V2539

`REPORT NO.: 214-MGA-97-13
SAFETY COMPLIANCE TESTING FOR
FMVSS 214 "SIDE IMPACT PROTECTION -
PASSENGER CARS"

CHRYSLER CORPORATION
1997 DODGE NEON 4 DOOR
NHTSA NO: CV0302

MGA PROVING GROUNDS
5000 WARREN ROAD
BURLINGTON, WI 53105

Test Date: December 9, 1996

Report Date: January 13, 1997

FINAL REPORT

Prepared For:

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
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9. Performing Organization Name and Address MGA Research Corporation 5000 Warren Road Burlington, WI 53105	10. Work Unit No. 11. Contract or Grant No. 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 1997 Dodge Neon 4 Door 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 December 09, 1996.

The impact velocity of the Moving Deformable Barrier (MDB) was 52.5 kph, and the ambient temperature at the struck side of the target vehicle at the time of impact was 23°C. The target vehicle post test maximum crush was 275 mm at level 3. The test vehicle's performance follows:

	RIGHT FRONT PASS.	RIGHT REAR PASS.
Right Upper Rib (RUR) Accel., g	71	48
Right Lower Rib (RLR) Accel., g	63	43
Lower Spine (T_{12}) Accel., g	60	67
Thoracic Trauma Index (TTI)	65	57
Pelvis (PEV) Accel., g	73	72

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

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

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Approval Date: 1-17-97

FINAL REPORT ACCEPTED BY (OVSC):

Accepted By:
Contract Technical Manager

Acceptance Date: 3/20/97

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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 1997 Dodge Neon 4 Door.

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 1997 Dodge Neon 4 Door was impacted on the right 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 32.6 mph (52.5 kph). The target vehicle was stationary and was positioned at an angle of 63° to the line of forward motion. The side impact test was conducted by MGA Research Corporation in Burlington, Wisconsin, on December 09, 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 right front and rear right 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. Right Upper Rib (RUR) uniaxial accelerometer (Y-direction)
2. Right Lower Rib (RLR) 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 FMVSS 214 Right Side Impact test:

Injury Criteria	Front SID	Rear SID
TTI (g)	65	57
Pelvis (g)	73	72

TEST NOTES

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

   Right Front Door on Centerline
   Midrear of Right Front Door
   Right Front Door Upper Centerline
   Midrear of Right Rear Door
   Right Rear Door Upper Centerline
   Rear Seat Track

2. The emergency brake failed to hold the vehicle stationary during and after the impact.

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: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 VIN: 1B3ES27C8VD111120

Vehicle Body Color: Lapis Blue Build Date: 8/96

Engine Data: 4 Cylinders; __ CID; 2.0 Liter; ___cc

Placement __ Longitudinal; X Lateral

Transmission: 3 speed;__ Manual; X Automatic;_ Overdrive

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

Odometer Reading 320 miles

Options:_A/C; X Pwr. Steering; X Pwr. Brakes;_ Pwr. Windows;

_Cruise Control;_Tilt Wheel;_Power Door Locks;

DATA FROM TIRE PLACARD:

Tire Pressure (at capacity): 32 Psi FRONT

32 Psi REAR

Recommended Tire Size: P175/70R14 and P185/65R14

Tires on Test Vehicle: P175/70R14 Manufacturer: Goodyear

Vehicle Capacity Data:

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

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

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

Vehicle Maximum Capacity Loading	= 392.4 kg	(A)
No. of Occupants x 68.04 kg.	= 340.2 kg	(B)
Cargo Capacity (A-B)	= 52.2 kg	

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

WEIGHT OF TEST VEHICLE WITH MAXIMUM FLUIDS:

Right Front	= 360.6 kg	Right Rear	= 197.3 kg
Left Front	= 367.4 kg	Left Rear	= 208.2 kg
TOTAL FRONT =	728.0 kg	TOTAL REAR =	405.5 kg

% of Total Vehicle Weight = 64.2 %; % of Total Weight = 35.8 %

TOTAL WEIGHT = 1133.5 kg

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight with Maximum Fluids	= 1133.5 kg
Cargo Carrying Capacity of Test Vehicle	= 52.2 kg
Weight of 2 Side Impact Dummies (2 x 80.7 kg.)	= 161.4 kg
TEST VEHICLE TARGET WEIGHT	= 1347.1 kg

FULLY LOADED WEIGHT OF VEHICLE:

Right Front	= 416.9 kg	Right Rear	= 289.9 kg
Left Front	= 372.4 kg	Left Rear	= 266.2 kg
TOTAL FRONT	= 789.3 kg	TOTAL REAR	= 556.1 kg
% of Total Weight	= 58.7 %	% of Total Weight	= 41.3 %

TOTAL TEST WEIGHT = 1345.4 kg

TEST VEHICLE ATTITUDE:

CURB WEIGHT ATTITUDE:

Right Front 657 mm Left Front 655 mm Right Rear 673 mm Left Rear 675 mm

FULLY LOADED WEIGHT ATTITUDE:

Right Front 635 mm Left Front 654 mm Right Rear 633 mm Left Rear 646 mm

TEST ATTITUDE:

Right Front 642 mm Left Front 652 mm Right Rear 645 mm Left Rear 649 mm

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Test Vehicle Wheelbase: 2638 mm

C.G. = 1050 mm rearward of front wheel centerline

TOTAL VEHICLE LENGTH:

Right Side = 4065 mm

Centerline = 4327 mm

Left Side = 4062 mm

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996

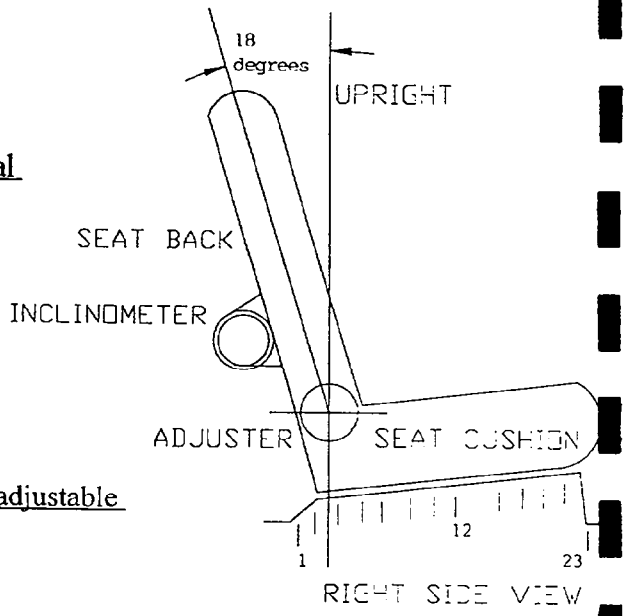
FRONT SEAT CUSHION PLACEMENT:

Total Length of Adjustment Travel: 215 mm

Test Position: 12th position rearward out of 23 total

FRONT SEAT BACK ADJUSTMENT POSITION:

Seat Back Angle = 18° from the vertical position



REAR POSITION SEAT:

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

Seat Back Adjustment Position: Non-adjustable

ADJUSTABLE STEERING COLUMN POSITION: Non-adjustable

WINDOW POSITIONS: Left Front Down Left Rear Removed

Right Front Up Right Rear Up

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

Fuel system usable capacity = 47.3 liters

Test Volume: 43.9 liters 93 % of capacity

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

Wheelbase: = 2638 mm

Impact Point is 379 mm rearward of front axle centerline

DATA SHEET NO. 2

TEST VEHICLE SUMMARY OF RESULTS

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996

Overall Length = 4327 mm; Overall Width = 1720 mm

TEST WEIGHT:

Right Front =	416.8 kg	Right Rear =	271.2 kg
Left Front =	391.0 kg	Left Rear =	262.7 kg
TOTAL FRONT =	807.8 kg	TOTAL REAR =	533.9 kg
% of Total Weight =	60.2 %	% of Total Weight =	39.8 %

TOTAL VEHICLE WEIGHT = 1341.7 kg

Wheelbase = 2638 mm

Longitudinal C.G. from Center of Front Axle = 1050 mm

Impact Angle with Respect to Impactor = 90° degrees

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (223 mm above ground) = 157 mm
2. LEVEL 2 (440 mm above ground) = 257 mm
3. LEVEL 3 (562 mm above ground) = 275 mm
4. LEVEL 4 (833 mm above ground) = 191 mm
5. LEVEL 5 (1285 mm above ground) = 38 mm

Maximum Post-Test Intrusion = 275 mm

OCCUPANTS:	Right Front Passenger	Right Rear Passenger
Type of Dummy	SID	SID
Restraints Used	type II seat belt with frontal airbag	type II seat belt

TEST VEHICLE SUMMARY OF RESULTS (Cont'd)

INSTRUMENTATION:

Number of Vehicle Data Channels:		= 20
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: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996

POSITION OF IMPACT (MDB) ON MONORAIL:

Crabbed 27° to right

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	= 1106 mm
C.G. Location From Center Line	= 14.7 mm
C.G. Location Above Ground Level	= 488 mm

MDB WEIGHT:

Left Front	= 434.5 kg	Left Rear	= 233.2 kg
Right Front	= 342.9 kg	Right Rear	= 346.0 kg
TOTAL FRONT = 777.4 kg		TOTAL REAR = 579.2 kg	

TOTAL MDB WEIGHT = 1356.6 kg

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

Impact Speed = Primary: 32.6 mph (52.5 kph) Secondary: 32.5 mph (52.3 kph)

CRASH TEST SUMMARY FOR SIDE IMPACTOR (Cont'd)

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

1. Row A Top of Stack (813 mm) = 53 mm
2. Row B Mid Stack (686 mm) = 43 mm
3. Row C Top of Bumper (533 mm) = 54 mm
4. Row D Center of Bumper (432 mm) = 83 mm

INSTRUMENTATION:

Number of MDB Data Channels = 7

DATA SHEET NO. 4

POST-TEST OBSERVATIONS

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996

VISIBLE DUMMY CONTACT POINTS:

	RIGHT FRONT SID	RIGHT REAR SID
Head	to right shoulder	to C Post
Arm	to door panel	to door panel
Pelvis	to door panel	to door panel
Left Knee	to right knee	to right knee
Right Knee	to door panel	to door panel

DOOR OPENING:

	LEFT SIDE	RIGHT SIDE
Front	Yes	No
Rear	Yes	No

MDB DISTANCE FROM TARGET IMPACT POINT:

Horizontal: 1 mm forward Vertical: 7 mm high

ARM REST LOCATIONS:

Front: 245 mm from bottom of window

Rear: 296 mm from bottom of window

POST-TEST OBSERVATIONS (Cont'd)

SEAT CRUSH:

Front Seat Back: 37 mm Front Seat Cushion: 35 mm

Left Rear Seat Back: 130 mm Rear Seat Cushion: 105 mm

GLAZING DAMAGE:

Right side front and rear door glass broken, windshield cracked

PILLAR PERFORMANCE:

No failure noted

SILL SEPARATION:

None noted

OTHER NOTABLE IMPACT EFFECTS:

Frontal airbags deployed, emergency brake failed to hold the vehicle, and gas cap door broke off during impact

SECTION 4

OCCUPANT AND VEHICLE INFORMATION

DATA SHEET NO. 5

SIDE IMPACT DUMMY (SID) INSTRUMENTATION DATA

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

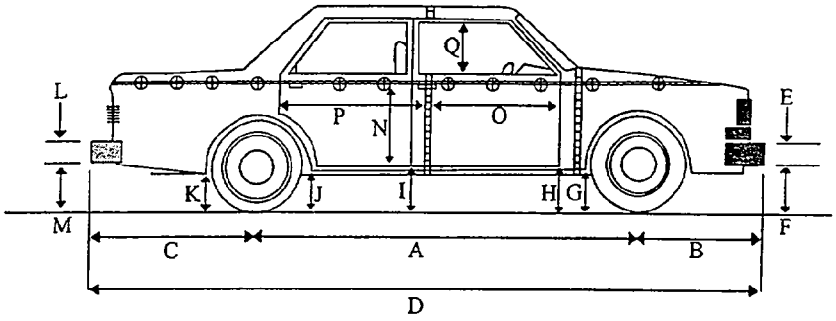
Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996

	Front SID ID #269				Rear SID ID #270			
	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								
Right Upper Rib (RUR) Y	18	32	-71	27	10	71	-48	46
Right Lower Rib (RLR) Y	11	83	-63	26	7	124	-43	46
SPINE ACCELERATIONS								
Lower Lateral Y	10	89	-60	31	14	75	-67	46
PELVIS ACCELERATIONS								
Lateral Y	9	51	-73	33	5	101	-72	39

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

DATA SHEET NO. 6

VEHICLE PRE AND POST-TEST MEASUREMENTS



D = Length at Centerline
R = Right Side Length
S = Left Side Length
T = Width at B Post
E & L = Bumper Thickness

J1 = To Pinch Weld
J2 = To Sill

ALL MEASUREMENTS IN (mm)

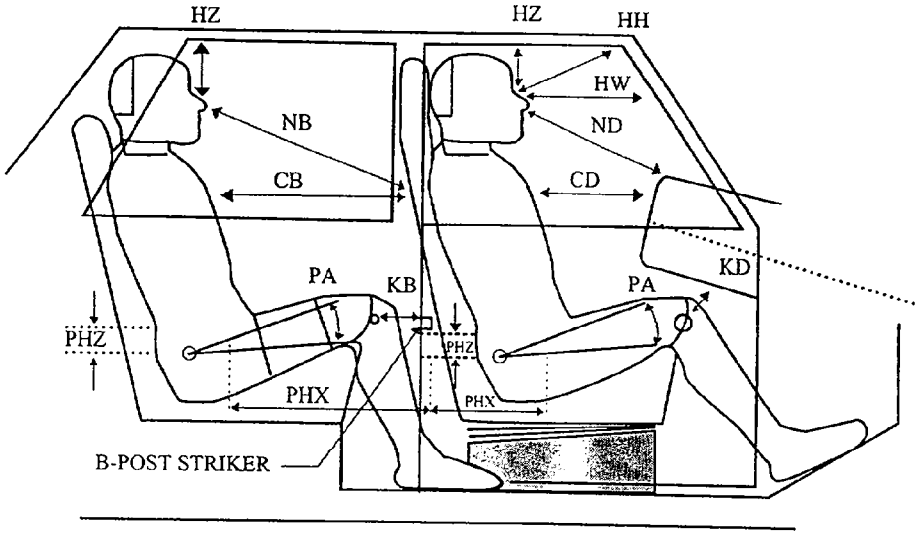
	PRE-TEST	POST-TEST	Δ CHANGE
A	2638	2610	28
B	835	900	65
C	854	828	26
D	4327	4338	11
E	184	184	0
F	382	404	22
G	215	224	9
H	158	169	11
I	170	178	8
J1/J2	178/173	190/180	12/7
K	304	330	26
L	300	300	0
M	372	390	18
N	683	590	93
O	793	765	28
P	1160	1121	39
Q	453	455	2
R	4065	4048	17
S	4062	4100	38
T	1720	1580	140

DATA SHEET NO. 7

SIDE IMPACT DUMMY (SID) LONGITUDINAL CLEARANCE DIMENSIONS

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

NHTSA NO.: CV0302 Test Date: December 09, 1996



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

	FRONT PASSENGER ID #269
HH	346
HW	614
HZ	175
ND	579
CD	489
CS	N/A
KDL(KDA°)	155 (28.5°)
KDR(KDA°)	150 (30.4°)
PA°	24.1°
PHX	192
PHZ	118

	REAR PASSENGER SID ID #270
HZ	135
NB	633
CB	565
KBL (KBA)	222 (11.9°)
KBR (KBA)	221 (3.3°)
PA°	24.7°
PHX	308
PHZ	309

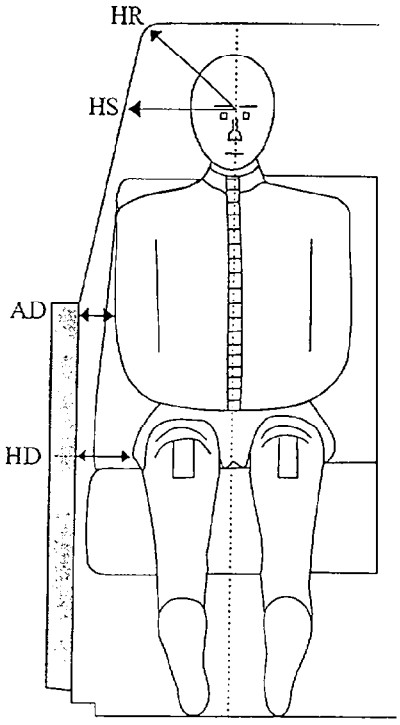
NOTE: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as reference point.

DATA SHEET NO. 8

SIDE IMPACT DUMMY (SID) LATERAL CLEARANCE DIMENSIONS

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

NHTSA NO.: CV0302 Test Date: December 09, 1996



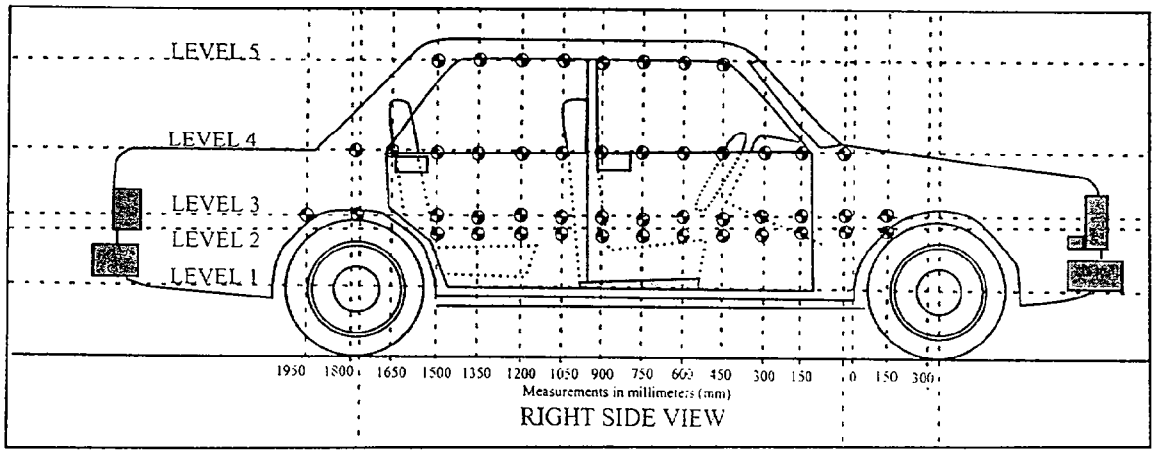
NOTE: All dimensions are in mm

	FRONT PASSENGER ID #269	REAR PASSENGER ID #270
HR	193	164
HS	275	272
AD	91	98
HD	105	127

DATA SHEET NO. 9
VEHICLE SIDE MEASUREMENTS

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

NHTSA NO.: CV0302 Test Date: December 09, 1996



RIGHT SIDE VIEW

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

MEASUREMENTS ALONG THE VERTICAL 750 mm. LINE SHOWN ABOVE

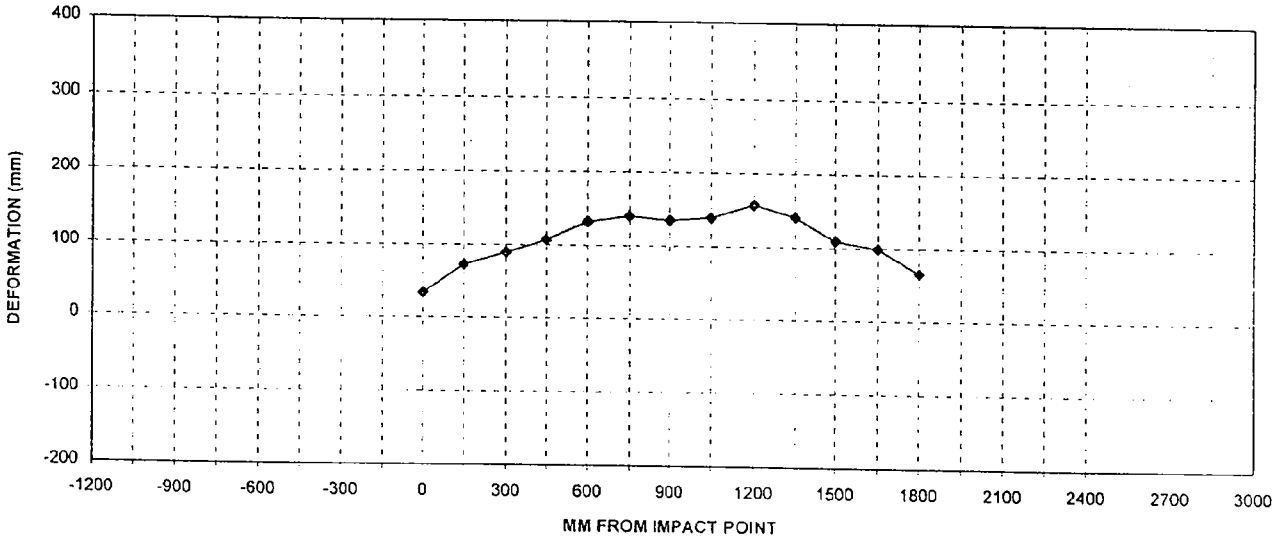
Level 1 @ Axle Centerline Height (or Sill Top Height)	= 223 mm
Level 2 @ Occupant H-Point	= 440 mm
Level 3 @ Mid Door	= 562 mm
Level 4 @ Window Sill	= 833 mm
Level 5 @ Window Top	= 1285 mm

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH PROFILES

	Level 1 - Axle Centerline		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1200			
-1050			
-900			
-750			
-600			
-450			
-300			
-150			
0 (impact point)	494	526	32
150	506	578	72
300	503	592	89
450	504	611	107
600	504	636	132
750	504	644	140
900	504	639	135
1050	495	634	139
1200	497	654	157
1350	499	640	141
1500	504	613	109
1650	507	606	99
1800	509	574	65
1950			
2100			
2250			
2400			
2550			
2700			
2850			
3000			

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



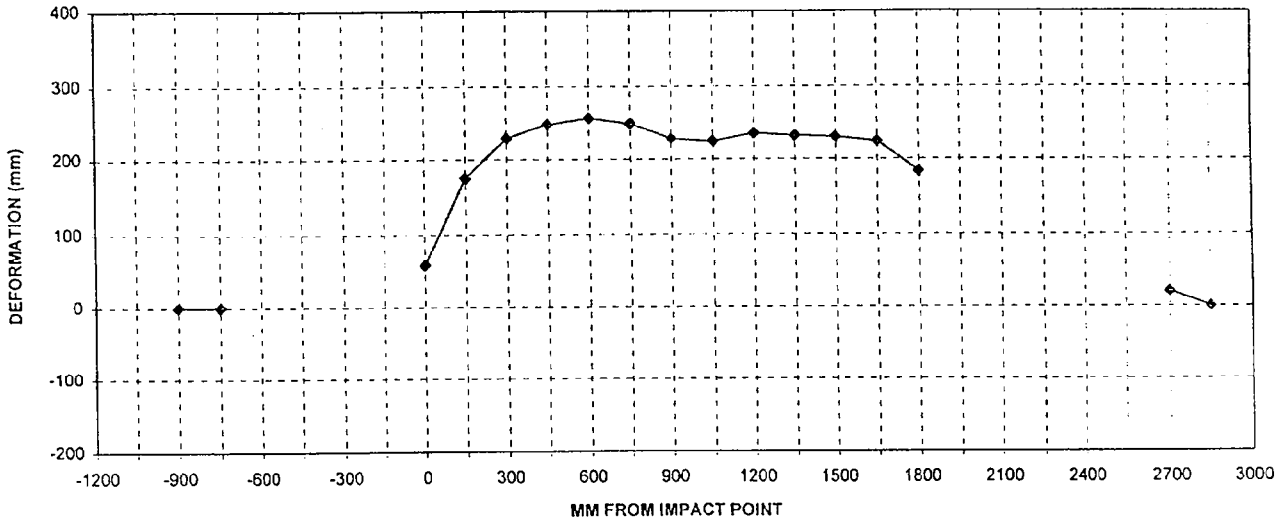
LEVEL 1 - AXLE CENTERLINE

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

	Level 2 - Occupant H Point		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1200			
-1050			
-900	509	509	0
-750	476	476	0
-600			
-450			
-300			
-150			
0 (impact point)	456	514	58
150	453	628	175
300	450	679	229
450	450	698	248
600	448	705	257
750	447	696	249
900	446	674	228
1050	446	670	224
1200	445	680	235
1350	446	678	232
1500	446	676	230
1650	447	671	224
1800	449	633	184
1950			
2100			
2250			
2400			
2550			
2700	478	498	20
2850	504	504	0
3000			

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



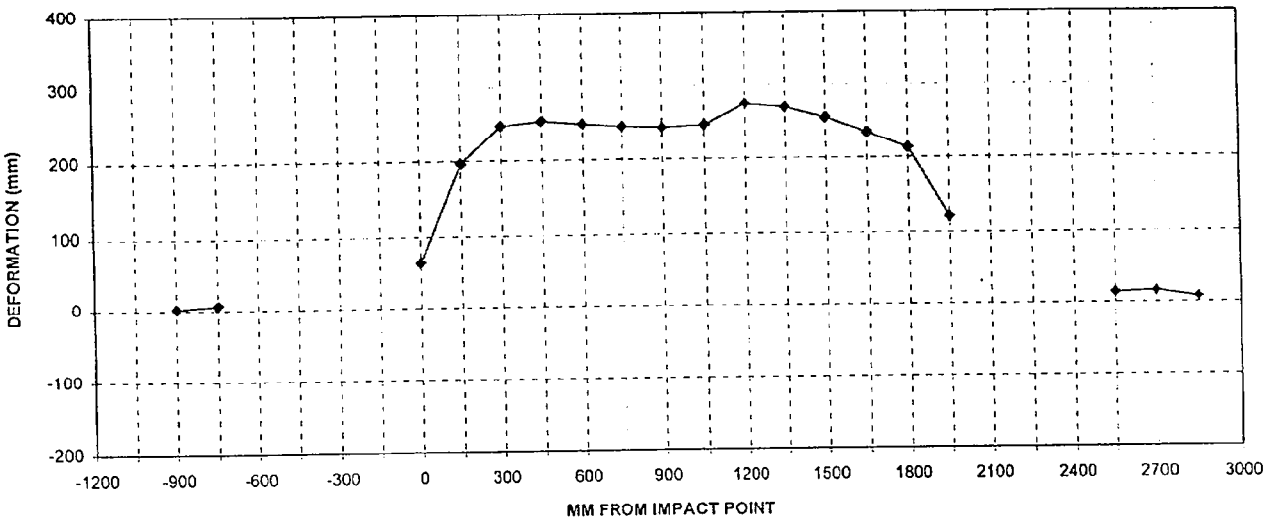
LEVEL 2 - OCCUPANT H-POINT

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

	Level 3 - Mid Door		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1200			
-1050			
-900	523	525	2
-750	478	484	6
-600			
-450			
-300			
-150			
0 (impact point)	444	508	64
150	441	637	196
300	436	684	248
450	436	690	254
600	436	686	250
750	435	681	246
900	434	678	244
1050	433	680	247
1200	431	706	275
1350	431	701	270
1500	431	687	256
1650	432	667	235
1800	432	645	213
1950	437	557	120
2100			
2250			
2400			
2550	453	467	14
2700	468	484	16
2850	512	520	8
3000			

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



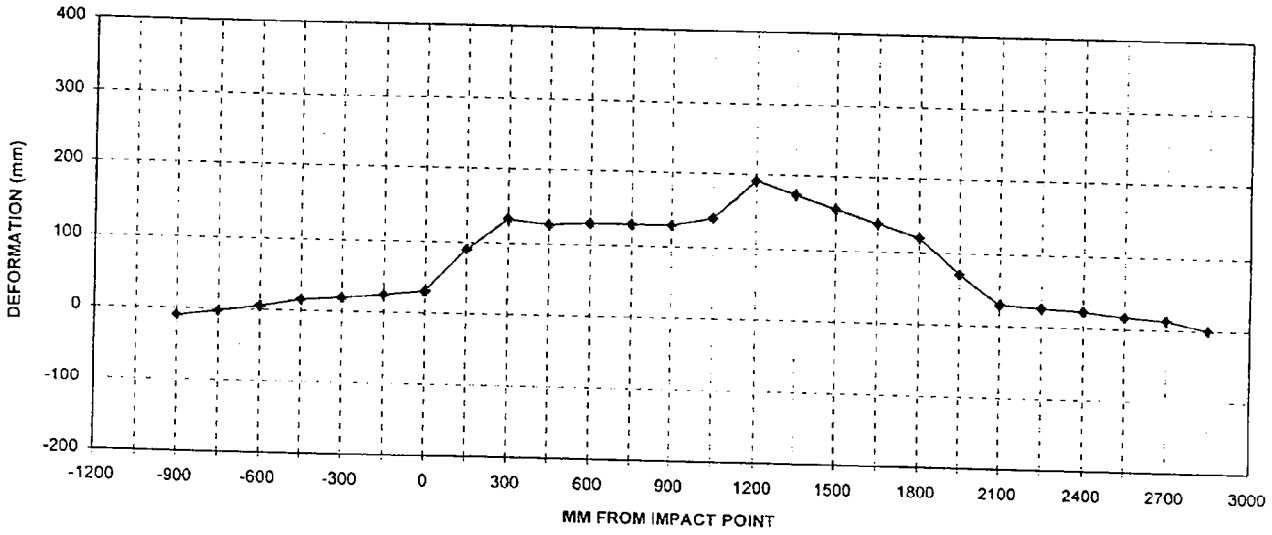
LEVEL 3 - MID DOOR

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

	Level 4 - Window Sill		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1200			
-1050			
-900	596	586	-10
-750	562	559	-3
-600	541	546	5
-450	524	539	15
-300	516	535	19
-150	511	535	24
0 (impact point)	508	538	30
150	502	592	90
300	498	630	132
450	503	629	126
600	504	633	129
750	504	633	129
900	505	634	129
1050	504	644	140
1200	505	696	191
1350	502	676	174
1500	502	658	156
1650	501	639	138
1800	497	618	121
1950	495	566	71
2100	494	524	30
2250	498	524	26
2400	502	525	23
2550	514	530	16
2700	524	536	12
2850	564	564	0
3000			

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



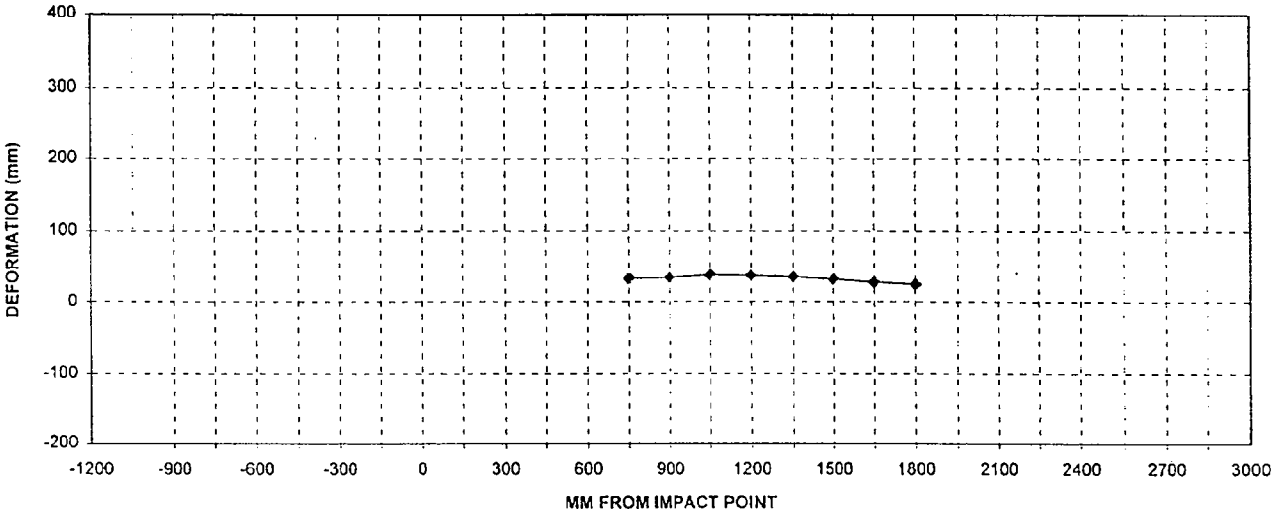
LEVEL 4 - WINDOW SILL

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

	Level 5 - Window Top		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1200			
-1050			
-900			
-750			
-600			
-450			
-300			
-150			
0 (impact point)			
150			
300			
450			
600			
750	738	771	33
900	738	772	34
1050	742	780	38
1200	749	786	37
1350	751	786	35
1500	752	784	32
1650	756	784	28
1800	763	788	25
1950			
2100			
2250			
2400			
2550			
2700			
2850			
3000			

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)

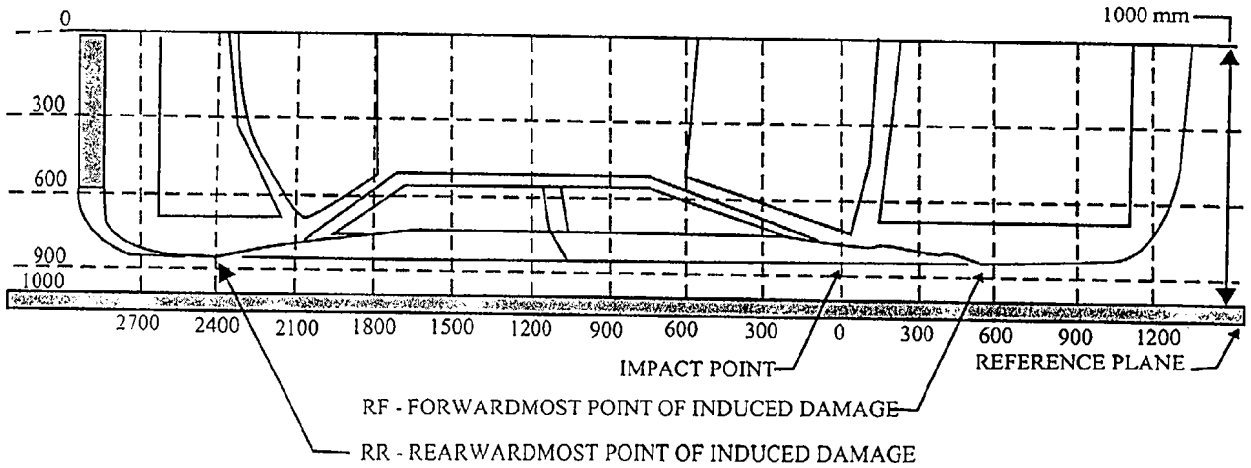


LEVEL 5 - WINDOW TOP

DATA SHEET NO. 11
VEHICLE DAMAGE PROFILE DISTANCES

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

NHTSA NO.: CV0302 Test Date: December 09, 1996



DPD MEASUREMENTS	POST-TEST (mm)	PRE-TEST (mm)	STATIC CRUSH (mm)
1. (RF = -900 mm)	525	523	2*
2. -150 mm	535	511	24
3. 600 mm	705	448	257
4. 1350 mm	678	446	232
5. 2100 mm	524	494	30
6. (RR = 2850 mm)	520	512	8*

* Induced damage was recorded for the full length of the vehicle.

DATA SHEET NO. 12

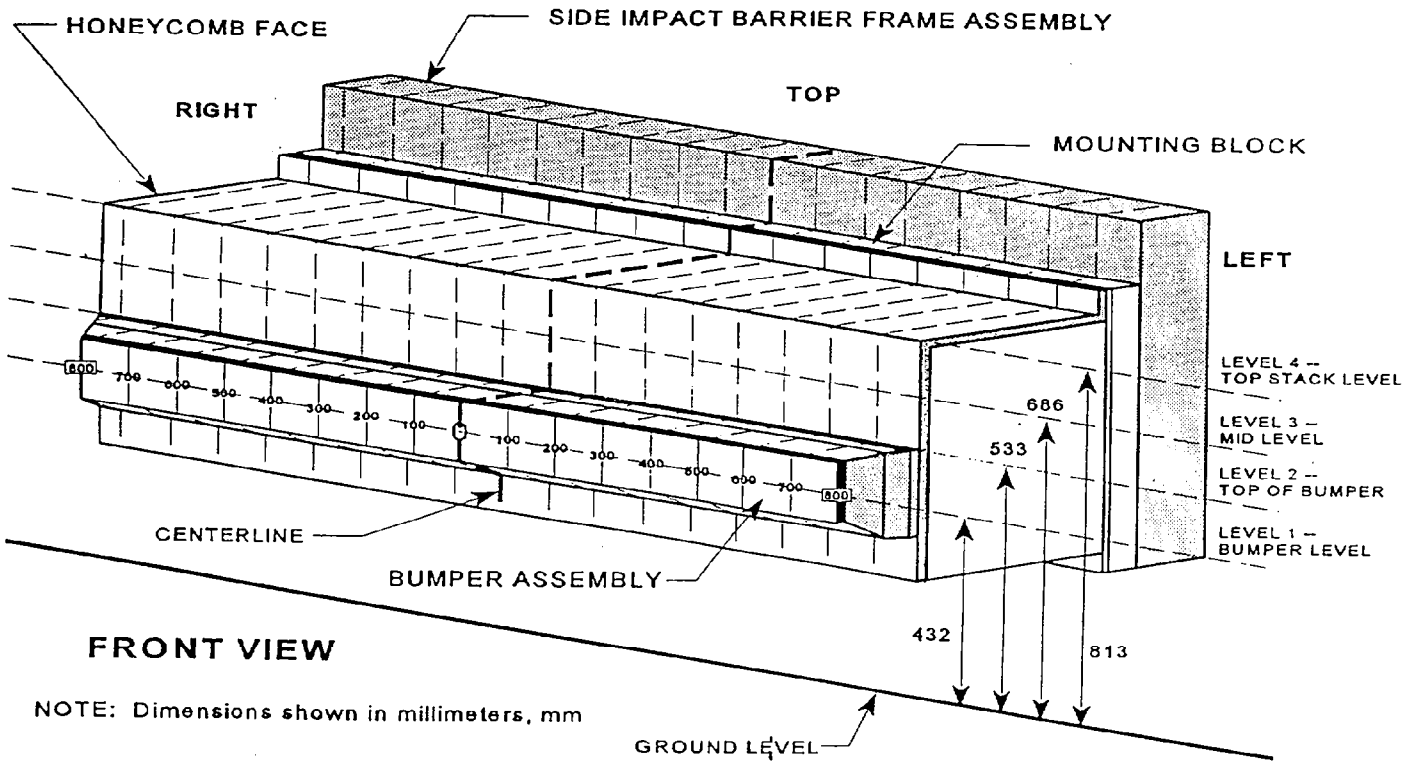
EXTERIOR STATIC CRUSH FOR SIDE IMPACTOR

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 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	53	20	10	8	7	5	4	4	3	0	1	1	0	0	-1	1	1
Mid Level Level 3	686 mm	43	9	3	1	1	0	-1	-1	-1	-3	-3	-4	-3	-5	-5	-3	17
Top Bumper Level 2	533 mm	54	45	30	25	19	17	14	16	19	25	25	22	20	16	14	20	37
Mid Bumper Level 1	432 mm	83	58	40	32	29	26	25	35	43	39	36	35	29	26	26	35	33

See next page for Barrier Face Graphic

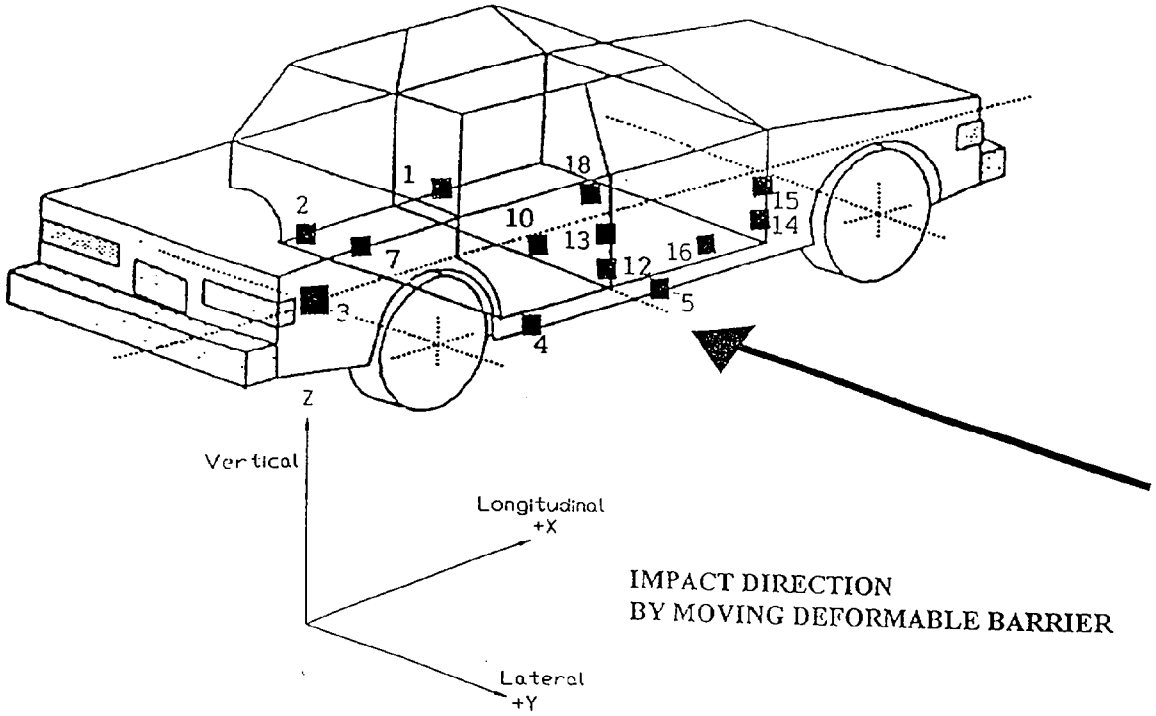

HONEYCOMB FACE
SIDE IMPACT BARRIER FRAME ASSEMBLY
RIGHT
TOP
MOUNTING BLOCK
LEFT
LEVEL 4 -- TOP STACK LEVEL
LEVEL 3 -- MID LEVEL
LEVEL 2 -- TOP OF BUMPER
LEVEL 1 -- BUMPER LEVEL
686
533
432
813
CENTERLINE
BUMPER ASSEMBLY
FRONT VIEW
NOTE: Dimensions shown in millimeters, mm
GROUND LEVEL

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996



1 - Left Side Sill @ Front Seat
2 - Left Side Sill @ Rear Seat
3 - Rear Floorpan Above Axle
4 - Right Side Sill @ Rear Seat
5 - Right Side Sill @ Front Seat
7 - Left Rear Occupant Compartment
12 - Right Lower B-Post
13 - Right Mid B-Post
14 - Right Lower A-Post
15 - Right Mid A-Post
16 - Front Seat Track
18 - Vehicle C.G.

DATA SHEET NO. 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 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	Left Side Sill @ Front Seat	2342	-638	163	4.7	-4.8	2.3	-43.7	12.8	-11.8	45.3
2	Left Side Sill @ Rear Seat	1583	-637	160	4.5	-6.4	3.9	-36.6	4.7	-8.7	36.9
3	Rr. Floorpan Above Axle	865	0	307	4.7	-12.3	5.6	-30.5	8.5	-10.2	31.7
4	Right Side Sill @ Rr. Seat	1599	637	150	---	---	3.8	-40.0	---	---	---
5	Right Side Sill @ Frt. Seat	2354	638	154	---	---	19.7	-48.6	---	---	---
7	Left Rear Occupant Compartment	1652	-376	180	---	---	3.7	-29.9	---	---	---
12	Right Lower B-Post	1942	666	282	---	---	27.6	-58.8	---	---	---
13	Right Mid B-Post	1952	684	775	---	---	34.9	-179.9	---	---	---
14	Right Lower A-Post	2956	672	248	---	---	31.5	-129.6	---	---	---
15	Right Mid A-Post	3012	736	783	---	---	6.6	-38.4	---	---	---
16	Right Front Passenger Seat Track	2081	516	240	---	---	13.7	-49.9	---	---	---
18	Vehicle CG**	2374	0	400	8.0	-17.1	6.5	-45.7	19.8	-18.4	47.0

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

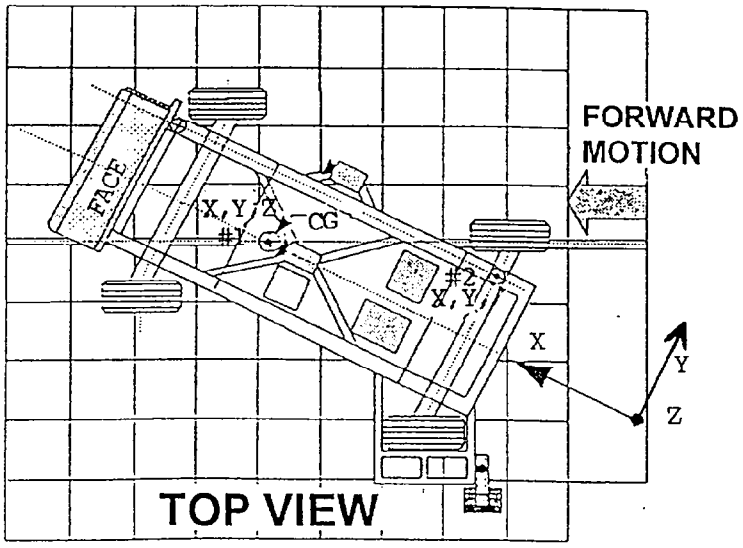
** Data not valid after approximately 31 msec.

DATA SHEET NO. 14

MOVING DEFORMABLE BARRIER (MDB) ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996



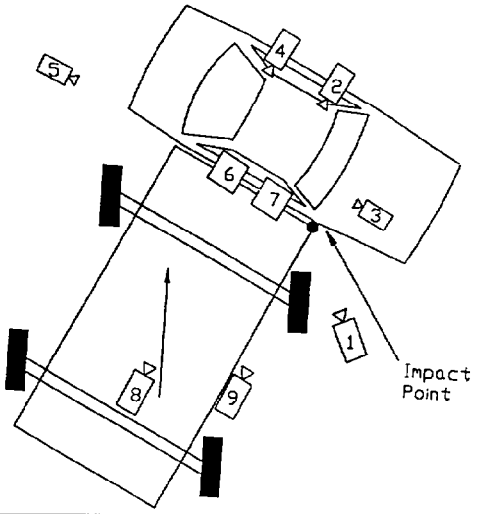
Accel. No.	Description	Coordinates (mm)*			(+) Positive		(-) Negative	
		X	Y	Z	Max. (g)	Time (msec)	Max. (g)	Time (msec)
1	MDB Center of Gravity	-1092	0	483				
	Longitudinal (X)	---	---	---	1.5	189	-15.8	38
	Lateral (Y)	---	---	---	6.2	44	-0.8	57
	Vertical (Z)	---	---	---	7.7	56	-10.7	30
	Resultant (R)	---	---	---	18.5	30	---	---
2	Rear Frame Member	-2591	625	622				
	Longitudinal (X)	---	---	---	1.8	85	-19.3	42
	Lateral (Y)	---	---	---	1.1	188	-4.3	38

*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: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996



Camera No.	View	Coordinates (mm)*			Angle	Lens (mm)	Film Speed (fps)
		X	Y	Z			
	Real Time					13	24
1	Right Impact	-900	2120	1615	90°	13	1010
2	Onboard Front Passenger					8	926
3	Onboard Rear Passenger					8	926
4	Onboard Hood					13	900
5	Left Impact	-360	-9340	1945	90°	25	1000
6	Top Overall	-410	-1130	5000	90°	8	NR
7	Top Impact	260	90	5000	90°	13	1015
8	Cart Wide					13	1053
9	Cart Impact					35	909

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

NR = Not run

DATA SHEET 16

FUEL SYSTEM INTEGRITY POST IMPACT TEST DATA

Vehicle Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 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 32.6 mph (52.5 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

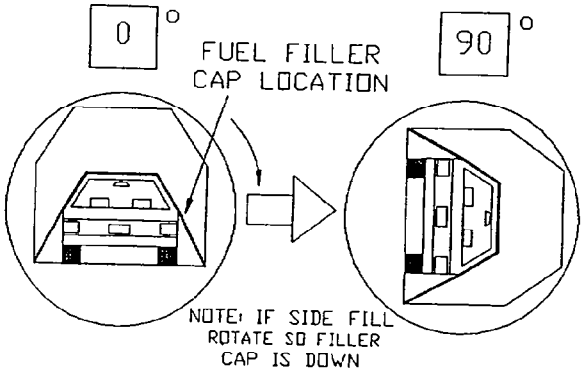
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA

Vehicle Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996

TEST PHASE: 0° - 90°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 46 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 46 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

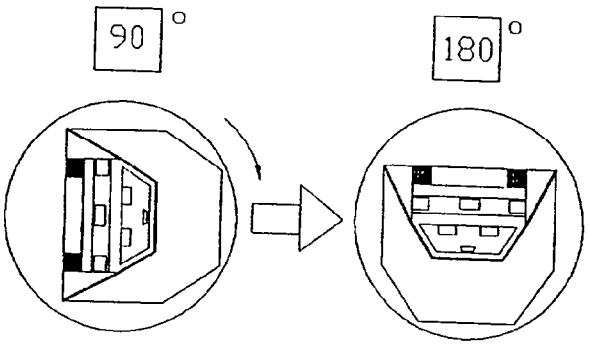
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA (Cont'd)

Vehicle Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996

TEST PHASE: 90° - 180°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 26 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 26 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

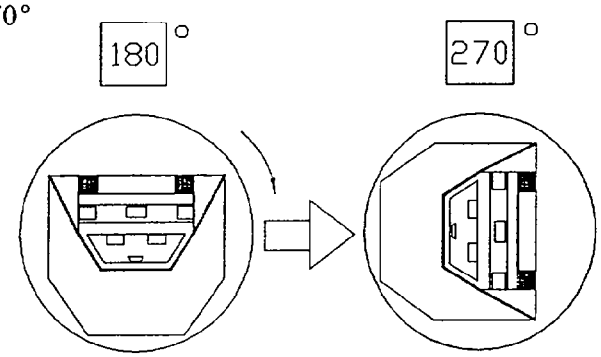
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA (Cont'd)

Vehicle Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996

TEST PHASE: 180° - 270°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 32 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 32 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

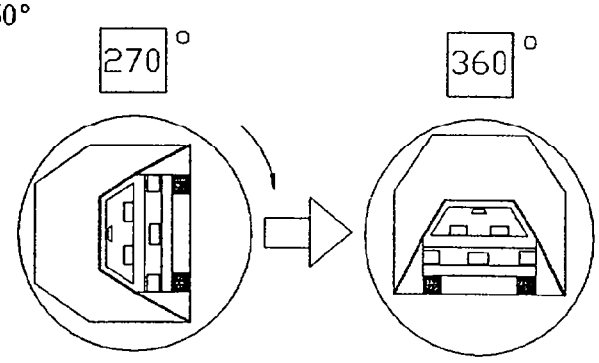
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA

Vehicle Year/Make/Model/Body Style: 1997/Dodge/Neon/4 Door

Vehicle NHTSA No.: CV0302 Test Date: December 09, 1996

TEST PHASE: 270° - 360°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 38 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 38 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

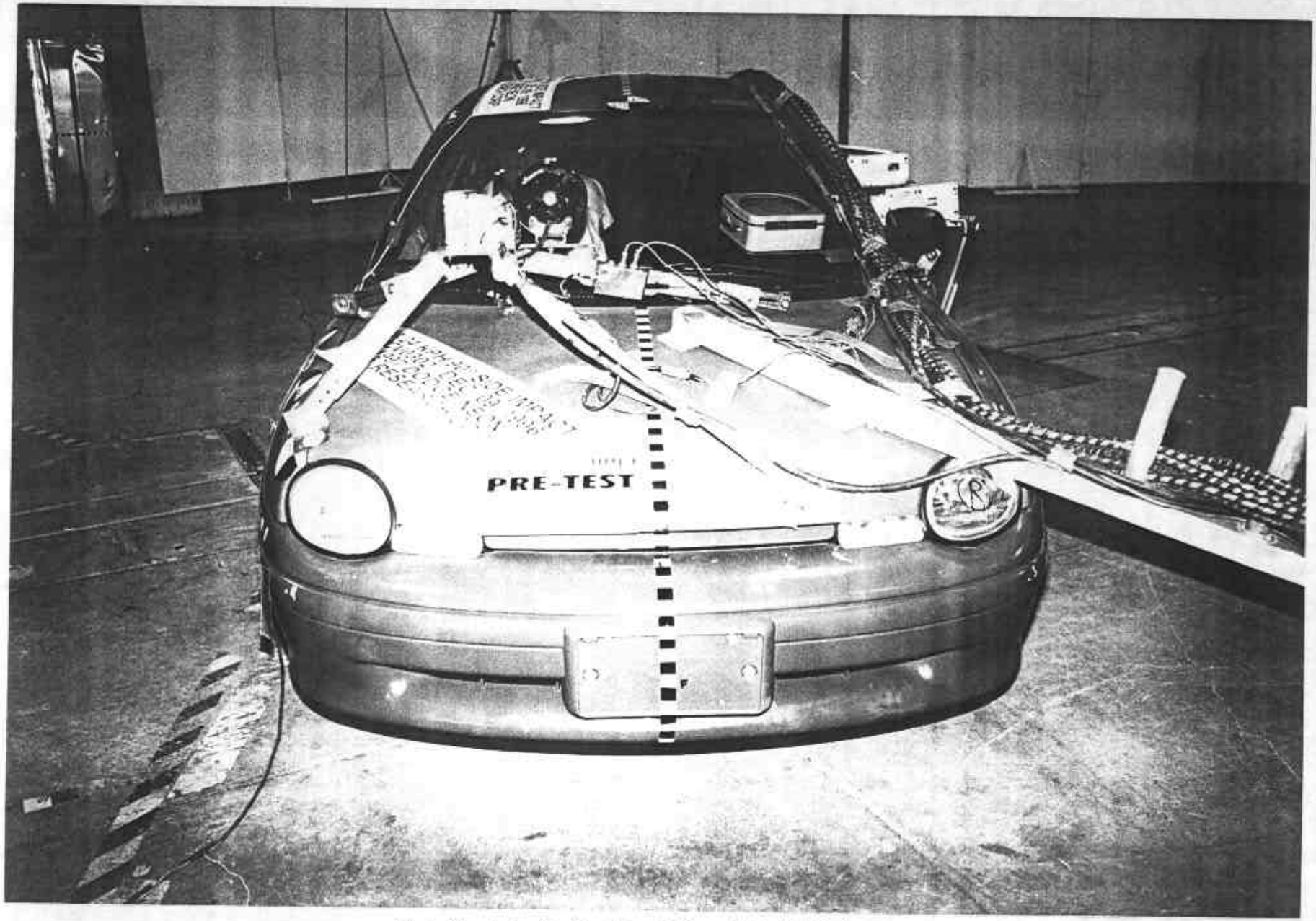


Photo No. A-1 - Pre-Test Front View of Test Vehicle

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

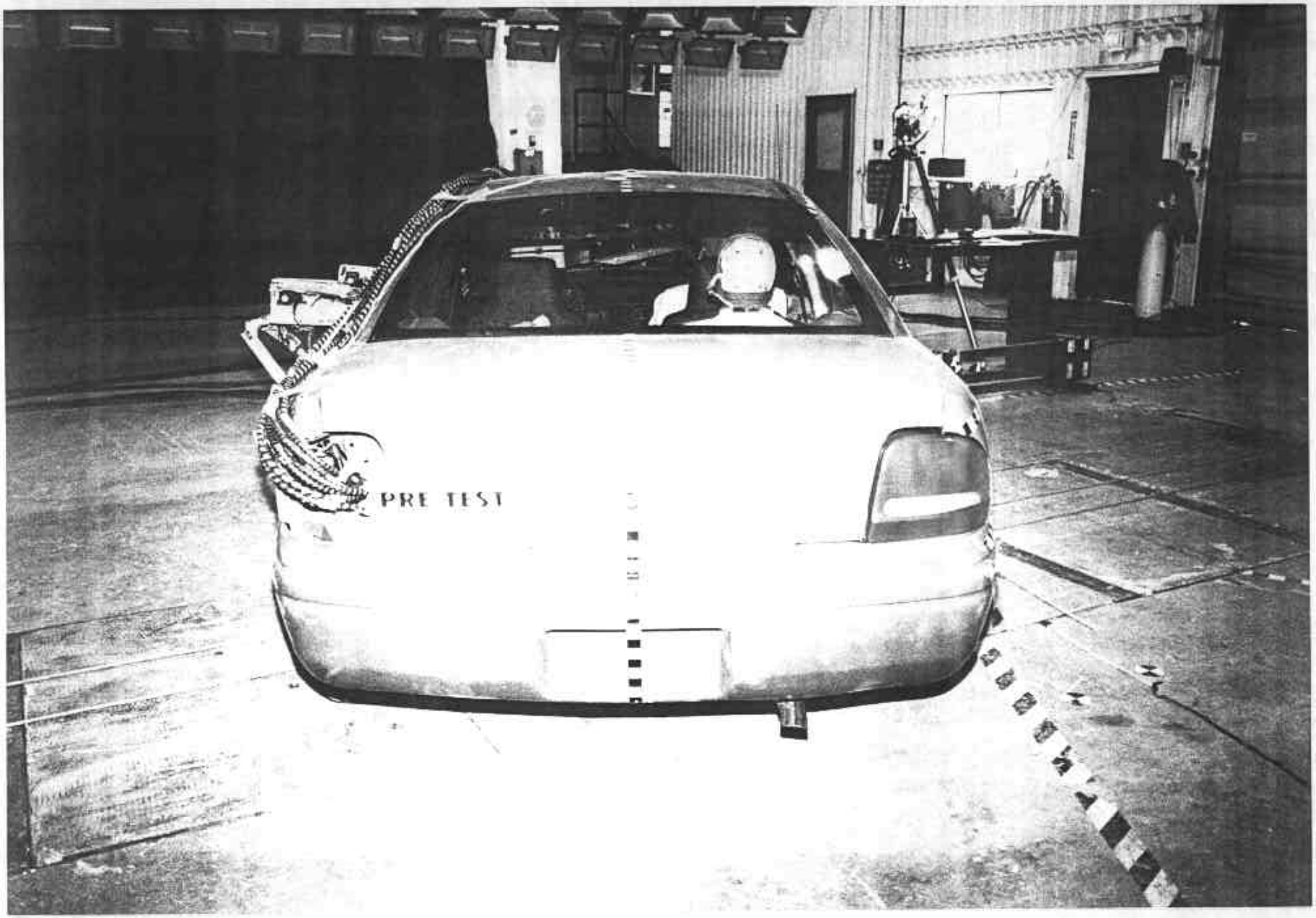


Photo No. A-3 - Pre-Test Rear View of Test Vehicle

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

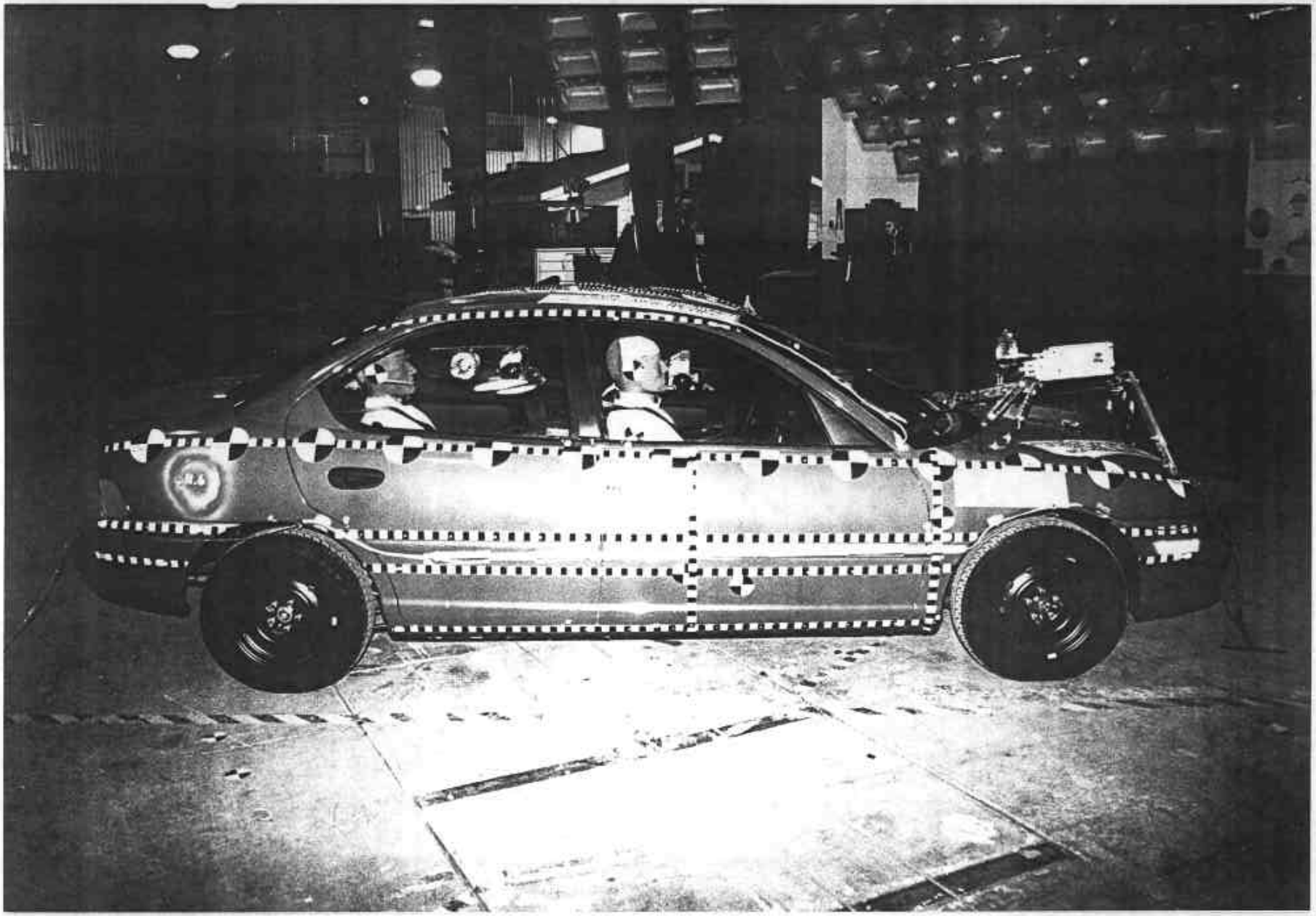


Photo No. A-5 - Pre-Test Right Side View of Test Vehicle

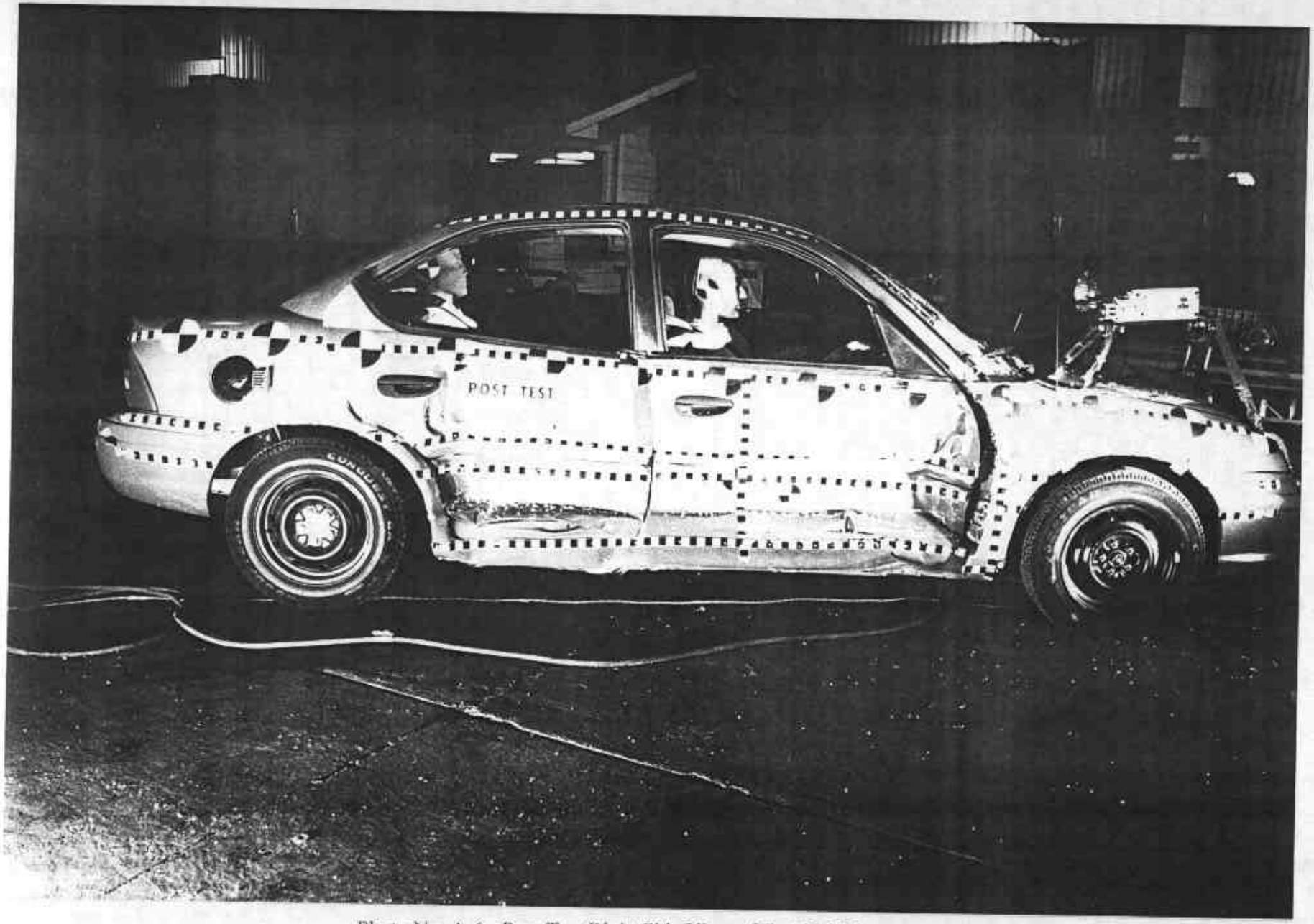


Photo No. A-6 - Post-Test Right Side View of Test Vehicle

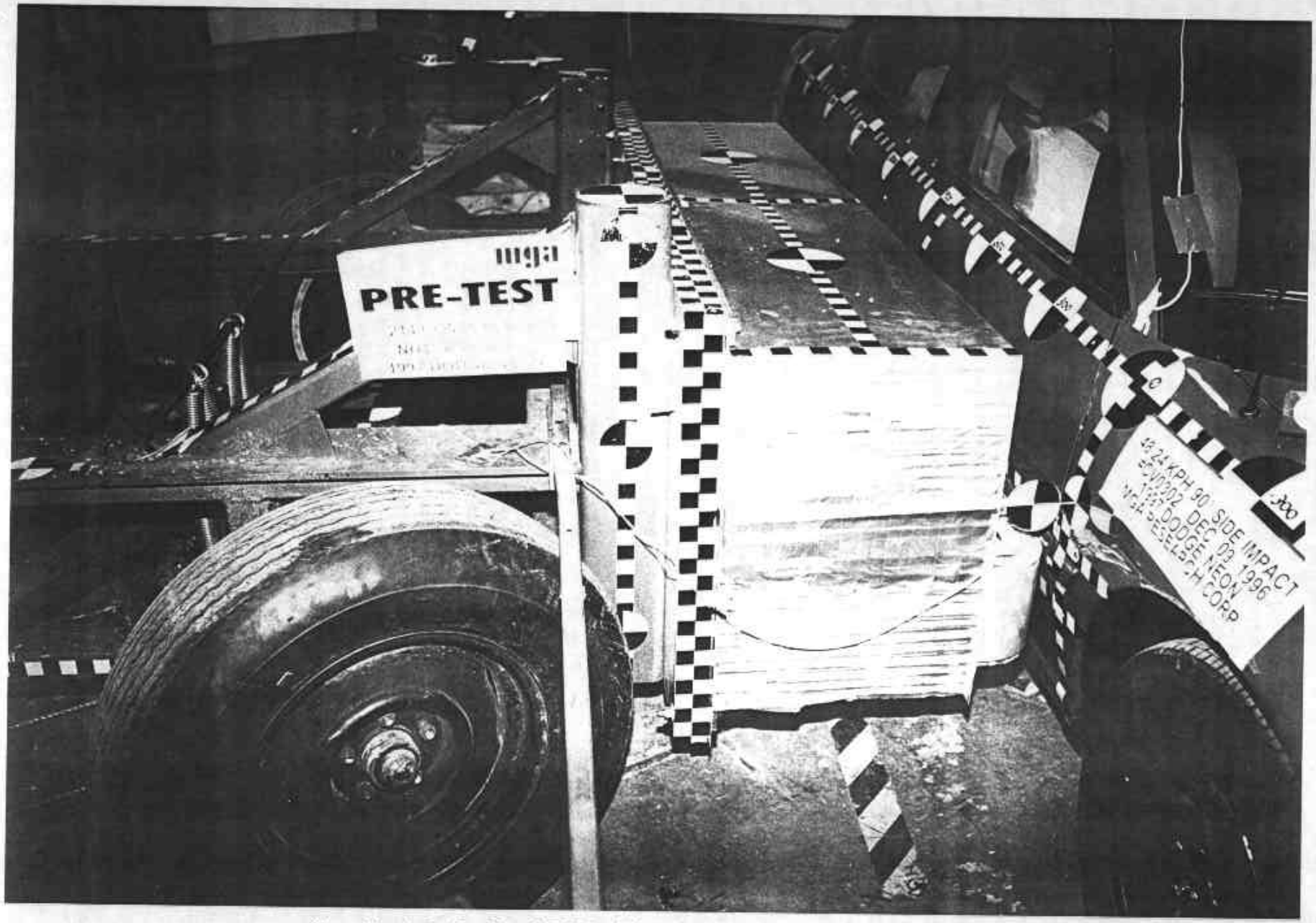


Photo No. A-7 - Pre-Test MDB Positioned Against Vehicle (right side)

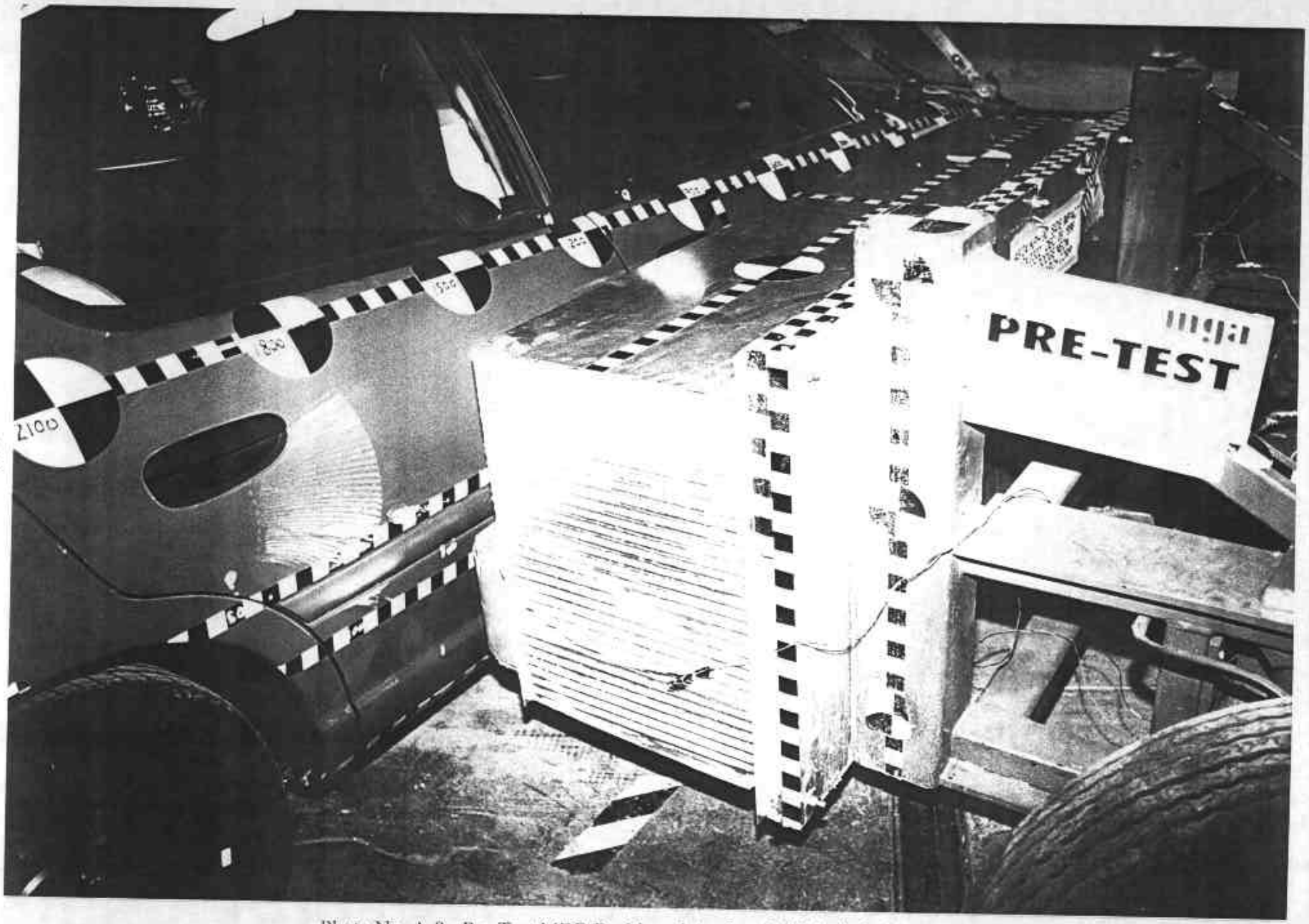


Photo No. A-8 - Pre-Test MDB Positioned Against Vehicle (left side)

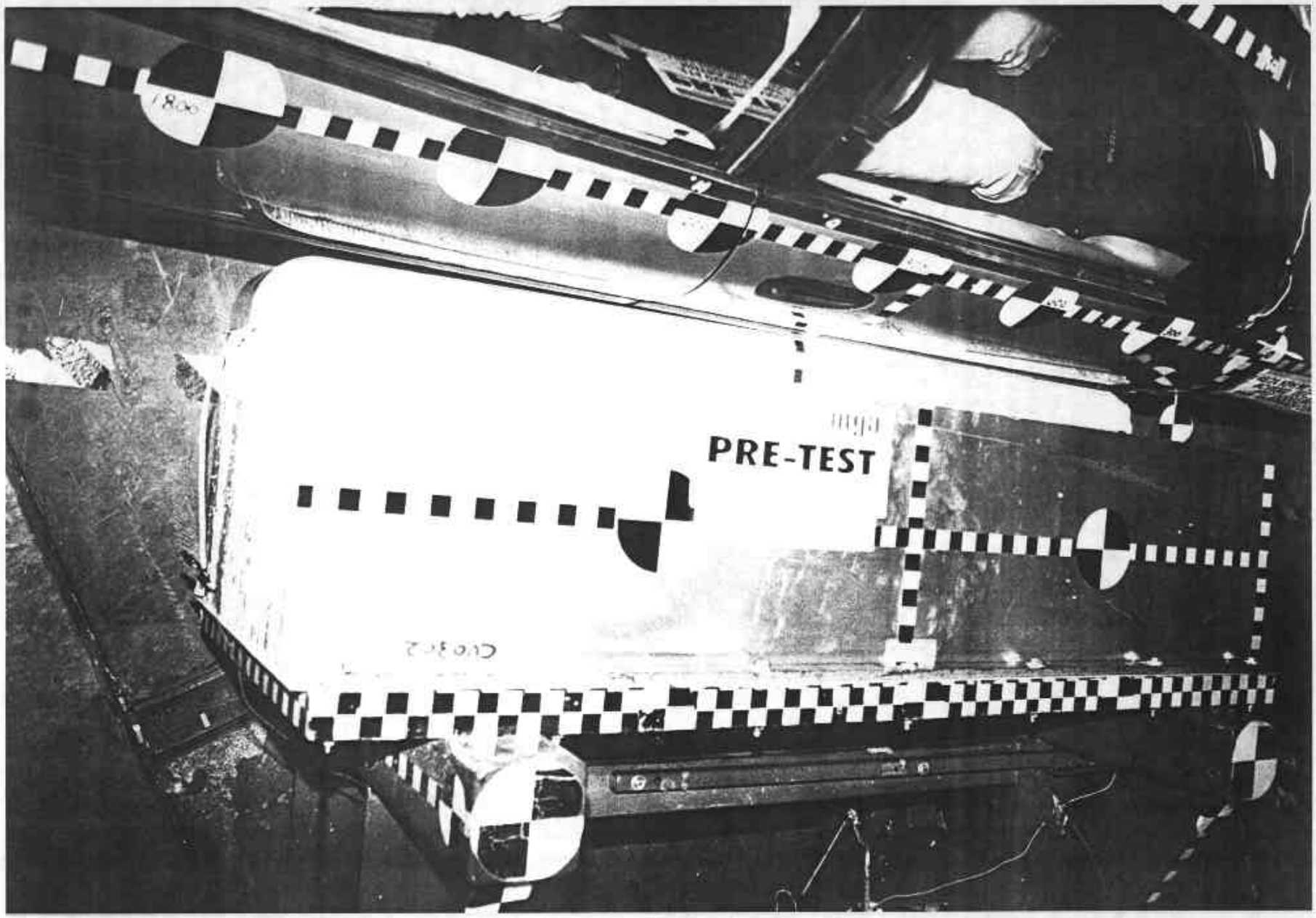


Photo No. A-9 - Pre-Test MDB Positioned Against Vehicle Overhead View

Photo No. A-10 - Post-Test MDB Impact Area (right side)

Photo No. A-11 - Post-Test MDB Impact Area (left side)

Photo No. A-12 - Post-Test MDB Impact Area Overhead View

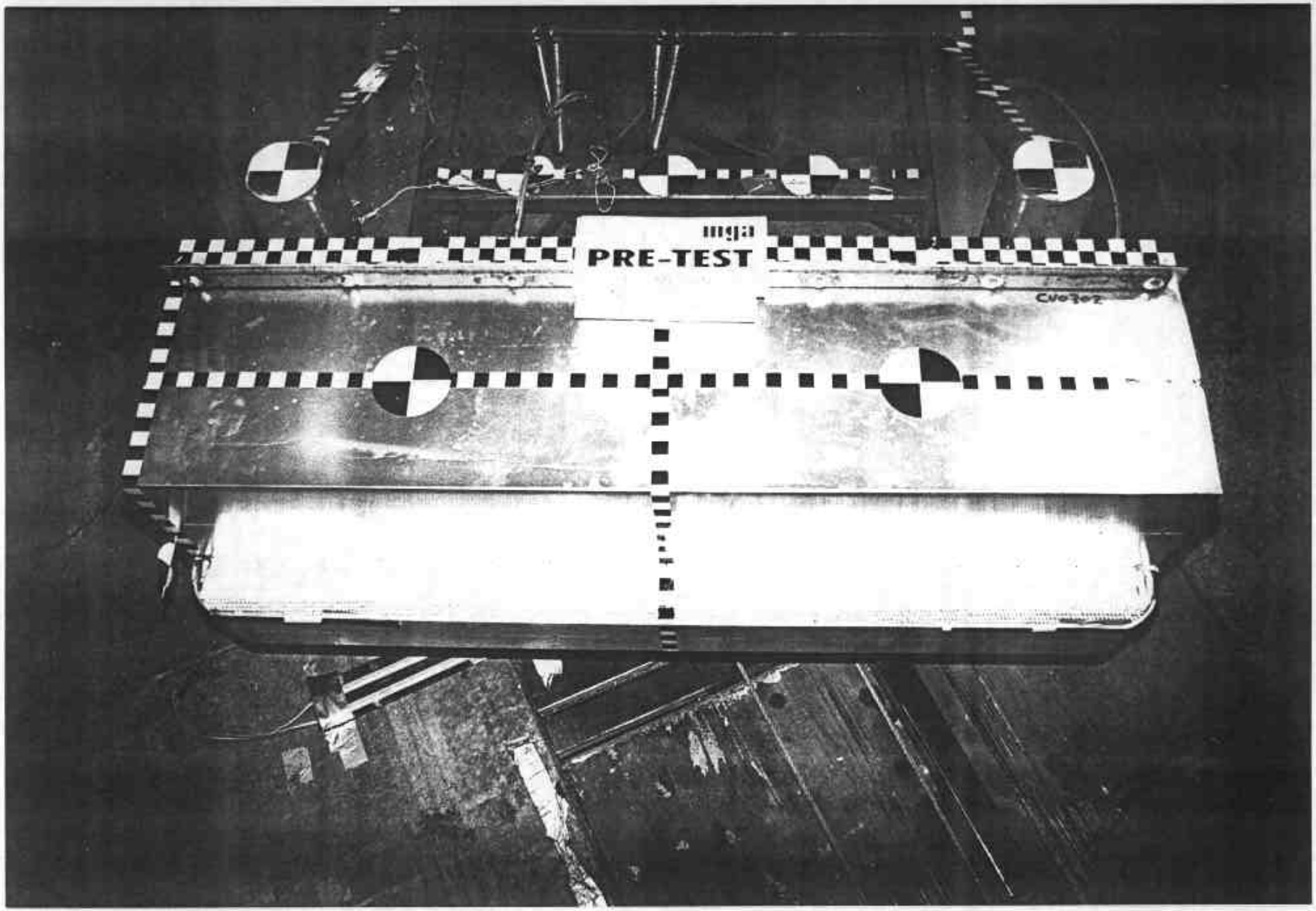


Photo No. A-13 - Pre-Test MDB Top View

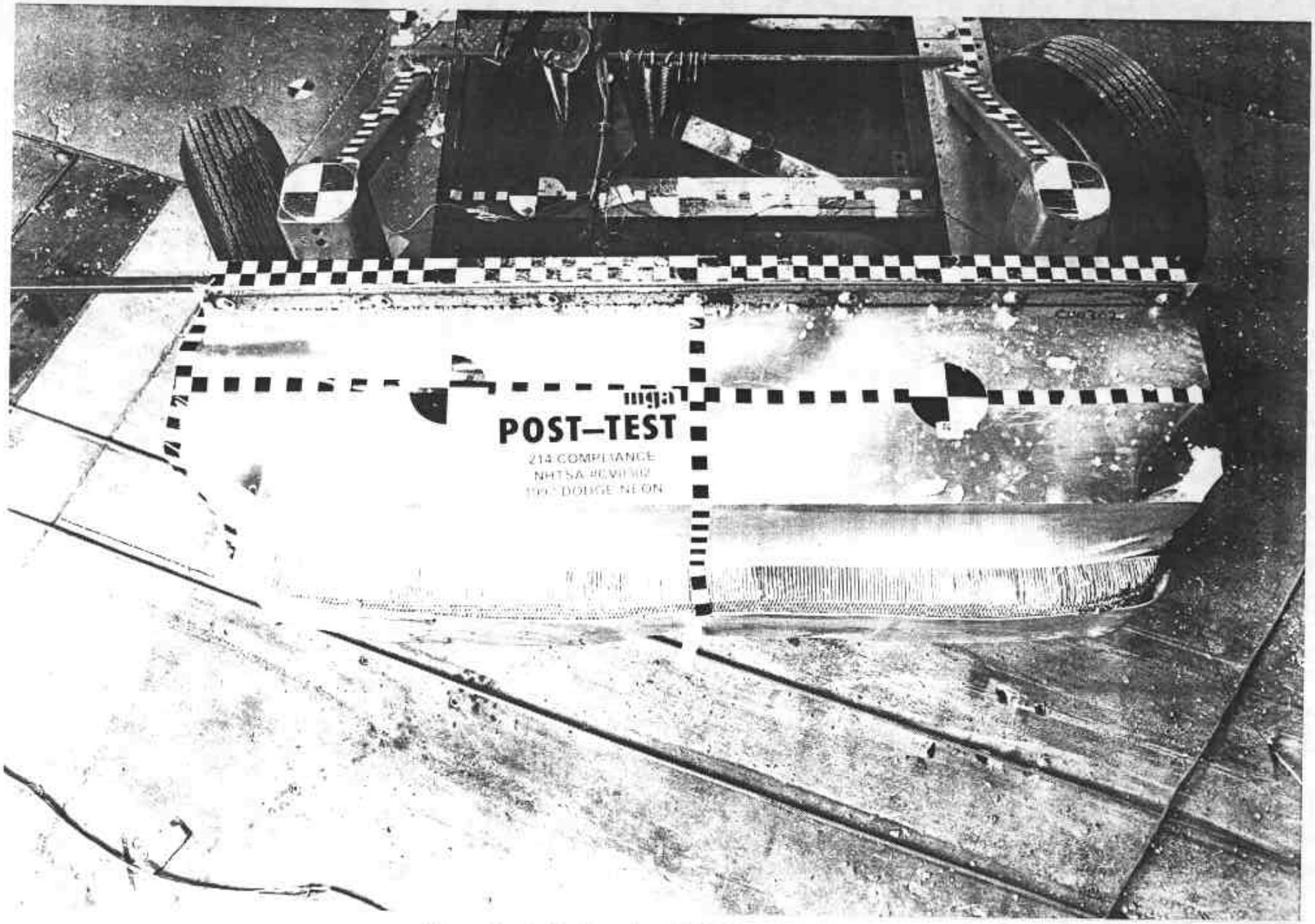


Photo No. A-14 - Post-Test MDB Top View

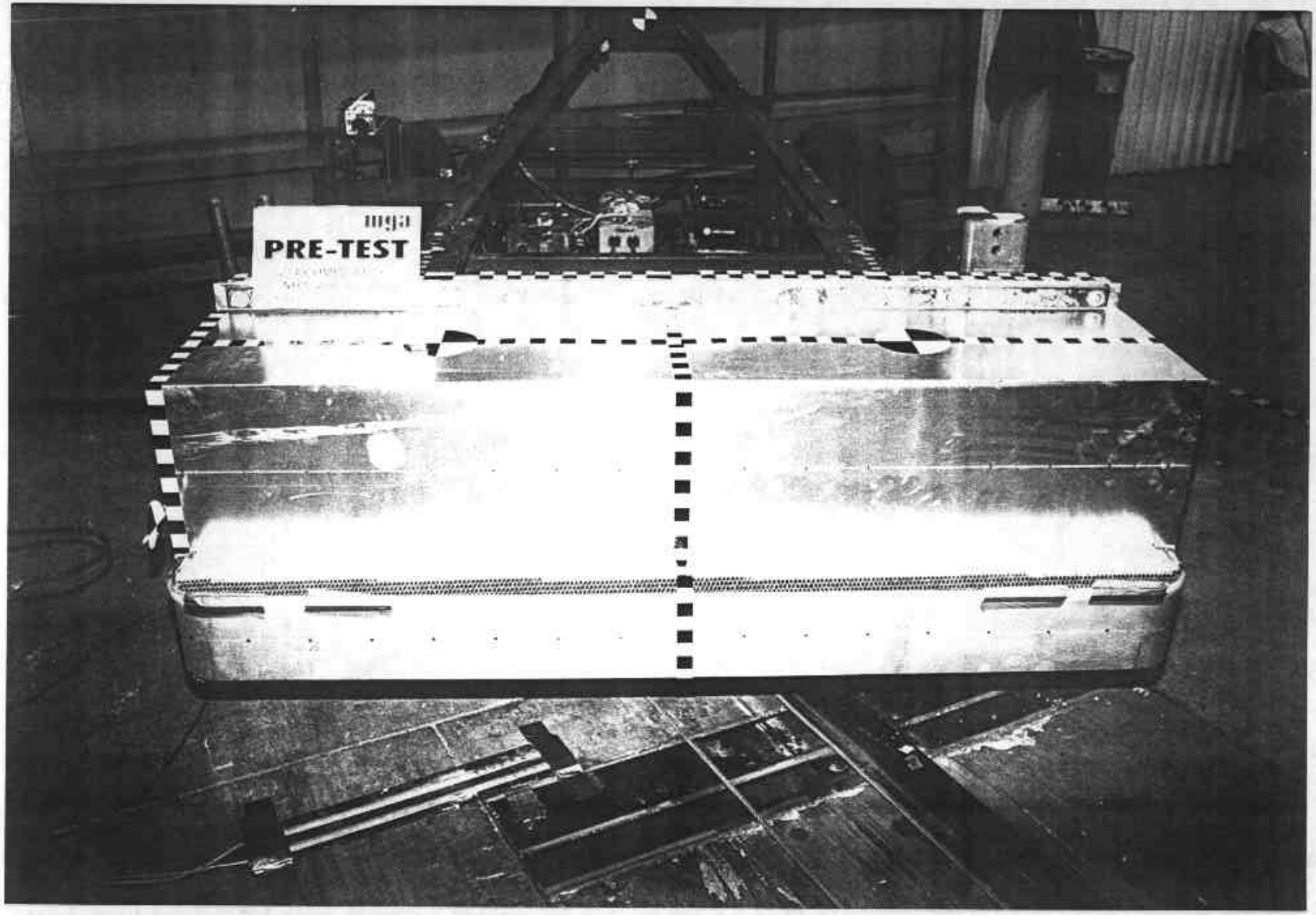


Photo No. A-15 - Pre-Test MDB Front View

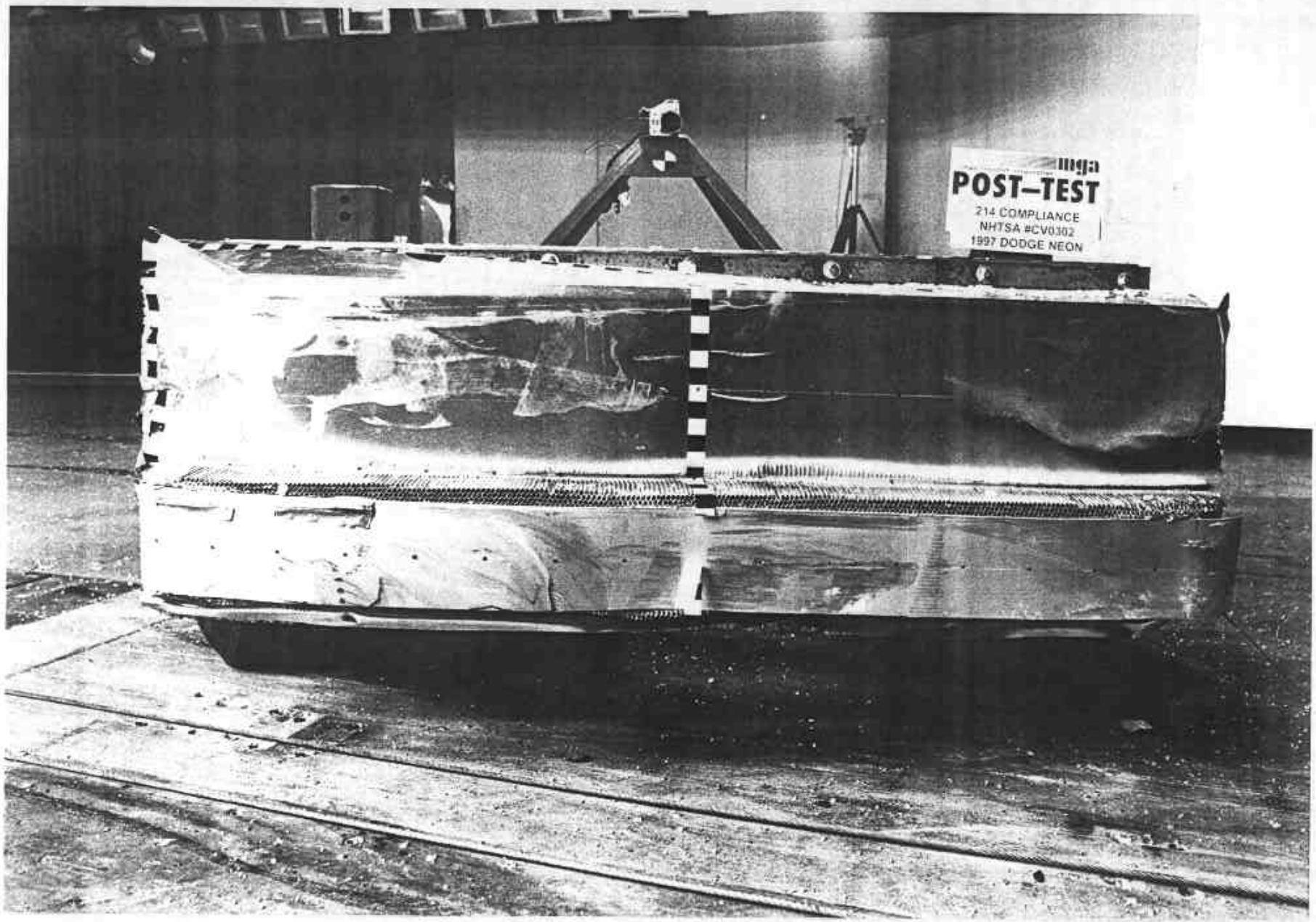


Photo No. A-16 - Post-Test MDB Front View

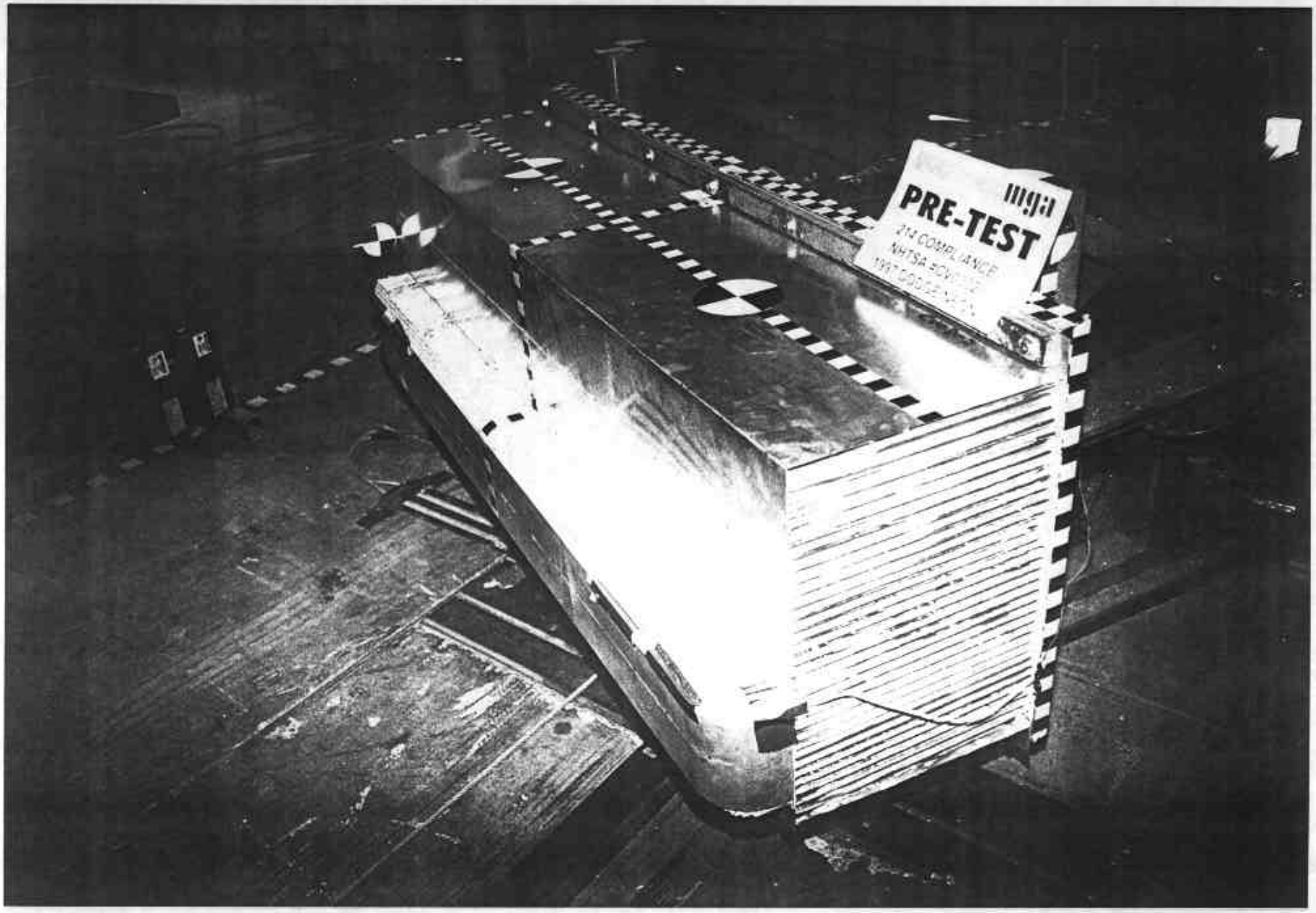


Photo No. A-17 - Pre-Test MDB Left Side View

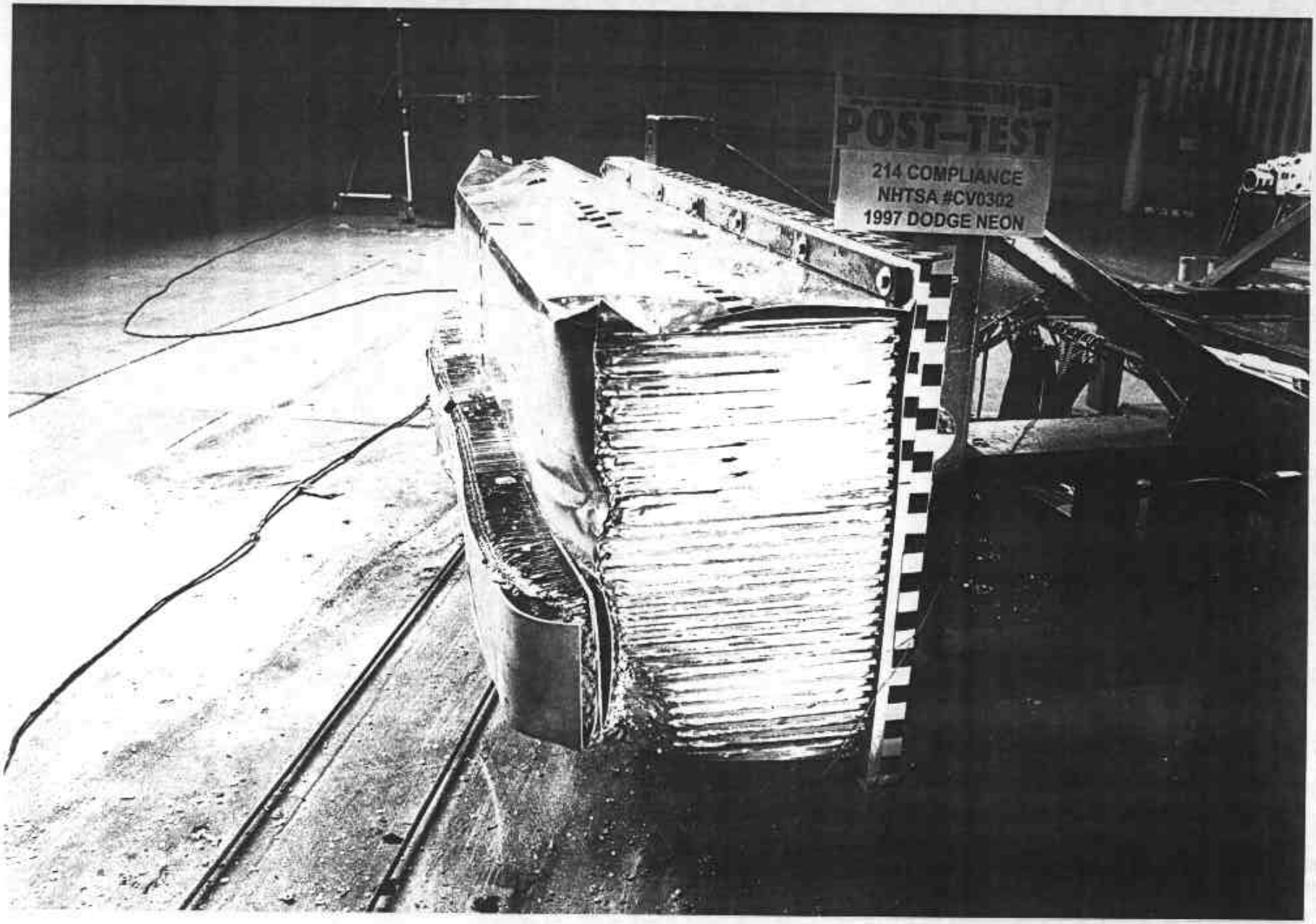


Photo No. A-18 - Post-Test MDB Left Side View

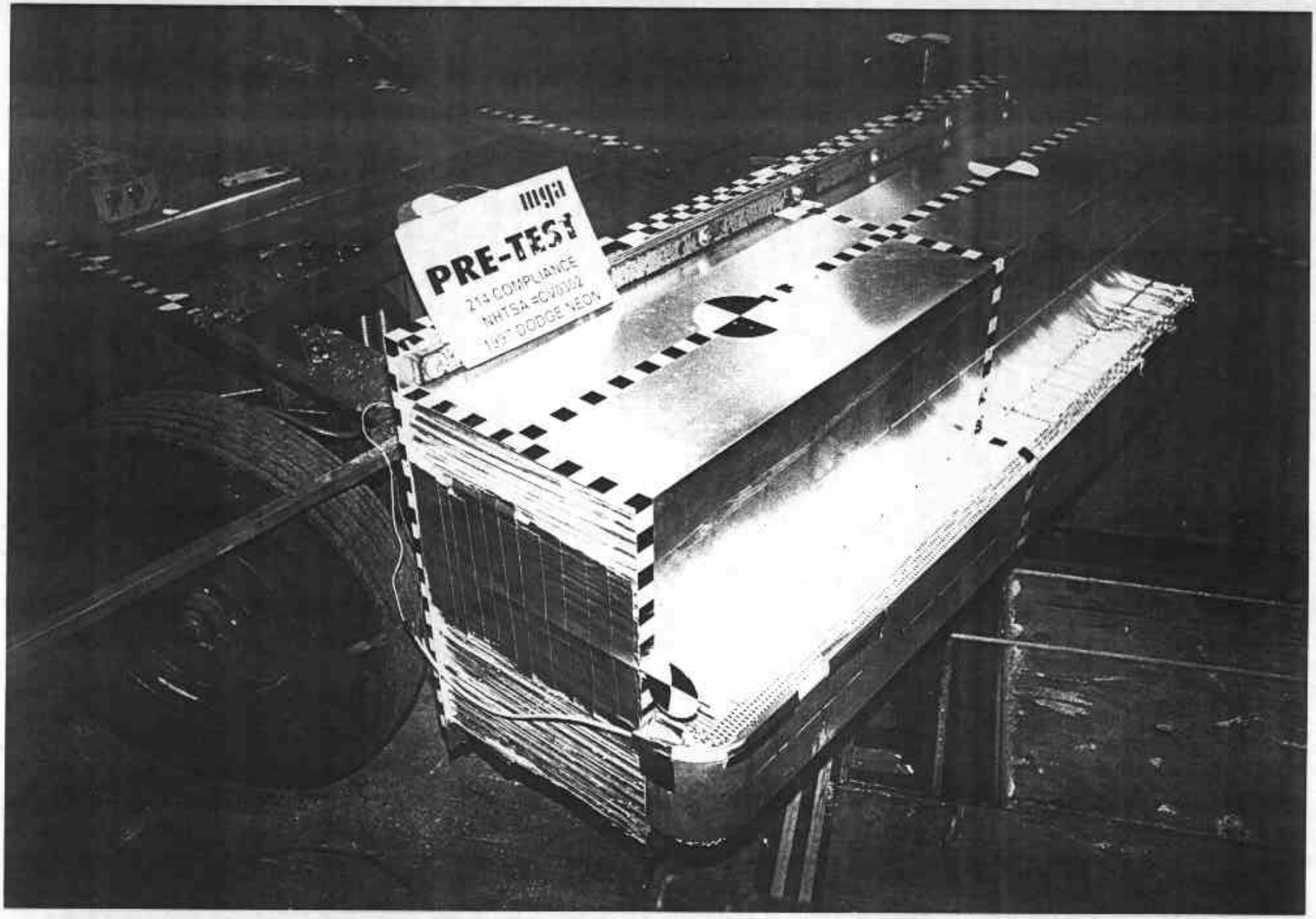
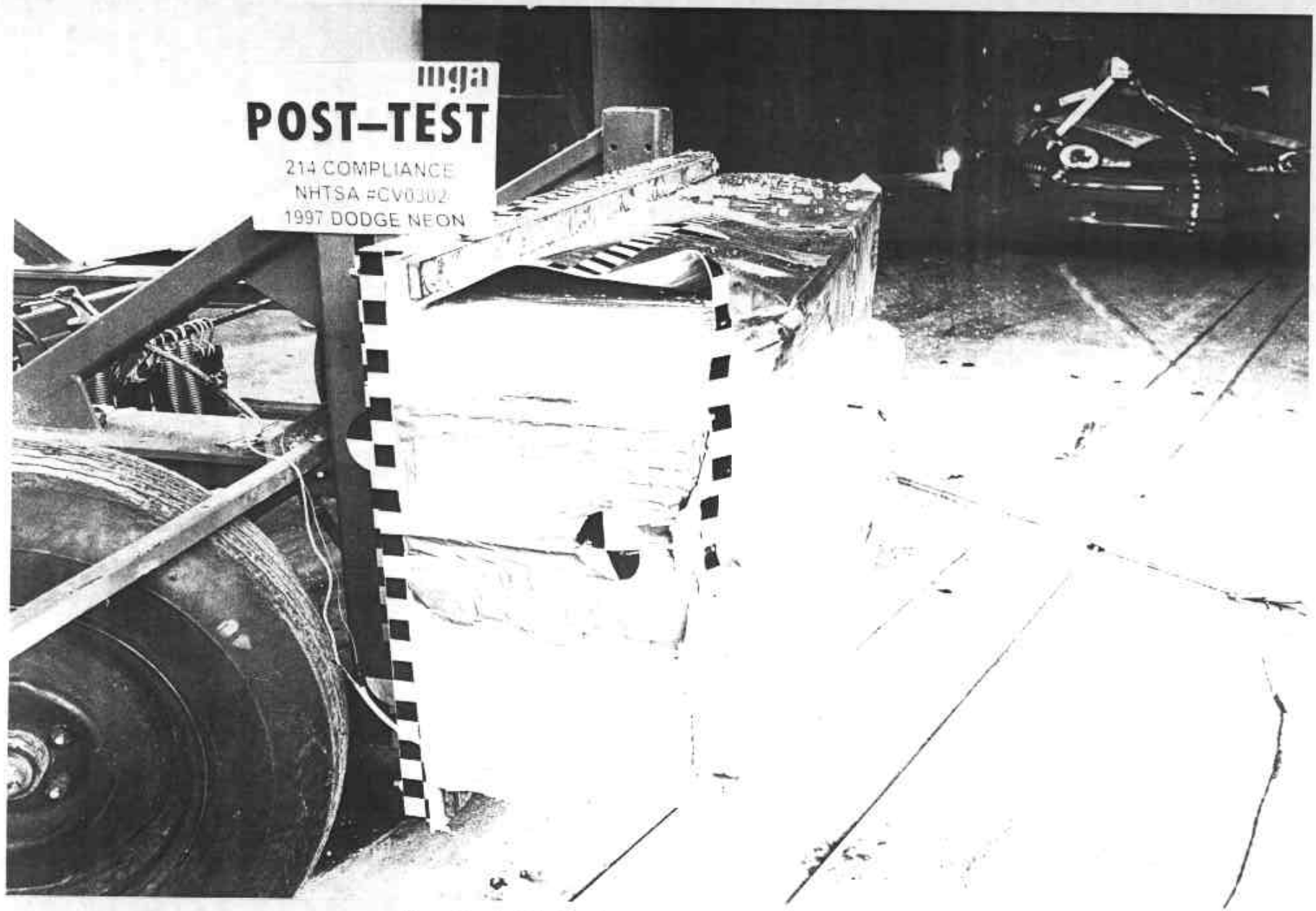


Photo No. A-19 - Pre-Test MDB Right Side View



A-20

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

A-21

Photo No. A-21 - Pre-Test Right Front Seat Position View

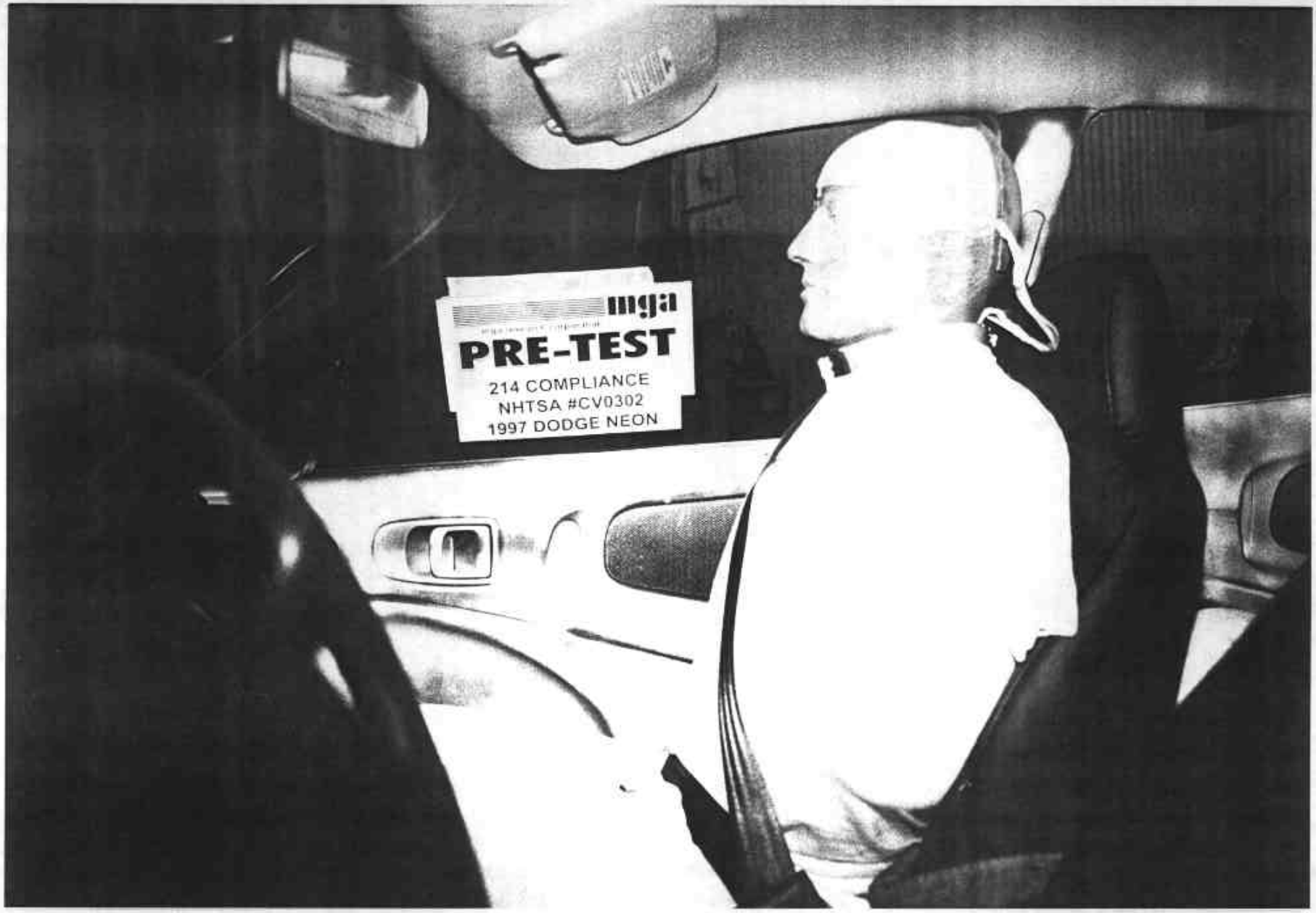


Photo No. A-22 - Pre-Test Front Passenger Dummy Left Side View

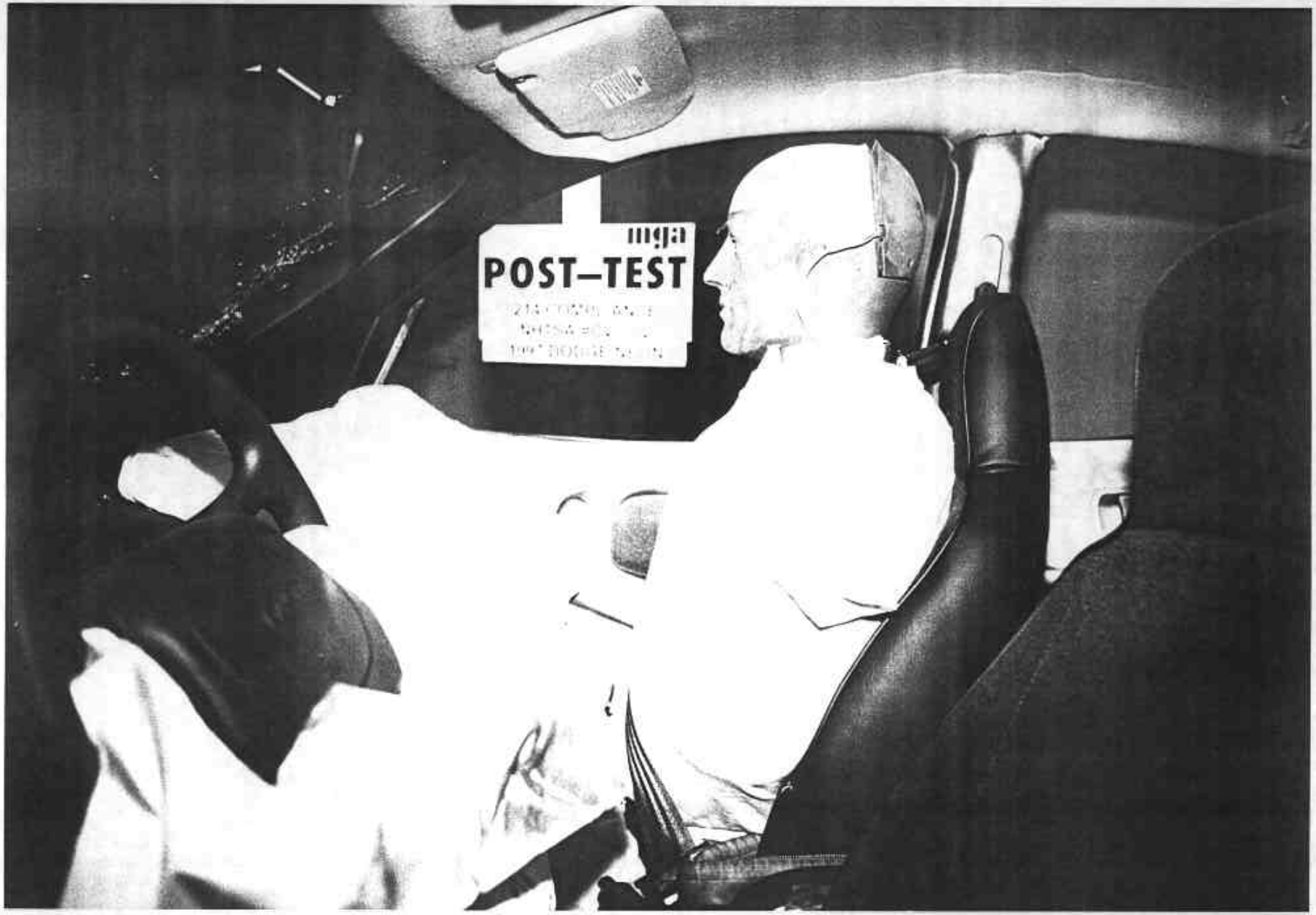


Photo No. A-23 - Post-Test Front Passenger Dummy Left Side View

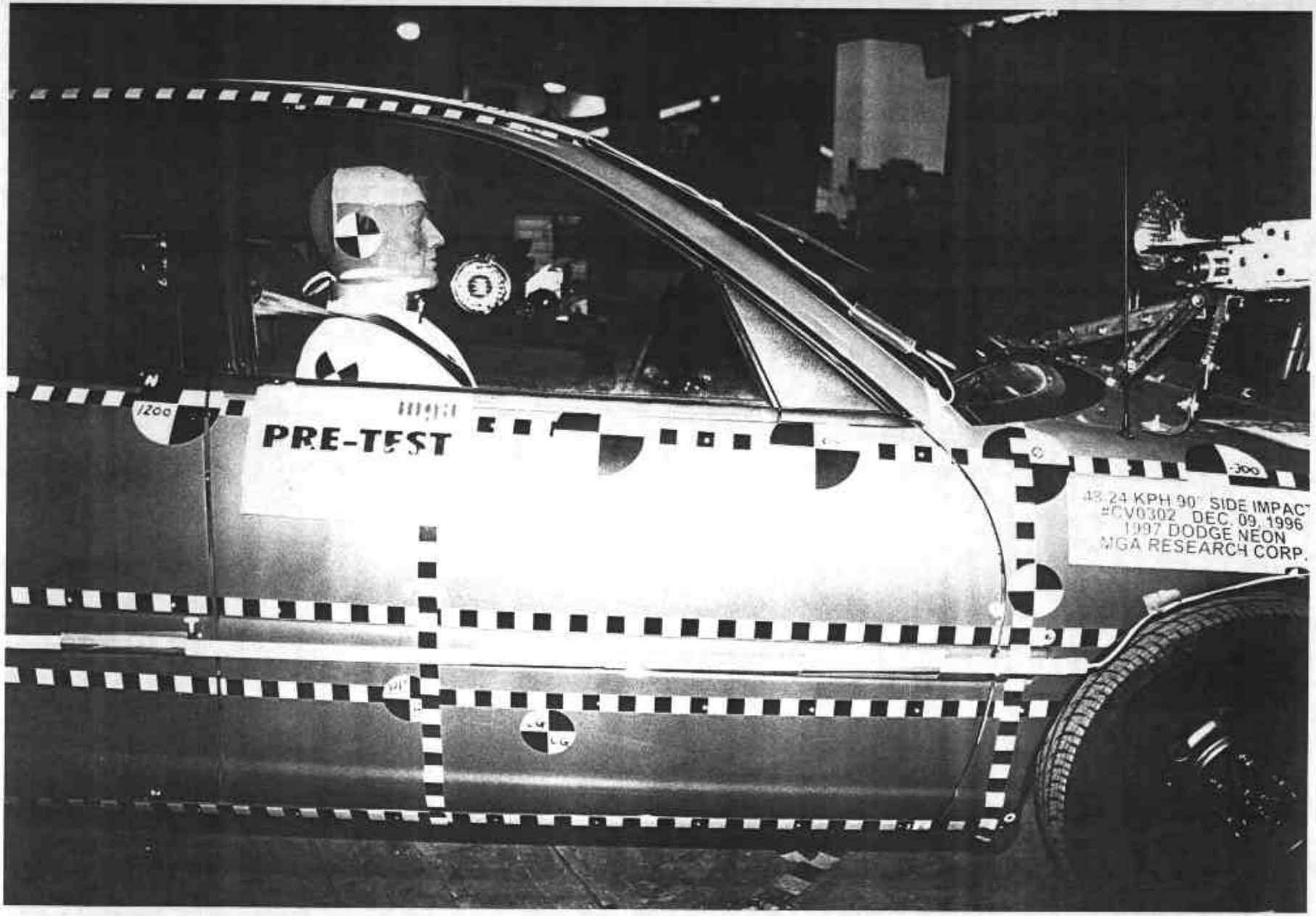


Photo No. A-24 - Pre-Test Front Passenger Dummy Right Side View

Photo No. A-25 - Post-Test Front Passenger Dummy Right Side View

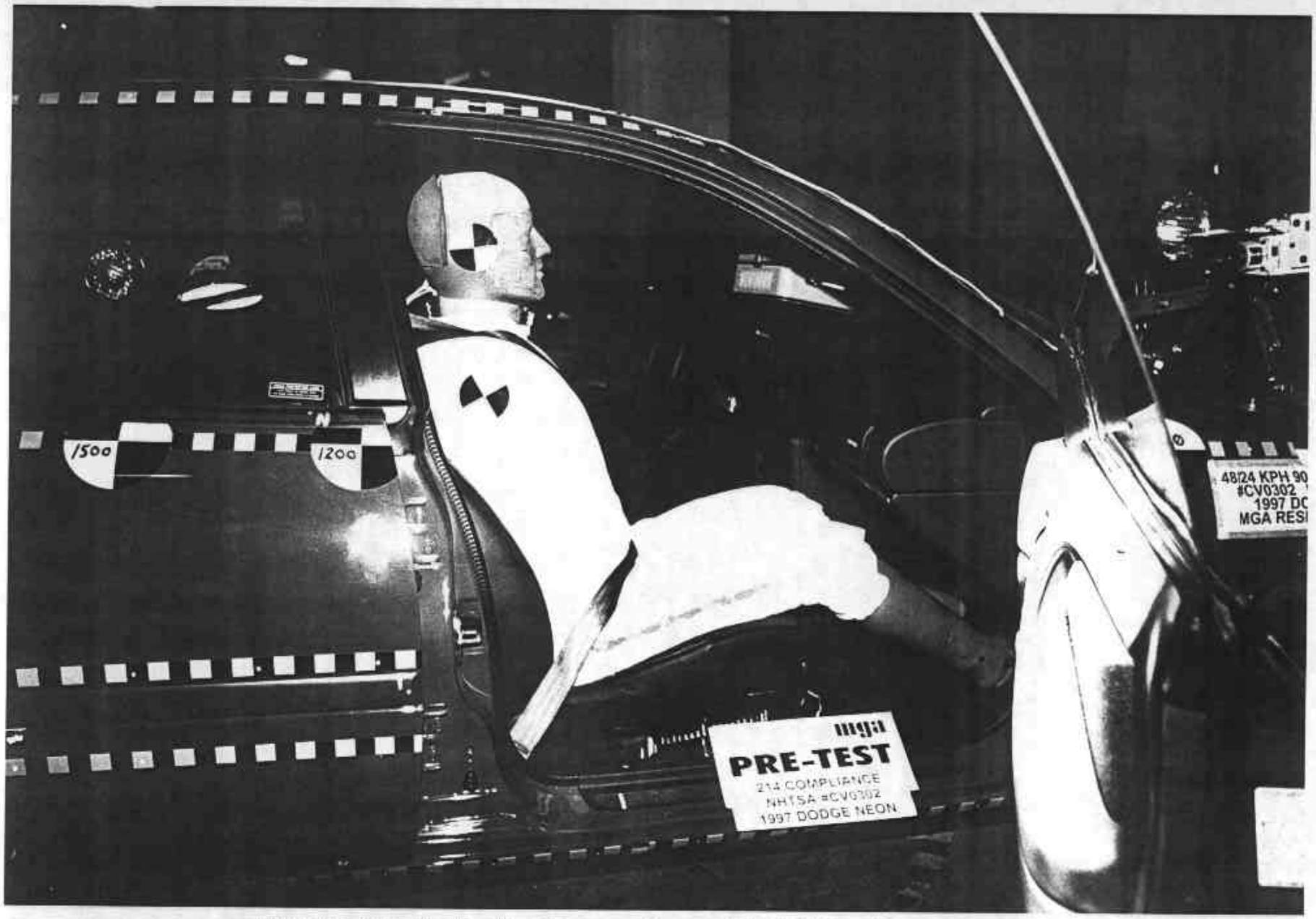


Photo No. A-26 - Pre-Test Front Passenger Dummy Right Side View (Door Open)

Photo No. A-27 - Pre-Test Front Passenger Dummy Shoulder and Door Top View

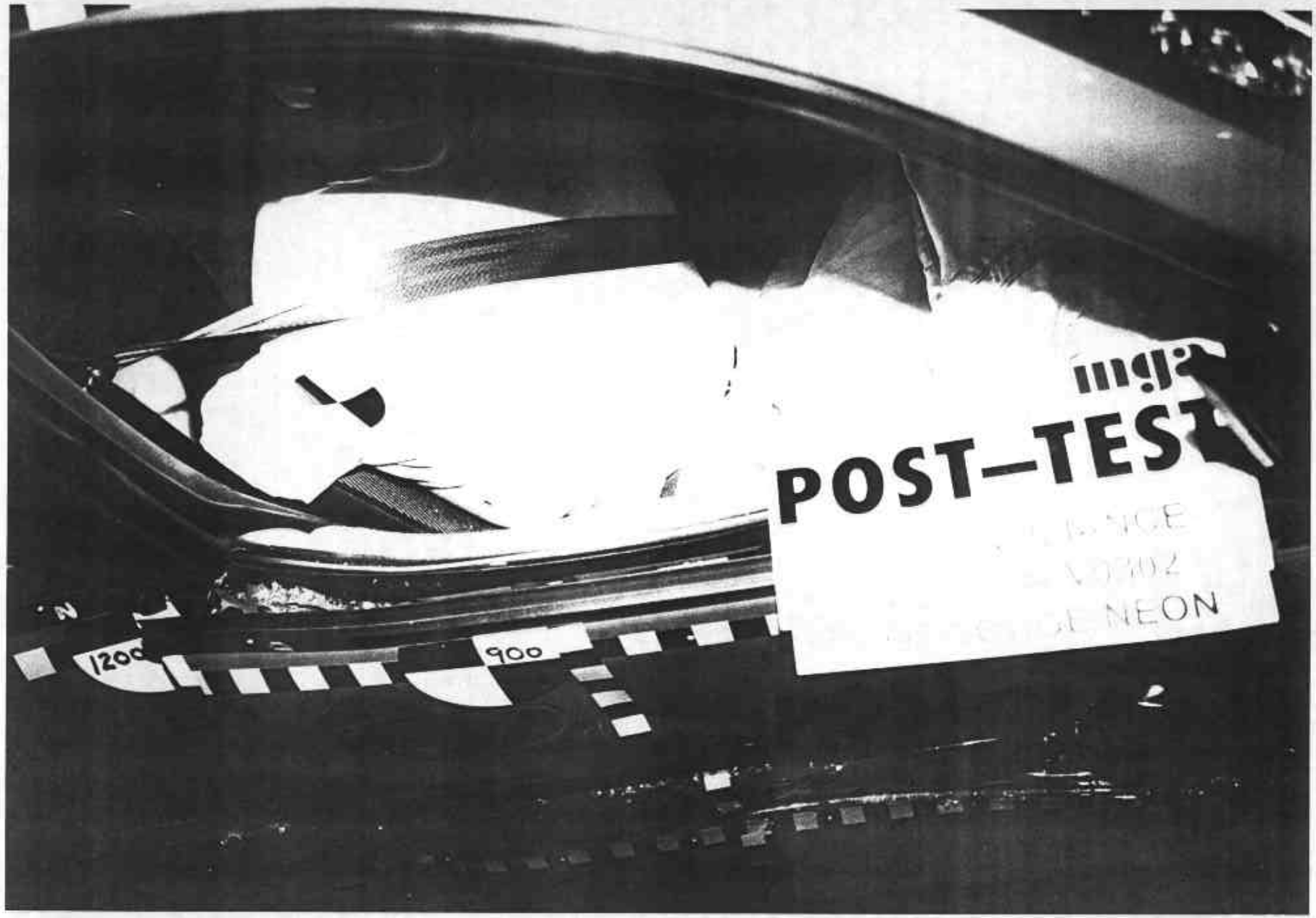


Photo No. A-28 - Post-Test Front Passenger Dummy Shoulder and Door Top View

A-29

Photo No. A-29 - Post-Test Front Passenger Dummy Contact

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

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

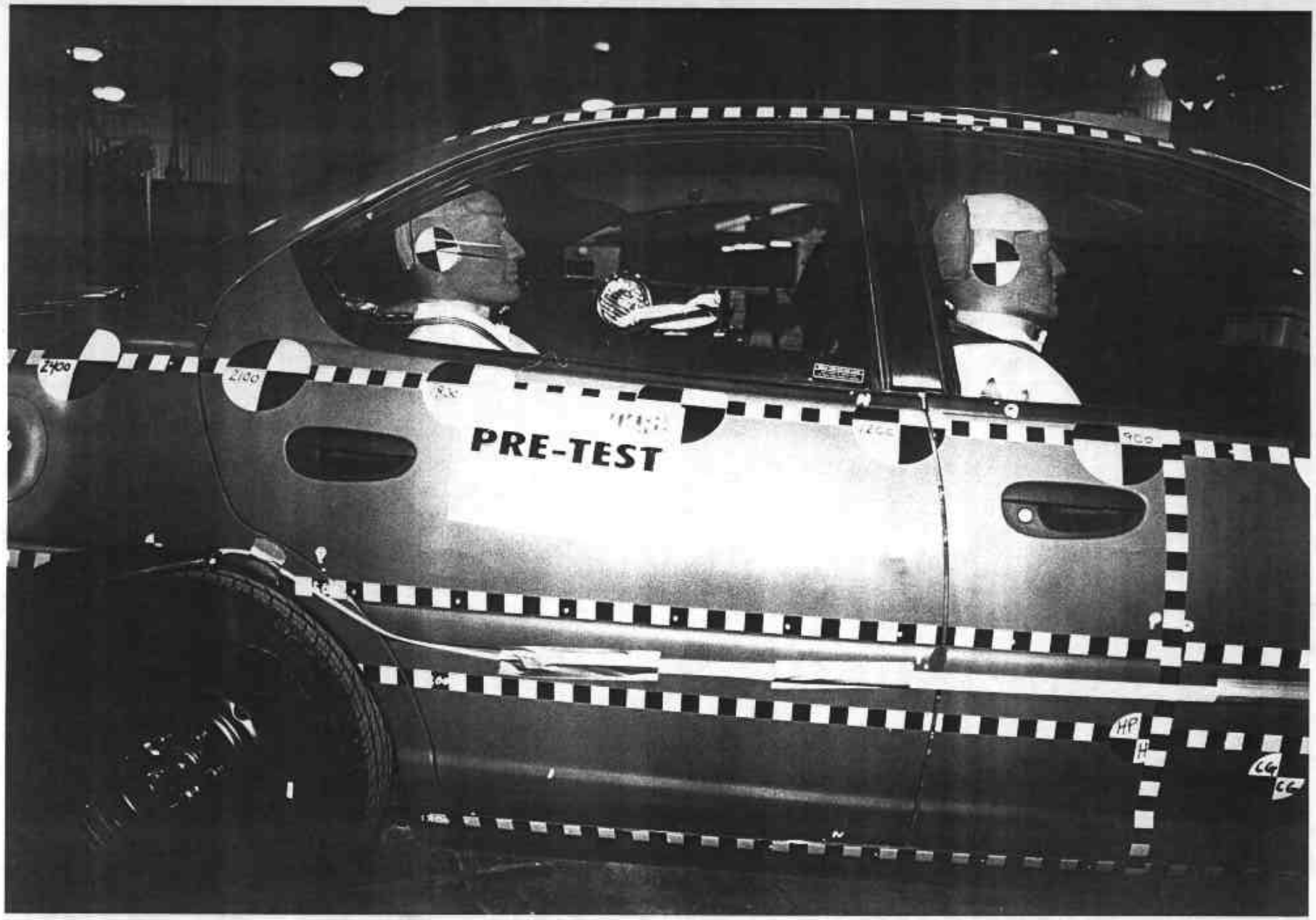


Photo No. A-32 - Pre-Test Rear Passenger Dummy Right Side View

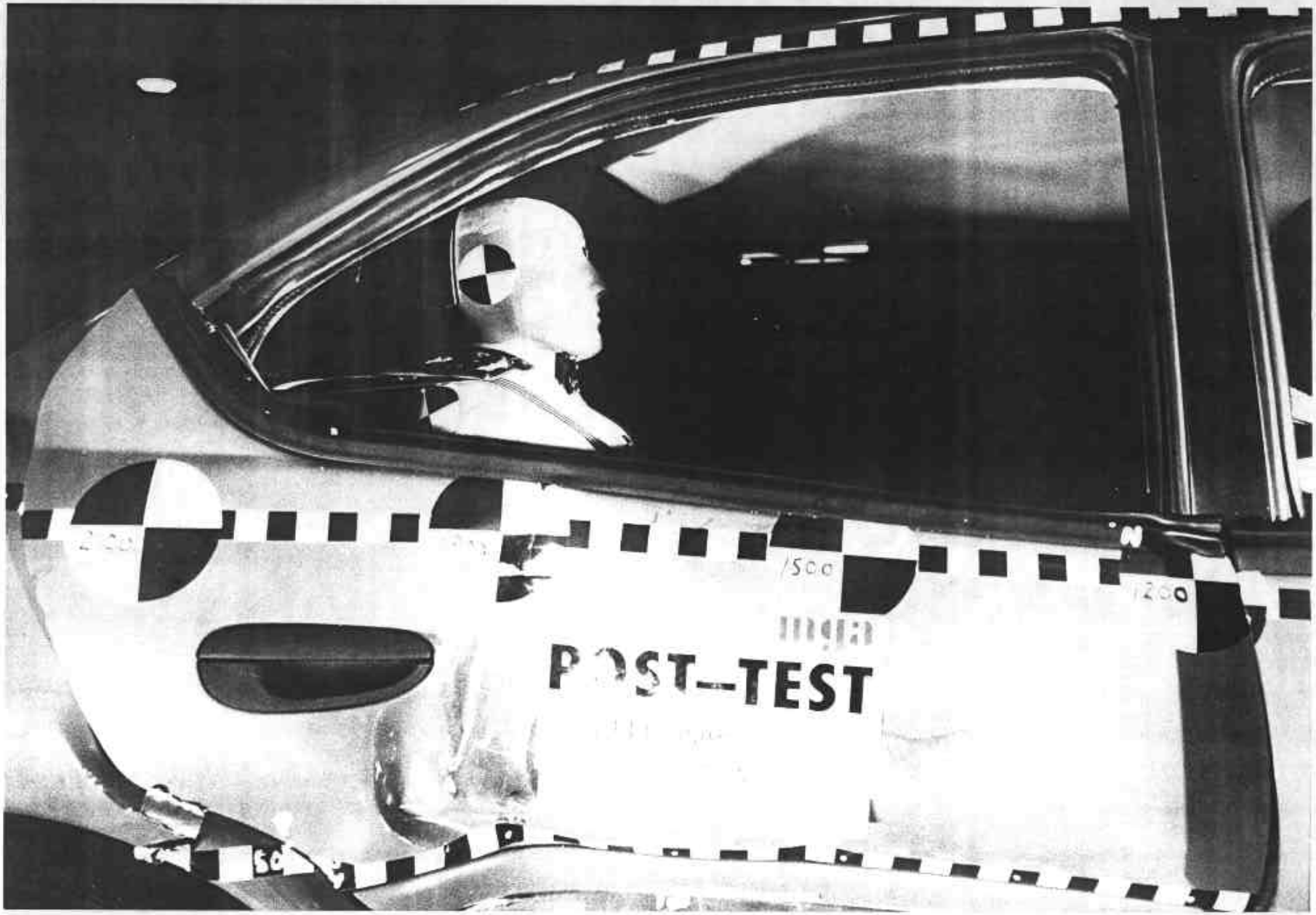


Photo No. A-33 - Post-Test Rear Passenger Dummy Right Side View

Photo No. A-34 - Pre-Test Rear Passenger Dummy Right Side View (Door Open)

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

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

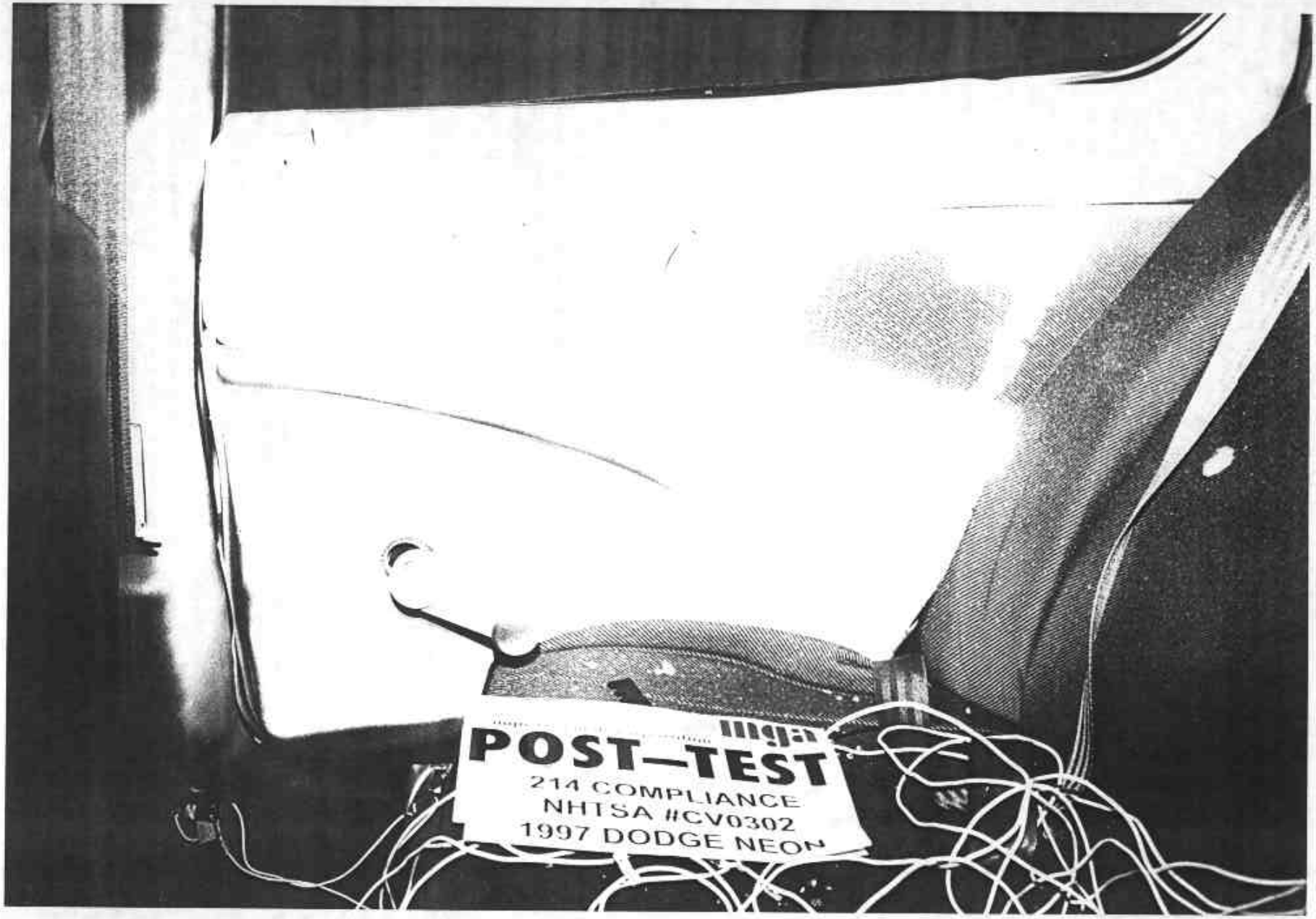


Photo No. A-37 - Post-Test Rear Passenger Dummy Contact

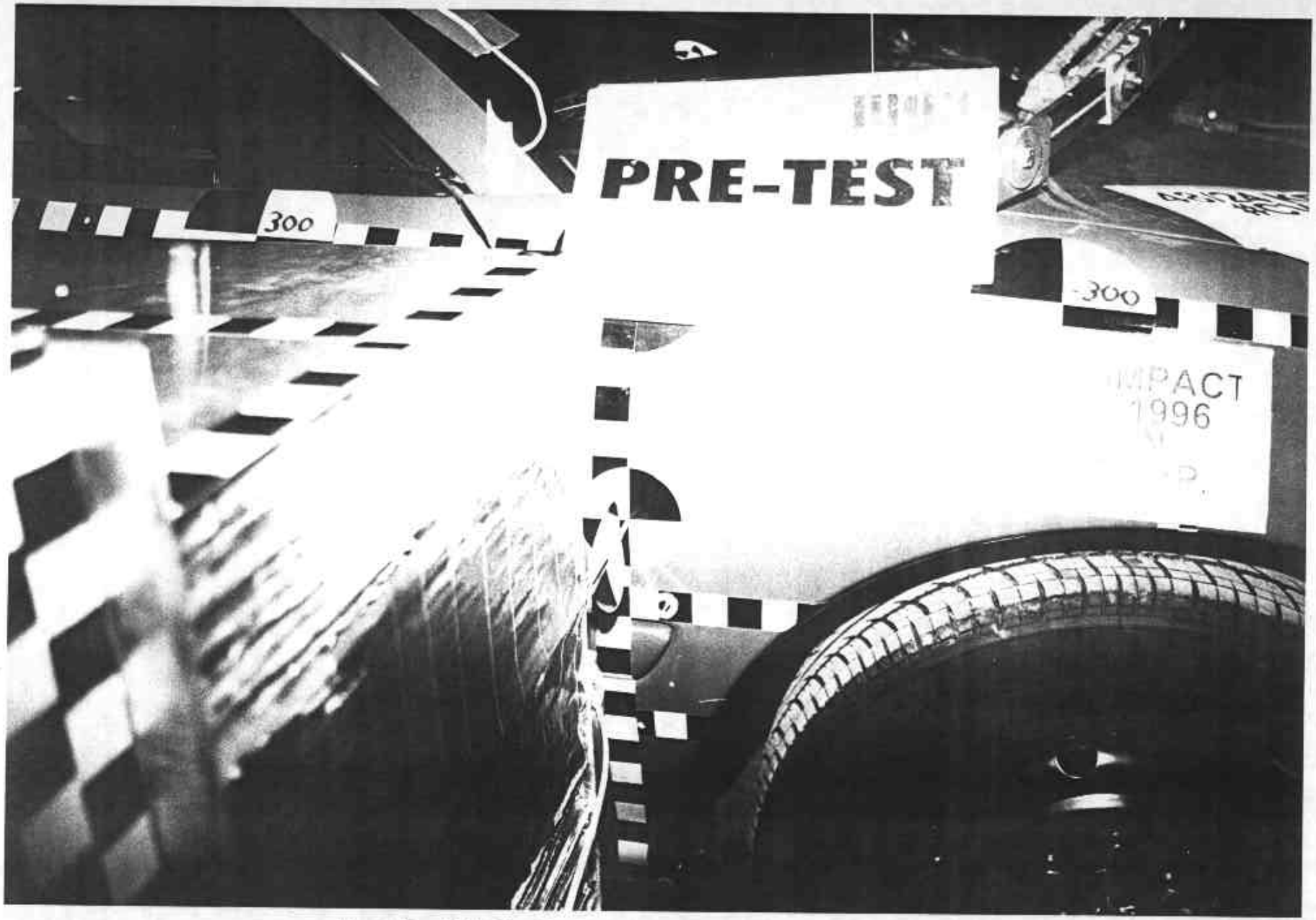


Photo No. A-38 - Pre-Test Right Front Impact Point on Vehicle

Photo No. A-39 - Post-Test Right Front Impact Point on Vehicle

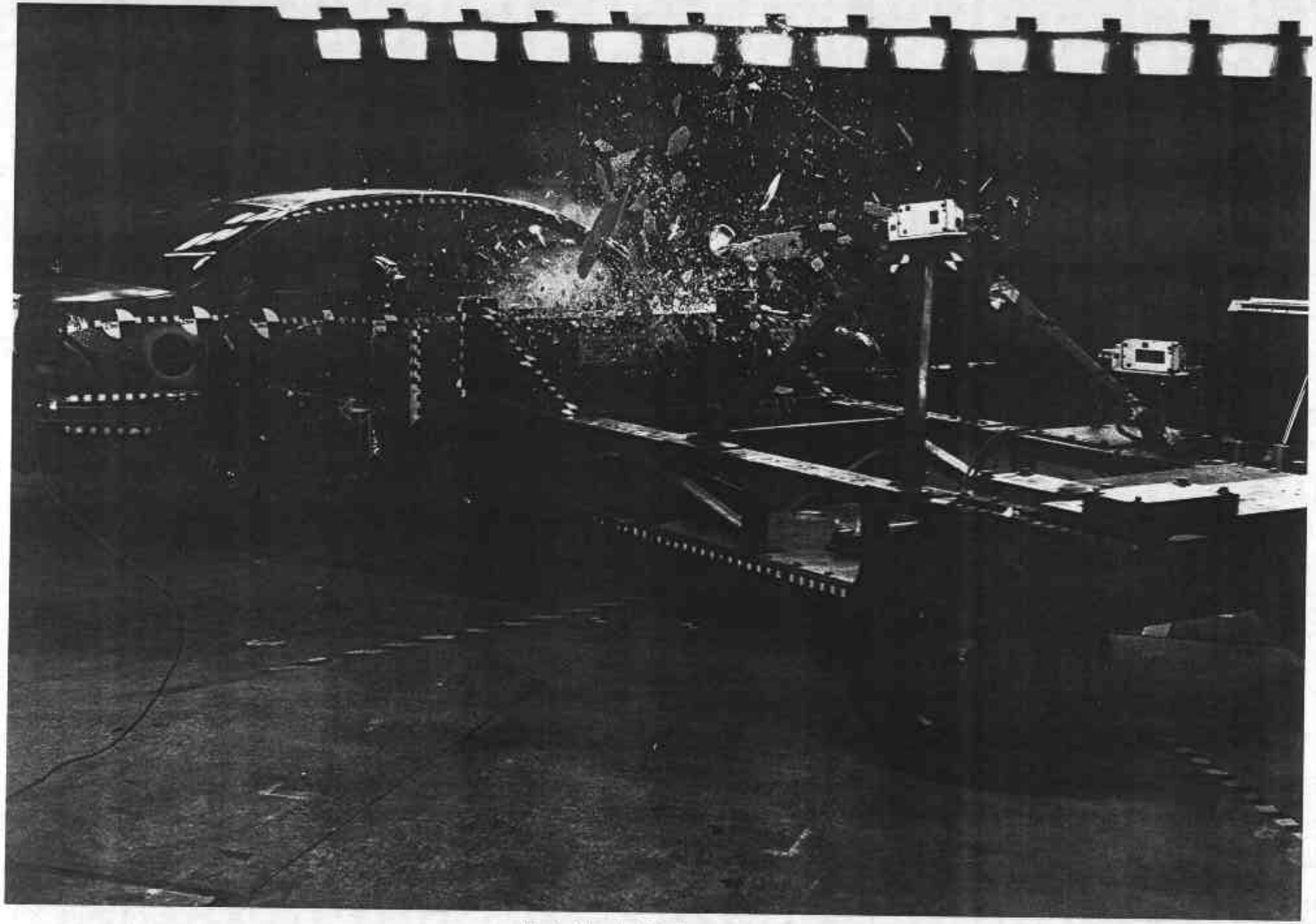


Photo No. A-40 - Impact

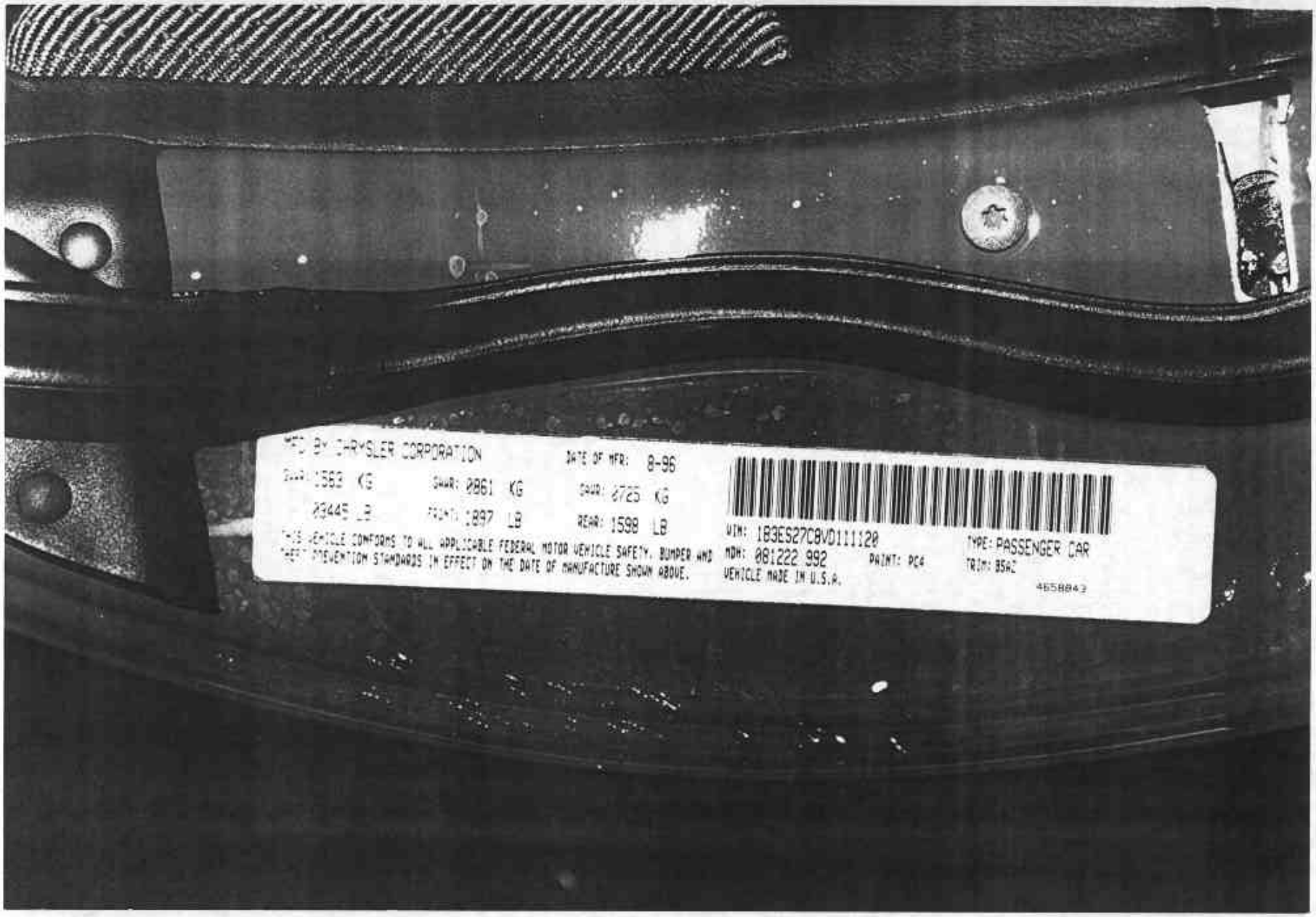
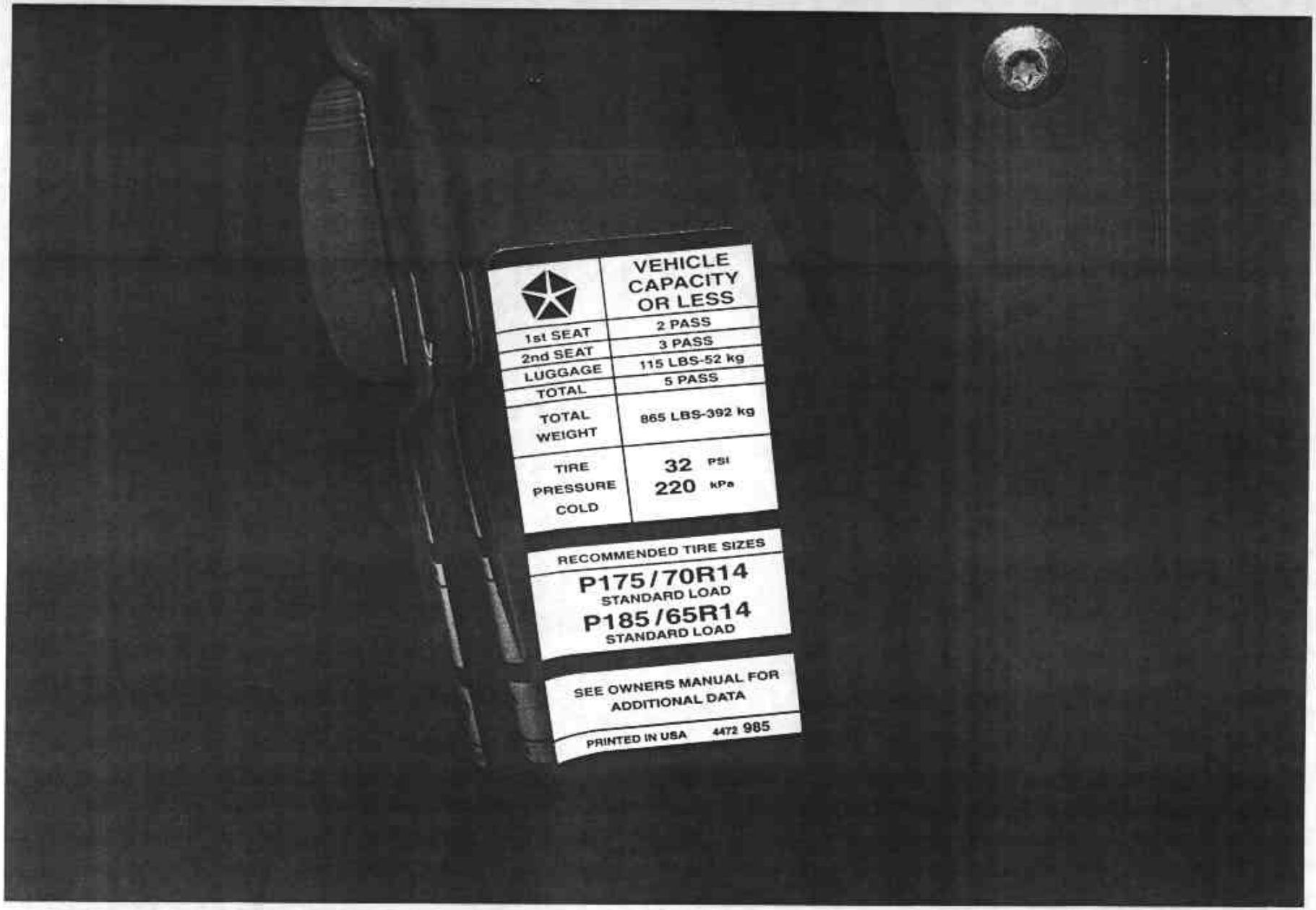


Photo No. A-41 - Vehicle Certification Label



A-42

Photo No. A-42 - Tire Placard

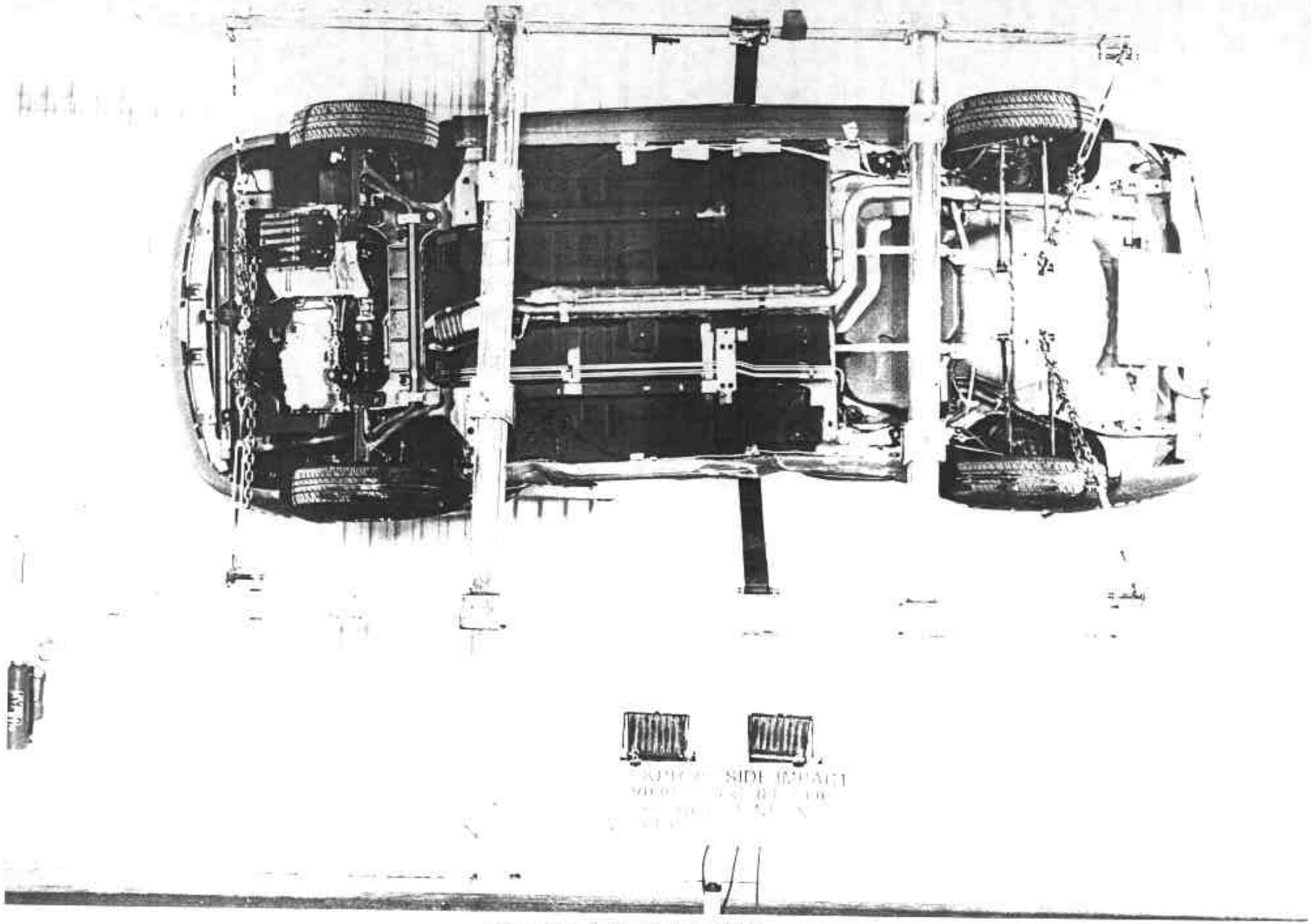


Photo No. A-43 - Rollover 90°

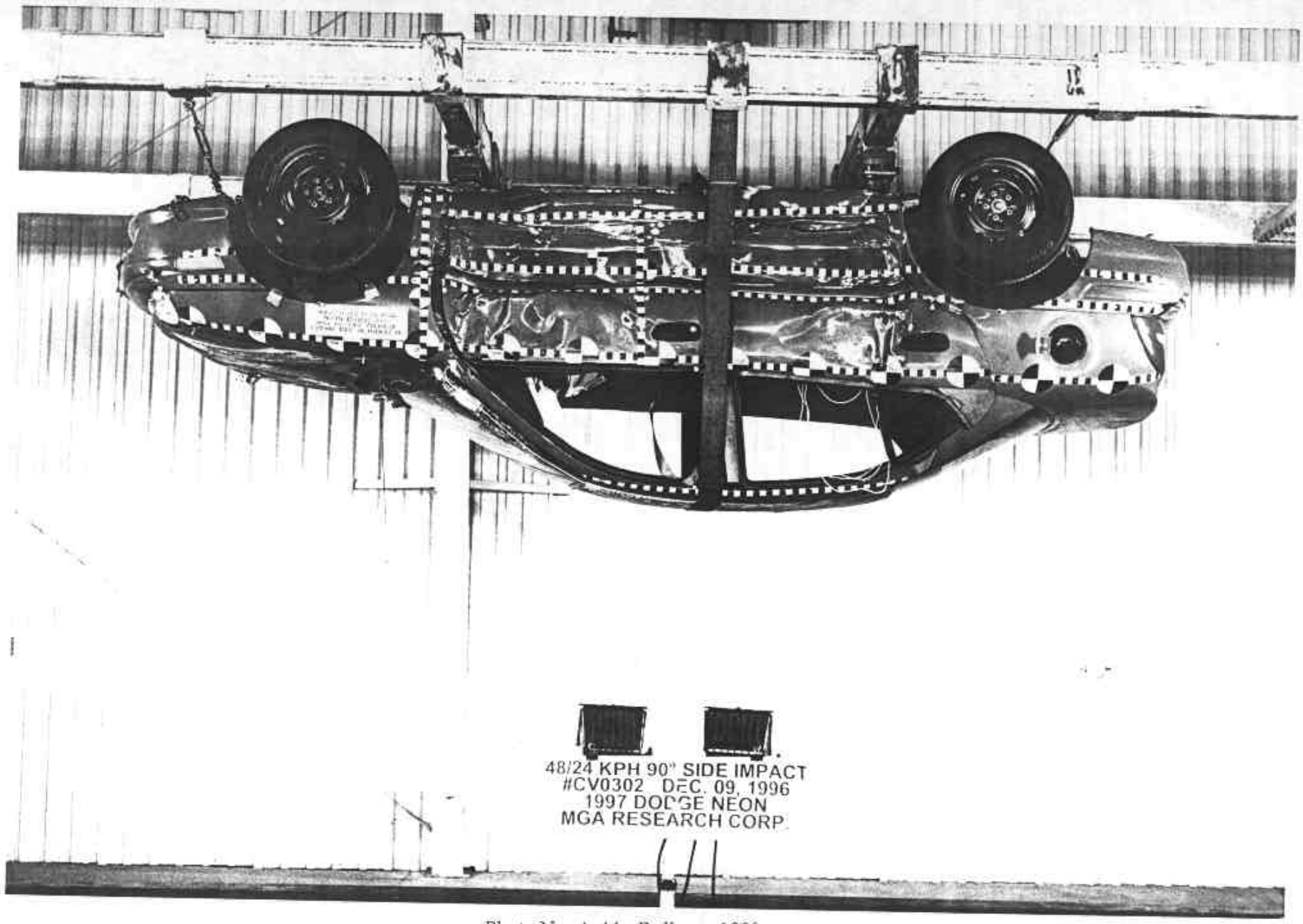


Photo No. A-44 - Rollover 180°

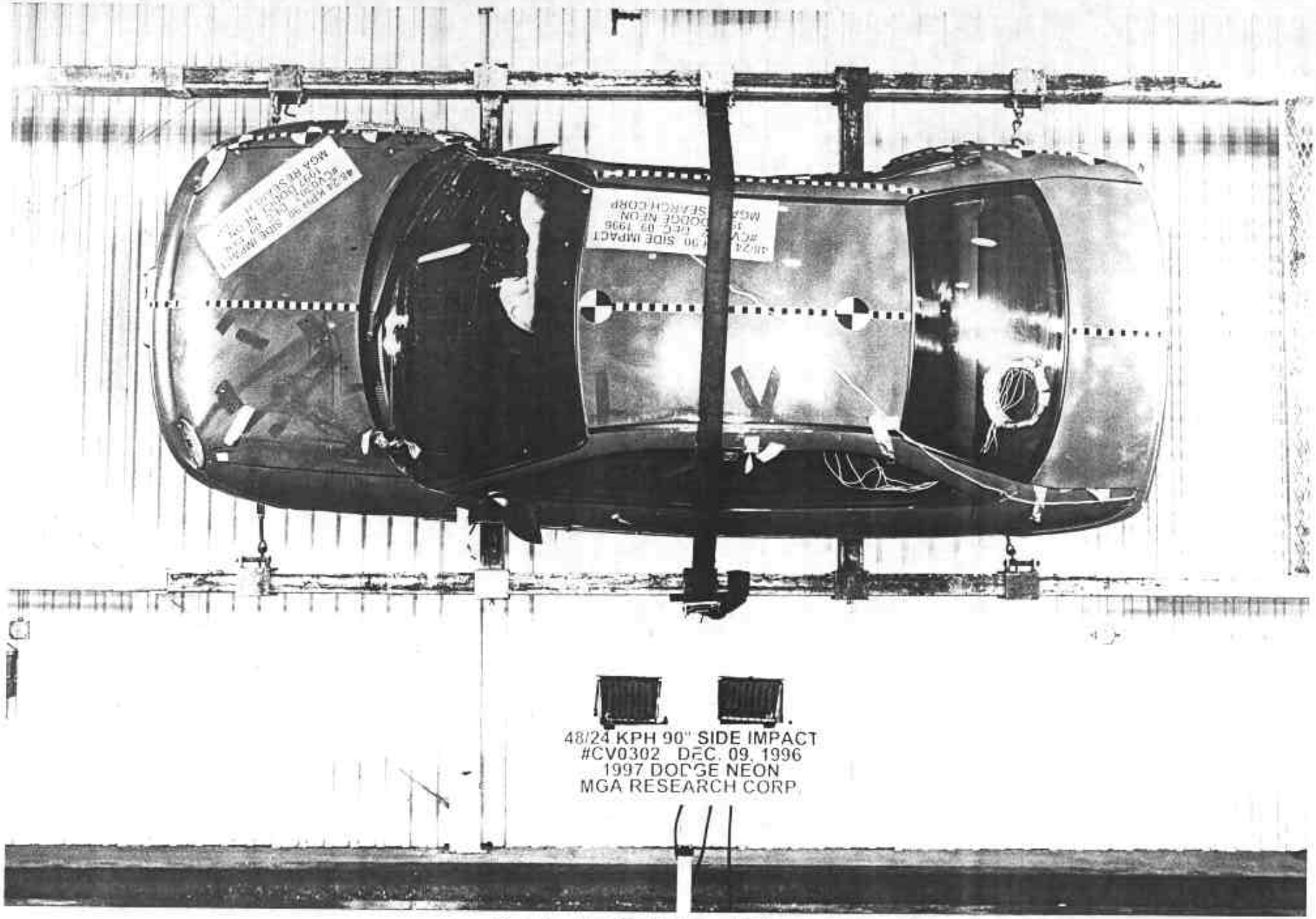


Photo No. A-45 - Rollover 270°

A-46

Photo No. A-46 - Rollover 360°

Photo No. A-47 - Right Front Attitude Point

Photo No. A-48 - Left Front Attitude Point

Photo No. A-49 - Right Rear Attitude Point

Photo No. A-50 - Left Rear Attitude Point

APPENDIX B - VEHICLE AND SID RESPONSE DATA

Table of Data Plots

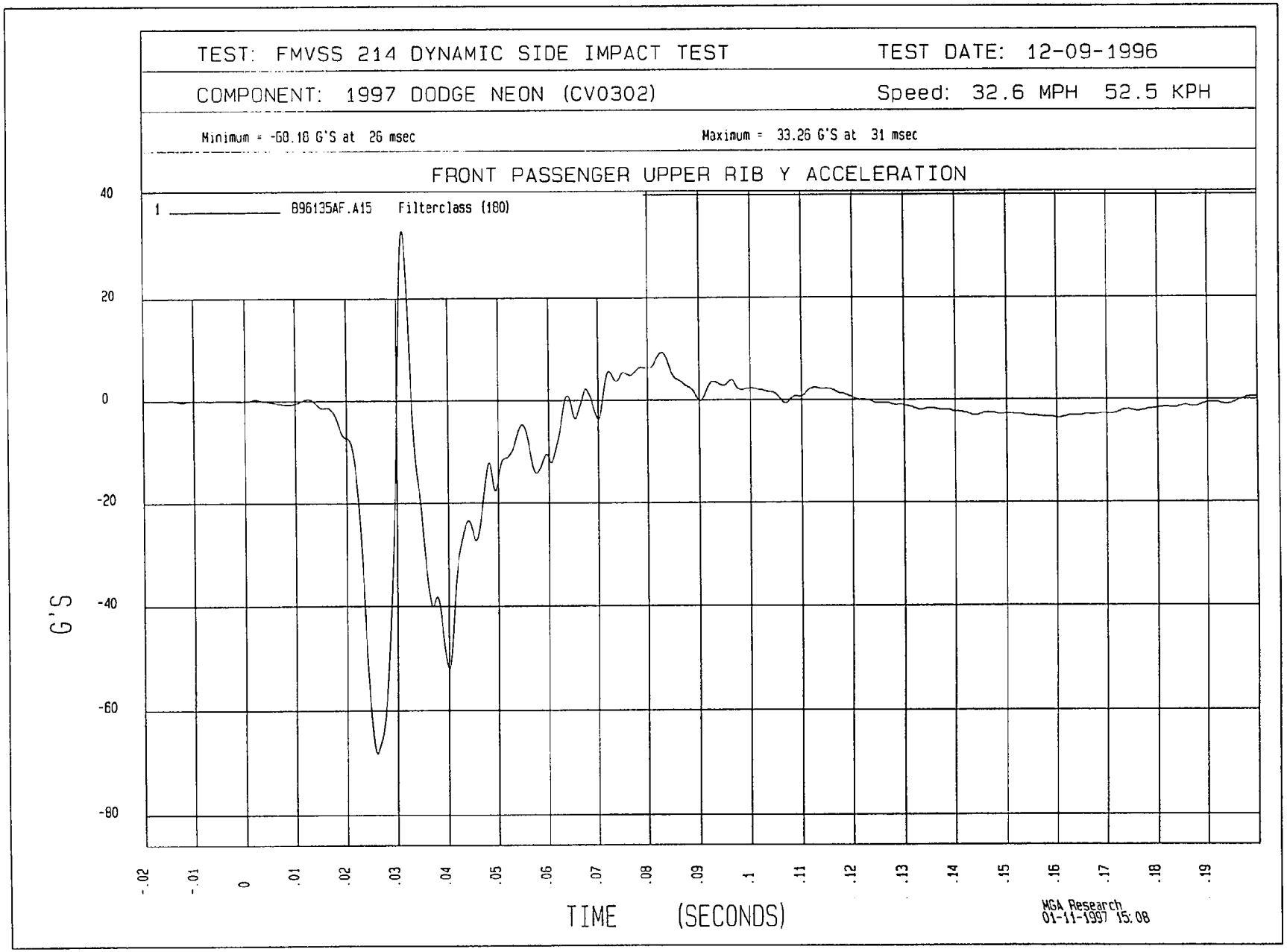
Table of Data Plots

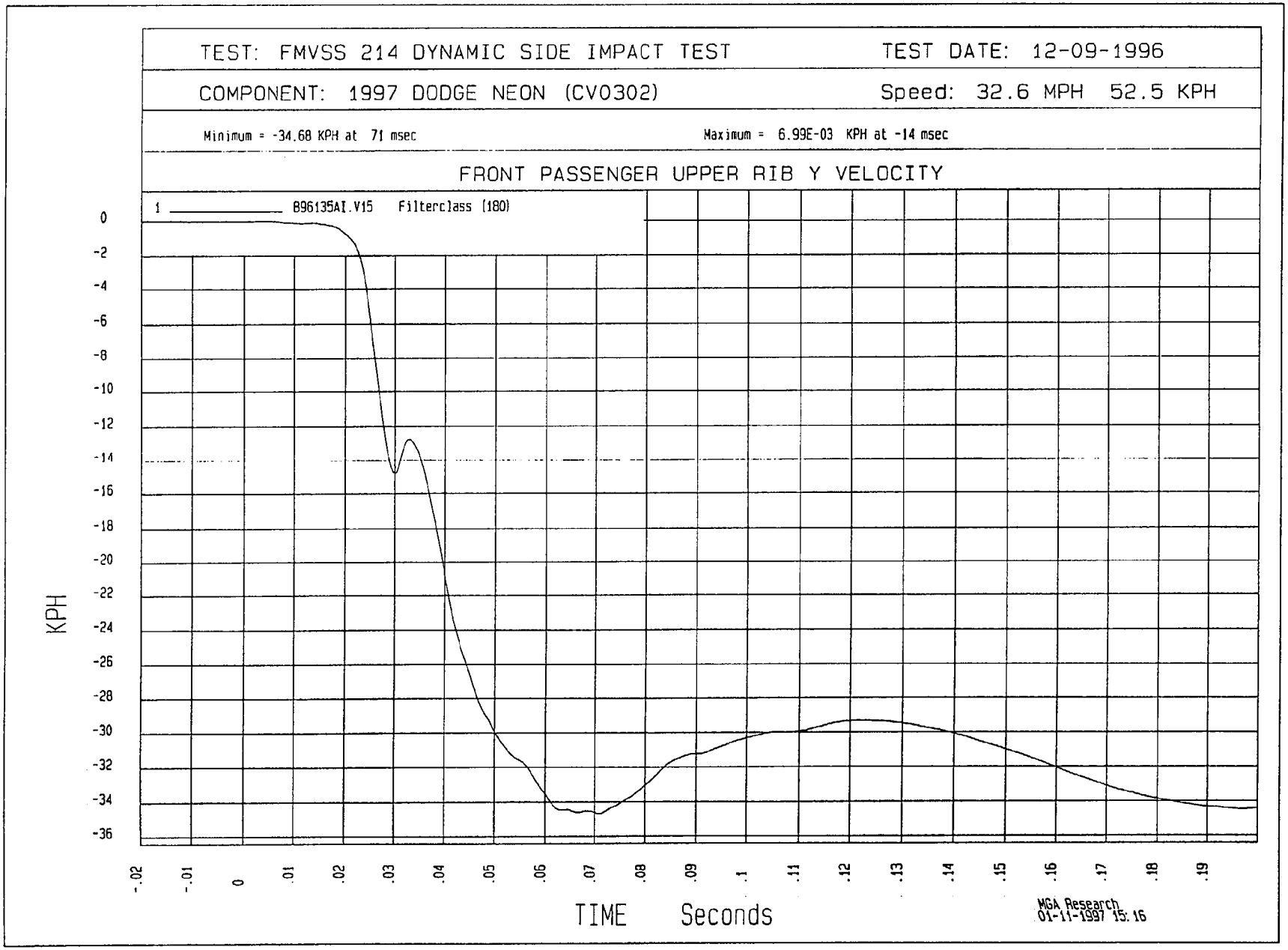
* Data not valid after approximately 31 msec.

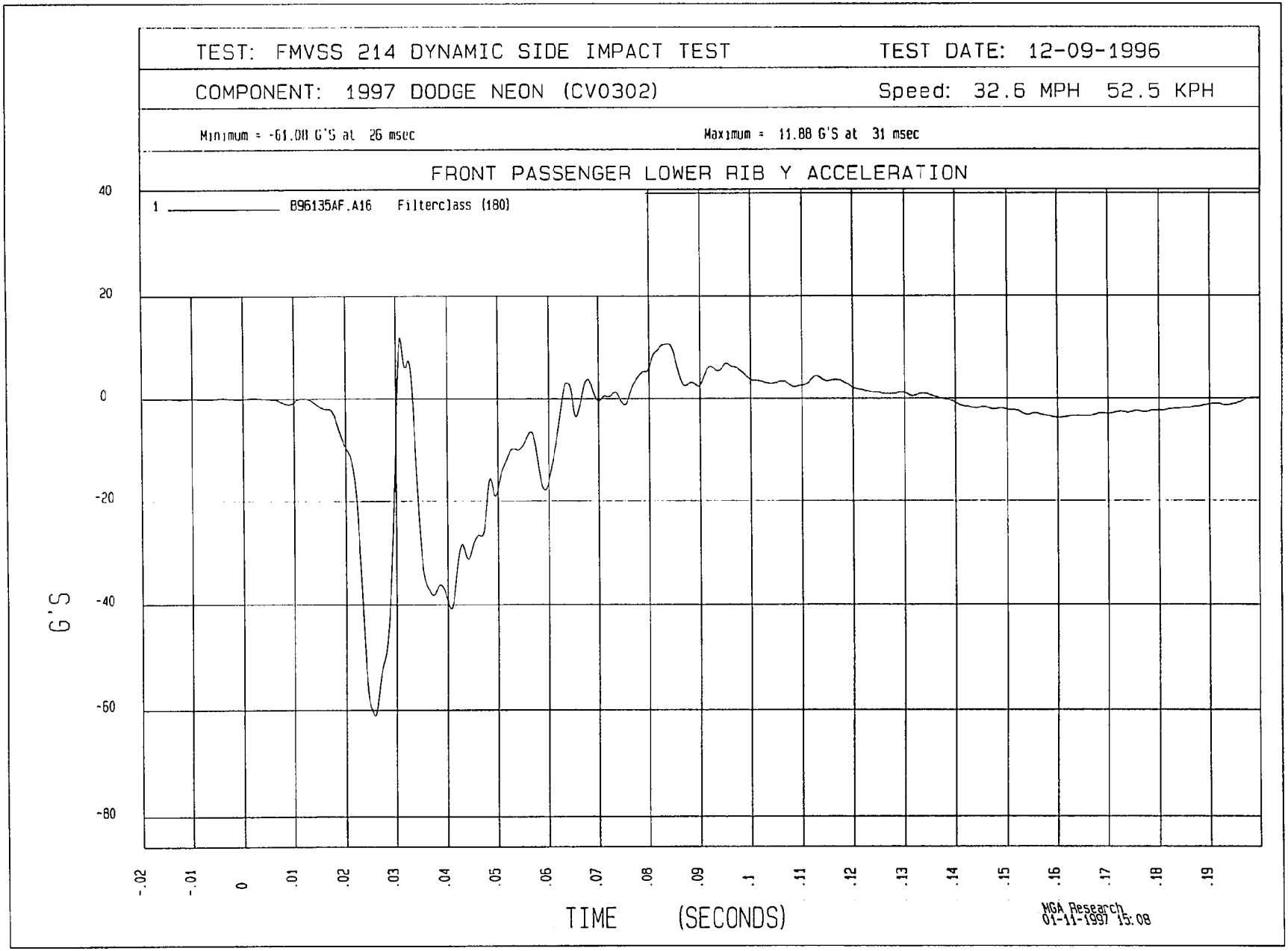
Table of Data Plots

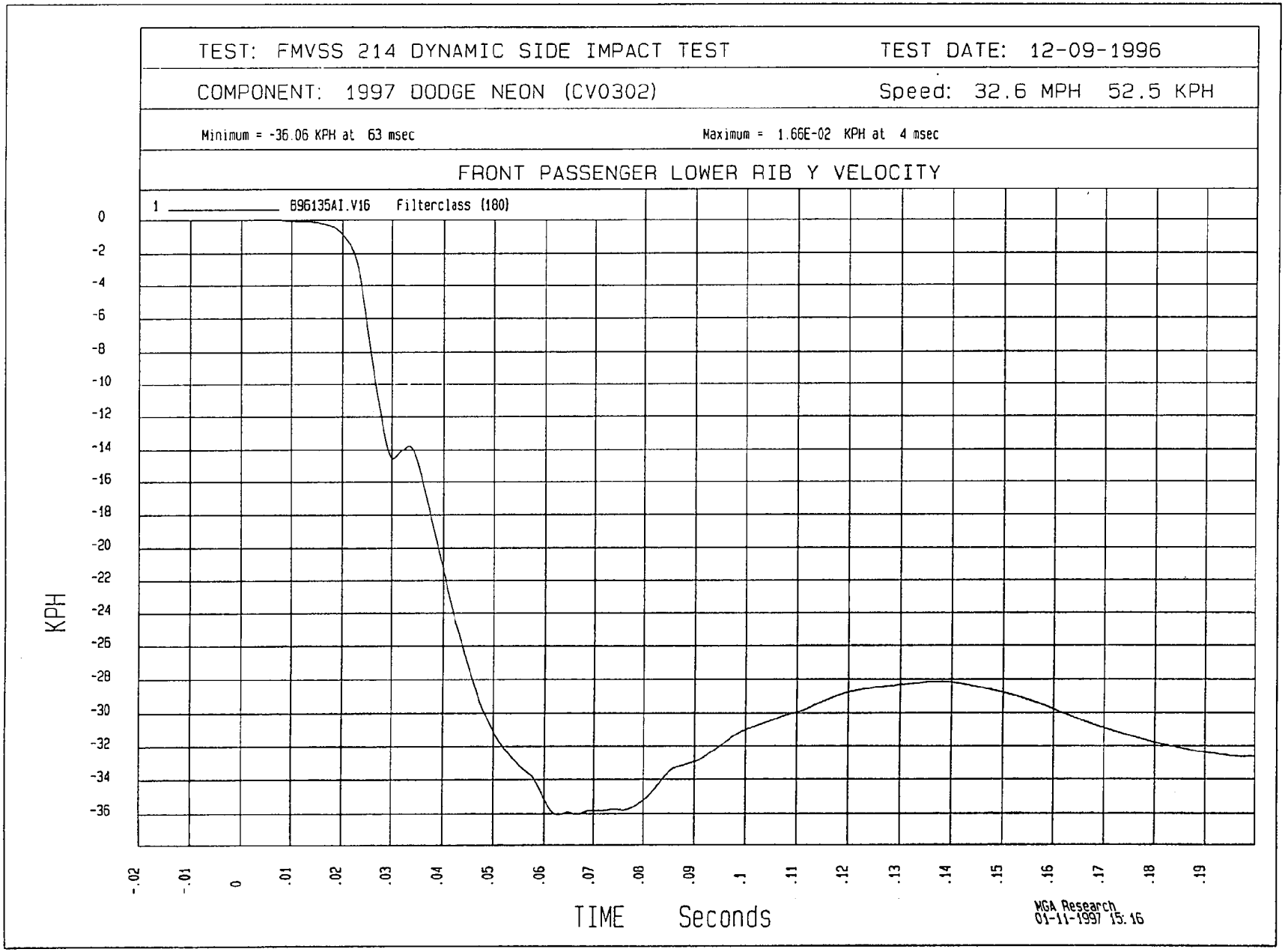
* Data not valid after approximately 31 msec.

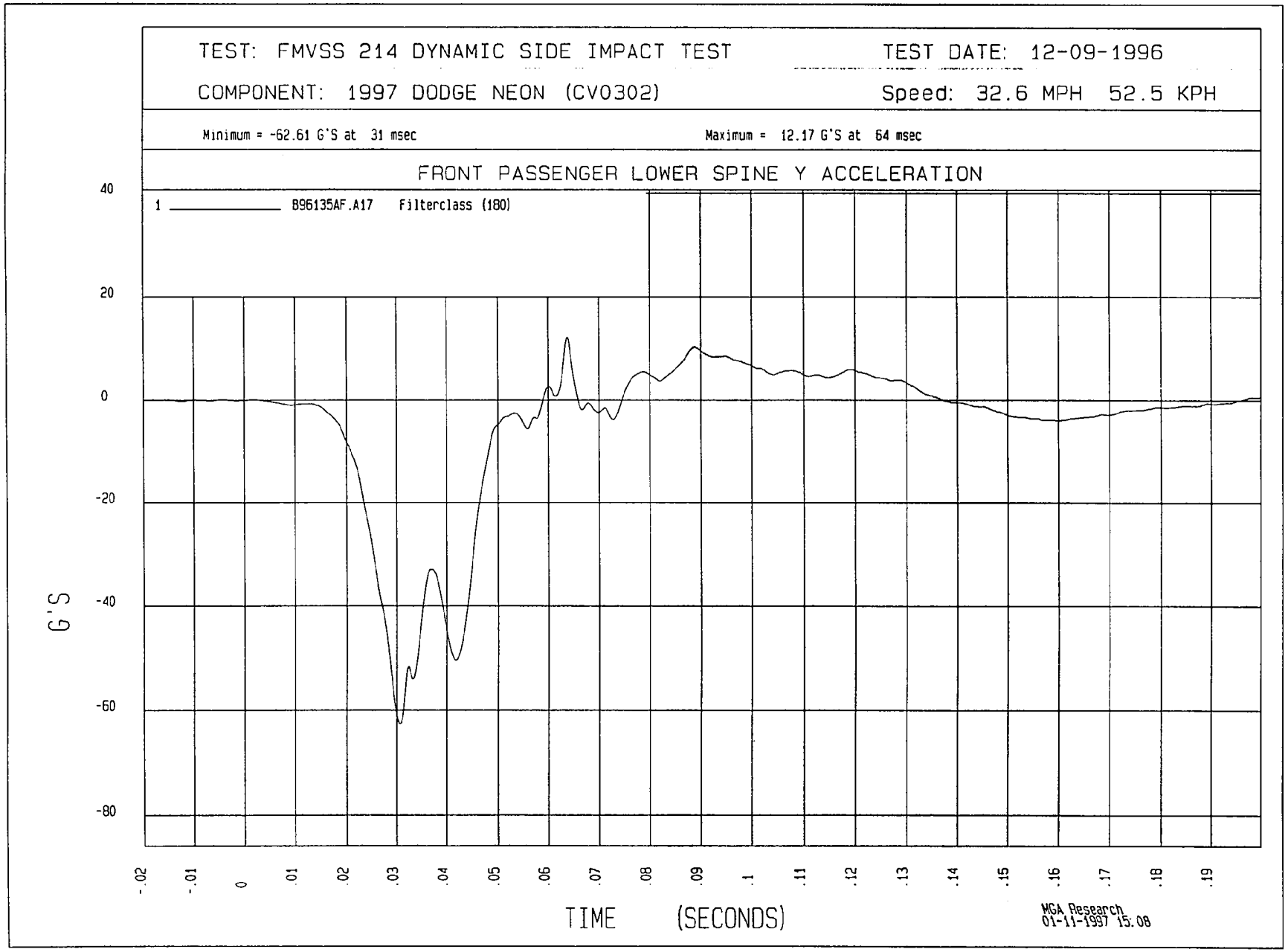
Table of Data Plots

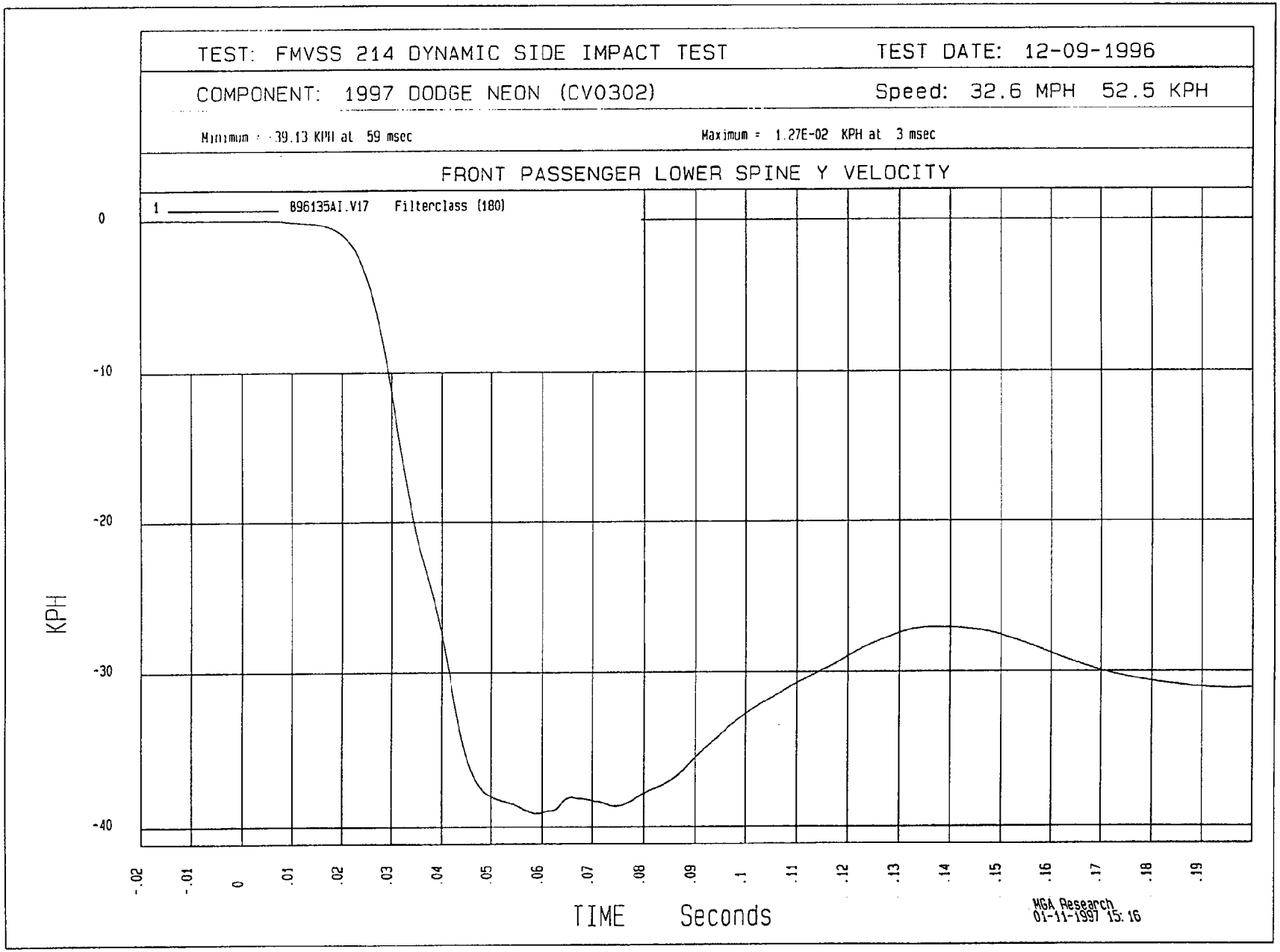

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -68.18 G'S at 26 msec
Maximum = 33.26 G'S at 31 msec
FRONT PASSENGER UPPER RIB Y ACCELERATION
1 B96135AF.A15 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:08

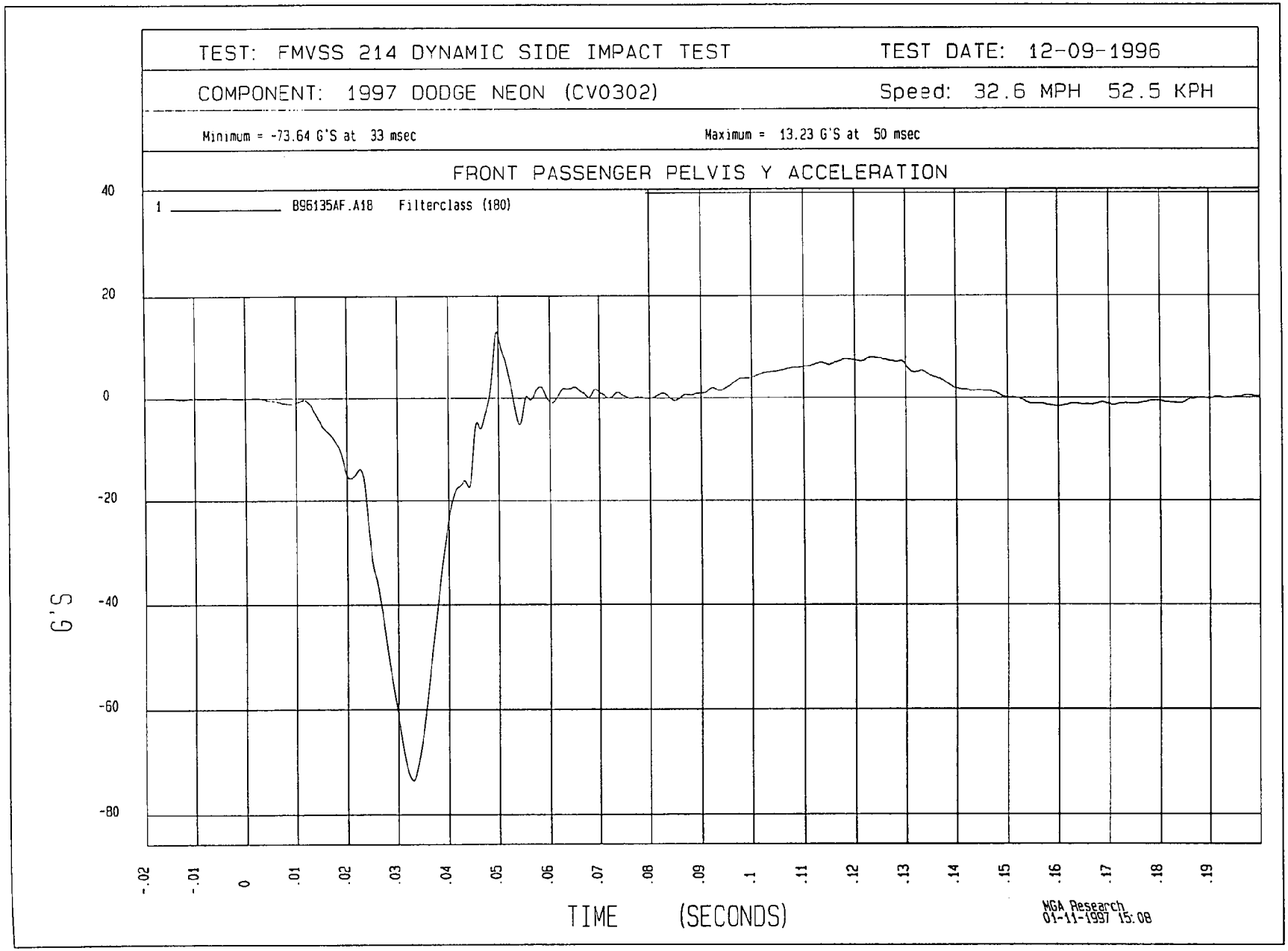

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -34.68 KPH at 71 msec
Maximum = 6.99E-03 KPH at -14 msec
FRONT PASSENGER UPPER RIB Y VELOCITY
1 B96135AI.V15 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
-32
-34
-36
-.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
01-11-1997 15:16

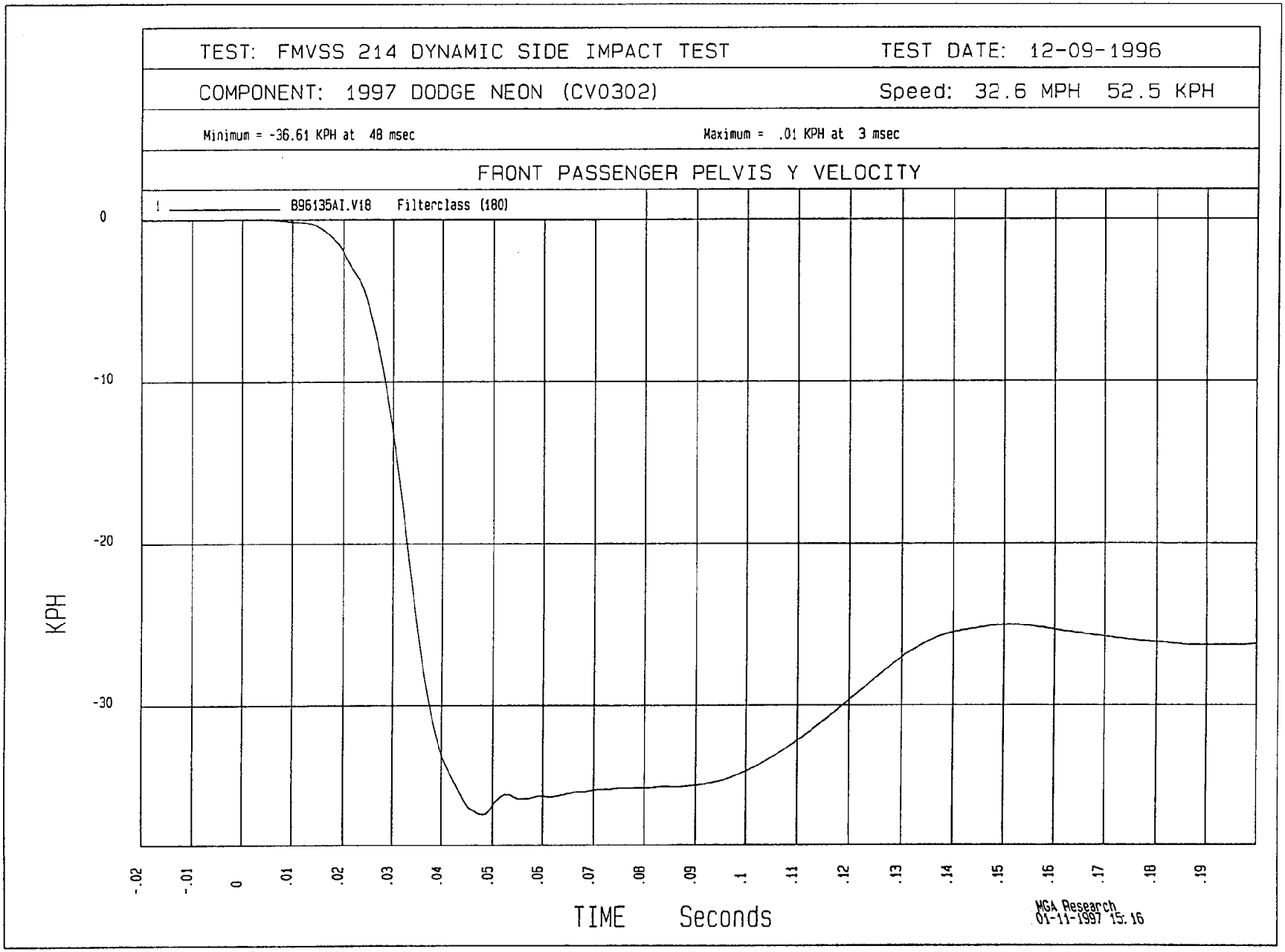

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -61.08 G'S at 26 msec
Maximum = 11.88 G'S at 31 msec
FRONT PASSENGER LOWER RIB Y ACCELERATION
1 B96135AF.A16 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
NGA Research
01-11-1997 15:08

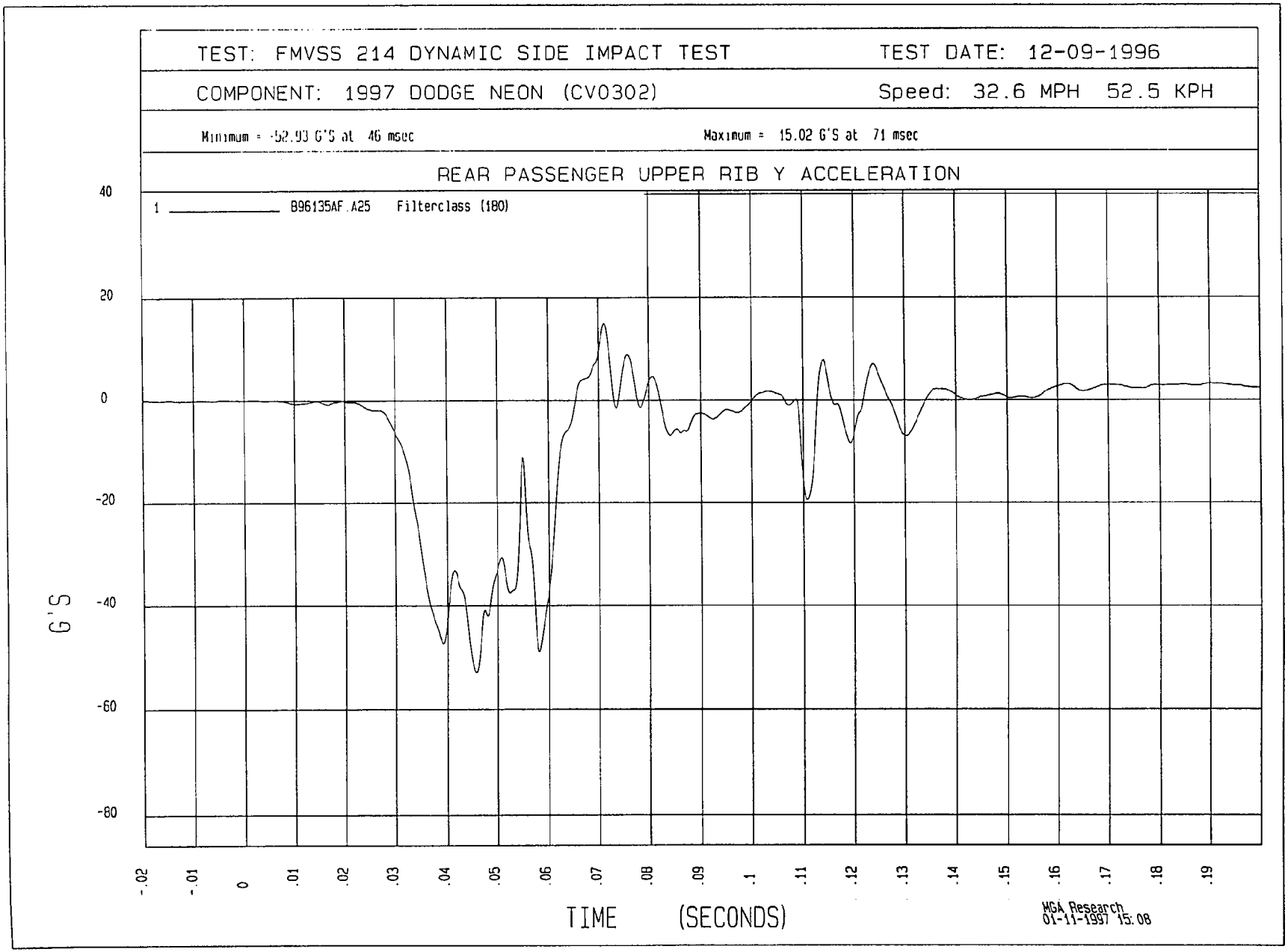

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -36.06 KPH at 63 msec
Maximum = 1.66E-02 KPH at 4 msec
FRONT PASSENGER LOWER RIB Y VELOCITY
1 B96135AI.V16 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
-32
-34
-36
-.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
01-11-1997 15:16

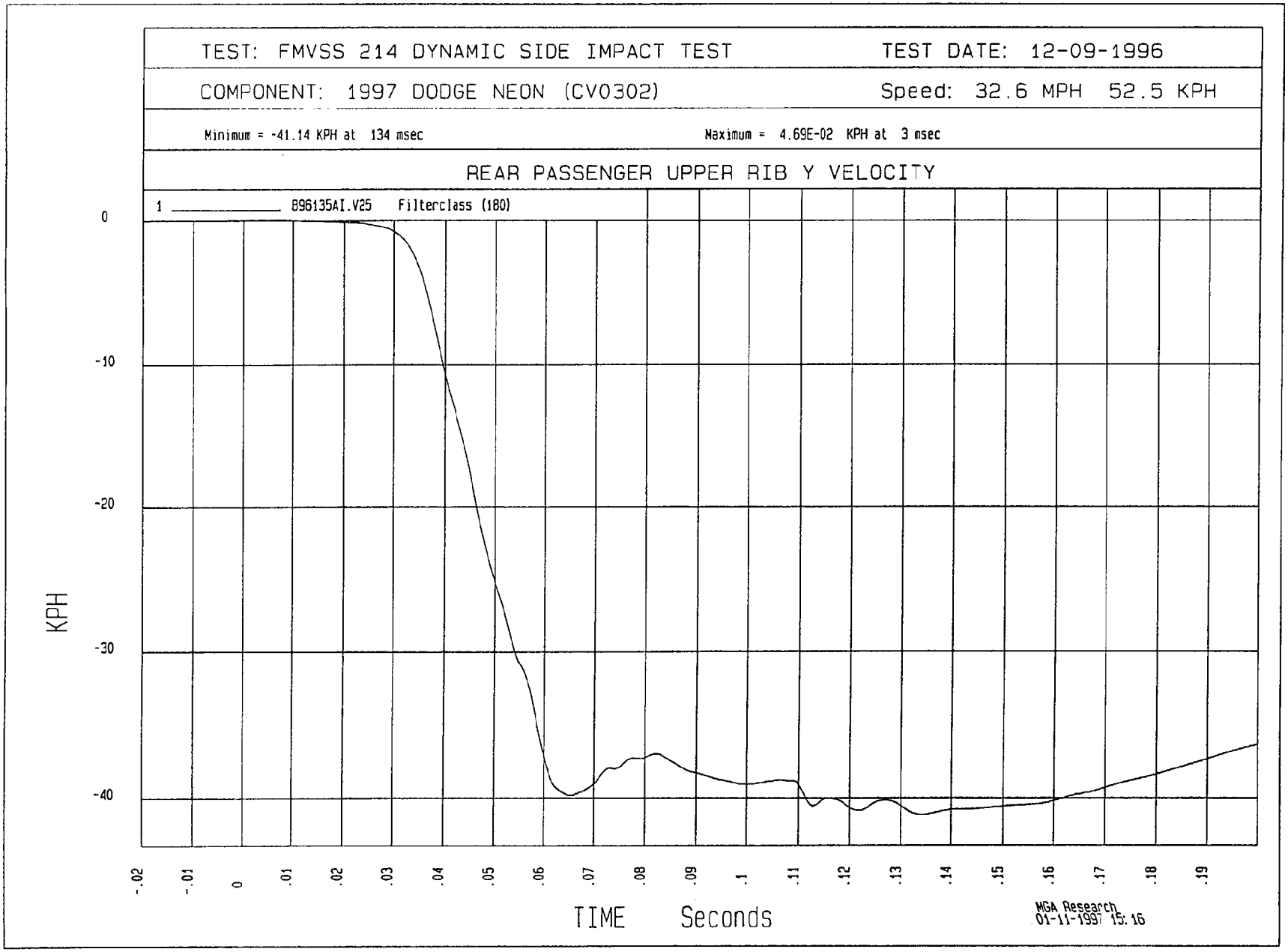

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -62.61 G'S at 31 msec
Maximum = 12.17 G'S at 64 msec
FRONT PASSENGER LOWER SPINE Y ACCELERATION
1 B96135AF.A17 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:08

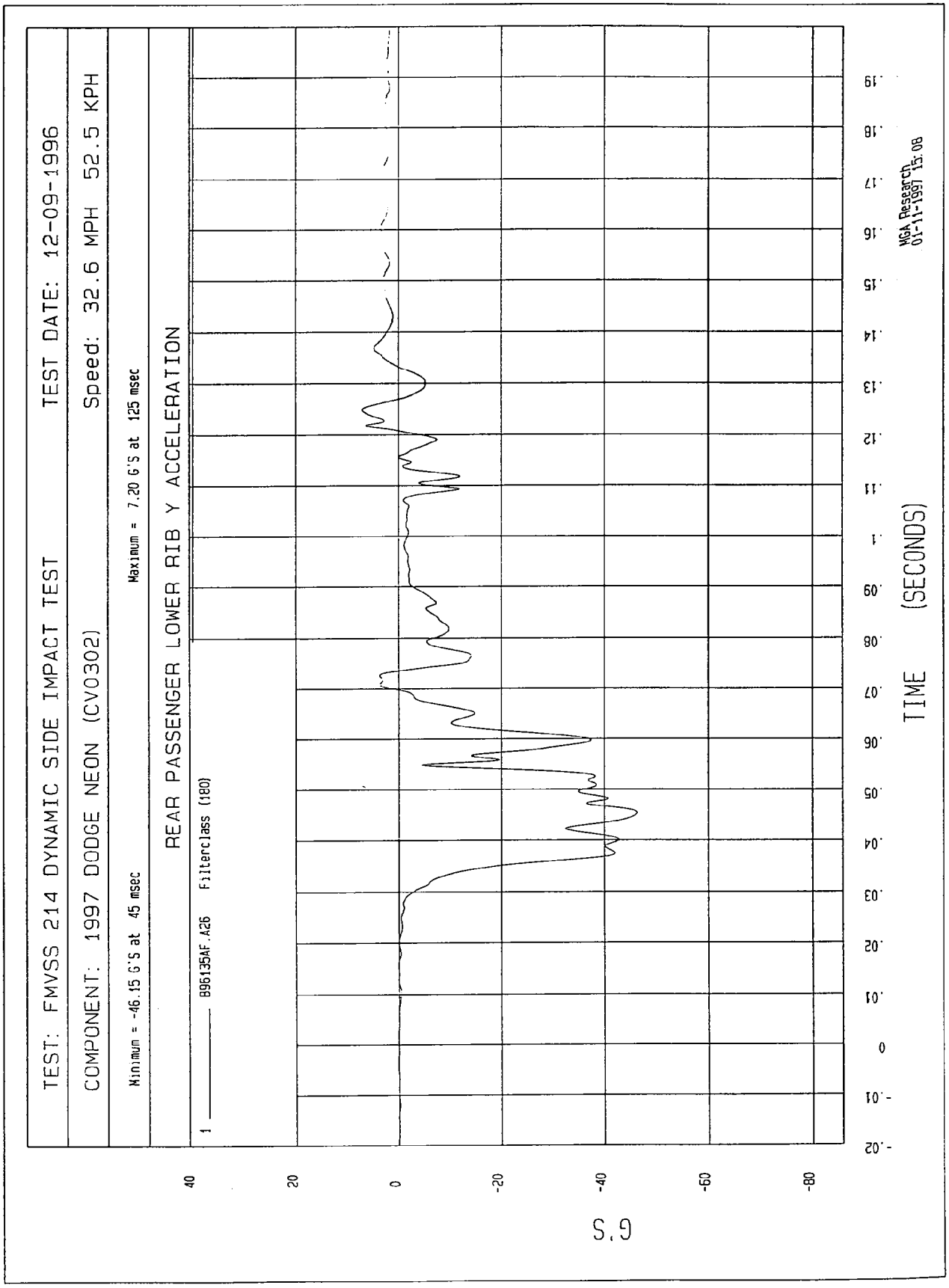

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -39.13 KPH at 59 msec
Maximum = 1.27E-02 KPH at 3 msec
FRONT PASSENGER LOWER SPINE Y VELOCITY
1 B96135AI.V17 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME Seconds
MGA Research
01-11-1997 15:16

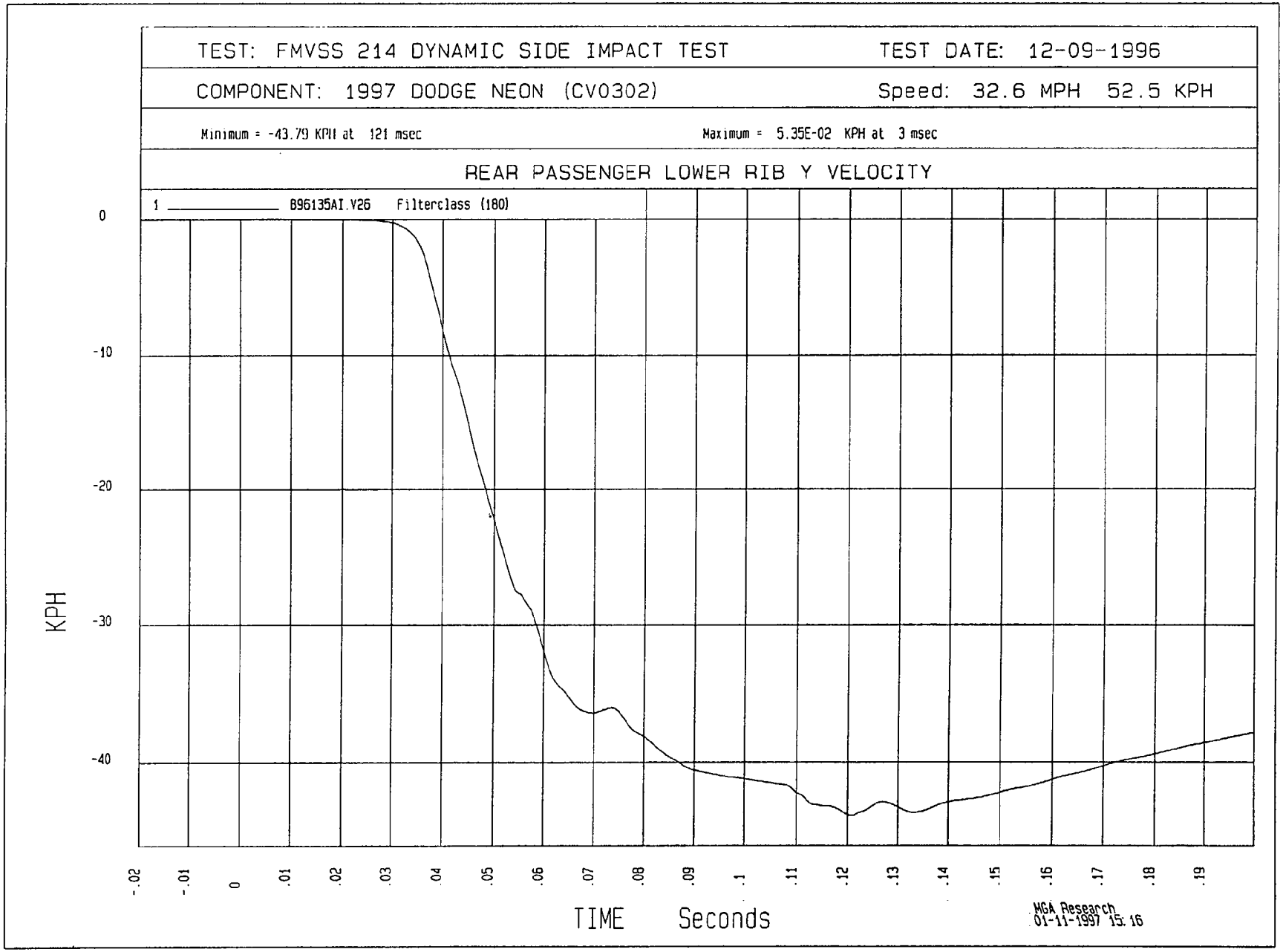

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -73.64 G'S at 33 msec
Maximum = 13.23 G'S at 50 msec
FRONT PASSENGER PELVIS Y ACCELERATION
1 B96135AF.A18 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
NGA Research
01-11-1997 15:08

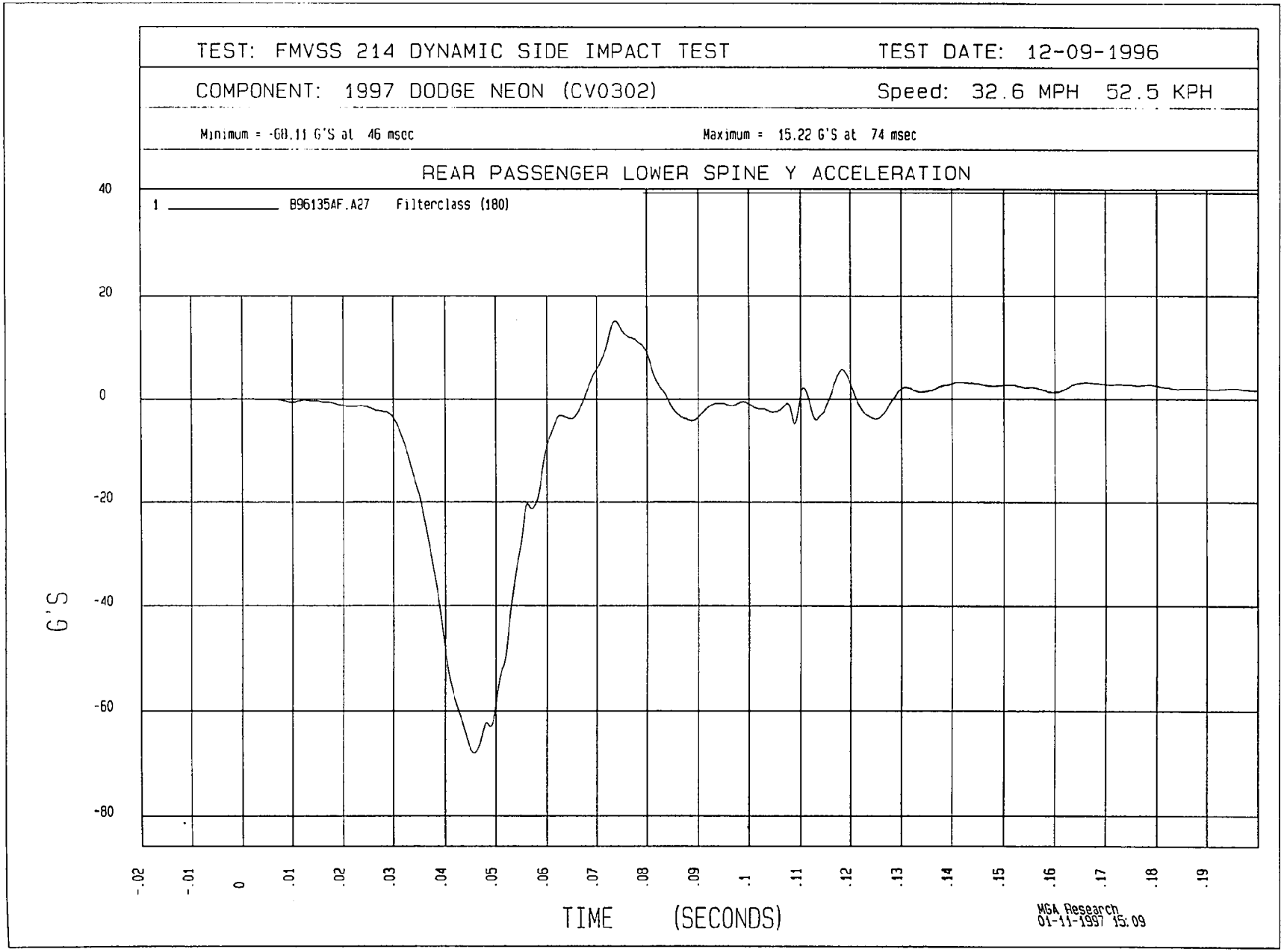

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -36.61 KPH at 48 msec
Maximum = .01 KPH at 3 msec
FRONT PASSENGER PELVIS Y VELOCITY
1 B96135AI.V18 Filterclass (180)
0
-10
-20
-30
KPH
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME Seconds
MGA Research
01-11-1997 15:16

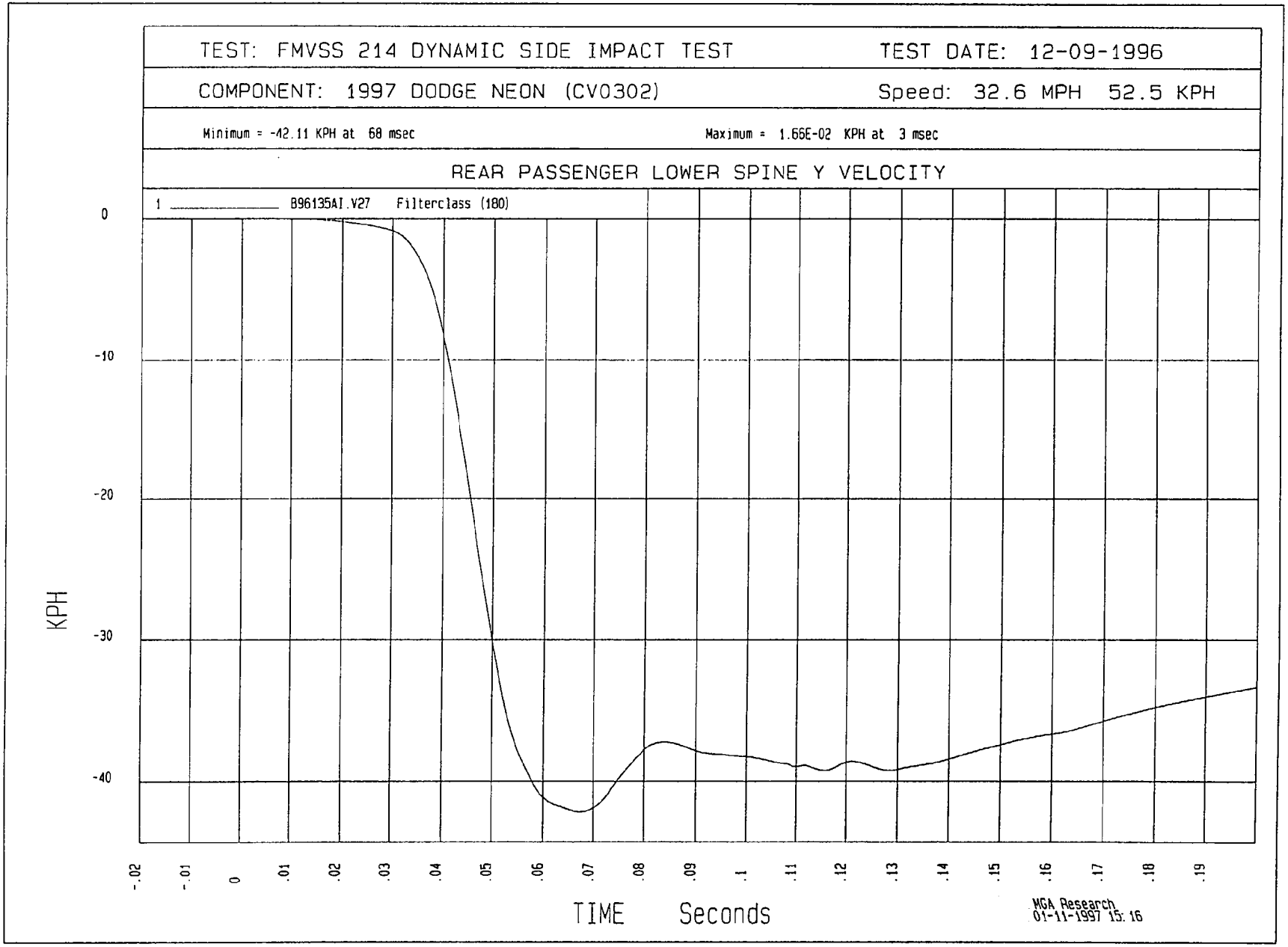

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -52.93 G'S at 46 msec
Maximum = 15.02 G'S at 71 msec
REAR PASSENGER UPPER RIB Y ACCELERATION
1 B96135AF.A25 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:08

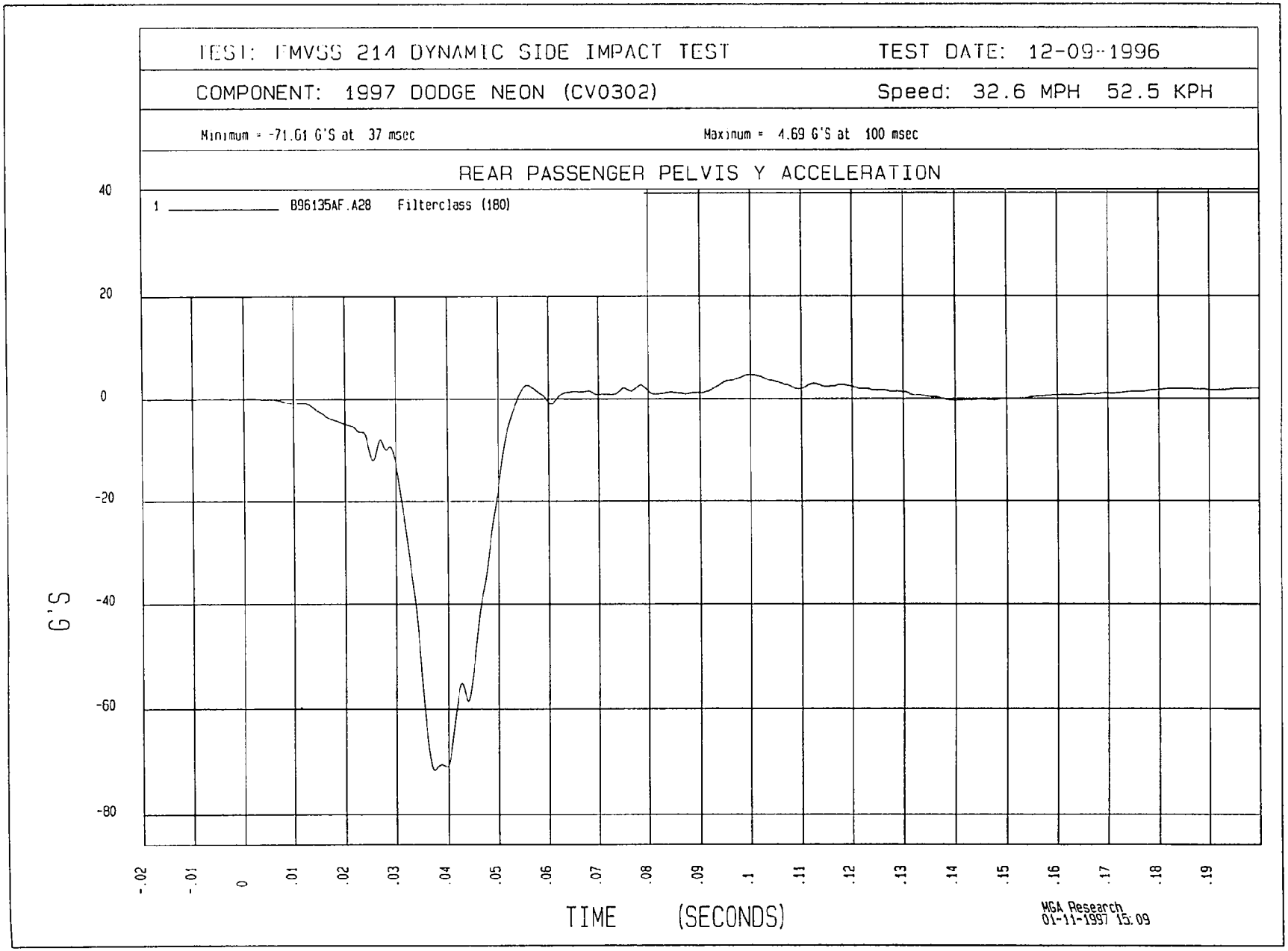

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -41.14 KPH at 134 msec
Maximum = 4.69E-02 KPH at 3 msec
REAR PASSENGER UPPER RIB Y VELOCITY
1 B96135AI.V25 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME Seconds
MGA Research
01-11-1997 15:16


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -46.15 G'S at 45 msec
Maximum = 7.20 G'S at 125 msec
REAR PASSENGER LOWER RIB Y ACCELERATION
1 B96135AF.A26 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
TIME (SECONDS)
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
MGA Research
01-11-1997 15:08


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -43.79 KPH at 121 msec
Maximum = 5.35E-02 KPH at 3 msec
REAR PASSENGER LOWER RIB Y VELOCITY
1 B96135AI.V26 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.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
01-11-1997 15:16


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -60.11 G'S at 46 msec
Maximum = 15.22 G'S at 74 msec
REAR PASSENGER LOWER SPINE Y ACCELERATION
1 B96135AF.A27 Filterclass (180)
40
20
0
-20
-40
-60
-80
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
01-11-1997 15:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -42.11 KPH at 68 msec
Maximum = 1.66E-02 KPH at 3 msec
REAR PASSENGER LOWER SPINE Y VELOCITY
1 B96135AI.V27 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.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
01-11-1997 15:16


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -71.61 G'S at 37 msec
Maximum = 4.69 G'S at 100 msec
REAR PASSENGER PELVIS Y ACCELERATION
1 B96135AF.A28 Filterclass (180)
40
20
0
-20
-40
-60
-80
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
01-11-1997 15:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -38.08 KPH at 54 msec
Maximum = 3.68E-02 KPH at 3 msec
REAR PASSENGER PELVIS Y VELOCITY
1 B96135AI.V28 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
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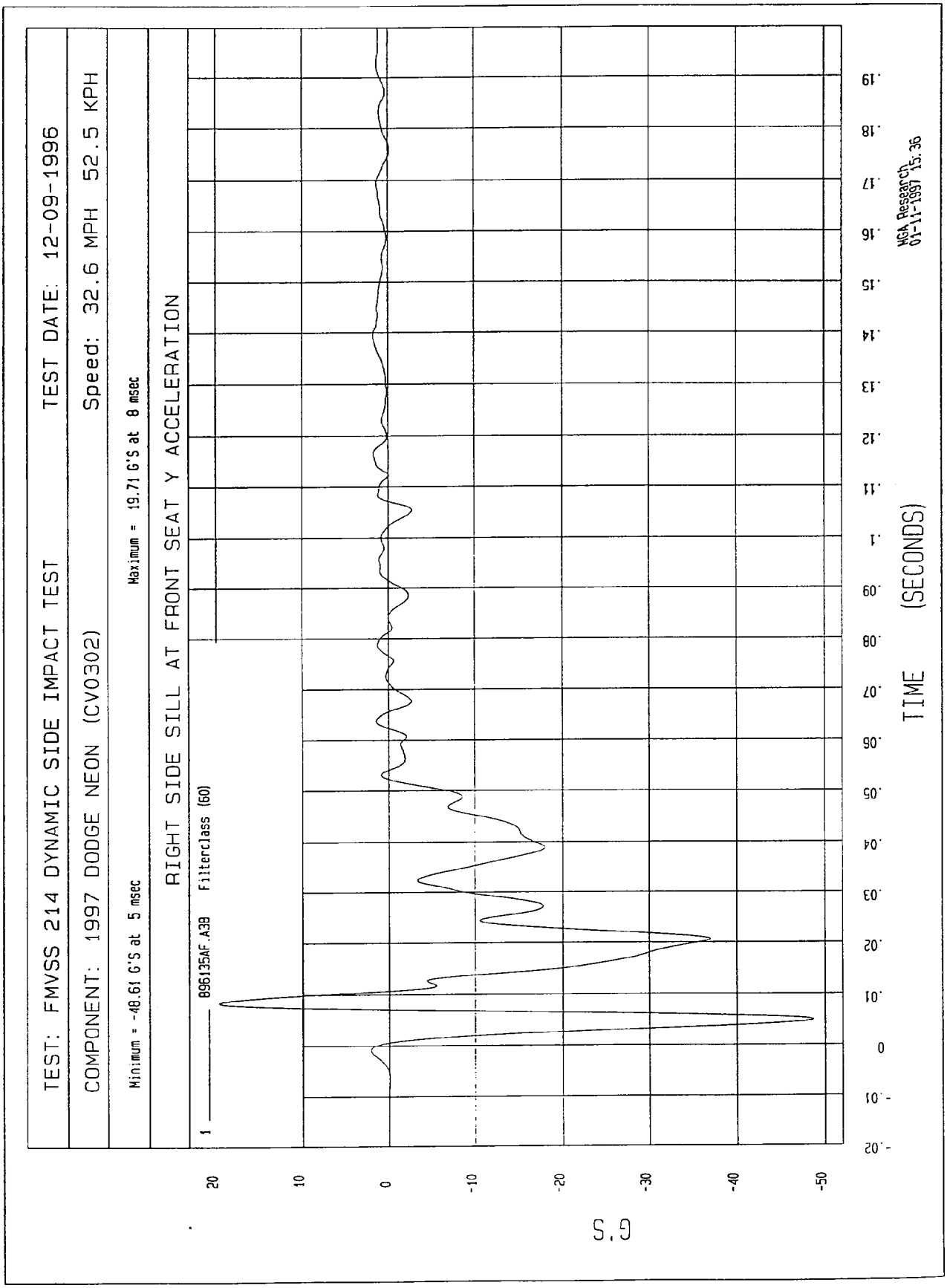
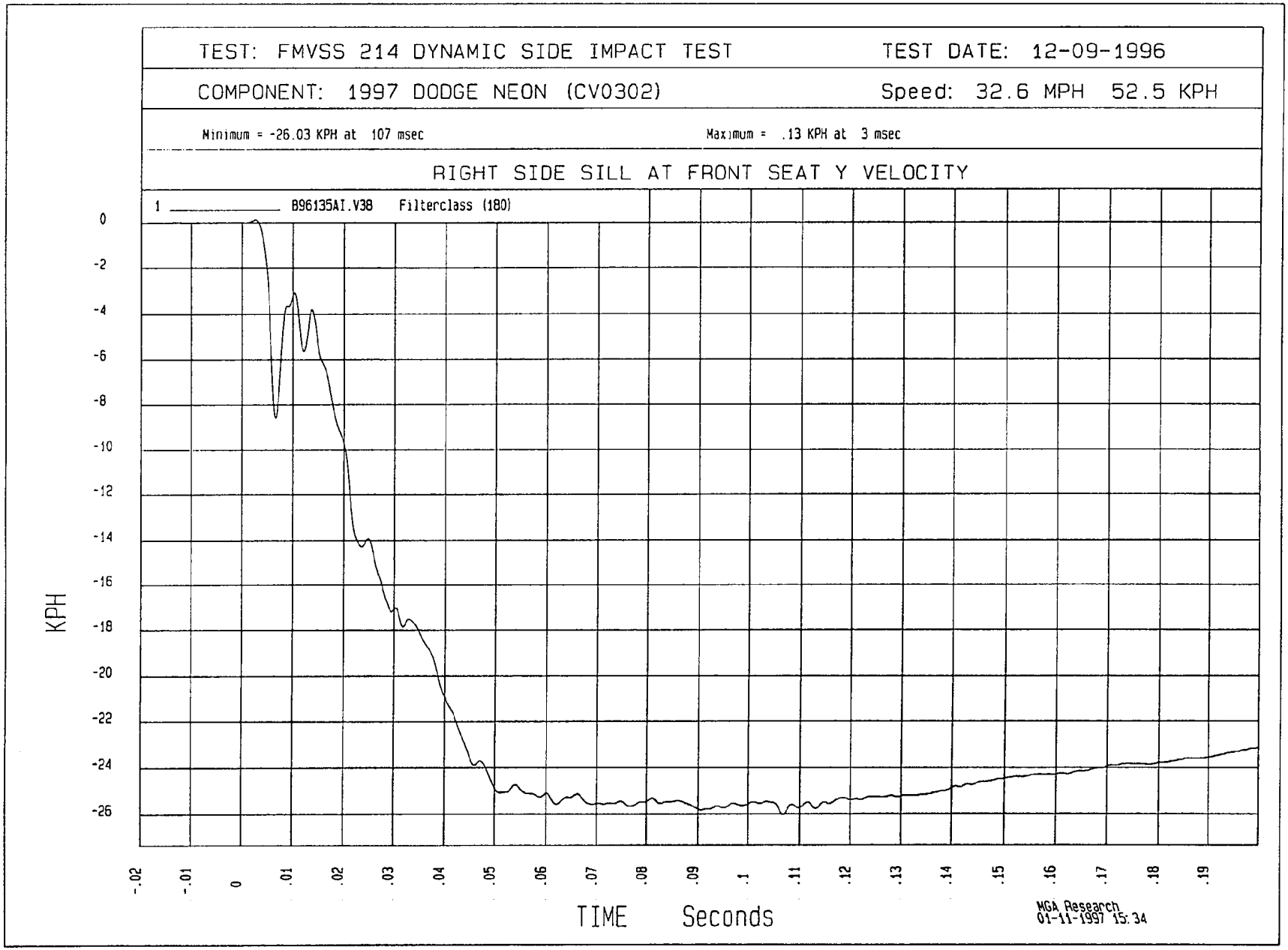
TIME Seconds
MGA Research
01-11-1997 15:16


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -48.61 G'S at 5 msec
Maximum = 19.71 G'S at 8 msec
RIGHT SIDE SILL AT FRONT SEAT Y ACCELERATION
1 B96135AF.A3B Filterclass (60)
G'S
TIME (SECONDS)
MGA Research 01-11-1997 15:36


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -26.03 KPH at 107 msec
Maximum = .13 KPH at 3 msec
RIGHT SIDE SILL AT FRONT SEAT Y VELOCITY
1 B96135AI.V38 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-.02
-.01
0
.01
.02
.03
.04
.05
.06
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.09
.1
.11
.12
.13
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.15
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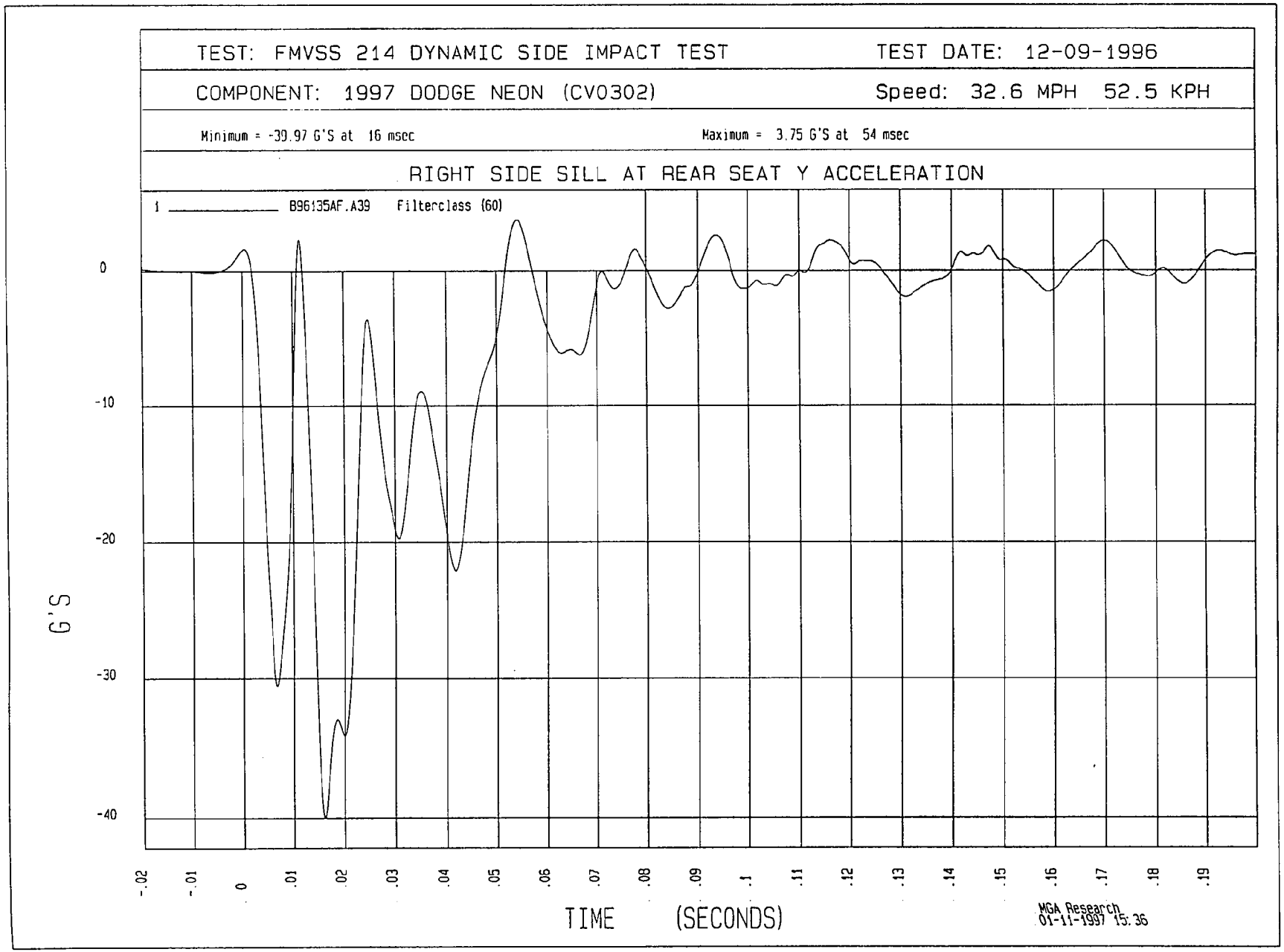
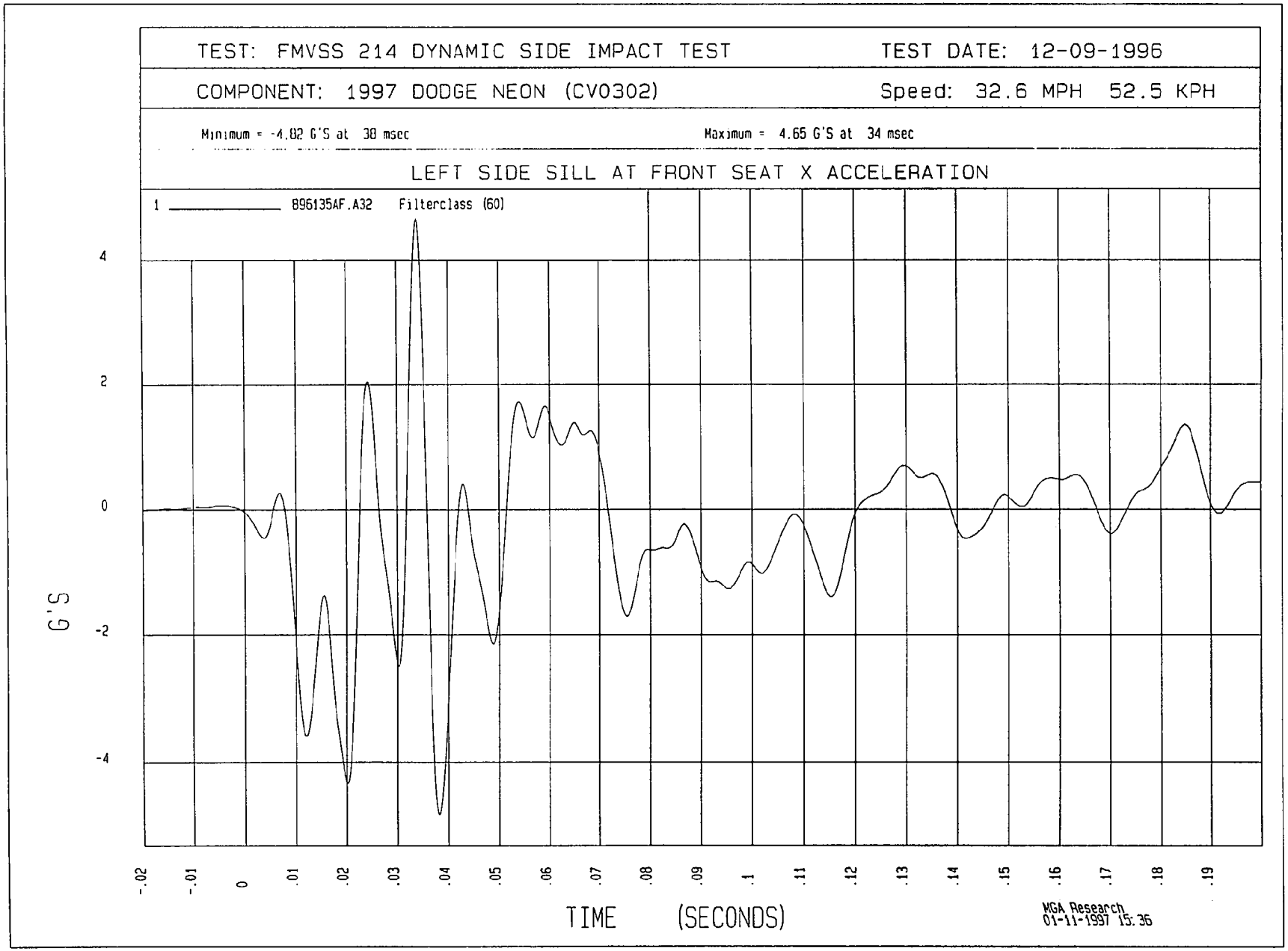
TIME Seconds
NGA Research
01-11-1997 15:34


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -39.97 G'S at 16 msec
Maximum = 3.75 G'S at 54 msec
RIGHT SIDE SILL AT REAR SEAT Y ACCELERATION
1 B96135AF.A39 Filterclass (60)
0
-10
-20
-30
-40
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
01-11-1997 15:36


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -31.28 KPH at 112 msec
Maximum = .33 KPH at 3 msec
RIGHT SIDE SILL AT REAR SEAT Y VELOCITY
1 896135AI.V39 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
-32
-.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
01-11-1997 15:34


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -4.82 G'S at 38 msec
Maximum = 4.65 G'S at 34 msec
LEFT SIDE SILL AT FRONT SEAT X ACCELERATION
1 896135AF.A32 Filterclass (60)
4
2
0
-2
-4
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
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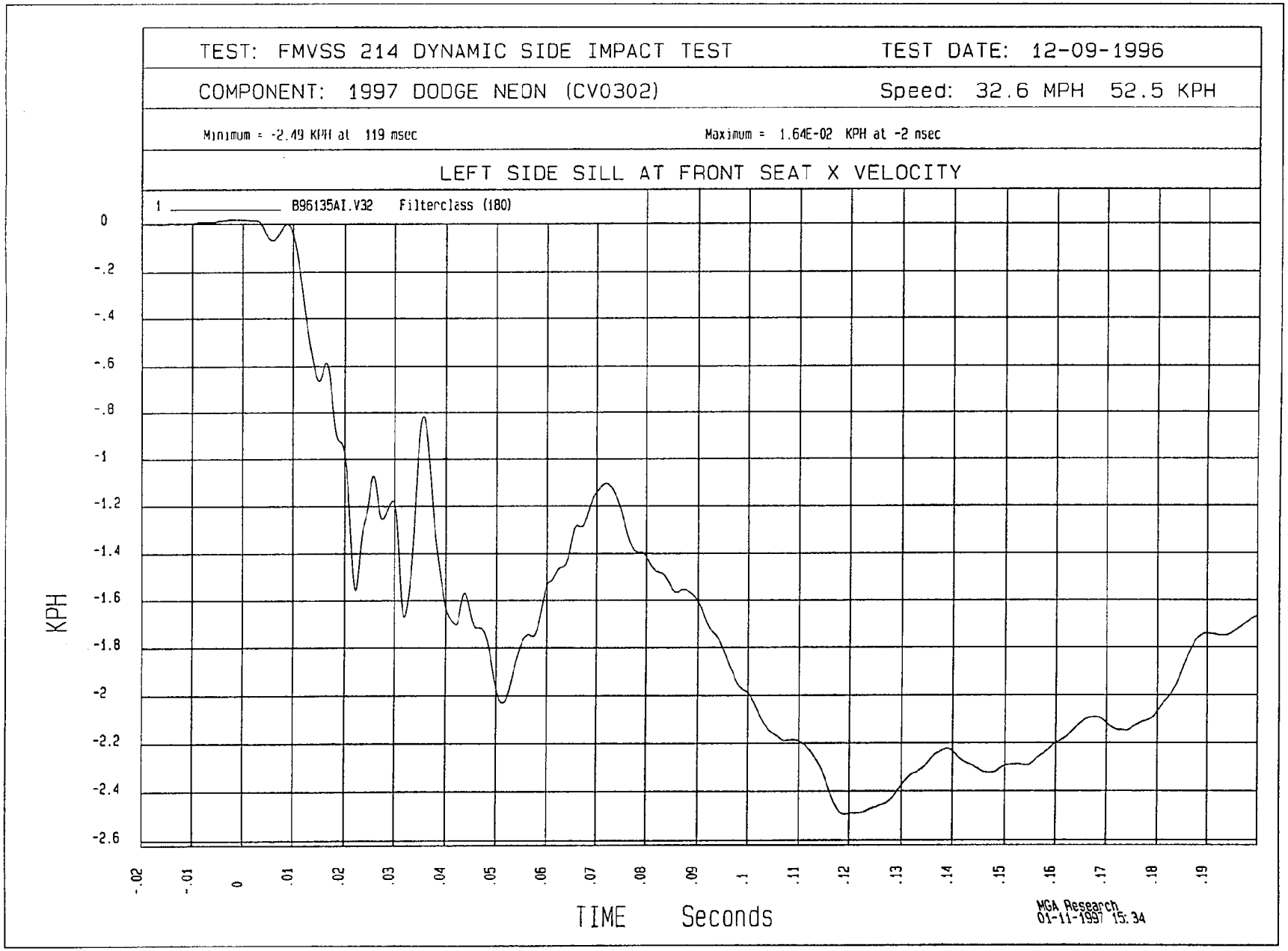
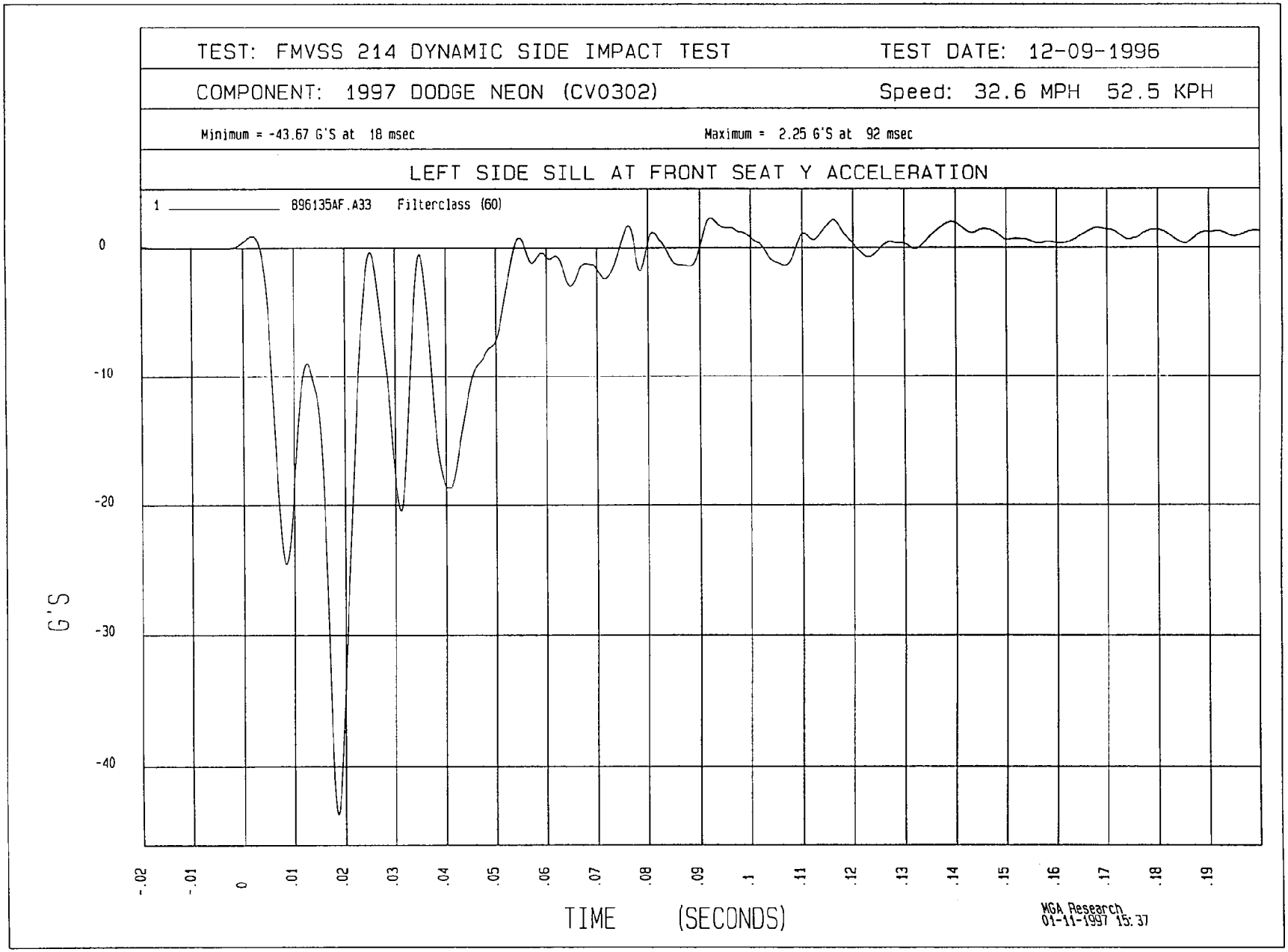
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:36


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -2.49 KPH at 119 msec
Maximum = 1.64E-02 KPH at -2 msec
LEFT SIDE SILL AT FRONT SEAT X VELOCITY
1 B96135AI.V32 Filterclass (180)
KPH
0
-.2
-.4
-.6
-.8
-1
-1.2
-1.4
-1.6
-1.8
-2
-2.2
-2.4
-2.6
-.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
01-11-1997 15:34


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -43.67 G'S at 18 msec
Maximum = 2.25 G'S at 92 msec
LEFT SIDE SILL AT FRONT SEAT Y ACCELERATION
1 896135AF.A33 Filterclass (60)
0
-10
-20
-30
-40
G's
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
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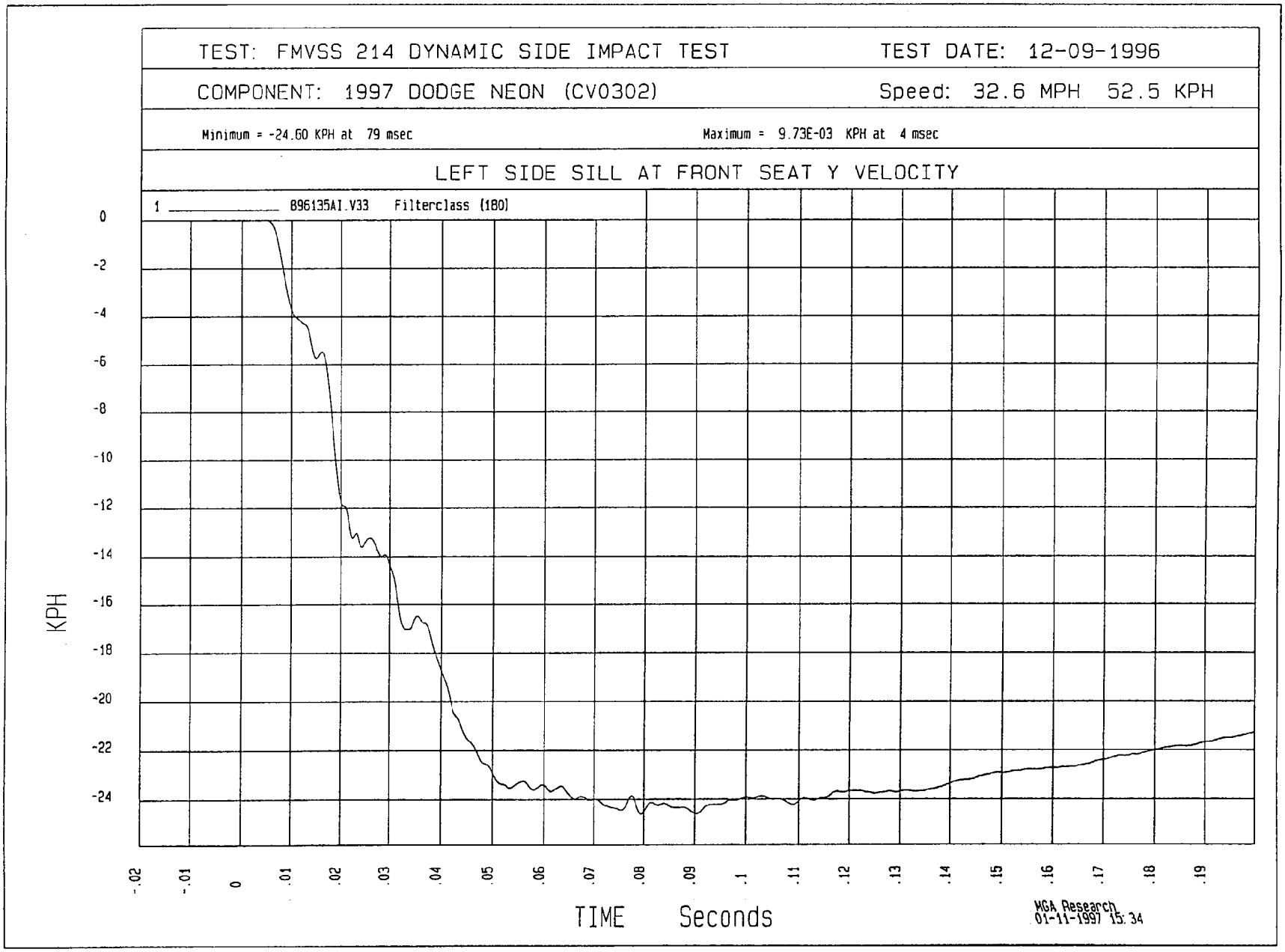
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:37


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -24.60 KPH at 79 msec
Maximum = 9.73E-03 KPH at 4 msec
LEFT SIDE SILL AT FRONT SEAT Y VELOCITY
1 B96135AI.V33 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-.02
-.01
0
.01
.02
.03
.04
.05
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.13
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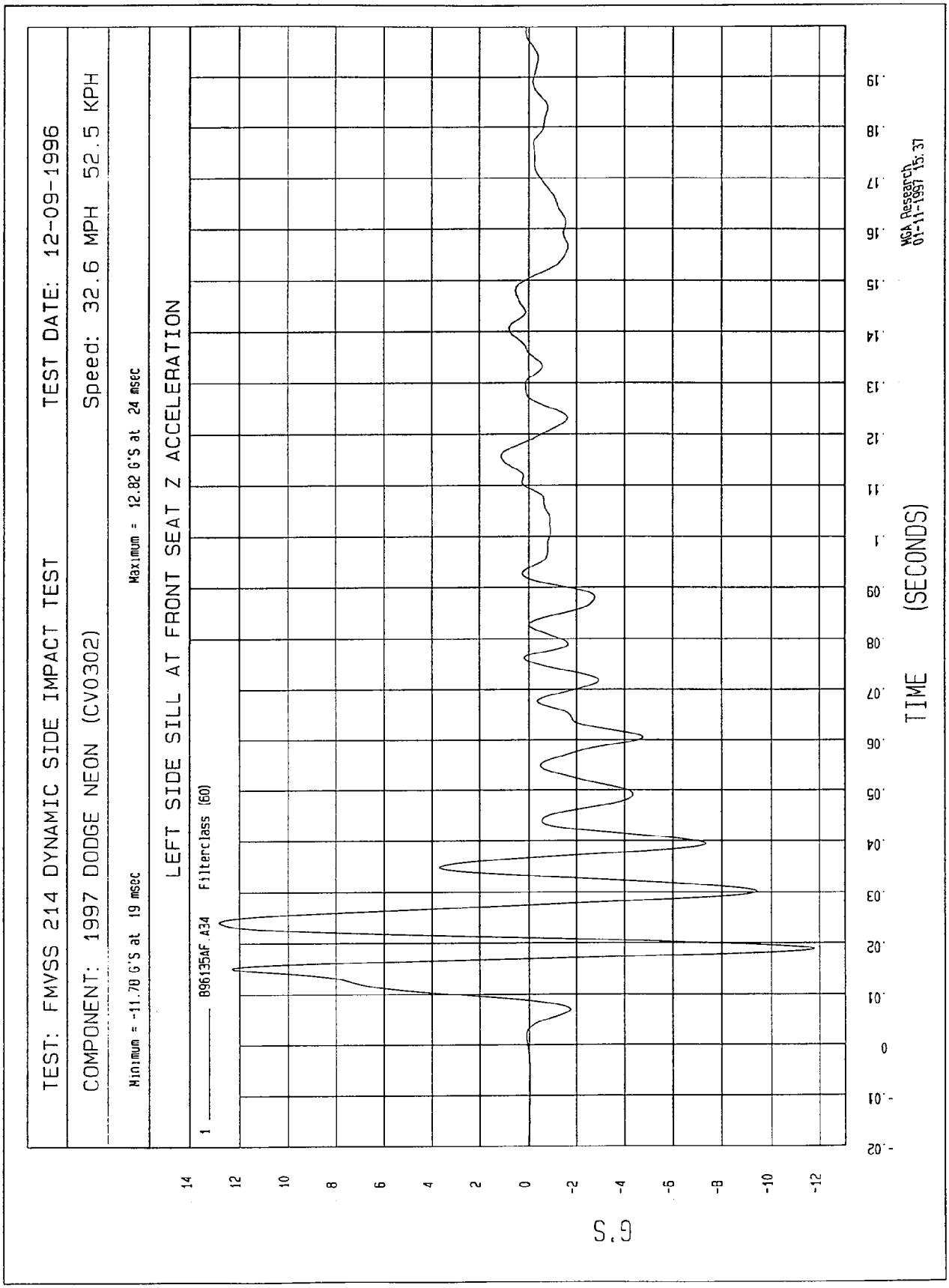
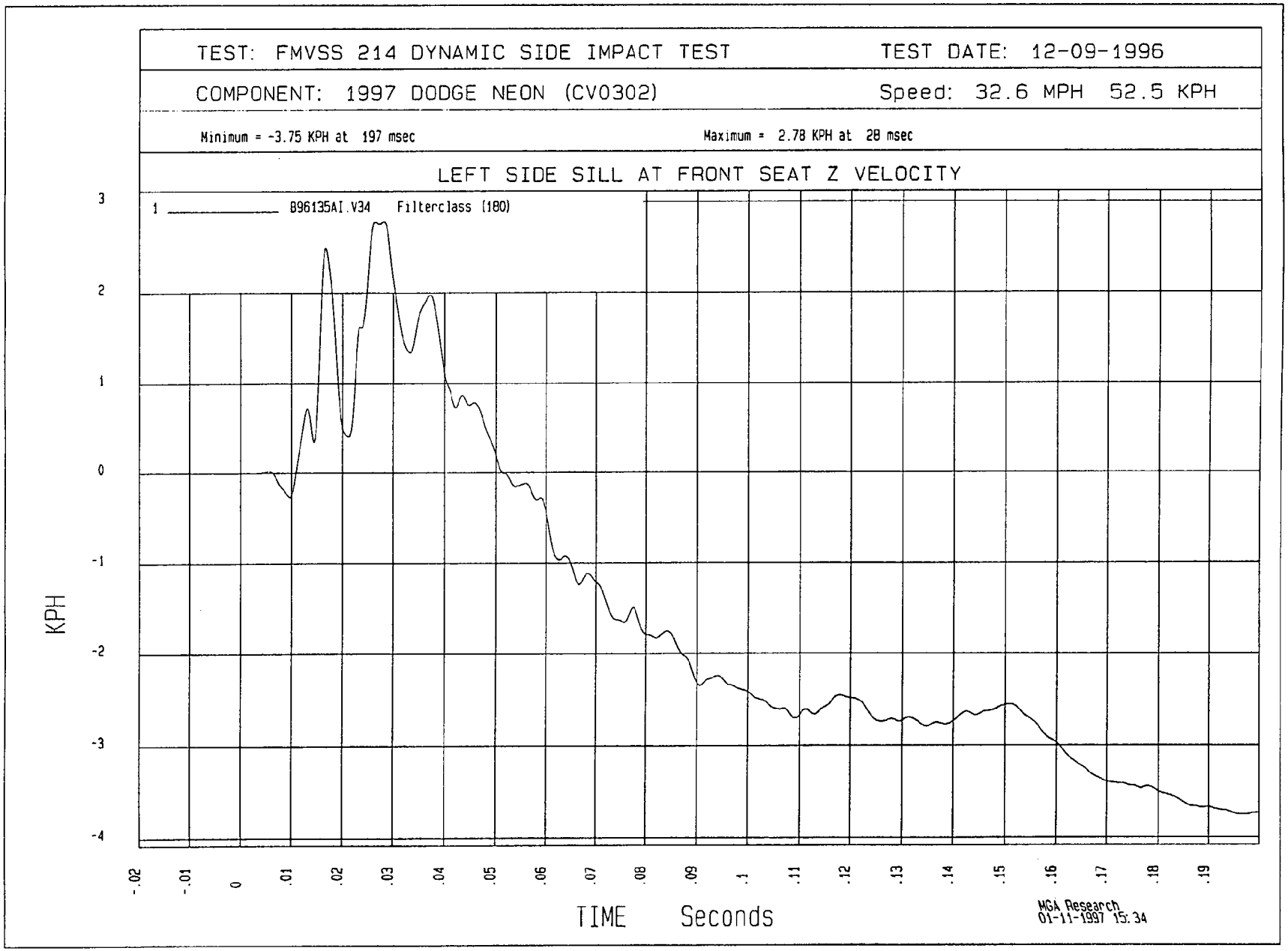
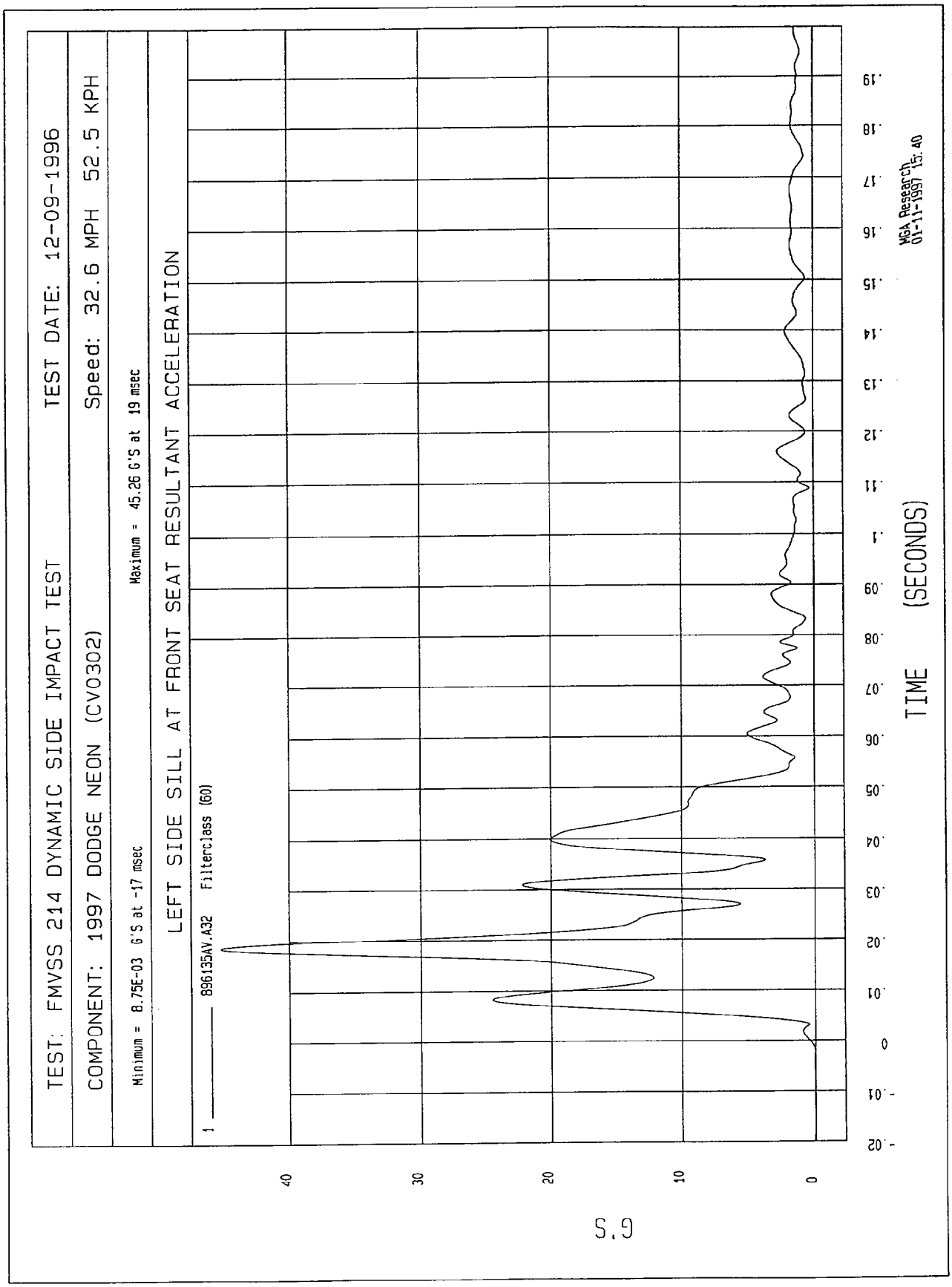
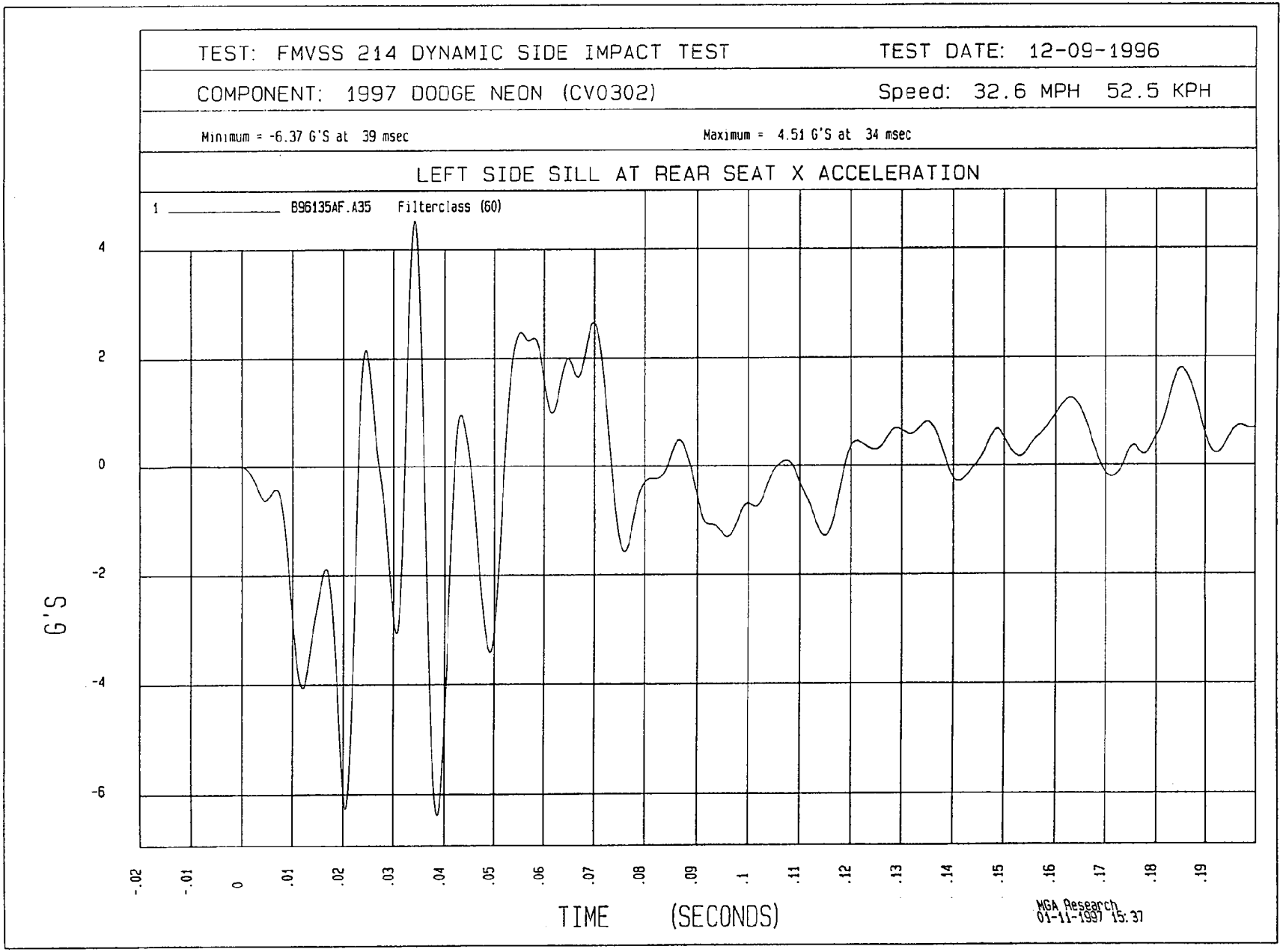
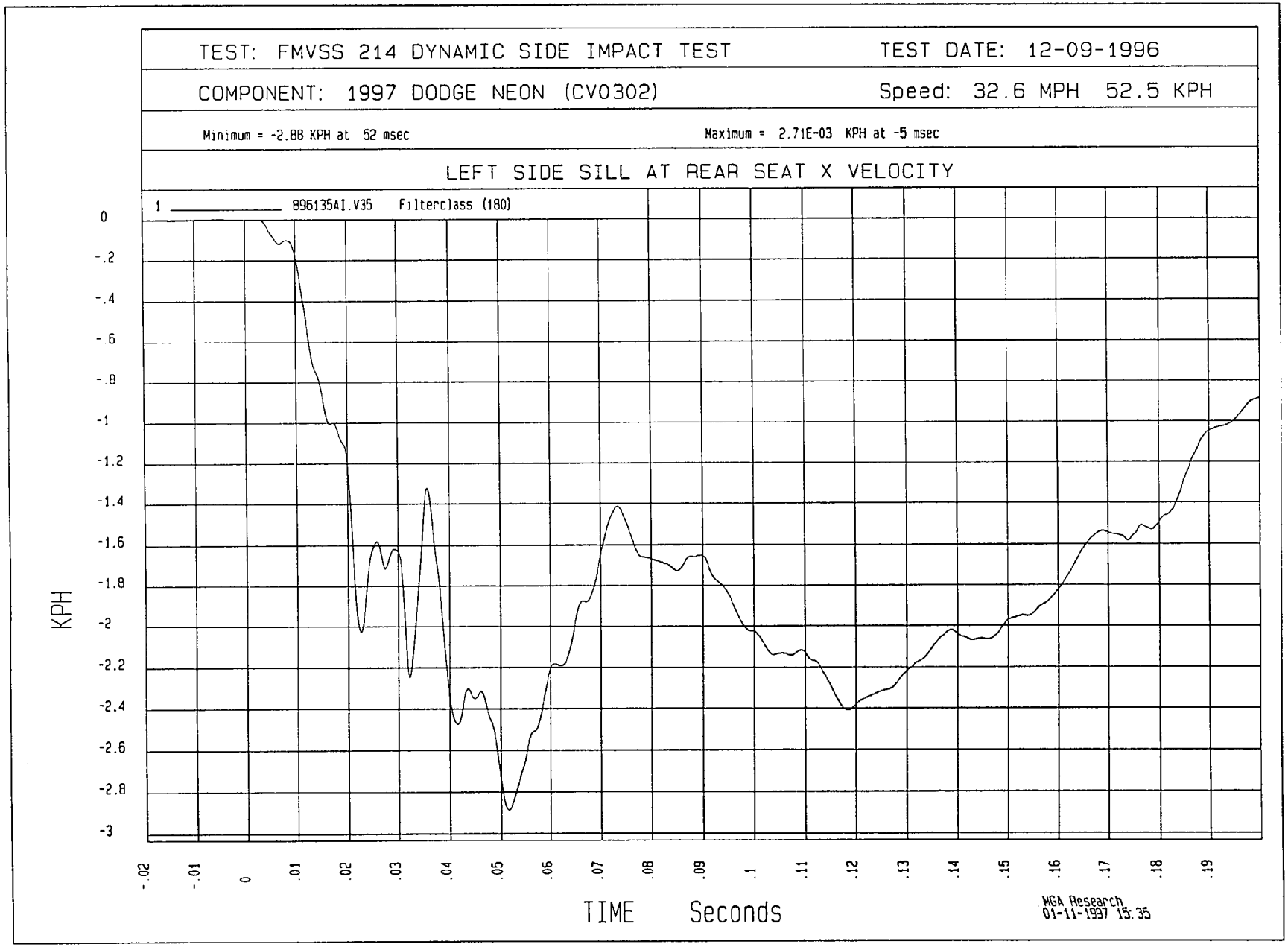
TIME Seconds
MGA Research
01-11-1997 15:34

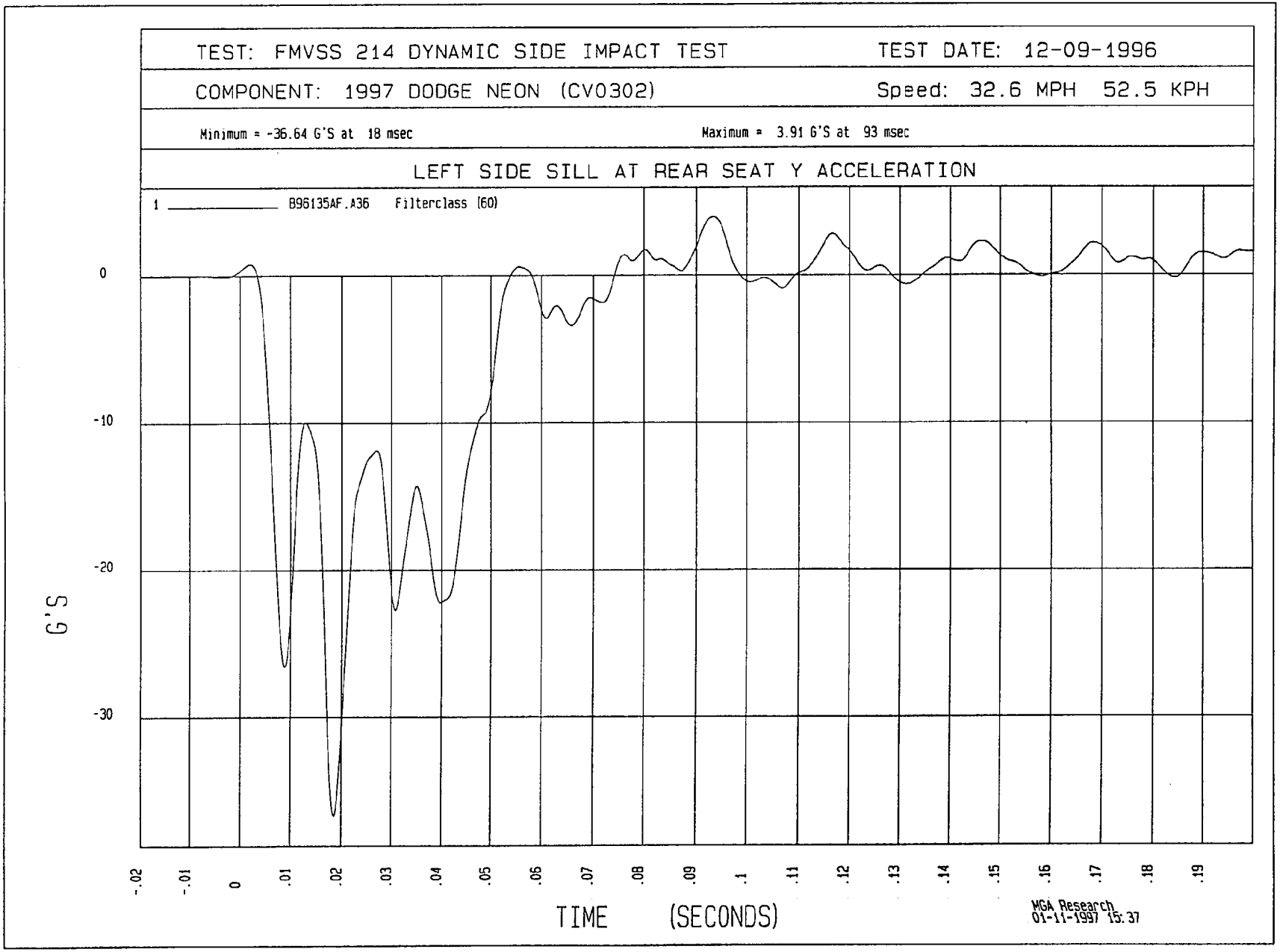

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -11.70 G'S at 19 msec
Maximum = 12.82 G'S at 24 msec
LEFT SIDE SILL AT FRONT SEAT Z ACCELERATION
1 _____ B96135AF.A34 Filterclass (60)
G'S
TIME (SECONDS)
MGA Research
01-11-1997 15:37

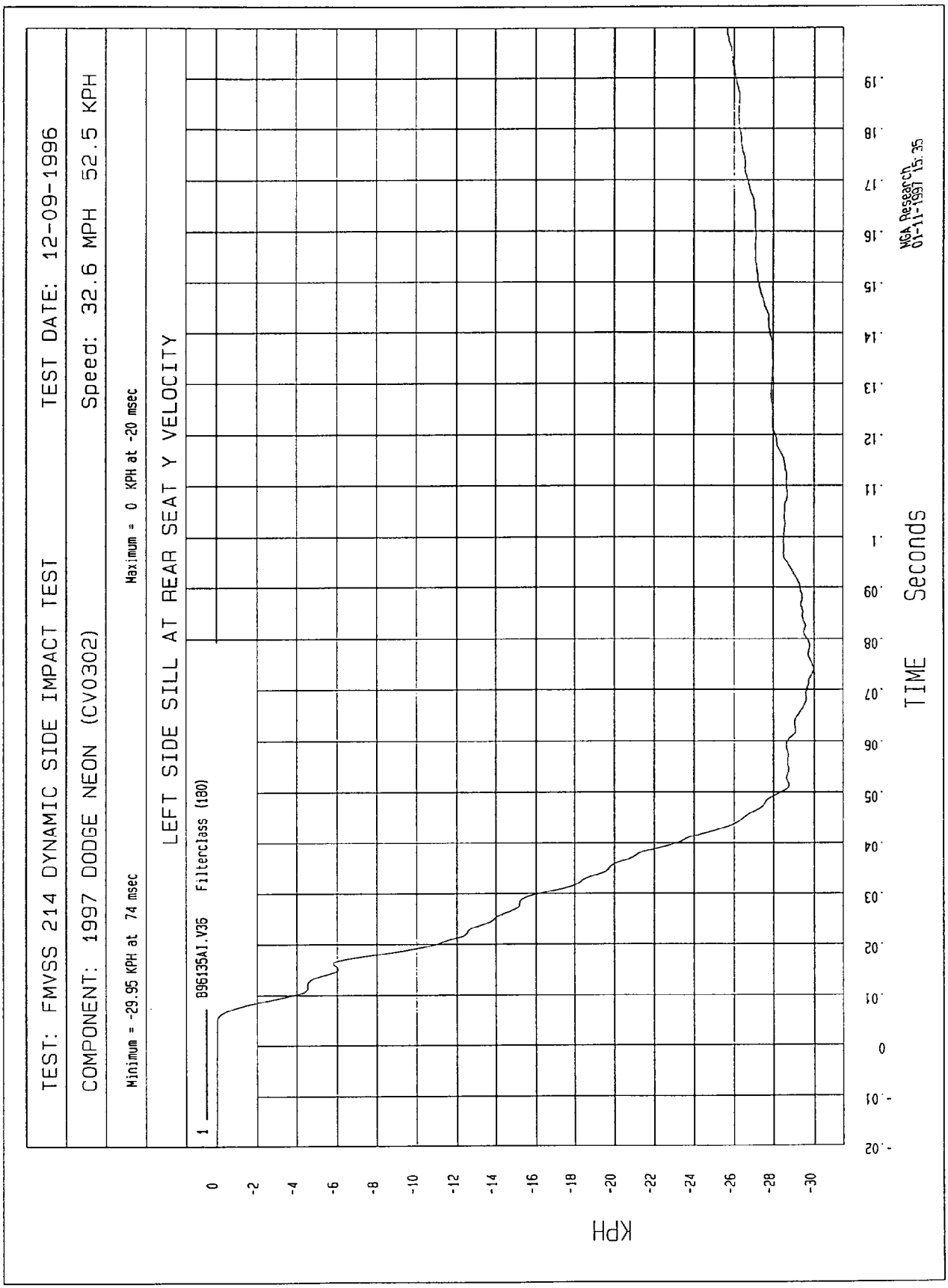

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -3.75 KPH at 197 msec
Maximum = 2.78 KPH at 28 msec
LEFT SIDE SILL AT FRONT SEAT Z VELOCITY
1 B96135AI.V34 Filterclass (180)
KPH
3
2
1
0
-1
-2
-3
-4
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME Seconds
MGA Research
01-11-1997 15:34

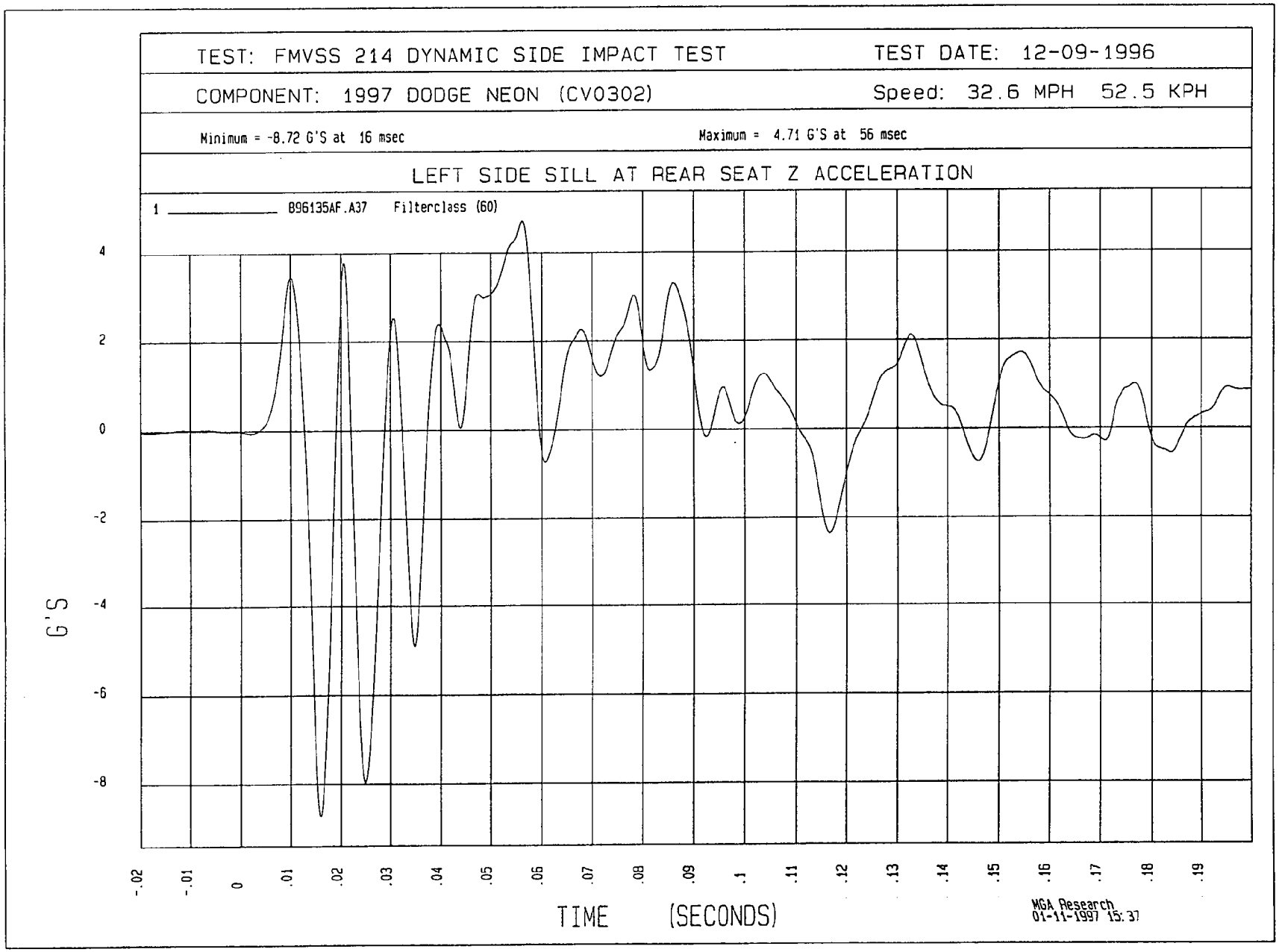

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = 8.75E-03 G'S at -17 msec
Maximum = 45.26 G'S at 19 msec
LEFT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION
1 _____ 896135AV.A32 Filterclass (60)
MGA Research
01-11-1997 15:40
G'S
TIME (SECONDS)

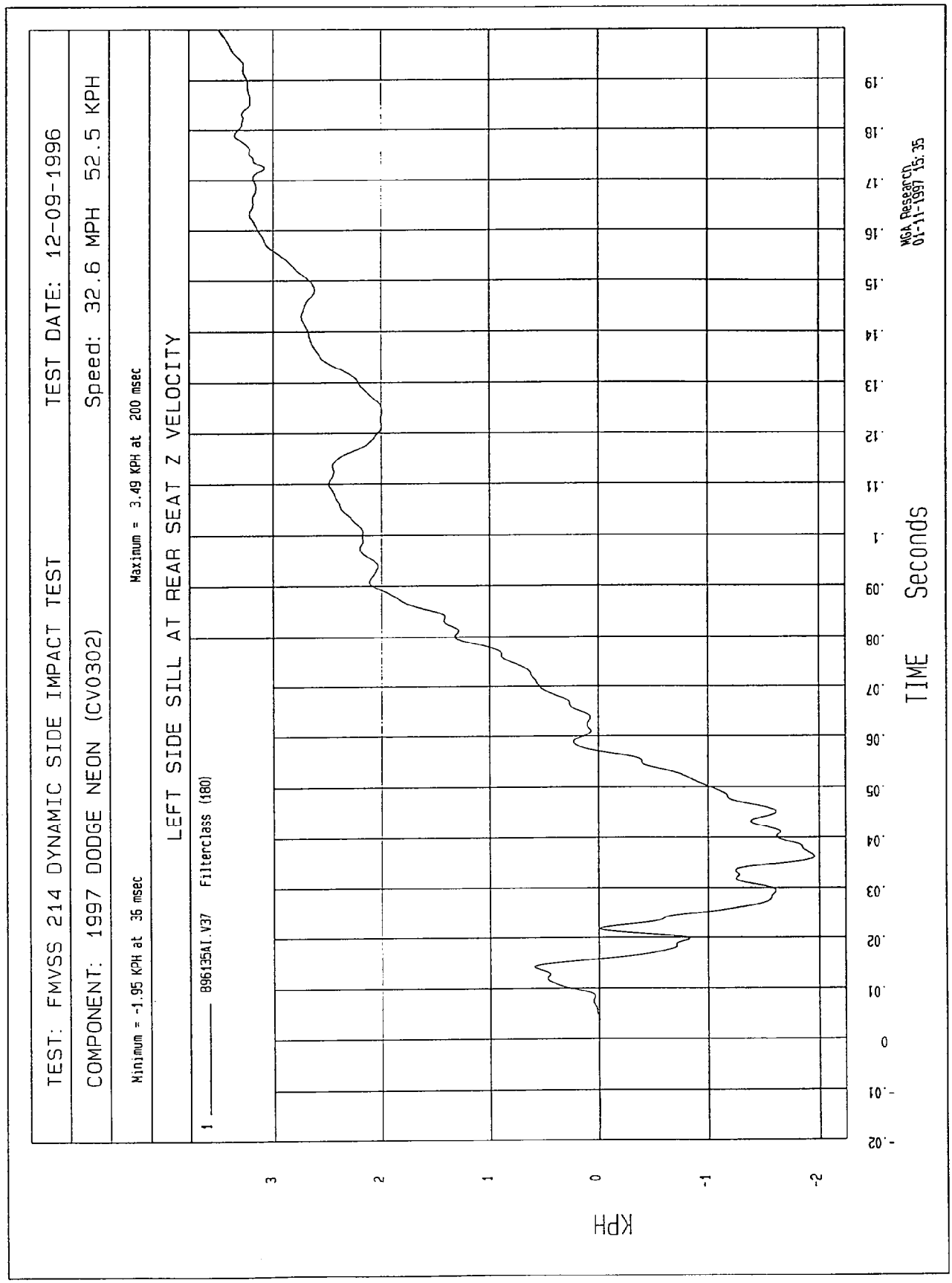

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -6.37 G'S at 39 msec
Maximum = 4.51 G'S at 34 msec
LEFT SIDE SILL AT REAR SEAT X ACCELERATION
1 B96135AF.A35 Filterclass (60)
4
2
0
-2
-4
-6
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:37

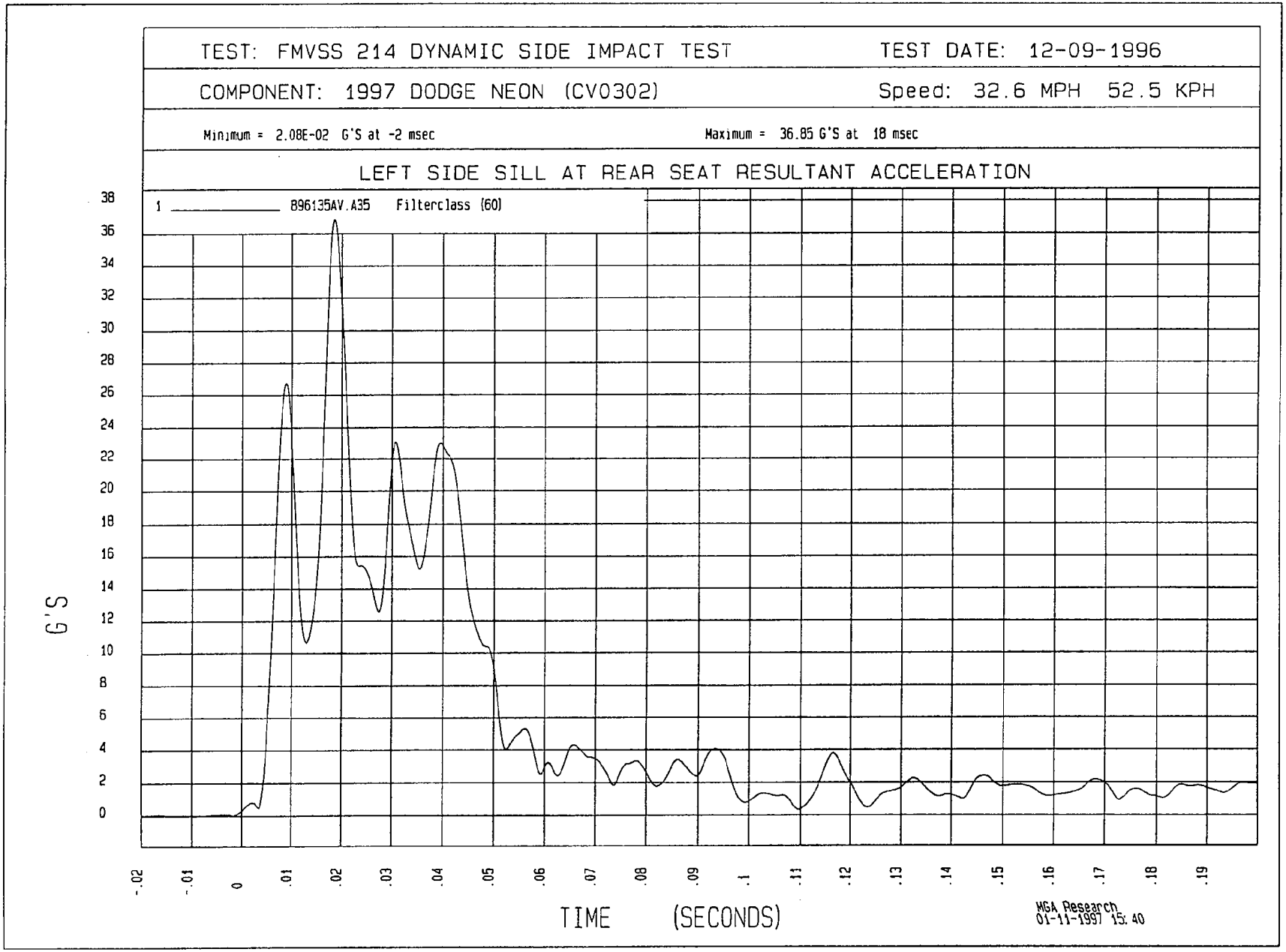

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -2.88 KPH at 52 msec
Maximum = 2.71E-03 KPH at -5 msec
LEFT SIDE SILL AT REAR SEAT X VELOCITY
1 896135AI.V35 Filterclass (180)
KPH
0
-.2
-.4
-.6
-.8
-1
-1.2
-1.4
-1.6
-1.8
-2
-2.2
-2.4
-2.6
-2.8
-3
-.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
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -36.64 G'S at 18 msec
Maximum = 3.91 G'S at 93 msec
LEFT SIDE SILL AT REAR SEAT Y ACCELERATION
1 B96135AF.A36 Filterclass (60)
0
-10
-20
-30
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
01-11-1997 15:37


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -29.95 KPH at 74 msec
Maximum = 0 KPH at -20 msec
LEFT SIDE SILL AT REAR SEAT Y VELOCITY
1 B96135A1.V35 Filterclass (180)
KPH
TIME Seconds
MGA Research
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -8.72 G'S at 16 msec
Maximum = 4.71 G'S at 56 msec
LEFT SIDE SILL AT REAR SEAT Z ACCELERATION
1 896135AF.A37 Filterclass (60)
4
2
0
-2
-4
-6
-8
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
01-11-1997 15:37


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -1.95 KPH at 36 msec
Maximum = 3.49 KPH at 200 msec
LEFT SIDE SILL AT REAR SEAT Z VELOCITY
1 B96135AI.V37 Filterclass (180)
KPH
TIME Seconds
MGA Research
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = 2.08E-02 G'S at -2 msec
Maximum = 36.85 G'S at 18 msec
LEFT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION
1 896135AV.A35 Filterclass (60)
G'S
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
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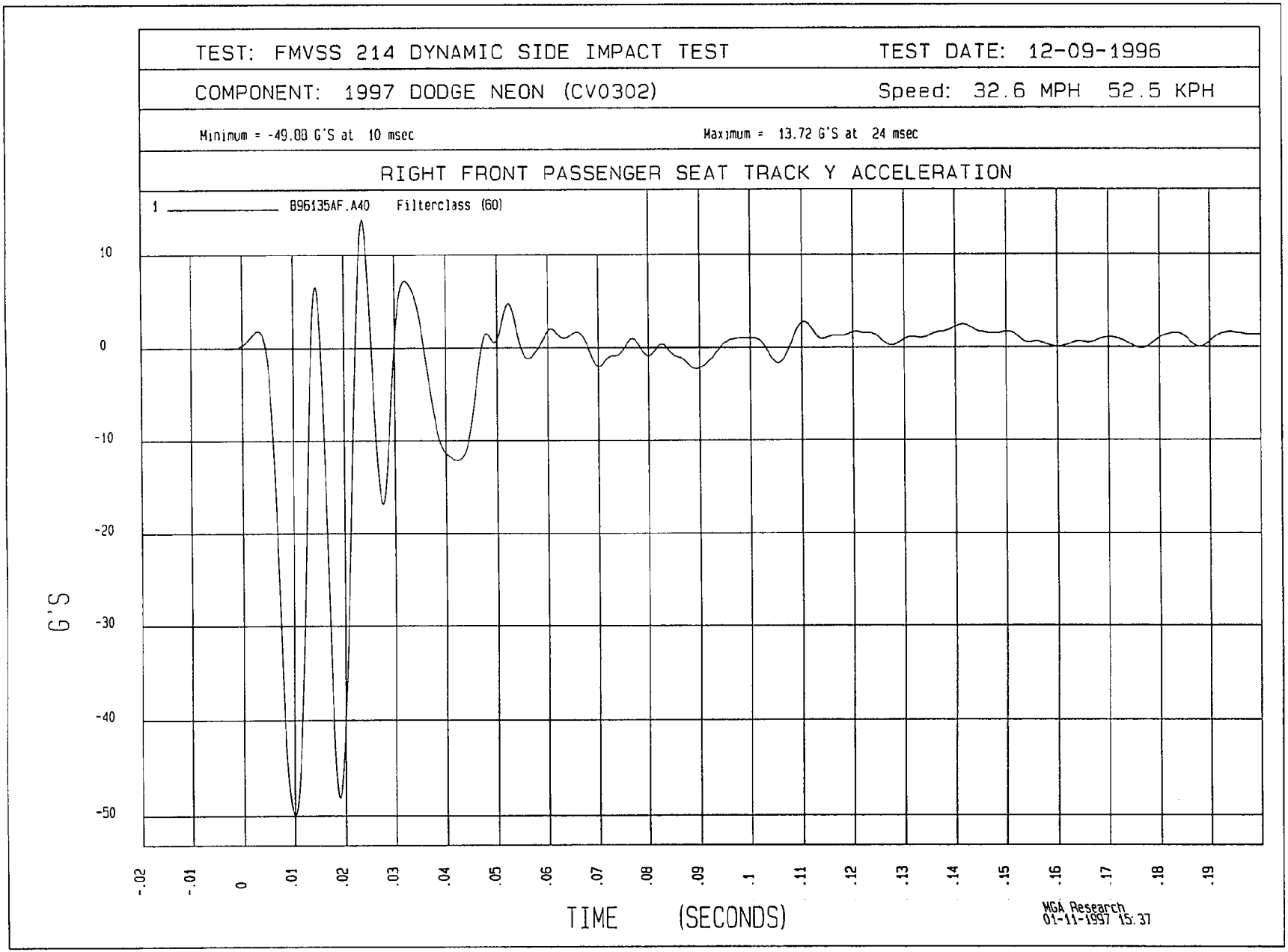
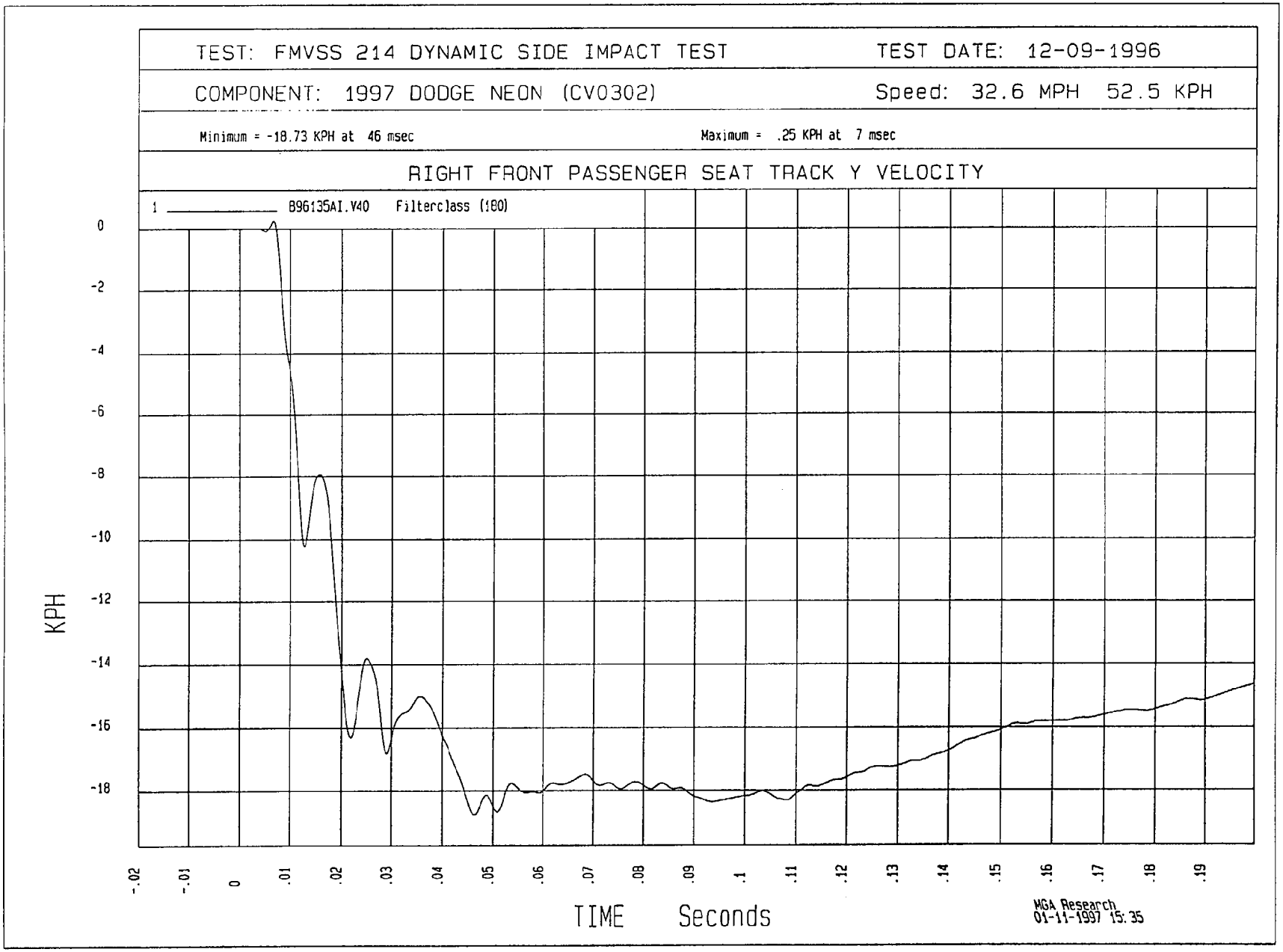
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:40


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -49.88 G'S at 10 msec
Maximum = 13.72 G'S at 24 msec
RIGHT FRONT PASSENGER SEAT TRACK Y ACCELERATION
1 B96135AF.A40 Filterclass (60)
10
0
-10
-20
-30
-40
-50
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
01-11-1997 15:37


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -18.73 KPH at 46 msec
Maximum = .25 KPH at 7 msec
RIGHT FRONT PASSENGER SEAT TRACK Y VELOCITY
1 B96135AI.V40 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
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.12
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.16
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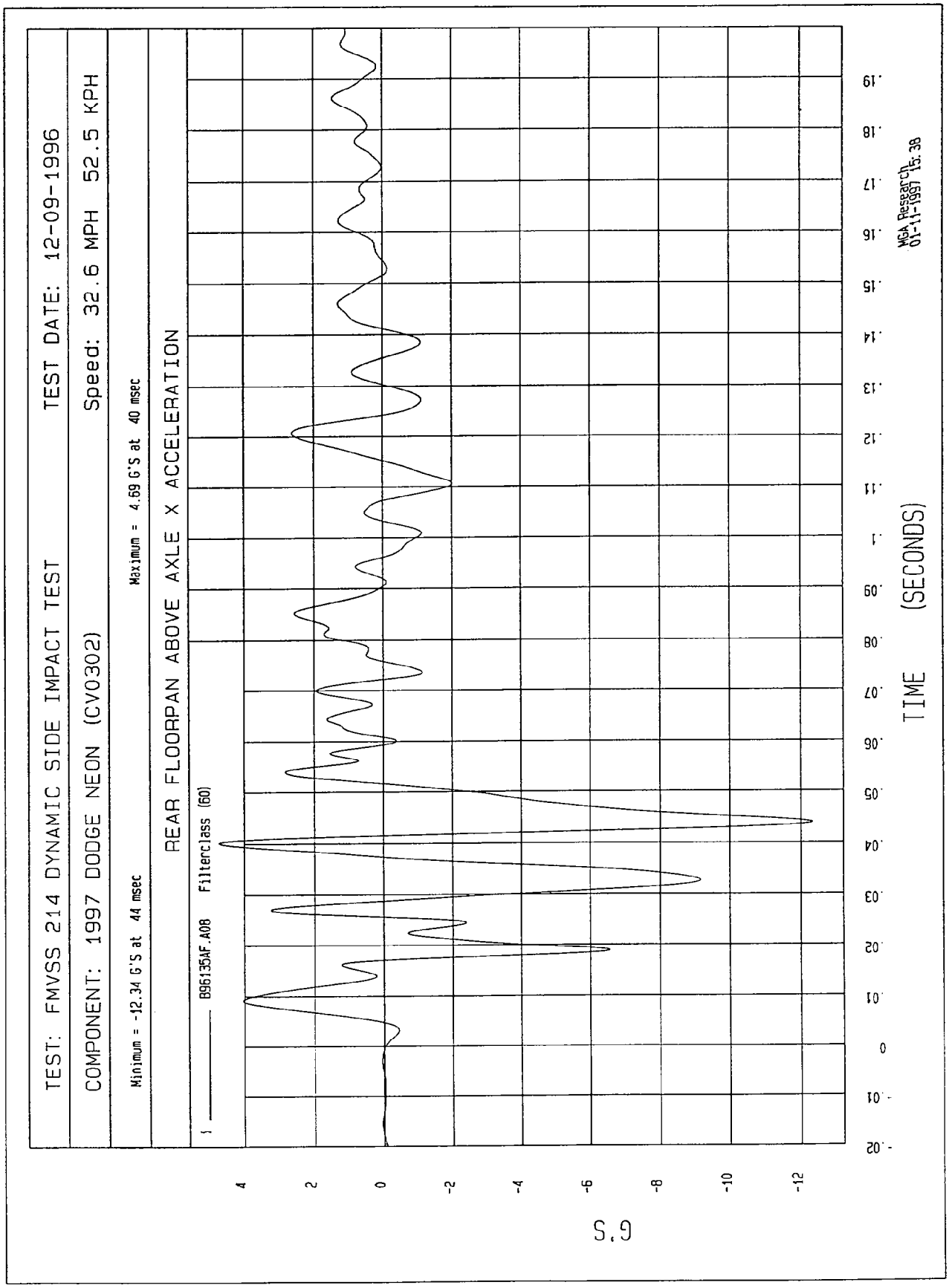
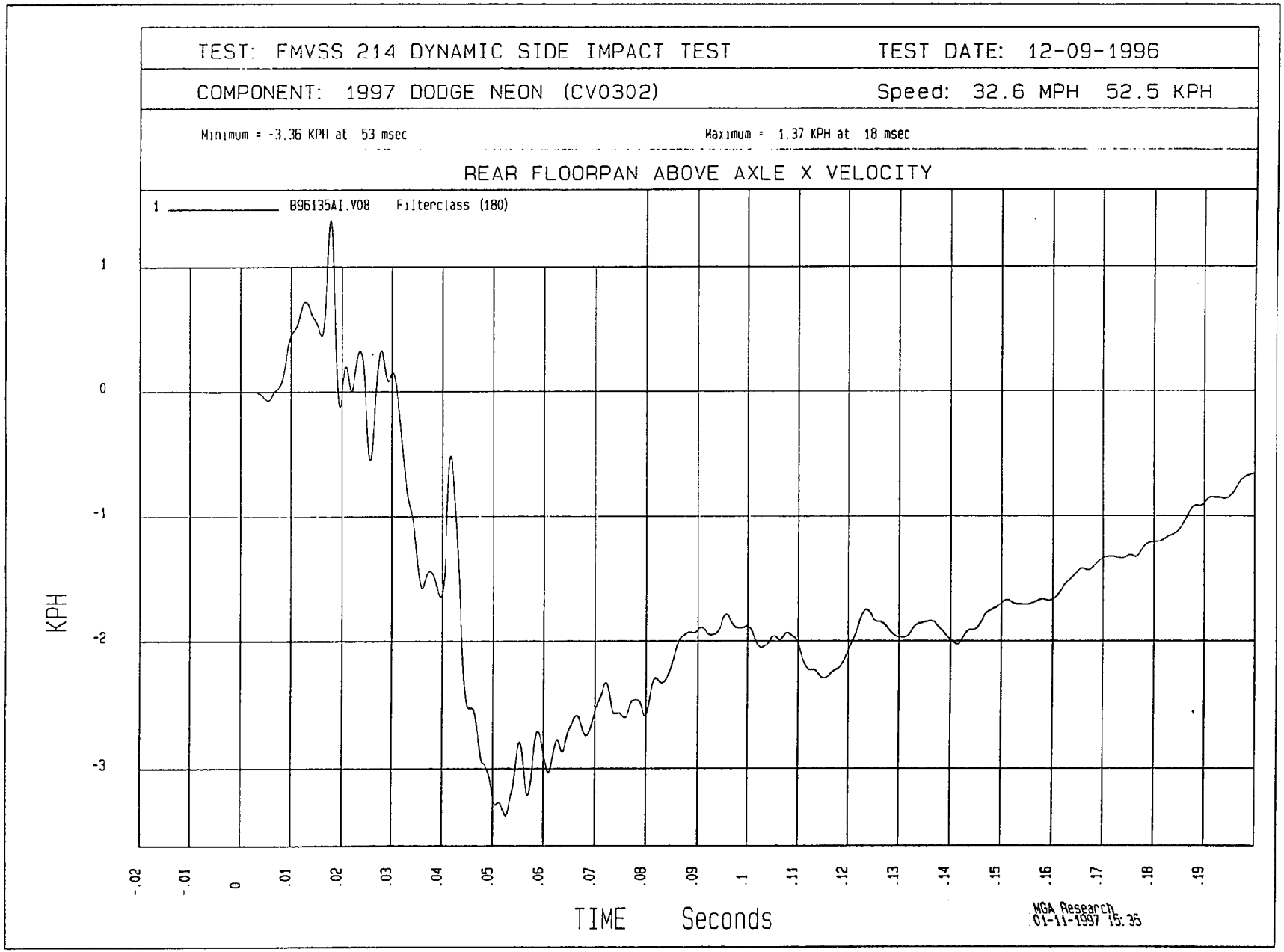
.19
TIME Seconds
MGA Research
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -12.34 G'S at 44 msec
Maximum = 4.69 G'S at 40 msec
REAR FLOORPAN ABOVE AXLE X ACCELERATION
1 B96135AF.A08 Filterclass (60)
4
2
0
-2
-4
-6
-8
-10
-12
6'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
01-11-1997 15:38


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -3.36 KPH at 53 msec
Maximum = 1.37 KPH at 18 msec
REAR FLOORPAN ABOVE AXLE X VELOCITY
1 B96135AI.V08 Filterclass (180)
KPH
1
0
-1
-2
-3
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
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.14
.15
.16
.17
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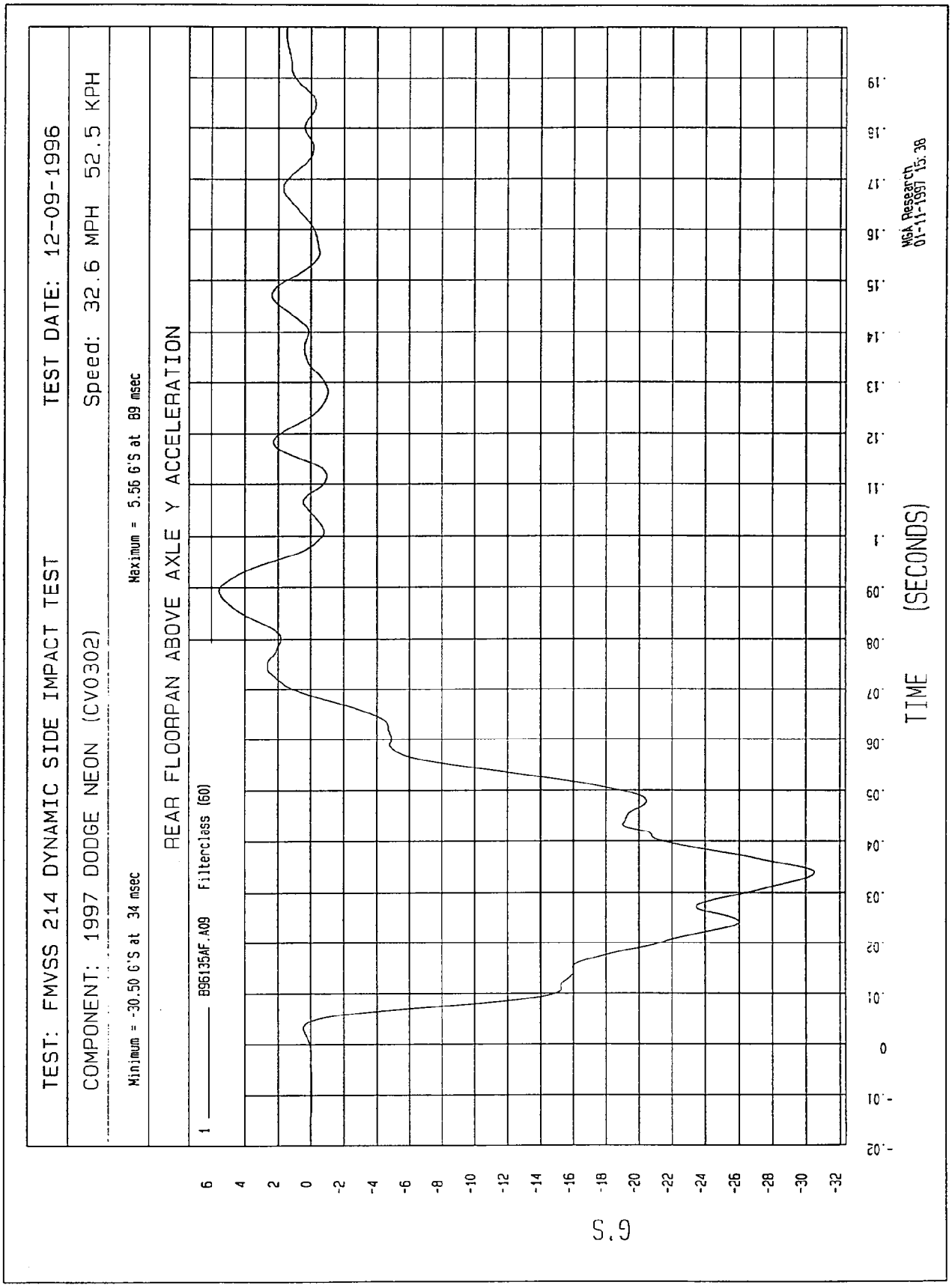
.19
TIME Seconds
MGA Research
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -30.50 G'S at 34 msec
Maximum = 5.56 G'S at 89 msec
REAR FLOORPAN ABOVE AXLE Y ACCELERATION
1 ——— 896135AF.A09 Filterclass (60)
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
-32
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
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.1
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.14
.15
.16
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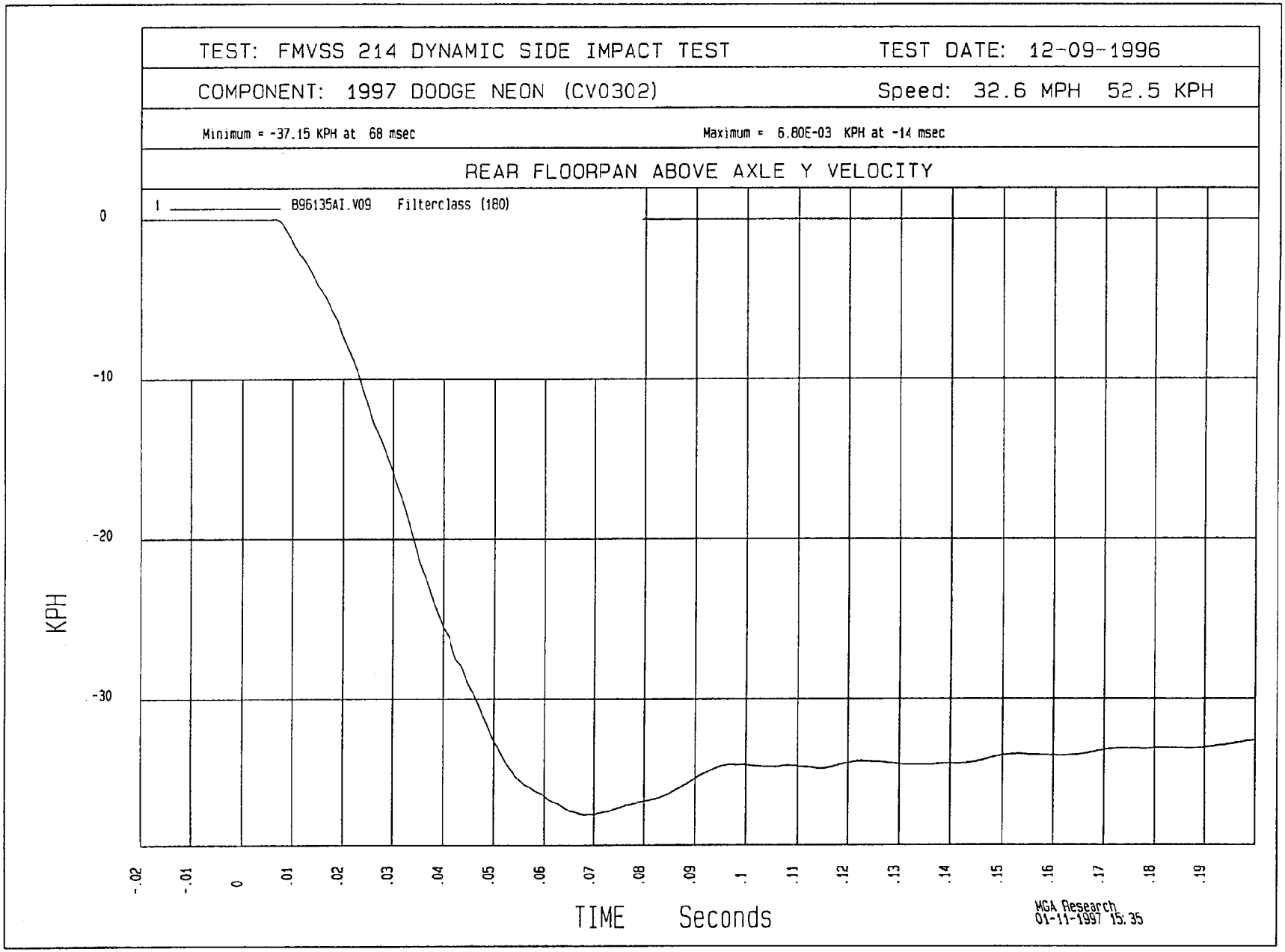
TIME (SECONDS)
MGA Research
01-11-1997 15:38

S.9


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -37.15 KPH at 68 msec
Maximum = 6.80E-03 KPH at -14 msec
REAR FLOORPAN ABOVE AXLE Y VELOCITY
1 B96135AI.V09 Filterclass (180)
0
-10
-20
-30
KPH
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
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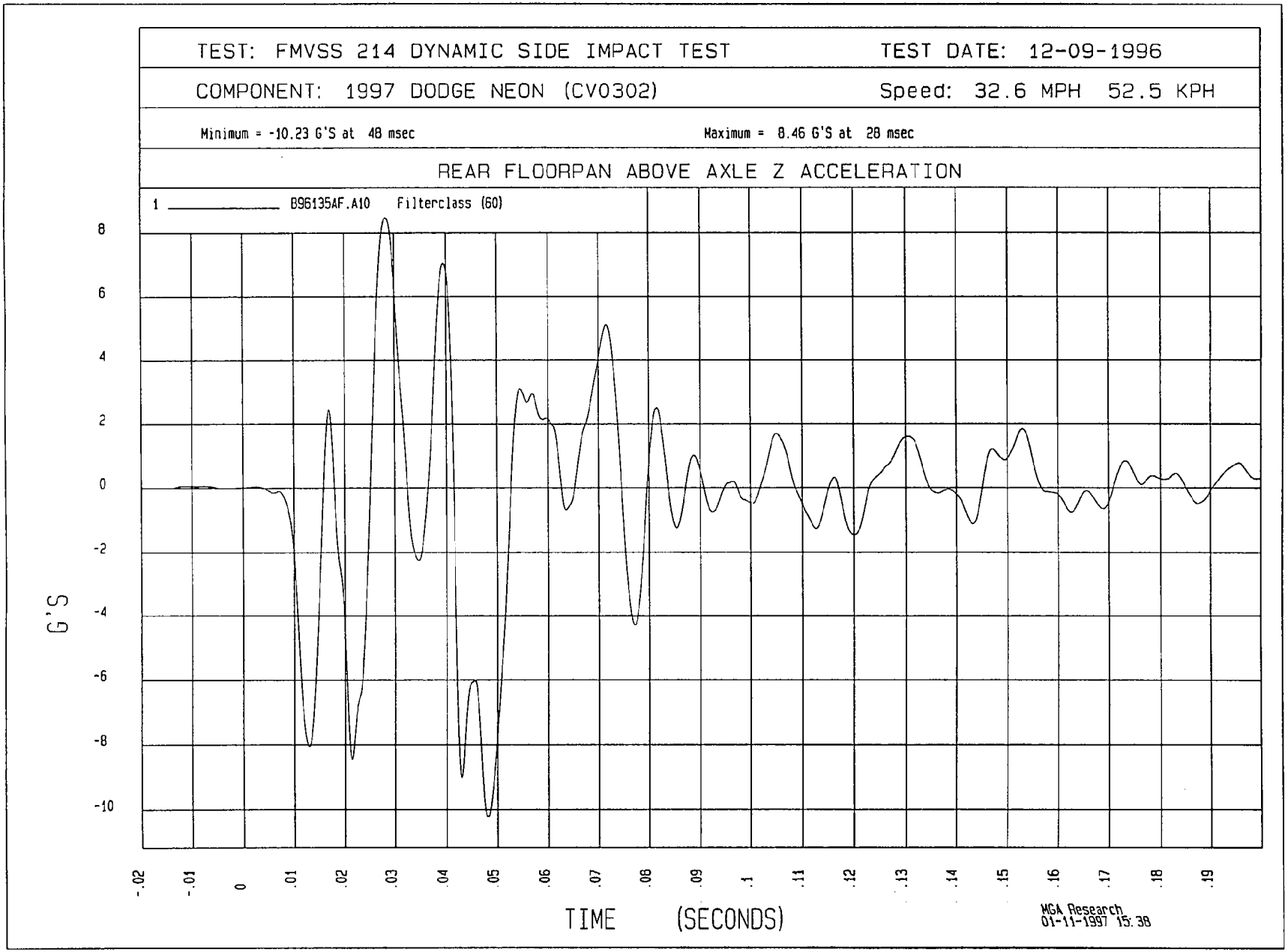
.18
.19
TIME Seconds
MGA Research
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -10.23 G'S at 48 msec
Maximum = 8.46 G'S at 28 msec
REAR FLOORPAN ABOVE AXLE Z ACCELERATION
1 B96135AF.A10 Filterclass (60)
8
6
4
2
0
-2
-4
-6
-8
-10
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
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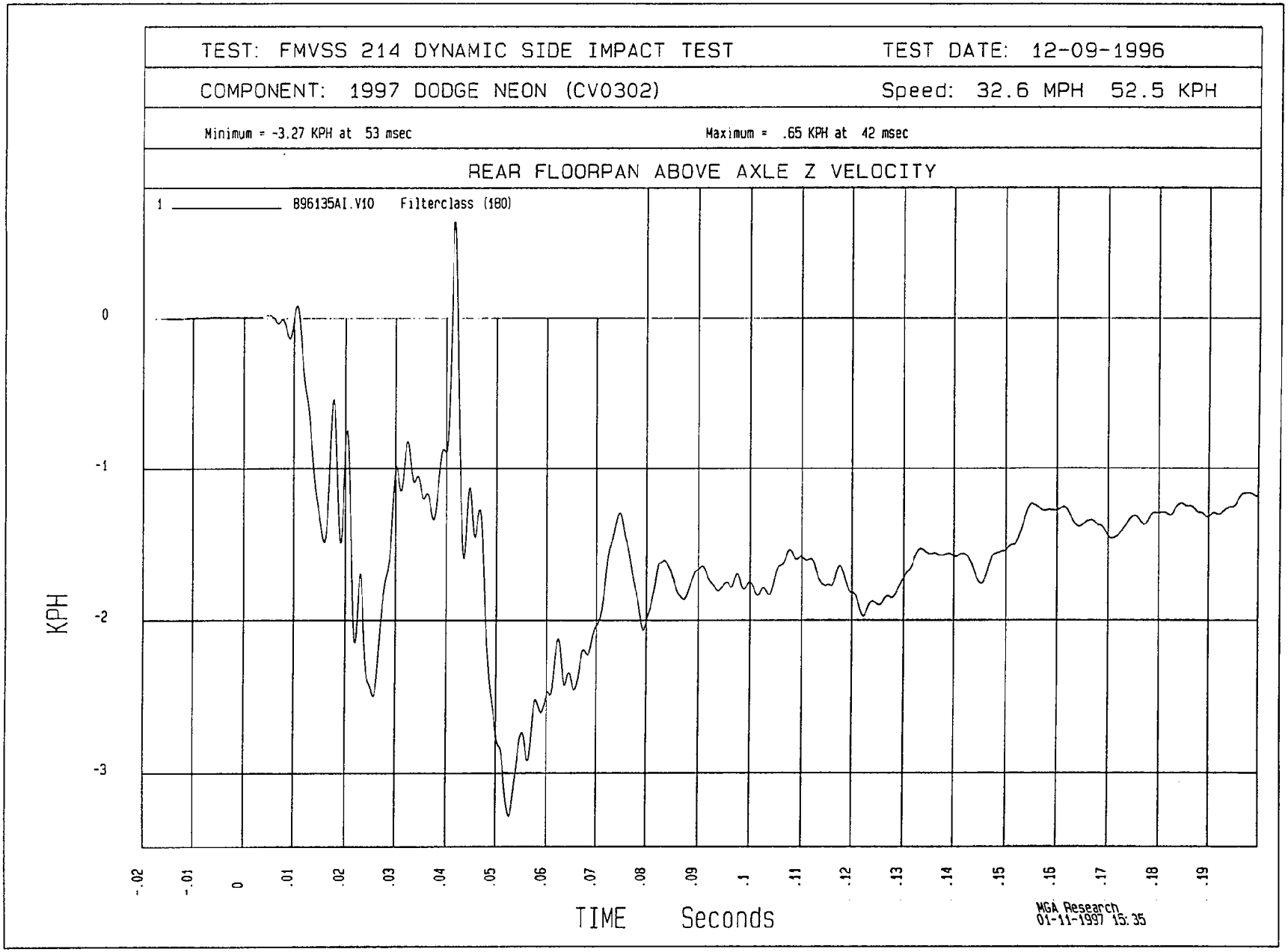
TIME (SECONDS)
MGA Research
01-11-1997 15:38


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -3.27 KPH at 53 msec
Maximum = .65 KPH at 42 msec
REAR FLOORPAN ABOVE AXLE Z VELOCITY
1 B96135AI.V10 Filterclass (180)
KPH
0
-1
-2
-3
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
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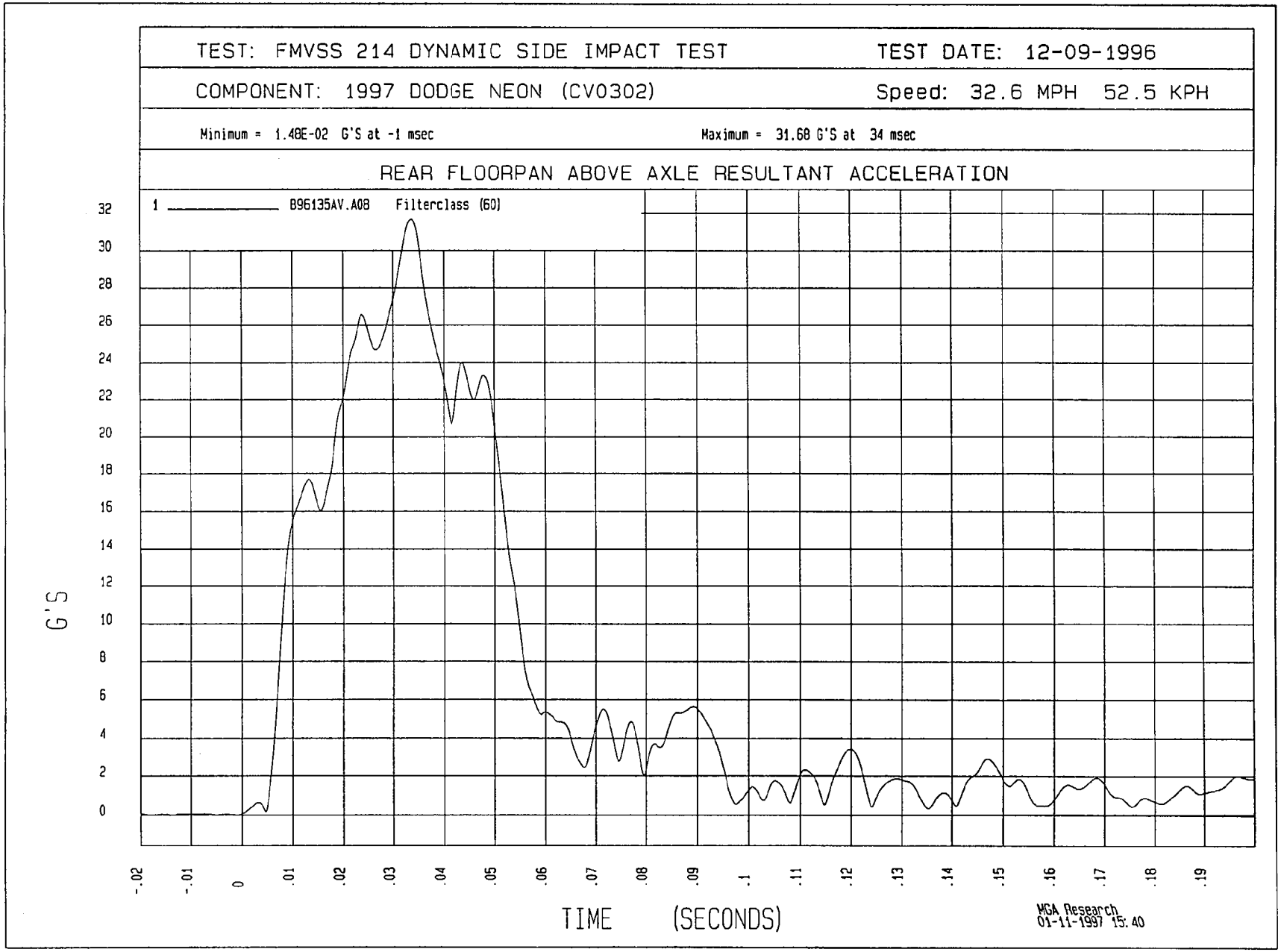
TIME Seconds
MGA Research
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = 1.48E-02 G'S at -1 msec
Maximum = 31.68 G'S at 34 msec
REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION
1 B96135AV.A08 Filterclass (60)
G'S
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
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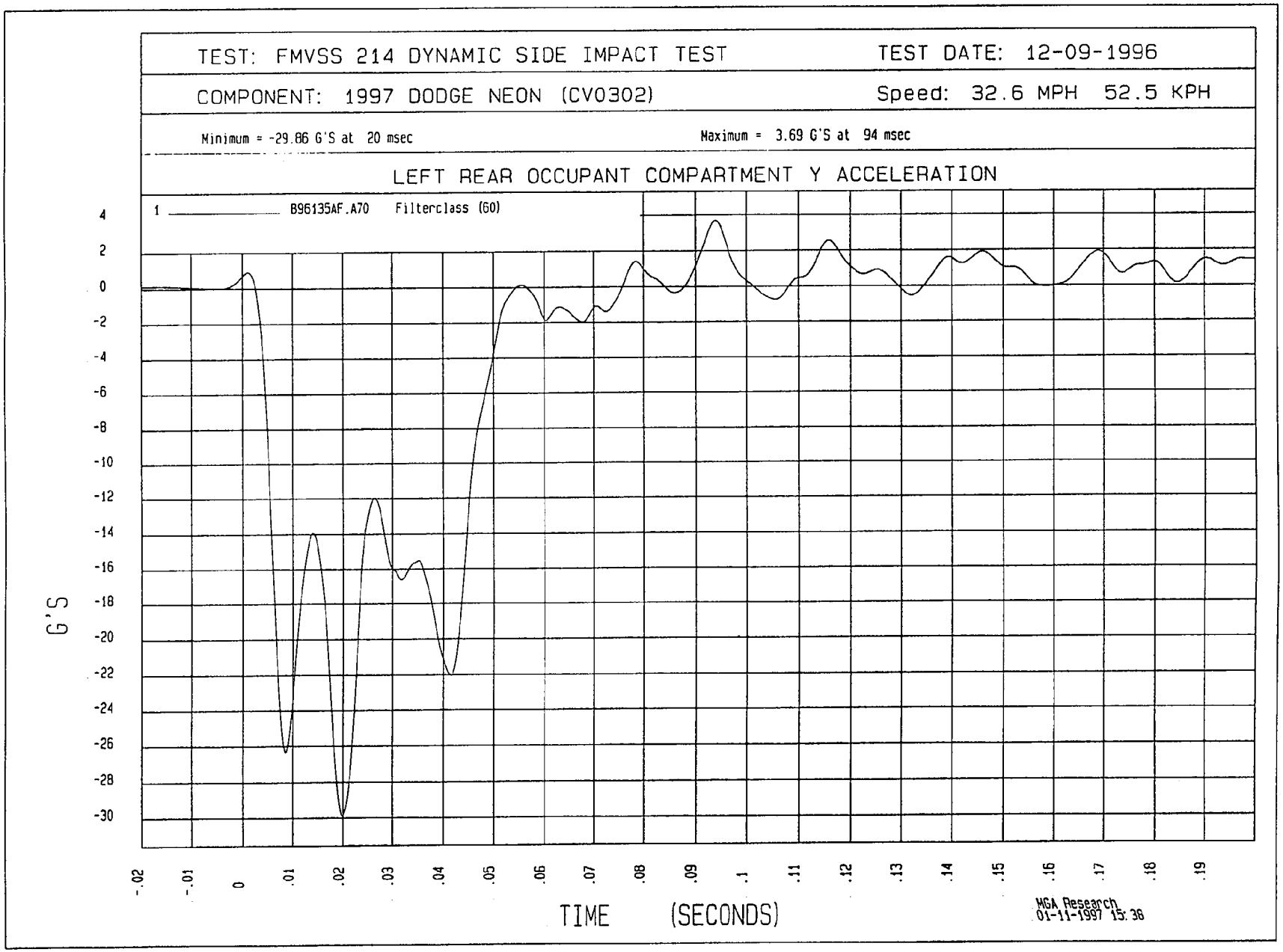
TIME (SECONDS)
MGA Research
01-11-1997 15:40


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -29.86 G'S at 20 msec
Maximum = 3.69 G'S at 94 msec
LEFT REAR OCCUPANT COMPARTMENT Y ACCELERATION
1 B96135AF.A70 Filterclass (60)
4
2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
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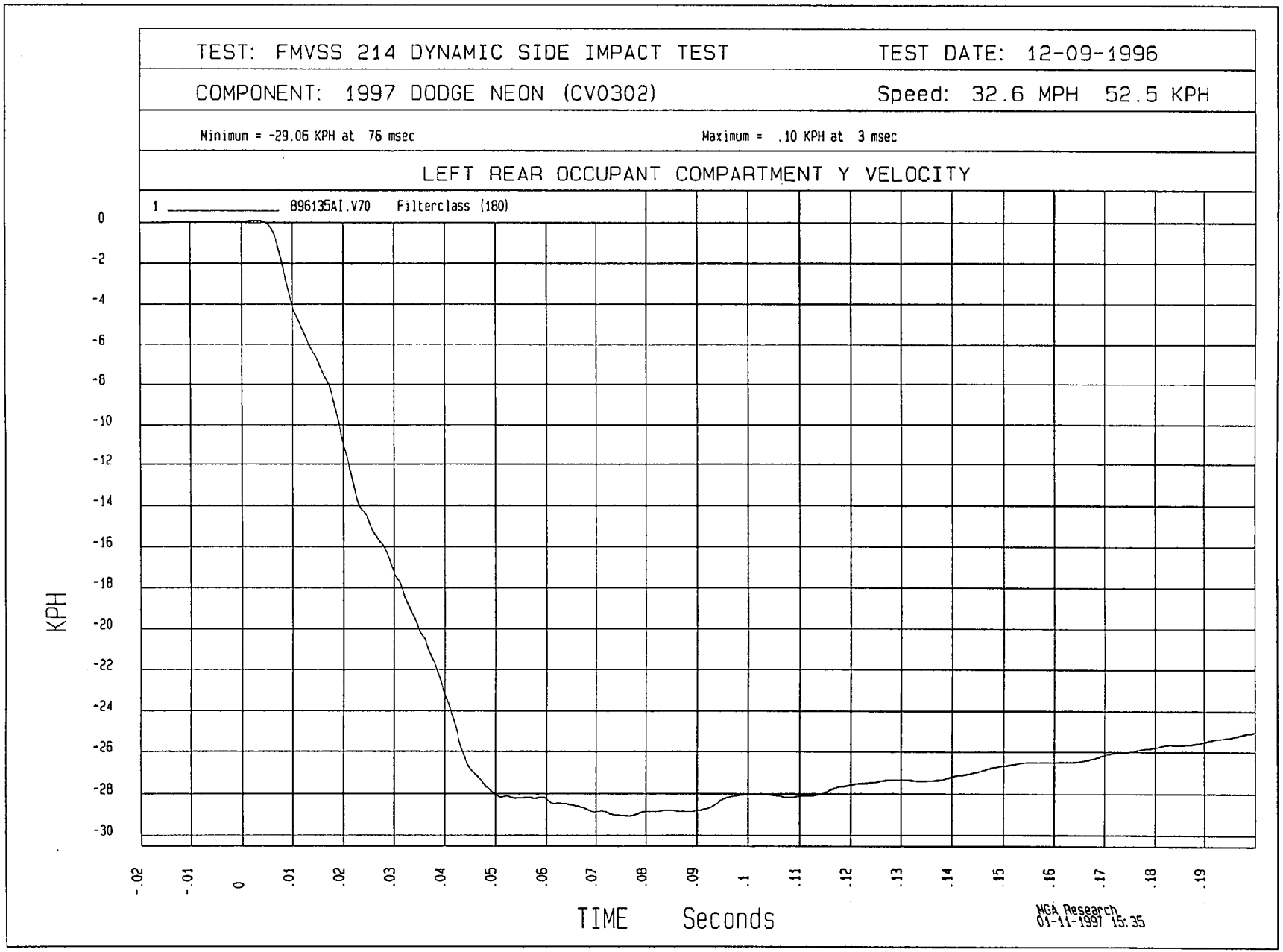
TIME (SECONDS)
MGA Research
01-11-1997 15:38


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -29.06 KPH at 76 msec
Maximum = .10 KPH at 3 msec
LEFT REAR OCCUPANT COMPARTMENT Y VELOCITY
1 B96135AI.V70 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
-.02
-.01
0
.01
.02
.03
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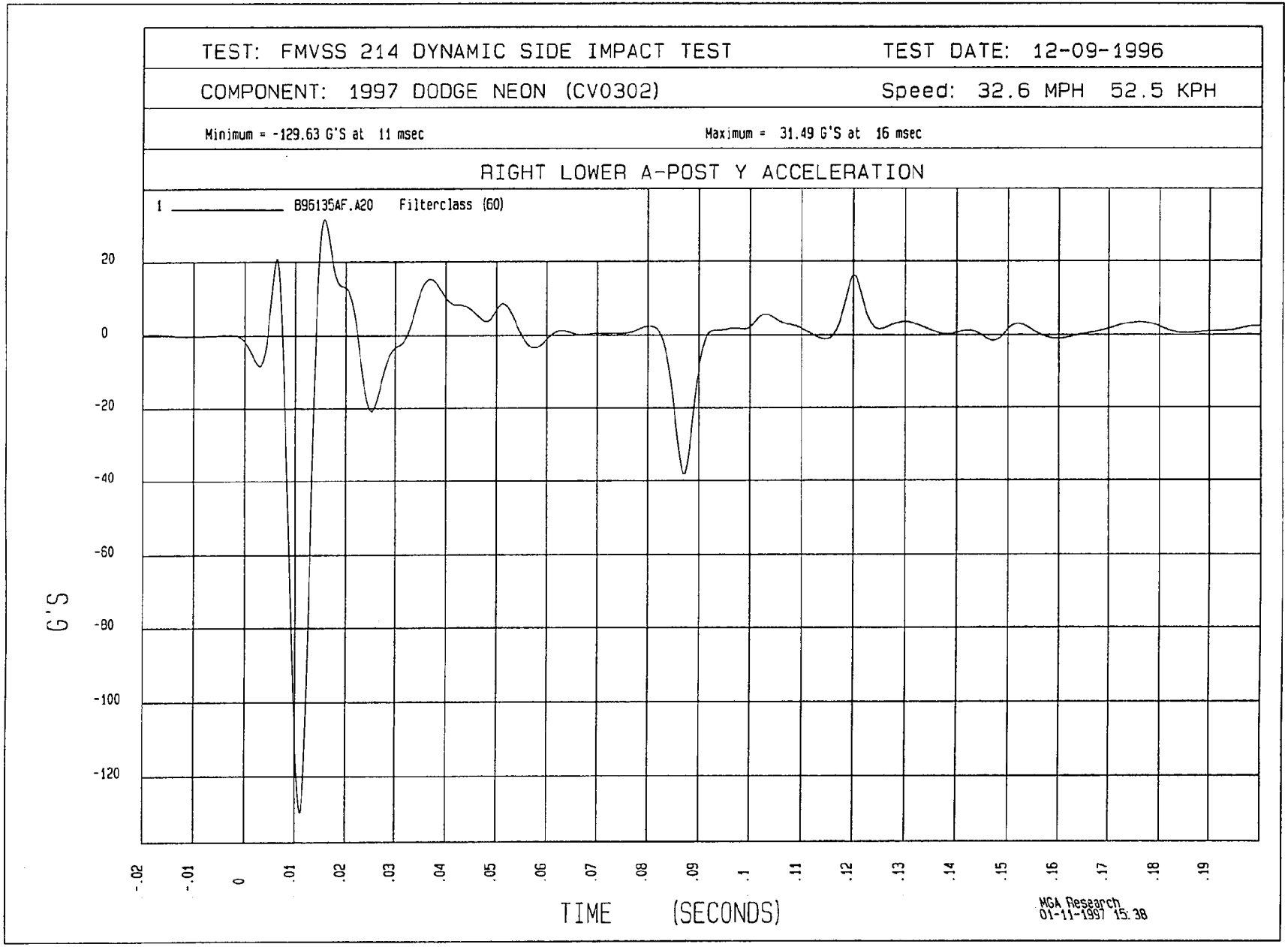
TIME Seconds
NGA Research
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -129.63 G'S at 11 msec
Maximum = 31.49 G'S at 16 msec
RIGHT LOWER A-POST Y ACCELERATION
1 B95135AF.A20 Filterclass (60)
20
0
-20
-40
-60
-80
-100
-120
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
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.18
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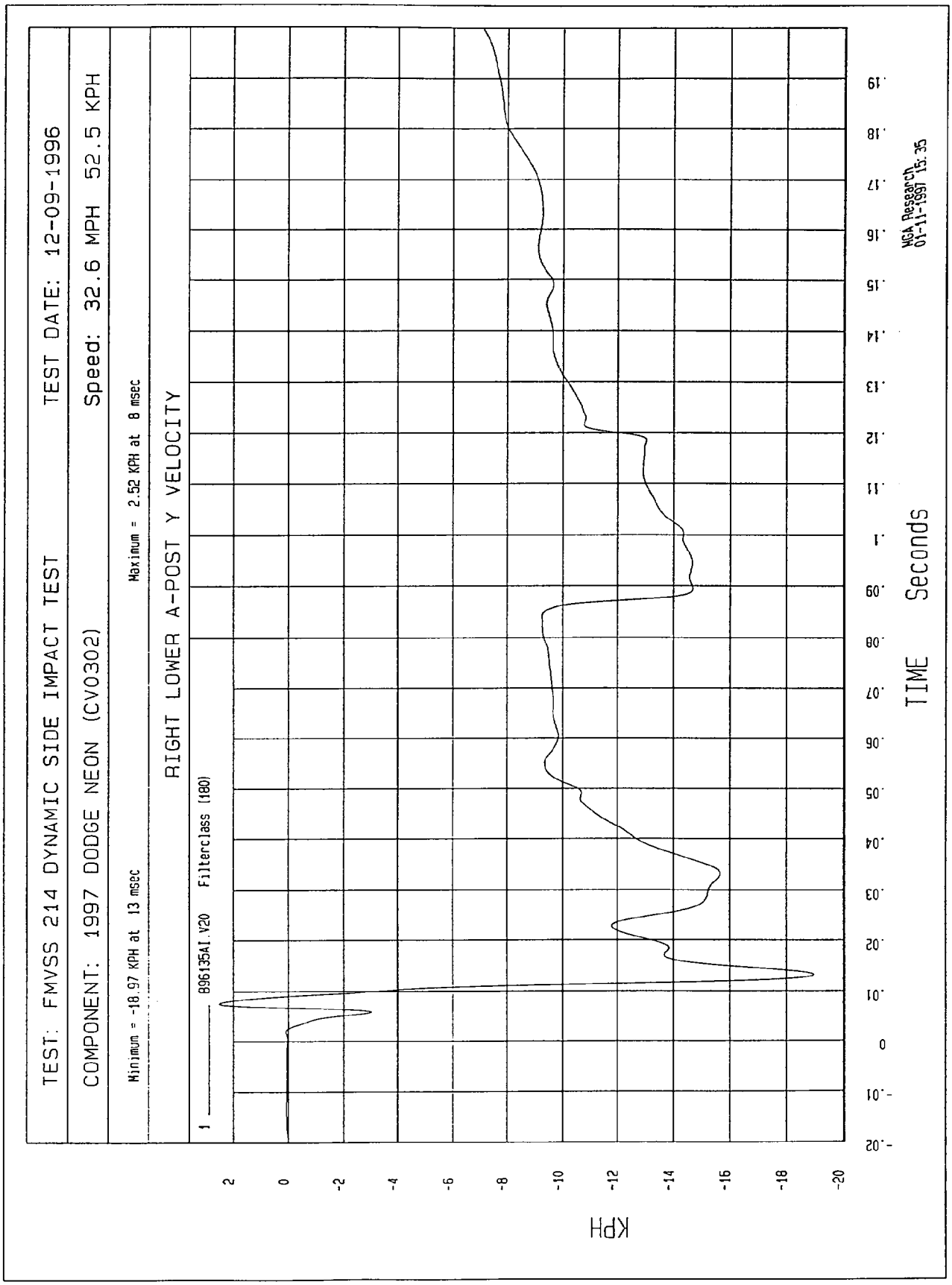
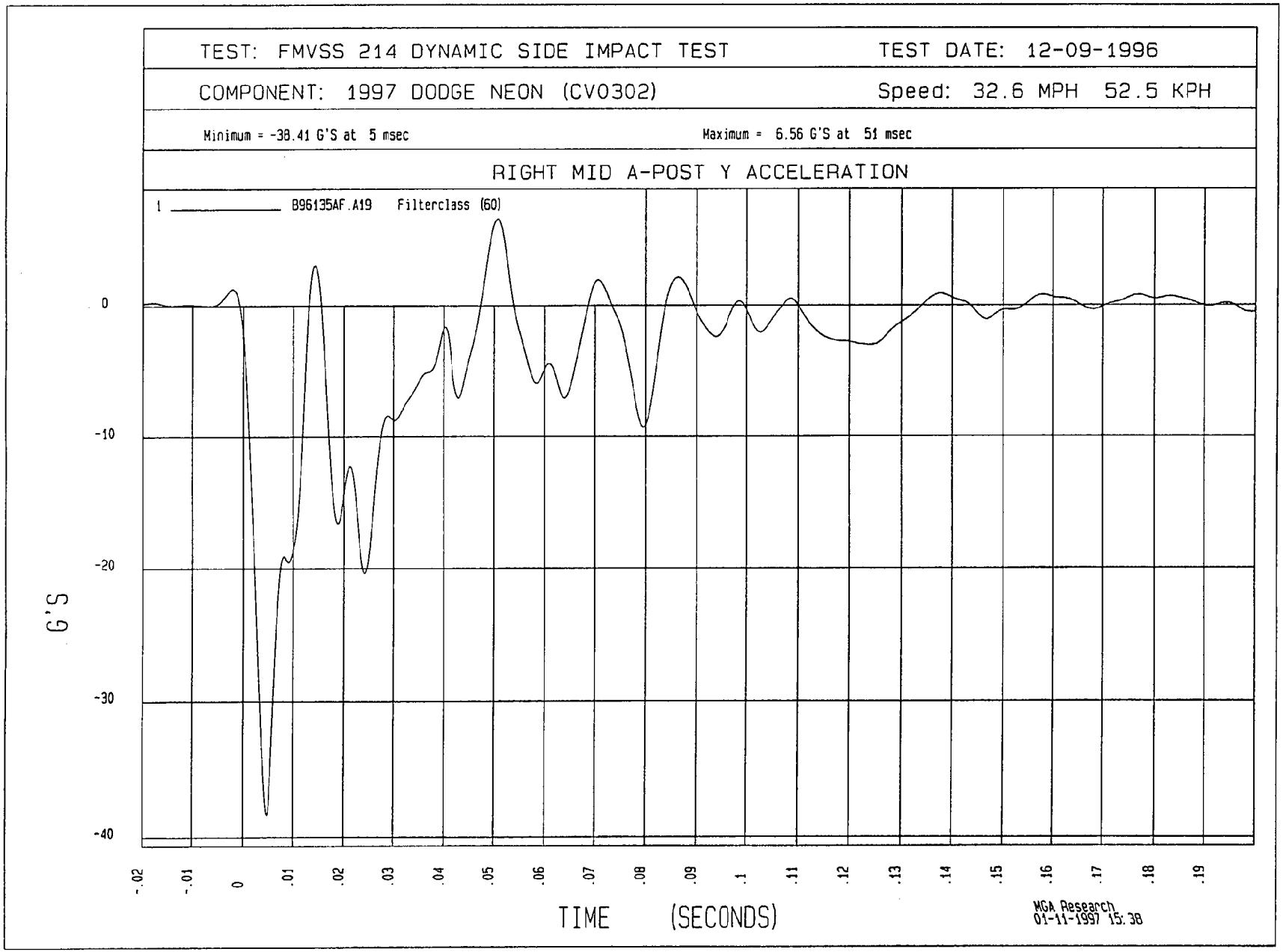
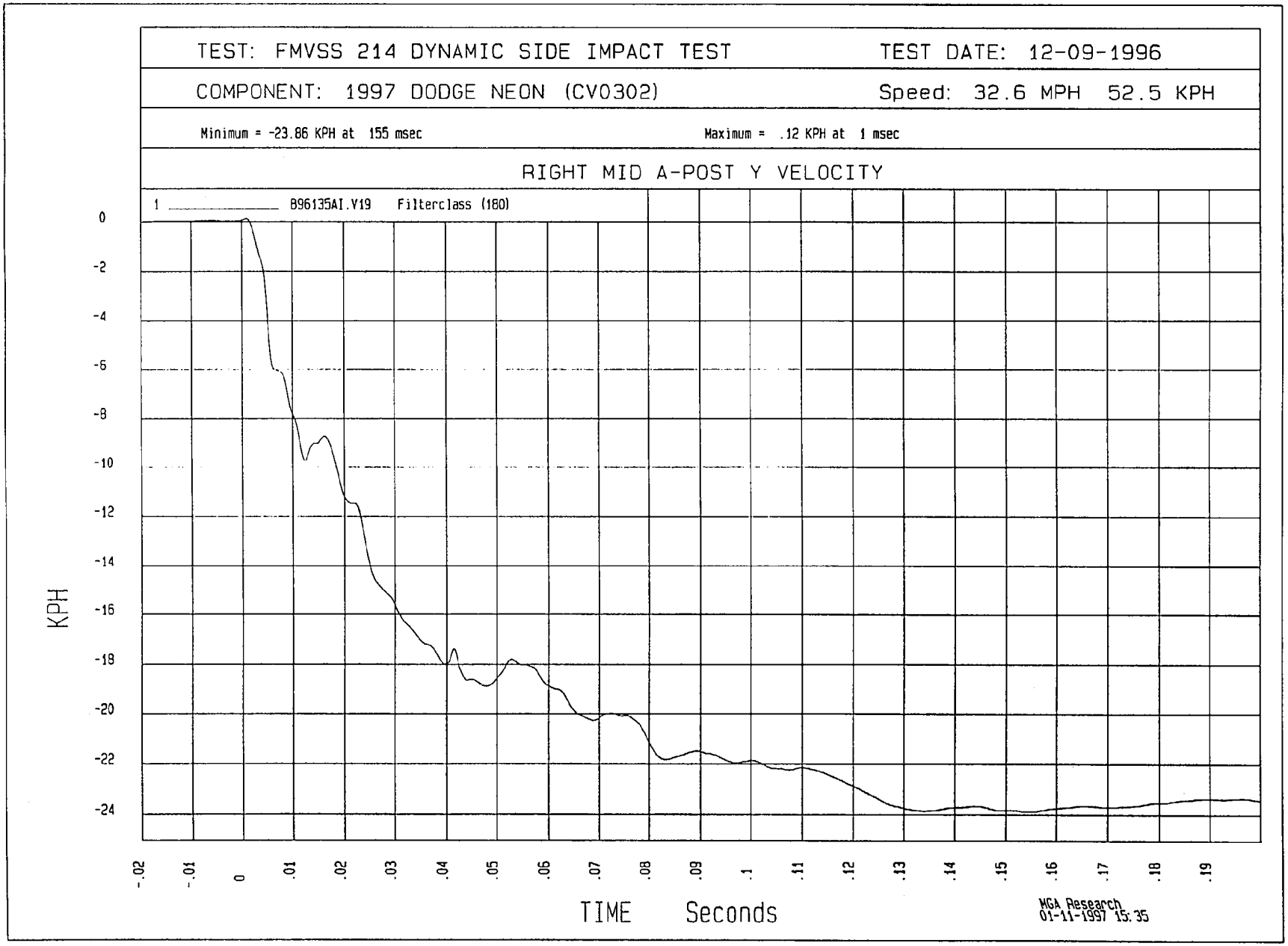
TIME (SECONDS)
MGA Research
01-11-1997 15:38


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -18.97 KPH at 13 msec
Maximum = 2.52 KPH at 8 msec
RIGHT LOWER A-POST Y VELOCITY
1 _____ 896135A1.V20 Filterclass (180)
KPH
TIME Seconds
NGA Research
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -38.41 G'S at 5 msec
Maximum = 6.56 G'S at 51 msec
RIGHT MID A-POST Y ACCELERATION
1 B96135AF.A19 Filterclass (60)
0
-10
-20
-30
-40
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
01-11-1997 15:38


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -23.86 KPH at 155 msec
Maximum = .12 KPH at 1 msec
RIGHT MID A-POST Y VELOCITY
1 B96135AI.V19 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
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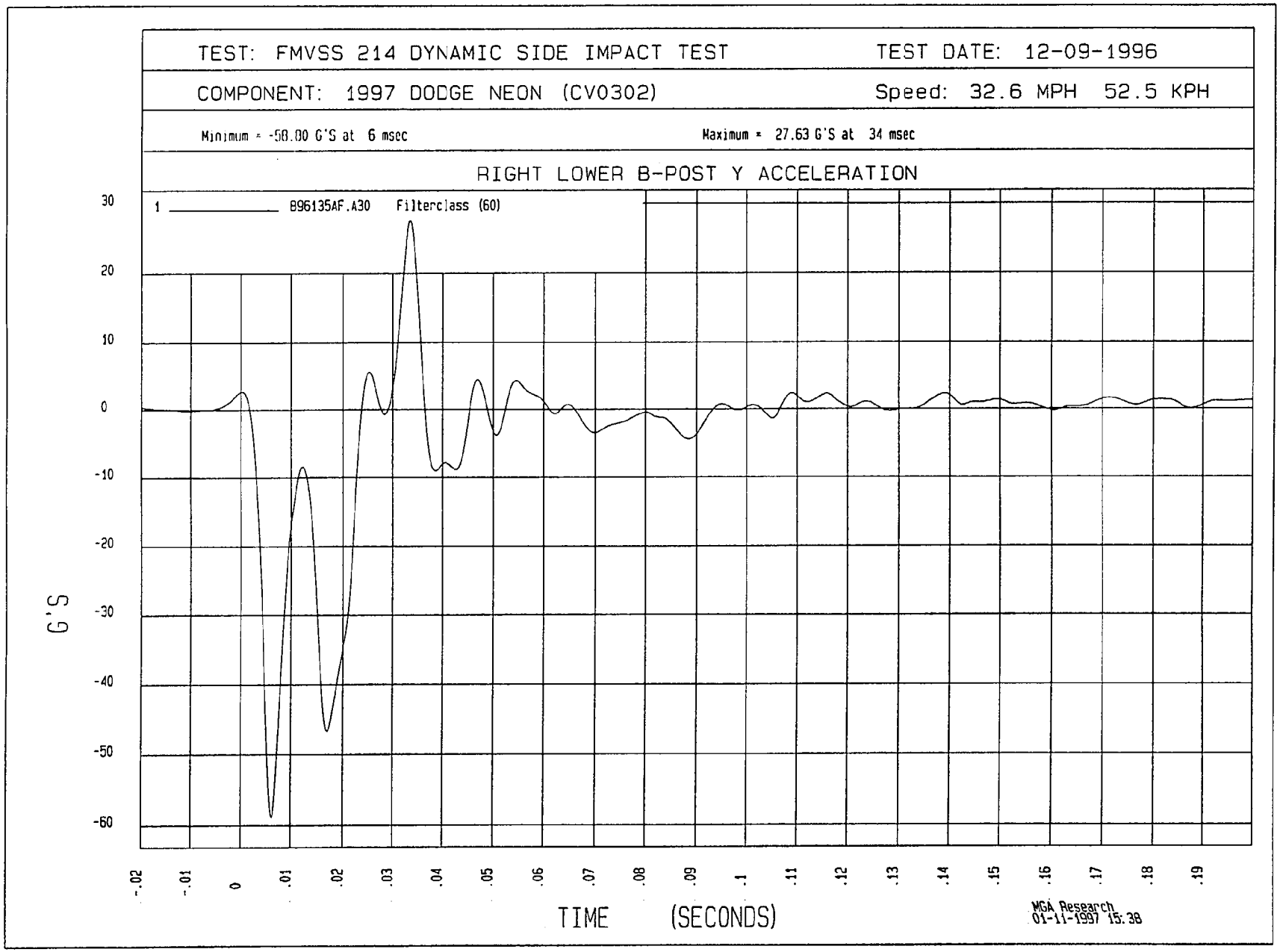
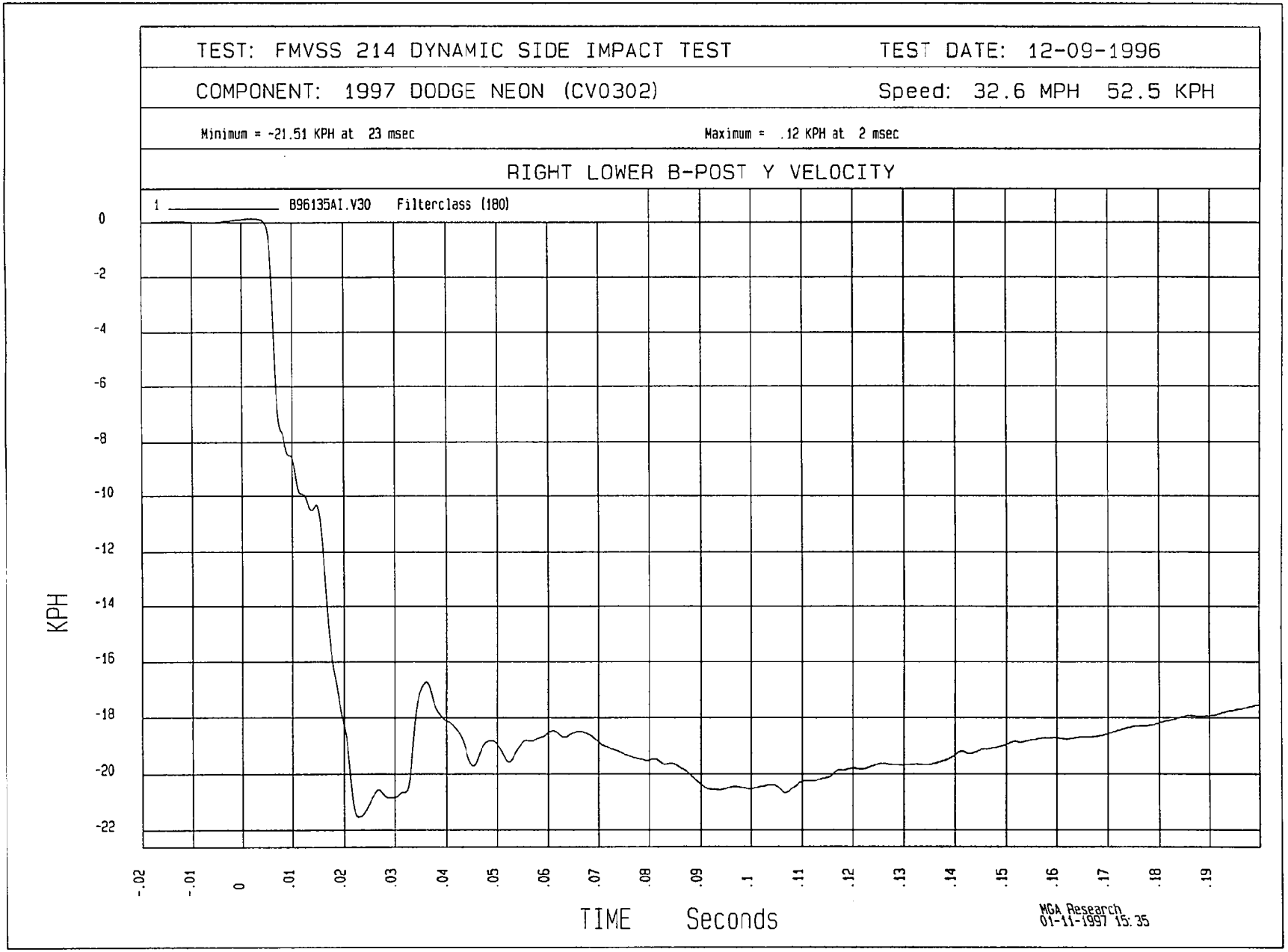
.16
.17
.18
.19
TIME Seconds
MGA Research
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -58.00 G'S at 6 msec
Maximum = 27.63 G'S at 34 msec
RIGHT LOWER B-POST Y ACCELERATION
1 896135AF.A30 Filterclass (60)
30
20
10
0
-10
-20
-30
-40
-50
-60
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
01-11-1997 15:38


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -21.51 KPH at 23 msec
Maximum = .12 KPH at 2 msec
RIGHT LOWER B-POST Y VELOCITY
1 B96135AI.V30 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
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.1
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.12
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.14
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.16
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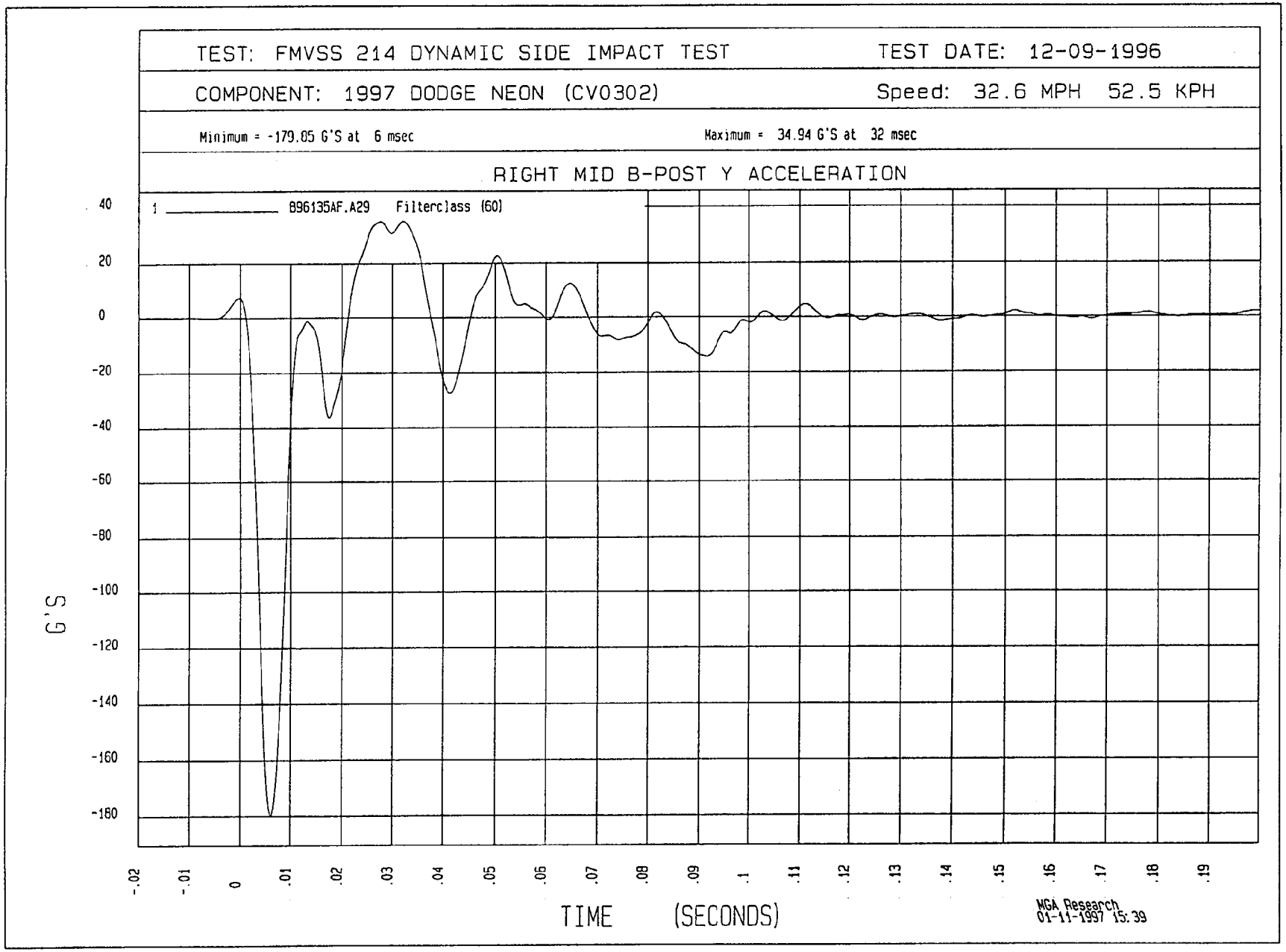
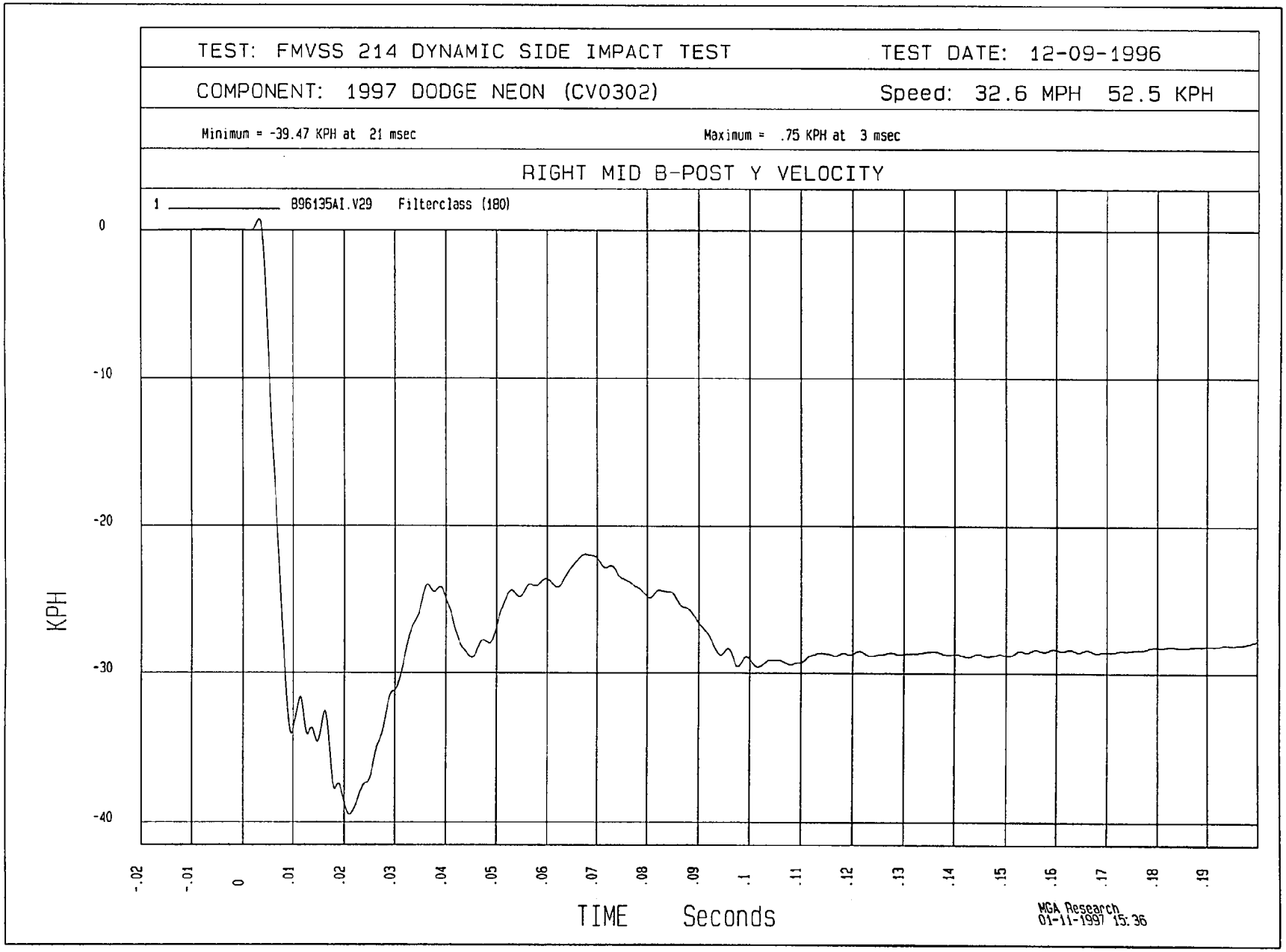
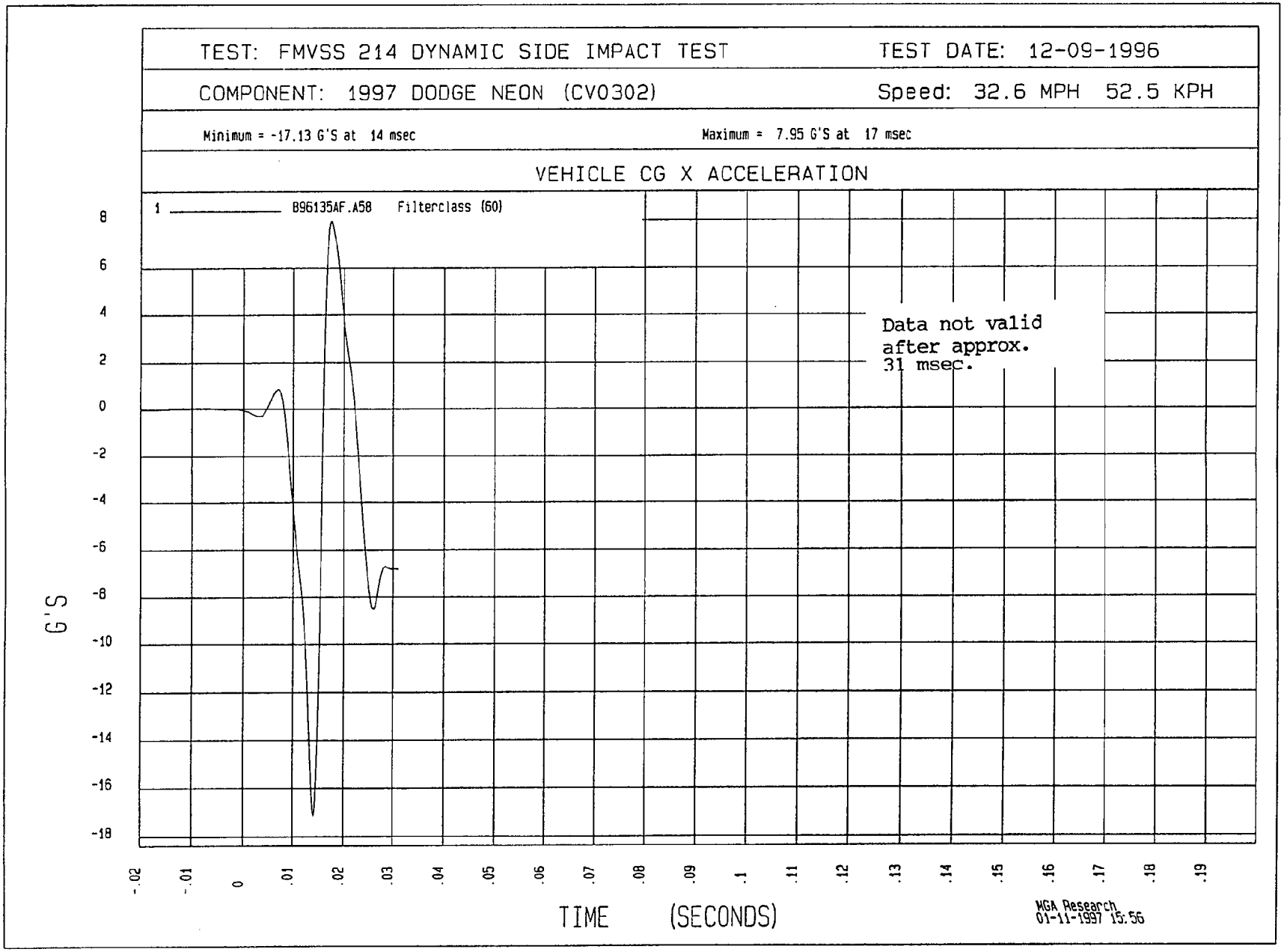
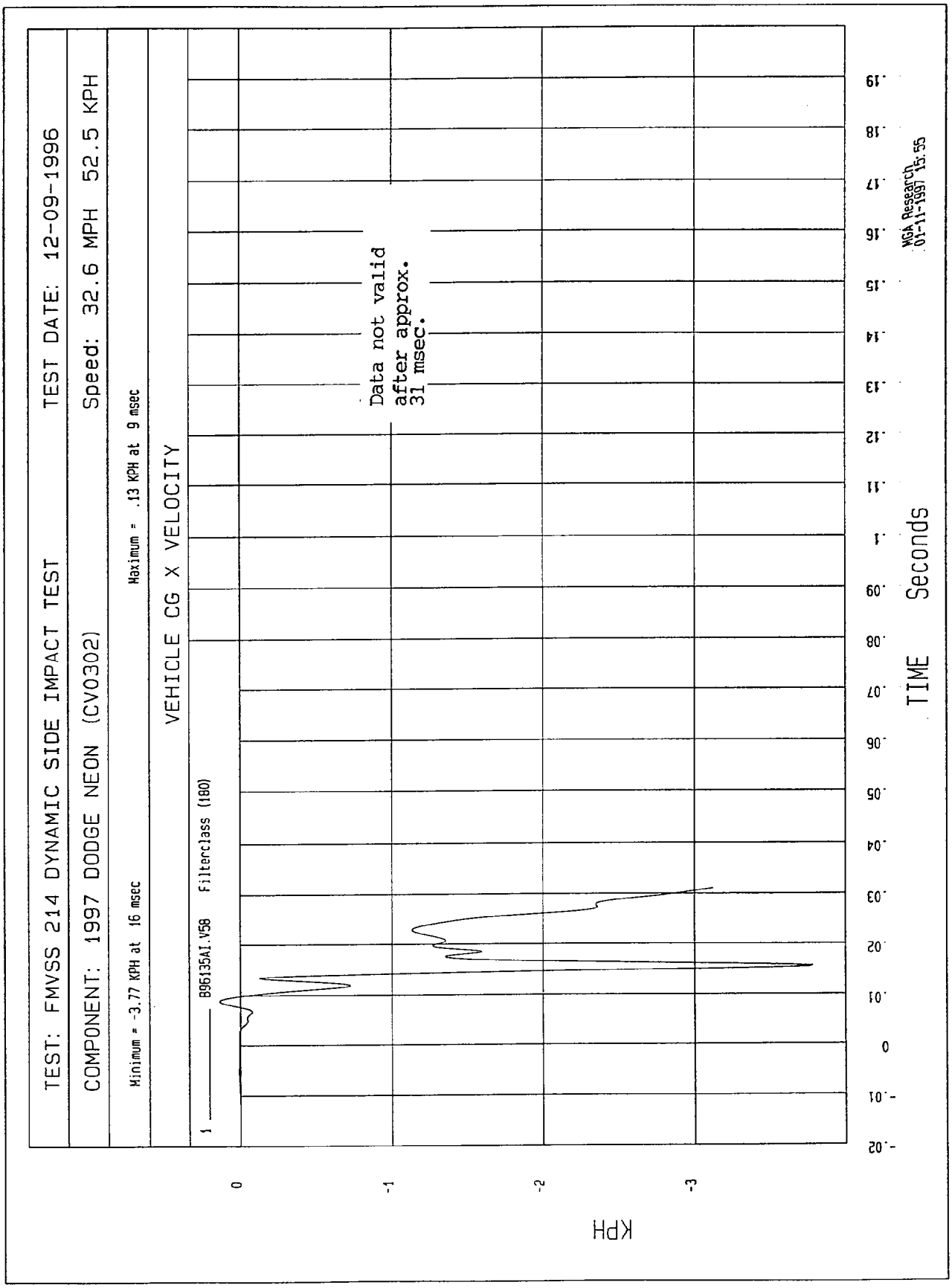
TIME Seconds
MGA Research
01-11-1997 15:35


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -179.05 G'S at 6 msec
Maximum = 34.94 G'S at 32 msec
RIGHT MID B-POST Y ACCELERATION
1 896135AF.A29 Filterclass (60)
40
20
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
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
01-11-1997 15:39


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -39.47 KPH at 21 msec
Maximum = .75 KPH at 3 msec
RIGHT MID B-POST Y VELOCITY
1 896135AI.V29 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.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
01-11-1997 15:36


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -17.13 G'S at 14 msec
Maximum = 7.95 G'S at 17 msec
VEHICLE CG X ACCELERATION
1 B96135AF.A58 Filterclass (60)
Data not valid after approx. 31 msec.
G'S
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-.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
01-11-1997 15:56


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -3.77 KPH at 16 msec
Maximum = .13 KPH at 9 msec
VEHICLE CG X VELOCITY
1 B96135AI.V58 Filterclass (180)
Data not valid
after approx.
31 msec.
KPH
0
-1
-2
-3
TIME Seconds
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
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.17
.18
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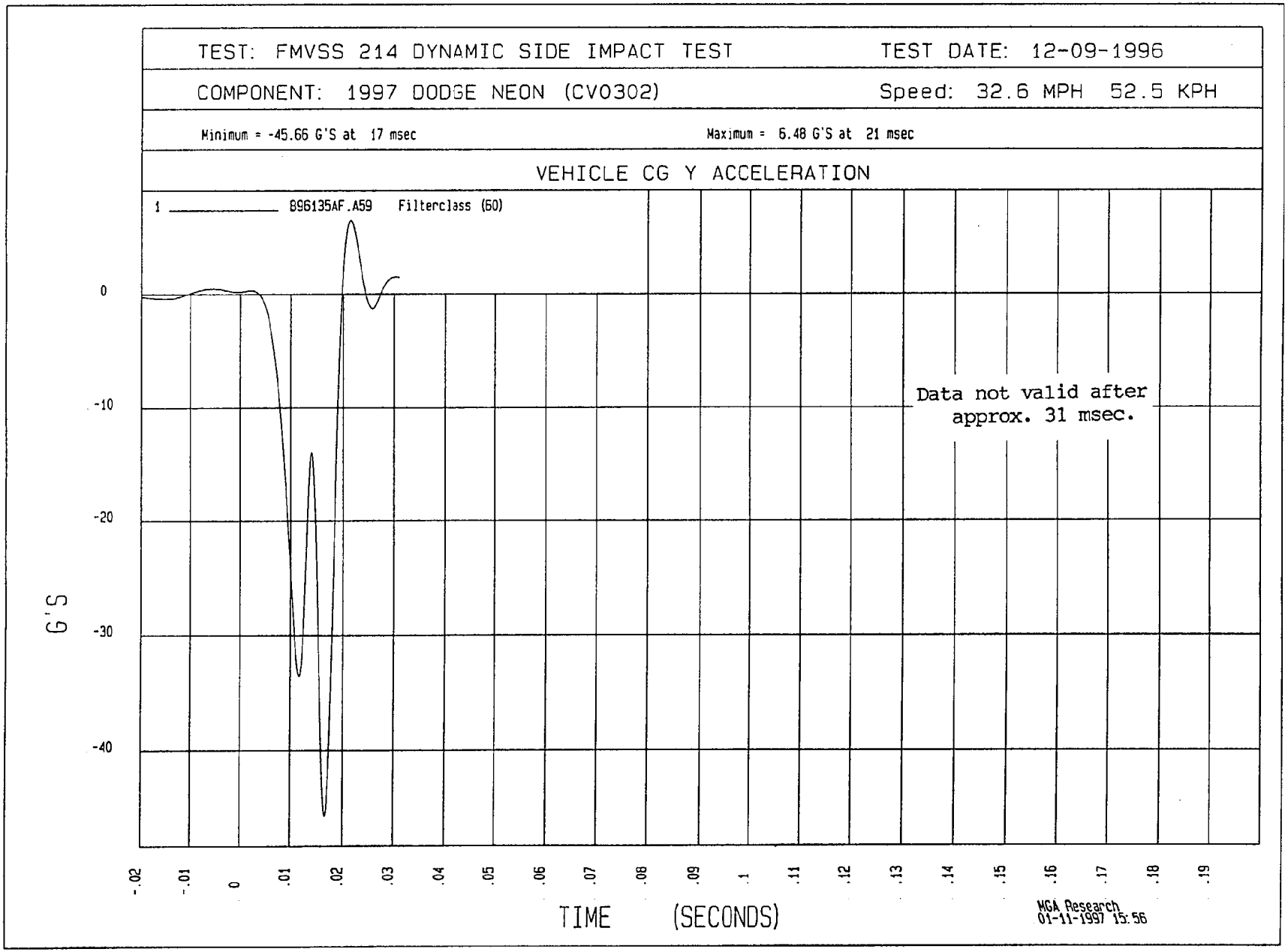
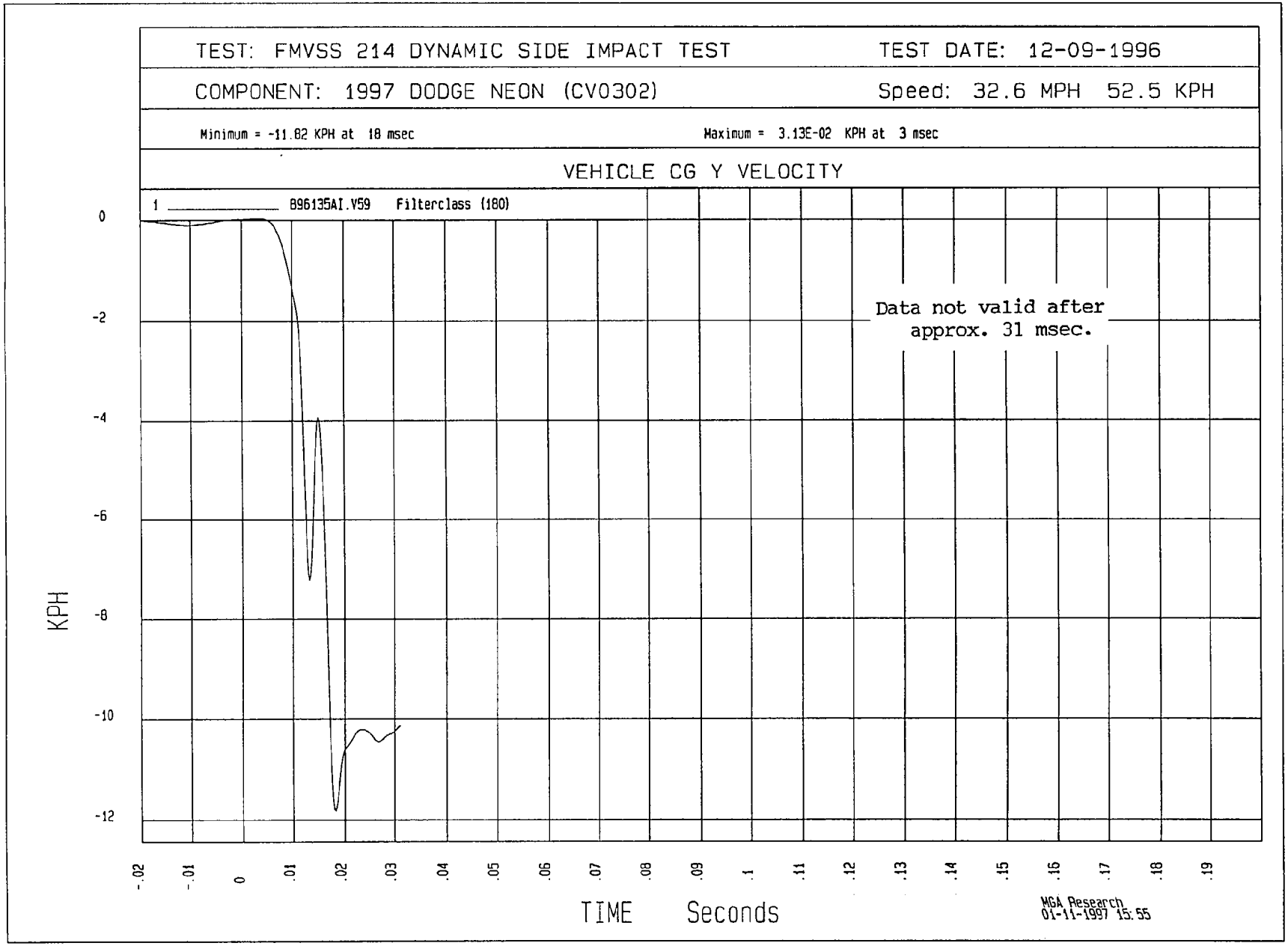
NGA Research
01-11-1997 15:55


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -45.66 G'S at 17 msec
Maximum = 6.48 G'S at 21 msec
VEHICLE CG Y ACCELERATION
1 896135AF.A59 Filterclass (60)
Data not valid after approx. 31 msec.
G'S
0
-10
-20
-30
-40
-.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
01-11-1997 15:56


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -11.82 KPH at 18 msec
Maximum = 3.13E-02 KPH at 3 msec
VEHICLE CG Y VELOCITY
1 896135AI.V59 Filterclass (180)
Data not valid after approx. 31 msec.
KPH
0
-2
-4
-6
-8
-10
-12
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
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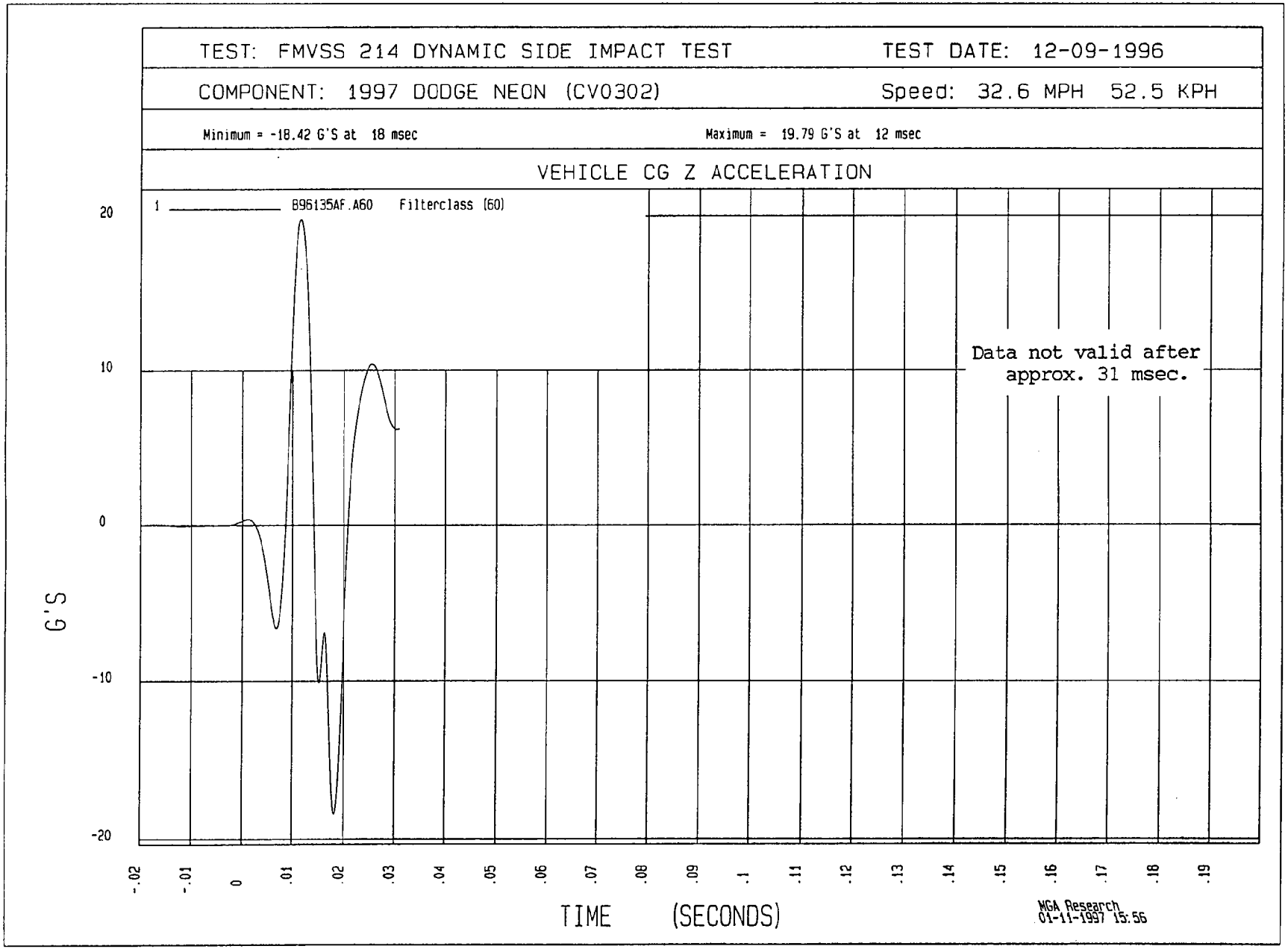
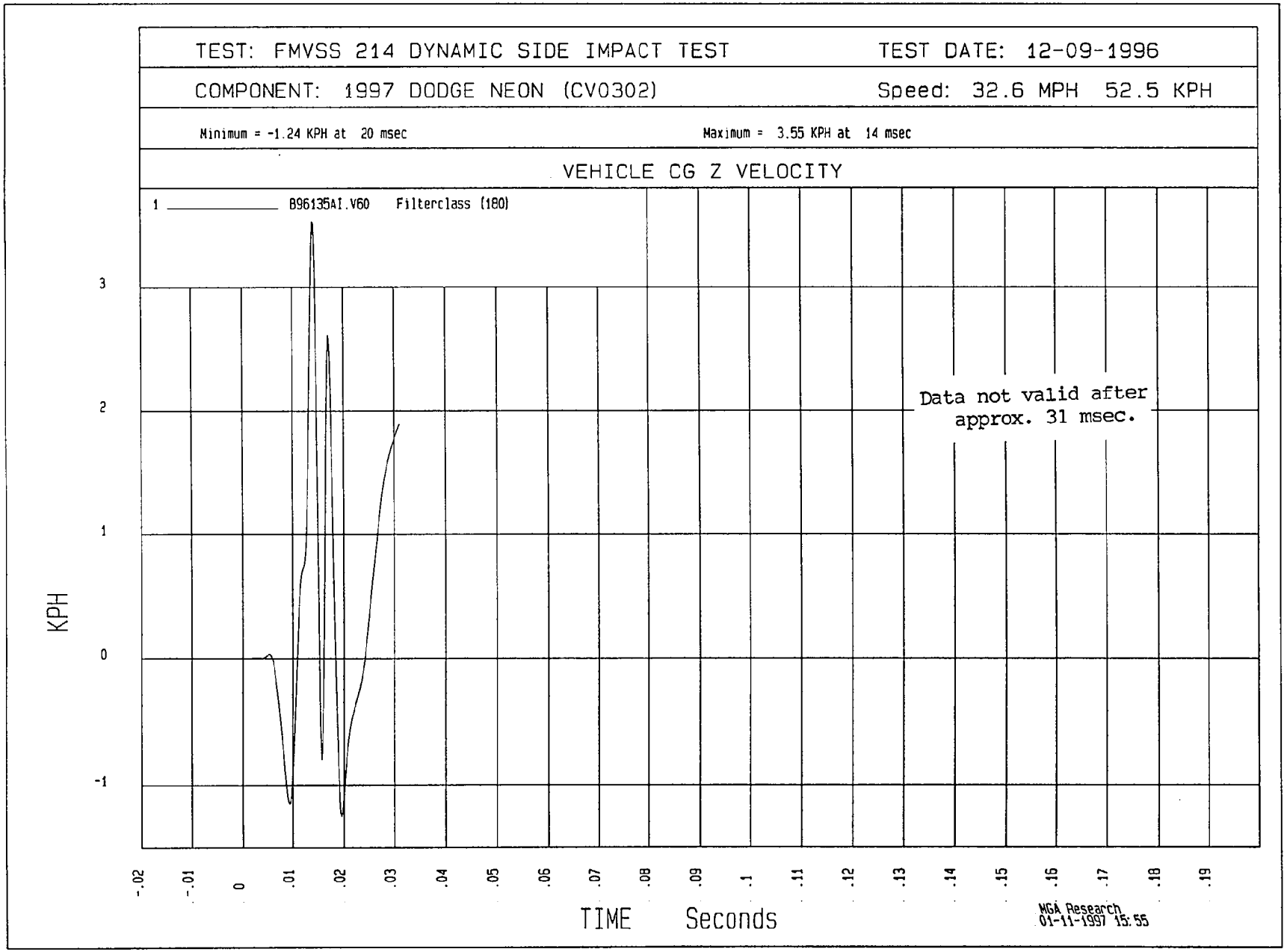
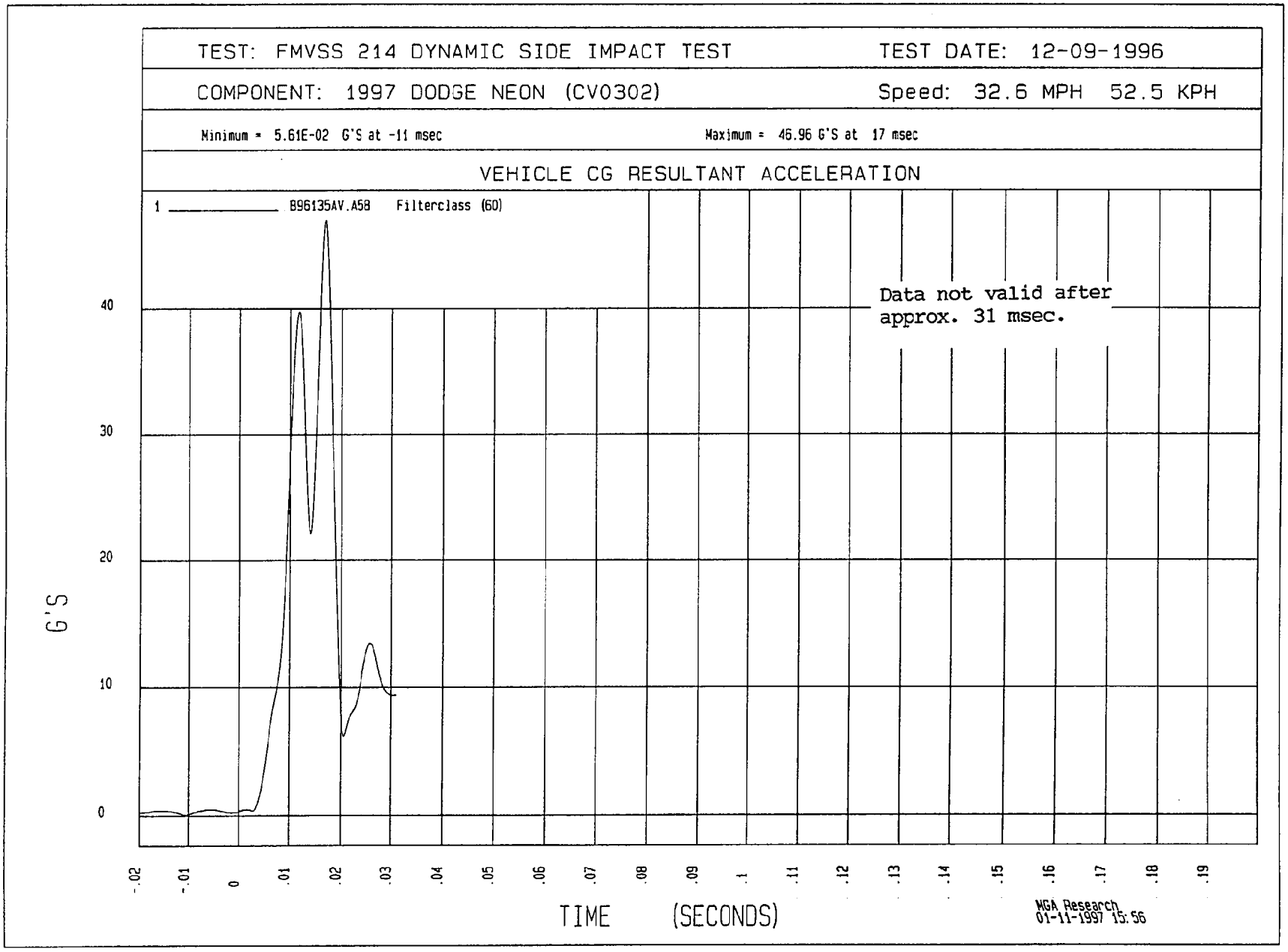
TIME Seconds
MGA Research
01-11-1997 15:55


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -18.42 G'S at 18 msec
Maximum = 19.79 G'S at 12 msec
VEHICLE CG Z ACCELERATION
1 B96135AF.A60 Filterclass (60)
Data not valid after approx. 31 msec.
20
10
0
-10
-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
01-11-1997 15:56


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -1.24 KPH at 20 msec
Maximum = 3.55 KPH at 14 msec
VEHICLE CG Z VELOCITY
1 B96135AI.V60 Filterclass (180)
Data not valid after approx. 31 msec.
KPH
3
2
1
0
-1
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME Seconds
NGA Research 01-11-1997 15:55


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = 5.61E-02 G'S at -11 msec
Maximum = 46.96 G'S at 17 msec
VEHICLE CG RESULTANT ACCELERATION
1 B96135AV.A58 Filterclass (60)
Data not valid after approx. 31 msec.
G'S
40
30
20
10
0
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
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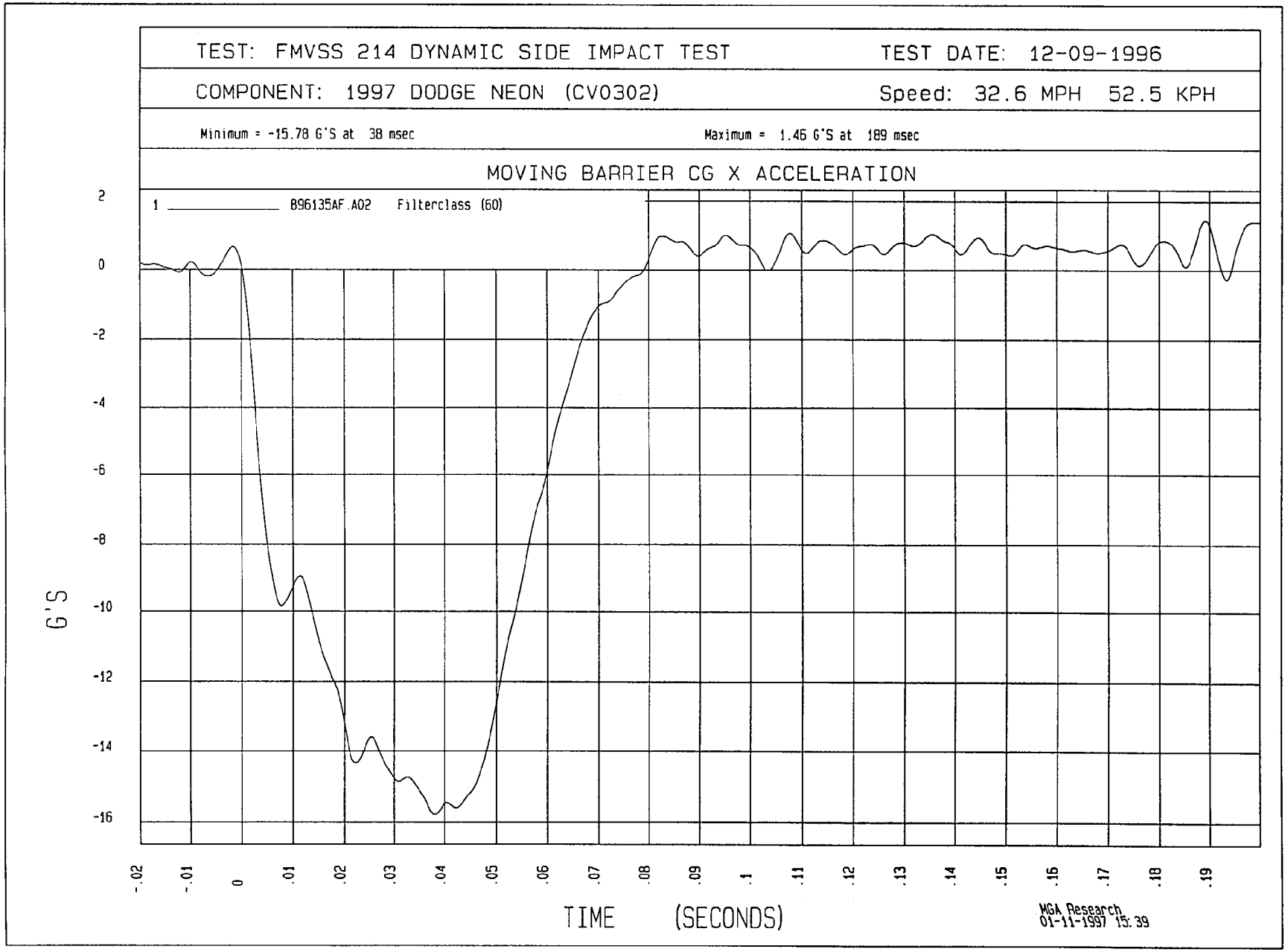
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:56


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -15.78 G'S at 38 msec
Maximum = 1.46 G'S at 189 msec
MOVING BARRIER CG X ACCELERATION
1 B96135AF.A02 Filterclass (60)
2
0
-2
-4
-6
-8
-10
-12
-14
-16
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
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.16
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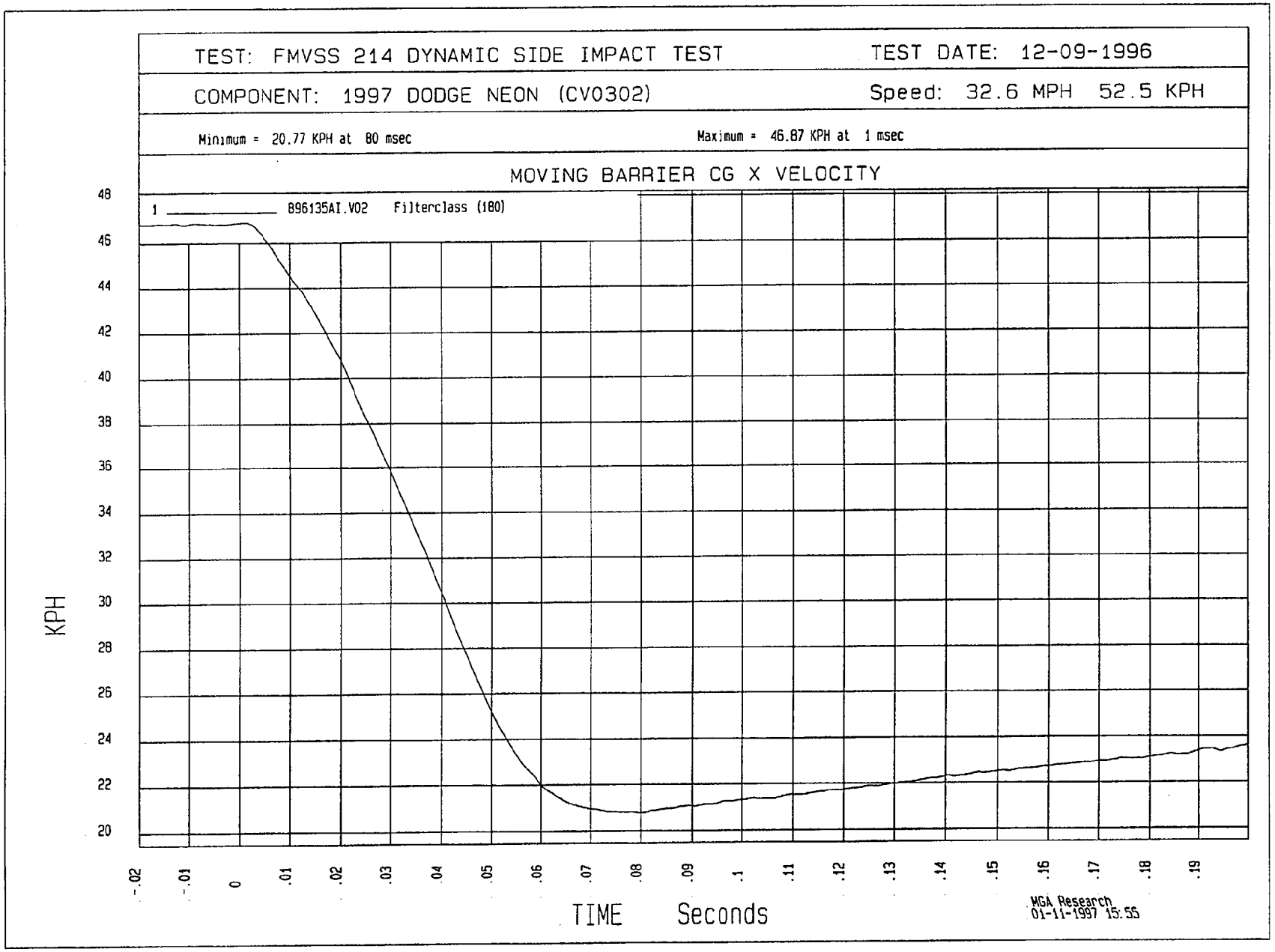
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:39


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = 20.77 KPH at 80 msec
Maximum = 46.87 KPH at 1 msec
MOVING BARRIER CG X VELOCITY
1 B96135AI.V02 Filterclass (180)
KPH
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
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.17
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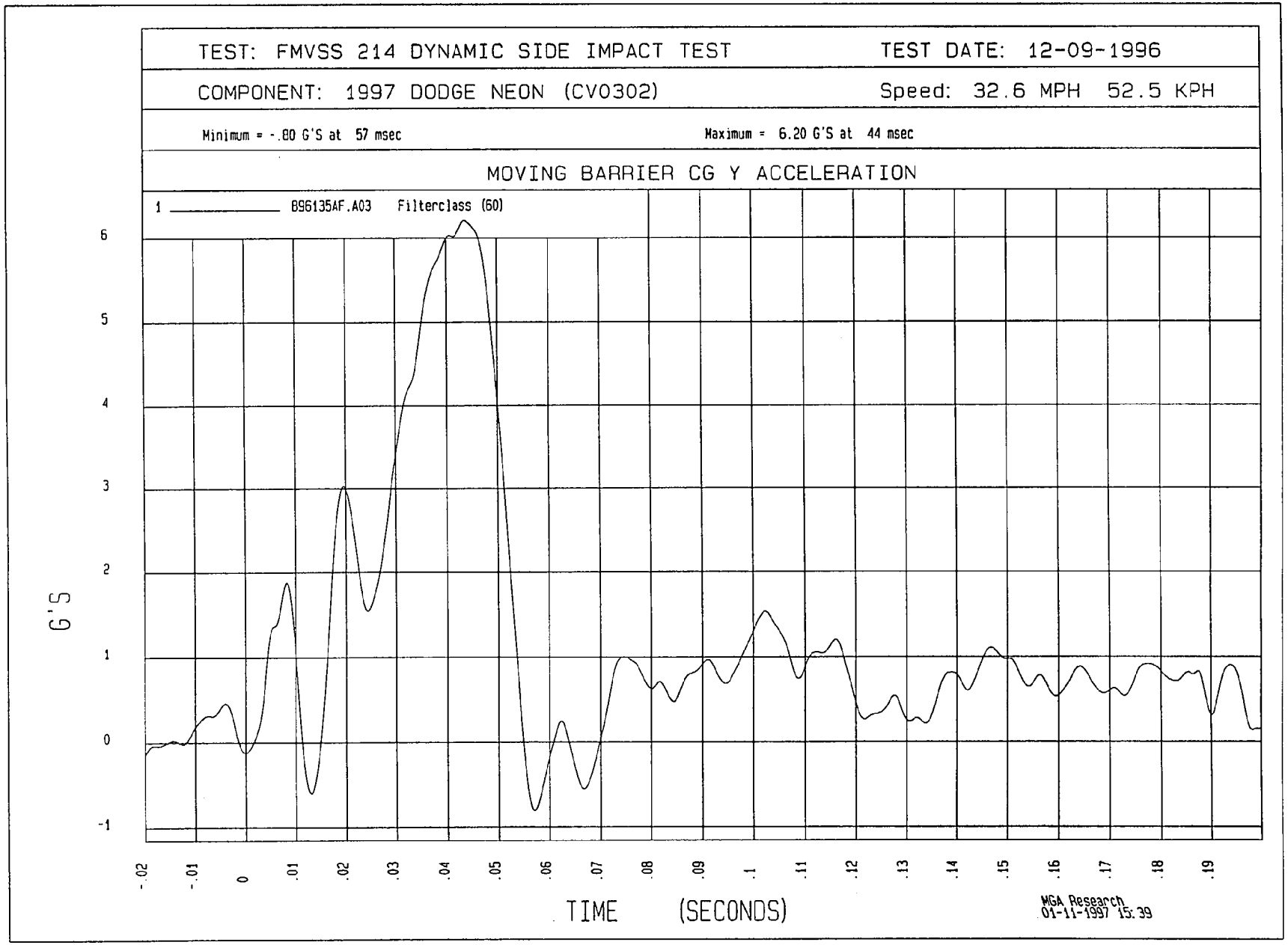
TIME Seconds
MGA Research
01-11-1997 15:55


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -.80 G'S at 57 msec
Maximum = 6.20 G'S at 44 msec
MOVING BARRIER CG Y ACCELERATION
1 896135AF.A03 Filterclass (60)
G'S
6
5
4
3
2
1
0
-1
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
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.18
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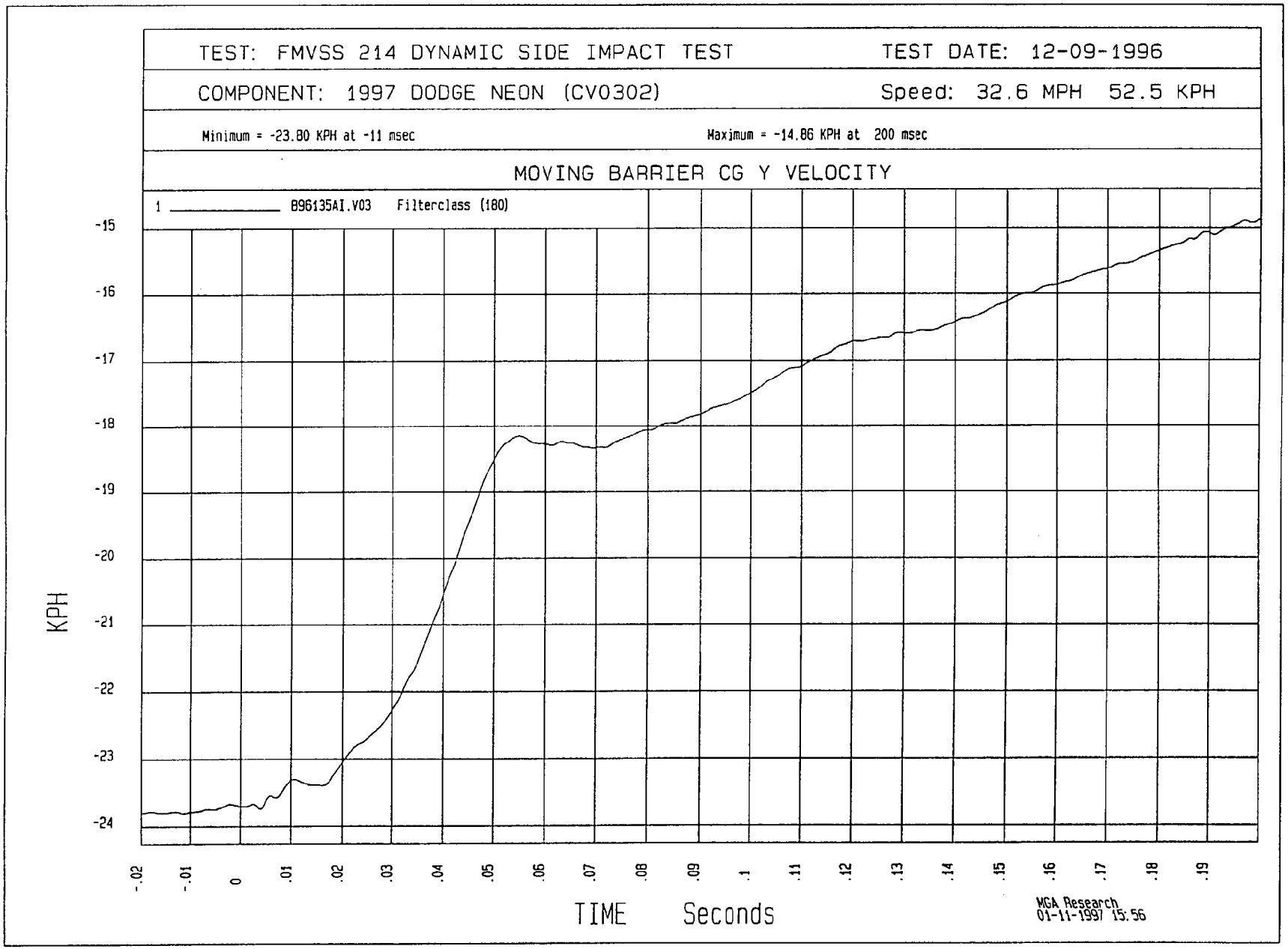
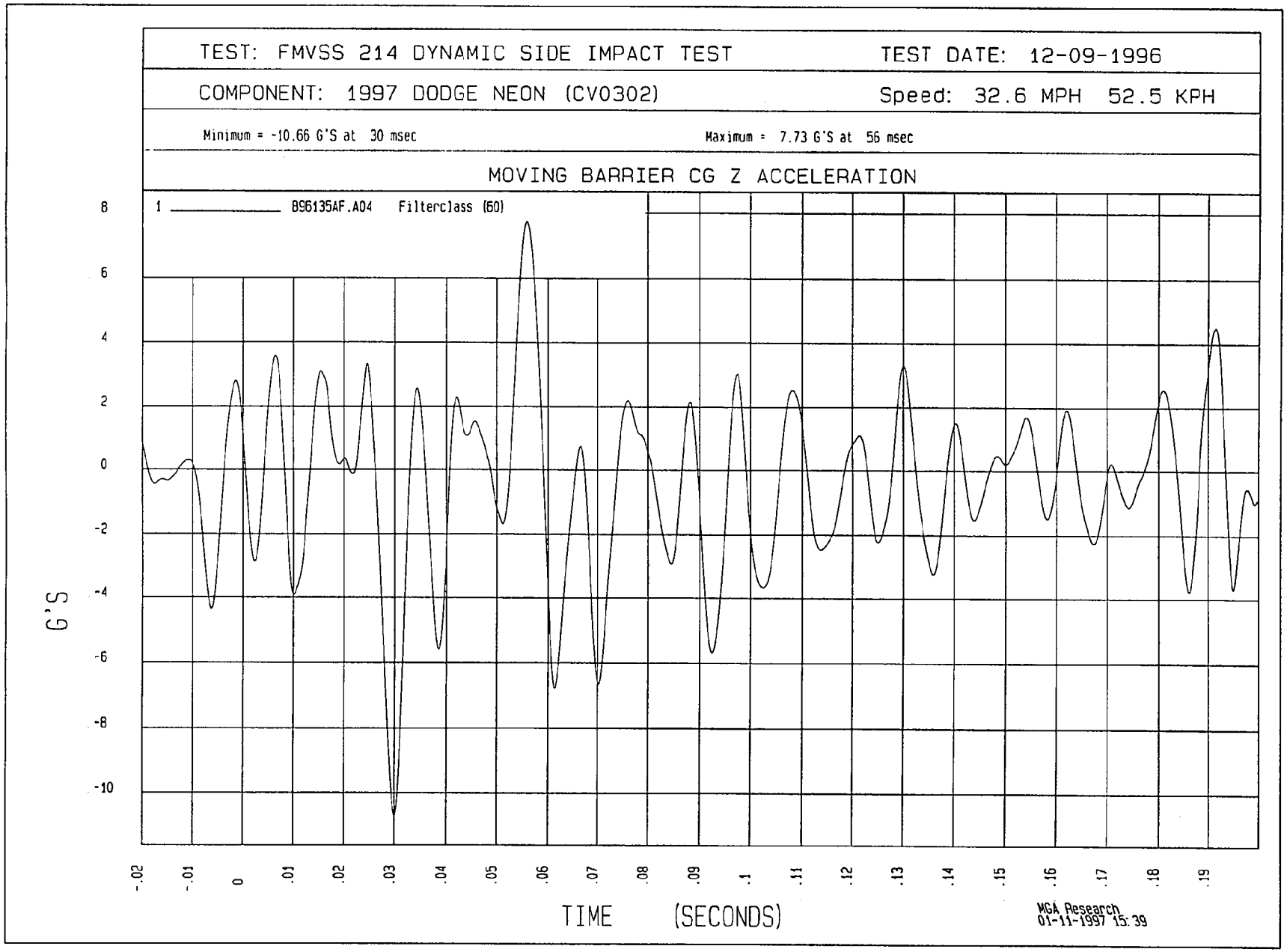
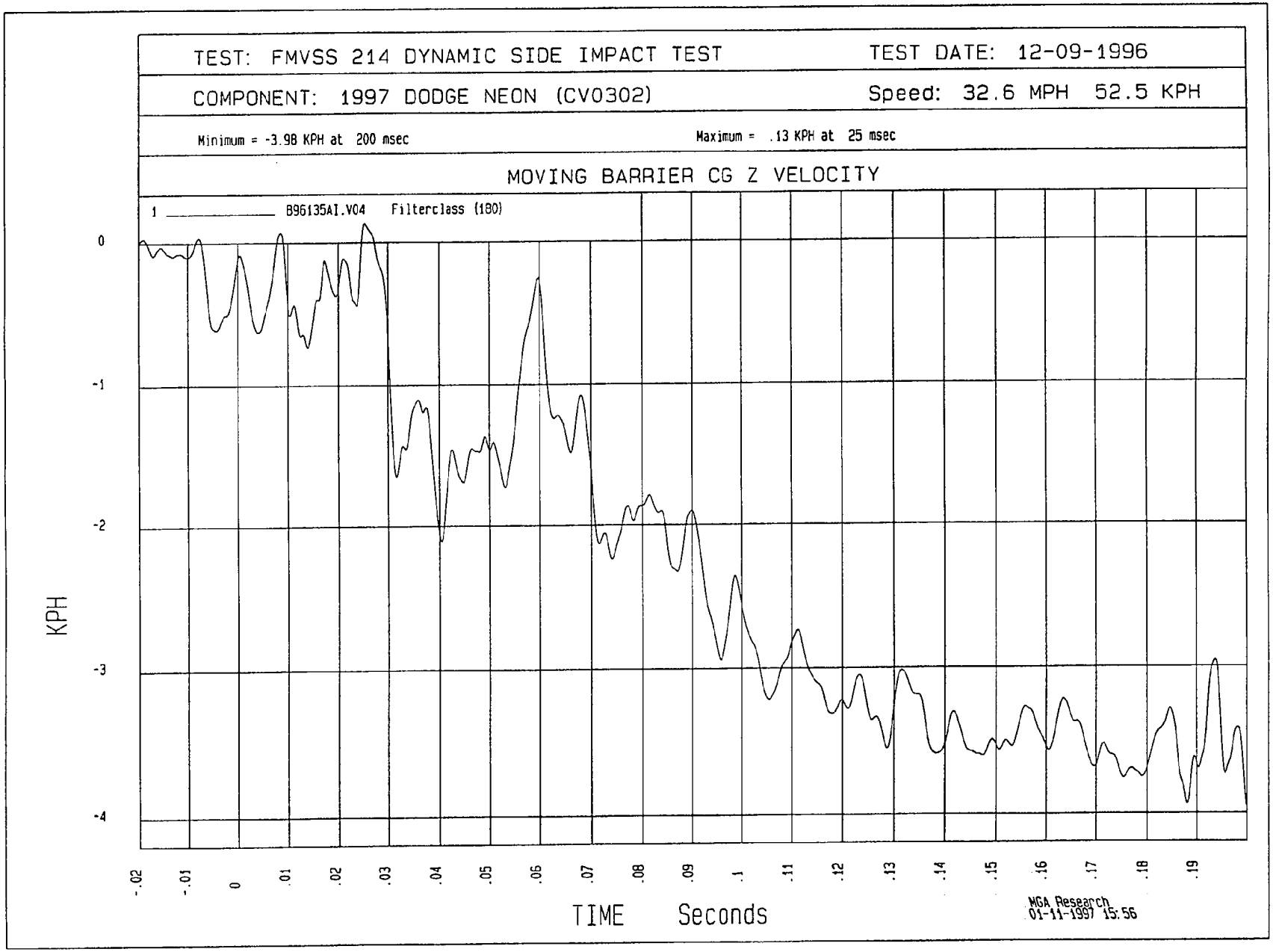
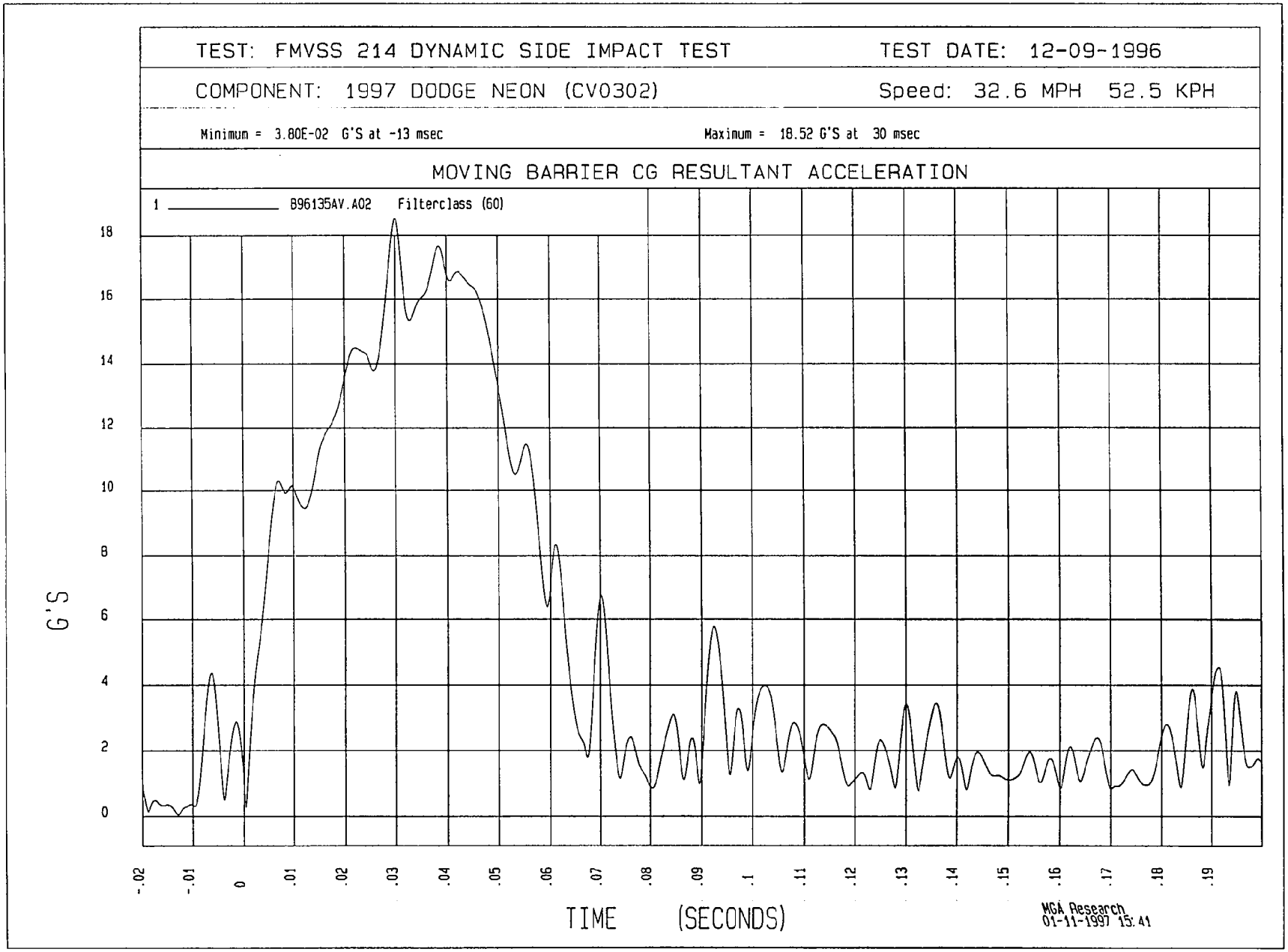
TIME (SECONDS)
MGA Research
01-11-1997 15:39


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -23.80 KPH at -11 msec
Maximum = -14.86 KPH at 200 msec
MOVING BARRIER CG Y VELOCITY
1 B96135AI.V03 Filterclass (180)
KPH
-15
-16
-17
-18
-19
-20
-21
-22
-23
-24
-.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
01-11-1997 15:56


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -10.66 G'S at 30 msec
Maximum = 7.73 G'S at 56 msec
MOVING BARRIER CG Z ACCELERATION
1 B96135AF.A04 Filterclass (60)
8
6
4
2
0
-2
-4
-6
-8
-10
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
01-11-1997 15:39


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -3.98 KPH at 200 msec
Maximum = .13 KPH at 25 msec
MOVING BARRIER CG Z VELOCITY
1 B96135AI.V04 Filterclass (180)
KPH
0
-1
-2
-3
-4
-.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
01-11-1997 15:56


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = 3.80E-02 G'S at -13 msec
Maximum = 18.52 G'S at 30 msec
MOVING BARRIER CG RESULTANT ACCELERATION
1 B96135AV.A02 Filterclass (60)
G'S
18
16
14
12
10
8
6
4
2
0
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
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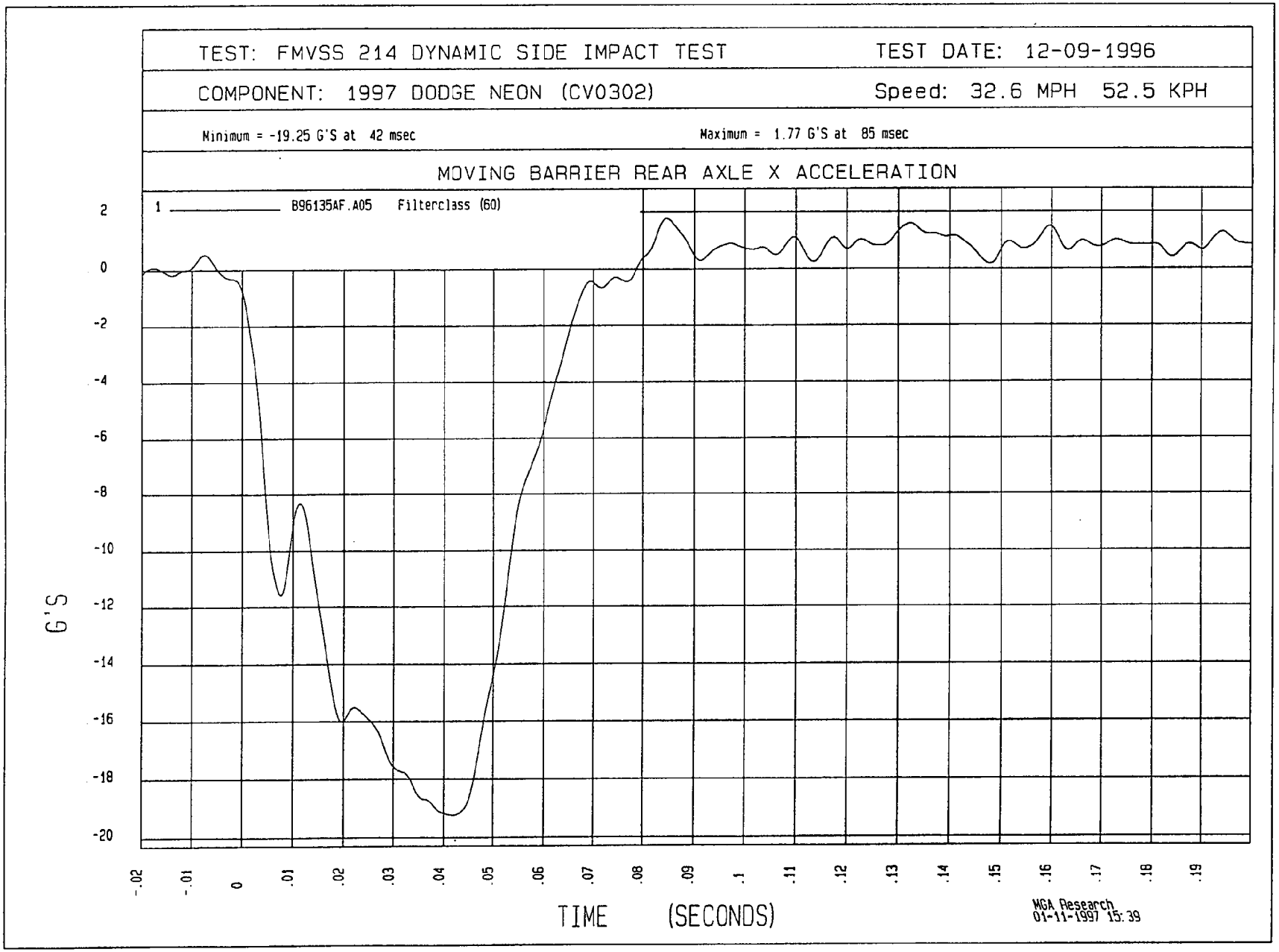
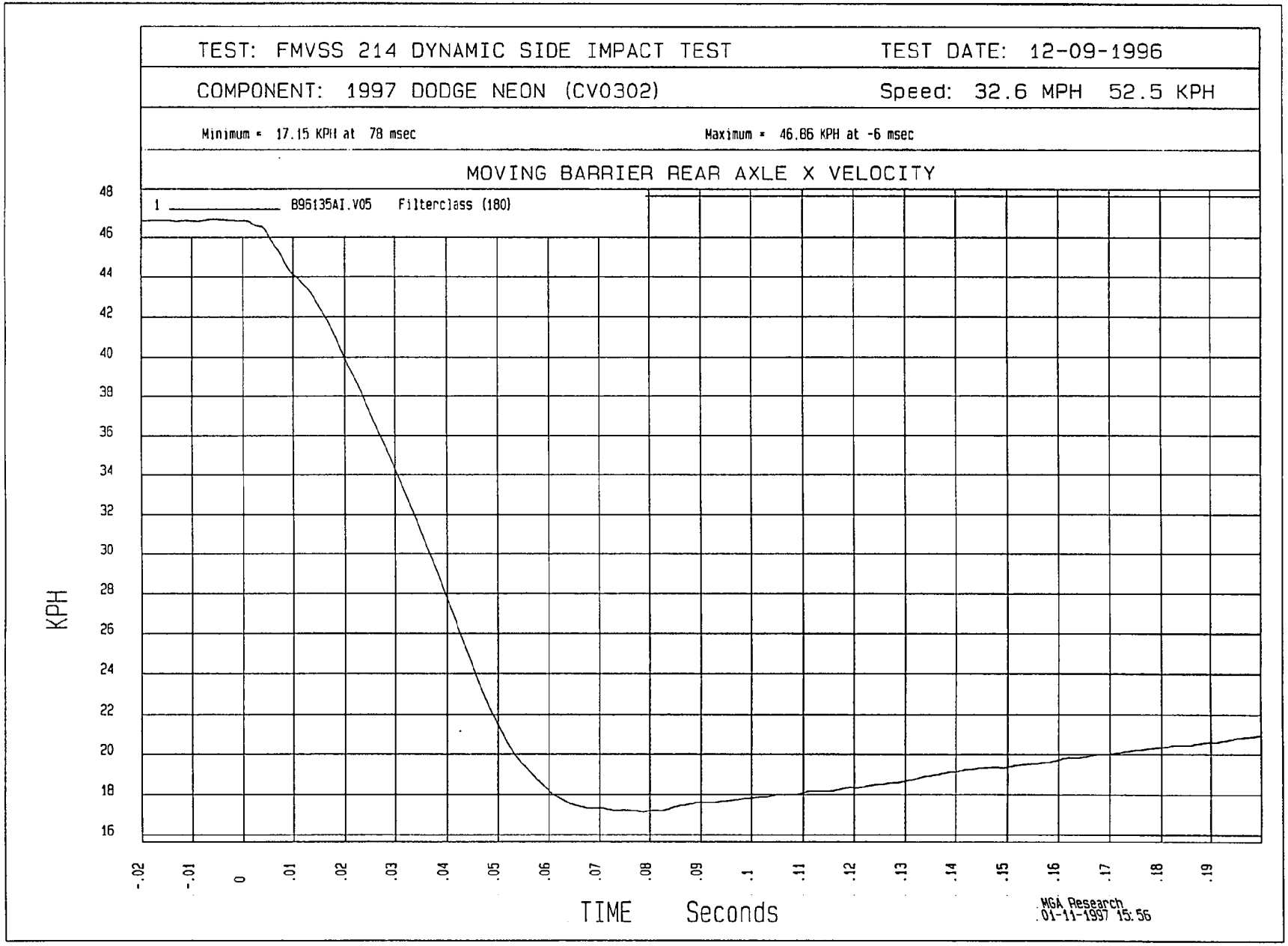
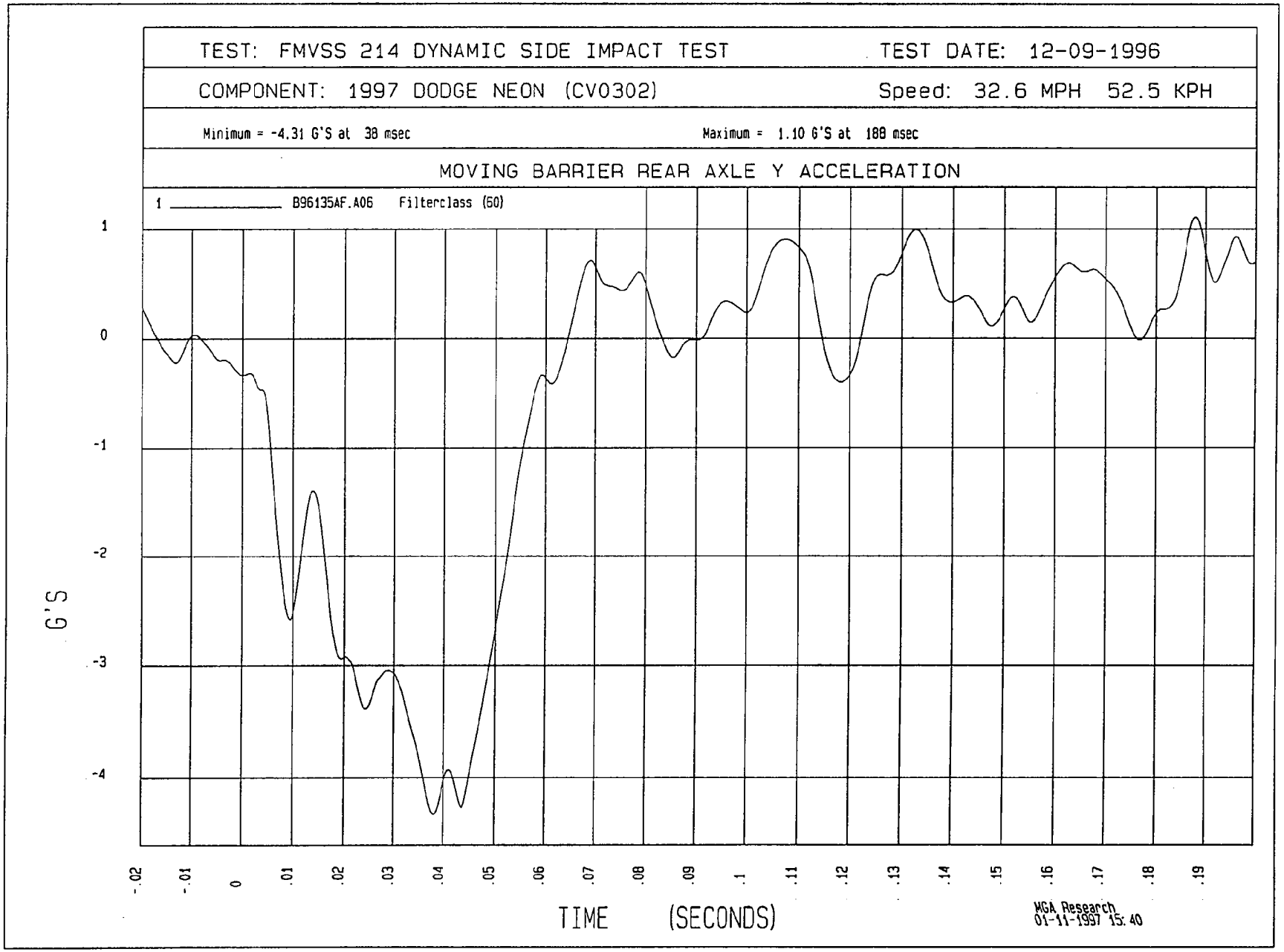
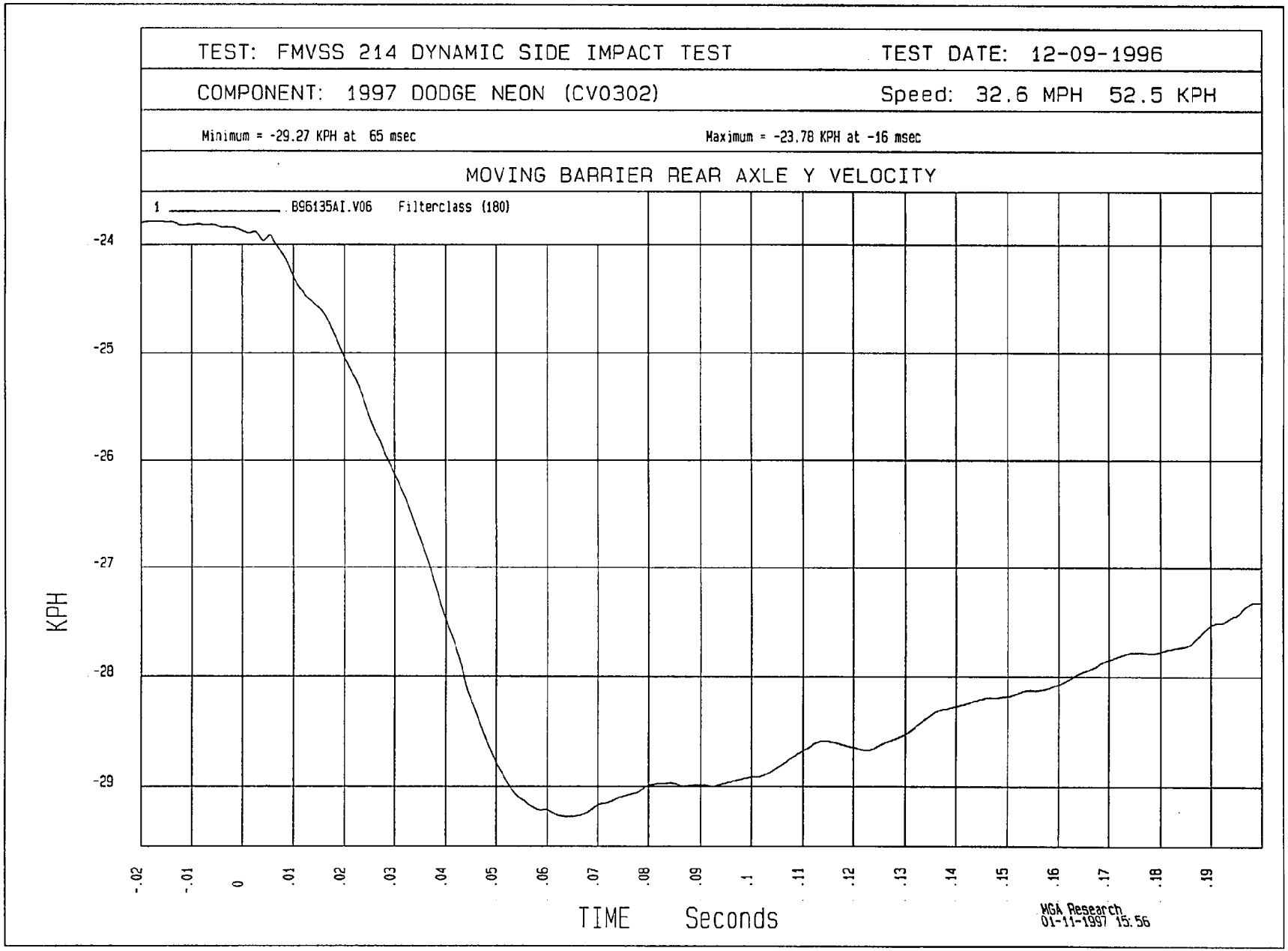
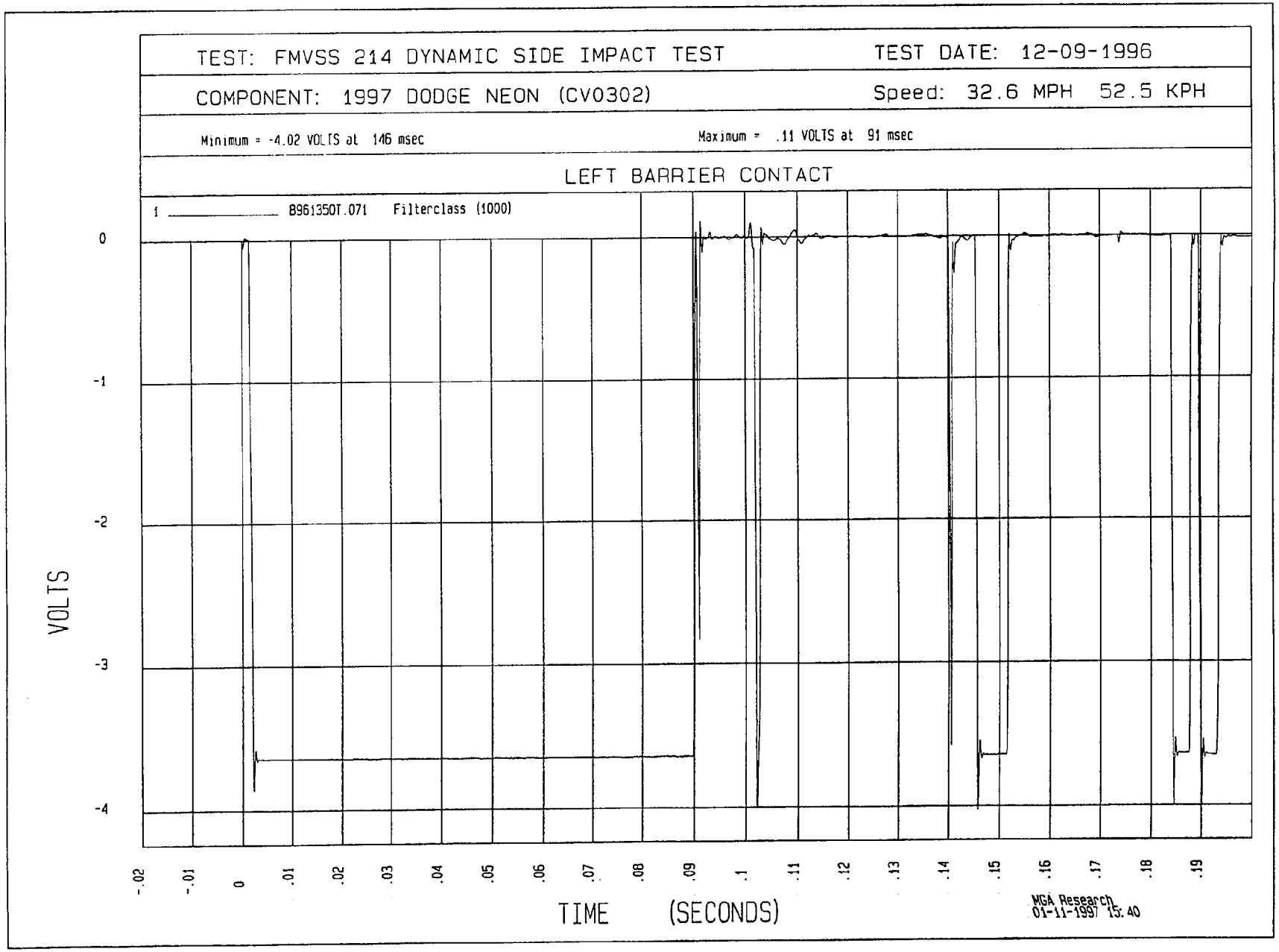
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:41

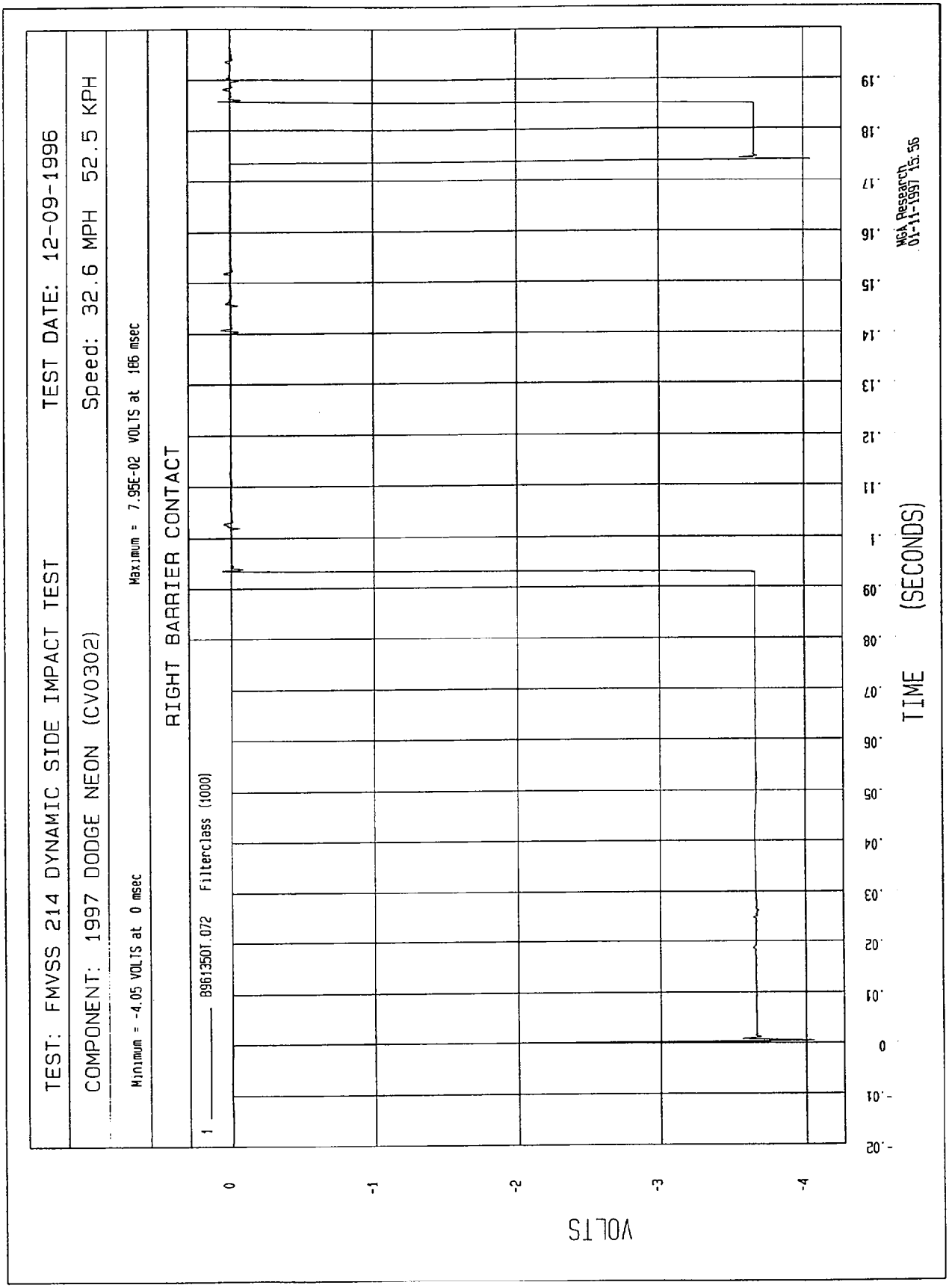

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -19.25 G'S at 42 msec
Maximum = 1.77 G'S at 85 msec
MOVING BARRIER REAR AXLE X ACCELERATION
1 B96135AF.A05 Filterclass (60)
2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
G'S
-.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
01-11-1997 15:39

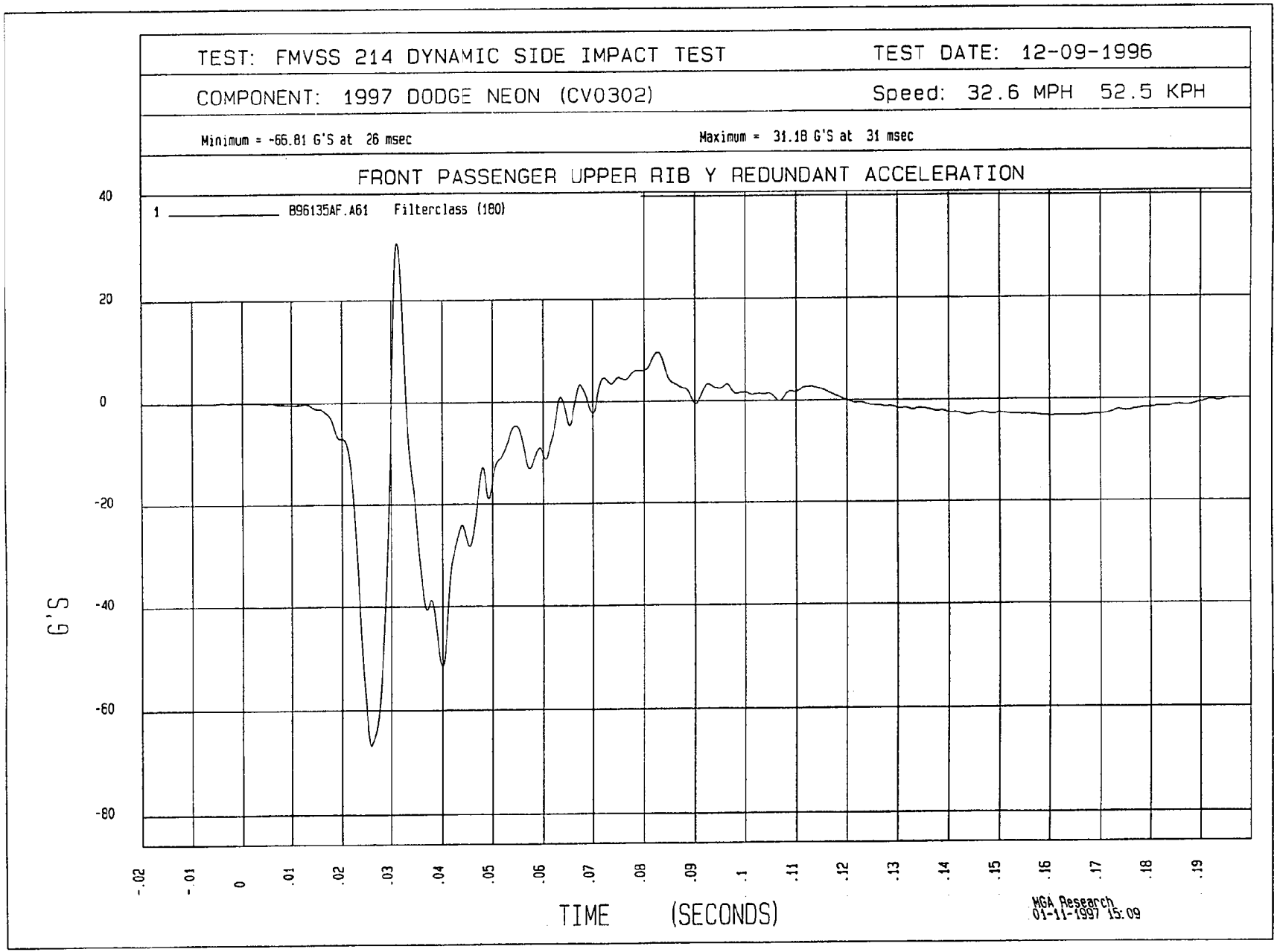

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = 17.15 KPH at 78 msec
Maximum = 46.86 KPH at -6 msec
MOVING BARRIER REAR AXLE X VELOCITY
1 B96135AI.V05 Filterclass (180)
KPH
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
-.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
01-11-1997 15:56

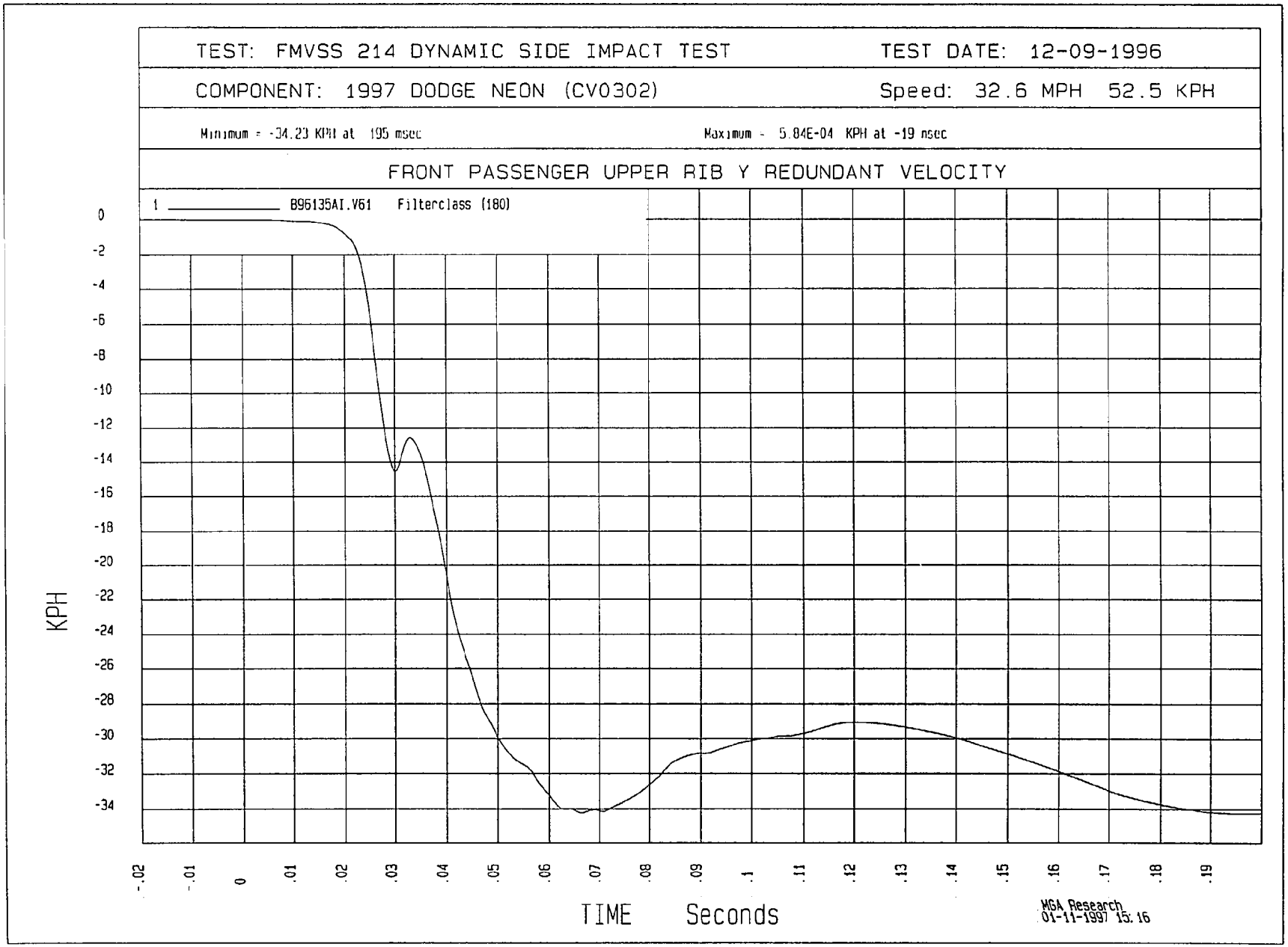

TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -4.31 G'S at 38 msec
Maximum = 1.10 G'S at 188 msec
MOVING BARRIER REAR AXLE Y ACCELERATION
1 B96135AF.A06 Filterclass (60)
1
0
-1
-2
-3
-4
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:40


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -29.27 KPH at 65 msec
Maximum = -23.78 KPH at -16 msec
MOVING BARRIER REAR AXLE Y VELOCITY
1 B96135AI.V06 Filterclass (180)
-24
-25
-26
-27
-28
-29
KPH
-.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
01-11-1997 15:56


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -4.02 VOLTS at 146 msec
Maximum = .11 VOLTS at 91 msec
LEFT BARRIER CONTACT
1 B961350T.071 Filterclass (1000)
VOLTS
0
-1
-2
-3
-4
-.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
01-11-1997 15:40


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -4.05 VOLTS at 0 msec
Maximum = 7.95E-02 VOLTS at 186 msec
RIGHT BARRIER CONTACT
1 _____ B9613501.072 Filterclass (1000)
VOLTS
0
-1
-2
-3
-4
.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
01-11-1997 15:56


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -66.81 G'S at 26 msec
Maximum = 31.18 G'S at 31 msec
FRONT PASSENGER UPPER RIB Y REDUNDANT ACCELERATION
1 B96135AF.A61 Filterclass (180)
40
20
0
-20
-40
-60
-80
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
01-11-1997 15:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -34.23 KPH at 195 msec
Maximum = 5.84E-04 KPH at -19 msec
FRONT PASSENGER UPPER RIB Y REDUNDANT VELOCITY
1 B96135AI.V61 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
-32
-34
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
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.13
.14
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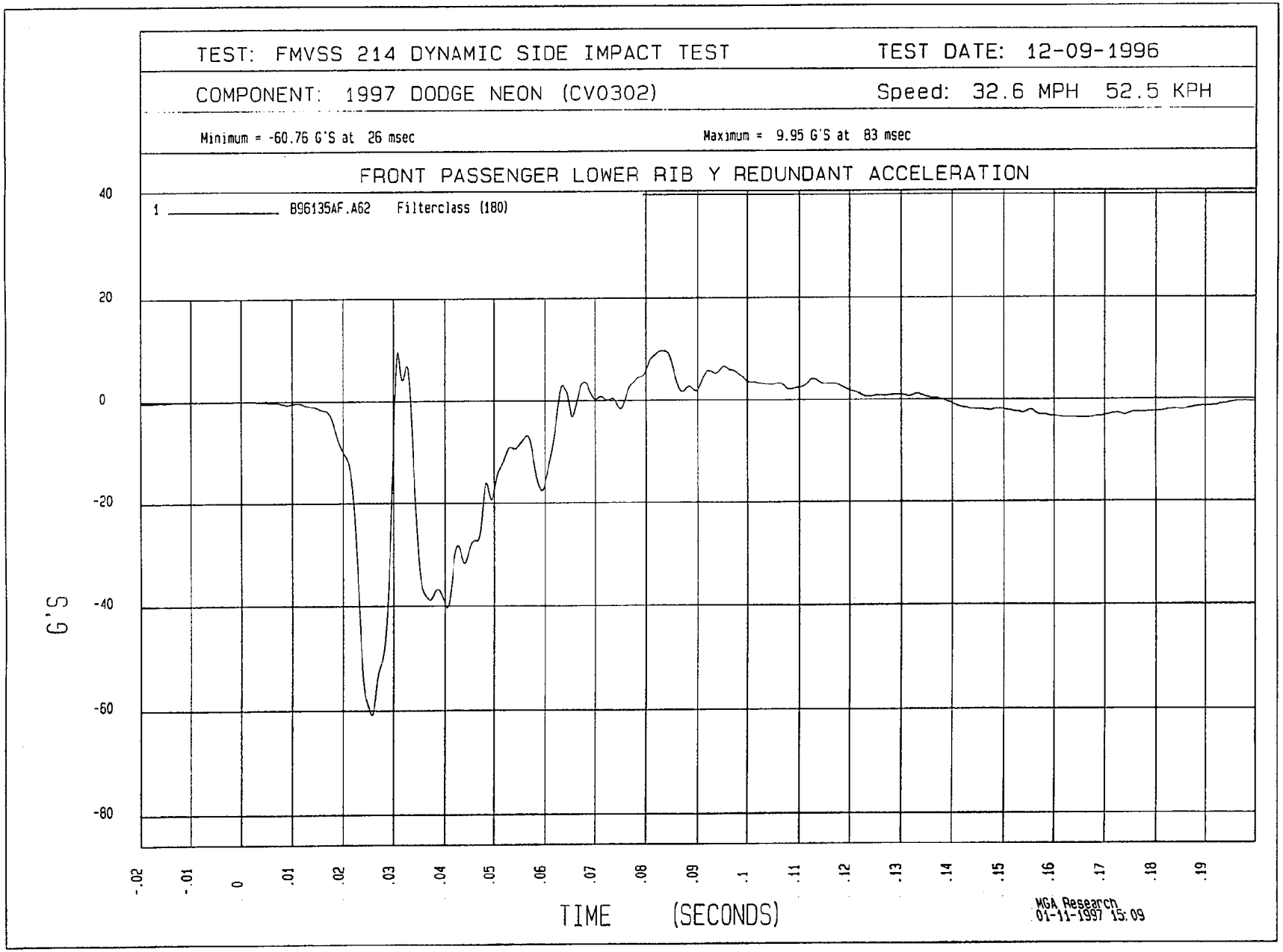
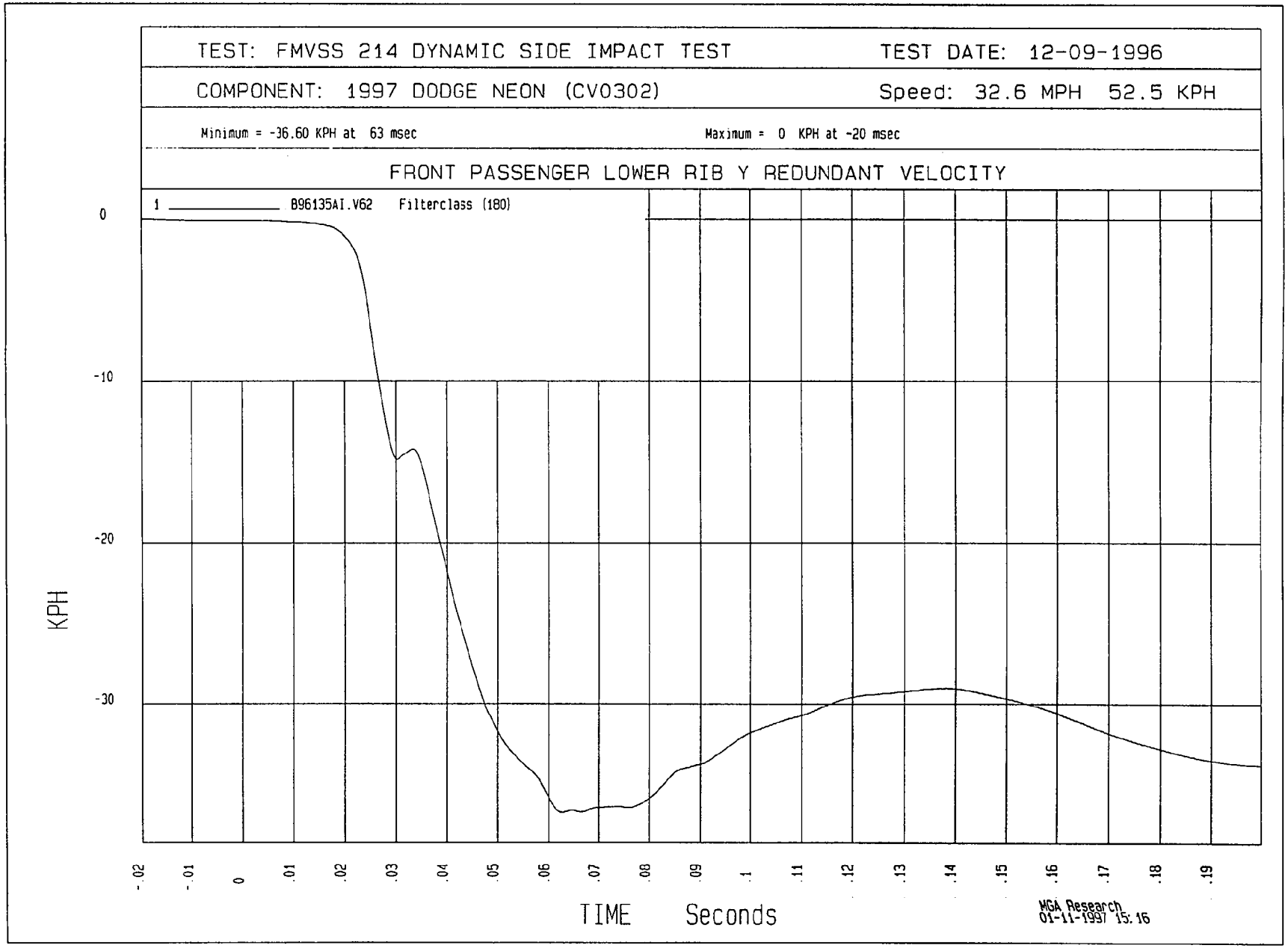
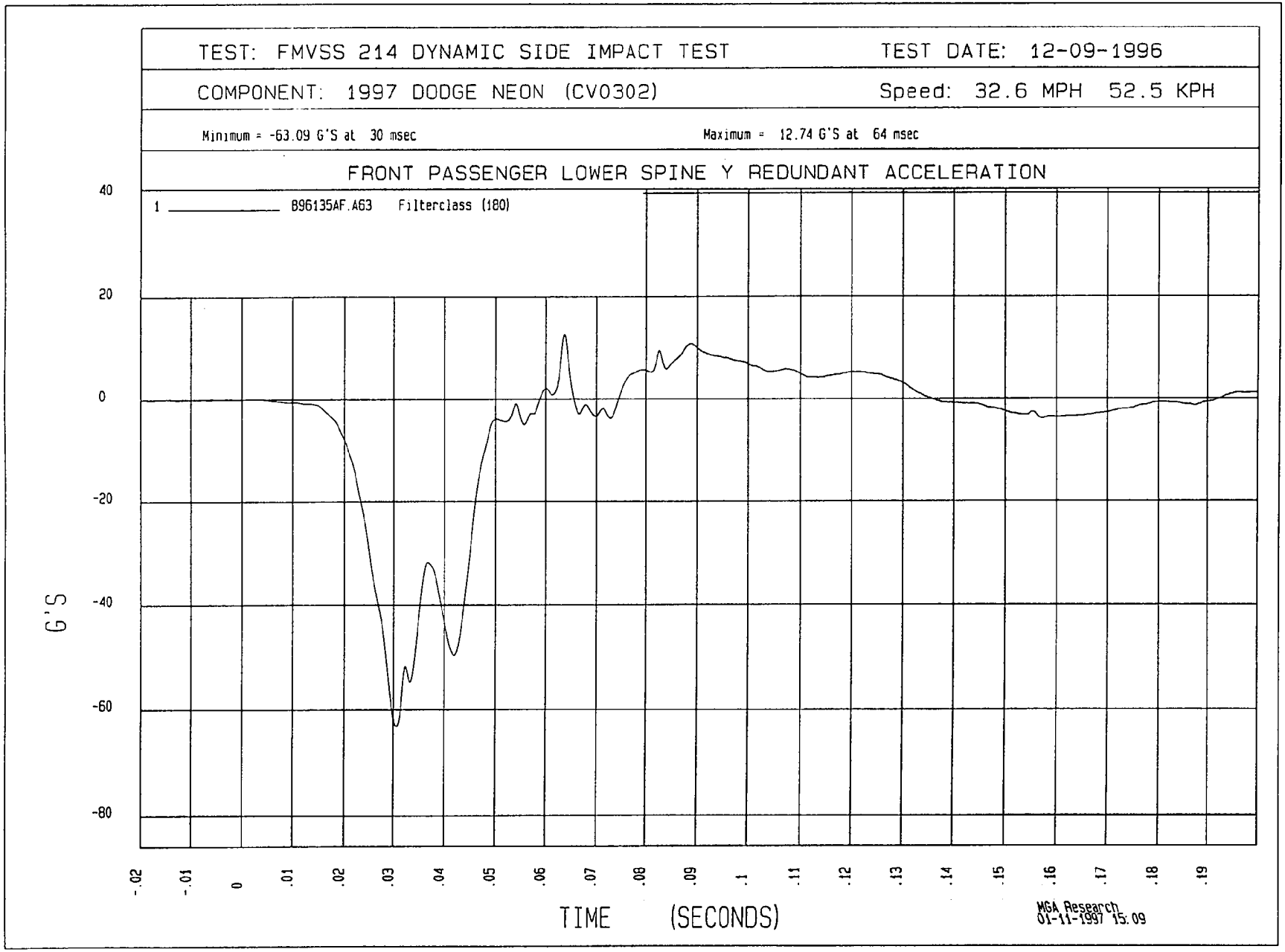
.16
.17
.18
.19
TIME Seconds
MGA Research
01-11-1997 15:16


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -60.76 G'S at 26 msec
Maximum = 9.95 G'S at 83 msec
FRONT PASSENGER LOWER RIB Y REDUNDANT ACCELERATION
1 B96135AF.A62 Filterclass (180)
40
20
0
-20
-40
-60
-80
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
01-11-1997 15:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -36.60 KPH at 63 msec
Maximum = 0 KPH at -20 msec
FRONT PASSENGER LOWER RIB Y REDUNDANT VELOCITY
1 B96135AI.V62 Filterclass (180)
0
-10
-20
-30
KPH
-.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
01-11-1997 15:16


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -63.09 G'S at 30 msec
Maximum = 12.74 G'S at 64 msec
FRONT PASSENGER LOWER SPINE Y REDUNDANT ACCELERATION
1 B96135AF.A63 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
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.14
.15
.16
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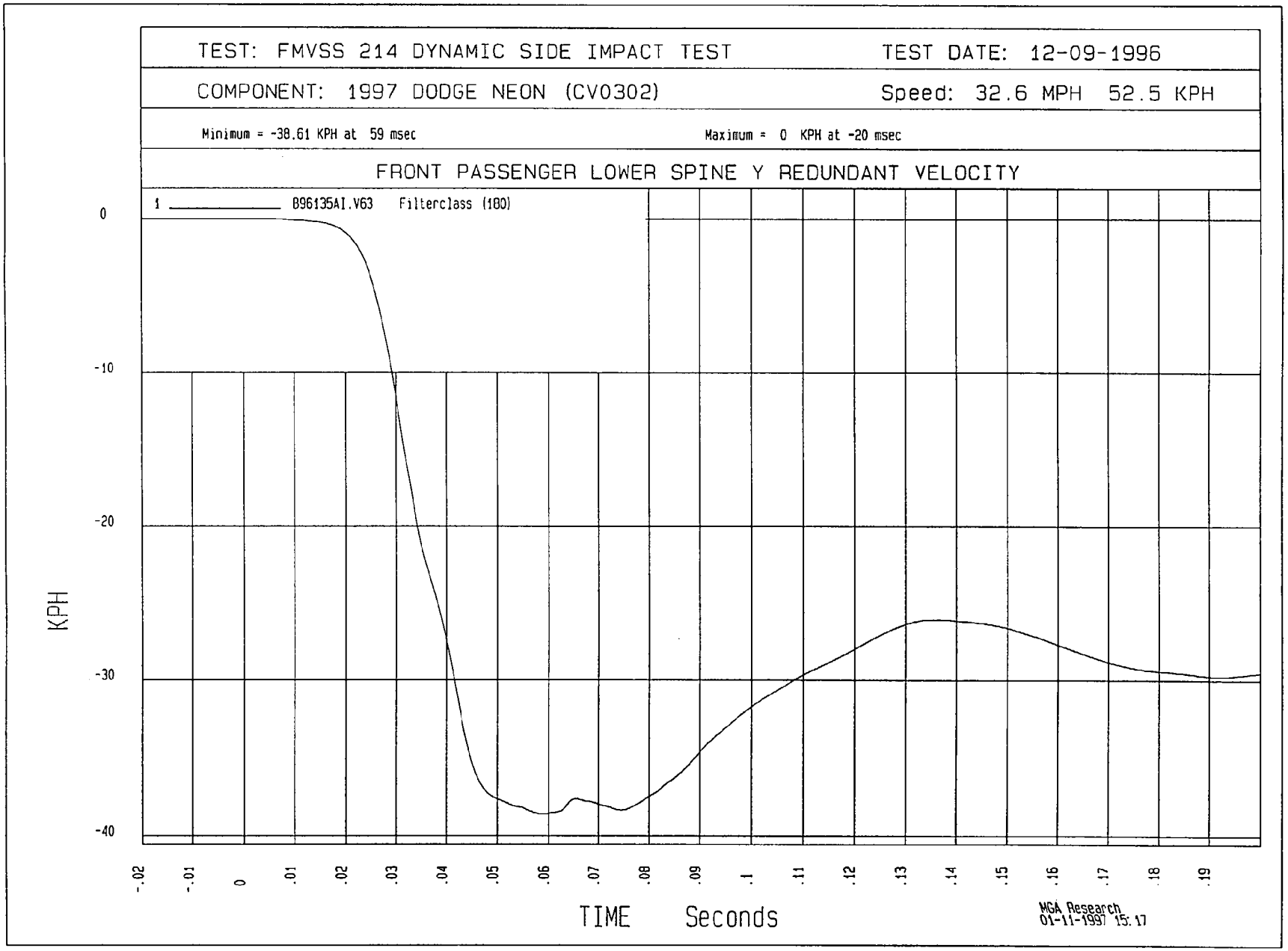
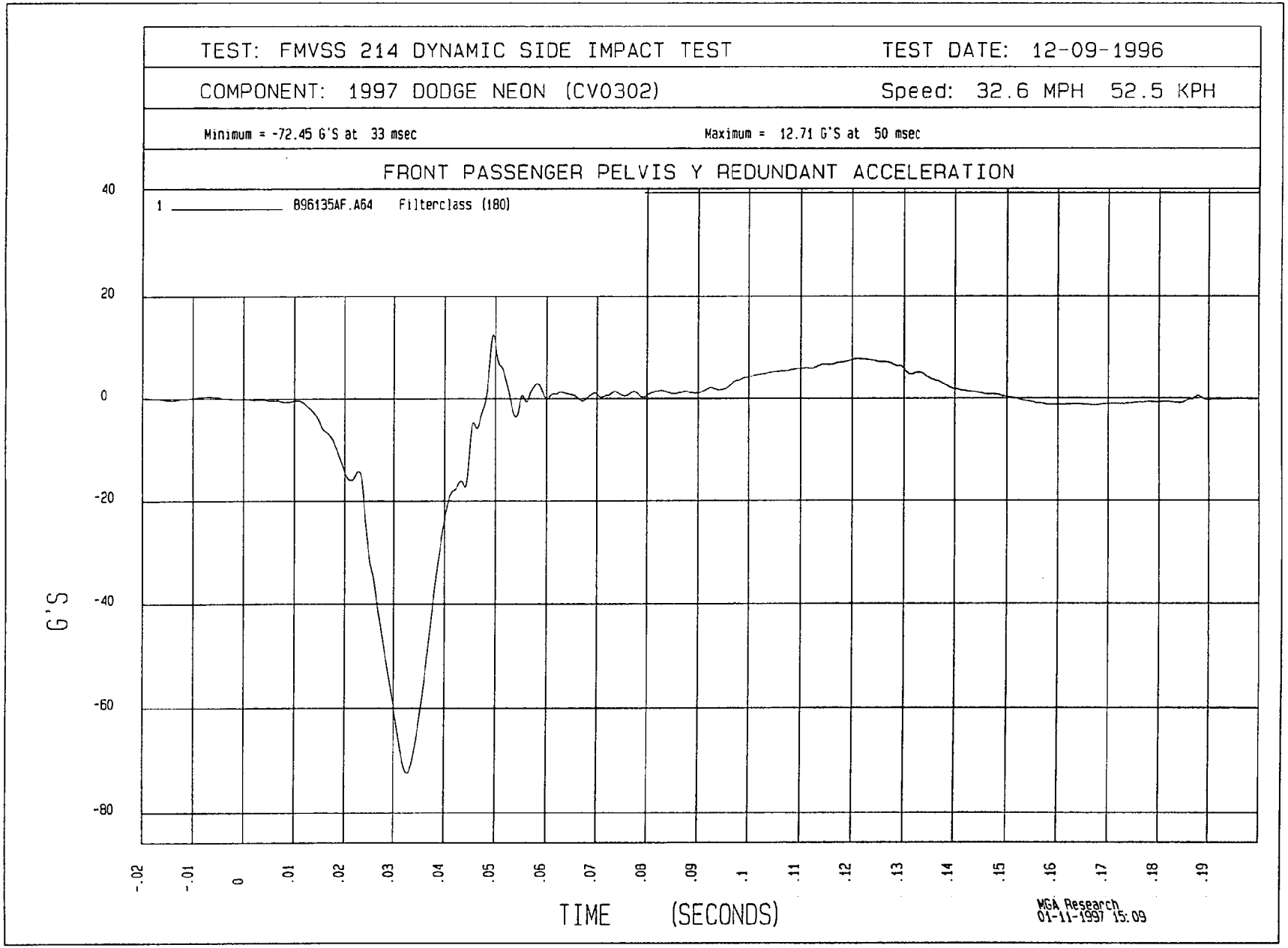
.18
.19
TIME (SECONDS)
MGA Research
01-11-1997 15:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -38.61 KPH at 59 msec
Maximum = 0 KPH at -20 msec
FRONT PASSENGER LOWER SPINE Y REDUNDANT VELOCITY
1 B96135AI.V63 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.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
01-11-1997 15:17


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -72.45 G'S at 33 msec
Maximum = 12.71 G'S at 50 msec
FRONT PASSENGER PELVIS Y REDUNDANT ACCELERATION
1 B96135AF.A64 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
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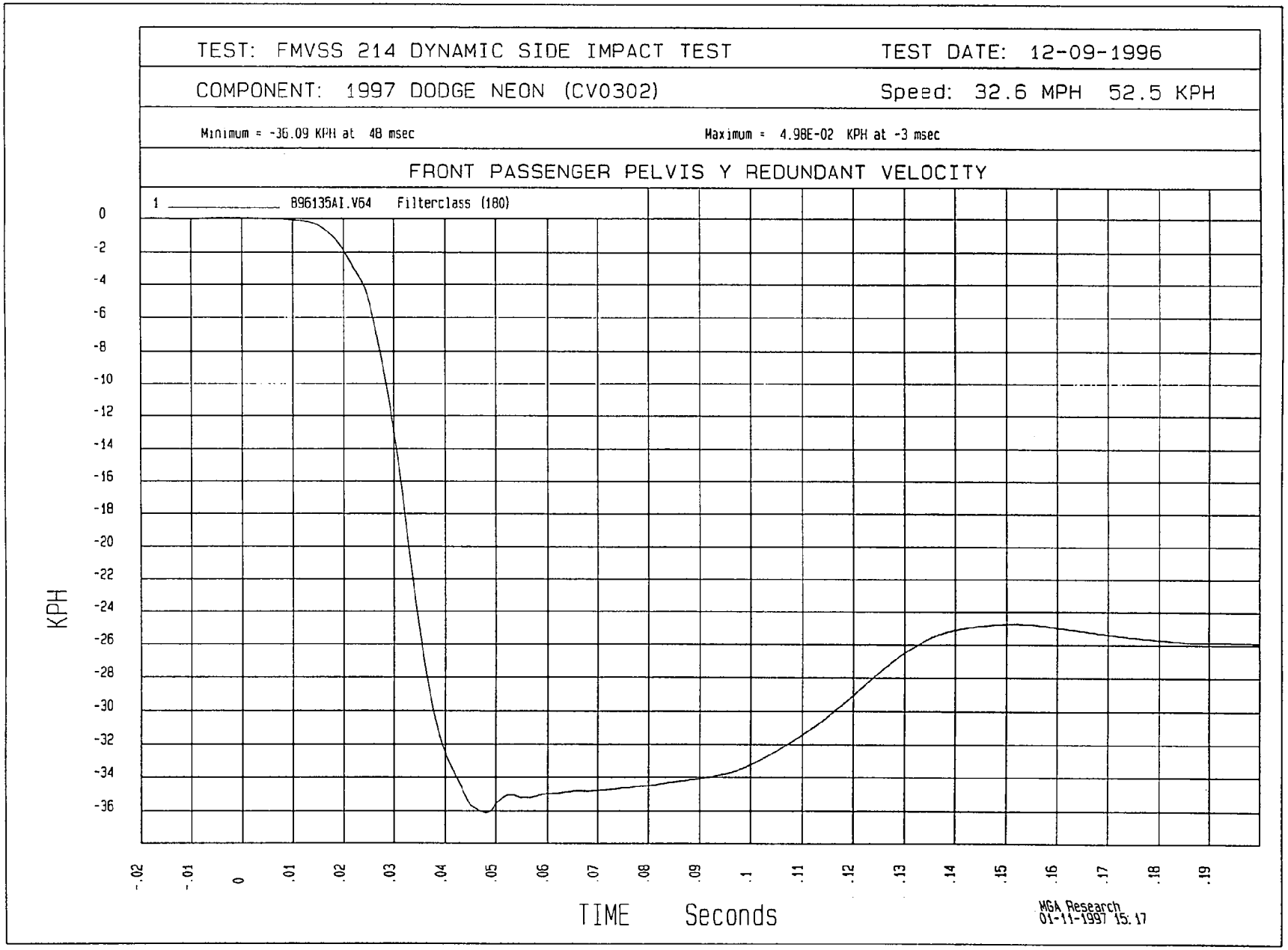
TIME (SECONDS)
MGA Research
01-11-1997 15:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -36.09 KPH at 48 msec
Maximum = 4.98E-02 KPH at -3 msec
FRONT PASSENGER PELVIS Y REDUNDANT VELOCITY
1 896135AI.V64 Filterclass (180)
KPH
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
-32
-34
-36
-.02
-.01
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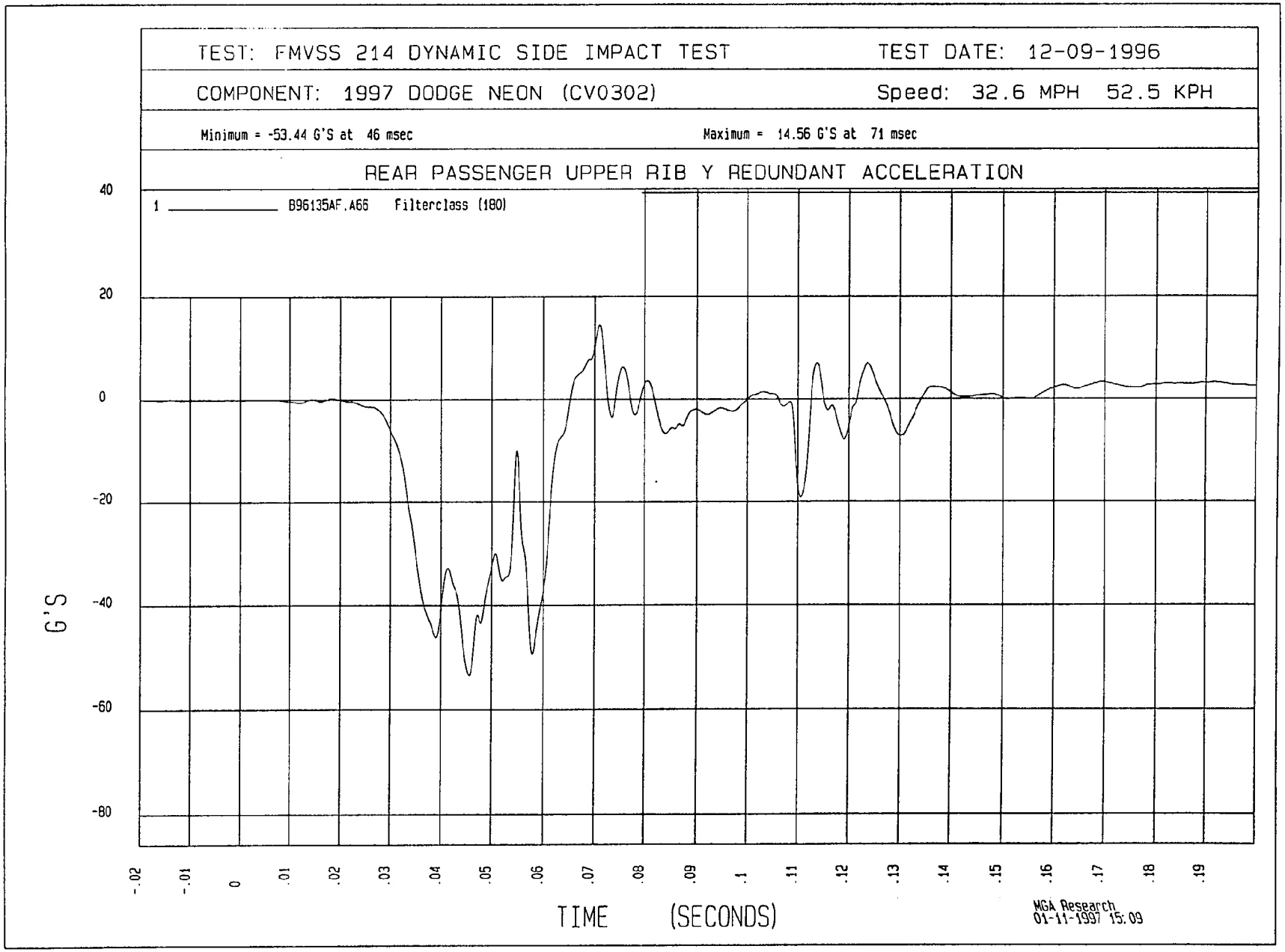
TIME Seconds
MGA Research
01-11-1997 15:17


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -53.44 G'S at 46 msec
Maximum = 14.56 G'S at 71 msec
REAR PASSENGER UPPER RIB Y REDUNDANT ACCELERATION
1 B96135AF.A66 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
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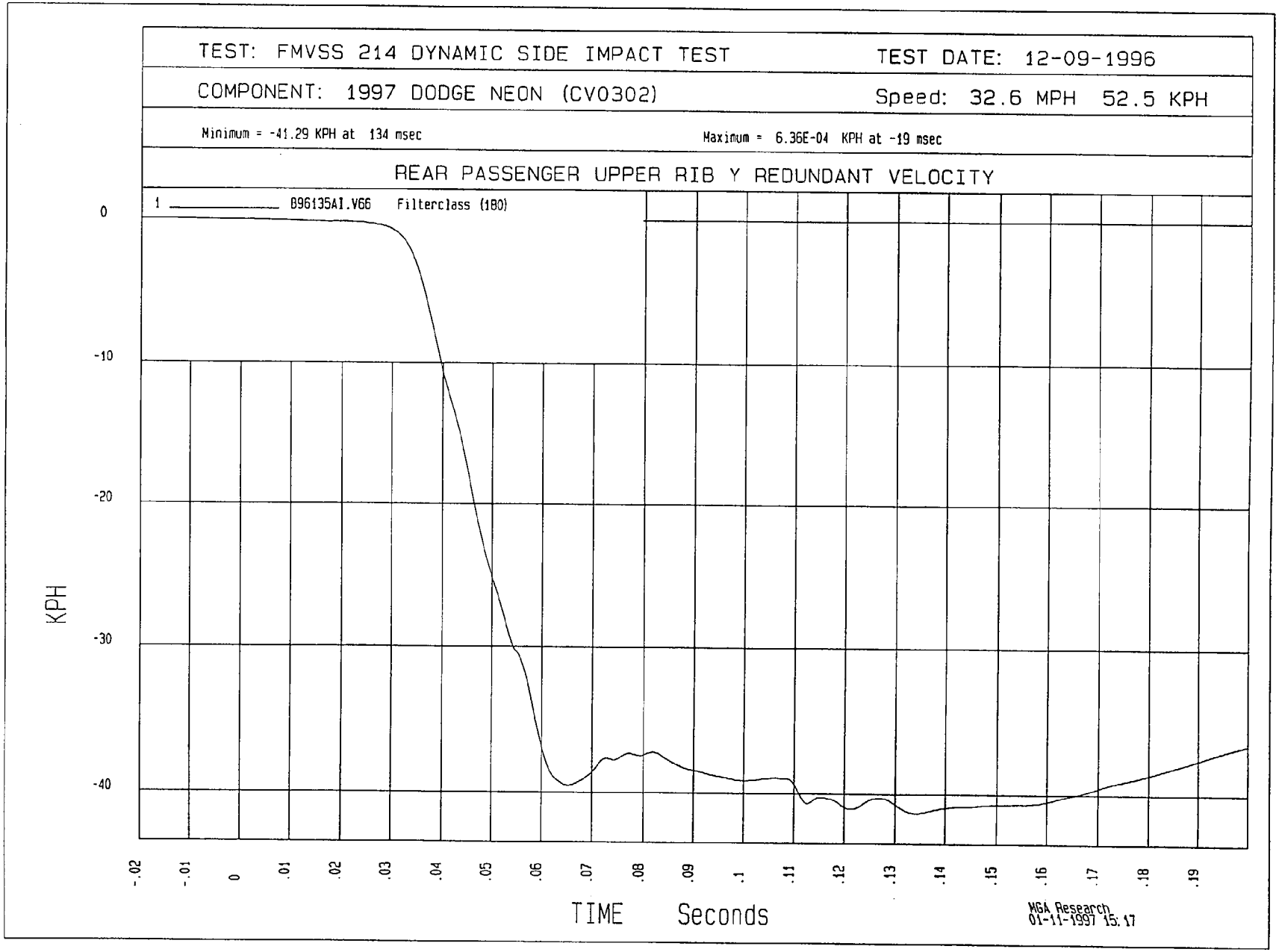
TIME (SECONDS)
MGA Research
01-11-1997 15:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -41.29 KPH at 134 msec
Maximum = 6.36E-04 KPH at -19 msec
REAR PASSENGER UPPER RIB Y REDUNDANT VELOCITY
1 B96135A1.V66 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.02
-.01
0
.01
.02
.03
.04
.05
.06
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.1
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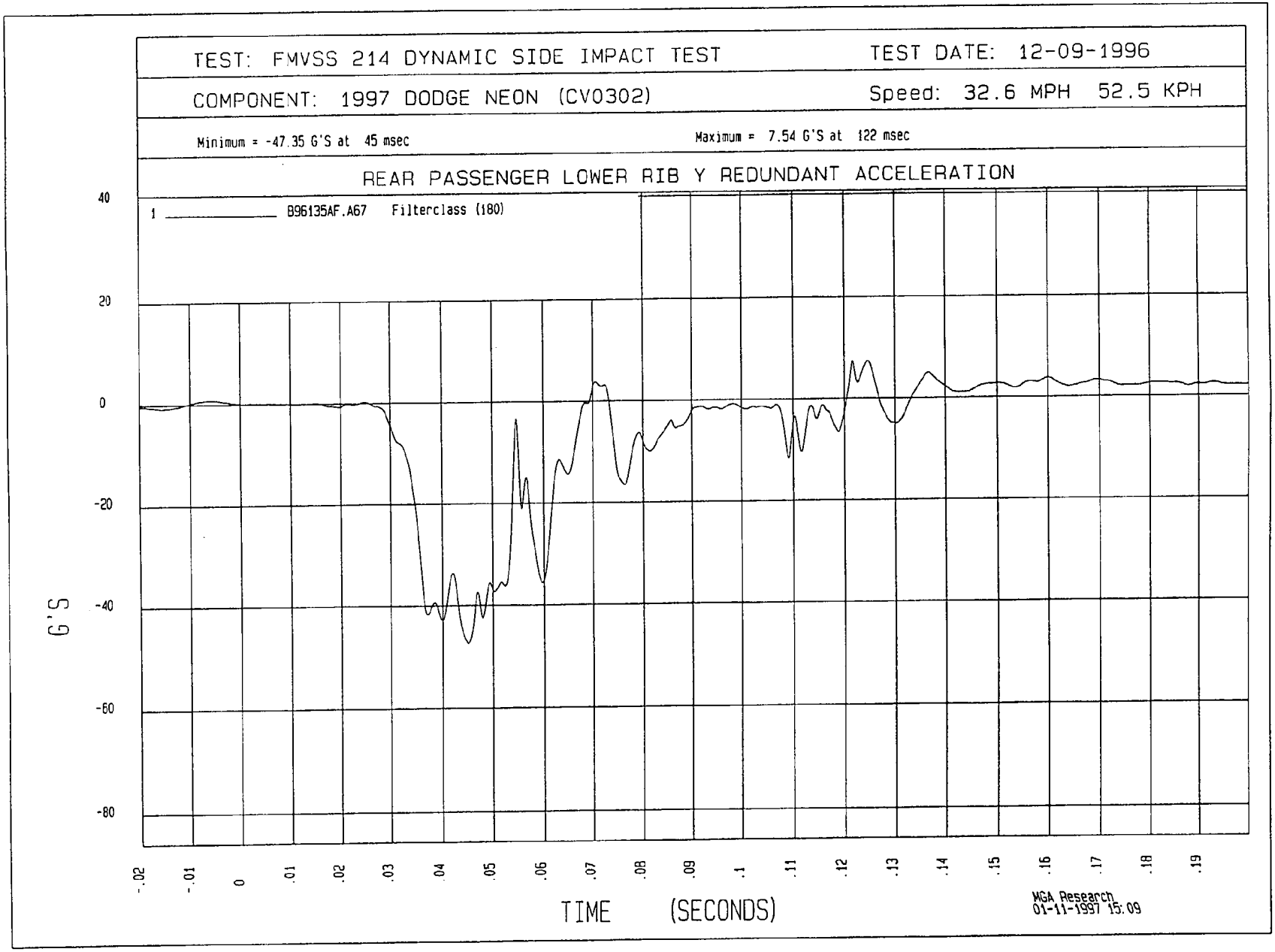
TIME Seconds
MGA Research
01-11-1997 15:17


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -47.35 G'S at 45 msec
Maximum = 7.54 G'S at 122 msec
REAR PASSENGER LOWER RIB Y REDUNDANT ACCELERATION
1 B96135AF.A67 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
.03
.04
.05
.06
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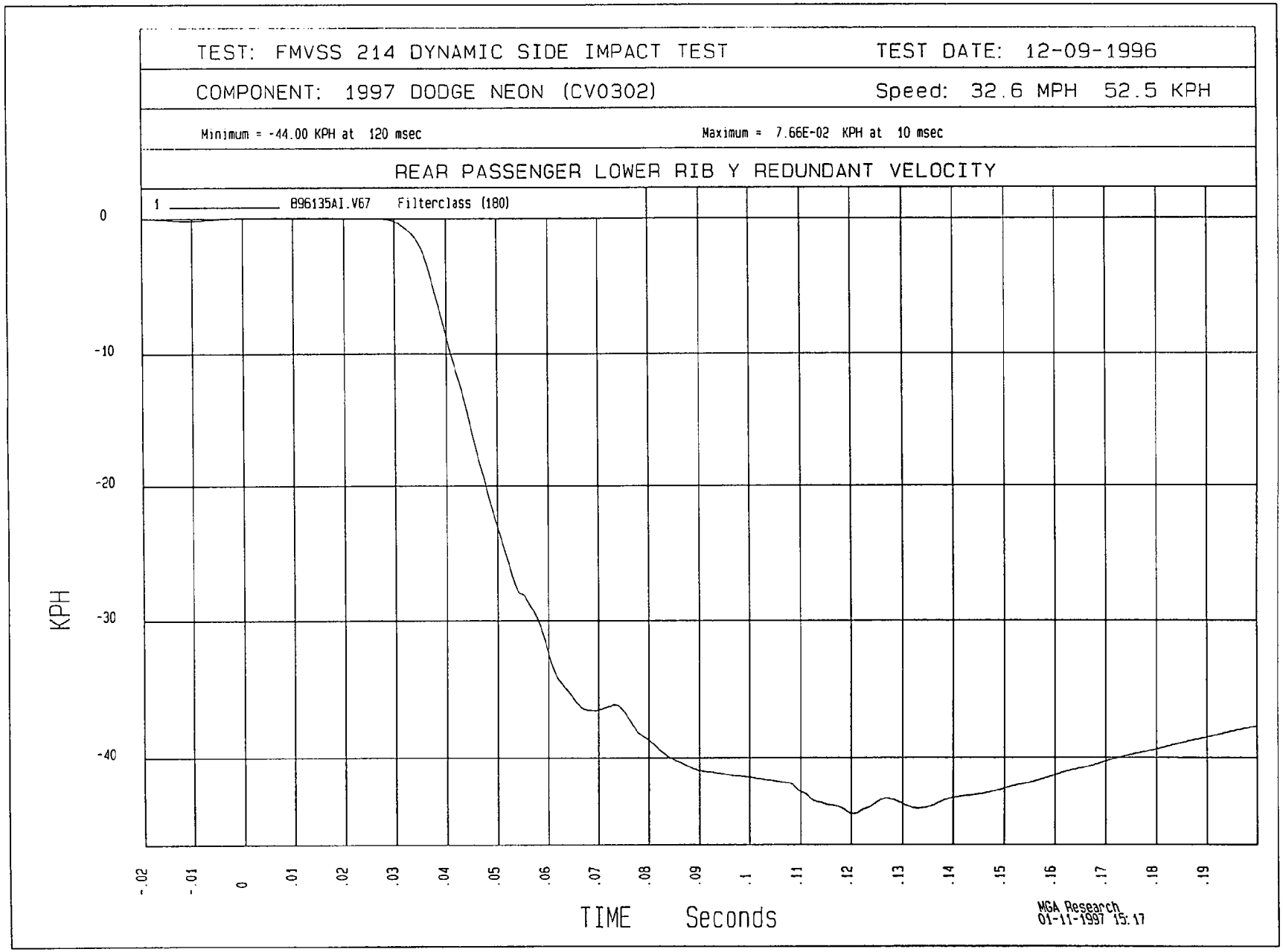
TIME (SECONDS)
MGA Research
01-11-1997 15:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -44.00 KPH at 120 msec
Maximum = 7.66E-02 KPH at 10 msec
REAR PASSENGER LOWER RIB Y REDUNDANT VELOCITY
1 B96135A1.V67 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.02
-.01
0
.01
.02
.03
.04
.05
.06
.07
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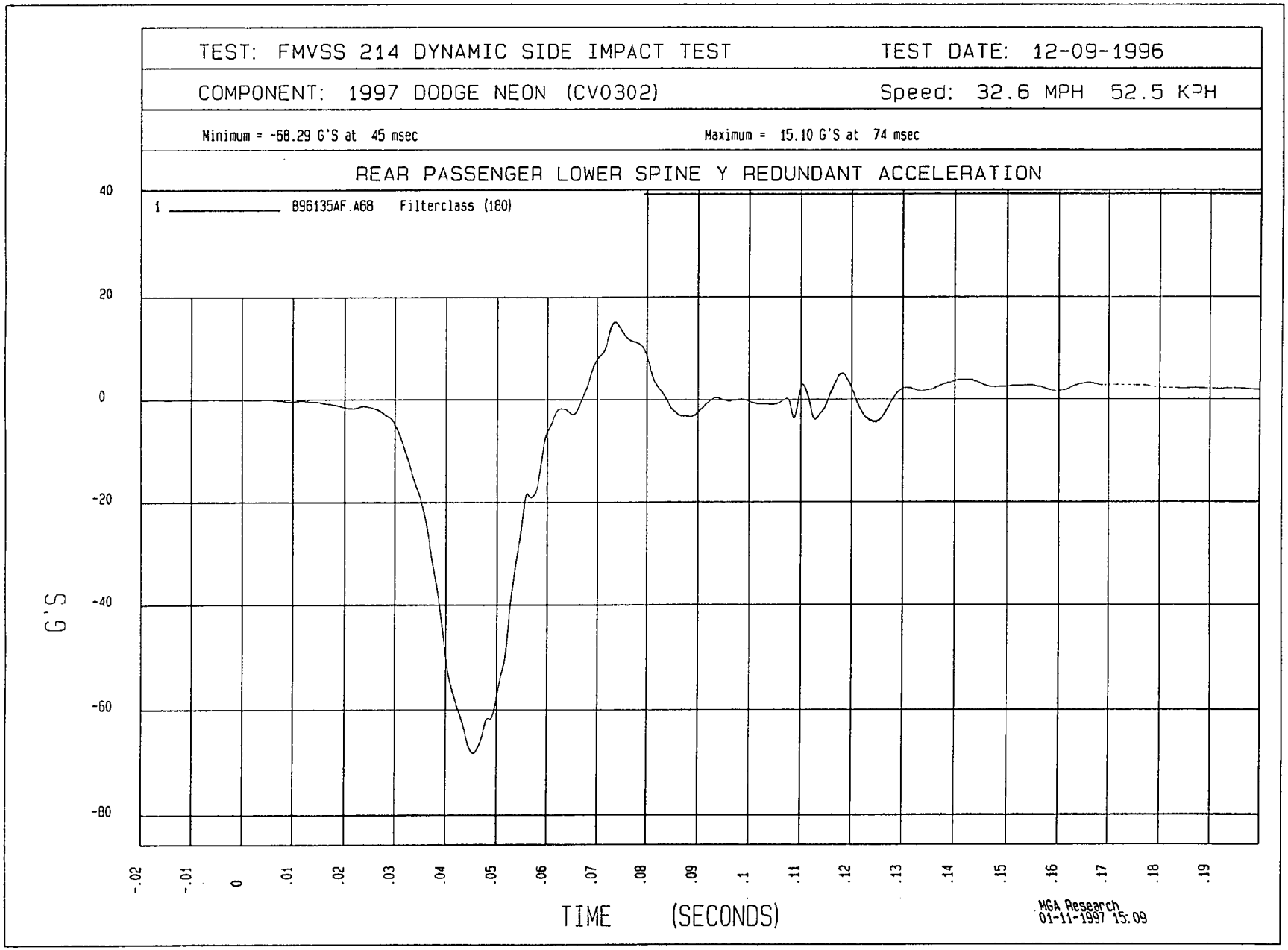
TIME Seconds
MGA Research
01-11-1997 15:17


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -68.29 G'S at 45 msec
Maximum = 15.10 G'S at 74 msec
REAR PASSENGER LOWER SPINE Y REDUNDANT ACCELERATION
1 896135AF.A68 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
.03
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.05
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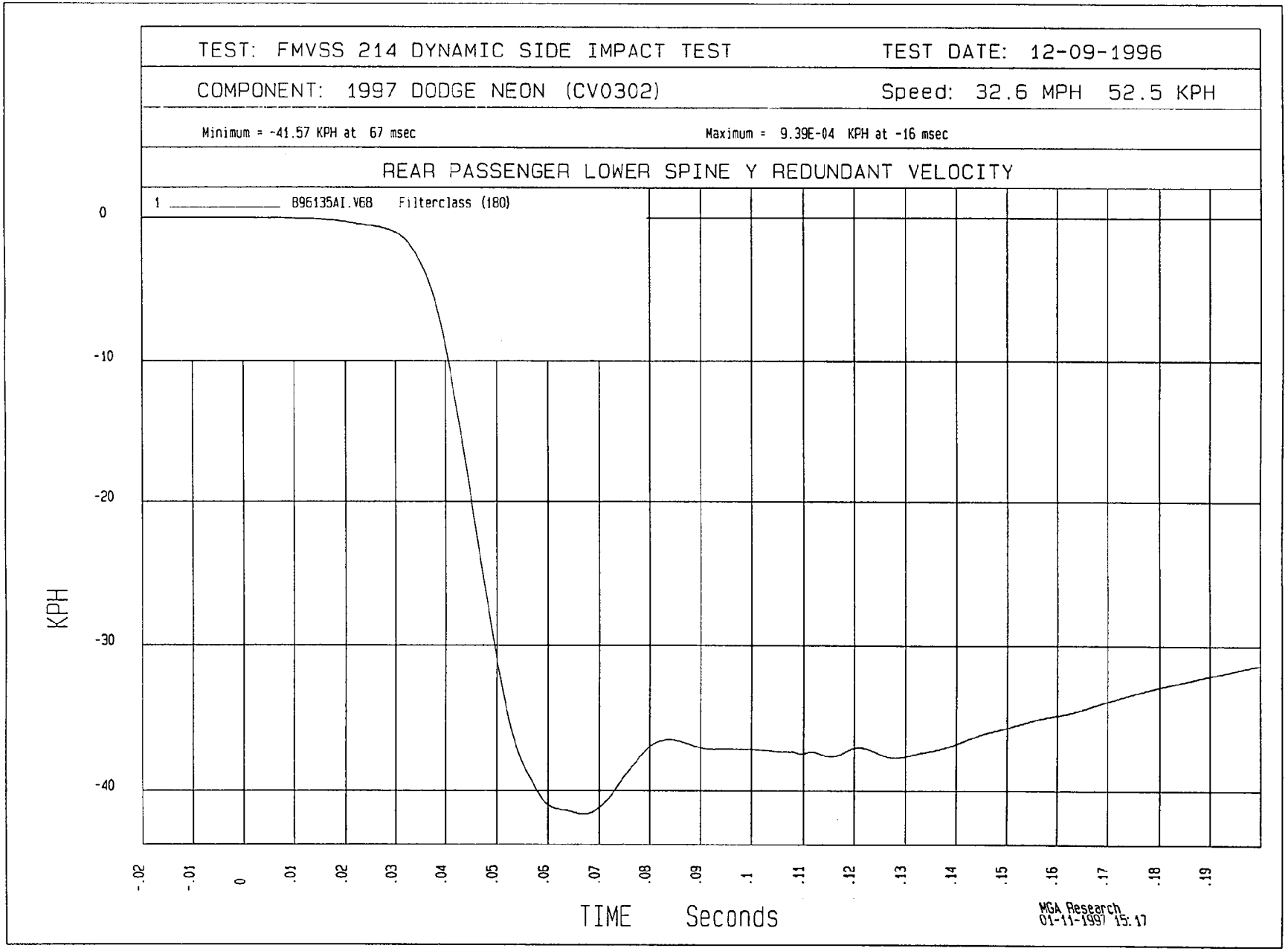
TIME (SECONDS)
MGA Research
01-11-1997 15:09


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -41.57 KPH at 67 msec
Maximum = 9.39E-04 KPH at -16 msec
REAR PASSENGER LOWER SPINE Y REDUNDANT VELOCITY
1 B96135AI.V68 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.02
-.01
0
.01
.02
.03
.04
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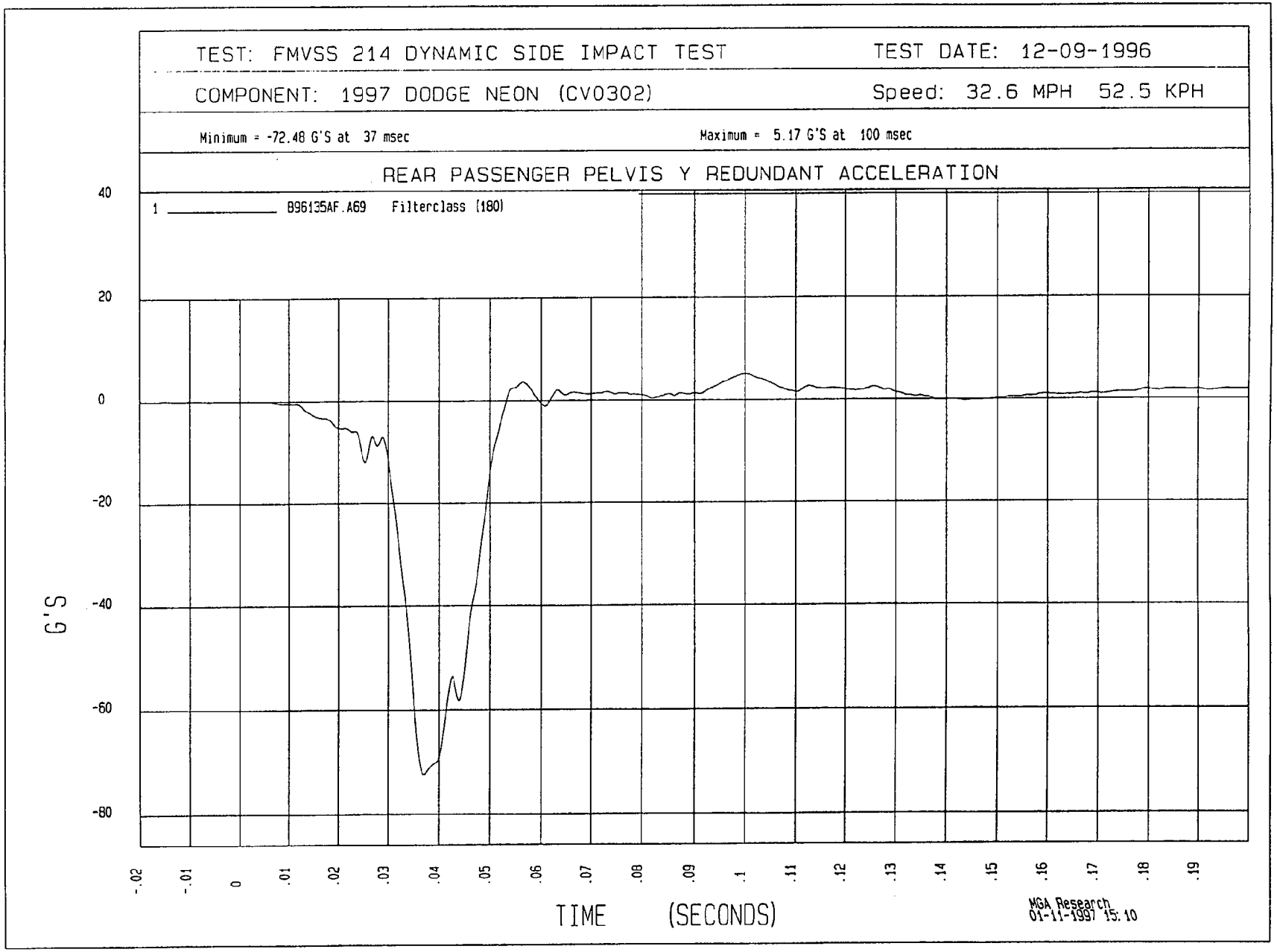
TIME Seconds
MGA Research
01-11-1997 15:17


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -72.48 G'S at 37 msec
Maximum = 5.17 G'S at 100 msec
REAR PASSENGER PELVIS Y REDUNDANT ACCELERATION
1 B96135AF.A69 Filterclass (180)
40
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
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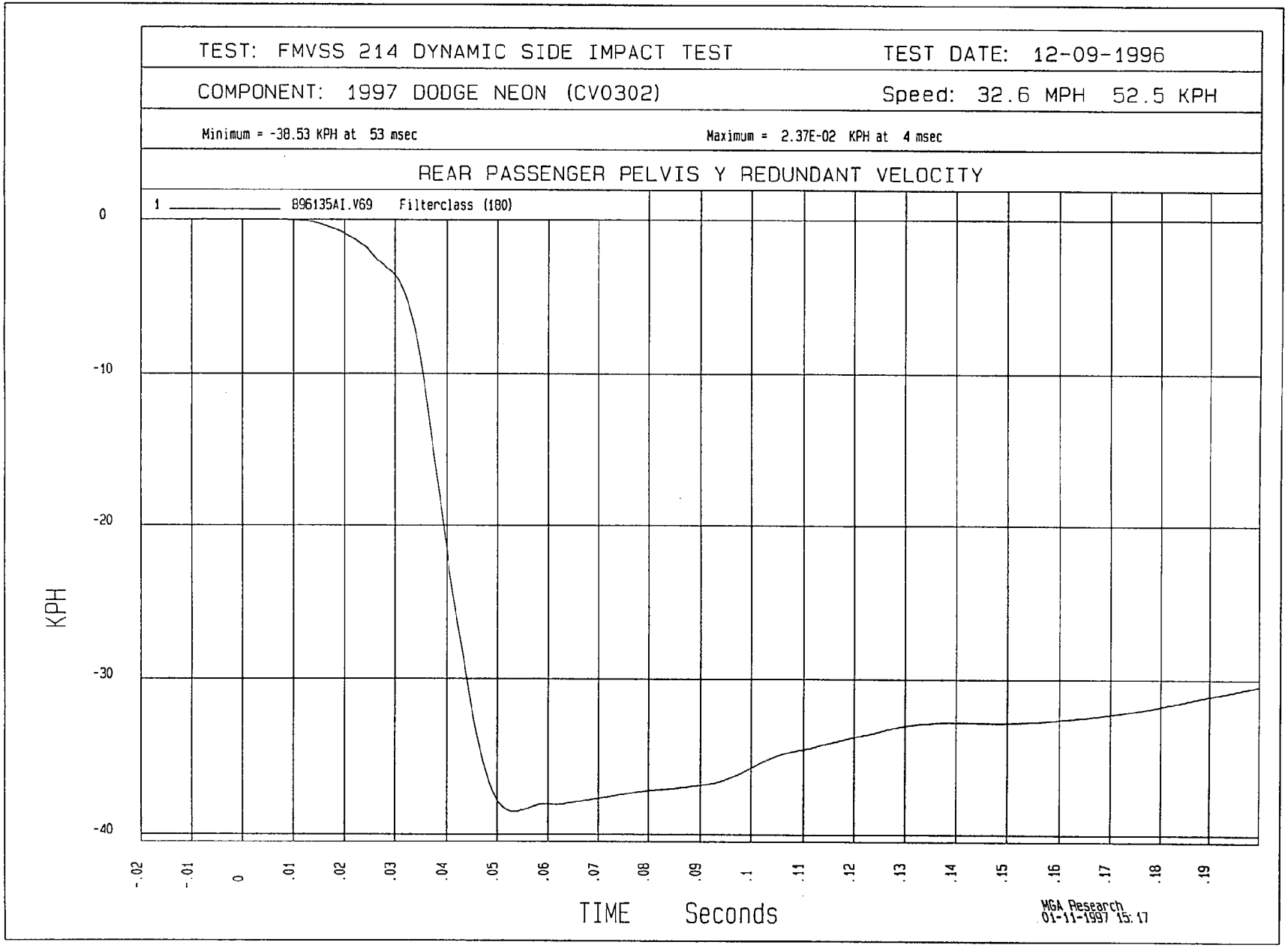
TIME (SECONDS)
MGA Research
01-11-1997 15:10


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -38.53 KPH at 53 msec
Maximum = 2.37E-02 KPH at 4 msec
REAR PASSENGER PELVIS Y REDUNDANT VELOCITY
1 B96135AI.V69 Filterclass (180)
0
-10
-20
-30
-40
KPH
-.02
-.01
0
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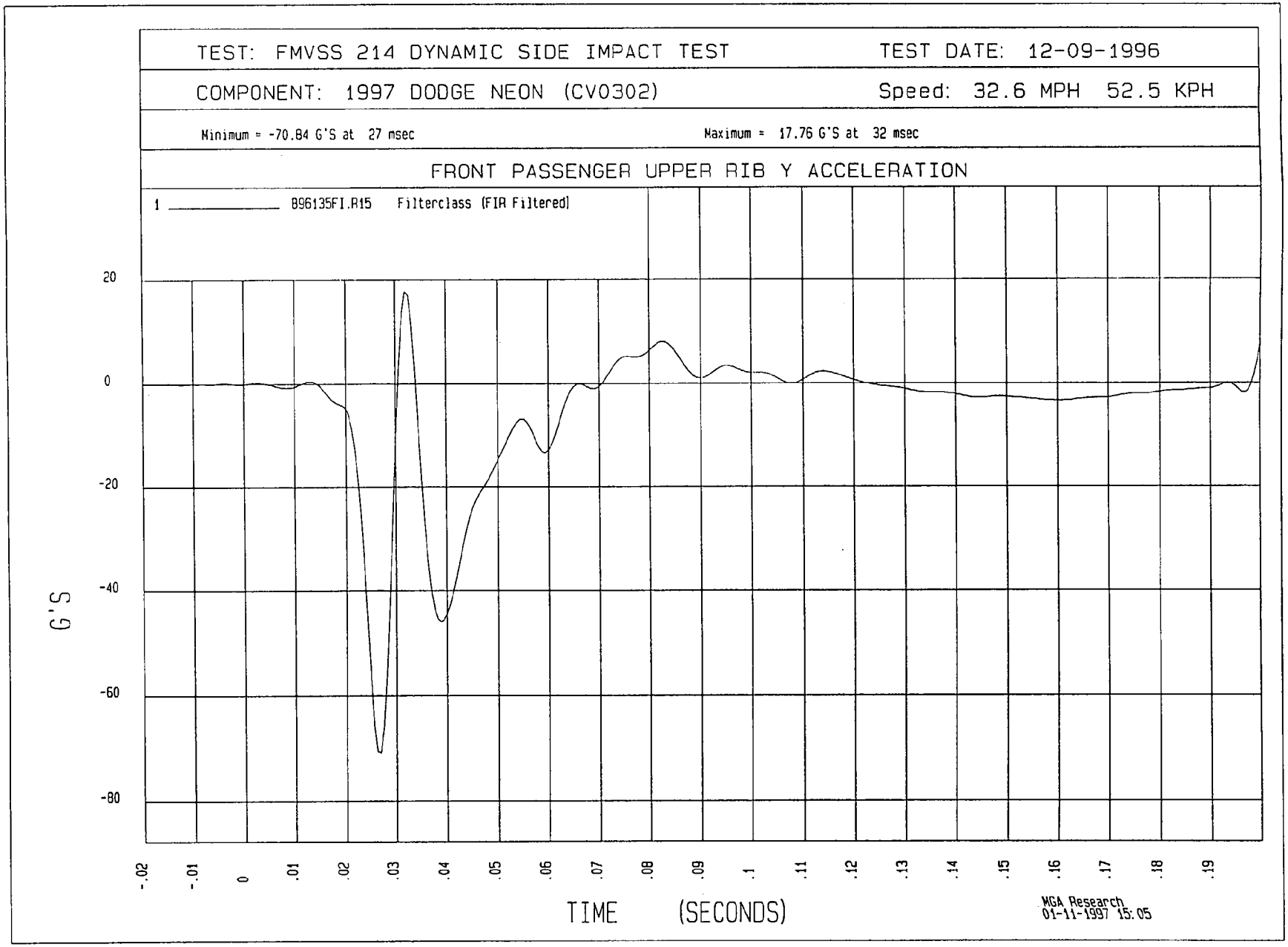
TIME Seconds
MGA Research
01-11-1997 15:17

FINITE IMPULSE RESPONSE (FIR) FILTERED DATA


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -70.84 G'S at 27 msec
Maximum = 17.76 G'S at 32 msec
FRONT PASSENGER UPPER RIB Y ACCELERATION
1 B96135FI.R15 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
G'S
-.02
-.01
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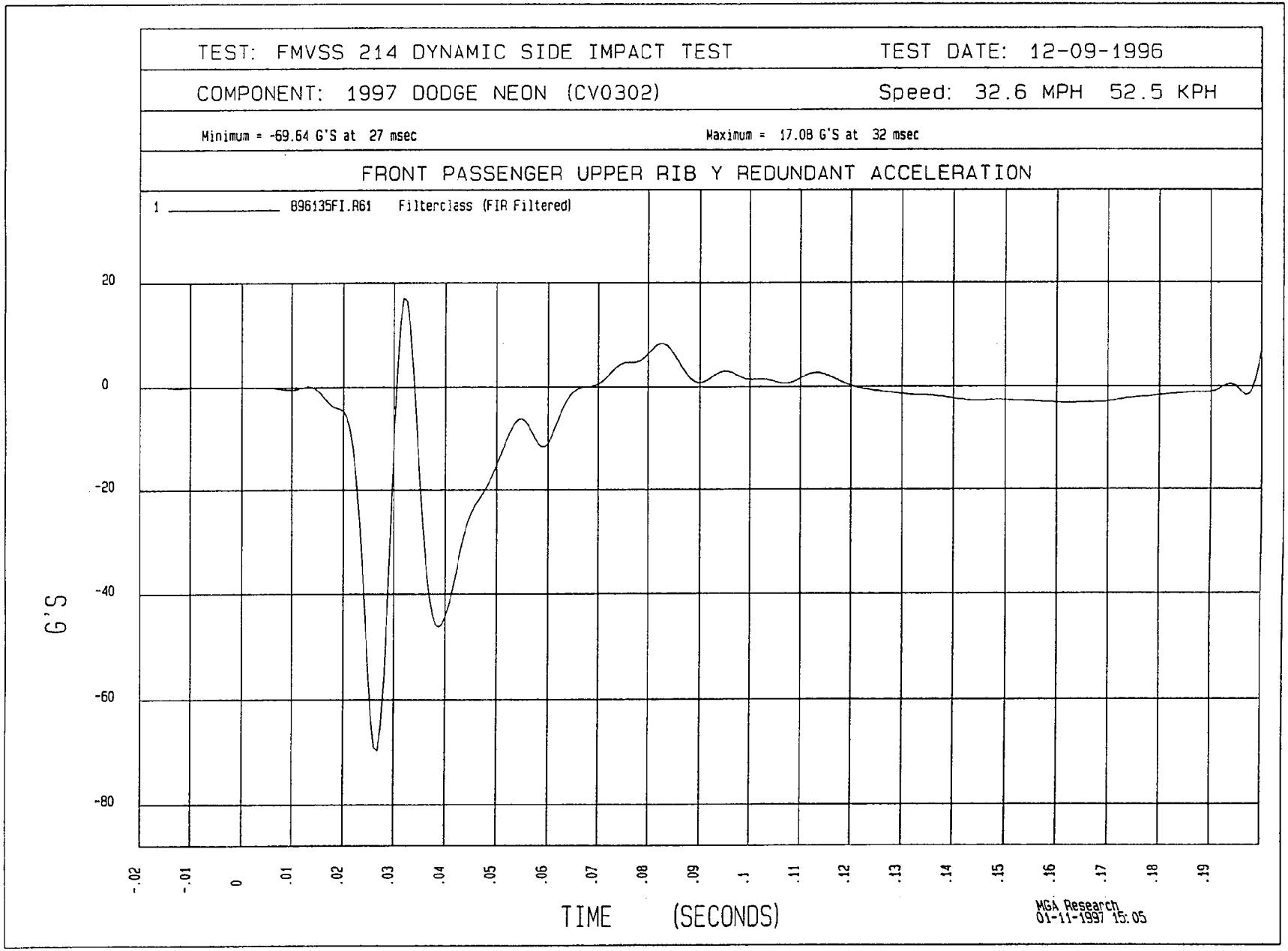
TIME (SECONDS)
MGA Research
01-11-1997 15:05


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -69.64 G'S at 27 msec
Maximum = 17.08 G'S at 32 msec
FRONT PASSENGER UPPER RIB Y REDUNDANT ACCELERATION
1 B96135FI.A61 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
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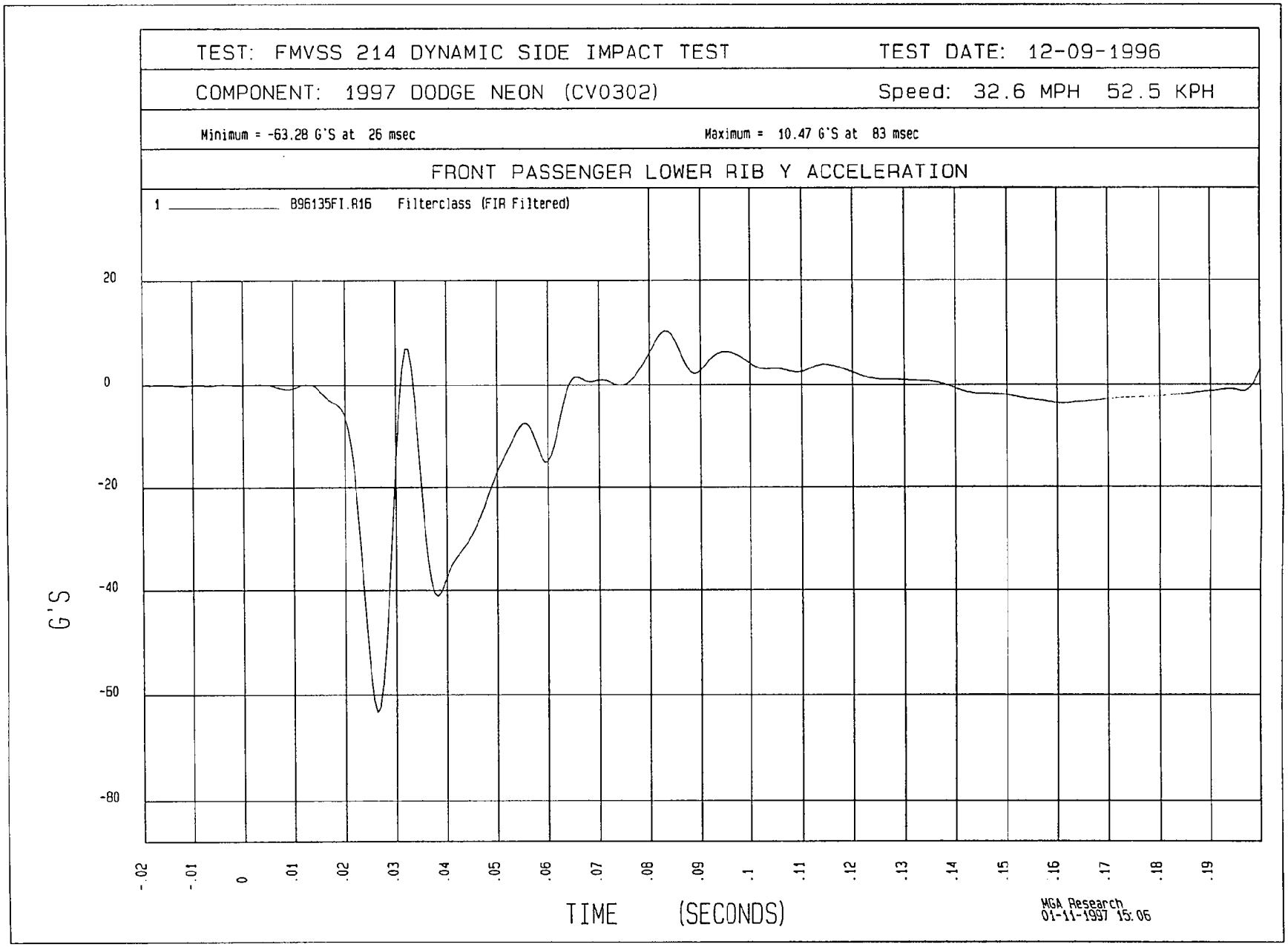
TIME (SECONDS)
MGA Research
01-11-1997 15:05


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -63.28 G'S at 26 msec
Maximum = 10.47 G'S at 83 msec
FRONT PASSENGER LOWER RIB Y ACCELERATION
1 B96135FI.R16 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
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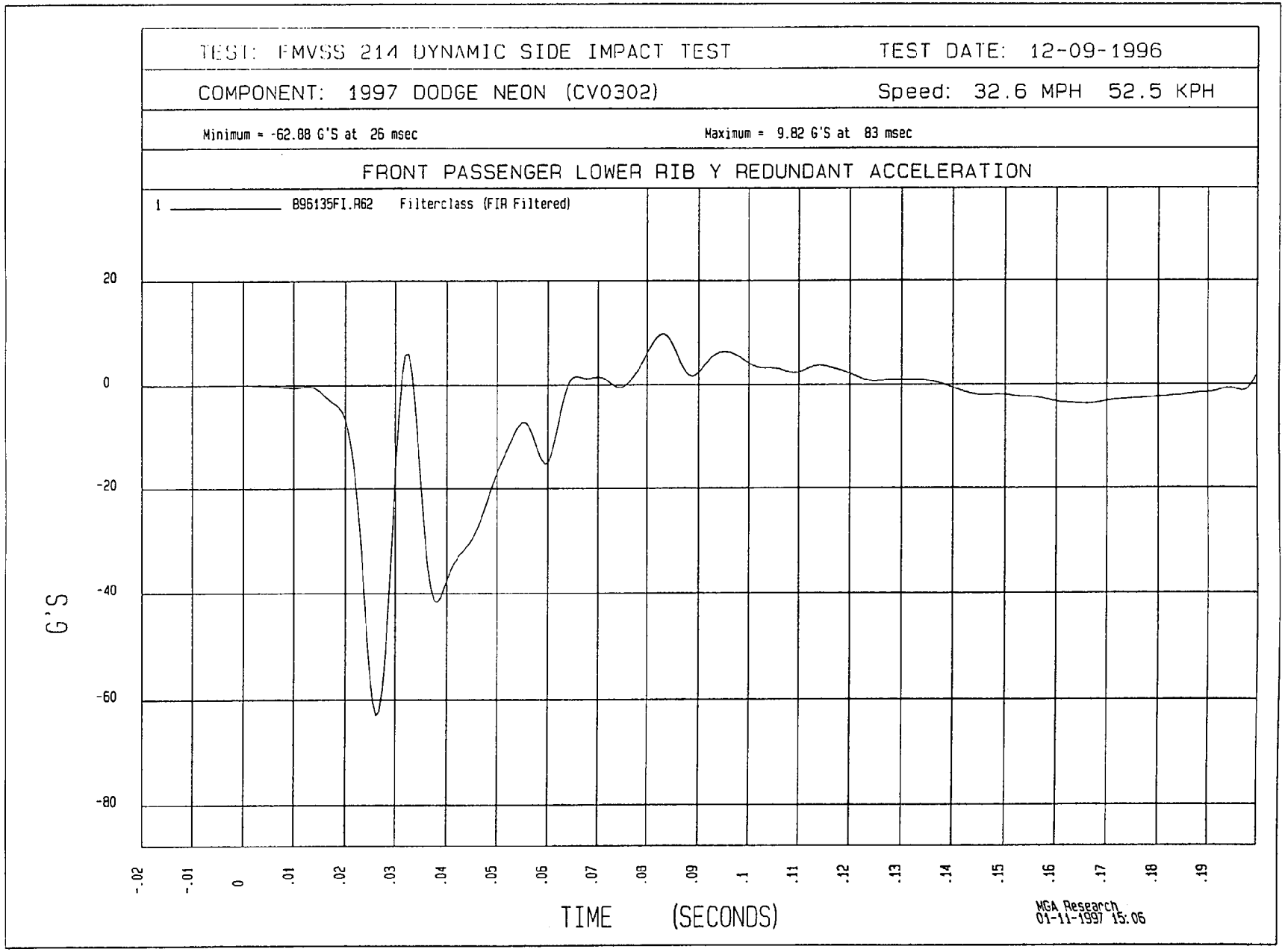
TIME (SECONDS)
MGA Research
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -62.88 G'S at 26 msec
Maximum = 9.82 G'S at 83 msec
FRONT PASSENGER LOWER RIB Y REDUNDANT ACCELERATION
1 B96135FI.A62 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
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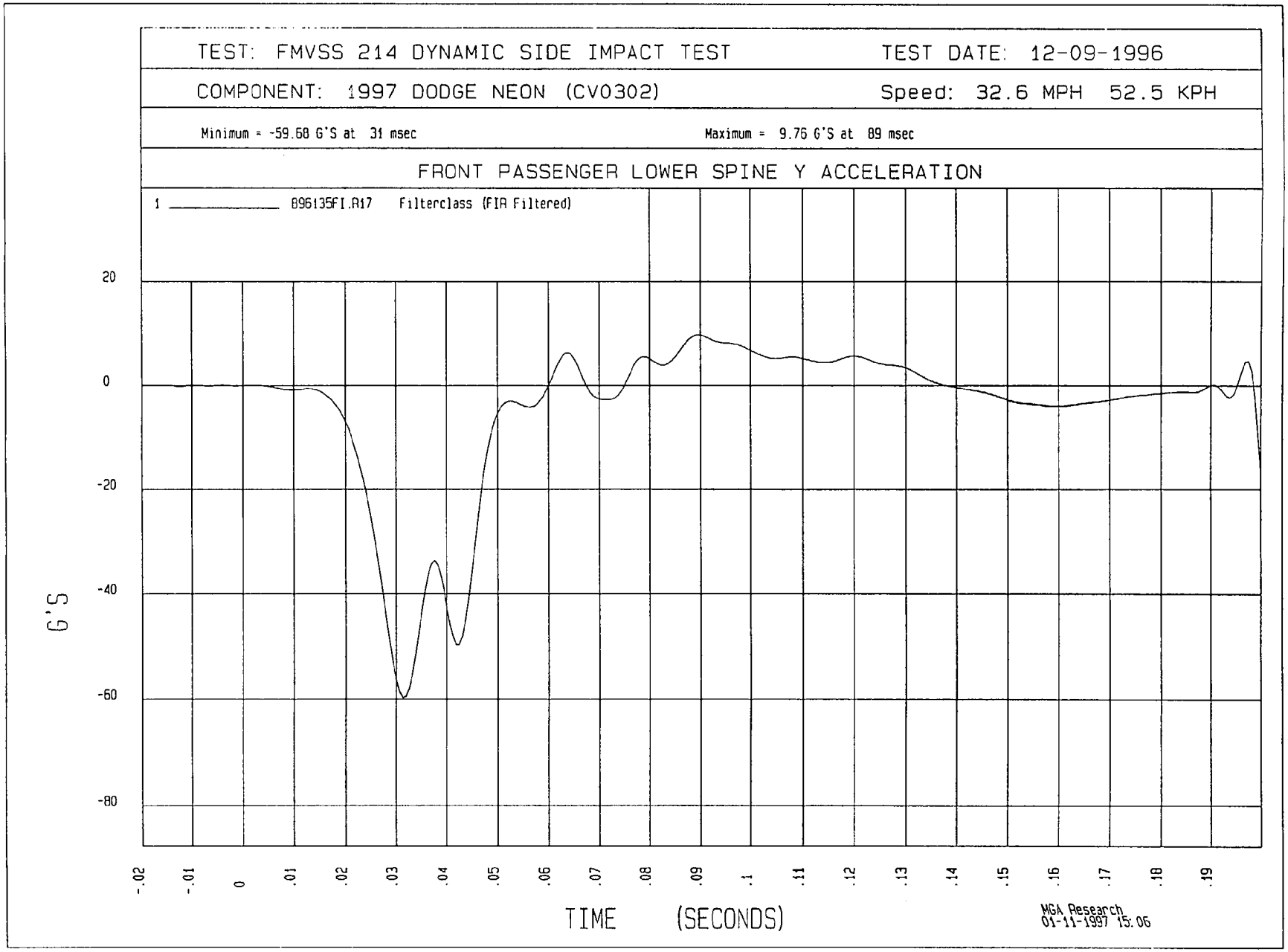
TIME (SECONDS)
MGA Research
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -59.68 G'S at 31 msec
Maximum = 9.76 G'S at 89 msec
FRONT PASSENGER LOWER SPINE Y ACCELERATION
1 896135FI.A17 Filterclass (FIA Filtered)
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
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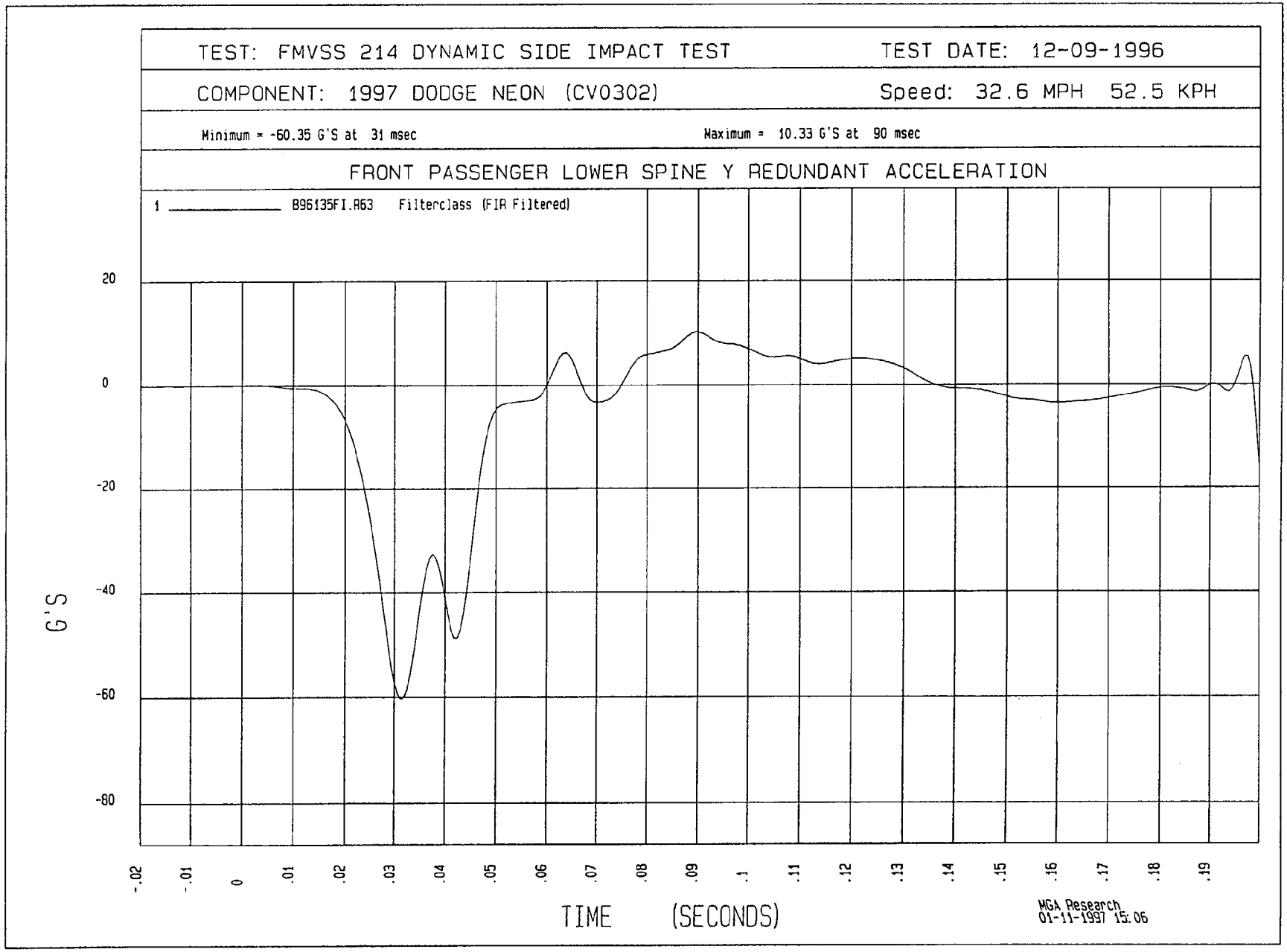
TIME (SECONDS)
MGA Research
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -60.35 G'S at 31 msec
Maximum = 10.33 G'S at 90 msec
FRONT PASSENGER LOWER SPINE Y REDUNDANT ACCELERATION
1 B96135FI.A63 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
G'S
-.02
-.01
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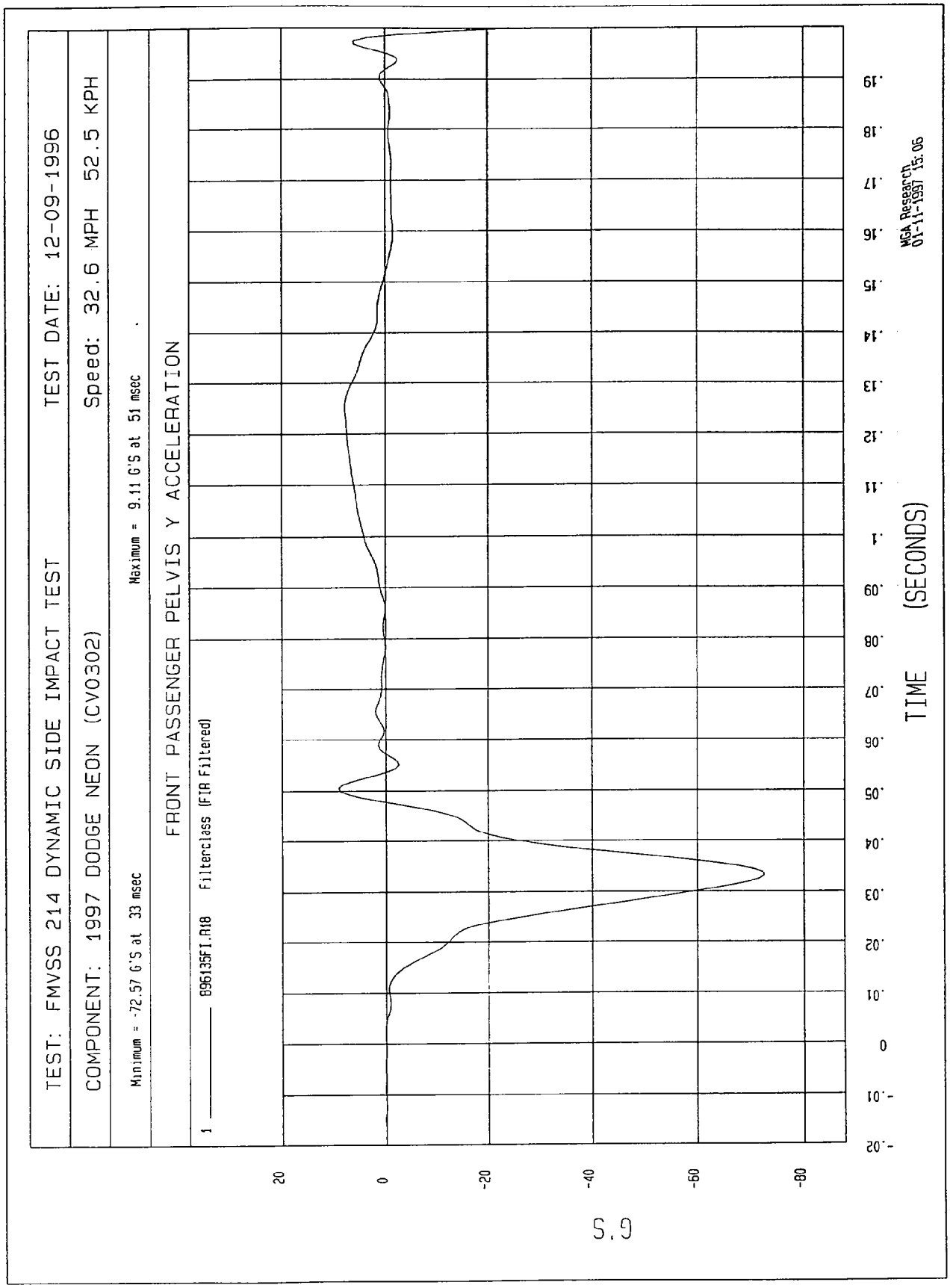
TIME (SECONDS)
MGA Research
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -72.57 G'S at 33 msec
Maximum = 9.11 G'S at 51 msec
FRONT PASSENGER PELVIS Y ACCELERATION
1 B96135FI.A18 Filterclass (FIA Filtered)
20
0
-20
-40
-60
-80
-.02
-.01
0
.01
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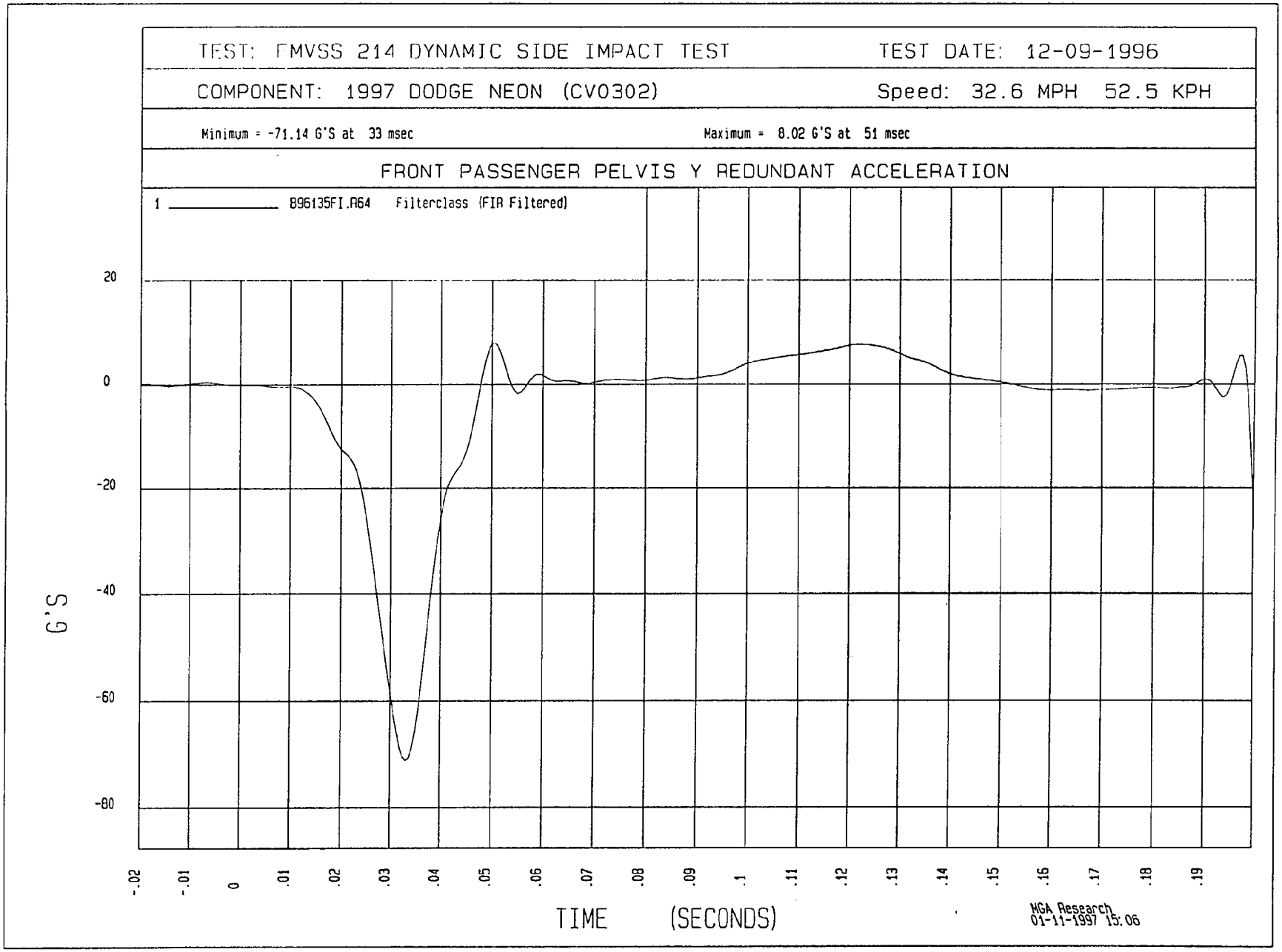
TIME (SECONDS)
MGA Research
01-11-1997 15:06
S.9


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -71.14 G'S at 33 msec
Maximum = 8.02 G'S at 51 msec
FRONT PASSENGER PELVIS Y REDUNDANT ACCELERATION
1 B96135FI.A64 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
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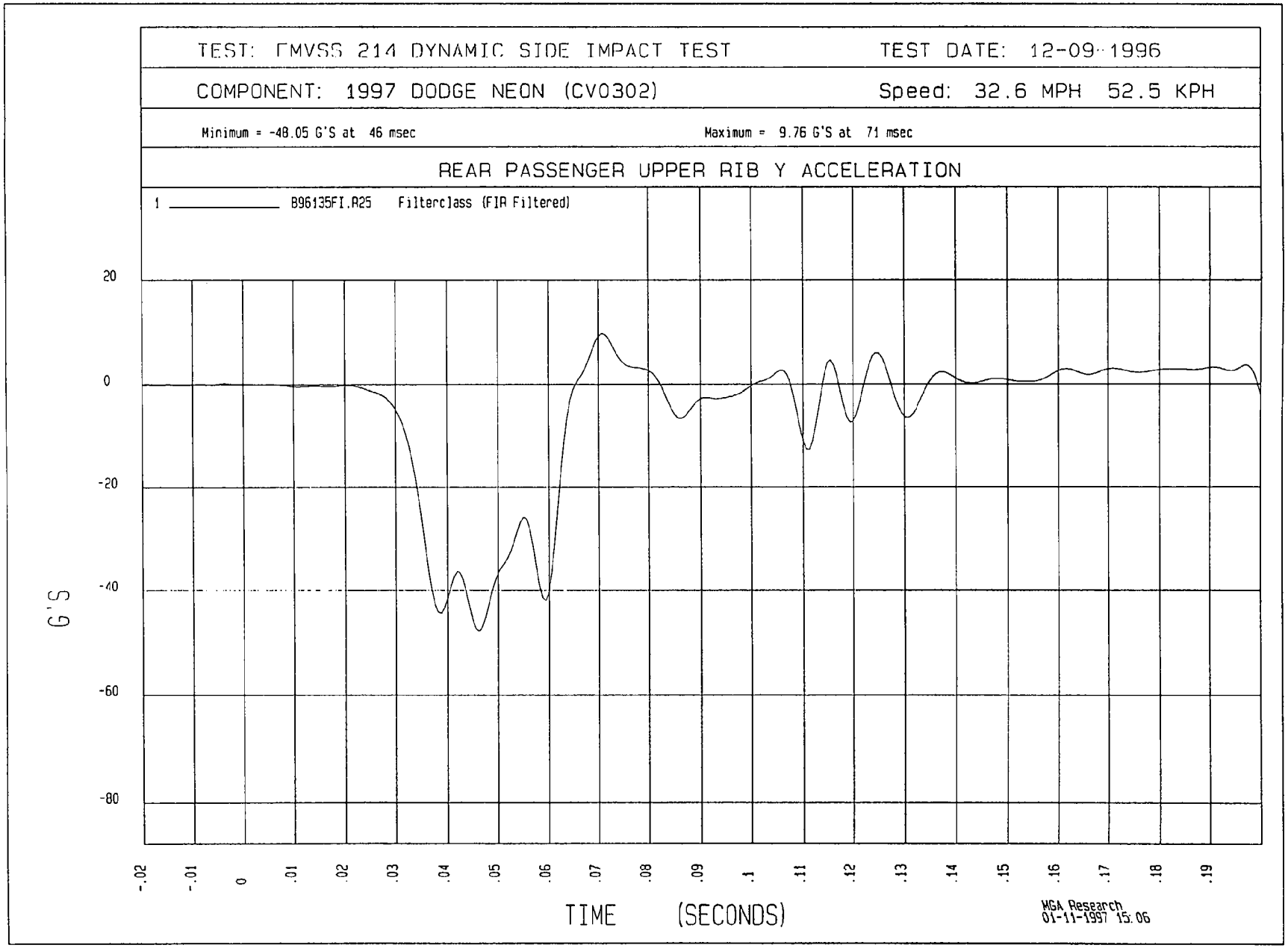
TIME (SECONDS)
NGA Research
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -48.05 G'S at 46 msec
Maximum = 9.76 G'S at 71 msec
REAR PASSENGER UPPER RIB Y ACCELERATION
1 B96135FI.A25 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
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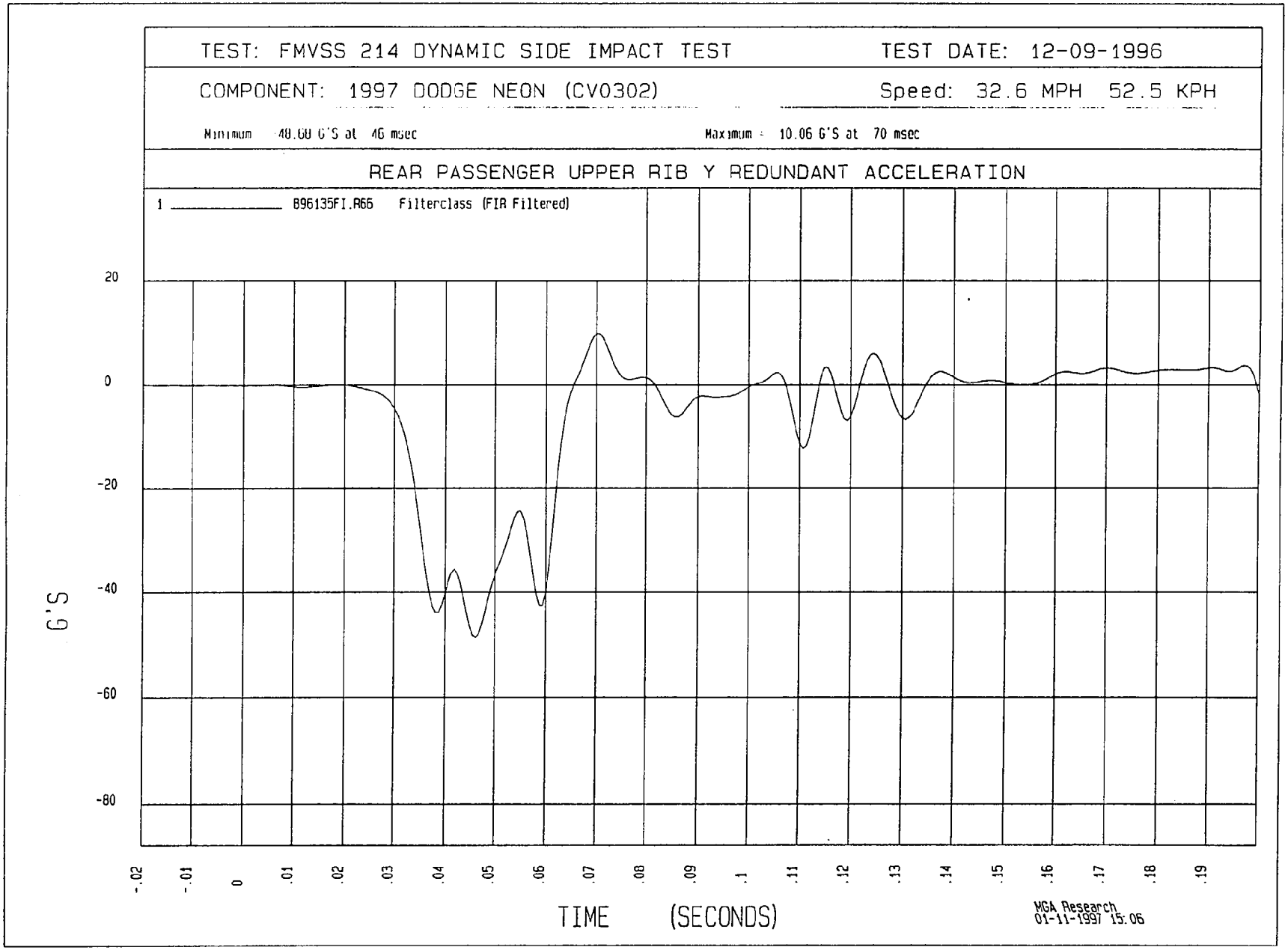
TIME (SECONDS)
MGA Research
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum -48.60 G'S at 46 msec
Maximum = 10.06 G'S at 70 msec
REAR PASSENGER UPPER RIB Y REDUNDANT ACCELERATION
1 B96135FI.A66 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
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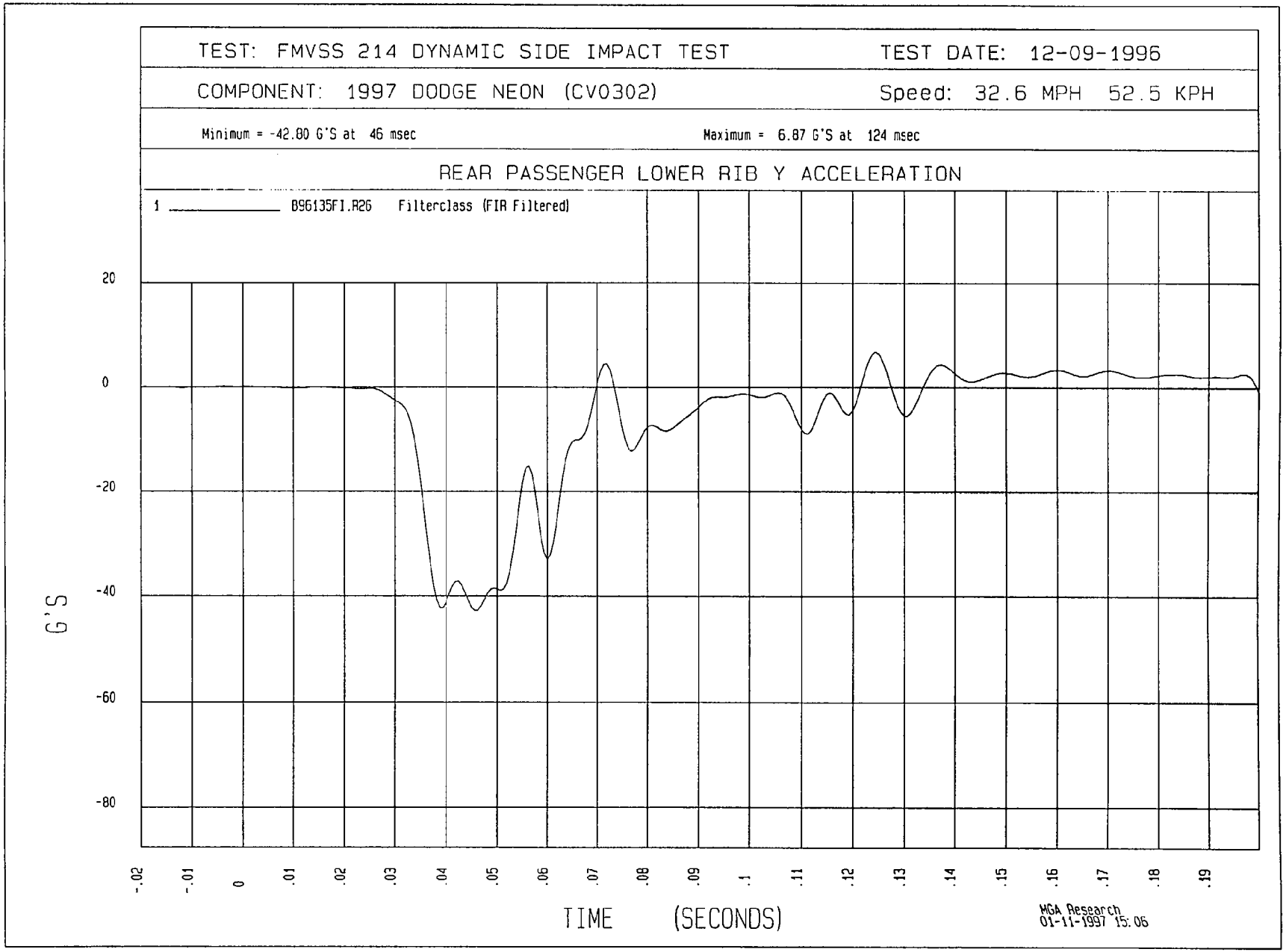
TIME (SECONDS)
MGA Research
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -42.80 G'S at 46 msec
Maximum = 6.87 G'S at 124 msec
REAR PASSENGER LOWER RIB Y ACCELERATION
1 B96135FI.R26 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
G'S
-.02
-.01
0
.01
.02
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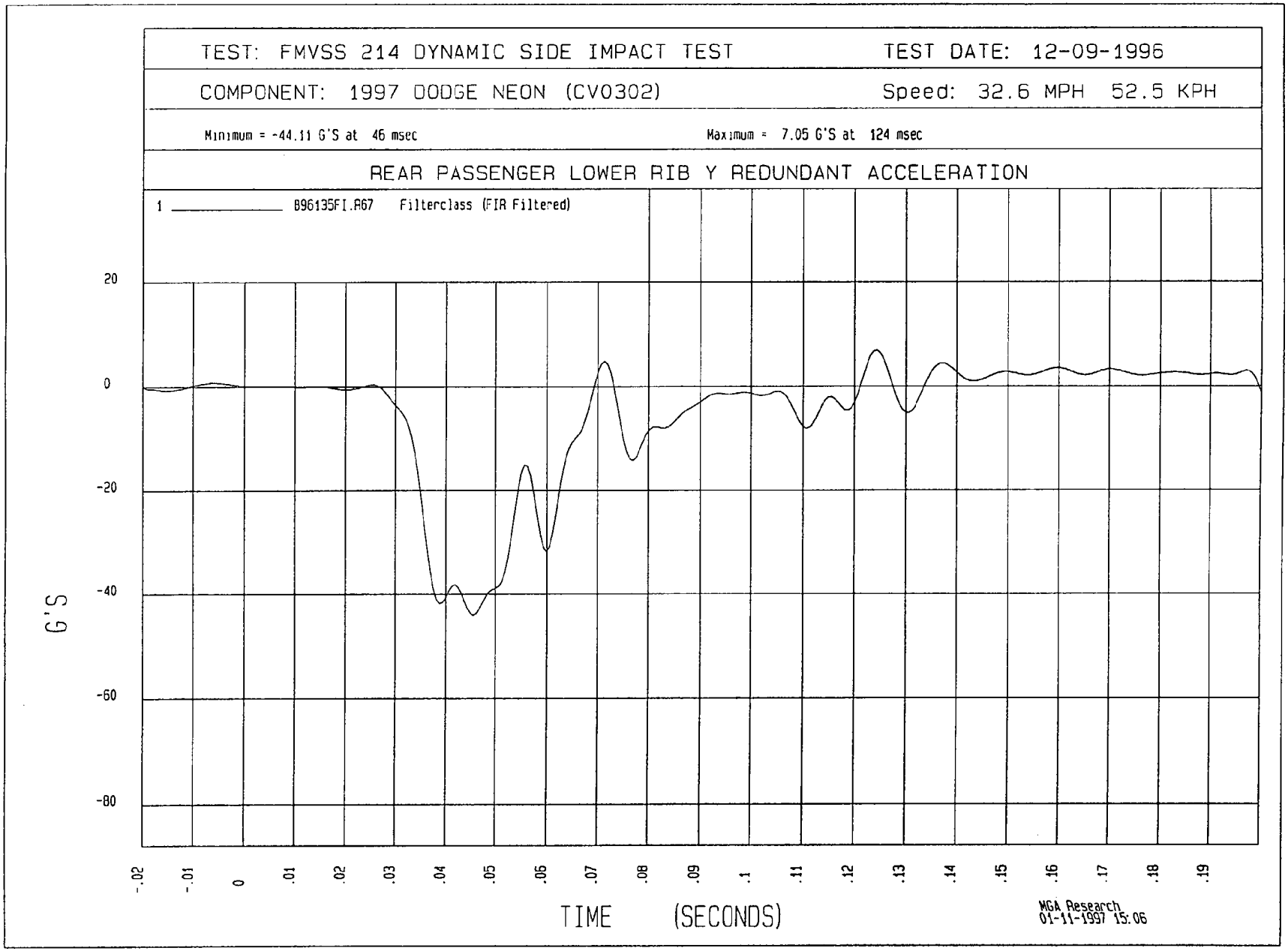
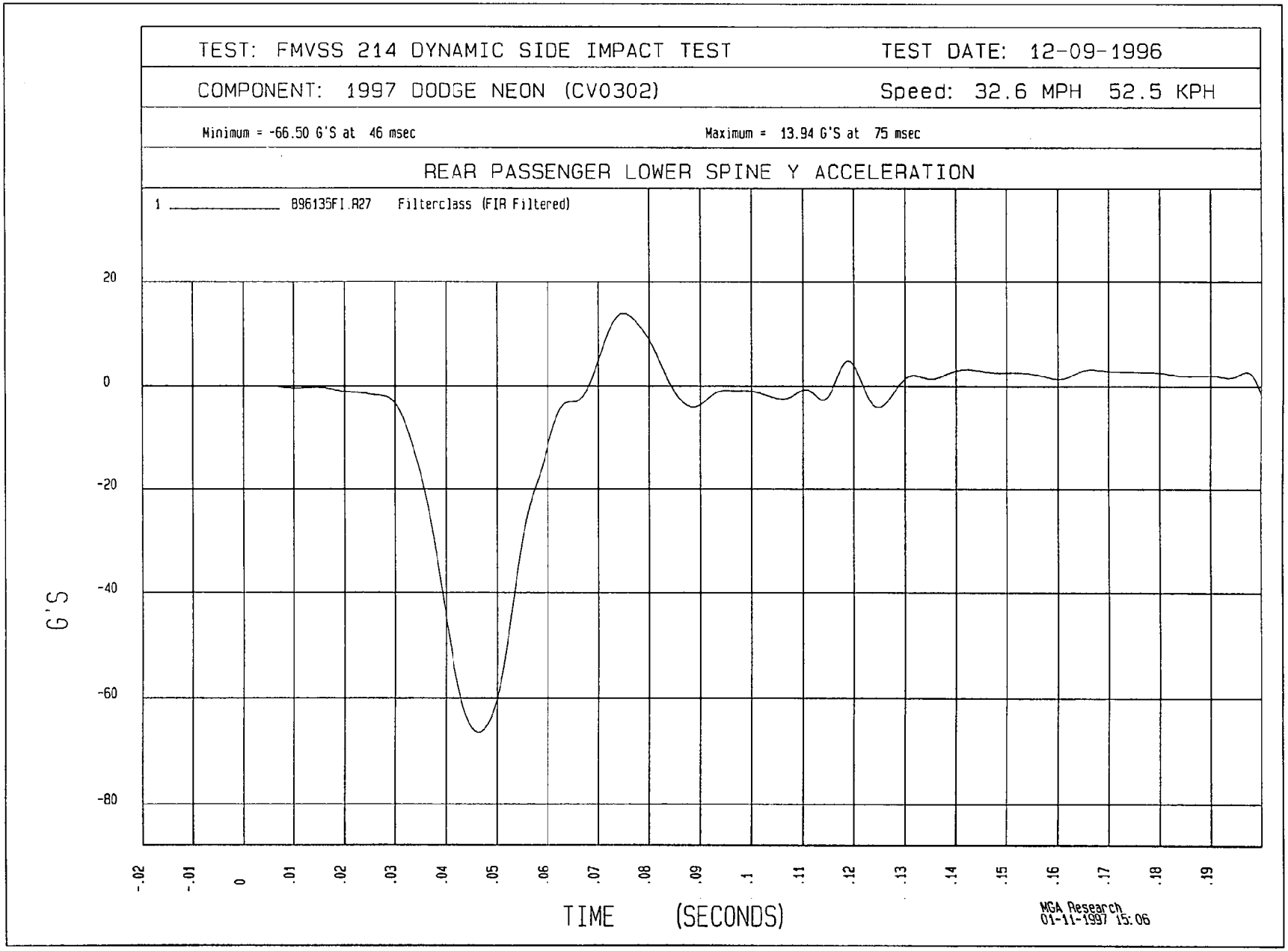
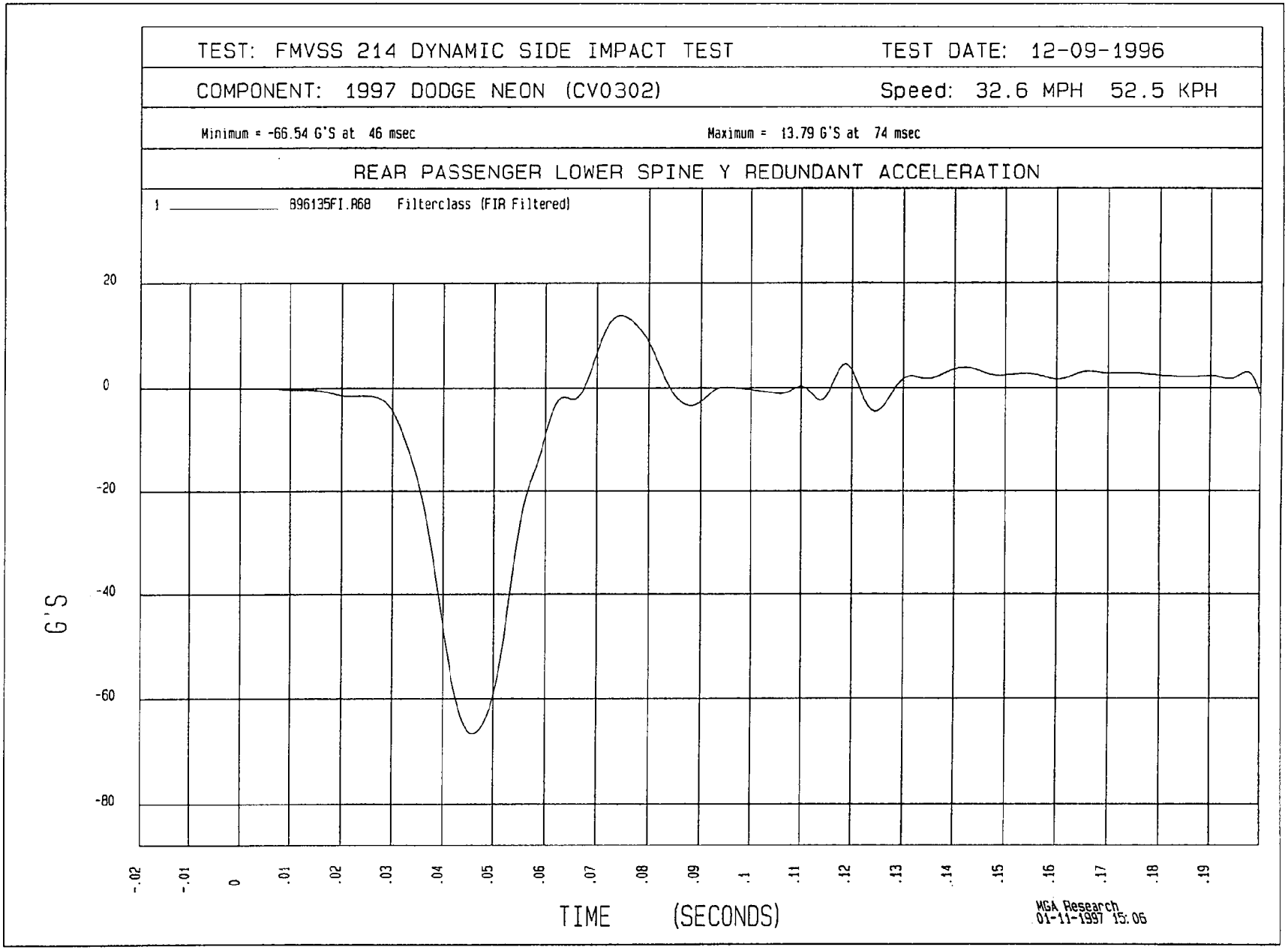
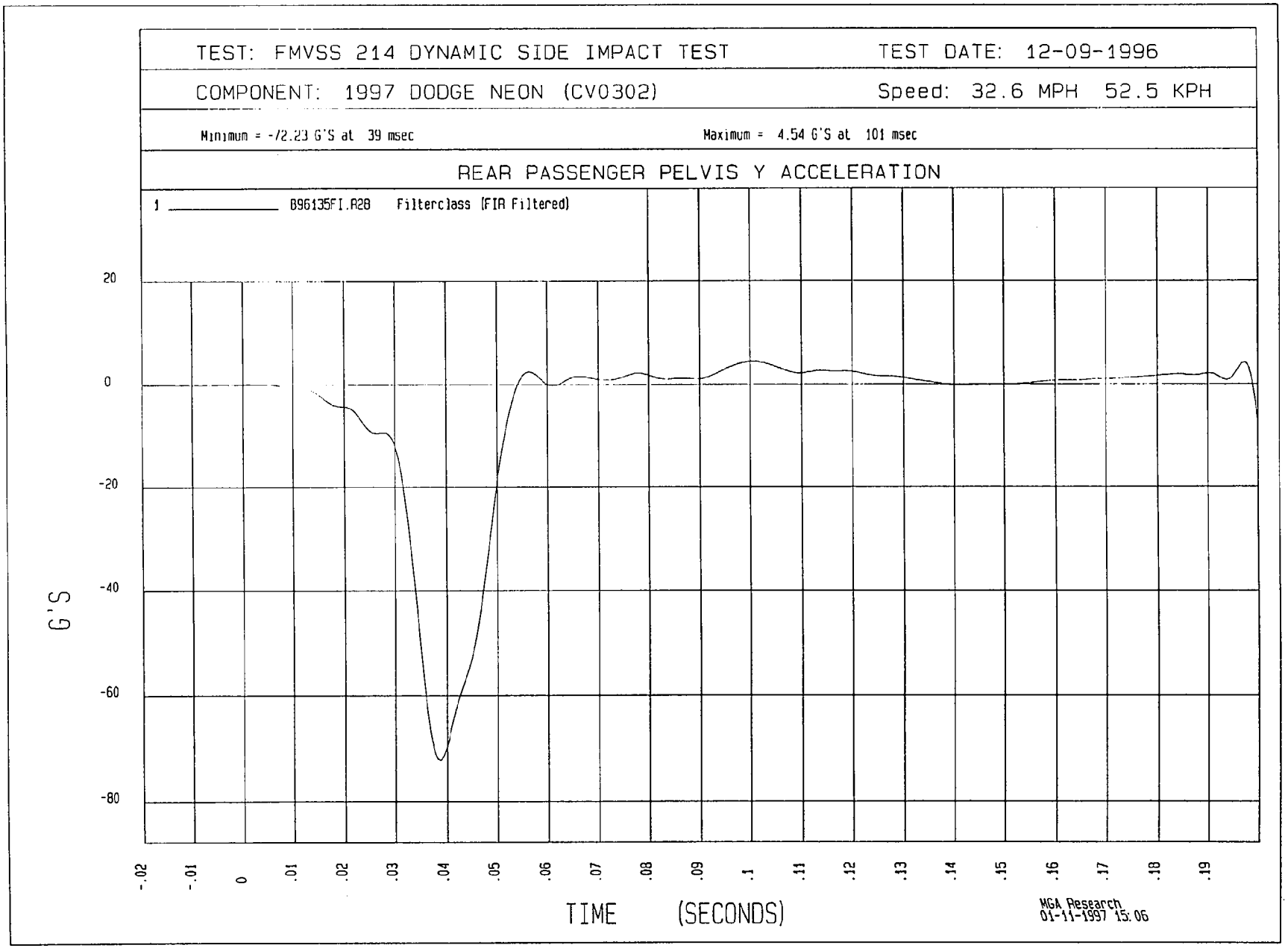
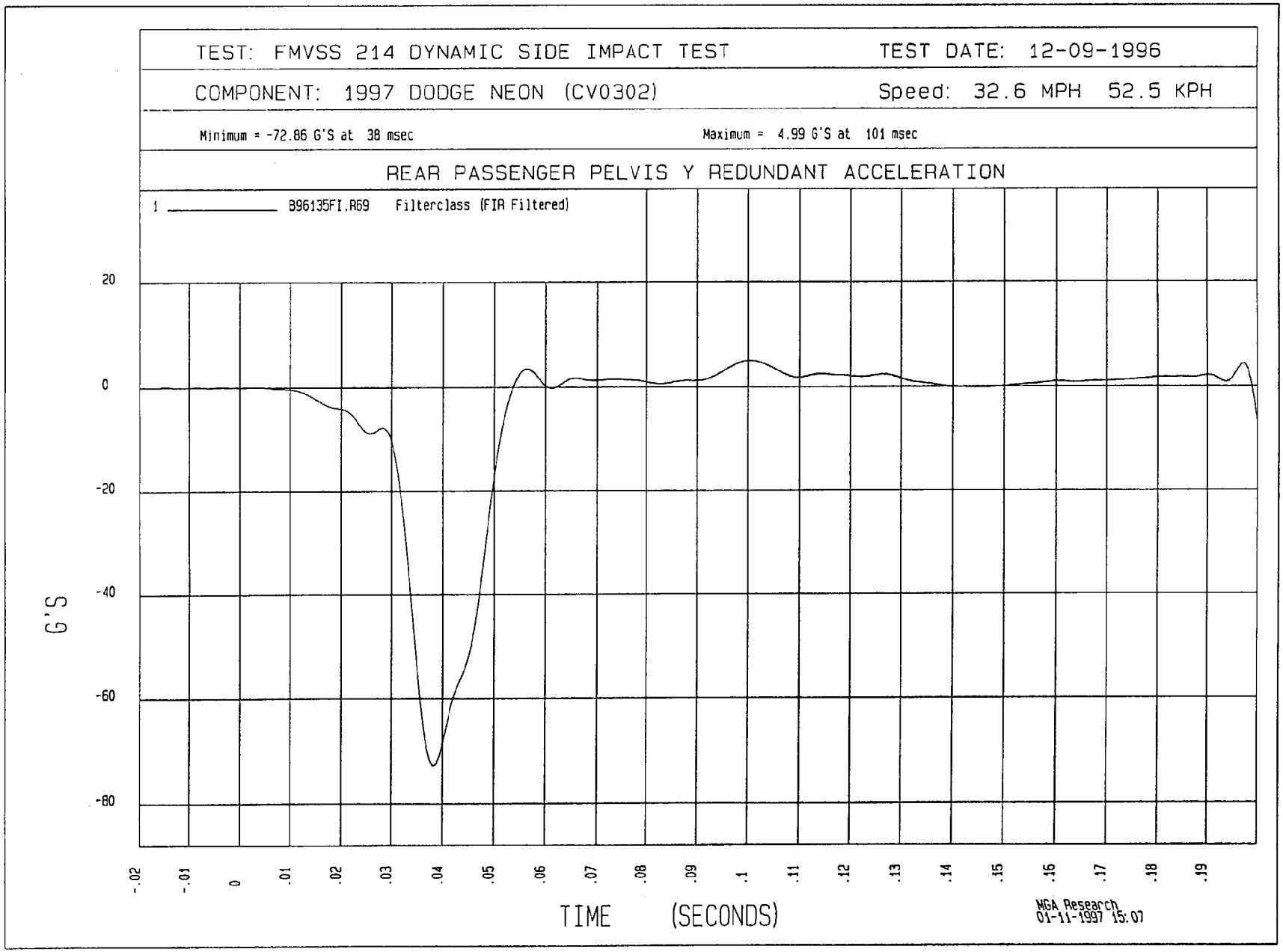
TIME (SECONDS)
MGA Research
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -44.11 G'S at 46 msec
Maximum = 7.05 G'S at 124 msec
REAR PASSENGER LOWER RIB Y REDUNDANT ACCELERATION
1 B96135FI.A67 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
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
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -66.50 G'S at 46 msec
Maximum = 13.94 G'S at 75 msec
REAR PASSENGER LOWER SPINE Y ACCELERATION
1 B96135FI.A27 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
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
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -66.54 G'S at 46 msec
Maximum = 13.79 G'S at 74 msec
REAR PASSENGER LOWER SPINE Y REDUNDANT ACCELERATION
1 B96135FI.A68 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
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
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -72.23 G'S at 39 msec
Maximum = 4.54 G'S at 101 msec
REAR PASSENGER PELVIS Y ACCELERATION
1 B96135FI.A28 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
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
01-11-1997 15:06


TEST: FMVSS 214 DYNAMIC SIDE IMPACT TEST
TEST DATE: 12-09-1996
COMPONENT: 1997 DODGE NEON (CV0302)
Speed: 32.6 MPH 52.5 KPH
Minimum = -72.86 G'S at 38 msec
Maximum = 4.99 G'S at 101 msec
REAR PASSENGER PELVIS Y REDUNDANT ACCELERATION
1 B96135FI.A69 Filterclass (FIR Filtered)
20
0
-20
-40
-60
-80
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
01-11-1997 15:07

APPENDIX C

SID CONFIGURATION AND PERFORMANCE VERIFICATION

REPORT NO. MGA-96-DC13

DUMMY PERFORMANCE CALIBRATIONS

FMVSS 214 - SIDE IMPACT TEST

CHRYLSER CORPORATION
1997 DODGE NEON 4 DOOR
NHTSA NO. CV0302

MGA PROVING GROUNDS
5000 WARREN ROAD
BURLINGTON, WI 53105

Test Date: December 09, 1996

Report Date: January 16, 1997

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

Front Dummy Serial Number: 269

Calibration Test Results Summary

Dummy Serial Number: 269

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.: 269 DATE OF VERIFICATION: December 08, 1996

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height	35.0" - 35.8"	35.2
RH - Rib Height	19.75" - 20.50"	20.00
HP - Hip Pivot Height	3.9" ref.	3.9
RD - Rib From Back Line	9.0" to 9.5"	9.5
KV - Knee Pivot From Back Line	20.1" - 20.7"	20.4
SW - Knee Pivot to Floor	19.3" - 19.9"	19.4
HW - Hip Width	14.0" - 15.4"	15.0

MEASUREMENTS BY: _____

APPROVED BY: _____

MGA RESEARCH CORPORATION

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 08, 1996

DUMMY NUMBER: 269 TEST NUMBER: D962042

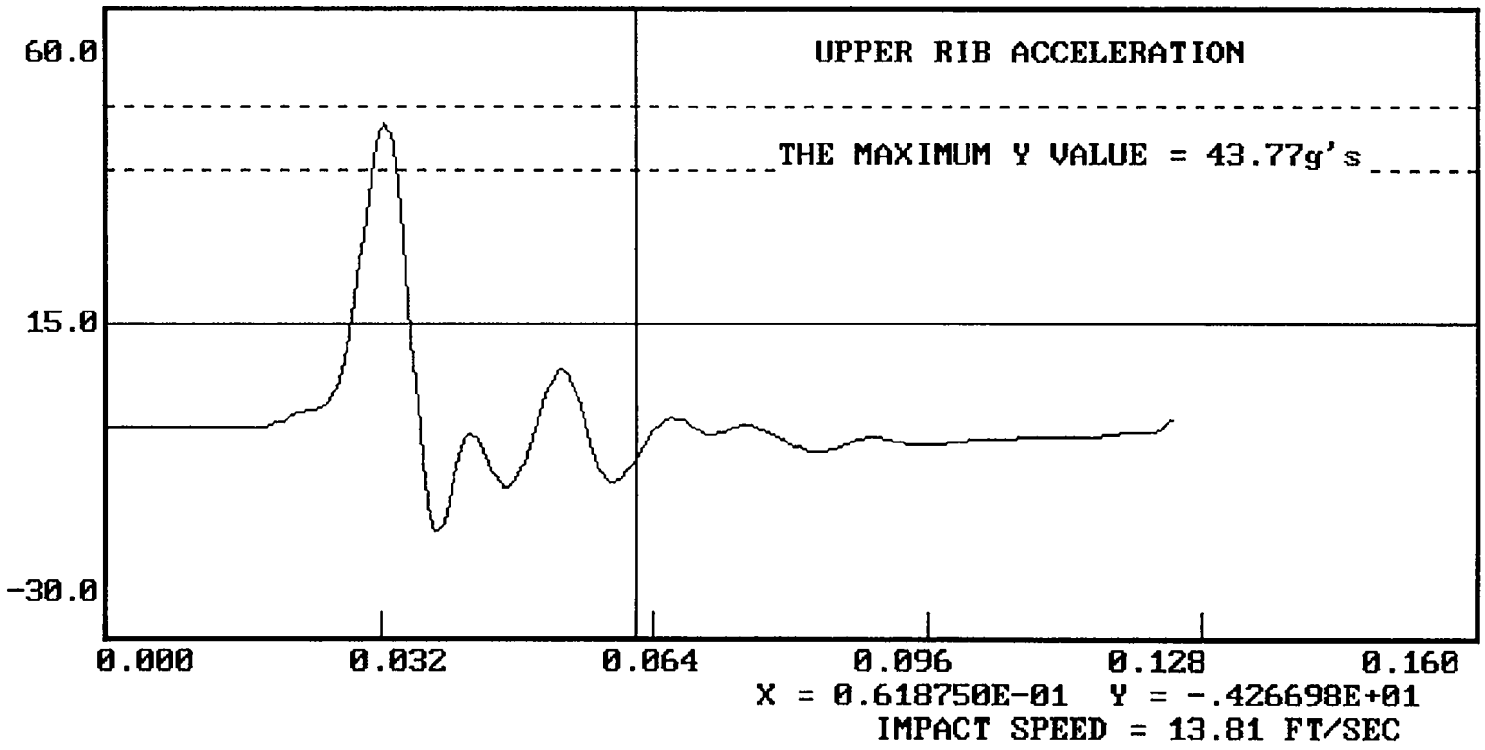
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	20%
PROBE SPEED	13.8 - 14.2 fps	13.8
UPPER RIB	37 - 46 g's	44
LOWER RIB	37 - 46 g's	46
LOWER SPINE	15 - 22 g's	19

TEST MEETS SPECIFICATIONS

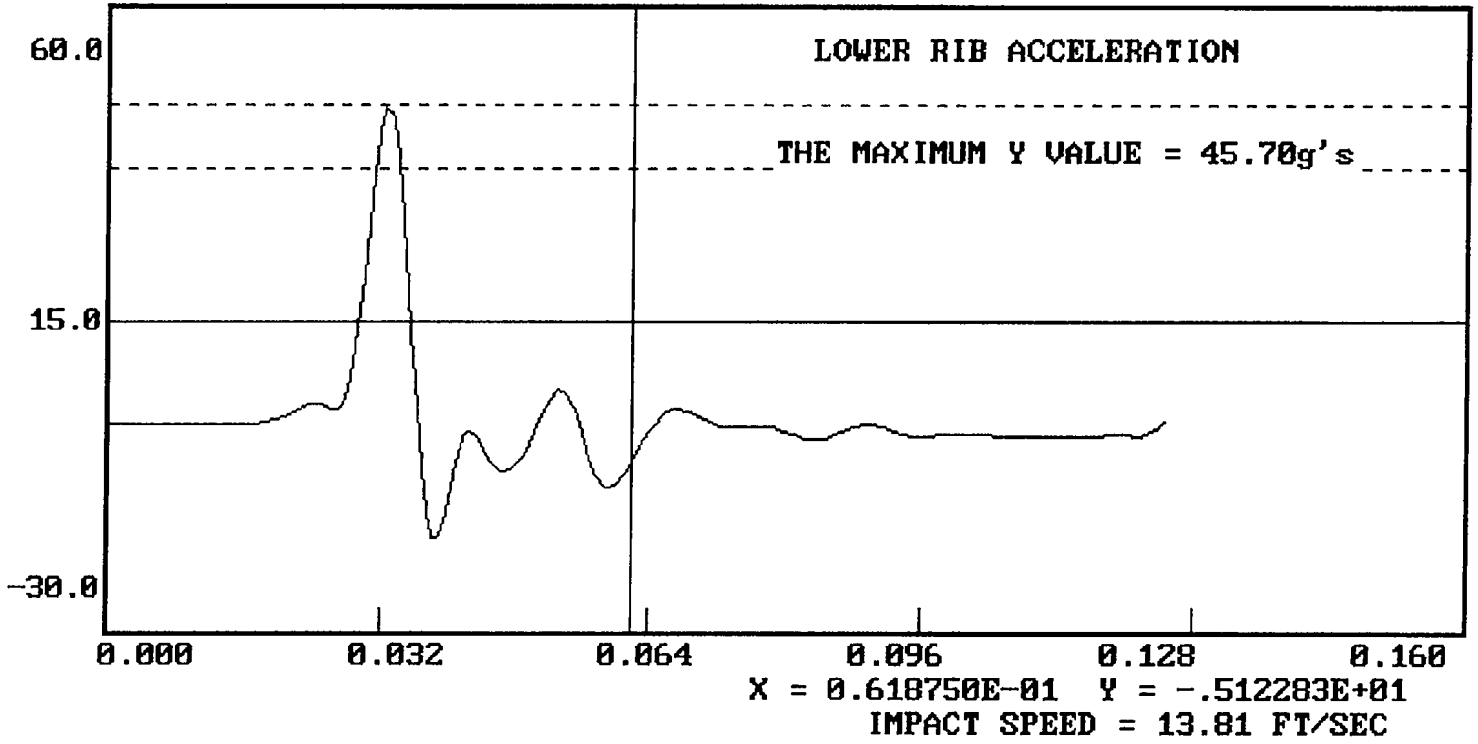
TECHNICIAN _____

APPROVED BY _____

DUMMY CALIBRATION - THORAX IMPACT 12-08-1996 14:13
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))

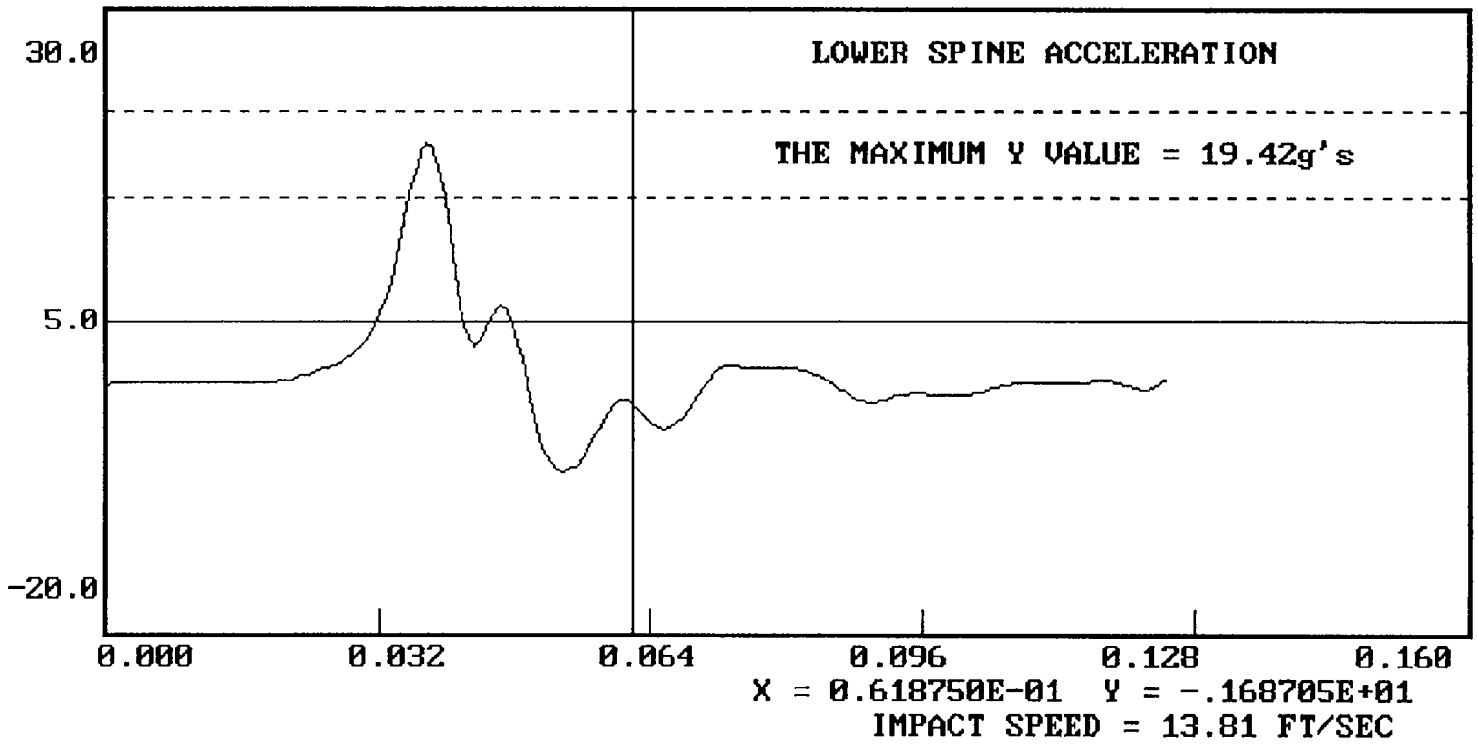


DUMMY CALIBRATION - THORAX IMPACT 12-08-1996 14:17
DUMMY # 269
G'S (ACCELERATION) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.512283E+01
IMPACT SPEED = 13.81 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 12-08-1996 14:13
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.168705E+01
IMPACT SPEED = 13.81 FT/SEC

MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 08, 1996

DUMMY NUMBER: 269 TEST NUMBER: D962043

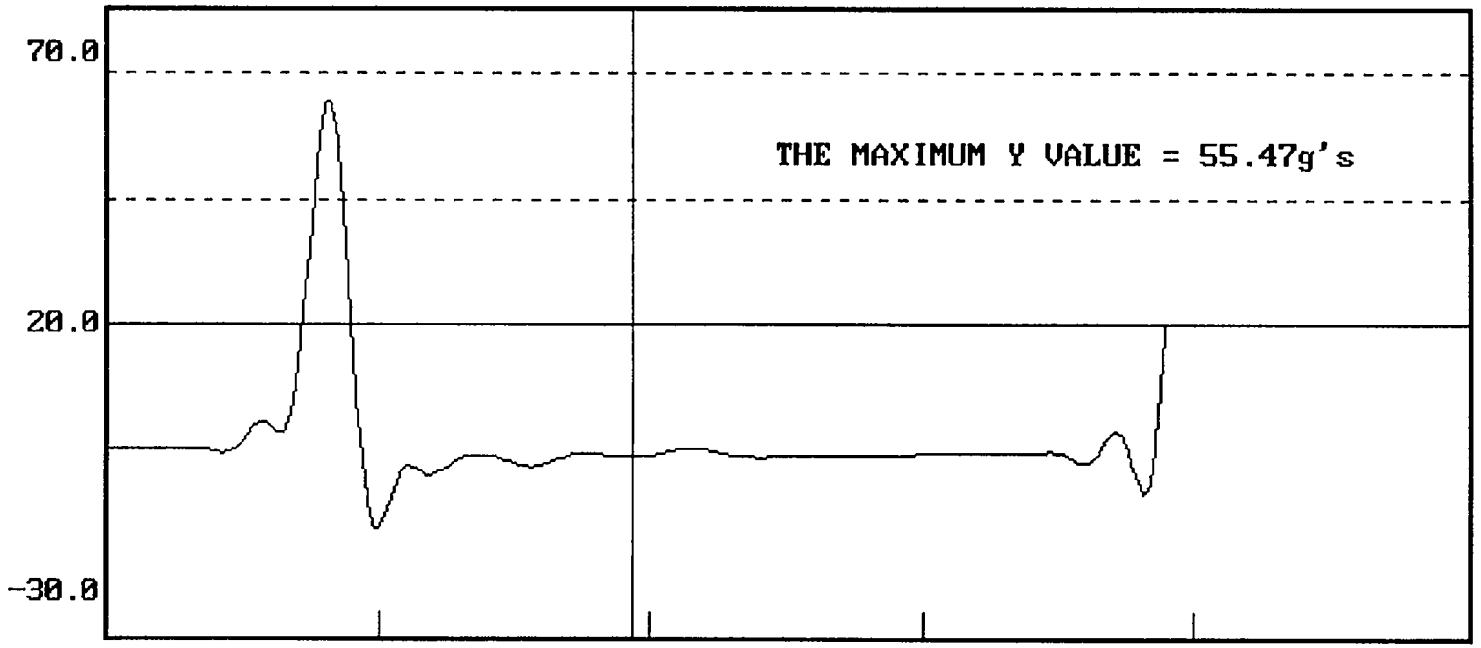
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	22%
PROBE SPEED	13.8 - 14.2 f/s	13.8
PELVIS ACCELERATION	40 - 60 g's	55

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - PELVIS IMPACT 12-08-1996 12:18
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.113058E+01
IMPACT SPEED = 13.82 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

SIDE IMPACT DUMMY (SID)

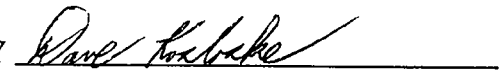
DATE: December 08, 1996

DUMMY NUMBER: 269 TEST NUMBER: D962044

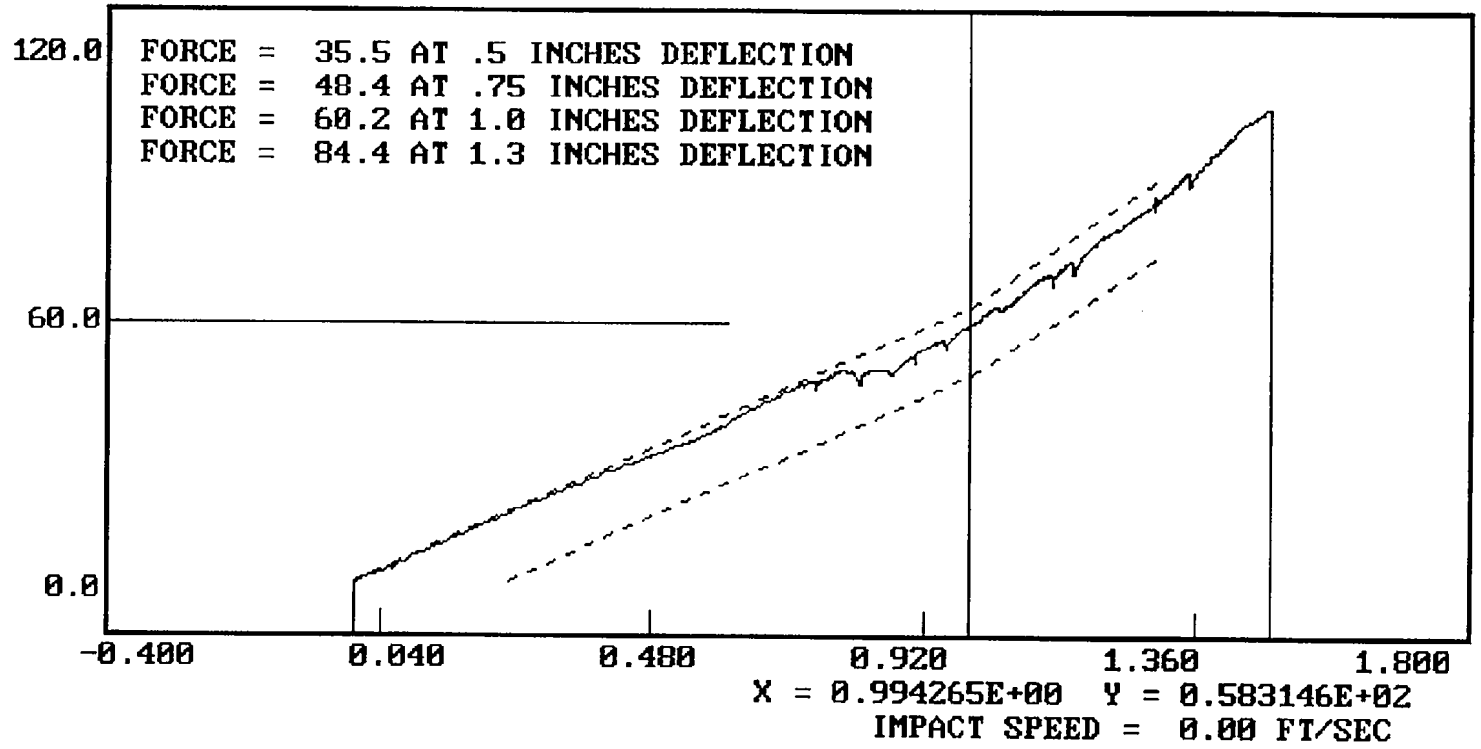
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	22%
FORCE @ 0.5 in	23.3 - 36.5 lbs	35.5
FORCE @ 0.75 in	36.7 - 49.8 lbs	48.4
FORCE @ 1.0 in	50 - 63 lbs	60
FORCE @ 1.3 in	73 - 88 lbs	84

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - ABDOMEN COMPRESSION 12-08-1996 10:41
DUMMY # 269
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



X = 0.994265E+00 Y = 0.583146E+02
IMPACT SPEED = 0.00 FT/SEC

MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: December 08, 1996

DUMMY NUMBER: 269 TEST NUMBER: D962045

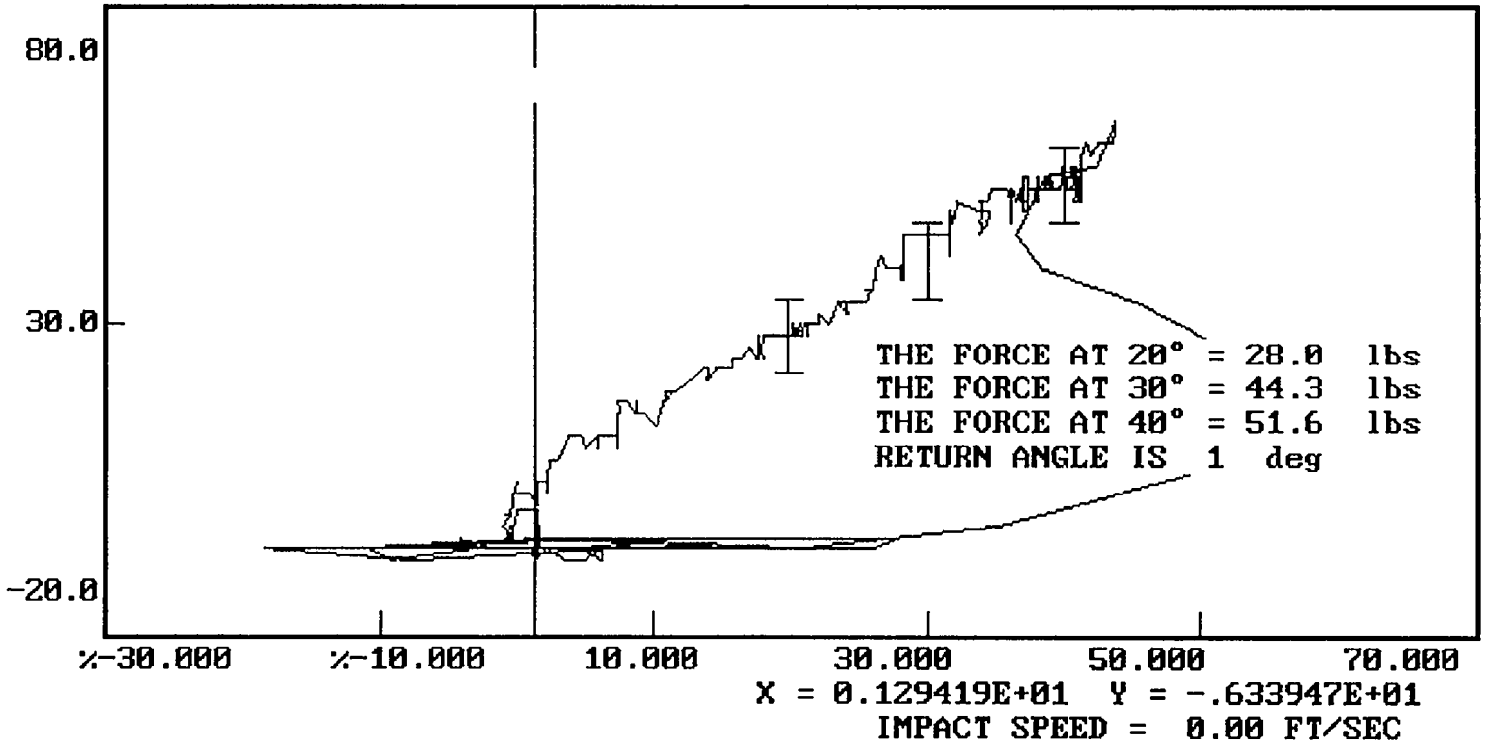
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	22%
FORCE @ 0°	0 - 6 lbs	0
FORCE @ 20°	22 - 34 lbs	28
FORCE @ 30°	34 - 46 lbs	44
FORCE @ 40°	46 - 58 lbs	52
RETURN ANGLE	12° maximum	1°

TEST MEETS SPECIFICATIONS

TECHNICIAN _____

APPROVED BY _____

DUMMY CALIBRATION - LUMBAR FLEXION 12-08-1996 10:31
DUMMY # 269
FORCE (LBS) VS. TORSO ROTATION (DEGREES)



PRE-TEST CERTIFICATION DATA

Rear Dummy Serial Number: 270

Calibration Test Results Summary

Passenger Serial Number: 270

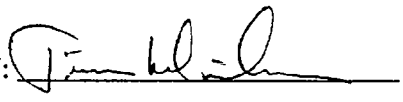
Pre-Test Calibration

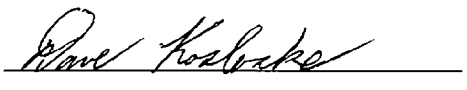
External Dimensions:	The dummy passed all external dimension requirements.
Thorax Impact Test:	The thorax passed all impact test requirements.
Pelvic Impact Test:	The pelvis passed all impact test requirements.
Abdominal Compression Test:	The abdomen passed all compression test requirements.
Lumbar Flexion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

SIDE IMPACT DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA

DUMMY NO.: 270 DATE OF VERIFICATION: December 08, 1996

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height	35.0" - 35.8"	35.2
RH - Rib Height	19.75" - 20.50"	20.50
HP - Hip Pivot Height	3.9" ref.	3.9
RD - Rib From Back Line	9.0" to 9.5"	9.5
KV - Knee Pivot From Back Line	20.1" - 20.7"	20.6
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: December 08, 1996

DUMMY NUMBER: 270 TEST NUMBER: D962052

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	22%
PROBE SPEED	13.8 - 14.2 fps	13.8
UPPER RIB	37 - 46 g's	38
LOWER RIB	37 - 46 g's	42
LOWER SPINE	15 - 22 g's	21

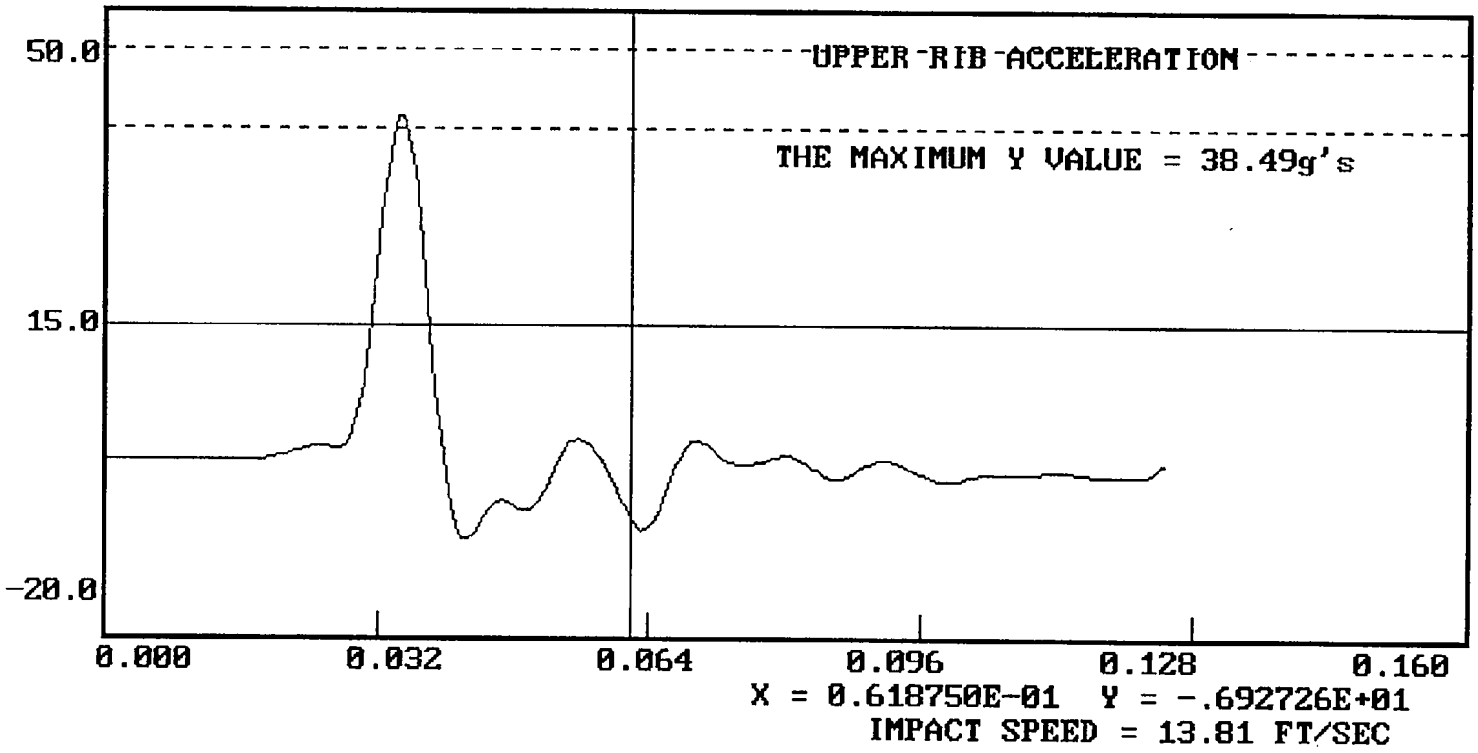
TEST MEETS SPECIFICATIONS

TECHNICIAN

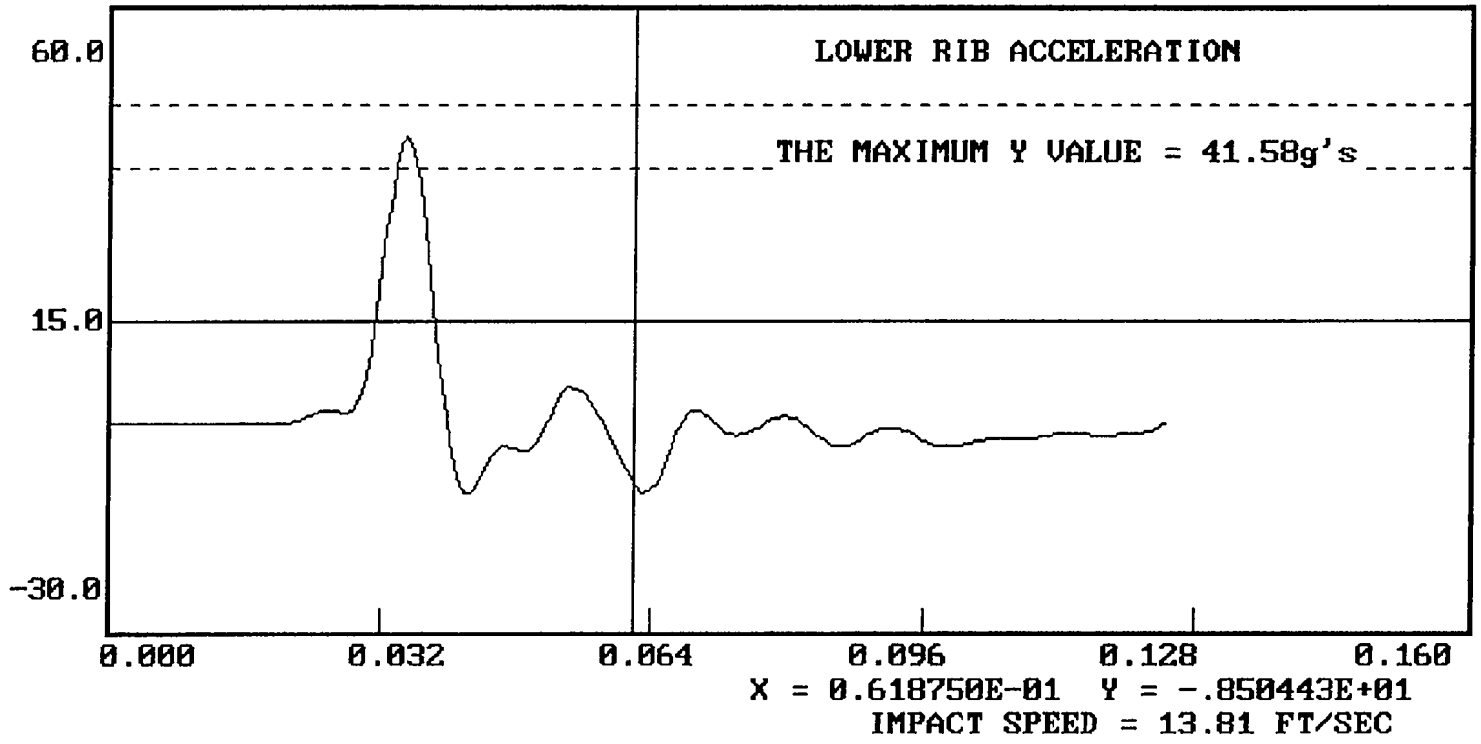
APPROVED BY

DUMMY CALIBRATION - THORAX IMPACT
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))

12-08-1996 14:40

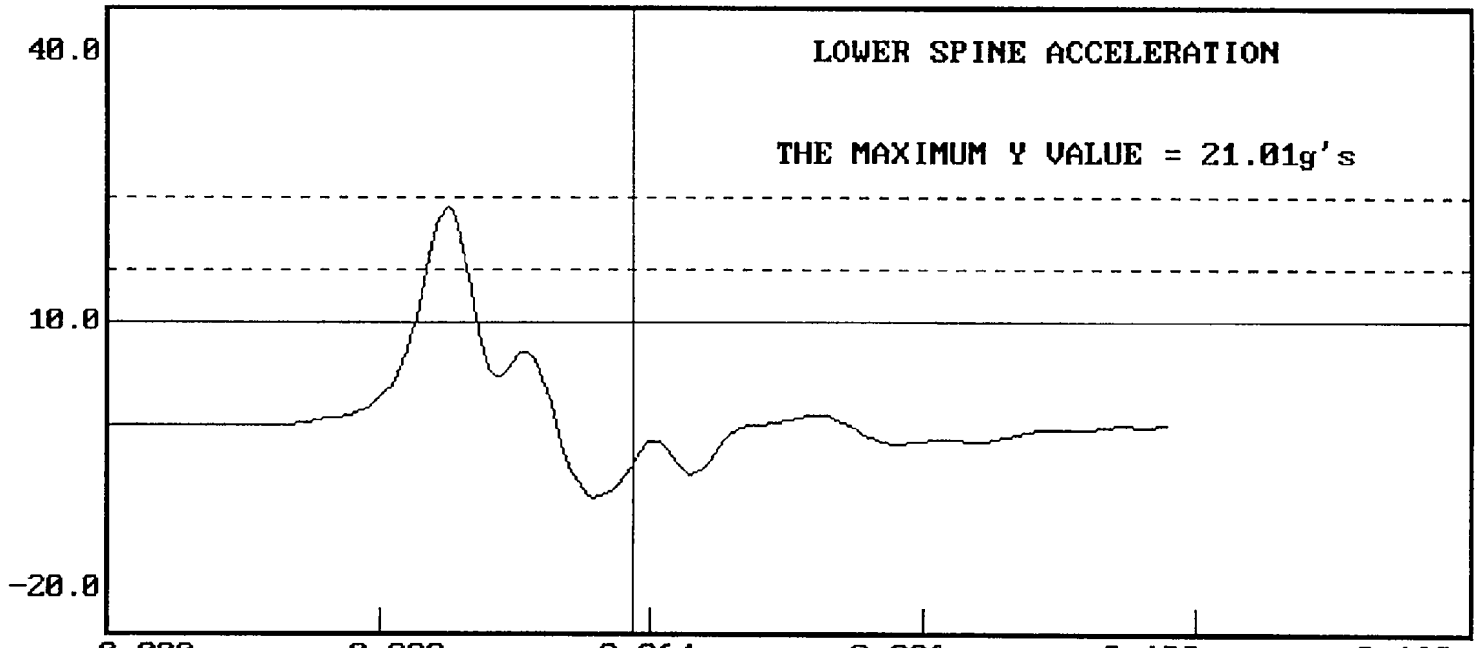


DUMMY CALIBRATION - THORAX IMPACT 12-08-1996 14:41
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.850443E+01
IMPACT SPEED = 13.81 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 12-08-1996 14:42
DUMMY # 270
G'S (ACCELERATION) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.352417E+01
IMPACT SPEED = 13.81 FT/SEC

MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 08, 1996

DUMMY NUMBER: 270

TEST NUMBER: D962053

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	20%
PROBE SPEED	13.8 - 14.2 f/s	14.0
PELVIS ACCELERATION	40 - 60 g's	47

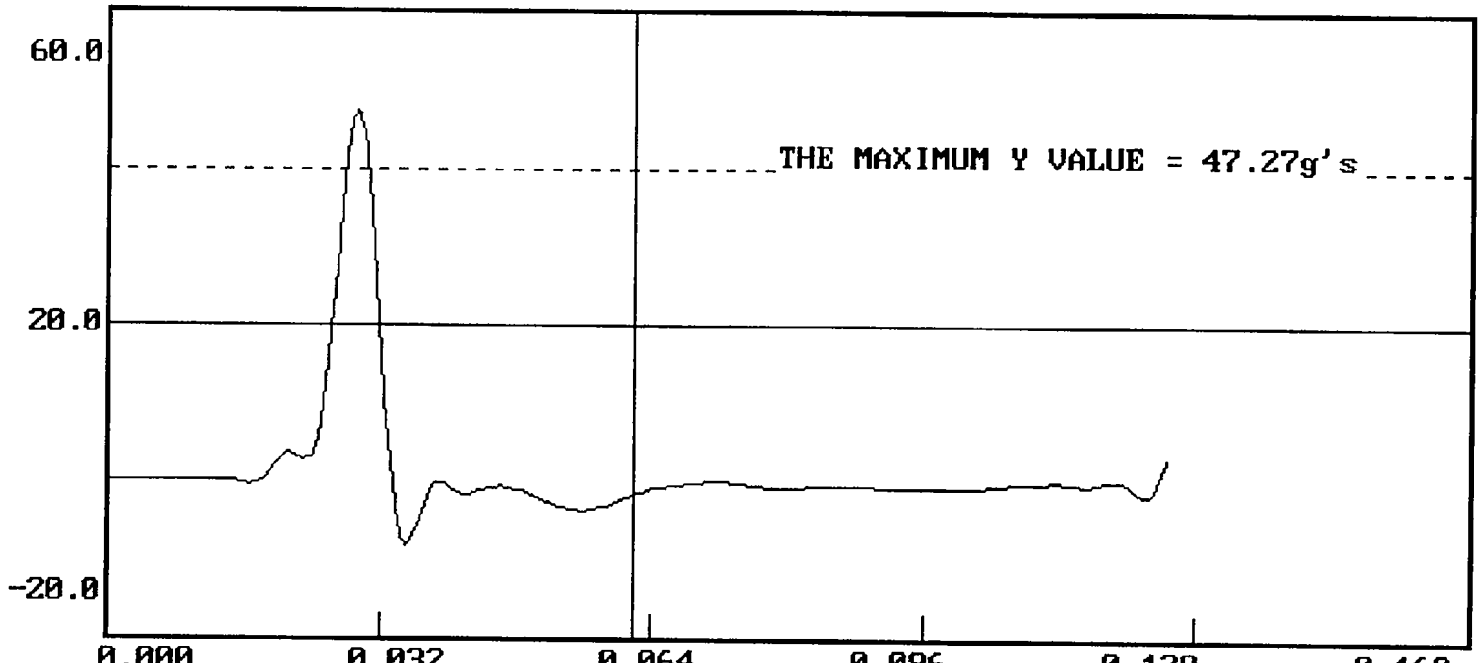
TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - PELVIS IMPACT
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))

12-08-1996 11:31



X = 0.618750E-01 Y = -.193872E+01
IMPACT SPEED = 13.95 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

SIDE IMPACT DUMMY (SID)

DATE: December 08, 1996

DUMMY NUMBER: 270 TEST NUMBER: D962054

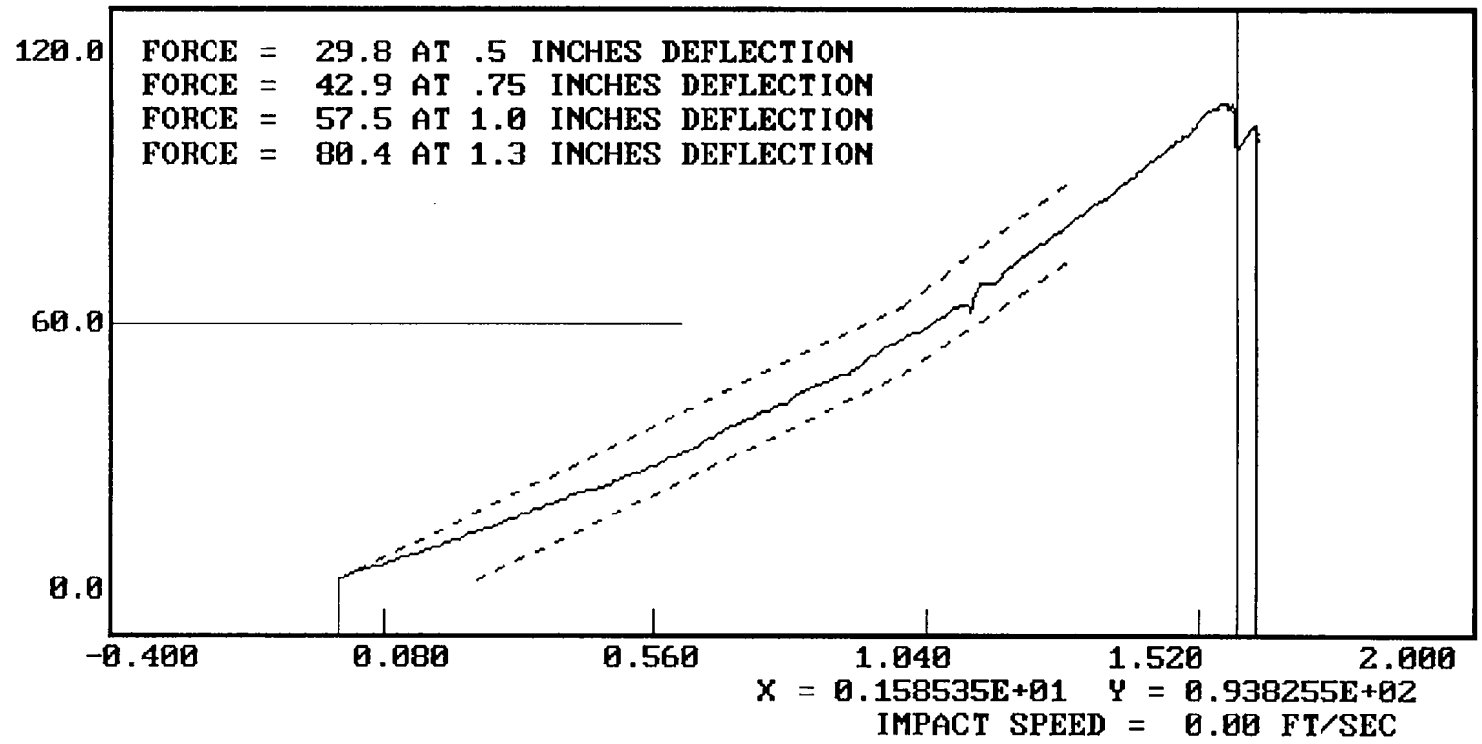
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	22%
FORCE @ 0.5 in	23.3 - 36.5 lbs	29.8
FORCE @ 0.75 in	36.7 - 49.8 lbs	42.9
FORCE @ 1.0 in	50 - 63 lbs	58
FORCE @ 1.3 in	73 - 88 lbs	80

TEST MEETS SPECIFICATIONS

TECHNICIAN _____

APPROVED BY _____

DUMMY CALIBRATION - ABDOMEN COMPRESSION 12-08-1996 10:46
DUMMY # 270
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



X = 0.158535E+01 Y = 0.938255E+02
IMPACT SPEED = 0.00 FT/SEC

MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: December 08, 1996

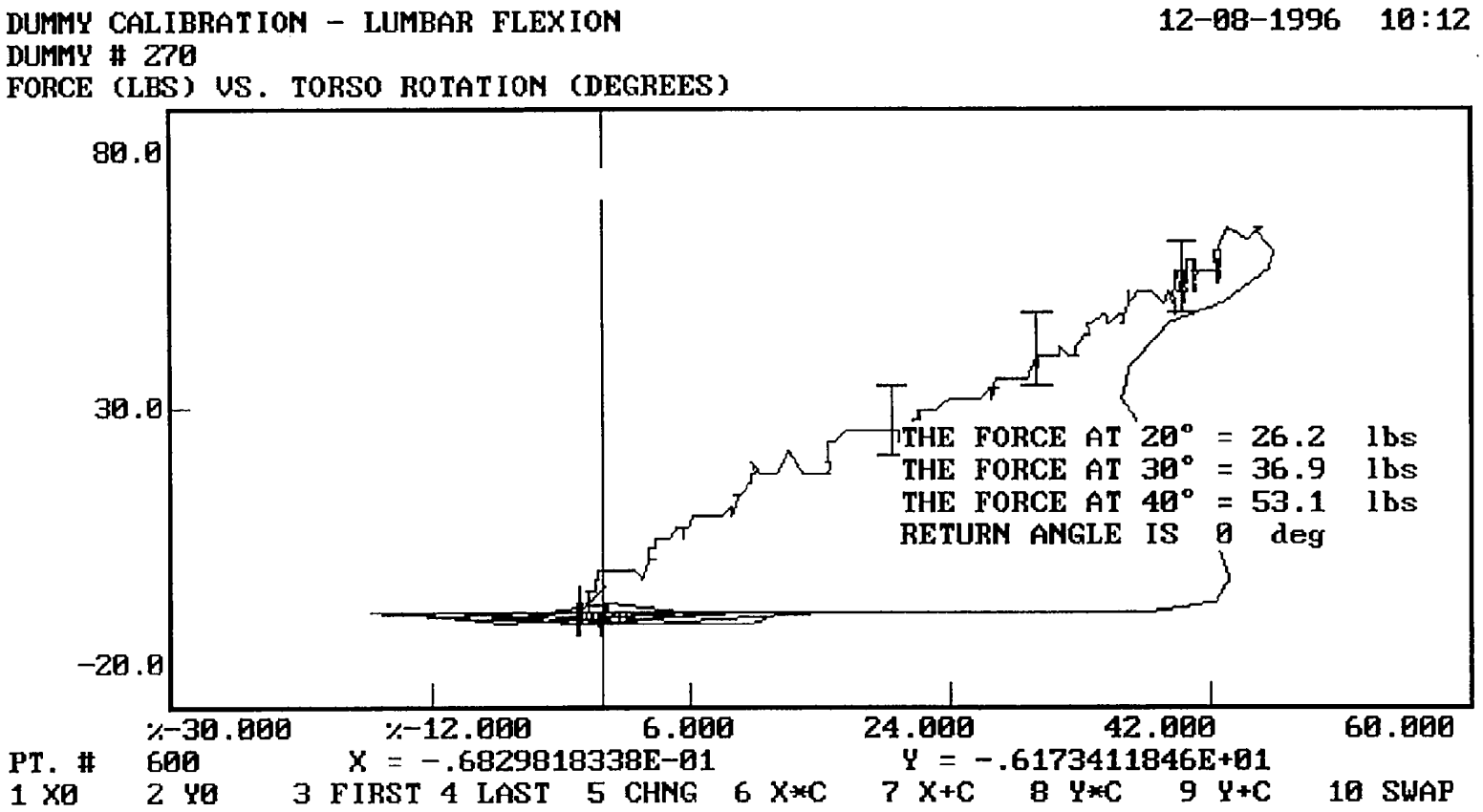
DUMMY NUMBER: 270 TEST NUMBER: D962055

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	37
FORCE @ 40°	46 - 58 lbs	53
RETURN ANGLE	12° maximum	0°

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY


DUMMY CALIBRATION - LUMBAR FLEXION
12-08-1996 10:12
DUMMY # 270
FORCE (LBS) VS. TORSO ROTATION (DEGREES)
80.0
30.0
-20.0
-30.000
-12.000
6.000
24.000
42.000
60.000
THE FORCE AT 20° = 26.2 lbs
THE FORCE AT 30° = 36.9 lbs
THE FORCE AT 40° = 53.1 lbs
RETURN ANGLE IS 0 deg
PT. # 600
X = -.6829818338E-01
Y = -.6173411846E+01
1 X0 2 Y0 3 FIRST 4 LAST 5 CHNG 6 X*C 7 X+C 8 Y*C 9 Y+C 10 SWAP

POST-TEST CERTIFICATION DATA

Front Dummy Serial Number: 269

Calibration Test Results Summary

Dummy Serial Number: 269

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.: 269

DATE OF VERIFICATION: December 10, 1996

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height	35.0" - 35.8"	35.1
RH - Rib Height	19.75" - 20.50"	20.00
HP - Hip Pivot Height	3.9" ref.	3.9
RD - Rib From Back Line	9.0" to 9.5"	9.5
KV - Knee Pivot From Back Line	20.1" - 20.7"	20.4
SW - Knee Pivot to Floor	19.3" - 19.9"	19.4
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: December 10, 1996

DUMMY NUMBER: 269 TEST NUMBER: D96210678

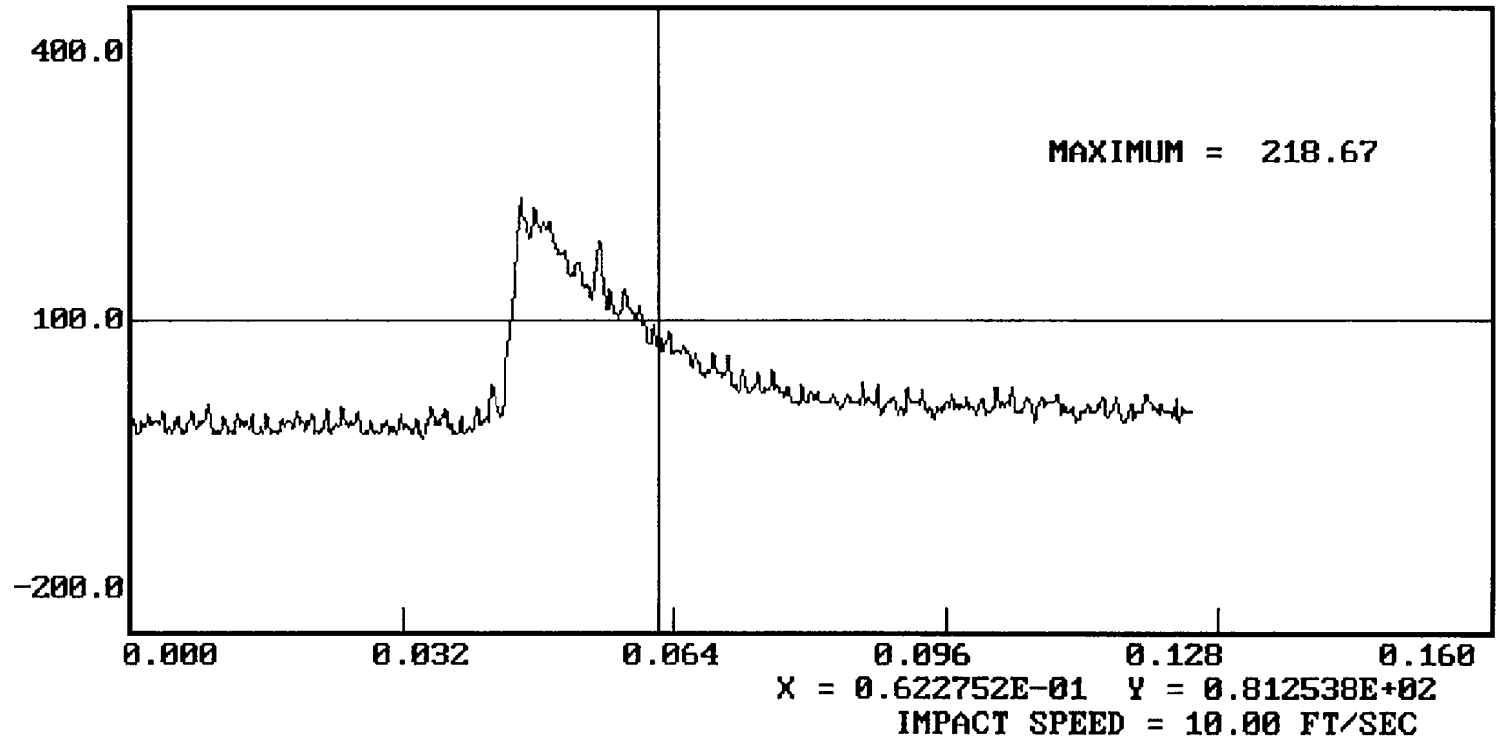
TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE		66° - 78° F	70°
RELATIVE HUMIDITY		10 - 70%	25%
VELOCITY 10 ft/s	FORCE (lb.)	188 - 253	219
	DISPLACEMENT (in.)	1.18 - 1.38	1.31
VELOCITY 14 ft/s	FORCE (lb.)	389 - 472	457
	DISPLACEMENT (in.)	1.26 - 1.47	1.42
VELOCITY 20 ft/s	FORCE (lb.)	841 - 1000	971
	DISPLACEMENT (in.)	1.30 - 1.57	1.49

TEST MEETS SPECIFICATIONS

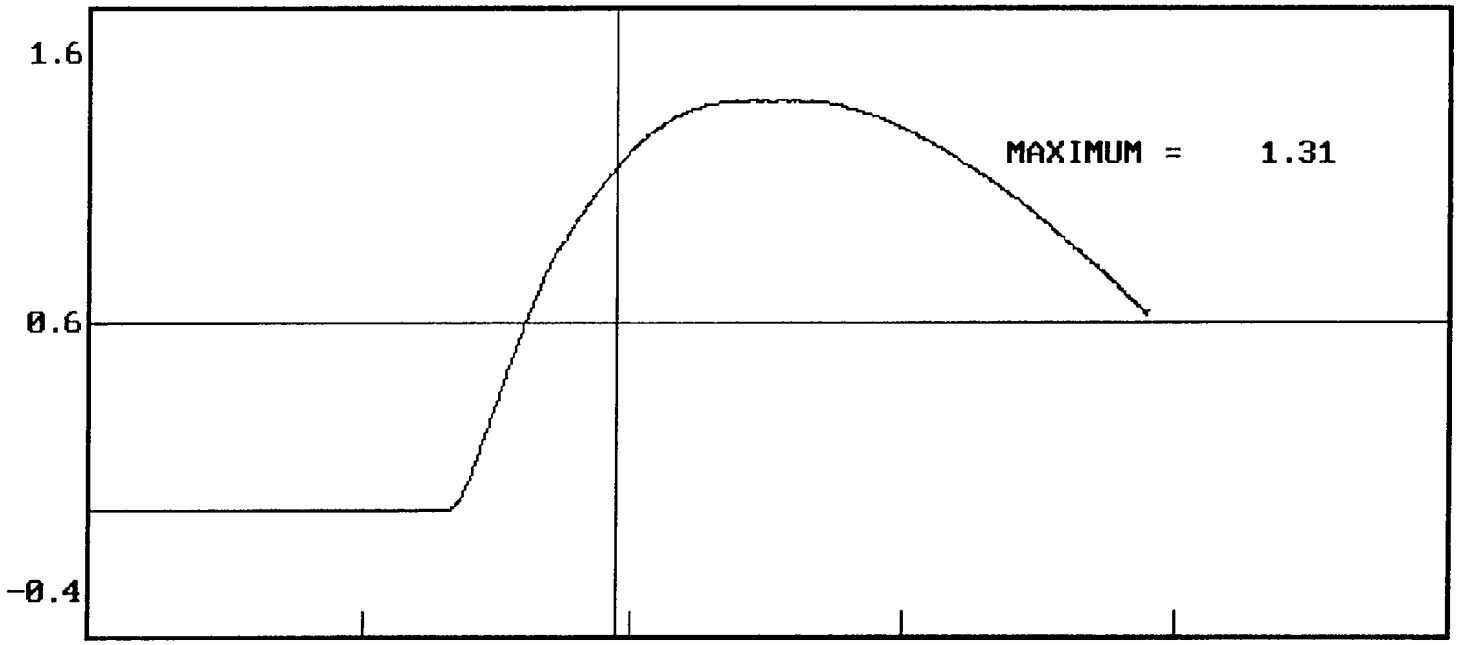
TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 12:22
DUMMY # 269
FORCE (LBS) VS. TIME ((SECONDS))

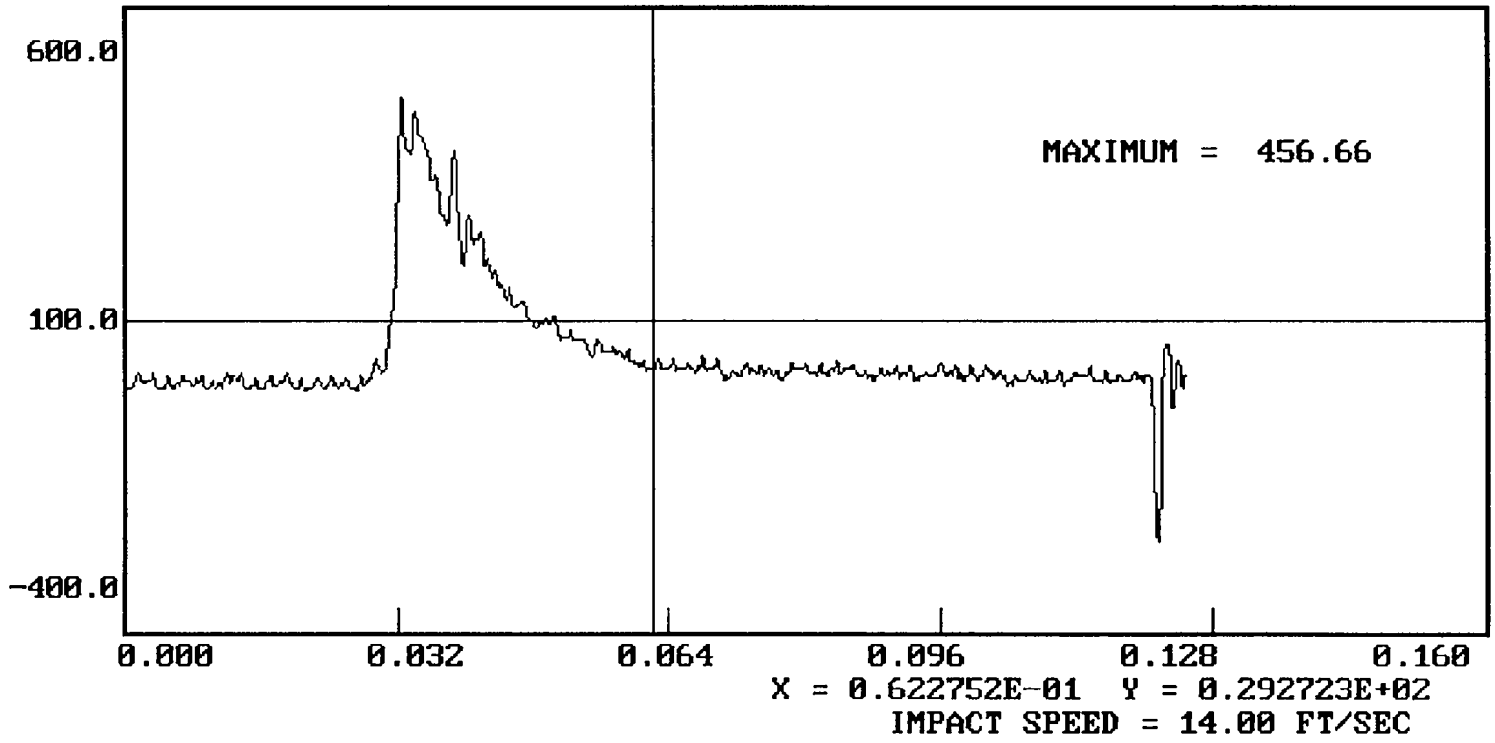


DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 12:22
DUMMY # 269
DISPLACEMENT (IN) VS. TIME ((SECONDS))

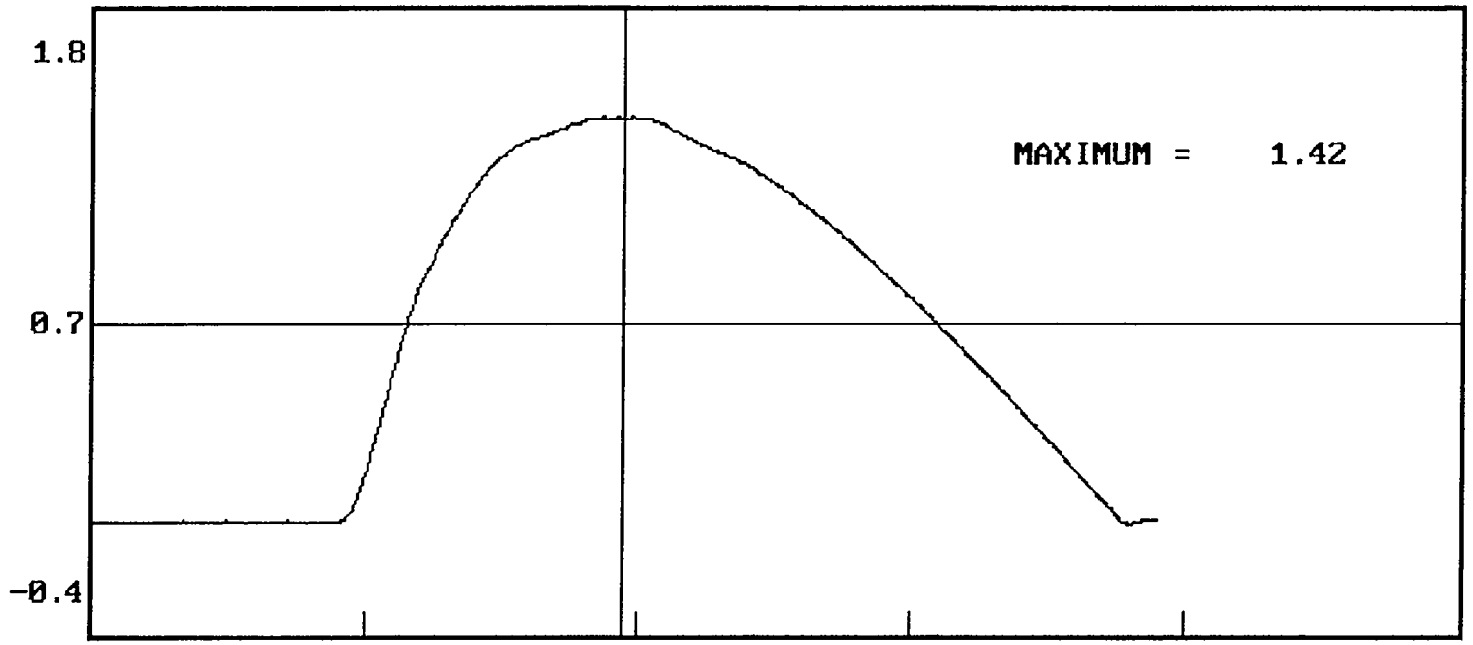


X = 0.622752E-01 Y = 0.109965E+01
IMPACT SPEED = 10.00 FT/SEC

DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 12:25
DUMMY # 269
FORCE (LBS) VS. TIME ((SECONDS))

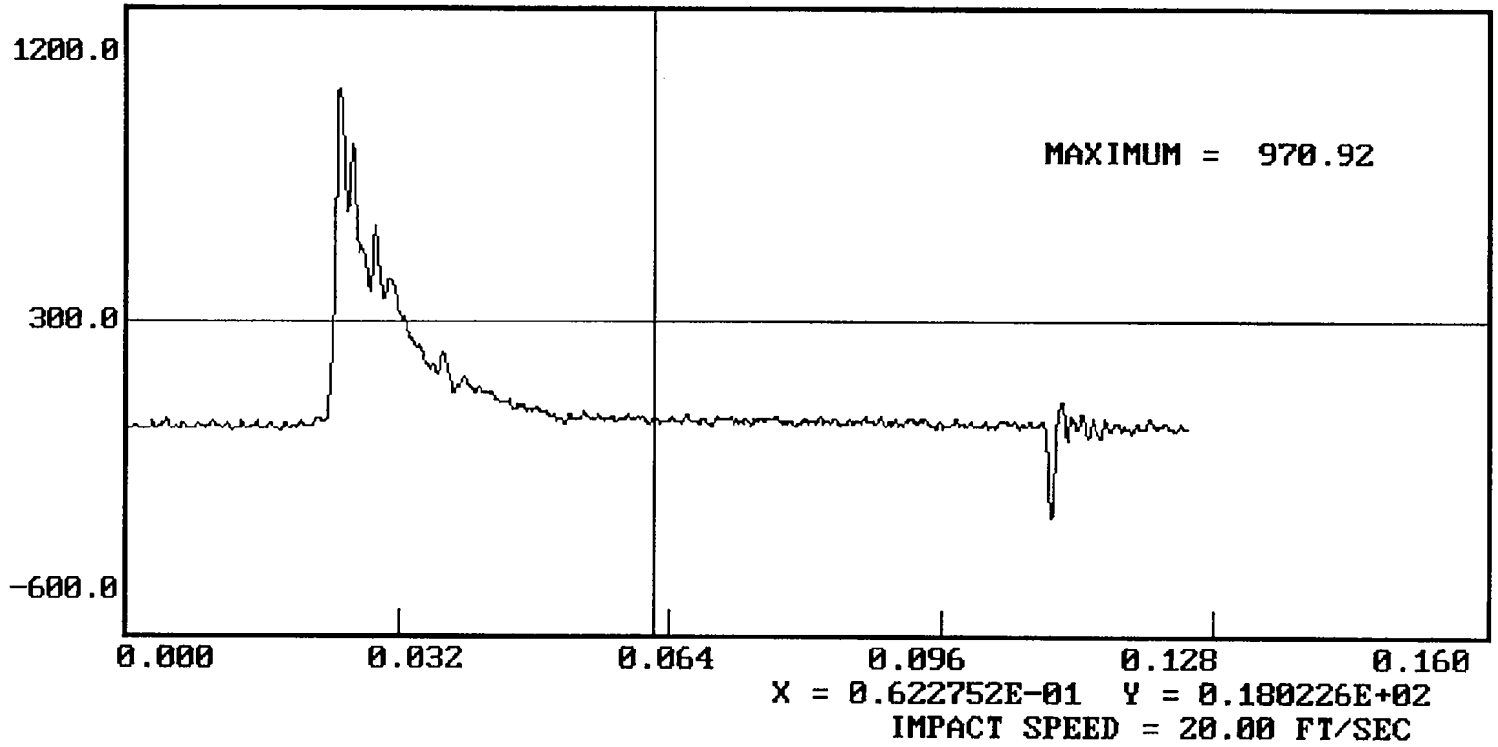


DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 12:25
DUMMY # 269
DISPLACEMENT (IN) VS. TIME ((SECONDS))

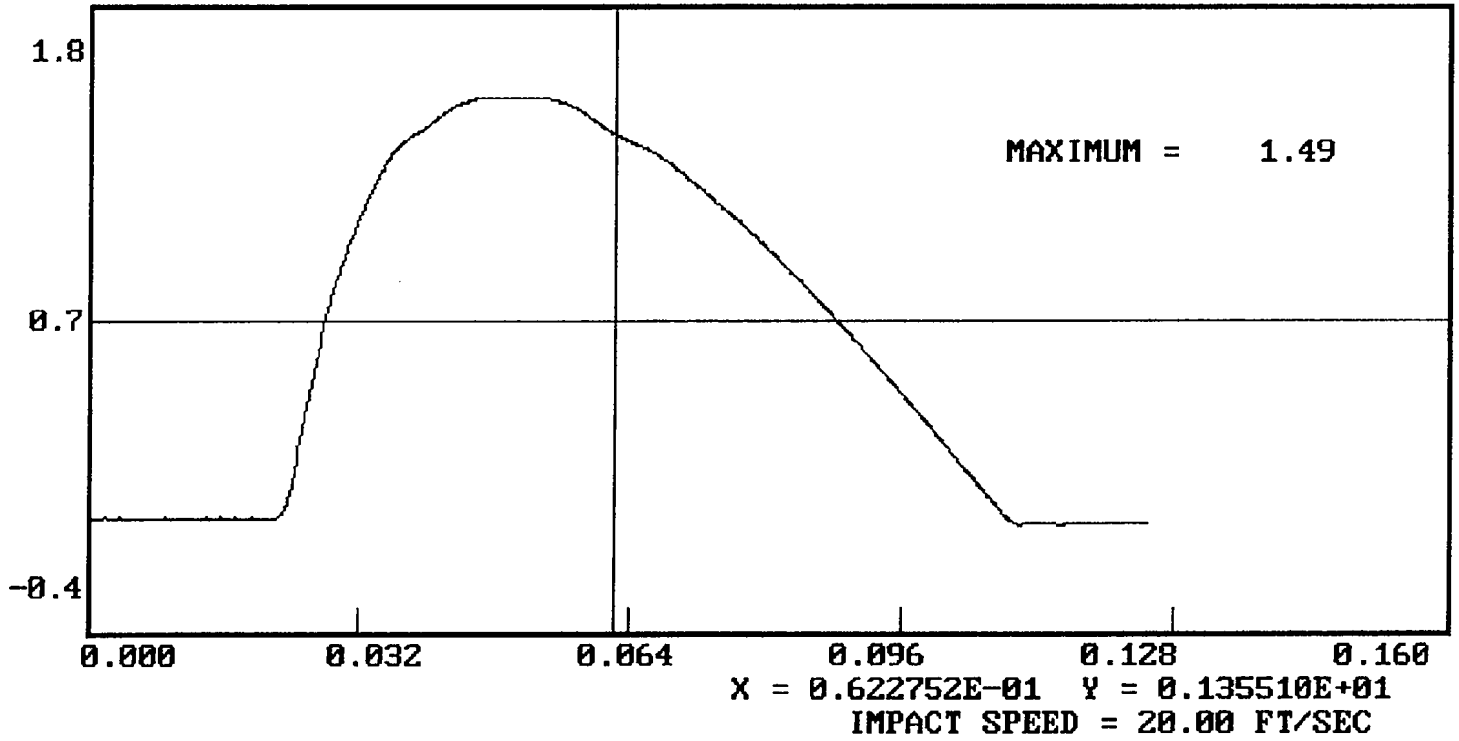


X = 0.622752E-01 Y = 0.142231E+01
IMPACT SPEED = 14.00 FT/SEC

DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 13:24
DUMMY # 269
FORCE (LBS) VS. TIME ((SECONDS))



DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 13:24
DUMMY # 269
DISPLACEMENT (IN) VS. TIME ((SECONDS))



MGA RESEARCH CORPORATION

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1996

DUMMY NUMBER: 269

TEST NUMBER: D962102

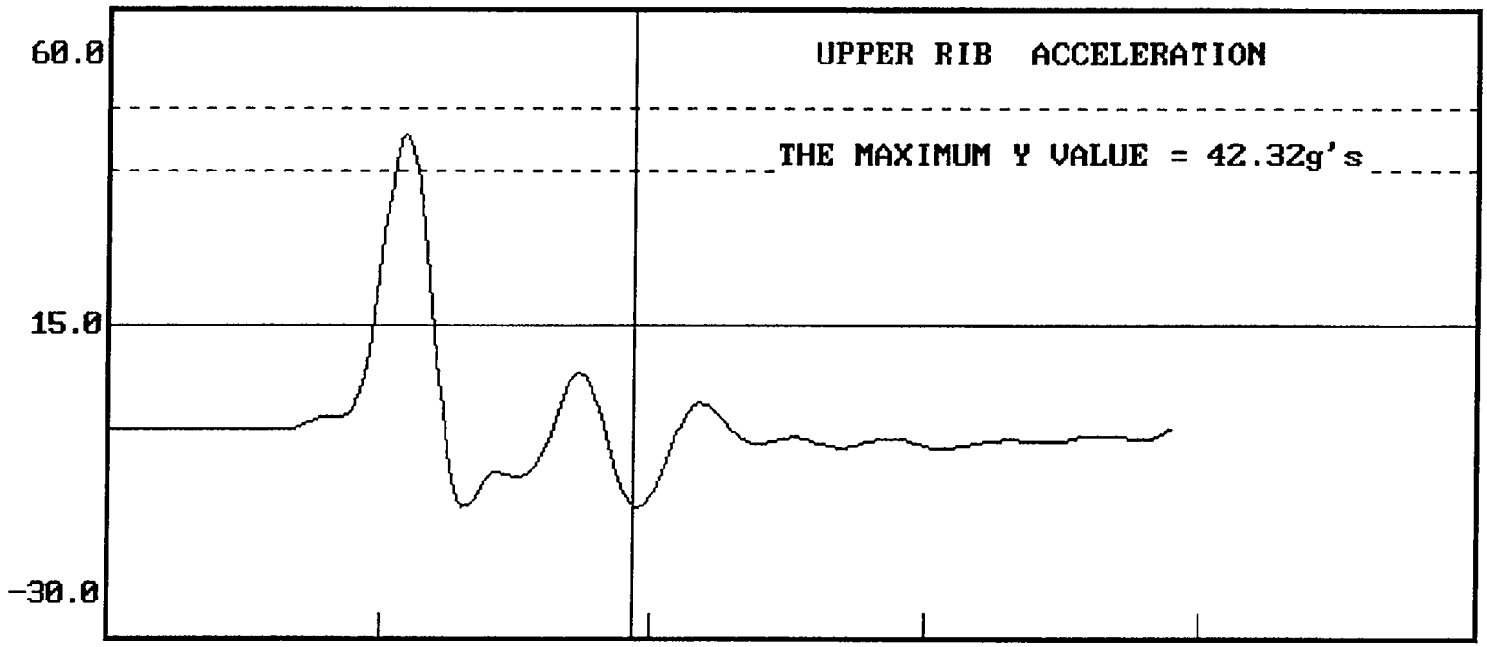
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	25%
PROBE SPEED	13.8 - 14.2 fps	14.1
UPPER RIB	37 - 46 g's	42
LOWER RIB	37 - 46 g's	43
LOWER SPINE	15 - 22 g's	21

TEST MEETS SPECIFICATIONS

TECHNICIAN

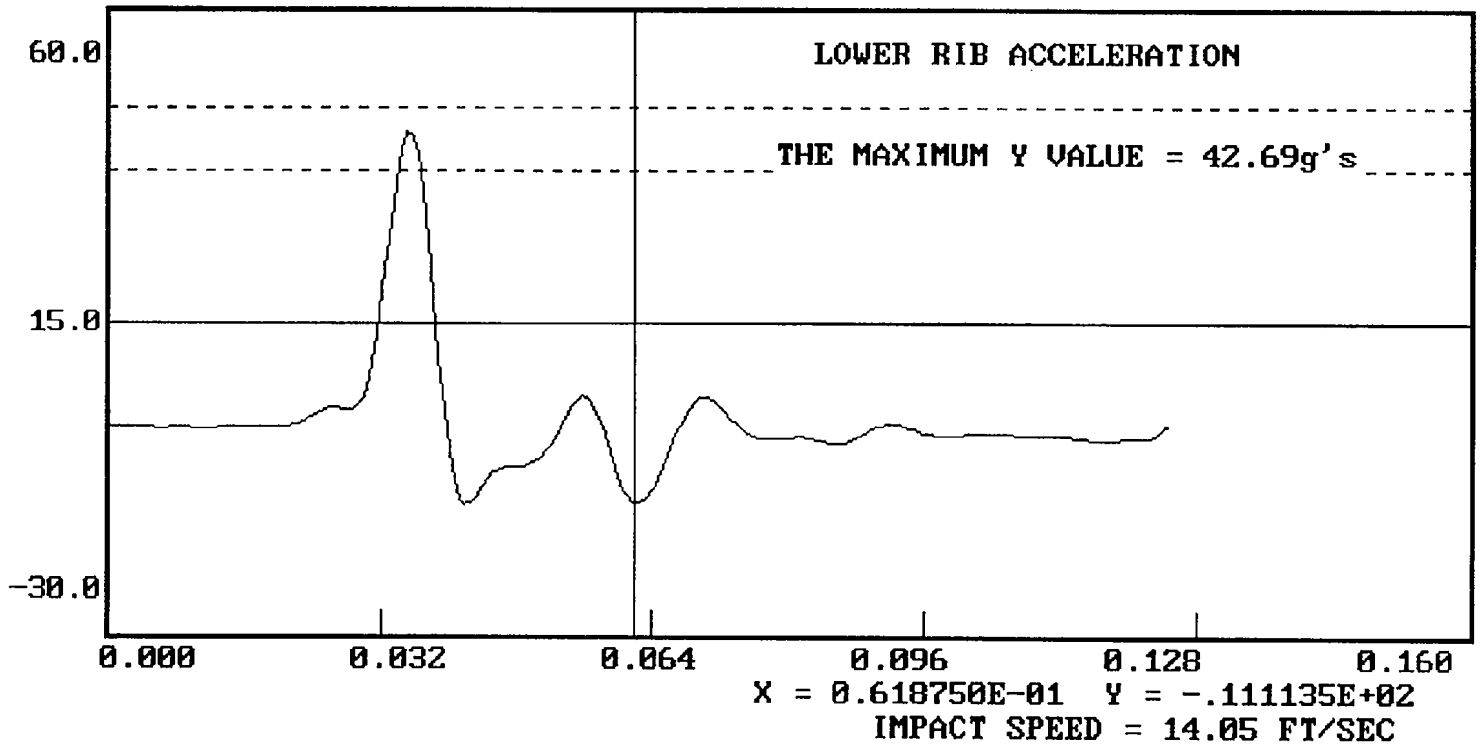
APPROVED BY

DUMMY CALIBRATION - THORAX IMPACT 12-10-1996 15:40
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))



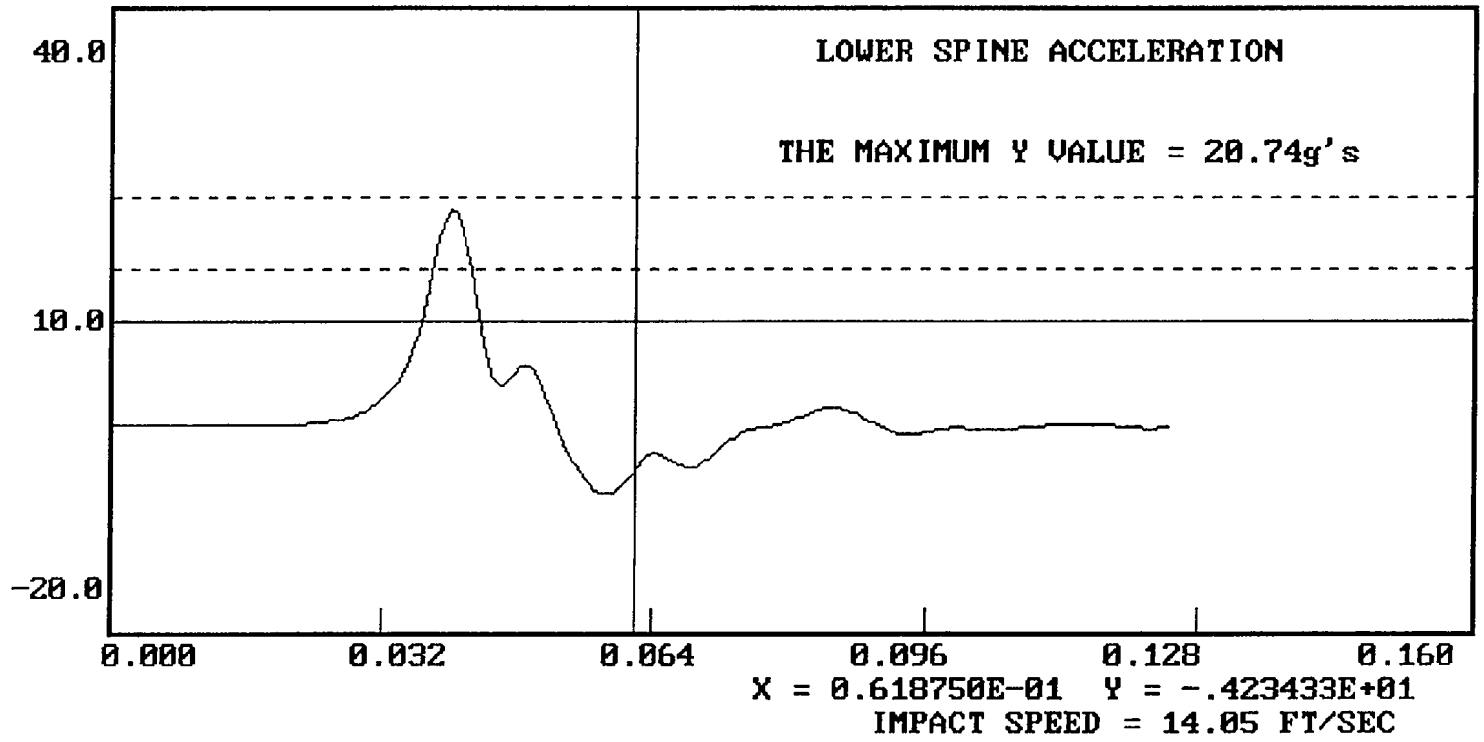
X = 0.618750E-01 Y = -.110699E+02
IMPACT SPEED = 14.05 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 12-10-1996 15:40
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.111135E+02
IMPACT SPEED = 14.05 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 12-10-1996 15:40
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))



MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1996

DUMMY NUMBER: 269 TEST NUMBER: D962103

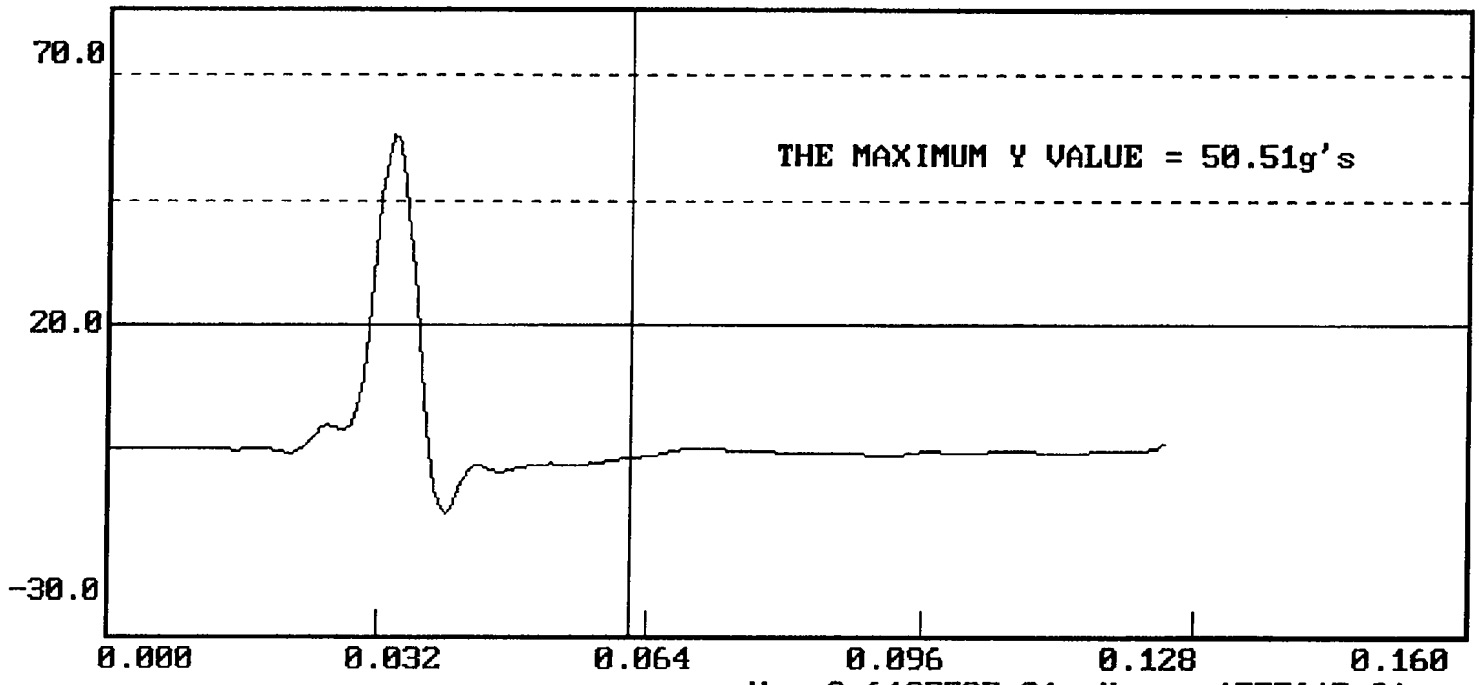
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	25%
PROBE SPEED	13.8 - 14.2 f/s	14.0
PELVIS ACCELERATION	40 - 60 g's	51

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - PELVIS IMPACT 12-10-1996 15:48
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.155561E+01
IMPACT SPEED = 14.04 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

SIDE IMPACT DUMMY (SID)

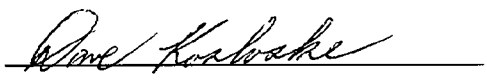
DATE: December 10, 1996

DUMMY NUMBER: 269 TEST NUMBER: D962104

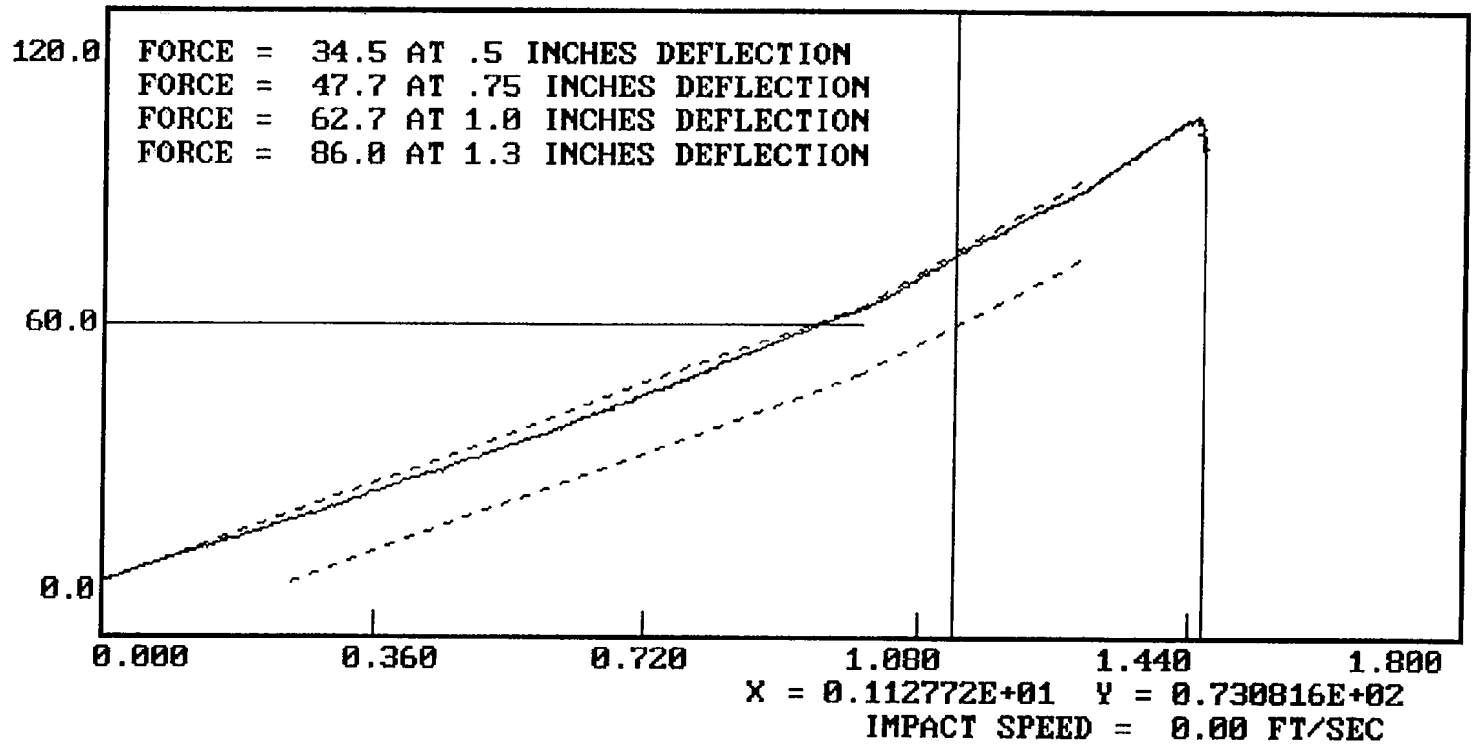
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	25%
FORCE @ 0.5 in	23.3 - 36.5 lbs	34.5
FORCE @ 0.75 in	36.7 - 49.8 lbs	47.7
FORCE @ 1.0 in	50 - 63 lbs	63
FORCE @ 1.3 in	73 - 88 lbs	86

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - ABDOMEN COMPRESSION 12-10-1996 14:39
DUMMY # 269
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



X = 0.112772E+01 Y = 0.730816E+02
IMPACT SPEED = 0.00 FT/SEC

MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1996

DUMMY NUMBER: 269 TEST NUMBER: D962105

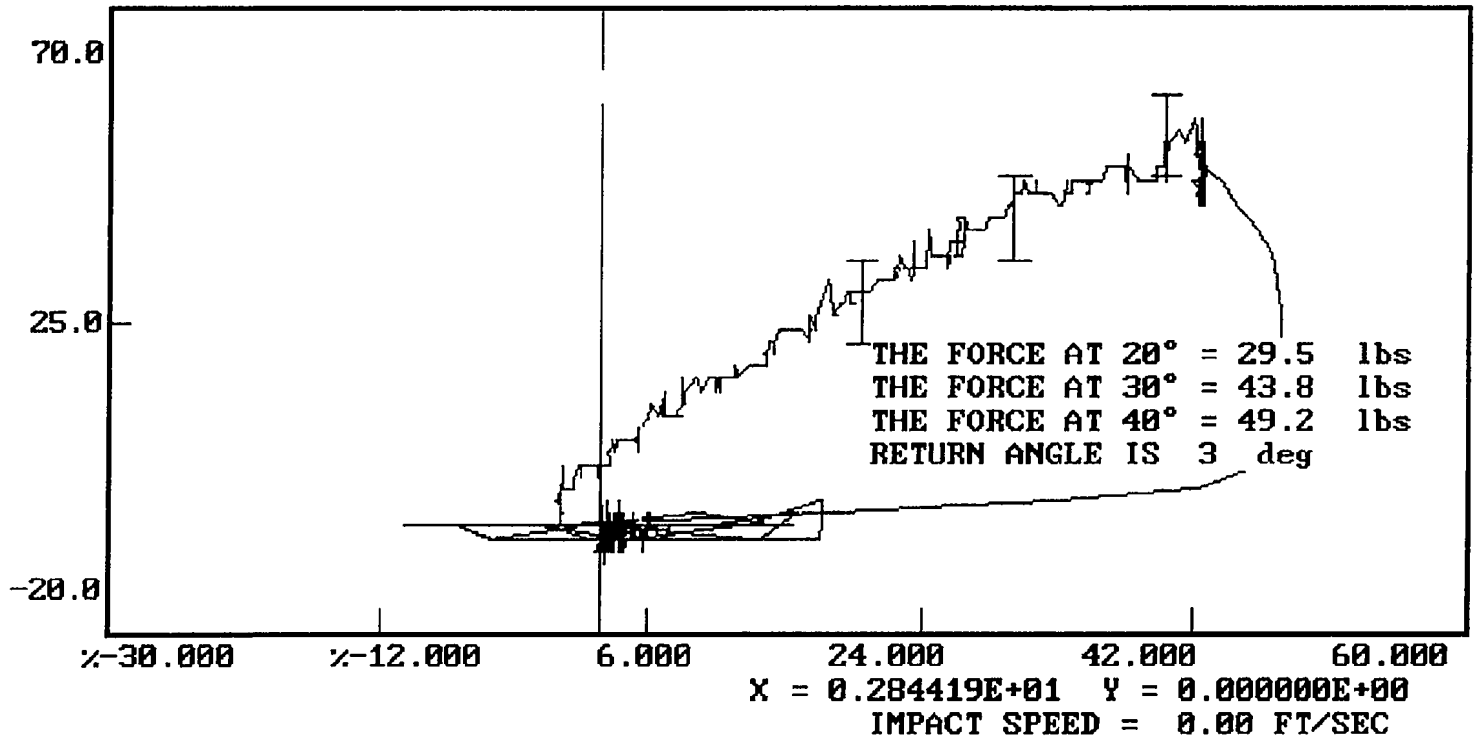
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	25%
FORCE @ 0°	0 - 6 lbs	0
FORCE @ 20°	22 - 34 lbs	30
FORCE @ 30°	34 - 46 lbs	44
FORCE @ 40°	46 - 58 lbs	49
RETURN ANGLE	12° maximum	3°

TEST MEETS SPECIFICATIONS

TECHNICIAN _____

APPROVED BY _____

DUMMY CALIBRATION - LUMBAR FLEXION 12-10-1996 14:05
DUMMY # 269
FORCE (LBS) VS. TORSO ROTATION (DEGREES)



POST-TEST CERTIFICATION DATA

Rear Dummy Serial Number: 270

Calibration Test Results Summary

Dummy Serial Number: 270

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.: 270 DATE OF VERIFICATION: December 10, 1996

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height	35.0" - 35.8"	35.2
RH - Rib Height	19.75" - 20.50"	20.50
HP - Hip Pivot Height	3.9" ref.	3.9
RD - Rib From Back Line	9.0" to 9.5"	9.5
KV - Knee Pivot From Back Line	20.1" - 20.7"	20.6
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

THORACIC SHOCK ABSORBER TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1996

DUMMY NUMBER: 270 TEST NUMBER: D96211678

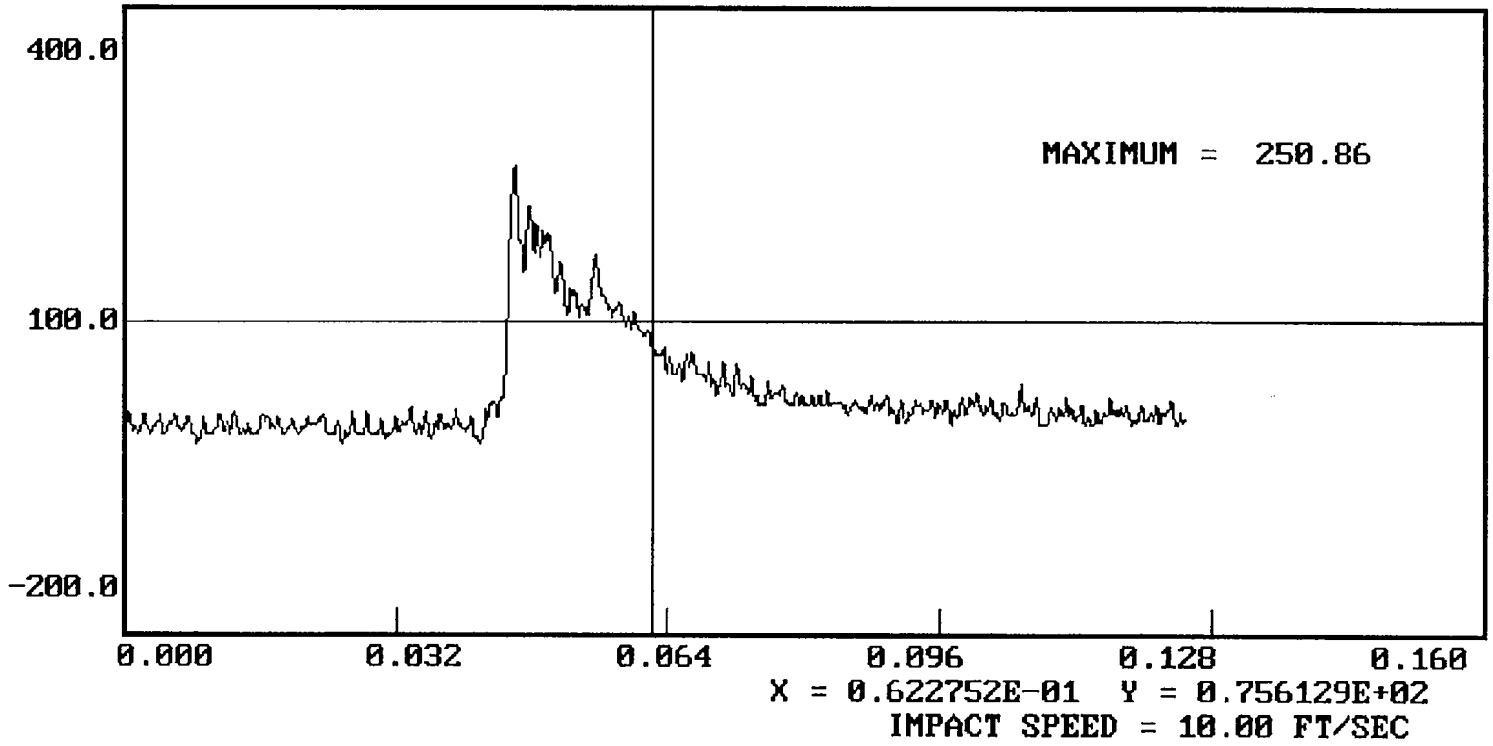
TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE		66° - 78° F	70°
RELATIVE HUMIDITY		10 - 70%	25%
VELOCITY 10 ft/s	FORCE (lb.)	188 - 253	251
	DISPLACEMENT (in.)	1.18 - 1.38	1.30
VELOCITY 14 ft/s	FORCE (lb.)	389 - 472	436
	DISPLACEMENT (in.)	1.26 - 1.47	1.30
VELOCITY 20 ft/s	FORCE (lb.)	841 - 1000	908
	DISPLACEMENT (in.)	1.30 - 1.57	1.43

TEST MEETS SPECIFICATIONS

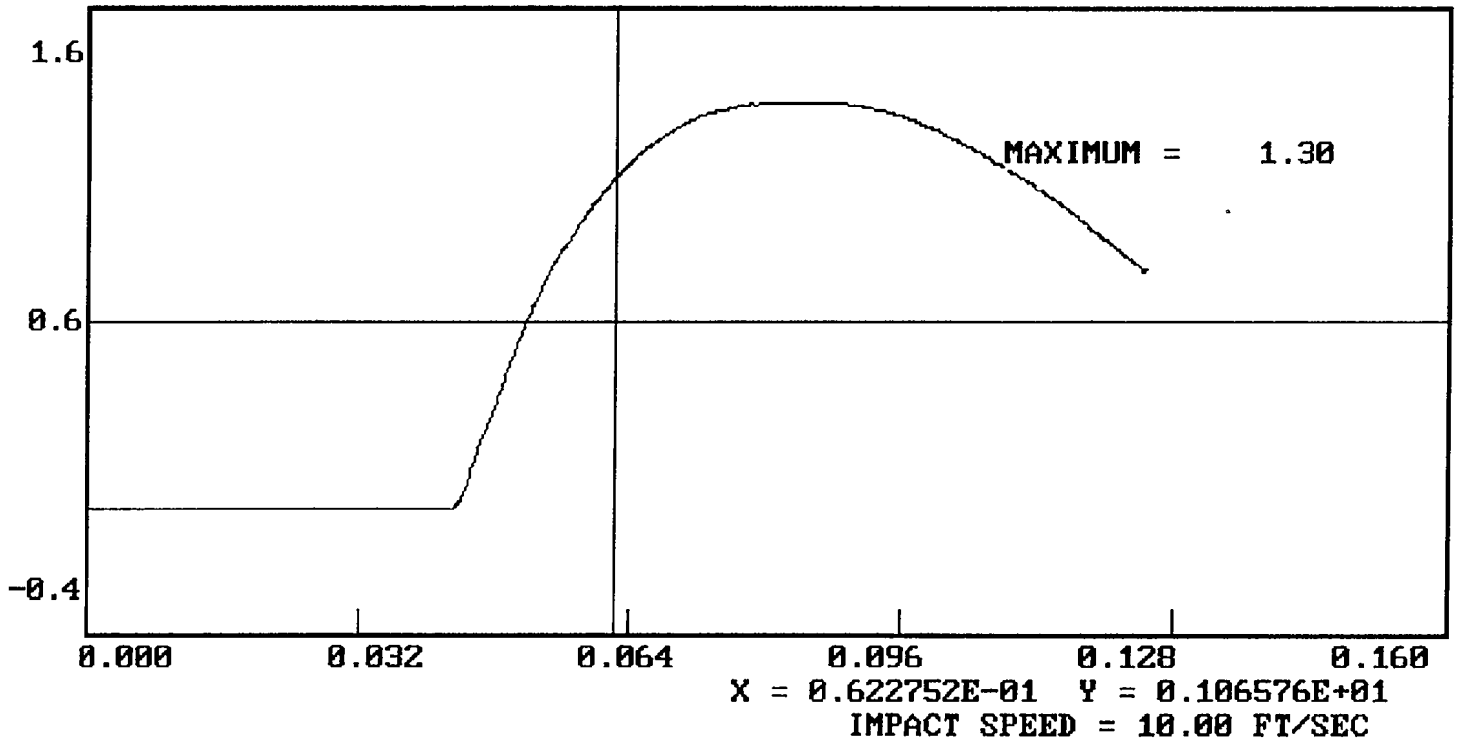
TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 11:12
DUMMY # 270
FORCE (LBS) VS. TIME ((SECONDS))

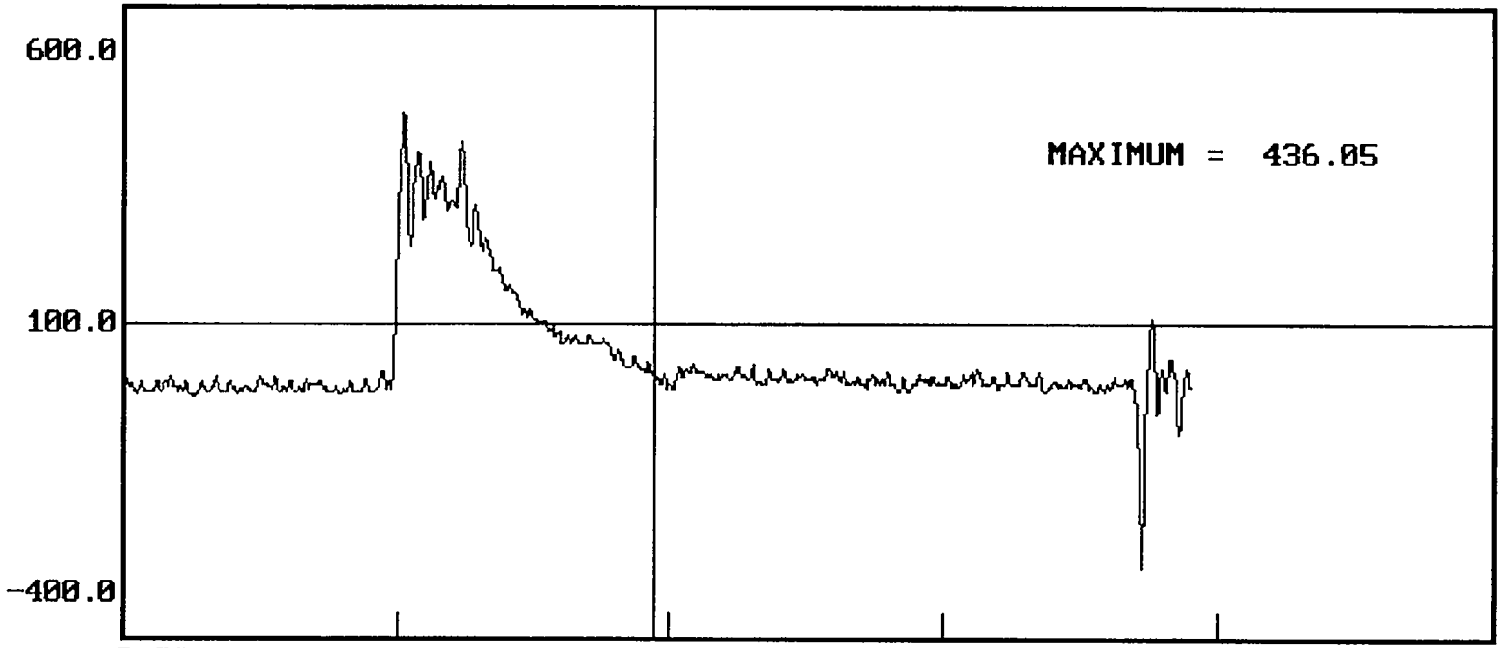


DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 11:12
DUMMY # 270
DISPLACEMENT (IN) VS. TIME ((SECONDS))



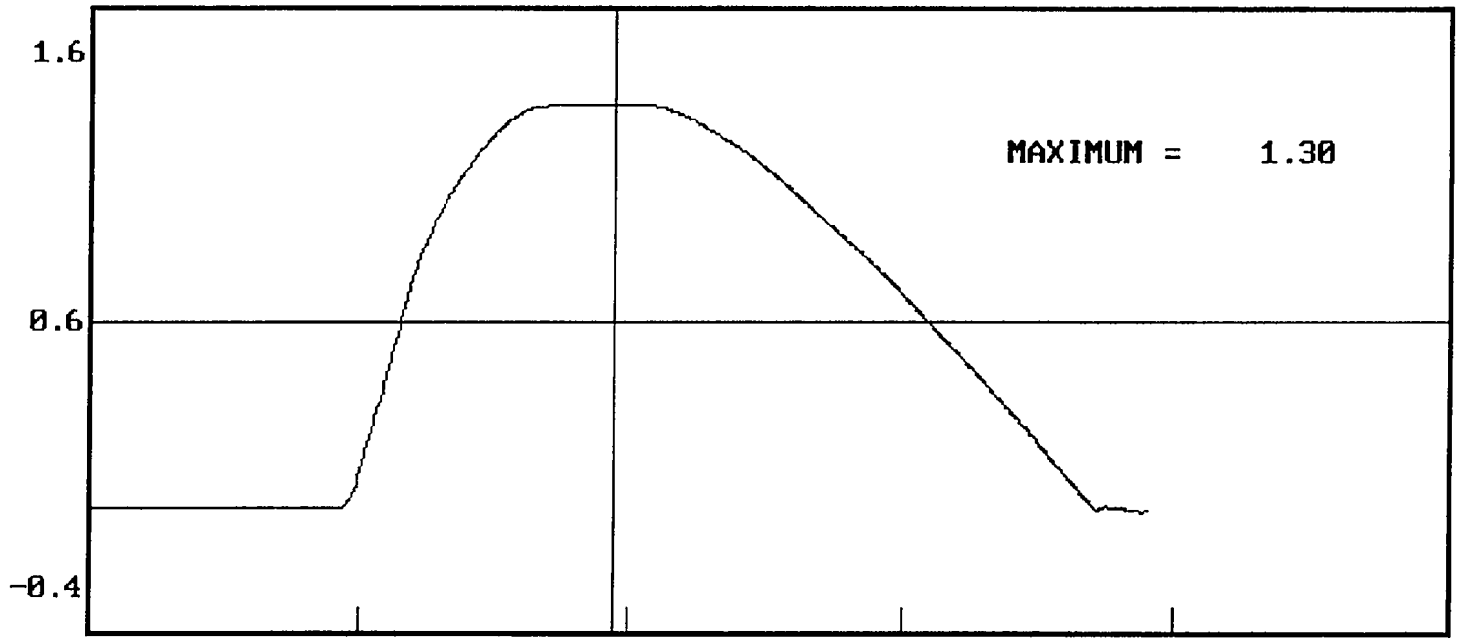
X = 0.622752E-01 Y = 0.106576E+01
IMPACT SPEED = 10.00 FT/SEC

DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 10:48
DUMMY # 270
FORCE (LBS) VS. TIME ((SECONDS))



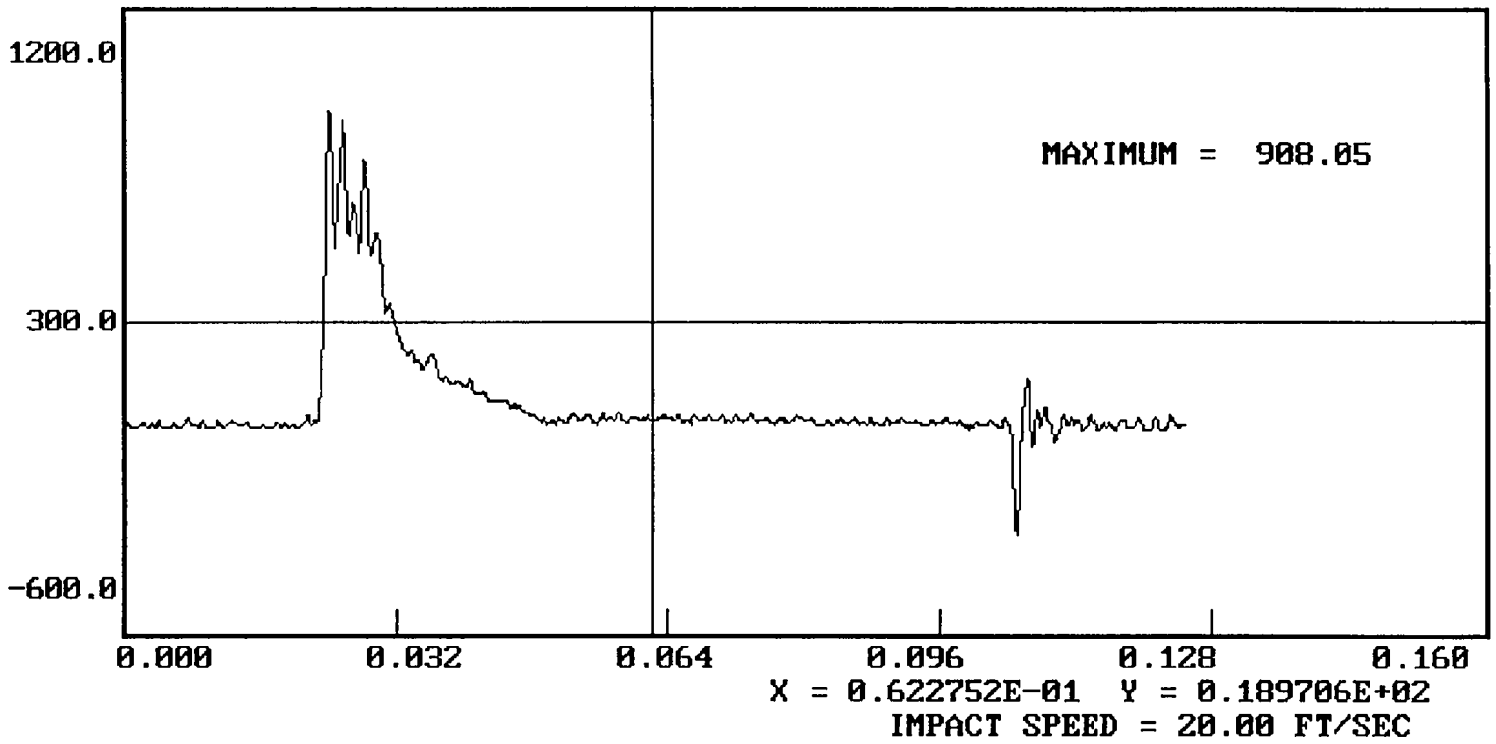
X = 0.622752E-01 Y = 0.124616E+02
IMPACT SPEED = 14.00 FT/SEC

DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 10:48
DUMMY # 270
DISPLACEMENT (IN) VS. TIME ((SECONDS))

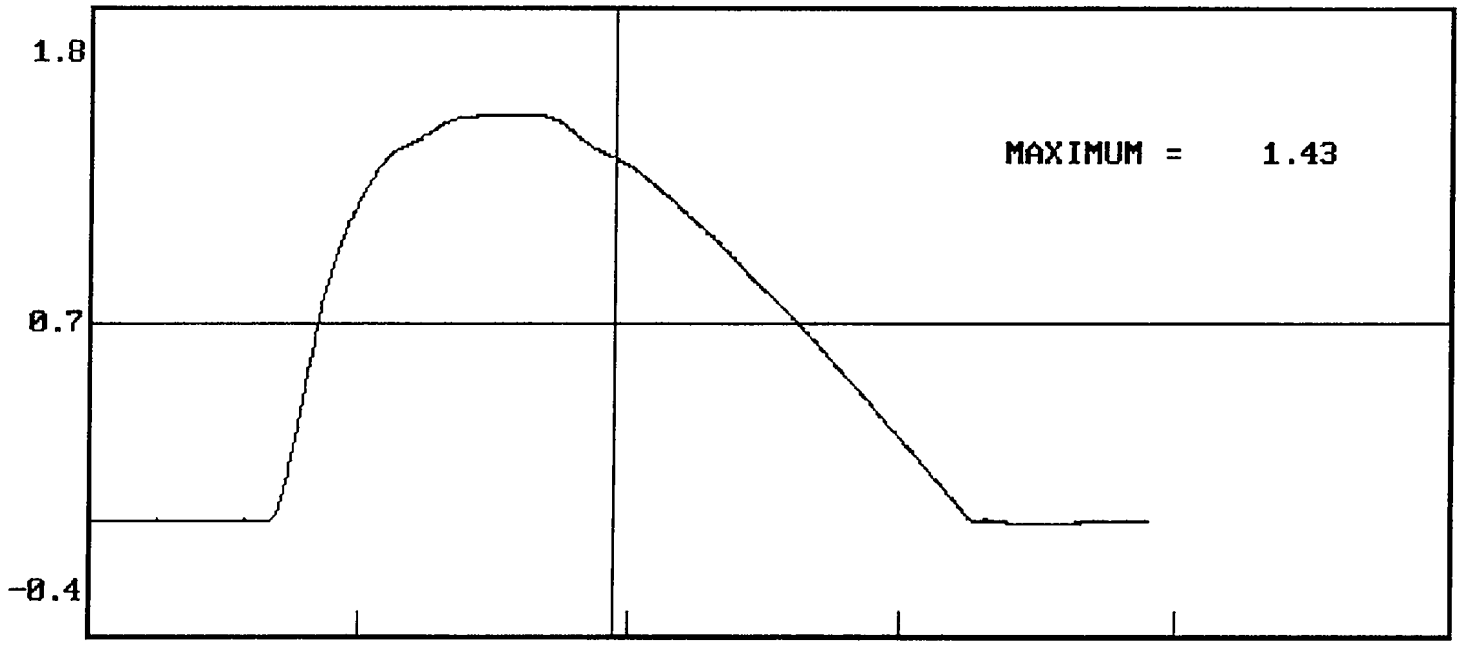


X = 0.622752E-01 Y = 0.129364E+01
IMPACT SPEED = 14.00 FT/SEC

DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 10:45
DUMMY # 270
FORCE (LBS) VS. TIME ((SECONDS))



DUMMY CALIBRATION - DAMPENER BENCH TEST 12-10-1996 10:45
DUMMY # 270
DISPLACEMENT (IN) VS. TIME ((SECONDS))



X = 0.622752E-01 Y = 0.127883E+01
IMPACT SPEED = 20.00 FT/SEC

MGA RESEARCH CORPORATION

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1996

DUMMY NUMBER: 270 TEST NUMBER: D962112

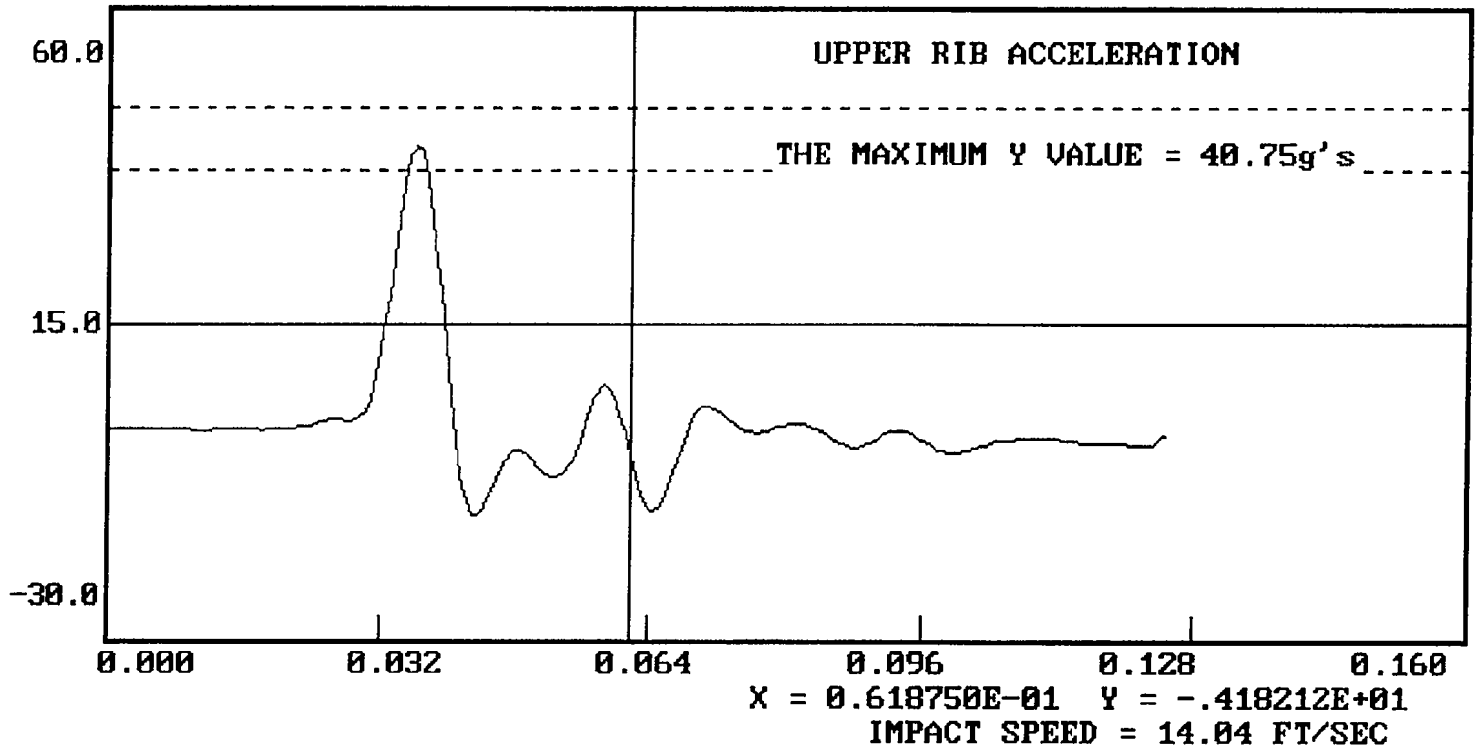
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	25%
PROBE SPEED	13.8 - 14.2 fps	14.0
UPPER RIB	37 - 46 g's	41
LOWER RIB	37 - 46 g's	43
LOWER SPINE	15 - 22 g's	21

TEST MEETS SPECIFICATIONS

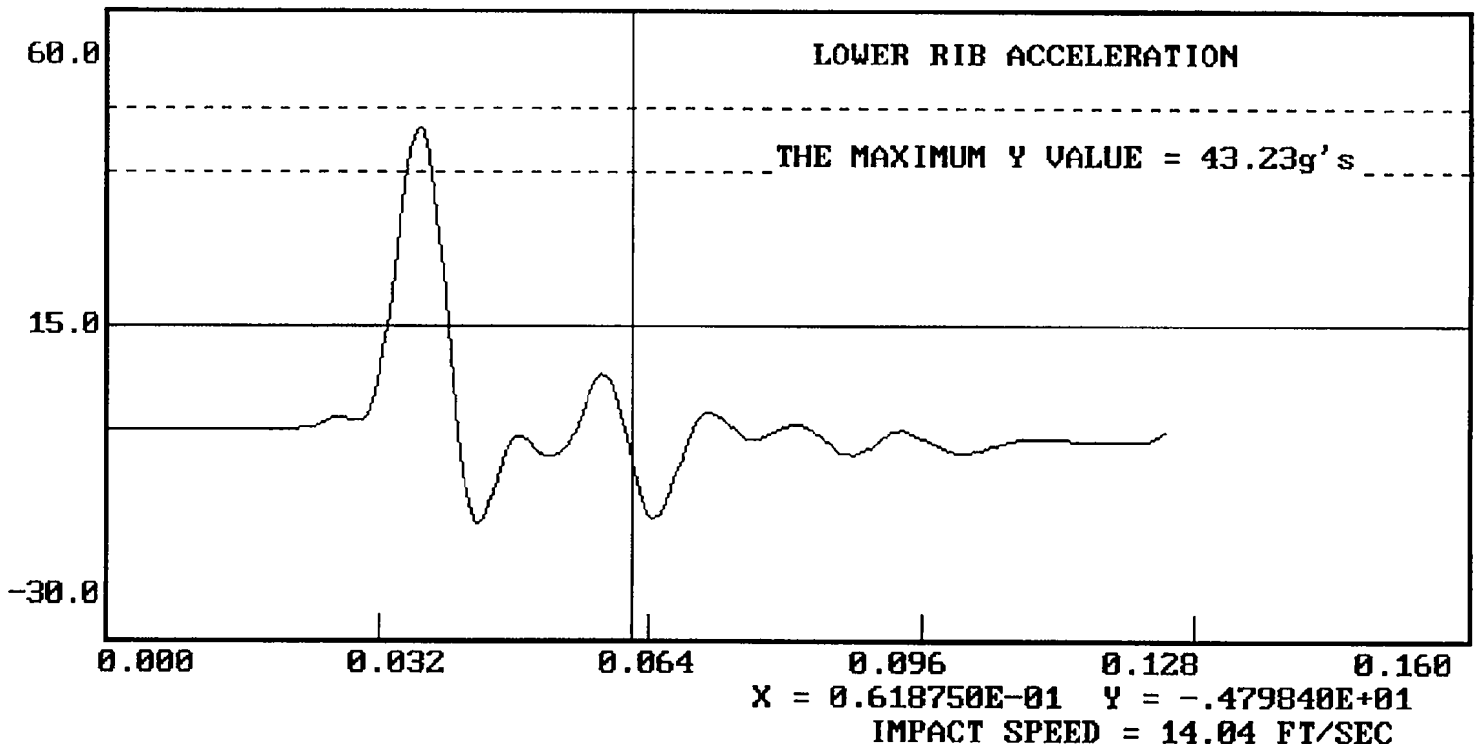
TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - THORAX IMPACT 12-10-1996 16:04
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))

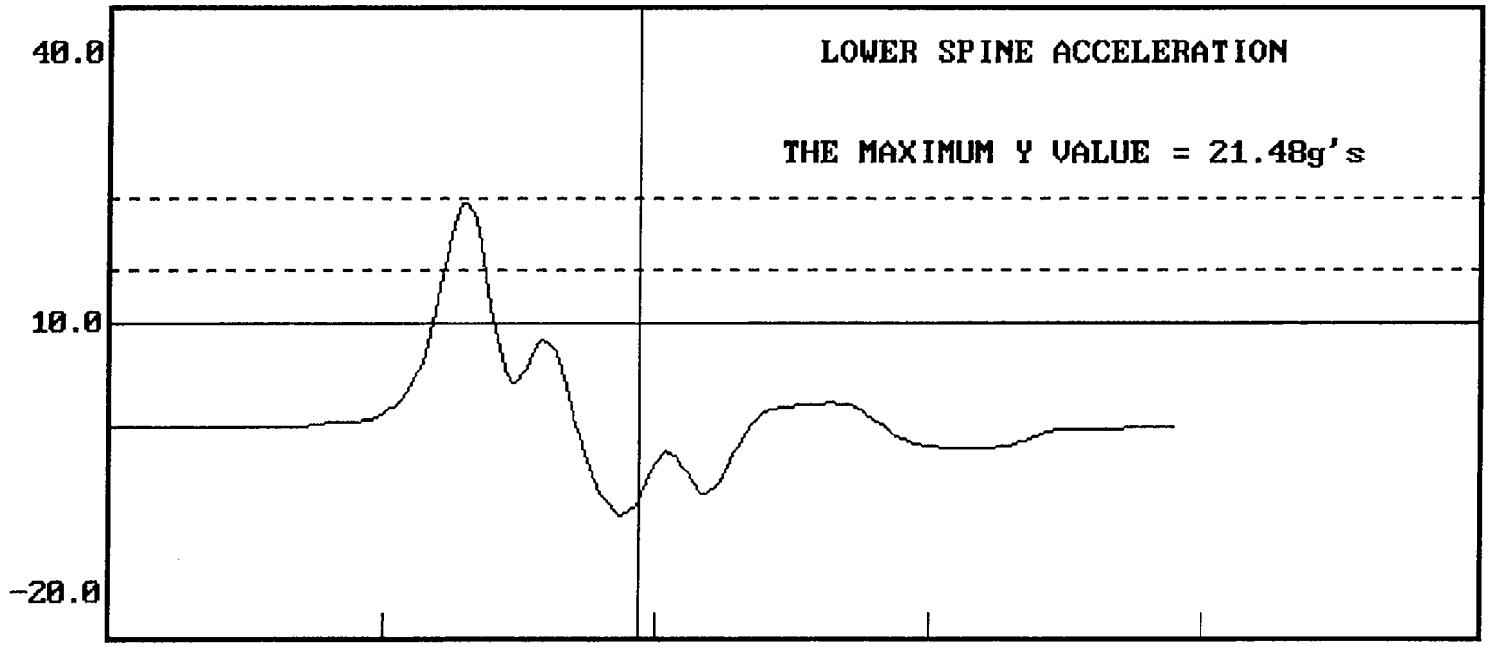


DUMMY CALIBRATION - THORAX IMPACT 12-10-1996 16:04
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.479840E+01
IMPACT SPEED = 14.04 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 12-10-1996 16:09
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.679371E+01
IMPACT SPEED = 14.04 FT/SEC

MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1996

DUMMY NUMBER: 270 TEST NUMBER: D962113

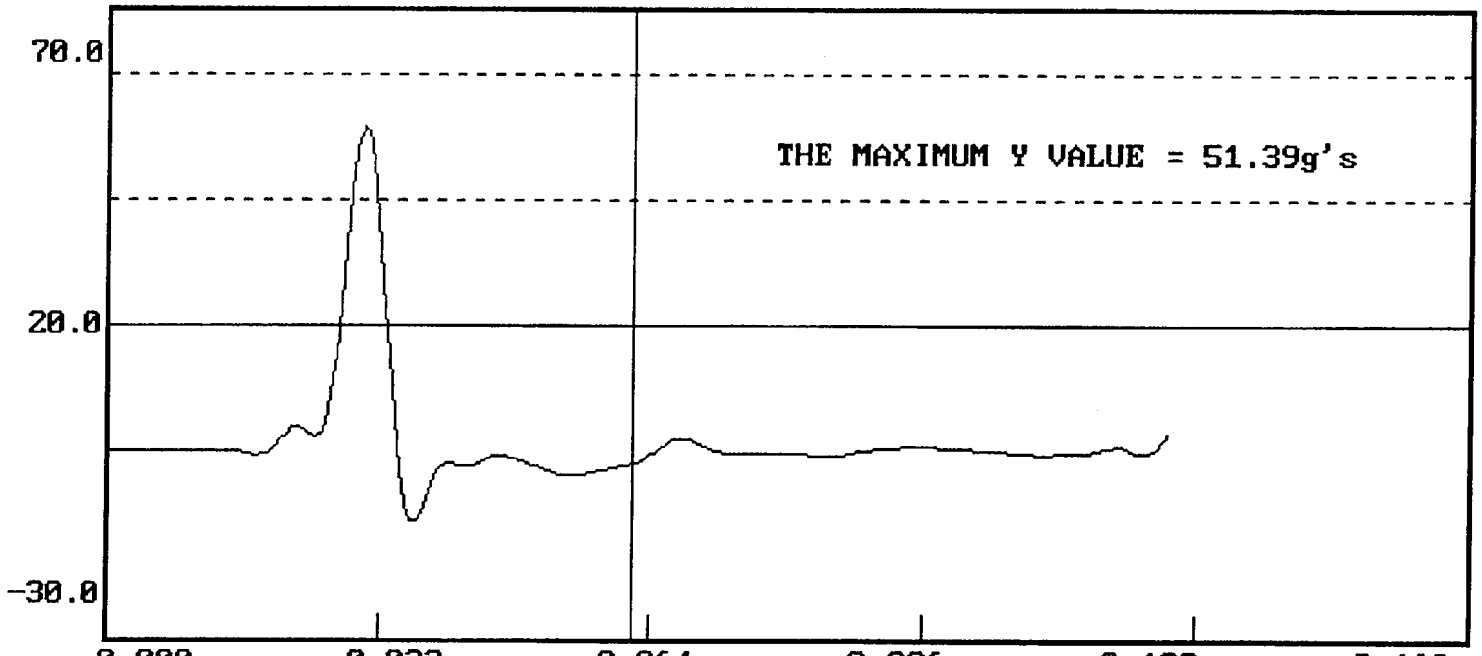
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	25%
PROBE SPEED	13.8 - 14.2 f/s	14.1
PELVIS ACCELERATION	40 - 60 g's	51

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - PELVIS IMPACT 12-10-1996 16:19
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.204790E+01
IMPACT SPEED = 14.10 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1996

DUMMY NUMBER: 270 TEST NUMBER: D962114

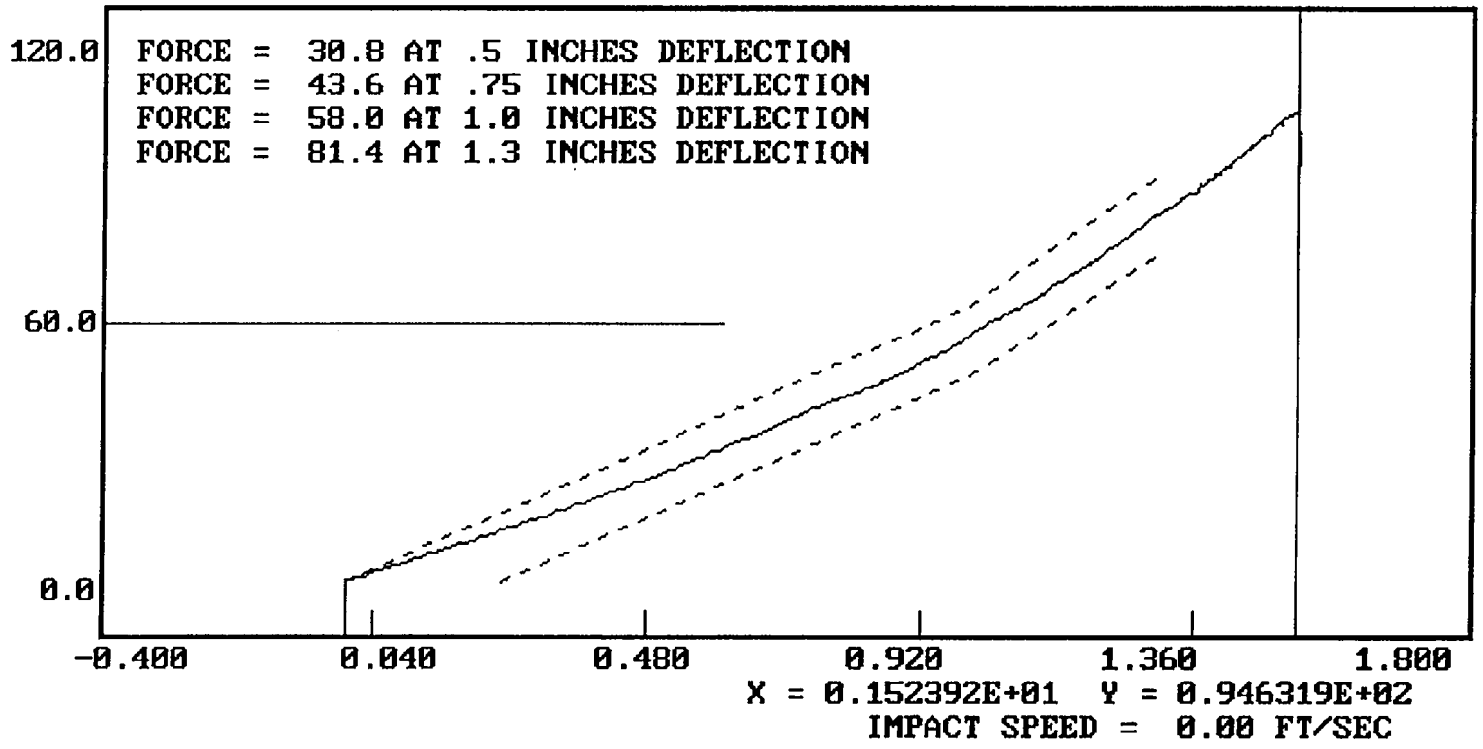
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	25%
FORCE @ 0.5 in	23.3 - 36.5 lbs	30.8
FORCE @ 0.75 in	36.7 - 49.8 lbs	43.6
FORCE @ 1.0 in	50 - 63 lbs	58
FORCE @ 1.3 in	73 - 88 lbs	81

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - ABDOMEN COMPRESSION 12-10-1996 14:43
DUMMY # 270
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: December 10, 1996

DUMMY NUMBER: 270 TEST NUMBER: D962115

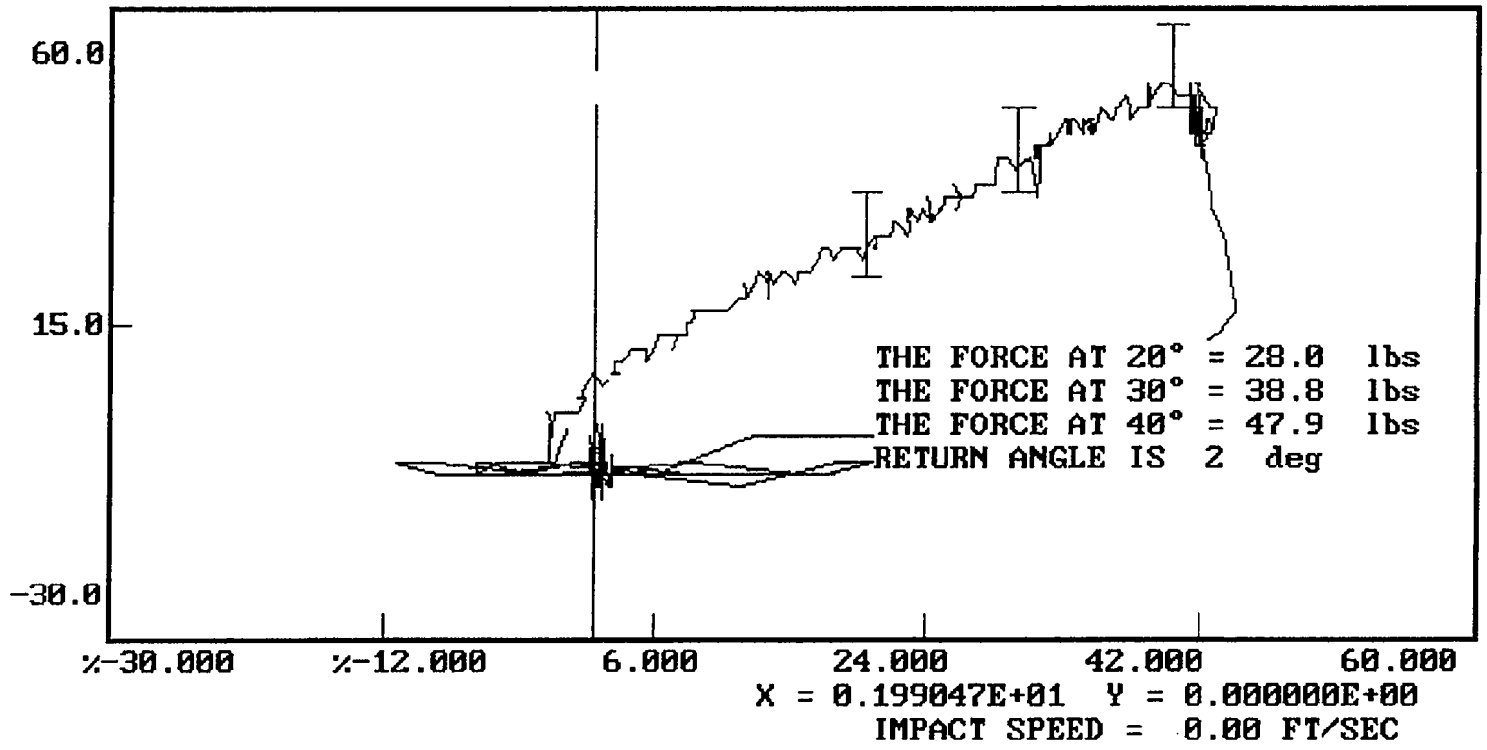
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	25%
FORCE @ 0°	0 - 6 lbs	0
FORCE @ 20°	22 - 34 lbs	28
FORCE @ 30°	34 - 46 lbs	39
FORCE @ 40°	46 - 58 lbs	48
RETURN ANGLE	12° maximum	2°

TEST MEETS SPECIFICATIONS

TECHNICIAN _____

APPROVED BY _____

DUMMY CALIBRATION - LUMBAR FLEXION 12-10-1996 14:26
DUMMY # 270
FORCE (LBS) VS. TORSO ROTATION (DEGREES)



POST-TEST DRIVER DUMMY INSPECTION CHECKLIST

Type: Side Impact Dummy

Serial Number: 269

Inspected By: Tim Michnay

Date: December 10, 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: 270

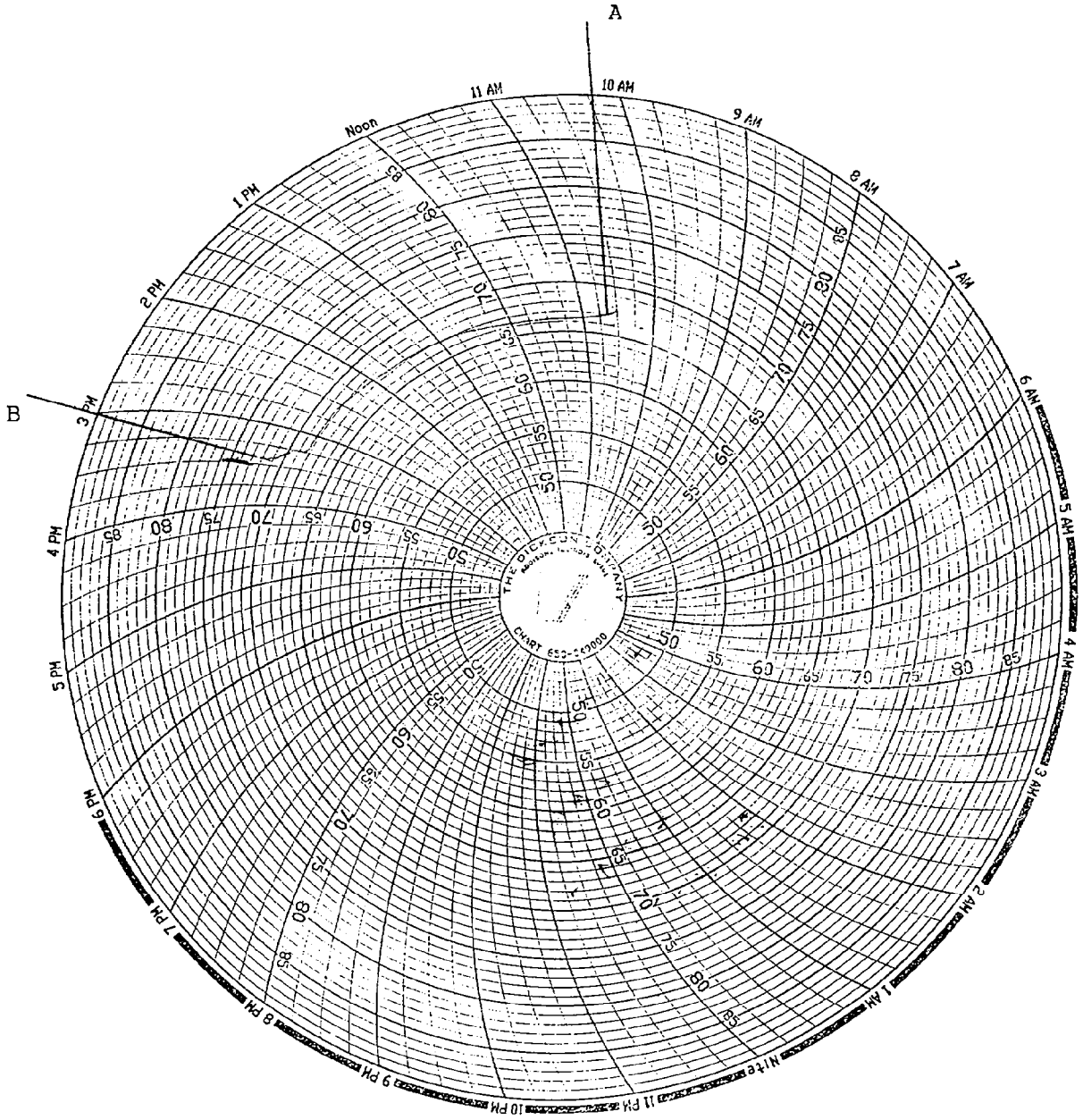
Inspected By: Tim Michnay

Date: December 10, 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 installed in vehicle
B = test conducted

APPENDIX D

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

DUMMY AND VEHICLE CALIBRATION DATA

INSTRUMENTS FOR RIGHT FRONT PASSENGER DUMMY NO. 269

	RIGHT FRONT PASSENGER		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Upper Rib Y	AGTM2	Endevco	September 10, 1996
Lower Rib Y	ALEC1	Endevco	September 16, 1996
Lower Spine Y	AH1G2	Endevco	September 11, 1996
Pelvis Y	ALCN9	Endevco	September 10, 1996
Upper Rib Redundant Y	AGTB5	Endevco	September 10, 1996
Lower Rib Redundant Y	J10411	Endevco	September 16, 1996
Lower Spine Redundant Y	AM751	Endevco	September 11, 1996
Pelvis Redundant Y	AKAF3	Endevco	September 10, 1996

INSTRUMENTS FOR RIGHT REAR PASSENGER DUMMY NO. 270

	RIGHT REAR PASSENGER		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Upper Rib Y	AP1H2	Endevco	September 10, 1996
Lower Rib Y	AJ9C2	Endevco	September 09, 1996
Lower Spine Y	AP2D7	Endevco	September 10, 1996
Pelvis Y	ALCH7	Endevco	September 09, 1996
Upper Rib Redundant Y	AH0B0	Endevco	September 10, 1996
Lower Rib Redundant Y	AHTT2	Endevco	September 09, 1996
Lower Spine Redundant Y	AP1T8	Endevco	September 10, 1996
Pelvis Redundant Y	AJ420	Endevco	September 09, 1996

VEHICLE INSTRUMENT CALIBRATION

	VEHICLE AND MDB ACCELEROMETERS		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Moving Barrier CG X	C14-Z10	Entran	July 12, 1996
Moving Barrier CG Y	B14-R01	Entran	July 15, 1996
Moving Barrier CG Z	B14-R16	Entran	July 11, 1996
Moving Barrier Rear Axle X	B14-R03	Entran	July 11, 1996
Moving Barrier Rear Axle Y	A10-G01	Entran	June 04, 1996
Right Mid A-Post Y	C06-G12	Entran	December 03, 1996
Right Lower A-Post Y	A09-G05	Entran	December 03, 1996
Right Mid B-Post Y	L14-D17	Entran	December 03, 1996
Right Lower B-Post Y	C25-A11	Entran	December 03, 1996
Rear Floorpan Above Axle X	A09-G08	Entran	July 11, 1996
Rear Floorpan Above Axle Y	J06-D23	Entran	July 03, 1996
Rear Floorpan Above Axle Z	D05-R14	Entran	July 11, 1996
Right Front Passenger Seat Track Y	B28-B01	Entran	July 15, 1996
Left Side Sill at Front Seat X	C14-Z05	Entran	December 04, 1996
Left Side Sill at Front Seat Y	D05-R24	Entran	December 04, 1996
Left Side Sill at Front Seat Z	L14-D19	Entran	December 04, 1996
Left Side Sill at Rear Seat X	B14-R04	Entran	December 04, 1996
Left Side Sill at Rear Seat Y	C05-Z13	Entran	December 04, 1996
Left Side Sill at Rear Seat Z	H16-X11	Entran	December 04, 1996
Right Side Sill at Front Seat Y	C25-A01	Entran	December 04, 1996

VEHICLE INSTRUMENT CALIBRATION

	VEHICLE AND MDB ACCELEROMETERS		
	SERIAL NO	MANUFACTURER	CALIBRATION DATE
Right Side Sill at Rear Seat Y	E13-D03	Entran	December 04, 1996
Left Rear Occupant Compartment Y	A09-G03	Entran	December 03, 1996
Vehicle CG X	L22-G05	Entran	July 11, 1996
Vehicle CG Y	B13-Z02	Entran	July 11, 1996
Vehicle CG Z	E13-D07	Entran	July 10, 1996

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