V.2431

REPORT NO.: 214-MGA-96-017
SAFETY COMPLIANCE TESTING FOR
FMVSS 214 "SIDE IMPACT PROTECTION -
PASSENGER CARS"

CHRYSLER CORPORATION
1996 CHRYSLER SEBRING JX CONVERTIBLE
NHTSA NO: CT0309

MGA PROVING GROUNDS
5000 WARREN ROAD
BURLINGTON, WI 53105

Test Date: March 20, 1996

Report Date: April 1, 1996

FINAL REPORT

Prepared For:

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
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| 4. Title and Subtitle<br><br>Final Report of FMVSS No.214 Compliance<br>Side Impact Protection Testing of a 1996 Chrysler Sebring JX Convertible<br>NHTSA No. CT0309 | | 5. Report Date<br>April 1, 1996<br><br>6. Performing Organization Code<br>MGA |
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| 9. Performing Organization Name and Address<br>MGA Research Corporation<br>5000 Warren Road<br>Burlington, WI 53105 | | 10. Work Unit No.<br><br>11. Contract or Grant No.<br>DTNH22-93-C-02047 |
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| 15. Supplementary Notes | | |

16. Abstract

A 48/24 kph 90° Impact (Moving Deformable Barrier) Compliance Test was conducted on the subject 1996 Chrysler Sebring JX Convertible in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-214D-04 for the determination of FMVSS No. 214 Side Impact Protection compliance. The test was conducted at MGA Research Corporation in Burlington, Wisconsin, on March 20, 1996.

The impact velocity of the Moving Deformable Barrier (MDB) was 53.1 kph, and the ambient temperature at the struck side (driver's) of the target vehicle at the time of impact was 23°C. The target vehicle post test maximum crush was 225 mm at level 2. The test vehicle's performance follows:

| | DRIVER | PASS. |
|---|---|---|
| Left Upper Rib (LUR) Accel., g | 37 | 80 |
| Left Lower Rib (LLR) Accel., g | 36 | 69 |
| Lower Spine ($T_{12}$) Accel., g | 52 | 53 |
| Thoracic Trauma Index (TTI) | 45 | 66 |
| Pelvis (PEV) Accel., g | 50 | 44 |

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

| 17. Key Words | 18. Distribution Statement |
|---|---|
| Compliance Testing<br>Side Impact Protection<br>FMVSS 214<br>Side Impact Dummy (SID) | Copies of this report are available from:<br>National Highway Traffic Safety Adm.<br>Technical Ref. Division,<br>Room 5108 (NAD-52)<br>400 Seventh Street, S.W.<br>Washington, D.C. 20590<br>Telephone No. 202-366-4946<br>Attn: Robert Hornickle |

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SECTION 1

PURPOSE AND TEST PROCEDURE

This side impact test is part of the FY 96 FMVSS 214 Side Impact Protection Compliance Test Program, sponsored by the National Highway Traffic Safety Administration (NHTSA), under Contract No. DTNH22-93-C-02047. The purpose of this test was to evaluate side impact protection of a 1996 Chrysler Sebring JX Convertible.

This side impact test was conducted in accordance with the Vehicle Safety Compliance's FMVSS 214 test procedure (TP-214D-04, dated September 1, 1995).

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

SECTION 2

SUMMARY OF SIDE IMPACT TEST

A 1996 Chrysler Sebring JX Convertible 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 33.0 mph (53.1 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 March 20, 1996. 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 OVSC Side Impact Laboratory Test Procedure which is dated September 1, 1995. 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 ($T_{12}$) uniaxial accelerometer (Y-direction)
4. Pelvic (PEV) section uniaxial accelerometer (Y-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) | 45 | 66 |
| Pelvis (g) | 50 | 44 |

## TEST NOTES

1. The following accelerometers were not used for this test:

   Left Front Door on Centerline
   Midrear of Left Front Door
   Left Front Door Upper Centerline
   Midrear of Left Rear Door
   Left Rear Door Upper Centerline
   Left Mid B-Post
   Rear Seat Track

2. The ATD umbilical cords interfered with the string potentiometer used to measure rear seating position intrusion.

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: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 VIN: 3C3-EL45X9TT-243523

Vehicle Body Color: Candy Apple Red Build Date: 1-96

Engine Data: 4 Cylinders; __ CID; 2.4 Liter; ___cc

Placement __ Longitudinal; X Lateral

Transmission: 4 speed; __ Manual; X Automatic; __ Overdrive

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

Odometer Reading 91 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: P205/65R15 or P215/55R16

Tires on Test Vehicle: P205/65R15 Manufacturer: Michelin

Vehicle Capacity Data:

Number of Occupants: 2 Front; 2 Rear; __ 3rd Seat 4 Total

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

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

Vehicle Maximum Capacity Loading = 324.3 kg (A)

No. of Occupants x 68.04 kg. = 272.2 kg (B)

Cargo Capacity (A-B) = 52.1 kg

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

WEIGHT OF TEST VEHICLE WITH MAXIMUM FLUIDS:

| | | | |
|---|---|---|---|
| Right Front | = 461.3 kg | Right Rear | = 298.5 kg |
| Left Front | = 477.2 kg | Left Rear | = 302.1 kg |
| TOTAL FRONT = 938.5 kg | | TOTAL REAR = 600.6 kg | |

% of Total Vehicle Weight = 61.0 %; % of Total Weight = 39.0 %

TOTAL WEIGHT = 1539.1 kg

## GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

### CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

| | |
|---|---|
| Total Test Vehicle Delivered Weight with Maximum Fluids | = 1539.1 kg |
| Cargo Carrying Capacity of Test Vehicle | = 52.1 kg |
| Weight of 2 Side Impact Dummies (2 x 80.7 kg.) | = 161.4 kg |
| TEST VEHICLE TARGET WEIGHT | = 1752.6 kg |

### ACTUAL WEIGHT OF TEST VEHICLE WITH 2 DUMMIES AND CARGO:

| | | | |
|---|---|---|---|
| Right Front | = 482.2 kg | Right Rear | = 354.3 kg |
| Left Front | = 528.9 kg | Left Rear | = 381.5 kg |
| TOTAL FRONT | = 1011.1 kg | TOTAL REAR | = 735.8 kg |
| % of Total Weight | = 57.9 % | % of Total Weight | = 42.1 % |

TOTAL TEST WEIGHT = 1746.9 kg

### TEST VEHICLE ATTITUDE:

CURB WEIGHT ATTITUDE:

Right Front 719 mm Left Front 713 mm Right Rear 713 mm Left Rear 705 mm

FULLY LOADED WEIGHT ATTITUDE:

Right Front 715 mm Left Front 699 mm Right Rear 688 mm Left Rear 666 mm

TEST ATTITUDE:

Right Front 707 mm Left Front 701 mm Right Rear 694 mm Left Rear 670 mm

## GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Test Vehicle Wheelbase: 2690 mm

C.G. = 1133 mm rearward of front wheel centerline

TOTAL VEHICLE LENGTH:

Right Side = 4480 mm

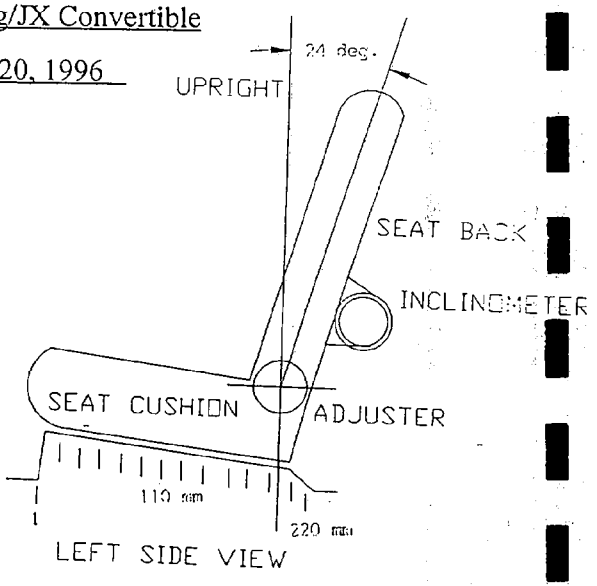
Centerline = 4917 mm

Left Side = 4480 mm

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996




FRONT SEAT CUSHION PLACEMENT:

Total Length of Adjustment Travel: 220 mm

Test Position: mid travel at 110 mm

FRONT SEAT BACK ADJUSTMENT POSITION:

Seat Back Angle = 24° from the vertical position

SECOND POSITION SEAT:

Total Length of Fore/Aft Adjustment Travel: Non-Adjustable

Seat Back Adjustment Position: Non-Adjustable

ADJUSTABLE STEERING COLUMN POSITION: Center of range of motion at 22.9°

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 = 59.8 liters

Test Volume: 55.3 liters 92.5 % of capacity

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

Wheelbase: = 2690 mm

Impact Point is 405 mm rearward of front axle centerline

DATA SHEET NO. 2

TEST VEHICLE SUMMARY OF RESULTS

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

Overall Length = 4917 mm; Overall Width = 1757 mm

TEST WEIGHT:

| | | | |
|---|---|---|---|
| Right Front = | 482.2 kg | Right Rear = | 354.3 kg |
| Left Front = | 528.9 kg | Left Rear = | 381.5 kg |
| TOTAL FRONT = | 1011.1 | TOTAL REAR = | 735.8 kg |
| % of Total Weight = | 57.9 % | % of Total Weight = | 42.1 % |

TOTAL VEHICLE WEIGHT = 1746.9 kg

Wheelbase = 2690 mm

Longitudinal C.G. from Center of Front Axle = 1133 mm

Impact Angle with Respect to Impactor = 90° degrees

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 ( 246 mm above ground) = 77 mm
2. LEVEL 2 ( 446 mm above ground) = 225 mm
3. LEVEL 3 ( 570 mm above ground) = 221 mm
4. LEVEL 4 ( 868 mm above ground) = 184 mm
5. LEVEL 5 (1280 mm above ground) = 36 mm

Maximum Post-Test Intrusion = 225 mm

| OCCUPANTS: | Left Front Passenger | Left Rear Passenger |
|---|---|---|
| Type of Dummy | SID | SID |
| Restraints Used | type II belt | type II belt |

## TEST VEHICLE SUMMARY OF RESULTS (Cont'd)

INSTRUMENTATION:

| | | |
|---|---|---|
| Number of Vehicle Data Channels: | | = 21 |
| Number of Cameras: | Onboard Vehicle | = 3 |
| | Offboard Vehicle | = 4 |
| | Deformable Barrier | = 2 |
| | TOTAL | = 9 |

DATA SHEET NO. 3

MOVING DEFORMABLE BARRIER (MDB) SUMMARY OF RESULTS

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

POSITION OF IMPACT (MDB) ON MONORAIL:

Crabbed 26.8° to left

MDB DETAILS:

| | |
|---|---|
| Overall Width of Framework Carriage | = 1252 mm |
| Overall Length of MDB (incl. honeycomb impact face) | = 4115 mm |
| Wheelbase of Framework Carriage | = 2591 mm |
| Tread of Framework Carriage (Front & Rear) | = 1880 mm |
| C.G. Location Rearward of Front Axle | = 1102 mm |
| C.G. Location From Center Line | = -8 mm |
| C.G. Location Above Ground Level | = 488 mm |

MDB WEIGHT:

| | | | |
|---|---|---|---|
| Left Front | = 496.7 kg | Left Rear | = 187.3 kg |
| Right Front | = 283.0 kg | Right Rear | = 389.2 kg |
| TOTAL FRONT = 779.7 kg | | TOTAL REAR = 576.5 kg | |

TOTAL MDB WEIGHT = 1356.2 kg

Impact Angle (MDB C/L to Target Vehicle C/L) = 90° degrees

Impact Speed = Primary: 33.0 mph (53.3 kph) Secondary: 33.1 mph (53.3 kph)

## CRASH TEST SUMMARY FOR SIDE IMPACTOR (Cont'd)

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

1. Row A Top of Stack (813 mm) = 130 mm
2. Row B Mid Stack (686 mm) = 95 mm
3. Row C Top of Bumper (533 mm) = 96 mm
4. Row D Center of Bumper (432 mm) = 137 mm

INSTRUMENTATION:

Number of MDB Data Channels = 7

DATA SHEET NO. 4

POST-TEST OBSERVATIONS

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

VISIBLE DUMMY CONTACT POINTS:

| | LEFT FRONT SID | LEFT REAR SID |
|---|---|---|
| Head | to head rest, window, window sill | to C pillar |
| Arm | to mid door panel | to side panel |
| Pelvis | no visible contact | to arm rest |
| Left Knee | to lower arm rest | to side panel |
| Right Knee | to left knee | to left knee |

DOOR OPENING:

| | LEFT SIDE | RIGHT SIDE |
|---|---|---|
| Front | no | opened |
| Rear | N/A | N/A |

MDB DISTANCE FROM TARGET IMPACT POINT:

Horizontal: 9 mm forward Vertical: 4 mm high

ARM REST LOCATIONS:

Front: 600 mm from bottom of window

Rear: 803 mm from bottom of window

POST-TEST OBSERVATIONS (Cont'd)

SEAT CRUSH:

Front Seat Back: 10 mm Front Seat Cushion: 9 mm

Left Rear Seat Back: 6 mm Rear Seat Cushion: 18 mm

GLAZING DAMAGE:

Windshield cracked, both driver's side windows broke

PILLAR PERFORMANCE:

No failure noted

SILL SEPARATION:

No failure noted

OTHER NOTABLE IMPACT EFFECTS:

Fuel filler door opened upon impact

# SECTION 4

# OCCUPANT AND VEHICLE INFORMATION

DATA SHEET NO. 5

SIDE IMPACT DUMMY (SID) INSTRUMENTATION DATA

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

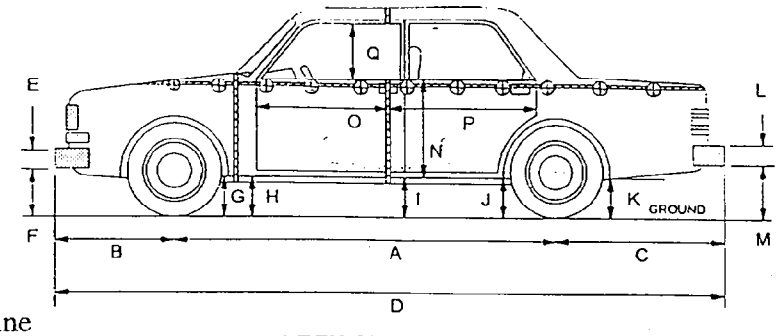
| | Front Dummy ID #271 | | | | Rear Dummy ID #272 | | | |
|---|---|---|---|---|---|---|---|---|
| | Pos. Direct. | | Neg. Direct | | Pos. Direct. | | Neg. Direct | |
| | Max (g) | Time (msec) | Max (g) | Time (msec) | Max (g) | Time (msec) | Max (g) | Time (msec) |
| **RIB ACCELERATIONS** | | | | | | | | |
| Left Upper Rib (LUR) Y | 37.3 | 41 | -9.8 | 73 | 79.7 | 56 | -8.3 | 85 |
| Left Lower Rib (LLR) Y | 35.8 | 41 | -6.7 | 115 | 69.2 | 56 | -7.0 | 85 |
| **SPINE ACCELERATIONS** | | | | | | | | |
| Lower Lateral Y | 52.2 | 54 | -8.1 | 122 | 52.8 | 61 | -11.0 | 90 |
| **PELVIS ACCELERATIONS** | | | | | | | | |
| Lateral Y | 50.1 | 51 | -11.7 | 129 | 44.5 | 66 | -3.8 | 135 |

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

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

DATA SHEET NO. 6

VEHICLE PRE AND POST-TEST MEASUREMENTS




LEFT SIDE VIEW

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)

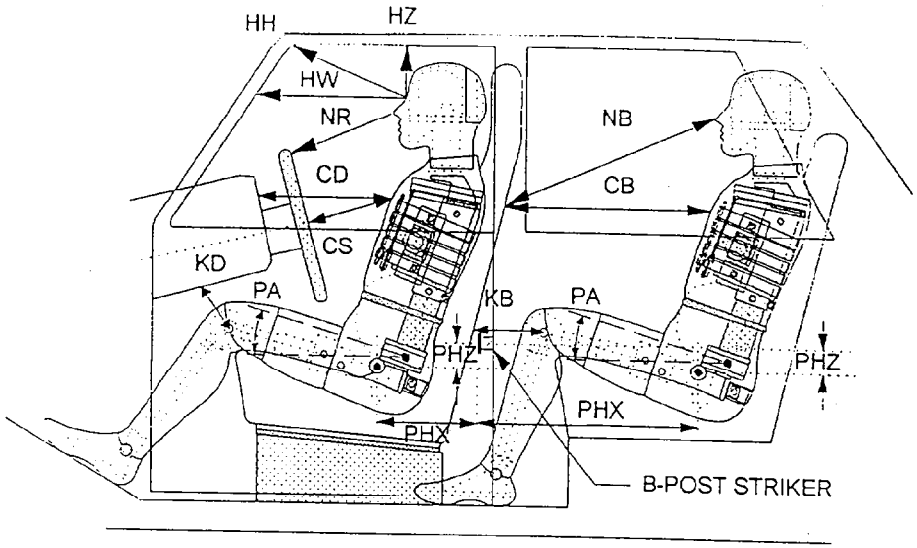
| | PRE-TEST | POST-TEST | Δ CHANGE |
|---|---|---|---|
| A | 2690 | 2665 | 25 |
| B | 1017 | 1034 | 17 |
| C | 1210 | 1218 | 8 |
| D | 4917 | 4917 | 0 |
| E | 145 | 145 | 0 |
| F | 396 | 384 | 12 |
| G | 207 | 206 | 1 |
| H | 154 | 177 | 23 |
| I | 133 | 178 | 45 |
| J1/J2 | 154/145 | 193/186 | 39/41 |
| K | 237 | 281 | 44 |
| L | 293 | 293 | 0 |
| M | 322 | 357 | 35 |
| N | 630 | 604 | 26 |
| O | 840 | 808 | 32 |
| P | 566 | 566 | 0 |
| Q | 400 | 364 | 36 |
| R | 4480 | 4462 | 18 |
| S | 4480 | 4424 | 56 |
| T | 1757 | 1683 | 74 |

DATA SHEET NO. 7

SIDE IMPACT DUMMY (SID) LONGITUDINAL CLEARANCE DIMENSIONS

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

NHTSA NO.: CT0309 Test Date: March 20, 1996




NOTE: All dimensions are in mm with tolerance of ± 3 mm

| | FRONT SID ID #271 |
|---|---|
| HH | 453 |
| HW | 688 |
| HZ | 183 |
| NR | 443 |
| CD | 524 |
| CS | 329 |
| KDL(KDA°) | 147 (37.7°) |
| KDR(KDA°) | 155 (43.5°) |
| PA° | 24.4° |
| PHX | 469 |
| PHZ | 113 |

| | REAR PASSENGER SID ID #272 |
|---|---|
| HZ | 155 |
| NB | 586 |
| CB | 508 |
| KBL (KBA) | 193 (5.7°) |
| KBR (KBA) | 184 (11.6°) |
| PA° | 23.1° |
| PHX | 432 |
| PHZ | 100 |

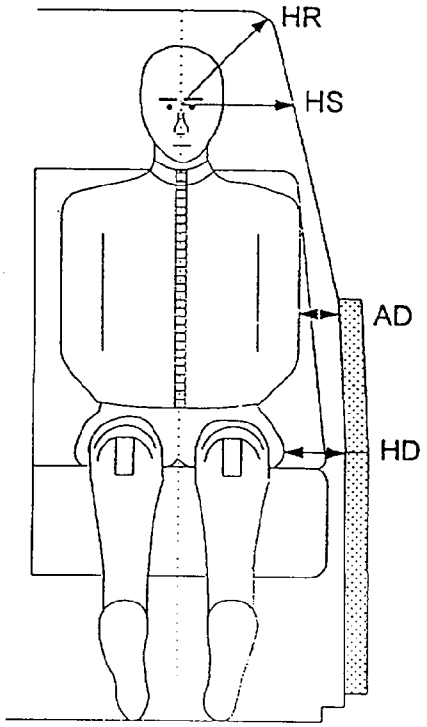
NOTE: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as reference point.

DATA SHEET NO. 8

SIDE IMPACT DUMMY (SID) LATERAL CLEARANCE DIMENSIONS

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

NHTSA NO.: CT0309 Test Date: March 20, 1996



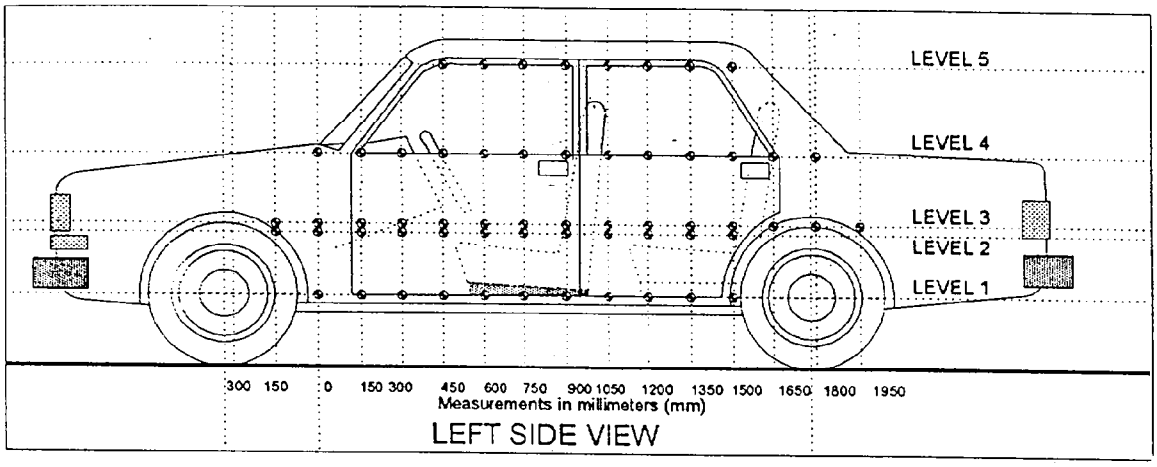

NOTE: All dimensions are in mm

| | DRIVER ID #271 | LEFT REAR PASSENGER ID #272 |
|---|---|---|
| HR | 198 | 223 |
| HS | 324 | 232 |
| AD | 132 | 60 |
| HD | 123 | 116 |

DATA SHEET NO. 9
VEHICLE SIDE MEASUREMENTS

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

NHTSA NO.: CT0309 Test Date: March 20, 1996




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

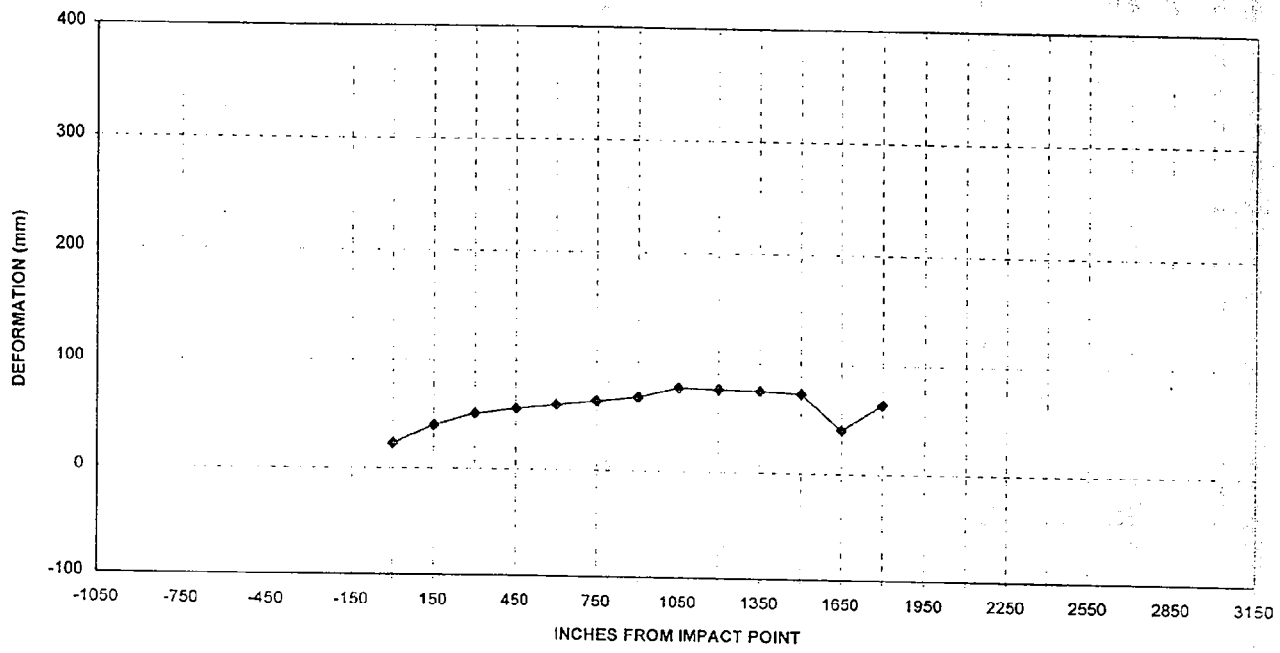
| | |
|---|---|
| Level 5 @ Window Top | = 1280 mm |
| Level 4 @ Window Sill | = 868 mm |
| Level 3 @ Mid Door | = 570 mm |
| Level 2 @ Occupant H-Point | = 446 mm |
| Level 1 @ Axle Centerline Height (or Sill Top Height) | = 246 mm |

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

| | Level 1 - Axle Centerline | | |
|---|---|---|---|
| Longitudinal Distance (mm) | Pre-Test (mm) | Post-Test (mm) | Static Crush (mm) |
| -1050 | | | |
| -900 | | | |
| -750 | | | |
| -600 | | | |
| -450 | | | |
| -300 | | | |
| -150 | | | |
| 0 (impact point) | 744 | 767 | 23 |
| 150 | 746 | 786 | 40 |
| 300 | 746 | 797 | 51 |
| 450 | 748 | 804 | 56 |
| 600 | 748 | 808 | 60 |
| 750 | 748 | 812 | 64 |
| 900 | 749 | 817 | 68 |
| 1050 | 747 | 824 | 77 |
| 1200 | 744 | 820 | 76 |
| 1350 | 743 | 818 | 75 |
| 1500 | 740 | 813 | 73 |
| 1650 | 736 | 806 | 70 |
| 1800 | 732 | 796 | 64 |
| 1950 | | | |
| 2100 | | | |
| 2250 | | | |
| 2400 | | | |
| 2550 | | | |
| 2700 | | | |
| 2850 | | | |
| 3000 | | | |
| 3150 | | | |

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



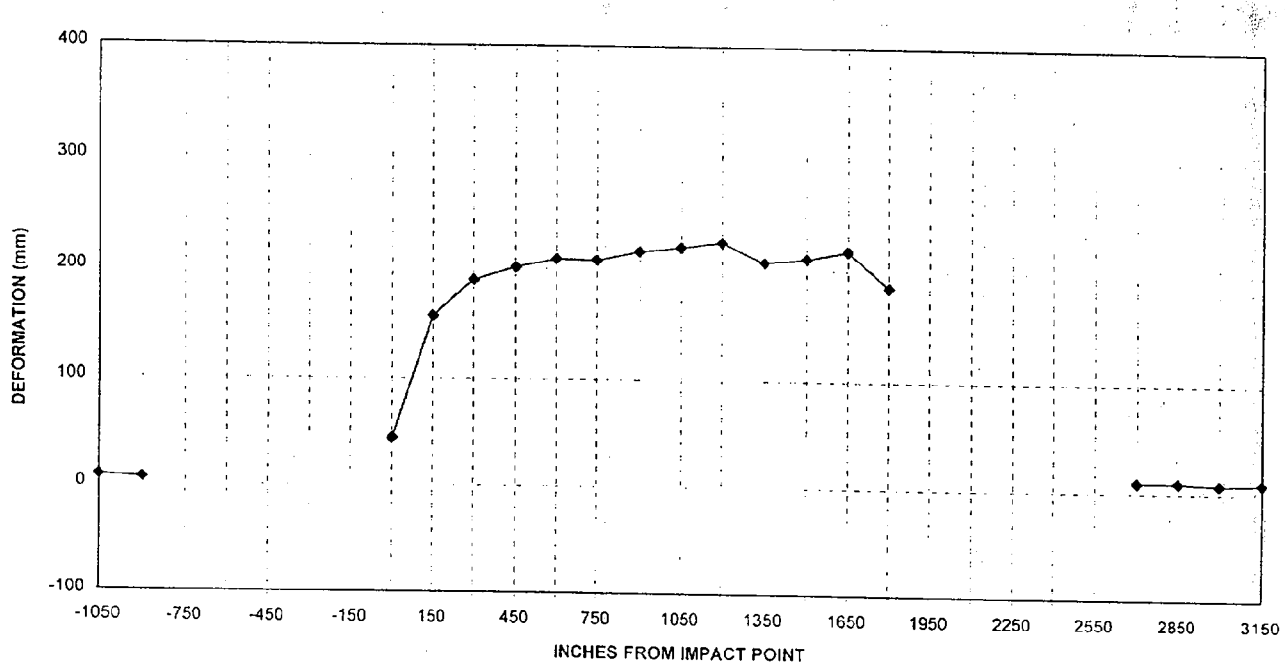

LEVEL 1 - AXLE CENTERLINE

DATA SHEET NO. 10 (Cont'd)
VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

| | Level 2 - Occupant H Point | | |
|---|---|---|---|
| Longitudinal Distance (mm) | Pre-Test (mm) | Post-Test (mm) | Static Crush (mm) |
| -1050 | 770 | 778 | 8 |
| -900 | 734 | 740 | 6 |
| -750 | | | |
| -600 | | | |
| -450 | | | |
| -300 | | | |
| -150 | | | |
| 0 (impact point) | 683 | 727 | 44 |
| 150 | 685 | 842 | 157 |
| 300 | 687 | 876 | 189 |
| 450 | 688 | 889 | 201 |
| 600 | 690 | 899 | 209 |
| 750 | 691 | 899 | 208 |
| 900 | 691 | 907 | 216 |
| 1050 | 692 | 912 | 220 |
| 1200 | 690 | 915 | 225 |
| 1350 | 689 | 896 | 207 |
| 1500 | 690 | 901 | 211 |
| 1650 | 689 | 907 | 218 |
| 1800 | 686 | 871 | 185 |
| 1950 | | | |
| 2100 | | | |
| 2250 | | | |
| 2400 | | | |
| 2550 | | | |
| 2700 | 702 | 712 | 10 |
| 2850 | 719 | 729 | 10 |
| 3000 | 738 | 746 | 8 |
| 3150 | 768 | 777 | 9 |

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



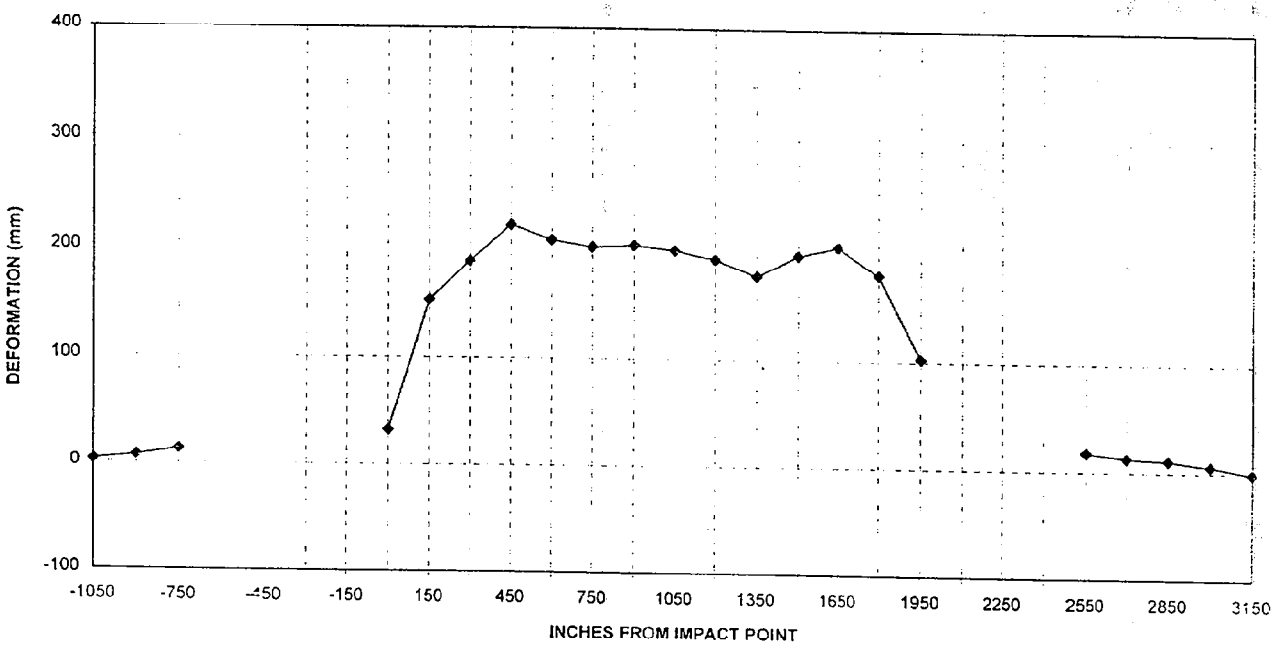

LEVEL 2 - OCCUPANT H-POINT

DATA SHEET NO. 10 (Cont'd)
VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

| | Level 3 - Mid Door | | |
|---|---|---|---|
| Longitudinal Distance (mm) | Pre-Test (mm) | Post-Test (mm) | Static Crush (mm) |
| -1050 | 777 | 780 | 3 |
| -900 | 738 | 745 | 7 |
| -750 | 709 | 722 | 13 |
| -600 | | | |
| -450 | | | |
| -300 | | | |
| -150 | | | |
| 0 (impact point) | 682 | 714 | 32 |
| 150 | 683 | 836 | 153 |
| 300 | 685 | 874 | 189 |
| 450 | 688 | 909 | 221 |
| 600 | 688 | 896 | 208 |
| 750 | 690 | 892 | 202 |
| 900 | 690 | 894 | 204 |
| 1050 | 690 | 890 | 200 |
| 1200 | 690 | 882 | 192 |
| 1350 | 688 | 865 | 177 |
| 1500 | 687 | 883 | 196 |
| 1650 | 685 | 889 | 204 |
| 1800 | 682 | 861 | 179 |
| 1950 | 678 | 781 | 103 |
| 2100 | | | |
| 2250 | | | |
| 2400 | | | |
| 2550 | 693 | 711 | 18 |
| 2700 | 709 | 722 | 13 |
| 2850 | 732 | 743 | 11 |
| 3000 | 764 | 770 | 6 |
| 3150 | 814 | 813 | -1 |

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



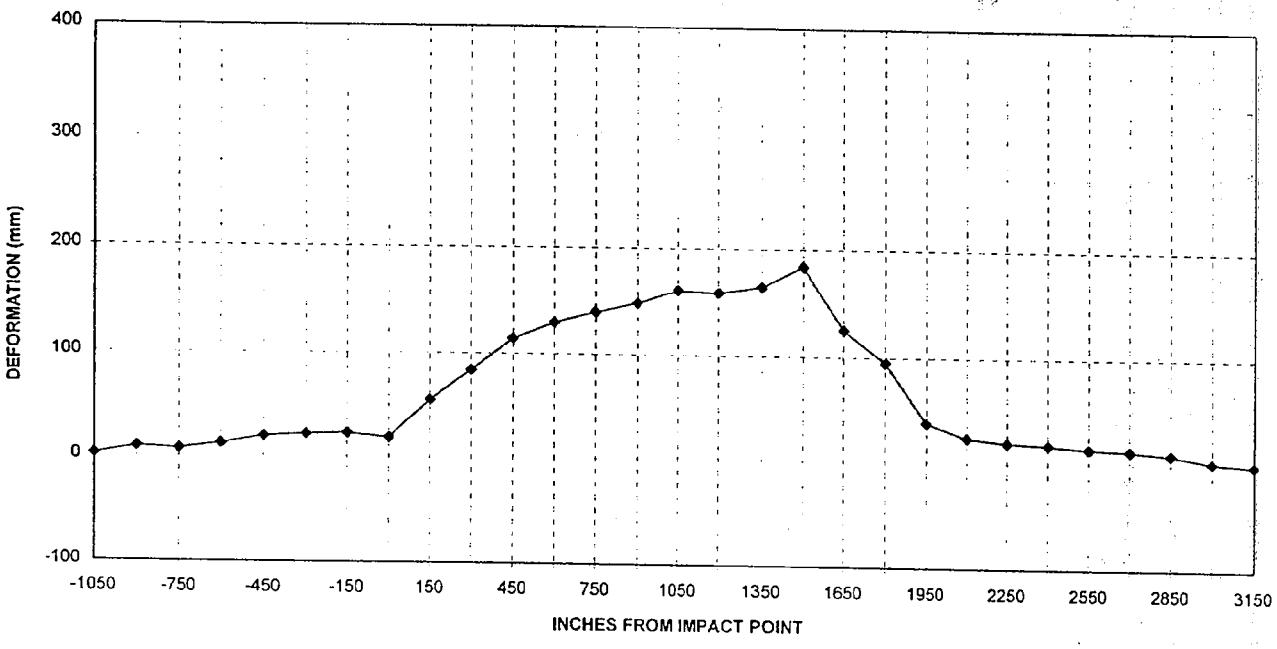

LEVEL 3 - MID DOOR

DATA SHEET NO. 10 (Cont'd)
VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

| | Level 4 - Window Sill | | |
|---|---|---|---|
| Longitudinal Distance (mm) | Pre-Test (mm) | Post-Test (mm) | Static Crush (mm) |
| -1050 | 844 | 846 | 2 |
| -900 | 810 | 819 | 9 |
| -750 | 792 | 799 | 7 |
| -600 | 769 | 781 | 12 |
| -450 | 757 | 776 | 19 |
| -300 | 745 | 766 | 21 |
| -150 | 740 | 762 | 22 |
| 0 (impact point) | 738 | 756 | 18 |
| 150 | 733 | 788 | 55 |
| 300 | 735 | 819 | 84 |
| 450 | 736 | 850 | 114 |
| 600 | 736 | 865 | 129 |
| 750 | 736 | 875 | 139 |
| 900 | 738 | 886 | 148 |
| 1050 | 738 | 899 | 161 |
| 1200 | 736 | 895 | 159 |
| 1350 | 737 | 902 | 165 |
| 1500 | 738 | 922 | 184 |
| 1650 | 736 | 861 | 125 |
| 1800 | 738 | 833 | 95 |
| 1950 | 736 | 773 | 37 |
| 2100 | 737 | 760 | 23 |
| 2250 | 740 | 759 | 19 |
| 2400 | 747 | 764 | 17 |
| 2550 | 756 | 770 | 14 |
| 2700 | 770 | 782 | 12 |
| 2850 | 787 | 796 | 9 |
| 3000 | 810 | 812 | 2 |
| 3150 | 840 | 839 | -1 |

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

## VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



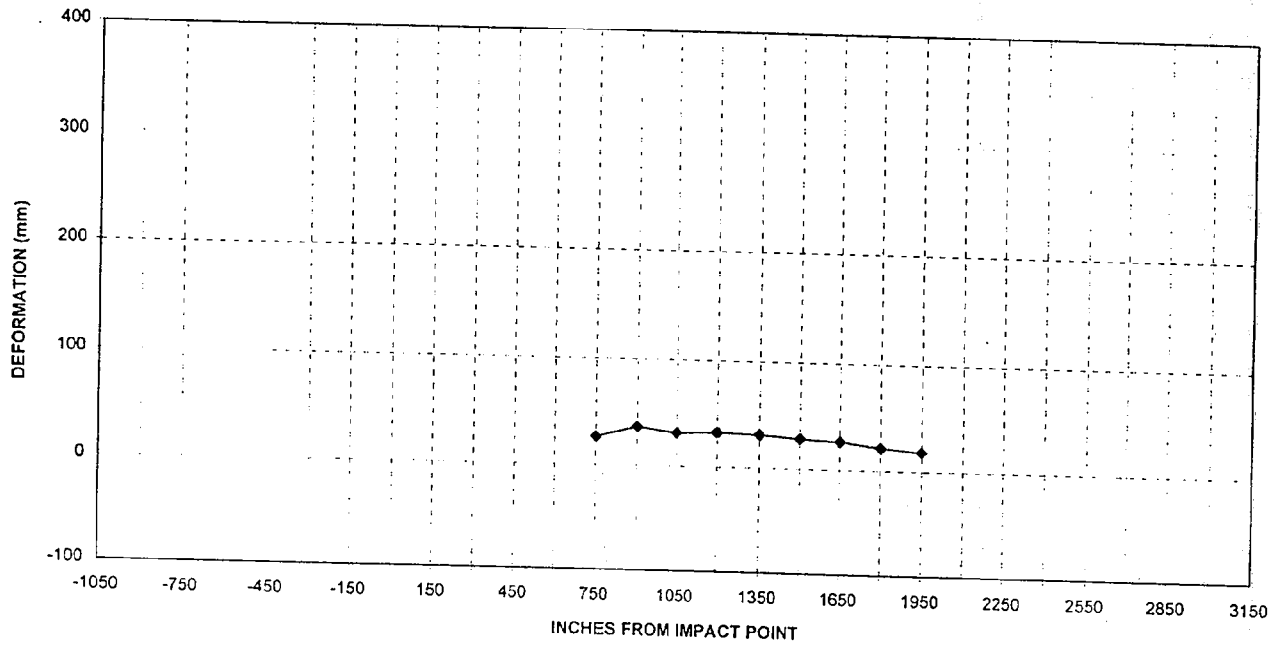

LEVEL 4 - WINDOW SILL

DATA SHEET NO. 10 (Cont'd)
VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

| | Level 5 - Window Top | | |
|---|---|---|---|
| Longitudinal Distance (mm) | Pre-Test (mm) | Post-Test (mm) | Static Crush (mm) |
| -1050 | | | |
| -900 | | | |
| -750 | | | |
| -600 | | | |
| -450 | | | |
| -300 | | | |
| -150 | | | |
| **0 (impact point)** | | | |
| 150 | | | |
| 300 | | | |
| 450 | | | |
| 600 | | | |
| 750 | 980 | 1006 | 26 |
| 900 | 980 | 1016 | 36 |
| 1050 | 981 | 1012 | 31 |
| 1200 | 985 | 1017 | 32 |
| 1350 | 988 | 1019 | 31 |
| 1500 | 993 | 1021 | 28 |
| 1650 | 1006 | 1032 | 26 |
| 1800 | 1015 | 1036 | 21 |
| 1950 | 1020 | 1038 | 18 |
| 2100 | | | |
| 2250 | | | |
| 2400 | | | |
| 2550 | | | |
| 2700 | | | |
| 2850 | | | |
| 3000 | | | |
| 3150 | | | |

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

## VEHICLE EXTERIOR STATIC CRUSH (Cont'd)

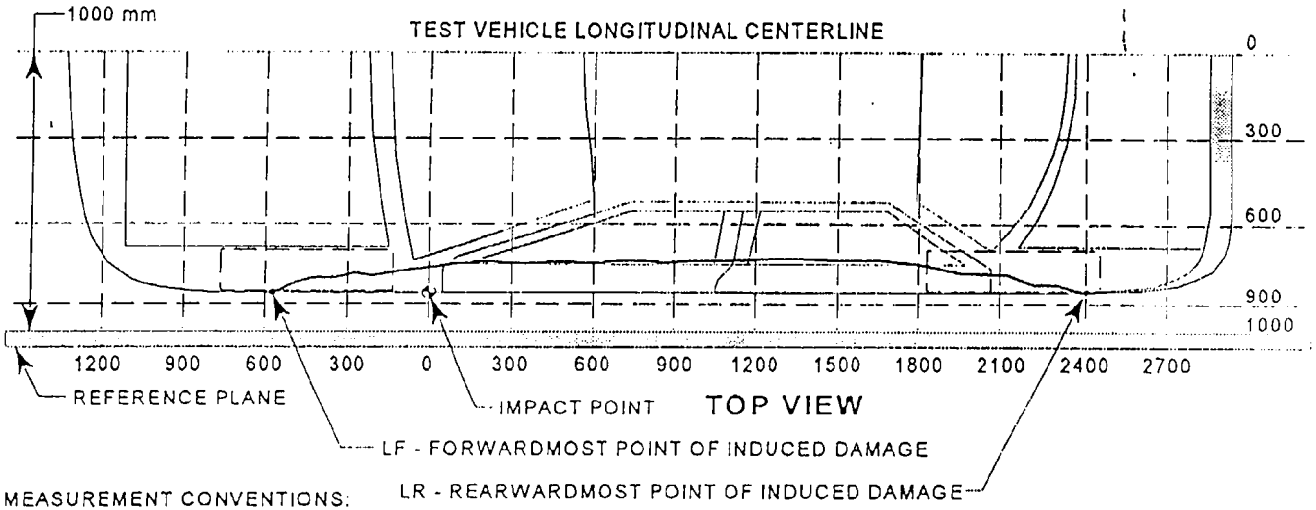



LEVEL 5 - WINDOW TOP

DATA SHEET NO. 11
VEHICLE DAMAGE PROFILE DISTANCES

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

NHTSA NO.: CT0309 Test Date: March 20, 1996




MEASUREMENT CONVENTIONS:
Forward of the impact point (towards front of vehicle) is considered negative (—).
Rearward of the impact point (toward rearend of vehicle) is considered positive (+).

| DPD MEASUREMENTS | POST-TEST (mm) | PRE-TEST (mm) | STATIC CRUSH (mm) |
|---|---|---|---|
| 1. (LF = -300 mm) | 694 | 694 | 0 |
| 2. 210 mm | 800 | 734 | 66 |
| 3. 720 mm | 916 | 691 | 225 |
| 4. 1230 mm | 909 | 690 | 219 |
| 5. 1740 mm | 850 | 737 | 113 |
| 6. (LR = 2250 mm) | 708 | 708 | 0 |

DATA SHEET NO. 12

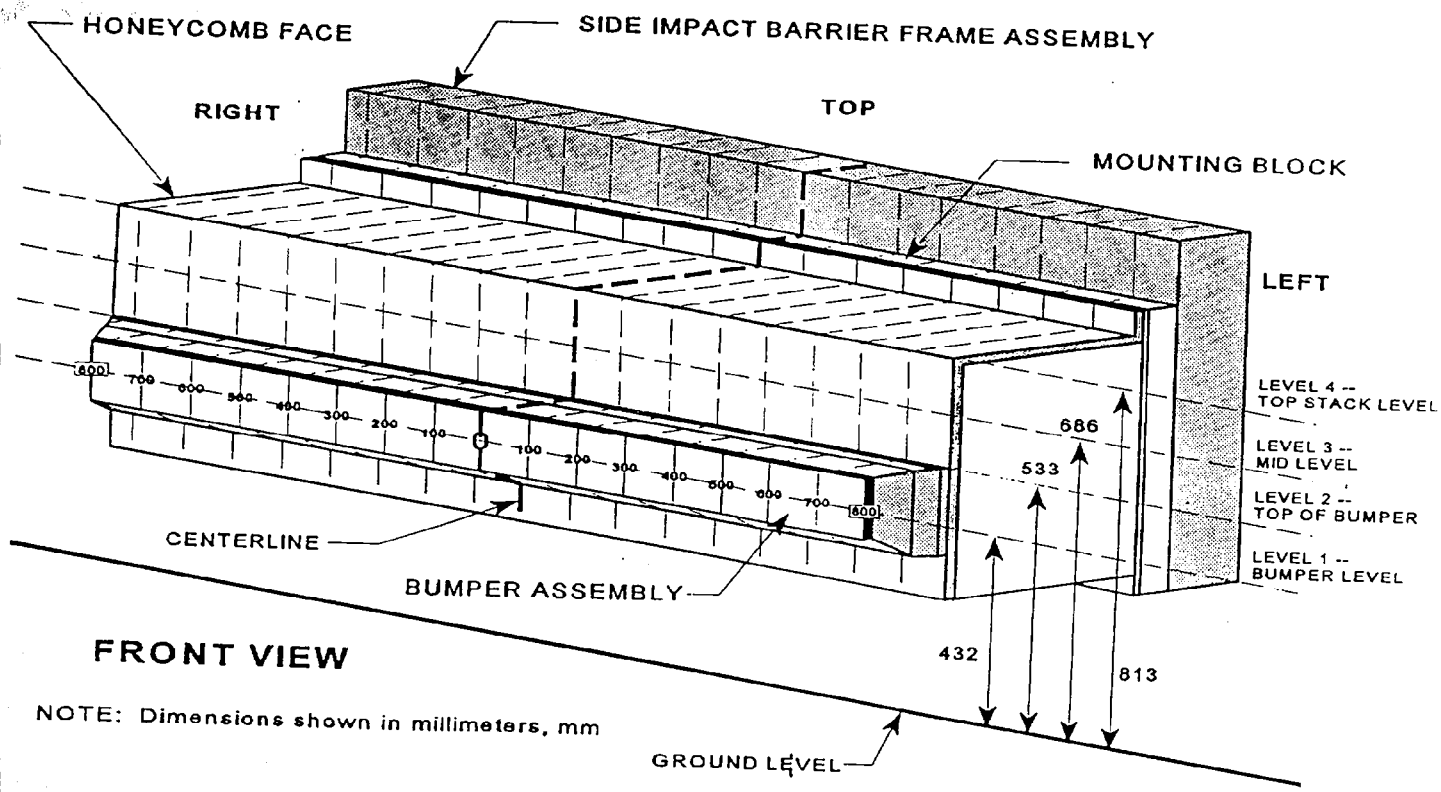
EXTERIOR STATIC CRUSH FOR SIDE IMPACTOR

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

| | | Distance Right of Center (mm) | | | | | | | | | Distance Left of Center (mm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Location | Height at CL* | 800 | 700 | 600 | 500 | 400 | 300 | 200 | 100 | 0 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 |
| Top Stack Level 4 | 813 mm | 89 | 41 | 15 | 1 | 1 | 2 | 4 | 6 | 8 | 9 | 11 | 13 | 14 | 30 | 57 | 92 | 130 |
| Mid Level Level 3 | 686 mm | 53 | 5 | 5 | 8 | 15 | 2 | 3 | 3 | 5 | 7 | 9 | 10 | 12 | 14 | 23 | 48 | 95 |
| Top Bumper Level 2 | 533 mm | 75 | 72 | 68 | 68 | 61 | 48 | 32 | 25 | 21 | 21 | 25 | 27 | 29 | 39 | 53 | 72 | 96 |
| Mid Bumper Level 1 | 432 mm | 113 | 110 | 110 | 113 | 111 | 93 | 75 | 69 | 59 | 57 | 60 | 63 | 66 | 77 | 94 | 118 | 137 |

See next page for Barrier Face Graphic

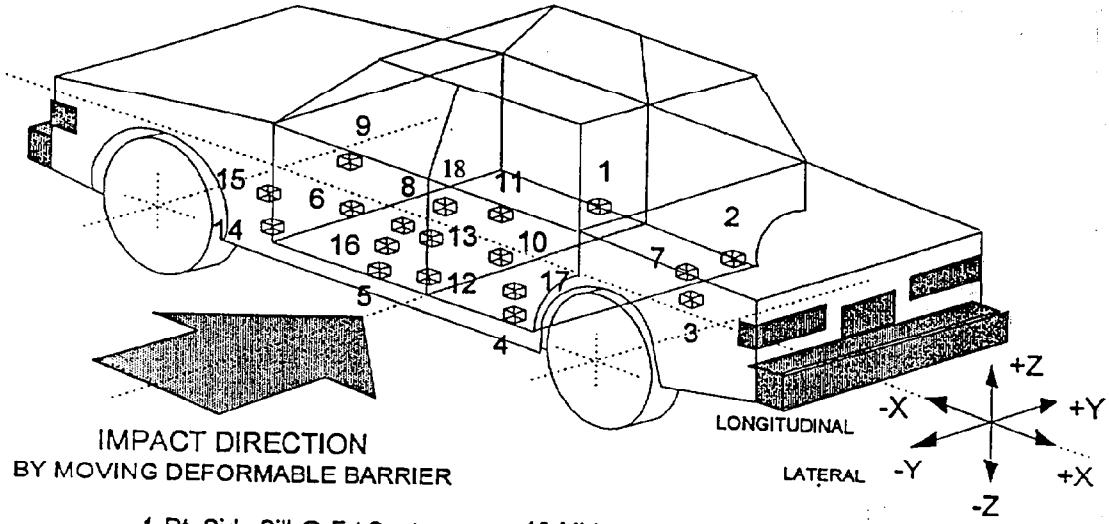

HONEYCOMB FACE
SIDE IMPACT BARRIER FRAME ASSEMBLY
RIGHT
TOP
MOUNTING BLOCK
LEFT
LEVEL 4 -- TOP STACK LEVEL
LEVEL 3 -- MID LEVEL
LEVEL 2 -- TOP OF BUMPER
LEVEL 1 -- BUMPER LEVEL
686
533
432
813
CENTERLINE
BUMPER ASSEMBLY
GROUND LEVEL
FRONT VIEW
NOTE: Dimensions shown in millimeters, mm

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996




1-Rt. Side Sill @ Frt Seat
2-Rt. Side Sill @ Rr. Seat
3-Rr. Floorpan Above Axle
4-Left Side Sill @ Rr. Seat
5-Left Side Sill @ Frt. Seat
6-Left Frt. Door On Centerline
7-Rt. Rr. Occ Compartment
8-Midrear of Left Frt. Door
9-Left Frt. Door Upper Ctrline
10-Midrear of Left Rear Door
11-Left Rear Door Upper Ctrline
12-Left Lower B-Post
13-Left Middle B-Post
14-Left Lower A-Post
15-Left Middle A-Post
16-Front Seat Track
17-Rear Seat Track
18-Vehicle C.G.

DATA SHEET NO. 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

| 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. | Max. |
| 1 | Rt. Side Sill @ Front Seat | 2584 | 692 | 188 | 4.2 | -2.6 | 29.4 | -2.1 | 7.7 | -5.3 | 29.4 |
| 2 | Rt. Side Sill @ Rear Seat | 1705 | 684 | 205 | 4.5 | -3.2 | 30.7 | -1.9 | 5.4 | -6.3 | 31.1 |
| 3 | Rr. Floorpan Above Axle | 1059 | -25 | 490 | 5.1 | -11.4 | 20.7 | -2.1 | 10.4 | -5.9 | 22.2 |
| 4 | Left Side Sill @ Rr. Seat | 1638 | -685 | 203 | --- | --- | 42.9 | -5.3 | --- | --- | --- |
| 5 | Left Side Sill @ Frt. Seat | 2561 | -693 | 178 | --- | --- | 35.7 | -2.3 | --- | --- | --- |
| 7 | Right Rear Occupant Compartment | 2051 | 310 | 370 | --- | --- | 25.3 | -1.7 | --- | --- | --- |
| 12 | Left Lower B-Post | 2167 | -695 | 215 | --- | --- | 39.7 | -2.8 | --- | --- | --- |
| 14 | Left Lower A-Post | 3400 | -905 | 357 | --- | --- | 92.1 | -18.3 | --- | --- | --- |
| 15 | Left Mid A-Post | 3471 | -862 | 680 | --- | --- | 51.3 | -9.3 | --- | --- | --- |
| 16 | Driver Left Seat Track | 2377 | -595 | 277 | --- | --- | 34.2 | -2.9 | --- | --- | --- |
| 18 | Vehicle CG | 2786 | -23 | 353 | 4.2 | -10.0 | 25.9 | -1.7 | 17.8 | -14.4 | 30.3 |

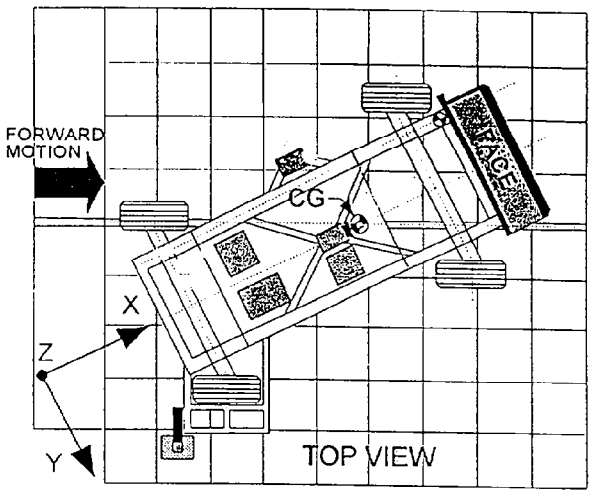
*Reference: X - Rear Bumper (+ Forward)
Y - Vehicle Centerline (+ To right)
Z - Ground Level (+ Up)

DATA SHEET NO. 14

MOVING DEFORMABLE BARRIER (MDB) ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996




| 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) | --- | --- | --- | 1.4 | 117 | -16.3 | 29 |
| | Lateral (Y) | --- | --- | --- | 1.9 | 71 | -6.8 | 53 |
| | Vertical (Z) | --- | --- | --- | 12.1 | 69 | -9.7 | 117 |
| | Resultant (R) | --- | --- | --- | 19.9 | 52 | --- | --- |
| 2 | Rear Frame Member | -2591 | -625 | 622 | | | | |
| | Longitudinal (X) | --- | --- | --- | 1.7 | 188 | -20.4 | 44 |
| | Lateral (Y) | --- | --- | --- | 3.6 | 52 | -1.9 | 71 |

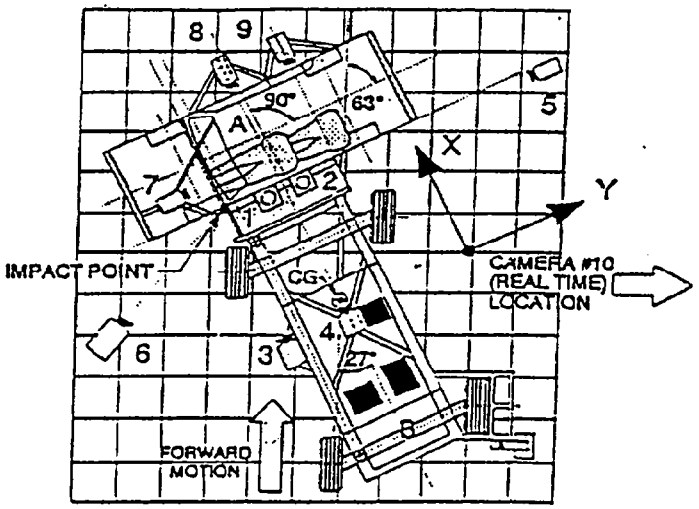
*Reference: X - Front Axle (+ Forward)
Y - Vehicle Centerline (+ To right)
Z - Ground Level (+ Up)

DATA SHEET NO. 15

HIGH SPEED CAMERA LOCATIONS AND DATA

Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996




| Camera No. | View | Coordinates (mm)* | | | Angle | Lens (mm) | Film Speed (fps) |
|---|---|---|---|---|---|---|---|
| | | X | Y | Z | | | |
| | Real Time | | | | | 13 | 24 |
| 1 | Top Impact | -30 | -103 | 5400 | 90° | 13 | N/T |
| 2 | Top Wide | 320 | 747 | 5130 | 90° | 8 | 1099 |
| 3 | Cart Pointer | | | | | 35 | 1020 |
| 4 | Cart | | | | | 13 | 1042 |
| 5 | Right Impact | 3130 | 8817 | 1920 | 90° | 25 | 1020 |
| 6 | Left Overall | -3180 | -1693 | 1655 | 90° | 13 | 1099 |
| 7 | Onboard Driver | | | | | 8 | 1031 |
| 8 | Onboard Hood | | | | | 13 | 990 |
| 9 | Onboard Passenger | | | | | 8 | 943 |

* Reference: (from impact point)
+X = Forward
+Y = To Right
+Z = Upward from floor level

NT = No Timing Available

DATA SHEET 16

FUEL SYSTEM INTEGRITY POST IMPACT TEST DATA

Vehicle Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

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 33.0 mph (53.1 kph)

FUEL SPILLAGE MEASUREMENT:

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

FUEL SPILLAGE LOCATION(S): None

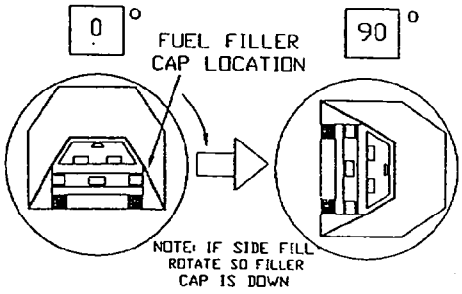
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA

Vehicle Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

TEST PHASE: 0° - 90°




DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 50 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 50 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

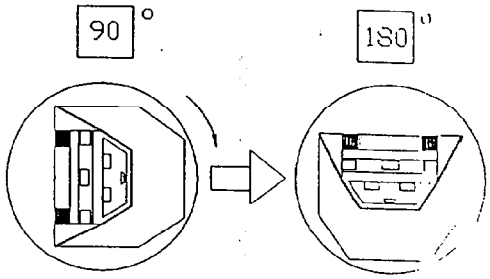
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA (Cont'd)

Vehicle Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

TEST PHASE: 90° - 180°




DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 30 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 30 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

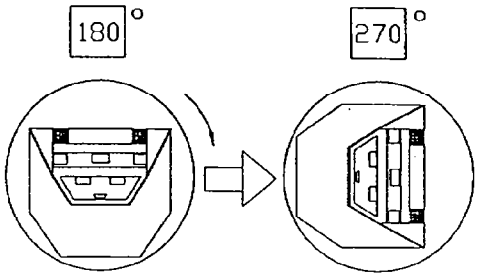
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA (Cont'd)

Vehicle Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

TEST PHASE: 180° - 270°




DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 15 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 15 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

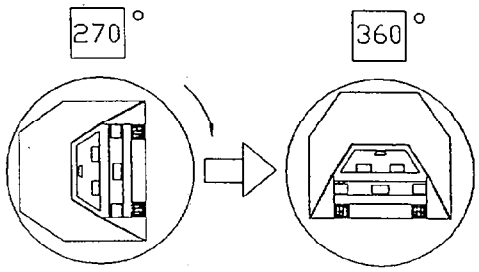
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA

Vehicle Year/Make/Model/Body Style: 1996/Chrysler/Sebring/JX Convertible

Vehicle NHTSA No.: CT0309 Test Date: March 20, 1996

TEST PHASE: 270° - 360°




DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 40 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 40 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

TABLE OF PHOTOGRAPHS

TABLE OF PHOTOGRAPHS

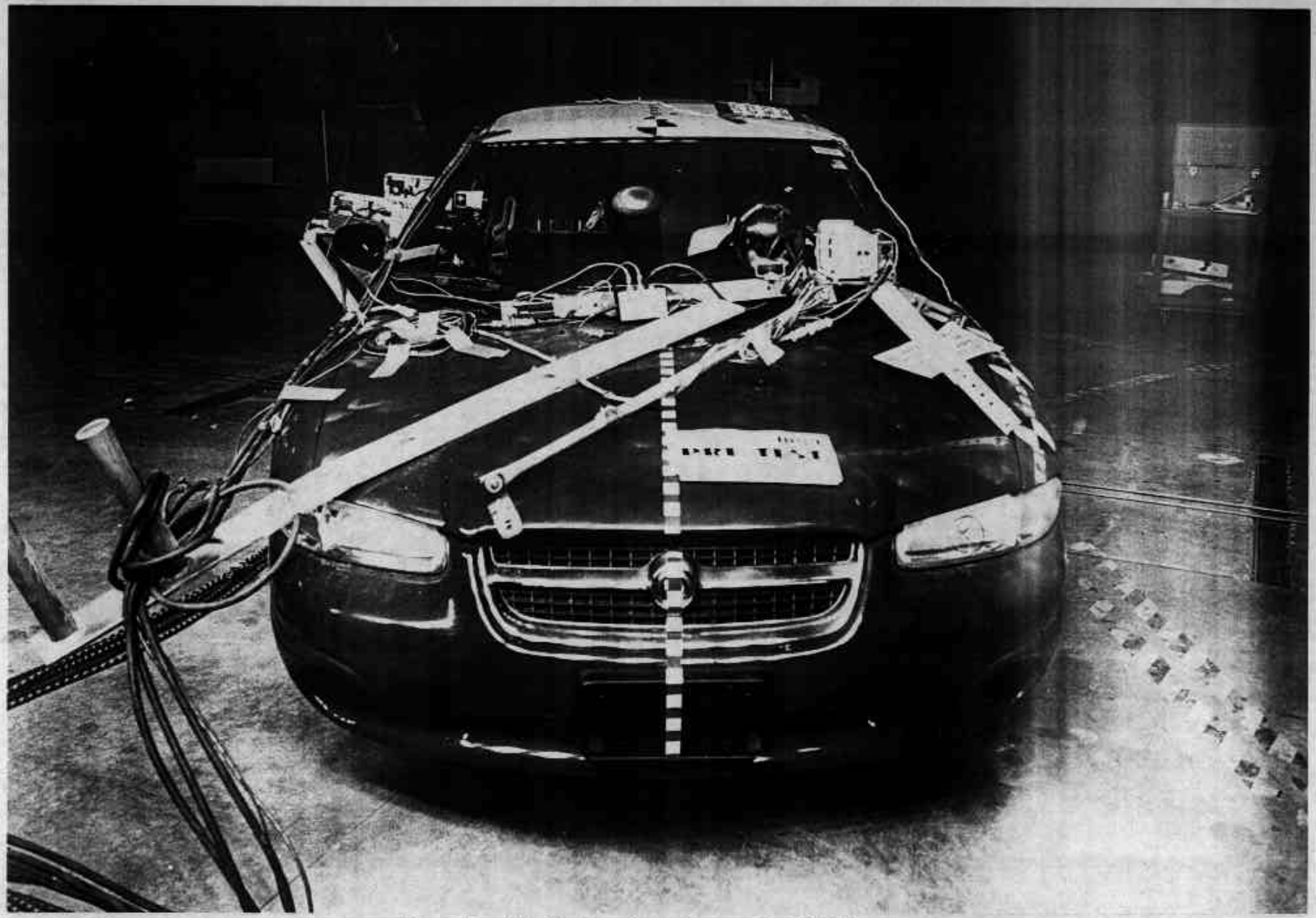
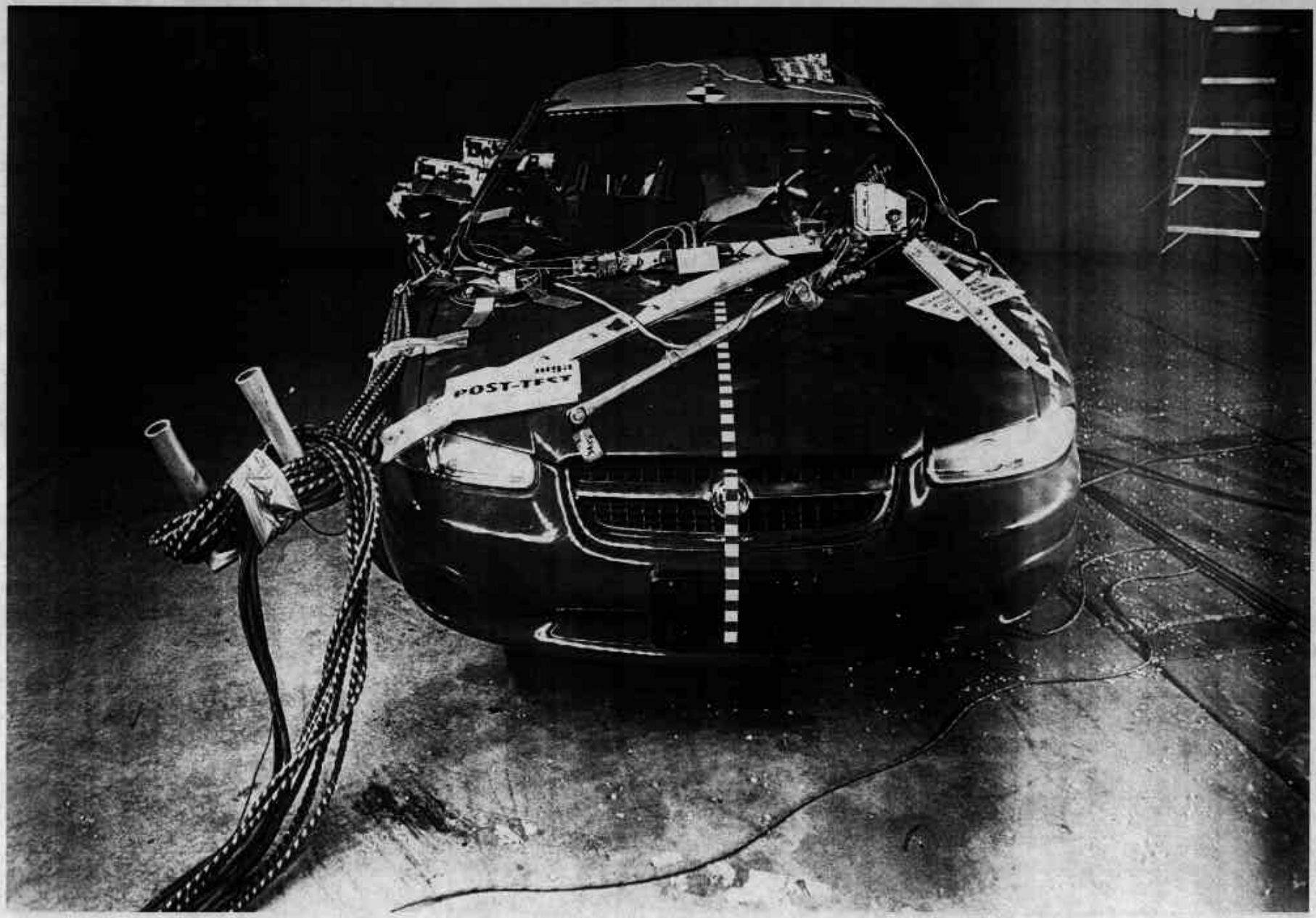


Photo No. A-1 - Pre-Test Front View of Test Vehicle




A-2

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

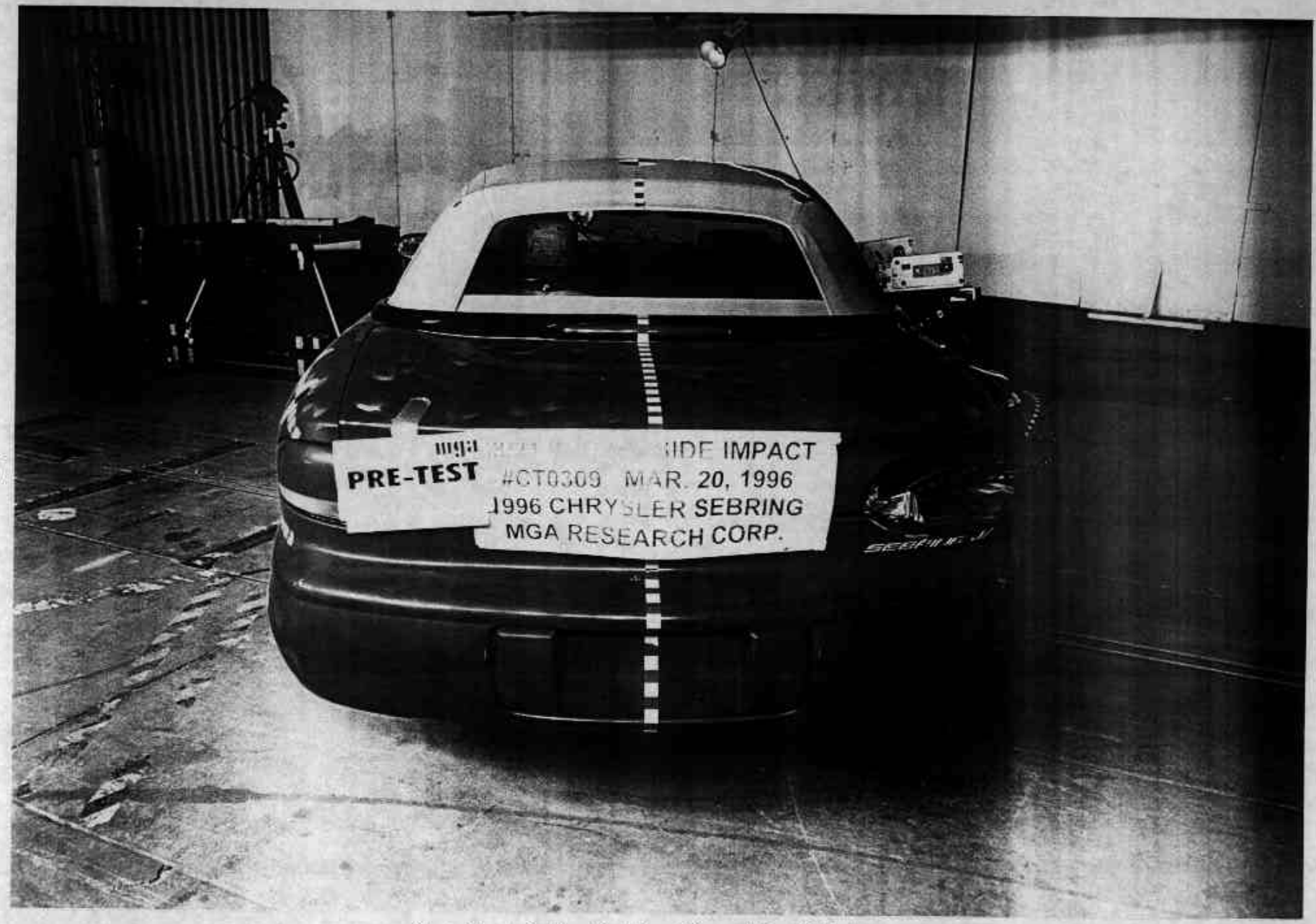



Photo No. A-3 - Pre-Test Rear View of Test Vehicle


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

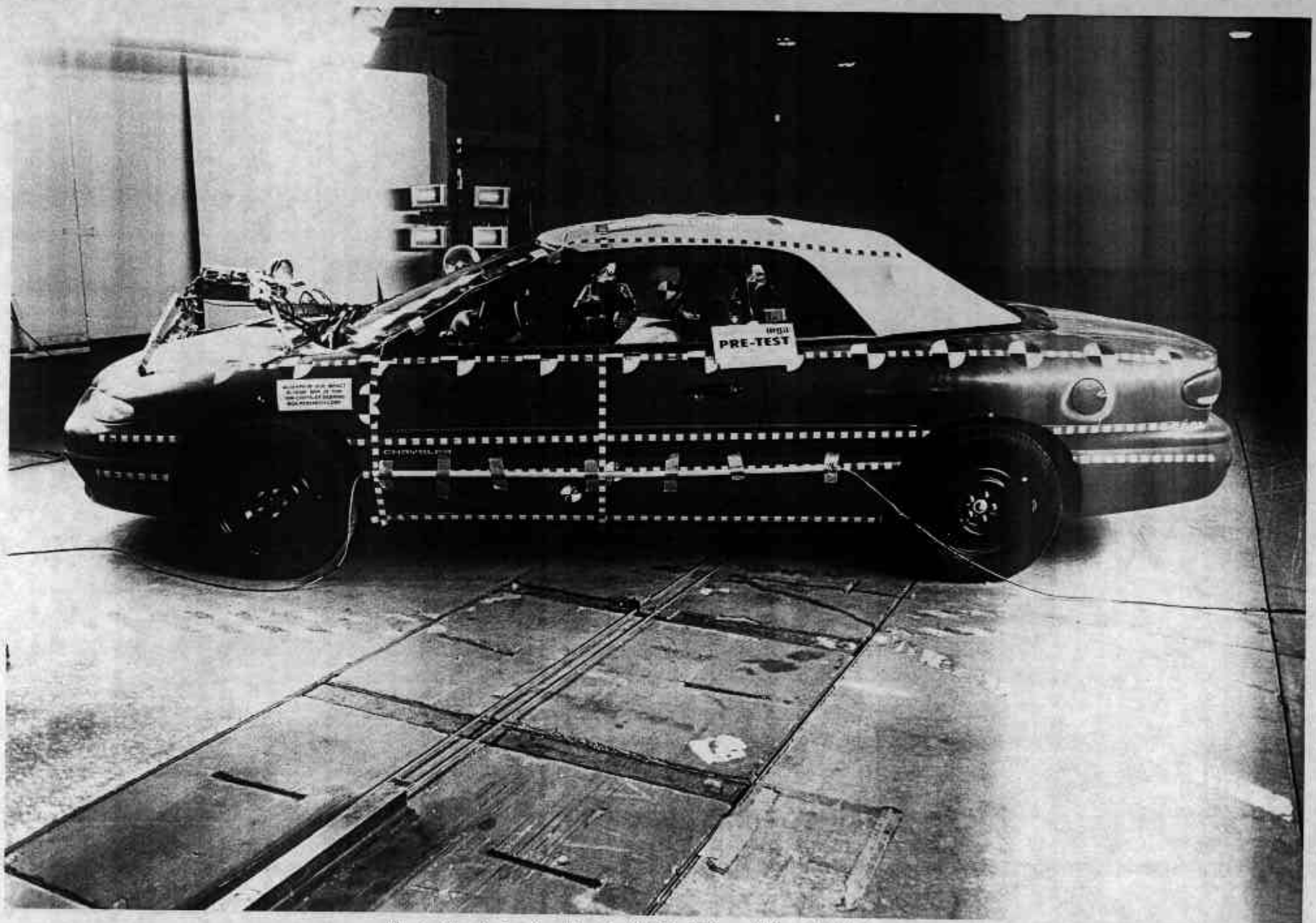



Photo No. A-5 - Pre-Test Left Side View of Test Vehicle

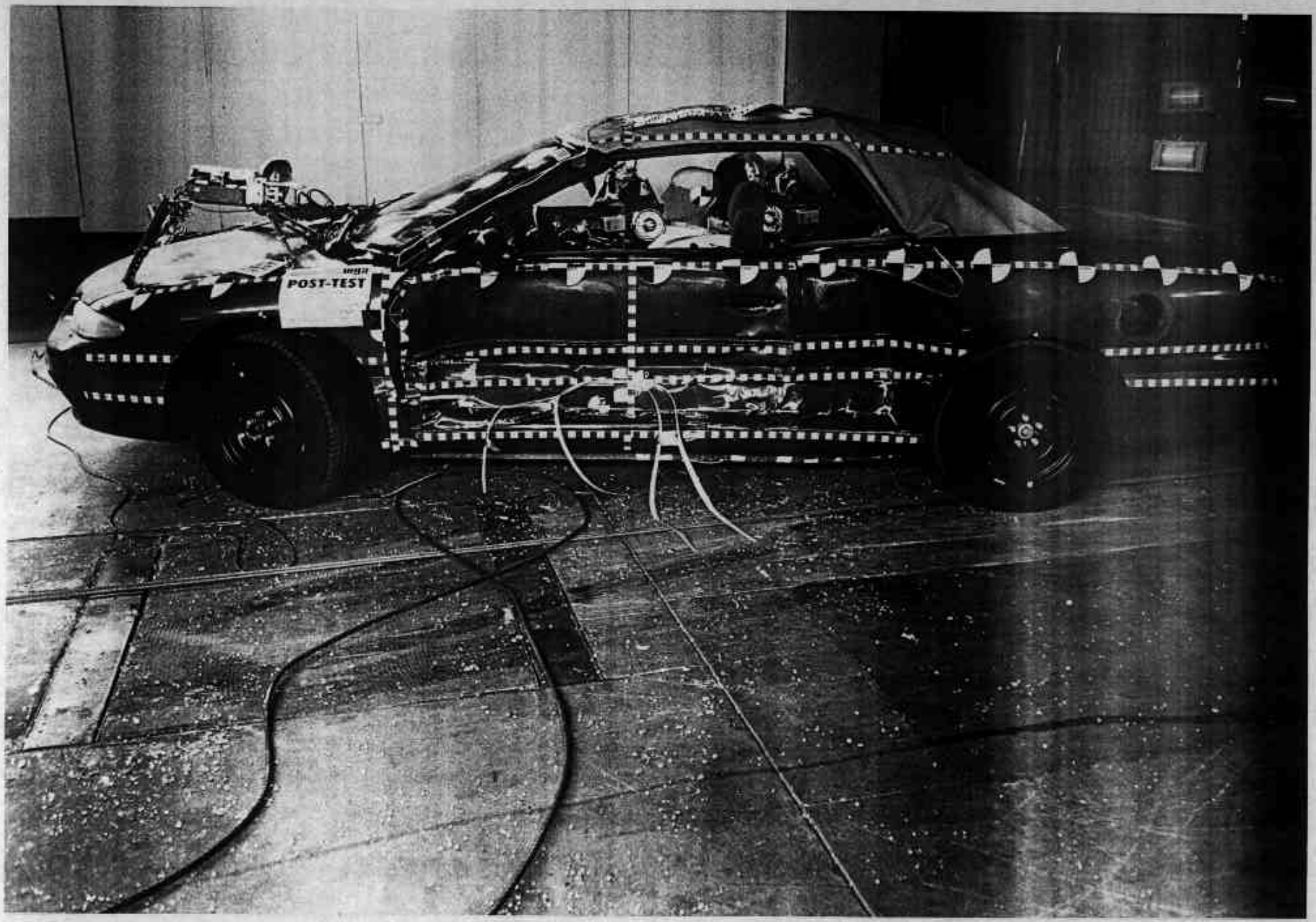
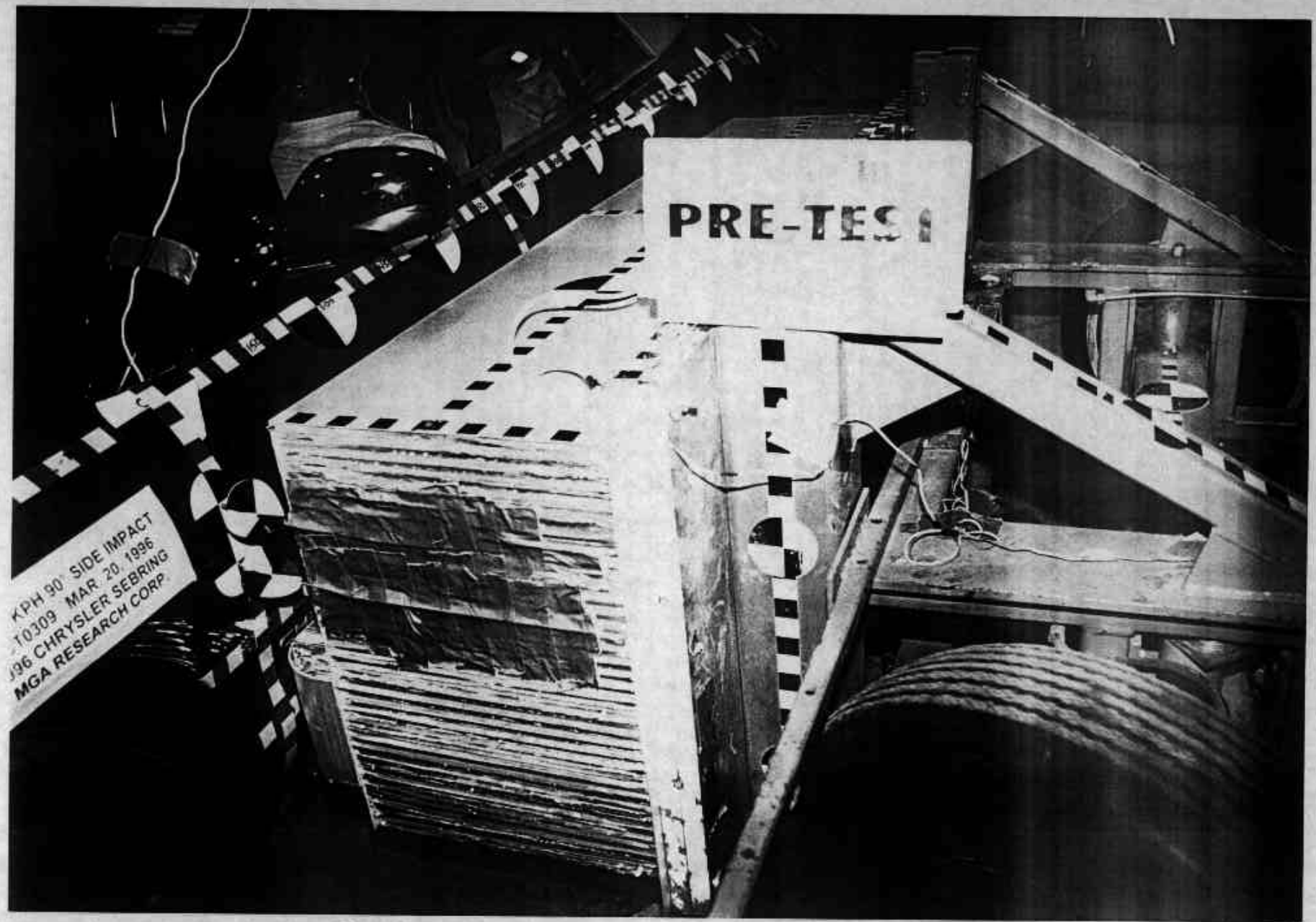



Photo No. A-6 - Post-Test Left Side View of Test Vehicle




A-7

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

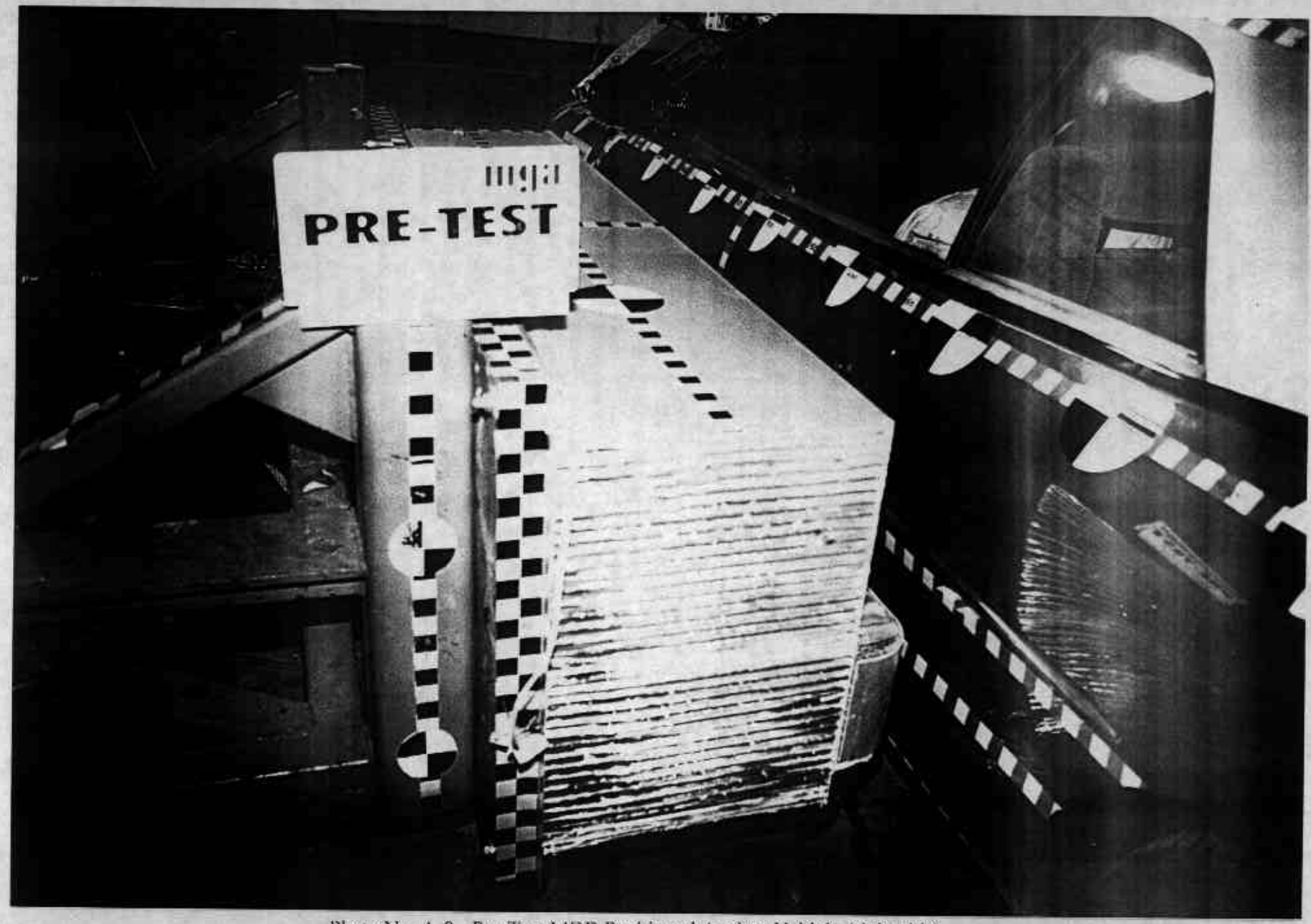



Photo No. A-8 - Pre-Test MDB Positioned Against Vehicle (right side)

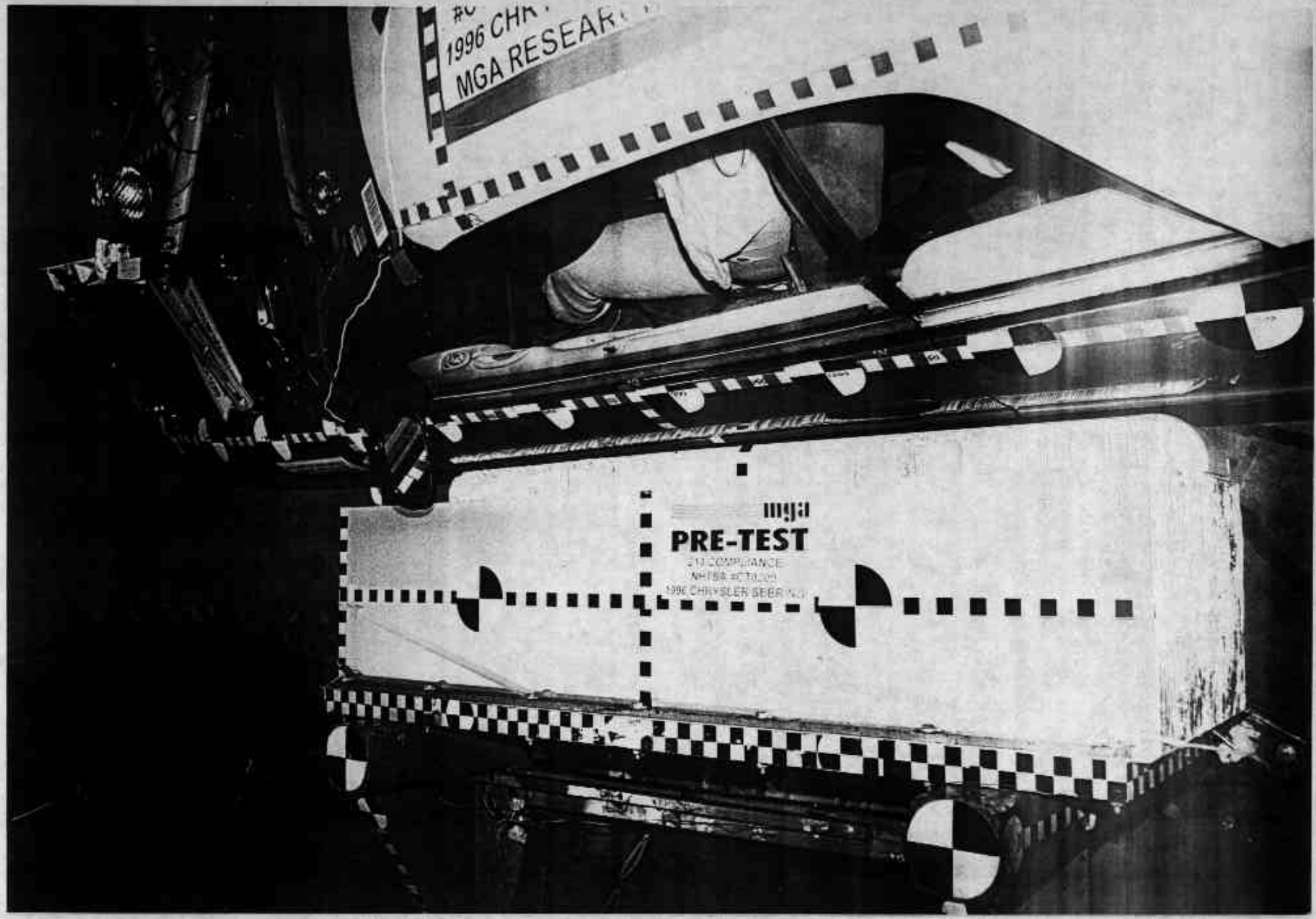



Photo No. A-9 - Pre-Test MDB Positioned Against Vehicle Overhead View




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

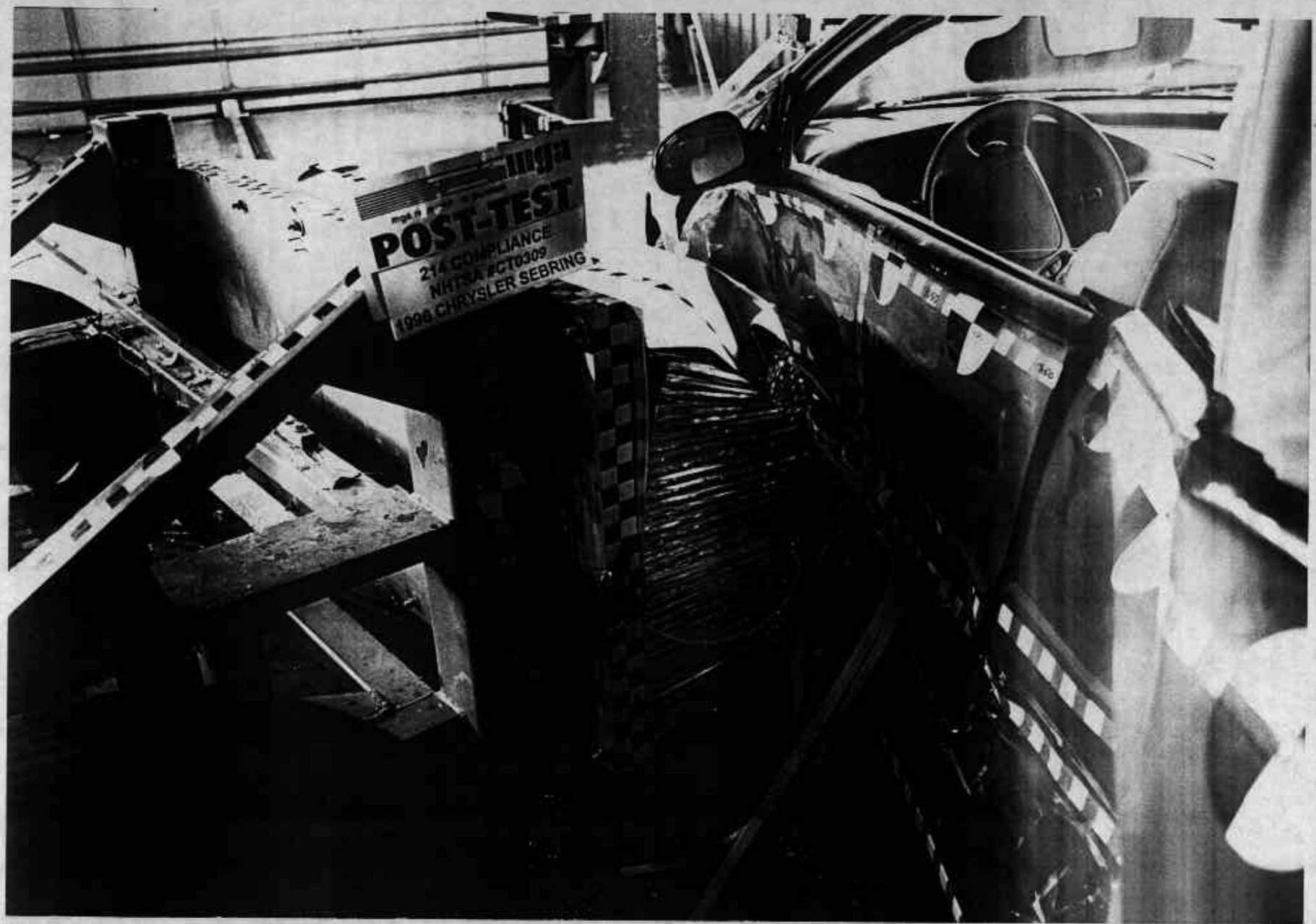



Photo No. A-11 - Post-Test MDB Positioned Against Vehicle (right side)

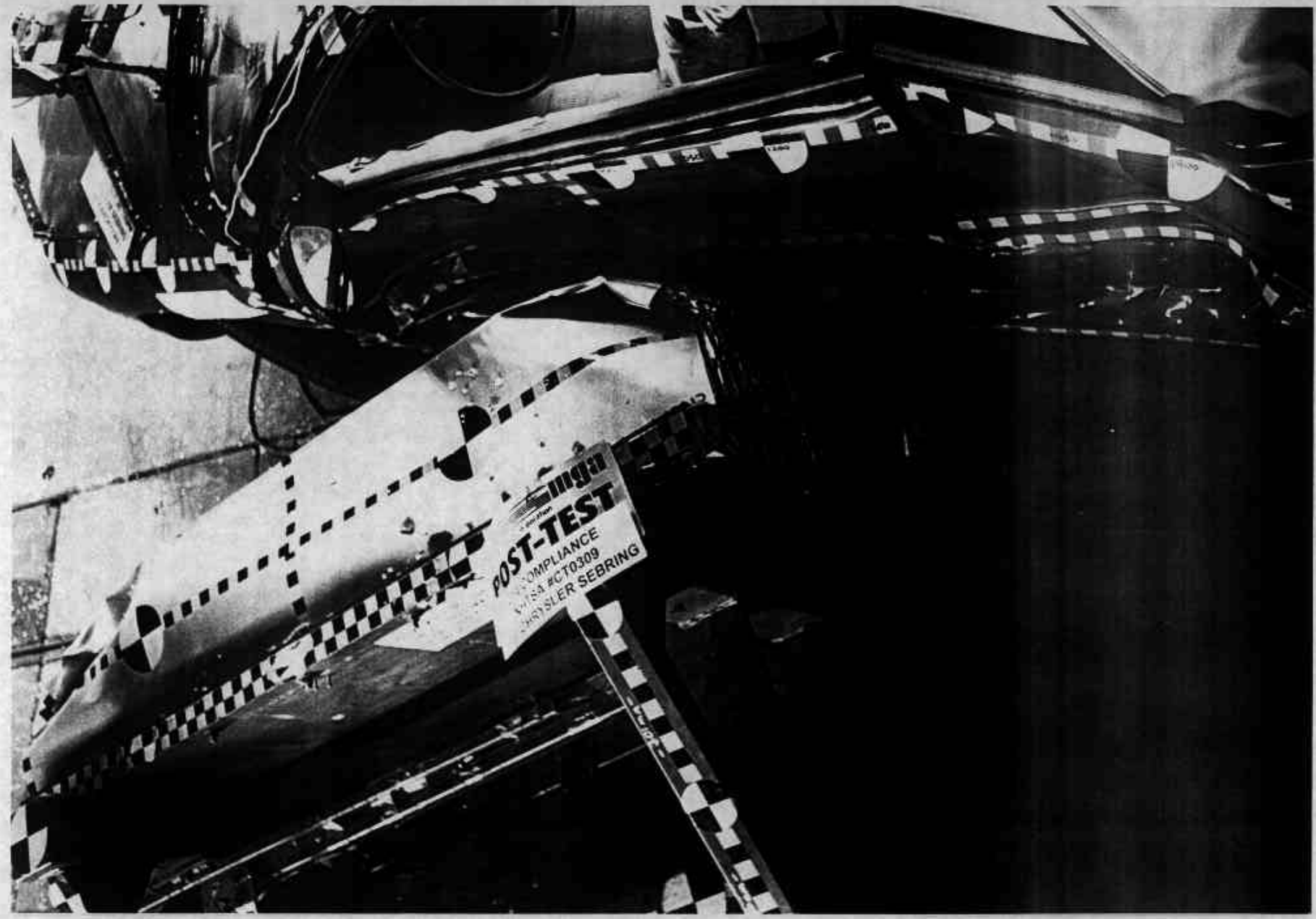



Photo No. A-12 - Post-Test MDB Positioned Against Vehicle Overhead View

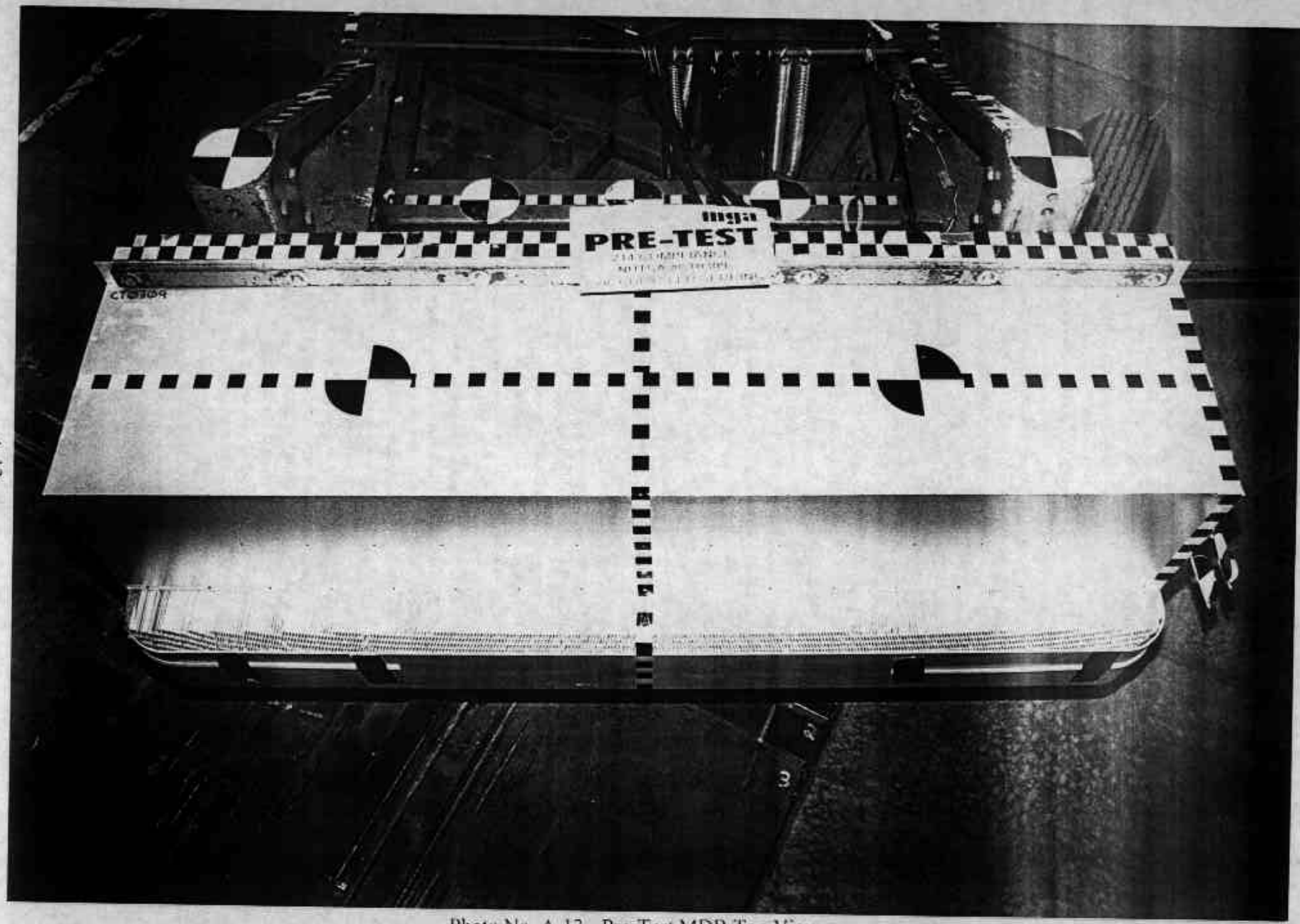



Photo No. A-13 - Pre-Test MDB Top View

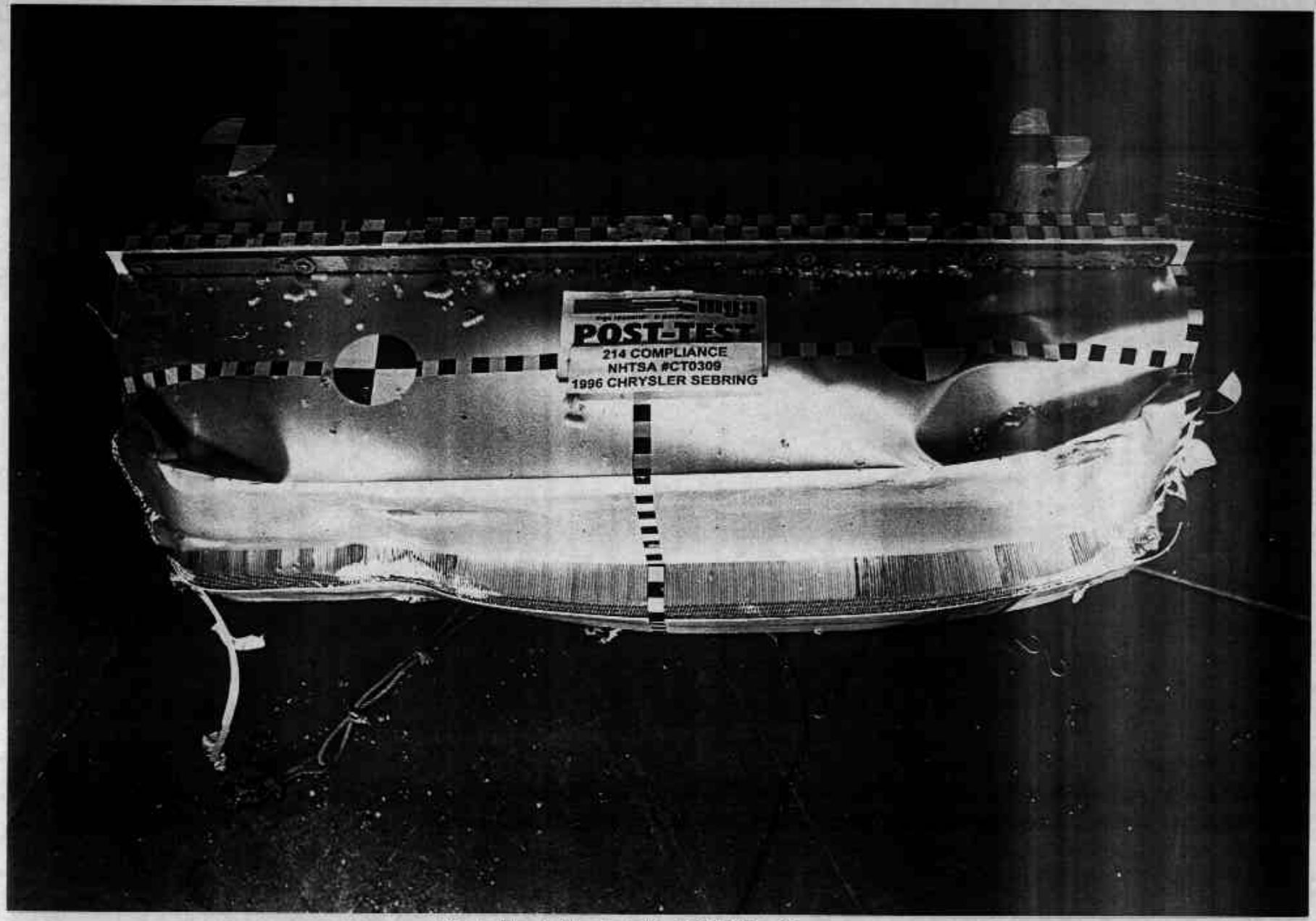



Photo No. A-14 - Post-Test MDB Top View

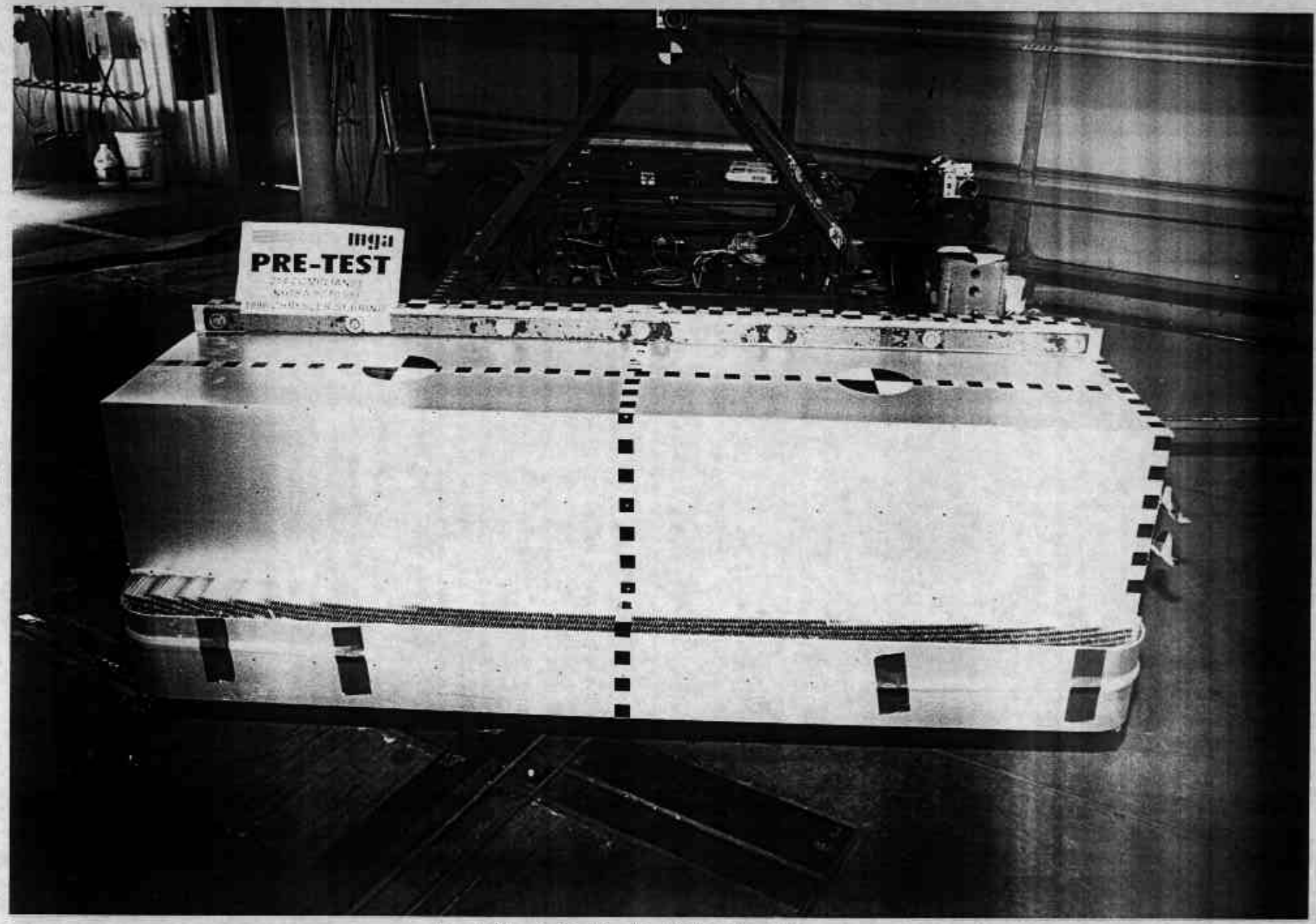



Photo No. A-15 - Pre-Test MDB Front View

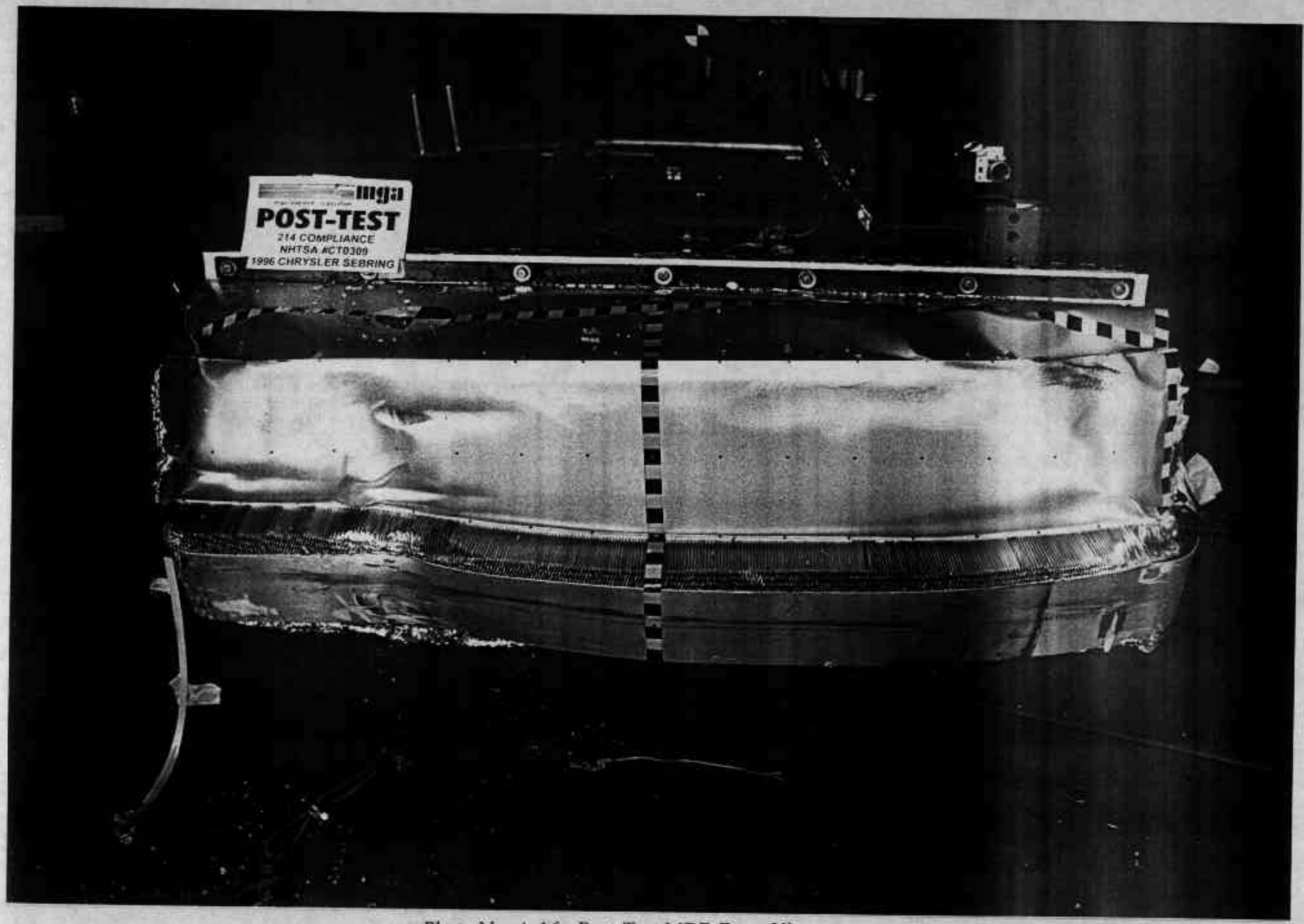



Photo No. A-16 - Post-Test MDB Front View

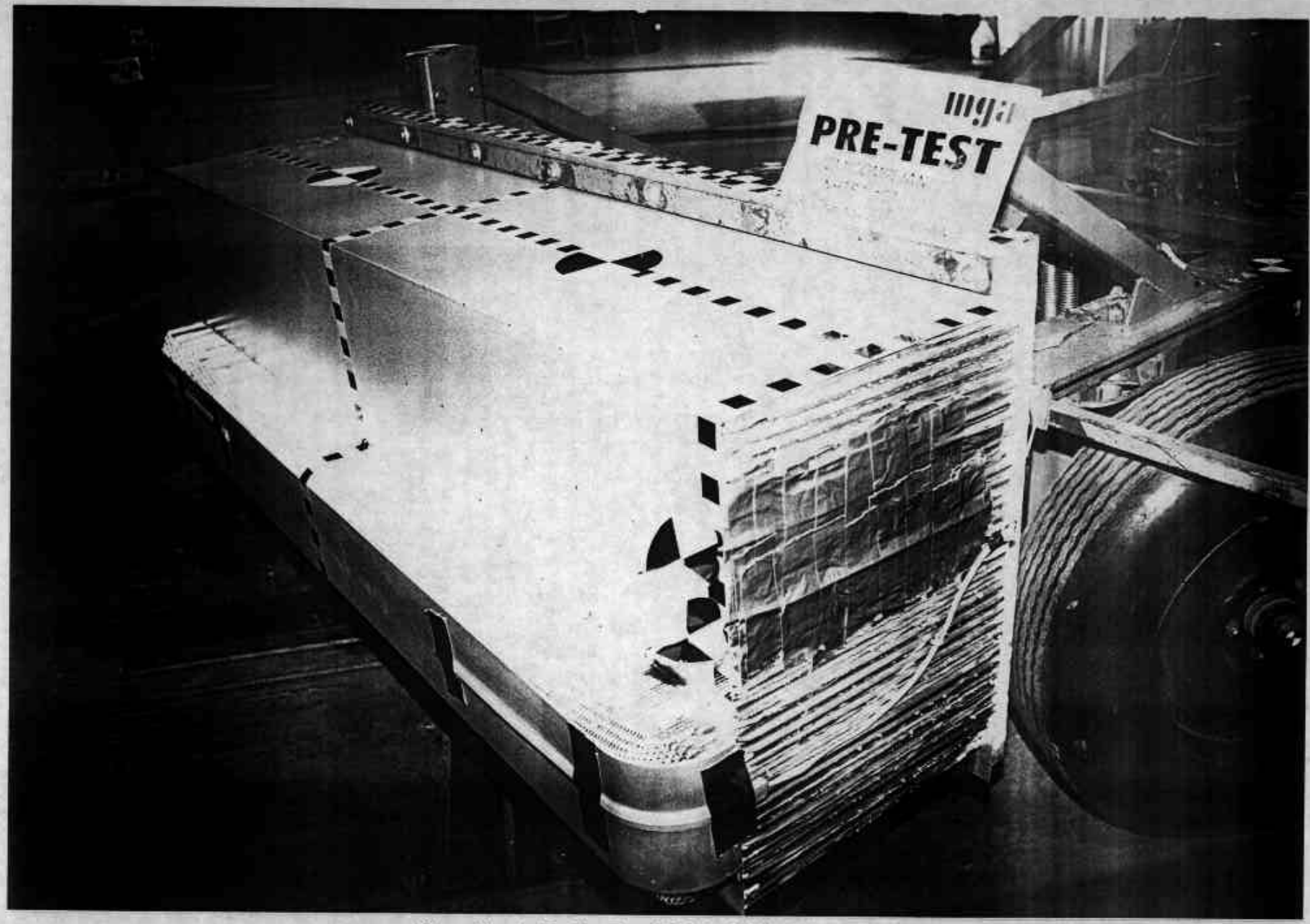



Photo No. A-17 - Pre-Test MDB Left Side View

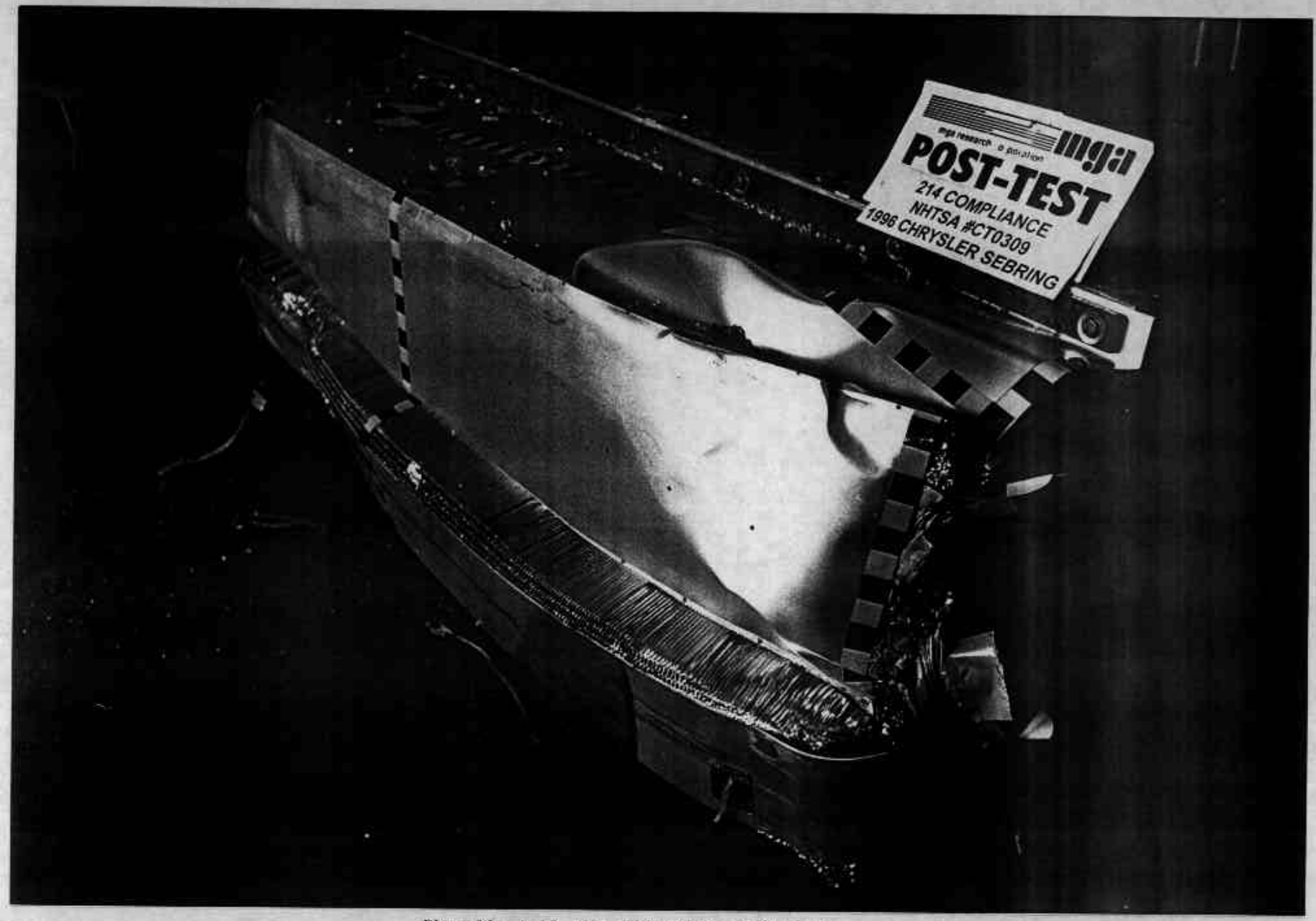



Photo No. A-18 - Post-Test MDB Left Side View

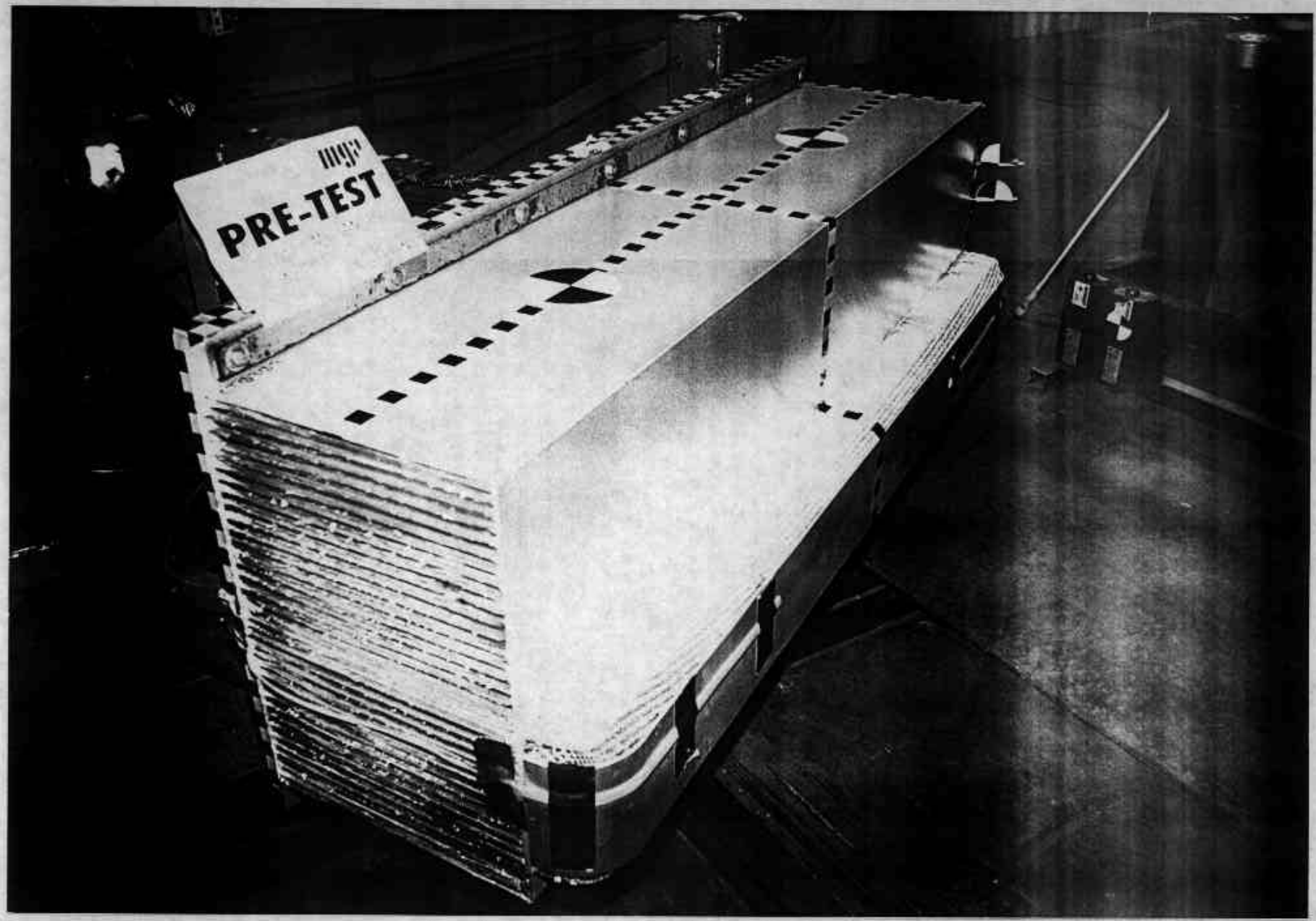



Photo No. A-19 - Pre-Test MDB Right Side View

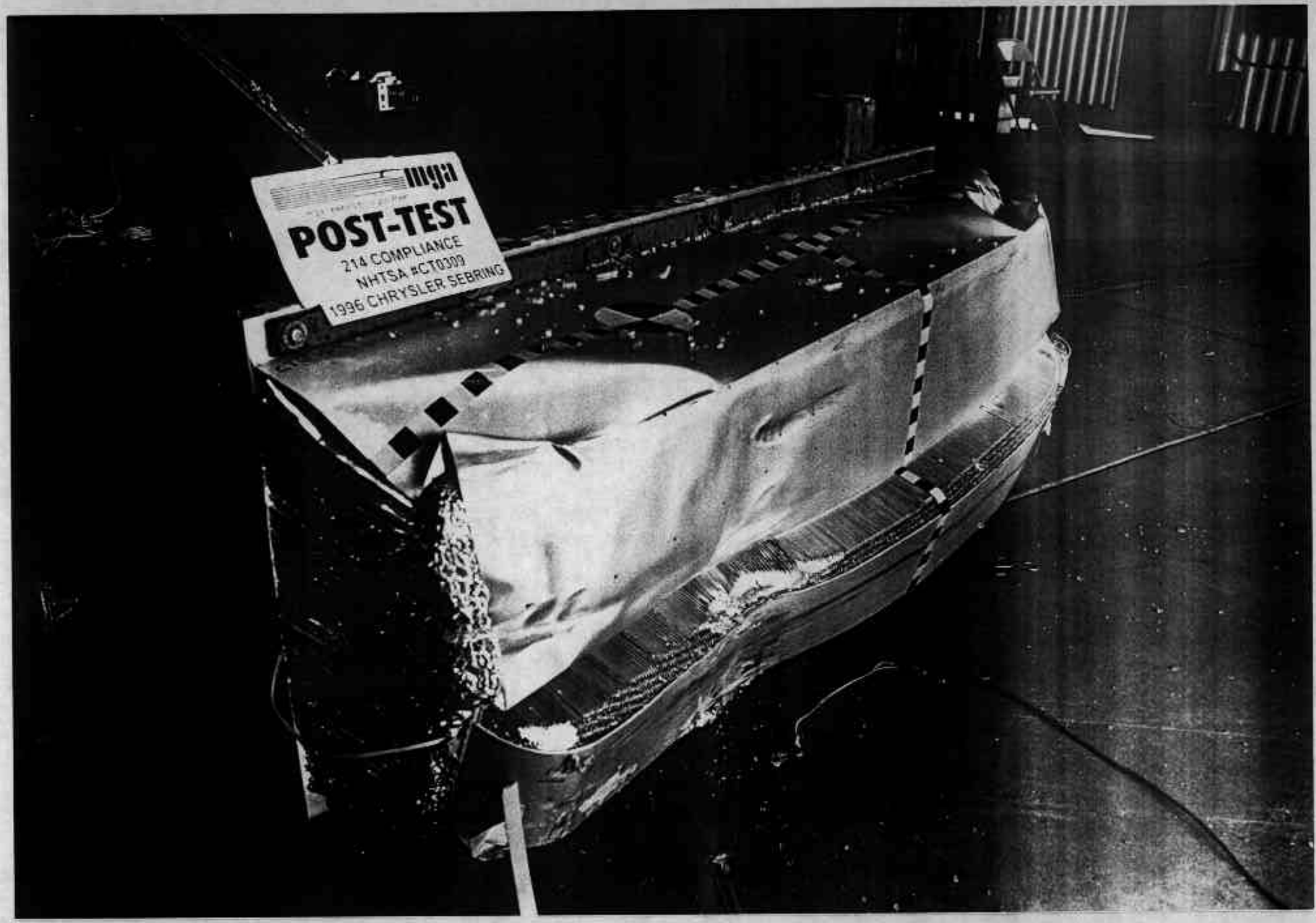



Photo No. A-20 - Post-Test MDB Right Side View


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


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

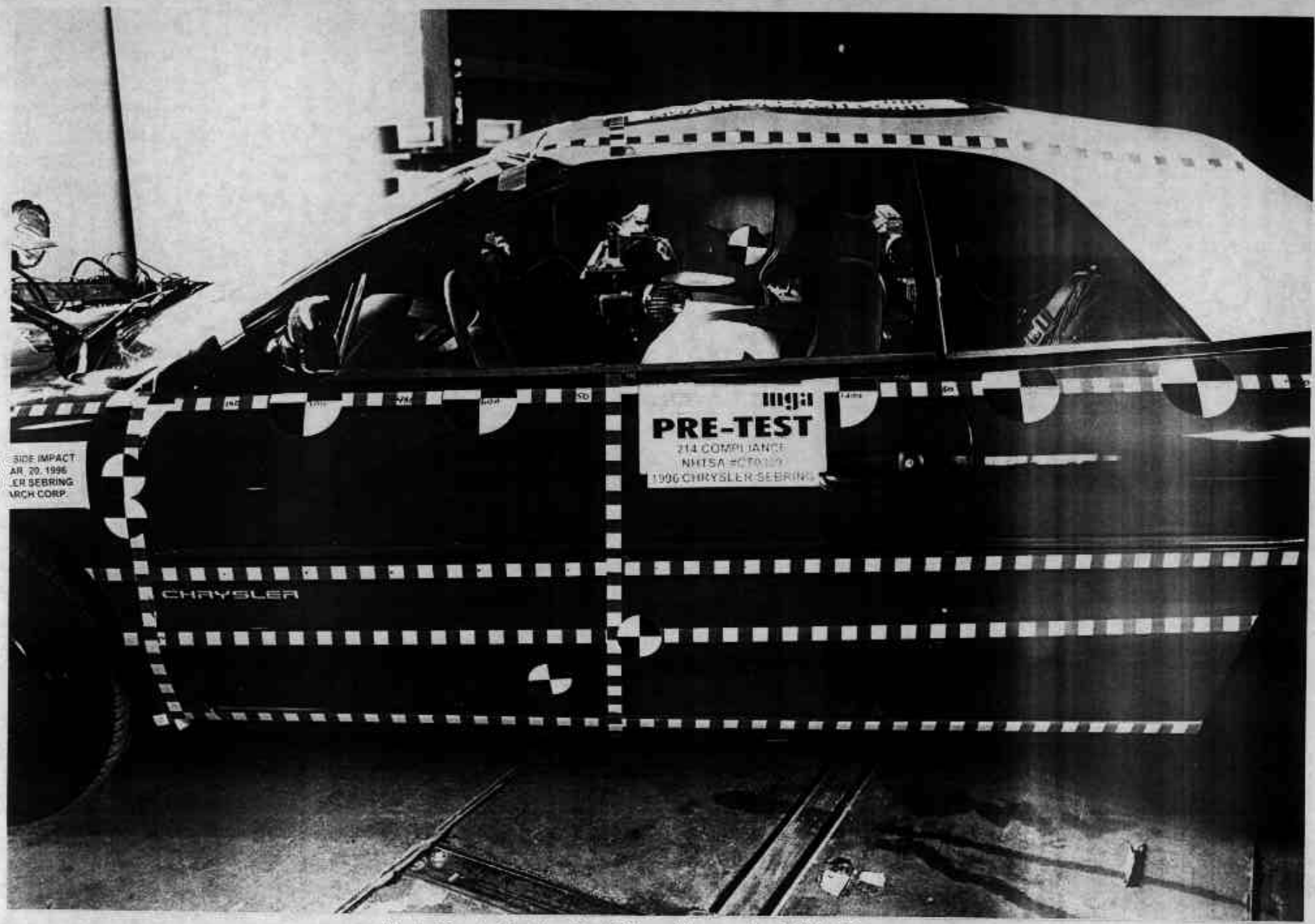
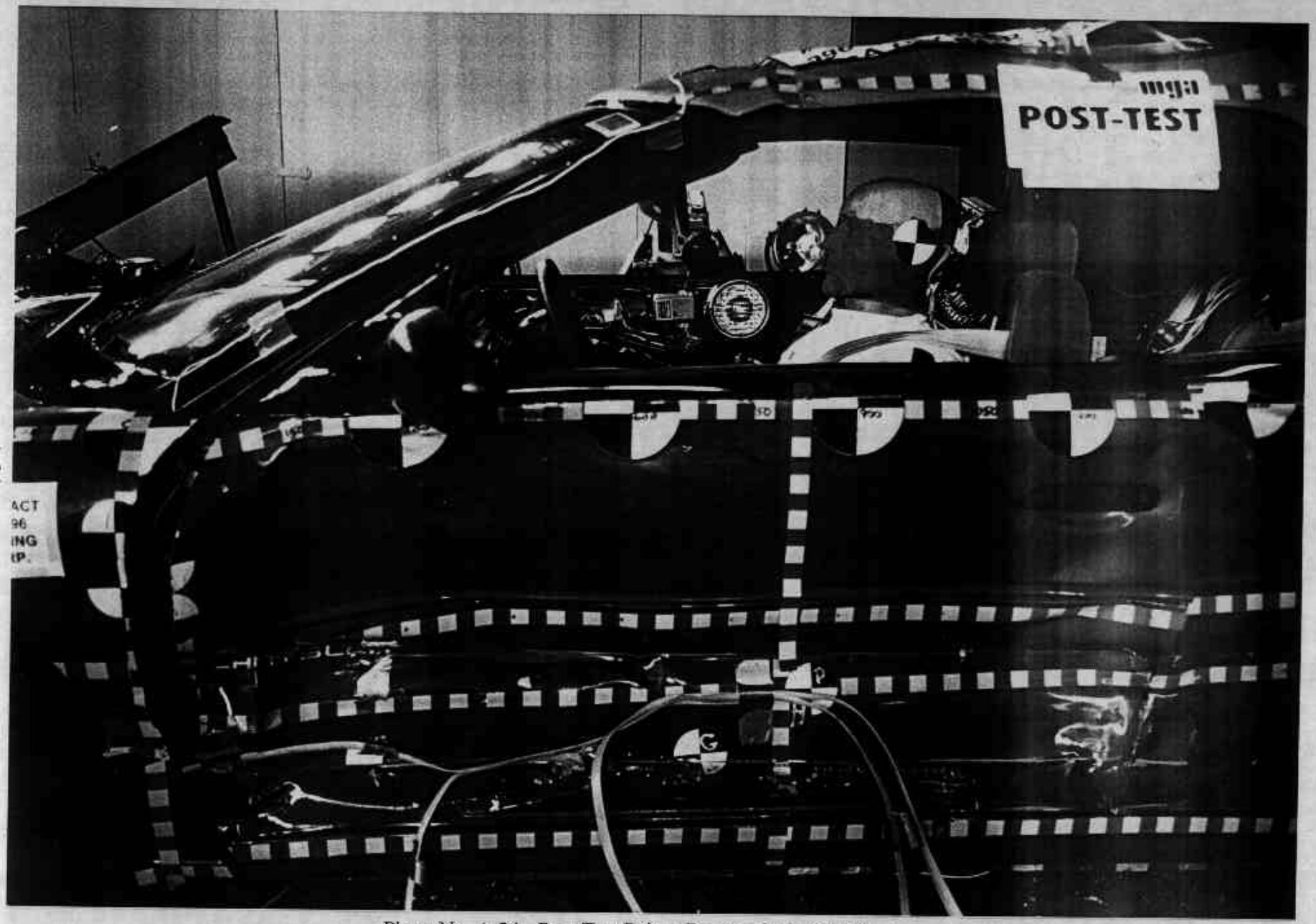



Photo No. A-23 - Pre-Test Driver Dummy Left Side View




A-24

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

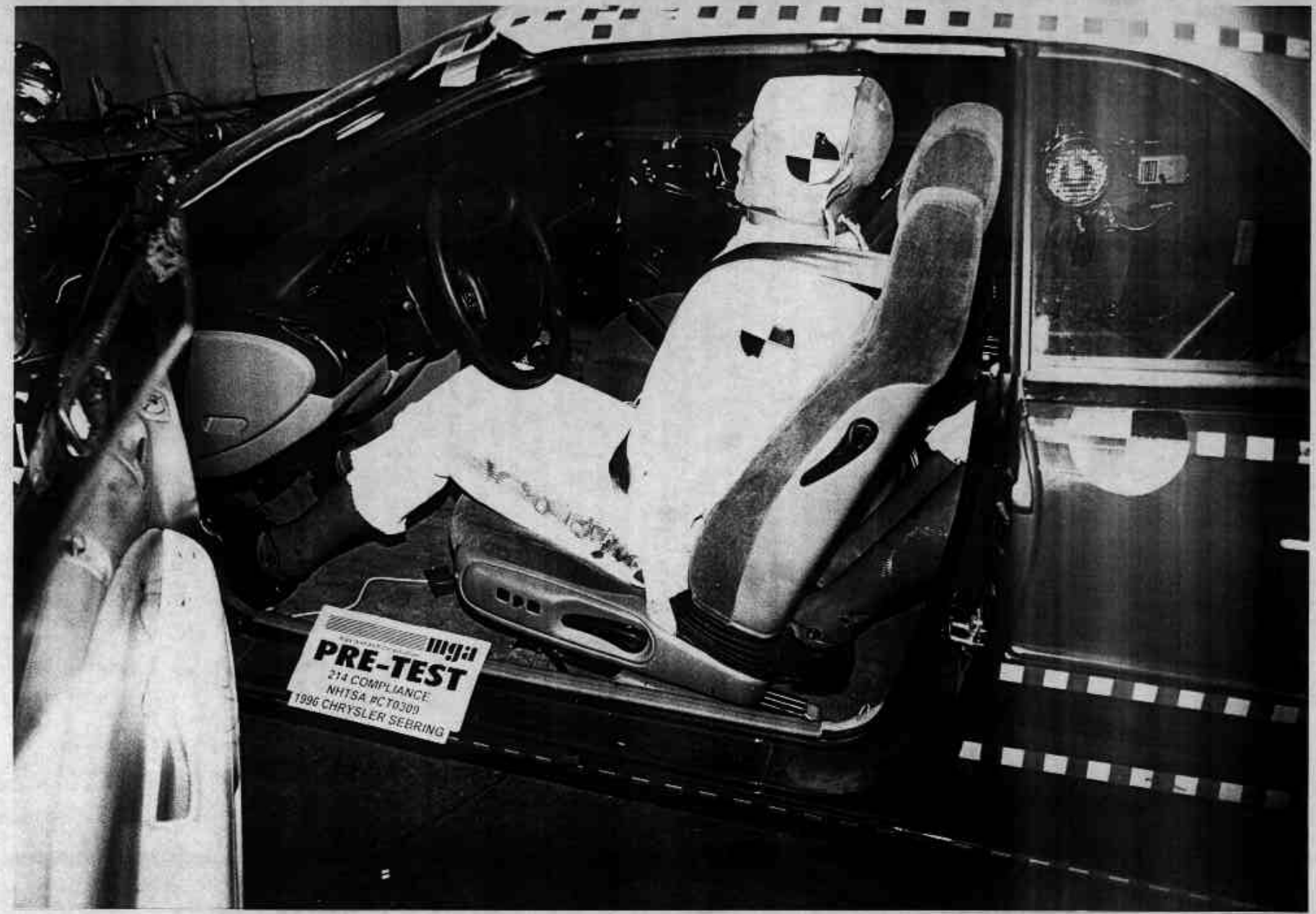



Photo No. A-25 - Pre-Test Driver Dummy Left Side View (Door Open)


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

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


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

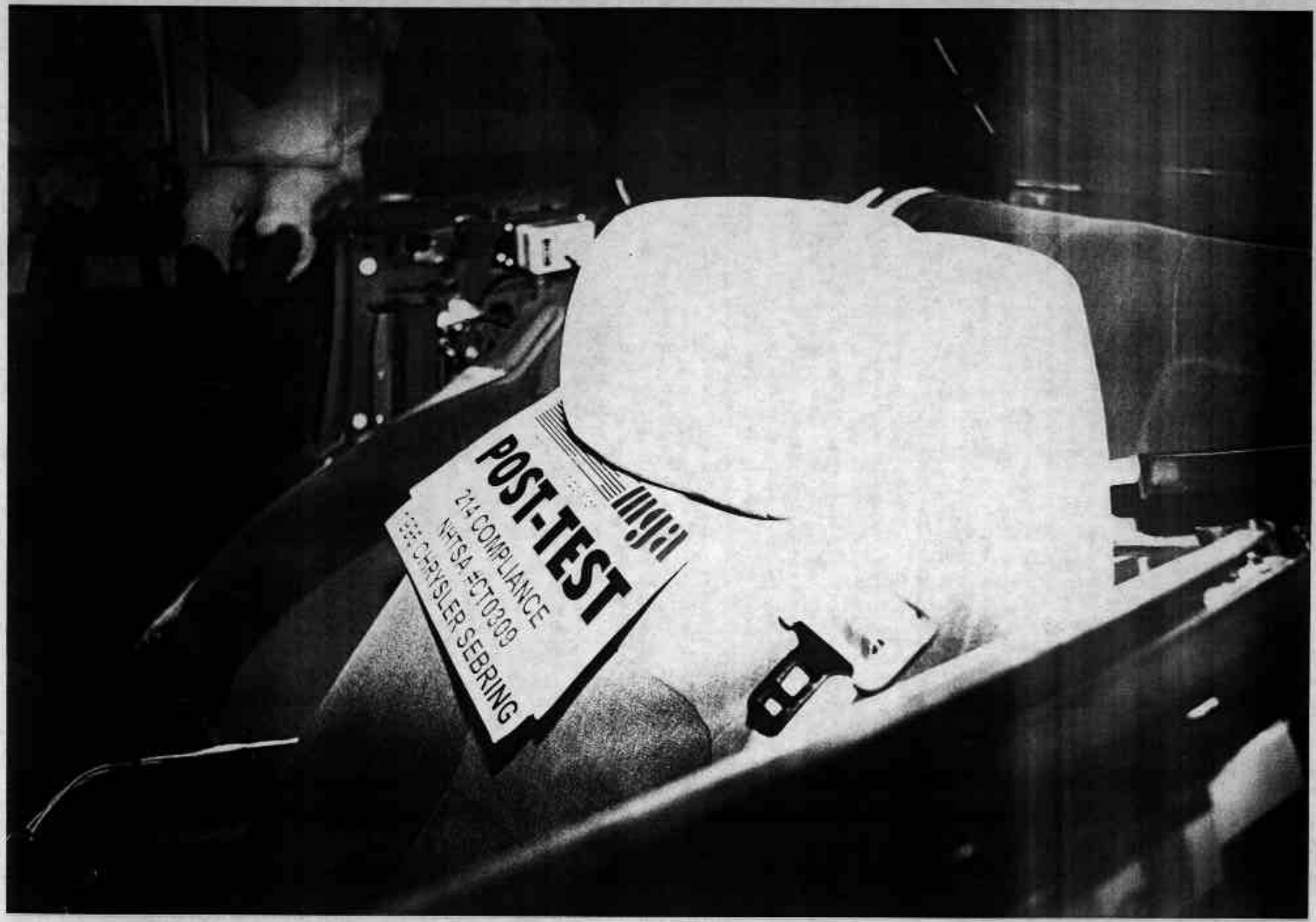
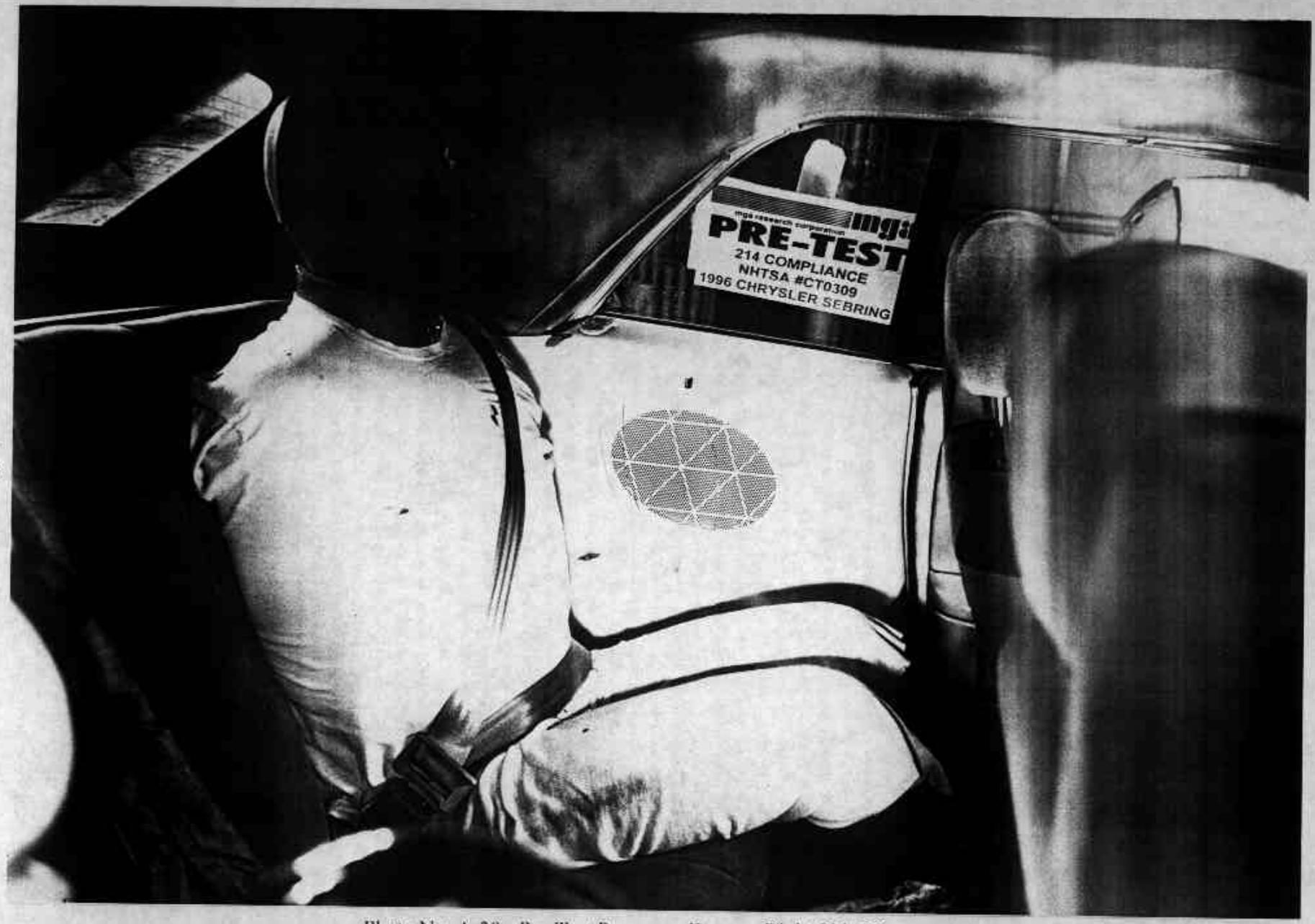



Photo No. A-29 - Post-Test Driver Dummy Head Contact




A-30

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

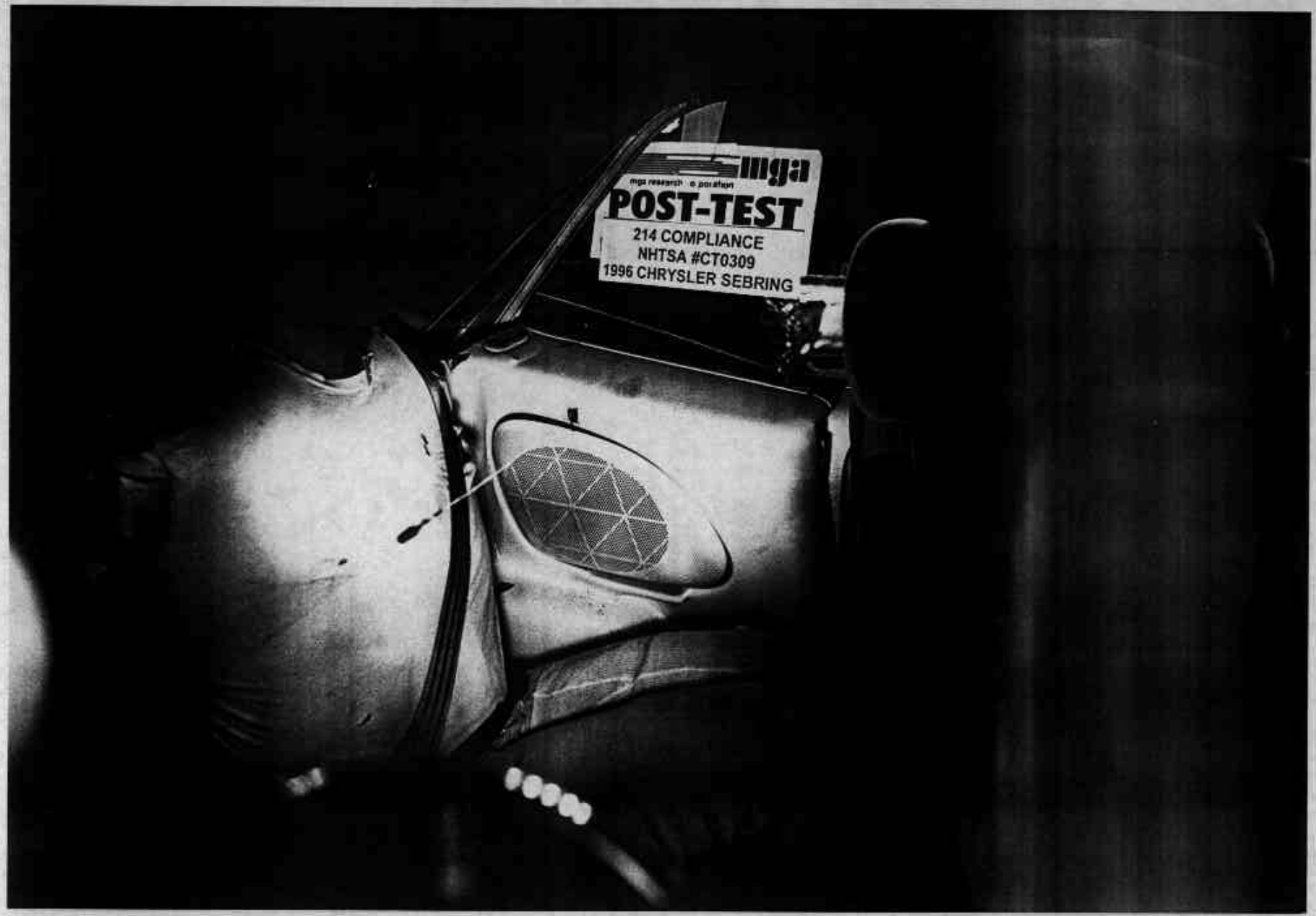



Photo No. A-31 - Post-Test Passenger Dummy Right Side View


A-32

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


Photo No. A-33 - Pre-Test Passenger Dummy Shoulder and Door Top View


Photo No. A-34 - Post-Test Passenger Dummy Shoulder and Door Top View


Photo No. A-35 - Post-Test Passenger Dummy Contact


A-36

Photo No. A-36 - Post-Test Passenger Dummy Head Contact


A-37

Photo No. A-37 - Pre-Test Left Front Impact Point on Vehicle


A-38

Photo No. A-38 - Post-Test Left Front Impact Point on Vehicle

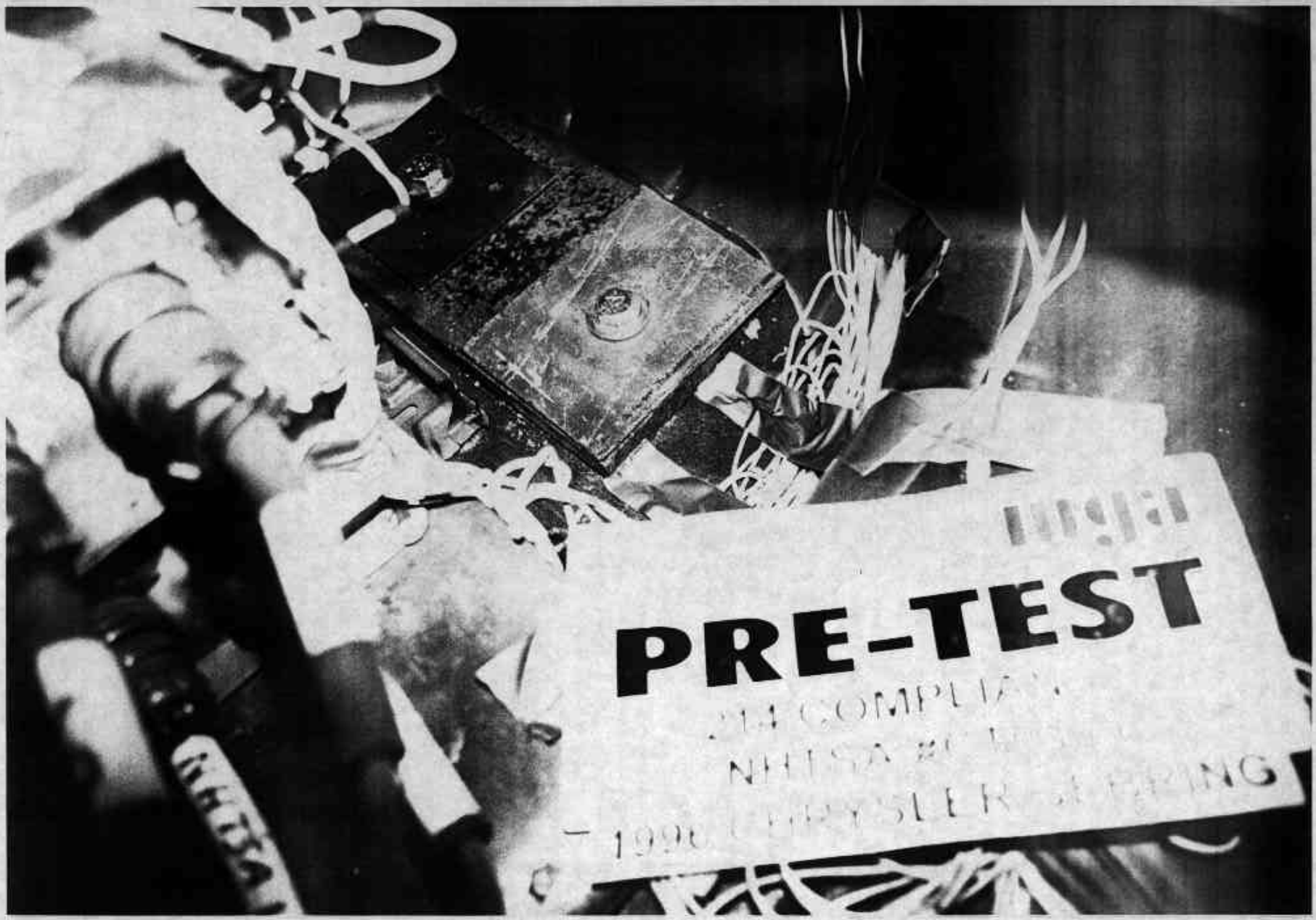
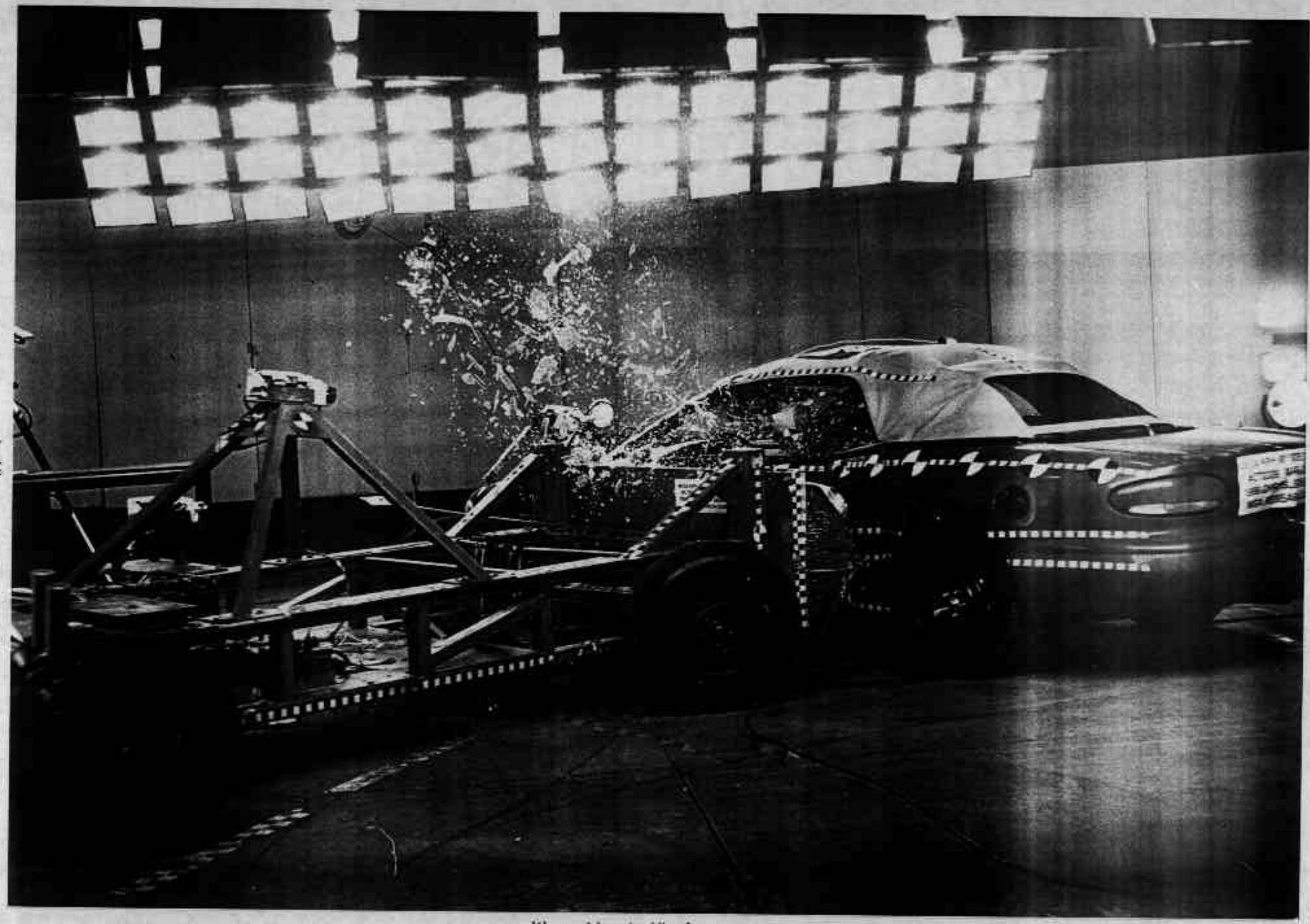



Photo No. A-39 - Ballast Added to Vehicle Trunk



A-40

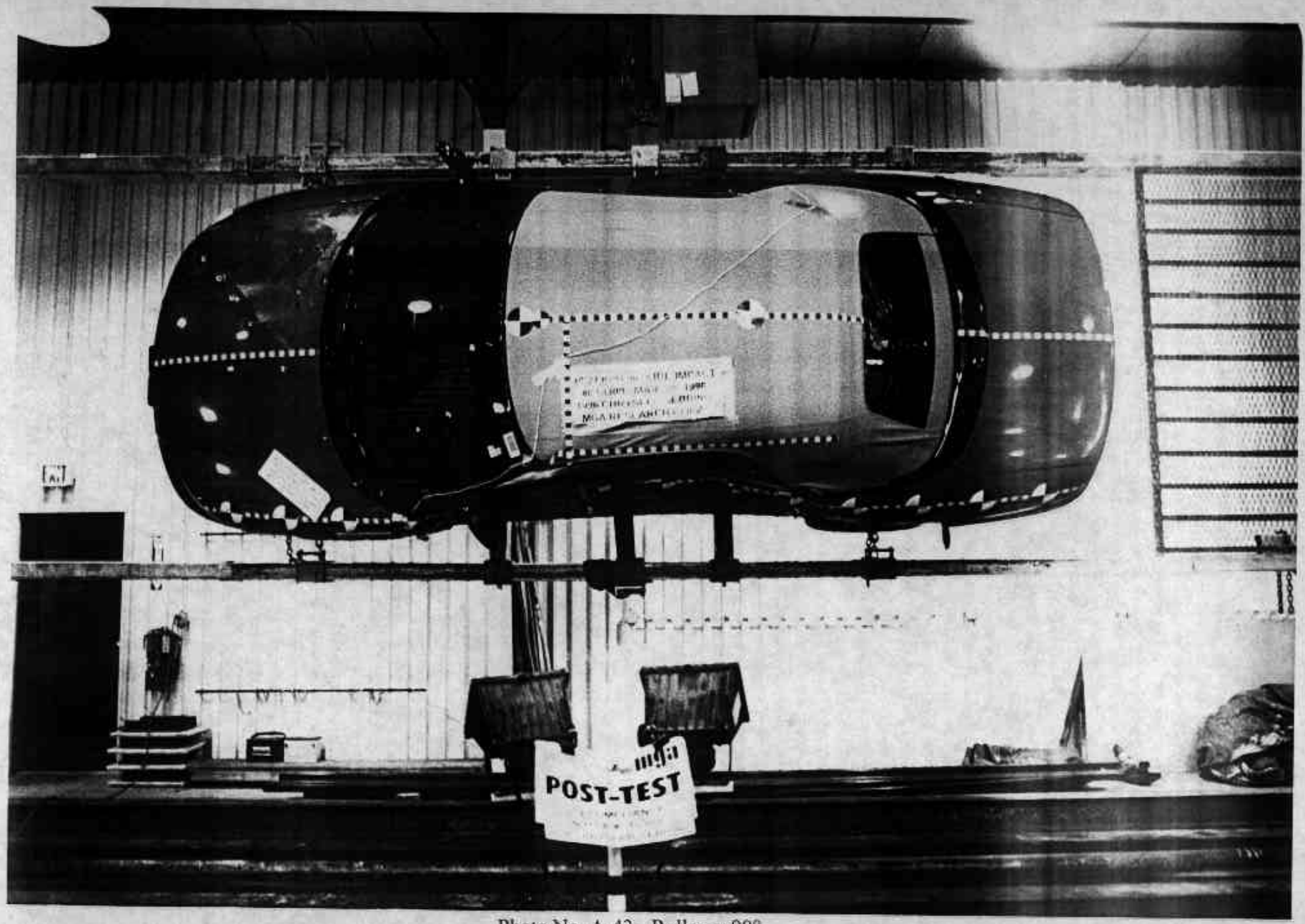
Photo No. A-40 - Impact




Photo No. A-41 - Vehicle Certification Label


A-42

Photo No. A-42 - Tire Placard




A-43

Photo No. A-43 - Rollover 90°

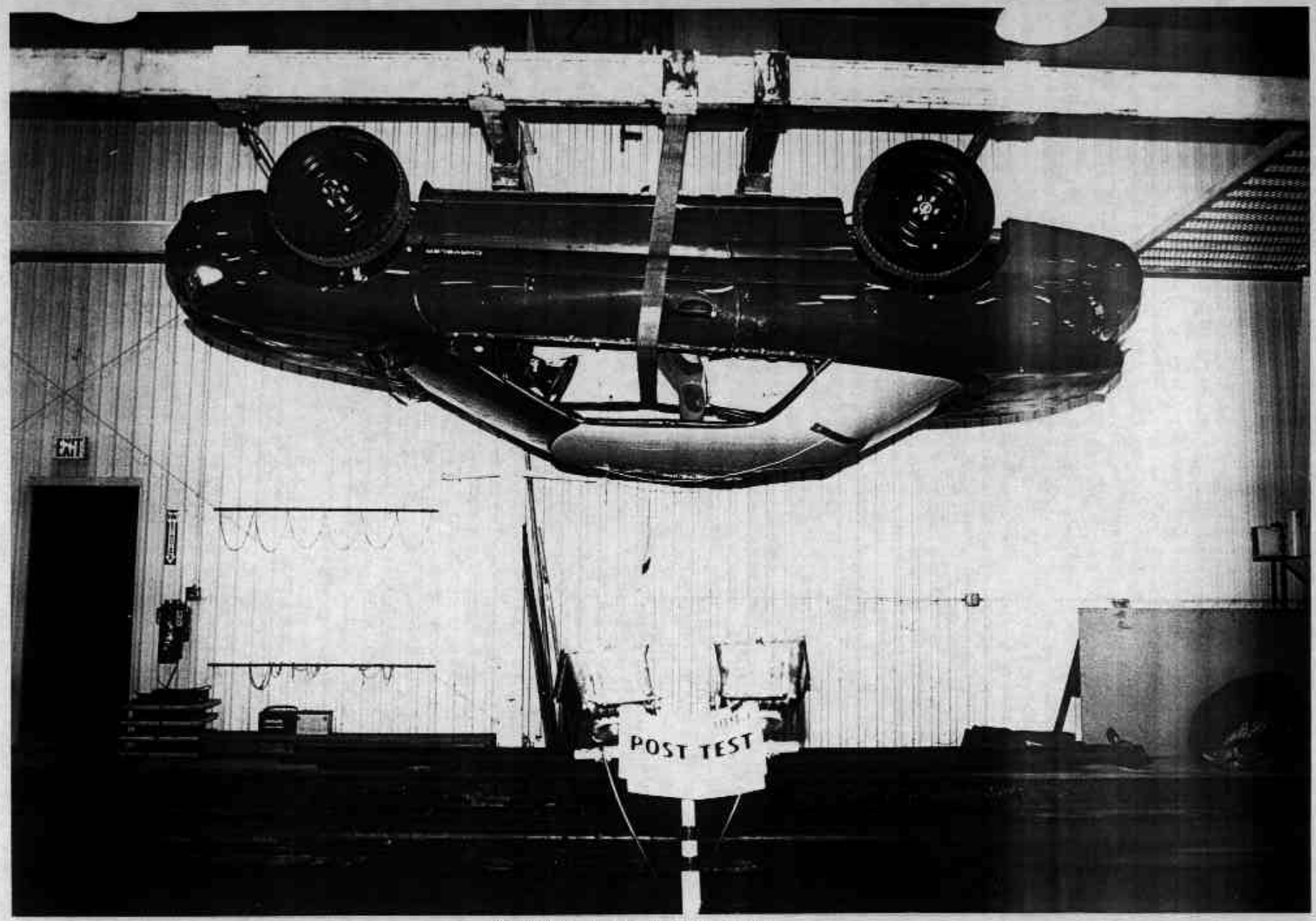



Photo No. A-44 - Rollover 180°

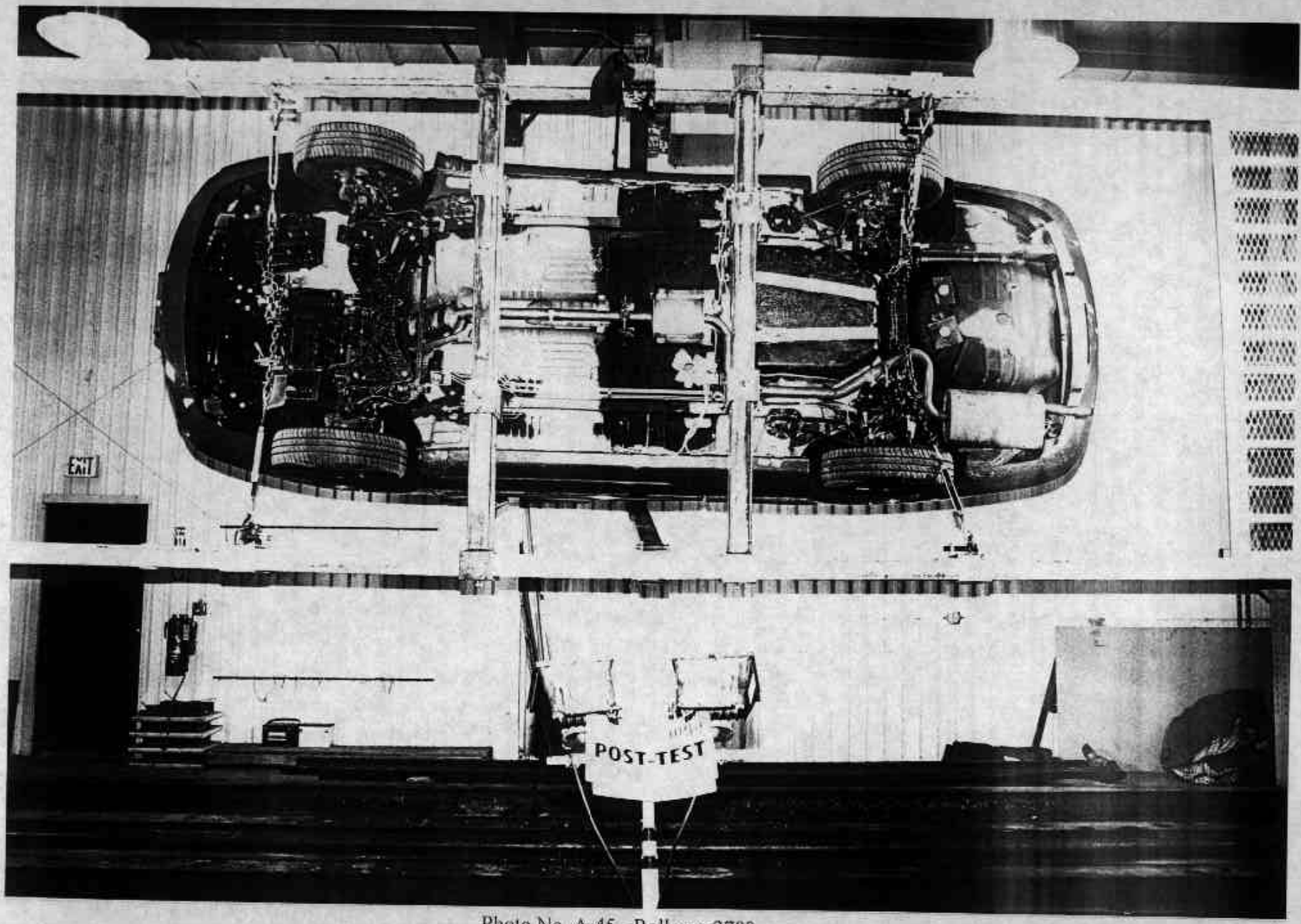



Photo No. A-45 - Rollover 270°

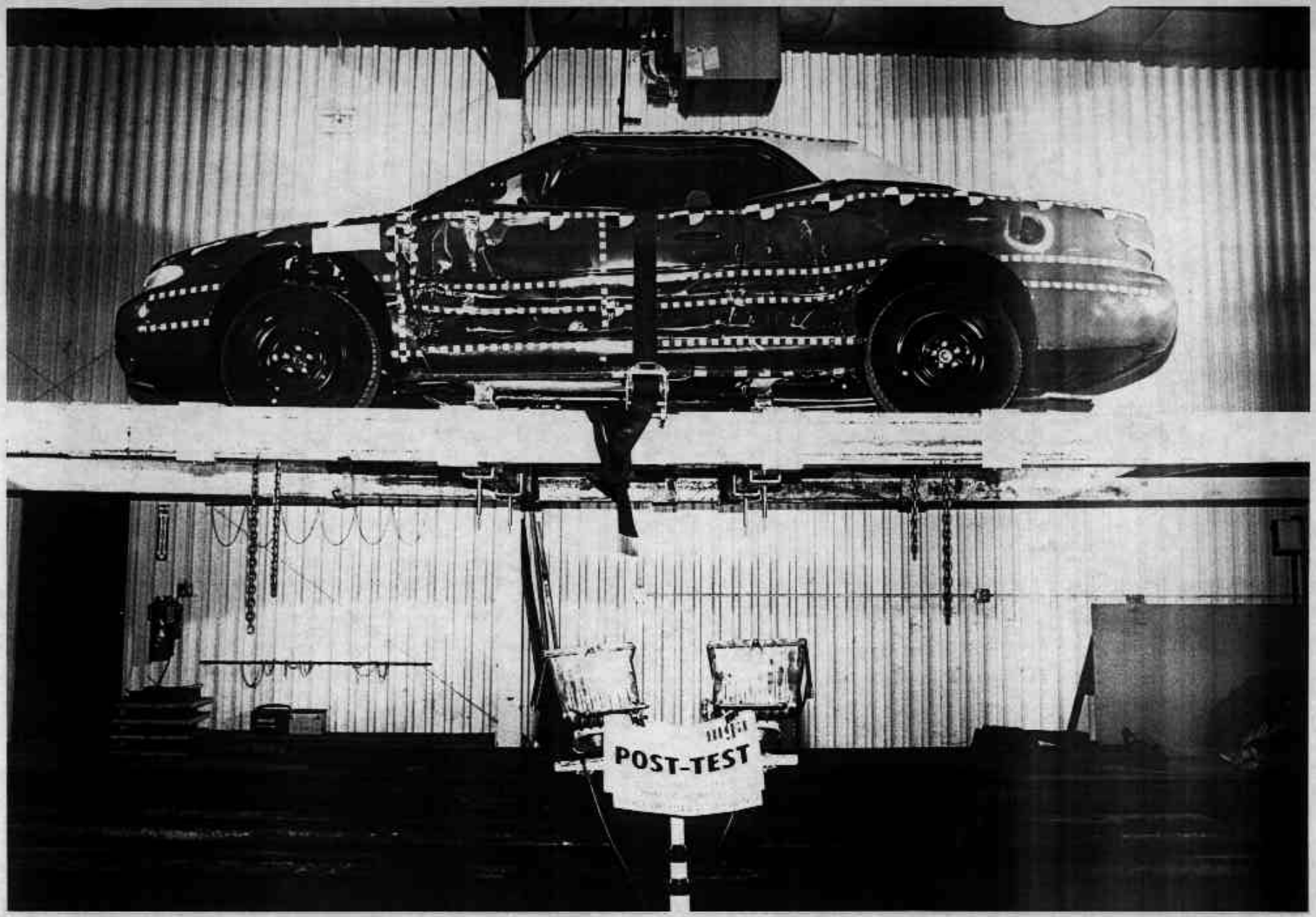



Photo No. A-46 - Rollover 360°

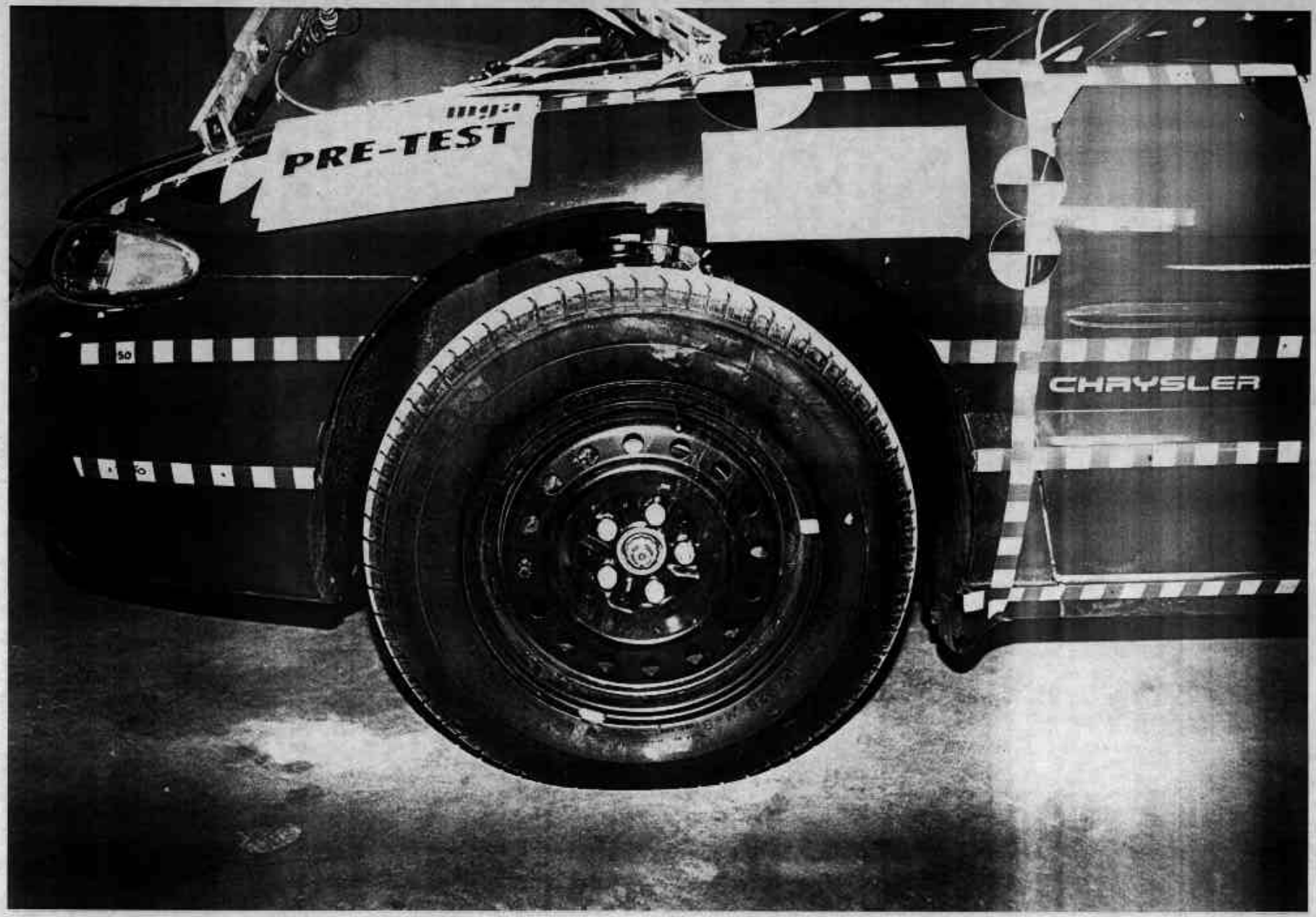



Photo No. A-47 - Left Front Attitude Point

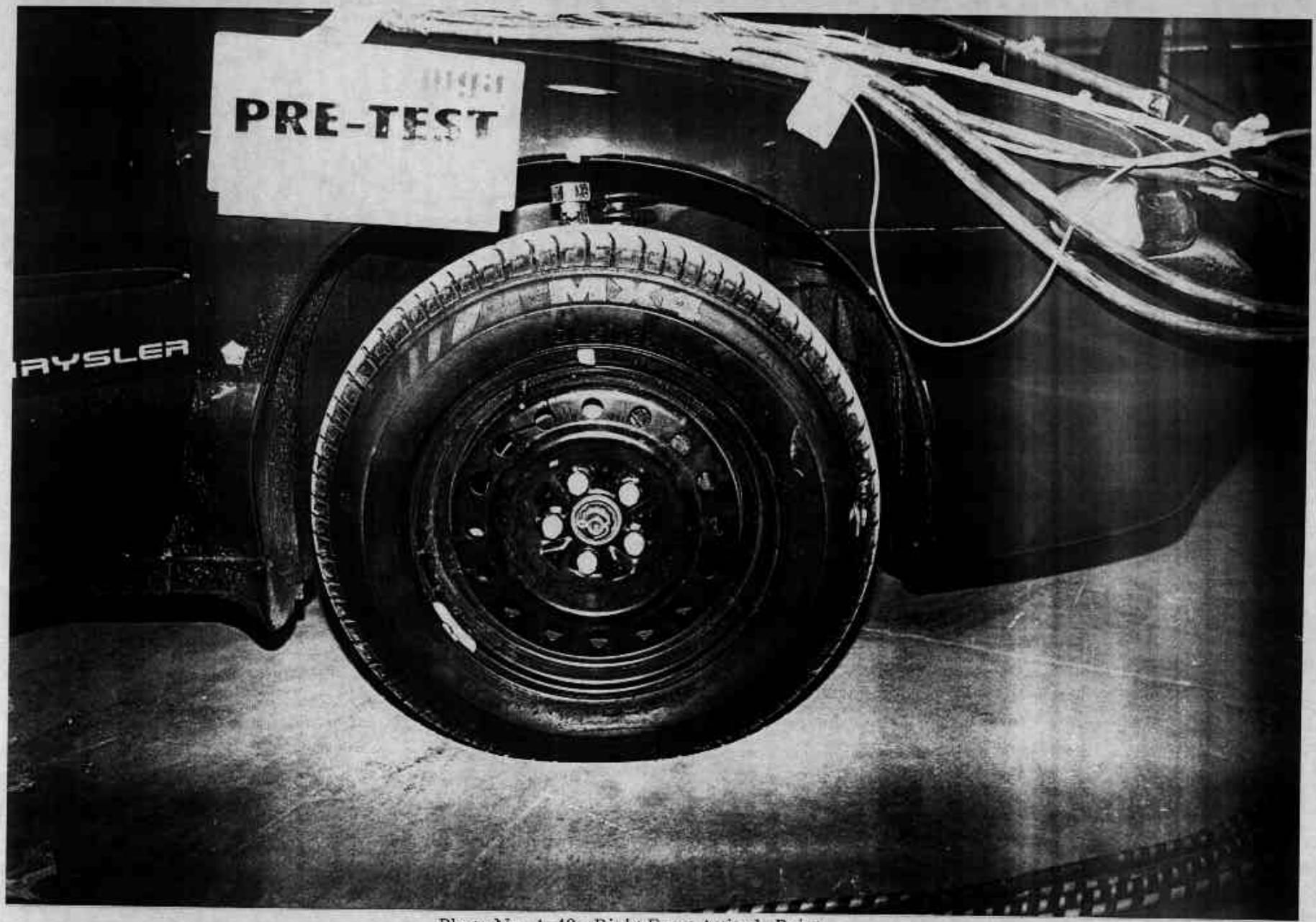





Photo No. A-48 - Right Front Attitude Point

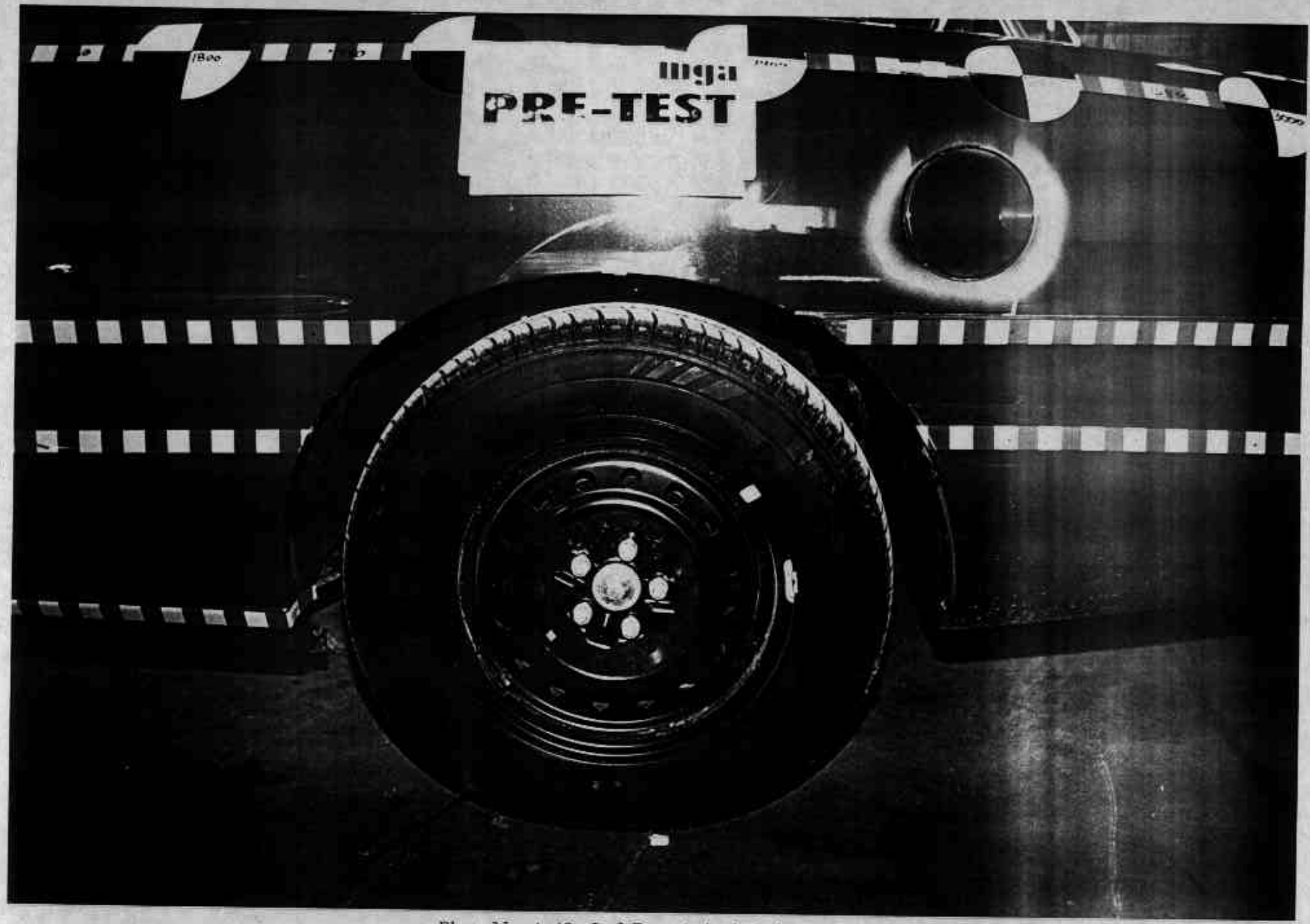





Photo No. A-49 - Left Rear Attitude Point

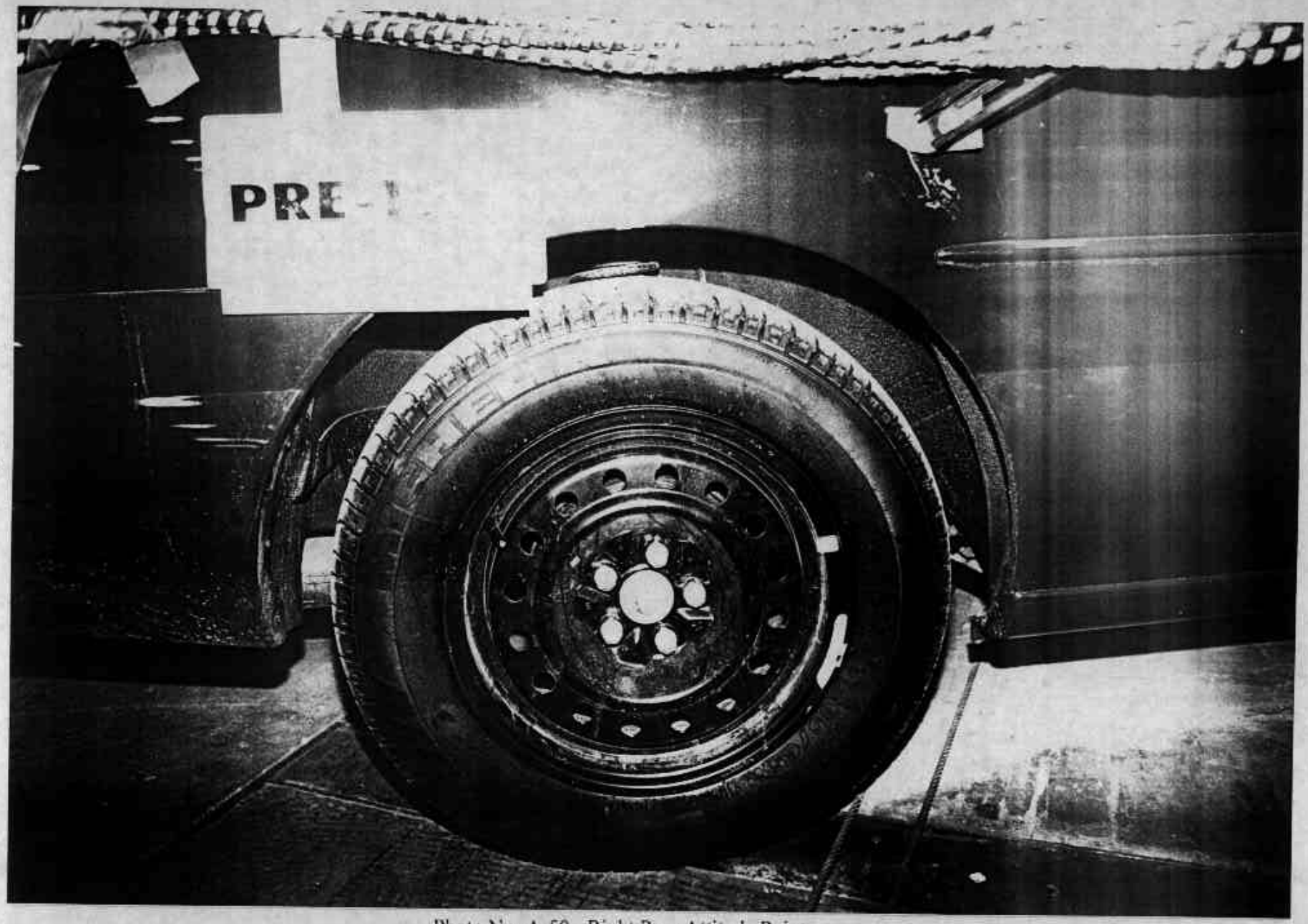



Photo No. A-50 - Right Rear Attitude Point

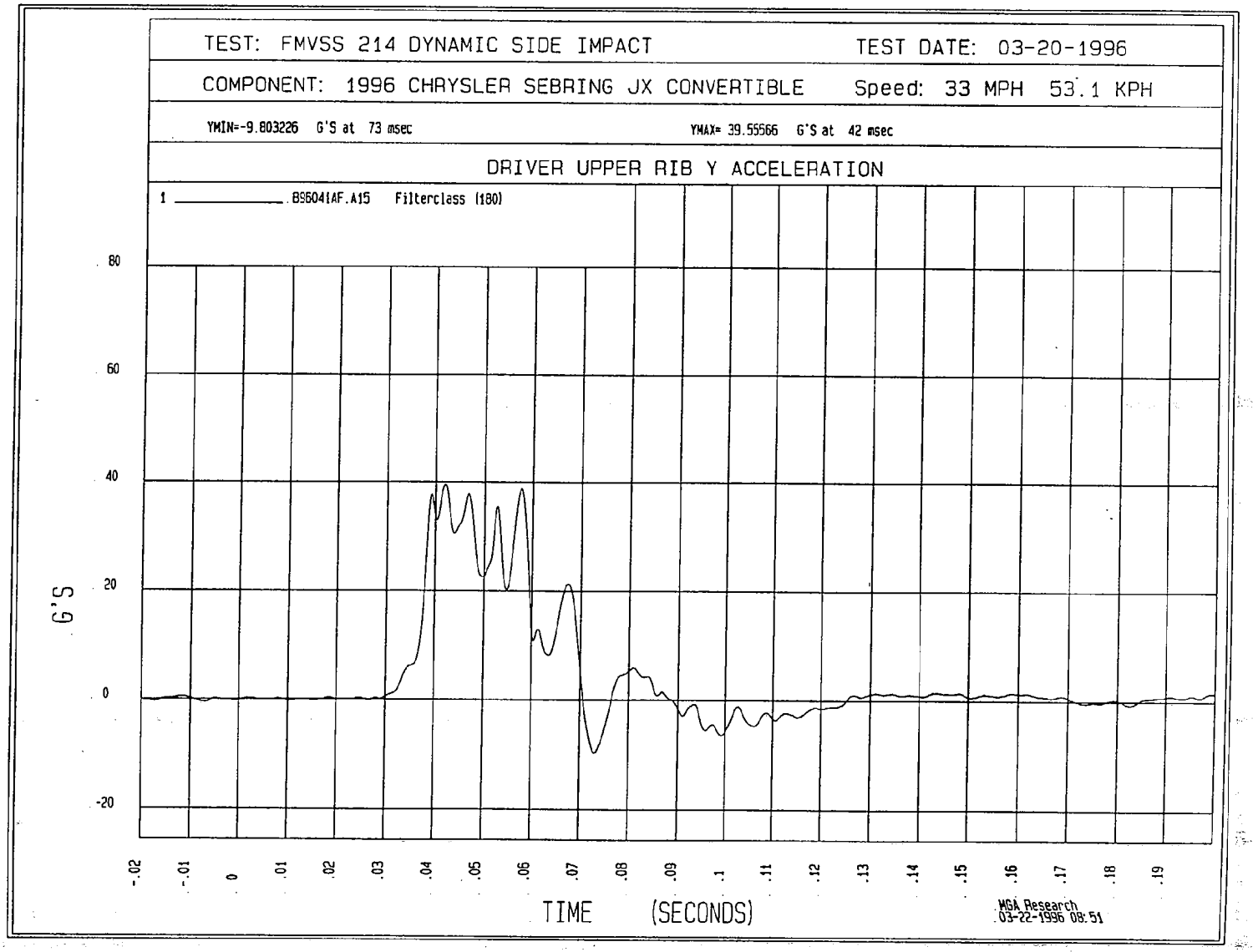
# APPENDIX B - VEHICLE AND SID RESPONSE DATA

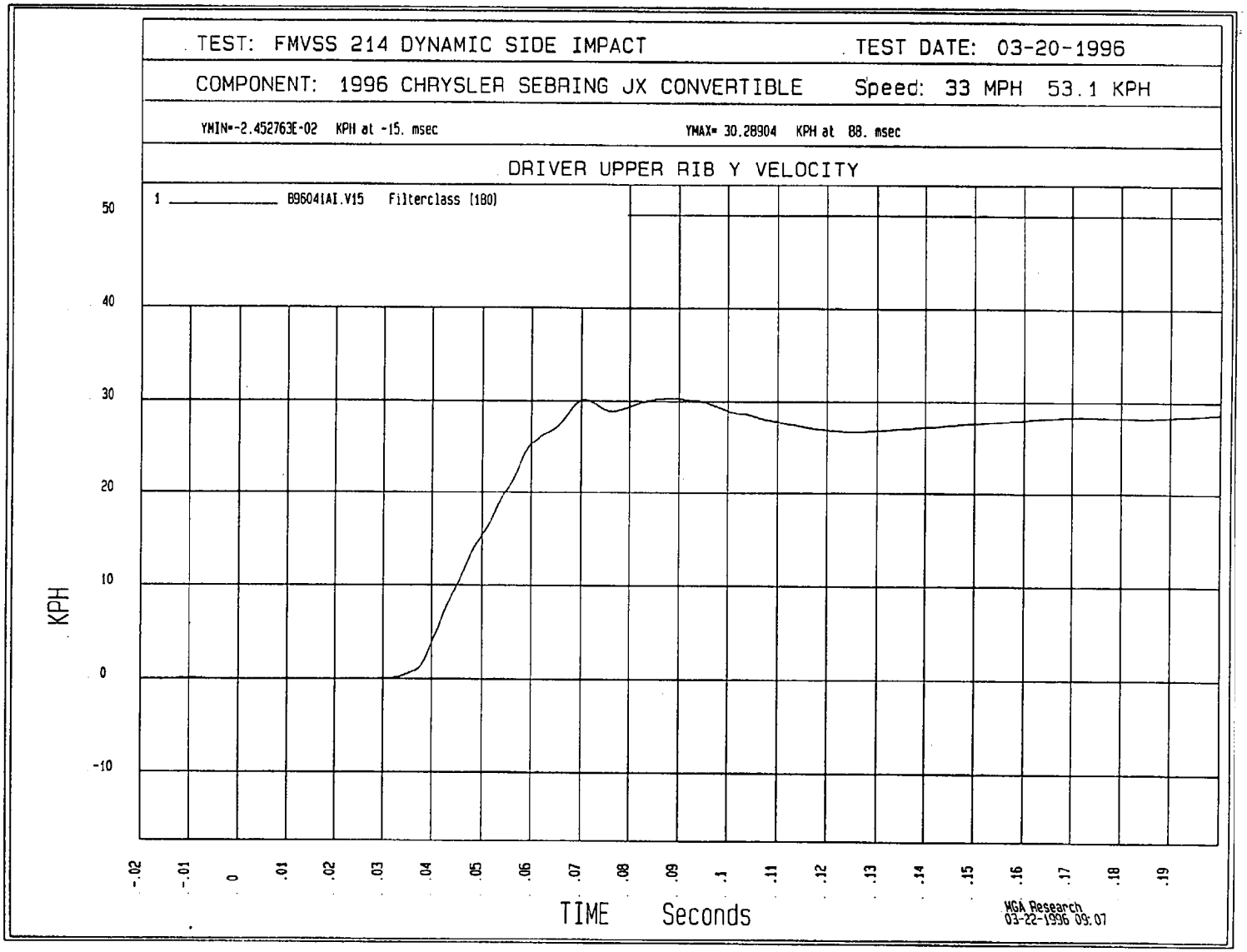
Table of Data Plots

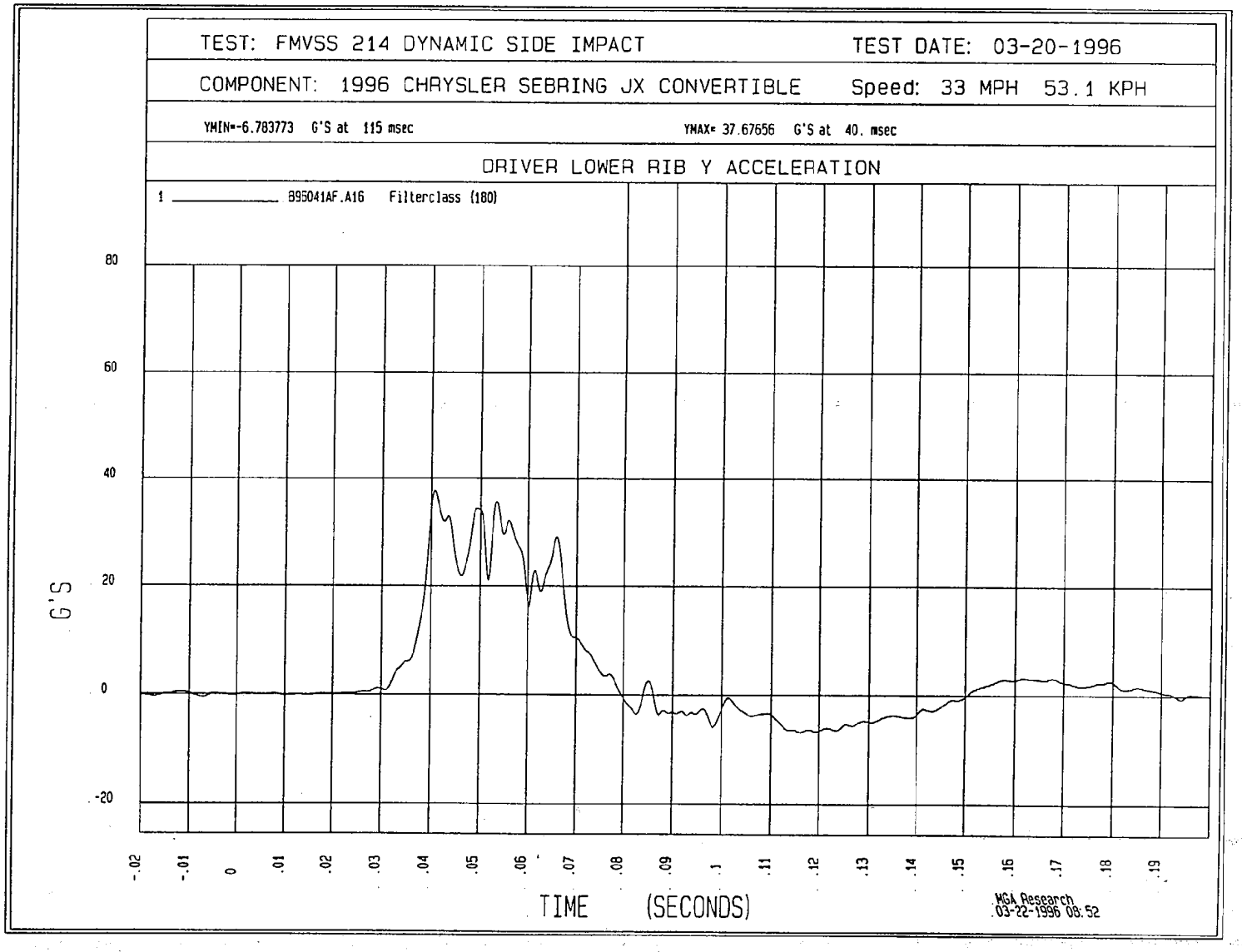
Table of Data Plots

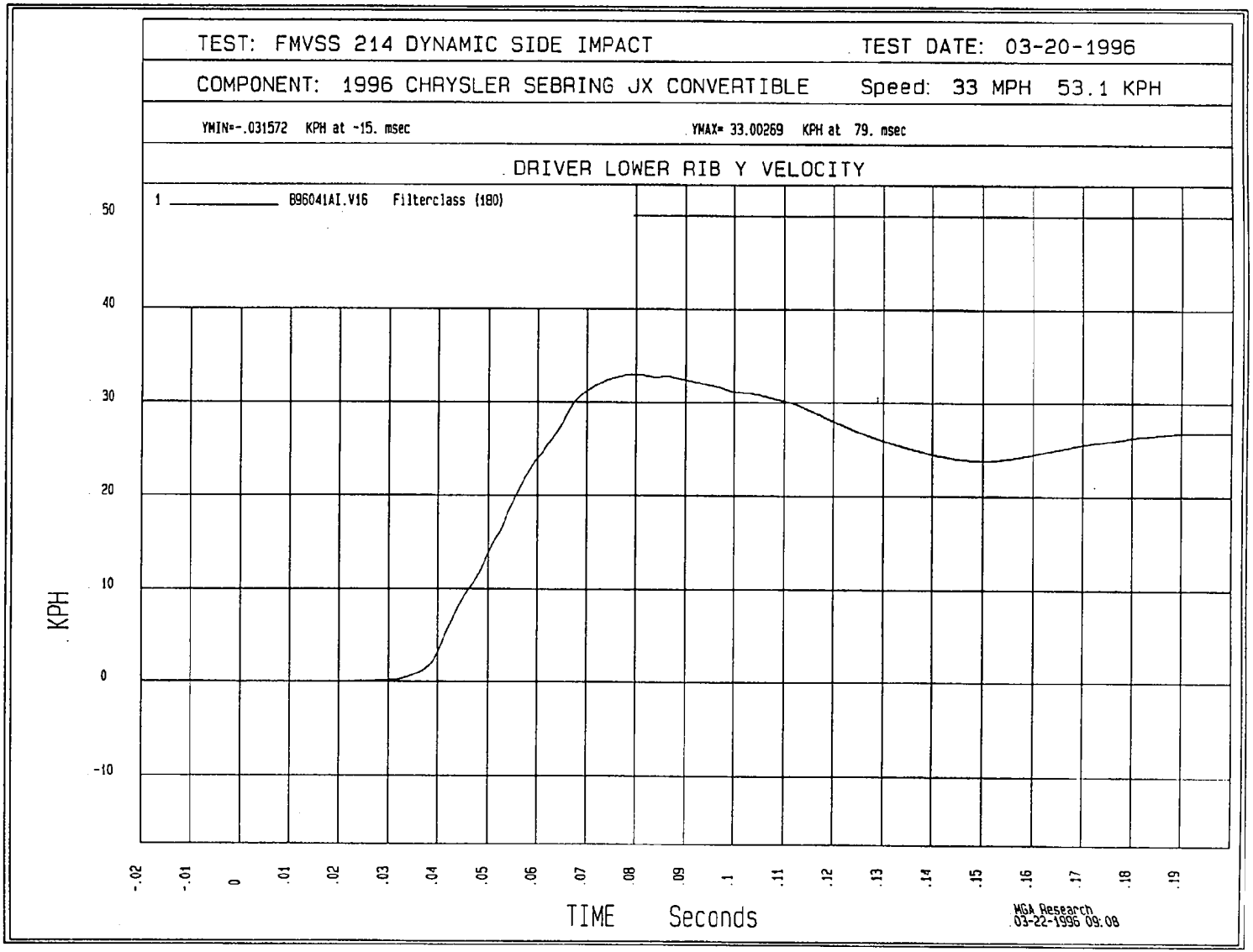
Table of Data Plots

Table of Data Plots


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-9.803226 G'S at 73 msec
YMAX= 39.55566 G'S at 42 msec
DRIVER UPPER RIB Y ACCELERATION
1 B96041AF.A15 Filterclass (180)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:51


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-2.452763E-02 KPH at -15. msec
YMAX= 30.28904 KPH at 88. msec
DRIVER UPPER RIB Y VELOCITY
1 B96041AI.V15 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME Seconds
MGA Research
03-22-1996 09:07


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-6.783773 G'S at 115 msec
YMAX= 37.67656 G'S at 40. msec
DRIVER LOWER RIB Y ACCELERATION
1 B95041AF.A16 Filterclass (180)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:52


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.031572 KPH at -15. msec
YMAX= 33.00269 KPH at 79. msec
DRIVER LOWER RIB Y VELOCITY
1 B96041AI.V16 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
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.13
.14
.15
.16
.17
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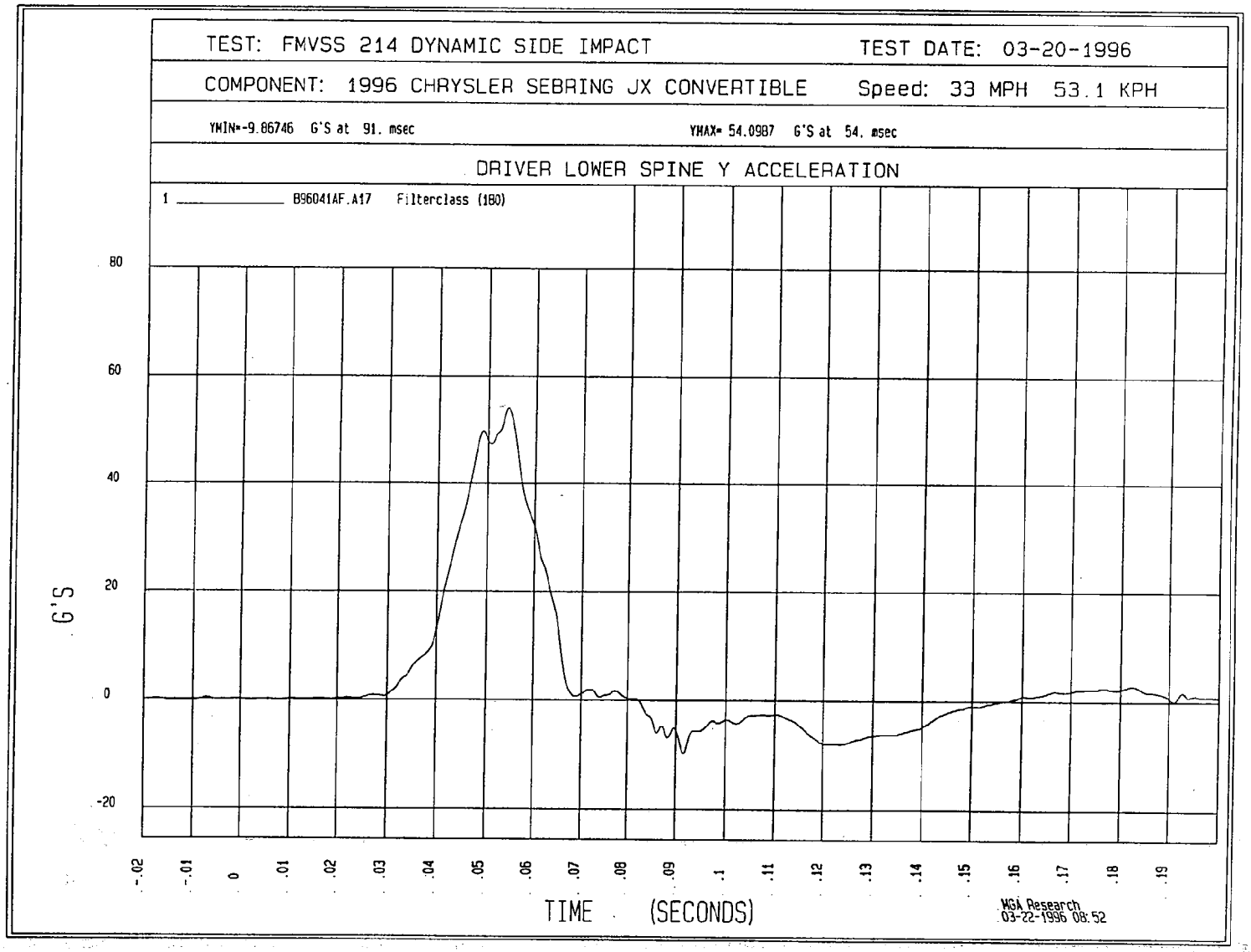
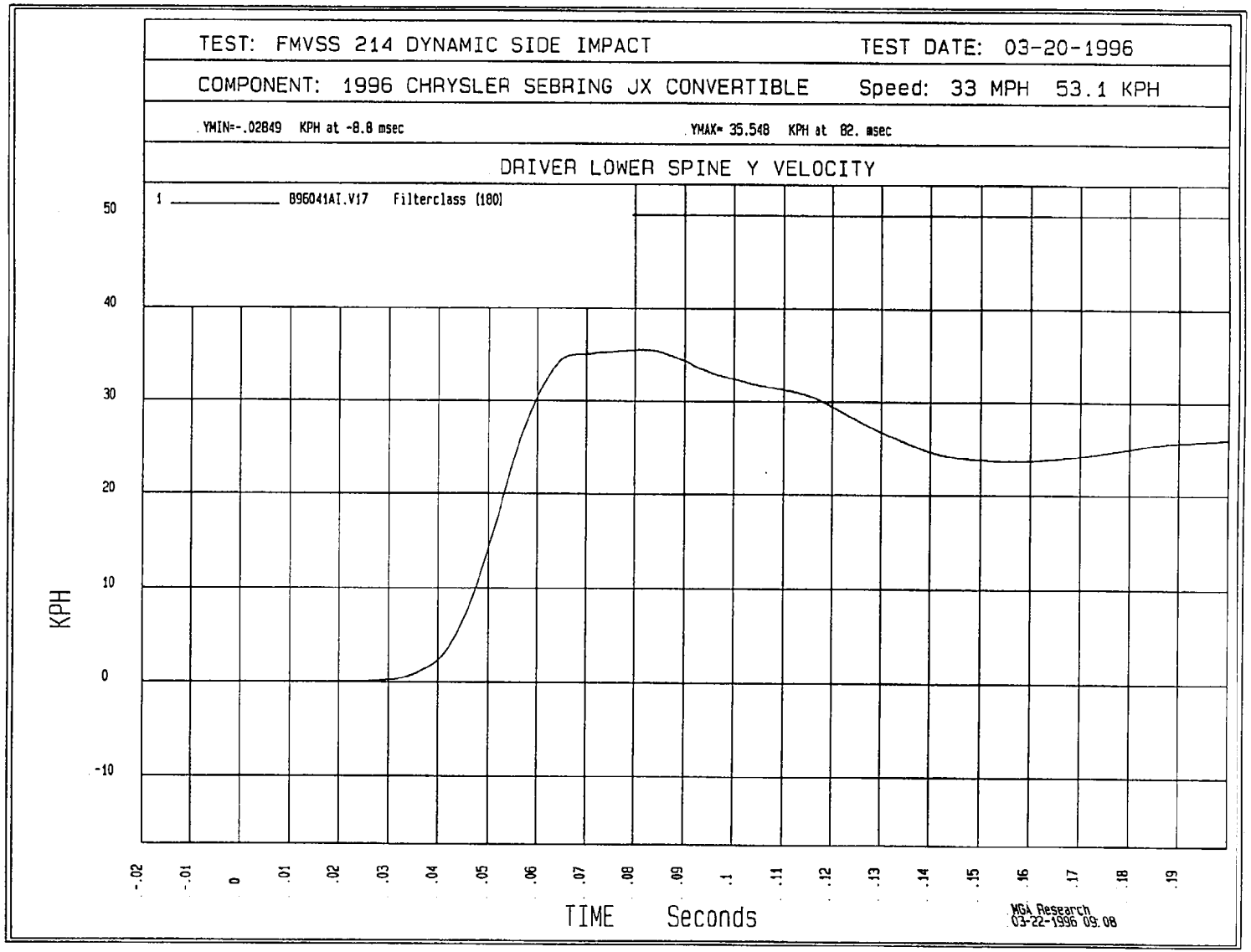
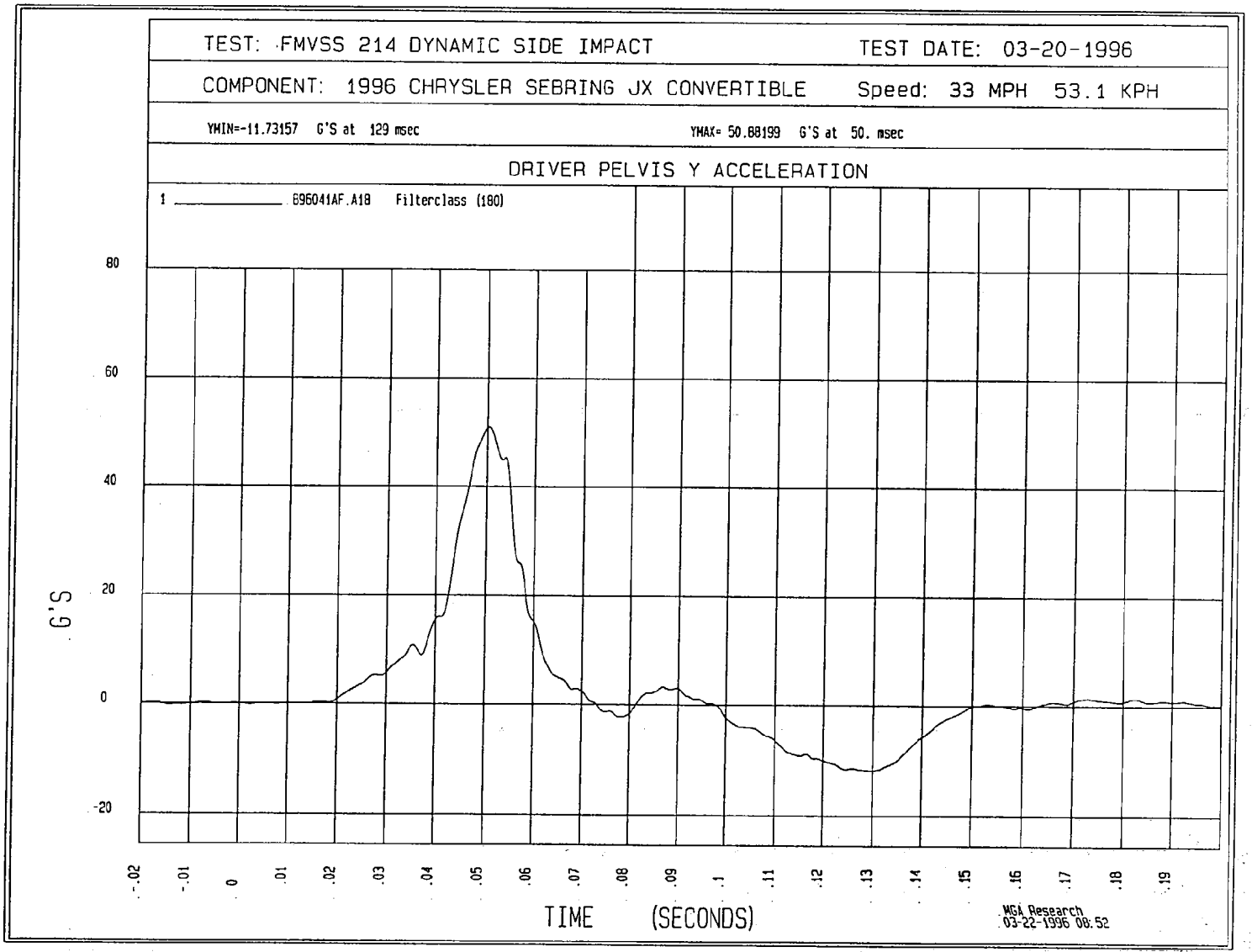
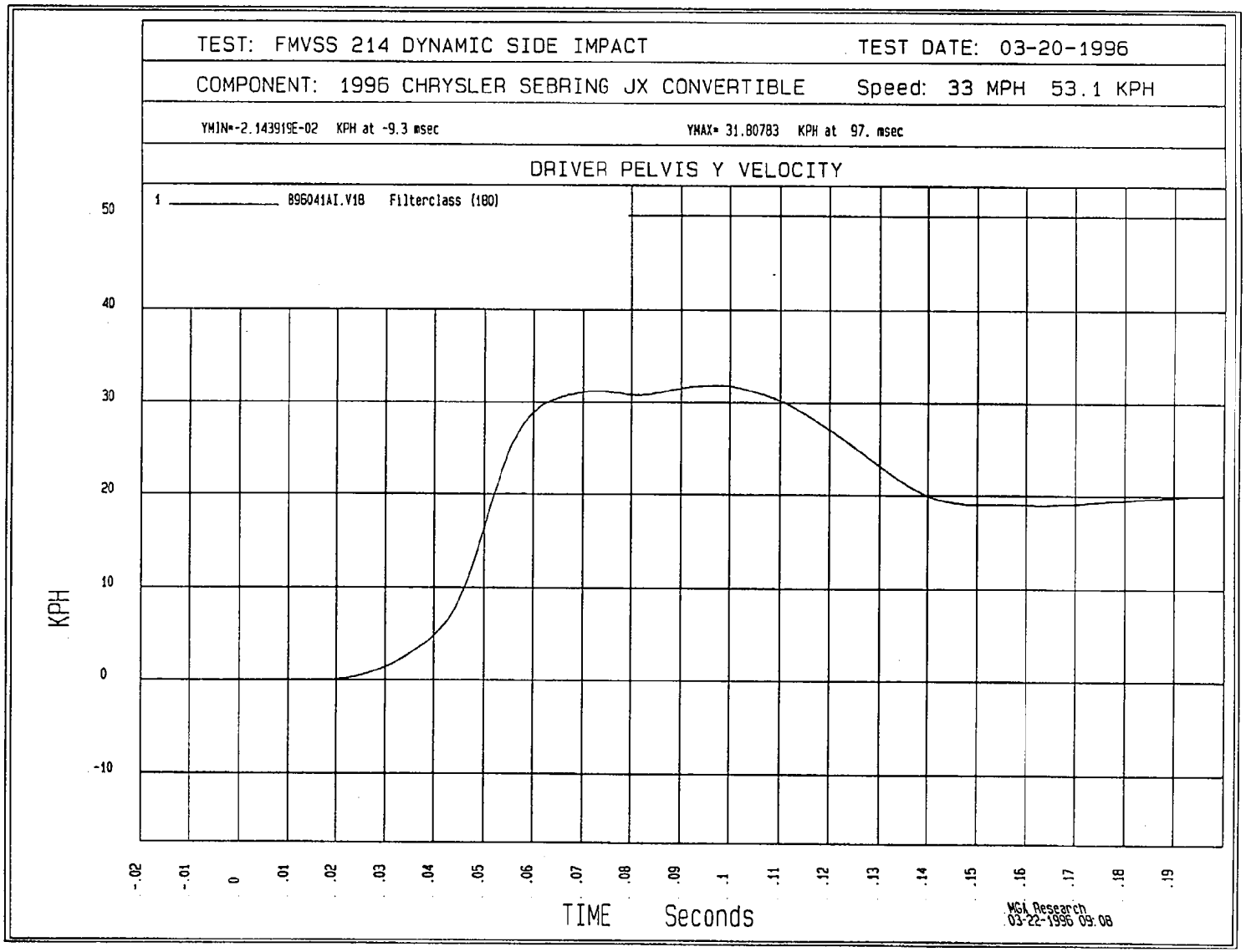
.19
TIME Seconds
MGA Research
03-22-1996 09:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-9.86746 G'S at 91. msec
YMAX= 54.0987 G'S at 54. msec
DRIVER LOWER SPINE Y ACCELERATION
1 B960414F.A17 Filterclass (180)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:52


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.02849 KPH at -8.8 msec
YMAX= 35.548 KPH at 82. msec
DRIVER LOWER SPINE Y VELOCITY
1 B96041AI.V17 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME Seconds
MGA Research
03-22-1996 09:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-11.73157 G'S at 129 msec
YMAX= 50.88199 G'S at 50. msec
DRIVER PELVIS Y ACCELERATION
1 B96041AF.A18 Filterclass (180)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:52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TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-2.143919E-02 KPH at -9.3 msec
YMAX= 31.80783 KPH at 97. msec
DRIVER PELVIS Y VELOCITY
1 896041AI.V1B Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
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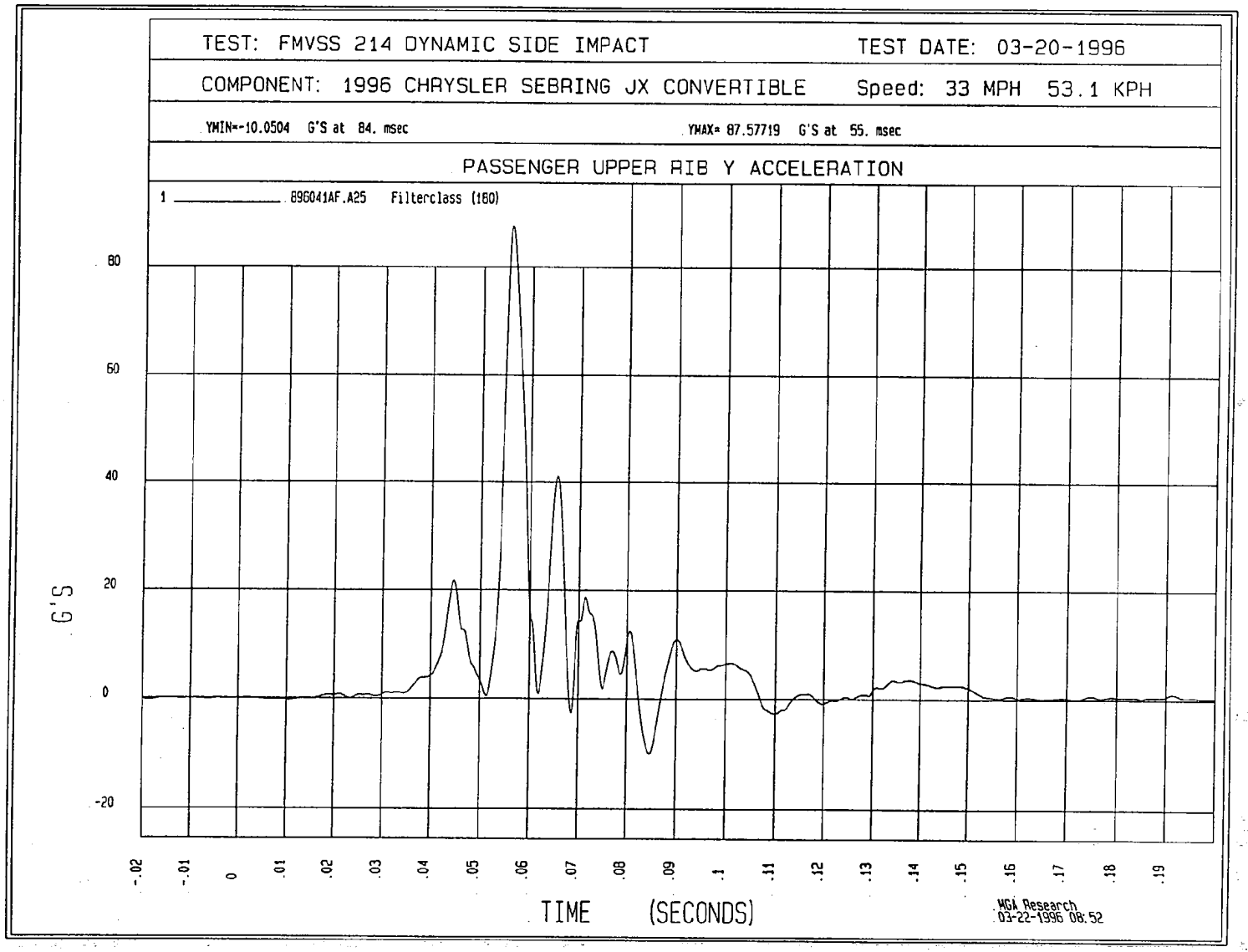
.19
TIME Seconds
MGA Research
03-22-1996 09:08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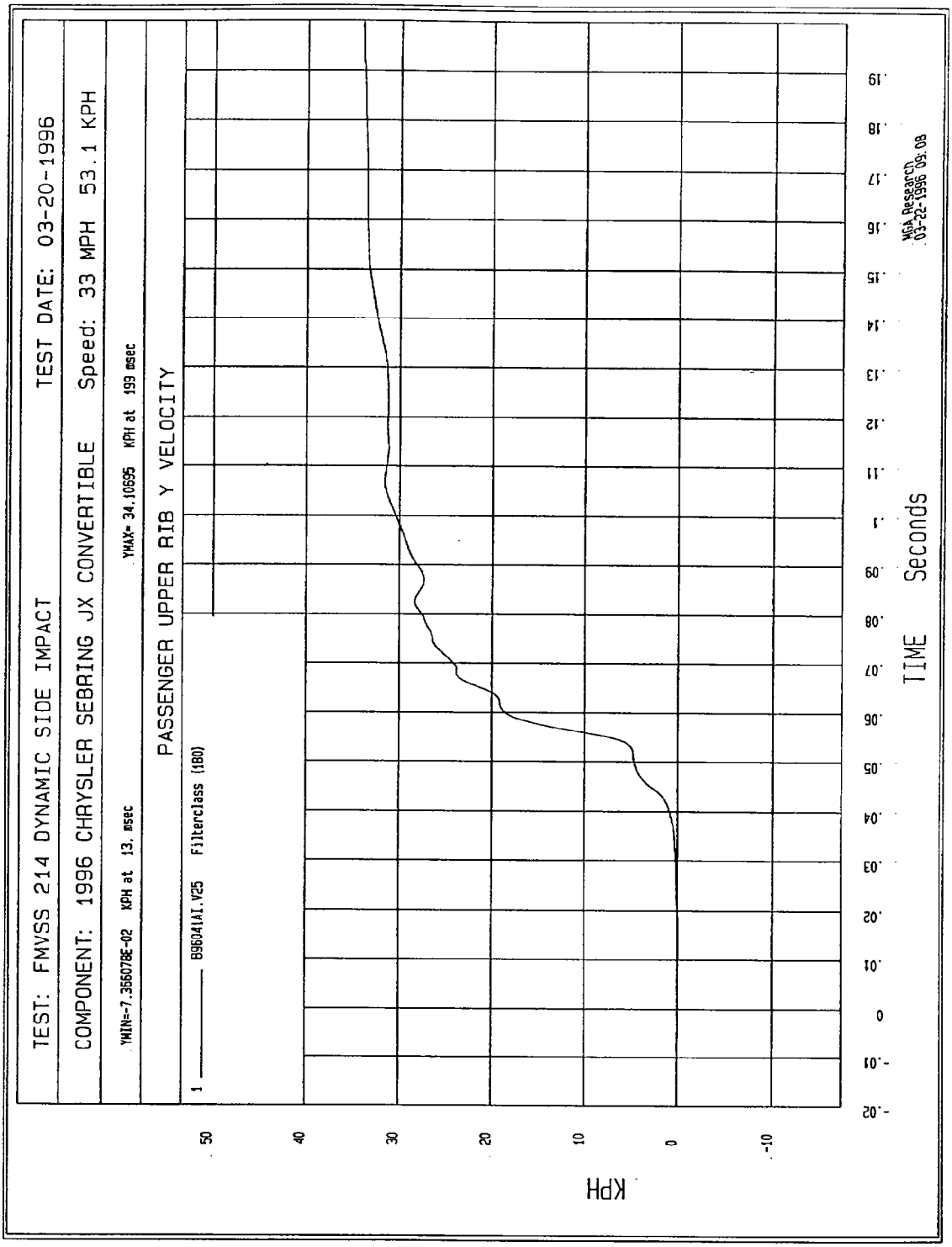
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-10.0504 G'S at 84. msec
YMAX= 87.57719 G'S at 55. msec
PASSENGER UPPER RIB Y ACCELERATION
1 896041AF.A25 Filterclass (180)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:52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TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-7.356078E-02 KPH at 13. msec
YMAX= 34.10695 KPH at 193 msec
PASSENGER UPPER RIB Y VELOCITY
1 B96041AI.V25 Filterclass (180)
KPH
50
40
30
20
10
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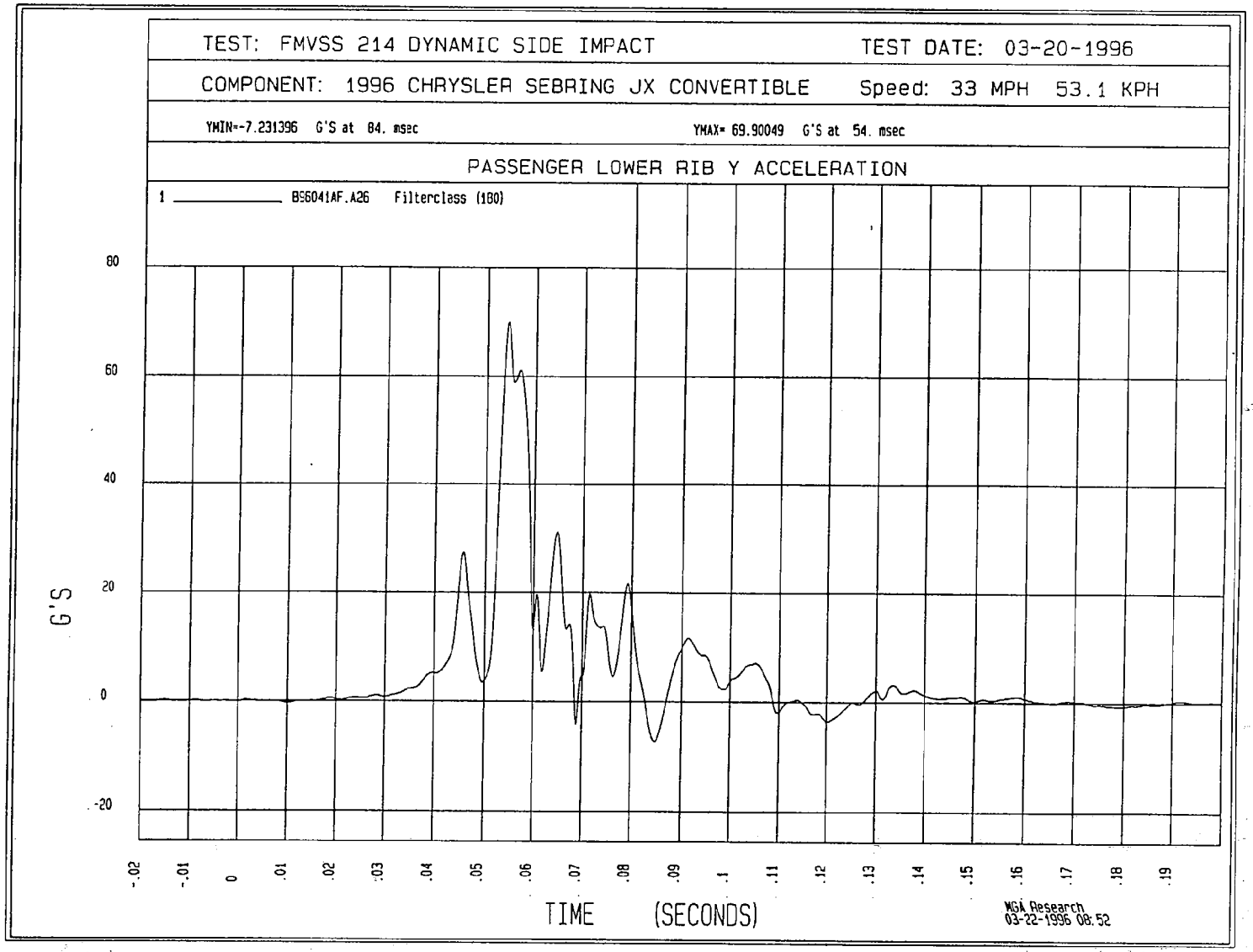
TIME Seconds
MGA Research
03-22-1996 09:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-7.231396 G'S at 84. msec
YMAX= 69.90049 G'S at 54. msec
PASSENGER LOWER RIB Y ACCELERATION
1 BS6041AF.A26 Filterclass (180)
80
60
40
20
0
-20
G'S
-.02
-.01
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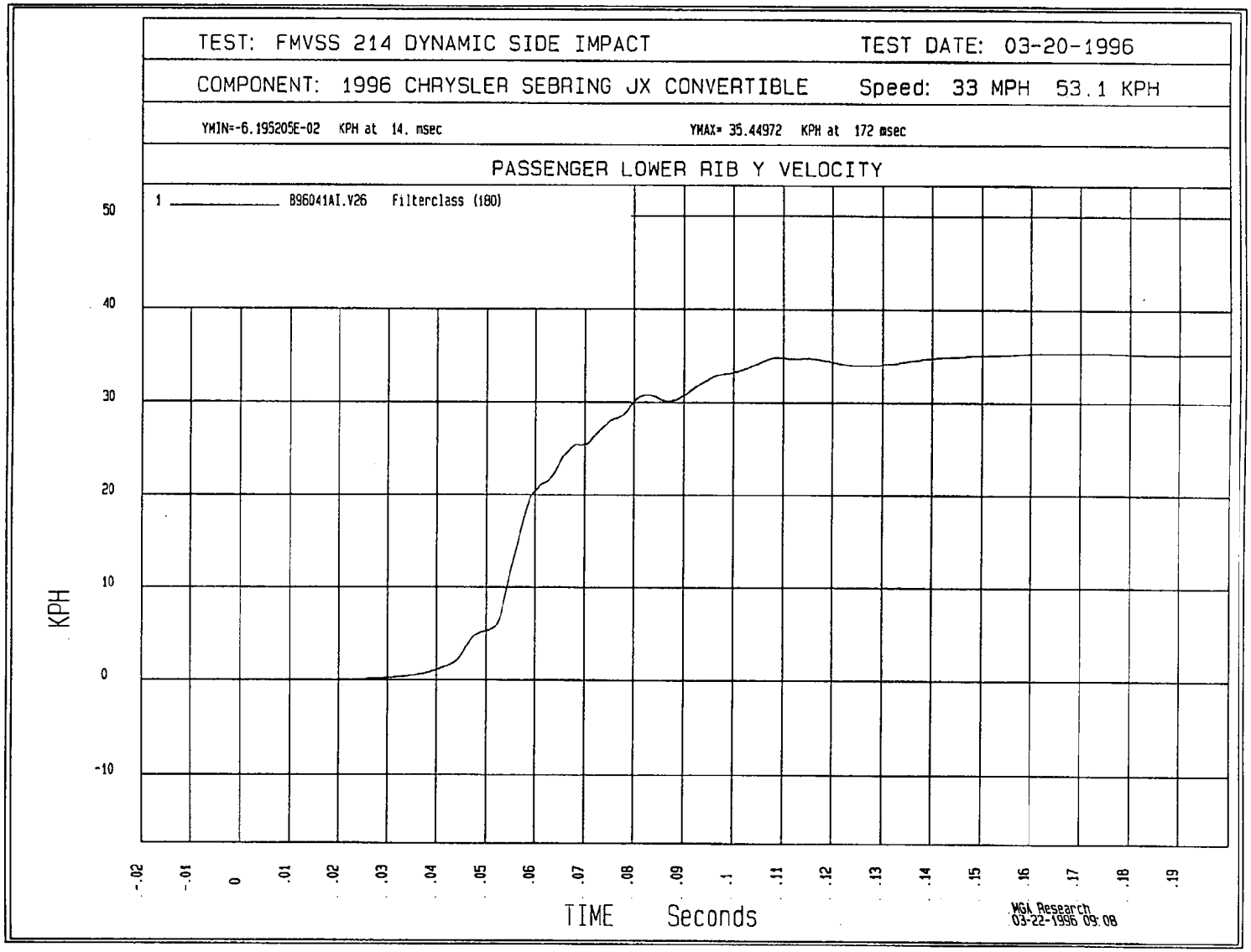
TIME (SECONDS)
MGA Research
03-22-1996 08:52


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-6.195205E-02 KPH at 14. msec
YMAX= 35.44972 KPH at 172 msec
PASSENGER LOWER RIB Y VELOCITY
1 B96041AI.V26 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
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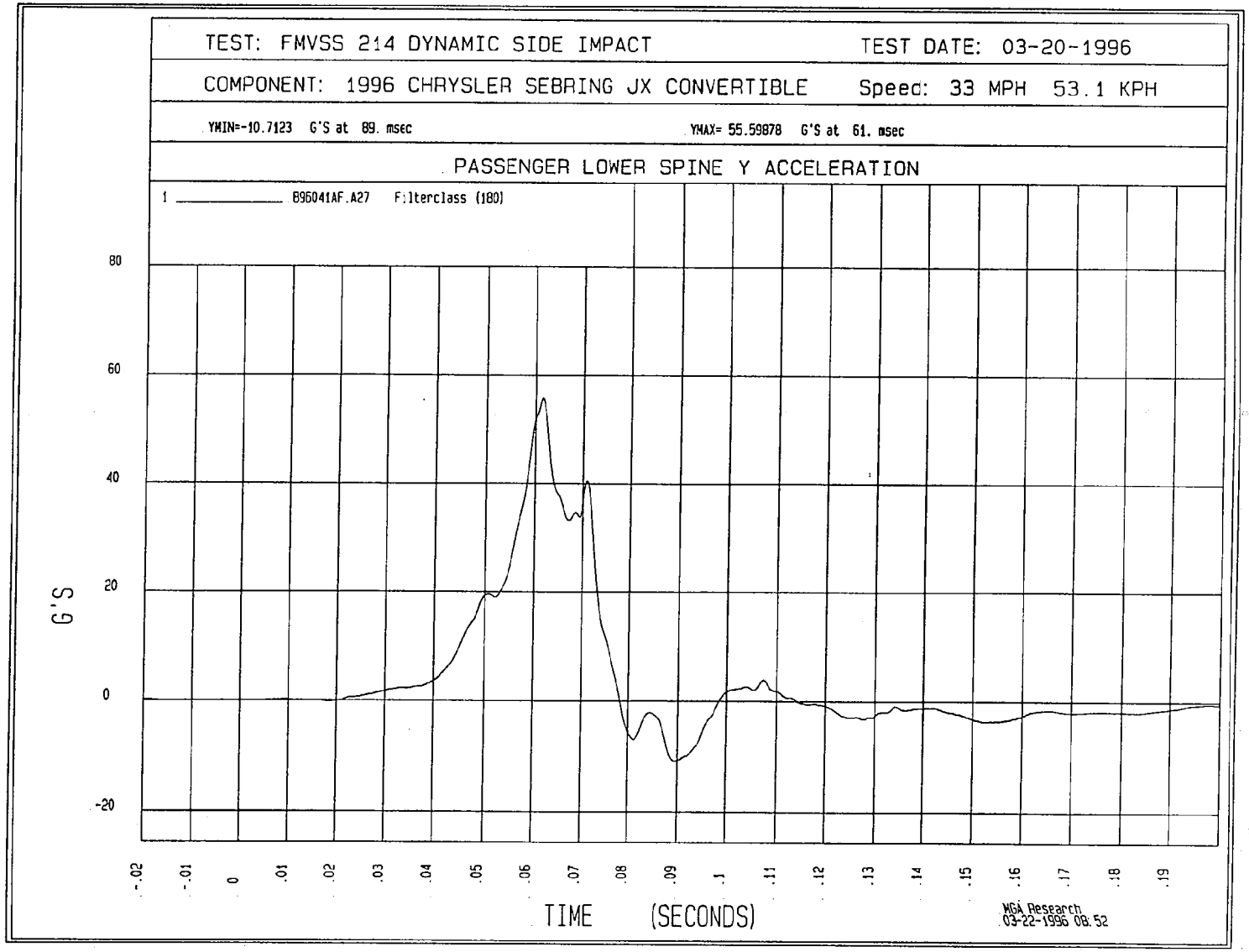
TIME Seconds
MGA Research
03-22-1996 09:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-10.7123 G'S at 89. msec
YMAX= 55.59878 G'S at 61. msec
PASSENGER LOWER SPINE Y ACCELERATION
1 B96041AF.A27 Filterclass (180)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
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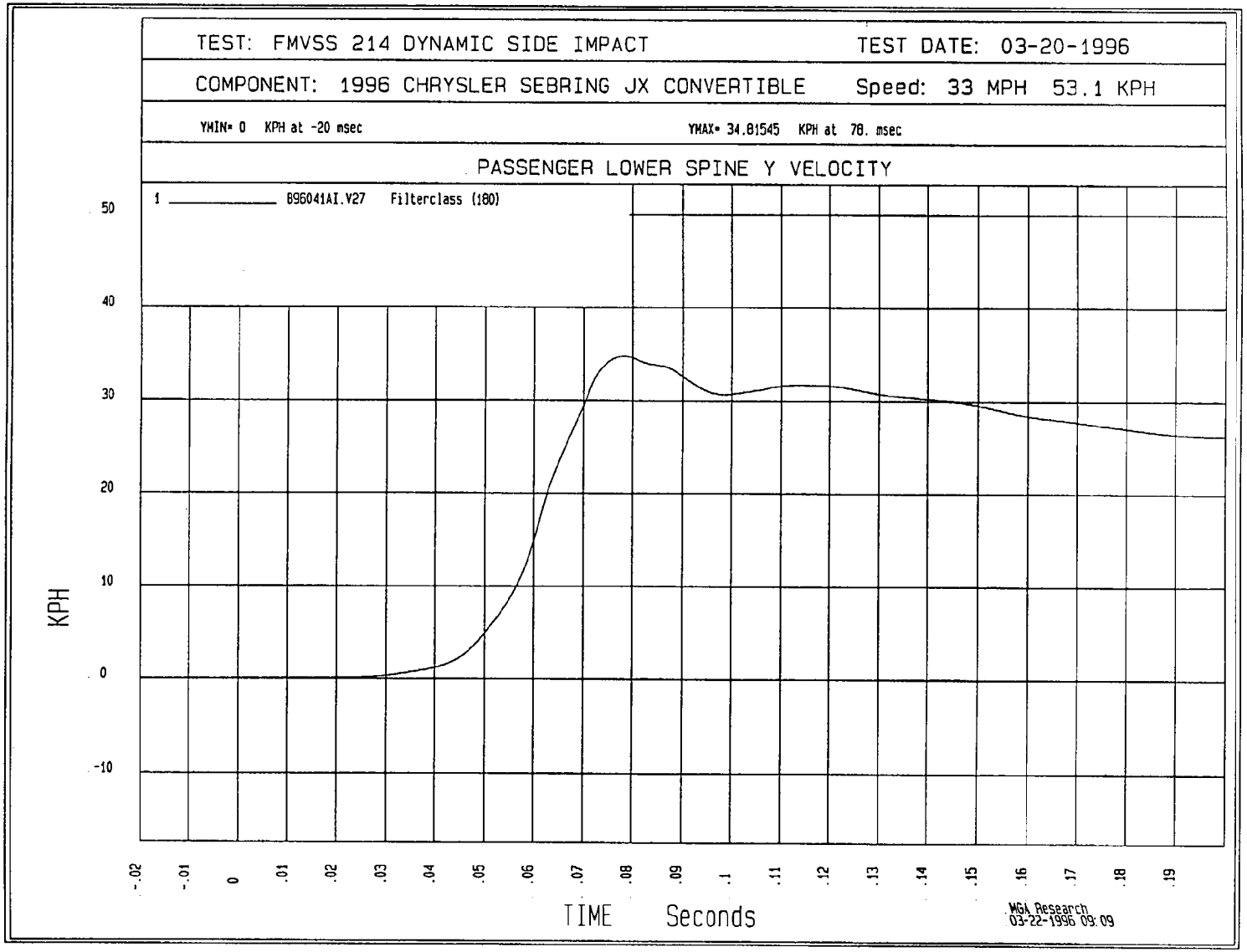
TIME (SECONDS)
WGA Research
03-22-1996 08:52


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN= 0 KPH at -20 msec
YMAX= 34.81545 KPH at 78. msec
PASSENGER LOWER SPINE Y VELOCITY
1 B96041AI.V27 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
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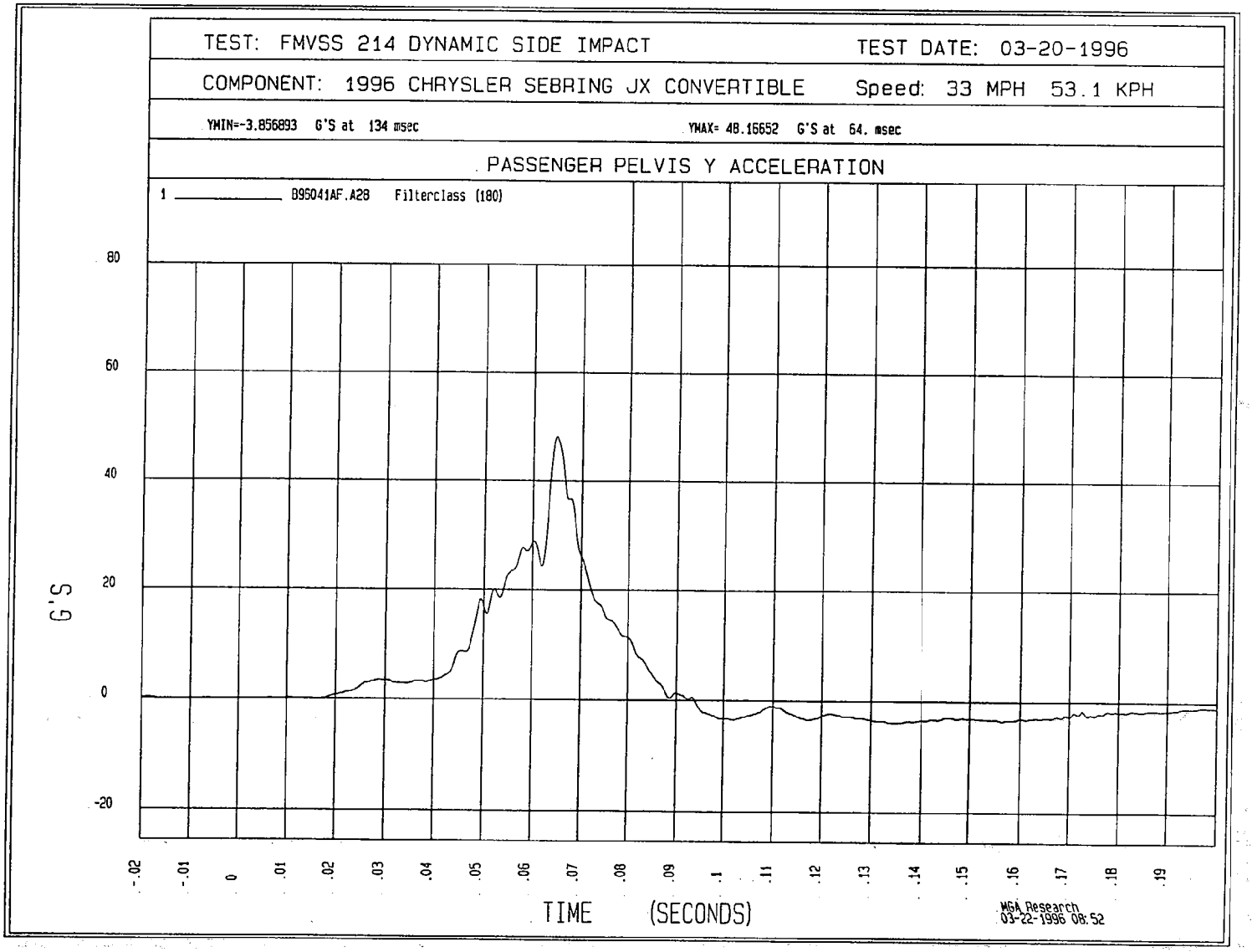
TIME Seconds
MGA Research
03-22-1996 09:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-3.856893 G'S at 134 msec
YMAX= 48.16652 G'S at 64. msec
PASSENGER PELVIS Y ACCELERATION
1 B95041AF.A28 Filterclass (180)
80
60
40
20
0
-20
G'S
-.02
-.01
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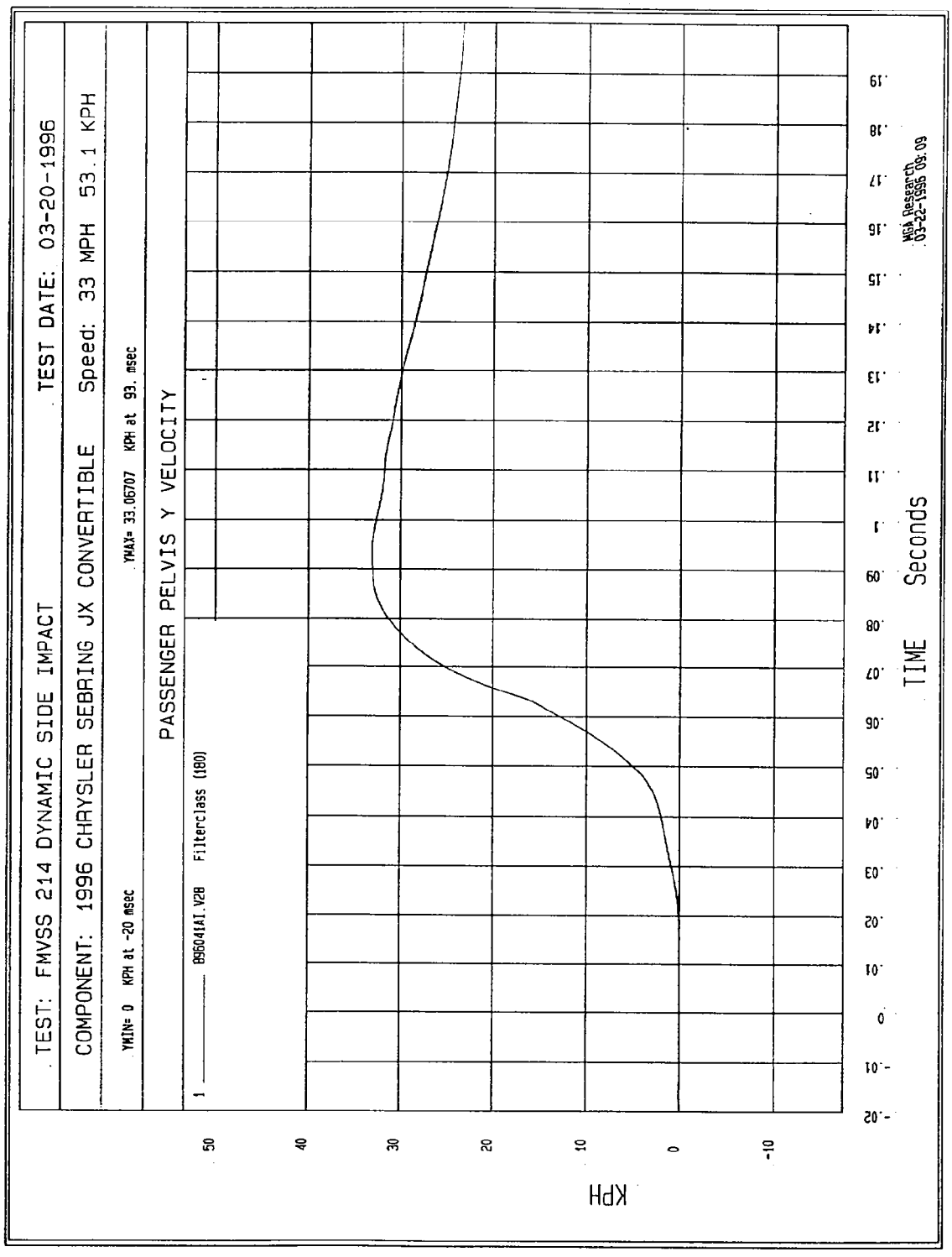
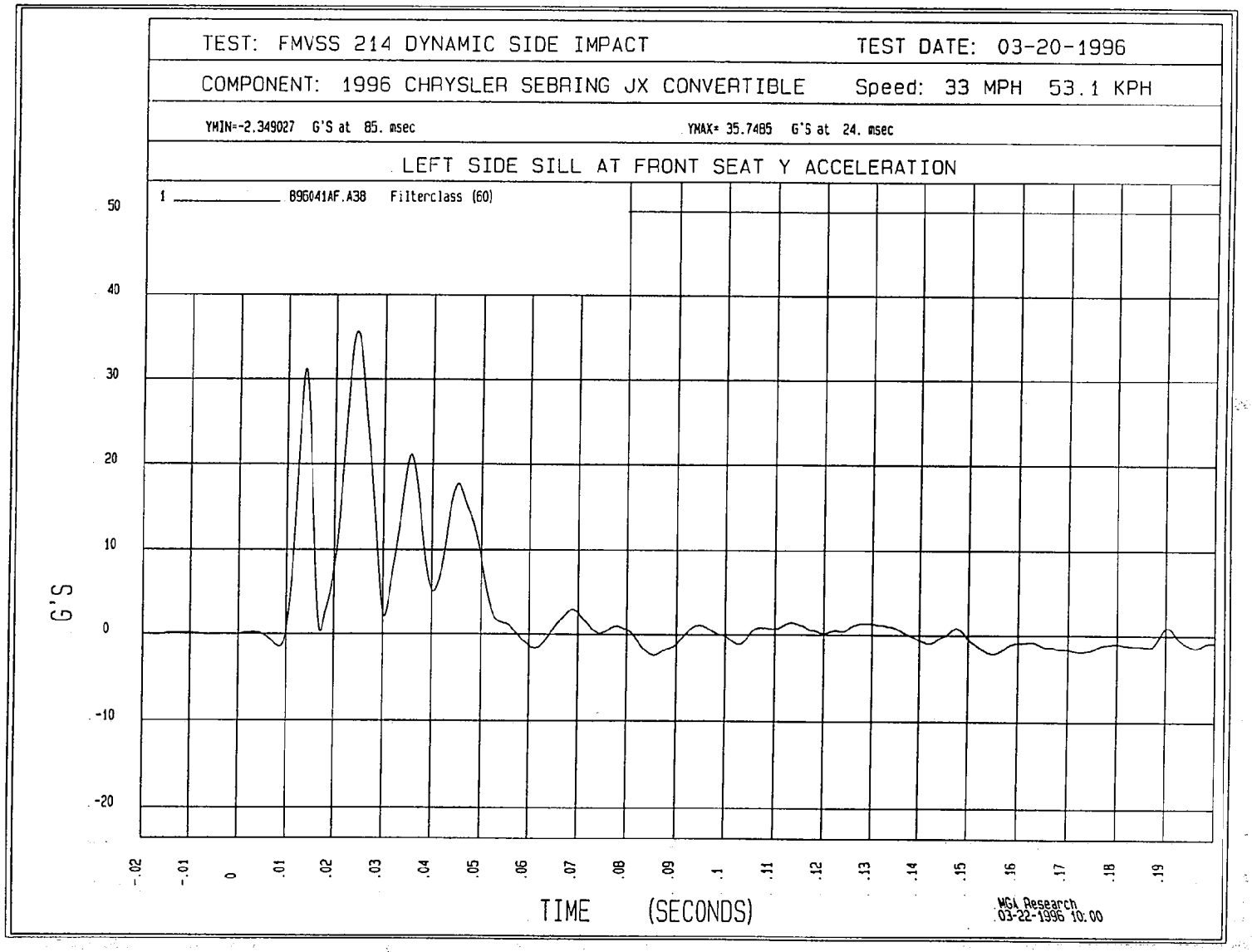
TIME (SECONDS)
MGA Research
03-22-1996 08:52


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN= 0 KPH at -20 msec
YMAX= 33.06707 KPH at 93. msec
PASSENGER PELVIS Y VELOCITY
1 B96041A1.V2B Filterclass (180)
KPH
TIME Seconds
Msk Research
03-22-1996 08:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-2.349027 G'S at 85. msec
YMAX= 35.7485 G'S at 24. msec
LEFT SIDE SILL AT FRONT SEAT Y ACCELERATION
1 B96041AF.A38 Filterclass (60)
50
40
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0
-10
-20
G'S
-.02
-.01
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.01
.02
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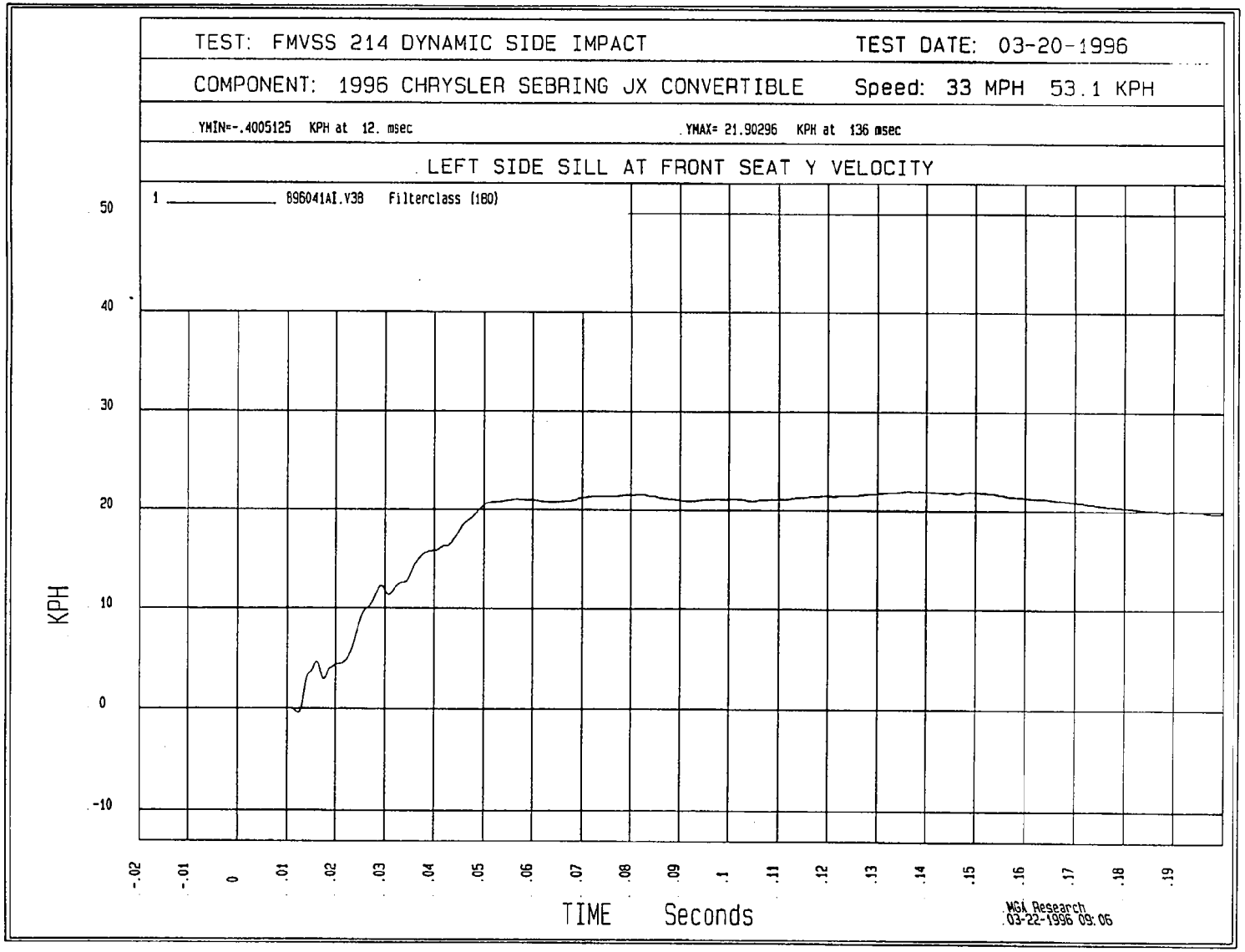
TIME (SECONDS)
MGL Research
03-22-1996 10:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.4005125 KPH at 12. msec
YMAX= 21.90296 KPH at 136 msec
LEFT SIDE SILL AT FRONT SEAT Y VELOCITY
1 896041AI.V38 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
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.02
.03
.04
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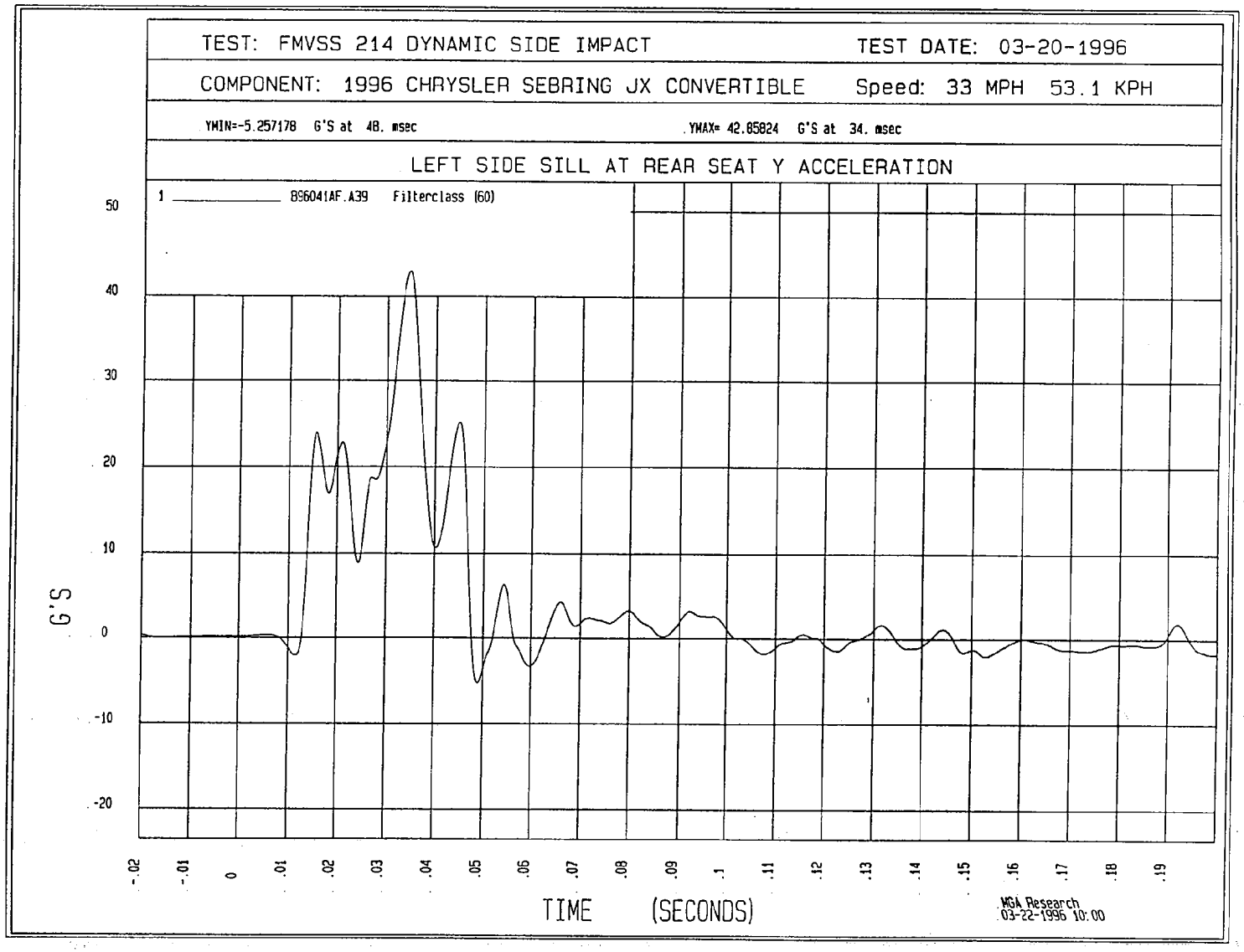
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-5.257178 G'S at 48. msec
YMAX= 42.85824 G'S at 34. msec
LEFT SIDE SILL AT REAR SEAT Y ACCELERATION
1 B96041AF.A39 Filterclass (60)
50
40
30
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0
-10
-20
G'S
-.02
-.01
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.01
.02
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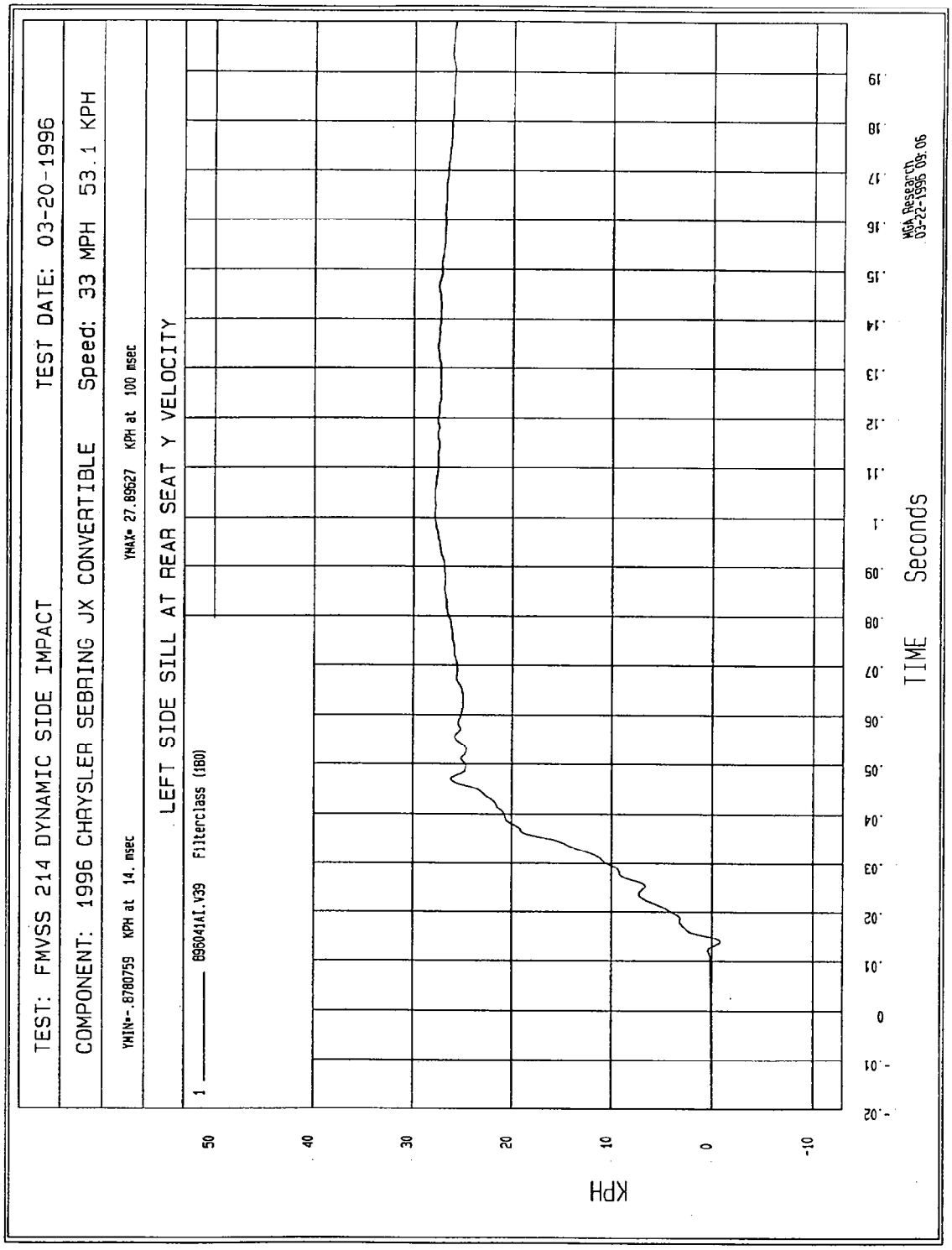
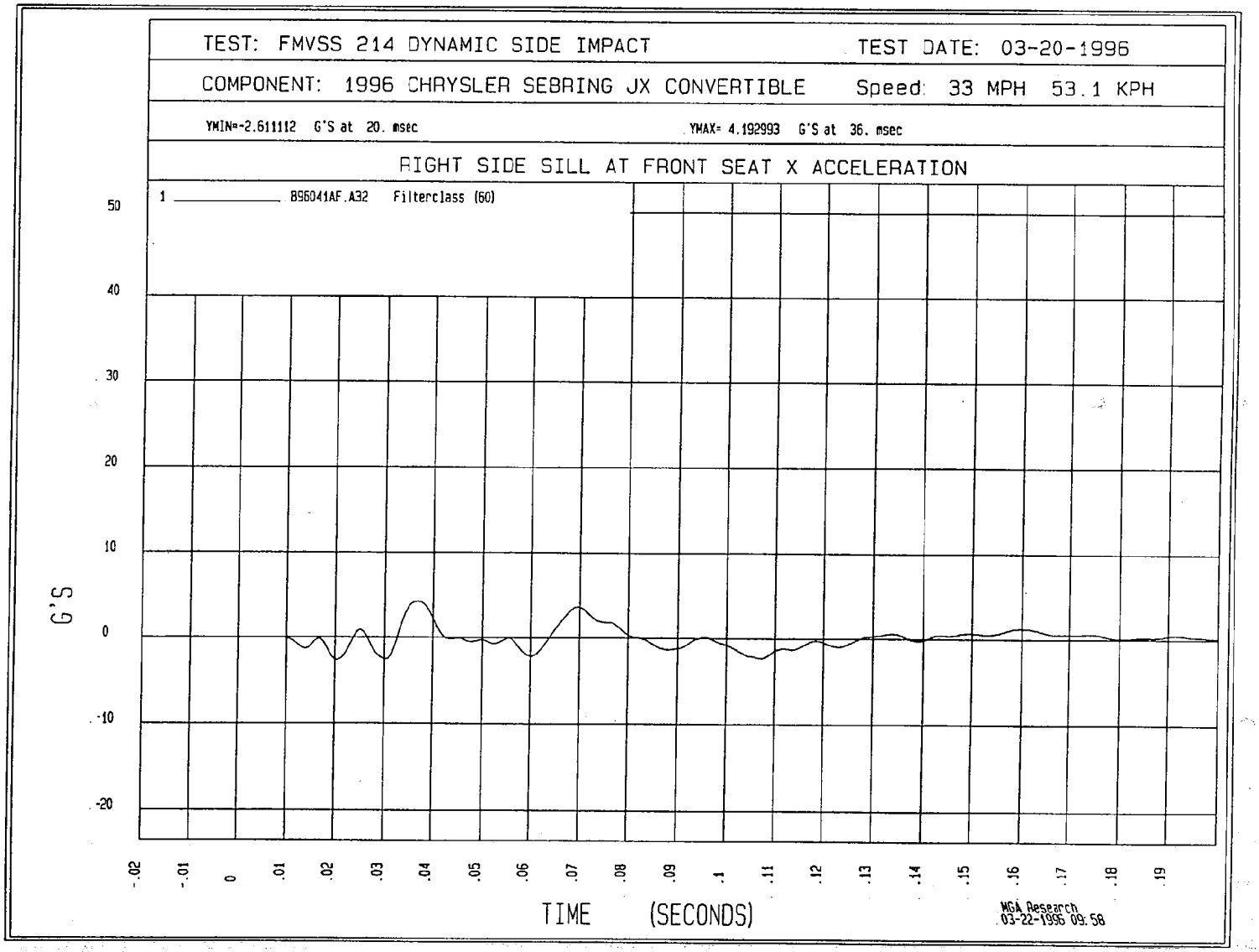
TIME (SECONDS)
MGA Research
03-22-1996 10:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.8780759 KPH at 14. msec
YMAX= 27.89627 KPH at 100 msec
LEFT SIDE SILL AT REAR SEAT Y VELOCITY
1 _____ 895041A1.V39 Filterclass (180)
KPH
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-2.611112 G'S at 20. msec
YMAX= 4.192993 G'S at 36. msec
RIGHT SIDE SILL AT FRONT SEAT X ACCELERATION
1 B96041AF.A32 Filterclass (60)
50
40
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-20
G'S
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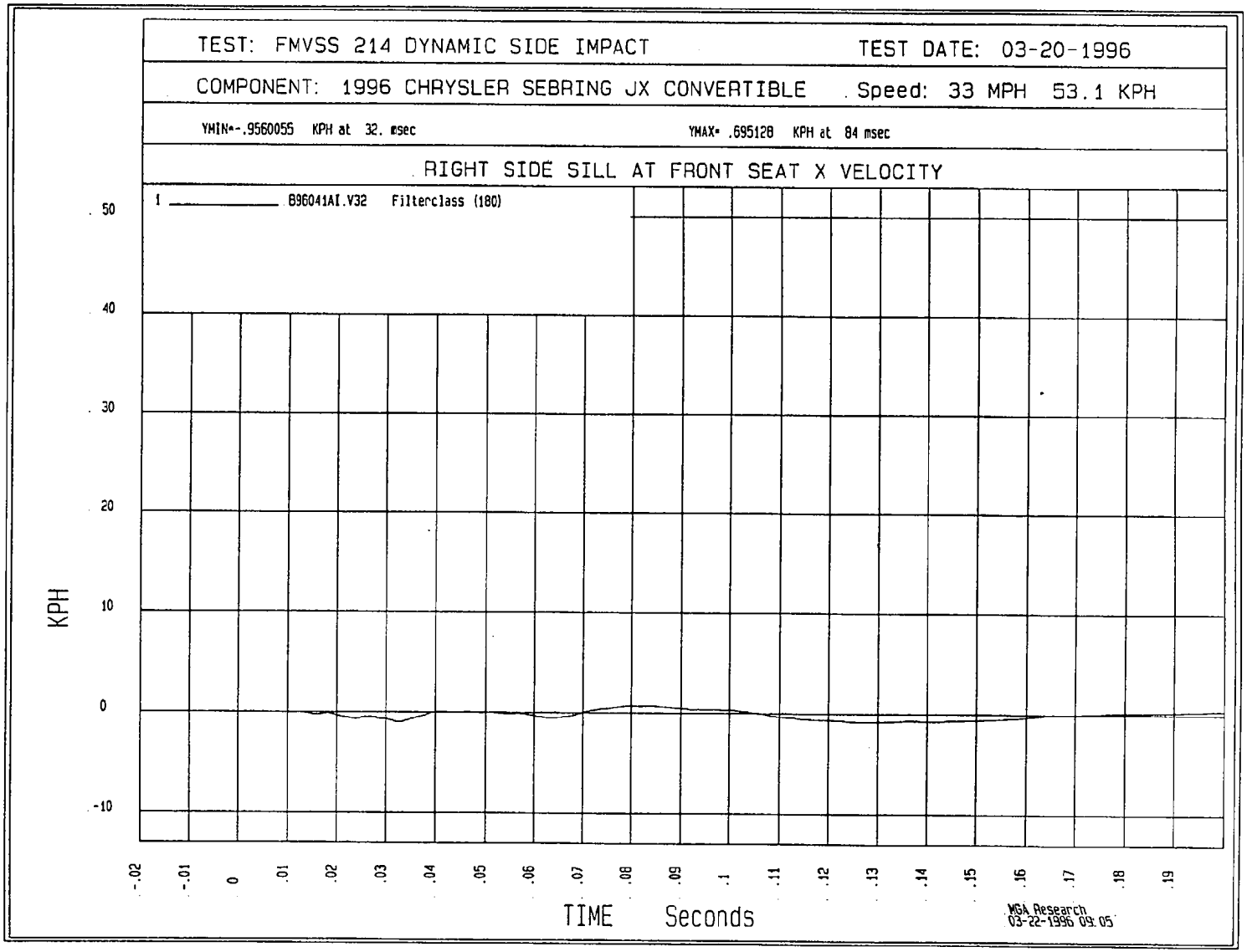
TIME (SECONDS)
MGA Research
03-22-1996 09:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.9560055 KPH at 32. msec
YMAX= .695128 KPH at 84 msec
RIGHT SIDE SILL AT FRONT SEAT X VELOCITY
1 B96041AI.V32 Filterclass (180)
KPH
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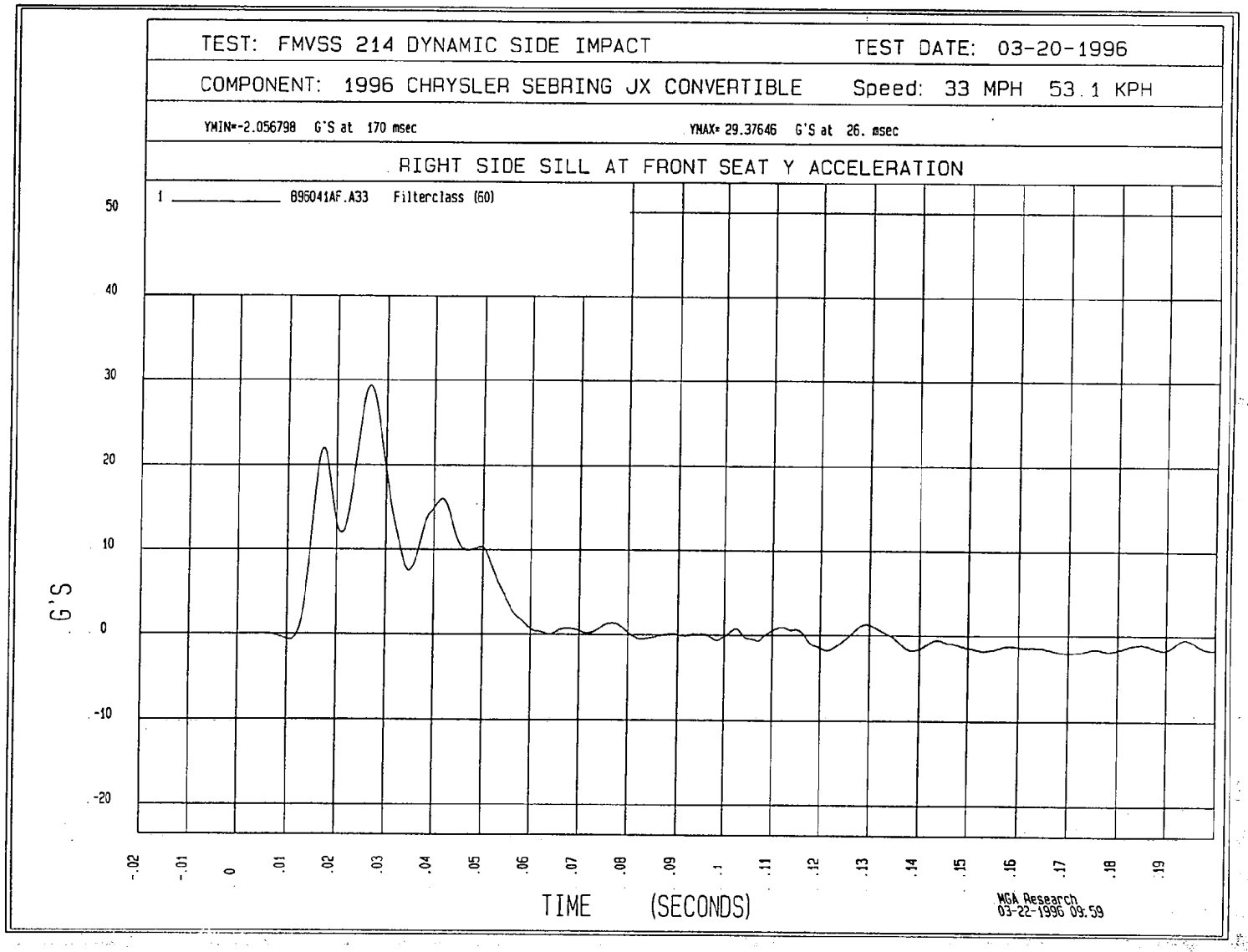
TIME Seconds
MGA Research
03-22-1996 09:05


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-2.056798 G'S at 170 msec
YMAX= 29.37646 G'S at 26. msec
RIGHT SIDE SILL AT FRONT SEAT Y ACCELERATION
1 B95041AF.A33 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
-.02
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0
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.02
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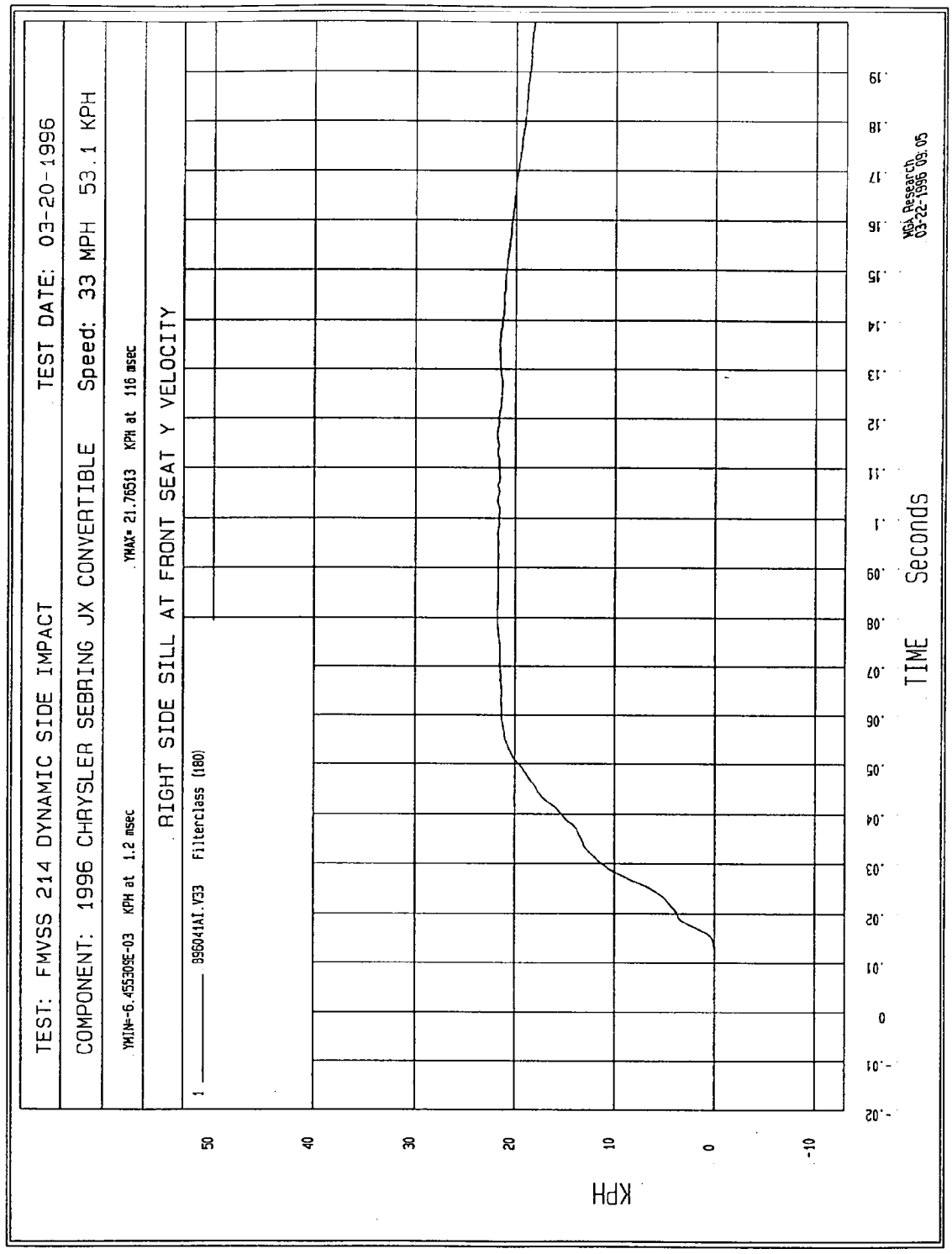
TIME (SECONDS)
MGA Research
03-22-1996 09:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-6.455305E-03 KPH at 1.2 msec
YMAX= 21.76513 KPH at 116 msec
RIGHT SIDE SILL AT FRONT SEAT Y VELOCITY
1 _____ 896041AI.Y33 Filterclass (180)
KPH
50
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-10
TIME Seconds
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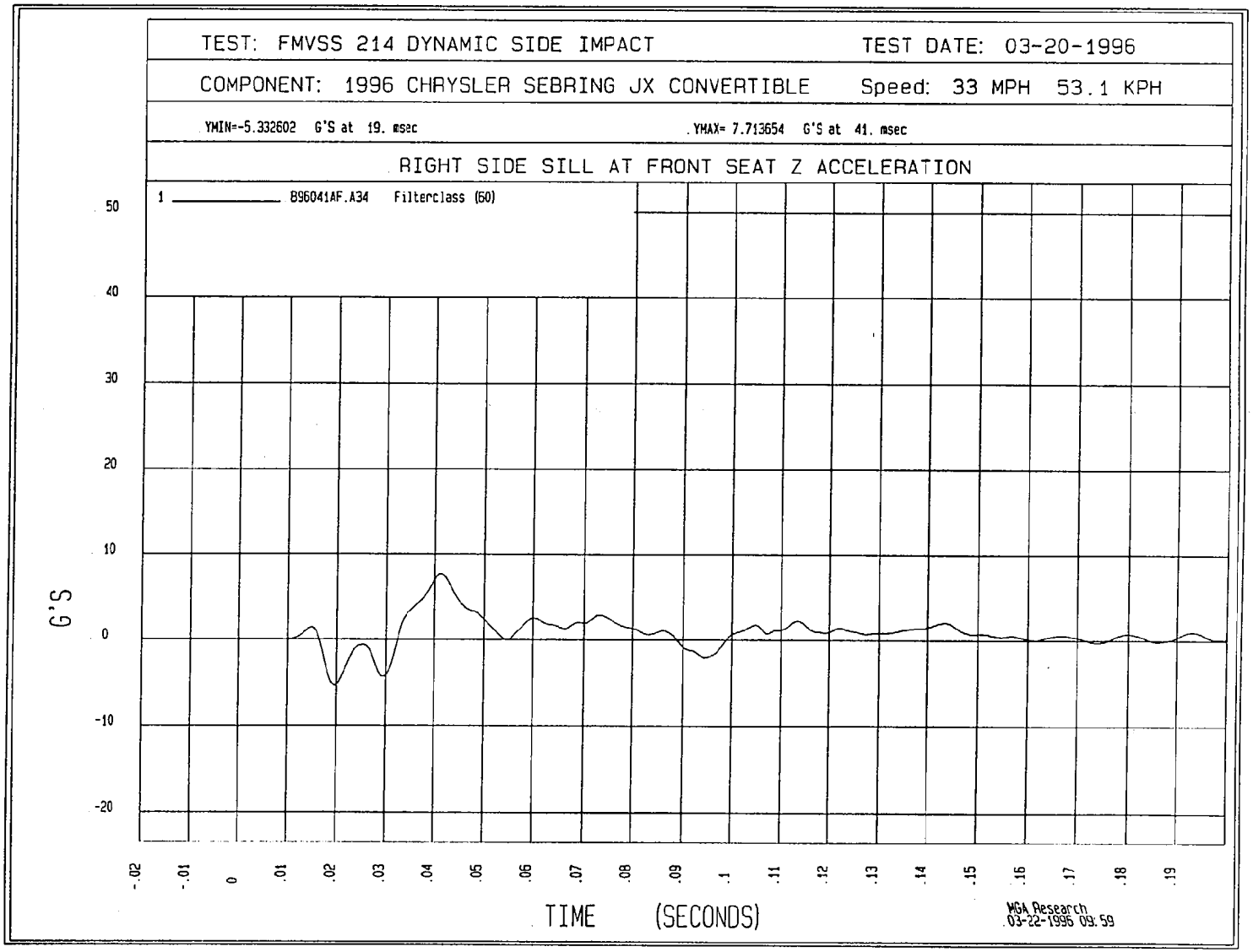
MGA Research
03-22-1996 09:05


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-5.332602 G'S at 19. msec
YMAX= 7.713654 G'S at 41. msec
RIGHT SIDE SILL AT FRONT SEAT Z ACCELERATION
1 B96041AF.A34 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
-.02
-.01
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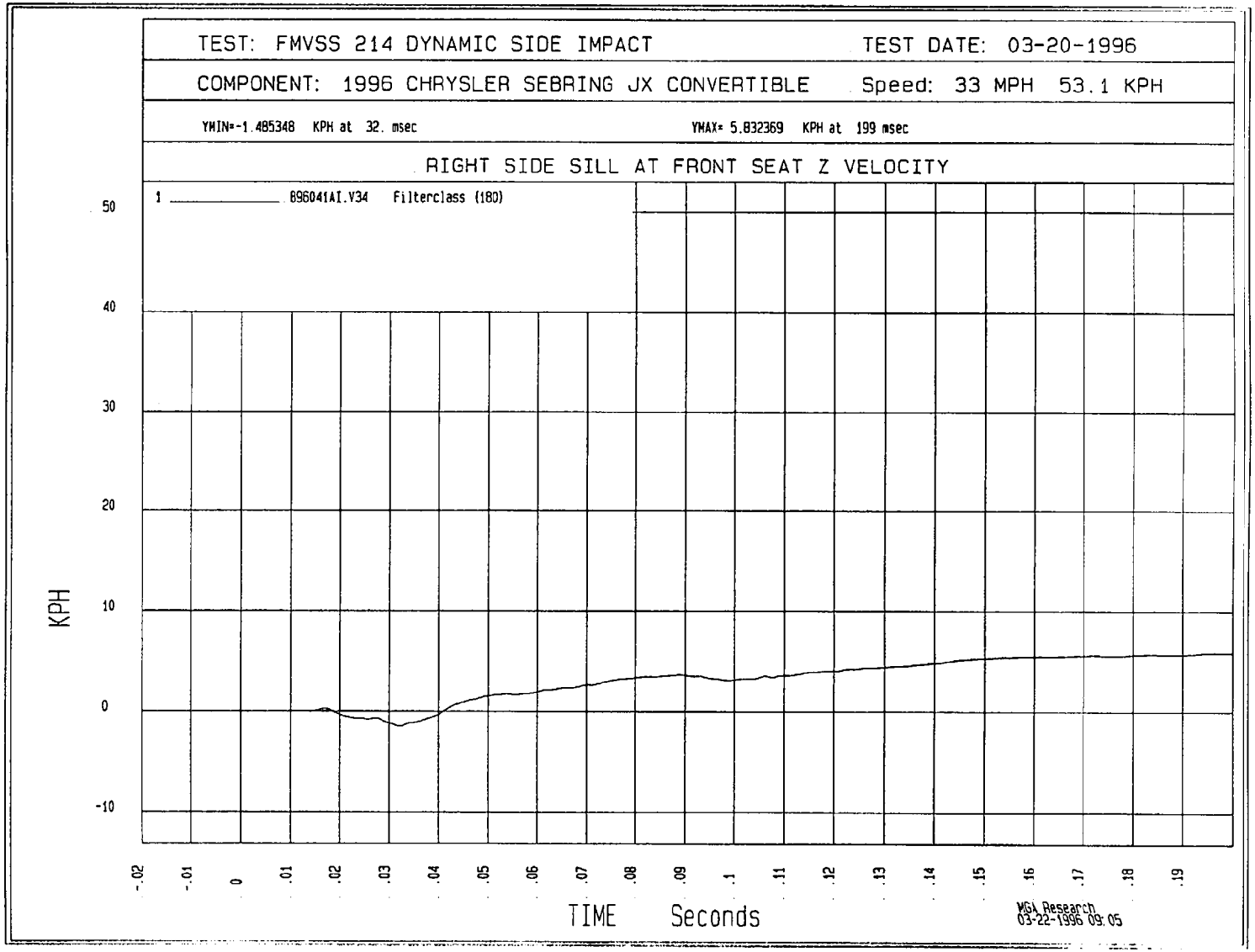
TIME (SECONDS)
MGA Research
03-22-1996 09:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-1.485348 KPH at 32. msec
YMAX= 5.832369 KPH at 199 msec
RIGHT SIDE SILL AT FRONT SEAT Z VELOCITY
1 896041AI.V34 Filterclass (180)
50
40
30
20
10
0
-10
KPH
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-.01
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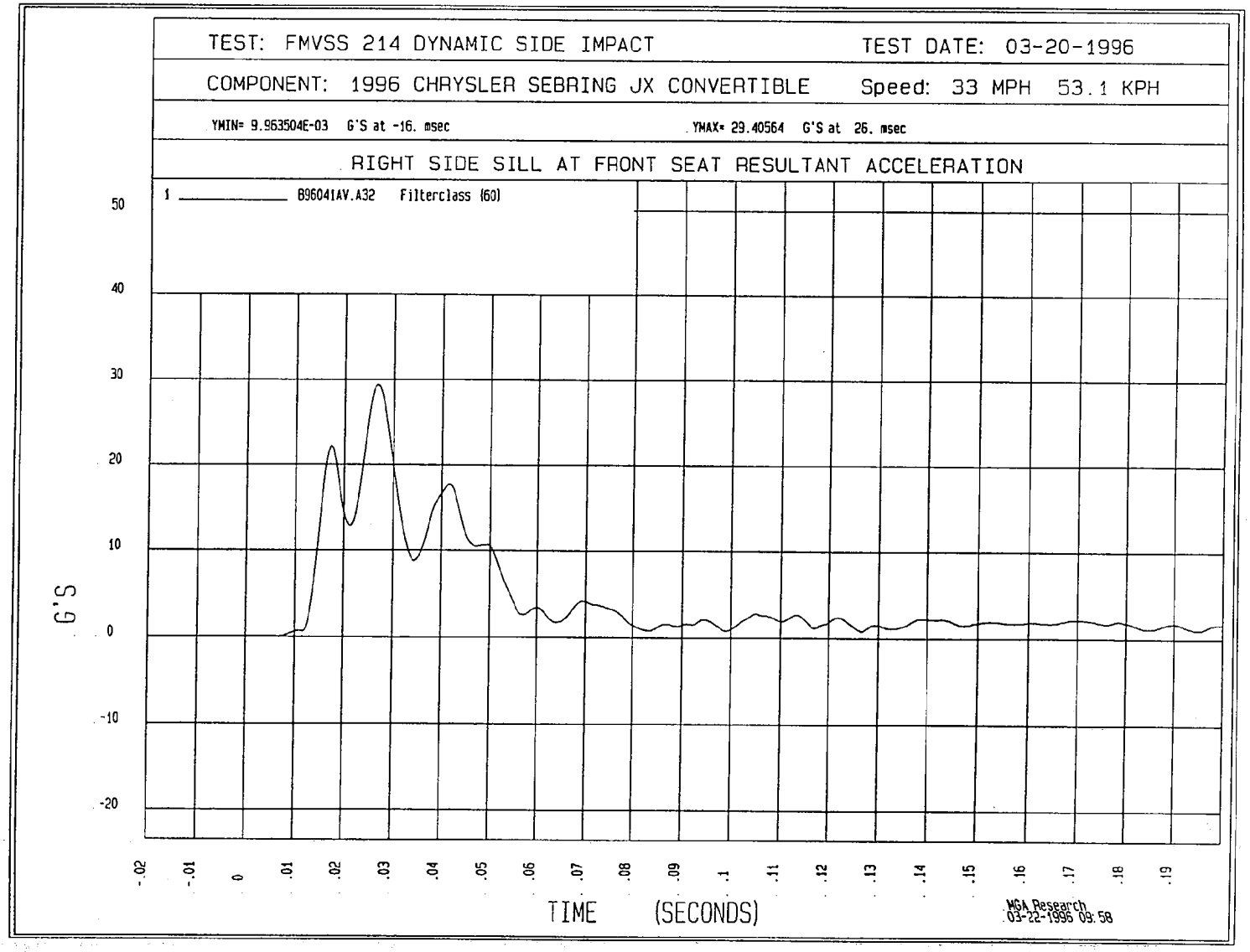
TIME Seconds
MGA Research
03-22-1996 09:05


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN= 9.963504E-03 G'S at -16. msec
YMAX= 29.40564 G'S at 26. msec
RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION
1 B96041AV.A32 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
-.02
-.01
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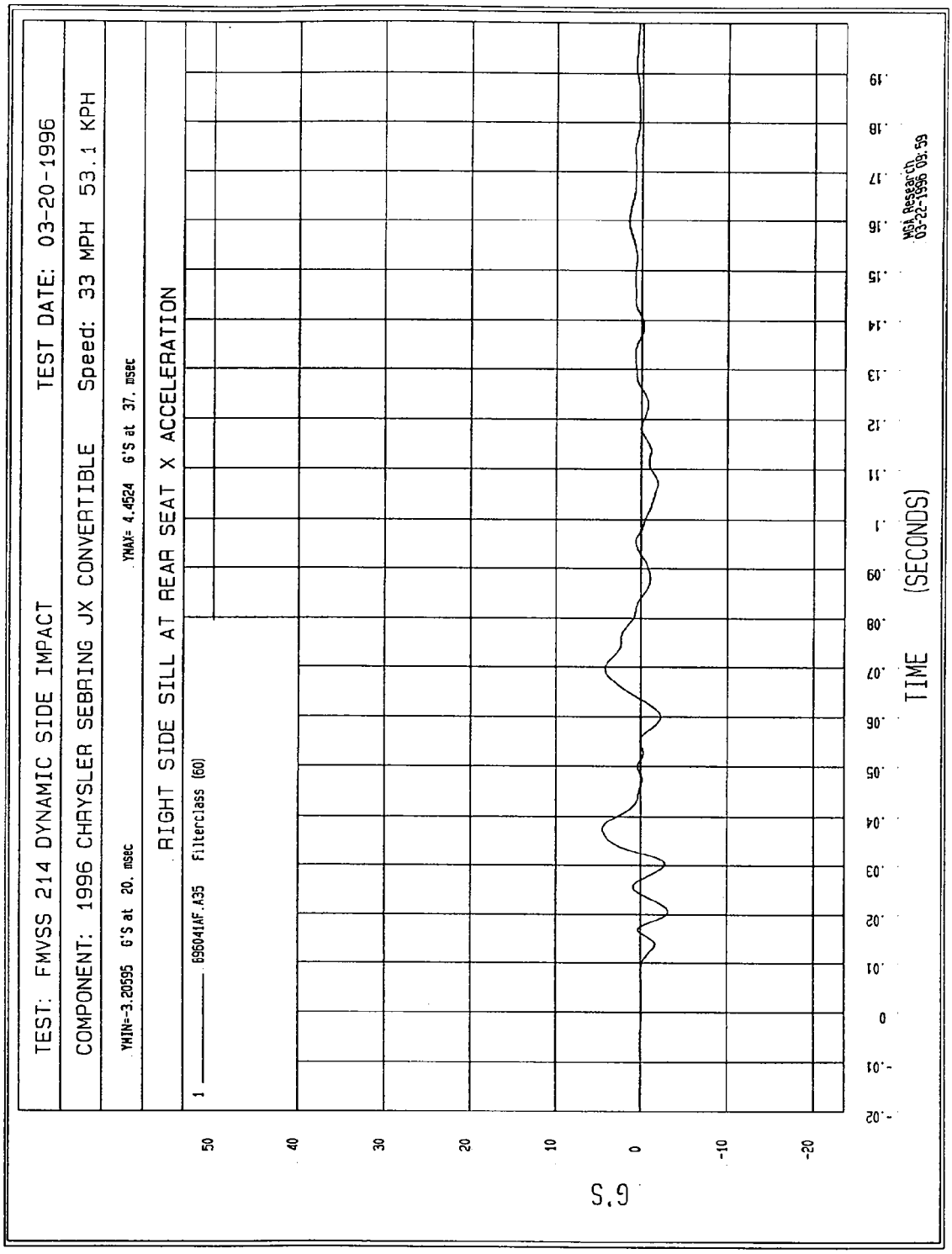
TIME (SECONDS)
MGA Research
03-22-1996 09:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-3.20595 G'S at 20. msec
YMAX= 4.4524 G'S at 37. msec
RIGHT SIDE SILL AT REAR SEAT X ACCELERATION
1 696041AF.A35 Filterclass (60)
50
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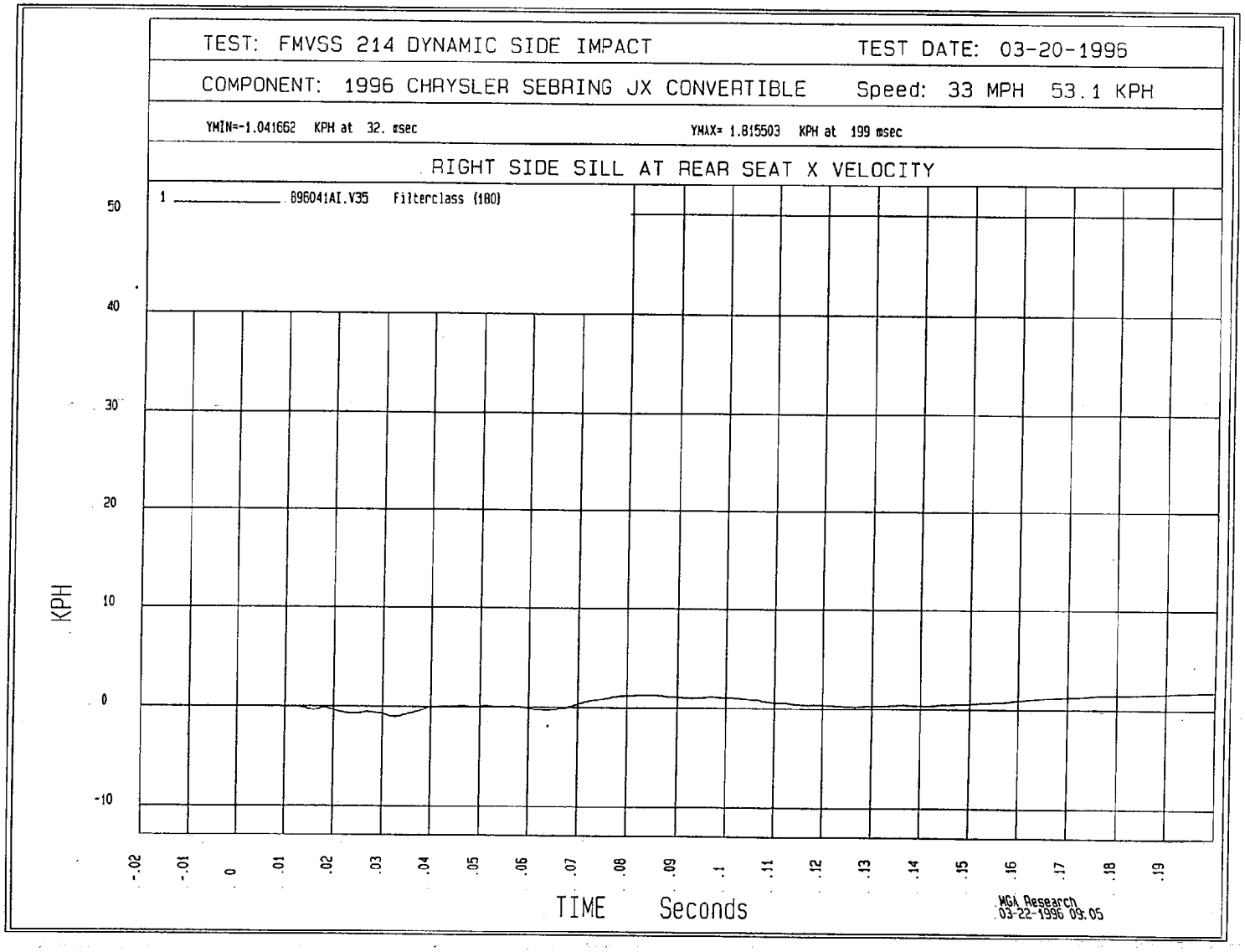
TIME (SECONDS)
MGA Research
03-22-1996 09:59

S.9


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-1.041662 KPH at 32. msec
YMAX= 1.815503 KPH at 199 msec
RIGHT SIDE SILL AT REAR SEAT X VELOCITY
1 B96041AI.V35 Filterclass (180)
KPH
50
40
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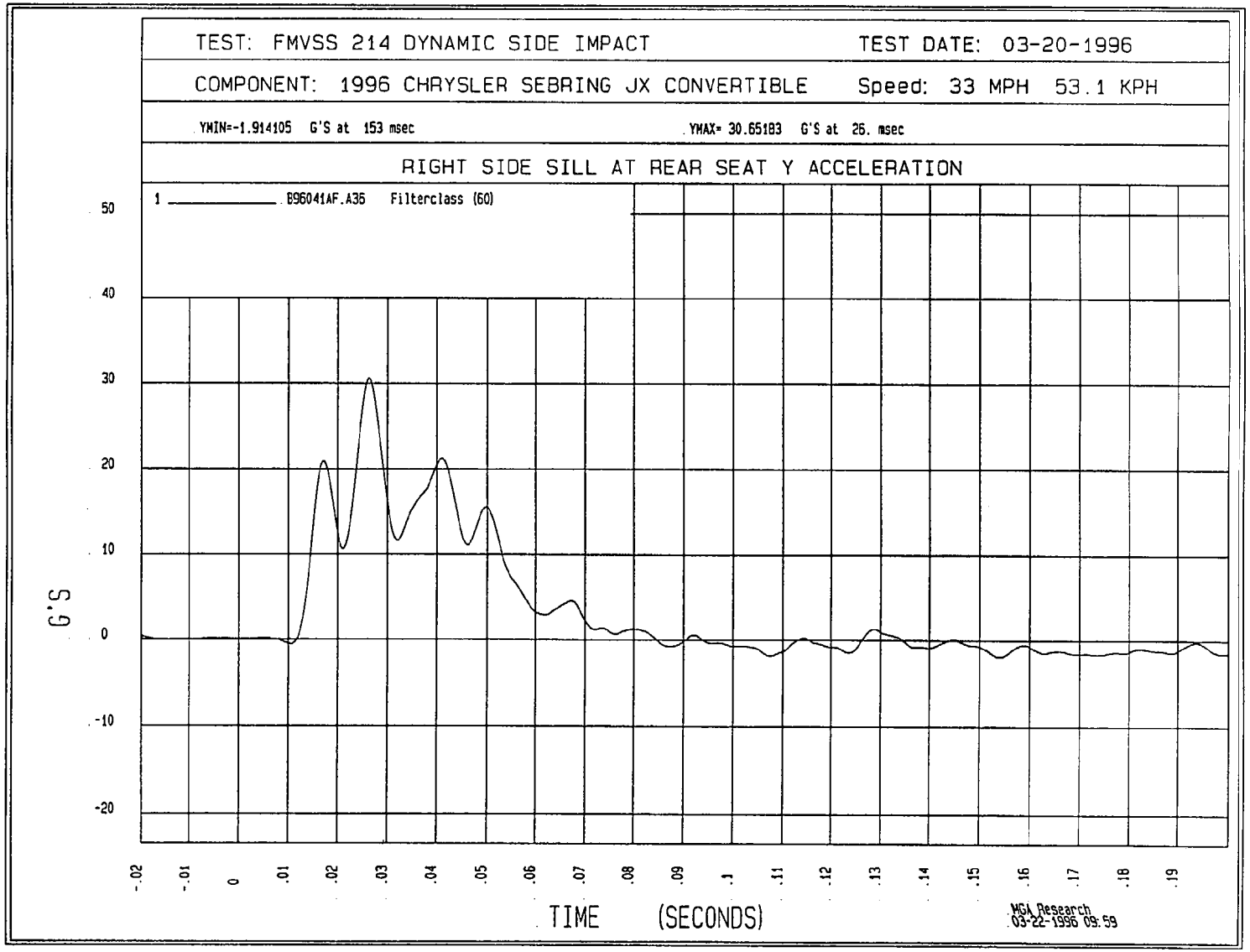
TIME Seconds
MGA Research
03-22-1996 09:05


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-1.914105 G'S at 153 msec
YMAX= 30.65183 G'S at 26. msec
RIGHT SIDE SILL AT REAR SEAT Y ACCELERATION
1 B96041AF.A35 Filterclass (60)
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-20
G's
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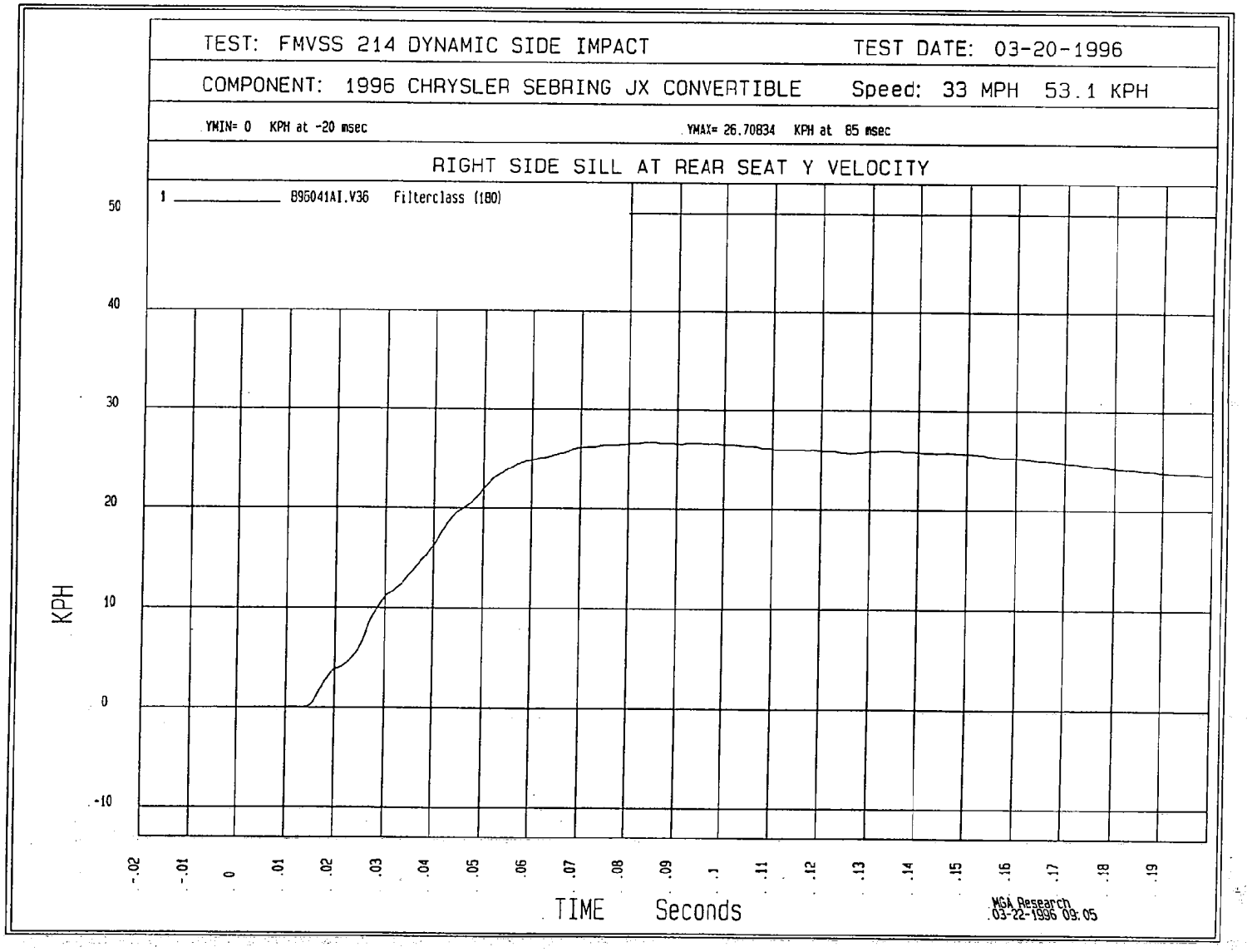
TIME (SECONDS)
MGA Research
03-22-1996 09:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN= 0 KPH at -20 msec
YMAX= 26.70834 KPH at 85 msec
RIGHT SIDE SILL AT REAR SEAT Y VELOCITY
1 B96041AI.V36 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
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.02
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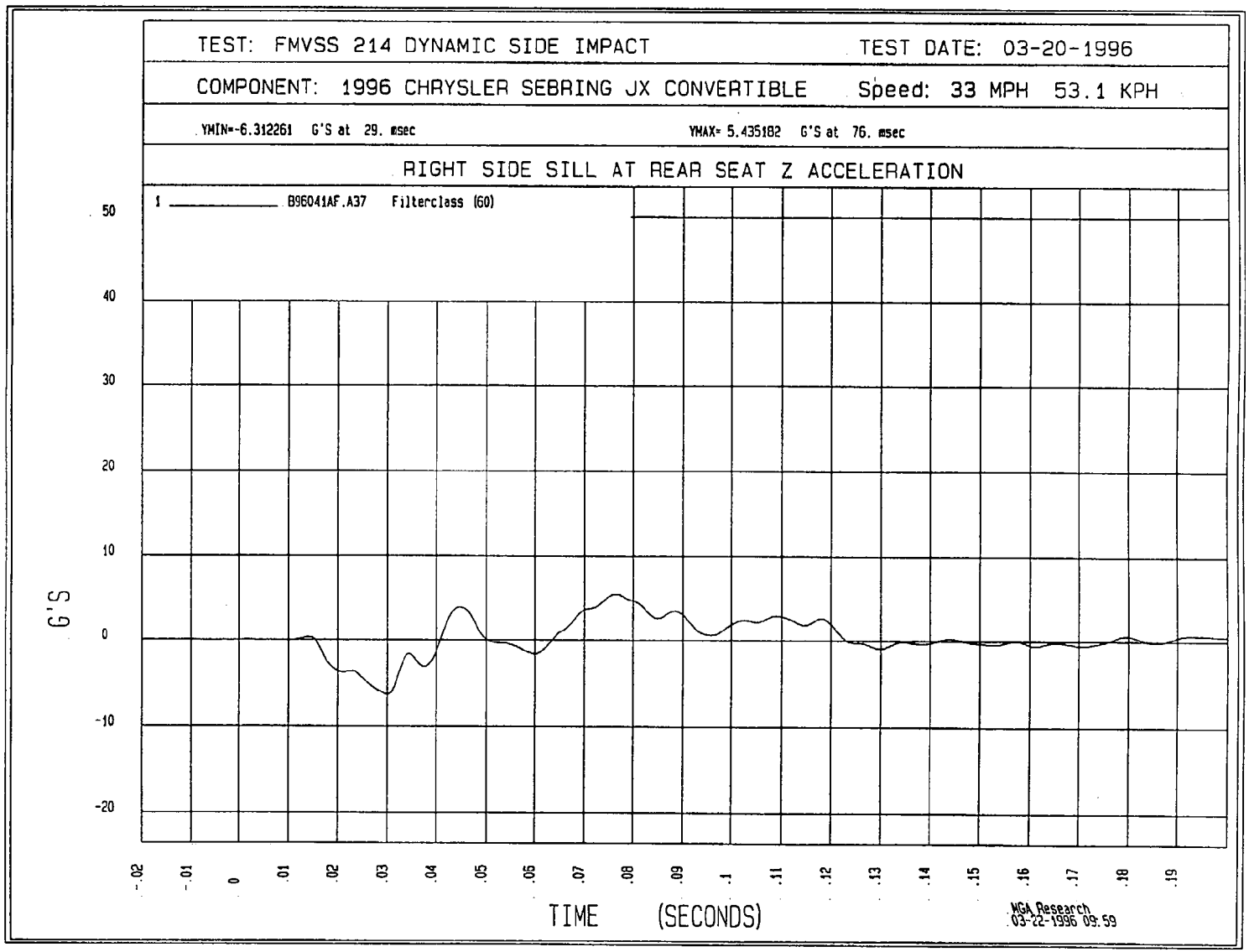
TIME Seconds
MGA Research
03-22-1996 09:05


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-6.312261 G'S at 29. msec
YMAX= 5.435182 G'S at 76. msec
RIGHT SIDE SILL AT REAR SEAT Z ACCELERATION
1 B96041AF.A37 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
-.02
-.01
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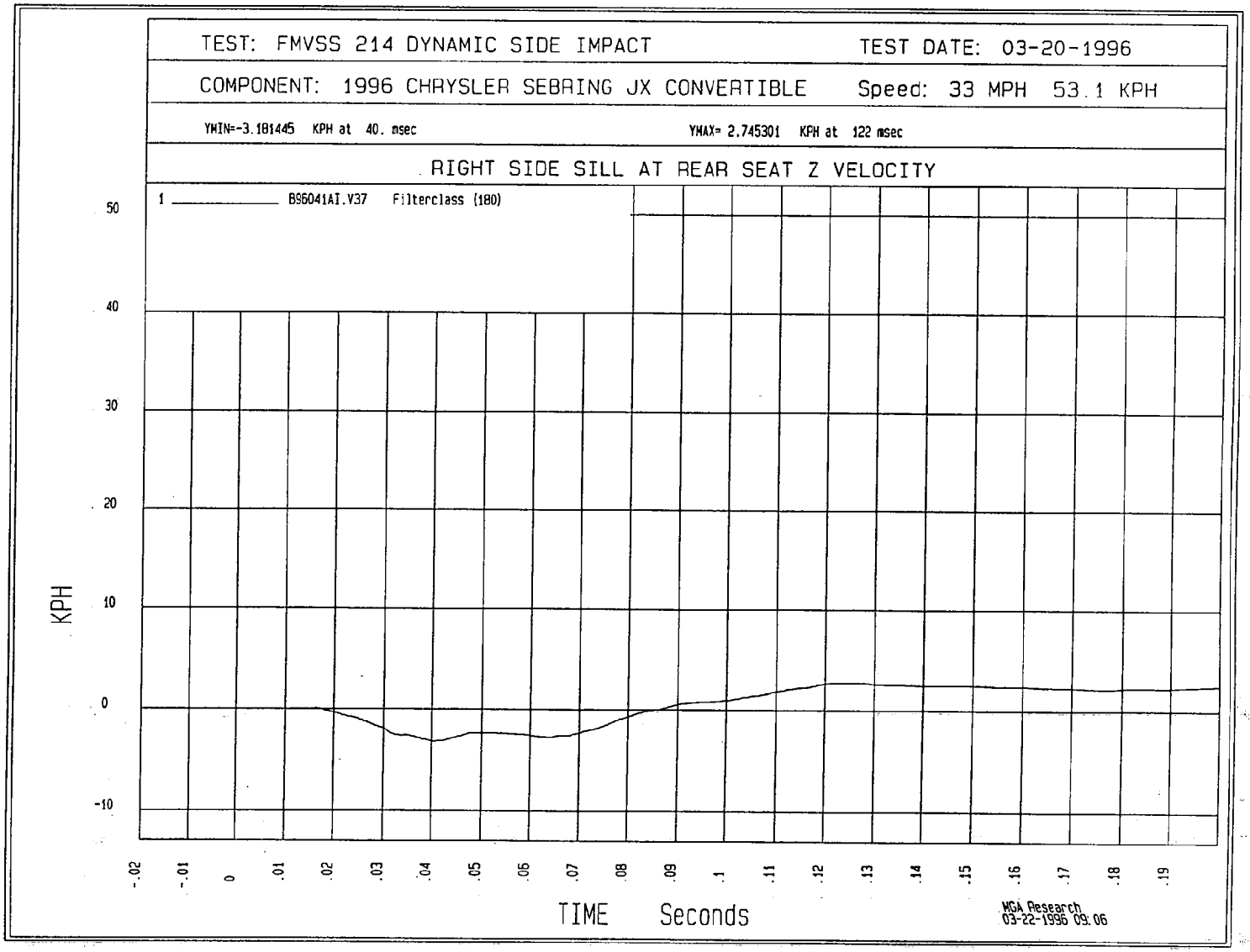
TIME (SECONDS)
MGA Research
03-22-1996 09:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-3.181445 KPH at 40. msec
YMAX= 2.745301 KPH at 122 msec
RIGHT SIDE SILL AT REAR SEAT Z VELOCITY
1 B96041AI.V37 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
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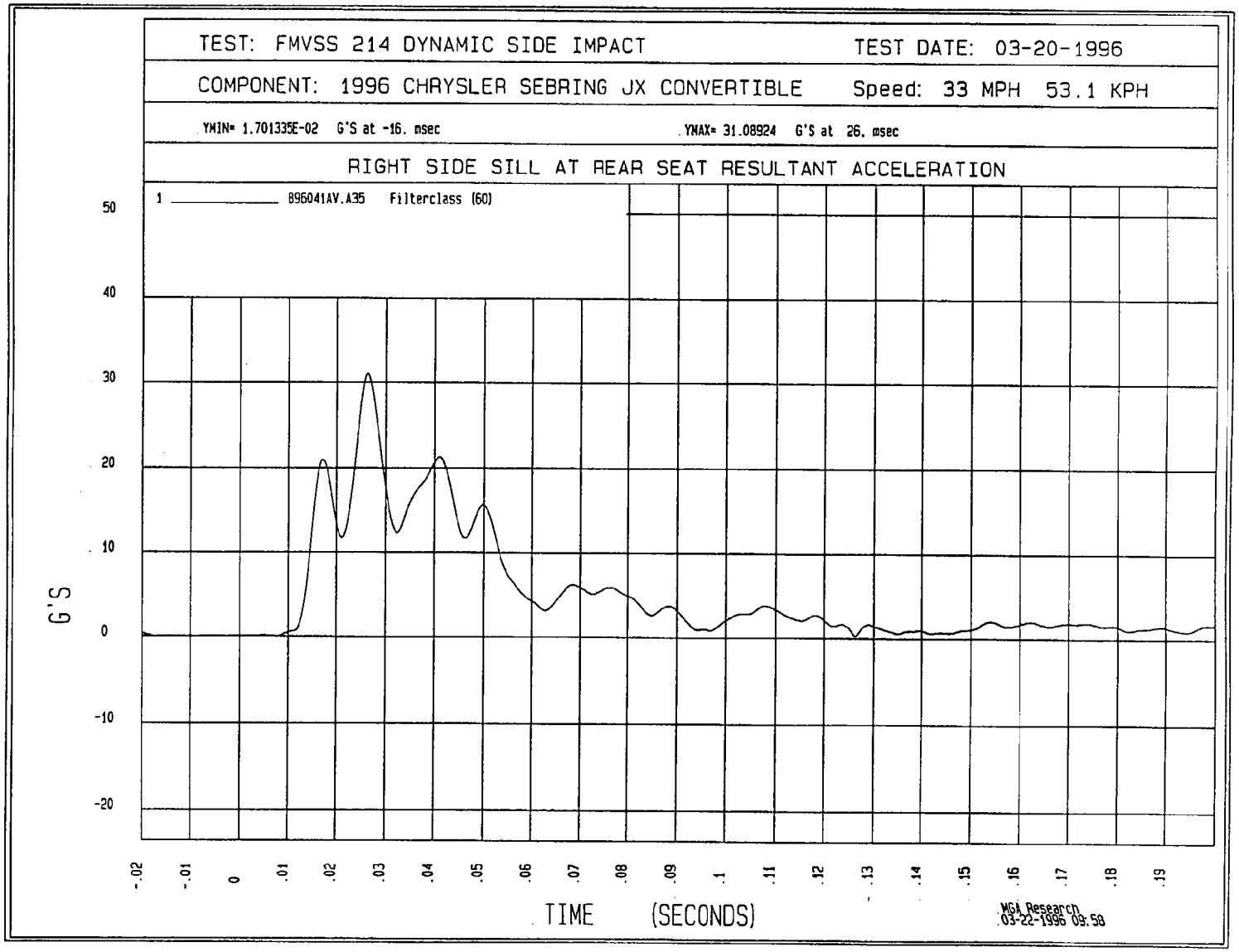
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN= 1.701335E-02 G'S at -16. msec
YMAX= 31.08924 G'S at 26. msec
RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION
1 896041AV.A35 Filterclass (60)
50
40
30
20
10
0
-10
-20
G's
-.02
-.01
0
.01
.02
.03
.04
.05
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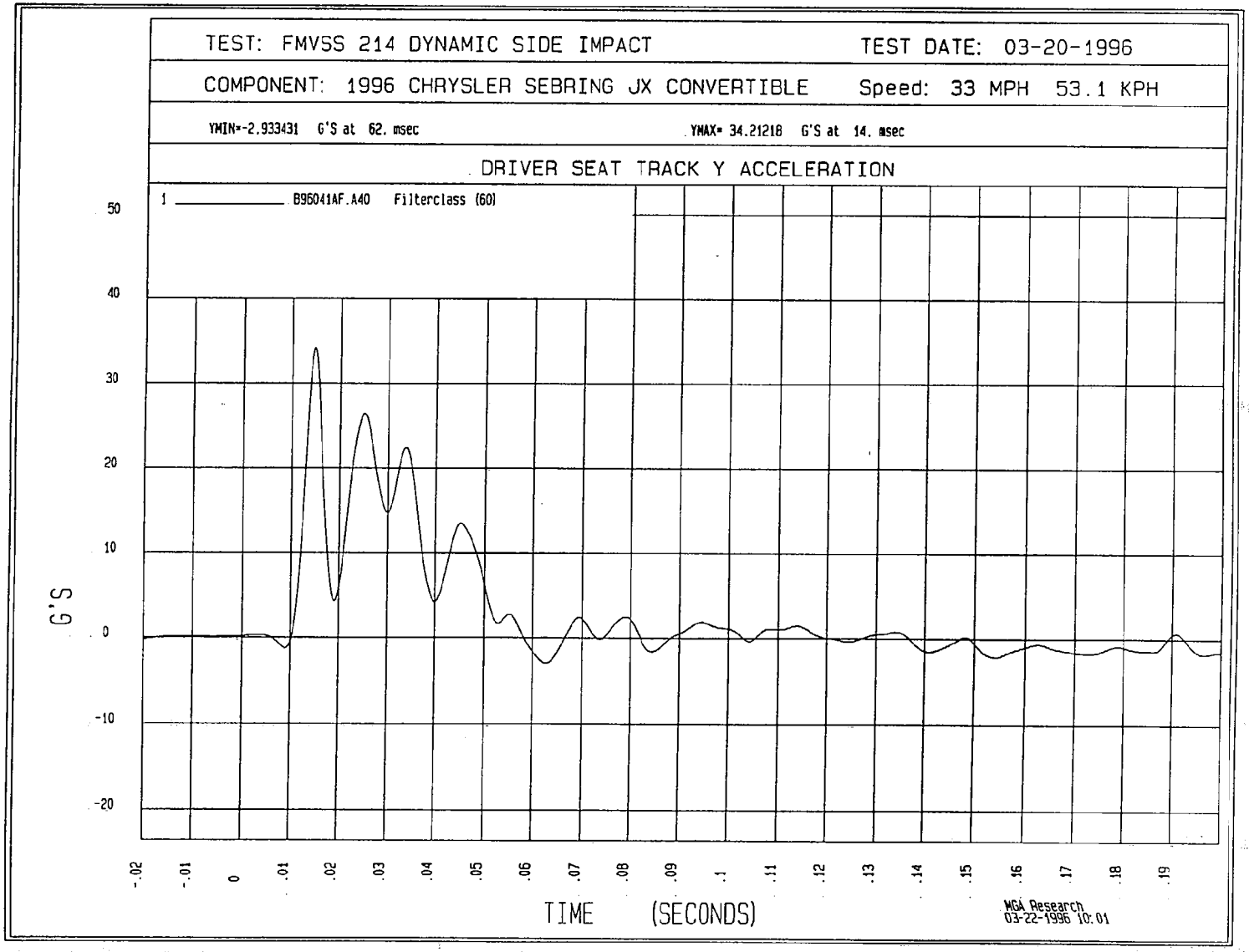
TIME (SECONDS)
MGA Research
03-22-1996 09:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-2.933431 G'S at 62. msec
YMAX= 34.21218 G'S at 14. msec
DRIVER SEAT TRACK Y ACCELERATION
1 B96041AF.A40 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
-.02
-.01
0
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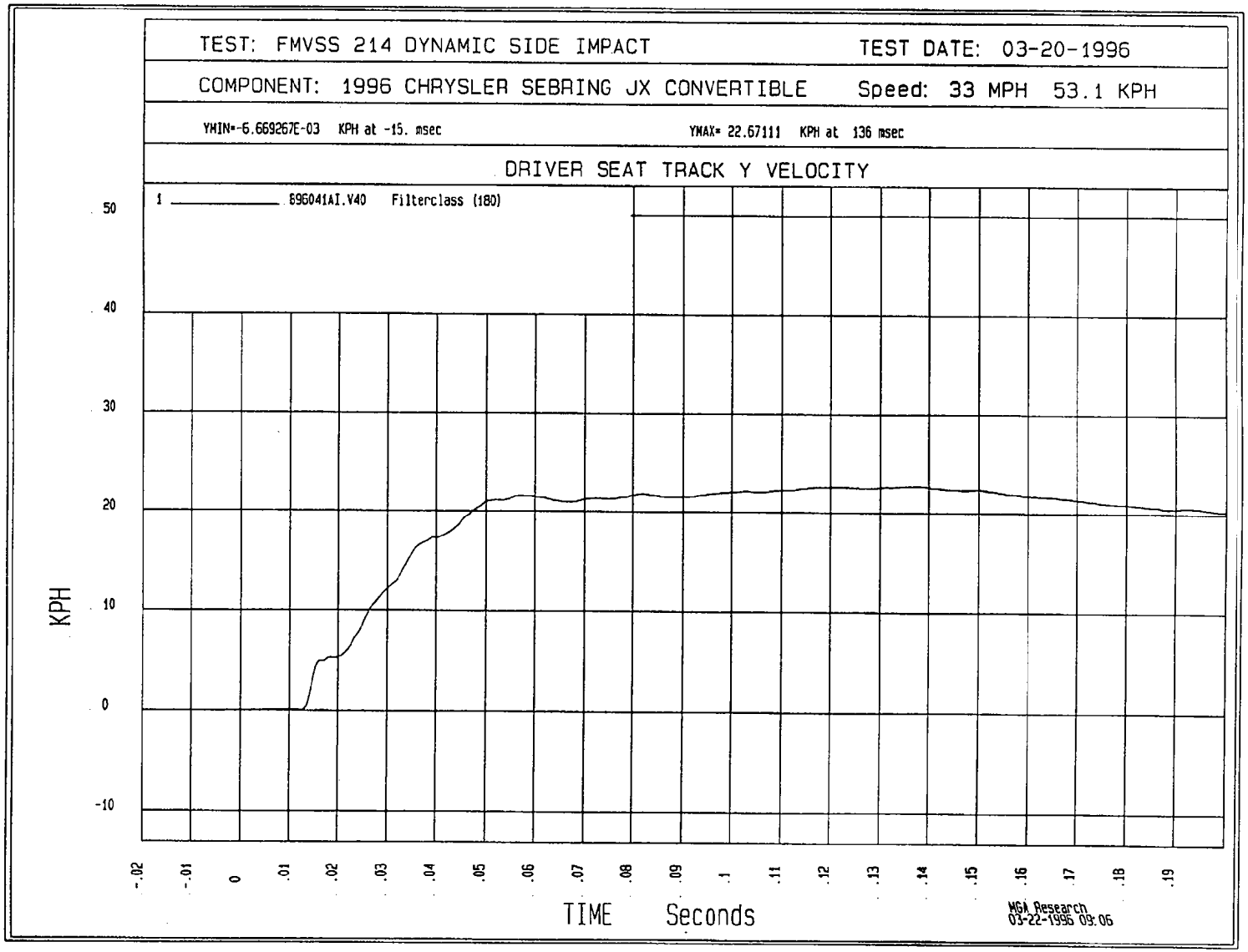
TIME (SECONDS)
MGA Research
03-22-1996 10:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-6.669267E-03 KPH at -15. msec
YMAX= 22.67111 KPH at 136 msec
DRIVER SEAT TRACK Y VELOCITY
1 896041AI.V40 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
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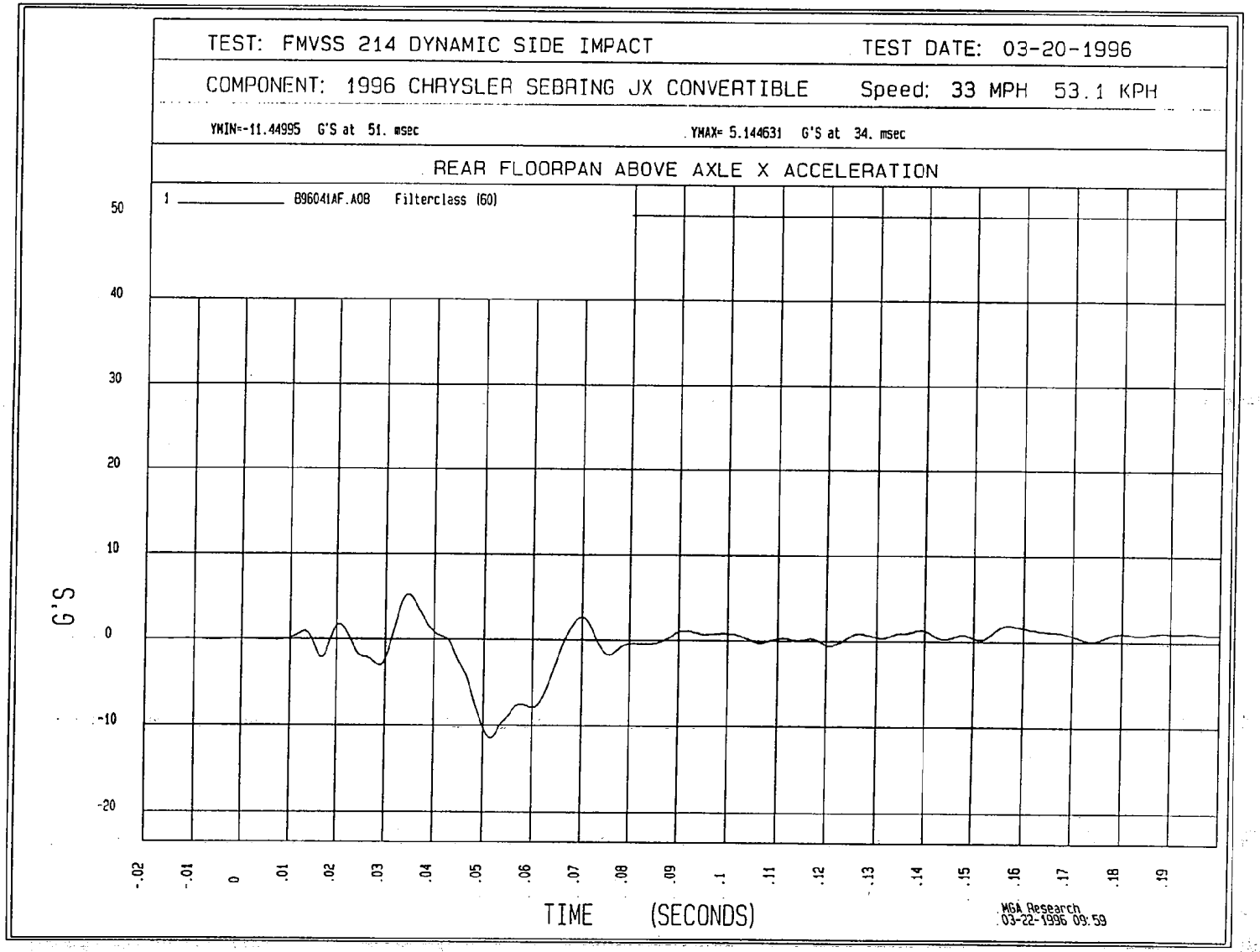
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-11.44995 G'S at 51. msec
YMAX= 5.144631 G'S at 34. msec
REAR FLOORPAN ABOVE AXLE X ACCELERATION
1 B96041AF.A08 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
-.02
-.01
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.02
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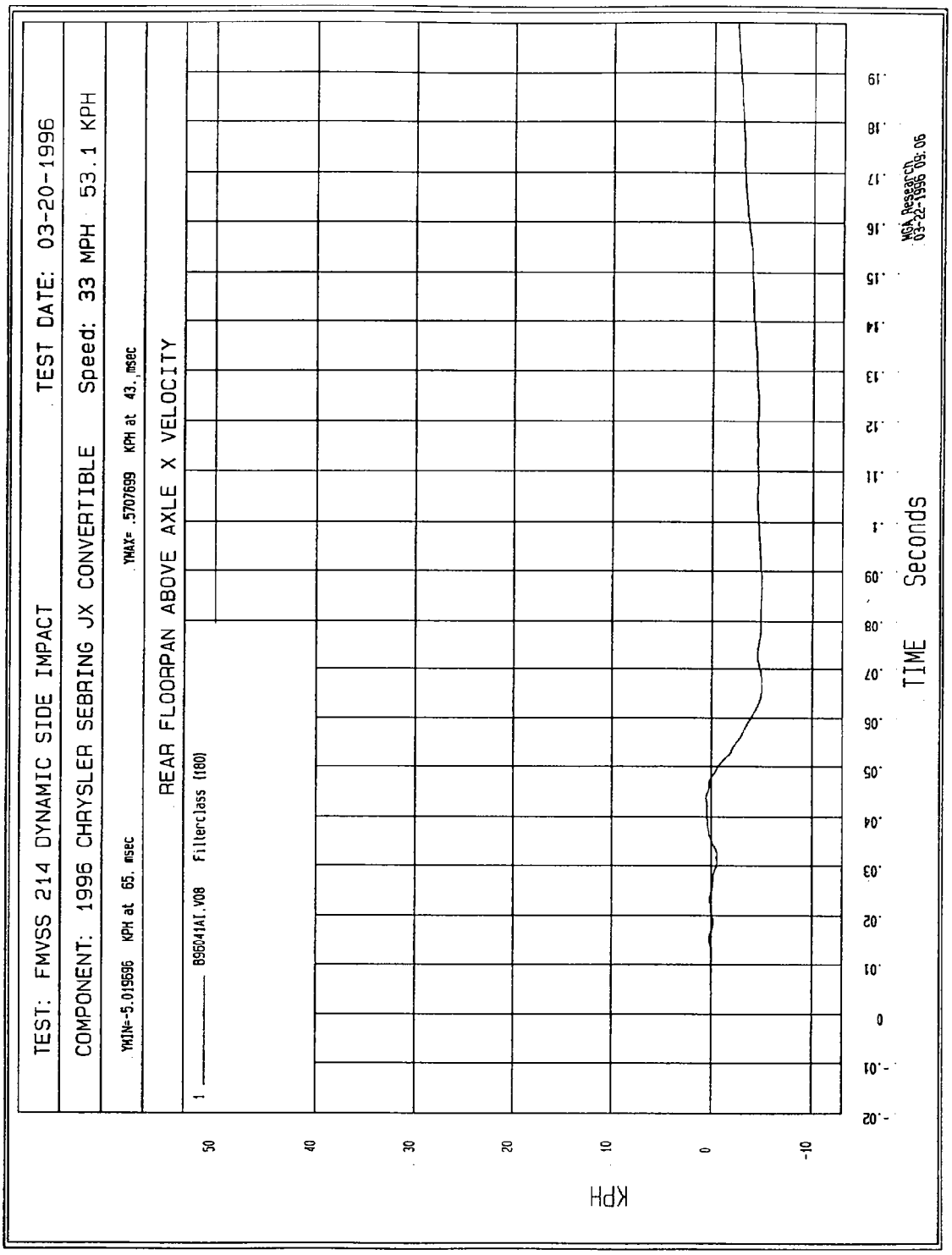
TIME (SECONDS)
MGA Research
03-22-1996 09:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-5.019596 KPH at 65. msec
YMAX= .5707699 KPH at 43. msec
REAR FLOORPAN ABOVE AXLE X VELOCITY
1 B96041AI.V08 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
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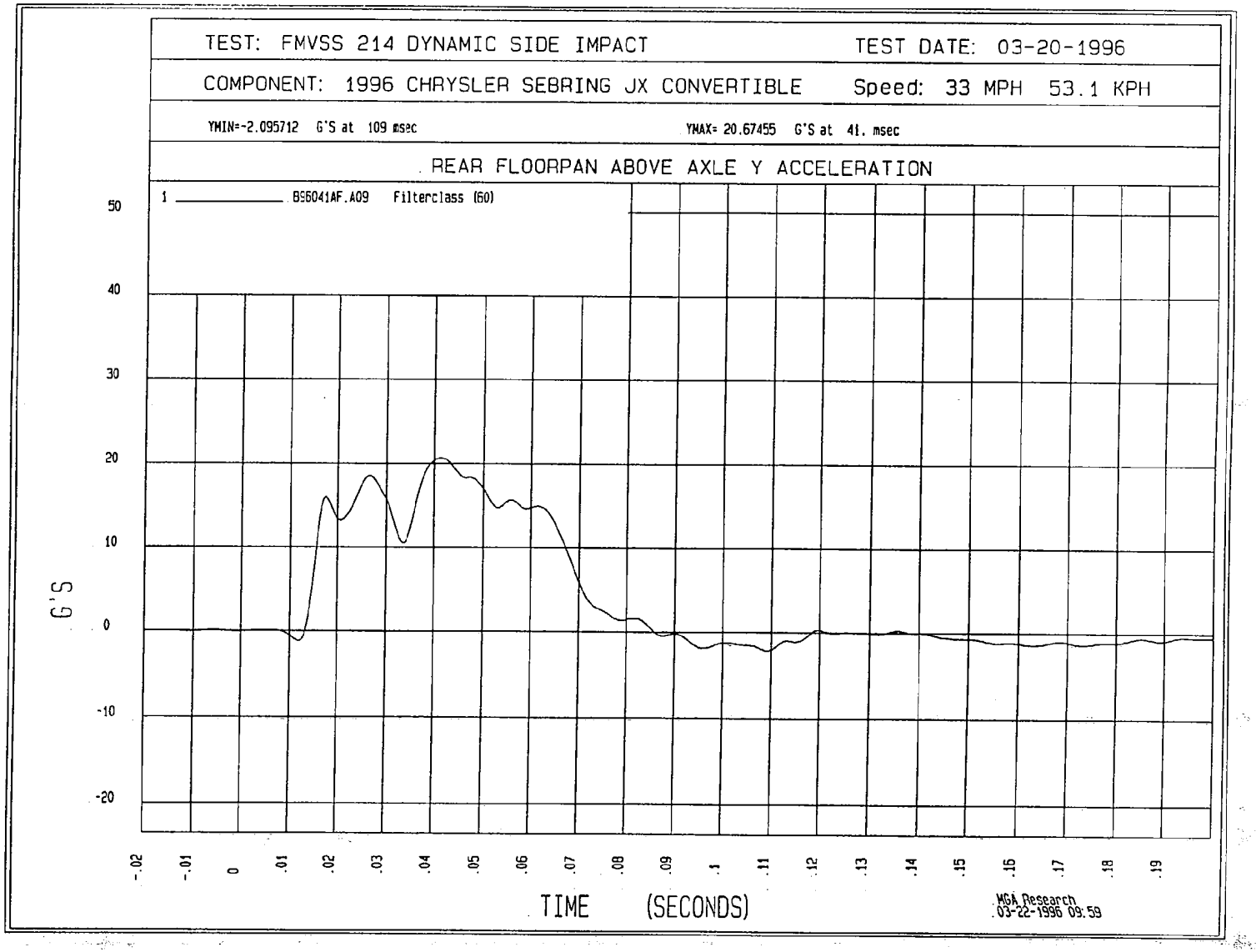
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-2.095712 G'S at 109 msec
YMAX= 20.67455 G'S at 41. msec
REAR FLOORPAN ABOVE AXLE Y ACCELERATION
1 BS6041AF.A09 Filterclass (60)
50
40
30
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10
0
-10
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G'S
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-.01
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.02
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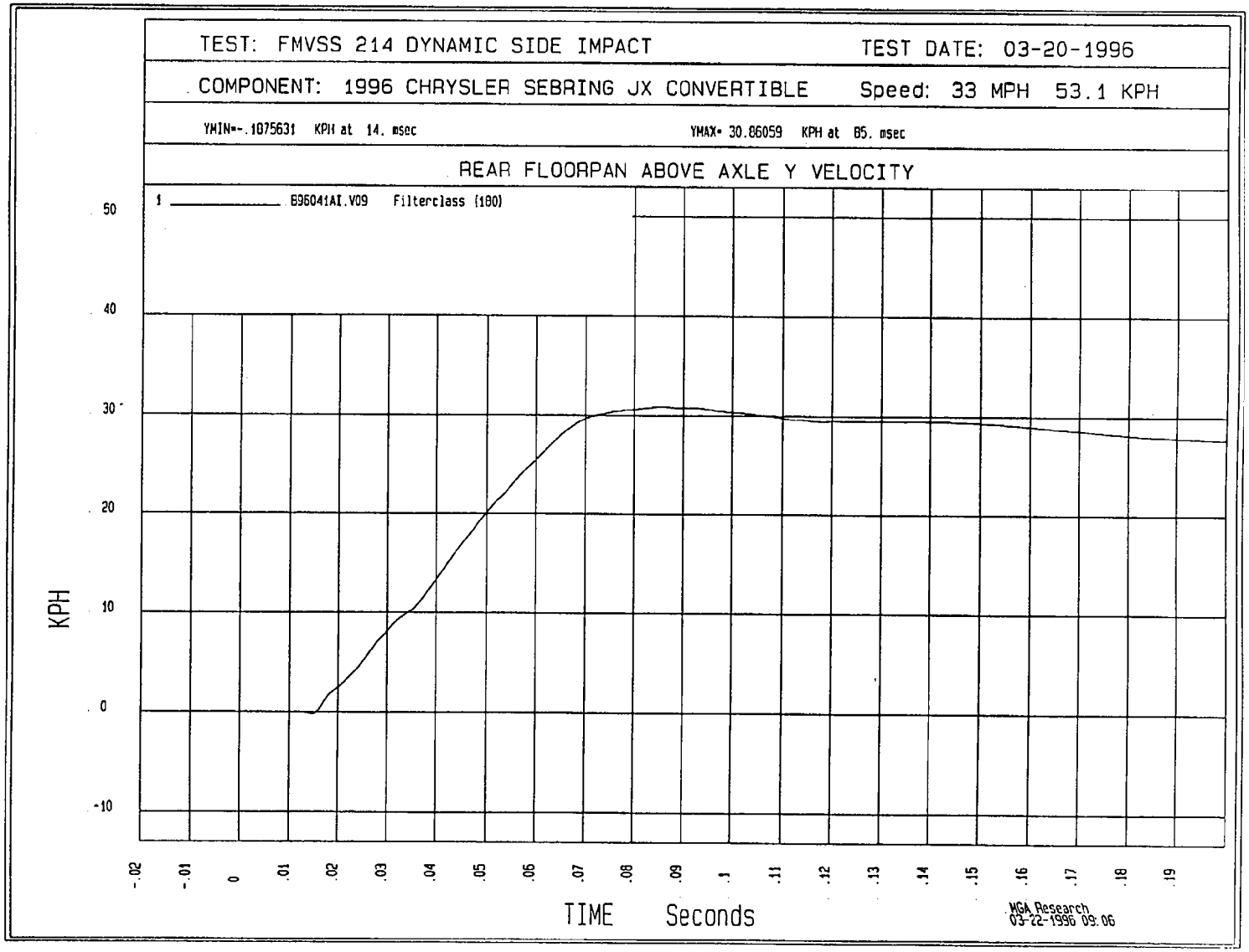
TIME (SECONDS)
MGA Research
03-22-1996 09:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.1075631 KPH at 14. msec
YMAX= 30.86059 KPH at 85. msec
REAR FLOORPAN ABOVE AXLE Y VELOCITY
1 B96041AI.V09 Filterclass (180)
KPH
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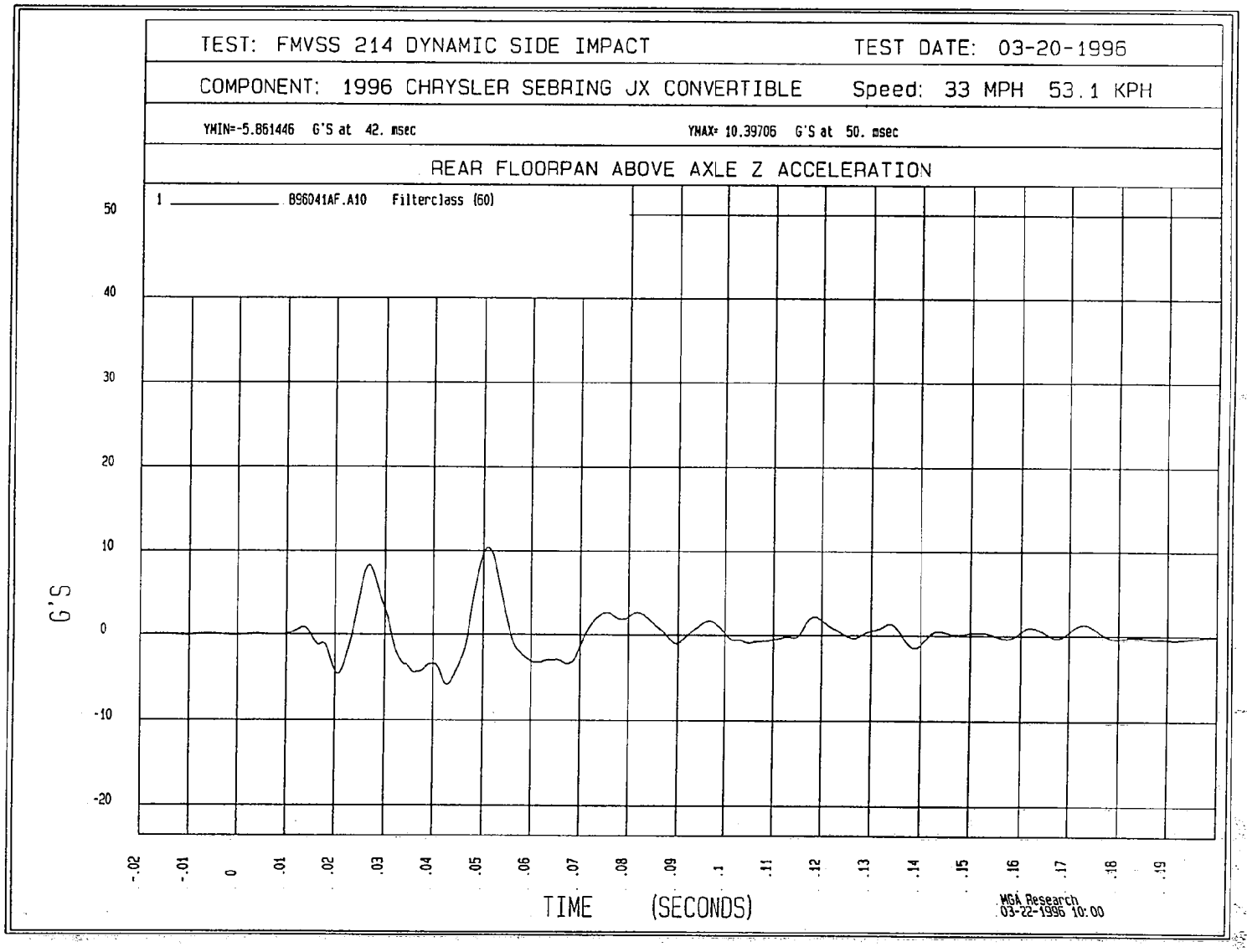
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-5.861446 G'S at 42. msec
YMAX= 10.39706 G'S at 50. msec
REAR FLOORPAN ABOVE AXLE Z ACCELERATION
1 B96041AF.A10 Filterclass (60)
50
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30
20
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0
-10
-20
G'S
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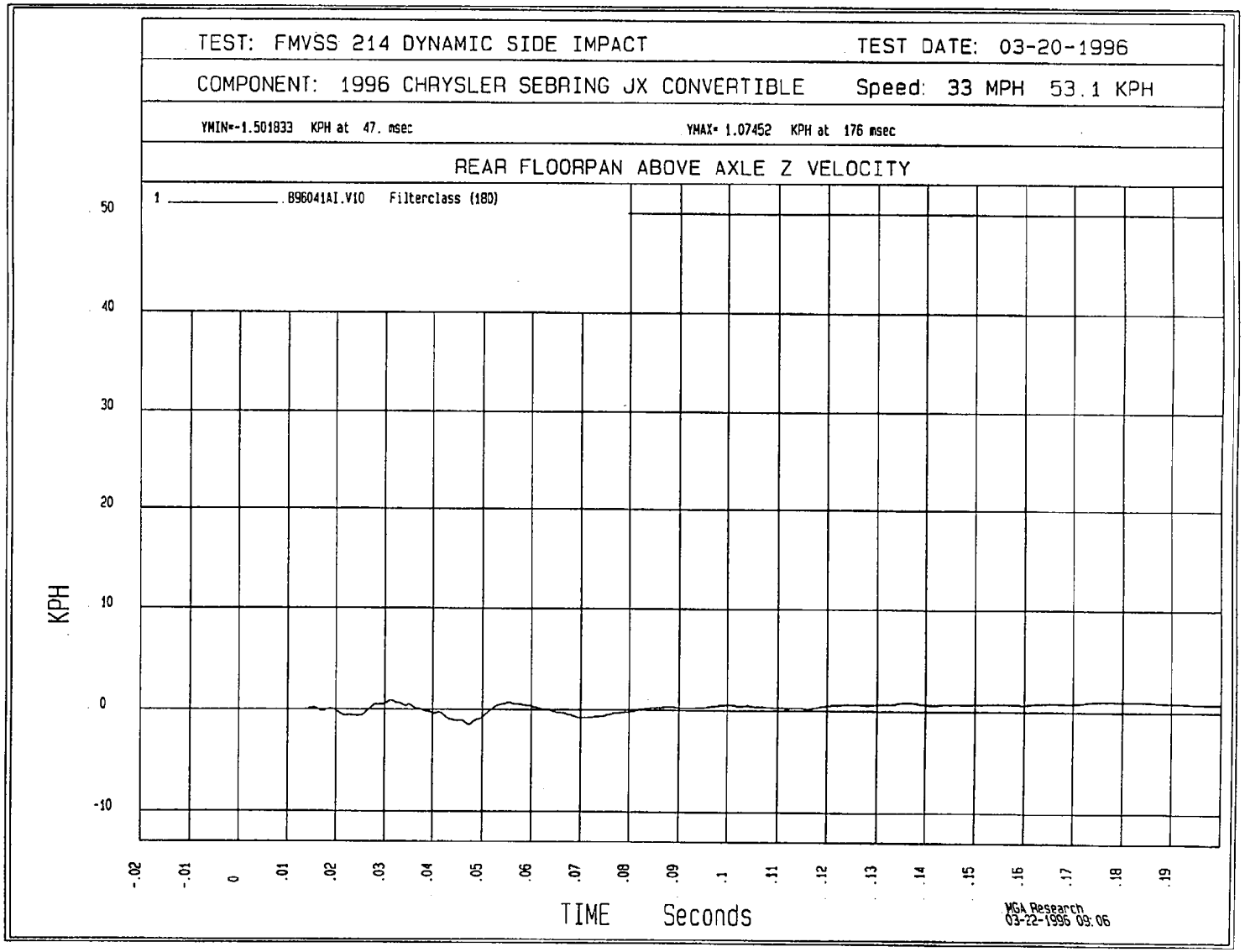
TIME (SECONDS)
MGA Research
03-22-1996 10:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-1.501833 KPH at 47. msec
YMAX= 1.07452 KPH at 176 msec
REAR FLOORPAN ABOVE AXLE Z VELOCITY
1 B96041AI.V10 Filterclass (180)
KPH
50
40
30
20
10
0
-10
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-.01
0
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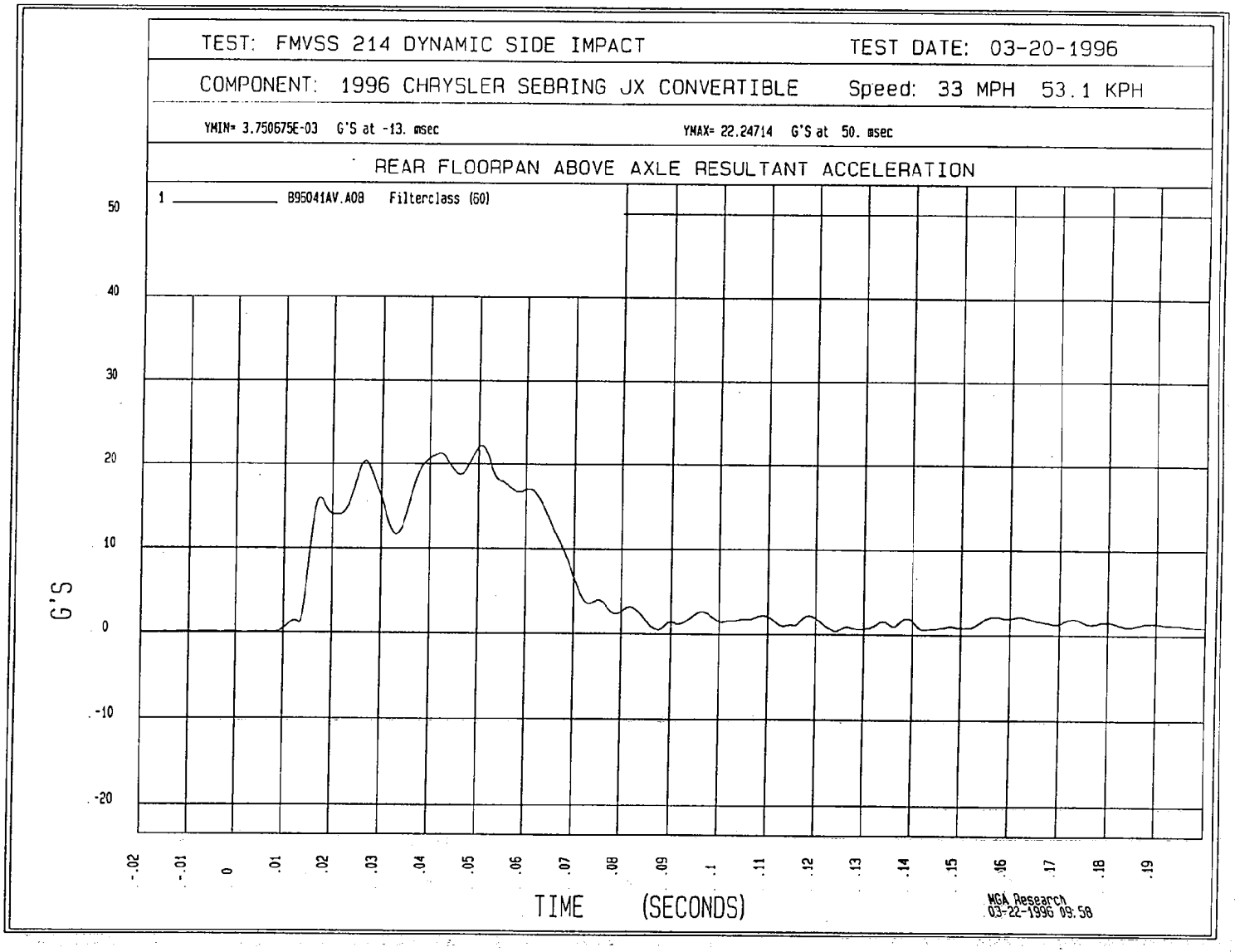
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN= 3.750675E-03 G'S at -13. msec
YMAX= 22.24714 G'S at 50. msec
REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION
1 B95041AV.A08 Filterclass (60)
G'S
50
40
30
20
10
0
-10
-20
-.02
-.01
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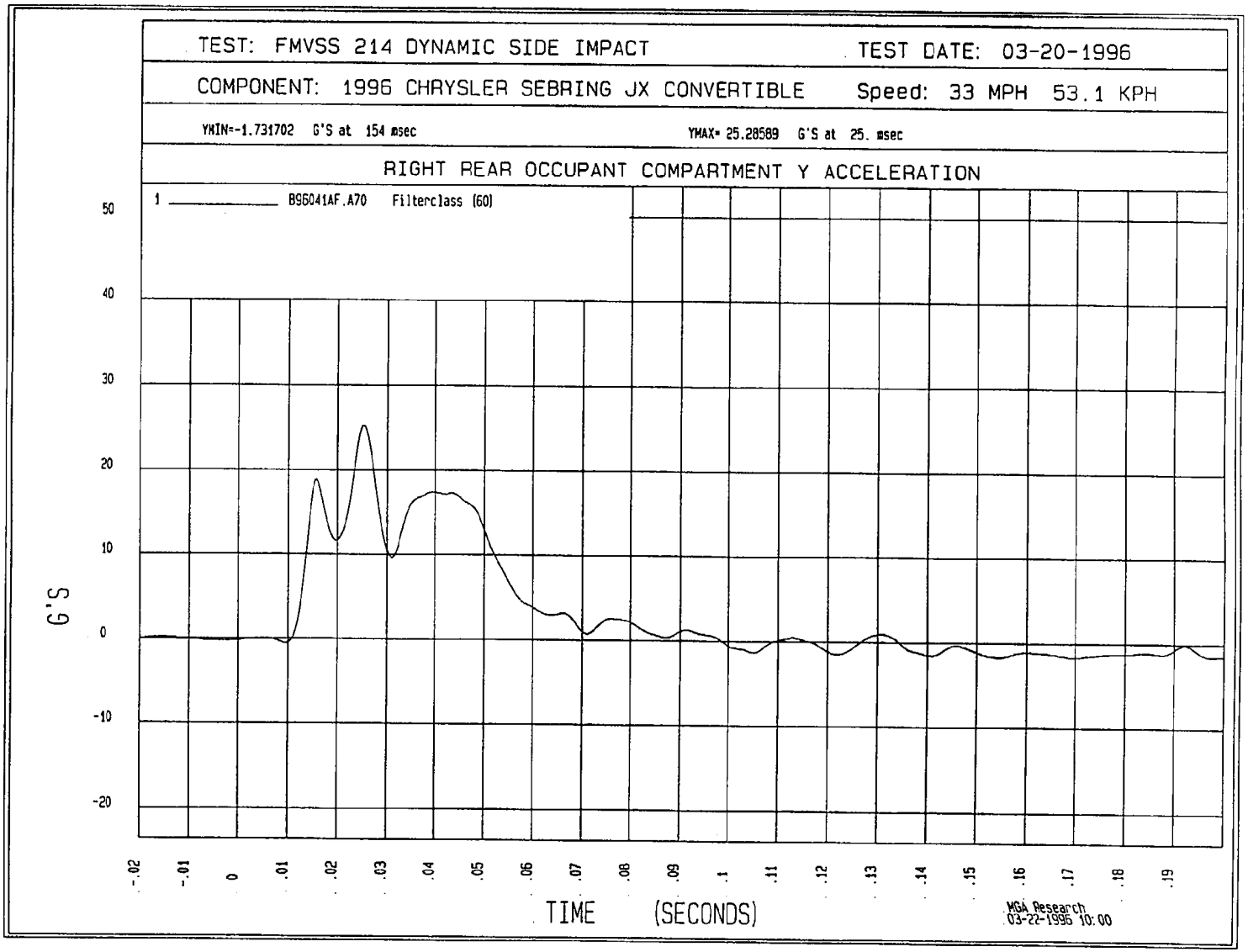
TIME (SECONDS)
MGA Research
03-22-1996 09:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-1.731702 G'S at 154 msec
YMAX= 25.28589 G'S at 25. msec
RIGHT REAR OCCUPANT COMPARTMENT Y ACCELERATION
1 BS6041AF.A70 Filterclass (60)
G'S
50
40
30
20
10
0
-10
-20
-.02
-.01
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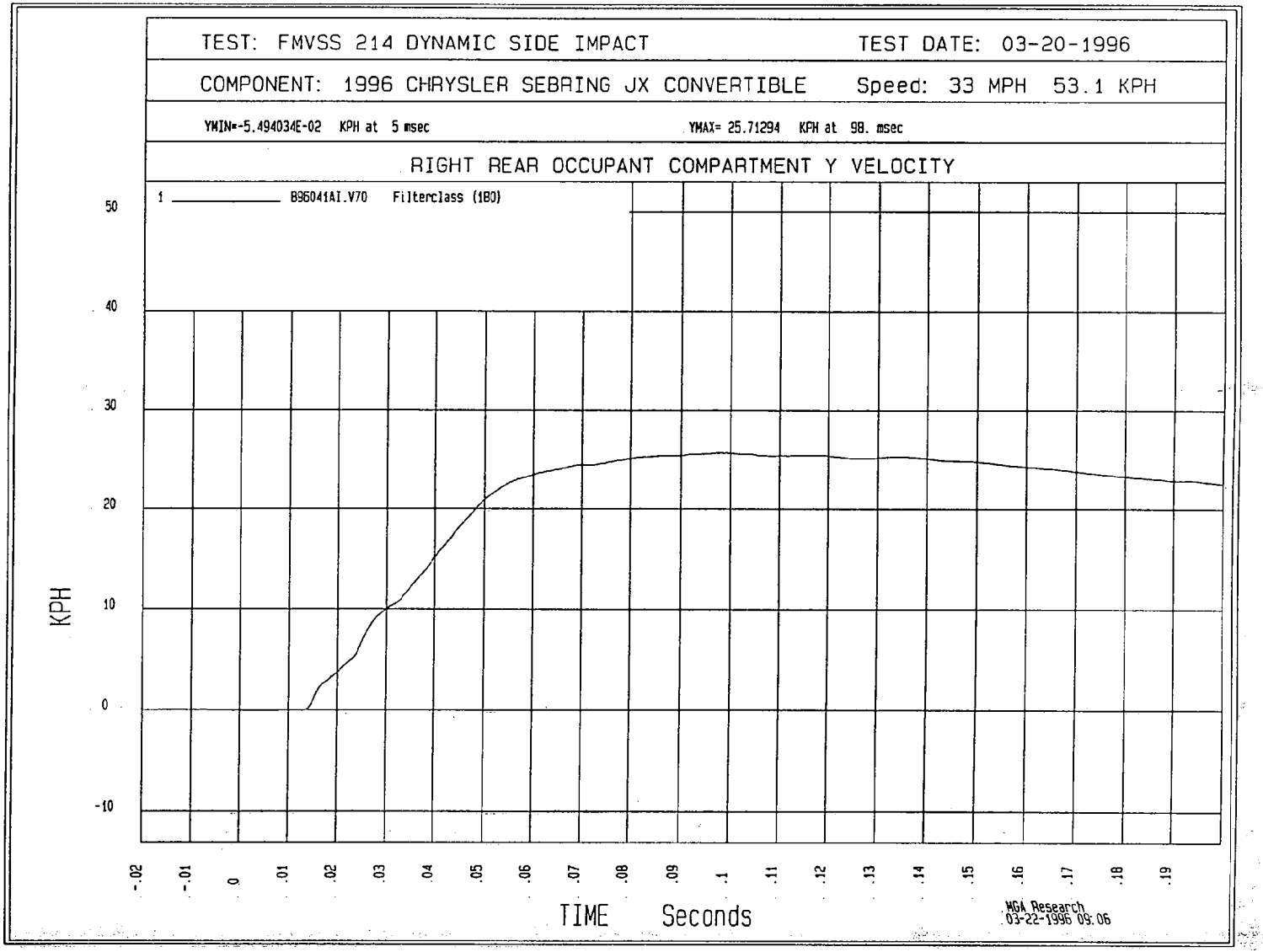
TIME (SECONDS)
MGA Research
03-22-1995 10:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-5.494034E-02 KPH at 5 msec
YMAX= 25.71294 KPH at 98. msec
RIGHT REAR OCCUPANT COMPARTMENT Y VELOCITY
1 B96041AI.V70 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
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.02
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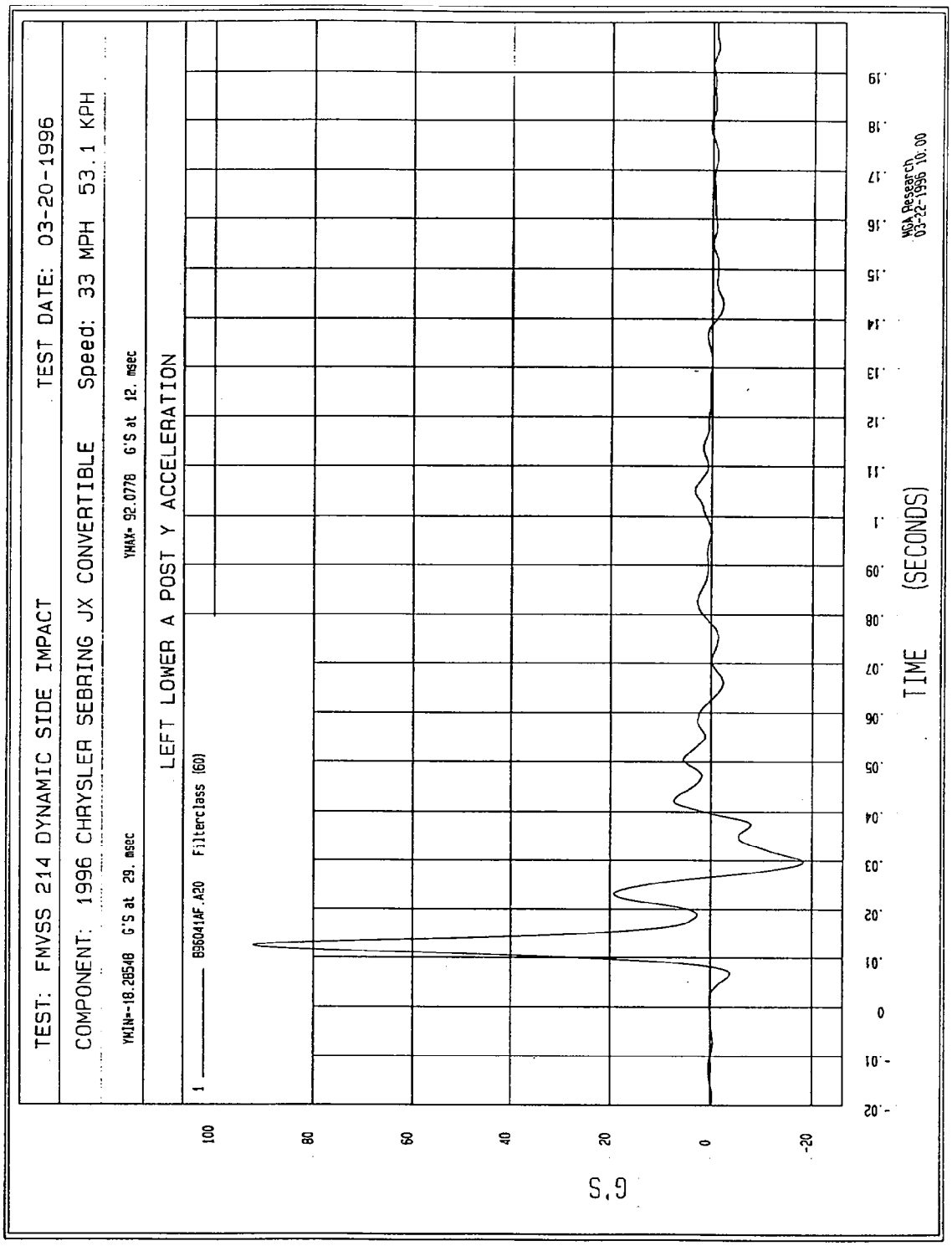
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-18.28548 G'S at 29. msec
YMAX= 92.0778 G'S at 12. msec
LEFT LOWER A POST Y ACCELERATION
1 B96041AF.A20 Filterclass (60)
100
80
60
40
20
0
-20
G'S
TIME (SECONDS)
-.02
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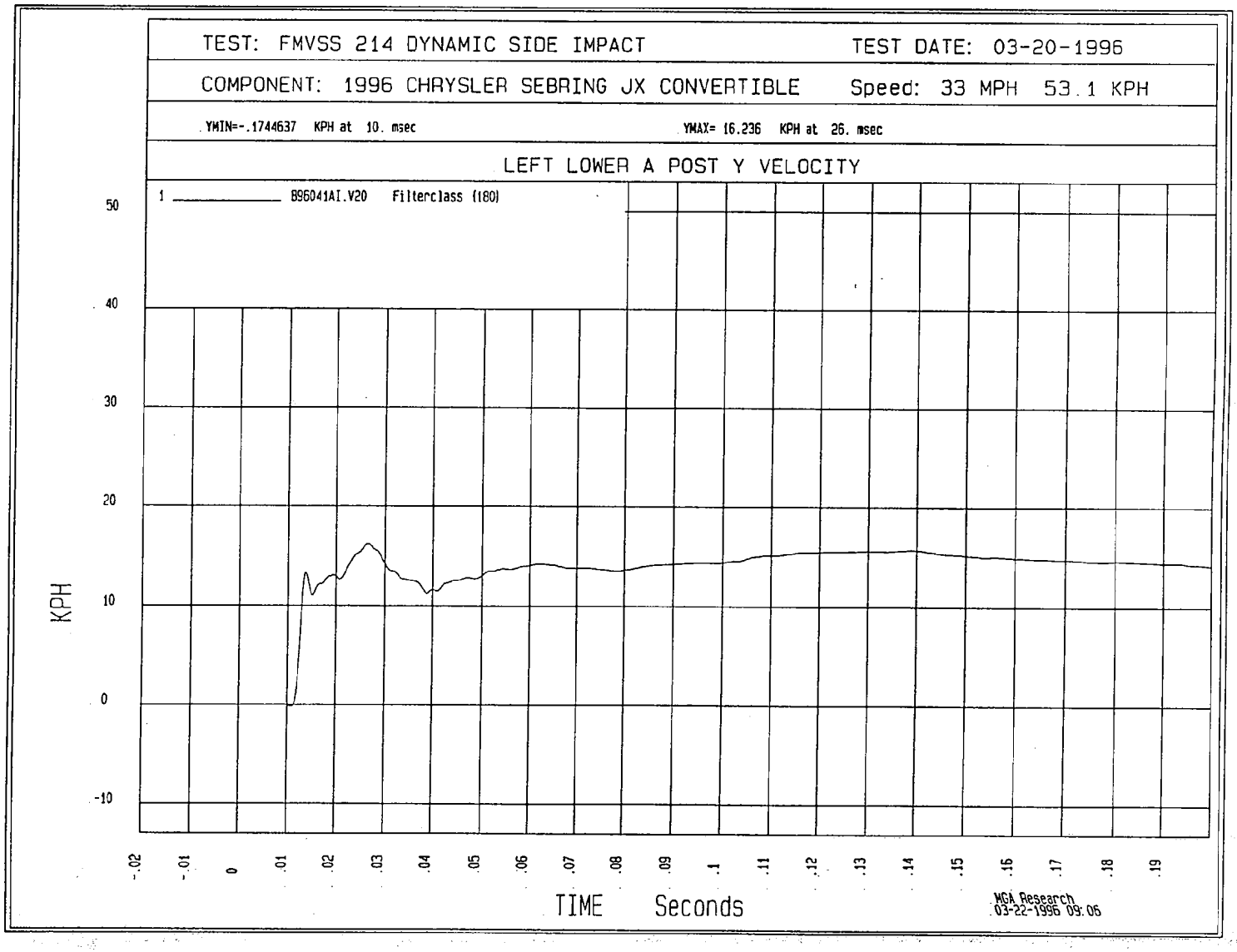
NGA Research
03-22-1996 10.00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.1744637 KPH at 10. msec
YMAX= 16.236 KPH at 26. msec
LEFT LOWER A POST Y VELOCITY
1 B96041AI.V20 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
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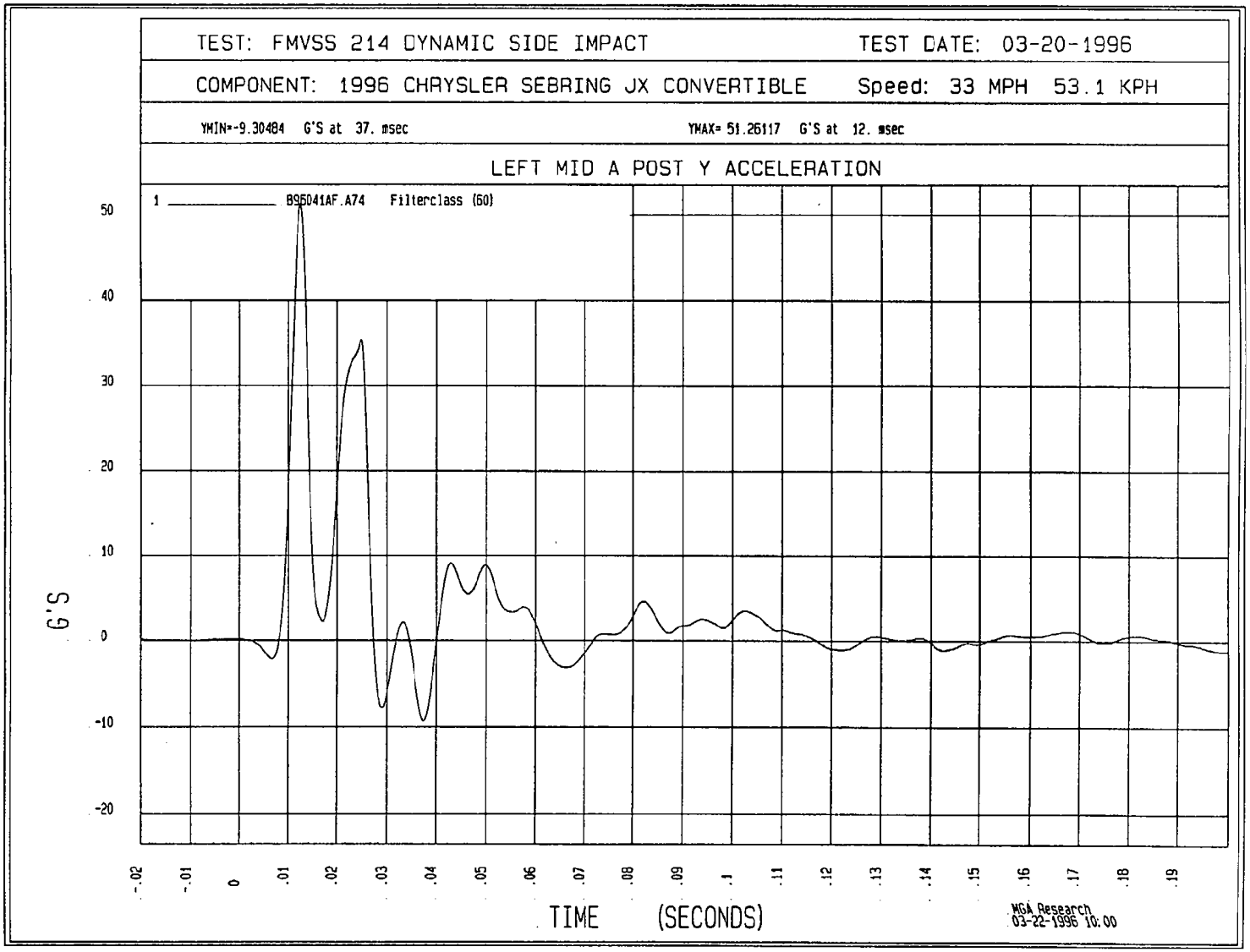
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-9.30484 G'S at 37. msec
YMAX= 51.26117 G'S at 12. msec
LEFT MID A POST Y ACCELERATION
1 B95041AF.A74 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
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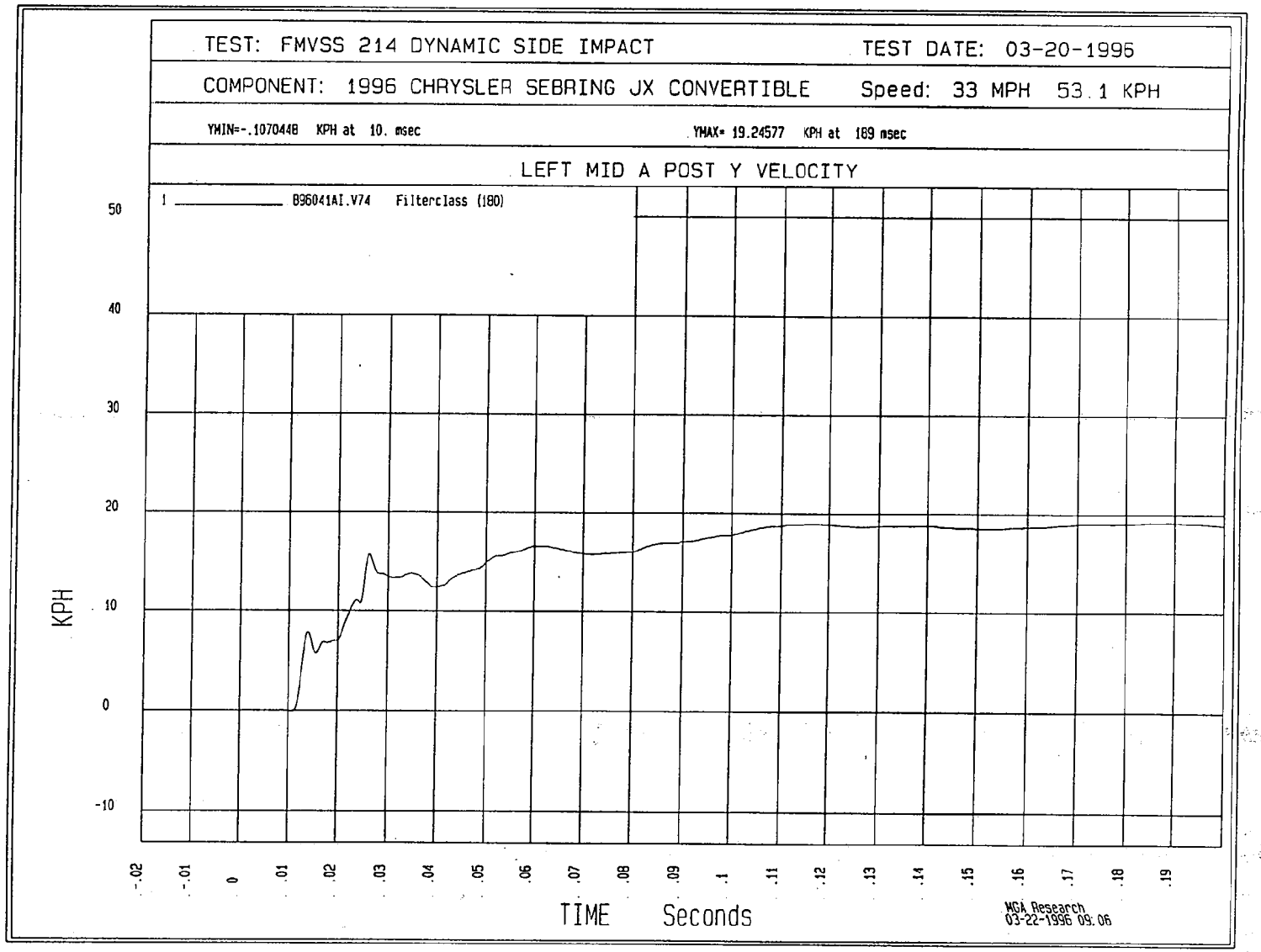
TIME (SECONDS)
MGA Research
03-22-1996 10:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.107044 KPH at 10. msec
YMAX= 19.24577 KPH at 189 msec
LEFT MID A POST Y VELOCITY
1 B96041AI.V74 Filterclass (180)
KPH
50
40
30
20
10
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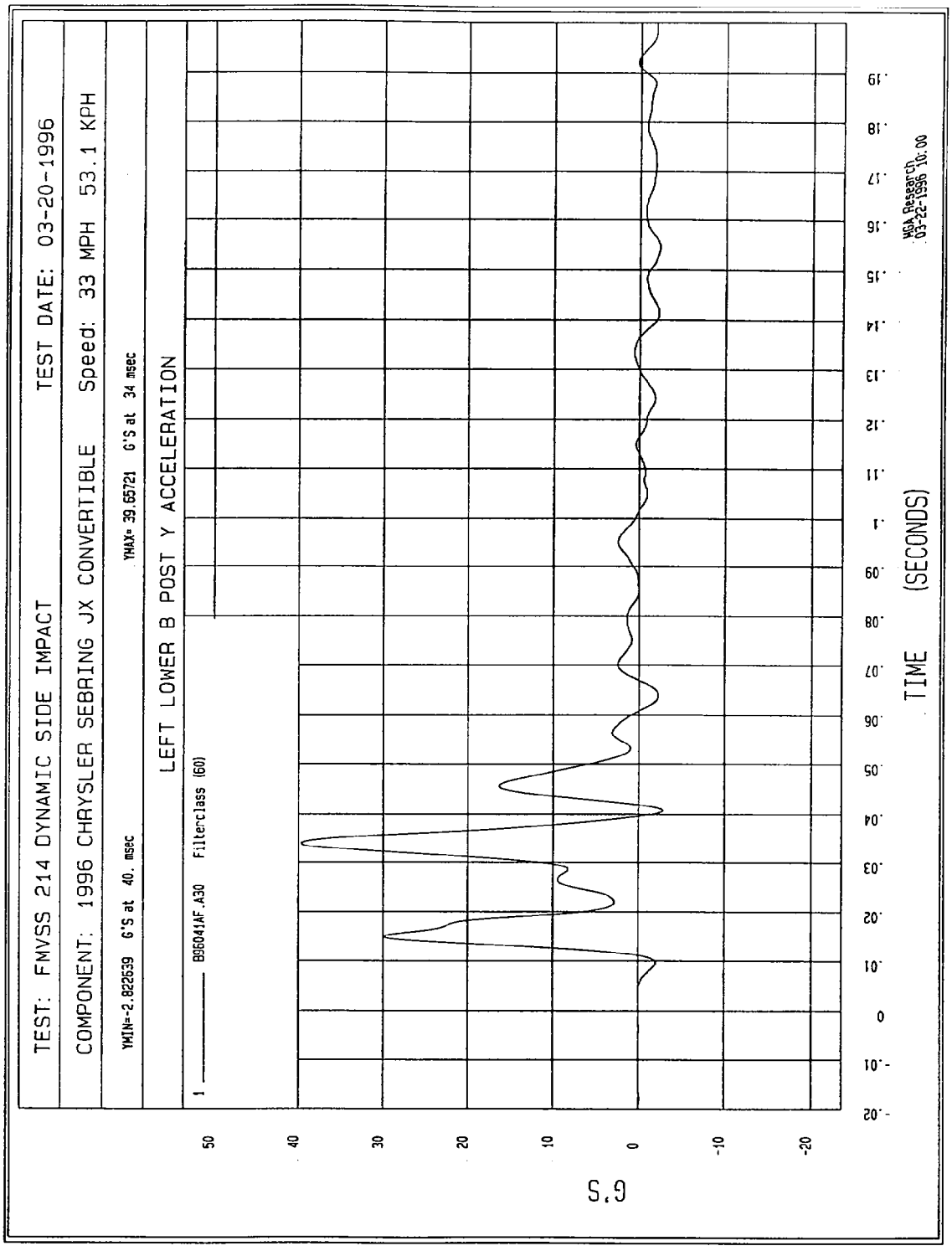
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-2.822639 G'S at 40. msec
YMAX= 39.65721 G'S at 34 msec
LEFT LOWER B POST Y ACCELERATION
1 B96041AF.A30 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
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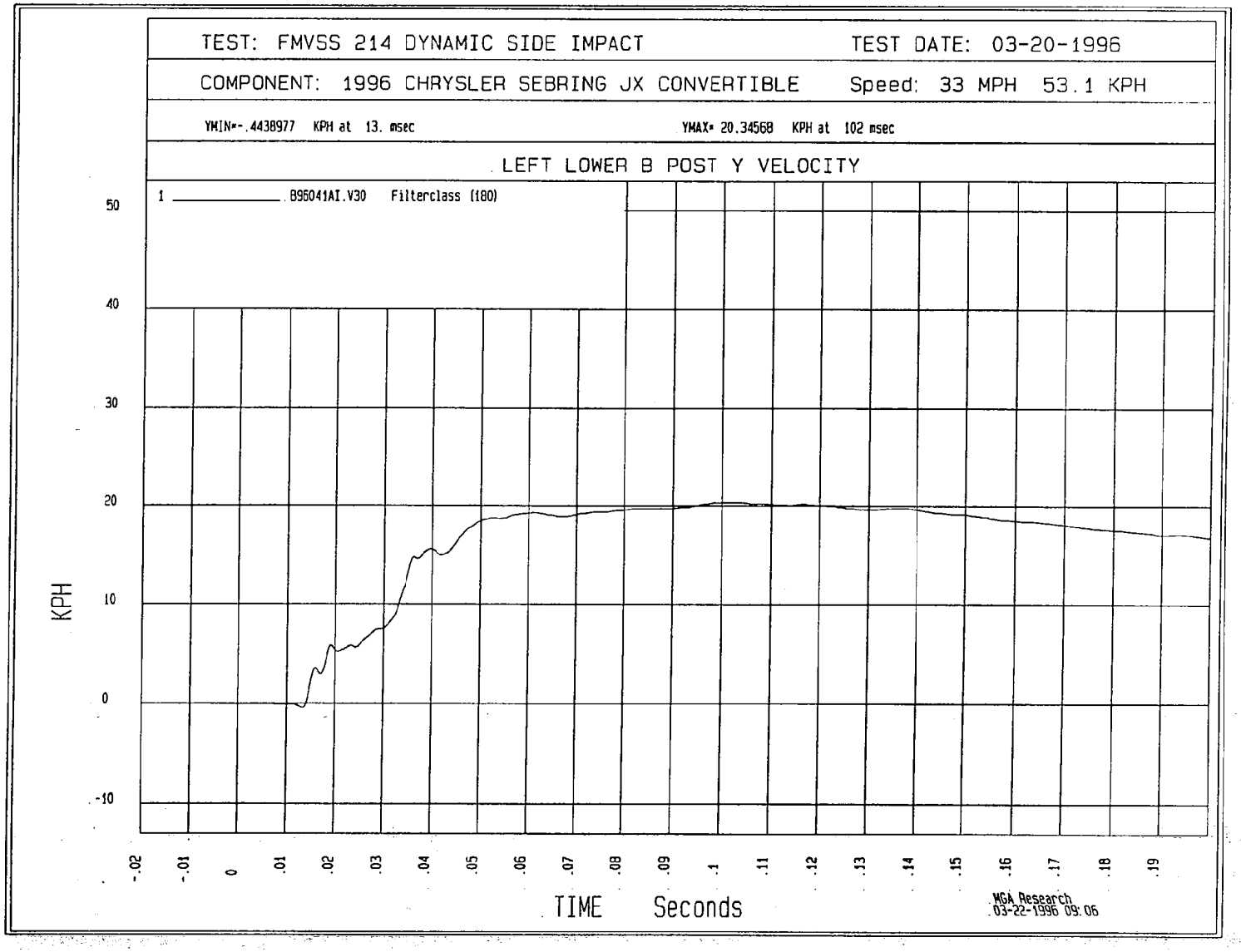
TIME (SECONDS)
MGA Research
03-22-1996 10:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.4438977 KPH at 13. msec
YMAX= 20.34568 KPH at 102 msec
LEFT LOWER B POST Y VELOCITY
1 896041AI.V30 Filterclass (180)
KPH
50
40
30
20
10
0
-10
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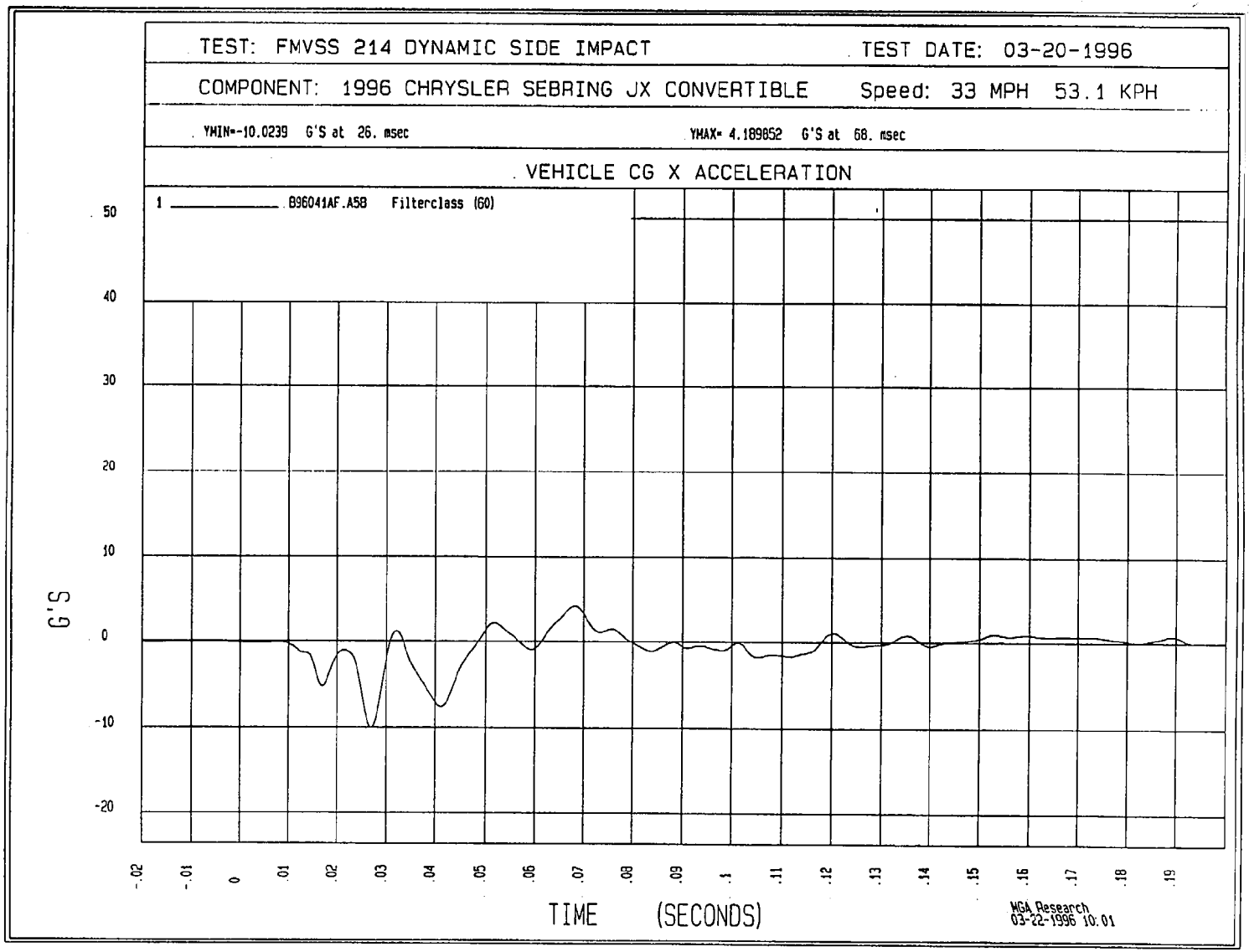
TIME Seconds
MGA Research
03-22-1996 09:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-10.0239 G'S at 26. msec
YMAX= 4.189852 G'S at 68. msec
VEHICLE CG X ACCELERATION
1 B96041AF.A58 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
-.02
-.01
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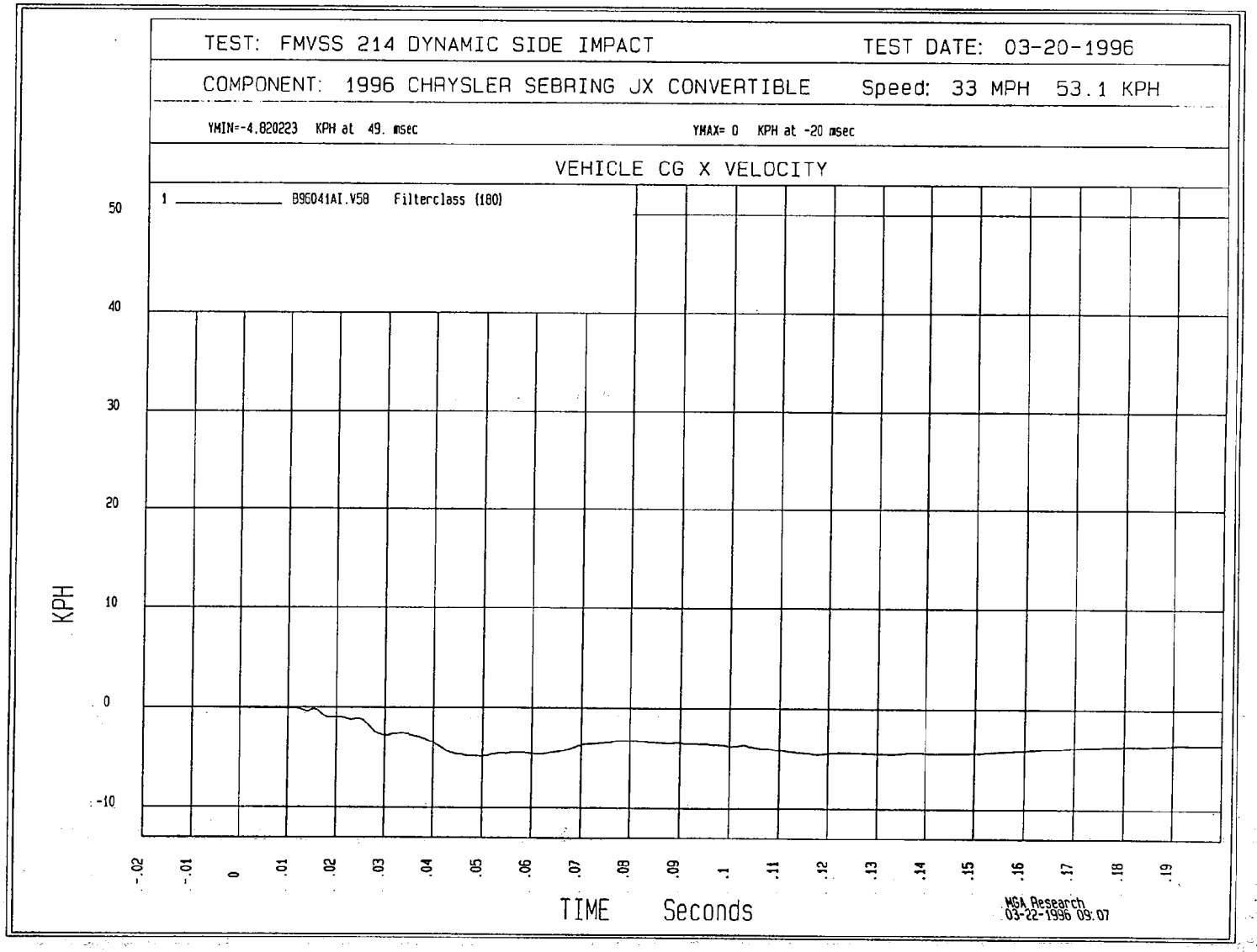
TIME (SECONDS)
MGA Research
03-22-1996 10:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-4.820223 KPH at 49. msec
YMAX= 0 KPH at -20 msec
VEHICLE CG X VELOCITY
1 B96041AI.V58 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
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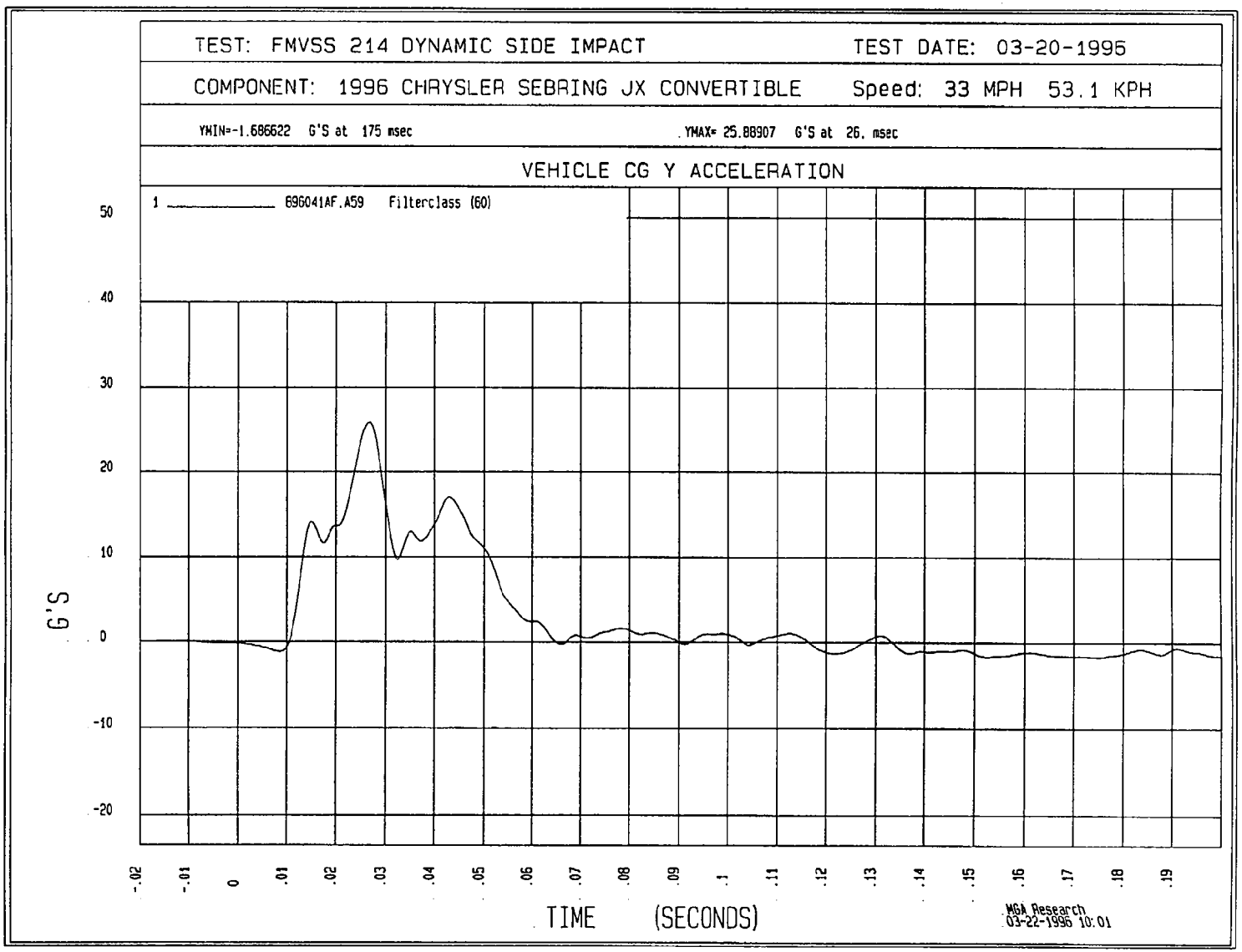
TIME Seconds
MGA Research
03-22-1996 09:07


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1995
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-1.686622 G'S at 175 msec
YMAX= 25.88907 G'S at 26. msec
VEHICLE CG Y ACCELERATION
1 696041AF.A59 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
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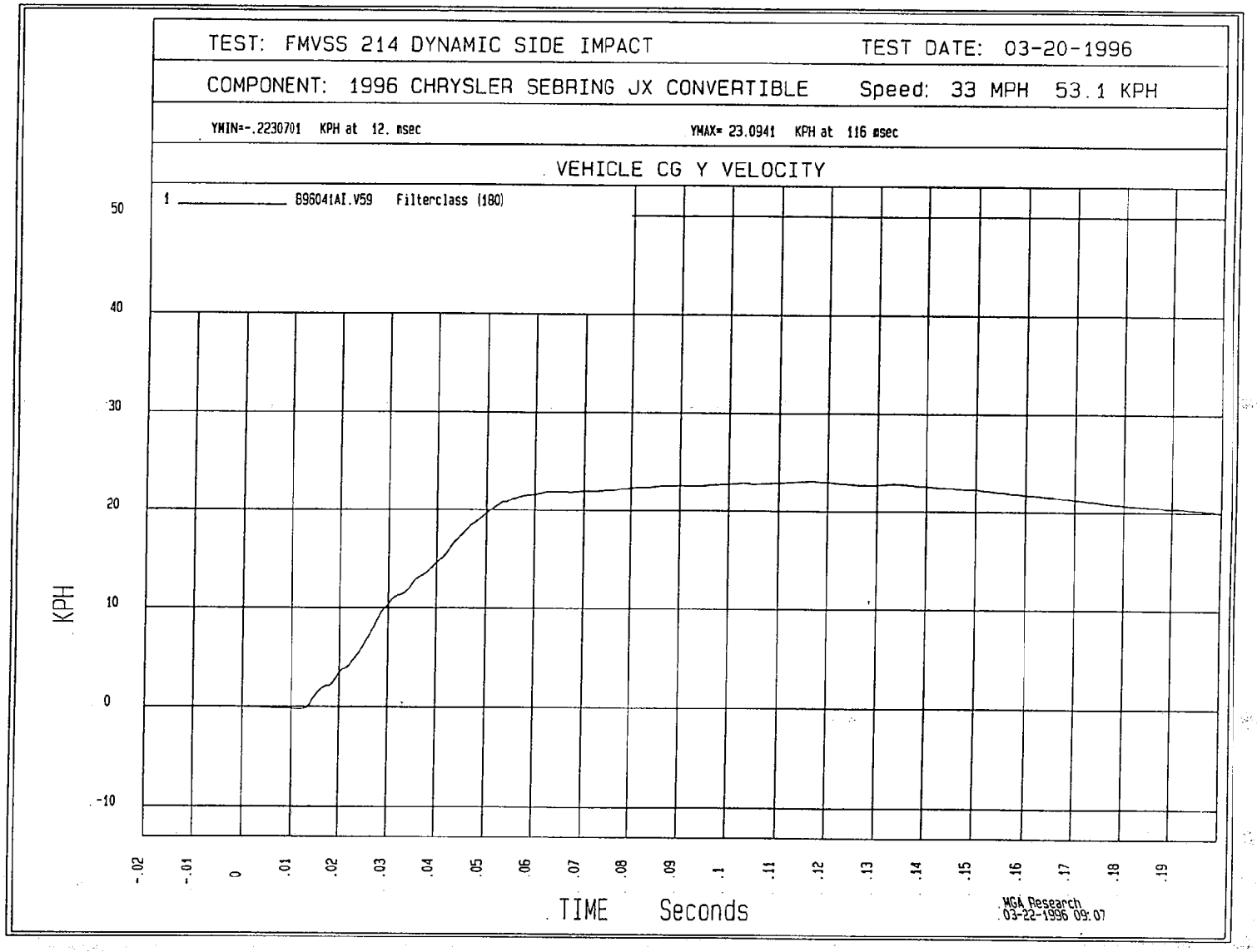
TIME (SECONDS)
MGA Research
03-22-1995 10:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.2230701 KPH at 12. msec
YMAX= 23.0941 KPH at 116 msec
VEHICLE CG Y VELOCITY
1 896041AI.V59 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
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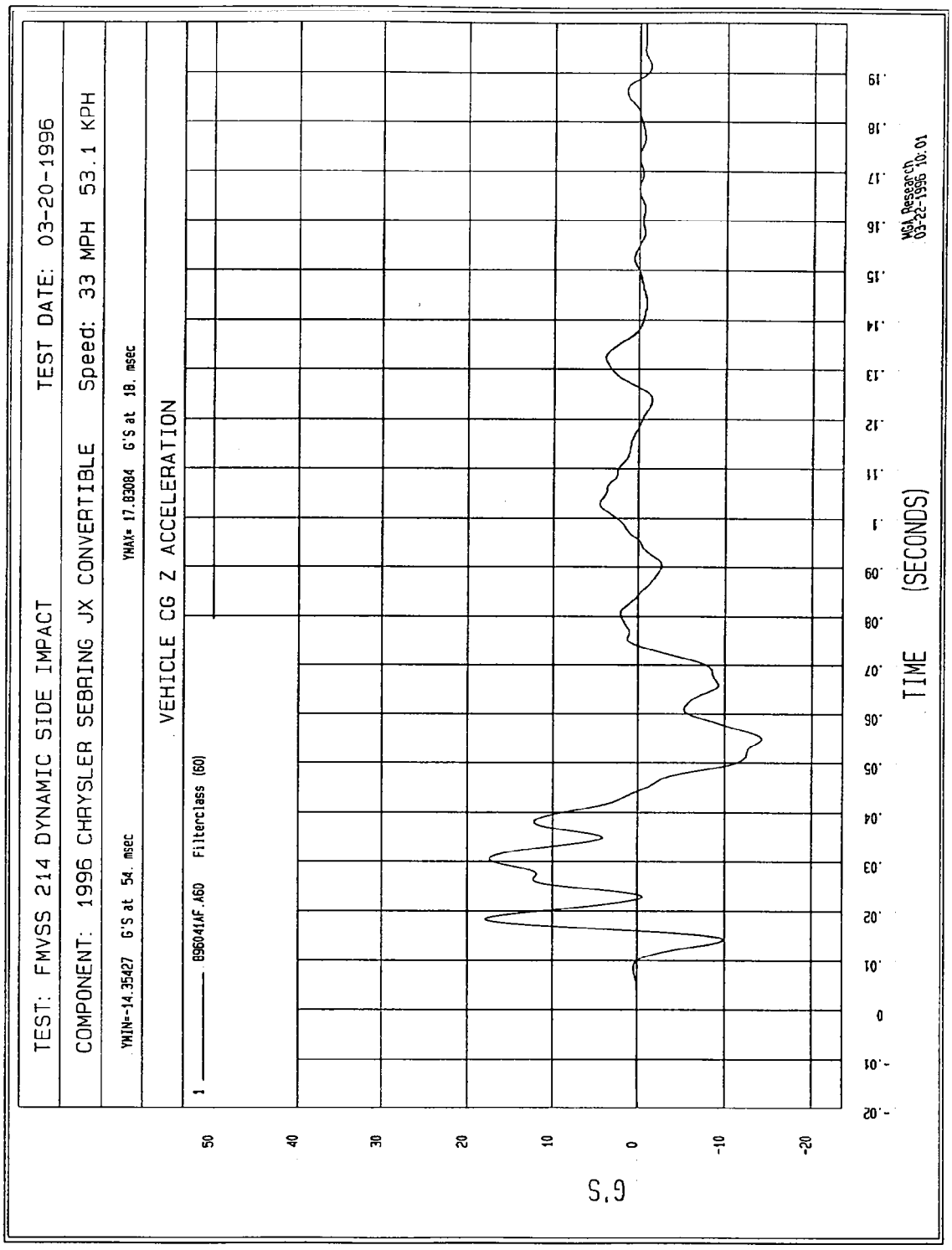
TIME Seconds
MGA Research
03-22-1996 09:07


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-14.35427 G'S at 54. msec
YMAX= 17.83084 G'S at 18. msec
VEHICLE CG Z ACCELERATION
1 ——— 896041AF.A60 Filterclass (60)
50
40
30
20
10
0
-10
-20
G'S
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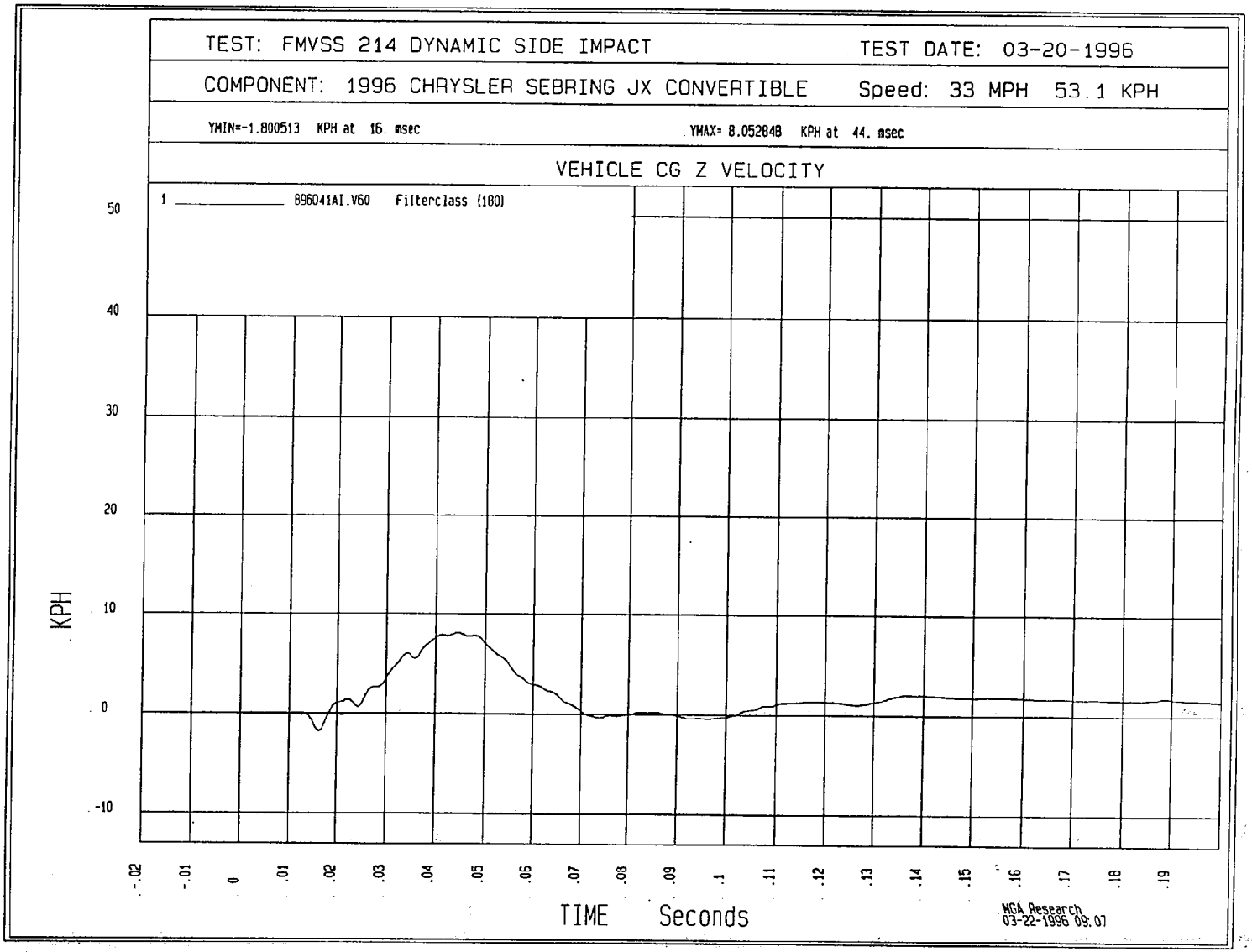
TIME (SECONDS)
MGA Research
03-22-1996 10:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-1.800513 KPH at 16. msec
YMAX= 8.052848 KPH at 44. msec
VEHICLE CG Z VELOCITY
1 896041AI.V60 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
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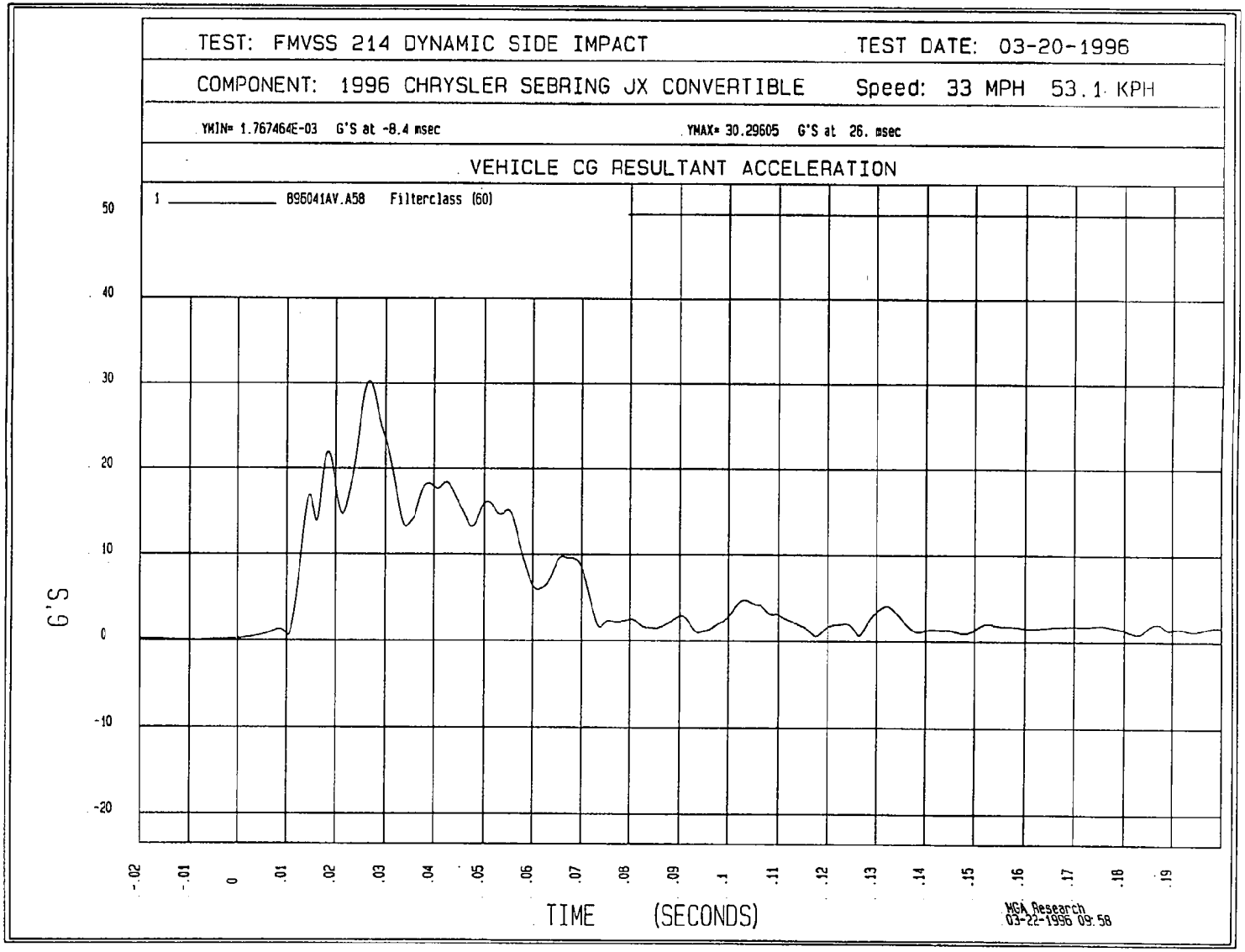
TIME Seconds
MGA Research
03-22-1996 09:07


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN= 1.767464E-03 G'S at -8.4 msec
YMAX= 30.29605 G'S at 26. msec
VEHICLE CG RESULTANT ACCELERATION
1 895041AV.A58 Filterclass (60)
G'S
50
40
30
20
10
0
-10
-20
-.02
-.01
0
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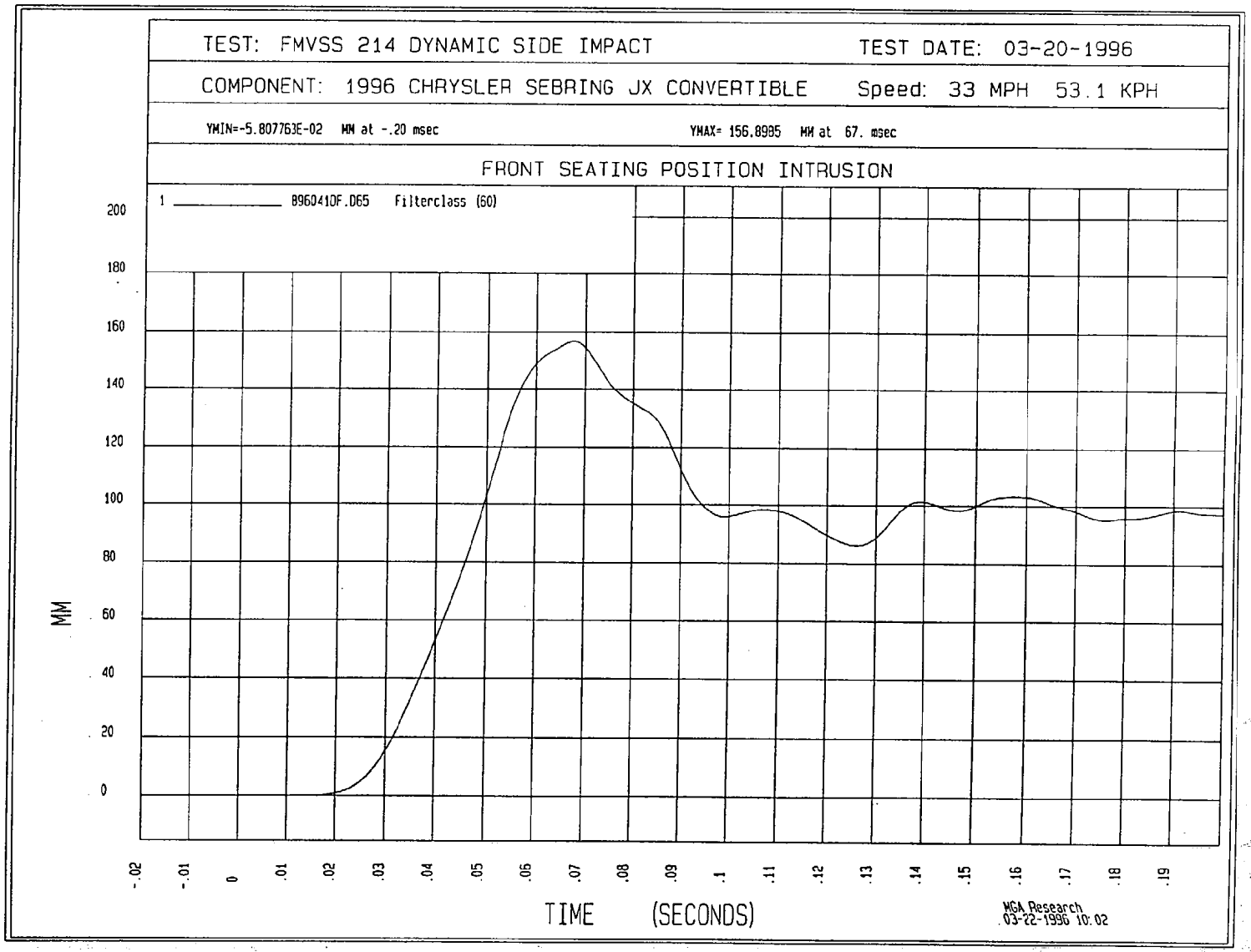
TIME (SECONDS)
MGA Research
03-22-1996 09:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-5.807763E-02 MM at -.20 msec
YMAX= 156.8995 MM at 67. msec
FRONT SEATING POSITION INTRUSION
1 896041DF.D65 Filterclass (60)
MM
200
180
160
140
120
100
80
60
40
20
0
-.02
-.01
0
.01
.02
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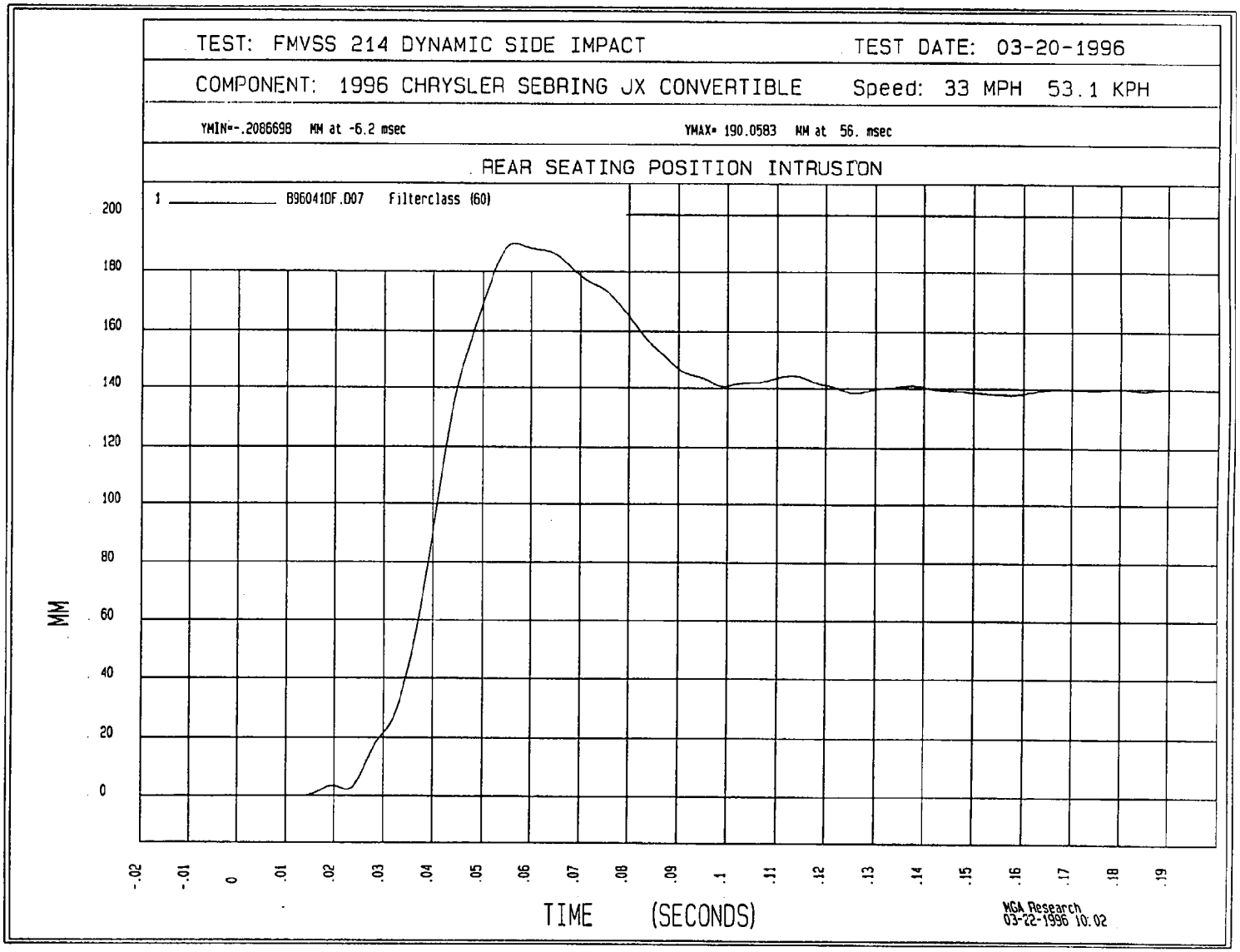
TIME (SECONDS)
MGA Research
03-22-1996 10:02


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.2086698 MM at -6.2 msec
YMAX= 190.0583 MM at 56. msec
REAR SEATING POSITION INTRUSION
1 B96041DF.D07 Filterclass (60)
MM
200
180
160
140
120
100
80
60
40
20
0
-.02
-.01
0
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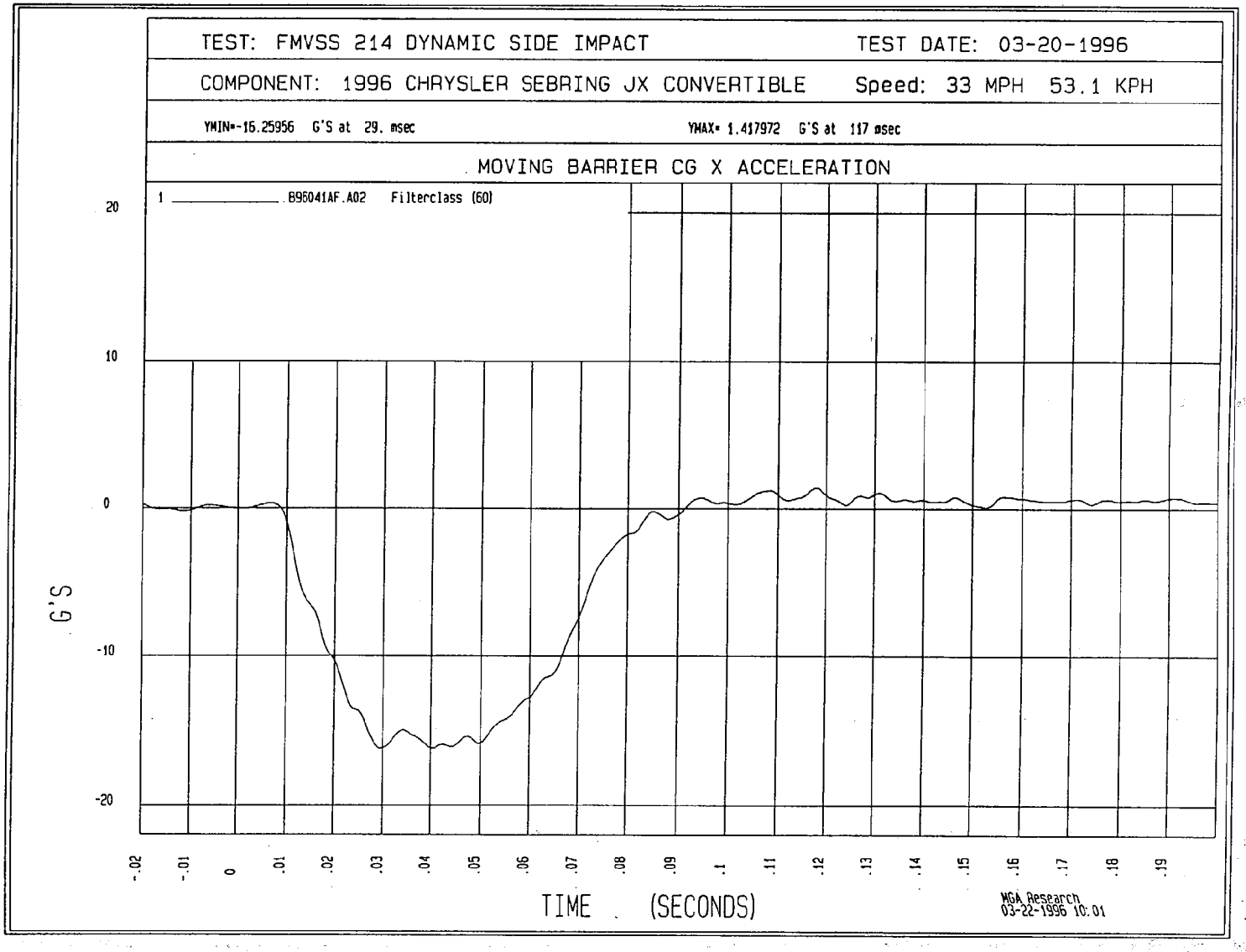
TIME (SECONDS)
MGA Research
03-22-1996 10:02


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-16.25956 G'S at 29. msec
YMAX= 1.417972 G'S at 117 msec
MOVING BARRIER CG X ACCELERATION
1 B96041AF.A02 Filterclass (60)
20
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0
-10
-20
G'S
-.02
-.01
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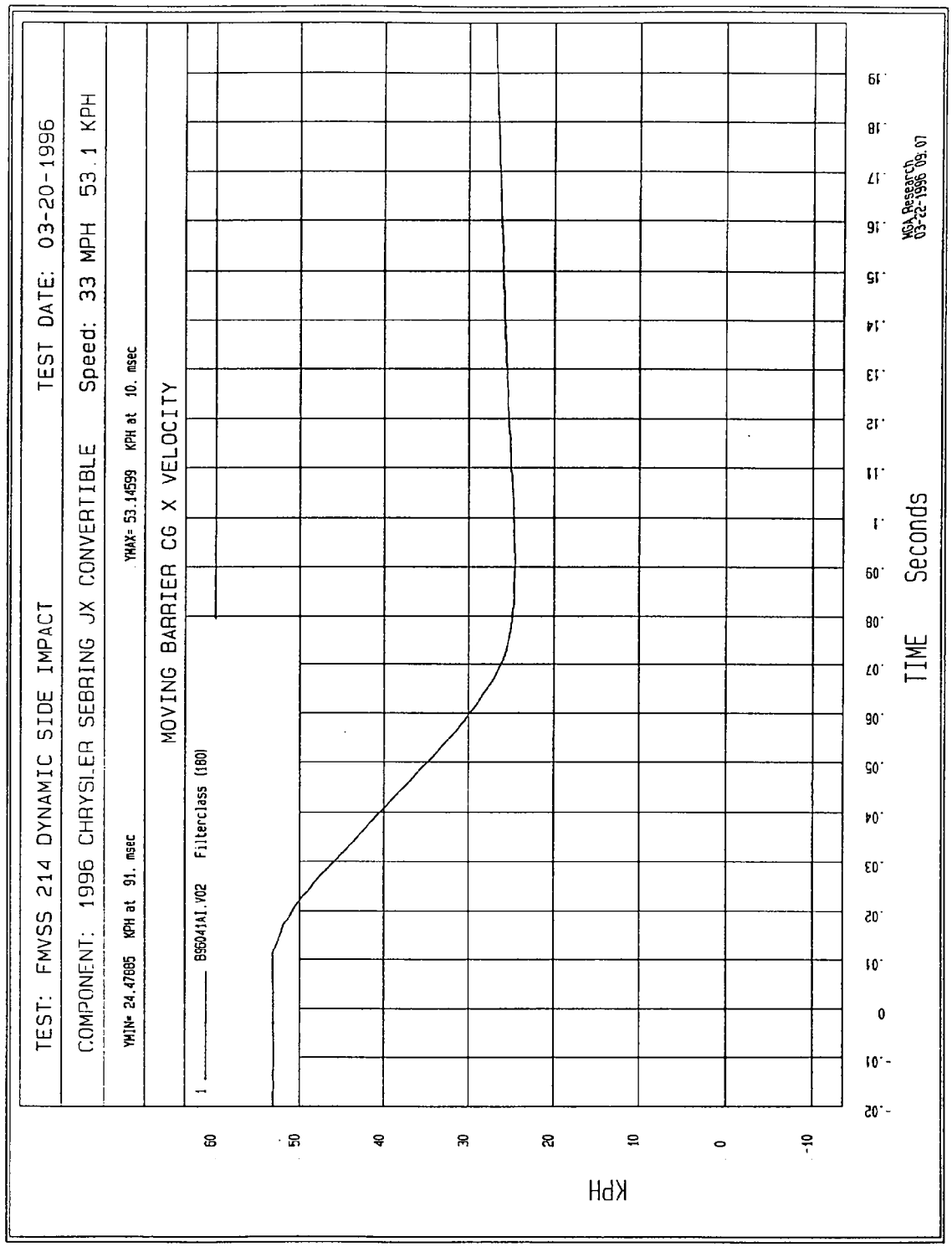
TIME (SECONDS)
MGA Research
03-22-1996 10:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN= 24.47685 KPH at 91. msec
YMAX= 53.14599 KPH at 10. msec
MOVING BARRIER CG X VELOCITY
1 B9604IAI.V02 Filterclass (180)
KPH
60
50
40
30
20
10
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-10
-.02
-.01
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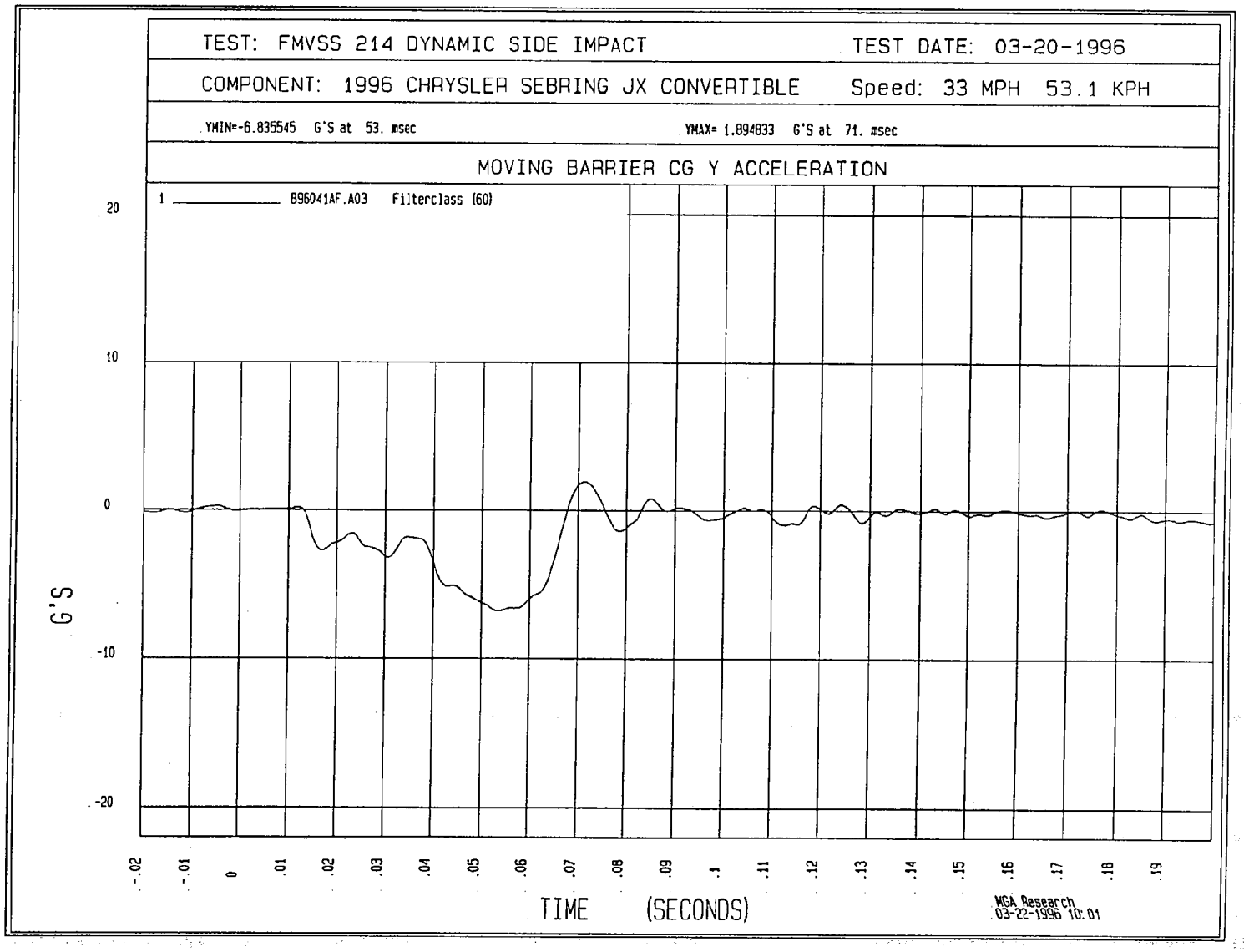
TIME Seconds
MGA Research
03-22-1996 09:07


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-6.835545 G'S at 53. msec
YMAX= 1.894833 G'S at 71. msec
MOVING BARRIER CG Y ACCELERATION
1 B96041AF.A03 Filterclass (60)
20
10
0
-10
-20
G'S
-.02
-.01
0
.01
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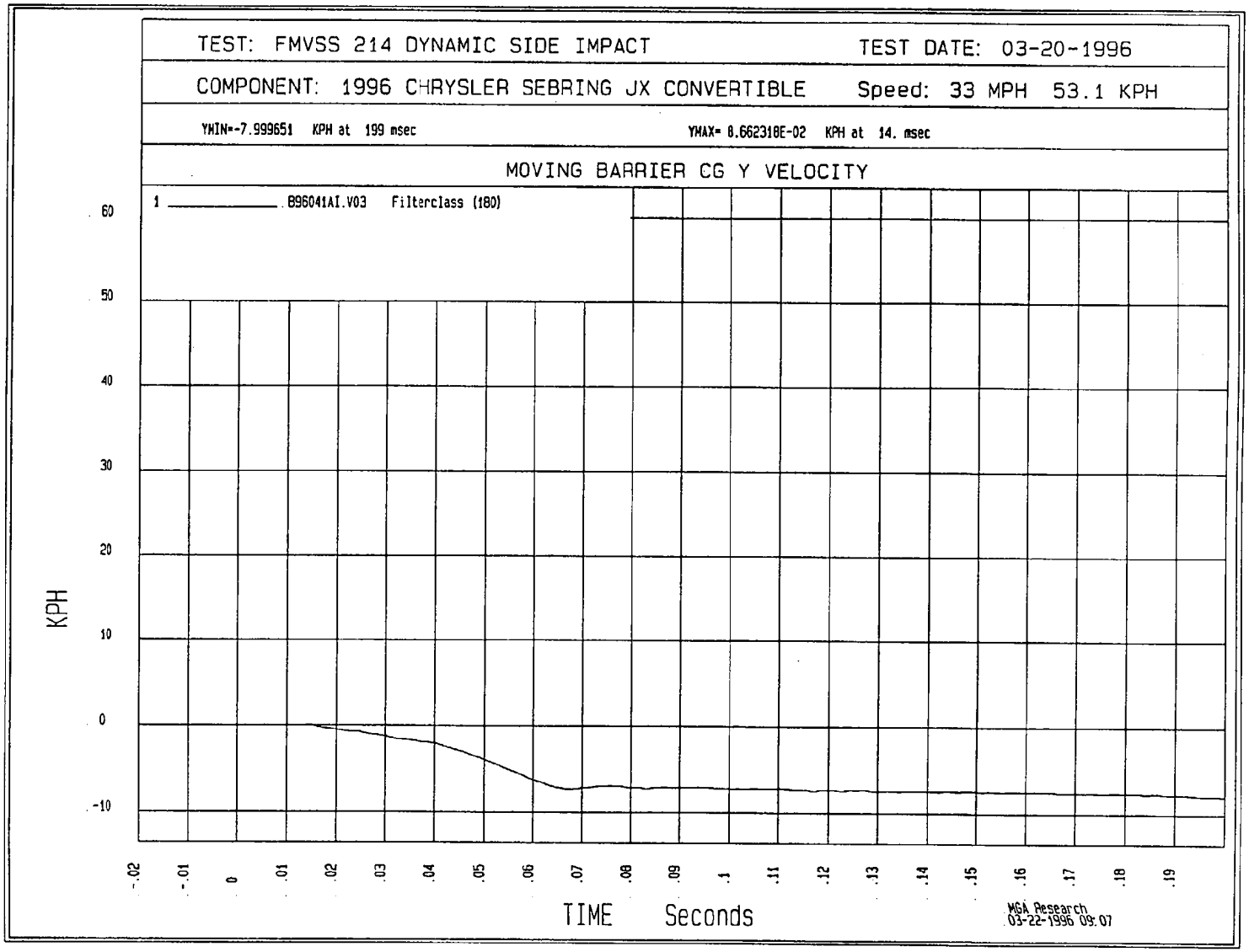
TIME (SECONDS)
MGA Research
03-22-1996 10:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-7.999651 KPH at 199 msec
YMAX= 8.662318E-02 KPH at 14. msec
MOVING BARRIER CG Y VELOCITY
1 B96041AI.V03 Filterclass (180)
60
50
40
30
20
10
0
-10
KPH
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0
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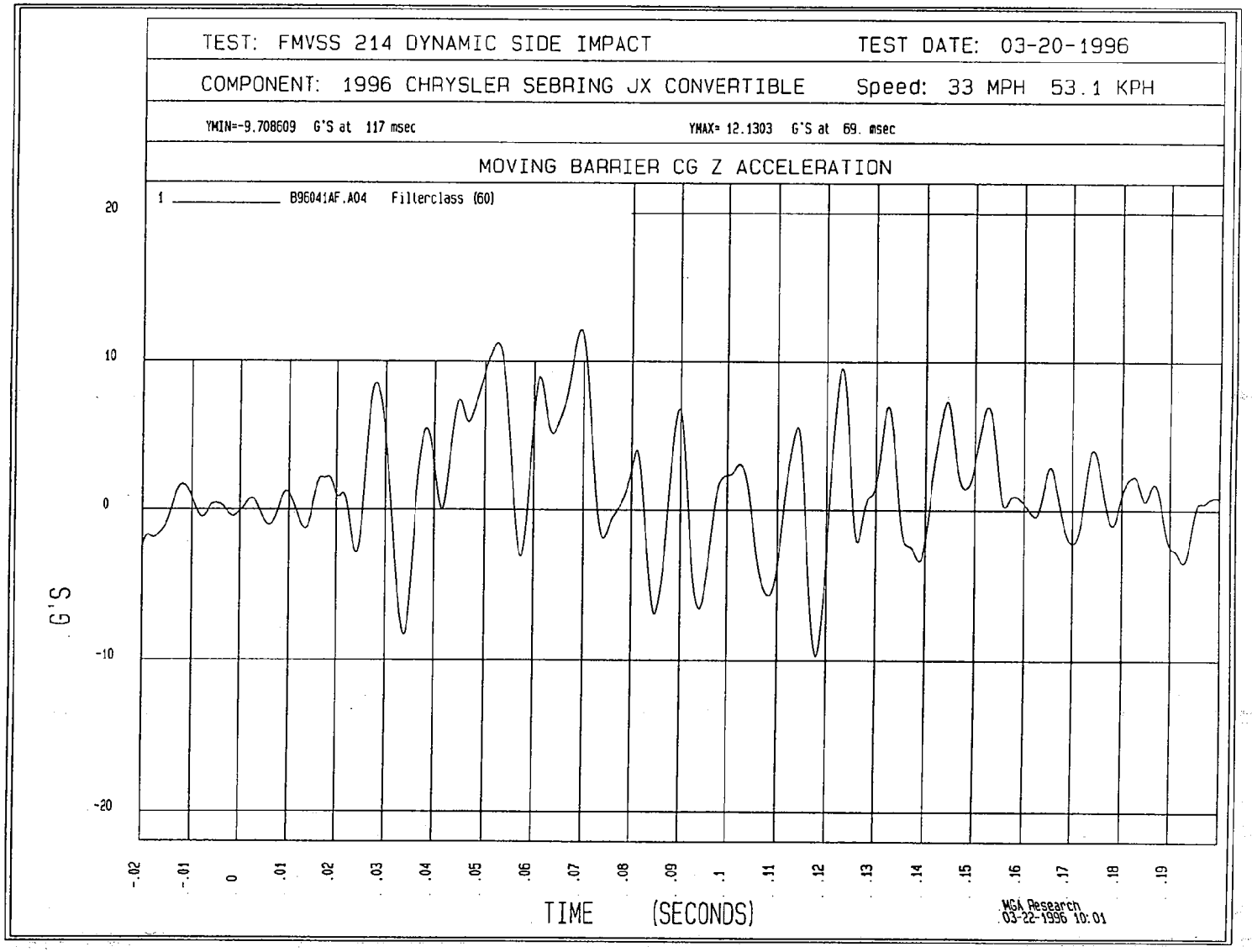
TIME Seconds
MGA Research
03-22-1996 09:07


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-9.708609 G'S at 117 msec
YMAX= 12.1303 G'S at 69. msec
MOVING BARRIER CG Z ACCELERATION
1 B96041AF.A04 Filterclass (60)
20
10
0
-10
-20
G'S
-.02
-.01
0
.01
.02
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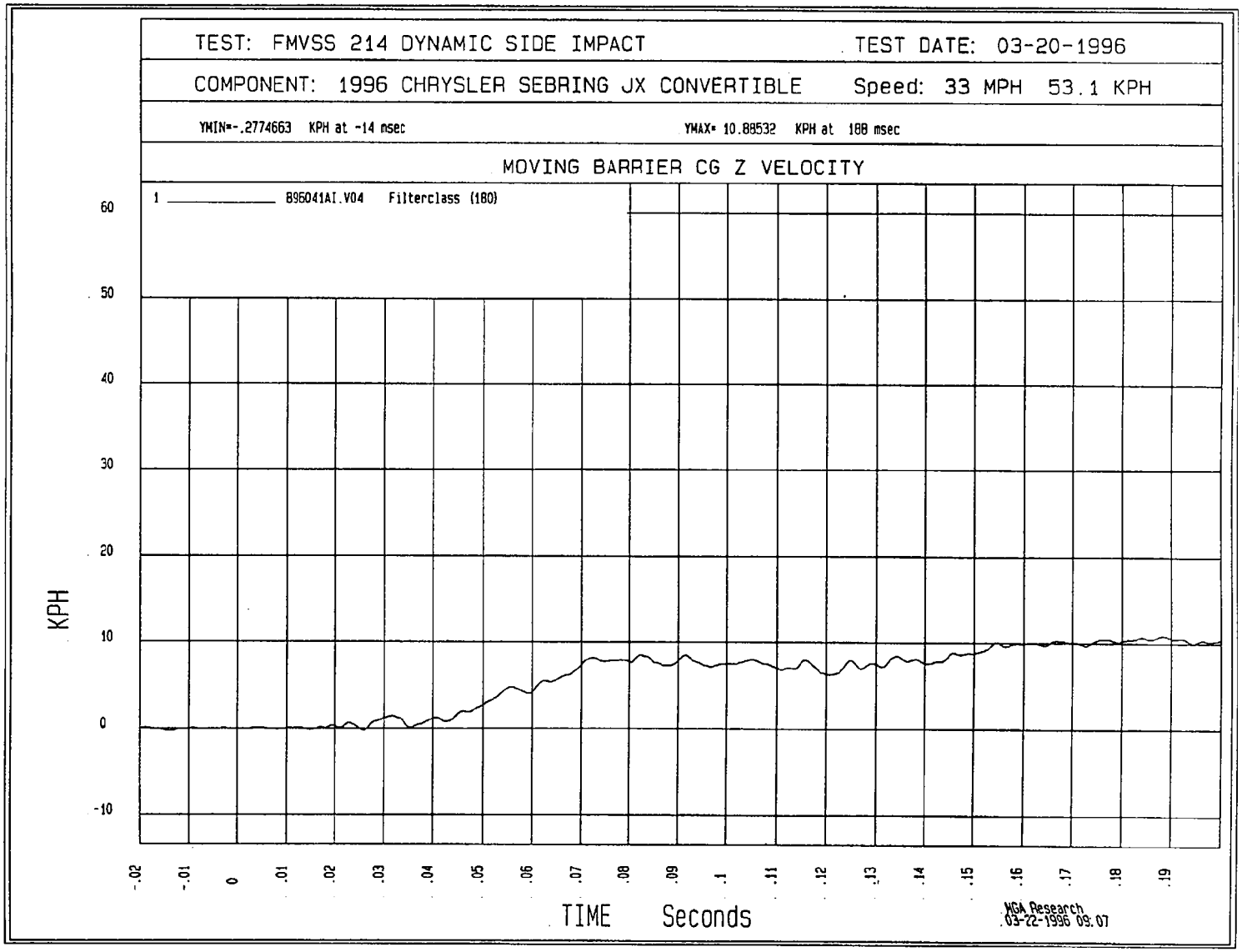
TIME (SECONDS)
MGA Research
03-22-1996 10:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.2774663 KPH at -14 msec
YMAX= 10.88532 KPH at 188 msec
MOVING BARRIER CG Z VELOCITY
1 B96041AI.V04 Filterclass (180)
KPH
60
50
40
30
20
10
0
-10
-.02
-.01
0
.01
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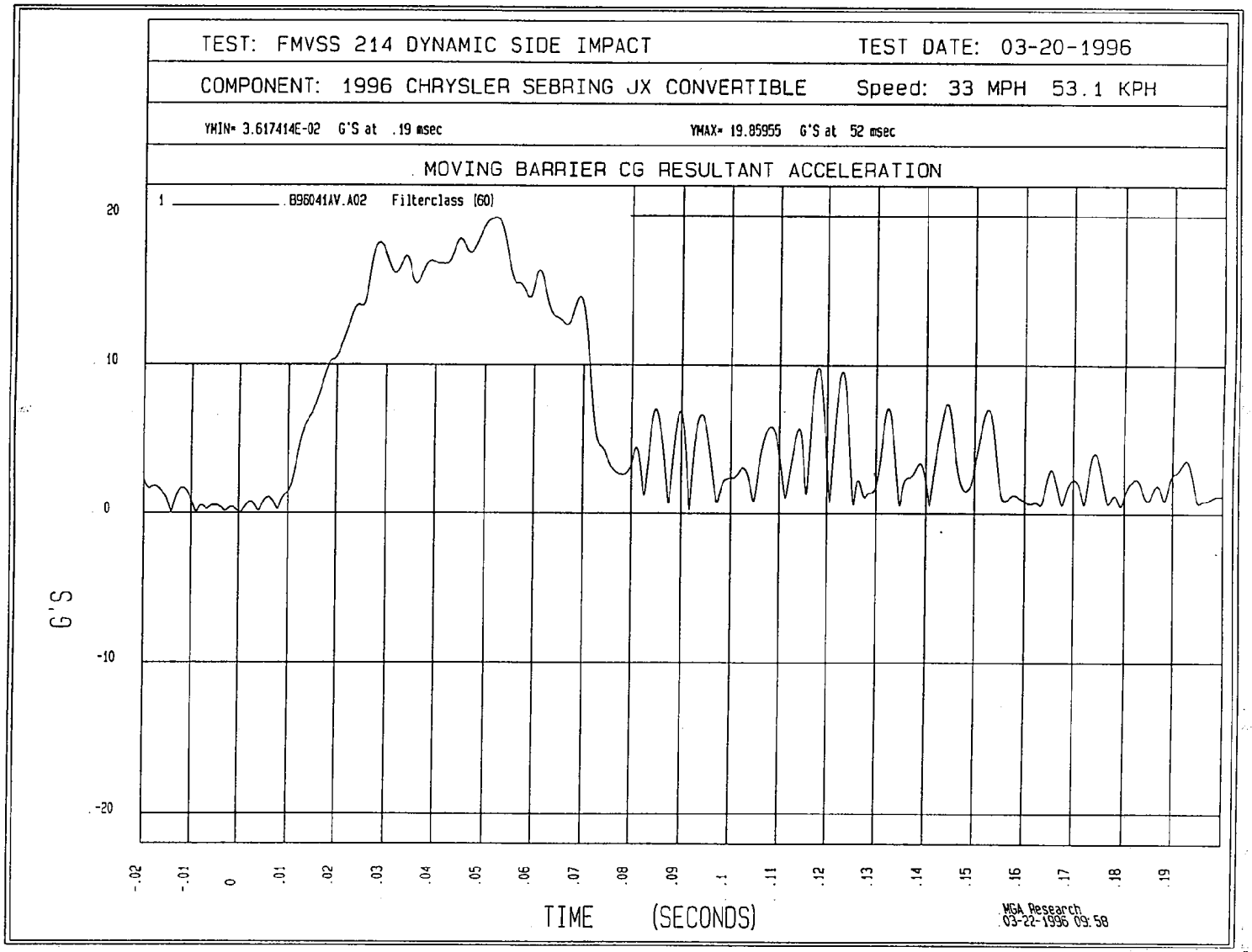
TIME Seconds
MGA Research
03-22-1996 09:07


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN= 3.617414E-02 G'S at .19 msec
YMAX= 19.85955 G'S at 52 msec
MOVING BARRIER CG RESULTANT ACCELERATION
1 B96041AV.A02 Filterclass (60)
20
10
0
-10
-20
G'S
-.02
-.01
0
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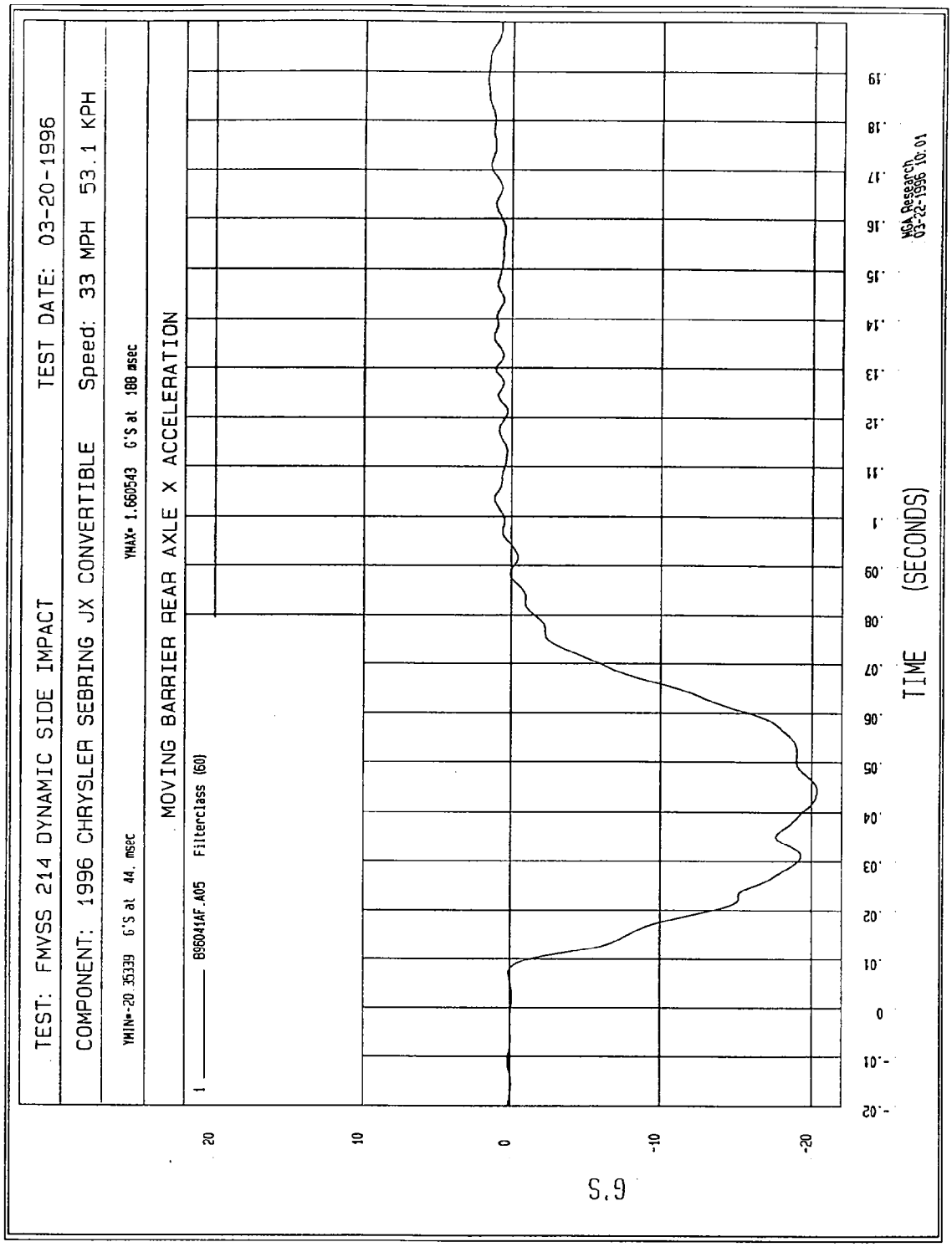
TIME (SECONDS)
MGA Research
03-22-1996 09:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-20.35339 G'S at 44. msec
YMAX= 1.660543 G'S at 188 msec
MOVING BARRIER REAR AXLE X ACCELERATION
1 B960414F.A05 Filterclass (60)
20
10
0
-10
-20
-.02
.01
0
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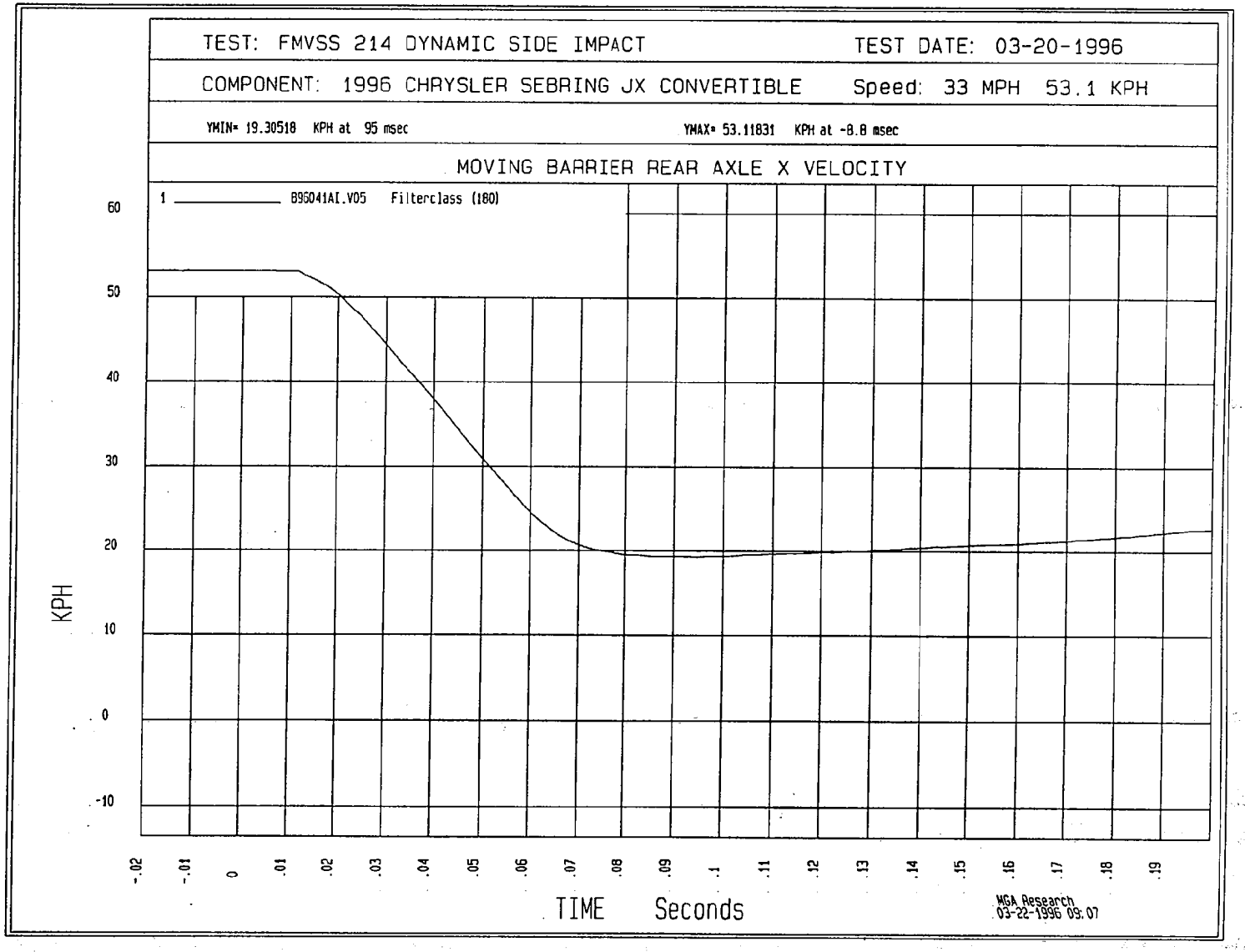
TIME (SECONDS)
MGA Research
03-22-1996 10:01

S.9


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN= 19.30518 KPH at 95 msec
YMAX= 53.11831 KPH at -8.8 msec
MOVING BARRIER REAR AXLE X VELOCITY
1 B95041AI.V05 Filterclass (180)
60
50
40
30
20
10
0
-10
KPH
-.02
-.01
0
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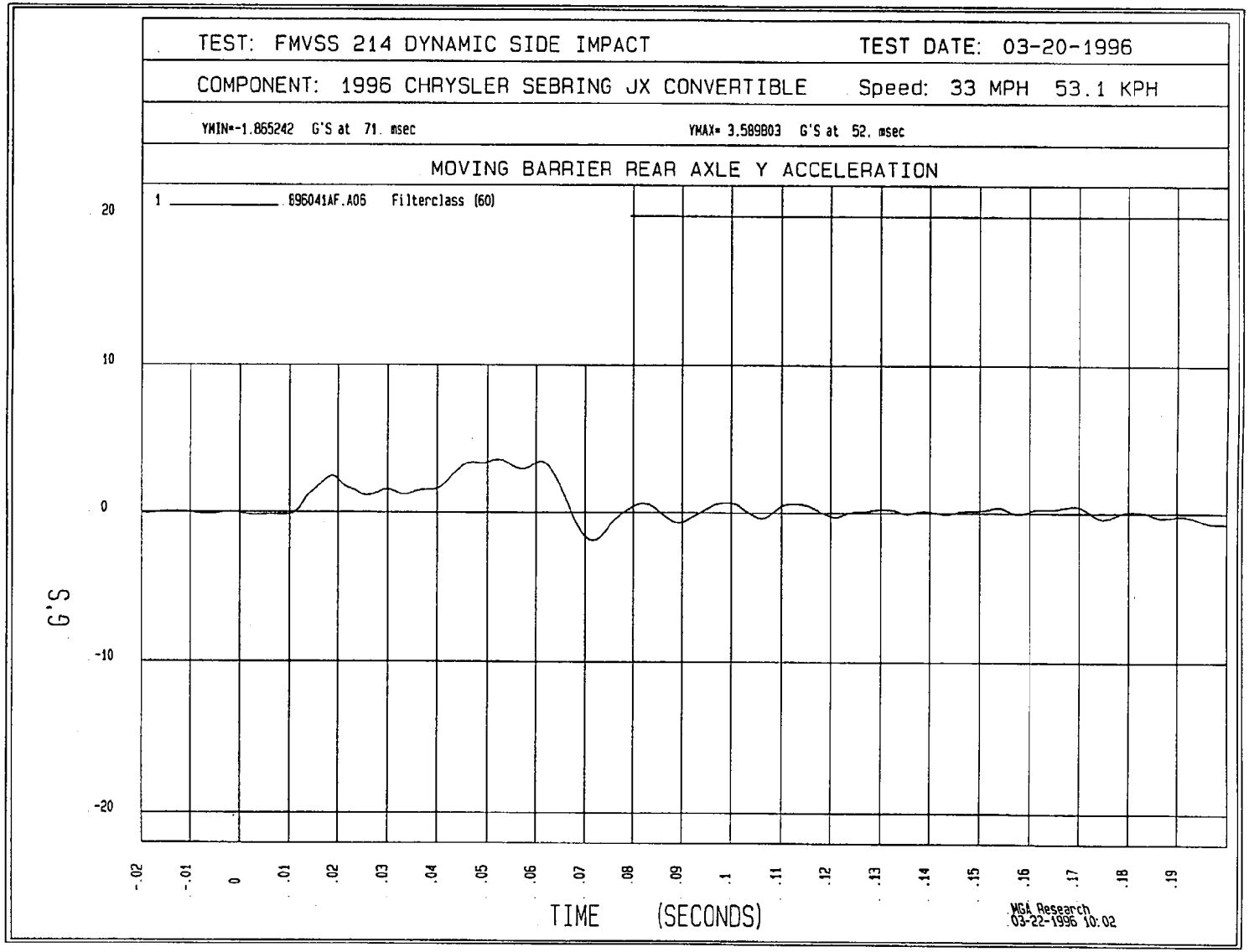
TIME Seconds
MGA Research
03-22-1996 09:07


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-1.865242 G'S at 71. msec
YMAX= 3.589803 G'S at 52. msec
MOVING BARRIER REAR AXLE Y ACCELERATION
1 896041AF.A06 Filterclass (60)
20
10
0
-10
-20
G's
-.02
-.01
0
.01
.02
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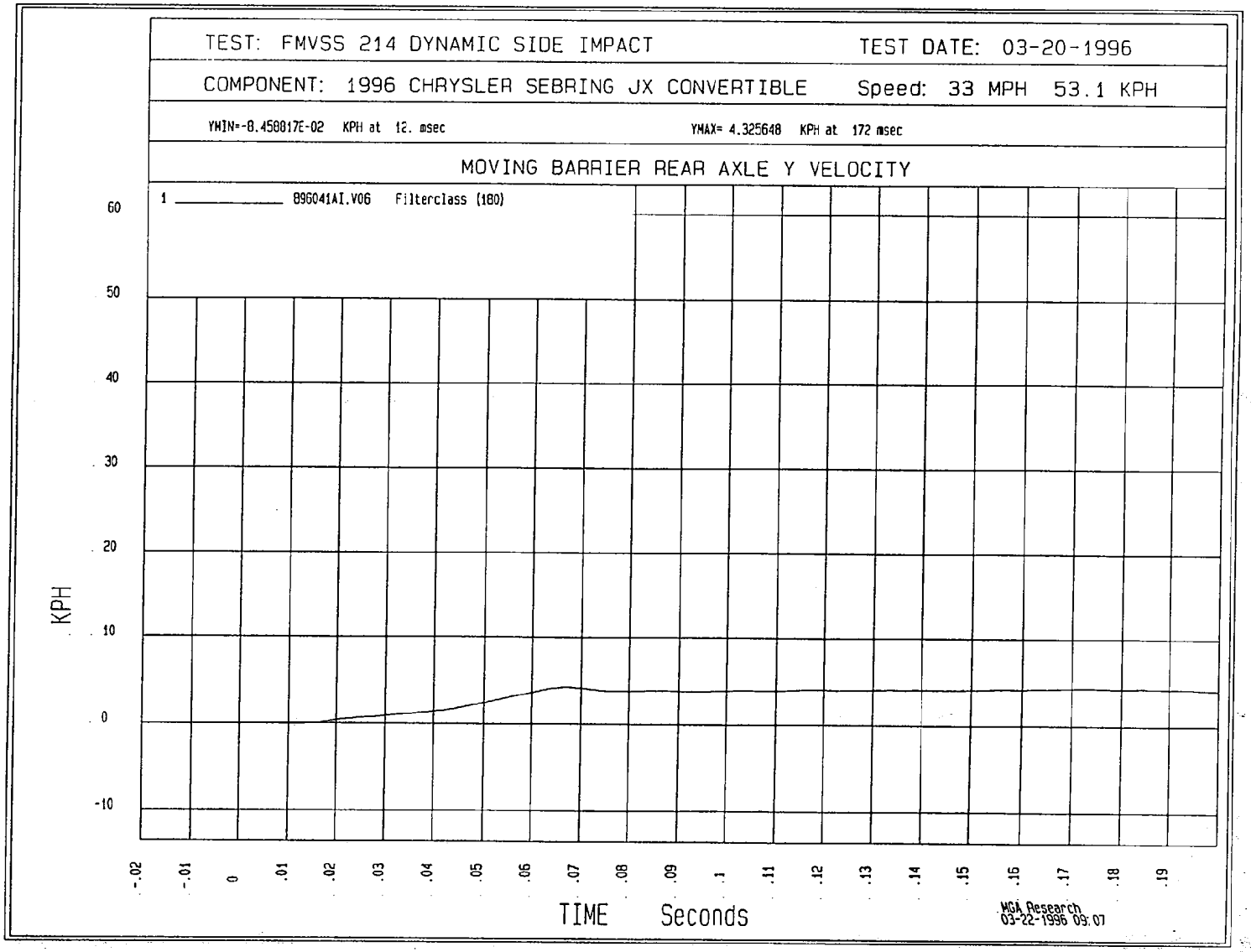
TIME (SECONDS)
MGA Research
03-22-1996 10:02


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-8.458817E-02 KPH at 12. msec
YMAX= 4.325648 KPH at 172 msec
MOVING BARRIER REAR AXLE Y VELOCITY
1 896041AI.V06 Filterclass (180)
60
50
40
30
20
10
0
-10
KPH
-.02
-.01
0
.01
.02
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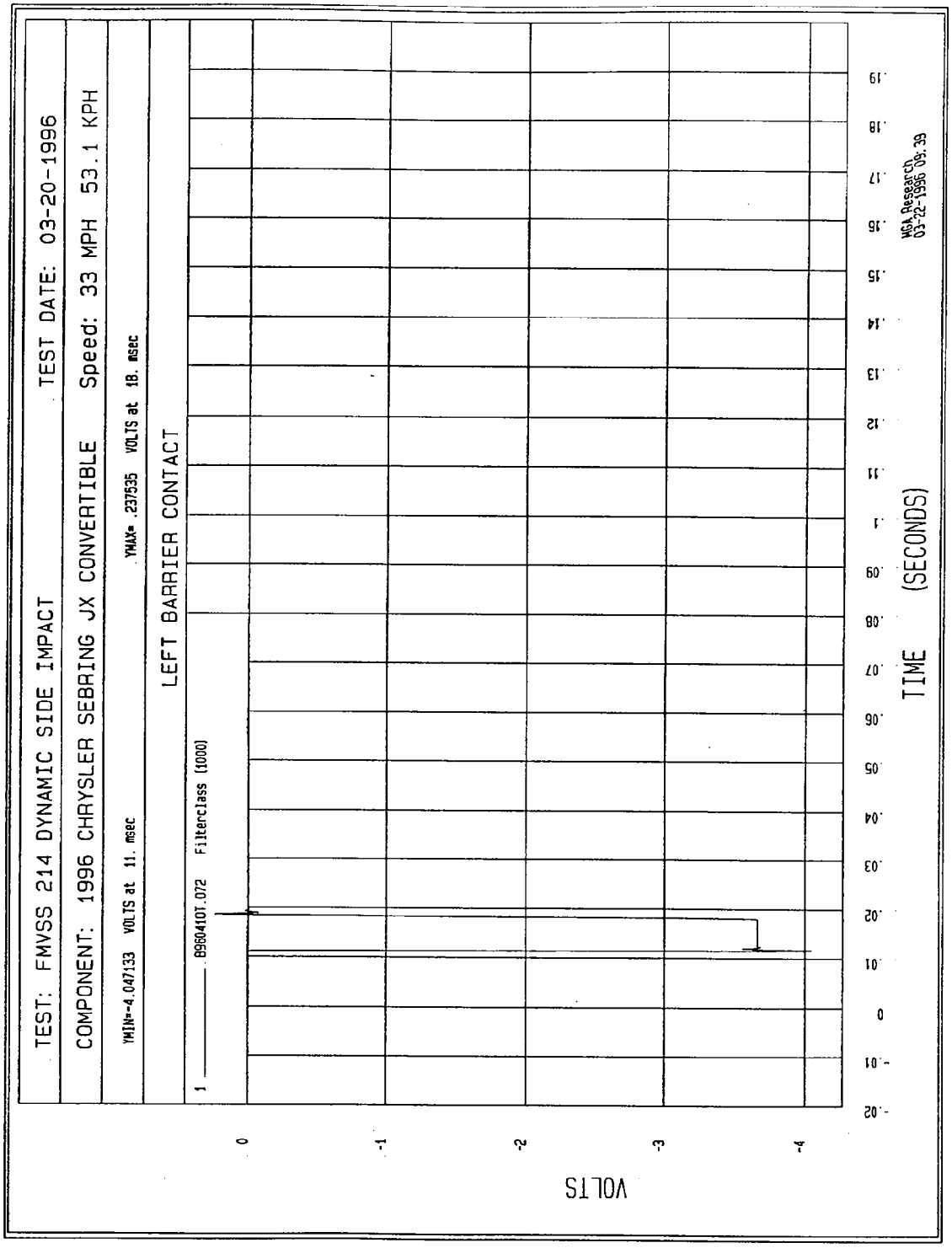
TIME Seconds
MGA Research
03-22-1996 09:07


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-4.047133 VOLTS at 11. msec
YMAX= .237535 VOLTS at 18. msec
LEFT BARRIER CONTACT
1 B9604107.072 FilterClass (1000)
VOLTS
0
-1
-2
-3
-4
TIME (SECONDS)
-.02
-.01
0
.01
.02
.03
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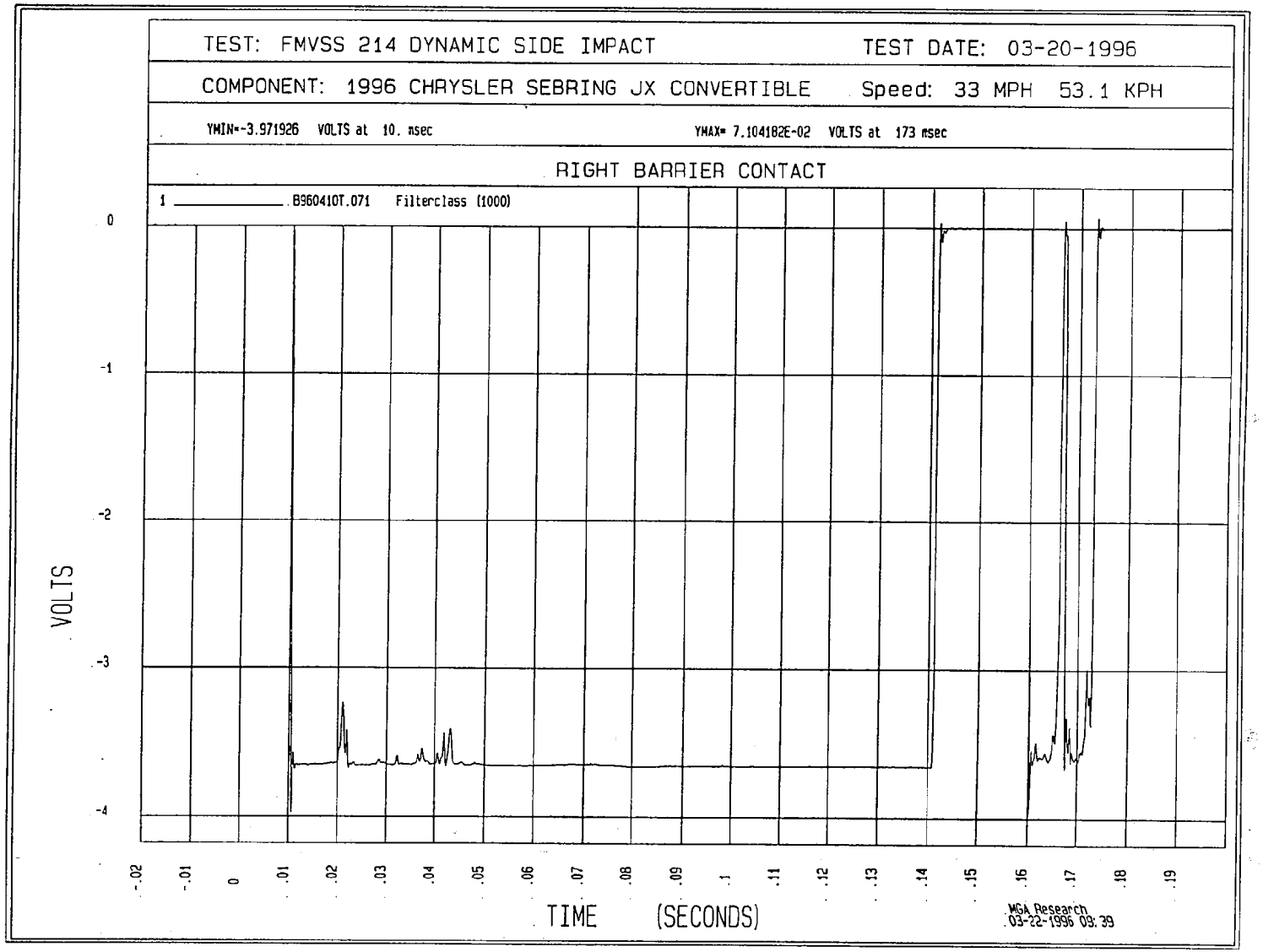
MGA Research
03-22-1996 09:39


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-3.971926 VOLTS at 10. msec
YMAX= 7.104182E-02 VOLTS at 173 msec
RIGHT BARRIER CONTACT
1 B960410T.071 Filterclass (1000)
VOLTS
0
-1
-2
-3
-4
-.02
-.01
0
.01
.02
.03
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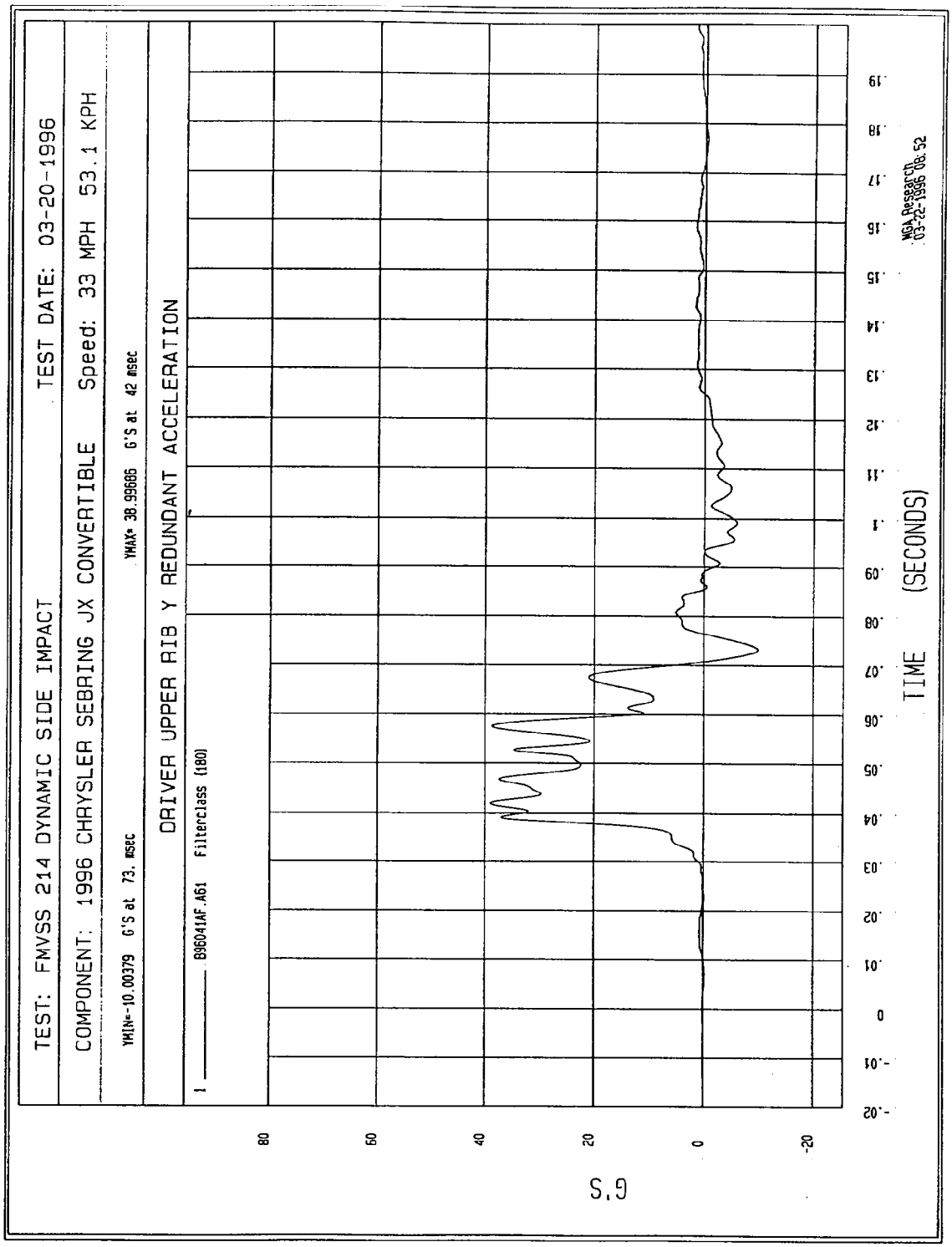
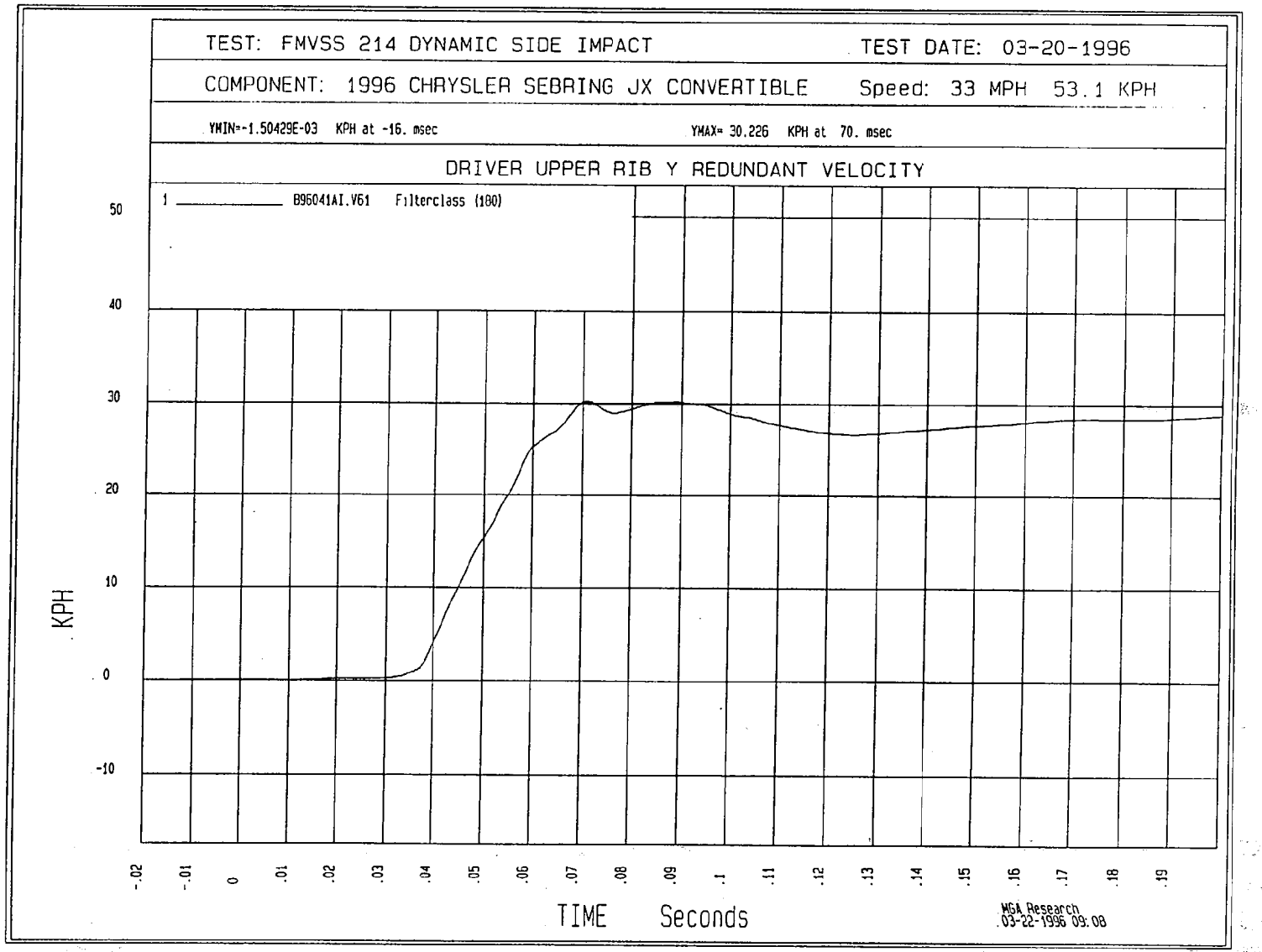
TIME (SECONDS)
MGA Research
03-22-1996 09:39


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-10.00379 G'S at 73. msec
YMAX= 38.99686 G'S at 42 msec
DRIVER UPPER RIB Y REDUNDANT ACCELERATION
1 B96041AF.A61 Filterclass (180)
MGA Research
03-22-1996 08:52
G's
TIME (SECONDS)


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-1.50429E-03 KPH at -16. msec
YMAX= 30.226 KPH at 70. msec
DRIVER UPPER RIB Y REDUNDANT VELOCITY
1 B96041AI.V61 Filterclass (180)
50
40
30
20
10
0
-10
KPH
-.02
-.01
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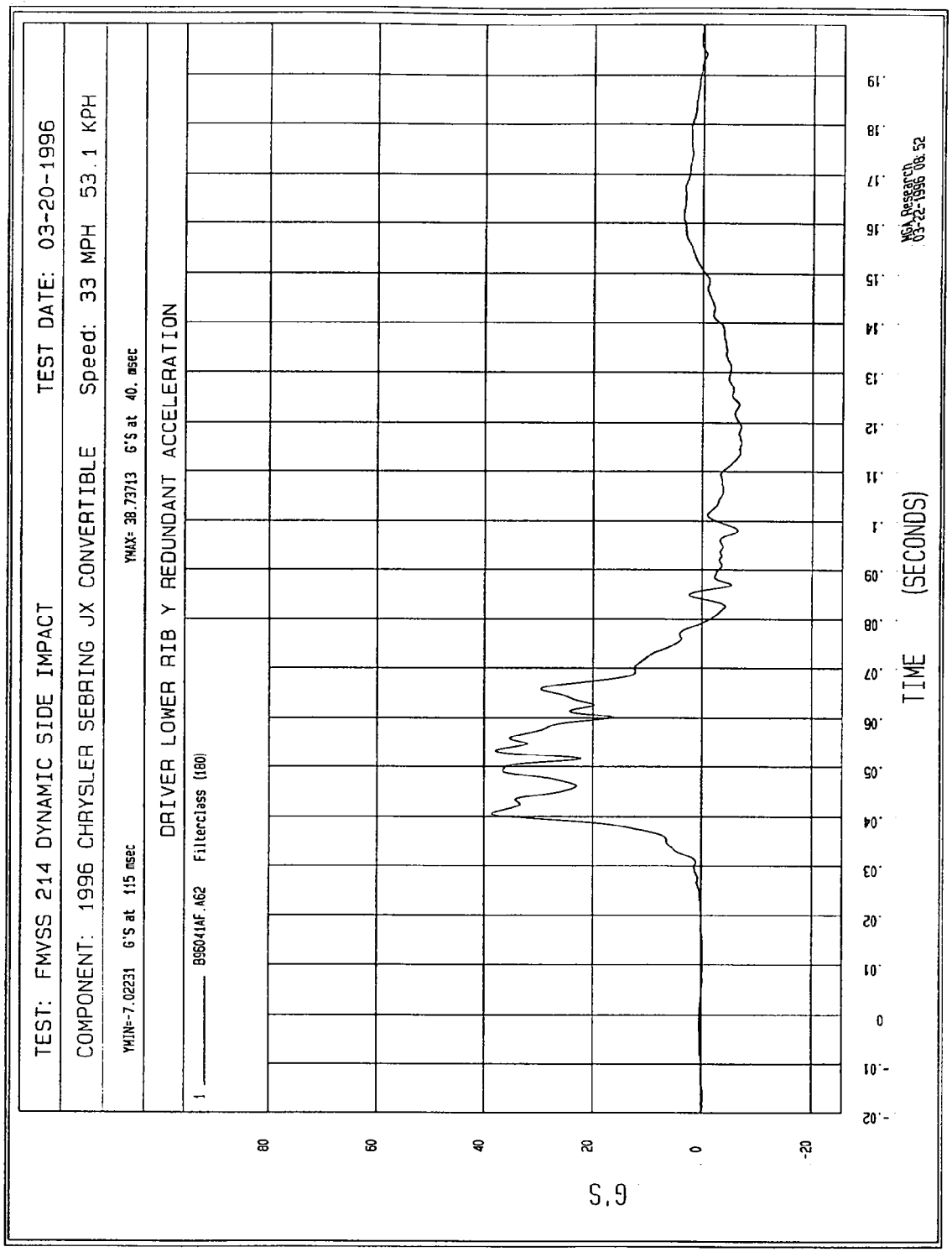
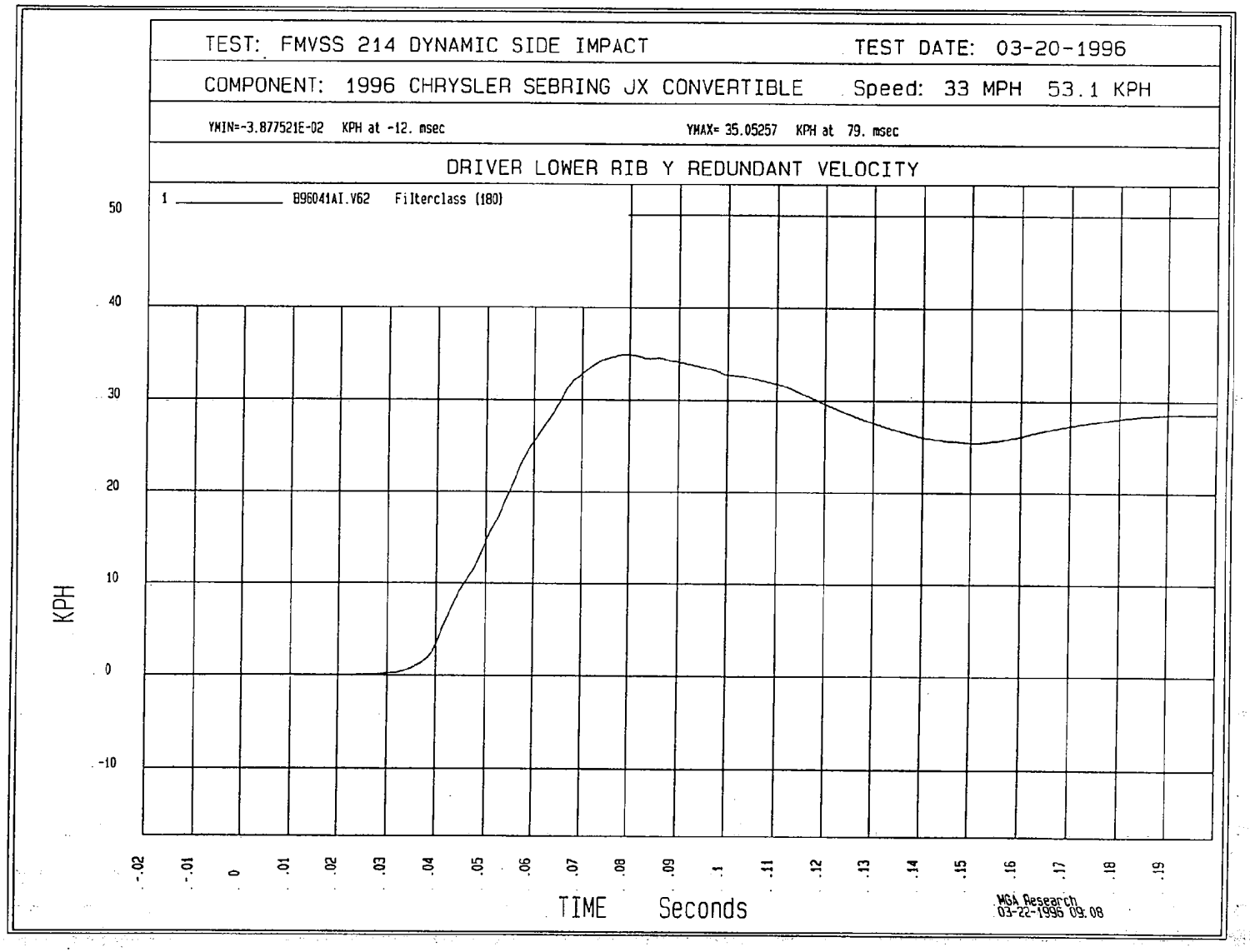
TIME Seconds
MGA Research
03-22-1996 09:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-7.02231 G'S at 115 msec
YMAX= 38.73713 G'S at 40. msec
DRIVER LOWER RIB Y REDUNDANT ACCELERATION
1 B960414F.A62 Filterclass (180)
MGA Research
03-22-1996 08:52
TIME (SECONDS)
G'S


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-3.877521E-02 KPH at -12. msec
YMAX= 35.05257 KPH at 79. msec
DRIVER LOWER RIB Y REDUNDANT VELOCITY
1 B96041AI.V62 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
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.03
.04
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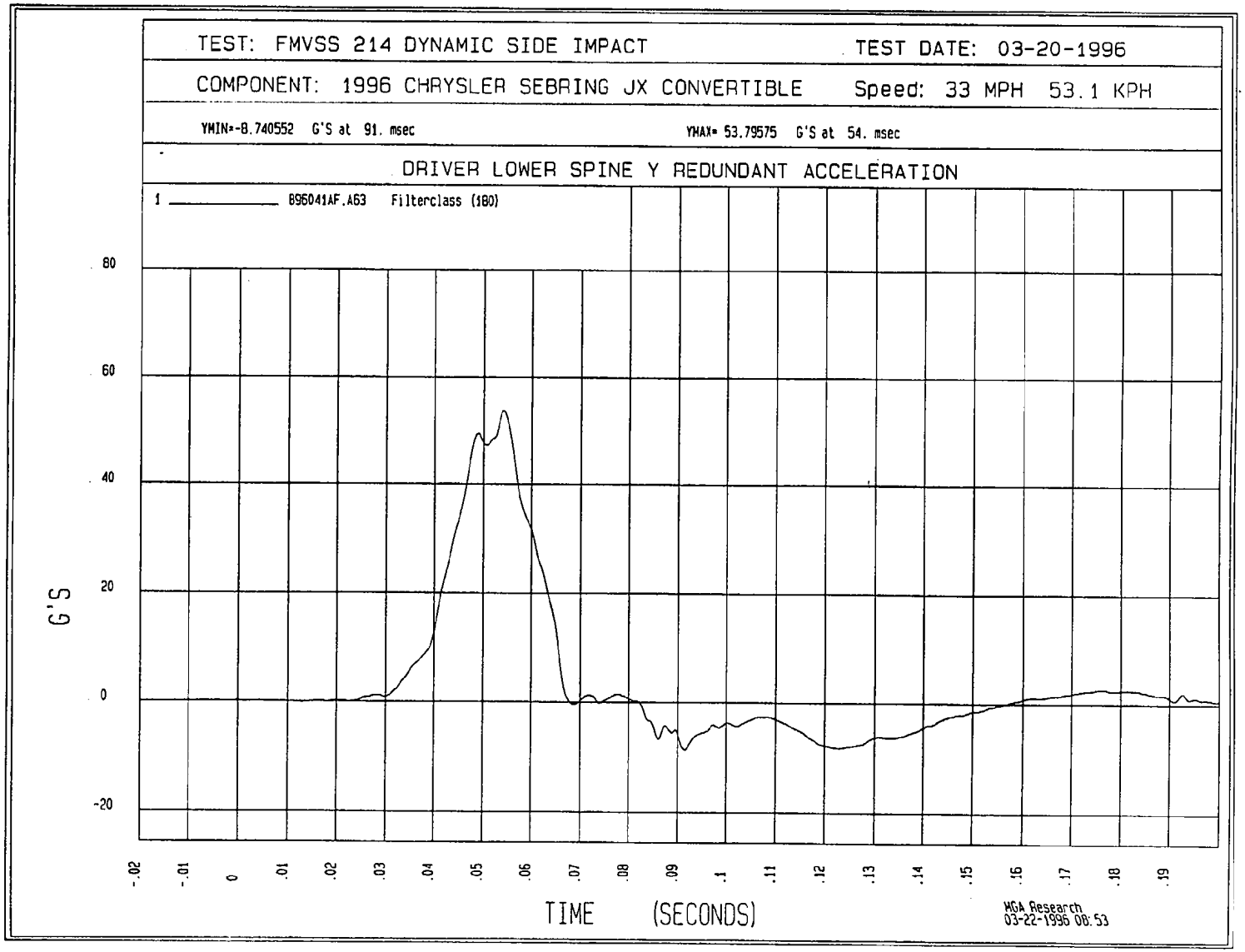
TIME Seconds
MGA Research
03-22-1996 09:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-8.740552 G'S at 91. msec
YMAX= 53.79575 G'S at 54. msec
DRIVER LOWER SPINE Y REDUNDANT ACCELERATION
1 B96041AF.A63 Filterclass (180)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
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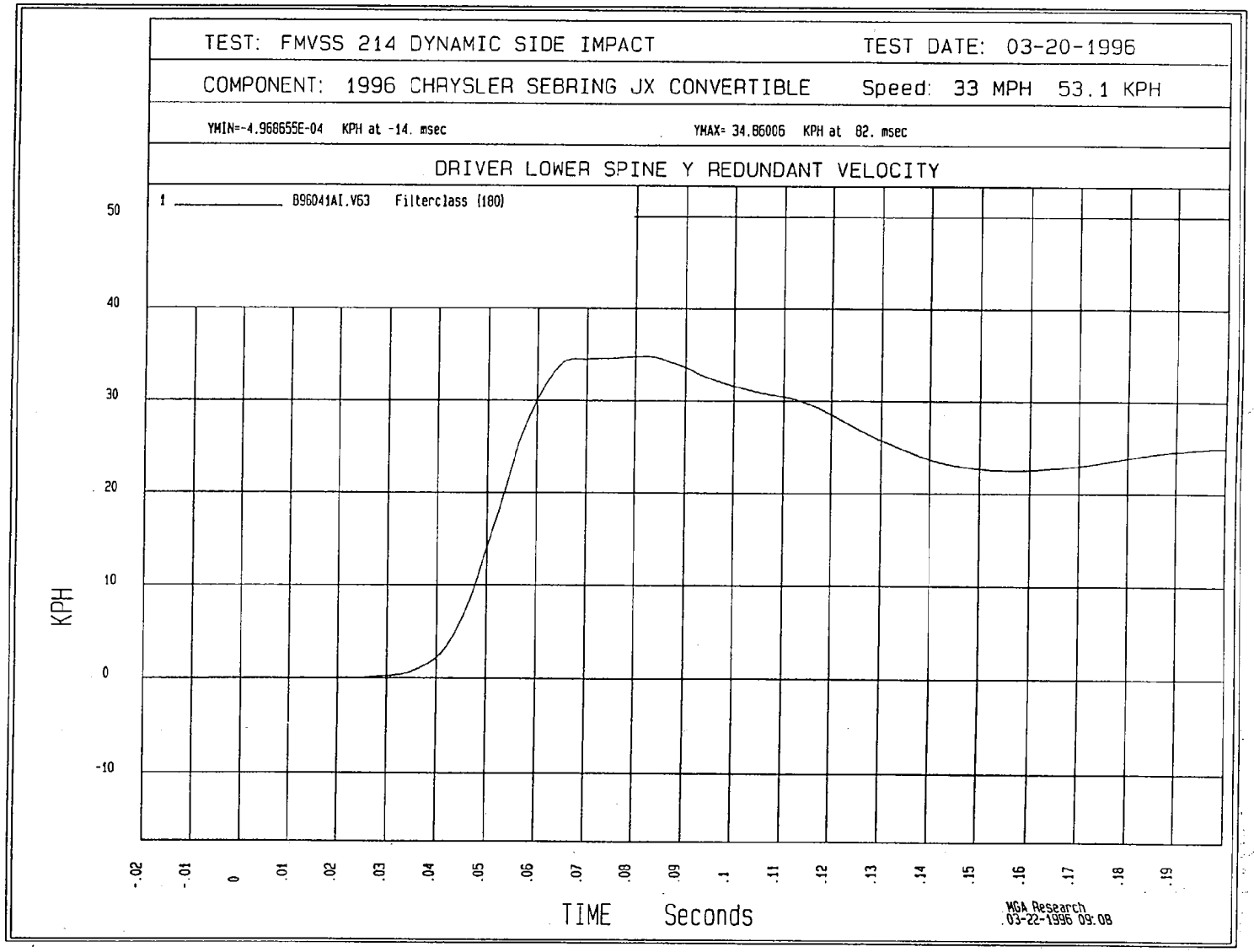
TIME (SECONDS)
MGA Research
03-22-1996 08:53


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-4.968655E-04 KPH at -14. msec
YMAX= 34.86006 KPH at 82. msec
DRIVER LOWER SPINE Y REDUNDANT VELOCITY
1 B96041AI.V63 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
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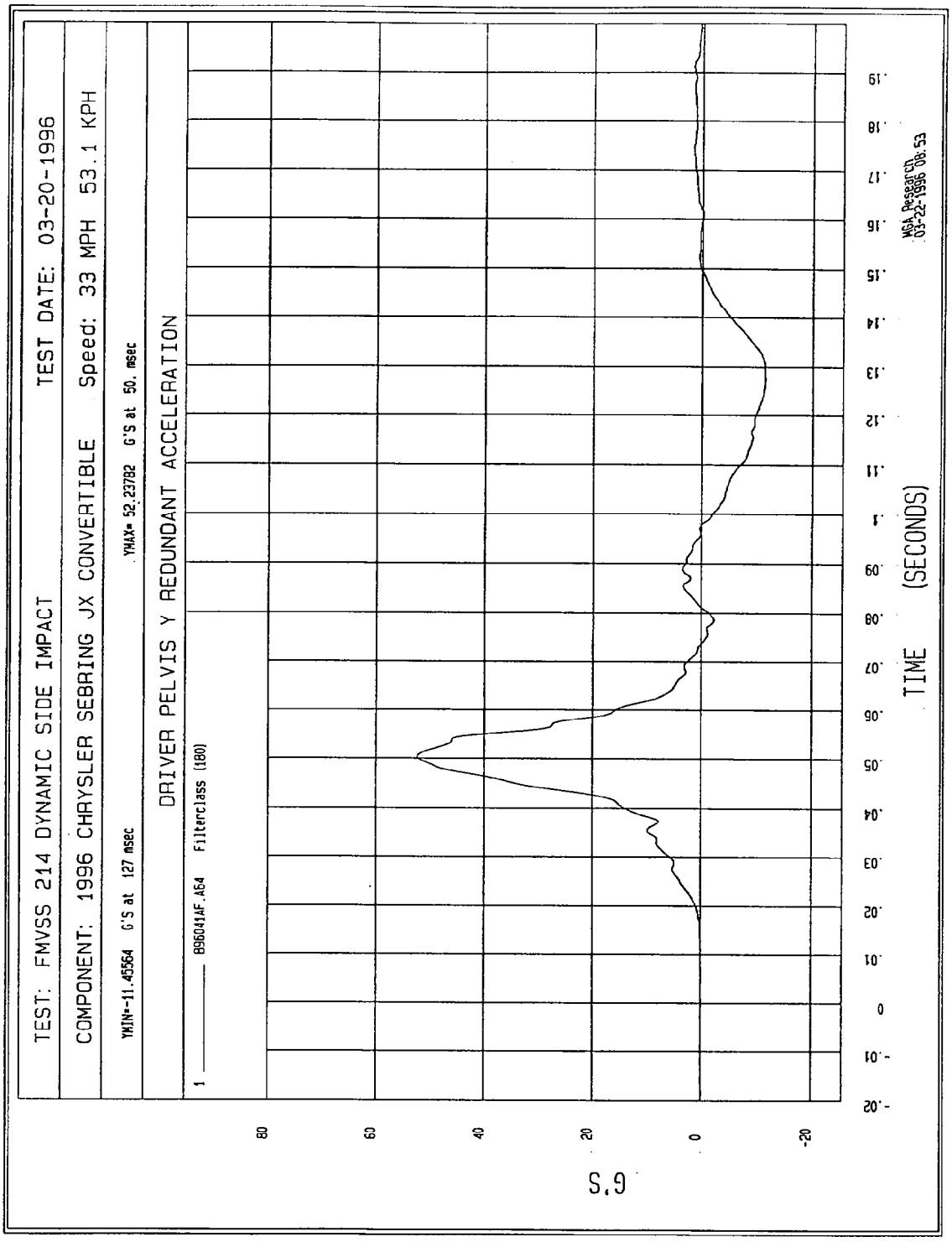
TIME Seconds
MGA Research
03-22-1996 09:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-11.45564 G'S at 127 msec
YMAX= 52.23782 G'S at 50. msec
DRIVER PELVIS Y REDUNDANT ACCELERATION
1 B96041AF.A64 Filterclass (180)
80
60
40
20
0
-20
-.02
-.01
0
.01
.02
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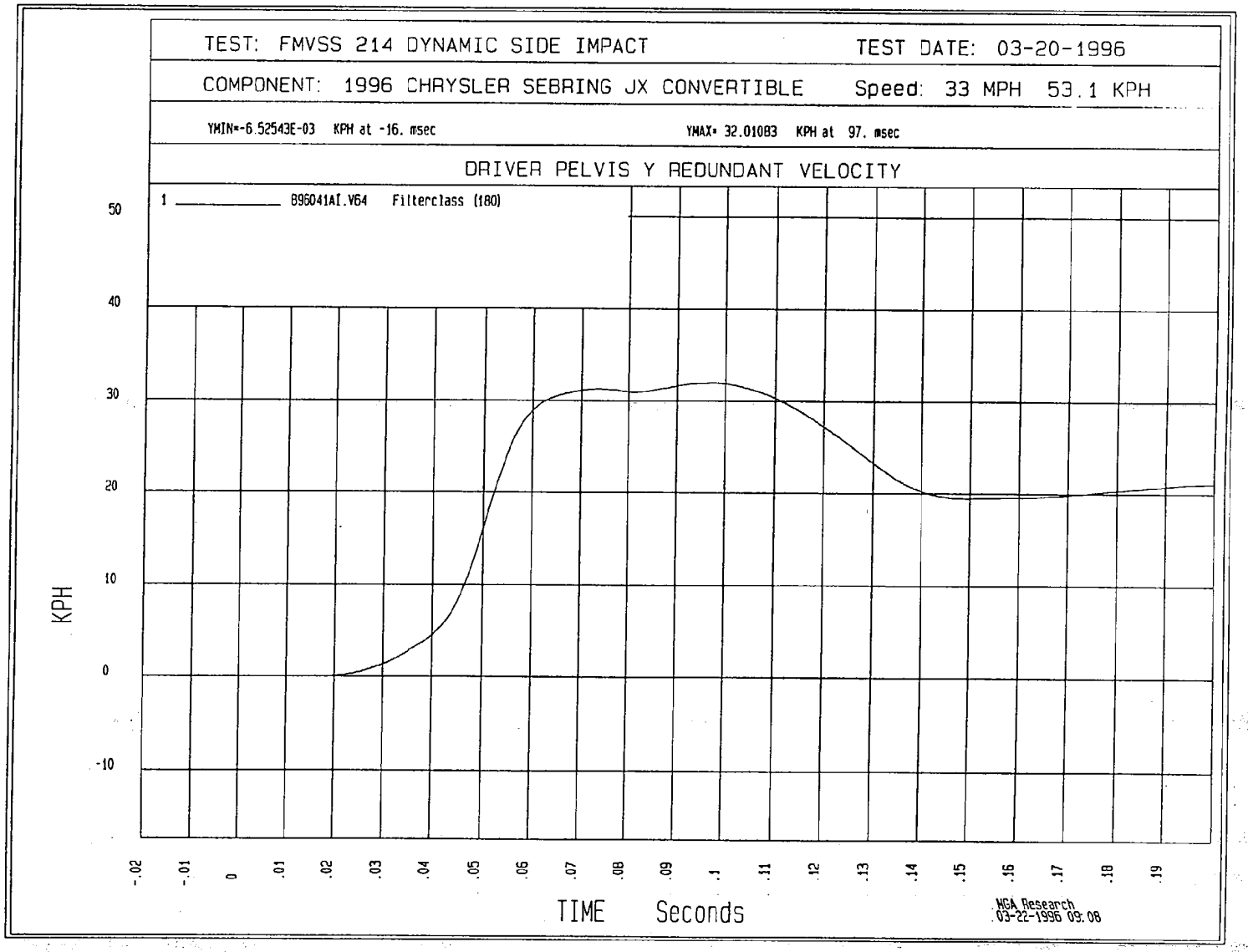
TIME (SECONDS)
MGA Research
03-22-1996 08:53

S.9


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-6.52543E-03 KPH at -16. msec
YMAX= 32.01083 KPH at 97. msec
DRIVER PELVIS Y REDUNDANT VELOCITY
1 896041AI.V64 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
.01
.02
.03
.04
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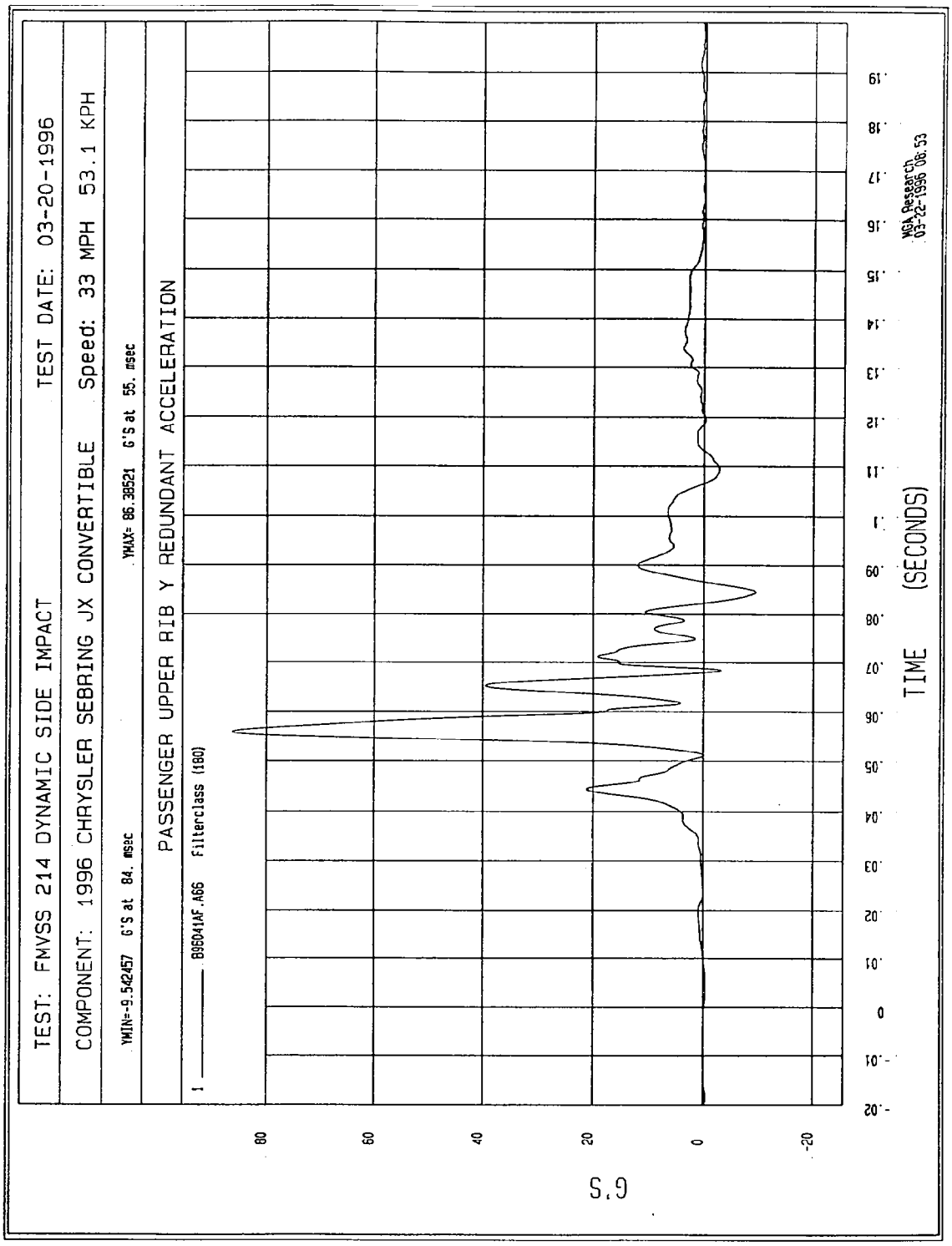
TIME Seconds
MGA Research
03-22-1996 09:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-9.542457 G'S at 84. msec
YMAX= 86.38521 G'S at 55. msec
PASSENGER UPPER RIB Y REDUNDANT ACCELERATION
1 B9604IAF.A6G Filterclass (180)
80
60
40
20
0
-20
G'S
TIME (SECONDS)
-.02
-.01
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.02
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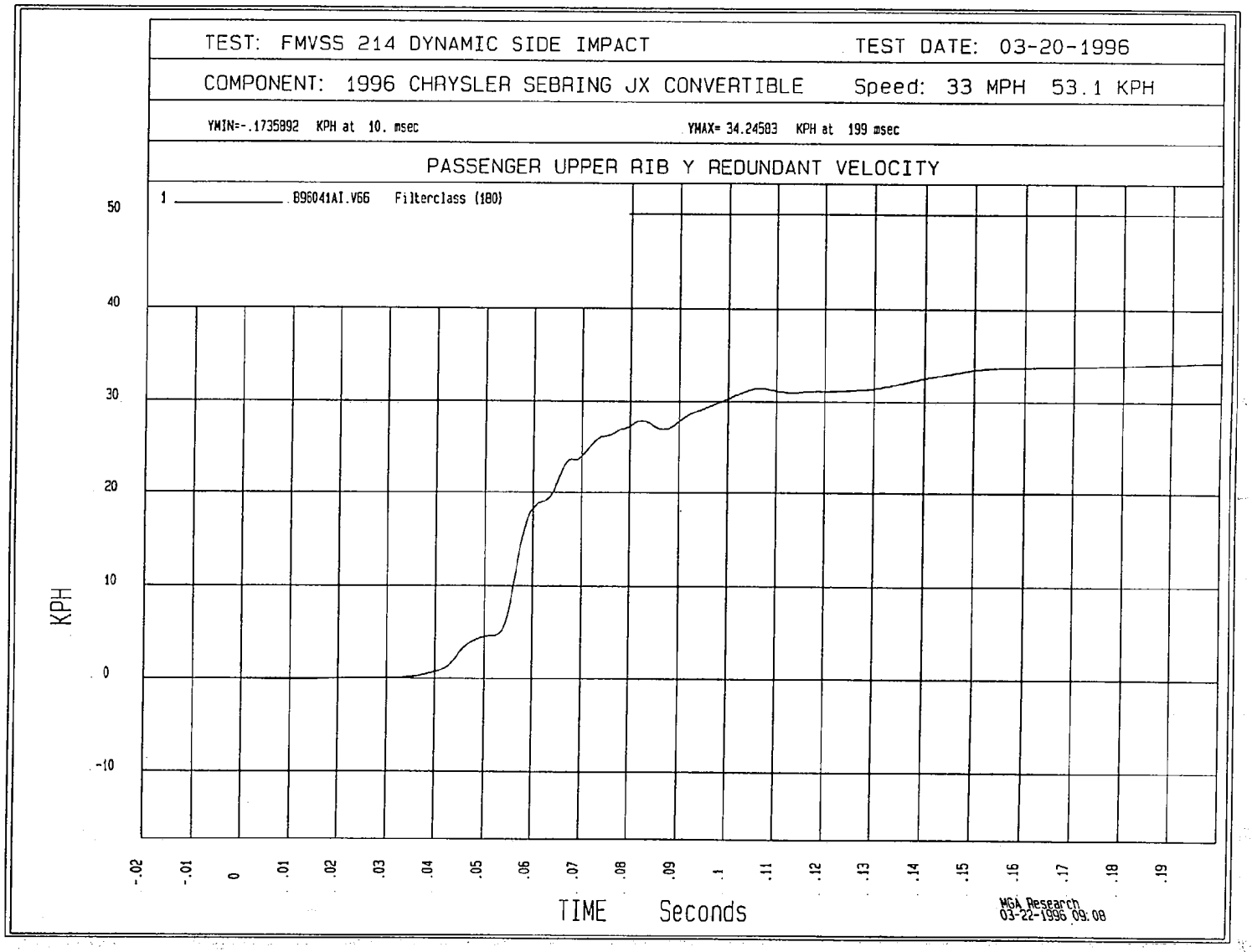
MGA Research
03-22-1996 08:53


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-.1735892 KPH at 10. msec
YMAX= 34.24583 KPH at 199 msec
PASSENGER UPPER RIB Y REDUNDANT VELOCITY
1 B96041AI.V66 Filterclass (180)
KPH
50
40
30
20
10
0
-10
-.02
-.01
0
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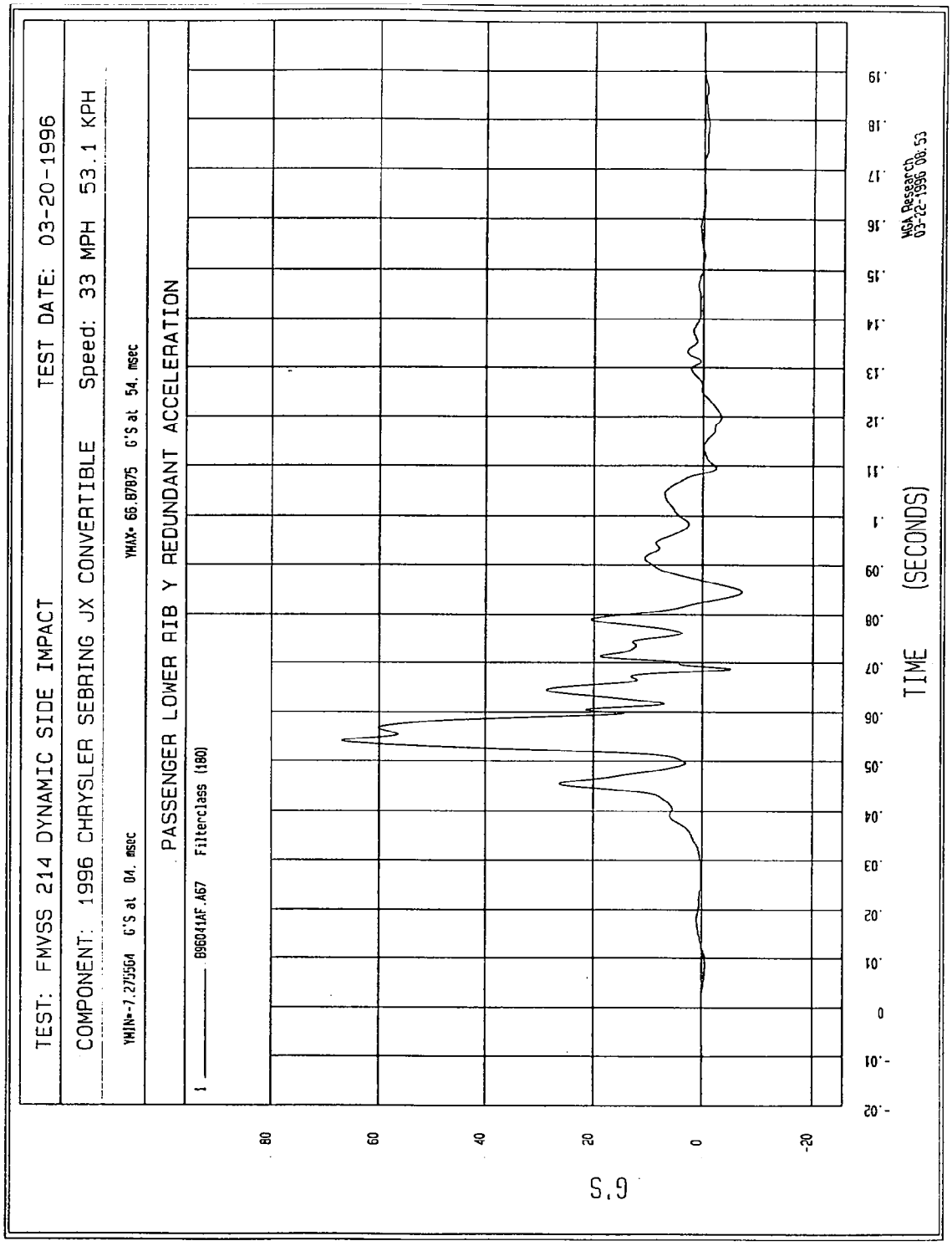
TIME Seconds
MGA Research
03-22-1996 09:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-7.275504 G'S at 04. msec
YMAX= 66.87875 G'S at 54. msec
PASSENGER LOWER RIB Y REDUNDANT ACCELERATION
1 B96041AF.A67 Filterclass (180)
80
60
40
20
0
-20
G'S
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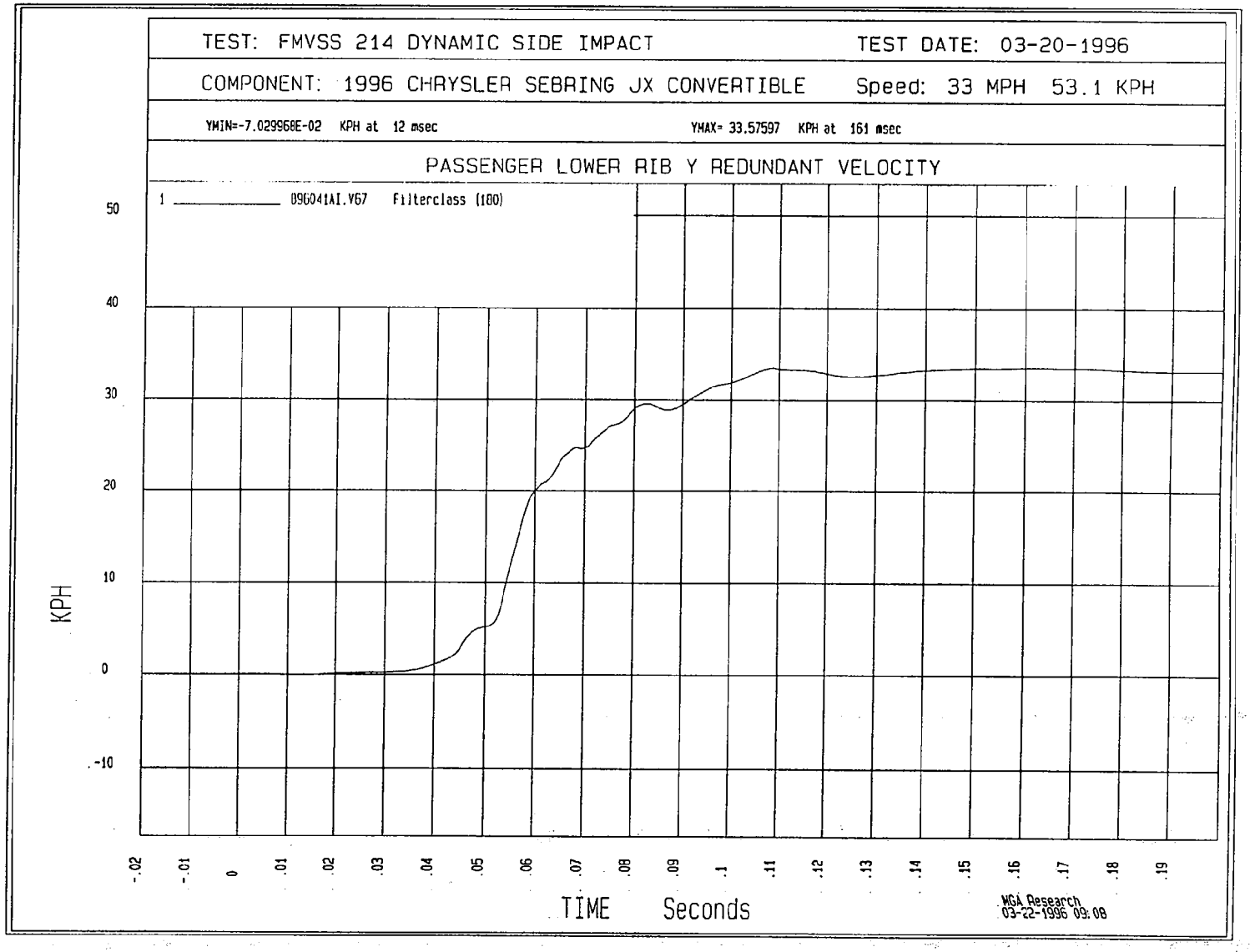
TIME (SECONDS)
MGA Research
03-22-1996 08:53


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-7.029968E-02 KPH at 12 msec
YMAX= 33.57597 KPH at 161 msec
PASSENGER LOWER RIB Y REDUNDANT VELOCITY
1 _____ 960041AI.V67 Filterclass (180)
KPH
50
40
30
20
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0
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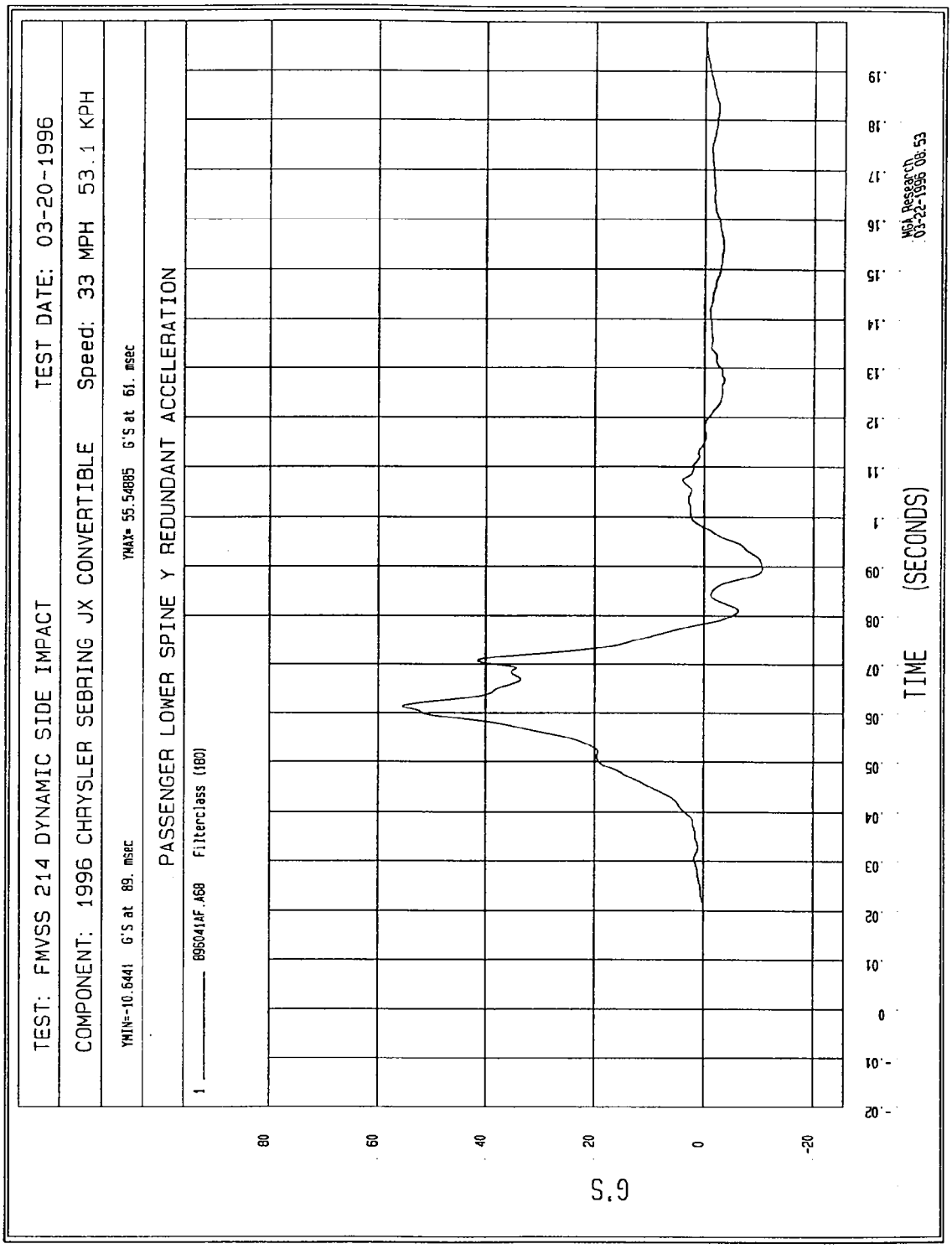
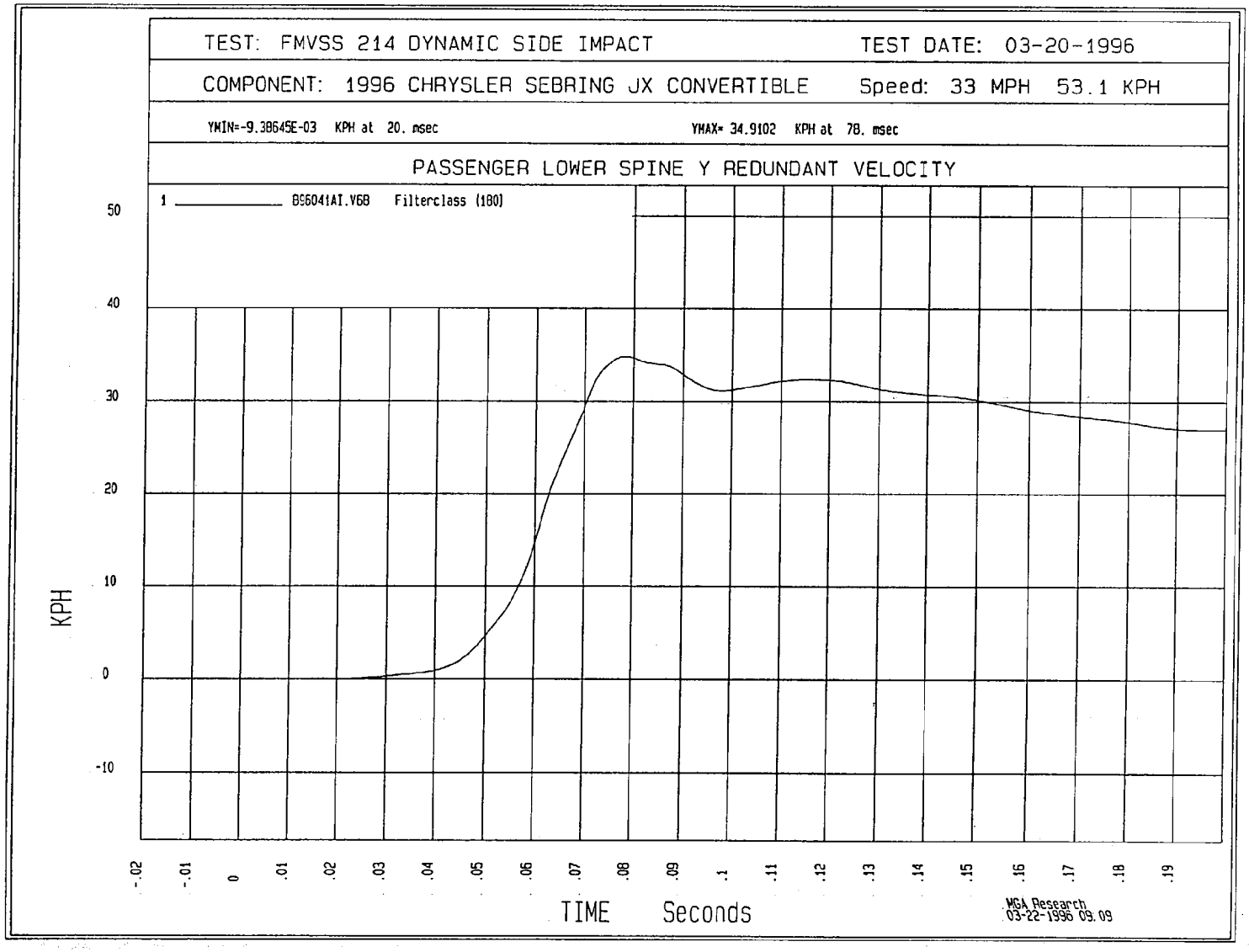
TIME Seconds
MGA Research
03-22-1996 09:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-10.6441 G'S at 89. msec
YMAX= 55.54885 G'S at 61. msec
PASSENGER LOWER SPINE Y REDUNDANT ACCELERATION
1 _____ 896041AF.A60 Filterclass (180)
MGA Research
03-22-1996 08:53
G'S
TIME (SECONDS)


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-9.38645E-03 KPH at 20. msec
YMAX= 34.9102 KPH at 78. msec
PASSENGER LOWER SPINE Y REDUNDANT VELOCITY
1 BS6041AI.V6B Filterclass (180)
KPH
50
40
30
20
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0
-10
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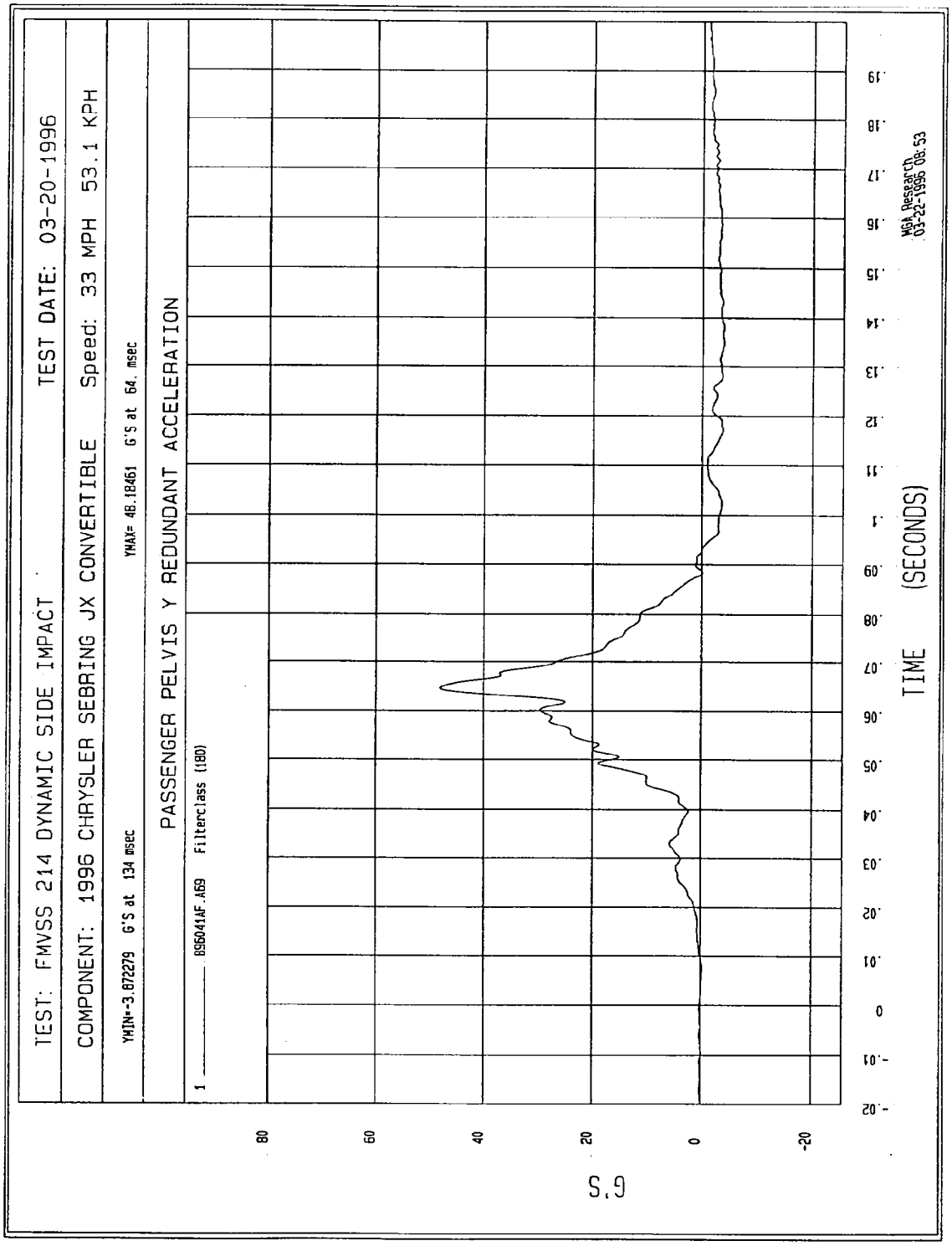
TIME Seconds
MGA Research
03-22-1996 09.09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-3.872279 G'S at 134 msec
YMAX= 48.18461 G'S at 64. msec
PASSENGER PELVIS Y REDUNDANT ACCELERATION
1 _____ B96041AF.A69 Filterclass (180)
80
60
40
20
0
-20
G'S
-.02
-.01
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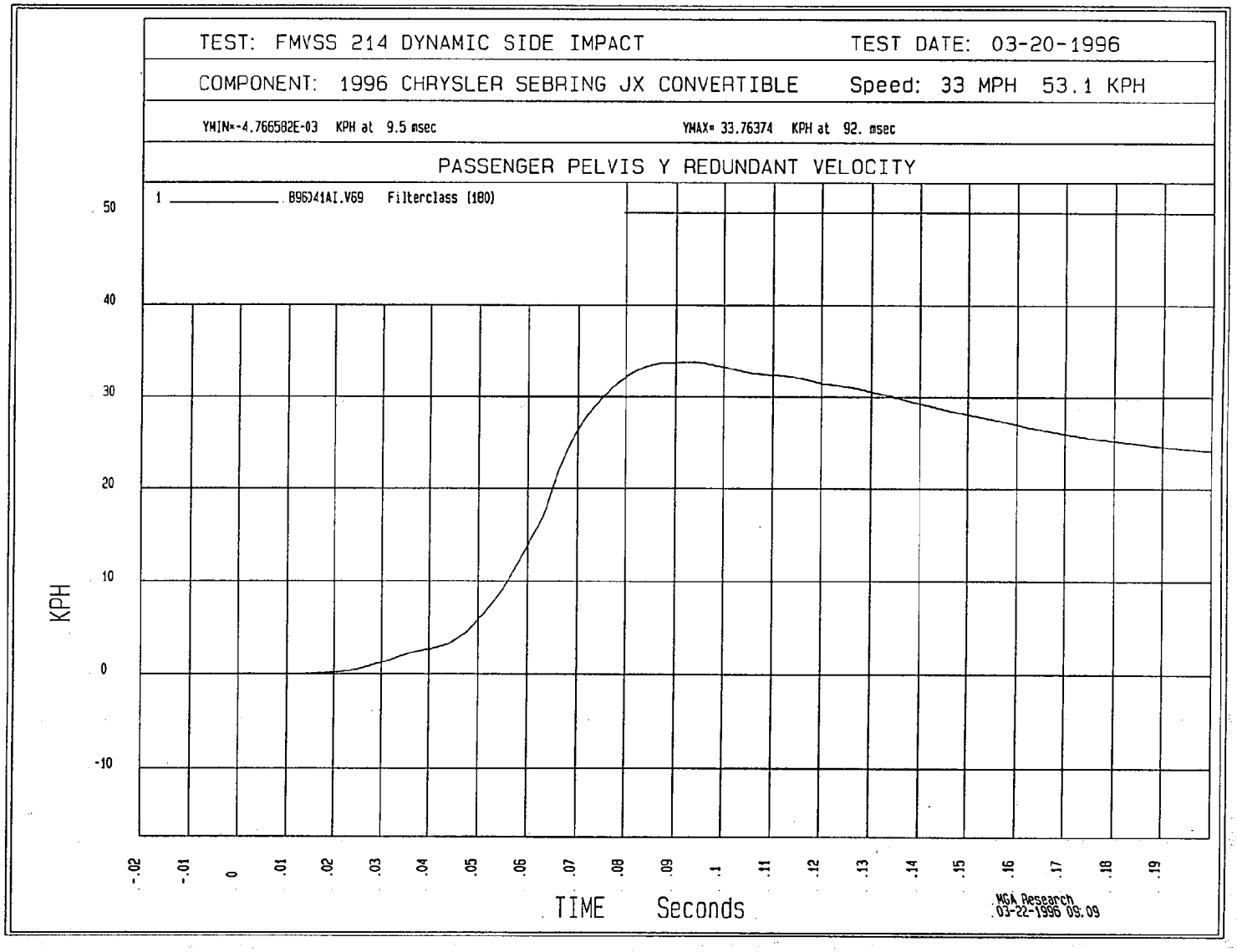
TIME (SECONDS)
MGA Research
03-22-1996 08:53


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-4.766582E-03 KPH at 9.5 msec
YMAX= 33.76374 KPH at 92. msec
PASSENGER PELVIS Y REDUNDANT VELOCITY
1 B96041AI.V69 Filterclass (180)
KPH
50
40
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0
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-.01
0
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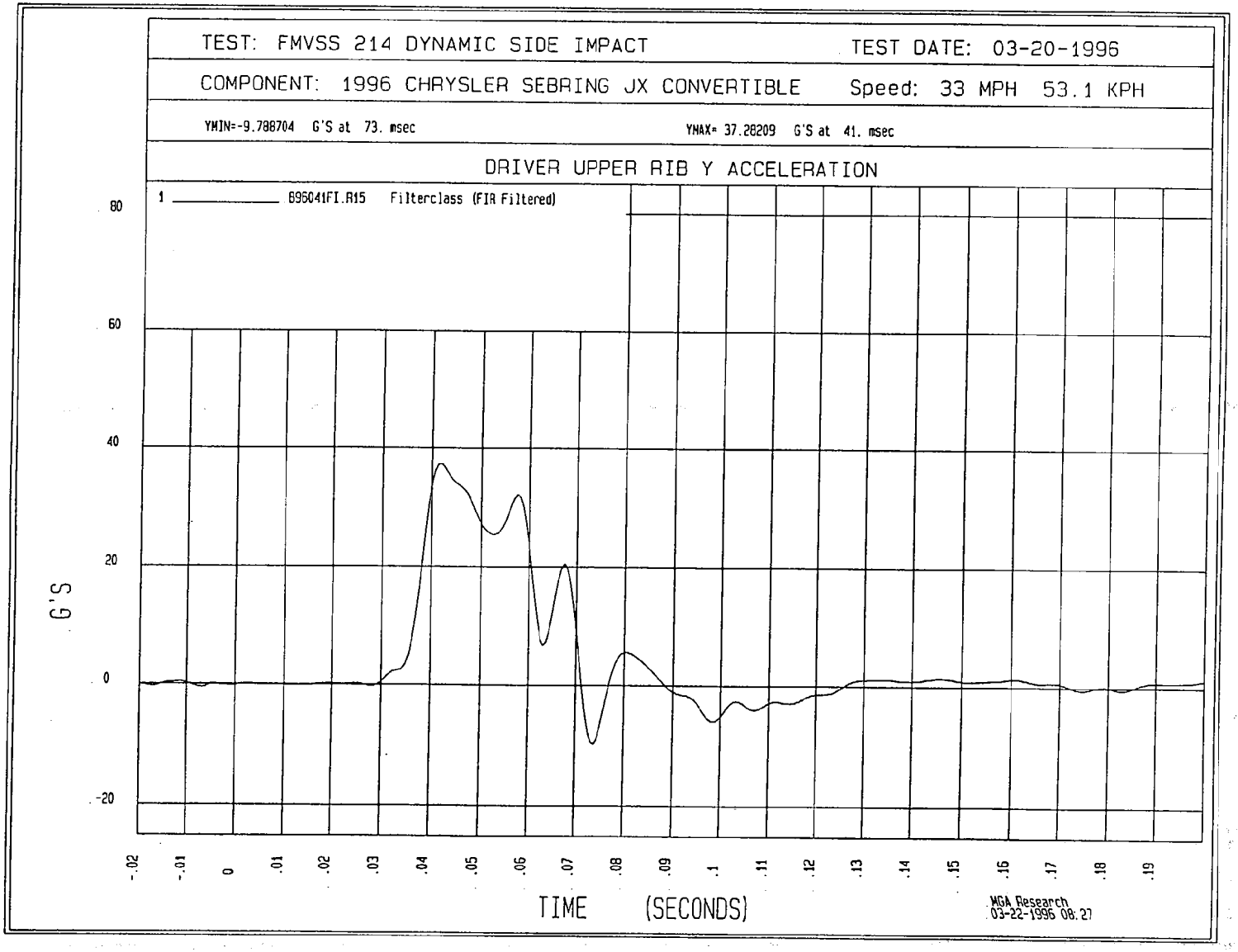
TIME Seconds
MGA Research
03-22-1996 09:09

FINITE IMPULSE RESPONSE (FIR) FILTERED DATA


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-9.788704 G'S at 73. msec
YMAX= 37.28209 G'S at 41. msec
DRIVER UPPER RIB Y ACCELERATION
1 _____ 895041FI.R15 Filterclass (FIR Filtered)
80
60
40
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0
-20
G'S
-.02
-.01
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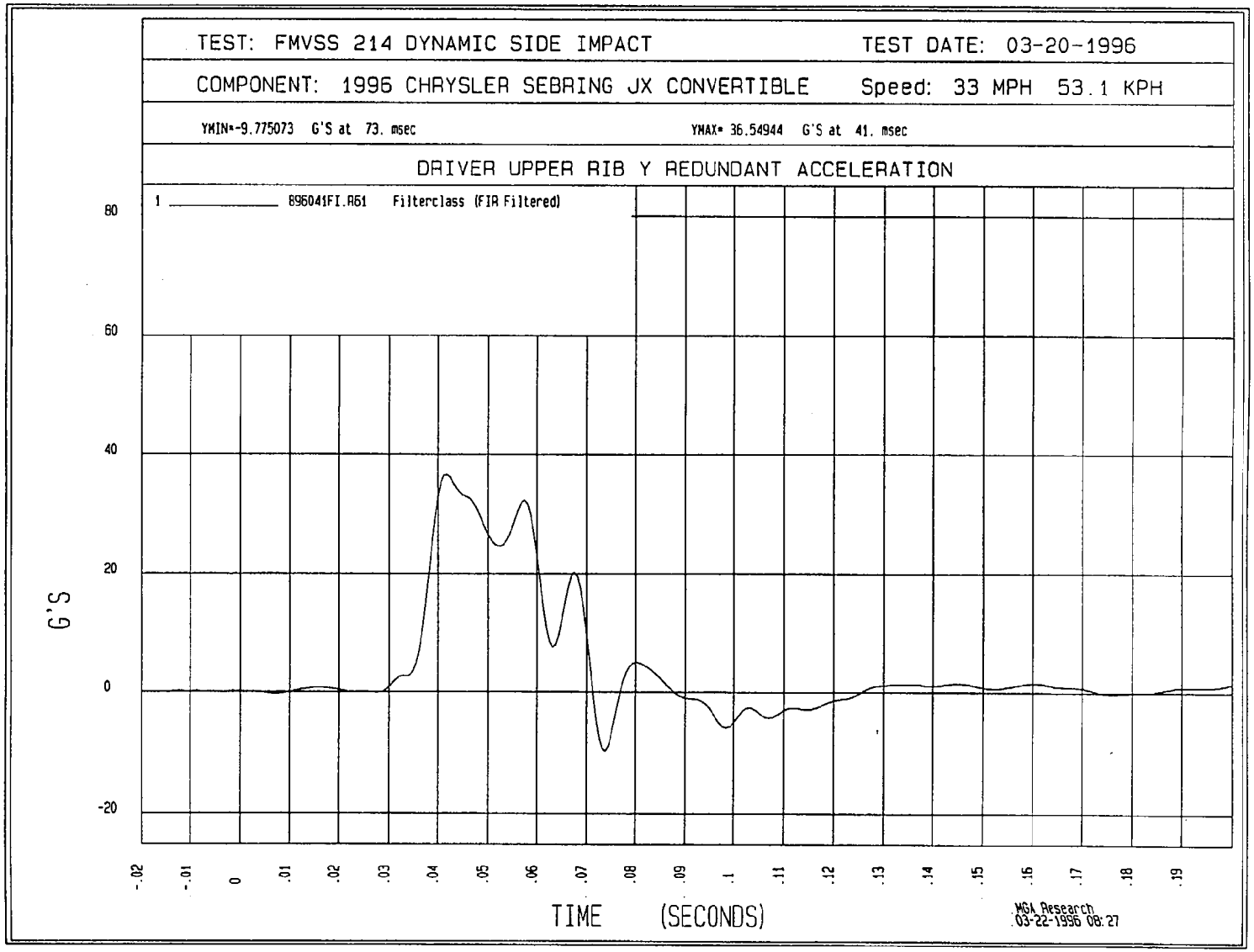
TIME (SECONDS)
MGA Research
03-22-1996 08:27


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-9.775073 G'S at 73. msec
YMAX= 36.54944 G'S at 41. msec
DRIVER UPPER RIB Y REDUNDANT ACCELERATION
1 896041FI.A61 Filterclass (FIR Filtered)
80
60
40
20
0
-20
G'S
-.02
-.01
0
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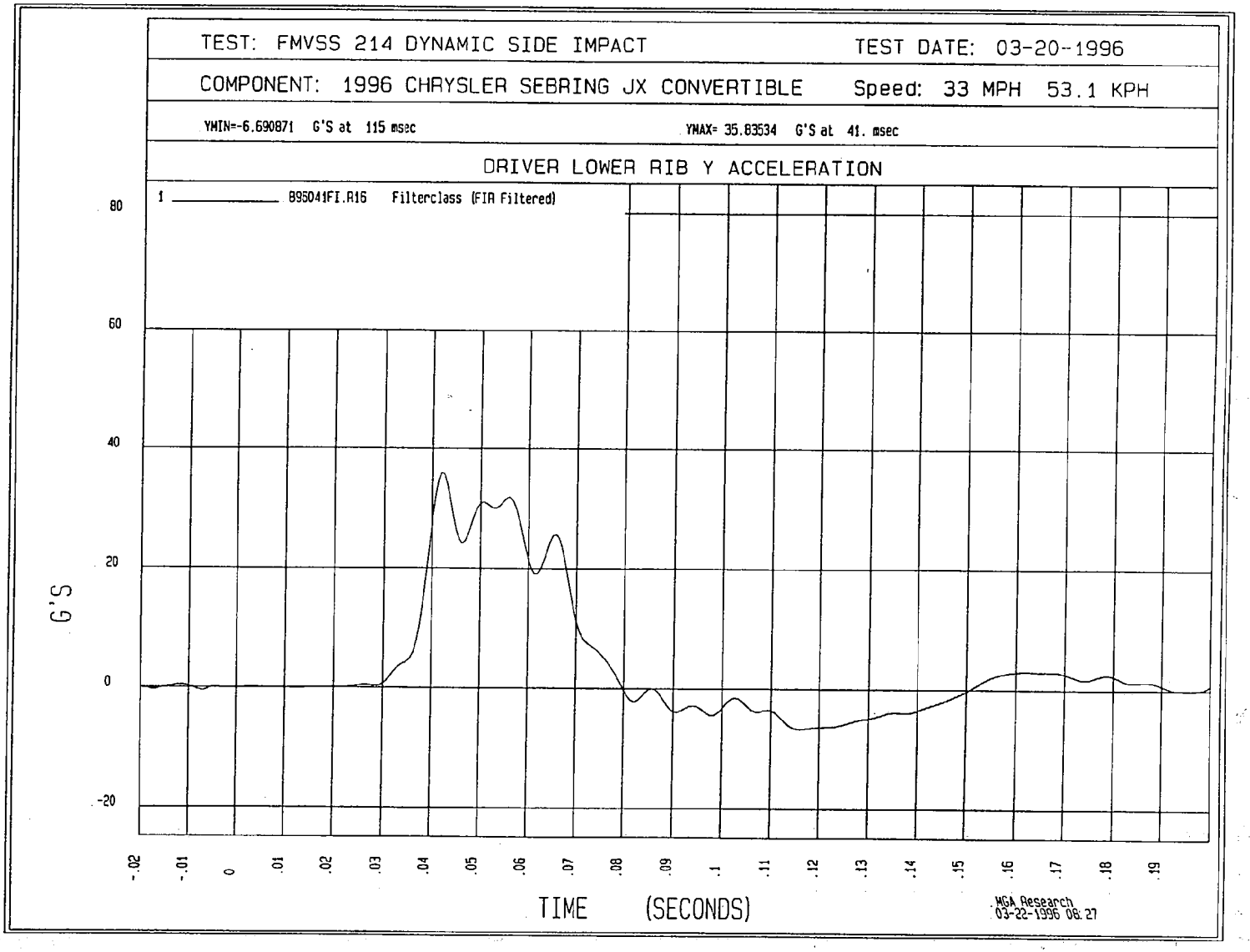
TIME (SECONDS)
MGA Research
03-22-1996 08:27


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-6.690871 G'S at 115 msec
YMAX= 35.83534 G'S at 41. msec
DRIVER LOWER RIB Y ACCELERATION
1 895041FI.R16 Filterclass (FIA Filtered)
80
60
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0
-20
G'S
-.02
-.01
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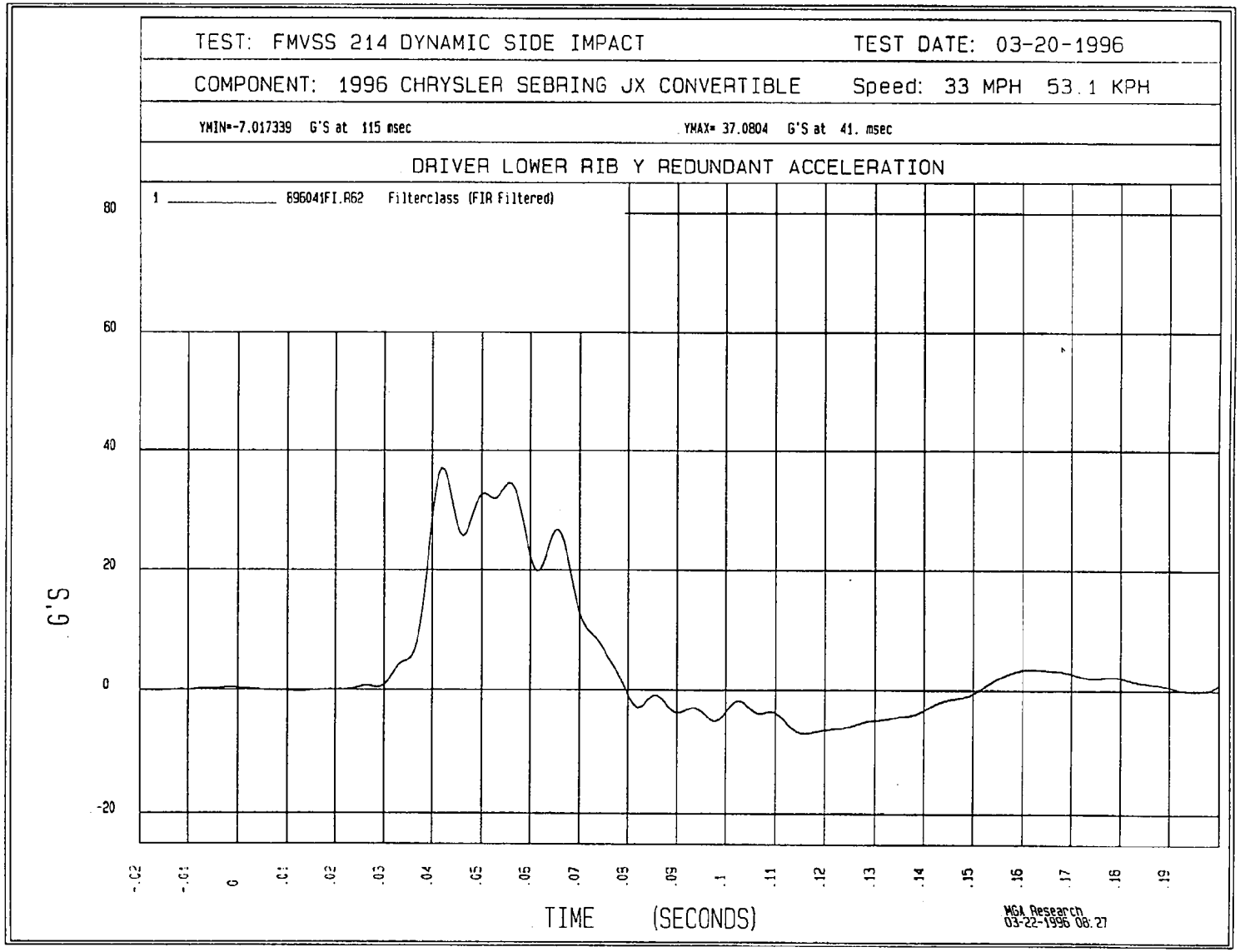
TIME (SECONDS)
MGA Research
03-22-1996 08:27


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-7.017339 G'S at 115 msec
YMAX= 37.0804 G'S at 41. msec
DRIVER LOWER RIB Y REDUNDANT ACCELERATION
1 896041FI.R62 Filterclass (FIR Filtered)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
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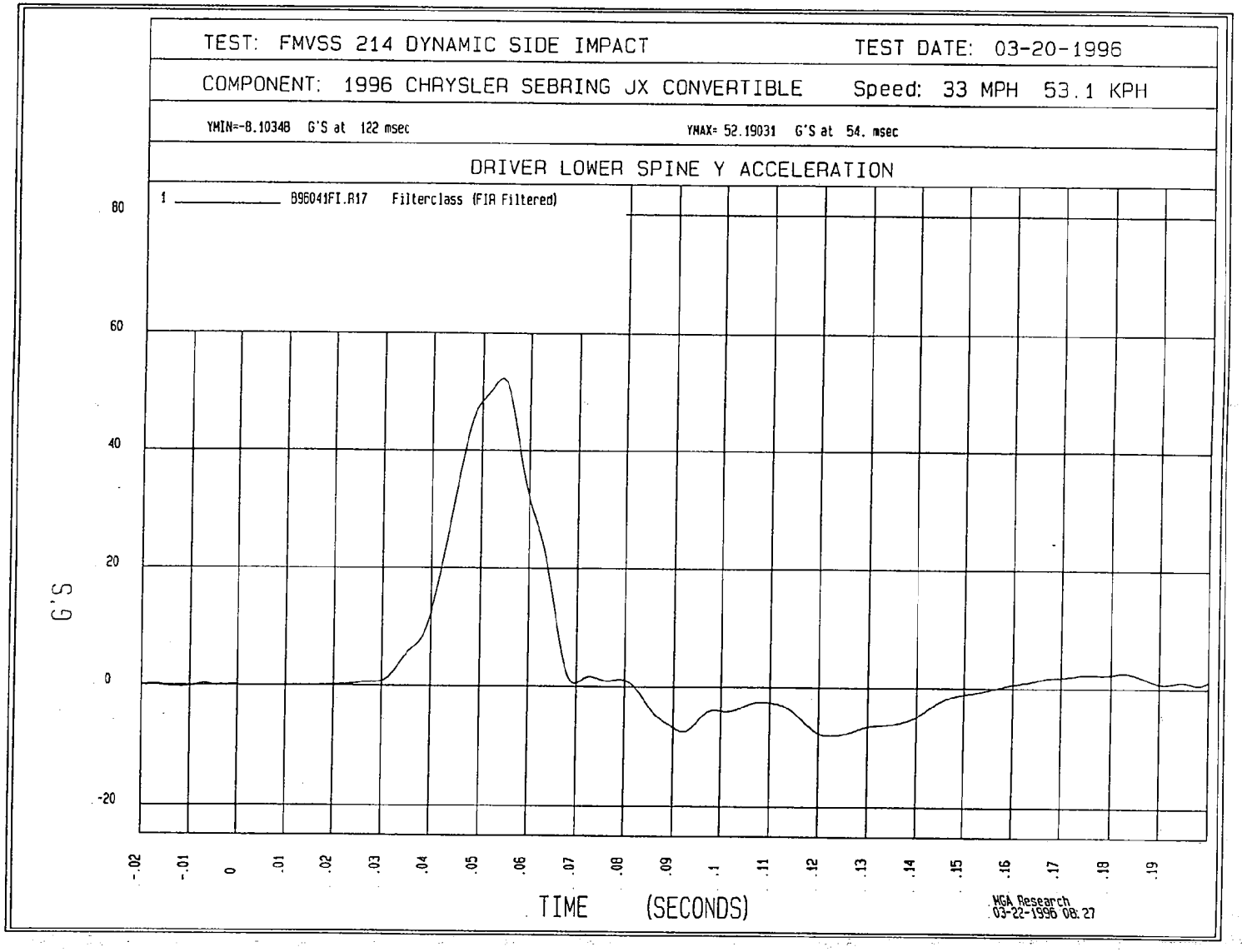
TIME (SECONDS)
MGA Research
03-22-1996 08:27


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-8.10348 G'S at 122 msec
YMAX= 52.19031 G'S at 54. msec
DRIVER LOWER SPINE Y ACCELERATION
1 B96041FI.A17 Filterclass (FIA Filtered)
80
60
40
20
0
-20
G'S
-.02
-.01
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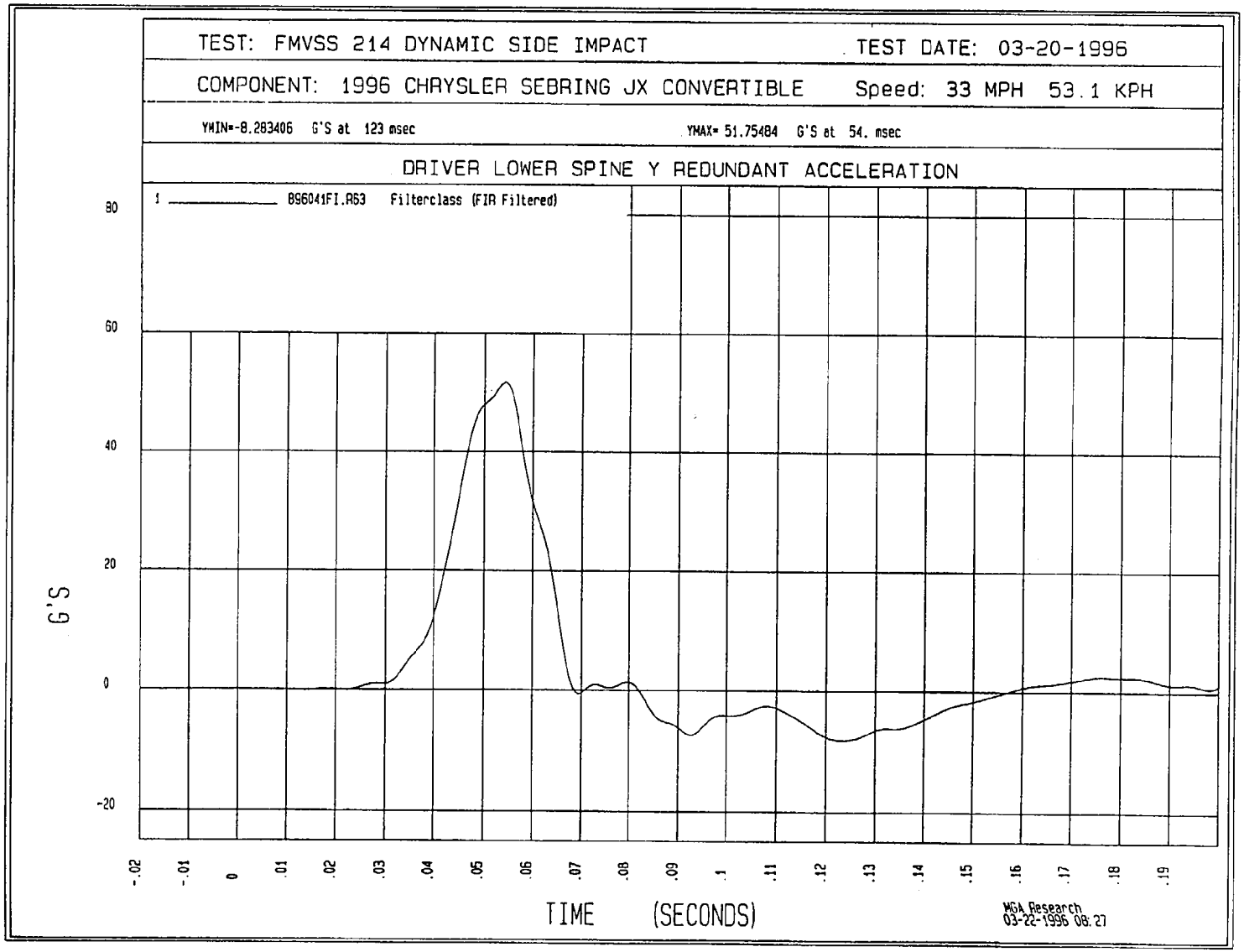
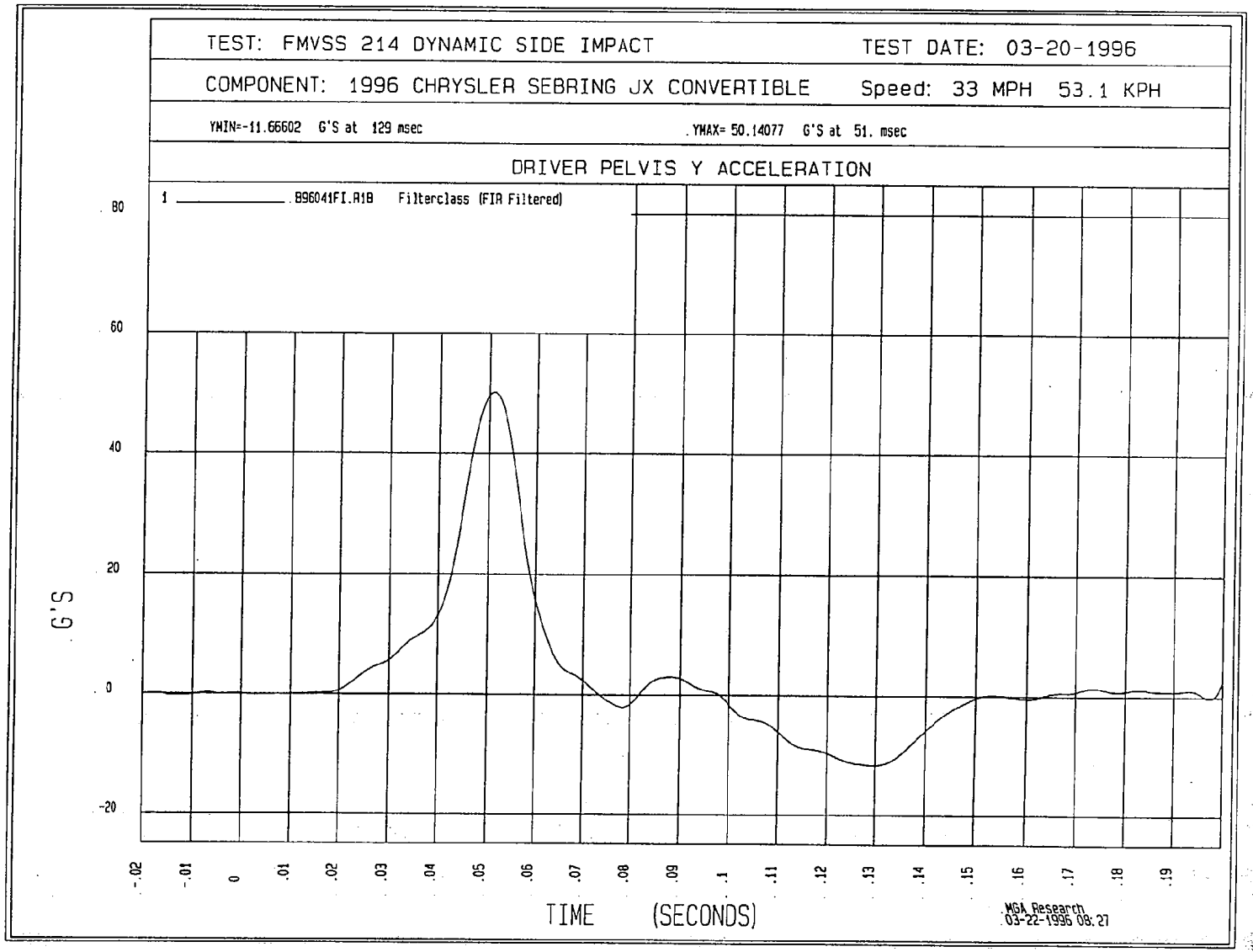
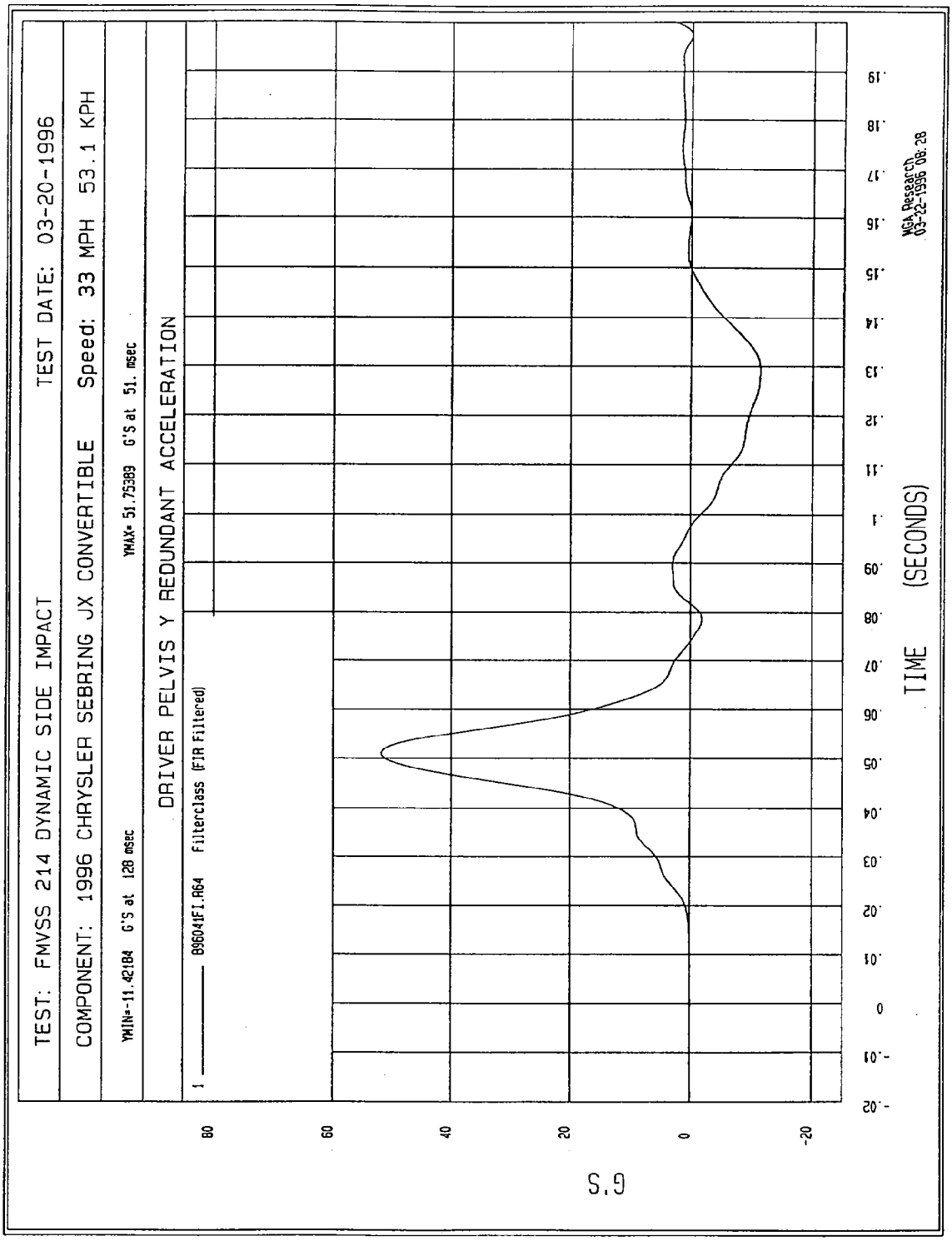
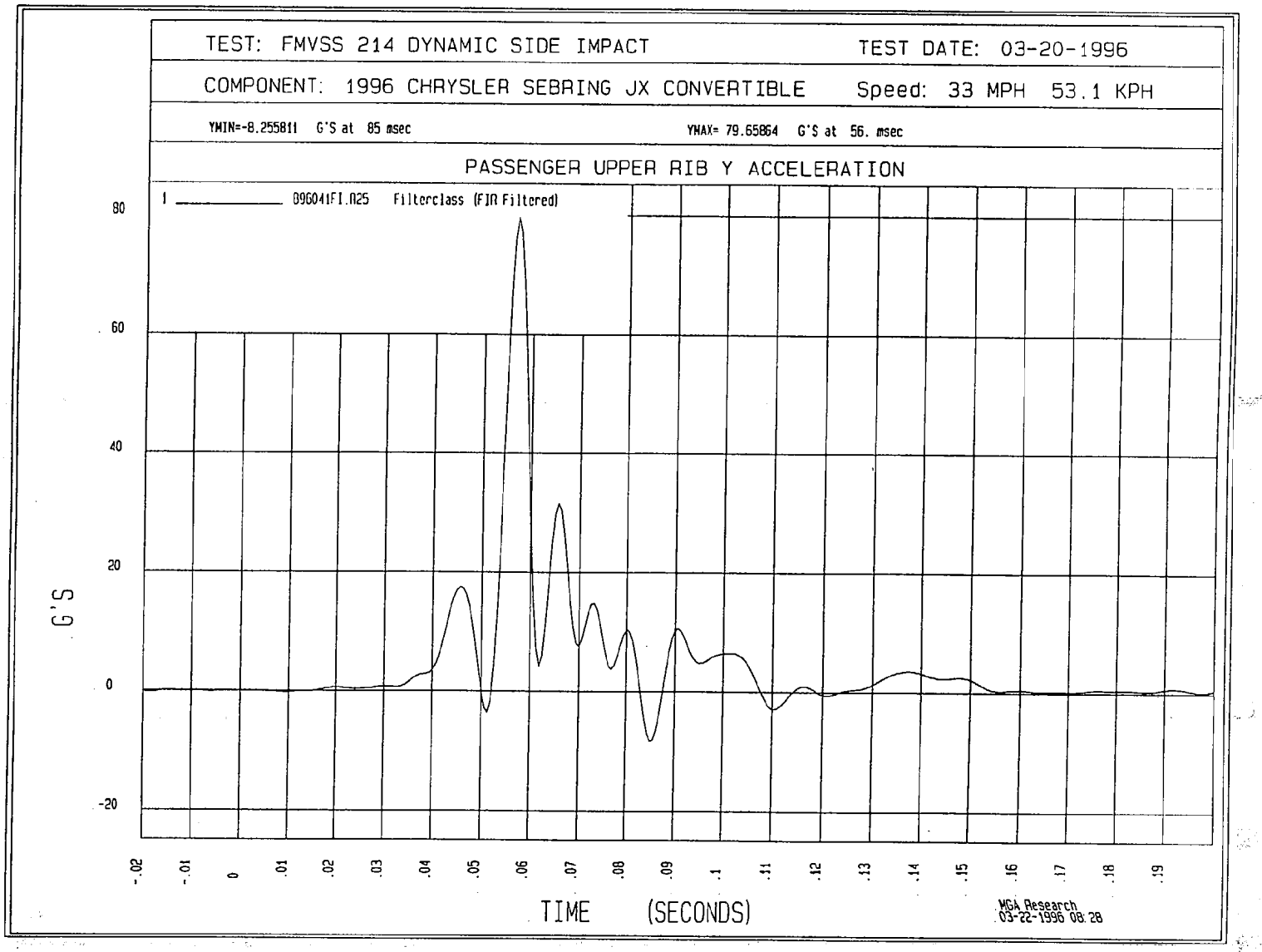
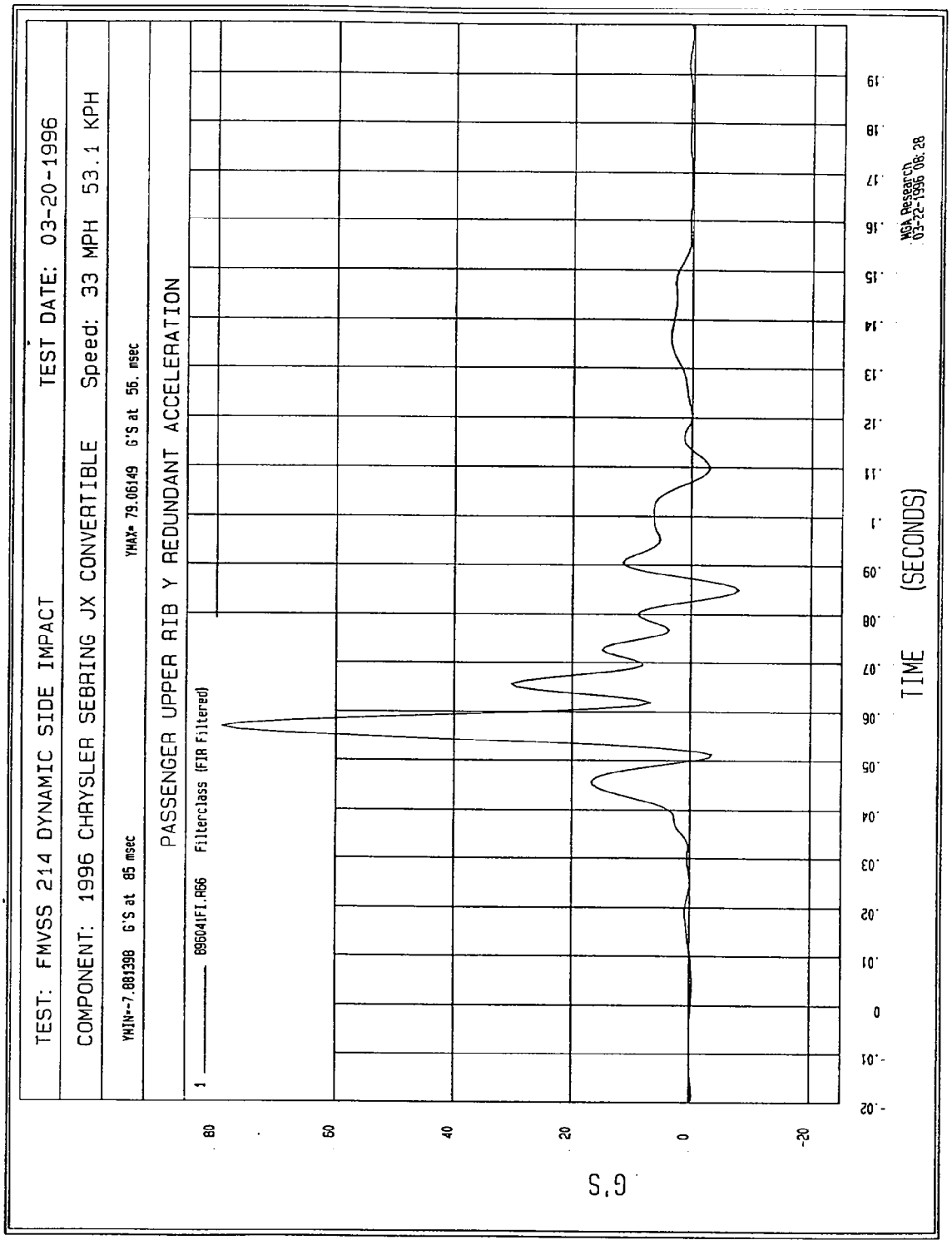
TIME (SECONDS)
MGA Research
03-22-1996 08:27

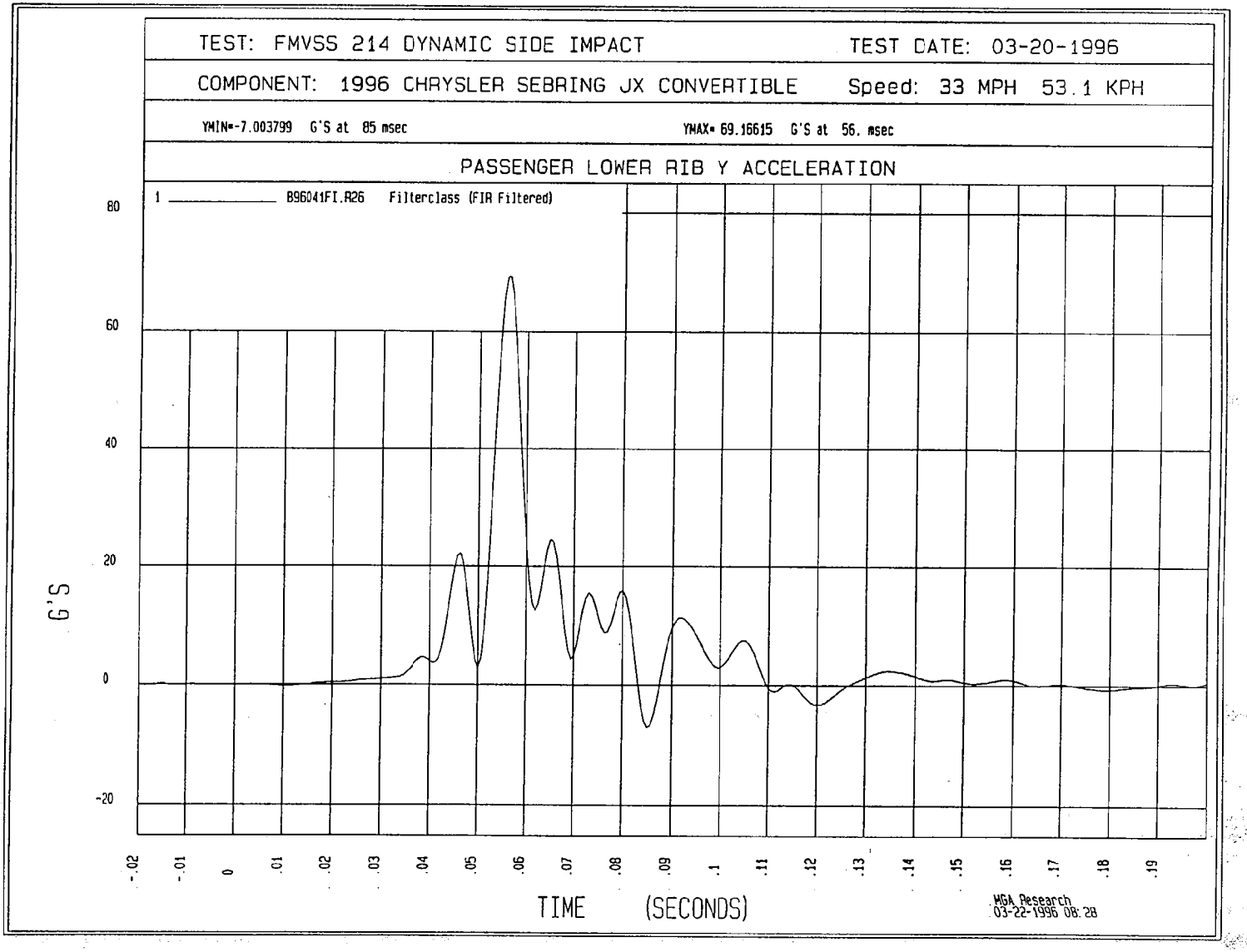

TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-8.283406 G'S at 123 msec
YMAX= 51.75484 G'S at 54. msec
DRIVER LOWER SPINE Y REDUNDANT ACCELERATION
1 B96041FI.A63 Filterclass (FIR Filtered)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:27

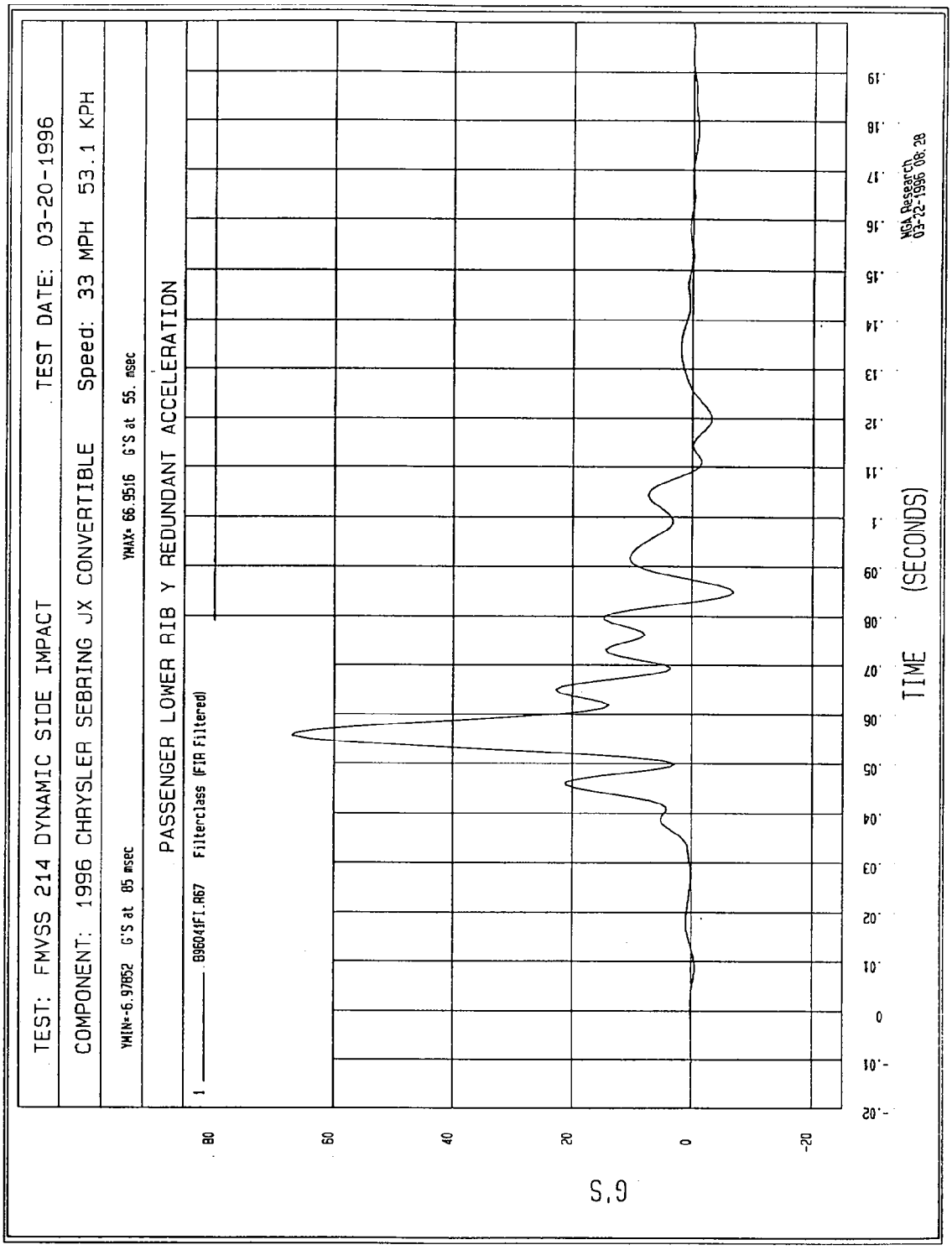

TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-11.66602 G'S at 129 msec
YMAX= 50.14077 G'S at 51. msec
DRIVER PELVIS Y ACCELERATION
1 896041FI.A1B Filterclass (FIR Filtered)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:27

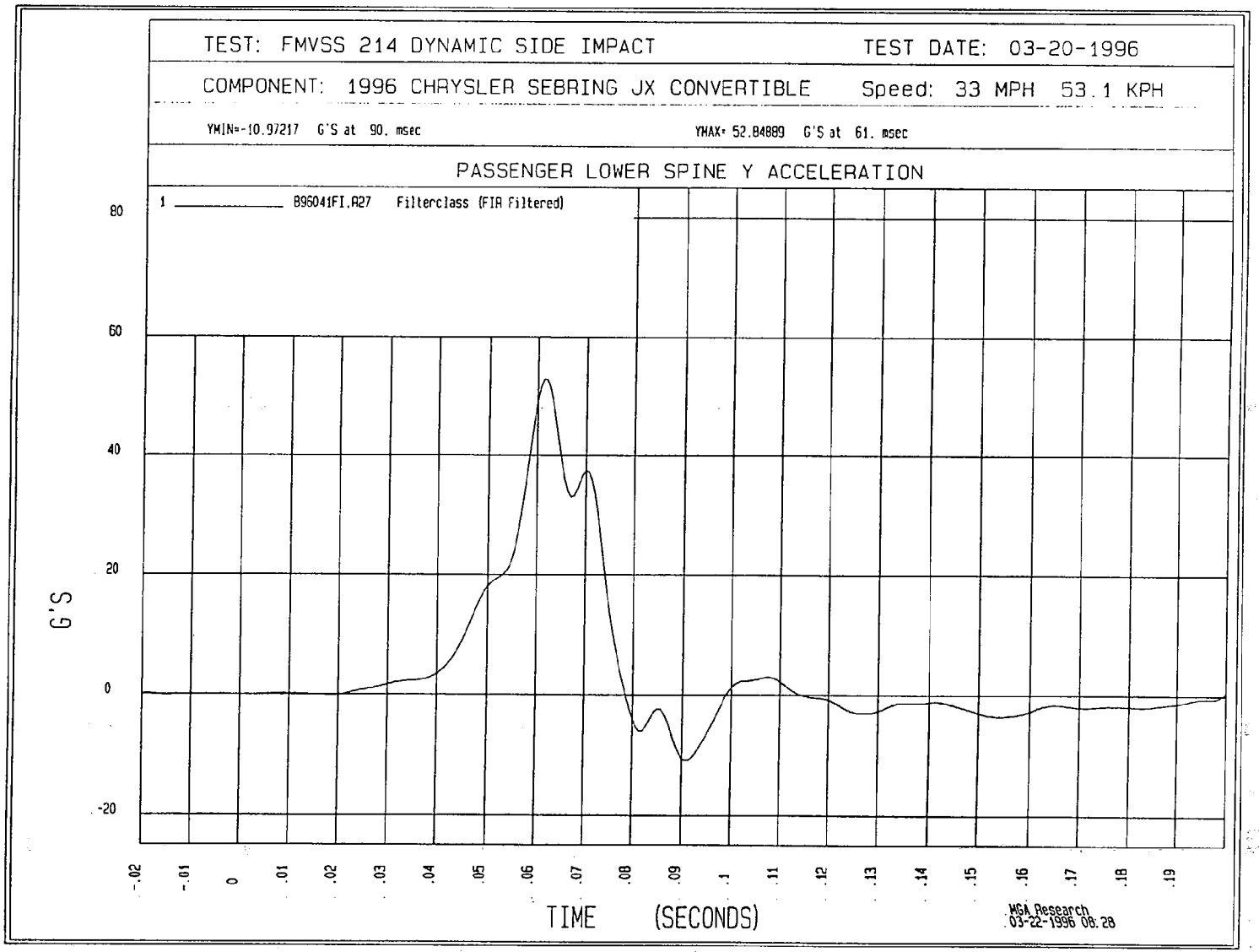

TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-11.42184 G'S at 128 msec
YMAX= 51.75389 G'S at 51. msec
DRIVER PELVIS Y REDUNDANT ACCELERATION
1 ——— 896041FI.RG4 Filterclass (FIR Filtered)
80
60
40
20
0
-20
G'S
.19
.18
.17
.16
.15
.14
.13
.12
.11
.1
.09
.08
.07
.06
.05
.04
.03
.02
.01
0
-.01
-.02
TIME (SECONDS)
MGA Research
03-22-1996 08:28

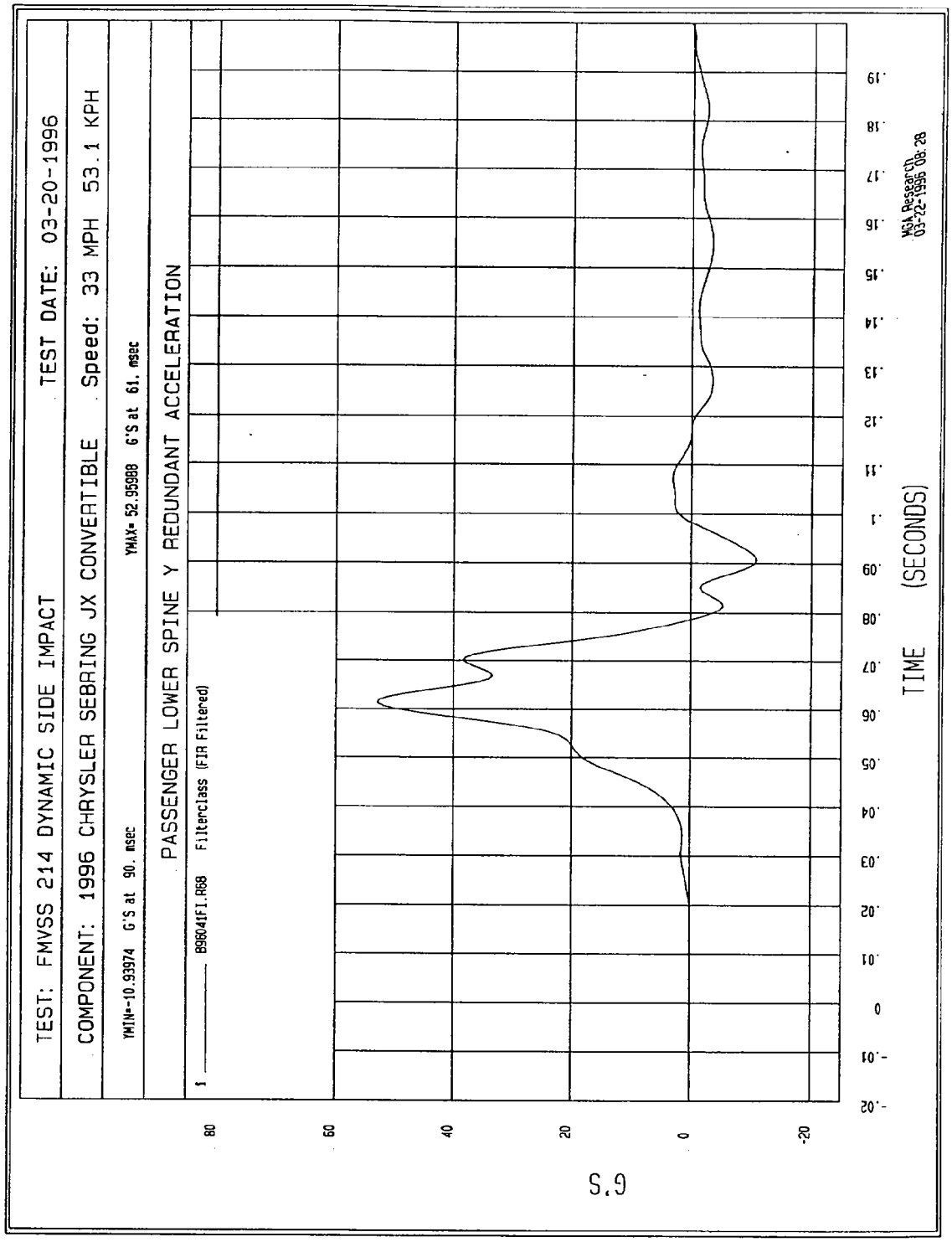

TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-8.255811 G'S at 85 msec
YMAX= 79.65864 G'S at 56. msec
PASSENGER UPPER RIB Y ACCELERATION
1 096041FI.A25 Filterclass (FIR Filtered)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:28

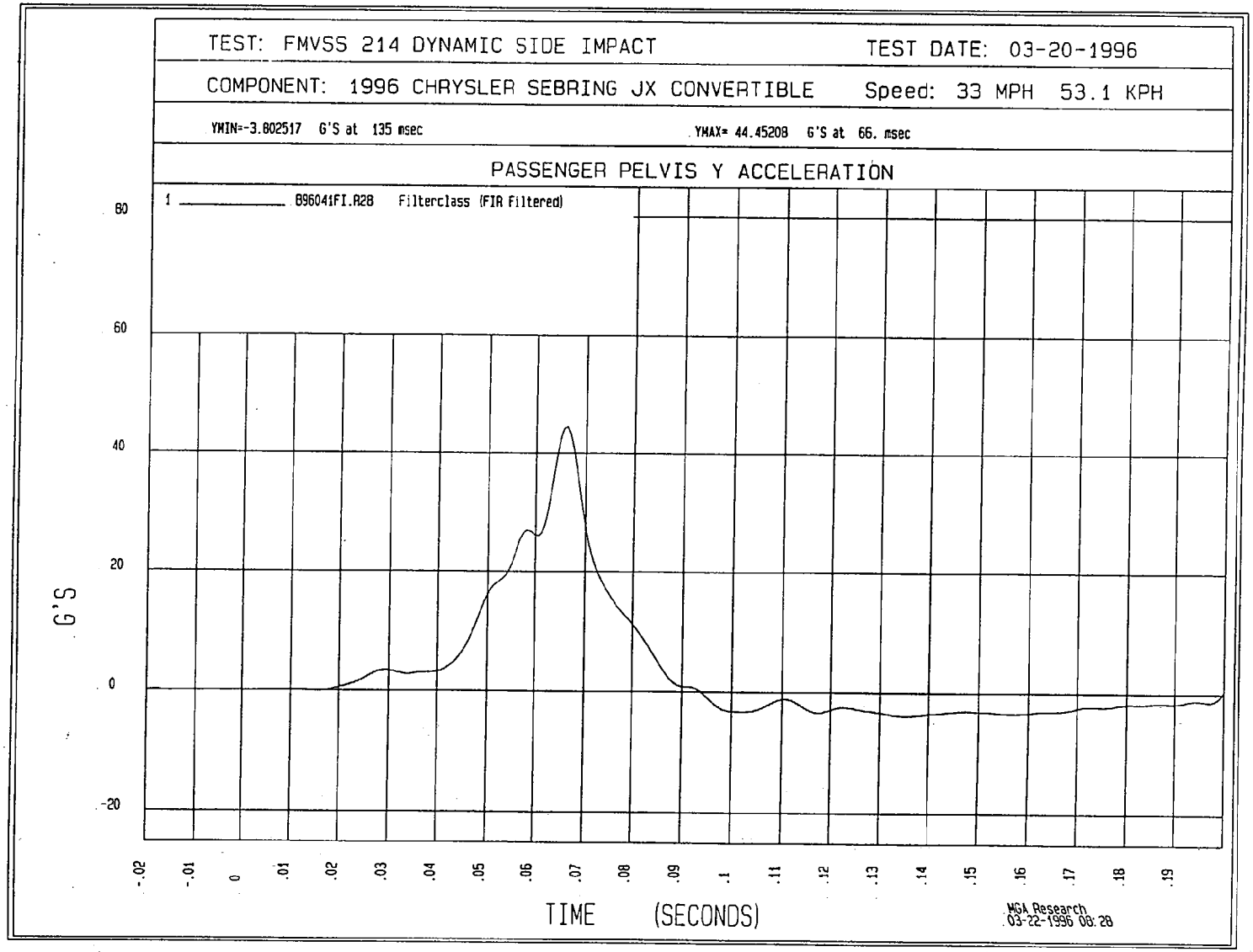

TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-7.881398 G'S at 85 msec
YMAX= 79.06149 G'S at 55. msec
PASSENGER UPPER RIB Y REDUNDANT ACCELERATION
1 ——— 896041FI.R66 Filterclass (FIR Filtered)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:28

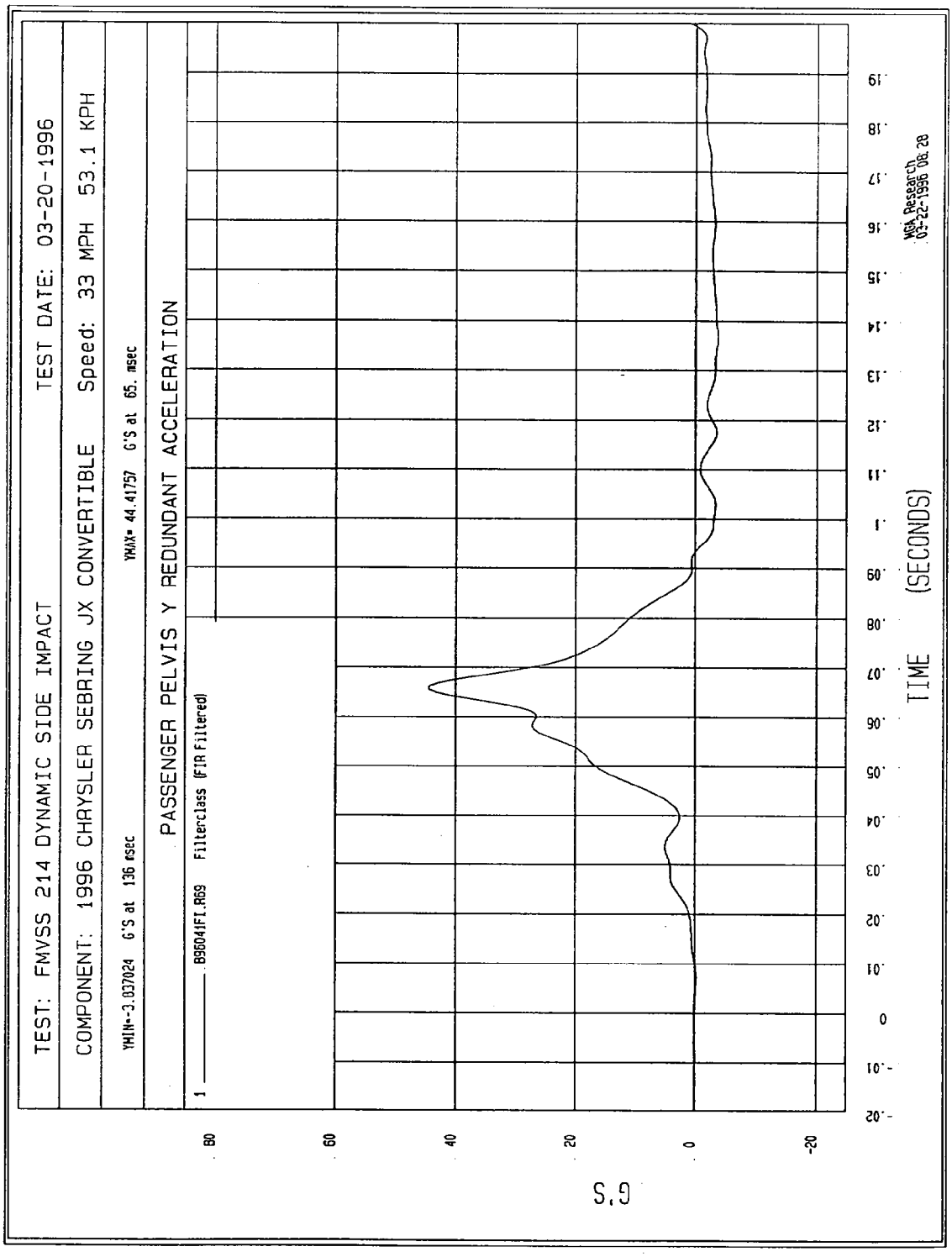

TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-7.003799 G'S at 85 msec
YMAX= 69.16615 G'S at 56. msec
PASSENGER LOWER RIB Y ACCELERATION
1 B96041FI.R26 Filterclass (FIR Filtered)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:28


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-6.97852 G'S at 85 msec
YMAX= 66.9516 G'S at 55. msec
PASSENGER LOWER RIB Y REDUNDANT ACCELERATION
1 ——— 896041FI.A67 Filterclass (FIR Filtered)
G'S
TIME (SECONDS)
MGA Research
03-22-1996 08:28


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-10.97217 G'S at 90. msec
YMAX= 52.84889 G'S at 61. msec
PASSENGER LOWER SPINE Y ACCELERATION
1 B96041FI.A27 Filterclass (FIR Filtered)
80
60
40
20
0
-20
G's
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:28


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-10.93974 G'S at 90. msec
YMAX= 52.95988 G'S at 61. msec
PASSENGER LOWER SPINE Y REDUNDANT ACCELERATION
1 B96041FI.R68 Filterclass (FIR Filtered)
80
60
40
20
0
-20
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:28
6'S


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-3.802517 G'S at 135 msec
YMAX= 44.45208 G'S at 66. msec
PASSENGER PELVIS Y ACCELERATION
1 B96041FI.A2B Filterclass (FIR Filtered)
80
60
40
20
0
-20
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:28


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 03-20-1996
COMPONENT: 1996 CHRYSLER SEBRING JX CONVERTIBLE
Speed: 33 MPH 53.1 KPH
YMIN=-3.037024 G'S at 136 msec
YMAX= 44.41757 G'S at 65. msec
PASSENGER PELVIS Y REDUNDANT ACCELERATION
1 B96041FI.R69 Filterclass (FIR Filtered)
80
60
40
20
0
-20
G's
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
03-22-1996 08:28

# APPENDIX C

# SID CONFIGURATION AND PERFORMANCE VERIFICATION

REPORT NO. MGA-96-DC17

# DUMMY PERFORMANCE CALIBRATIONS

## FMVSS 214 - SIDE IMPACT TEST

CHRYSLER CORPORATION
1996 CHRYSLER SEBRING CONVERTIBLE
NHTSA NO. CT0309

MGA PROVING GROUNDS
5000 WARREN ROAD
BURLINGTON, WI 53105

Test Date: March 20, 1996

Report Date: April 1, 1996

FINAL REPORT

Prepared For:

U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
MAIL CODE: NEF-30
400 SEVENTH STREET, S.W., ROOM 6115
Washington, D.C. 20590

TABLE OF CONTENTS

PRE-TEST CERTIFICATION DATA

Driver Dummy Serial Number: 271

Calibration Test Results Summary

Dummy Serial Number: 271

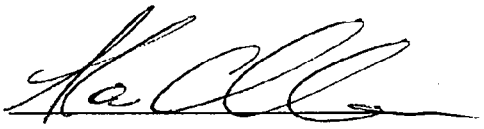
Pre-Test Calibration

| | |
|---|---|
| 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

DUMMY NO.: 271 DATE OF VERIFICATION: March 4, 1996

| DESCRIPTION | SPECIFICATION | TEST RESULTS |
|---|---|---|
| SH - Seated Height | 35.0" - 35.8" | 35.4 |
| RH - Rib Height | 19.75" - 20.50" | 20.40 |
| HP - Hip Pivot Height | 3.9" ref. | 3.9 |
| RD - Rib From Back Line | 9.0" to 9.5" | 9.4 |
| KV - Knee Pivot From Back Line | 20.1" - 20.7" | 20.4 |
| SW - Knee Pivot to Floor | 19.3" - 19.9" | 19.5 |
| HW - Hip Width | 14.0" - 15.4" | 15.0 |

MEASUREMENTS BY: 

APPROVED BY: 

MGA RESEARCH CORPORATION

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: March 1, 1996

DUMMY NUMBER: 271 TEST NUMBER: D96432

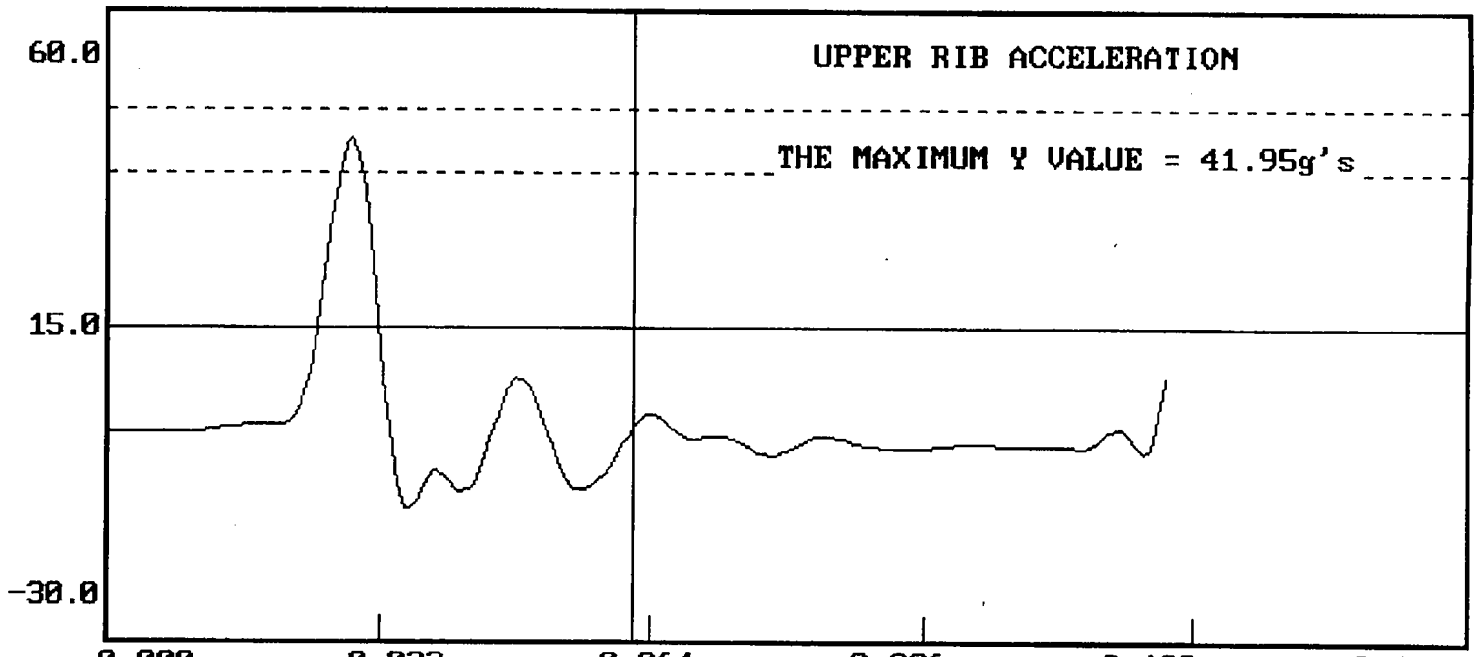
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 20% |
| PROBE SPEED | 13.8 - 14.2 fps | 14.1 |
| UPPER RIB | 37 - 46 g's | 42 |
| LOWER RIB | 37 - 46 g's | 42 |
| LOWER SPINE | 15 - 22 g's | 20 |

TEST MEETS SPECIFICATIONS

TECHNICIAN _____

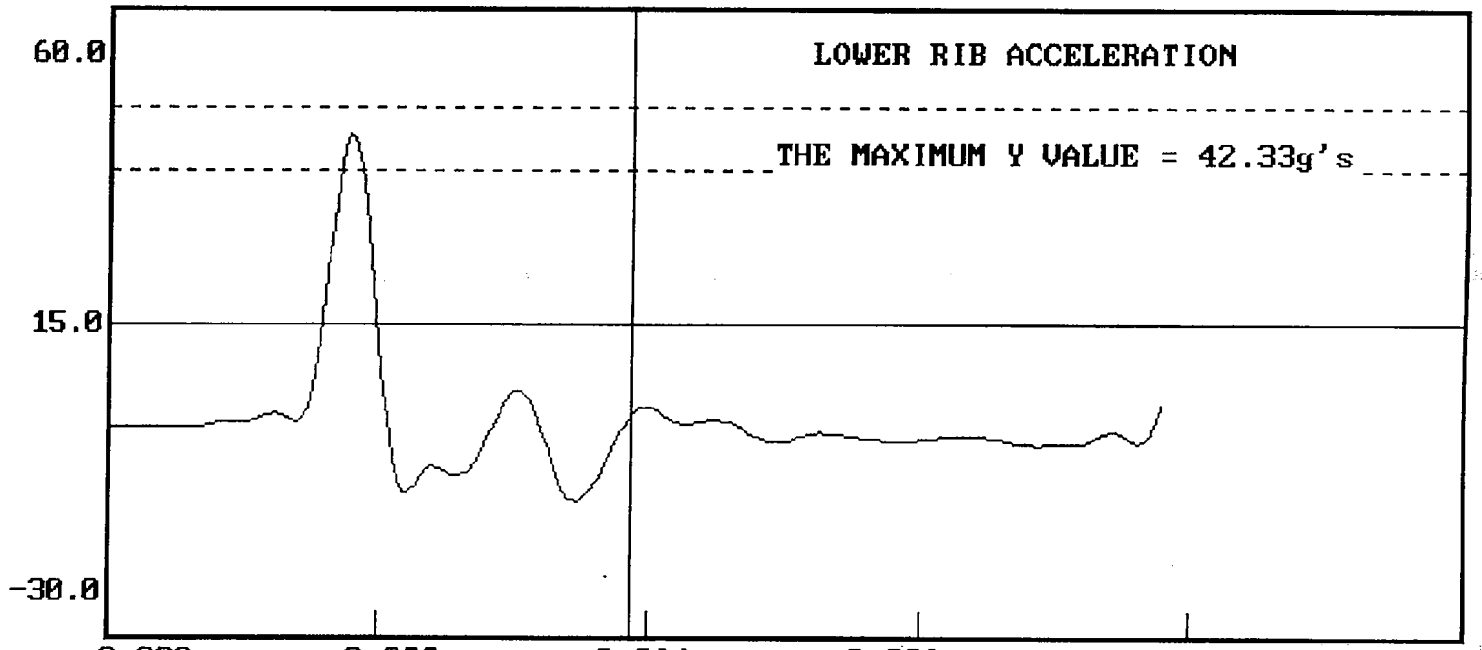
APPROVED BY _____

DUMMY CALIBRATION - THORAX IMPACT 03-01-1996 15:13
DUMMY # 271
ACCELERATION (G'S) VS. TIME ((SECONDS))



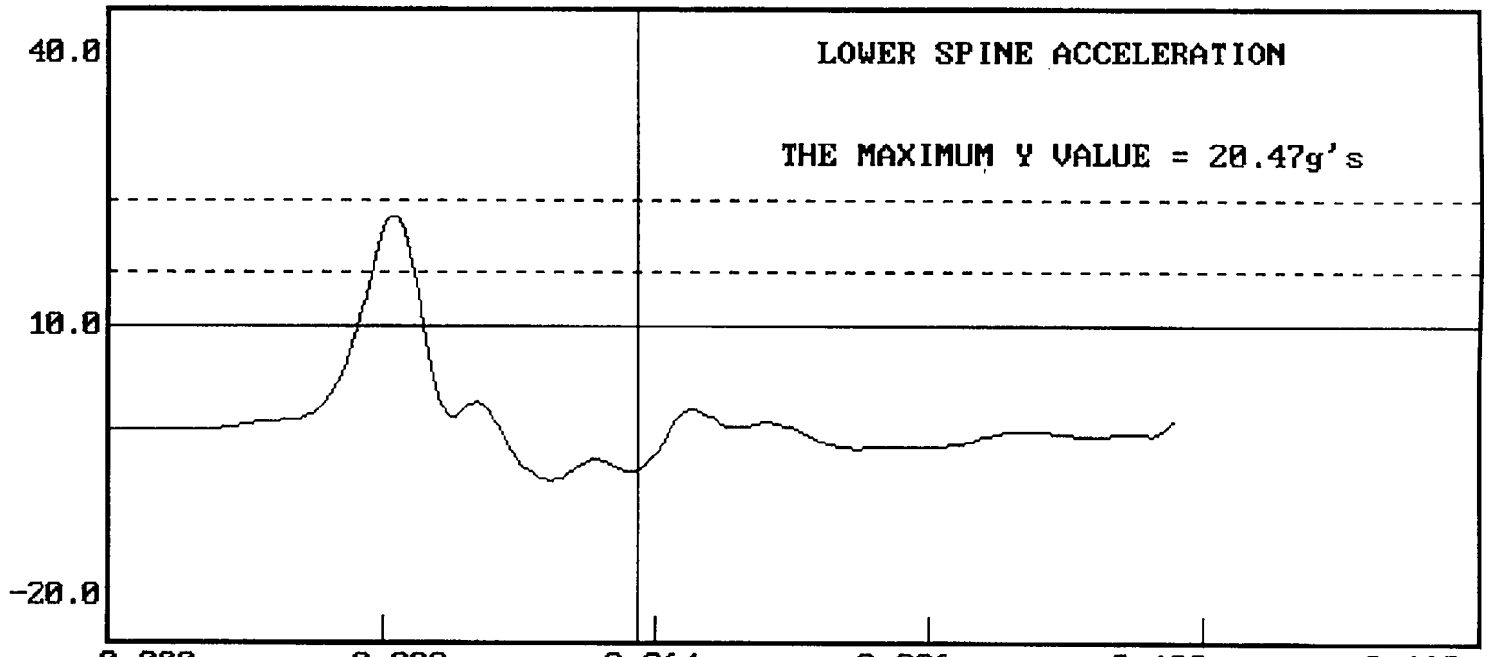

X = 0.618750E-01 Y = 0.670265E+00
IMPACT SPEED = 14.07 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 03-01-1996 15:13
DUMMY # 271
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = 0.177267E+01
IMPACT SPEED = 14.07 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 03-01-1996 15:13
DUMMY # 271
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = -.377460E+01
IMPACT SPEED = 14.07 FT/SEC

MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

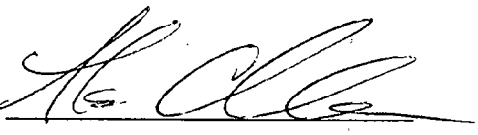
SIDE IMPACT DUMMY (SID)

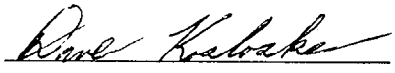
DATE: March 1, 1996

DUMMY NUMBER: 271 TEST NUMBER: D96433

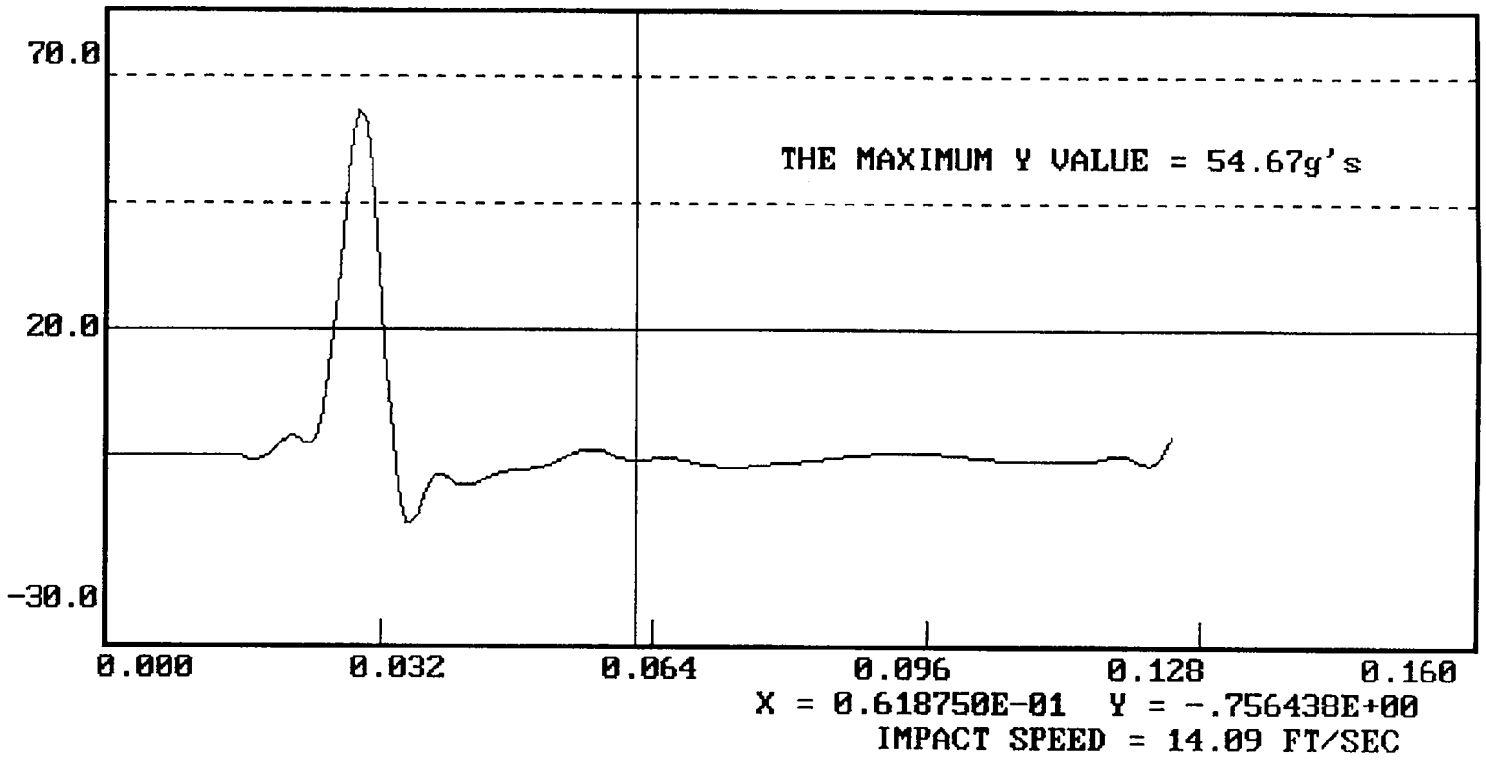
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 20% |
| PROBE SPEED | 13.8 - 14.2 f/s | 14.1 |
| PELVIS ACCELERATION | 40 - 60 g's | 55 |

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - PELVIS IMPACT 03-01-1996 15:21
DUMMY # 271
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = -.756438E+00
IMPACT SPEED = 14.09 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

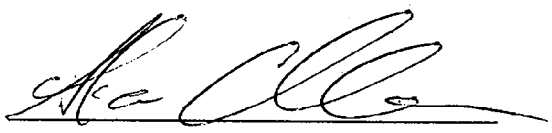
SIDE IMPACT DUMMY (SID)

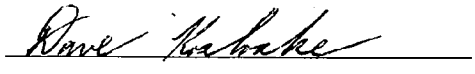
DATE: March 4, 1996

DUMMY NUMBER: 271 TEST NUMBER: D96434

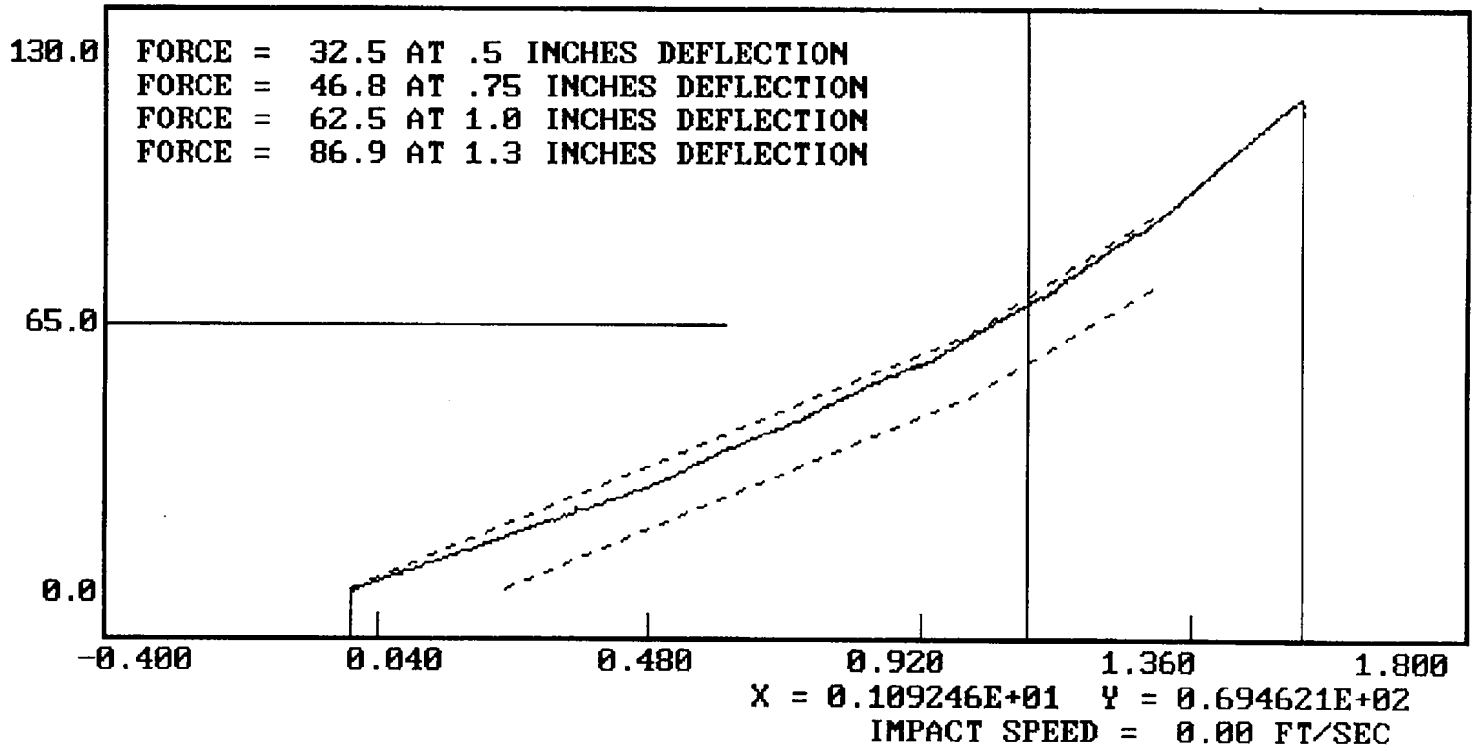
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 20% |
| FORCE @ 0.5 in | 23.3 - 36.5 lbs | 32.5 |
| FORCE @ 0.75 in | 36.7 - 49.8 lbs | 46.8 |
| FORCE @ 1.0 in | 50 - 63 lbs | 63 |
| FORCE @ 1.3 in | 73 - 88 lbs | 87 |

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - ABDOMEN COMPRESSION 03-04-1996 14:39
DUMMY # 271
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: March 4, 1996

DUMMY NUMBER: 271 TEST NUMBER: D96435

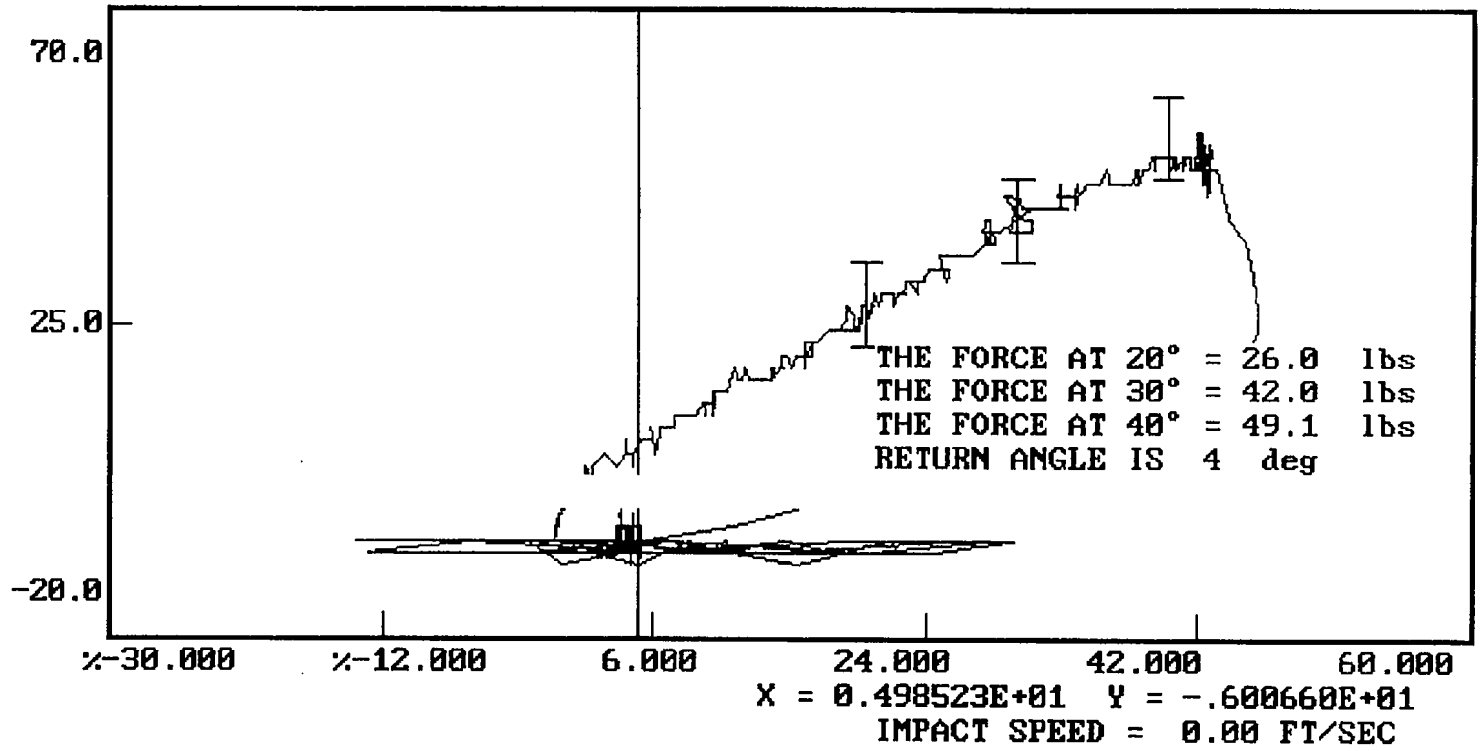
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 20% |
| FORCE @ 0° | 0 - 6 lbs | 0 |
| FORCE @ 20° | 22 - 34 lbs | 26 |
| FORCE @ 30° | 34 - 46 lbs | 42 |
| FORCE @ 40° | 46 - 58 lbs | 49 |
| RETURN ANGLE | 12° maximum | 4° |

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - LUMBAR FLEXION 03-04-1996 17:11
DUMMY # 271
FORCE (LBS) VS. TORSO ROTATION (DEGREES)



PRE-TEST CERTIFICATION DATA

Passenger Dummy Serial Number: 272

## Calibration Test Results Summary

Passenger Serial Number: 272

Pre-Test Calibration

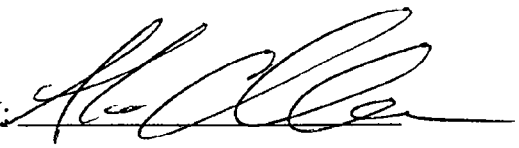
| | |
|---|---|
| External Dimensions: | The dummy passed all external dimension requirements. |
| Thorax Impact Test: | The thorax passed all impact test requirements. |
| Pelvic Impact Test: | The pelvis passed all impact test requirements. |
| Abdominal Compression Test: | The abdomen passed all compression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

SIDE IMPACT DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA

DUMMY NO.: 272

DATE OF VERIFICATION: March 6, 1996

| DESCRIPTION | SPECIFICATION | TEST RESULTS |
|---|---|---|
| SH - Seated Height | 35.0" - 35.8" | 35.2 |
| RH - Rib Height | 19.75" - 20.50" | 20.20 |
| HP - Hip Pivot Height | 3.9" ref. | 3.9 |
| RD - Rib From Back Line | 9.0" to 9.5" | 9.4 |
| KV - Knee Pivot From Back Line | 20.1" - 20.7" | 20.7 |
| SW - Knee Pivot to Floor | 19.3" - 19.9" | 19.6 |
| HW - Hip Width | 14.0" - 15.4" | 15.0 |

MEASUREMENTS BY: 

APPROVED BY: 

MGA RESEARCH CORPORATION

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: March 5, 1996

DUMMY NUMBER: 272 TEST NUMBER: D96442

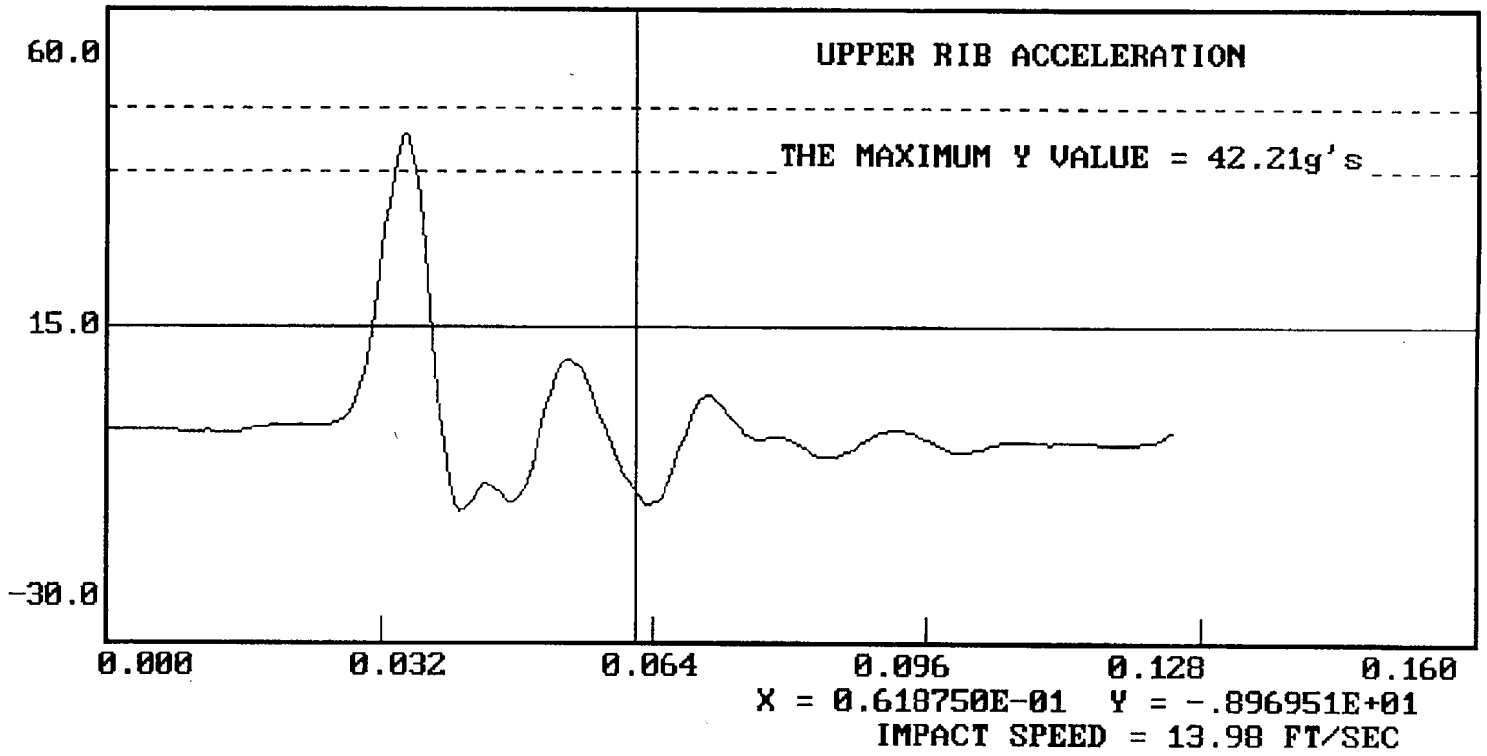
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 30% |
| PROBE SPEED | 13.8 - 14.2 fps | 14.0 |
| UPPER RIB | 37 - 46 g's | 42 |
| LOWER RIB | 37 - 46 g's | 42 |
| LOWER SPINE | 15 - 22 g's | 22 |

TEST MEETS SPECIFICATIONS

TECHNICIAN

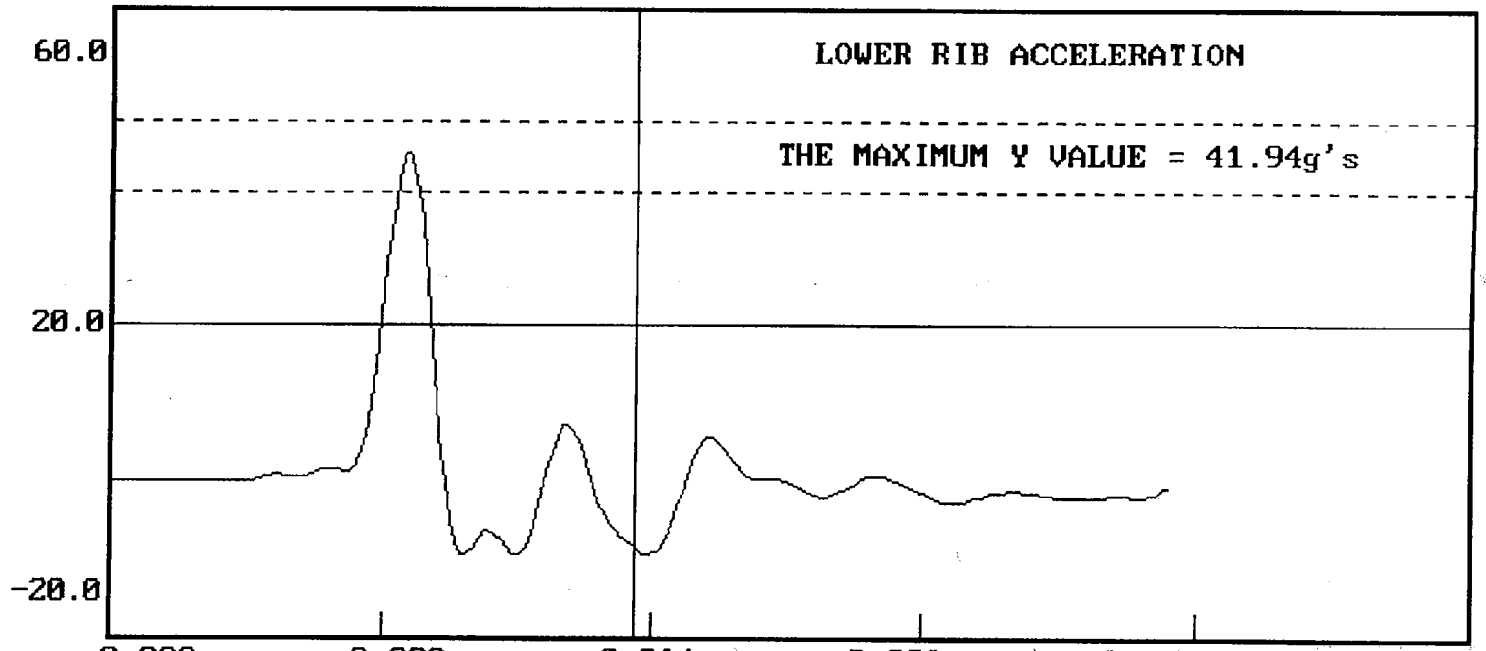
APPROVED BY

DUMMY CALIBRATION - THORAX IMPACT 03-05-1996 18:08
DUMMY # 272
ACCELERATION (G'S) VS. TIME ((SECONDS))



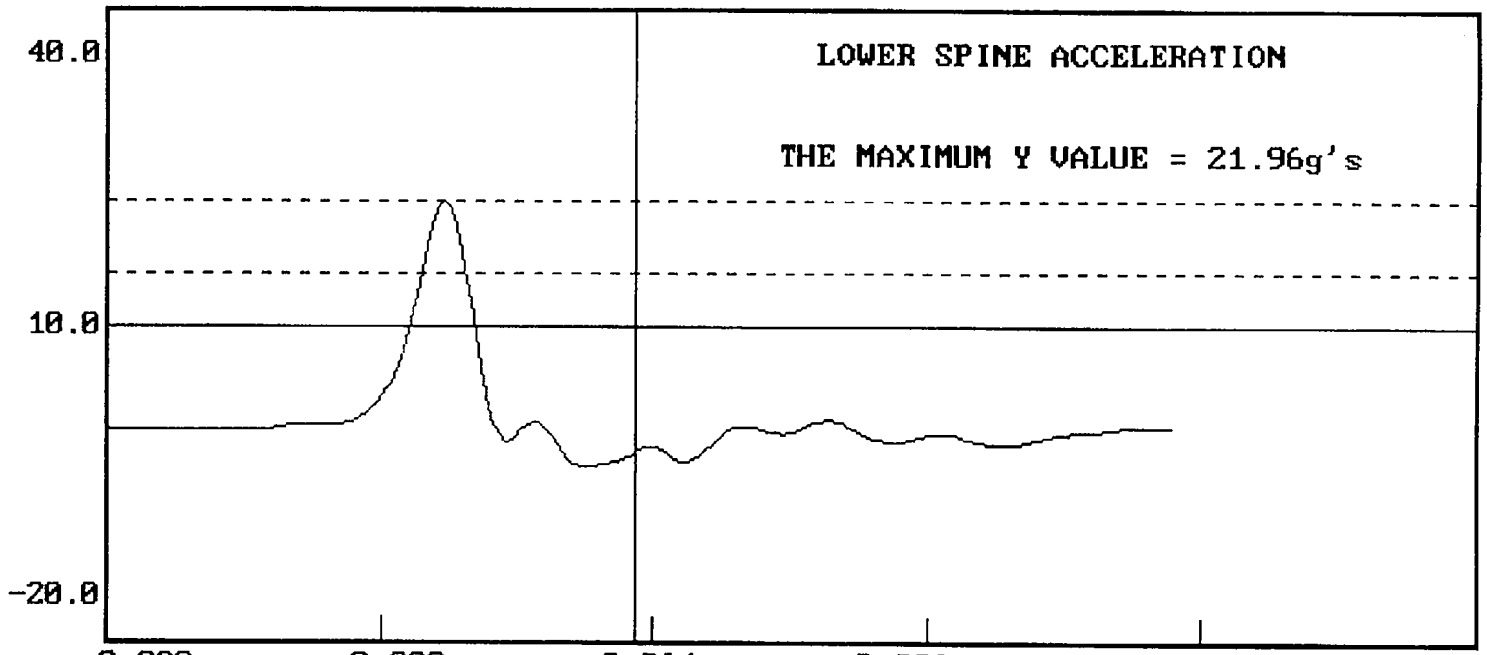

X = 0.618750E-01 Y = -.896951E+01
IMPACT SPEED = 13.98 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 03-05-1996 18:08
DUMMY # 272
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = -.864573E+01
IMPACT SPEED = 13.98 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 03-05-1996 18:08
DUMMY # 272
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = -.209688E+01
IMPACT SPEED = 13.98 FT/SEC

MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: March 6, 1996

DUMMY NUMBER: 272 TEST NUMBER: D96443

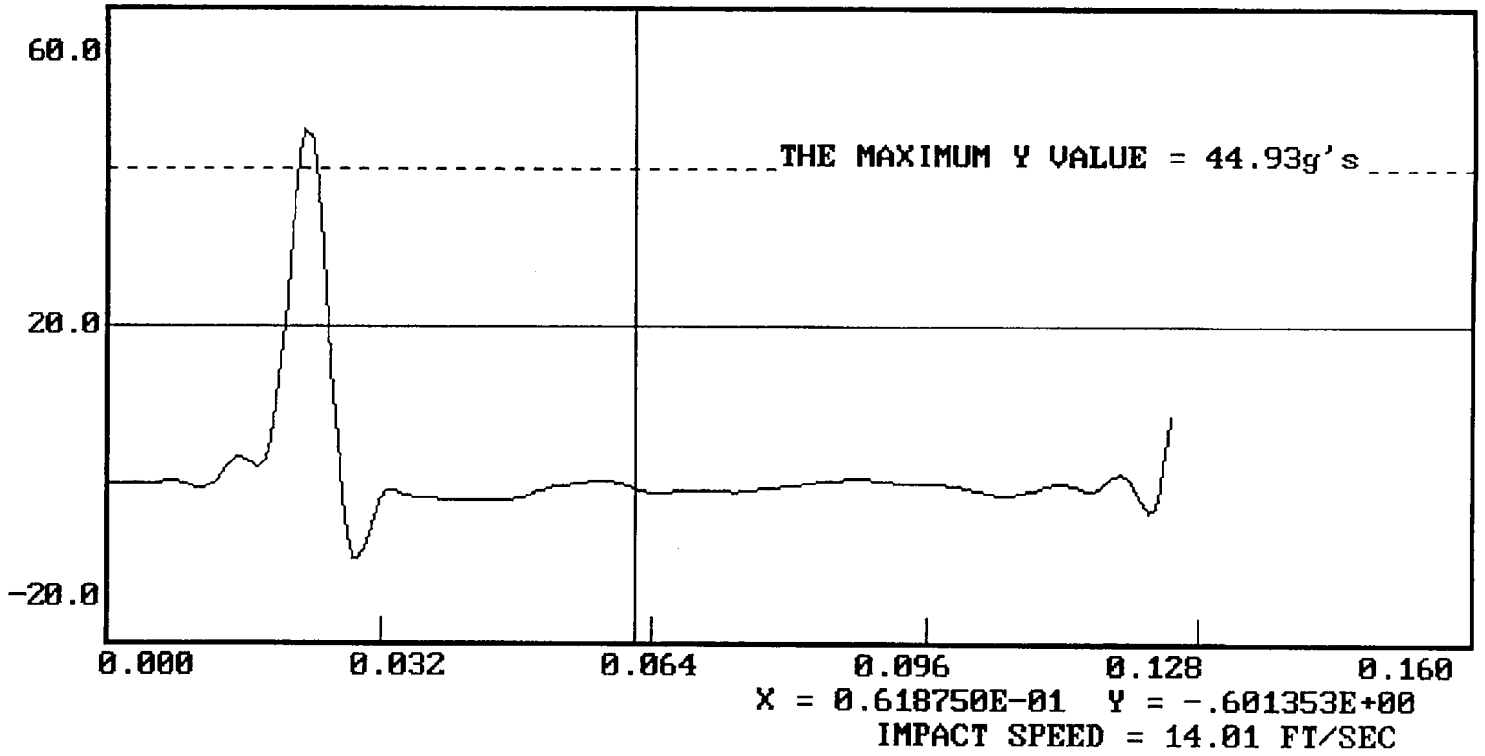
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 28% |
| PROBE SPEED | 13.8 - 14.2 f/s | 14.0 |
| PELVIS ACCELERATION | 40 - 60 g's | 45 |

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - PELVIS IMPACT 03-06-1996 08:36
DUMMY # 272
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = -.601353E+00
IMPACT SPEED = 14.01 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

SIDE IMPACT DUMMY (SID)

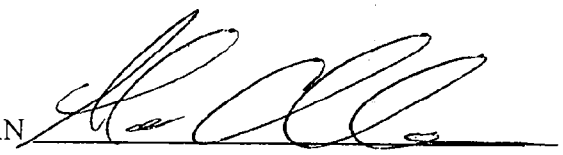
DATE: March 4, 1996

DUMMY NUMBER: 272

TEST NUMBER: D96444

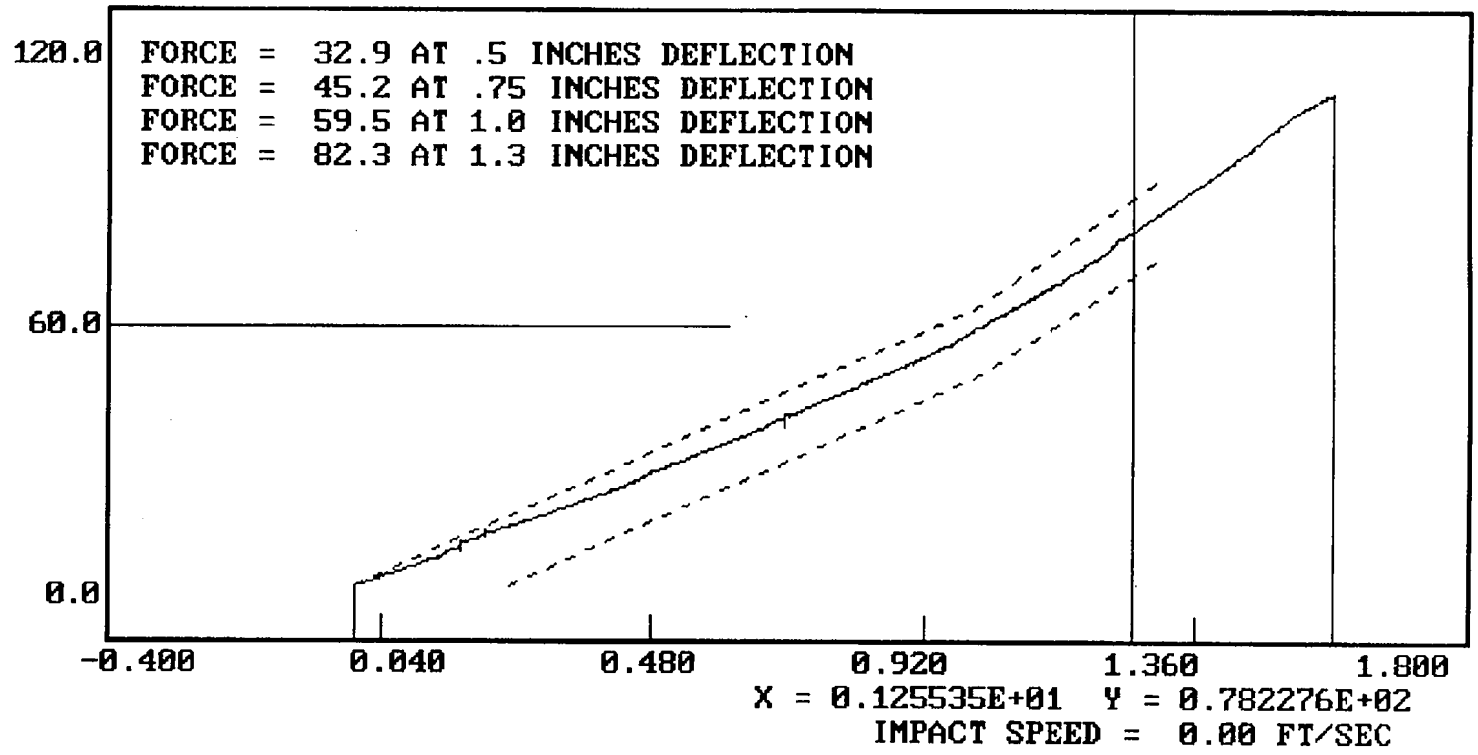
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 20% |
| FORCE @ 0.5 in | 23.3 - 36.5 lbs | 32.9 |
| FORCE @ 0.75 in | 36.7 - 49.8 lbs | 45.2 |
| FORCE @ 1.0 in | 50 - 63 lbs | 60 |
| FORCE @ 1.3 in | 73 - 88 lbs | 82 |

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY Dave Kolbeke

DUMMY CALIBRATION - ABDOMEN COMPRESSION 03-04-1996 15:50
DUMMY # 272
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

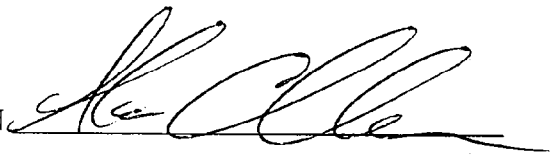
DATE: March 4, 1996

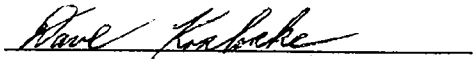
DUMMY NUMBER: 272

TEST NUMBER: D96445

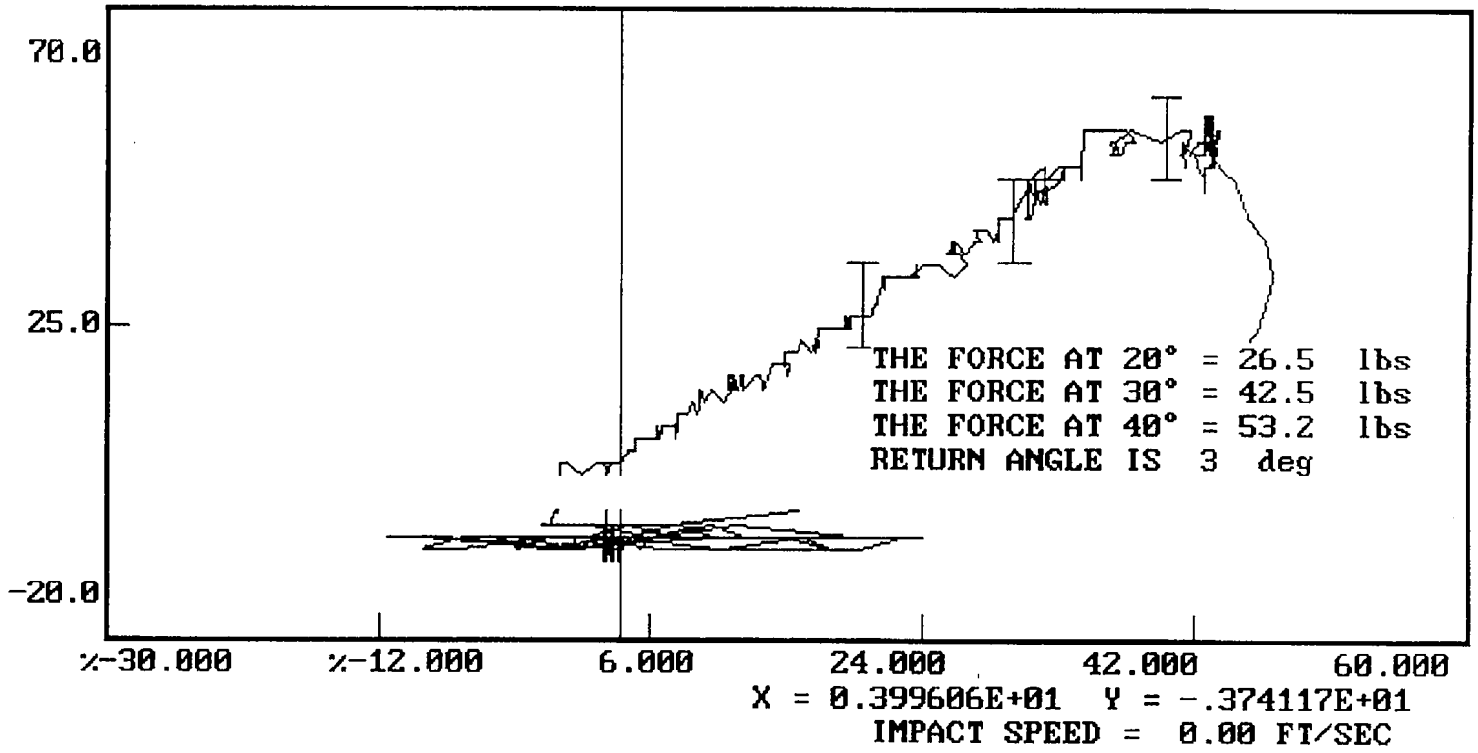
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 20% |
| FORCE @ 0° | 0 - 6 lbs | 0 |
| FORCE @ 20° | 22 - 34 lbs | 27 |
| FORCE @ 30° | 34 - 46 lbs | 43 |
| FORCE @ 40° | 46 - 58 lbs | 53 |
| RETURN ANGLE | 12° maximum | 3° |

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - LUMBAR FLEXION 03-04-1996 17:22
DUMMY # 272
FORCE (LBS) VS. TORSO ROTATION (DEGREES)



POST-TEST CERTIFICATION DATA

Driver Dummy Serial Number: 271

Calibration Test Results Summary

Dummy Serial Number: 271

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

DUMMY NO.: 271

DATE OF VERIFICATION: April 4, 1996

| DESCRIPTION | SPECIFICATION | TEST RESULTS |
|---|---|---|
| SH - Seated Height | 35.0" - 35.8" | 35.4 |
| RH - Rib Height | 19.75" - 20.50" | 20.40 |
| HP - Hip Pivot Height | 3.9" ref. | 3.9 |
| RD - Rib From Back Line | 9.0" to 9.5" | 9.4 |
| KV - Knee Pivot From Back Line | 20.1" - 20.7" | 20.4 |
| SW - Knee Pivot to Floor | 19.3" - 19.9" | 19.5 |
| HW - Hip Width | 14.0" - 15.4" | 15.0 |

MEASUREMENTS BY: 

APPROVED BY: Dave Kubaka

MGA RESEARCH CORPORATION

THORACIC SHOCK ABSORBER TEST

SIDE IMPACT DUMMY (SID)

DATE: April 3, 1996

DUMMY NUMBER: 271 TEST NUMBER: D9662678

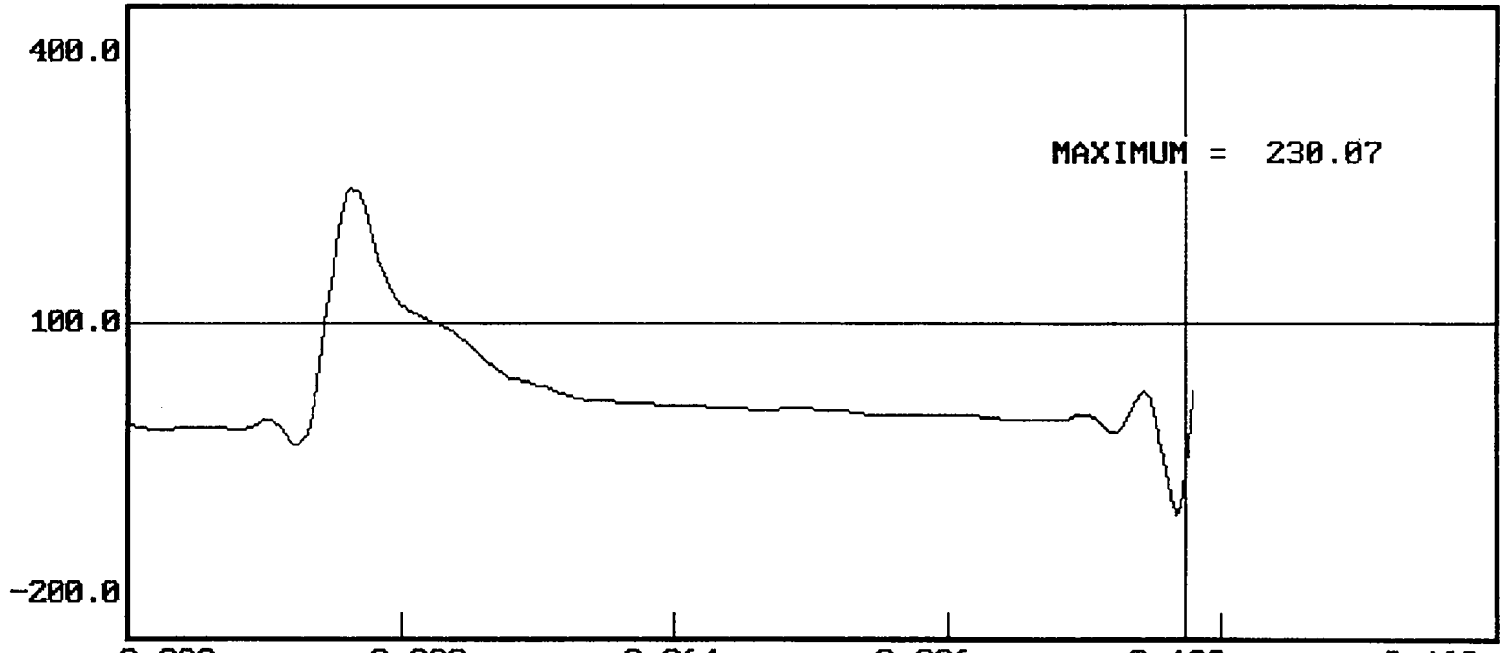
| TEST PARAMETER | | SPECIFICATION | TEST RESULTS |
|---|---|---|---|
| TEMPERATURE | | 66° - 78° F | 70° |
| RELATIVE HUMIDITY | | 10 - 70% | 30% |
| VELOCITY 10 ft/s | FORCE (lb.) | 188 - 253 | 230 |
| | DISPLACEMENT (in.) | 1.18 - 1.38 | 1.23 |
| VELOCITY 14 ft/s | FORCE (lb.) | 389 - 472 | 409 |
| | DISPLACEMENT (in.) | 1.26 - 1.47 | 1.28 |
| VELOCITY 20 ft/s | FORCE (lb.) | 841 - 1000 | 856 |
| | DISPLACEMENT (in.) | 1.30 - 1.57 | 1.33 |

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

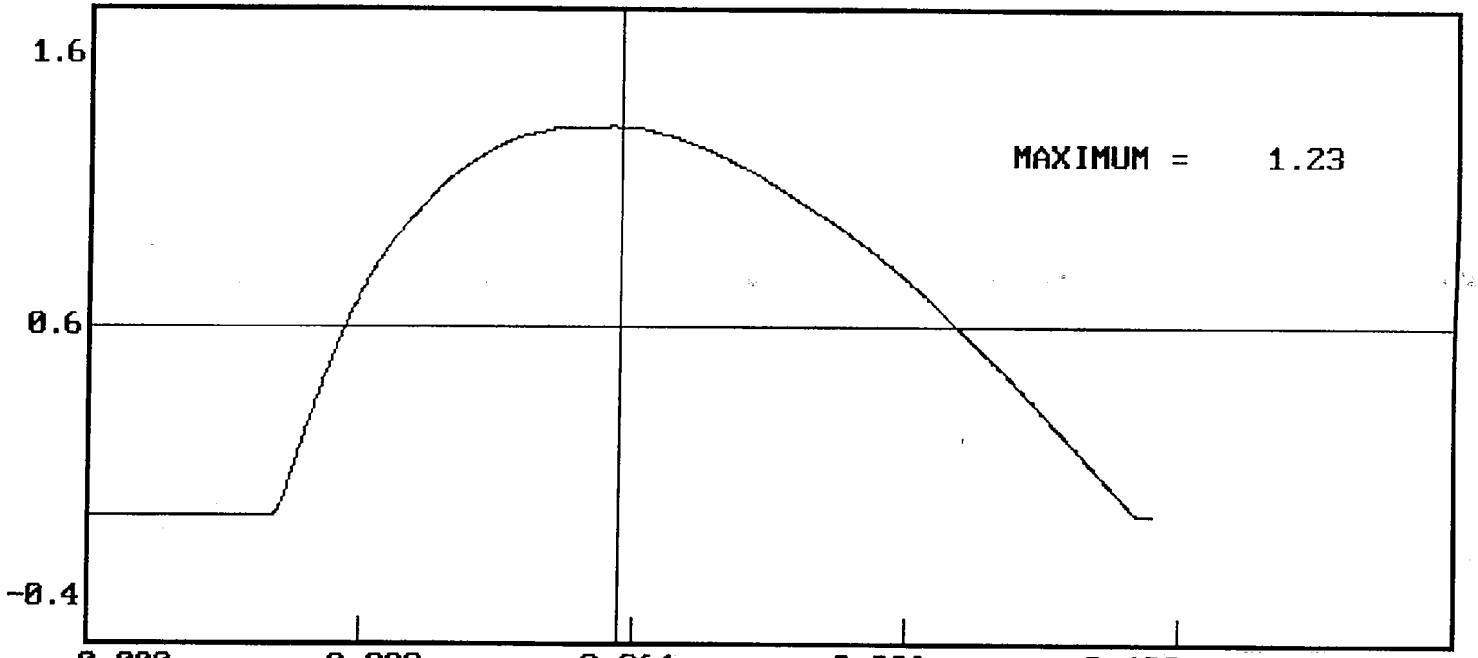
DUMMY CALIBRATION - DAMPENER BENCH TEST 04-03-1996 09:18
DUMMY # 271
FORCE (LBS) VS. TIME ((SECONDS))




X = 0.123750E+00 Y = -.333156E+02
IMPACT SPEED = 10.00 FT/SEC

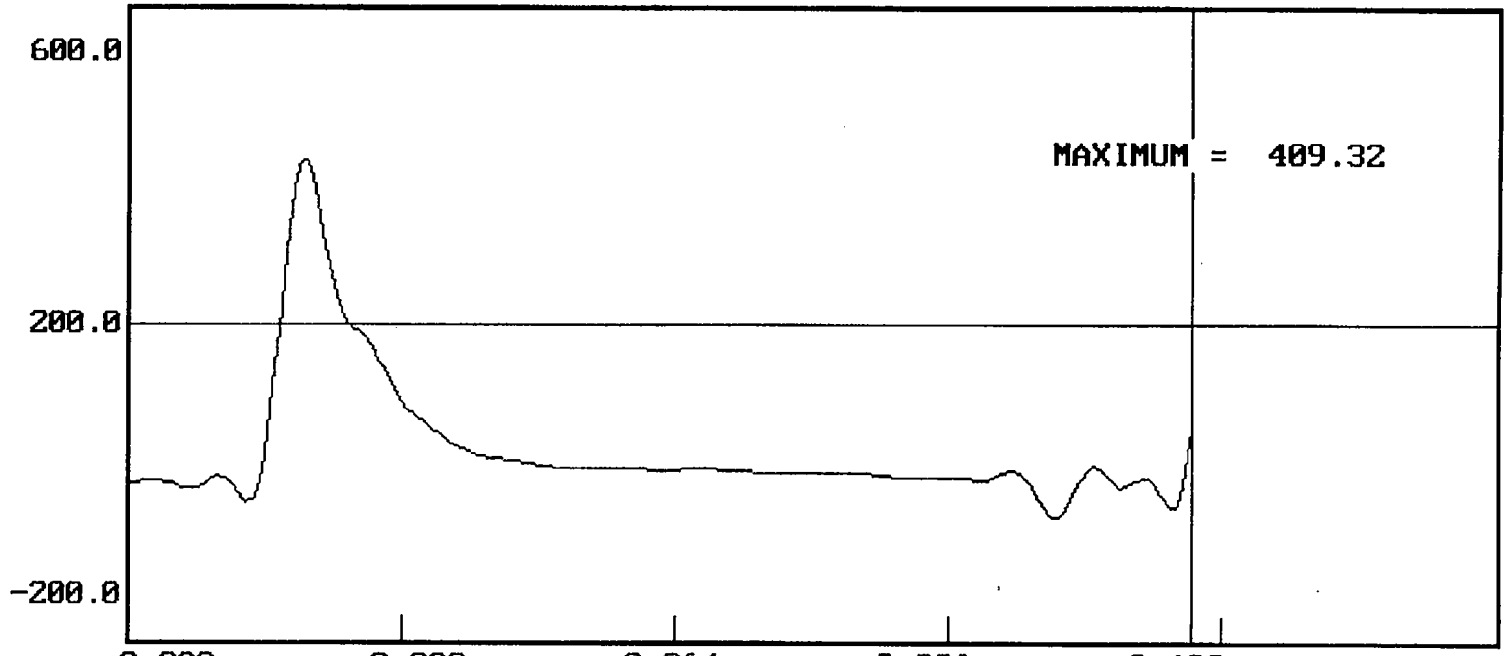
DUMMY CALIBRATION - DAMPENER BENCH TEST
DUMMY # 271
DISPLACEMENT (IN) VS. TIME ((SECONDS))

04-03-1996 09:18




X = 0.622752E-01 Y = 0.123380E+01
IMPACT SPEED = 10.00 FT/SEC

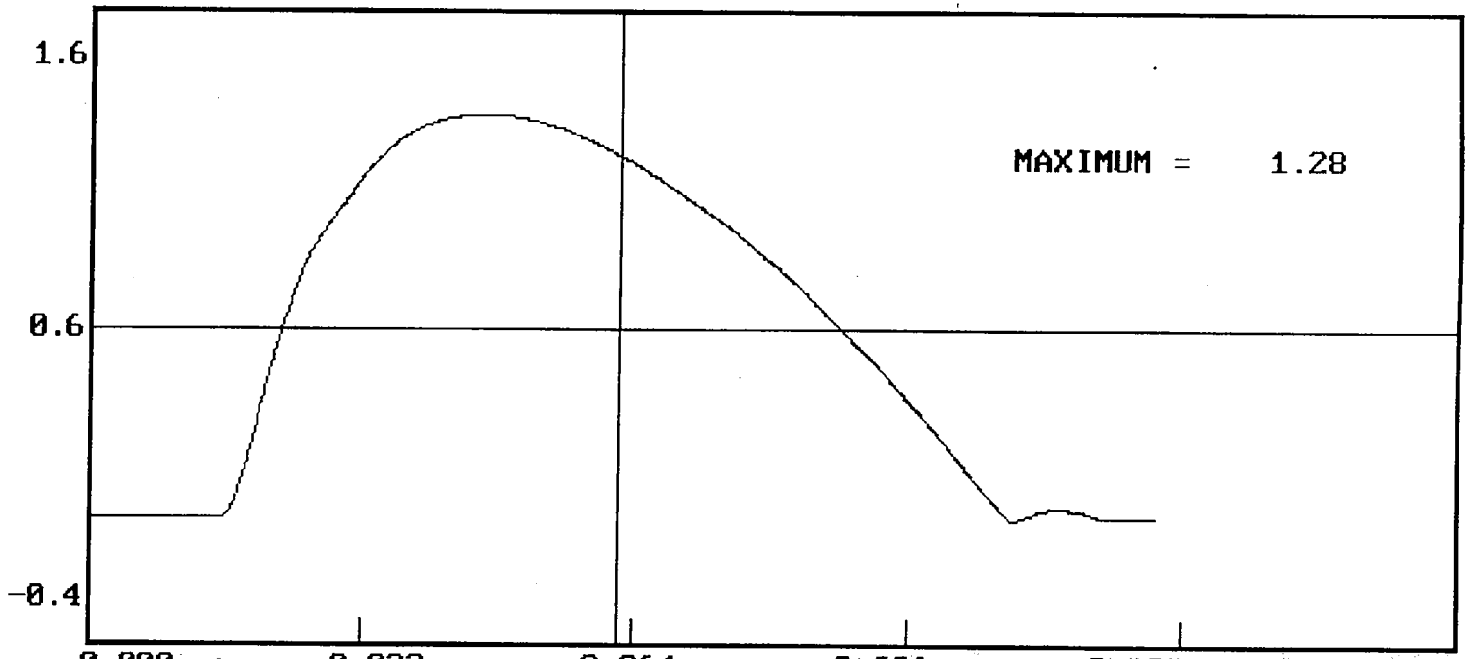
DUMMY CALIBRATION - DAMPENER BENCH TEST 04-03-1996 09:45
DUMMY # 271
FORCE (LBS) VS. TIME ((SECONDS))




X = 0.124375E+00 Y = 0.740185E+02
IMPACT SPEED = 14.00 FT/SEC

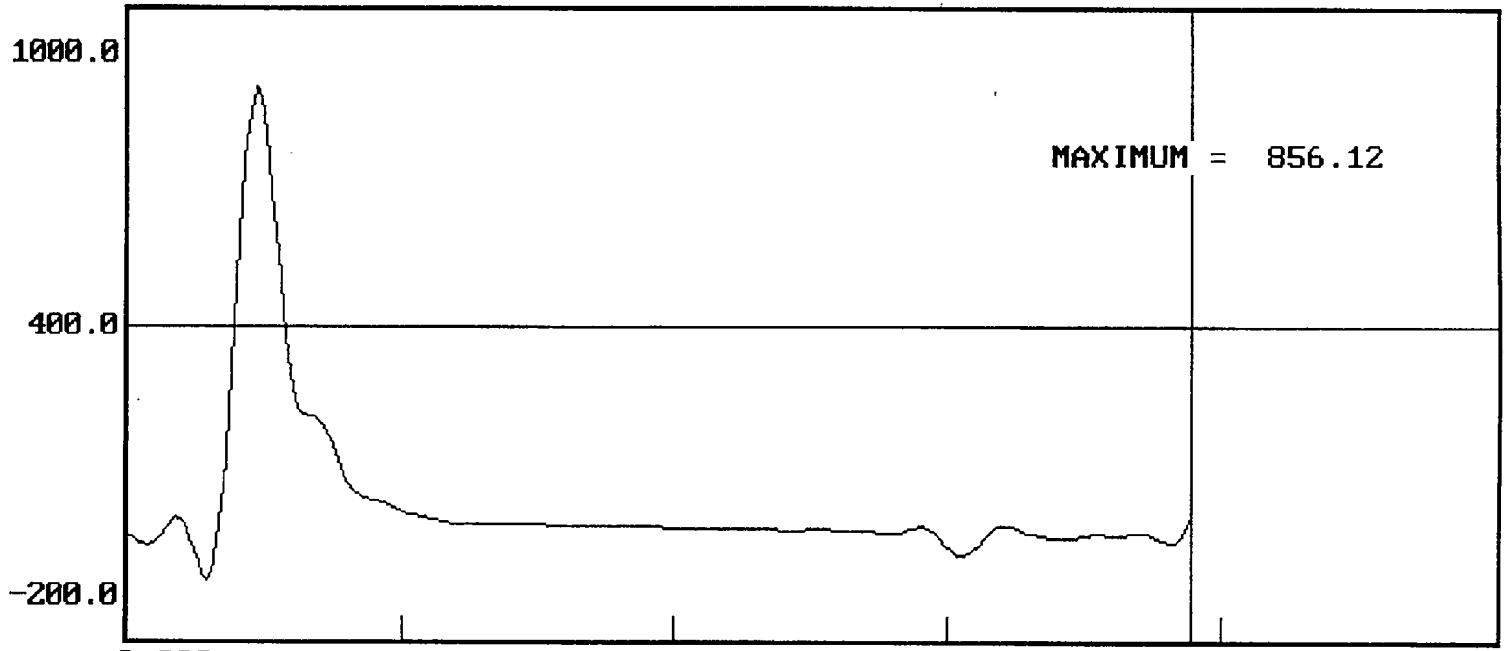
DUMMY CALIBRATION - DAMPENER BENCH TEST
DUMMY # 271
DISPLACEMENT (IN) VS. TIME ((SECONDS))

04-03-1996 09:45

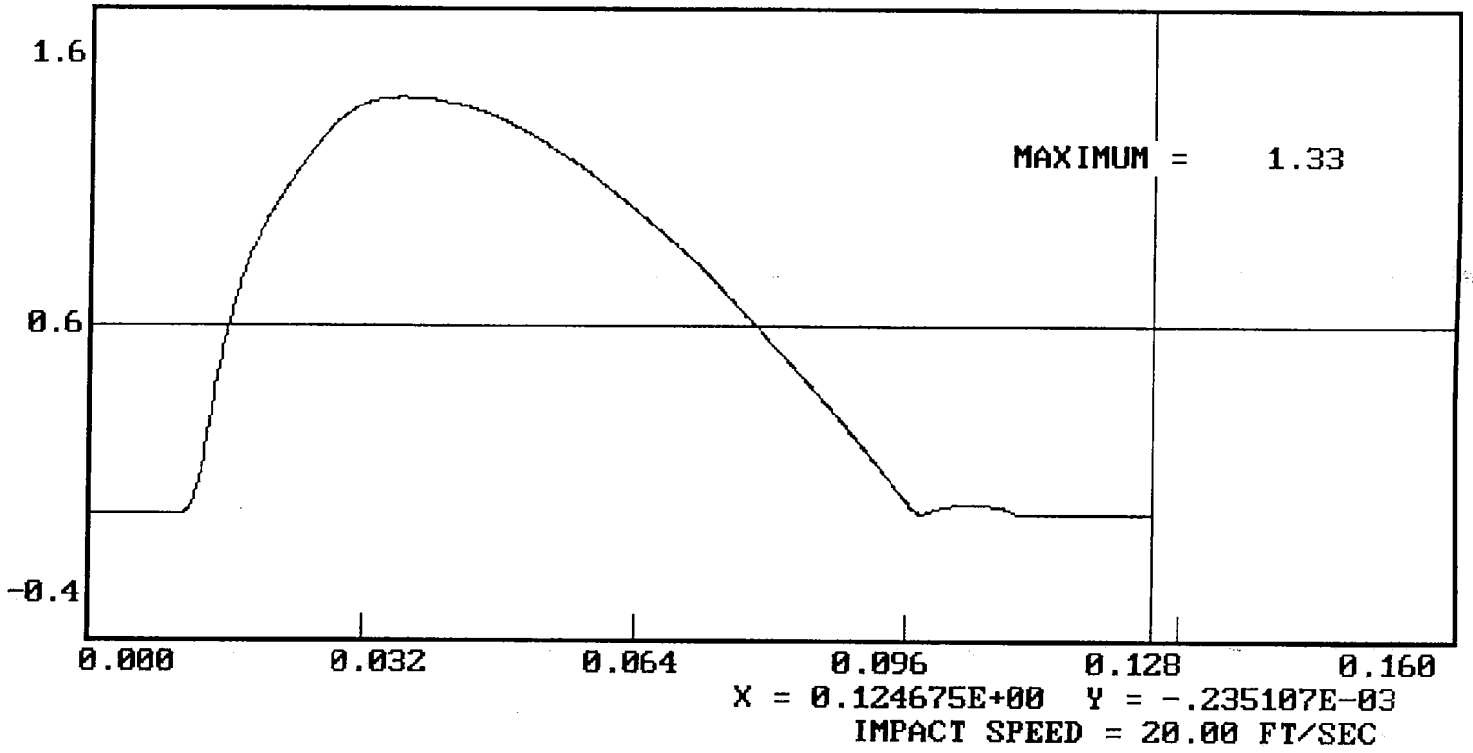



X = 0.622752E-01 Y = 0.114997E+01
IMPACT SPEED = 14.00 FT/SEC

DUMMY CALIBRATION - DAMPENER BENCH TEST 04-03-1996 10:17
DUMMY # 271
FORCE (LBS) VS. TIME ((SECONDS))



DUMMY CALIBRATION - DAMPENER BENCH TEST 04-03-1996 10:17
DUMMY # 271
DISPLACEMENT (IN) VS. TIME ((SECONDS))




X = 0.124675E+00 Y = -.235107E-03
IMPACT SPEED = 20.00 FT/SEC

MGA RESEARCH CORPORATION

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: April 4, 1996

DUMMY NUMBER: 271 TEST NUMBER: D96622

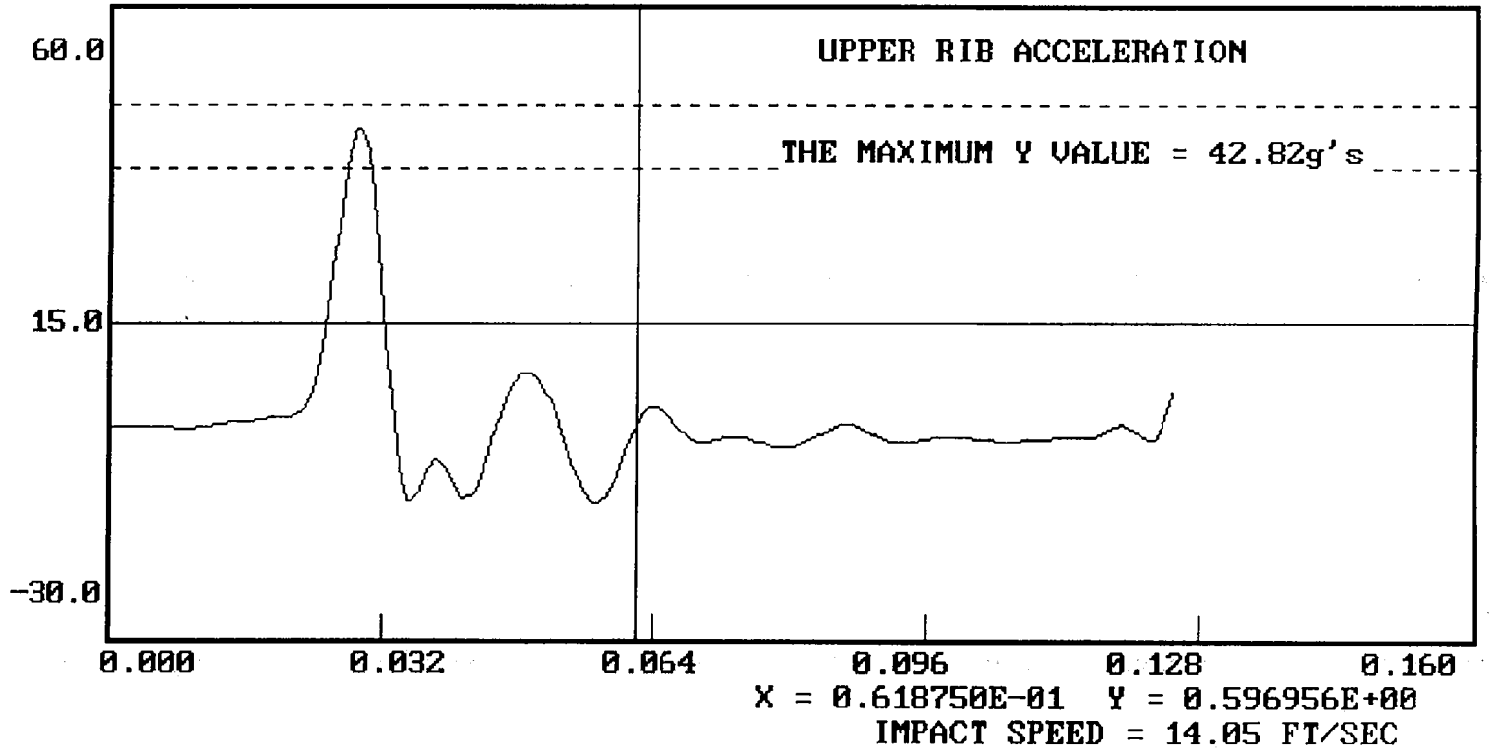
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 32% |
| PROBE SPEED | 13.8 - 14.2 fps | 14.1 |
| UPPER RIB | 37 - 46 g's | 43 |
| LOWER RIB | 37 - 46 g's | 43 |
| LOWER SPINE | 15 - 22 g's | 22 |

TEST MEETS SPECIFICATIONS

TECHNICIAN

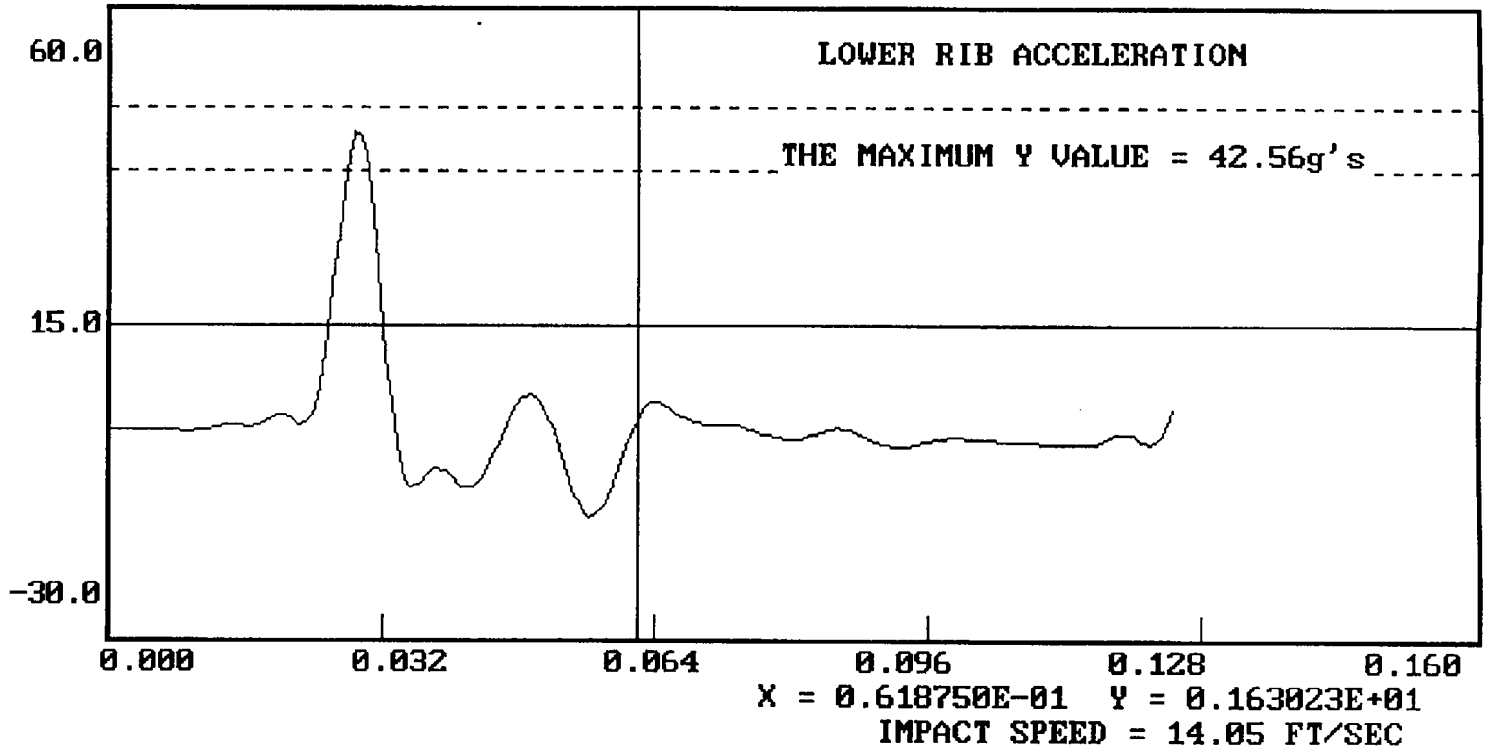
APPROVED BY

DUMMY CALIBRATION - THORAX IMPACT 04-04-1996 10:17
DUMMY # 271
ACCELERATION (G'S) VS. TIME ((SECONDS))



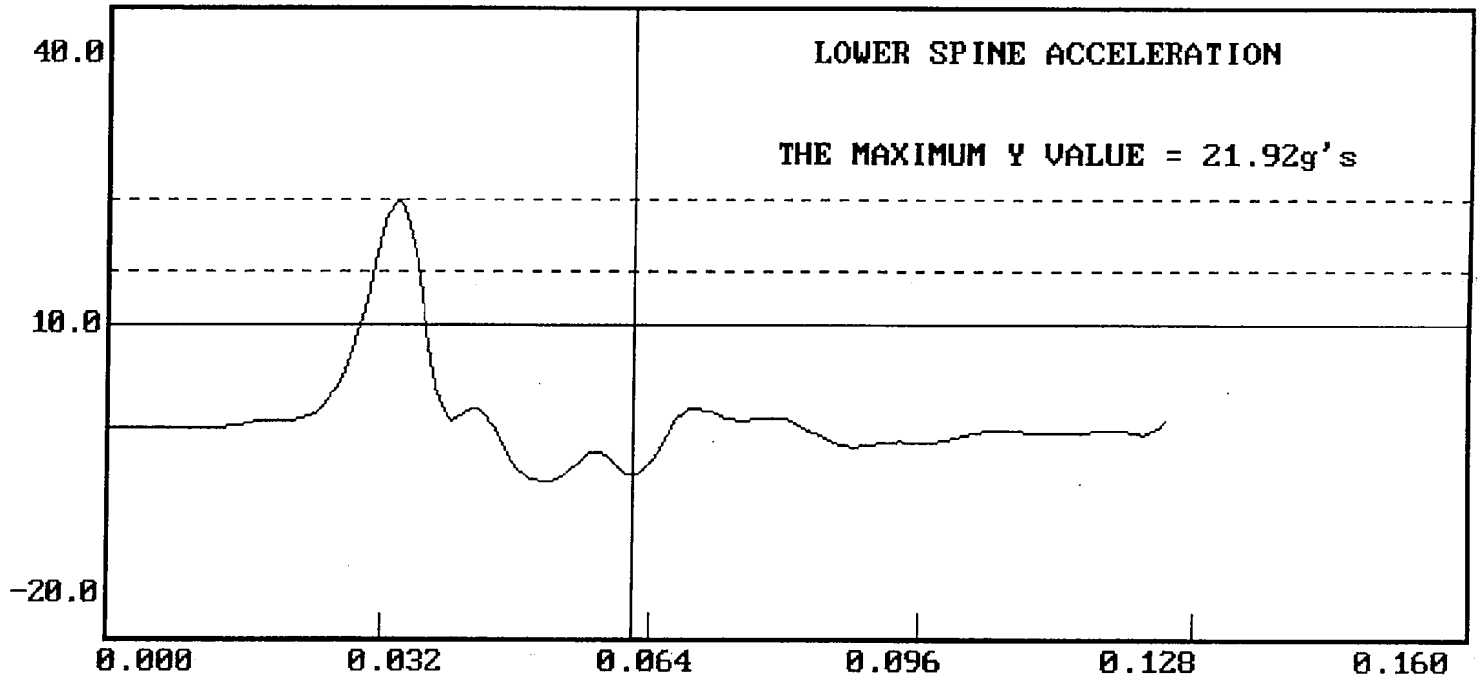

X = 0.618750E-01 Y = 0.596956E+00
IMPACT SPEED = 14.05 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 04-04-1996 10:17
DUMMY # 271
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = 0.163023E+01
IMPACT SPEED = 14.05 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 04-04-1996 10:17
DUMMY # 271
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = -.439317E+01
IMPACT SPEED = 14.05 FT/SEC

MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: April 4, 1996

DUMMY NUMBER: 271 TEST NUMBER: D96623

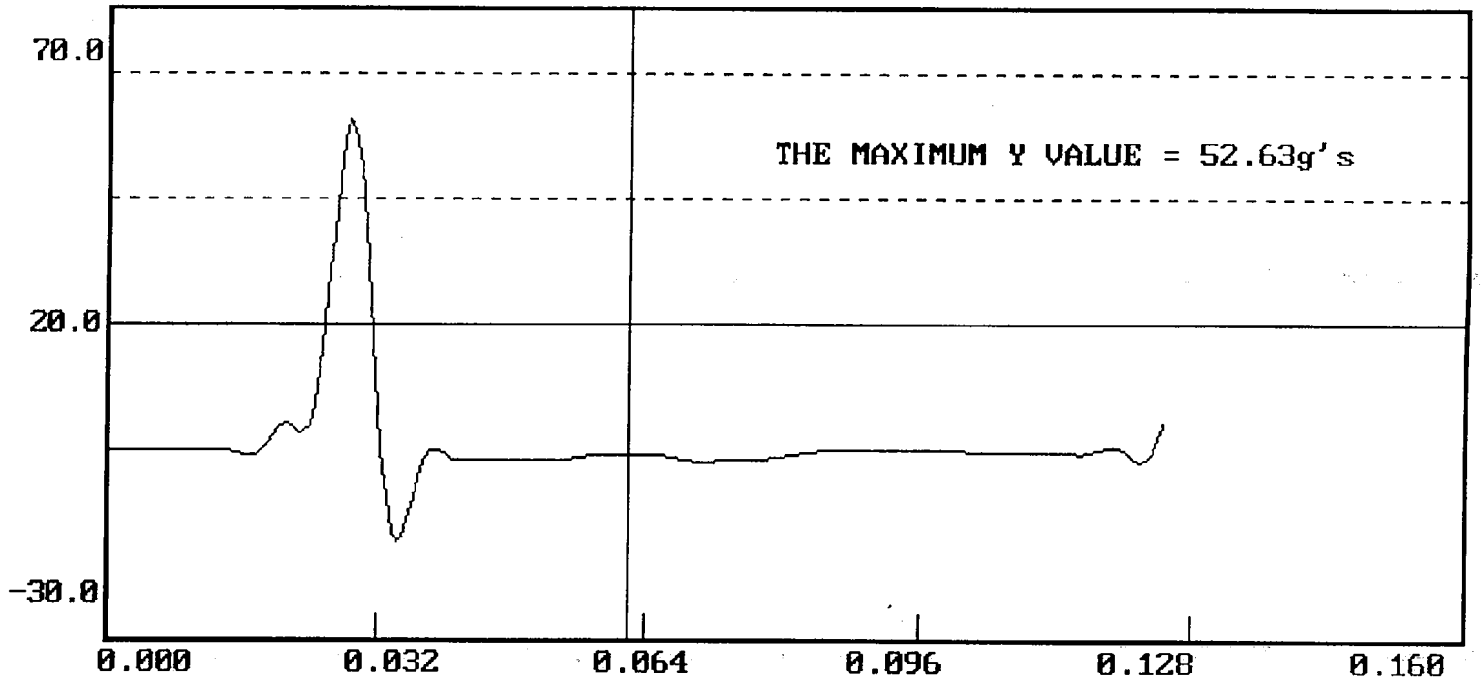
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 32% |
| PROBE SPEED | 13.8 - 14.2 f/s | 14.0 |
| PELVIS ACCELERATION | 40 - 60 g's | 53 |

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - PELVIS IMPACT 04-04-1996 10:29
DUMMY # 271
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = -.869130E+00
IMPACT SPEED = 13.96 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

SIDE IMPACT DUMMY (SID)

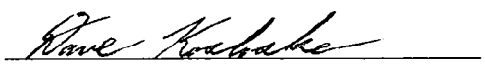
DATE: March 27, 1996

DUMMY NUMBER: 271 TEST NUMBER: D96624

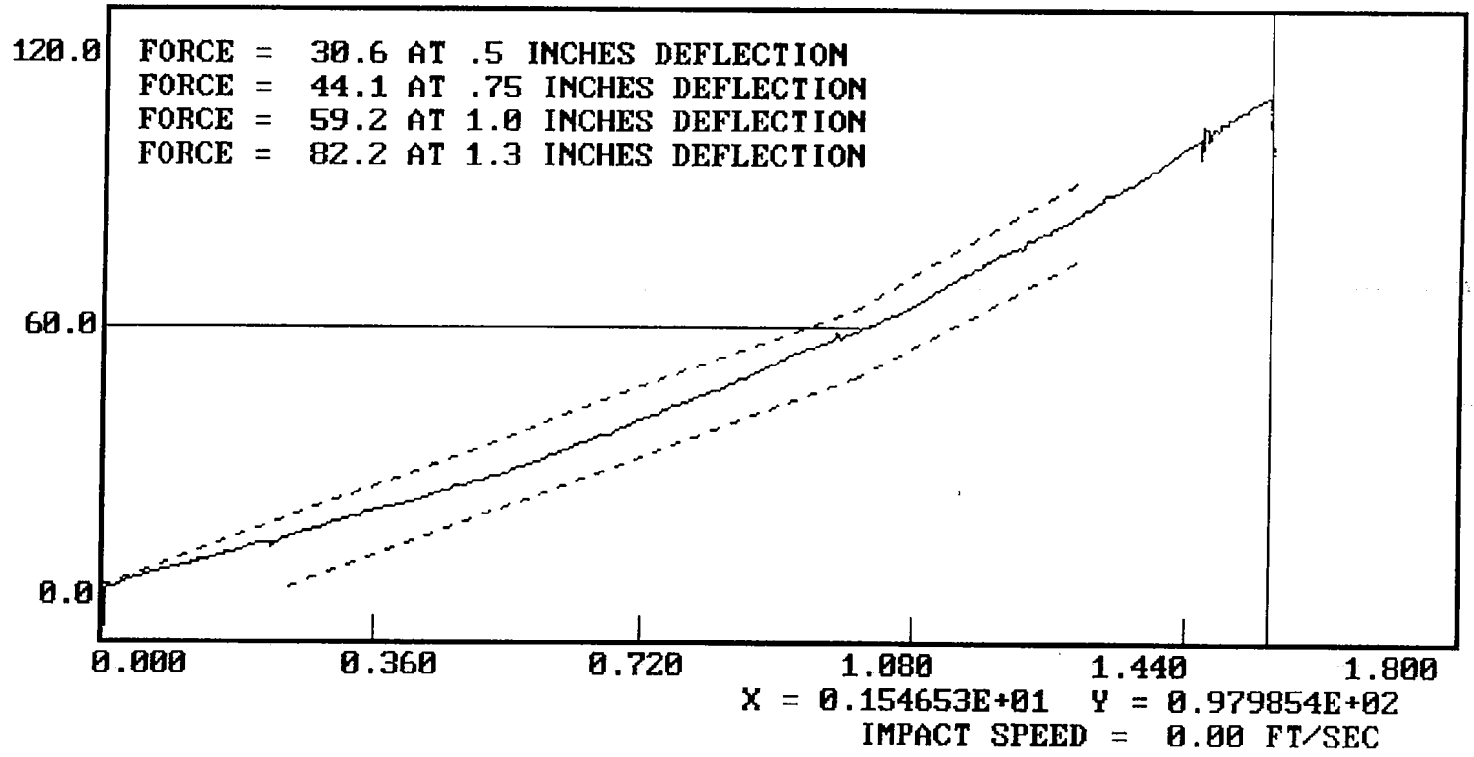
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 24% |
| FORCE @ 0.5 in | 23.3 - 36.5 lbs | 30.6 |
| FORCE @ 0.75 in | 36.7 - 49.8 lbs | 44.1 |
| FORCE @ 1.0 in | 50 - 63 lbs | 59 |
| FORCE @ 1.3 in | 73 - 88 lbs | 82 |

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - ABDOMEN COMPRESSION 03-27-1996 09:39
DUMMY # 271
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: March 26, 1996

DUMMY NUMBER: 271 TEST NUMBER: D96625

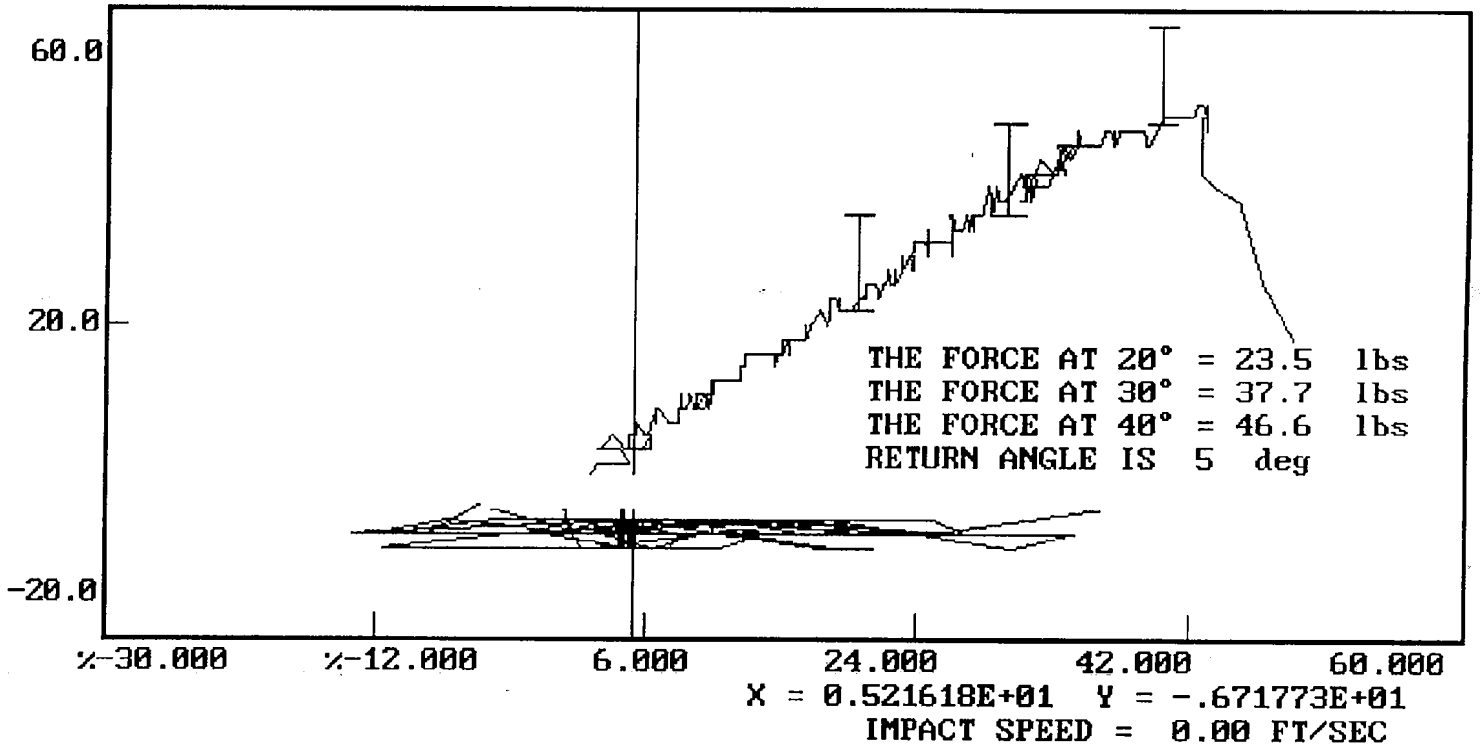
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 22% |
| FORCE @ 0° | 0 - 6 lbs | 0 |
| FORCE @ 20° | 22 - 34 lbs | 24 |
| FORCE @ 30° | 34 - 46 lbs | 38 |
| FORCE @ 40° | 46 - 58 lbs | 47 |
| RETURN ANGLE | 12° maximum | 5° |

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - LUMBAR FLEXION 03-26-1996 17:25
DUMMY # 271
FORCE (LBS) VS. TORSO ROTATION (DEGREES)



POST-TEST CERTIFICATION DATA

Passenger Dummy Serial Number: 272

Calibration Test Results Summary

Dummy Serial Number: 272

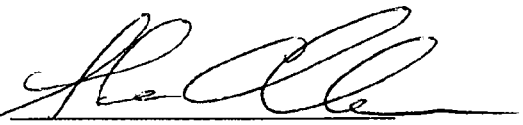
Post-Test Calibration

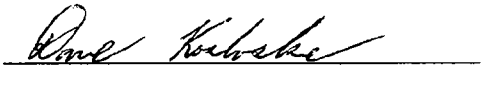
| | |
|---|---|
| External Dimensions: | The dummy passed all external dimension requirements. |
| Thorax Impact Test: | The thorax passed all impact test requirements. |
| Pelvic Impact Test: | The pelvis passed all impact test requirements. |
| Abdominal Compression Test: | The abdomen passed all compression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

SIDE IMPACT DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA

DUMMY NO.: 272 DATE OF VERIFICATION: March 4, 1996

| DESCRIPTION | SPECIFICATION | TEST RESULTS |
|---|---|---|
| SH - Seated Height | 35.0" - 35.8" | 35.2 |
| RH - Rib Height | 19.75" - 20.50" | 20.20 |
| HP - Hip Pivot Height | 3.9" ref. | 3.9 |
| RD - Rib From Back Line | 9.0" to 9.5" | 9.4 |
| KV - Knee Pivot From Back Line | 20.1" - 20.7" | 20.7 |
| SW - Knee Pivot to Floor | 19.3" - 19.9" | 19.6 |
| HW - Hip Width | 14.0" - 15.4" | 15.0 |

MEASUREMENTS BY: 

APPROVED BY: 

MGA RESEARCH CORPORATION

THORACIC SHOCK ABSORBER TEST

SIDE IMPACT DUMMY (SID)

DATE: April 3, 1996

DUMMY NUMBER: 272 TEST NUMBER: D9663678

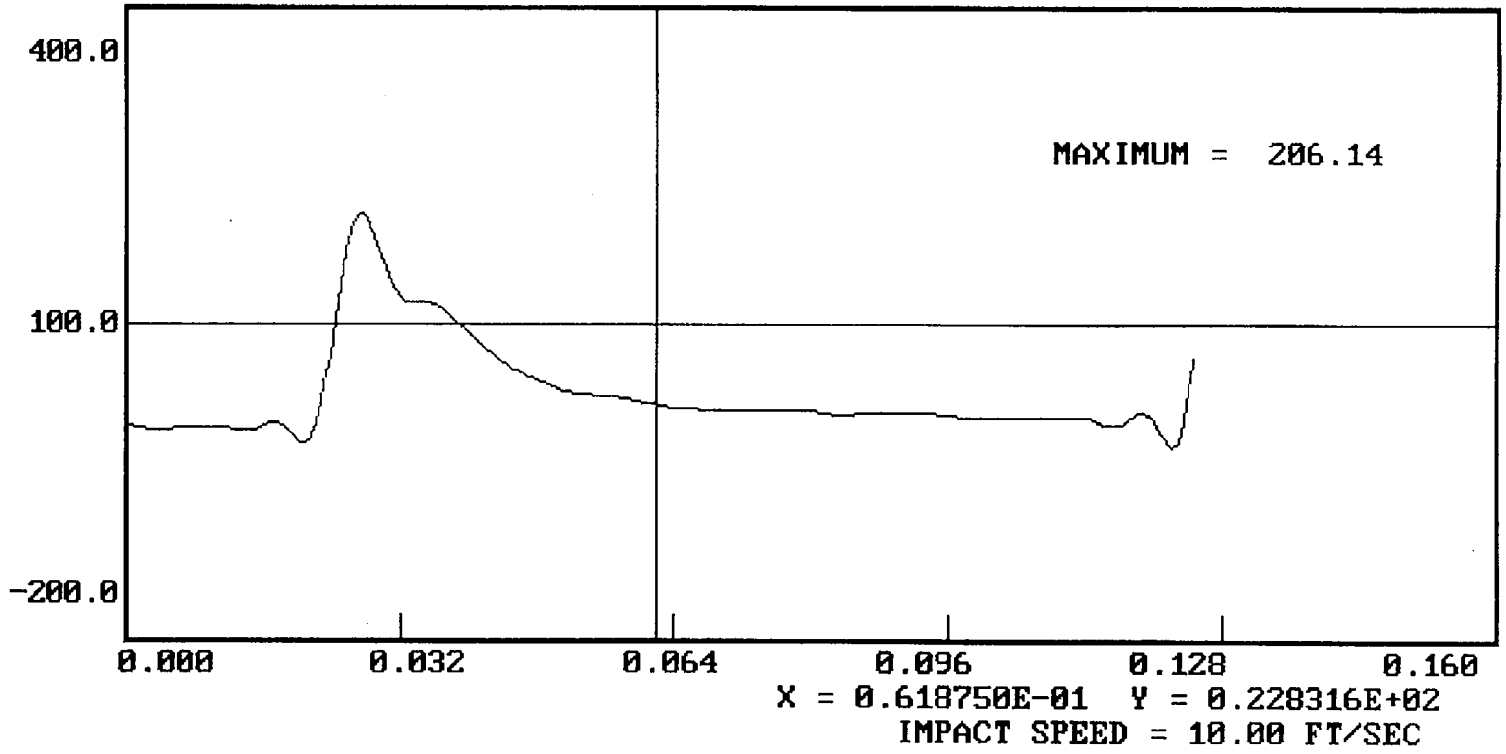
| TEST PARAMETER | | SPECIFICATION | TEST RESULTS |
|---|---|---|---|
| TEMPERATURE | | 66° - 78° F | 70° |
| RELATIVE HUMIDITY | | 10 - 70% | 30% |
| VELOCITY 10 ft/s | FORCE (lb.) | 188 - 253 | 206 |
| | DISPLACEMENT (in.) | 1.18 - 1.38 | 1.29 |
| VELOCITY 14 ft/s | FORCE (lb.) | 389 - 472 | 408 |
| | DISPLACEMENT (in.) | 1.26 - 1.47 | 1.36 |
| VELOCITY 20 ft/s | FORCE (lb.) | 841 - 1000 | 875 |
| | DISPLACEMENT (in.) | 1.30 - 1.57 | 1.31 |

TEST MEETS SPECIFICATIONS

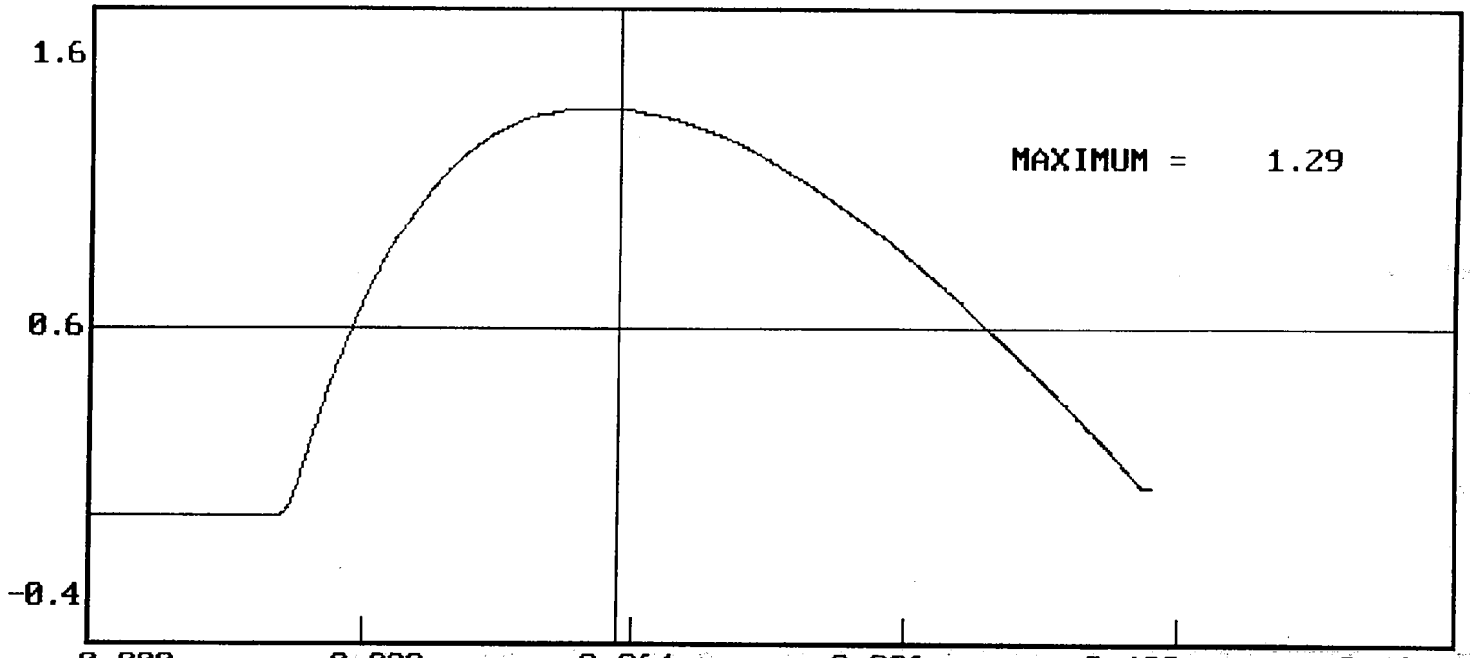
TECHNICIAN

APPROVED BY Dave Kobaka

DUMMY CALIBRATION - DAMPENER BENCH TEST 04-03-1996 11:12
DUMMY # 272
FORCE (LBS) VS. TIME ((SECONDS))

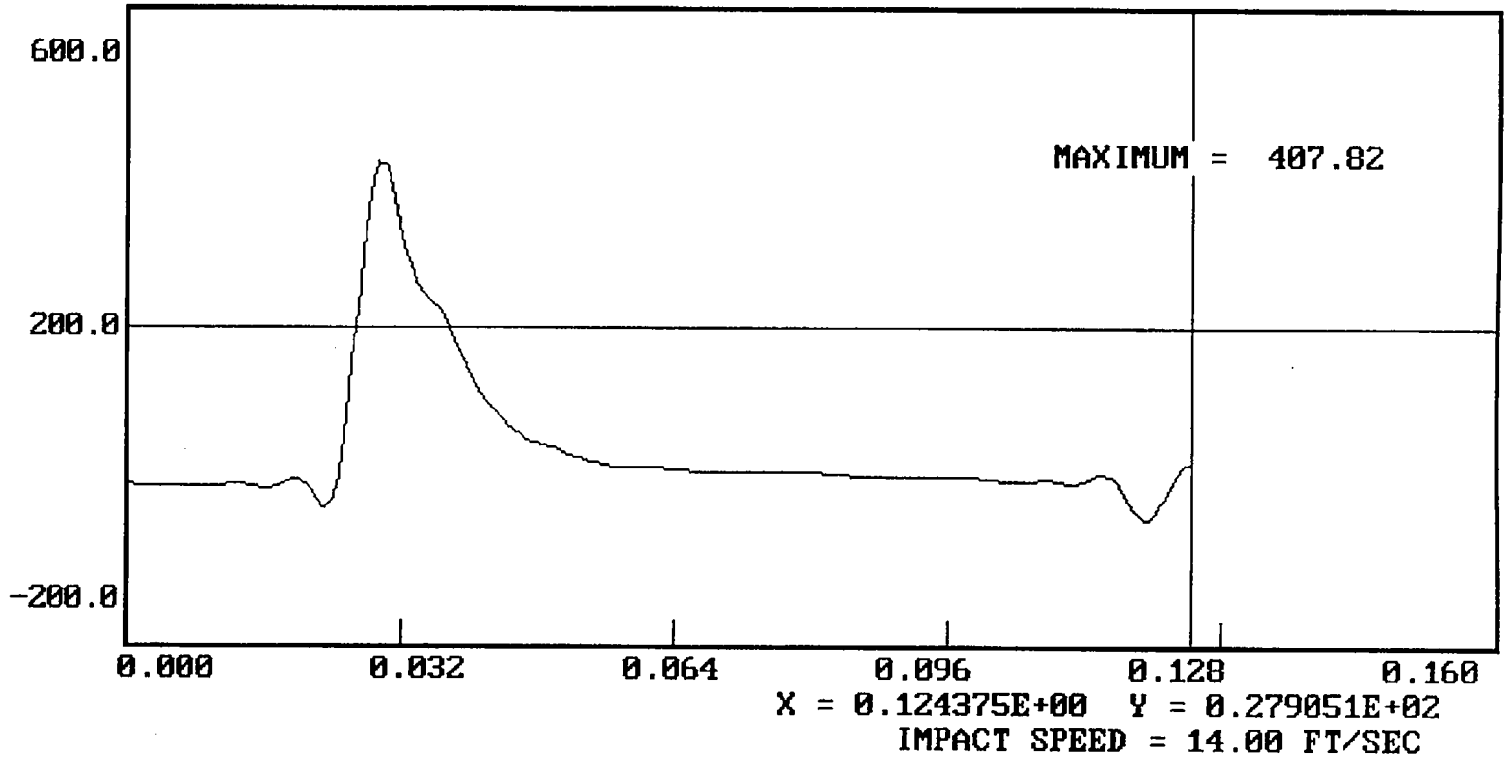


DUMMY CALIBRATION - DAMPENER BENCH TEST 04-03-1996 11:12
DUMMY # 272
DISPLACEMENT (IN) VS. TIME ((SECONDS))



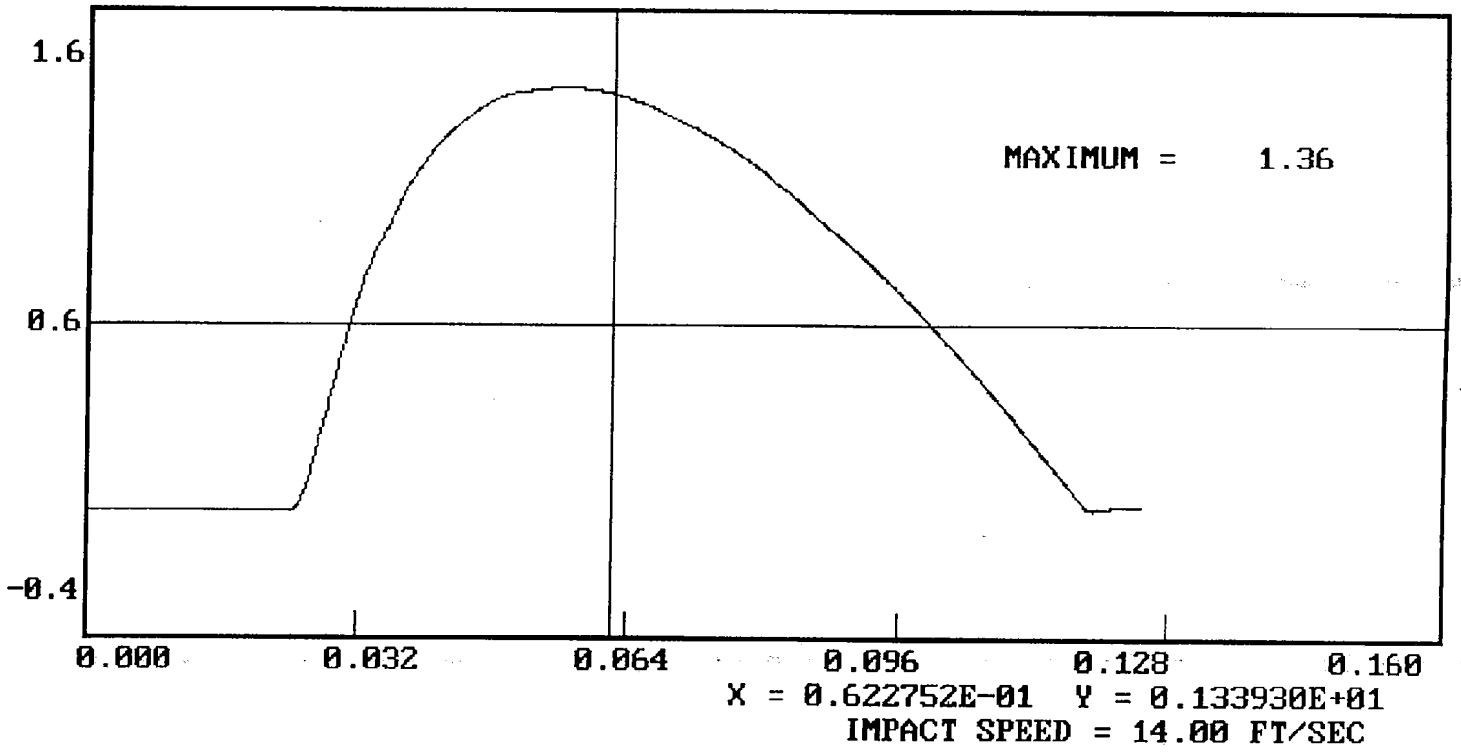

X = 0.622752E-01 Y = 0.129100E+01
IMPACT SPEED = 10.00 FT/SEC

DUMMY CALIBRATION - DAMPENER BENCH TEST 04-03-1996 14:45
DUMMY # 272
FORCE (LBS) VS. TIME ((SECONDS))

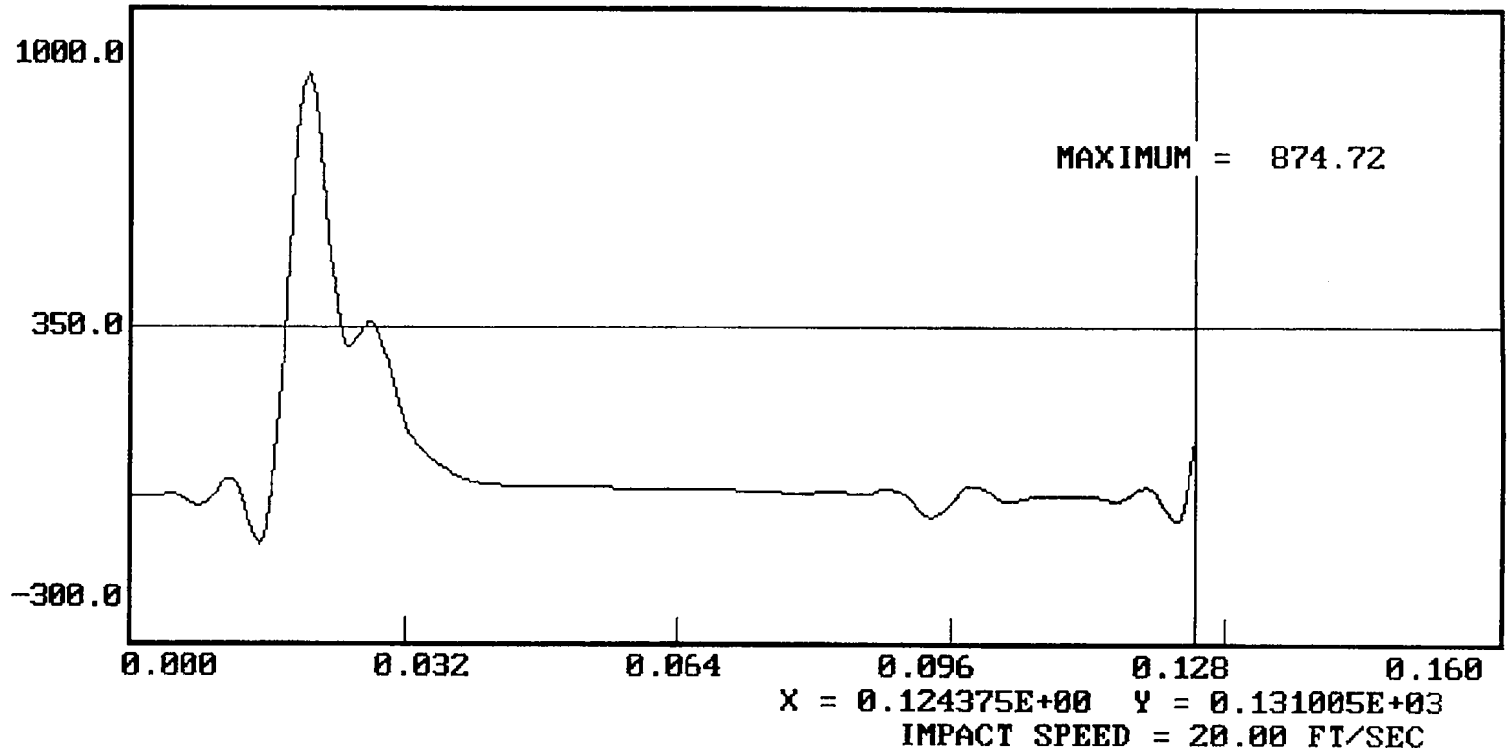


DUMMY CALIBRATION - DAMPENER BENCH TEST
DUMMY # 272
DISPLACEMENT (IN) VS. TIME ((SECONDS))

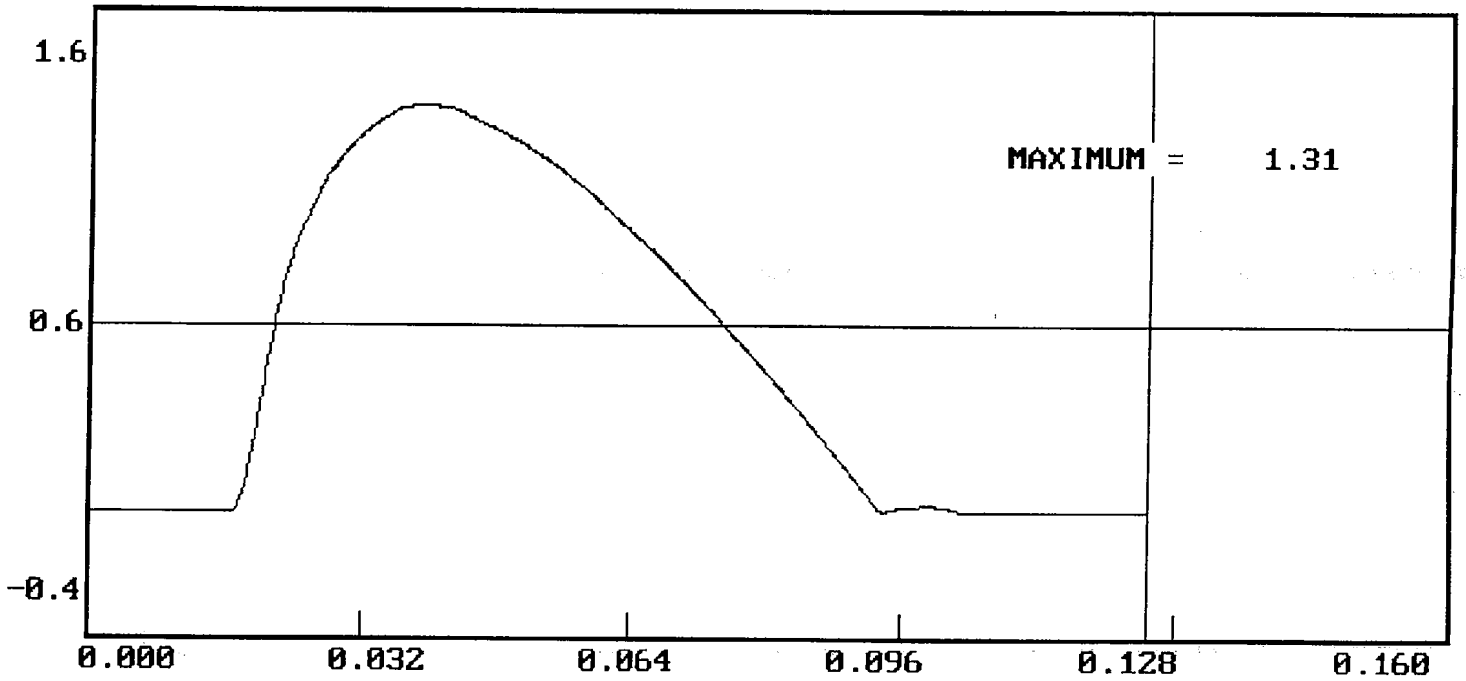
04-03-1996 14:45



DUMMY CALIBRATION - DAMPENER BENCH TEST 04-03-1996 14:25
DUMMY # 272
FORCE (LBS) VS. TIME ((SECONDS))



DUMMY CALIBRATION - DAMPENER BENCH TEST 04-03-1996 14:26
DUMMY # 272
DISPLACEMENT (IN) VS. TIME ((SECONDS))




X = 0.124675E+00 Y = 0.121226E-02
IMPACT SPEED = 20.00 FT/SEC

MGA RESEARCH CORPORATION

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: April 4. 1996

DUMMY NUMBER: 272 TEST NUMBER: D96632

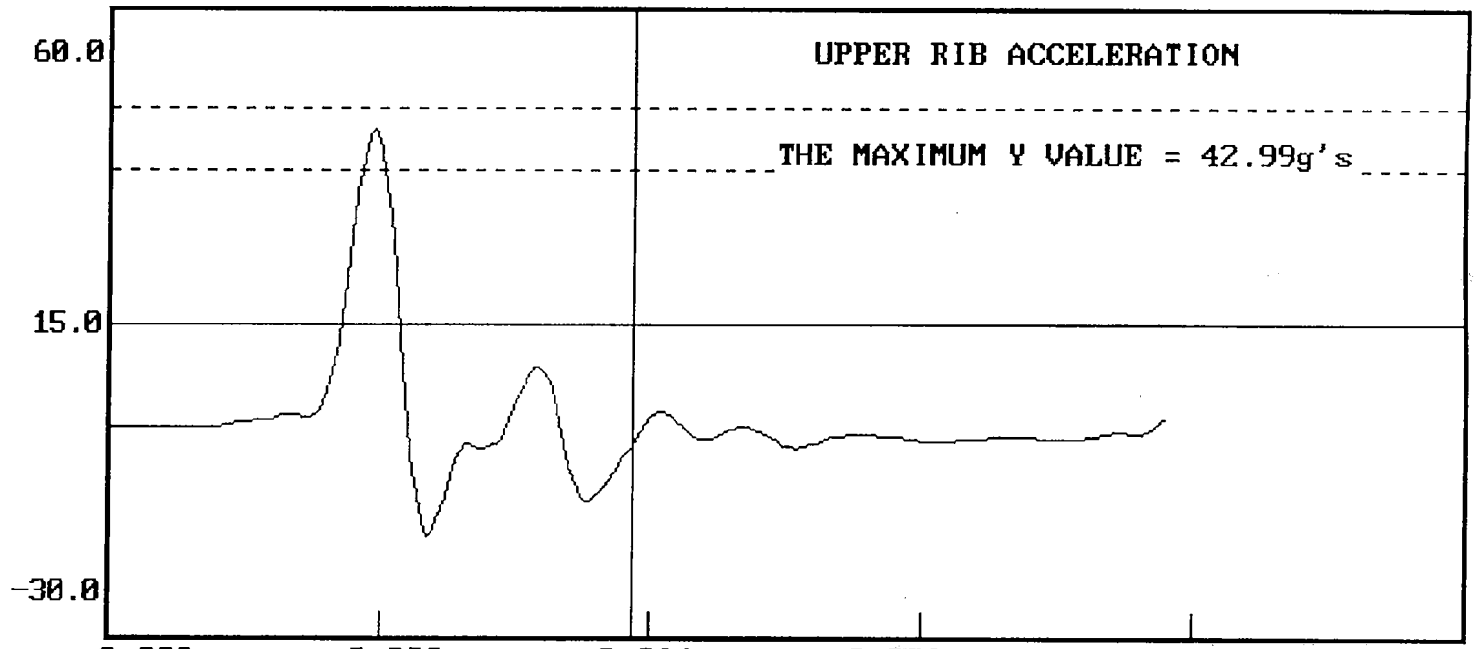
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 32% |
| PROBE SPEED | 13.8 - 14.2 fps | 14.0 |
| UPPER RIB | 37 - 46 g's | 43 |
| LOWER RIB | 37 - 46 g's | 45 |
| LOWER SPINE | 15 - 22 g's | 20 |

TEST MEETS SPECIFICATIONS

TECHNICIAN

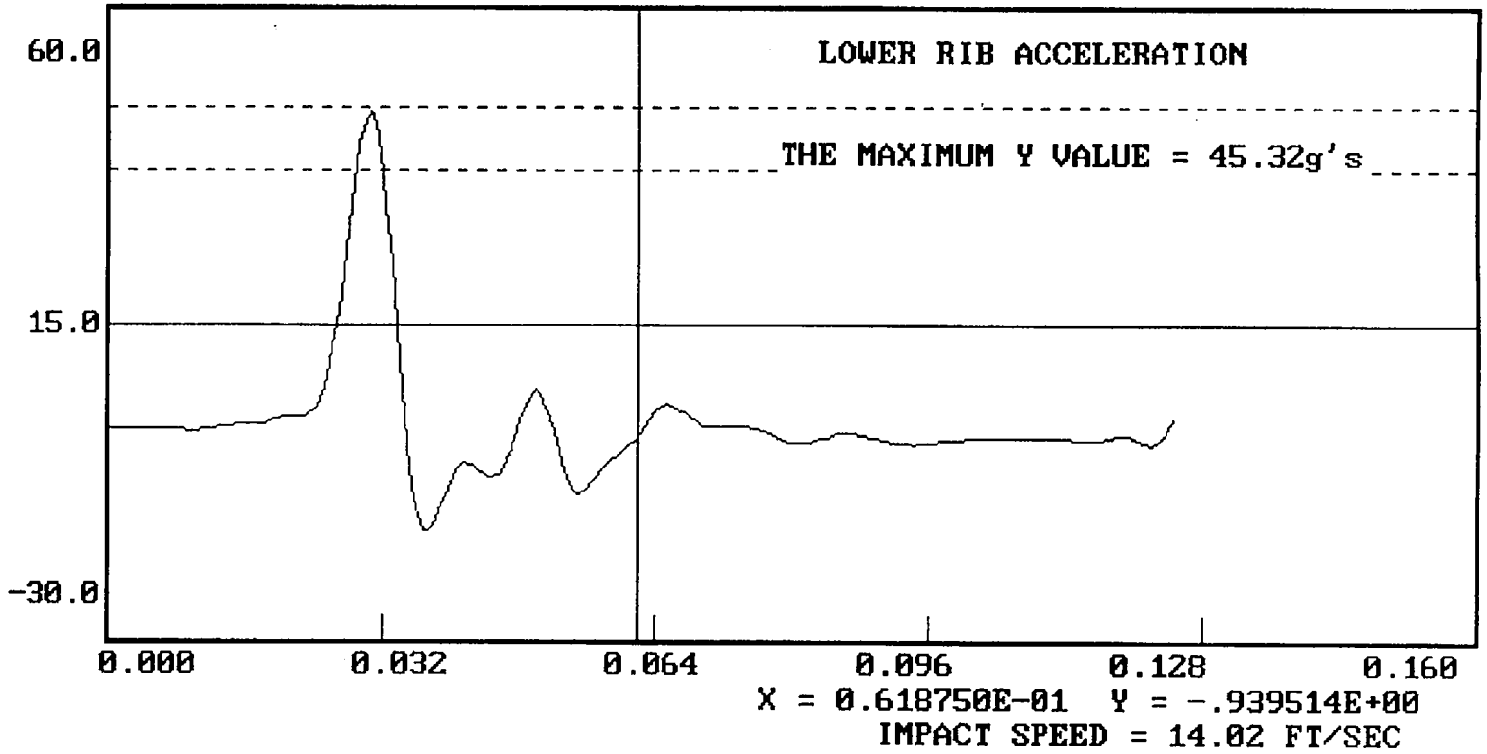
APPROVED BY

DUMMY CALIBRATION - THORAX IMPACT 04-04-1996 09:54
DUMMY # 272
ACCELERATION (G'S) VS. TIME ((SECONDS))



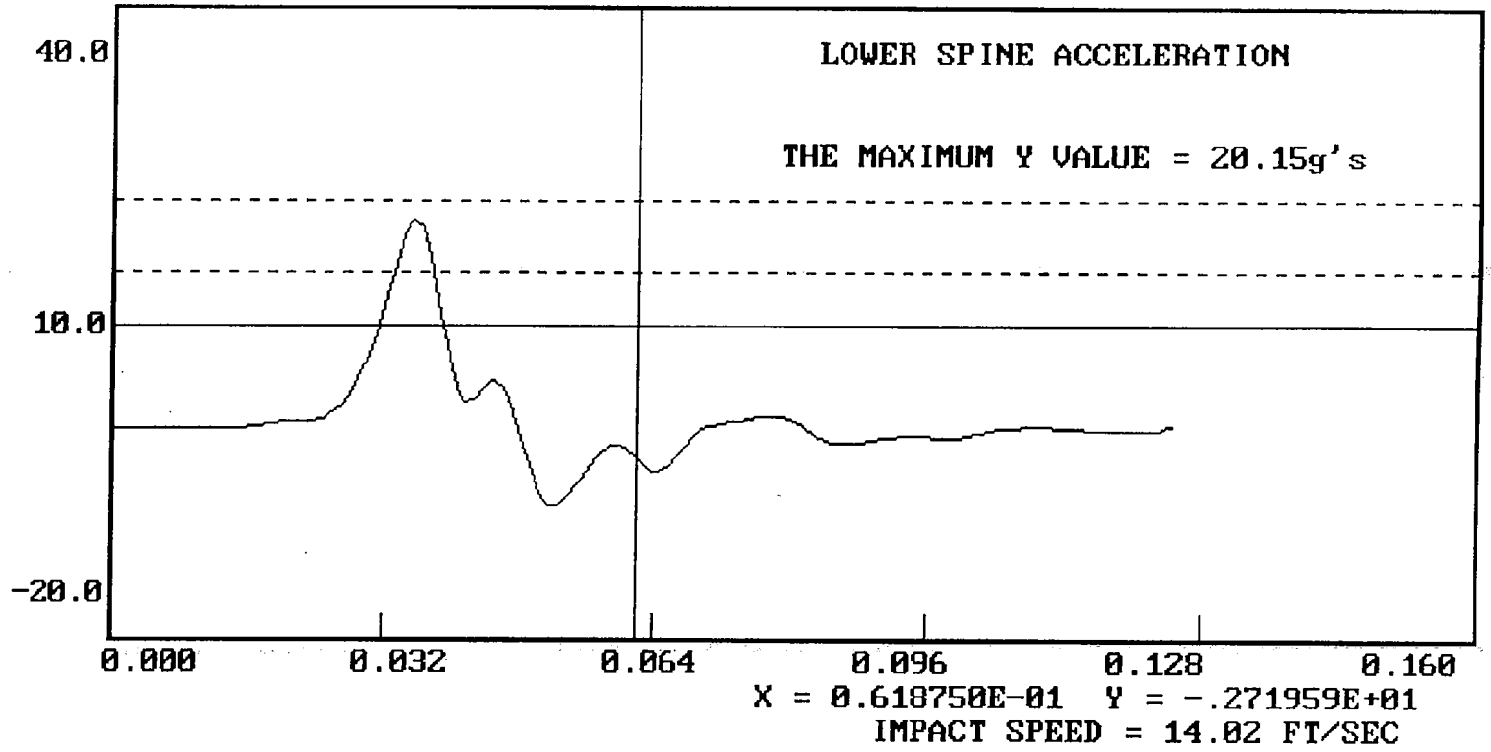

X = 0.618750E-01 Y = -.221316E+01
IMPACT SPEED = 14.02 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 04-04-1996 09:54
DUMMY # 272
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = -.939514E+00
IMPACT SPEED = 14.02 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 04-04-1996 09:54
DUMMY # 272
ACCELERATION (G'S) VS. TIME ((SECONDS))



MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

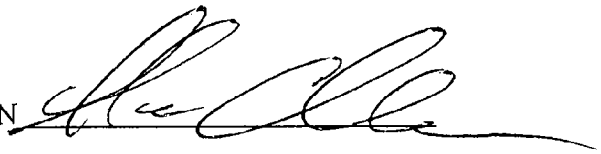
SIDE IMPACT DUMMY (SID)

DATE: April 4, 1996

DUMMY NUMBER: 272 TEST NUMBER: D96633

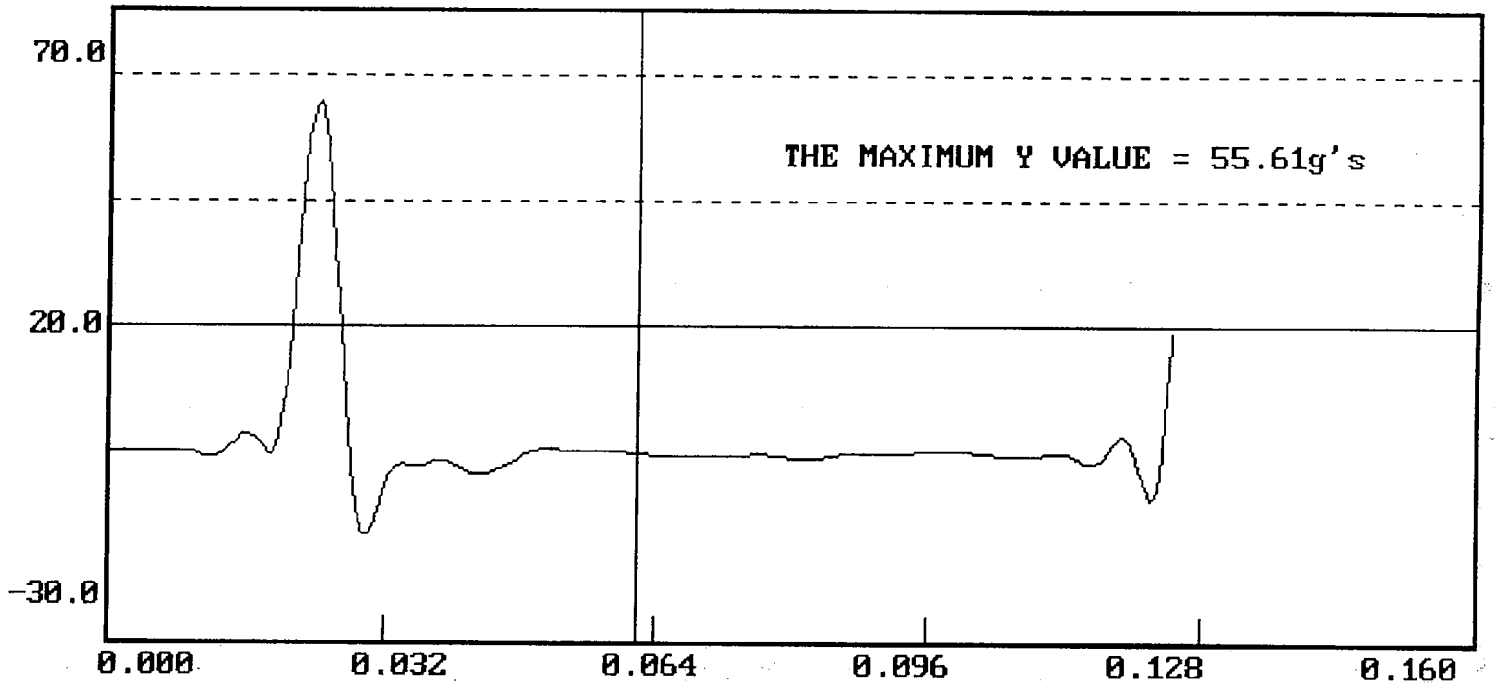
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 32% |
| PROBE SPEED | 13.8 - 14.2 f/s | 14.0 |
| PELVIS ACCELERATION | 40 - 60 g's | 56 |

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY Dave Kosbake

DUMMY CALIBRATION - PELVIS IMPACT 04-04-1996 10:01
DUMMY # 272
ACCELERATION (G'S) VS. TIME ((SECONDS))




X = 0.618750E-01 Y = -.299754E+00
IMPACT SPEED = 14.01 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

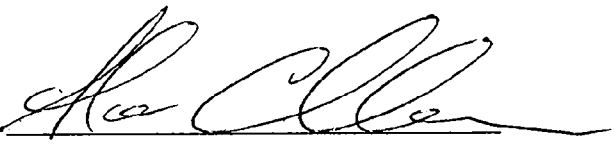
SIDE IMPACT DUMMY (SID)

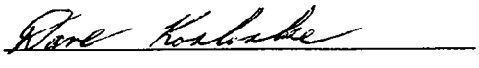
DATE: March 27, 1996

DUMMY NUMBER: 272 TEST NUMBER: D96634

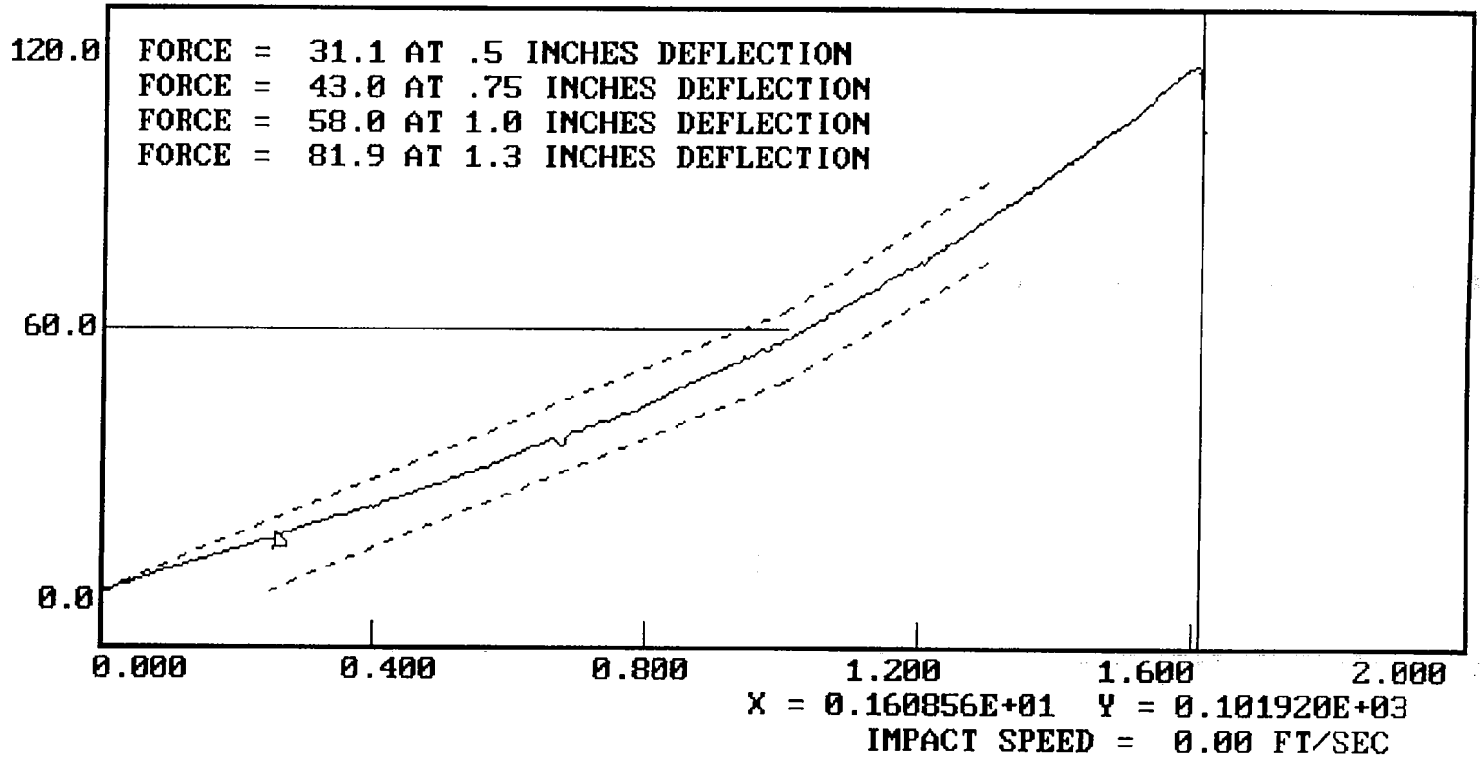
| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 24% |
| FORCE @ 0.5 in | 23.3 - 36.5 lbs | 31.1 |
| FORCE @ 0.75 in | 36.7 - 49.8 lbs | 43.0 |
| FORCE @ 1.0 in | 50 - 63 lbs | 58 |
| FORCE @ 1.3 in | 73 - 88 lbs | 82 |

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - ABDOMEN COMPRESSION 03-27-1996 09:23
DUMMY # 272
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: March 26, 1996

DUMMY NUMBER: 272

TEST NUMBER: D96635

| TEST PARAMETER | SPECIFICATION | TEST RESULTS |
|---|---|---|
| TEMPERATURE | 66 - 78° F | 70° |
| RELATIVE HUMIDITY | 10 - 70% | 22% |
| FORCE @ 0° | 0 - 6 lbs | 0 |
| FORCE @ 20° | 22 - 34 lbs | 23 |
| FORCE @ 30° | 34 - 46 lbs | 36 |
| FORCE @ 40° | 46 - 58 lbs | 54 |
| RETURN ANGLE | 12° maximum | 4° |

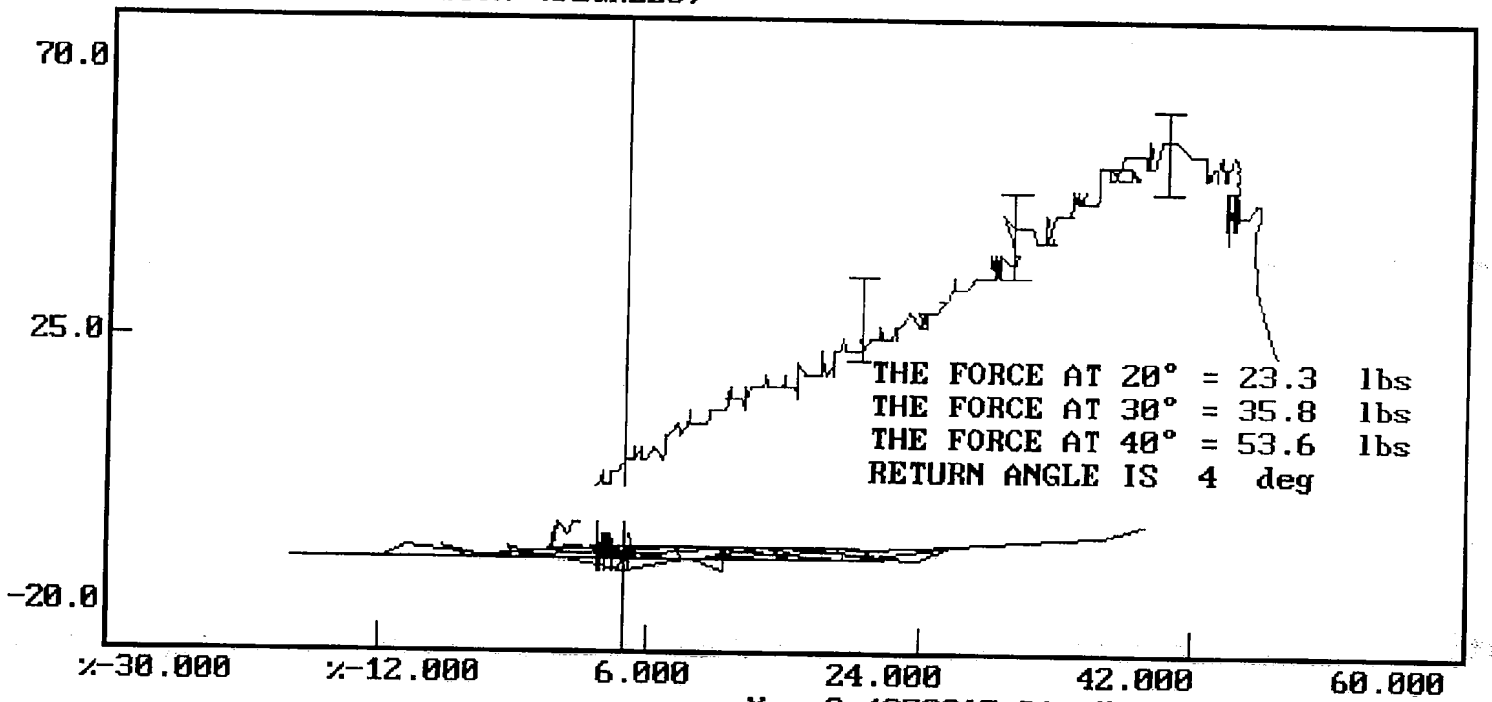
TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - LUMBAR FLEXION
DUMMY # 272
FORCE (LBS) VS. TORSO ROTATION (DEGREES)

03-26-1996 17:48




X = 0.437286E+01 Y = -.688866E+01
IMPACT SPEED = 0.00 FT/SEC

# POST-TEST DRIVER DUMMY INSPECTION CHECKLIST

Type: Side Impact Dummy

Serial Number: 271

Inspected By: Tim Michnay

Date: April 4, 1996

| Part | Items Checked | Comments |
|---|---|---|
| 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):

# POST-TEST PASSENGER DUMMY INSPECTION CHECKLIST

Type: Side Impact Dummy

Serial Number: 272

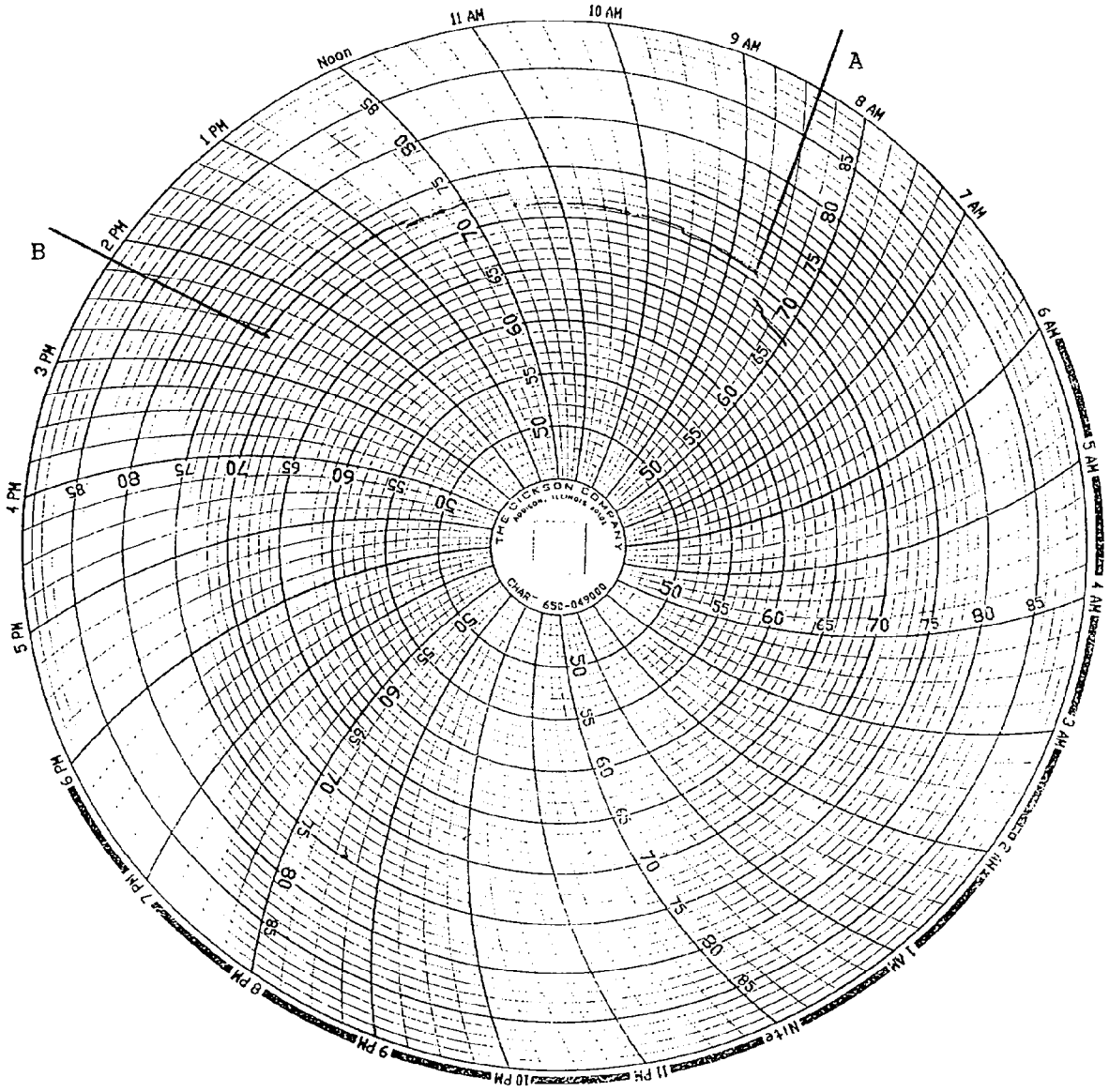
Inspected By: Tim Michnay

Date: April 4, 1996

| Part | Items Checked | Comments |
|---|---|---|
| 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




A = Dummies placed 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 | AP2A4 | Endevco | February 21, 1996 |
| Lower Rib Y | AP1B3 | Endevco | February 21, 1996 |
| Lower Spine Y | ANAP1 | Endevco | February 21, 1996 |
| Pelvis Y | AHTC3 | Endevco | February 21, 1996 |
| Upper Rib Redundant Y | AP2D8 | Endevco | February 21, 1996 |
| Lower Rib Redundant Y | AP1C6 | Endevco | February 21, 1996 |
| Lower Spine Redundant Y | ANAT6 | Endevco | February 21, 1996 |
| Pelvis Redundant Y | AGP53 | Endevco | February 21, 1996 |

INSTRUMENTS FOR PASSENGER DUMMY NO. 272

| | LEFT REAR PASSENGER | | |
|---|---|---|---|
| | SERIAL NO. | MANUFACTURER | CALIBRATION DATE |
| Upper Rib Y | AGTM8 | Endevco | February 20, 1996 |
| Lower Rib Y | 11166 | Endevco | January 29, 1996 |
| Lower Spine Y | AP0H4 | Endevco | February 20, 1996 |
| Pelvis Y | APY15 | Endevco | February 20, 1996 |
| Upper Rib Redundant Y | AJ411 | Endevco | February 20, 1996 |
| Lower Rib Redundant Y | 11630 | Endevco | January 29, 19996 |
| Lower Spine Redundant Y | AP0P6 | Endevco | February 20, 1996 |
| Pelvis Redundant Y | APY16 | Endevco | February 20, 1996 |

VEHICLE INSTRUMENT CALIBRATION

| | VEHICLE AND MDB ACCELEROMETERS | | |
|---|---|---|---|
| | SERIAL NO. | MANUFACTURER | CALIBRATION DATE |
| Moving Barrier CG X | J06-D17 | Entran | January 22, 1996 |
| Moving Barrier CG Y | J23-E01 | Entran | January 22, 1996 |
| Moving Barrier CG Z | J23-E08 | Entran | January 22, 1996 |
| Moving Barrier Rear Axle X | C25-A08 | Entran | October 24, 1995 |
| Moving Barrier Rear Axle Y | L18-G01 | Entran | October 24, 1995 |
| Left Mid A-Post Y | E25-G06 | Entran | February 02, 1996 |
| Left Lower A-Post Y | J06-D23 | Entran | December 13, 1995 |
| Left Lower B-Post Y | C25-A01 | Entran | October 05, 1995 |
| Rear Floorpan Above Axle X | J23-E07 | Entran | January 22, 1996 |
| Rear Floorpan Above Axle Y | L14-D07 | Entran | January 22, 1996 |
| Rear Floorpan Above Axle Z | J23-E05 | Entran | January 22, 1996 |
| Driver Seat Track Y | D06-A16 | Entran | February 02, 1996 |
| Right Side Sill at Front Seat X | L14-D05 | Entran | October 24, 1995 |
| Right Side Sill at Front Seat Y | J03-A13 | Entran | February 02, 1996 |
| Right Side Sill at Front Seat Z | G19-G05 | Entran | February 02, 1996 |
| Right Side Sill at Rear Seat X | E24-G08 | Entran | February 02, 1996 |
| Right Side Sill at Rear Seat Y | C27-B05 | Entran | February 02, 1996 |
| Right Side Sill at Rear Seat Z | E13-D02 | Entran | February 02, 1995 |
| Left Side Sill at Front Seat Y | E13-D18 | Entran | October 23, 1995 |

VEHICLE INSTRUMENT CALIBRATION

| | VEHICLE AND MDB ACCELEROMETERS | | |
|---|---|---|---|
| | SERIAL NO | MANUFACTURER | CALIBRATION DATE |
| Left Side Sill at Rear Seat Y | L14-D14 | Entran | October 24, 1995 |
| Right Rear Occupant Compartment Y | J10-E13 | Entran | January 26, 1996 |
| Vehicle CG X | J10-E11 | Entran | January 26, 1996 |
| Vehicle CG Y | J23-E12 | Entran | January 26, 1996 |
| Vehicle CG Z | J06-D19 | Entran | January 26, 1996 |

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