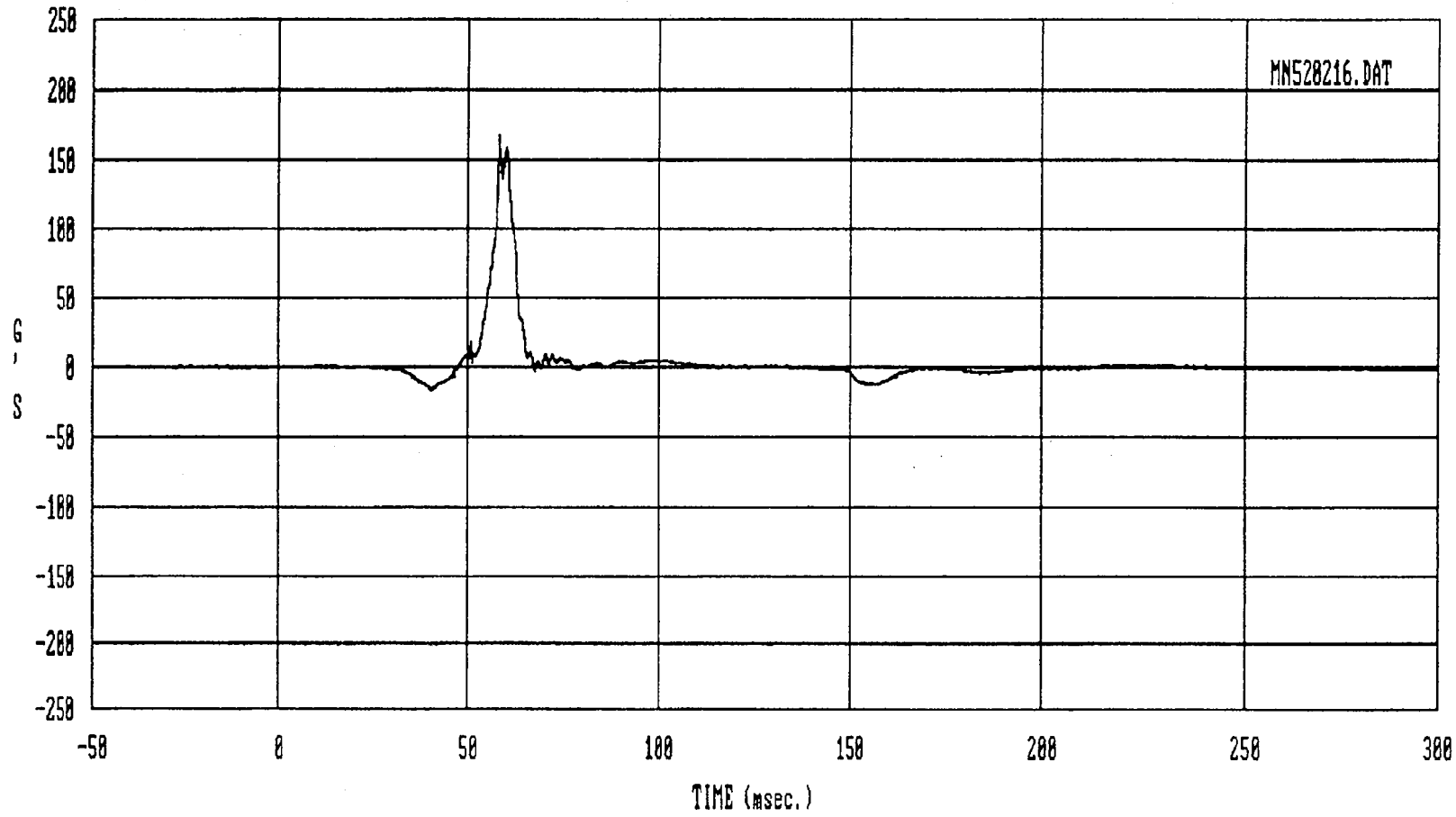
Curve: Driver shoulder belt load Filter: SAE CLASS 60 Max = 2383.6 Min = -5.2440

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



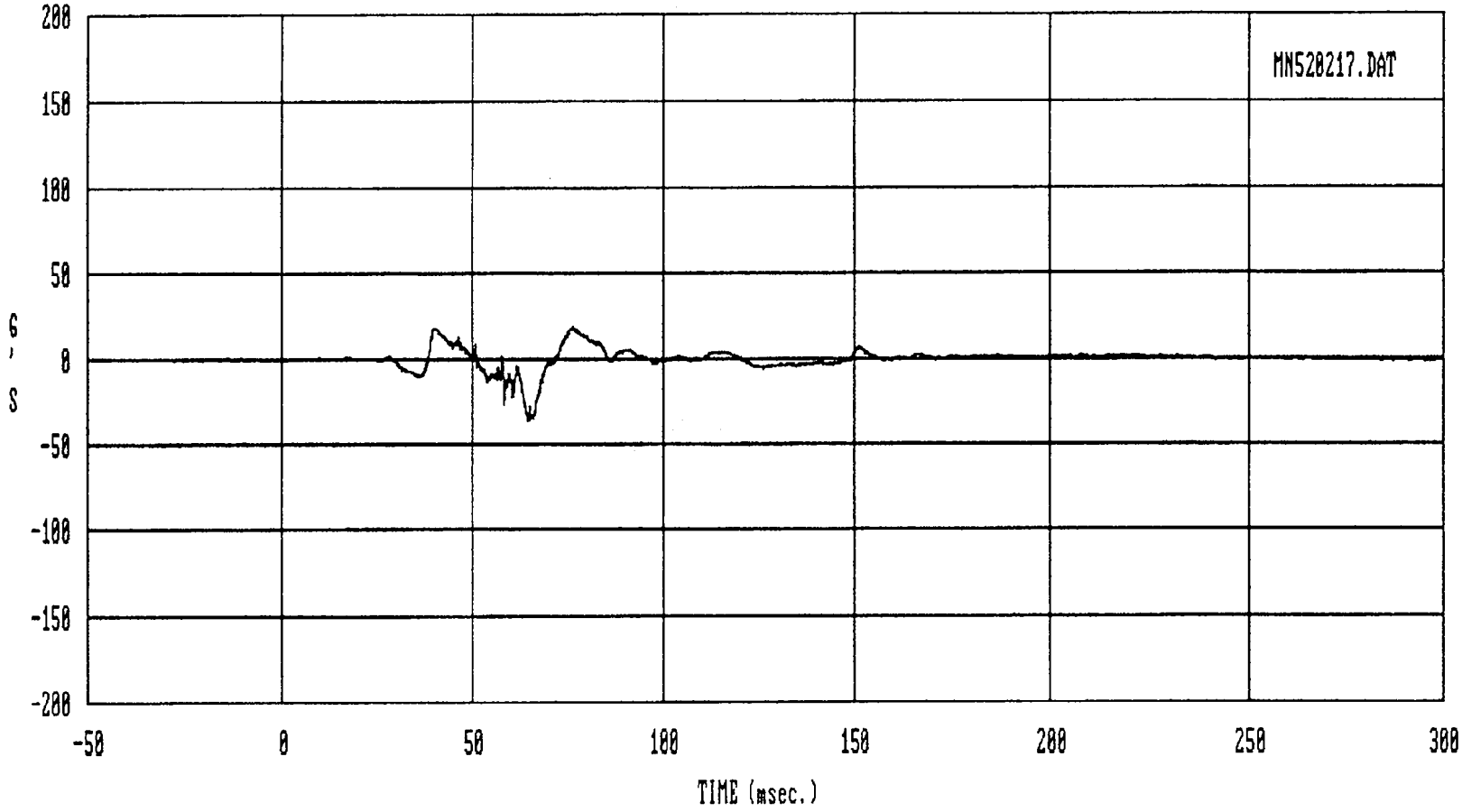
Curve: Passenger Head acceleration -- X axis Filter: SAE CLASS 1000 Max = 20.600 Min = -9.2240

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



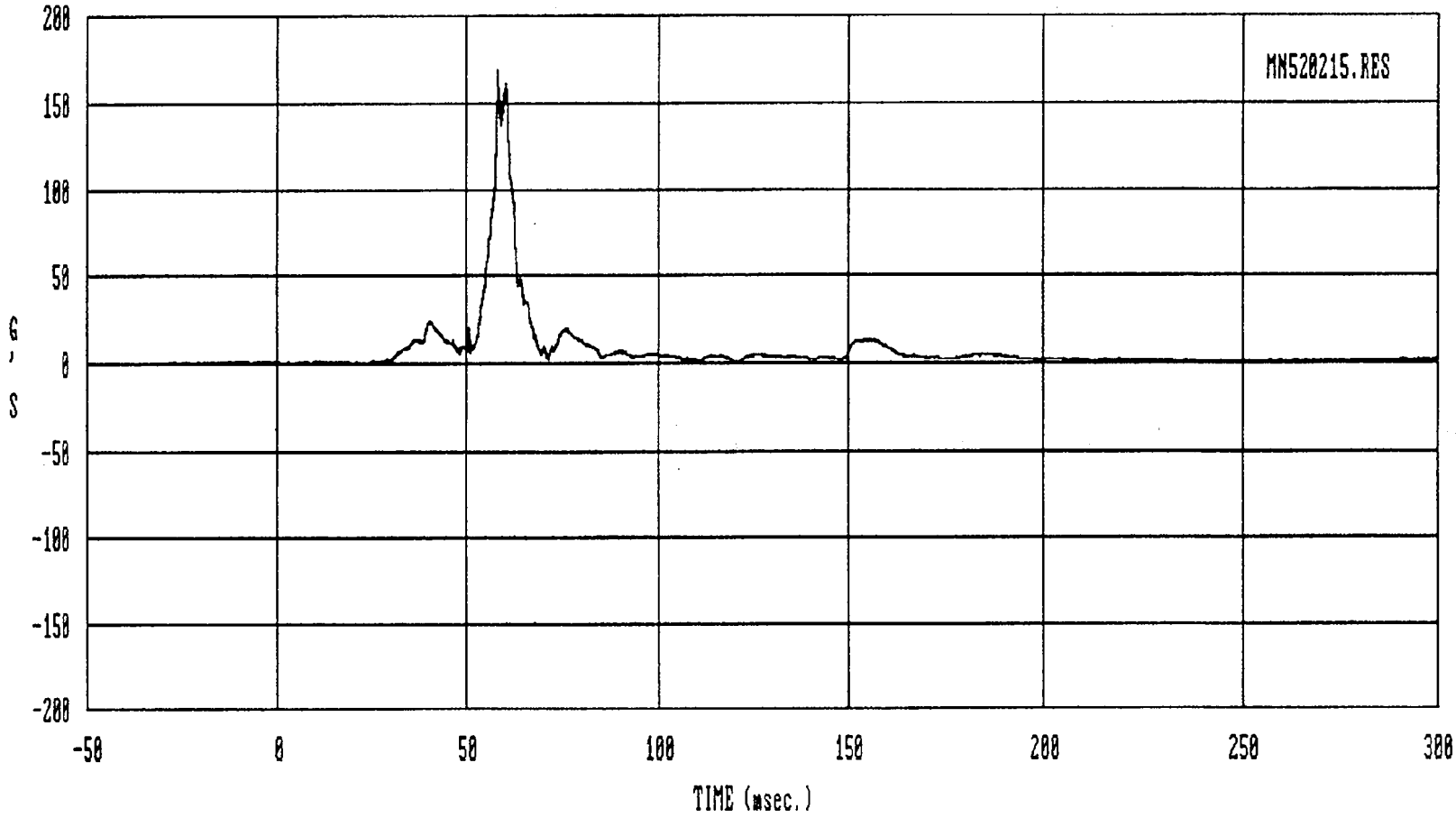
Curve: Passenger Head acceleration -- Y axis Filter: SAE CLASS 1000 Max = 167.75 Min = -16.994

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



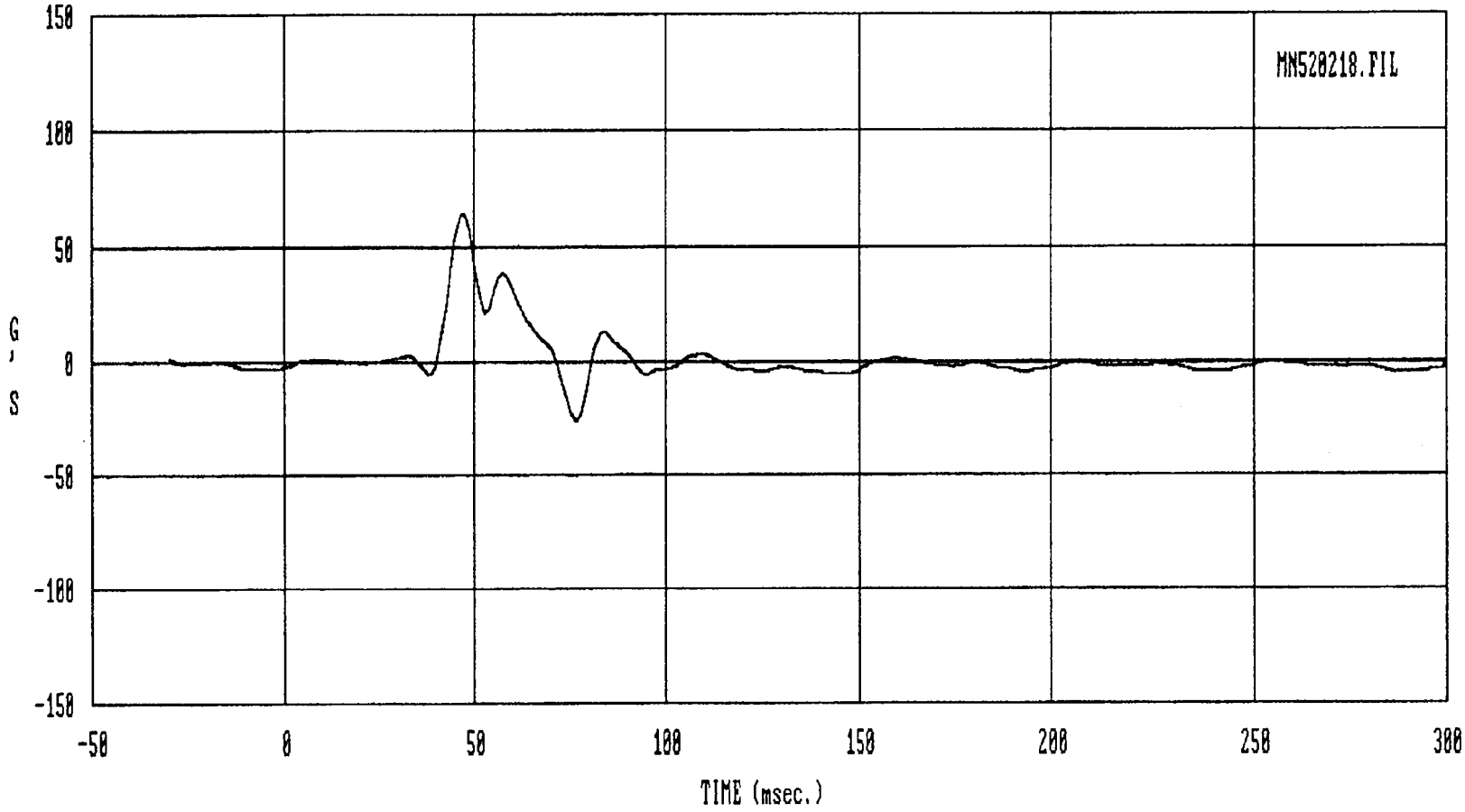
Curve: Passenger Head acceleration -- Z axis Filter: SAE CLASS 1000 Max = 18.667 Min = -45.871

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



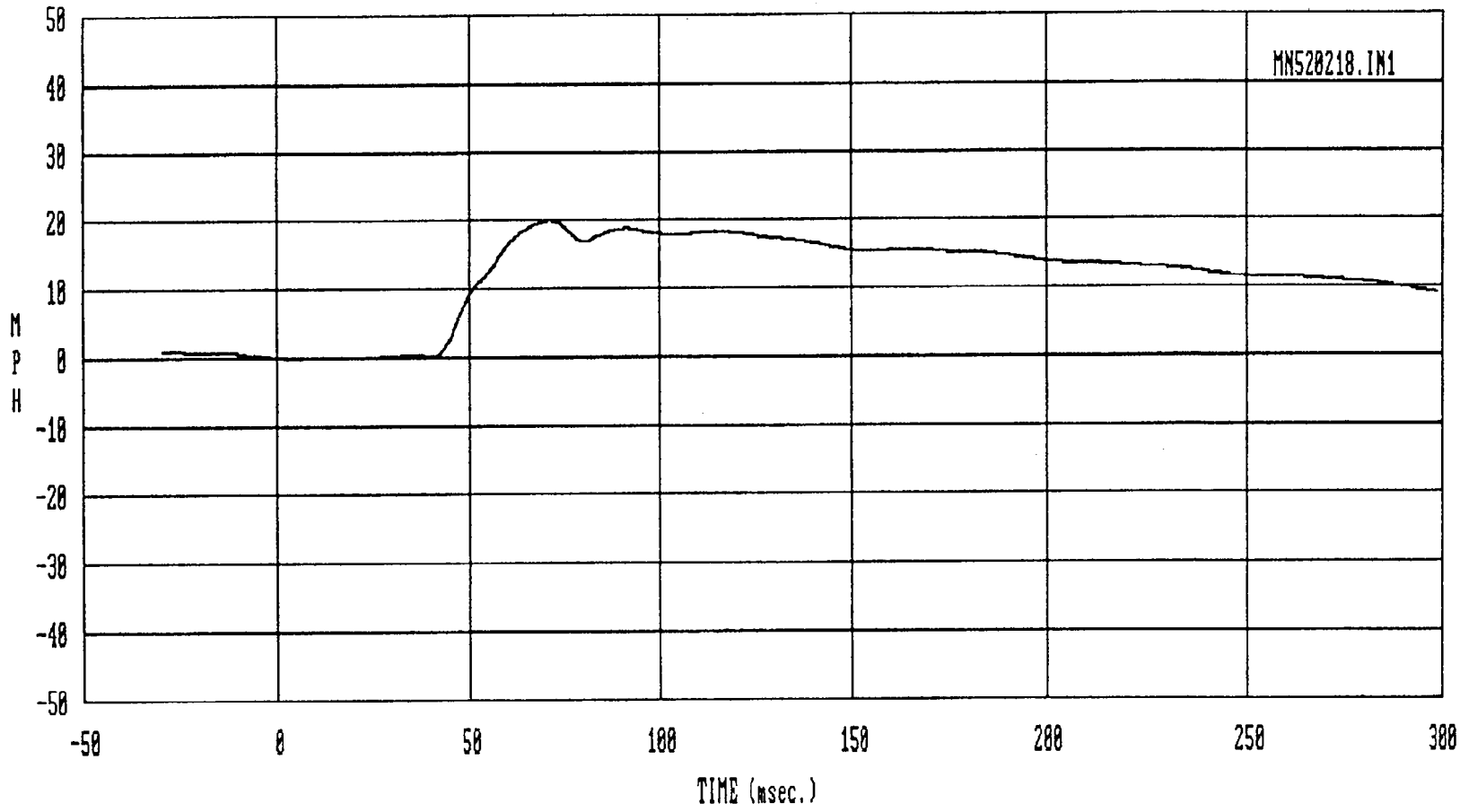
Curve: Passenger head resultant acceleration Filter: SAE CLASS 1000 Max = 168.84 Min = .00000

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



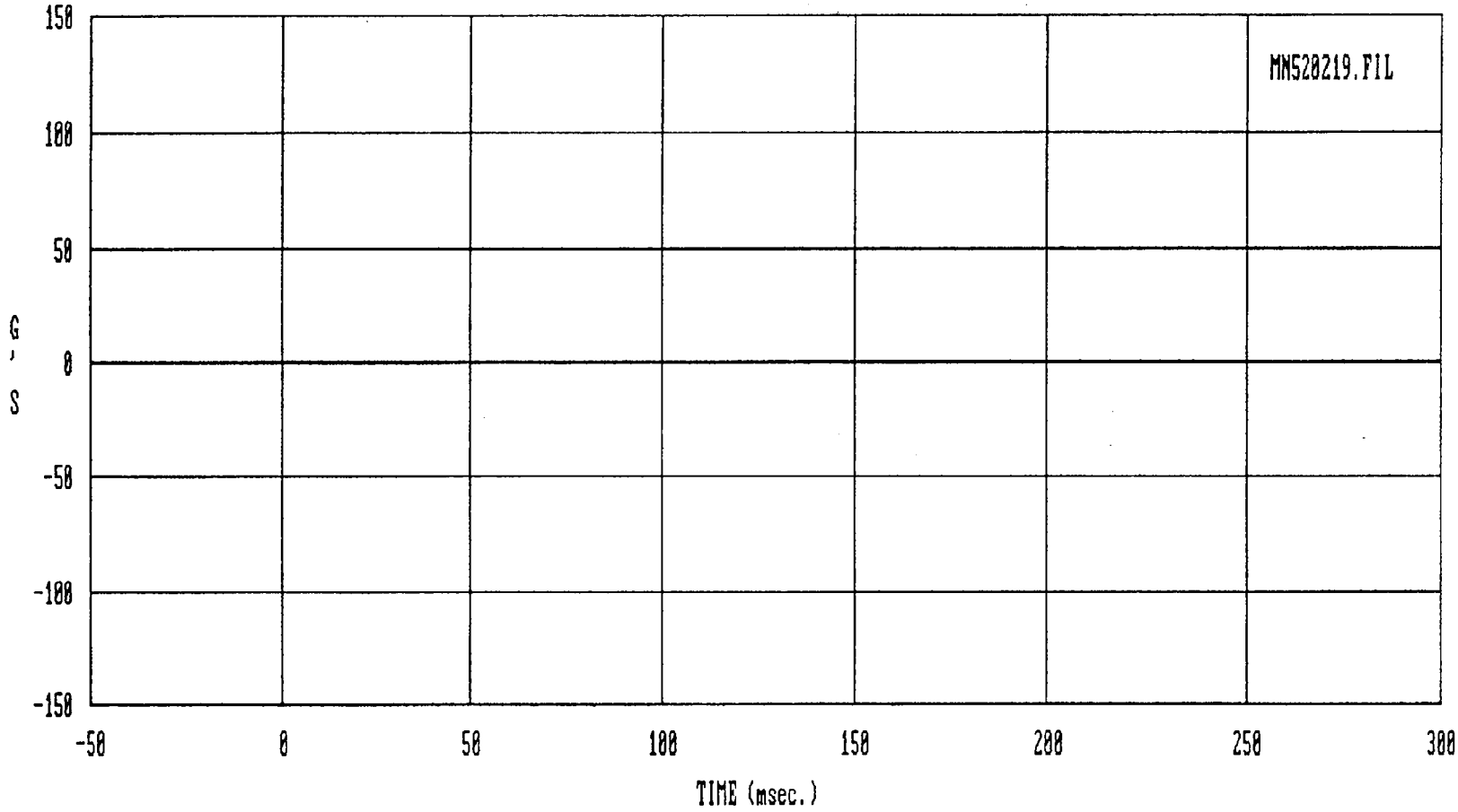
Curve: Passenger upper spine acceleration -- Primary Filter: FIR 100 Max = 65.178 Min = -25.655

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



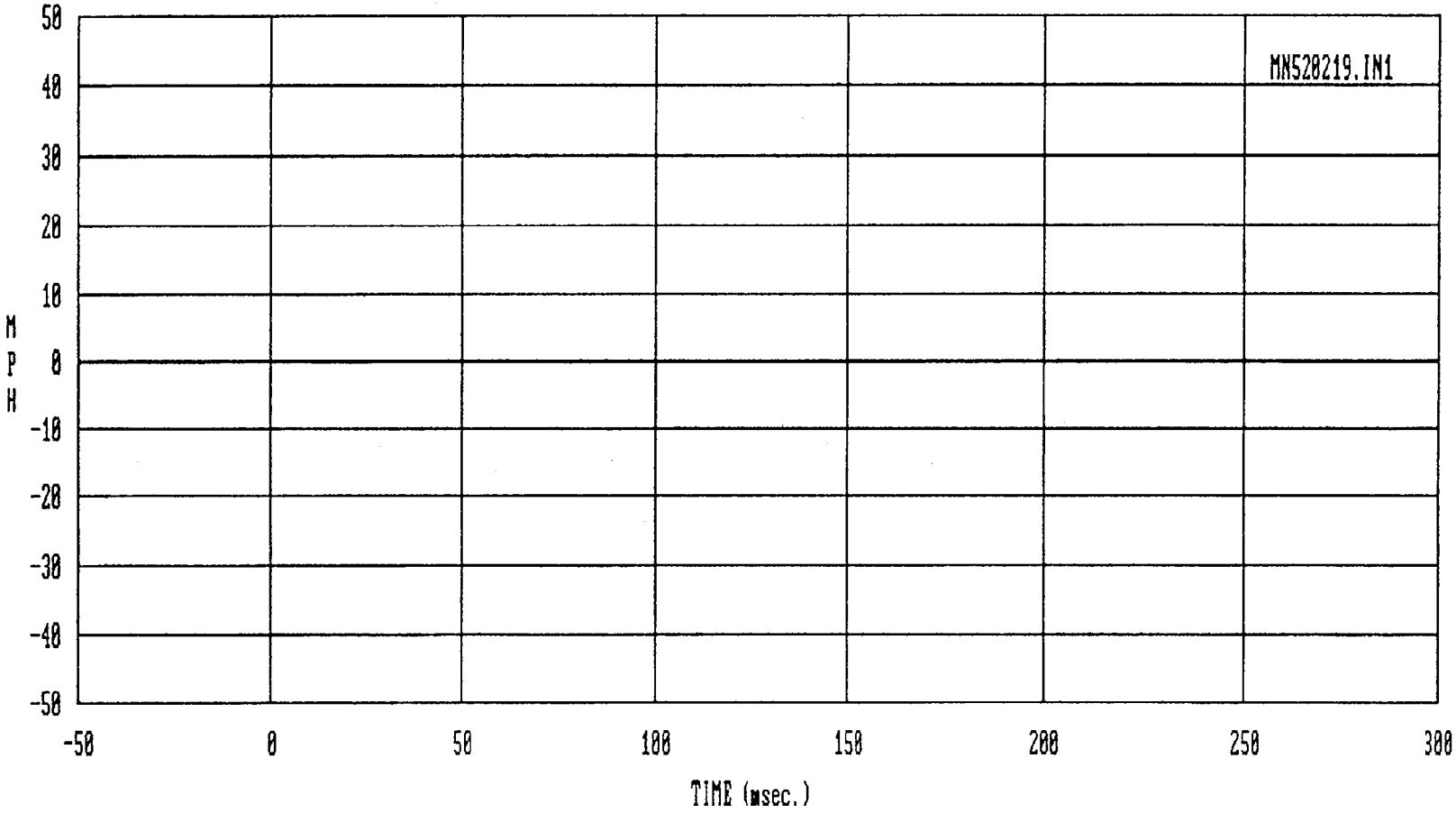
Curve: Passenger upper spine delta V -- Primary Filter: FIR 100 Max = 19.985 Min = -.11021

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



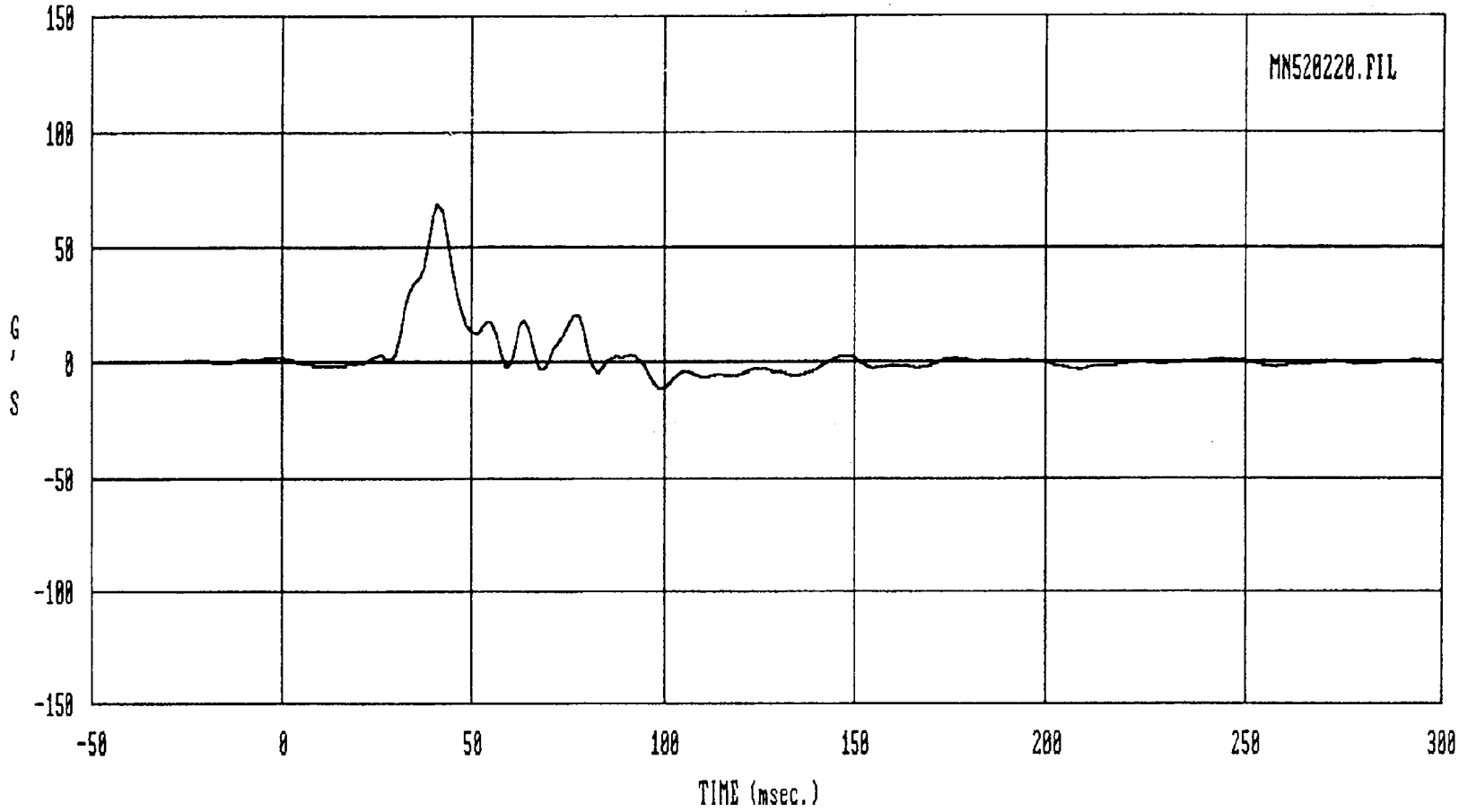
Curve: Passenger upper spine acceleration -- Redundant Filter: FIR 100 Max = .00000 Min = .00000

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



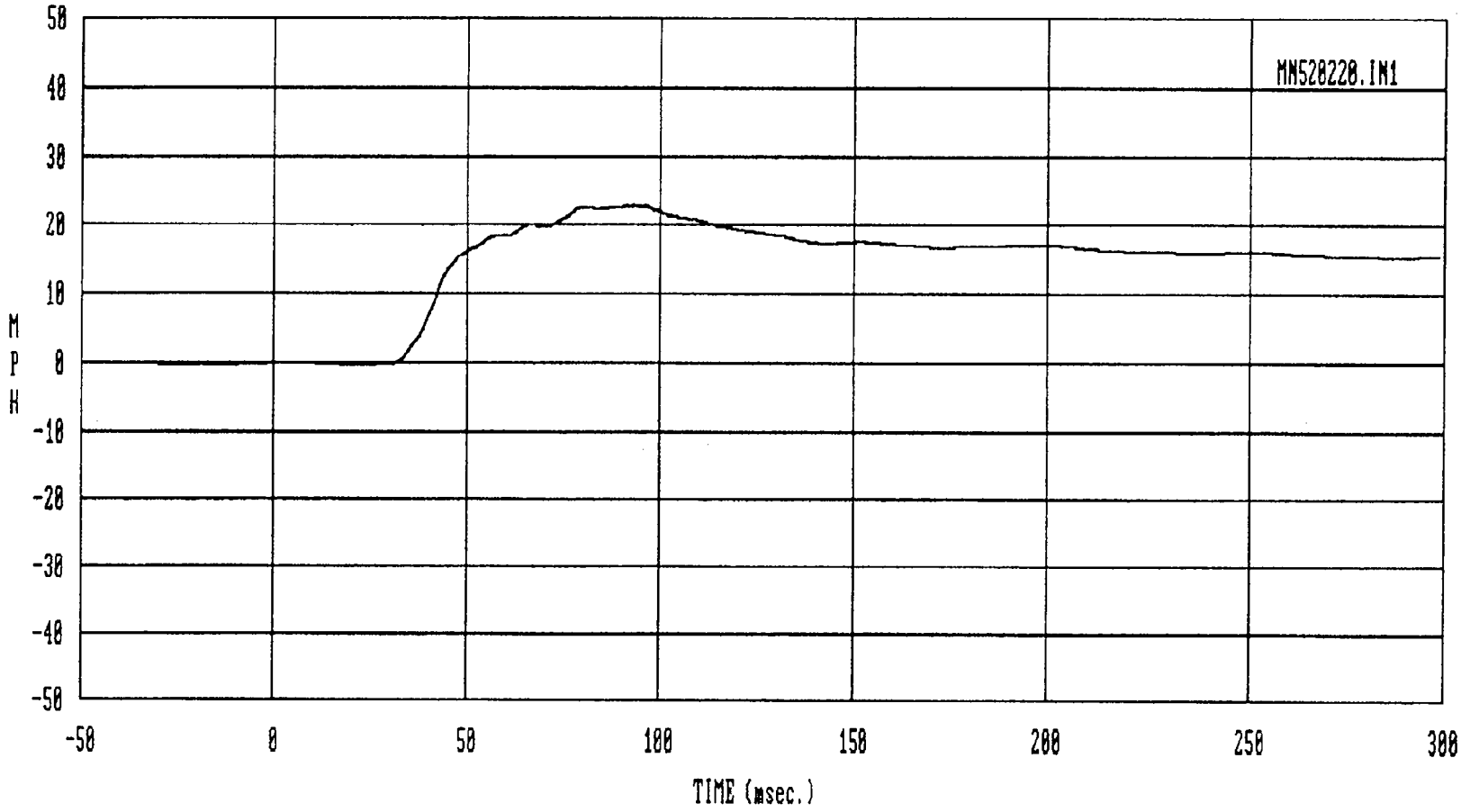
Curve: Passenger upper spine delta V -- Redundant Filter: FIR 100 Max = .00000 Min = .00000

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



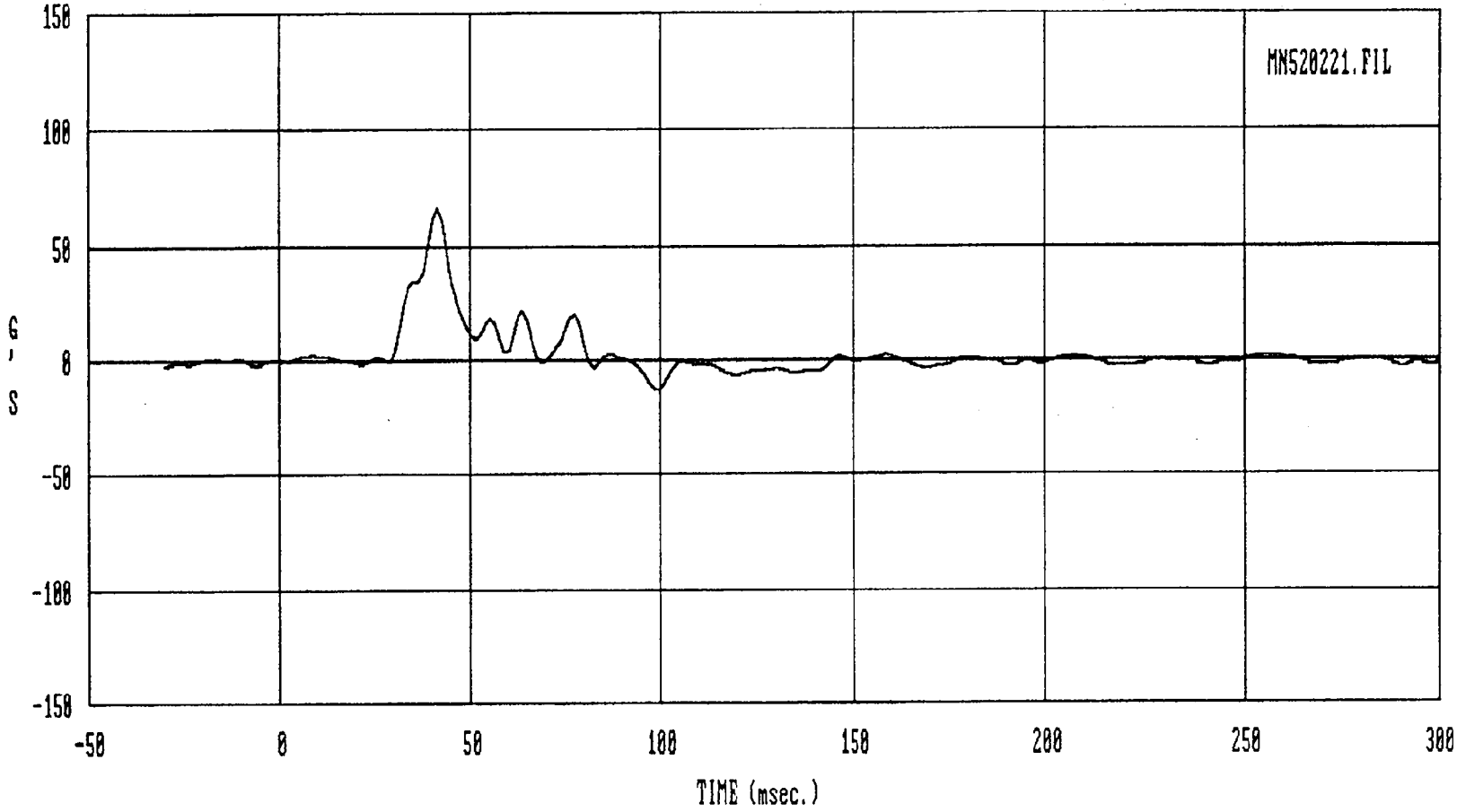
Curve: Passenger upper rib acceleration -- Primary Filter: FIR 100 Max = 69.042 Min = -11.164

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



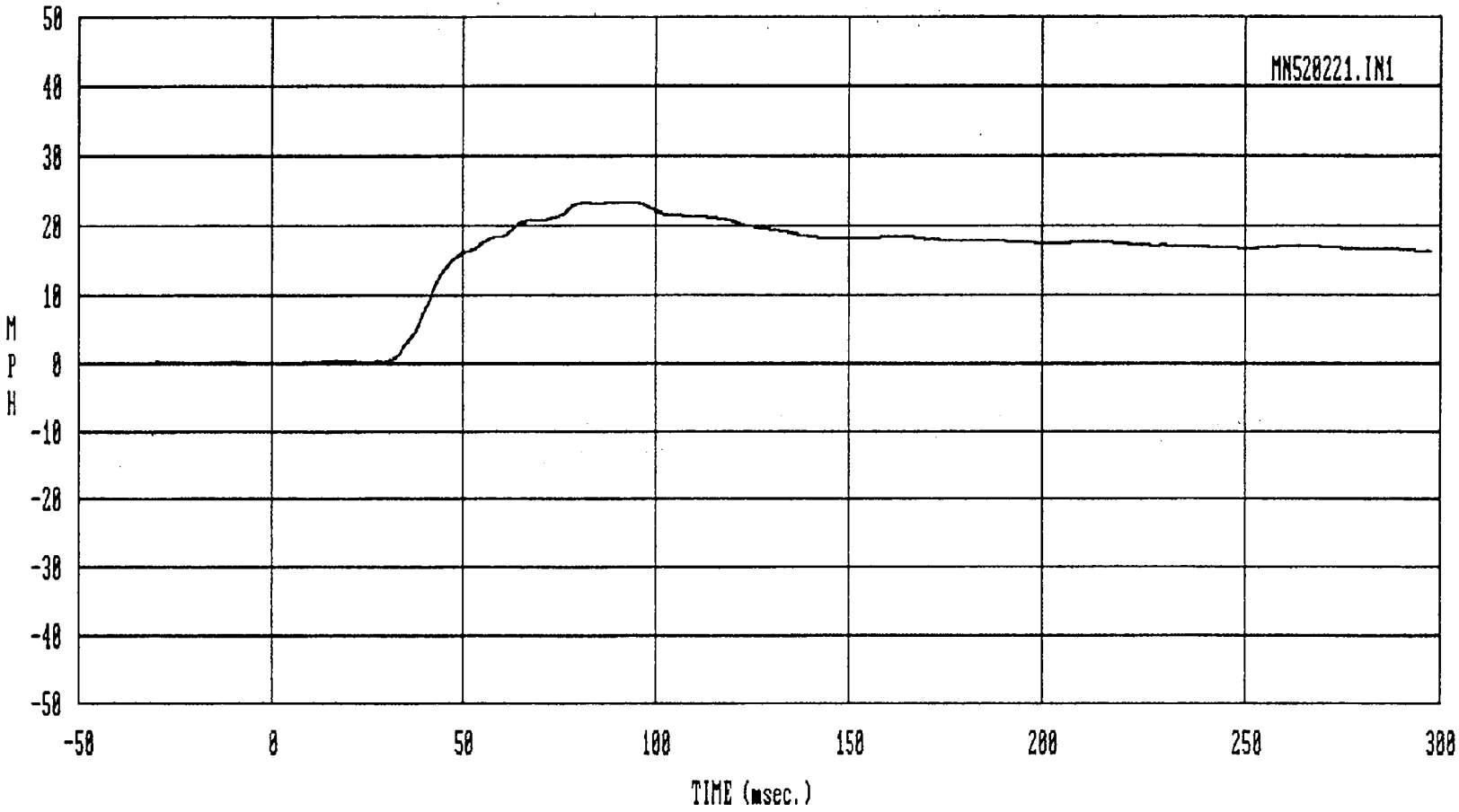
Curve: Passenger upper rib delta V — Primary Filter: FIR 100 Max = 22.853 Min = -.39186

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



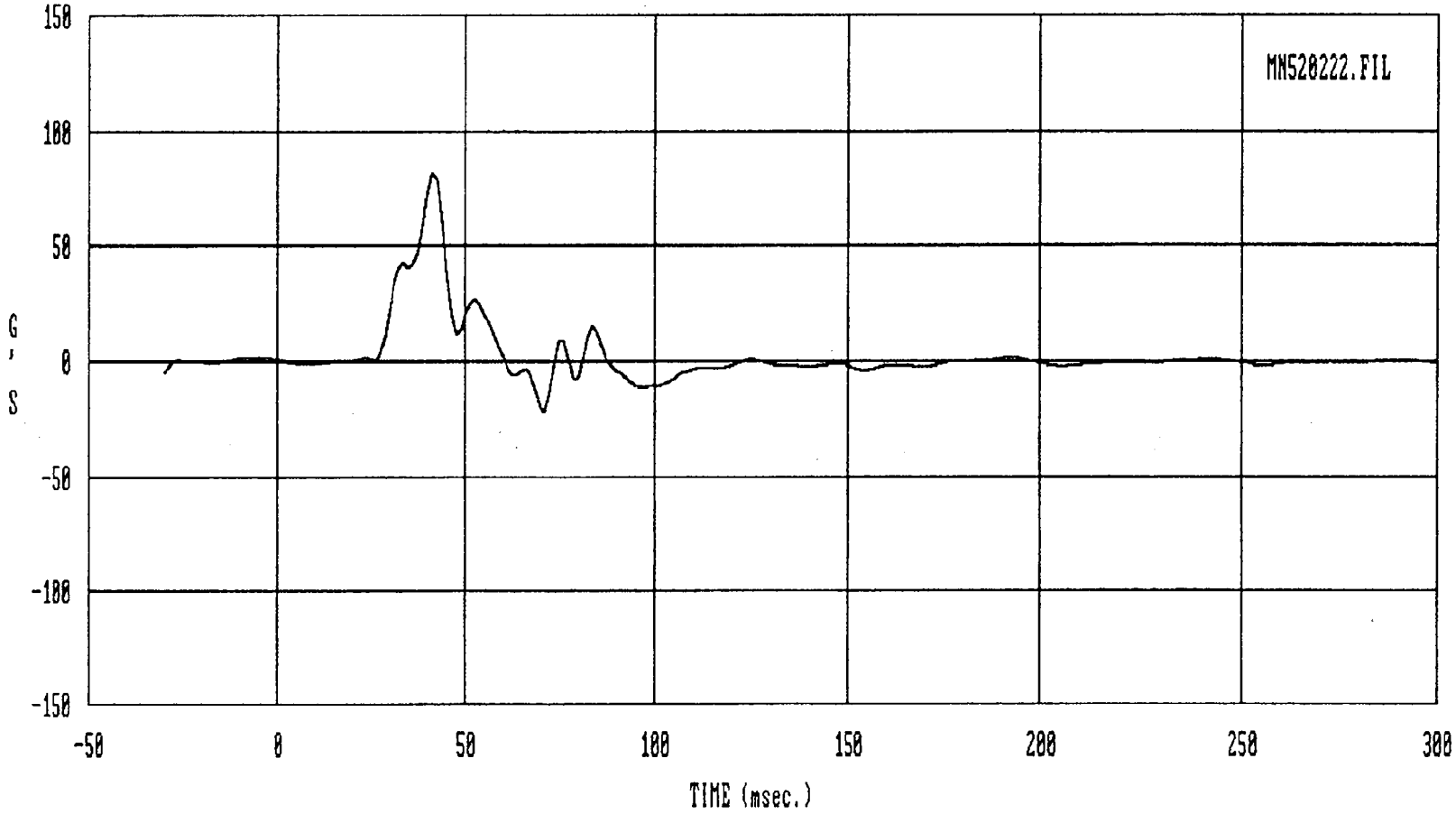
Curve: Passenger upper rib acceleration -- Redundant Filter: FIR 100 Max = 66.877 Min = -13.412

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



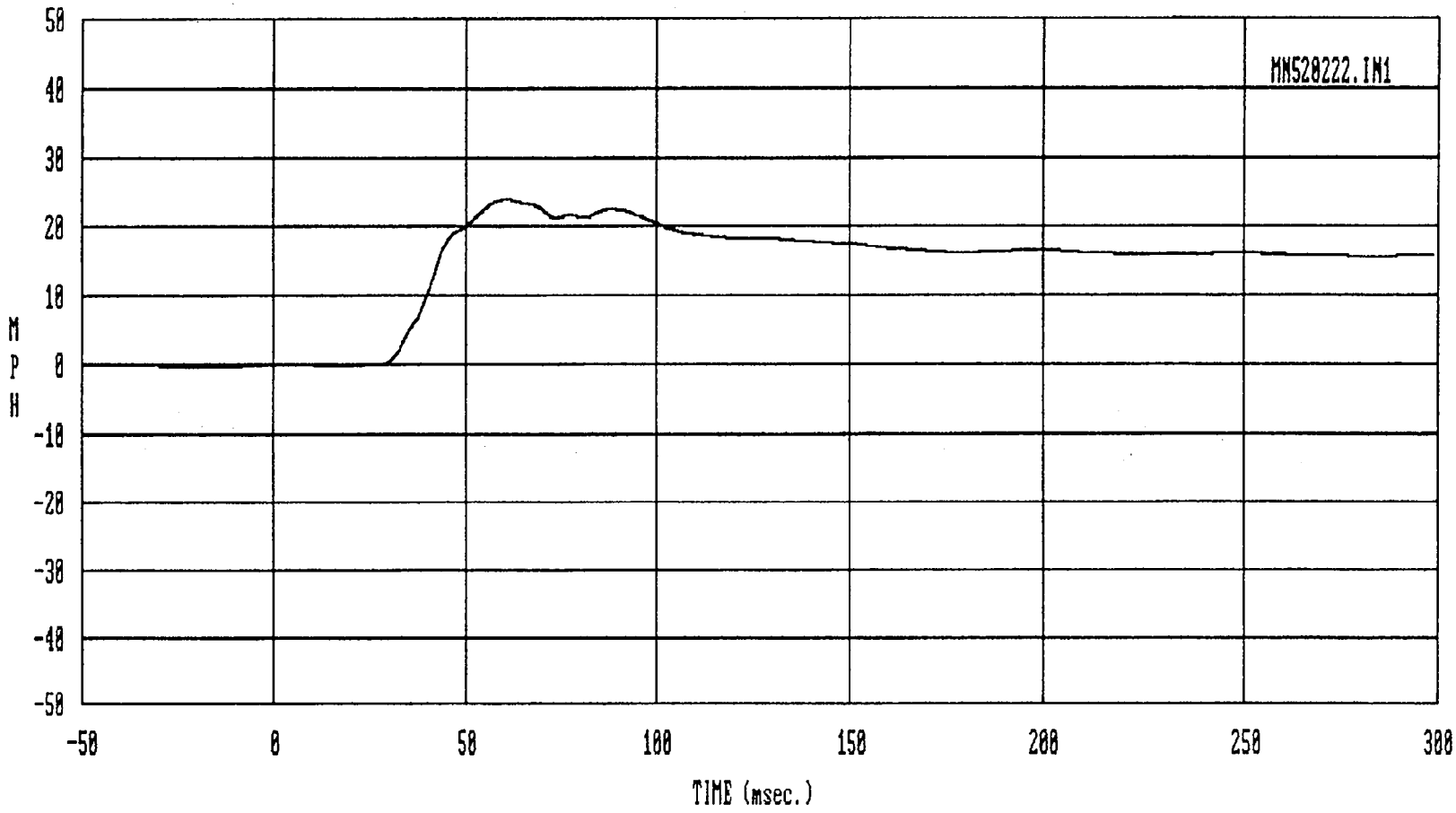
Curve: Passenger upper rib delta V -- Redundant Filter: FIR 100 Max = 23.432 Min = -.38289E-01

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



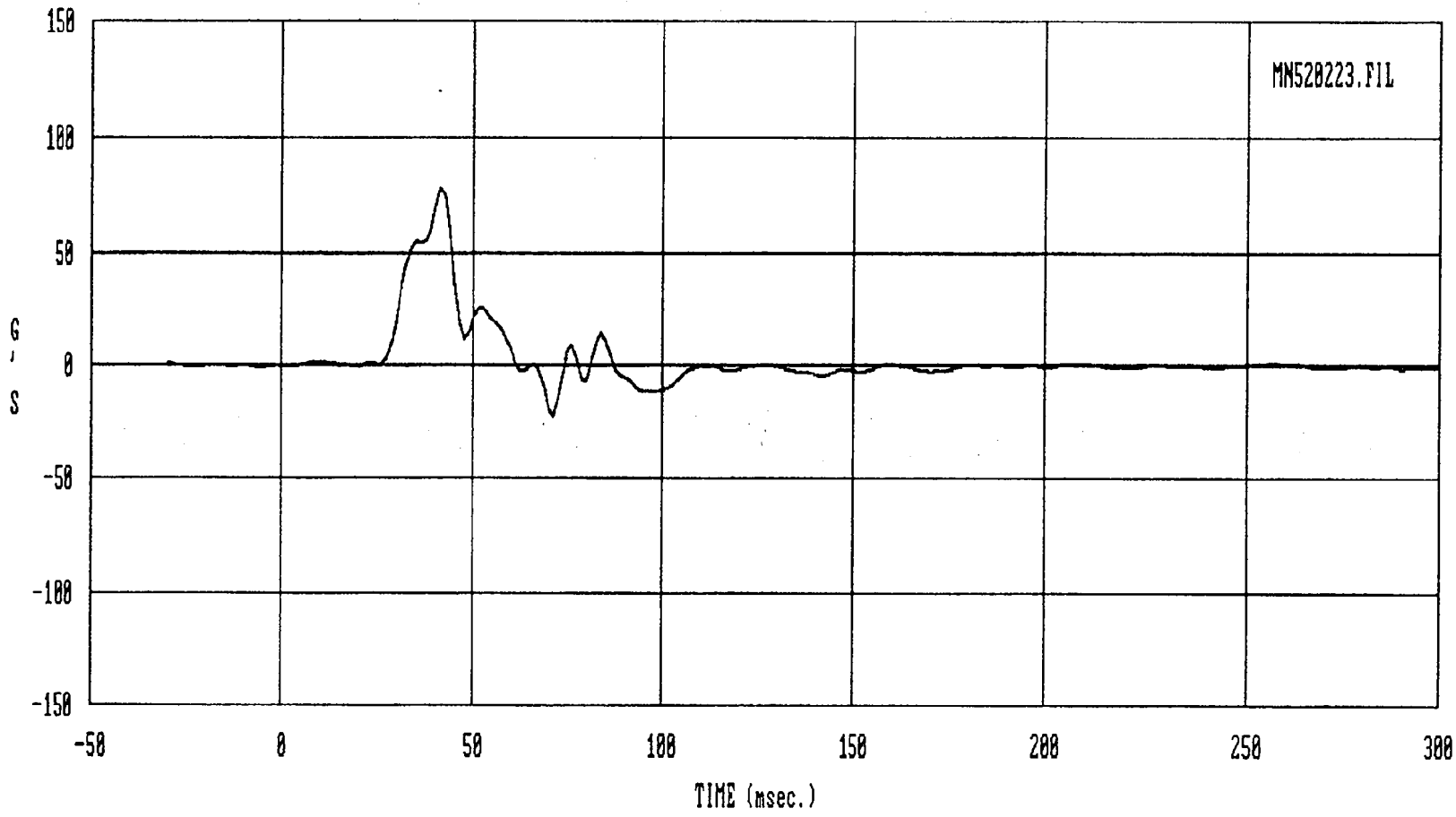
Curve: Passenger lower rib acceleration -- Primary Filter: FIR 100 Max = 82.633 Min = -21.784

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



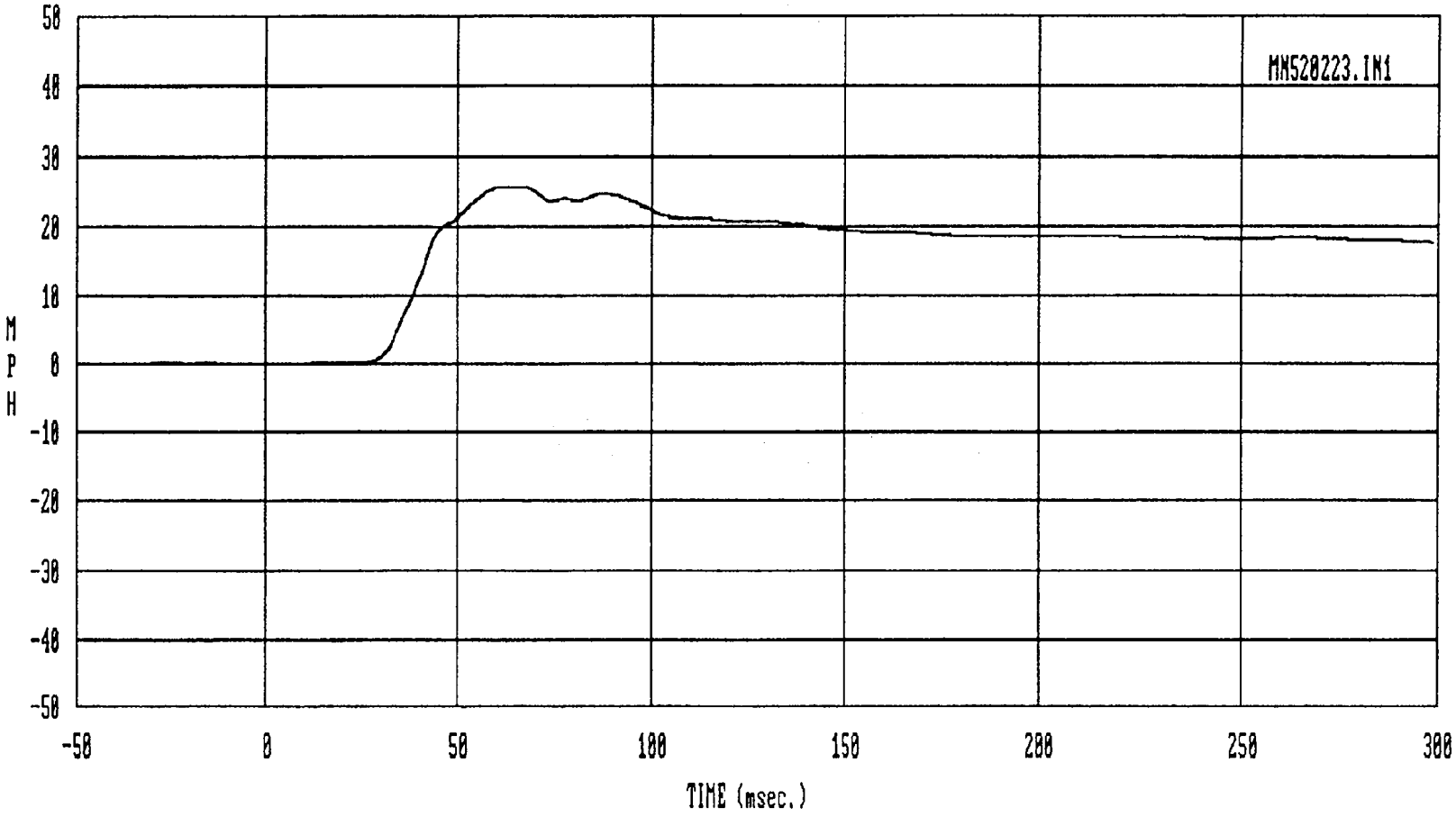
Curve: Passenger lower rib delta V -- Primary Filter: FIR 100 Max = 23.987 Min = -.14149

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



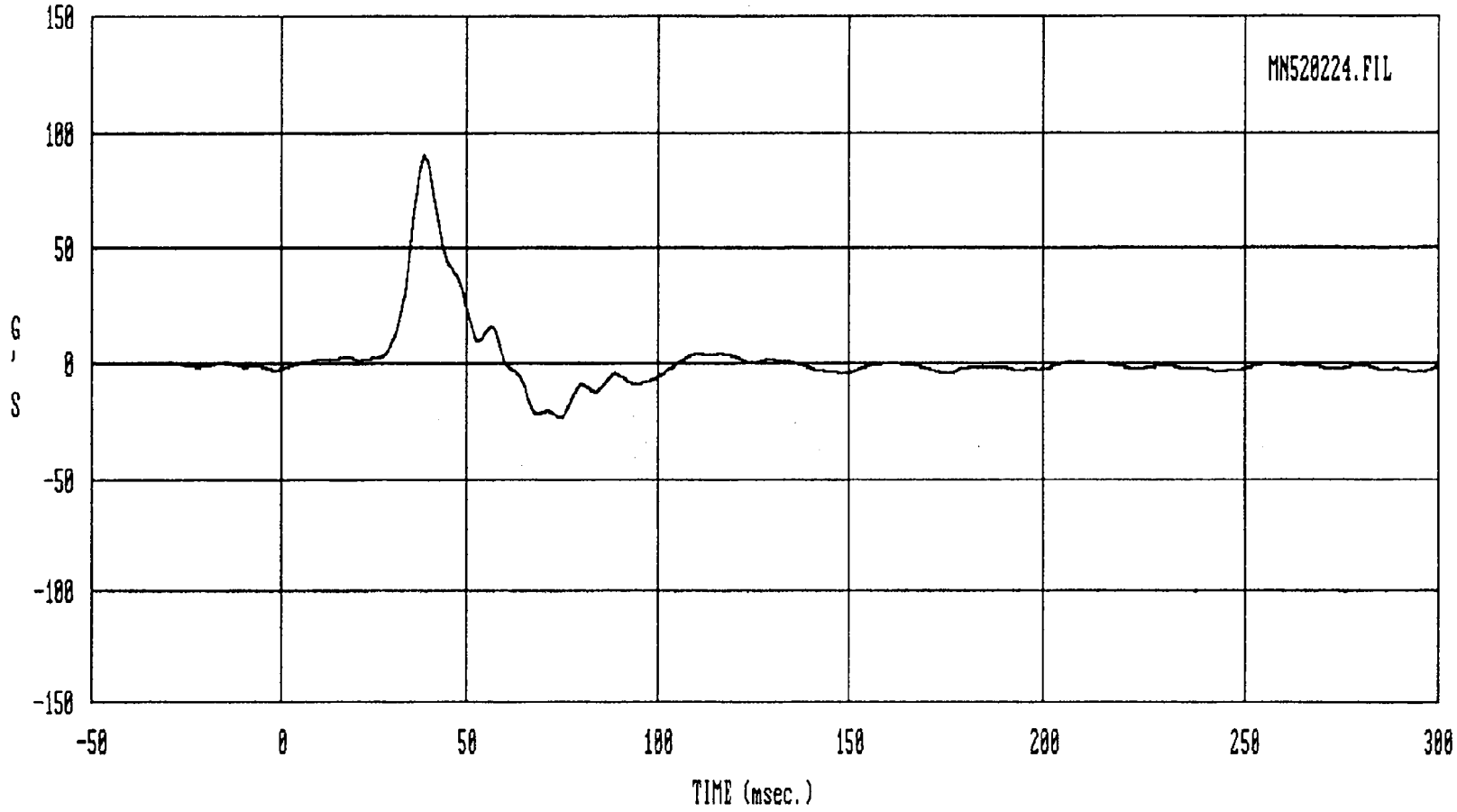
Curve: Passenger lower rib acceleration -- Redundant Filter: FIR 100 Max = 78.885 Min = -22.694

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



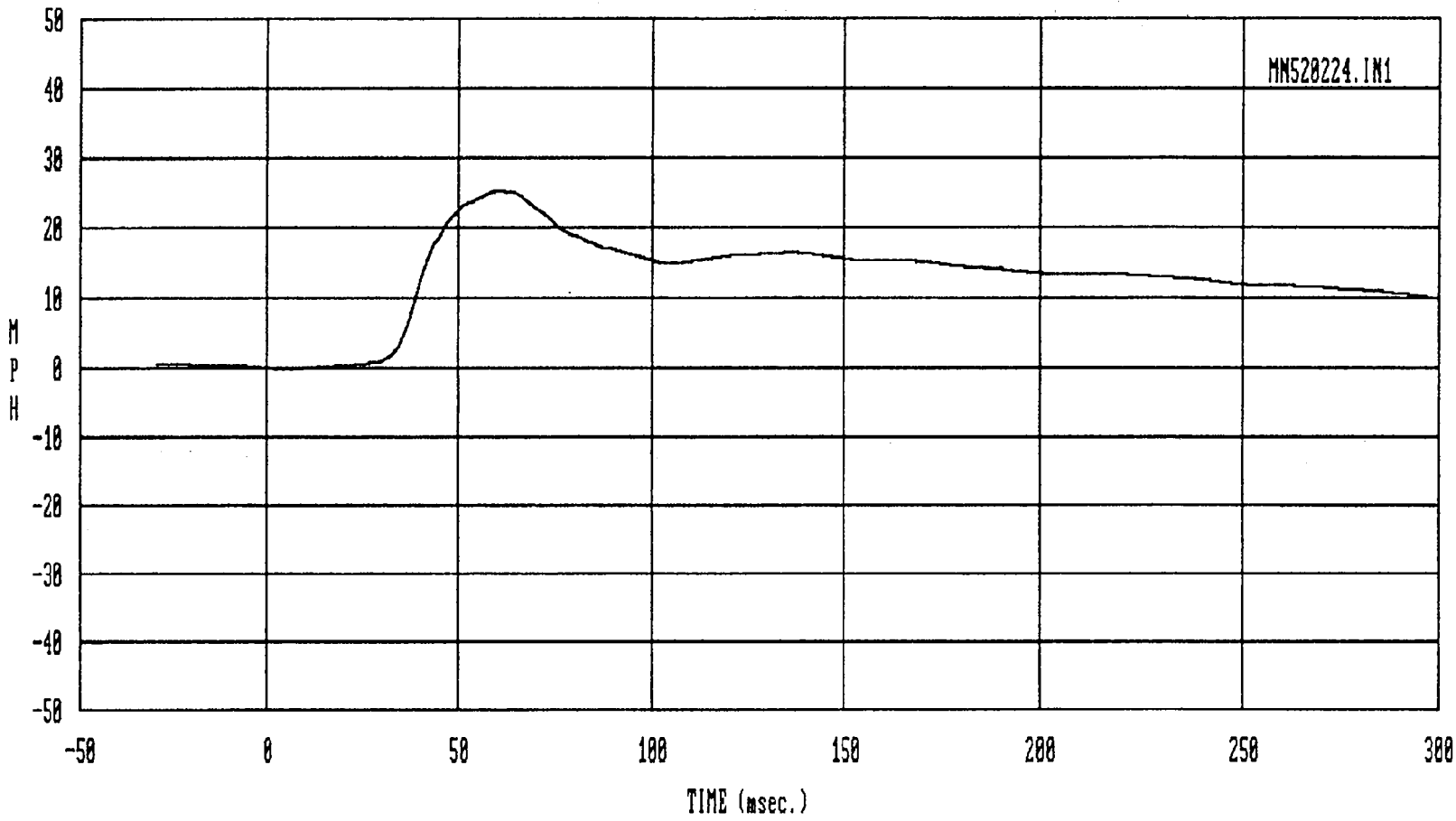
Curve: Passenger lower rib delta V -- Redundant Filter: FIR 180 Max = 25.804 Min = -.63848E-01

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



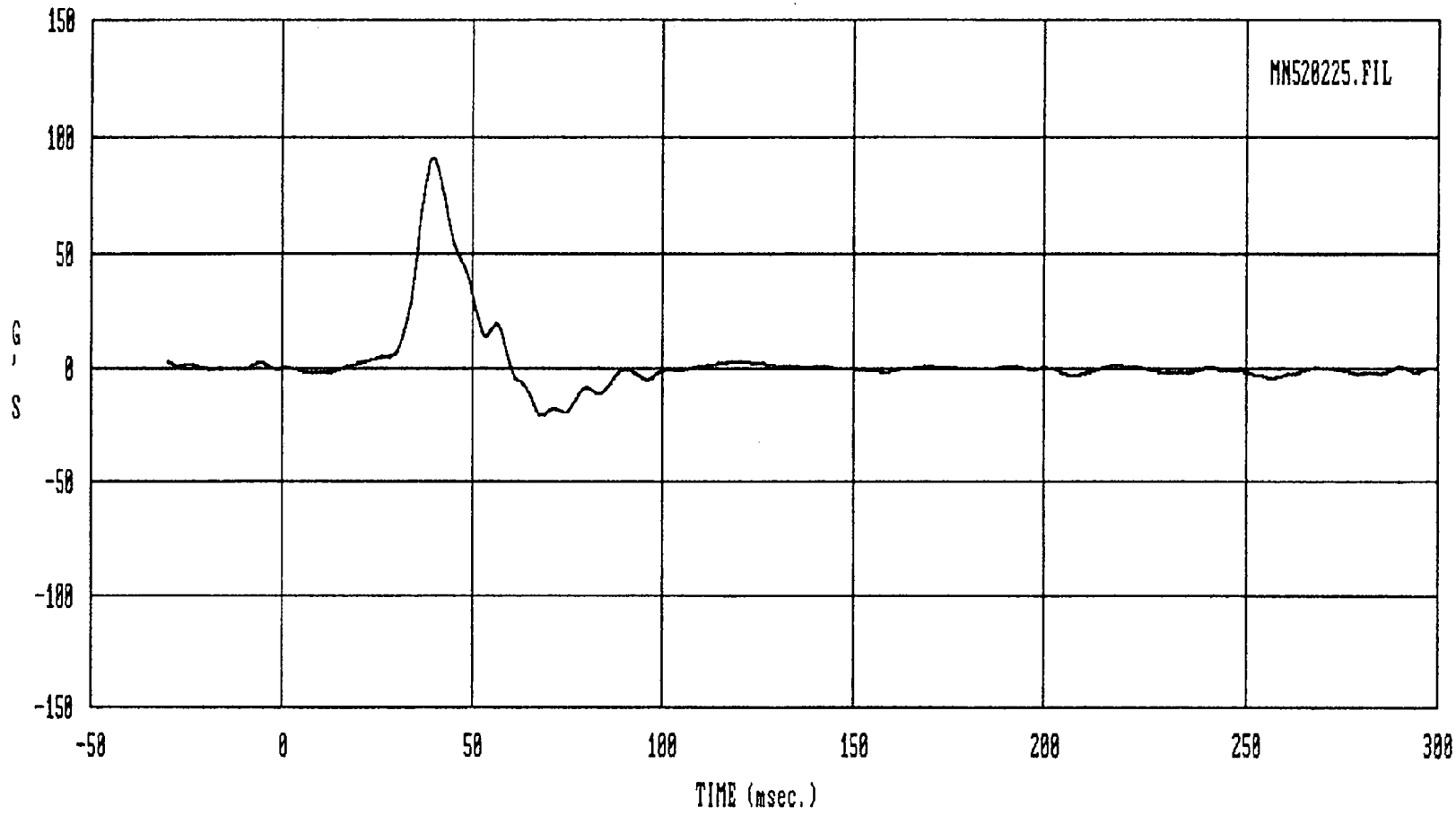
Curve: Passenger lower spine acceleration -- Primary Filter: FIR 100 Max = 90.643 Min = -23.109

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



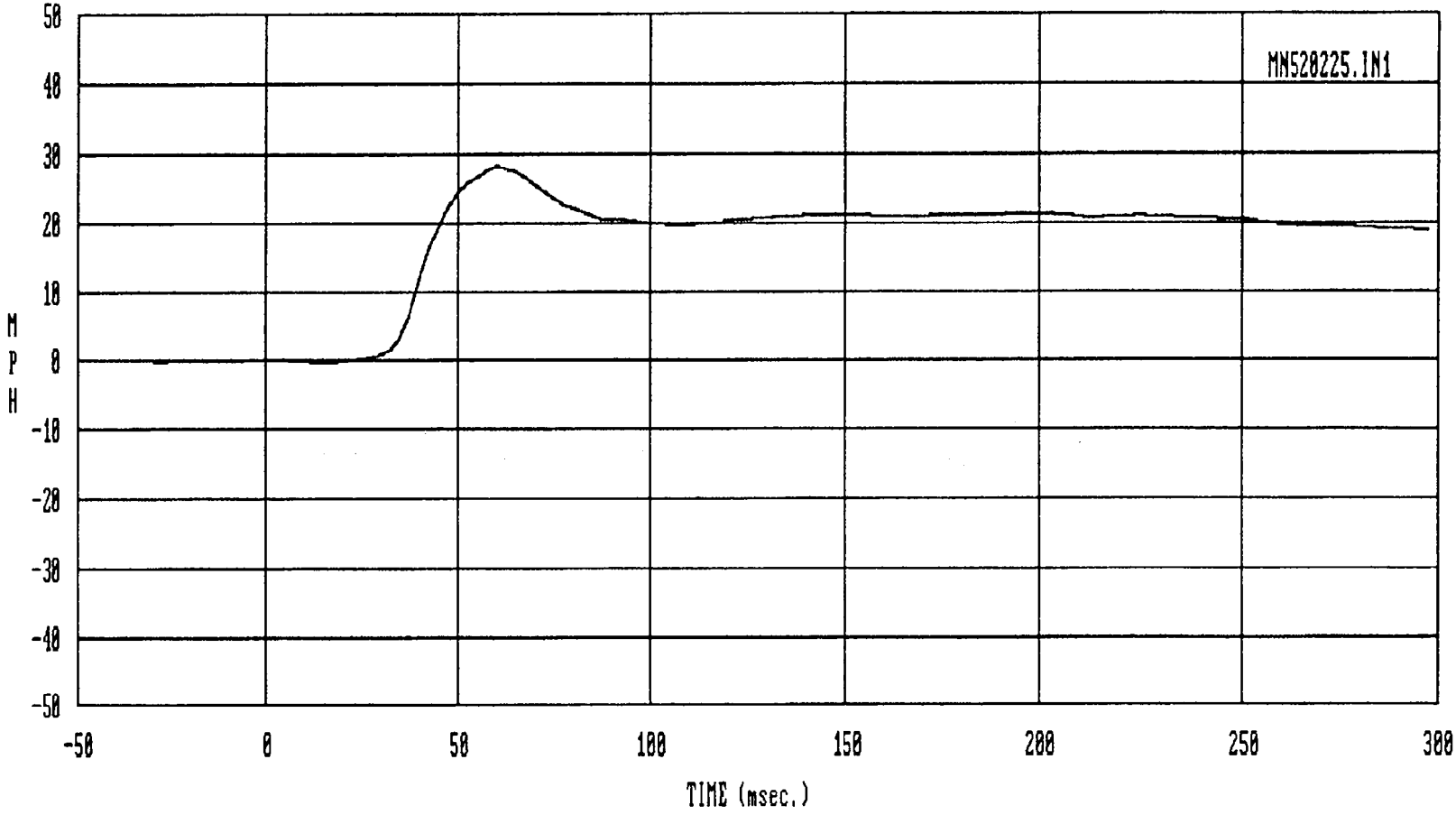
Curve: Passenger lower spine delta V -- Primary Filter: FIR 100 Max = 25.295 Min = -.13941

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



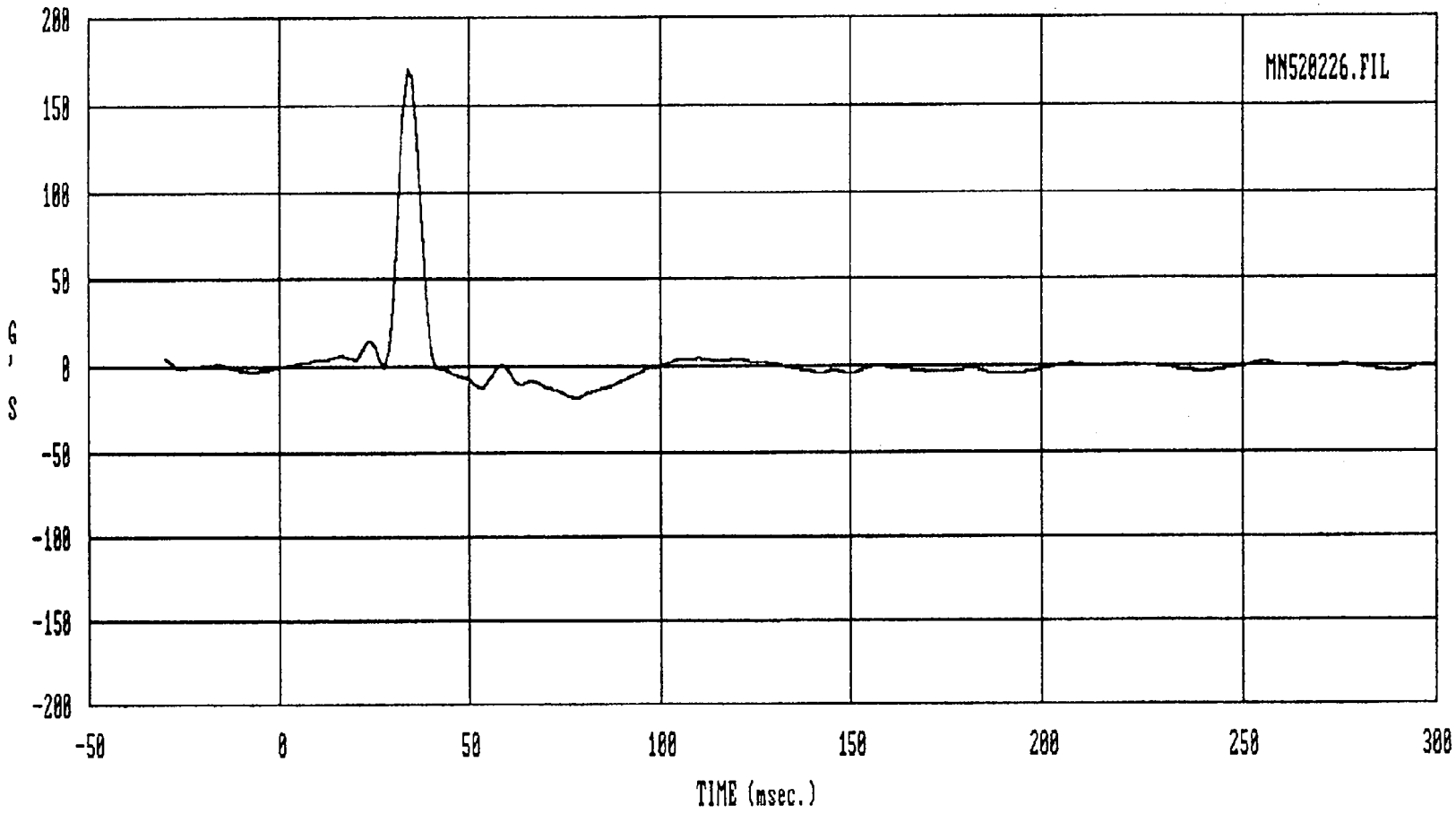
Curve: Passenger lower spine acceleration — Redundant Filter: FIR 100 Max = 92.174 Min = -28.834

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



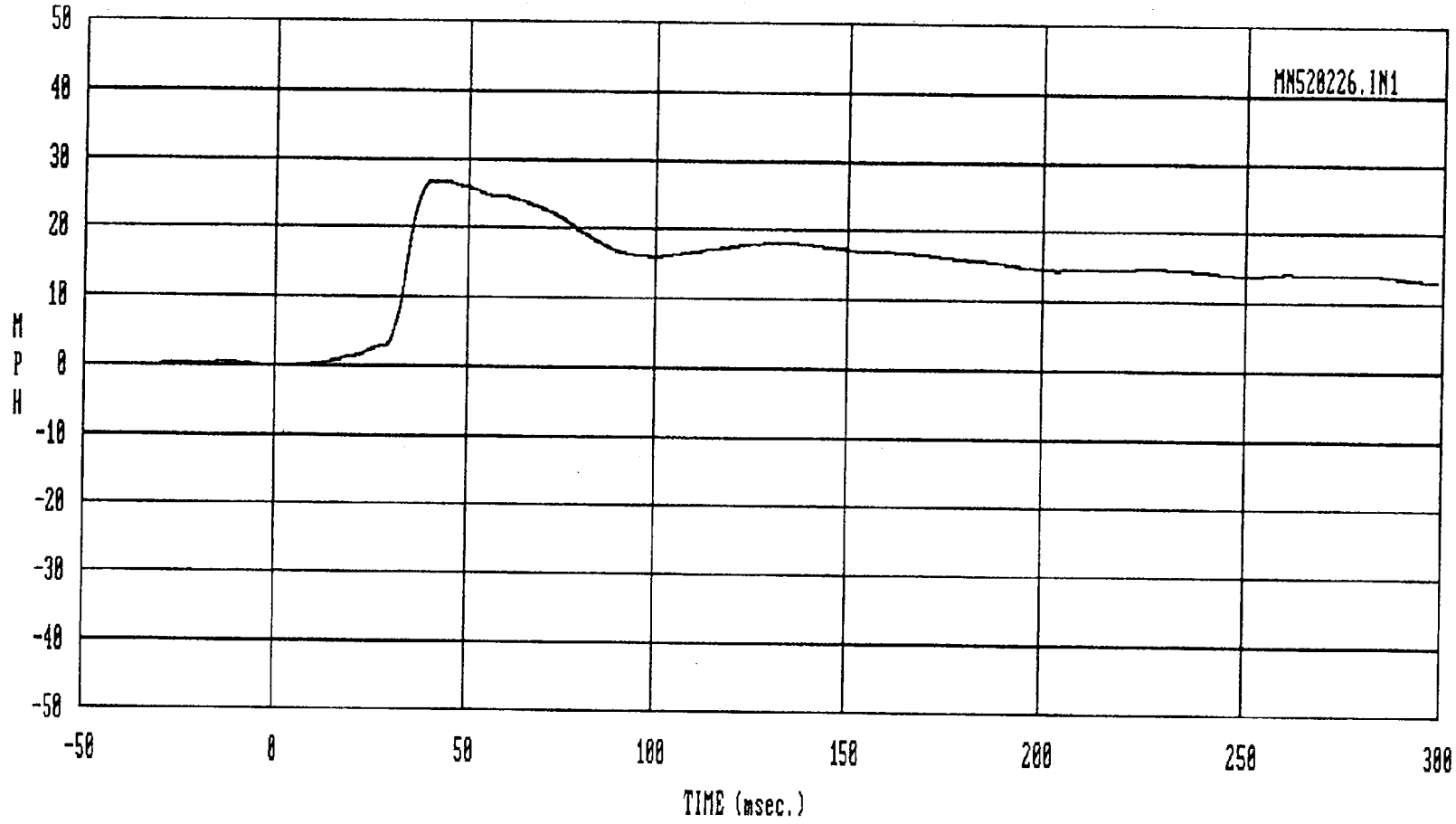
Curve: Passenger lower spine delta V -- Redundant Filter: FIR 100 Max = 28.287 Min = -.34364

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



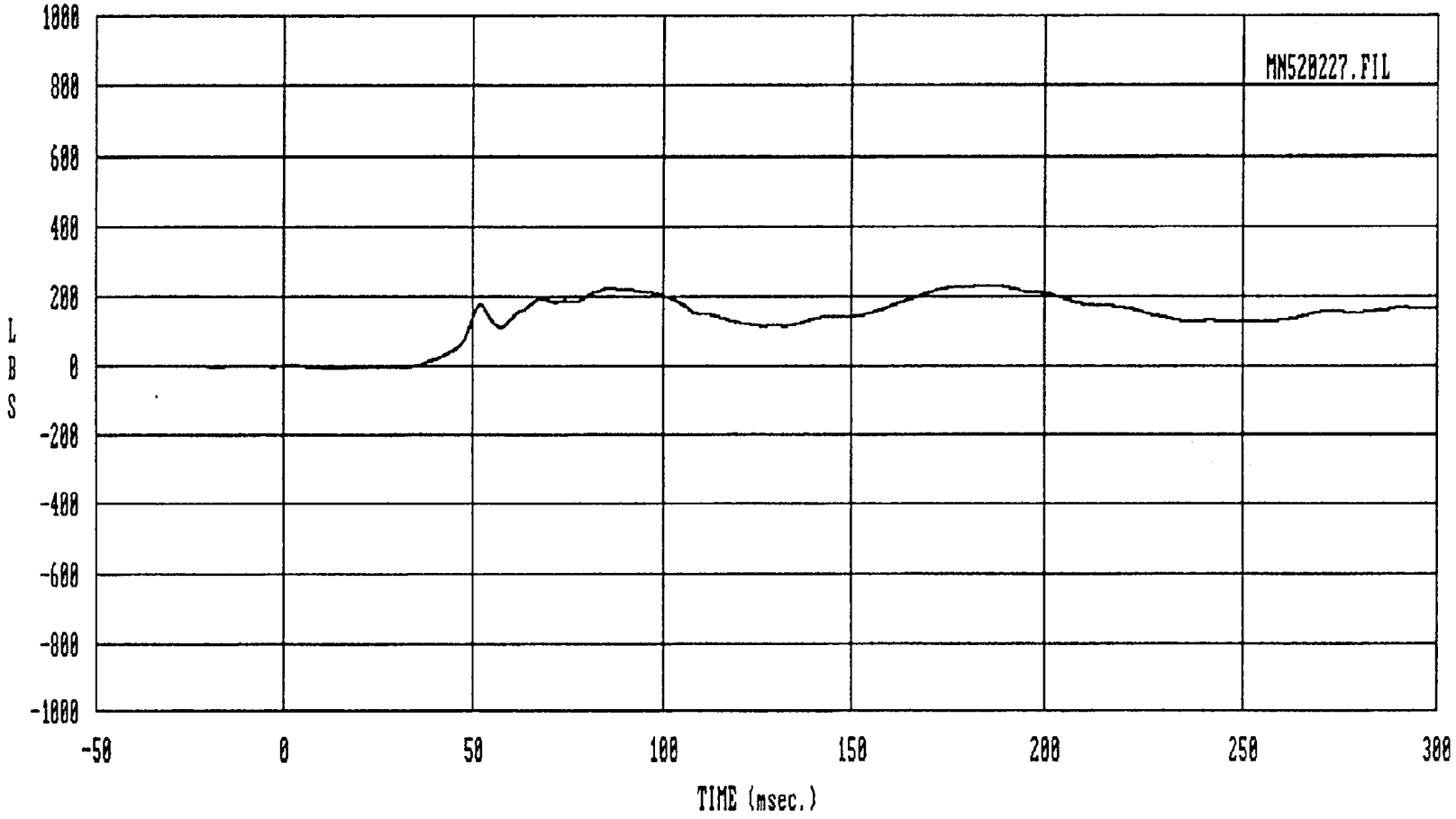
Curve: Passenger pelvis acceleration Filter: FIR 100 Max = 172.54 Min = -18.241

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



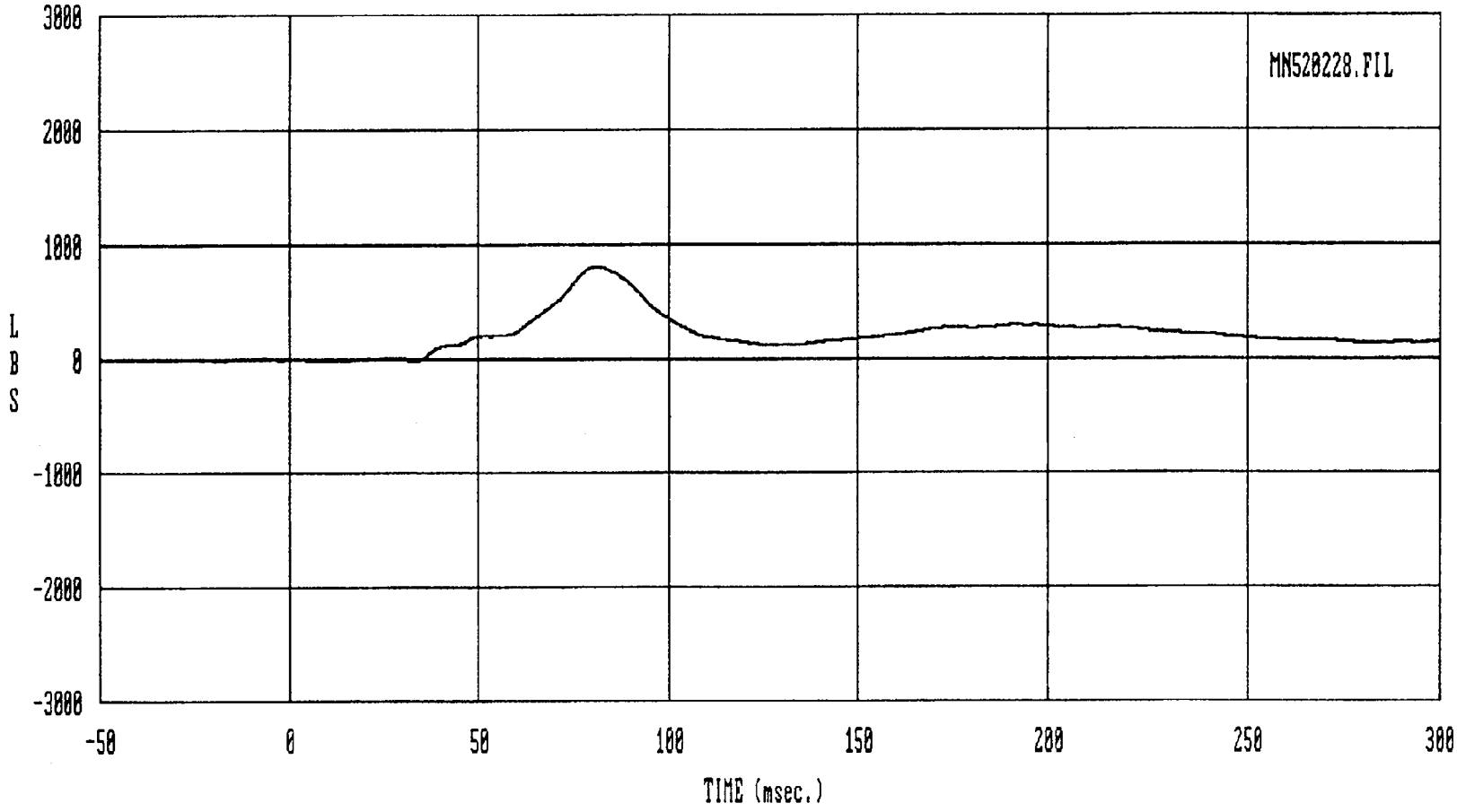
Curve: Passenger pelvis delta V Filter: FIR 100 Max = 26.747 Min = 2.8952

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



Curve: Passenger lap belt load Filter: SAE CLASS 60 Max = 232.16 Min = -9.0884

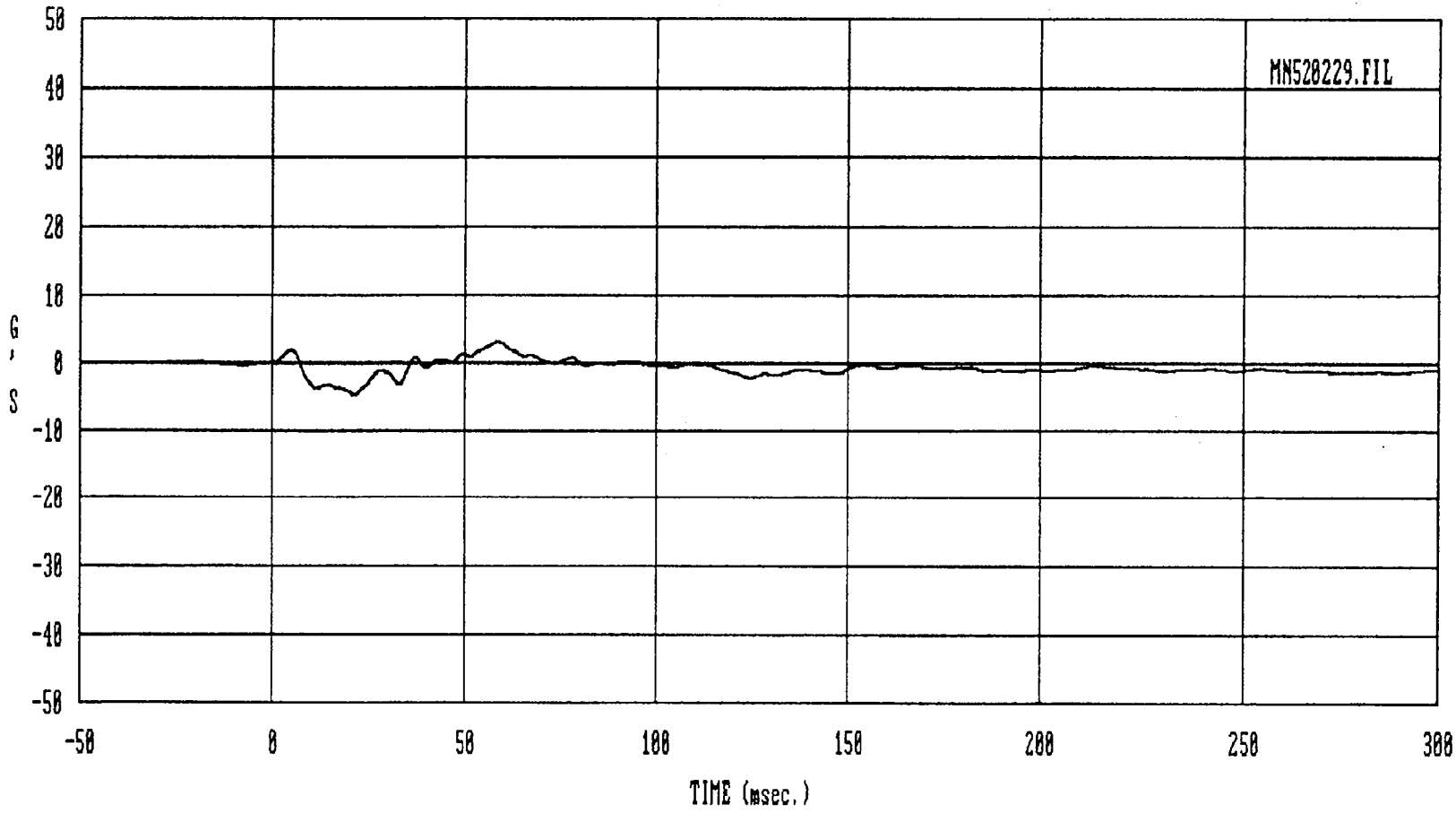
MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



Curve: Passenger shoulder belt load Filter: SAE CLASS 60 Max = 812.48 Min = -15.121

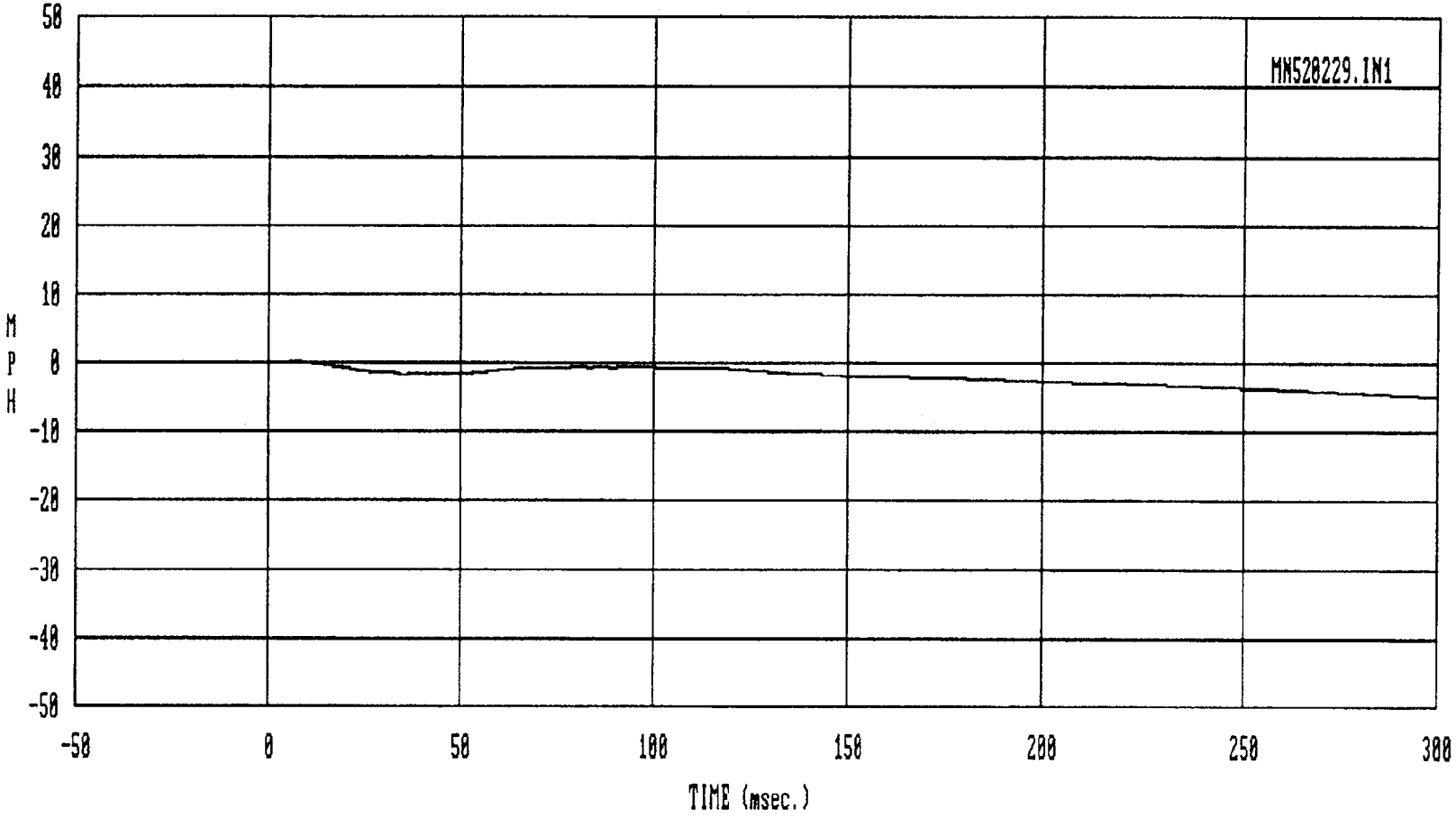
MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra

VEHICLE ACCELEROMETER DATA



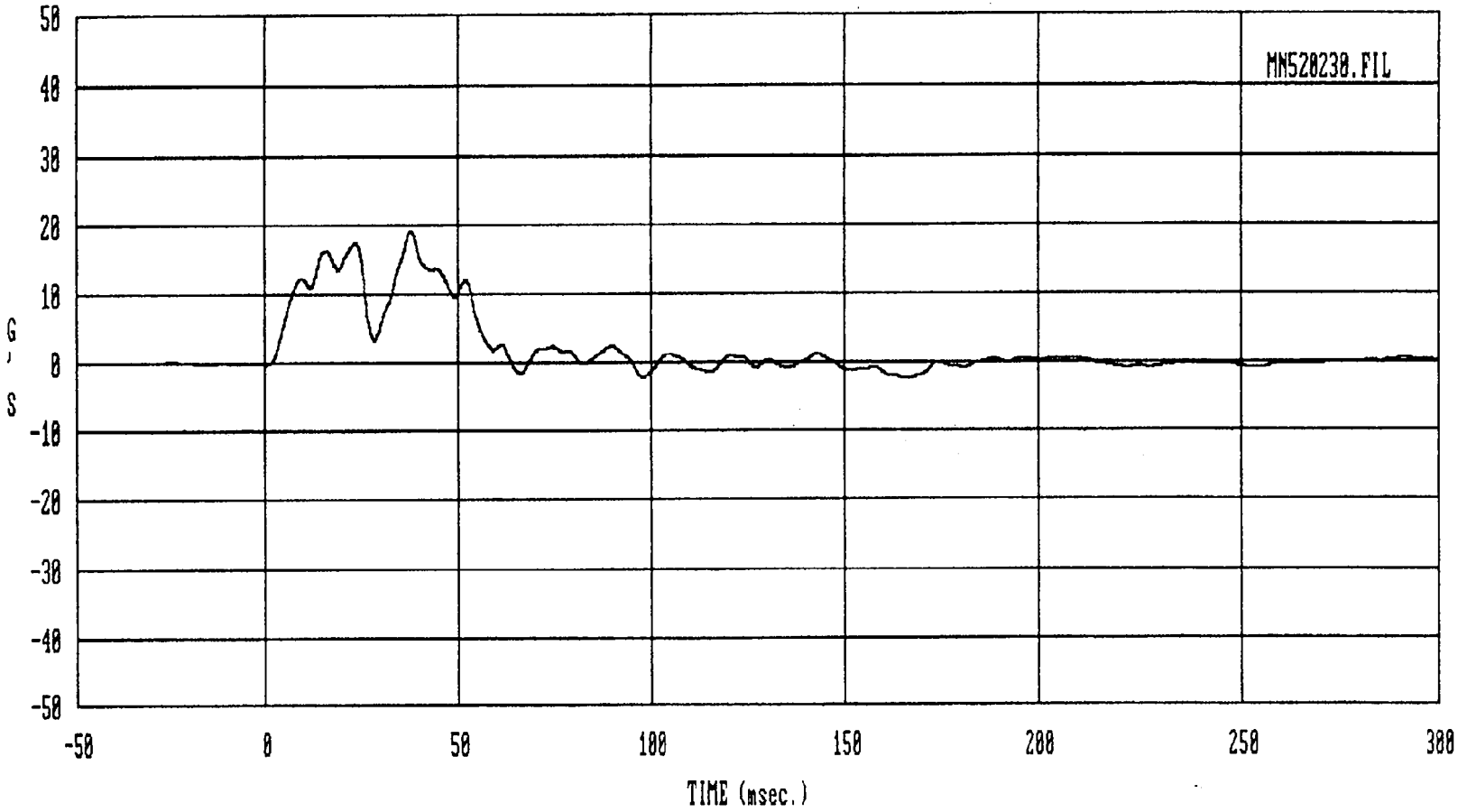
Curve: Front seat right sill acceleration — X axis Filter: SAE CLASS 60 Max = 3.0935 Min = -4.7029

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



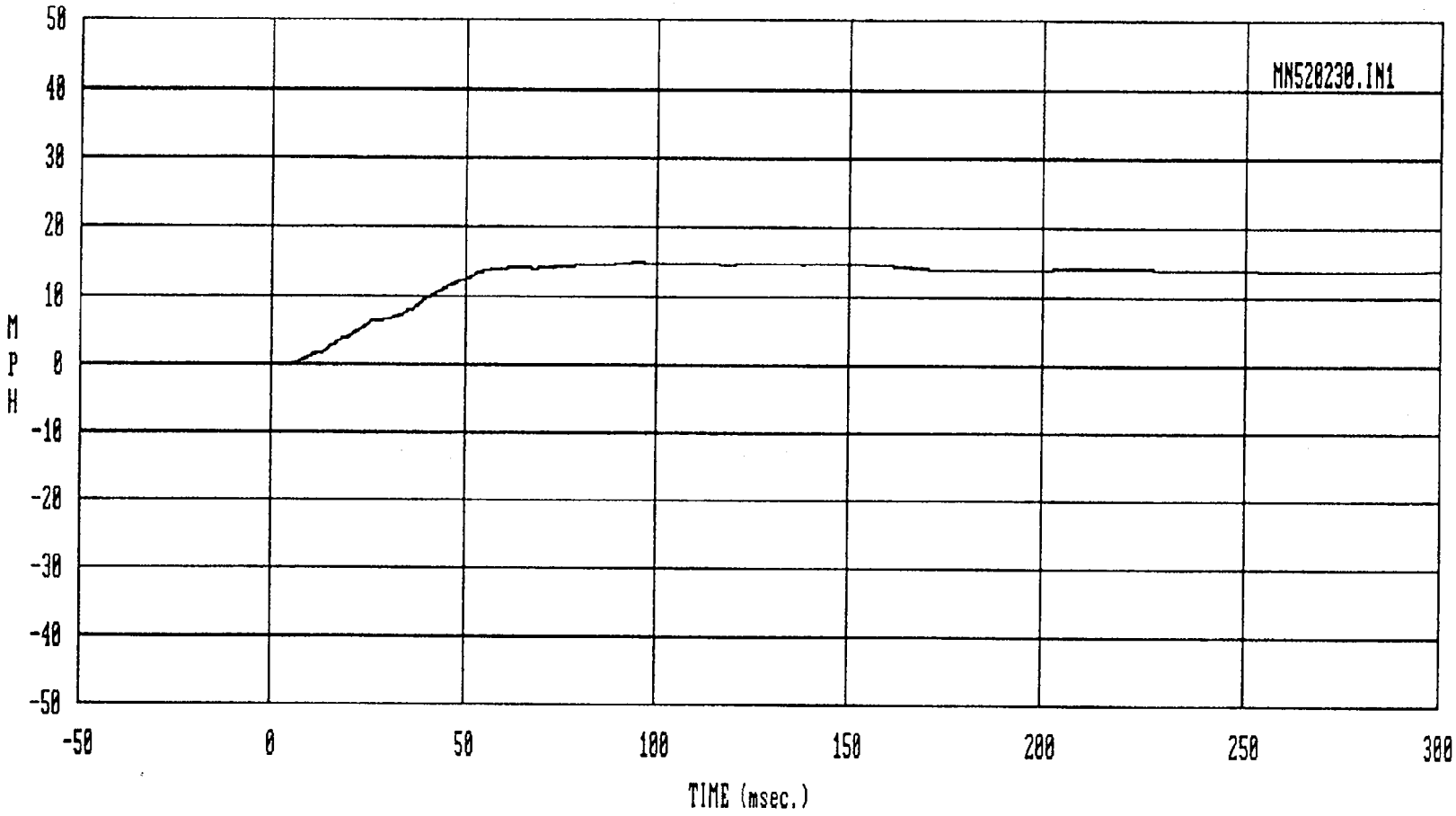
Curve: Front seat right sill delta V -- X axis Filter: SAE CLASS 180 Max = .20531 Min = -4.9095

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



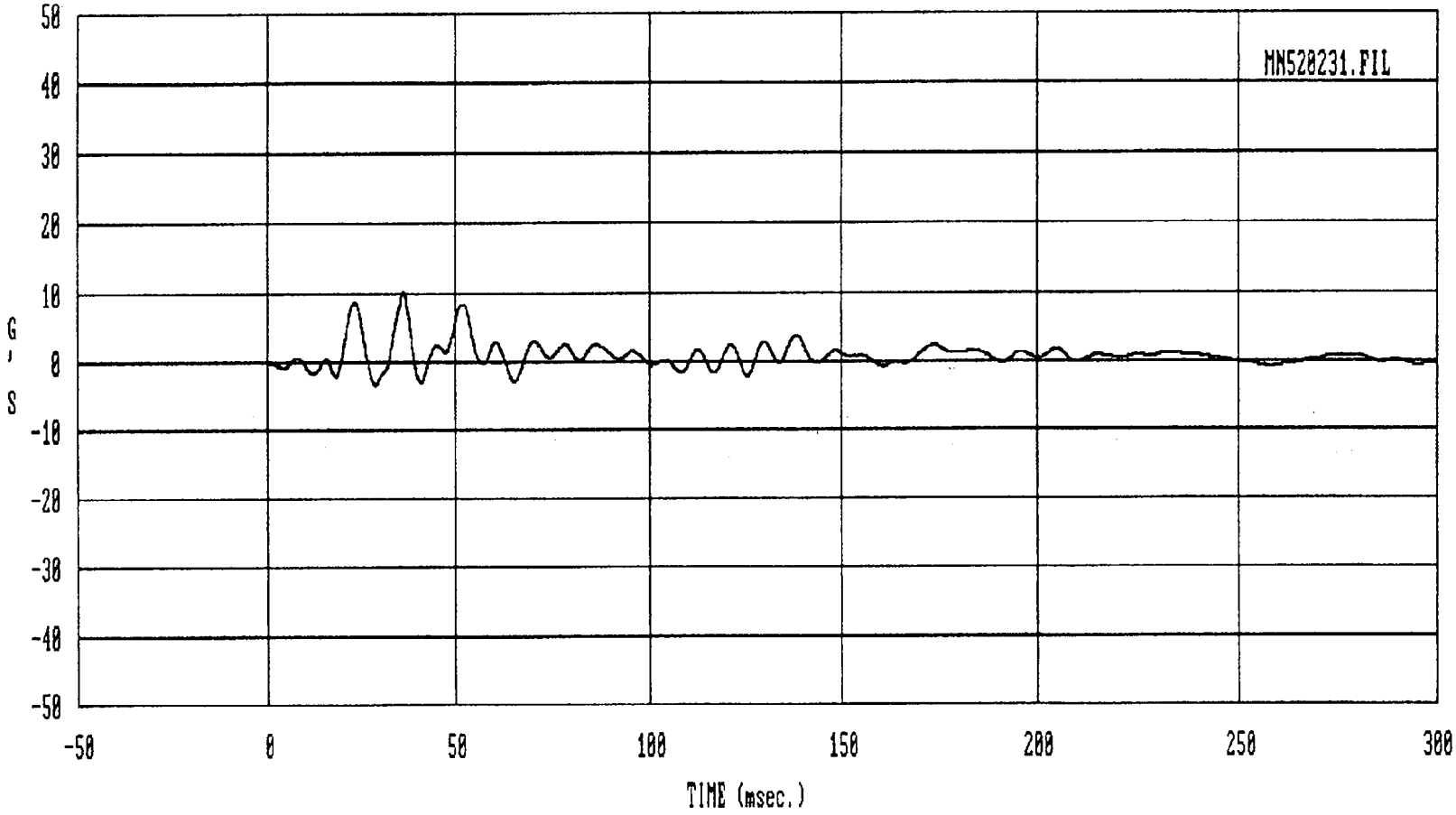
Curve: Front seat right sill acceleration -- Y axis Filter: SAE CLASS 60 Max = 19.316 Min = -2.4280

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



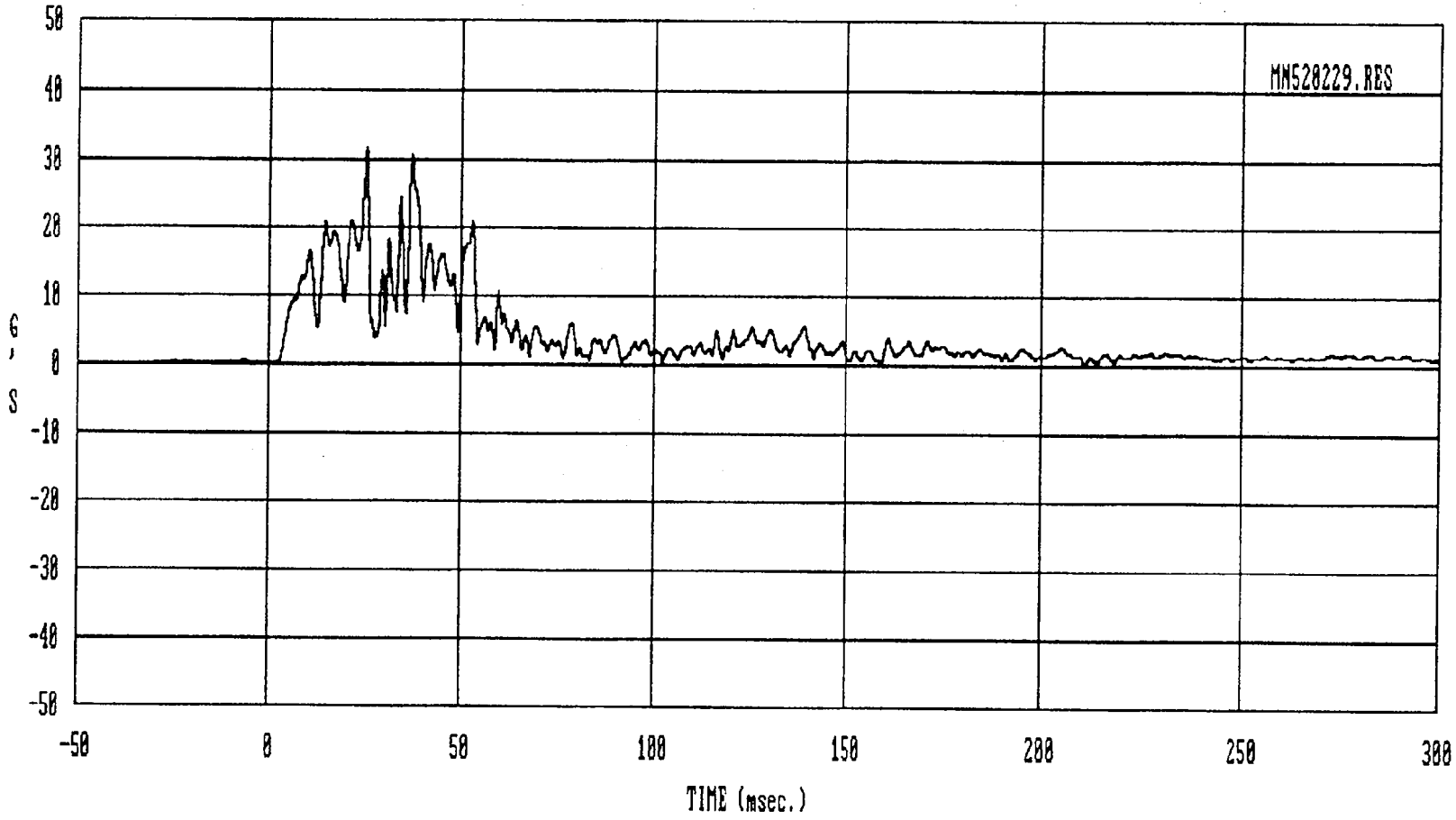
Curve: Front seat right sill delta V -- Y axis Filter: SAE CLASS 180 Max = 14.891 Min = -.79626E-02

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



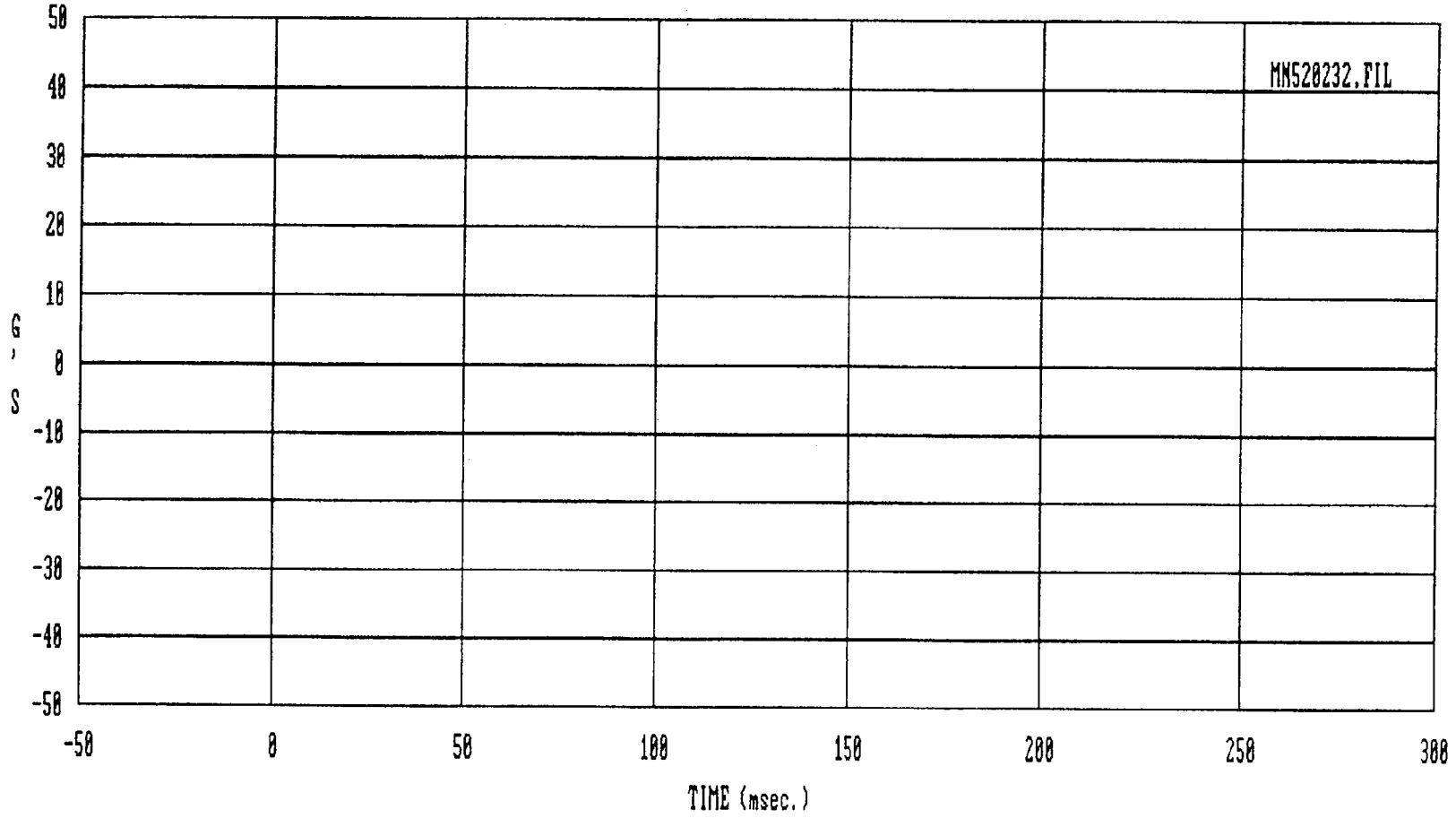
Curve: Front seat right sill acceleration -- Z axis Filter: SAE CLASS 60 Max = 10.258 Min = -3.4407

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



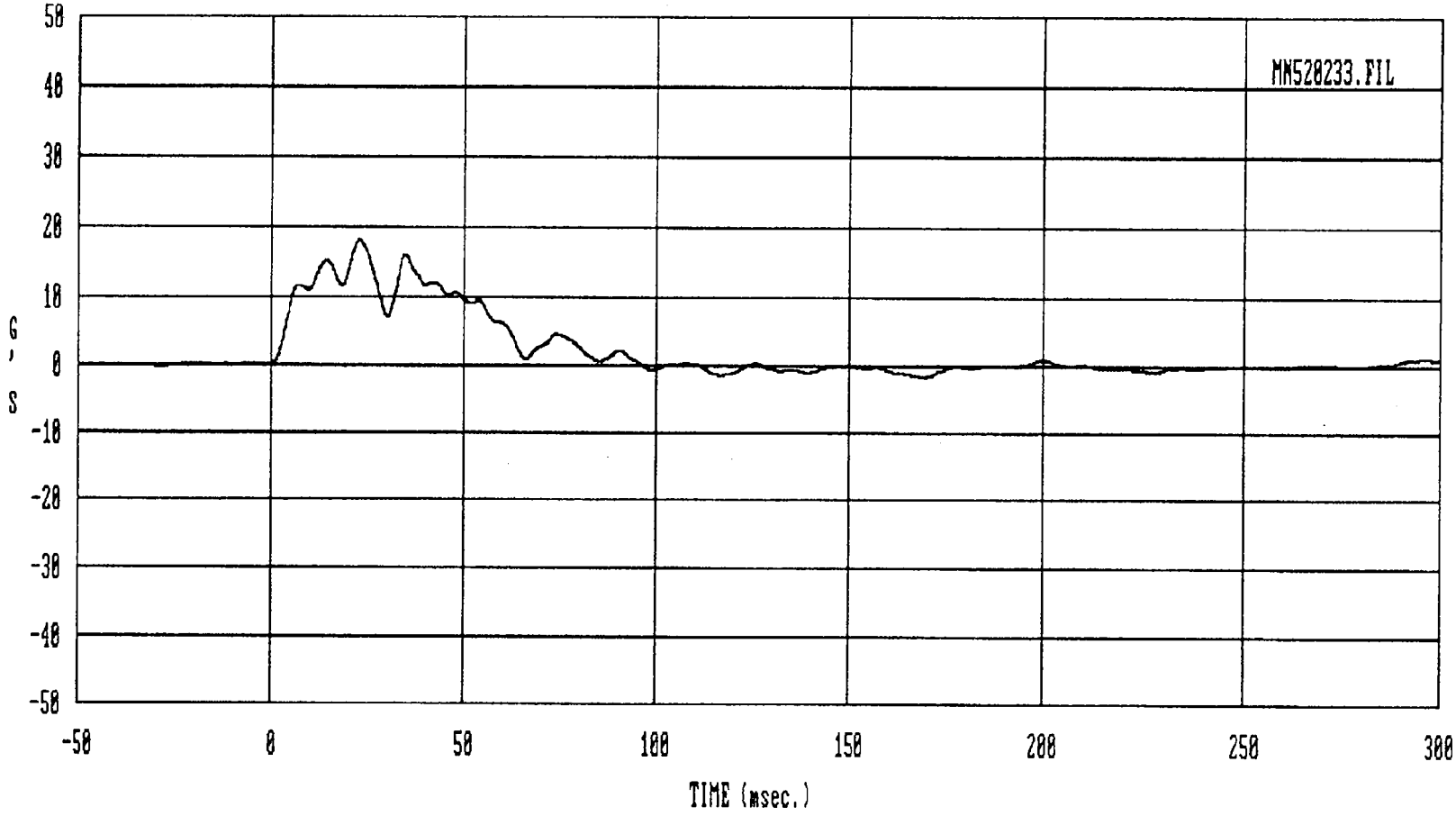
Curve: Front seat right sill resultant acceleration Filter: SAE CLASS 60 Max = 31.832 Min = .56719E-01

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



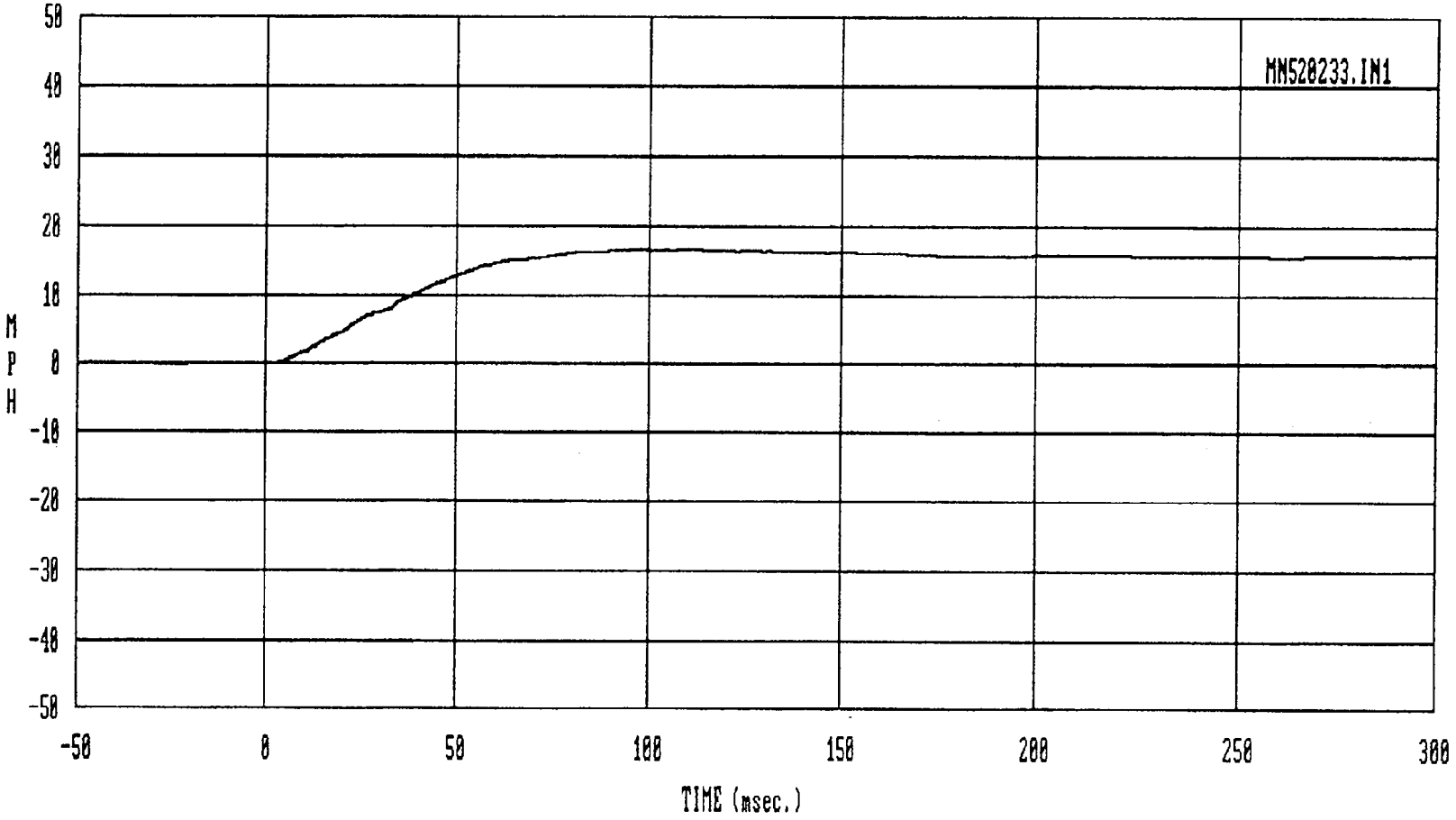
Curve: Rear seat right sill acceleration -- X axis Filter: SAE CLASS 60 Max = .00000 Min = .00000

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



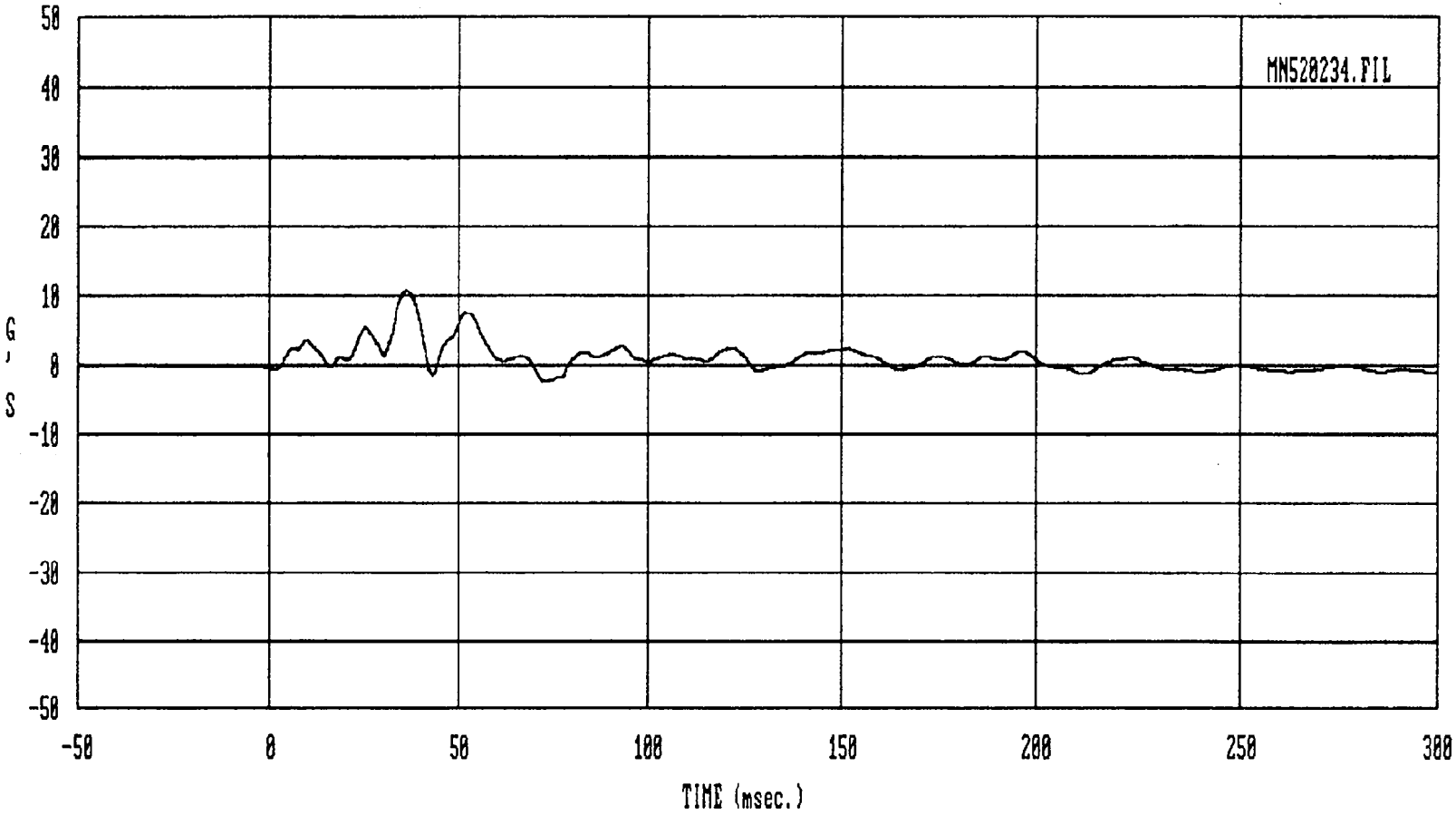
Curve: Rear seat right sill acceleration -- Y axis Filter: SAE CLASS 60 Max = 18.227 Min = -1.5519

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



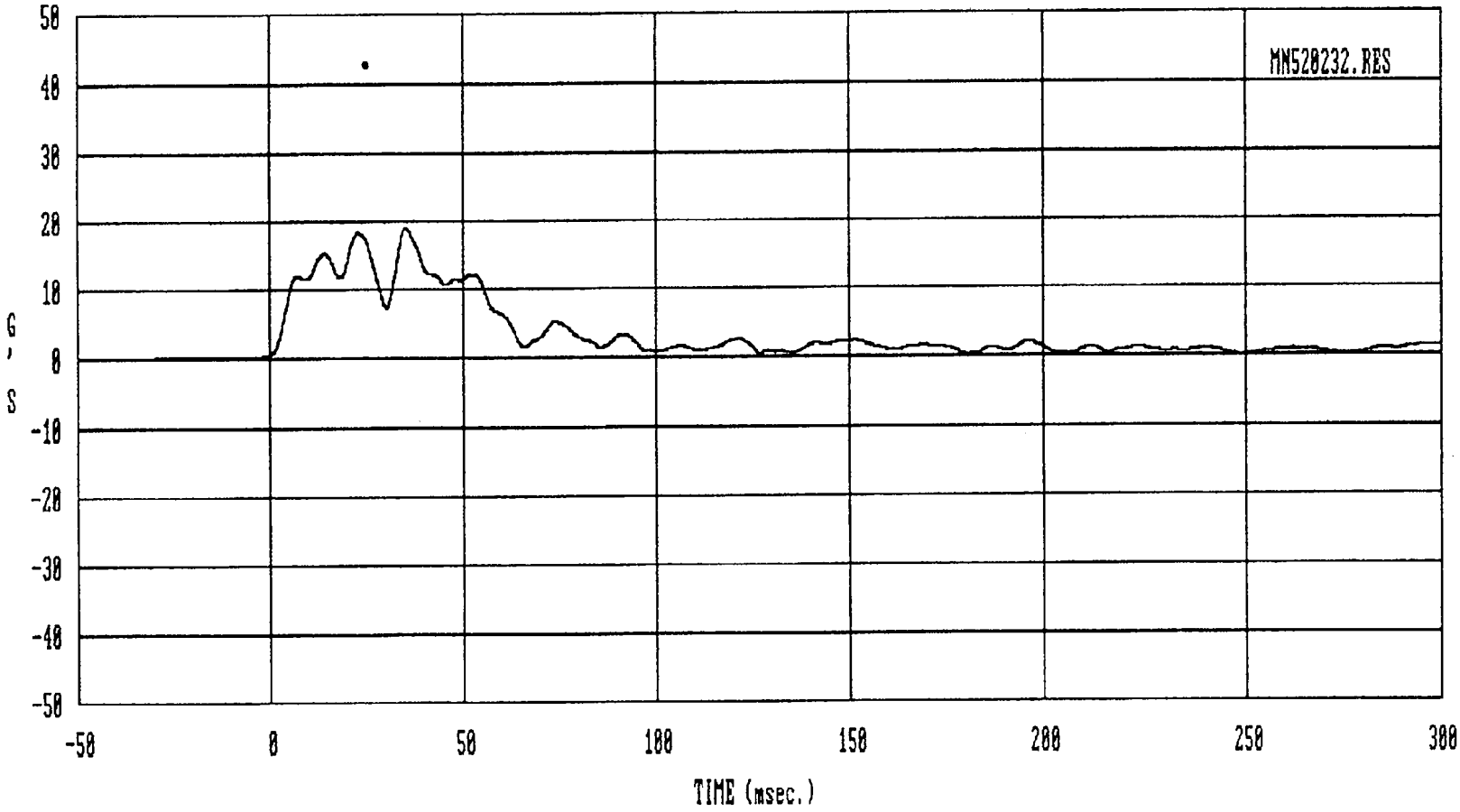
Curve: Rear seat right sill delta V -- Y axis Filter: SAE CLASS 180 Max = 16.658 Min = 7.5703

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



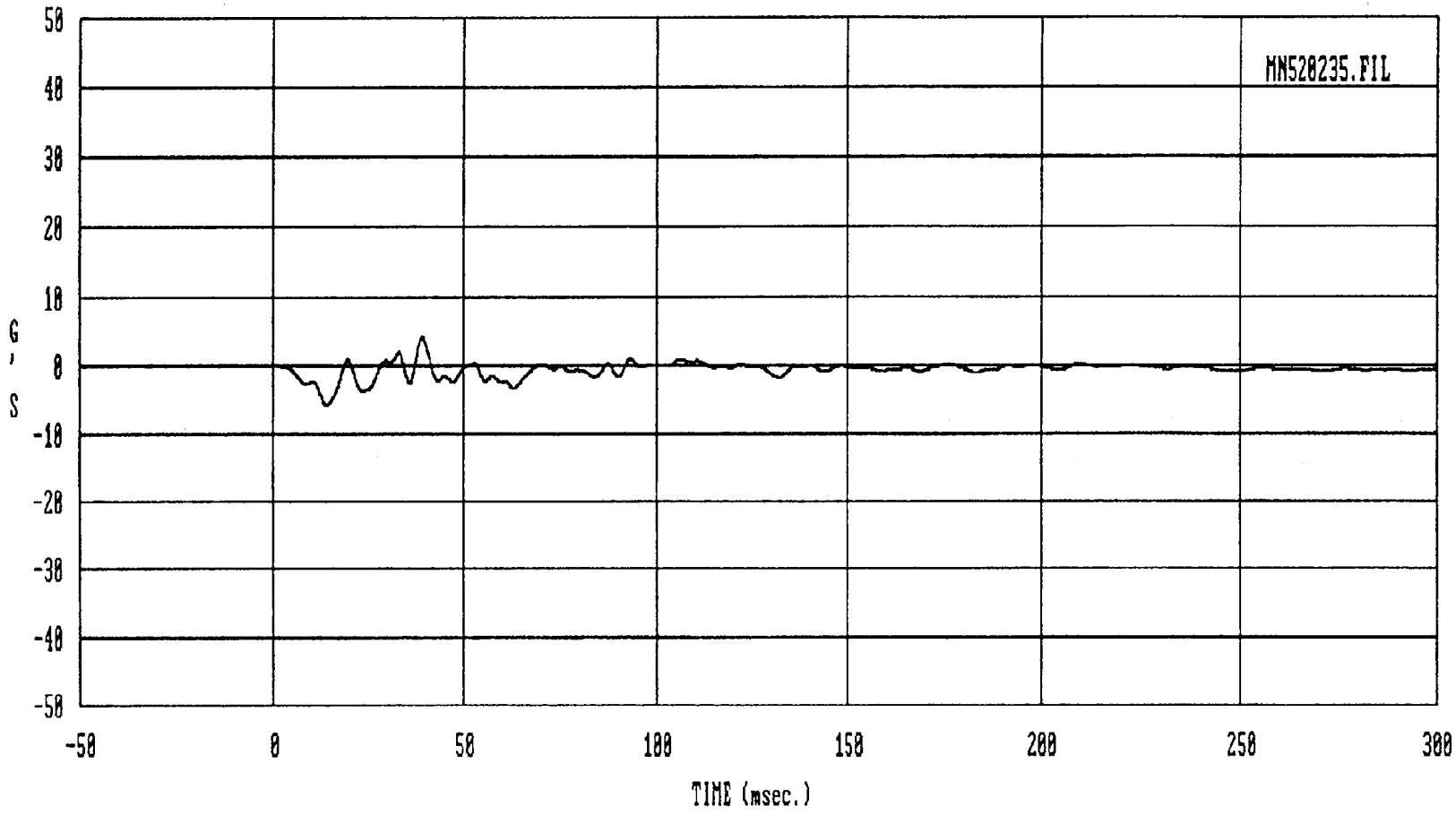
Curve: Rear seat right sill acceleration -- Z axis Filter: SAE CLASS 60 Max = 10.730 Min = -2.4379

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



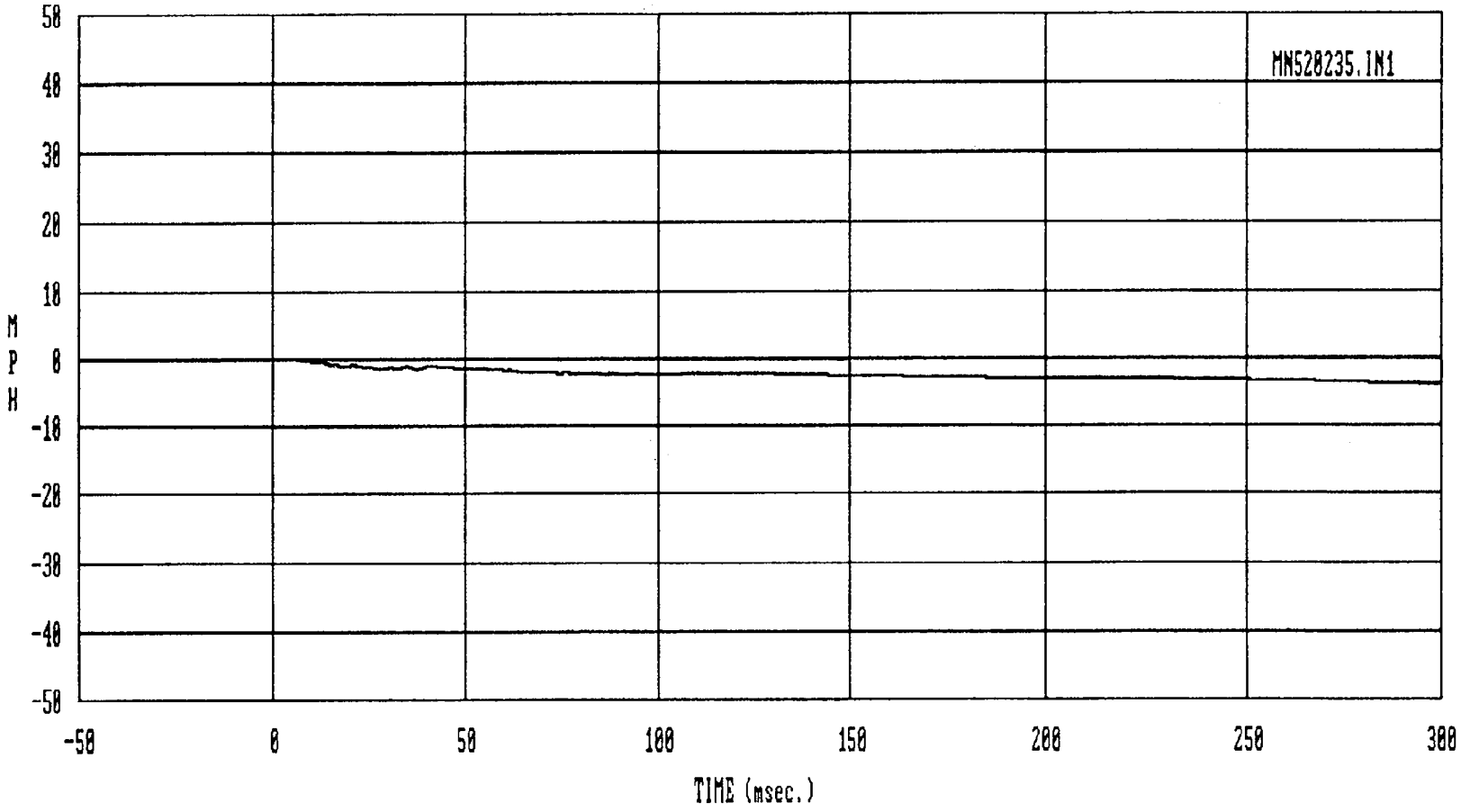
Curve: Rear seat right sill resultant acceleration Filter: SAE CLASS 60 Max = 19.045 Min = .81582E-01

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



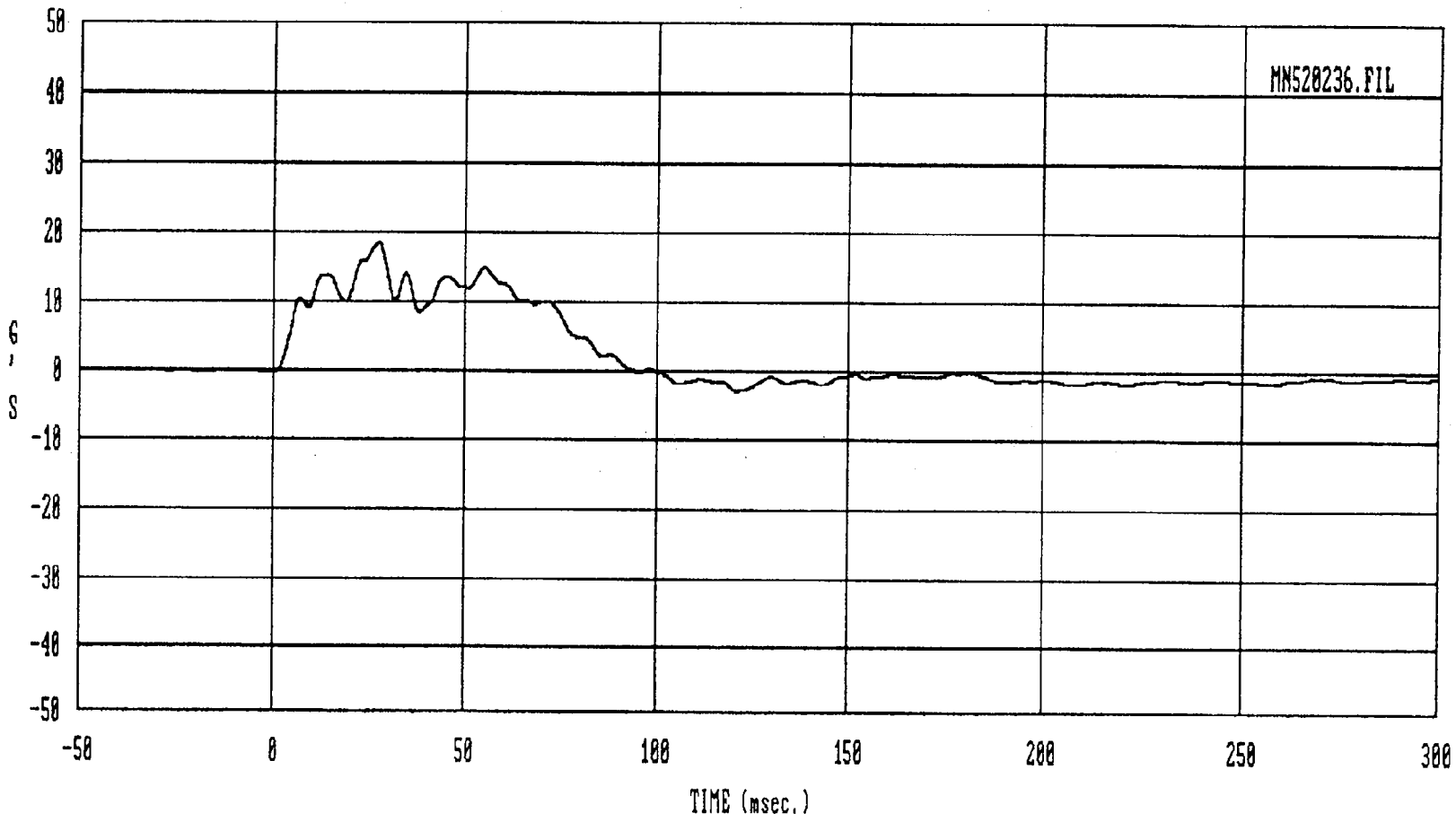
Curve: Rear floor above axle acceleration -- X axis Filter: SAE CLASS 60 Max = 4.1717 Min = -5.8601

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



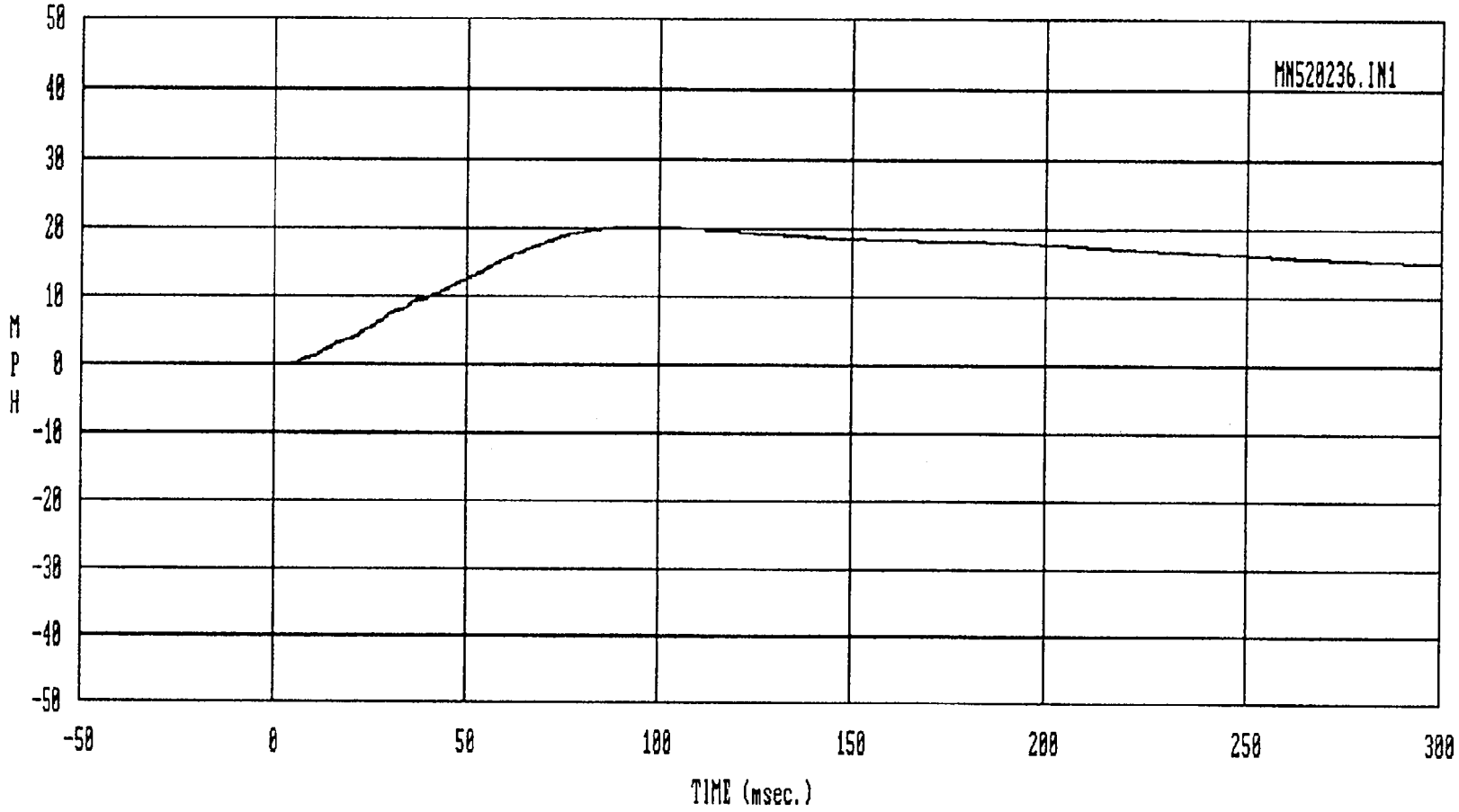
Curve: Rear floor above axle delta V -- X axis Filter: SAE CLASS 180 Max = .16111E-02 Min = -3.8836

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



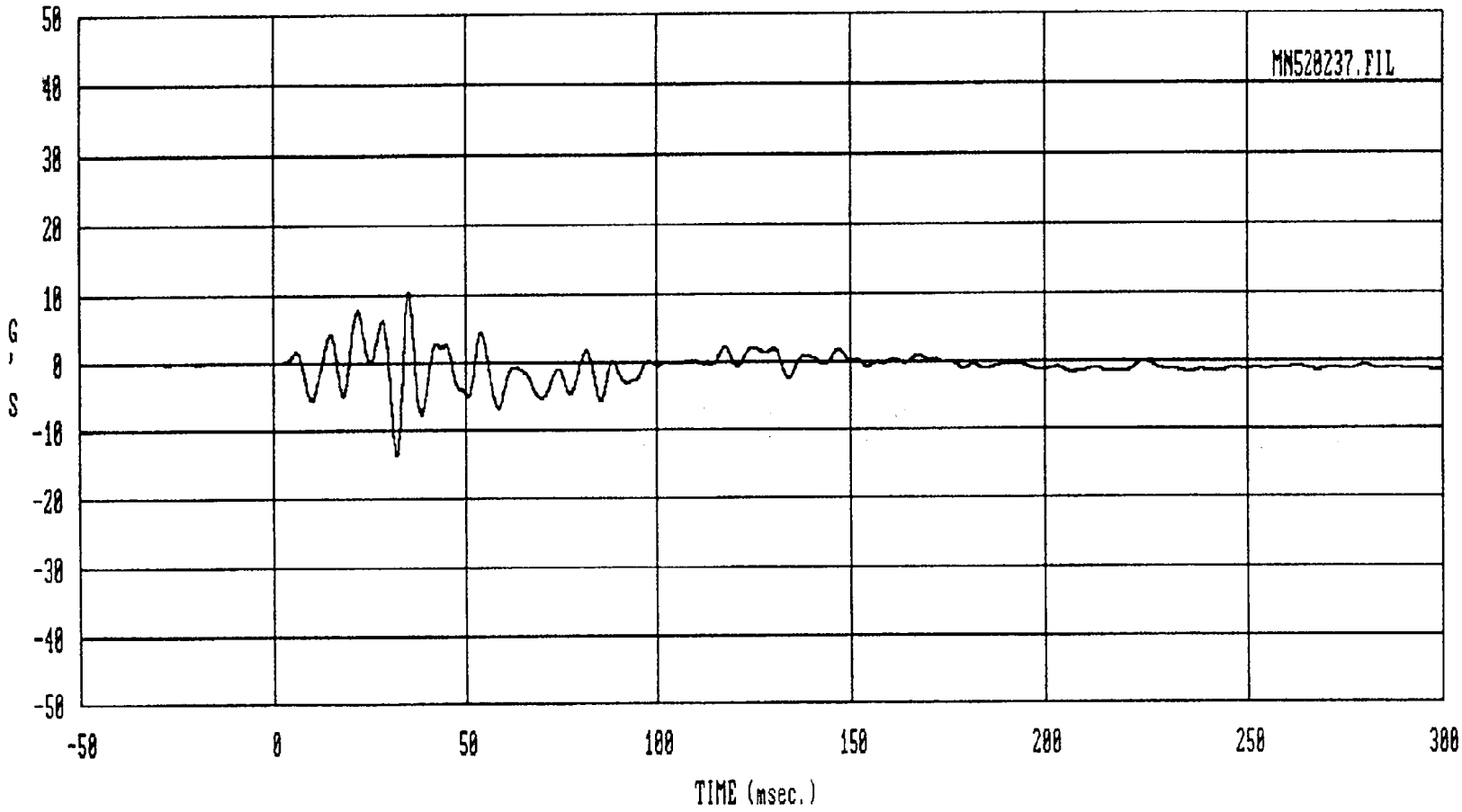
Curve: Rear floor above axle acceleration -- Y axis Filter: SAE CLASS 60 Max = 18.598 Min = -2.8583

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



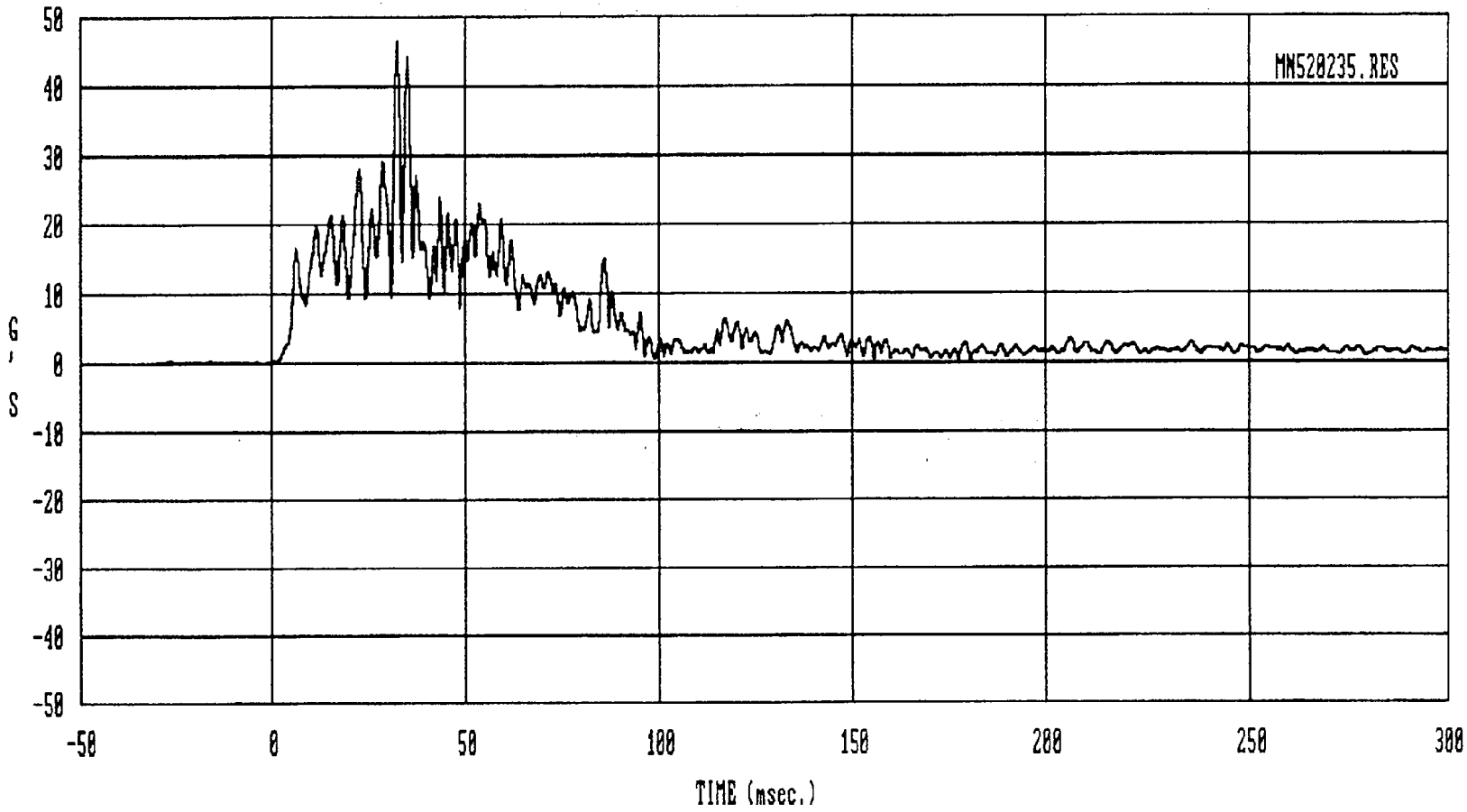
Curve: Rear floor above axle delta V -- Y axis Filter: SAE CLASS 180 Max = 20.280 Min = -.47645E-02

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



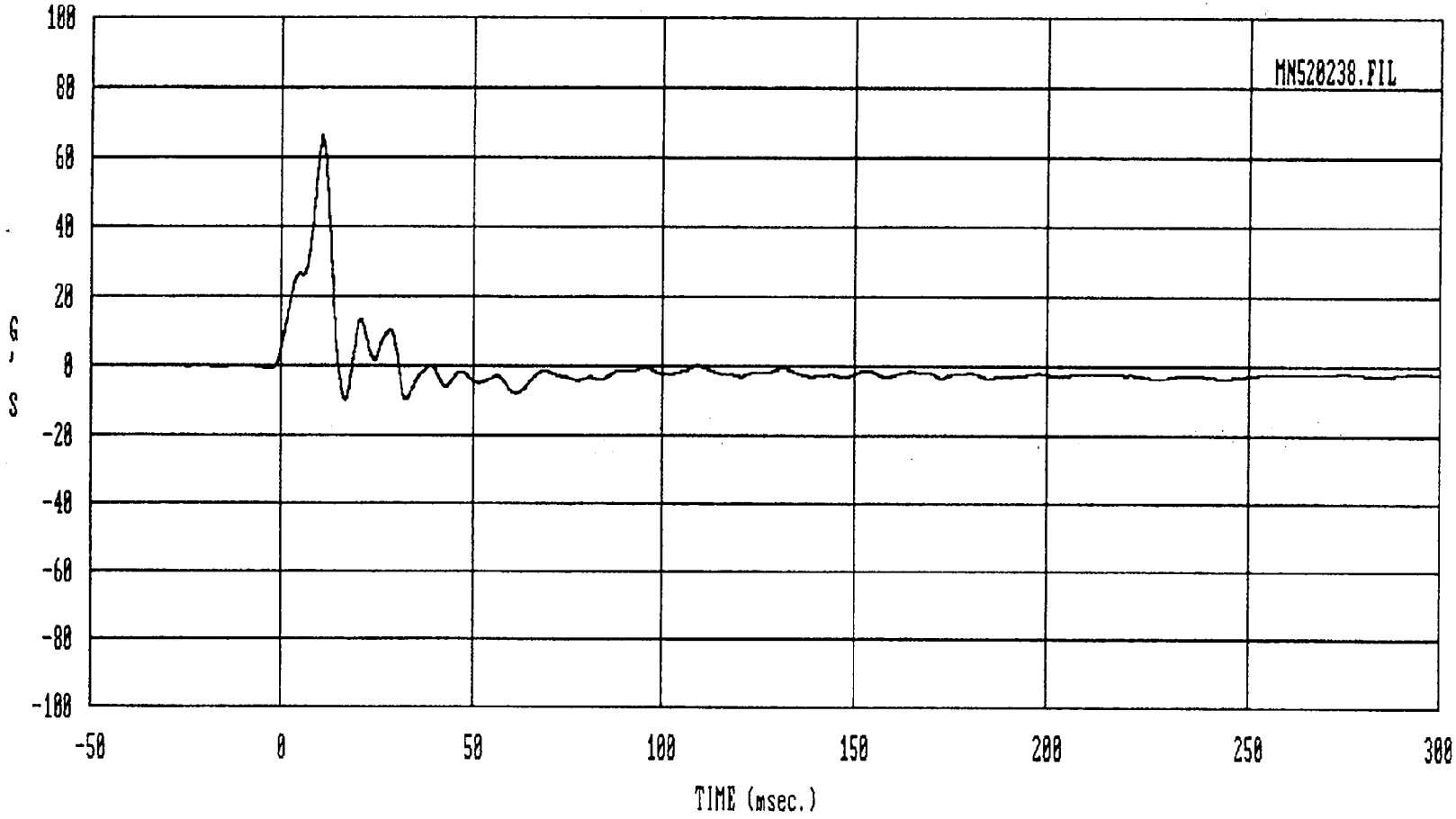
Curve: Rear floor above axle acceleration -- Z axis Filter: SAE CLASS 60 Max = 10.467 Min = -13.644

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



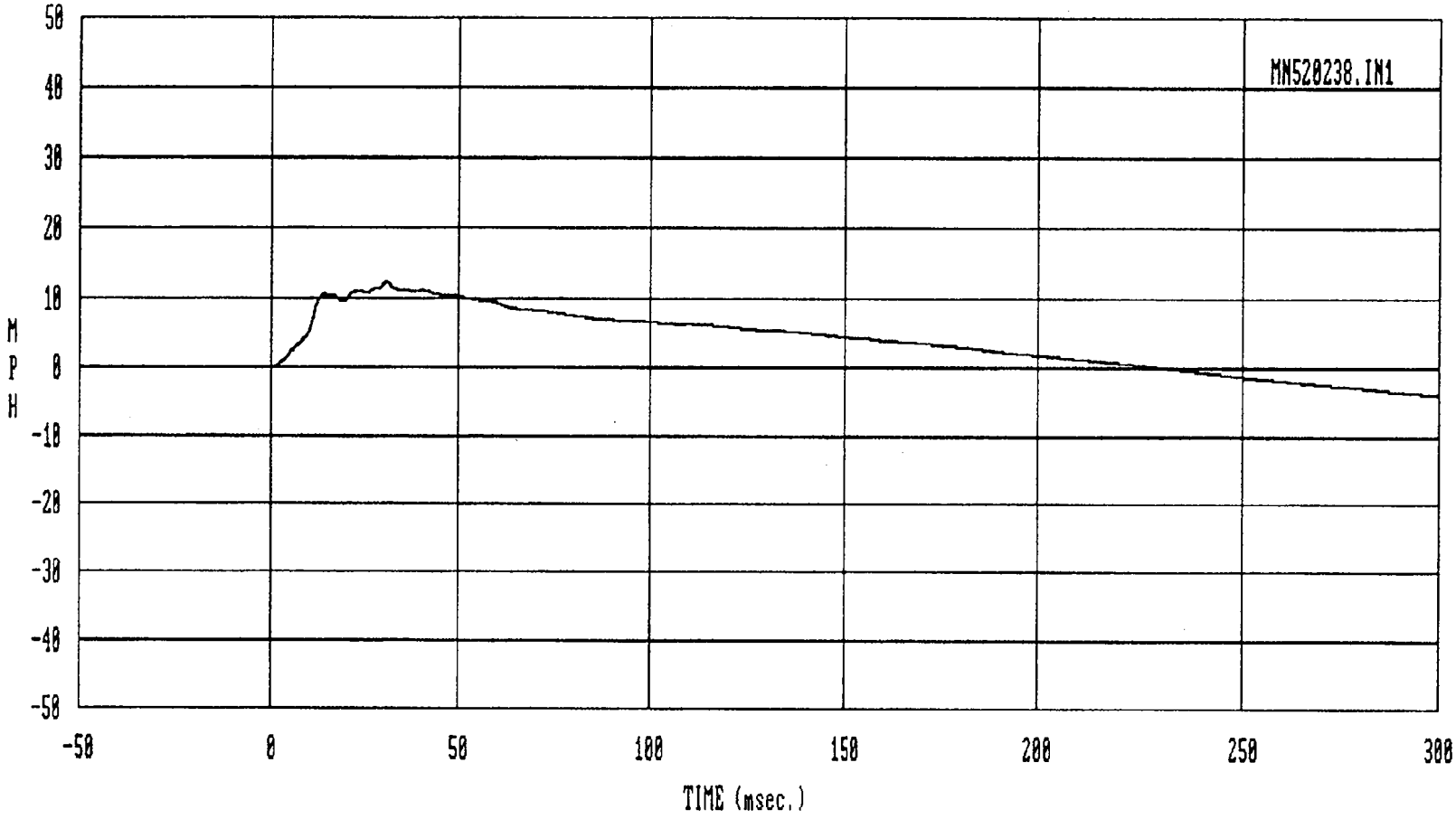
Curve: Rear floor above axle resultant acceleration Filter: SAE CLASS 60 Max = 46.751 Min = .21136

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



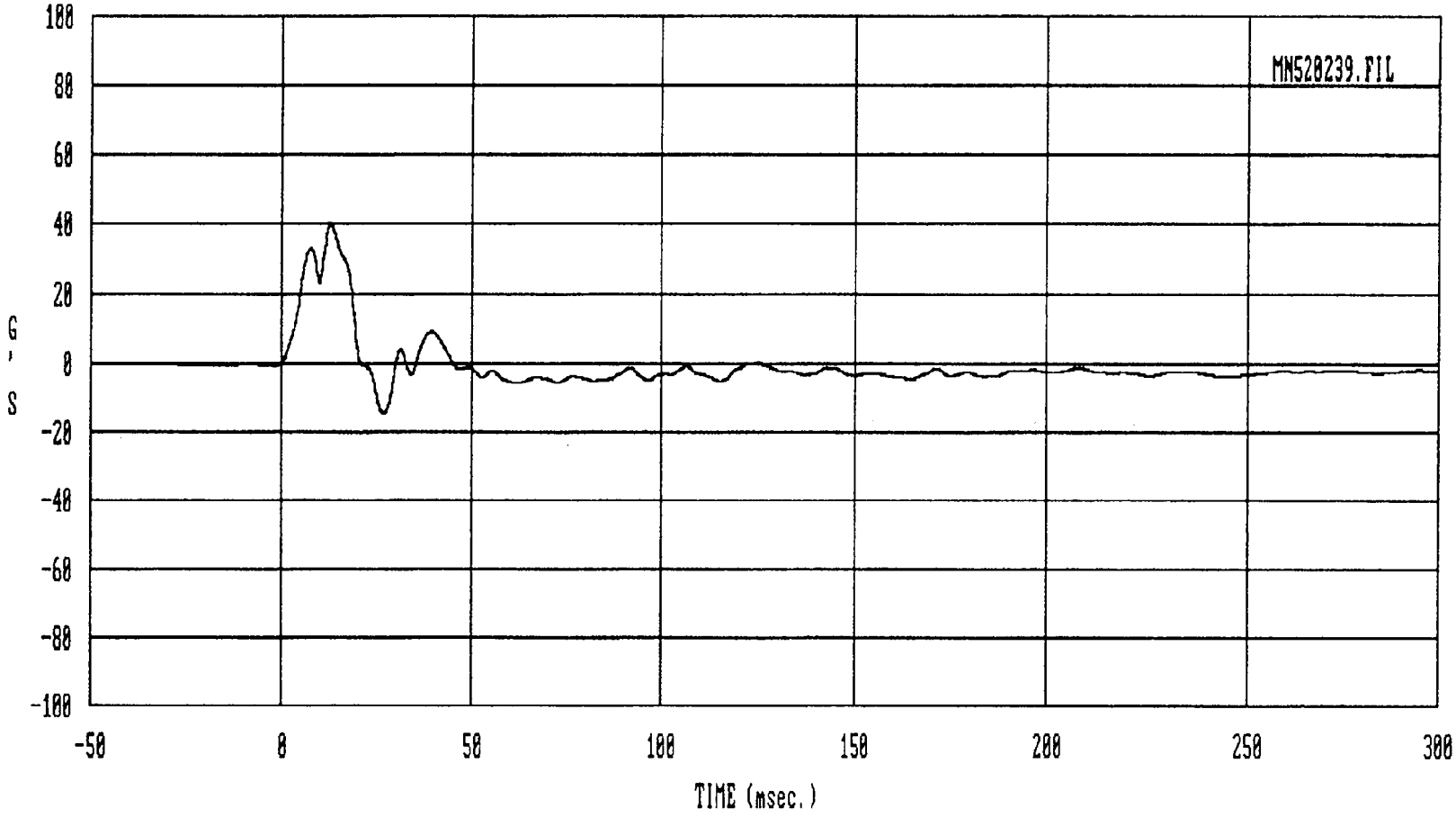
Curve: Rear seat left sill acceleration -- Y axis Filter: SAE CLASS 60 Max = 66.338 Min = -9.6853

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



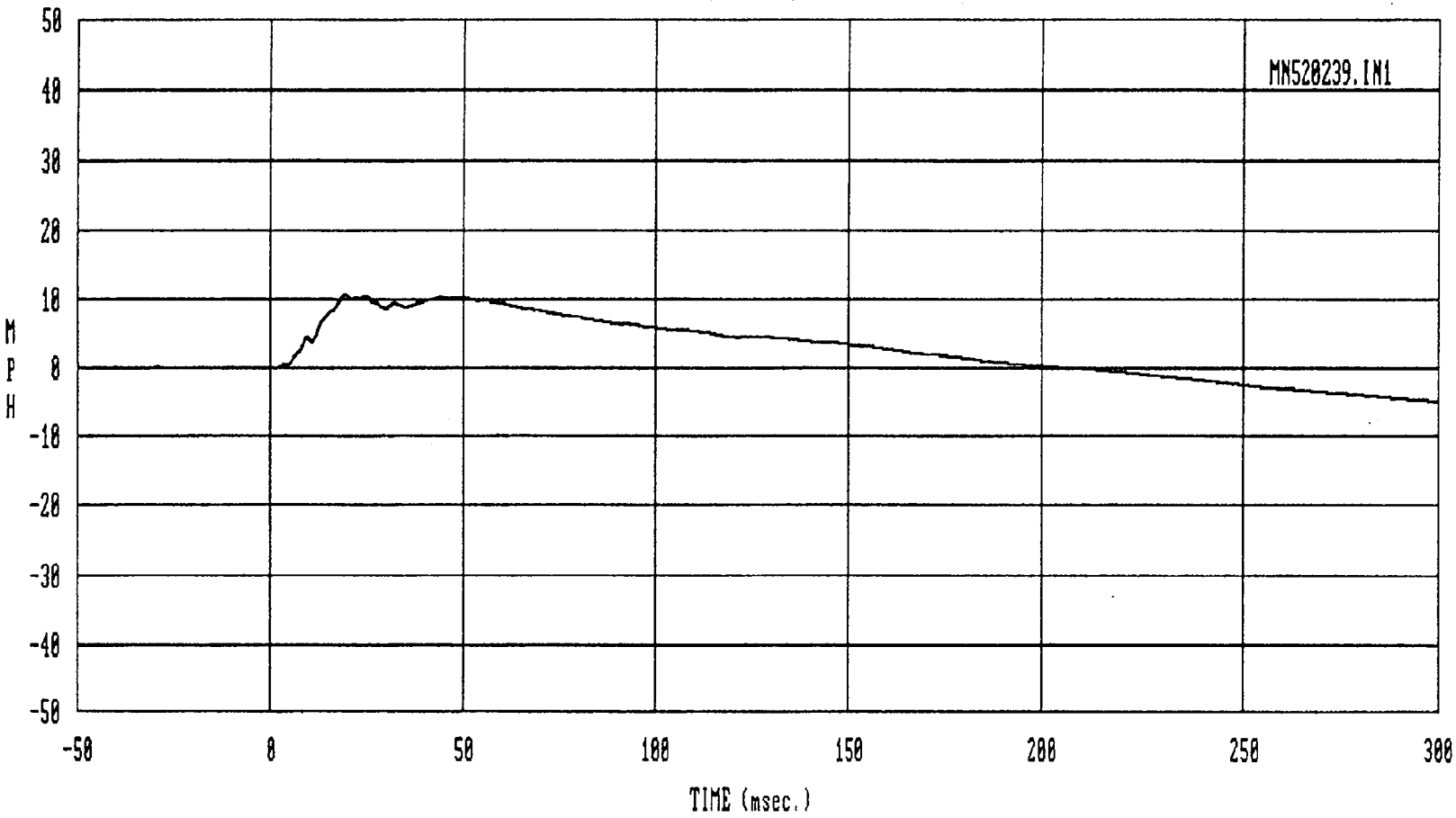
Curve: Rear seat left sill delta V -- Y axis Filter: SAE CLASS 180 Max = 12.339 Min = -3.8354

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



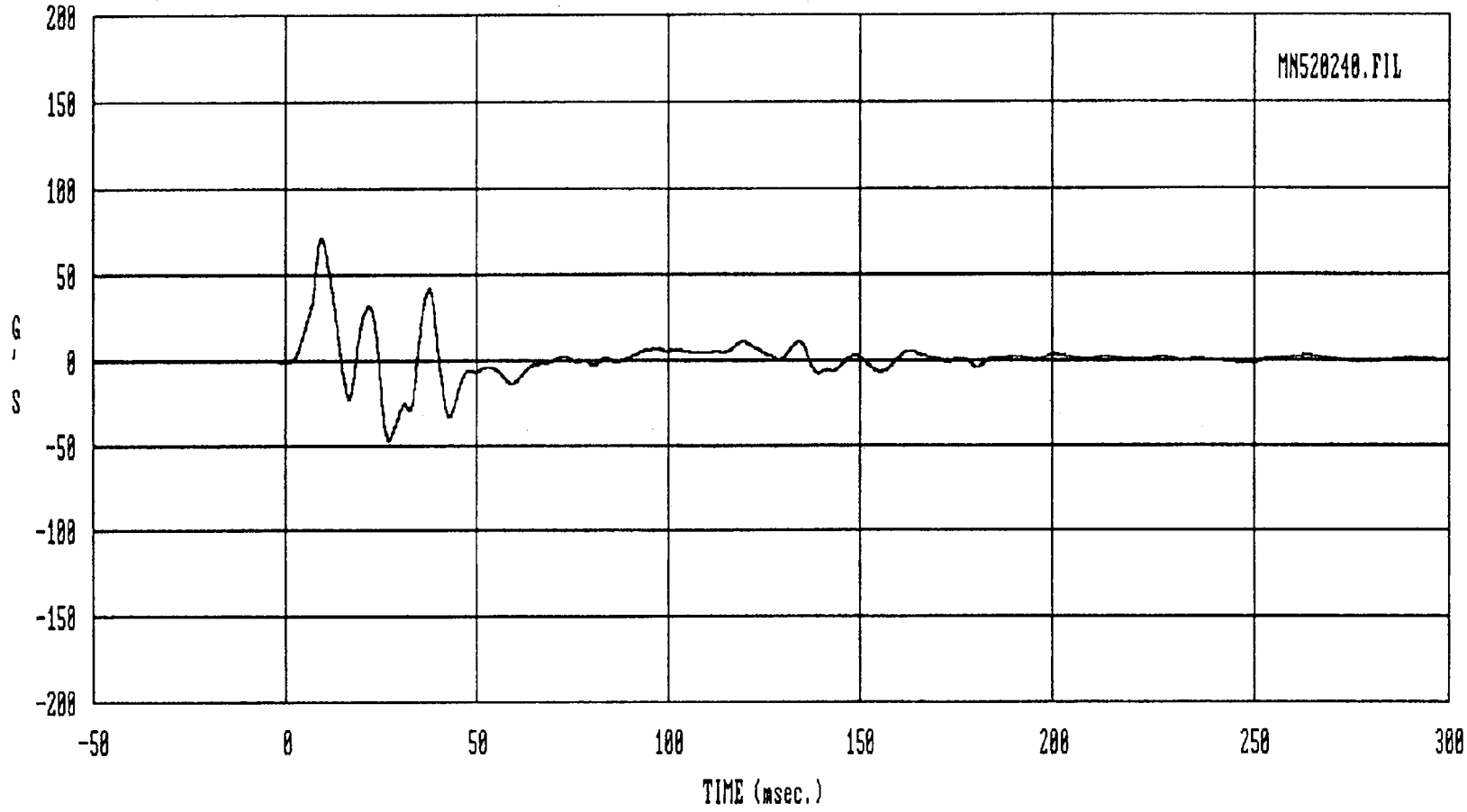
Curve: Front seat left Sill acceleration -- Y axis Filter: SAE CLASS 60 Max = 48.686 Min = -14.559

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



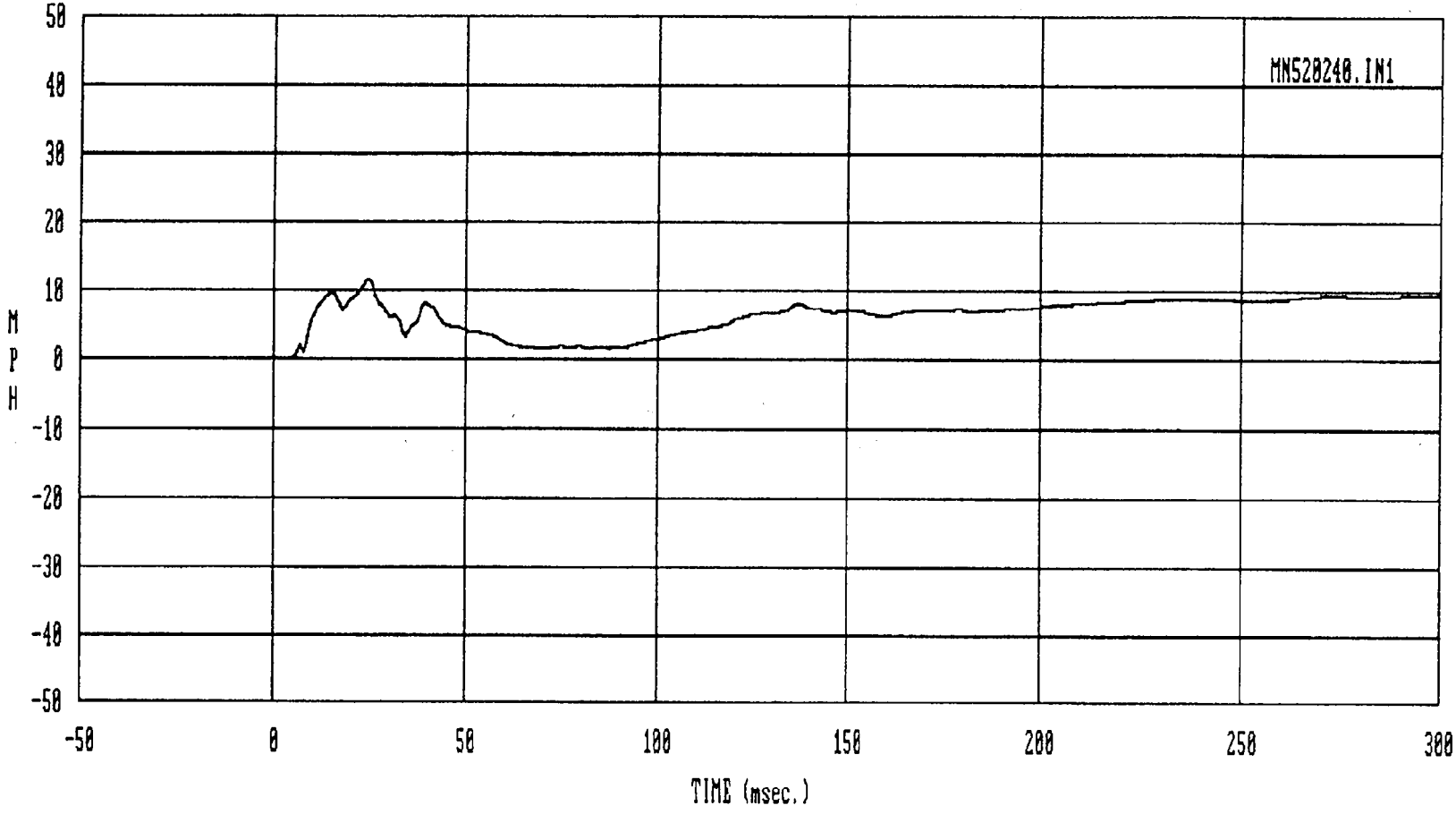
Curve: Front seat left Sill delta V -- Y axis Filter: SAE CLASS 180 Max = 10.931 Min = -4.9094

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



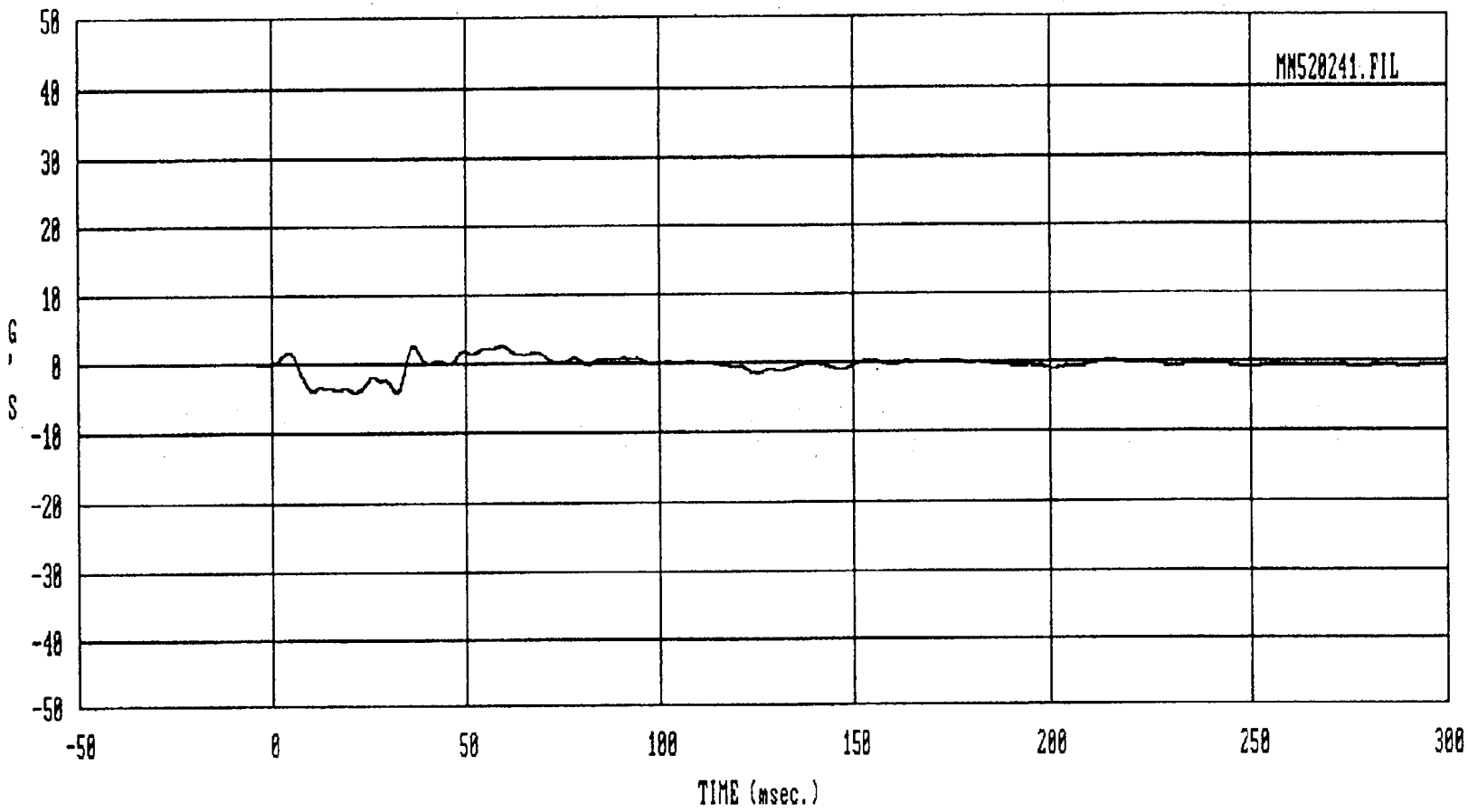
Curve: Left front door at centerline -- Y axis Filter: SAE CLASS 60 Max = 71.902 Min = -46.842

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



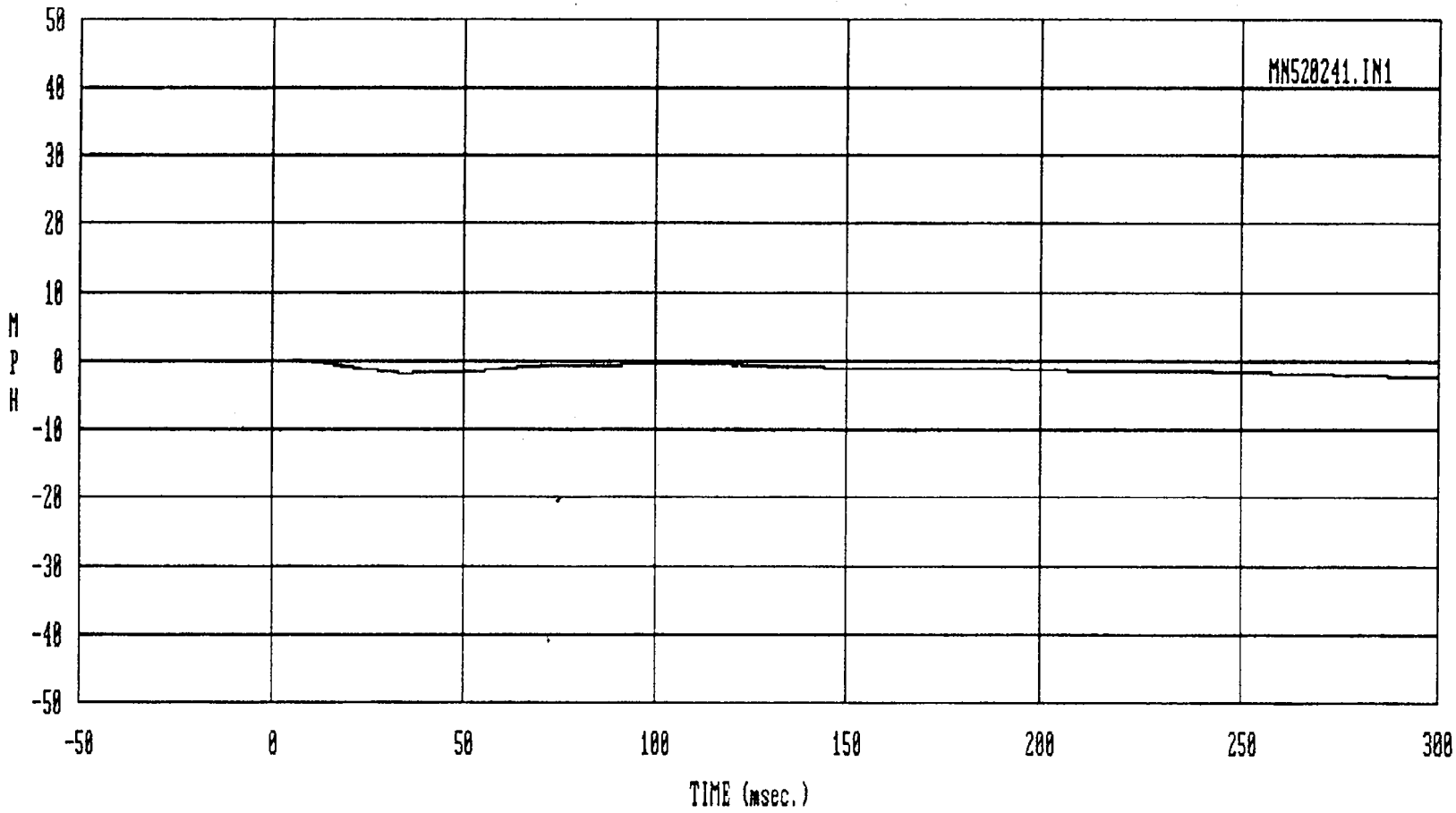
Curve: Left front door at centerline -- Y axis Filter: SAE CLASS 180 Max = 11.711 Min = -.58635E-02

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



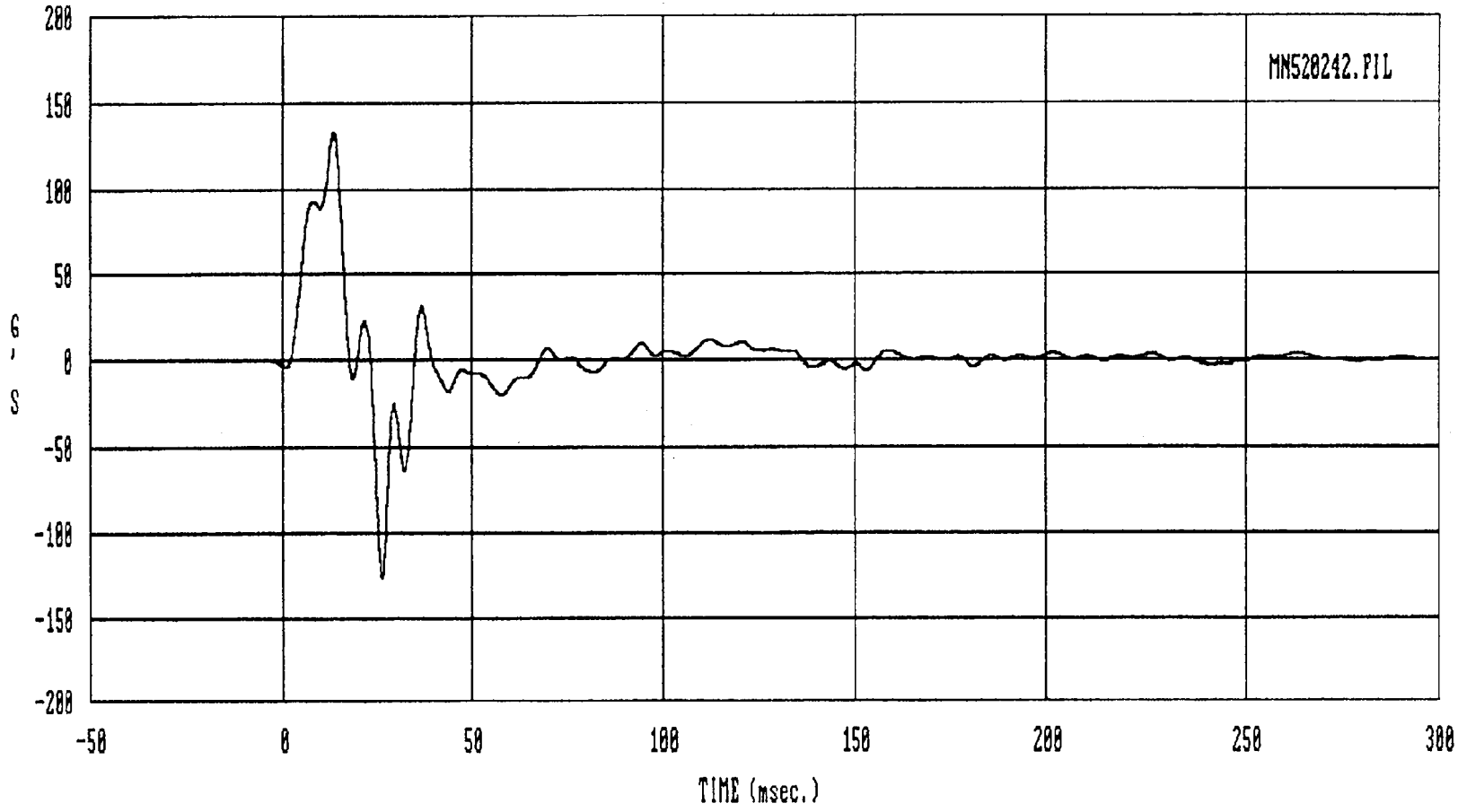
Curve: Right rear occupant compartment -- X axis Filter: SAE CLASS 60 Max = 2.5380 Min = -4.1697

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



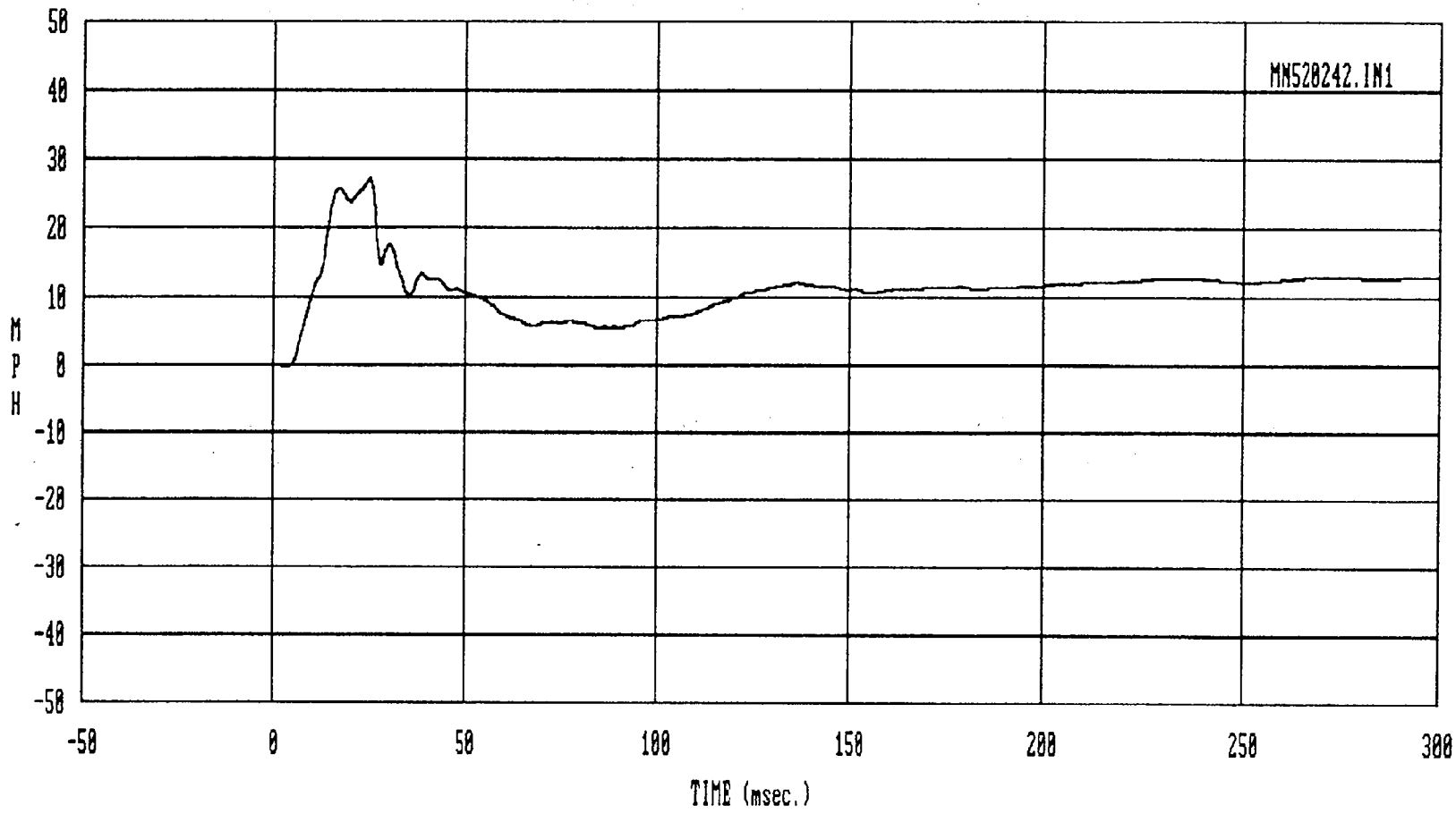
Curve: Right rear occupant compartment -- X axis Filter: SAE CLASS 180 Max = .15674 Min = -2.2289

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



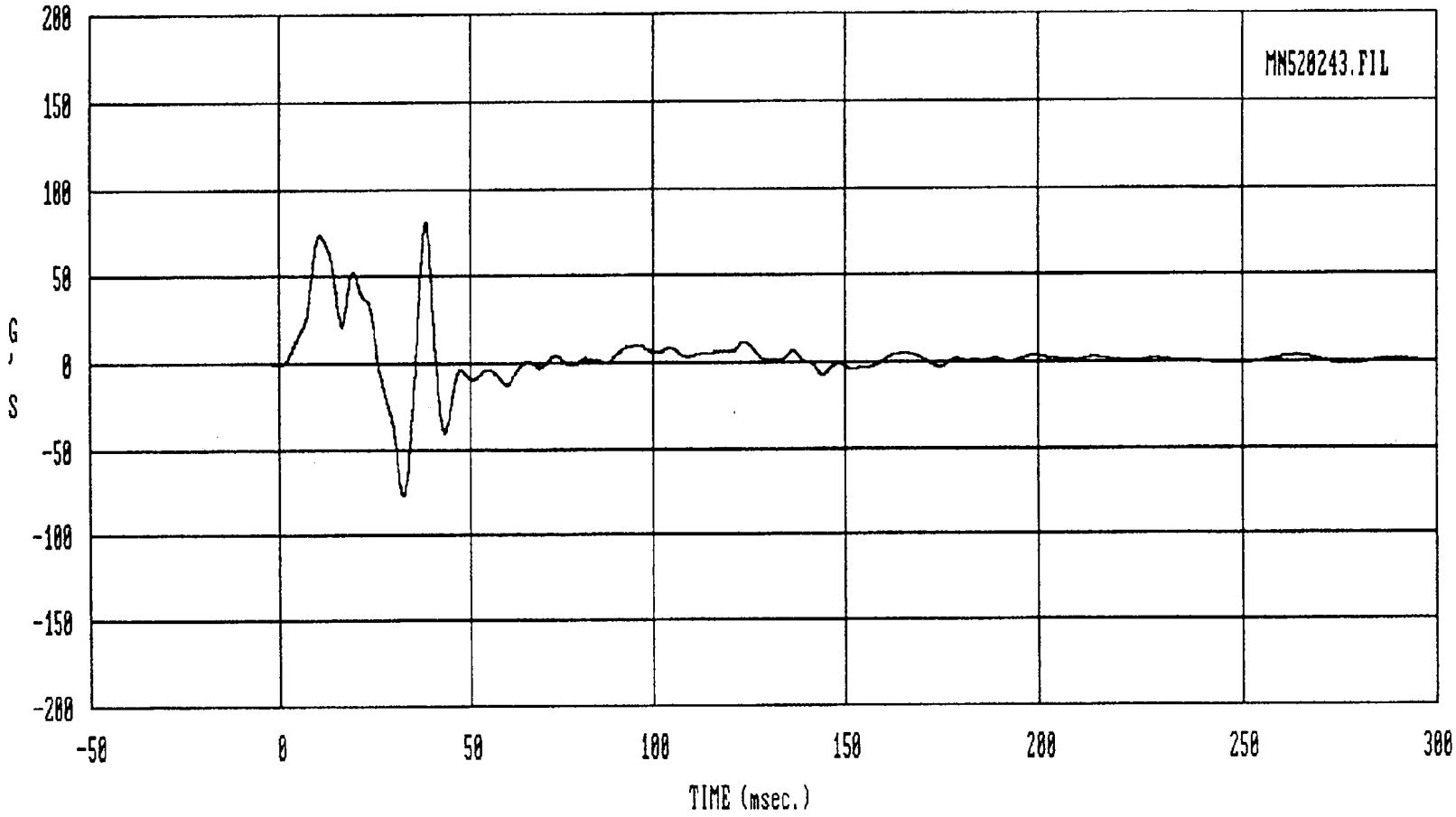
Curve: Left front door at mid-rear -- Y axis Filter: SAE CLASS 60 Max = 134.04 Min = -126.24

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



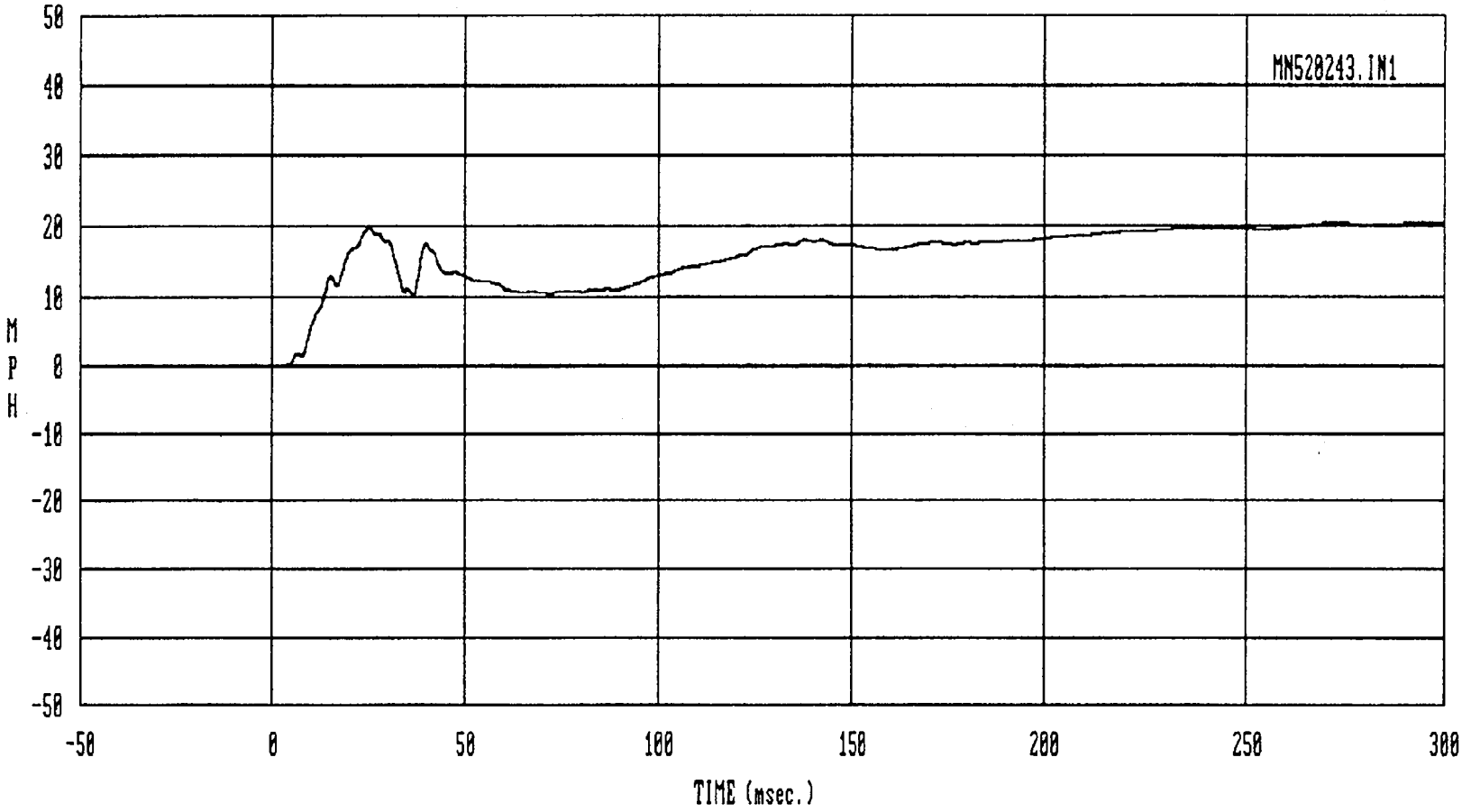
Curve: Left front door at mid-rear -- Y axis Filter: SAE CLASS 180 Max = 27.237 Min = -.20631

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



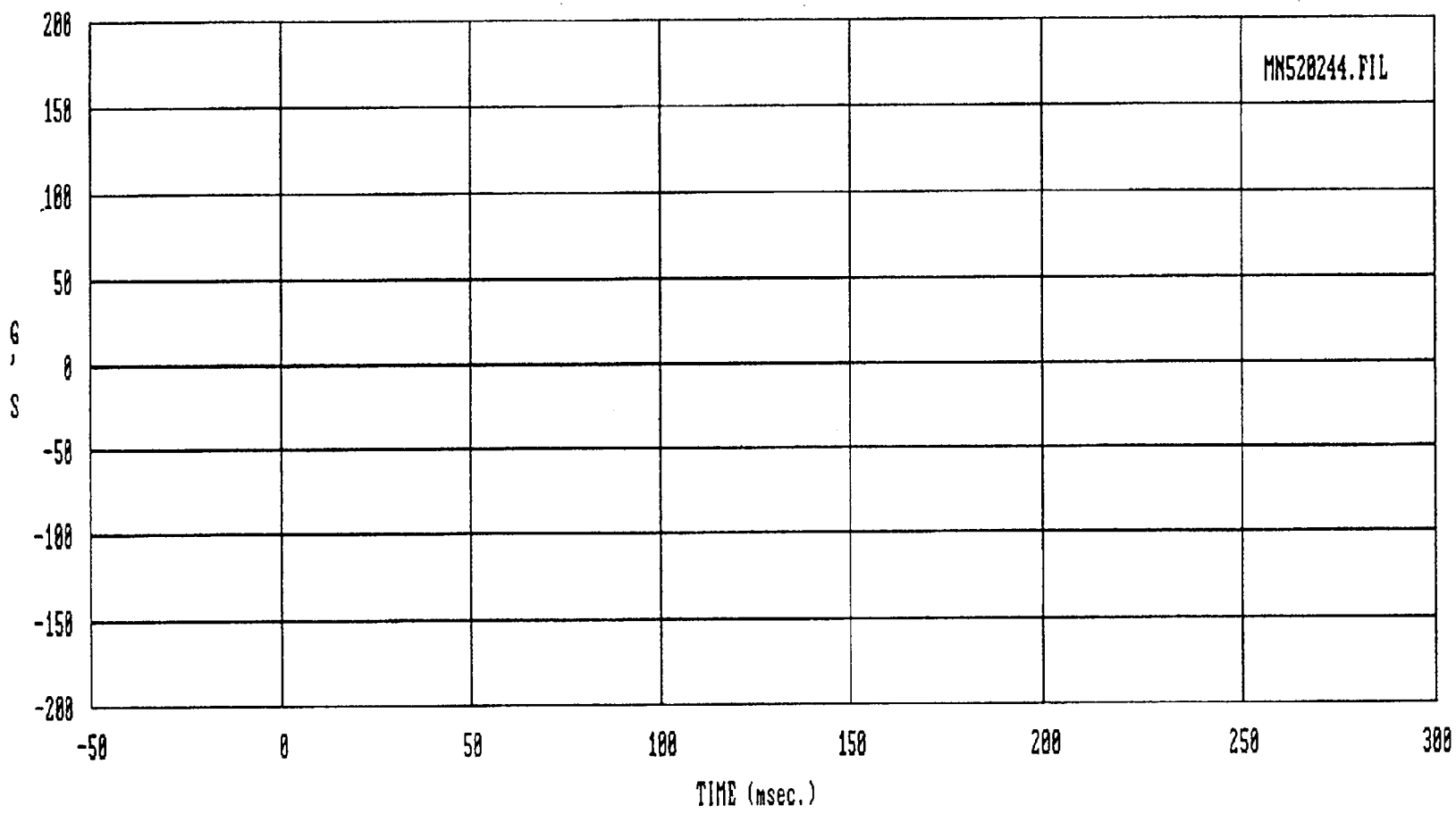
Curve: Left front door at upper centerline -- Y axis Filter: SAE CLASS 60 Max = 81.051 Min = -77.077

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



Curve: Left front door at upper centerline -- Y axis Filter: SAE CLASS 180 Max = 20.587 Min = -.58526E-01

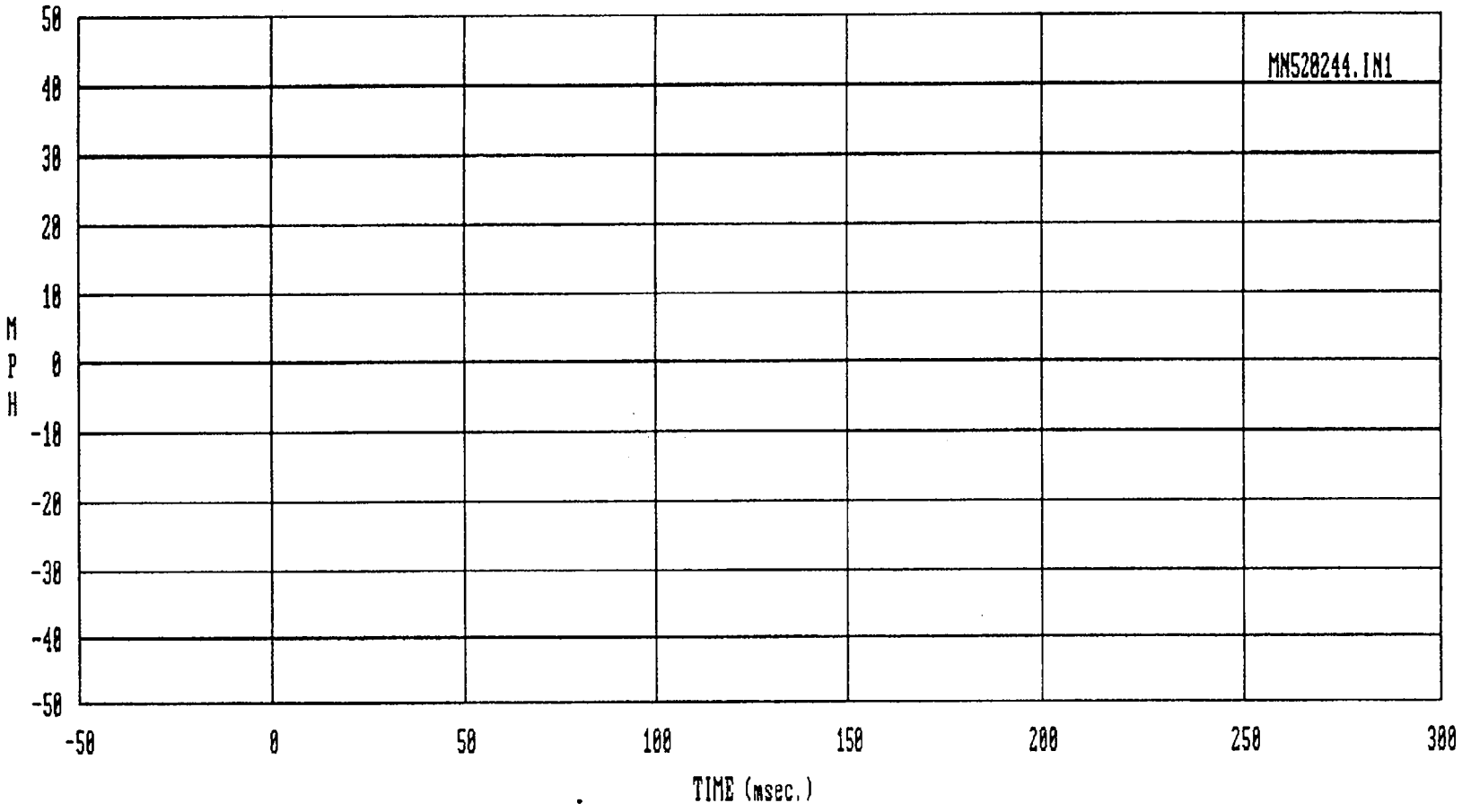
MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



Curve: Left rear door at mid-rear -- Y axis Filter: SAE CLASS 60 Max = .00000 Min = .00000

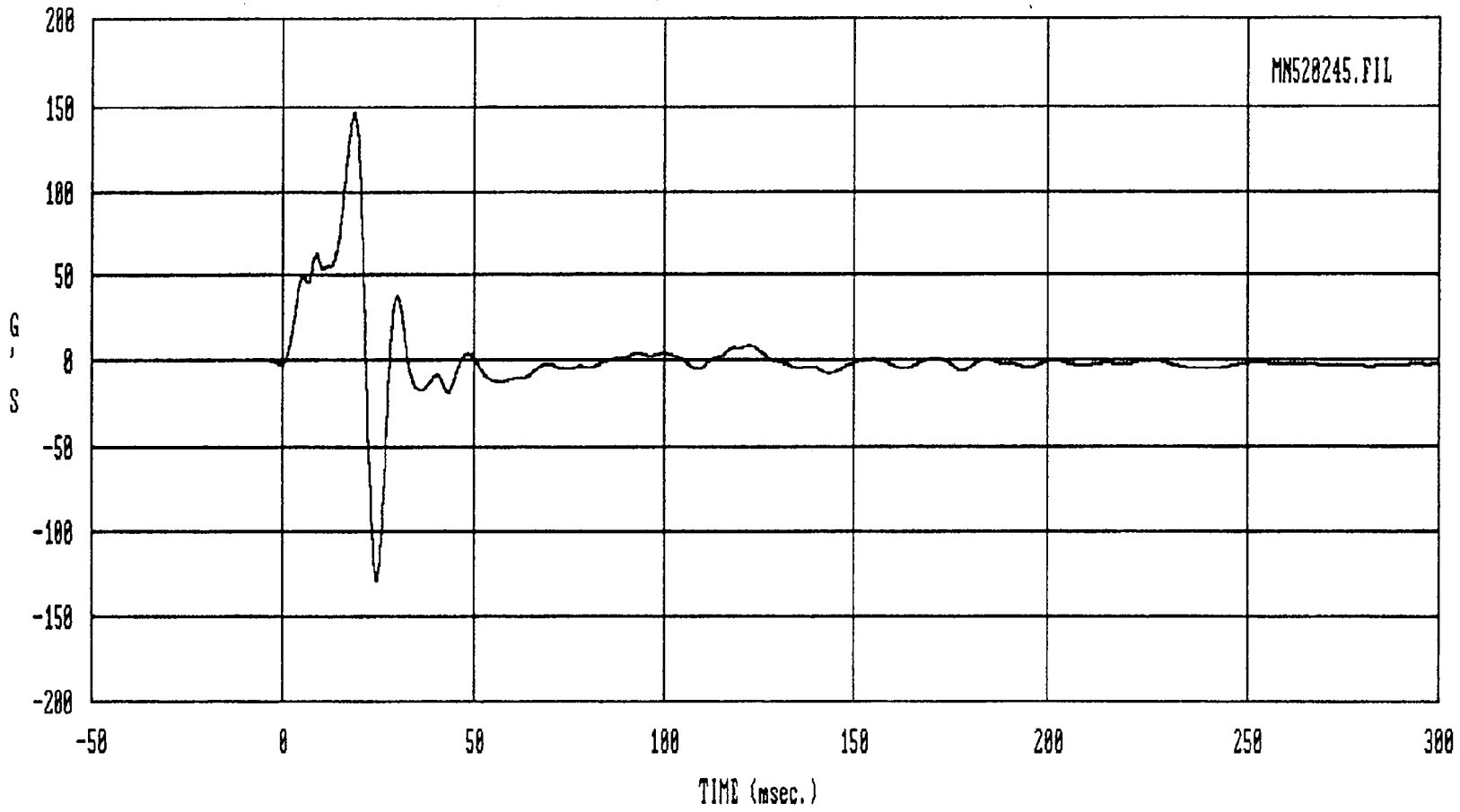
MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra

99T



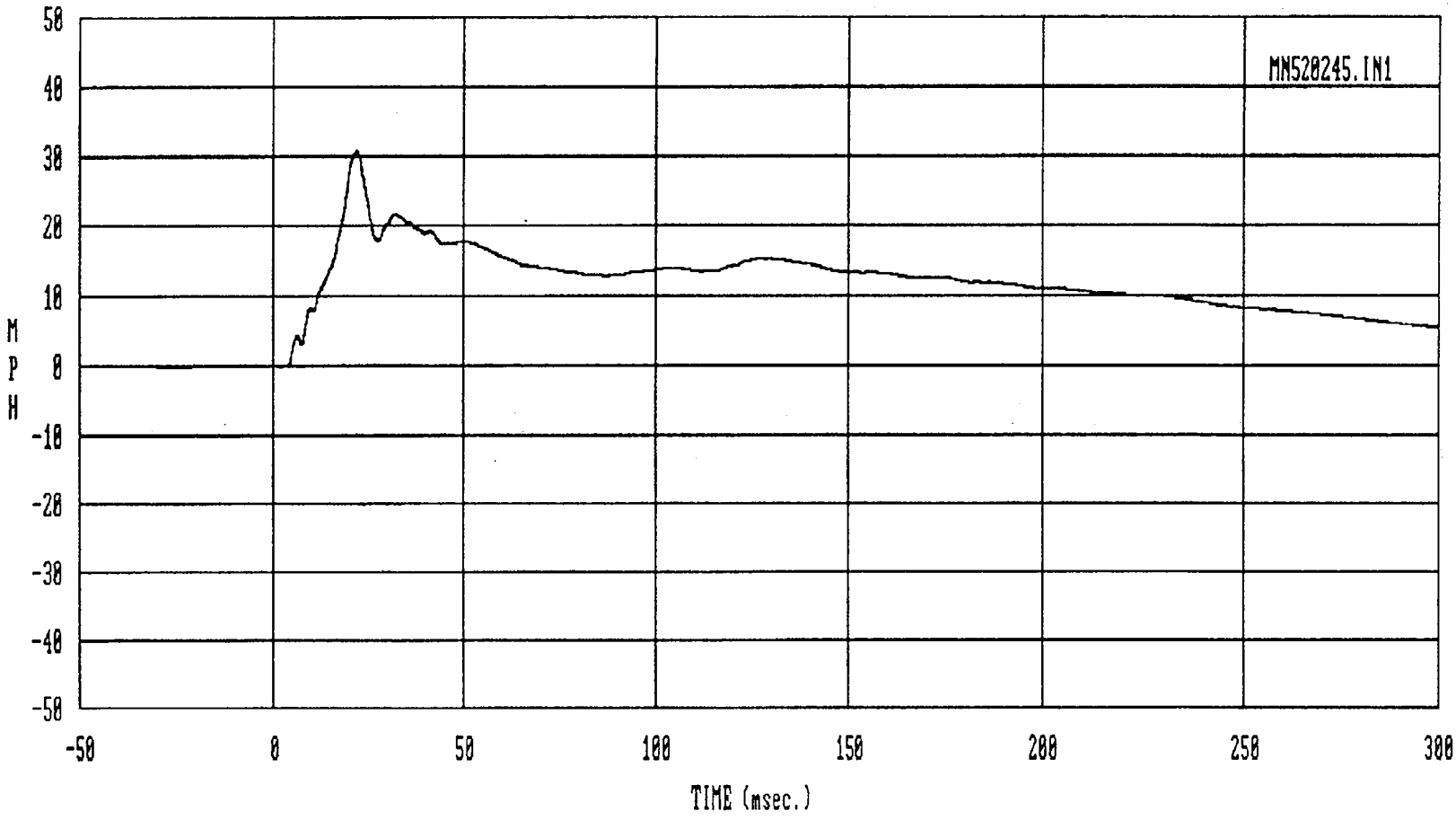
Curve: Left rear door at mid-rear -- Y axis Filter: SAE CLASS 180 Max = .00000 Min = .00000

MSE Date: 06/17/92 Program: Side Impact, 30/15, 90 deg. Vehicle: 1992 Nissan Sentra



Curve: Left rear door at upper centerline -- Y axis Filter: SAE CLASS 60 Max = 146.96 Min = -128.71

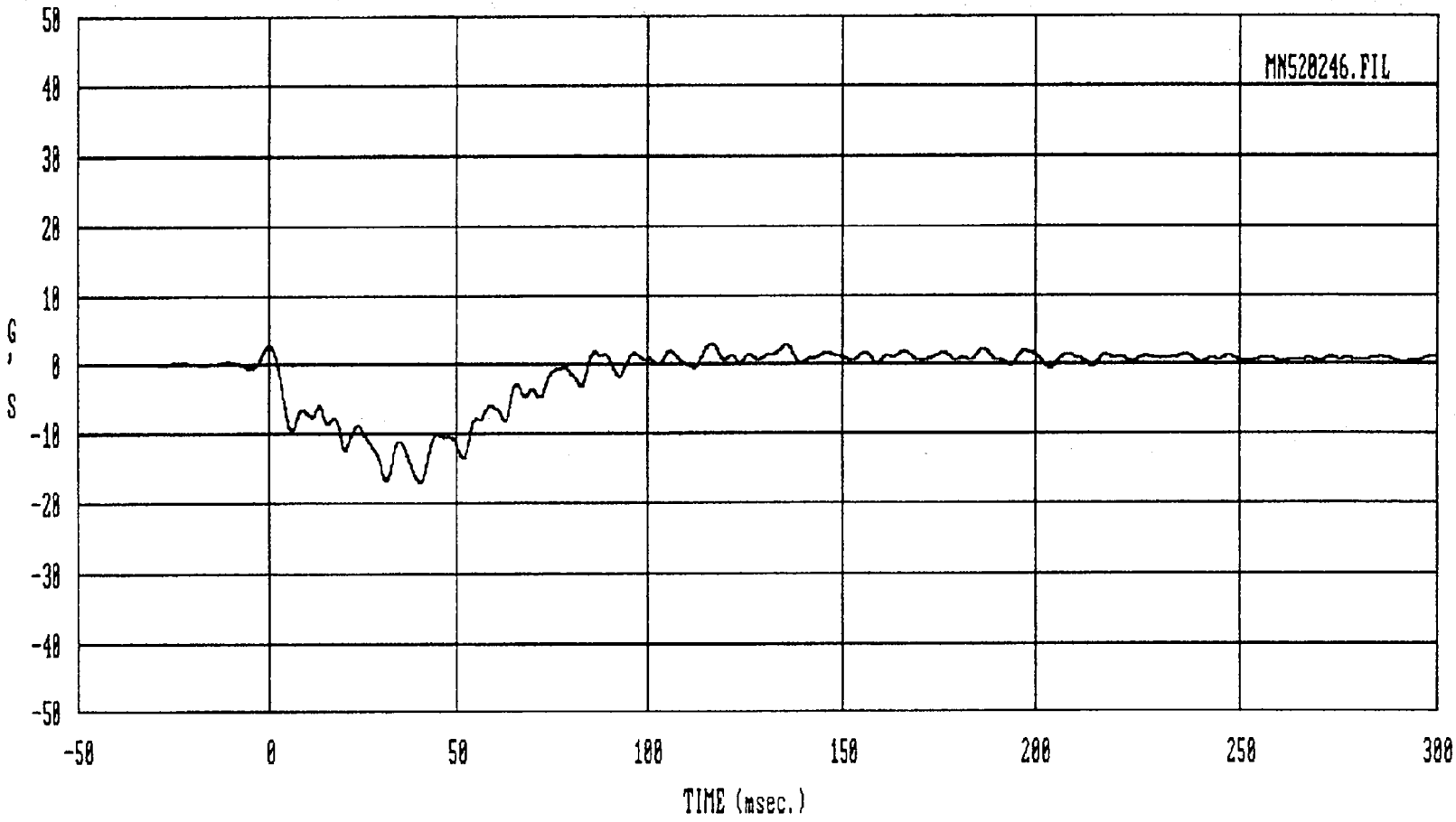
MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



Curve: Left rear door at upper centerline -- Y axis Filter: SAE CLASS 180 Max = 30.806 Min = -.10572

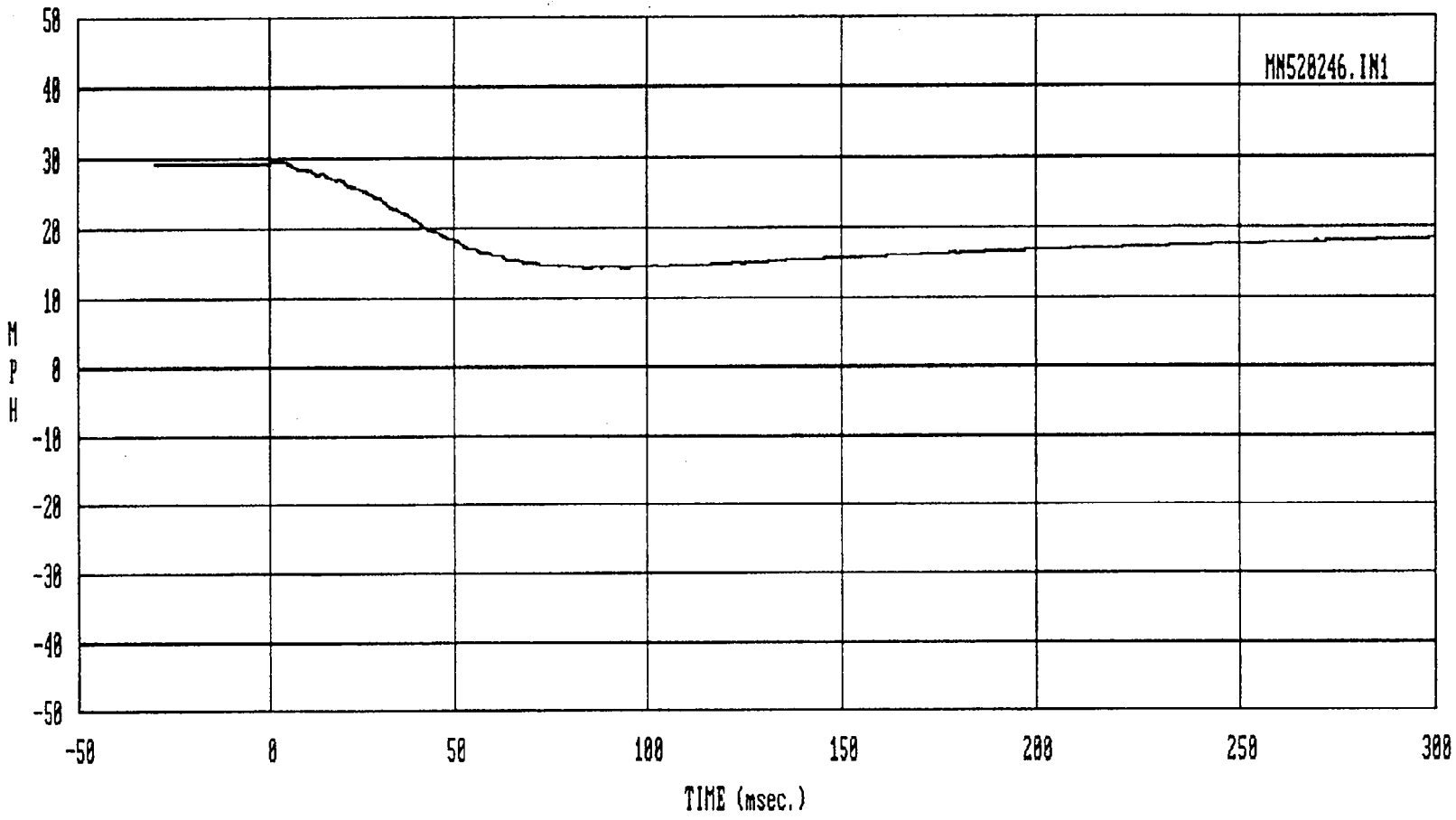
MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra

MDB ACCELEROMETER DATA



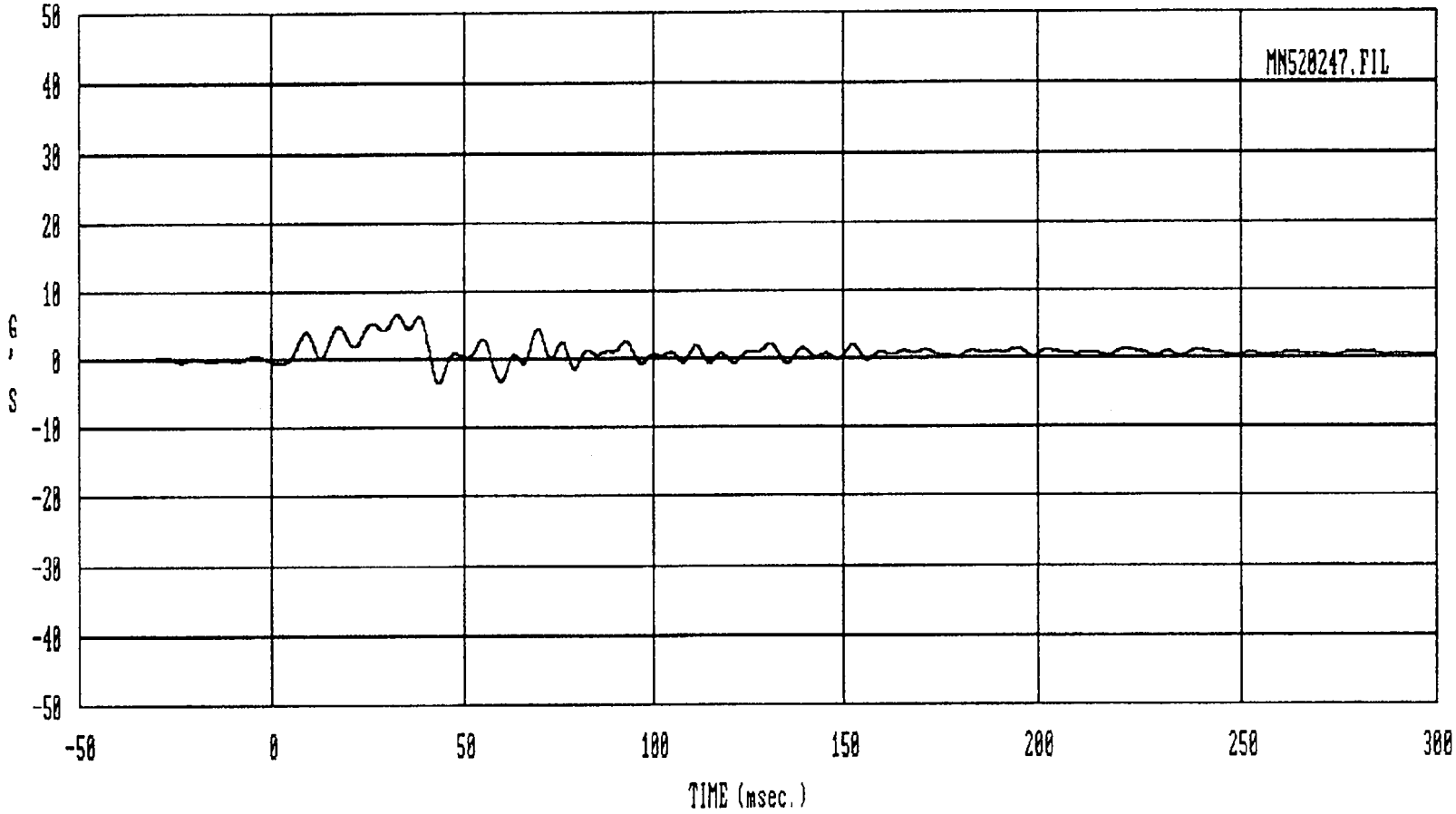
Curve: M.D.B. C/G acceleration -- X axis Filter: SAE CLASS 60 Max = 2.9660 Min = -17.046

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



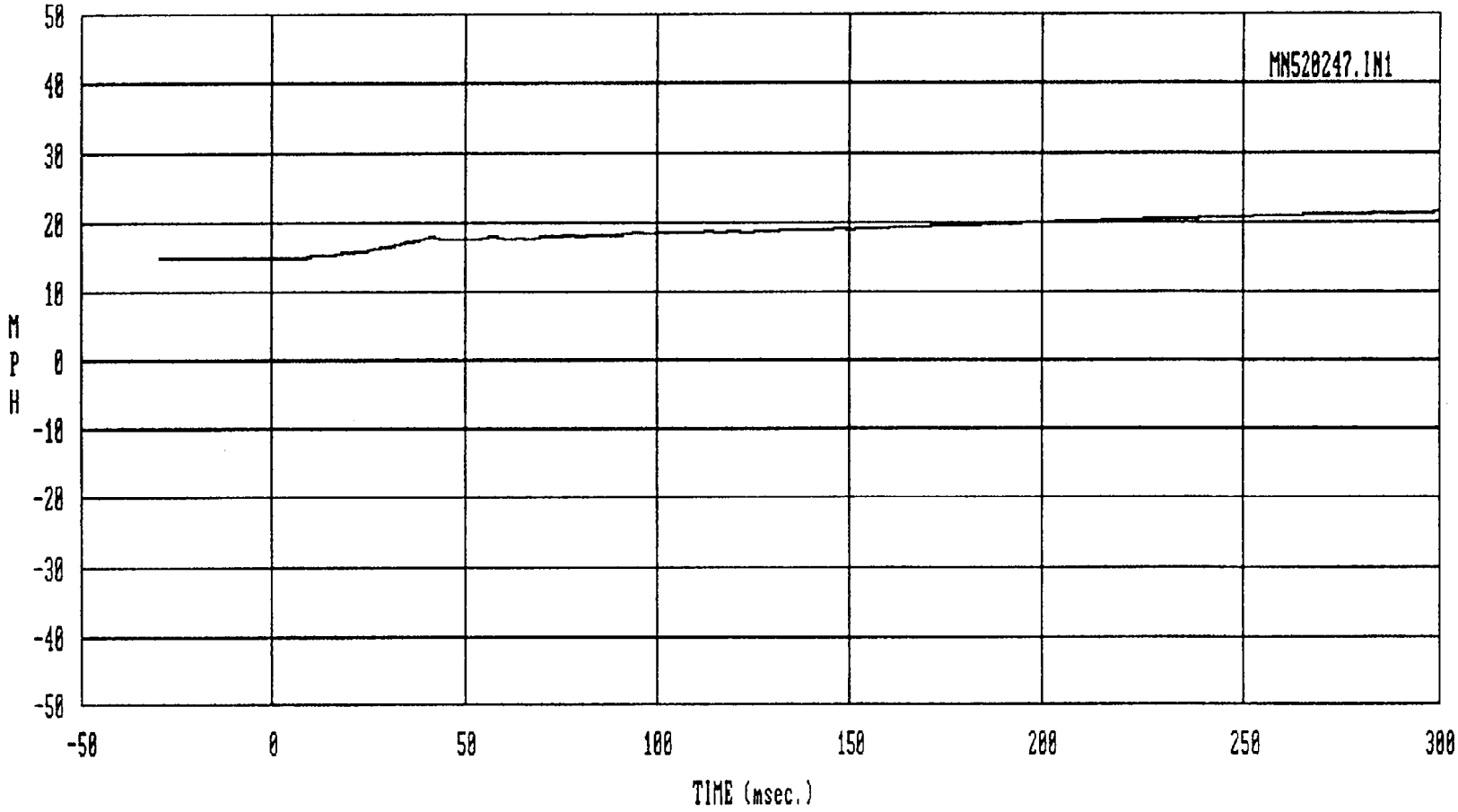
Curve: M.D.B. C/G delta V -- X axis Filter: SAE CLASS 180 Max = 29.466 Min = 14.310

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



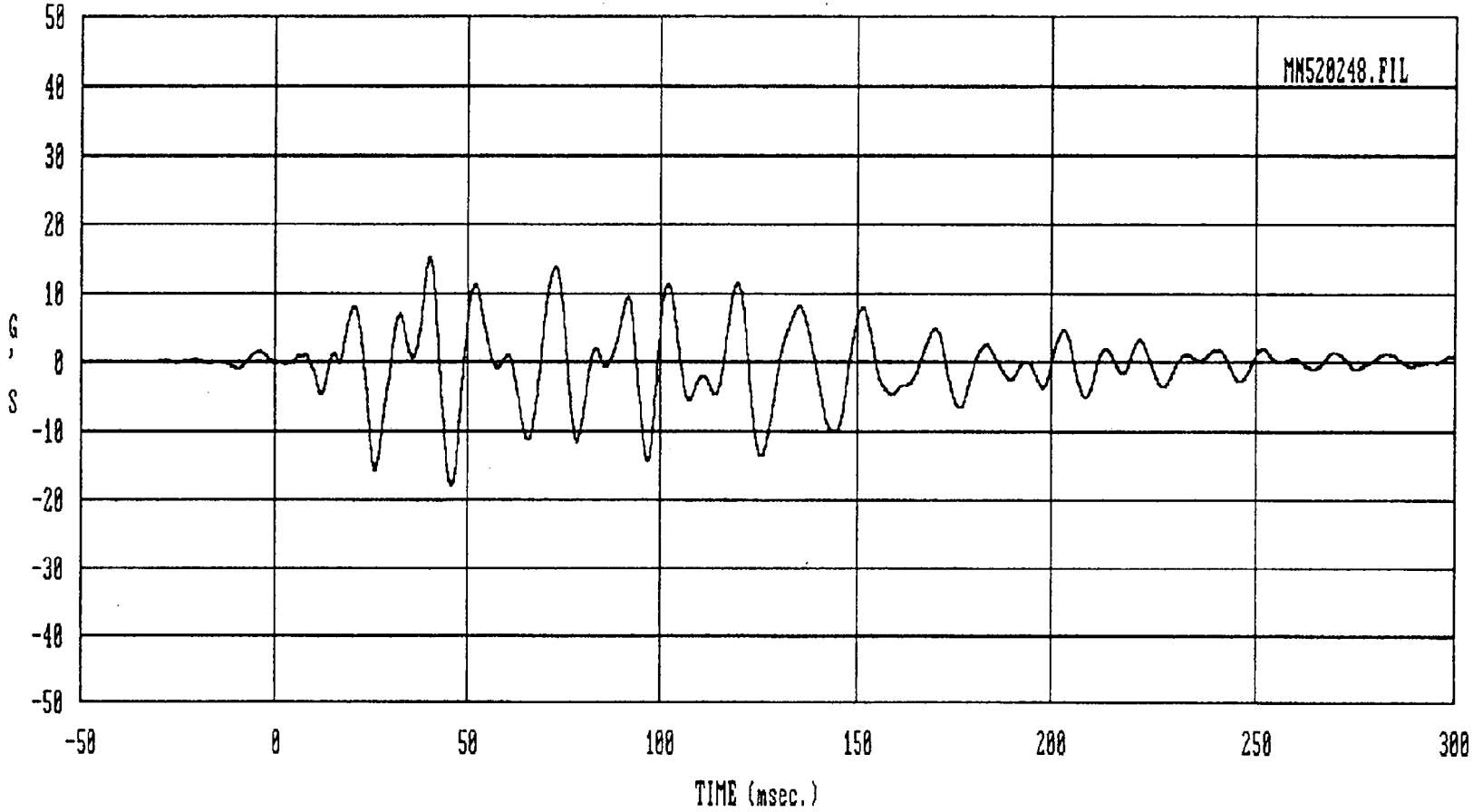
Curve: M.D.B. C/G acceleration -- Y axis Filter: SAE CLASS 60 Max = 6.7864 Min = -3.4990

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



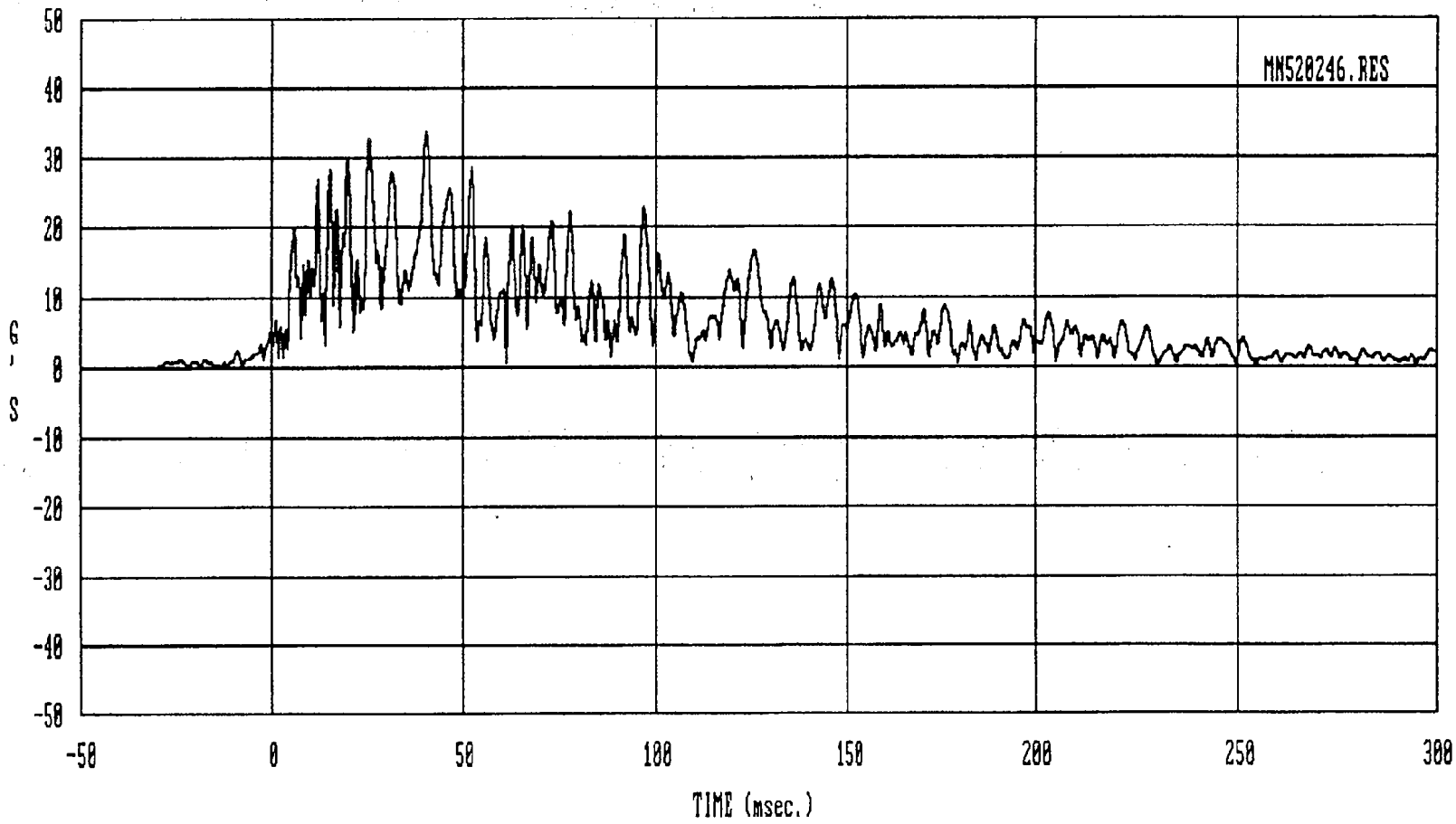
Curve: M.D.B. C/G delta V -- Y axis Filter: SAE CLASS 180 Max = 21.549 Min = 14.879

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



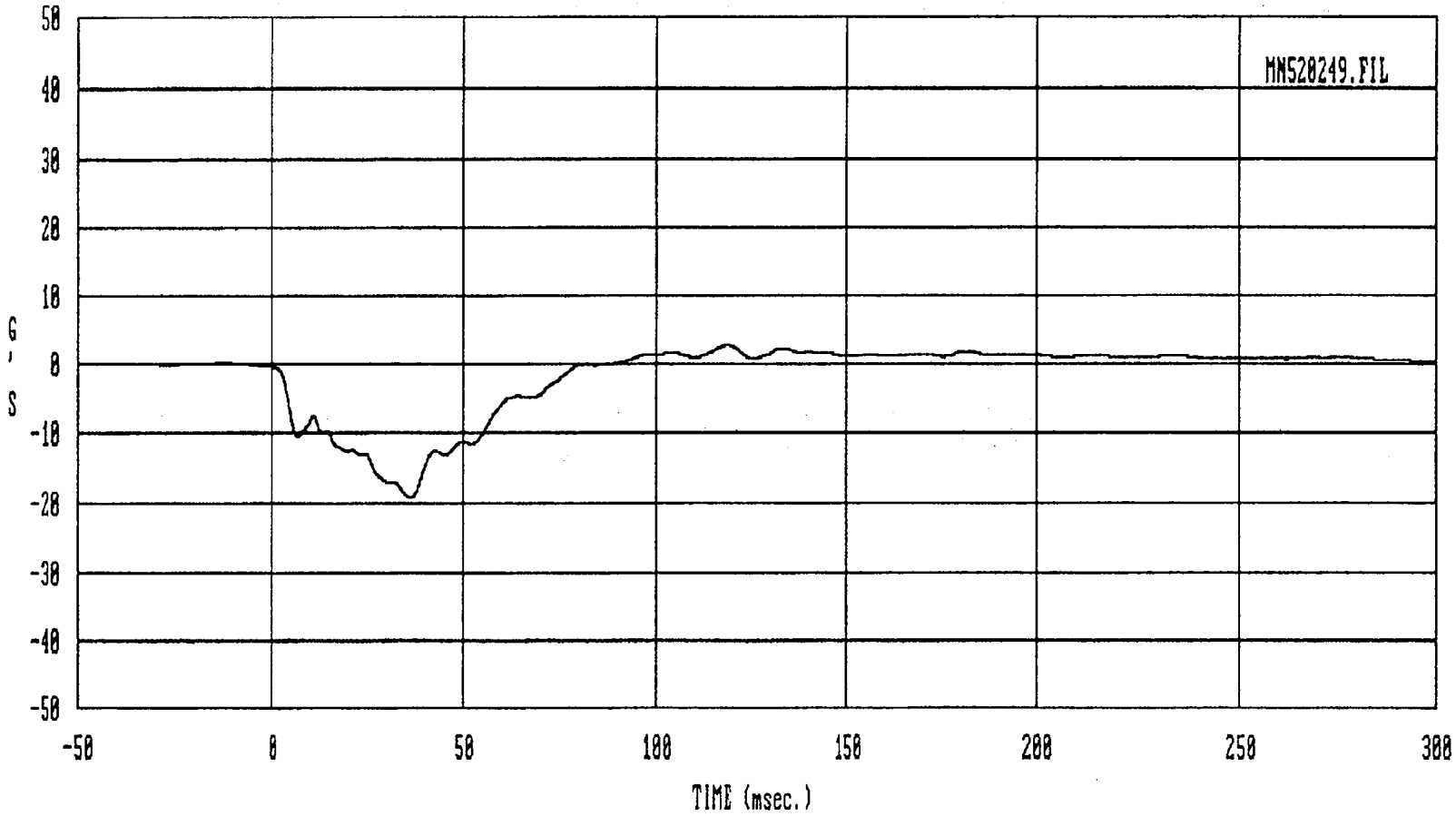
Curve: M.D.B. C/G acceleration -- Z axis Filter: SAE CLASS 60 Max = 15.323 Min = -17.785

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



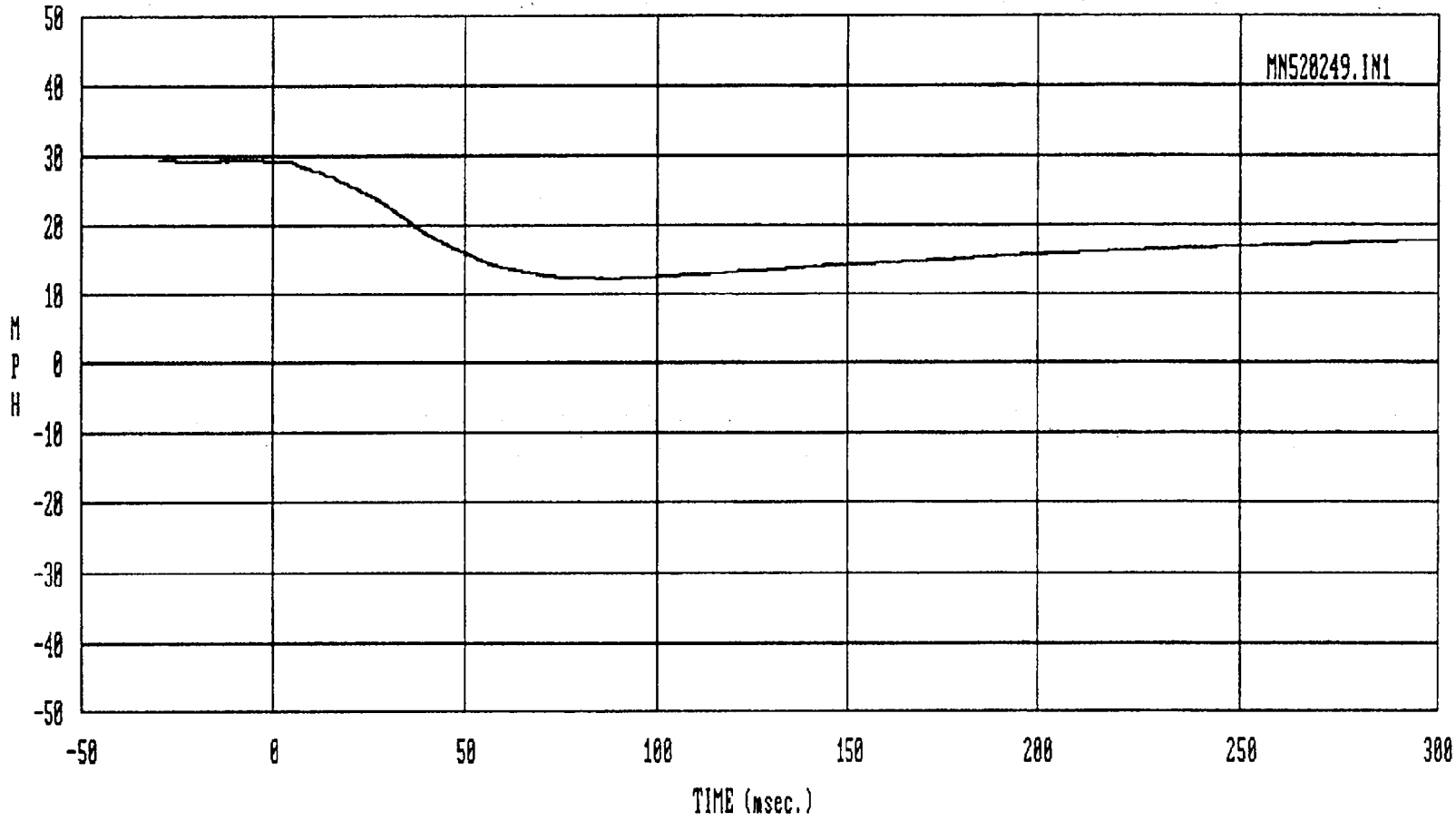
Curve: M.D.B. C/G resultant acceleration Filter: SAE CLASS 60 Max = 33.834 Min = .34910

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



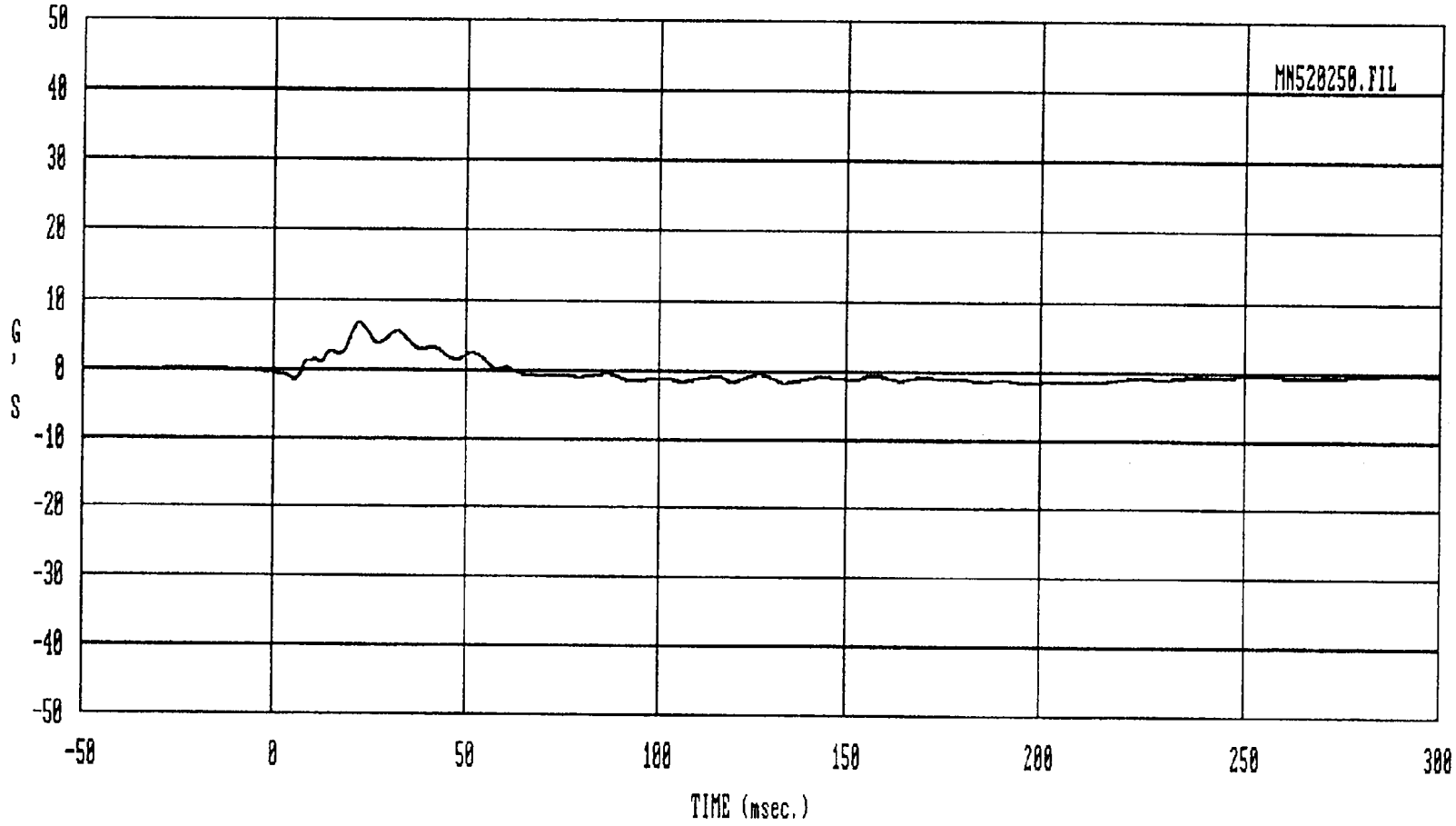
Curve: M.D.B. rear C/G acceleration -- X axis Filter: SAE CLASS 60 Max = 2.7631 Min = -19.189

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



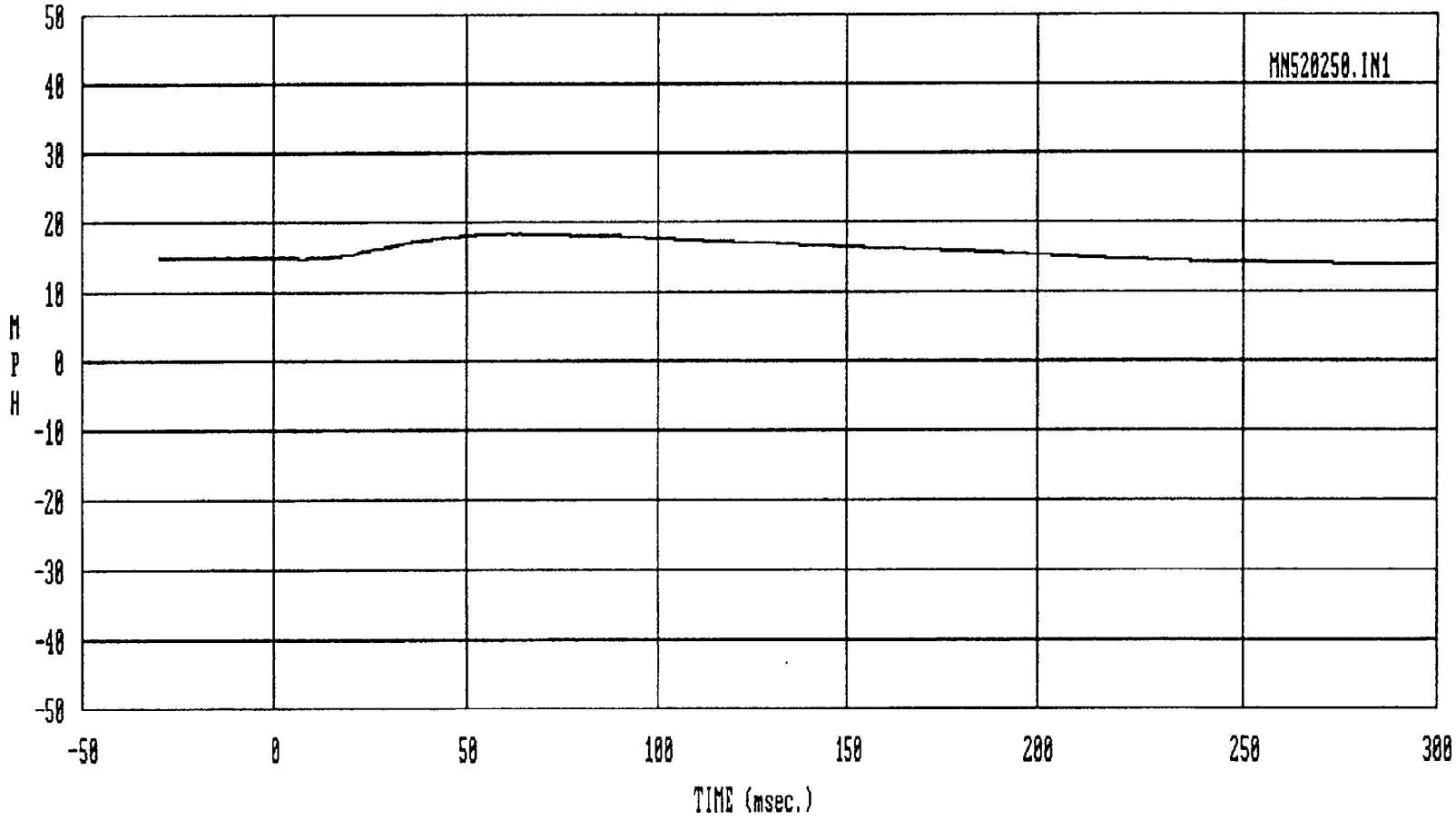
Curve: M.D.B. rear C/G delta V -- X axis Filter: SAE CLASS 180 Max = 29.359 Min = 12.275

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



Curve: M.D.B. rear C/G acceleration -- Y axis Filter: SAE CLASS 60 Max = 6.9863 Min = -1.6936

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra



Curve: M.D.B. rear C/G delta V -- Y axis Filter: SAE CLASS 180 Max = 18.404 Min = 13.876

MSE Date: 06/17/92 Program: Side Impact 30/15 90 Deg. Vehicle: 1992 Nissan Sentra

SECTION 7

SID CONFIGURATION AND PERFORMANCE VERIFICATION DATA

Two SID's were used during the test. They were:

DRIVER POSITION: SID, SERIAL NO. 136

LEFT REAR PASSENGER

POSITION: SID, SERIAL NO. 137

The pretest SID calibration data are shown in this section.

SID IMPACT CALIBRATION SUMMARY SHEET

S.I.D. I.D. NO. : 136 (DRIVER)

Sheet No. 2 of 3 TEST PARAMETER	SPECIFICATION	Pretest Calibration	Posttest Calibration
3. ABDOMINAL COMPRESSION TEST (Preload = 10 pounds)			
a. Force @ .5" - - - -	23 - 36 lbs.	N/A	
b. Force @ .75"- - - -	36 - 50 lbs.	N/A	
c. Force @ 1.0"- - - - -	50 - 63 lbs	N/A	
d. Force @ 1.3"- - - - -	73 - 88 lbs.	N/A	
4. LUMBAR FLEXION TEST:			
a. Force @ 20' - - - -	22 to 34 lbs	N/A	
b. Force @ 30' - - - -	34 to 46 lbs	N/A	
c. Force @ 40' - - - - -	46 to 58 lbs	N/A	
d. Return Angle - - - -	12 maximum	N/A	
5. THORAX IMPACT TEST:	VEL: 14.12 ft/sec.		
	Primary	41.43	
a. Upper Rib accel.- - -	37 - 46g's Sec.	41.71	
	Primary	39.20	
b. Lower Rib accel.- - -	37 - 46g's Sec.	40.23	
	Primary	21.13	
c. Lower Spine accel - -	15 -22 g's Sec.	20.79	
6. PELVIC IMPACT TEST:	Vel: 14.11 ft/sec.		
Pelvic accel. - - - -	40 - 60g's	47.07	

SID IMPACT CALIBRATION SUMMARY SHEET

S.I.D. I.D. NO. : 137 (PASSENGER)

Sheet No. 2 of 3 TEST PARAMETER	SPECIFICATION	Pretest Calibration	Posttest Calibration
3. ABDOMINAL COMPRESSION TEST (Preload = 10 pounds)			
a. Force @ .5" - - - -	23 - 36 lbs.	N/A	
b. Force @ .75"- - - -	36 - 50 lbs.	N/A	
c. Force @ 1.0"- - - - -	50 - 63 lbs	N/A	
d. Force @ 1.3"- - - - -	73 - 88 lbs.	N/A	
4. LUMBAR FLEXION TEST:			
a. Force @ 20' - - - -	22 to 34 lbs	N/A	
b. Force @ 30' - - - -	34 to 46 lbs	N/A	
c. Force @ 40' - - - - -	46 to 58 lbs	N/A	
d. Return Angle - - - -	12 maximum	N/A	
5. THORAX IMPACT TEST:	VEL: 14.19 ft/sec.		
	Primary	42.90	
a. Upper Rib accel.- - -	37 - 46g's Sec.	43.60	
	Primary	42.18	
b. Lower Rib accel.- - -	37 - 46g's Sec.	42.77	
	Primary	21.17	
c. Lower Spine accel - -	15 -22 g's Sec.	21.44	
6. PELVIC IMPACT TEST: Pelvic accel. - - - -	Vel: 14.09 ft/sec 40 - 60g's	44.49	