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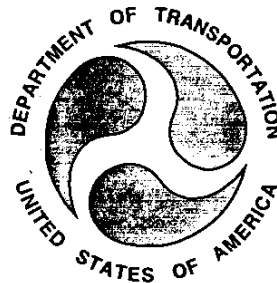
NEW CAR ASSESSMENT PROGRAM SIDE IMPACT TEST

DaimlerChrysler

2000 Chrysler LHS
4-Door Sedan

NHTSA NO: MY0301

MGA PROVING GROUNDS
5000 WARREN ROAD
BURLINGTON, WI 53105



Test Date: December 8, 1999

Report Date: December 13, 1999

FINAL REPORT

Prepared For:

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
SAFETY PERFORMANCE STANDARDS
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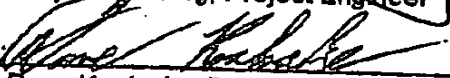
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				14. Sponsoring Agency Code NPS-10																			
15. Supplementary Notes																							
16. Abstract A 90° Moving Deformable Barrier NCAP side impact was conducted on the subject 2000 Chrysler LHS 4-Door to obtain new car assessment and research data indicant of FMVSS No. 214D performance. The test was conducted at MGA Research Corporation in Burlington, Wisconsin, on December 8, 1999. The impact velocity of the Moving Deformable Barrier (MDB) was 62 kph, and the ambient temperature at the struck side (driver's) of the target vehicle at the time of impact was 22.2°C. The target vehicle post test maximum crush was 427 mm at level 2. The test vehicle's performance follows: <table border="1"> <thead> <tr> <th></th> <th>DRIVER</th> <th>PASS.</th> </tr> </thead> <tbody> <tr> <td>Left Upper Rib (LUR) Accel., g</td> <td>54</td> <td>62</td> </tr> <tr> <td>Left Lower Rib (LLR) Accel., g</td> <td>58</td> <td>91</td> </tr> <tr> <td>Lower Spine (T₁₂) Accel., g</td> <td>70</td> <td>82</td> </tr> <tr> <td>Thoracic Trauma Index (TTI)</td> <td>64</td> <td>86</td> </tr> <tr> <td>Pelvis (PEV) Accel., g</td> <td>91</td> <td>93</td> </tr> </tbody> </table> The 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 the side impact event.							DRIVER	PASS.	Left Upper Rib (LUR) Accel., g	54	62	Left Lower Rib (LLR) Accel., g	58	91	Lower Spine (T ₁₂) Accel., g	70	82	Thoracic Trauma Index (TTI)	64	86	Pelvis (PEV) Accel., g	91	93
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17. Key Words New Car Assessment Program (NCAP) FMVSS No. 214D Side Impact Dummy (SID) Occupant Side Impact Protection				18. Distribution Statement Copies of this report are available from: National Highway Traffic Safety Adm. Technical Ref. Division, Room 5108 (NAD-52) 400 Seventh Street, S.W. Washington, D.C. 20590																			
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SECTION 1
PURPOSE AND TEST PROCEDURE

This side impact test is part of the FY00 NCAP Side Impact Program, sponsored by the National Highway Traffic Safety Administration (NHTSA), under Contract No. DTNH22-97-D-22001. The purpose of this test was to evaluate side impact protection of a 2000 Chrysler LHS 4-Door.

This side impact test was conducted in accordance with the New Car Assessment Program Side Impact Testing Procedure dated October 1996.

MGA does not endorse or certify products. The manufacturer's name appears solely for identification purposes.

SECTION 2

SUMMARY OF SIDE IMPACT TEST

A 2000 Chrysler LHS 4-Door was impacted on the left or driver's side by a Moving Deformable Barrier (MDB) which was moving forward in a 27° crabbed position to the tow road guidance system at a velocity of 38.5 mph (62.0 kph). The target vehicle was stationary and was positioned at an angle of 63° to the line of forward motion. The side impact test was conducted by MGA Research Corporation in Burlington, Wisconsin, on December 8, 1999. Pre- and post-test photographs of the test vehicle, the MDB and the side impact dummies (SIDs) are included in Appendix A.

Two Side Impact Dummies (SIDs) were placed in the driver and left rear designated seating positions according to instructions specified in the New Car Assessment Program Side Impact Laboratory Test Procedure which is dated October 1996. The side impact event was documented by nine high speed cameras. Camera locations and other pertinent camera information can be found in this report.

The SIDs were instrumented with the following accelerometers.

1. Left Upper Rib (LUR) uniaxial accelerometer (Y-direction)
2. Left Lower Rib (LLR) uniaxial accelerometer (Y-direction)
3. Lower Thoracic Spine (T₁₂) uniaxial accelerometer (Y-direction)
4. Pelvic (PEV) section uniaxial accelerometer (Y-direction)
5. Head Center of Gravity triaxial accelerometers (X, Y, and Z-direction)

Appendix B contains the vehicle and dummy response data traces. A summary of the side impact dummy (SID) configuration and performance verification test data is shown in Appendix C. Dummy and vehicle calibration data can be found in Appendix D of this report.

The following table summarizes the results of the test:

Injury Criteria	Front SID	Rear SID
TTI (g)	64	86
Pelvis (g)	91	93

SECTION 3
SIDE IMPACT DUMMY (SID) AND
VEHICLE TEST DATA

DATA SHEET NO. 1
GENERAL VEHICLE TEST PARAMETER DATA

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

Vehicle NHTSA No.: MY0301 VIN: 2C3HC56G4YH133481

Vehicle Body Color: Green Build Date: 8/99

Engine Data: 6 Cylinders; CID; 3.5 Liter; cc

Placement X Longitudinal; Lateral

Transmission: 4 Speed; Manual; X Automatic; X Overdrive

Final Drive: Rear Wheel Drive; X Frt. Wheel Drive; Four Wheel Drive

Odometer Reading 27 miles

Options: X A/C; X Pwr. Steering; X Pwr. Brakes; X Pwr. Windows;
X Cruise Control; X Tilt Wheel; X Power Door Locks;

DATA FROM TIRE PLACARD:

Tire Pressure (at capacity): 30 Psi FRONT

30 Psi REAR

Recommended Tire Size: P225/ 55R /17

Tires on Test Vehicle: P225/ 55R /17 Manufacturer: Goodyear

Vehicle Capacity Data:

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

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

Type of Front Seat Back: Fixed; X Adjustable with Lever X Power

Vehicle Maximum Capacity Loading = 392.4 kg (A)

No. of Occupants x 68.04 kg. = 340.2 kg (B)

Cargo Capacity (A-B) = 52.2 kg

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)WEIGHT OF TEST VEHICLE WITH MAXIMUM FLUIDS:

Right Front =	<u>513.5</u>	kg	Right Rear =	<u>289.4</u>	kg
Left Front =	<u>521.6</u>	kg	Left Rear =	<u>295.3</u>	kg
TOTAL FRONT =	<u>1035.1</u>	kg	TOTAL REAR =	<u>584.7</u>	kg
% of Total Weight =	<u>63.9</u>	%	% of Total Weight =	<u>36.1</u>	%
TOTAL WEIGHT =	<u>1619.8</u>	kg			

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-DoorVehicle NHTSA No.: MY0301 Test Date: December 8, 1999CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight with Maximum Fluids	=	<u>1619.8</u> kg
Cargo Carrying Capacity of Test Vehicle*	=	<u>52.2</u> kg
Weight of 2 Side Impact Dummies (2 x <u>80.7</u> kg.)	=	<u>161.4</u> kg
TEST VEHICLE TARGET WEIGHT	=	<u>1833.4</u> kg

ACTUAL WEIGHT OF TEST VEHICLE WITH 2 DUMMIES AND CARGO (Fully Loaded):

Right Front =	<u>522.1</u> kg	Right Rear =	<u>351.5</u> kg
Left Front =	<u>572.9</u> kg	Left Rear =	<u>386.9</u> kg
TOTAL FRONT =	<u>1095.0</u> kg	TOTAL REAR =	<u>738.4</u> kg
% of Total Weight =	<u>59.7</u> %	% of Total Weight =	<u>40.3</u> %
TOTAL WEIGHT =	<u>1833.4</u> kg		

TEST VEHICLE ATTITUDE:

CURB WEIGHT ATTITUDE:

Right Front 741 mm Left Front 748 mm Right Rear 766 mm Left Rear 755 mm

FULLY LOADED WEIGHT ATTITUDE:

Right Front 732 mm Left Front 732 mm Right Rear 736 mm Left Rear 718 mm

TEST ATTITUDE:

Right Front 729 mm Left Front 735 mm Right Rear 742 mm Left Rear 729 mm* light trucks and MPV's RCW is 136 kgs or manufacturer's value, whichever is less

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Test Vehicle Wheelbase: 2878 mm

C.G. = 1134 mm rearward of front wheel centerline

TOTAL VEHICLE LENGTH:

Right Side = 4260 mm

Centerline = 4262 mm

Left Side = 5184 mm

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-DoorVehicle NHTSA No.: MY0301 Test Date: December 8, 1999FRONT SEAT CUSHION PLACEMENT:Total Length of Adjustment Travel: 220 mmTest Position: 110 mm rear of full forwardFRONT SEAT BACK ADJUSTMENT POSITION:Seat Back Angle = 13SECOND POSITION SEAT:Total Length of Fore/Aft Adjustment Travel: Non-AdjustableSeat Back Adjustment Position: Non-AdjustableADJUSTABLE STEERING COLUMN POSITION: Mid - Position 3 of 5

WINDOW POSITIONS: Left Front Closed Left Rear Closed
 Right Front Open Right Rear Open

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:Fuel system usable capacity = 17.0 gallonsTest Volume: 15.9 gallons 93.5 % of capacityLOCATIONS OF IMPACT POINT ON TEST VEHICLE SIDE TO BE IMPACTED:Wheelbase: = 2878 mmImpact Point is 499 mm rearward of front axle centerline

DATA SHEET NO. 2
TEST VEHICLE SUMMARY OF RESULTS

Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999

Overall Length = 5184 mm; Overall Width = 1886 mm

TEST WEIGHT:

Right Front = 534.3 kg Right Rear = 353.8 kg

Left Front = 571.5 kg Left Rear = 365.1 kg

TOTAL FRONT = 1105.8 kg TOTAL REAR = 718.9 kg

% of Total Weight = 60.6 % % of Total Weight = 39.4 %

TOTAL WEIGHT = 1824.7 kg

Wheelbase = 2878 mm

Longitudinal C.G. from Center of Front Axle = 1134 mm

Impact Angle with Respect to Impactor = 0 ° degrees

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (215 mm above ground) = 162 mm

2. LEVEL 2 (482 mm above ground) = 427 mm

3. LEVEL 3 (570 mm above ground) = 415 mm

4. LEVEL 4 (880 mm above ground) = 305 mm

5. LEVEL 5 (1310 mm above ground) = 116 mm

Maximum Post-Test Intrusion = 427 mm

OCCUPANTS:

	<u>Driver</u>	<u>Left Rear Passenger</u>
Type of Dummy	<u>SID</u>	<u>SID</u>
Restraints Used	<u>3 pt. belt & frontal</u>	<u>3 pt. belt</u>
	<u>airbag</u>	

TEST VEHICLE SUMMARY OF RESULTS (Cont'd)INSTRUMENTATION:

Number of Vehicle Data Channels:	=	<u>25</u>
Number of Cameras:		
Onboard Vehicle	=	<u>3</u>
Offboard Vehicle	=	<u>4</u>
Deformable Barrier	=	<u>2</u>
TOTAL	=	<u>9</u>

DATA SHEET NO. 3

MOVING DEFORMABLE BARRIER (MDB) SUMMARY OF RESULTSYear/Make/Model/Body Style: 2000/Chrysler/LHS/4-DoorVehicle NHTSA No.: MY0301 Test Date: December 8, 1999POSITION OF IMPACT (MDB) ON MONORAIL:Crabbed 27° to leftMDB DETAILS:

Overall Width of Framework Carriage	=	<u>1252 mm</u>
Overall Length of MDB (incl. honeycomb impact face)	=	<u>4115 mm</u>
Wheelbase of Framework Carriage	=	<u>2591 mm</u>
Tread of Framework Carriage (Front & Rear)	=	<u>1880 mm</u>
C.G. Location Rearward of Front Axle	=	<u>1100 mm</u>
C.G. Location From Center Line	=	<u>-10 mm</u>
C.G. Location Above Ground Level	=	<u>477 mm</u>

MDB WEIGHT:

Left Front	=	<u>458.8 kg</u>	Left Rear	=	<u>230.3 kg</u>
Right Front	=	<u>324.4 kg</u>	Right Rear	=	<u>350.6 kg</u>
TOTAL FRONT	=	<u>783.2 kg</u>	TOTAL REAR	=	<u>580.9 kg</u>
TOTAL MDB WEIGHT =		<u>1364.1 kg</u>			

Impact Angle (MDB C/L to Target Vehicle C/L) = 90° degreesImpact Speed = Primary: 38.5 mph (62.0 kph) Secondary: 38.6 mph (62.1 kph)

CRASH TEST SUMMARY FOR SIDE IMPACTOR (Cont'd)MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

- | | | | |
|----|---------------------------------|---|---------------|
| 1. | Row A Top of Stack (813 mm) | = | <u>150</u> mm |
| 2. | Row B Mid Stack (686 mm) | = | <u>109</u> mm |
| 3. | Row C Top of Bumper (533 mm) | = | <u>111</u> mm |
| 4. | Row D Center of Bumper (432 mm) | = | <u>156</u> mm |

INSTRUMENTATION:

Number of MDB Data Channels = 7

DATA SHEET NO. 4

POST-TEST OBSERVATIONSYear/Make/Model/Body Style: 2000/Chrysler/LHS/4-DoorVehicle NHTSA No.: MY0301 Test Date: December 8, 1999VISIBLE DUMMY CONTACT POINTS:

	<u>LEFT FRONT SID</u>	<u>LEFT REAR SID</u>
Head	<u>Passenger Headrest</u>	<u>C-Post</u>
Arm	<u>Door Panel</u>	<u>Door Panel</u>
Pelvis	<u>Armrest</u>	<u>Armrest</u>
Left Knee	<u>Door Panel</u>	<u>Door Panel</u>
Right Knee	<u>Left Knee</u>	<u>Left Knee</u>

DOOR OPENING:

	<u>LEFT SIDE</u>	<u>RIGHT SIDE</u>
Front	<u>Remained Closed</u>	<u>Remained Closed</u>
Rear	<u>Remained Closed</u>	<u>Remained Closed</u>

MDB DISTANCE FROM TARGET IMPACT POINT:Horizontal: 21 mm forwardVertical: 16 mm upARM REST LOCATIONS:Front: 210 mm below windowRear: 281 mm below window

POST-TEST OBSERVATIONS (Cont'd)SEAT CRUSH:

Front Seat Back: 70 mm Front Seat Cushion: 71 mm
Left Rear Seat Back: 165 mm Rear Seat Cushion: 193 mm

GLAZING DAMAGE:

Windshield cracked, Left side windows broke

PILLAR PERFORMANCE:

No separation

SILL SEPARATION:

None

OTHER NOTABLE IMPACT EFFECTS:

Gas door opened

AIRBAG DEPLOYMENT STATUS:

	<u>DRIVER</u>	<u>FRONT PASSENGER</u>	<u>REAR PASSENGER</u>
Frontal	<u>No</u>	<u>No</u>	<u>NA</u>
Side	<u>NA</u>	<u>NA</u>	<u>NA</u>

SECTION 4
OCCUPANT AND VEHICLE INFORMATION

DATA SHEET NO. 5
SIDE IMPACT DUMMY (SID) INSTRUMENTATION DATA

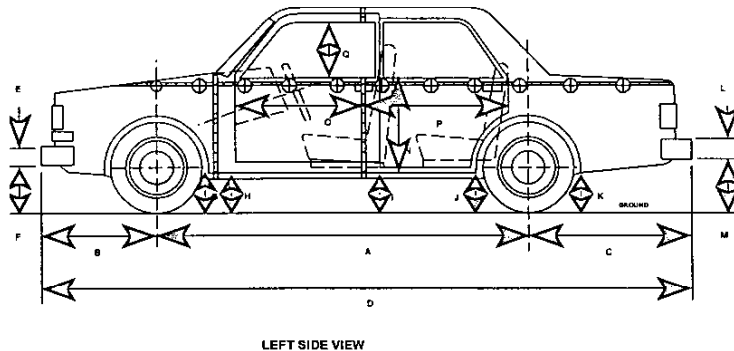
Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999

	Driver SID ID # 271				Left Passenger SID ID # 272			
	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	11.8	178	-22.1	71	11.4	64	-19.1	56
Lateral	57.4	53	-6	22	118.9	56	-19.0	66
Vertical	48.1	51	-8.0	170	29.0	47	-75.6	59
Resultant	66.7	50	----	----	129.1	56	----	----
HIC	296	----	----	----	880	----	----	----
RIB ACCELERATIONS								
Left Upper Rib (LUR) Y	54.4	42	-20.1	80	62.4	46	-5.7	104
Left Lower Rib (LLR) Y	58.0	39	-19.1	100	90.8	47	-15.3	72
SPINE ACCELERATIONS								
Lower Lateral Y	69.8	42	-21.4	104	81.6	44	-16.4	76
PELVIS ACCELERATIONS								
Lateral Y	90.6	38	-28.9	90	93.1	37	-16.5	82

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

DATA SHEET NO. 6
VEHICLE PRE AND POST-TEST MEASUREMENTS



D = Length at Centerline

R = Right Side Length

S = Left Side Length

T = Width at B Post

E & L = Bumper Thickness

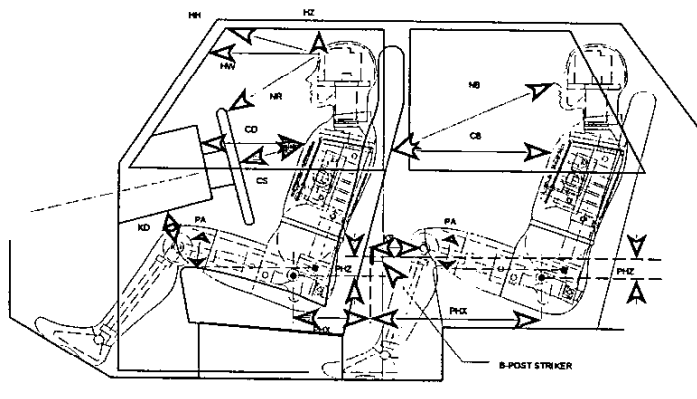
J1 = To Pinch Weld

J2 = To Sill

ALL MEASUREMENTS IN (mm)

	PRE-TEST	POST-TEST	Δ CHANGE
A	2878	2835	43
B	1076	1087	-11
C	1230	1324	-94
D	5184	5246	-62
E	95	95	0
F	407	435	-28
G	163	156	7
H	164	173	-9
I	166	191	-25
J1/J2	147/153	125/143	22/10
K	218	222	-4
L	220	220	0
M	375	387	-12
N	680	550	130
O	902	804	98
P	1162	1008	154
Q	470	447	23
R	4260	4272	-12
S	4262	4180	82
T	1886	1550	336

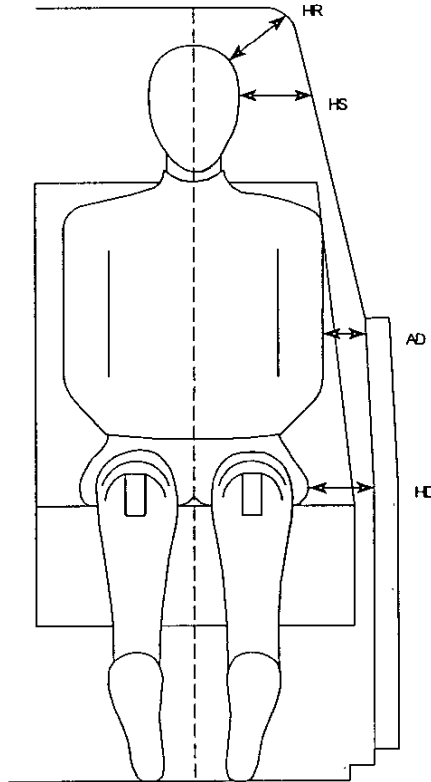
DATA SHEET NO. 7

SIDE IMPACT DUMMY (SID) LONGITUDINAL CLEARANCE DIMENSIONSYear/Make/Model/Body Style: 2000/Chrysler/LHS/4-DoorNHTSA NO.: MY0301 Test Date: December 8, 1999NOTE: All dimensions are in mm with tolerance of ± 3 mm

	DRIVER SID ID # 271		LEFT REAR PASSENGER SID ID # 272
HH	410	HZ	162
HW	691	NB	727
HZ	175	CB	662
NR	426	KBL (KBA)	323 0.0°
CD	540	KBR (KBA)	360 0.0°
CS	323	PA°	23.3°
KDL(KDA°)	146 25.9°	PHX	240
KDR(KDA°)	148 28.1°	PHZ	357
PA°	24.5°		
PHX	188		
PHZ	143		

NOTE: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as reference point.

DATA SHEET NO. 8

SIDE IMPACT DUMMY (SID) LATERAL CLEARANCE DIMENSIONSYear/Make/Model/Body Style: 2000/Chrysler/LHS/4-DoorNHTSA NO.: MY0301 Test Date: December 8, 1999

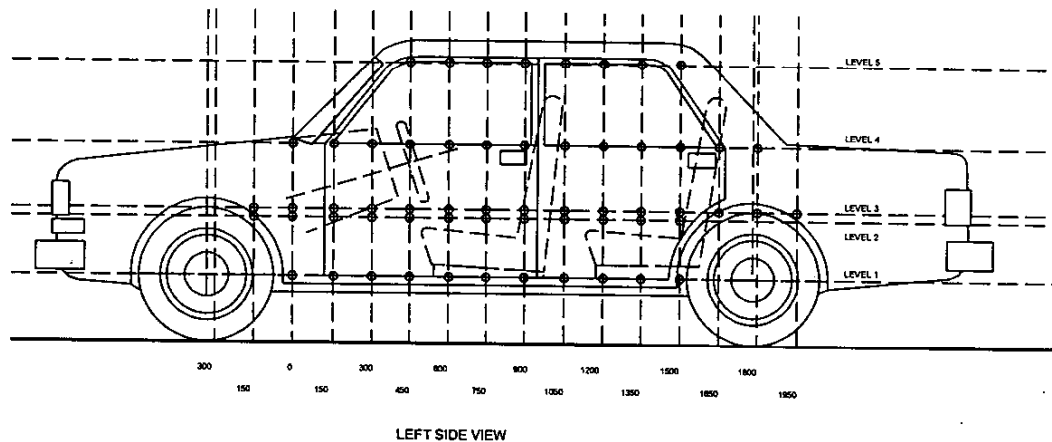
NOTE: All dimensions are in mm

	DRIVER SID ID # 271	LEFT REAR PASSENGER SID ID # 272
HR	186	175
HS	340	336
AD	119	107
HD	162	188

DATA SHEET NO. 9
VEHICLE SIDE MEASUREMENTS

Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

NHTSA NO.: MY0301 Test Date: December 8, 1999



NOTE: All measurements are in millimeters (mm)

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 ARE TAKEN WHEN THE VEHICLE IS IN THE "AS TESTED"
 CONFIGURATION

MEASUREMENTS ALONG THE VERTICAL 750 mm. LINE SHOWN ABOVE

Level 1 @ Axle Centerline Height (or Sill Top Height)	= <u>215</u> mm
Level 2 @ Occupant H-Point	= <u>482</u> mm
Level 3 @ Mid Door	= <u>570</u> mm
Level 4 @ Window Sill	= <u>880</u> mm
Level 5 @ Window Top	= <u>1310</u> mm

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

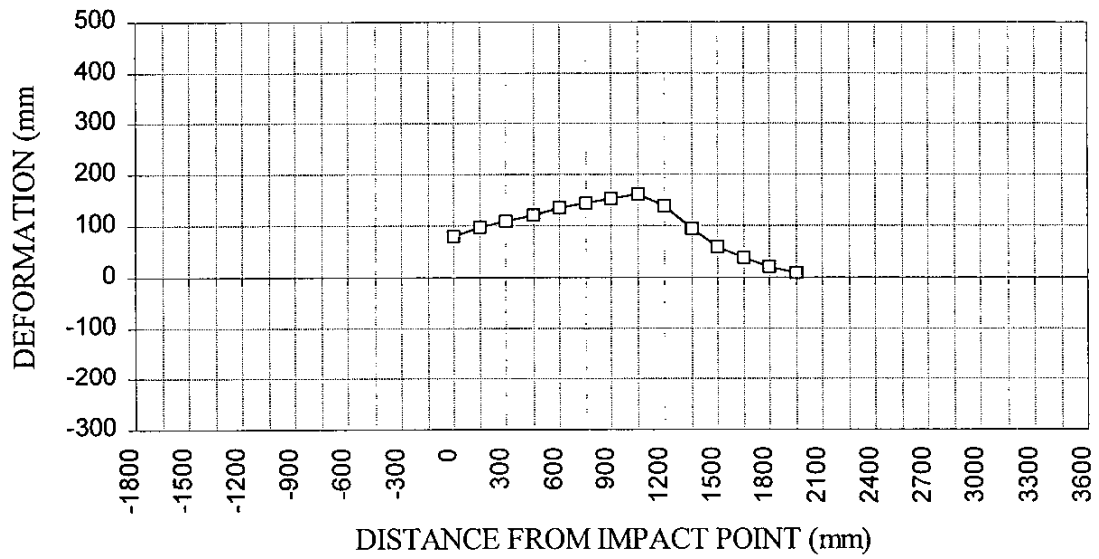
Longitudinal Distance (mm)	Level 1 - Axle Centerline		
	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1800			
-1650			
-1500			
-1350			
-1200			
-1050			
-900			
-750			
-600			
-450			
-300			
-150			
0 (impact point)	673	753	80
150	672	769	97
300	671	780	109
450	670	792	122
600	669	805	136
750	669	813	144
900	670	824	154
1050	673	835	162
1200	674	812	138
1350	676	771	95
1500	676	736	60
1650	675	714	39
1800	675	697	22

Reference plane is parallel to test vehicle longitudinal centerline.
Given dimensions = Reference plane to car body

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

Longitudinal Distance (mm)	Level 1 - Axle Centerline		
	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
1950	677	687	10
2100			
2250			
2400			
2550			
2700			
2850			
3000			
3150			
3300			
3450			
3600			

Reference plane is parallel to test vehicle longitudinal centerline.
Given dimensions = Reference plane to car body

VEHICLE EXTERIOR STATIC CRUSH

LEVEL 1 - AXLE CENTERLINE

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

Longitudinal Distance (mm)	Level 2 - Occupant H-Point		
	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1800			
-1650			
-1500			
-1350			
-1200			
-1050			
-900			
-750			
-600			
-450			
-300			
-150			
0 (impact point)	622	750	128
150	620	887	267
300	614	943	329
450	612	970	358
600	610	993	383
750	608	1003	395
900	607	1013	406
1050	606	1002	396
1200	607	1007	400
1350	607	1027	420
1500	607	1034	427
1650	609	1027	418
1800	610	988	378

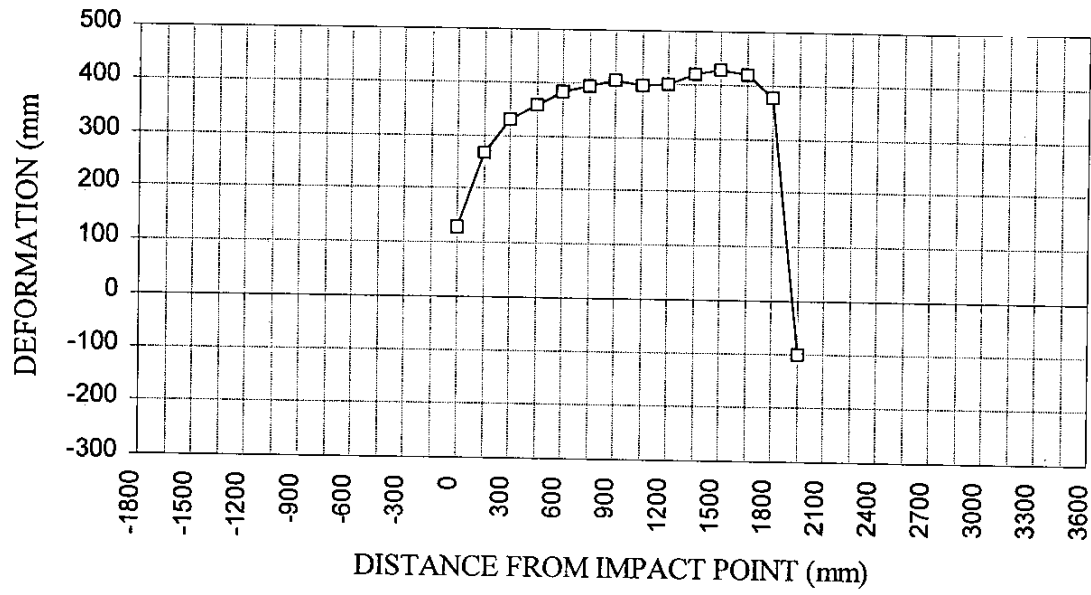
Reference plane is parallel to test vehicle longitudinal centerline.
Given dimensions = Reference plane to car body

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

Longitudinal Distance (mm)	Level 2 - Occupant H-Point		
	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
1950	612	512	-100
2100			
2250			
2400			
2550			
2700			
2850			
3000			
3150			
3300			
3450			
3600			

Reference plane is parallel to test vehicle longitudinal centerline.
Given dimensions = Reference plane to car body

VEHICLE EXTERIOR STATIC CRUSH



LEVEL 2 - OCCUPANT H-POINT

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

Longitudinal Distance (mm)	Level 3 - Mid-Door		
	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1800			
-1650			
-1500			
-1350			
-1200			
-1050	677	692	15
-900	647	669	22
-750			
-600			
-450			
-300			
-150			
0 (impact point)	623	756	133
150	616	869	253
300	615	907	292
450	613	932	319
600	610	954	344
750	608	967	359
900	607	981	374
1050	606	986	380
1200	608	989	381
1350	609	1011	402
1500	611	1026	415
1650	612	1007	395
1800	613	999	386

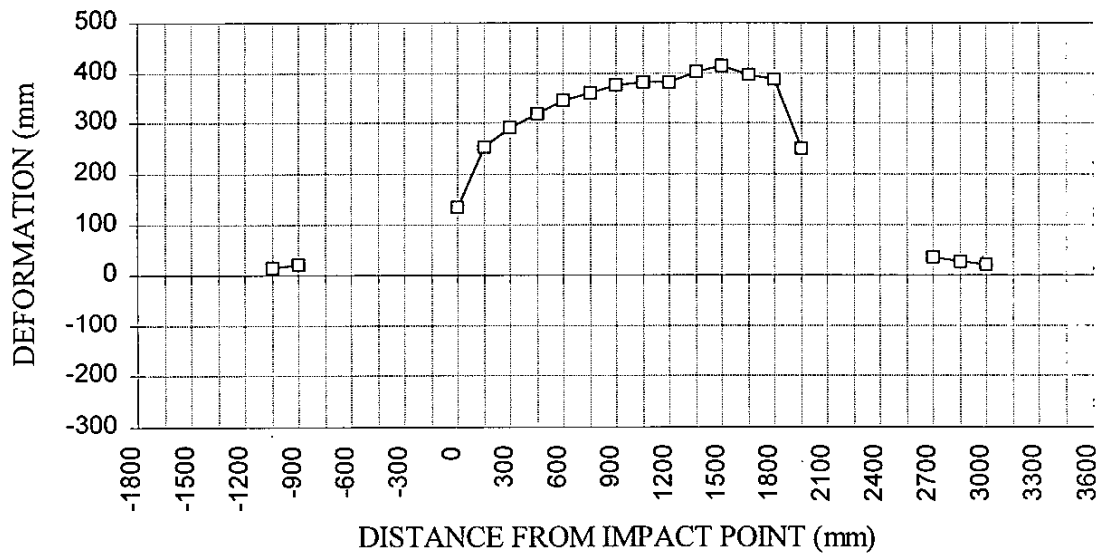
Reference plane is parallel to test vehicle longitudinal centerline.
Given dimensions = Reference plane to car body

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

Longitudinal Distance (mm)	Level 3 - Mid-Door		
	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
1950	615	865	250
2100			
2250			
2400			
2550			
2700	641	677	36
2850	665	693	28
3000	693	713	20
3150			
3300			
3450			
3600			

Reference plane is parallel to test vehicle longitudinal centerline.
 Given dimensions = Reference plane to car body

VEHICLE EXTERIOR STATIC CRUSH



LEVEL 3 - MID-DOOR

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

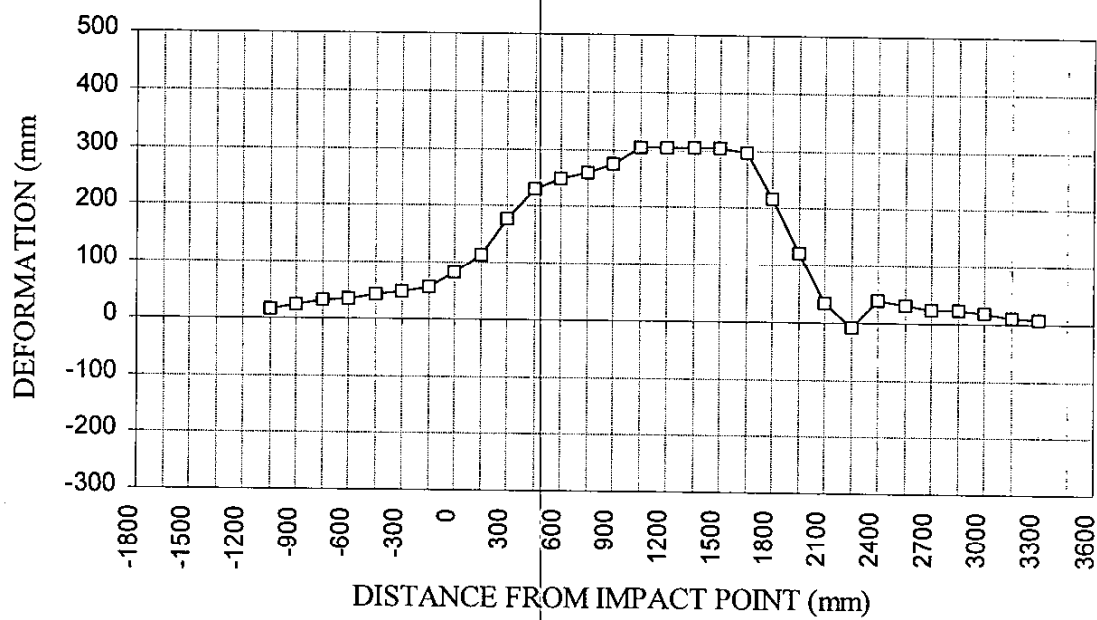
Longitudinal Distance (mm)	Level 4 - Window Sill		
	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1800			
-1650			
-1500			
-1350			
-1200			
-1050	768	783	15
-900	737	761	24
-750	712	743	31
-600	694	727	33
-450	681	723	42
-300	674	721	47
-150	670	724	54
0 (impact point)	669	750	81
150	673	785	112
300	670	847	177
450	670	899	229
600	670	919	249
750	668	928	260
900	665	940	275
1050	664	967	303
1200	663	967	304
1350	662	966	304
1500	662	967	305
1650	663	959	296
1800	663	879	216

Reference plane is parallel to test vehicle longitudinal centerline.
Given dimensions = Reference plane to car body

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

Longitudinal Distance (mm)	Level 4 - Window Sill		
	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
1950	663	784	121
2100	665	700	35
2250	671	663	-8
2400	678	718	40
2550	690	720	30
2700	705	729	24
2850	725	747	22
3000	750	767	17
3150	782	792	10
3300	828	834	6
3450			
3600			

Reference plane is parallel to test vehicle longitudinal centerline.
 Given dimensions = Reference plane to car body

VEHICLE EXTERIOR STATIC CRUSH

LEVEL 4 - WINDOW SILL

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

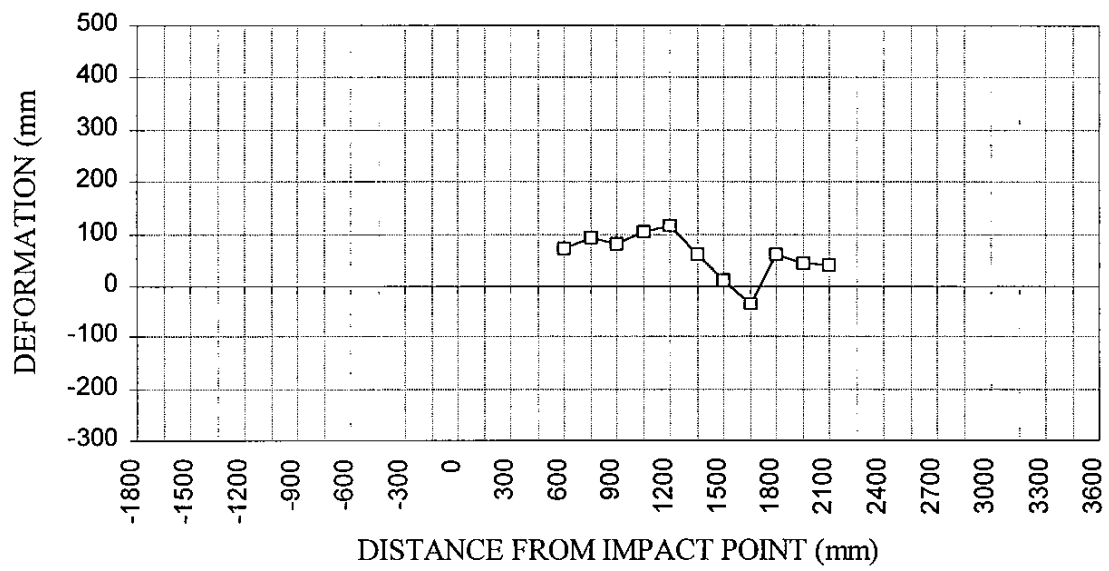
	Level 5 - Window Top		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1800			
-1650			
-1500			
-1350			
-1200			
-1050			
-900			
-750			
-600			
-450			
-300			
-150			
0 (impact point)			
150			
300			
450			
600	957	1029	72
750	946	1038	92
900	939	1021	82
1050	942	1046	104
1200	946	1062	116
1350	950	1011	61
1500	950	962	12
1650	946	910	-36
1800	949	1009	60

Reference plane is parallel to test vehicle longitudinal centerline.
Given dimensions = Reference plane to car body

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

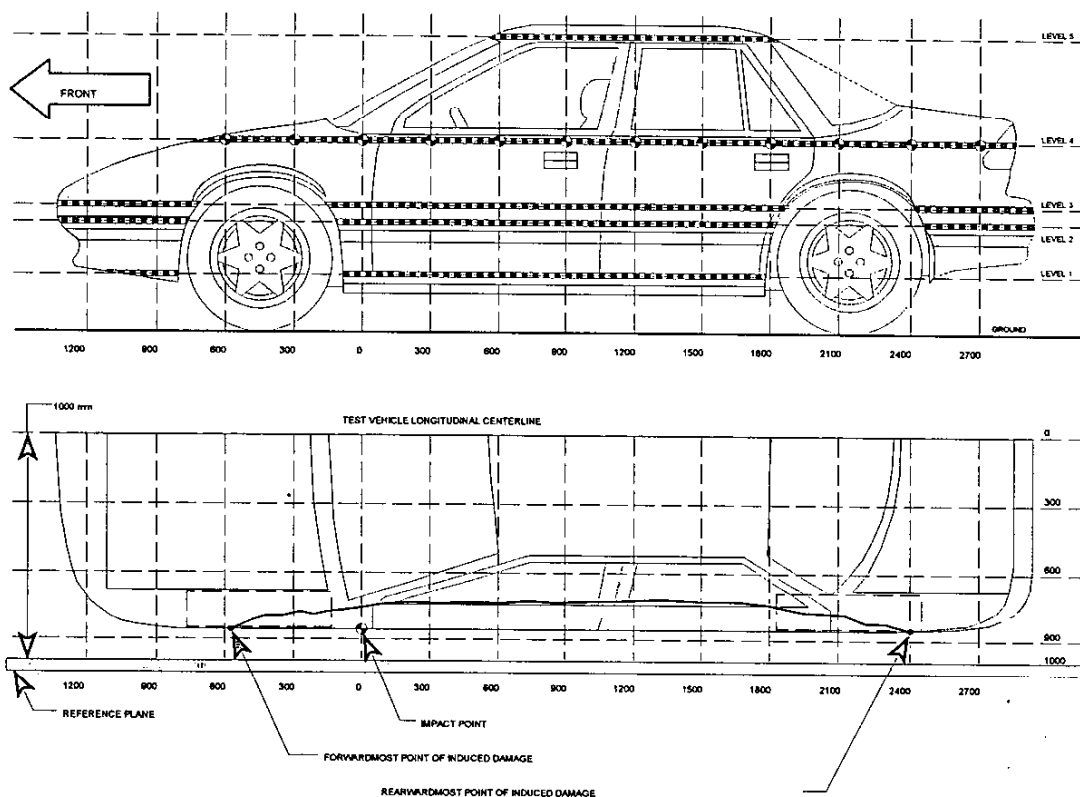
	Level 5 - Window Top		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
1950	960	1004	44
2100	972	1013	41
2250			
2400			
2550			
2700			
2850			
3000			
3150			
3300			
3450			
3600			

Reference plane is parallel to test vehicle longitudinal centerline.
 Given dimensions = Reference plane to car body

VEHICLE EXTERIOR STATIC CRUSH

LEVEL 5 - WINDOW TOP

DATA SHEET NO. 11

VEHICLE DAMAGE PROFILE DISTANCESYear/Make/Model/Body Style: 2000/Chrysler/LHS/4-DoorNHTSA NO.: MY0301 Test Date: December 8, 1999

NOTE: All measurements are in millimeters (mm)

DPD MEASUREMENTS	POST-TEST (mm)	PRE-TEST (mm)	STATIC CRUSH (mm)
1. (LR = <u>3300</u> mm)	834	828	6
2. <u>2448</u> mm	717	679	38
3. <u>1500</u> mm	1034	607	427
4. <u>667</u> mm	998	610	388
5. <u>-197</u> mm	723	671	52
6. (LF = <u>-1050</u> mm)	783	768	15

DATA SHEET NO. 12
EXTERIOR STATIC CRUSH FOR SIDE IMPACTOR

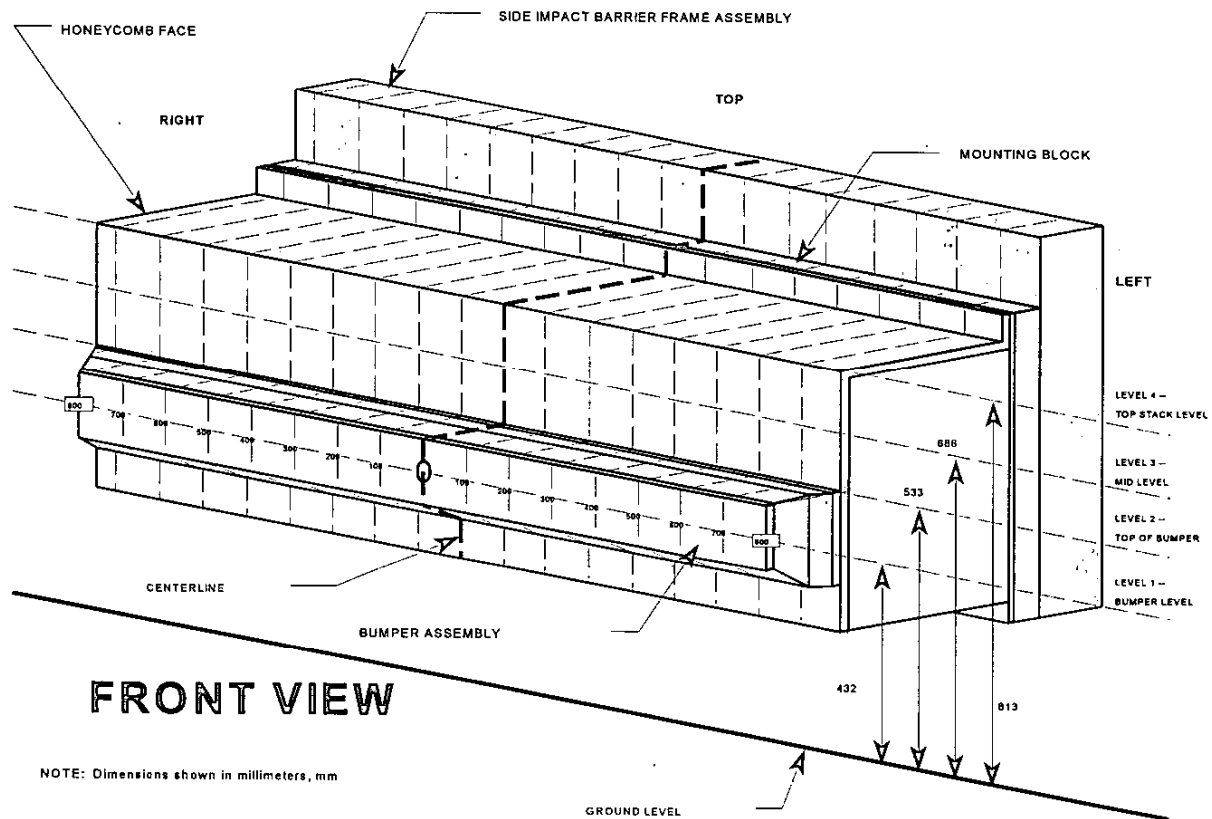
Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999

Location	Height at CL	Distance Right of Center (mm)									Distance Left of Center (mm)							
		800	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	800
Top Stack Level 4	813 mm	90	33	4	-1	-1	1	3	7	8	8	9	12	17	29	66	104	150
Mid Level Level 3	686 mm	78	36	18	11	8	10	16	21	14	8	10	12	14	16	31	61	109
Top Bumper Level 2	533 mm	35	29	25	25	31	40	45	44	35	34	29	38	42	51	63	82	111
Mid Bumper Level 1	432 mm	68	56	53	52	71	101	111	97	85	77	76	78	84	90	103	128	156

See next page for Barrier Face Graphic

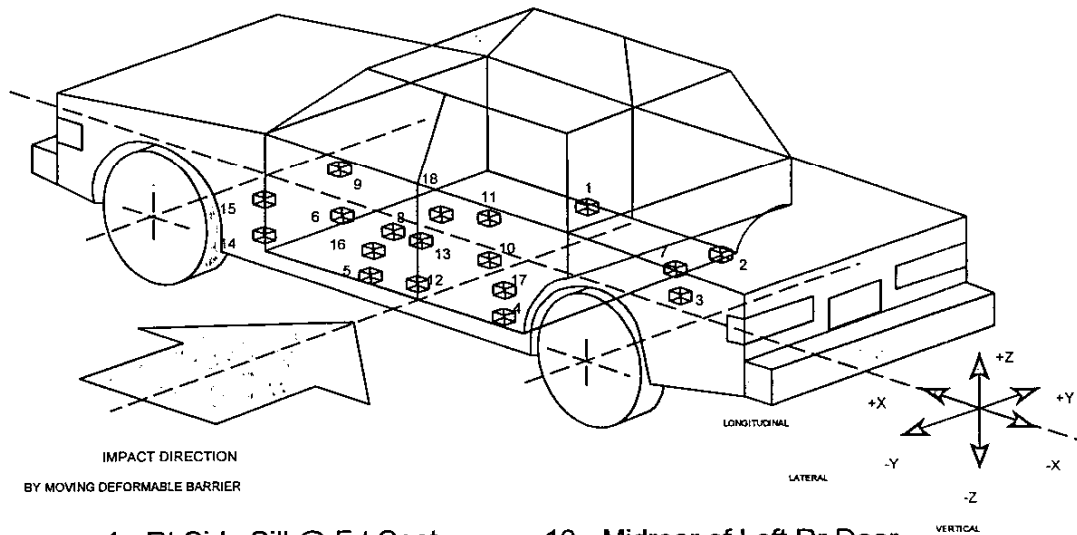
DATA SHEET NO. 12 (Cont'd)



DATA SHEET 13
TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999



- 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 Up C/Line

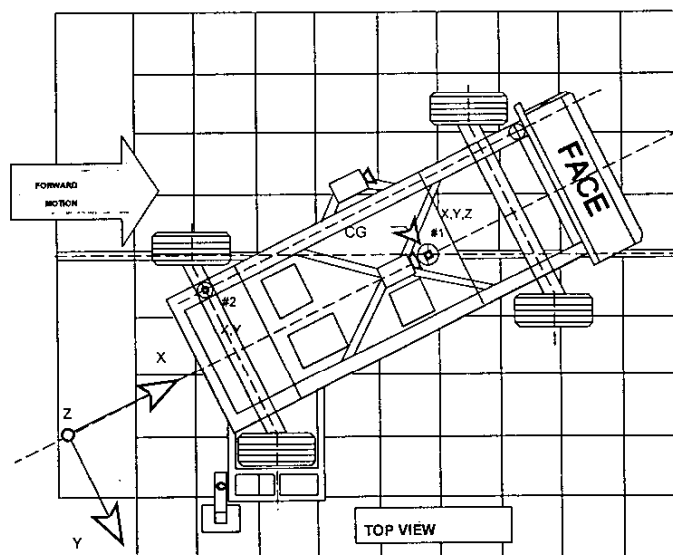
- 10 - Midrear of Left Rr Door
- 11 - Left Rr Door Up C/Line
- 12 - Left Lwr B-Post
- 13 - Left Middle B-Post
- 14 - Left Lwr A-Post
- 15 - Left Middle A-Post
- 16 - Frt Seat Track
- 17 - Rr Seat Track
- 18 - Vehicle C.G.

DATA SHEET NO. 13
TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY
 Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door
 Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999

Accel. No.	Description	Coordinates (mm)*			Long. (X) Maximums (g's)		Lat. (Y) Maximums (g's)		Vert. (Z) Maximums (g's)		Resultant (g's)
		X	Y	Z	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	
1	Rt. Side Sill @ Front Seat	2883	769	220	3.8	-3.5	19.7	-2.6	6.5	-5.3	19.8
2	Rt. Side Sill @ Rear Seat	2024	771	225	3.8	-3.9	19.5	-2.9	5.5	-5.2	19.8
3	Rr. Floorpan Above Axle	1315	0	510	2.4	-6.6	19.3	-3.1	6.3	-4.0	19.6
4	Left Side Sill @ Rr. Seat	1994	-771	226	---	---	23.0	-3.7	---	---	---
5	Left Side Sill @ Frt. Seat	2904	-769	215	---	---	77.6	-11.5	---	---	---
6	Left Front Door Centerline	3115	-800	608	---	---	244.5	-48.6	---	---	---
7	Right Rear Occupant Compartment	2212	400	341	---	---	17.4	-2.5	---	---	---
8	Mid Rear of Left Front Door	2705	-805	664	---	---	169.4	**	---	---	---
9	Left Front Door Upper Centerline	3097	-804	867	---	---	163.3	-90.9	---	---	---
10	Left Rear Door Mid Rear	1778	-800	683	---	---	106.5	-54.4	---	---	---
11	Left Rear Door Upper Centerline	2092	-795	879	---	---	190.1	-63.5	---	---	---
12	Left Lower B-Post	2525	-720	353	---	---	75.6	-35.4	---	---	---
13	Left Mid B-Post	2485	-740	839	---	---	106.7	-28.7	---	---	---
14	Left Lower A-Post	3542	-715	420	---	---	64.9	-42.6	---	---	---
15	Left Mid A-Post	3658	-800	948	---	---	14.7	-3.4	---	---	---
16	Driver Left Seat Track	2775	-560	300	---	---	57.4	-35.2	---	---	---
18	Vehicle CG	2975	0	365	4.2	-7.3	21.8	-3.2	9.5	-10.3	24.2

*Reference: X - Rear Bumper (+ Forward) Y - Vehicle Centerline (+ To right) Z - Ground Level (+ Up)
 ** Not valid after 29 msec

DATA SHEET NO. 14

MOVING DEFORMABLE BARRIER (MDB) ACCELEROMETER LOCATIONS AND DATA SUMMARYYear/Make/Model/Body Style: 2000/Chrysler/LHS/4-DoorVehicle NHTSA No.: MY0301 Test Date: December 8, 1999

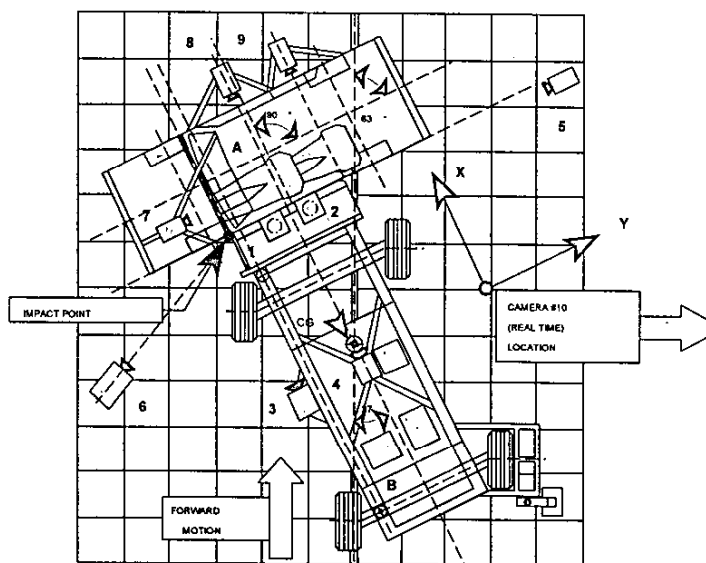
Accel. No.	Description	Coordinates (mm)*			(+) Positive		(-) Negative	
		X	Y	Z	Max. (g)	Time (msec)	Max. (g)	Time (msec)
1	MDB Center of Gravity	-1092	0	483				
	Longitudinal (X)	---	---	---	1.9	127	-17.2	43
	Lateral (Y)	---	---	---	.9	139	-9.4	39
	Vertical (Z)	---	---	---	32.3	36	-22.9	22
	Resultant (R)	---	---	---	37.3	36	--	--
2	Rear Frame Member	-2501	-625	622				
	Longitudinal (X)	---	---	---	2.3	145	-22.6	38
	Lateral (Y)	---	---	---	3.8	28	-1.4	192

*Reference: X - Front Axle (+ Forward)
 Y - Vehicle Centerline (+ To right)
 Z - Ground Level (+ Up)

DATA SHEET NO. 15
HIGH SPEED CAMERA LOCATIONS AND DATA

Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999



Camera No.	View	Coordinates (mm)*			Lens (mm)	Film Speed (fps)
		X	Y	Z		
	Real Time					
1	Top Overall	-90	1200	5000	8	1042
2	Top Impact	-70	60	5000	13	1005
3	Cart Pointer				35	1010
4	Cart Overall				13	889
5	Right Impact	-4060	4240	1370	50	847
6	Left Impact	-1730	-2410	1850	13	917
7	Onboard Hood				13	1015
8	Onboard Driver				8	990
9	Onboard Rear Passenger				8	1000

* Reference: (from point of impact)

+X = Forward

+Y = To Right

+Z = Upward

DATA SHEET 16
FUEL SYSTEM INTEGRITY POST IMPACT TEST DATA

Vehicle Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999

TEST REQUIREMENTS:

Drain the test vehicle's fuel system and operate the engine until the fuel system is dry. Add Stoddard solvent, which has been dyed purple, until 92-94% of the stated usable capacity is reached. Operate the engine to assure the Stoddard solvent is present throughout the entire fuel system.

TEST VEHICLE IMPACT TYPE: X Side Impact MDB 38.5 mph (62.0 kph)

FUEL SPILLAGE MEASUREMENT:

POST IMPACT TEST	TEST RESULTS	MAXIMUM ALLOWABLE
1. From impact until vehicle motion ceases	0 oz.	1 oz
2. For 5 minute period after vehicle motion ceases	0 oz.	5 oz
3. For next 25 minutes	0 oz.	1 oz./1 min

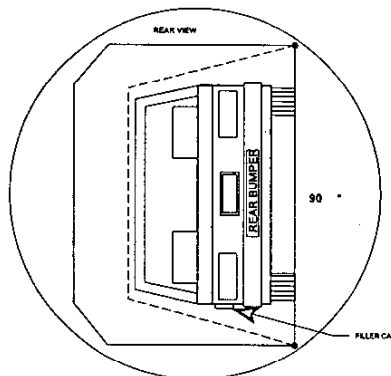
FUEL SPILLAGE LOCATION(S): None

DATA SHEET 16
FMVSS 301 STATIC ROLLOVER TEST DATA

Vehicle Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999

TEST PHASE: 0° - 90°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 44 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 44 seconds

Next Whole Minute Interval = 8 minutes

FUEL SPILLAGE MEASUREMENT:

0° TO 90° ROTATION (FILLER CAP DOWN)	TEST RESULTS	MAXIMUM ALLOWABLE
1. First 5 Minutes From Onset of Rotation	0 oz.	5 oz
2. Sixth Minute From Onset of Rotation	0 oz.	1 oz
3. Seventh Minute From Onset of Rotation	0 oz.	1 oz
4. Eighth Minute if Required	0 oz.	1 oz

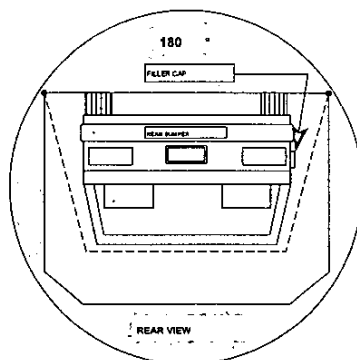
FUEL SPILLAGE LOCATIONS(S): None

DATA SHEET 16
FMVSS 301 STATIC ROLLOVER TEST DATA (Cont'd)

Vehicle Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999

TEST PHASE: 90° - 180°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 14 seconds
(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 14 seconds

Next Whole Minute Interval = 8 minutes

FUEL SPILLAGE MEASUREMENT:

90° TO 180° ROTATION	TEST RESULTS	MAXIMUM ALLOWABLE
1. First 5 Minutes From Onset of Rotation	0 oz.	5 oz
2. Sixth Minute From Onset of Rotation	0 oz.	1 oz
3. Seventh Minute From Onset of Rotation	0 oz.	1 oz
4. Eighth Minute if Required	0 oz.	1 oz

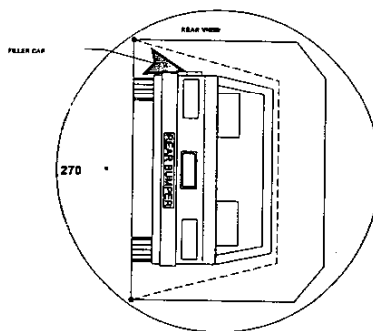
FUEL SPILLAGE LOCATIONS(S): None

DATA SHEET 16
FMVSS 301 STATIC ROLLOVER TEST DATA (Cont'd)

Vehicle Year/Make/Model/Body Style: 2000/ChryslerLHS4-Door

Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999

TEST PHASE: 180° - 270°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 25 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 25 seconds

Next Whole Minute Interval = 8 minutes

FUEL SPILLAGE MEASUREMENT:

180° TO 270° ROTATION	TEST RESULTS	MAXIMUM ALLOWABLE
1. First 5 Minutes From Onset of Rotation	0 oz.	5 oz
2. Sixth Minute From Onset of Rotation	0 oz.	1 oz
3. Seventh Minute From Onset of Rotation	0 oz.	1 oz
4. Eighth Minute if Required	0 oz.	1 oz

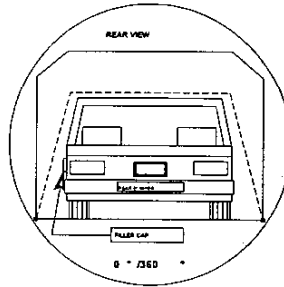
FUEL SPILLAGE LOCATIONS(S): None

DATA SHEET 16
FMVSS 301 STATIC ROLLOVER TEST DATA

Vehicle Year/Make/Model/Body Style: 2000/Chrysler/LHS/4-Door

Vehicle NHTSA No.: MY0301 Test Date: December 8, 1999

TEST PHASE: 270° - 360°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 51 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 51 seconds

Next Whole Minute Interval = 8 minutes

FUEL SPILLAGE MEASUREMENT:

270° TO 360° ROTATION	TEST RESULTS	MAXIMUM ALLOWABLE
1. First 5 Minutes From Onset of Rotation	0 oz.	5 oz
2. Sixth Minute From Onset of Rotation	0 oz.	1 oz
3. Seventh Minute From Onset of Rotation	0 oz.	1 oz
4. Eighth Minute if Required	0 oz.	1 oz

FUEL SPILLAGE LOCATIONS(S): None

APPENDIX A - PHOTOGRAPHS

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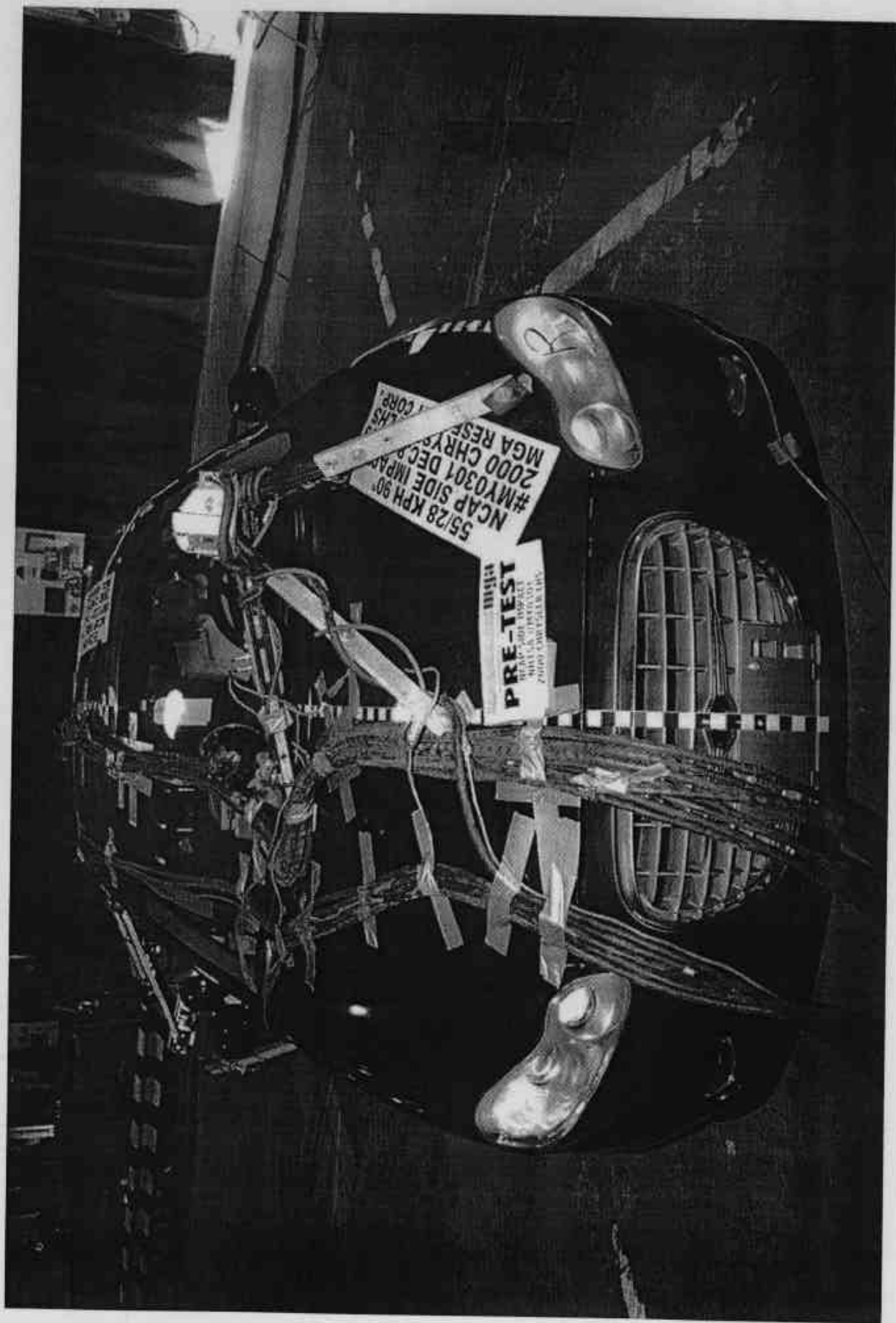


Photo No. A-1 - Pre-Test Front View of Test Vehicle

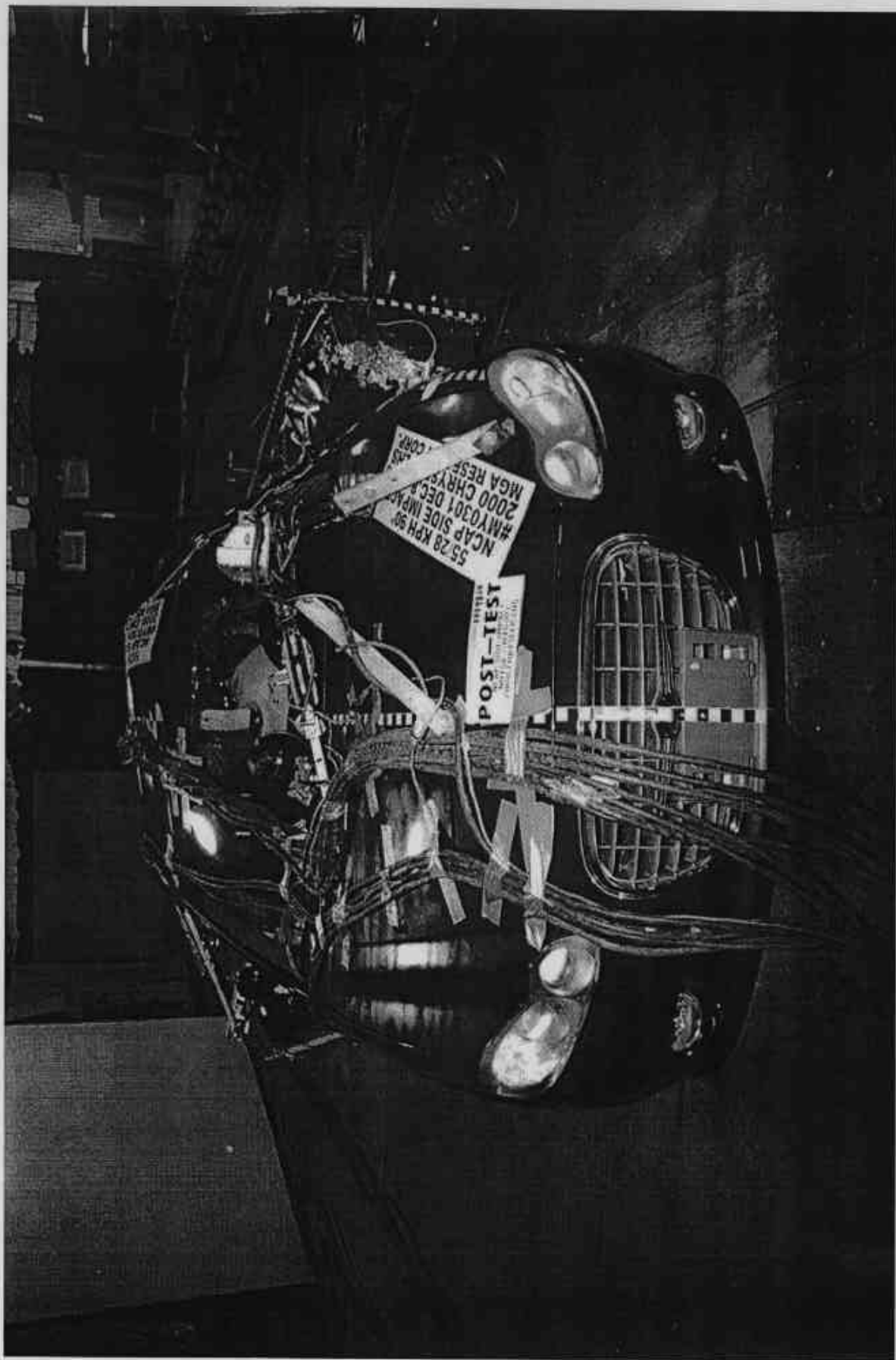


Photo No. A-2 - Post-Test Front View of Test Vehicle

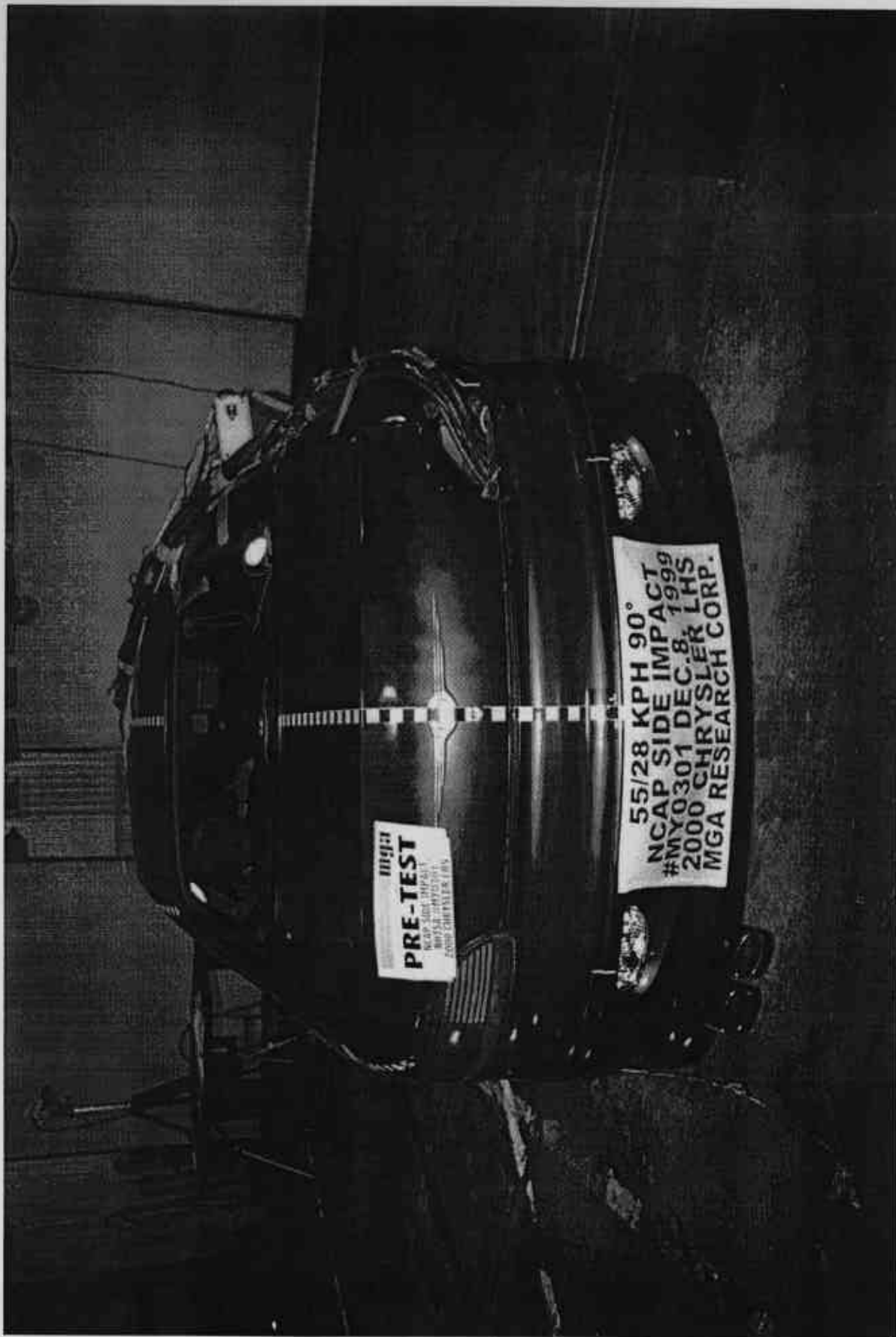


Photo No. A-3 - Pre-Test Rear View of Test Vehicle

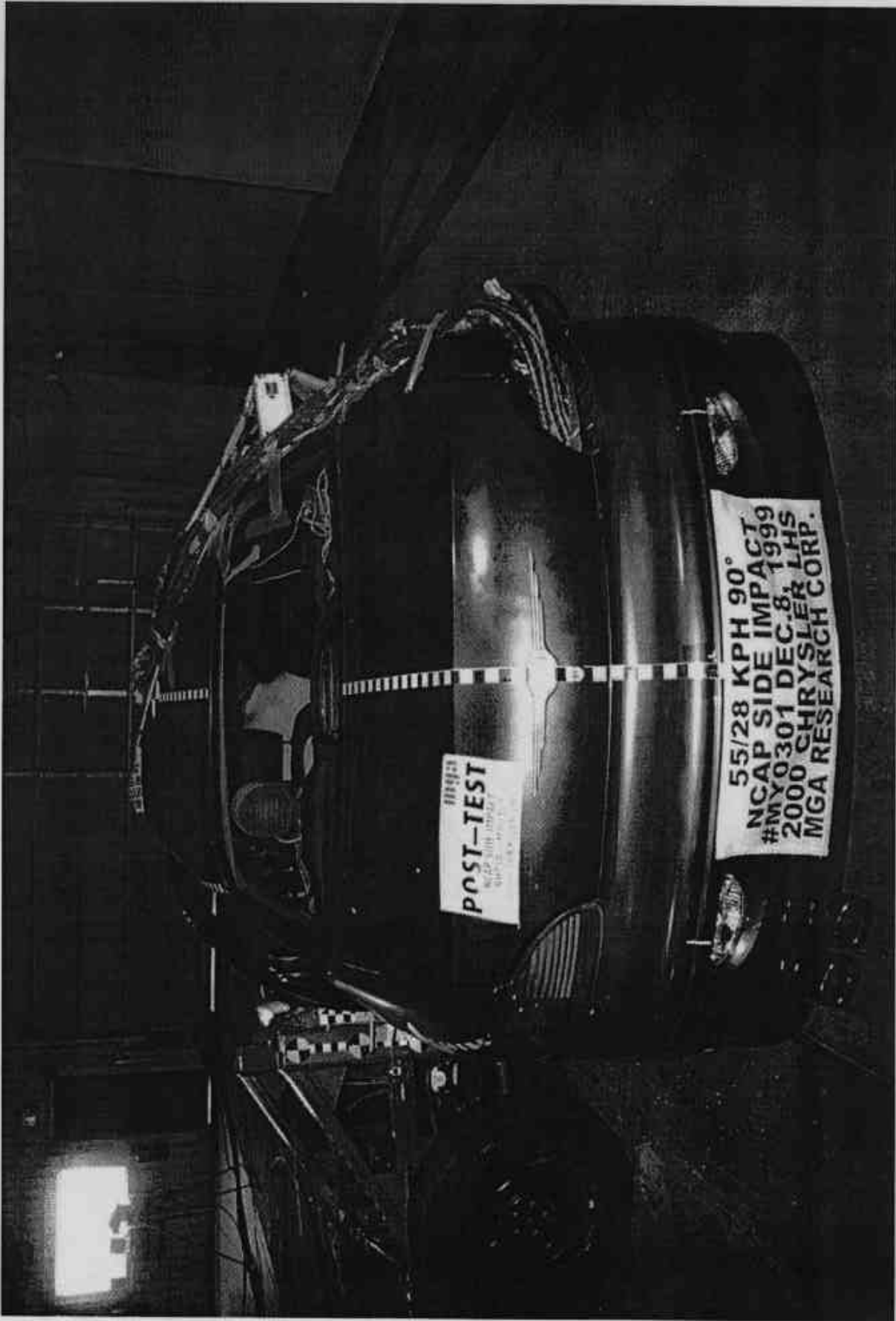


Photo No. A-4 - Post-Test Rear View of Test Vehicle

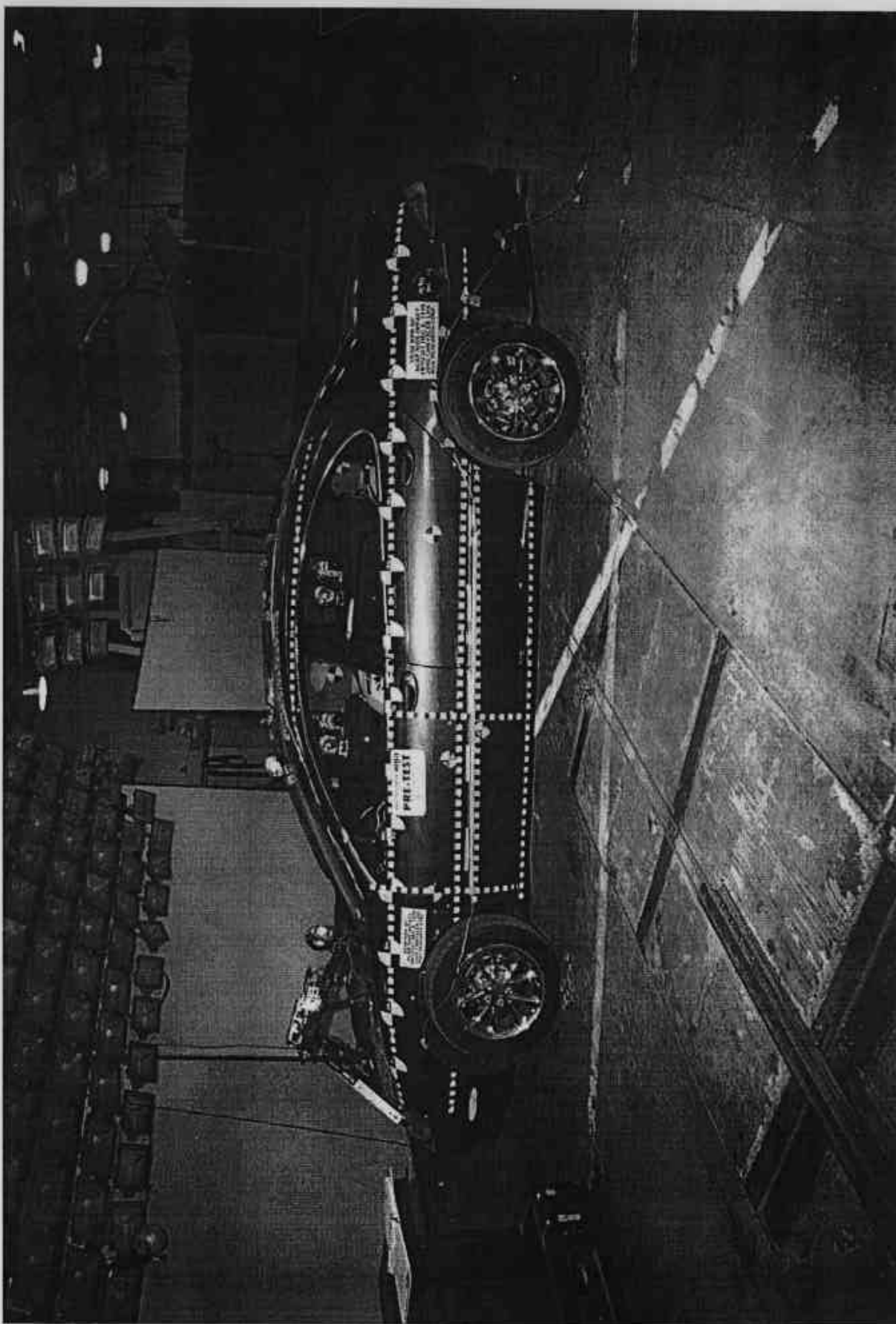


Photo No. A-5 - Pre-Test Left Side View of Test Vehicle

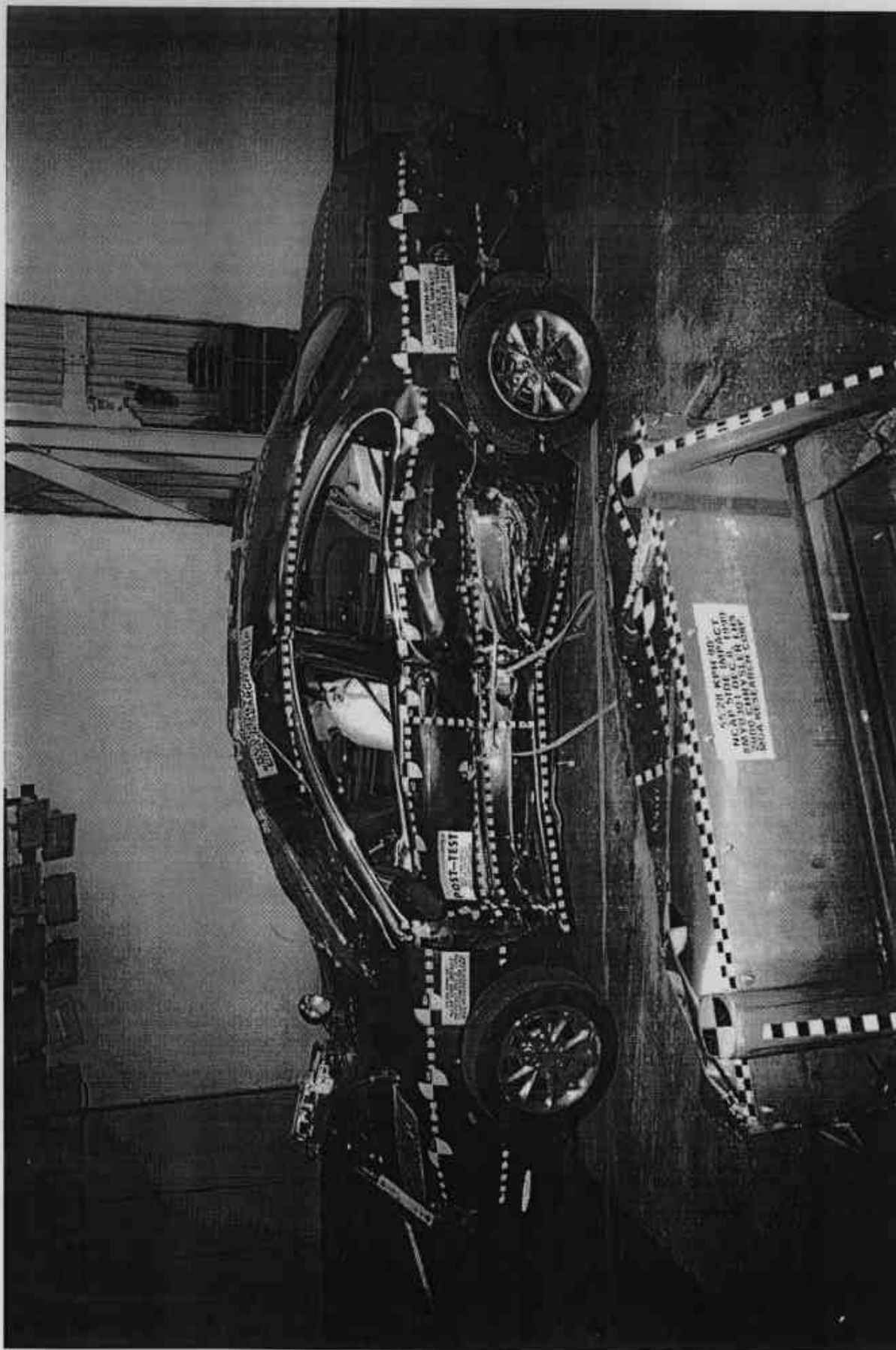


Photo No. A-6 - Post-Test Left Side View of Test Vehicle

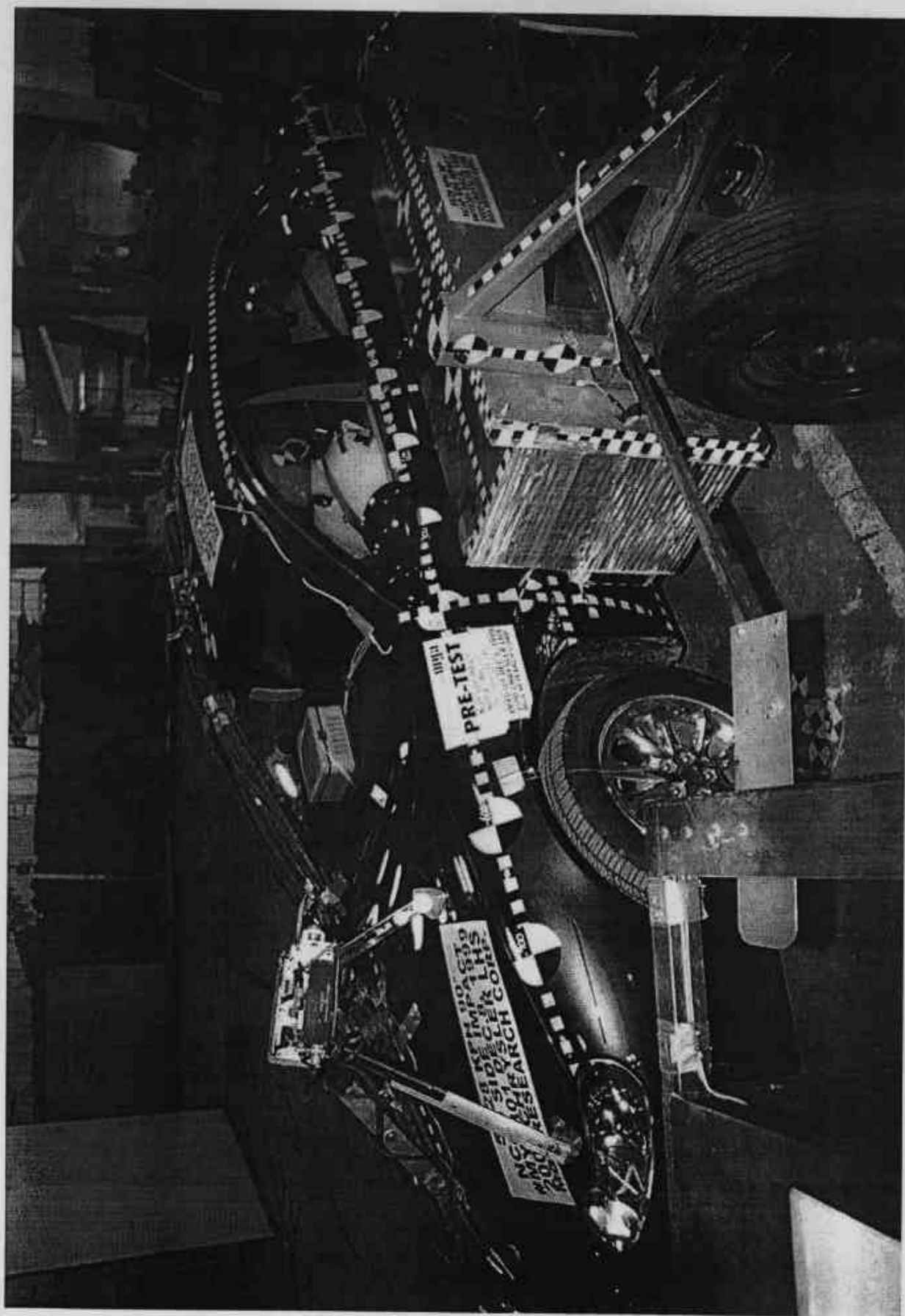


Photo No. A-7 - Pre-Test MDB Positioned Against Vehicle (left side)

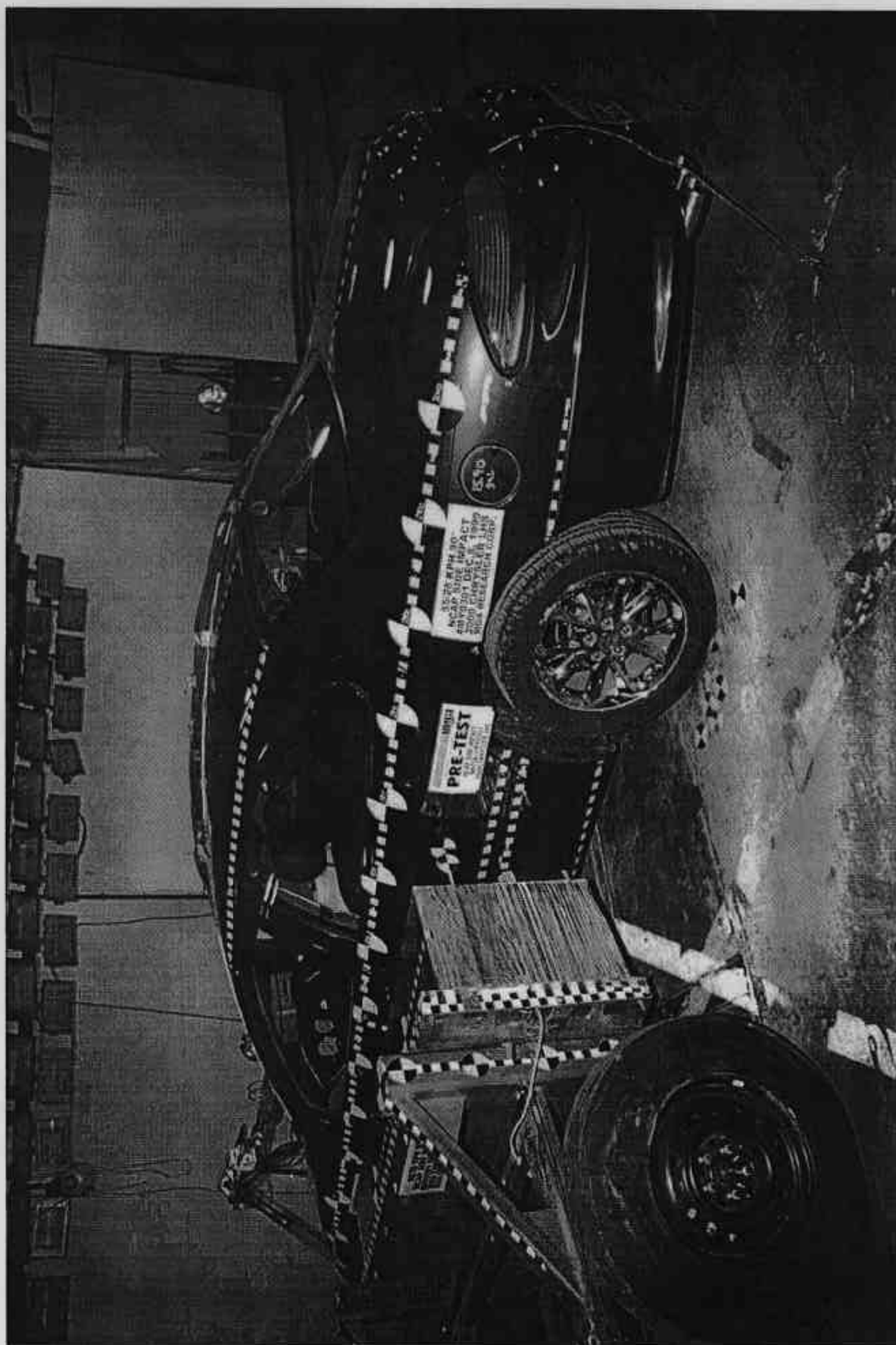
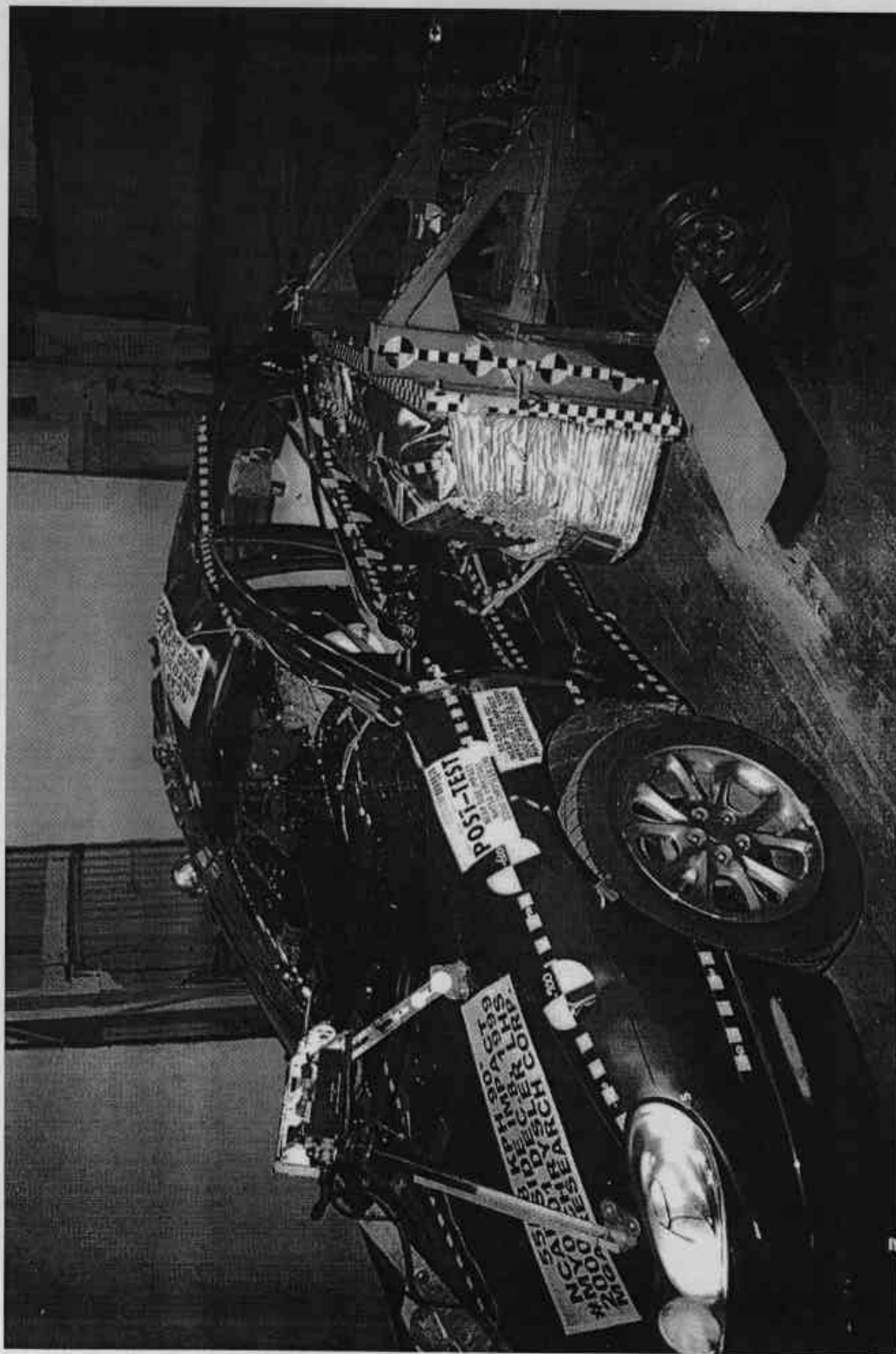


Photo No. A-8 - Pre-Test MDB Positioned Against Vehicle (right side)



A-10

Photo No. A-10 - Post-Test MDB Positioned Against Vehicle (left side)

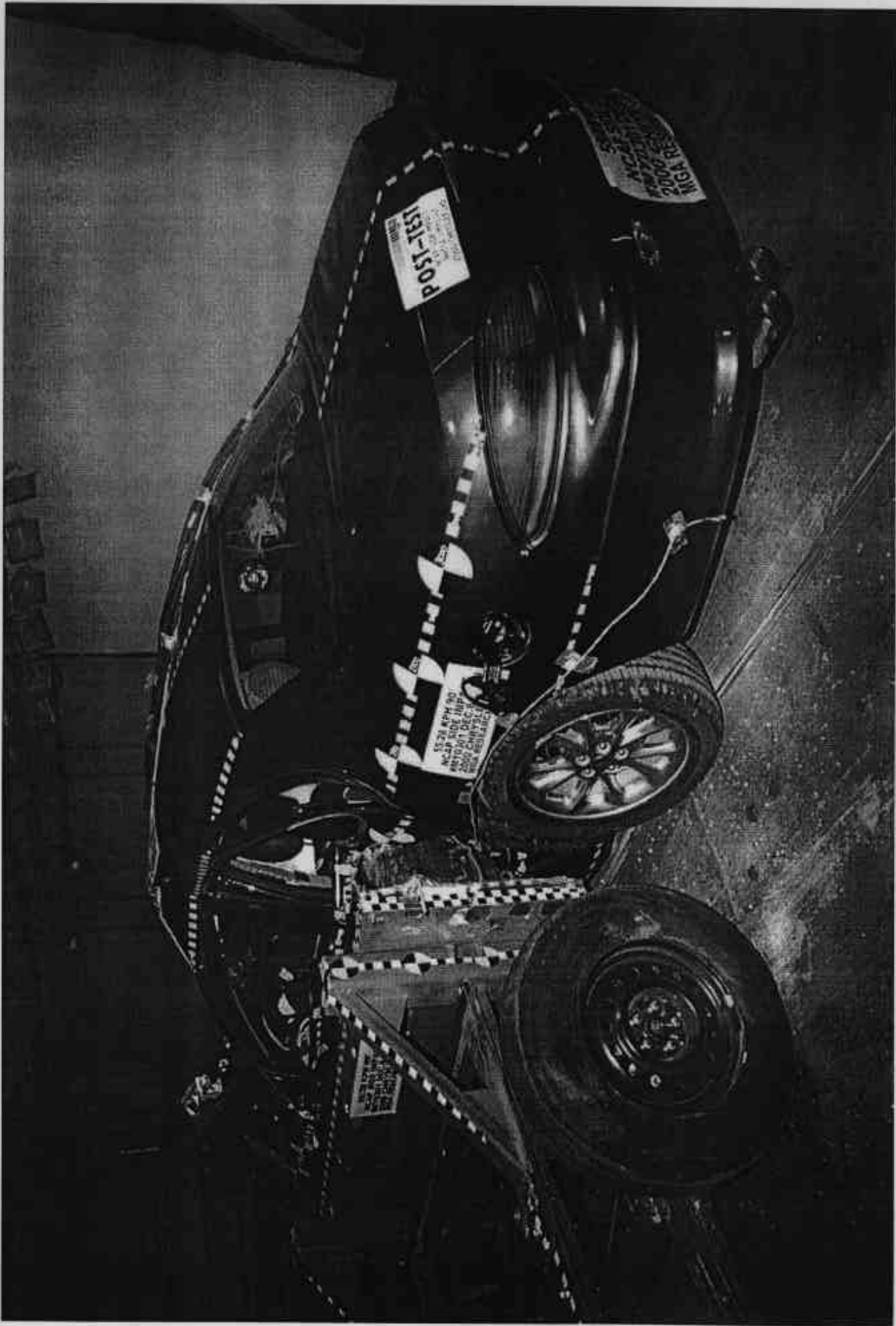
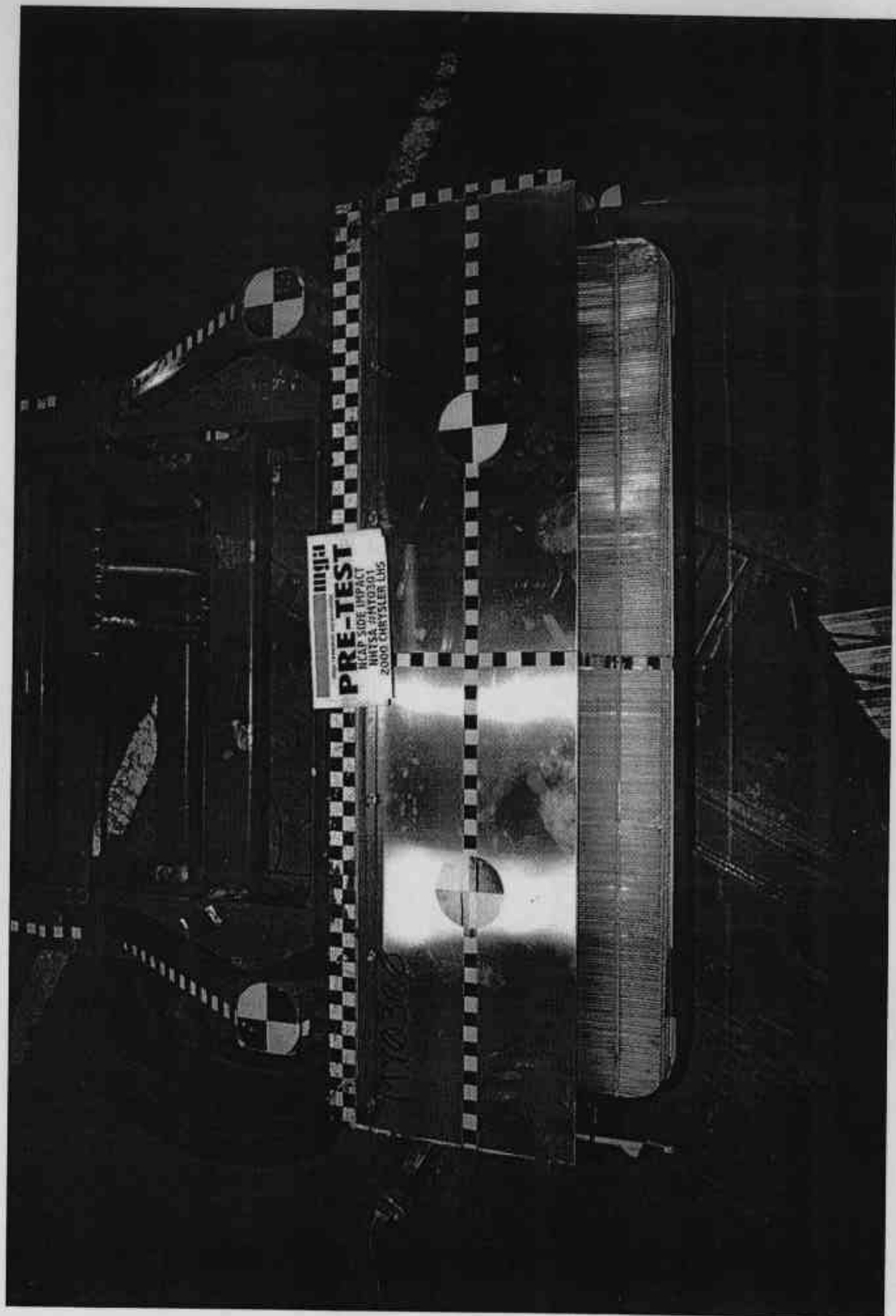


Photo No. A-11 - Post-Test MDB Positioned Against Vehicle (right side)



A-13

Photo No. A-13 - Pre-Test MDB Top View

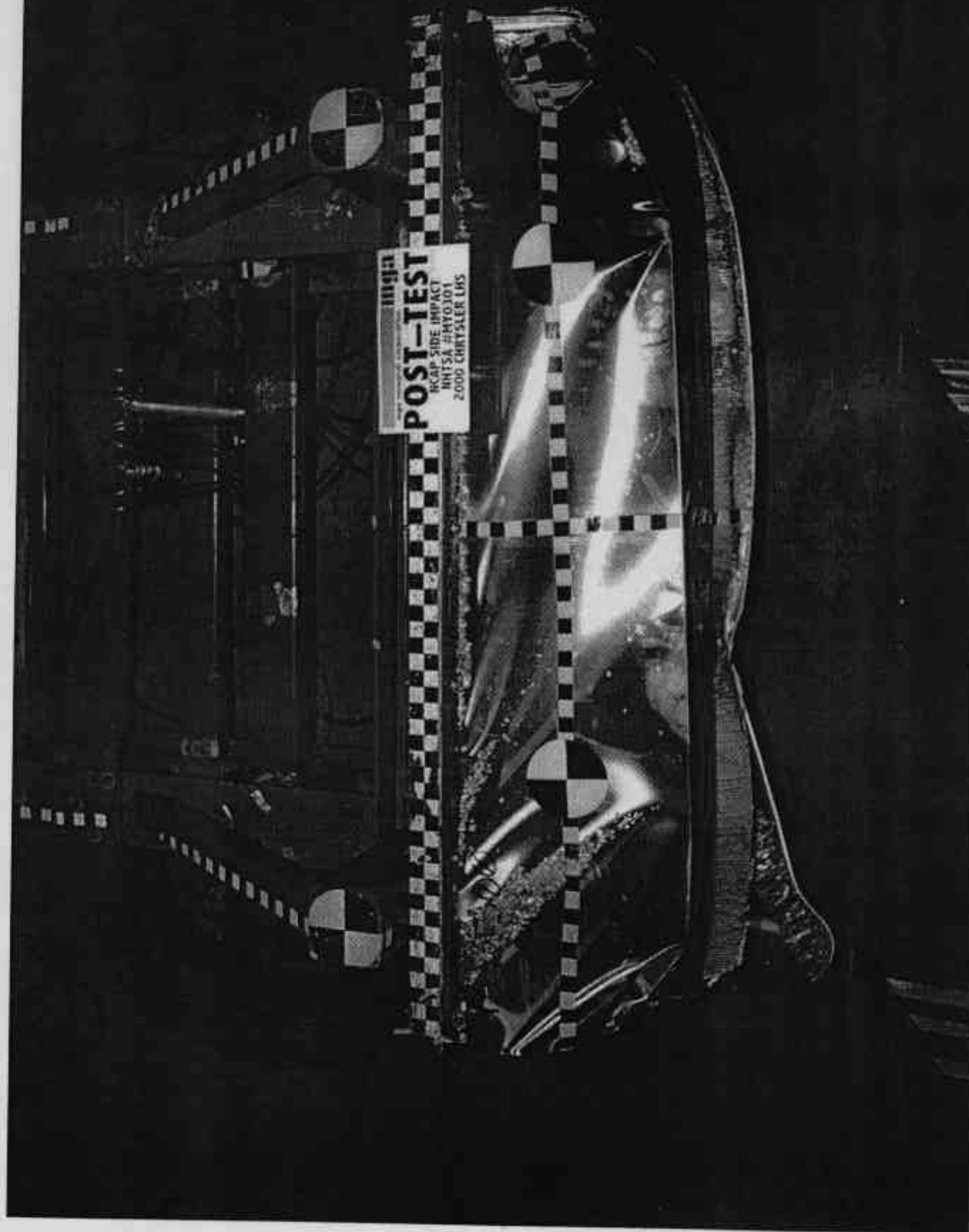
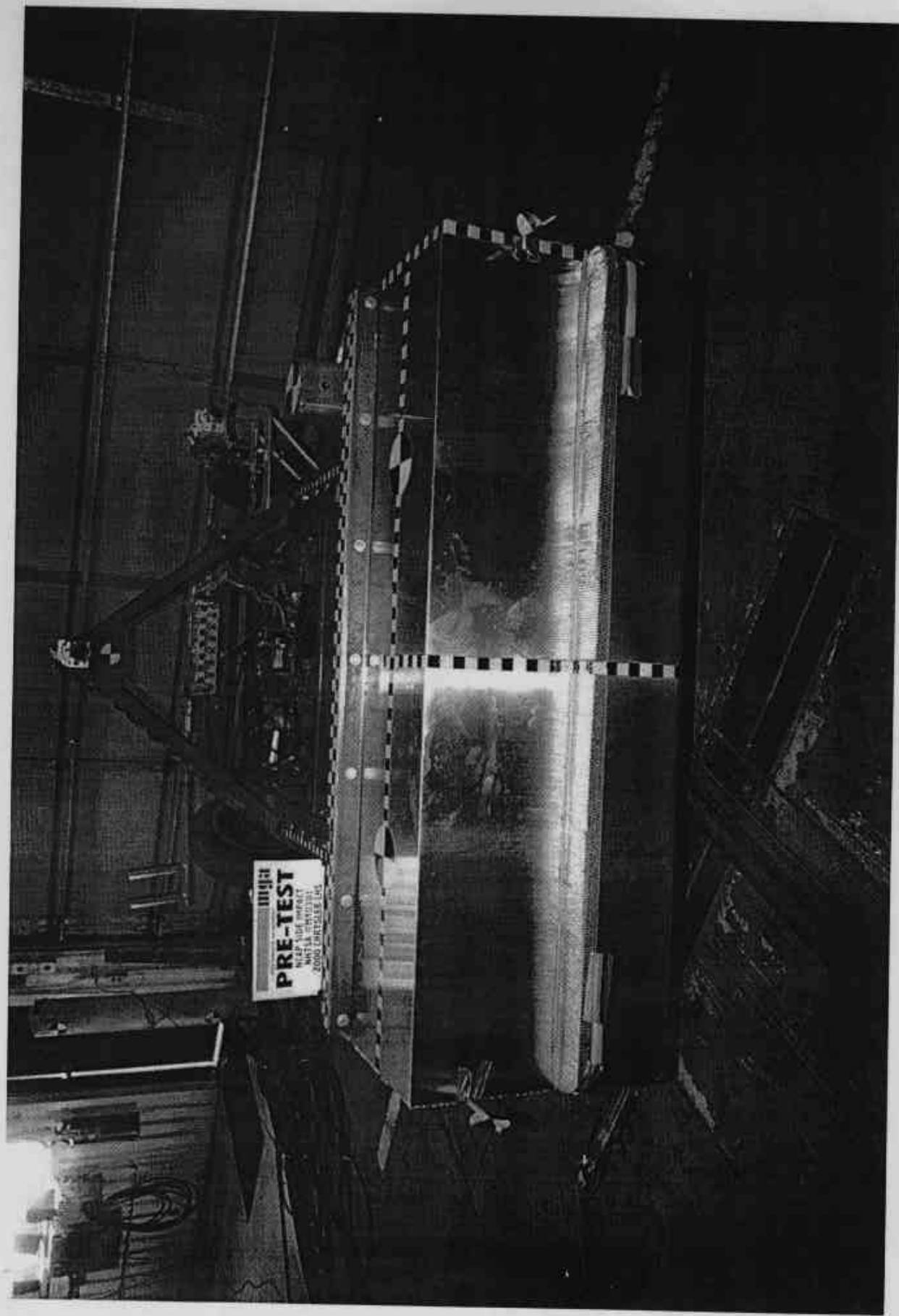


Photo No. A-14 - Post-Test MDB Top View



A-15

Photo No. A-15 - Pre-Test MDB Front View

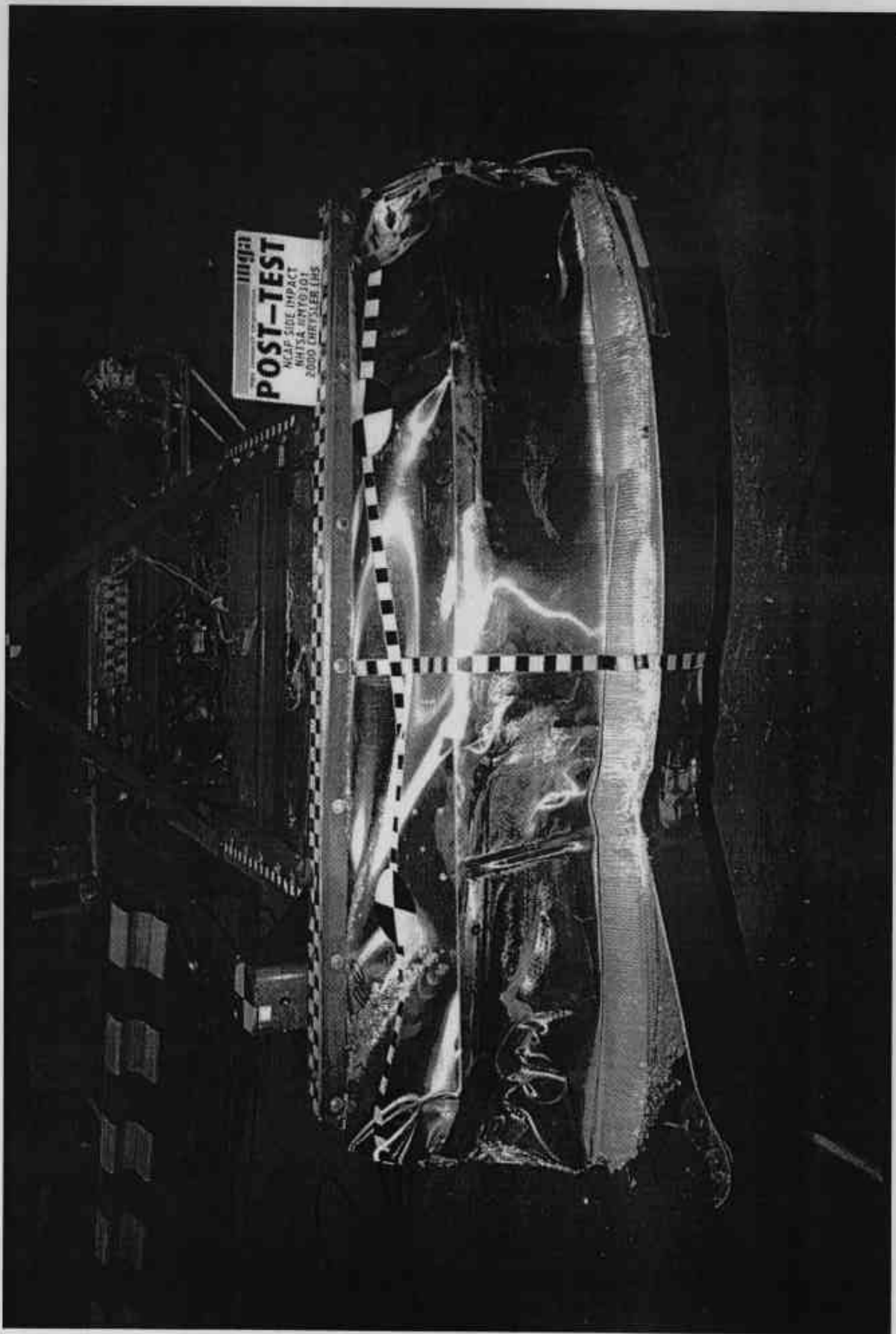
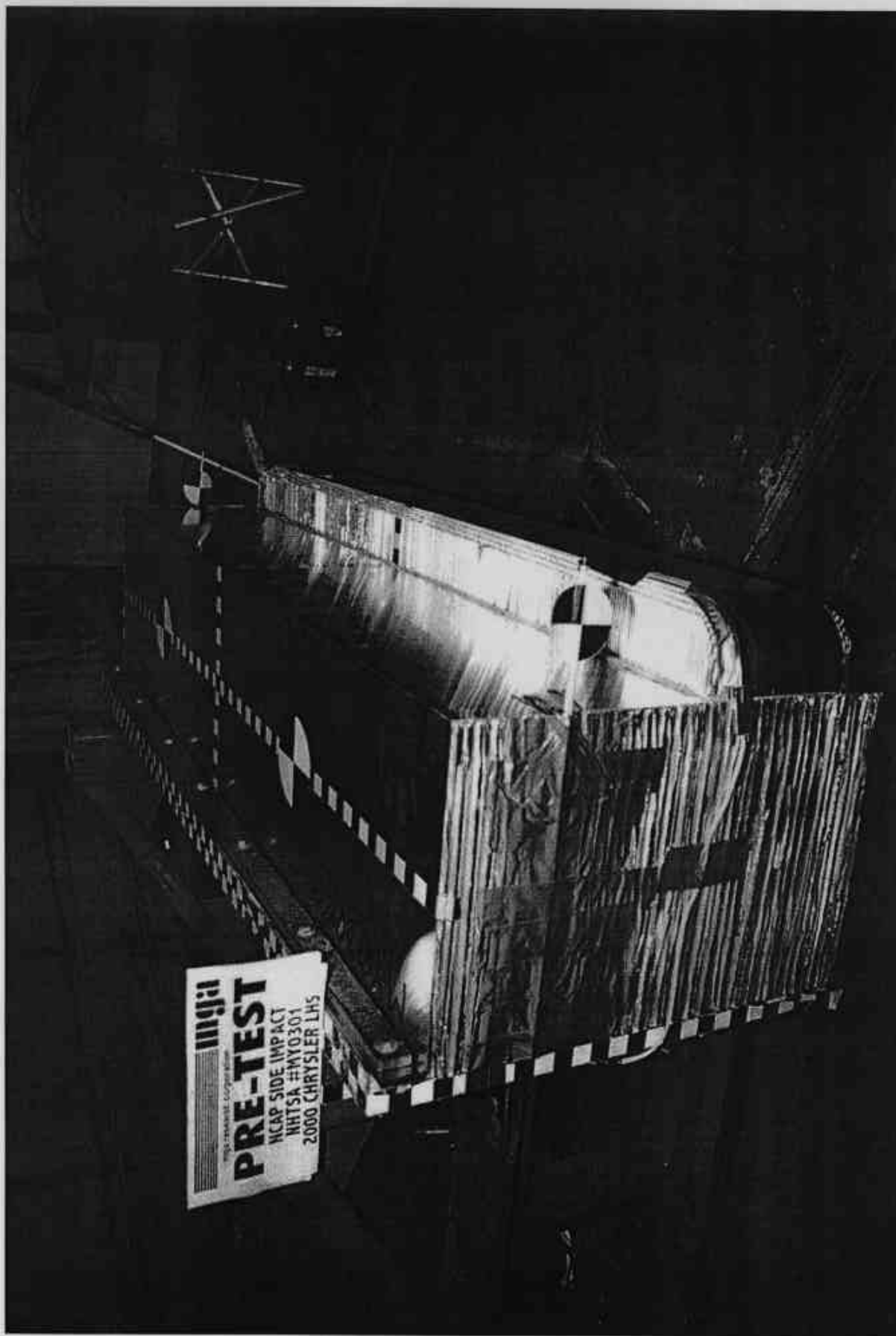


Photo No. A-16 - Post-Test MDB Front View



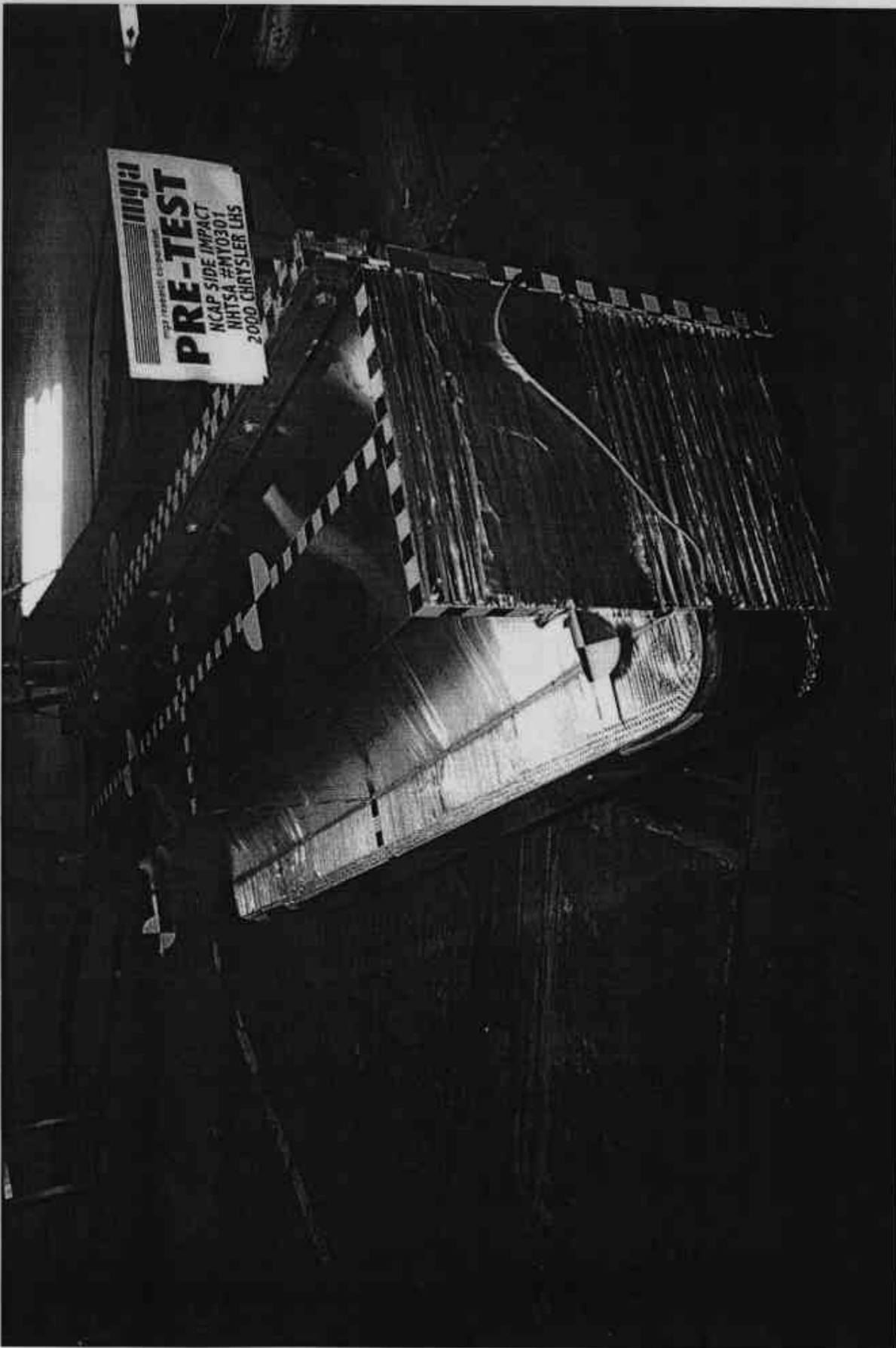
A-17

Photo No. A-17 - Pre-Test MDB Right Side View



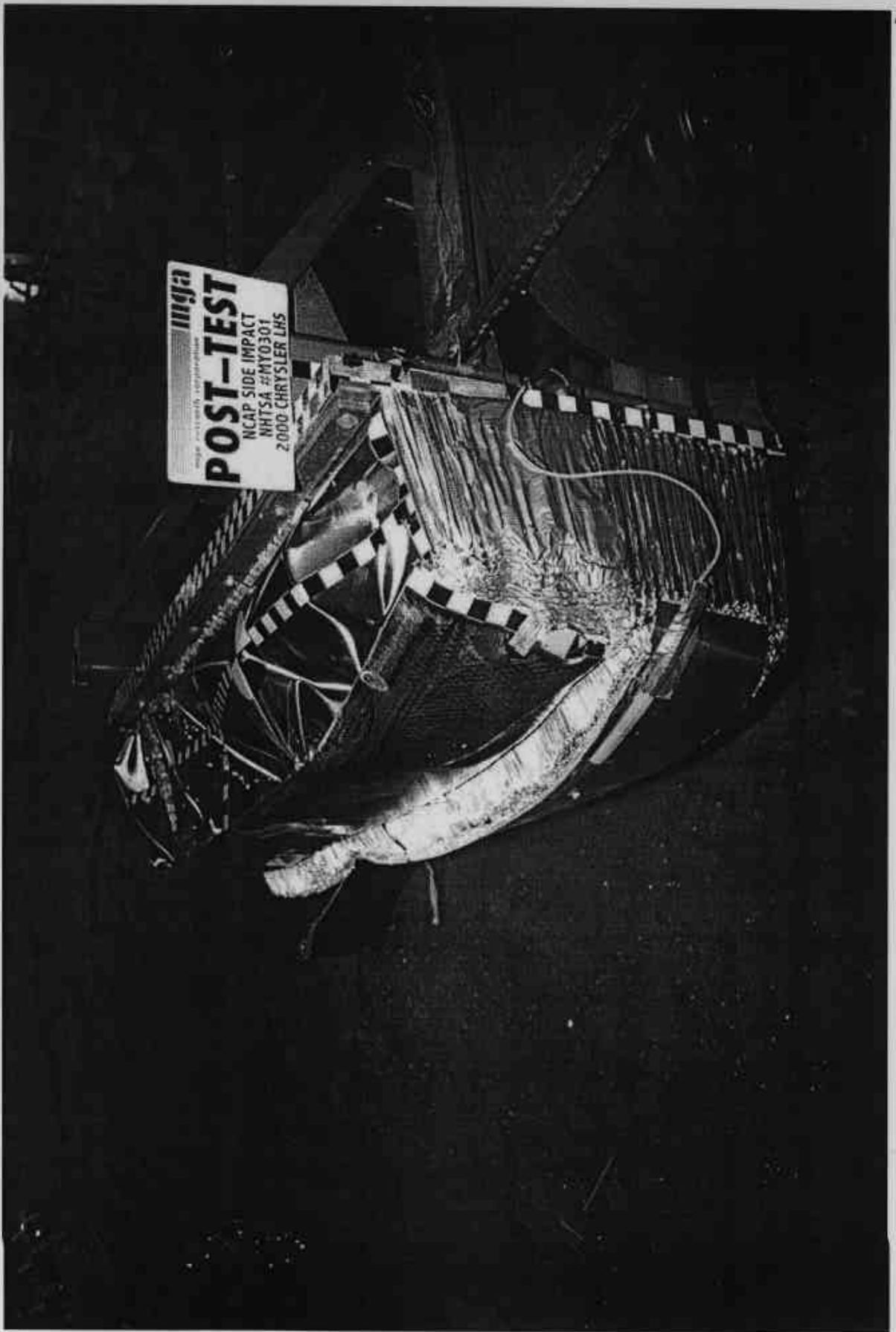
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Photo No. A-18 - Post-Test MDB Right Side View



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Photo No. A-19 - Pre-Test MDB Left Side View



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Photo No. A-20 - Post-Test MDB Left Side View



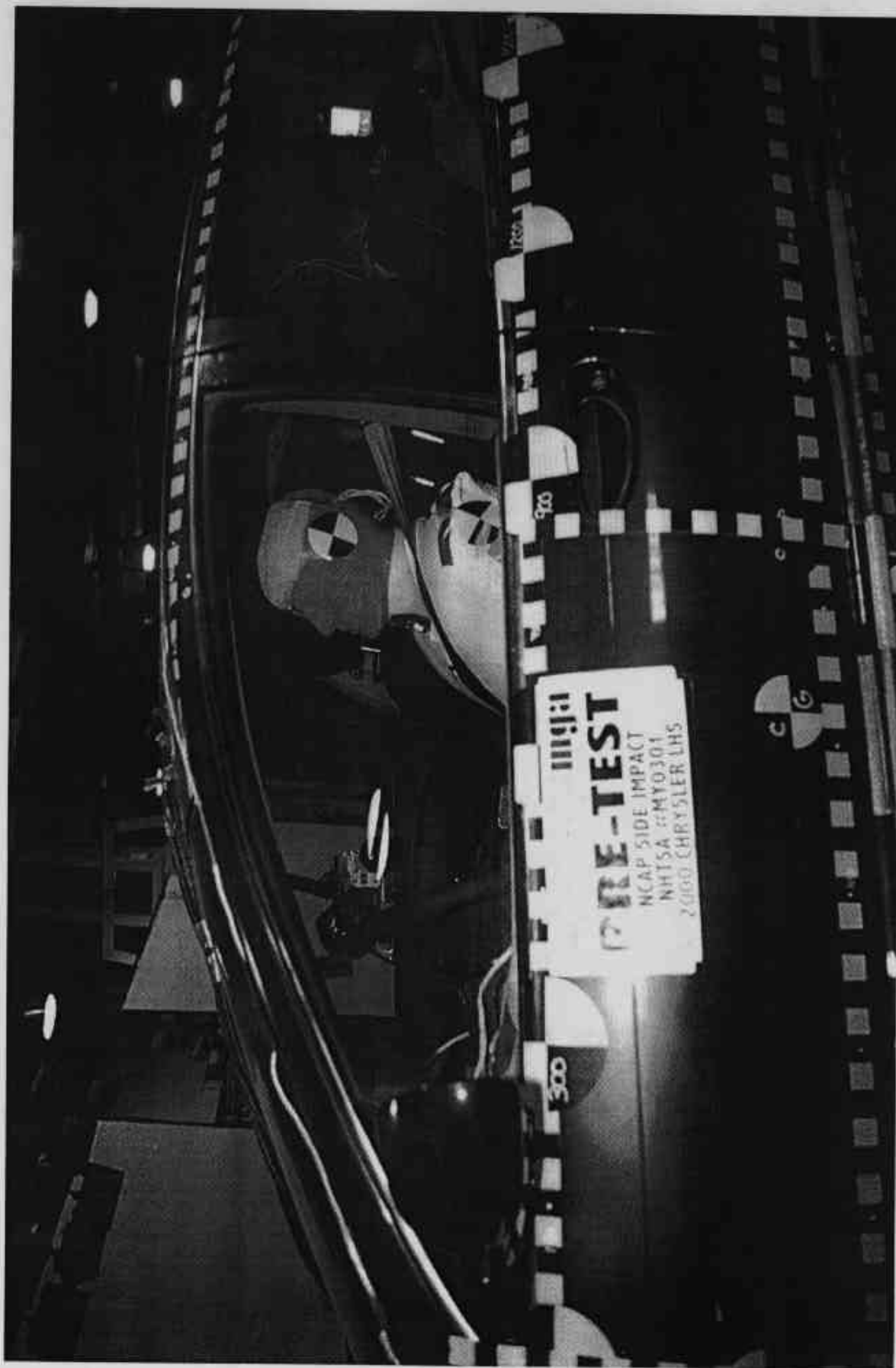
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Photo No. A-21 - Pre-Test Driver Dummy Right Side View



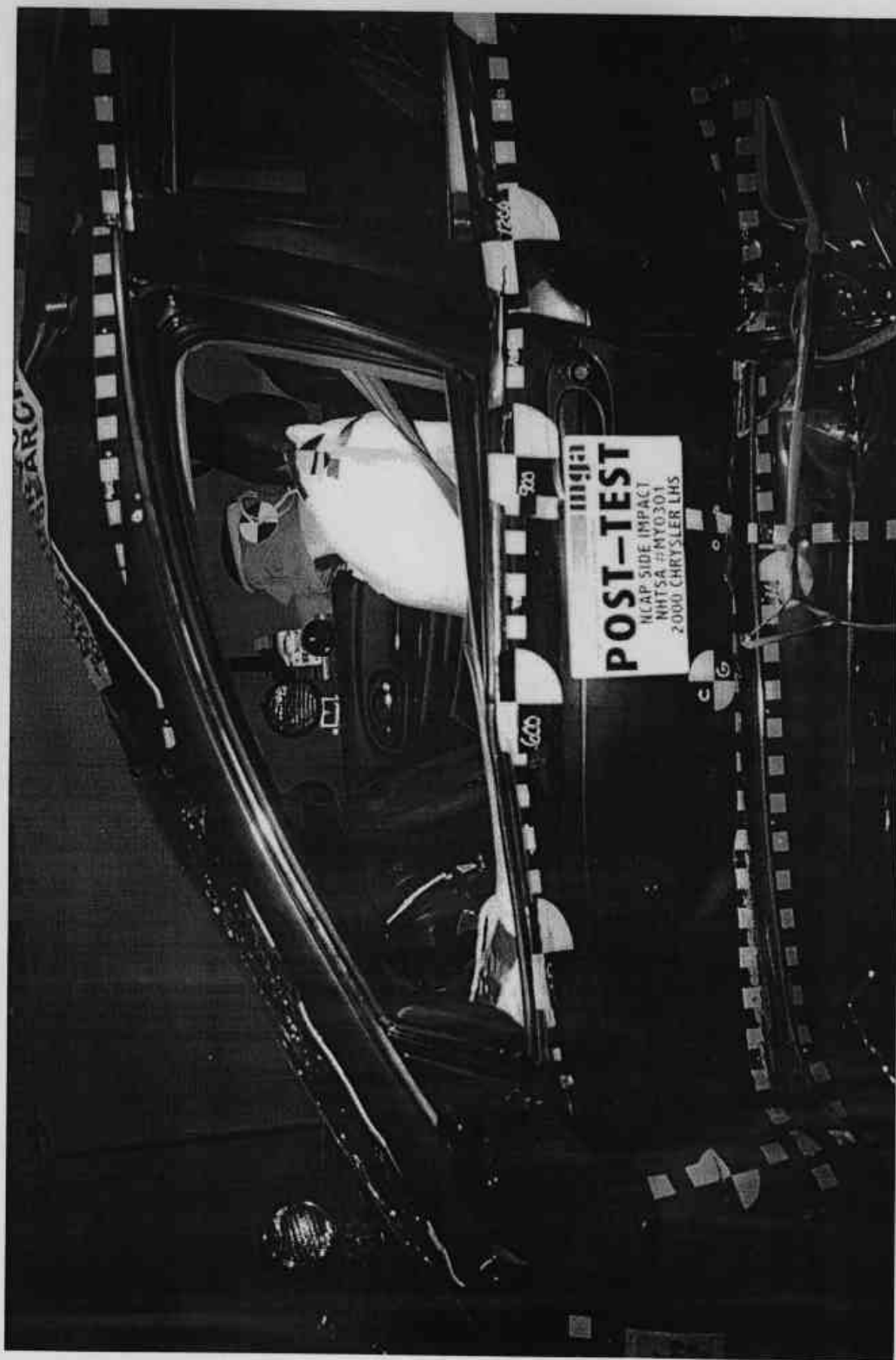
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Photo No. A-22 - Post-Test Driver Dummy Right Side View



A-23

Photo No. A-23 - Pre-Test Driver Dummy Left Side View



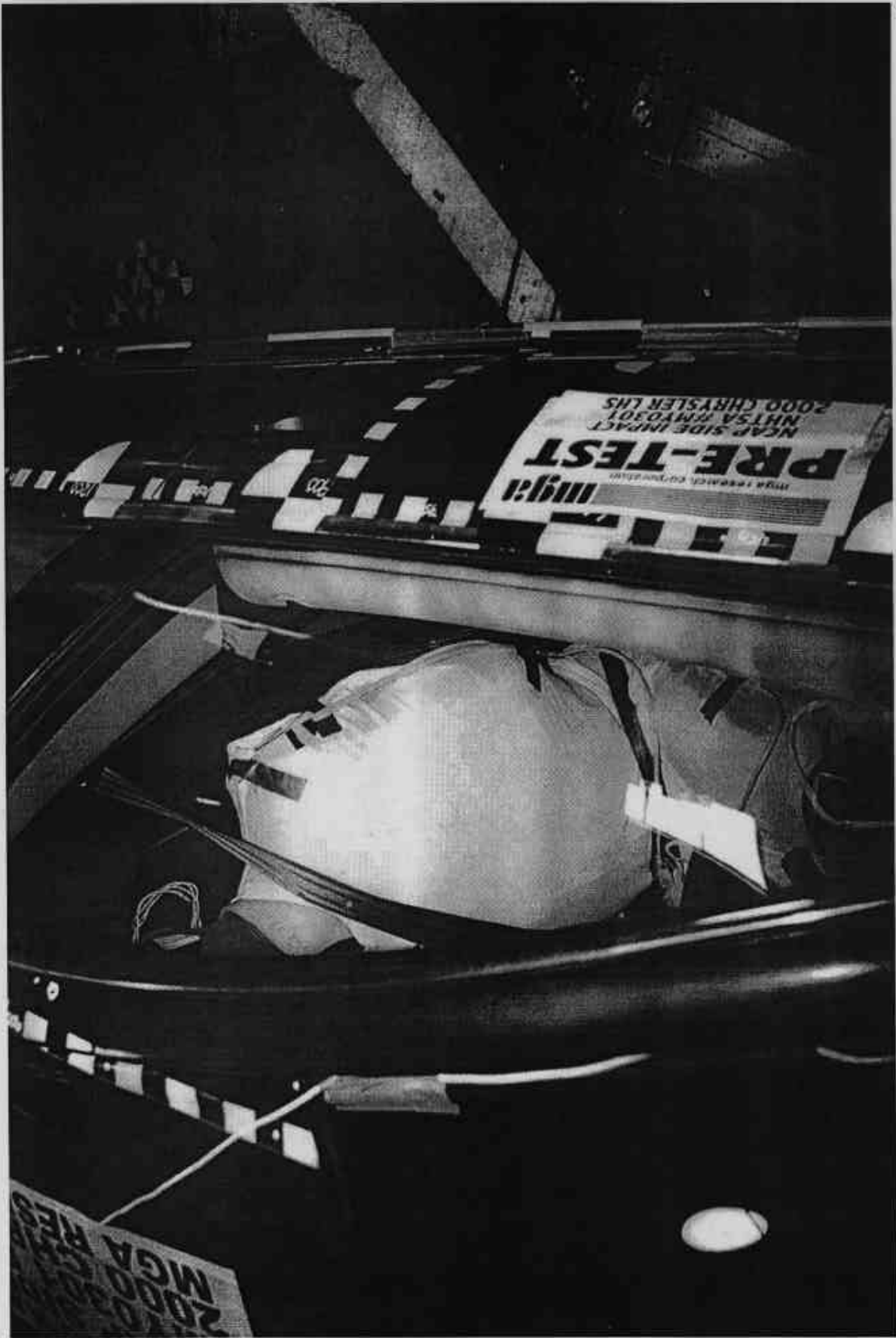
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Photo No. A-24 - Post-Test Driver Dummy Left Side View



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Photo No. A-25 - Pre-Test Driver Dummy Left Side View (Door Open)



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Photo No. A-26 - Pre-Test Driver Shoulder and Door Top View



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Photo No. A-27 - Post-Test Driver Shoulder and Door Top View



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Photo No. A-28 - Post-Test Driver Dummy Contact



A-29

Photo No. A-29 - Post-Test Driver Dummy Head Contact



A-30

Photo No. A-30 - Pre-Test Passenger Dummy Right Side View

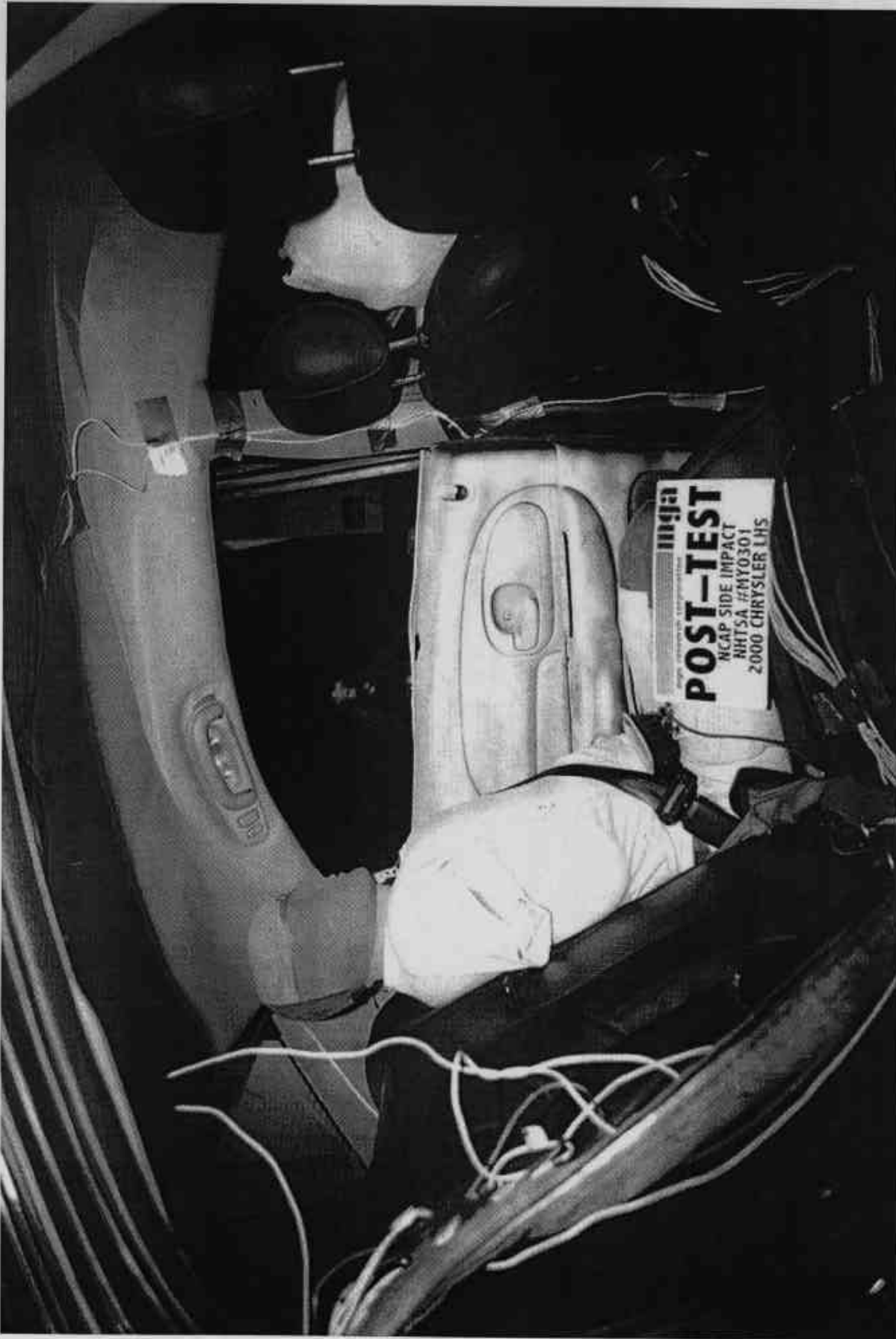
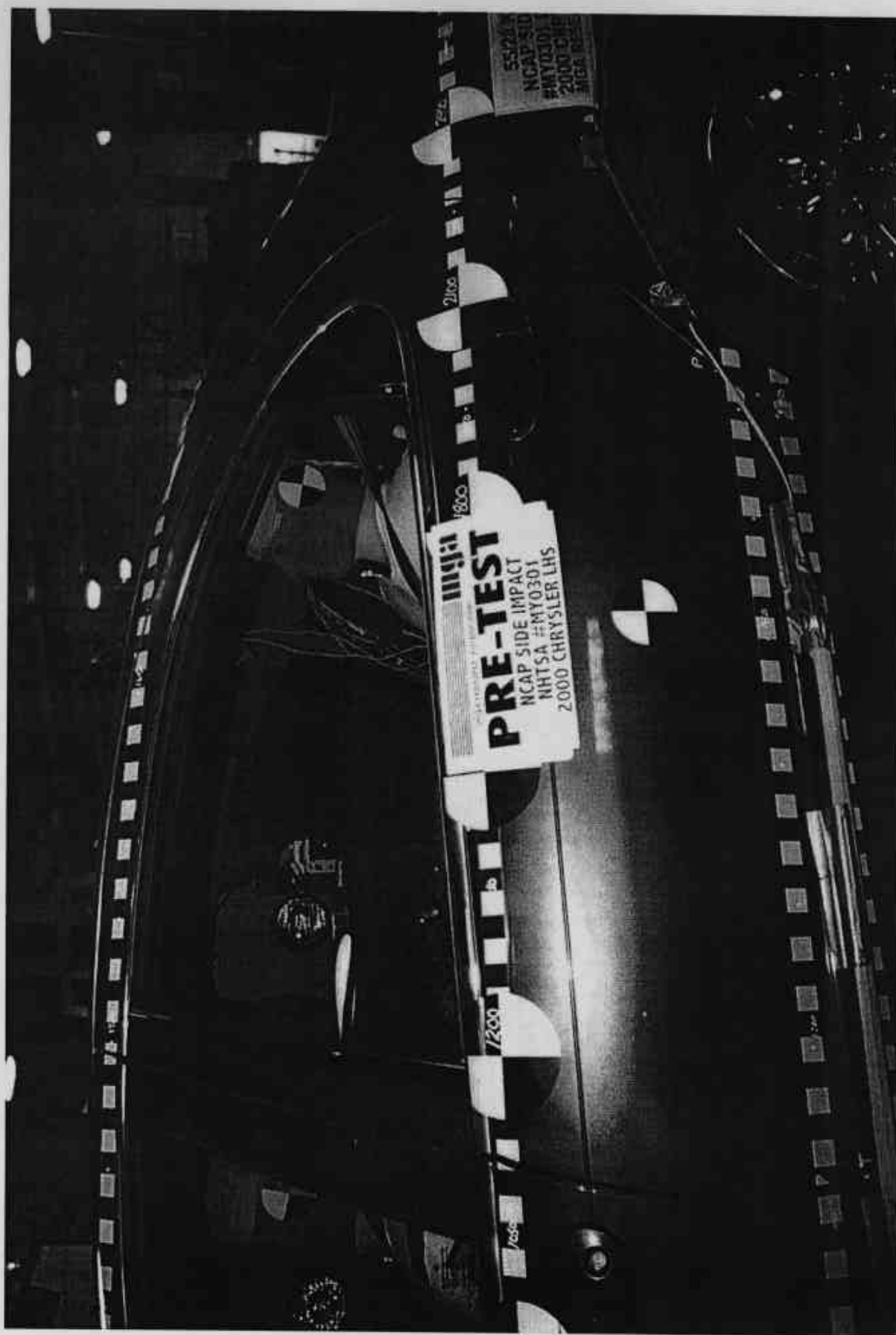
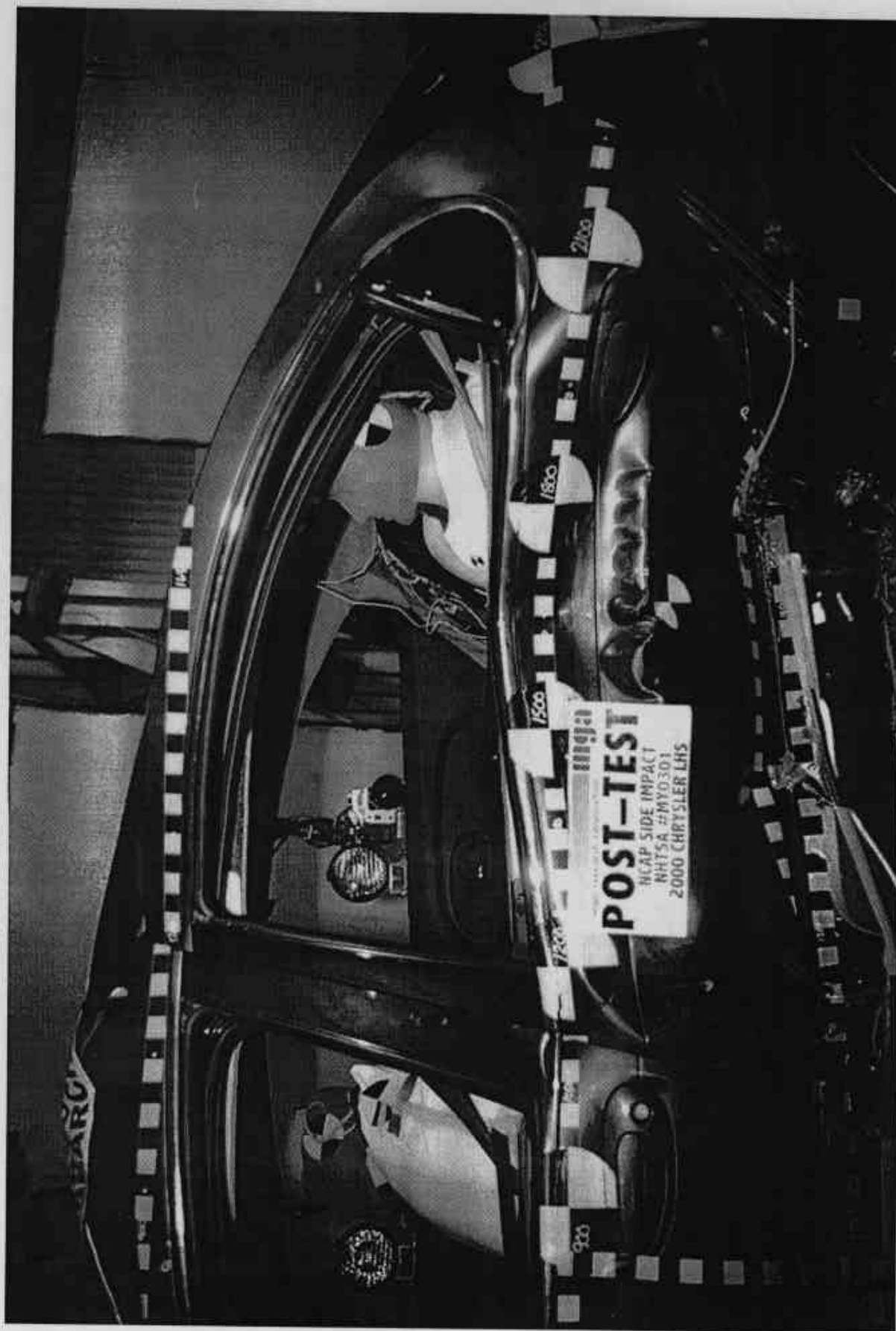


Photo No. A-31 - Post-Test Passenger Dummy Right Side View



A-32

Photo No. A-32 - Pre-Test Passenger Dummy Left Side View



A-33

Photo No. A-33 - Post-Test Passenger Dummy Left Side View

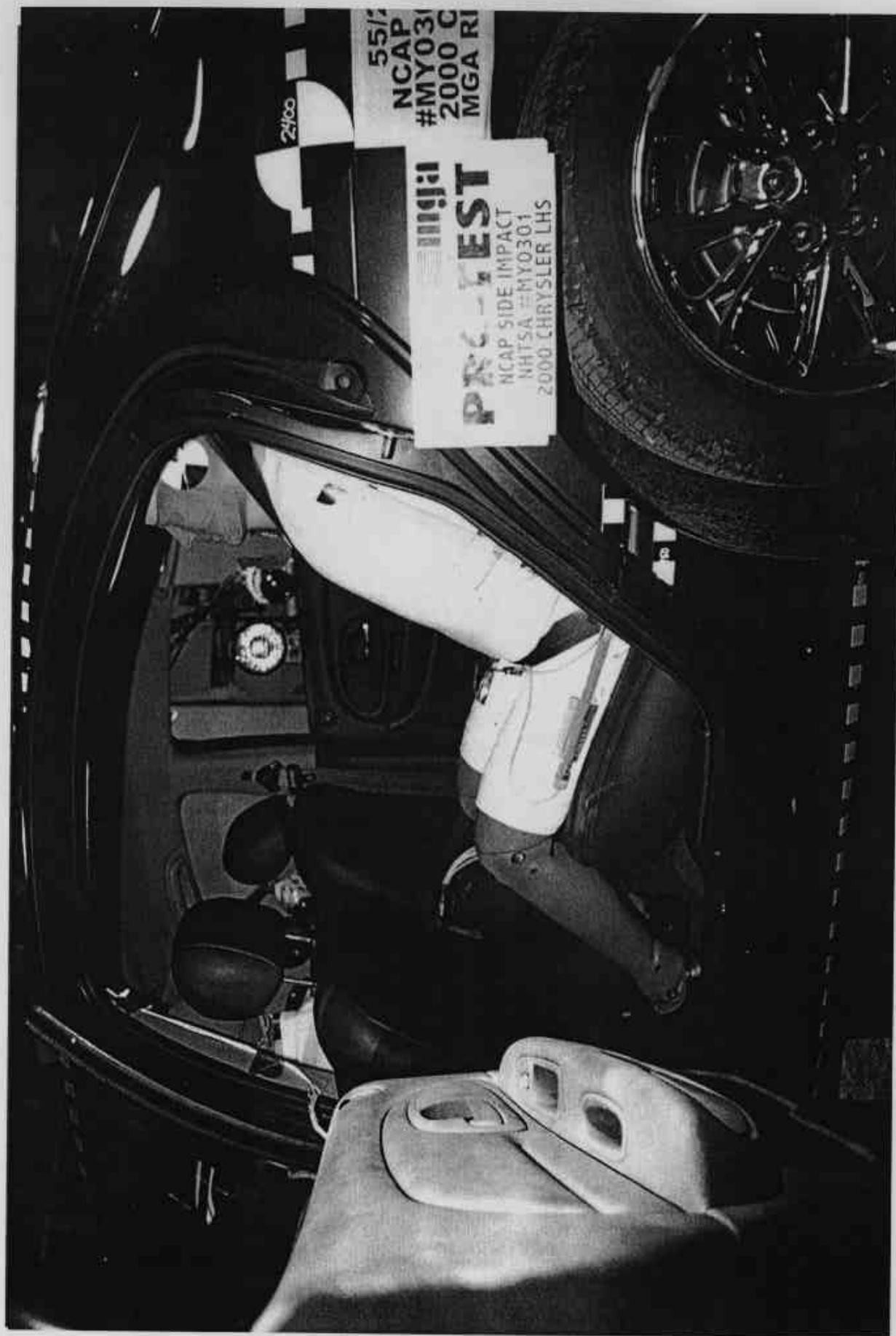


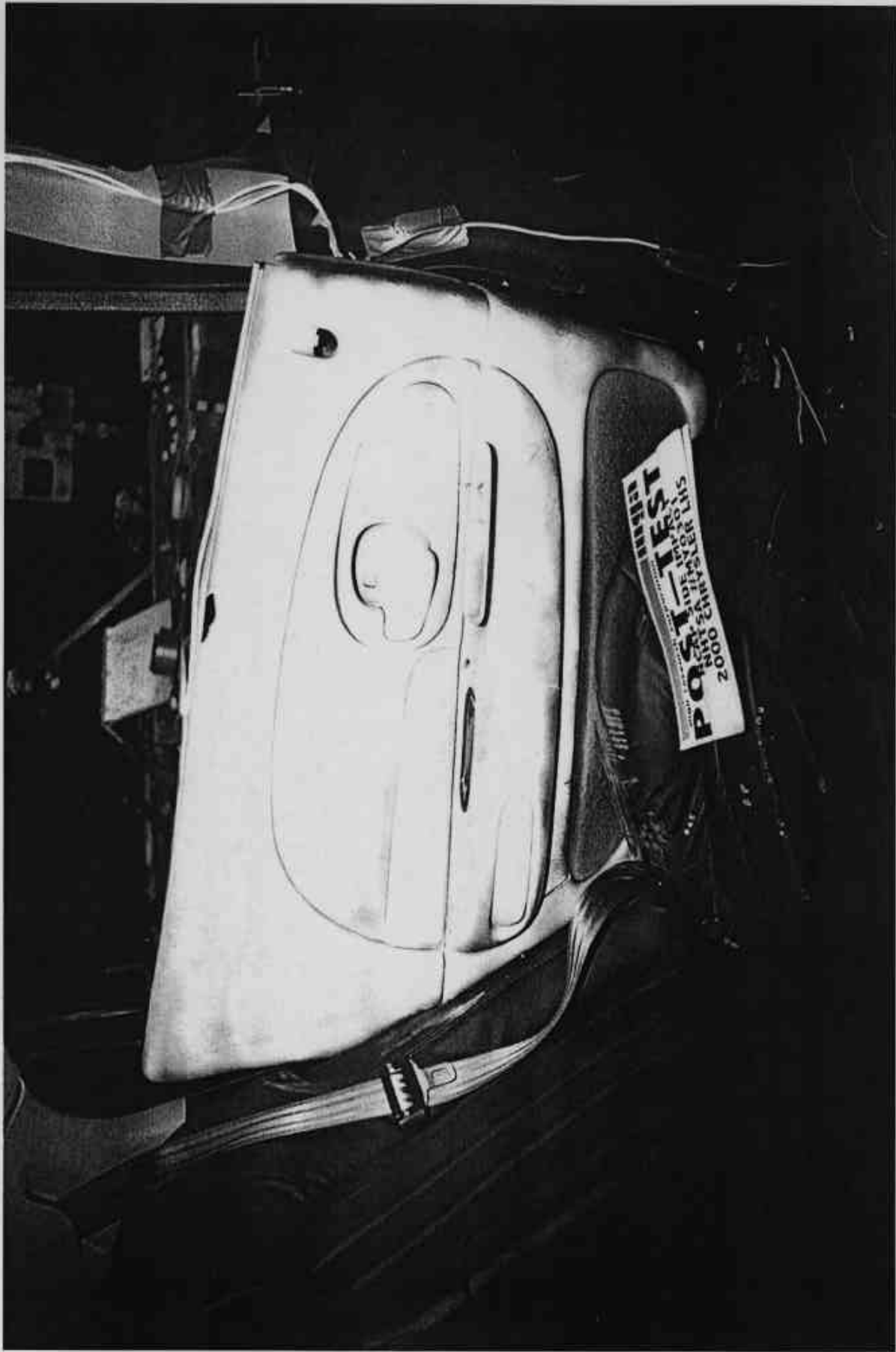
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Photo No. A-35 - Pre-Test Passenger Dummy Shoulder and Door Top View



Photo No. A-36 - Post-Test Passenger Dummy Shoulder and Door Top View



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Photo No. A-37 - Post-Test Passenger Dummy Contact



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Photo No. A-38 - Post-Test Passenger Dummy Head Contact



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Photo No. A-39 - Pre-Test Left Front Impact Point on Vehicle



Photo No. A-40 - Post-Test Left Front Impact Point on Vehicle

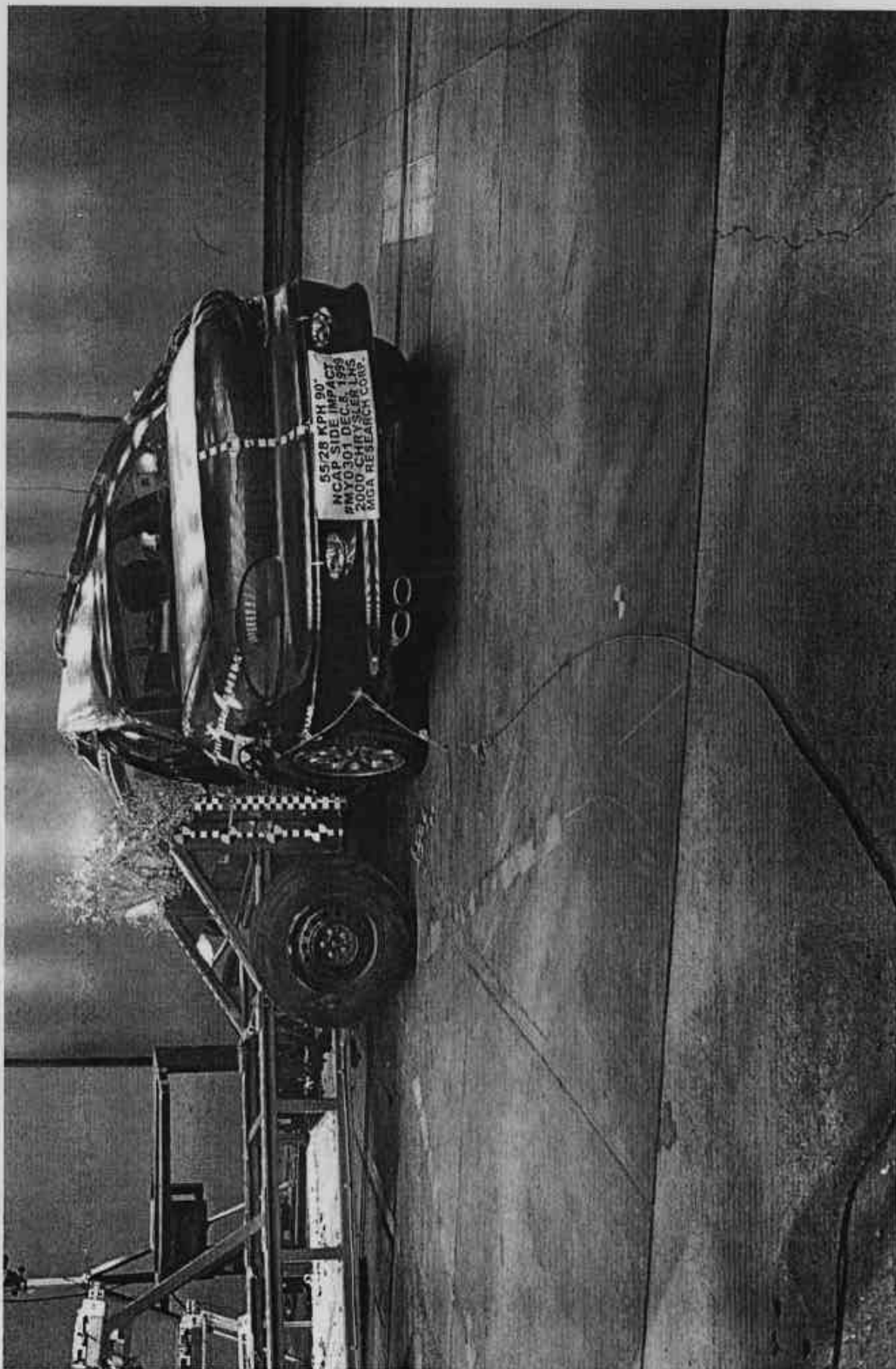


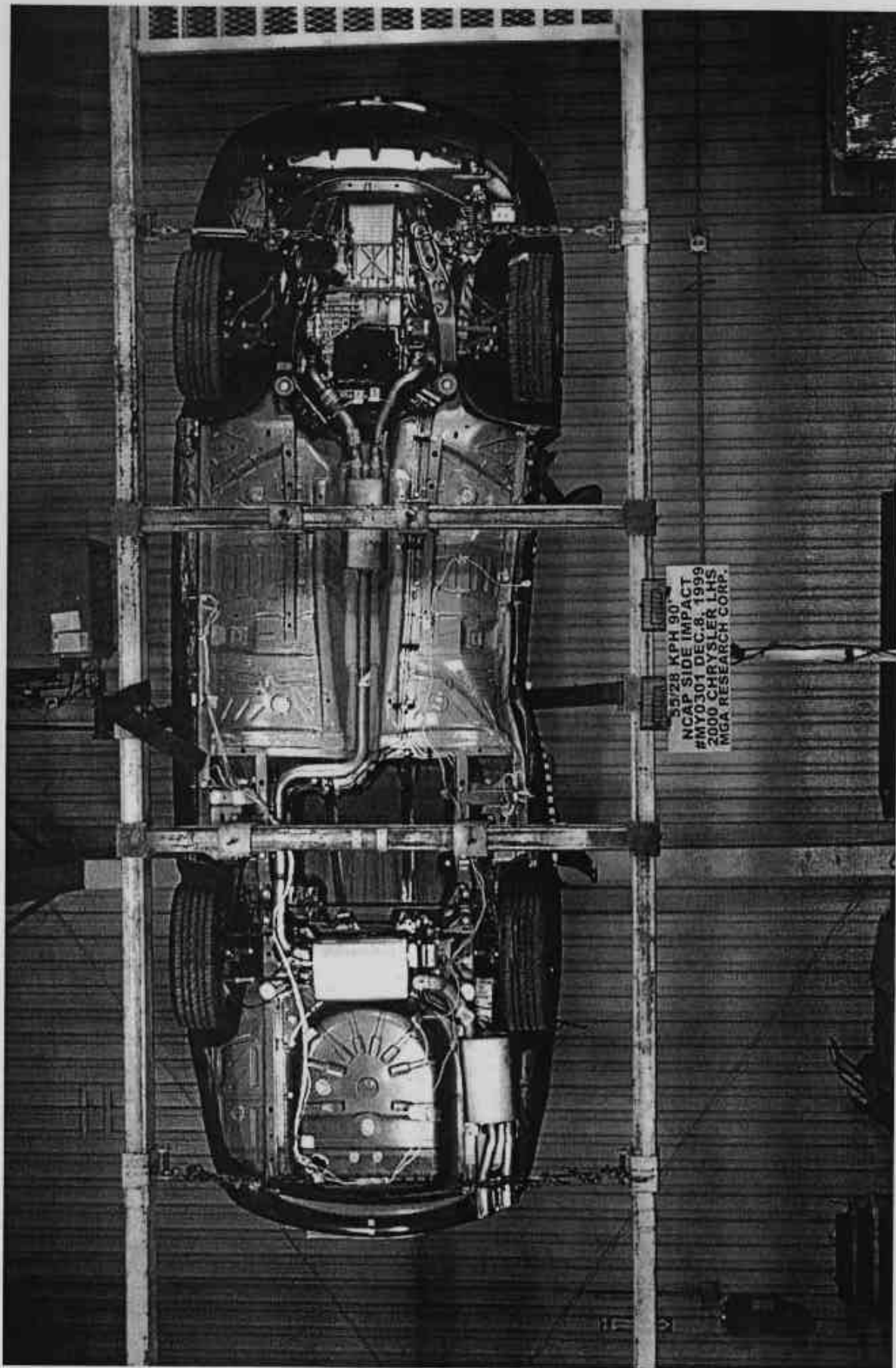
Photo No. A-41 - Impact

A-41



Photo No. A-42 - Vehicle Certification Label

	1ST SEAT	2 PASS
	2ND SEAT	3 PASS
LUGGAGE	115 LBS-52 kg	
TOTAL	5 PASS	
TOTAL WEIGHT	865 LBS-392 kg	
TIRE	30 PSI	
PRESSURE COLD	210 kPa	
	FRONT AND REAR	
MINIMUM TIRE SIZE		
P225/55R17 95T		
STANDARD LOAD		
SEE OWNERS MANUAL FOR ADDITIONAL DATA		
PRINTED IN U.S. 0472248AA		



A-44

Photo No. A-44 - Rollover 90°

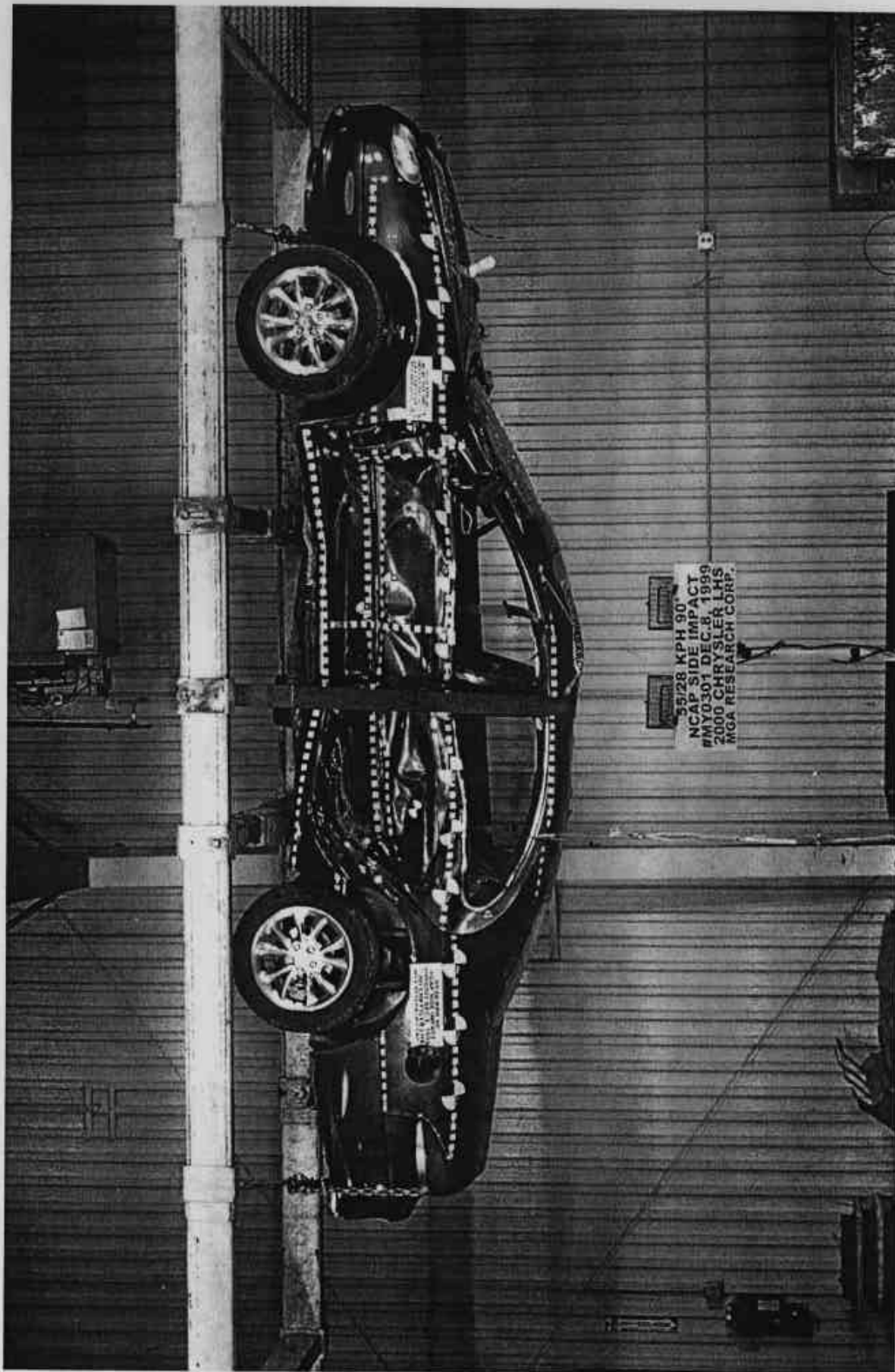
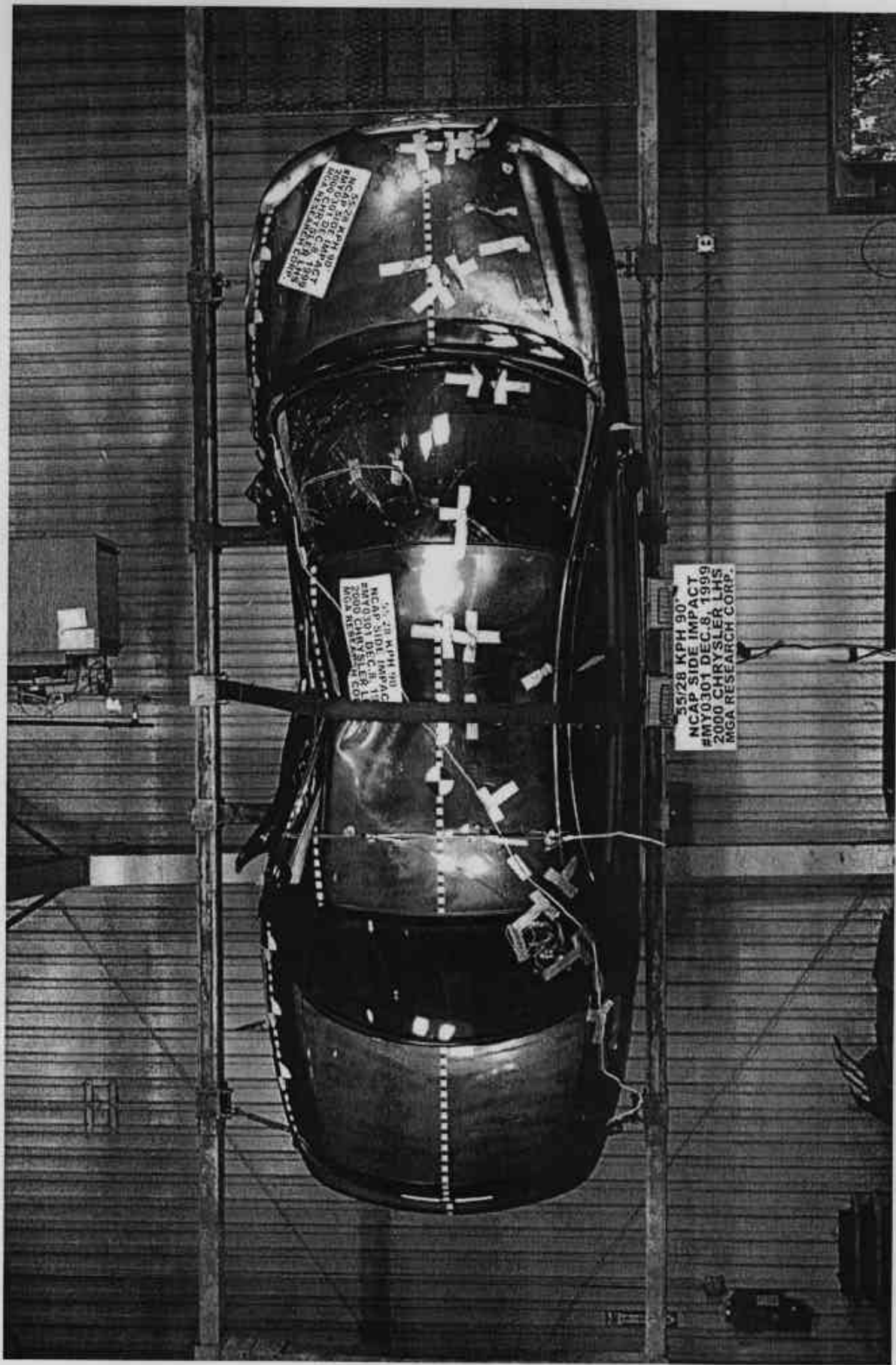


Photo No. A-45 - Rollover 180°



A-46

Photo No. A-46 - Rollover 270°

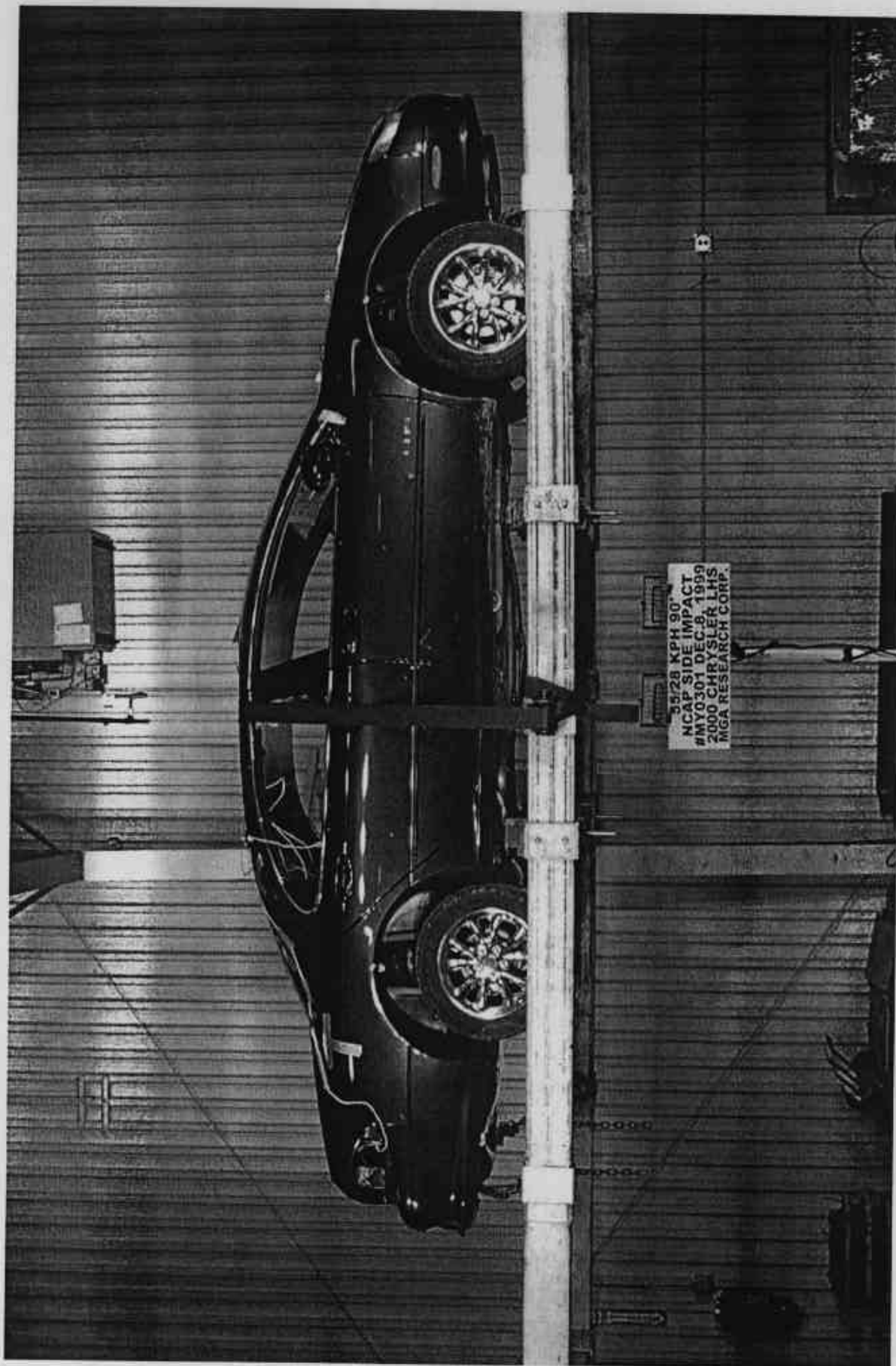


Photo No. A-47 - Rollover 360°



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Photo No. A-48 - Left Front Attitude Point



Photo No. A-49 - Right Front Attitude Point



Photo No. A-50 - Left Rear Attitude Point

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Photo No. A-51 - Right Rear Attitude Point

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* Data not valid after approximately 29 msec.

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FIR Filtered

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TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

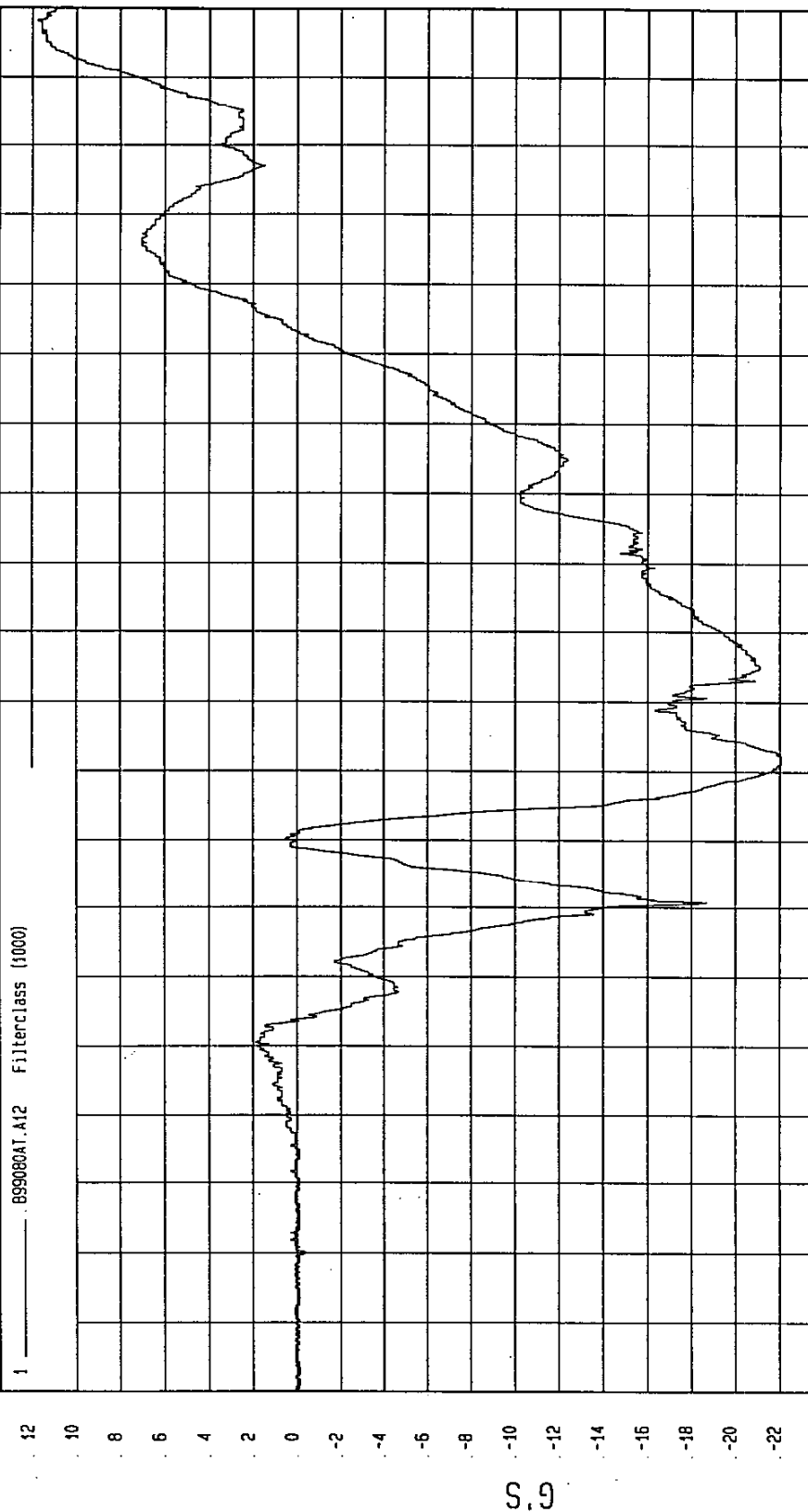
Speed: 38.5 MPH 62 KPH

COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 11.77 G'S at 178 msec

Minimum = -22.07 G'S at 71 msec

DRIVER HEAD X ACCELERATION



MCA Research
12-06-1999 15:38

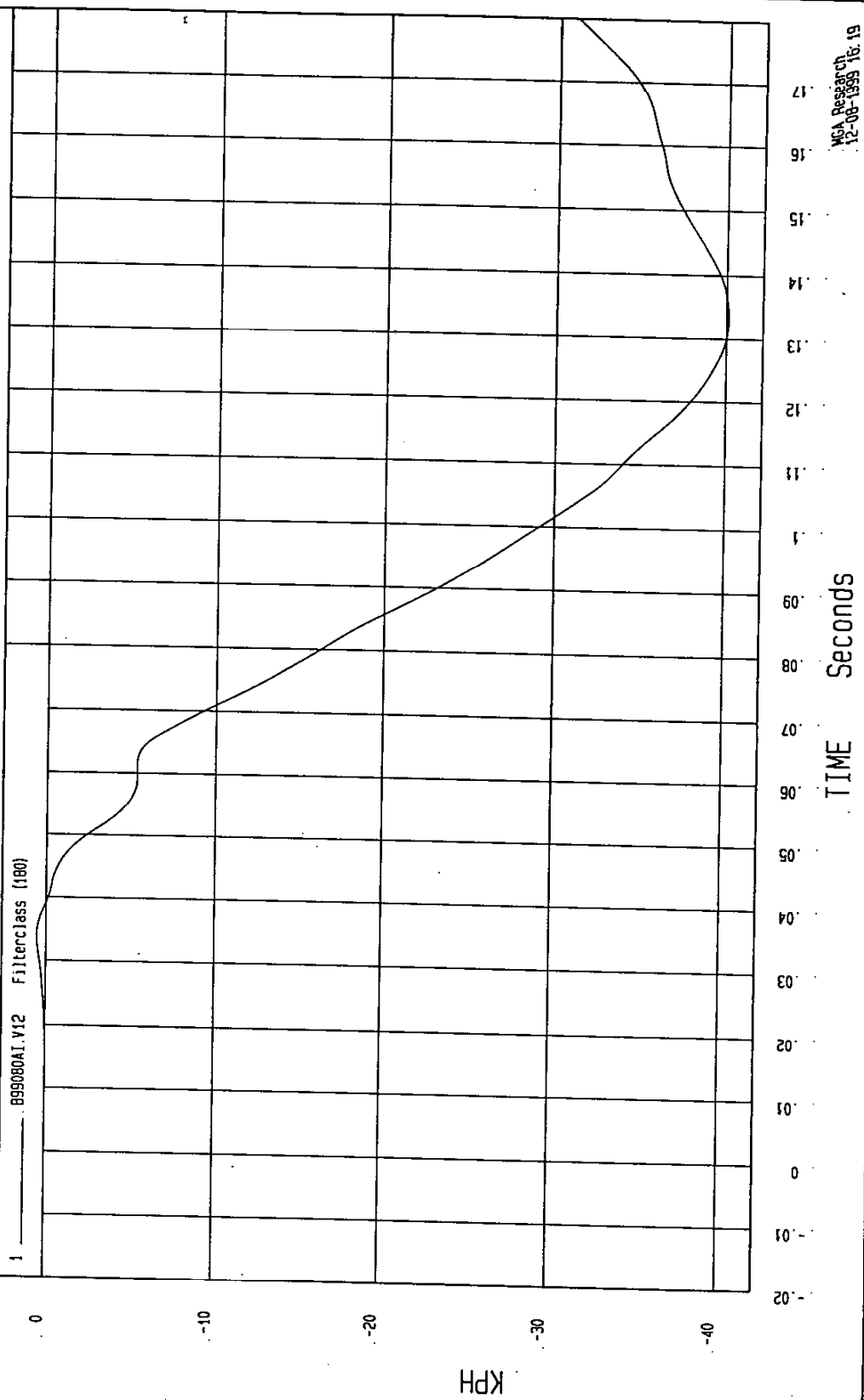
TIME (SECONDS)

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -40.13 KPH at 133 msec Maximum = .54 KPH at 34 msec

DRIVER HEAD X VELOCITY



TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

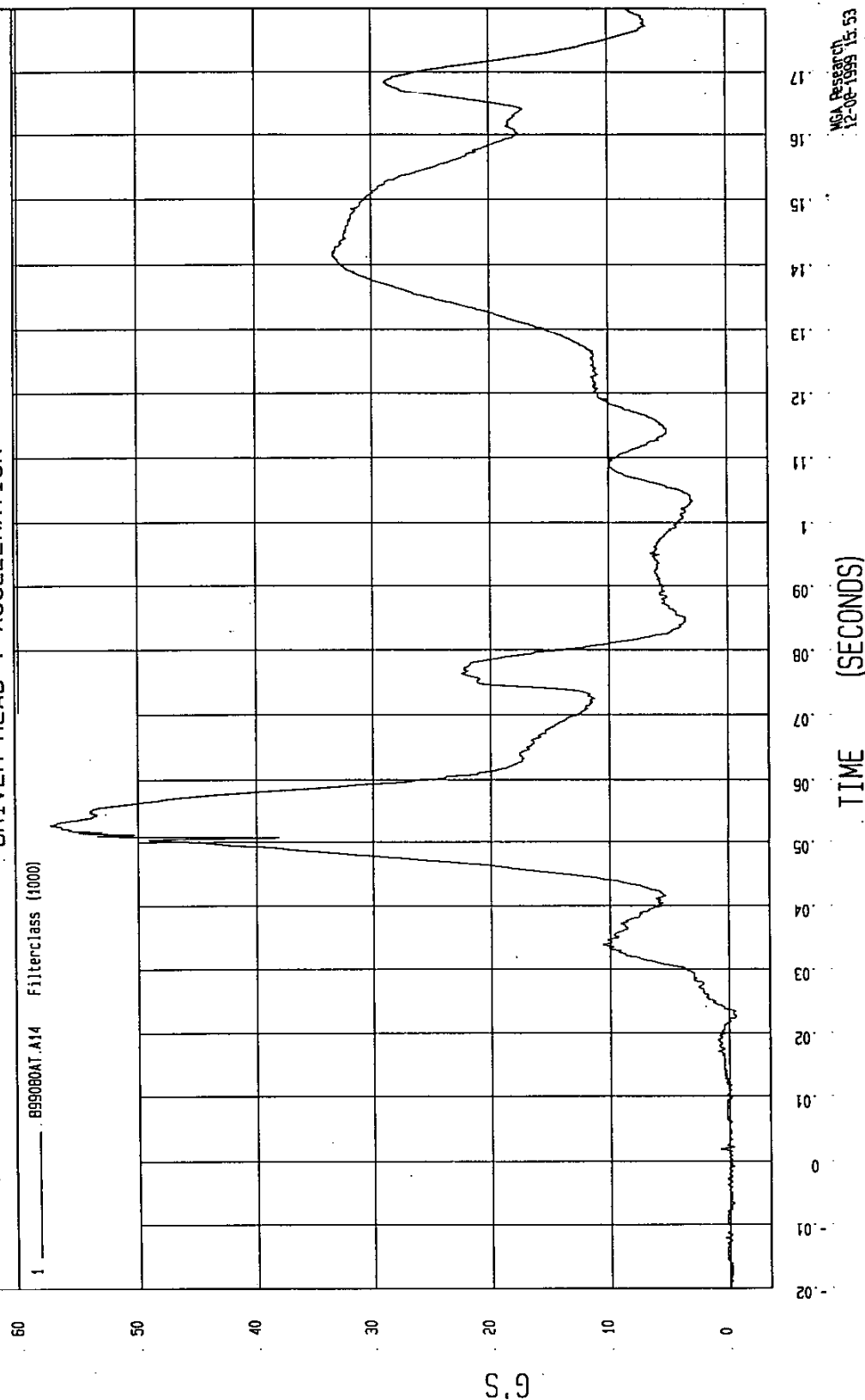
Speed: 38.5 MPH 62 KPH

COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 57.41 G'S at 53 msec

Minimum = -58 G'S at 22 msec

DRIVER HEAD Y ACCELERATION



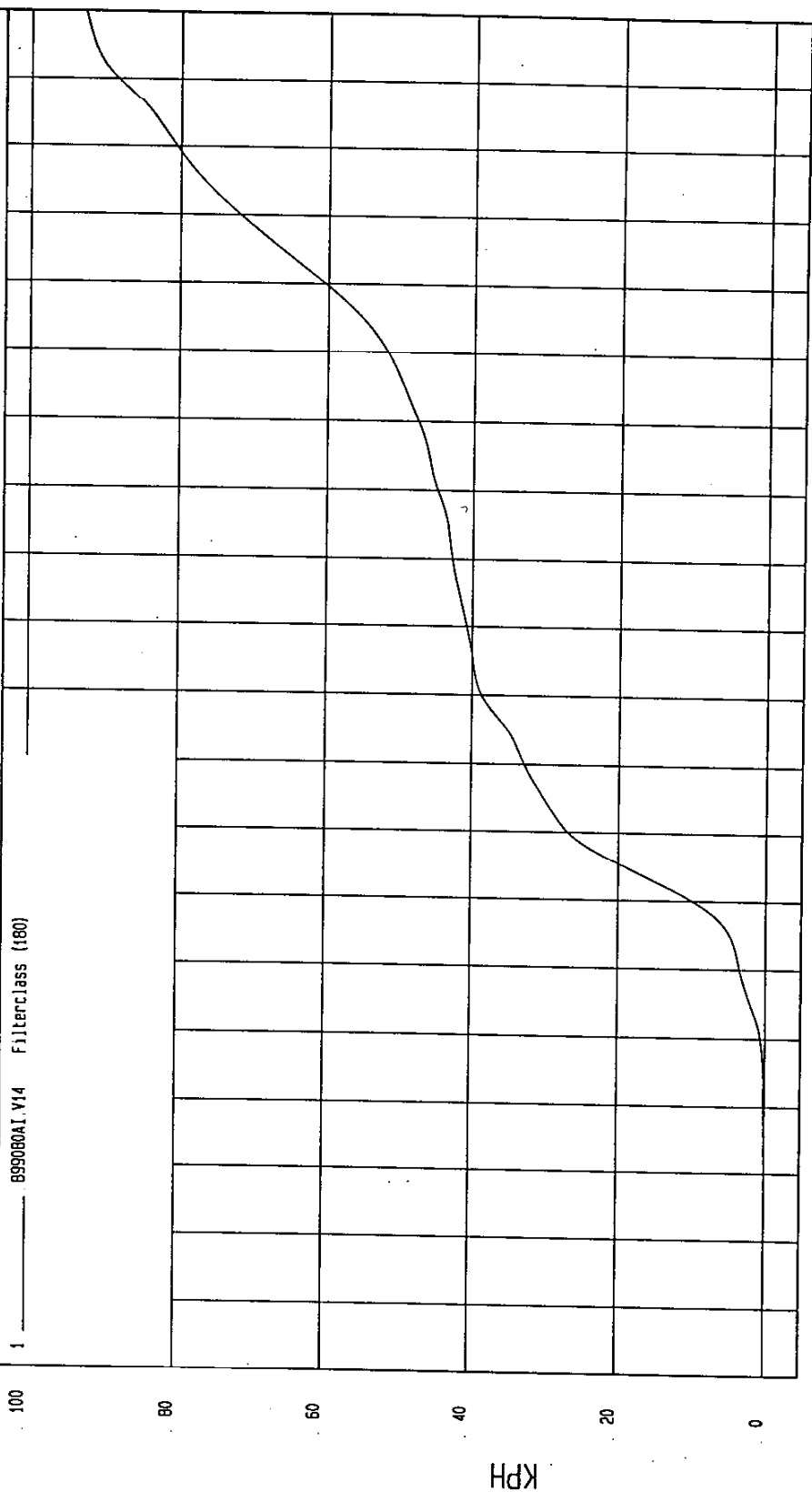
MCA Research
12-08-1999 15:53

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -1.15E-02 KPH at -16 msec Maximum = 98.34 KPH at 200 msec

DRIVER HEAD Y VELOCITY



TIME Seconds

MSA Research
12-08-1999 16:19

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

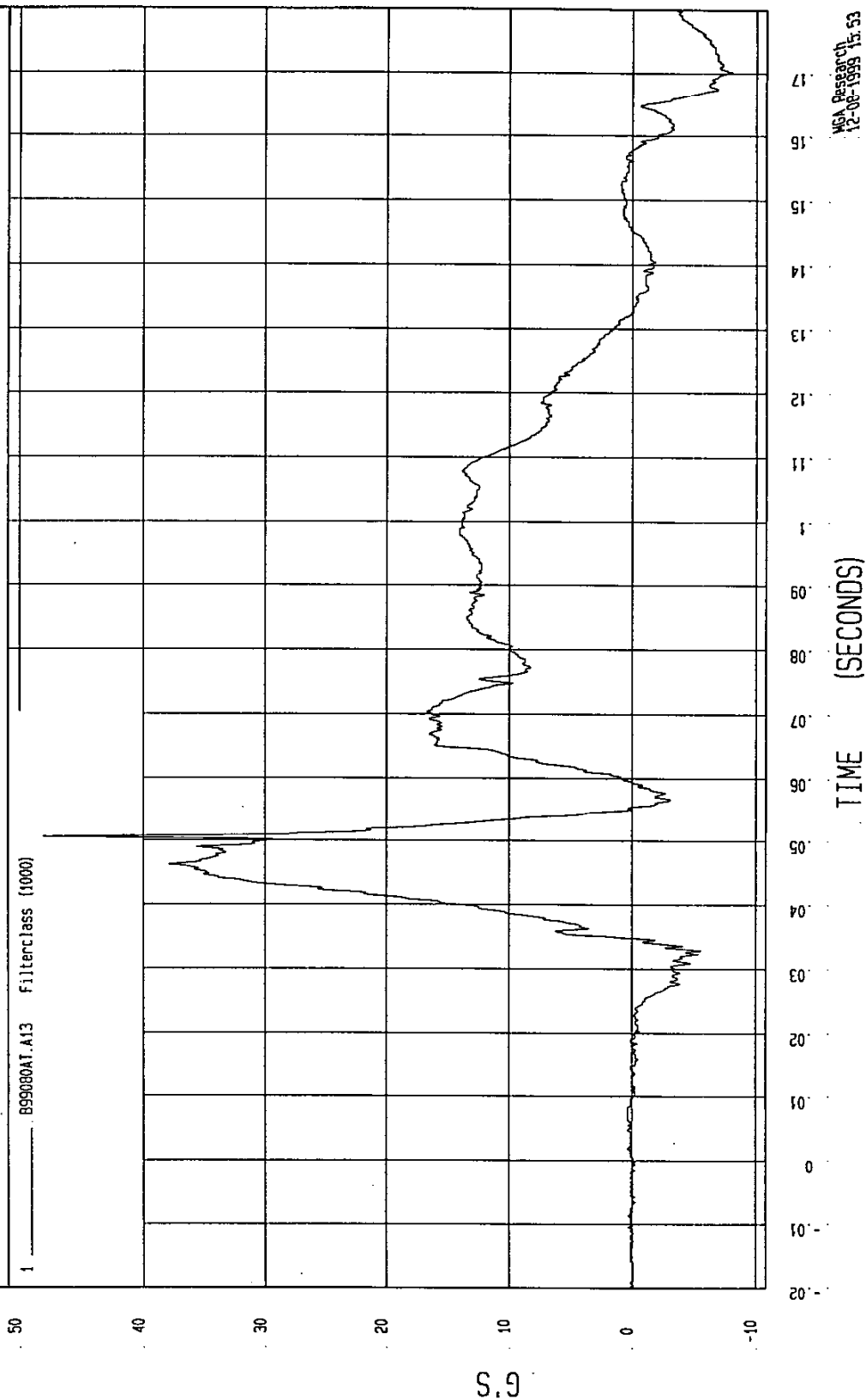
Speed: 38.5 MPH 62 KPH

COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 48.13 G'S at 51 msec

Minimum = -8.01 G'S at 170 msec

DRIVER HEAD Z ACCELERATION

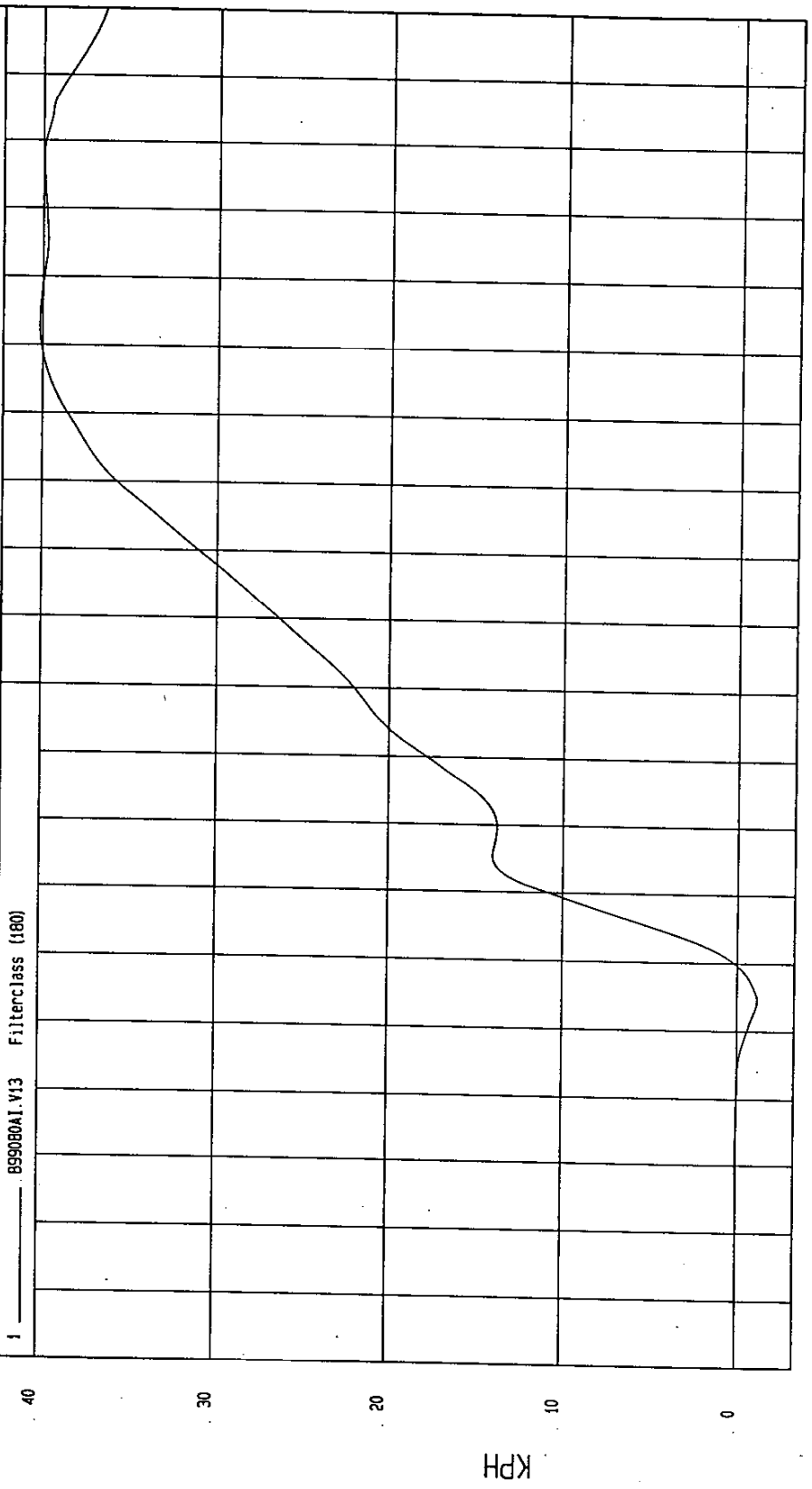
MGA Research
12-08-1999 15:53

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

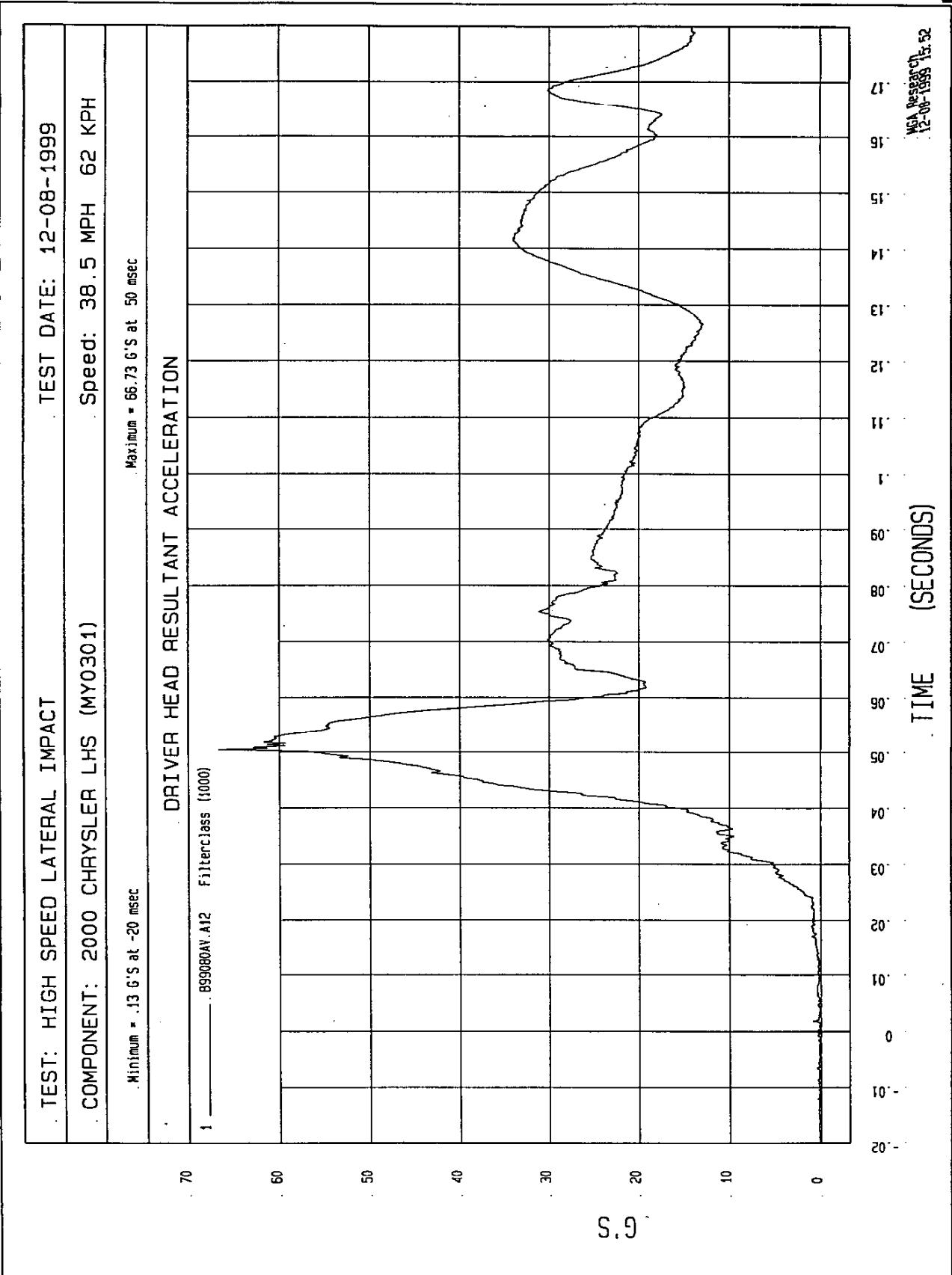
COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -1.16 KPH at 35 msec Maximum = 40.17 KPH at 133 msec

DRIVER HEAD Z VELOCITY



WCA Research
12-08-1999 16:19



TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

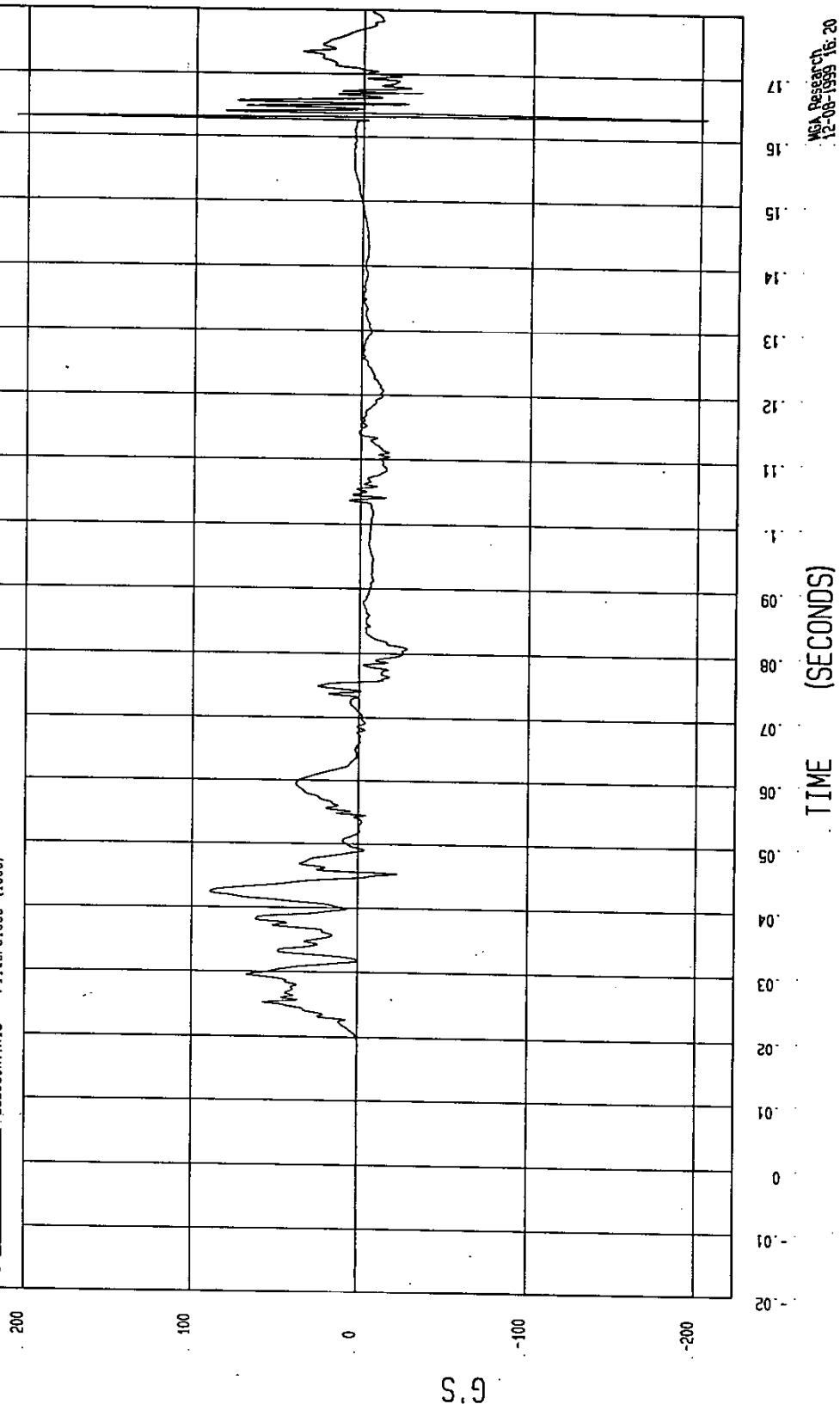
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 206.67 G'S at 163 msec

Minimum = -203.49 G'S at 163 msec

DRIVER UPPER RIB Y ACCELERATION

1 899080AT.A15 Filterclass (1000)



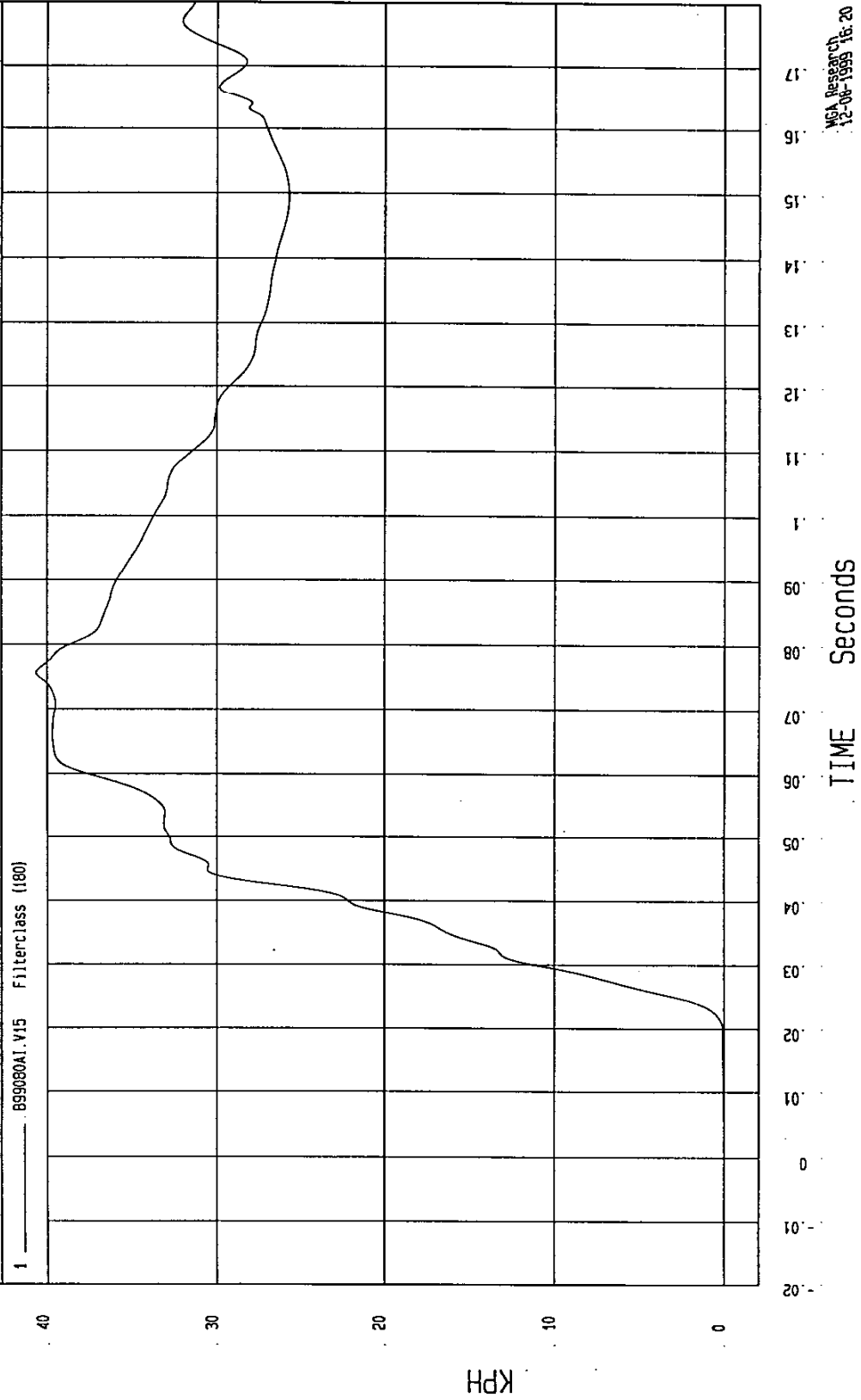
MCA Research
12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -1.51E-02 KPH at -8 msec Maximum = 40.65 KPH at 76 msec

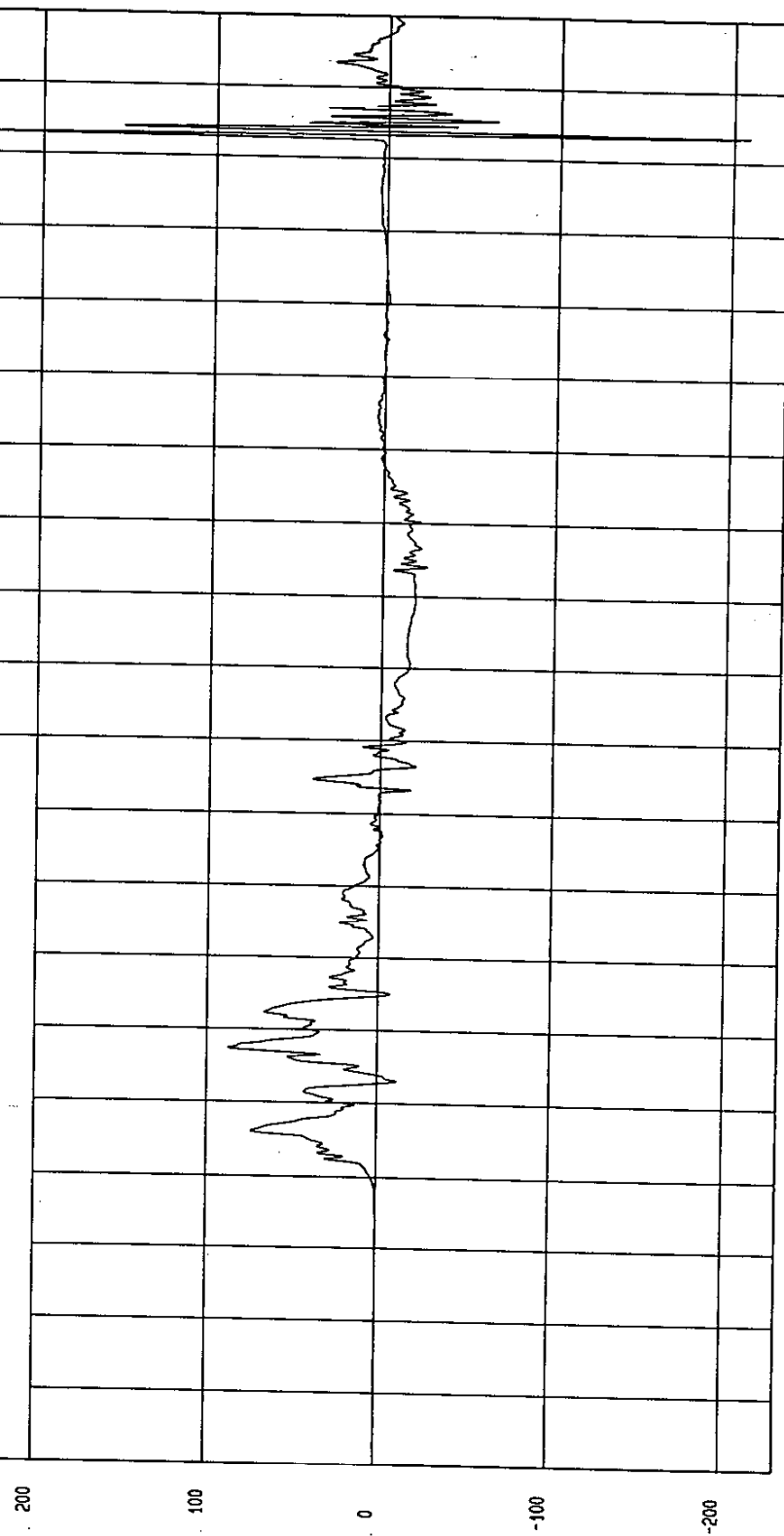
DRIVER UPPER RIB Y VELOCITY



TEST: HIGH SPEED LATERAL IMPACT
 COMPONENT: 2000 CHRYSLER LHS (MY0301)
 Minimum = -209.46 G'S at 163 msec
 Maximum = 244.06 G'S at 163 msec

DRIVER LOWER RIB Y ACCELERATION

1 899080AT.A16 Filterclass (1000)



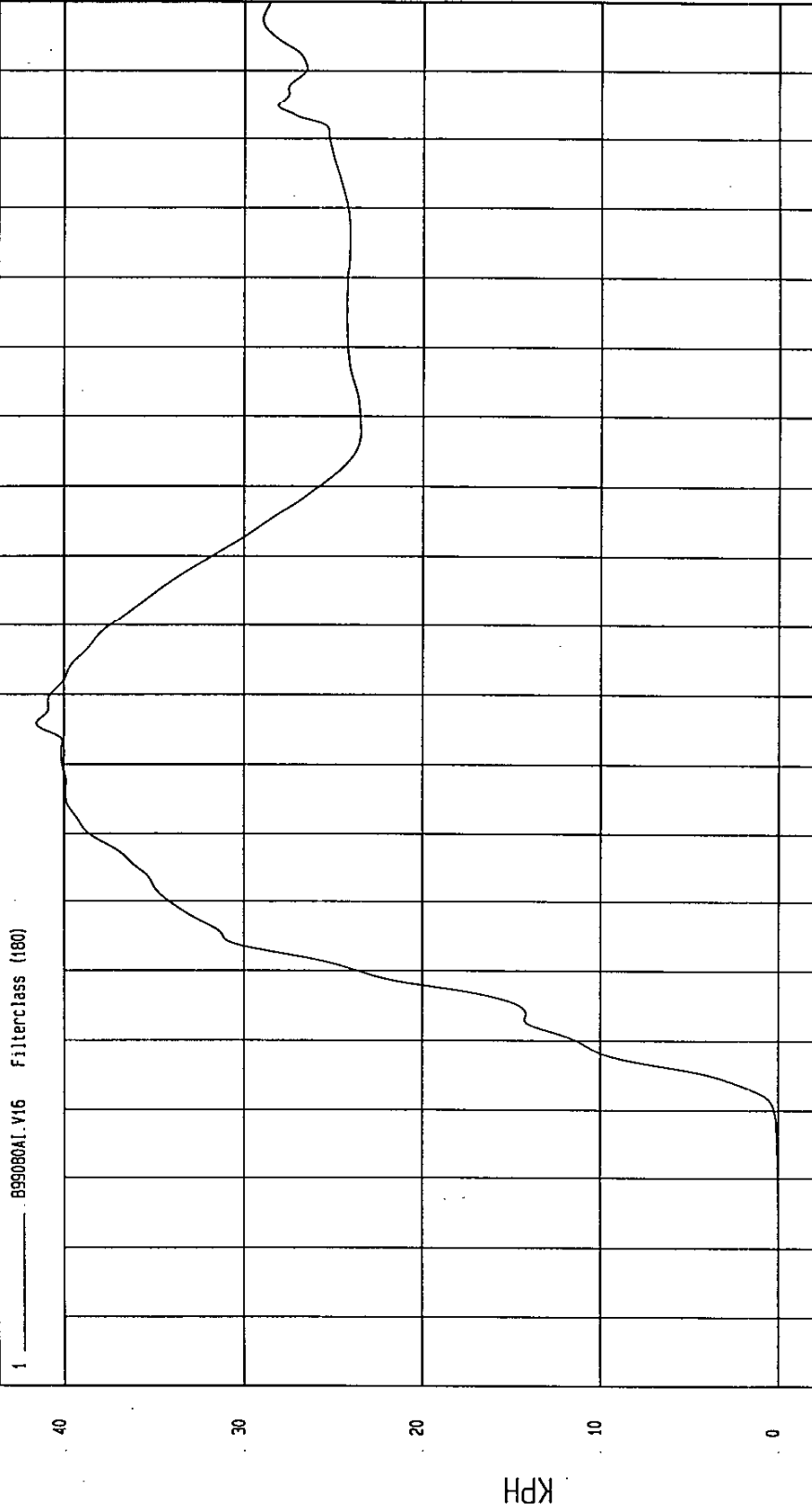
MSA Research
 12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -1.20E-02 KPH at -8 msec Maximum = 41.51 KPH at 76 msec

DRIVER LOWER RIB Y VELOCITY

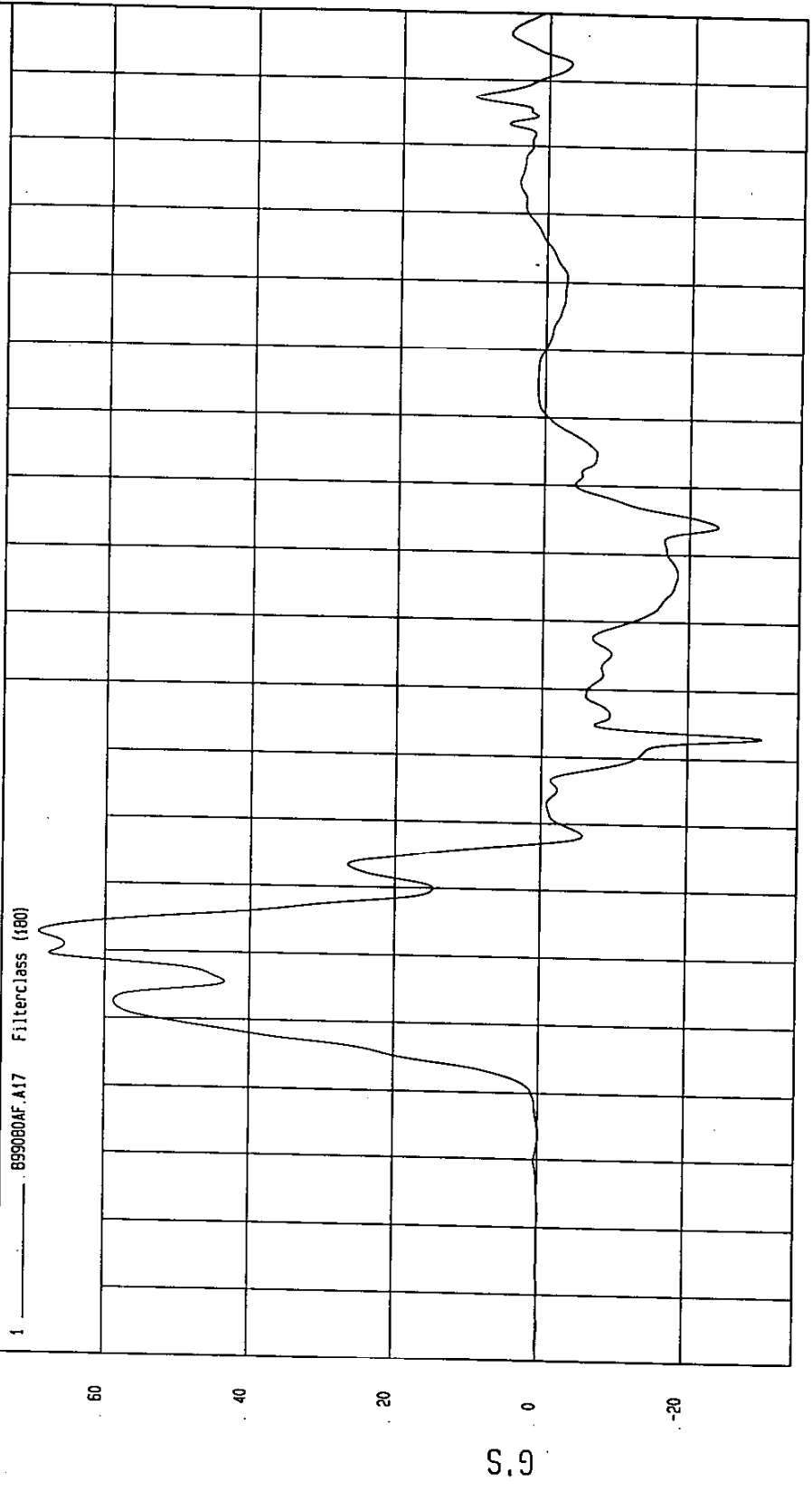


TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -30.3 G'S at 73 msec Maximum = 68.95 G'S at 43 msec

DRIVER LOWER SPINE Y ACCELERATION



TIME (SECONDS)

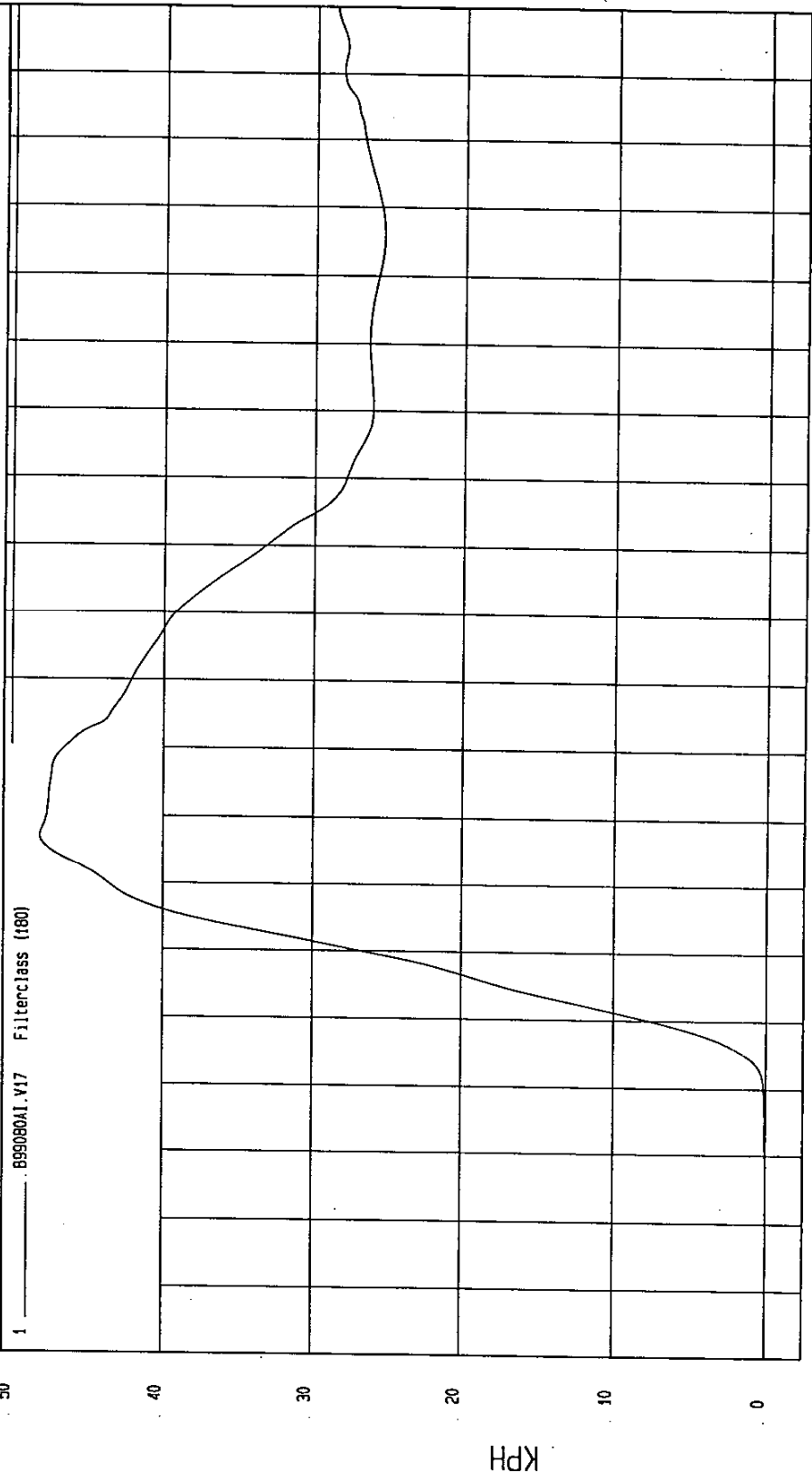
MCA Research
12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -1.15E-02 KPH at -8 msec Maximum = 48.13 KPH at 57 msec

DRIVER LOWER SPINE Y VELOCITY



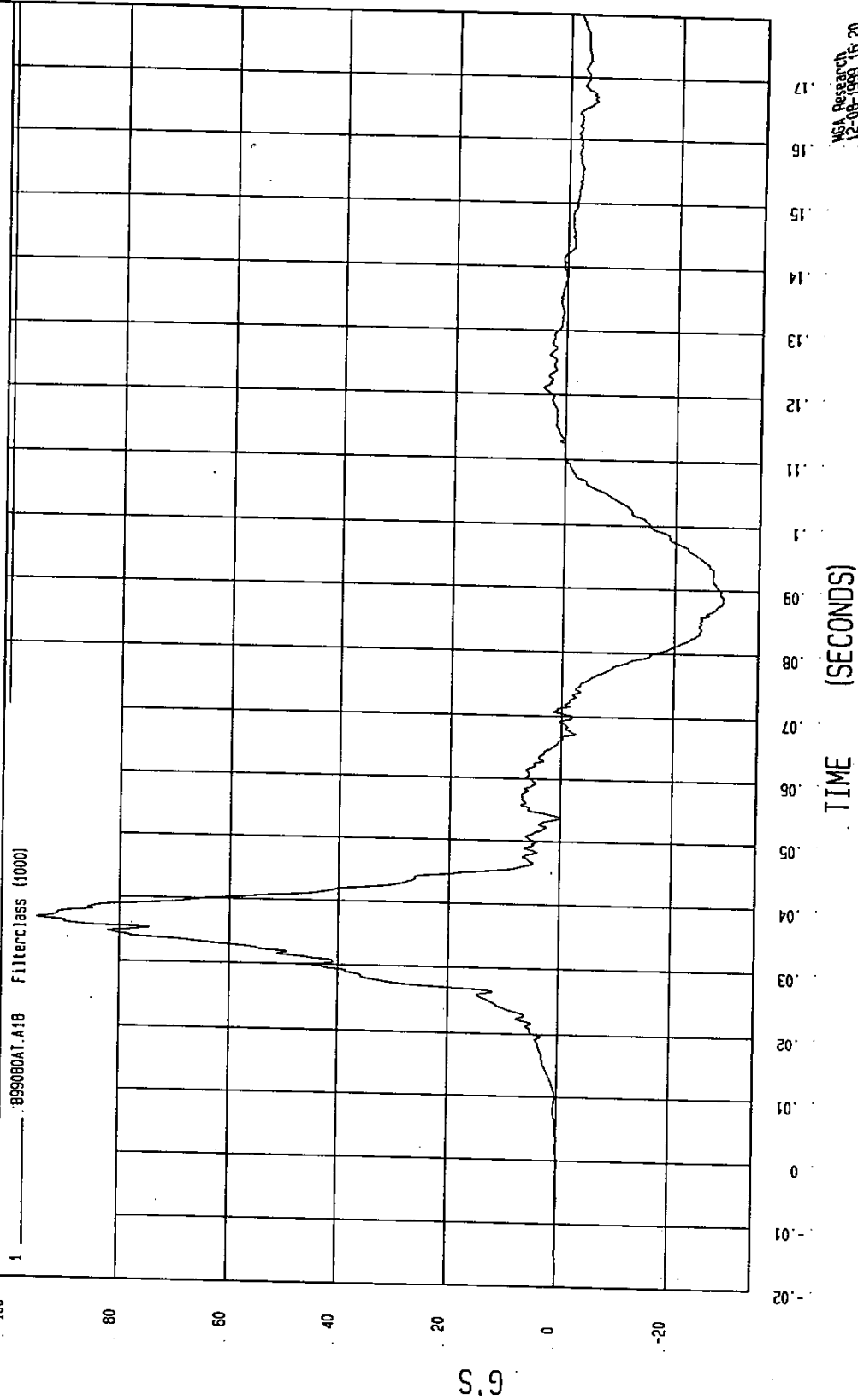
MOA Research
12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -28.93 G'S at 89 msec Maximum = 94.9 G'S at 37 msec

DRIVER PELVIS Y ACCELERATION



NEA Research
12-08-1999 16:20

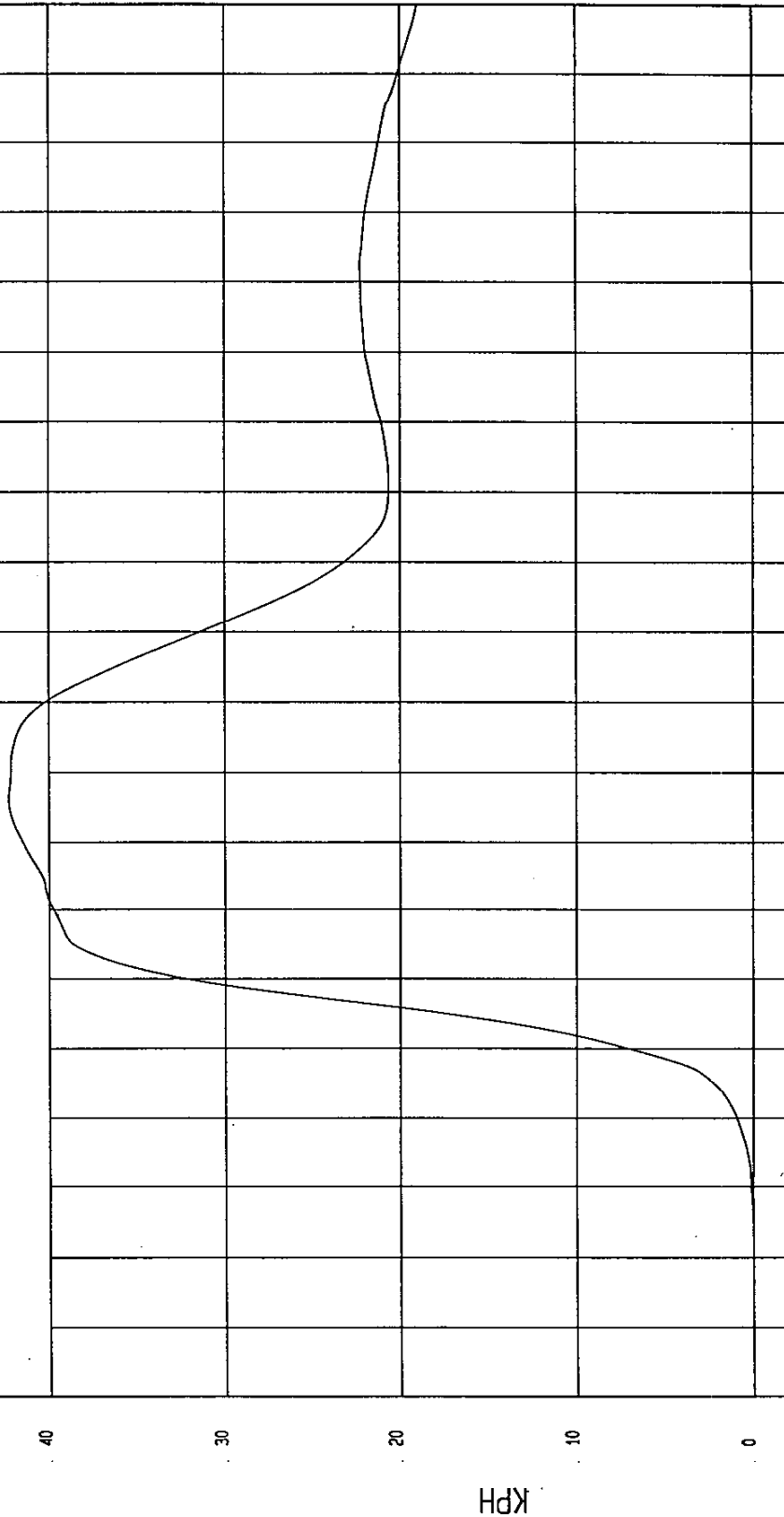
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -6.54E-03 KPH at 0 msec Maximum = 42.24 KPH at 66 msec

DRIVER PELVIS Y VELOCITY

1 _____ 895080A1.V18 Filterclass (180)



SEA Research
12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0304)

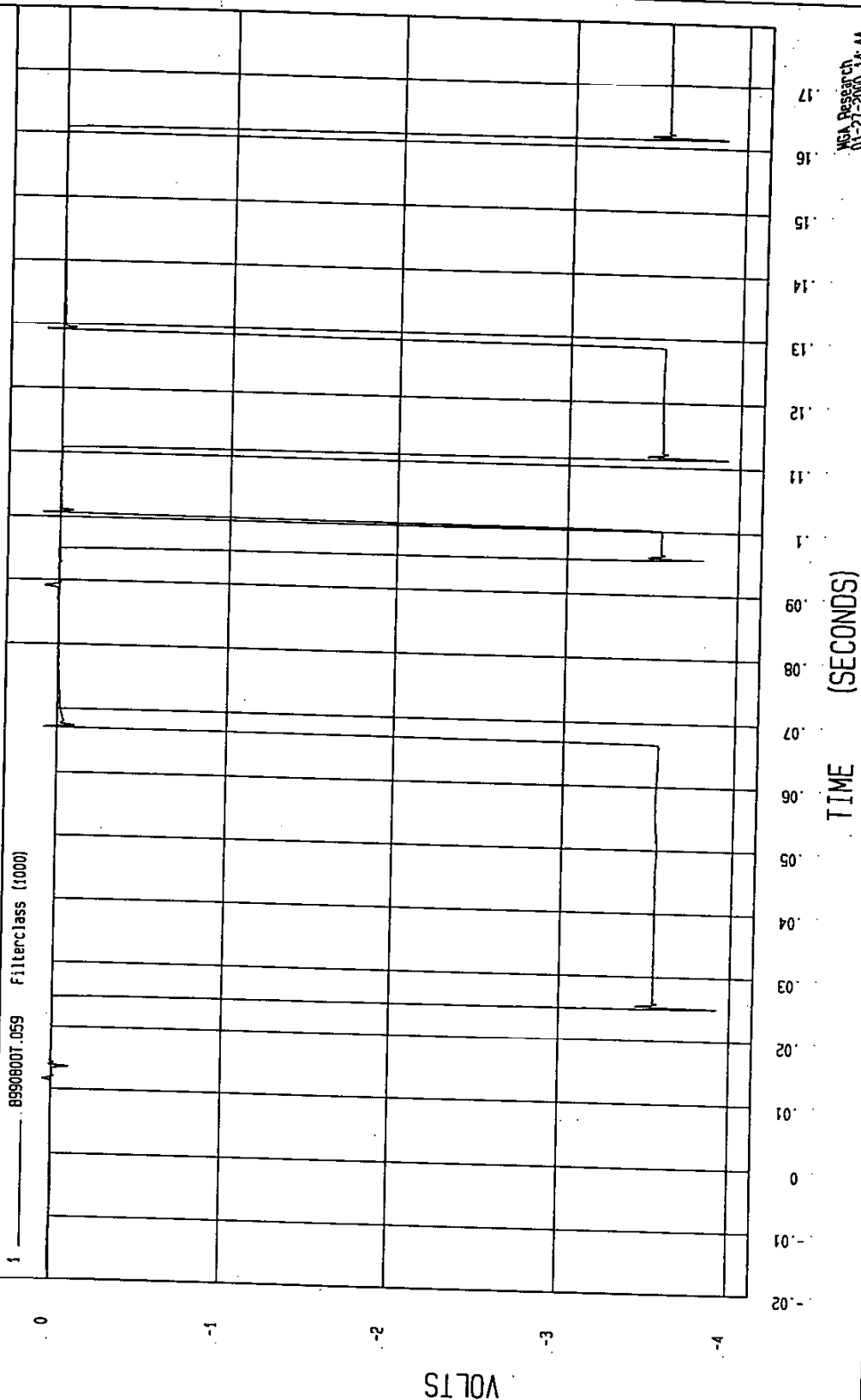
Speed: 38.5 MPH 62 KPH

Minimum = -3.93 VOLTS at 111 msec

Maximum = .1 VOLTS at 101 msec

DRIVER SHOULDER CONTACT

1 ——— .8590800T.059 FilterClass (1000)

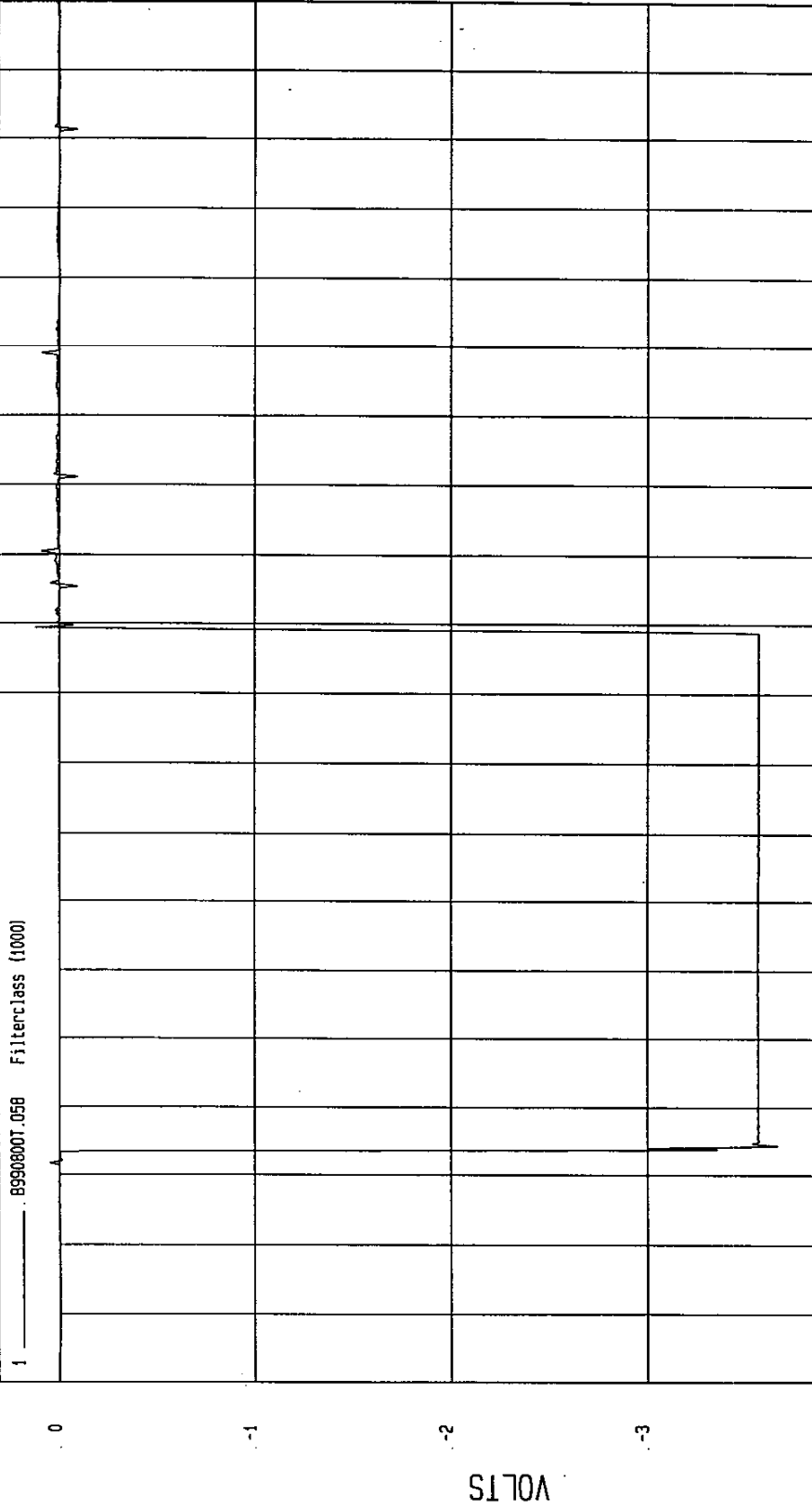
VCA Research
01-21-2000 14:44

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

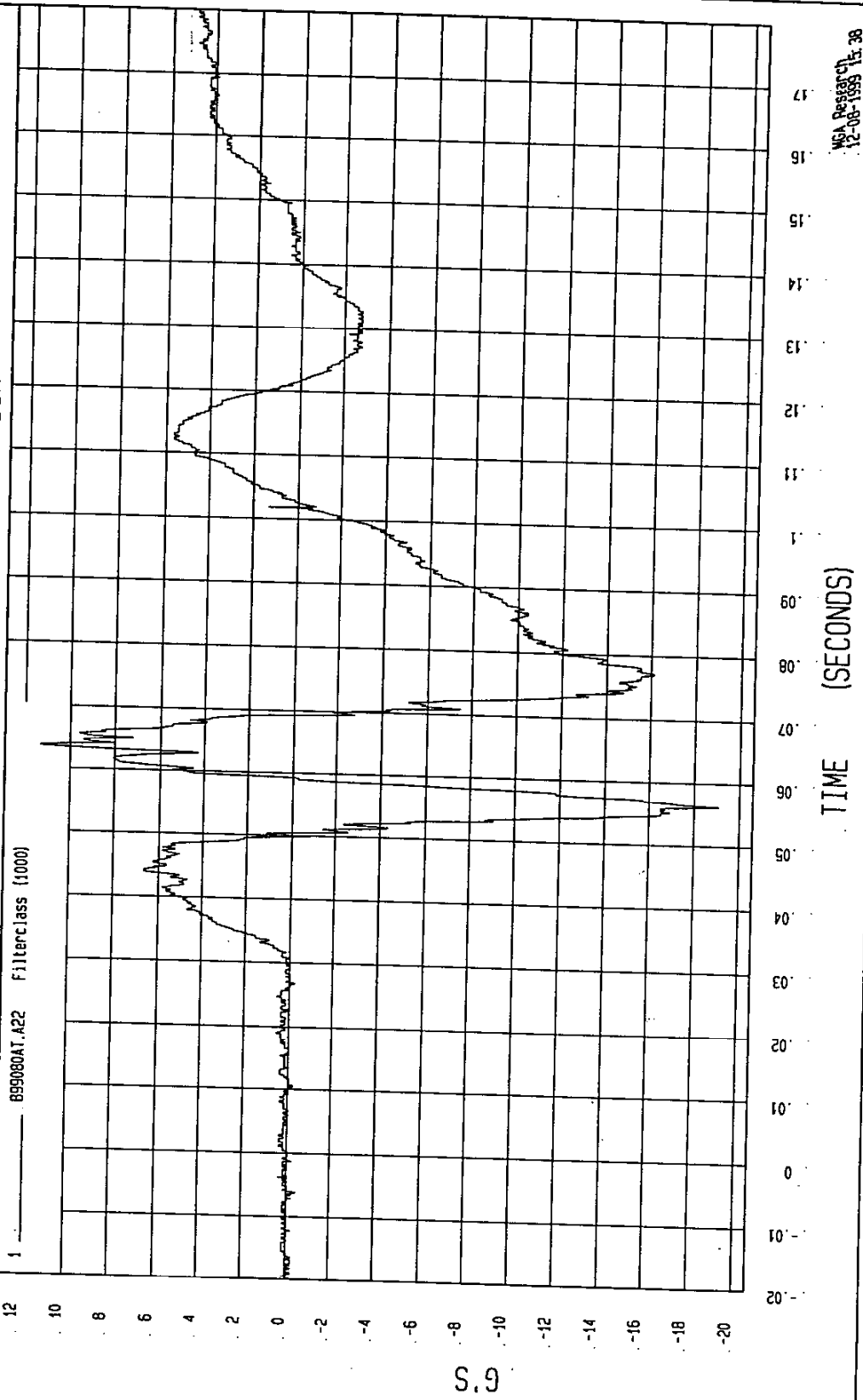
Minimum = -3.65 VOLTS at 14 msec Maximum = .12 VOLTS at 99 msec

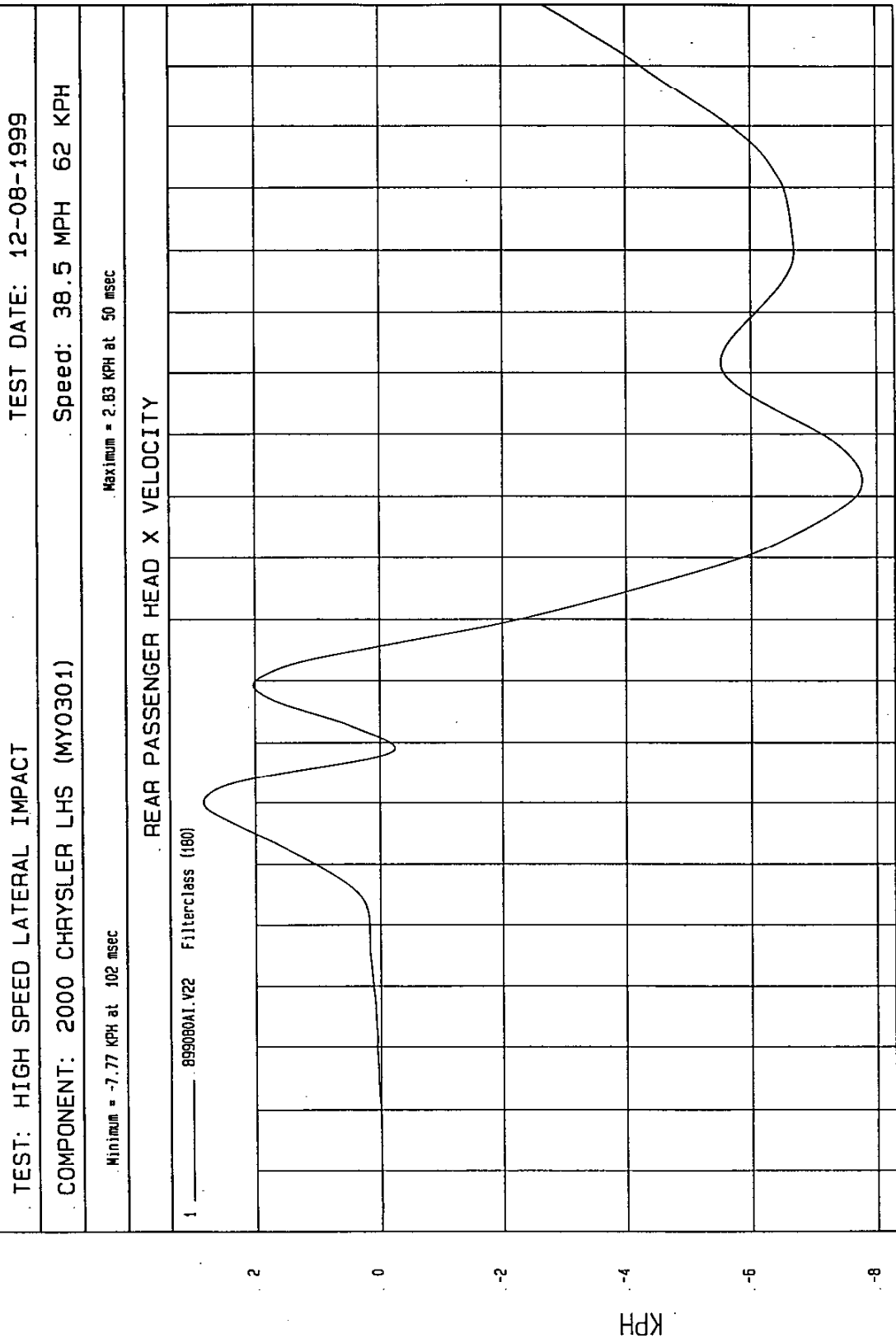
DRIVER PELVIS CONTACT



TEST: HIGH SPEED LATERAL IMPACT
 TEST DATE: 12-08-1999
 COMPONENT: 2000 CHRYSLER LHS (MY0301)
 Speed: 38.5 MPH 62 KPH
 Minimum = -19.07 G'S at 56 msec
 Maximum = 11.35 G'S at 64 msec

REAR PASSENGER HEAD X ACCELERATION





MCA Research
12-08-1999 16:19

TIME Seconds

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

Speed: 38.5 MPH 62 KPH

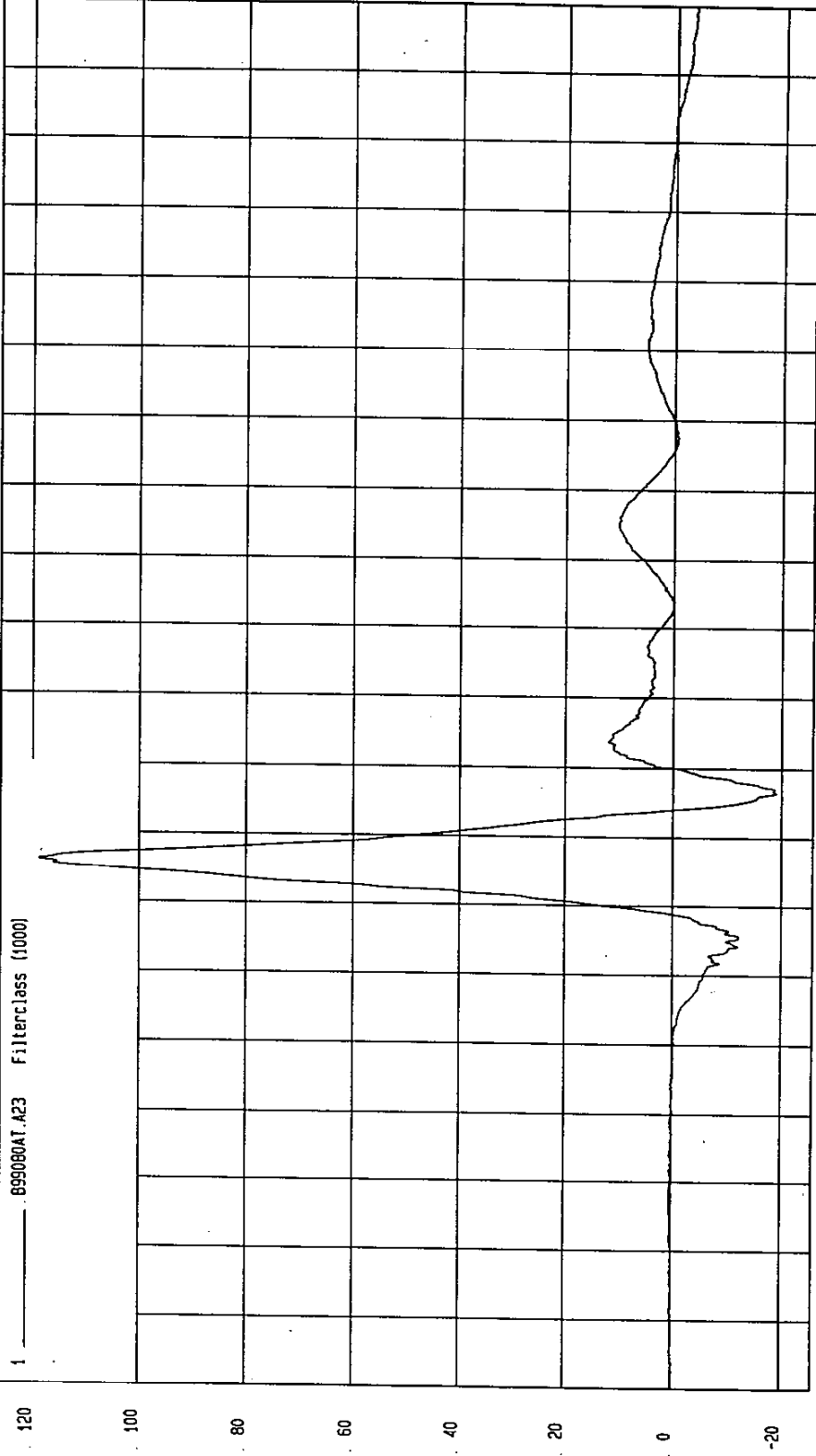
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 118.92 G'S at 56 msec

Minimum = -19.03 G'S at 66 msec

REAR PASSENGER HEAD Y ACCELERATION

1 ——— 89080AT.A23 Filterclass (1000)



MCA Research
12-08-1999 15:44

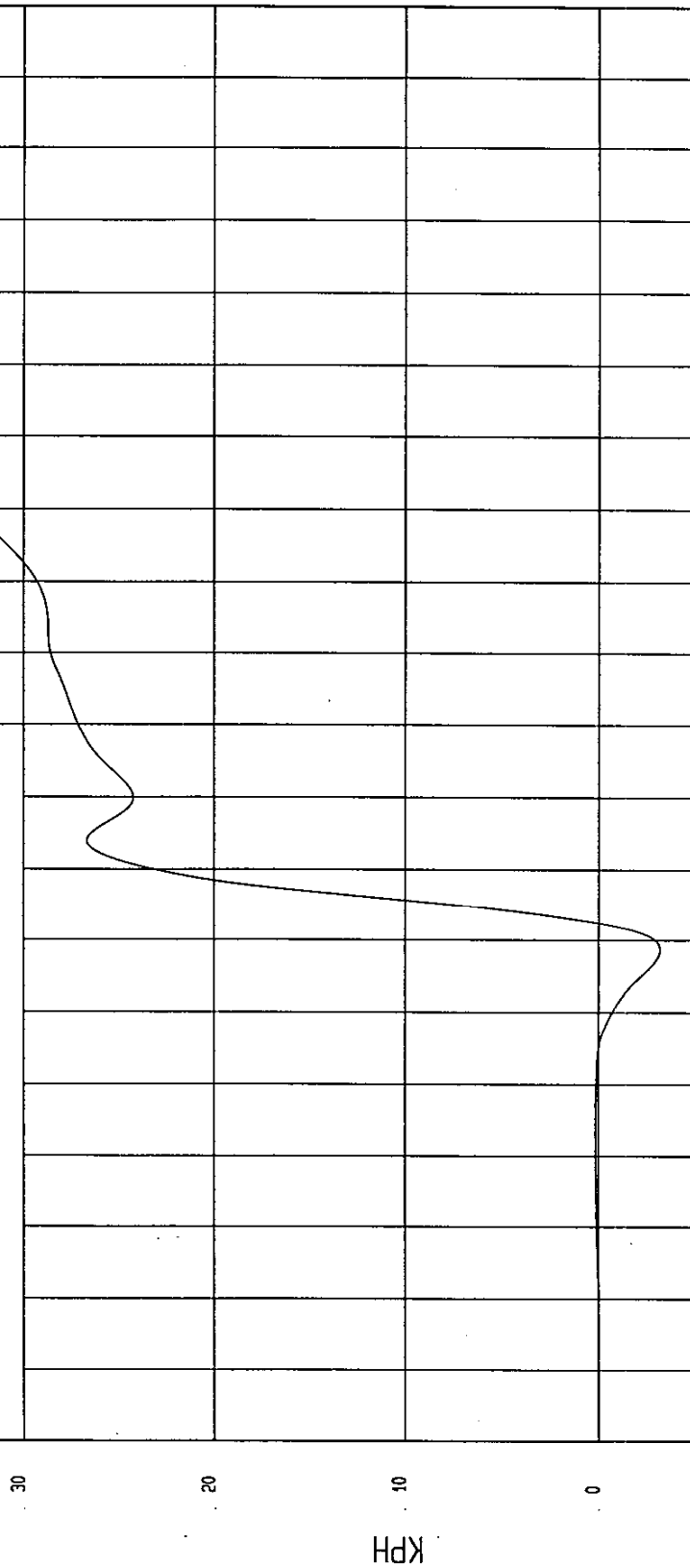
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -3.2 KPH at 49 msec Maximum = 37.06 KPH at 163 msec

REAR PASSENGER HEAD Y VELOCITY

1 _____ 899080A1.V23 Filterclass (180)



TIME Seconds

MGA Research
12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

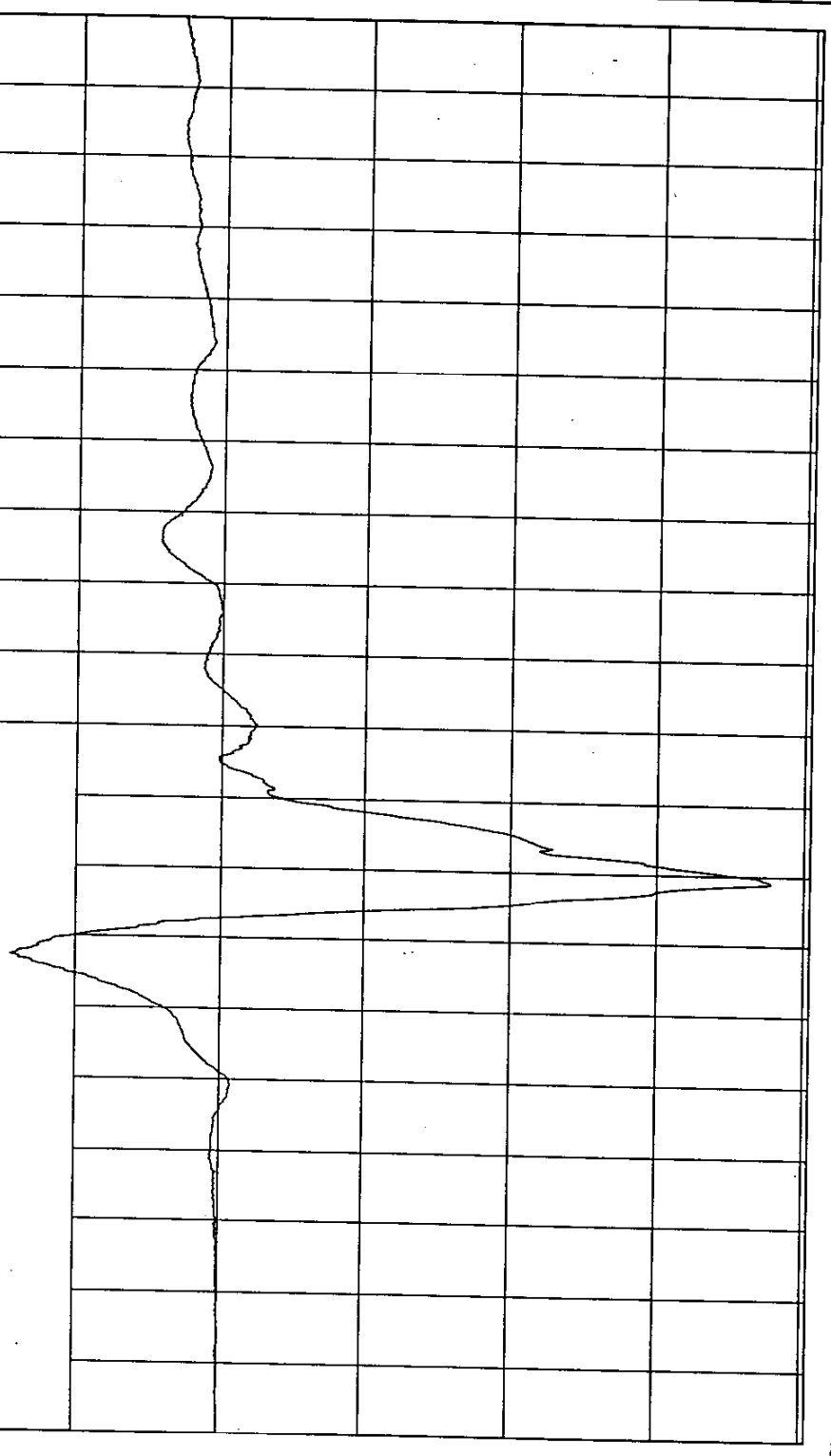
Speed: 38.5 MPH 62 KPH

Minimum = -75.6 G'S at 59 msec

Maximum = 29.02 G'S at 47 msec

REAR PASSENGER HEAD Z ACCELERATION

1 895080AT.A24 Filterclass (1000)



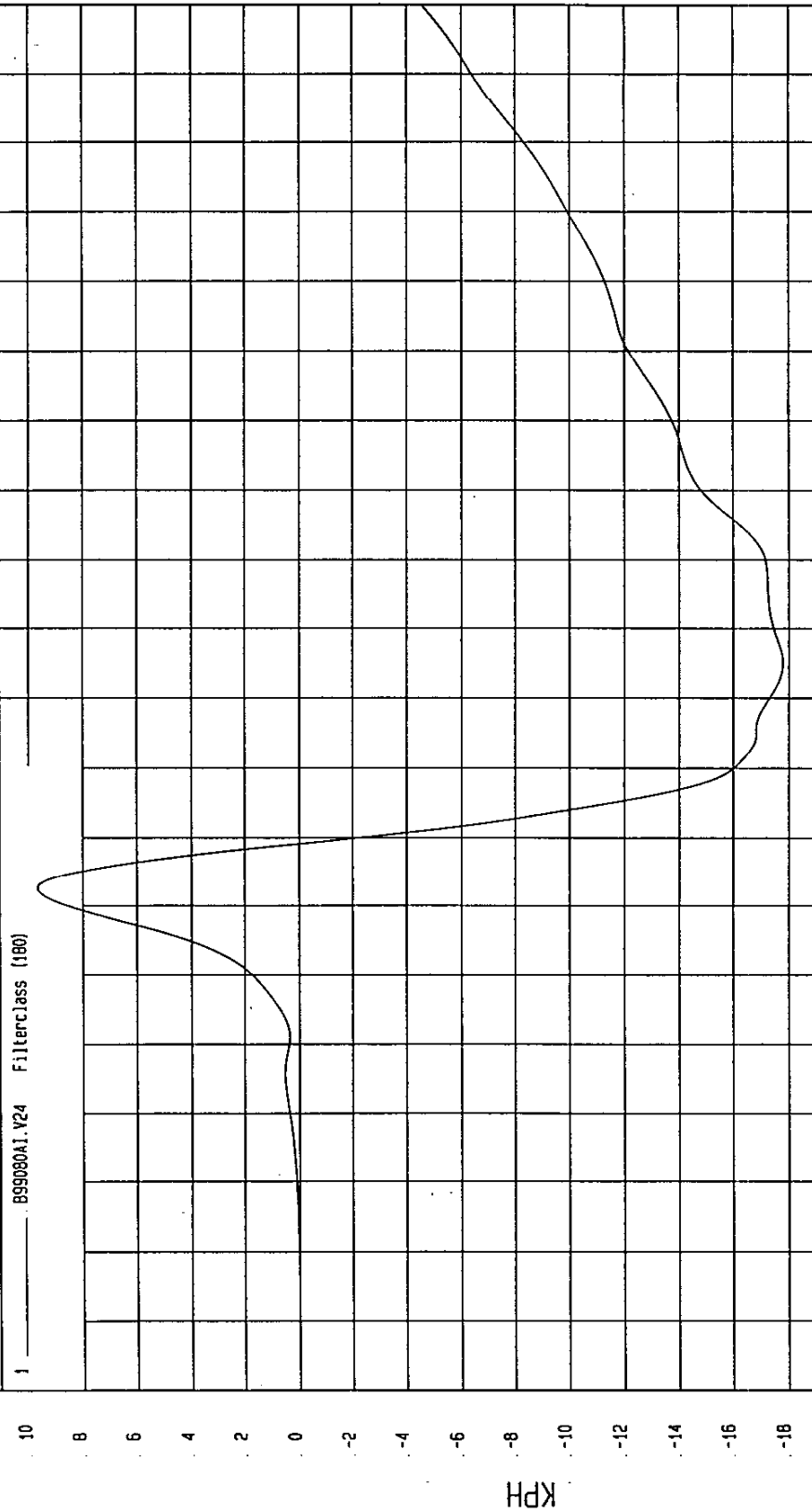
MCA Research
12-08-1999 15.44

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -17.79 KPH at 85 msec Maximum = 9.68 KPH at 53 msec

REAR PASSENGER HEAD Z VELOCITY

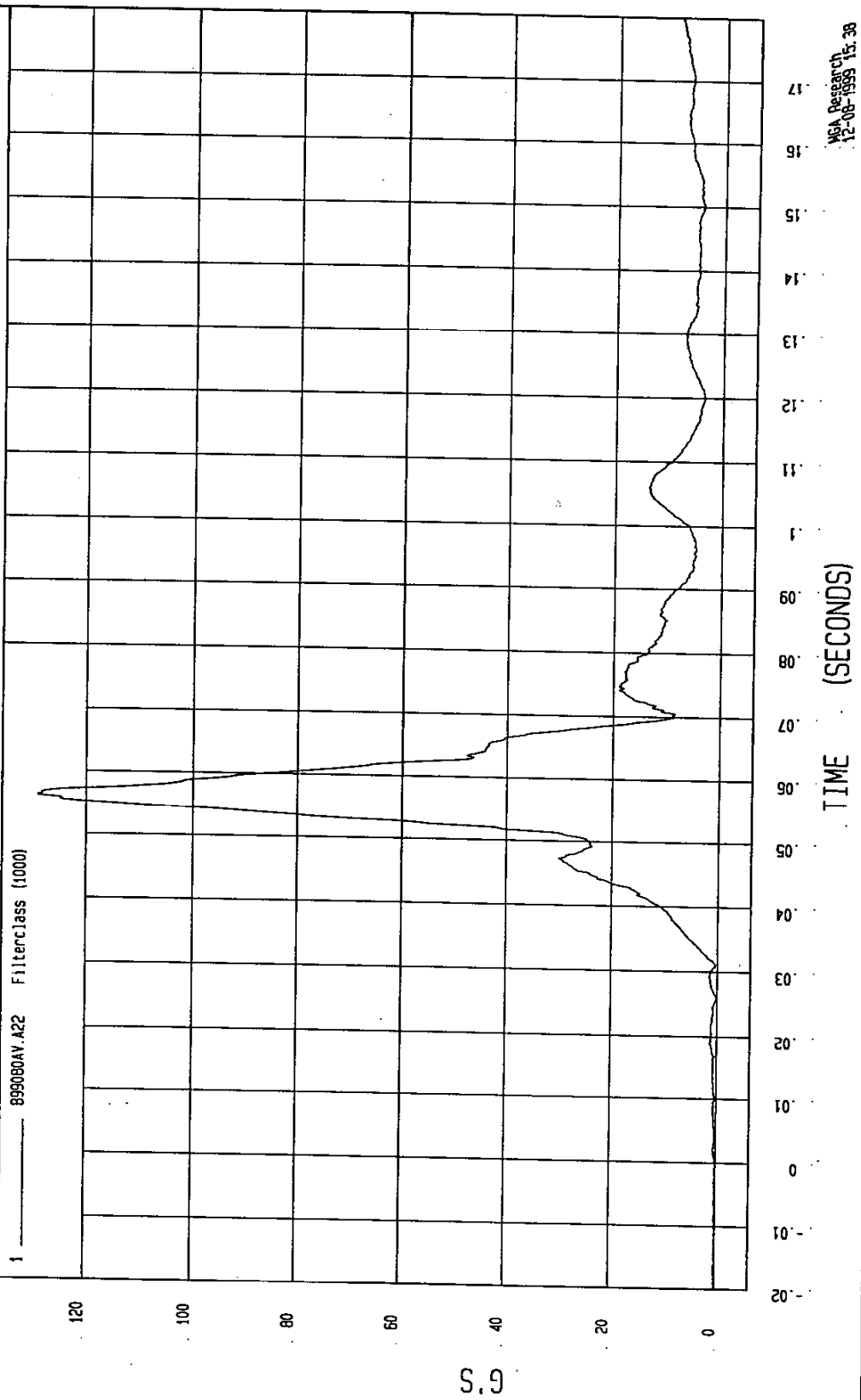


TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = 8.54E-02 G'S at -19 msec Maximum = 129.13 G'S at 56 msec

REAR PASSENGER HEAD RESULTANT ACCELERATION



MSA Research
12-08-1999 15:38

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

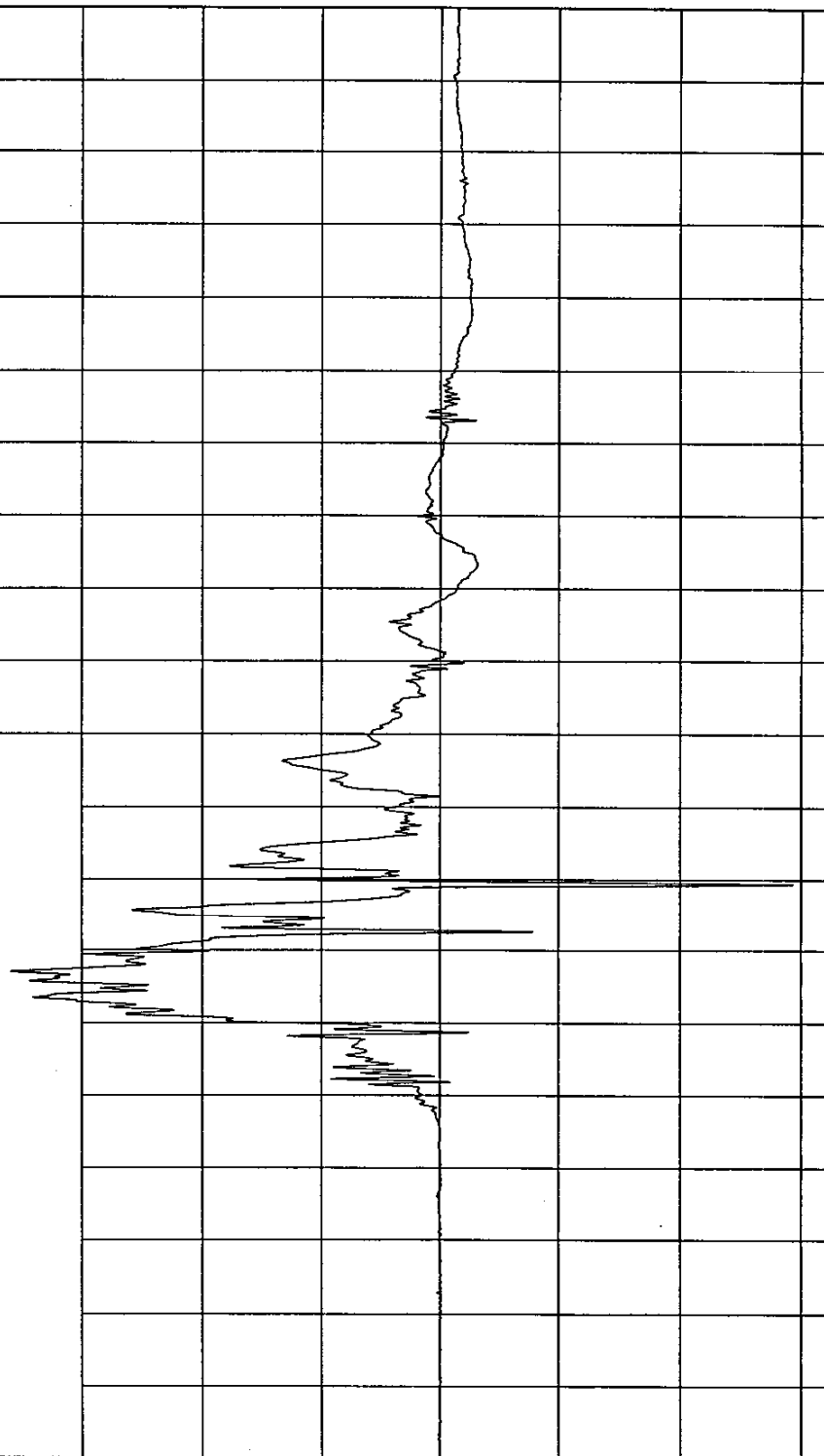
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 71.89 G'S at 47 msec

Minimum = -58.65 G'S at 59 msec

REAR PASSENGER UPPER RIB Y ACCELERATION

1 _____ B99080AT.A25 FilterClass (1000)



MSA Research
12-08-1999 16:20

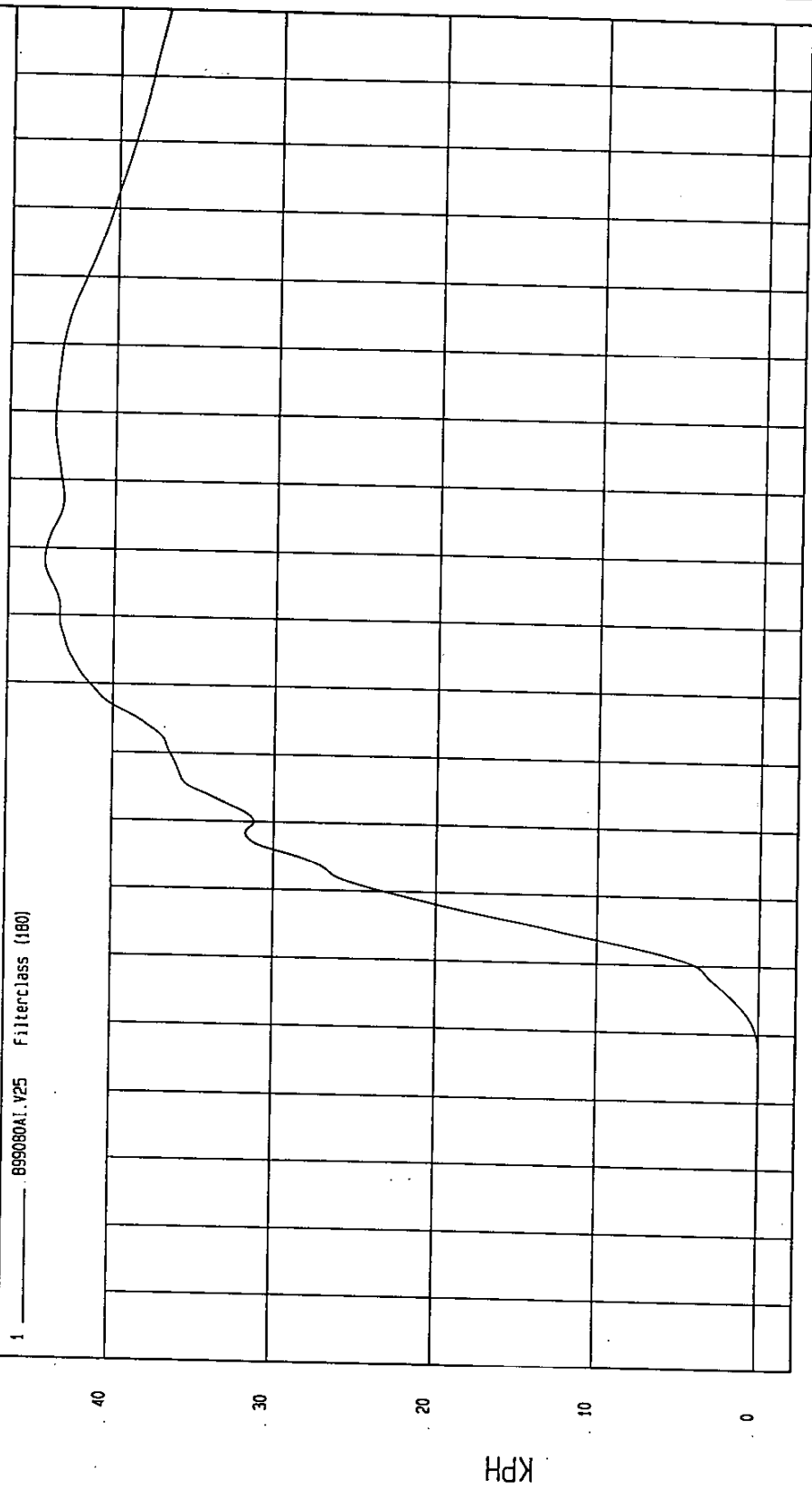
TIME (SECONDS)

G'S

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999
 COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH
 Minimum = -4.83E-02 KPH at 9 msec Maximum = 44.28 KPH at 98 msec

REAR PASSENGER UPPER RIB Y VELOCITY

1 ——— B99080A1.V25 Filterclass (180)



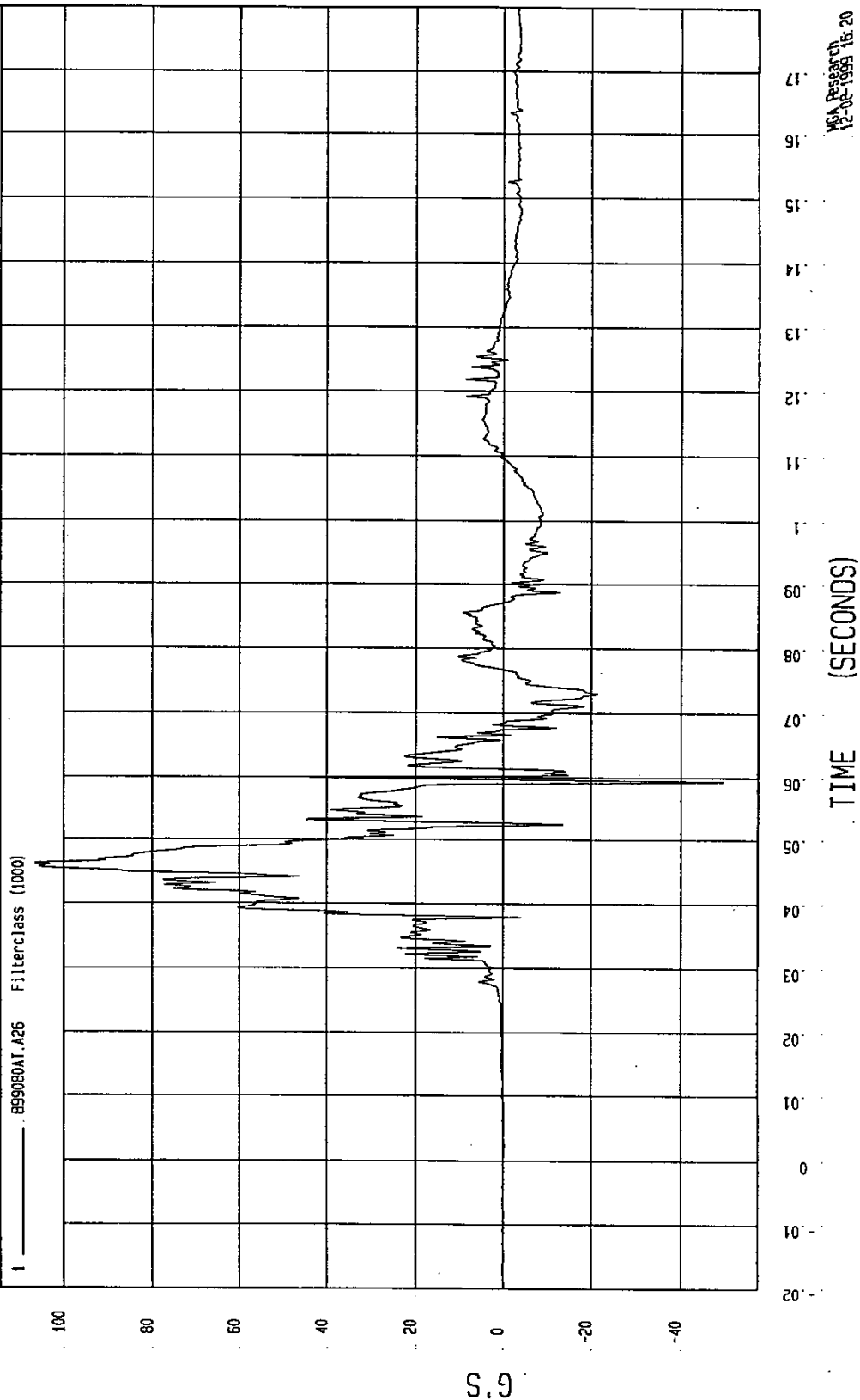
MSA Research
 12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -49.72 G'S at 59 msec Maximum = 106.55 G'S at 46 msec

REAR PASSENGER LOWER RIB Y ACCELERATION



MCA Research
12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

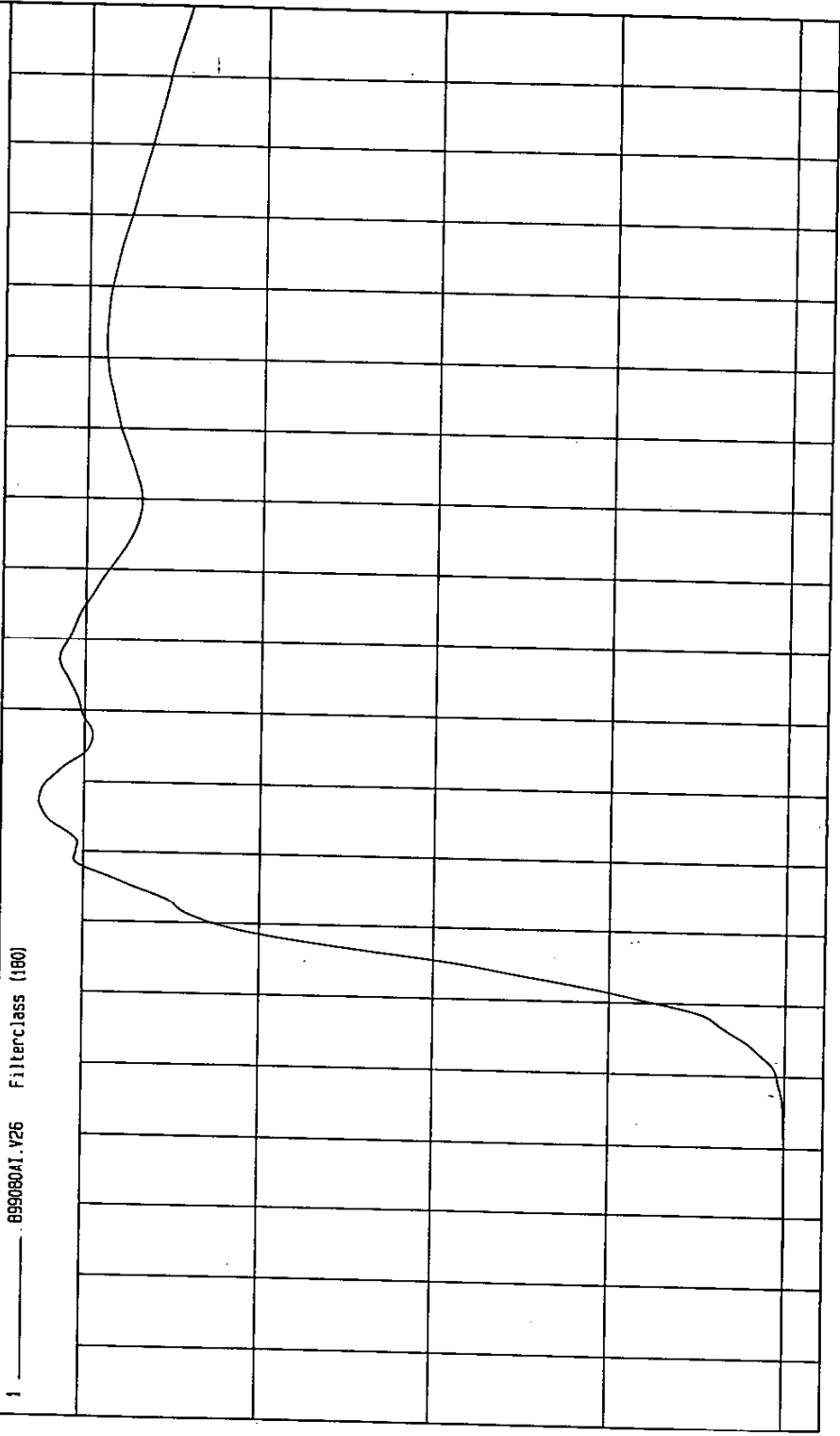
Speed: 38.5 MPH 62 KPH

Minimum = -4.46E-02 KPH at 9 msec

Maximum = 42.48 KPH at 67 msec

REAR PASSENGER LOWER RIB Y VELOCITY

1 899080A1.V26 Filterclass (180)



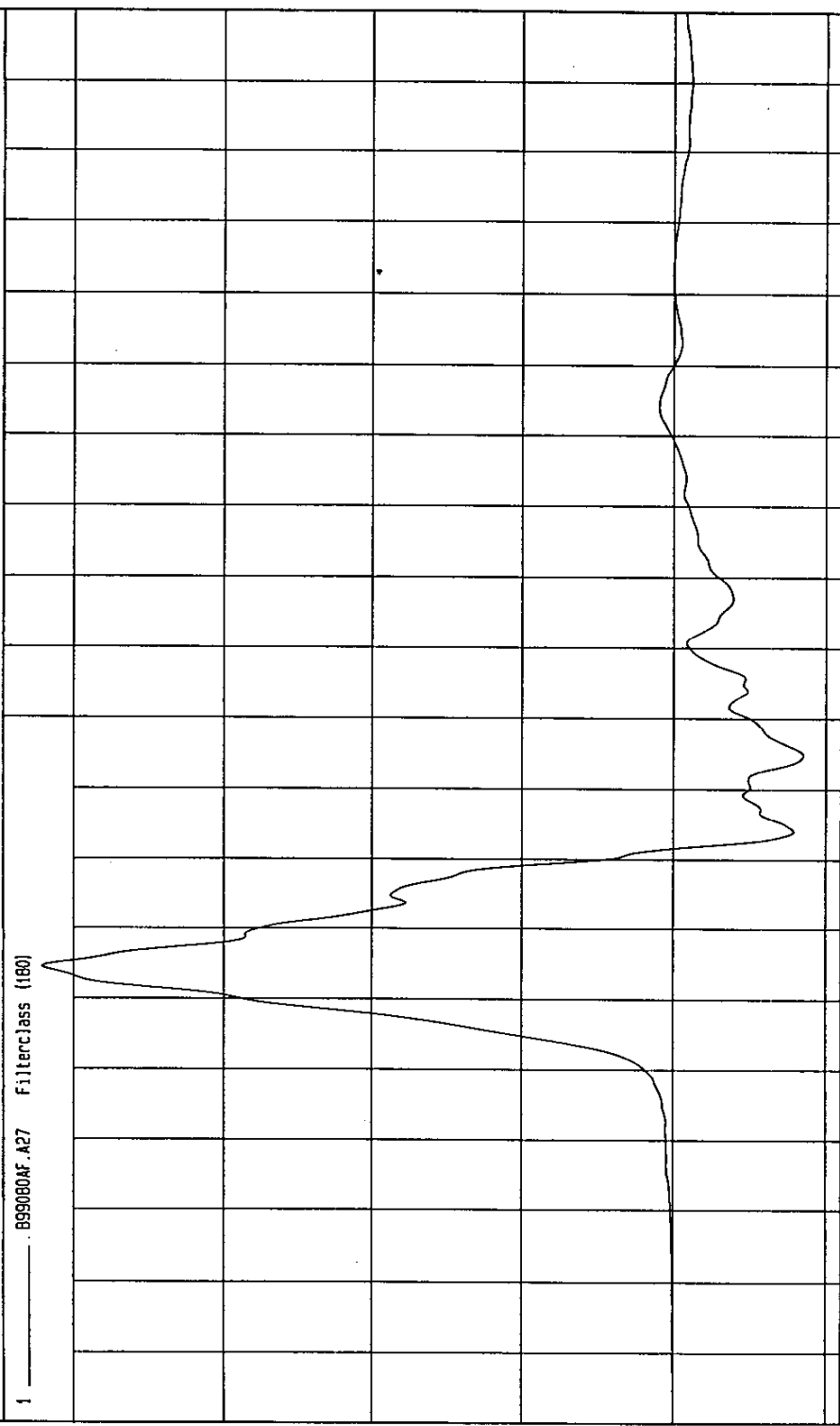
MSA Research
12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -17.01 G'S at 75 msec Maximum = 84.2 G'S at 45 msec

REAR PASSENGER LOWER SPINE Y ACCELERATION



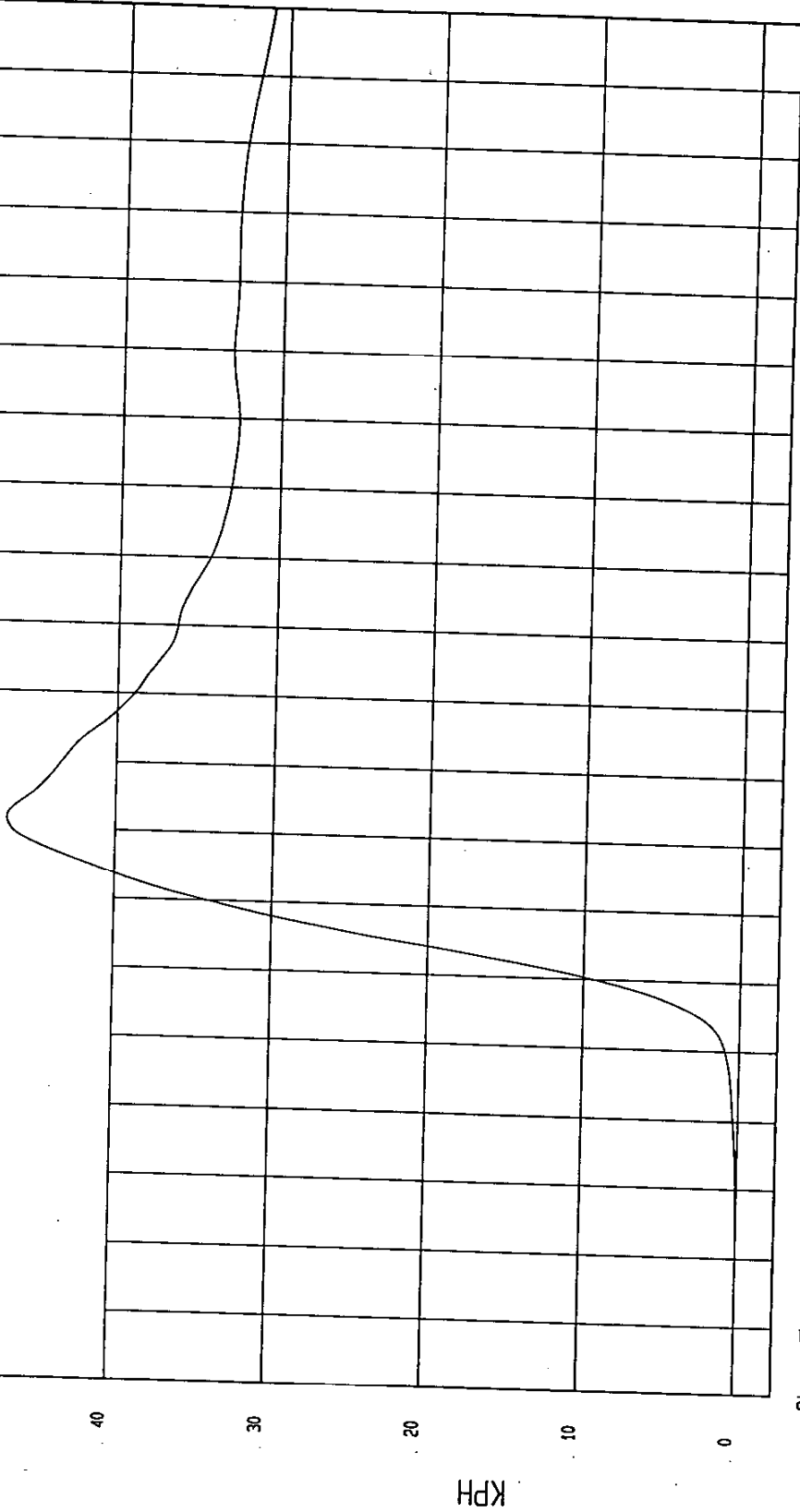
TIME (SECONDS)

MCA Research
12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT
 COMPONENT: 2000 CHRYSLER LHS (MY0301)
 TEST DATE: 12-08-1999
 Speed: 38.5 MPH 62 KPH
 Minimum = -.01 KPH at -.13 msec
 Maximum = 46.91 KPH at 62 msec

REAR PASSENGER LOWER SPINE Y VELOCITY

1 ——— B99080A1.V27 FilterClass (180)



MCA Research
 12-08-1999 16:20

TIME Seconds

KPH

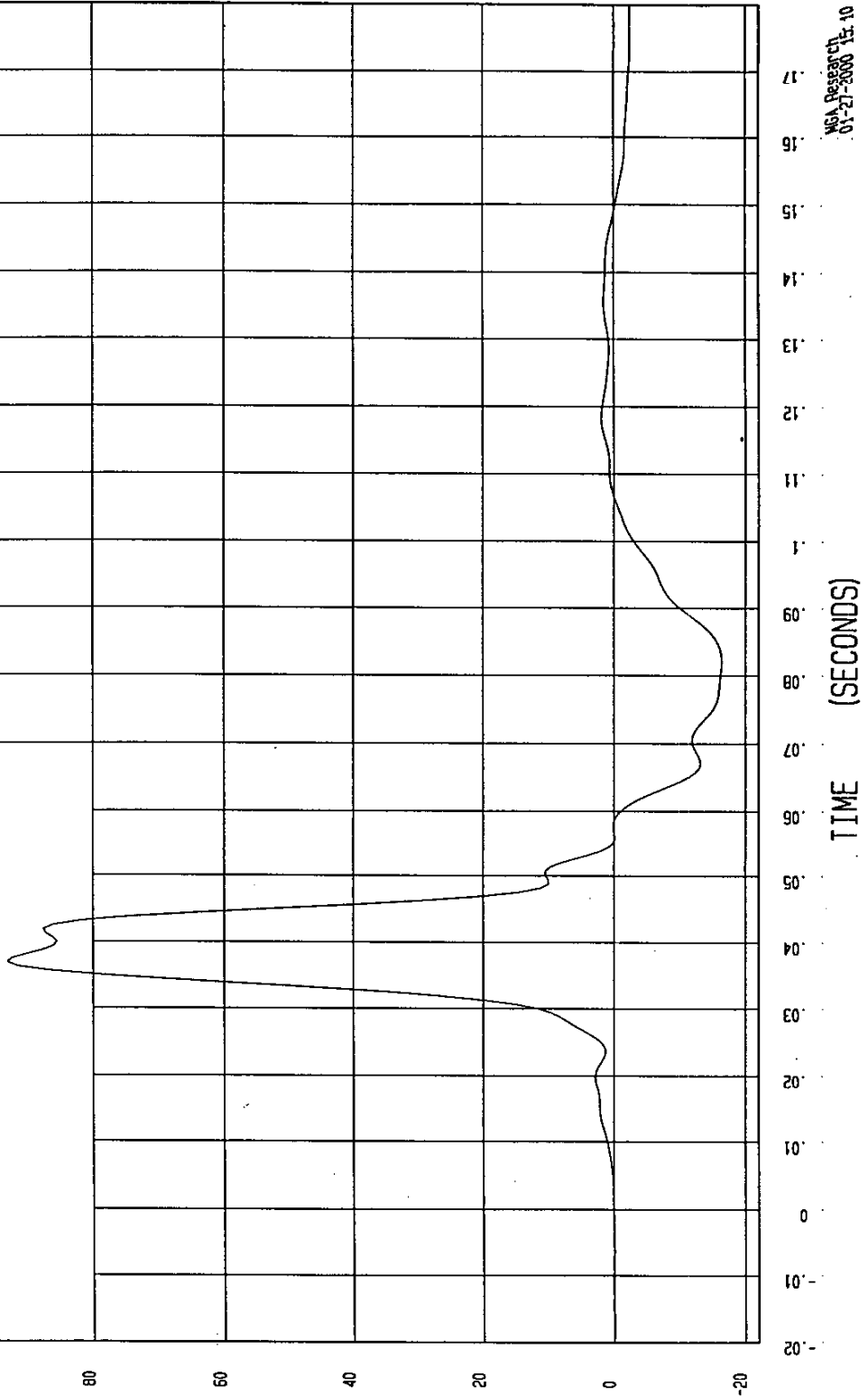
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -16.53 G'S at 82 msec Maximum = 93.12 G'S at 37 msec

REAR PASSENGER PELVIS Y ACCELERATION

1 _____ B99080FI.028 FilterClass (FIR Filtered)

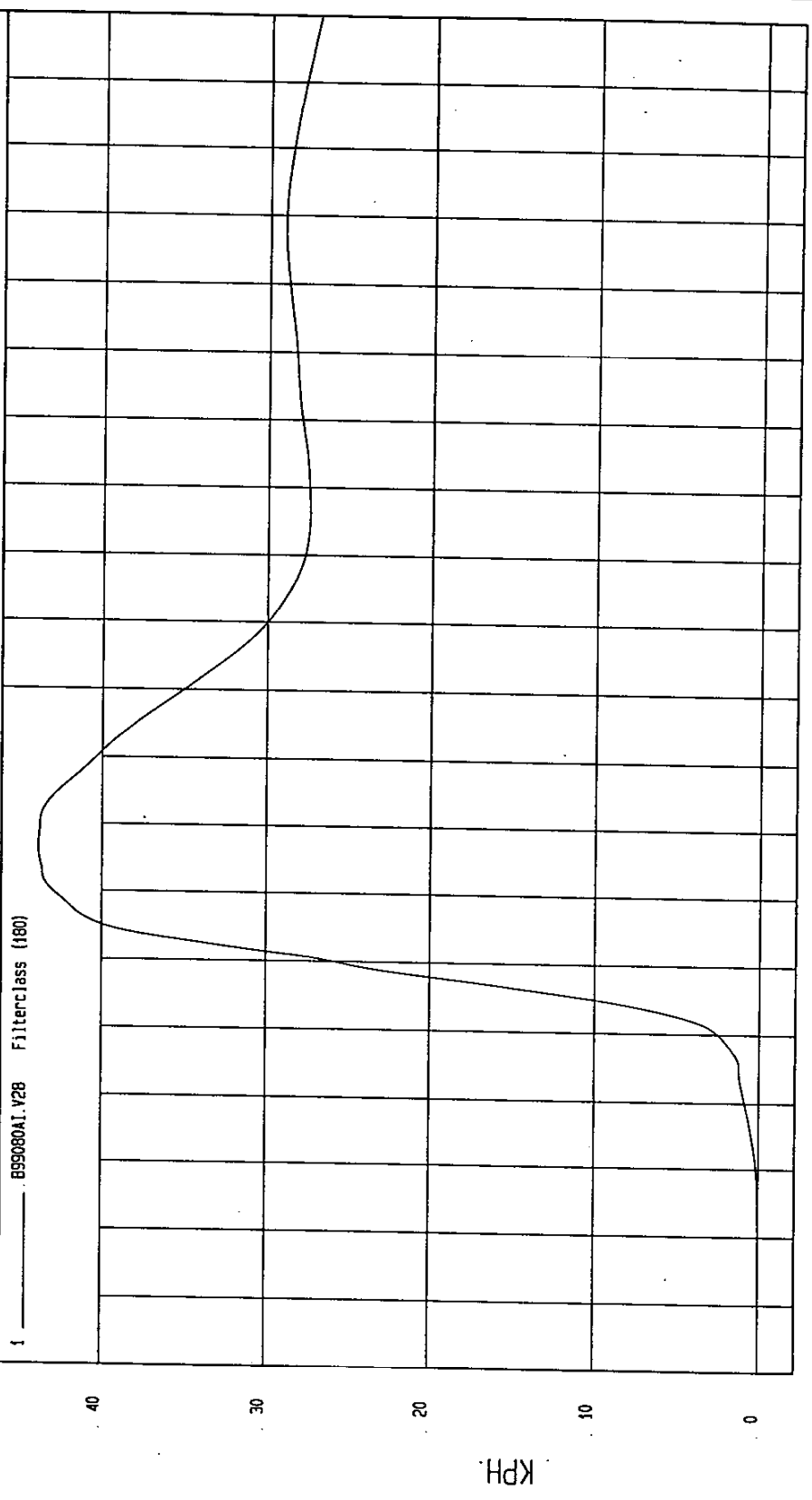
NSA Research
01-27-2000 12:10

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -1.12E-02 KPH at -16 msec Maximum = 43.9 KPH at 57 msec

REAR PASSENGER PELVIS Y VELOCITY



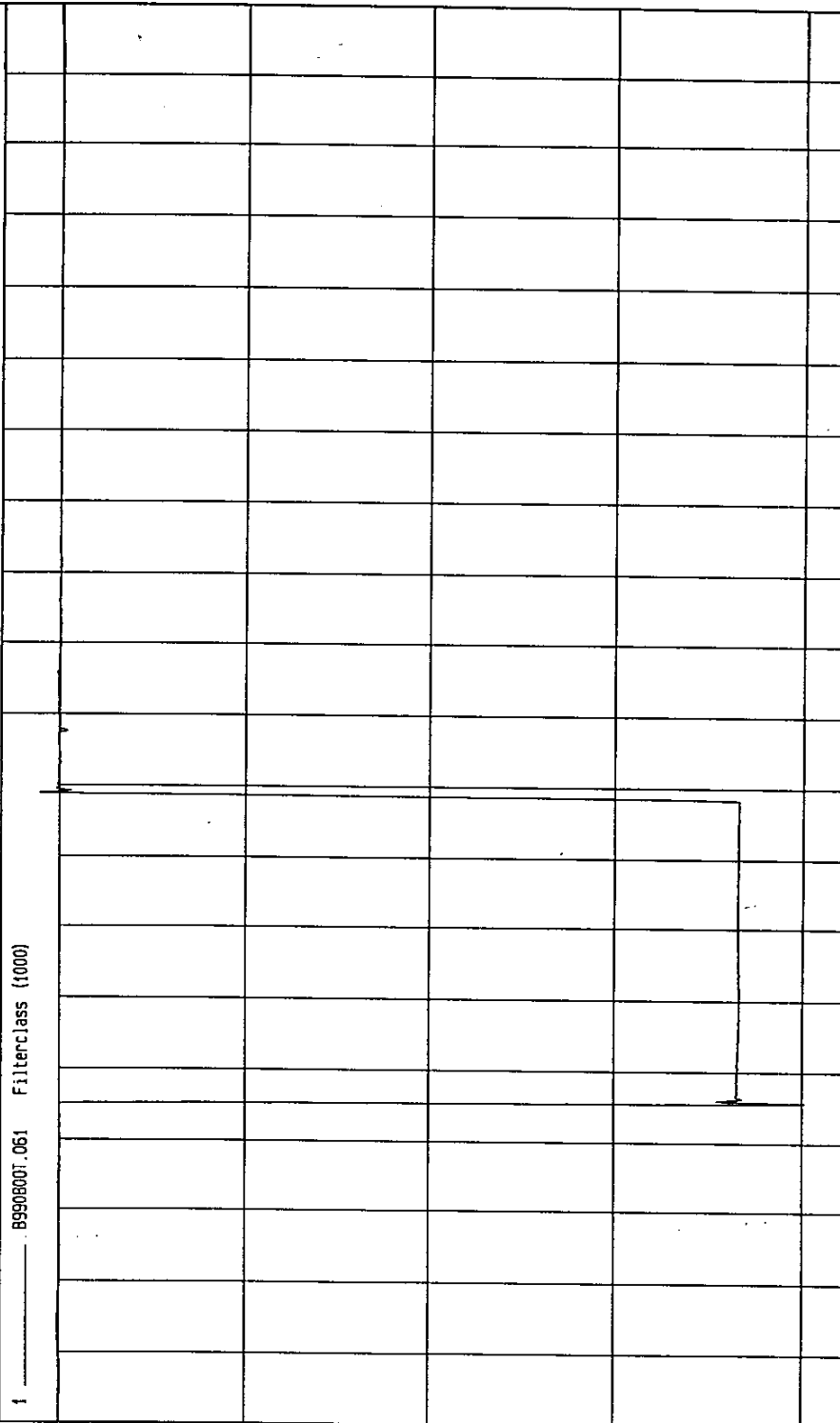
WCA Research
12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -4.02 VOLTS at 26 msec Maximum = .11 VOLTS at 69 msec

REAR PASSENGER SHOULDER CONTACT



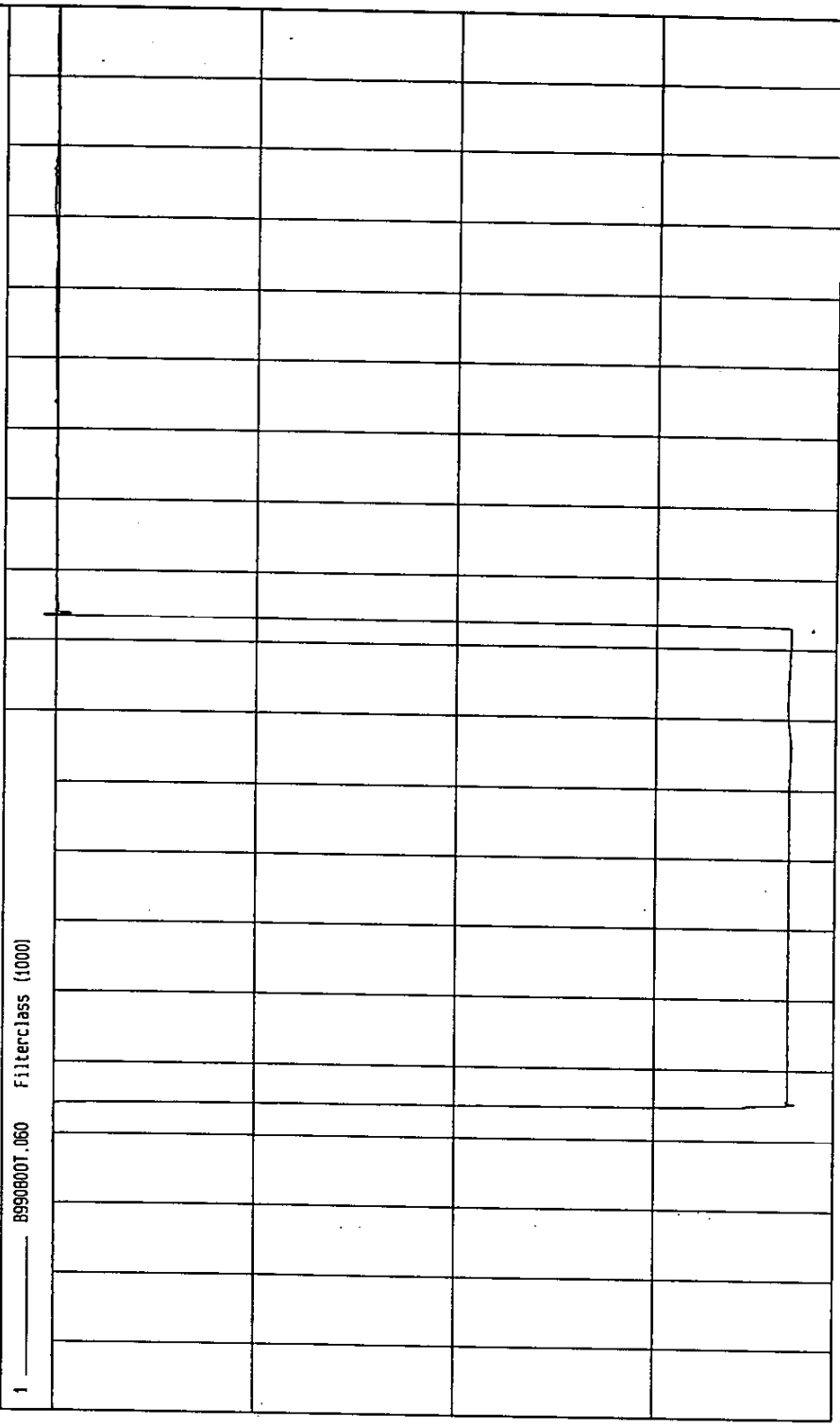
MCA Research
01-27-2000 14:44

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -3.69 VOLTS at 25 msec Maximum = 6.16E-02 VOLTS at 94 msec

REAR PASSENGER PELVIS CONTACT



1 ——— B950800T.060 Filterclass (1000)

TIME (SECONDS)

WGA Research
01-27-2000 14:44

VOLTS

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

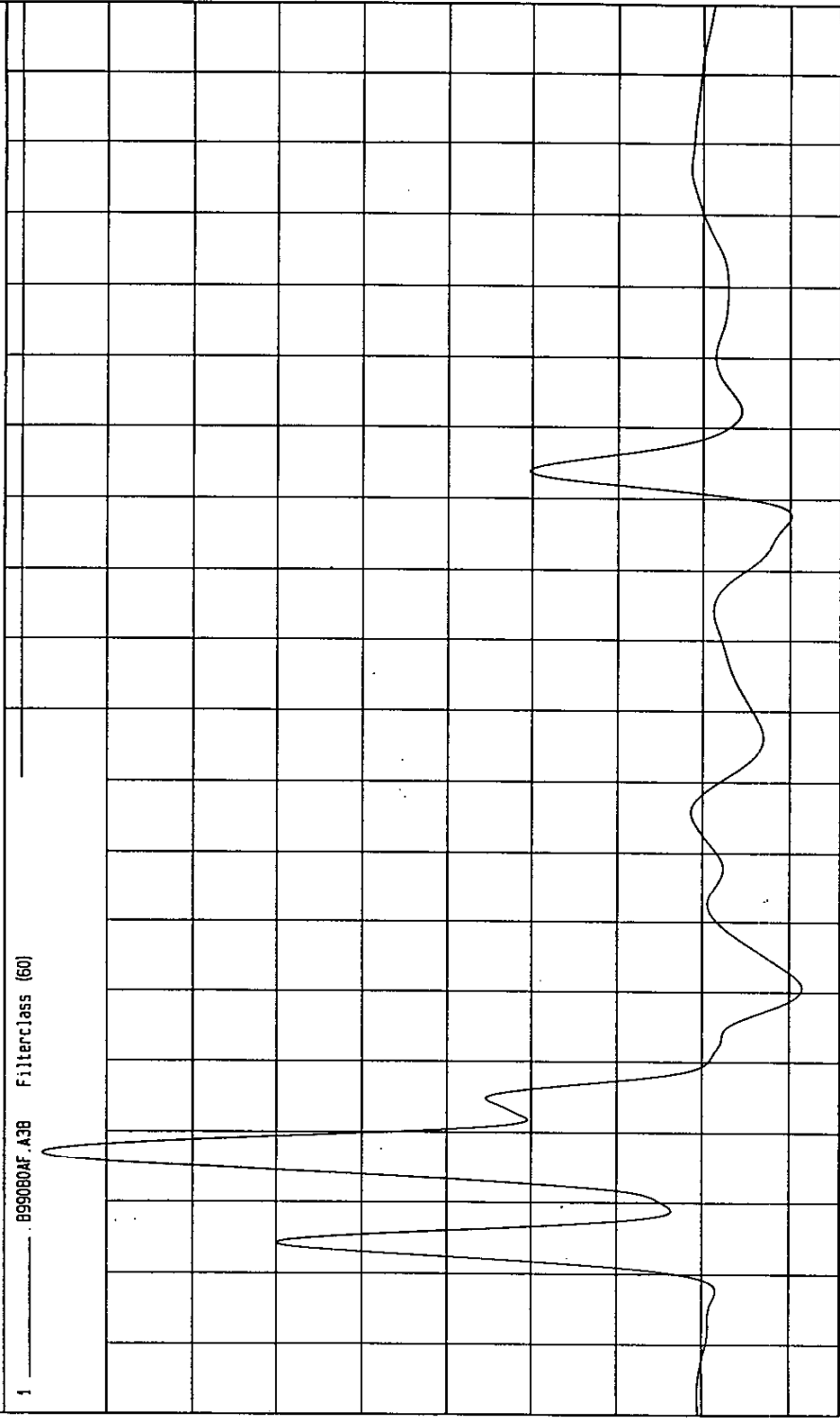
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 77.56 G'S at 17 msec

Minimum = -11.45 G'S at 41 msec

LEFT SIDE SILL AT FRONT SEAT Y ACCELERATION

1 899080AF.A38 Filterclass (60)



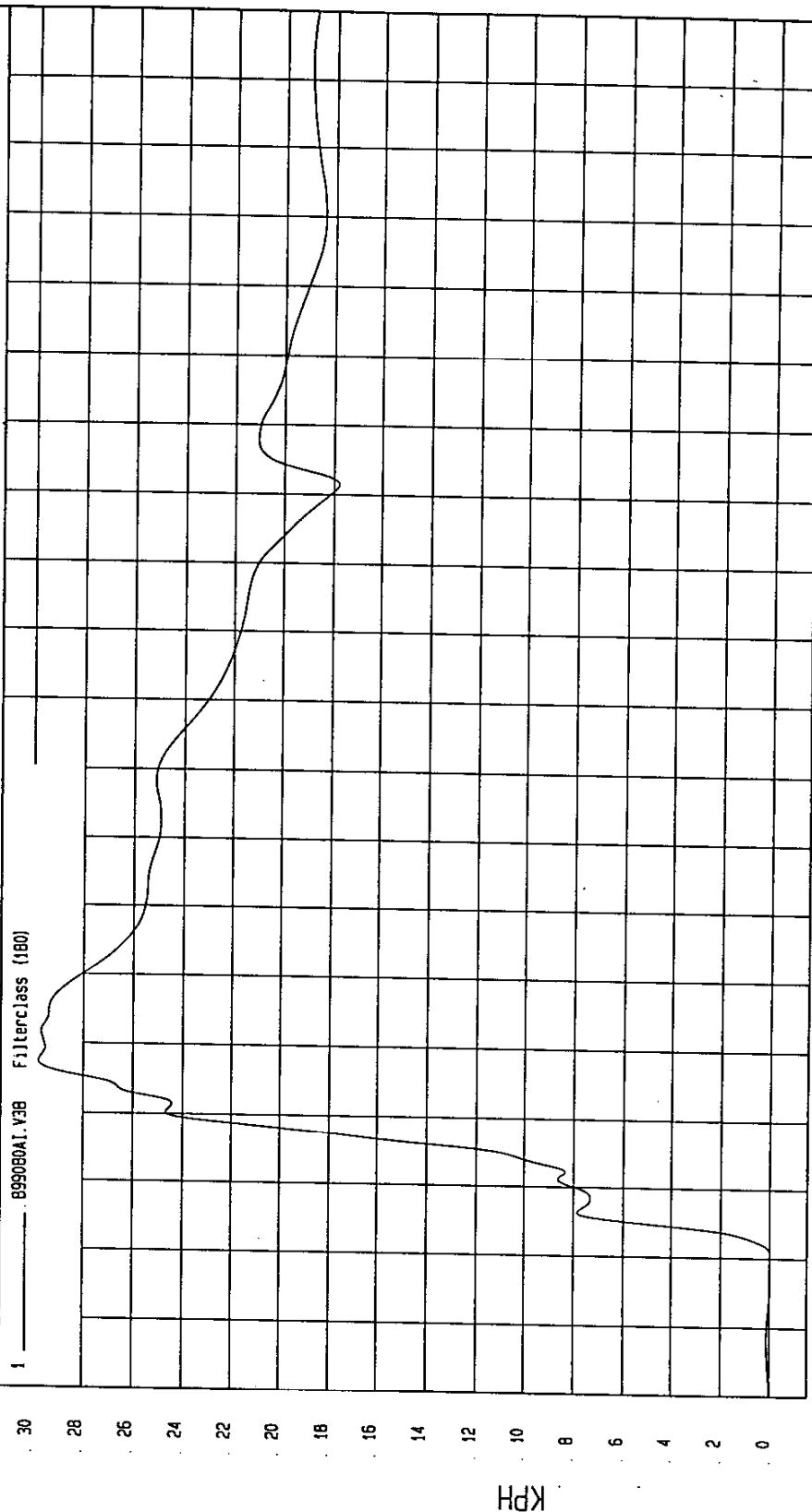
MOA Research
12-08-1999 15:02

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999
COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -3.53E-02 KPH at -3 msec Maximum = 29.8 KPH at 27 msec

LEFT SIDE SILL AT FRONT SEAT Y VELOCITY

1 899080A1.V38 Filterclass (180)



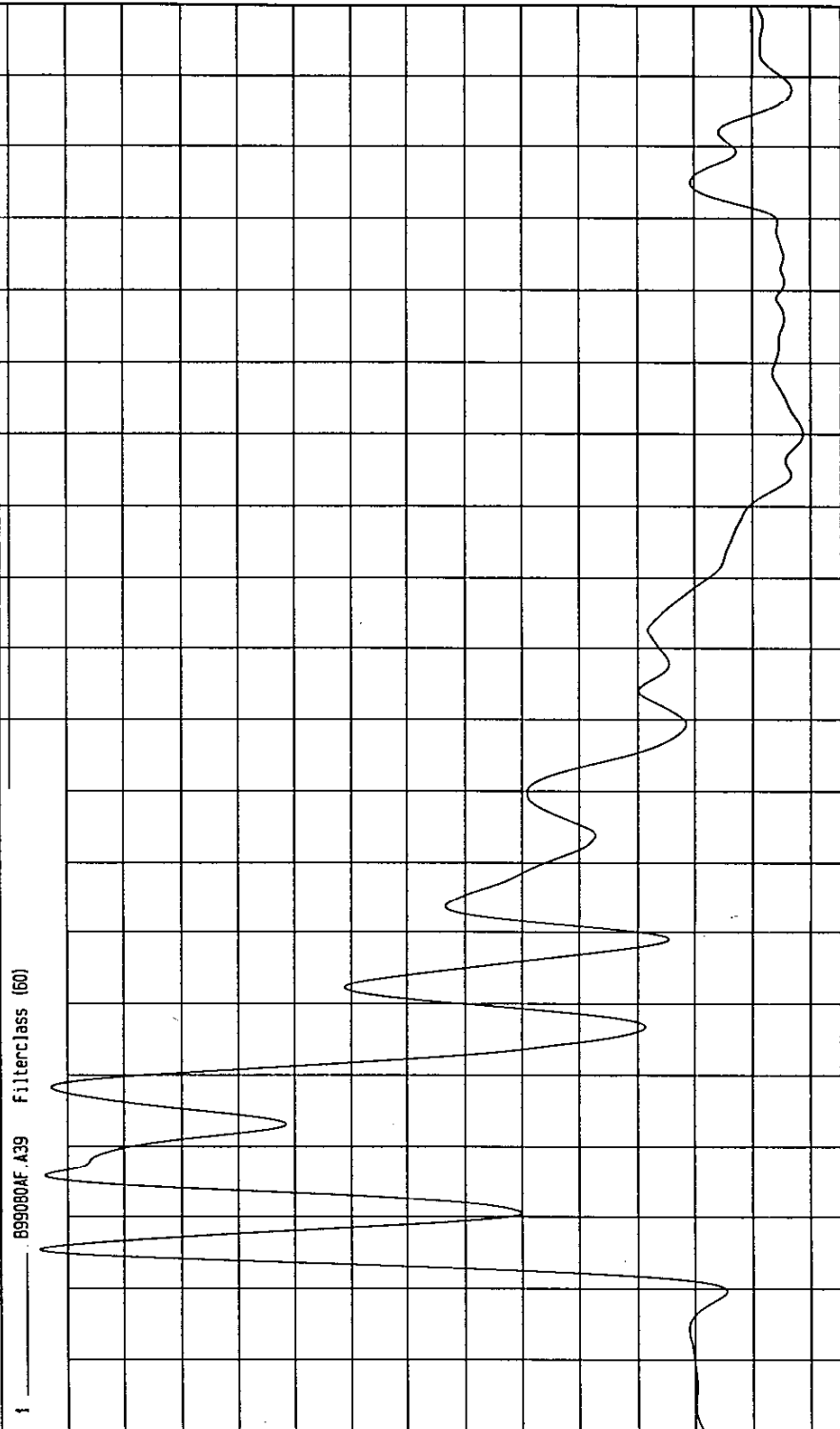
NSA Research
12-08-1999 16:02

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -3.74 G'S at 120 msec Maximum = 23 G'S at 6 msec

LEFT SIDE SILL AT REAR SEAT Y ACCELERATION



TIME (SECONDS)

24
22
20
18
16
14
12
10
8
6
4
2
0
-2
-4

0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.01
-0.02

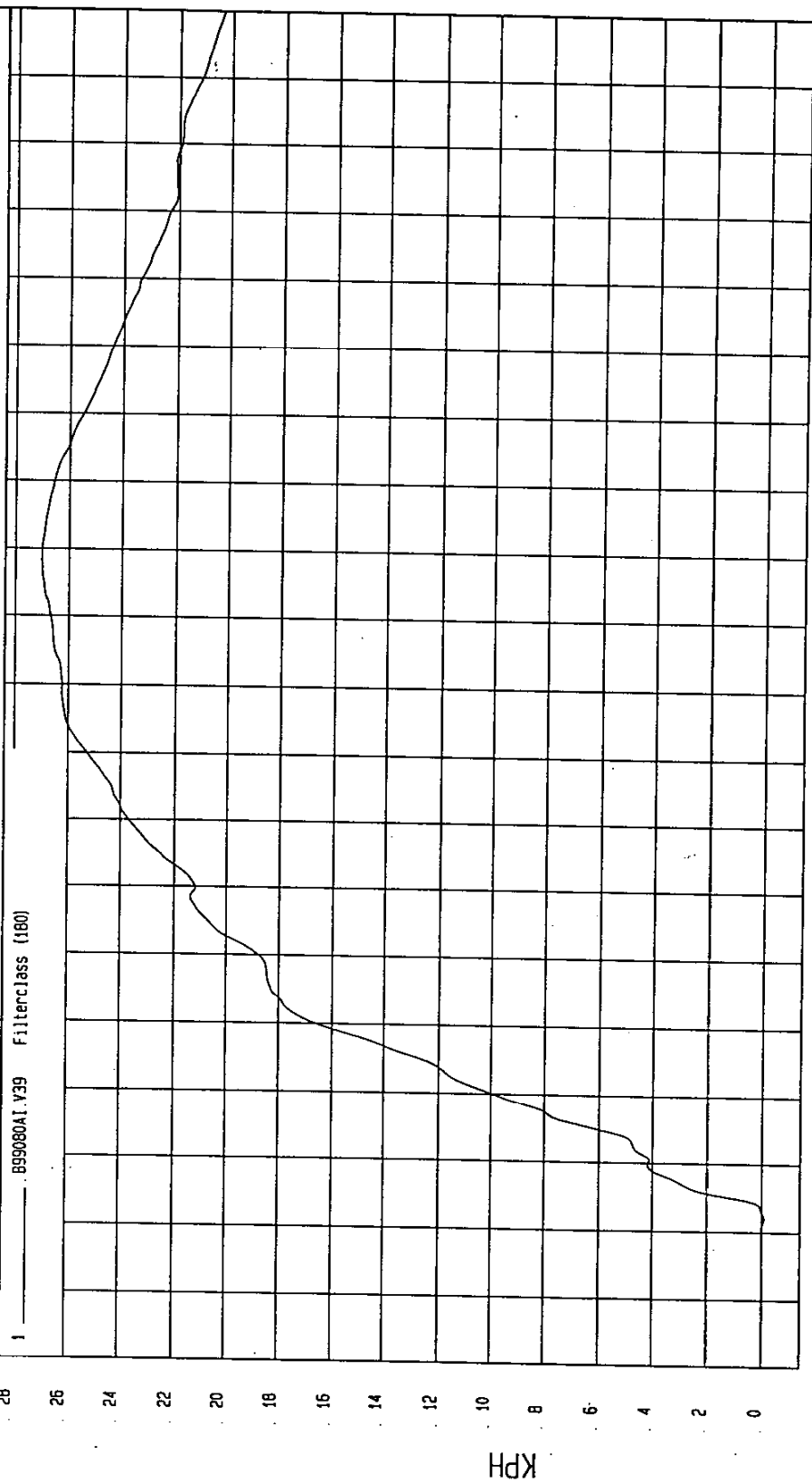
MSA Research
12-08-1999 15.17

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -9.50E-02 KPH at 2 msec Maximum = 27.03 KPH at 99 msec

LEFT SIDE SILL AT REAR SEAT Y VELOCITY



MSA Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

Speed: 38.5 MPH 62 KPH

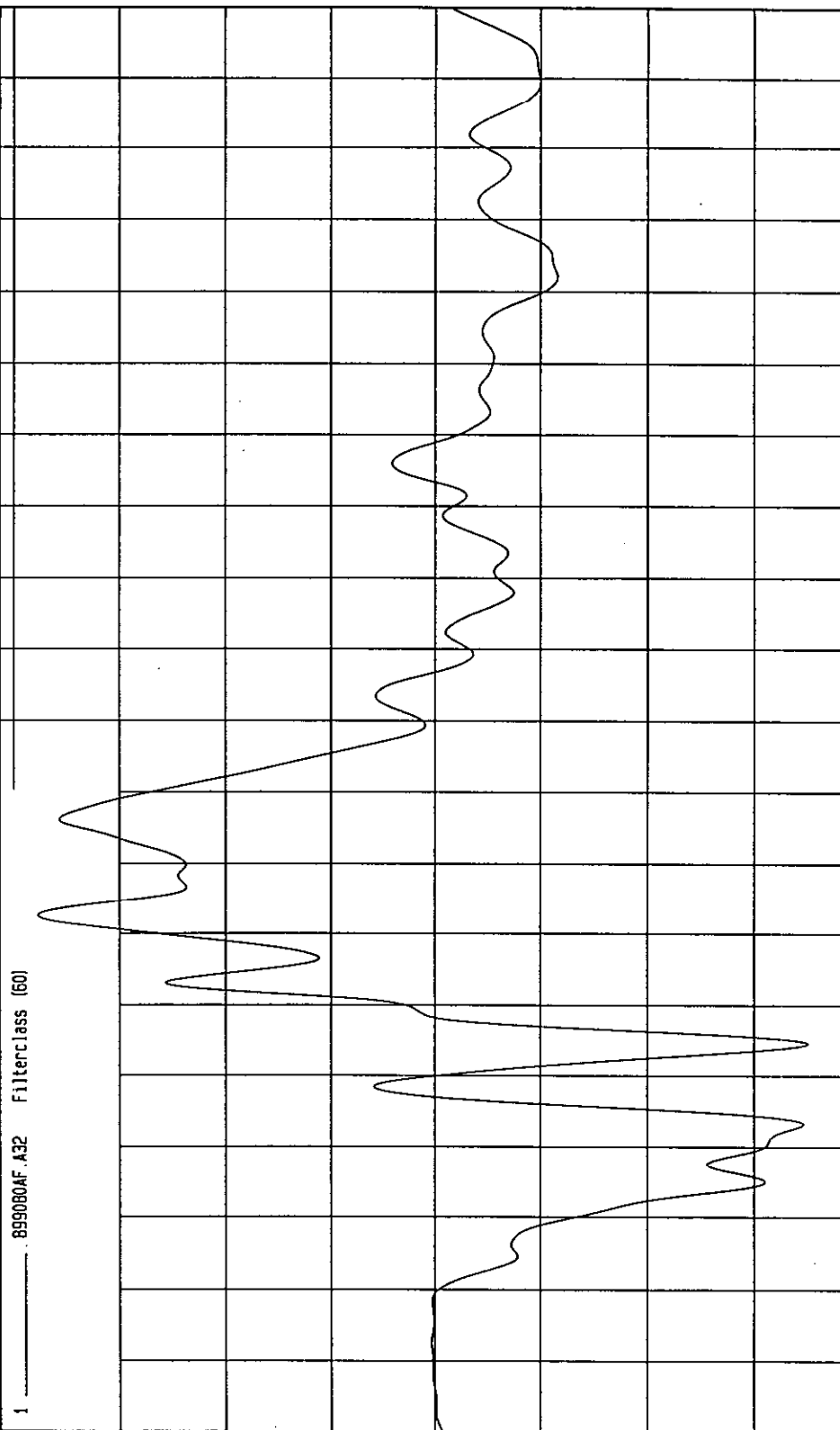
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 3.77 G'S at 53 msec

Minimum = -3.51 G'S at 35 msec

RIGHT SIDE SILL AT FRONT SEAT X ACCELERATION

1 899080AF.A32 Filterclass (60)



MSA Research
12-08-1999 16.17

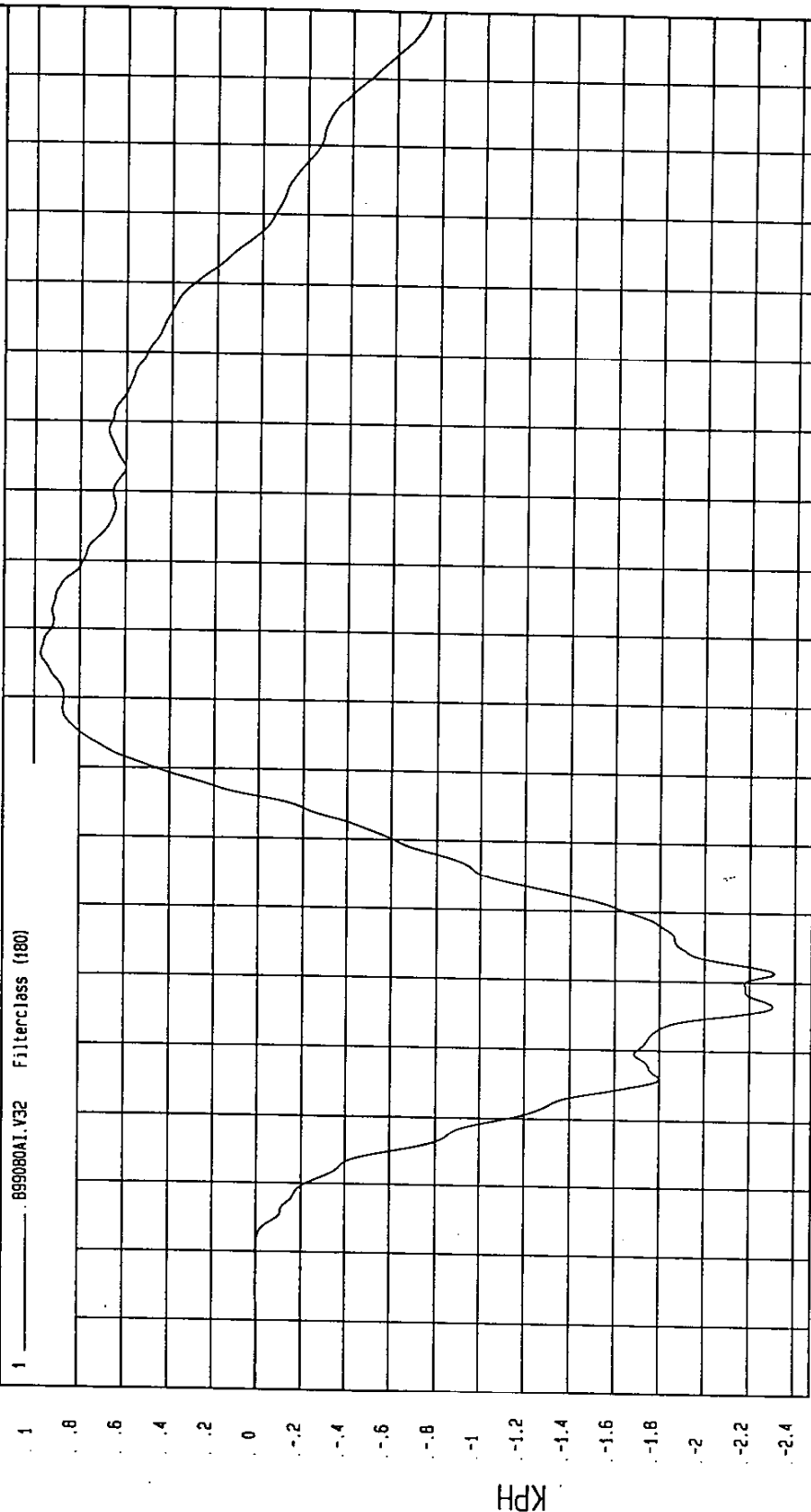
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999
COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -2.31 KPH at 41 msec

Maximum = .97 KPH at 66 msec

RIGHT SIDE SILL AT FRONT SEAT X VELOCITY

1 899080A1.V32 Filterclass (180)



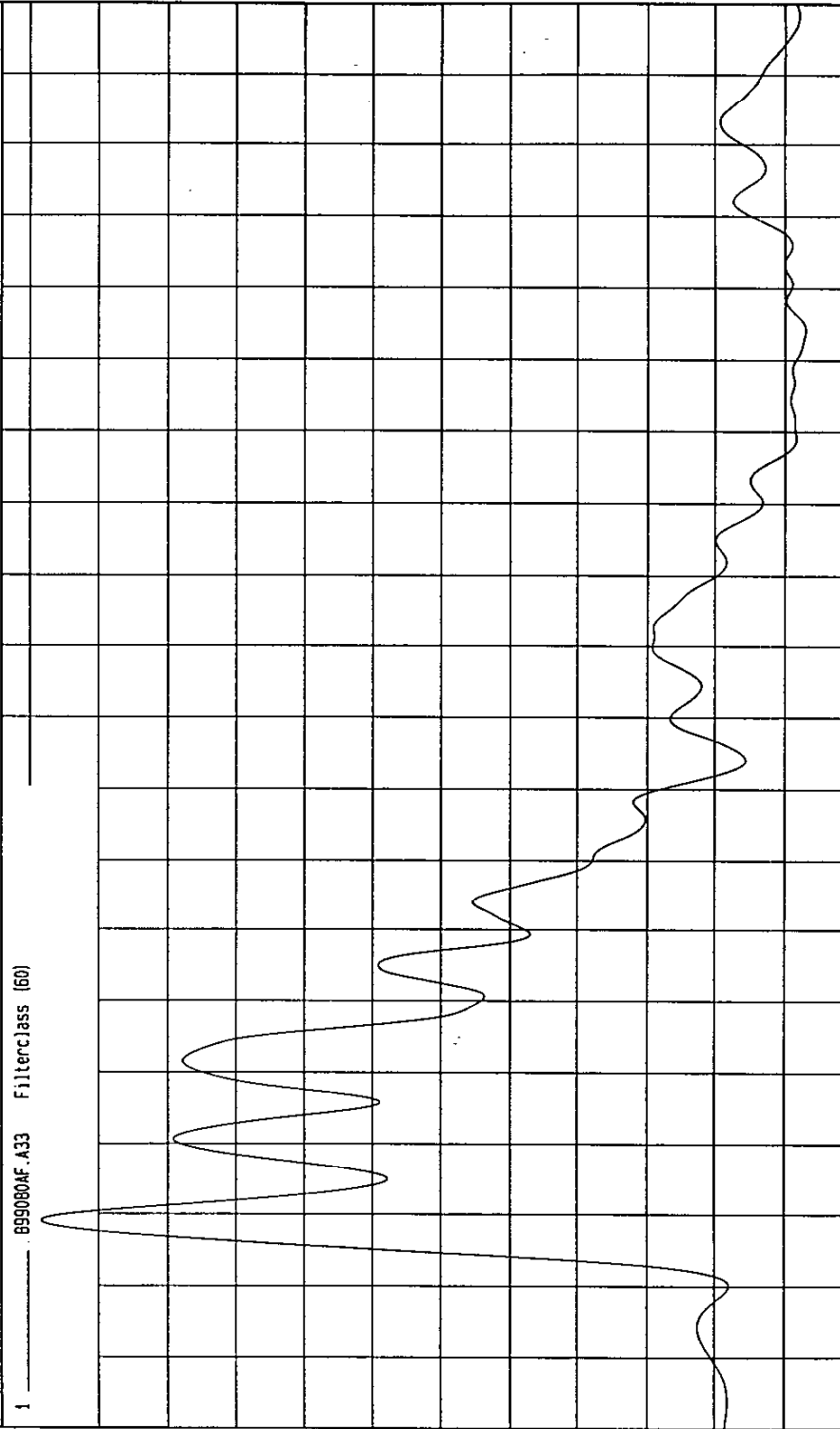
MCA Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -2.6 G'S at 134 msec Maximum = 19.68 G'S at 9 msec

RIGHT SIDE SILL AT FRONT SEAT Y ACCELERATION



TIME (SECONDS)

19.68 G'S at 9 msec

MECA Research
12-08-1999 16:17

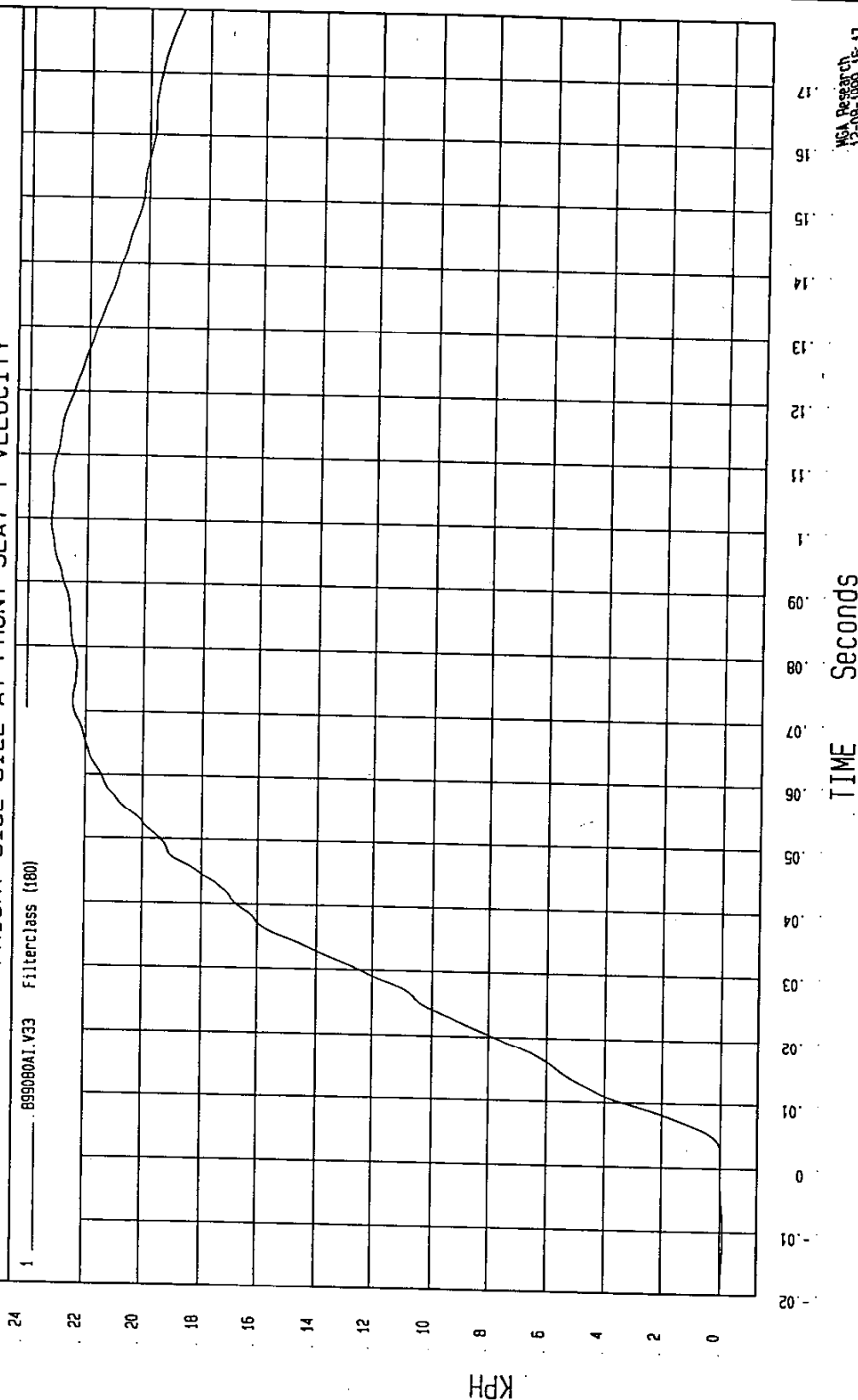
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -9.66E-02 KPH at -11 msec Maximum = 23.24 KPH at 99 msec

RIGHT SIDE SILL AT FRONT SEAT Y VELOCITY

1 899080A1.V33 Filterclass (180)



NSA Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

Speed: 38.5 MPH 62 KPH

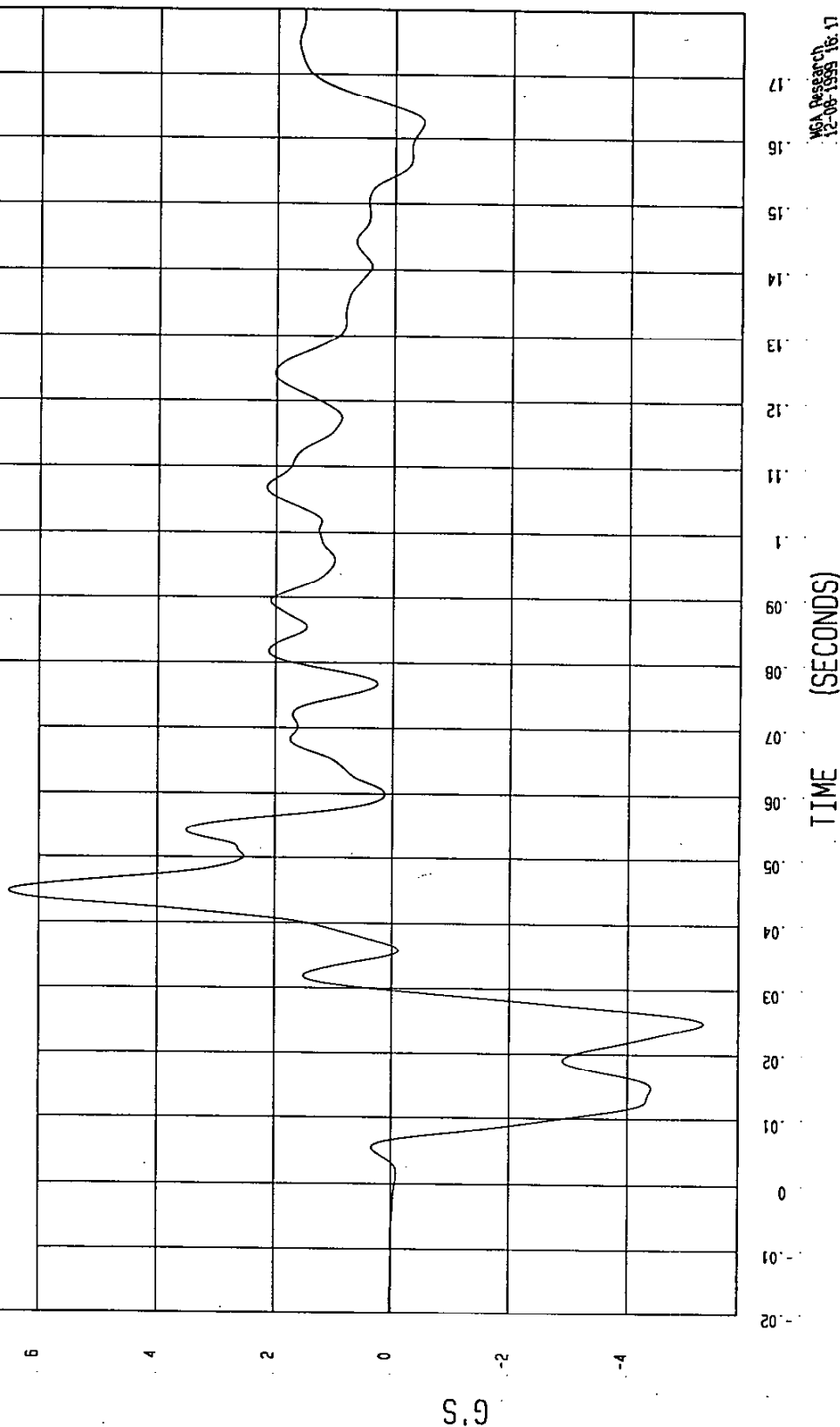
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Minimum = -5.27 G'S at 25 msec

Maximum = 6.51 G'S at 45 msec

RIGHT SIDE SILL AT FRONT SEAT Z ACCELERATION

1 899080AF.A34 Filterclass (60)

MS Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0304)

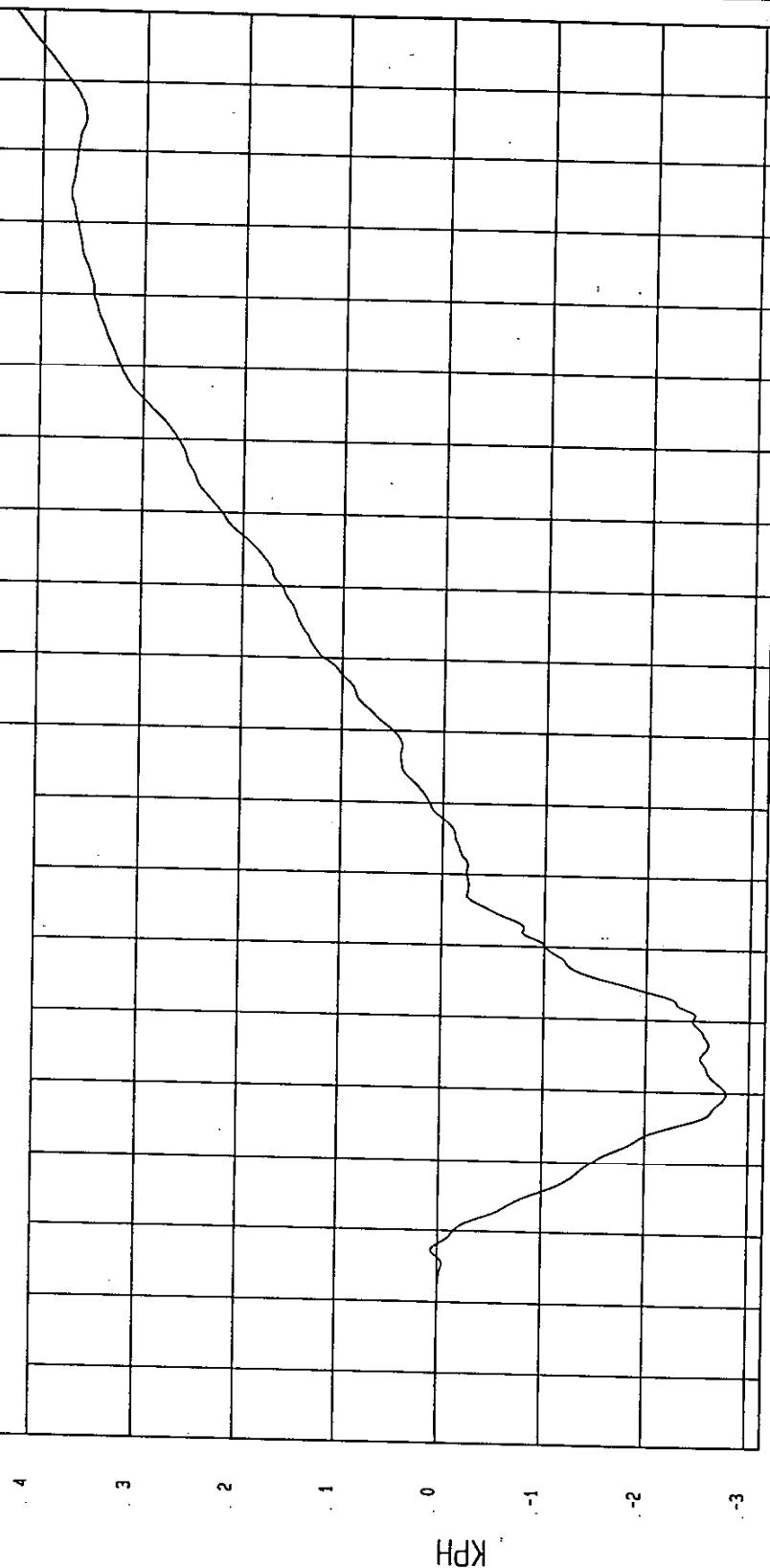
Speed: 38.5 MPH 62 KPH

Minimum = -2.78 KPH at 30 msec

Maximum = 4.63 KPH at 189 msec

RIGHT SIDE SILL AT FRONT SEAT Z VELOCITY

1 _____ BS9080A1.V34 Filterclass (180)



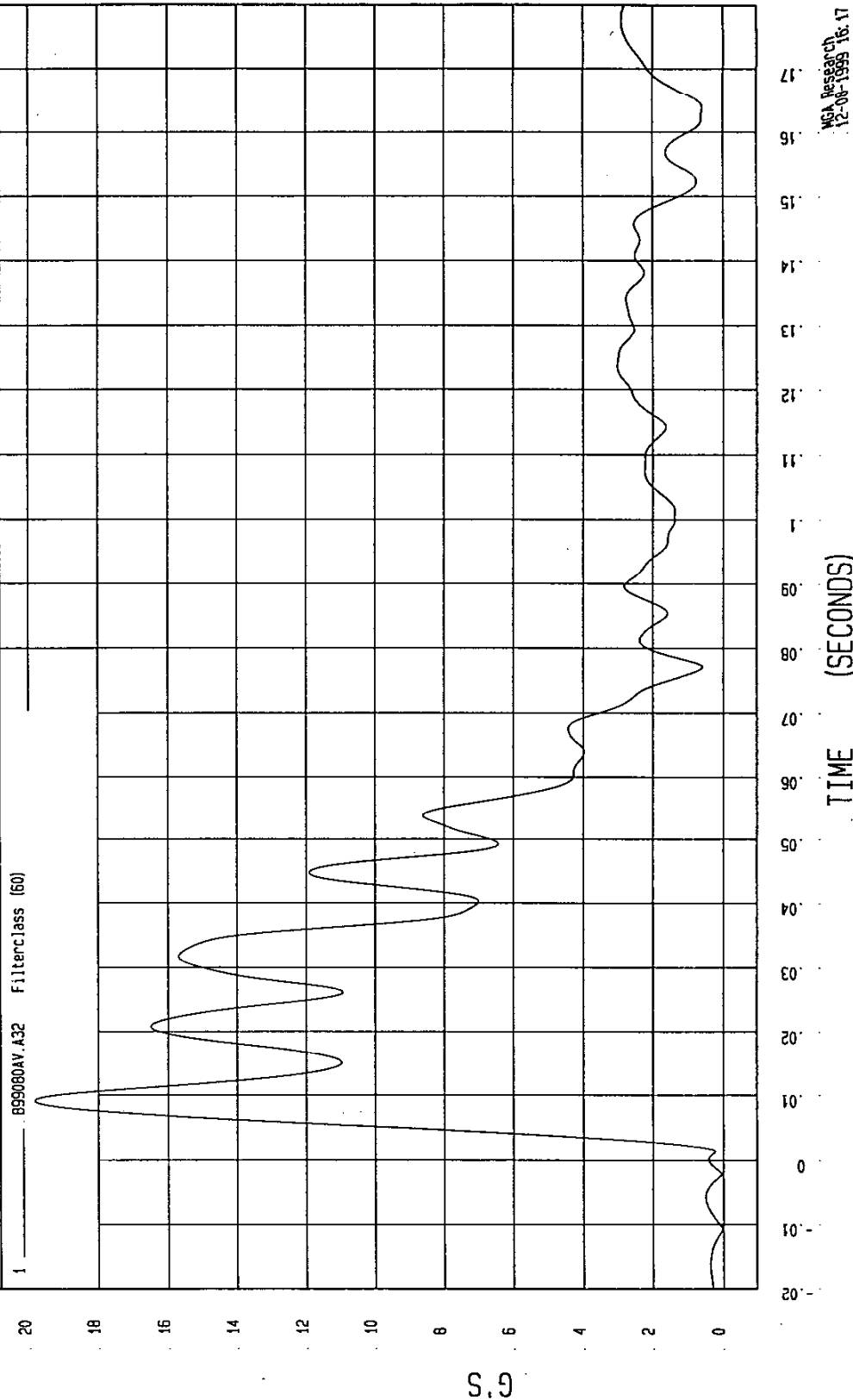
MSA Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = 1.72E-02 G'S at -11 msec Maximum = 19.84 G'S at 9 msec

RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION



NSA Research
12-08-1999 16:17

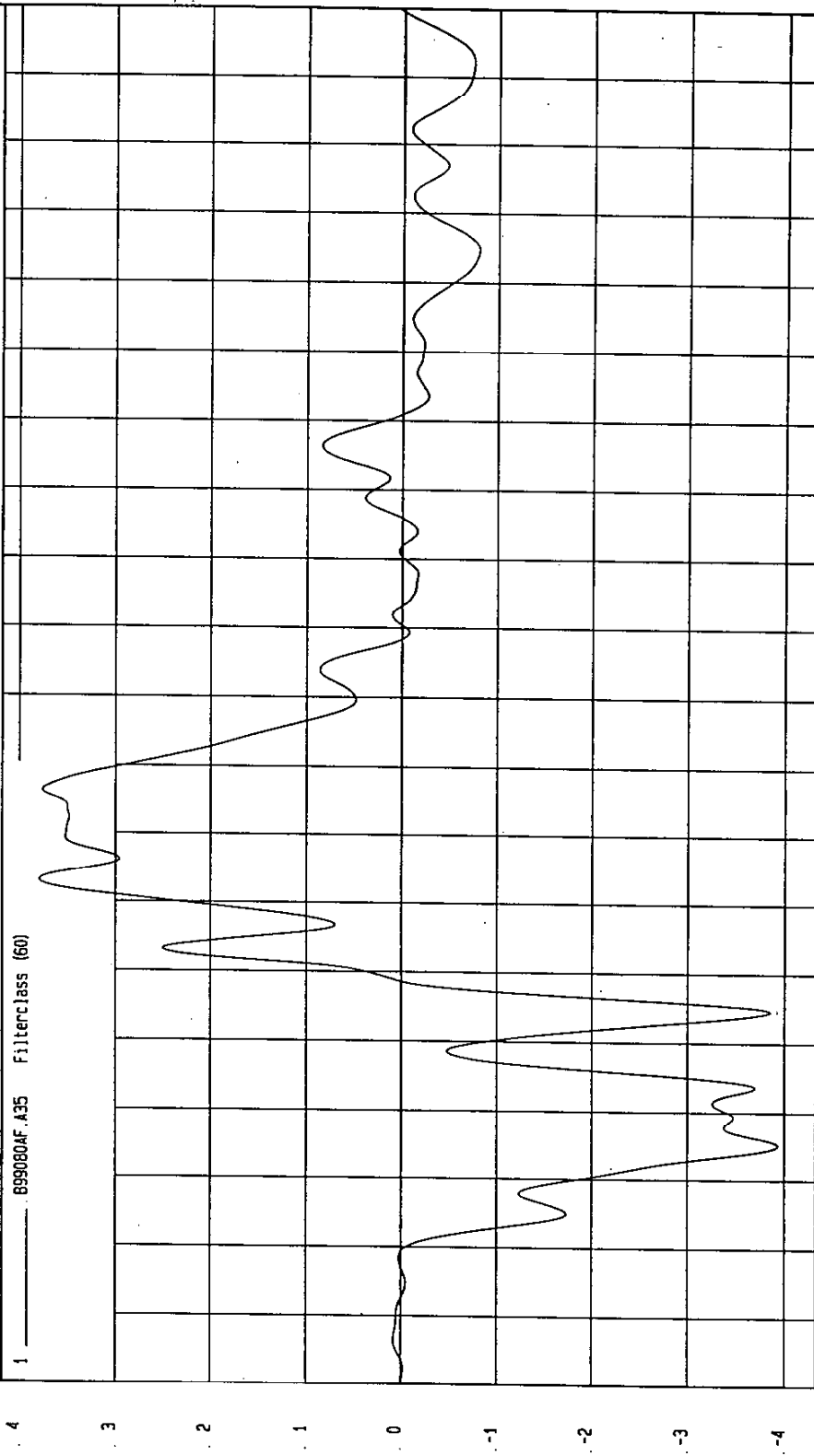
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -3.93 G'S at 15 msec Maximum = 3.79 G'S at 53 msec

RIGHT SIDE SILL AT REAR SEAT X ACCELERATION

1 899080AF.A35 FilterClass (60)



TIME (SECONDS)

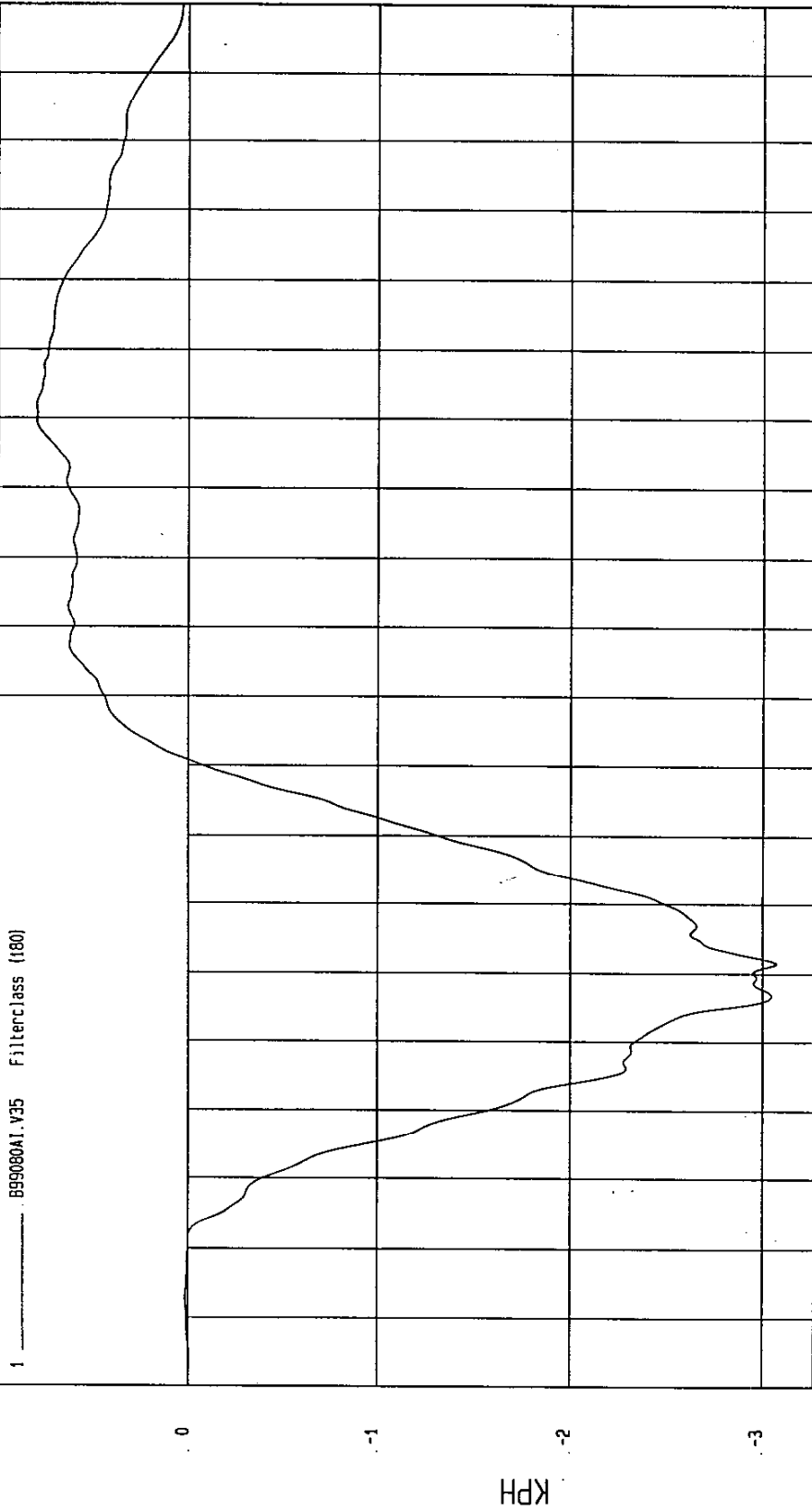
NSA Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -3.07 KPH at 42 msec Maximum = .79 KPH at 122 msec

RIGHT SIDE SILL AT REAR SEAT X VELOCITY



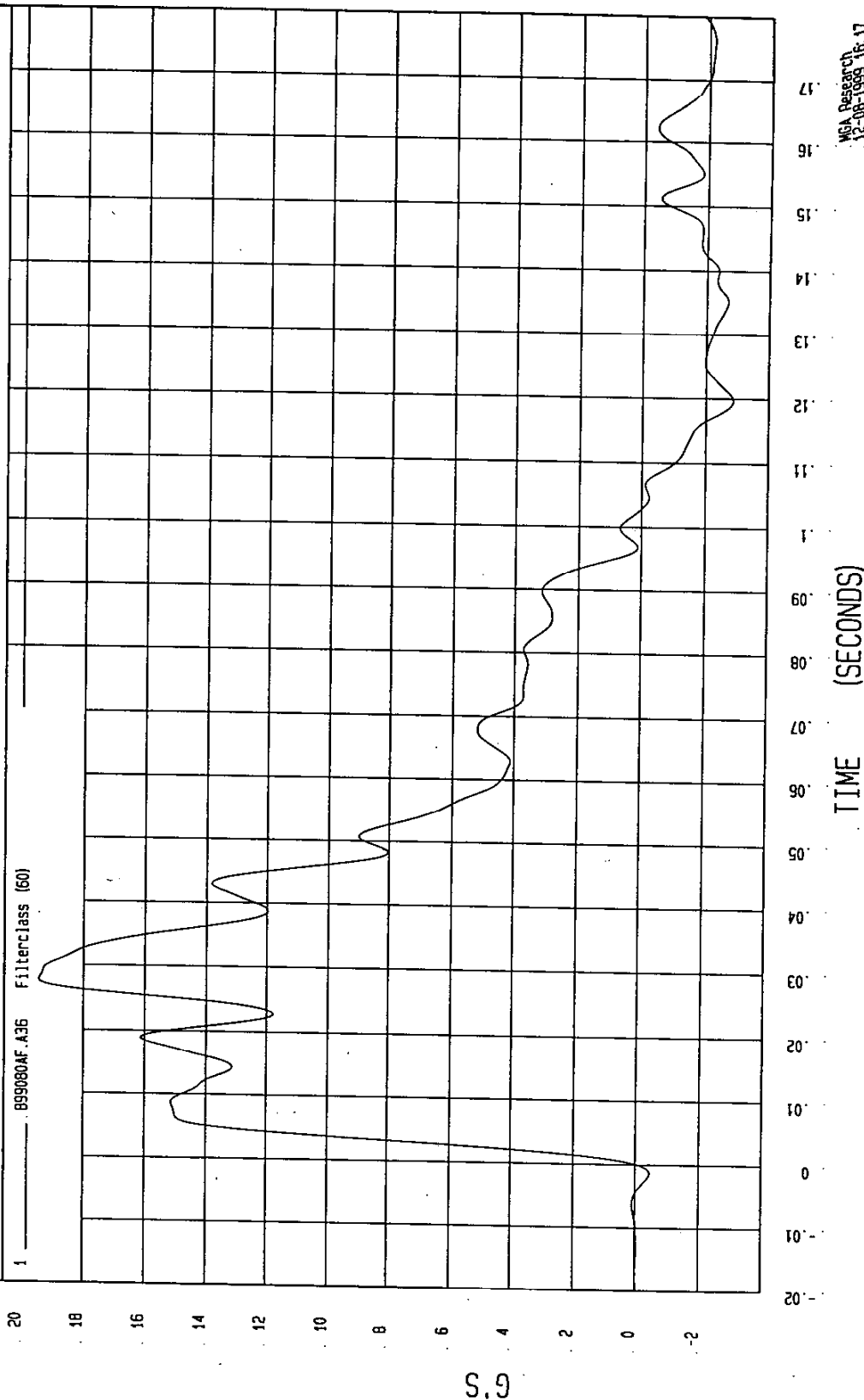
WCA Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -2.88 G'S at 120 msec Maximum = 19.46 G'S at 28 msec

RIGHT SIDE SILL AT REAR SEAT Y ACCELERATION



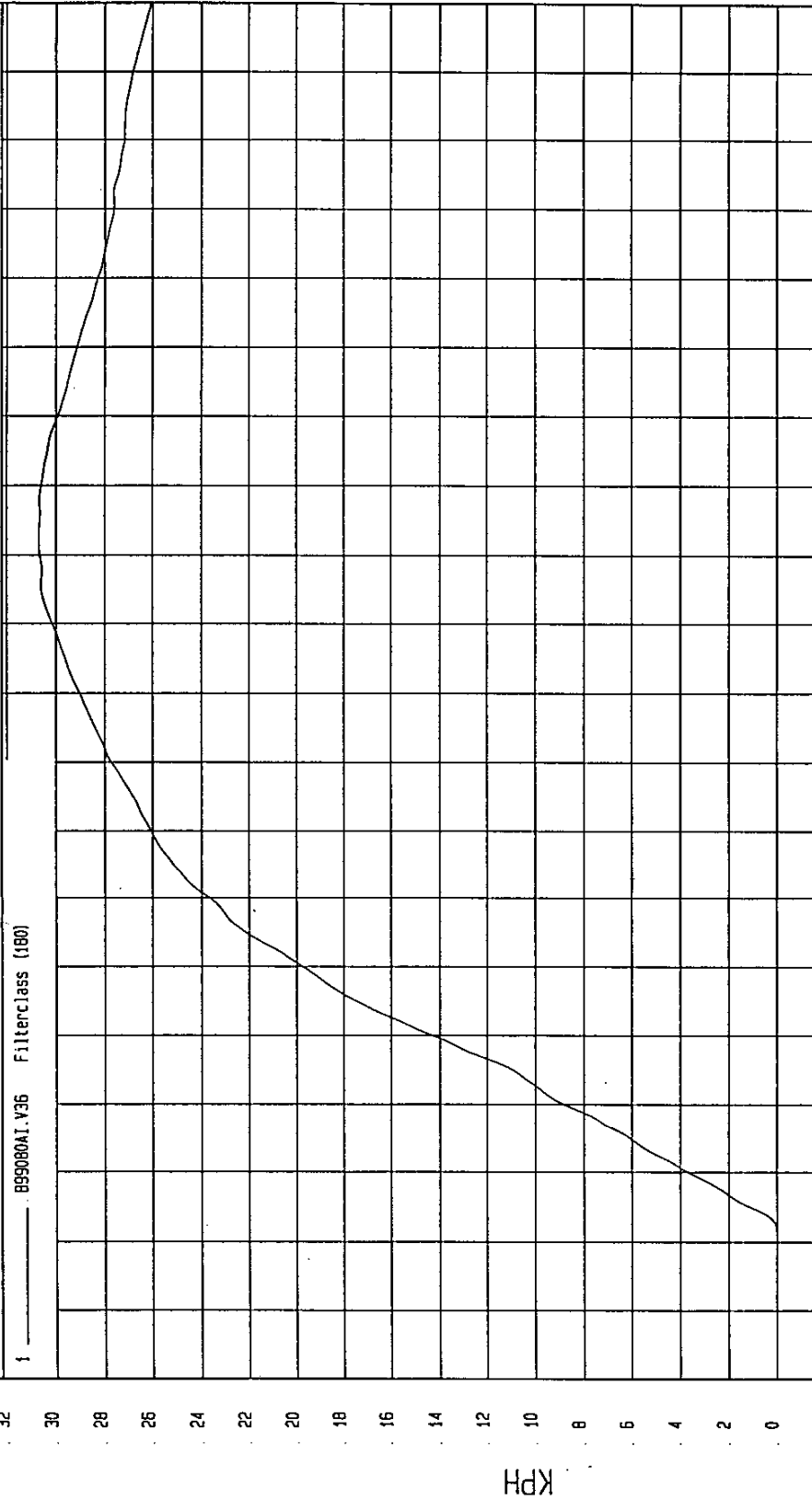
MSA Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -1.10E-02 KPH at -8 msec Maximum = 30.68 KPH at 103 msec

RIGHT SIDE SILL AT REAR SEAT Y VELOCITY



TIME Seconds

17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
-1
-2

MOA Research
12-06-1999 16:17

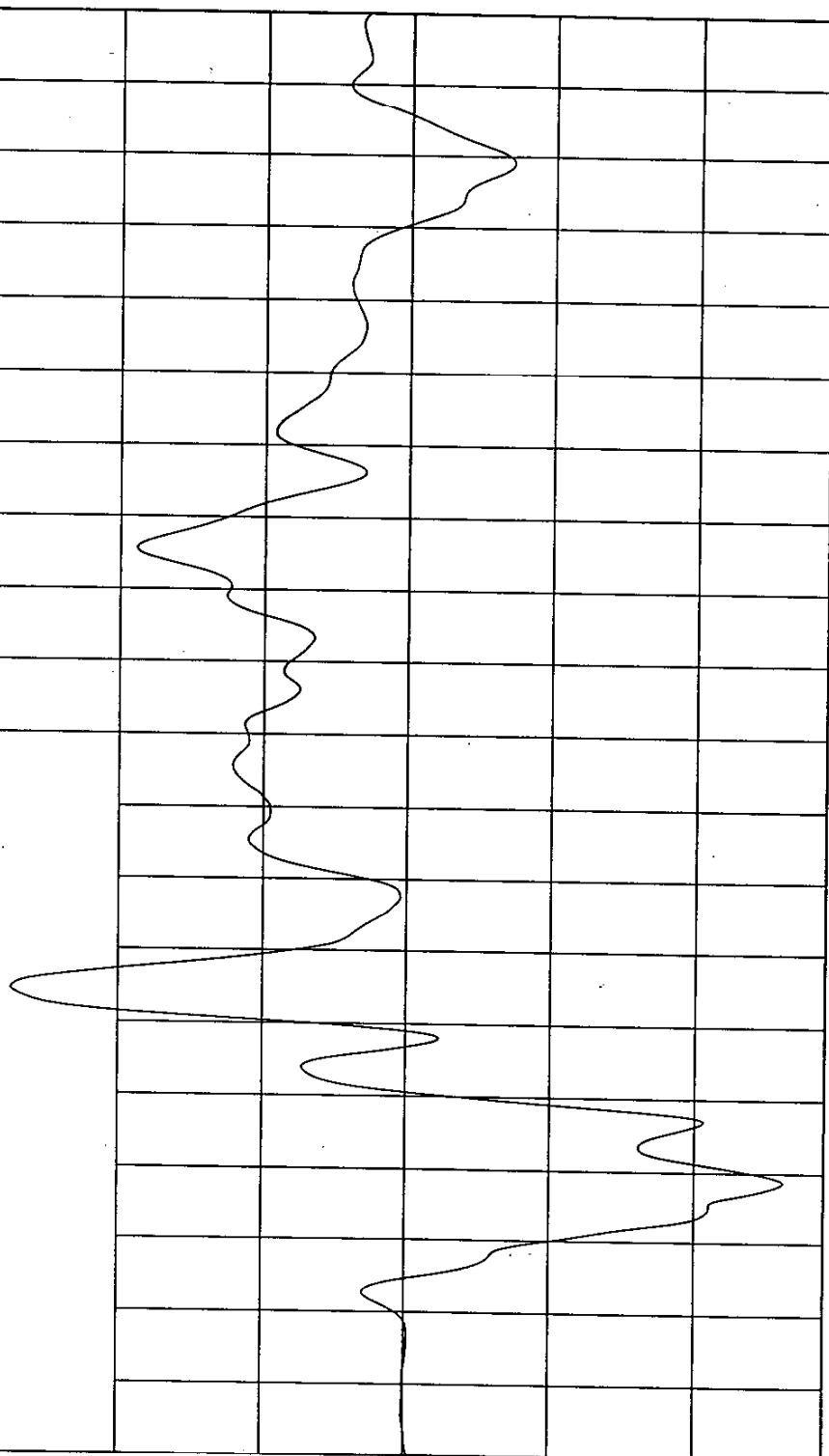
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -5.23 G'S at 19 msec Maximum = 5.48 G'S at 44 msec

RIGHT SIDE SILL AT REAR SEAT Z ACCELERATION

1 B99080AF.A37 Filterclass (60)



TIME (SECONDS)

MSA Research
12-08-1999 16:17

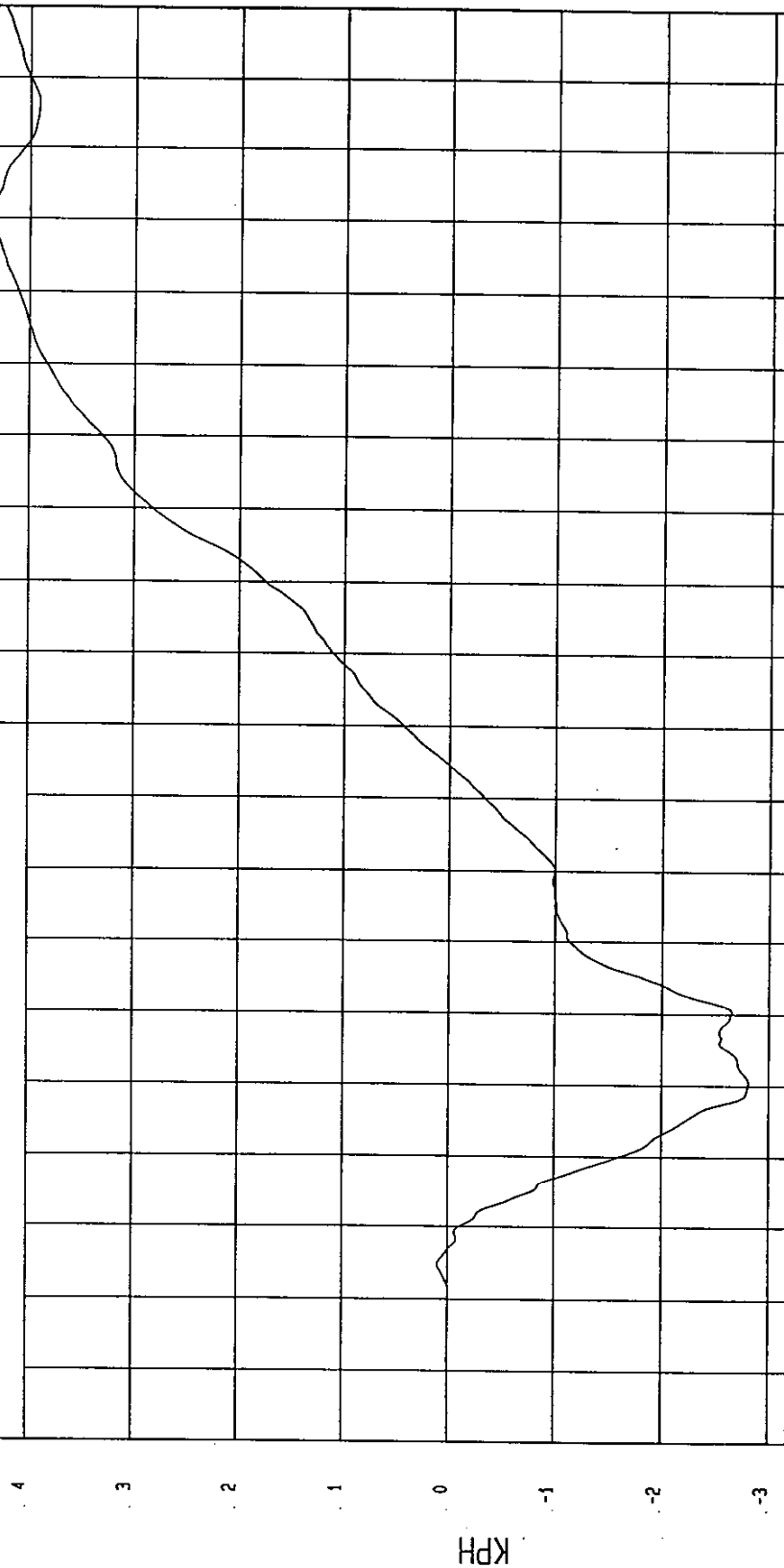
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -2.61 KPH at 30 msec Maximum = 4.44 KPH at 194 msec

RIGHT SIDE SILL AT REAR SEAT Z VELOCITY

1 ———: 899080A1.V37 Filterclass (180)



NSA Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT
TEST DATE: 12-08-1999
Speed: 38.5 MPH 62 KPH

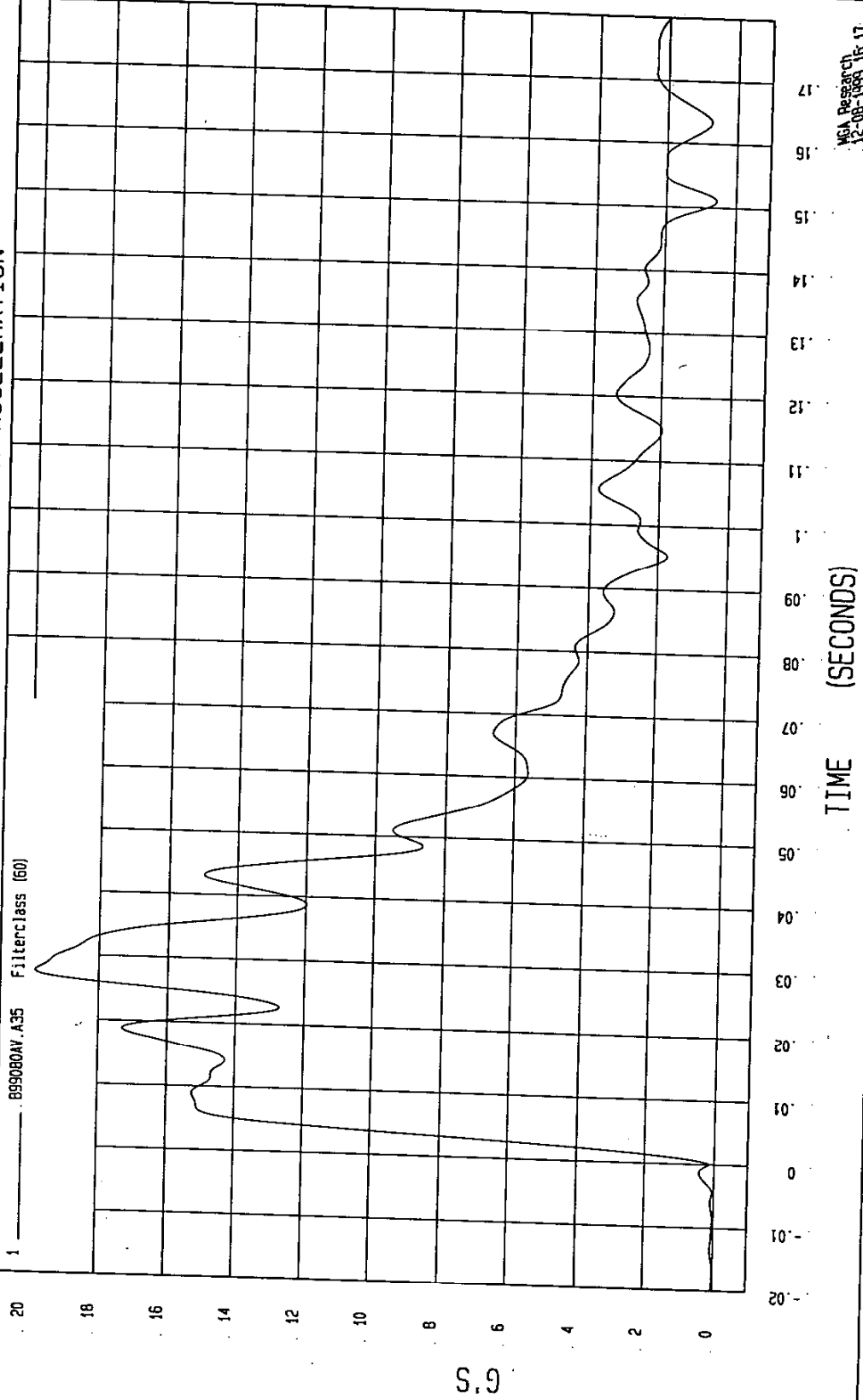
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Minimum = 1.62E-02 G'S at -16 msec

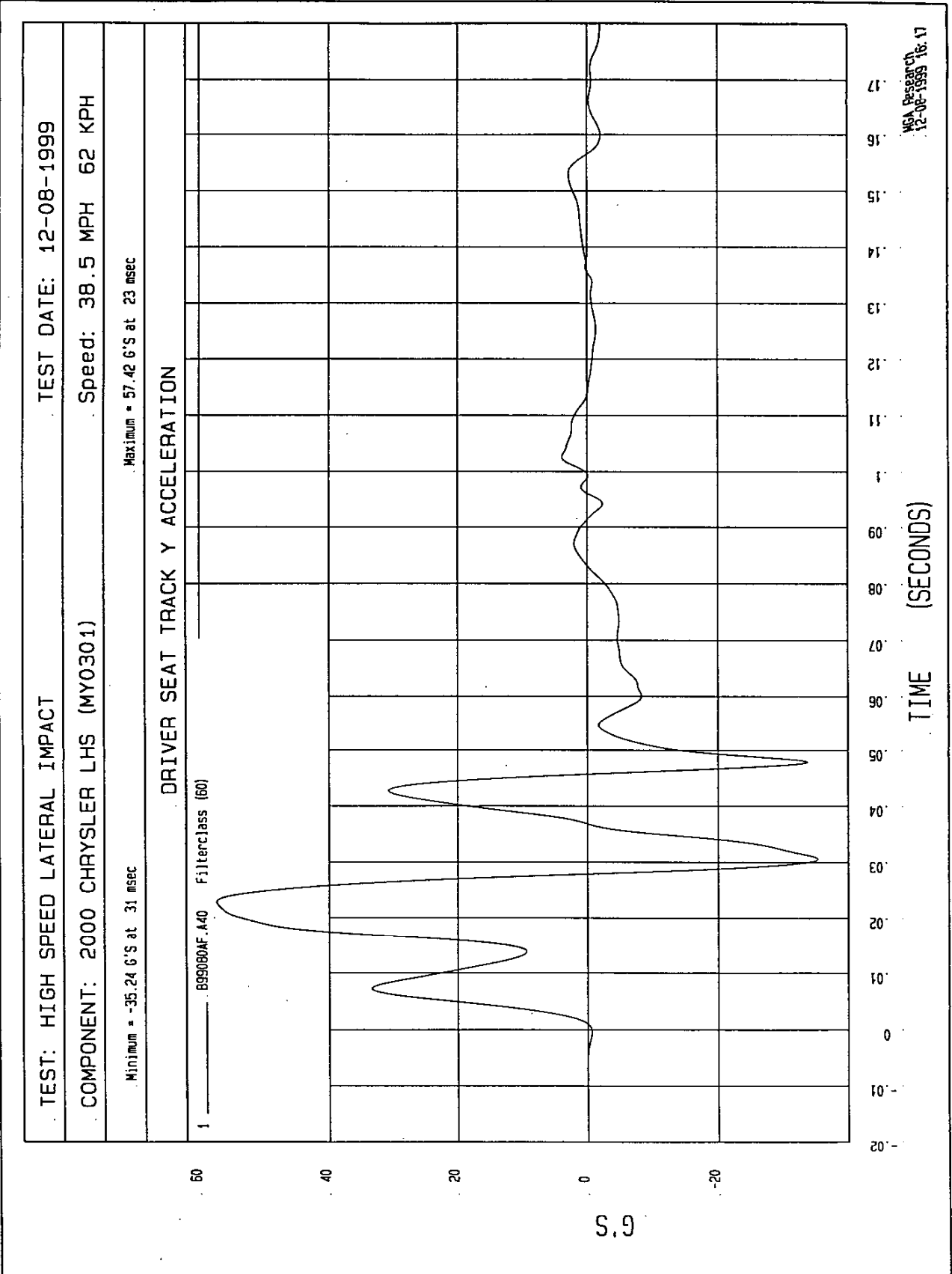
Maximum = 19.84 G'S at 28 msec

RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION

1 ——— B990804V.A35 Filterclass (50)



MCA Research
12-08-1999 16:17

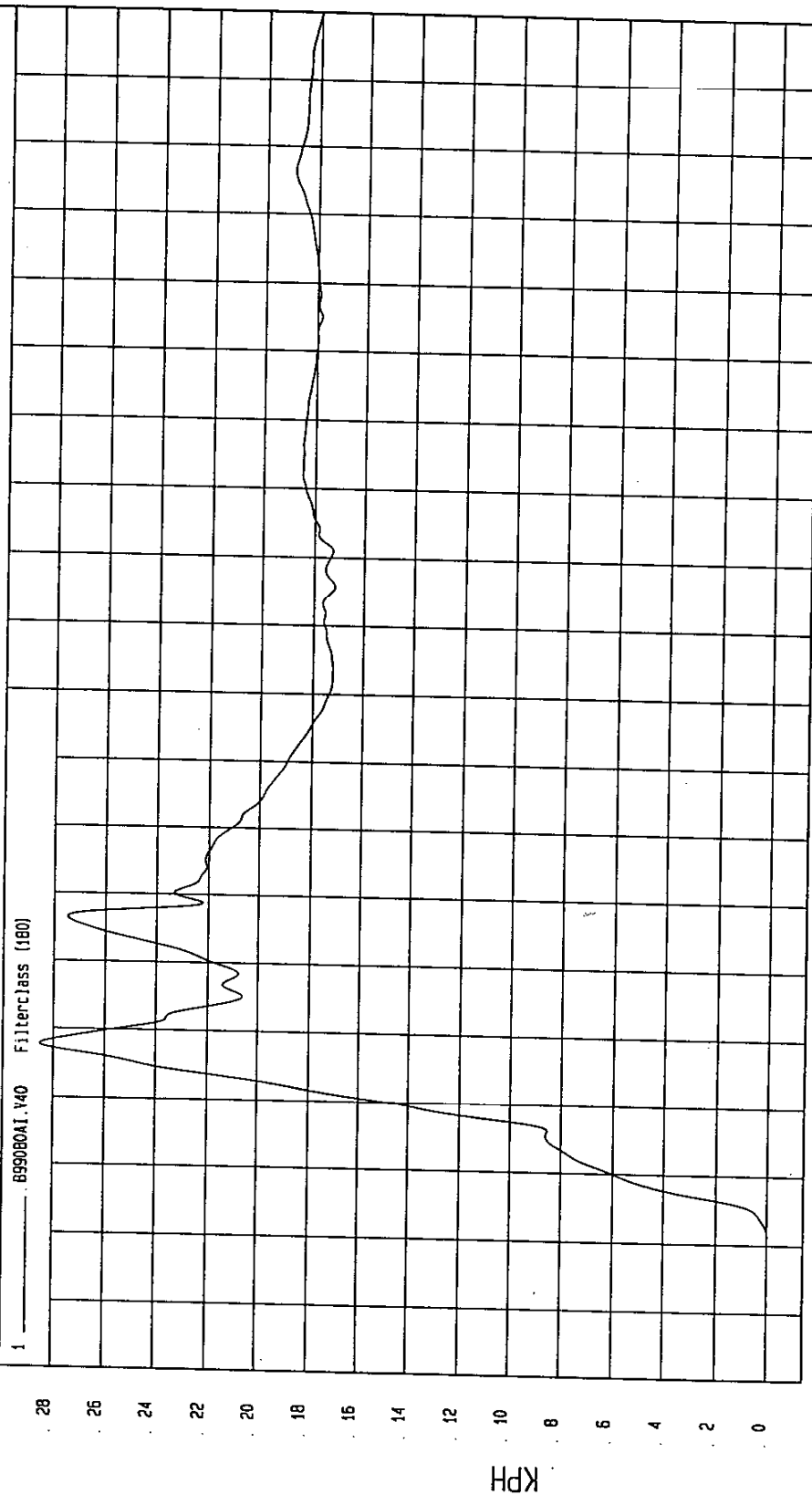


TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -3.73E-03 KPH at -12 msec Maximum = 28.53 KPH at 28 msec

DRIVER SEAT TRACK Y VELOCITY



NSA Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

Speed: 38.5 MPH 62 KPH

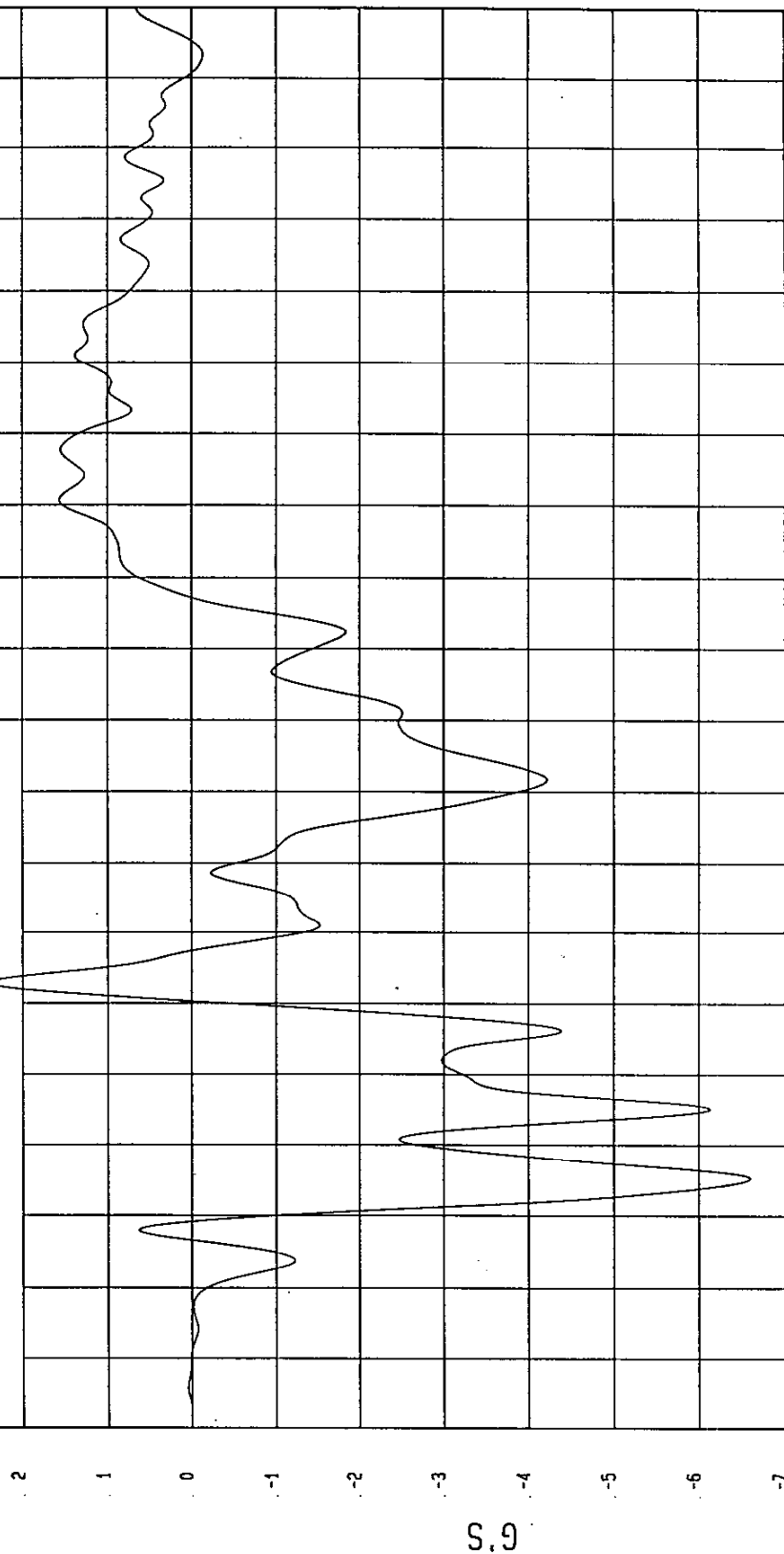
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 2.4 G'S at 43 msec

Minimum = -6.6 G'S at 15 msec

REAR FLOORPAN ABOVE AXLE X ACCELERATION

1 899080AF.A08 Filterclass (60)



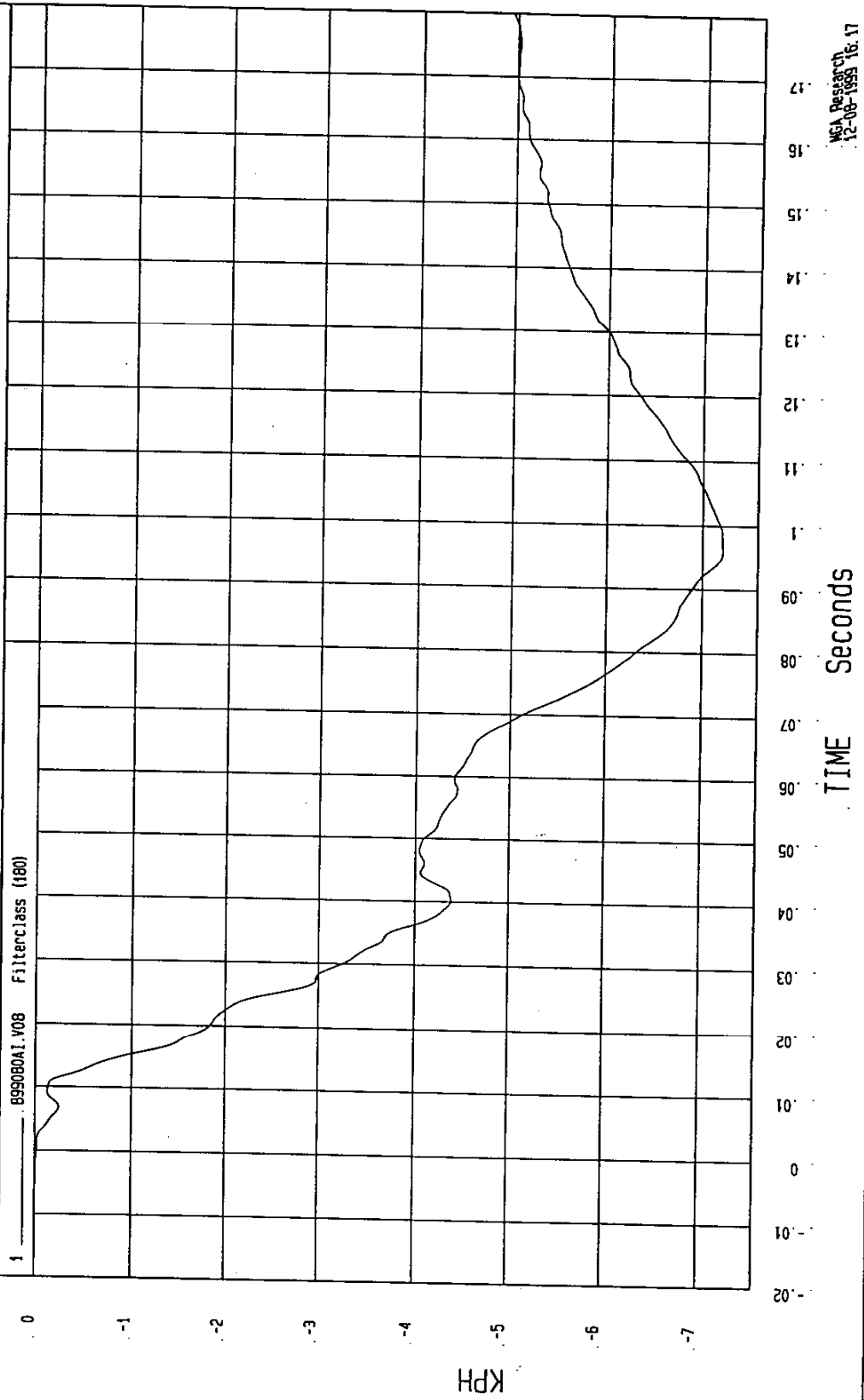
MSA Research
12-08-1999 16:17

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -7.21 KPH at 96 msec Maximum = 7.30E-03 KPH at -7 msec

REAR FLOORPAN ABOVE AXLE X VELOCITY



TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

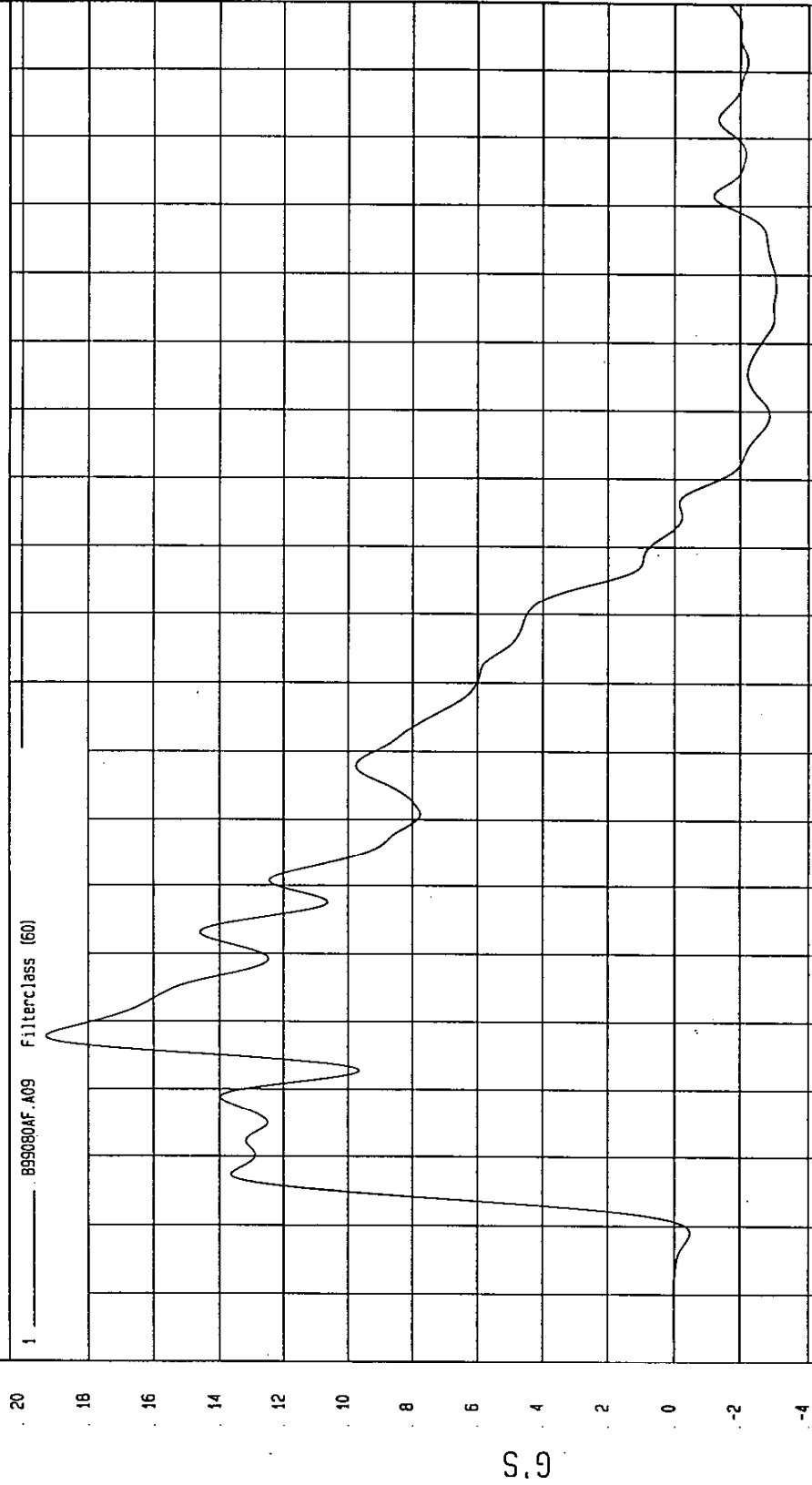
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 19.27 G'S at 28 msec

Minimum = -3.07 G'S at 138 msec

REAR FLOORPAN ABOVE AXLE Y ACCELERATION

1 899080AF.A09 Filterclass (60)



MCA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

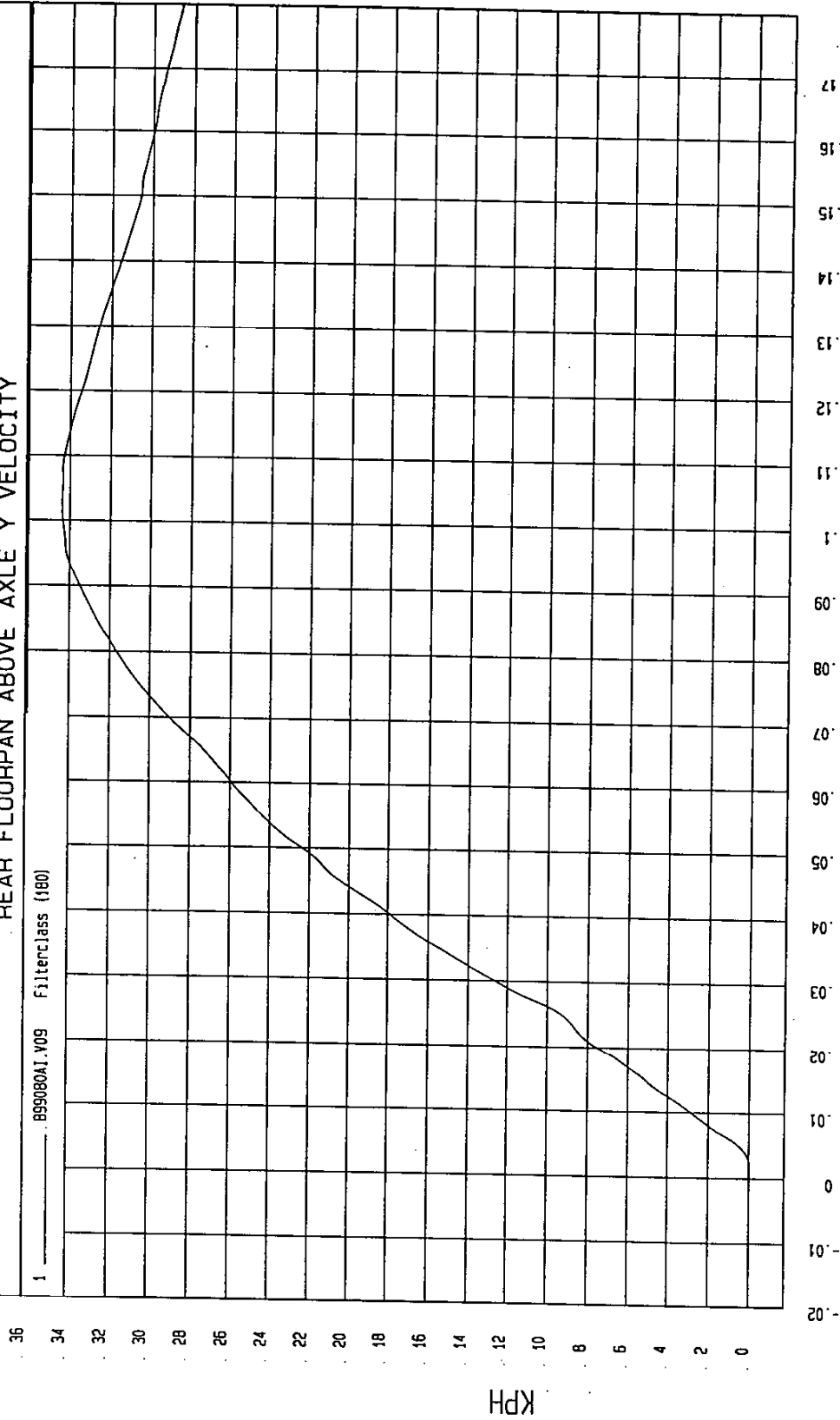
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Minimum = -.02 KPH at 1 msec

Maximum = 34.38 KPH at 102 msec

REAR FLOORPAN ABOVE AXLE Y VELOCITY

1 B99080A1.V09 Filterclass (100)



MSA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

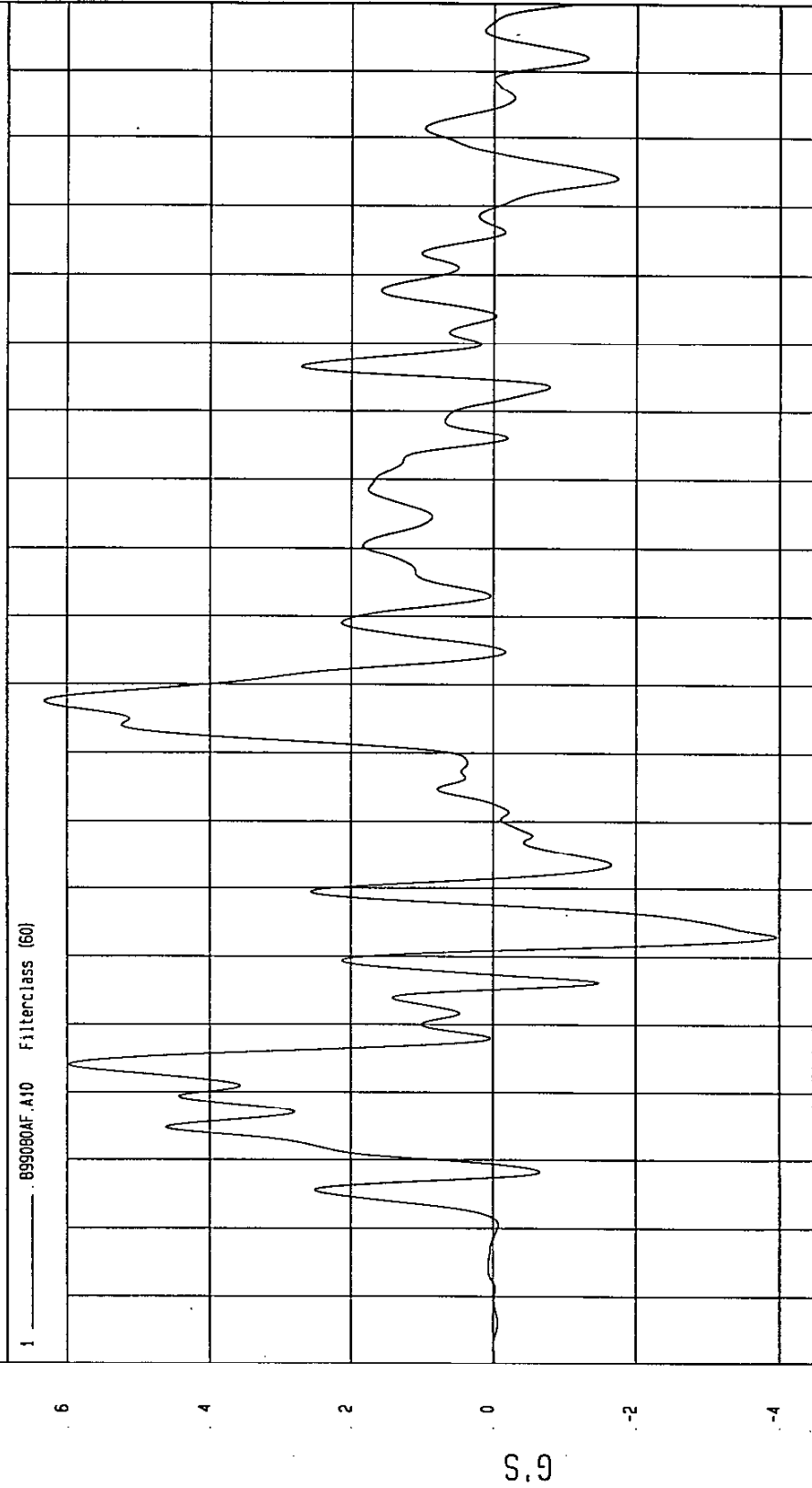
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 6.32 G'S at 78 msec

Minimum = -3.96 G'S at 43 msec

REAR FLOORPAN ABOVE AXLE Z ACCELERATION

1 B99080AF.A10 Filterclass (60)

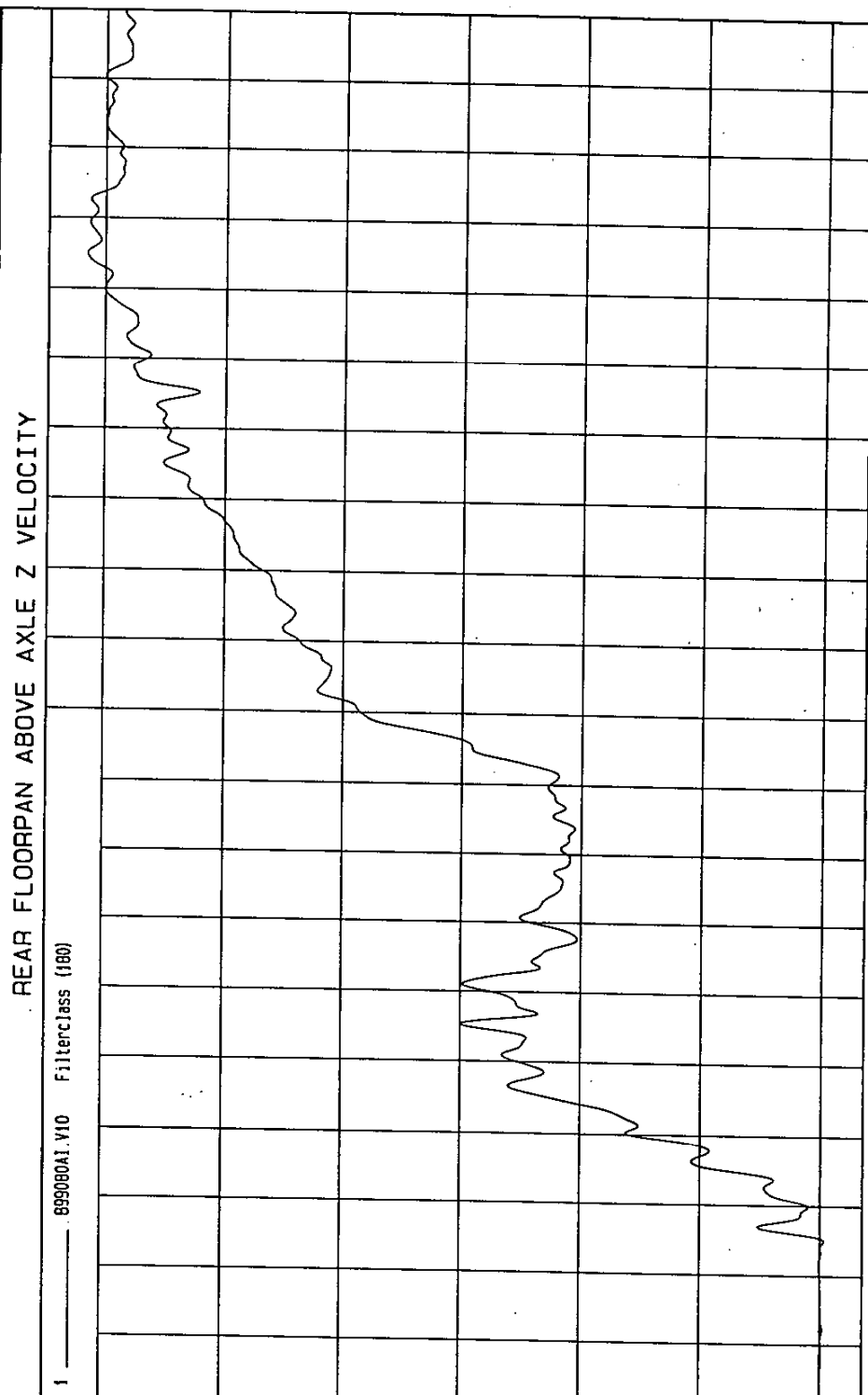


MSA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -3.32E-02 KPH at 5 msec Maximum = 6.15 KPH at 145 msec

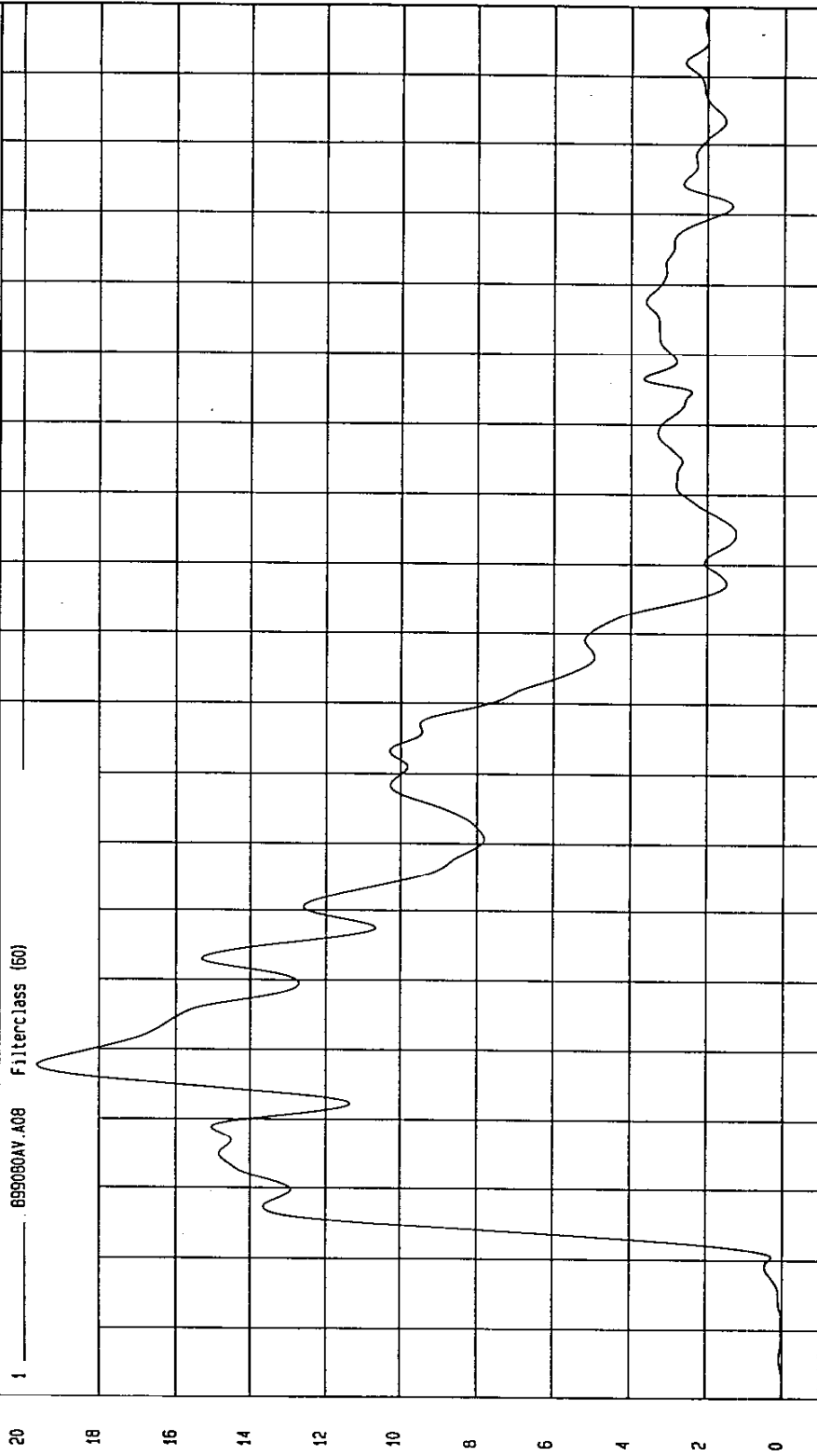


TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = 7.37E-03 G'S at -17 msec Maximum = 19.63 G'S at 28 msec

REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION



MCA Research
12-08-1999 16:16

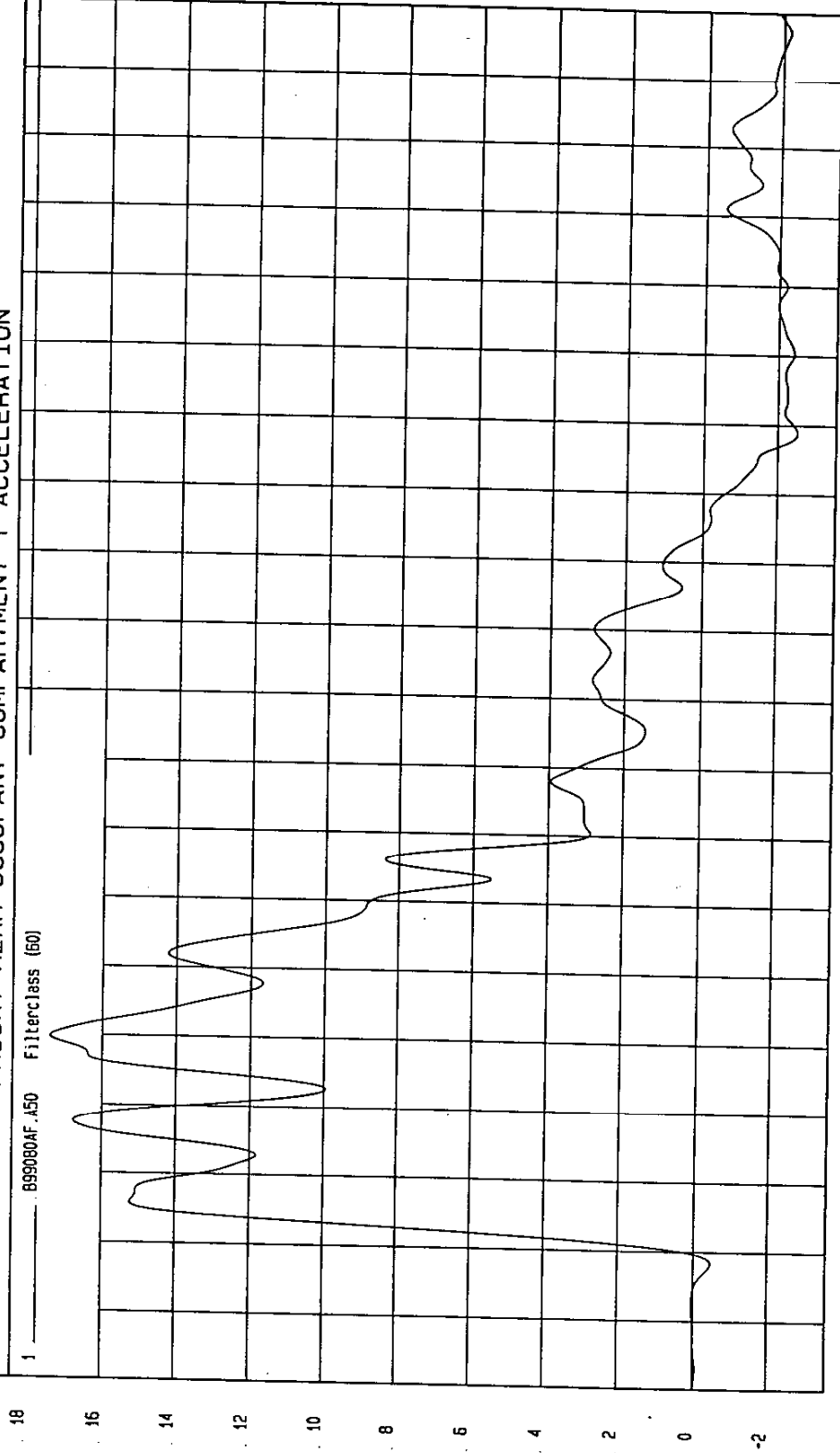
TEST: HIGH SPEED LATERAL IMPACT
TEST DATE: 12-08-1999
Speed: 38.5 MPH 62 KPH

COMPONENT: 2000 CHRYSLER LHS (MY0301)

Minimum = -2.5 G'S at 119 msec
Maximum = 17.39 G'S at 30 msec

RIGHT REAR OCCUPANT COMPARTMENT Y ACCELERATION

1 899080AF.A50 Filterclass (50)



NSA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

Speed: 38.5 MPH 62 KPH

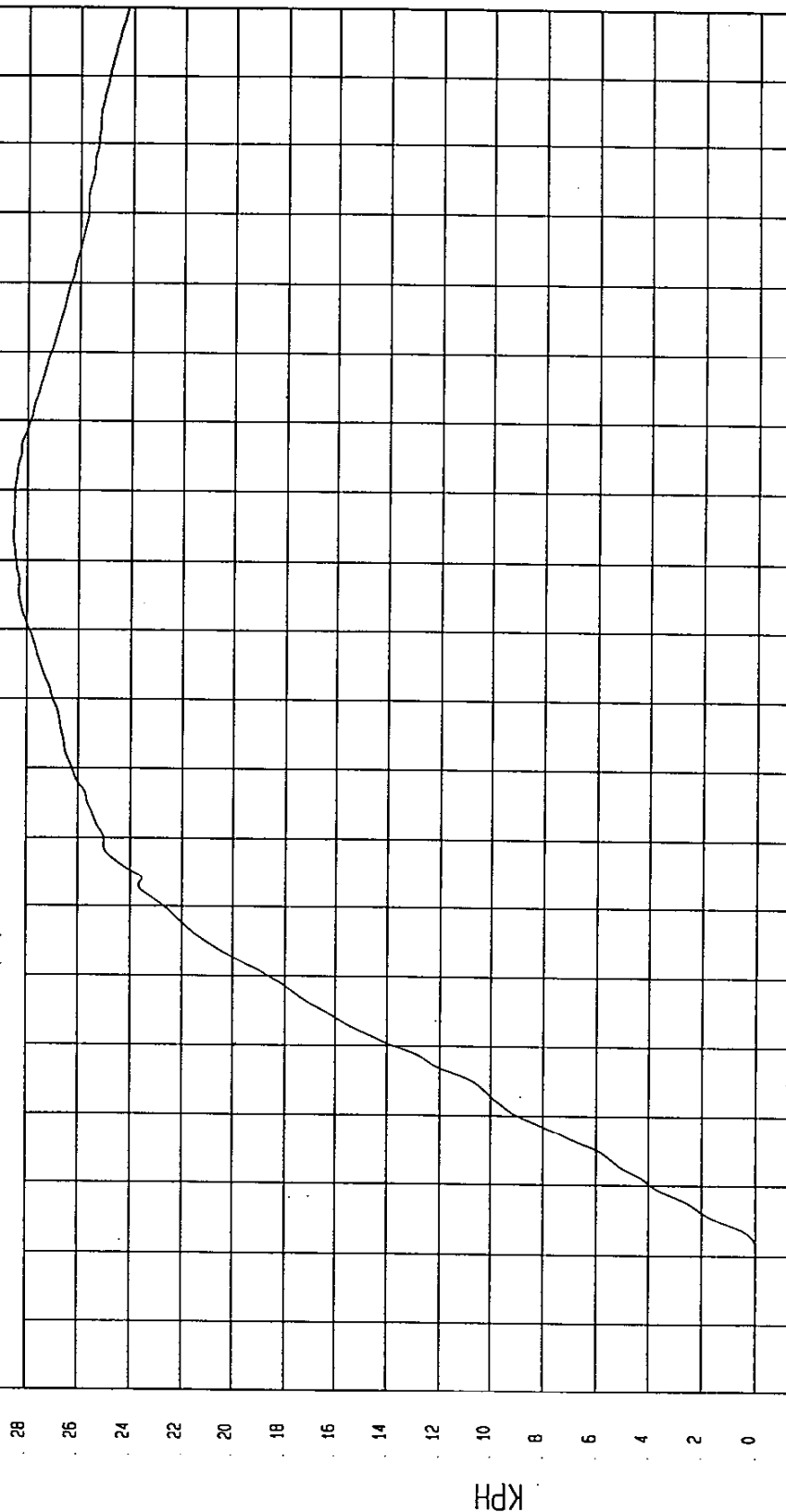
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Minimum = -.01 KPH at -15 msec

Maximum = 28.53 KPH at 103 msec

RIGHT REAR OCCUPANT COMPARTMENT Y VELOCITY

1 899080A1.V50 Filterclass (180)



VSA Research
12-08-1999 16:18

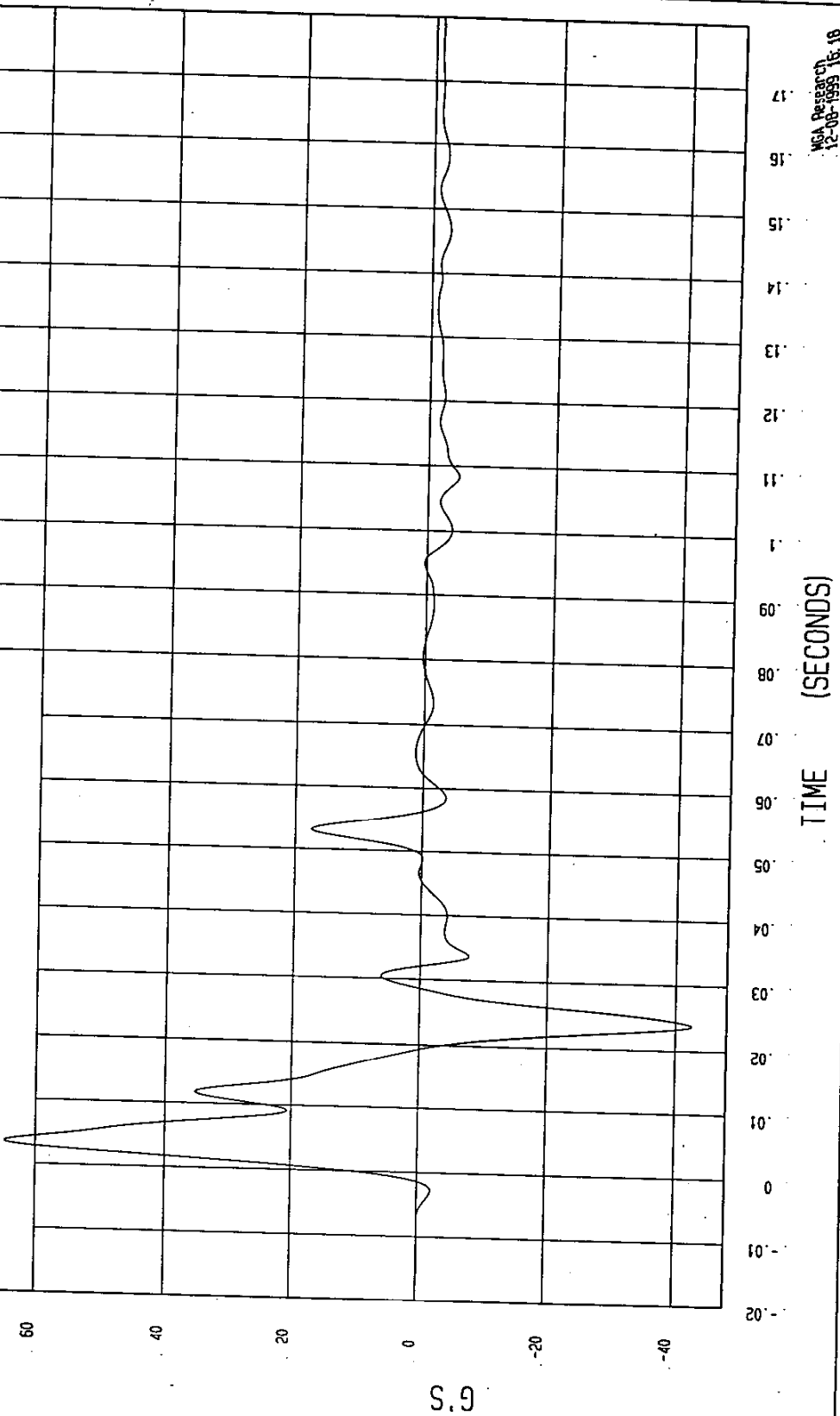
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -42.57 G'S at 24 msec Maximum = 64.88 G'S at 4 msec

LEFT LOWER A-POST Y ACCELERATION

1 .899080AF.A20 FilterClass (60)



MCA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

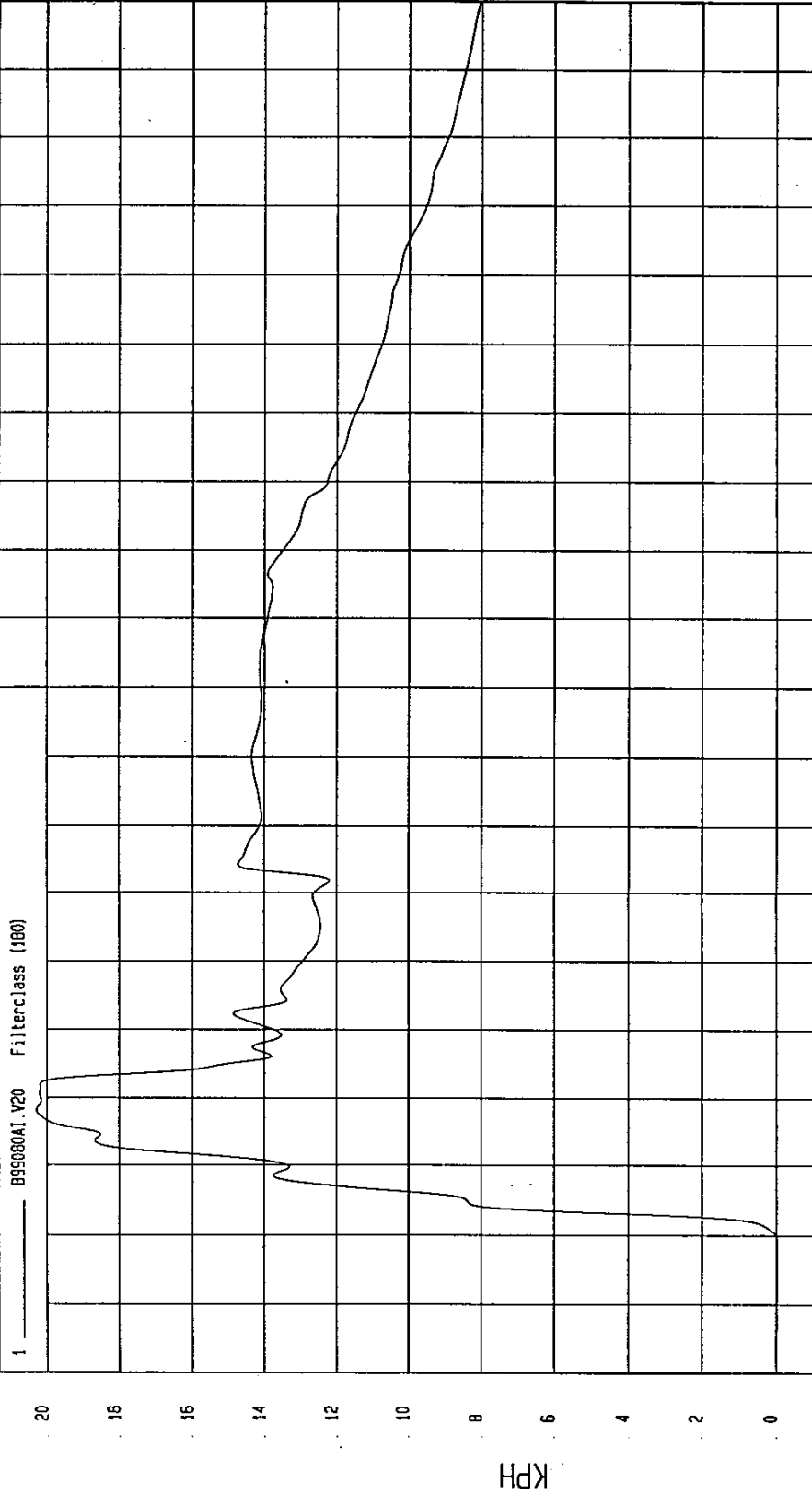
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 20.29 KPH at 18 msec

Minimum = -2.84E-02 KPH at -8 msec

LEFT LOWER A-POST Y VELOCITY

1 899080A1.V20 Filterclass (180)



TIME Seconds

MSA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT
TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

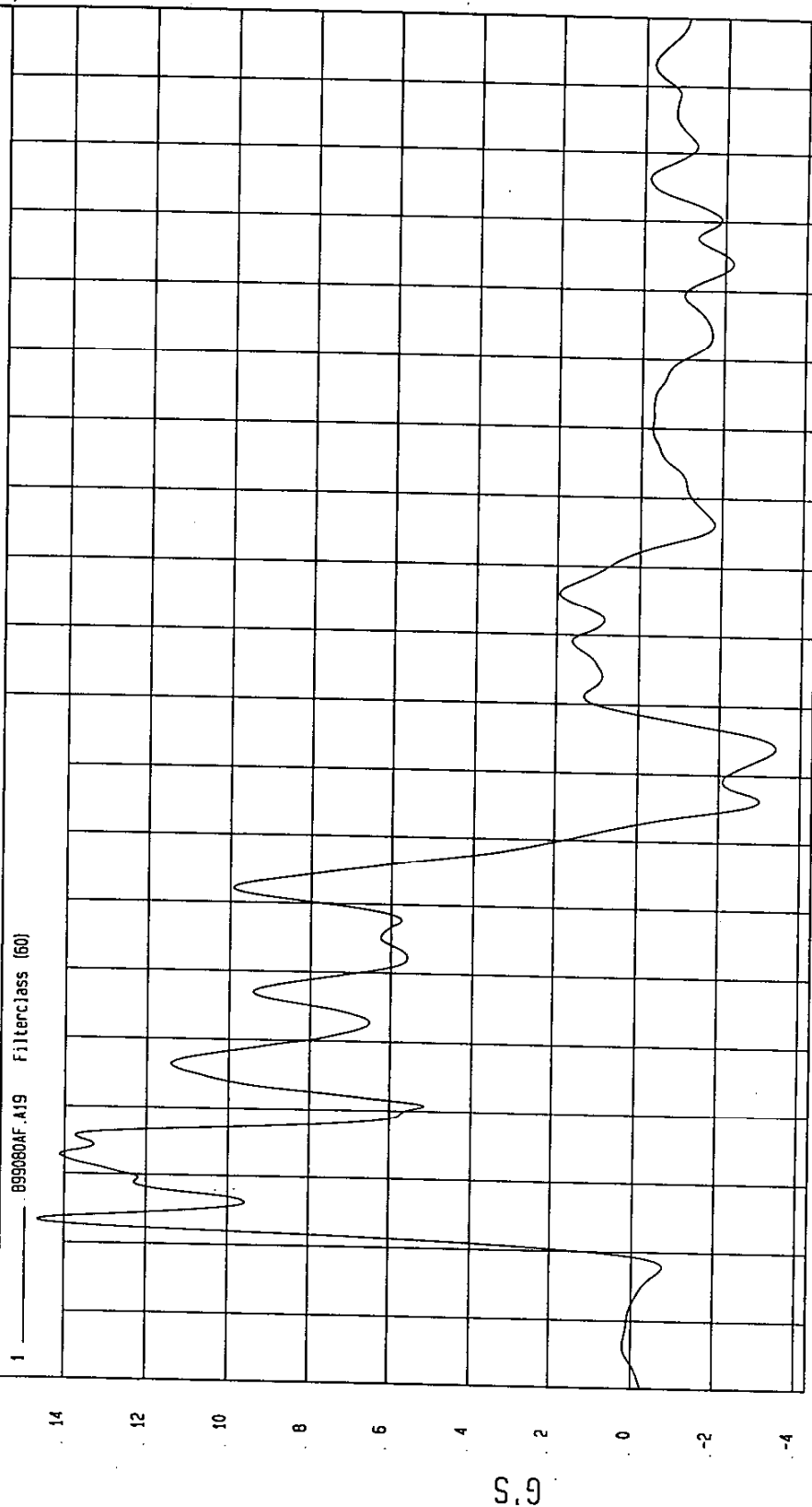
Speed: 38.5 MPH 62 KPH

Minimum = -3.39 G'S at 74 msec

Maximum = 14.67 G'S at 3 msec

LEFT MID A-POST Y ACCELERATION

1 899080AF.A19 FilterClass (60)



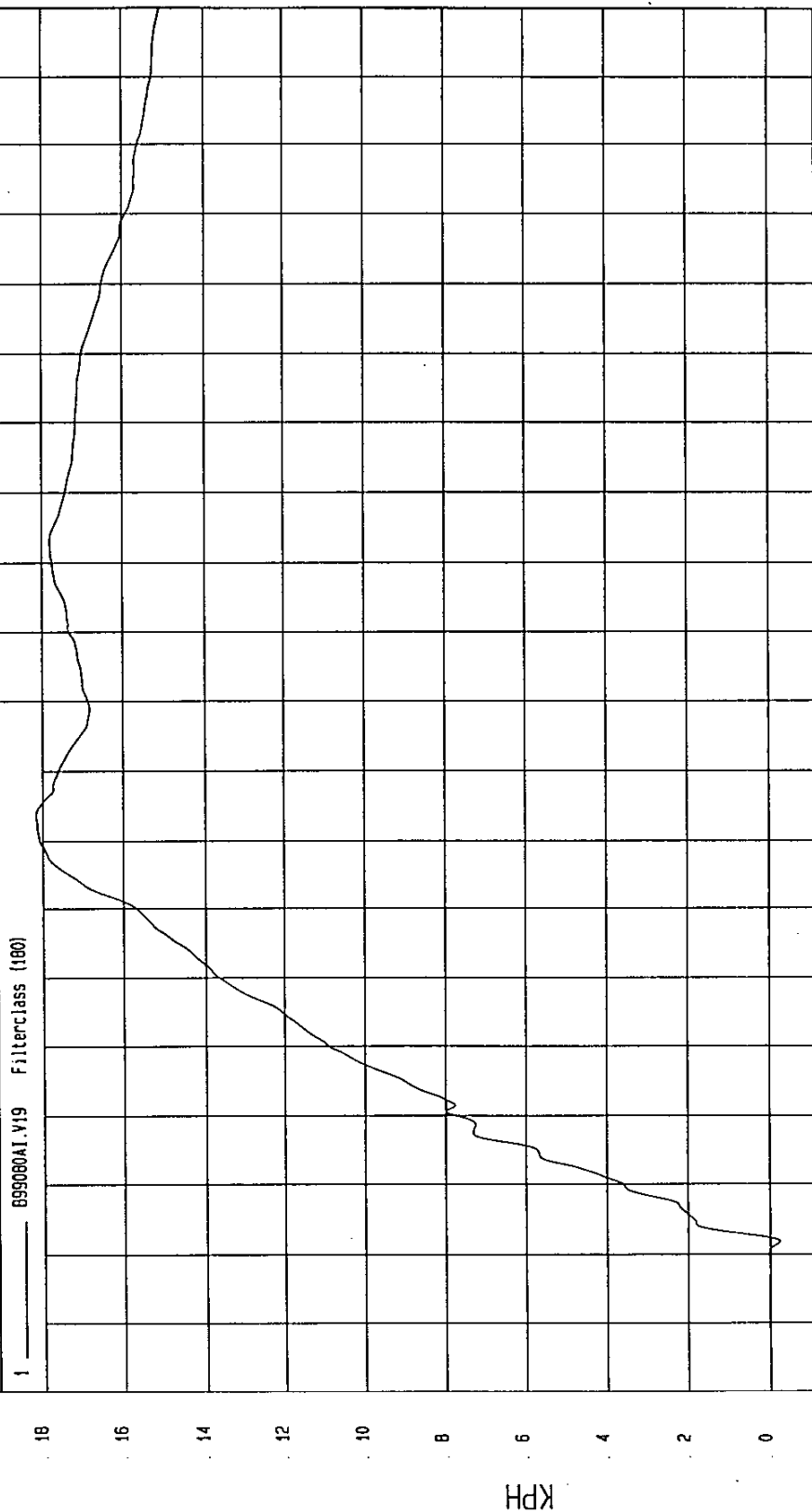
MCA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -24 KPH at 2 msec Maximum = 18.17 KPH at 64 msec

LEFT MID A-POST Y VELOCITY



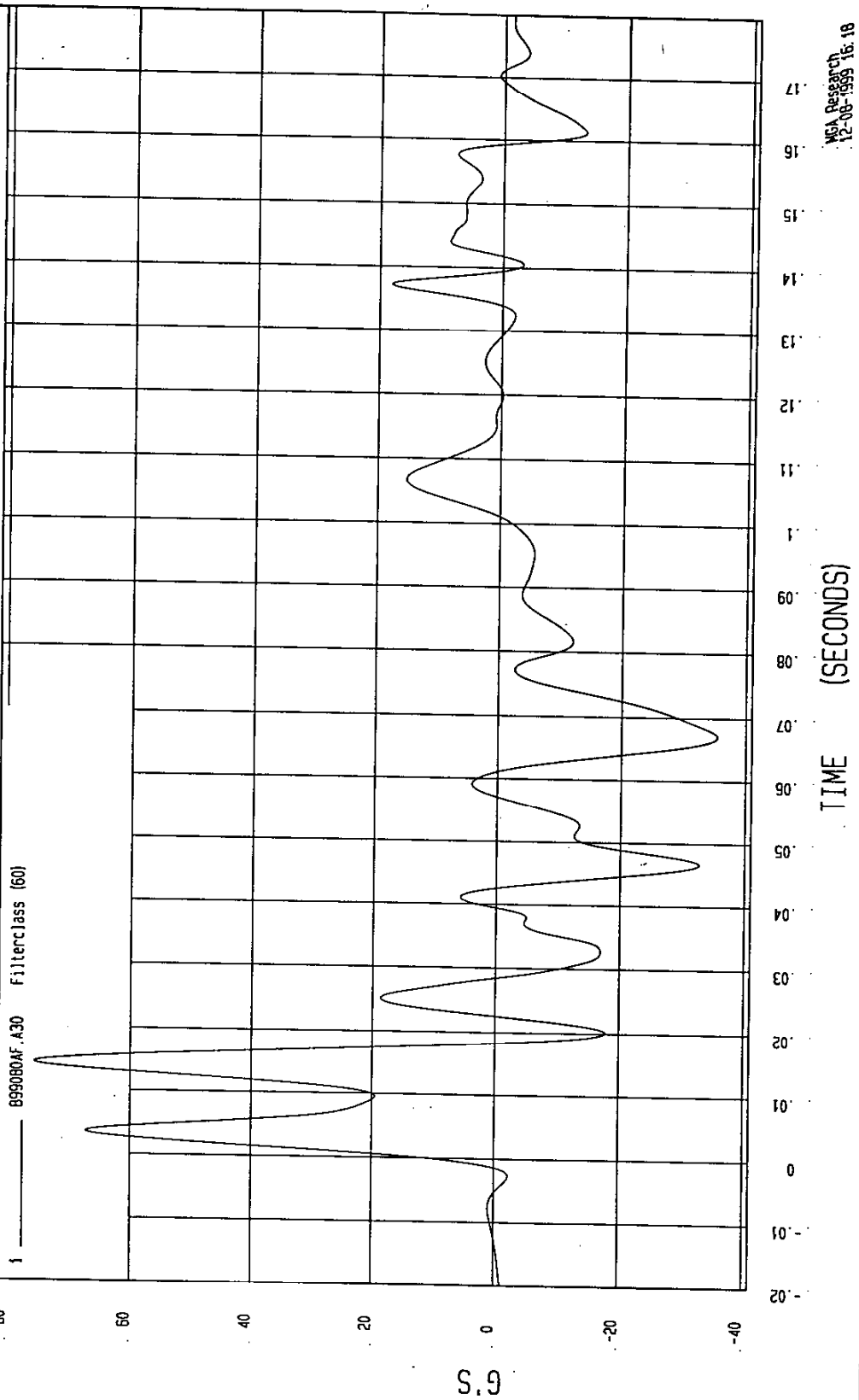
MSA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -35.4 G'S at 67 msec Maximum = 75.63 G'S at 14 msec

LEFT LOWER B-POST Y ACCELERATION



TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

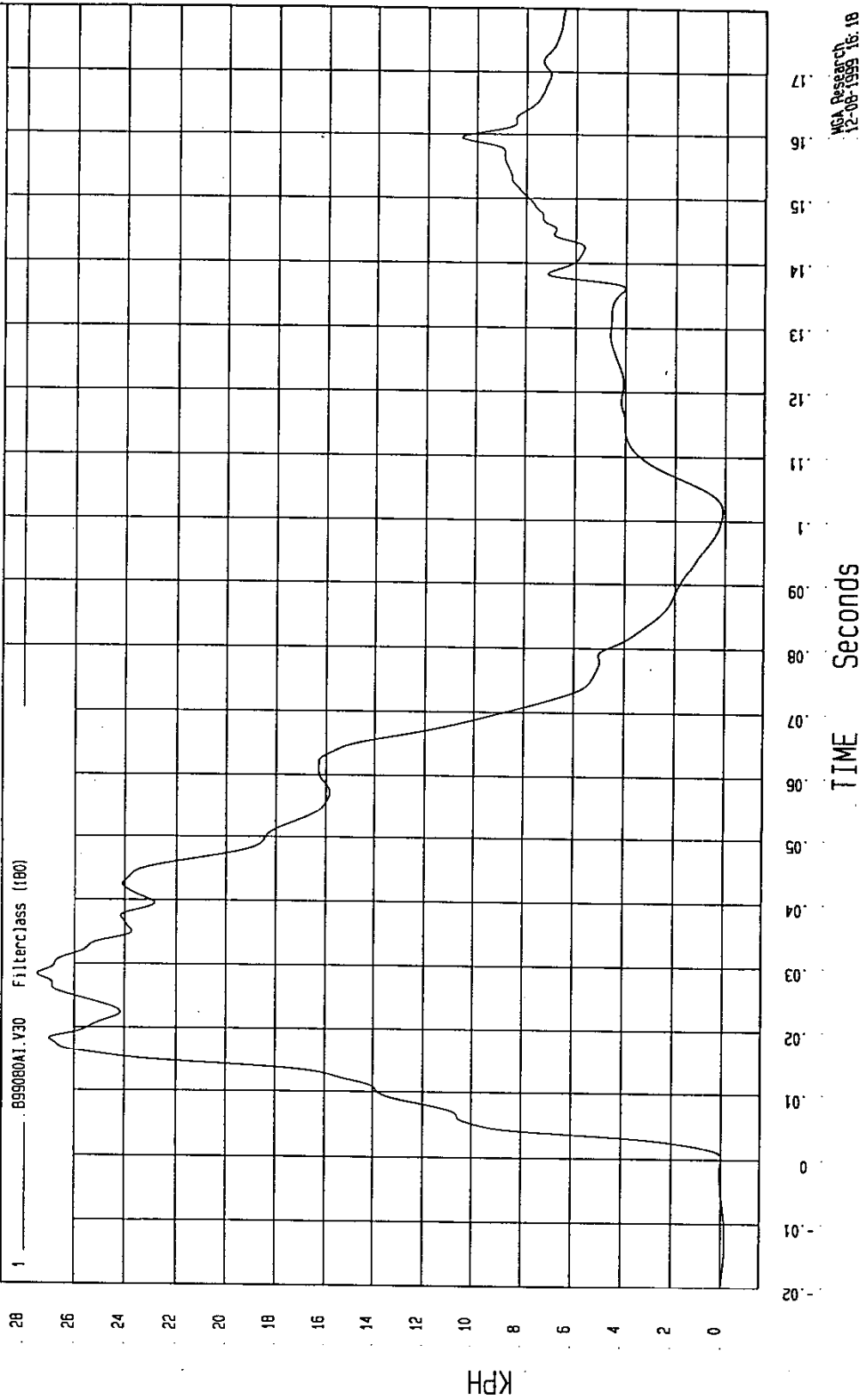
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Speed: 38.5 MPH 62 KPH

Minimum = -.15 KPH at -12 msec

Maximum = 27.46 KPH at 28 msec

LEFT LOWER B-POST Y VELOCITY

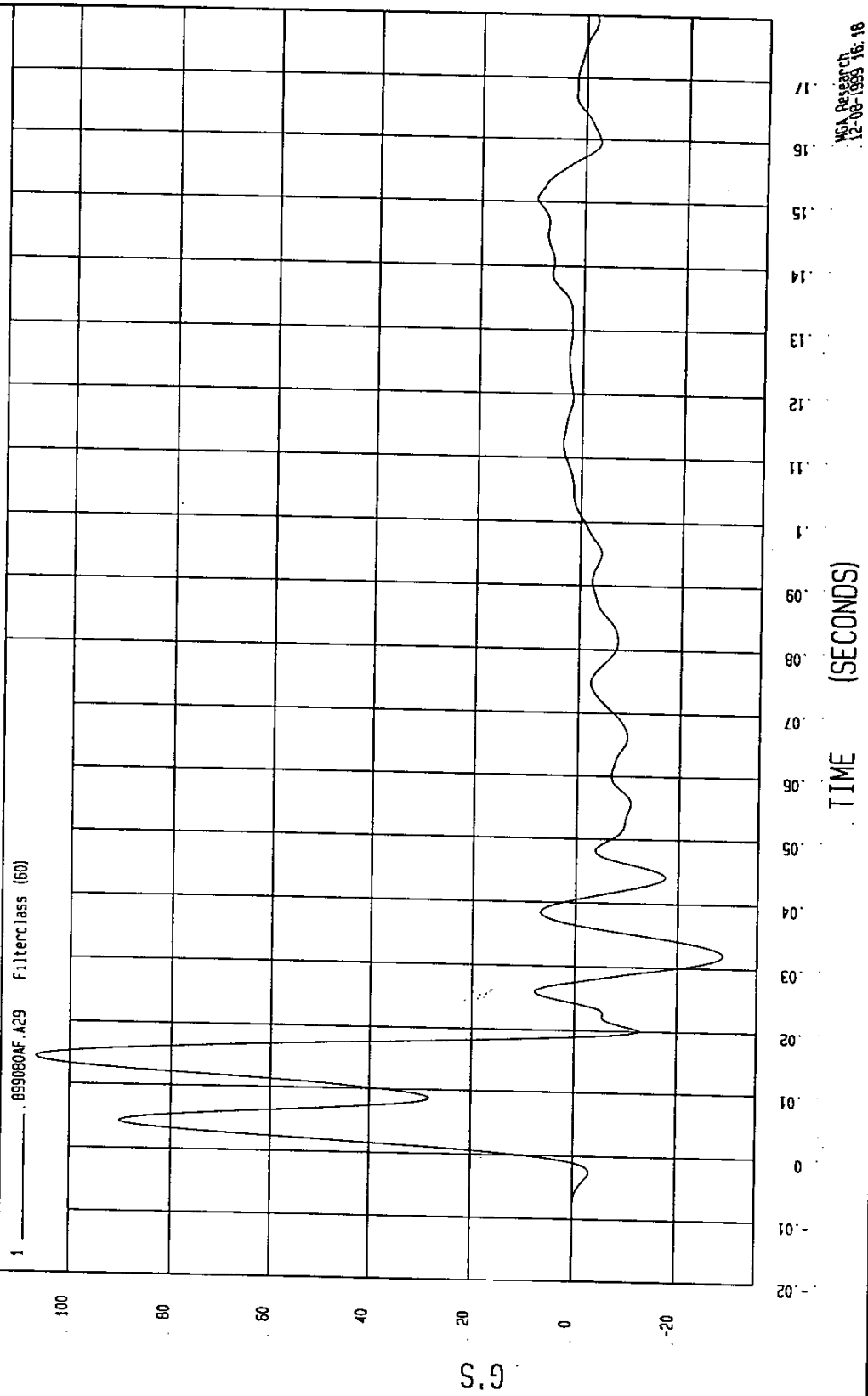


TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -28.73 G'S at 32 msec Maximum = 106.73 G'S at 14 msec

LEFT MID B-POST Y ACCELERATION



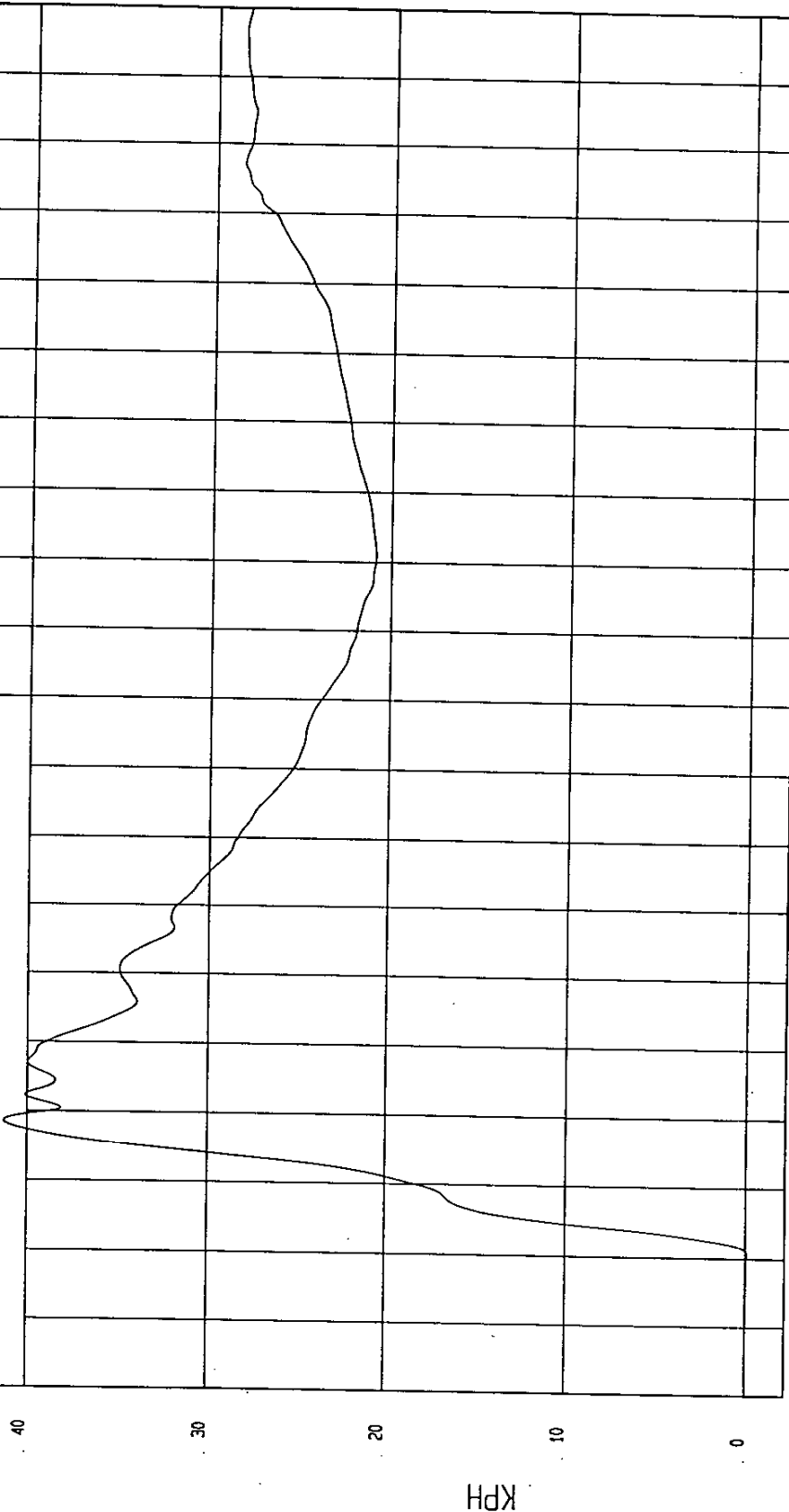
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -9.66E-02 KPH at 1 msec Maximum = 41.28 KPH at 19 msec

LEFT MID B-POST Y VELOCITY

1 ——— 899080AT.V29 Filterclass (180)



TIME Seconds

MGA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

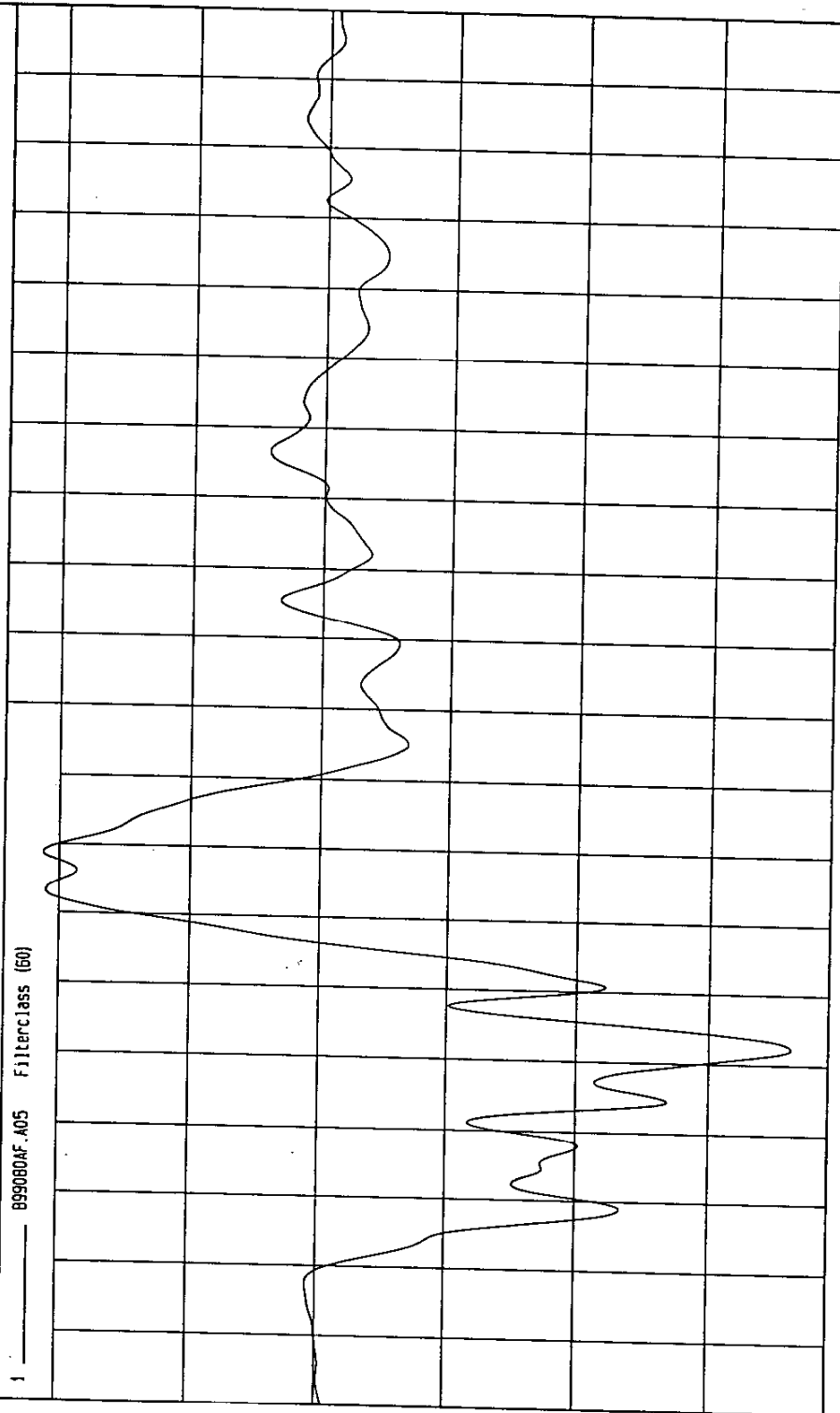
Speed: 38.5 MPH 62 KPH

Minimum = -7.25 G'S at 32 msec

Maximum = 4.24 G'S at 59 msec

VEHICLE CG X ACCELERATION

1 899080AF.A05 Filterclass (50)



TIME (SECONDS)

0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.01
-0.02

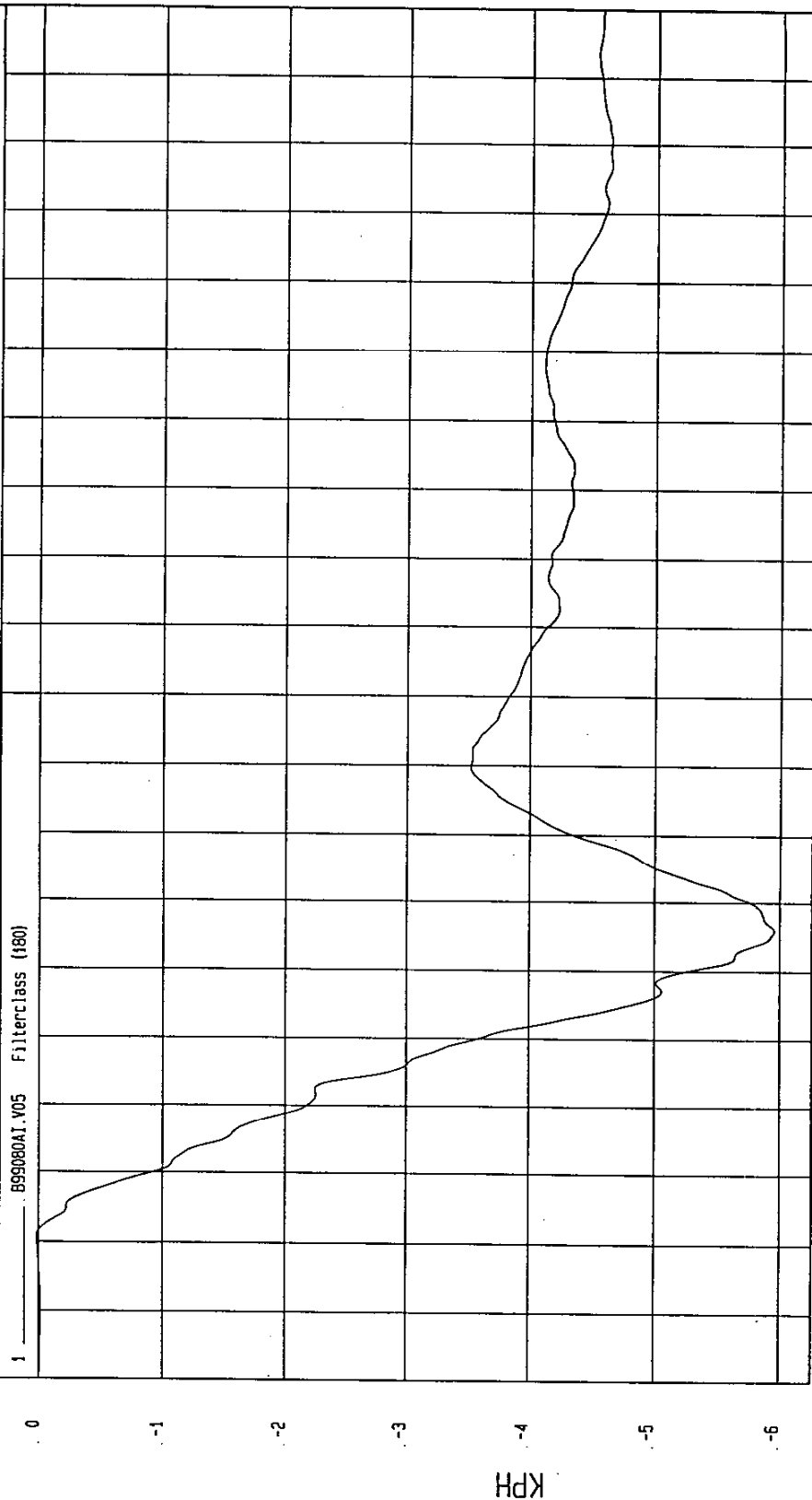
WCA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -5.96 KPH at 46 msec Maximum = 1.71E-02 KPH at 1 msec

VEHICLE CG X VELOCITY



MSA Research
12-08-1999 16:18

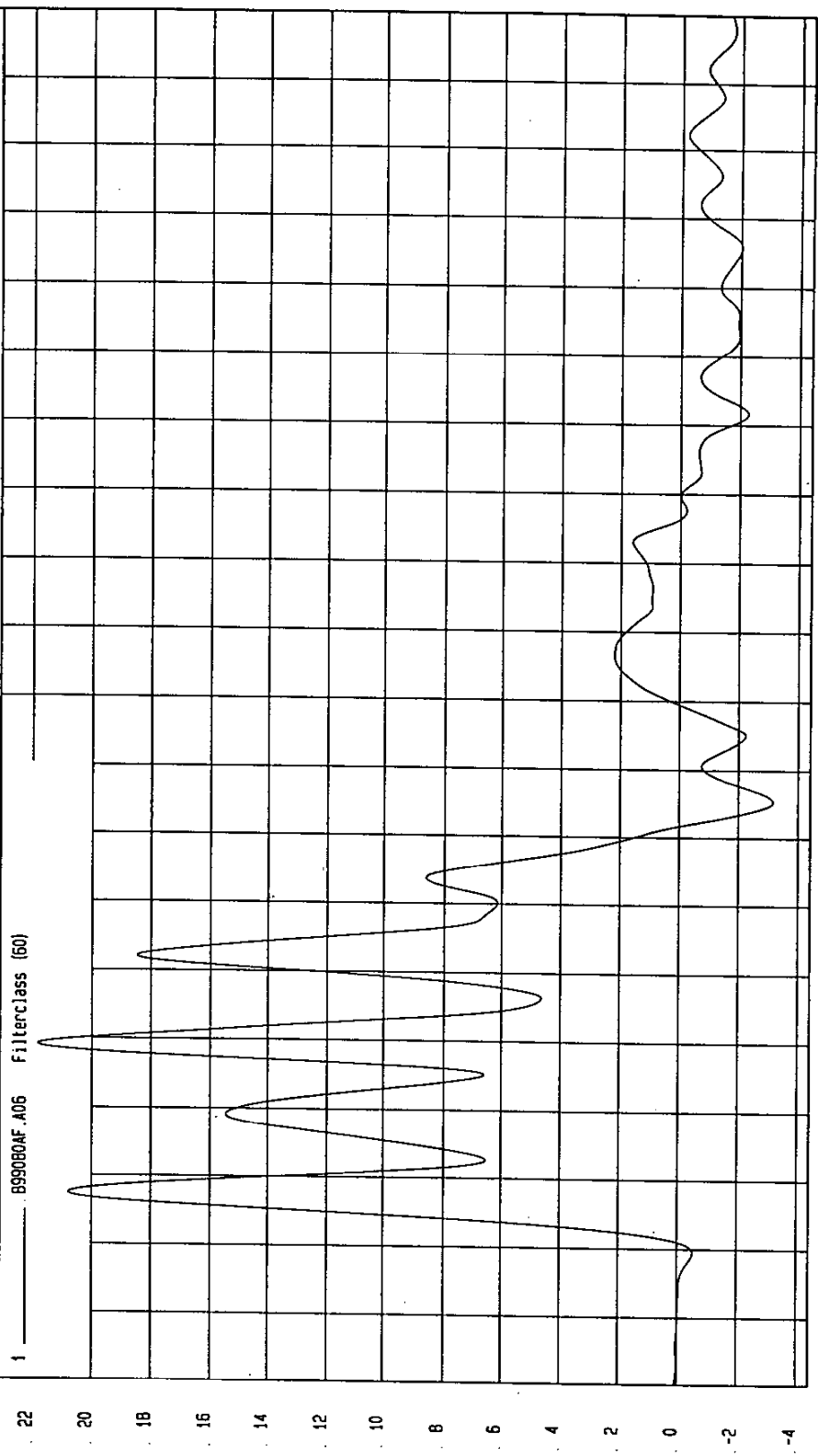
TIME Seconds

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -3.16 G'S at 65 msec Maximum = 21.82 G'S at 29 msec

VEHICLE CG Y ACCELERATION



TIME (SECONDS)

MECA Research
12-08-1999 15:18

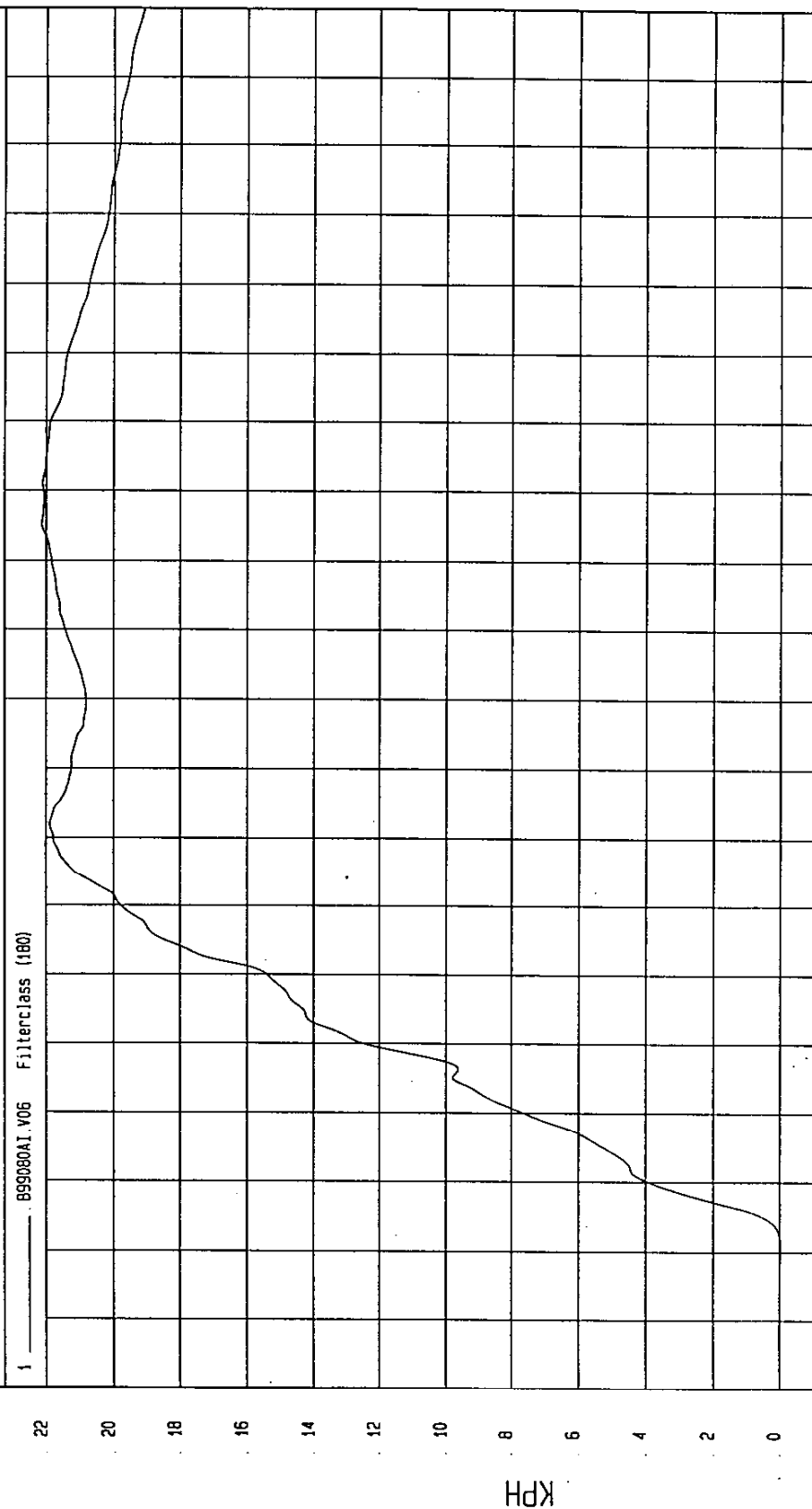
G.S

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -2.20E-02 KPH at 1 msec Maximum = 22.13 KPH at 105 msec

VEHICLE CG Y VELOCITY



WCA Research
12-08-1999 16:18

TEST: HIGH SPEED LATERAL IMPACT
TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

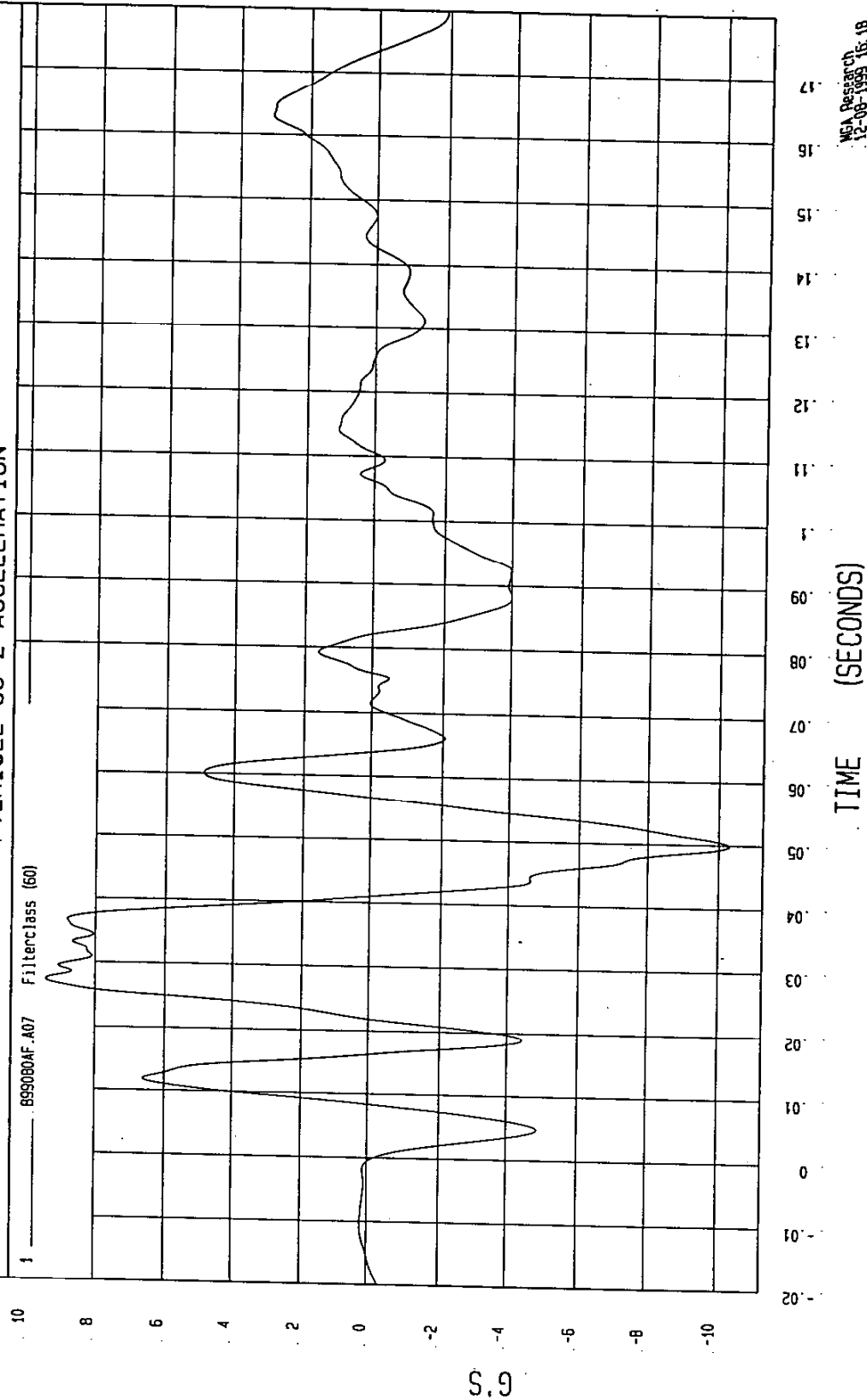
Speed: 38.5 MPH 62 KPH

Minimum = -10.31 G'S at 50 msec

Maximum = 9.45 G'S at 27 msec

VEHICLE CG Z ACCELERATION

1 _____ 899080AF.A07 Filterclass (60)



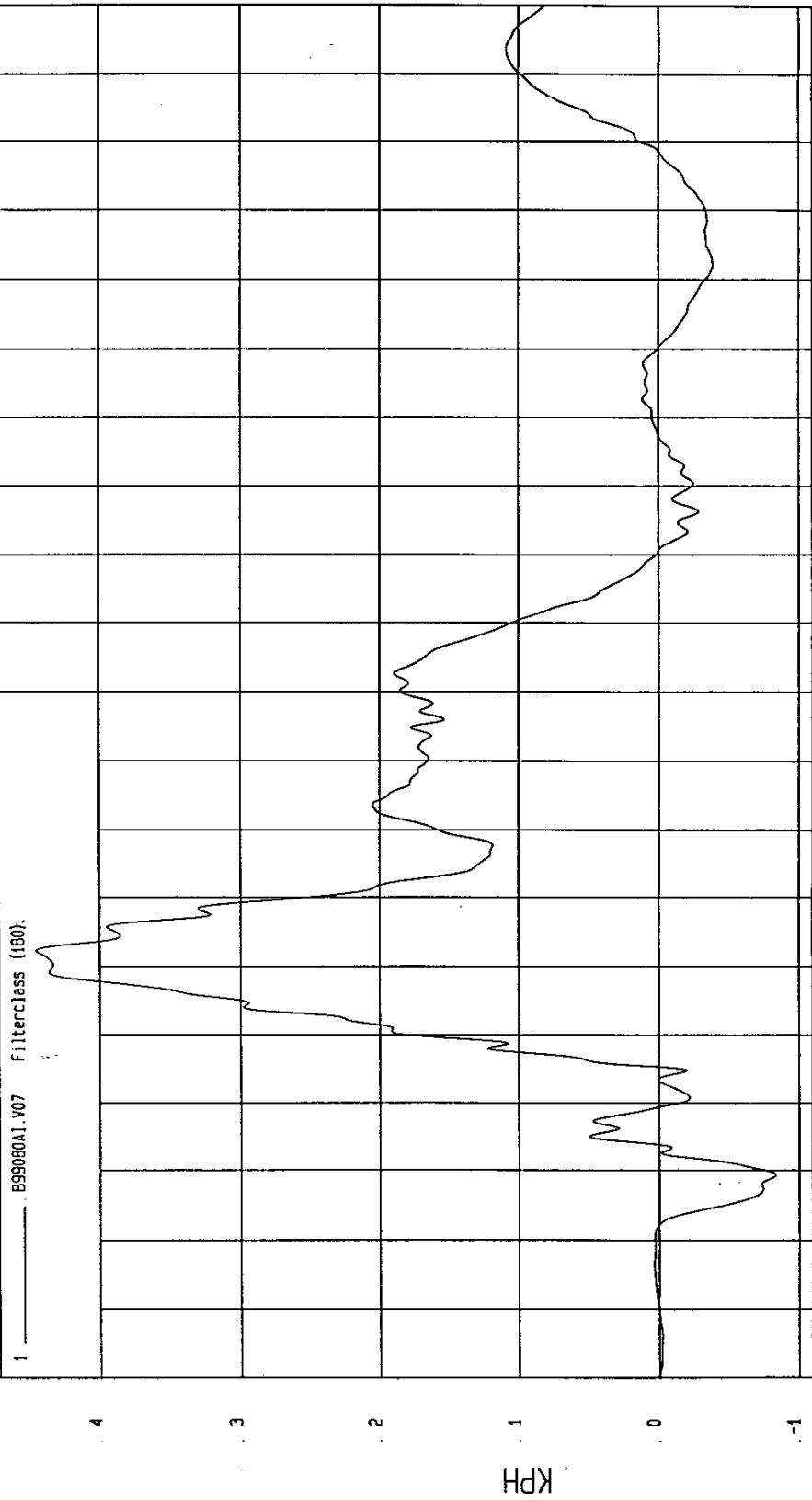
WEA Research
12-08-1999 15:18

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -.83 KPH at 9 msec Maximum = 4.45 KPH at 42 msec

VEHICLE CG Z VELOCITY

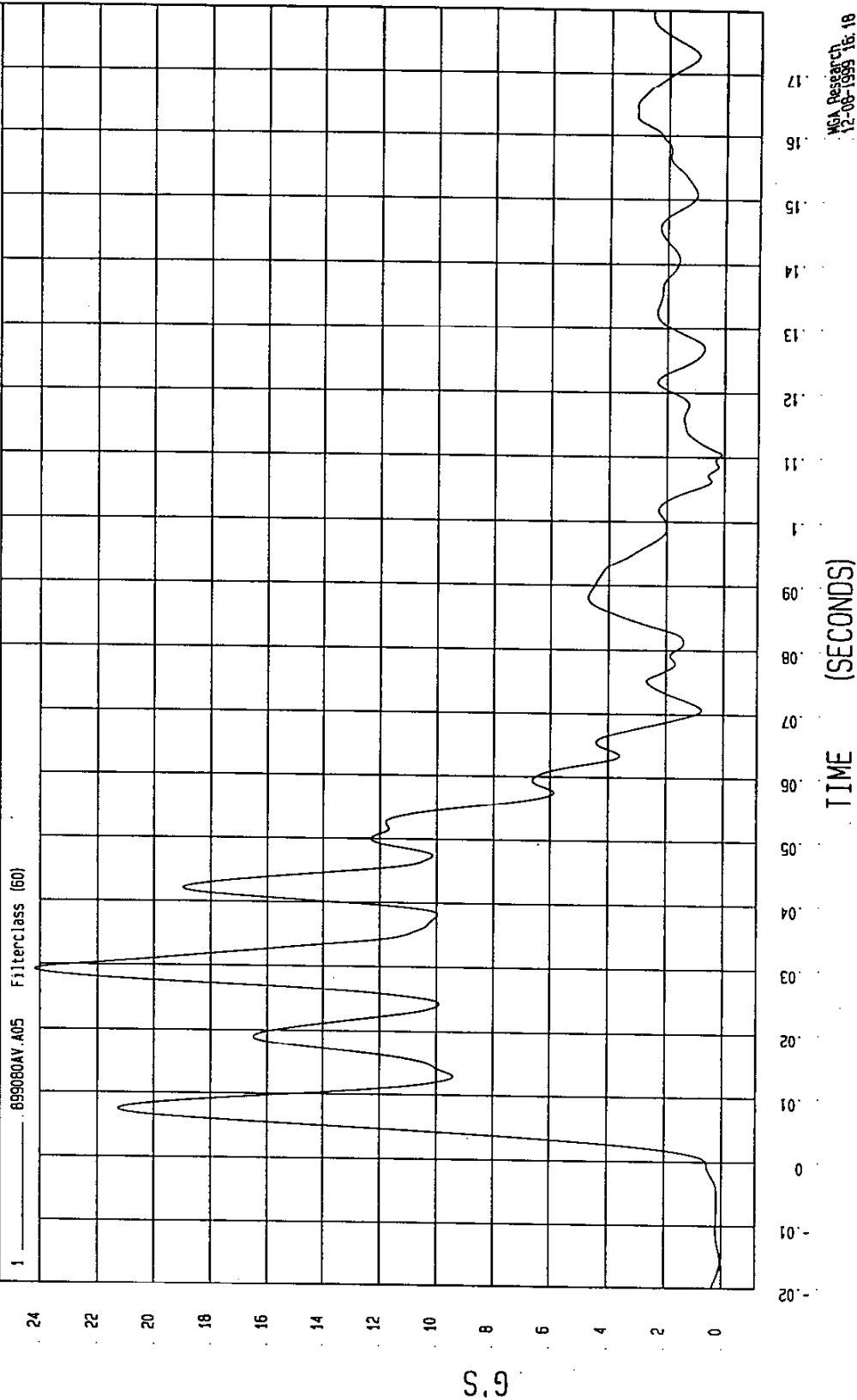


TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = .05 G'S at -16 msec Maximum = 24.18 G'S at 29 msec

VEHICLE CG RESULTANT ACCELERATION



TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -63.25 G'S at 22 msec Maximum = 169.46 G'S at 12 msec

LEFT FRONT DOOR MIDREAR Y ACCELERATION

1 ——— B99080AF.A52 Filterclass (60)

Data not valid after
approx. 29 msec.180
160
140
120
100
80
60
40
20
0
-20
-40
-60
-80
-100

S.G

-0.20
-0.10
0
0.10
0.20
0.30
0.40
0.50
0.60
0.70
0.80
0.90
1
1.1
1.2
1.3
1.4
1.5
1.6
1.7

TIME (SECONDS)

NSA Research
12-21-1999 09:50

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

COMPONENT: 2000 CHRYSLER LHS (MY0301)

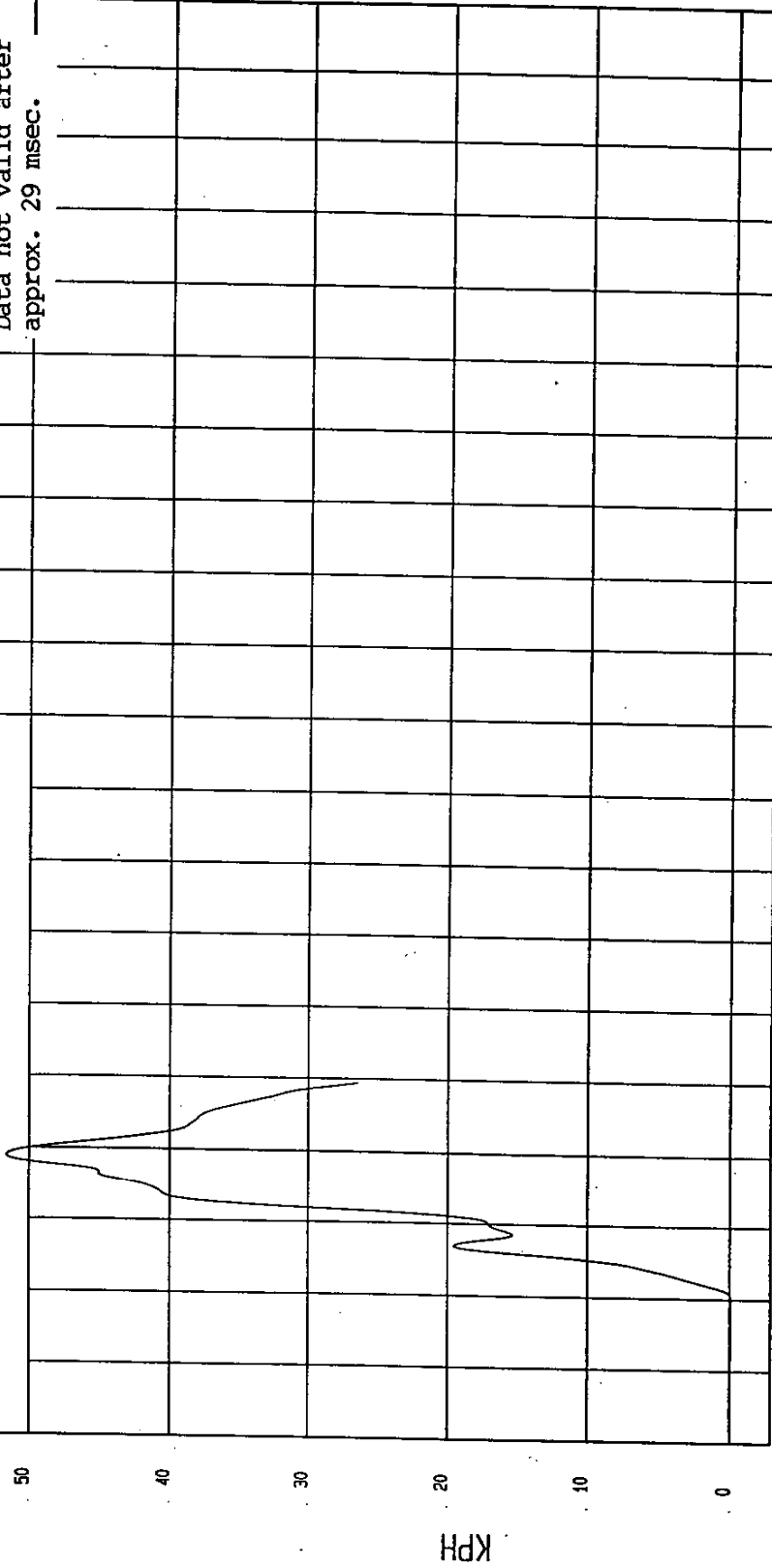
Maximum = 51.63 KPH at 19 msec

Minimum = -5.92E-02 KPH at 0 msec

LEFT FRONT DOOR MIDREAR Y VELOCITY

1 B99080A1.V52 Filterclass (180)

Data not valid after approx. 29 msec.



WCA Research
12-21-1999 08:50

TIME Seconds

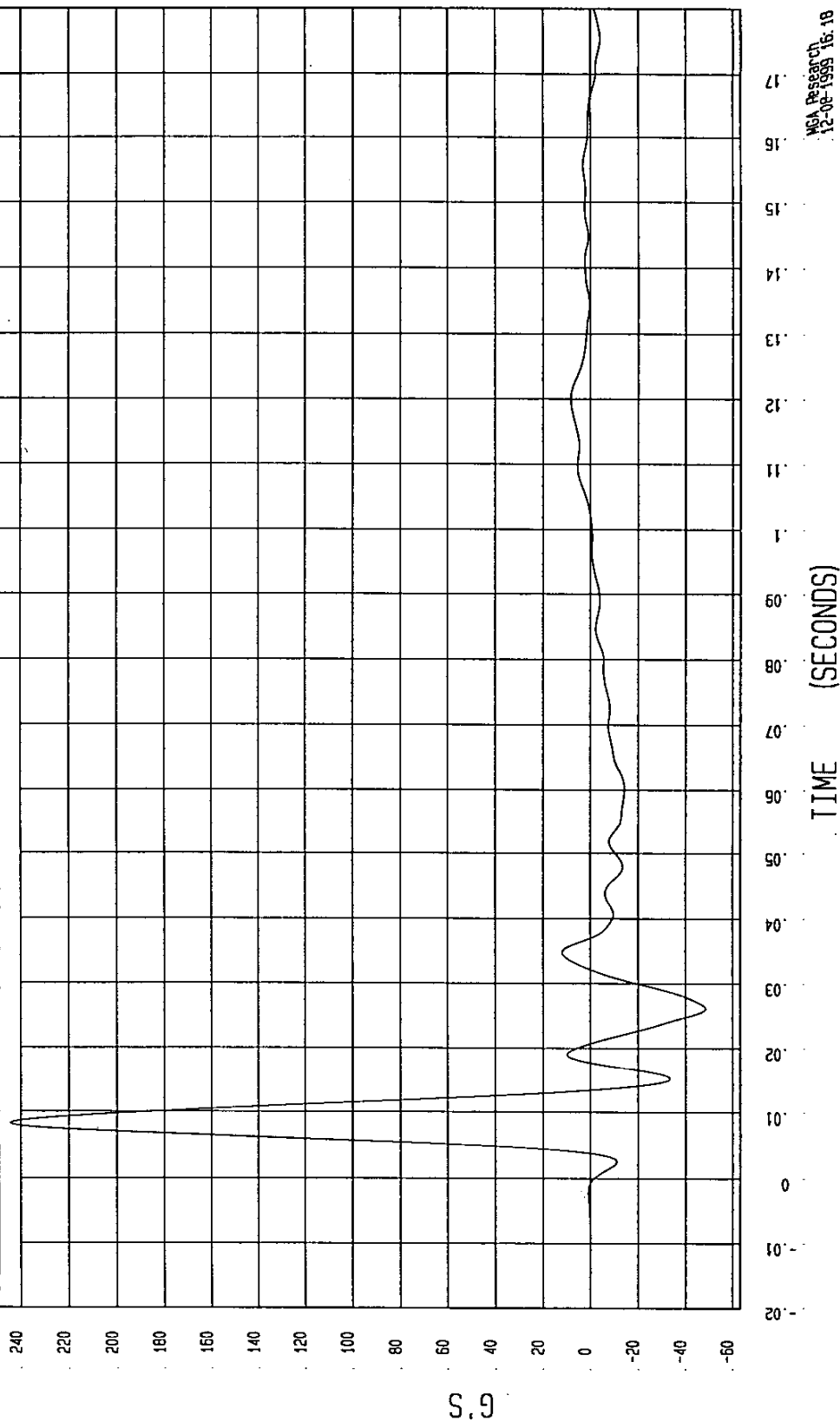
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

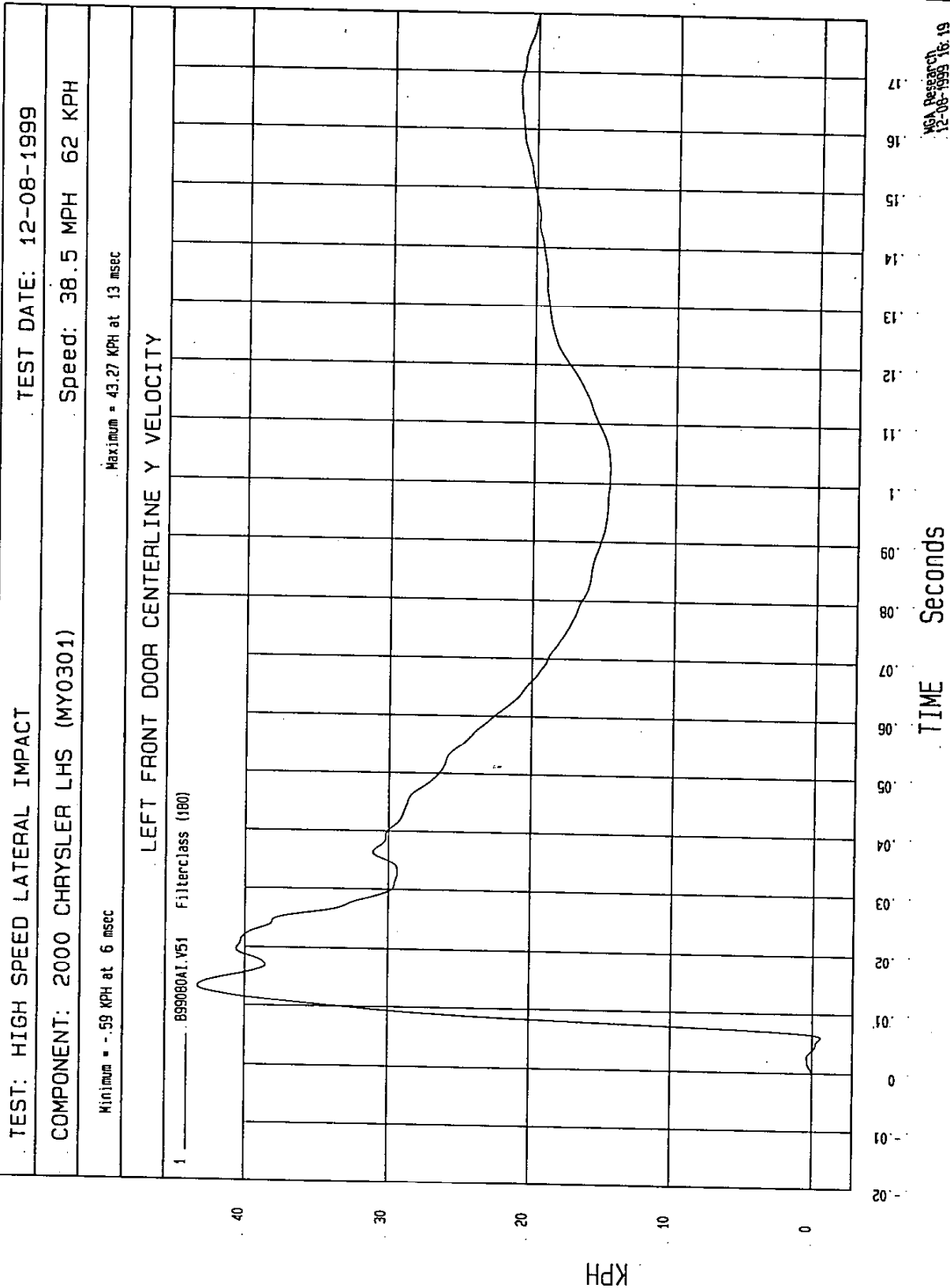
COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -48.55 G'S at 26 msec Maximum = 244.5 G'S at 8 msec

LEFT FRONT DOOR CENTERLINE Y ACCELERATION

1 B99080AF.A51 FilterClass (60)

MCA Research
12-08-1999 16:18



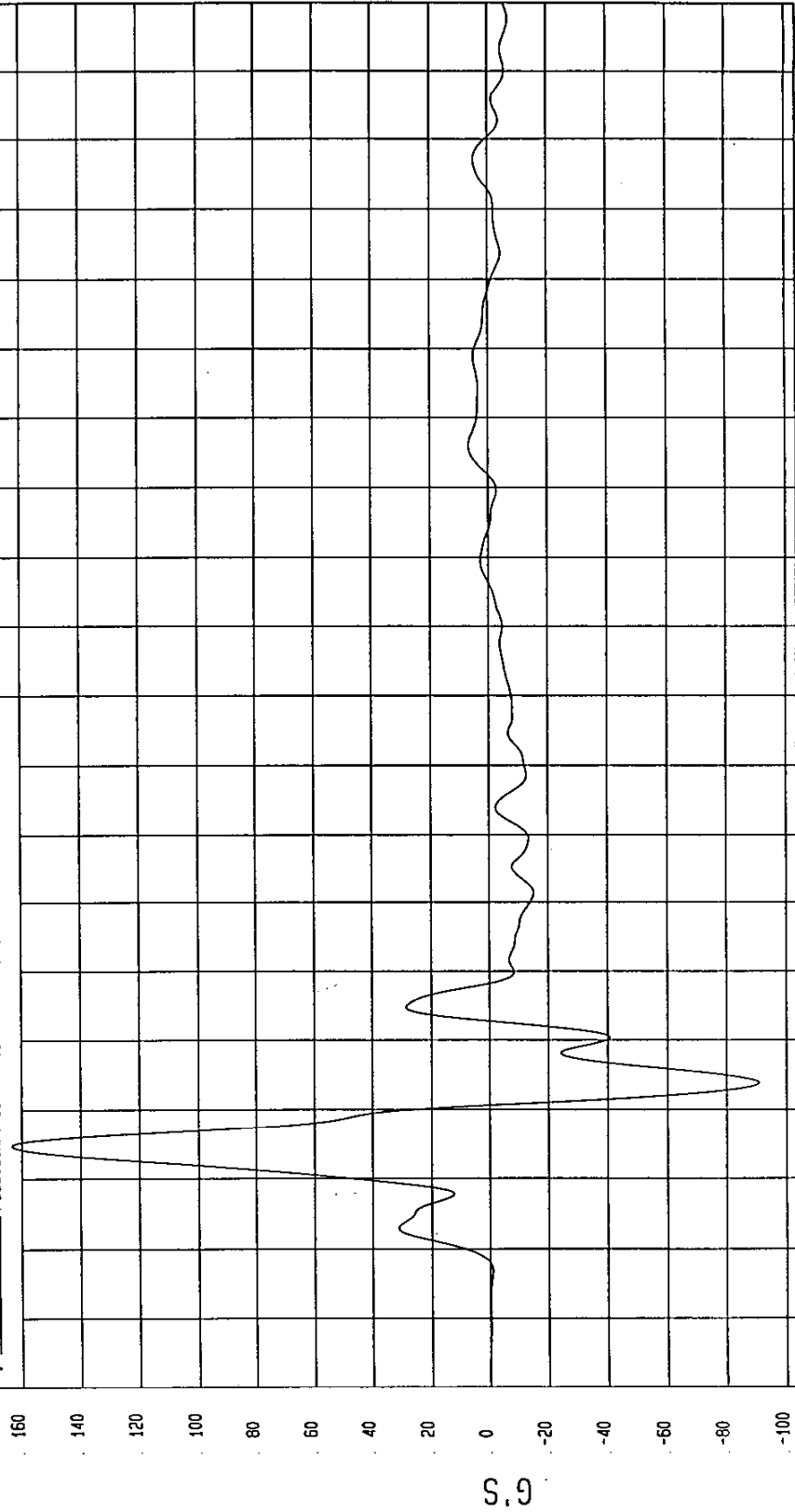
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -90.9 G'S at 24 msec Maximum = 163.25 G'S at 15 msec

LEFT FRONT DOOR UPPER CENTERLINE Y ACCELERATION

1 899080AF.A53 FilterClass (60)



NSA Research
12-08-1999 16:19

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

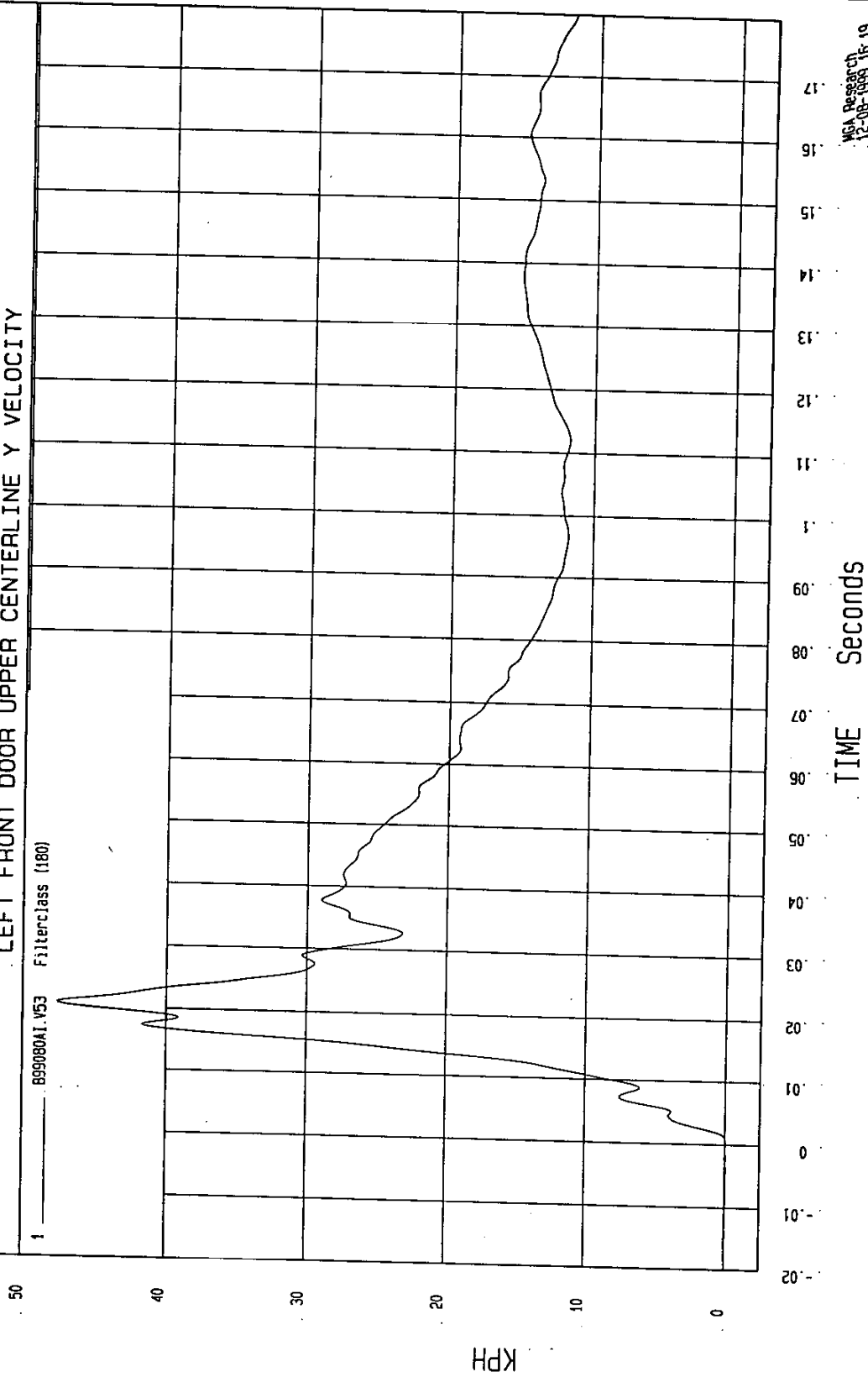
Speed: 38.5 MPH 62 KPH

Minimum = -5.40E-02 KPH at -7 msec

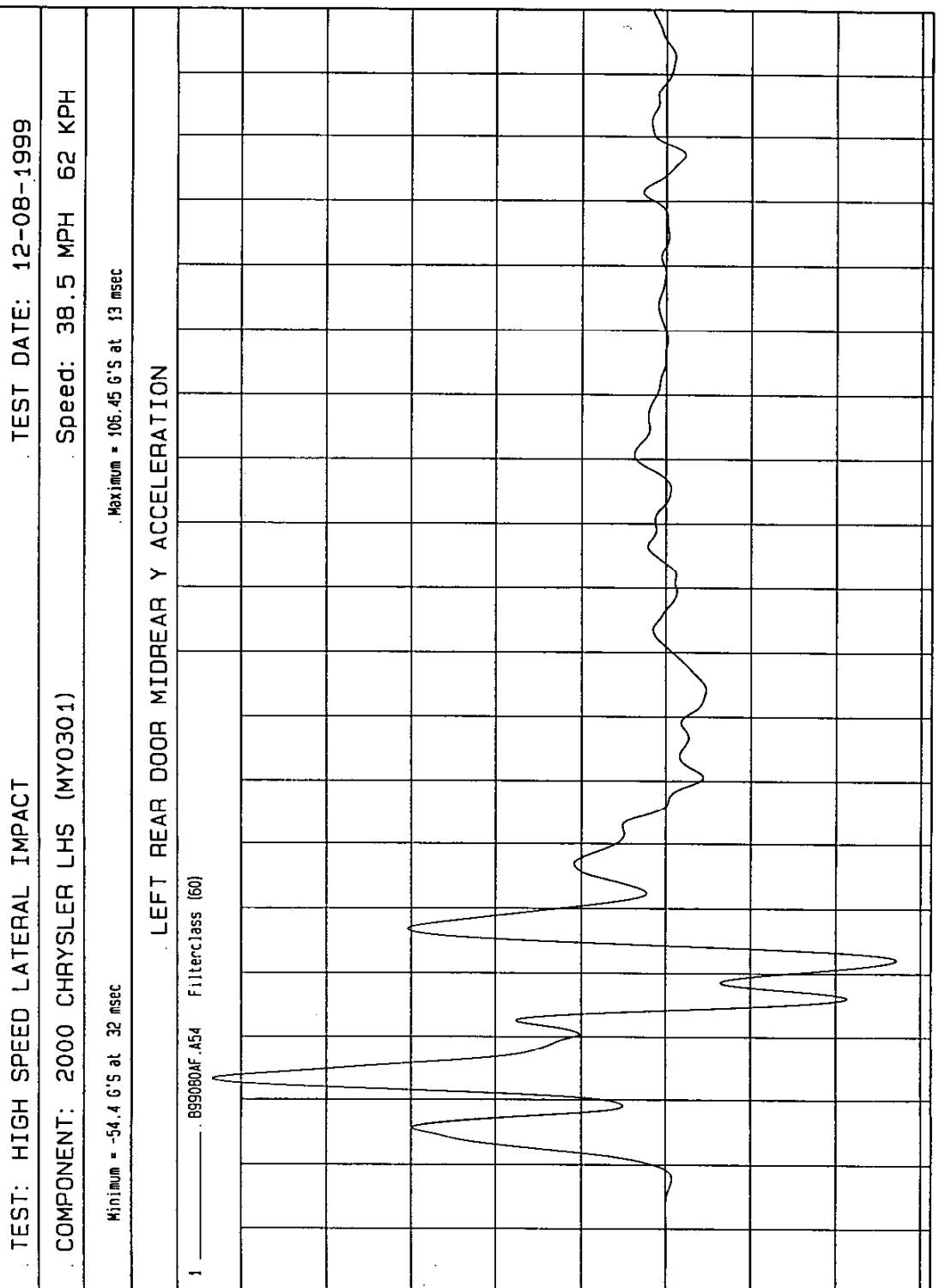
Maximum = 47.79 KPH at 21 msec

LEFT FRONT DOOR UPPER CENTERLINE Y VELOCITY

1 B95080A1.V53 Filterclass (180)



WCA Research
12-08-1999 16:19



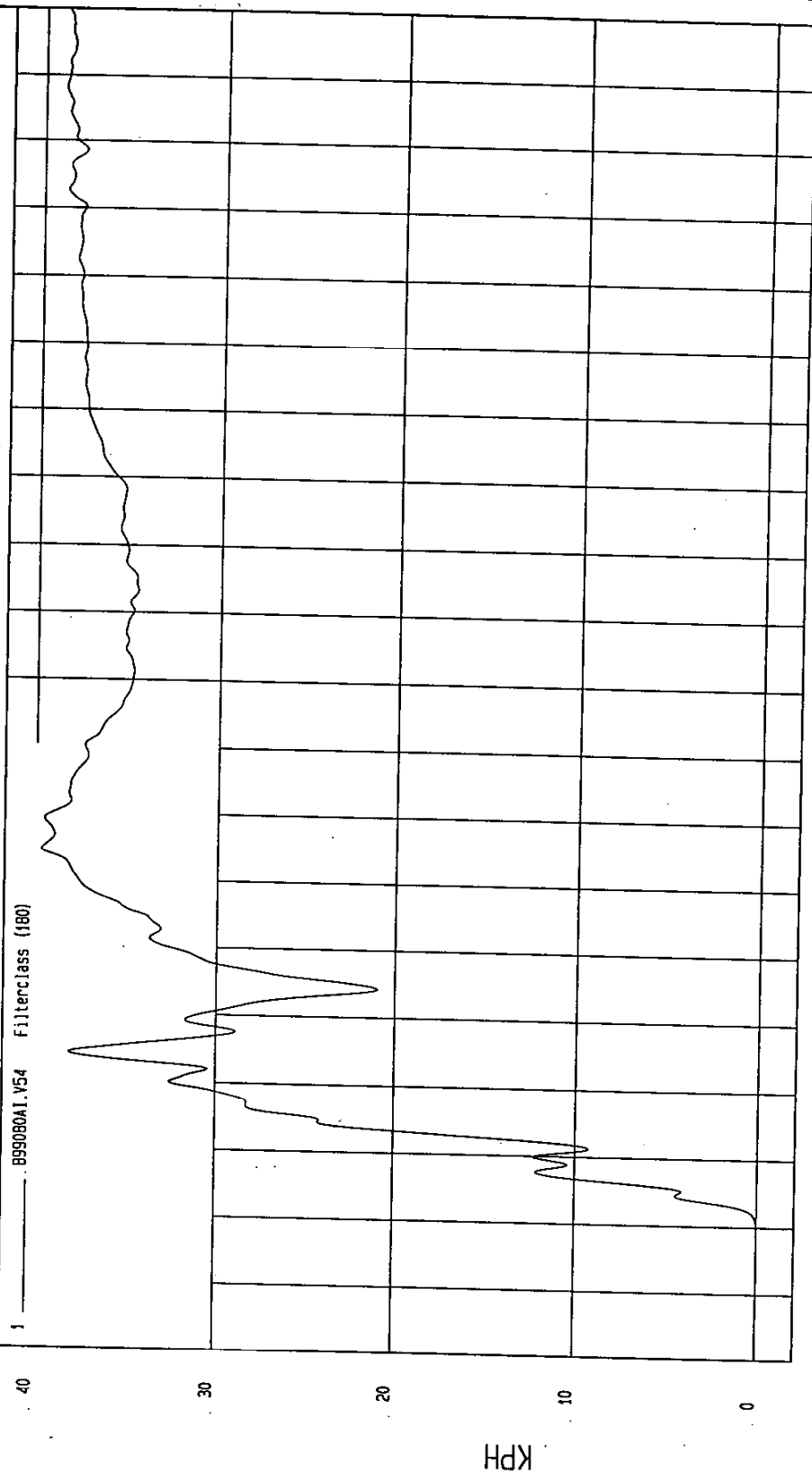
NSA Research
12-08-1999 16:19

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

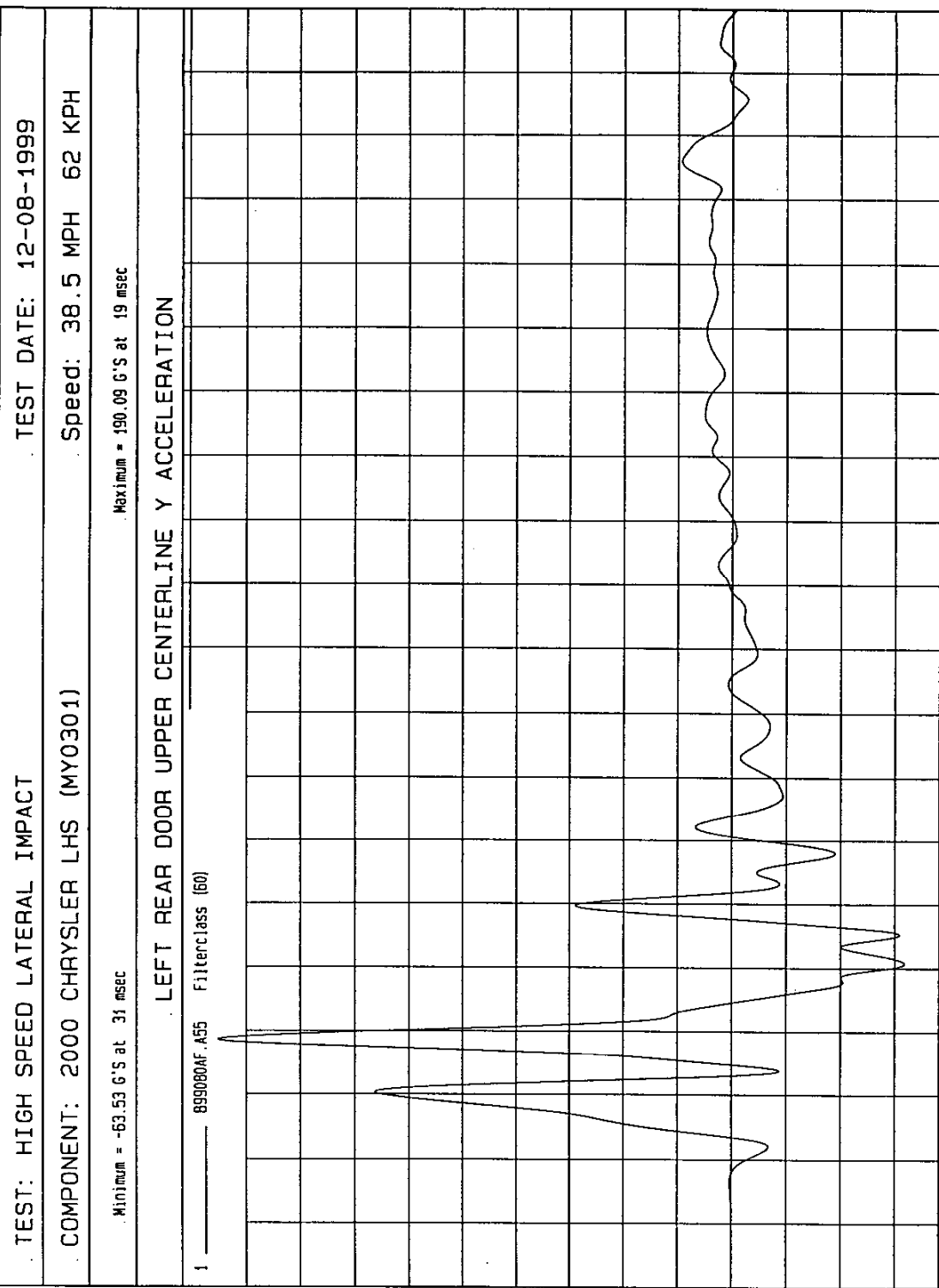
COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -2.40E-02 KPH at -7 msec Maximum = 39.71 KPH at 55 msec

LEFT REAR DOOR MIDREAR Y VELOCITY



MSA Research
12-08-1999 16:19



MSA Research
12-08-1999 16:19

TIME (SECONDS)

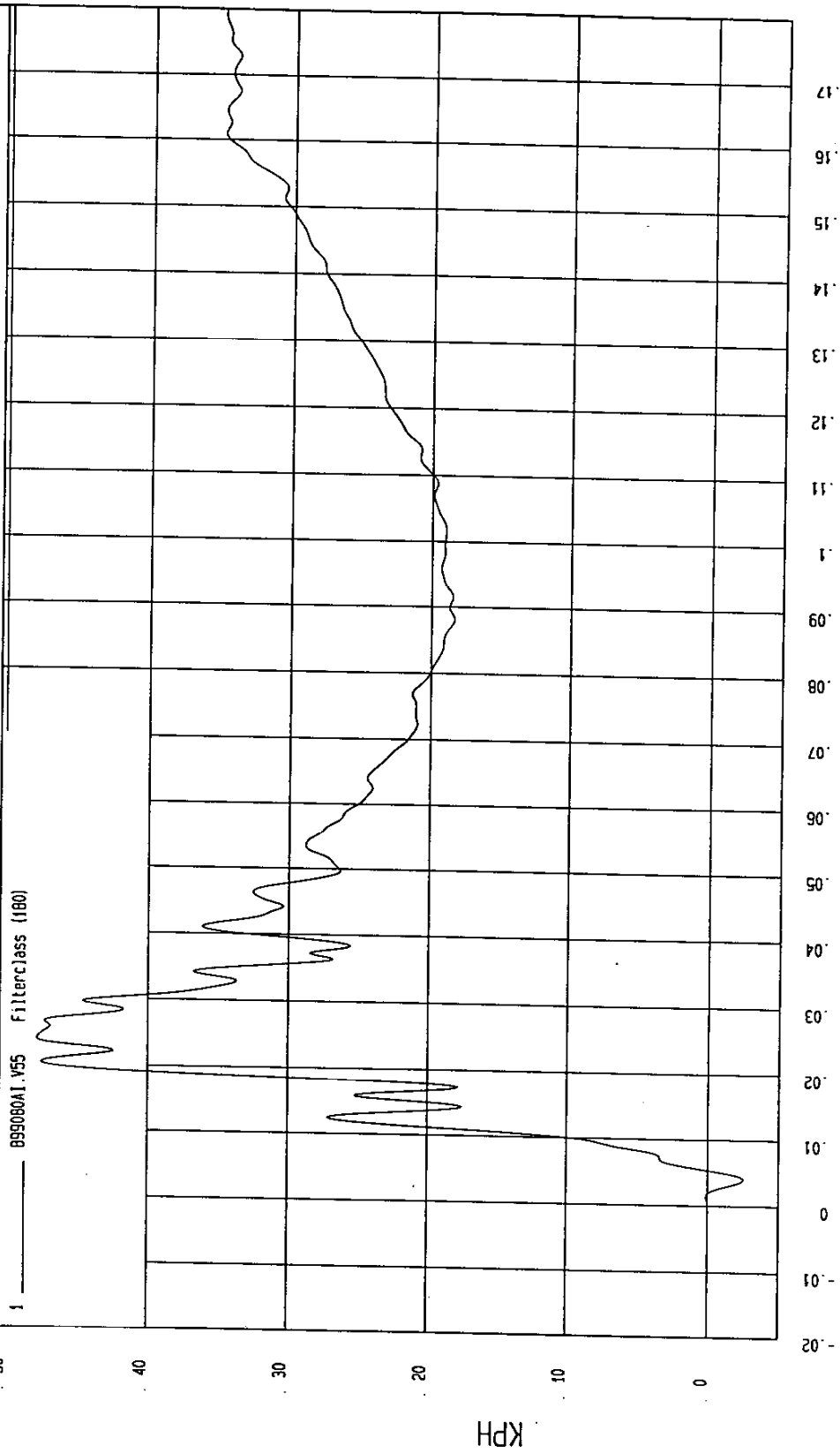
G.S

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -2.52 KPH at 4 msec Maximum = 47.87 KPH at 24 msec

LEFT REAR DOOR UPPER CENTERLINE Y VELOCITY



WCA Research
12-08-1999 16:19

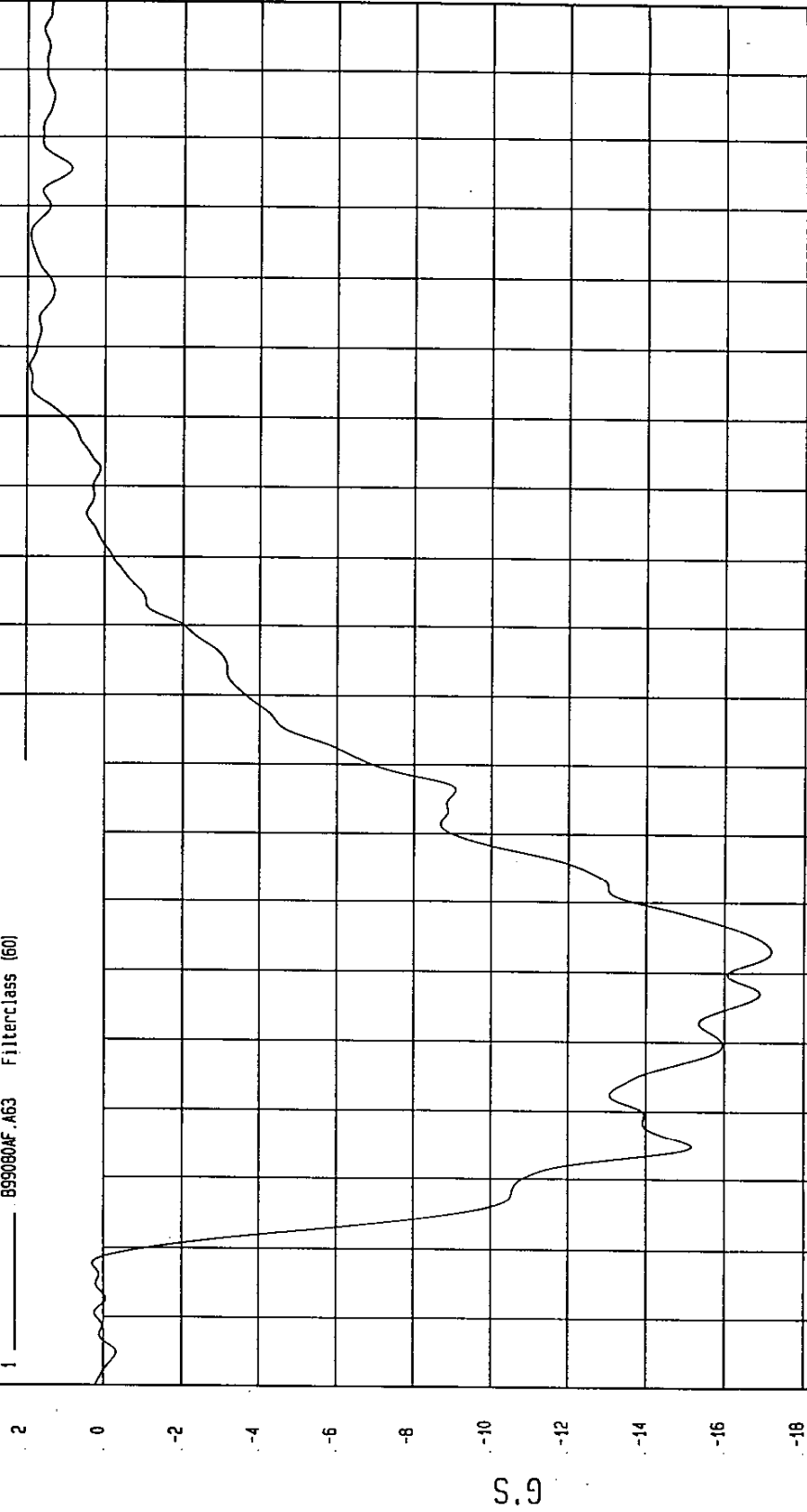
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -17.18 G'S at 43 msec Maximum = 1.94 G'S at 127 msec

MOVING BARRIER CG X ACCELERATION

1 ——— B99080AF.A63 Filterclass (60)

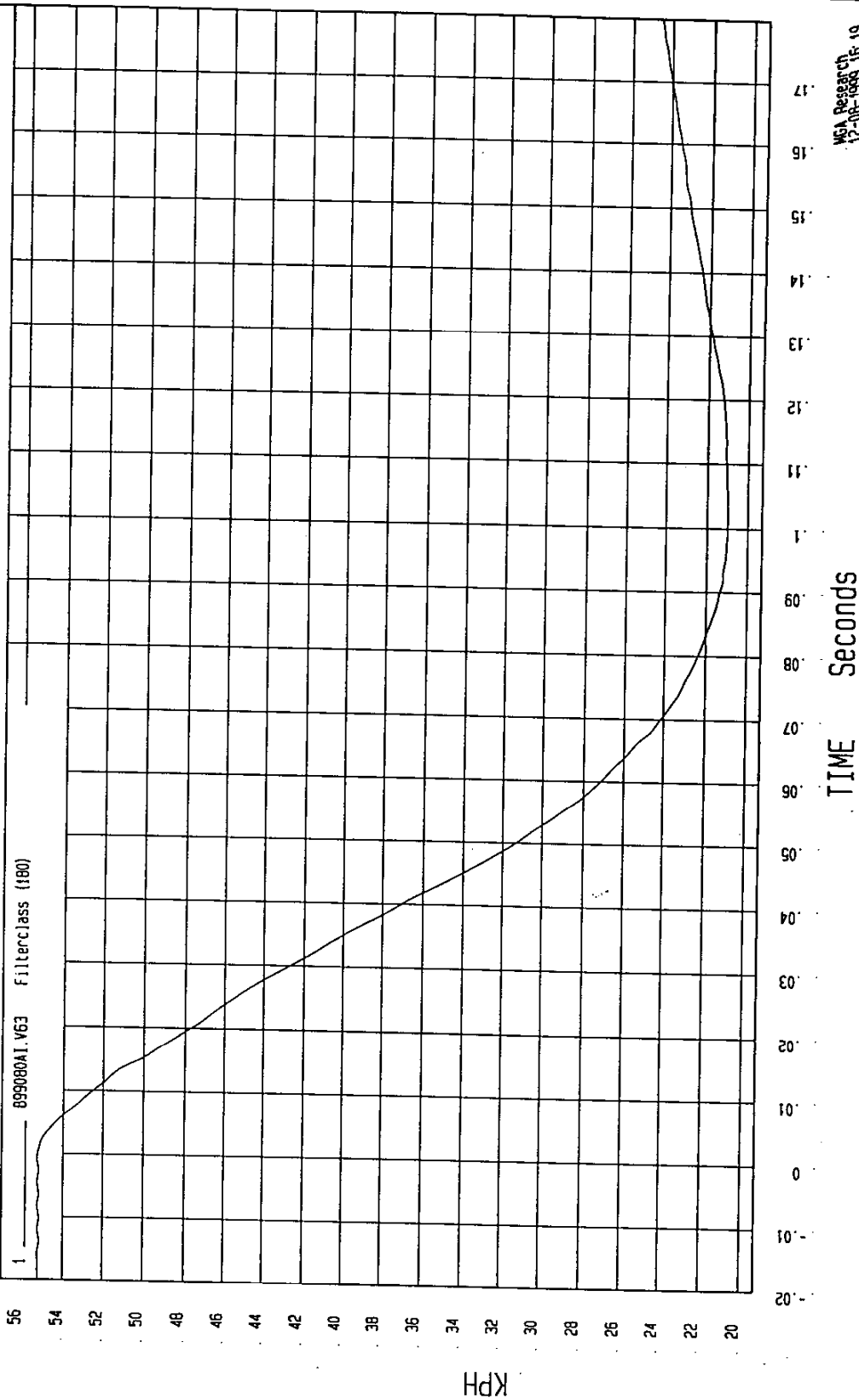


WCA Research
12-21-1999 08:59

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999
COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = 20.99 KPH at 102 msec Maximum = 55.25 KPH at -1 msec

MOVING BARRIER CG X VELOCITY



MSA Research
12-08-1999 16:19

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

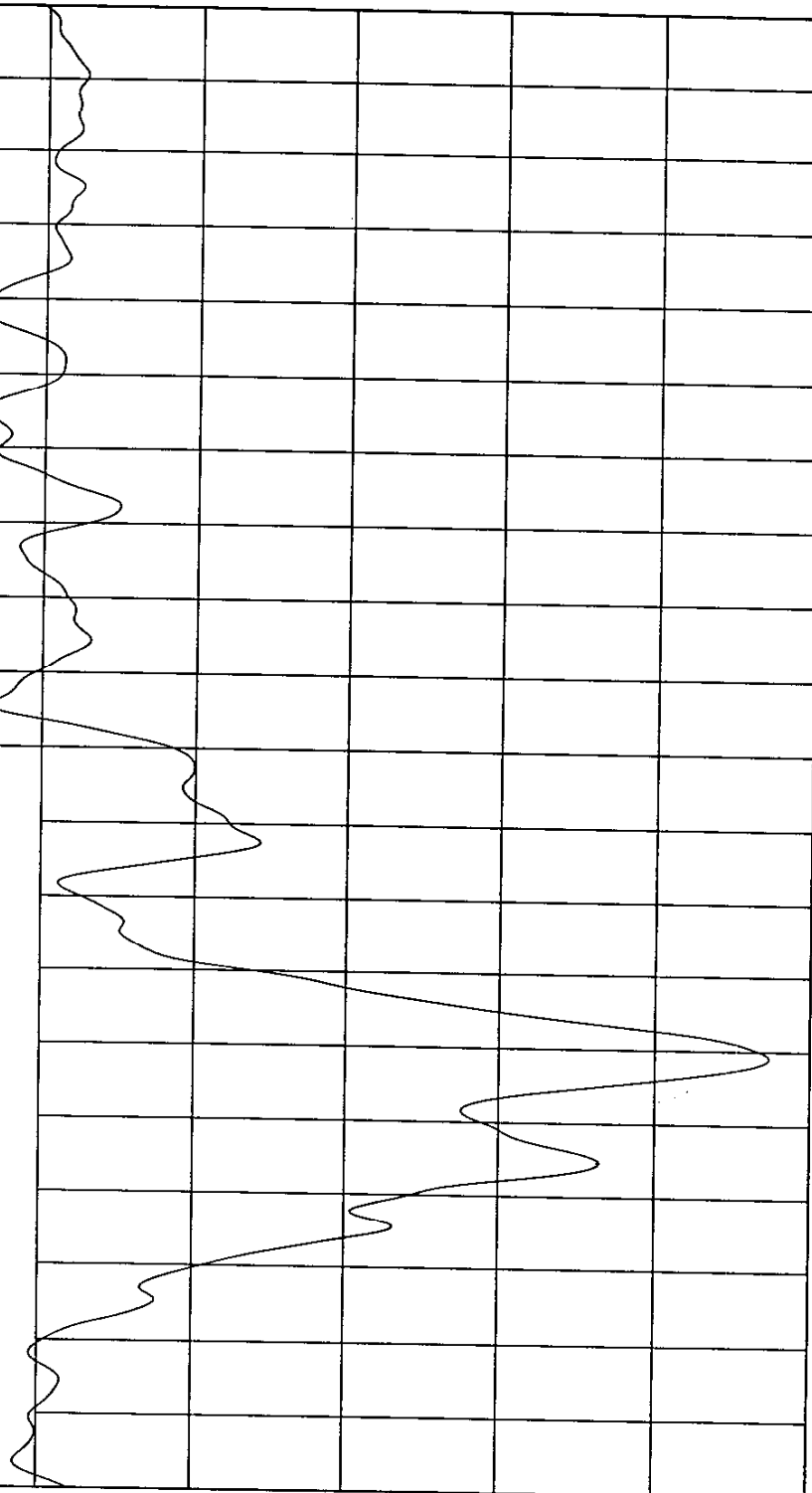
Speed: 38.5 MPH 62 KPH

Minimum = -9.44 G'S at 39 msec

Maximum = .86 G'S at 139 msec

MOVING BARRIER CG Y ACCELERATION

1 ——— B990804F.A54 Filterclass (60)



TIME (SECONDS)

0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.01
-0.02

WEL Research
12-21-1999 09:59

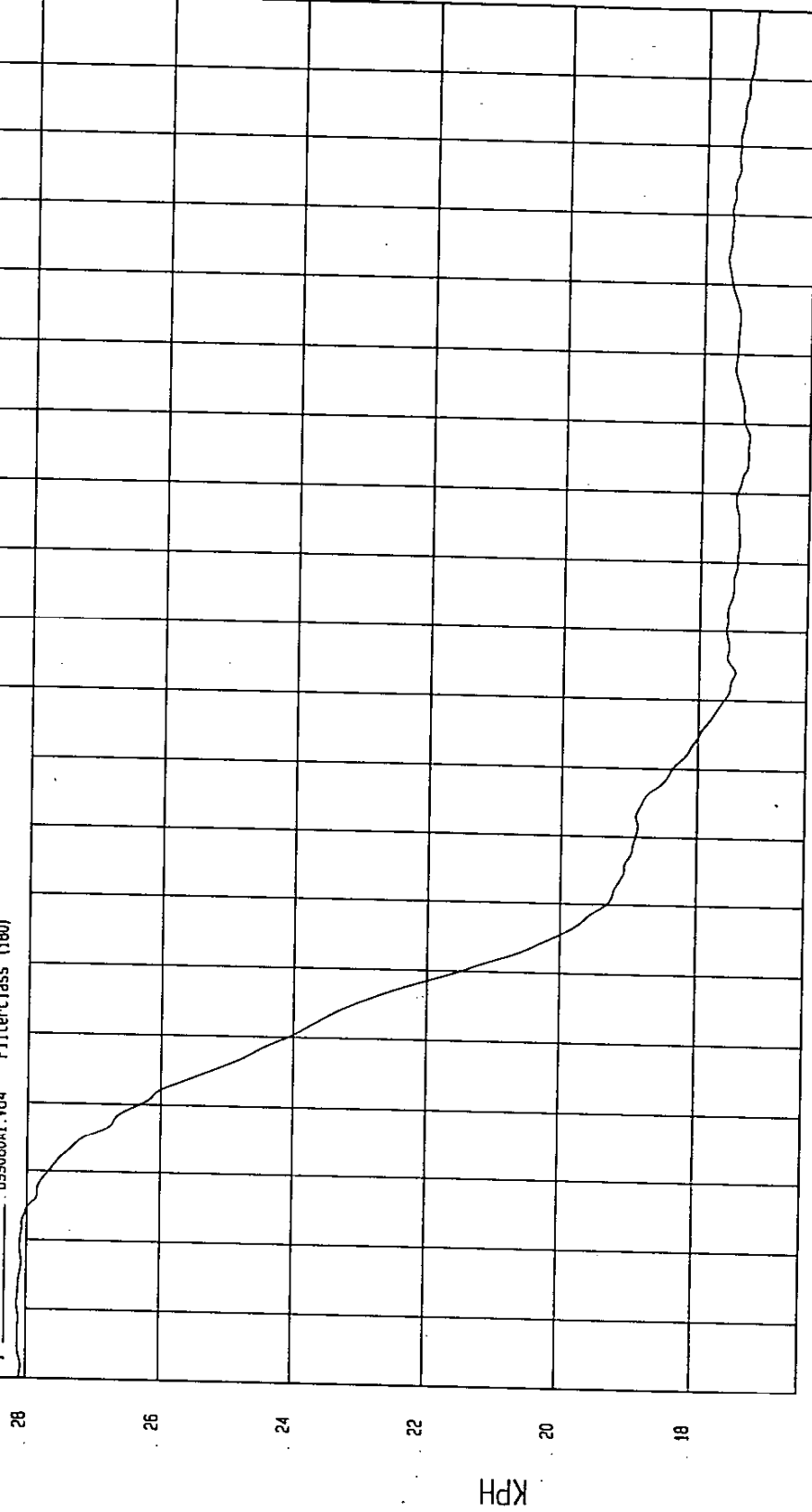
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = 16.96 KPH at 200 msec Maximum = 28.14 KPH at -9 msec

MOVING BARRIER CG Y VELOCITY

1 ——— B99080A1.V64 FilterClass (100)



NSA Research
12-08-1999 16:19

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

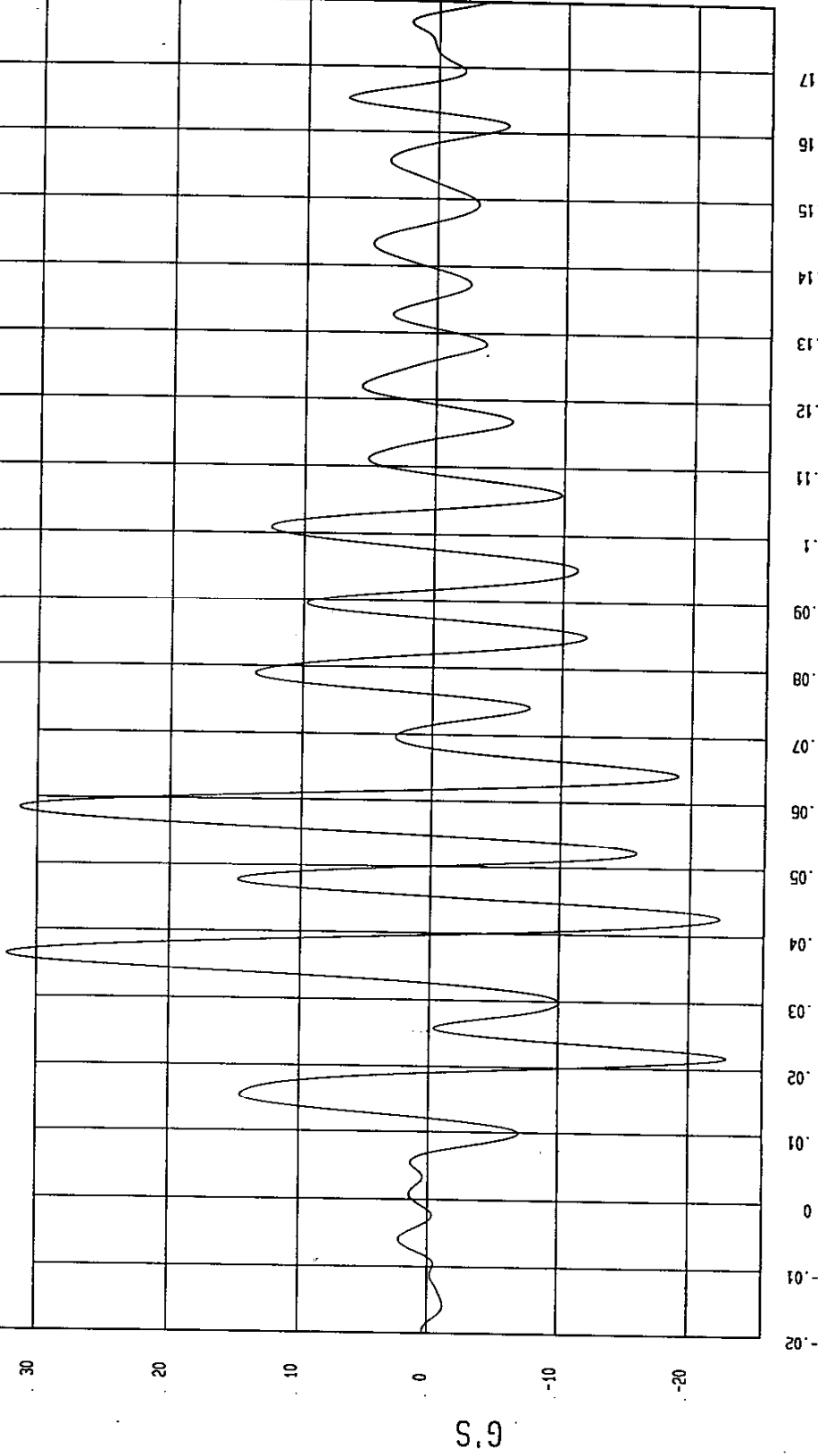
Speed: 38.5 MPH 62 KPH

Minimum = -22.87 G'S at 22 msec

Maximum = 32.29 G'S at 36 msec

MOVING BARRIER CG Z ACCELERATION

1 ——— B99080MF.A65 Filterclass (60)



MOA Research
12-21-1999 09:59

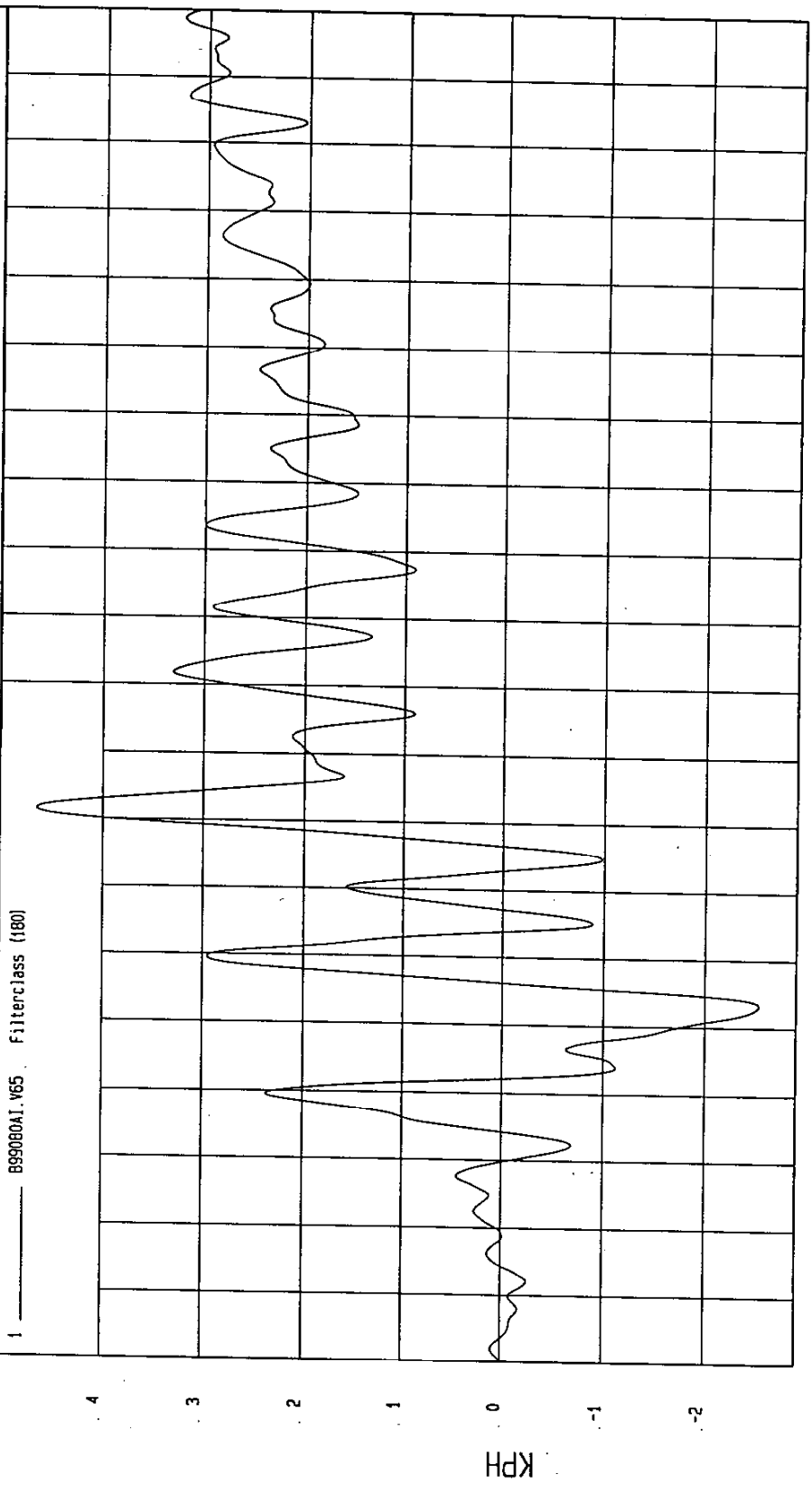
TIME (SECONDS)

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -2.54 KPH at 33 msec Maximum = 4.65 KPH at 62 msec

MOVING BARRIER CG Z VELOCITY



TIME Seconds

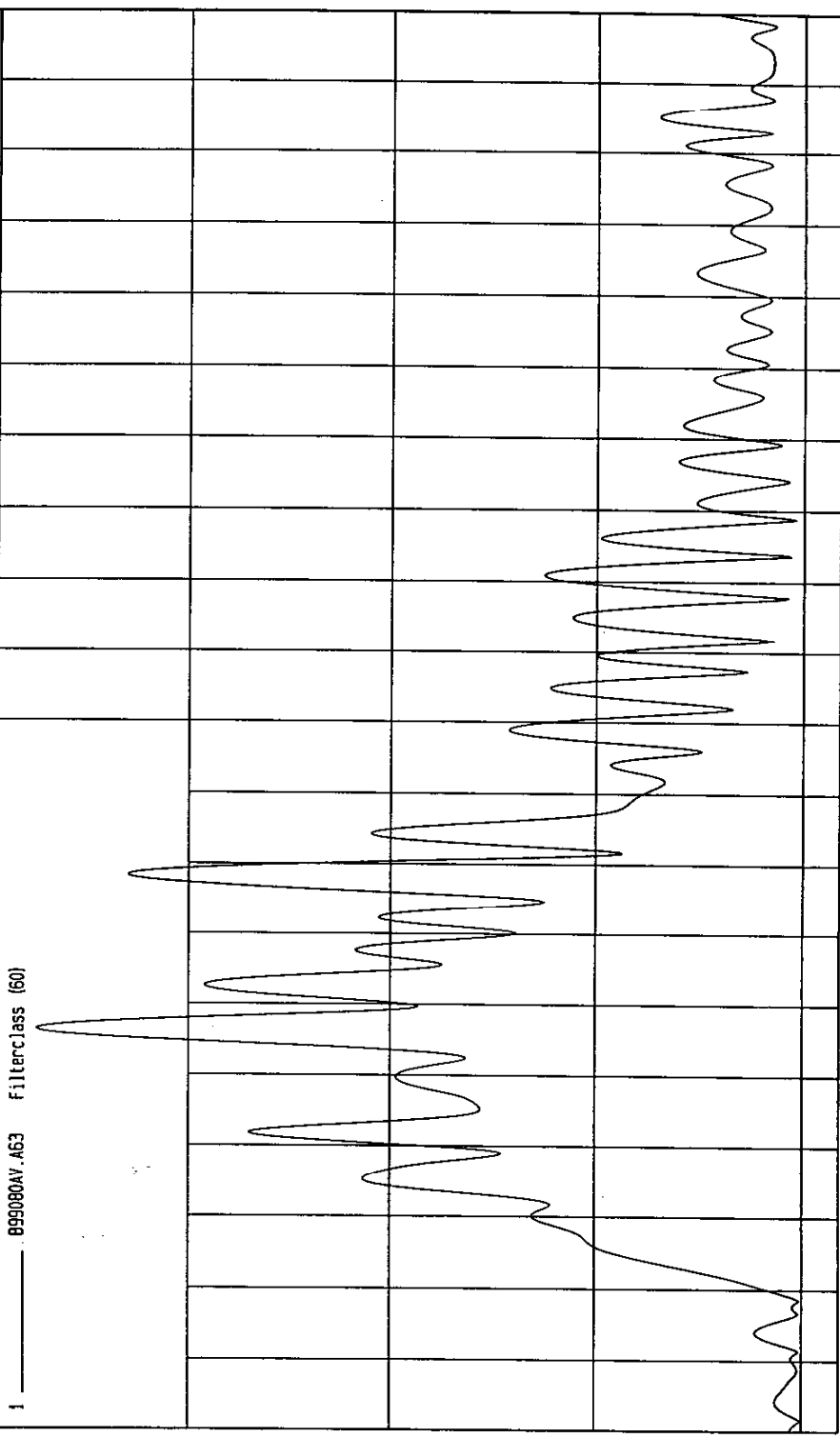
MECA Research
12-08-1999 16:19

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = 7.02E-02 G'S at -18 msec Maximum = 37.34 G'S at 36 msec

MOVING BARRIER CG RESULTANT ACCELERATION



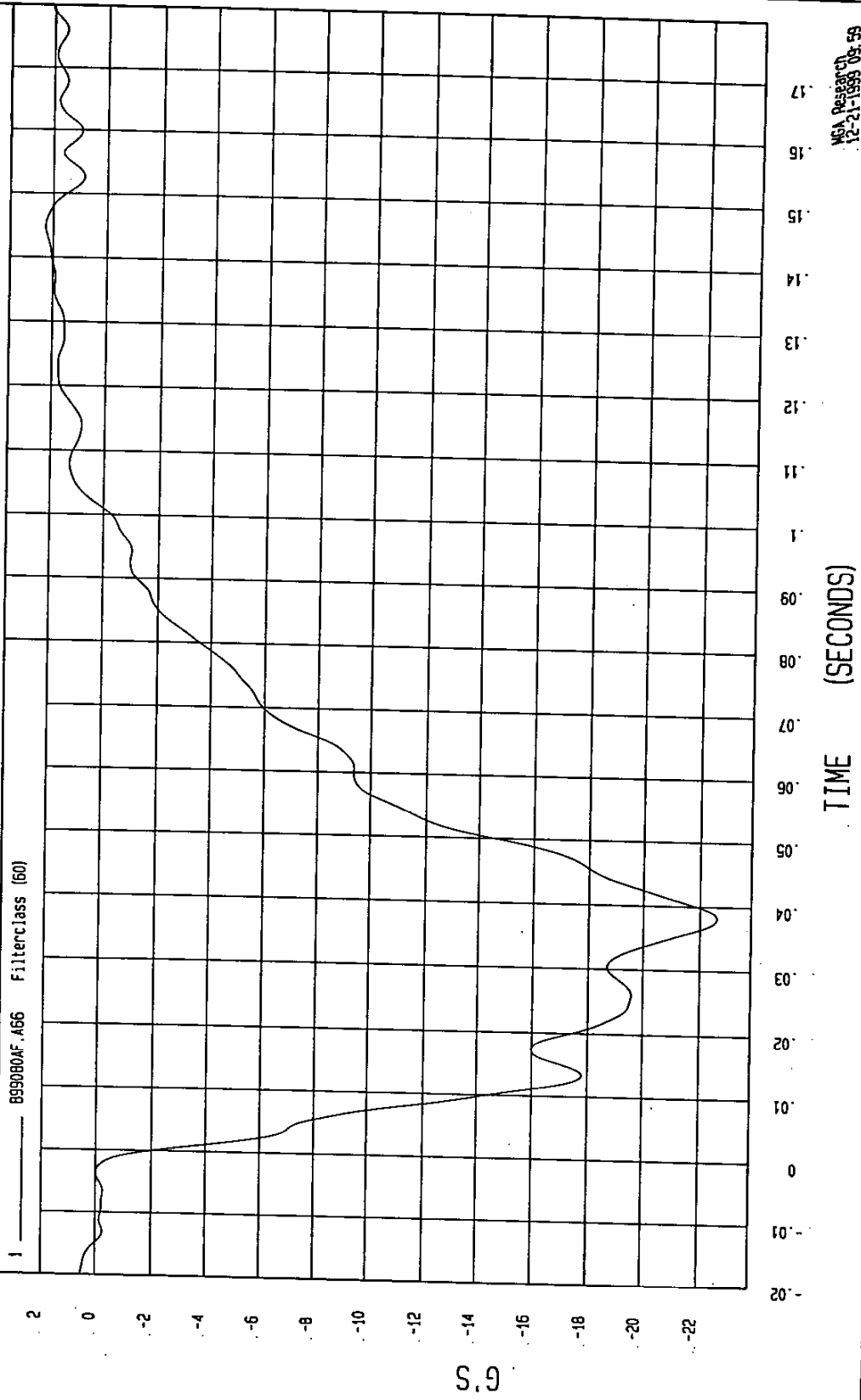
WCA Research
12-21-1999 10:01

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

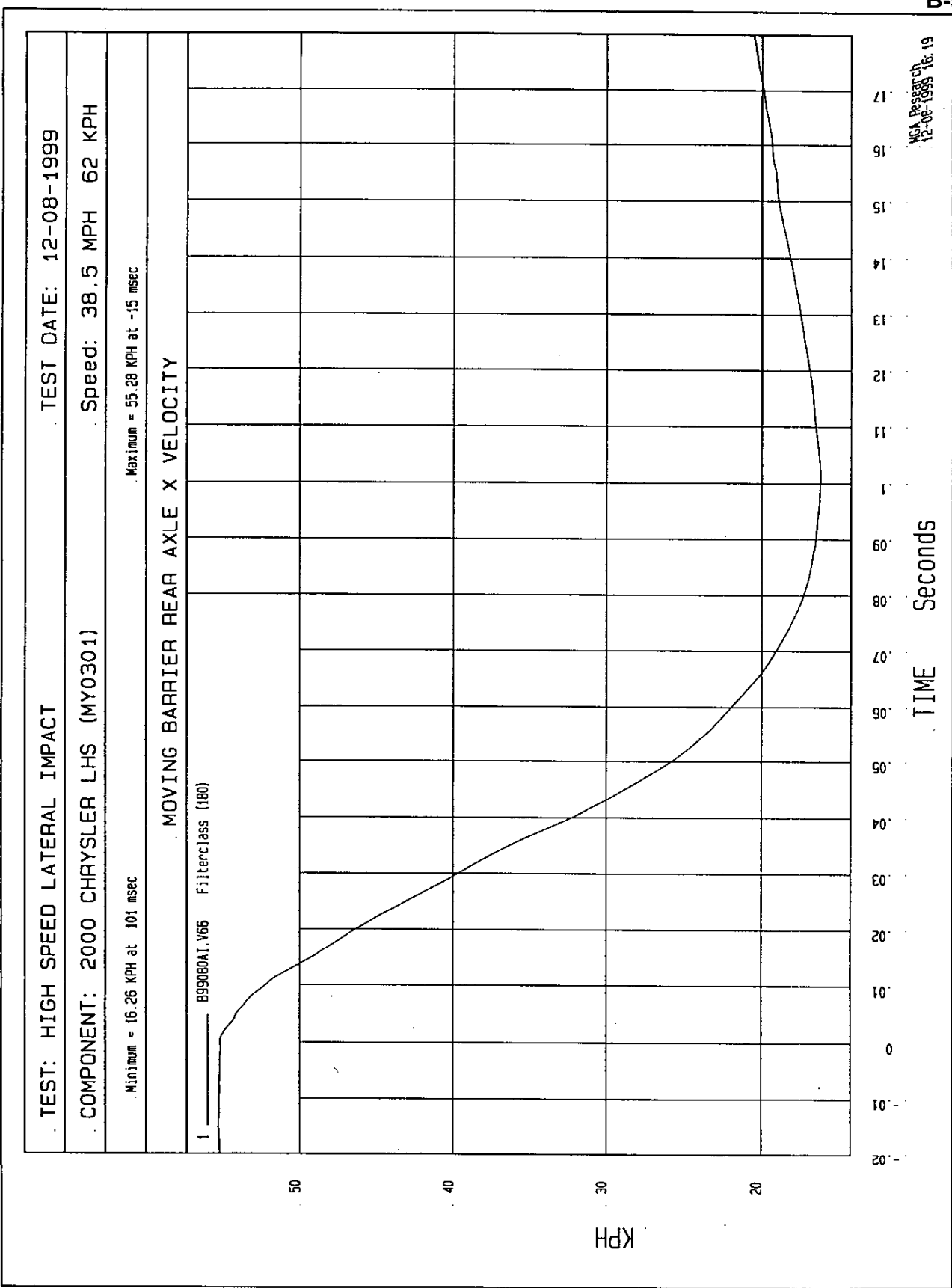
COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -22.6 G'S at 38 msec Maximum = 2.27 G'S at 145 msec

MOVING BARRIER REAR AXLE X ACCELERATION



MGA Research
12-21-1999 08:59



TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -1.41 G'S at 192 msec Maximum = 3.75 G'S at 28 msec

MOVING BARRIER REAR AXLE Y ACCELERATION

1 899080AF.A67 Filterclass (60)

4

3

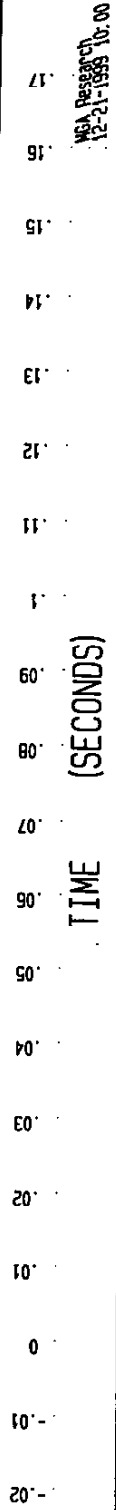
2

1

0

-1

G'S

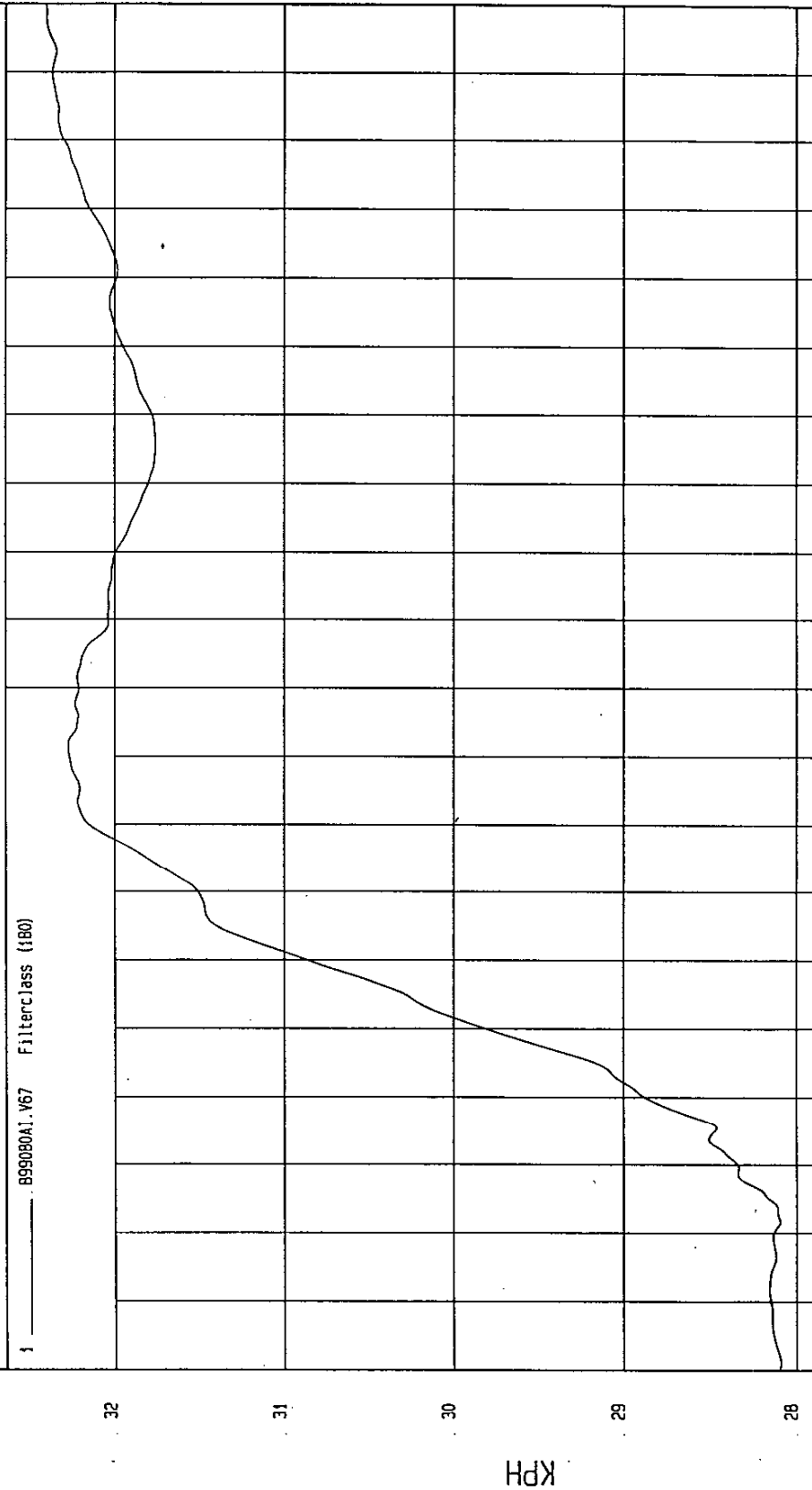


TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999
COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = 28.09 KPH at -19 msec Maximum = 32.42 KPH at 182 msec

MOVING BARRIER REAR AXLE Y VELOCITY

1 B99050A1.V67 Filterclass (f80)



TIME Seconds

NCA Research
12-08-1999 16:19

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

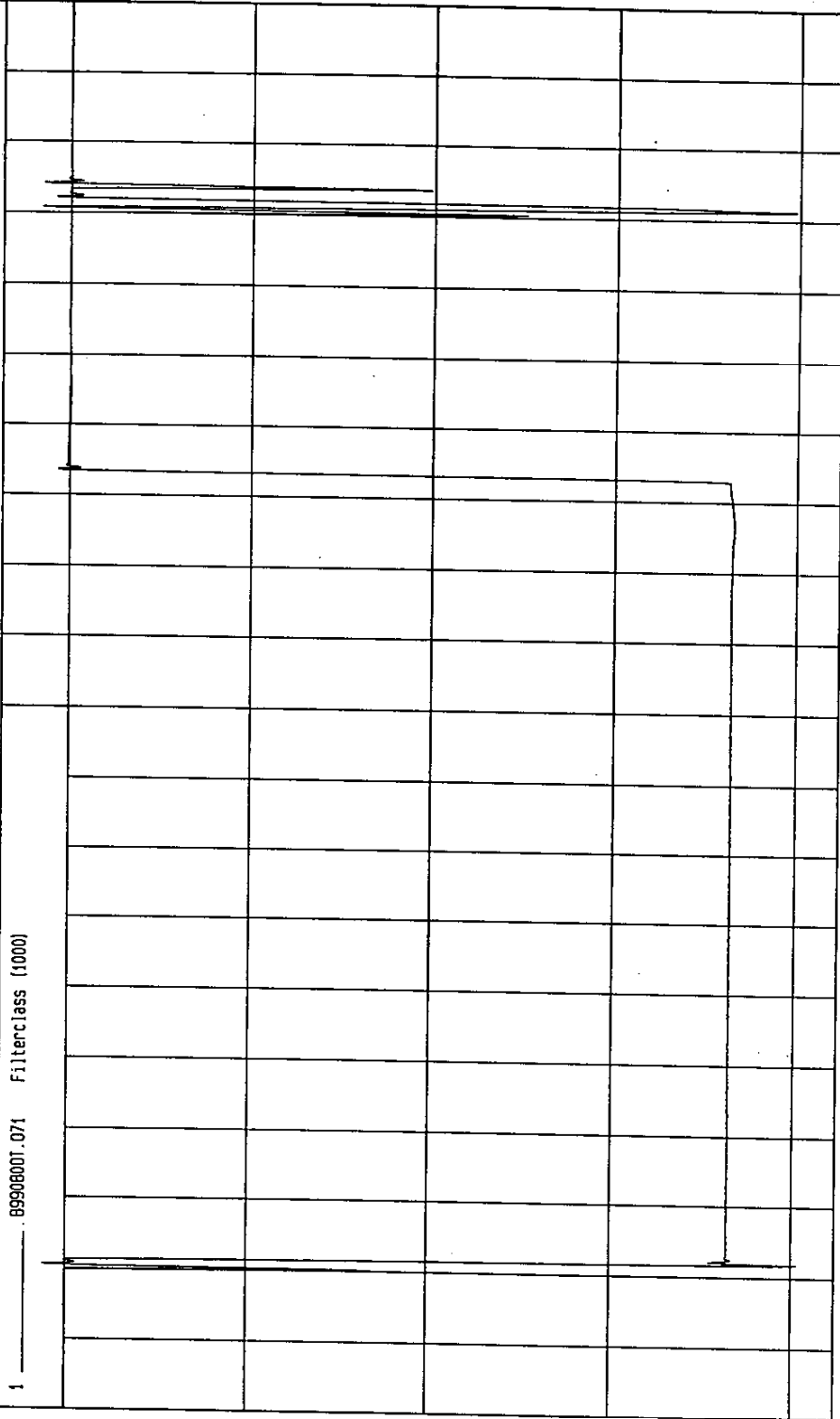
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = .16 VOLTS at 151 msec

Minimum = -4.03 VOLTS at 2 msec

LEFT BARRIER CONTACT

1 89908001.071 Filterclass (1000)



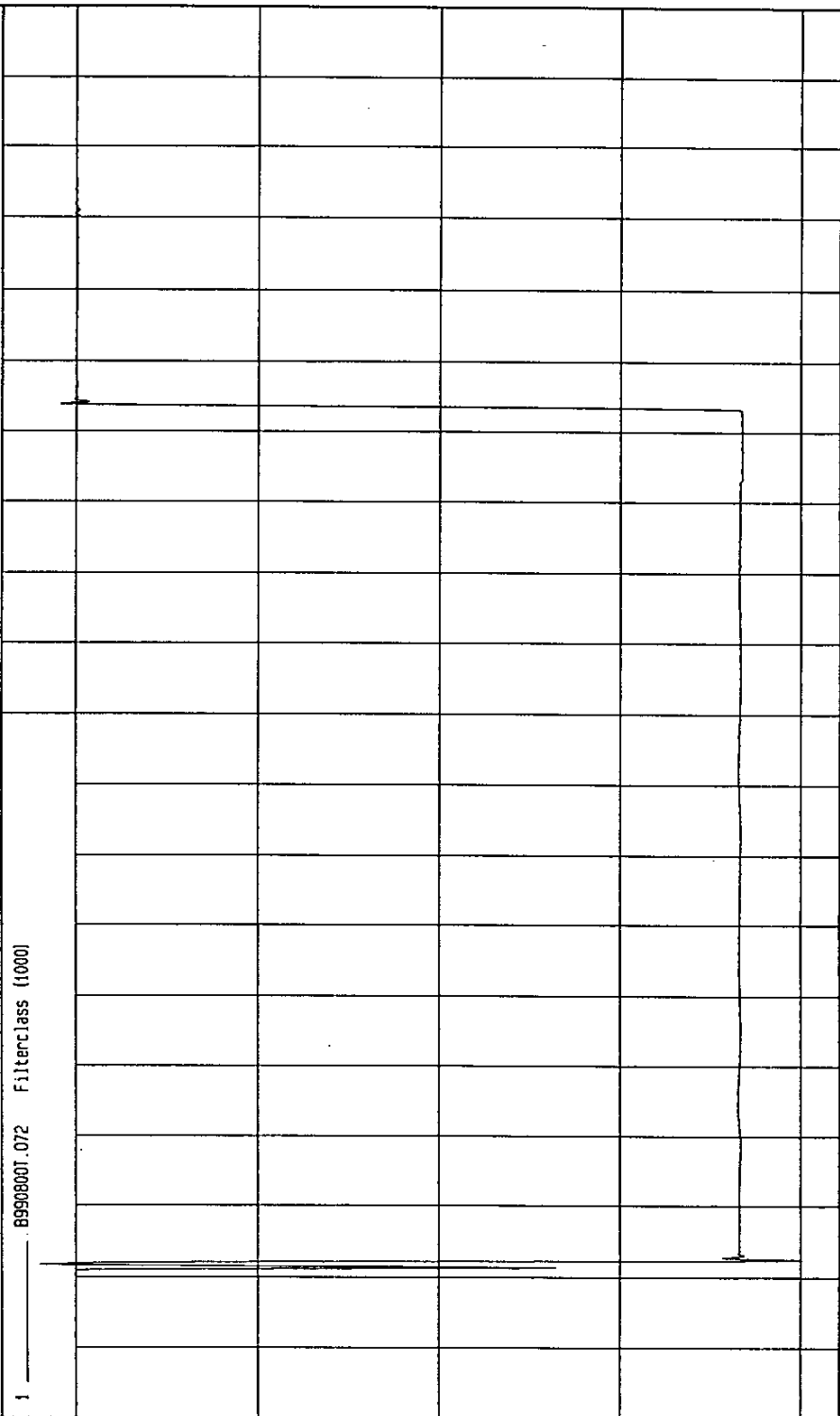
MCA Research
12-08-1999 16:19

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -4.01 VOLTS at 2 msec Maximum = .2 VOLTS at 2 msec

RIGHT BARRIER CONTACT



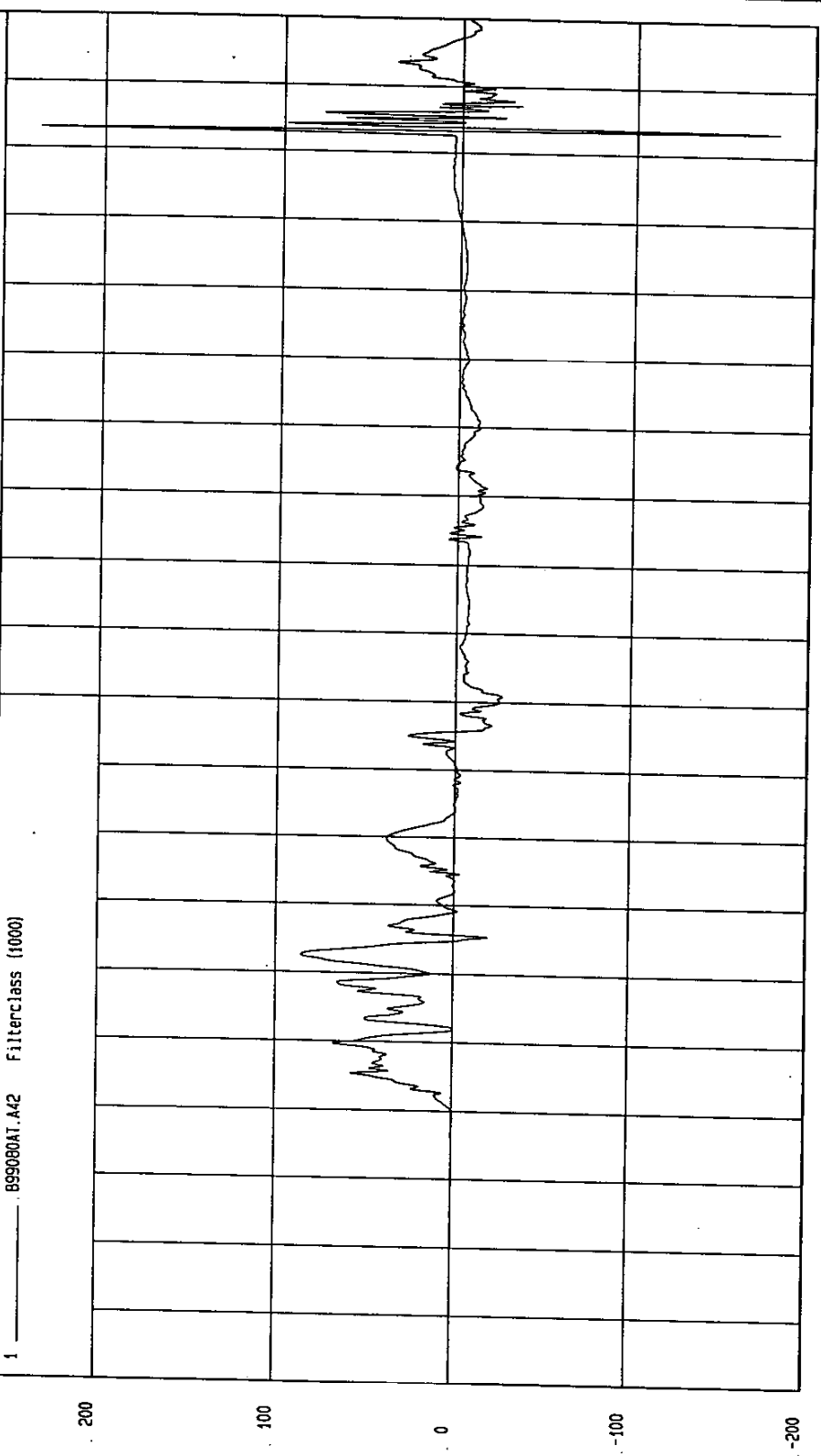
MSA Research
12-08-1999 16:19

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -179.87 G'S at 163 msec Maximum = 235.73 G'S at 163 msec

DRIVER UPPER RIB Y REDUNDANT ACCELERATION



TIME (SECONDS)

NSA Research
12-08-1999 16:20

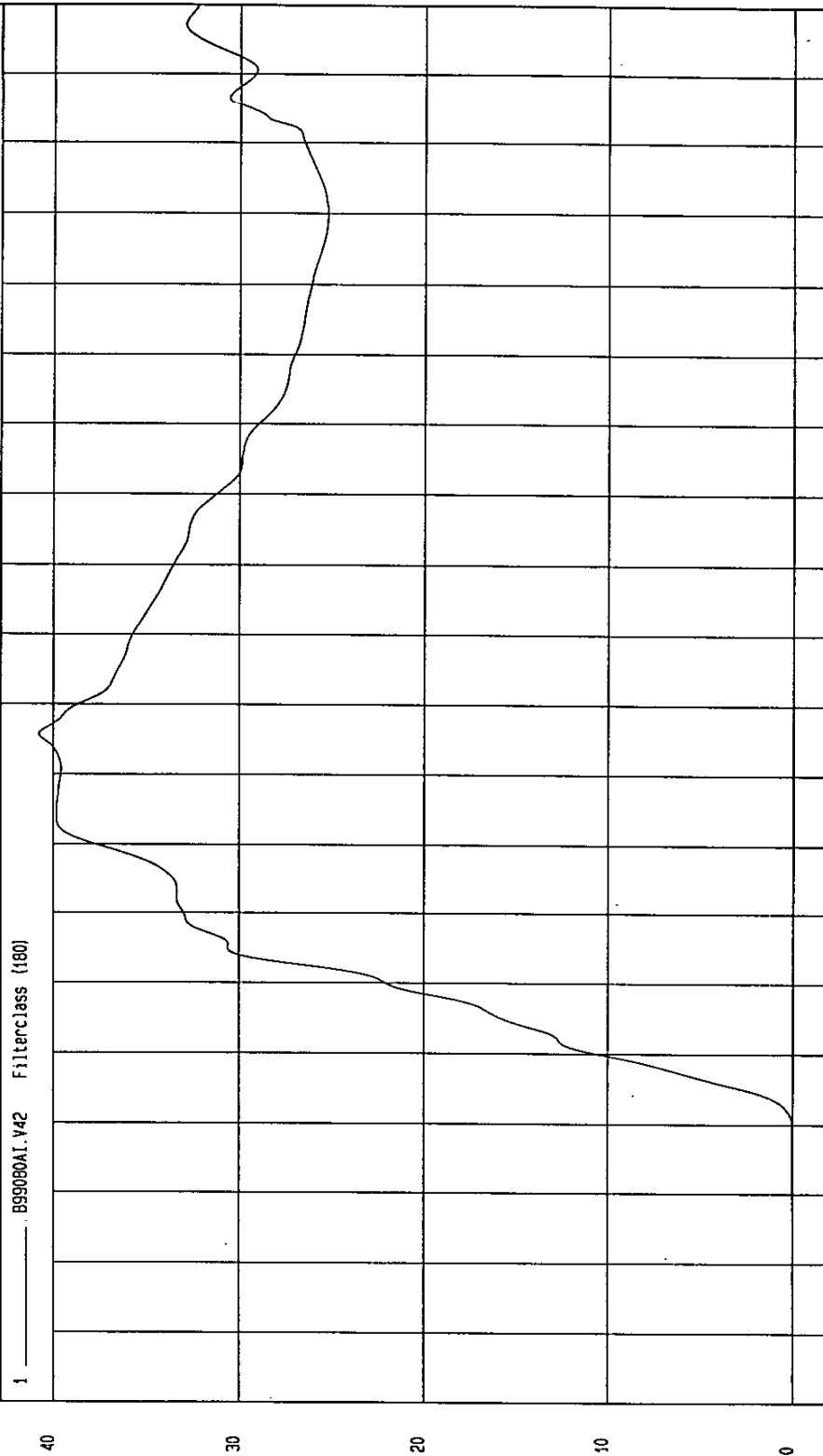
G.S

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -1.00E-02 KPH at -8 msec Maximum = 40.77 KPH at 76 msec

DRIVER UPPER RIB Y REDUNDANT VELOCITY



VCA Research
12-08-1999 16:20

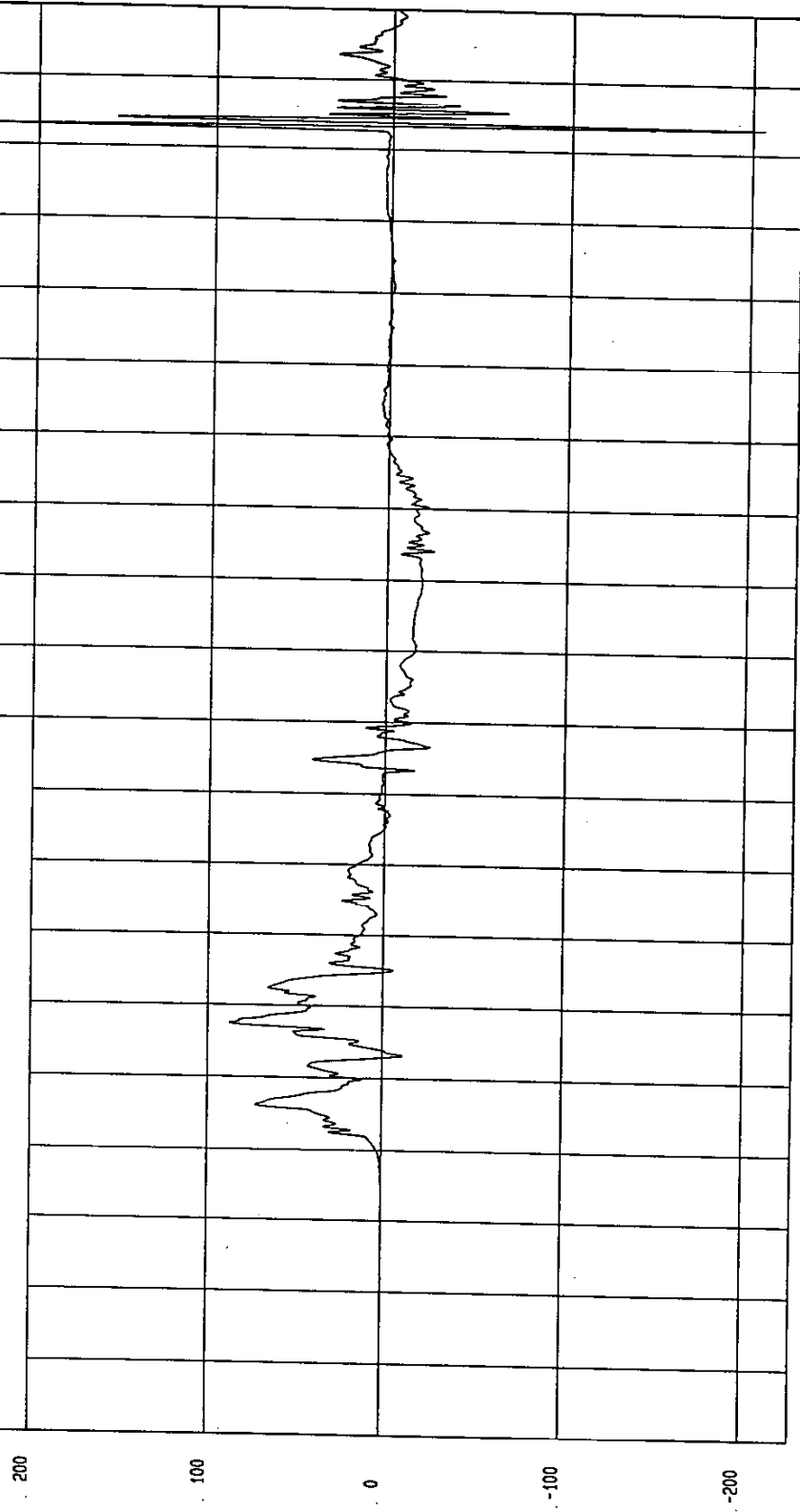
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

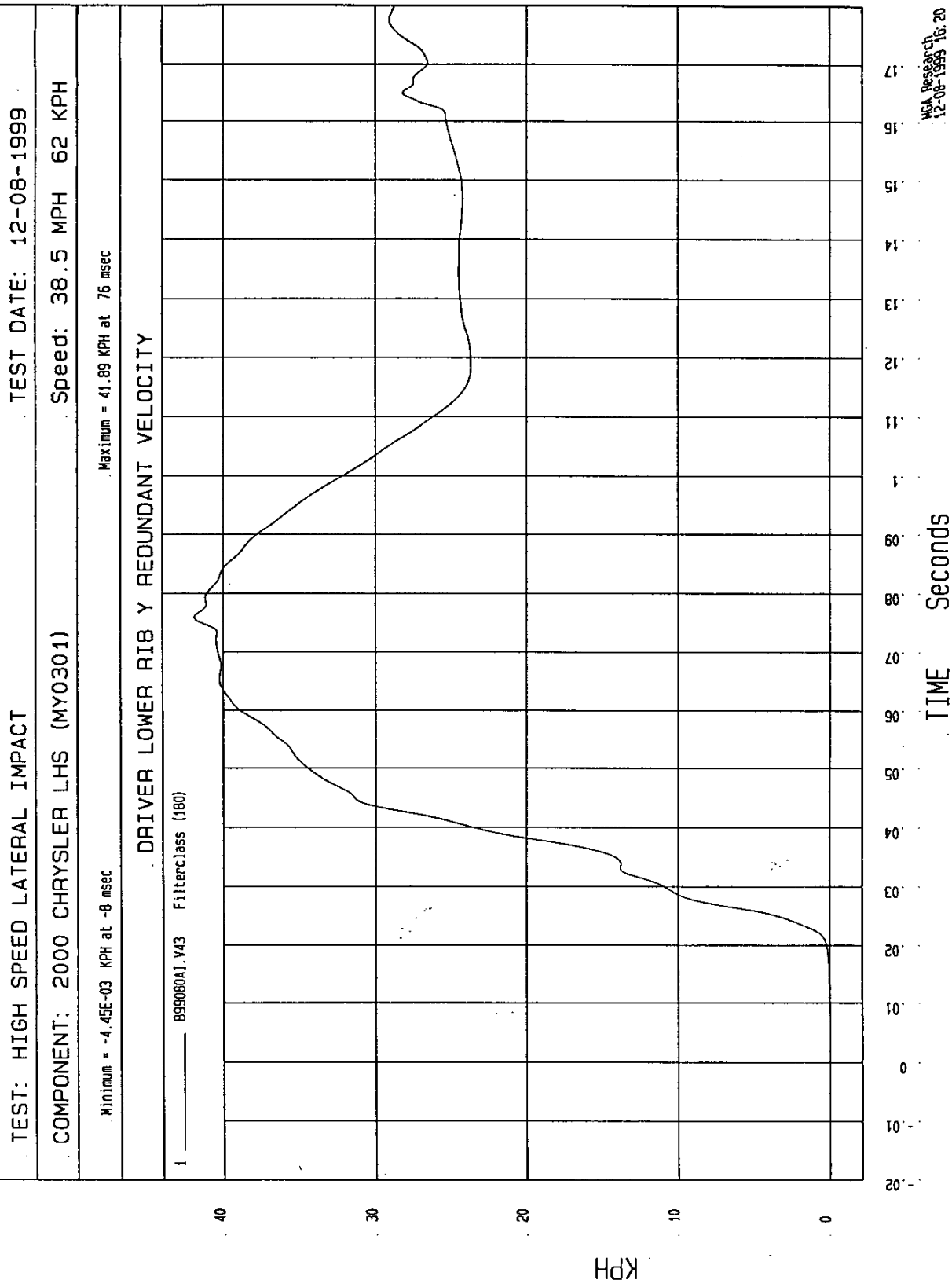
Minimum = -206.6 G'S at 164 msec Maximum = 224.45 G'S at 163 msec

DRIVER LOWER RIB Y REDUNDANT ACCELERATION

1 ——— B95080AT.A43 FilterClass (1000)



MCA Research
12-08-1999 16:20



TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

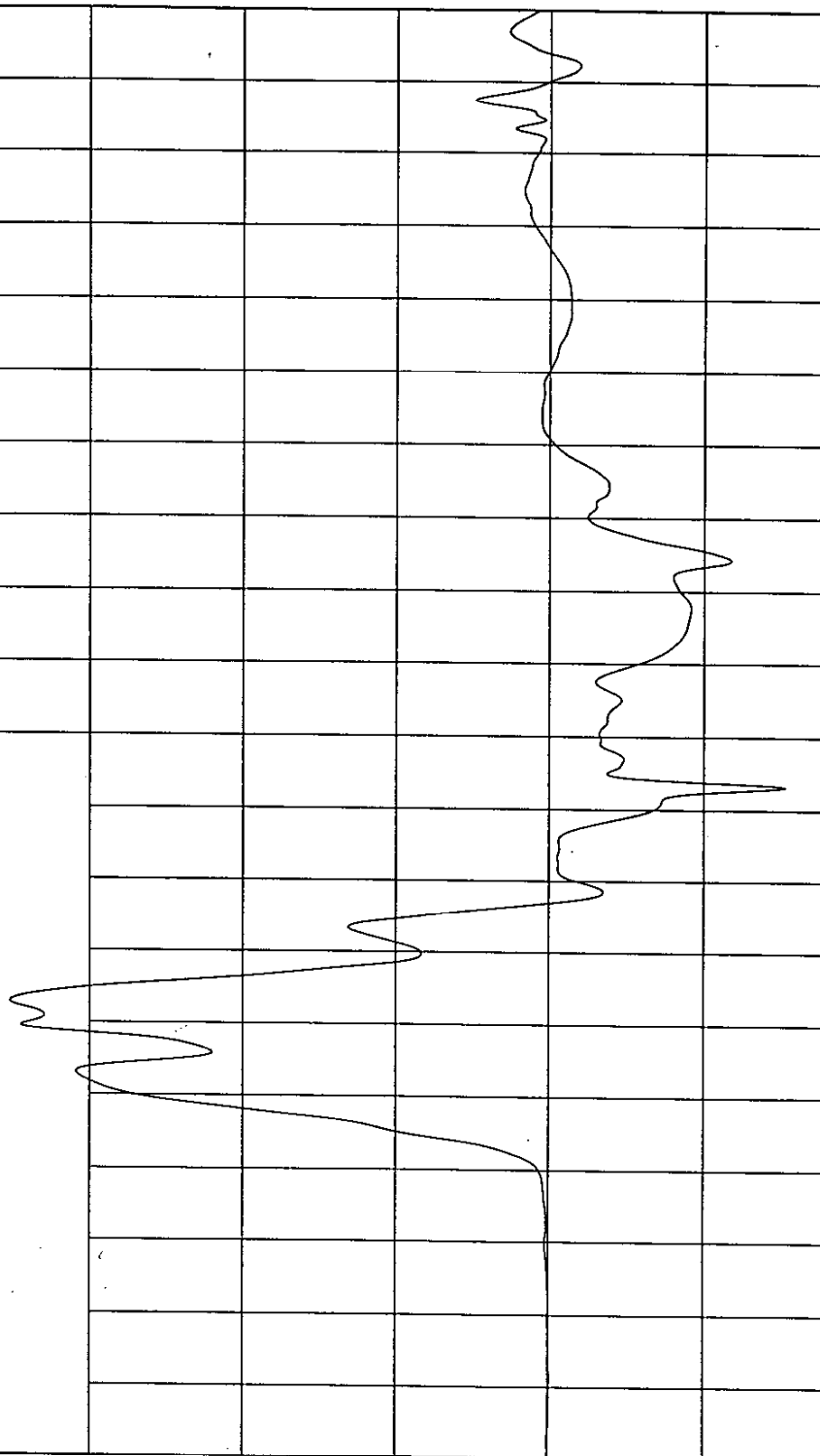
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 70.29 G'S at 43 msec

Minimum = -30.48 G'S at 73 msec

DRIVER LOWER SPINE Y REDUNDANT ACCELERATION

1 B99080AF.A44 Filterclass (180)



MSA Research
12-08-1999 16:20

TIME (SECONDS)

G'S

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

Speed: 38.5 MPH 62 KPH

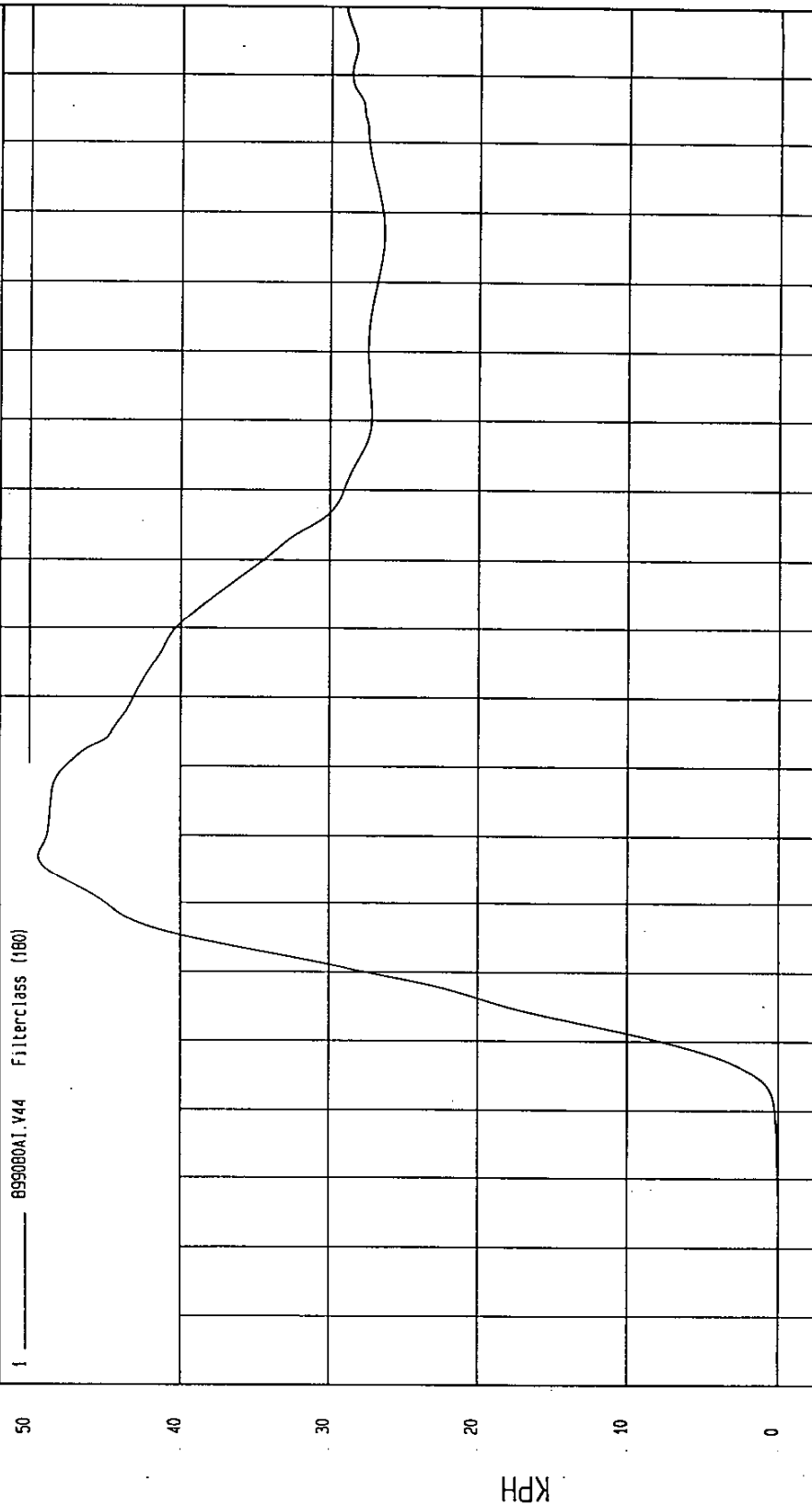
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 49.44 KPH at 57 msec

Minimum = -1.42E-02 KPH at -2 msec

DRIVER LOWER SPINE Y REDUNDANT VELOCITY

1 899080A1.V44 Filterclass (180)



MCA Research
12-08-1999 16:20

TIME Seconds

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

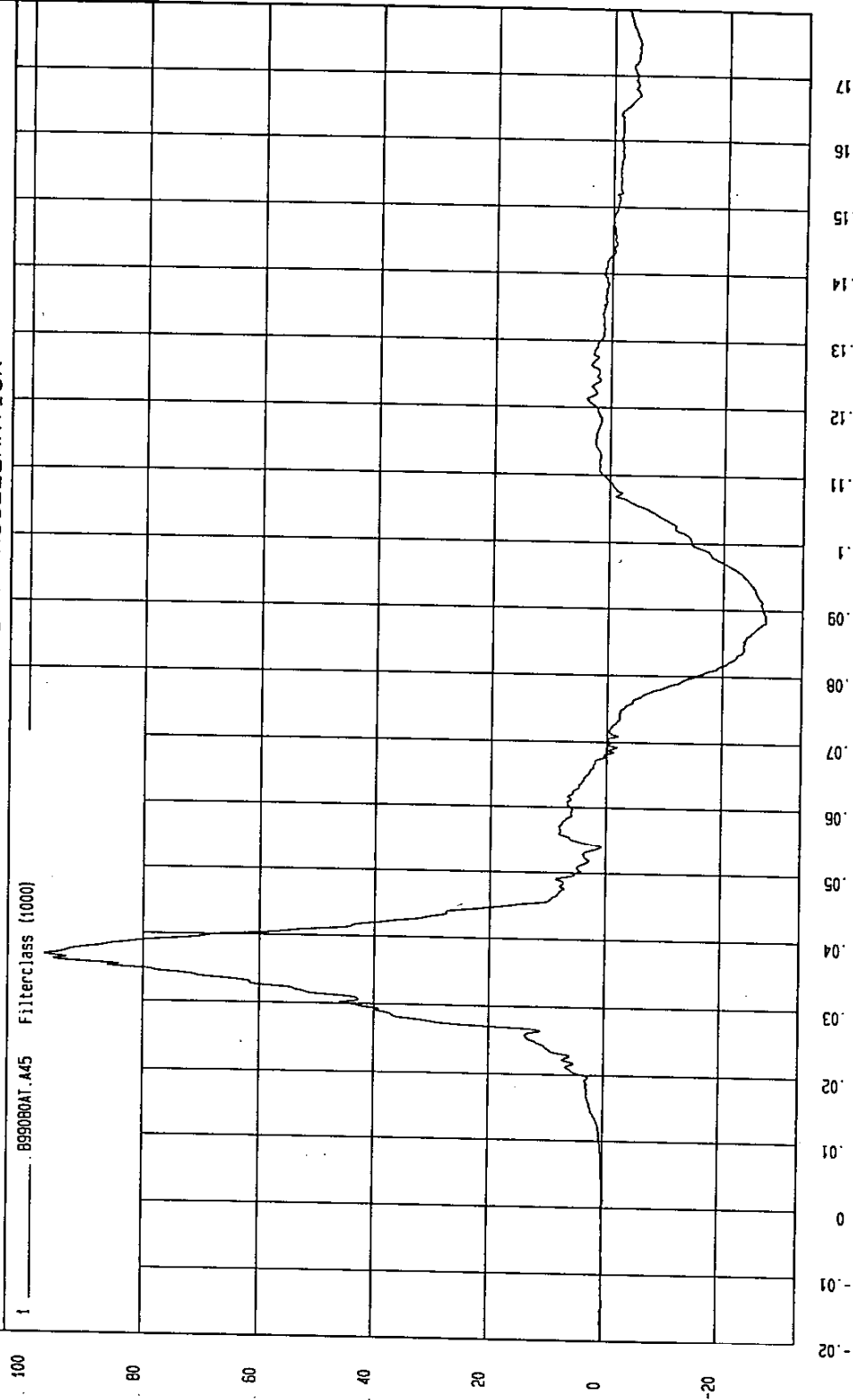
Speed: 38.5 MPH 62 KPH

Minimum = -27.51 G'S at 88 msec

Maximum = 97.45 G'S at 37 msec

DRIVER PELVIS Y REDUNDANT ACCELERATION

1 899080AT.A45 Filterclass (1000)



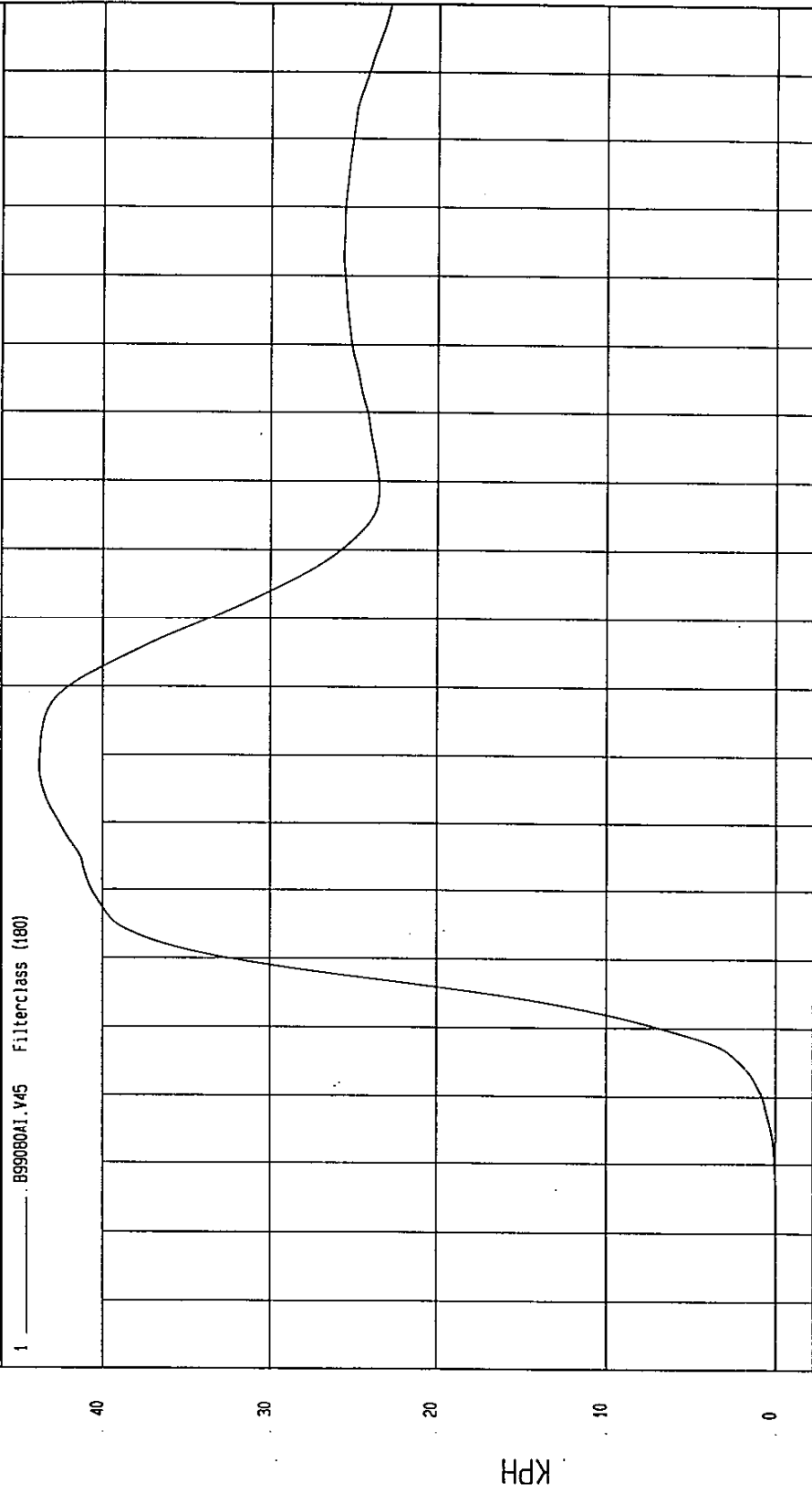
MSA Research
12-08-1999 16:20

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -6.30E-03 KPH at 3 msec Maximum = 43.69 KPH at 68 msec

DRIVER PELVIS Y REDUNDANT VELOCITY



TIME Seconds

MOA Research
12-08-1999 16:21

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

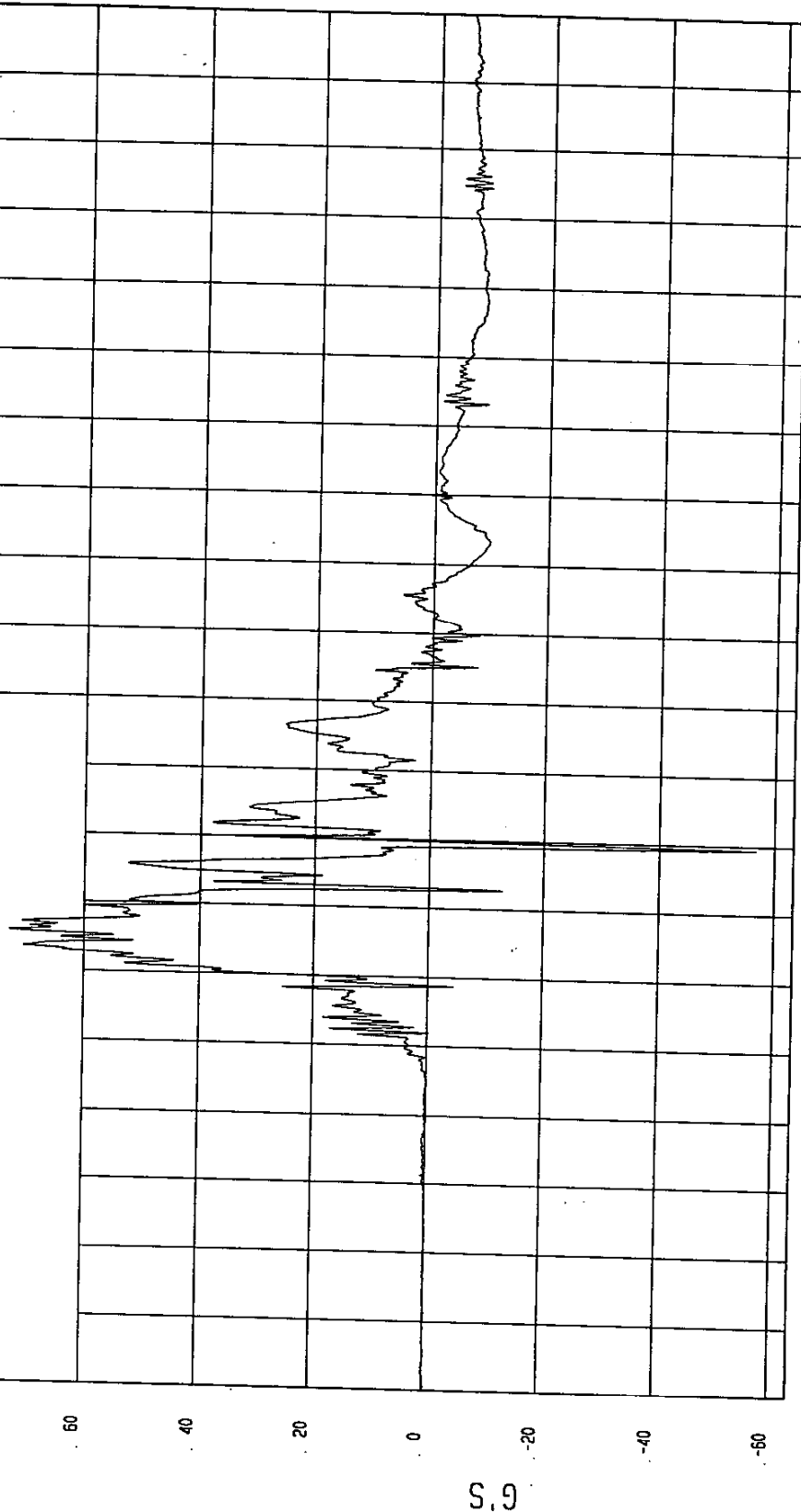
Speed: 38.5 MPH 62 KPH

Minimum = -56.73 G'S at 59 msec

Maximum = 72.89 G'S at 46 msec

REAR PASSENGER UPPER RIB Y REDUNDANT ACCELERATION

1 B99080AT.A46 Filterclass (1000)



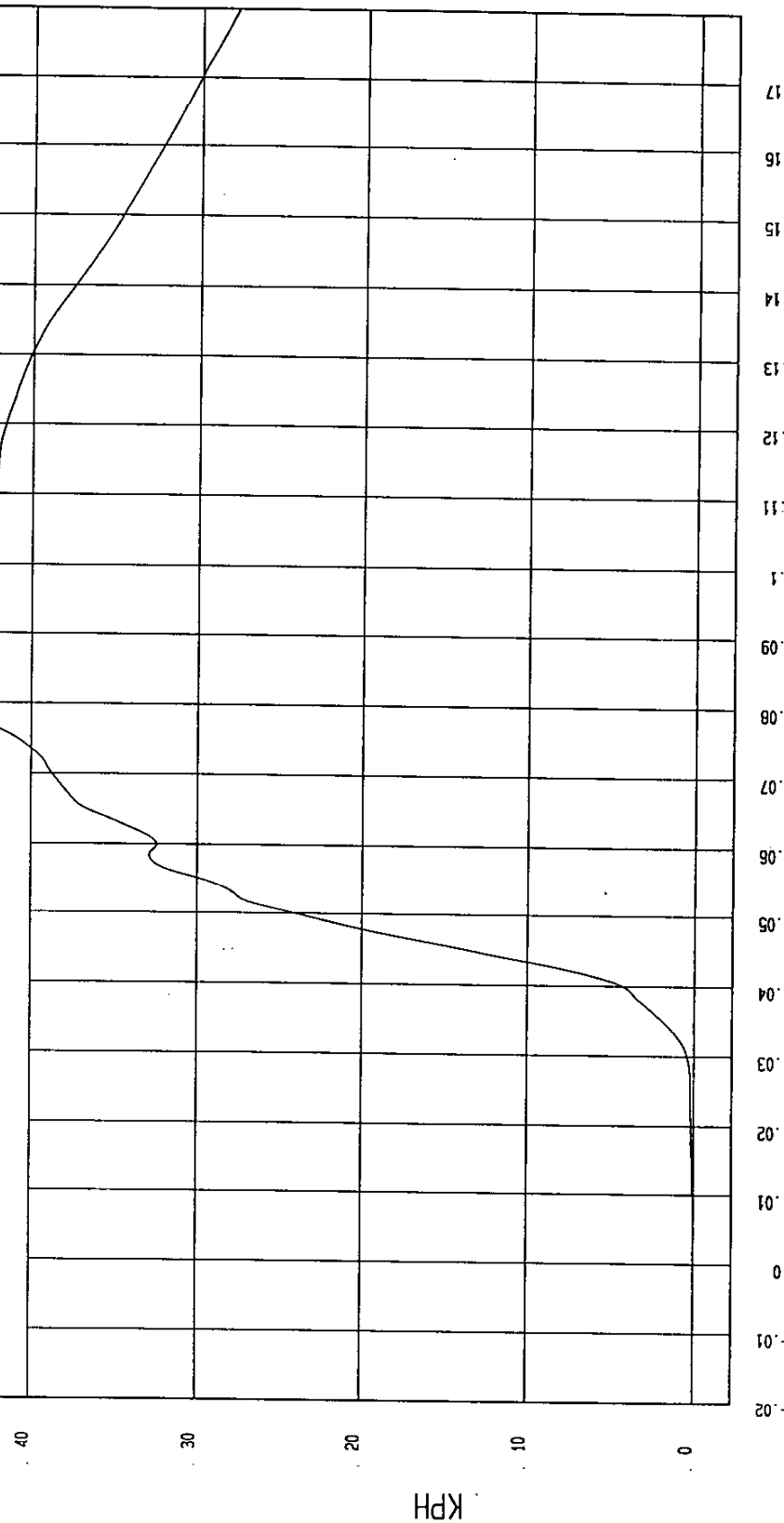
MSA Research
12-08-1999 16:21

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999
COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -8.96E-03 KPH at -8 msec Maximum = 44.86 KPH at 88 msec

REAR PASSENGER UPPER RIB Y REDUNDANT VELOCITY

1 ——— B99080A1.V46 Filterclass (f80)



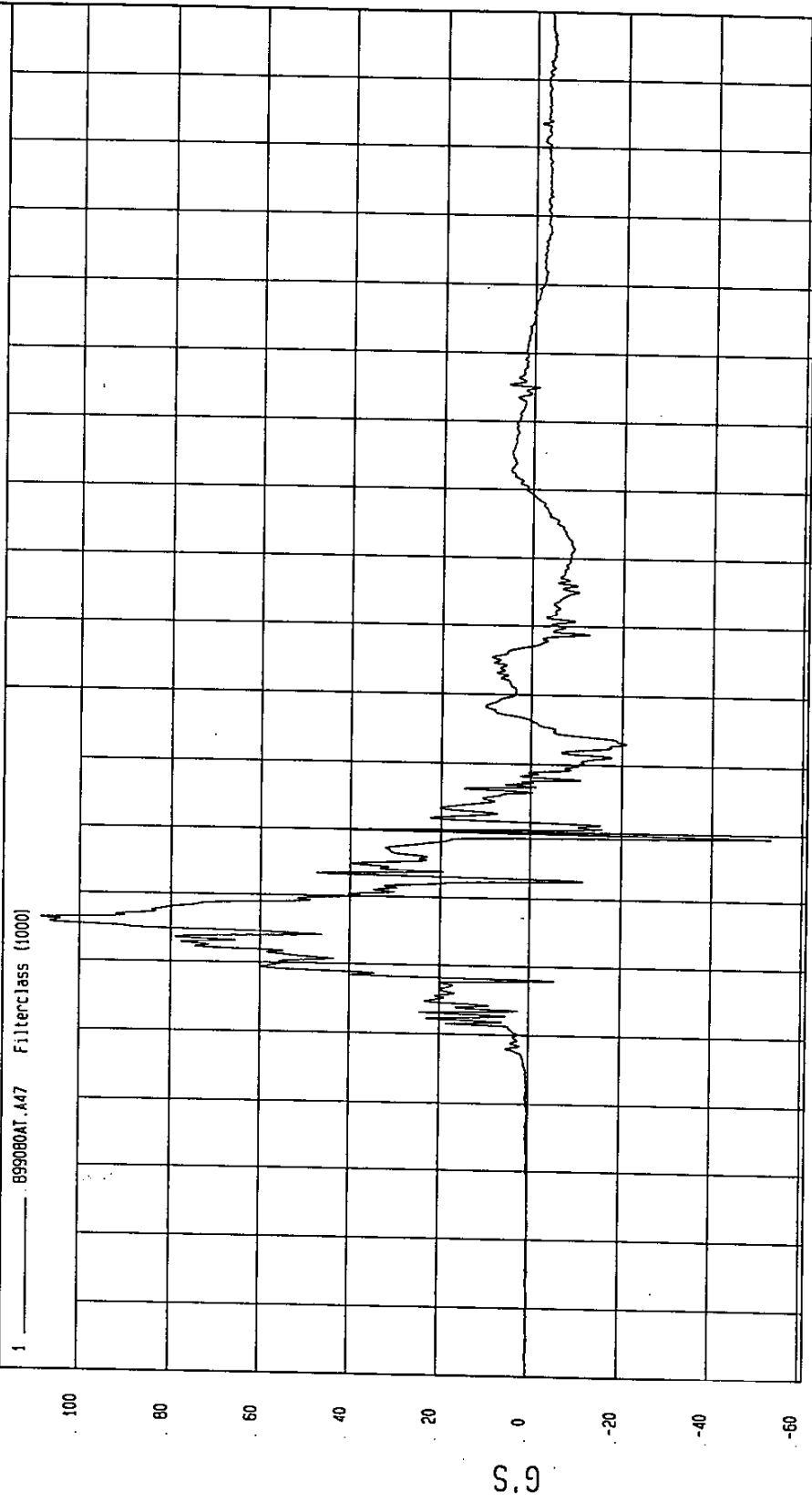
MSA Research
12-08-1999 16:21

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -53.02 G'S at 59 msec Maximum = 108.55 G'S at 46 msec

REAR PASSENGER LOWER RIB Y REDUNDANT ACCELERATION

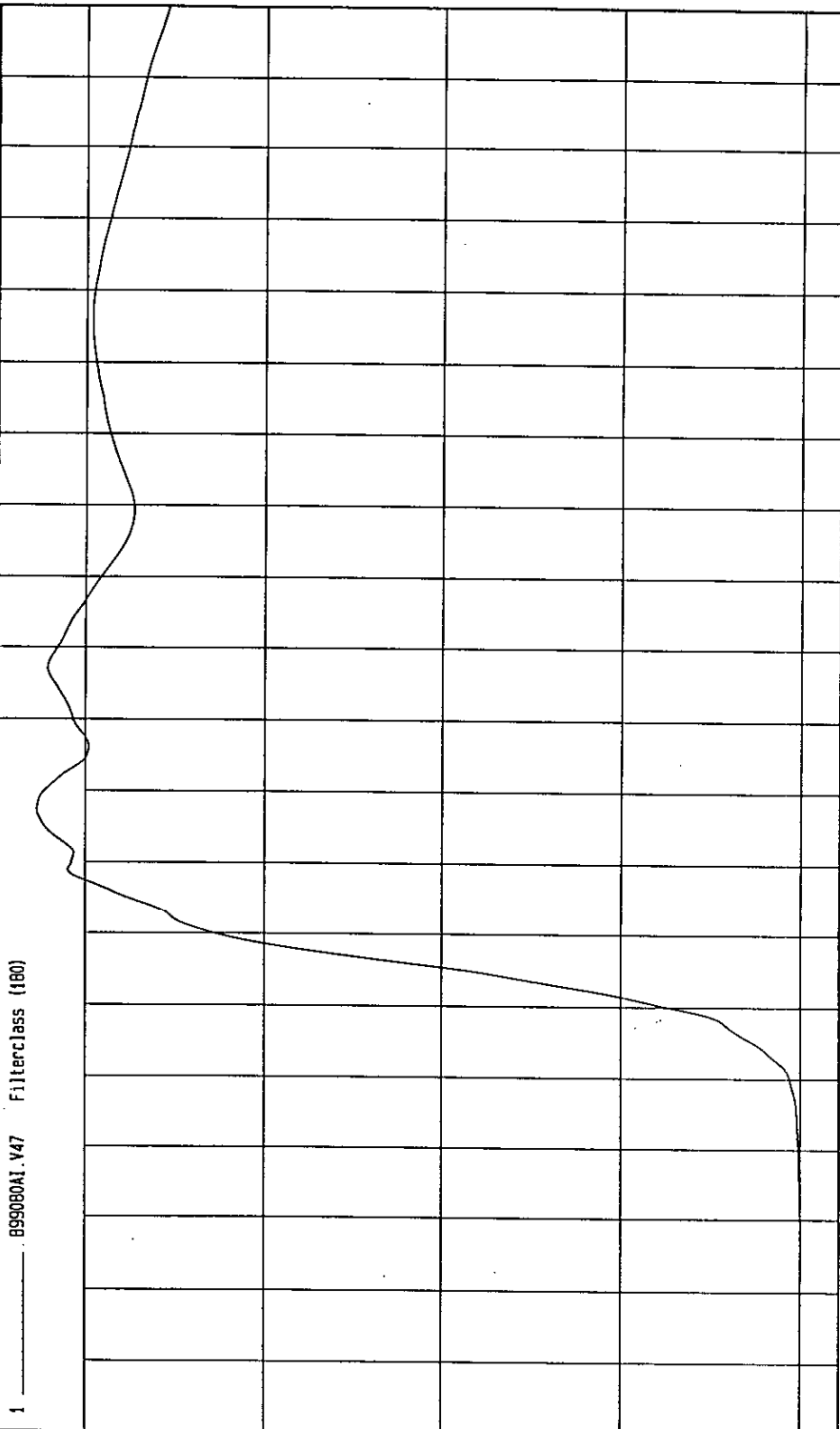


TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -01 KPH at 8 msec Maximum = 42.63 KPH at 67 msec

REAR PASSENGER LOWER RIB Y REDUNDANT VELOCITY



TIME Seconds

MCA Research
12-08-1999 16:21

TEST: HIGH SPEED LATERAL IMPACT
COMPONENT: 2000 CHRYSLER LHS (MY0301)

TEST DATE: 12-08-1999

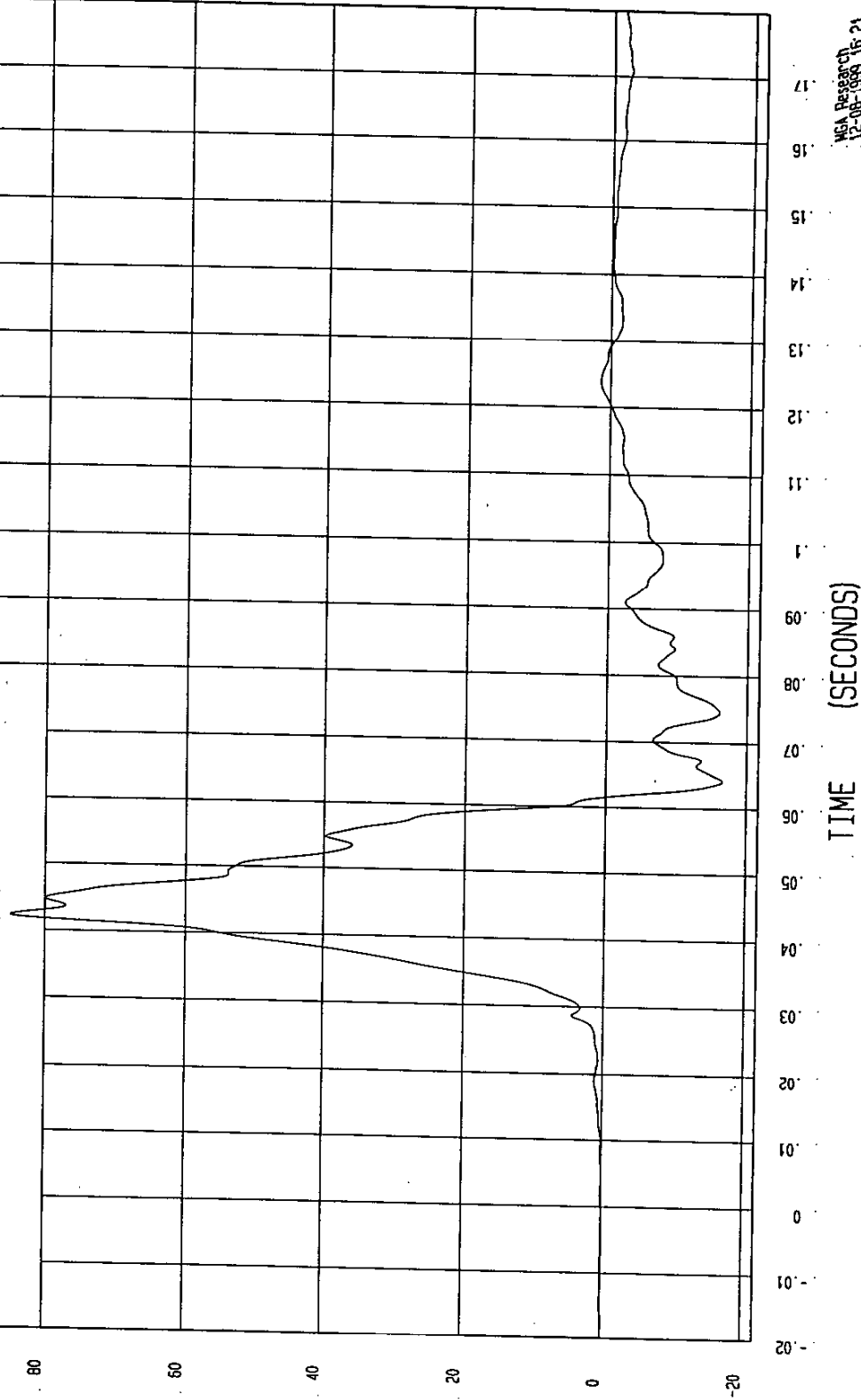
Speed: 38.5 MPH 62 KPH

Minimum = -16.63 G'S at 64 msec

Maximum = 84.85 G'S at 42 msec

REAR PASSENGER LOWER SPINE Y REDUNDANT ACCELERATION

1 — 899080AF.A48 Filterclass (180)



NCA Research
12-08-1999 16:21

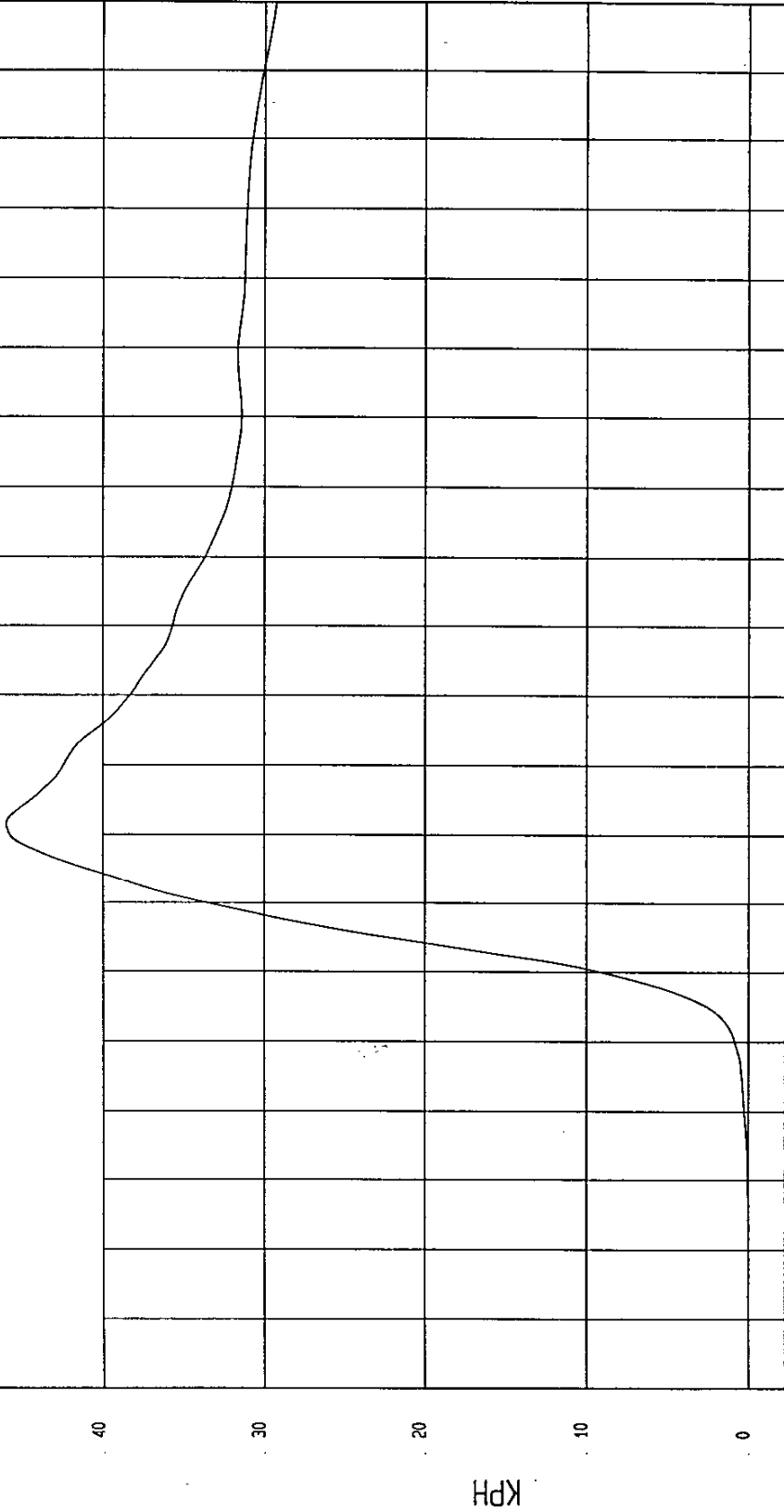
TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -8.18E-03 KPH at -16 msec Maximum = 45.96 KPH at 62 msec

REAR PASSENGER LOWER SPINE Y REDUNDANT VELOCITY

1 B99000A1.V48 Filterclass (180)



MCA Research
12-03-1999 16:21

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

Speed: 38.5 MPH 62 KPH

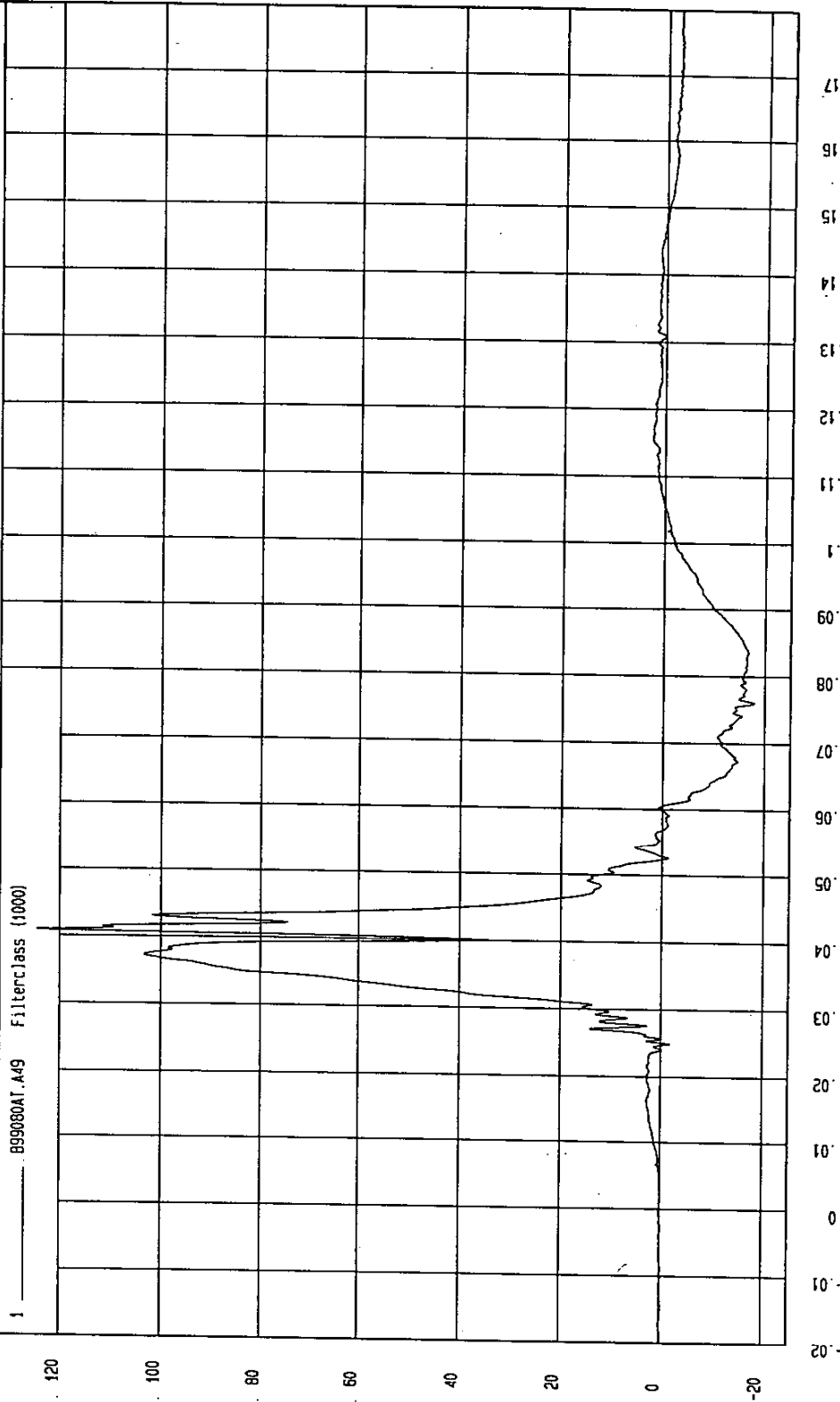
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 124.56 G'S at 41 msec

Minimum = -17.91 G'S at 76 msec

REAR PASSENGER PELVIS Y REDUNDANT ACCELERATION

1 B99080AT.A49 FilterClass (1000)

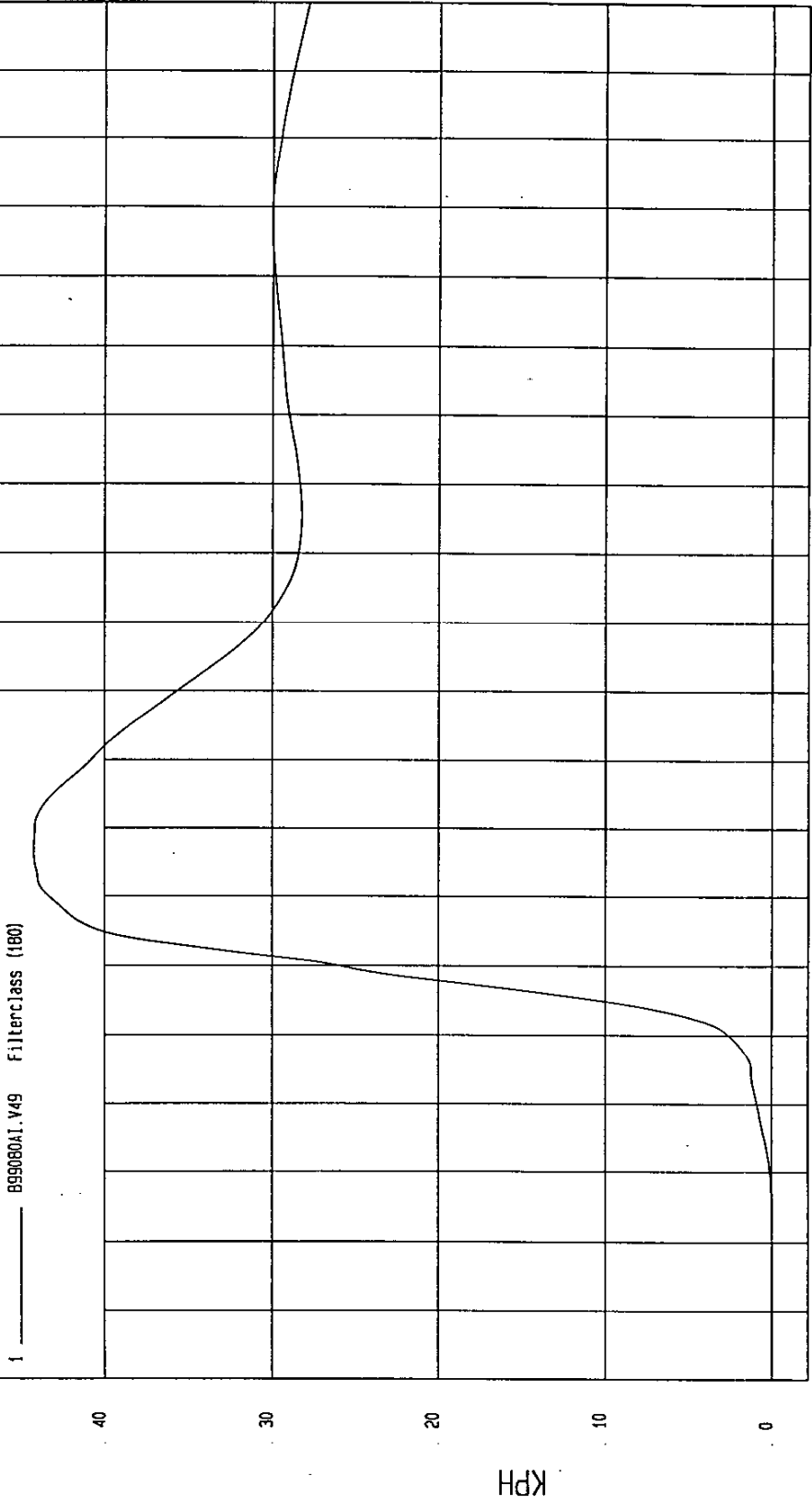


TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -1.35E-02 KPH at -8 msec Maximum = 44.27 KPH at 57 msec

REAR PASSENGER PELVIS Y REDUNDANT VELOCITY



TIME Seconds

NSI Research
12-08-1999 16:21

FINITE IMPULSE RESPONSE (FIR) FILTERED DATA

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

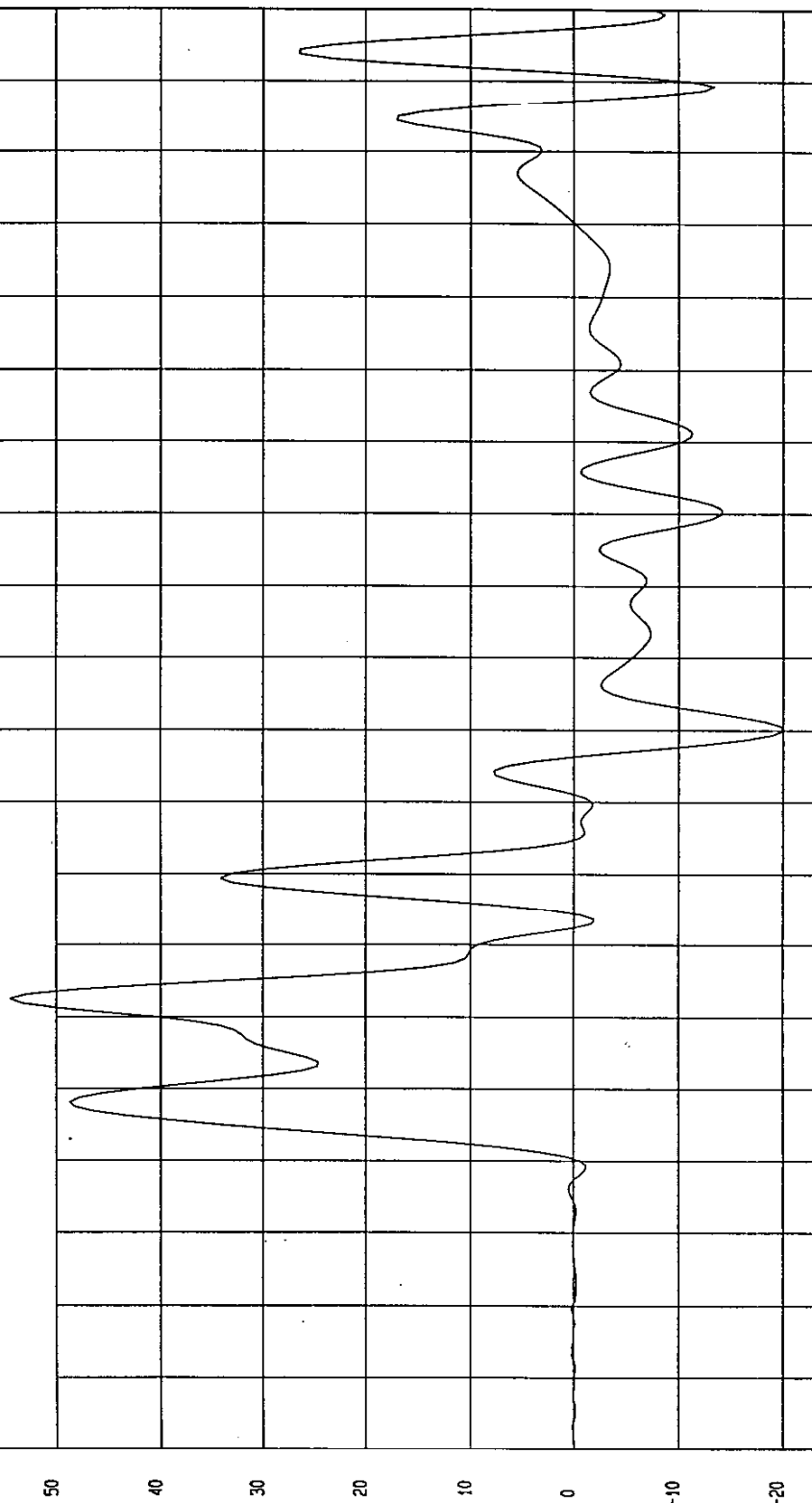
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 54.41 G'S at 42 msec

Minimum = -20.06 G'S at 80 msec

DRIVER UPPER RIB Y ACCELERATION

1 099000F1.R15 FilterClass (FIR Filtered)



M&I Research
12-08-1999 16:00

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

Speed: 38.5 MPH 62 KPH

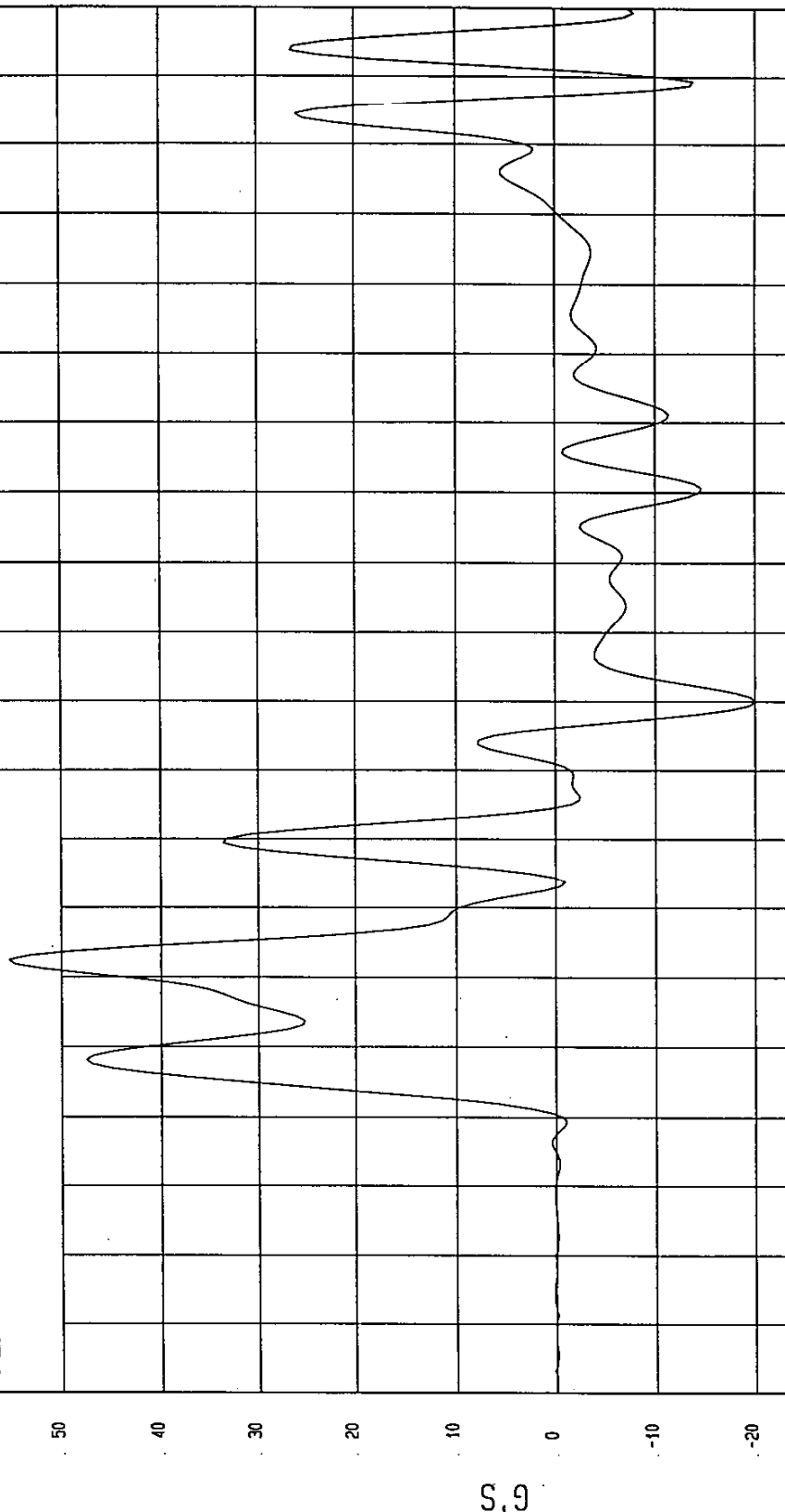
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 55.33 G'S at 42 msec

Minimum = -20.06 G'S at 80 msec

DRIVER UPPER RIB Y REDUNDANT ACCELERATION

1 — 899080F1.R42 Filterclass (FIR Filtered)

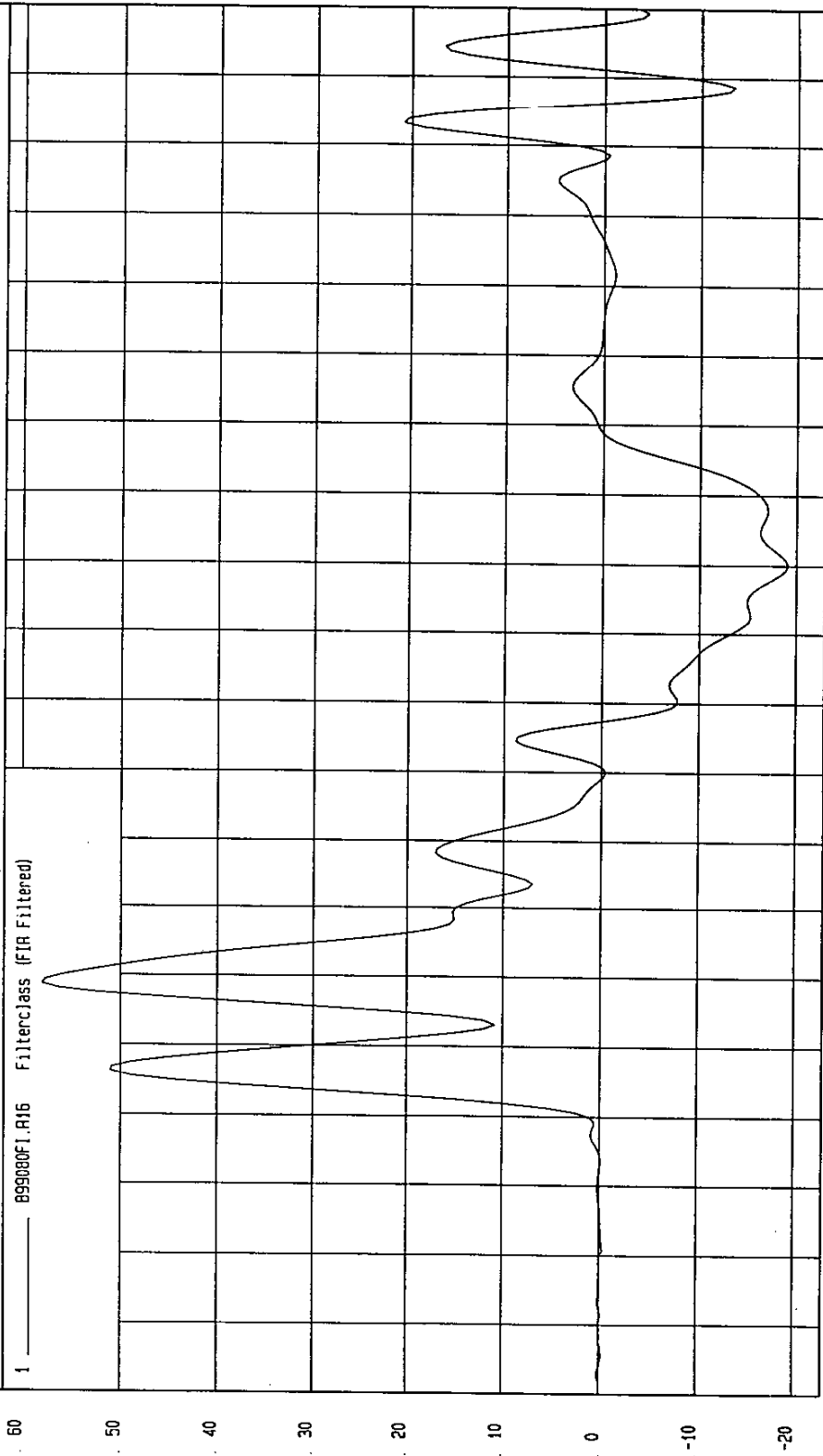


NSA Research
12-08-1999 16:01

TIME (SECONDS)

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999
COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH
Minimum = -19.06 G's at 100 msec Maximum = 57.98 G's at 39 msec

DRIVER LOWER RIB Y ACCELERATION



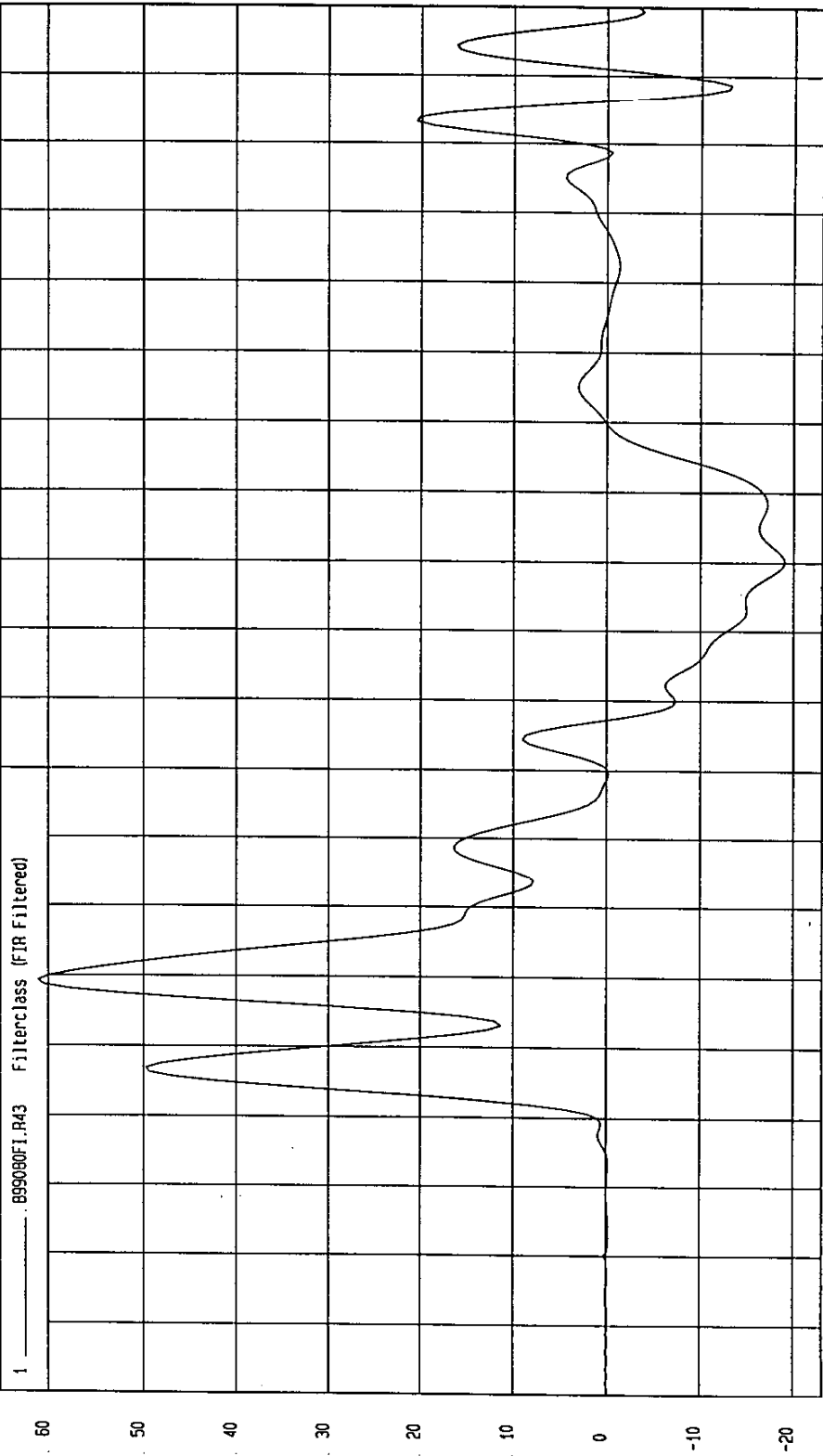
MCA Research
12-06-1999 16:01

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -19.05 G'S at 100 msec Maximum = 61.08 G'S at 39 msec

DRIVER LOWER RIB Y REDUNDANT ACCELERATION



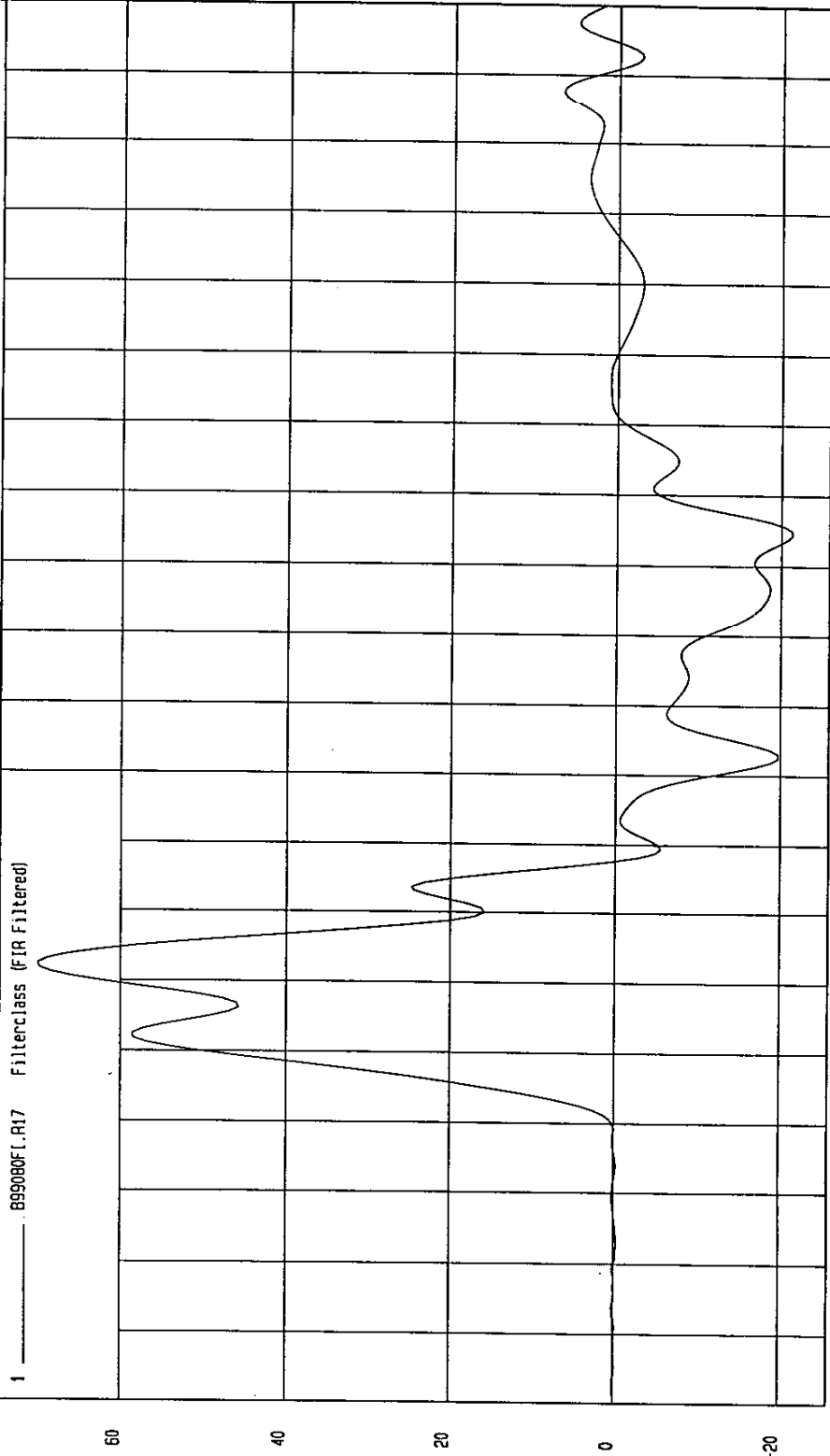
MGA Research
12-08-1999 16:01

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -21.36 G'S at 104 msec Maximum = 69.78 G'S at 42 msec

DRIVER LOWER SPINE Y ACCELERATION



WEA Research
12-08-1999 16:01

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

SPEED: 38.5 MPH 62 KPH

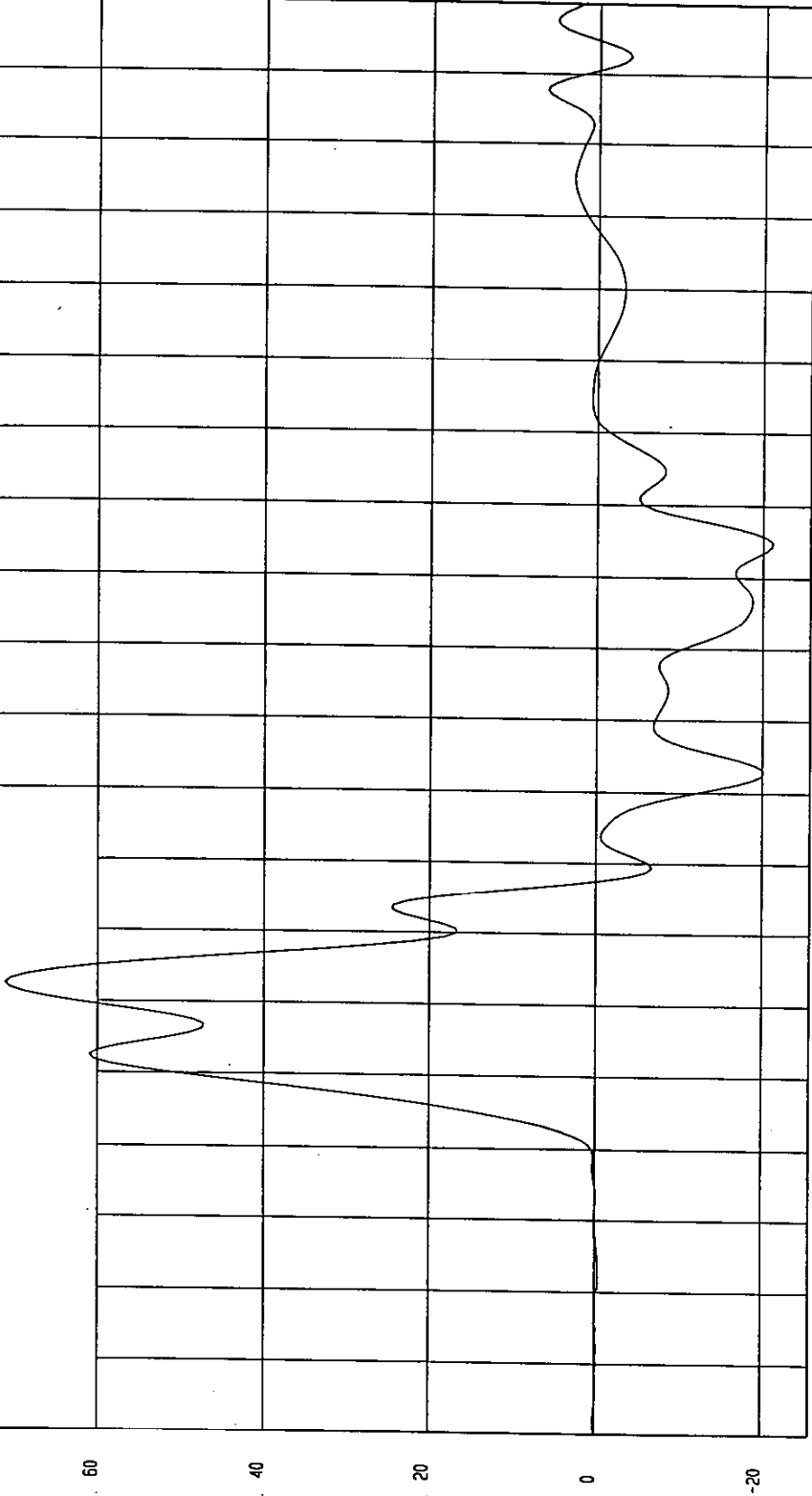
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 71.02 G'S at 42 msec

Minimum = -21.16 G'S at 105 msec

DRIVER LOWER SPINE Y REDUNDANT ACCELERATION

1 8990801.R44 FilterClass (FIR Filtered)



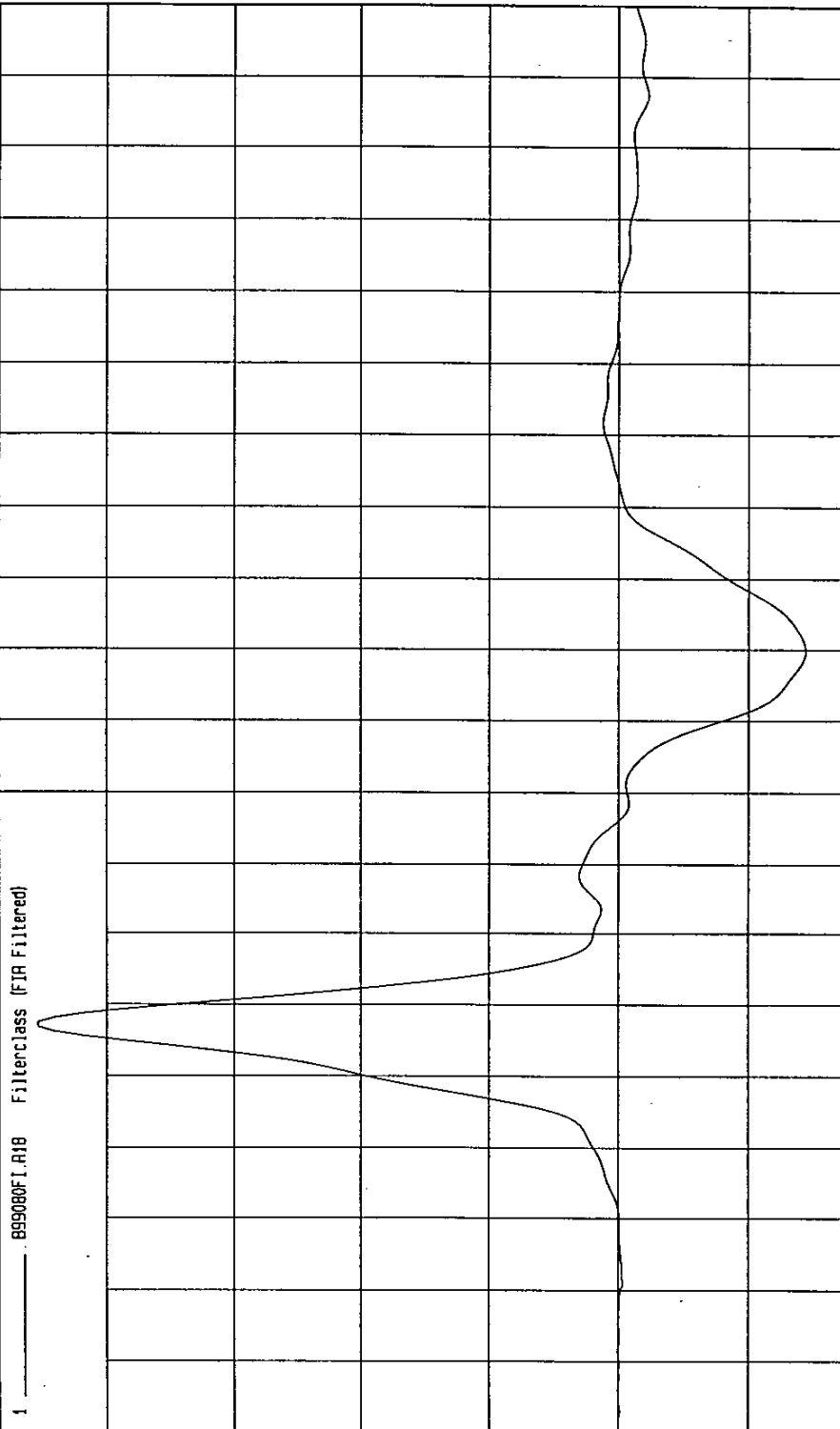
MSA Research
12-08-1999 16.01

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -28.85 G'S at 90 msec Maximum = 90.55 G'S at 38 msec

DRIVER PELVIS Y ACCELERATION



TIME (SECONDS)

MGA Research
12-08-1999 16:01

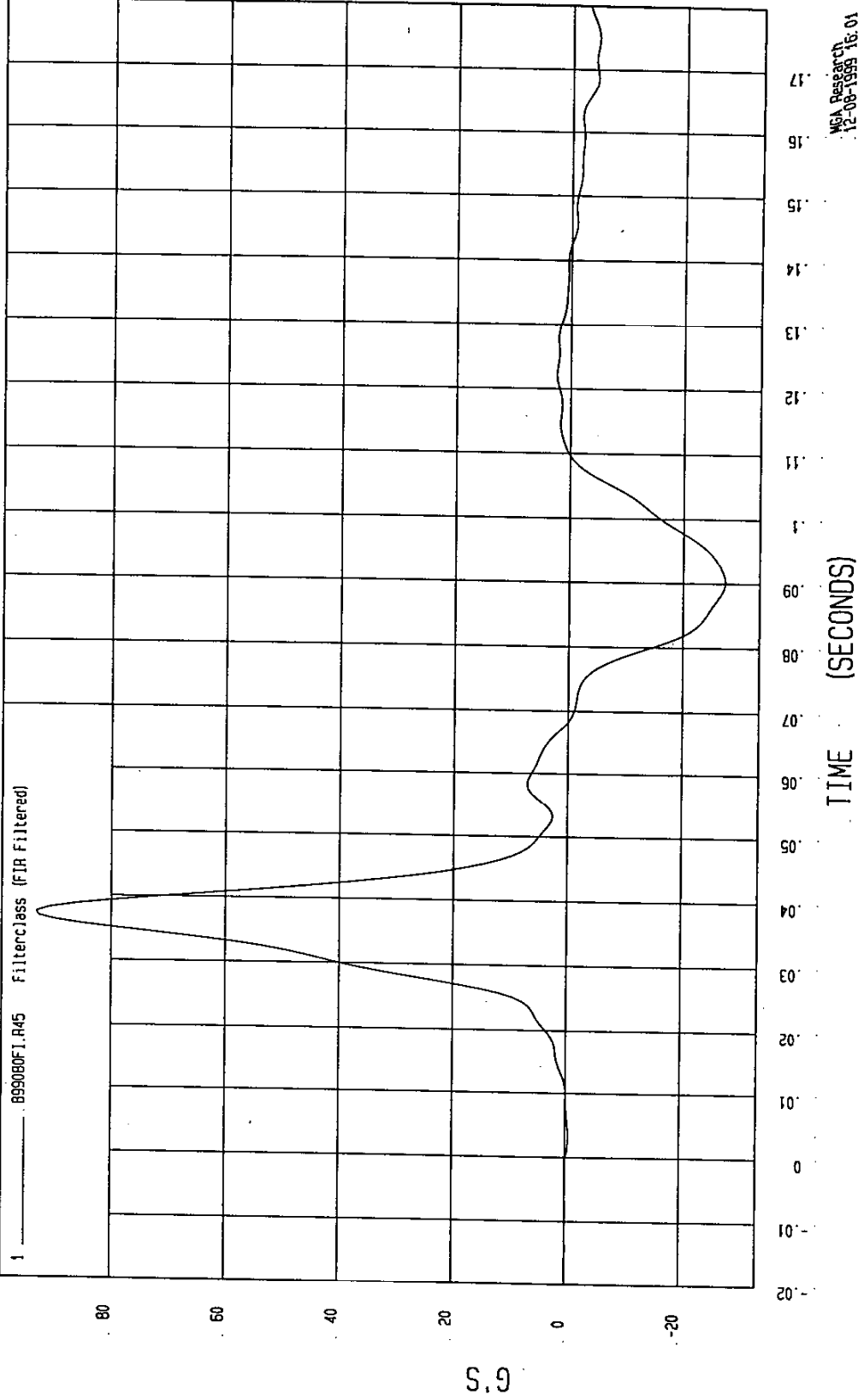
G.S

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -27.55 G'S at 90 msec Maximum = 92.89 G'S at 38 msec

DRIVER PELVIS Y REDUNDANT ACCELERATION



TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

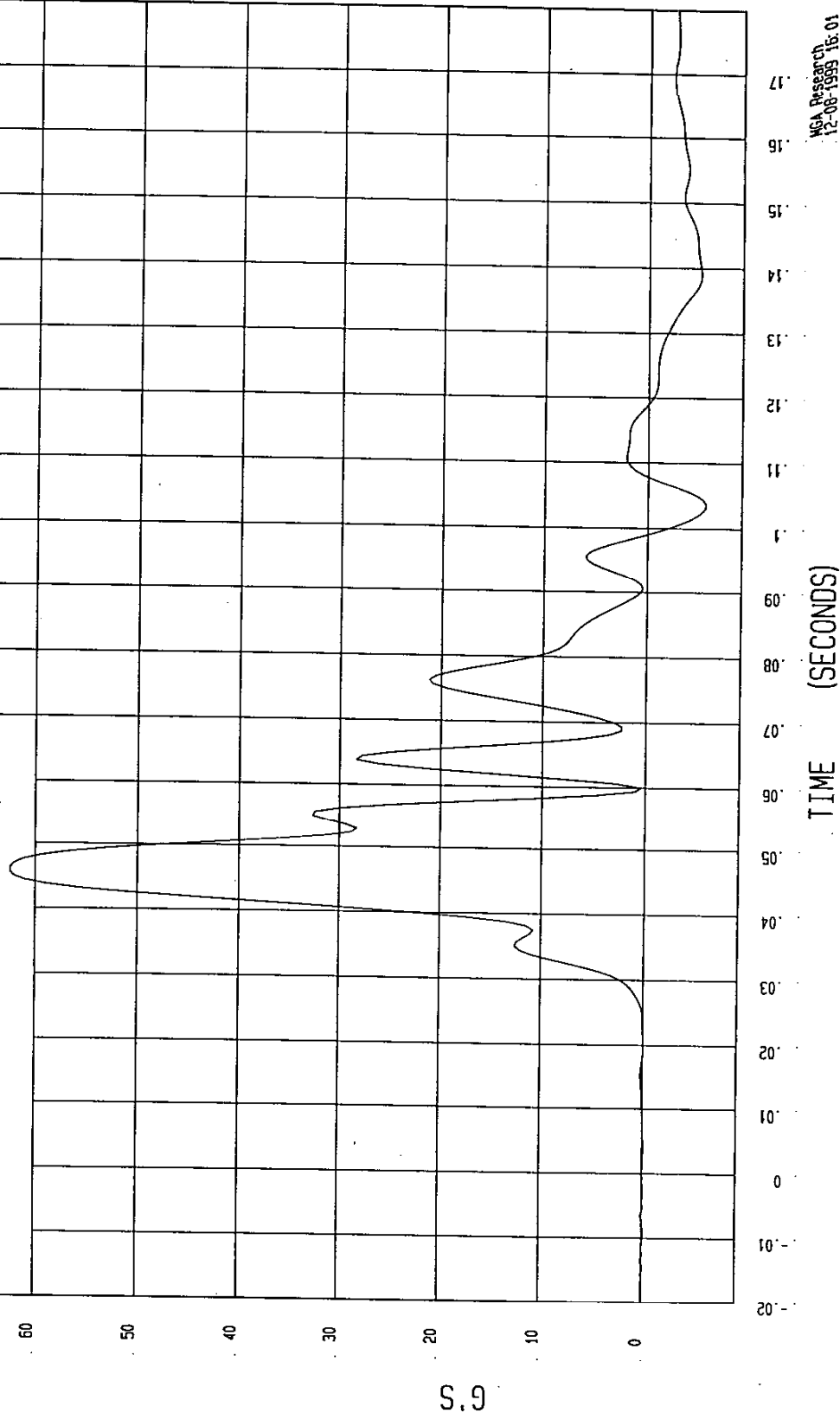
Speed: 38.5 MPH 62 KPH

Minimum = -5.67 G'S at 104 msec

Maximum = 62.42 G'S at 46 msec

REAR PASSENGER UPPER RIB Y ACCELERATION

1 Filterclass (FIR Filtered)

MGA Research
12-08-1999 16:01

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

Speed: 38.5 MPH 62 KPH

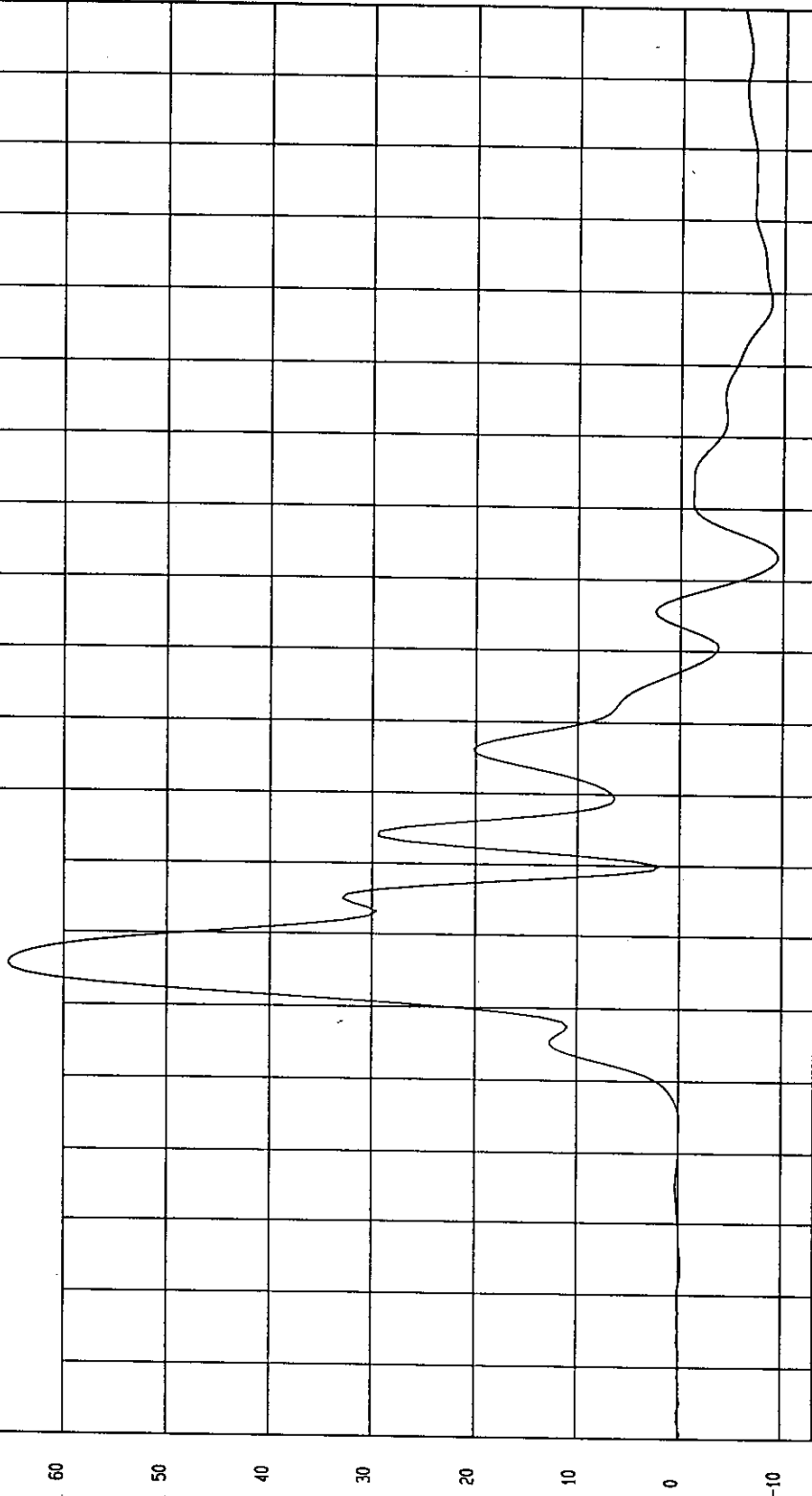
COMPONENT: 2000 CHRYSLER LHS (MY0301)

Maximum = 65.43 G'S at 46 msec

Minimum = -9.44 G'S at 103 msec

REAR PASSENGER UPPER RIB Y REDUNDANT ACCELERATION

1 899080FI.R46 Filterclass (FIR Filtered)

NSA Research
12-08-1999 16:01

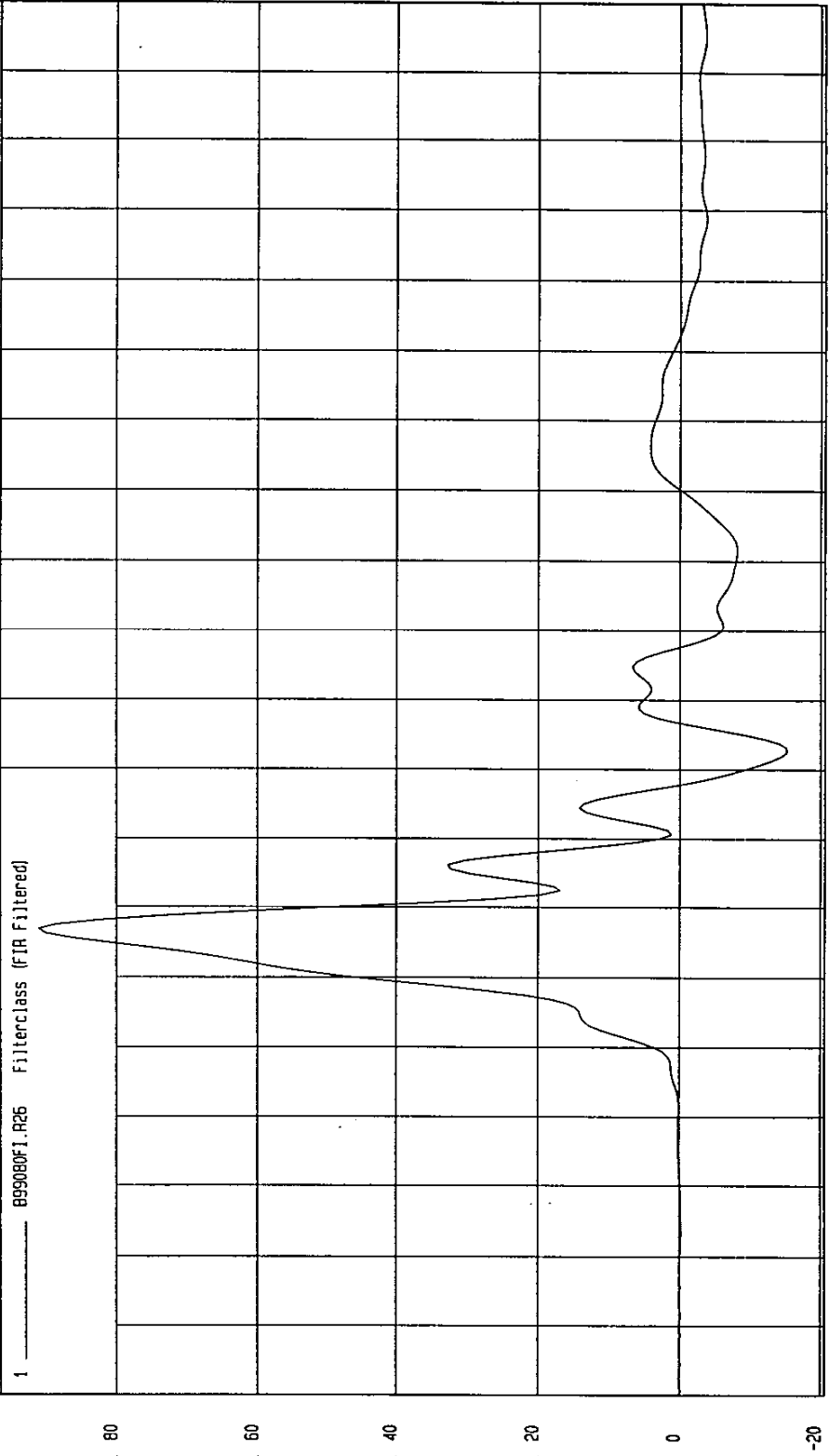
TIME (SECONDS)

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -15.28 G'S at 72 msec Maximum = 90.8 G'S at 47 msec

REAR PASSENGER LOWER RIB Y ACCELERATION



NSI Research
12-08-1999 16:01

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

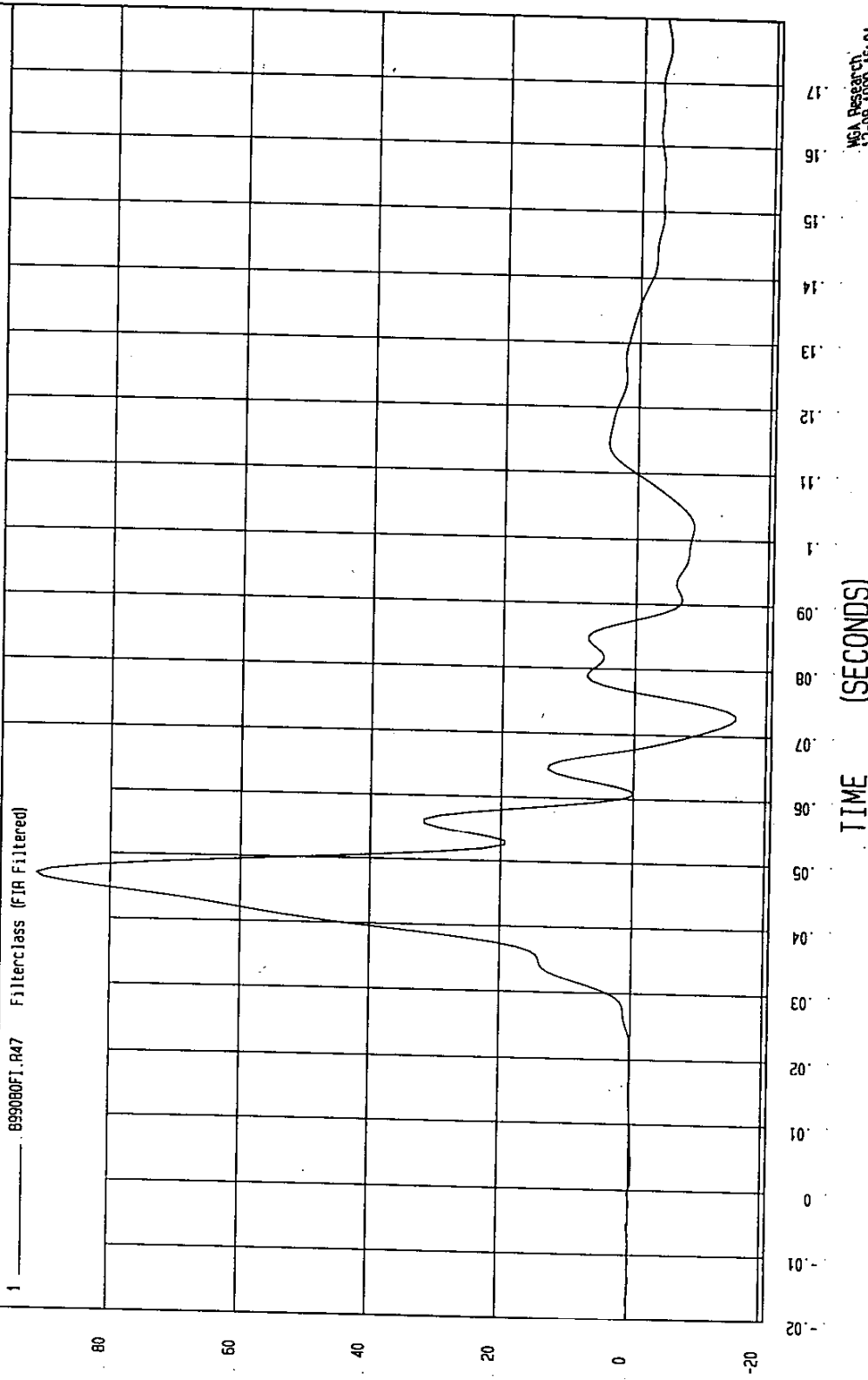
Speed: 38.5 MPH 62 KPH

Minimum = -15.48 G'S at 72 msec

Maximum = 91.33 G'S at 47 msec

REAR PASSENGER LOWER RIB Y REDUNDANT ACCELERATION

1 _____ B99080FI.R47 Filterclass (FIR Filtered)



MCA Research
12-08-1999 16:01

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

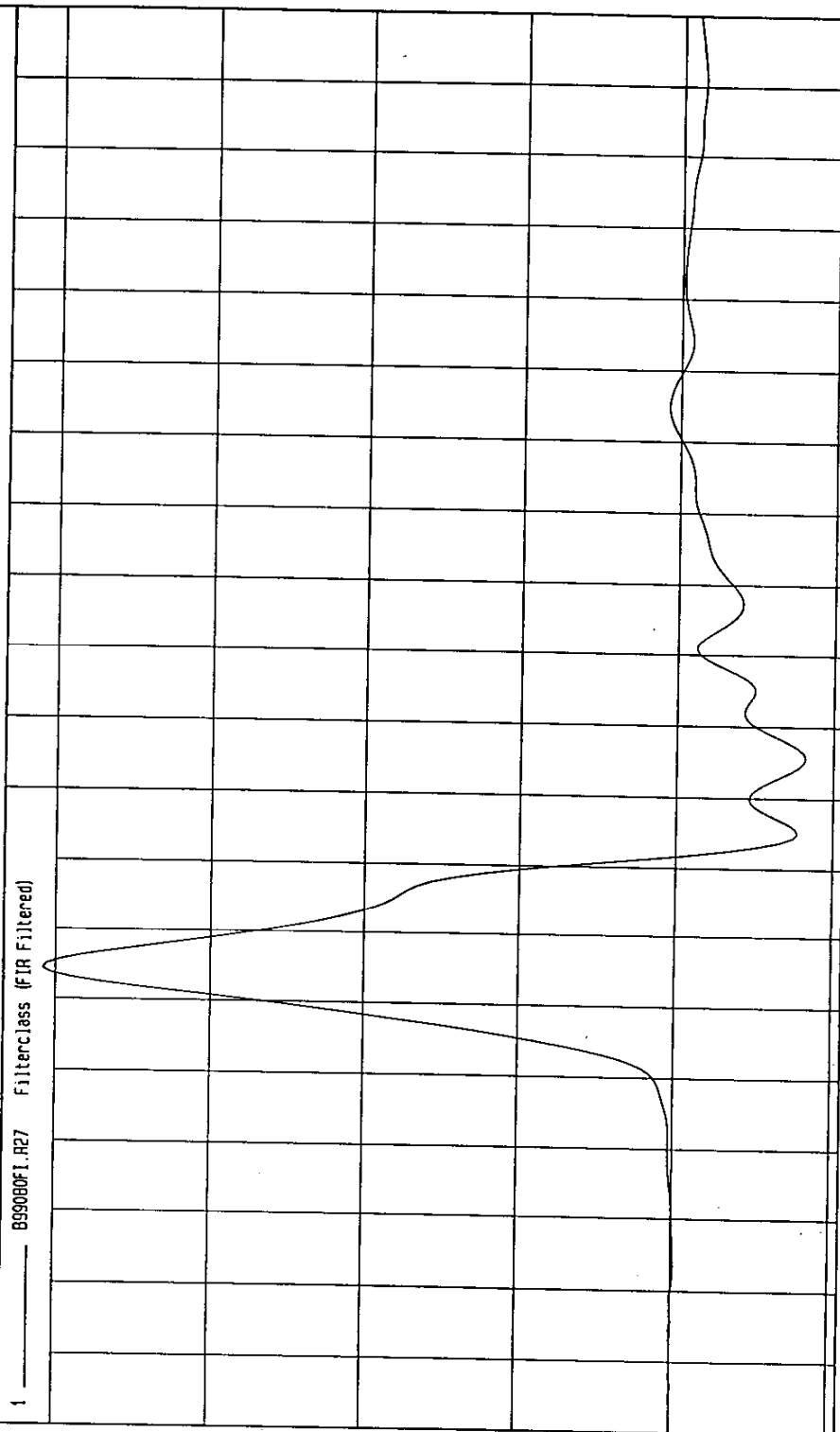
Speed: 38.5 MPH 62 KPH

Minimum = -16.41 G'S at 76 msec

Maximum = 81.6 G'S at 44 msec

REAR PASSENGER LOWER SPINE Y ACCELERATION

1 ——— B99080F1.R27 Filterclass (FIR Filtered)



MCA Research
12-08-1999 16:01

TEST: HIGH SPEED LATERAL IMPACT

TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301)

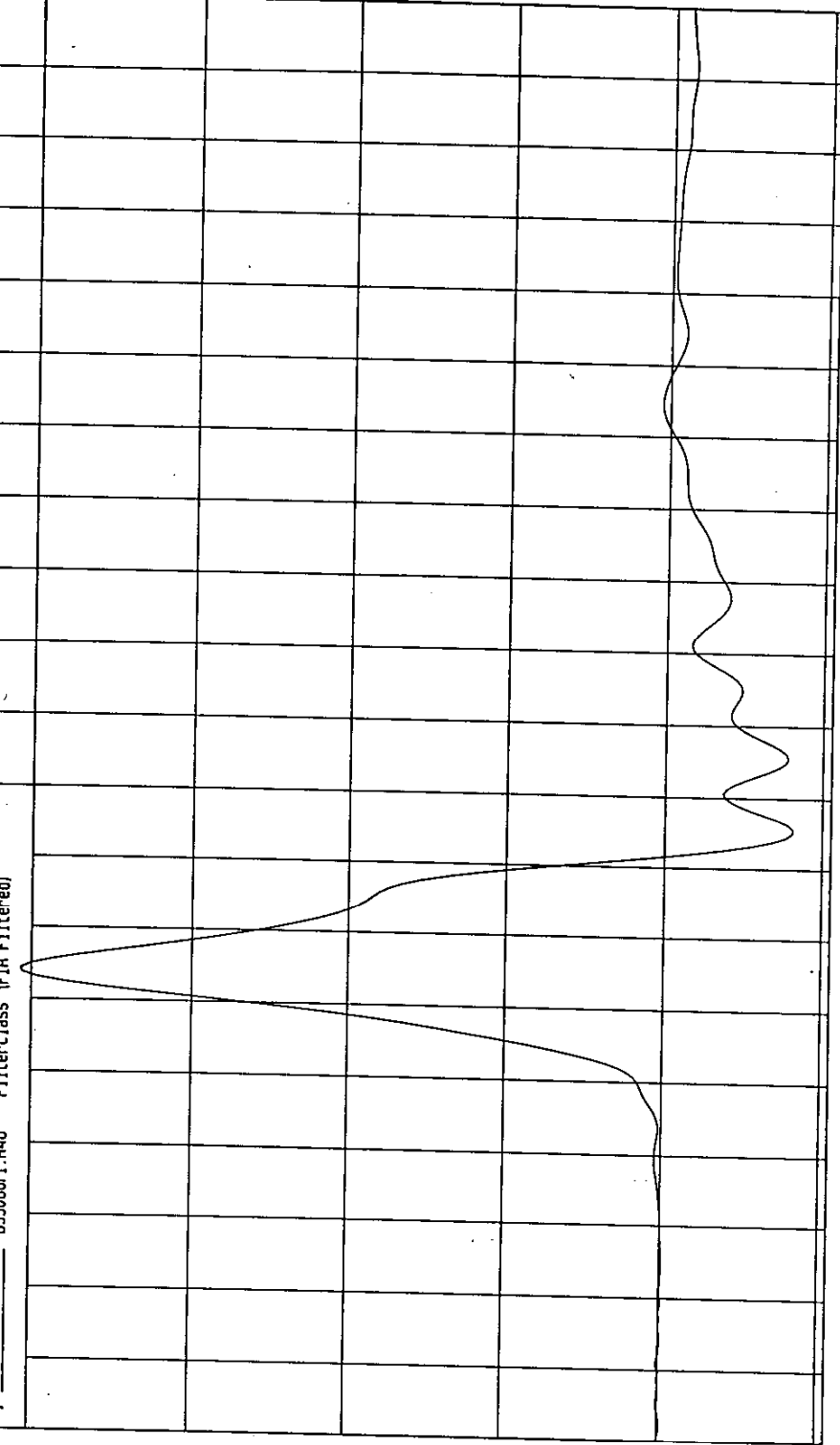
Speed: 38.5 MPH 62 KPH

Minimum = -16.23 G'S at 66 msec

Maximum = 81.3 G'S at 44 msec

REAR PASSENGER LOWER SPINE Y REDUNDANT ACCELERATION

1 ——— B99080F1.R48 FilterClass (FIR Filtered)



NSA Research
12-08-1999 16:01

TIME (SECONDS)

S.9

TEST: HIGH SPEED LATERAL IMPACT

COMPONENT: 2000 CHRYSLER LHS (MY0301)

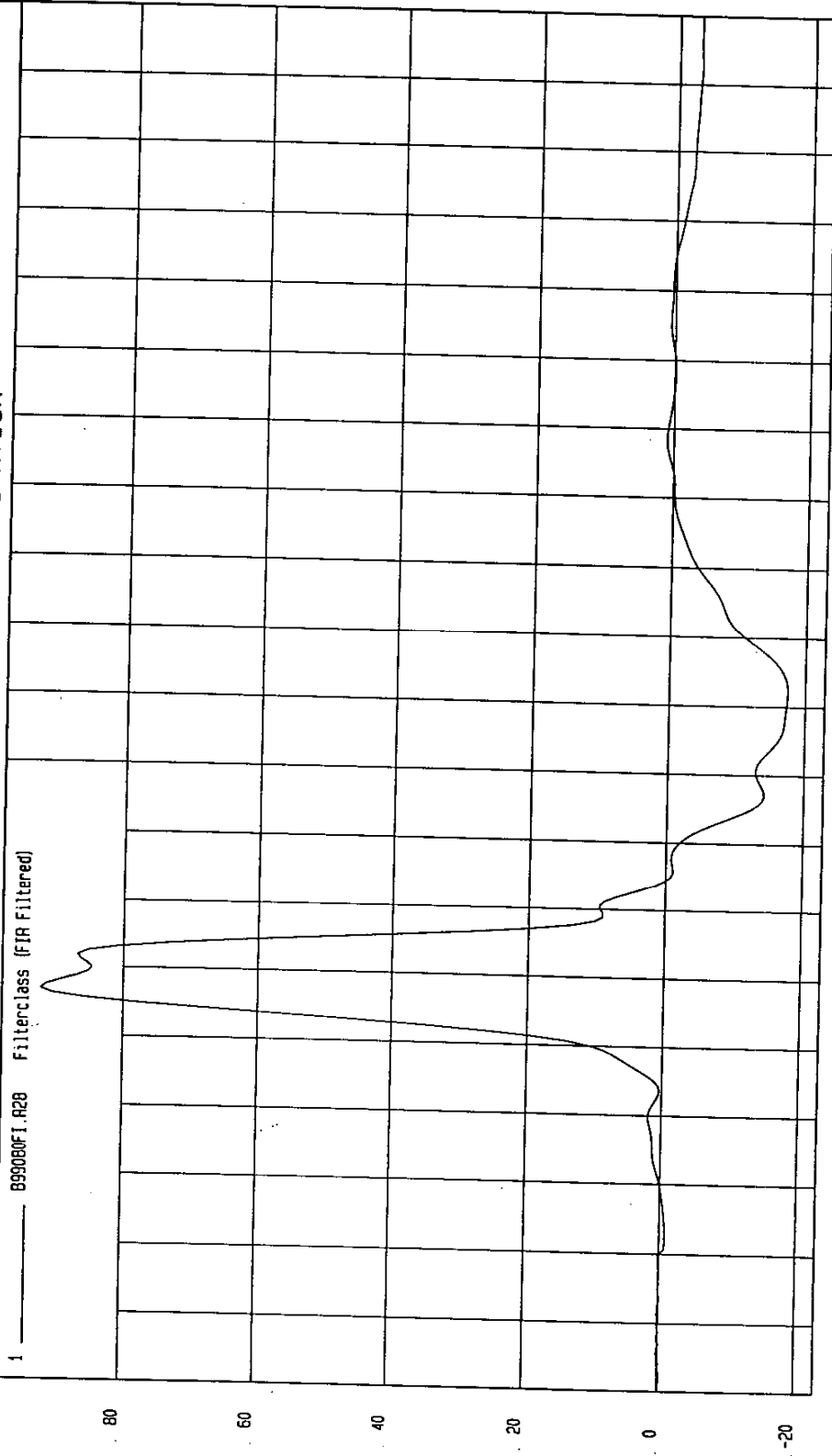
Speed: 38.5 MPH 62 KPH

Minimum = -17.41 G's at 82 msec

Maximum = 92.24 G's at 37 msec

REAR PASSENGER PELVIS Y ACCELERATION

1 ——— 895080F1.R28 Filterclass (FIR Filtered)



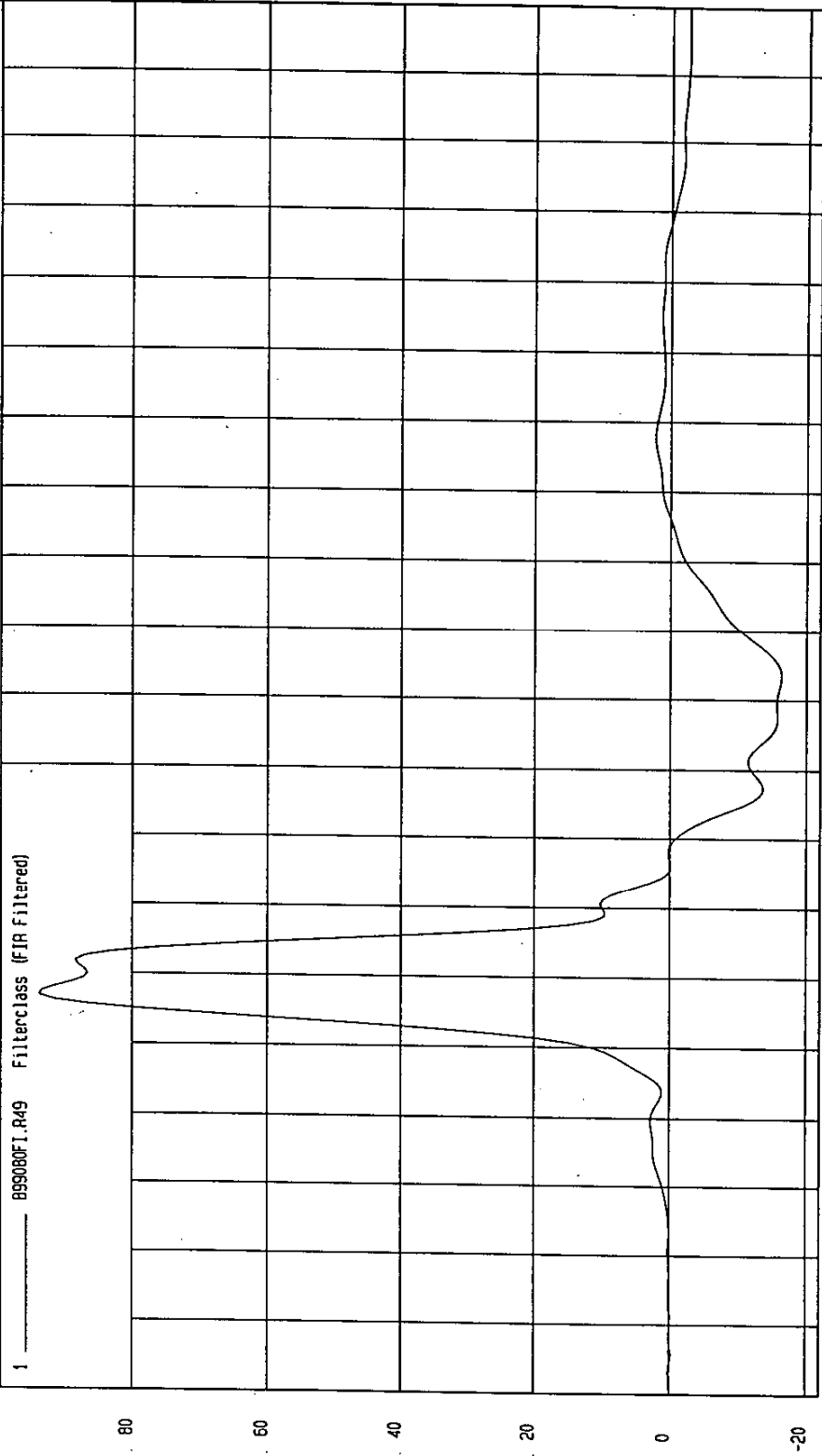
MCA Research
12-08-1999 16:01

TEST: HIGH SPEED LATERAL IMPACT TEST DATE: 12-08-1999

COMPONENT: 2000 CHRYSLER LHS (MY0301) Speed: 38.5 MPH 62 KPH

Minimum = -16.44 G'S at 84 msec Maximum = 93.82 G'S at 37 msec

REAR PASSENGER PELVIS Y REDUNDANT ACCELERATION



APPENDIX C
SID CONFIGURATION AND PERFORMANCE VERIFICATION

PRE-TEST CERTIFICATION DATA

C-1

Driver Dummy Serial Number: 271

Calibration Test Results Summary

C-2

Driver Dummy Serial Number: 271

Pre-Test Calibration

External Dimensions:	The dummy passed all external dimension requirements.
Thorax Impact Test:	The thorax passed all impact test requirements.
Pelvic Impact Test:	The pelvis passed all impact test requirements.
Abdominal Compression Test:	The abdomen passed all compression test requirements.
Lumbar Flexion Test:	The lumbar passed all flexion test requirements.

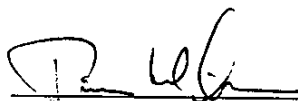
SIDE IMPACT DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA C-3

DUMMY SERIAL NUMBER: 271

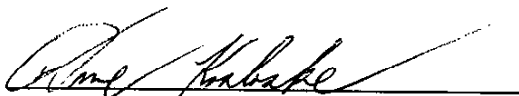
DATE OF VERIFICATION: December 7, 1999

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height (mm)	889 - 909	898
RH - Rib Height (mm)	501 - 521	514
HP - Hip Pivot Height (mm)	99 ref.	99
RD - Rib From Back Line (mm)	229 - 241	235
KV - Knee Pivot From Back Line (mm)	511 - 526	518
SW - Knee Pivot to Floor (mm)	490 - 505	493
HW - Hip Width (mm)	356 - 391	375

MEASUREMENTS BY:



APPROVED BY:



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C-4

HEAD DROP TEST

SIDE IMPACT DUMMY (SID)

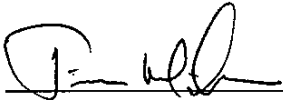
DATE: December 6, 1999

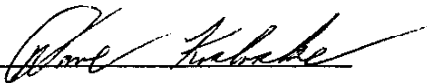
DUMMY NUMBER: 271

TEST NUMBER: D991411

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	18.9° - 25.5° C	21.0°
RELATIVE HUMIDITY	10 - 70%	27%
PEAK RESULTANT ACCELERATION	210 - 260 g's	249
PEAK LATERAL ACCELERATION	< 10 g's	-5
TIME ABOVE 100 G.	0.9 - 1.5 msec.	1.2

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

TEST: Dummy Calibration - Head Drop TEST DATE: 12-06-1999 - 14:08:51

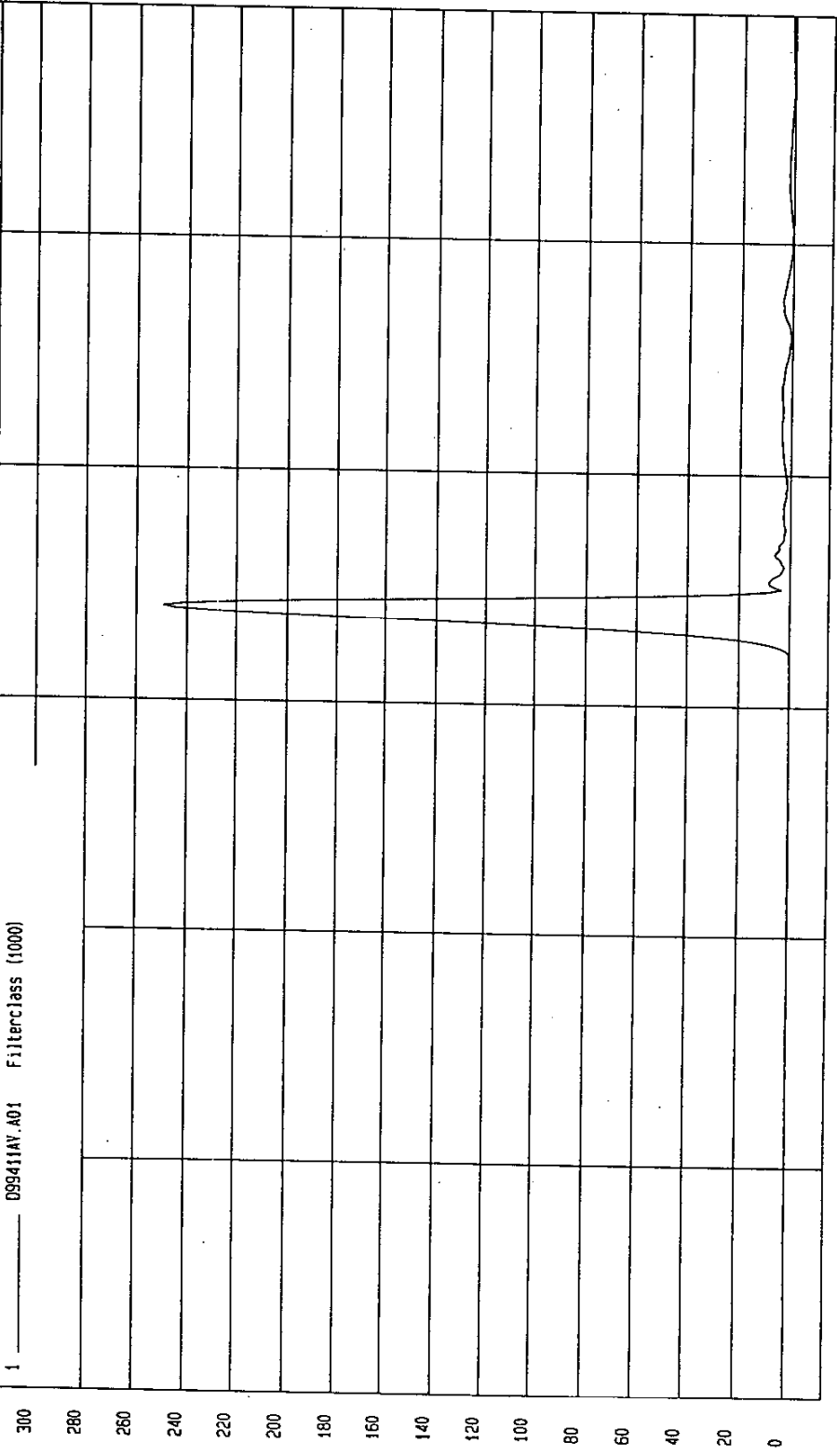
COMPONENT: Dummy # 271

Minimum = 7.30E-02 G'S at .2 msec

Maximum = 249.46 G'S at 34.1 msec

PEAK RESULTANT ACCELERATION

1 _____ 099411AV.A01 Filterclass (1000)



TIME (sec.)

HGA Research
12-06-1999 14:10

G's

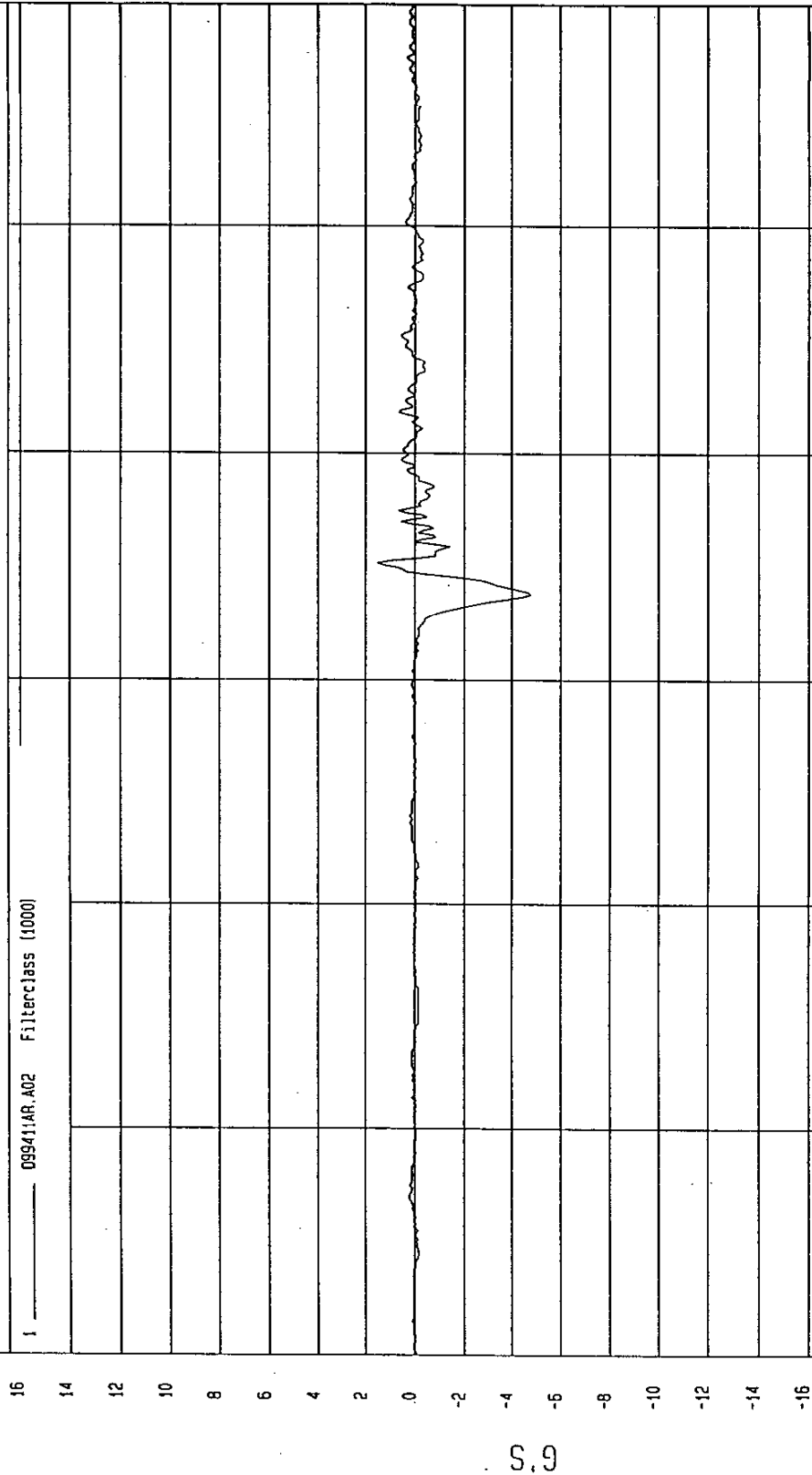
TEST: Dummy Calibration - Head Drop TEST DATE: 12-06-1999 - 14:08:51

COMPONENT: Dummy # 271

Minimum = -4.77 G'S at 33.8 msec

Maximum = 2.09 G'S at 74.3 msec

PEAK LATERAL ACCELERATION



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THORACIC SHOCK ABSORBER TEST
SIDE IMPACT DUMMY (SID)

C-7

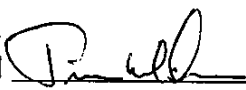
DATE: December 6, 1999

DUMMY SERIAL NUMBER: 271 TEST NUMBER: D991416

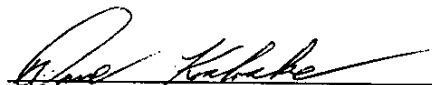
TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)		18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)		10 - 70	28%
VELOCITY 3.05 m/s	FORCE (N)	836 - 1125	913
	DISPLACEMENT (mm)	30 - 35	33
VELOCITY 4.27 m/s	FORCE (N)	1730 - 2099	2056
	DISPLACEMENT (mm)	32 - 37	35
VELOCITY 6.1 m/s	FORCE (N)	3741 - 4448	3961
	DISPLACEMENT (mm)	33 - 40	37

TEST MEETS SPECIFICATIONS

TECHNICIAN



APPROVED BY

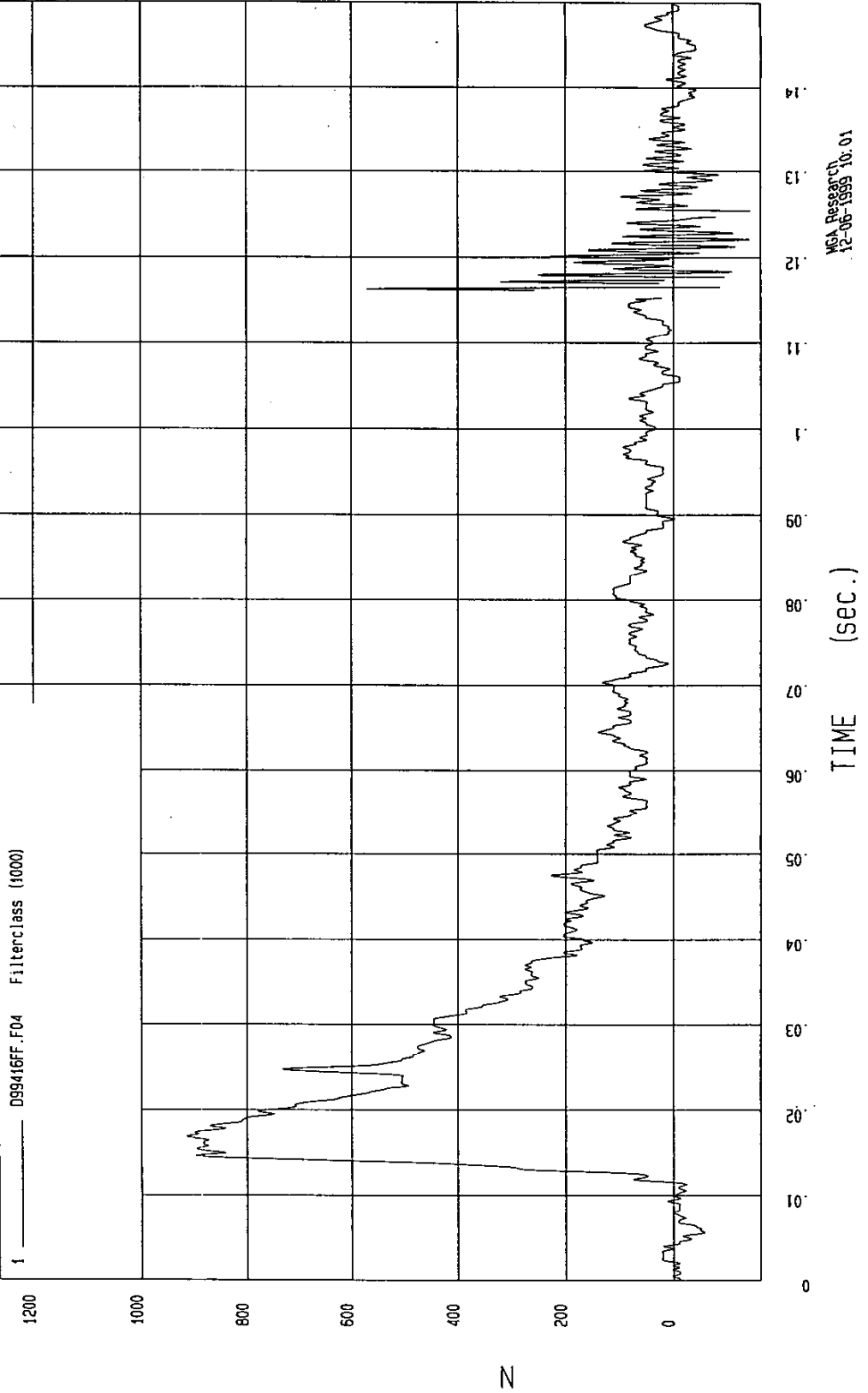


TEST: Dummy Calibration - Dampener Impact TEST DATE: 12-06-1999 - 09:52:48

COMPONENT: Dummy # 271 Velocity: 10 FT/SEC 3.05 M/SEC

Minimum = -1822.58 N at 115. msec Maximum = 913.01 N at 16.9 msec

PEAK FORCE



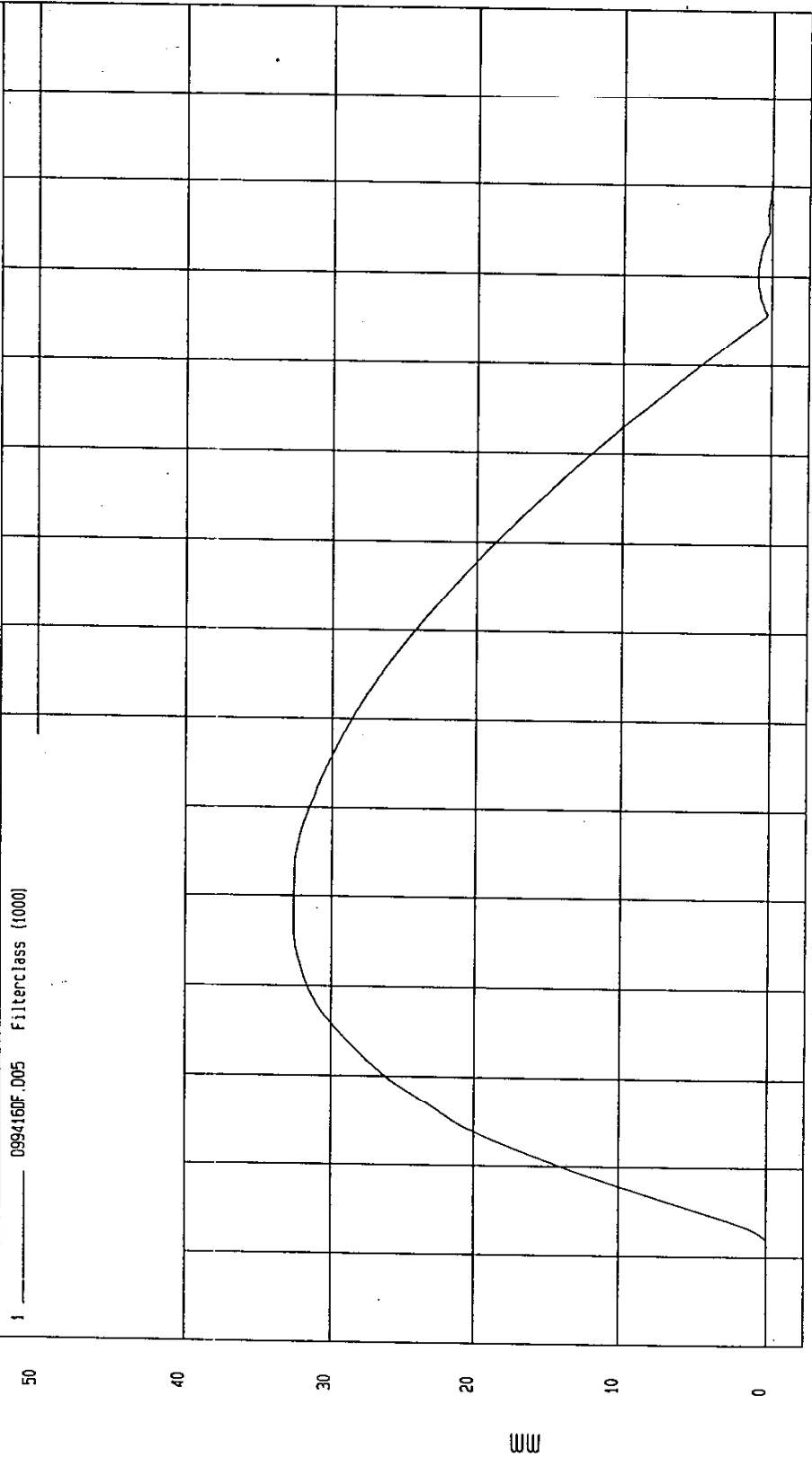
TEST: Dummy Calibration - Dampener Impact TEST DATE: 12-06-1999 - 09:52:48

COMPONENT: Dummy # 271 Velocity: 10 FT/SEC 3.05 M/SEC

Minimum = -3.57E-02 mm at 142. msec Maximum = 32.59 mm at 47.9 msec

PEAK DISPLACEMENT

1 ——— 0994160F.D05 Filterclass (1000)



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12-06-1999 10:01

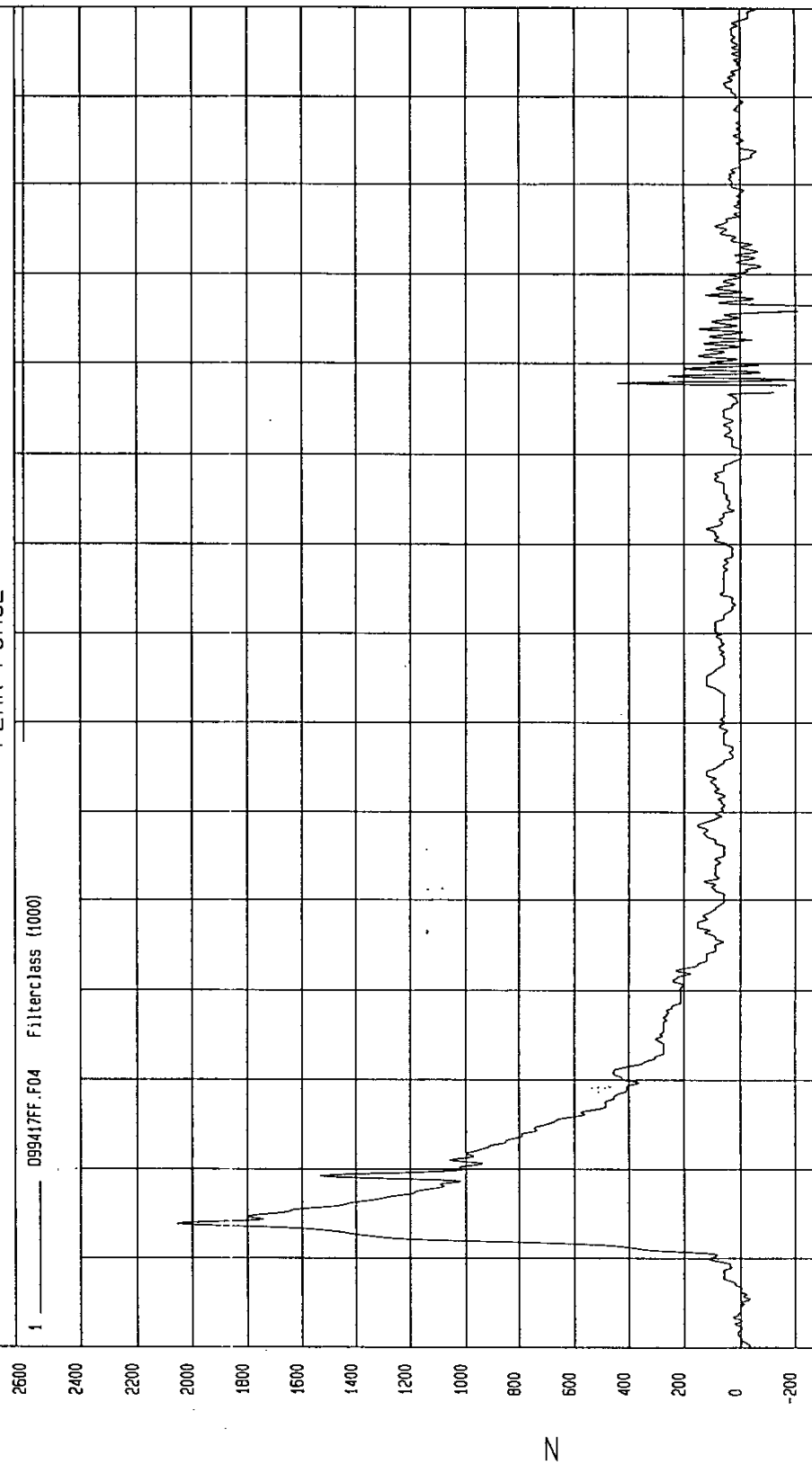
TEST: Dummy Calibration - Dampener Impact TEST DATE: 12-06-1999 - 09:57:27

COMPONENT: Dummy # 271 Velocity: 14 FT/SEC 4.27 M/SEC

Minimum = -1540.21 N at 107. msec Maximum = 2055.51 N at 13.9 msec

PEAK FORCE

1 099417ff.F04 Filterclass (1000)

MGA Research
12-06-1999 10:01

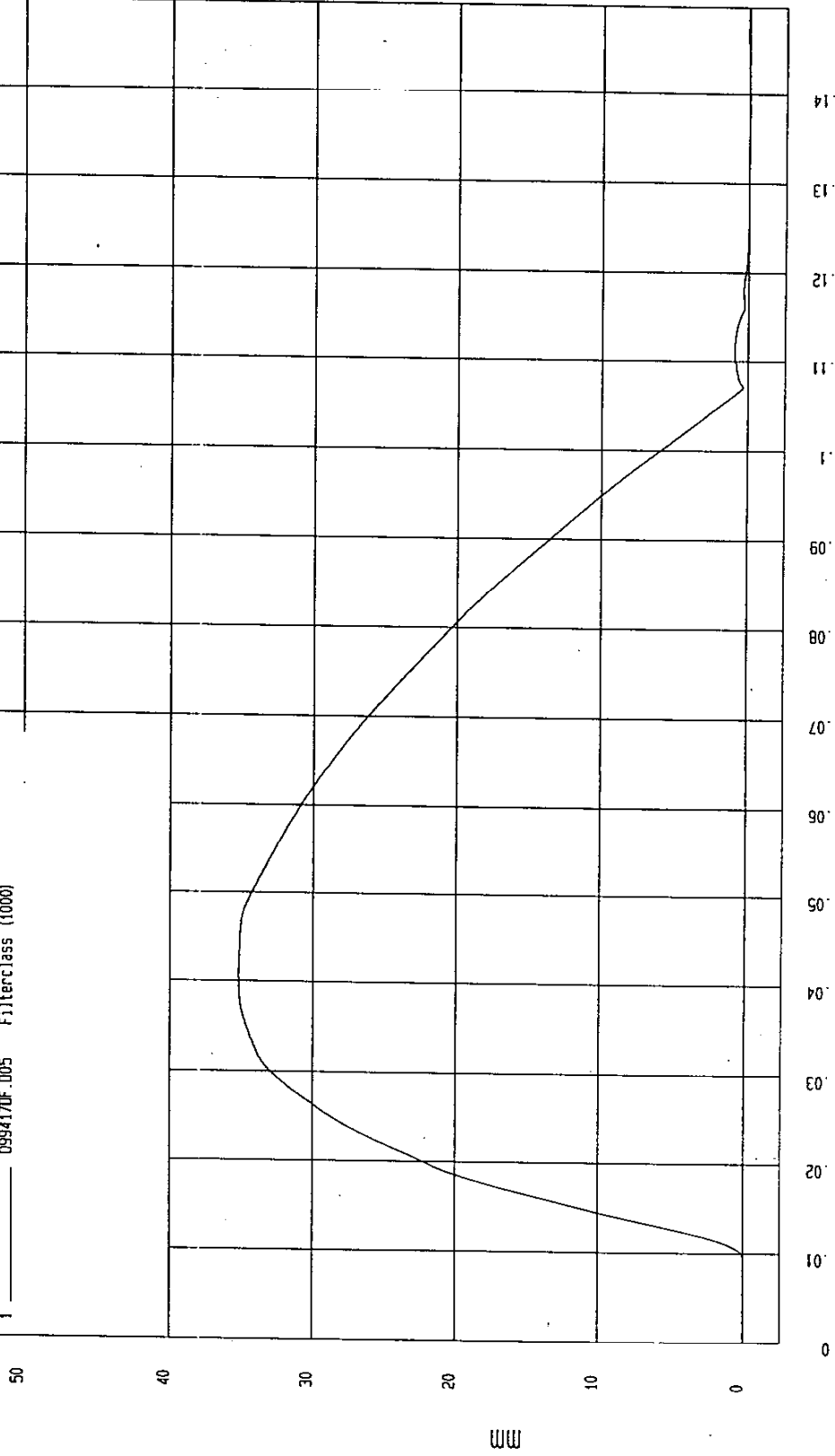
TEST: Dummy Calibration - Dampener Impact TEST DATE: 12-06-1999 - 09:57:27

COMPONENT: Dummy # 271 Velocity: 14 FT/SEC 4.27 M/SEC

Minimum = -4.38E-02 mm at 134. msec Maximum = 35.22 mm at 40.5 msec

PEAK DISPLACEMENT

1 ——— 0994170F.005 Filterclass (1000)



NSA Research
12-06-1999 10:01

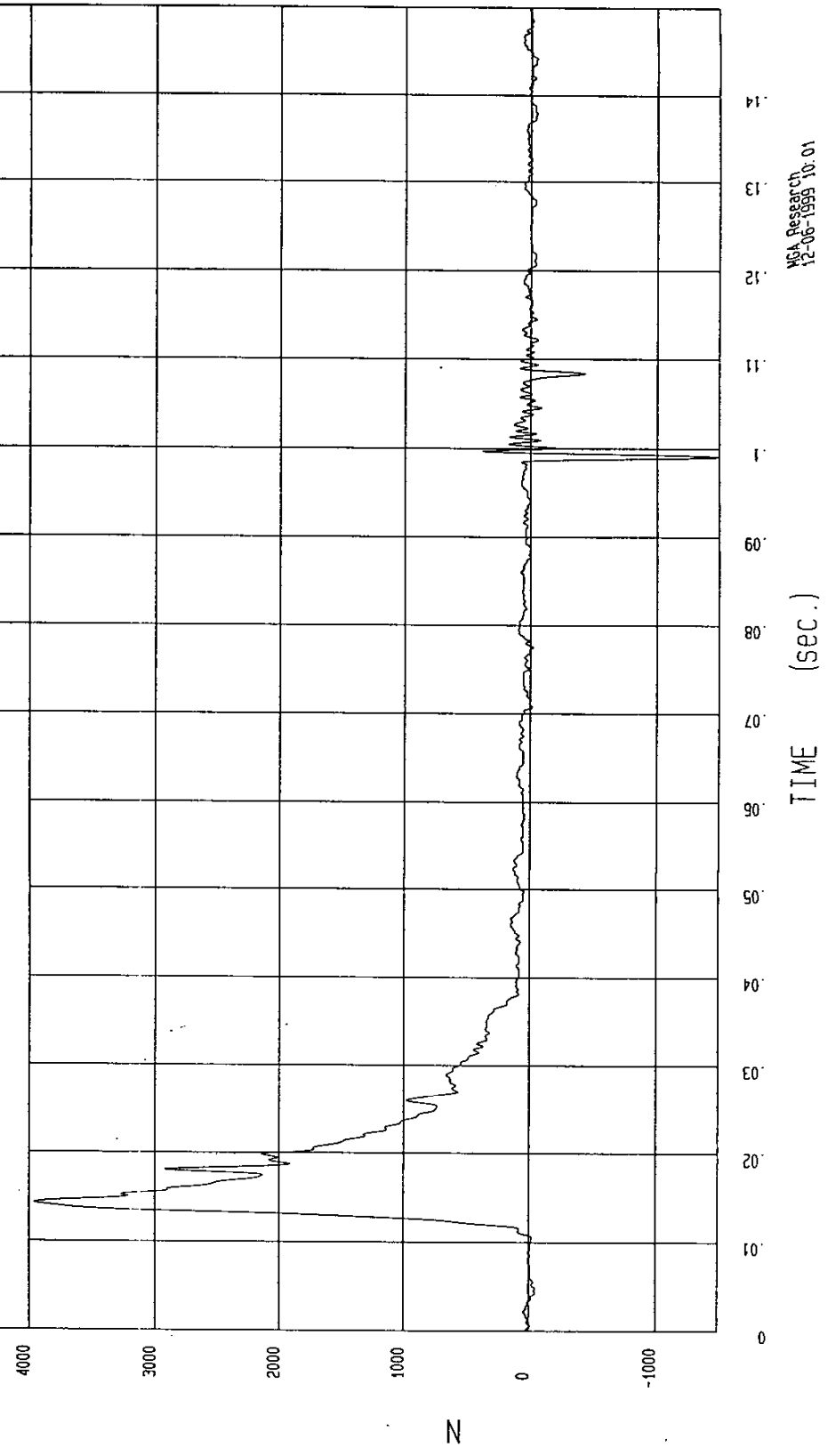
TEST: Dummy Calibration - Dampener Impact TEST DATE: 12-06-1999 - 10:00:33

COMPONENT: Dummy # 271 Velocity: 20 FT/SEC 6.1 M/SEC

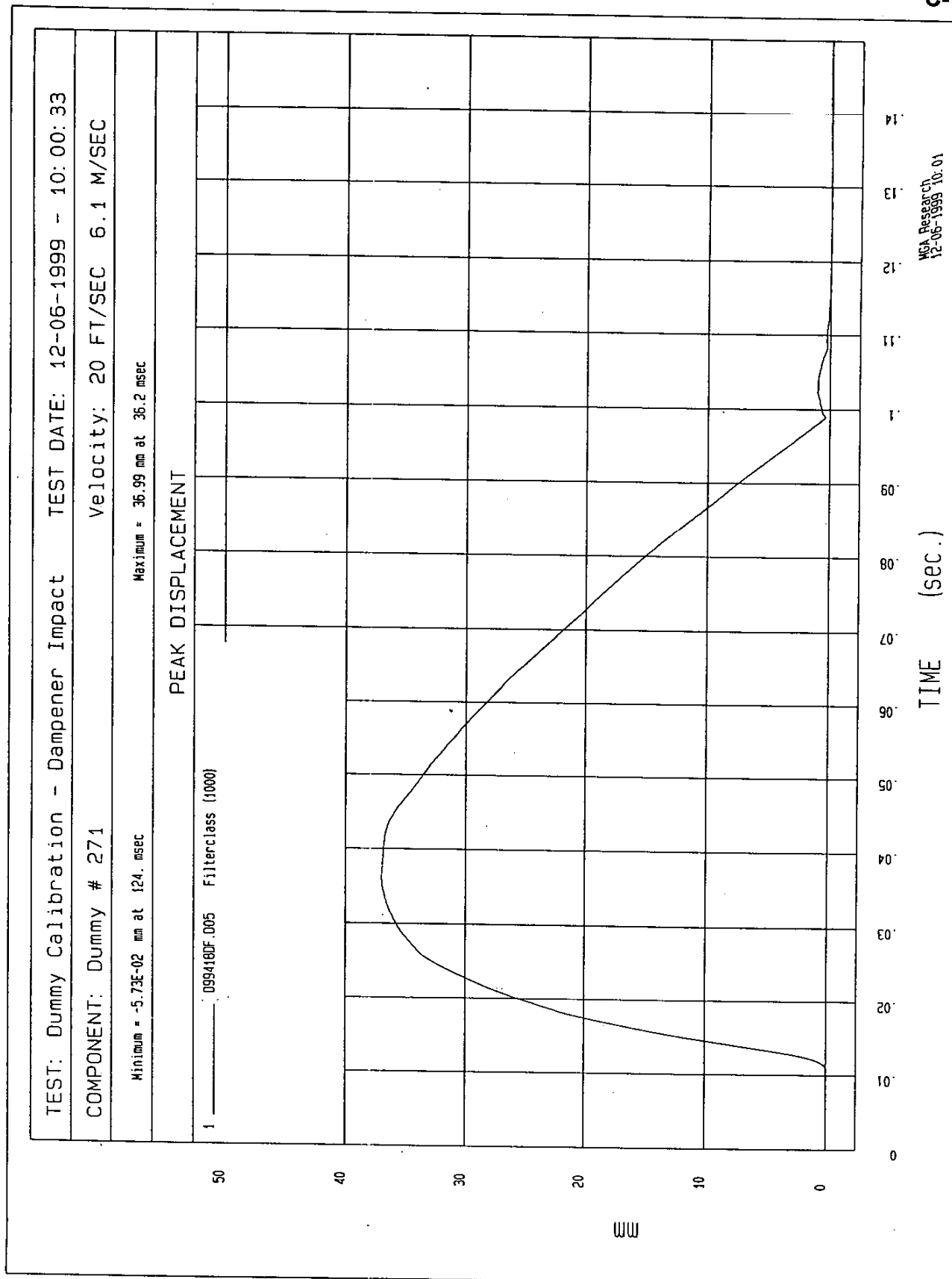
Minimum = -1478.20 N at 99 msec Maximum = 3960.68 N at 14.4 msec

PEAK FORCE

1 _____ D99418FF.F04 Filterclass (1000)



NSA Research
12-06-1999 10:01



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C-14

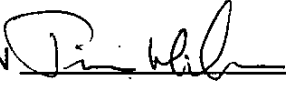
THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 7, 1999DUMMY SERIAL NUMBER: 271TEST NUMBER: D991412

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	28%
PROBE SPEED (m/s)	4.27 - 4.33	4.27
UPPER RIB (g's)	37 - 46 g's	43
LOWER RIB (g's)	37 - 46 g's	43
LOWER SPINE (g's)	15 - 22 g's	20

TEST MEETS SPECIFICATIONS

TECHNICIAN APPROVED BY 

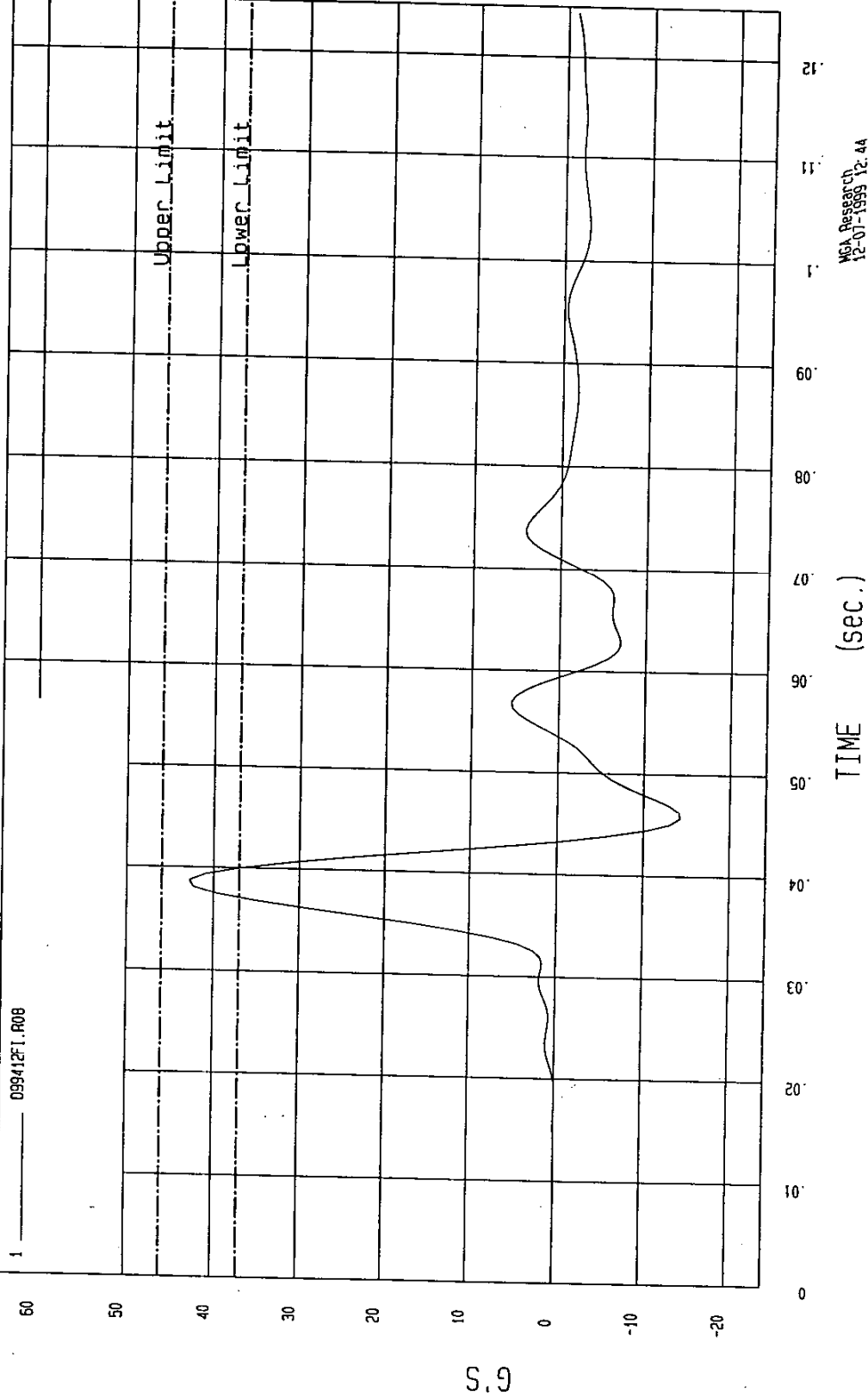
TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-07-1999 - 12:30:37
COMPONENT: Dummy # 271 Velocity: 14.014 FT/SEC 4.27 M/SEC

Minimum = -14.13 G'S at 45.6 msec

Maximum = 42.83 G'S at 38.7 msec

UPPER RIB ACCELERATION

1 099412F1.R08



NCA Research
12-07-1999 12:44

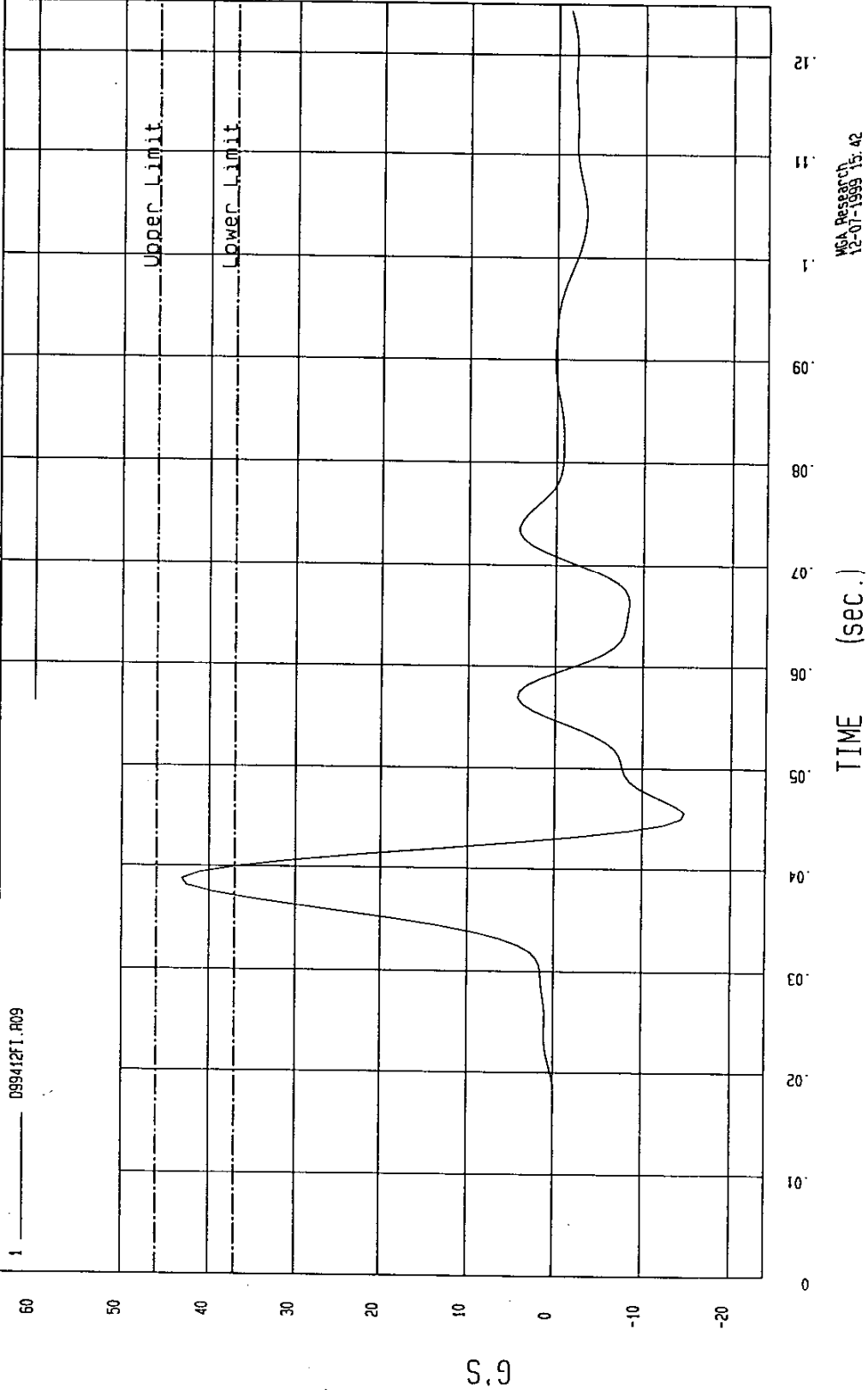
TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-07-1999 - 12:30:37

COMPONENT: Dummy # 271 Velocity: 14.014 FT/SEC 4.27 M/SEC

Minimum = -14.50 G's at 45.6 msec

Maximum = 43.12 G's at 38.7 msec

LOWER RIB ACCELERATION



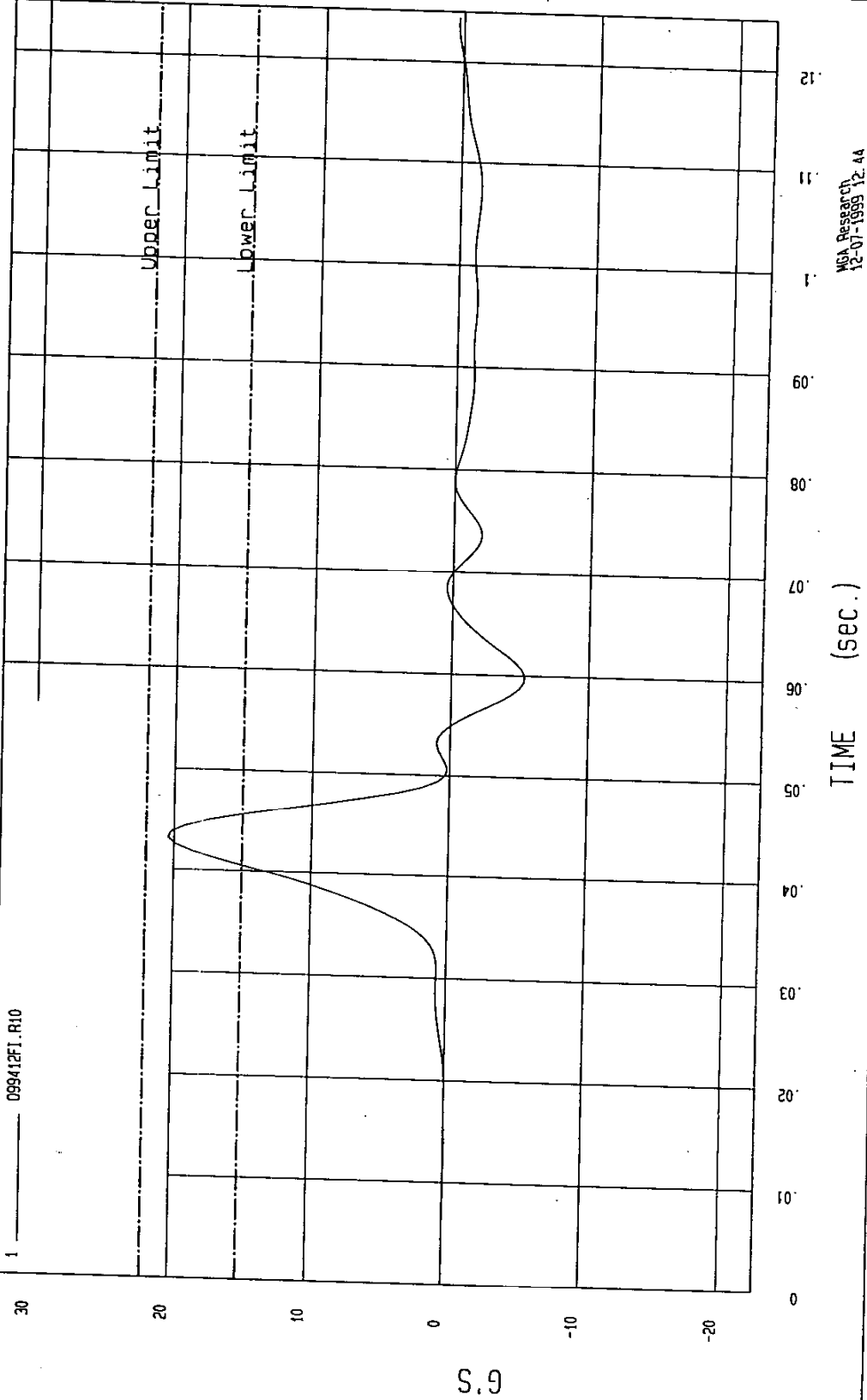
TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-07-1999 - 12:30:37
COMPONENT: Dummy # 271 Velocity: 14.014 FT/SEC 4.27 M/SEC

Minimum = -5.35 G'S at 60 msec

Maximum = 20.43 G'S at 43.1 msec

LOWER SPINE ACCELERATION

1 099412FT.R10



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12-07-1999 12:44

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C-18

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 7, 1999

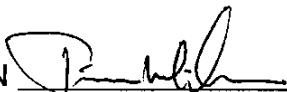
DUMMY SERIAL NUMBER: 271

TEST NUMBER: D991413

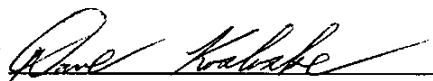
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	28%
PROBE SPEED (m/s)	4.27 - 4.33	4.29
PELVIS ACCELERATION (g's)	40 - 60	43

TEST MEETS SPECIFICATIONS

TECHNICIAN



APPROVED BY

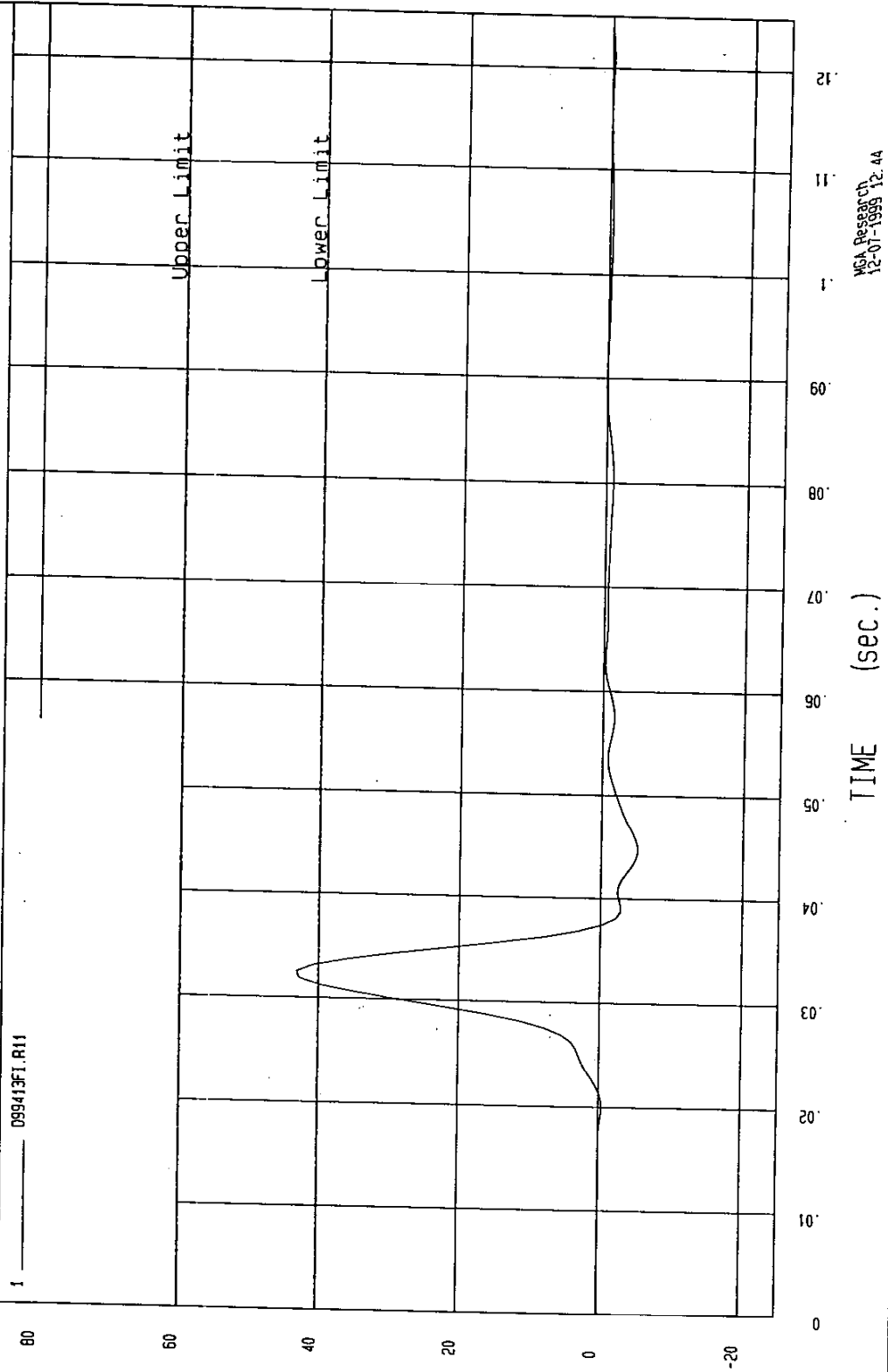


TEST: Dummy Calibration - Pelvis Impact TEST DATE: 12-07-1999 - 12:43:28

COMPONENT: Dummy # 271 Velocity: 14.065 FT/SEC 4.29 M/SEC

Minimum = -7.18 G'S at 196. msec Maximum = 43.16 G'S at 32.5 msec

PELVIS ACCELERATION



MGA Research
12-01-1999 12:44

MGA RESEARCH CORPORATION

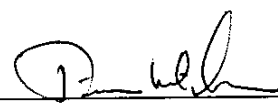
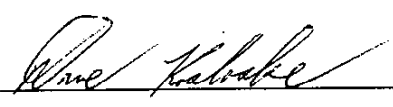
ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

SIDE IMPACT DUMMY (SID)

DATE: December 6, 1999DUMMY SERIAL NUMBER: 271TEST NUMBER: D991414

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	26%
FORCE @ 12.7 mm	104 - 162	141
FORCE @ 19.0 mm	163 - 222	191
FORCE @ 25.4 mm	222 - 280	254
FORCE @ 33 mm	325 - 391	336

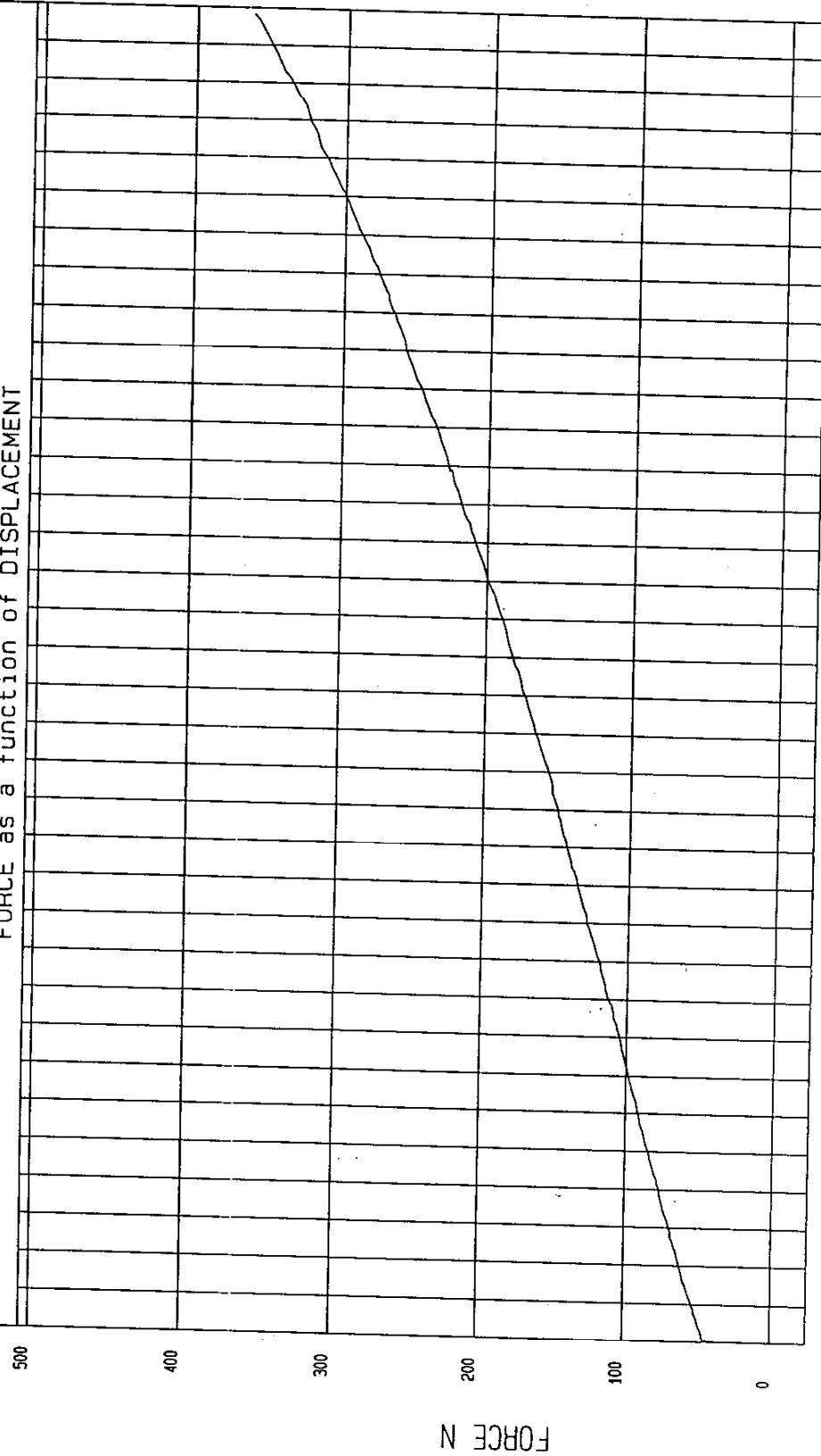
TEST MEETS SPECIFICATIONS

TECHNICIAN APPROVED BY 

TEST: DUMMY CALIBRATION - ABDOMEN COMPRESSION TEST DATE: 12-06-1999 - 12:33:51

COMPONENT: DUMMY # 271

FORCE as a function of DISPLACEMENT



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12-06-1999 13:39

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C-22

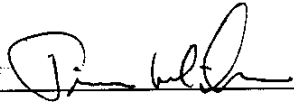
LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: December 6, 1999DUMMY SERIAL NUMBER: 271TEST NUMBER: D991415

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	26%
FORCE @ 0°	0 - 26.7	0
FORCE @ 20°	97.9 - 151.2	121.5
FORCE @ 30°	151.2 - 204.6	173.3
FORCE @ 40°	204.6 - 258.0	217.1
RETURN ANGLE	12° maximum	3°

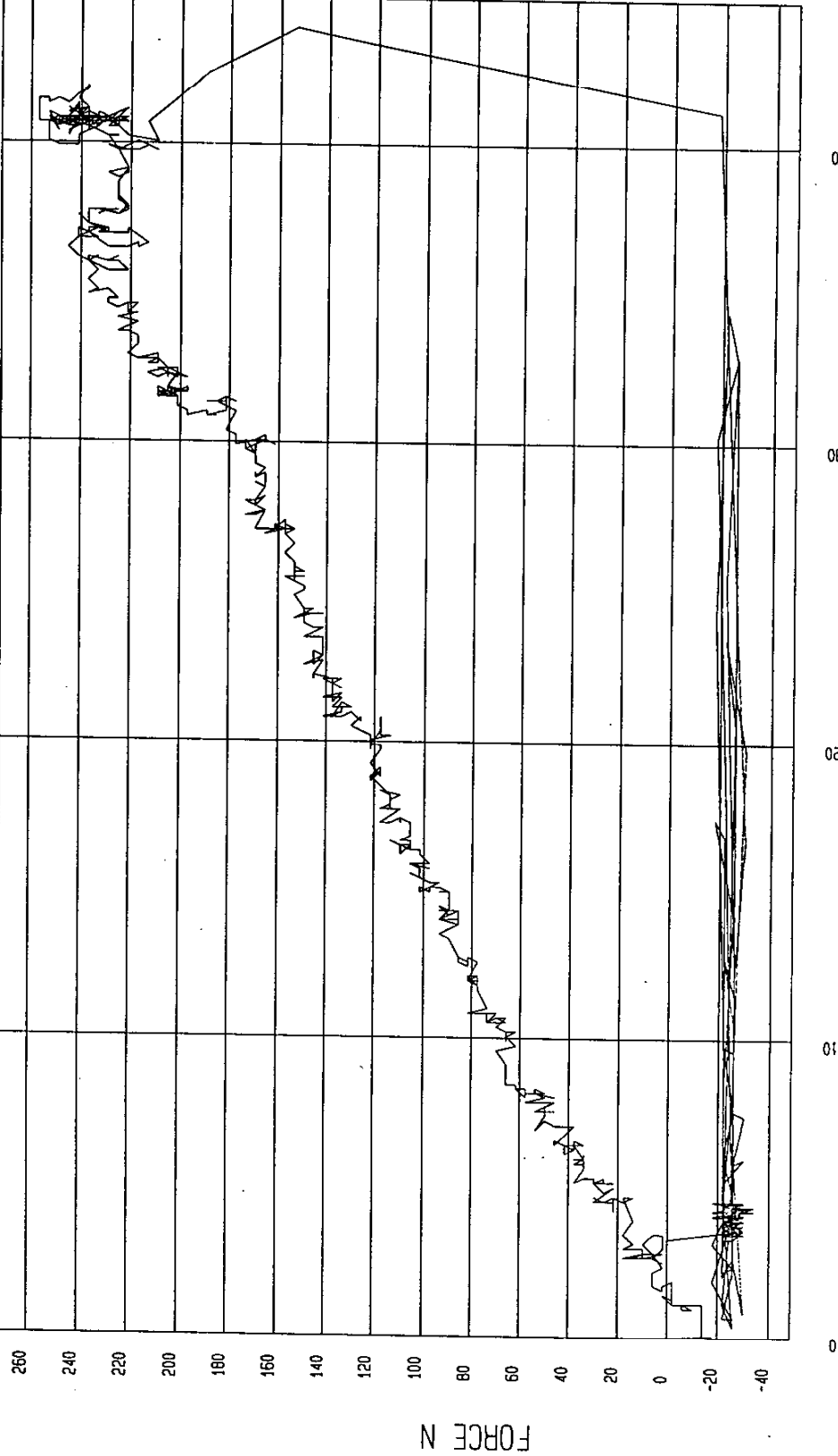
TEST MEETS SPECIFICATIONS

TECHNICIAN APPROVED BY 

TEST: DUMMY CALIBRATION - LUMBAR FLEXION TEST DATE: 12-06-1999 - 11:34:02

COMPONENT: DUMMY # 271

FORCE as a function of TORSO ROTATION



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12-06-1999 13:39

PRE-TEST CERTIFICATION DATA

C-24

Passenger Dummy Serial Number: 272

Calibration Test Results Summary

C-25

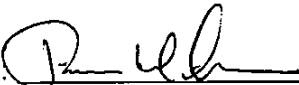
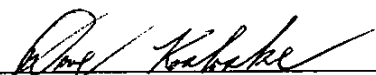
Passenger Dummy Serial Number: 272

Pre-Test Calibration

External Dimensions:	The dummy passed all external dimension requirements.
Thorax Impact Test:	The thorax passed all impact test requirements.
Pelvic Impact Test:	The pelvis passed all impact test requirements.
Abdominal Compression Test:	The abdomen passed all compression test requirements.
Lumbar Flexion Test:	The lumbar passed all flexion test requirements.

SIDE IMPACT DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA^{C-26}DUMMY SERIAL NUMBER: 272DATE OF VERIFICATION: December 7, 1999

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height (mm)	889 - 909	895
RH - Rib Height (mm)	501 - 521	513
HP - Hip Pivot Height (mm)	99 ref.	99
RD - Rib From Back Line (mm)	229 - 241	236
KV - Knee Pivot From Back Line (mm)	511 - 526	523
SW - Knee Pivot to Floor (mm)	490 - 505	493
HW - Hip Width (mm)	356 - 391	374

MEASUREMENTS BY: APPROVED BY: 

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C-27

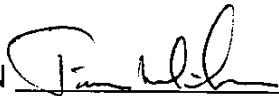
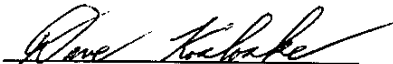
HEAD DROP TEST

SIDE IMPACT DUMMY (SID)

DATE: December 6, 1999DUMMY NUMBER: 272TEST NUMBER: D991425

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	18.9° - 25.5° C	21.0°
RELATIVE HUMIDITY	10 - 70%	27%
PEAK RESULTANT ACCELERATION	210 - 260 g's	233
PEAK LATERAL ACCELERATION	< 10 g's	-3
TIME ABOVE 100 G.	0.9 - 1.5 msec.	1.3

TEST MEETS SPECIFICATIONS

TECHNICIAN APPROVED BY 

TEST: Dummy Calibration - Head Drop

TEST DATE: 12-06-1999 - 14:24:53

COMPONENT: Dummy # 272

Minimum = 5.81E-02 G'S at .7 msec

Maximum = 233.18 G'S at 31.6 msec

PEAK RESULTANT ACCELERATION

1 ----- 099421AV.A01 Filterclass (1000)

300

280

260

240

220

200

180

160

140

120

100

80

60

40

20

0

S.G

0

0.01

0.02

0.03

0.04

0.05

TIME (sec.)

MCA Research
12-06-1999 14:30

TEST: Dummy Calibration - Head Drop TEST DATE: 12-06-1999 - 14:24:53

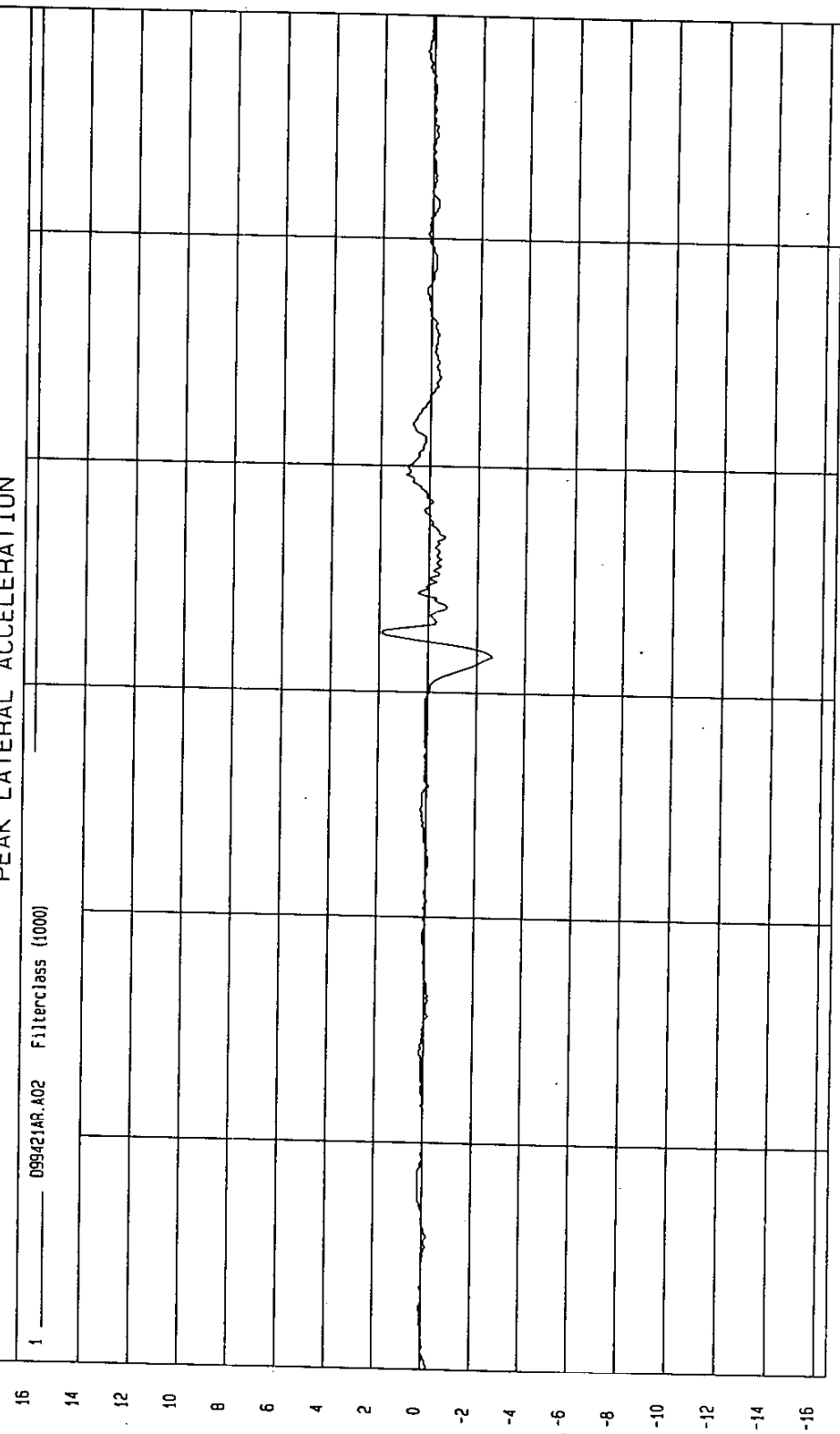
COMPONENT: Dummy # 272

Minimum = -2.64 G'S at 31.6 msec

Maximum = 1.90 G'S at 32.6 msec

PEAK LATERAL ACCELERATION

1 _____ 099421AR.A02 Filterclass (1000)



0 10 20 30 40 50

TIME (sec.)

MEA Research
12-06-1999 14:30

G.S

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THORACIC SHOCK ABSORBER TEST
SIDE IMPACT DUMMY (SID)

DATE: December 6, 1999

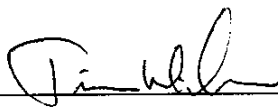
DUMMY SERIAL NUMBER: 272

TEST NUMBER: D991426/7/8

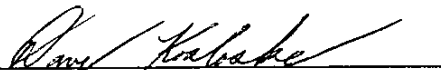
TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)		18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)		10 - 70	27%
VELOCITY 3.05 m/s	FORCE (N)	836 - 1125	896
	DISPLACEMENT (mm)	30 - 35	33
VELOCITY 4.27 m/s	FORCE (N)	1730 - 2099	1756
	DISPLACEMENT (mm)	32 - 37	36
VELOCITY 6.1 m/s	FORCE (N)	3741 - 4448	4031
	DISPLACEMENT (mm)	33 - 40	38

TEST MEETS SPECIFICATIONS

TECHNICIAN



APPROVED BY



TEST: Dummy Calibration - Dampener Impact TEST DATE: 12-06-1999 - 10:16:37

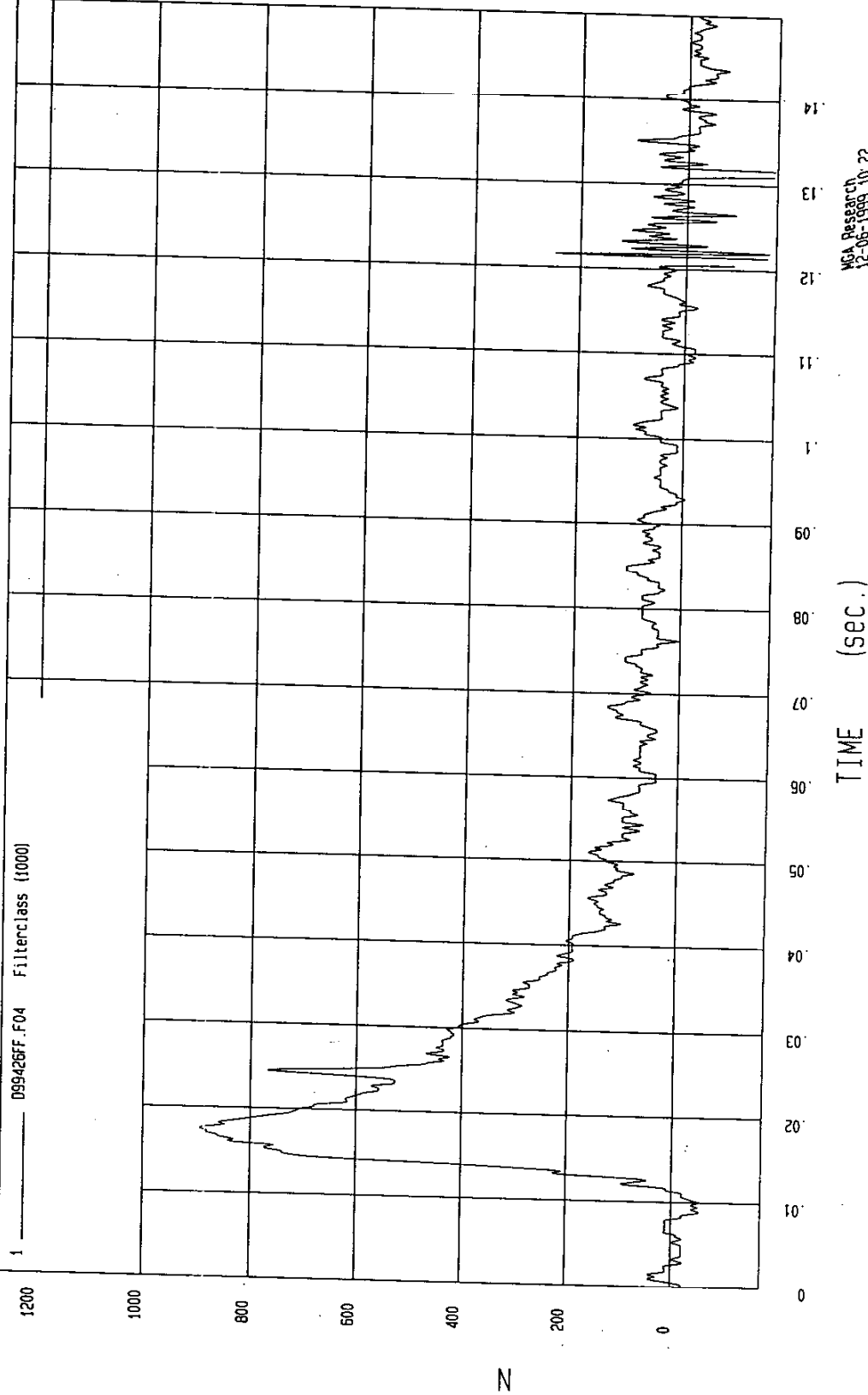
COMPONENT: Dummy # 272 Velocity: 10 FT/SEC 3.05 M/SEC

Minimum = -1384.2 N at 121 msec

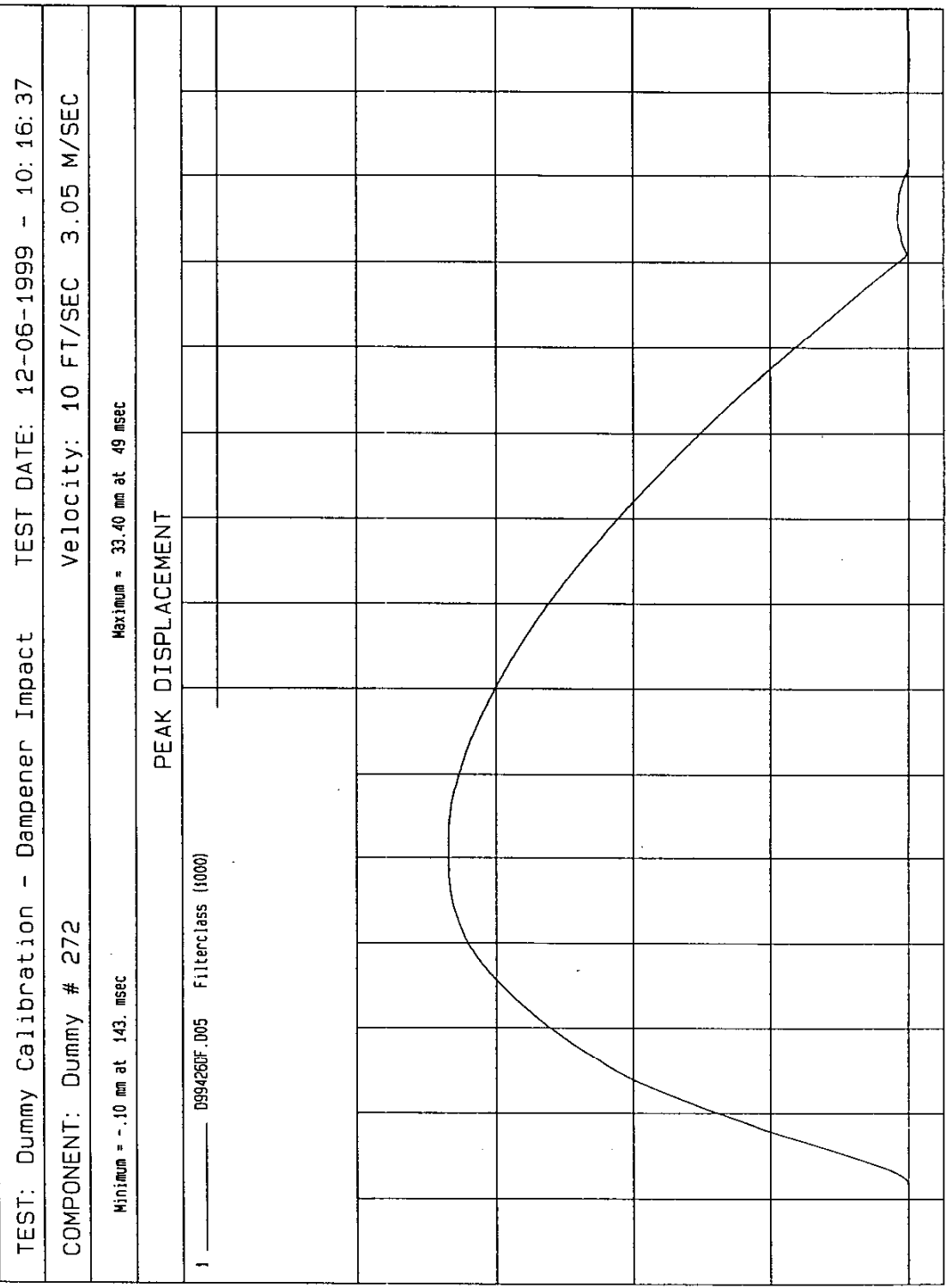
Maximum = 895.57 N at 17.5 msec

PEAK FORCE

1 ——— D99426F.F04 Filterclass (1000)



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12-06-1999 10:22



MCA Research
12-06-1999 10:23

TEST: Dummy Calibration - Dampener Impact TEST DATE: 12-06-1999 - 10:19:30

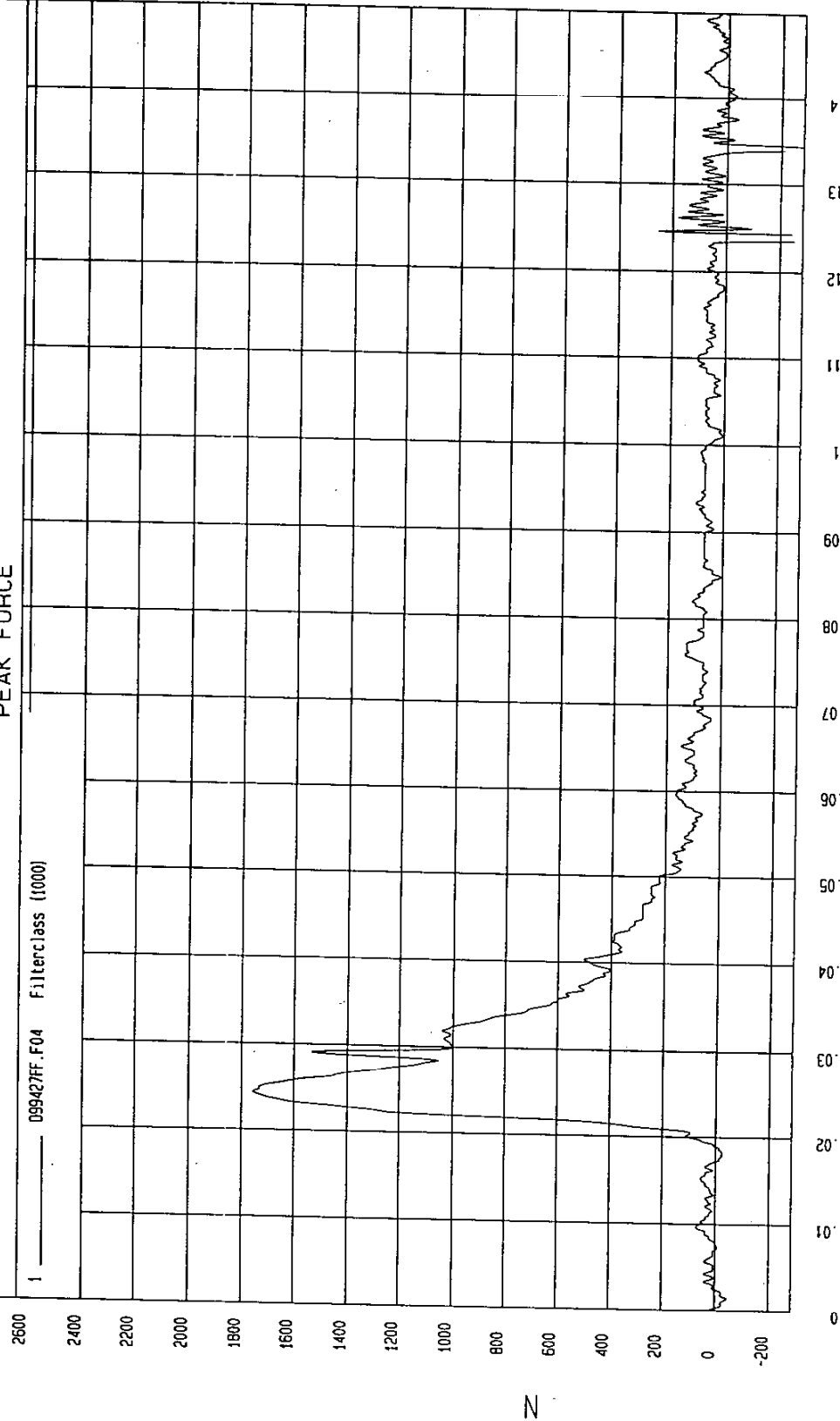
COMPONENT: Dummy # 272 Velocity: 14 FT/SEC 4.27 M/SEC

Minimum = -1333.97 N at 123. msec

Maximum = 1755.97 N at 24.4 msec

PEAK FORCE

1 — 099427FF.F04 Filterclass (1000)

MCA Research
12-06-1999 10:23

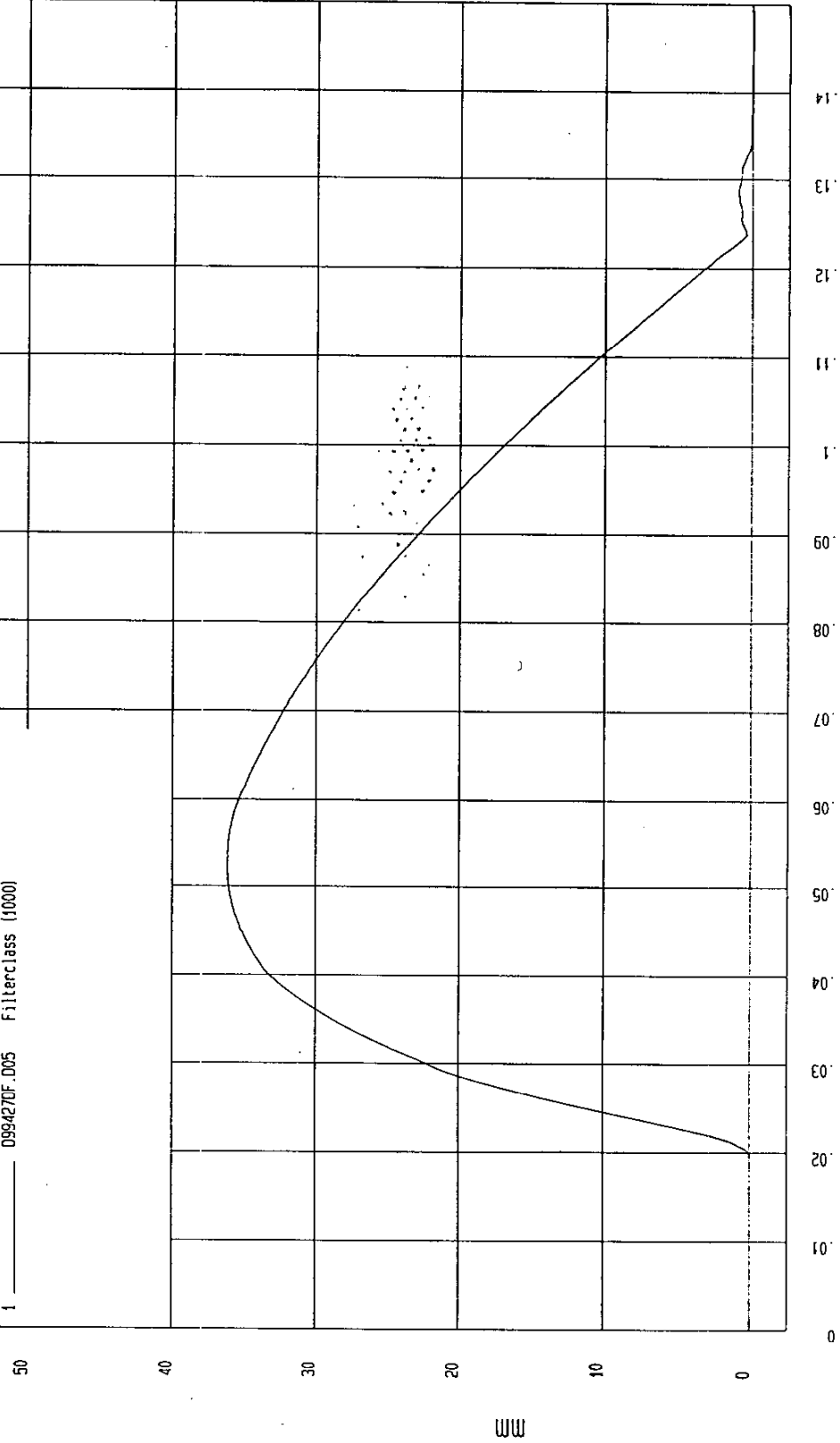
TEST: Dummy Calibration - Dampener Impact TEST DATE: 12-06-1999 - 10:19:30

COMPONENT: Dummy # 272 Velocity: 14 FT/SEC 4.27 M/SEC

Minimum = -5.94E-02 mm at 147. msec Maximum = 36.10 mm at 52.3 msec

PEAK DISPLACEMENT

1 0994270F.D05 Filterclass (1000)



MGA Research
12-06-1999 10:23

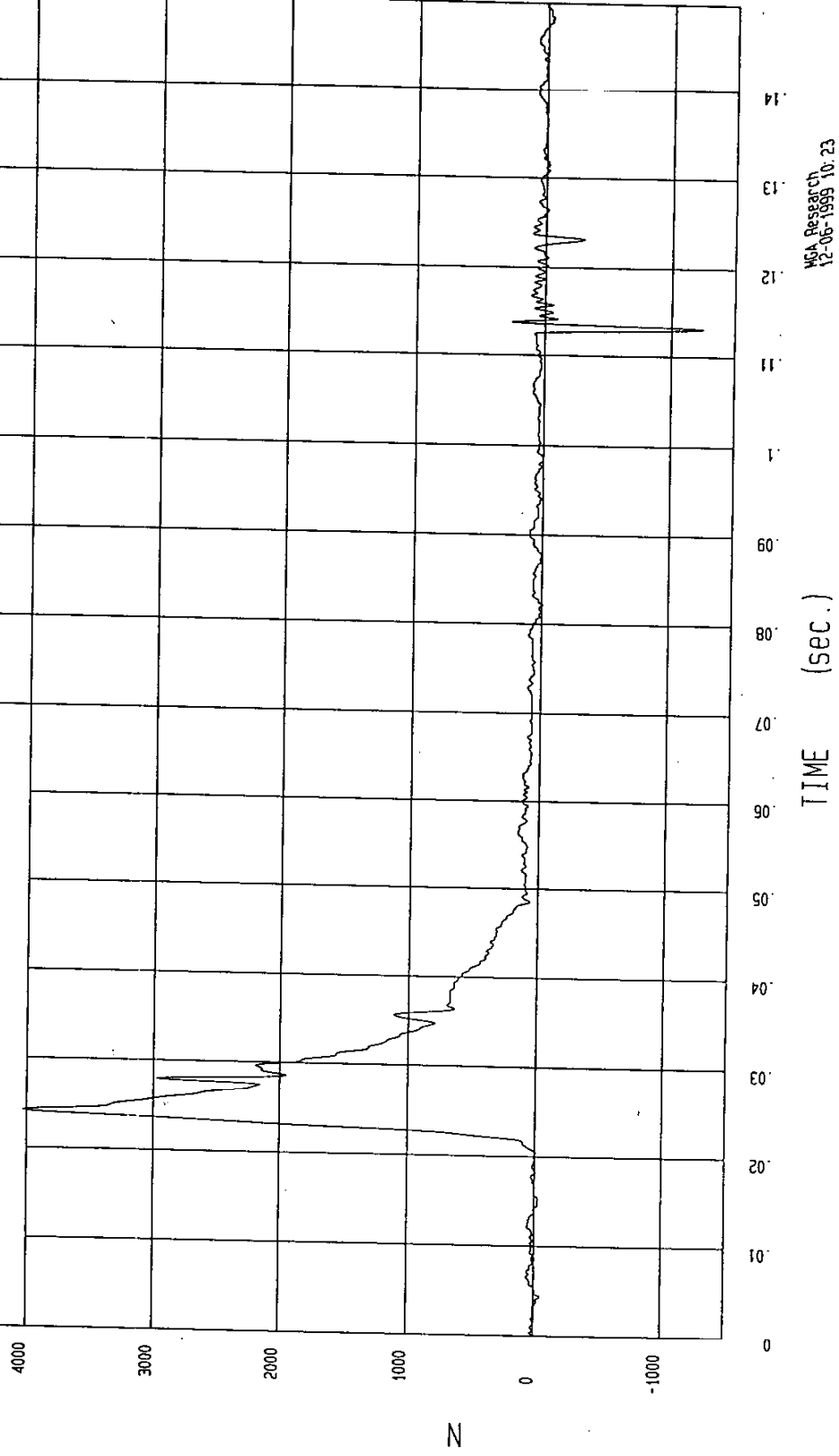
TEST: Dummy Calibration - Dampener Impact TEST DATE: 12-06-1999 - 10:22:15

COMPONENT: Dummy # 272 Velocity: 20 FT/SEC 6.1 M/SEC

Minimum = -1244.22 N at 113. msec Maximum = 4031.39 N at 24.2 msec

PEAK FORCE

1 ——— D99428FF.F04 Filterclass (1000)



MSA Research
12-06-1999 10:23

TEST: Dummy Calibration - Dampener Impact TEST DATE: 12-06-1999 - 10:22:15

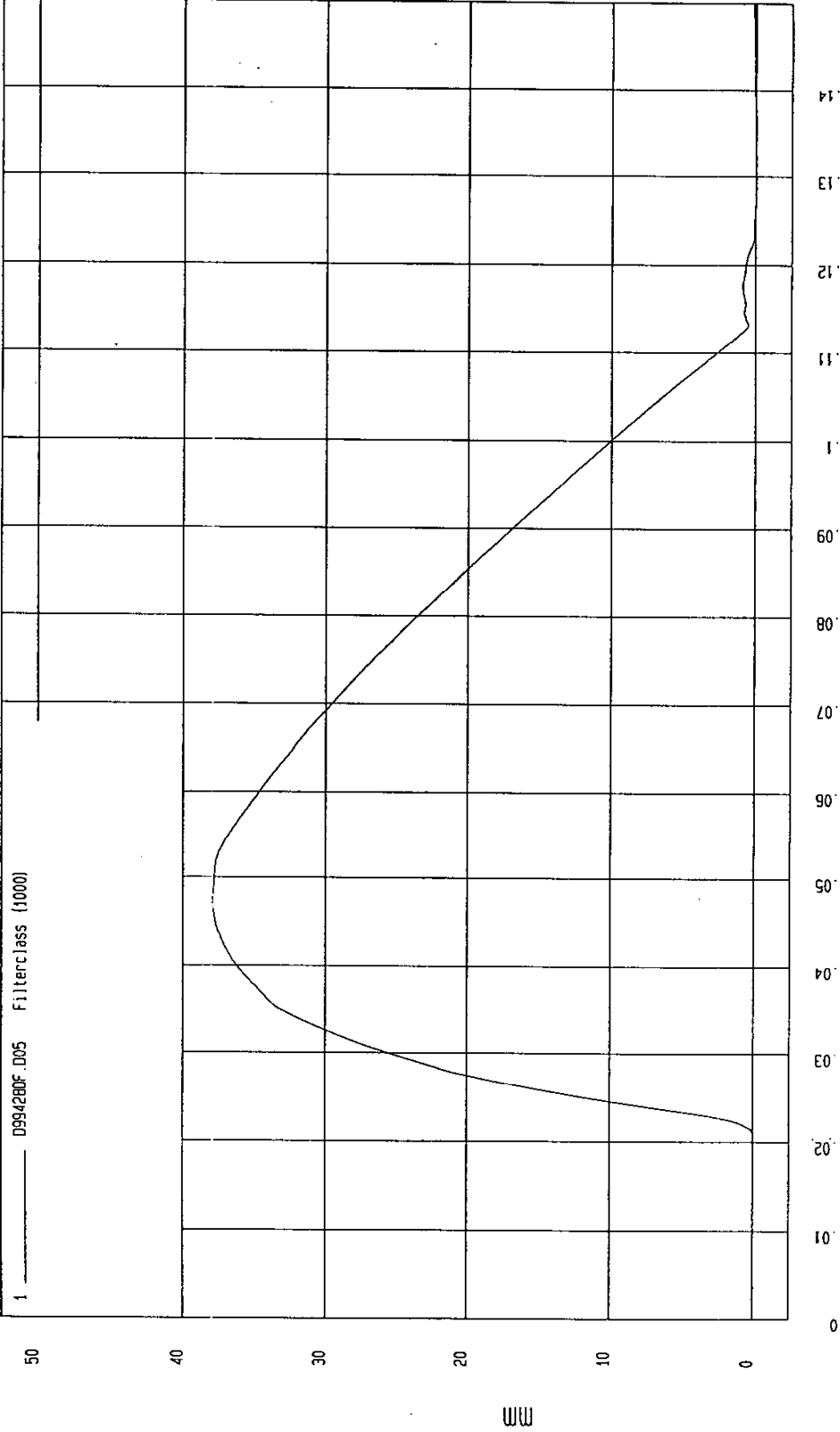
COMPONENT: Dummy # 272 Velocity: 20 FT/SEC 6.1 M/SEC

Minimum = -7.37E-02 mm at 135. msec

Maximum = 37.94 mm at 47.2 msec

PEAK DISPLACEMENT

1 ——— D994280F.D05 Filterclass (1000)



MCA Research
12-06-1999 10:23

MGA RESEARCH CORPORATION

C-37

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 7, 1999

DUMMY SERIAL NUMBER: 272 TEST NUMBER: D991422

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	28%
PROBE SPEED (m/s)	4.27 - 4.33	4.29
UPPER RIB (g's)	37 - 46 g's	42
LOWER RIB (g's)	37 - 46 g's	39
LOWER SPINE (g's)	15 - 22 g's	21

TEST MEETS SPECIFICATIONS

TECHNICIAN

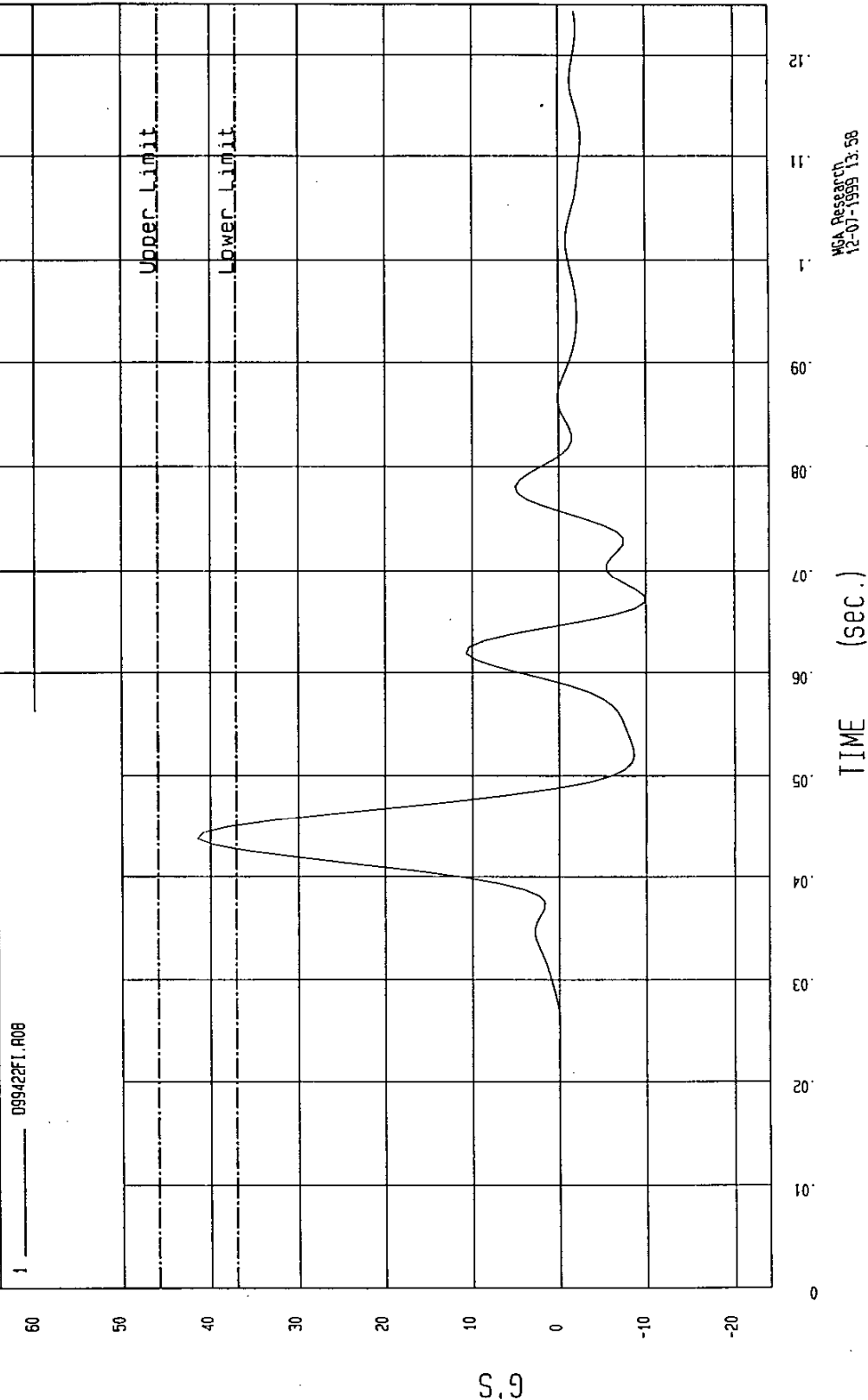
[Signature]

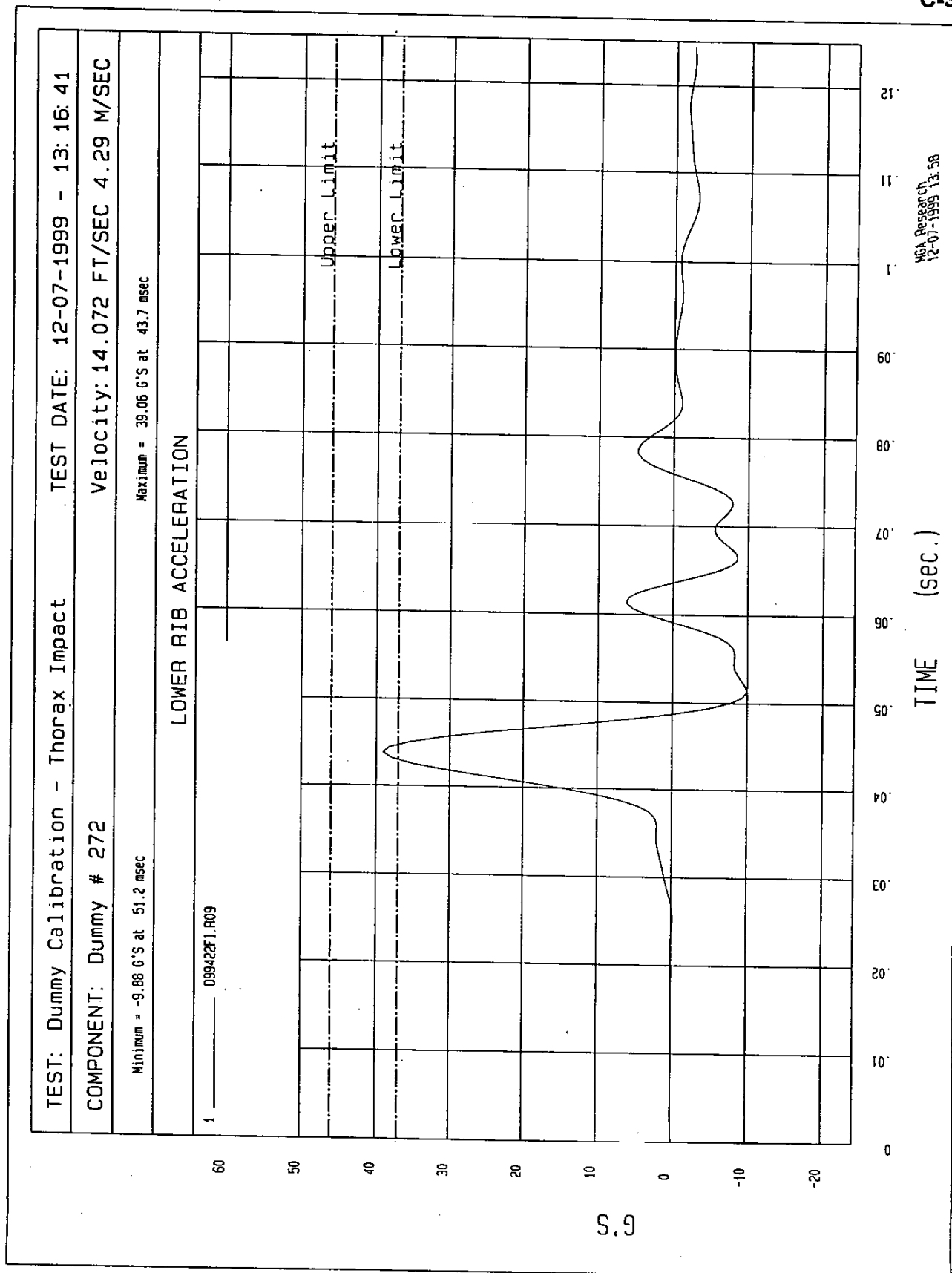
APPROVED BY

[Signature]

TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-07-1999 - 13:16:41
COMPONENT: Dummy # 272 Velocity: 14.072 FT/SEC 4.29 M/SEC
Minimum = -9.88 G'S at 66.8 msec Maximum = 41.52 G'S at 43.7 msec

UPPER RIB ACCELERATION





TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-07-1999 - 13:18:00

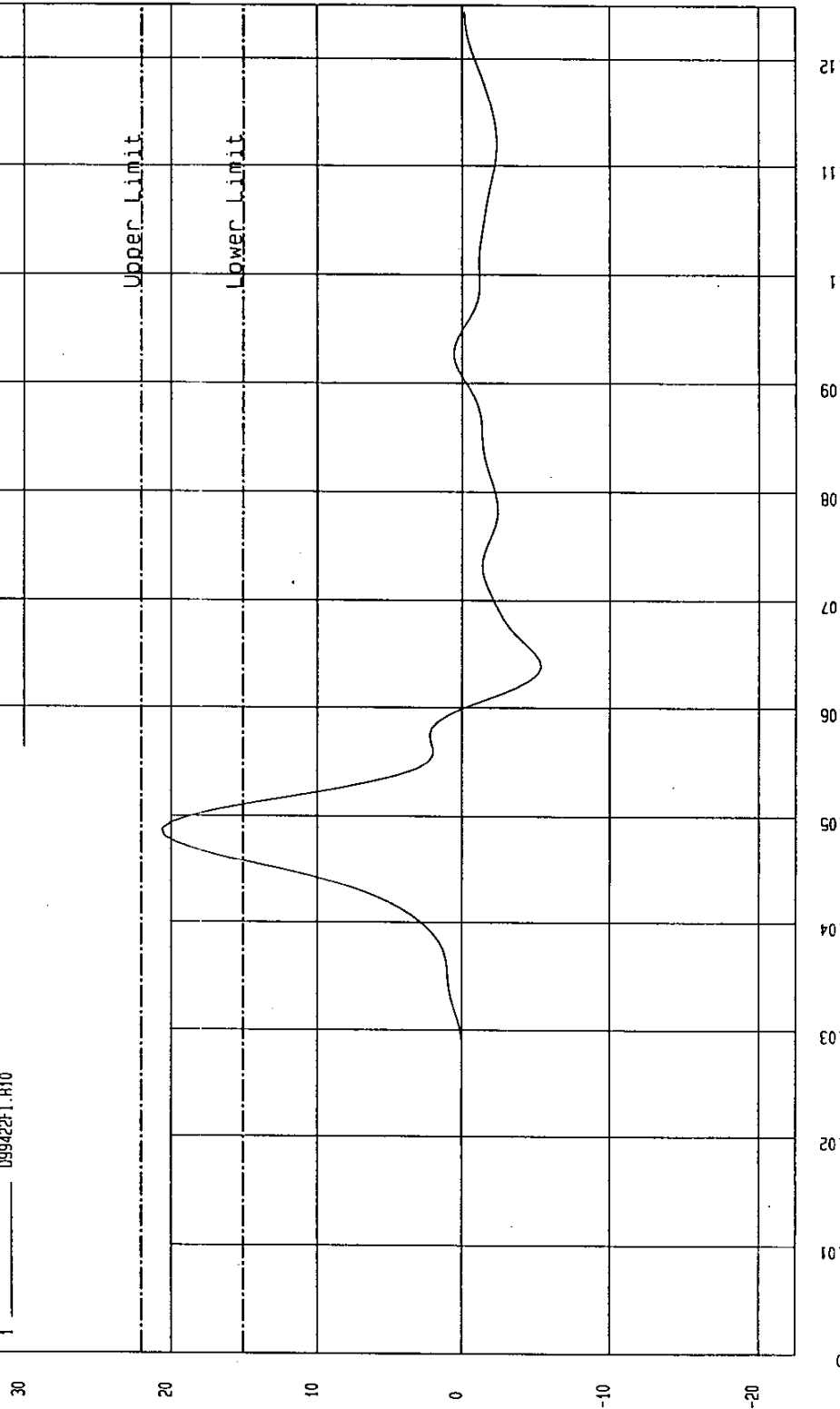
COMPONENT: Dummy # 272 Velocity: 14.072 FT/SEC 4.29 M/SEC

Minimum = -5.35 G'S at 63.7 msec

Maximum = 20.62 G'S at 48.7 msec

LOWER SPINE ACCELERATION

1 _____ D99422F1.R10

VCA Research
12-01-1999 13:58

MGA RESEARCH CORPORATION

C-41

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 7, 1999

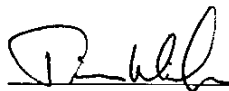
DUMMY SERIAL NUMBER: 272

TEST NUMBER: D991423

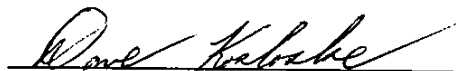
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	28%
PROBE SPEED (m/s)	4.27 - 4.33	4.29
PELVIS ACCELERATION (g's)	40 - 60	40

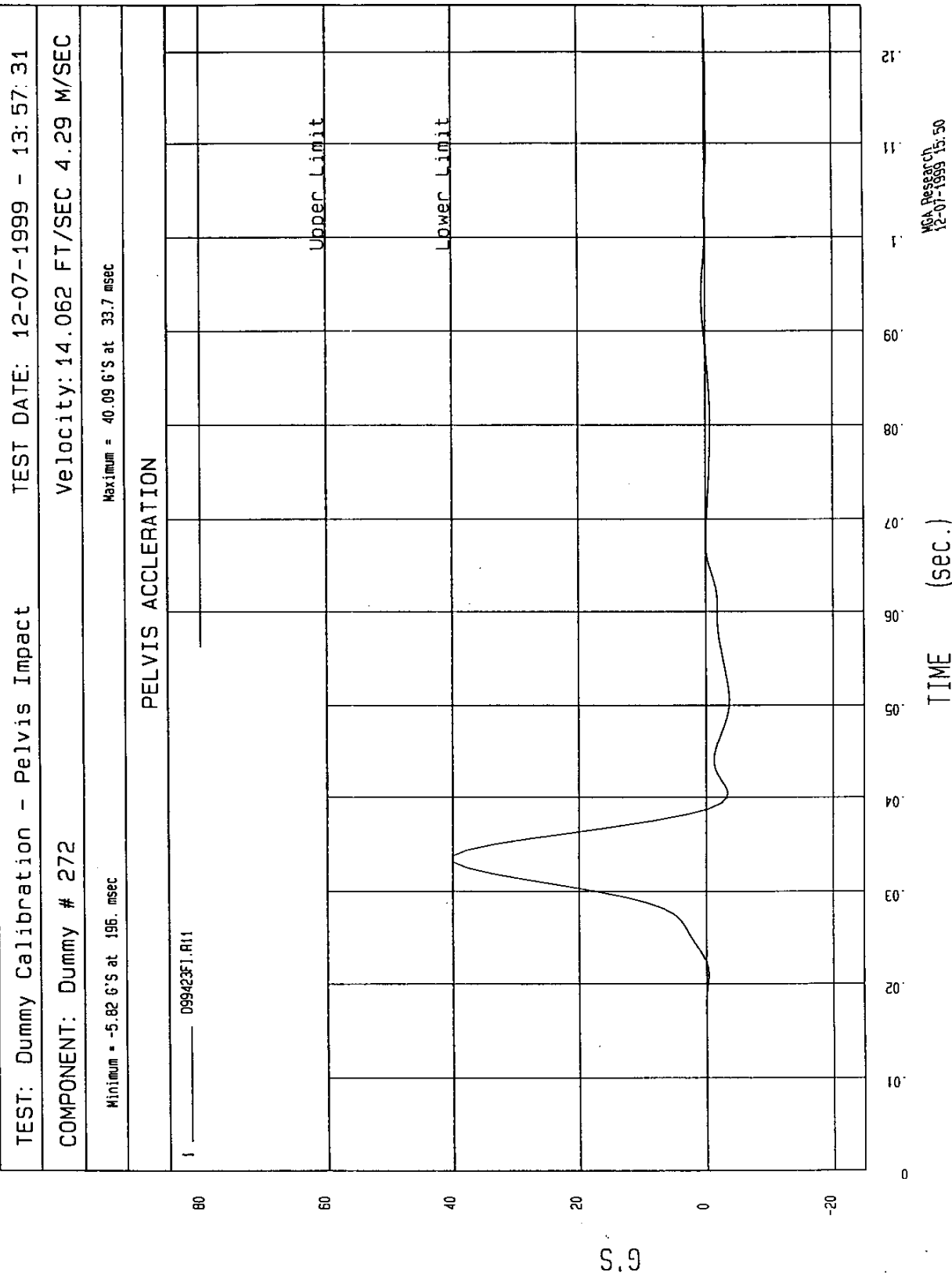
TEST MEETS SPECIFICATIONS

TECHNICIAN



APPROVED BY





MGA RESEARCH CORPORATION
ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)
SIDE IMPACT DUMMY (SID)

DATE: December 6, 1999

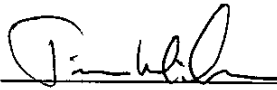
DUMMY SERIAL NUMBER: 272

TEST NUMBER: D991424

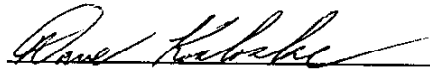
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	27%
FORCE @ 12.7 mm	104 - 162	147
FORCE @ 19.0 mm	163 - 222	204
FORCE @ 25.4 mm	222 - 280	269
FORCE @ 33 mm	325 - 391	368

TEST MEETS SPECIFICATIONS

TECHNICIAN



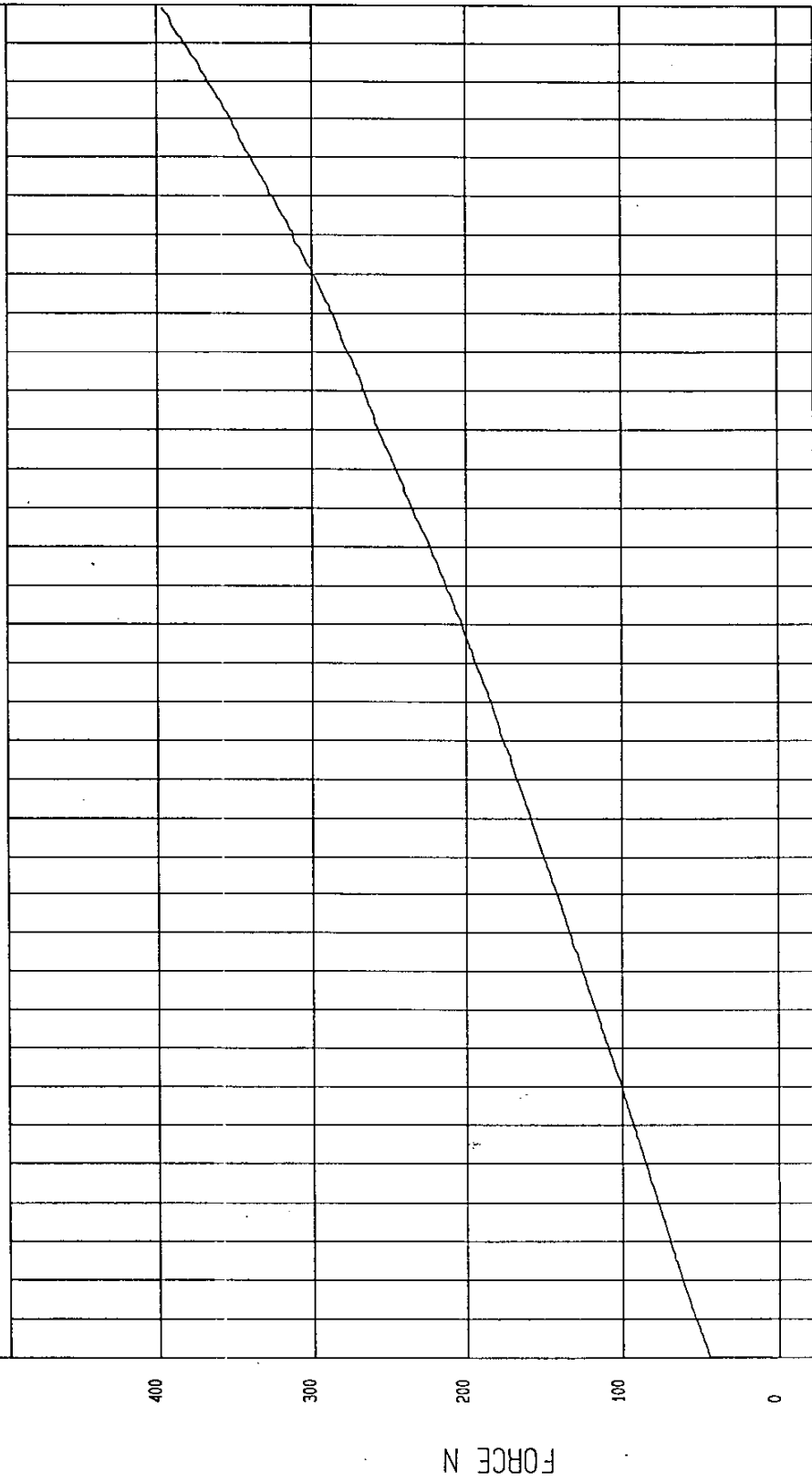
APPROVED BY



TEST: DUMMY CALIBRATION - ABDOMEN COMPRESSION TEST DATE: 12-06-1999 - 13:26:26

COMPONENT: DUMMY # 272

FORCE as a function of DISPLACEMENT



MECA Research
12-06-1999 13:39

DISPLACEMENT mm

FORCE N

MGA RESEARCH CORPORATION

C-45

LUMBAR FLEXION TEST

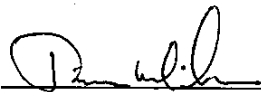
SIDE IMPACT DUMMY (SID)

DATE: December 6, 1999DUMMY SERIAL NUMBER: 272TEST NUMBER: D991425

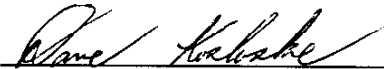
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	26%
FORCE @ 0°	0 - 26.7	0
FORCE @ 20°	97.9 - 151.2	119.2
FORCE @ 30°	151.2 - 204.6	175.0
FORCE @ 40°	204.6 - 258.0	250.7
RETURN ANGLE	12° maximum	4°

TEST MEETS SPECIFICATIONS

TECHNICIAN



APPROVED BY



TEST: DUMMY CALIBRATION - LUMBAR FLEXION TEST DATE: 12-06-1999 - 12:14:53

COMPONENT: DUMMY # 272

FORCE as a function of TORSO ROTATION



MGA Research
12-06-1999 13:39

POST-TEST CERTIFICATION DATA

C-47

Driver Dummy Serial Number: 271

Calibration Test Results Summary

C-48

Driver Dummy Serial Number: 271

Post-Test Calibration

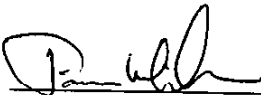
External Dimensions:	The dummy passed all external dimension requirements.
Thorax Impact Test:	The thorax did not pass all impact test requirements.
Pelvic Impact Test:	The pelvis passed all impact test requirements.
Abdominal Compression Test:	The abdomen passed all compression test requirements.
Lumbar Flexion Test:	The lumbar passed all flexion test requirements.

SIDE IMPACT DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA **C-49**

DUMMY SERIAL NUMBER: 271

DATE OF VERIFICATION: December 10, 1999

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height (mm)	889 - 909	898
RH - Rib Height (mm)	501 - 521	514
HP - Hip Pivot Height (mm)	99 ref.	99
RD - Rib From Back Line (mm)	229 - 241	235
KV - Knee Pivot From Back Line (mm)	511 - 526	518
SW - Knee Pivot to Floor (mm)	490 - 505	493
HW - Hip Width (mm)	356 - 391	375

MEASUREMENTS BY: 

APPROVED BY: 

MGA RESEARCH CORPORATION

C-50

HEAD DROP TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1999

DUMMY NUMBER: 271

TEST NUMBER: D991471

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	18.9° - 25.5° C	21.0°
RELATIVE HUMIDITY	10 - 70%	26%
PEAK RESULTANT ACCELERATION	210 - 260 g's	237
PEAK LATERAL ACCELERATION	< 10 g's	5
TIME ABOVE 100 G.	0.9 - 1.5 msec.	1.2

TEST MEETS SPECIFICATIONS

TECHNICIAN



APPROVED BY



TEST: Dummy Calibration - Head Drop TEST DATE: 12-10-1999 - 16:03:31

COMPONENT: Dummy # 271

Minimum = 6.68E-02 G'S at .9 msec

Maximum = 237.38 G'S at 29.7 msec

PEAK RESULTANT ACCELERATION

1 _____ D99471AV.A01 Filterclass (1000)

300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0

G

0

10

20

30

40

50

TIME (sec.)

NSA Research
12-10-1999 16:04

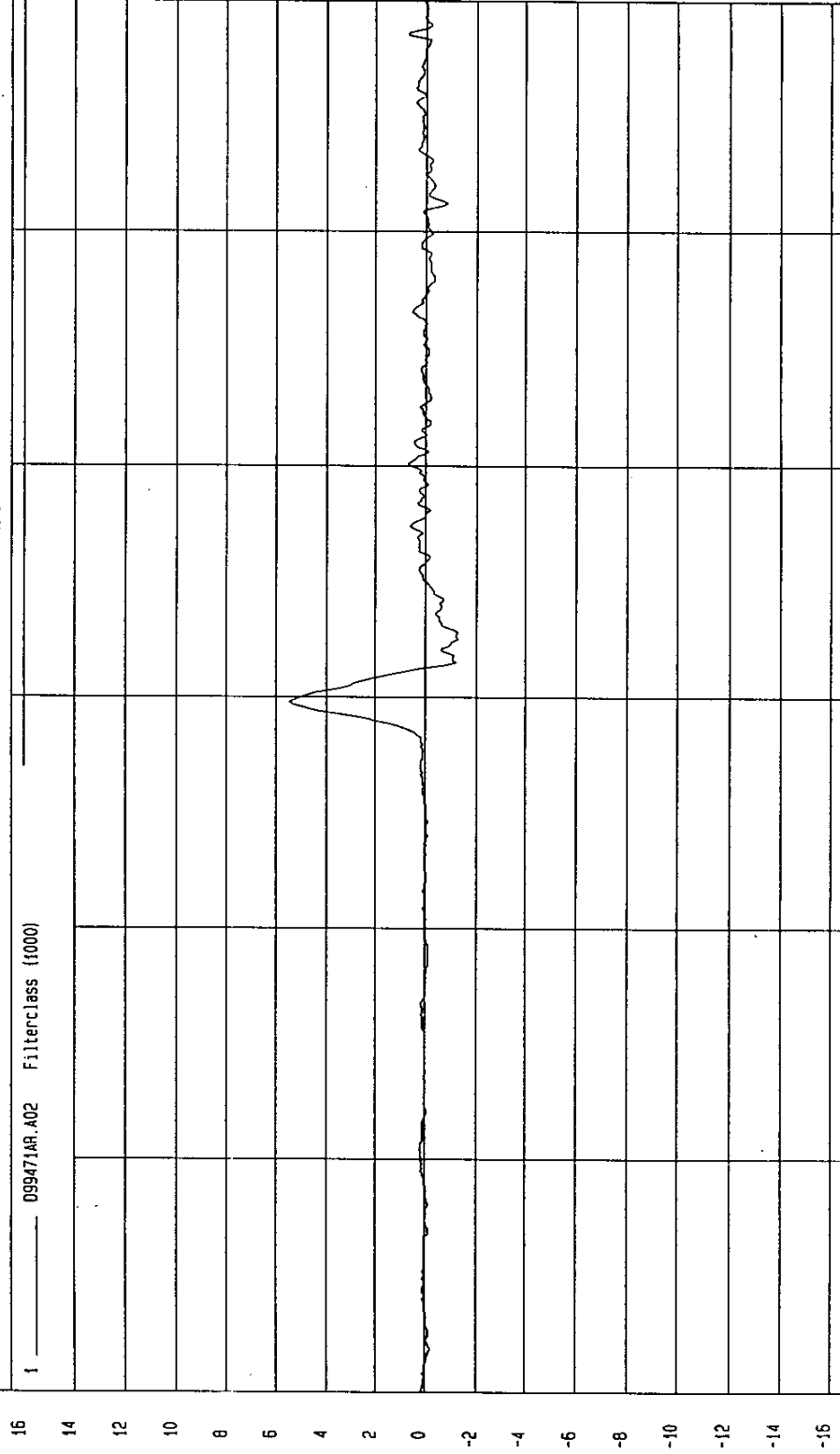
TEST: Dummy Calibration - Head Drop TEST DATE: 12-10-1999 - 16:03:31

COMPONENT: Dummy # 271

Minimum = -2.40 G'S at 102. msec

Maximum = 5.47 G'S at 29.8 msec

PEAK LATERAL ACCELERATION



MGA Research
12-10-1999 16:04

MGA RESEARCH CORPORATION

C-53

THORAX IMPACT TEST

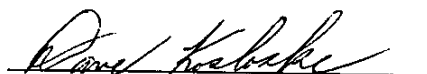
SIDE IMPACT DUMMY (SID)

DATE: December 10, 1999DUMMY SERIAL NUMBER: 271TEST NUMBER: D991472

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	26%
PROBE SPEED (m/s)	4.27 - 4.33	4.27
UPPER RIB (g's)	37 - 46 g's	48*
LOWER RIB (g's)	37 - 46 g's	49*
LOWER SPINE (g's)	15 - 22 g's	22.19*

* Failed—Does not meet specifications

TEST MEETS SPECIFICATIONS

TECHNICIAN APPROVED BY 

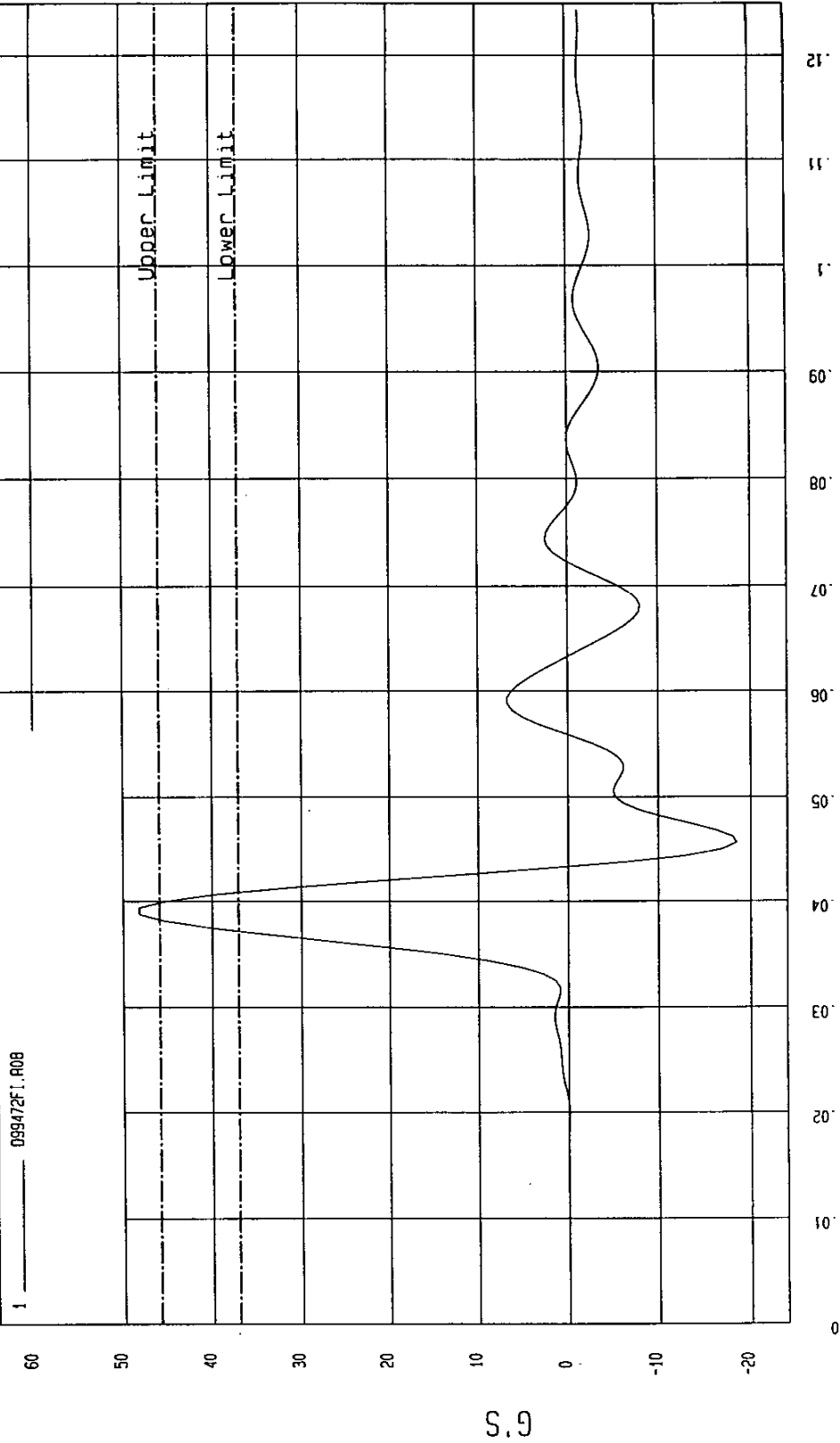
TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-10-1999 - 09:58:29

COMPONENT: Dummy # 271 Velocity: 14.001 FT/SEC 4.27 M/SEC

Minimum = -18.44 G'S at 45.6 msec

Maximum = 48.26 G'S at 39.3 msec

UPPER RIB ACCELERATION

MCA Research
12-10-1999 10:21

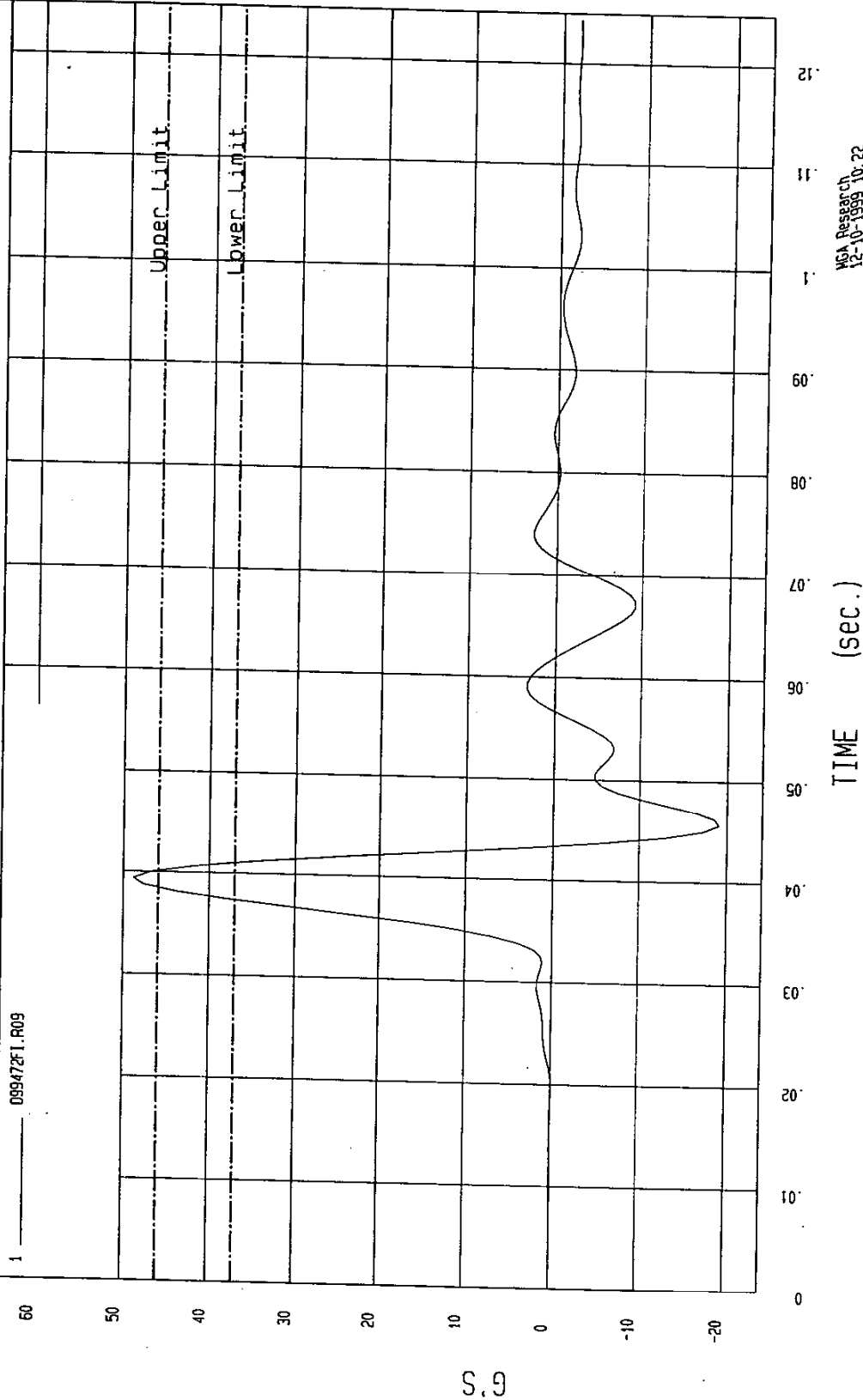
TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-10-1999 - 09:58:29
COMPONENT: Dummy # 271 Velocity: 14.001 FT/SEC 4.27 M/SEC

Minimum = -19.02 G'S at 45.6 msec

Maximum = 48.84 G'S at 39.3 msec

LOWER RIB ACCELERATION

1 _____ 059472F1.R09



MSA Research
12-10-1999 10:22

TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-10-1999 - 09:58:29

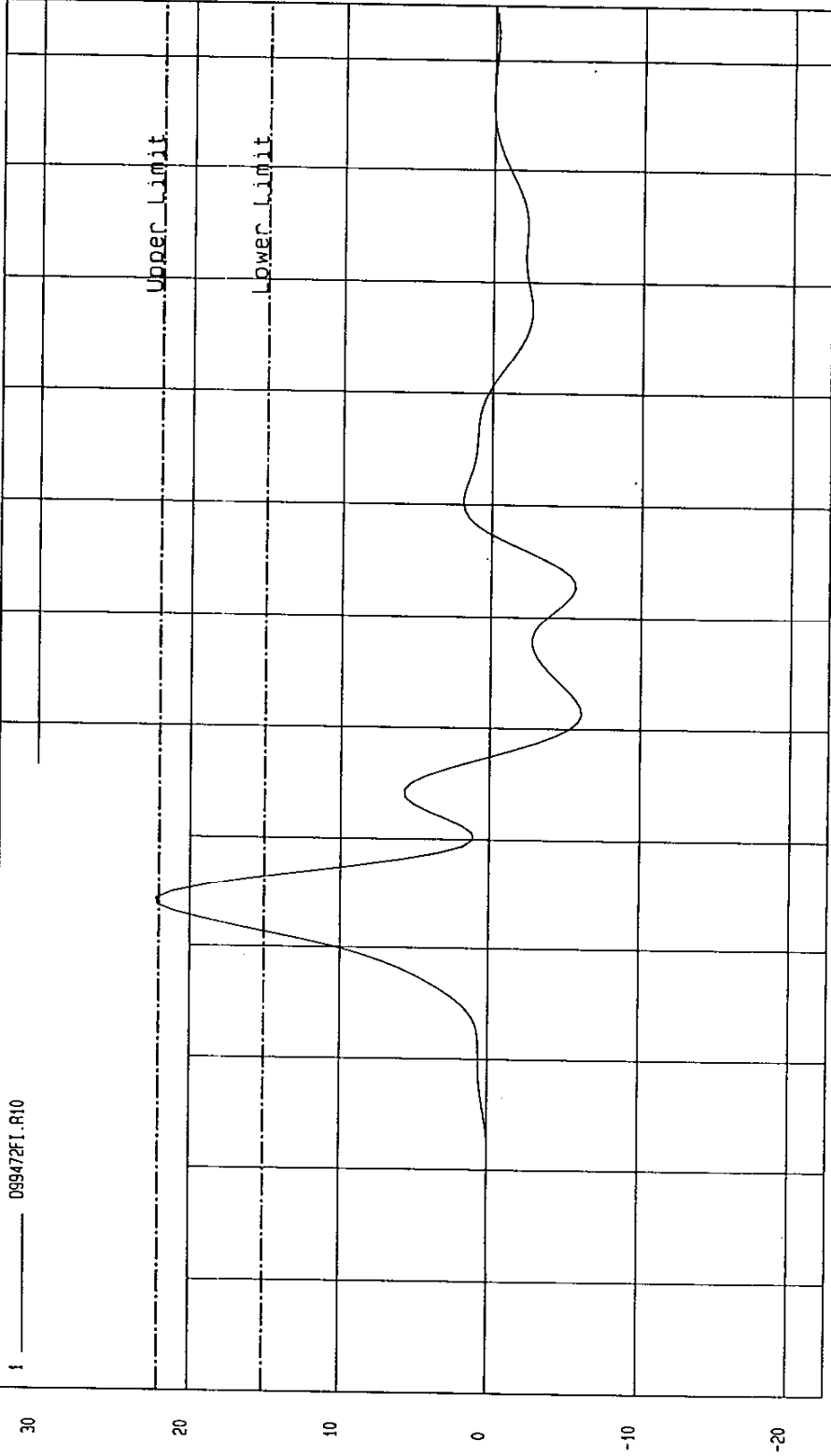
COMPONENT: Dummy # 271 Velocity: 14.001 FT/SEC 4.27 M/SEC

Minimum = -6.07 G'S at 61.2 msec

Maximum = 22.19 G'S at 44.3 msec

LOWER SPINE ACCELERATION

1 099472FI.R10



WCA Research
12-10-1999 10:22

MGA RESEARCH CORPORATION

C-57

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1999

DUMMY SERIAL NUMBER: 271

TEST NUMBER: D991473

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	26%
PROBE SPEED (m/s)	4.27 - 4.33	4.28
PELVIS ACCELERATION (g's)	40 - 60	44

TEST MEETS SPECIFICATIONS

TECHNICIAN

Tim Hill

APPROVED BY

Paul Korbak

TEST: Dummy Calibration - Pelvis Impact TEST DATE: 12-10-1999 - 10:20:49

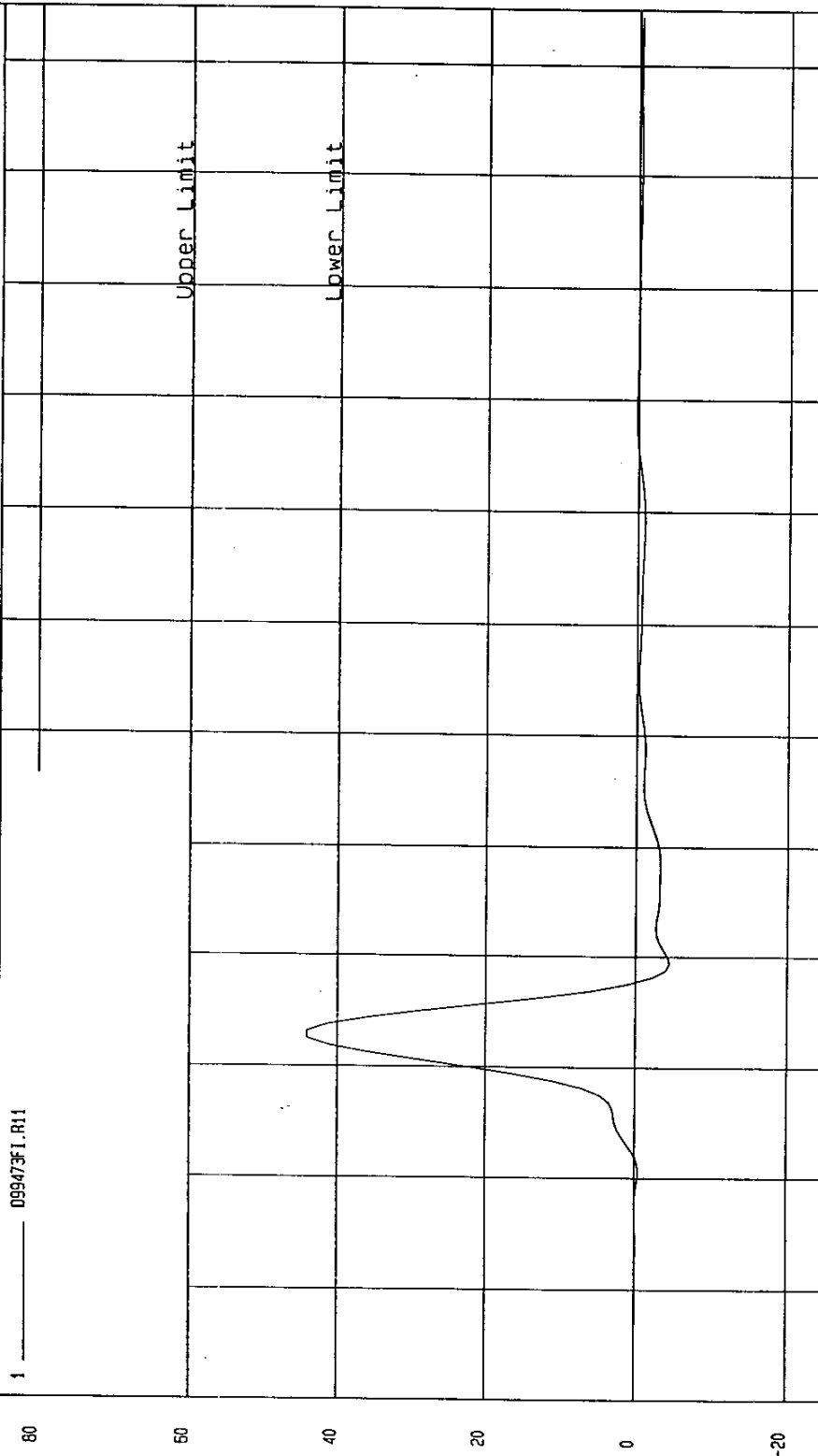
COMPONENT: Dummy # 271 Velocity: 14.03 FT/SEC 4.28 M/SEC

Minimum = -7.18 G'S at 196. msec

Maximum = 44.19 G'S at 33.1 msec

PELVIS ACCELERATION

1 ——— 099473F1.R11

MGA Research
12-10-1999 10:22

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

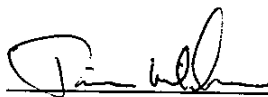
SIDE IMPACT DUMMY (SID)

DATE: December 10, 1999DUMMY SERIAL NUMBER: 271TEST NUMBER: D991474

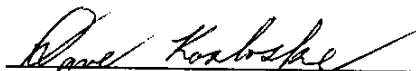
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	23%
FORCE @ 12.7 mm	104 - 162	147
FORCE @ 19.0 mm	163 - 222	202
FORCE @ 25.4 mm	222 - 280	265
FORCE @ 33 mm	325 - 391	357

TEST MEETS SPECIFICATIONS

TECHNICIAN



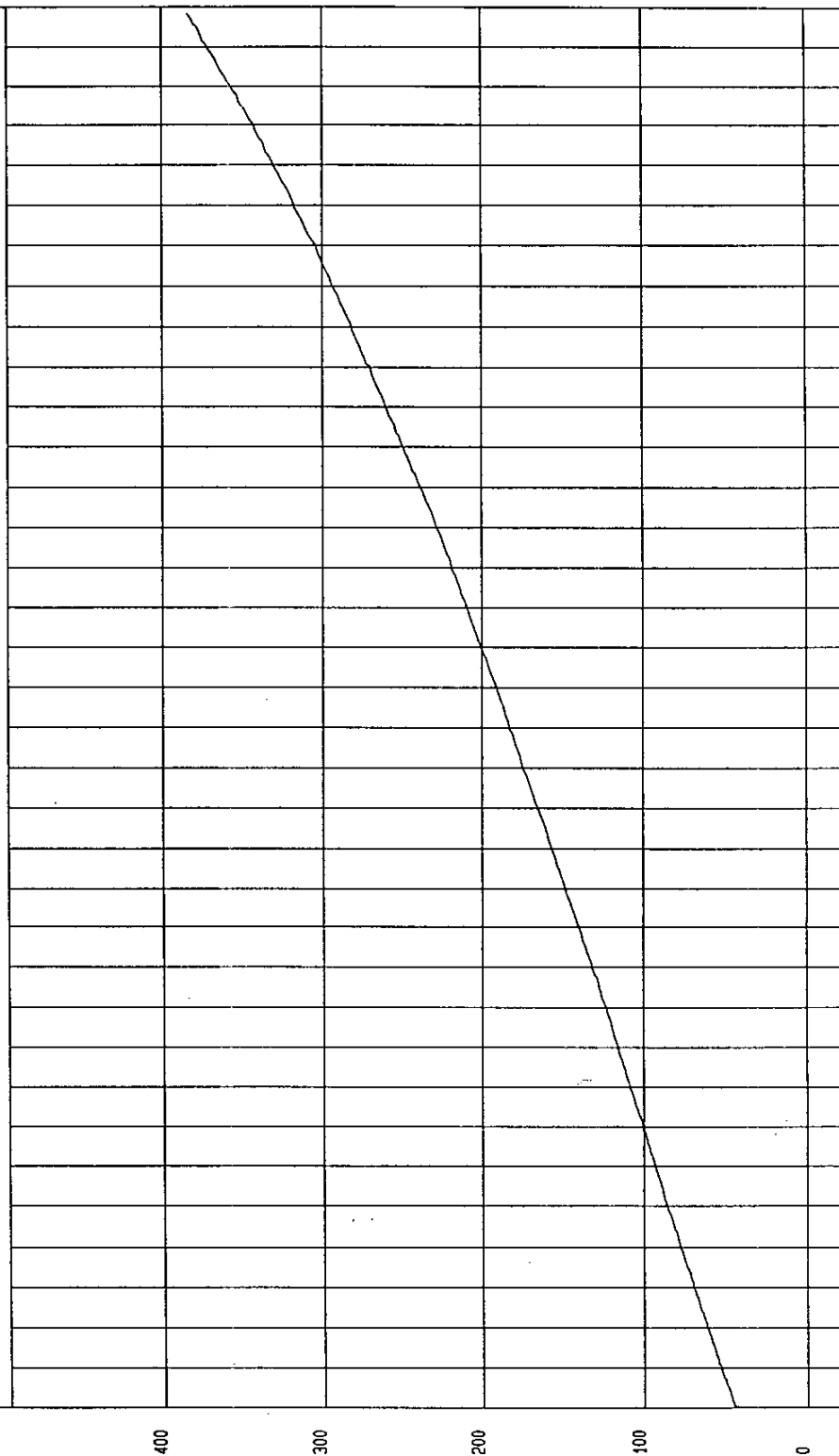
APPROVED BY



TEST: DUMMY CALIBRATION - ABDOMEN COMPRESSION TEST DATE: 12-10-1999 - 12:52:04

COMPONENT: DUMMY # 271

FORCE as a function of DISPLACEMENT



NSA Research
12-10-1999 15:36

MGA RESEARCH CORPORATION

C-61

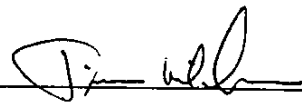
LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1999DUMMY SERIAL NUMBER: 271TEST NUMBER: D991475

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	23%
FORCE @ 0°	0 - 26.7	0
FORCE @ 20°	97.9 - 151.2	136.3
FORCE @ 30°	151.2 - 204.6	156.3
FORCE @ 40°	204.6 - 258.0	208.1
RETURN ANGLE	12° maximum	5°

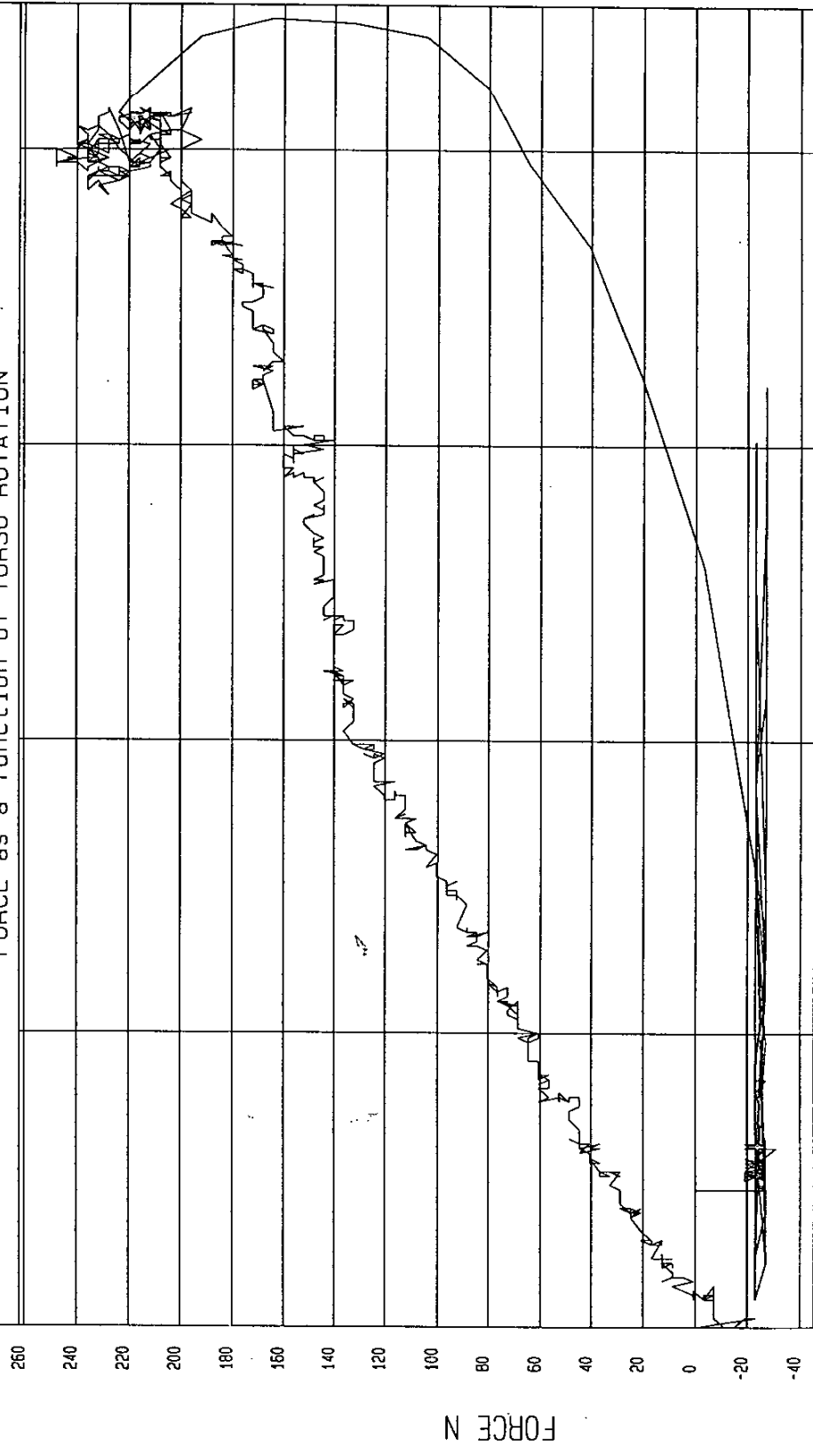
TEST MEETS SPECIFICATIONS

TECHNICIAN APPROVED BY 

TEST: DUMMY CALIBRATION - LUMBAR FLEXION TEST DATE: 12-10-1999 - 12:06:14

COMPONENT: DUMMY # 271

FORCE as a function of TORSO ROTATION



MGA Research
12-10-1999 15:36

POST-TEST CERTIFICATION DATA

C-63

Passenger Dummy Serial Number: 272

Calibration Test Results Summary

C-64

Passenger Dummy Serial Number: 272

Post-Test Calibration

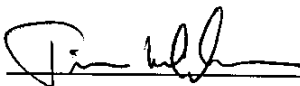
External Dimensions:	The dummy passed all external dimension requirements.
Thorax Impact Test:	The thorax passed all impact test requirements.
Pelvic Impact Test:	The pelvis passed all impact test requirements.
Abdominal Compression Test:	The abdomen passed all compression test requirements.
Lumbar Flexion Test:	The lumbar passed all flexion test requirements.

SIDE IMPACT DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA C-65

DUMMY SERIAL NUMBER: 272

DATE OF VERIFICATION: December 10, 1999

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height (mm)	889 - 909	895
RH - Rib Height (mm)	501 - 521	513
HP - Hip Pivot Height (mm)	99 ref.	99
RD - Rib From Back Line (mm)	229 - 241	236
KV - Knee Pivot From Back Line (mm)	511 - 526	523
SW - Knee Pivot to Floor (mm)	490 - 505	493
HW - Hip Width (mm)	356 - 391	374

MEASUREMENTS BY: 

APPROVED BY: 

MGA RESEARCH CORPORATION

HEAD DROP TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1999DUMMY NUMBER: 272TEST NUMBER: D991481

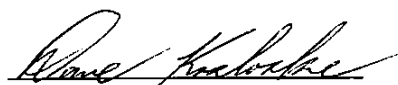
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	18.9° - 25.5° C	21.0°
RELATIVE HUMIDITY	10 - 70%	26%
PEAK RESULTANT ACCELERATION	210 - 260 g's	249
PEAK LATERAL ACCELERATION	< 10 g's	2
TIME ABOVE 100 G.	0.9 - 1.5 msec.	1.2

TEST MEETS SPECIFICATIONS

TECHNICIAN



APPROVED BY



TEST: Dummy Calibration - Head Drop TEST DATE: 12-10-1999 - 15:36:47

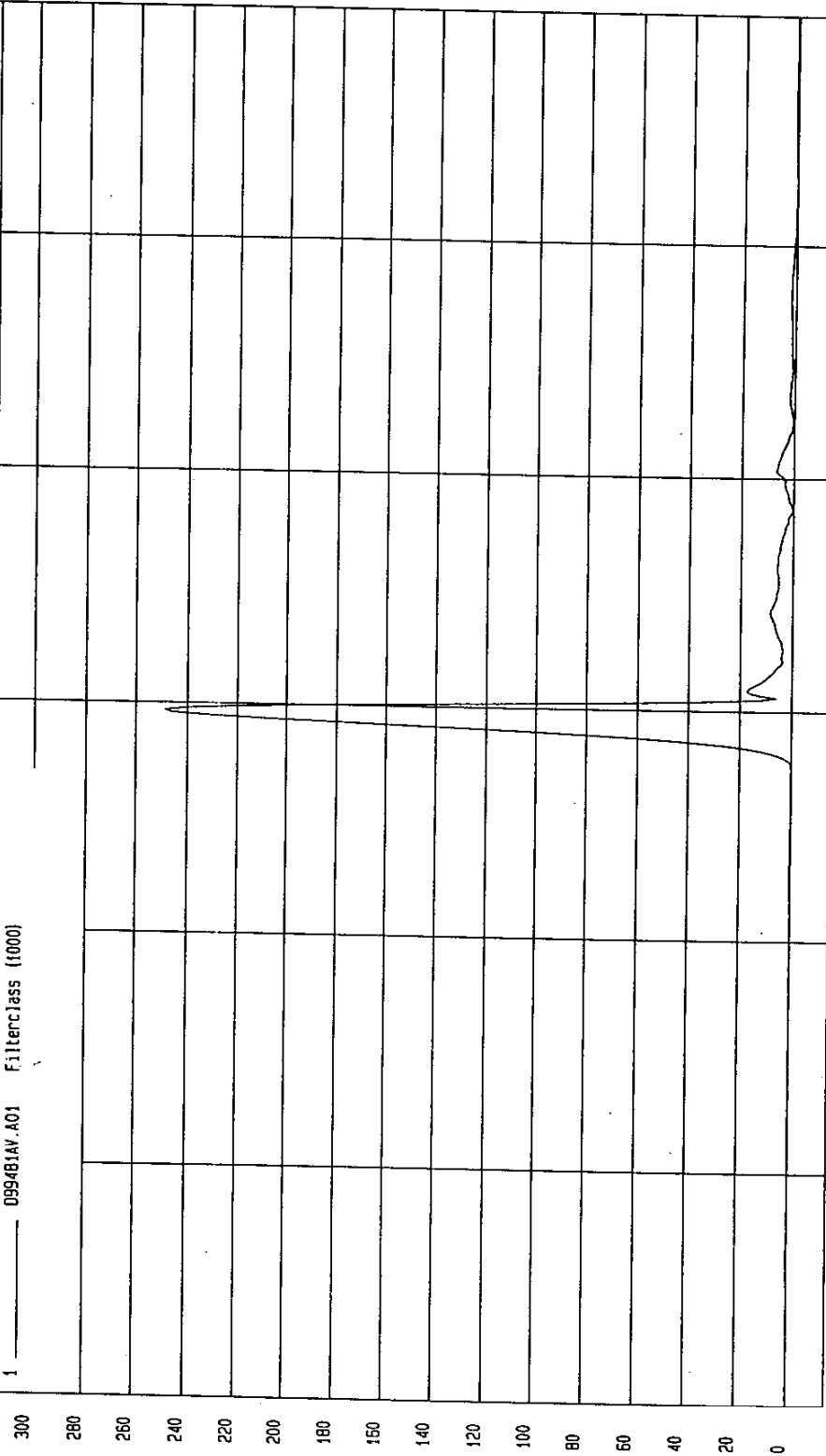
COMPONENT: Dummy # 272

Minimum = 3.76E-02 G'S at 1.4 msec

Maximum = 248.67 G'S at 29.7 msec

PEAK RESULTANT ACCELERATION

1 ——— D994B1AV.A01 FilterClass (1000)



HGA Research
12-10-1999 15:37

TIME (sec.)

G.S

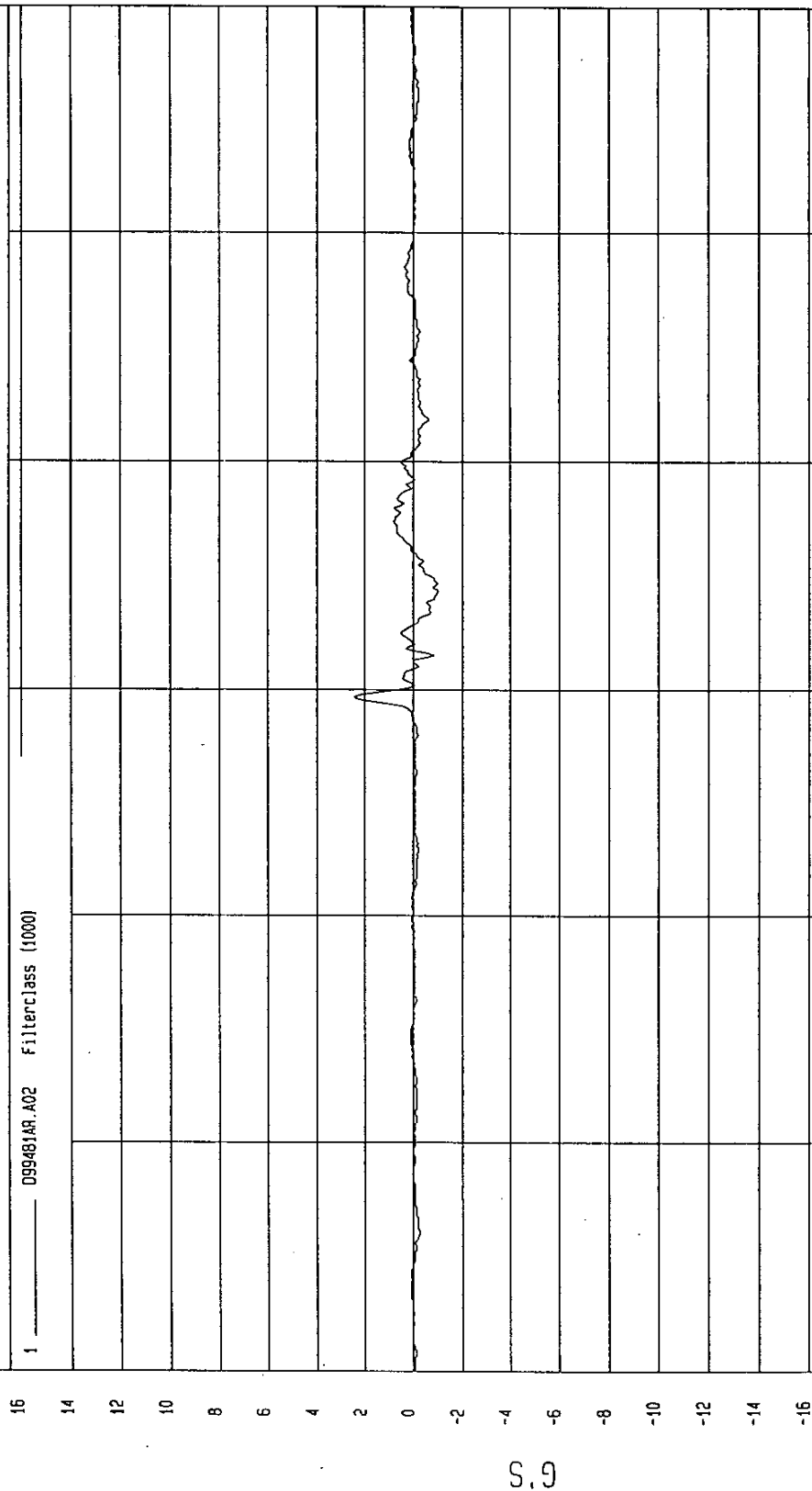
TEST: Dummy Calibration - Head Drop TEST DATE: 12-10-1999 - 15:36:47

COMPONENT: Dummy # 272

Minimum = -2.35 G's at 104. msec

Maximum = 2.44 G's at 29.7 msec

PEAK LATERAL ACCELERATION



TIME (sec.)

WCA Research
12-10-1999 15:37

MGA RESEARCH CORPORATION

C-69

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1999

DUMMY SERIAL NUMBER: 272

TEST NUMBER: D991482

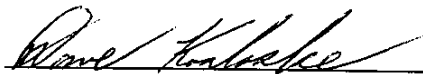
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	26%
PROBE SPEED (m/s)	4.27 - 4.33	4.27
UPPER RIB (g's)	37 - 46 g's	43
LOWER RIB (g's)	37 - 46 g's	43
LOWER SPINE (g's)	15 - 22 g's	22

TEST MEETS SPECIFICATIONS

TECHNICIAN

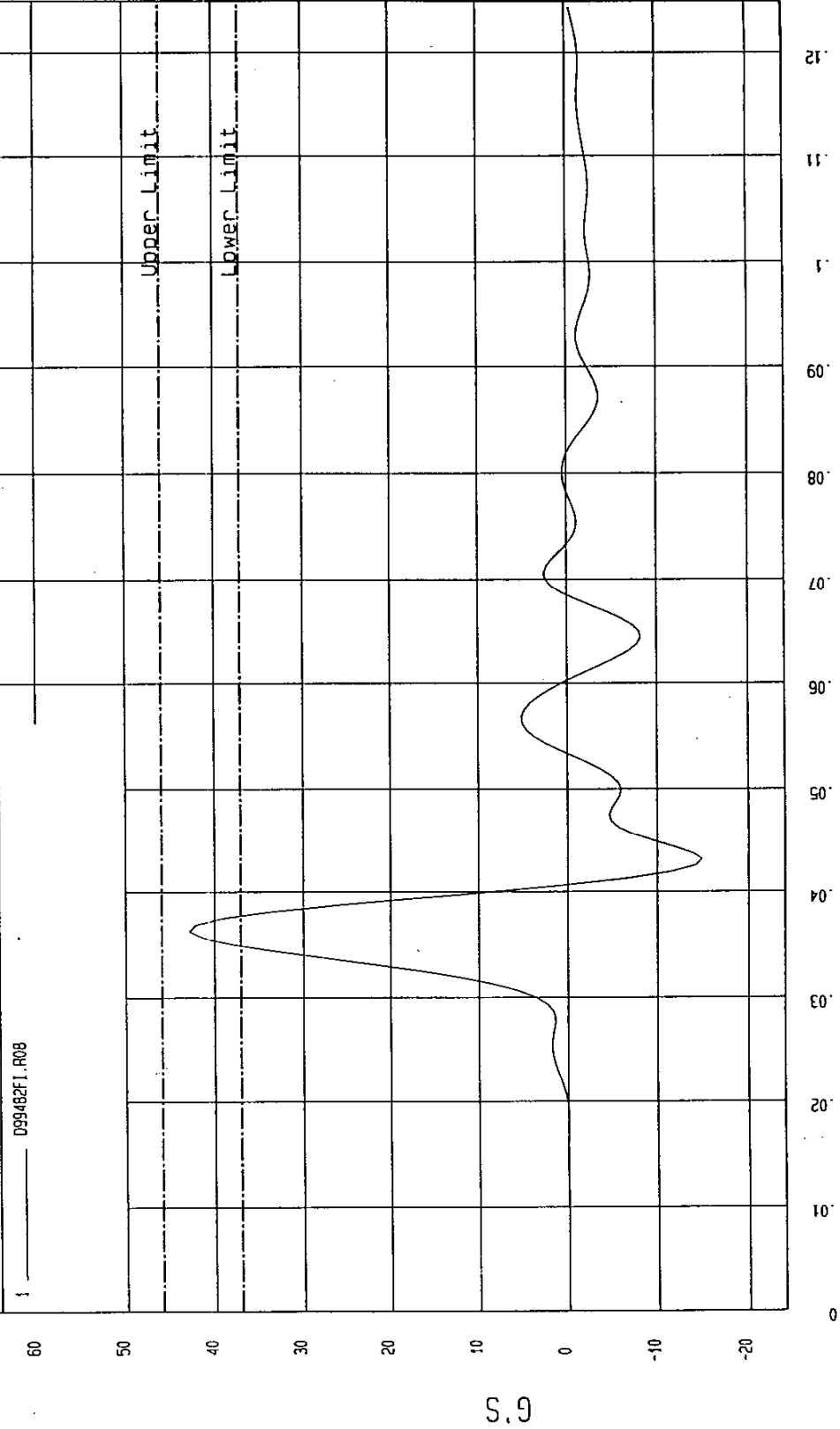


APPROVED BY



TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-10-1999 - 10:54:19
COMPONENT: Dummy # 272 Velocity: 14.006 FT/SEC 4.27 M/SEC
Minimum = -14.82 G'S at 43.1 msec Maximum = 42.88 G'S at 36.2 msec

UPPER RIB ACCELERATION



TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-10-1999 - 10:54:19

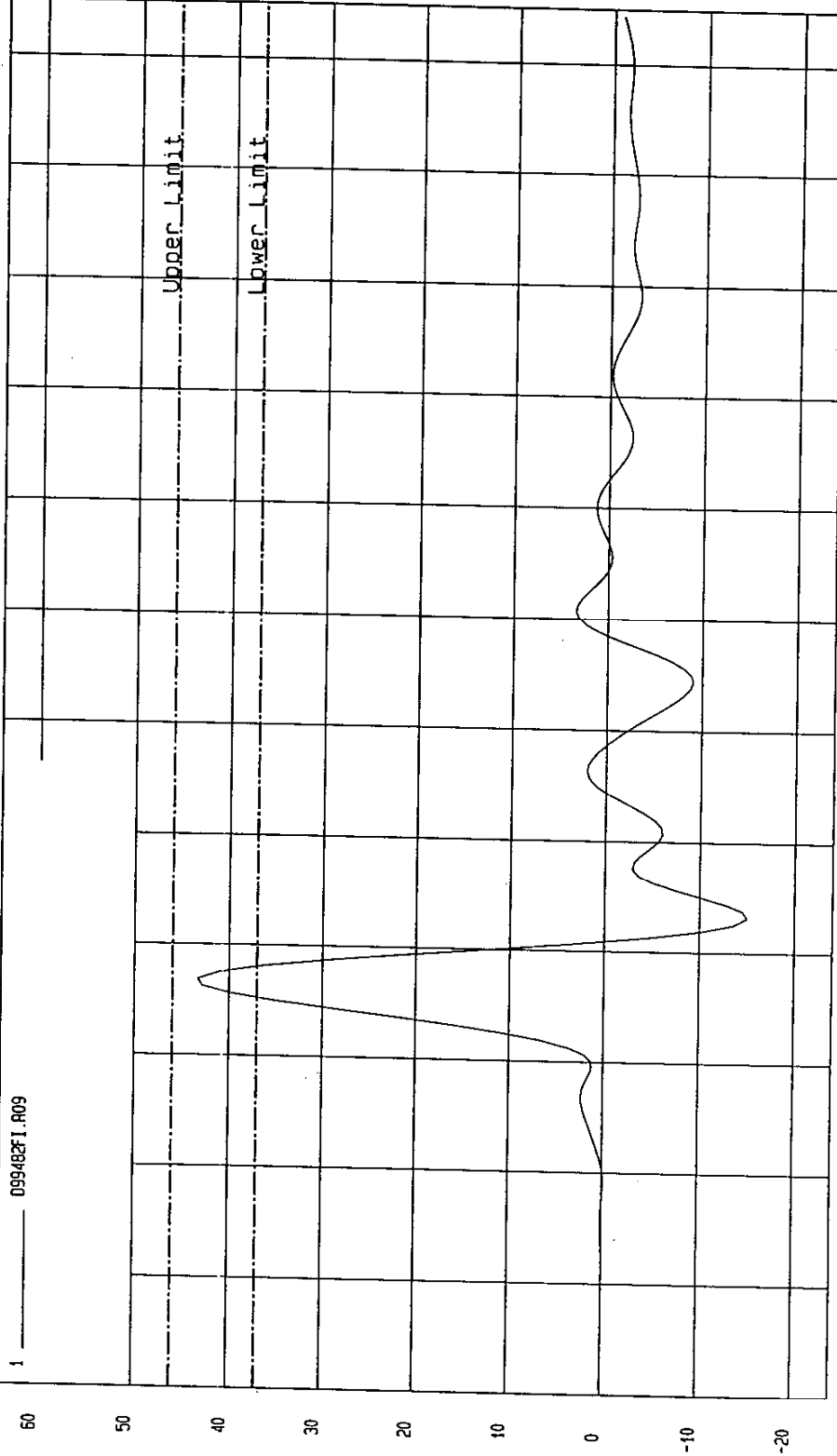
COMPONENT: Dummy # 272 Velocity: 14.006 FT/SEC 4.27 M/SEC

Minimum = -15.01 G'S at 43.1 msec

Maximum = 43.33 G'S at 36.8 msec

LOWER RIB ACCELERATION

1 099482F1.R09



NSA Research
12-10-1999 11:03

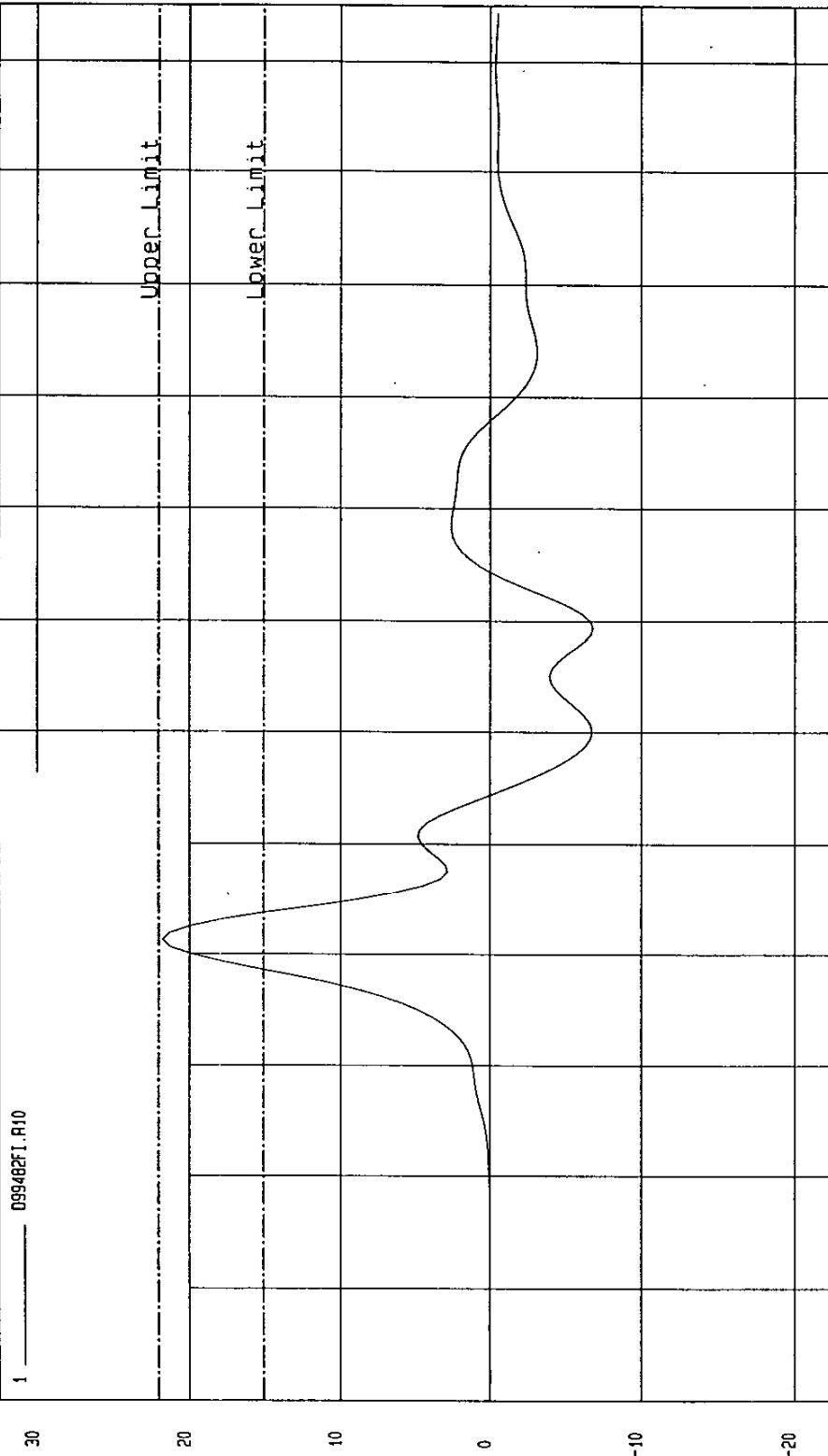
TEST: Dummy Calibration - Thorax Impact TEST DATE: 12-10-1999 - 10:56:59

COMPONENT: Dummy # 272 Velocity: 14.006 FT/SEC 4.27 M/SEC

Minimum = -6.81 G'S at 69.3 msec

Maximum = 21.76 G'S at 41.2 msec

LOWER SPINE ACCELERATION

MCA Research
12-10-1999 11:03

MGA RESEARCH CORPORATION

C-73

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1999

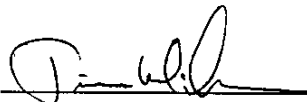
DUMMY SERIAL NUMBER: 272

TEST NUMBER: D991483

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	26%
PROBE SPEED (m/s)	4.27 - 4.33	4.29
PELVIS ACCELERATION (g's)	40 - 60	53

TEST MEETS SPECIFICATIONS

TECHNICIAN



APPROVED BY



TEST: Dummy Calibration - Pelvis Impact TEST DATE: 12-10-1999 - 11:02:39

COMPONENT: Dummy # 272 Velocity: 14.068 FT/SEC 4.29 M/SEC

Minimum = -9.71 G'S at 196. msec

Maximum = 53.00 G'S at 31.8 msec

PELVIS ACCELERATION

1 _____ 099483F1.R11

80

60

40

20

0

-20

G'S

Upper Limit

Lower Limit

21

11

1

60

80

40

60

40

60

40

20

0

0

TIME (sec.)

MCA Research
12-10-1999 11:03

MGA RESEARCH CORPORATION

C-75

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

SIDE IMPACT DUMMY (SID)

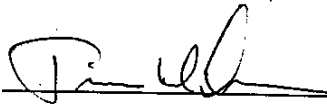
DATE: December 10, 1999

DUMMY SERIAL NUMBER: 272 TEST NUMBER: D991484

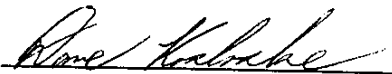
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	23%
FORCE @ 12.7 mm	104 - 162	134
FORCE @ 19.0 mm	163 - 222	185
FORCE @ 25.4 mm	222 - 280	248
FORCE @ 33 mm	325 - 391	335

TEST MEETS SPECIFICATIONS

TECHNICIAN



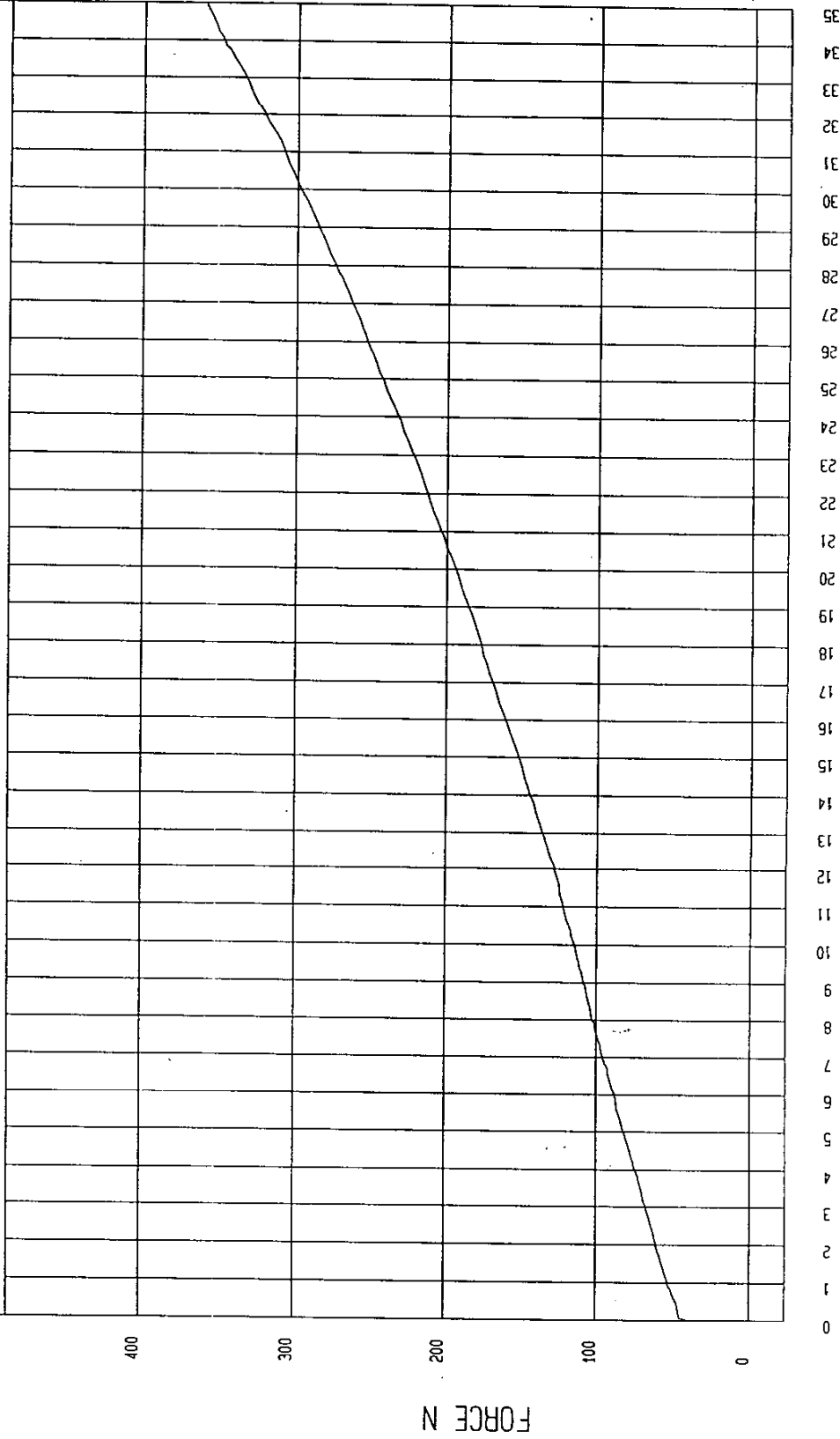
APPROVED BY



TEST: DUMMY CALIBRATION - ABDOMEN COMPRESSION TEST DATE: 12-10-1999 - 12:55:57

COMPONENT: DUMMY # 272

FORCE as a function of DISPLACEMENT



MEA Research
12-10-1999 15:36

MGA RESEARCH CORPORATION

C-77

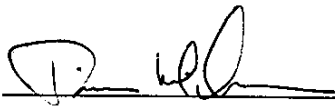
LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1999DUMMY SERIAL NUMBER: 272TEST NUMBER: D991485

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.0°
RELATIVE HUMIDITY (%)	10 - 70	23%
FORCE @ 0°	0 - 26.7	0
FORCE @ 20°	97.9 - 151.2	107.8
FORCE @ 30°	151.2 - 204.6	159.7
FORCE @ 40°	204.6 - 258.0	215.5
RETURN ANGLE	12° maximum	3°

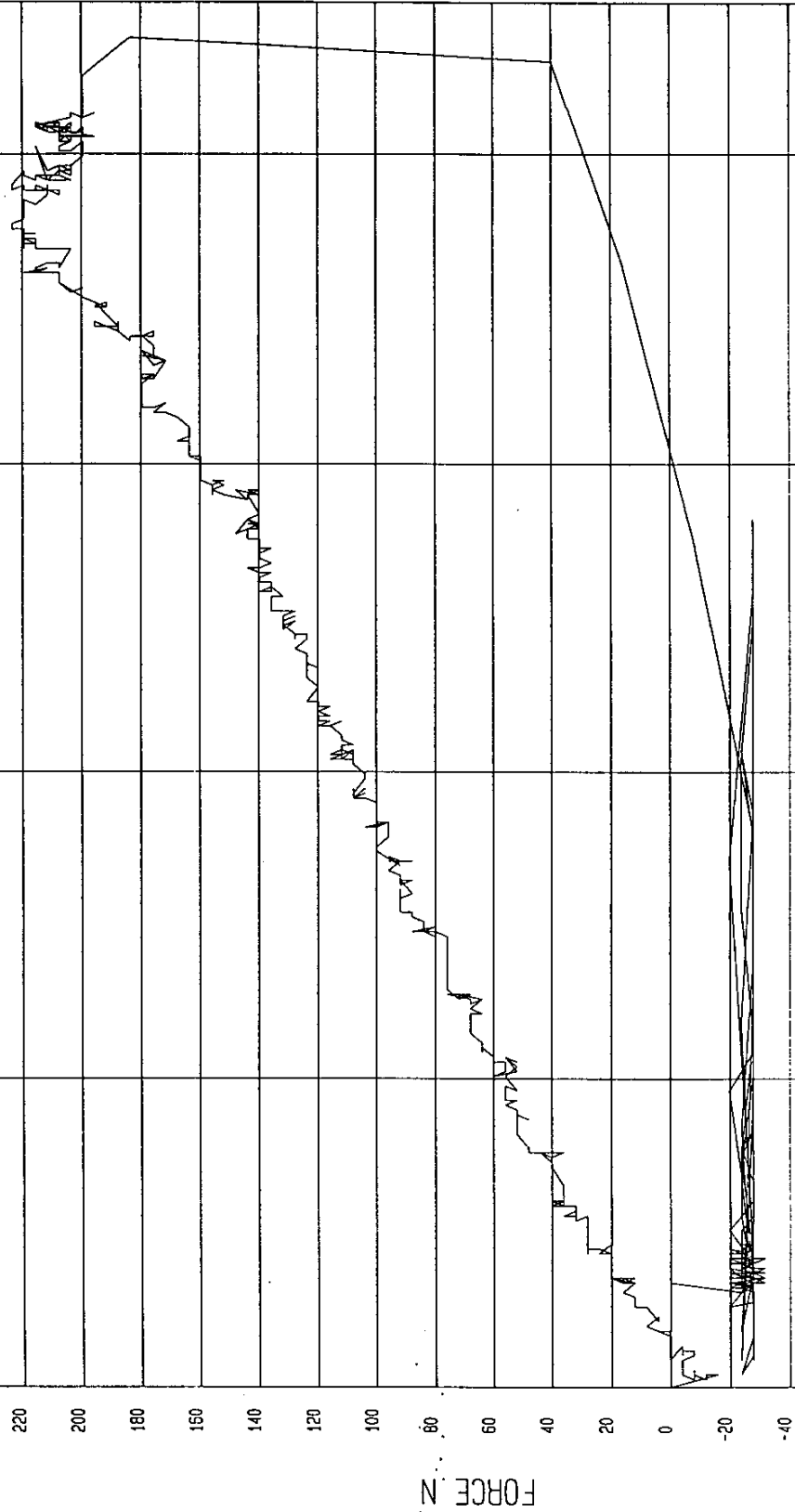
TEST MEETS SPECIFICATIONS

TECHNICIAN APPROVED BY 

TEST: DUMMY CALIBRATION - LUMBAR FLEXION TEST DATE: 12-10-1999 - 12:26:16

COMPONENT: DUMMY # 272

FORCE as a function of TORSO ROTATION



POST-TEST DRIVER DUMMY INSPECTION CHECKLIST

C-79

Type: Side Impact Dummy

Serial Number: 271

Inspected By: Tim Michnay

Date: December 10, 1999

<u>Part</u>	<u>Items Checked</u>	<u>Comments</u>
Skin	visual inspection	OK
Head	visual, ballast, accelerometer mount	OK
Neck	visual	OK
Spine box	visual, ballast, weldment, accelerometer mount	OK
Rib cage	visual, measure	OK
Sternum	visual	OK
Lumbar spine	visual	OK
Abdomen	visual	OK
Pelvis	visual, palpate, accelerometer mount	OK
Upper legs	visual	OK
Knees	visual	OK
Lower legs	visual, range of motion	OK
Ankles	visual, range of motion	OK
Feet	visual, range of motion	OK
Joints	1 to 2 g range	OK
Other	Arm Foam	Damaged

NOTES: (include component/problem/action/reason):
Arm foam damaged on impact side-Replaced

POST-TEST PASSENGER DUMMY INSPECTION CHECKLIST

C-80

Type: Side Impact Dummy

Serial Number: 272

Inspected By: Tim Michnay

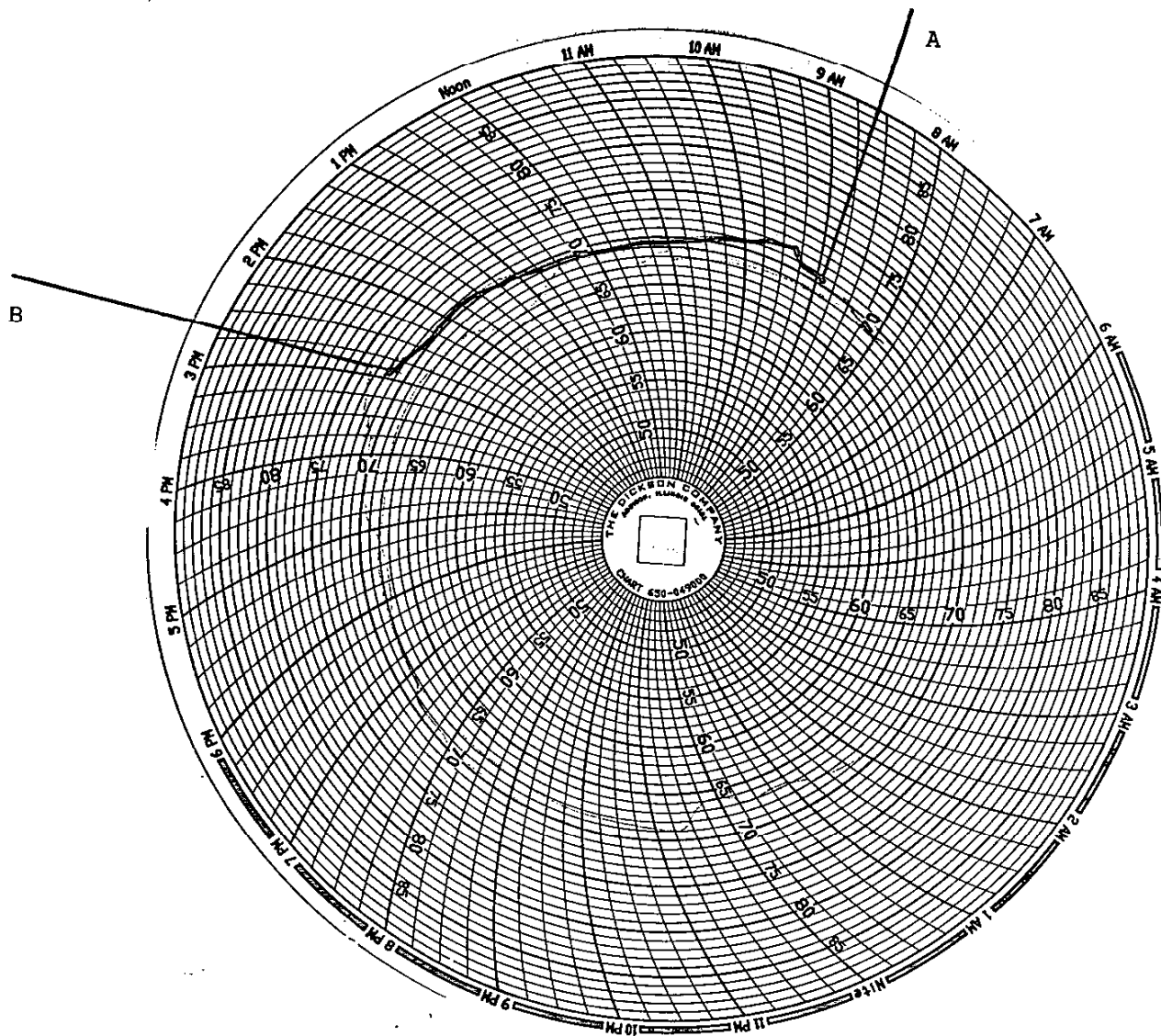
Date: December 10, 1999

<u>Part</u>	<u>Items Checked</u>	<u>Comments</u>
Skin	visual inspection	OK
Head	visual, ballast, accelerometer mount	OK
Neck	visual	OK
Spine box	visual, ballast, weldment, accelerometer mount	OK
Rib cage	visual, measure	OK
Sternum	visual	OK
Lumbar spine	visual	OK
Abdomen	visual	OK
Pelvis	visual, palpate, accelerometer mount	OK
Upper legs	visual	OK
Knees	visual	OK
Lower legs	visual, range of motion	OK
Ankles	visual, range of motion	OK
Feet	visual, range of motion	OK
Joints	1 to 2 g range	OK
Other		

NOTES: (include component/problem/action/reason):

VEHICLE AND DUMMY TEMPERATURE

C-81



A = dummies installed in vehicle
B = test conducted

APPENDIX D
TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

DUMMY AND VEHICLE CALIBRATION DATA
INSTRUMENTS FOR DRIVER DUMMY NO. 271

	DRIVER		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Upper Rib Y	AJ9C2	Endevco	November 8, 1999
Lower Rib Y	AJ816	Endevco	November 8, 1999
Lower Spine Y	AM748	Endevco	November 8, 1999
Pelvis Y	J11166	Endevco	November 2, 1999
Upper Rib Redundant Y	AHTT2	Endevco	November 8, 1999
Lower Rib Redundant Y	AM749	Endevco	November 8, 1999
Lower Spine Redundant Y	AALH1	Endevco	November 8, 1999
Pelvis Redundant Y	J11630	Endevco	November 2, 1999
Head Center of Gravity X	AH0D1	Endevco	November 2, 1999
Head Center of Gravity Y	AHWK8	Endevco	November 2, 1999
Head Center of Gravity Z	AH0M0	Endevco	November 2, 1999

DUMMY AND VEHICLE CALIBRATION DATA
INSTRUMENTS FOR PASSENGER DUMMY NO. 272

	LEFT REAR PASSENGER		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Upper Rib Y	AHR15	Endevco	November 2, 1999
Lower Rib Y	AGTB5	Endevco	August 2, 1999
Lower Spine Y	AP2C4	Endevco	August 2, 1999
Pelvis Y	J13884	Endevco	November 2, 1999
Upper Rib Redundant Y	AHW95	Endevco	November 2, 1999
Lower Rib Redundant Y	AGTM2	Endevco	August 2, 1999
Lower Spine Redundant Y	AKAA6	Endevco	August 2, 1999
Pelvis Redundant Y	J14027	Endevco	November 2, 1999
Head Center of Gravity X	J19173	Endevco	November 2, 1999
Head Center of Gravity Y	AP0F6	Endevco	November 2, 1999
Head Center of Gravity Z	J13656	Endevco	November 2, 1999

VEHICLE INSTRUMENT CALIBRATION

	VEHICLE ACCELEROMETERS		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Moving Barrier CG X	J10-E05	Entran	August 17, 1999
Moving Barrier CG Y	J04-F10	Entran	August 16, 1999
Moving Barrier CG Z	I18-E18	Entran	August 17, 1999
Moving Barrier Rear Axle X	C25-A17	Entran	August 6, 1999
Moving Barrier Rear Axle Y	I25-J12	Entran	August 6, 1999
Left Mid A-Post Y	C25-A06	Entran	August 17, 1999
Left Lower A-Post Y	J10-E12	Entran	August 17, 1999
Left Mid B-Post Y	E10-F20	Entran	September 24, 1999
Left Lower B-Post Y	D05-R09	Entran	August 17, 1999
Rear Floorpan Above Axle X	E10-F03	Entran	August 17, 1999
Rear Floorpan Above Axle Y	I25-J07	Entran	August 17, 1999
Rear Floorpan Above Axle Z	I25-J05	Entran	August 17, 1999
Driver Seat Track Y	F12-G05	Entran	August 6, 1999
Right Side Sill at Front Seat X	E10-F17	Entran	August 16, 1999
Right Side Sill at Front Seat Y	K11-J10	Entran	August 16, 1999
Right Side Sill at Front Seat Z	I26-D09	Entran	August 16, 1999
Right Side Sill at Rear Seat X	A09-G02	Entran	August 16, 1999
Right Side Sill at Rear Seat Y	J10-E18	Entran	August 17, 1999
Right Side Sill at Rear Seat Z	J06-D19	Entran	August 6, 1999

VEHICLE INSTRUMENT CALIBRATION

	VEHICLE ACCELEROMETERS		
	SERIAL NO	MANUFACTURER	CALIBRATION DATE
Left Side Sill at Front Seat Y	F07-A20	Entran	November 22, 1999
Left Side Sill at Rear Seat Y	H02-J04	Entran	November 22, 1999
Right Rear Occupant Compartment Y	F11-G08	Entran	August 6, 1999
Vehicle CG X	G01-J11	Entran	August 17, 1999
Vehicle CG Y	D05-R20	Entran	August 17, 1999
Vehicle CG Z	I25-J18	Entran	August 17, 1999
Left Front Door Centerline	C05-Z13	Entran	October 22, 1999
Midrear of Left Front Door	F12-G07	Entran	August 17, 1999
Left Front Door Upper Centerline	K16-X04	Entran	October 22, 1999
Midrear of Left Rear Door	E13-D18	Entran	August 17, 1999
Left Rear Door Upper Centerline	F07-A24	Entran	August 16, 1999

Note: All Endevco accelerometers are Model No. 7264-2000 All Entran accelerometers are Model No. EGE-72