1738

REPORT NO.: MSE-92-01-TR1086-01 R1086-01

SIDE IMPACT PROTECTION STUDY IN PRODUCTION VEHICLES

MDB-TO-VEHICLE SIDE IMPACT TEST OF A 27° CRABBED MOVING DEFORMABLE BARRIER TO A 1987 DODGE COLT VISTA, 4 WHEEL DRIVE VAN AT 33.0 MPH

NHTSA NO.: RH0301

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

17 AUGUST 1992

FINAL REPORT

Prepared Under Contract No. DTNH22-87-C-07168, D.O. #3

For

U.S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Office of Crashworthiness Research
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: 17 August 1992

Report Accepted by OCR:

Accepted by: _____

Acceptance Date: _____

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16. Abstract

A 30/15 mph 90° Impact (Moving Deformable Barrier) Test was conducted on the subject 1987 Dodge Colt Vista, 4-Wheel Drive Van 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 August 15, 1992.

The impact velocity of the Moving Deformable Barrier (MDB) was 33.10 mph, and the ambient temperature at the struck side (driver's) of the target vehicle at the time of impact was 97°F. The target vehicle post test maximum crush was 13.1 inches at level 2. The test vehicle's performance follows:

	DRIVER	PASS
Left Upper Rib (LUR) Accel., g	129.6	52.5
Left Lower Rib (LLR) Accel., g	106.3	63.4
Lower Spine (T_{12}) Accel., g	108.7	76.4
Thoracic Trauma Index (TTI)	119.2	69.9
Pelvis (PEV_d) Accel., g	82.0	108.3

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) 1987 DODGE COLT VISTA	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

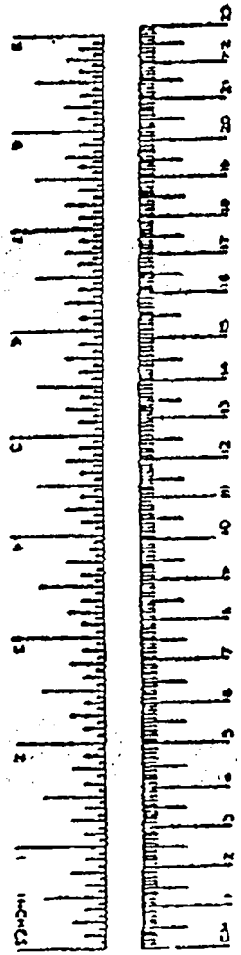
SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
	LENGTH			
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
	AREA			
cm^2	square centimeters	0.16	square inches	in^2
m^2	square meters	1.2	square yards	yd^2
km^2	square kilometers	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

°F -40 0 32 40 98.6 120 160 200 212 °F

°C -40 -20 0 20 40 60 80 100 °C

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



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SECTION 1

PURPOSE AND INTRODUCTION

This testing program is a part of an investigation and evaluation of side impact protection in production light trucks and vans. The test is specifically intended to simulate a 90 deg. intersection collision with the striking vehicle moving at 30 mph. This is accomplished by towing a Moving Deformable Barrier (MDB) crabbed at a 27 angle into the struck test vehicle which is placed in a stationary position. The velocity of the MDB is to be 33.0 $\pm$0.5 mph.

The subject vehicle for this test was a 1987 Dodge Colt Vista Van. The test was performed on 05 August 1992 at an actual impact speed of 33.10 mph. The leading left-hand edge of the MDB contacted the test vehicle 35.5 inches forward of the midpoint between the axles.

Section 2 contains a general test summary and vehicle information data sheets. Section 3 contains the test results.

Section 4 contains a test equipment list and calibration information. Section 5 Contains pretest and posttest photographs. Section 6 contains SID, vehicle and MDB response data plots. Section 7 contains the pretest SID configuration and performance verification data.

SECTION 2

TEST SUMMARY AND VEHICLE INFORMATION

The 1987 Dodge Colt Vista Van, Test No. 1, was tested on 05 August 1992. General test vehicle information and pretest conditions are given in Data Sheet No. 1. A crash test summary is shown in Data Sheet No. 1. The vehicle was instrumented with 10 accelerometer channels and three onboard high-speed movie cameras. Accelerometer locations and peak values are shown in Data Sheet No. 8. All pretest measurements were made detailing the left side vehicle profile. The impact point was marked on the vehicle 37 inches forward of the midpoint of the wheelbase.

Two side impact anthropomorphic dummy (SID) were placed in the vehicle and positioned using the side impact dummy seating procedure specified in the OMI side impact protection study laboratory test procedure, dated December, 1991. SID position measurements are shown in Data Sheet No. 3 and 4. The SID was instrumented with 12 accelerometers. A summary of the SID accelerometer data is given in Data Sheet No. 1. Lap and shoulder seat belts were equipped with load cells for both SIDs. Colored chalk was applied to the SID's head, left shoulder, left hip and his knees to help determine dummy contact points during the test.

The MDB was crabbed at 27 and instrumented with five (5) accelerometers and two (2) high-speed movie cameras. Accelerometer locations with peak values for the MDB are shown in Data Sheet No. 9.

Additional film coverage of the test was also provided by two (2) overhead and two (2) ground high-speed movie cameras and one real-time camera. Camera locations are given in Data Sheet No. 10. A total of 50 channels of information was recorded on two (2) FM data tape recorder and two (2) direct analog to digital acquisition units and data acquisition computers.

DATA SHEET NO. 1

SUMMARY OF RESULTS

VEH. MOD.YR/MAKE/MODEL: 1987 DODGE COLT VISTA

VEH. BODY STYLE: 4 WHEEL DRIVE VAN VIN: JB4FH31D2HZ019319

VEH. NHTSA NO.: RH0301 VEH. BUILD DATE: 08/86

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY

TEST RESULTS:

Vehicle Overall Length = 174.6 inches; Vehicle Overall Width 64.6 inches

Vehicle Test Weight:	994 lbs. Left Front	825 lbs. Left Rear
	955 lbs. Right Front	710 lbs. Right Rear
	1949 lbs. TOTAL FRONT	1535 lbs. TOTAL REAR

Wheelbase = 103.5 inches

Longitudinal C.G. from center of front axle = 45.6 inches

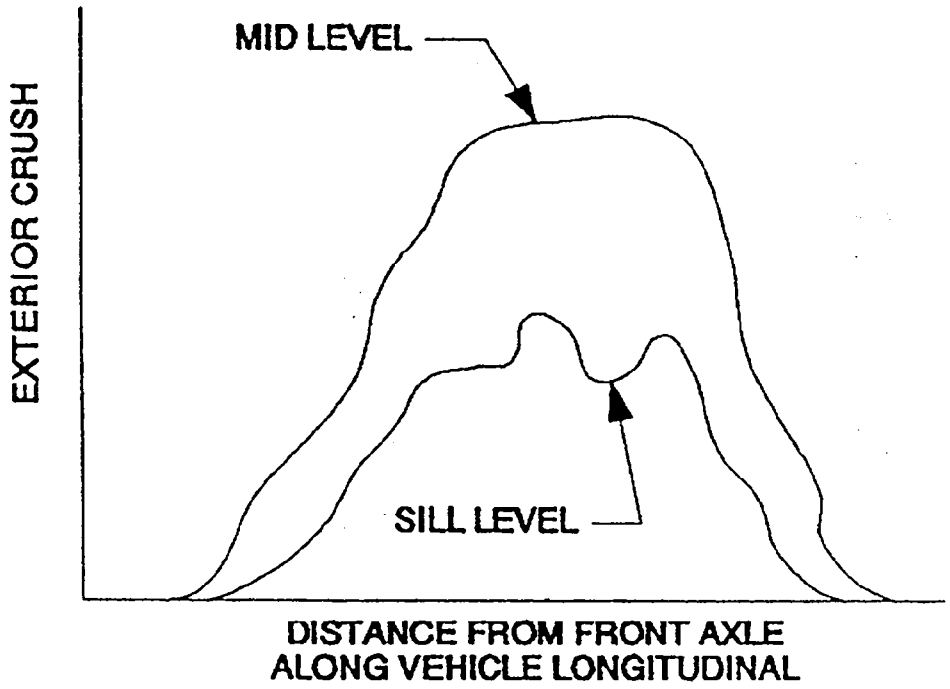
Impact Angle with respect to impactor = 90 degrees

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

1. LEVEL 1 (11.1 inches above ground) = 7.4 inches
2. LEVEL 2 (25.8 inches above ground) = 13.1 inches
3. LEVEL 3 (27.6 inches above ground) = 12.7 inches
4. LEVEL 4 (40.5 inches above ground) = 11.6 inches
5. LEVEL 5 (56.4 inches above ground) = -2.7 inches

Maximum Post Test Intrusion = 13.1 inches

External Lateral Damage Profile (sample shown below)



Occupants:	DRIVER	PASS. (LEFT REAR)
Dummy Identification	SID # 136	SID # 137
Restraint Used	3 Point continuous webbing Active belt system	3 Point continuous webbing Active belt system

Instrumentation:

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: To the right

Front Seat Back Movement: To the right

Glazing Breakage: 2 Sliding impact side windows shattered, windshield had a few cracks

Pillar Failure: None

Sill Separation: None

Other Notable Impact Effect: Impact pushed the back seat against the right rear door and pushed out the bottom of door slightly-Door remained latched

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 = 33.10 mph

Maximum Static Crush of Honeycomb Impact Face:

1. ROW A at bumper level = 6.1 inches
2. ROW B at midstack level = 2.0 inches
3. ROW C at top of stack level = 3.1 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:
Upper anchorage bolt is on the B-pillar, 24.8 inches above the B-post striker.

Visible Dummy Contact Points--	FRONT SID	REAR SID
HEAD	Upper seat belt anchorage	Vertical brace between side windows
SHOULDER	B-pillar and door	C-pillar
HIP	Door	Door
LEFT KNEE	Door and right knee	Door and right knee
RIGHT KNEE	Left Knee	Left Knee

	FRONT SID # 136				REAR SID # 137			
	+DIRECT MaxG	ms	-DIRECT MaxG	ms	+DIRECT MaxG	ms	-DIRECT MaxG	ms
RIB ACCELERATIONS:								
Upper Rib Lateral Y	129.6	26.9	31.0	31.9	52.5	35.6	11.0	75.0
Lower Rib Lateral Y	106.3	26.3	29.3	69.4	63.4	33.1	18.0	72.5
SPINE ACCELERATIONS:								
Lower Lateral Y	108.7	30.0	30.0	62.5	76.4	40.0	27.1	68.1
PELVIS ACCELERATIONS:								
Lateral Y	82.0	29.4	19.1	83.8	108.3	38.8	18.1	98.1

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

REMARKS:

RECORDED BY: Mr. Brian O'Keefe DATE: 08/10/92

APPROVED BY: 8/17/92

SIDE IMPACT DUMMY (SID) TEST DATA SUMMARY
1987 DODGE COLT VISTA VAN, NHTSA NO. RH0301

TEST DATE: 08/05/92

	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	25.7	51.2	11.3	190.5	24.8	126.7	54.0	78.2
Lateral -------- Y	101.0	48.2	9.2	141.4	28.8	78 2	9.7	41.1
Vertical ------- Z	16.3	53.2	3.6	42.3	43.3	78.1	4.7	36.7
RESULTANT ------ R	103.6	48.2	0.0	0.0	70.6	78.2	0.0	0.0
HIC ----------	398.9				217.7			
(TIME INTERVAL, SEC.)	(0.0471 TO 0.0551)				(0.0621 TO 0.0894)			
RIB ACCELERATIONS:								
1.Upper Rib Lateral Y	129.6	26.9	31.0	31.9	52.5	35.6	11.0	75.0
2.Upper Rib Lateral Y	128.7	26.9	30.6	31.3	51.1	35.6	8.5	75.0
1.Lower Rib Lateral Y	106.3	26.3	29.3	69.4	63.4	33.1	18.0	72.5
2.Lower Rib Lateral Y	113.8	26.3	23.6	70.0	62.4	33.8	17.6	73.1
SPINE ACCELERATIONS:								
1.Upper Spine LateralY	75.2	31.9	37.0	62.5	54.2	49.4	24.8	68.1
2.Upper Spine LateralY	73.4	31.3	39.1	61.9	0.0	0.0	0.0	0.0
1.Lower Spine LateralY	108.7	30.0	30.0	62.5	76.4	40.0	27.1	68.1
2.Lower Spine LateralY	109.3	30.0	32.5	62.5	79.4	40.0	24.3	68.1
PELVIS ACCELERATIONS:								
Lateral Y	82.0	29.4	19.1	83.8	108.3	38.8	18.1	98.1
RIB DEFLECTION:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
THORACIC TRAUMA INDEX (TTI), G's (d)	119.2				69.9			

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

TEST RESULTS

The 1987 Dodge Colt Vista Van was impacted at 33.10 mph by the 27 crabbed MDB on 05 August 1992. The MDB's left edge contacted the test vehicle 1.5 inches rearward of the impact line. The test vehicle spun around counterclockwise and pushed back due to impact with barrier. The vehicle driver side door and bed were crushed inwards a maximum of 13.1 inches. Pretest and posttest vehicle dimensions are shown in Data Sheet 5 and 6.

The MDB impacted the 1987 Dodge Colt Vista Van at a height that was above the sill. As a result, the MDB created extensive deformation to both left side door and "B" pillar. The doors contacted the SIDs at the lower and mid torso before the SIDs began to move. The contact to the lower and mid torso, started the SIDs heads to rotate in the counterclockwise direction. The front SIDs head impacted the seat belt anchor bolt on the "B" pillar. The passenger SIDs head impacted the virticle metal brace between the two side windows. Both SIDs then rebounded in a rotating clock wise motion. The seat belts haulted any further motion. Both SIDs ended up sitting in an upright position and facing forward.

The MDB impacted the test vehicle and was stopped by the remote brake system to prevent a second impact. The aluminum deformable barrier received minor damage with a maximum crush of 6.1 inches on the lower right-hand corner. The crush details for the MDB are given in Data Sheet No. 7.

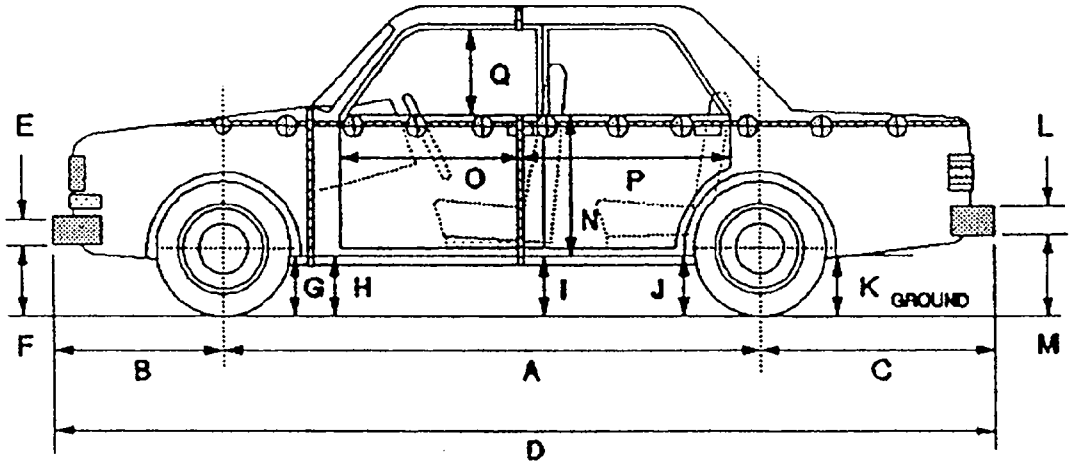
DATA SHEETS NO. 2

PRETEST AND POST TEST MEASUREMENTS

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



LEFT SIDE VIEW

	Pretest (inches)	Post Test (inches)	Change		Pretest (inches)	Post Test (inches)	Change
A	103.5	102.0	1.5	J	11.1	12.4	1.3
B	34.6	36.0	1.4	K	13.3	14.0	0.7
C	34.5	36.3	0.2	L	6.3	6.3	0.0
D	174.6	174.3	0.3	M	17.5	17.7	0.2
E	5.0	5.0	0.0	N	26.5	26.7	0.2
F	15.0	15.4	0.4	O	33.8	32.7	1.1
G	9.3	11.5	2.2	P	46.3	42.6	3.7
H	9.3	11.5	2.2	Q	16.8	16.5	0.3
I	9.9	12.5	2.6				

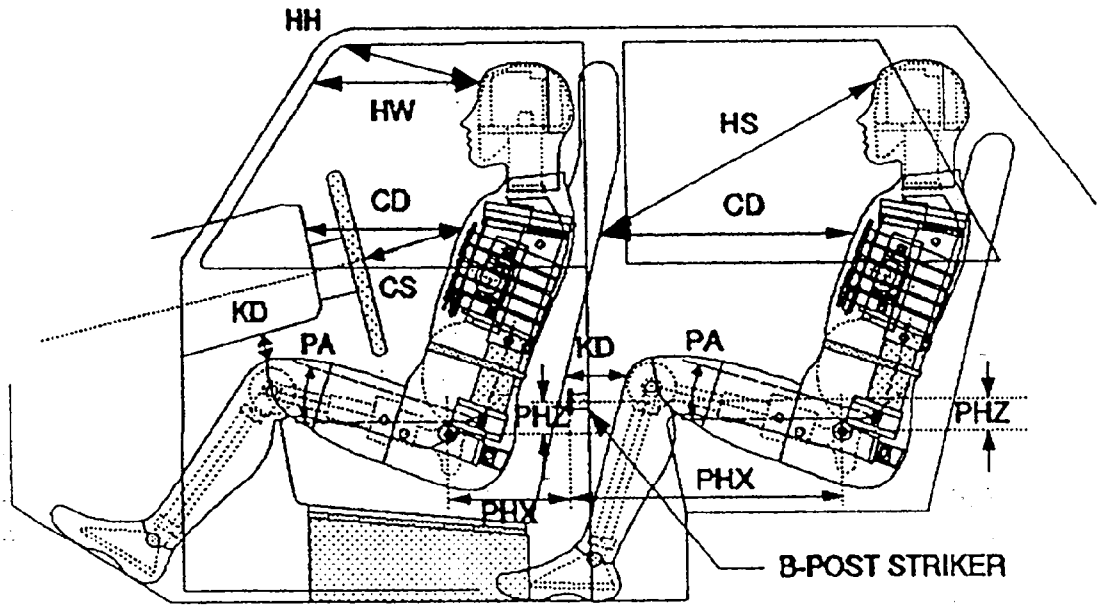
DATA SHEET NO. 3

SID LONGITUDINAL CLEARANCE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D24HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



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

LEFT SIDE VIEW

	DRIVER SID ID# 136		REAR SID ID# 137	
HH	20.2	inches	N/A	inches
HW	27.9	inches	N/A	inches
HS	26.2	inches	24.5	inches
CD	27.3	inches	18.0	inches
CS	18.0	inches	N/A	inches
KDL	4.5	inches	1.2	inches
KDR	2.8	inches	1.7	inches
PA	24.0	degrees	23.0	degrees
PHX	4.6	inches	13.9	inches
PHY	2.3	inches	7.0	inches

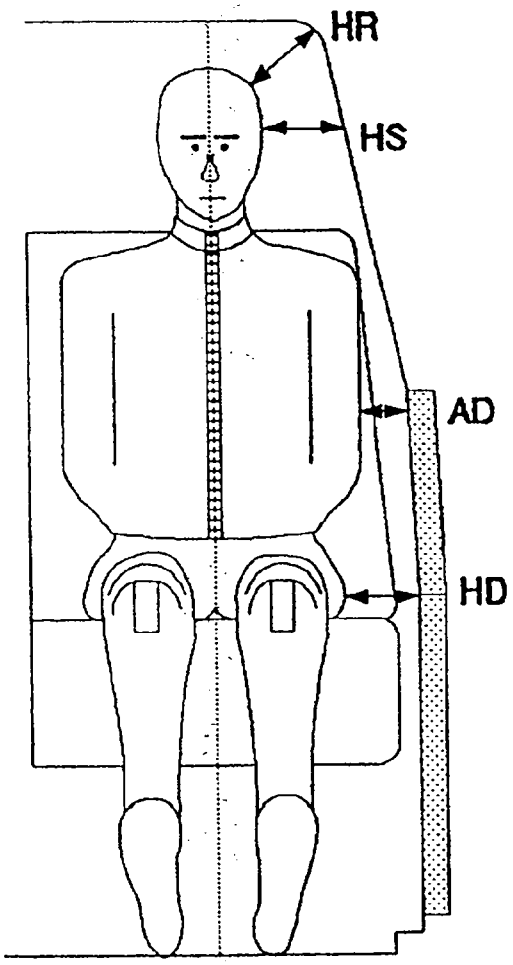
DATA SHEET NO. 4

SID LATERAL CLEARANCE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



	DRIVER SID ID# 136		REAR SID ID# 137	
HR	6.2	inches	6.5	inches
HS	6.6	inches	9.5	inches
AD	2.5	inches	4.5	inches
HD	5.0	inches	6.0	inches

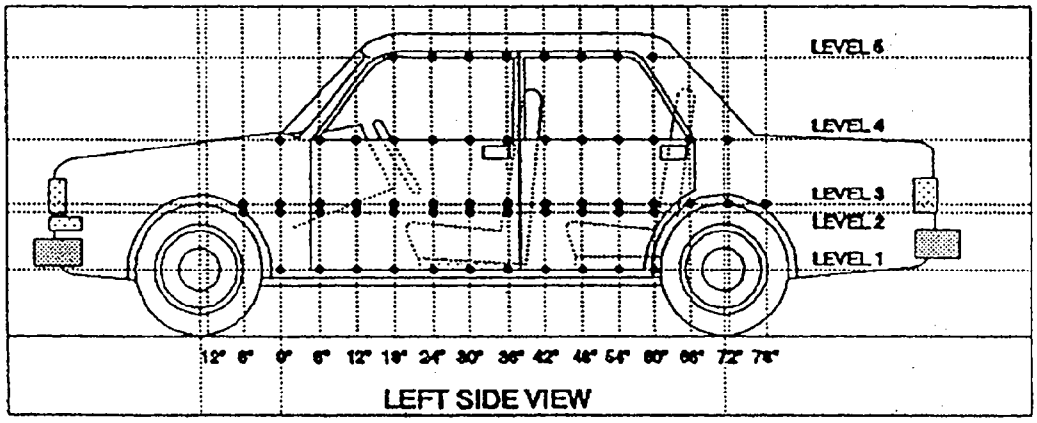
DATA SHEET NO. 5

VEHICLE SIDE MEASUREMENT

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



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 = 56.4 inches

LEVEL 4 @ Window Sill = 40.5 inches

LEVEL 3 @ Mid Door = 27.4 inches

LEVEL 2 @ Occupant H-Point = 25.8 inches

LEVEL 1 @ Axle Centerline Height = 11.1 inches
(or Sill Top Height)

MOBILITY SYSTEMS and EQUIPMENT COMPANY

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San Bernardino, California 92407
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Fax: (714) 887-5937

26 August 1992

U.S. Department of Transportation
National Highway Traffic Safety Administration
Office of Crashworthiness Research
400 Seventh Street, SW, Room 6221-A
Washington, DC 20590

Attention: Mr. Clay Gabler, NRD-11

Subject: Submittal of Final Test Report
Contract No. DTNH22-87-C-07168, D.O. #3

Dear Mr. Gabler:

Enclosed herewith are four (4) copies of the subject test report on the following vehicle:

VEHICLE	NHTSA NO.
1987 DODGE COLT VISTA	RH0301

If you should have any questions regarding the enclosed material, please do not hesitate to contact us.

Yours truly,

Dr. Anil V. Khadilkar
Project Manager

AVK/pb
Encl.

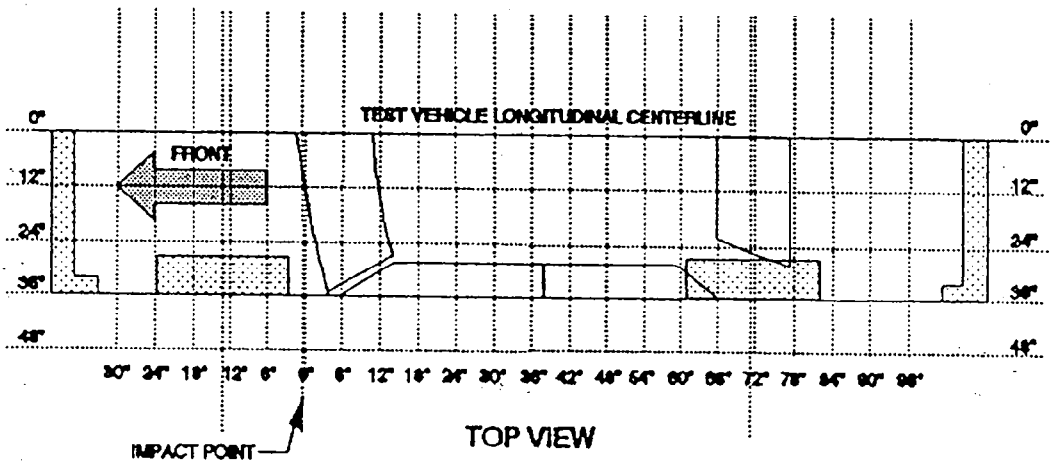
DATA SHEET NO. 6A

PRETEST AND POST TEST VEHICLE EXTERIOR PROFILES

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



TOP VIEW

LEVEL 1 AT AXLE CENTERLINE or TOP SIDE SILL

11.1 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 1 AT AXLE CENTERLINE

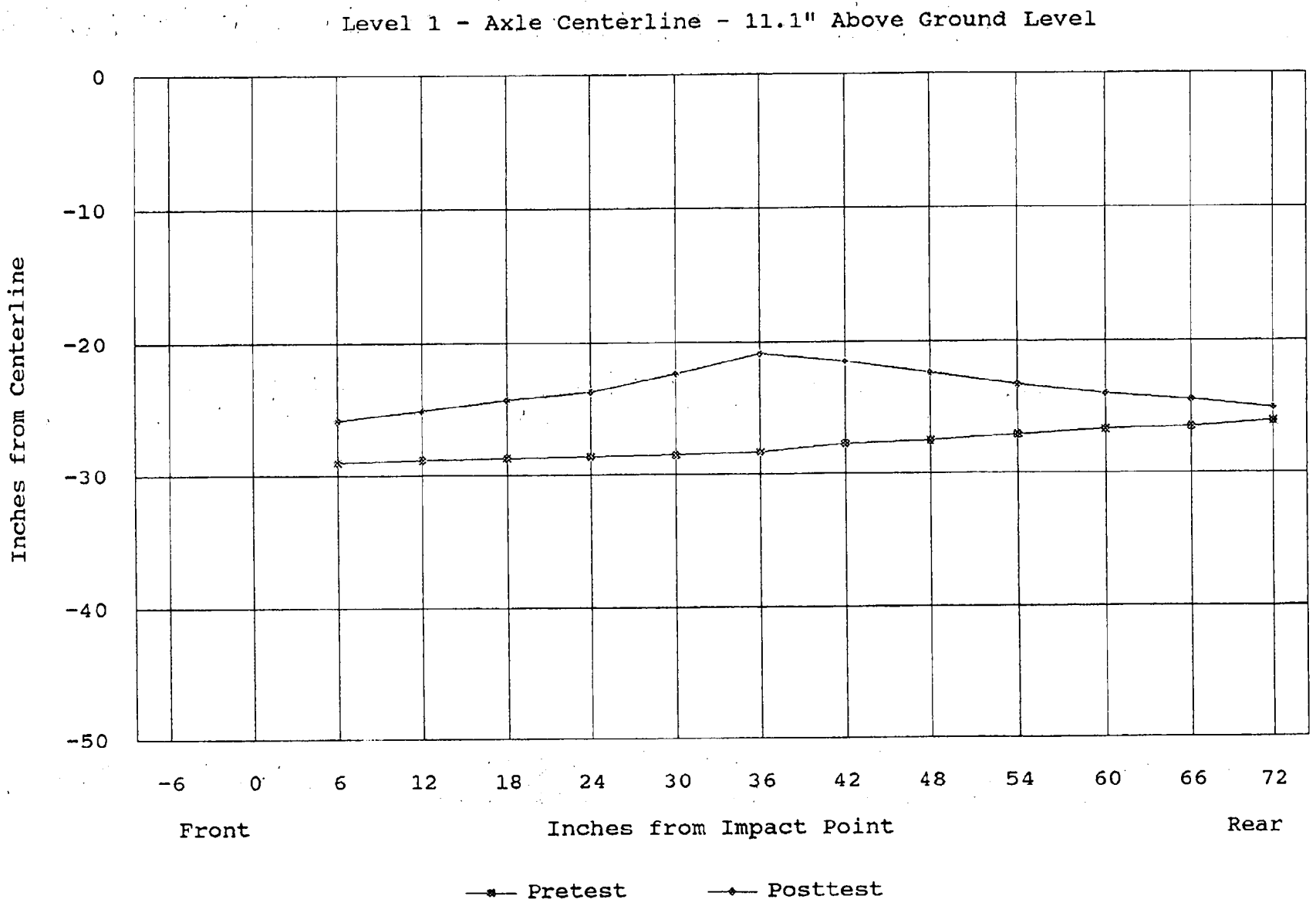
	POST TEST (inches)	PRETEST (inches)	STATIC CRUSH (inches)
-6inches	N/A	N/A	N/A
0 inch (impact point)	N/A	N/A	N/A
6 inches	22.1	19.0	3.1
12 inches	22.9	19.2	3.7
18 inches	23.7	19.3	4.4
24 inches	24.3	19.4	4.9
30 inches	25.6	19.5	6.1
36 inches	27.1	19.7	7.4
42 inches	26.5	20.3	6.2
48 inches	25.6	20.5	5.1
54 inches	24.7	20.9	3.8
60 inches	24.0	21.3	2.7
66 inches	23.5	21.5	2.0
72 inches	22.9	21.9.	1.0

REMARKS:

RECORDED BY: Mr. Brian O'Keefe DATE: 08/06/92

APPROVED BY: [signature] 8/17/92

Pretest and Posttest Exterior Profile



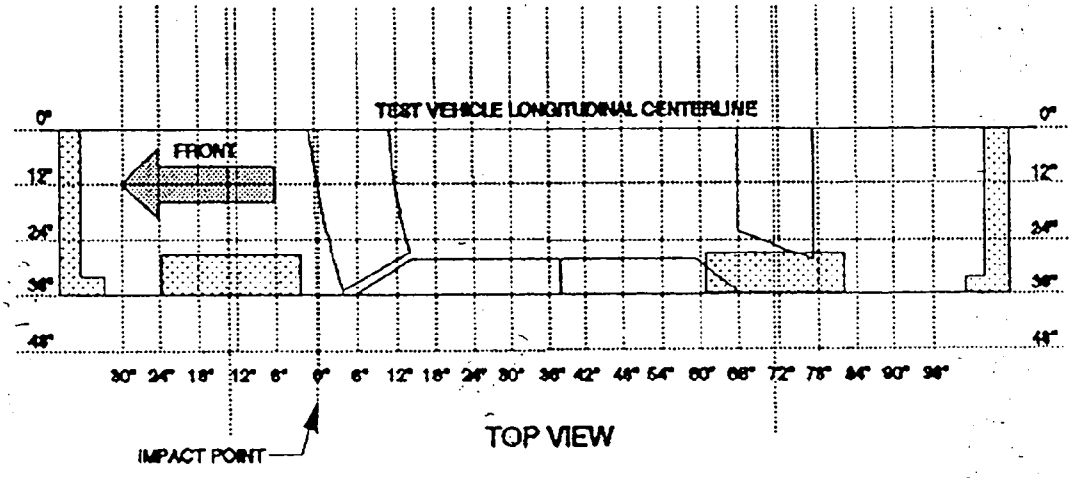
DATA SHEET NO. 6B

PRETEST AND POST TEST VEHICLE EXTERIOR PROFILES

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



TOP VIEW

LEVEL 2 AT OCCUPANT H-POINT

25.8 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	17.2	15.4	1.8
0 inch (impact point)	17.5	15.9	1.6
6 inches	23.1	15.9	7.2
12 inches	27.1	15.9	11.2
18 inches	27.0	15.8	11.2
24 inches	27.0	15.8	11.2
30 inches	27.0	15.7	11.3
36 inches	27.1	15.7	11.4
42 inches	27.7	15.7	12.0
48 inches	27.8	15.7	12.1
54 inches	28.1	15.7	12.4
60 inches	28.2	15.7	12.5
66 inches	28.8	15.7	13.1
72 inches	22.1	15.8	6.3

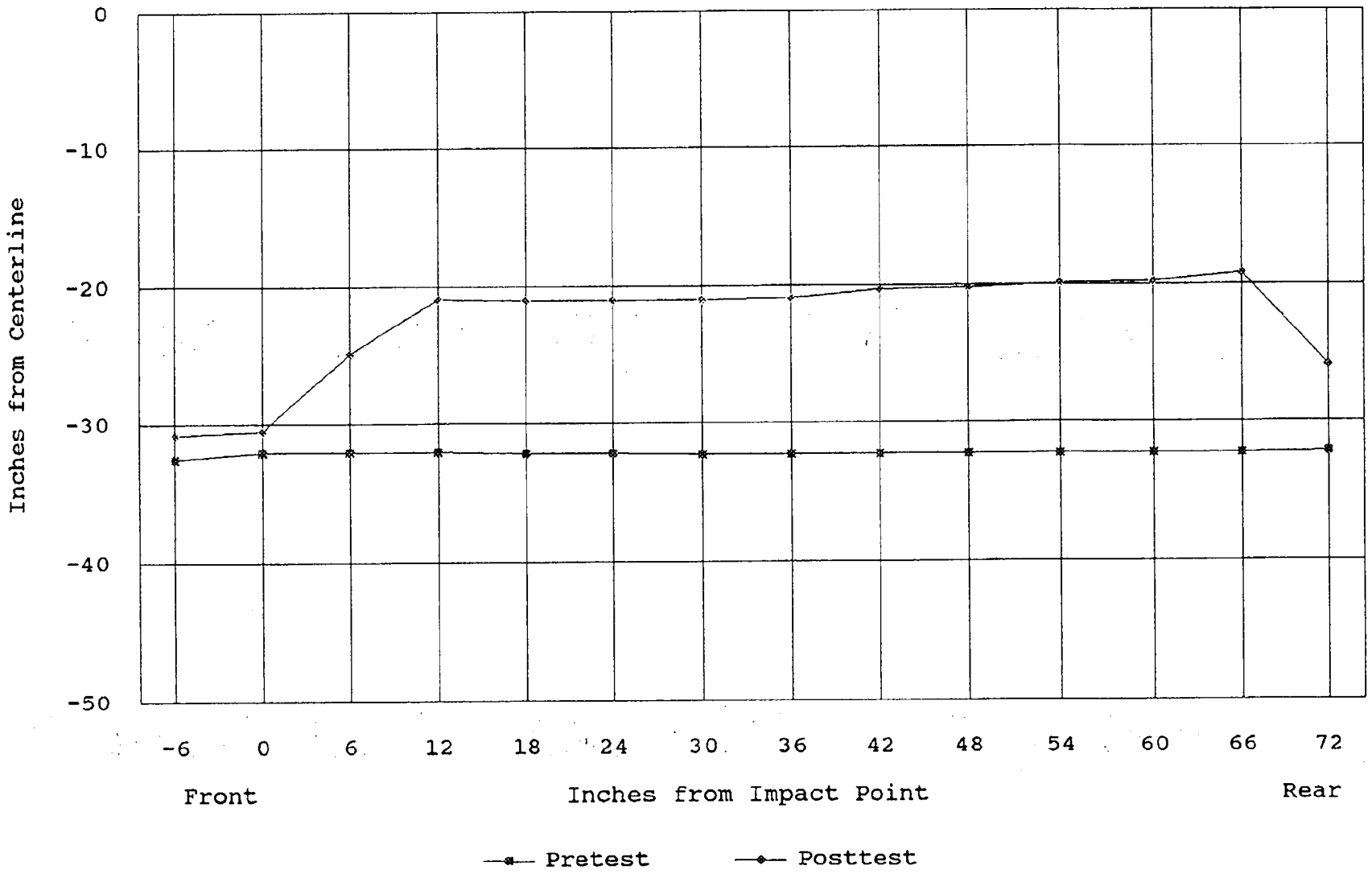
REMARKS:

RECORDED BY: Mr. Brian O'Keefe DATE: 08/06/92

APPROVED BY: 8/17/92

Pretest and Posttest Exterior Profile

Level 2 - Occupant H-point - 25.8" Above Ground Level



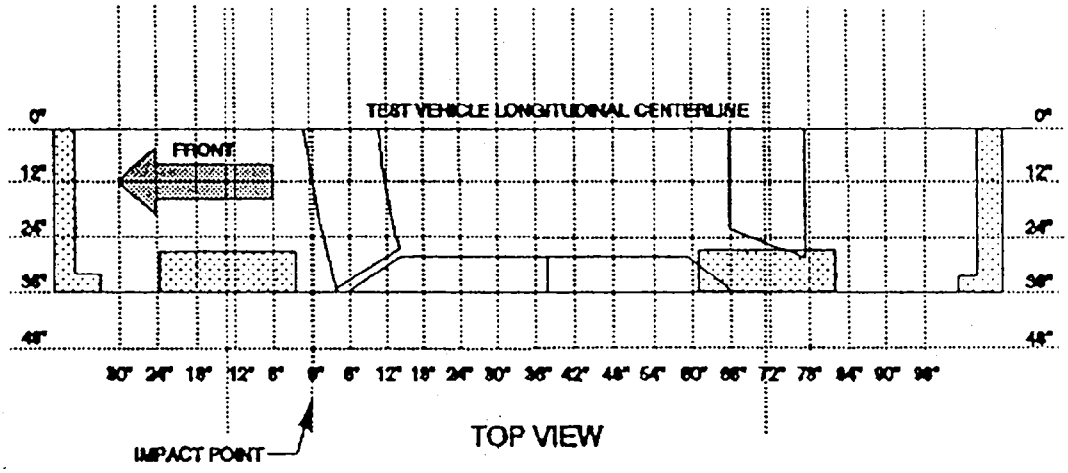
DATA SHEET NO. 6C

PRETEST AND POST TEST VEHICLE EXTERIOR PROFILES

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



TOP VIEW

LEVEL 3 AT MID DOOR

27.6 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	17.6	16.0	1.6
0 inch (impact point)	17.6	16.1	1.5
6 inches	22.4	15.9	6.5
12 inches	26.7	16.0	10.7
18 inches	26.6	15.9	10.7
24 inches	26.7	15.9	10.8
30 inches	27.1	15.7	11.4
36 inches	27.2	15.7	11.5
42 inches	28.0	15.7	12.3
48 inches	27.9	15.8	12.1
54 inches	28.0	15.8	12.2
60 inches	28.1	15.8	12.3
66 inches	28.7	16.0	12.7
72 inches	20.7	16.0	4.7

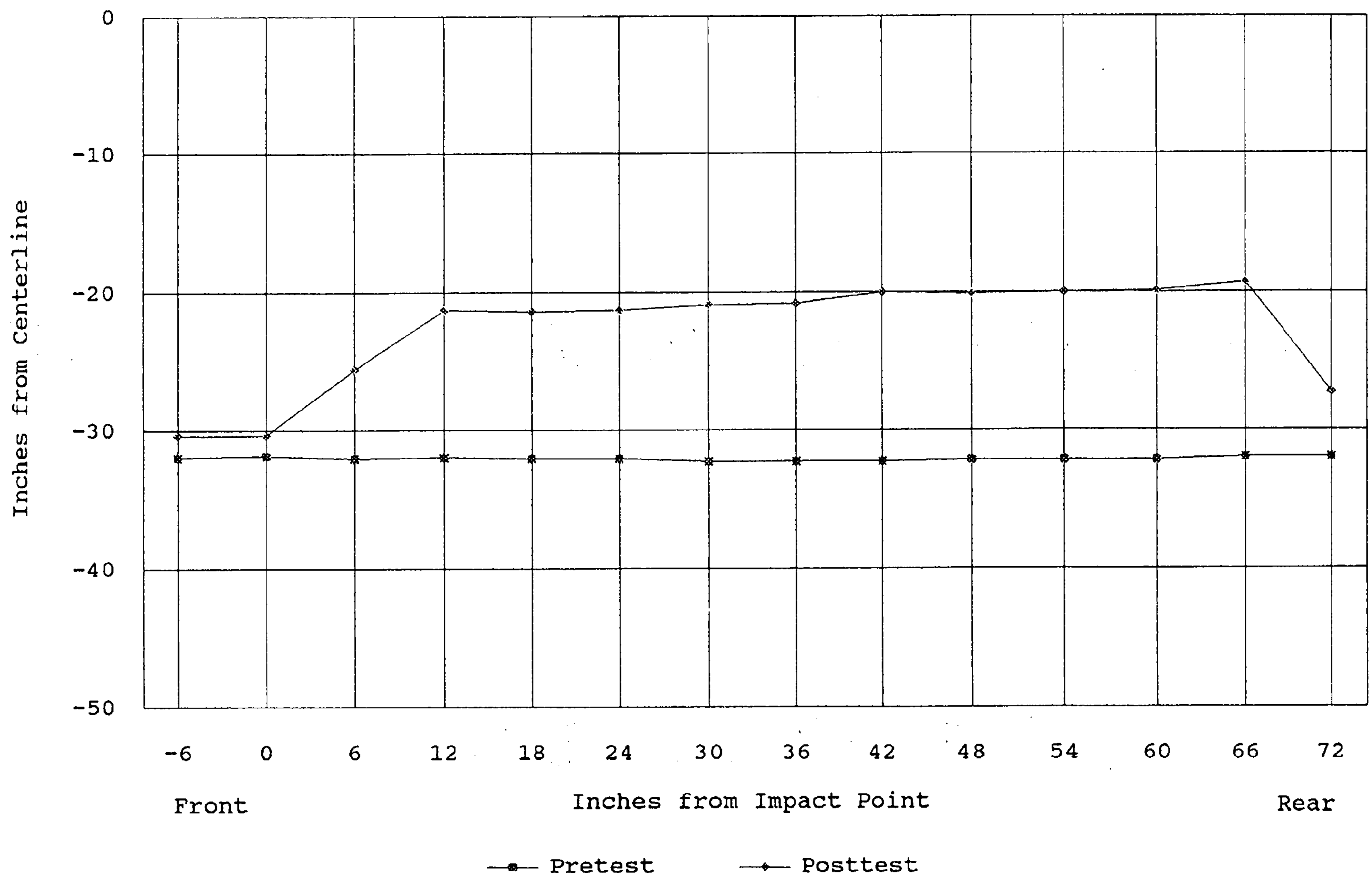
REMARKS:

RECORDED BY: Mr. Brian O'Keefe DATE: 08/06/92

APPROVED BY: 8/17/92

Pretest and Posttest Exterior Profile

Level 3 - Mid-door - 27.6" Above Ground Level



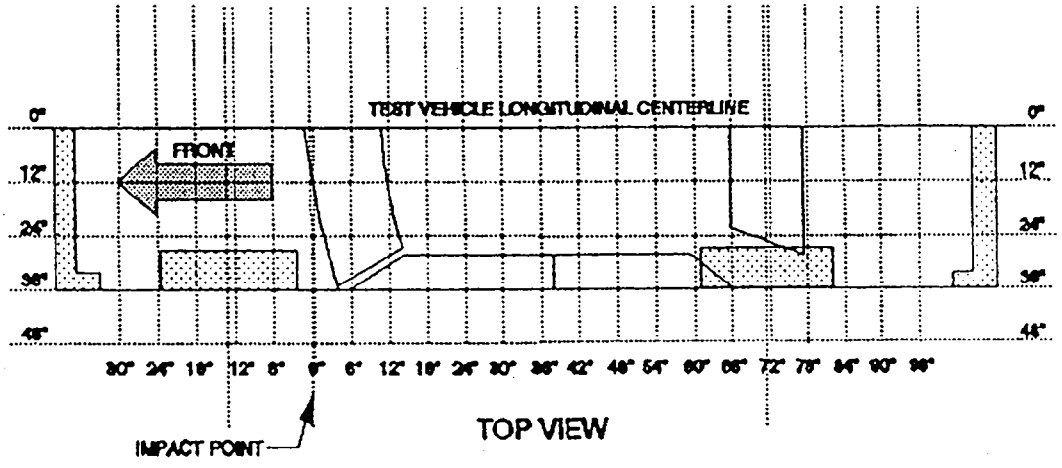
DATA SHEET NO. 6D

PRETEST AND POST TEST VEHICLE EXTERIOR PROFILES

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



TOP VIEW

LEVEL 4 AT WINDOW SILL

40.5 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)	21.0	19.2	1.8
6 inches	22.9	20.0	2.9
12 inches	24.5	19.6	4.9
18 inches	26.1	19.5	6.6
24 inches	27.0	19.5	7.5
30 inches	27.5	19.2	8.3
36 inches	28.1	19.0	9.1
42 inches	28.6	18.9	9.7
48 inches	30.1	18.8	11.3
54 inches	30.4	18.8	11.6
60 inches	29.4	18.8	10.6
66 inches	24.1	18.8	5.3
72 inches	20.1	18.6	1.5

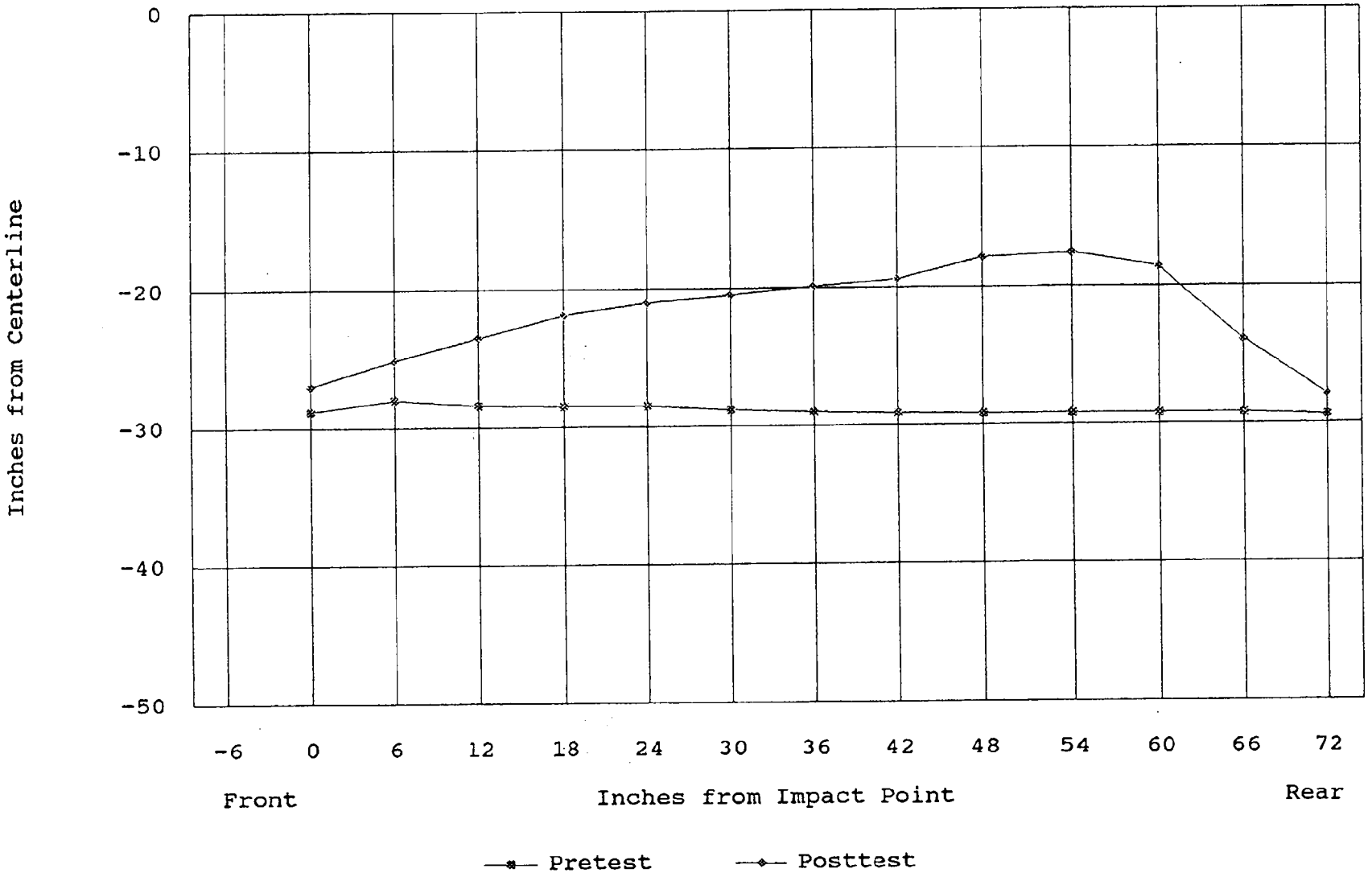
REMARKS:

RECORDED BY: Mr. Brian O'Keefe DATE: 08/06/92

APPROVED BY: 8/7/92

Pretest and Posttest Exterior Profile

Level 4 - Window Sill - 40.5" Above Ground Level



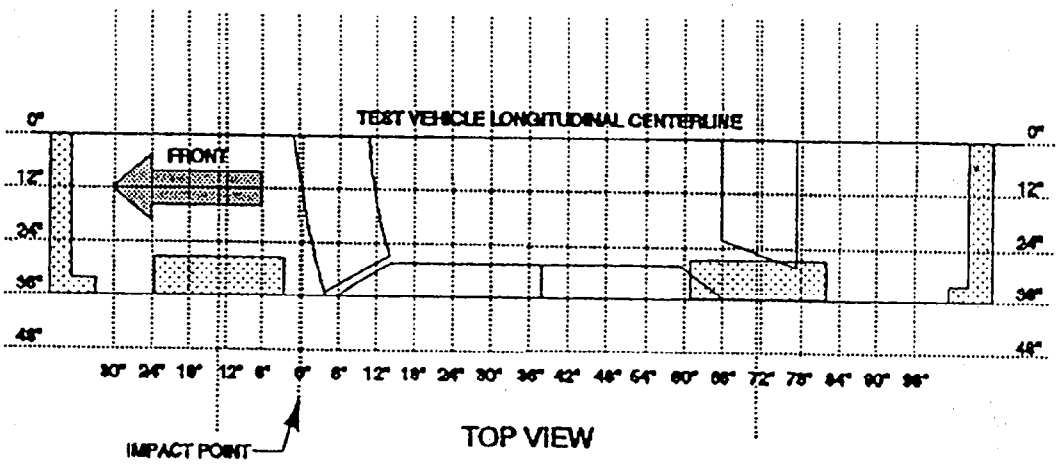
DATA SHEET NO. 6E

PRETEST AND POST TEST VEHICLE EXTERIOR PROFILES

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



TOP VIEW

LEVEL 5 AT WINDOW TOP

56.4 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 5 AT WINDOW TOP

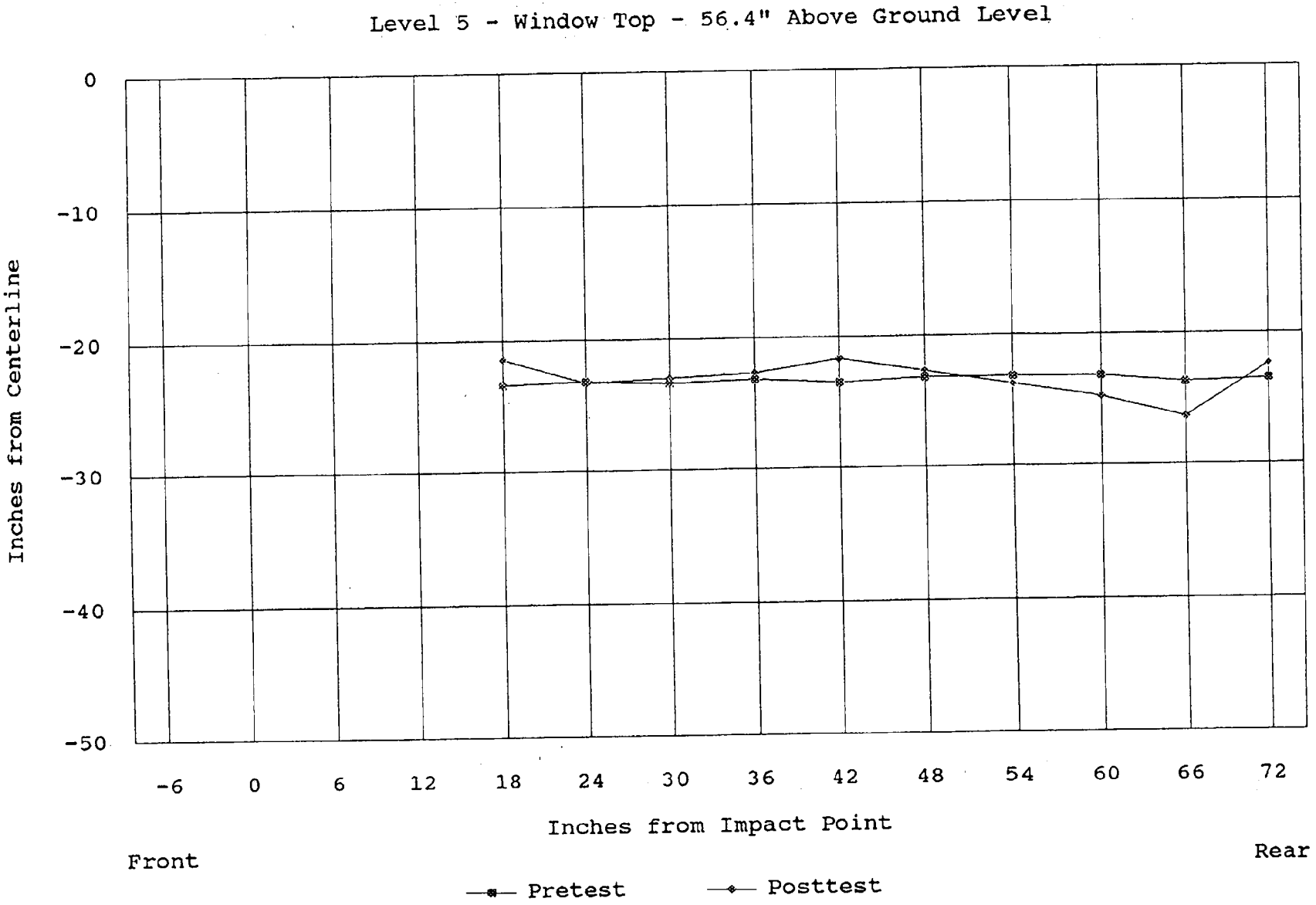
	POST TEST (inches)	PRETEST (inches)	STATIC CRUSH (inches)
-6inches	N/A	N/A	N/A
0 inch (impact point)	N/A	N/A	N/A
6 inches	N/A	N/A	N/A
12 inches	N/A	N/A	N/A
18 inches	26.5	24.6	1.9
24 inches	24.7	24.8	-0.1
30 inches	25.0	24.6	0.4
36 inches	25.3	24.8	0.5
42 inches	26.3	24.5	1.8
48 inches	25.3	24.8	0.5
54 inches	24.2	24.8	-0.6
60 inches	23.2	24.8	-1.6
66 inches	21.6	24.3	-2.7
72 inches	25.6	24.5	1.1

REMARKS:

RECORDED BY: Mr. Brian O'Keefe DATE: 08/06/92

APPROVED BY: 8/7/92

Pretest and Posttest Exterior Profile



DATA SHEET NO. 6F

SUMMARY OF VEHICLE EXTERIOR PROFILE STATIC CRUSH

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY

POSITION	LEVEL 1 (inches)	LEVEL 2 (inches)	LEVEL 3 (inches)	LEVEL 4 (inches)	LEVEL 5 (inches)
-6 inches	N/A	1.8	1.6	N/A	N/A
0 inch Impact Point	N/A	1.6	1.5	1.8	N/A
6 inches	3.1	7.2	6.5	2.9	N/A
12 inches	3.7	11.2	10.7	4.9	N/A
18 inches	4.4	11.2	10.7	6.6	1.9
24 inch	4.9	11.2	10.8	7.5	-0.1
30 inches	6.1	11.3	11.4	8.3	0.4
36 inches	7.4	11.4	11.5	9.1	0.5
42 inches	6.2	12.0	12.3	9.7	1.8
48 inches	5.1	12.1	12.1	11.3	0.5
54 inches	3.8	12.4	12.2	11.6	-0.6
60 inches	2.7	12.5	12.3	10.6	-1.6
66 inches	2.0	13.1	12.7	5.3	-2.7
72 inches	1.0	6.3	4.7	1.5	1.1

RECORDED BY: Mr. Brian O'Keefe DATE: 08/06/92

APPROVED BY: 8/17/92

DATA SHEET NO. 7

EXTERIOR STATIC CRUSH FOR SIDE IMPACTOR

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY

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	2.2	0.1	0.1
28 inches	0.7	0.0	0.1
24 inches	-0.1	0.0	0.5
20 inches	-0.1	0.0	0.9
16 inches	-0.3	0.0	1.2
12 inches	-0.5	0.0	1.2
8 inches	-0.5	0.1	1.4
4 inches	-0.4	0.0	1.5
0 inches	-0.3	0.1	1.8

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	-0.5	0.0	2.0
8 inches	-0.6	0.0	2.3
12 inches	-0.6	0.2	2.7
16 inches	-0.3	0.5	3.2
20 inches	0.1	0.8	3.8
24 inches	-0.2	1.0	4.5
28 inches	0.6	1.3	5.3
32 inches	3.1	2.0	6.1

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

REMARKS:

** Right of center is towards front of test vehicle.

RECORDED BY: Mr. Brian O'Keefe DATE: 08/06/92

APPROVED BY: 8/17/92

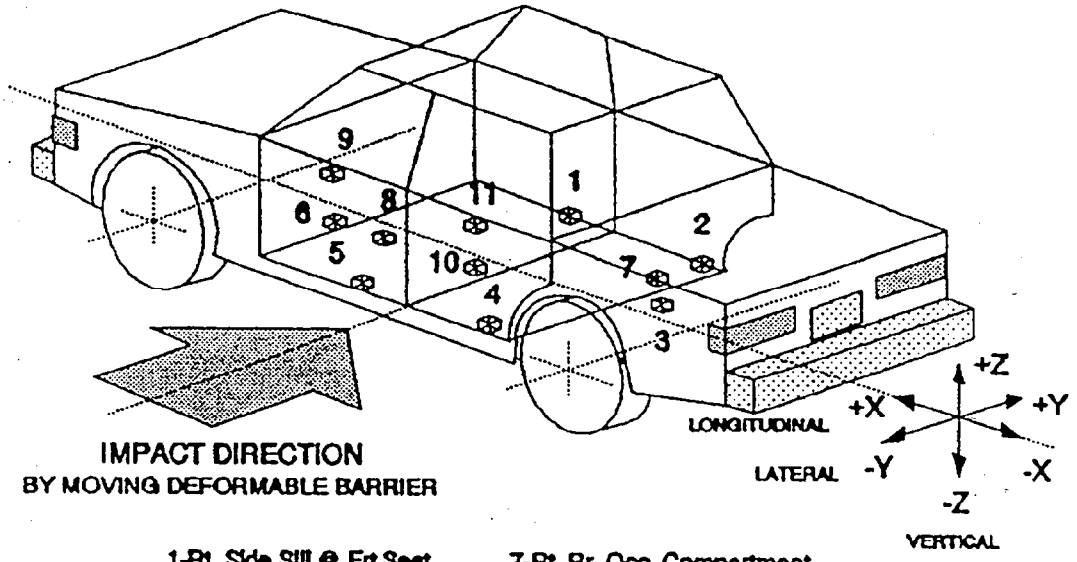
DATA SHEET NO. 8

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



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

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	112	22	9	4.9	63.7	20.9	12.8	9.3	28.7	21.2	12.8
2	80	21	9	-4.4	22.4	20.0	17.9	18.3	28.4	23.3	28.2
3	20	3	23	-5.9	25.1	18.3	37.6	8.4	19.1	18.4	37.7
4	79	-25	13	—	—	92.5	6.2	—	—	—	—
5	112	-25	11	—	—	66.0	8.2	—	—	—	—
6	106	-27	26	—	—	60.2	21.0	—	—	—	—

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
1	82	17	9	-8.3	10.2	—	—	---	--	---	--
2	92	-27	28	---	--	111.5	4.6	---	--	---	--
3	102	-27	35	---	--	138.3	10.4	---	--	---	--
4	55	-27	30	---	--	118.1	6.1	---	--	---	--
5	67	-27	38	---	--	159.1	13.5	---	--	---	--

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

REMARKS:

RECORDED BY: Mr. Brian O'Keefe DATE: 08/10/92

APPROVED BY: 8/17/92

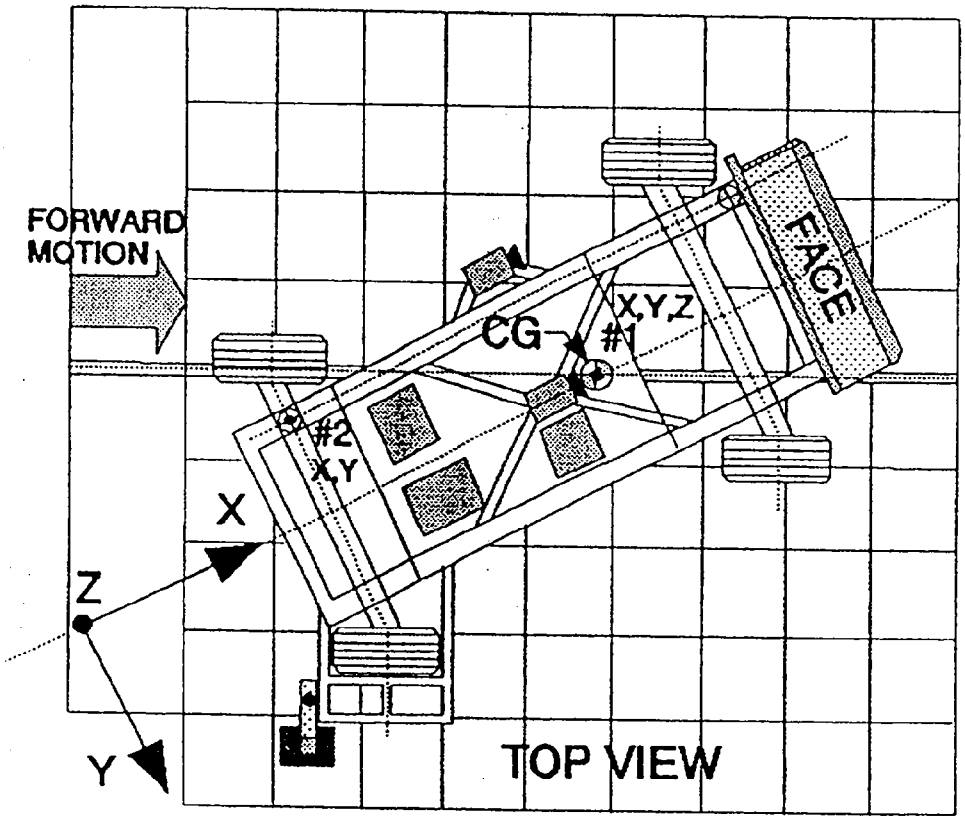
DATA SHEET NO. 9

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

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ0919319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



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	3.3	145.7	19.6	39.4
1 Lateral Y	73	0	12	2.9	74.7	9.1	34.8
1 Vertical Z	73	0	12	34.0	43.8	35.3	50.4
1 Resultant R	73	0	12	38.6	50.4	—	—
2 Longitudinal X	12	-19	17	1.8	127.2	17.9	34.0
3 Longitudinal X	12	-19	17	1.9	118.1	5.2	29.1

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

REMARKS:

RECORDED BY: Mr. Brian O'Keefe DATE: 08/10/92

APPROVED BY: 8/17/92

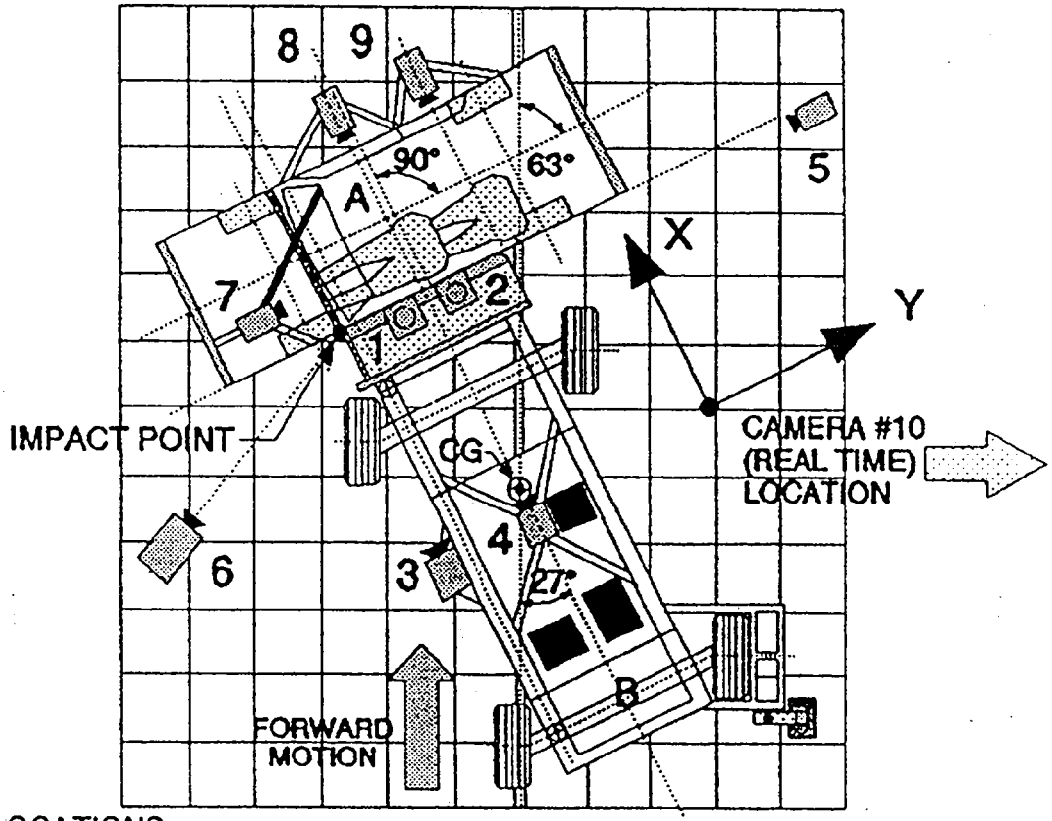
DATA SHEET NO. 10

HIGH SPEED CAMERA LOCATIONS AND DATA

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

TEST DATE: 08/05/92 TEST LAB.: MOBILITY SYSTEMS AND EQUIPMENT COMPANY



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	610	12	12	236
2	FASTAX II	28	600	-12	12	236
3	HIMAX	28	580	-121	-37	50
4	HIMAX	16	640	-151	0	72
5	PHOTOSONIC	13	570	-198	648	48
6	FASTAX II	28	610	-120	-600	48
7	FASTAX II	16	560	17	-45	48
8	FASTAX II	16	610	67	25	43
9	FASTAX II	16	610	67	59	44
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: 08/11/92

APPROVED BY: 8/17/92

DATA SHEET NO. 11

TEST VEHICLE DATA

VEH. MOD YR/MAKE/MODEL/BODY: 1987 DODGE COLT VISTA VAN

VEH. NHTSA NO.: RH0301 VIN.: JB4FH31D2HZ019319

VEH. BUILD DATE: 08/86 TEST DATE: 08/05/92

TEST LABORATORY: MOBILITY SYSTEMS AND EQUIPMENT COMPANY

OBSERVERS: NONE

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): 29 psi Front; 29 psi Rear

Recommended Tire Size: P185/70R14

Size of Tires Installed on Test Vehicle: P185/70R14

Tire Manufacturer: Yokohama (rear) & Kelly (front)

Number of Occupants: 2 Front; 3 Rear; 7 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 = — lbs. (A)

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

Vehicle Cargo Capacity = 77 lbs. (A - B) (with 5 passengers)

DATA SHEET NO. 11 (Cont.)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:
Front: Right = 903 lbs.; Left = 830 lbs.; Front Total = 1733 lbs.

(58 % of TOTAL shown below)

Rear: Right = 600 lbs.; Left = 646 lbs.; Front Total = 1246 lbs.

(42 % of TOTAL shown below)

Front Total + Rear Total = TOTAL DELV. = 2979 lbs.

CALCULATION OF TEST VEHICLE TARGET WEIGHT:

Total Test Vehicle Delivered Weight With Maximum Fluids = 2979 lbs. (A)

Maximum Cargo Carry Capacity of Test Vehicle = 77 lbs. (B)

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

Test Vehicle Target Weight = 3384 (A + B + C)

ACTUAL WEIGHT OF TEST VEHICLE WITH TWO SIDs AND CARGO:

Front: Right = 955 lbs.; Left = 994 lbs.; Front Total = 1949 lbs.

(56 % of TOTAL shown below)

Rear: Right = 710 lbs.; Left = 825 lbs.; Front Total = 1535 lbs.

(44 % of TOTAL shown below)

Front Total + Rear Total = TOTAL ACTUAL = 3484 lbs. (which includes ___ lbs. of cargo ballast weight)

TEST VEHICLE ATTITUDE:

As Delivered	Ready For Test
26.8 inches Right Front	26.3 inches Right Front
27.8 inches Left Front	26.8 inches Left Front
26.6 inches Right Rear	26.8 inches Right Rear
27.8 inches Left Rear	26.5 inches Left Rear

DATA SHEET NO. 11 (Cont.)

Test Vehicle Wheelbase = 103.5 inches

C.G. = 45.6 inches Rearward of Front Wheel Centerline

Total Vehicle Length: 173.1 inches Right Side

173.1 inches Left Side

174.6 inches Centerline

Arm Rest Location: N/A

Seat Belt Upper Anchorage Location: On B-pillar, 24.8 inches above striker.

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

Total Length of Seat Adjustment Travel = 6.3 inches

Total Number of Seat Adjustment Positions or Detents = 11

Front Seat Back Adjustment Position: 25^{0}

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: 13.5 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 = 103.5inches

Impact Point 14.8 is inches rearward of front axle centerline (which is 37" forward of the wheelbase midpoint)

REMARKS: Actual impact point is 16.3 inches rearward of front axle.

RECORDED BY: Mr. Brian O'Keefe DATE: 08/05/92

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: 13 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: 50 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: 8 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: AM
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: 8 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: 8 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: 8 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: 8 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: 7 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: 7 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: 4 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: 0 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: MN
INSCOM: SENSOR NOT INSTALLED INTENTIONALLY

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: 44 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: 27 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: 14 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: 21 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: 3 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 DATA COLLECTED ON THIS REDUNDANT CHANNEL

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: 3 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: 4	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: 4	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: 4	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: 4	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: 4	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: 9 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: 9 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: 8 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: 23 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: 11 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: 11 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
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: 24 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: 24 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: 12 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: 13 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: 110 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: 214 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: 17 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: 223 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: 149 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: 241 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
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: 169 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: CF
INSCOM: CHANNEL FAILED AT 28.4 MSEC

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: 31 INIVEL: 29.5
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: 13 INIVEL: 15.1
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: 32 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: 24 INIVEL: 29.5
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: 21 INIVEL: 17.0
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. Manufacturer's Certification and Tire Placard 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. Posttest View Showing Result of Seat Impacting Right Rear Door

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

FIGURE 5-2 POSTTEST FRONTAL VIEW OF TEST VEHICLE

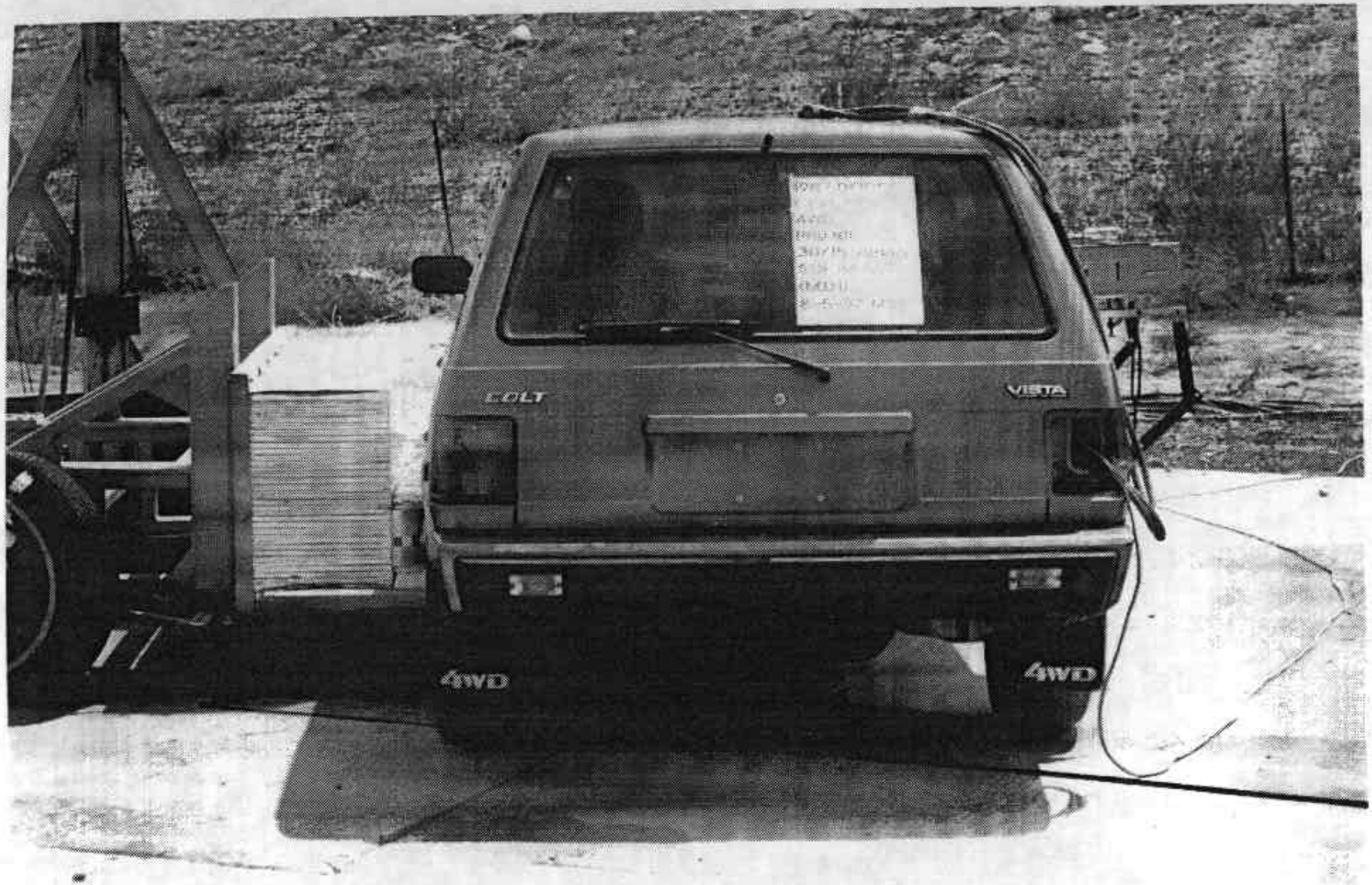


FIGURE 5-3 PRETEST REAR VIEW OF TEST VEHICLE

FIGURE 5-4 POSTTEST REAR VIEW OF TEST VEHICLE

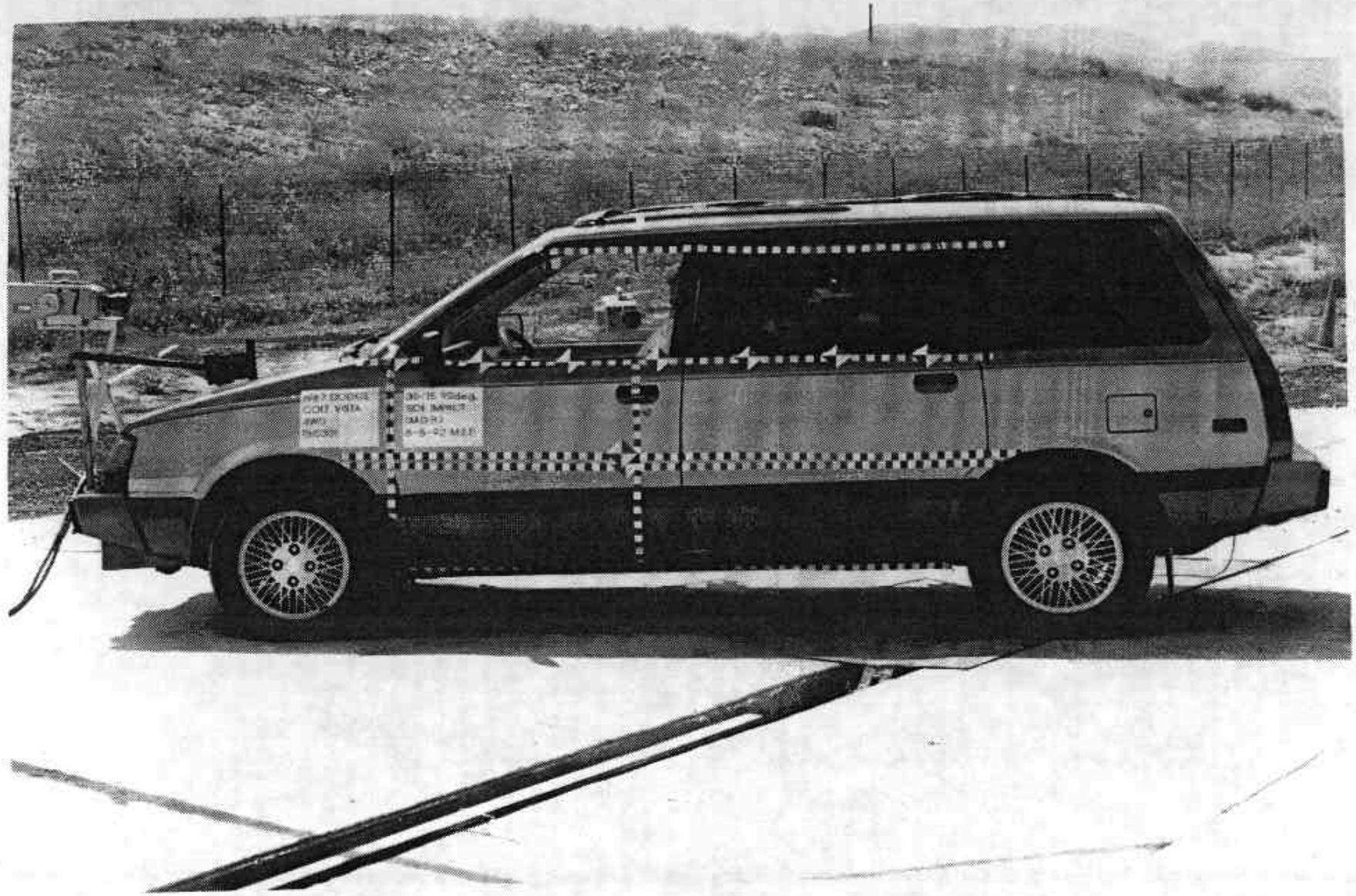


FIGURE 5-5 PRETEST STRUCK SIDE VIEW OF TEST VEHICLE

FIGURE 5-6 POSTTEST STRUCK SIDE VIEW OF TEST VEHICLE

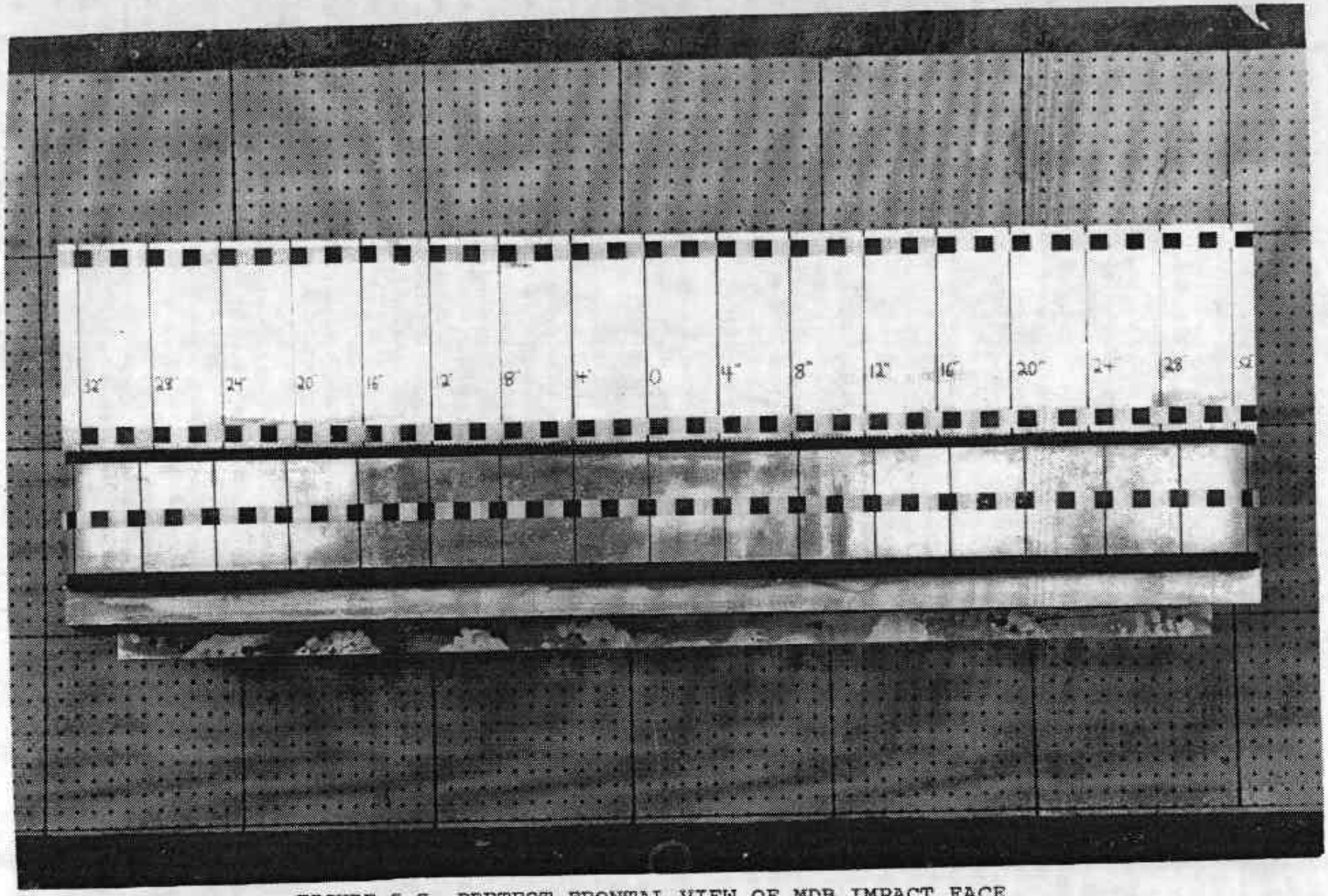


FIGURE 5-7 PRETEST FRONTAL VIEW OF MDB IMPACT FACE

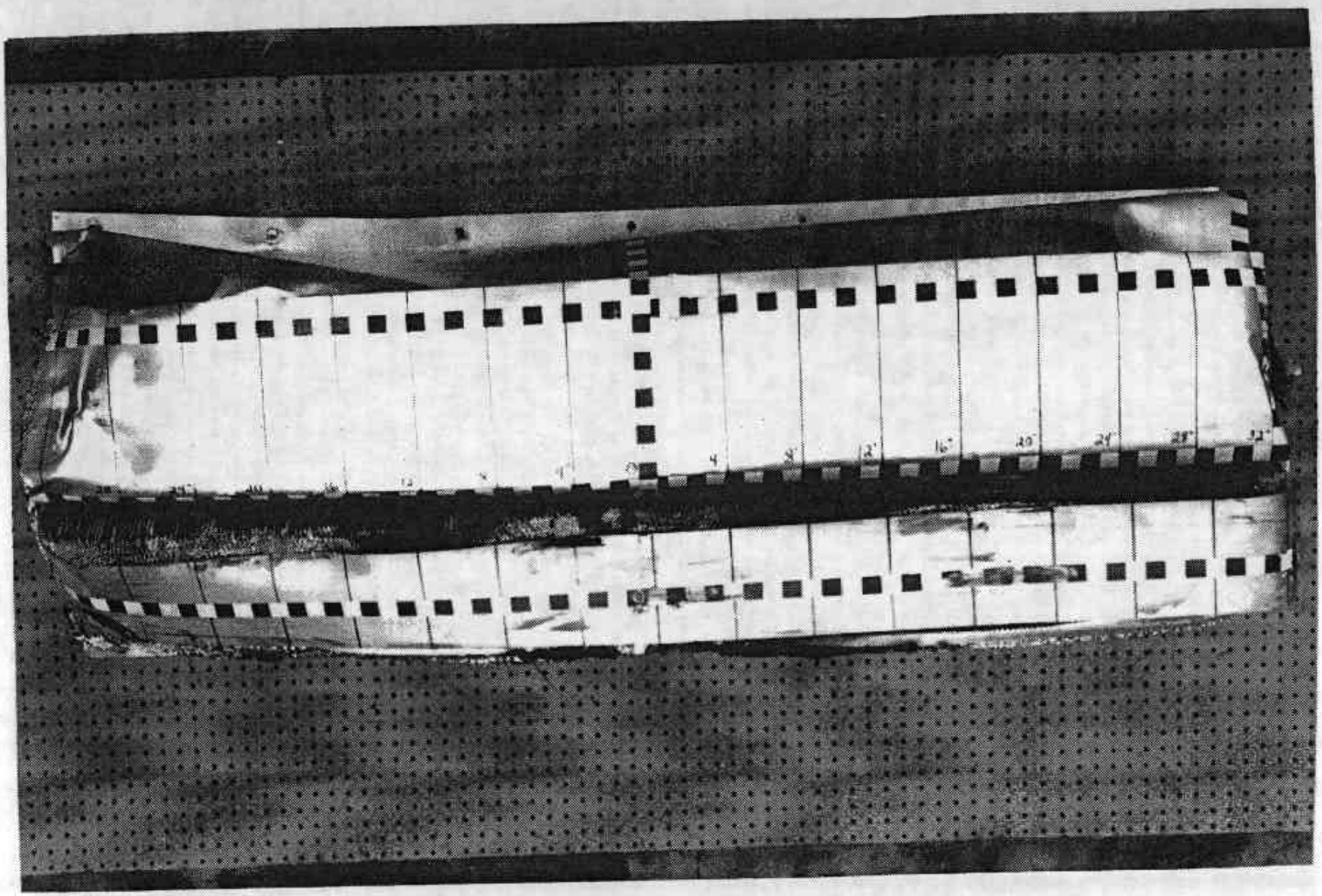


FIGURE 5-8 POSTTEST FRONTAL VIEW OF MDB IMPACT FACE

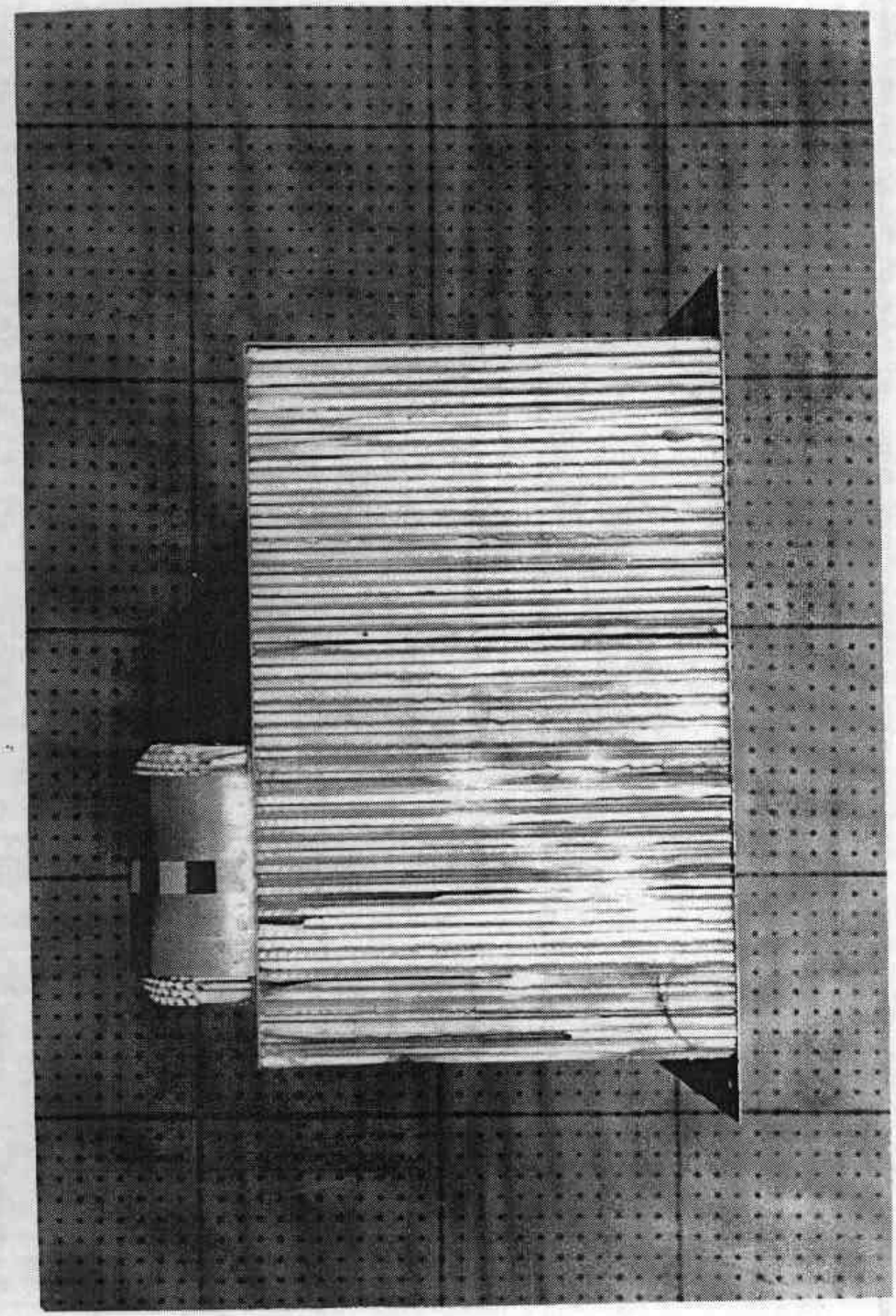


FIGURE 5-9 PRETEST LEFT SIDE VIEW OF MDB IMPACT FACE

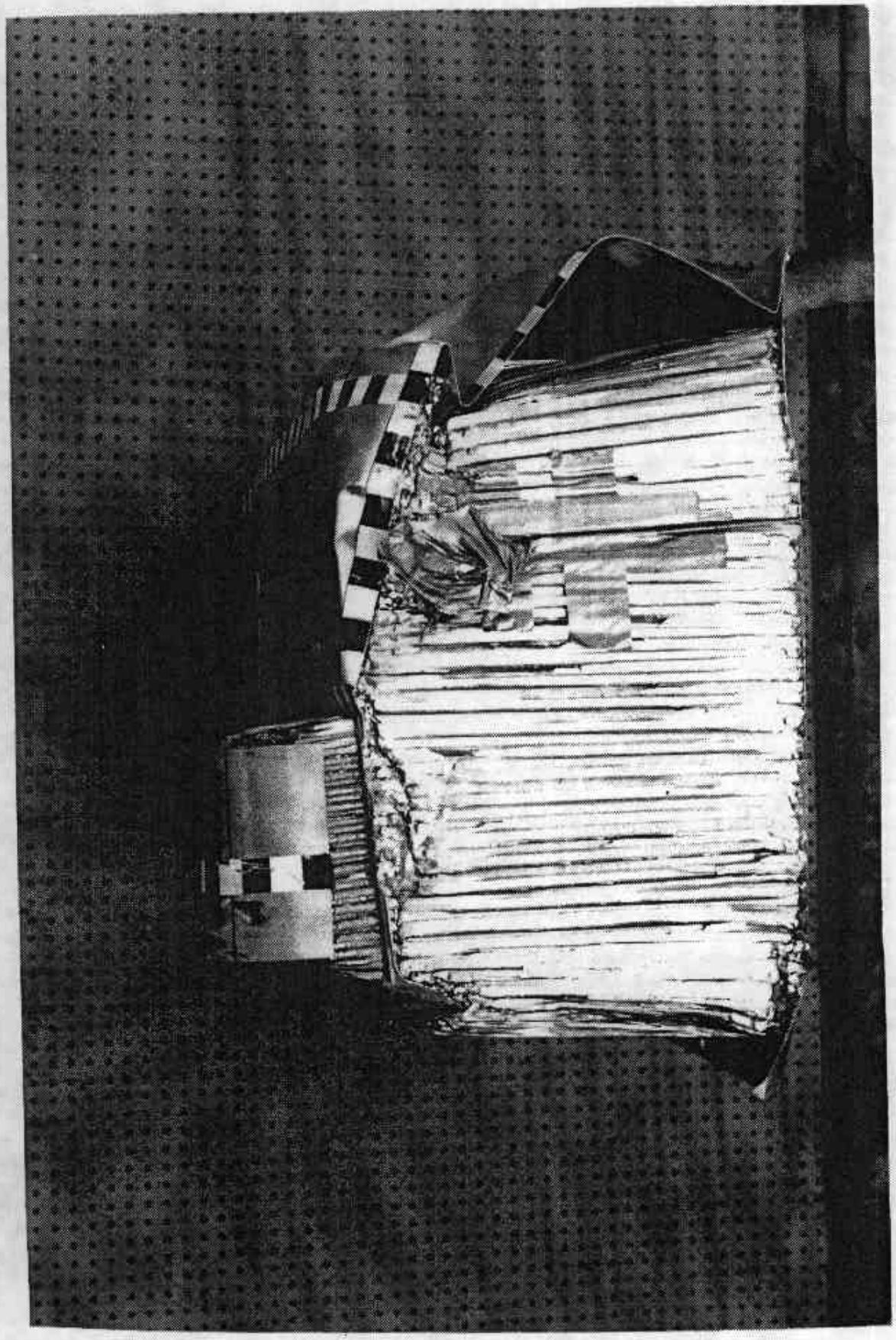


FIGURE 5-10 POSTTEST LEFT SIDE VIEW OF MDB IMPACT FACE

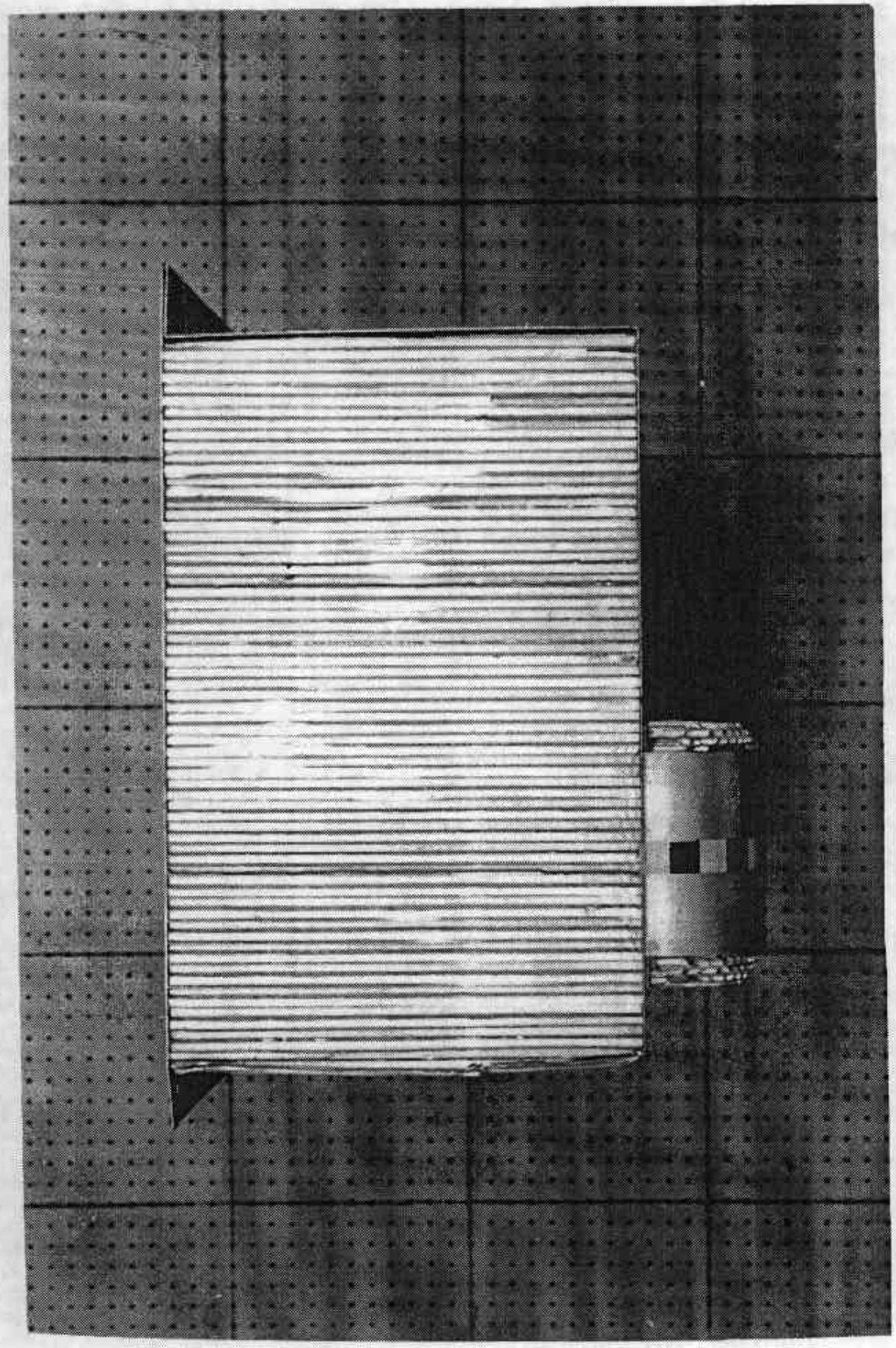


FIGURE 5-11 PRETEST RIGHT SIDE VIEW OF MDB IMPACT FACE

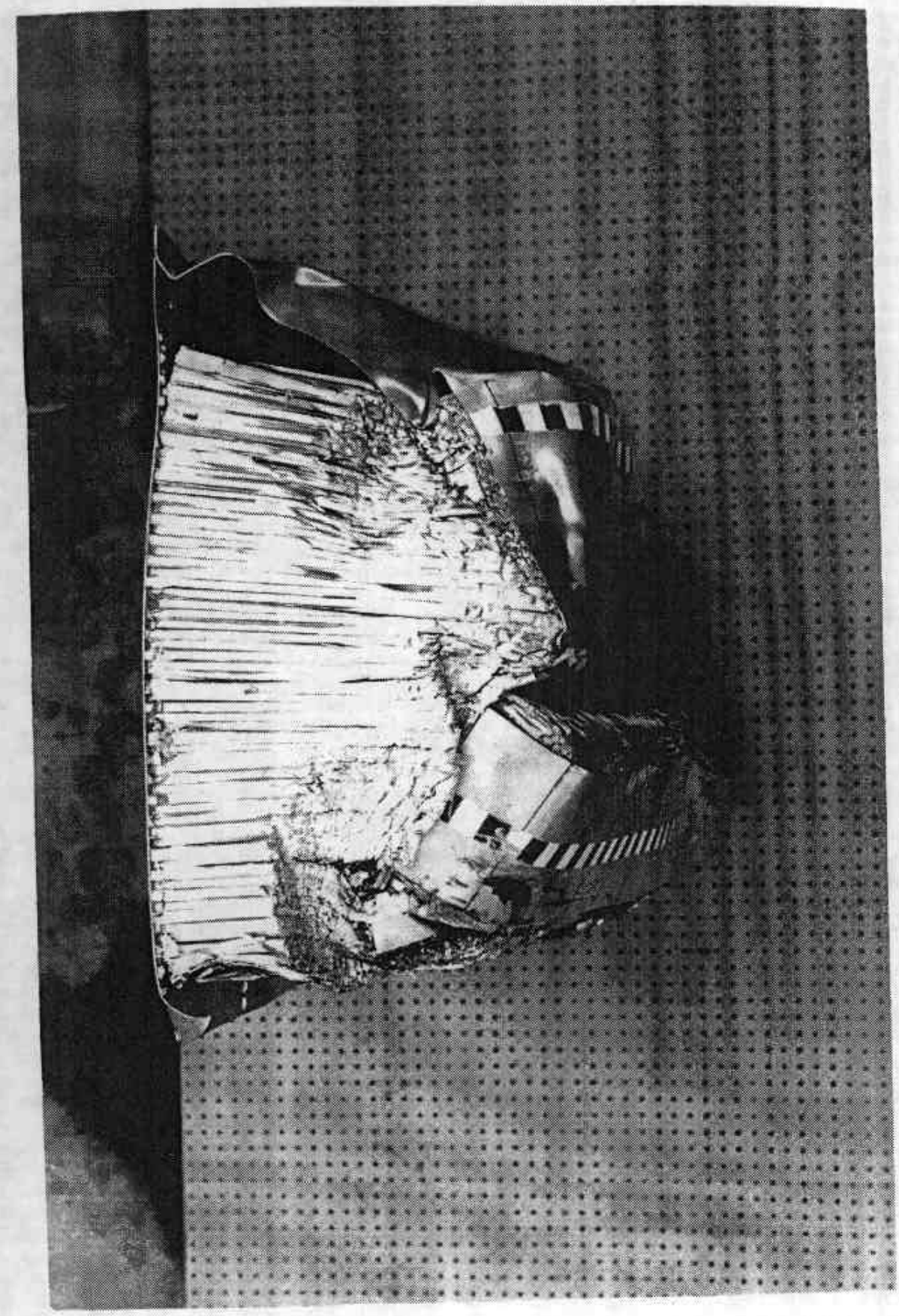


FIGURE 5-12 POSTTEST RIGHT SIDE VIEW OF MDB IMPACT FACE

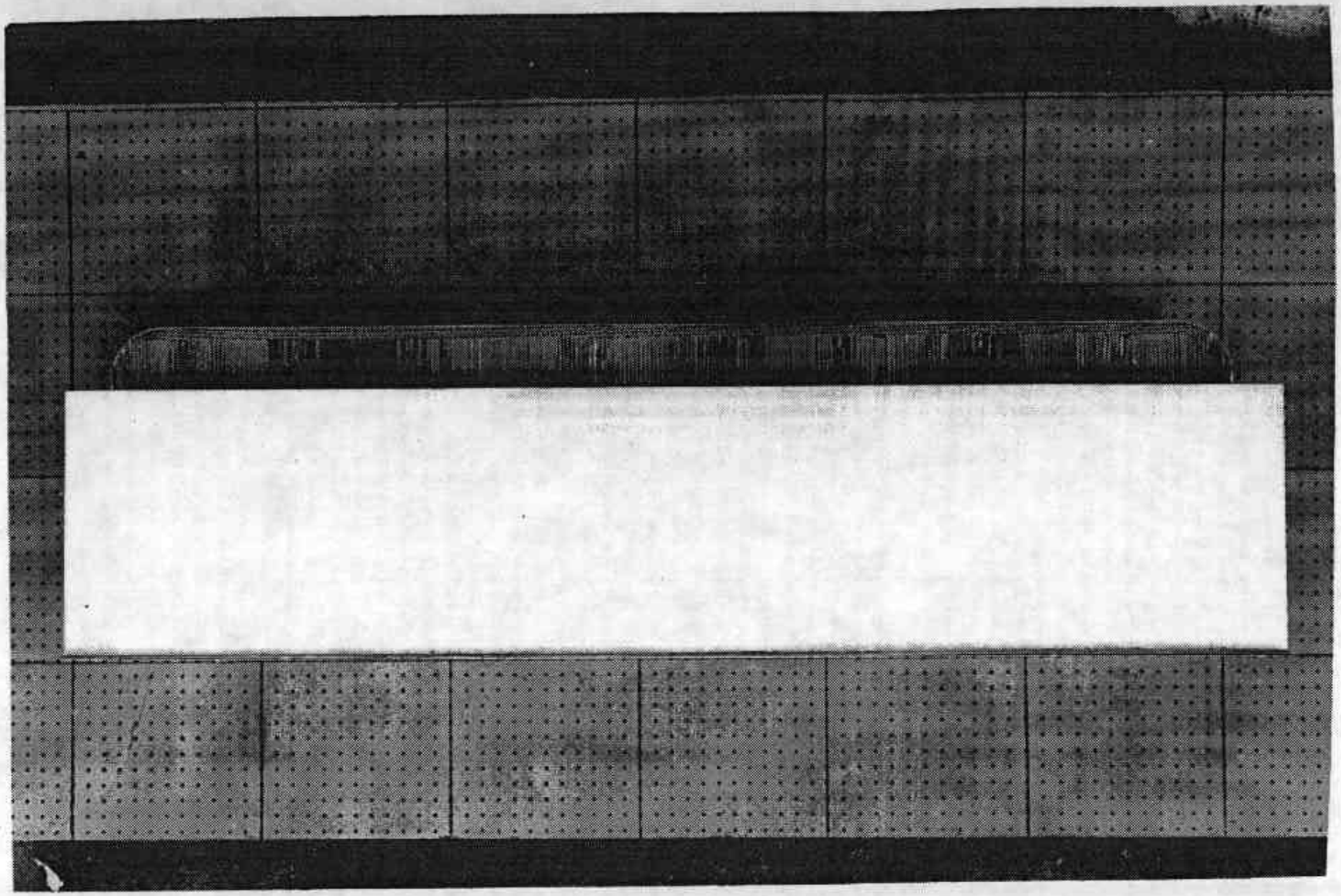


FIGURE 5-13 PRETEST TOP VIEW OF MDB IMPACT FACE

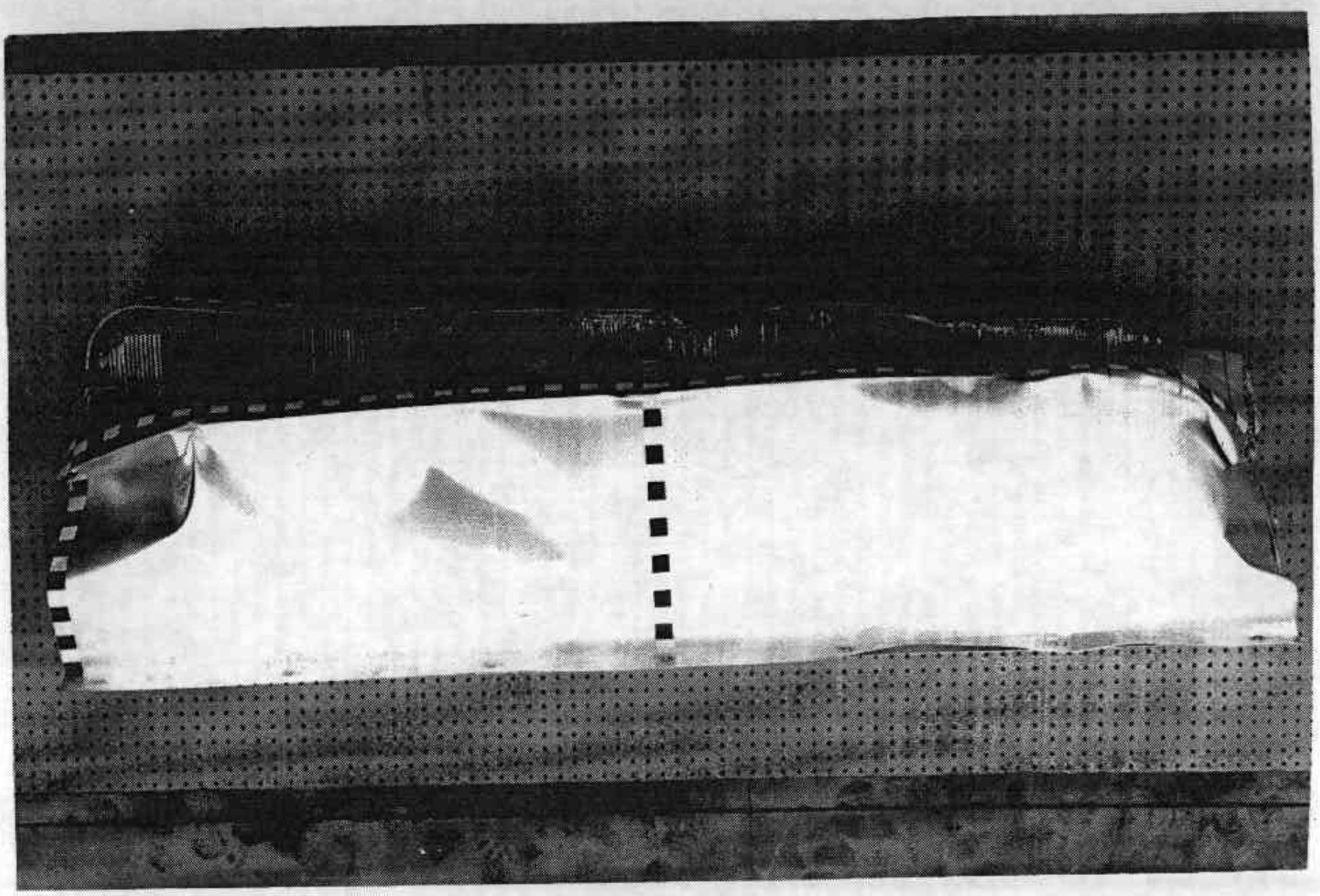


FIGURE 5-14 POSTTEST TOP VIEW OF MDB IMPACT FACE

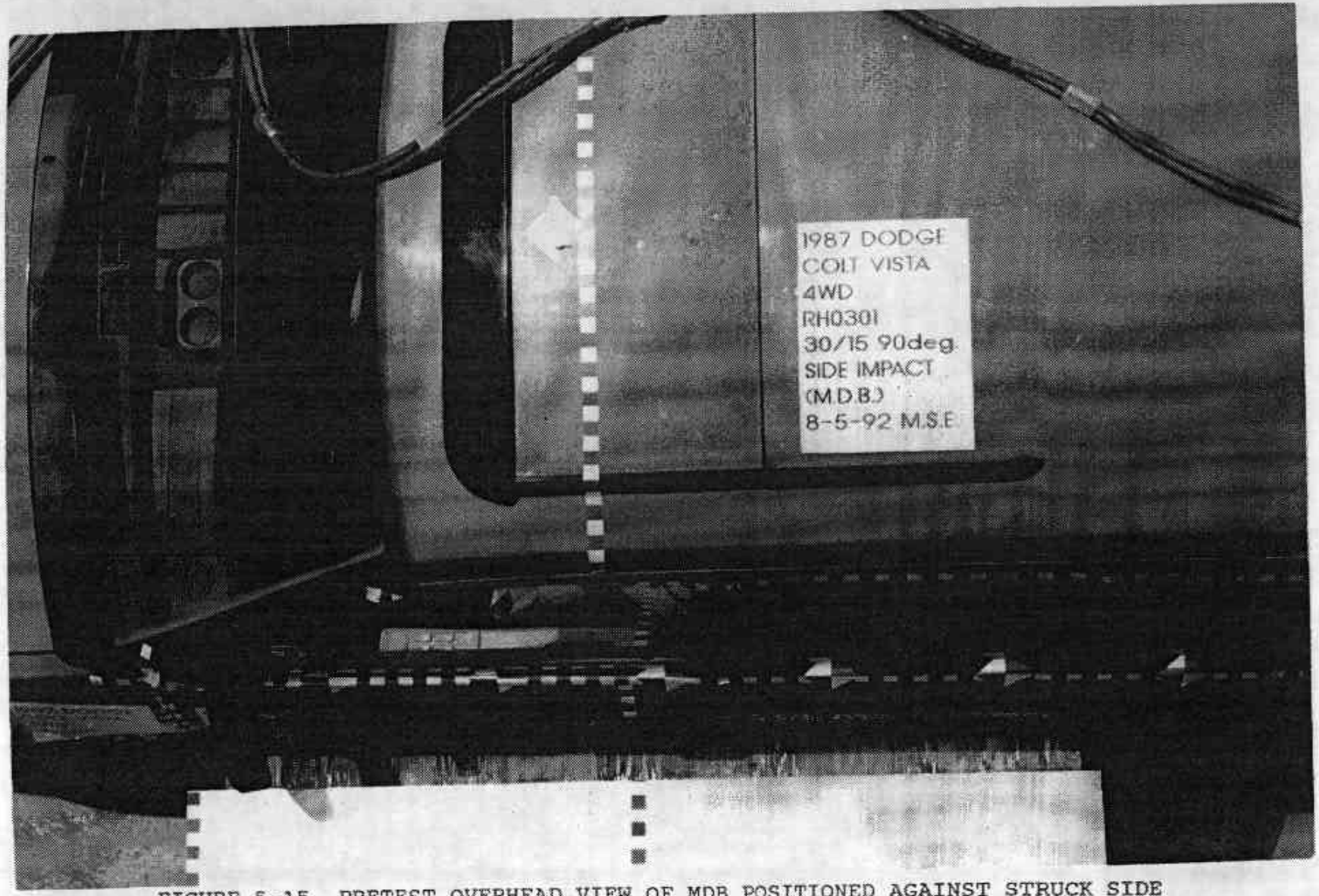


FIGURE 5-15 PRETEST OVERHEAD VIEW OF MDB POSITIONED AGAINST STRUCK SIDE OF TEST VEHICLE AT IMPACT LOCATION

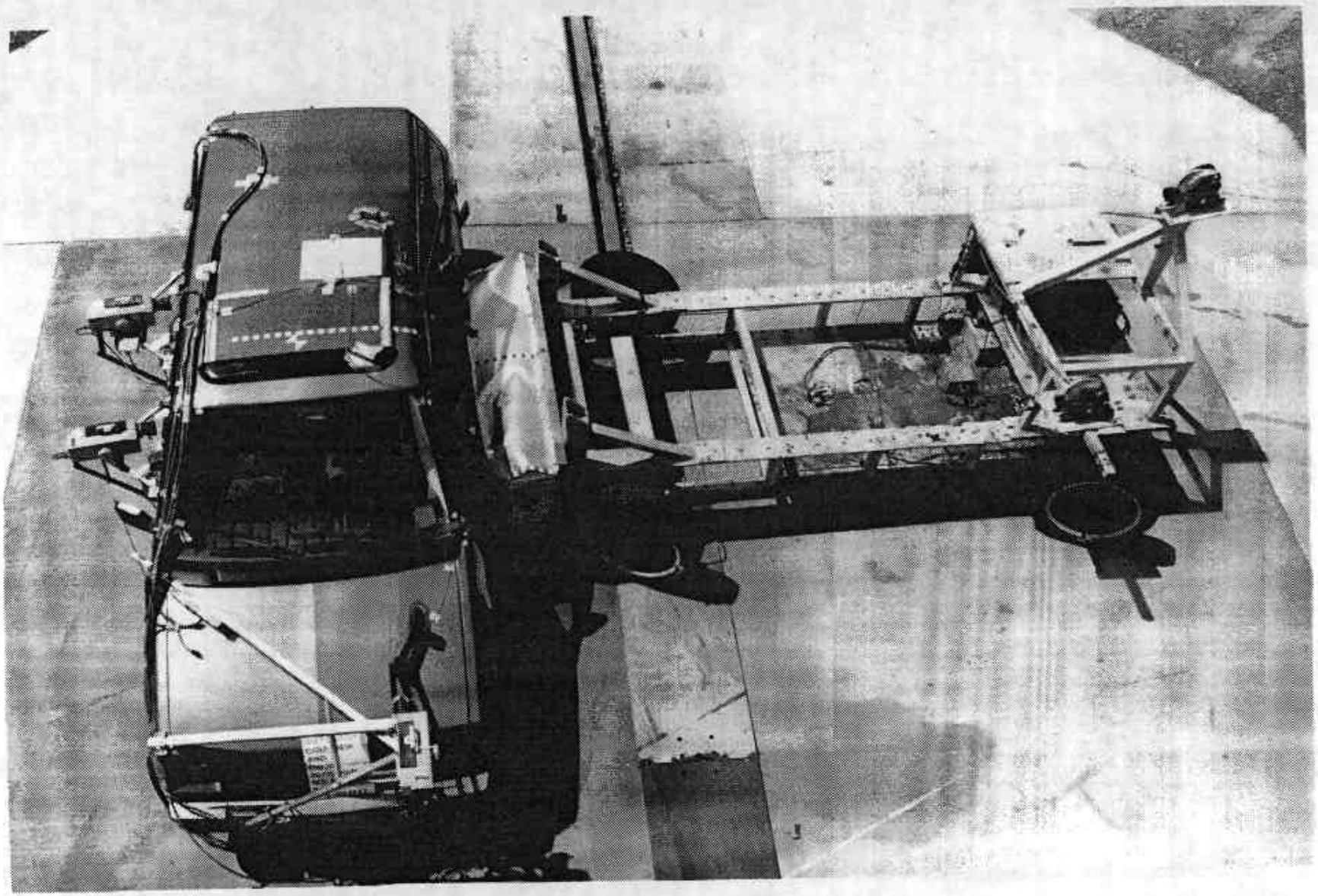


FIGURE 5-16 POSTTEST OVERHEAD VIEW OF MDB POSITIONED AGAINST STRUCK SIDE OF TEST VEHICLE AT IMPACT LOCATION

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

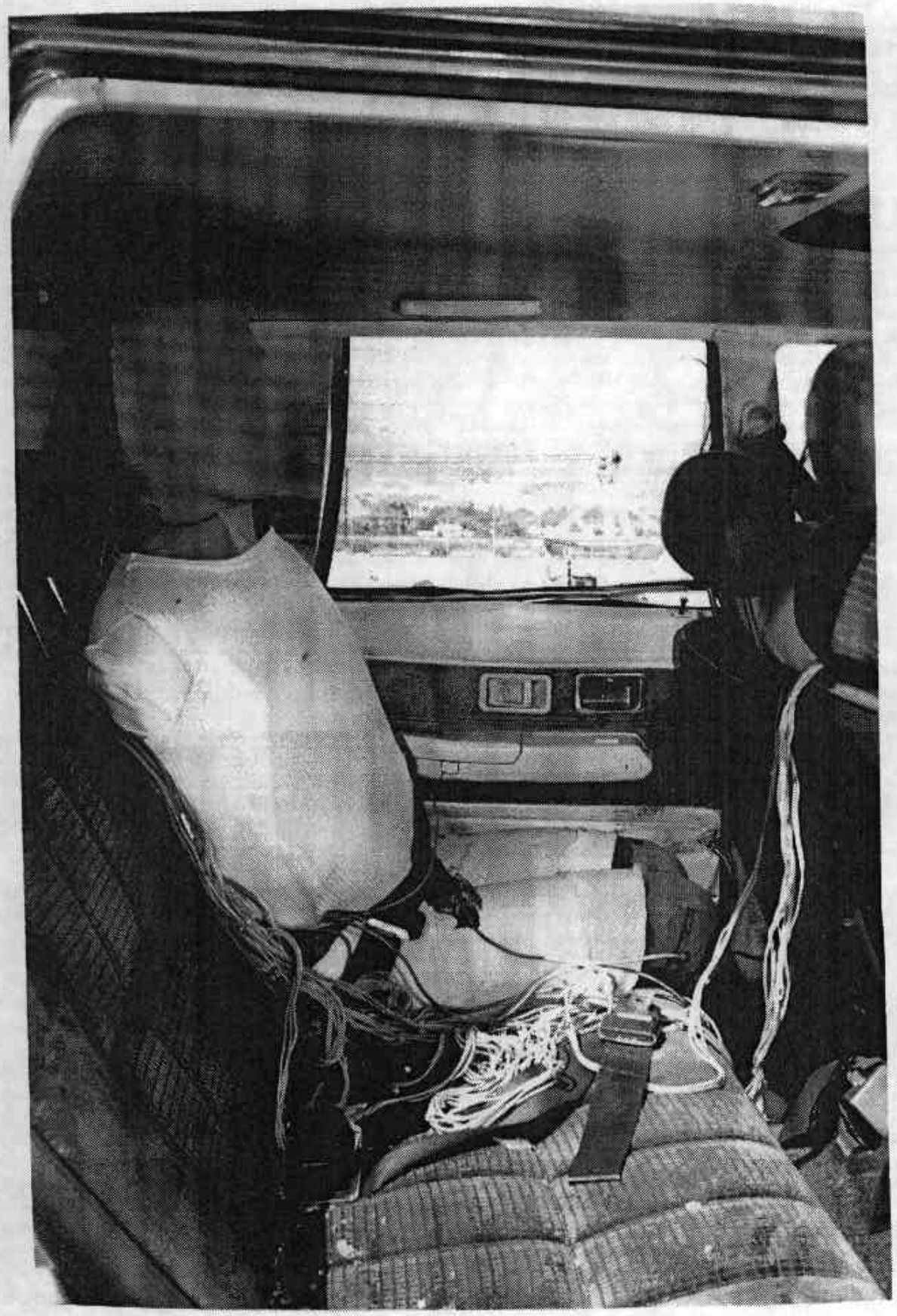


FIGURE 5-22 POSTTEST OCCUPANT COMPARTMENT RIGHT SIDE VIEW SHOWING PASSENGER SIDE

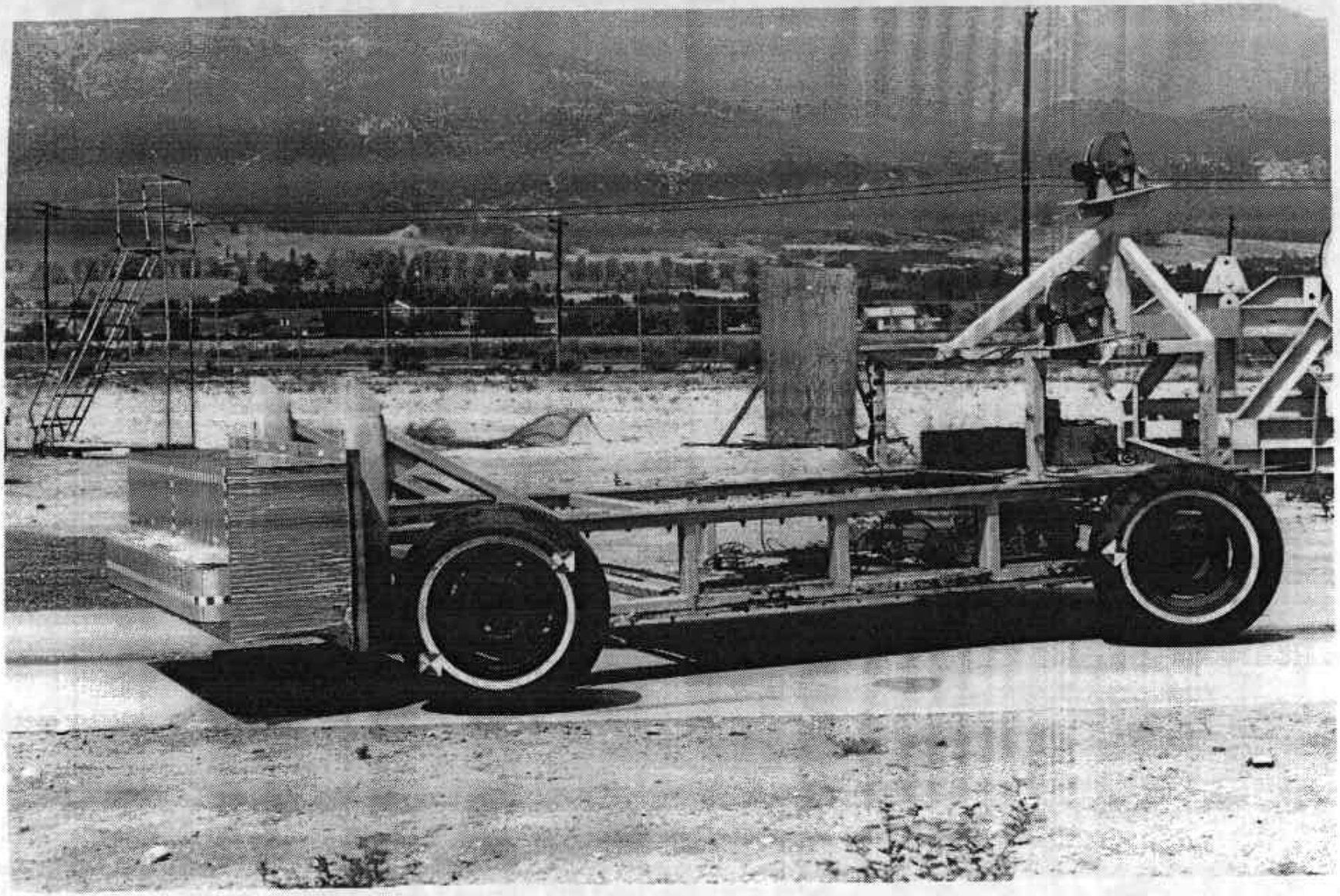


FIGURE 5-23 PRETEST RIGHT SIDE VIEW OF MDB WITH IMPACT FACE IN POSITION

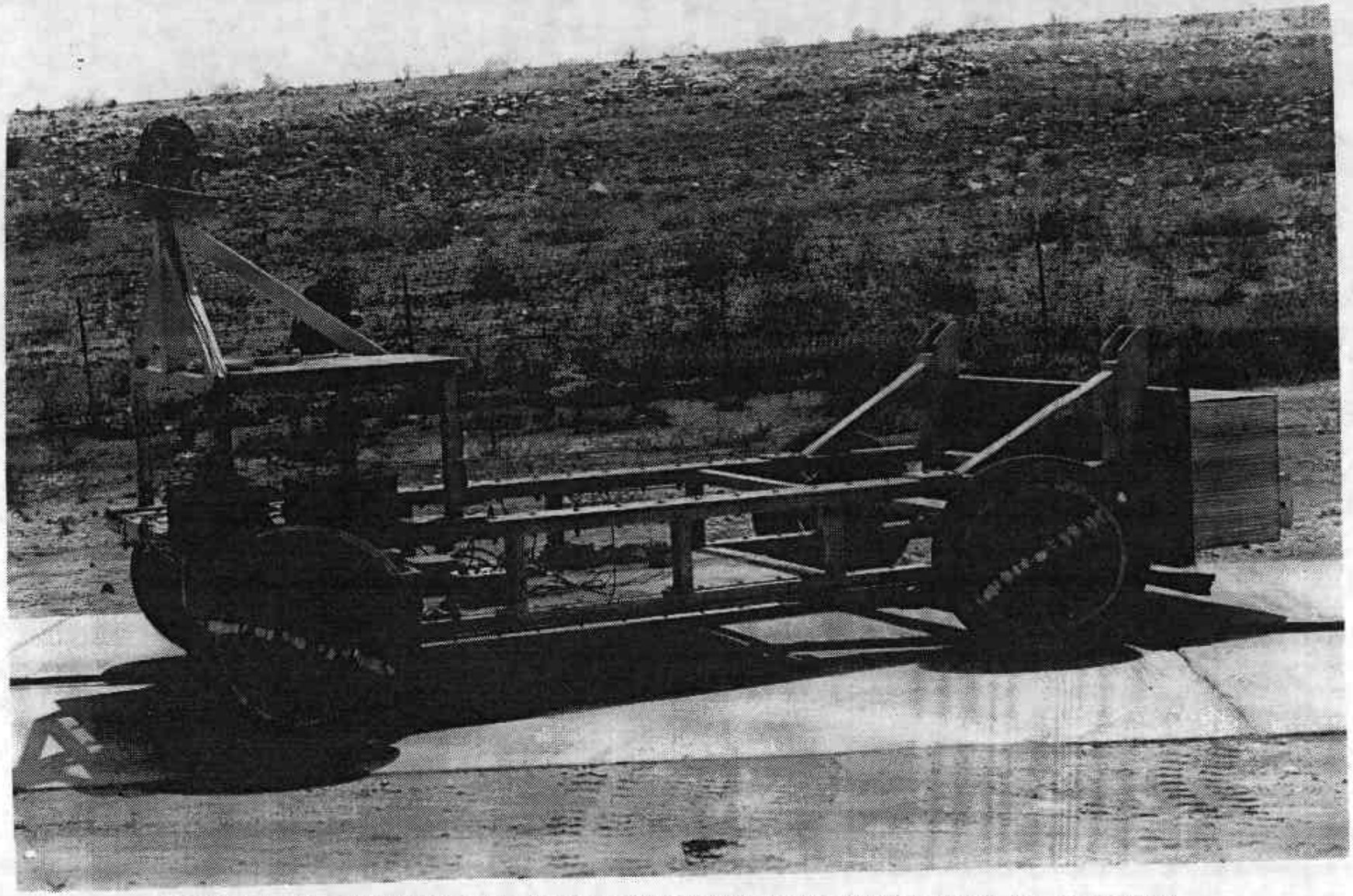


FIGURE 5-24 PRETEST LEFT SIDE VIEW OF MDB WITH IMPACT FACE IN POSITION

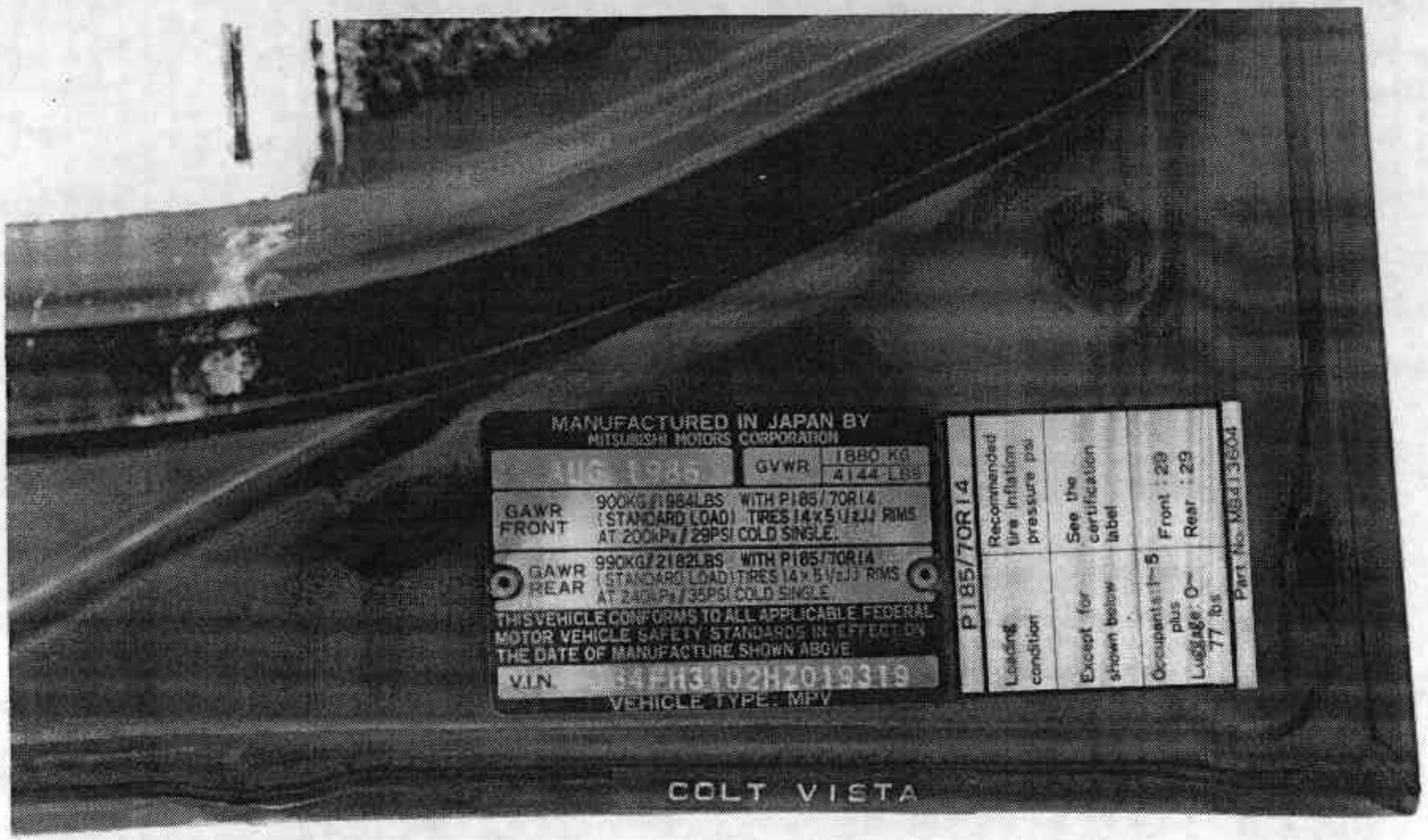


FIGURE 5-25 MANUFACTURER'S CERTIFICATION AND TIRE PLACARD LABEL

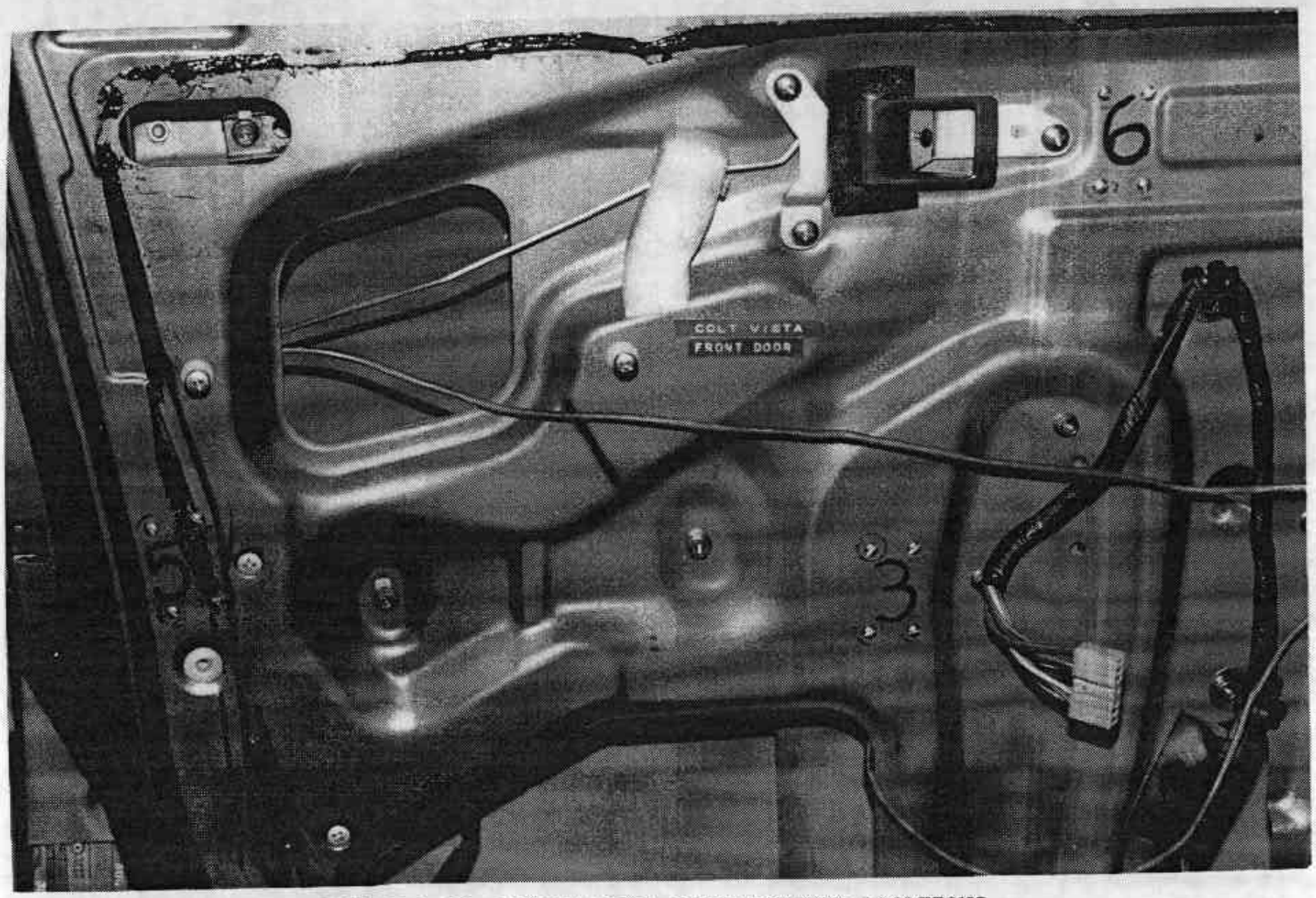


FIGURE 5-26 DRIVER DOOR ACCELEROMETER LOCATIONS

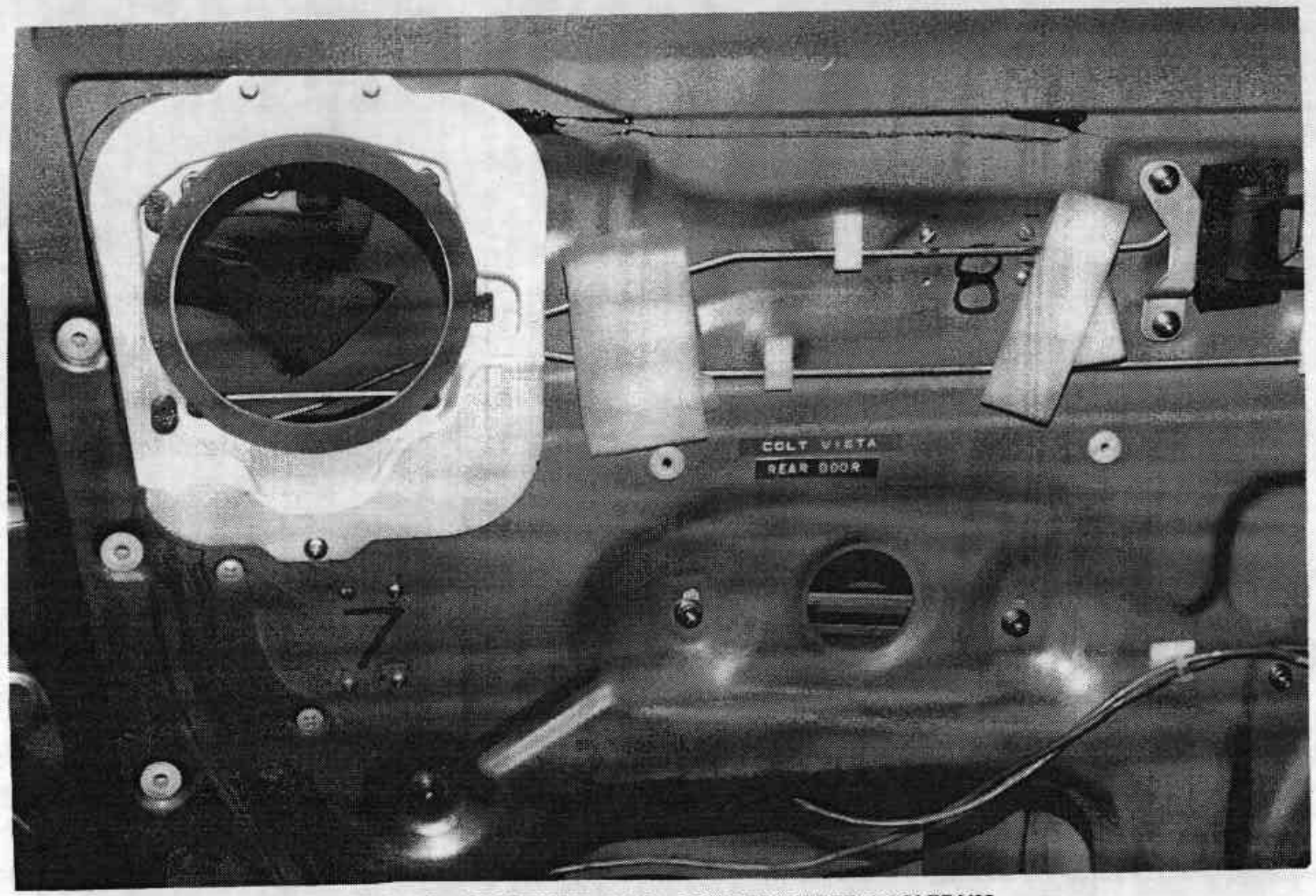


FIGURE 5-27 PASSENGER DOOR ACCELEROMETER LOCATIONS

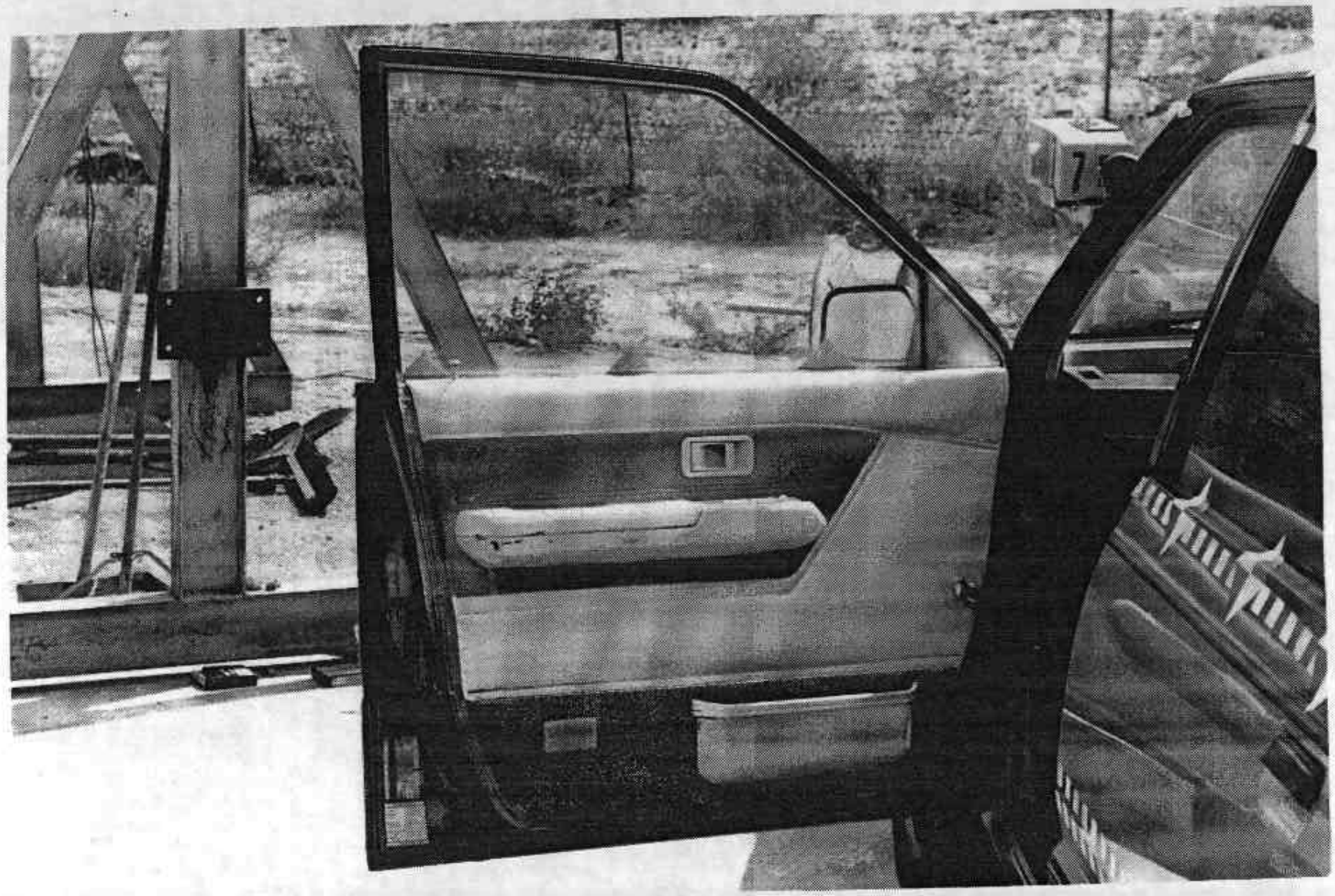


FIGURE 5-28 DRIVER DOOR ACCELEROMETERS INSTALLED, DOOR PANEL IN PLACE-PRETEST

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

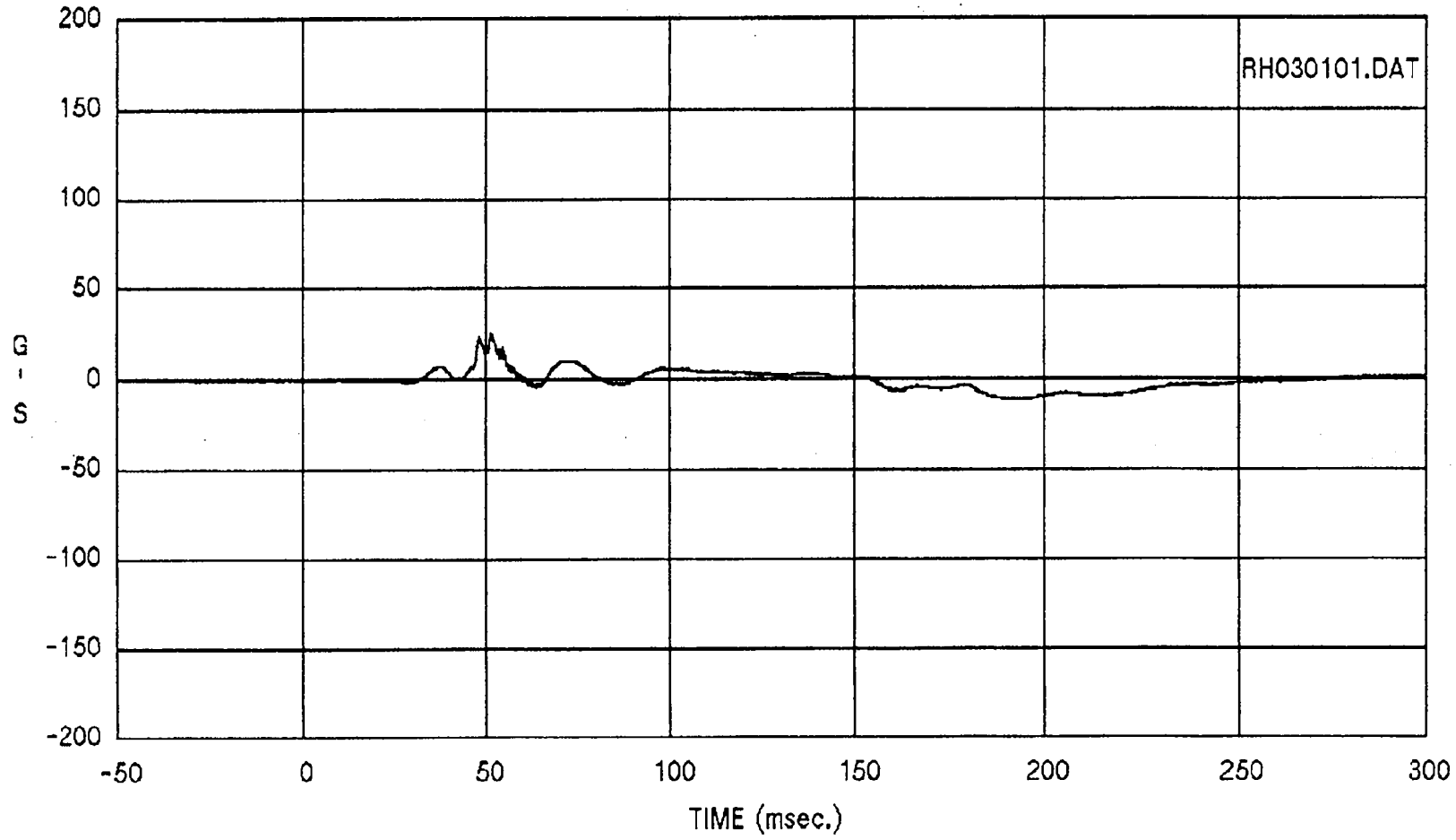
FIGURE 5-32 POSTTEST VIEW SHOWING RESULT OF SEAT IMPACTING RIGHT REAR DOOR

SECTION 6

VEHICLE AND SID RESPONSE DATA

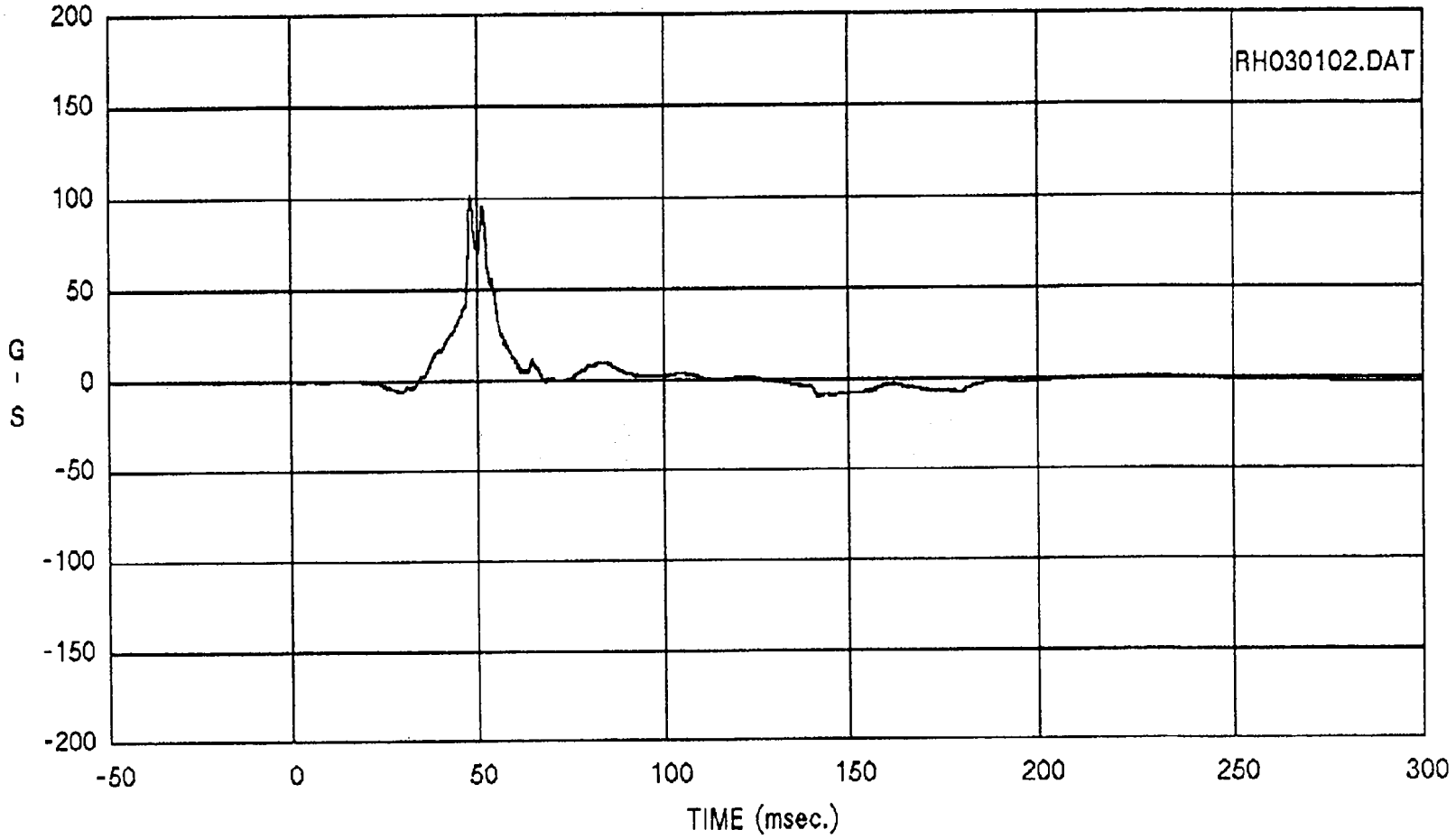
The dataplots from the side impact test are presented in this section.

SID DATA



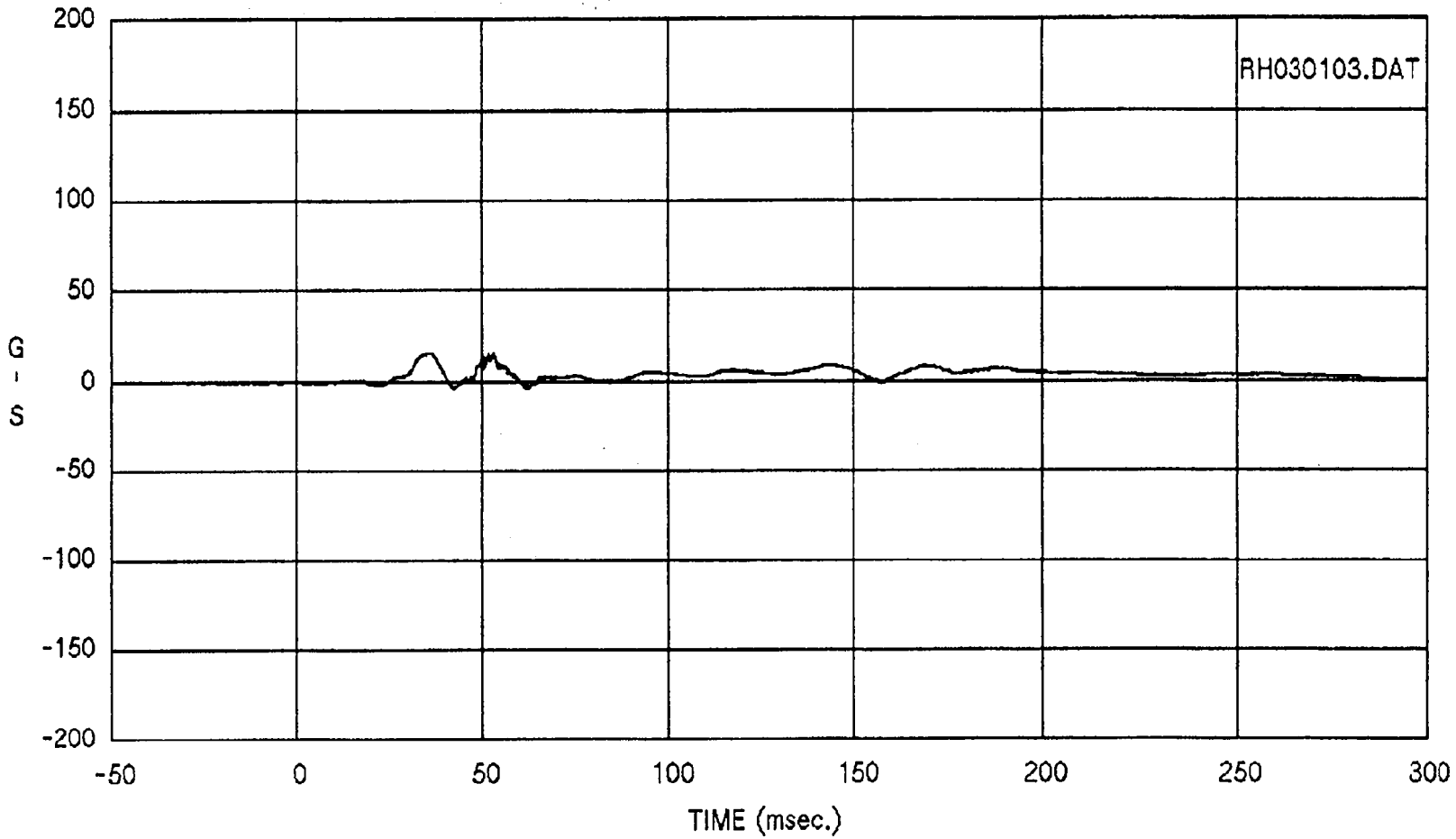
Curve: Driver Head acceleration -- X axis Filter: SAE CLASS 1000 Max = 25.741 Min = -11.304

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



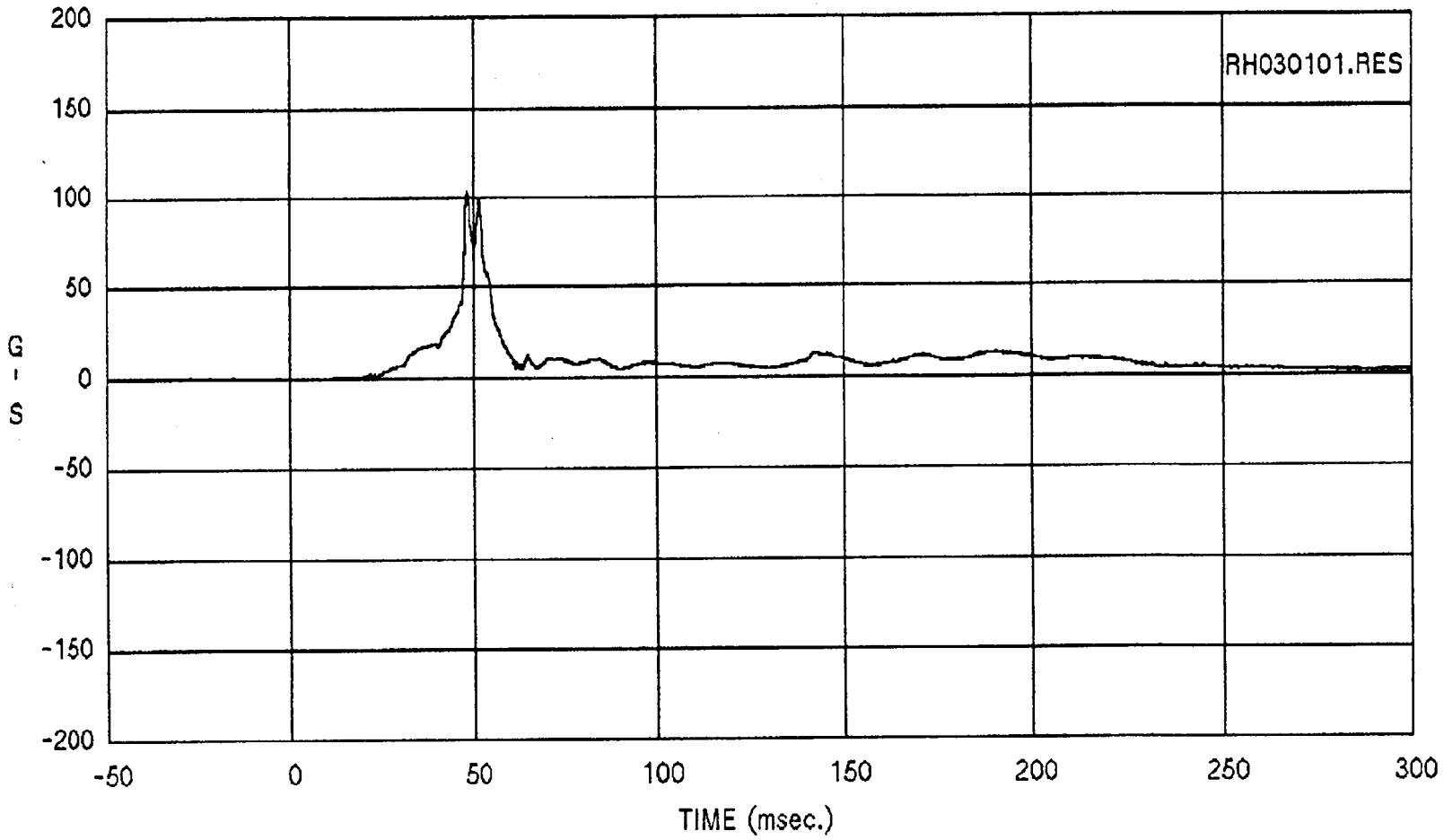
Curve: Driver Head acceleration -- Y axis Filter: SAE CLASS 1000 Max = 100.97 Min = -9.1923

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



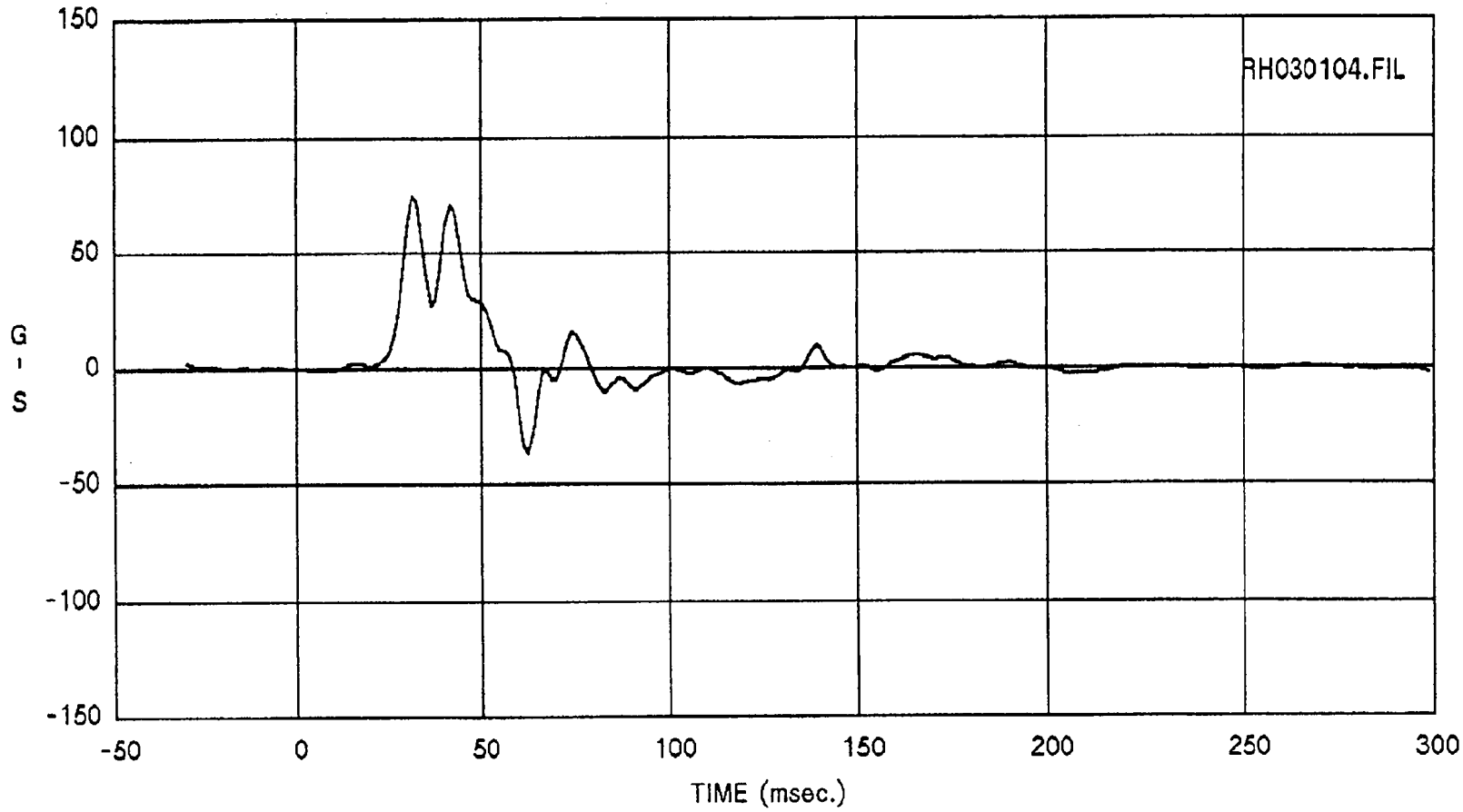
Curve: Driver Head acceleration -- Z axis Filter: SAE CLASS 1000 Max = 16.286 Min = -3.6445

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



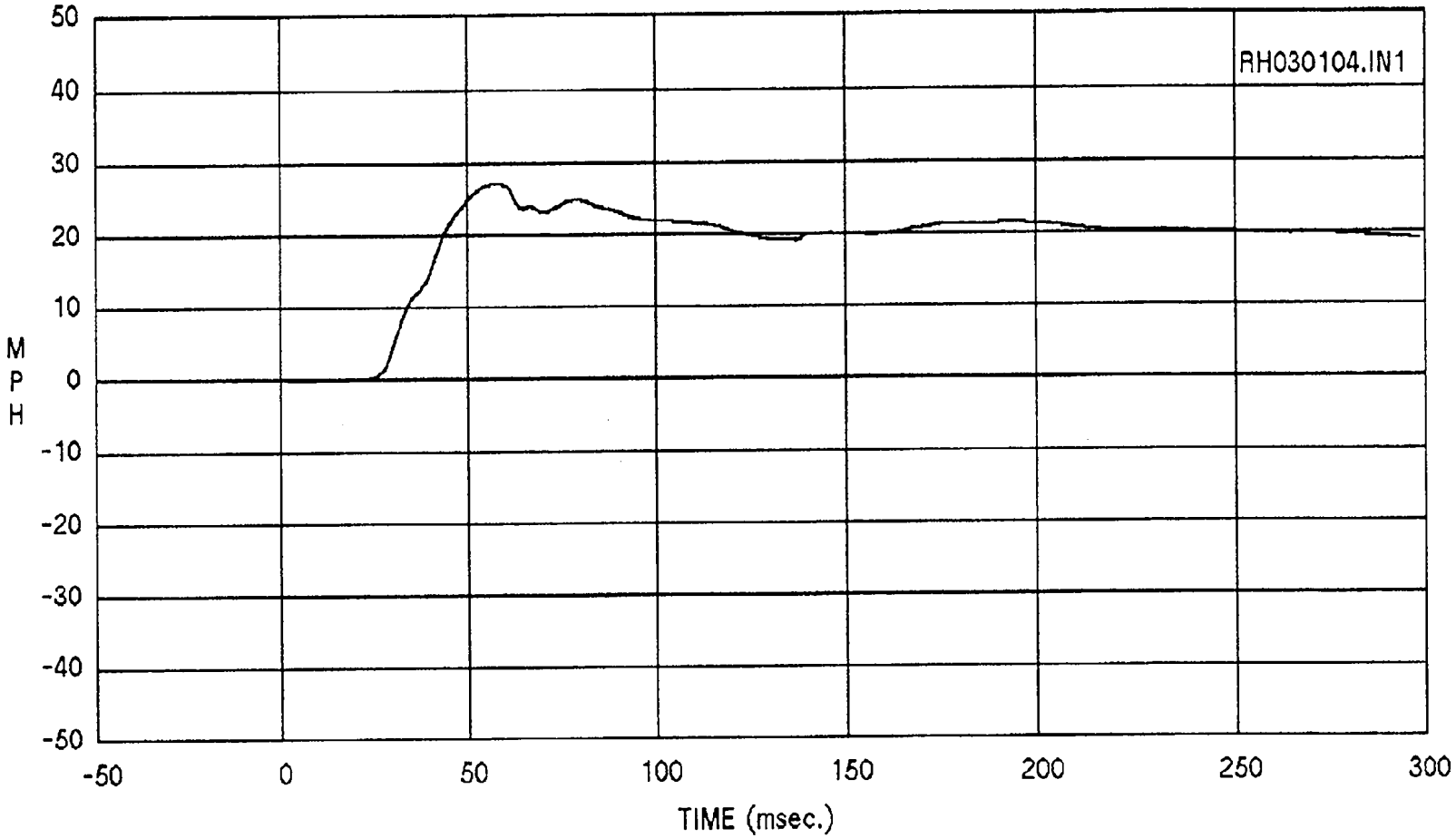
Curve: Driver head resultant acceleration Filter: SAE CLASS 1000 Max = 103.65 Min = .00000

MSE Date: 08/05/92 Program: Side Impact 30/15 90 Deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



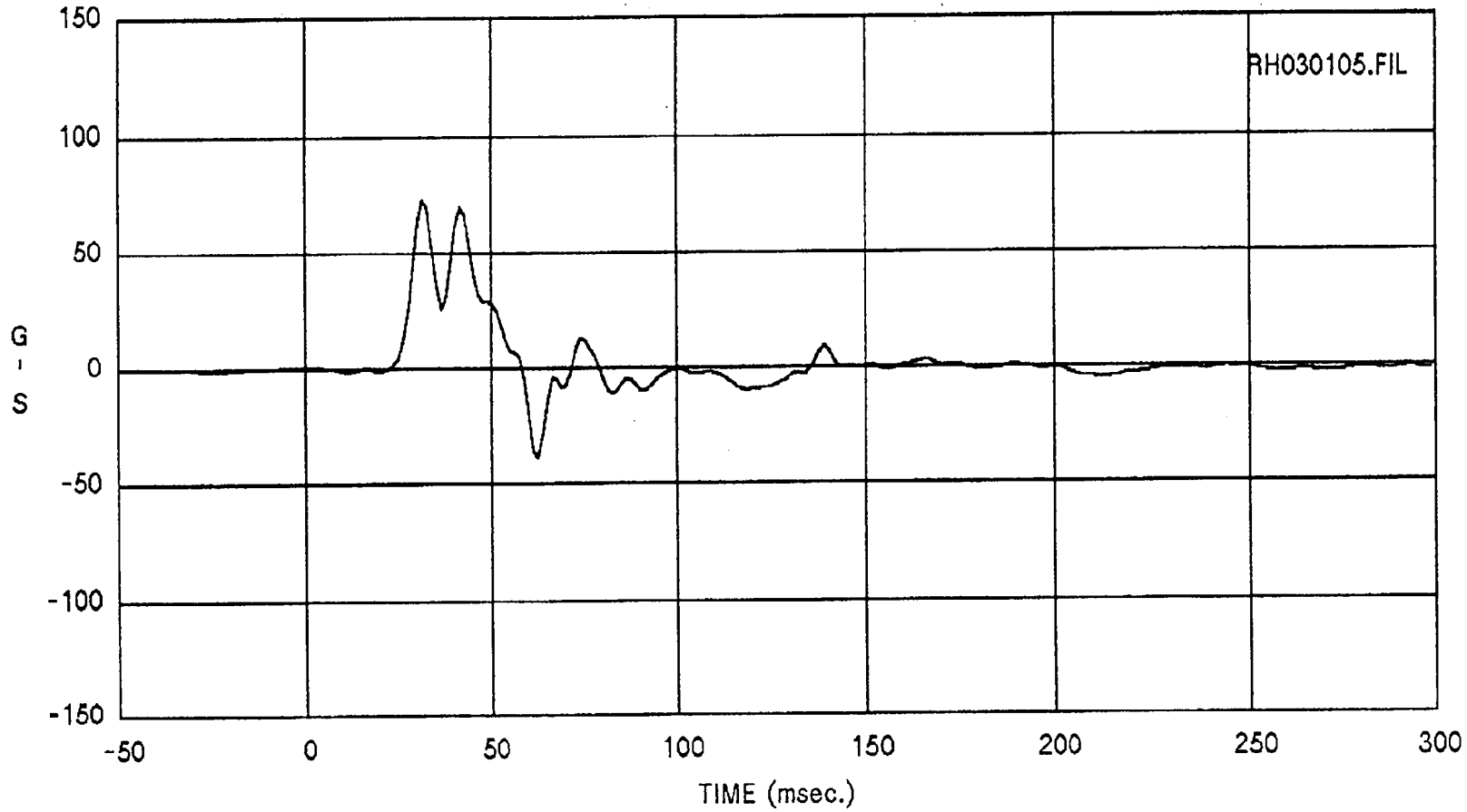
Curve: Driver upper spine acceleration -- Primary Filter: FIR 100 Max = 75.214 Min = -36.956

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



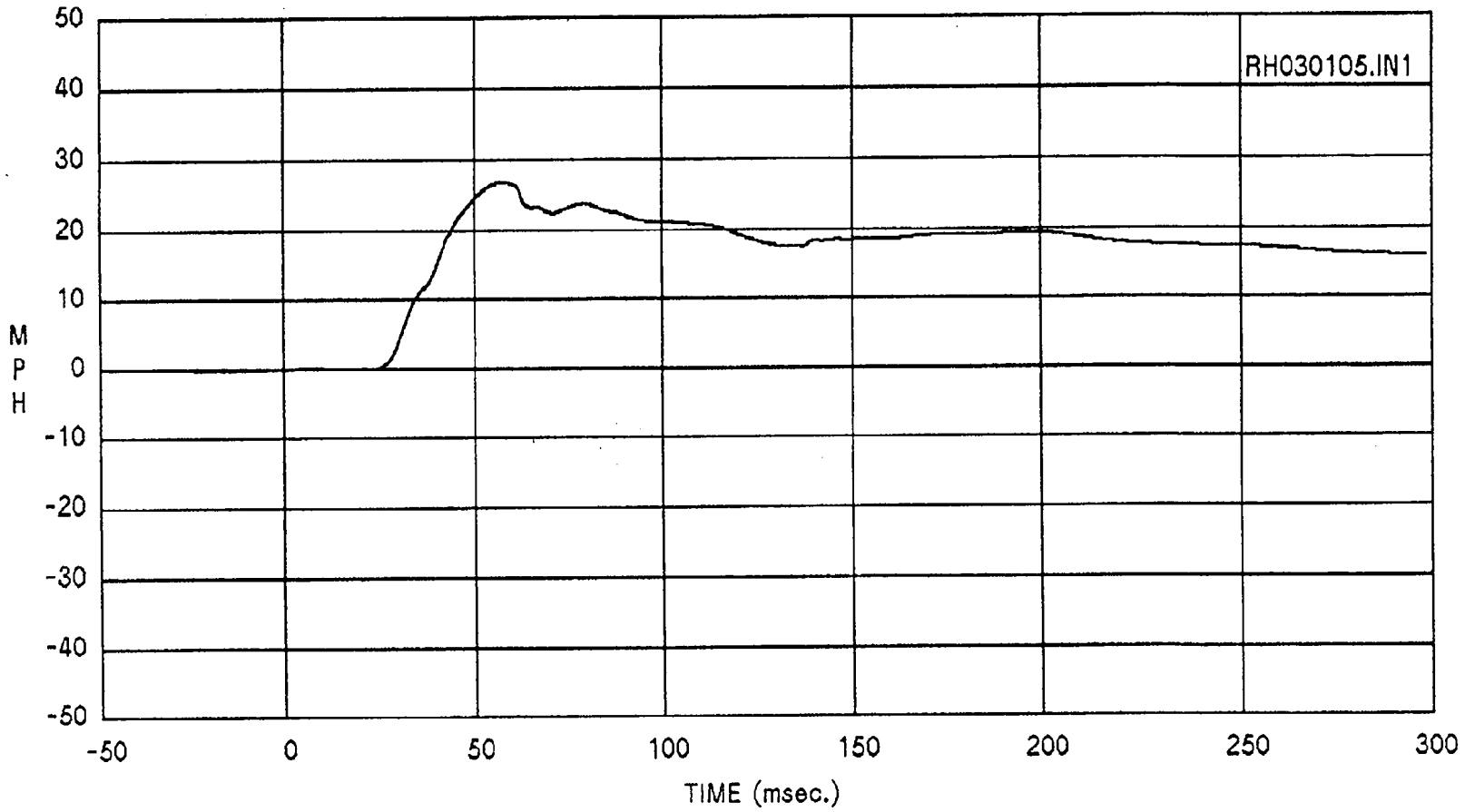
Curve: Driver upper spine delta V -- Primary Filter: SAE CLASS 180 Max = 27.239 Min = -.19740

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



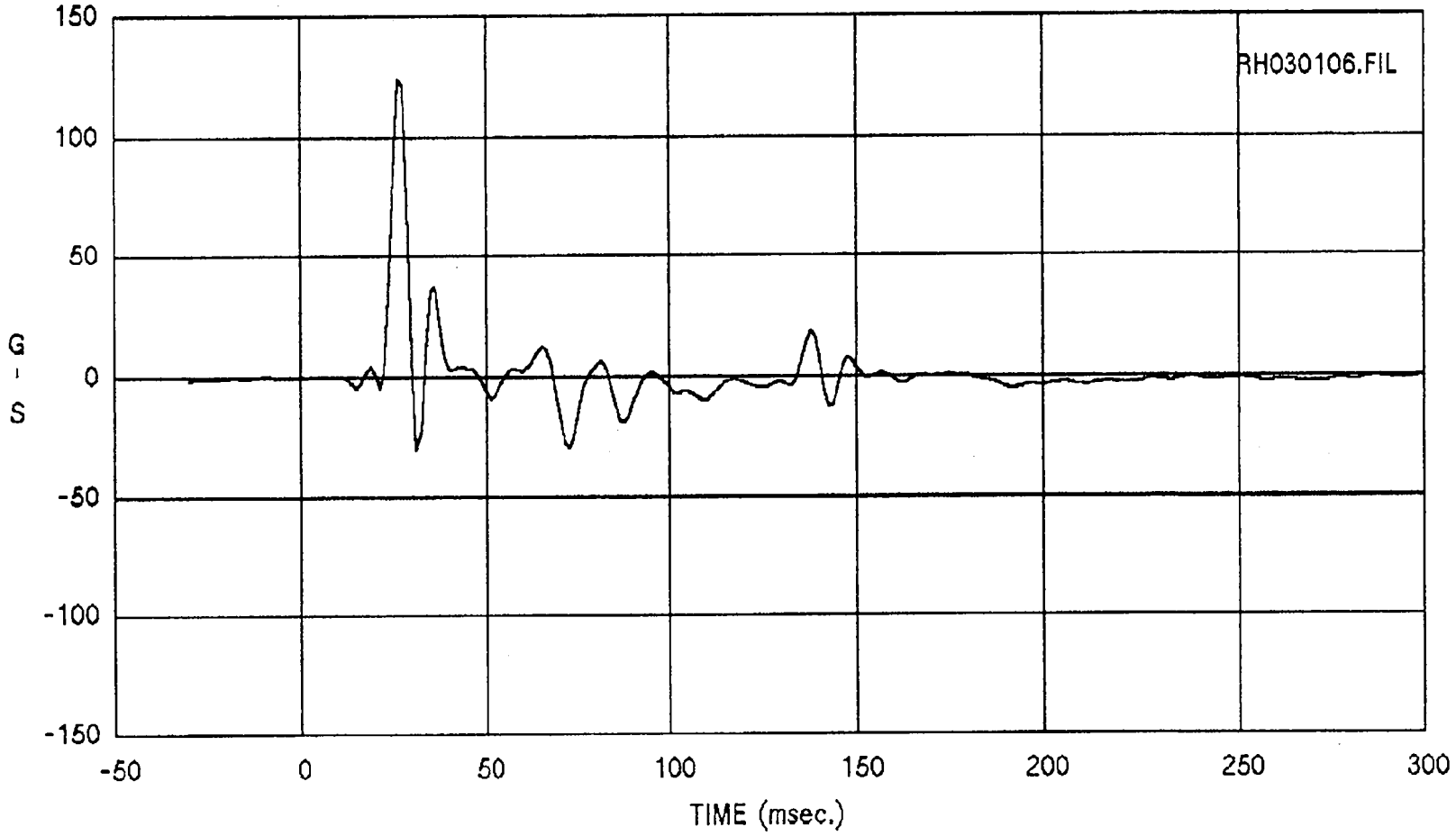
Curve: Driver upper spine acceleration -- Redundant Filter: FIR 100 Max = 73.393 Min = -39.075

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



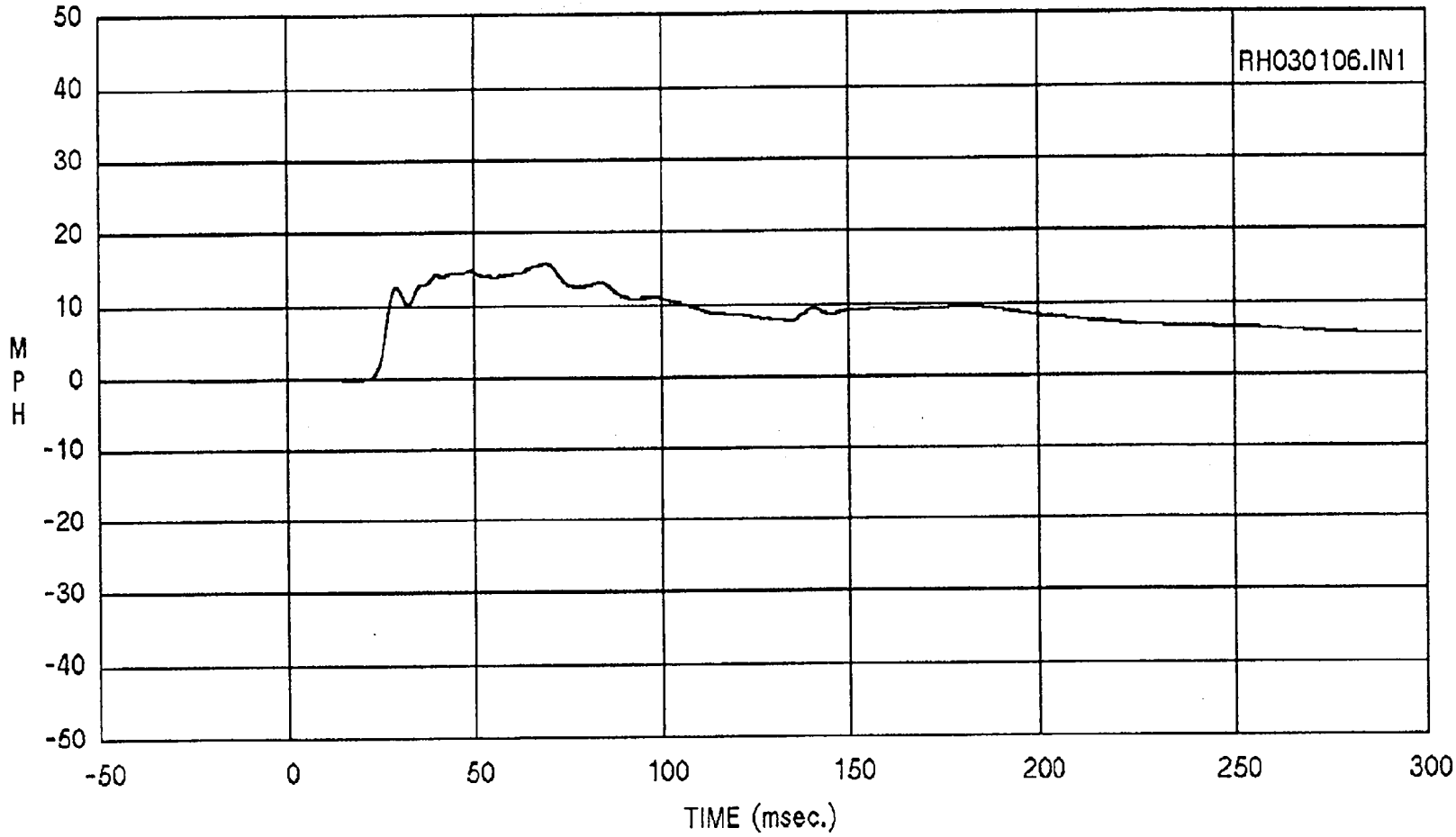
Curve: Driver upper spine delta V -- Redundant Filter: SAE CLASS 180 Max = 26.888 Min = -.70380
02

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



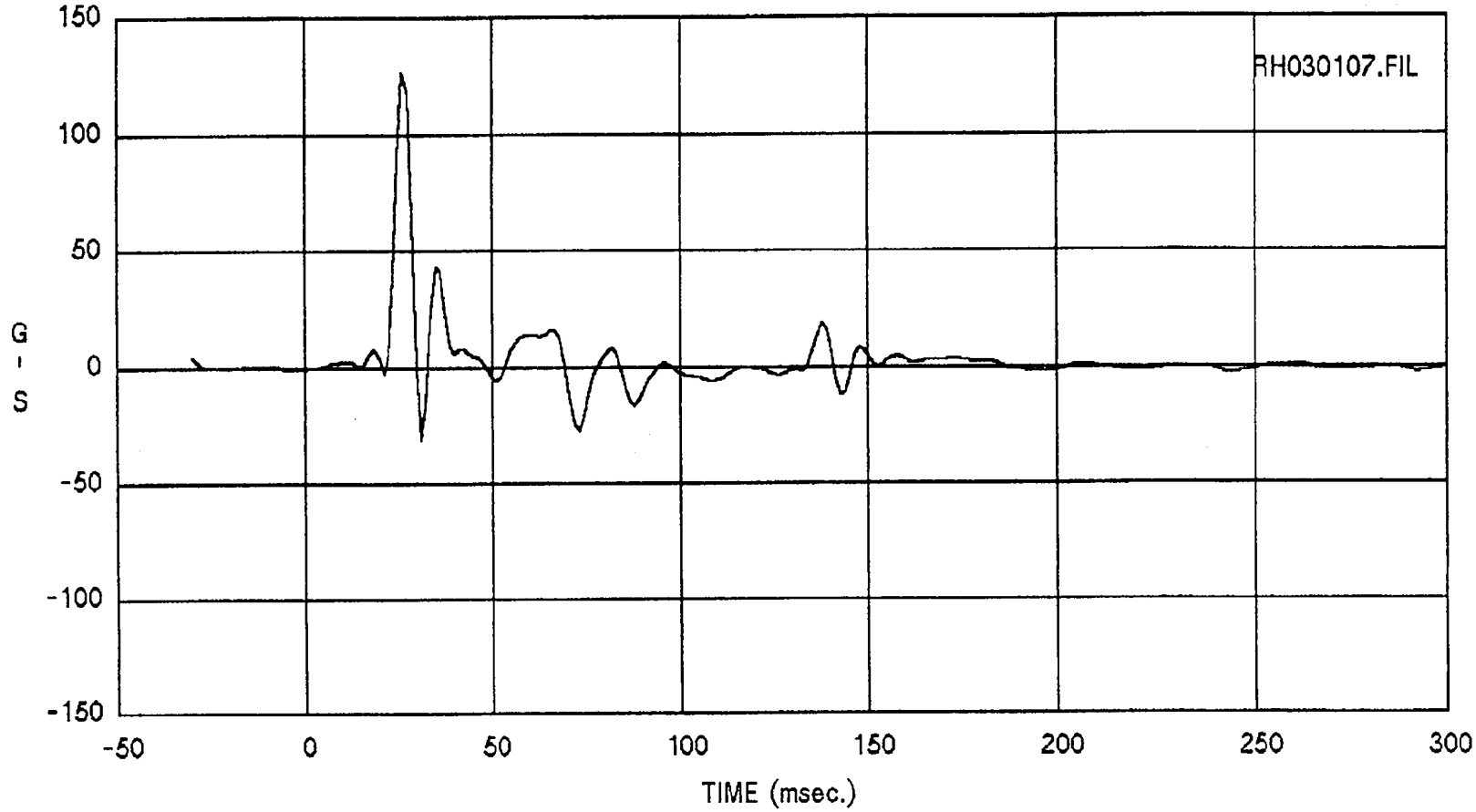
Curve: Driver upper rib acceleration -- Primary Filter: FIR 100 Max = 129.59 Min = -30.951

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



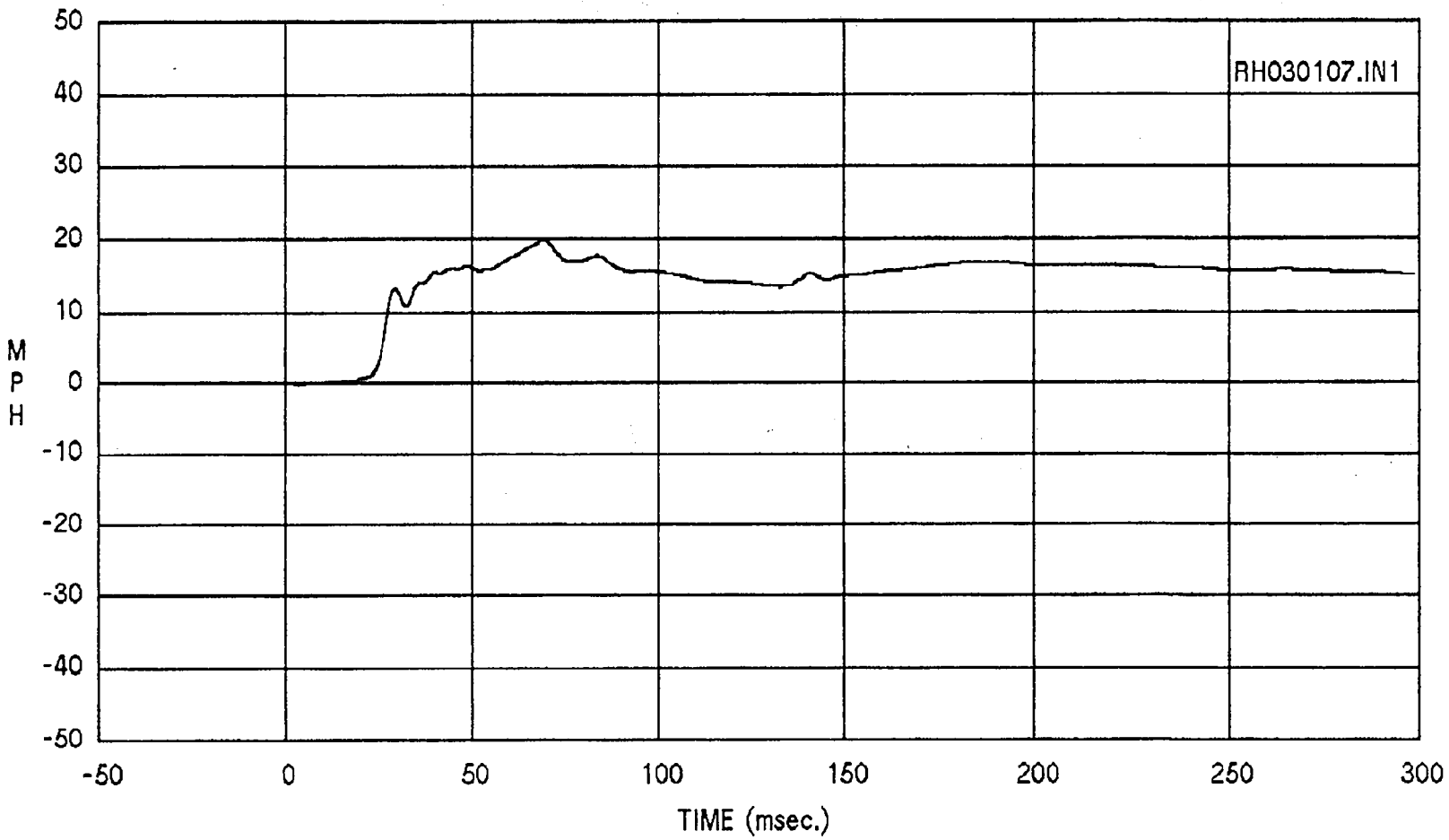
Curve: Driver upper rib delta V -- Primary Filter: SAE CLASS 180 Max = 15.782 Min = -.18103

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



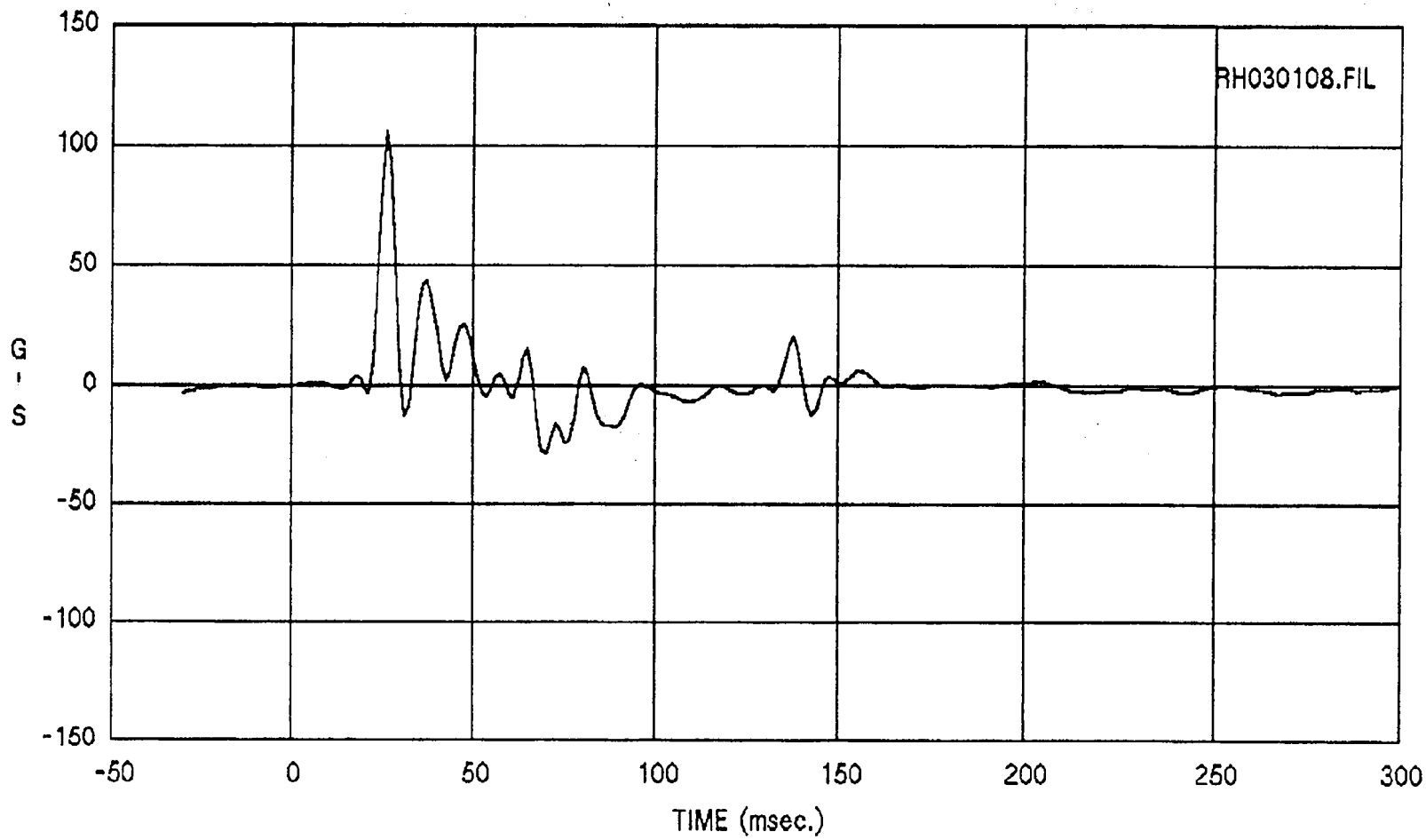
Curve: Driver upper rib acceleration -- Redundant Filter: FIR 100 Max = 128.66 Min = -30.606

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



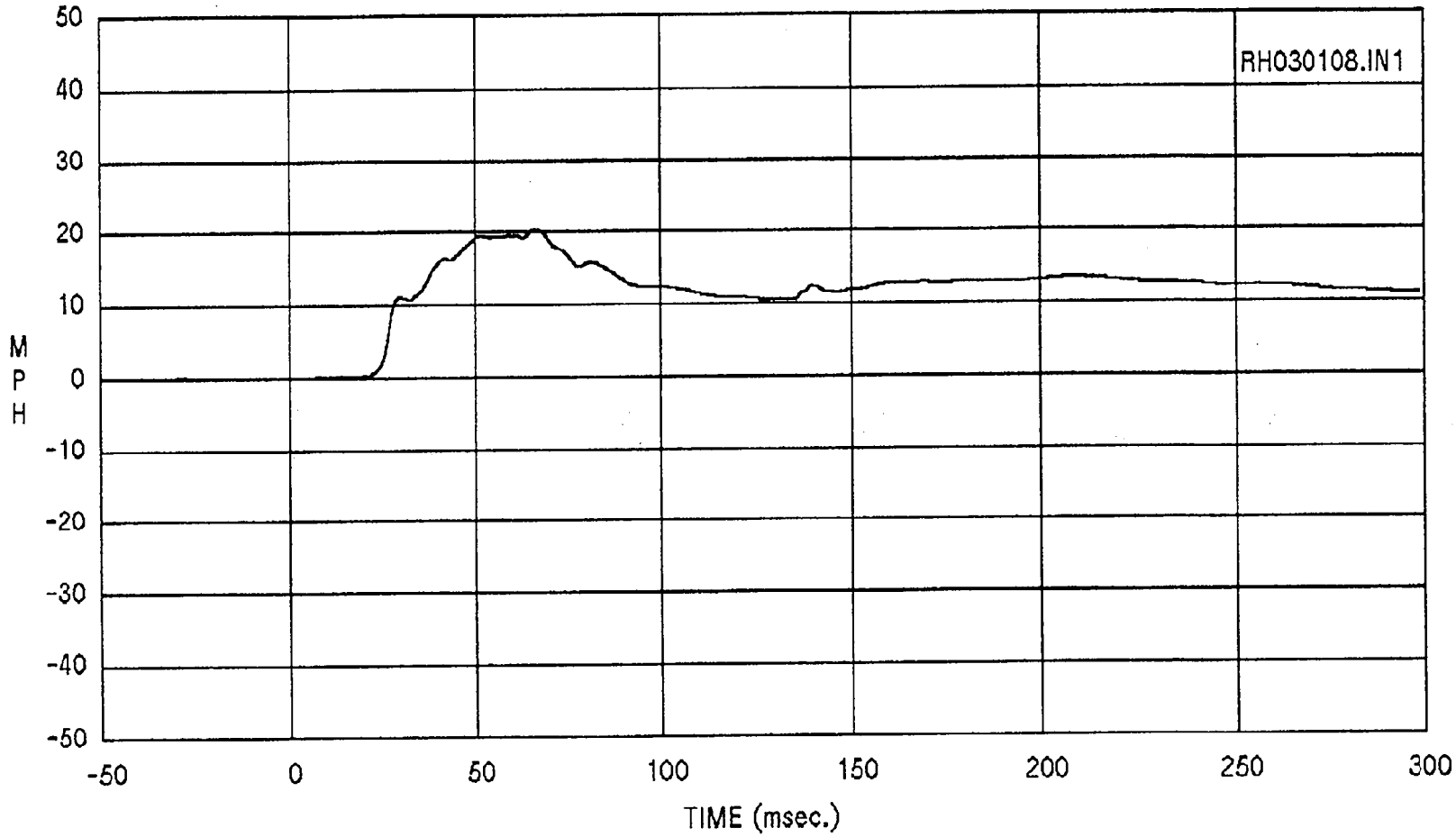
Curve: Driver upper rib delta V -- Redundant Filter: SAE CLASS 180 Max = 19.876 Min = -.32866E
01

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



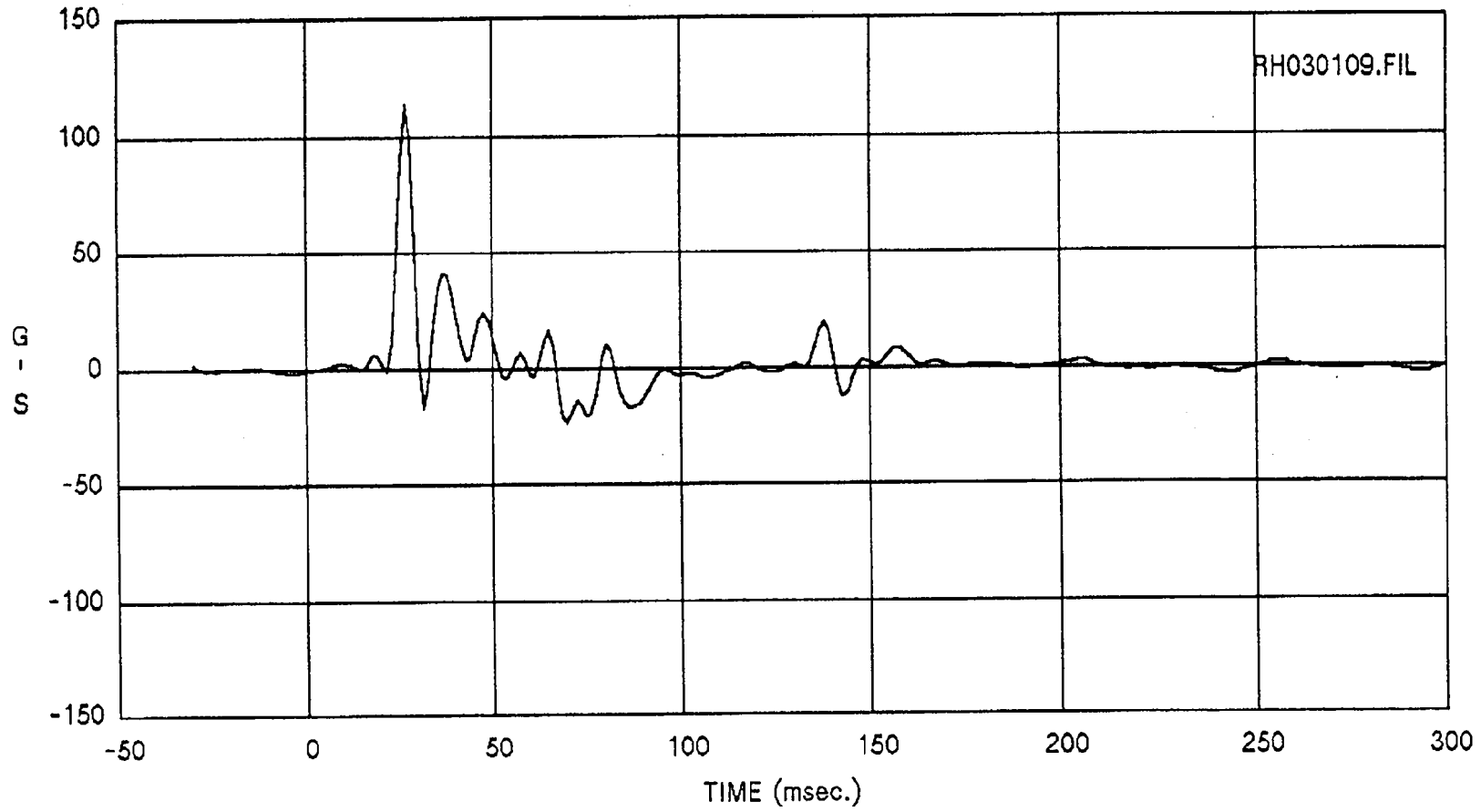
Curve: Driver lower rib acceleration -- Primary Filter: FIR 100 Max = 106.28 Min = -29.281

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



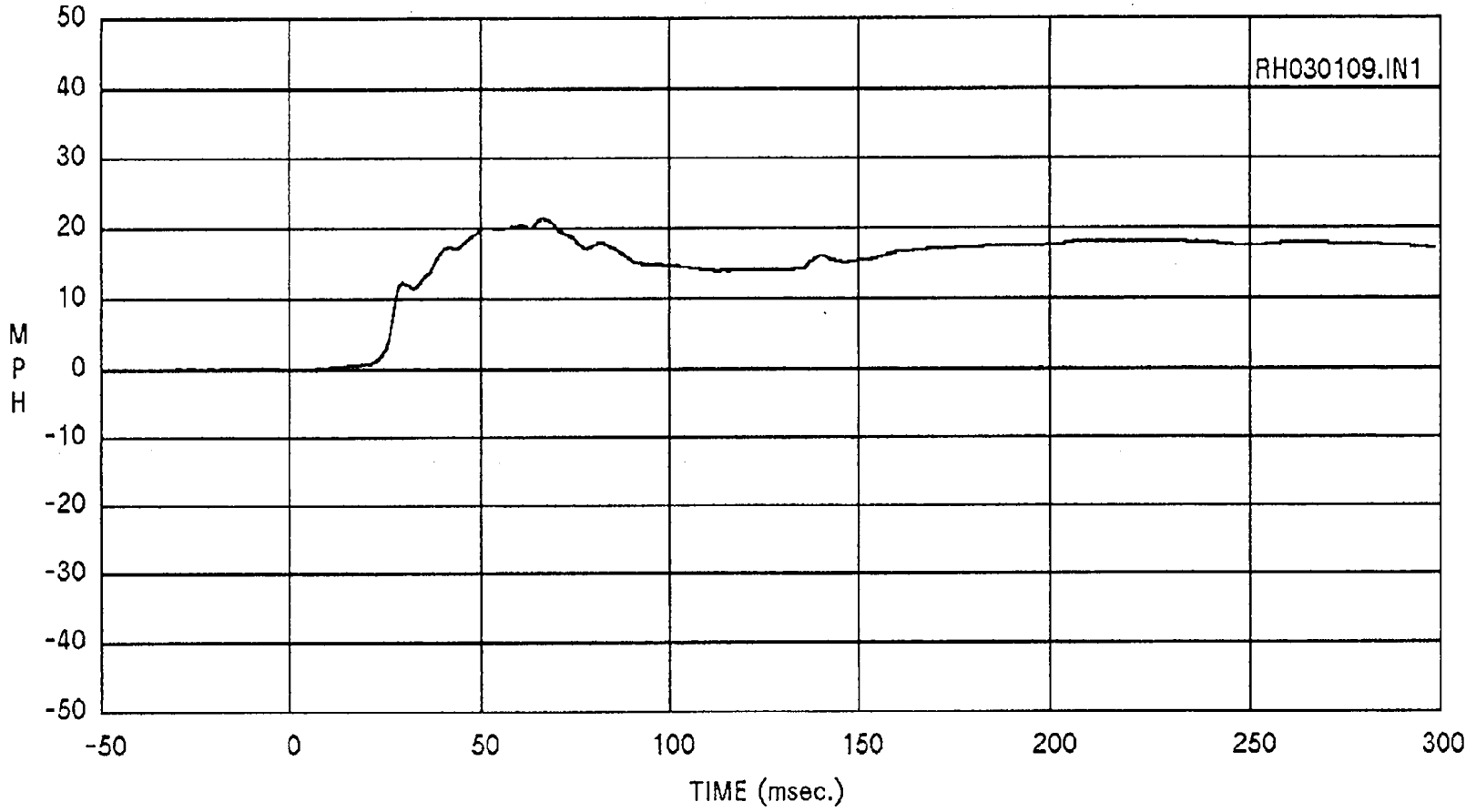
Curve: Driver lower rib delta V -- Primary Filter: SAE CLASS 180 Max = 20.466 Min = .22086

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



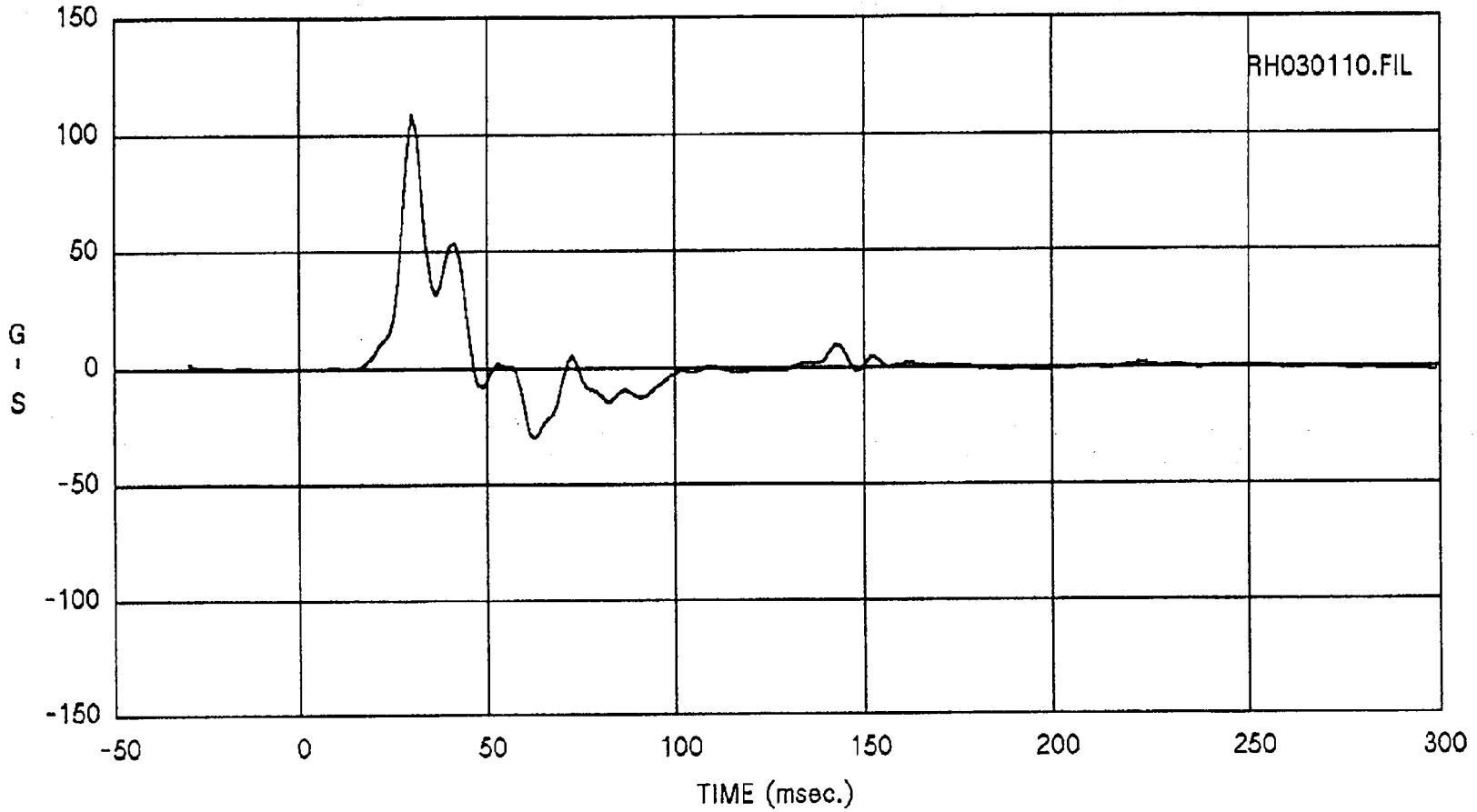
Curve: Driver lower rib acceleration -- Redundant Filter: FIR 100 Max = 113.83 Min = -23.614

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



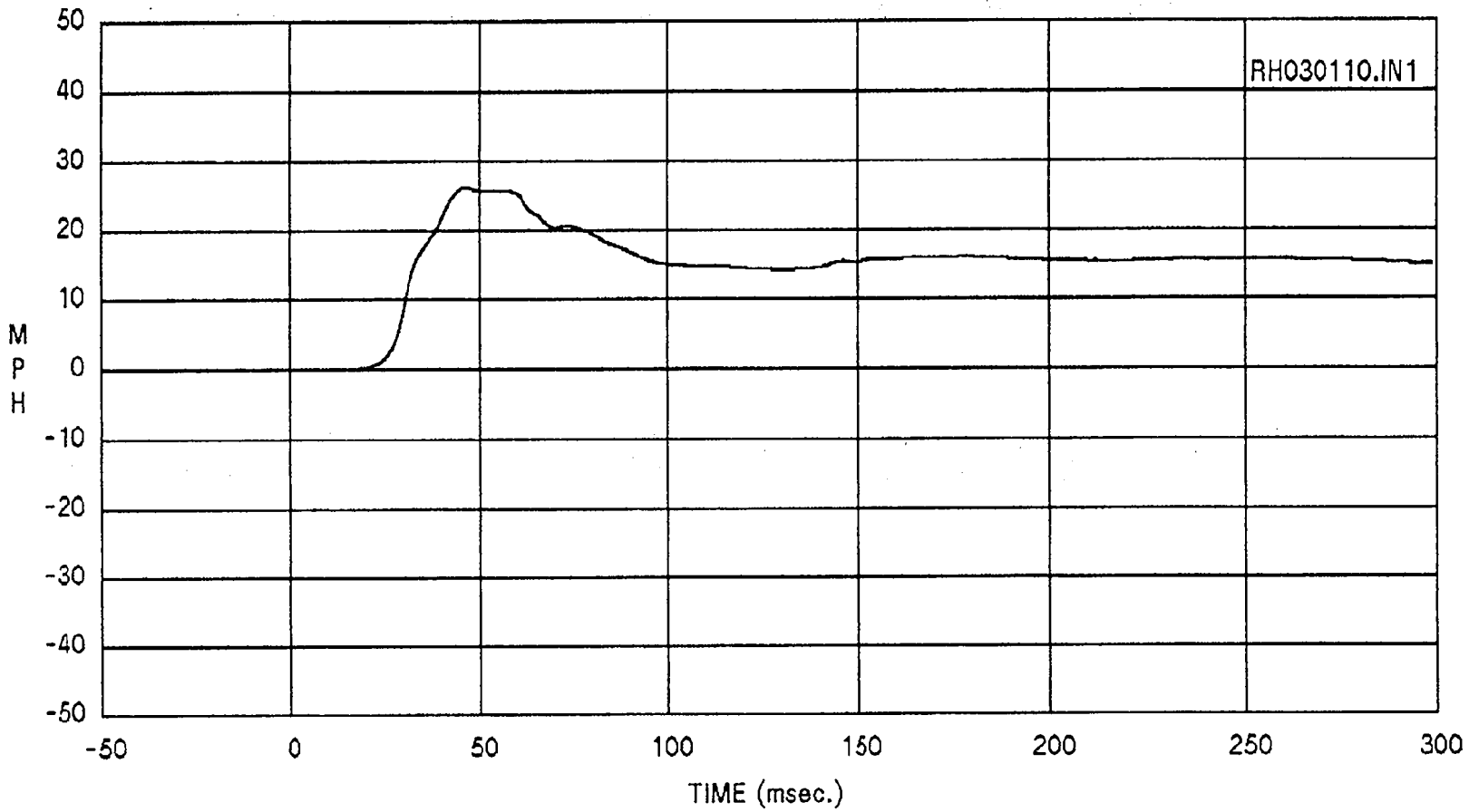
Curve: Driver lower rib delta V -- Redundant Filter: SAE CLASS 180 Max = 21.288 Min = -.85877E
02

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



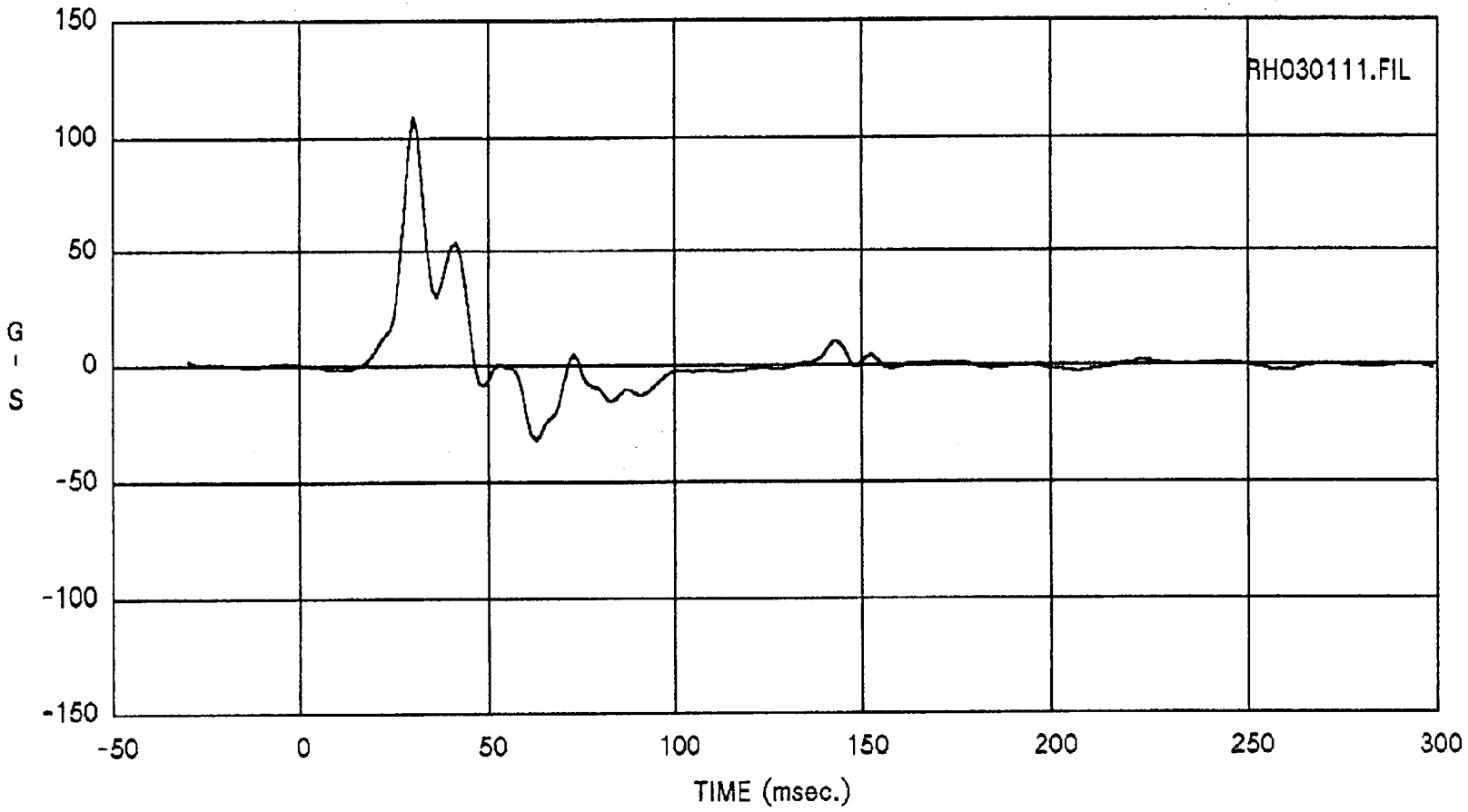
Curve: Driver lower spine acceleration -- Primary Filter: FIR 100 Max = 108.73 Min = -29.992

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



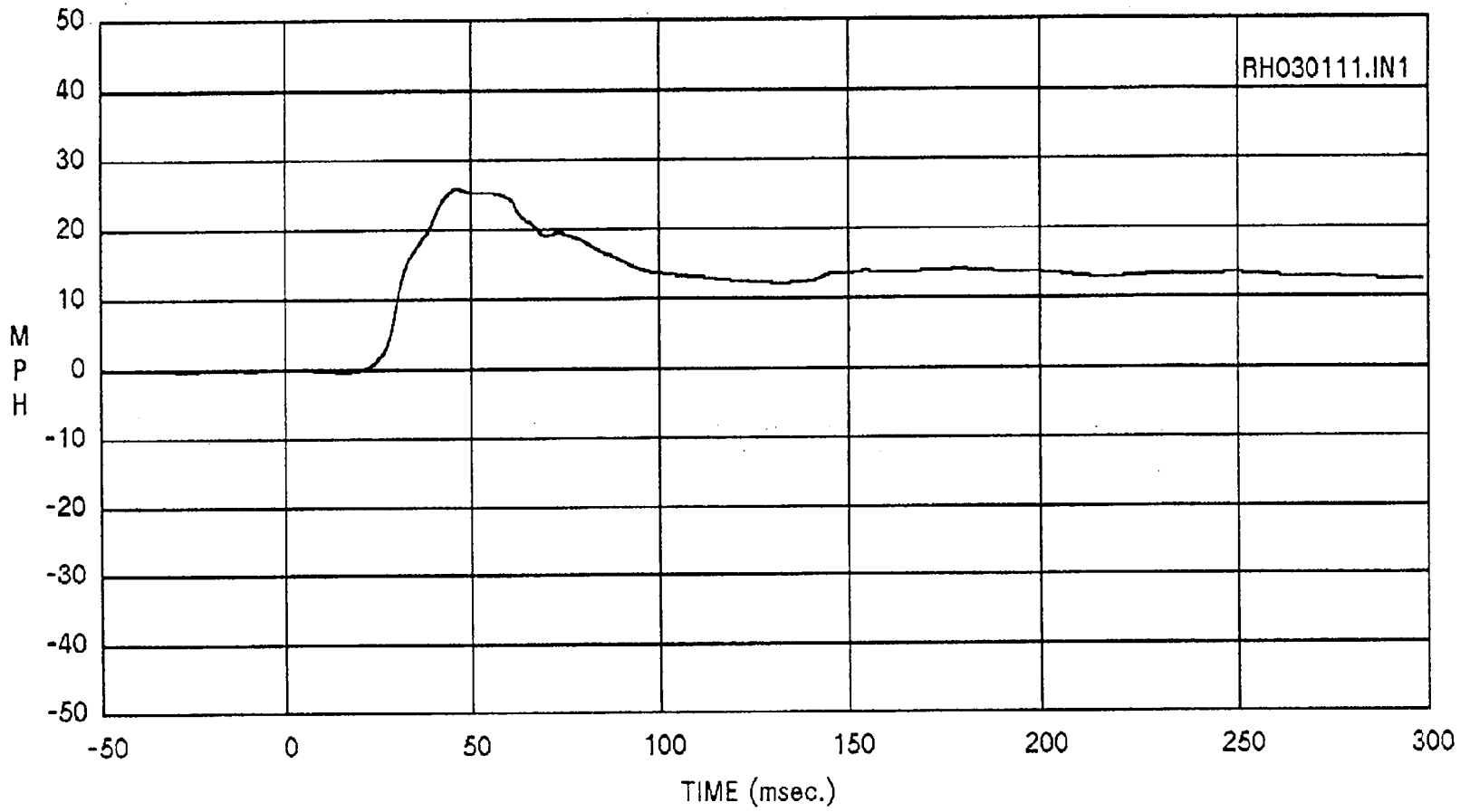
Curve: Driver lower spine delta V -- Primary Filter: SAE CLASS 180 01 Max = 26.262 Min = -.34765E

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



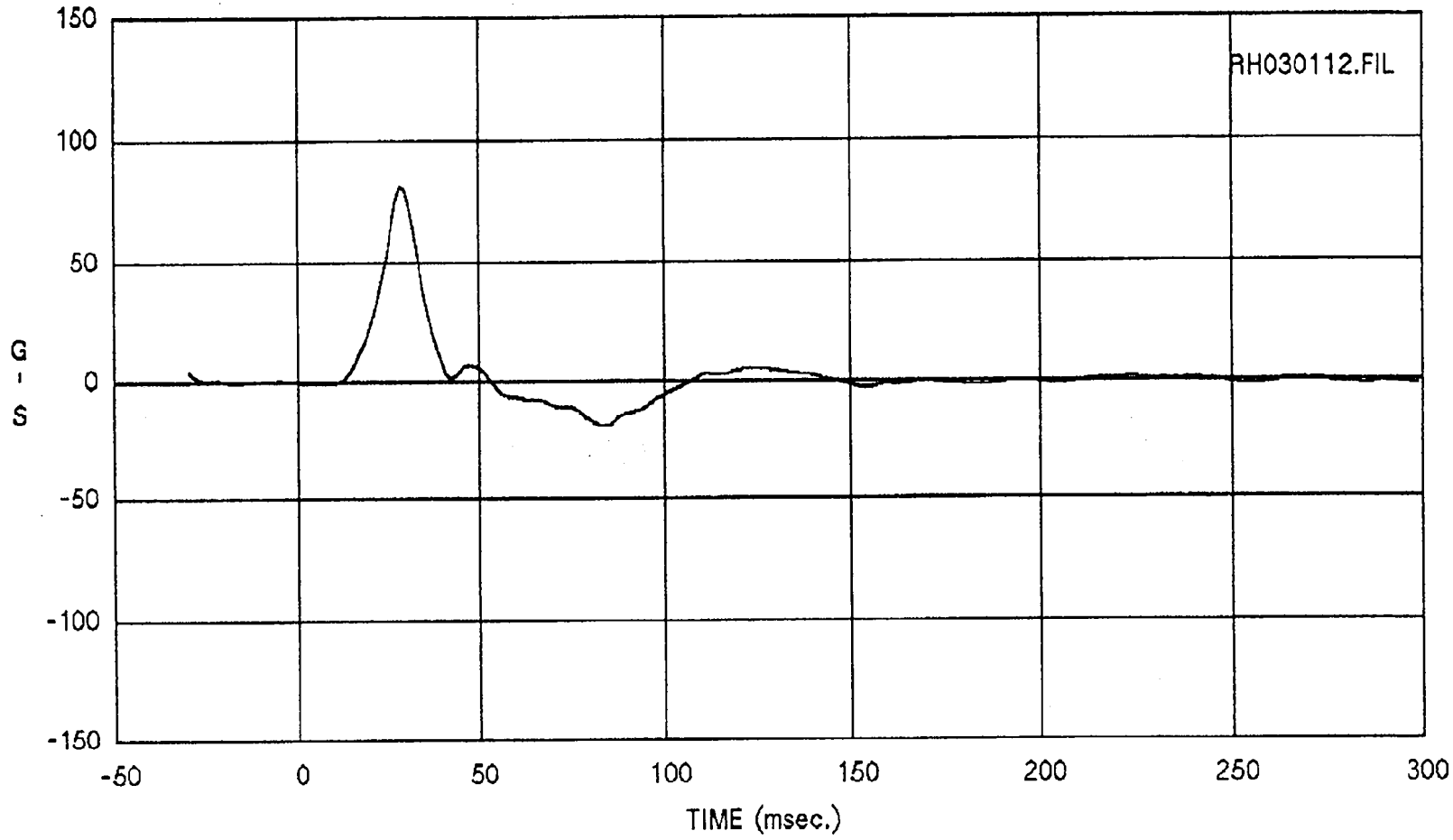
Curve: Driver lower spine acceleration -- Redundant Filter: FIR 100 Max = 109.32 Min = -32.476

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



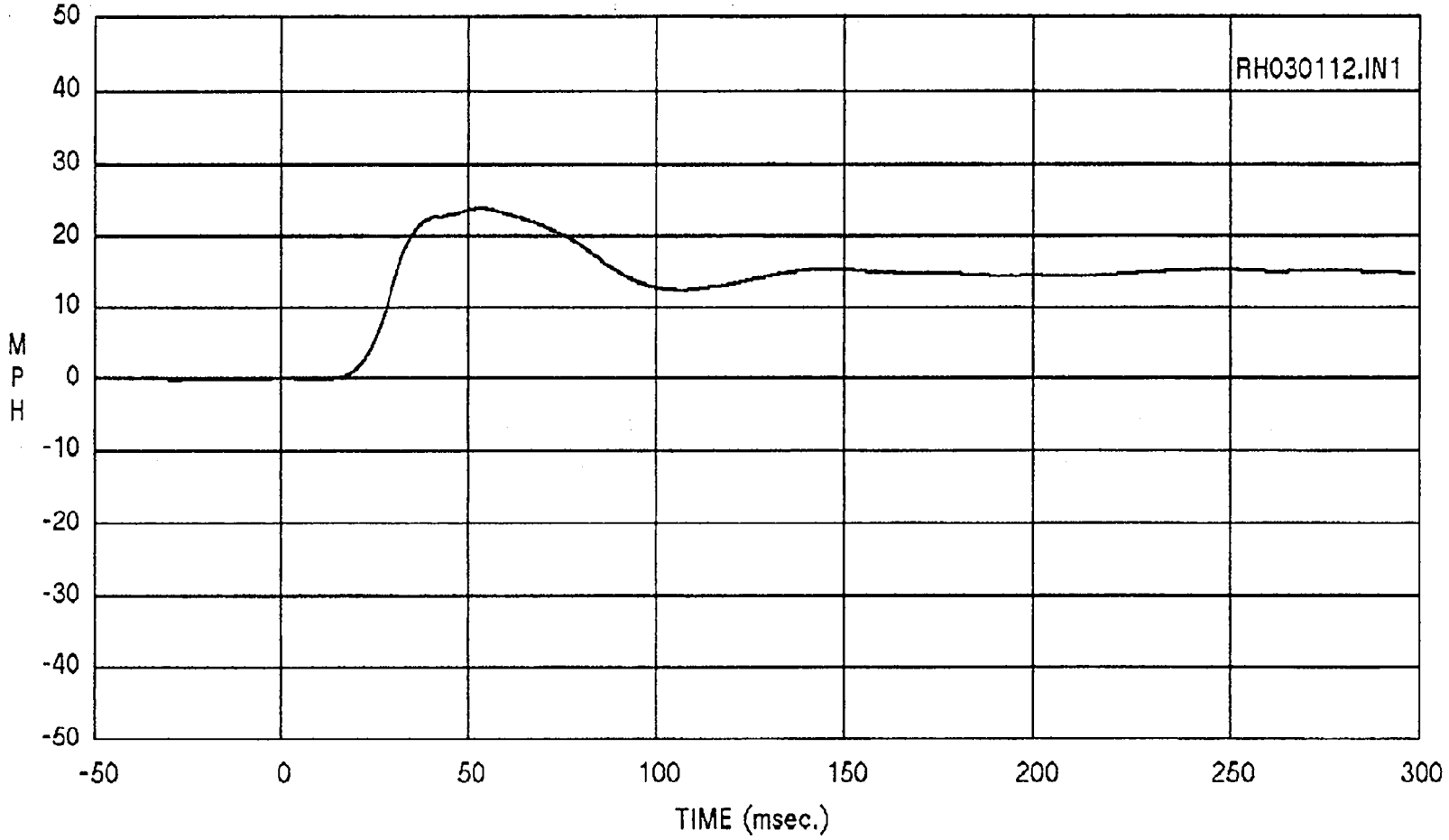
Curve: Driver lower spine delta V -- Redundant Filter: SAE CLASS 180 Max = 25.888 Min = -.38516

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



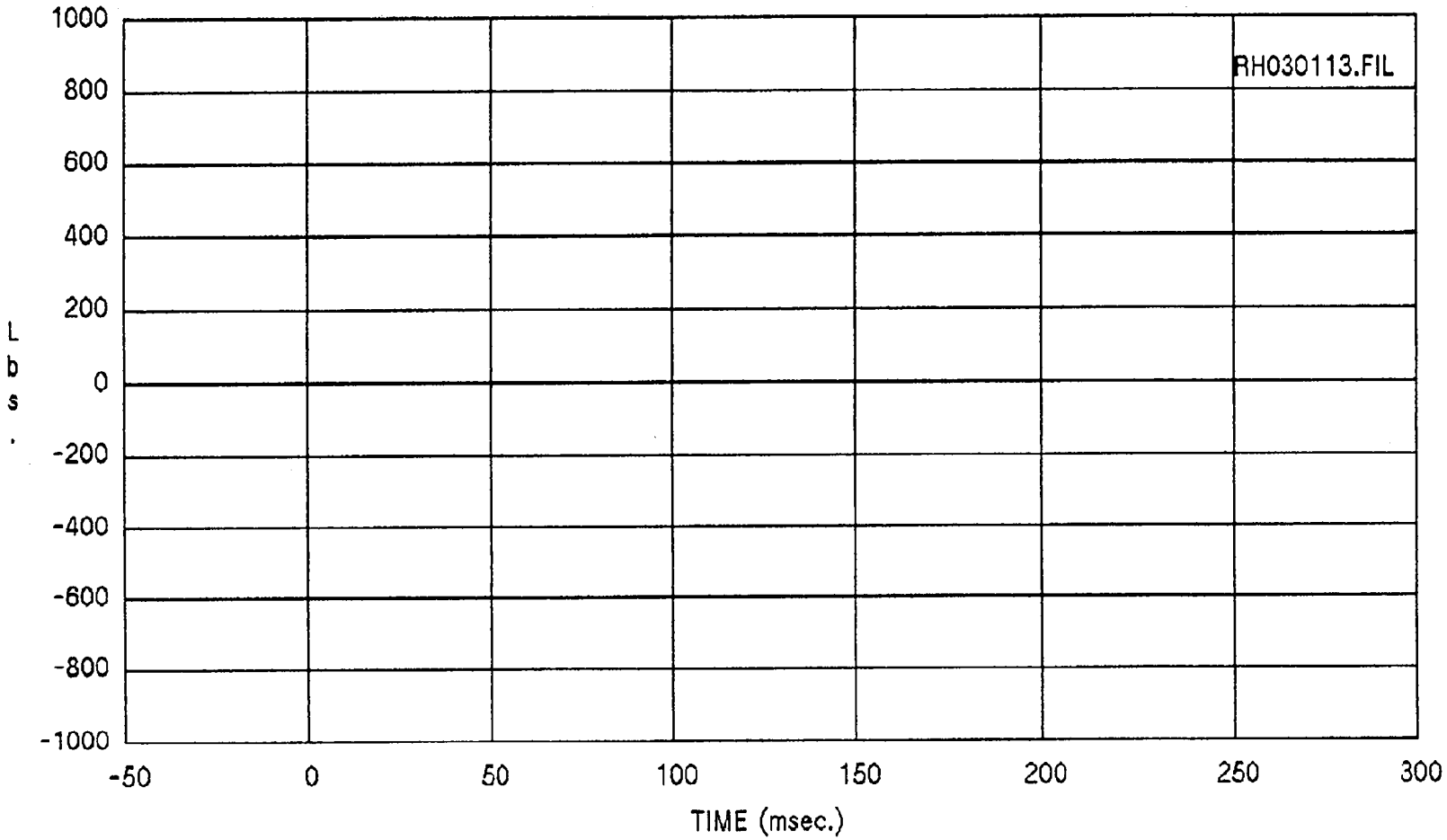
Curve: Driver pelvis acceleration Filter: FIR 100 Max = 81.962 Min = -19.077

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



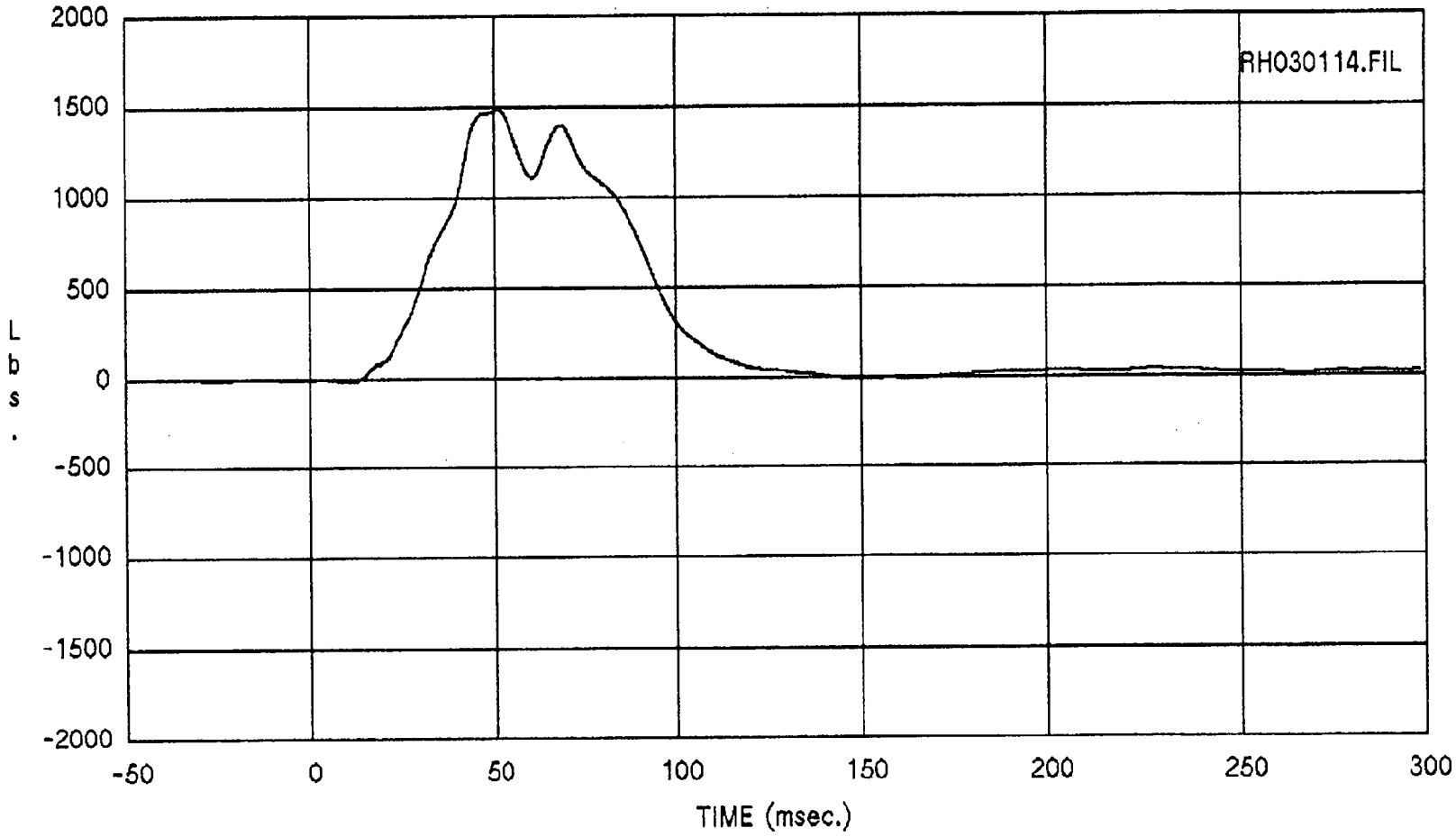
Curve: Driver pelvis delta V Filter: SAE CLASS 180 Max = 23.991 Min = -.80461E-0

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



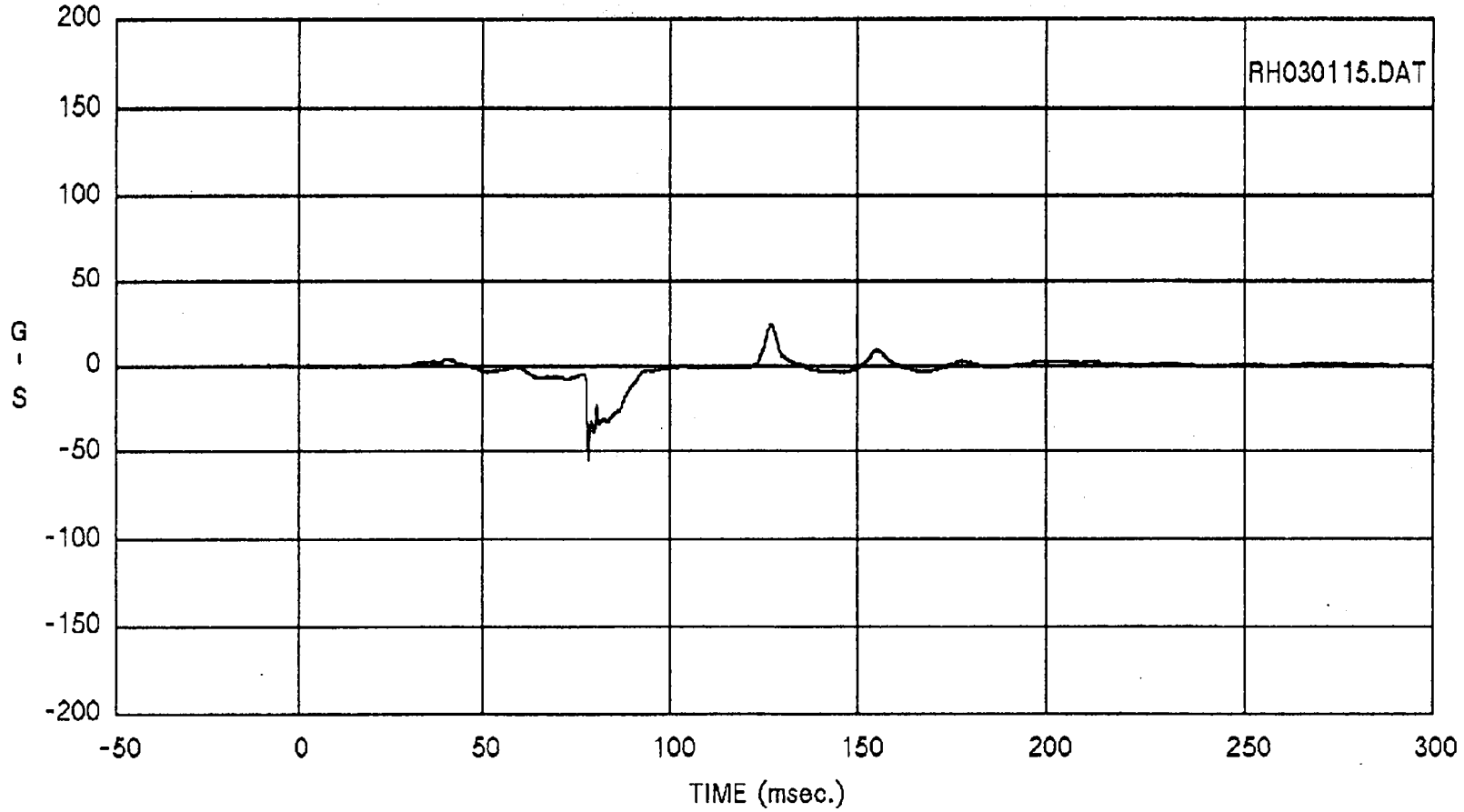
Curve: Driver lap belt load Filter: SAE CLASS 60 Max = .00000 Min = .00000

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



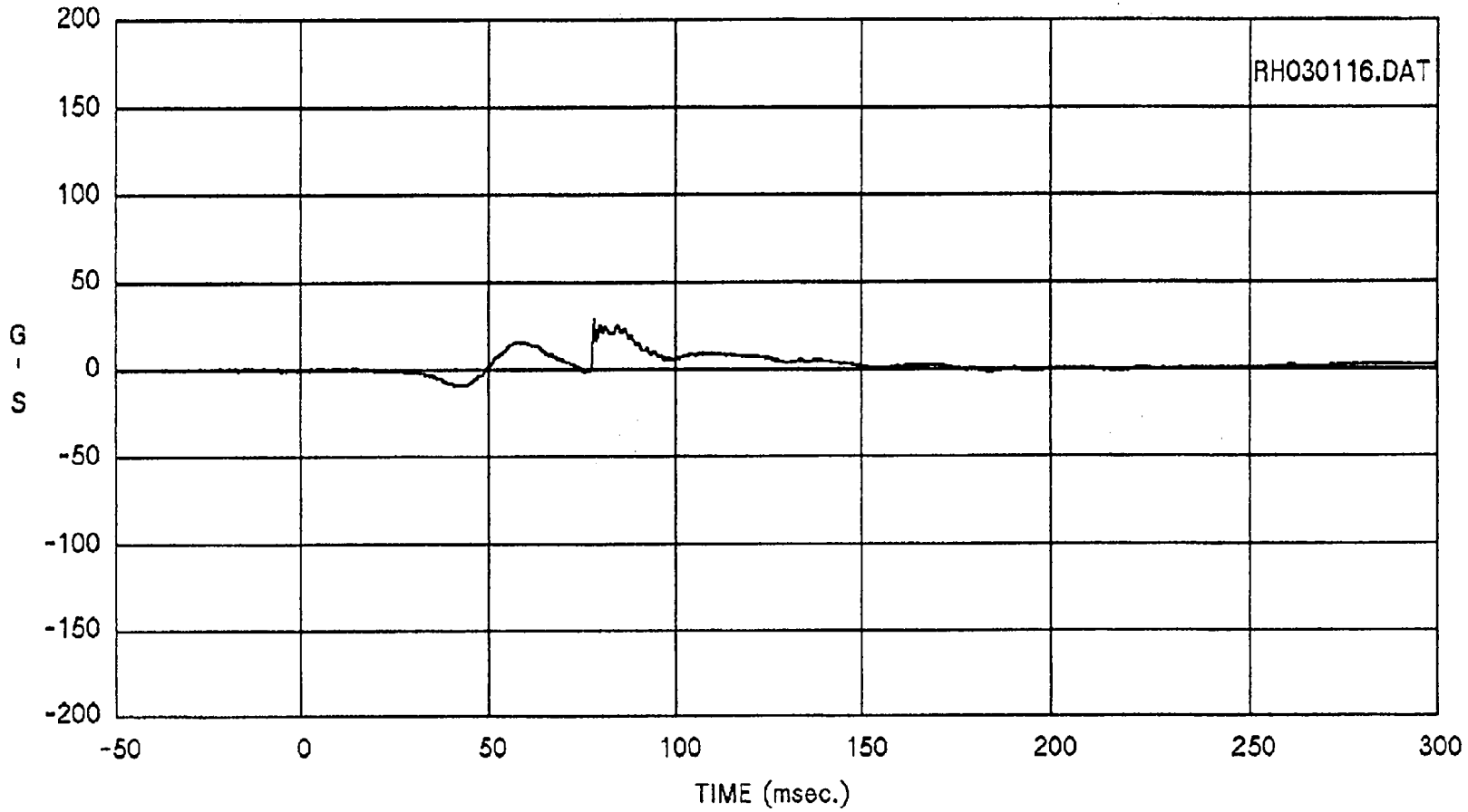
Curve: Driver shoulder belt load Filter: SAE CLASS 60 Max = 1486.1 Min = -14.028

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



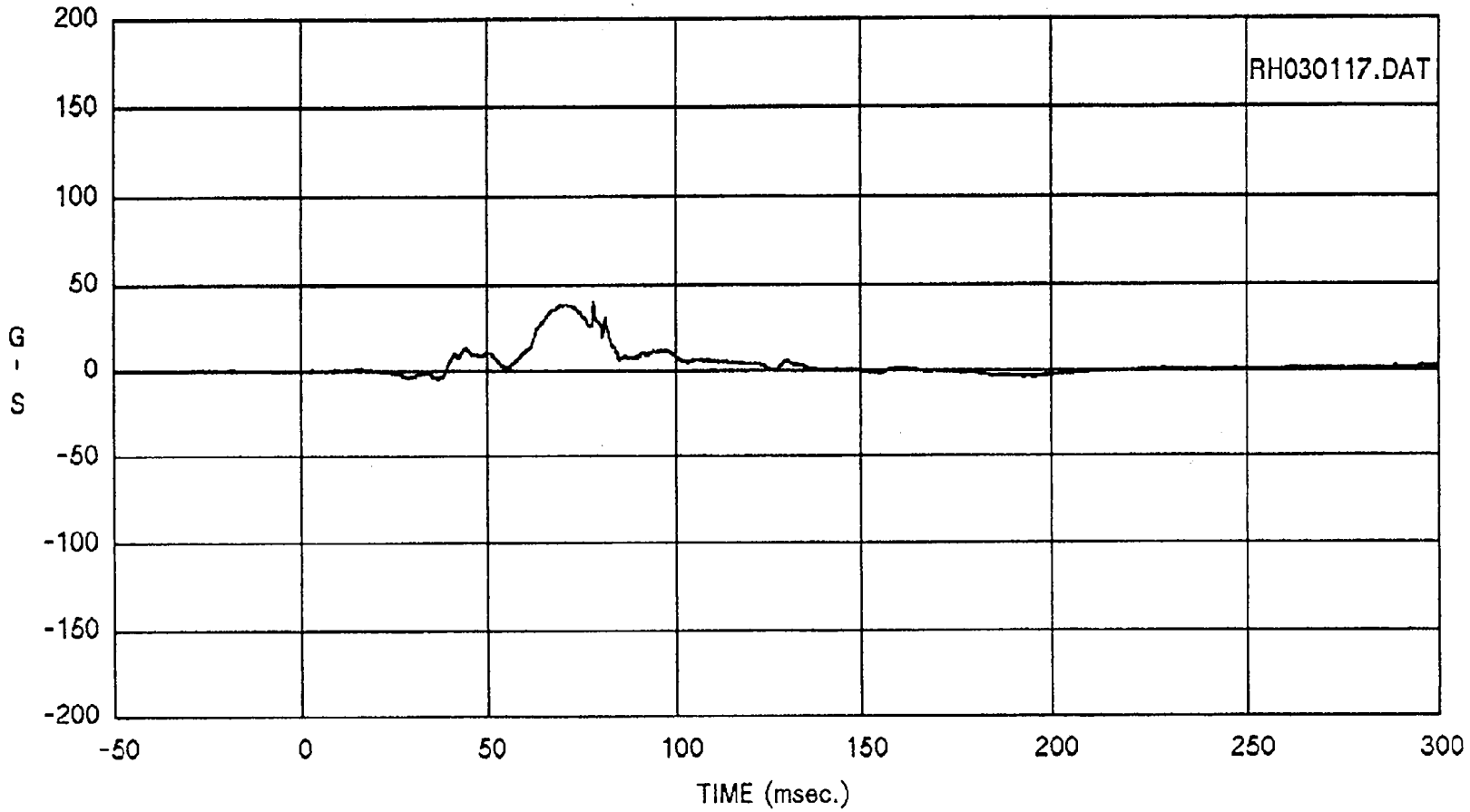
Curve: Passenger Head acceleration -- X axis Filter: SAE CLASS 1000 Max = 24.848 Min = -54.02

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



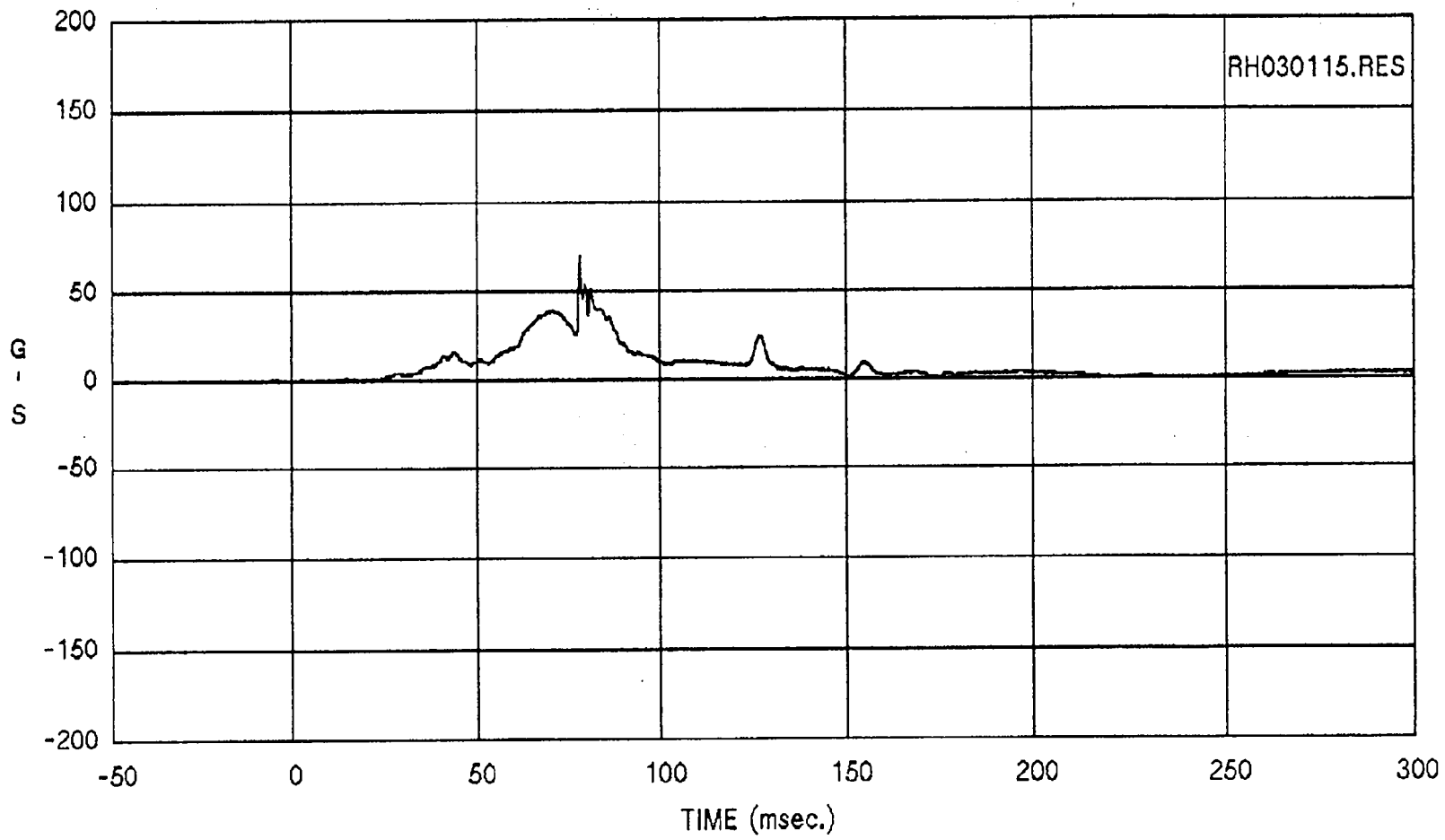
Curve: Passenger Head acceleration -- Y axis Filter: SAE CLASS 1000 Max = 28.843 Min = -9.700

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



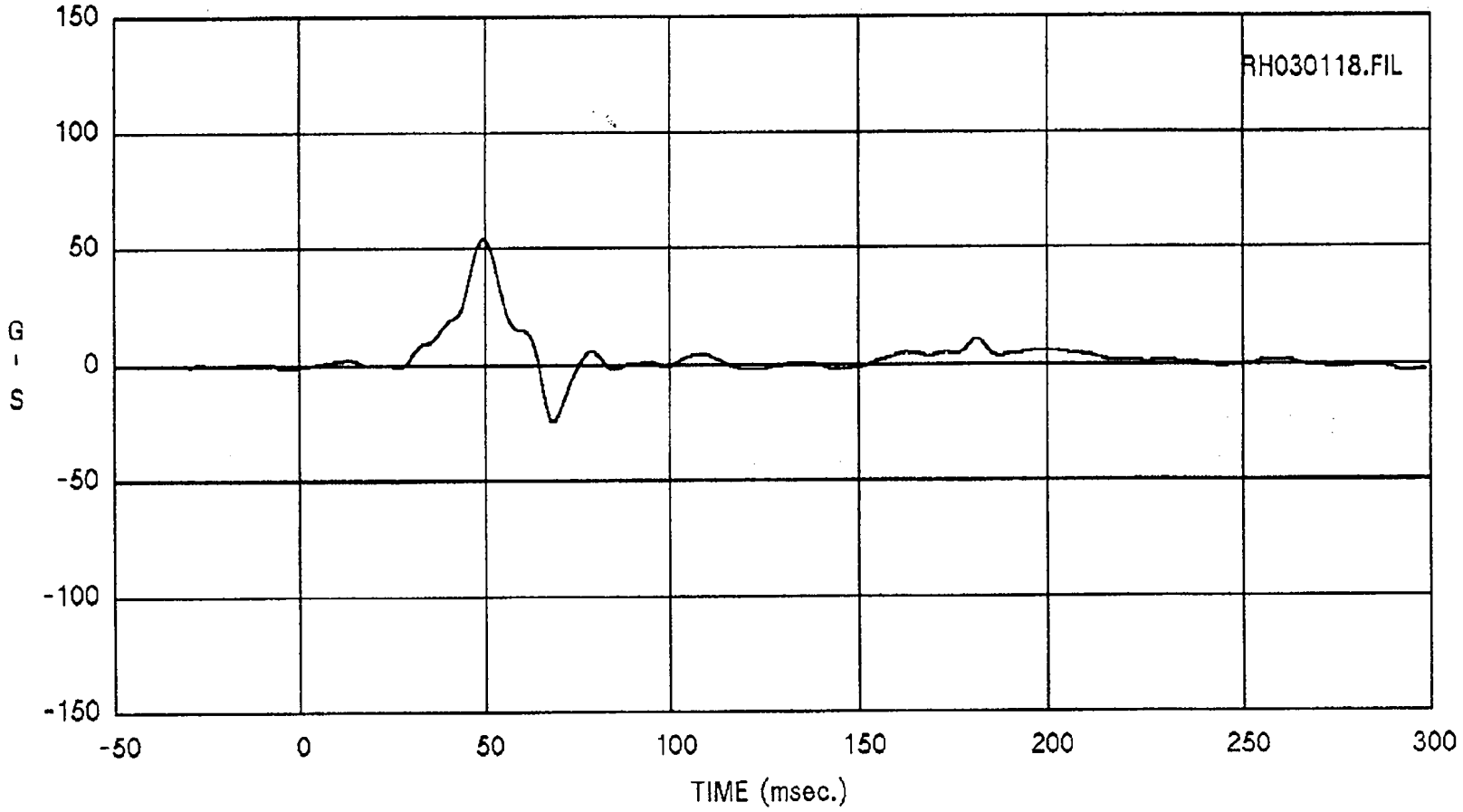
Curve: Passenger Head acceleration -- Z axis Filter: SAE CLASS 1000 Max = 43.343 Min = -4.714

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



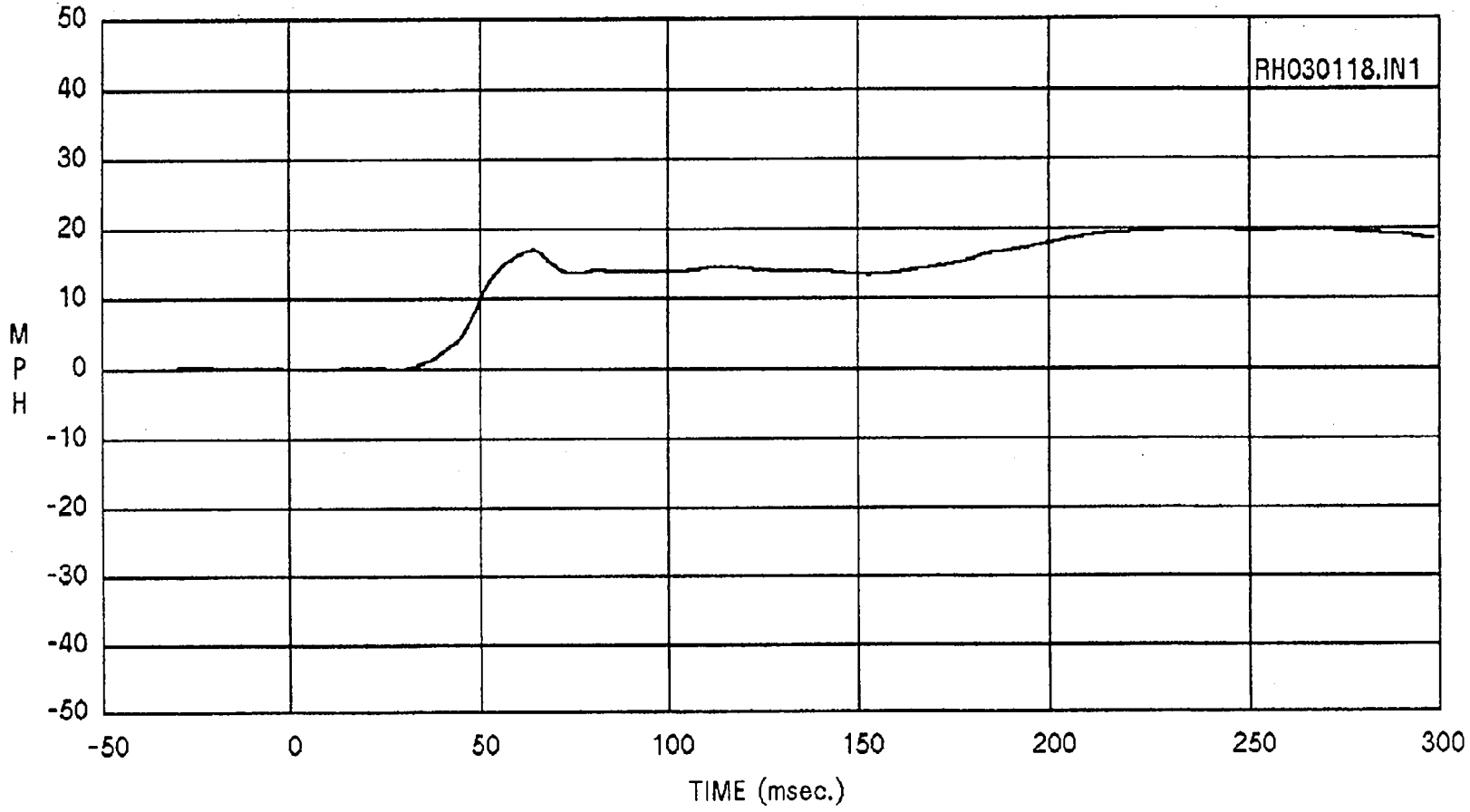
Curve: Passenger head resultant acceleration Filter: SAE CLASS 1000 Max = 70.605 Min = .00000

MSE Date: 08/05/92 Program: Side Impact 30/15 90 Deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



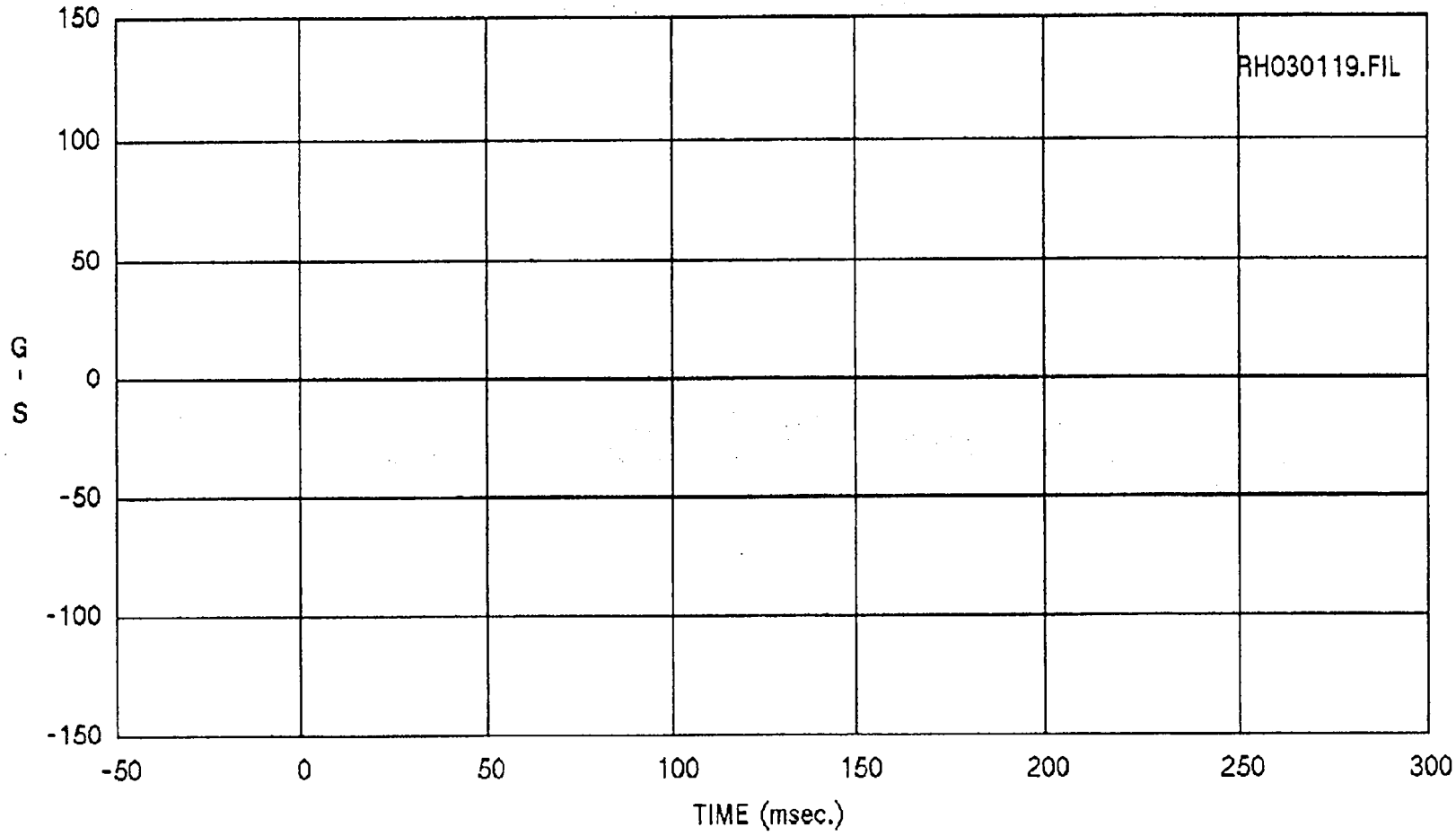
Curve: Passenger upper spine acceleration -- Primary Filter: FIR 100 Max = 54.192 Min = -24.822

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



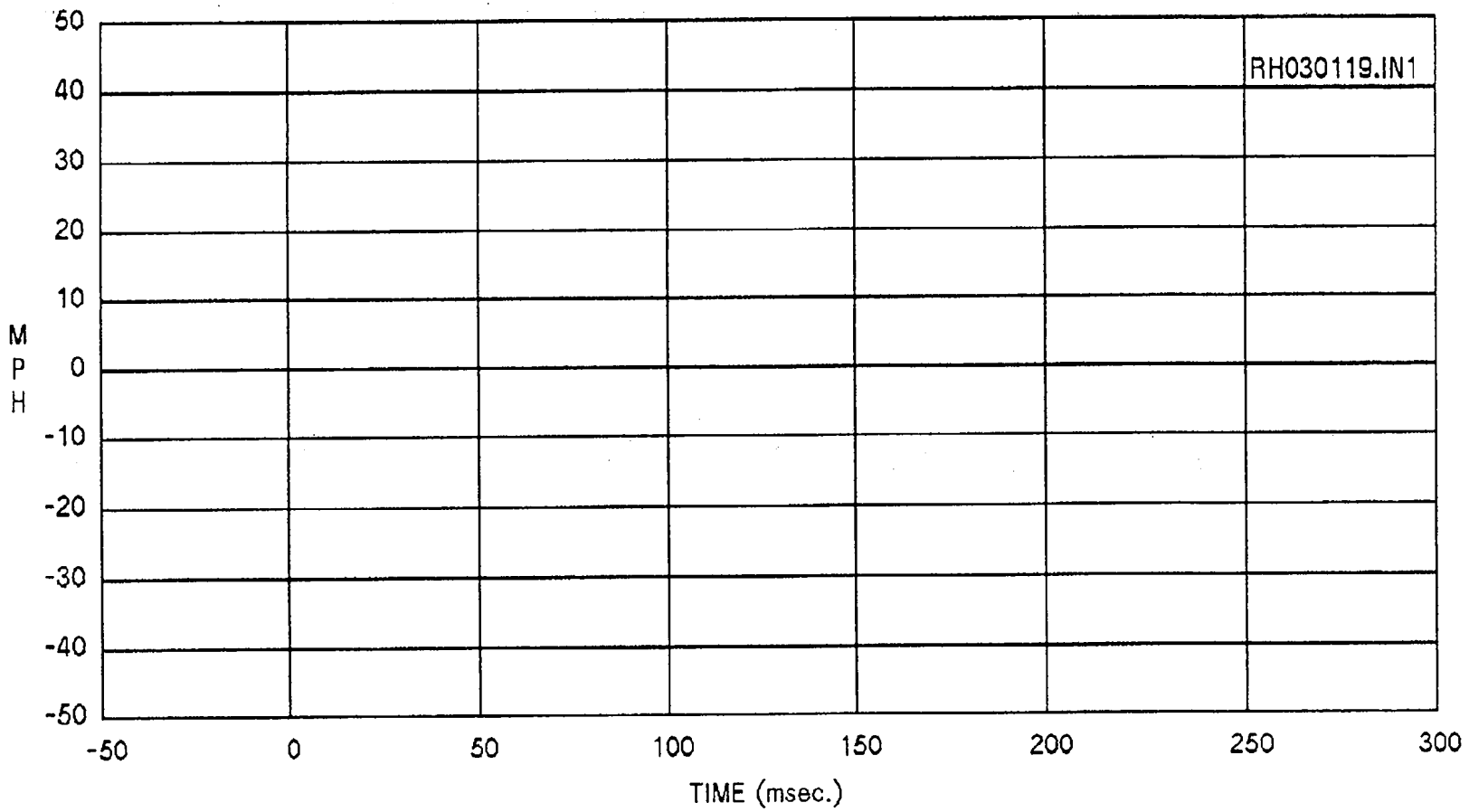
Curve: Passenger upper spine delta V -- Primary Filter: SAE CLASS 180 01 Max = 19.872 Min = -.86443

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



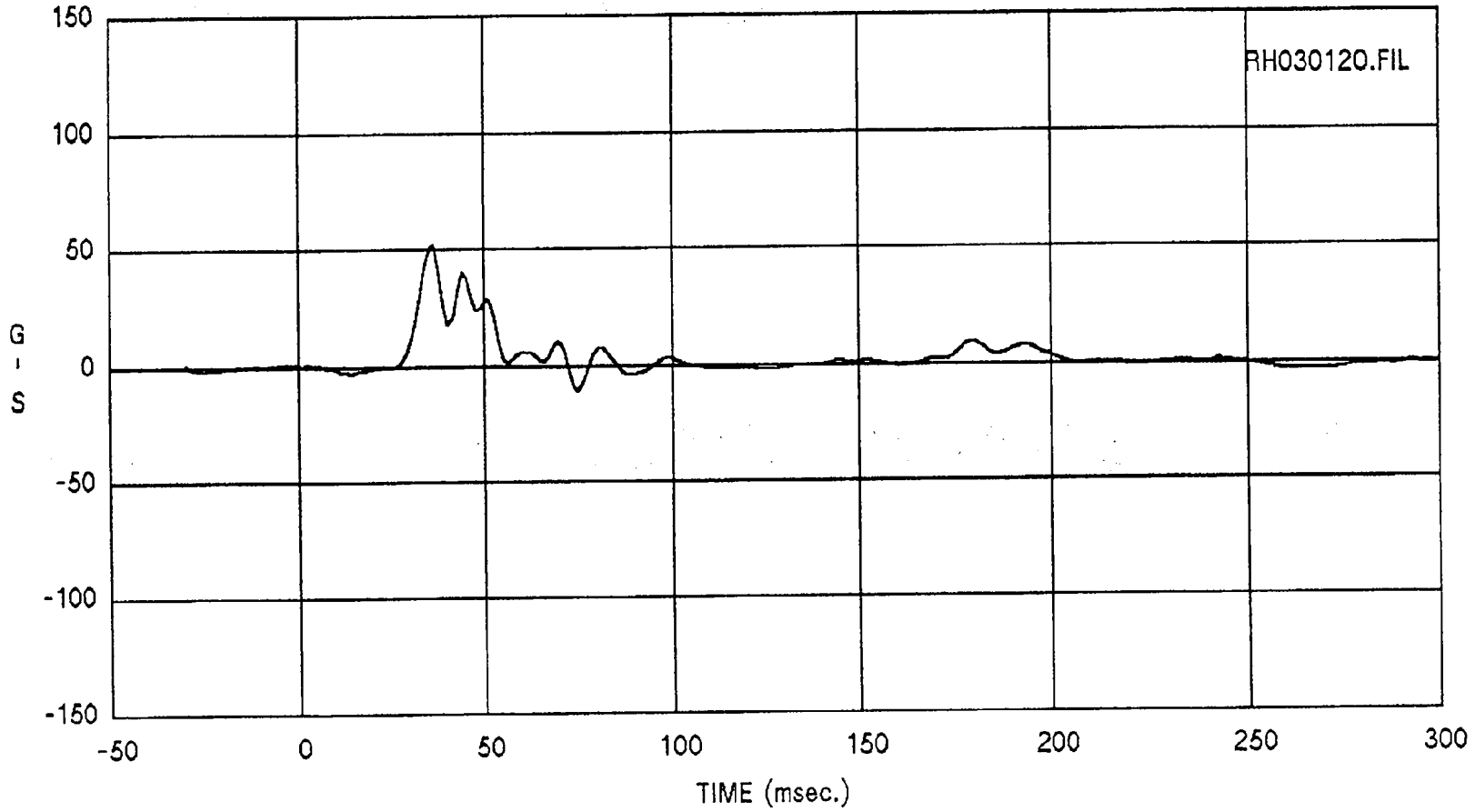
Curve: Passenger upper spine acceleration -- Redundant Filter: FIR 100 Max = .00000 Min = .00000

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



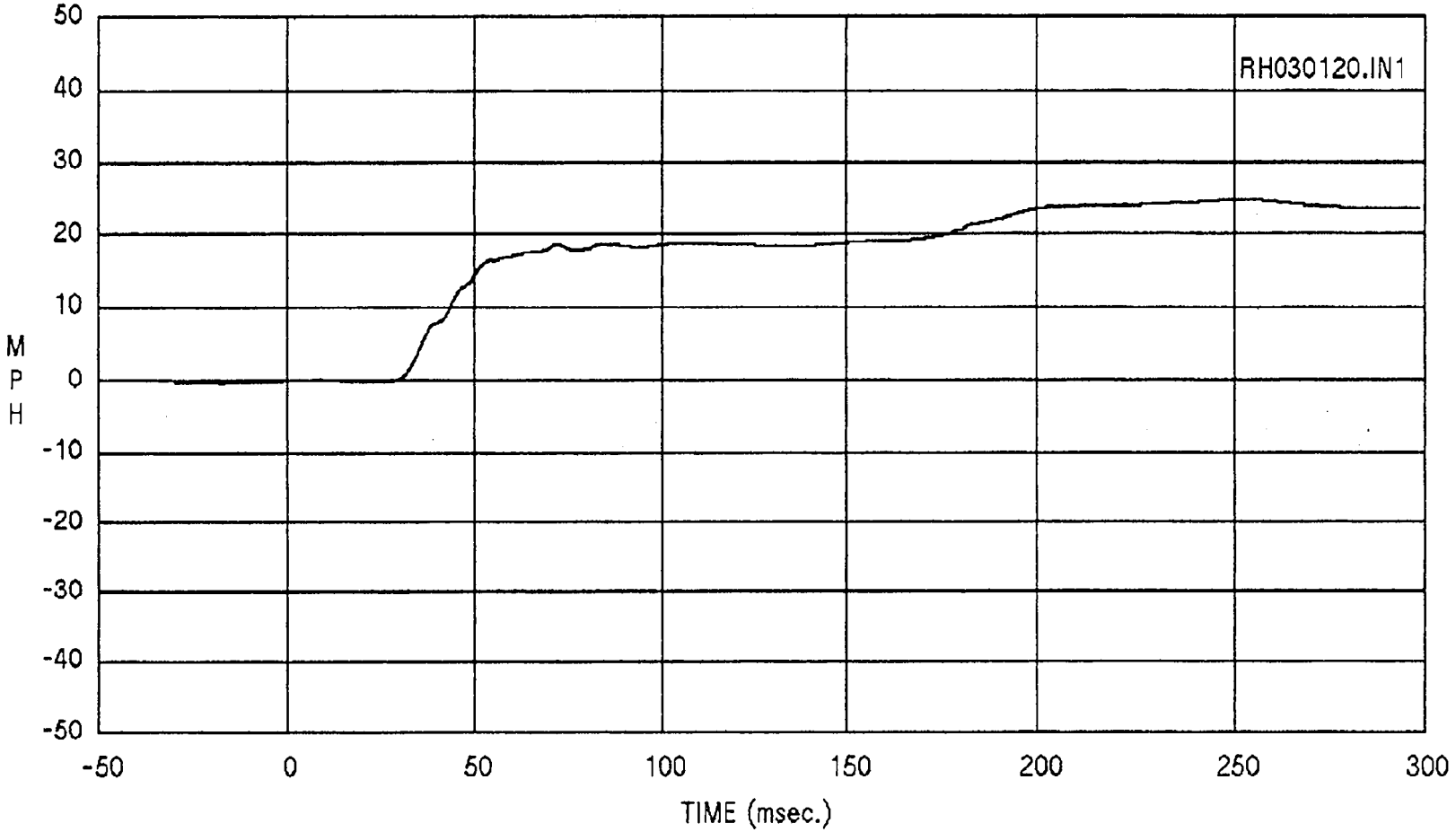
Curve: Passenger upper spine delta V -- Redundant Filter: SAE CLASS 180 Max = .00000 Min = .00000

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



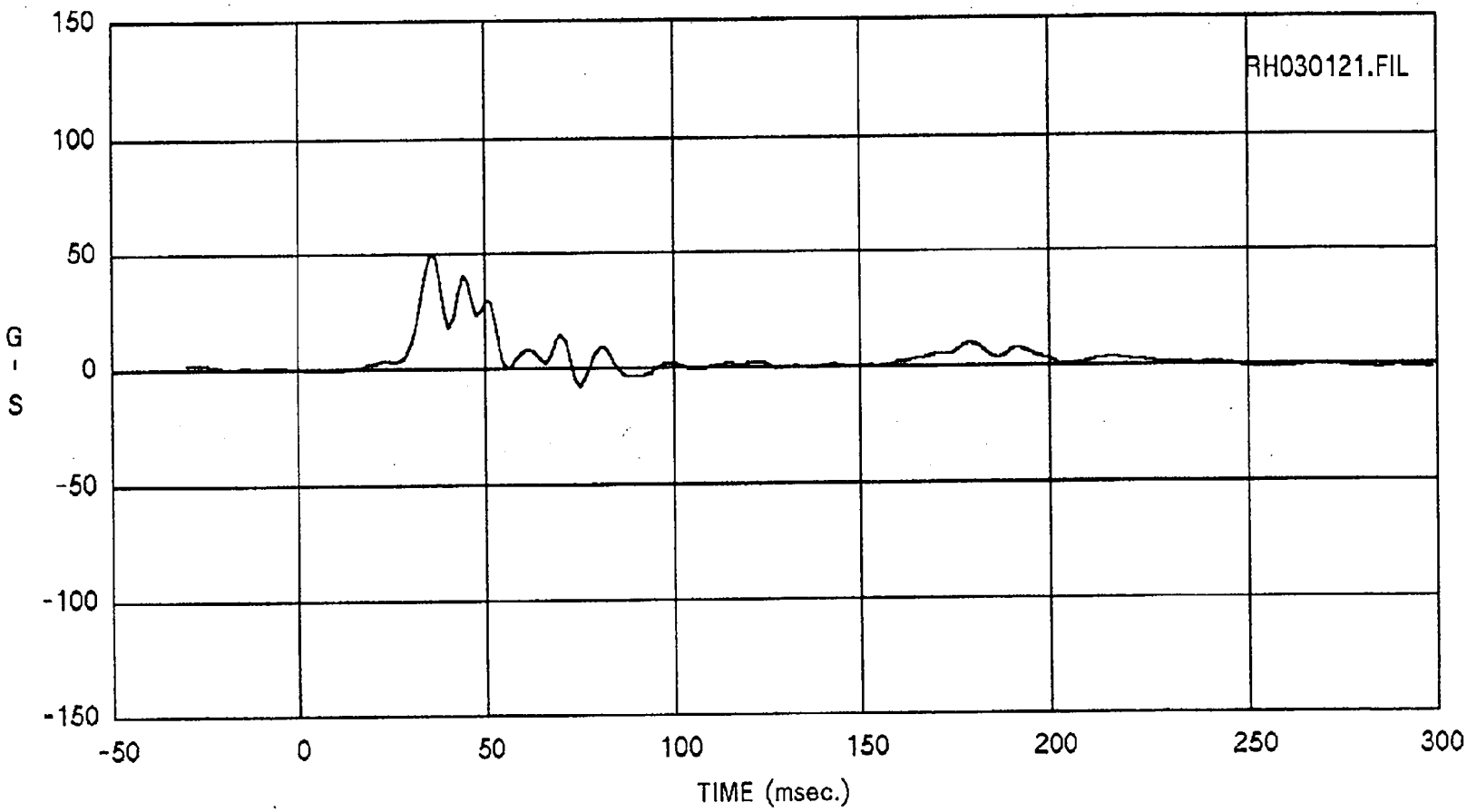
Curve: Passenger upper rib acceleration -- Primary Filter: FIR 100 Max = 52.452 Min = -11.049

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



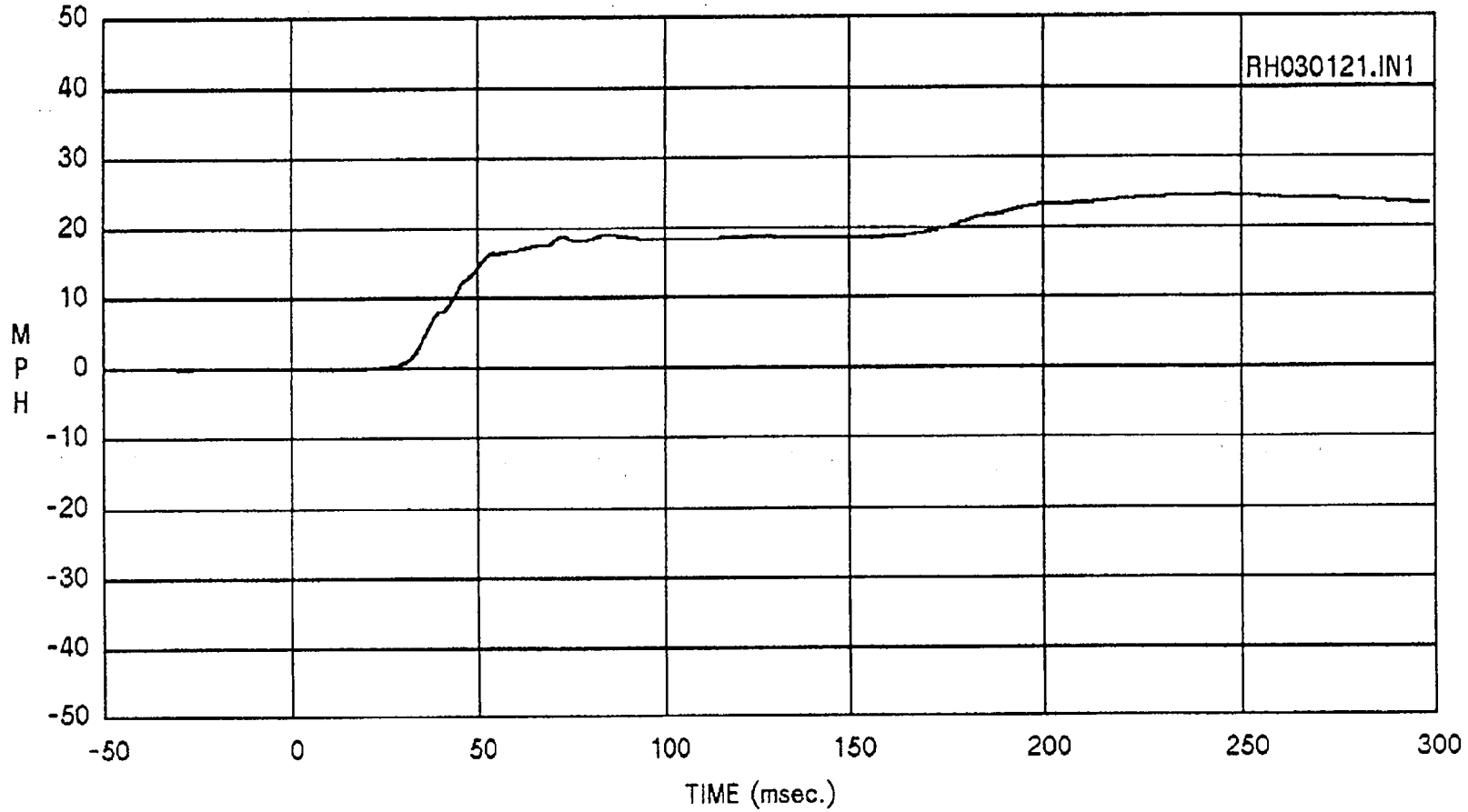
Curve: Passenger upper rib delta V -- Primary Filter: SAE CLASS 180 Max = 24.795 Min = -.18243

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



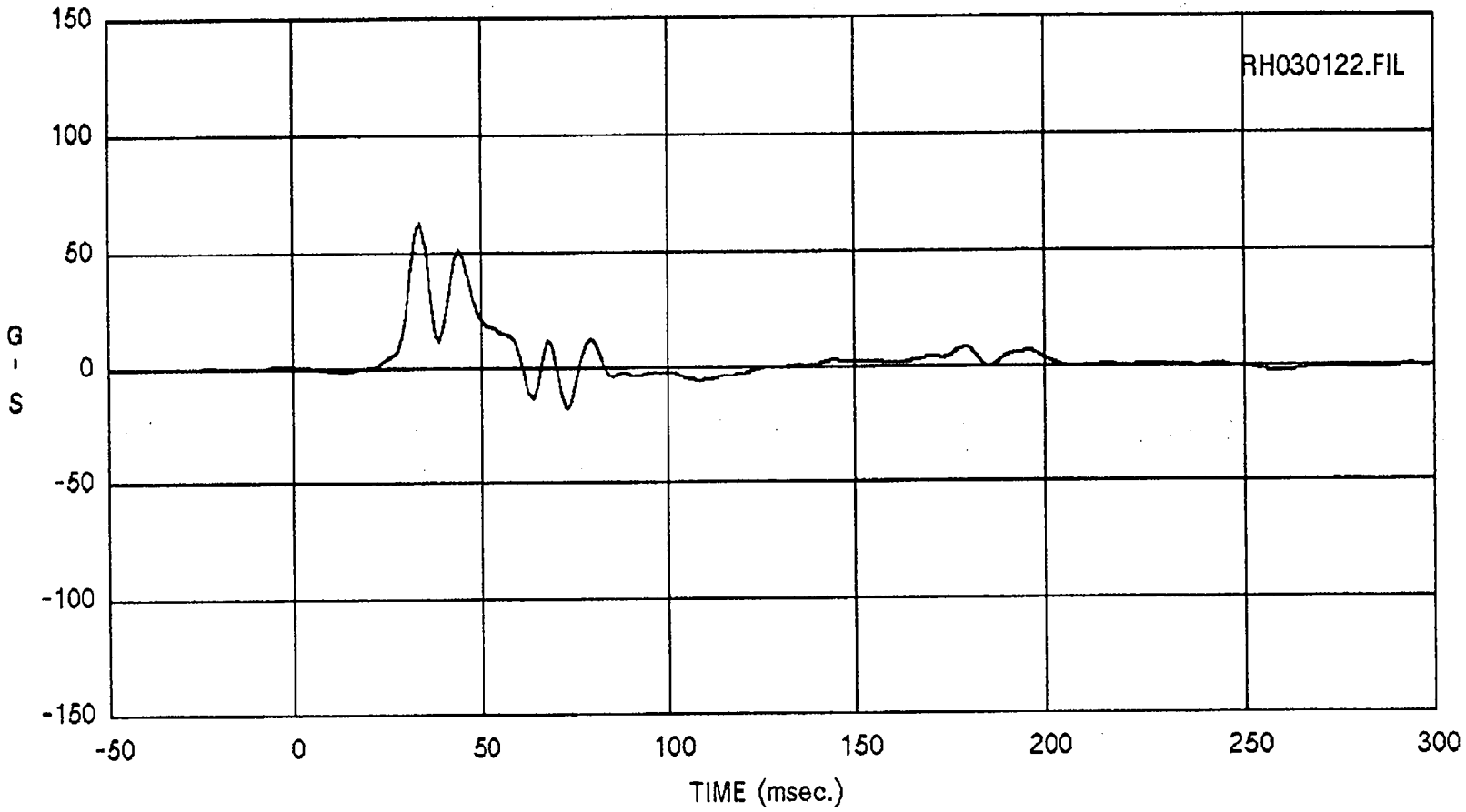
Curve: Passenger upper rib acceleration -- Redundant Filter: FIR 100 Max = 51.132 Min = -8.5268

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



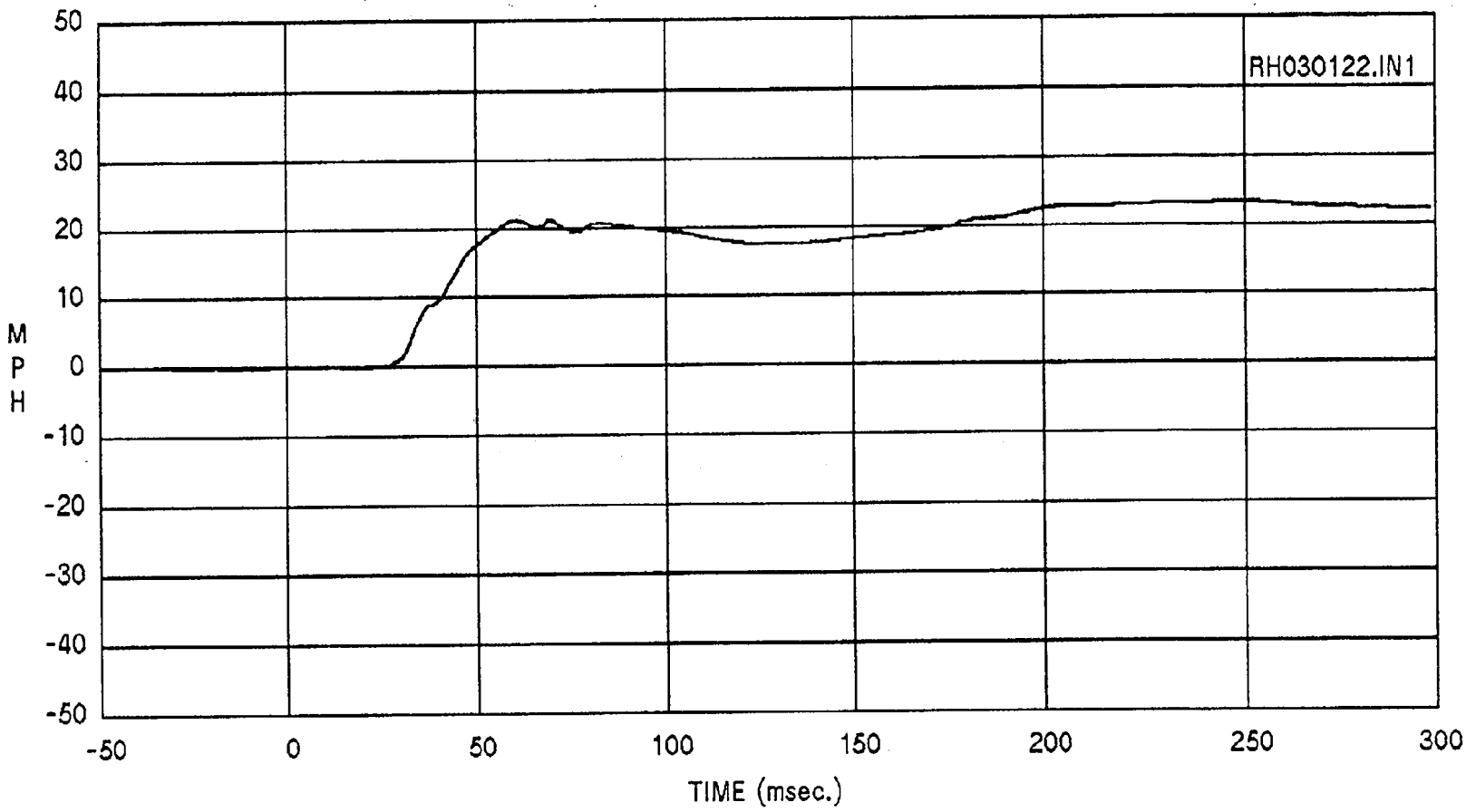
Curve: Passenger upper rib delta V -- Redundant Filter: SAE CLASS 180 Max = 24.600 Min = -.21682

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



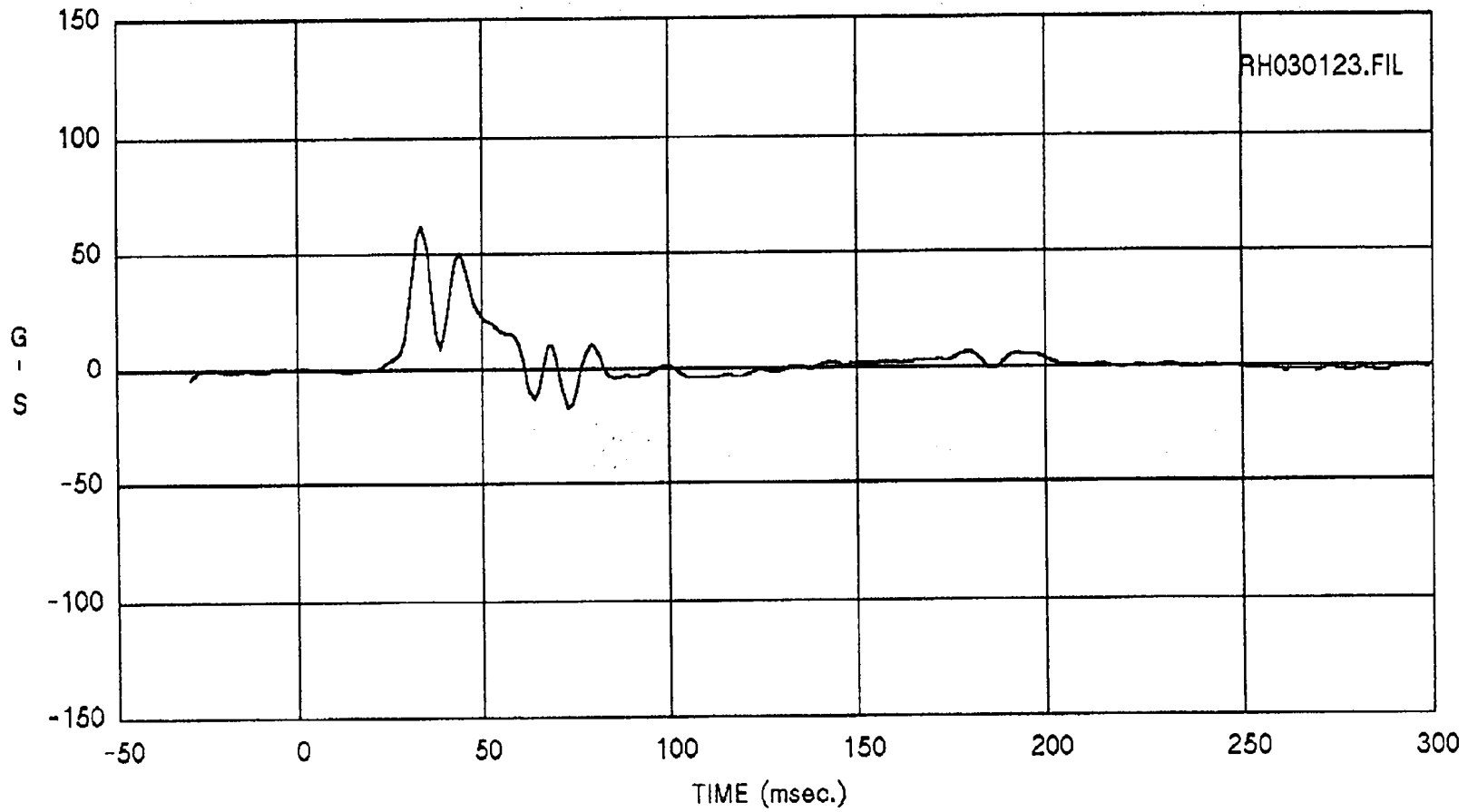
Curve: Passenger lower rib acceleration -- Primary Filter: FIR 100 Max = 63.424 Min = -18.014

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



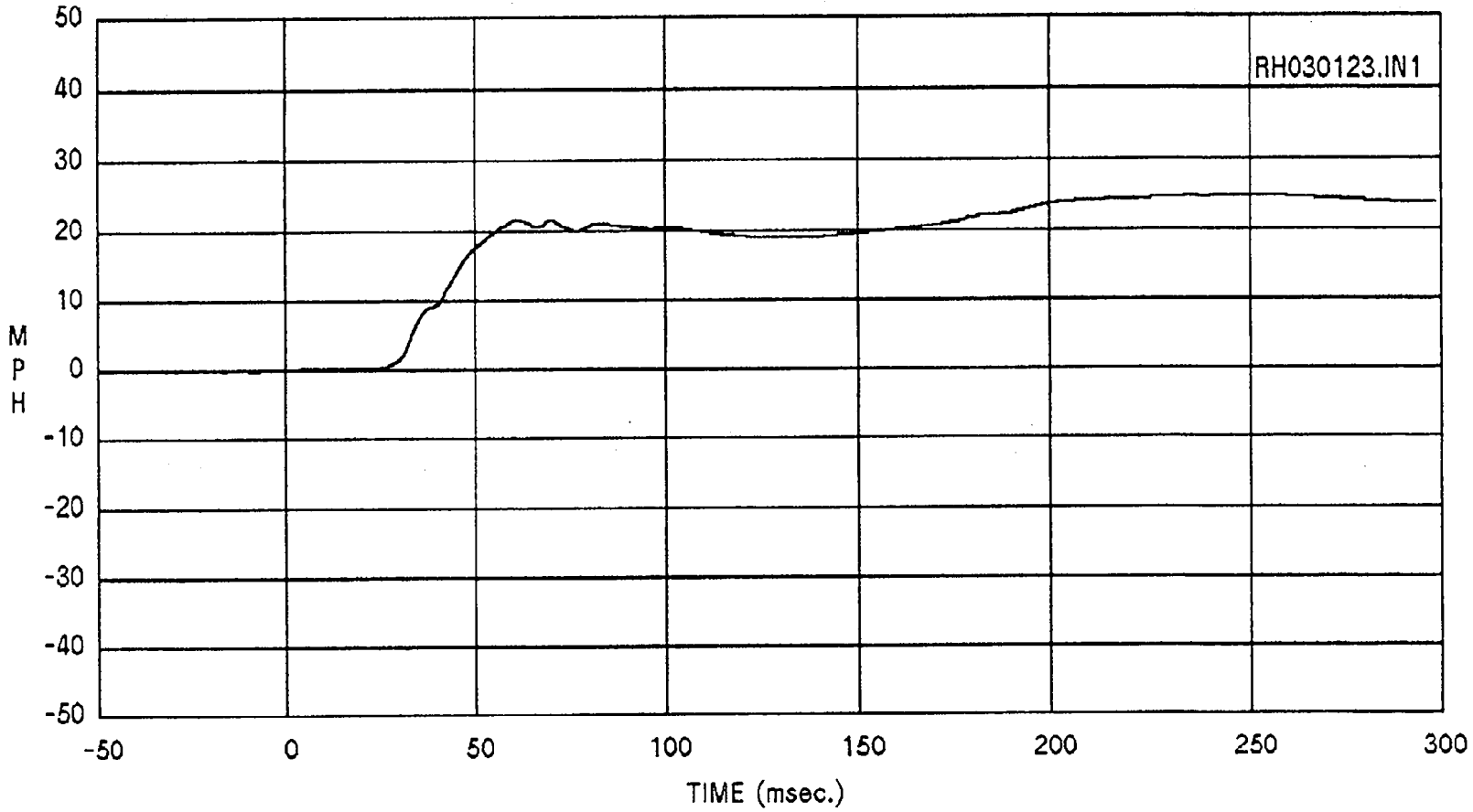
Curve: Passenger lower rib delta V -- Primary Filter: SAE CLASS 180 Max = 23.305 Min = -.17402

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



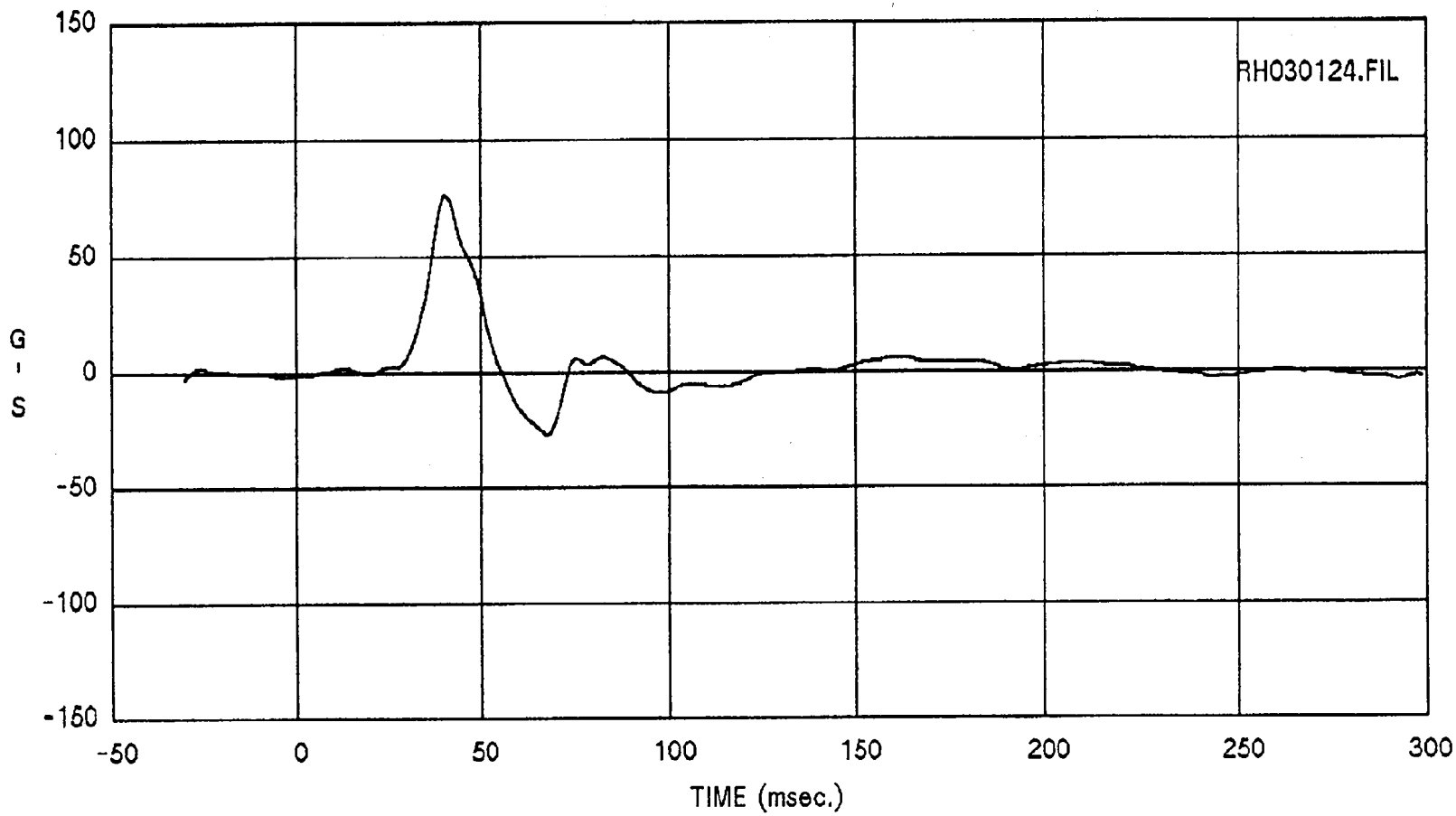
Curve: Passenger lower rib acceleration -- Redundant Filter: FIR 100 Max = 62.434 Min = -17.612

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



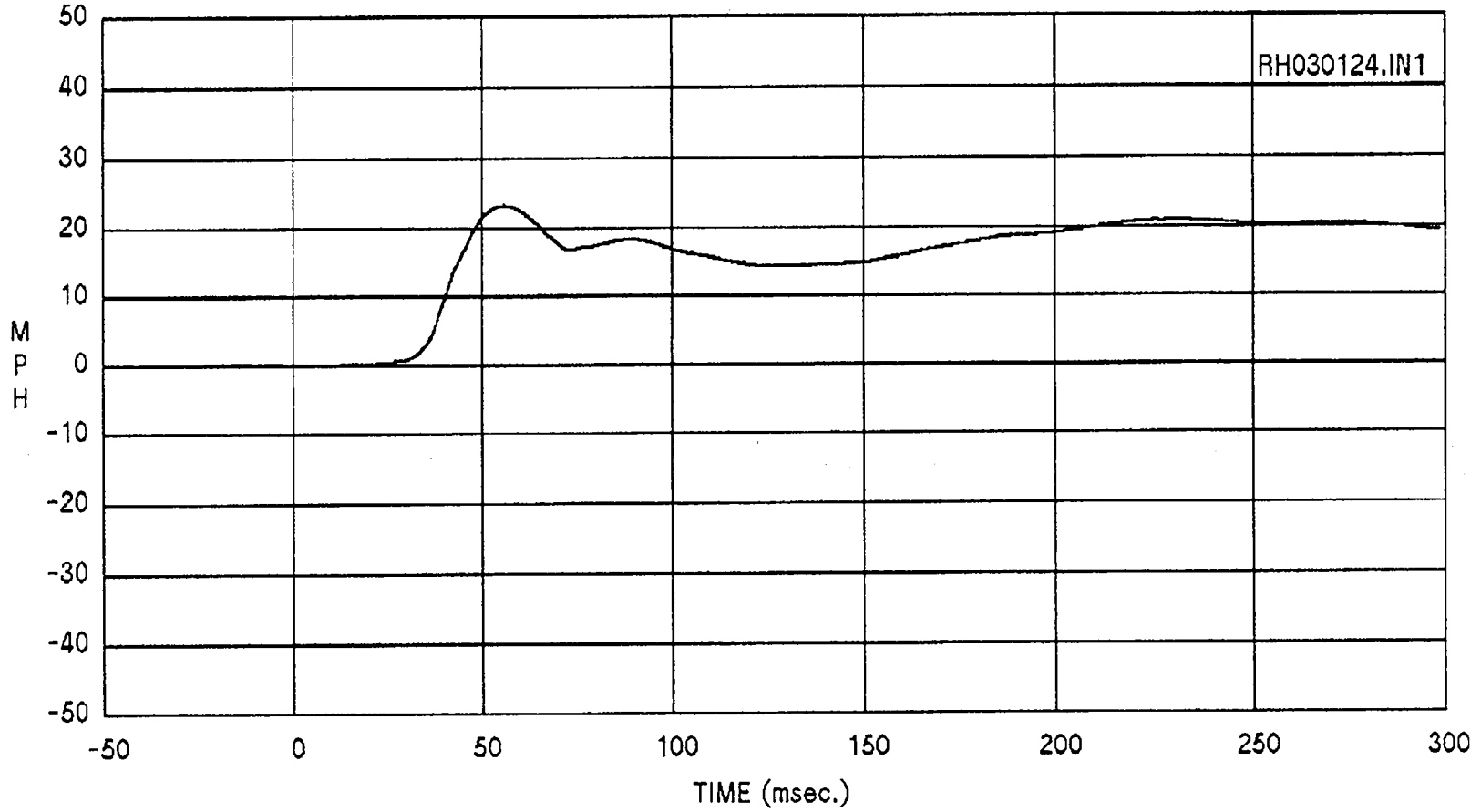
Curve: Passenger lower rib delta V -- Redundant Filter: SAE CLASS 180 Max = 24.735 Min = .70531
01

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



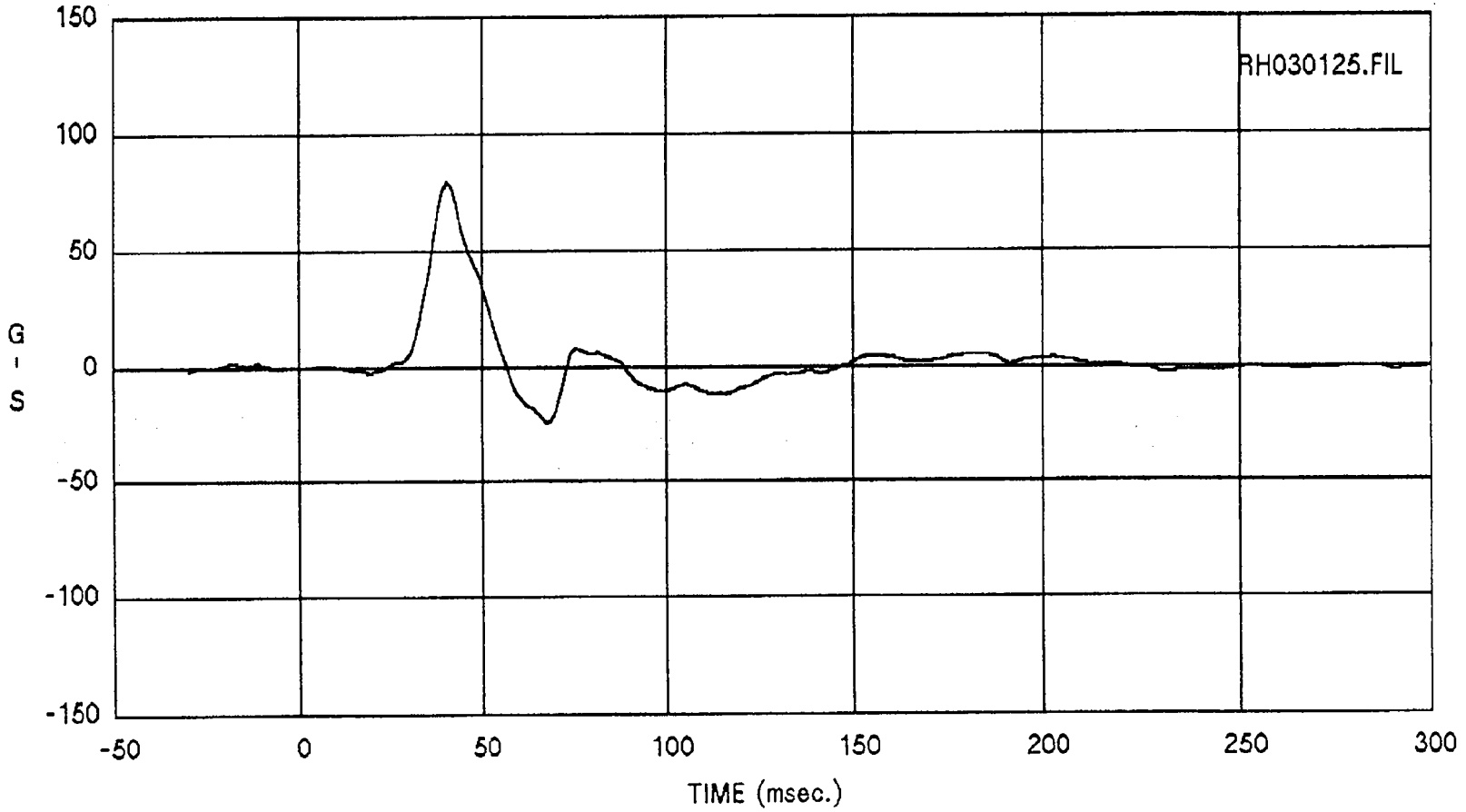
Curve: Passenger lower spine acceleration -- Primary Filter: FIR 100 Max = 76.441 Min = -27.136

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



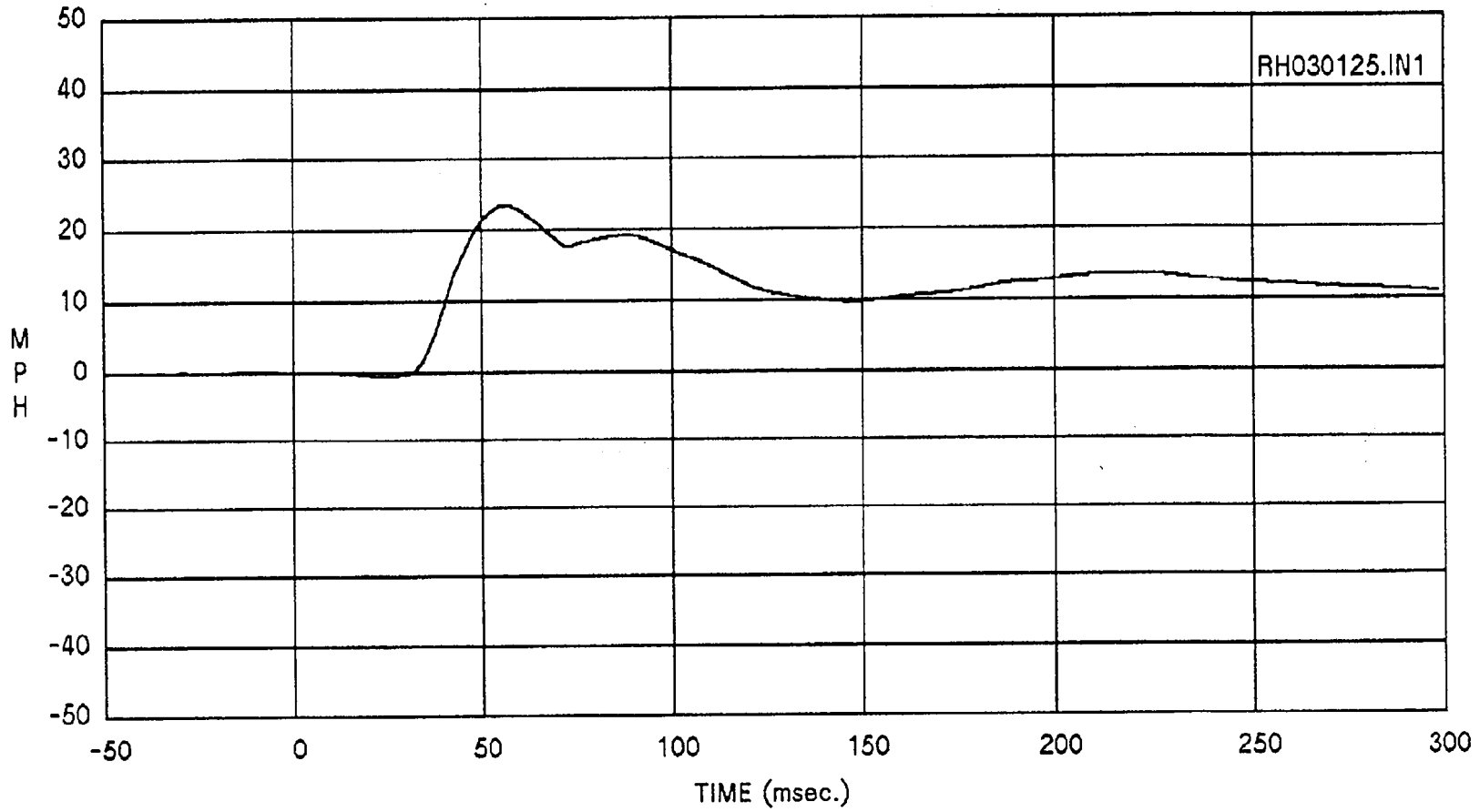
Curve: Passenger lower spine delta V -- Primary Filter: SAE CLASS 180 Max = 23.217 Min = -.89798
01

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



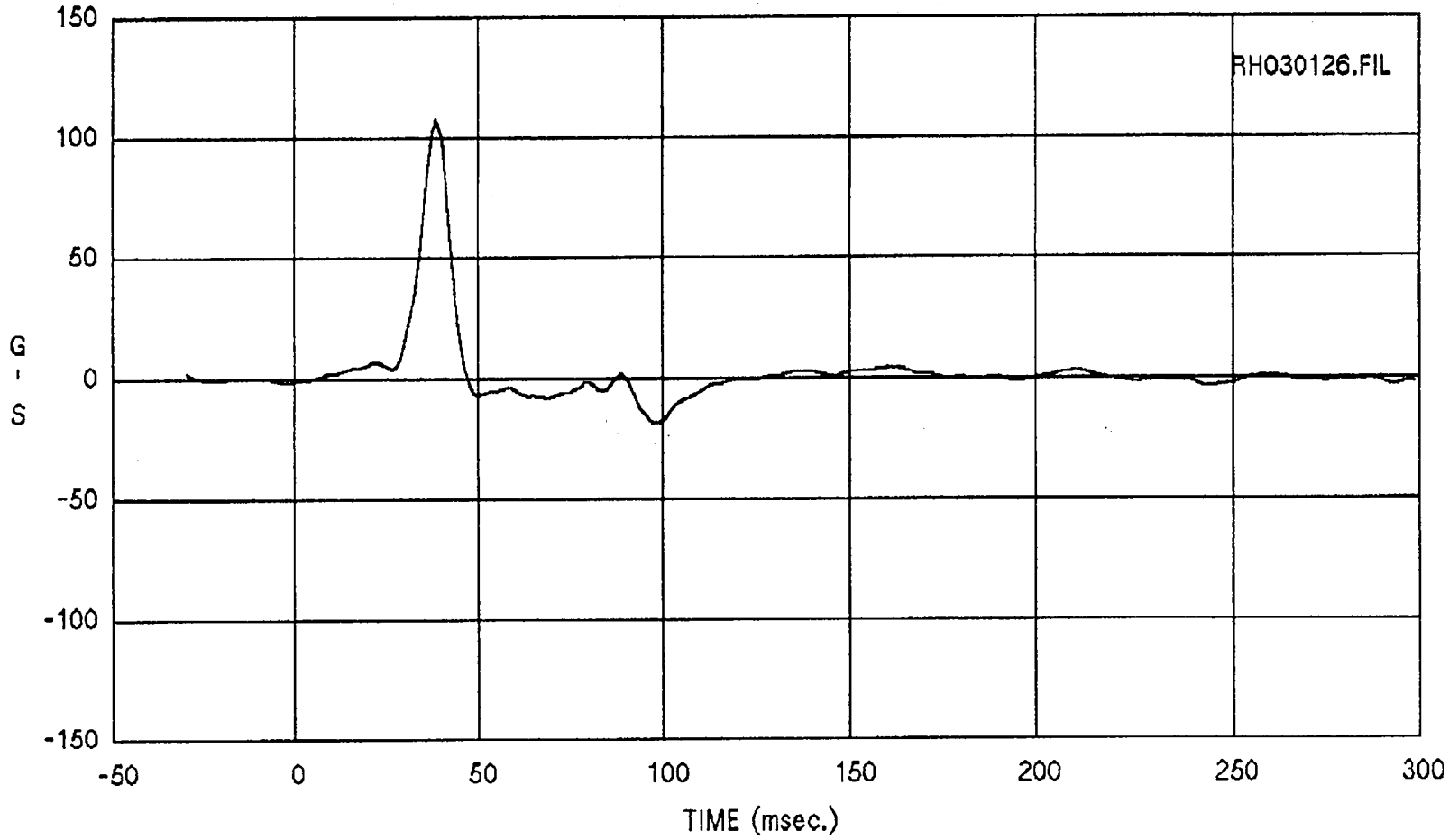
Curve: Passenger lower spine acceleration -- Redundant Filter: FIR 100 Max = 79.415 Min = -24.342

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



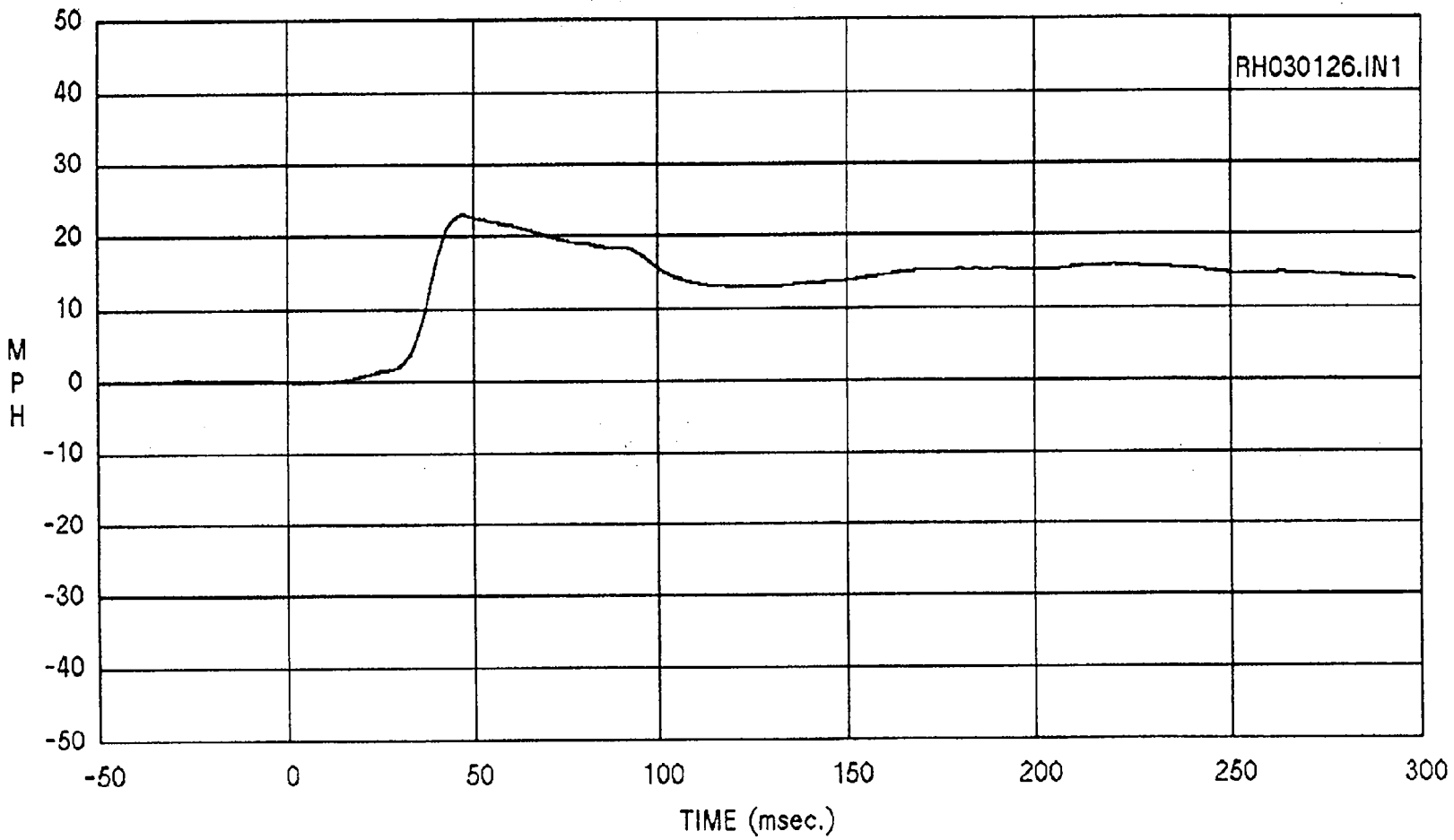
Curve: Passenger lower spine delta V -- Redundant Filter: SAE CLASS 180 Max = 23.368 Min = -.614

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



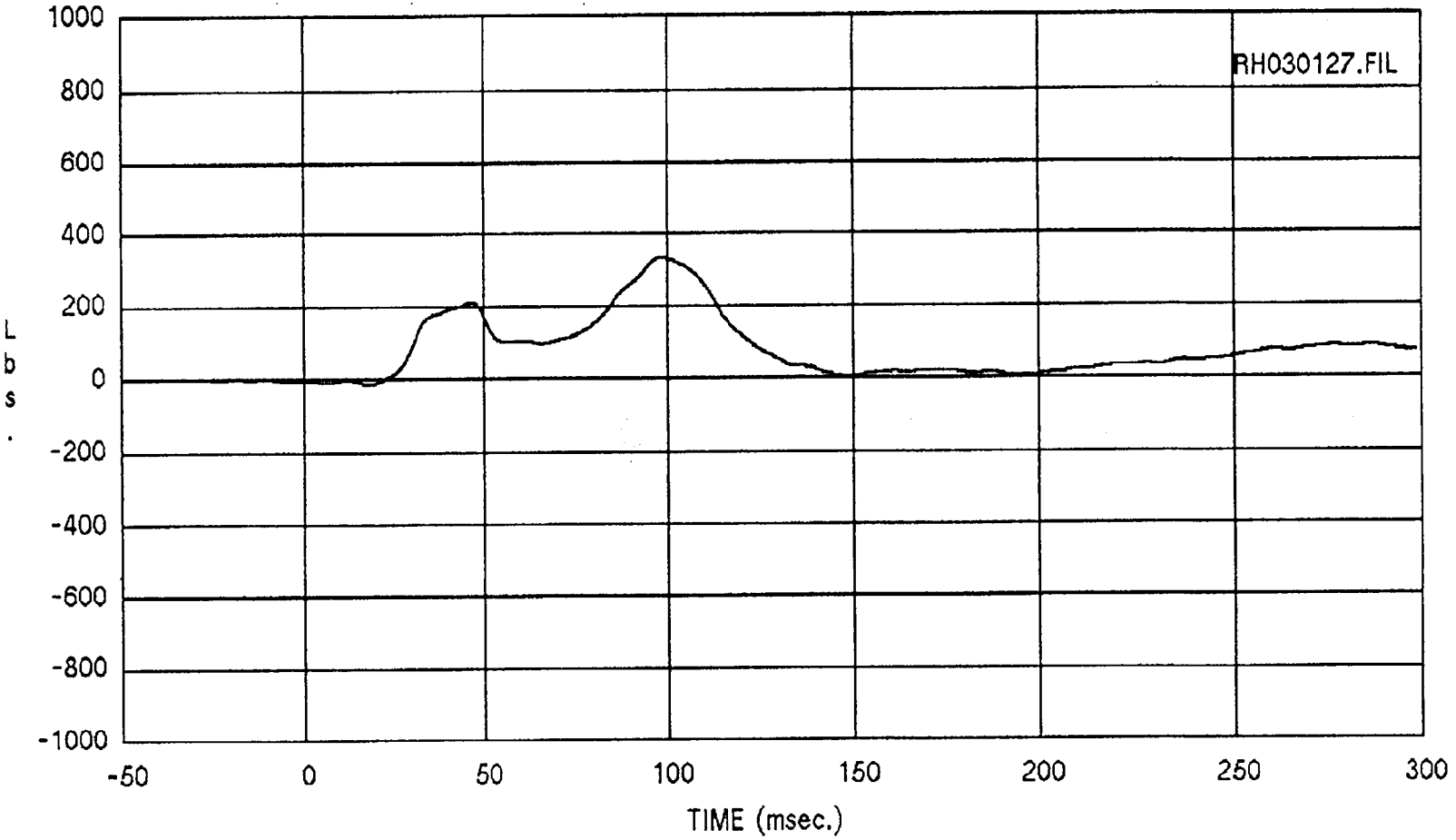
Curve: Passenger pelvis acceleration Filter: FIR 100 Max = 108.26 Min = -18.102

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



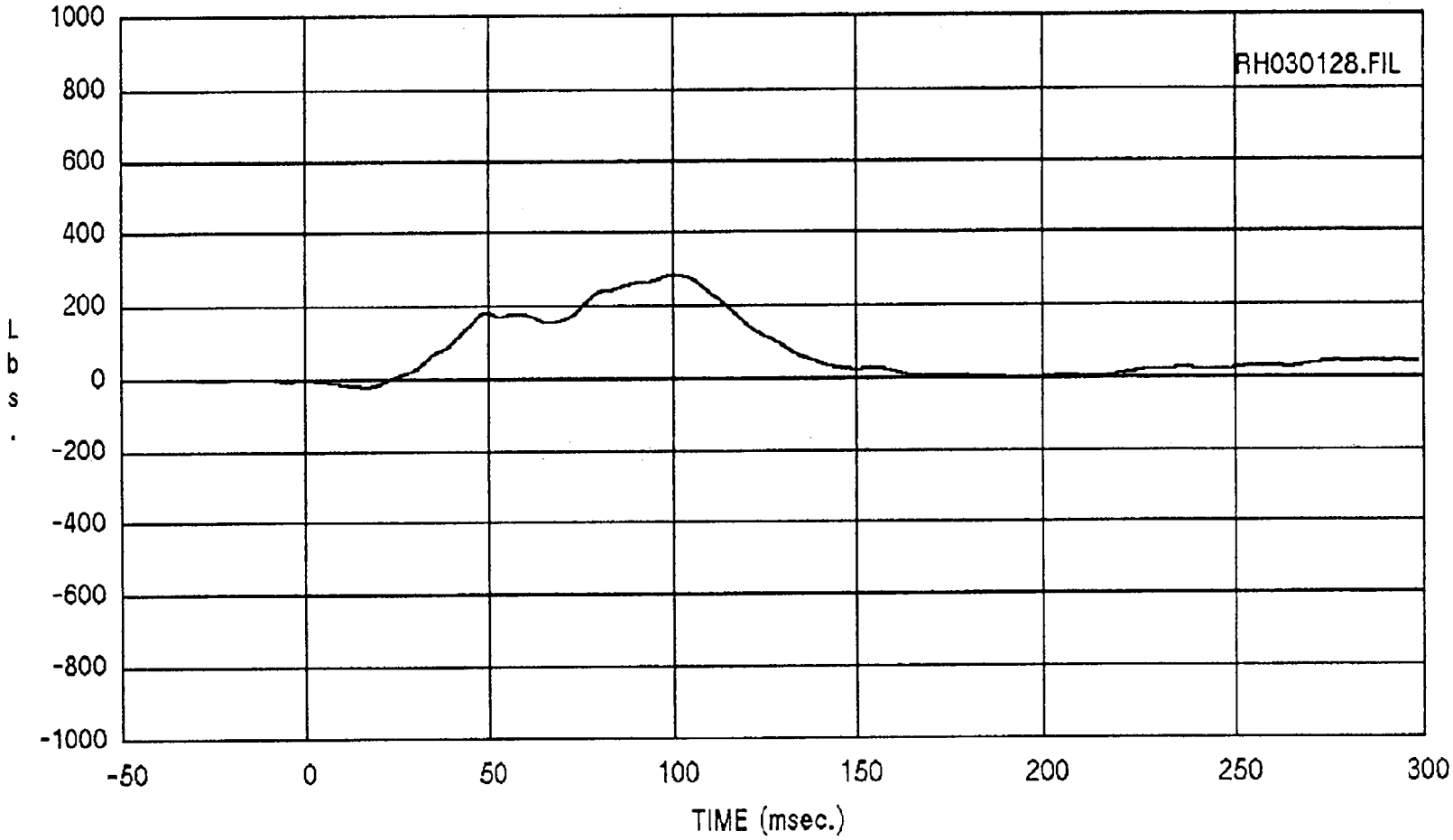
Curve: Passenger pelvis delta V Filter: SAE CLASS 180 Max = 23.043 Min = -.90216E-(

MSE Date: 08/05/92 Program: Side impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



Curve: Passenger lap belt load Filter: SAE CLASS 60 Max = 336.26 Min = -14.050

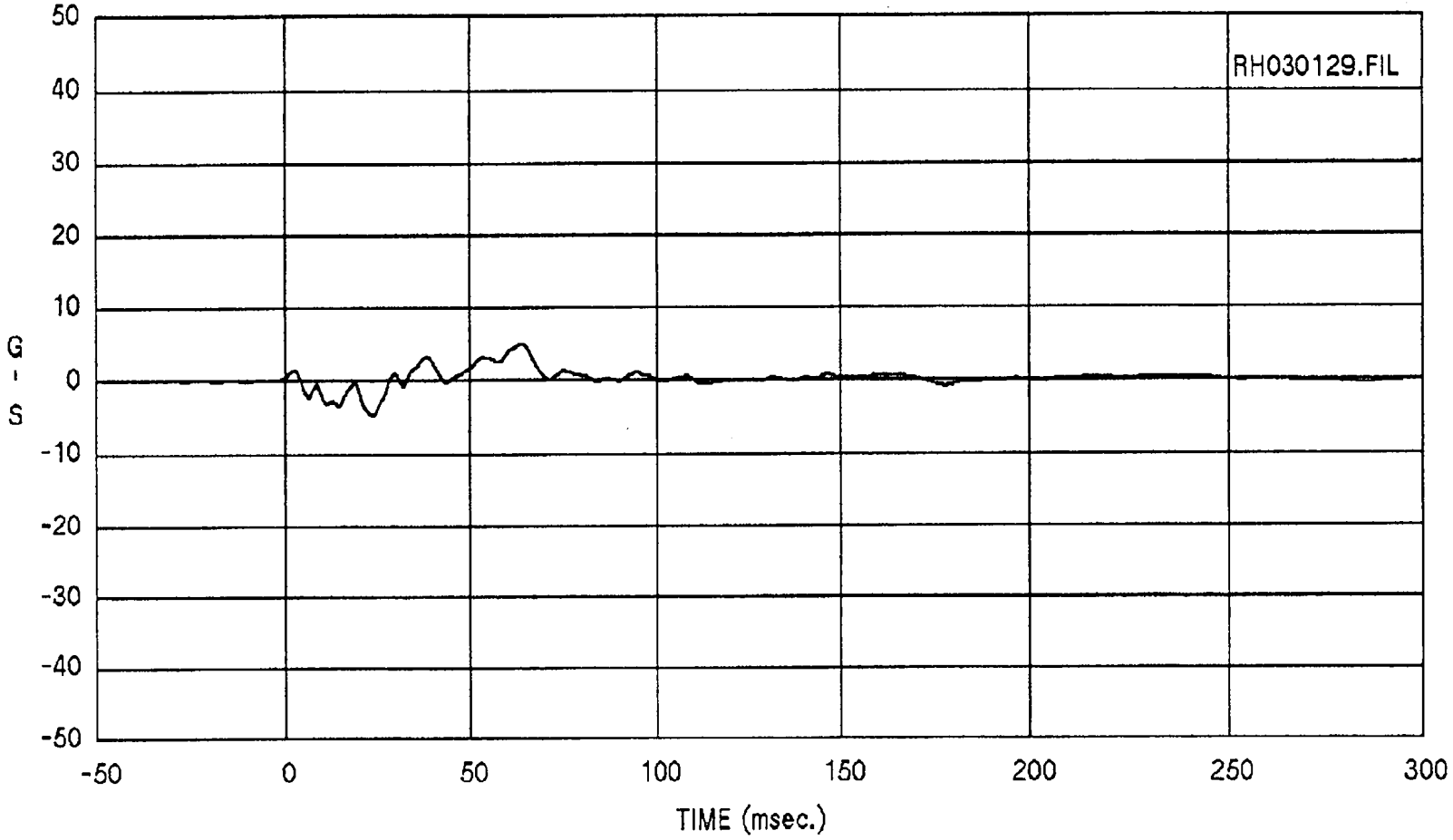
MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



Curve: Passenger shoulder belt load Filter: SAE CLASS 60 Max = 283.24 Min = -19.830

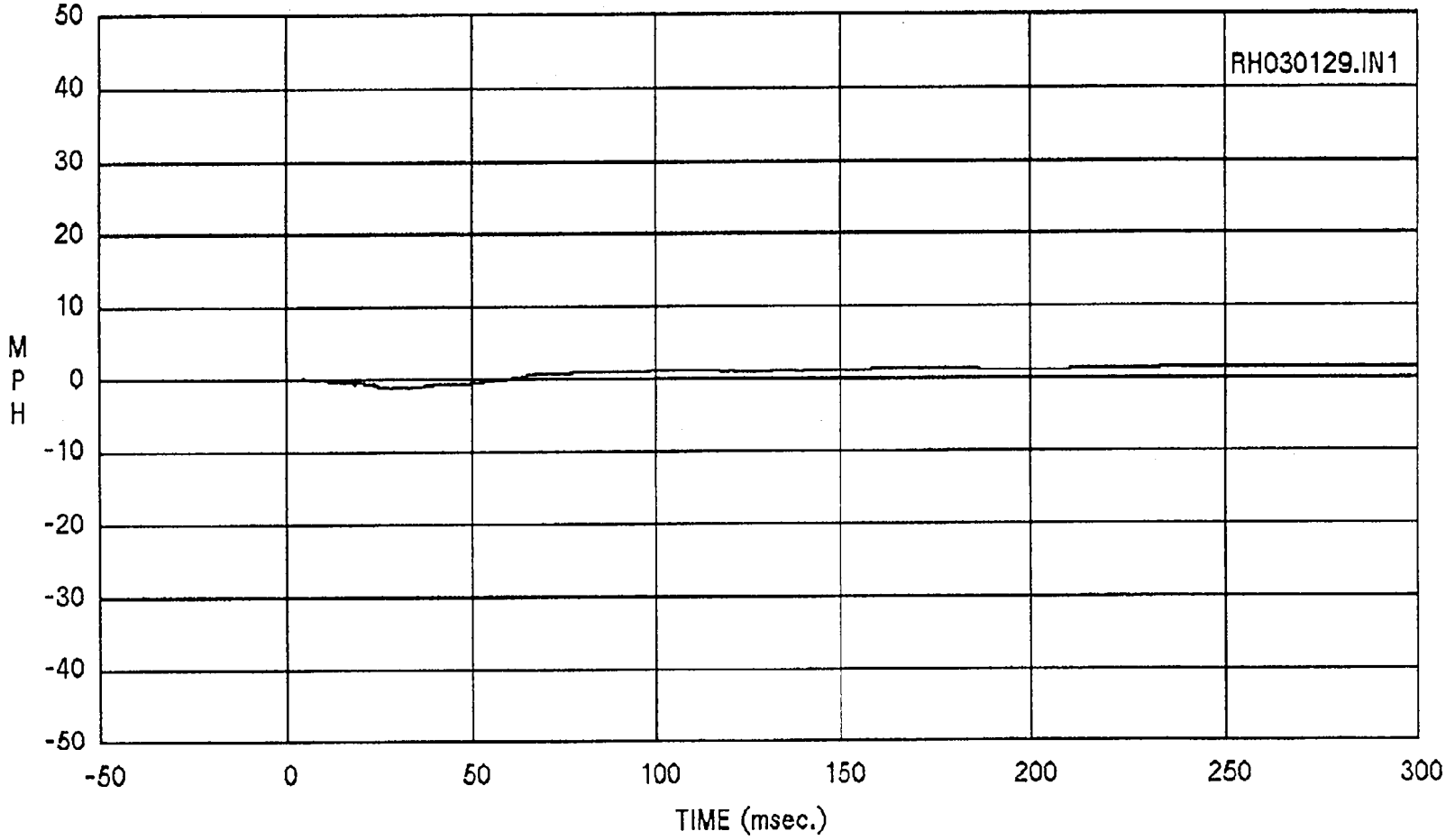
MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4

VEHICLE ACCELEROMETER DATA



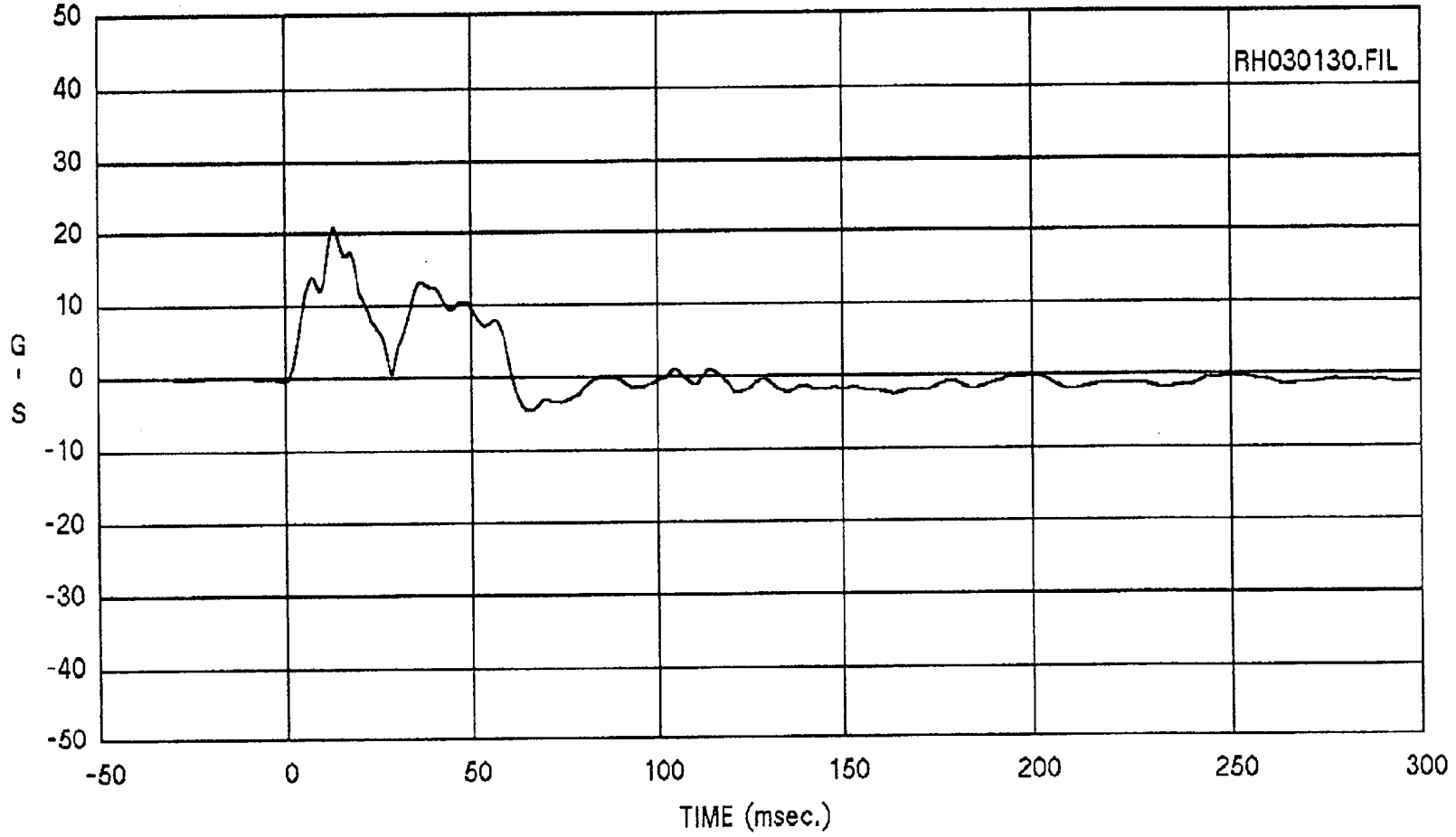
Curve: Front seat right sill acceleration -- X axis Filter: SAE CLASS 60 Max = 4.9491 Min = -4.7692

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



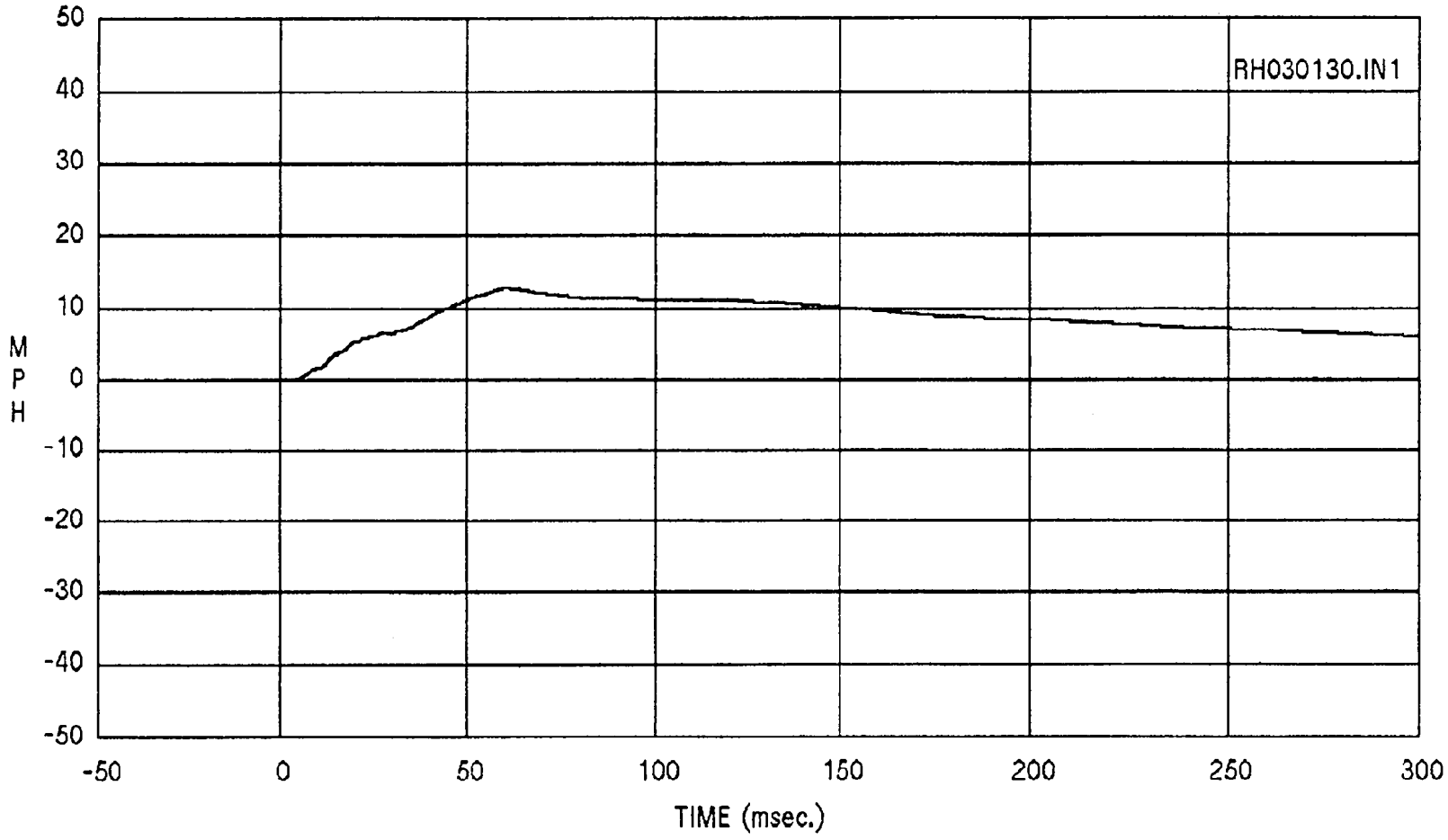
Curve: Front seat right sill delta V -- X axis Filter: SAE CLASS 180 Max = 1.6255 Min = -1.1896

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



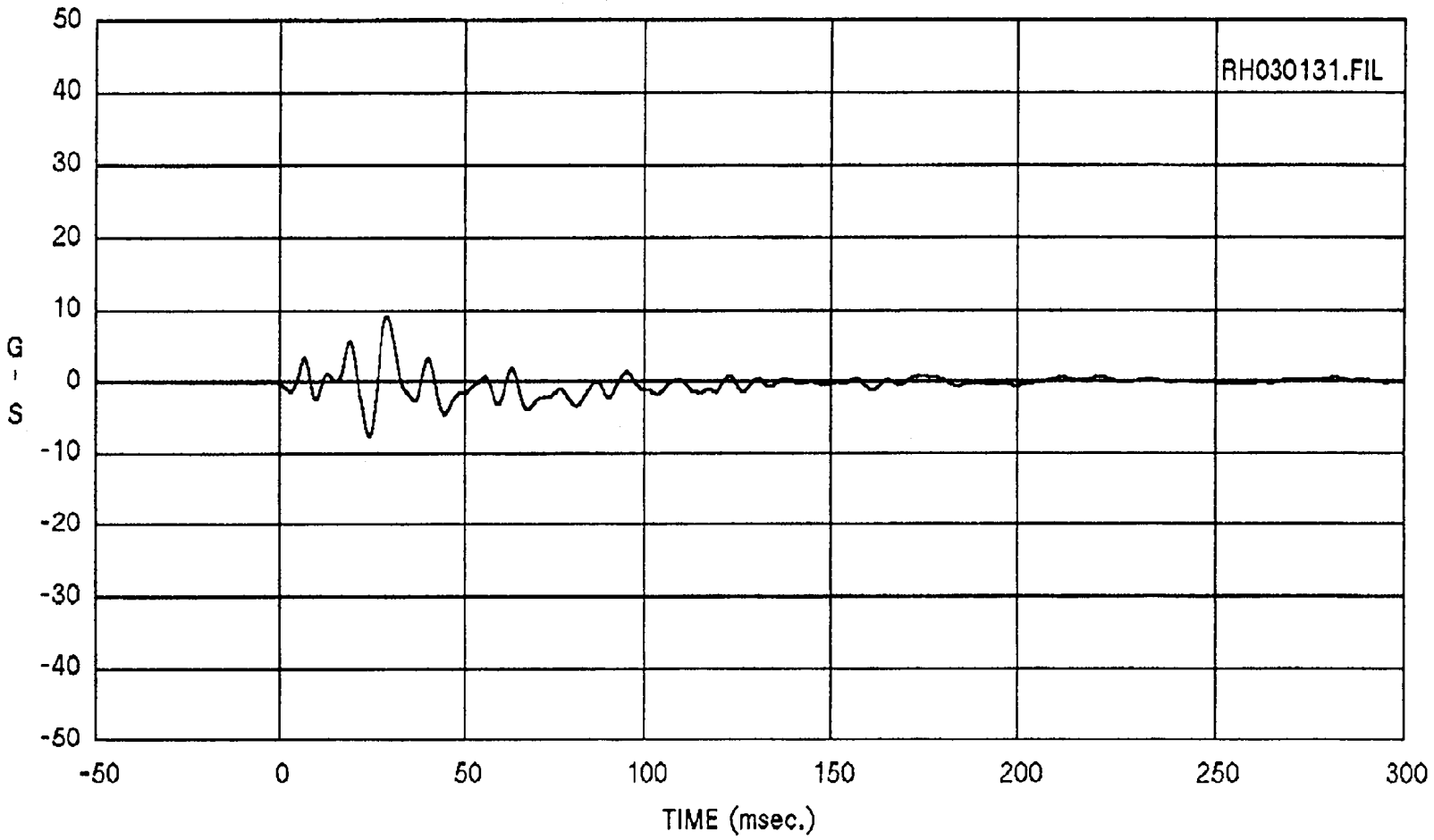
Curve: Front seat right sill acceleration -- Y axis Filter: SAE CLASS 60 Max = 20.945 Min = -4.5072

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



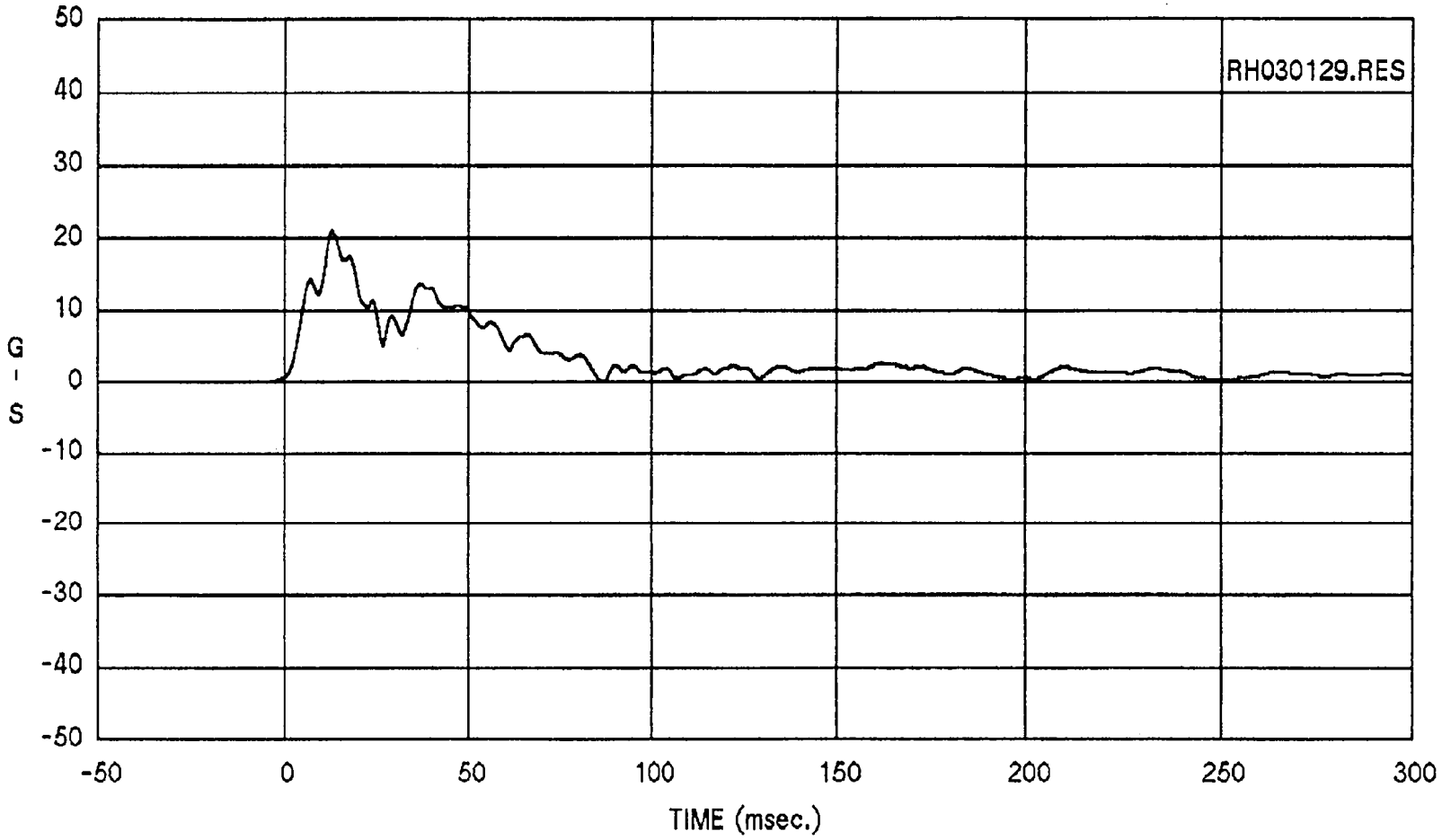
Curve: Front seat right sill delta V -- Y axis Filter: SAE CLASS 180 Max = 12.952 Min = -.61253E-(

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



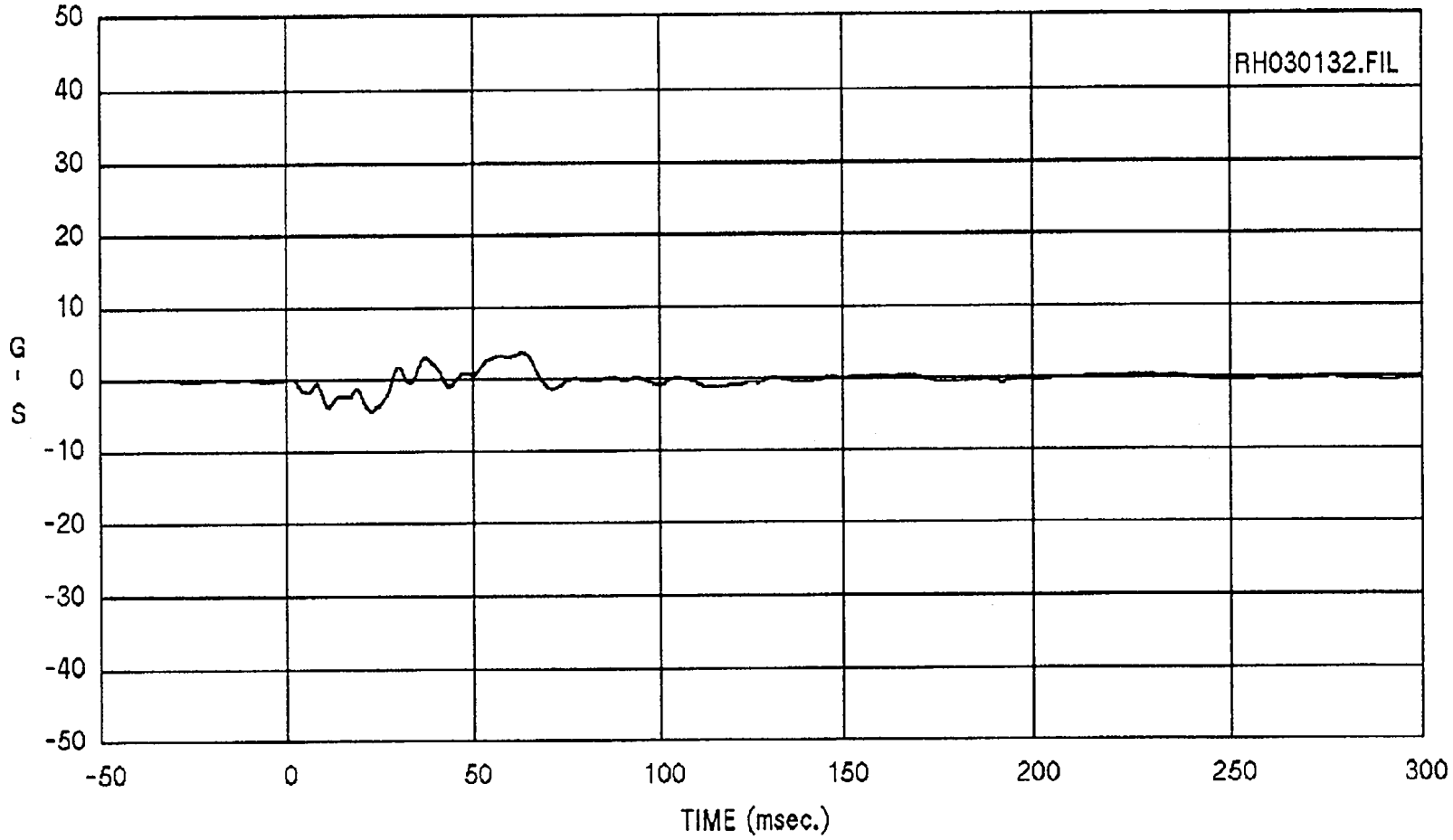
Curve: Front seat right sill acceleration -- Z axis Filter: SAE CLASS 60 Max = 9.2971 Min = -7.7130

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



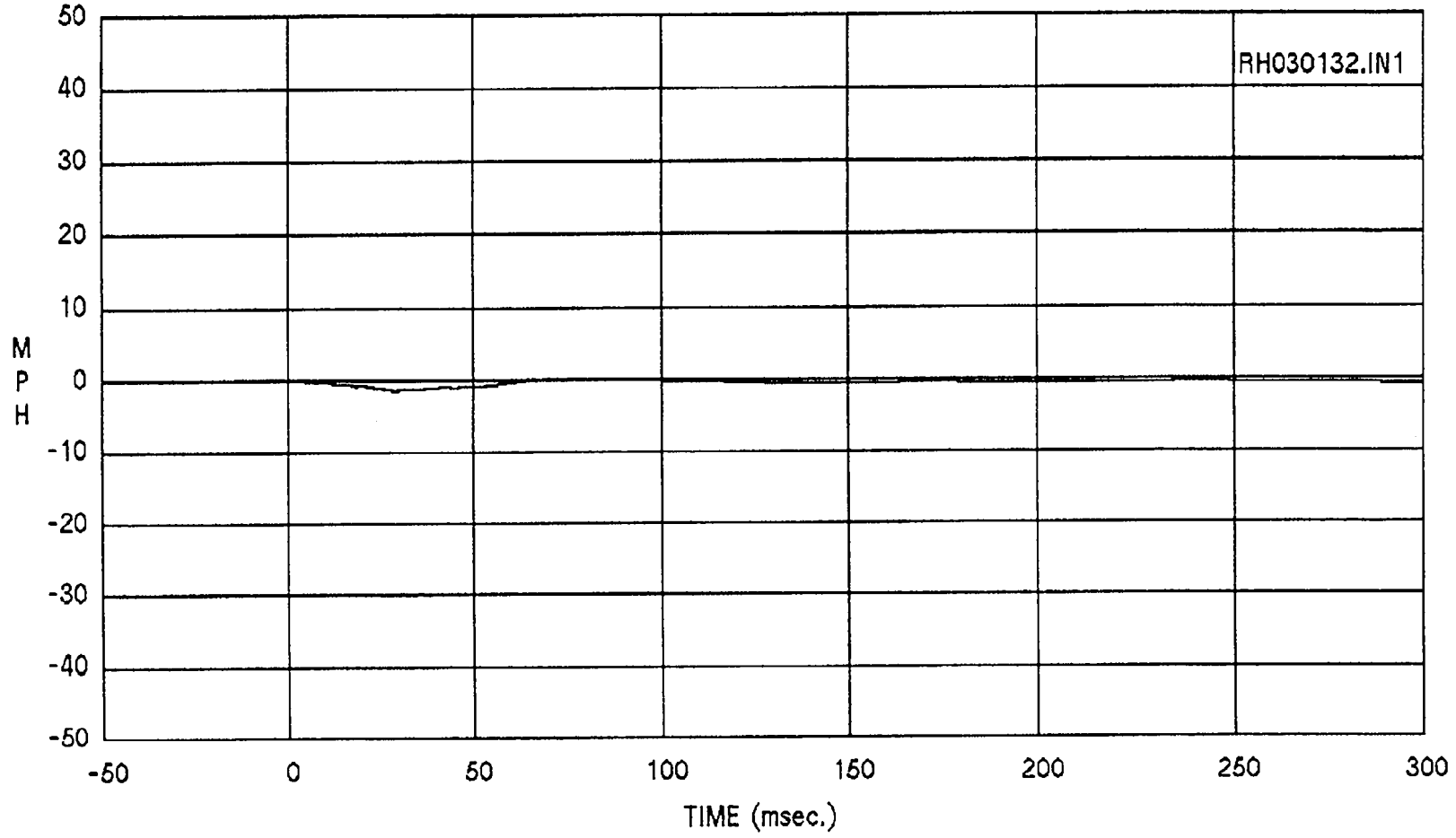
Curve: Front seat right sill resultant acceleration Filter: SAE CLASS 60 Max = 21.170 Min = .24039

MSE Date: 08/05/92 Program: Side Impact 30/15 90 Deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



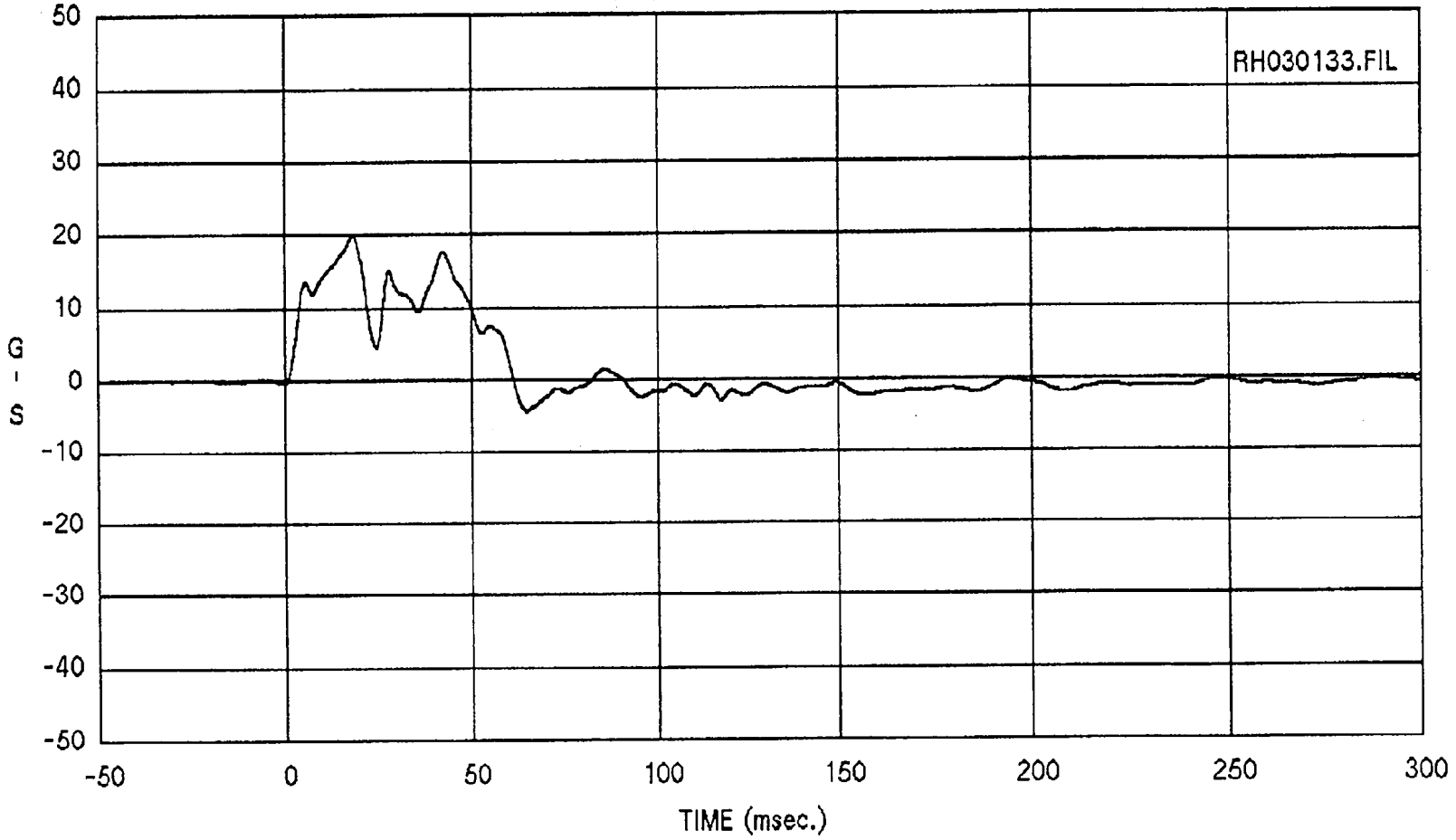
Curve: Rear seat right sill acceleration -- X axis Filter: SAE CLASS 60 Max = 3.6796 Min = -4.4480

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



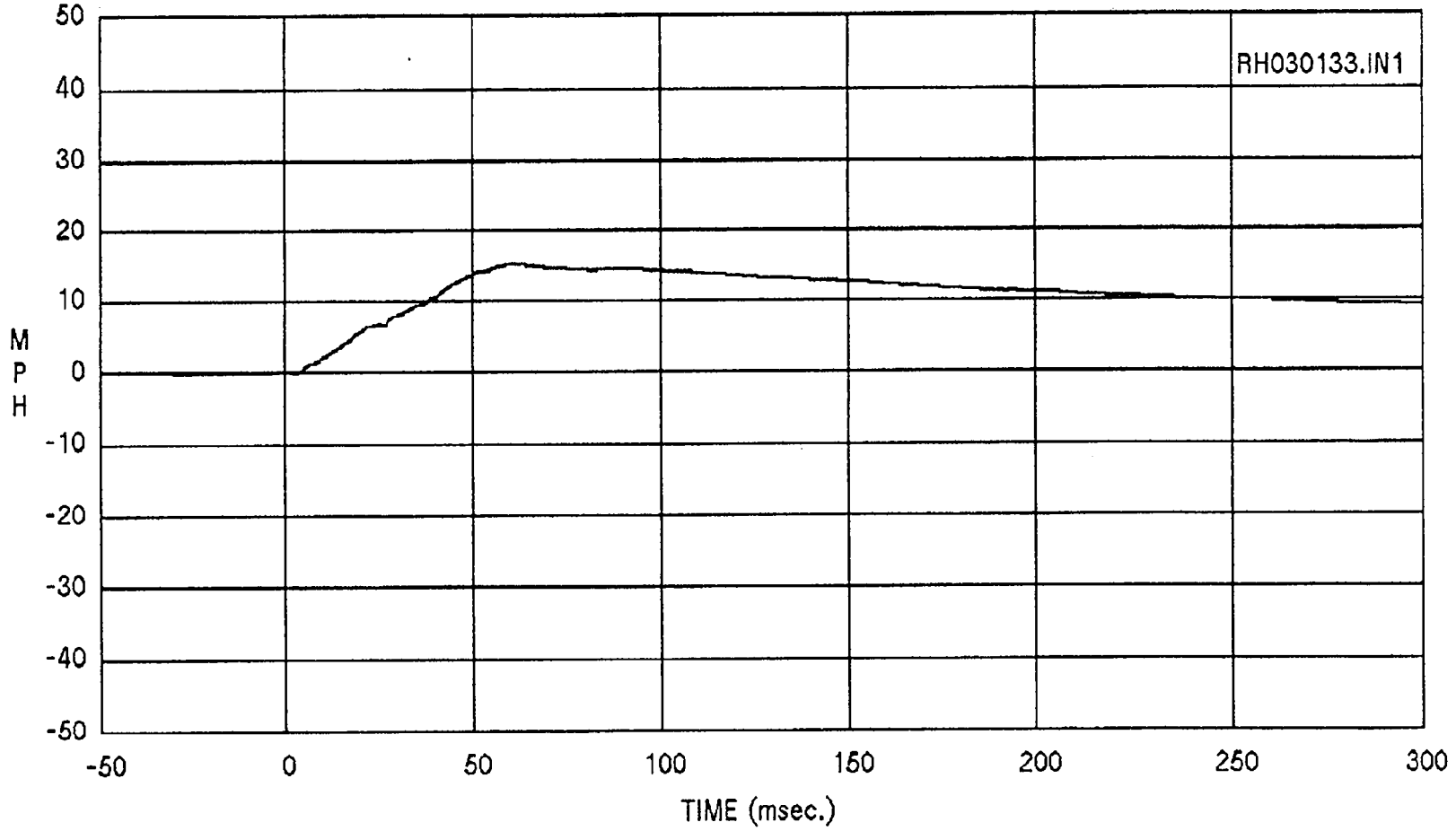
Curve: Rear seat right sill delta V -- X axis Filter: SAE CLASS 180 Max = .15712 Min = -1.4116

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



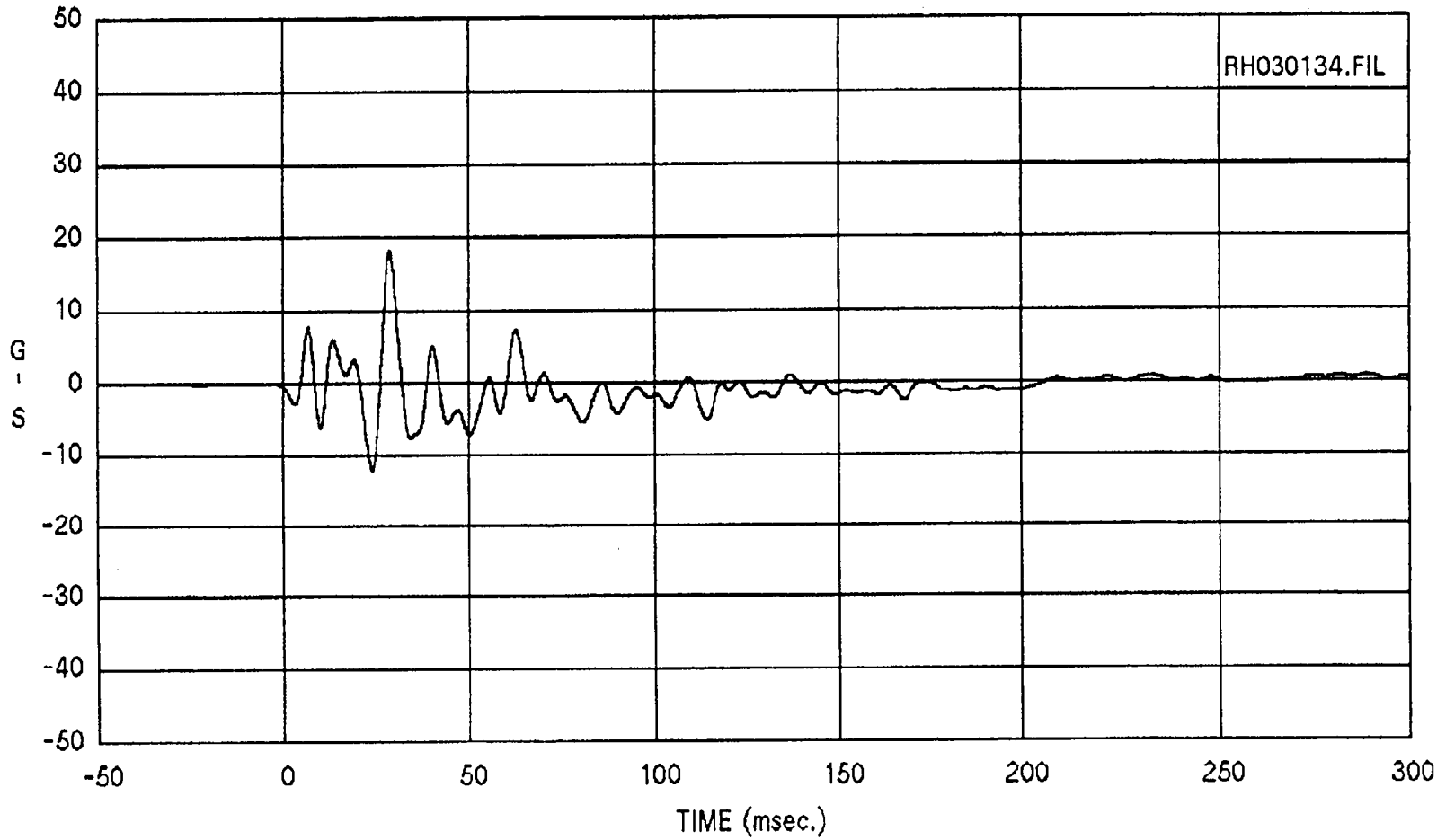
Curve: Rear seat right sill acceleration -- Y axis Filter: SAE CLASS 60 Max = 20.032 Min = -4.3514

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



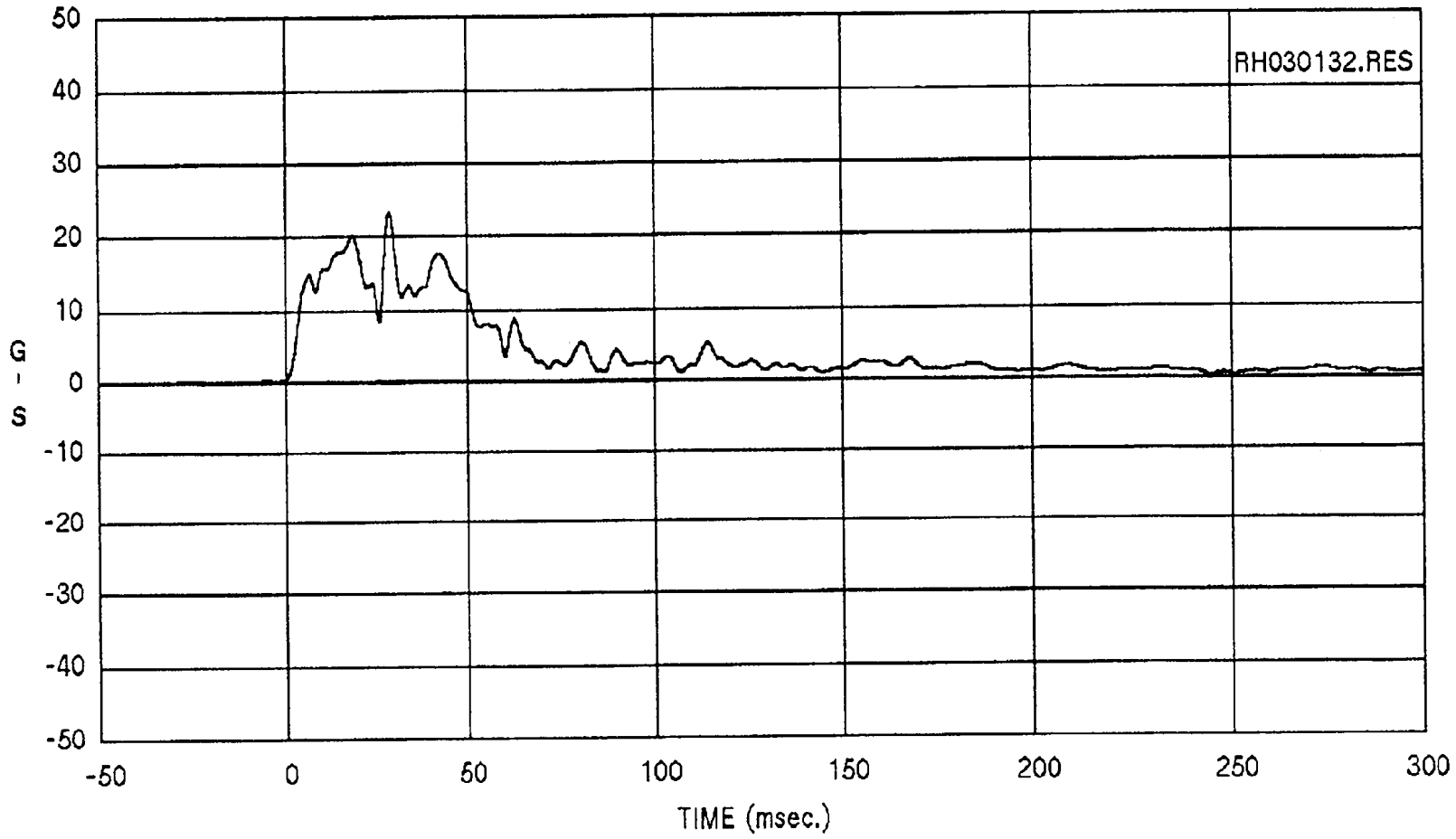
Curve: Rear seat right sill delta V -- Y axis Filter: SAE CLASS 180 Max = 15.315 Min = -.36262E-

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



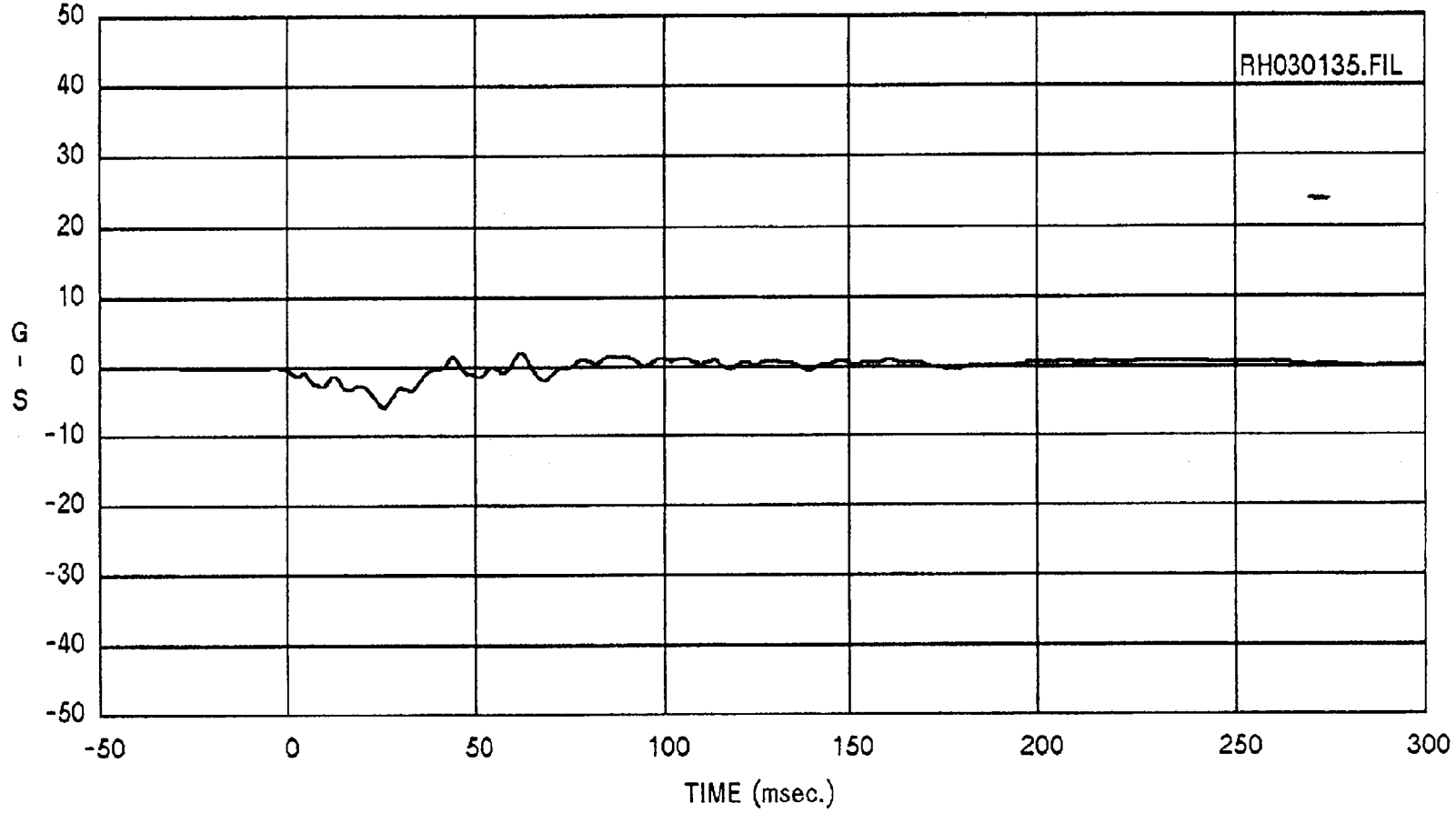
Curve: Rear seat right sill acceleration -- Z axis Filter: SAE CLASS 60 Max = 18.342 Min = -12.017

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



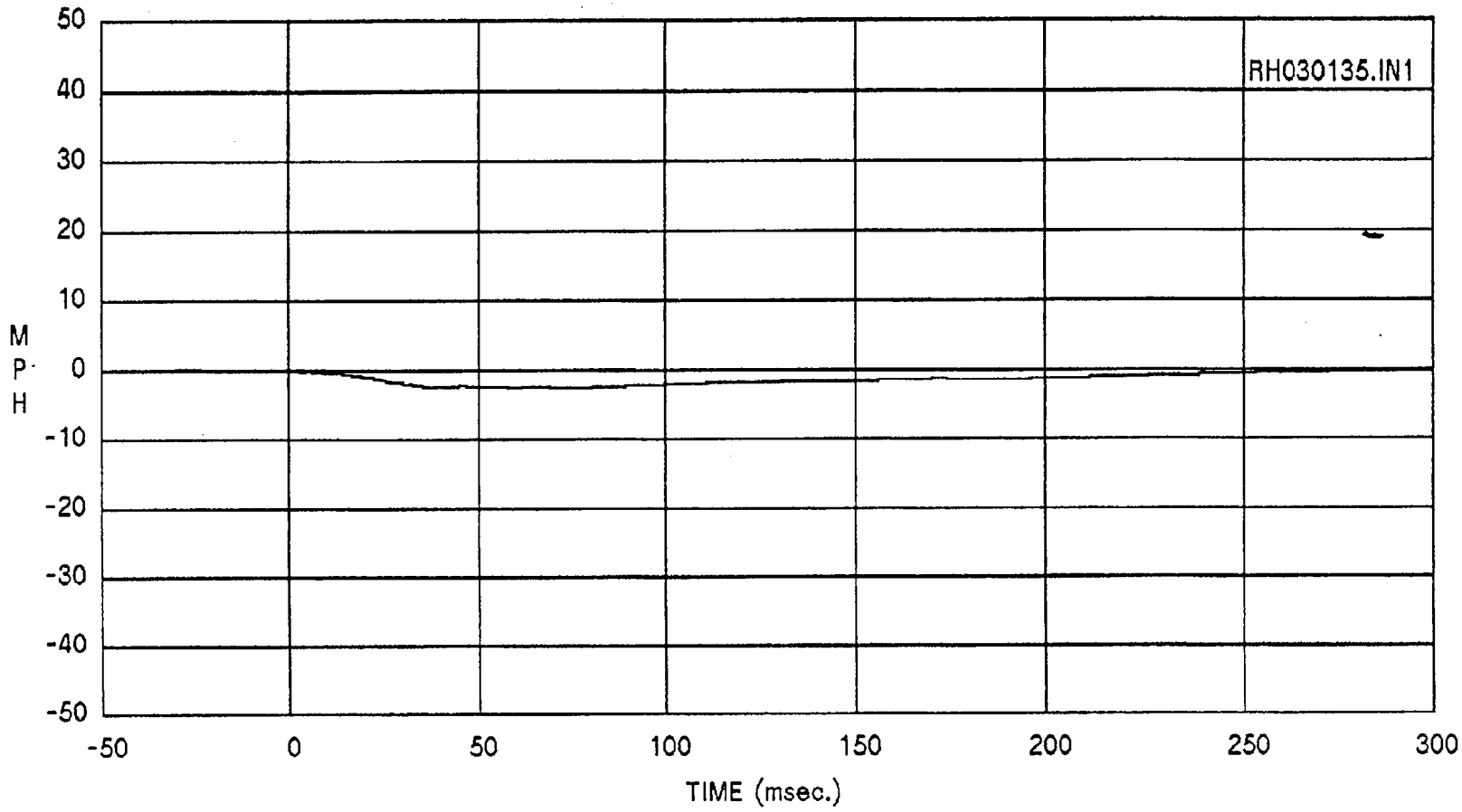
Curve: Rear seat right sill resultant acceleration Filter: SAE CLASS 60 Max = 23.330 Min = .43875

MSE Date: 08/05/92 Program: Side Impact 30/15 90 Deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



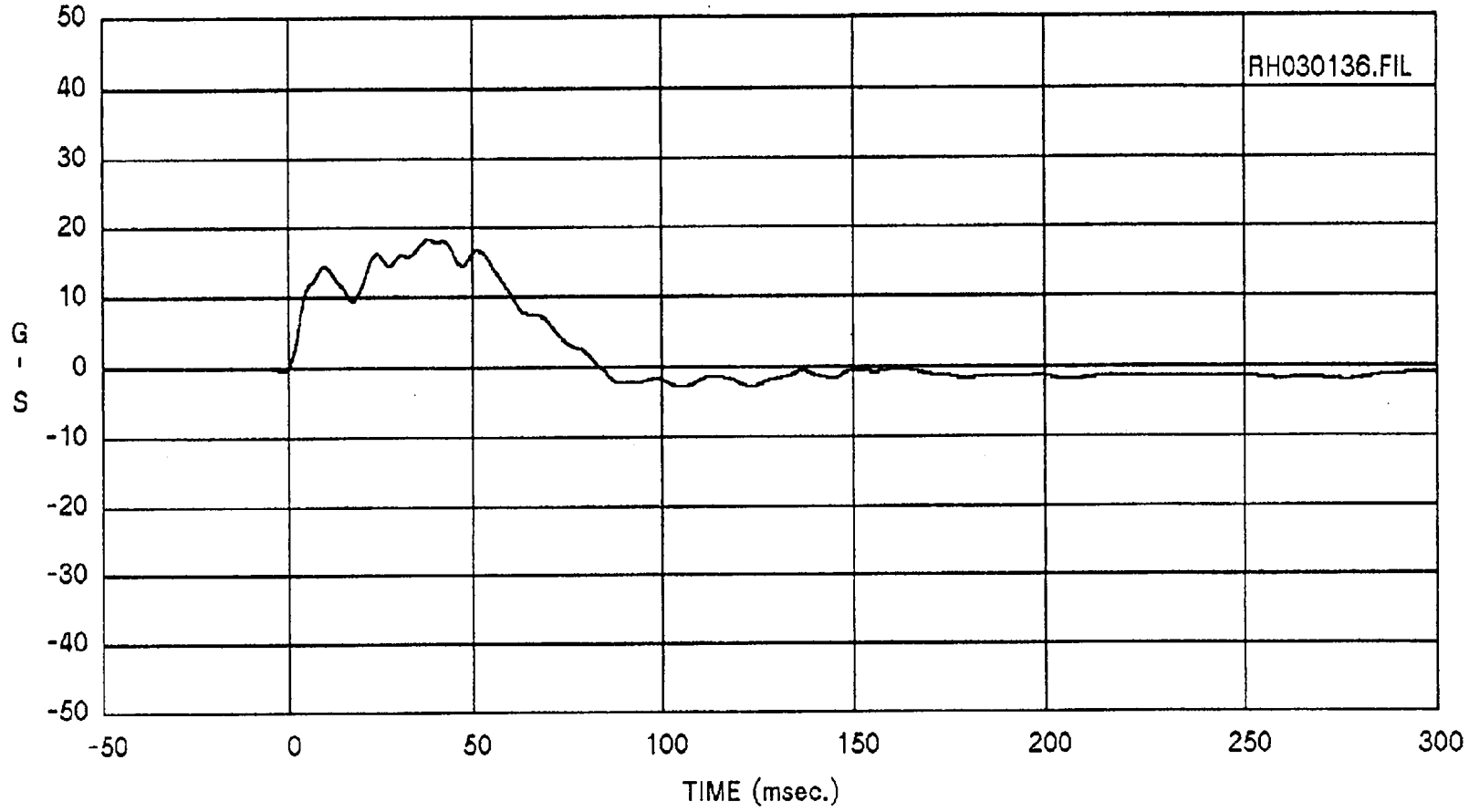
Curve: Rear floor above axle acceleration -- X axis Filter: SAE CLASS 60 Max = 2.0137 Min = -5.8861

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



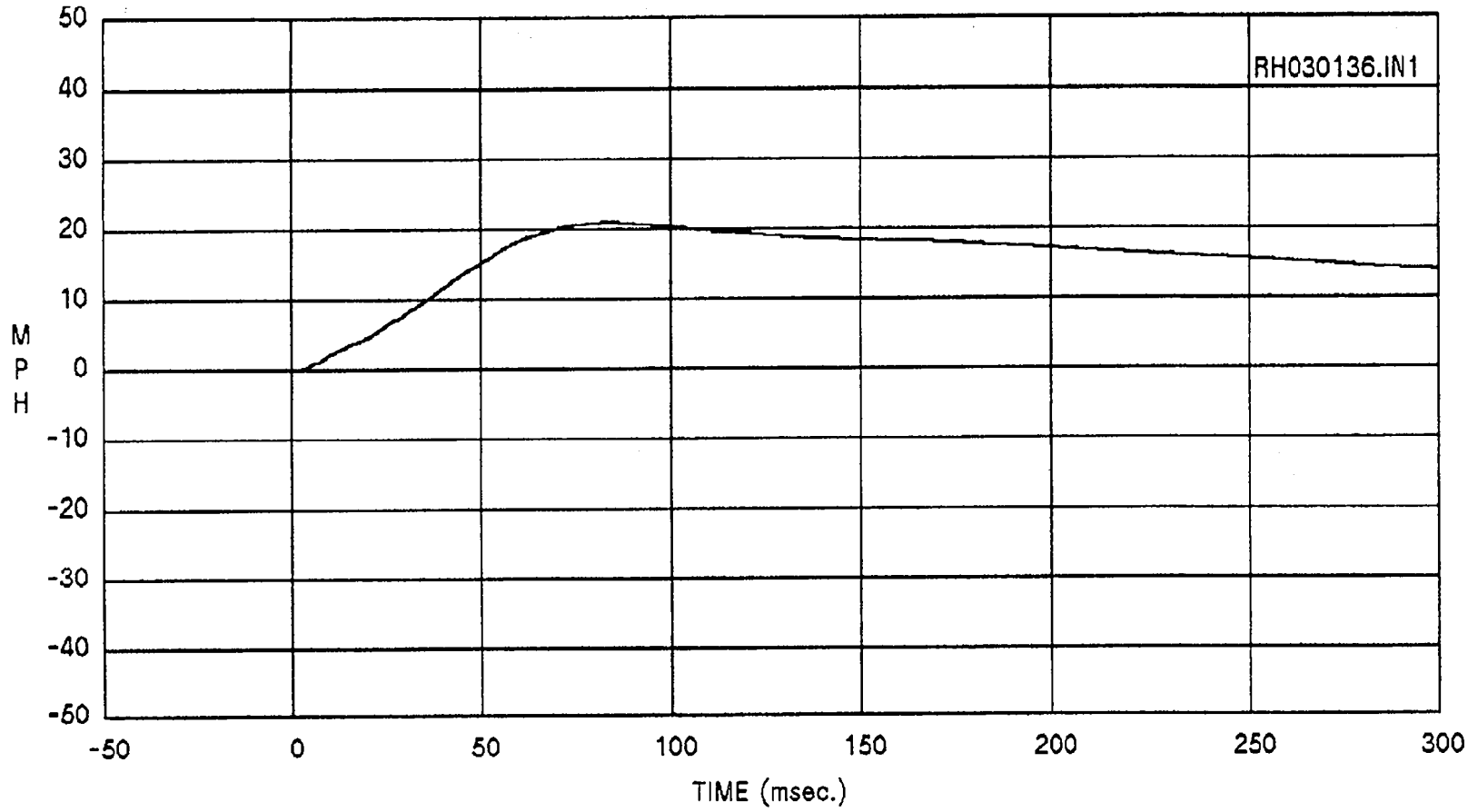
Curve: Rear floor above axle delta V -- X axis Filter: SAE CLASS 180 Max = .58811E-02 Min = -2.57

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



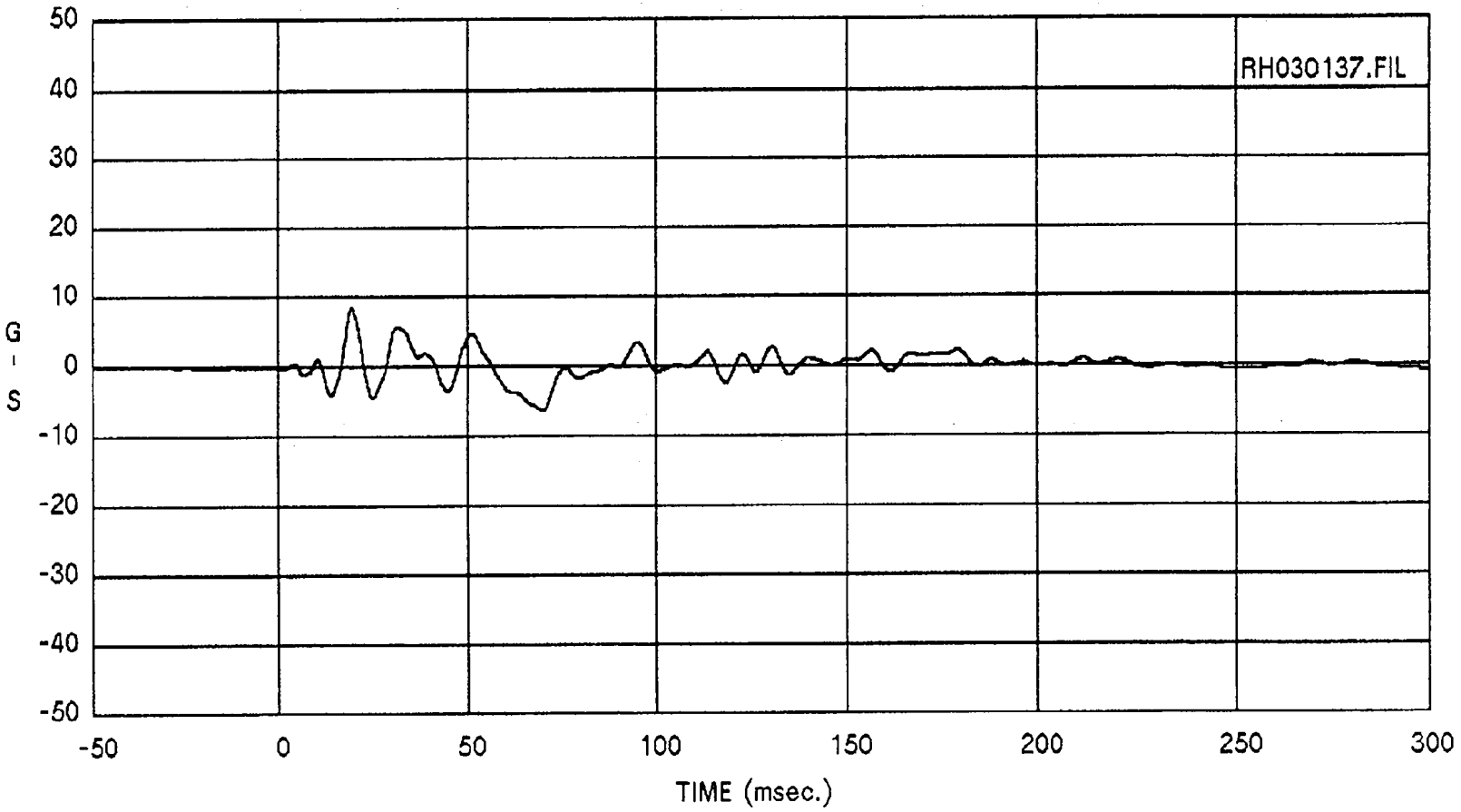
Curve: Rear floor above axle acceleration -- Y axis Filter: SAE CLASS 60 Max = 18.279 Min = -2.8692

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



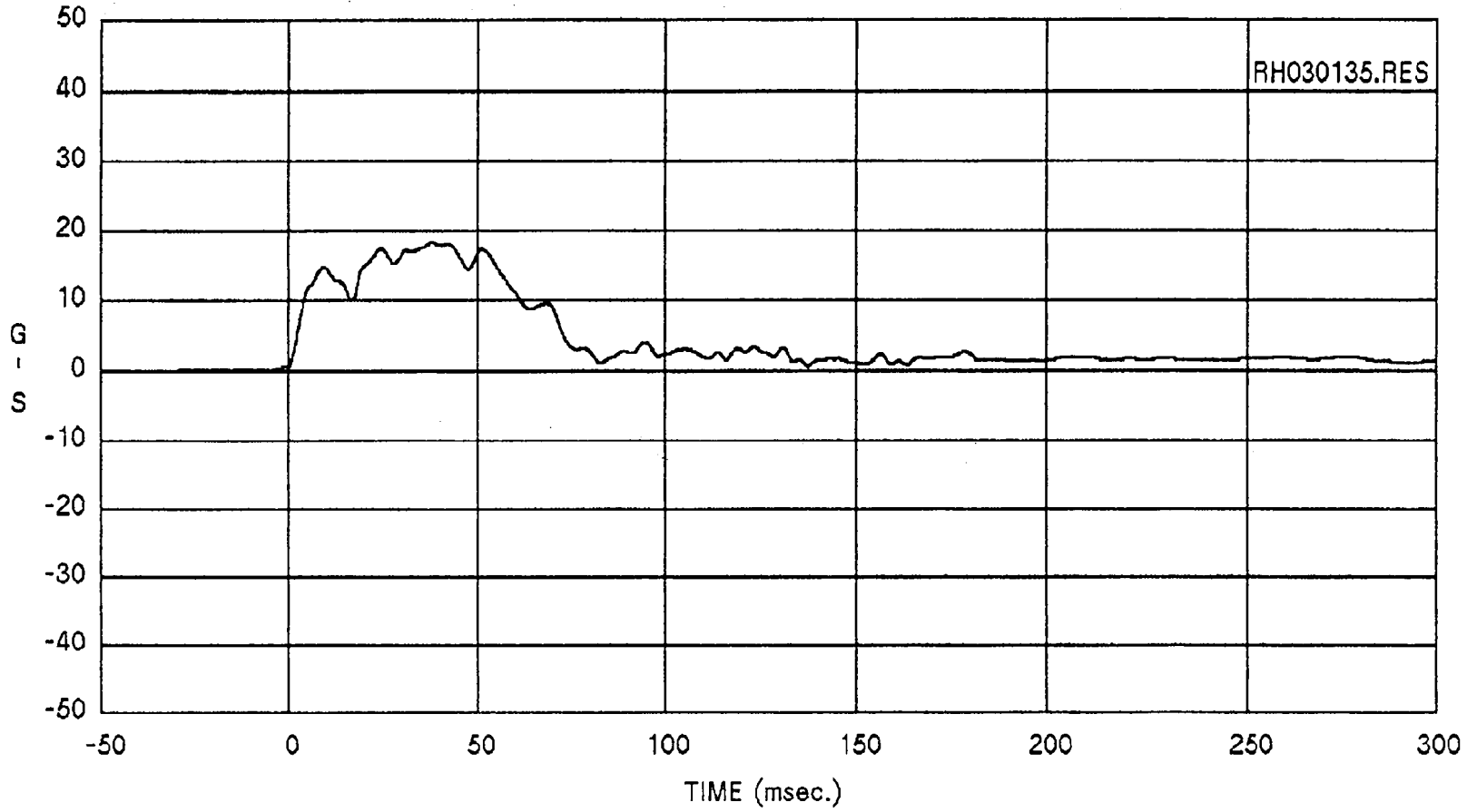
Curve: Rear floor above axle delta V -- Y axis Filter: SAE CLASS 180 01 Max = 20.895 Min = -.11808

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



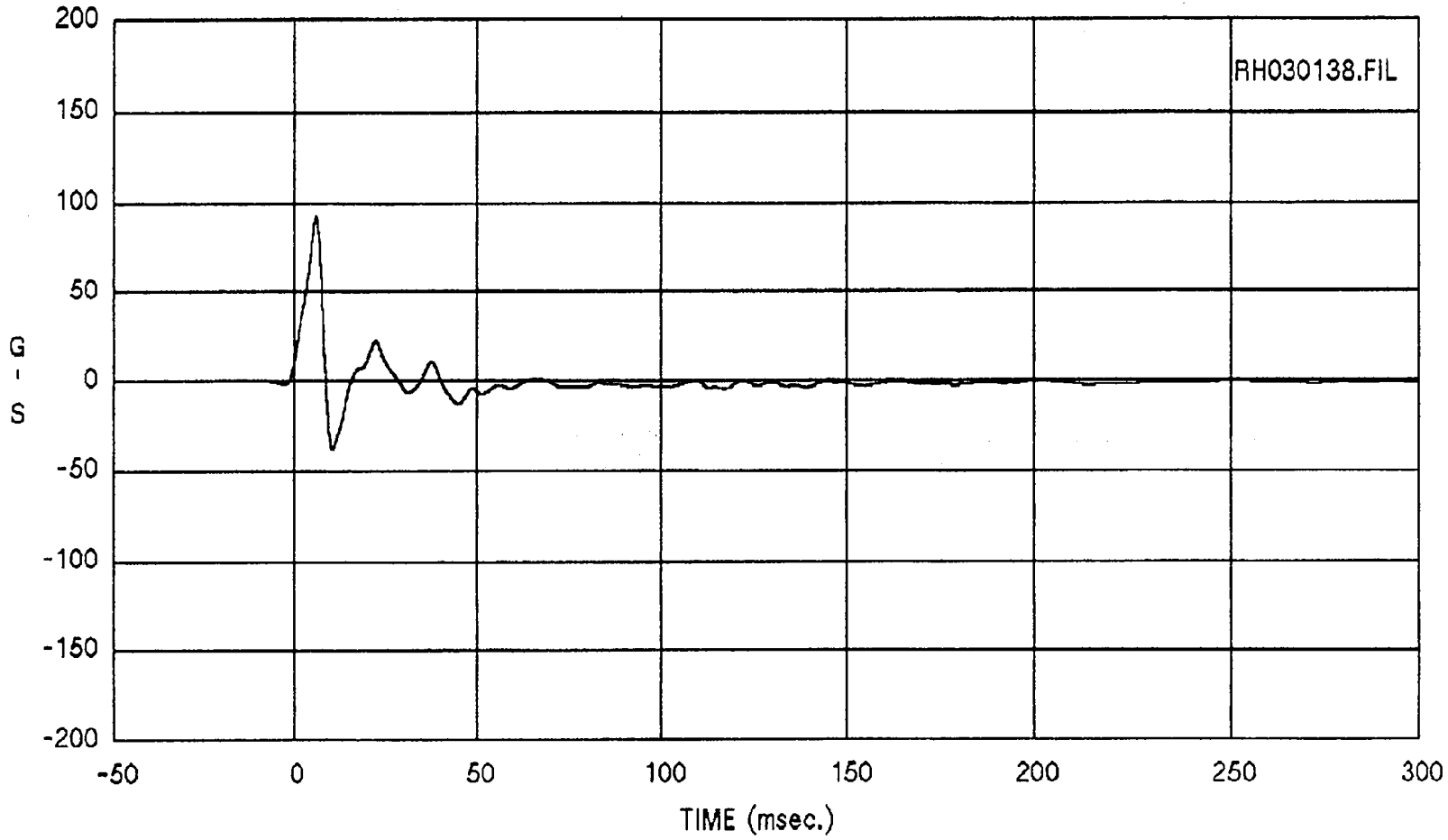
Curve: Rear floor above axle acceleration -- Z axis Filter: SAE CLASS 60 Max = 8.4230 Min = -6.3120

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



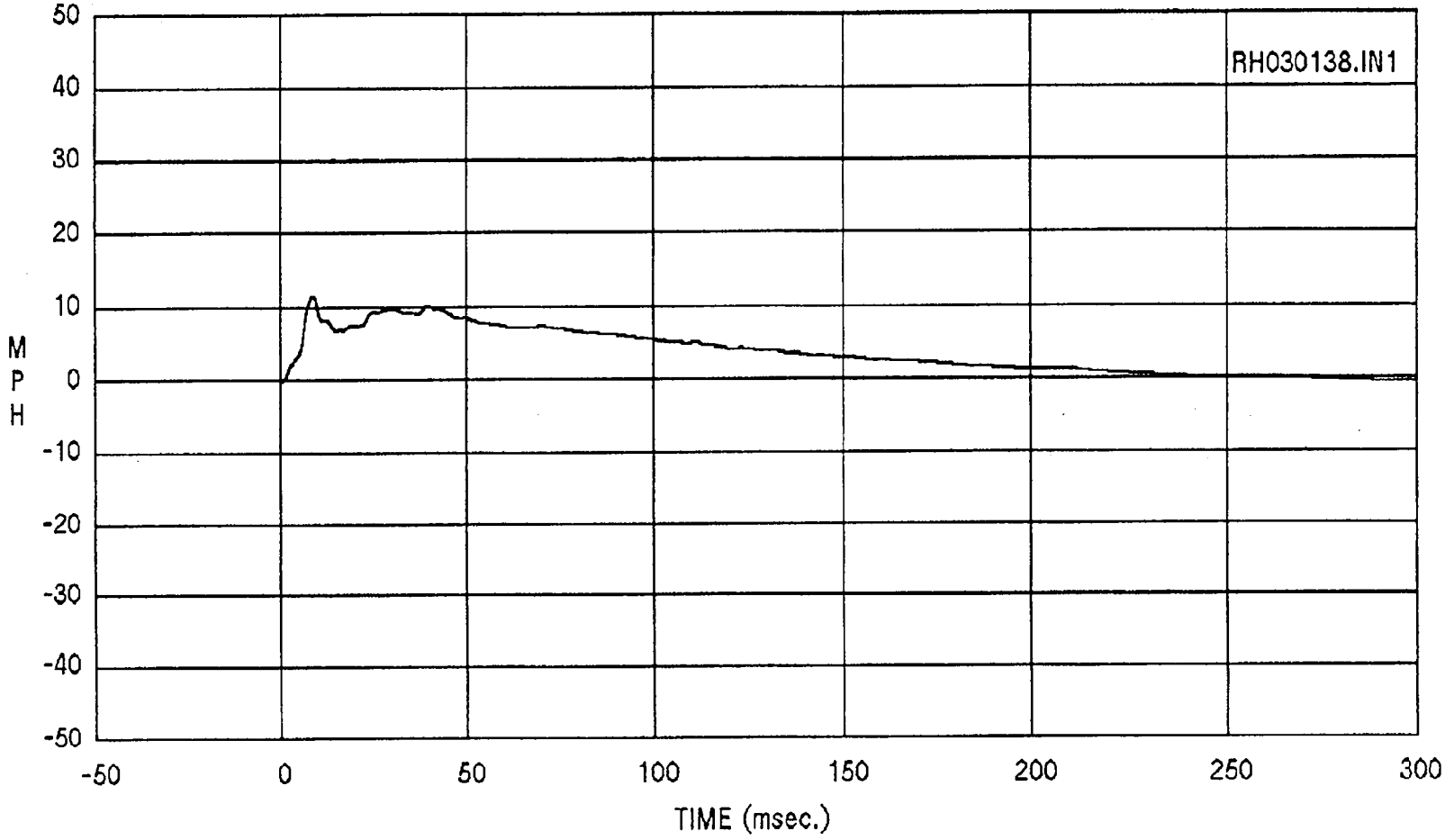
Curve: Rear floor above axle resultant acceleration Filter: SAE CLASS 60 Max = 18.351 Min = .65693

MSE Date: 08/05/92 Program: Side Impact 30/15 90 Deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



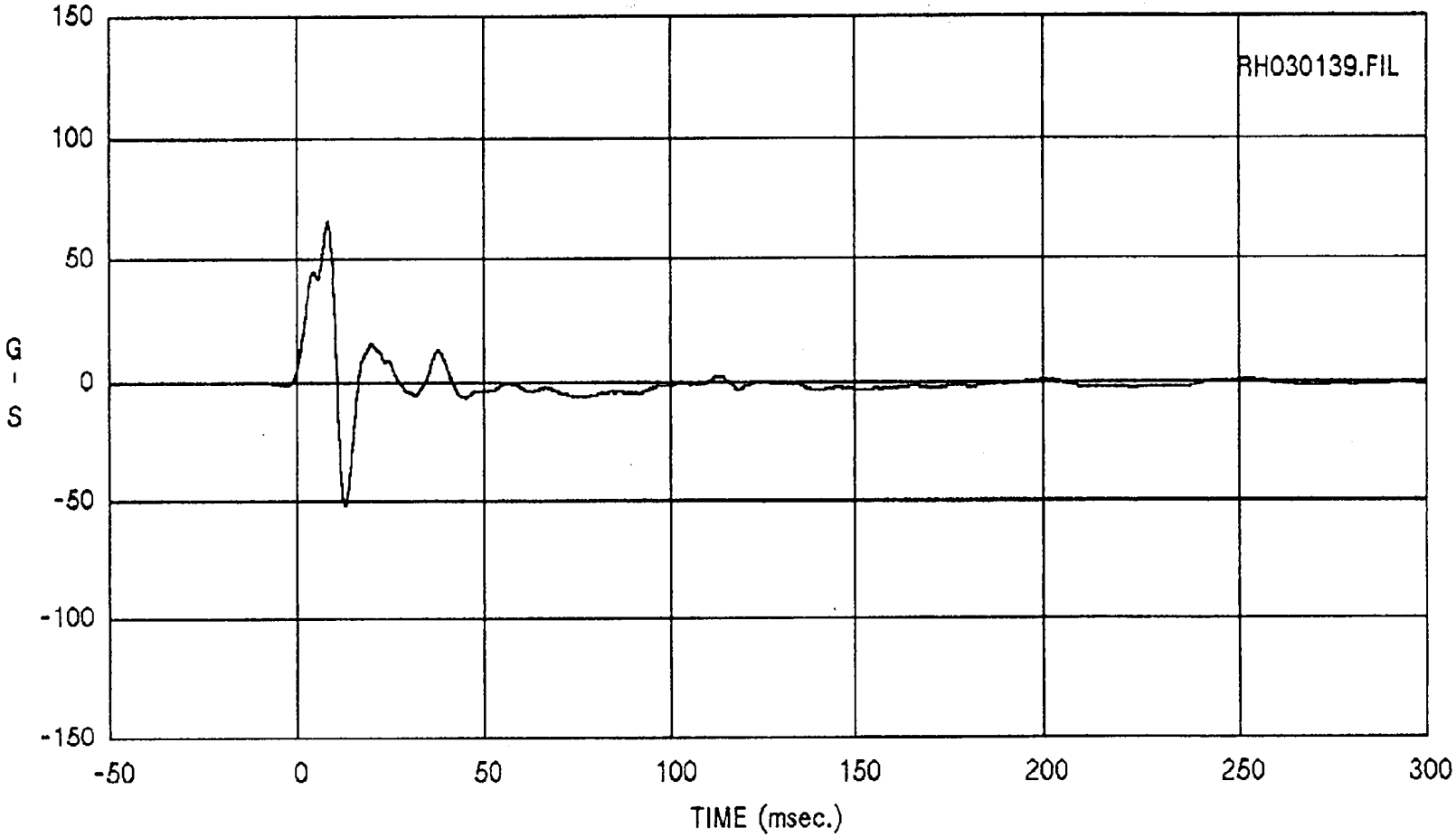
Curve: Rear seat left sill acceleration -- Y axis Filter: SAE CLASS 60 Max = 92.491 Min = -38.038

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



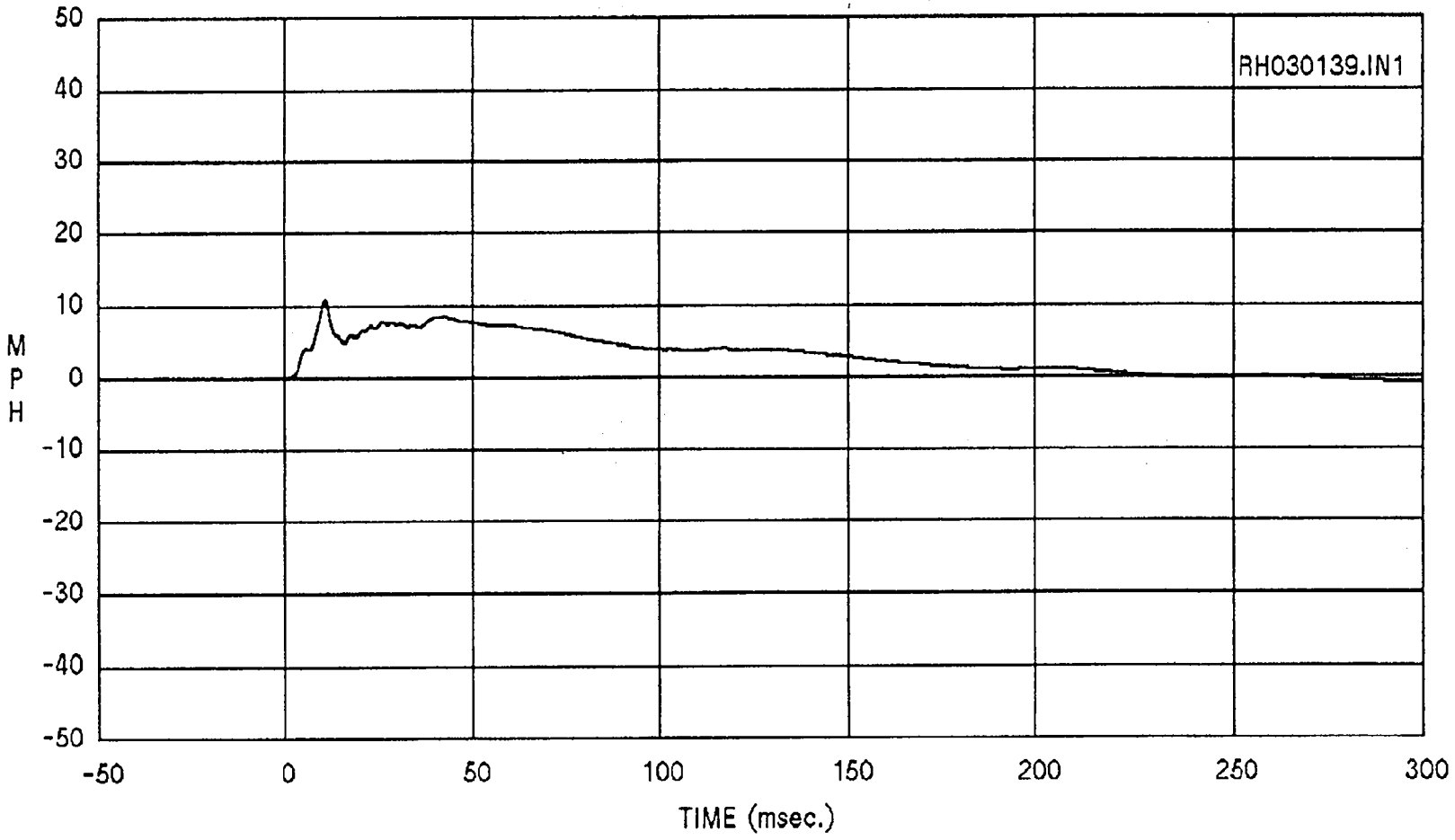
Curve: Rear seat left sill delta V -- Y axis Filter: SAE CLASS 180 Max = 11.595 Min = -.58027

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



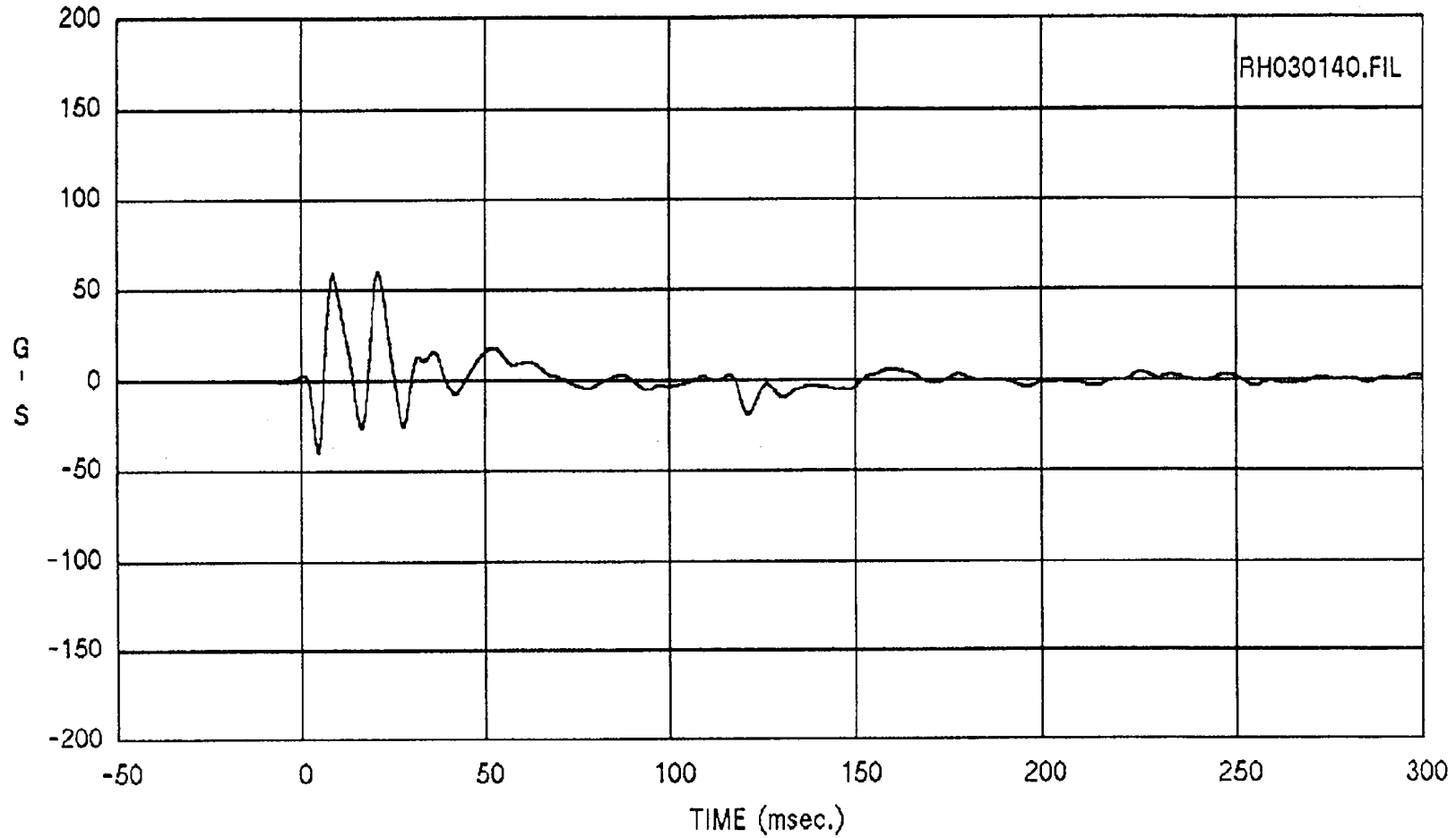
Curve: Front seat left SIII acceleration -- Y axis Filter: SAE CLASS 60 Max = 65.985 Min = -51.401

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



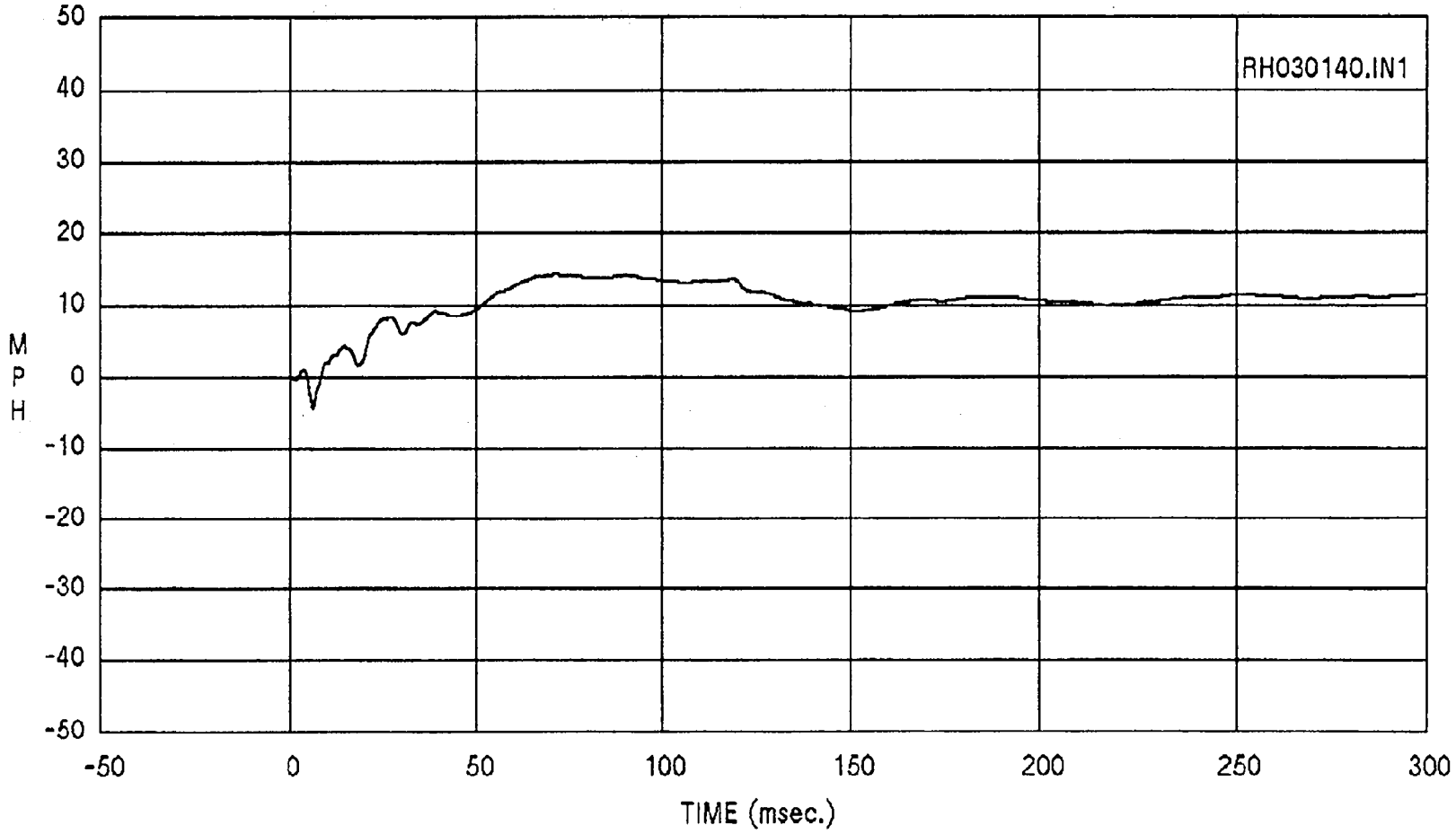
Curve: Front seat left SIII delta V -- Y axis Filter: SAE CLASS 180 Max = 10.910 Min = -.73945

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



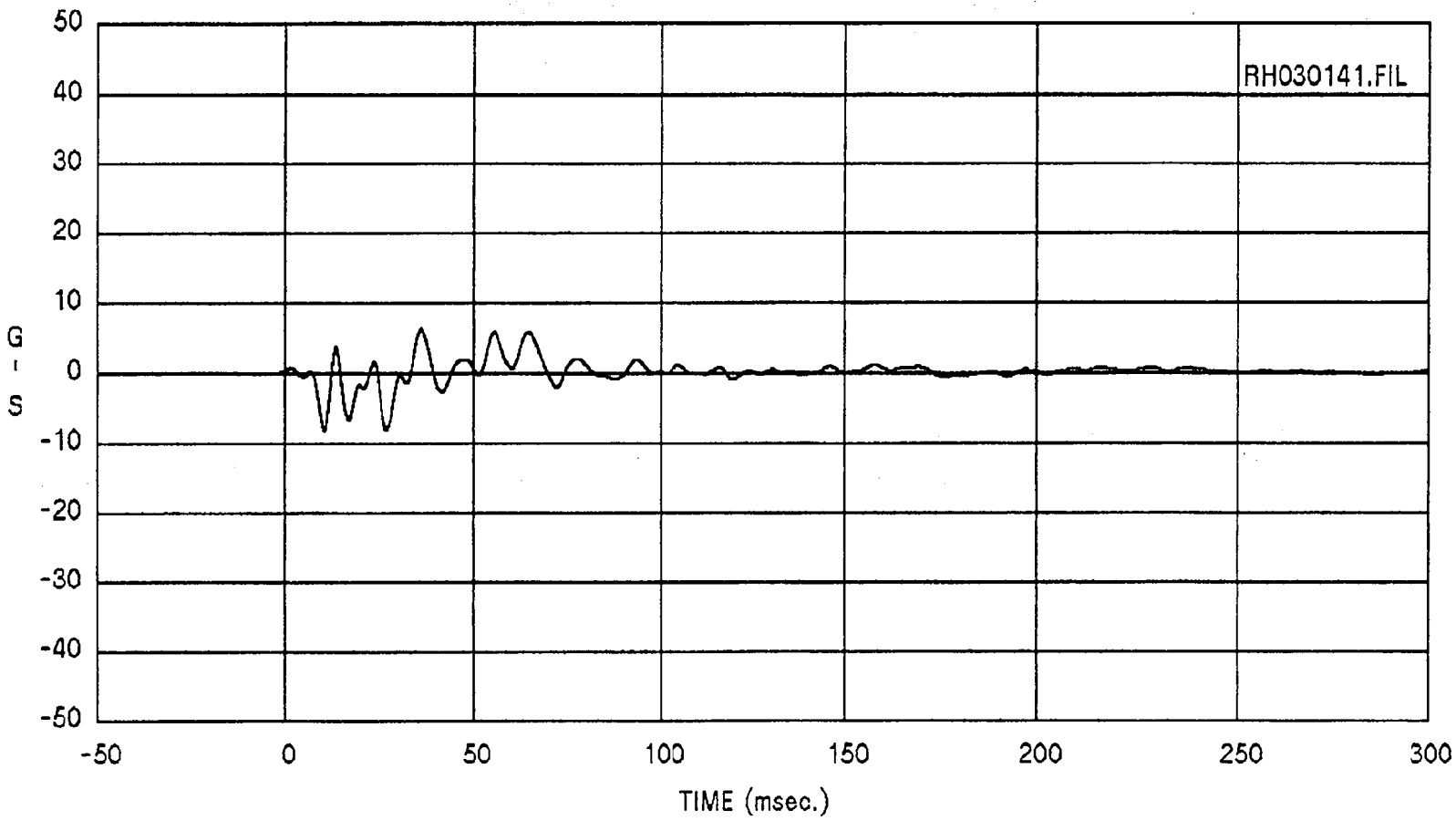
Curve: Left front door at centerline -- Y axis Filter: SAE CLASS 60 Max = 60.217 Min = -39.301

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



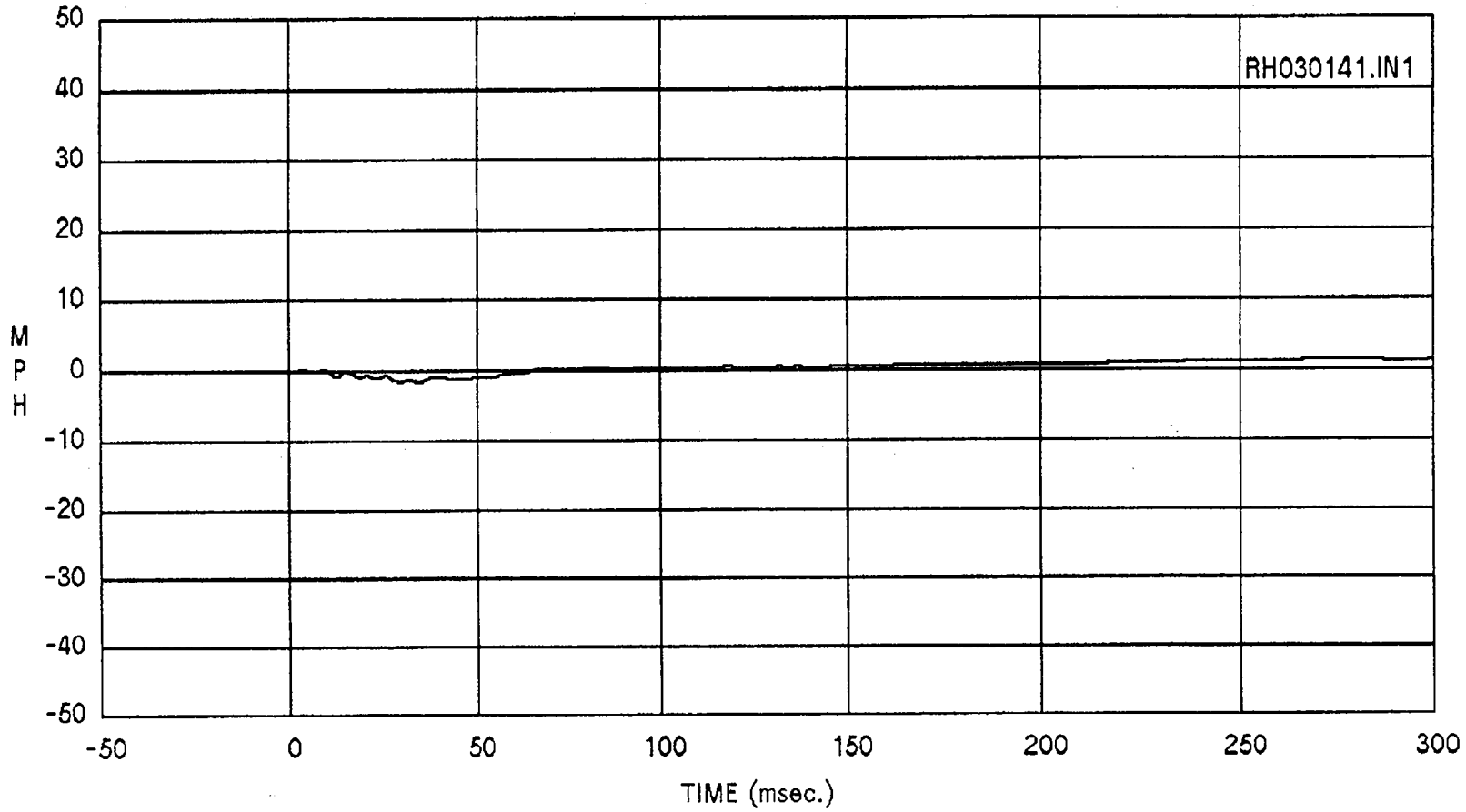
Curve: Left front door at centerline -- Y axis Filter: SAE CLASS 180 Max = 14.411 Min = -4.1640

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



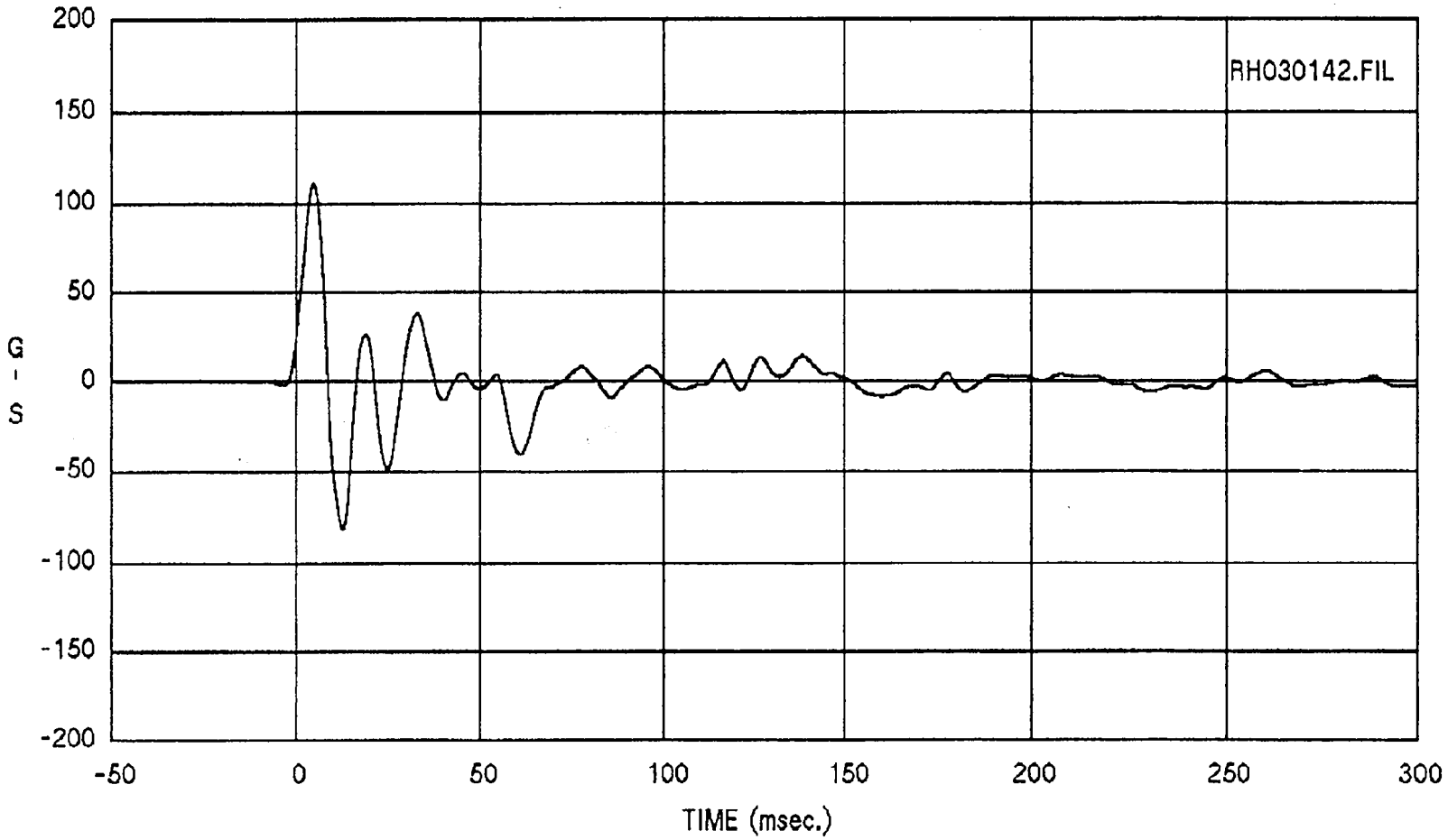
Curve: Right rear occupant compartment -- X axis Filter: SAE CLASS 60 Max = 6.2244 Min = -8.2891

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



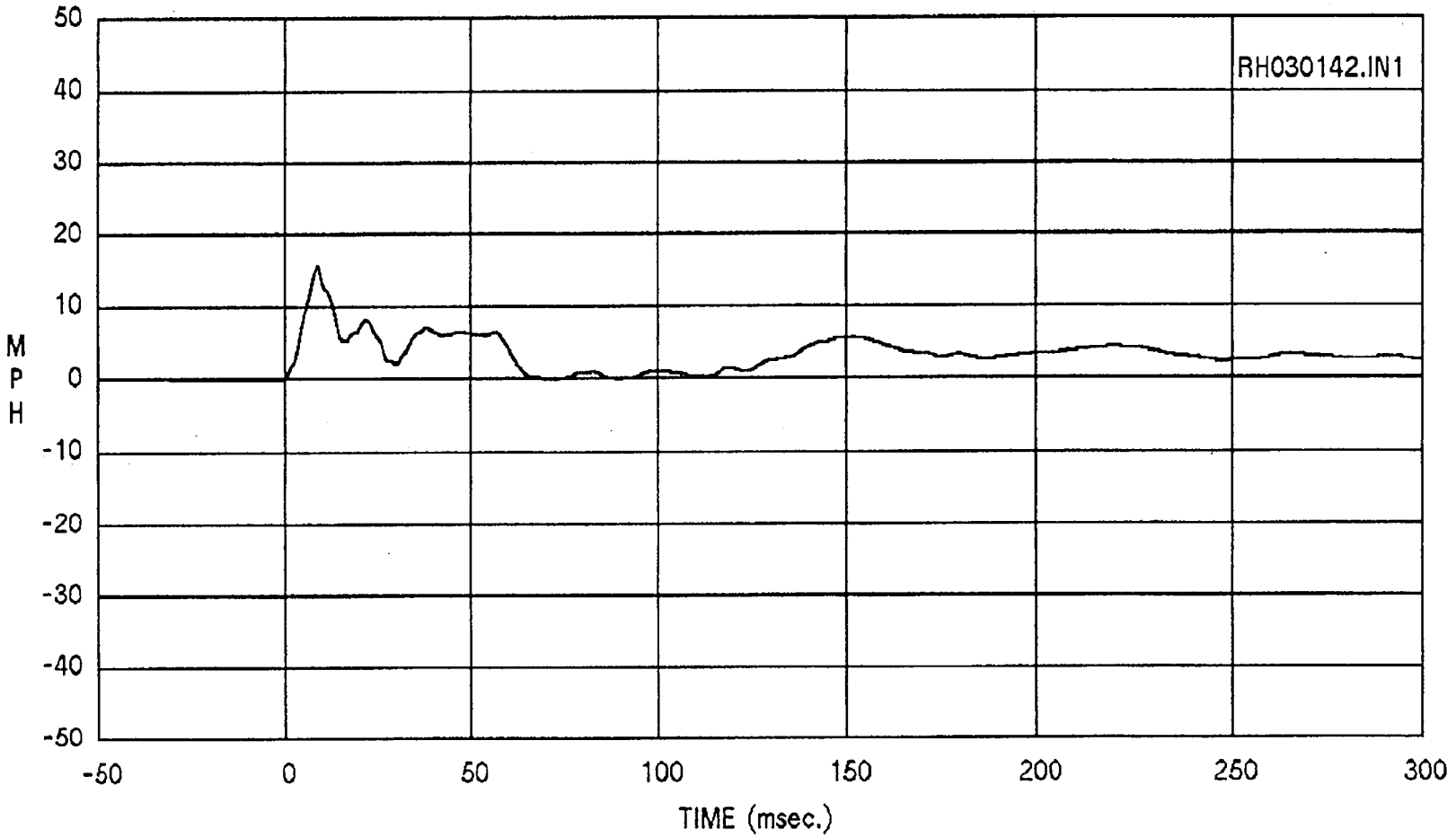
Curve: Right rear occupant compartment -- X axis Filter: SAE CLASS 180 Max = 1.2748 Min = -1.6293

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



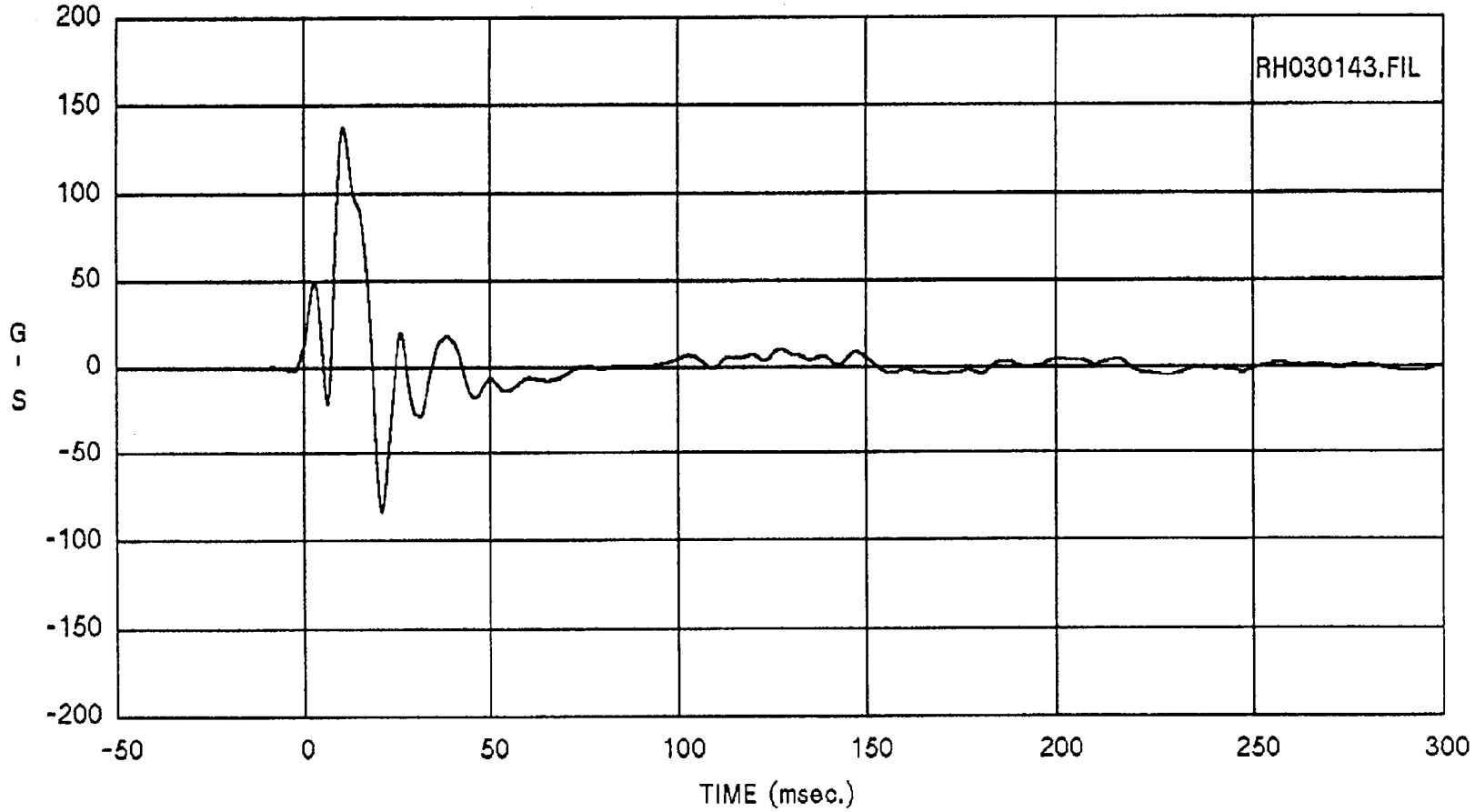
Curve: Left front door at mid-rear -- Y axis Filter: SAE CLASS 60 Max = 111.48 Min = -81.474

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



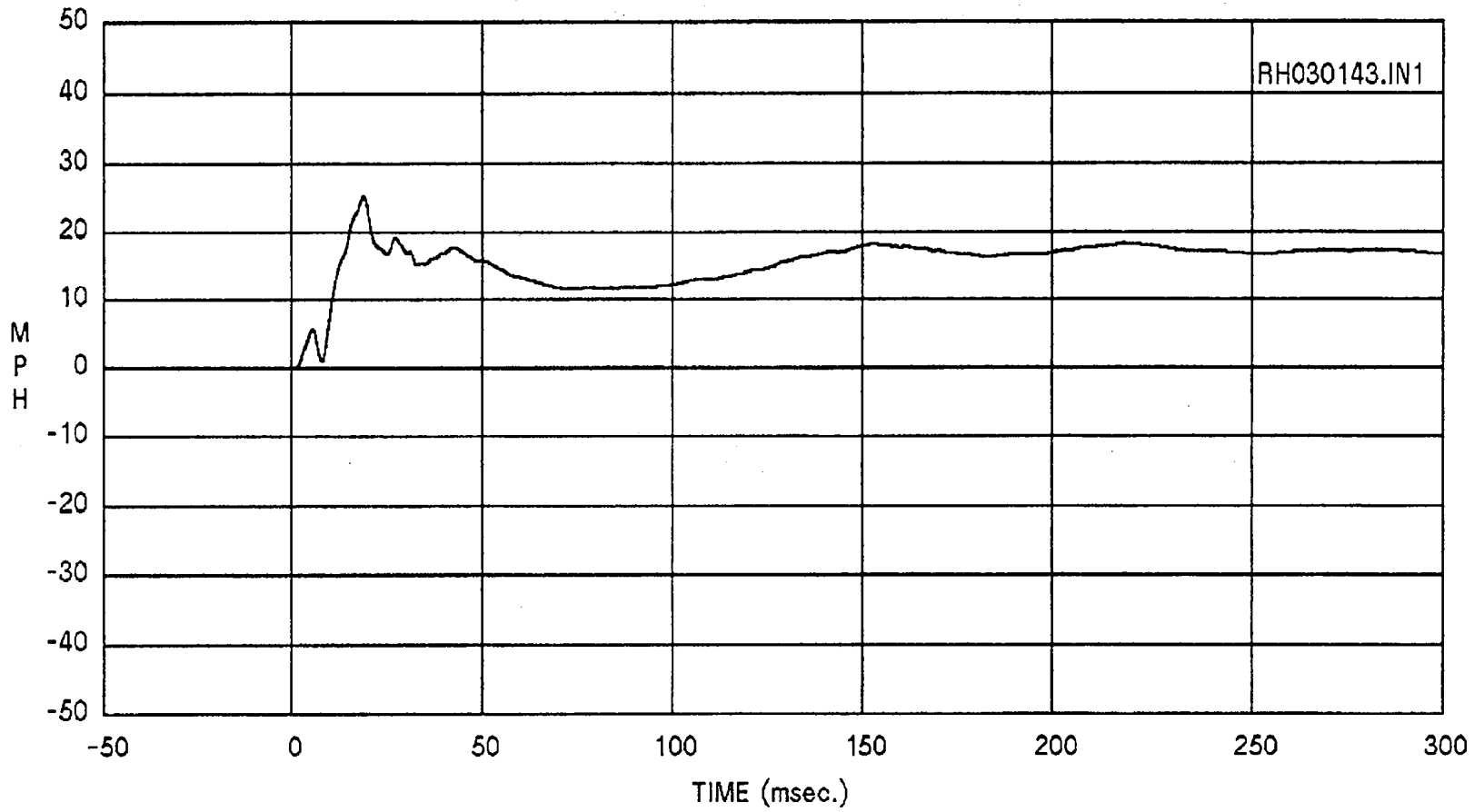
Curve: Left front door at mid-rear -- Y axis Filter: SAE CLASS 180 Max = 15.605 Min = -.64024E-

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



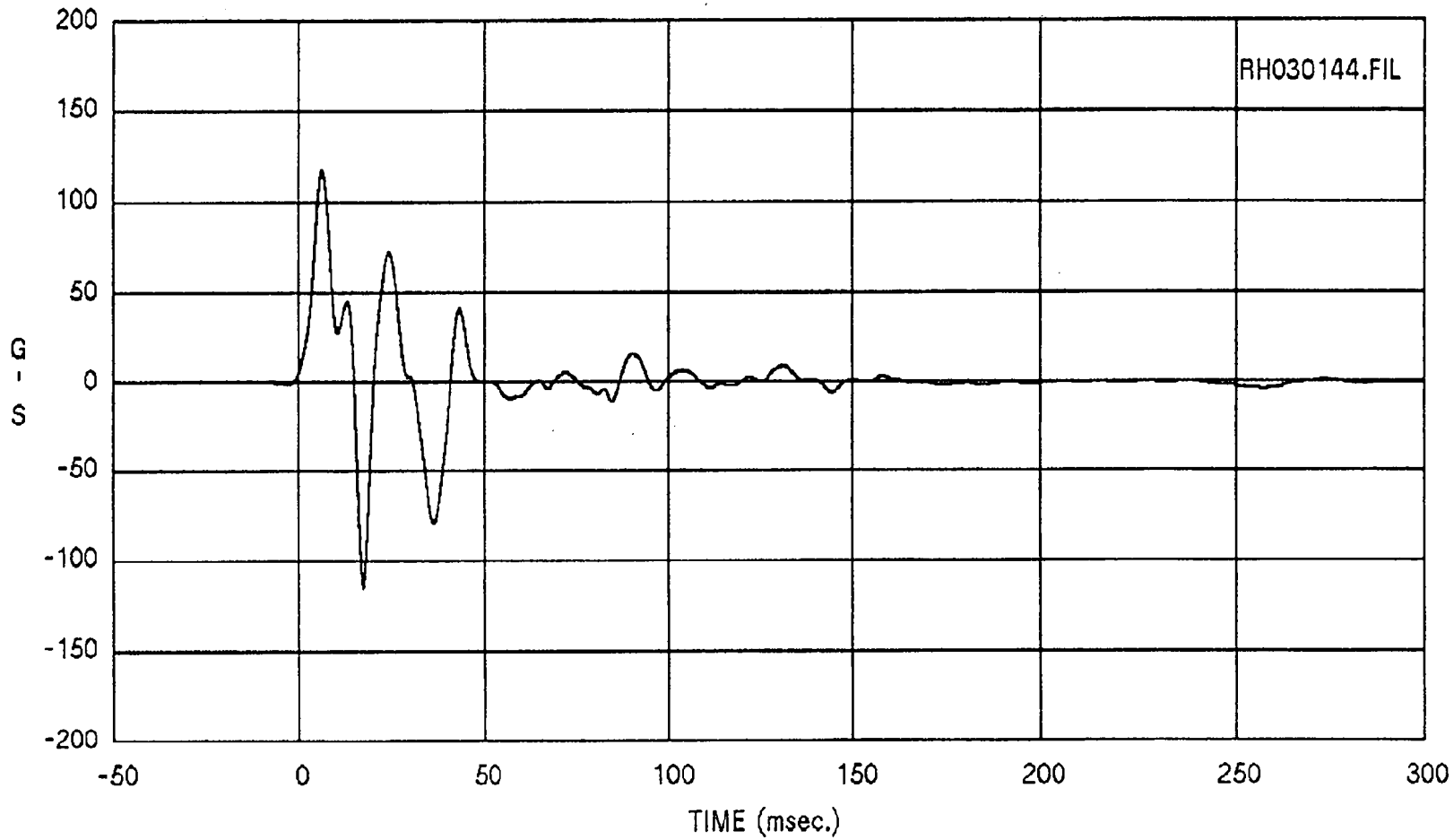
Curve: Left front door at upper centerline -- Y axis Filter: SAE CLASS 60 Max = 138.25 Min = -83.018

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



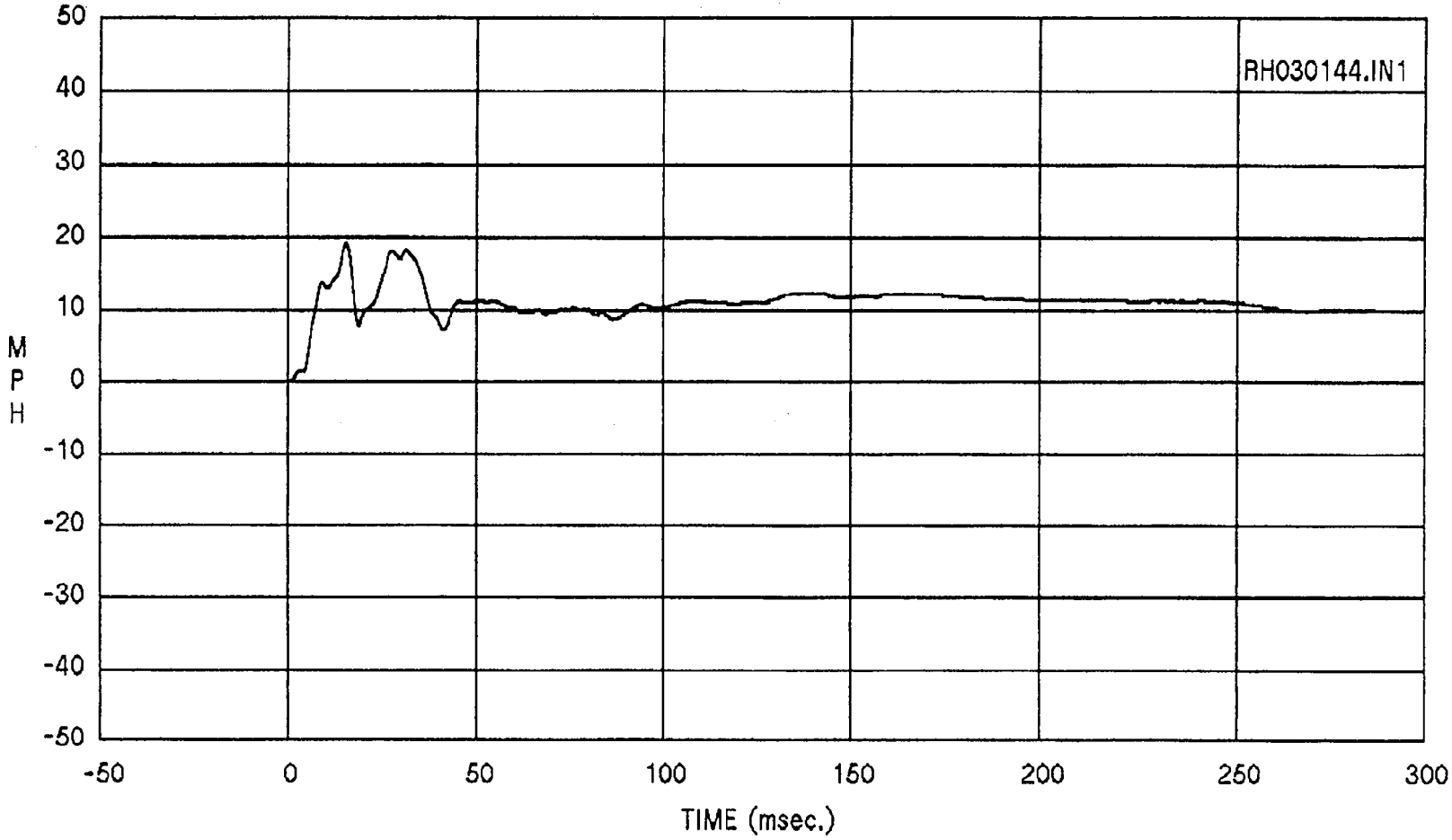
Curve: Left front door at upper centerline -- Y axis Filter: SAE CLASS 180 01 Max = 25.239 Min = -.90377

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



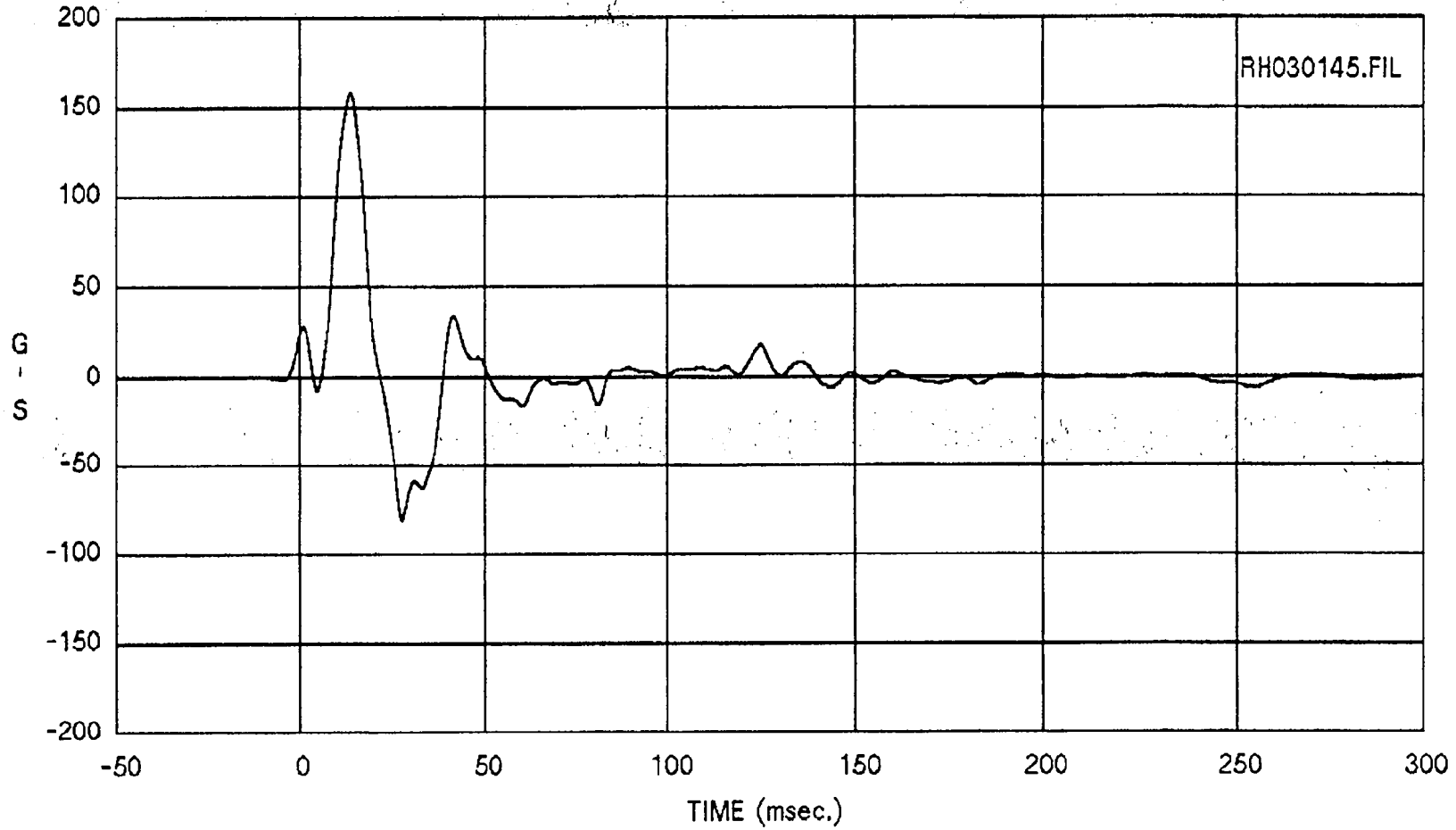
Curve: Left rear door at mid-rear -- Y axis Filter: SAE CLASS 60 Max = 118.10 Min = -114.97

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



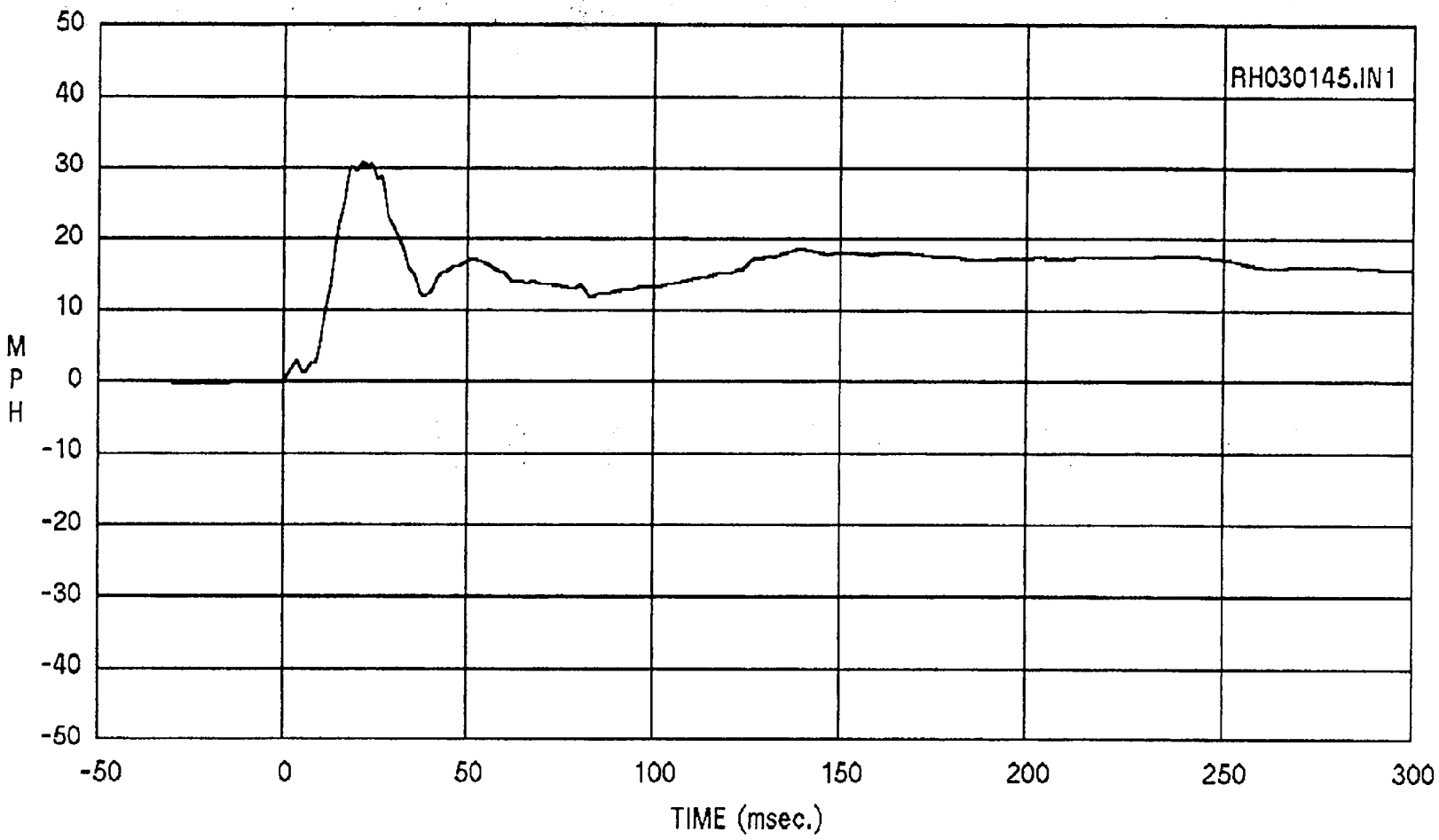
Curve: Left rear door at mid-rear -- Y axis Filter: SAE CLASS 180 Max = 19.282 Min = 1.5245

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



Curve: Left rear door at upper centerline -- Y axis Filter: SAE CLASS 60 Max = 159.05 Min = -81.256

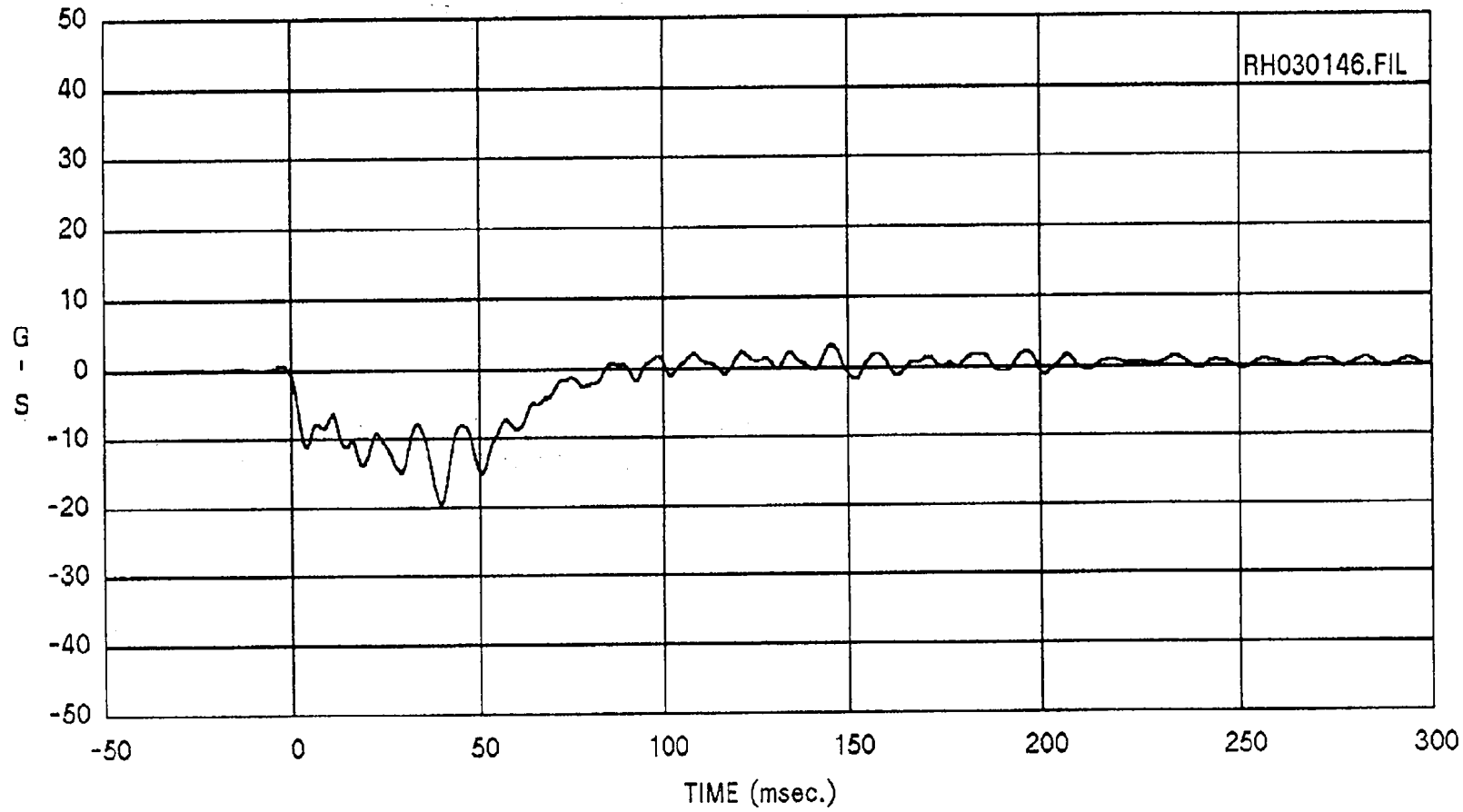
MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



Curve: Left rear door at upper centerline -- Y axis Filter: SAE CLASS 180 Max = 30.705 Min = 1.3585

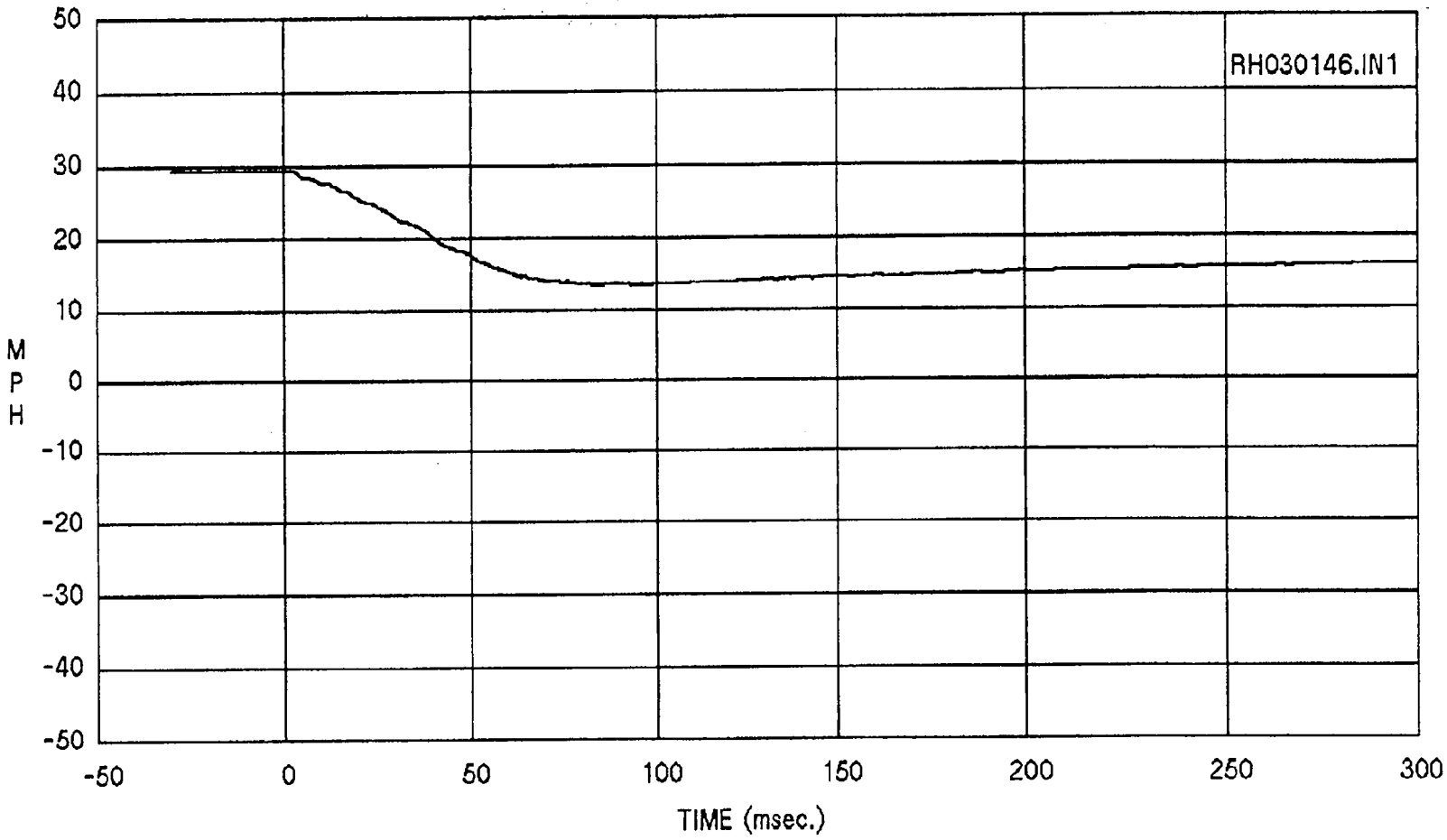
MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4

MDB ACCELEROMETER DATA



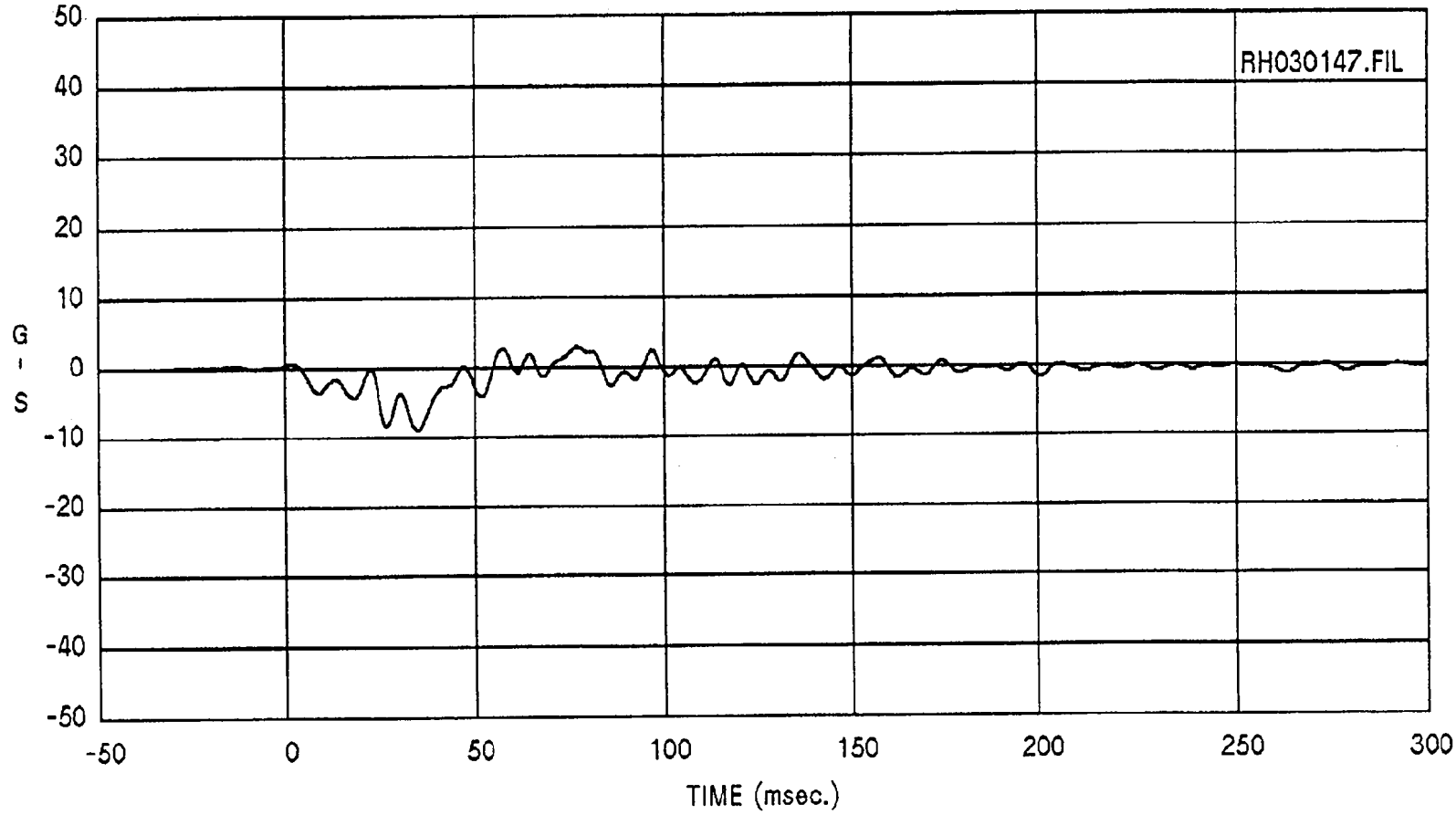
Curve: M.D.B. C/G acceleration -- X axis Filter: SAE CLASS 60 Max = 3.3017 Min = -19.573

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



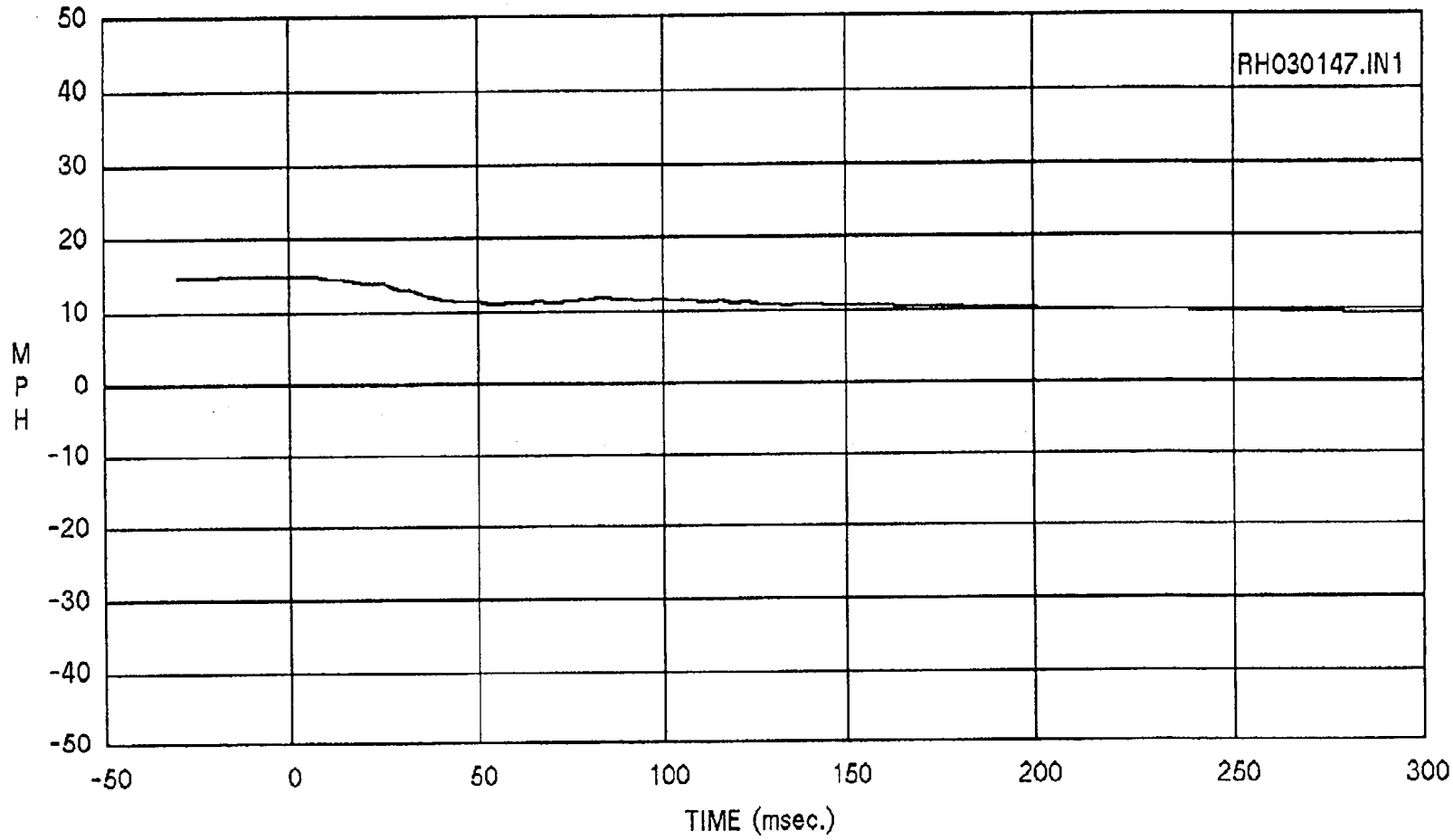
Curve: M.D.B. C/G delta V -- X axis Filter: SAE CLASS 180 Max = 29.492 Min = 13.500

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



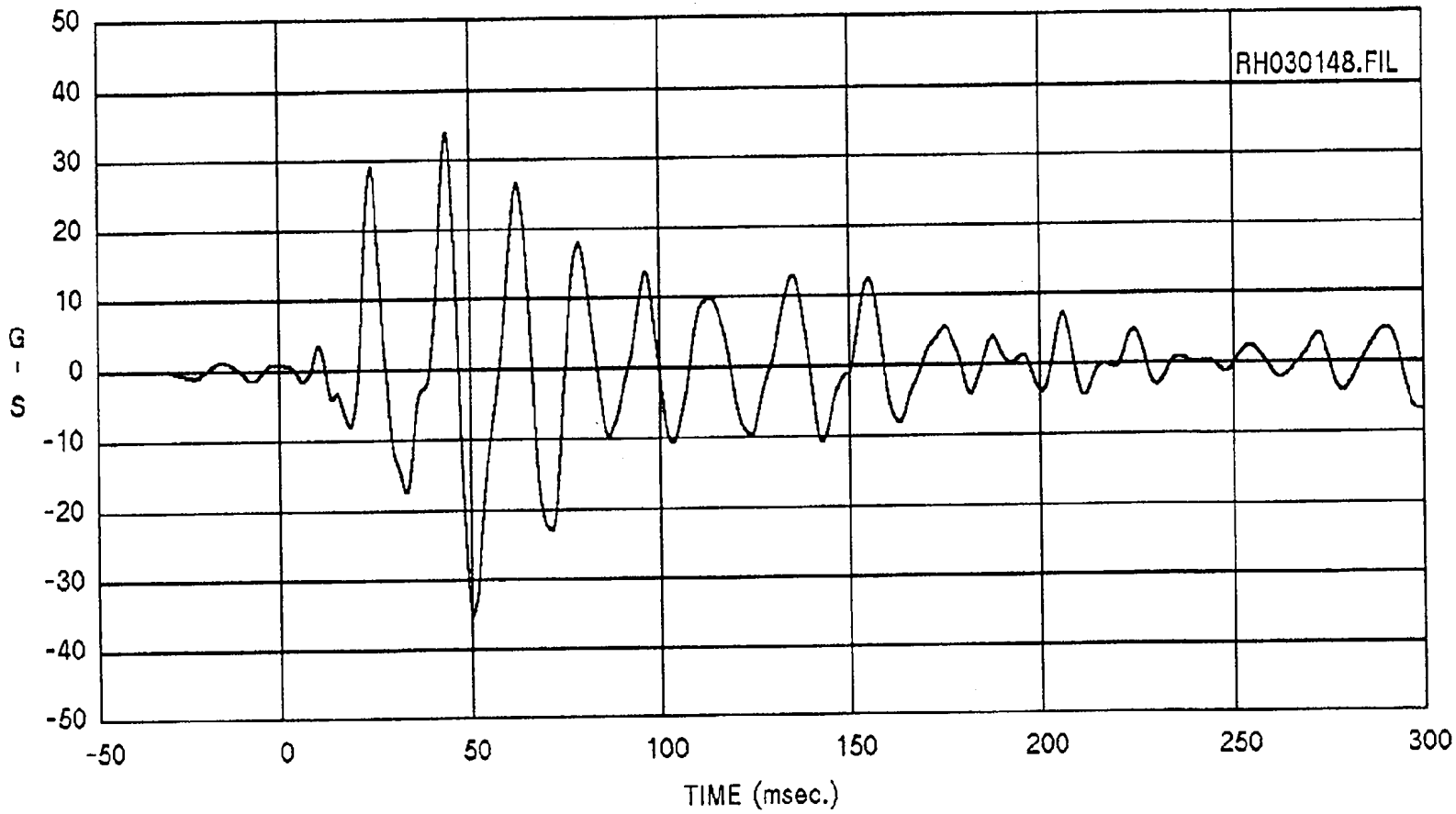
Curve: M.D.B. C/G acceleration -- Y axis Filter: SAE CLASS 60 Max = 2.8530 Min = -9.0847

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



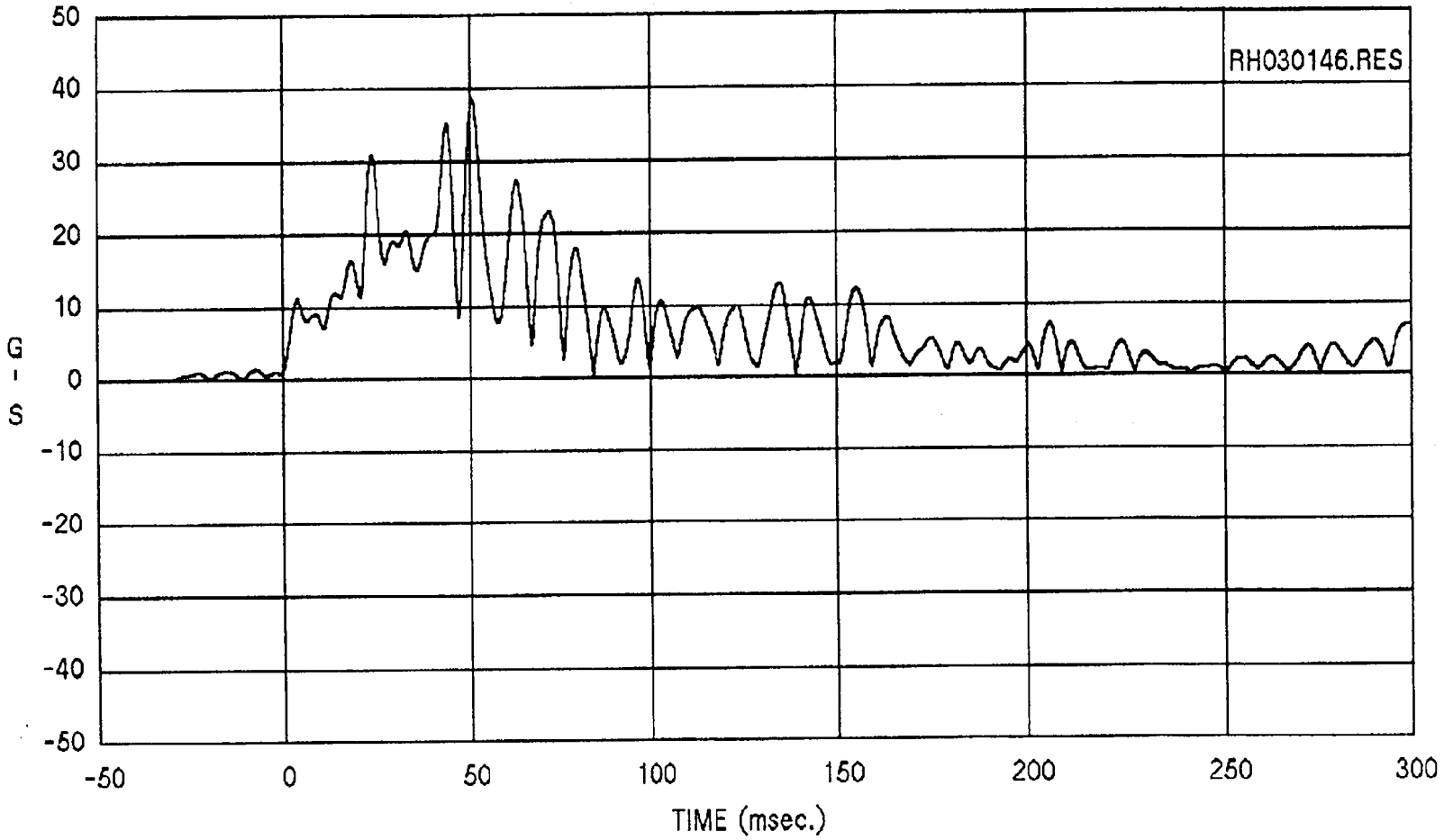
Curve: M.D.B. C/G delta V -- Y axis Filter: SAE CLASS 180 Max = 15.088 Min = 9.3487

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



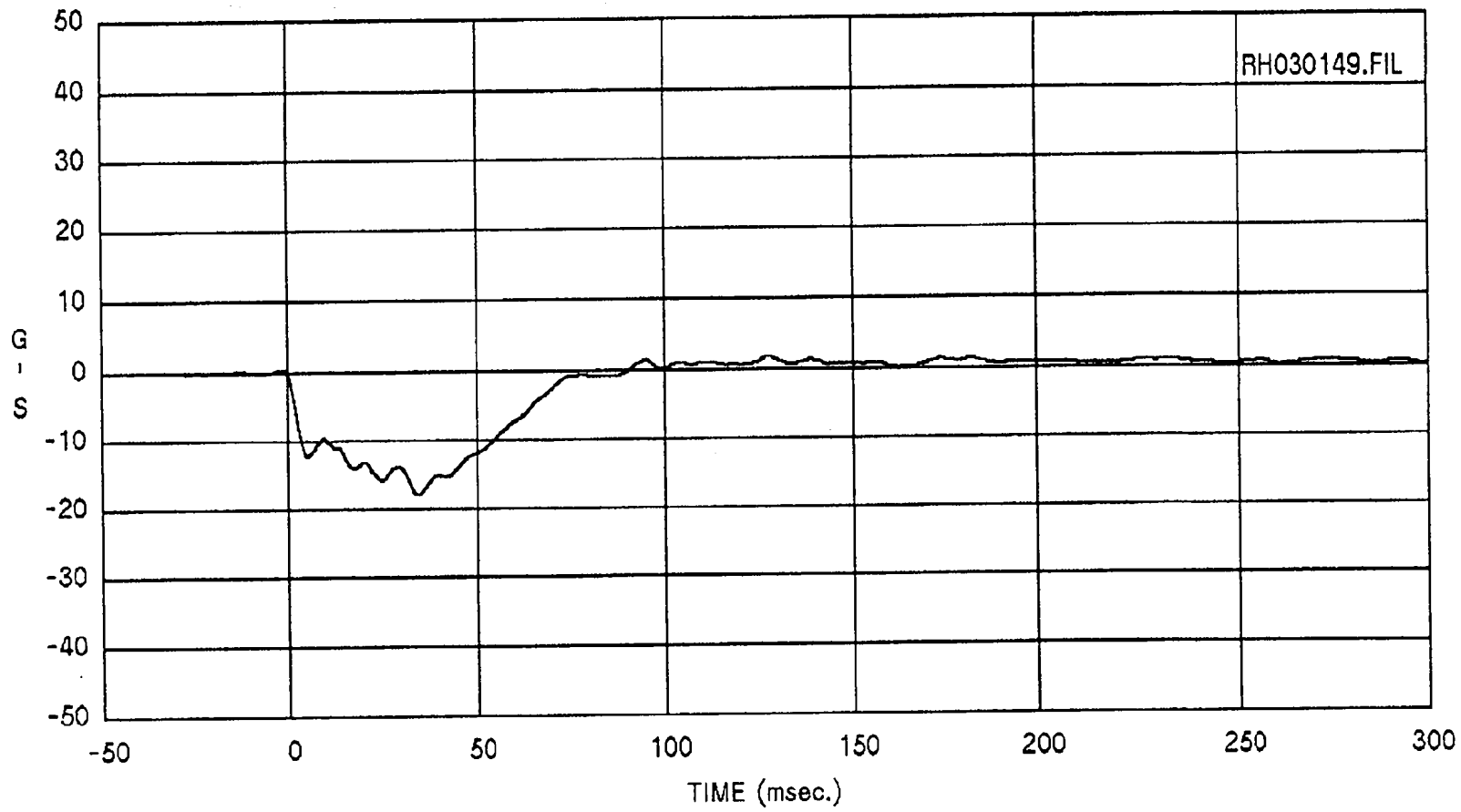
Curve: M.D.B. C/G acceleration -- Z axis Filter: SAE CLASS 60 Max = 33.958 Min = -35.329

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



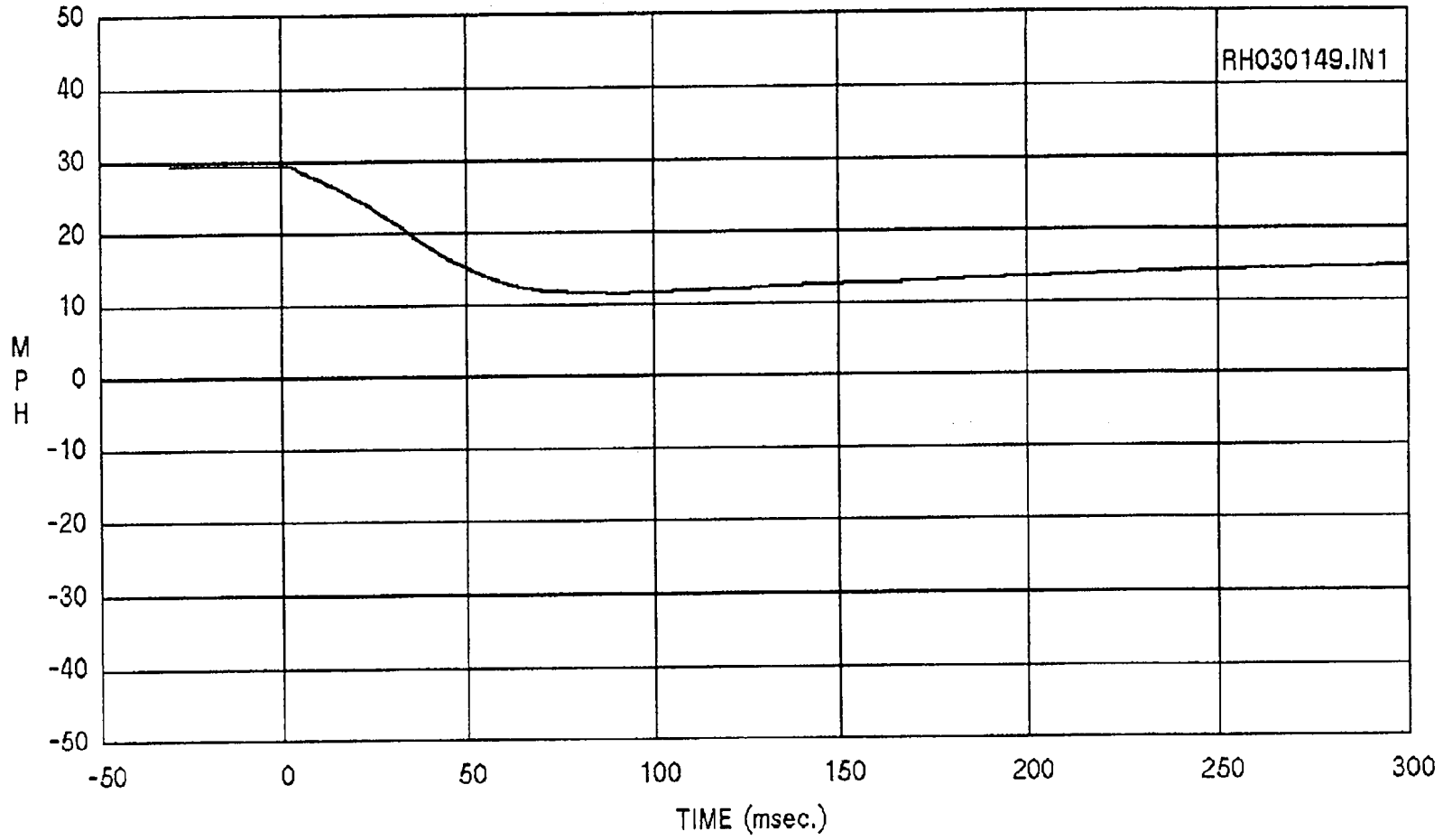
Curve: M.D.B. C/G resultant acceleration Filter: SAE CLASS 60 Max = 38.588 Min = .31975

MSE Date: 08/05/92 Program: Side Impact 30/15 90 Deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



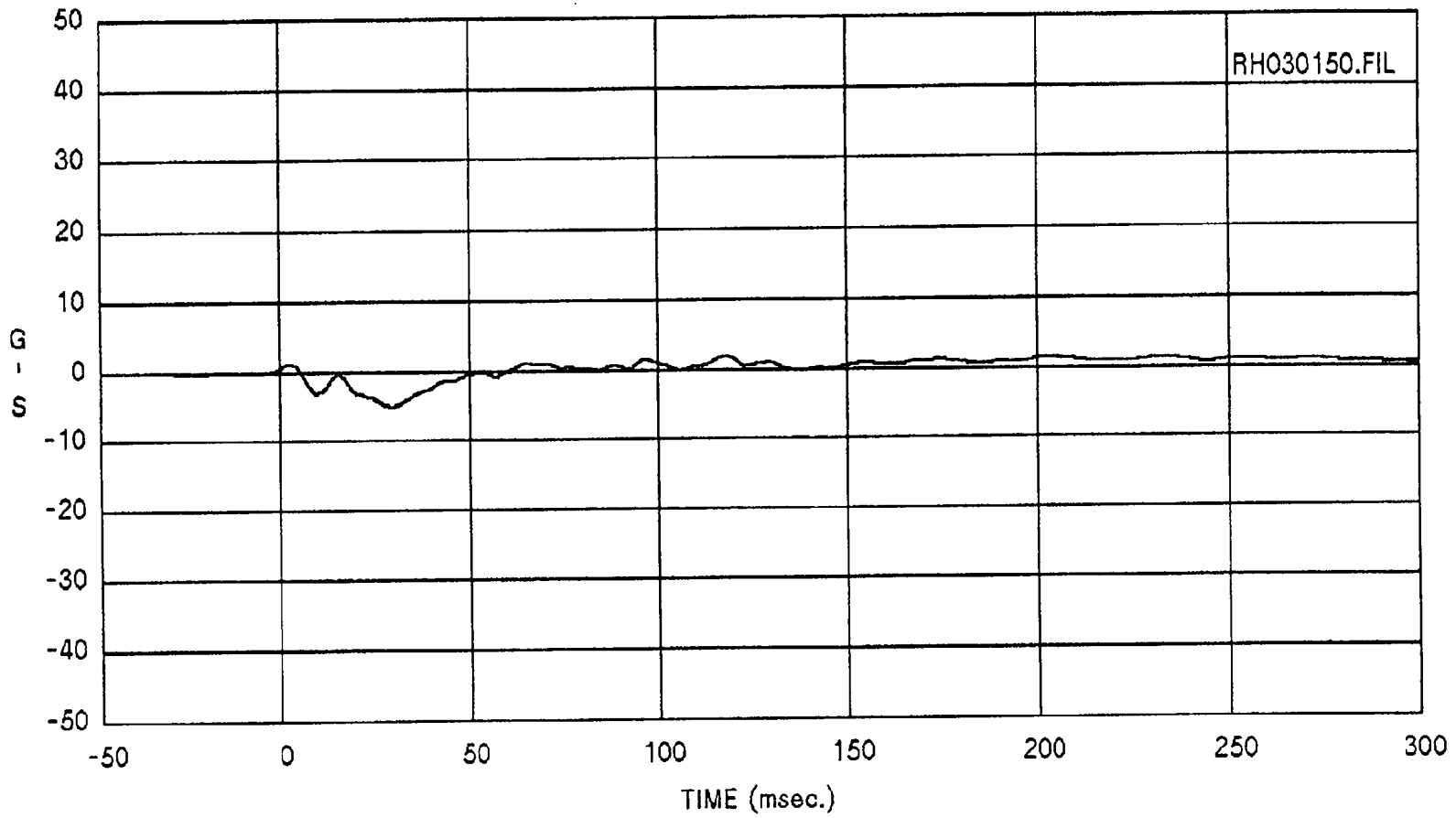
Curve: M.D.B. rear C/G acceleration -- X axis Filter: SAE CLASS 60 Max = 1.8057 Min = -17.866

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



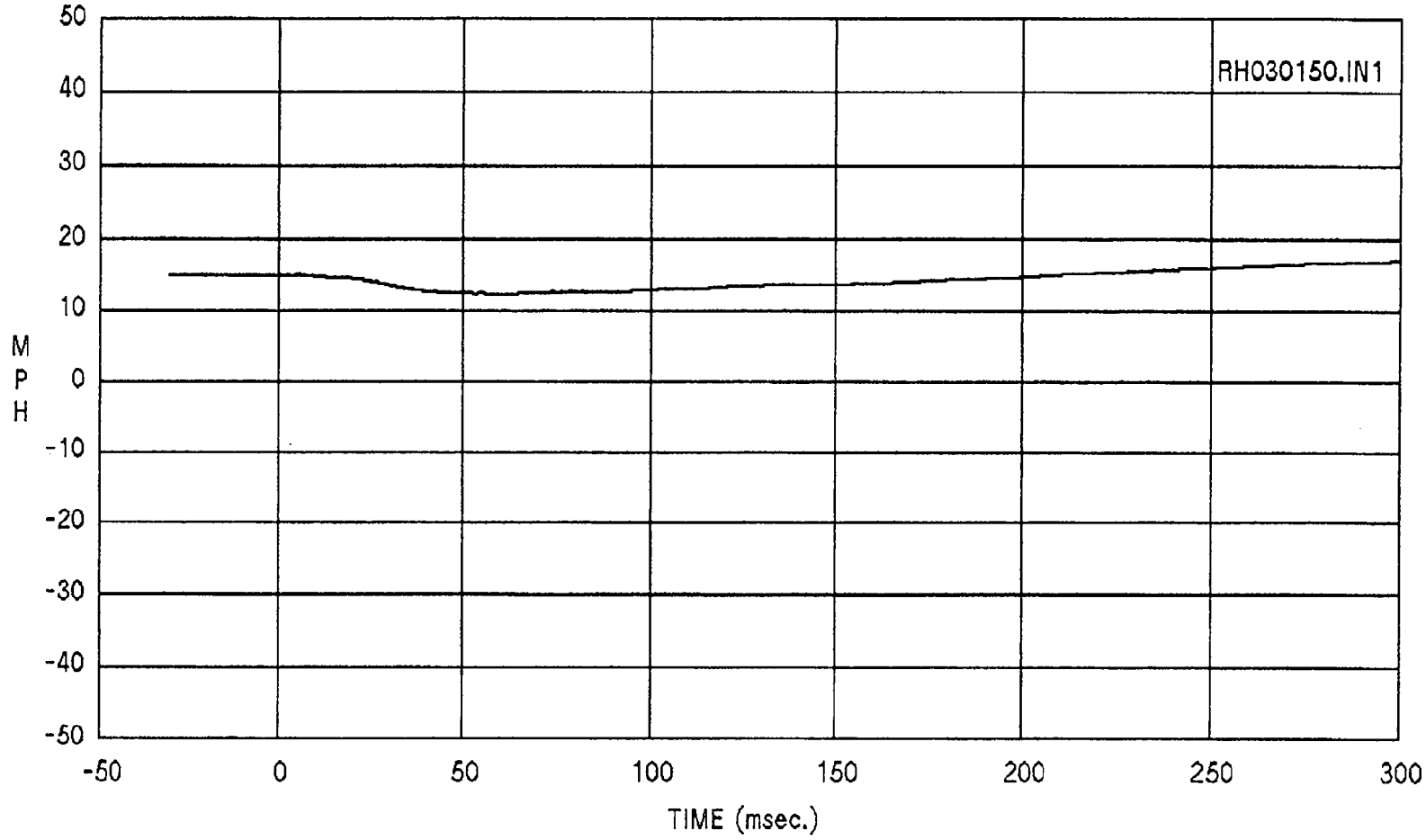
Curve: M.D.B. rear C/G delta V -- X axis Filter: SAE CLASS 180 Max = 29.494 Min = 11.531

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



Curve: M.D.B. rear C/G acceleration -- Y axis Filter: SAE CLASS 60 Max = 1.9057 Min = -5.1833

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4



Curve: M.D.B. rear C/G delta V -- Y axis Filter: SAE CLASS 180 Max = 17.042 Min = 12.444

MSE Date: 08/05/92 Program: Side Impact, 30/15, 90 deg. Vehicle:1987 Dodge Colt Vista Wagon 4x4

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)

TEST PARAMETER	SPECIFICATION	Pretest Calibration	Posttest Calibration
1. 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	
2. 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	
3. THORAX IMPACT TEST:	VEL:14.01ft/sec		
	Primary	43.8	
a. Upper Rib accel.- - -	37 - 46g's Sec	45.7	
	Primary	40.0	
b. Lower Rib accel.- - -	37 - 46g's Sec	40.8	
	Primary	21.7	
c. Lower Spine accel - -	15 -22 g's Sec	21.5	
4. PELVIC IMPACT TEST:	Vel:14.06 ft/sec		
Pelvic accel. - - - -	40 - 60g's	51.7	

SID IMPACT CALIBRATION SUMMARY SHEET

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

TEST PARAMETER	SPECIFICATION	Pretest Calibration	Posttest Calibration
1. 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	
2. 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	
3. THORAX IMPACT TEST:	VEL:14.13ft/sec		
	Primary	42.9	
a. Upper Rib accel.- - -	37 - 46g's Sec	43.5	
	Primary	39.8	
b. Lower Rib accel.- - -	37 - 46g's Sec	39.1	
	Primary	20.3	
c. Lower Spine accel - -	15 -22 g's Sec	19.9	
4. PELVIC IMPACT TEST:	Vel:13.89 ft/sec		
Pelvic accel. - - - -	40 - 60g's	44.6	