V2338

REPORT NO.: 214-MGA-96-005
SAFETY COMPLIANCE TESTING FOR
FMVSS 214 "SIDE IMPACT PROTECTION -
PASSENGER CARS"

HONDA MOTOR COMPANY
1996 ACURA 2.5 TL 4 DOOR SEDAN
NHTSA NO: CT5300

MGA PROVING GROUNDS
5000 WARREN ROAD
BURLINGTON, WI 53105

Test Date: November 28, 1995

Report Date: December 6, 1995

FINAL REPORT

Prepared For:

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
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15. Supplementary Notes

16. Abstract

A 48/24 kph 90° Impact (Moving Deformable Barrier) Compliance Test was conducted on the subject 1996 Acura 2.5 TL 4 Door Sedan 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 November 28, 1995.

The impact velocity of the Moving Deformable Barrier (MDB) was 52.8 kph, and the ambient temperature at the struck side (driver's) of the target vehicle at the time of impact was 18°C. The target vehicle post test maximum crush was 376 mm at level 2. The test vehicle's performance follows:

	DRIVER	PASS.
Left Upper Rib (LUR) Accel., g	38	51
Left Lower Rib (LLR) Accel., g	42	51
Lower Spine (T_{12}) Accel., g	61	44
Thoracic Trauma Index (TTI)	52	48
Pelvis (PEV) Accel., g	52	59

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	18. Distribution Statement
Compliance Testing Side Impact Protection FMVSS 214 Side Impact Dummy (SID)	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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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 in a 1996 Acura 2.5 TL 4 Door Sedan.

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

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

SECTION 2

SUMMARY OF SIDE IMPACT TEST

A 1996 Acura 2.5 TL 4 Door Sedan was impacted on the left or driver's side by a Moving Deformable Barrier (MDB) which was moving forward in a 27° crabbed position to the tow road guidance system at a velocity of 32.8 mph (52.8 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 November 28, 1995. Pre- and post-test photographs of the test vehicle, the MDB and the side impact dummies (SIDs) are included in Appendix A.

Two Side Impact Dummies (SIDs) were placed in the driver and left rear designated seating positions according to instructions specified in the OVSC Side Impact Laboratory Test Procedure which is dated September 1, 1995. The side impact event was documented by nine high speed cameras. Camera locations and other pertinent camera information can be found in this report.

The SIDs were instrumented with the following accelerometers.

1. Left Upper Rib (LUR) uniaxial accelerometer (Y-direction)
2. Left Lower Rib (LLR) uniaxial accelerometer (Y-direction)
3. Lower Thoracic Spine (T_{12}) uniaxial accelerometer (Y-direction)
4. Pelvic (PEV) section uniaxial accelerometer (Y-direction)

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

The following table summarizes the results of the test:

Injury Criteria	Front SID	Rear SID
TTI (g)	51.5	47.5
Pelvis (g)	52.4	59.4

TEST NOTES

The following accelerometers were not used for this test:

Left Front Door on Centerline

Midrear of Left Front Door

Left Front Door Upper Centerline

Midrear of Left Rear Door

Left Rear Door Upper Centerline

Rear Seat Track

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

DATA SHEET NO. 1

GENERAL VEHICLE TEST PARAMETER DATA

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 VIN: JH4UA264XTC002134

Vehicle Body Color: Green Build Date: 1/95

Engine Data: 5 Cylinders; __ CID; 2.5 Liter; ___cc

Placement X Longitudinal; __ Lateral

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

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

Odometer Reading 176 miles

Options: __A/C; X Pwr. Steering.; X Pwr. Brakes; X Pwr. Windows;

X Cruise Control; X Tilt Wheel; X Power Door Locks;

DATA FROM TIRE PLACARD:

Tire Pressure (at capacity): 30 Psi FRONT

29 Psi REAR

Recommended Tire Size: P205/60R15

Tires on Test Vehicle: P205/60R15 Manufacturer: Bridgestone

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 Power

Vehicle Maximum Capacity Loading = 385.6 kg (A)

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

Cargo Capacity (A-B) = 45.4 kg

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

WEIGHT OF TEST VEHICLE WITH MAXIMUM FLUIDS:

Right Front	= 439.1 kg	Right Rear	= 299.8 kg
Left Front	= 429.1 kg	Left Rear	= 302.1 kg
TOTAL FRONT = 868.2 kg		TOTAL REAR = 601.9 kg	

% of Total Vehicle Weight = 59.1 %; % of Total Weight = 40.9 %

TOTAL WEIGHT = 1470.1 kg

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight with Maximum Fluids	= 1470.1 kg
Cargo Carrying Capacity of Test Vehicle	= 45.4 kg
Weight of 2 Side Impact Dummies (2 x 80.7 kg.)	= 161.4 kg
TEST VEHICLE TARGET WEIGHT	= 1676.9 kg

ACTUAL WEIGHT OF TEST VEHICLE WITH 2 DUMMIES AND CARGO:

Right Front	= 463.1 kg	Right Rear	= 354.7 kg
Left Front	= 473.6 kg	Left Rear	= 383.7 kg
TOTAL FRONT	= 936.7 kg	TOTAL REAR	= 738.4 kg
% of Total Weight	= 55.9 %	% of Total Weight	= 44.1 %

TOTAL TEST WEIGHT = 1675.1 kg

TEST VEHICLE ATTITUDE:

CURB WEIGHT ATTITUDE:

Right Front 674 mm Left Front 677 mm Right Rear 679 mm Left Rear 681 mm

FULLY LOADED WEIGHT ATTITUDE:

Right Front 669 mm Left Front 661 mm Right Rear 656 mm Left Rear 635 mm

TEST ATTITUDE:

Right Front 662 mm Left Front 661 mm Right Rear 654 mm Left Rear 641 mm

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Test Vehicle Wheelbase: 2840 mm

C.G. = 1252 mm rearward of front wheel centerline

TOTAL VEHICLE LENGTH:

Right Side = 4585 mm

Centerline = 4832 mm

Left Side = 4585 mm

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

FRONT SEAT CUSHION PLACEMENT:

Total Length of Adjustment Travel: 190 mm

Test Position: 95 mm rearward

FRONT SEAT BACK ADJUSTMENT POSITION:

Seat Back Angle = 10.6° degrees at headrest

SECOND POSITION SEAT:

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

Seat Back Adjustment Position: Non-Adjustable

ADJUSTABLE STEERING COLUMN POSITION: Mid

WINDOW POSITIONS: Left Front Closed Left Rear Closed

Right Front Open Right Rear Opened

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

Fuel system usable capacity = 65.1 liters

Test Volume: 60.6 liters 93 % of capacity

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

Wheelbase: = 2840 mm

Impact Point is 480 mm rearward of front axle centerline

DATA SHEET NO. 2

TEST VEHICLE SUMMARY OF RESULTS

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

Overall Length = 4832 mm; Overall Width = 1775 mm

TEST WEIGHT:

Right Front =	463.1 kg	Right Rear =	354.7 kg
Left Front =	473.6 kg	Left Rear =	383.7 kg
TOTAL FRONT =	936.7 kg	TOTAL REAR =	738.4 kg
% of Total Weight =	55.9 %	% of Total Weight =	44.1 %

TOTAL VEHICLE WEIGHT = 1675.1 kg

Wheelbase = 2840 mm

Longitudinal C.G. from Center of Front Axle = 1252 mm

Impact Angle with Respect to Impactor = 90° degrees

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (268 mm above ground) = 255 mm
2. LEVEL 2 (485 mm above ground) = 376 mm
3. LEVEL 3 (590 mm above ground) = 324 mm
4. LEVEL 4 (868 mm above ground) = 278 mm
5. LEVEL 5 (1322 mm above ground) = 118 mm

Maximum Post-Test Intrusion = 376 mm

OCCUPANTS:	Left Front Passenger	Left Rear Passenger
Type of Dummy	SID	SID
Restraints Used	type II belt with airbag	type II belt system

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: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

POSITION OF IMPACT (MDB) ON MONORAIL:

Crabbed 27° to left

MDB DETAILS:

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

MDB WEIGHT:

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

TOTAL MDB WEIGHT = 1356.2 kg

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

Impact Speed = Primary: 32.8 mph (52.8 kph) Secondary: 32.8 mph (52.8 kph)

CRASH TEST SUMMARY FOR SIDE IMPACTOR (Cont'd)

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

1. Row A Top of Stack (813 mm) = 123 mm
2. Row B Mid Stack (686 mm) = 72 mm
3. Row C Top of Bumper (533 mm) = 44 mm
4. Row D Center of Bumper (432 mm) = 66 mm

INSTRUMENTATION:

Number of MDB Data Channels = 5

DATA SHEET NO. 4

POST-TEST OBSERVATIONS

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

VISIBLE DUMMY CONTACT POINTS:

	LEFT FRONT SID	LEFT REAR SID
Head	back of head to headrest	to C Post
Arm	to door and B-Post	to door
Pelvis	to B-Post	to door
Left Knee	to door	to door
Right Knee	to left knee	to left knee

DOOR OPENING:

	LEFT SIDE	RIGHT SIDE
Front	No	Yes
Rear	No	Yes

MDB DISTANCE FROM TARGET IMPACT POINT:

Horizontal: 5 mm forward Vertical: 2 mm high

ARM REST LOCATIONS:

Front: 275 mm

Rear: 275 mm

POST-TEST OBSERVATIONS (Cont'd)

SEAT CRUSH:

Front Seat Back: 65 mm Front Seat Cushion: 64 mm

Left Rear Seat Back: 79 mm Rear Seat Cushion: 112 mm

GLAZING DAMAGE:

Windshield cracked. Left door windows shattered

PILLAR PERFORMANCE:

No failure

SILL SEPARATION:

None

OTHER NOTABLE IMPACT EFFECTS:

Airbags fired and fuel cap door came open

SECTION 4

OCCUPANT AND VEHICLE INFORMATION

DATA SHEET NO. 5

SIDE IMPACT DUMMY (SID) INSTRUMENTATION DATA

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

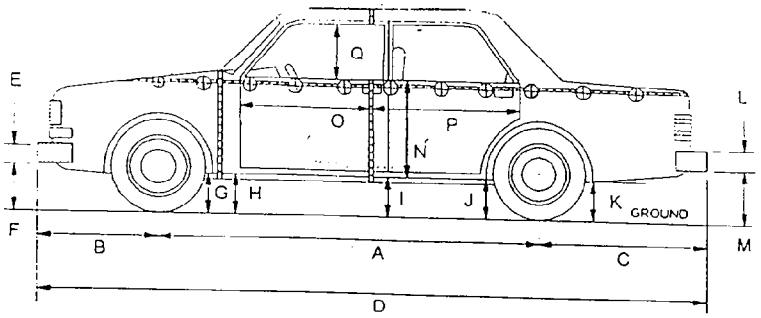
	Front Dummy ID #270				Rear Dummy ID #269			
	Pos. Direct.		Neg. Direct		Pos. Direct.		Neg. Direct	
	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
RIB ACCELERATIONS								
Left Upper Rib (LUR) Y	38.3	45	-13.1	80	50.8	49	-9.9	107
Left Lower Rib (LLR) Y	41.8	34	-12.5	80	51.0	48	-13.8	107
SPINE ACCELERATIONS								
Lower Lateral Y	61.2	31	-16.1	75	44.0	50	-12.8	73
PELVIS ACCELERATIONS								
Lateral Y	52.4	36	-15.1	93	59.4	45	-6.3	76

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

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

DATA SHEET NO. 6

VEHICLE PRE AND POST-TEST MEASUREMENTS



LEFT SIDE VIEW

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

J1 = To Pinch Weld
J2 = To Sill

ALL MEASUREMENTS IN (mm)

	PRE-TEST	POST-TEST	Δ CHANGE
A	2840	2775	65
B	868	900	-32
C	1124	1134	-10
D	4832	4809	23
E	125	125	0
F	408	446	-38
G	236	215	21
H	191	182	9
I	238	72*	166
J1/J2	241/191	35/10*	206/181
K	323	265	58
L	258	260	-2
M	346	305	41
N	670	583	87
O	657	643	14
P	1442	1414	28
Q	432	418	14
R	4585	4591	-6
S	4585	4520	65
T	1775	1552	223

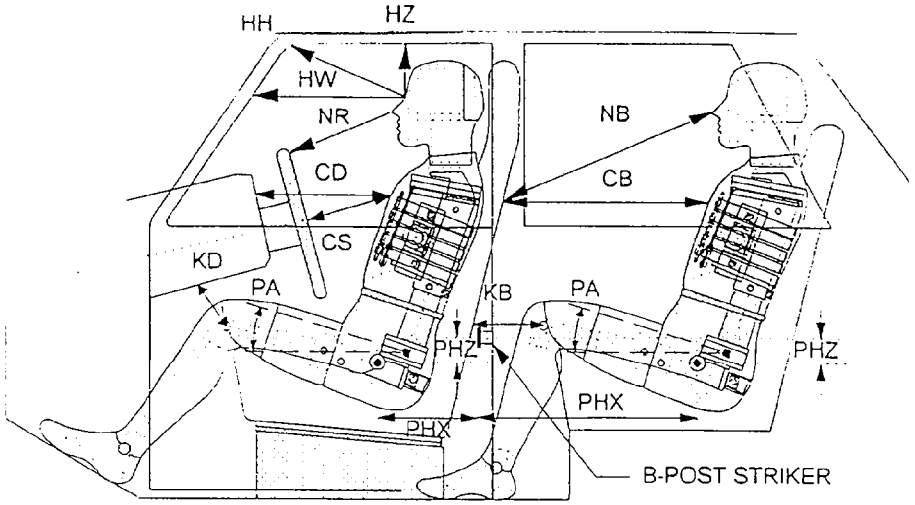
* Plastic trim fell on ground.

DATA SHEET NO. 7

SIDE IMPACT DUMMY (SID) LONGITUDINAL CLEARANCE DIMENSIONS

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995



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

	FRONT SID ID #270
HH	372
HW	624
HZ	189
NR	484
CD	574
CS	355
KDL(KDA°)	210 (4.0°)
KDR(KDA°)	210 (1.8°)
PA°	23.4°
PHX	144
PHZ	118

	REAR PASSENGER SID ID #269
HZ	150
NB	597
CB	497
KBL (KBA)	195 (4.9°)
KBR (KBA)	196 (15.8°)
PA°	23.9°
PHX	700
PHZ	102

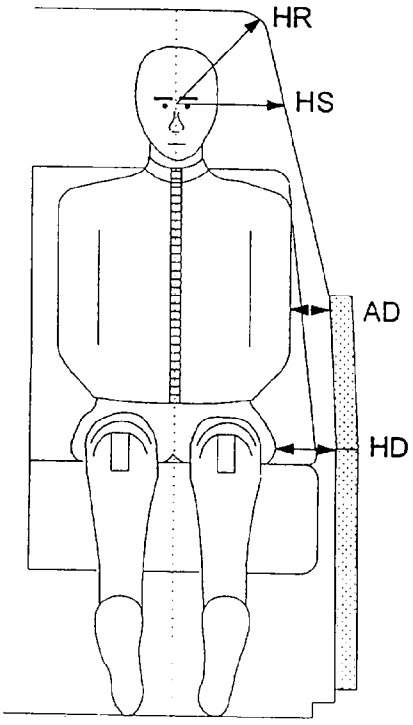
NOTE: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as reference point.

DATA SHEET NO. 8

SIDE IMPACT DUMMY (SID) LATERAL CLEARANCE DIMENSIONS

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995



NOTE: All dimensions are in mm

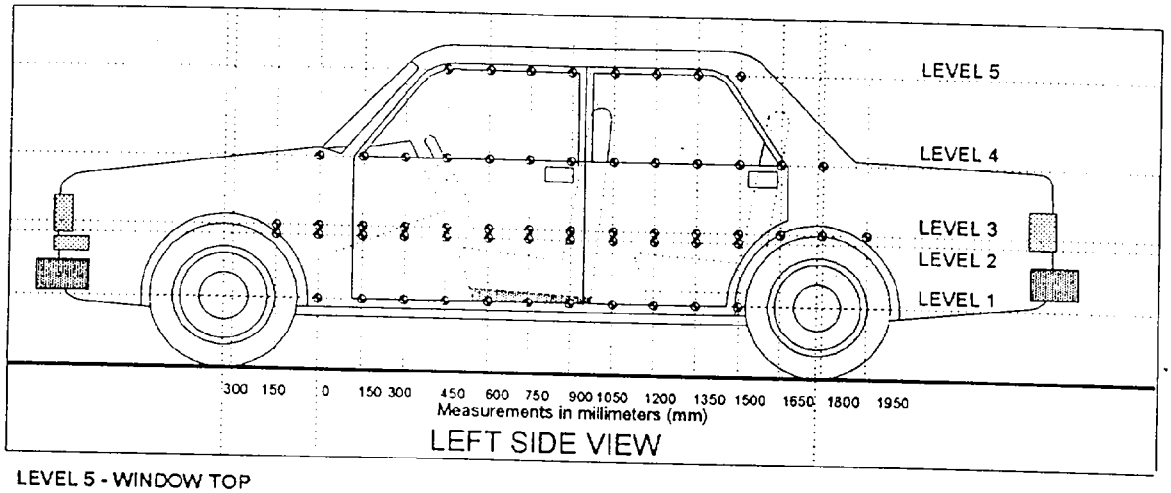
	DRIVER ID #270	LEFT REAR PASSENGER ID #269
HR	201	210
HS	304	240
AD	71	65
HD	120	127

DATA SHEET NO. 9

VEHICLE SIDE MEASUREMENTS

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995



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

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

MEASUREMENTS ALONG THE VERTICAL 750 mm. LINE SHOWN ABOVE

Level 5 @ Window Top	= 1322 mm
Level 4 @ Window Sill	= 868 mm
Level 3 @ Mid Door	= 590 mm
Level 2 @ Occupant H-Point	= 485 mm
Level 1 @ Axle Centerline Height (or Sill Top Height)	= 268 mm

DATA SHEET NO. 10

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995

	Level 1 - Axle Centerline		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1050			
-900			
-750			
-600			
-450			
-300			
-150			
0 (impact point)	621	727	106
150	627	800	173
300	627	840	213
450	624	841	217
600	625	837	212
750	625	839	214
900	625	839	214
1050	624	850	226
1200	623	878	255
1350	623	845	222
1500	621	793	172
1650	623	760	137
1800	624	746	122
1950	626	716	90
2100			

DATA SHEET NO. 10 (Continued)

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

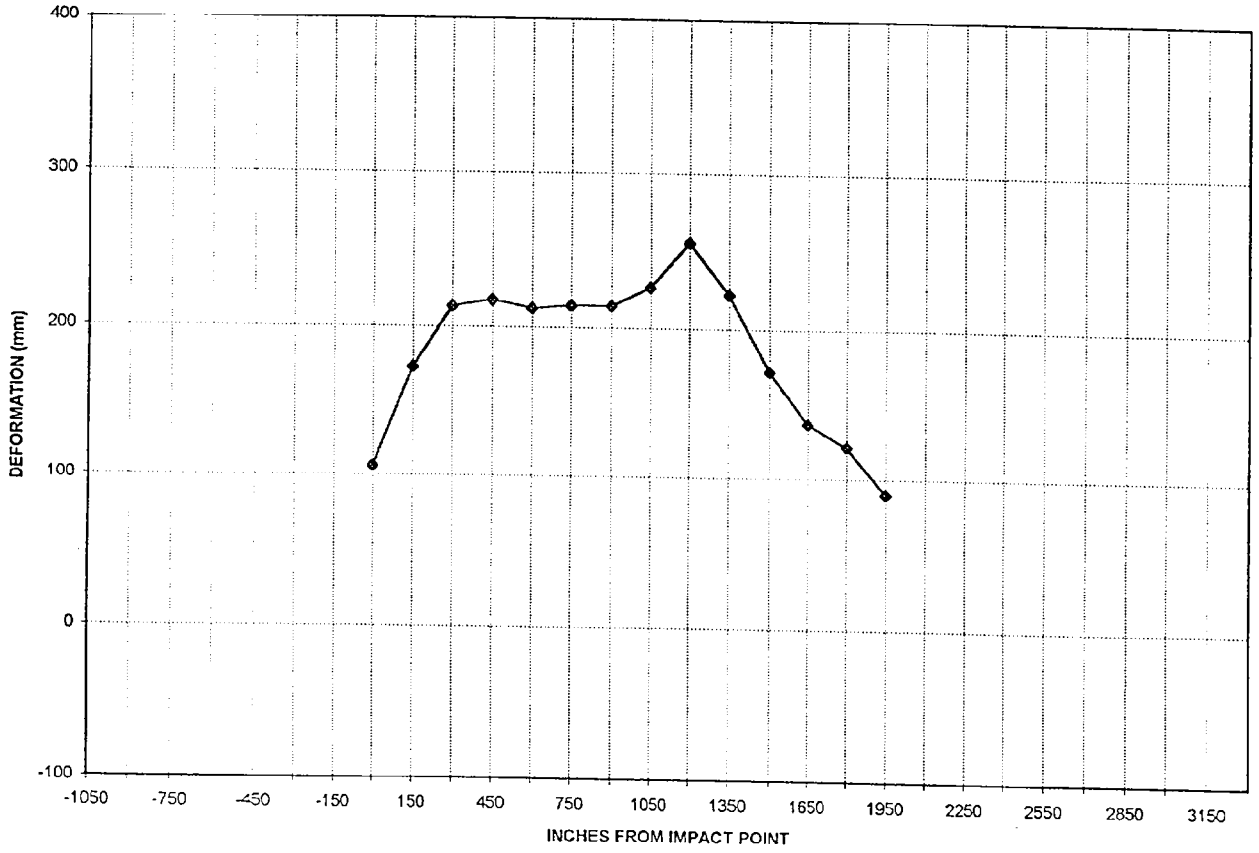
Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995

	Level 1 - Axle Centerline (Continued)		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
2250			
2400			
2550			
2700			
2850			
3000			
3150			
3300			

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

VEHICLE EXTERIOR STATIC CRUSH



LEVEL 1 - AXLE CENTERLINE

DATA SHEET NO. 10

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995

	Level 2 - Occupant H-Point		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1050	630	641	11
-900	602	619	17
-750			
-600			
-450			
-300			
-150			
0 (impact point)	569	802	233
150	568	862	294
300	568	915	347
450	566	927	361
600	564	929	365
750	563	930	367
900	564	937	373
1050	567	938	371
1200	566	942	376
1350	566	937	371
1500	564	920	356
1650	565	896	331
1800	568	816	248
1950	570	701	131
2100			

DATA SHEET NO. 10 (Continued)

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

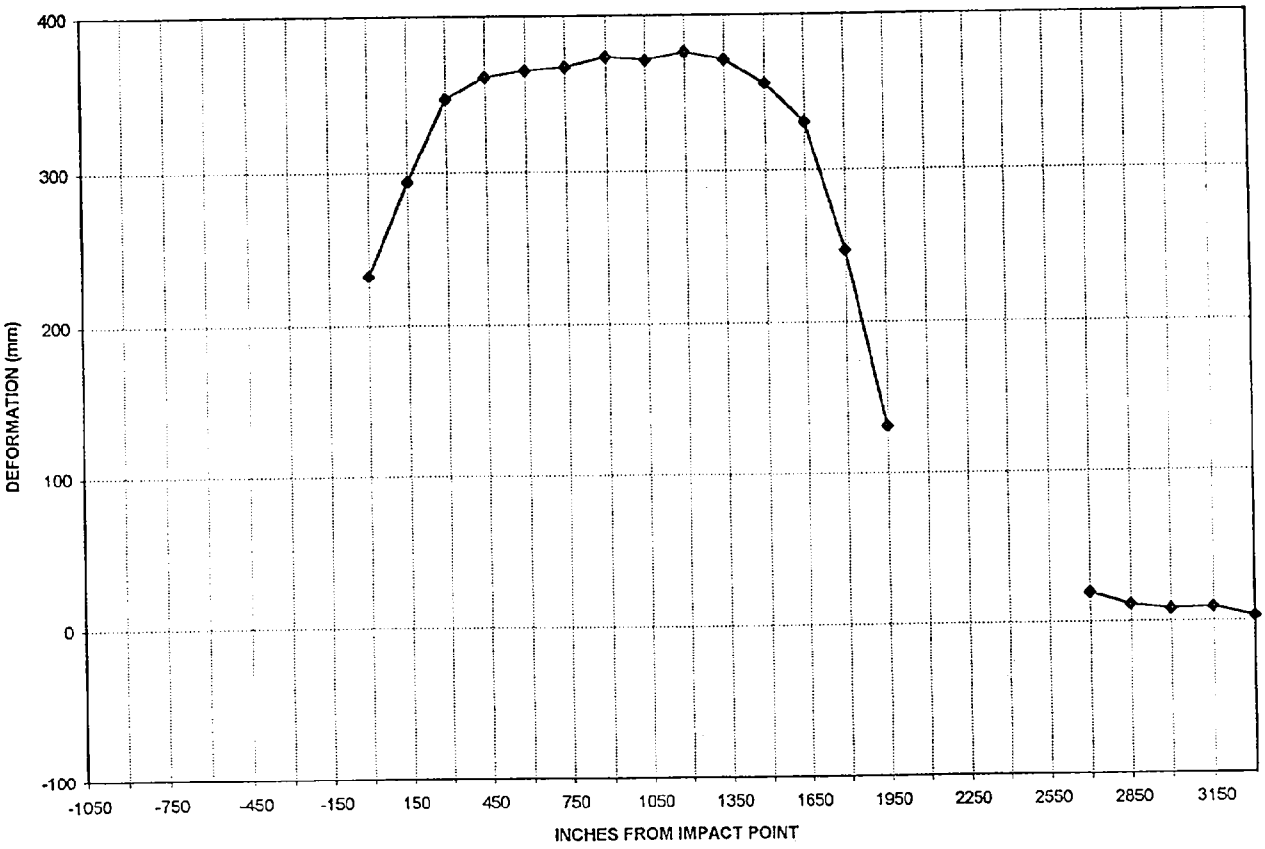
Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995

	Level 2 - Occupant H-Point (Continued)		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
2250			
2400			
2550			
2700	586	605	19
2850	602	613	11
3000	614	622	8
3150	626	635	9
3300	647	650	3

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

VEHICLE EXTERIOR STATIC CRUSH



LEVEL 2 - OCCUPANT H-POINT

DATA SHEET NO. 10

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995

	Level 3 - Mid Door		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1050	643	652	9
-900	611	630	19
-750			
-600			
-450			
-300			
-150	566	727	161
0 (impact point)	567	768	201
150	566	821	255
300	565	839	274
450	563	853	290
600	562	855	293
750	564	867	303
900	564	870	306
1050	563	870	307
1200	563	880	317
1350	564	888	324
1500	565	859	294
1650	564	830	266
1800	566	796	230
1950	566	730	164
2100	558	650	92

DATA SHEET NO. 10 (Continued)

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

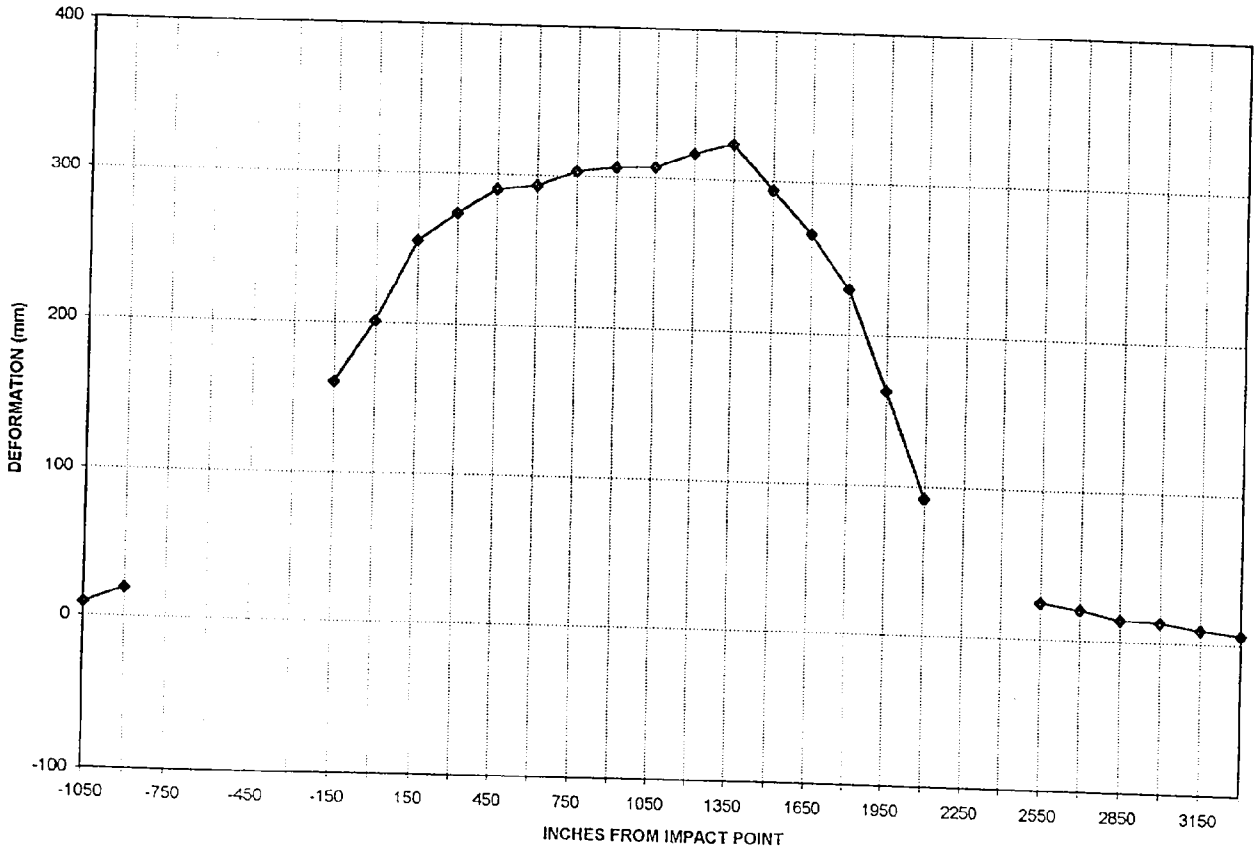
Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995

	Level 3 - Mid Door (Continued)		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
2250			
2400			
2550	569	593	24
2700	593	613	20
2850	606	620	14
3000	620	633	13
3150	636	645	9
3300	663	669	6

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

VEHICLE EXTERIOR STATIC CRUSH



LEVEL 3 - MID DOOR

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

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995

	Level 4 - Window Sill		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1050			
-900	676	681	5
-750	661	678	17
-600	650	677	27
-450	638	680	42
-300	626	687	61
-150	624	689	65
0 (impact point)	620	707	87
150	616	731	115
300	614	762	148
450	610	800	190
600	613	834	221
750	608	840	232
900	607	838	231
1050	606	847	241
1200	609	865	256
1350	613	891	278
1500	611	877	266
1650	610	871	261
1800	614	828	214
1950	627	761	134
2100	620	702	82

DATA SHEET NO. 10 (Continued)

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

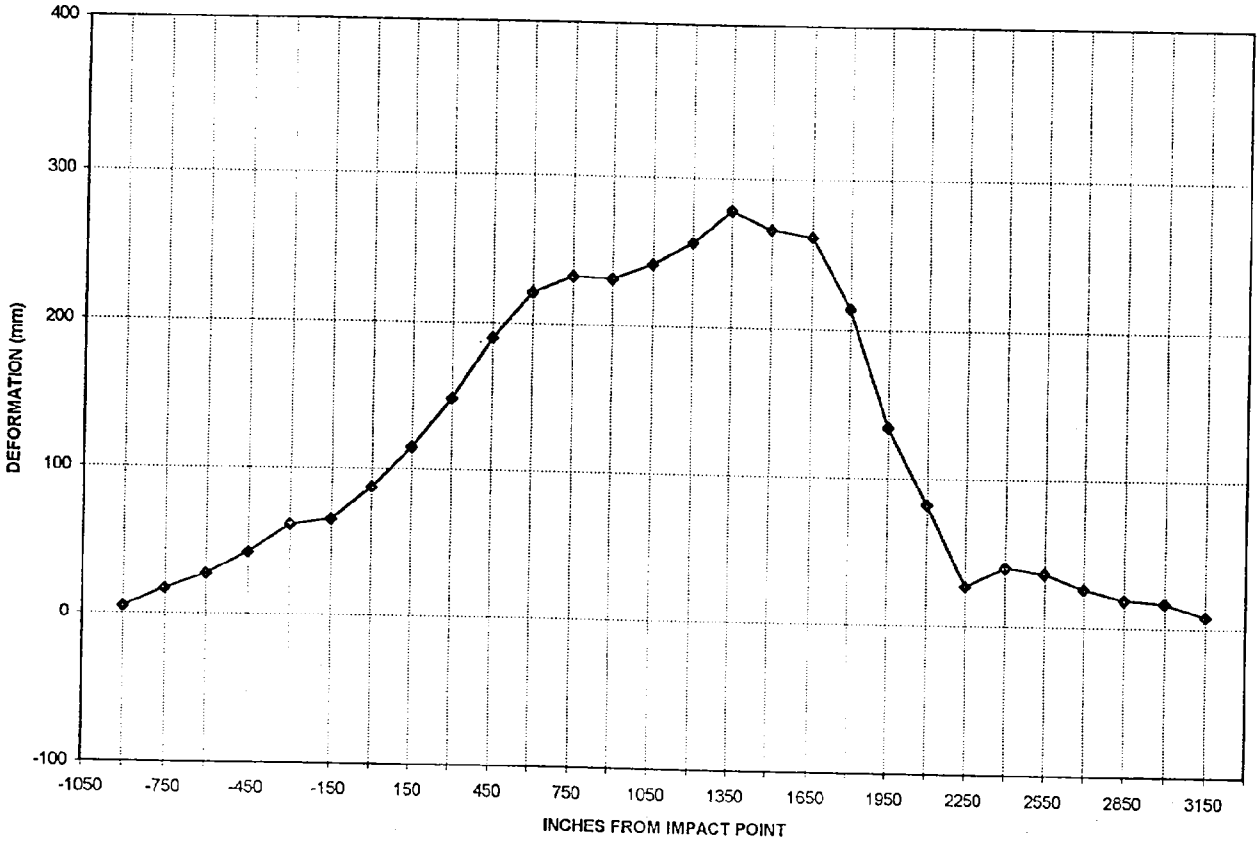
Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995

	Level 4 - Window Sill (Continued)		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
2250	621	648	27
2400	632	672	40
2550	635	671	36
2700	651	677	26
2850	666	685	19
3000	674	691	17
3150	699	707	8
3300			

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

VEHICLE EXTERIOR STATIC CRUSH



LEVEL 4 - WINDOW SILL

DATA SHEET NO. 10

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995

	Level 5 - Window Top		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1050			
-900			
-750			
-600			
-450			
-300			
-150			
0 (impact point)			
150			
300			
450			
600			
750			
900	878	927	49
1050	876	940	64
1200	877	963	86
1350	880	998	118
1500	877	961	84
1650	877	948	71
1800	877	934	57
1950			
2100			

DATA SHEET NO. 10 (Continued)

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

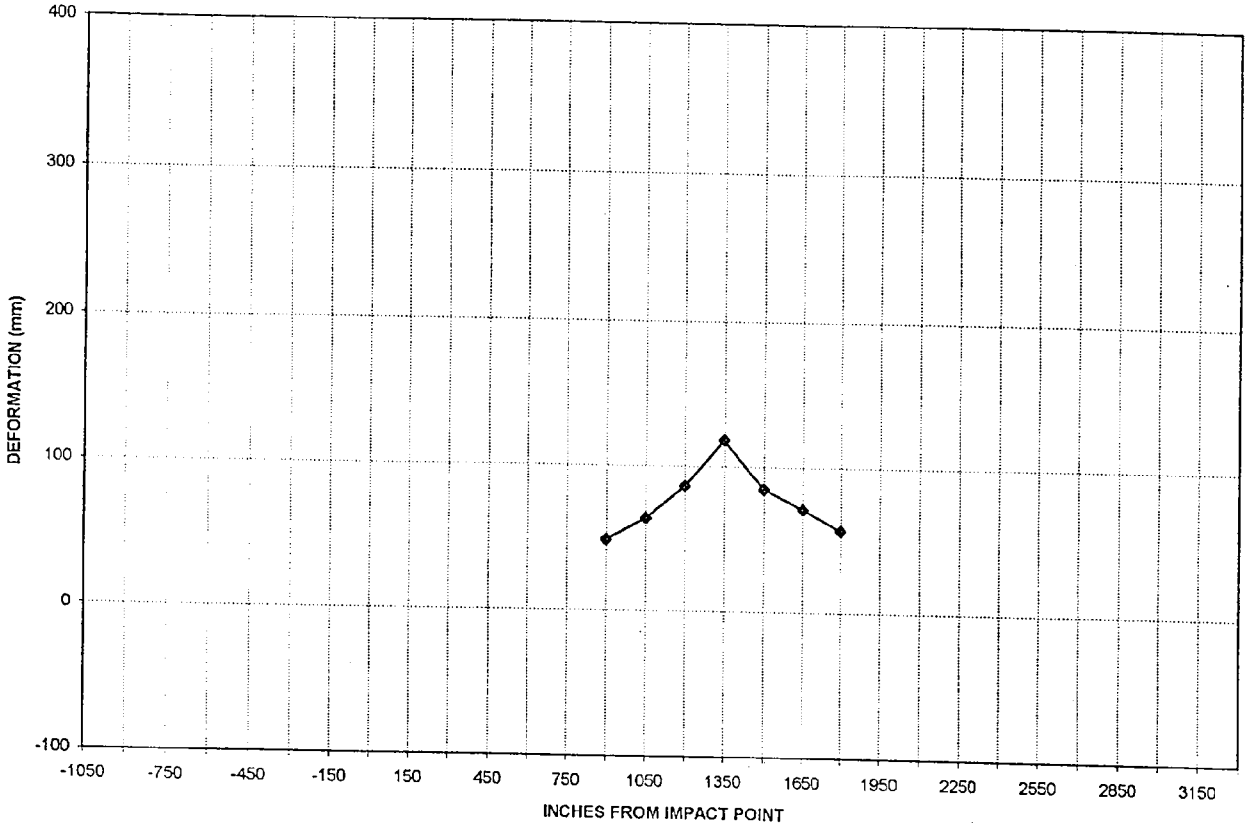
Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995

	Level 5 - Window Top (Continued)		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
2250			
2400			
2550			
2700			
2850			
3000			
3150			
3300			

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

VEHICLE EXTERIOR STATIC CRUSH



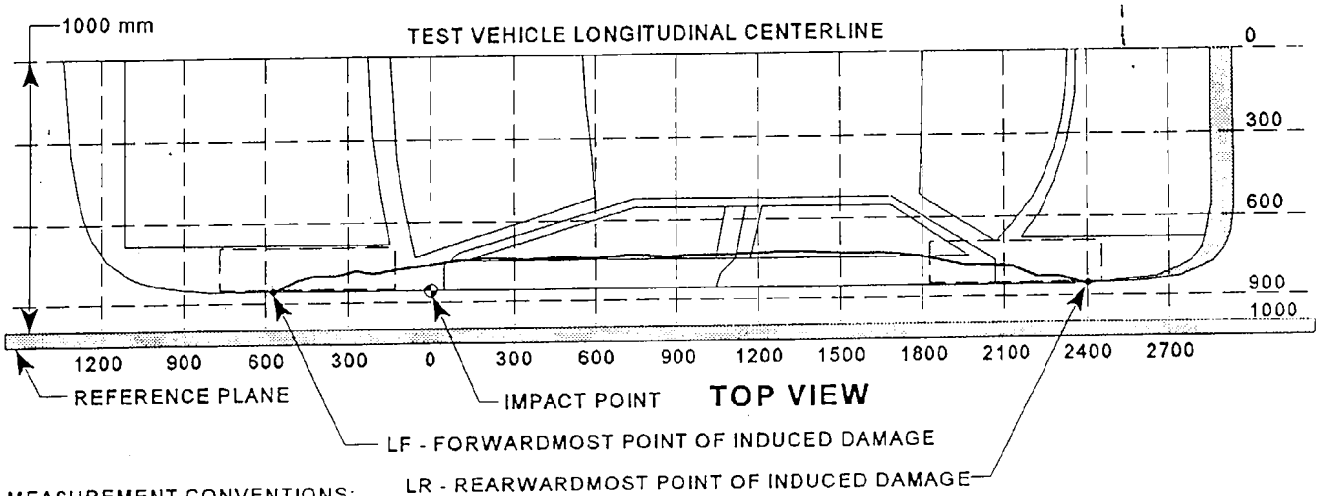
LEVEL 5 - WINDOW TOP

DATA SHEET NO. 11

VEHICLE DAMAGE PROFILE DISTANCES

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

NHTSA NO.: CT5300 Test Date: November 28, 1995



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

DPD MEASUREMENTS	POST-TEST (mm)	PRE-TEST (mm)	STATIC CRUSH (mm)
1. (LF = -600 mm)	590	590	0
2. 22 mm	820	568	252
3. 639 mm	831	564	267
4. 1254 mm	939	566	373
5. 1917 mm	779	569	210
6. (LR = 2250 mm)	576	576	0

DATA SHEET NO. 12

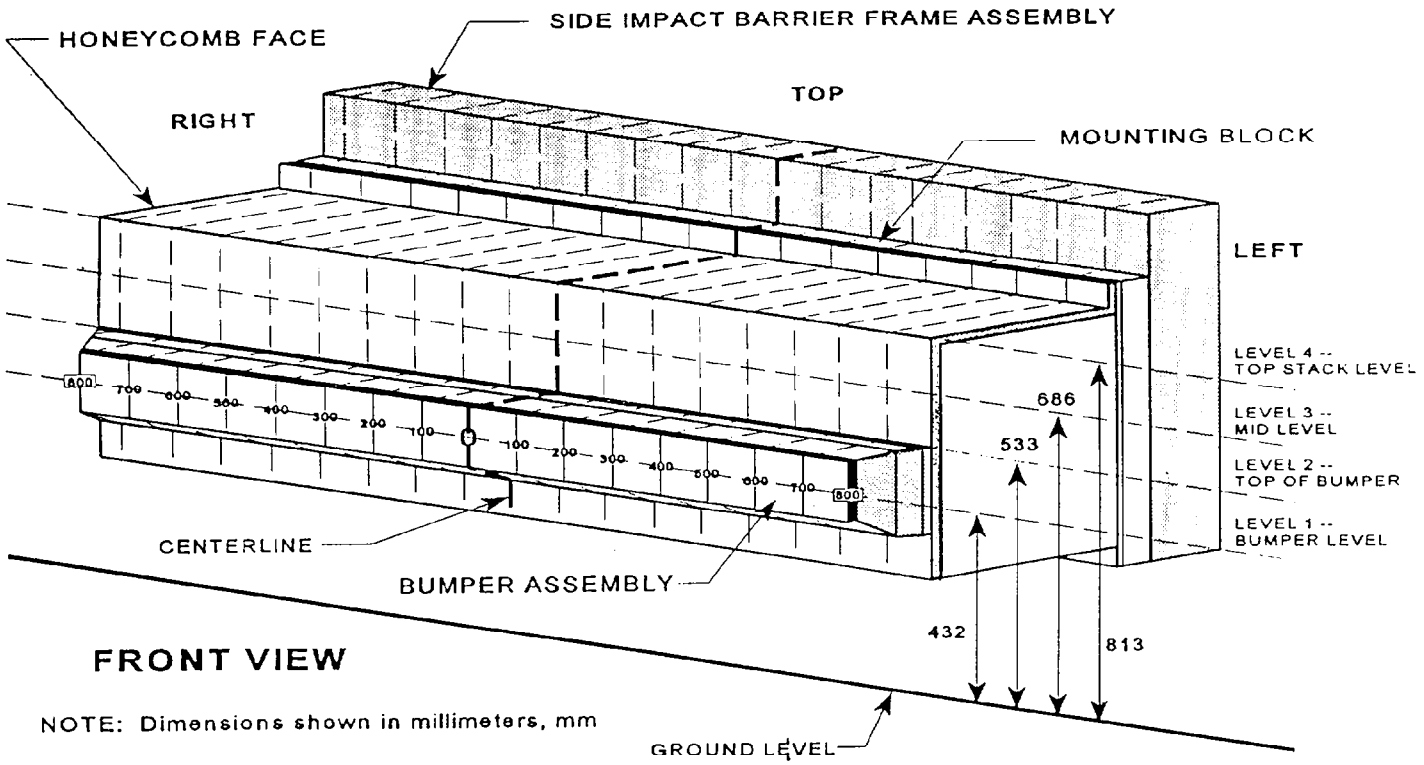
EXTERIOR STATIC CRUSH FOR SIDE IMPACTOR

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

		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	32	-3	-3	-2	-1	0	1	4	3	3	5	9	27	54	81	105	123
Mid Level Level 3	686 mm	29	-1	-2	-2	-2	-2	1	1	1	3	4	5	6	6	28	72	66
Top Bumper Level 2	533 mm	44	26	16	10	8	9	8	9	7	9	9	10	11	11	14	21	23
Mid Bumper Level 1	432 mm	66	53	37	31	33	29	29	27	25	27	26	27	27	29	41	60	64

See next page for Barrier Face Graphic

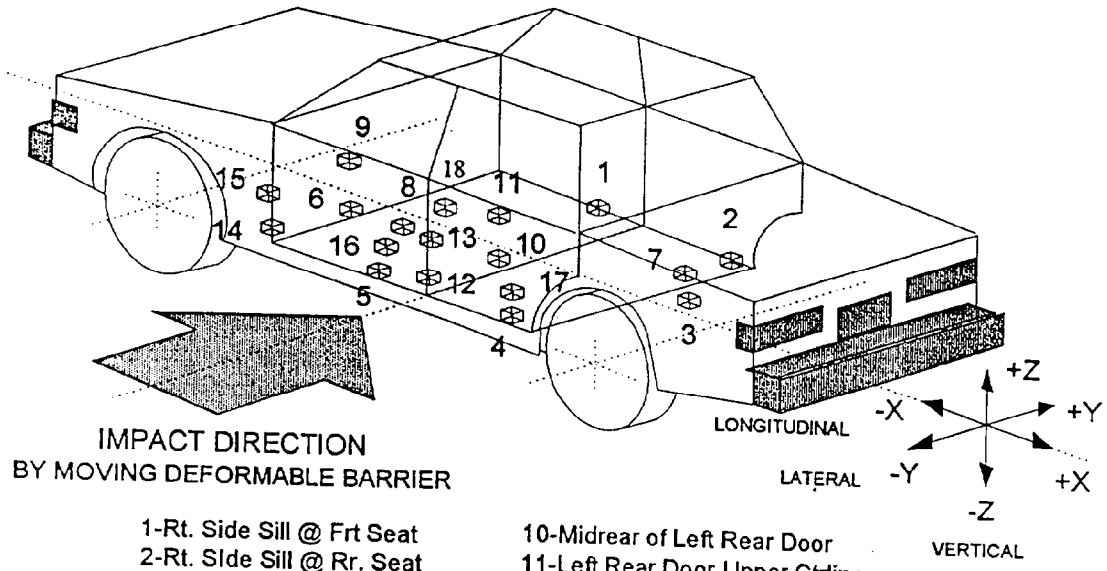

HONEYCOMB FACE
SIDE IMPACT BARRIER FRAME ASSEMBLY
TOP
RIGHT
MOUNTING BLOCK
LEFT
LEVEL 4 -- TOP STACK LEVEL
LEVEL 3 -- MID LEVEL
LEVEL 2 -- TOP OF BUMPER
LEVEL 1 -- BUMPER LEVEL
686
533
432
813
CENTERLINE
BUMPER ASSEMBLY
GROUND LEVEL
FRONT VIEW
NOTE: Dimensions shown in millimeters, mm

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995



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

DATA SHEET NO. 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

Accel. No.	Description	Coordinates (mm)*			Long. (X) Maximums (g's)		Lat. (Y) Maximums (g's)		Vert. (Z) Maximums (g's)		Resultant (g's)
		X	Y	Z	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Max.
1	Rt. Side Sill @ Front Seat	2400	663	175	3.8	-6.0	16.5	-2.9	6.3	-5.3	17.4
2	Rt. Side Sill @ Rear Seat	1606	670	201	3.4	-7.1	19.6	-2.7	7.2	-4.8	19.8
3	Rr. Floorpan Above Axle	1097	0	370	5.9	-4.1	19.5	-3.3	5.7	-5.1	19.8
4	Left Side Sill @ Rr. Seat	1704	-670	168	---	---	-13.7	46.9	---	---	---
5	Left Side Sill @ Frt. Seat	2495	-663	168	---	---	-0.9**	27.4**	---	---	---
7	Right Rear Occupant Compartment	1956	388	264	---	---	19.9	-1.9	---	---	---
12	Left Lower B-Post	2158	-690	315	---	---	89.0	-55.5	---	---	---
13	Left Mid B-Post	2182	-719	718	---	---	118.9	-46.7	---	---	---
14	Left Lower A-Post	3228	-643	322	---	---	37.9	-24.2	---	---	---
15	Left Mid A-Post	3269	-809	677	---	---	113.5	-42.1	---	---	---
16	Driver Left Seat Track	2422	-532	265	---	---	73.3	-20.9	---	---	---
18	Vehicle CG	2563	40	405	7.1	-10.1	40.4	-9.4	14.0	-18.0	43.6

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

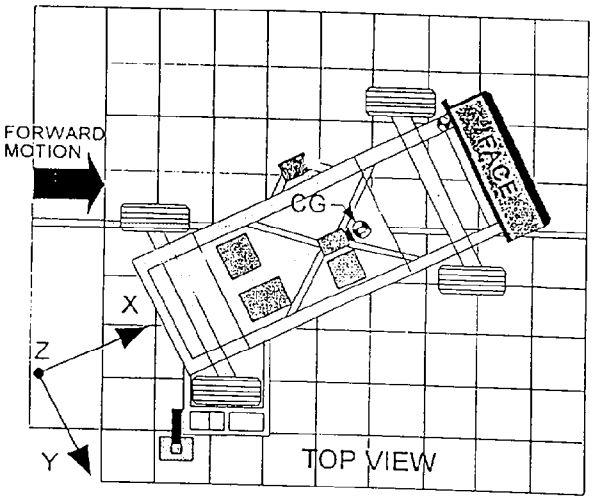
** Data not valid after approximately 11 msec.

DATA SHEET NO. 14

MOVING DEFORMABLE BARRIER (MDB) ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995



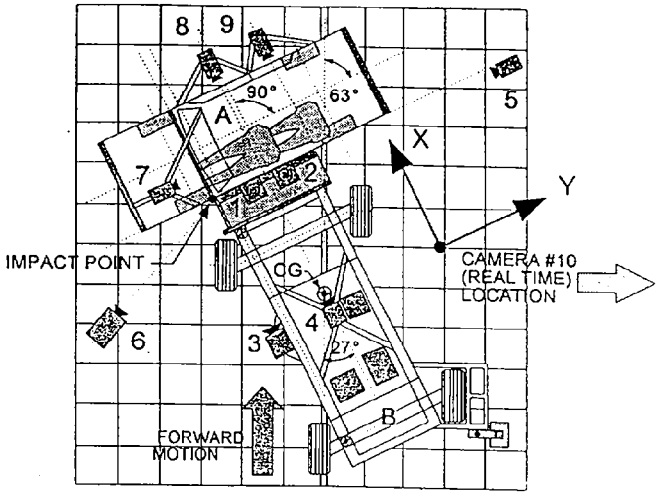
Accel. No.	Description	Coordinates (mm)*			(+) Positive		(-) Negative	
		X	Y	Z	Max. (g)	Time (msec)	Max. (g)	Time (msec)
1	MDB Center of Gravity	-1092	0	483				
	Longitudinal (X)	---	---	---	1.5	120	-16.8	40
	Lateral (Y)	---	---	---	0.9	139	-6.0	38
	Vertical (Z)	---	---	---	14.0	41	-12.7	37
	Resultant (R)	---	---	---	22.2	41	---	---
2	Rear Frame Member	-2591	-625	622				
	Longitudinal (X)	---	---	---	2.4	198	-19.9	35
	Lateral (Y)	---	---	---	3.8	33	-2.7	89

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

DATA SHEET NO. 15
HIGH SPEED CAMERA LOCATIONS AND DATA

Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995



Camera No.	View	Coordinates (mm)*			Angle	Lens (mm)	Film Speed (fps)
		X	Y	Z			
	Real Time					13	24
1	Top Impact	-350	850	5400		13	833
2	Top Wide	-700	0	5130		8	1190
3	Cart Pointer					35	943
4	Cart					13	971
5	Right Impact	-3775	-8020	1855	90°	25	1136
6	Left Impact	3660	2270	1665	90°	13	1031
7	Onboard Driver					8	909
8	Onboard Hood					13	873
9	Onboard Passenger					8	1053

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

DATA SHEET 16
FUEL SYSTEM INTEGRITY POST IMPACT TEST DATA

Vehicle Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

TEST REQUIREMENTS:

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

TEST VEHICLE IMPACT TYPE: X Side Impact MDB 33.0 mph (53 kph)

FUEL SPILLAGE MEASUREMENT:

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

FUEL SPILLAGE LOCATION(S): None

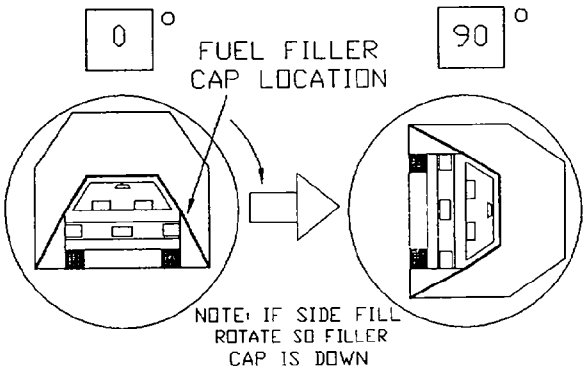
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA

Vehicle Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

TEST PHASE: 0° - 90°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 41 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 41 seconds

Next Whole Minute Interval = 8 minutes

FUEL SPILLAGE MEASUREMENT:

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

FUEL SPILLAGE LOCATIONS(S): None

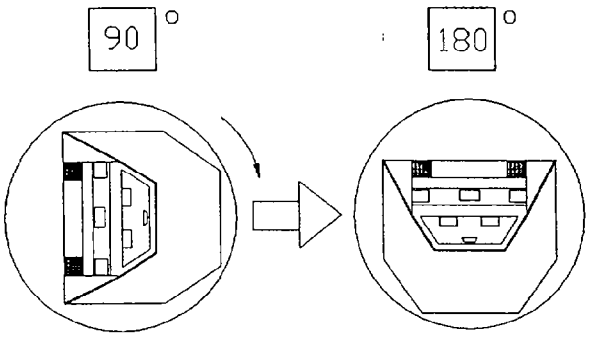
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA (Cont'd)

Vehicle Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

TEST PHASE: 90° - 180°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 28 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 28 seconds

Next Whole Minute Interval = 8 minutes

FUEL SPILLAGE MEASUREMENT:

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

FUEL SPILLAGE LOCATIONS(S): None

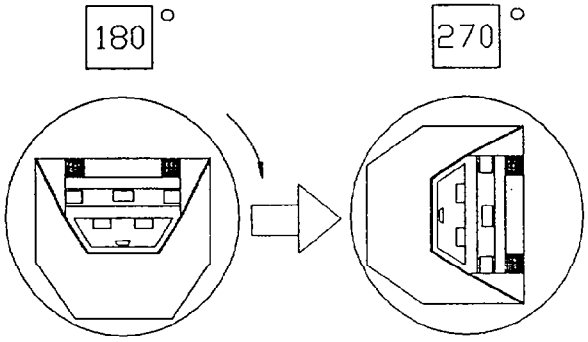
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA (Cont'd)

Vehicle Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

TEST PHASE: 180° - 270°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 22 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 22 seconds

Next Whole Minute Interval = 8 minutes

FUEL SPILLAGE MEASUREMENT:

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

FUEL SPILLAGE LOCATIONS(S): None

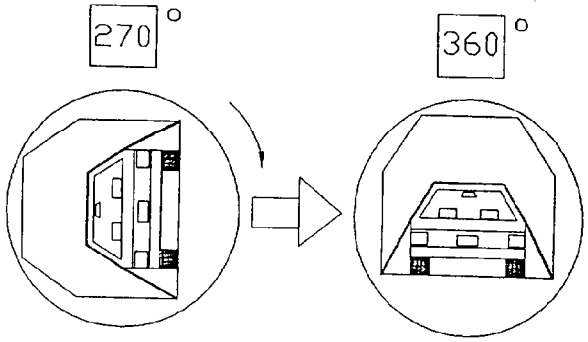
DATA SHEET 16

FMVSS 301 STATIC ROLLOVER TEST DATA

Vehicle Year/Make/Model/Body Style: 1996/Acura/2.5 TL/4 Door Sedan

Vehicle NHTSA No.: CT5300 Test Date: November 28, 1995

TEST PHASE: 270° - 360°



DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Fixture 90° Rotation Time = 2 minutes 45 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Position Hold Time = 5 minutes 0 seconds

TOTAL TIME = 7 minutes 45 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

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

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

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

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

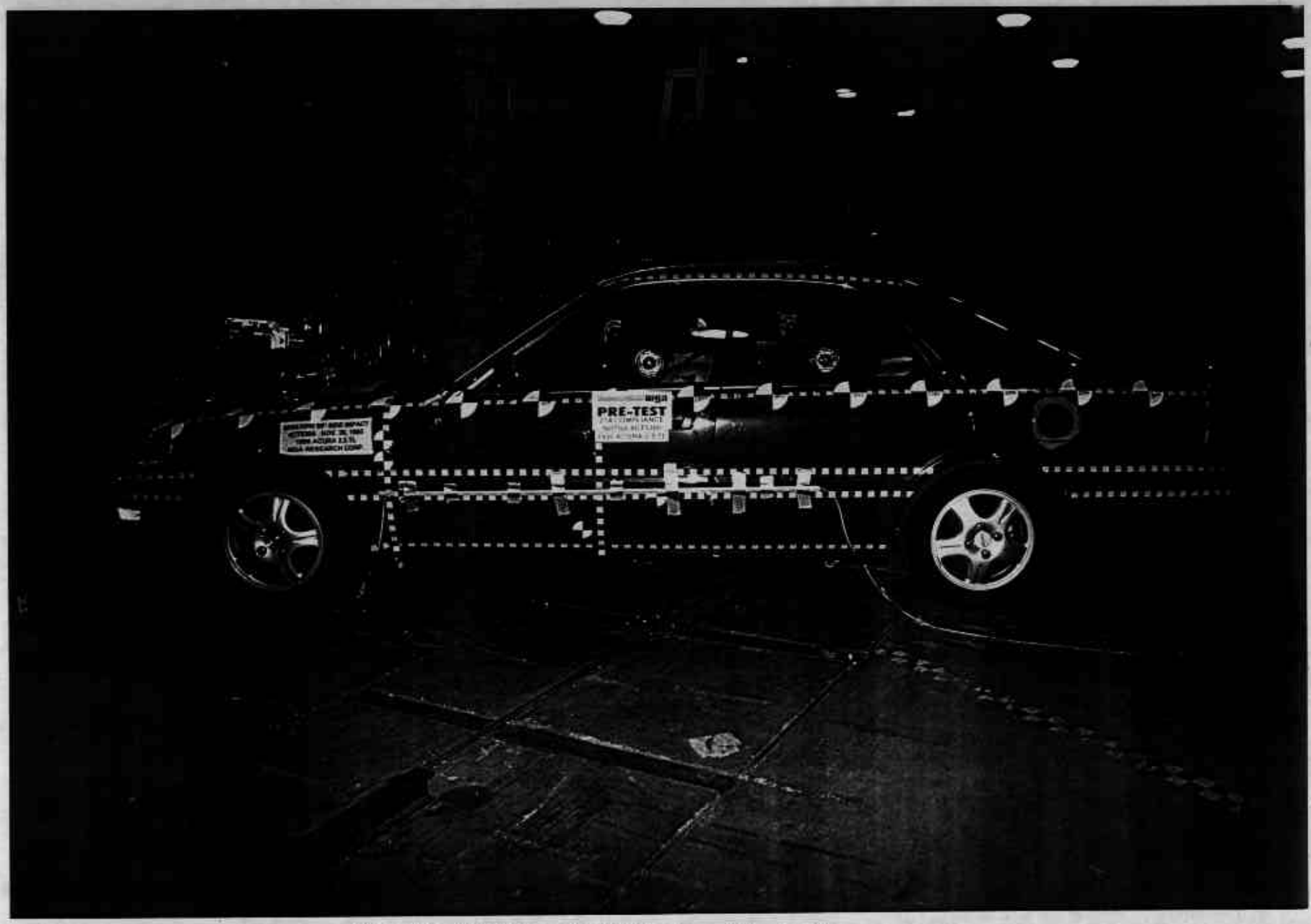

Photo No. A-5 - Pre-Test Left Side View of Test Vehicle

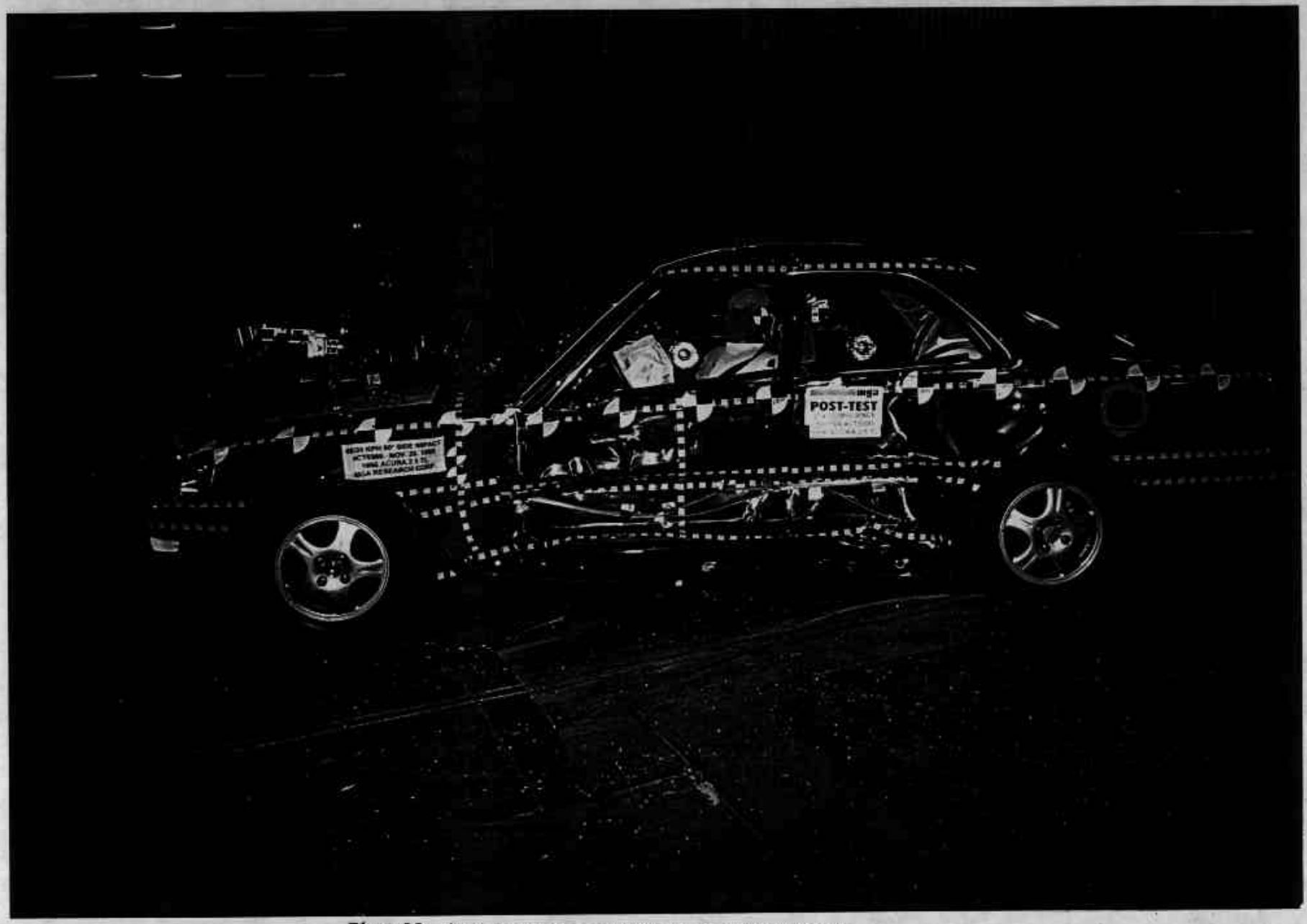

Photo No. A-6 - Post-Test Left Side View of Test Vehicle

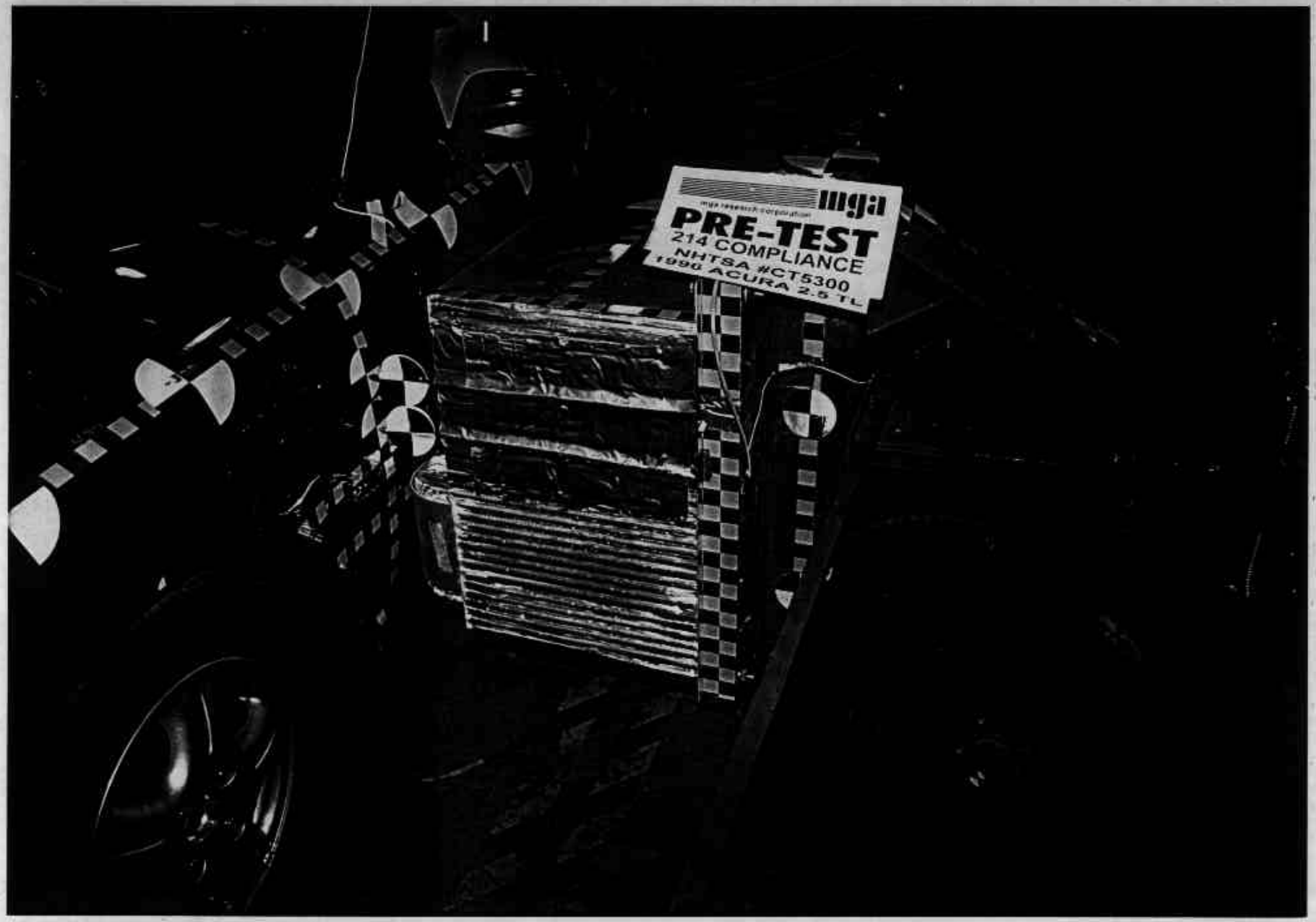

Photo No. A-7 - Pre-Test MDB Positioned Against Vehicle (left side)

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

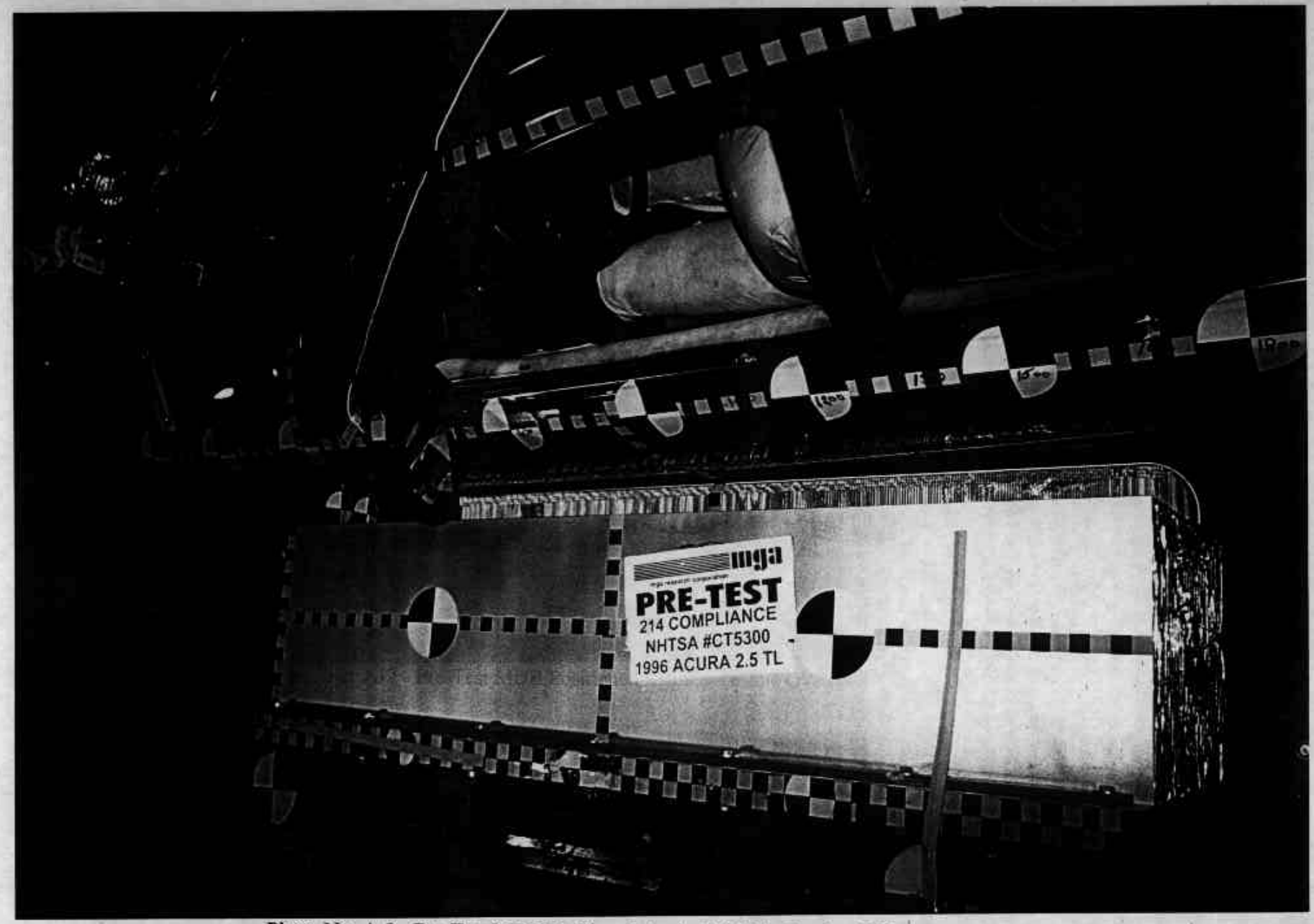

Photo No. A-9 - Pre-Test MDB Positioned Against Vehicle Overhead View

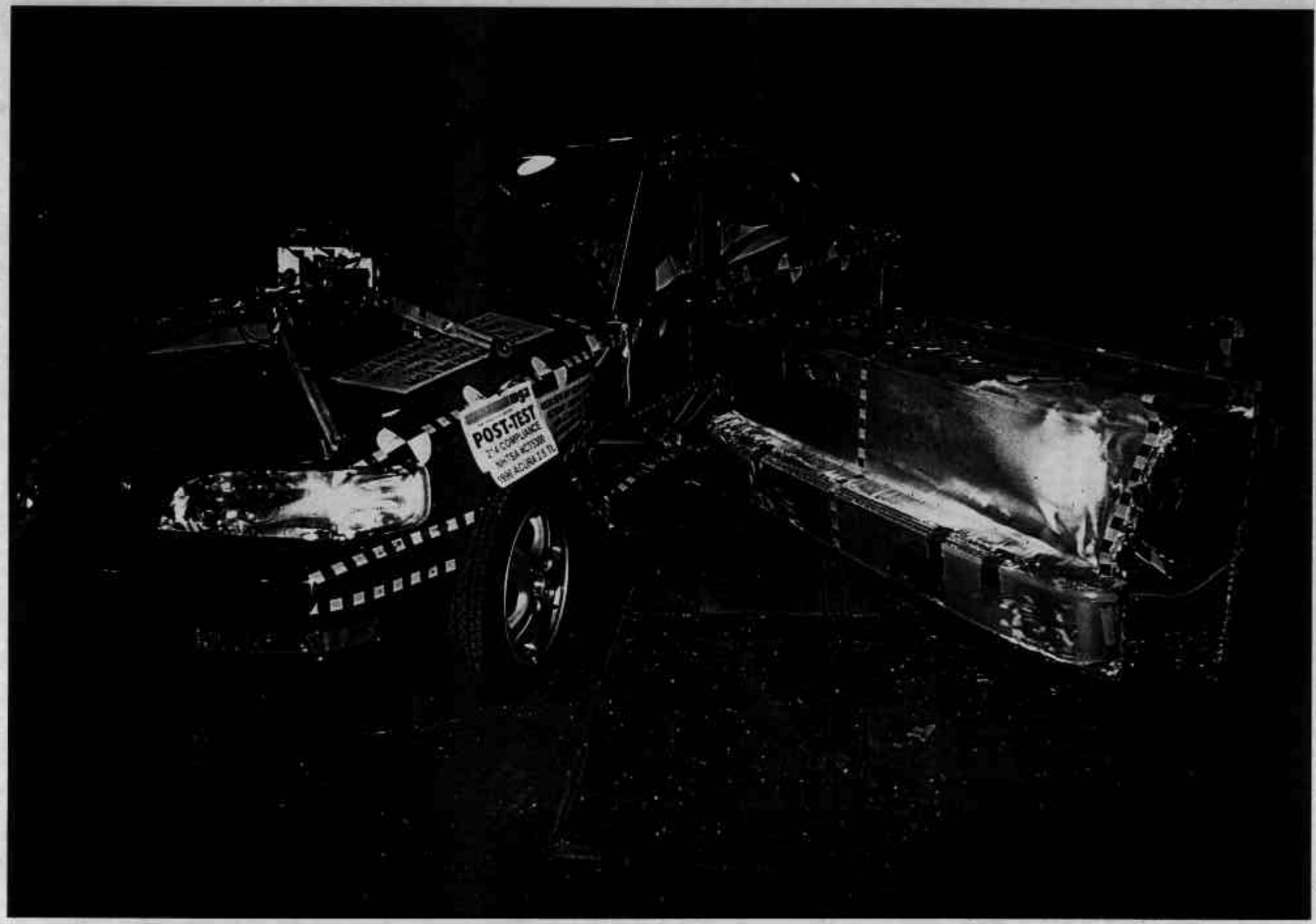

Photo No. A-10 - Post-Test MDB Positioned Against Vehicle (left side)

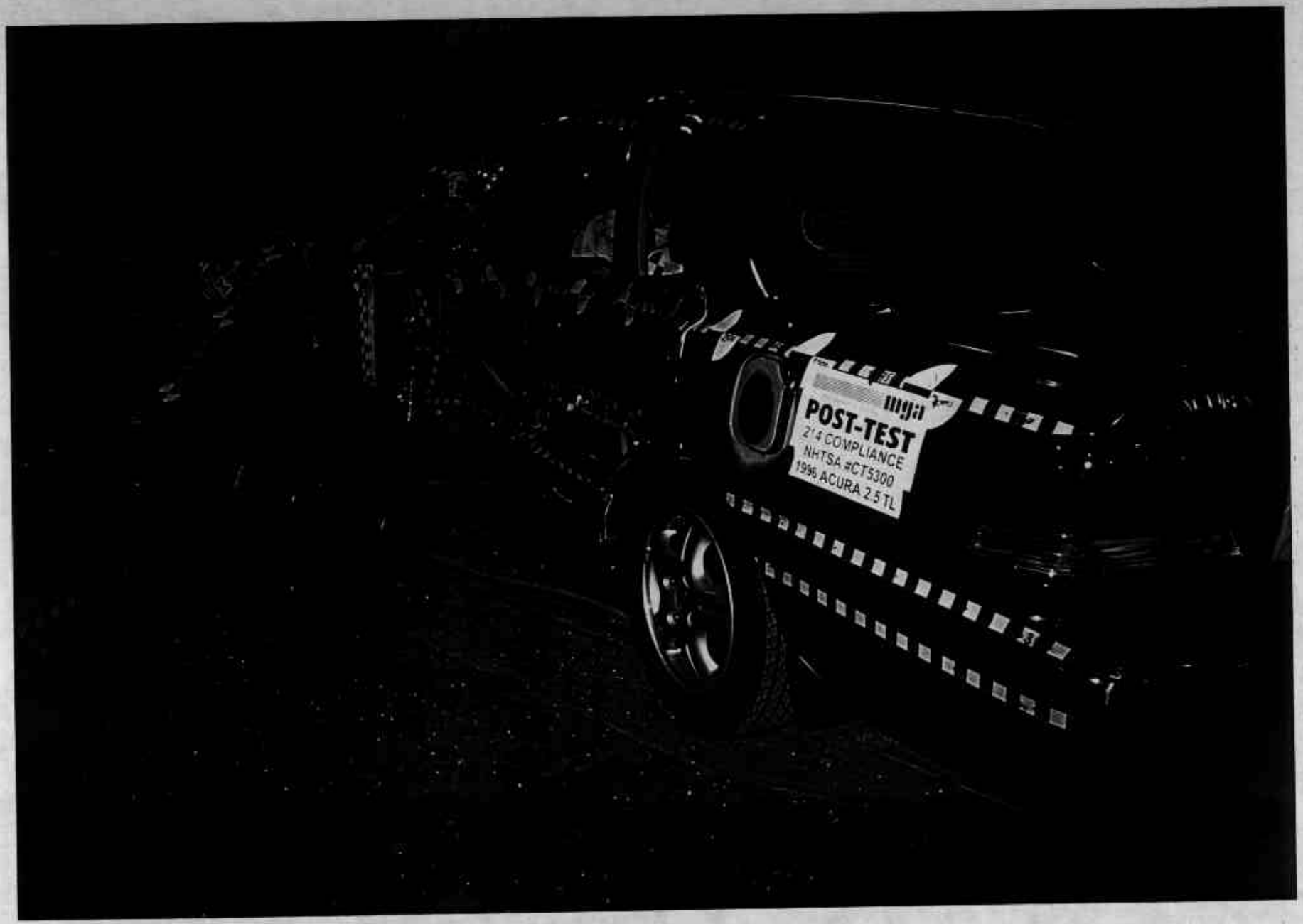

Photo No. A-11 - Post-Test MDB Positioned Against Vehicle (right side)

A-12

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

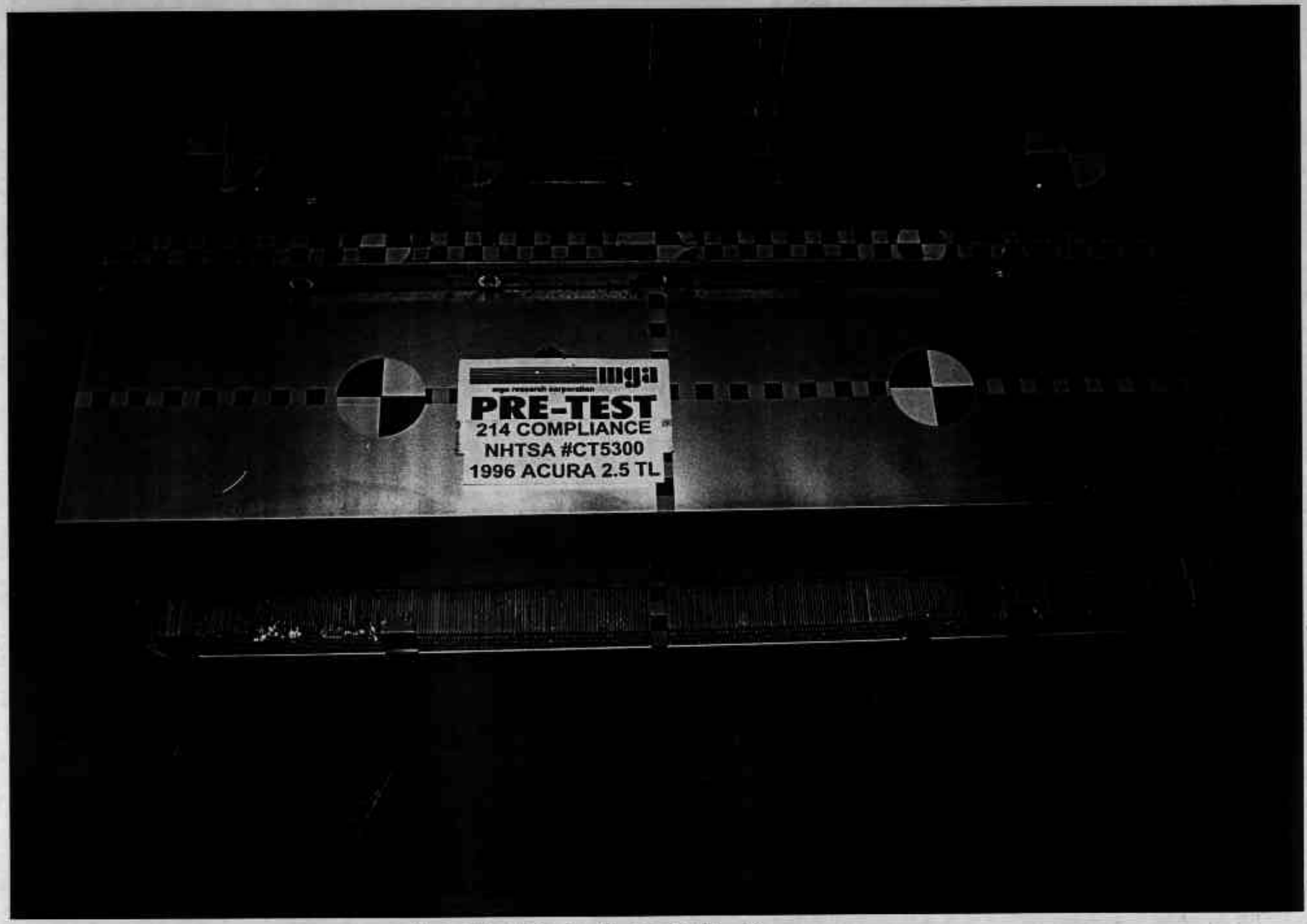

Photo No. A-13 - Pre-Test MDB Top View

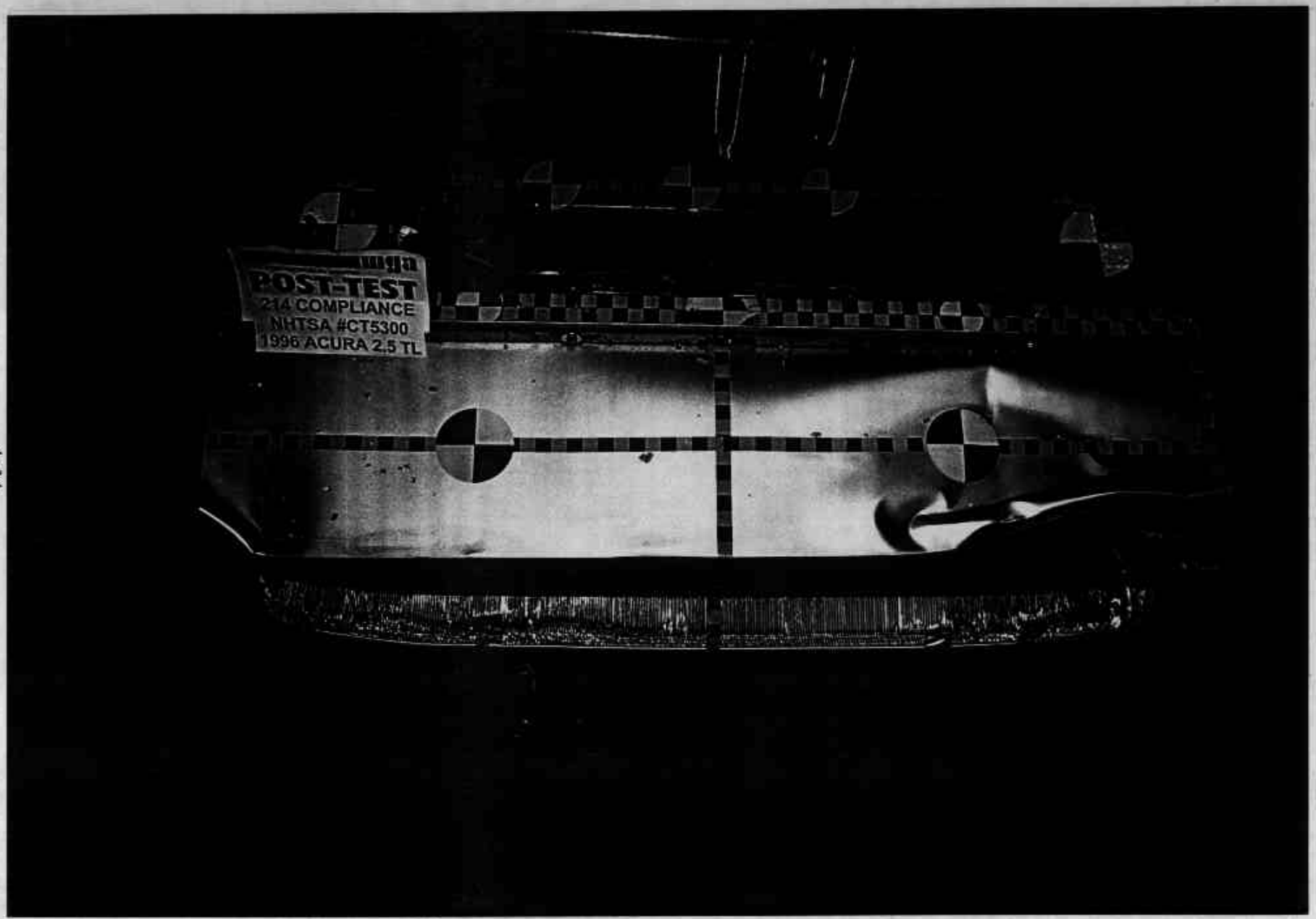

Photo No. A-14 - Post-Test MDB Top View

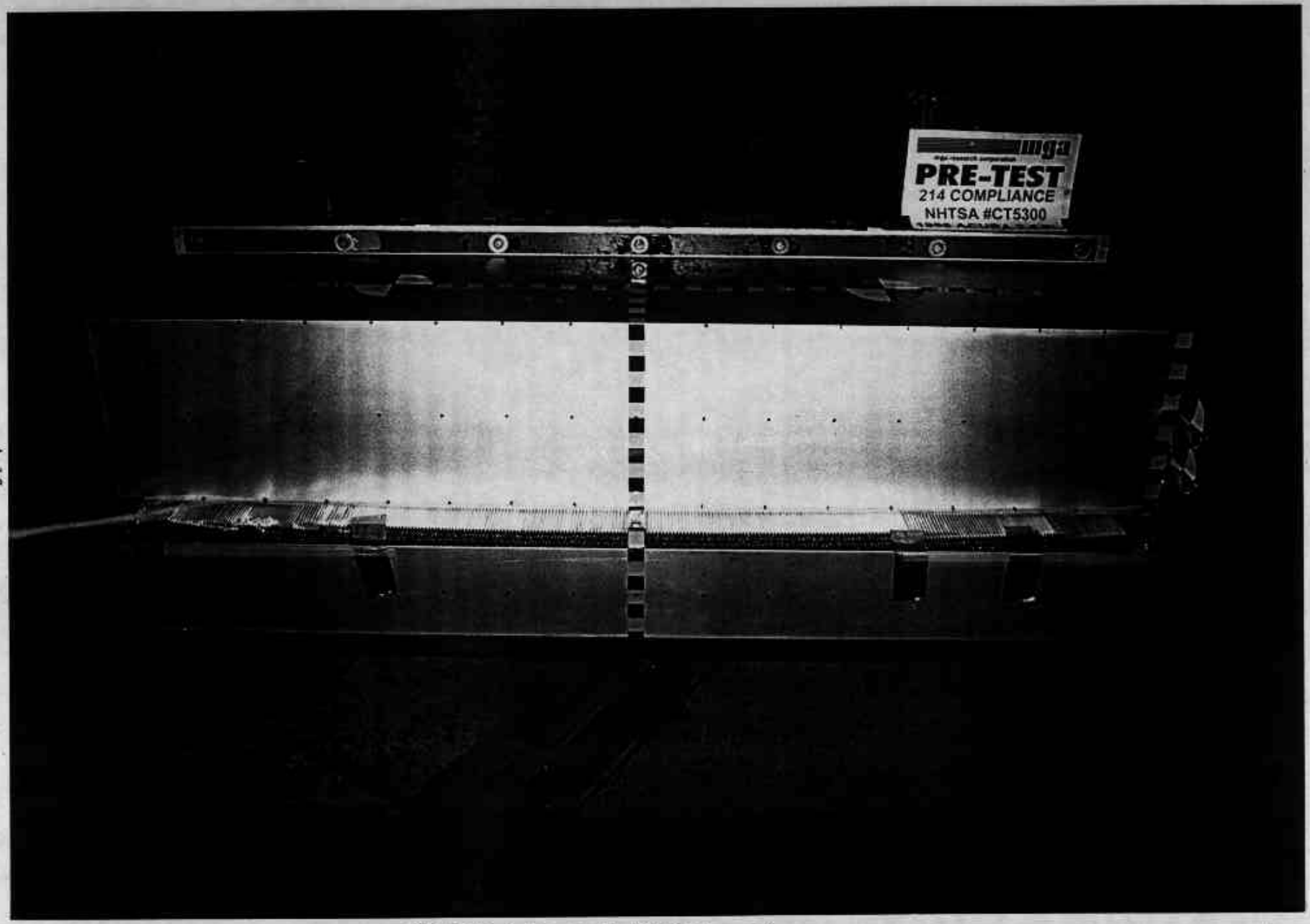

Photo No. A-15 - Pre-Test MDB Front View

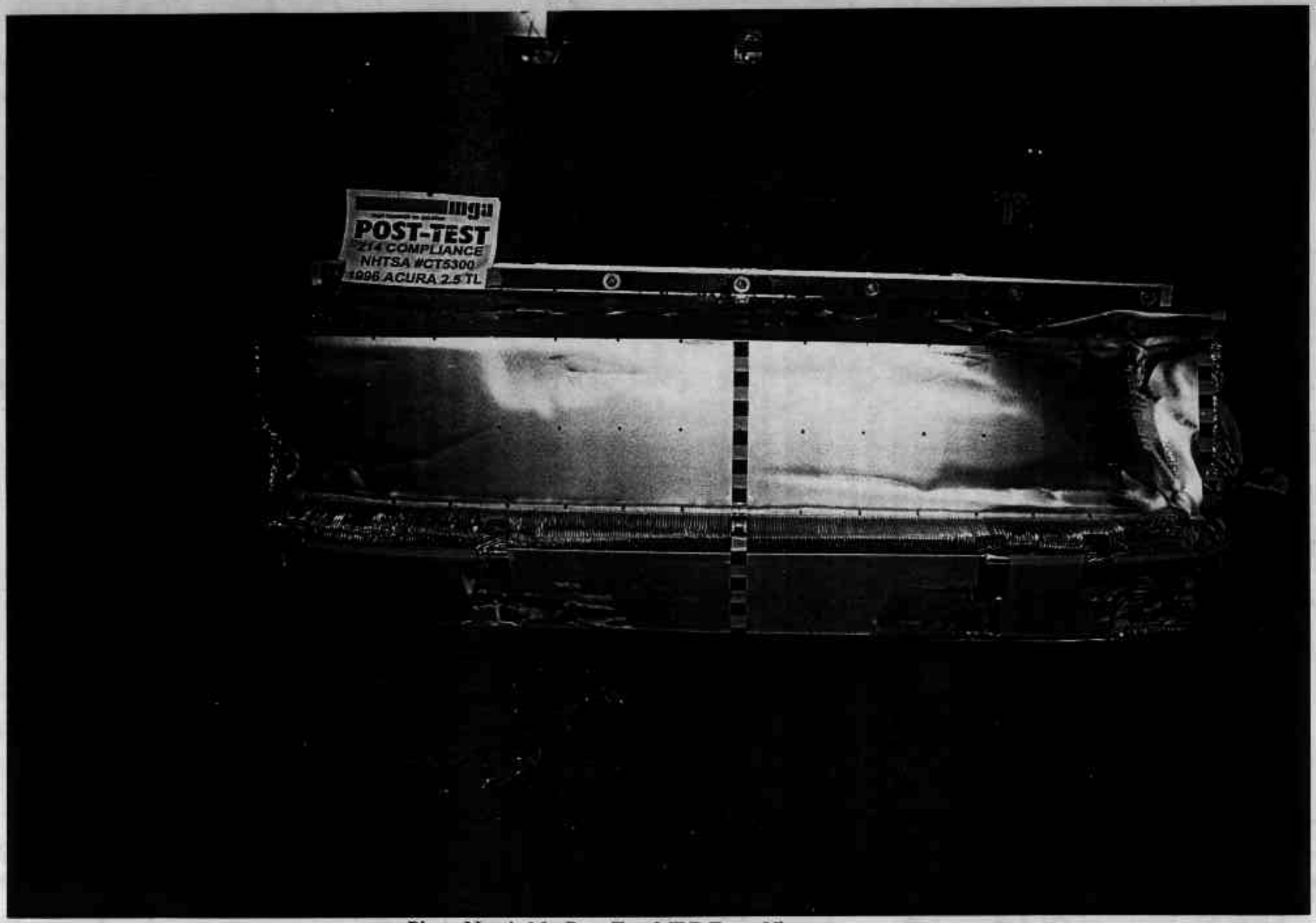

Photo No. A-16 - Post-Test MDB Front View

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

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

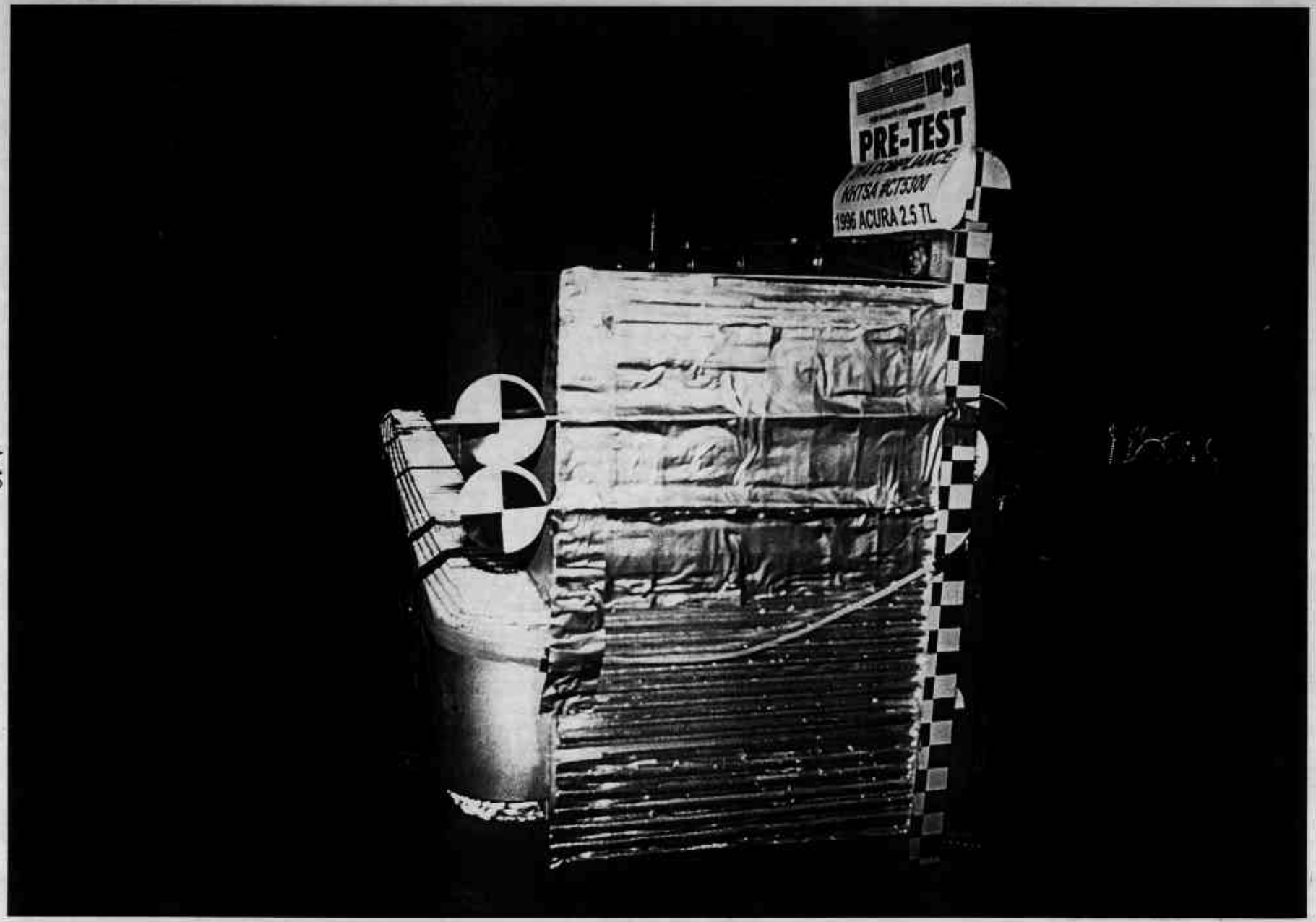

Photo No. A-19 - Pre-Test MDB Left Side View

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

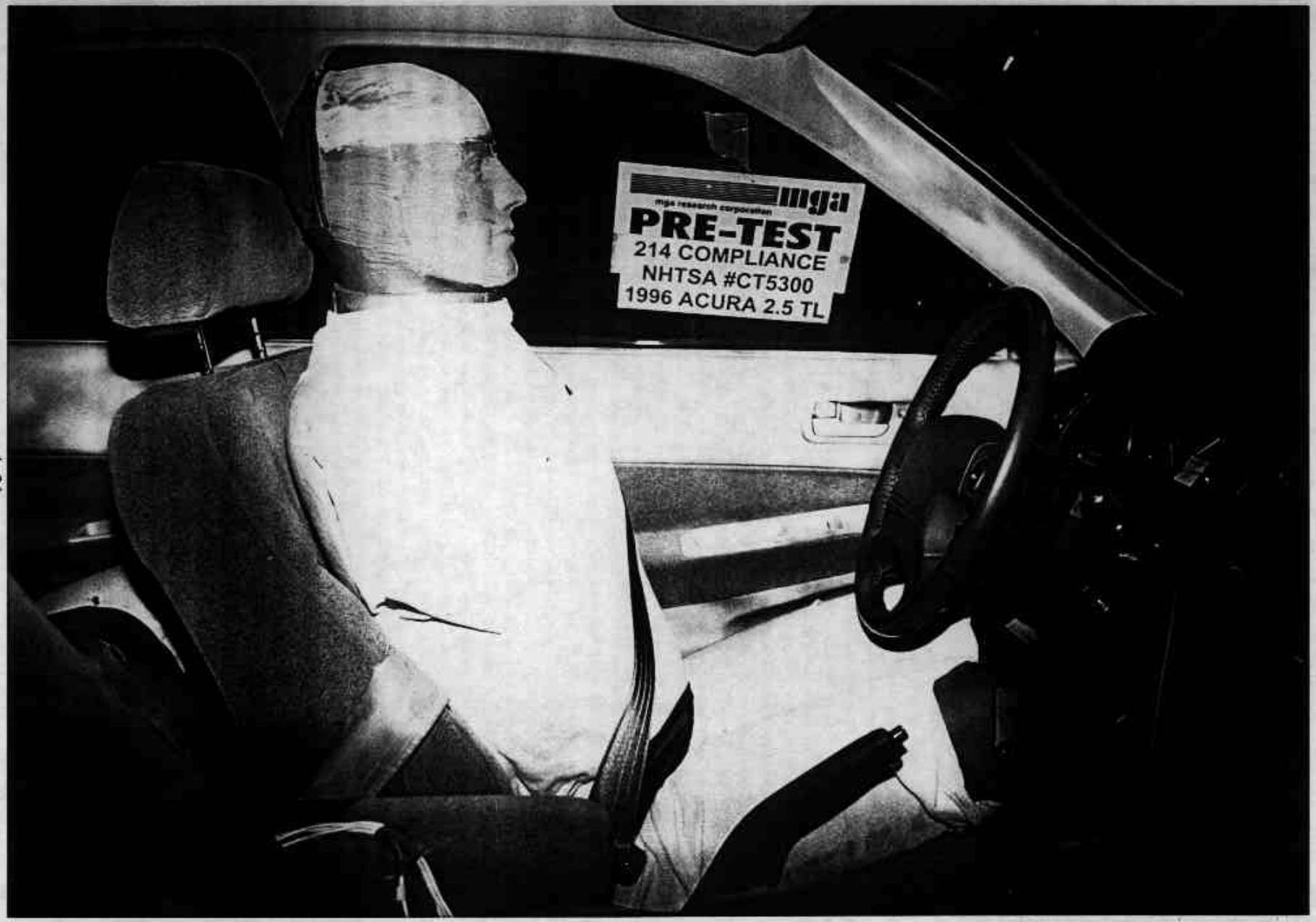

Photo No. A-21 - Pre-Test Driver Dummy Right Side View

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

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

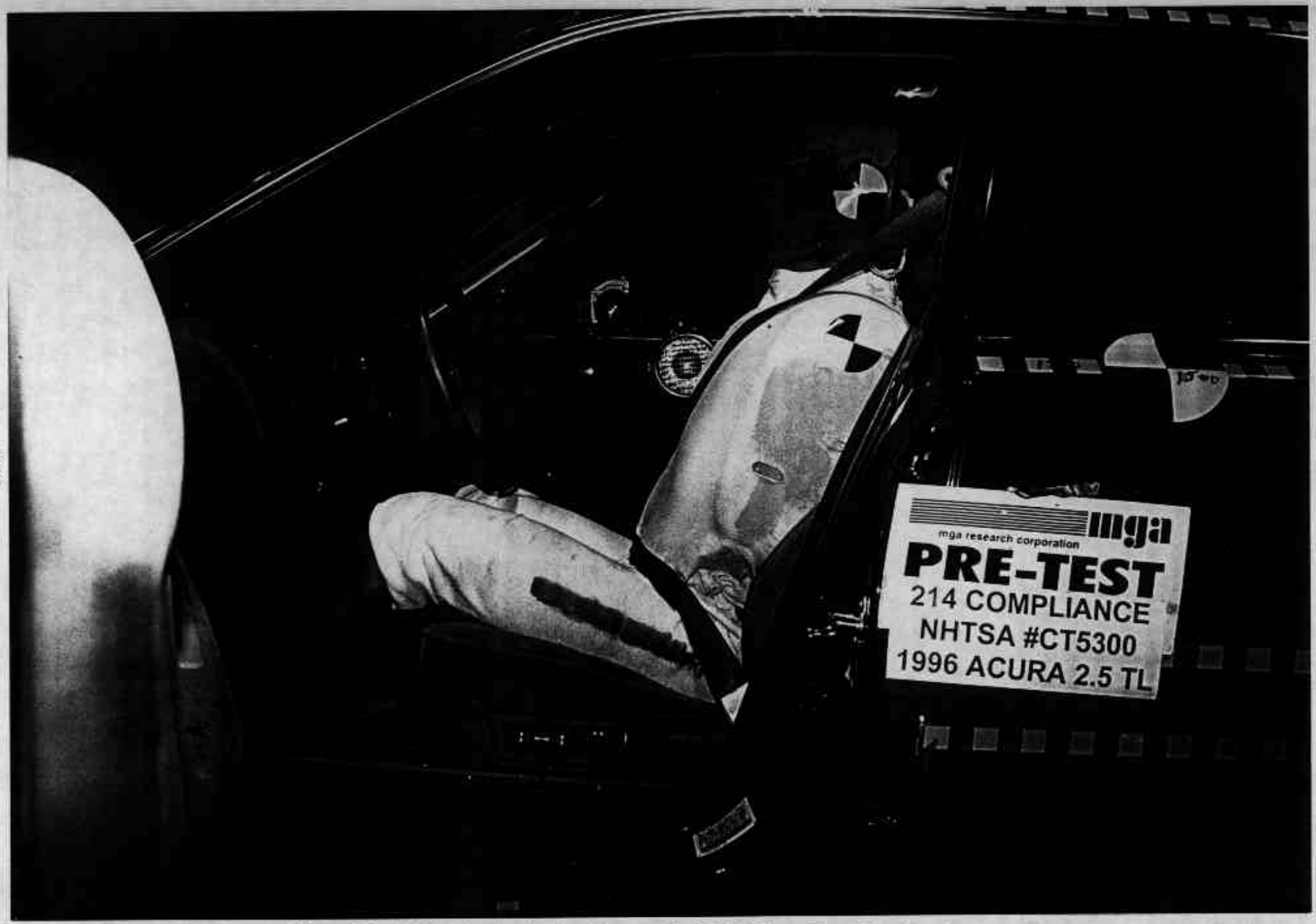

Photo No. A-25 - Pre-Test Driver Dummy Left Side View (Door Open)

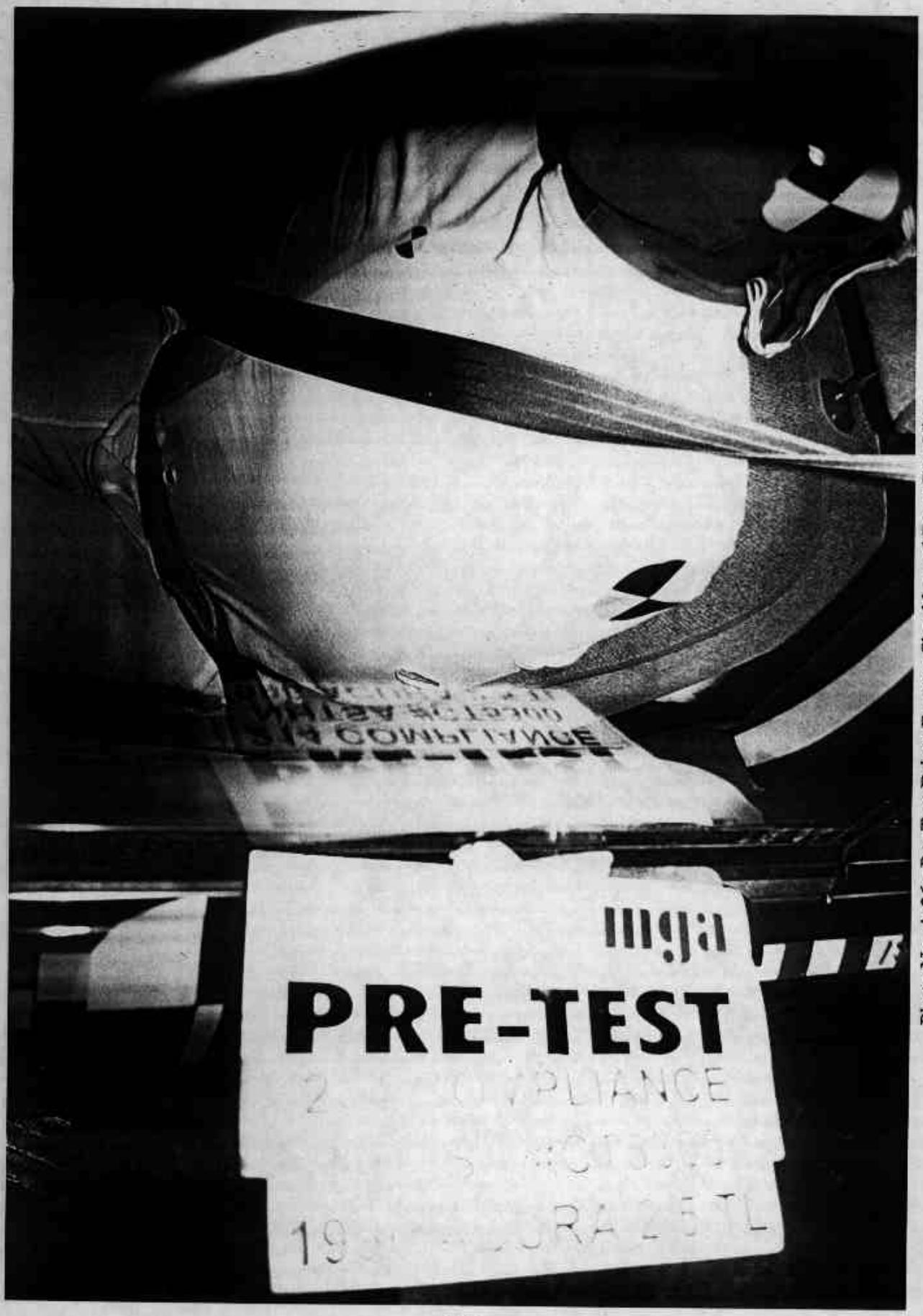

Photo No. A-26 - Pre-Test Driver Dummy Shoulder and Door Top View

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

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

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

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

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

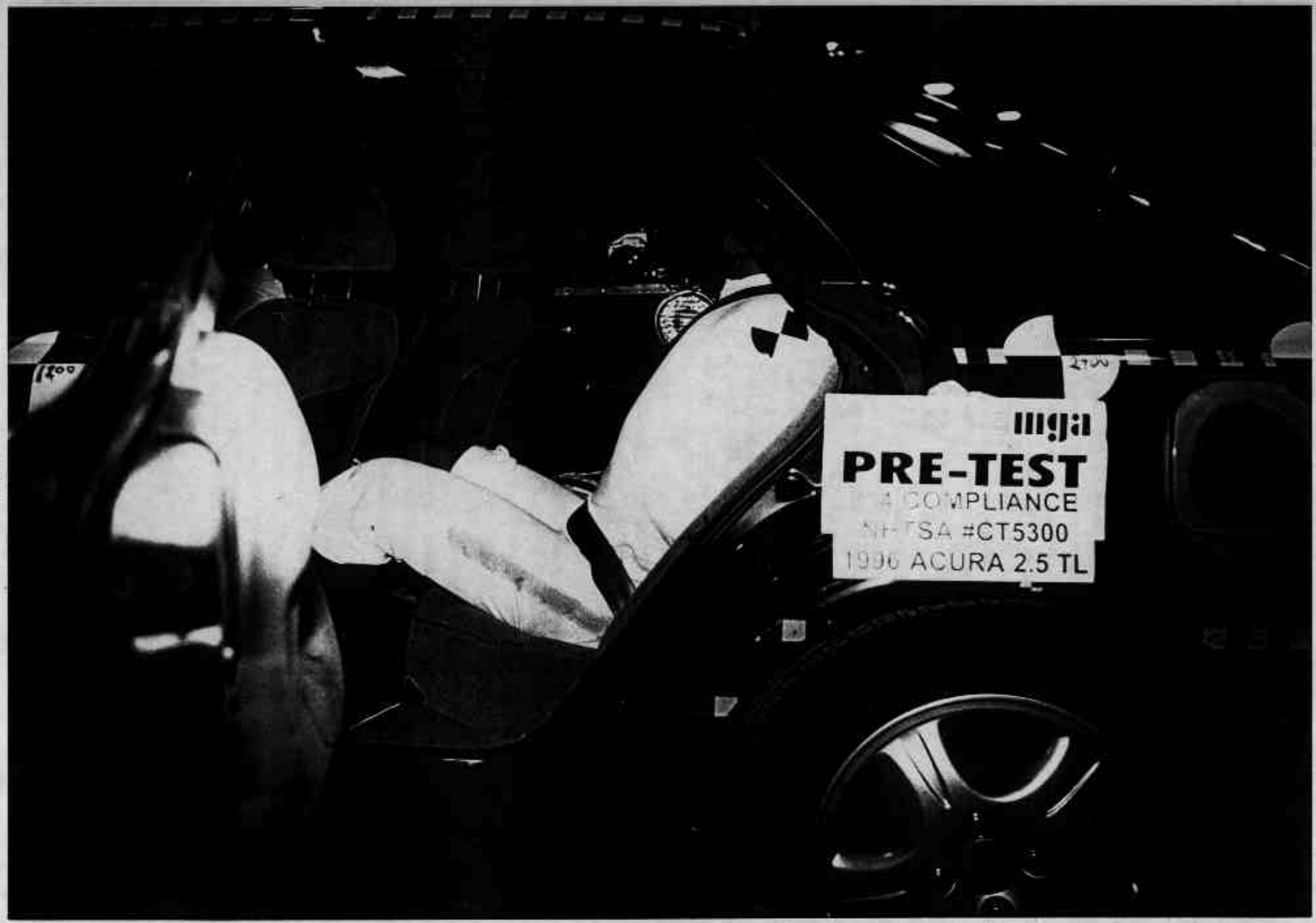

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Photo No. A-35 - Post-Test Passenger Dummy Shoulder and Door Top View

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

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

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

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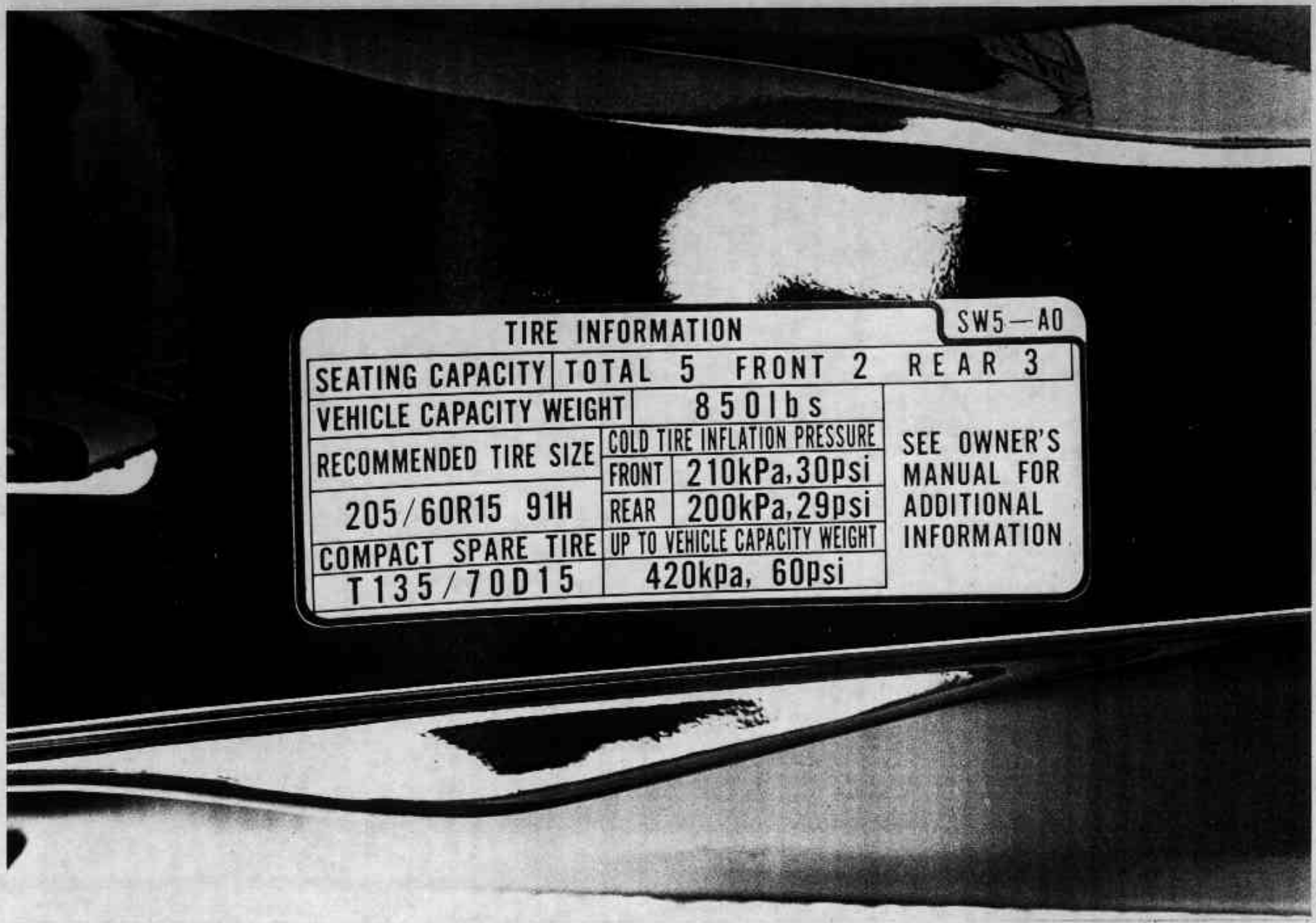
Photo No. A-40 - Vehicle Certification Label



A-41

Photo No. A-41 - Tire Placard

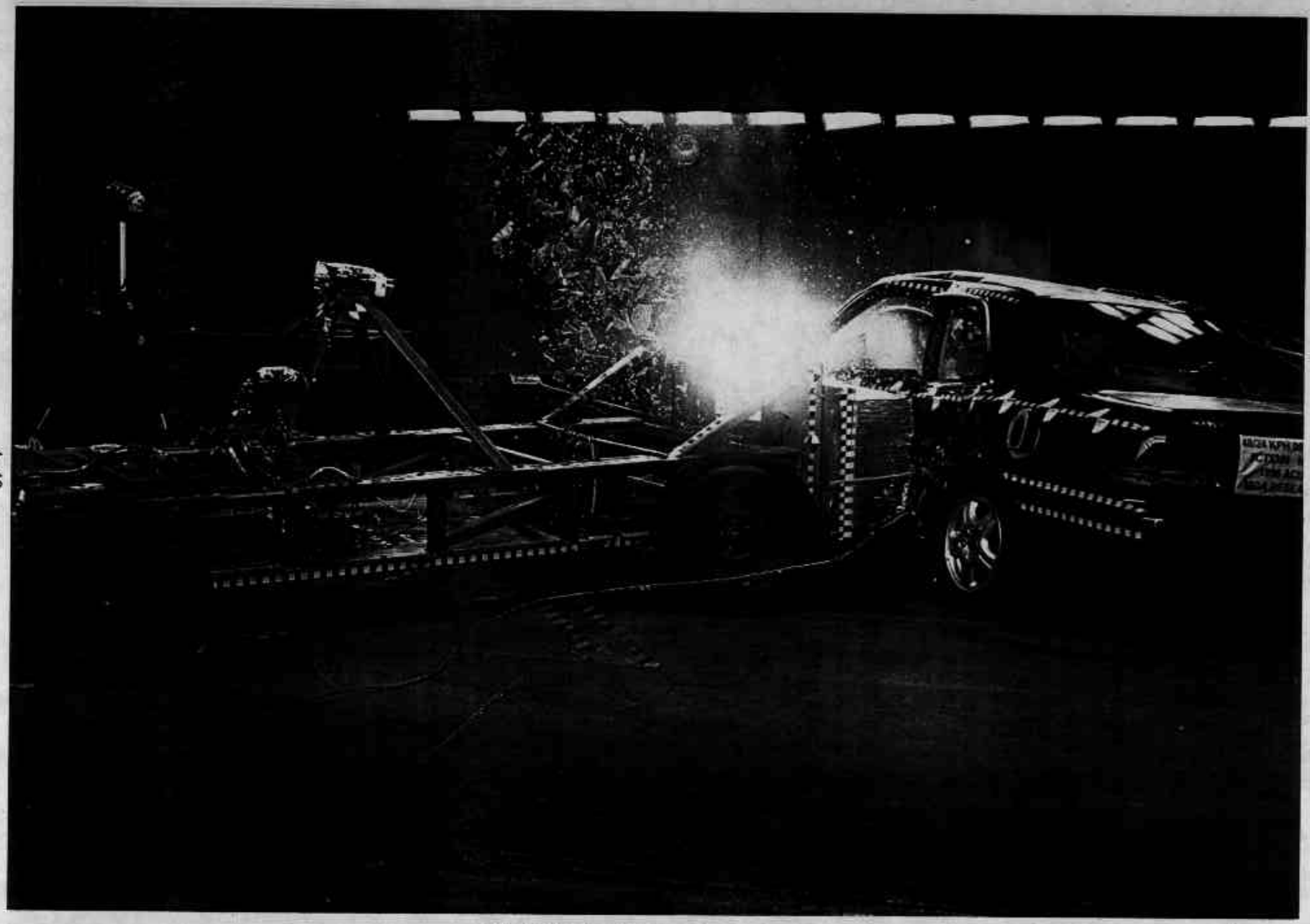


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Photo No. A-42 - Impact

Photo No. A-43 - Pre-Test Fuel Filler View

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Photo No. A-44 - Post-Test Fuel Filler View

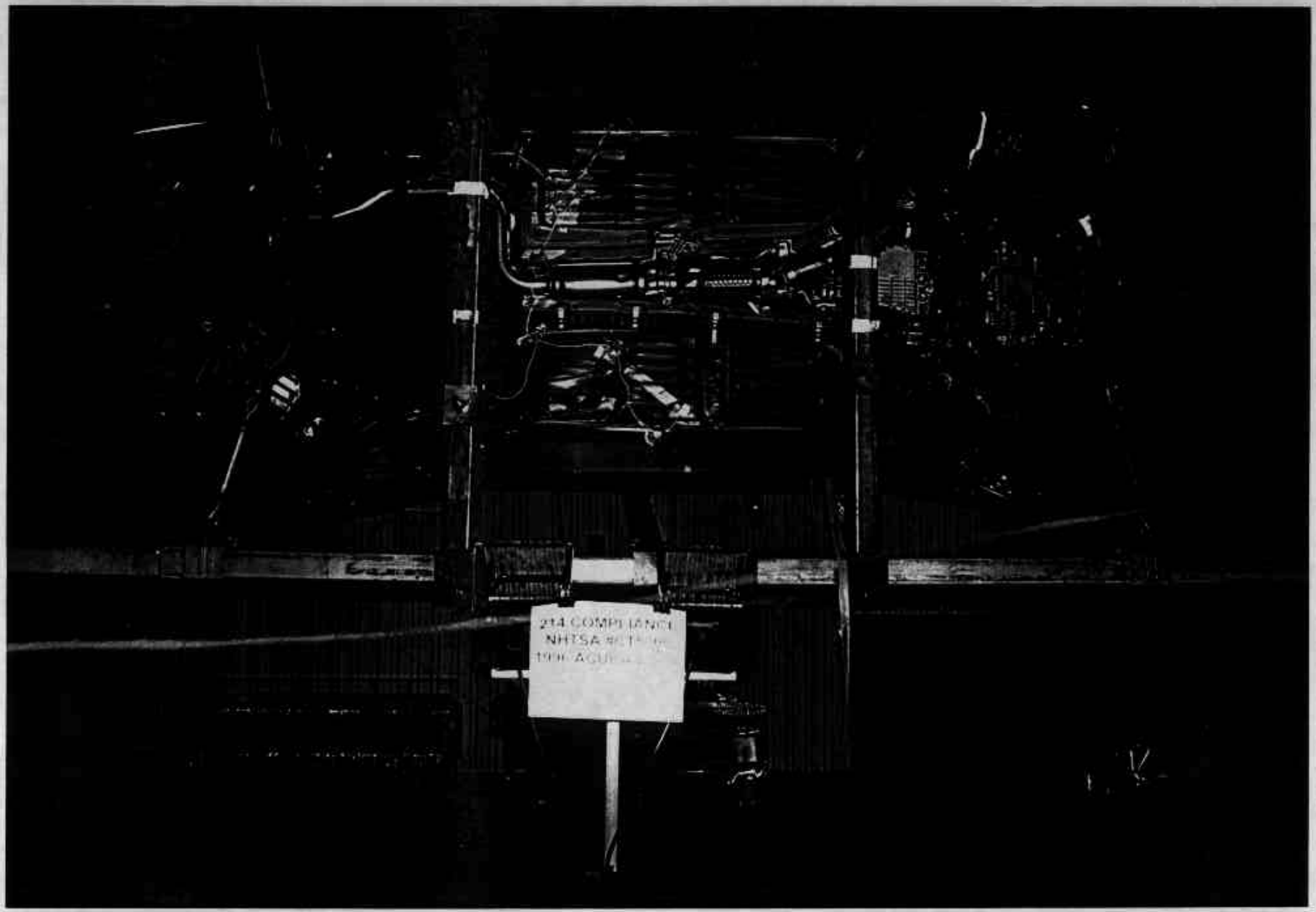

Photo No. A-45 - Rollover 90°

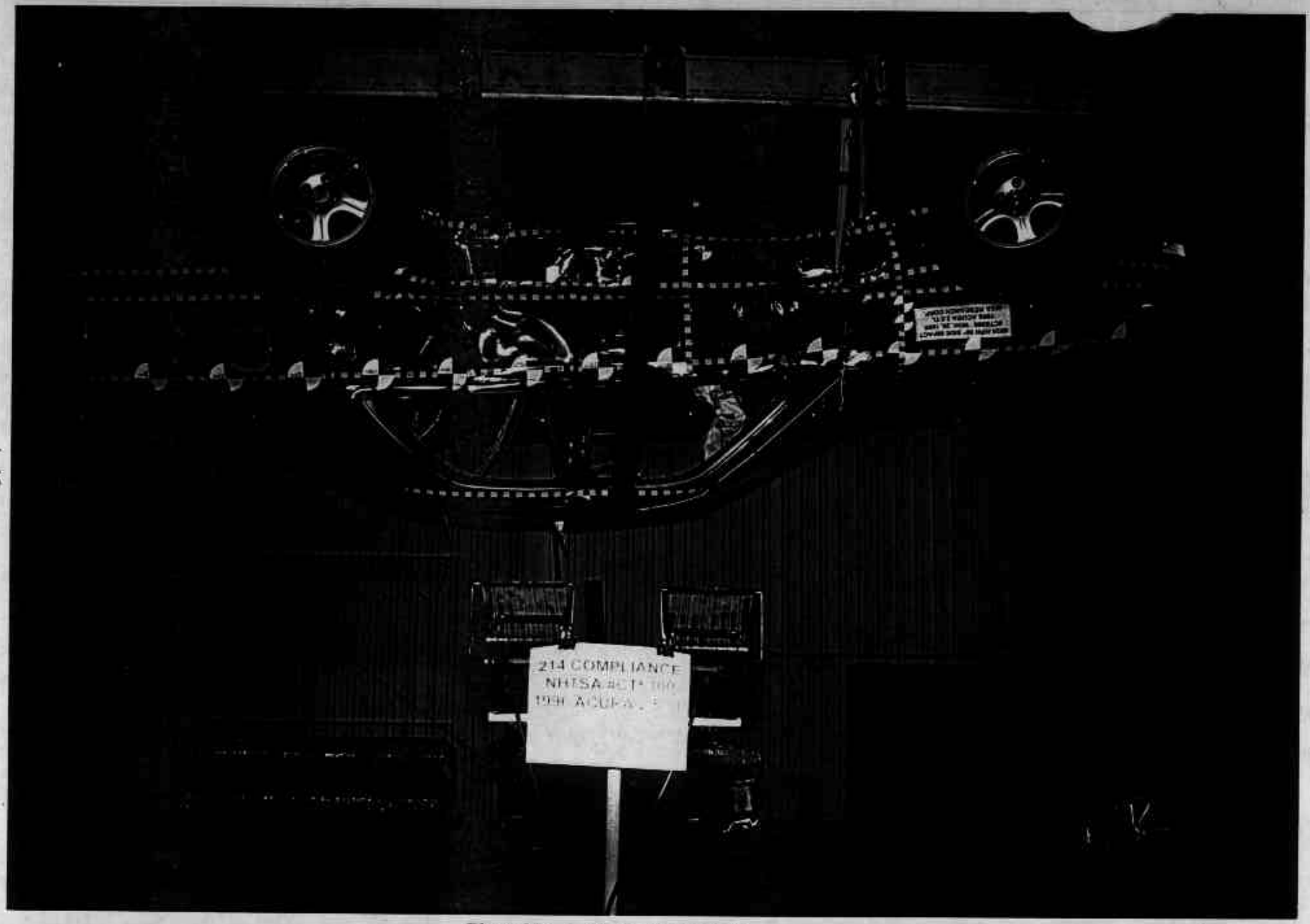

Photo No. A-46 - Rollover 180°

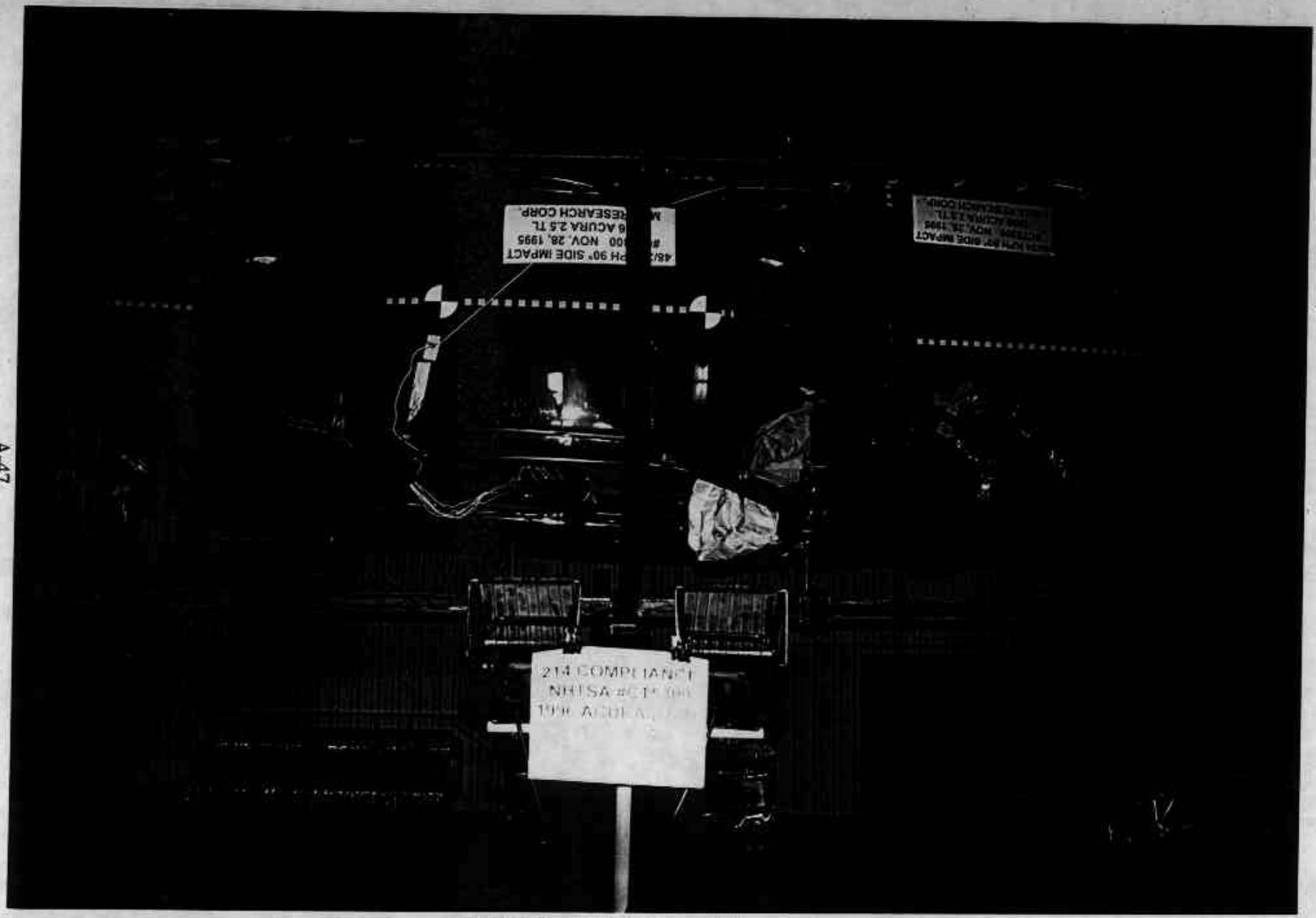

Photo No. A-47 - Rollover 270°

Photo No. A-48 - Rollover 360°

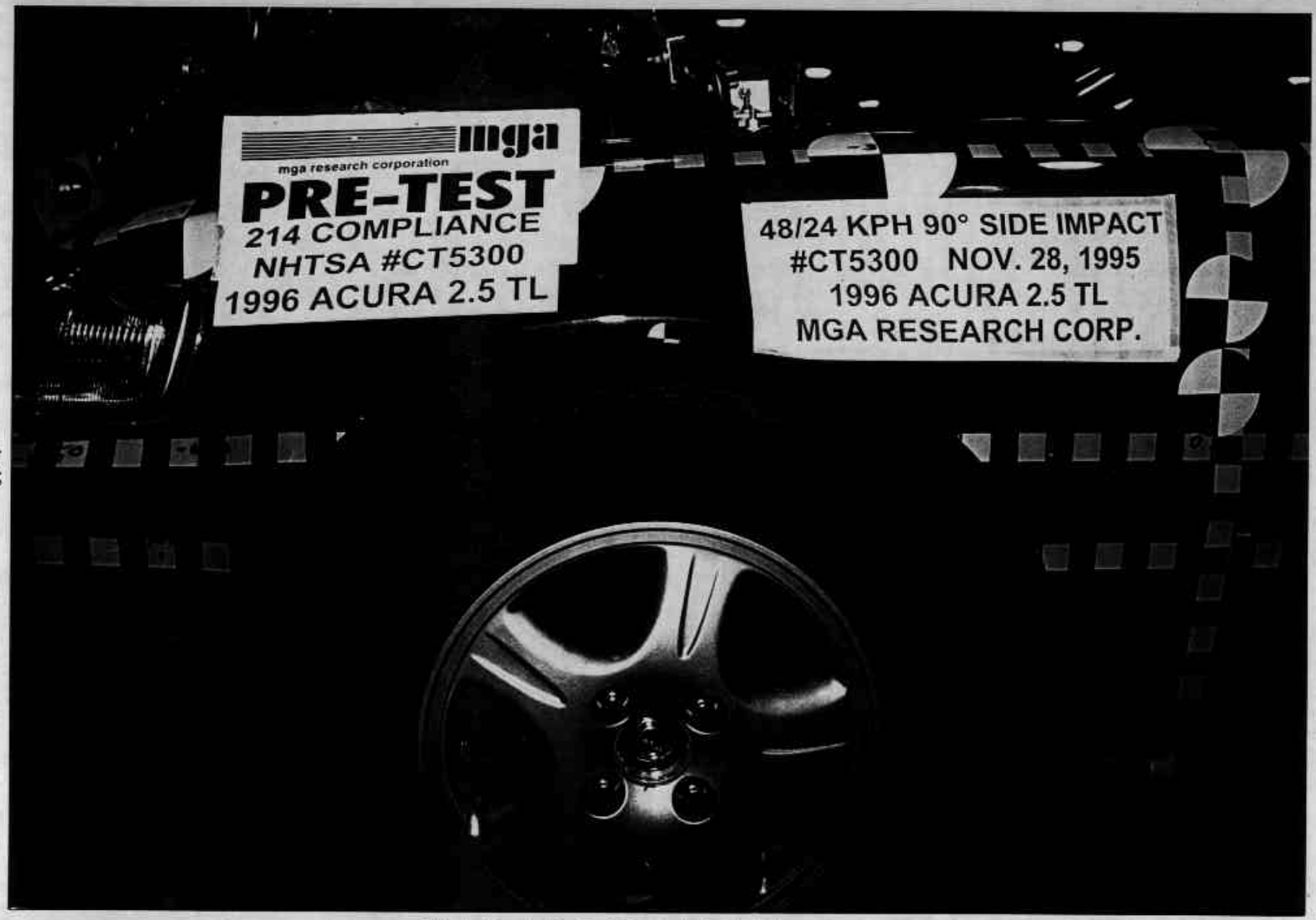

Photo No. A-49 - Left Front Attitude Point

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Photo No. A-50 - Right Front Attitude Point

Photo No. A-51 - Left Rear Attitude Point

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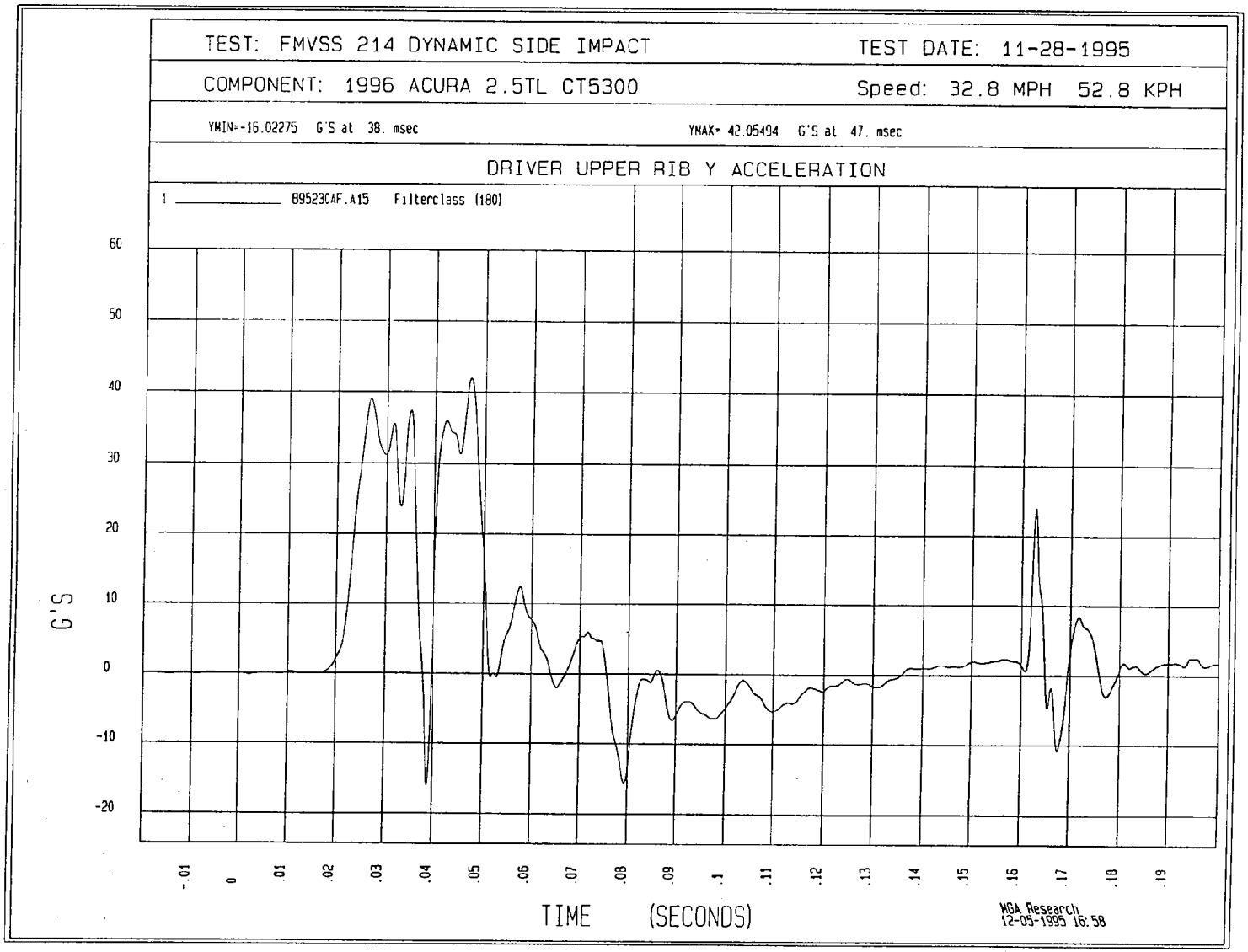
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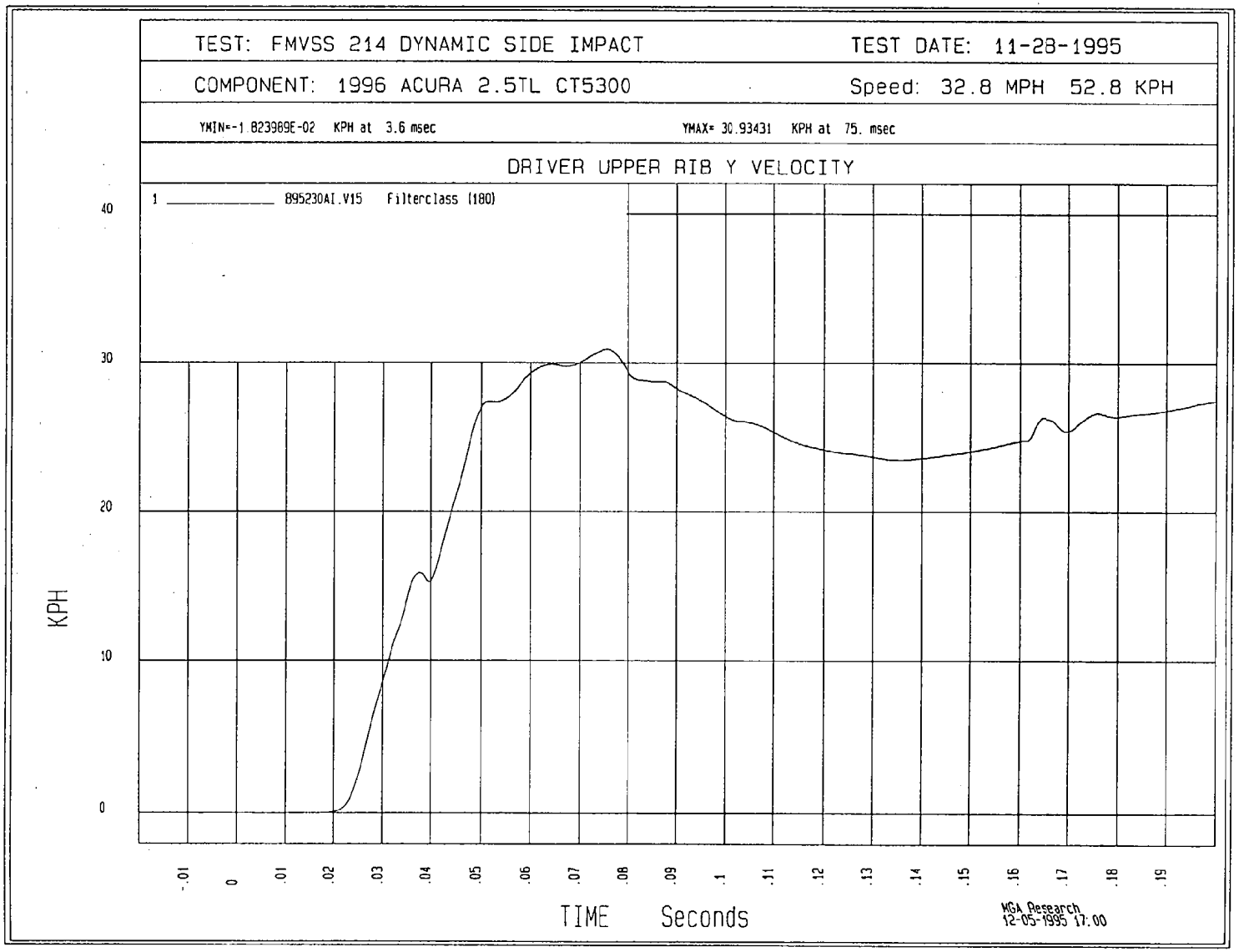
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-16.02275 G'S at 38. msec
YMAX= 42.05494 G'S at 47. msec
DRIVER UPPER RIB Y ACCELERATION
1 B95230AF.A15 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
12-05-1995 16:58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TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.823989E-02 KPH at 3.6 msec
YMAX= 30.93431 KPH at 75. msec
DRIVER UPPER RIB Y VELOCITY
1 895230AI.V15 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
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.13
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.16
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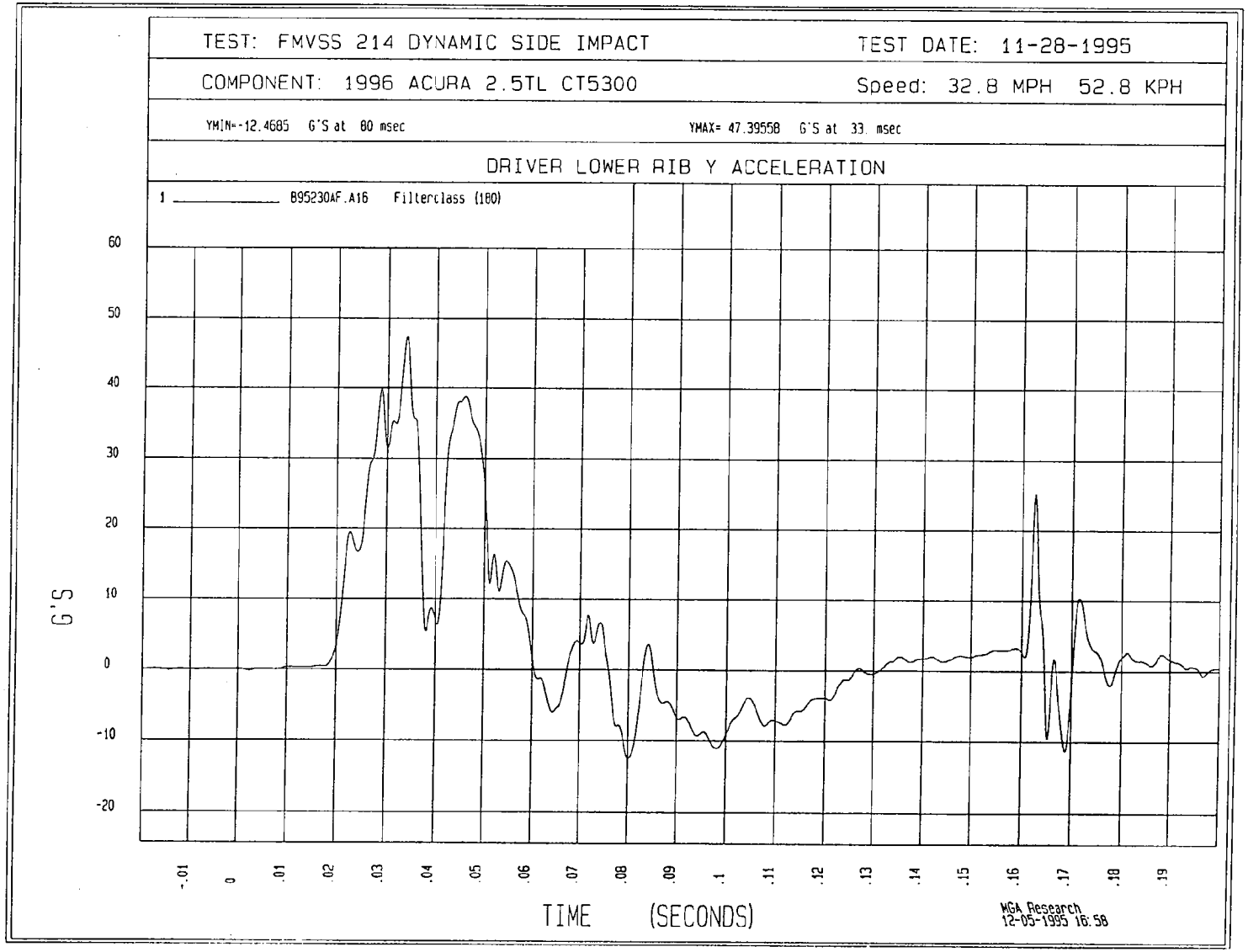
.19
TIME Seconds
MGA Research
12-05-1995 17:00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TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-12.4685 G'S at 80 msec
YMAX= 47.39558 G'S at 33. msec
DRIVER LOWER RIB Y ACCELERATION
1 B95230AF.A16 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G'S
-.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
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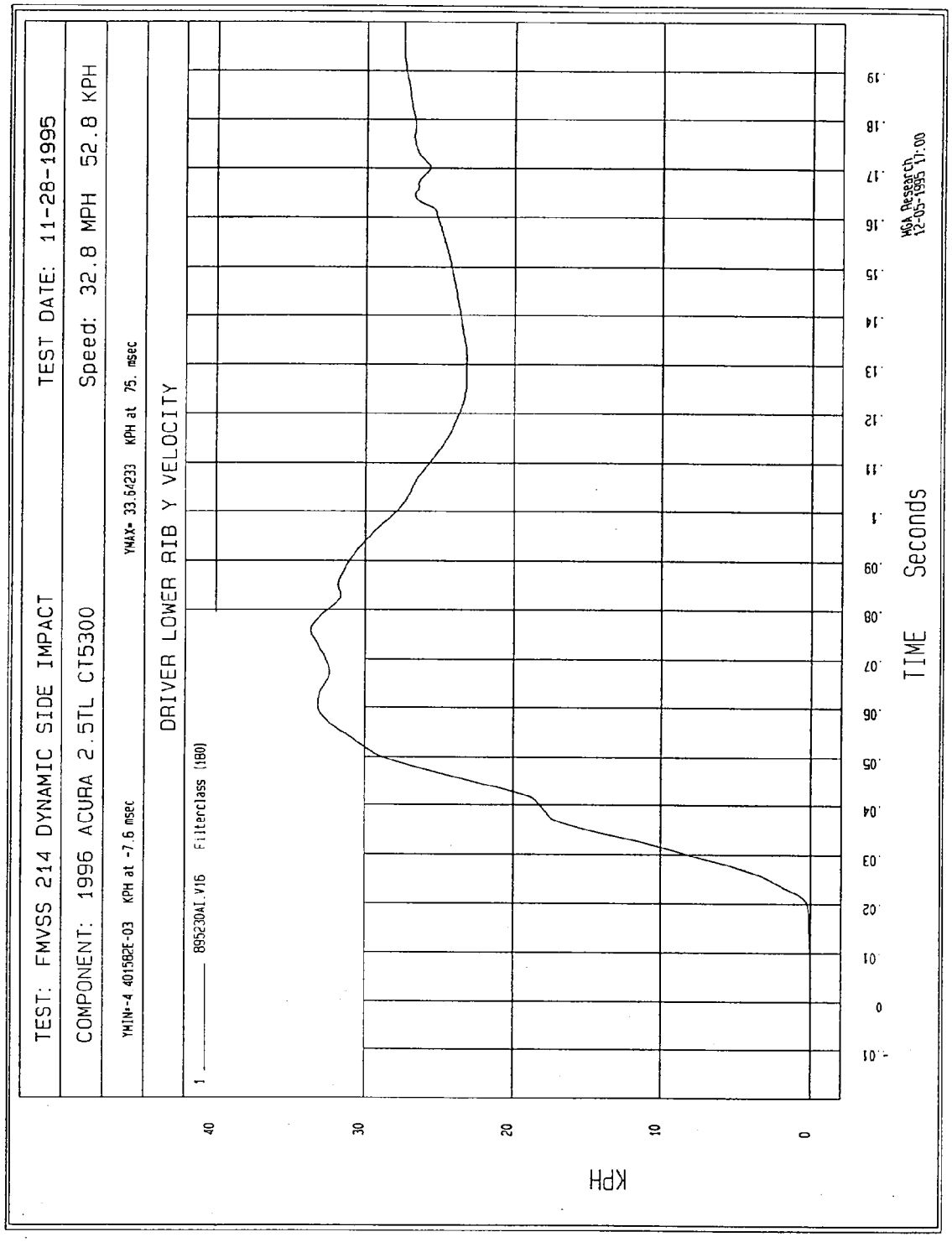
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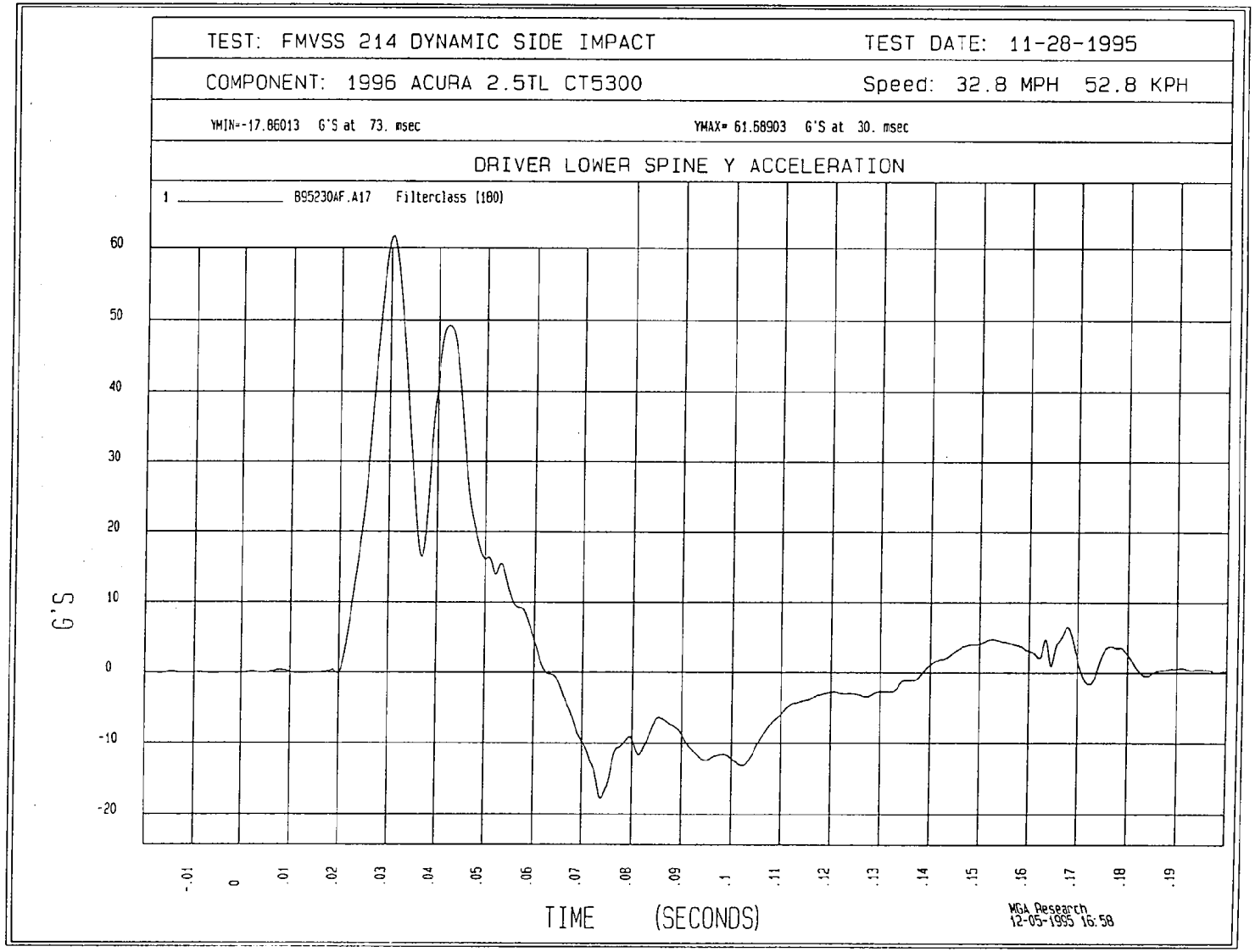
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-4 401582E-03 KPH at -7.6 msec
YMAX= 33.64233 KPH at 75. msec
DRIVER LOWER RIB Y VELOCITY
1 895230AI.V16 Filterclass (180)
KPH
TIME Seconds
MGA Research
12-05-1995 17:00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TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-17.86013 G'S at 73. msec
YMAX= 61.58903 G'S at 30. msec
DRIVER LOWER SPINE Y ACCELERATION
1 B95230AF.A17 Filterclass (180)
G'S
60
50
40
30
20
10
0
-10
-20
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
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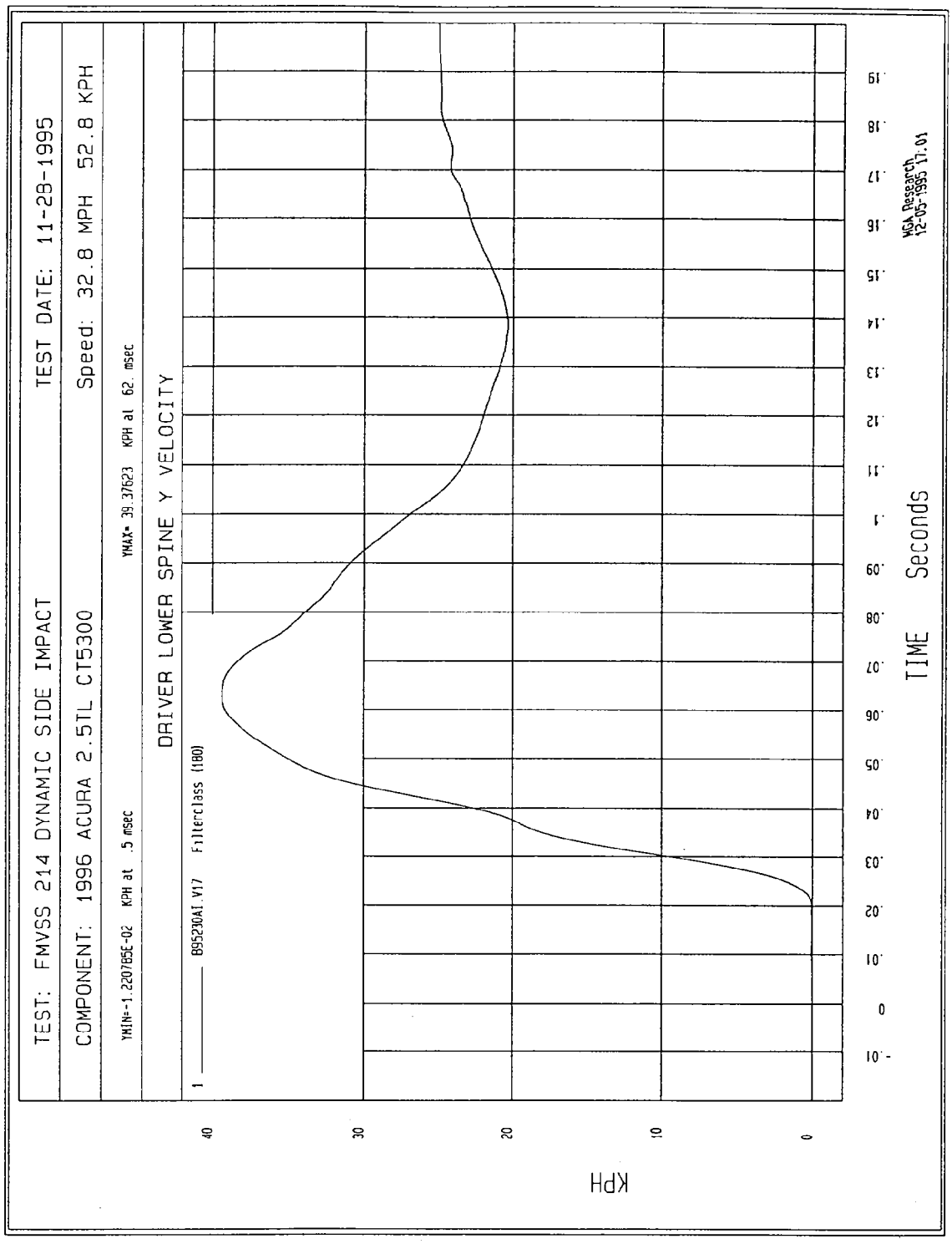
TIME (SECONDS)
WGA Research
12-05-1995 16:58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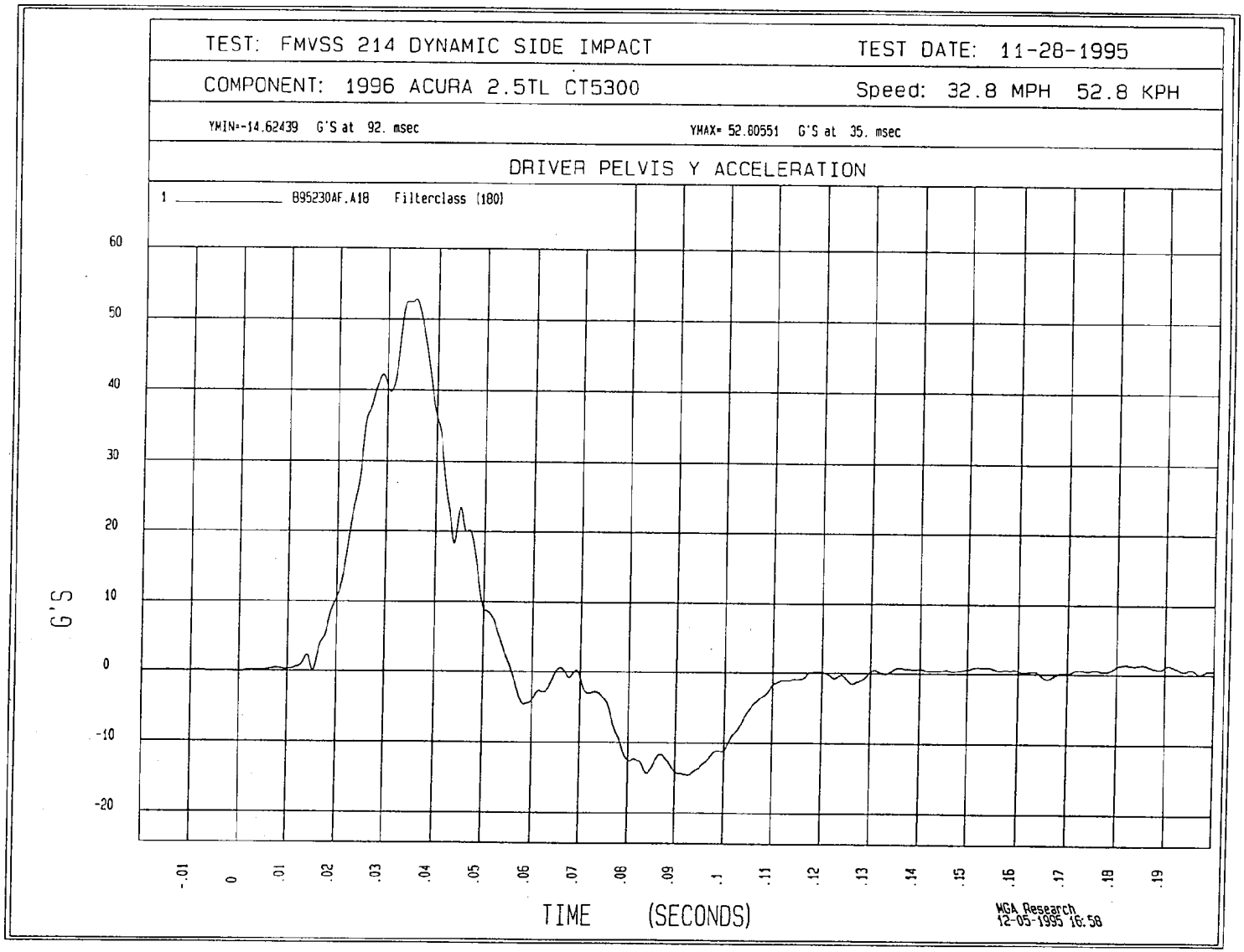
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.220765E-02 KPH at .5 msec
YMAX= 39.37623 KPH at 62. msec
DRIVER LOWER SPINE Y VELOCITY
1 B95230AI.V17 FilterClass (180)
KPH
TIME Seconds
NGA Research
12-05-1995 11:01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TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-14.62439 G'S at 92. msec
YMAX= 52.80551 G'S at 35. msec
DRIVER PELVIS Y ACCELERATION
1 B95230AF.A18 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
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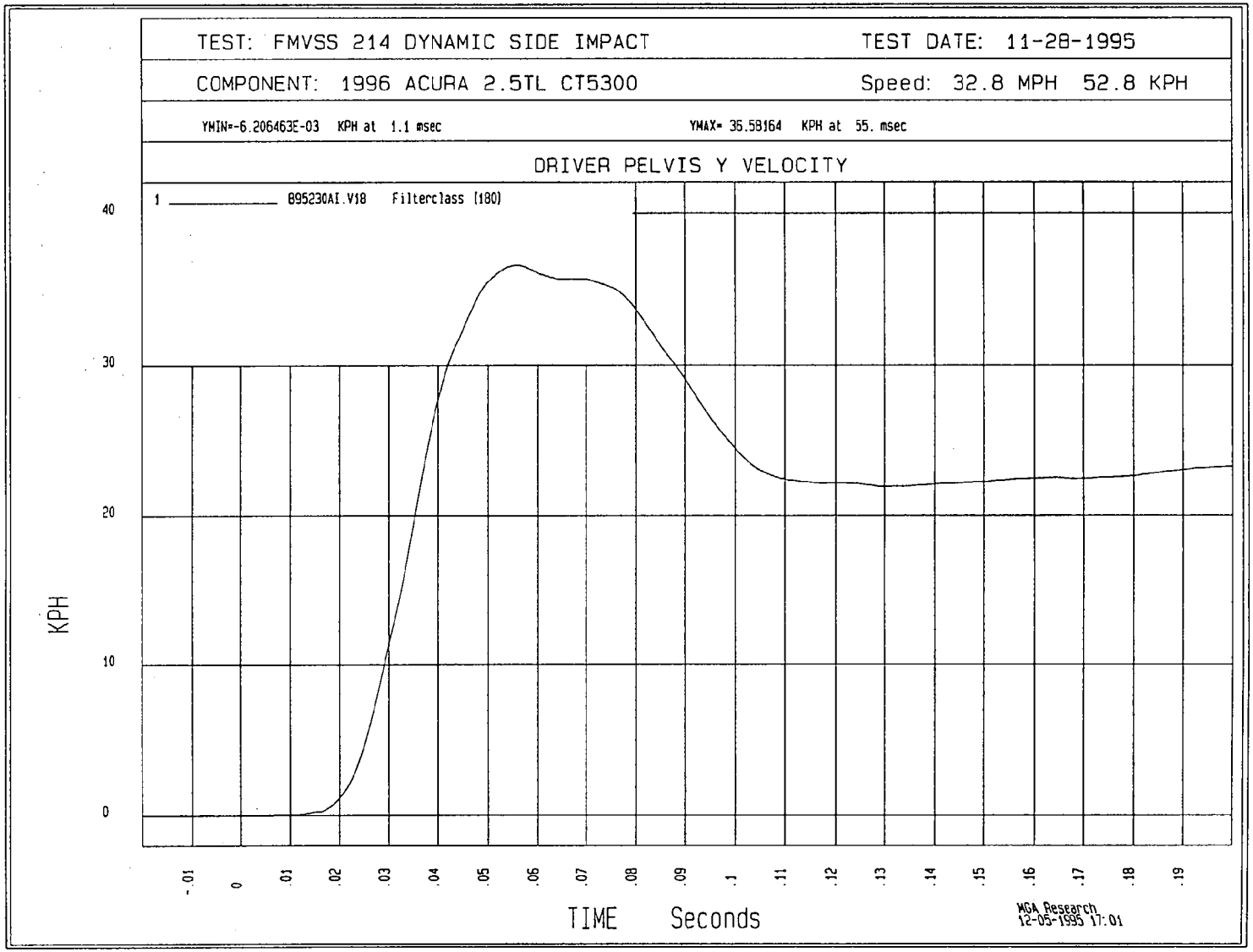
TIME (SECONDS)
MGA Research
12-05-1995 16:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-6.206463E-03 KPH at 1.1 msec
YMAX= 35.58164 KPH at 55. msec
DRIVER PELVIS Y VELOCITY
1 B95230AI.V18 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
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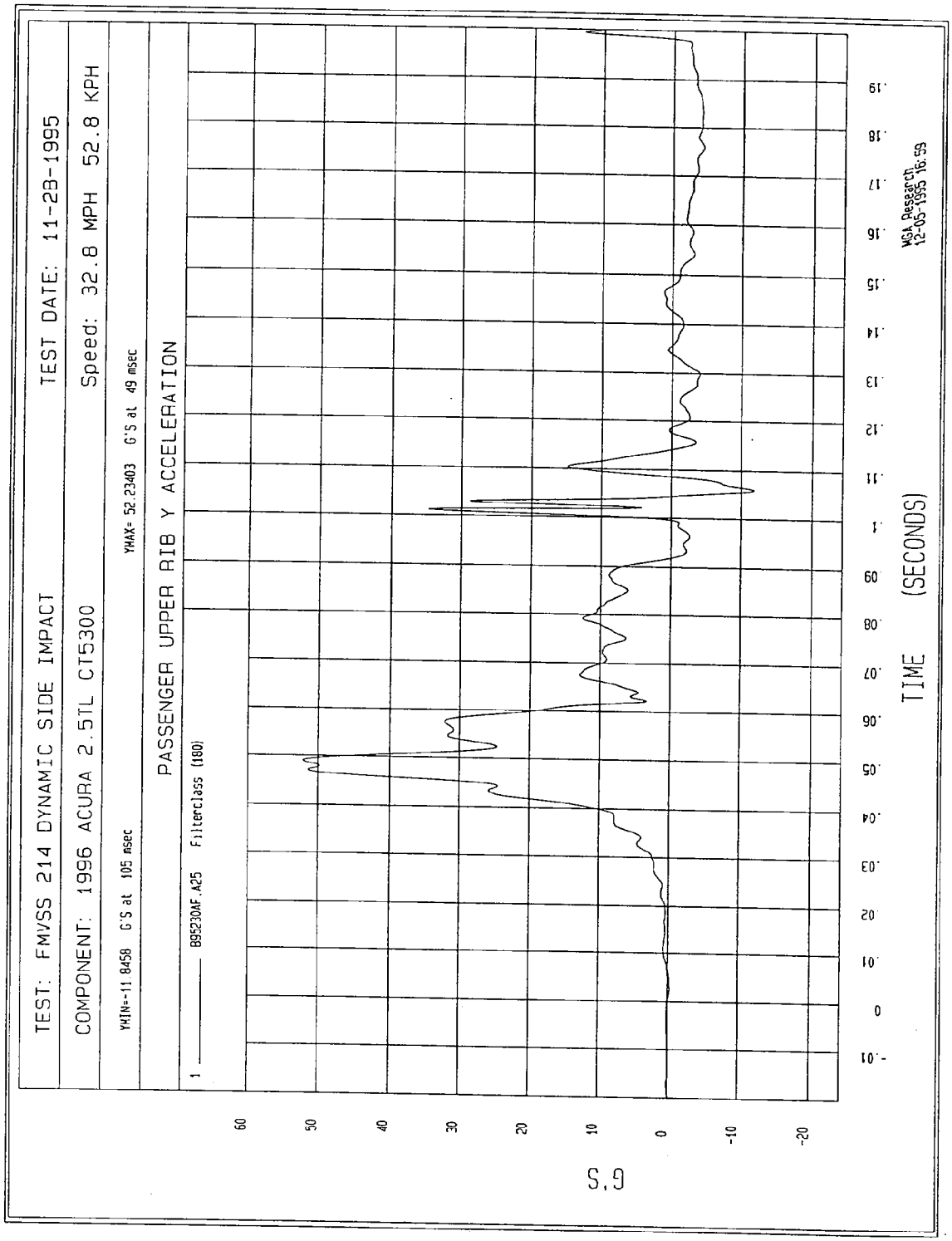
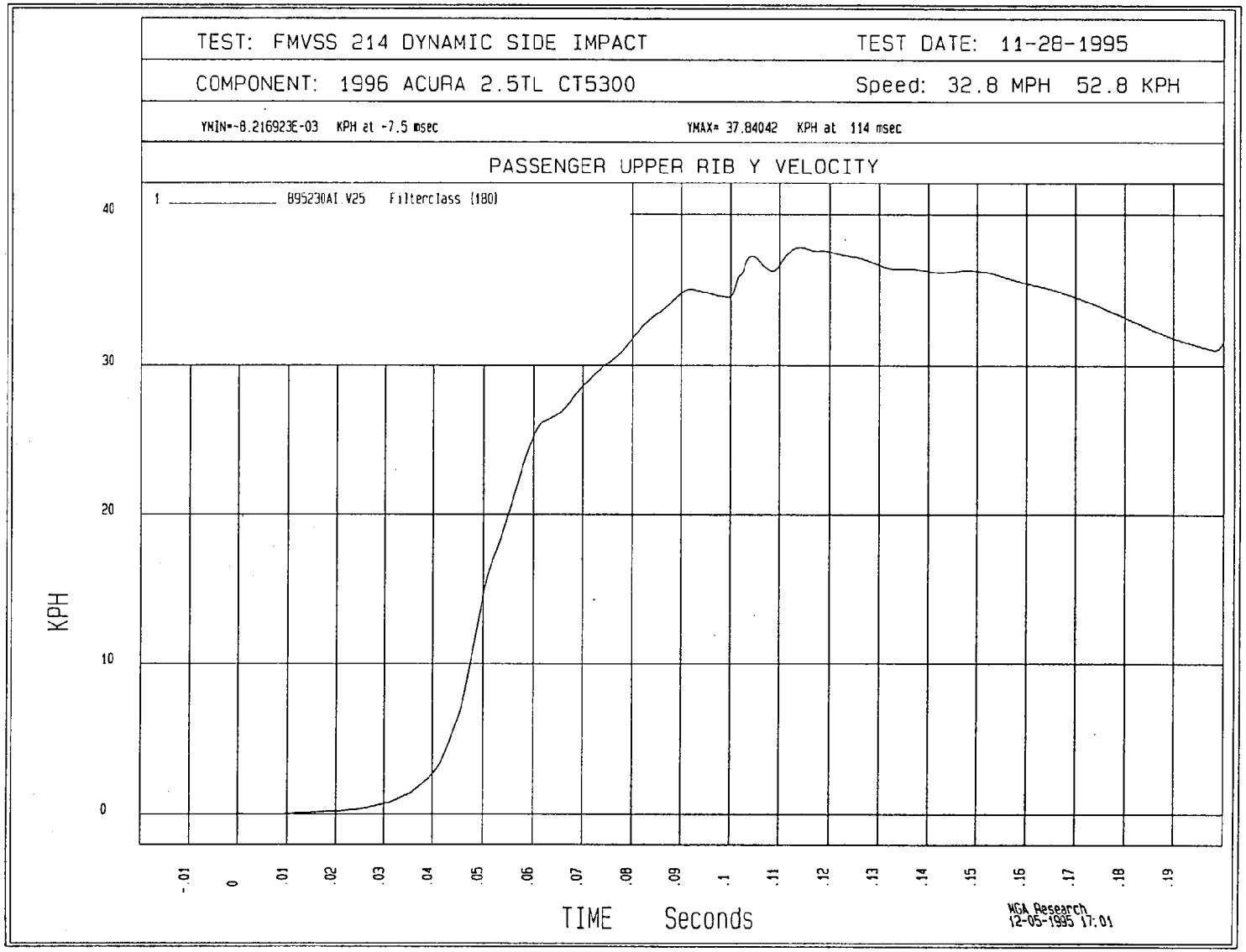
TIME Seconds
MGA Research
12-05-1995 17:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-11.8458 G'S at 105 msec
YMAX= 52.23403 G'S at 49 msec
PASSENGER UPPER RIB Y ACCELERATION
1 B95230AF.A25 Filterclass (180)
G'S
TIME (SECONDS)
MGA Research
12-05-1995 16:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-8.216923E-03 KPH at -7.5 msec
YMAX= 37.84042 KPH at 114 msec
PASSENGER UPPER RIB Y VELOCITY
1 895230AI.V25 Filterclass (180)
KPH
40
30
20
10
0
-.01
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.01
.02
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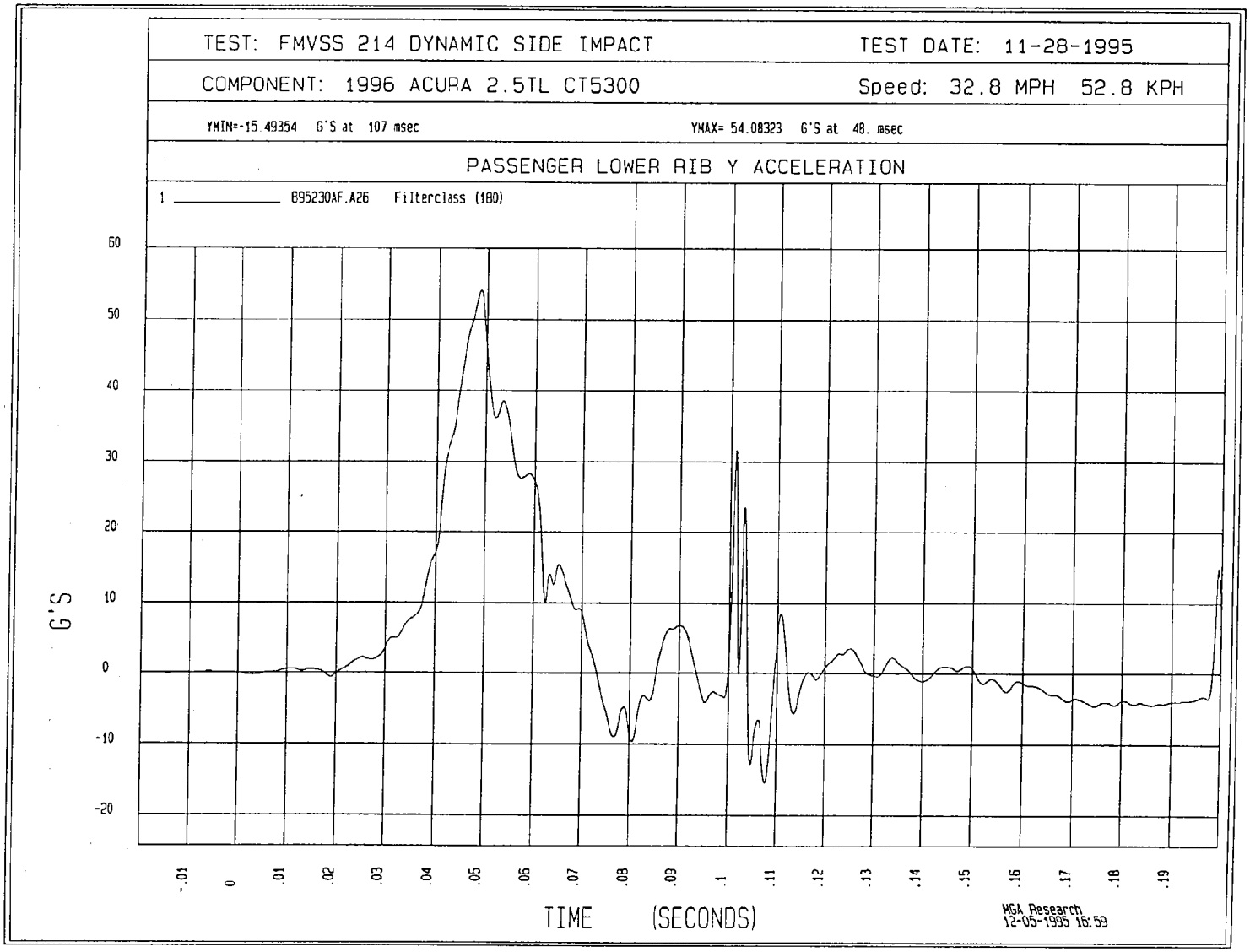
TIME Seconds
MGA Research
12-05-1995 17:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-15.49354 G'S at 107 msec
YMAX= 54.08323 G'S at 48. msec
PASSENGER LOWER RIB Y ACCELERATION
1 _____ 695230AF.A26 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
.03
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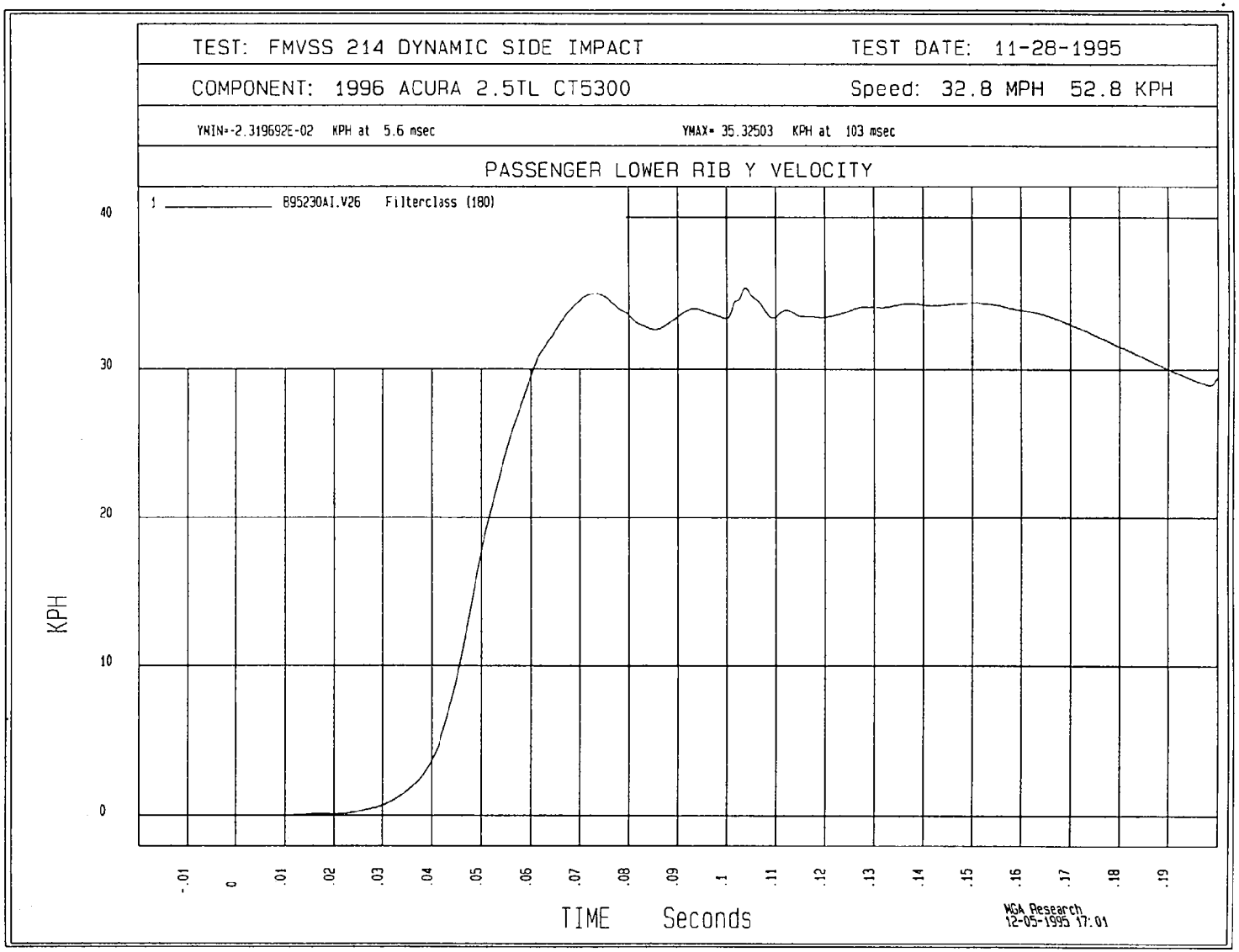
TIME (SECONDS)
MGA Research
12-05-1995 16:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-2.319692E-02 KPH at 5.6 msec
YMAX= 35.32503 KPH at 103 msec
PASSENGER LOWER RIB Y VELOCITY
1 B95230AI.V26 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
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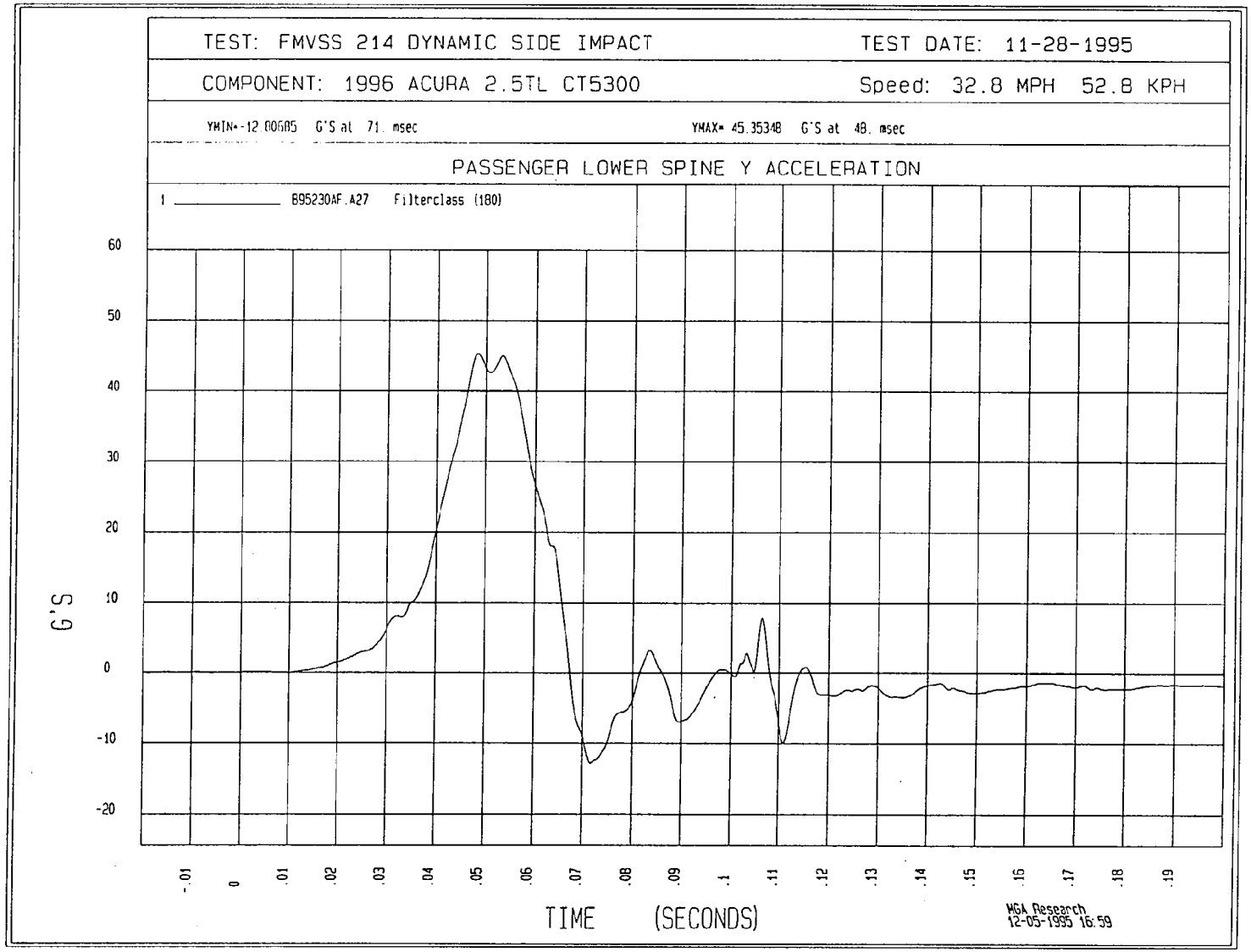
TIME Seconds
MGA Research
12-05-1995 17:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-12.80685 G'S at 71. msec
YMAX= 45.35348 G'S at 48. msec
PASSENGER LOWER SPINE Y ACCELERATION
1 B95230AF.A27 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G's
-.01
0
.01
.02
.03
.04
.05
.06
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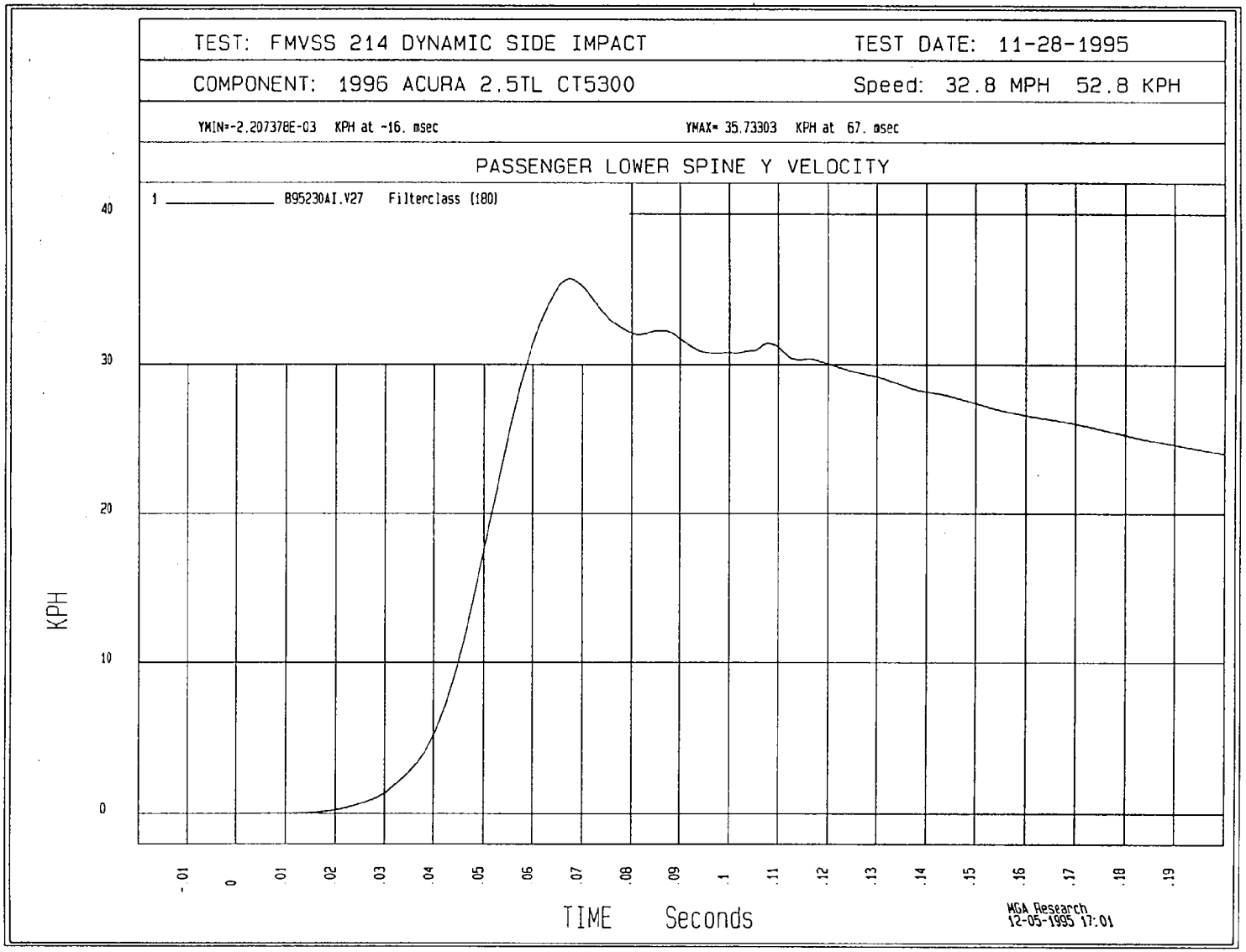
TIME (SECONDS)
MGA Research
12-05-1995 16:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-2.207378E-03 KPH at -16. msec
YMAX= 35.73303 KPH at 67. msec
PASSENGER LOWER SPINE Y VELOCITY
1 B95230AI.V27 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
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.03
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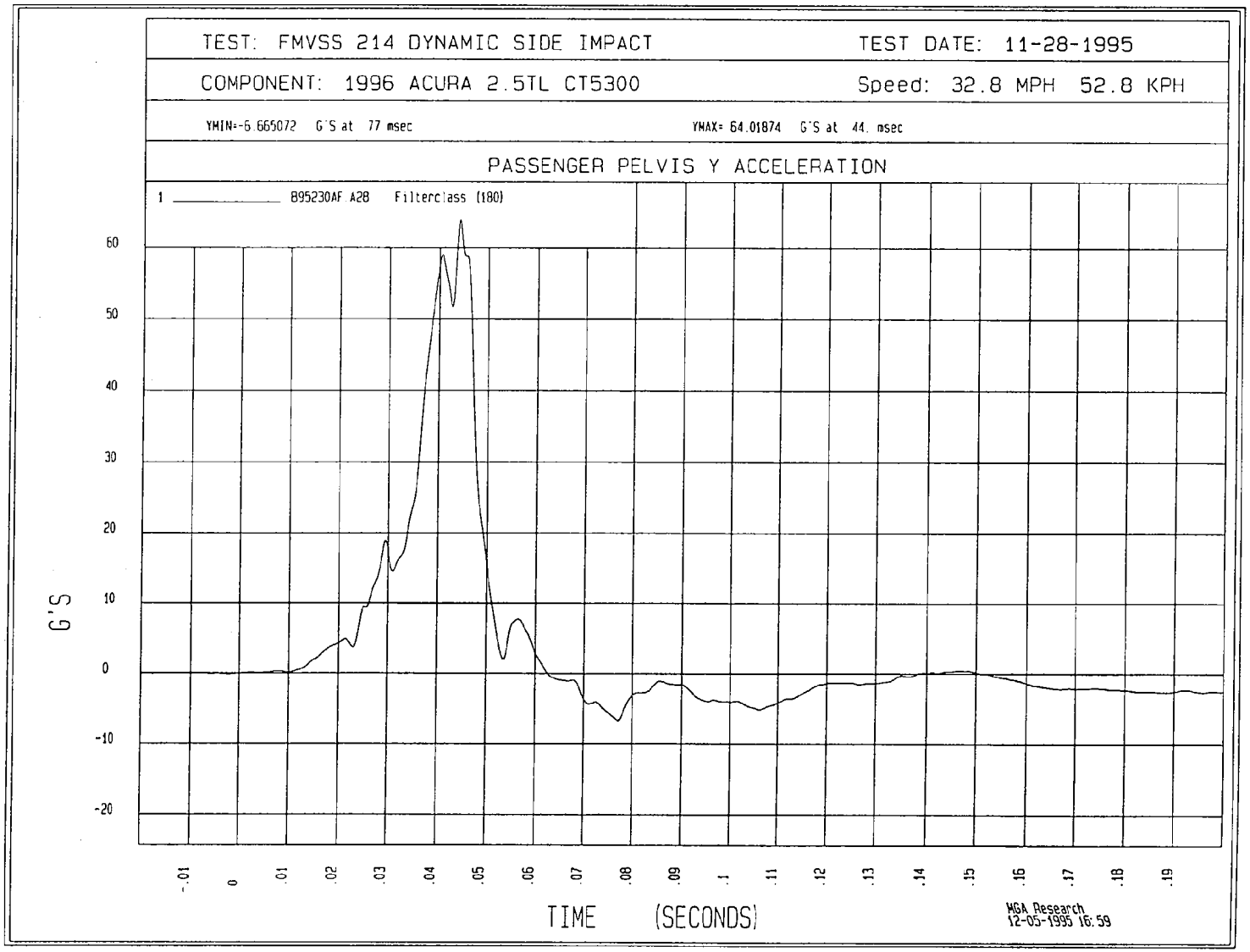
TIME Seconds
MGA Research
12-05-1995 17:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-6.665072 G'S at 77 msec
YMAX= 64.01874 G'S at 44. msec
PASSENGER PELVIS Y ACCELERATION
1 B95230AF A28 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G'S
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.01
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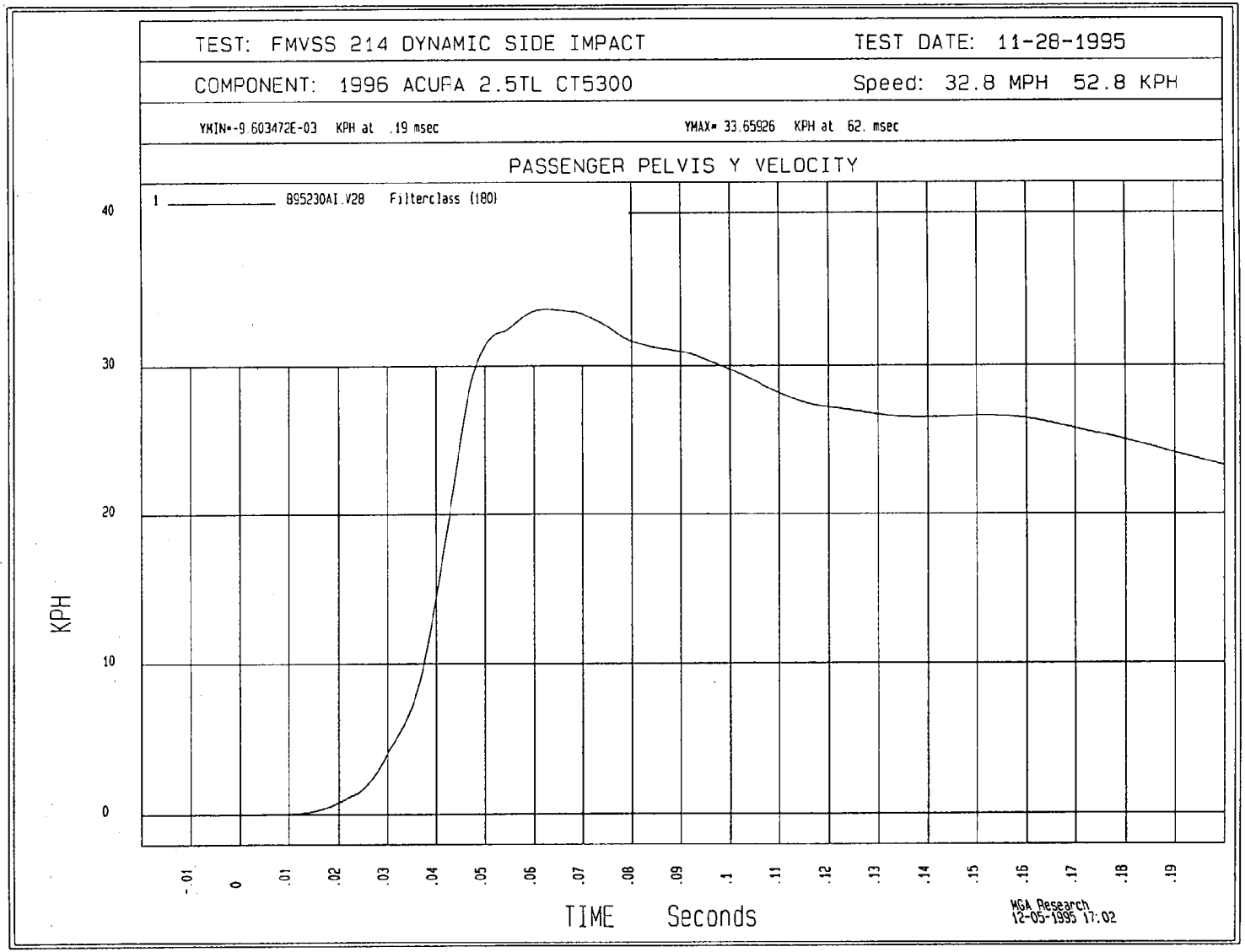
TIME (SECONDS)
MGA Research
12-05-1995 16:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-9.603472E-03 KPH at .19 msec
YMAX= 33.65926 KPH at 62. msec
PASSENGER PELVIS Y VELOCITY
1 B95230AI.V28 Filterclass (180)
KPH
40
30
20
10
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-.01
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.03
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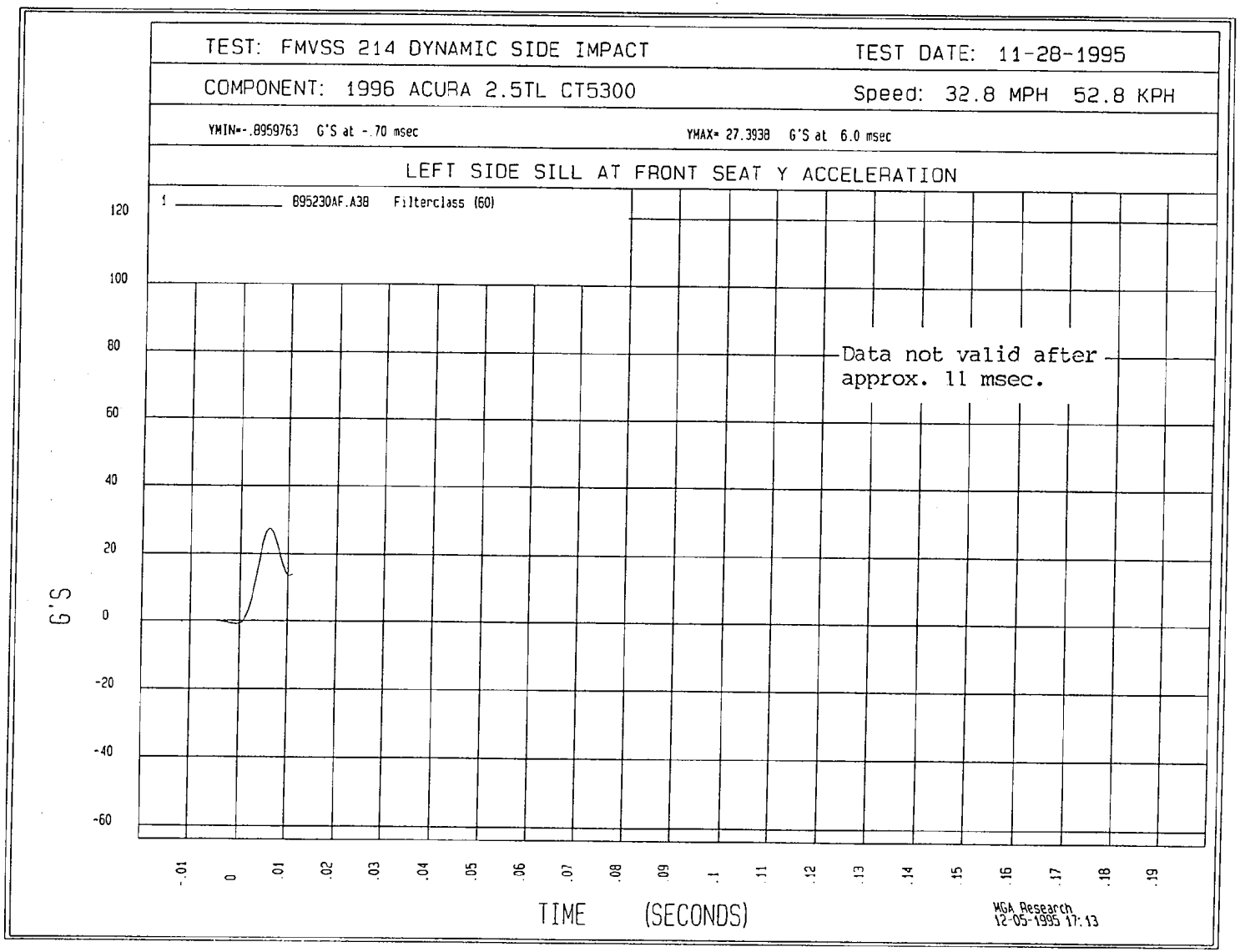
TIME Seconds
MGA Research
12-05-1995 17:02


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-.8959763 G'S at -.70 msec
YMAX= 27.3938 G'S at 6.0 msec
LEFT SIDE SILL AT FRONT SEAT Y ACCELERATION
1 B95230AF.A38 Filterclass (60)
Data not valid after approx. 11 msec.
G'S
120
100
80
60
40
20
0
-20
-40
-60
-.01
0
.01
.02
.03
.04
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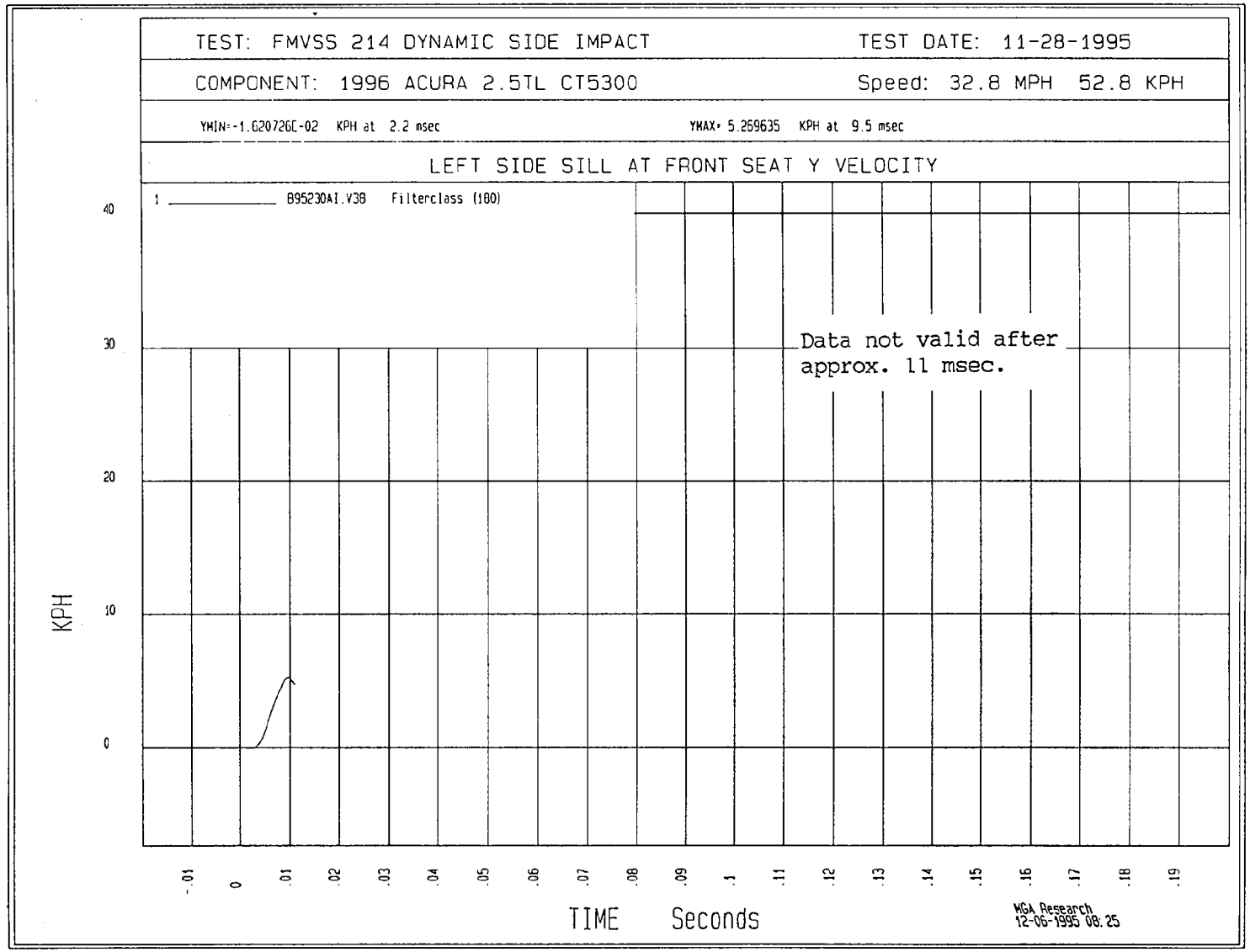
TIME (SECONDS)
MGA Research
12-05-1995 17:13


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.620726E-02 KPH at 2.2 msec
YMAX= 5.269635 KPH at 9.5 msec
LEFT SIDE SILL AT FRONT SEAT Y VELOCITY
1 B95230AI.V38 Filterclass (180)
Data not valid after approx. 11 msec.
KPH
40
30
20
10
0
-.01
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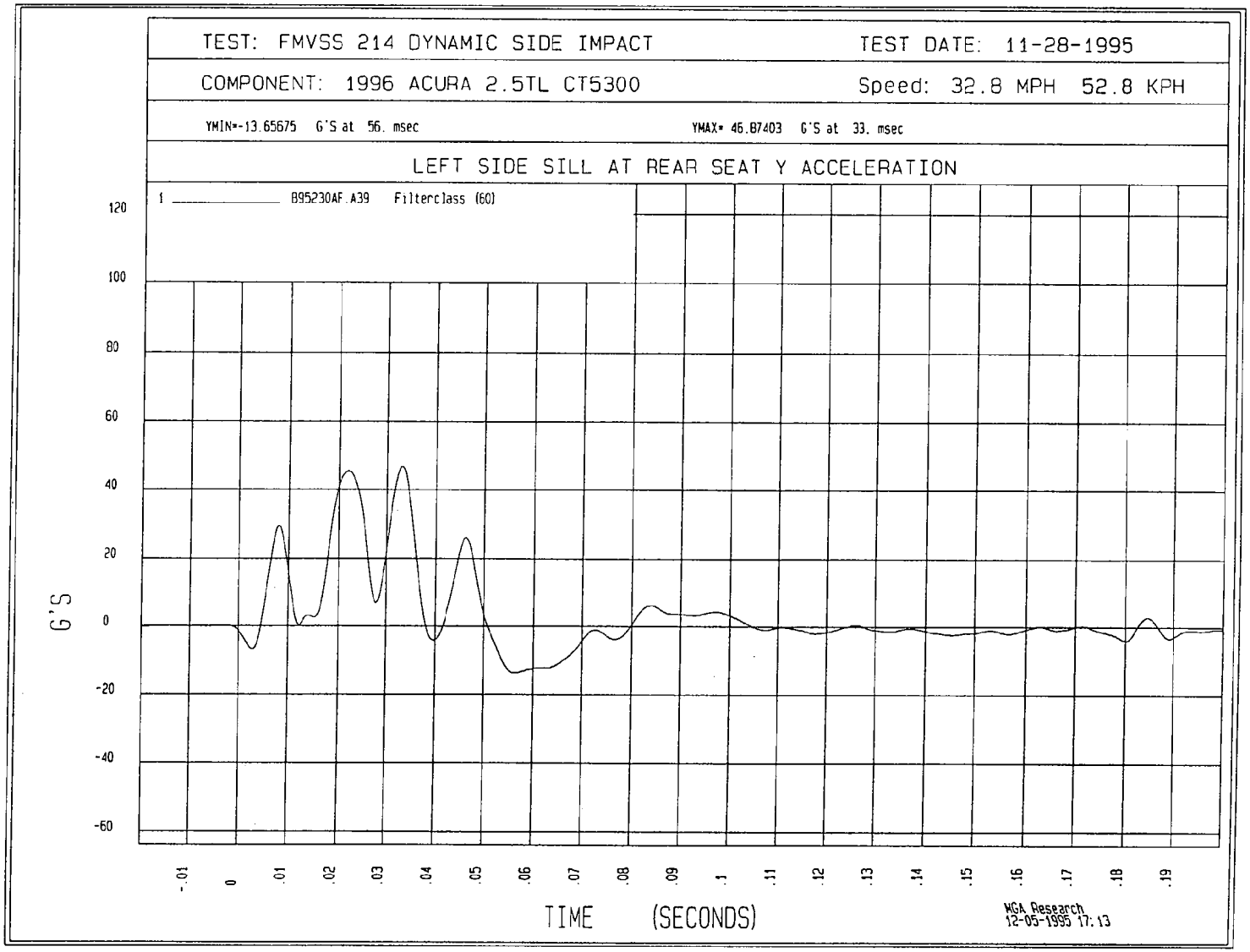
TIME Seconds
MGA Research
12-06-1995 08:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-13.65675 G'S at 56. msec
YMAX= 46.87403 G'S at 33. msec
LEFT SIDE SILL AT REAR SEAT Y ACCELERATION
1 B95230AF.A39 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.01
0
.01
.02
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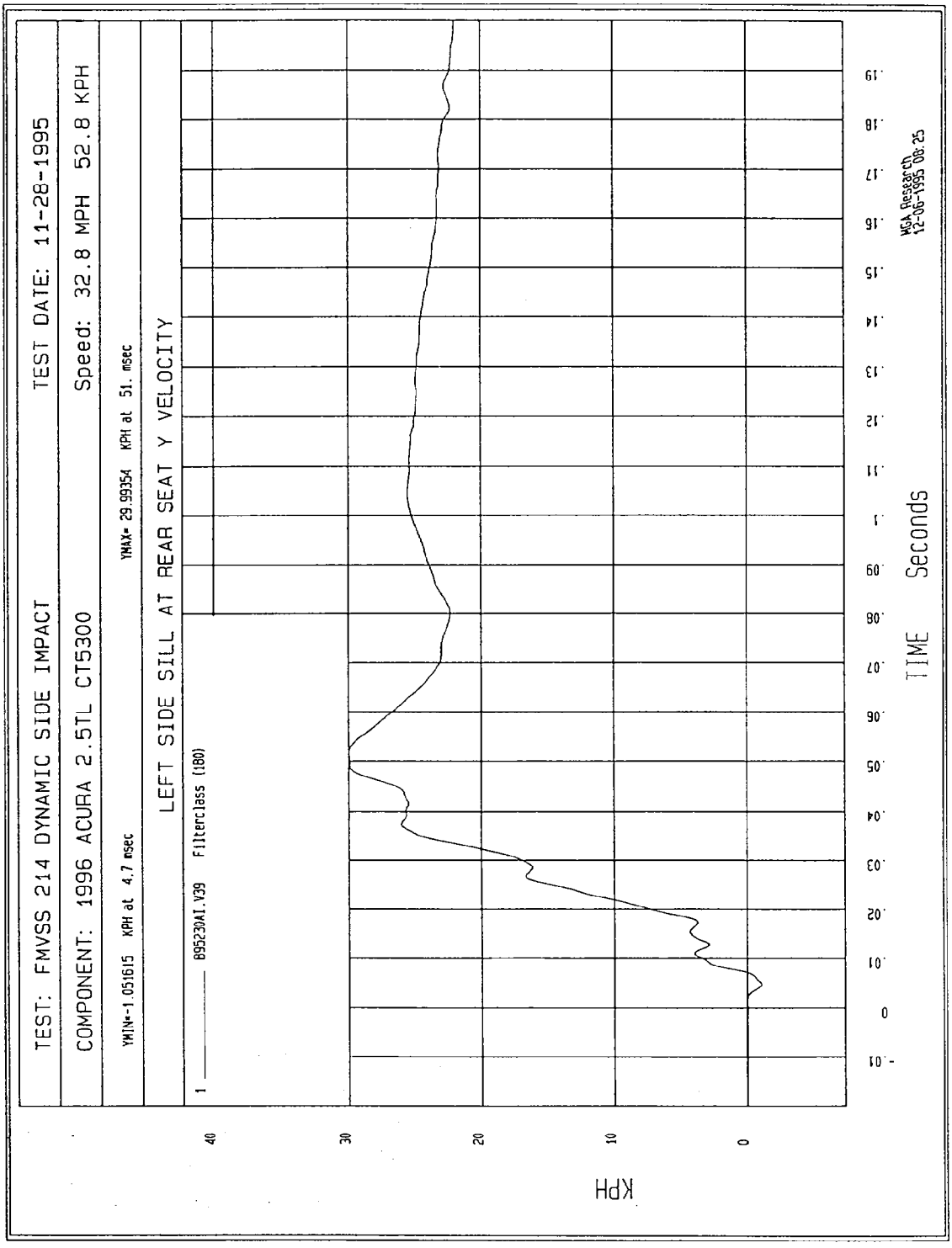
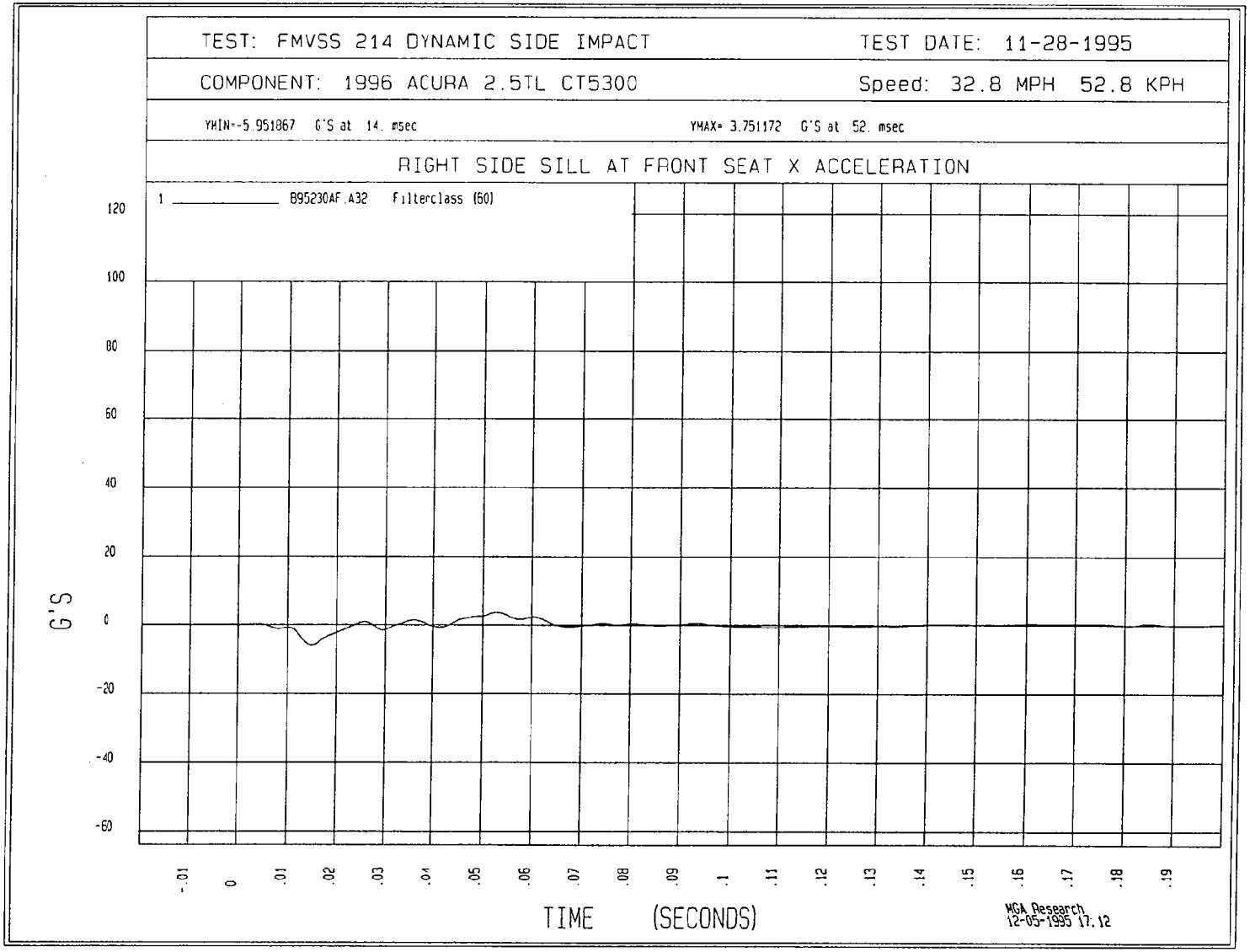
TIME (SECONDS)
MGA Research
12-05-1995 17:13


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.051615 KPH at 4.7 msec
YMAX= 29.99354 KPH at 51. msec
LEFT SIDE SILL AT REAR SEAT Y VELOCITY
1 895230AI.V39 Filterclass (180)
KPH
TIME Seconds
MGA Research
12-06-1995 08:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-5.951867 G'S at 14. msec
YMAX= 3.751172 G'S at 52. msec
RIGHT SIDE SILL AT FRONT SEAT X ACCELERATION
1 B95230AF.A32 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.01
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.01
.02
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.04
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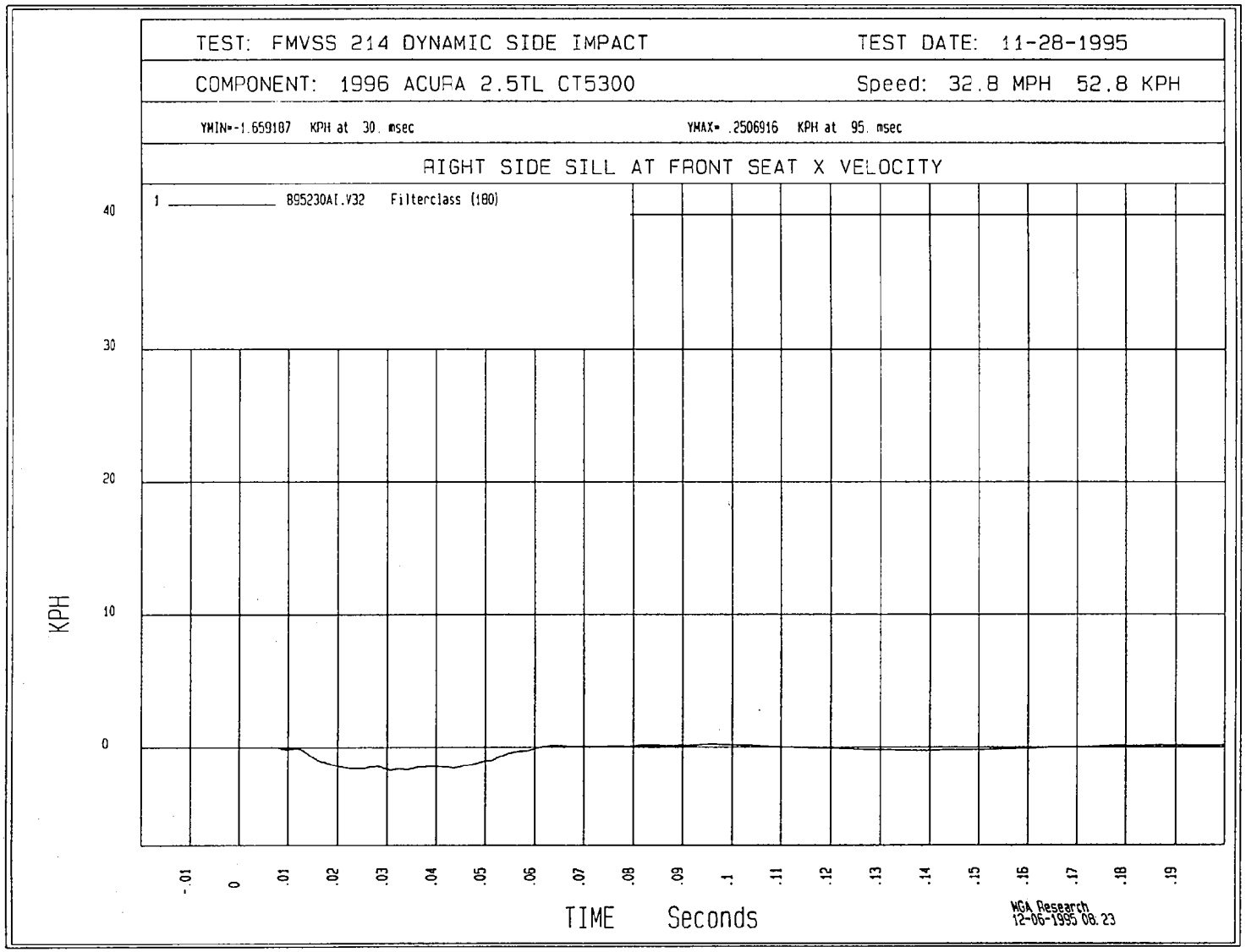
TIME (SECONDS)
MGA Research
12-05-1995 17:12


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.659187 KPH at 30. msec
YMAX= .2506916 KPH at 95. msec
RIGHT SIDE SILL AT FRONT SEAT X VELOCITY
1 B95230AI.V32 Filterclass (180)
KPH
40
30
20
10
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-.01
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.01
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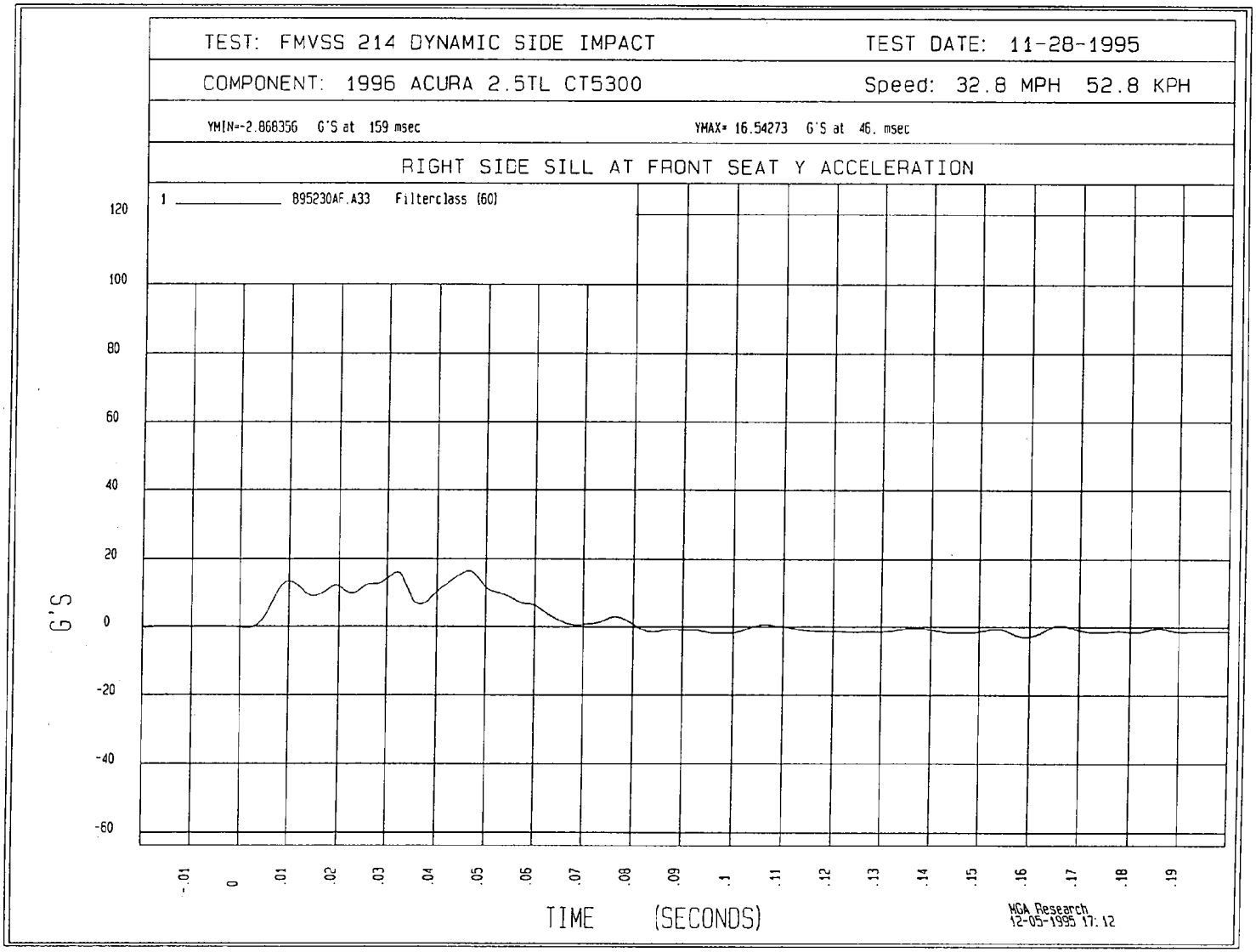
TIME Seconds
MGA Research
12-06-1995 08:23


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-2.868356 G'S at 159 msec
YMAX= 16.54273 G'S at 46. msec
RIGHT SIDE SILL AT FRONT SEAT Y ACCELERATION
1 B95230AF.A33 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.01
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.01
.02
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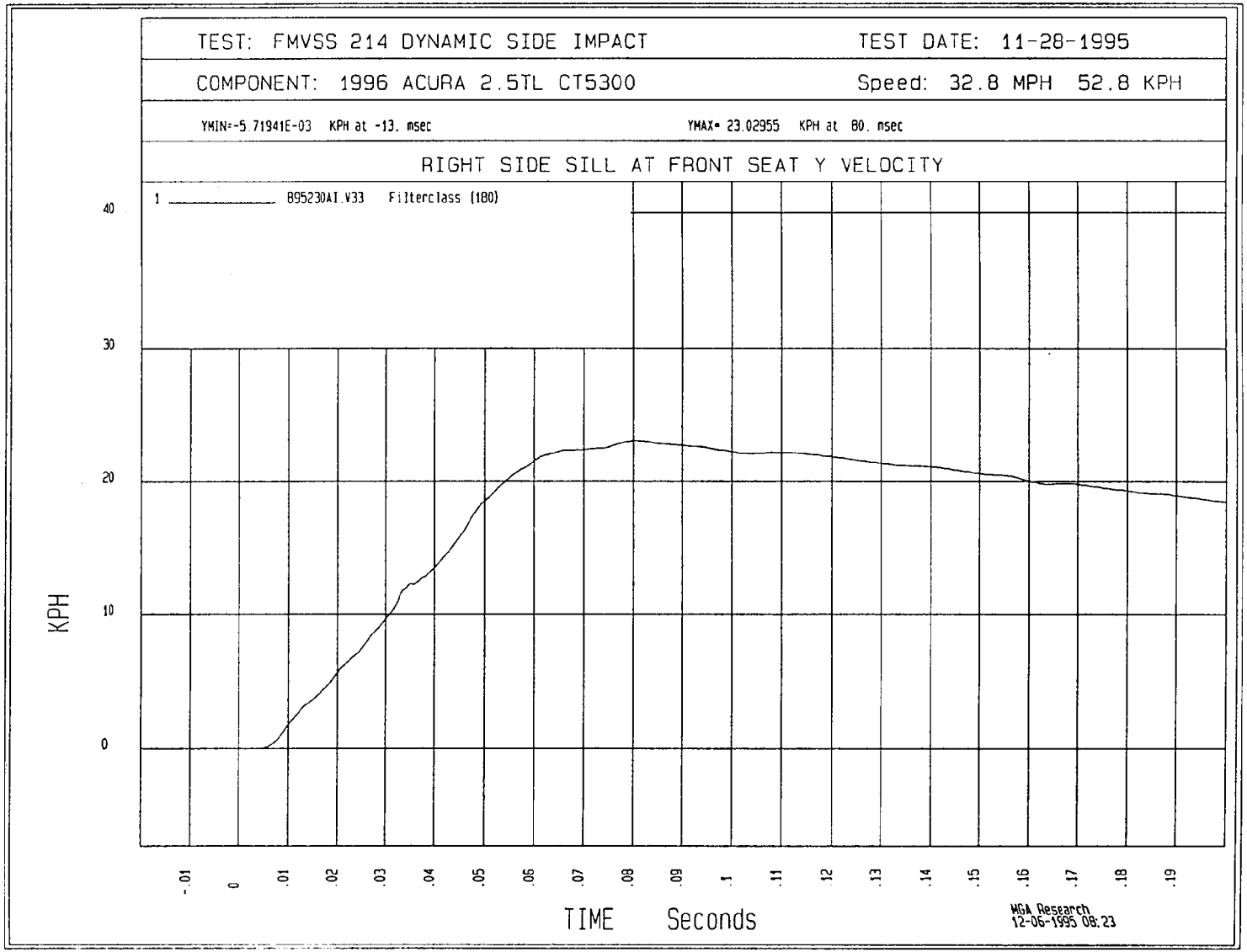
TIME (SECONDS)
MGA Research
12-05-1995 17:12


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-5.71941E-03 KPH at -13. msec
YMAX= 23.02955 KPH at 80. msec
RIGHT SIDE SILL AT FRONT SEAT Y VELOCITY
1 B95230AI.V33 Filterclass (180)
KPH
40
30
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10
0
-.01
0
.01
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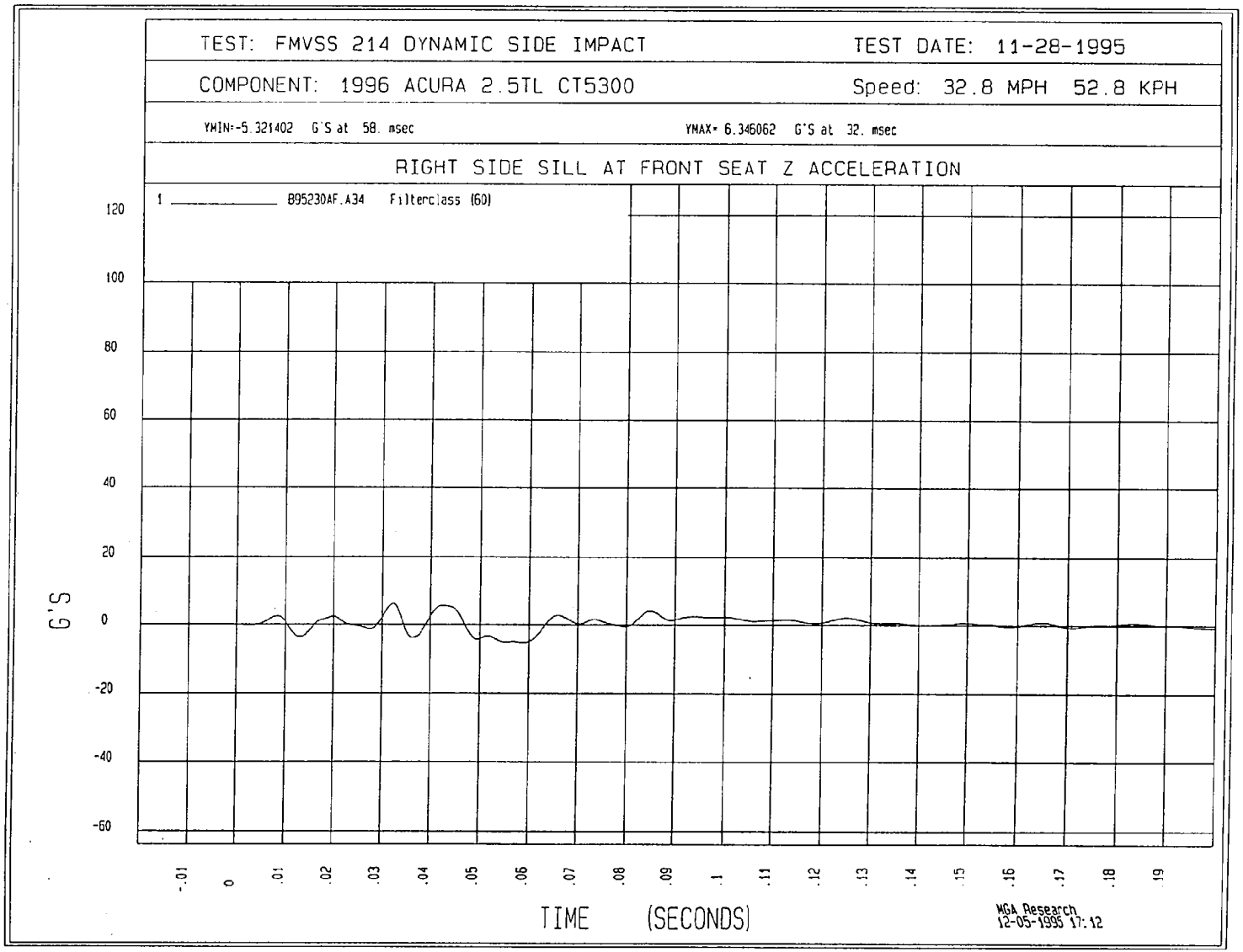
TIME Seconds
MGA Research
12-06-1995 08:23


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-5.321402 G'S at 58. msec
YMAX= 6.346062 G'S at 32. msec
RIGHT SIDE SILL AT FRONT SEAT Z ACCELERATION
1 B95230AF.A34 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
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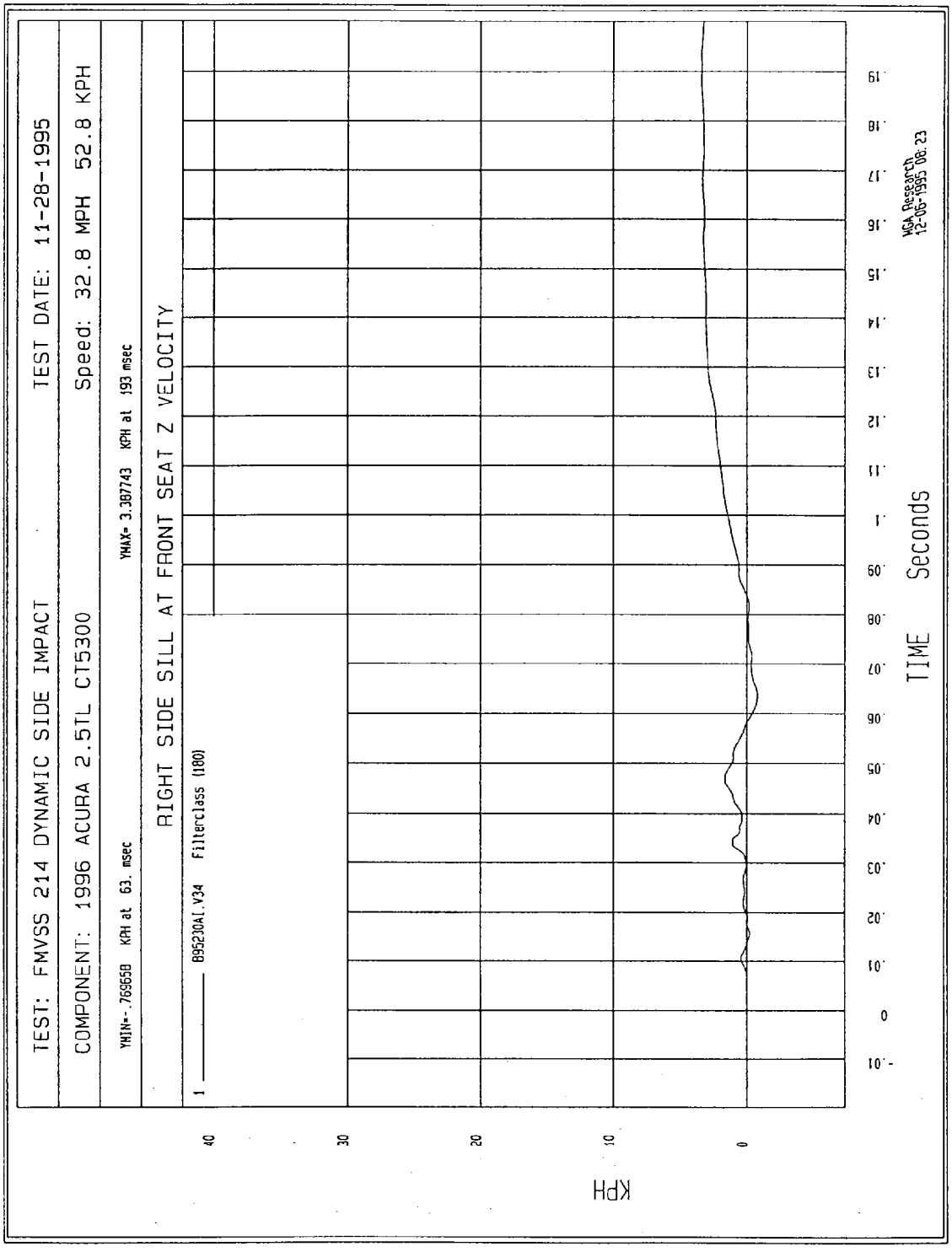
TIME (SECONDS)
MGA Research
12-05-1995 17:12


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-.76965B KPH at 63. msec
YMAX= 3.3B7743 KPH at 193 msec
RIGHT SIDE SILL AT FRONT SEAT Z VELOCITY
1 B95230AI.V34 Filterclass (180)
KPH
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-.01
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.01
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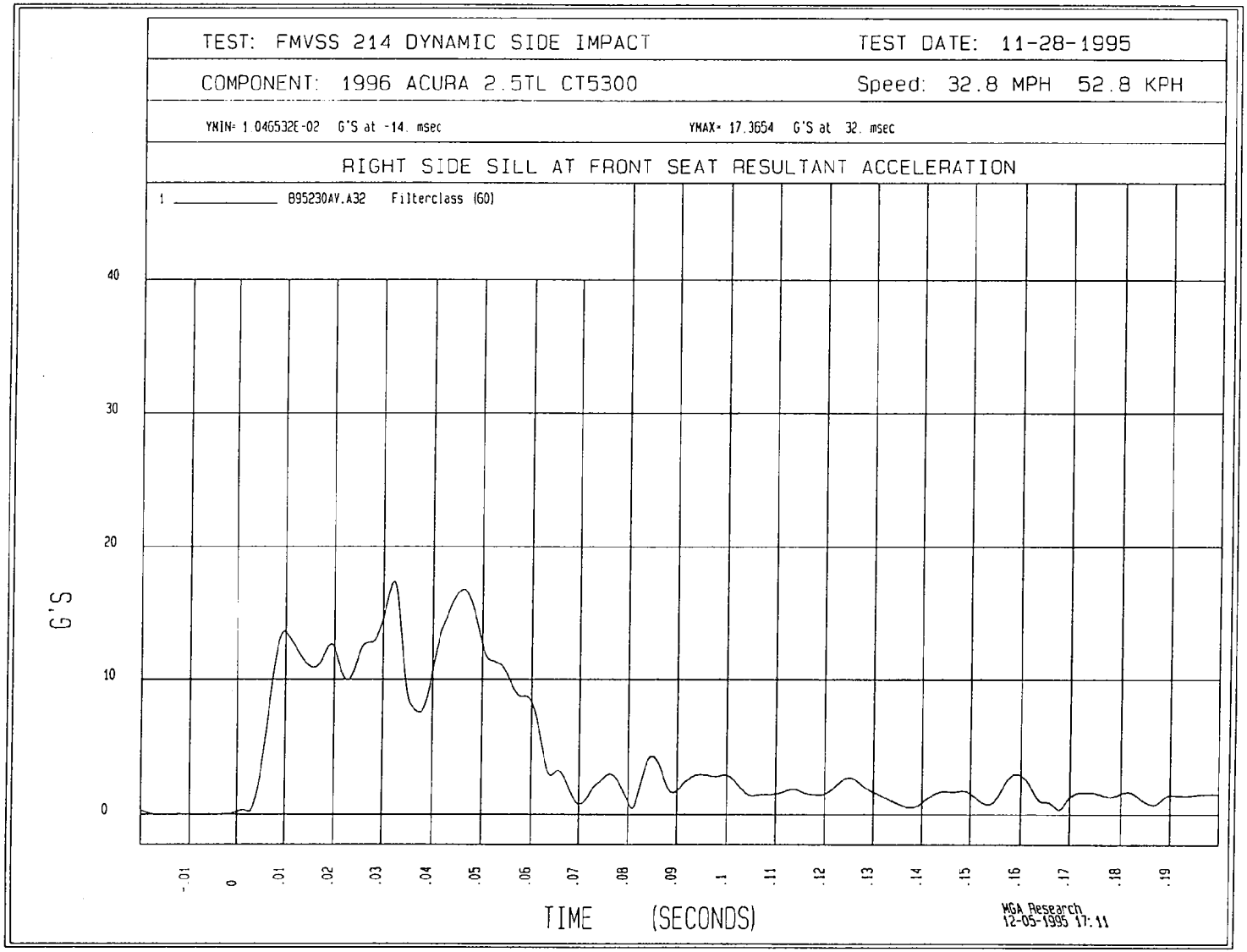
TIME Seconds
MGA Research
12-06-1995 08:23


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 1.046532E-02 G'S at -14. msec
YMAX= 17.3654 G'S at 32. msec
RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION
1 B95230AV.A32 Filterclass (60)
G'S
40
30
20
10
0
-.01
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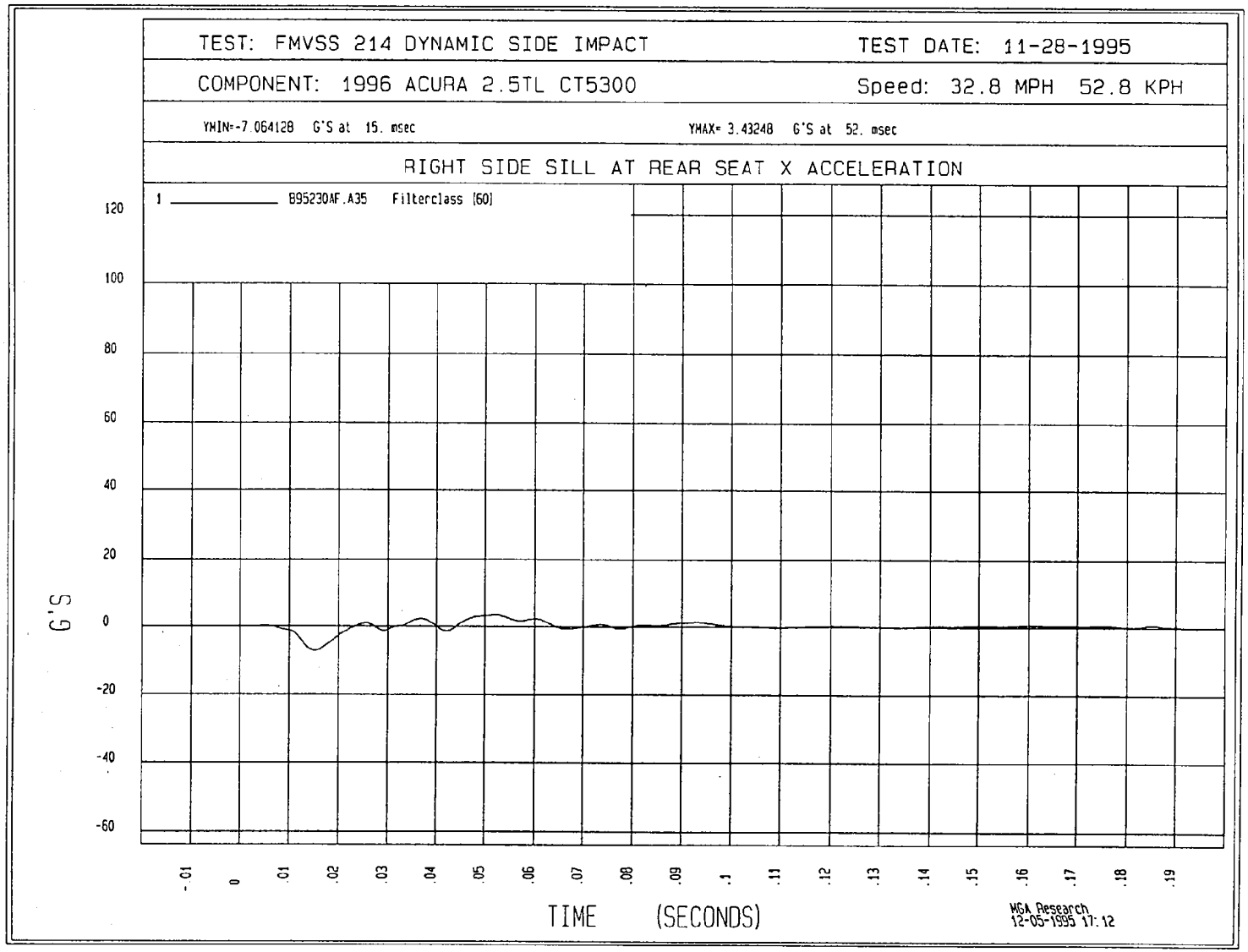
TIME (SECONDS)
MGA Research
12-05-1995 17:11


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-7.064128 G'S at 15. msec
YMAX= 3.43248 G'S at 52. msec
RIGHT SIDE SILL AT REAR SEAT X ACCELERATION
1 B95230AF.A35 Filterclass [60]
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.01
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.01
.02
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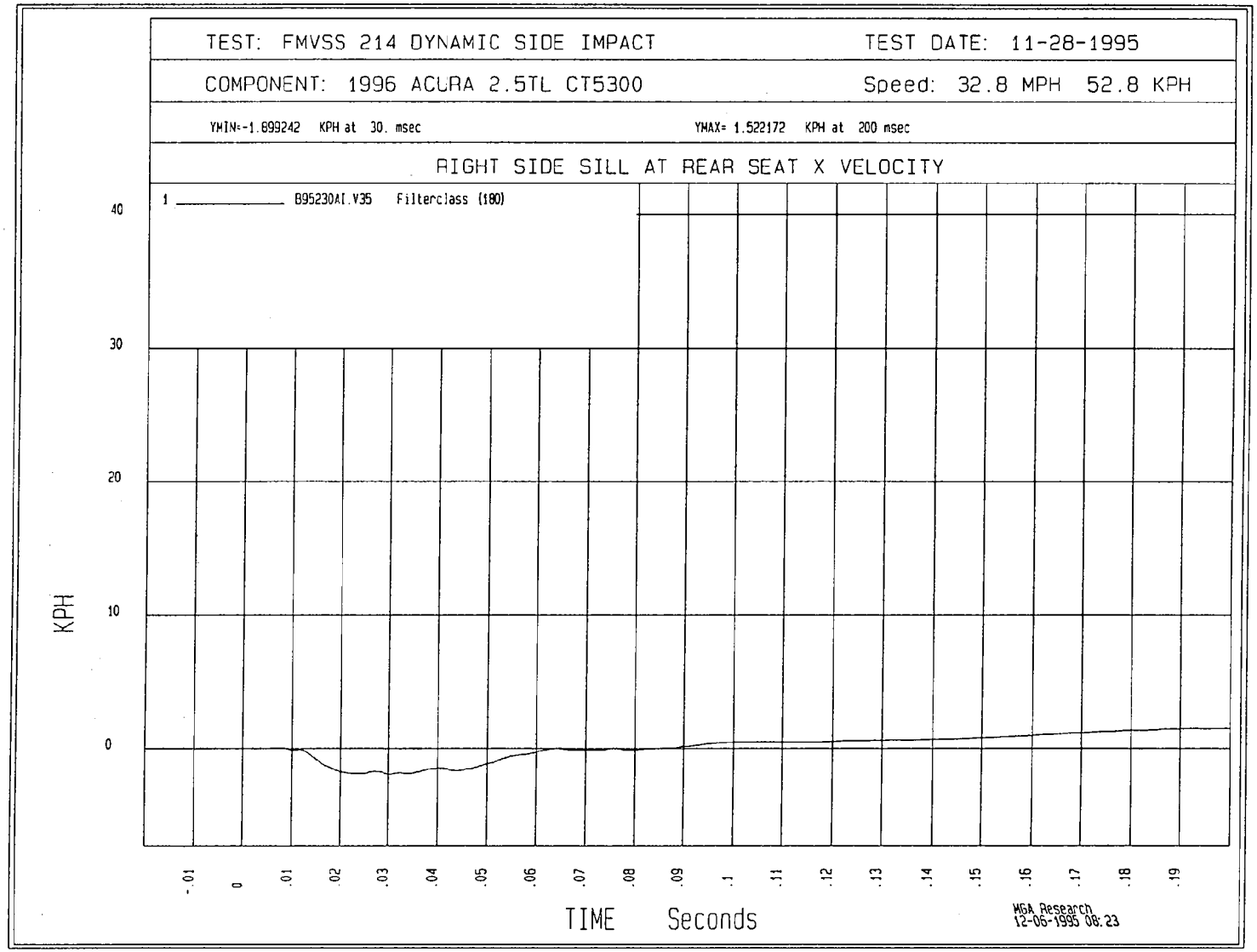
TIME (SECONDS)
MGA Research
12-05-1995 17:12


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.699242 KPH at 30. msec
YMAX= 1.522172 KPH at 200 msec
RIGHT SIDE SILL AT REAR SEAT X VELOCITY
1 B95230AI.V35 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
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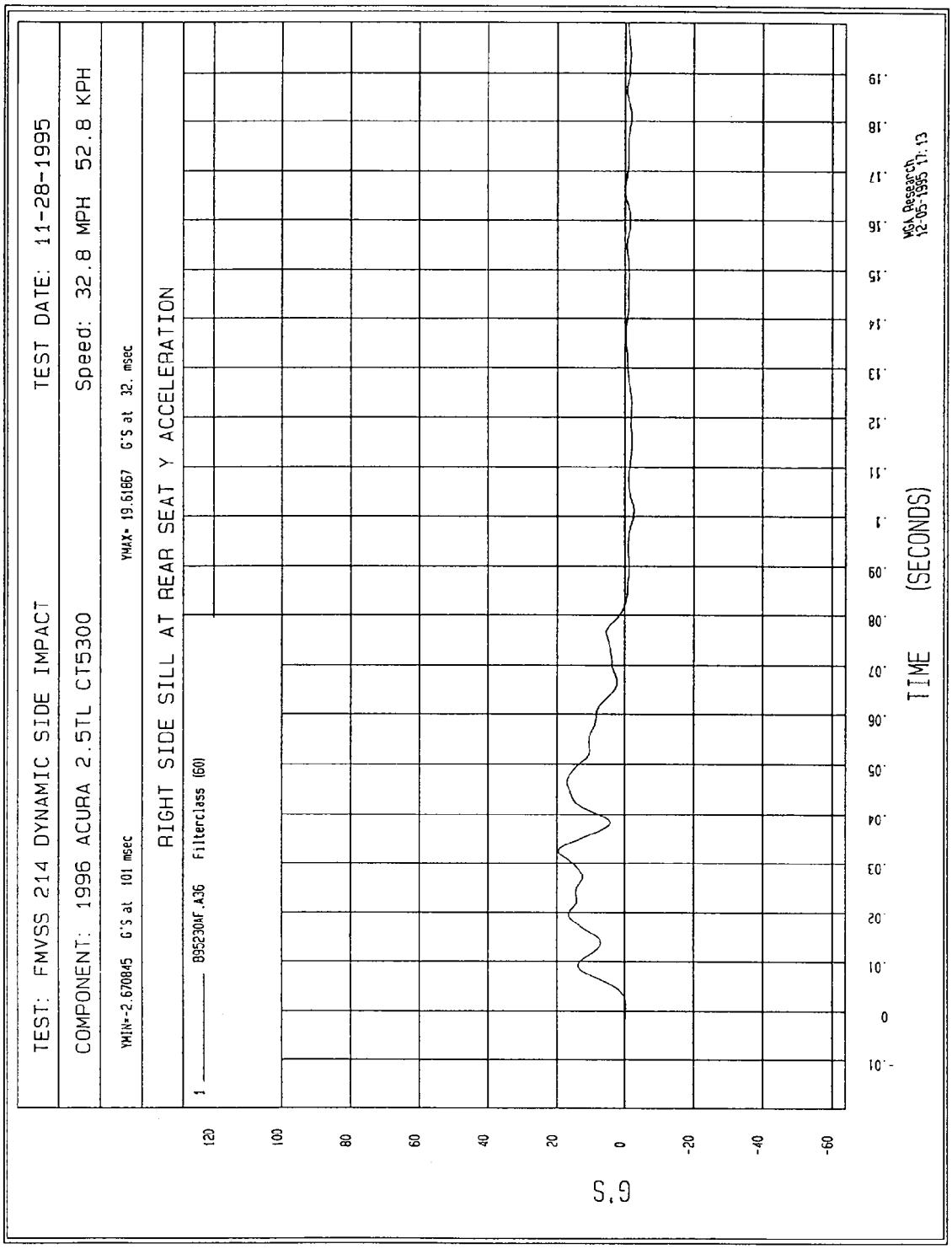
TIME Seconds
MGA Research
12-06-1995 08:23


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-2.670845 G'S at 101 msec
YMAX= 19.61867 G'S at 32. msec
RIGHT SIDE SILL AT REAR SEAT Y ACCELERATION
1 B95230AF.A36 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G's
TIME (SECONDS)
-.01
0
.01
.02
.03
.04
.05
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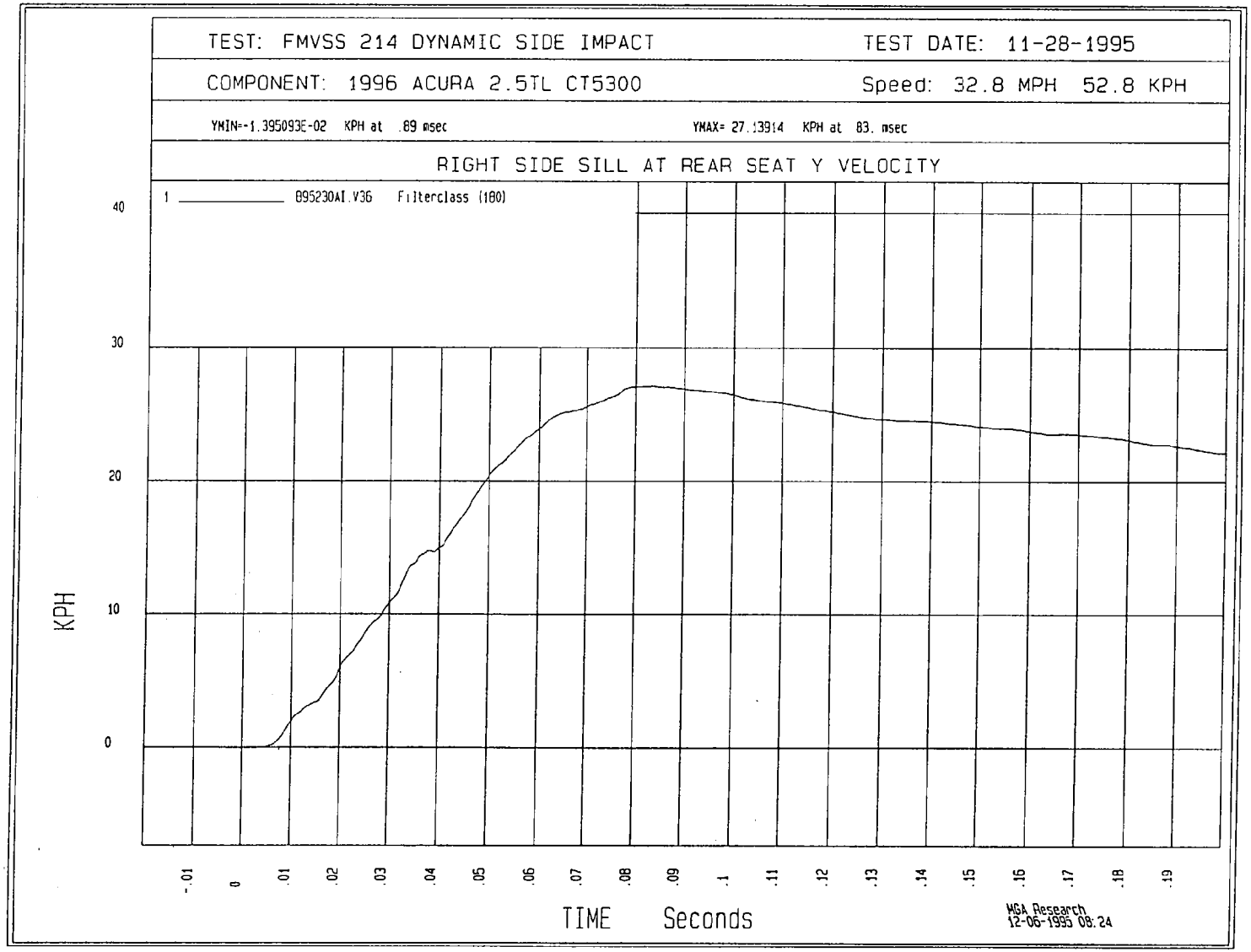
MGA Research
12-05-1995 17:13


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.395093E-02 KPH at .89 msec
YMAX= 27.13914 KPH at 83. msec
RIGHT SIDE SILL AT REAR SEAT Y VELOCITY
1 _____ 895230AI.V36 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
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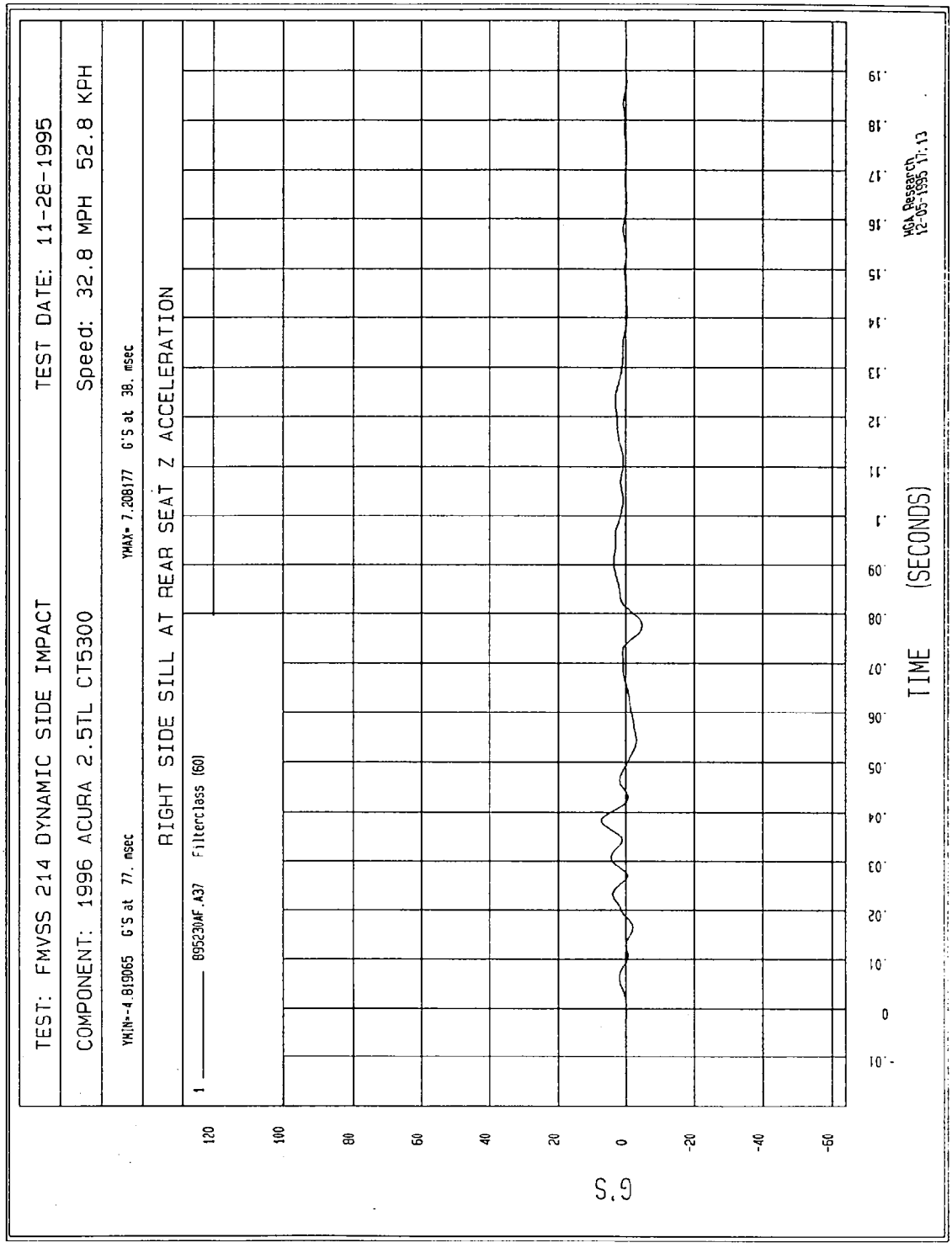
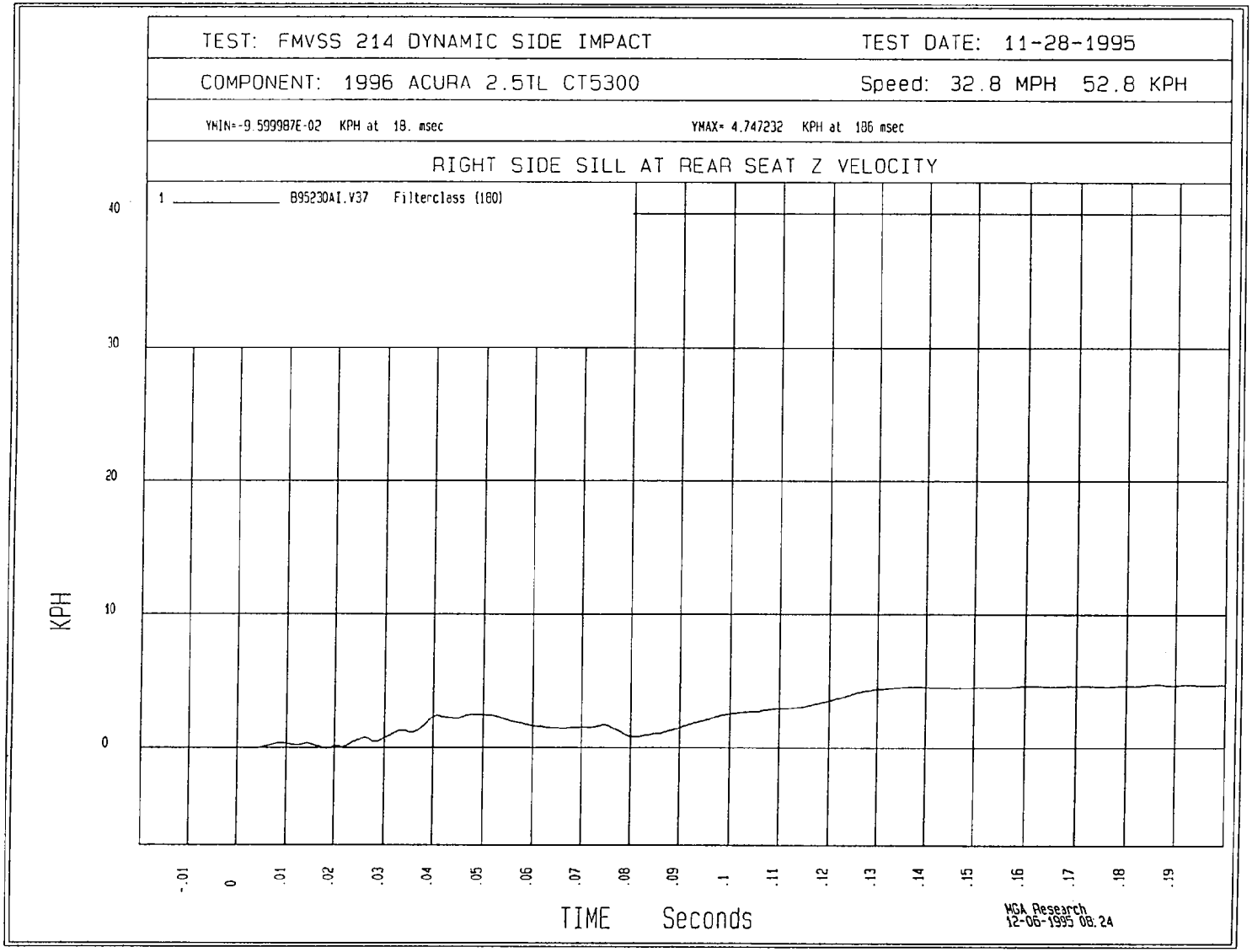
TIME Seconds
MGA Research
12-06-1995 08:24


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-4.819065 G'S at 77. msec
YMAX= 7.208177 G'S at 38. msec
RIGHT SIDE SILL AT REAR SEAT Z ACCELERATION
1 ——— 895230AF.A37 Filterclass (60)
G's
TIME (SECONDS)
MGA Research
12-05-1995 17:13


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-9.599987E-02 KPH at 18. msec
YMAX= 4.747232 KPH at 186 msec
RIGHT SIDE SILL AT REAR SEAT Z VELOCITY
1 B95230AI.V37 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
.06
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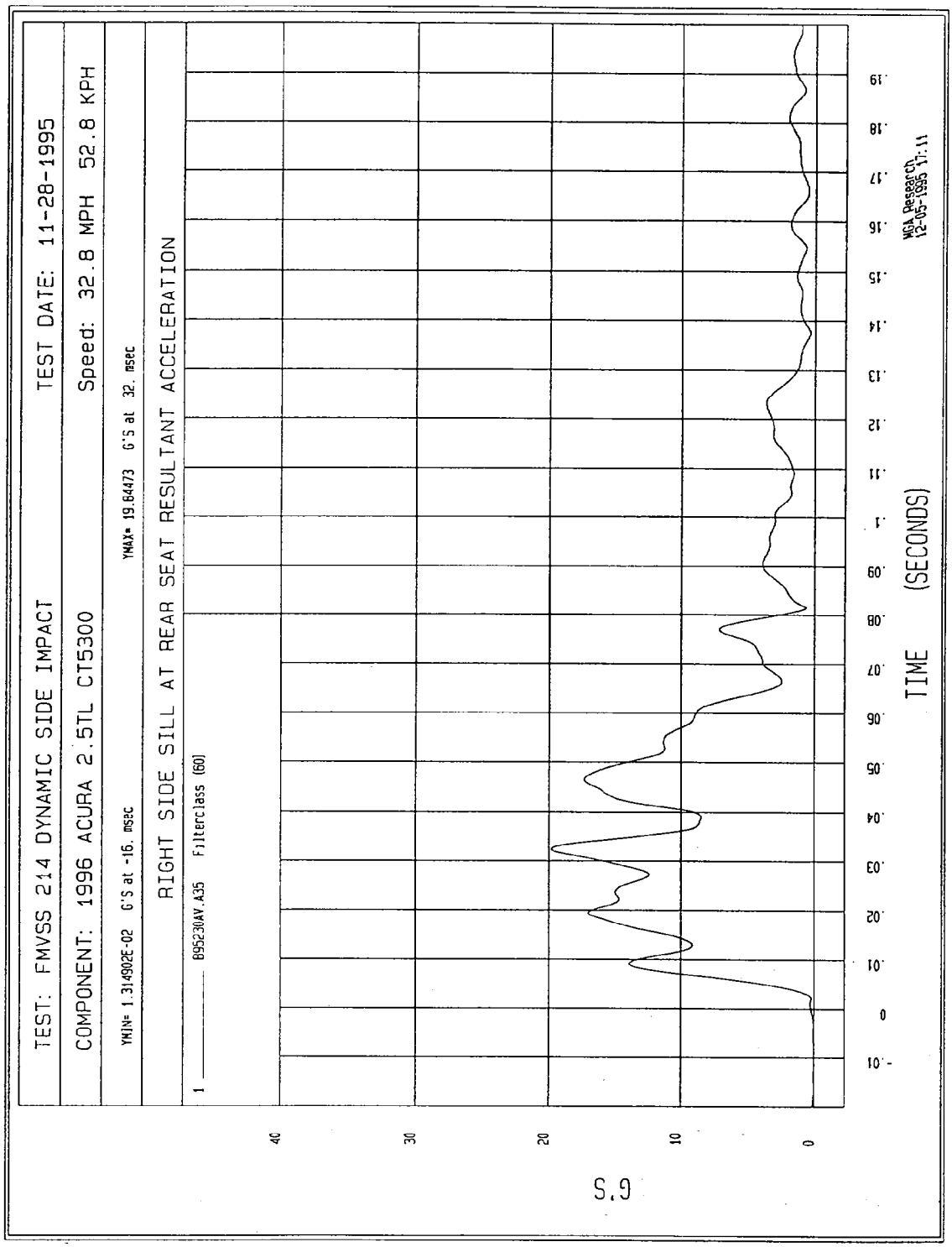
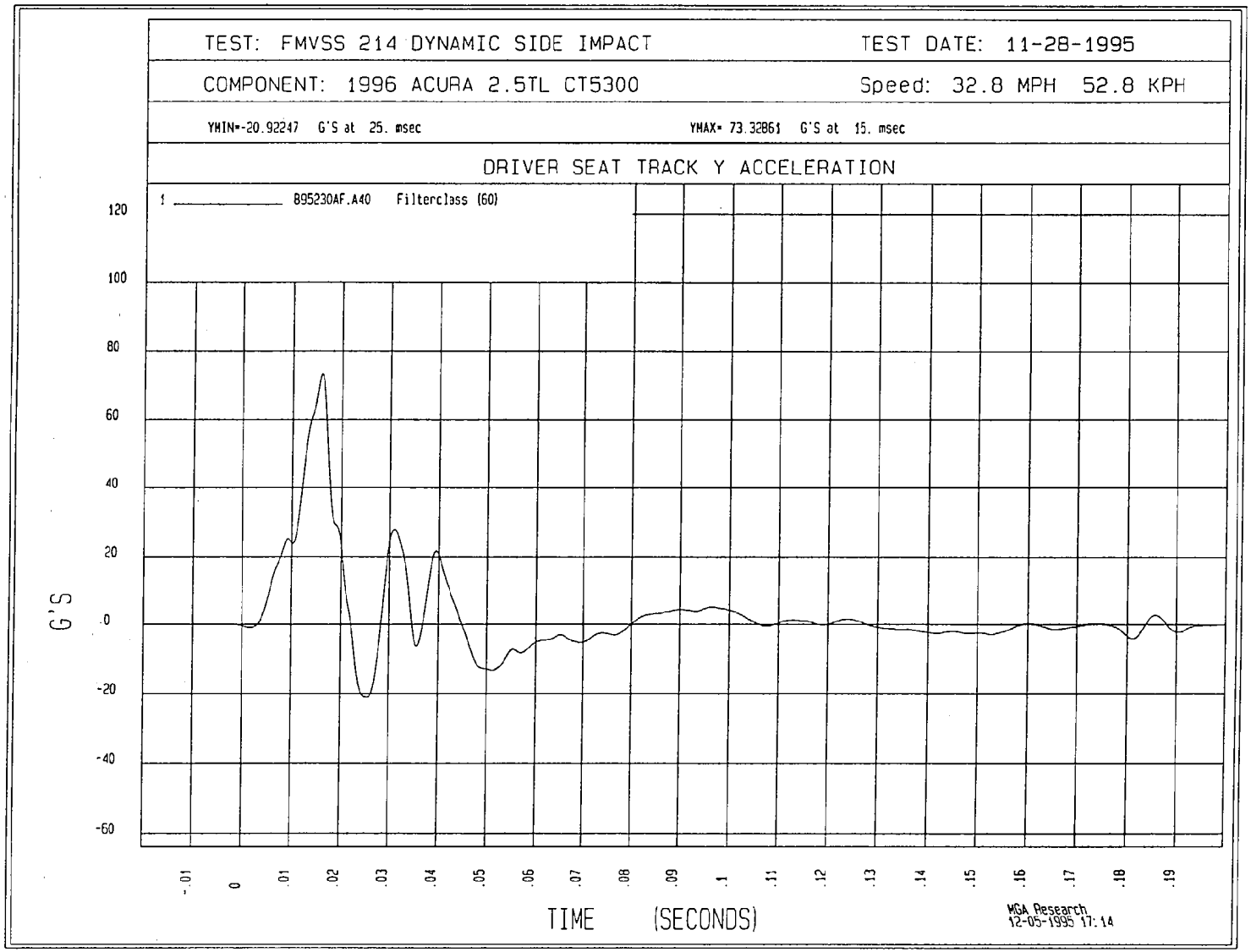
TIME Seconds
MGA Research
12-06-1995 08:24


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 1.314902E-02 G'S at -16. msec
YMAX= 19.64473 G'S at 32. msec
RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION
1 B95230AV.A35 Filterclass (60)
G'S
TIME (SECONDS)
MGA Research
12-05-1995 11:11


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-20.92247 G'S at 25. msec
YMAX= 73.32861 G'S at 15. msec
DRIVER SEAT TRACK Y ACCELERATION
1 895230AF.A40 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
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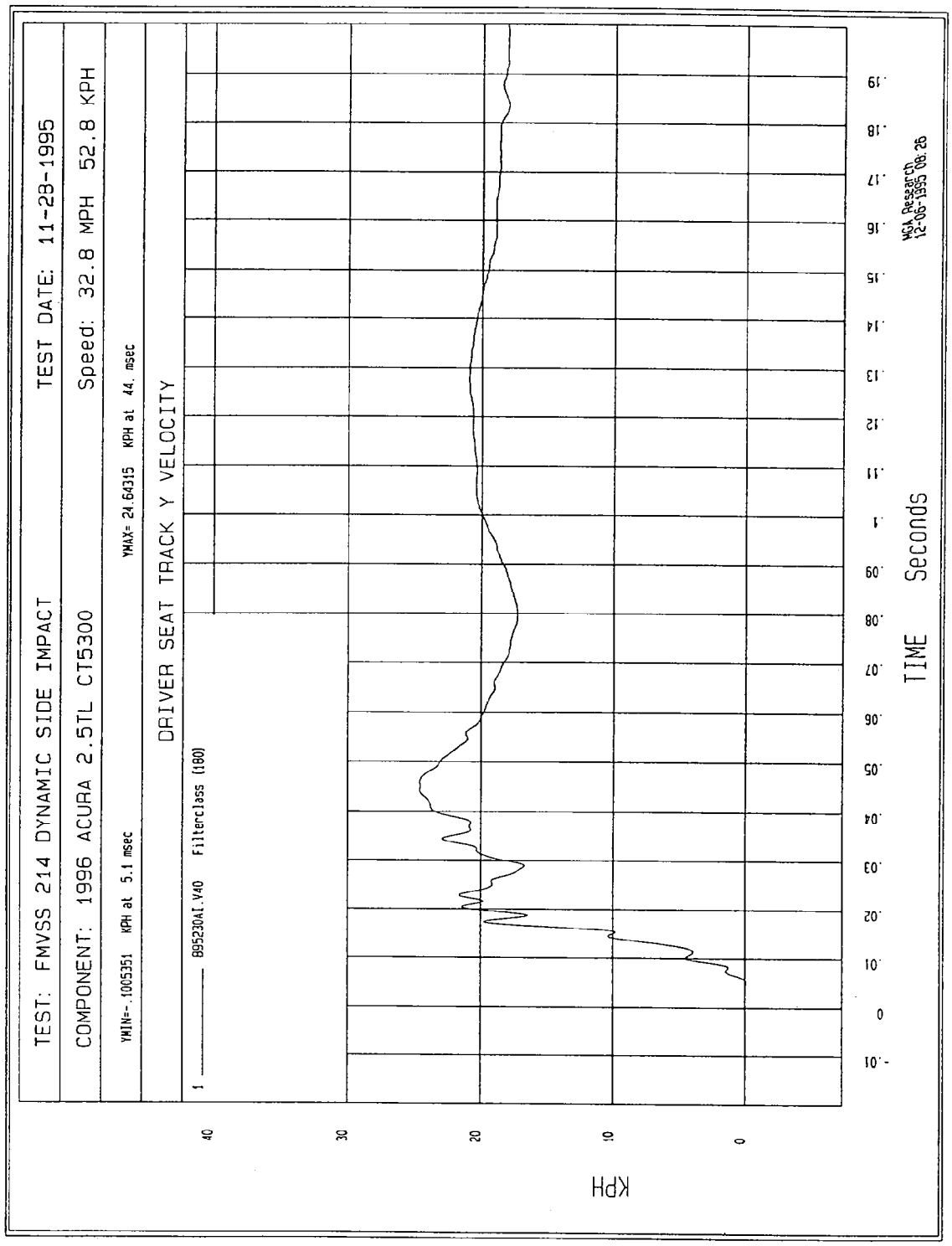
TIME (SECONDS)
MGA Research
12-05-1995 17:14


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-.1005351 KPH at 5.1 msec
YMAX= 24.64315 KPH at 44. msec
DRIVER SEAT TRACK Y VELOCITY
1 B95230AI.V40 Filterclass (180)
KPH
40
30
20
10
0
TIME Seconds
-.01
0
.01
.02
.03
.04
.05
.06
.07
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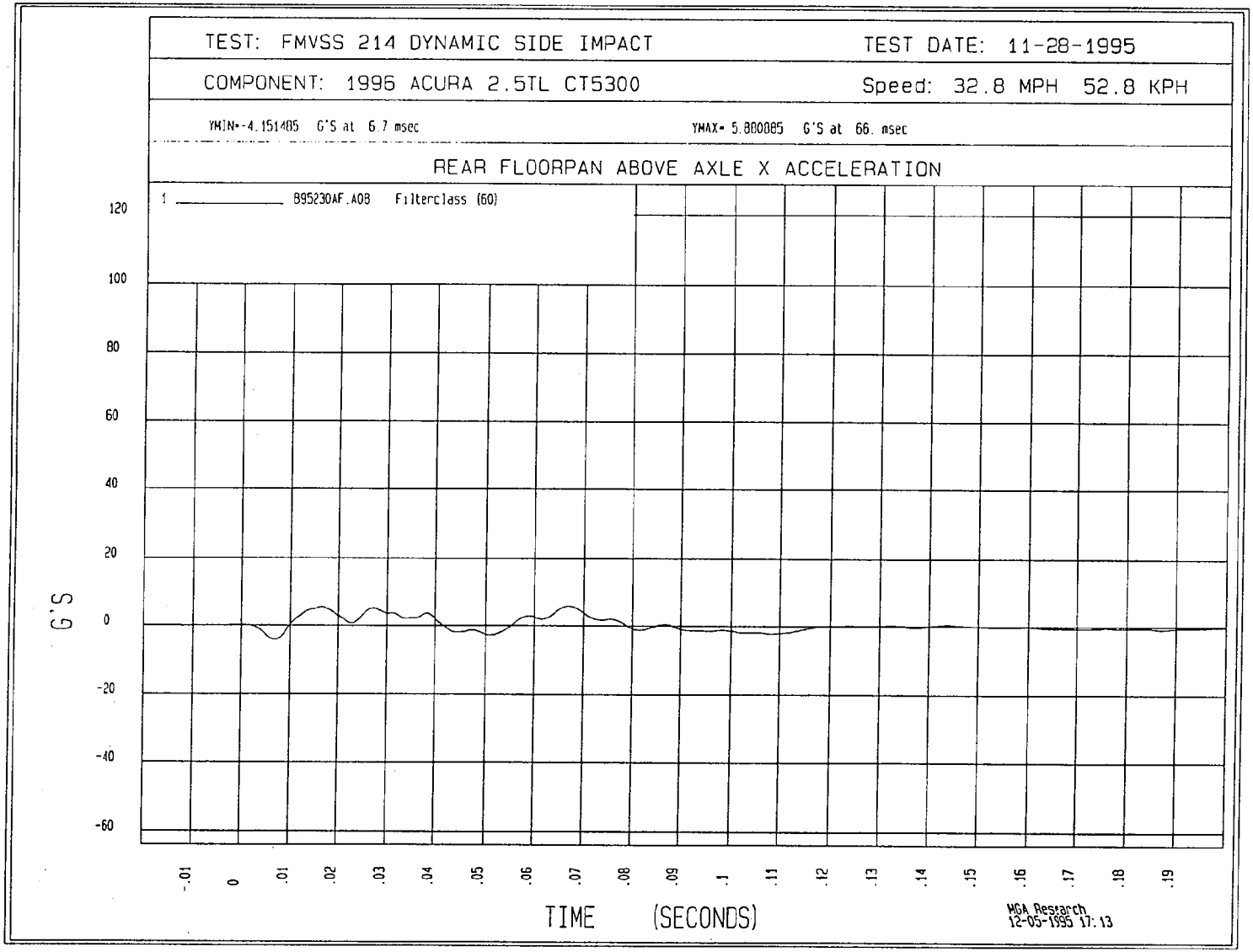
MGA Research
12-06-1995 08:26


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-4.151485 G'S at 6.7 msec
YMAX= 5.880085 G'S at 66. msec
REAR FLOORPAN ABOVE AXLE X ACCELERATION
1 895230AF.A08 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
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.14
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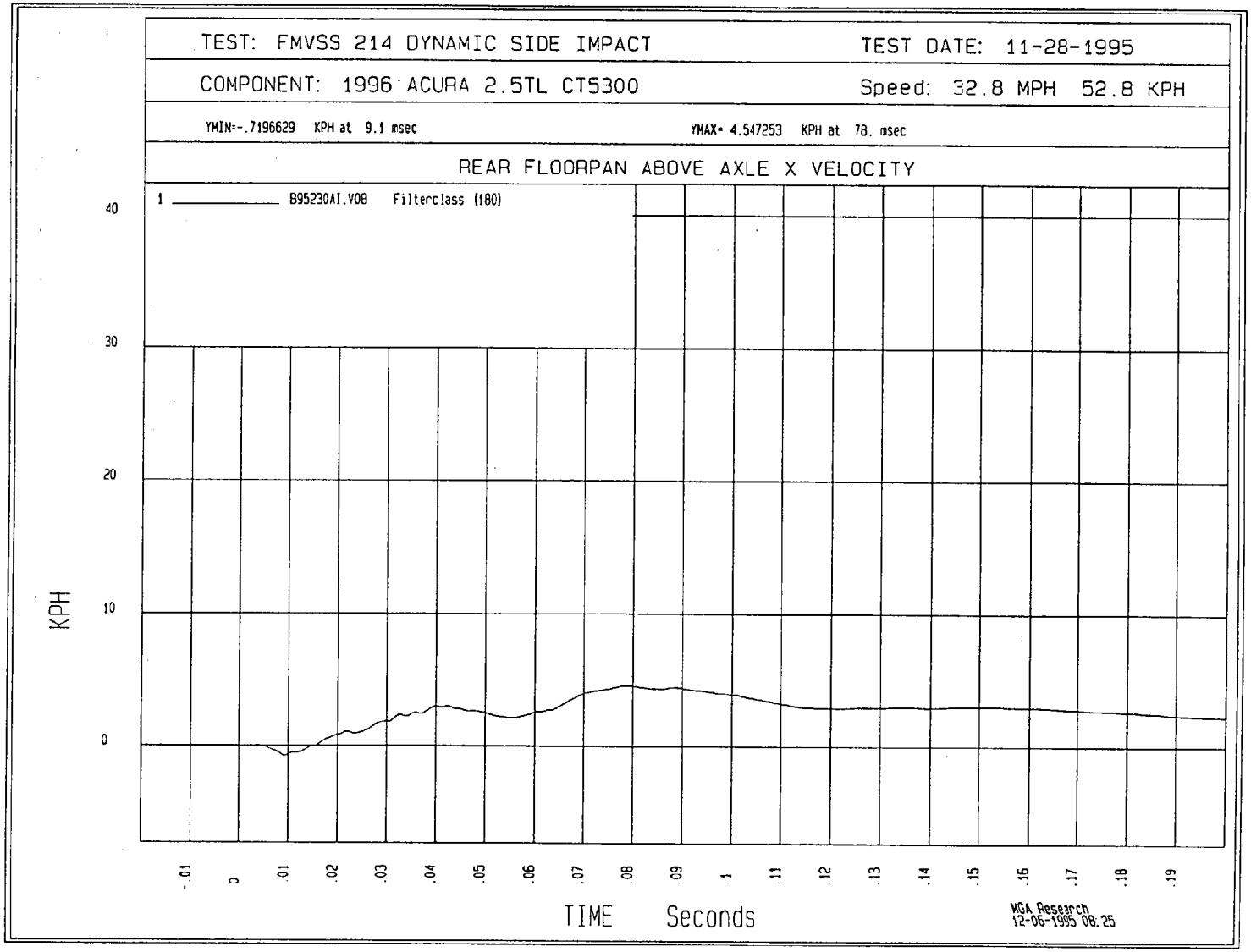
TIME (SECONDS)
MGA Research
12-05-1995 17:13


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-.7196629 KPH at 9.1 msec
YMAX= 4.547253 KPH at 78. msec
REAR FLOORPAN ABOVE AXLE X VELOCITY
1 B95230AI.V08 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
.06
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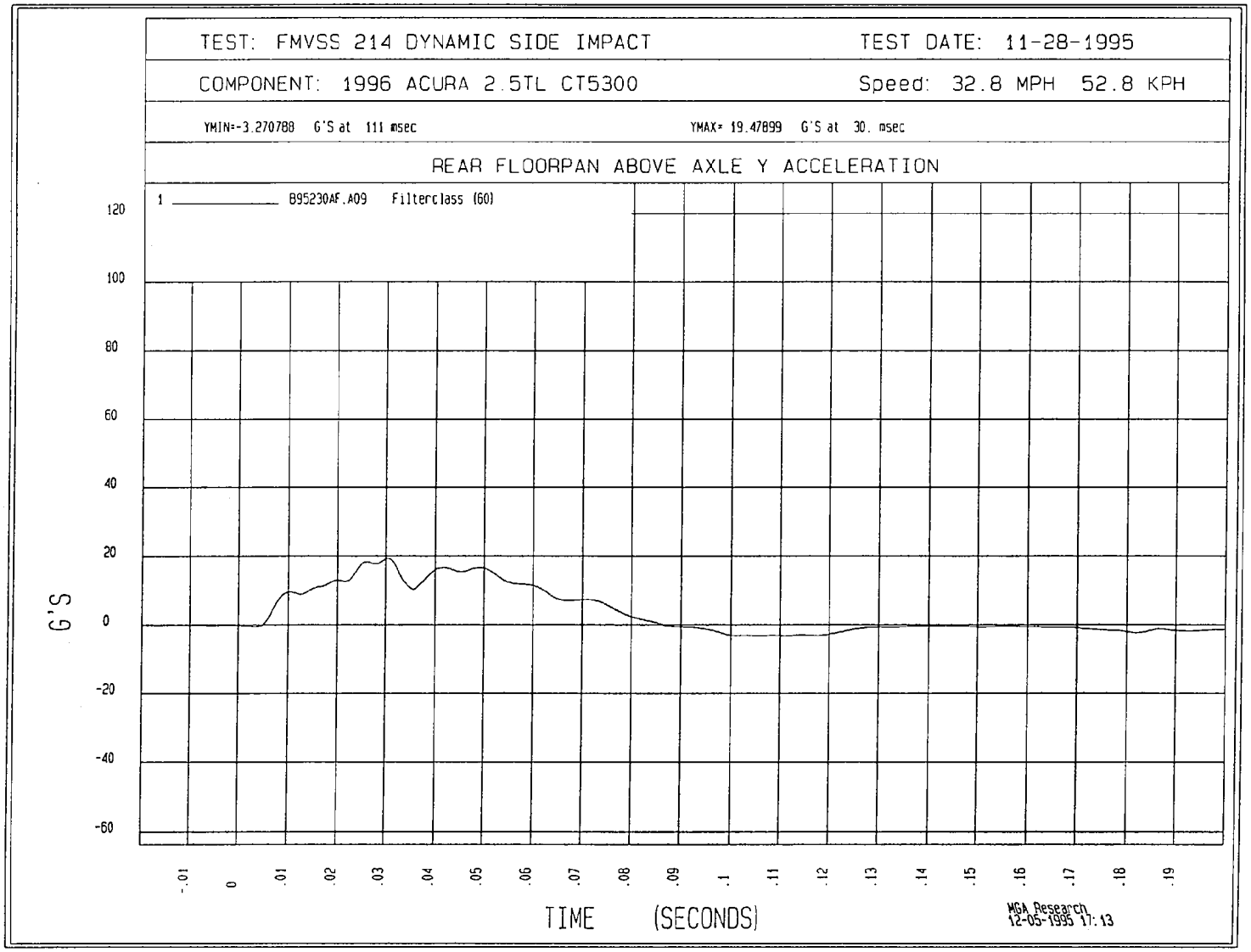
TIME Seconds
MGA Research
12-06-1995 08:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-3.270788 G'S at 111 msec
YMAX= 19.47899 G'S at 30. msec
REAR FLOORPAN ABOVE AXLE Y ACCELERATION
1 B95230AF.A09 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.01
0
.01
.02
.03
.04
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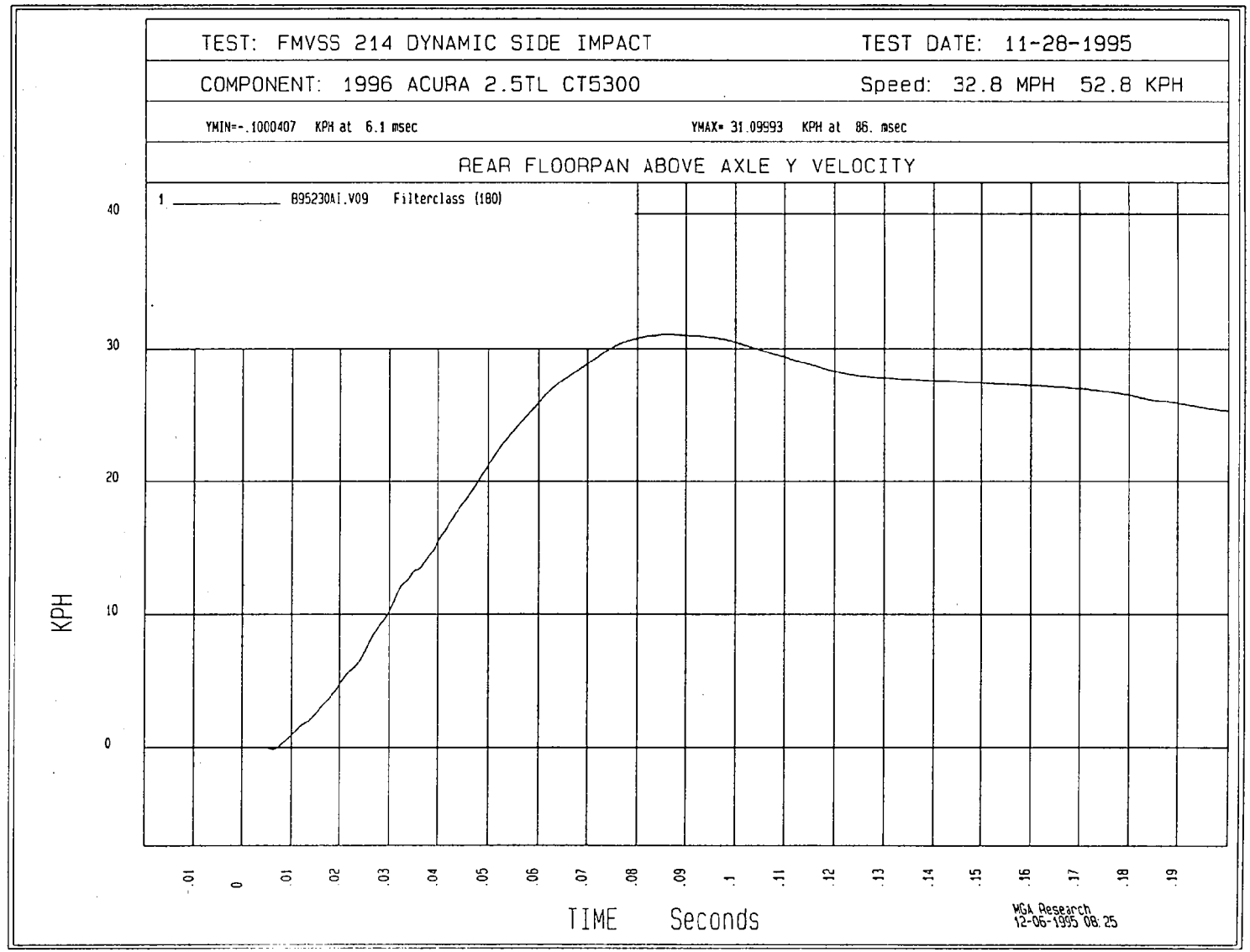
TIME (SECONDS)
MGA Research
12-05-1995 17:13


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-.1000407 KPH at 6.1 msec
YMAX= 31.09993 KPH at 86. msec
REAR FLOORPAN ABOVE AXLE Y VELOCITY
1 B95230AI.V09 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
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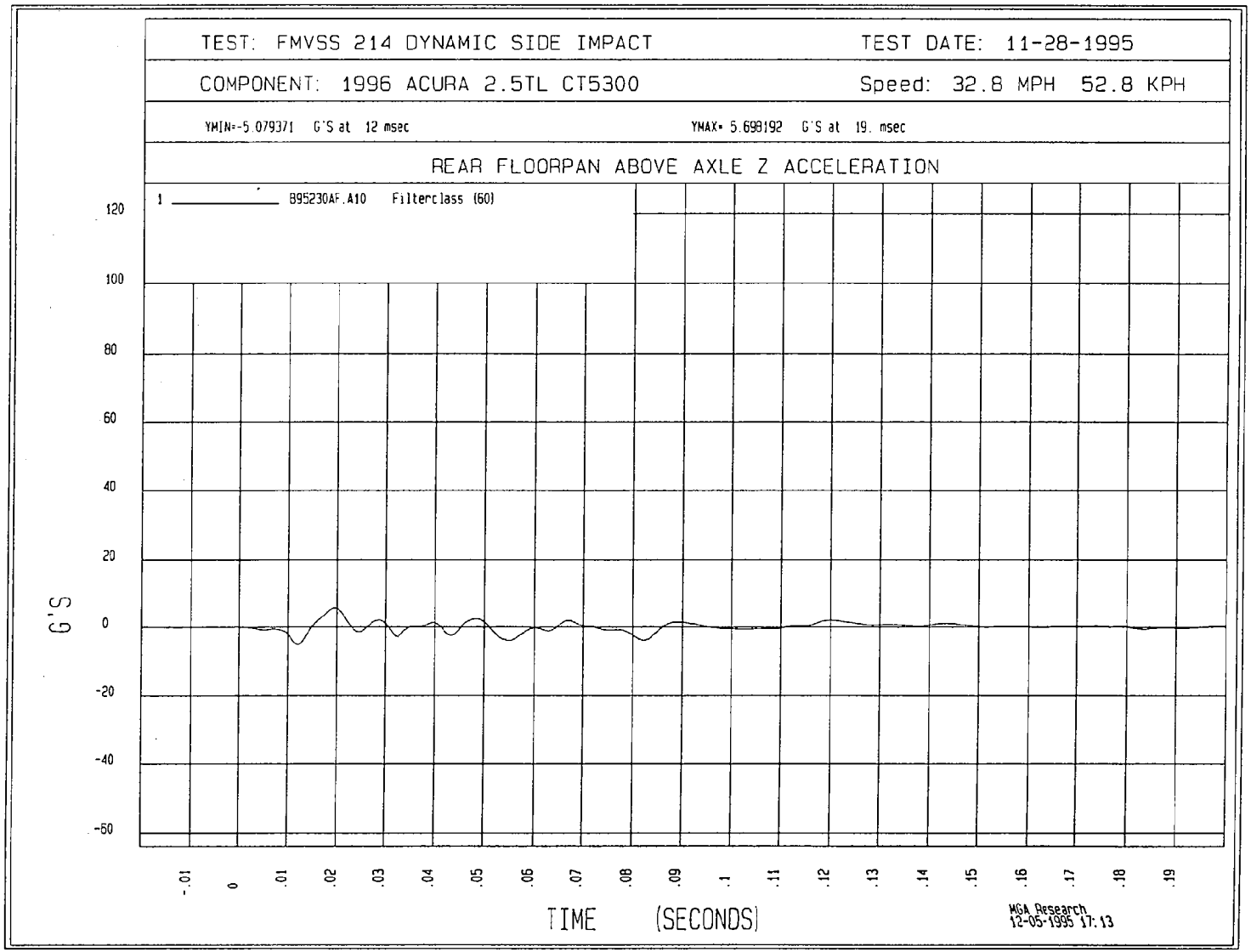
TIME Seconds
MGA Research
12-06-1995 08:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-5.079371 G'S at 12 msec
YMAX= 5.698192 G'S at 19. msec
REAR FLOORPAN ABOVE AXLE Z ACCELERATION
1 B95230AF.A10 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
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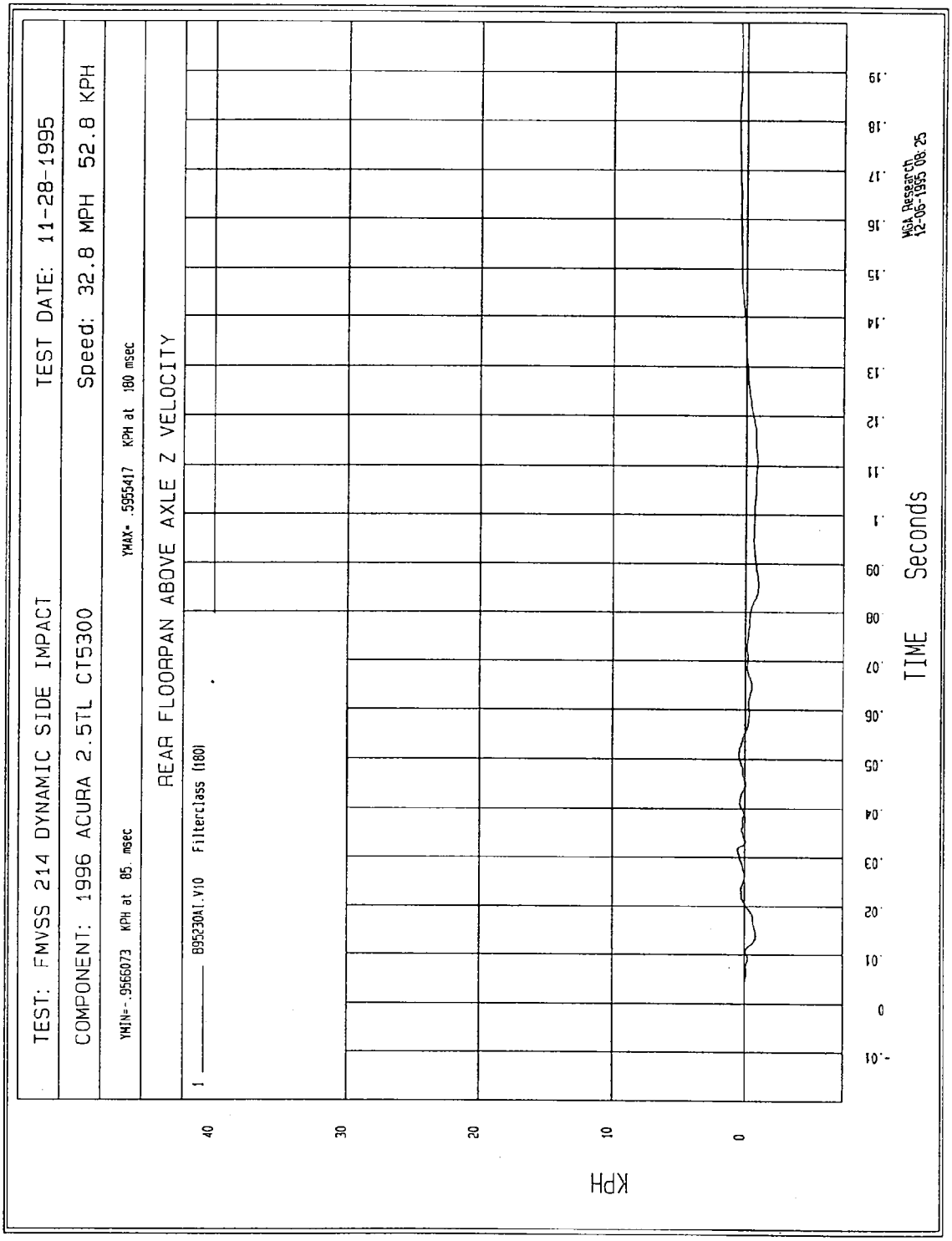
TIME (SECONDS)
MGA Research
12-05-1995 17:13


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-.9566073 KPH at 85. msec
YMAX= .5955417 KPH at 180 msec
REAR FLOORPAN ABOVE AXLE Z VELOCITY
1 B95230AI.V10 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
.06
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.09
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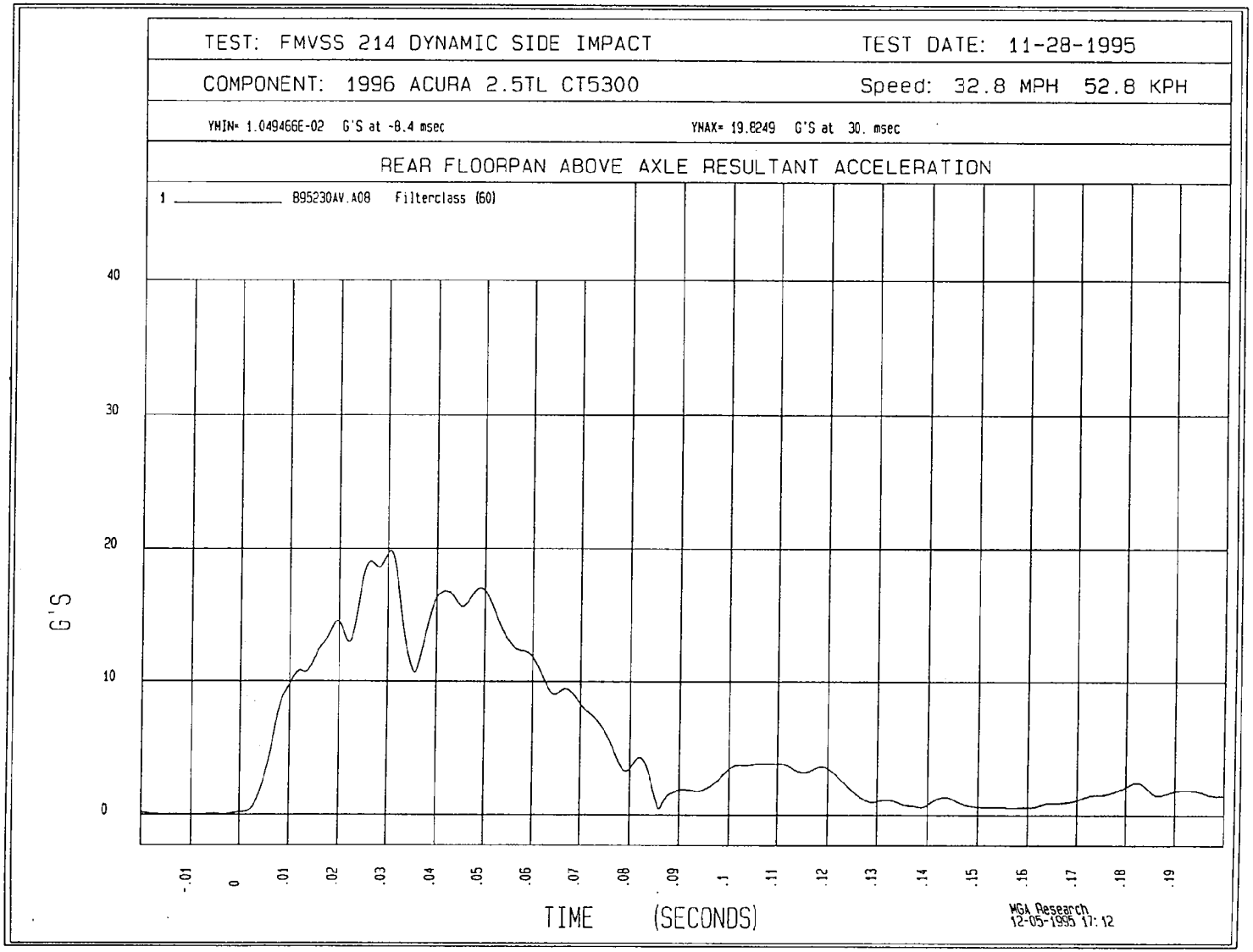
TIME Seconds
MGA Research
12-06-1995 08:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 1.049466E-02 G'S at -8.4 msec
YMAX= 19.8249 G'S at 30. msec
REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION
1 B95230AV.A08 Filterclass (60)
G'S
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
.06
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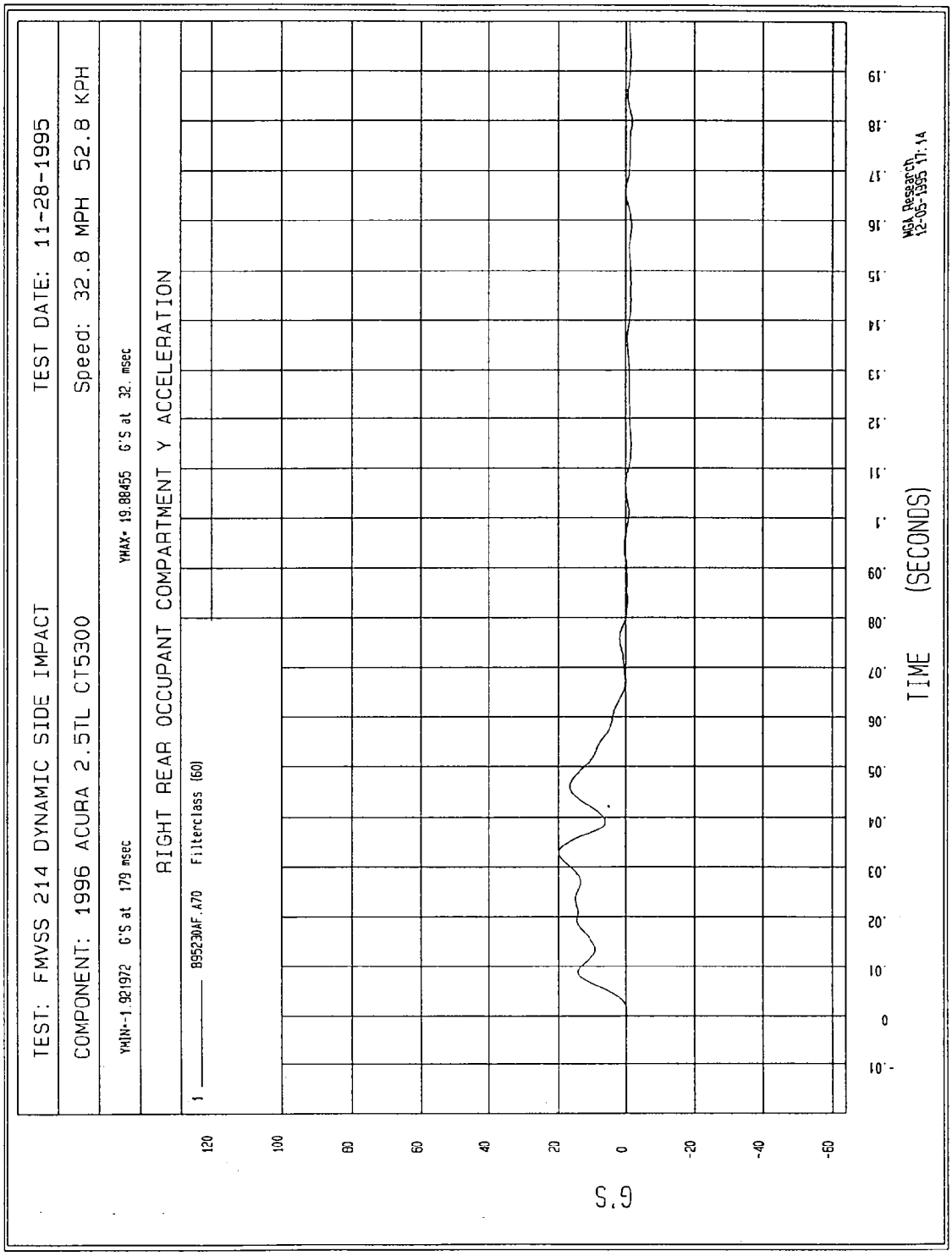
TIME (SECONDS)
MGA Research
12-05-1995 17:12


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.921972 G'S at 179 msec
YMAX= 19.88455 G'S at 32. msec
RIGHT REAR OCCUPANT COMPARTMENT Y ACCELERATION
1 ——— 895230AF.A70 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
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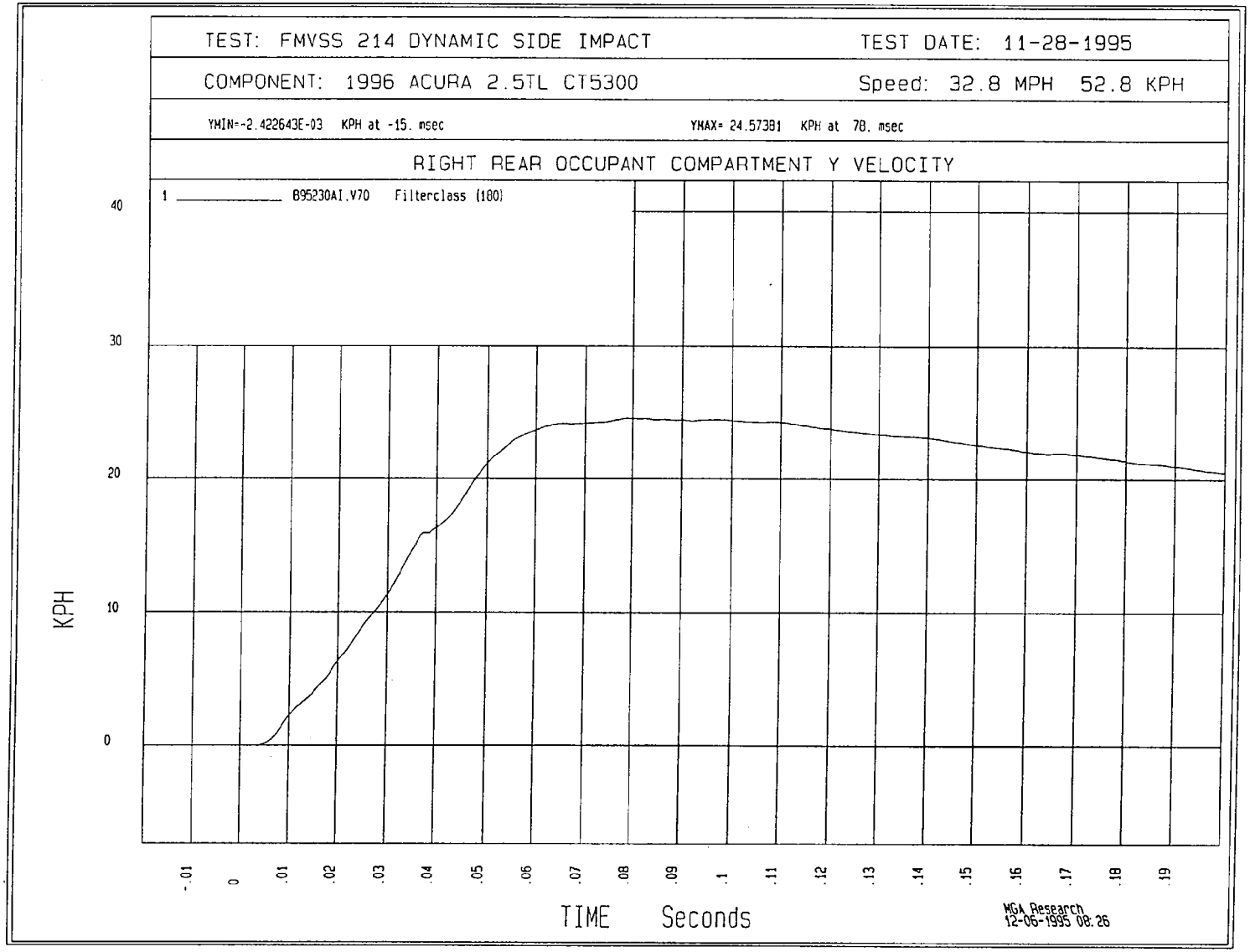
TIME (SECONDS)
MGA Research
12-05-1995 17:14


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-2.422643E-03 KPH at -15. msec
YMAX= 24.57381 KPH at 78. msec
RIGHT REAR OCCUPANT COMPARTMENT Y VELOCITY
1 B95230AI.V70 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
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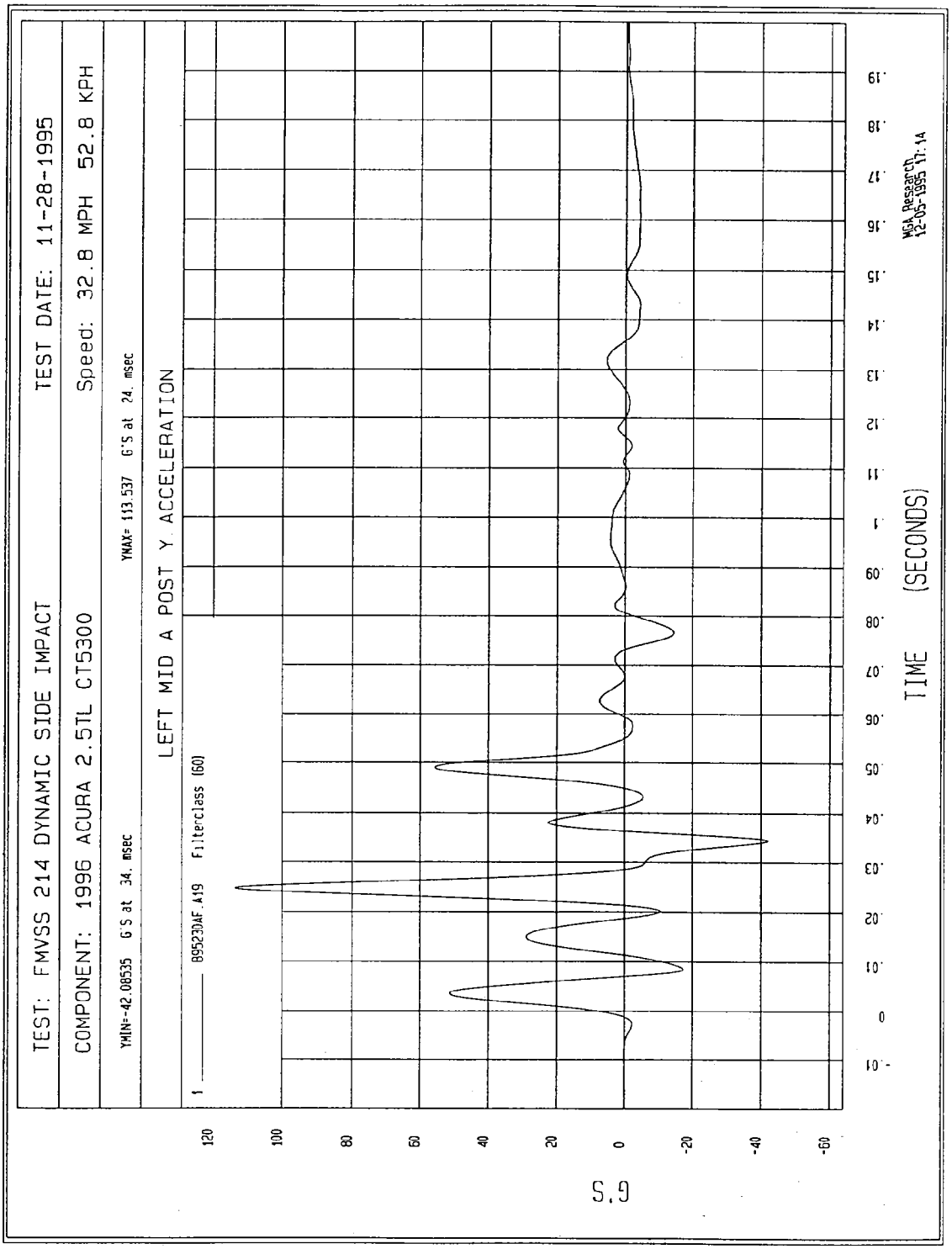
TIME Seconds
MGA Research
12-06-1995 08:26


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-42.08535 G'S at 34. msec
YMAX= 113.537 G'S at 24. msec
LEFT MID A POST Y ACCELERATION
1 _____ B95230AF.A19 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
TIME (SECONDS)
-.01
0
.01
.02
.03
.04
.05
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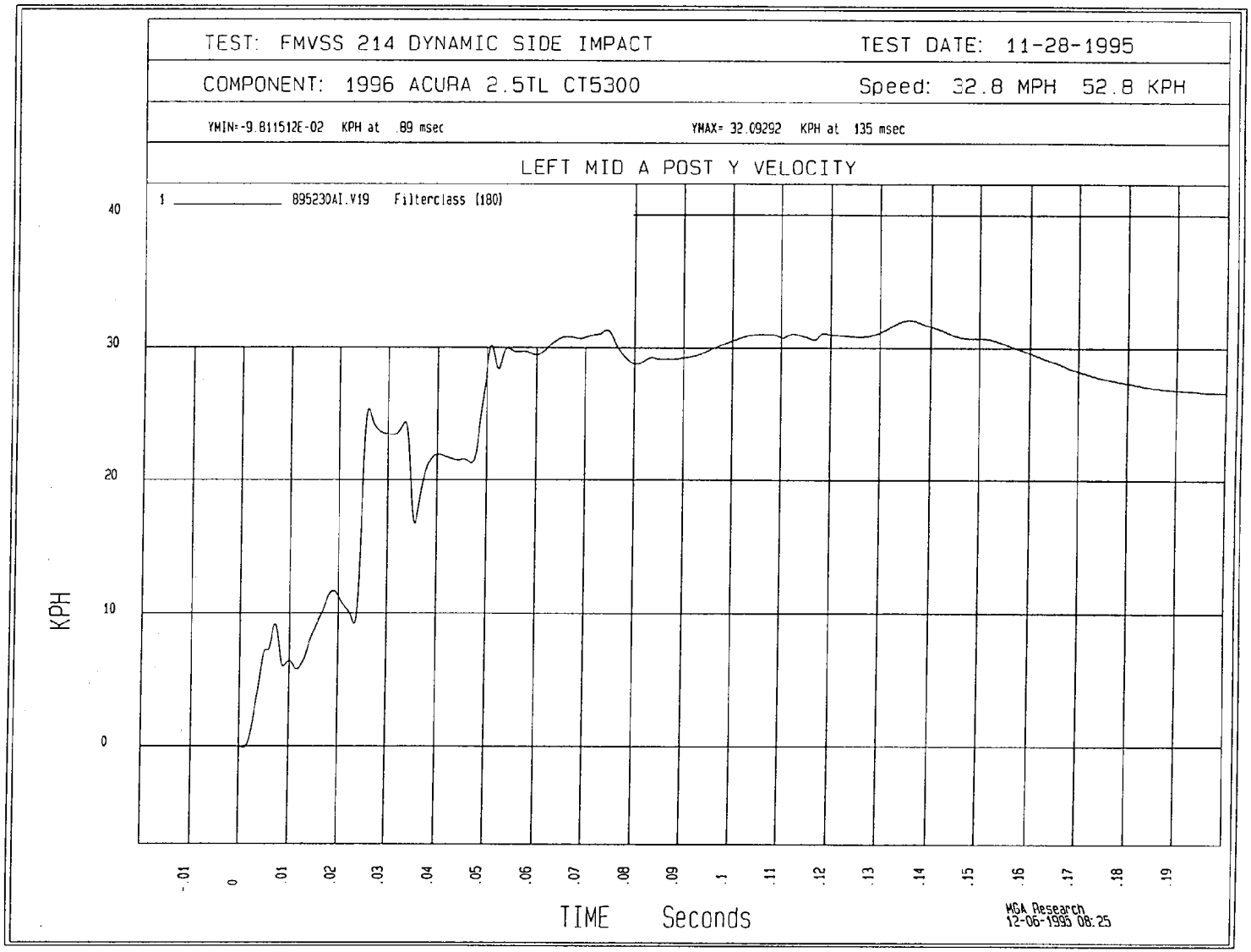
MGA Research
12-05-1995 17:14


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-9.811512E-02 KPH at .89 msec
YMAX= 32.09292 KPH at 135 msec
LEFT MID A POST Y VELOCITY
1 895230AI.V19 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
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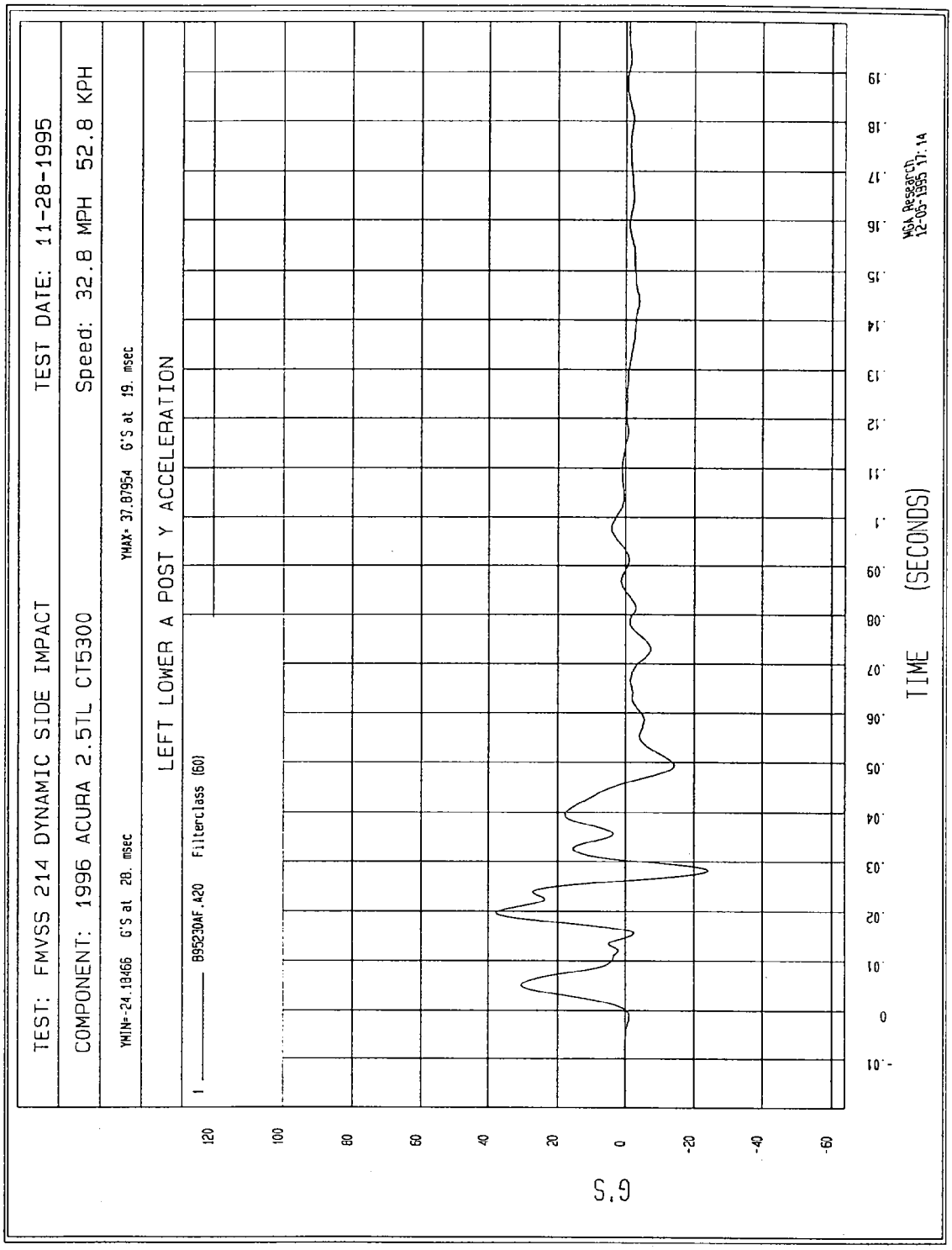
TIME Seconds
MGA Research
12-06-1995 08:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-24.18466 G'S at 28. msec
YMAX= 37.87954 G'S at 19. msec
LEFT LOWER A POST Y ACCELERATION
1 B95230AF.A20 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.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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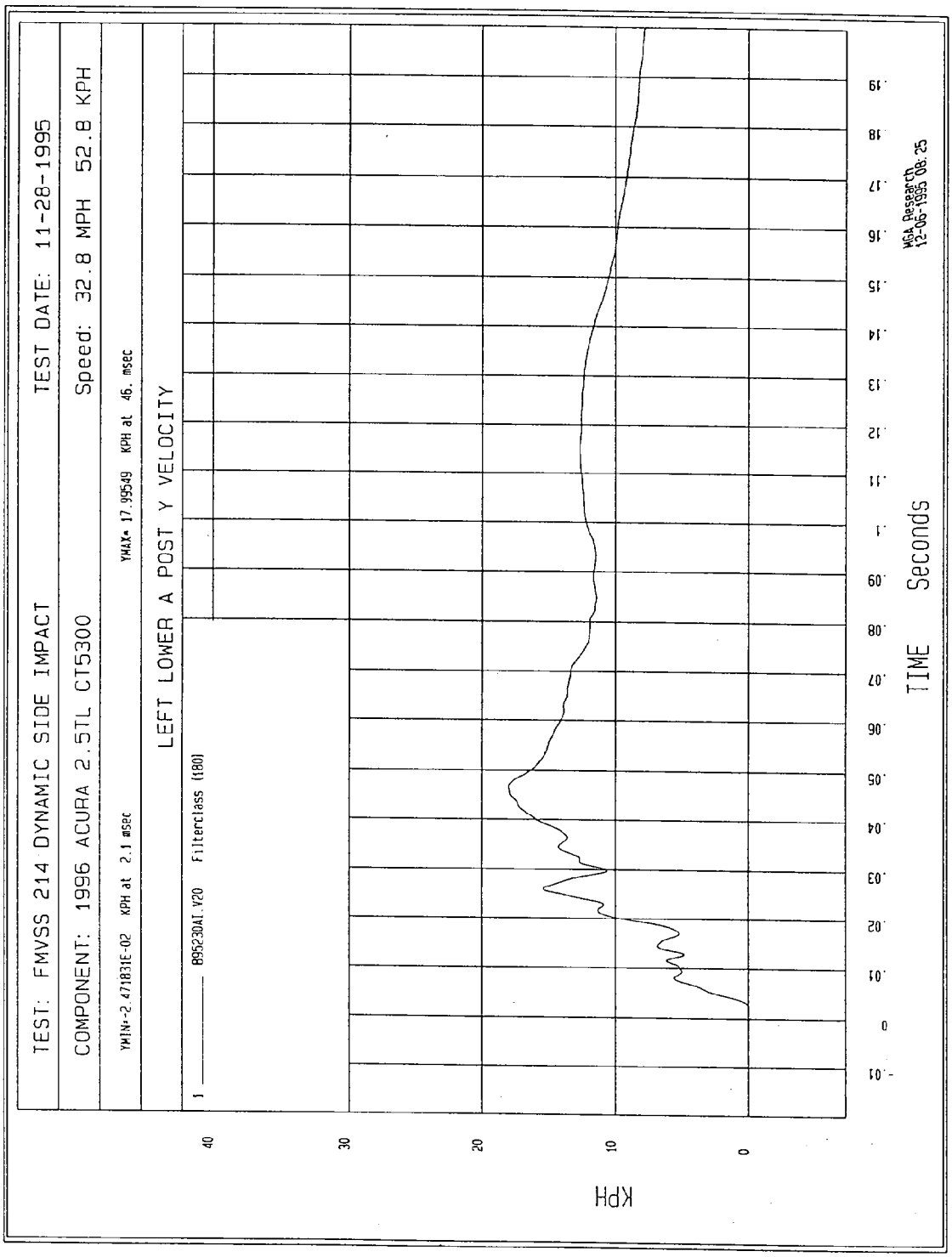
TIME (SECONDS)
MGA Research
12-05-1995 17:14


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-2.471831E-02 KPH at 2.1 msec
YMAX= 17.99549 KPH at 46. msec
LEFT LOWER A POST Y VELOCITY
1 _____ B95230AI.Y20 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
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.09
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.14
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.17
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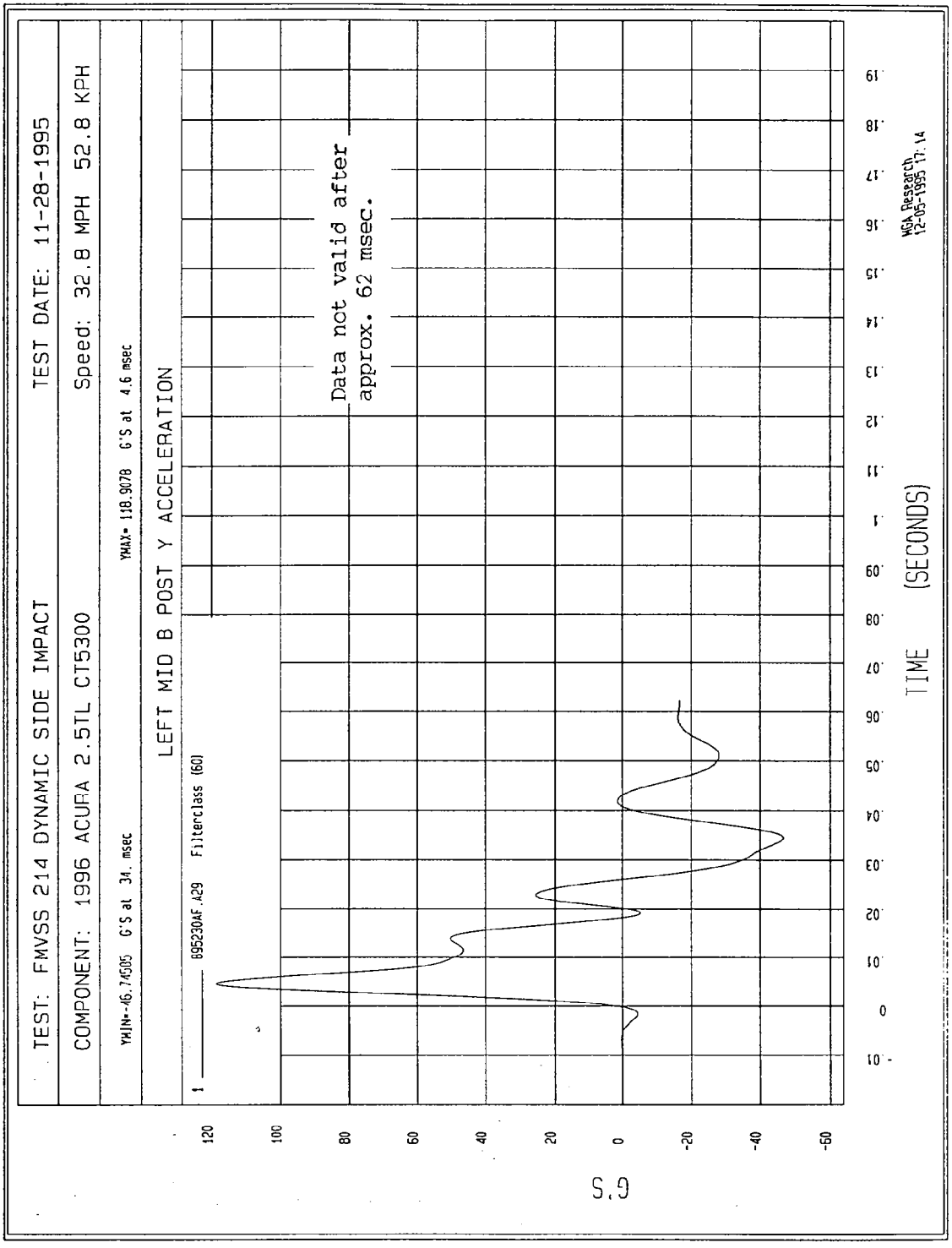
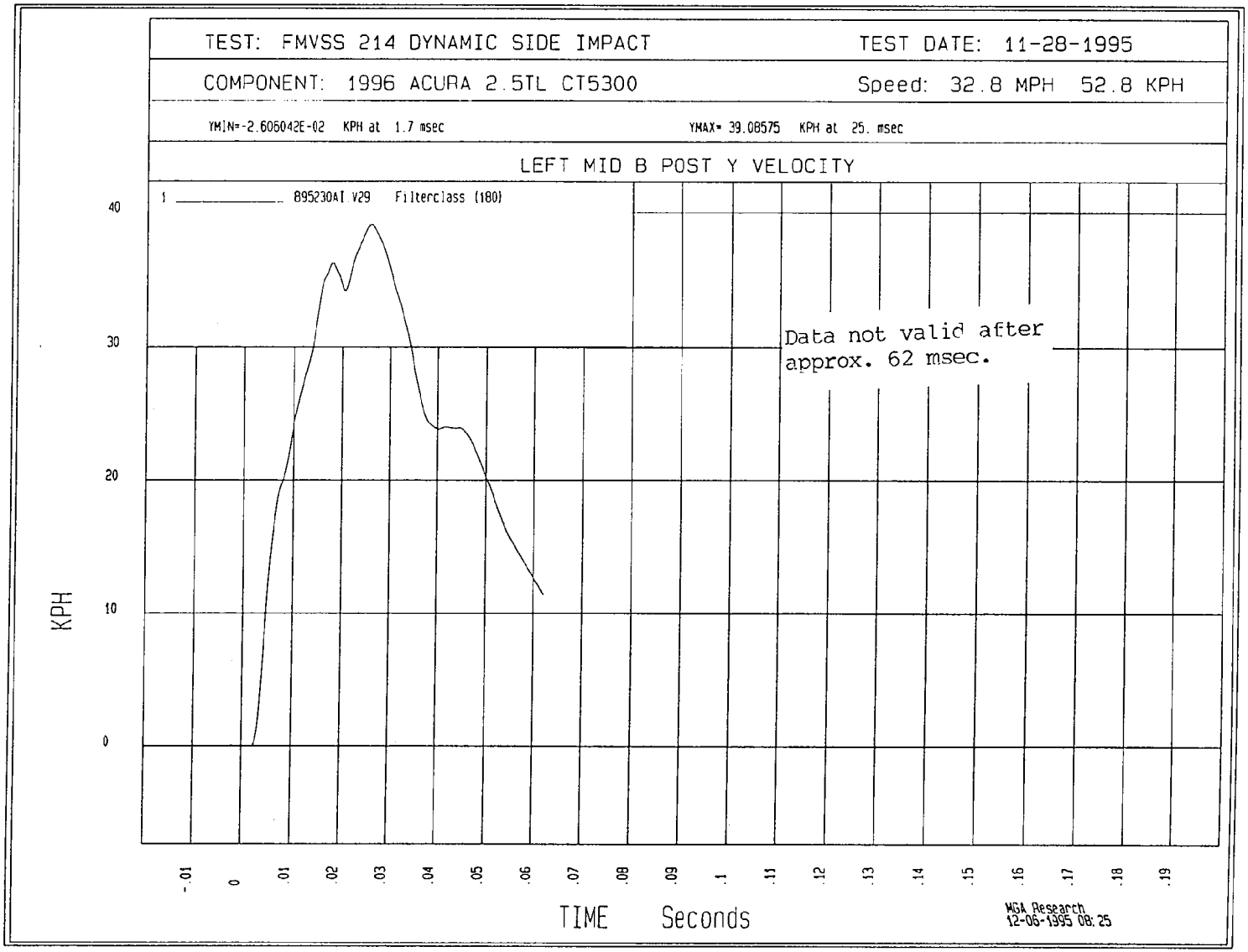
.19
TIME Seconds
MGA Research
12-06-1995 08:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-46.74505 G'S at 34. msec
YMAX= 118.9078 G'S at 4.6 msec
LEFT MID B POST Y ACCELERATION
1 _____ 895230AF.A29 Filterclass (60)
Data not valid after approx. 62 msec.
120
100
80
60
40
20
0
-20
-40
-60
G'S
.01
0
.10
.20
.30
.40
.50
.60
.70
.80
.90
1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
12-05-1995 17:14


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-2.606042E-02 KPH at 1.7 msec
YMAX= 39.08575 KPH at 25. msec
LEFT MID B POST Y VELOCITY
1 895230AI V29 Filterclass (180)
Data not valid after approx. 62 msec.
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
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.05
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.12
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.17
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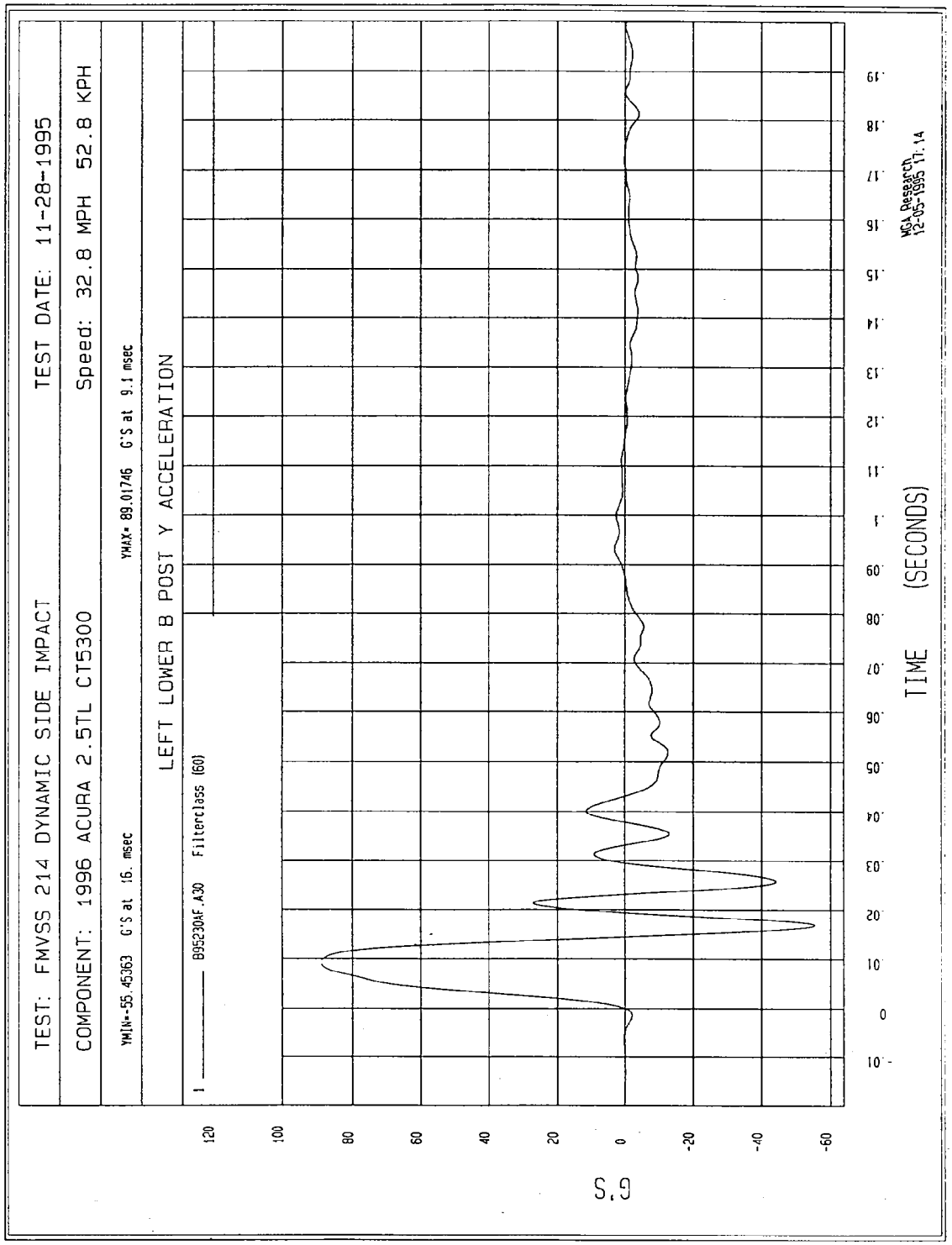
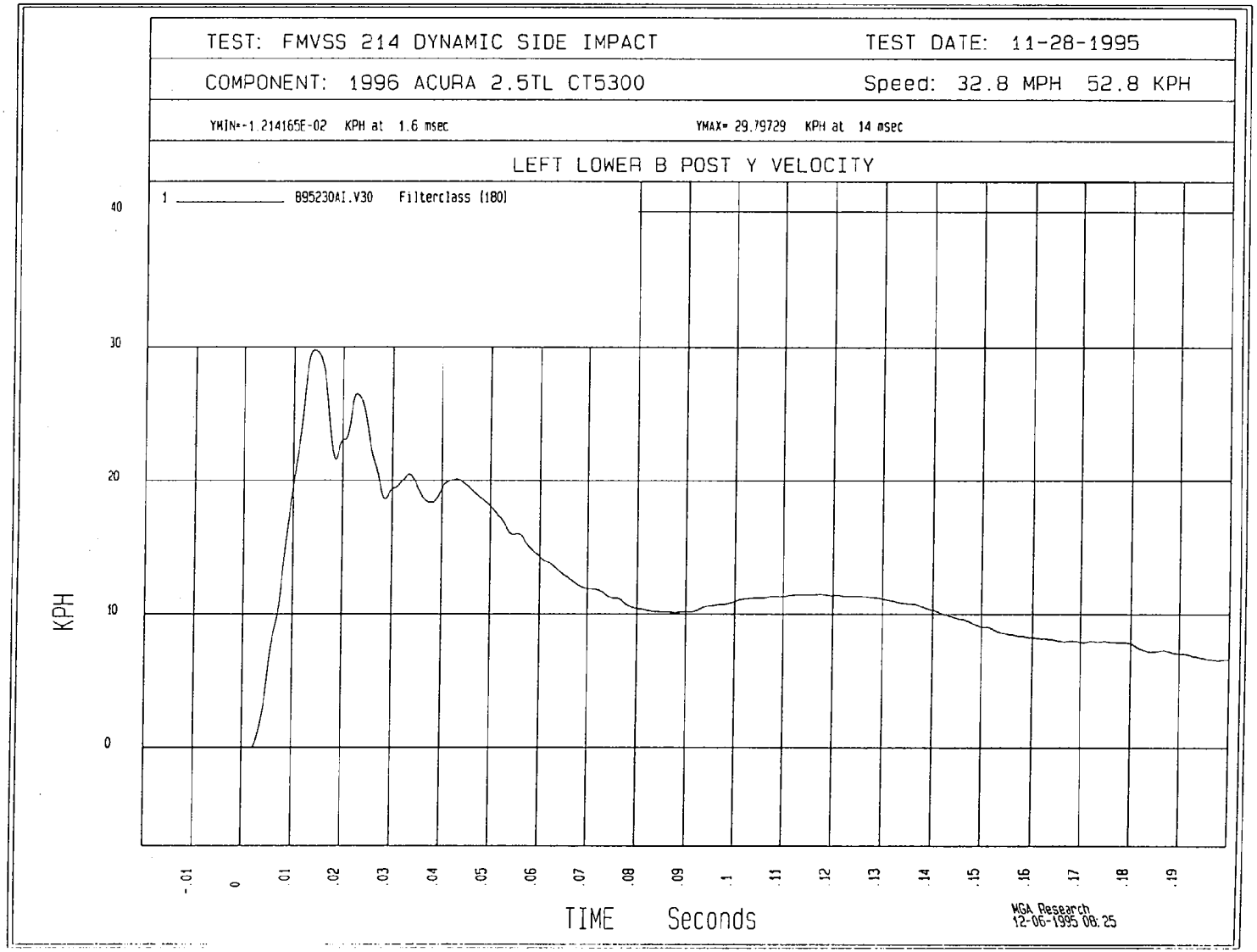
.19
TIME Seconds
MGA Research
12-06-1995 08:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-55.45363 G'S at 16. msec
YMAX= 89.01746 G'S at 9.1 msec
LEFT LOWER B POST Y ACCELERATION
1 B95230AF.A30 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
TIME (SECONDS)
MGA Research
12-05-1995 11:14


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.214165E-02 KPH at 1.6 msec
YMAX= 29.79729 KPH at 14 msec
LEFT LOWER B POST Y VELOCITY
1 B95230AI.V30 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
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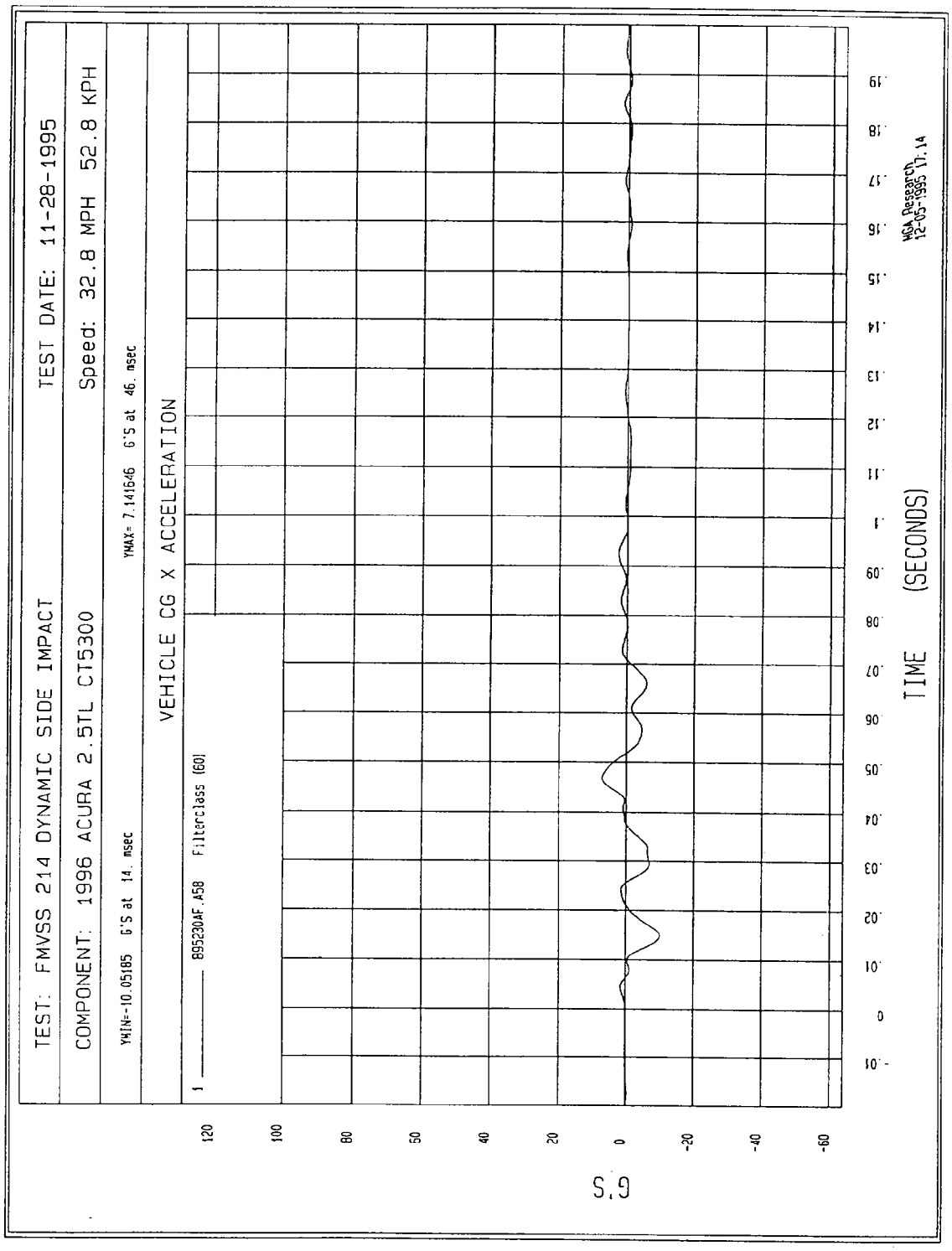
TIME Seconds
MGA Research
12-06-1995 08:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-10.05185 G'S at 14. msec
YMAX= 7.141646 G'S at 46. msec
VEHICLE CG X ACCELERATION
1 _____ 895230AF.A58 Filterclass (60)
120
100
80
50
40
20
0
-20
-40
-60
G'S
-.01
0
.01
.02
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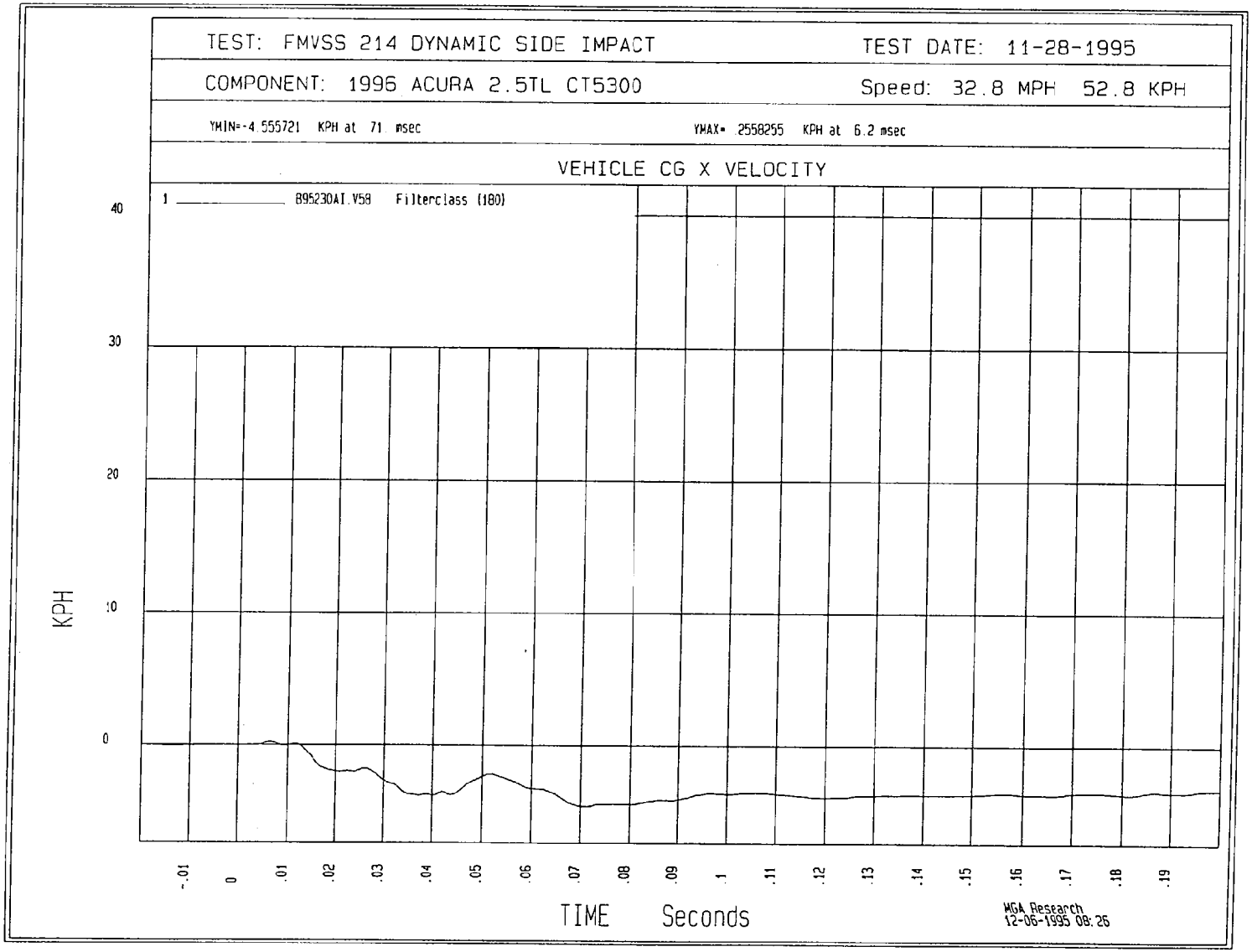
TIME (SECONDS)
NGA Research
12-05-1995 17:14


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-4.555721 KPH at 71 msec
YMAX= 2558255 KPH at 6.2 msec
VEHICLE CG X VELOCITY
1 895230AI.V58 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
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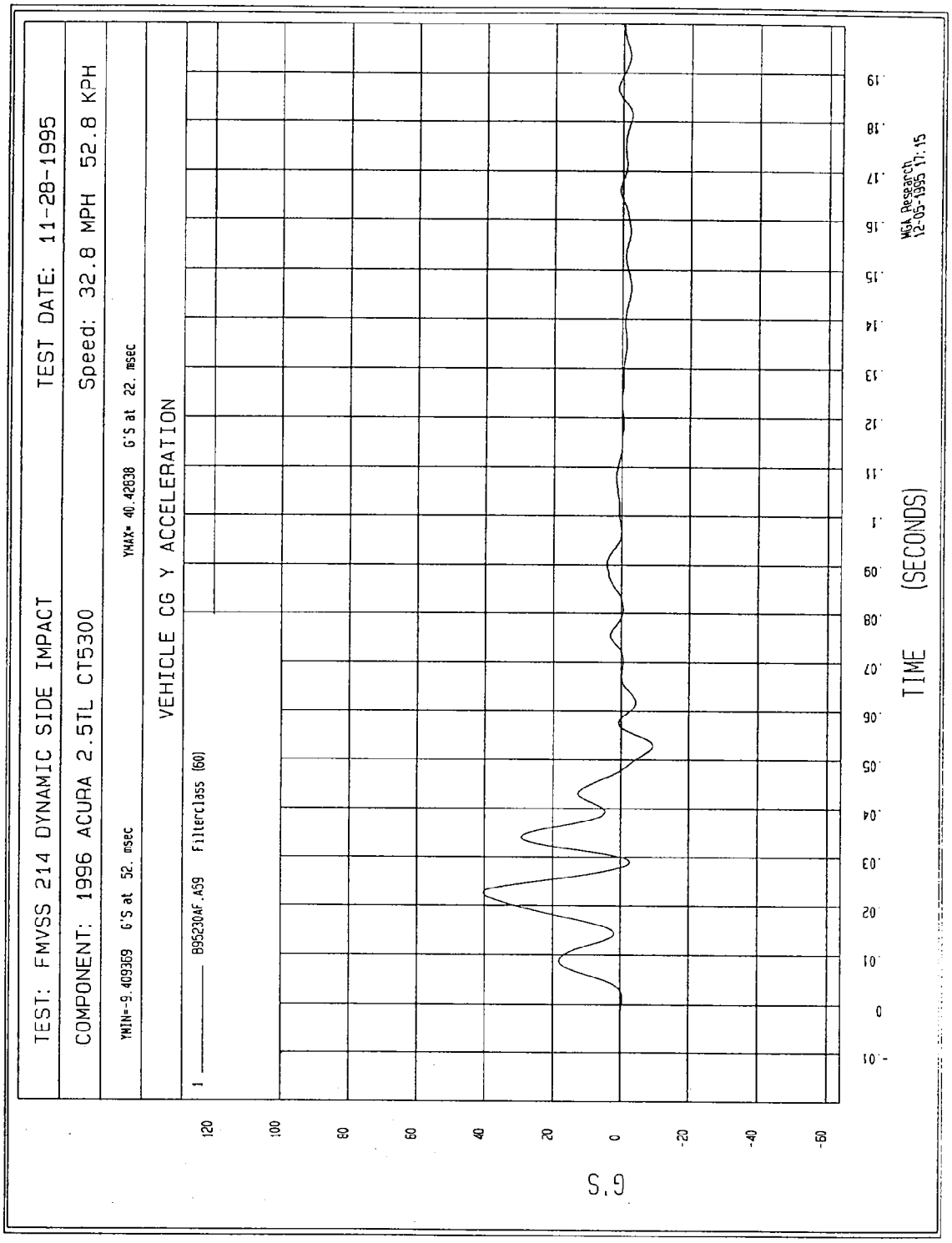
TIME Seconds
MGA Research
12-06-1995 08:26


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-9.409369 G'S at 52. msec
YMAX= 40.42638 G'S at 22. msec
VEHICLE CG Y ACCELERATION
1 B952304F.A59 Filterclass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-10
0
10
20
03
04
05
06
07
08
09
1
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14
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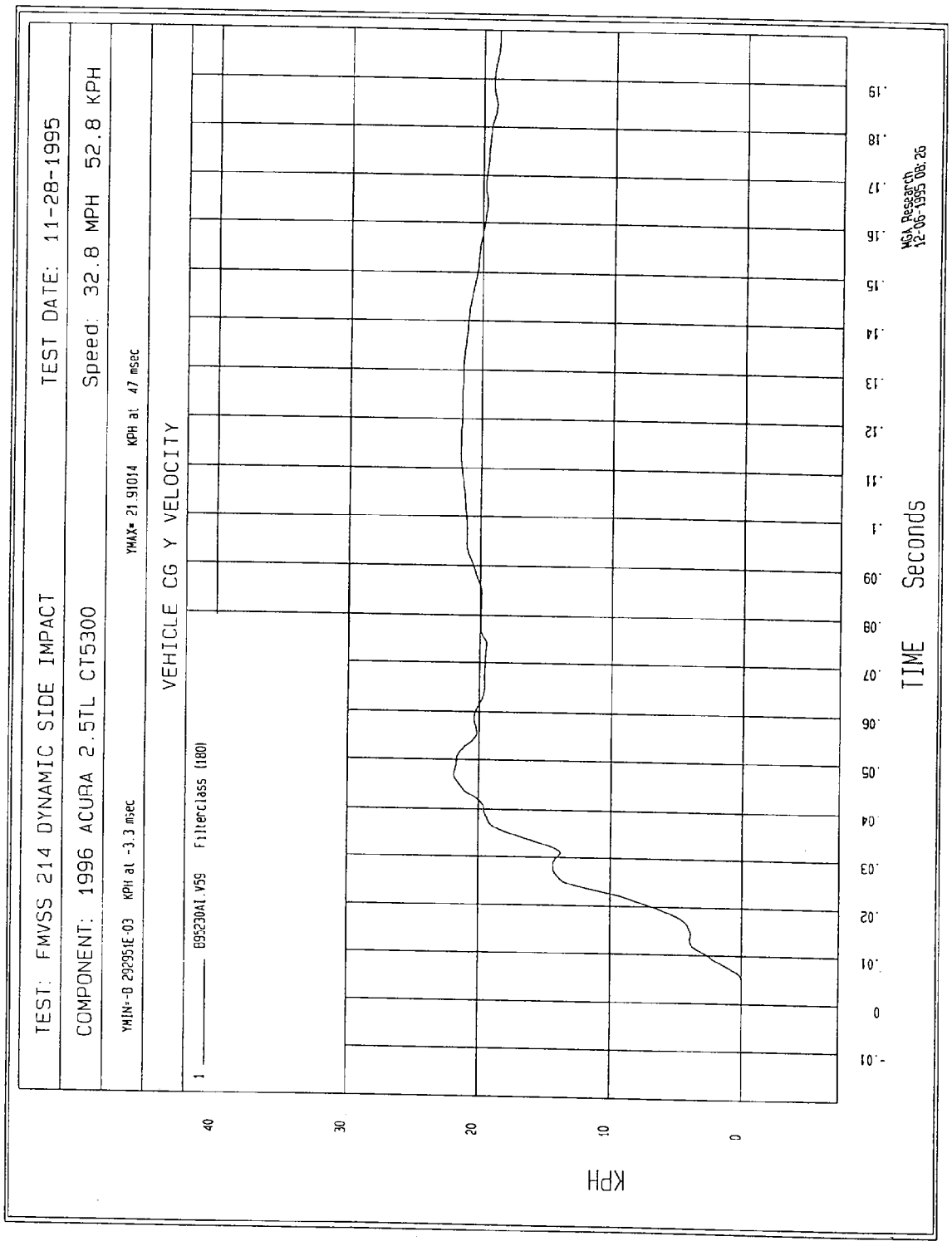
16
17
18
19
TIME (SECONDS)
MGA Research
12-05-1995 17:15


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=0 29295E-03 KPH at -3.3 msec
YMAX= 21.91014 KPH at 47 msec
VEHICLE CG Y VELOCITY
1 B95230AI.V5G Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
.06
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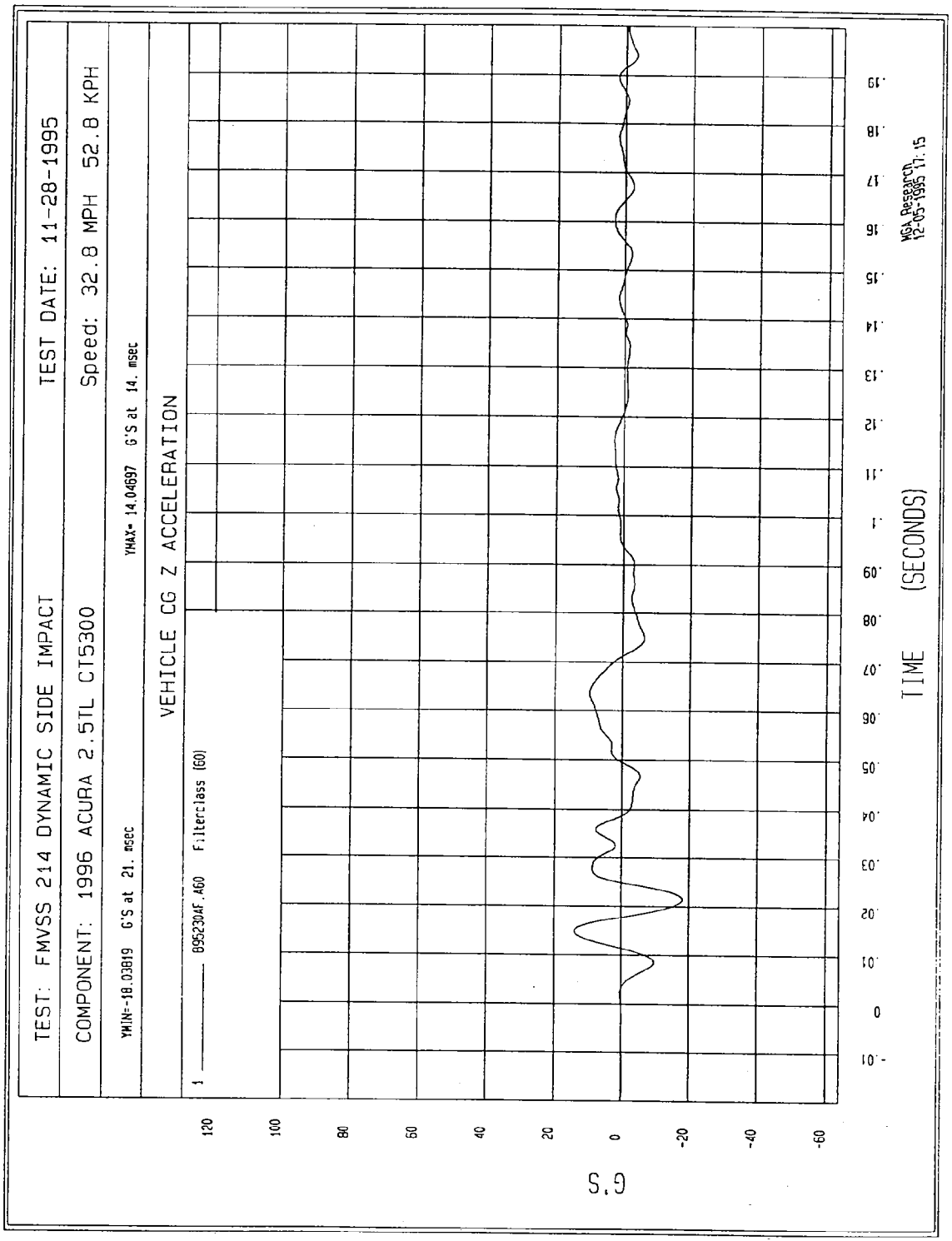
TIME Seconds
MGA Research
12-06-1995 08:26


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-18.03819 G'S at 21. msec
YMAX= 14.04697 G'S at 14. msec
VEHICLE CG Z ACCELERATION
1 ——— 895230AF.A60 FilterClass (60)
120
100
80
60
40
20
0
-20
-40
-60
G'S
-.01
0
.01
.02
.03
.04
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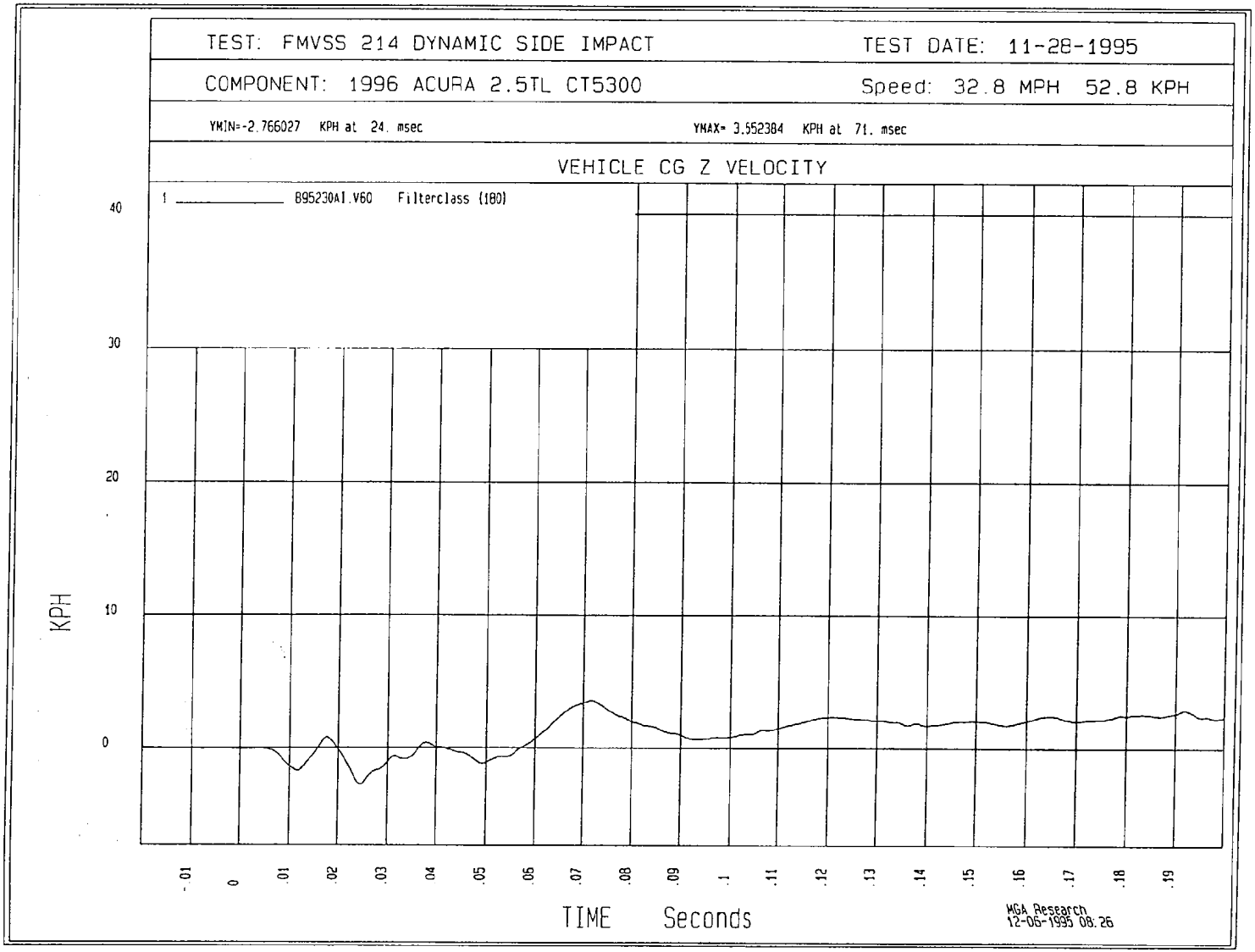
TIME (SECONDS)
MGA Research
12-05-1995 11:15


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-2.766027 KPH at 24. msec
YMAX= 3.552384 KPH at 71. msec
VEHICLE CG Z VELOCITY
1 B95230A1.V60 Filterclass (180)
40
30
20
10
0
KPH
-.01
0
.01
.02
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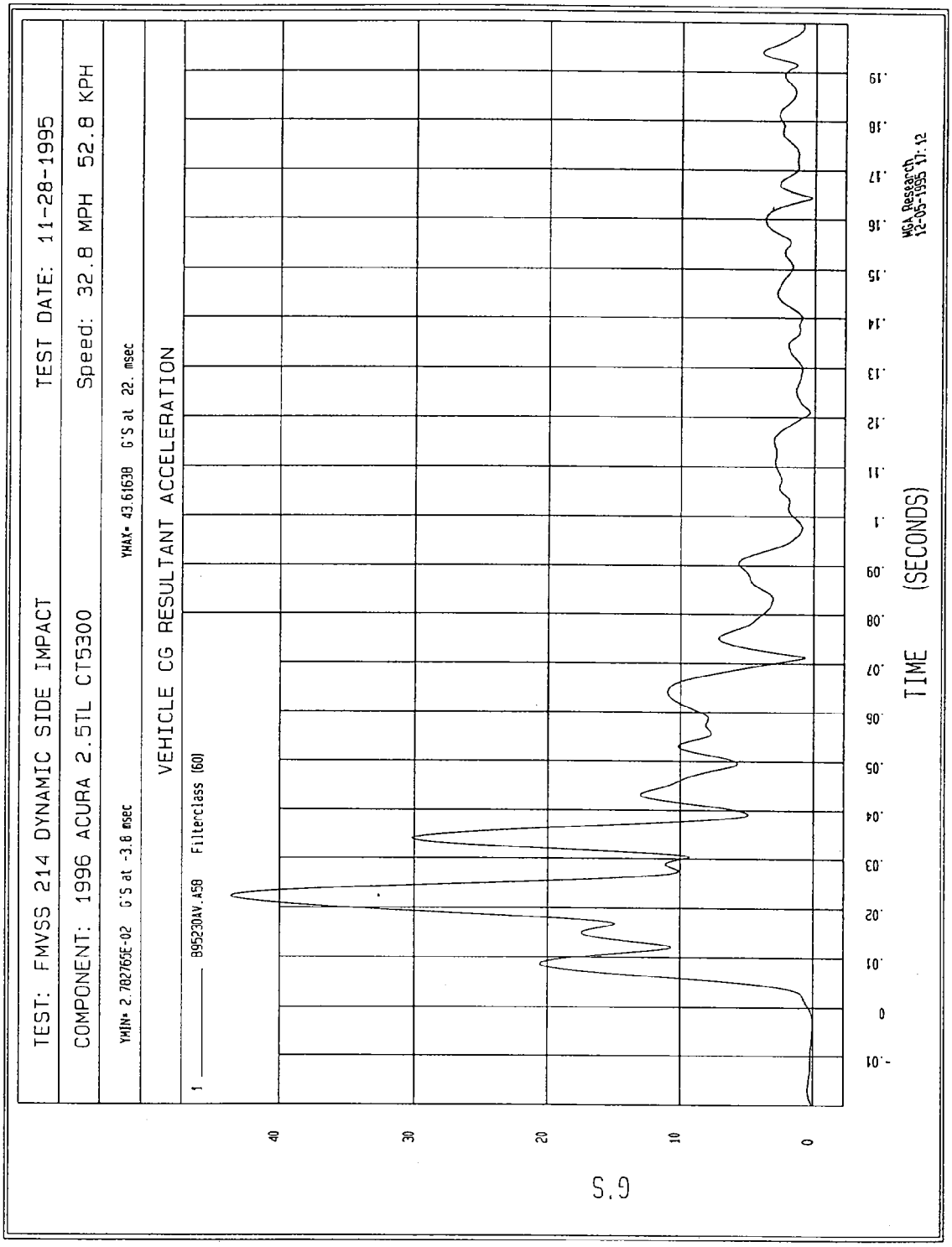
TIME Seconds
MGA Research
12-06-1995 08:26


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 2.702765E-02 G'S at -3.8 msec
YMAX= 43.61638 G'S at 22. msec
VEHICLE CG RESULTANT ACCELERATION
1 B95230AV.A58 Filterclass (60)
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
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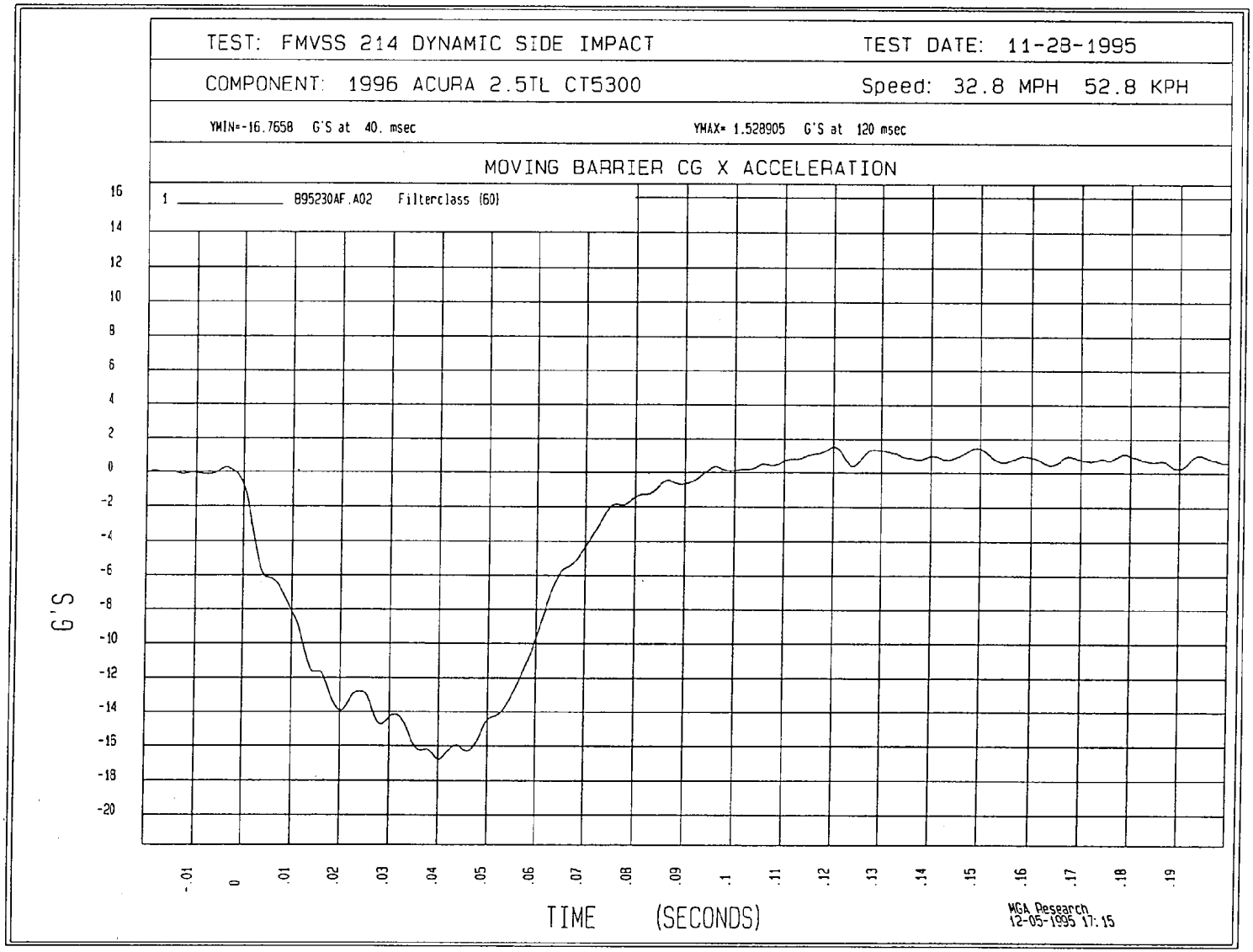
TIME (SECONDS)
MGA Research
12-05-1995 17:12
G's


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-16.7658 G'S at 40. msec
YMAX= 1.528905 G'S at 120 msec
MOVING BARRIER CG X ACCELERATION
1 B95230AF.A02 Filterclass (60)
G'S
16
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-.01
0
.01
.02
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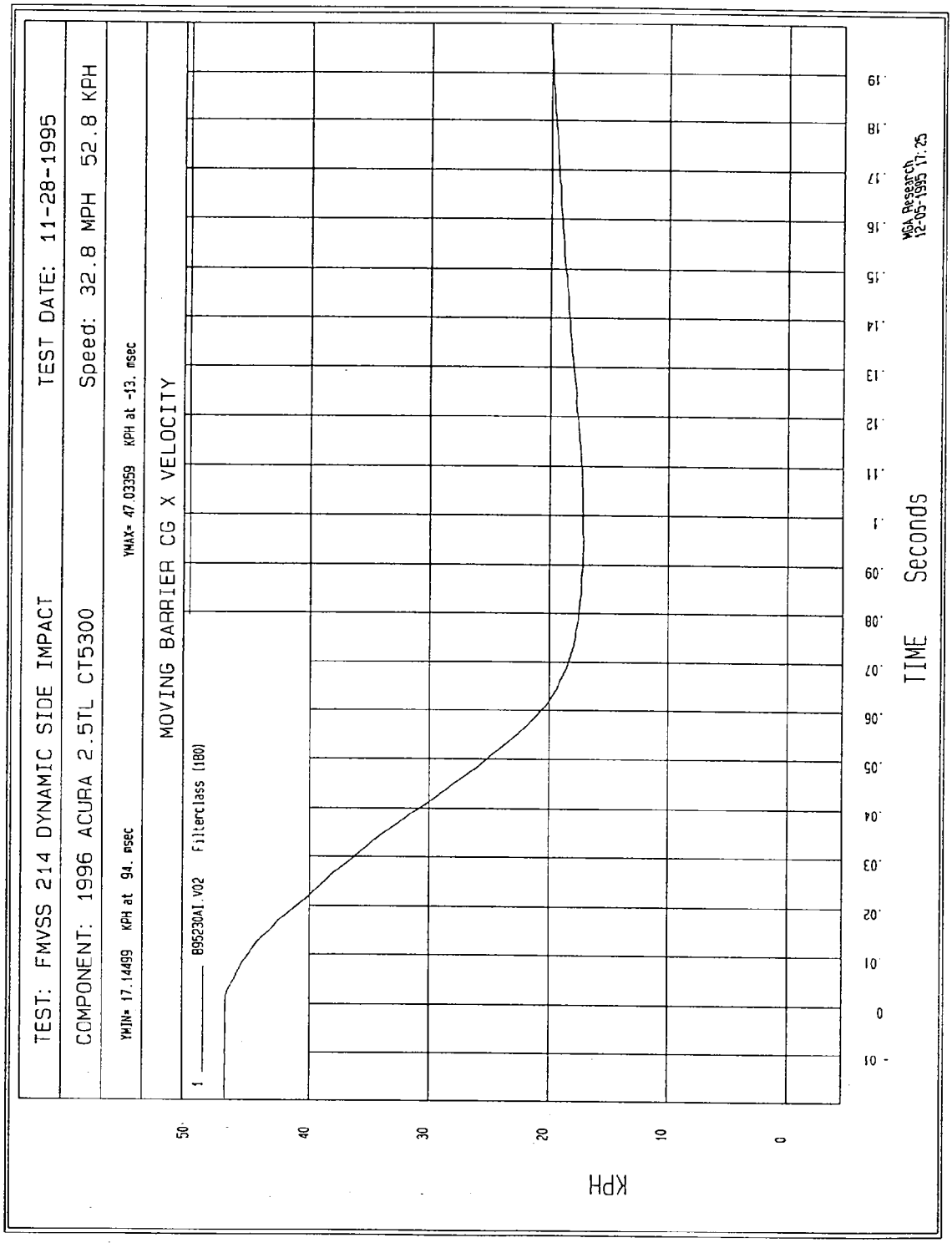
TIME (SECONDS)
MGA Research
12-05-1995 17:15


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 17.14499 KPH at 94. msec
YMAX= 47.03359 KPH at -13. msec
MOVING BARRIER CG X VELOCITY
1 ——— 895230AI.V02 Filterclass (180)
KPH
50
40
30
20
10
0
10 -
01
0
01
02
03
04
05
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1
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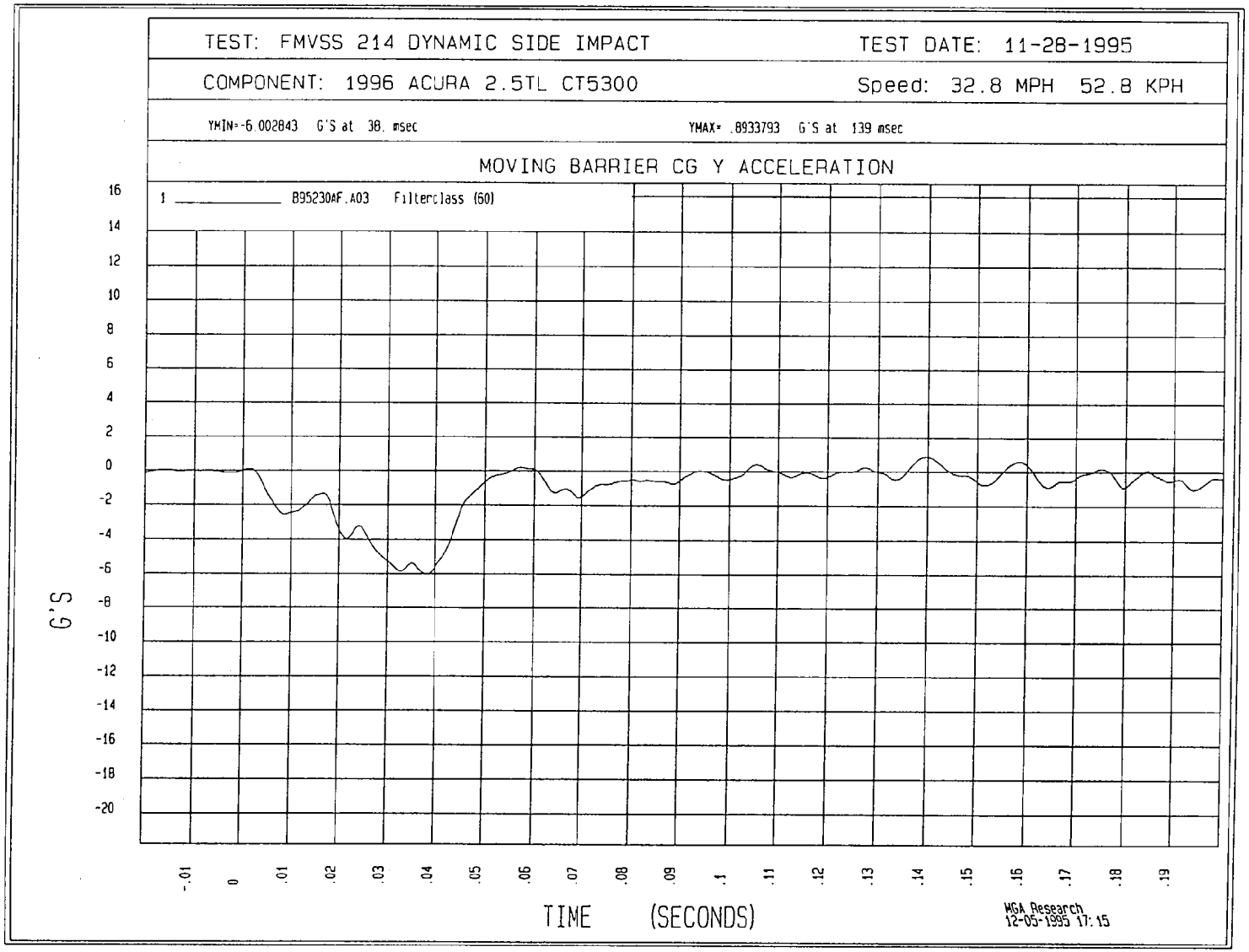
TIME Seconds
MGA Research
12-05-1995 11:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-6.002843 G'S at 38. msec
YMAX= .8933793 G'S at 139 msec
MOVING BARRIER CG Y ACCELERATION
1 B95230AF.A03 Filterclass (60)
16
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
G's
-.01
0
.01
.02
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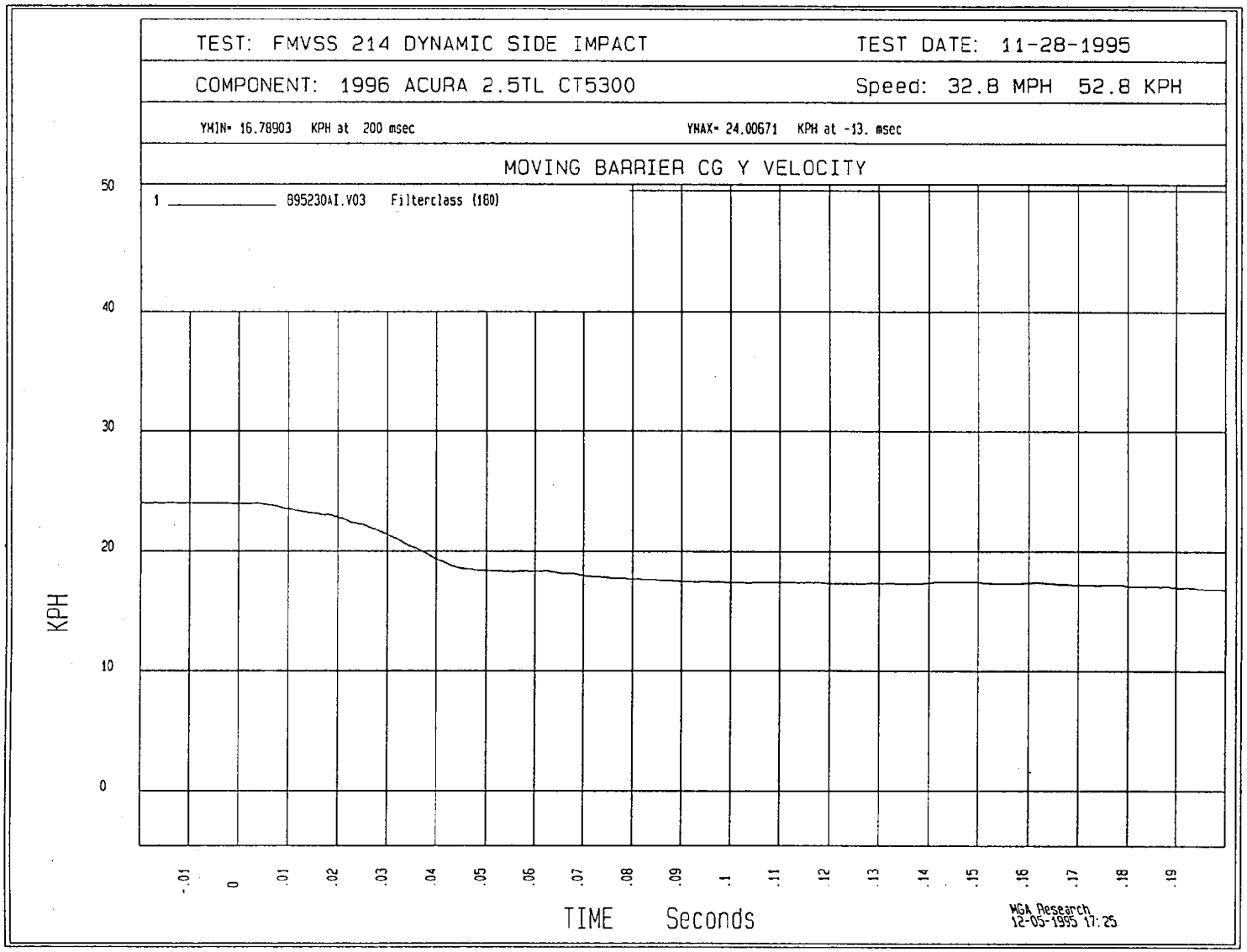
TIME (SECONDS)
MGA Research
12-05-1995 17:15


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 16.78903 KPH at 200 msec
YMAX= 24.00671 KPH at -13. msec
MOVING BARRIER CG Y VELOCITY
1 895230AI.V03 Filterclass (180)
KPH
50
40
30
20
10
0
-.01
0
.01
.02
.03
.04
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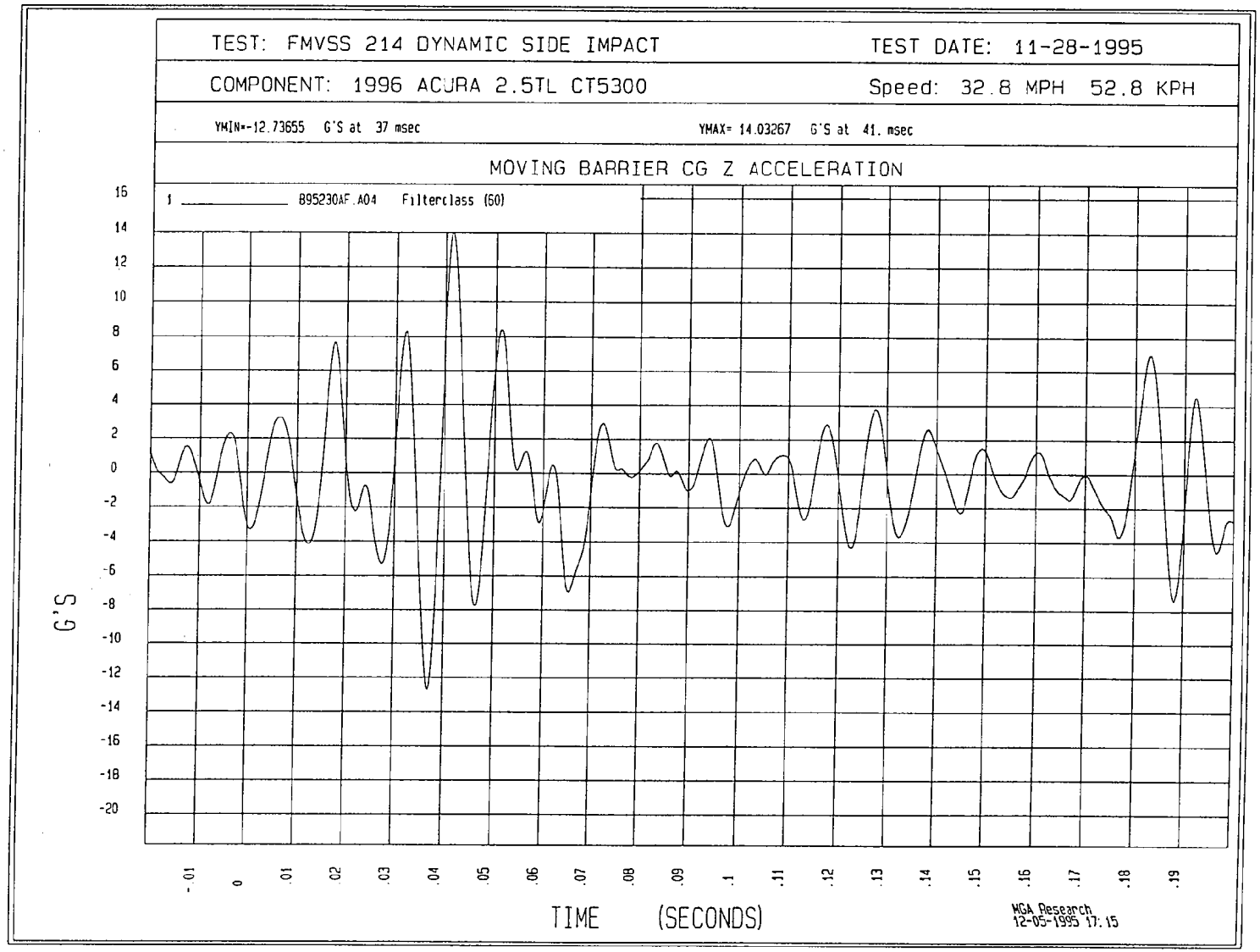
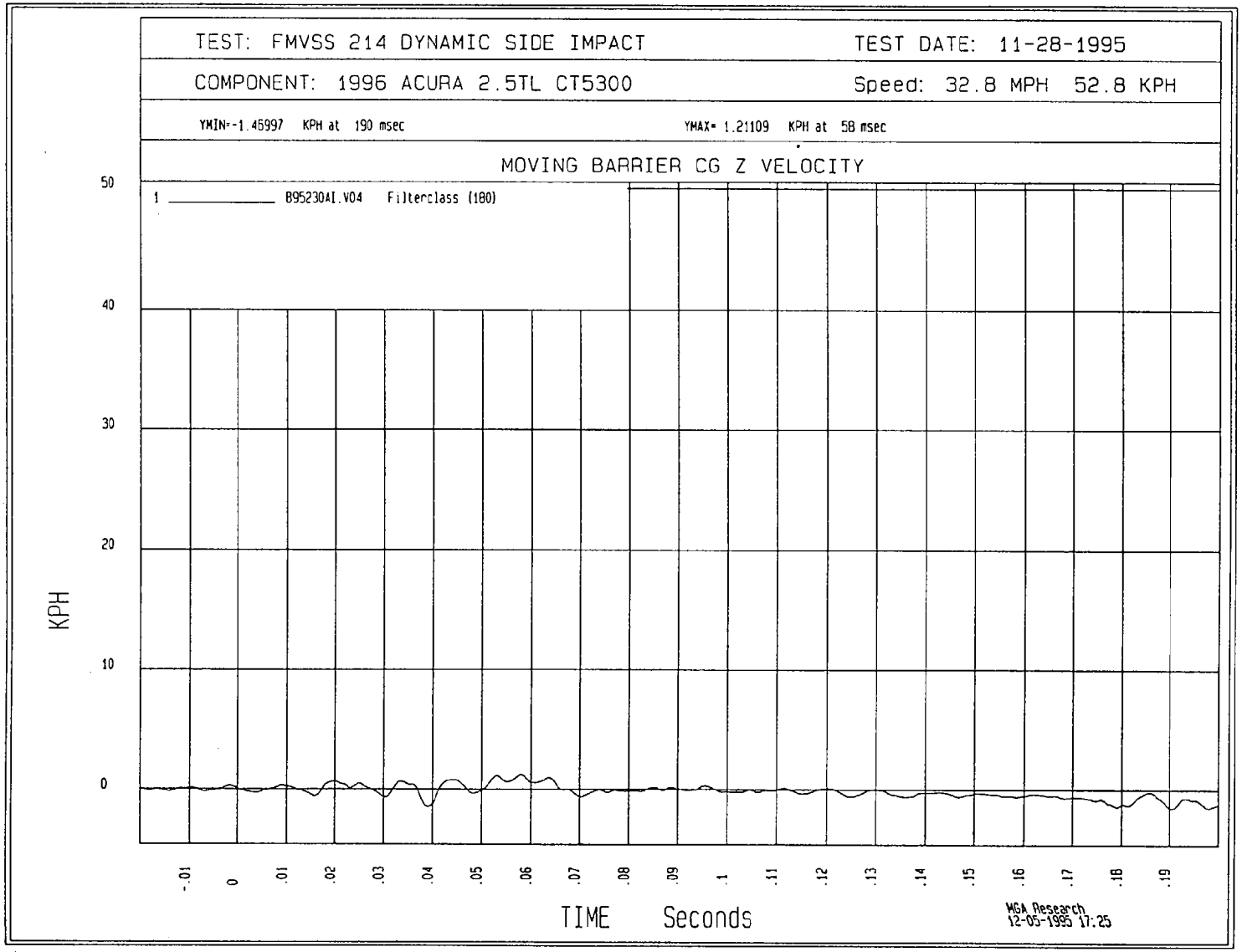
TIME Seconds
MGA Research
12-05-1995 17:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-12.73655 G'S at 37 msec
YMAX= 14.03267 G'S at 41. msec
MOVING BARRIER CG Z ACCELERATION
1 B95230AF.A04 Filterclass (60)
G'S
TIME (SECONDS)
MGA Research
12-05-1995 17:15


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.46997 KPH at 190 msec
YMAX= 1.21109 KPH at 58 msec
MOVING BARRIER CG Z VELOCITY
1 B95230AI.V04 Filterclass (180)
KPH
50
40
30
20
10
0
-.01
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.01
.02
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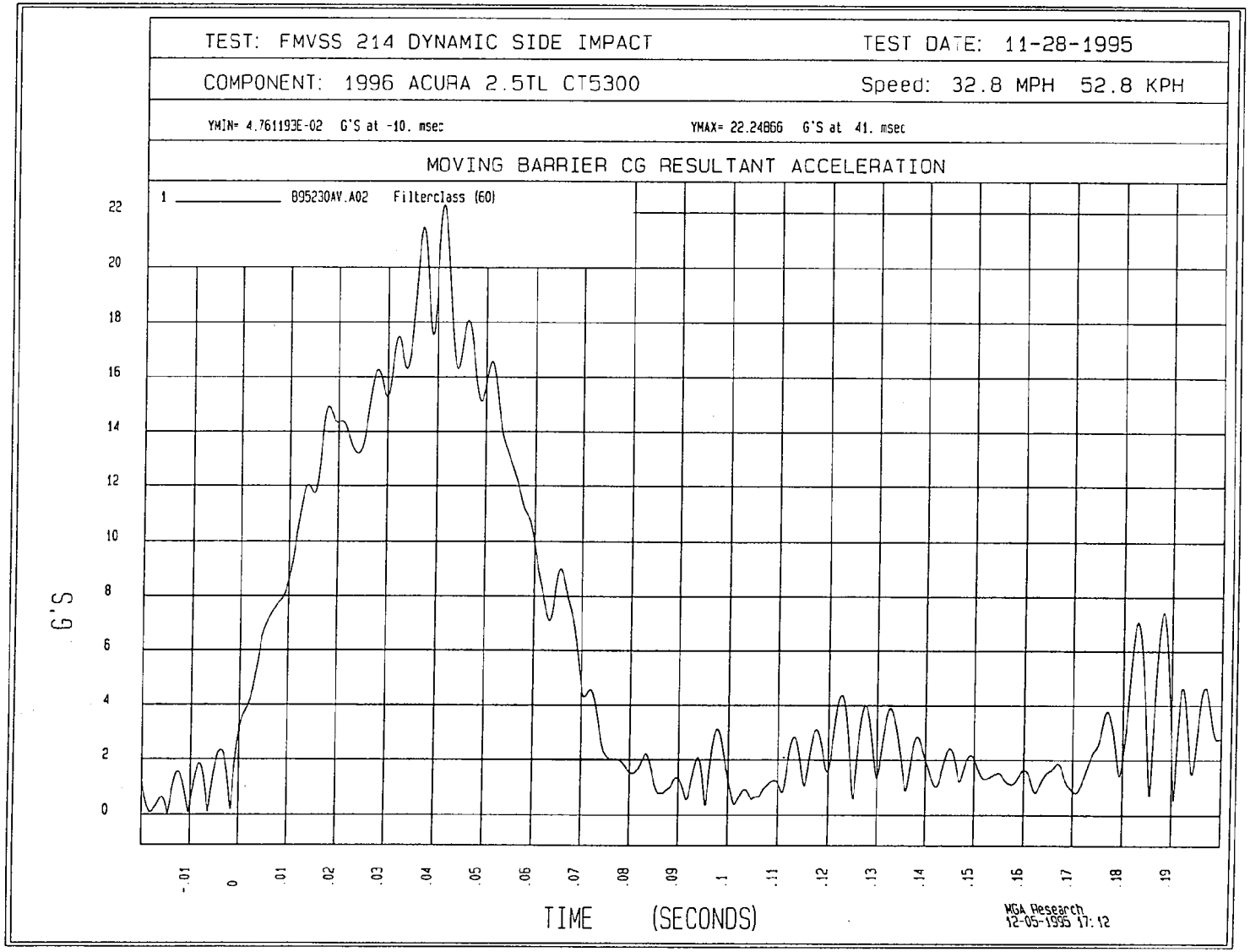
TIME Seconds
MGA Research
12-05-1995 17:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 4.761193E-02 G'S at -10. msec
YMAX= 22.24866 G'S at 41. msec
MOVING BARRIER CG RESULTANT ACCELERATION
1 B95230AV.A02 Filterclass (60)
G'S
22
20
18
16
14
12
10
8
6
4
2
0
-.01
0
.01
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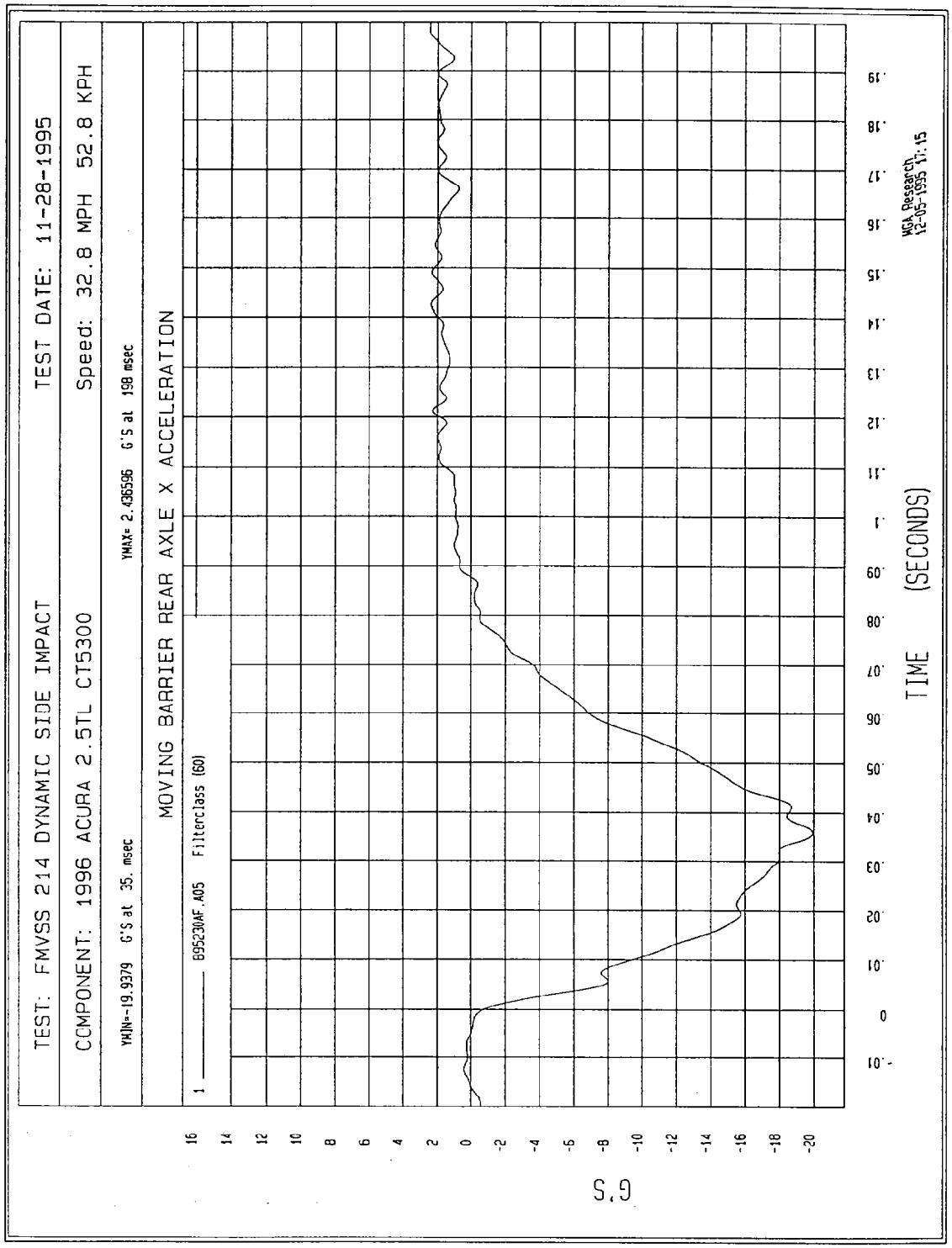
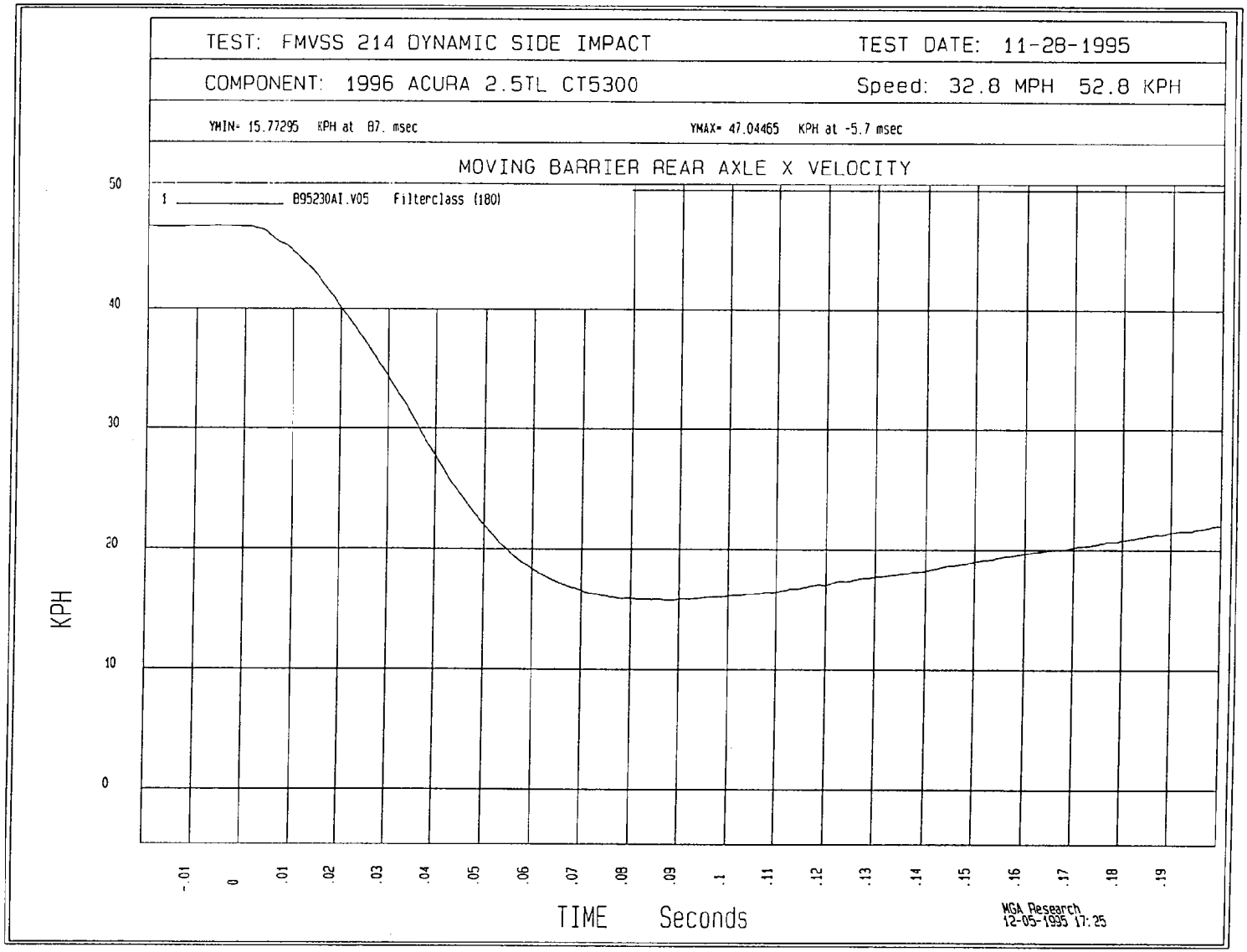
TIME (SECONDS)
MGA Research
12-05-1995 17:12


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-19.9379 G'S at 35. msec
YMAX= 2.436596 G'S at 198 msec
MOVING BARRIER REAR AXLE X ACCELERATION
1 ——— 695230AF.A05 Filterclass (60)
G'S
TIME (SECONDS)
MGA Research
12-05-1995 11:15


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 15.77295 KPH at 87. msec
YMAX= 47.04465 KPH at -5.7 msec
MOVING BARRIER REAR AXLE X VELOCITY
1 B95230AI.V05 Filterclass (180)
KPH
50
40
30
20
10
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-.01
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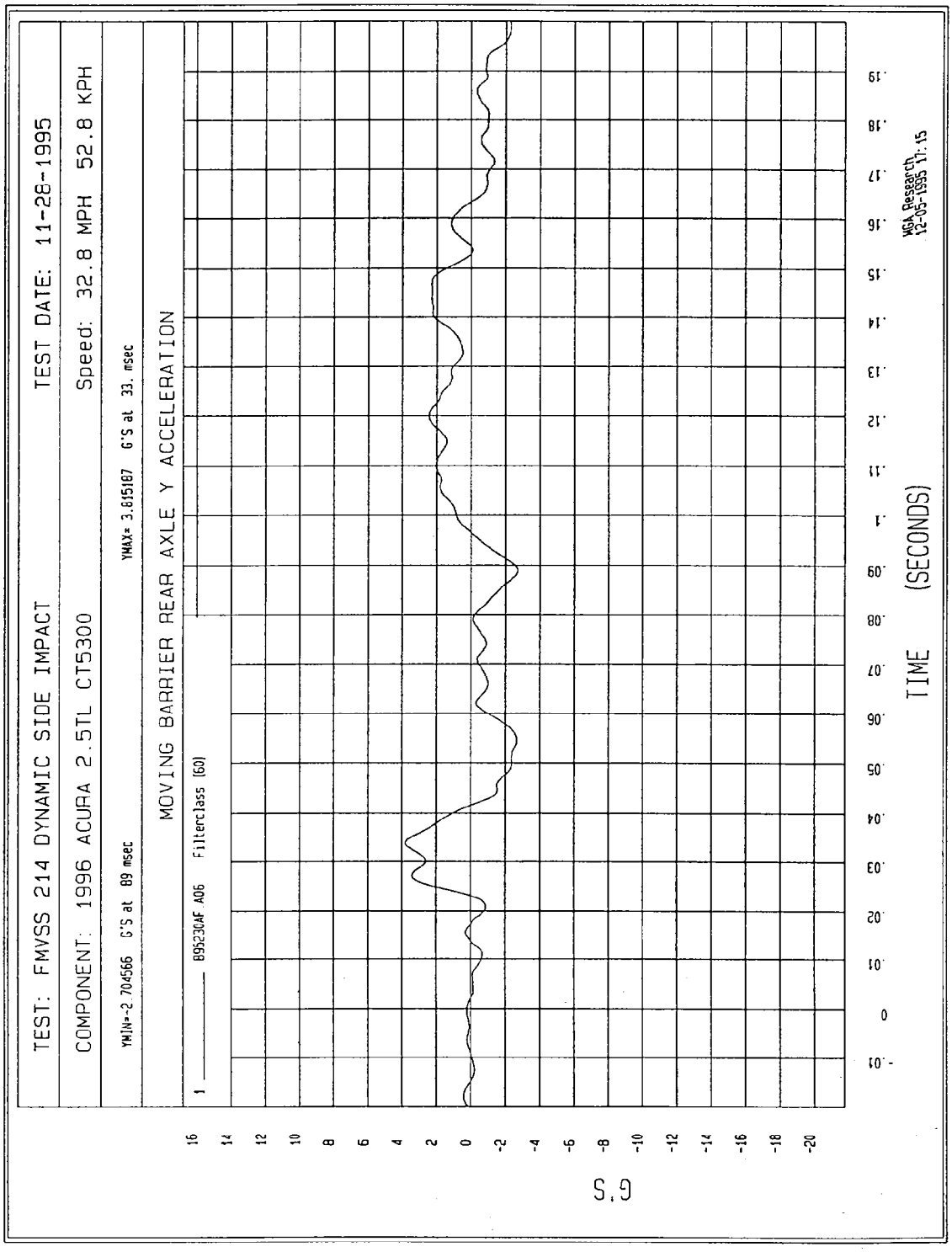
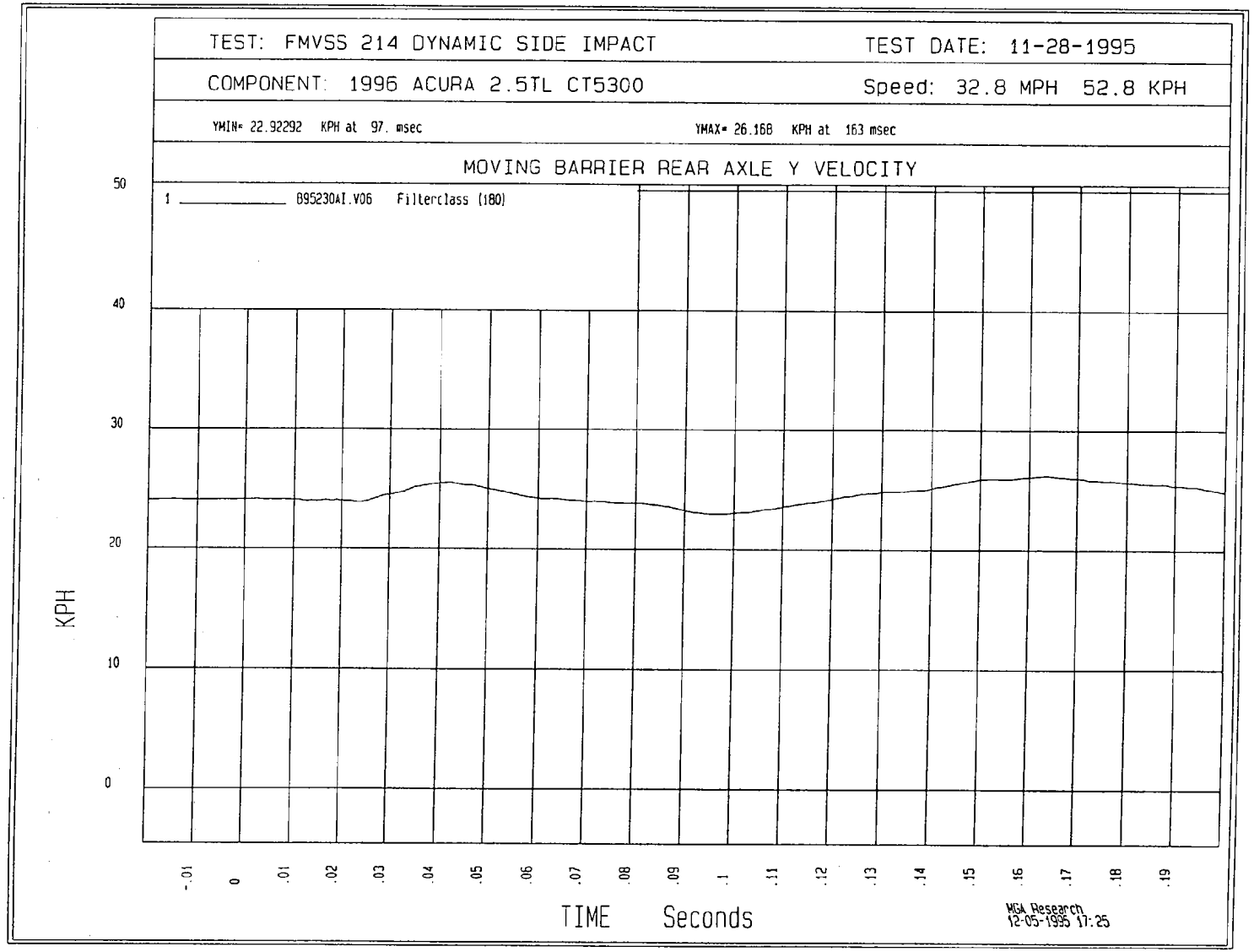
TIME Seconds
MGA Research
12-05-1995 17:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-2.704566 G'S at 89 msec
YMAX= 3.615187 G'S at 33. msec
MOVING BARRIER REAR AXLE Y ACCELERATION
1 _____ 895230AF A06 Filterclass (60)
G'S
TIME (SECONDS)
MGA Research
12-05-1995 11:15


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 22.92292 KPH at 97. msec
YMAX= 26.168 KPH at 163 msec
MOVING BARRIER REAR AXLE Y VELOCITY
1 B95230AI.V06 Filterclass (180)
KPH
50
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
.06
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.09
.1
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.16
.17
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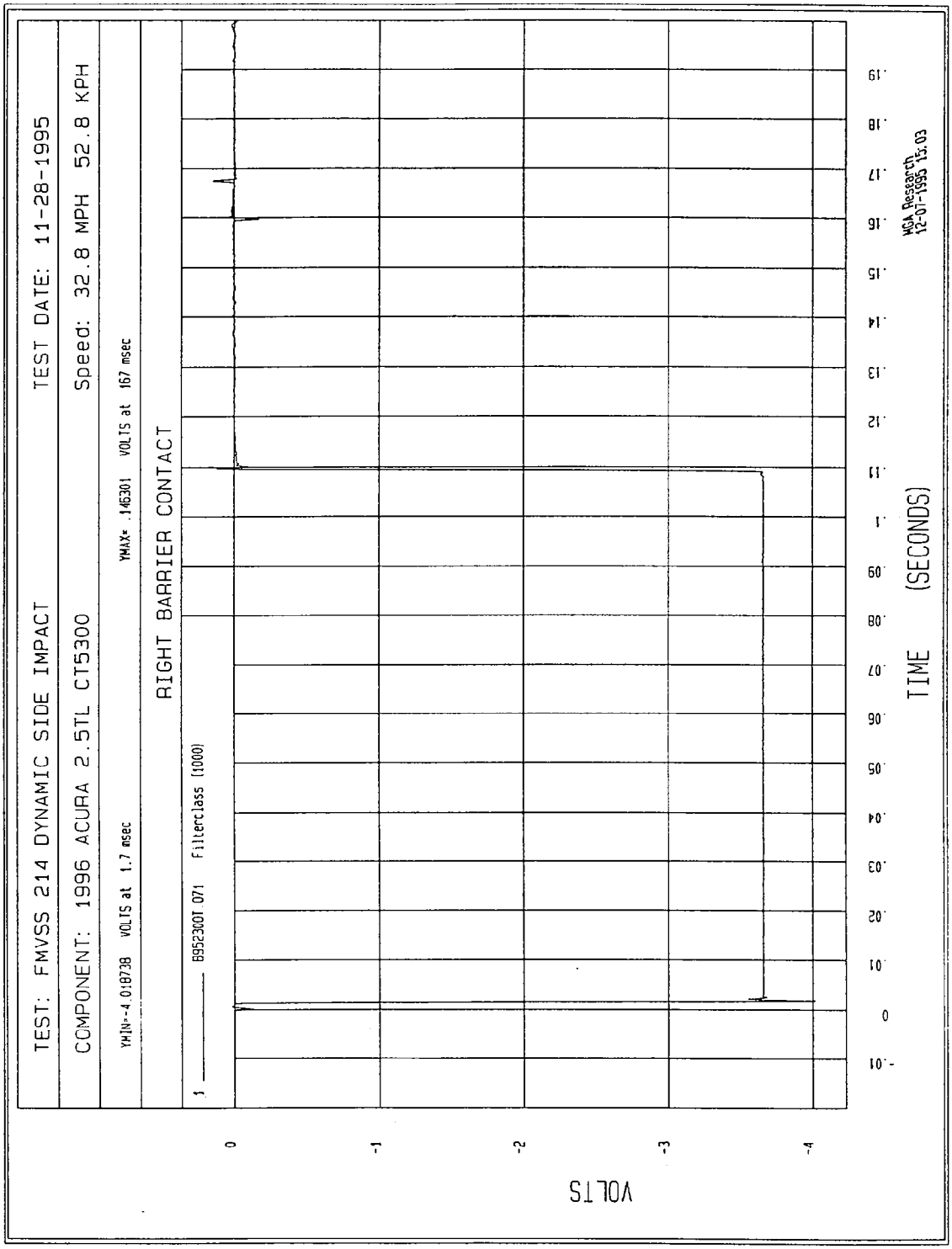
.19
TIME Seconds
MGA Research
12-05-1995 17:25


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-4.01873B VOLTS at 1.7 msec
YMAX= .146301 VOLTS at 167 msec
RIGHT BARRIER CONTACT
1 B9523001 071 Filterclass (1000)
VOLTS
0
-1
-2
-3
-4
TIME (SECONDS)
-.01
0
.01
.02
.03
.04
.05
.06
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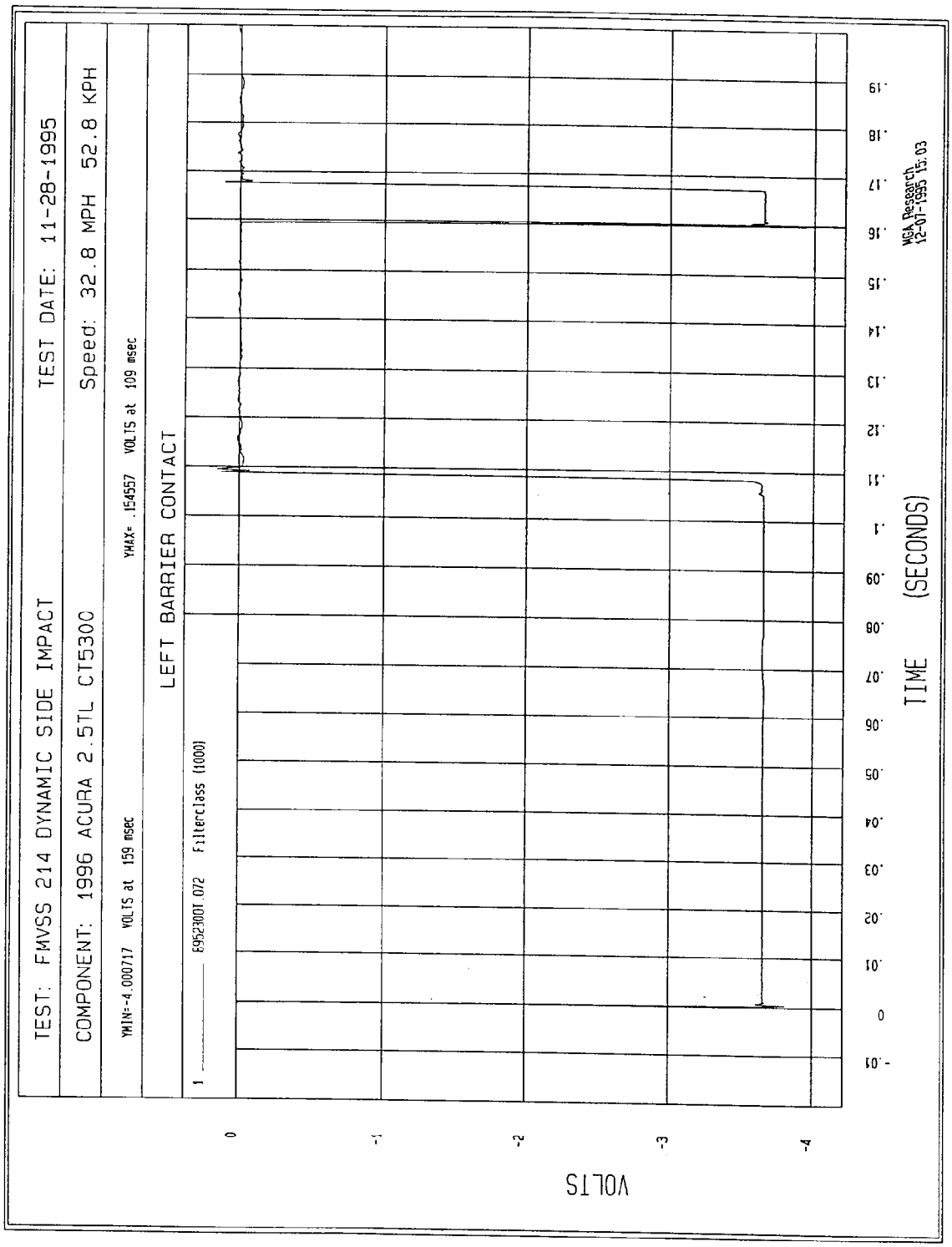
MGA Research
12-01-1995 15:03


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-4.000717 VOLTS at 159 msec
YMAX= .154557 VOLTS at 109 msec
LEFT BARRIER CONTACT
1 E9523001.072 Filterclass (1000)
VOLTS
0
-1
-2
-3
-4
TIME (SECONDS)
-.01
0
.01
.02
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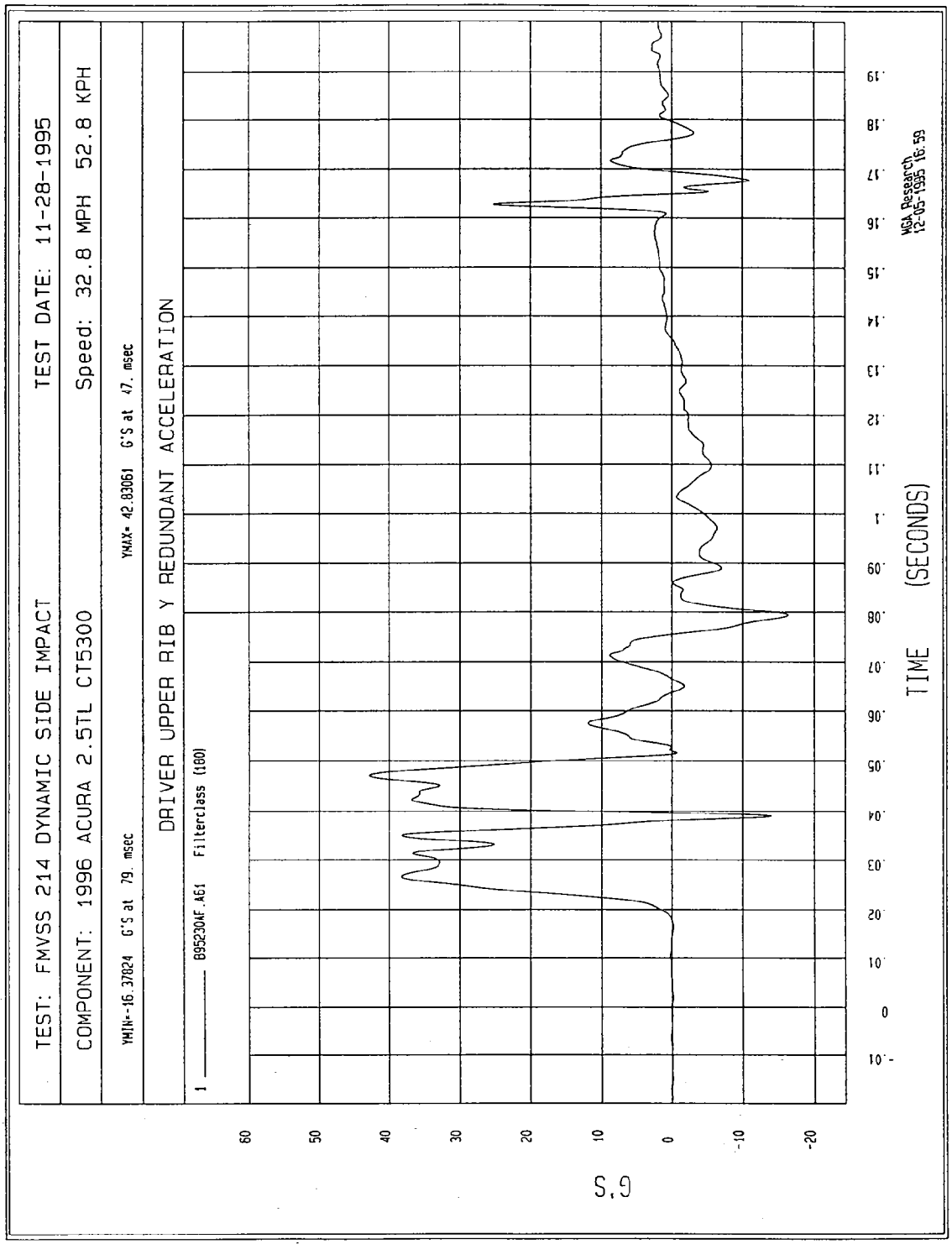
MGA Research
12-07-1995 15:03


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-16.37824 G'S at 79. msec
YMAX= 42.83061 G'S at 47. msec
DRIVER UPPER RIB Y REDUNDANT ACCELERATION
1 _____ B95230AF.A61 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G's
.01
0
.10
.02
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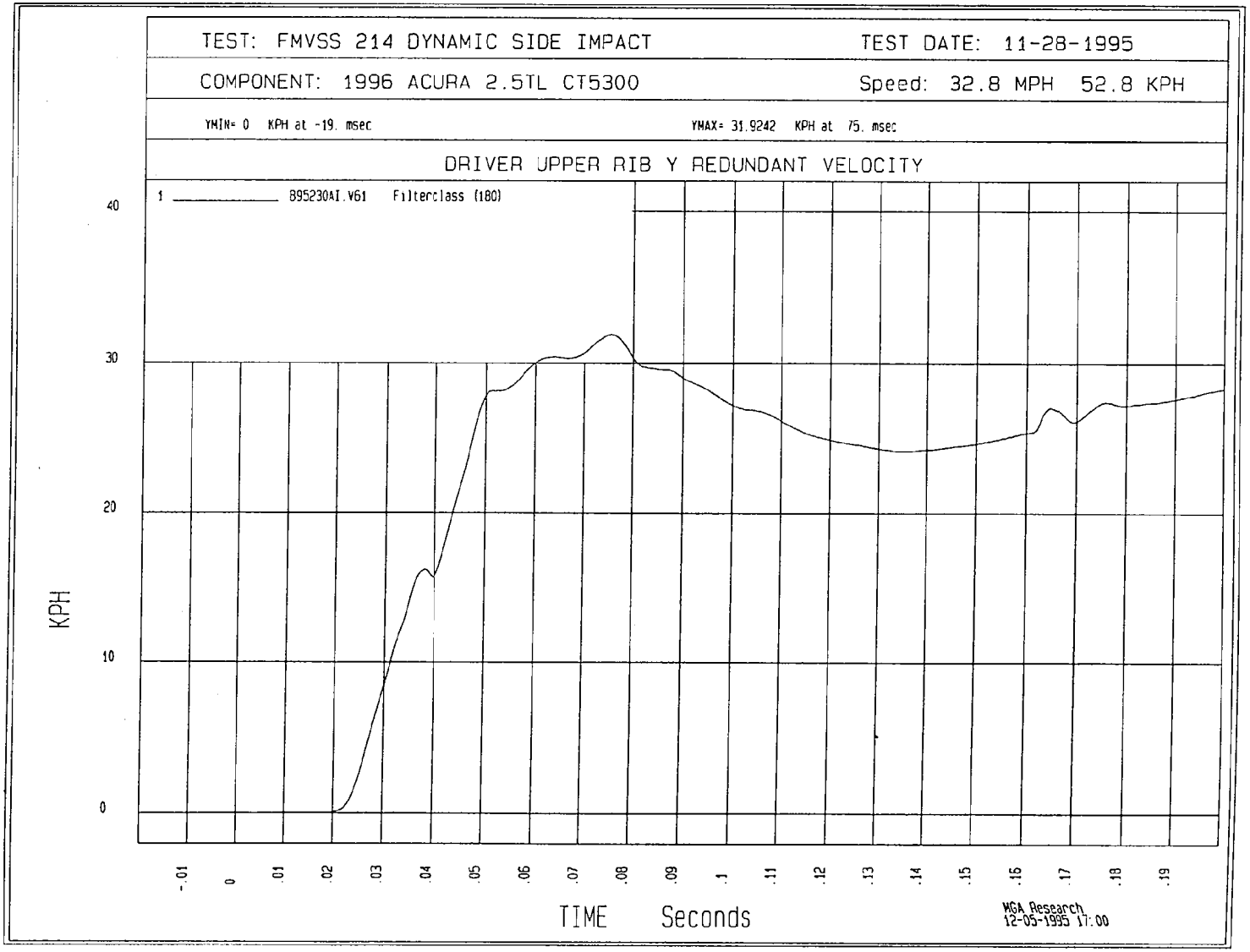
TIME (SECONDS)
MGA Research
12-05-1995 16:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 0 KPH at -19. msec
YMAX= 31.9242 KPH at 75. msec
DRIVER UPPER RIB Y REDUNDANT VELOCITY
1 895230AI.V61 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
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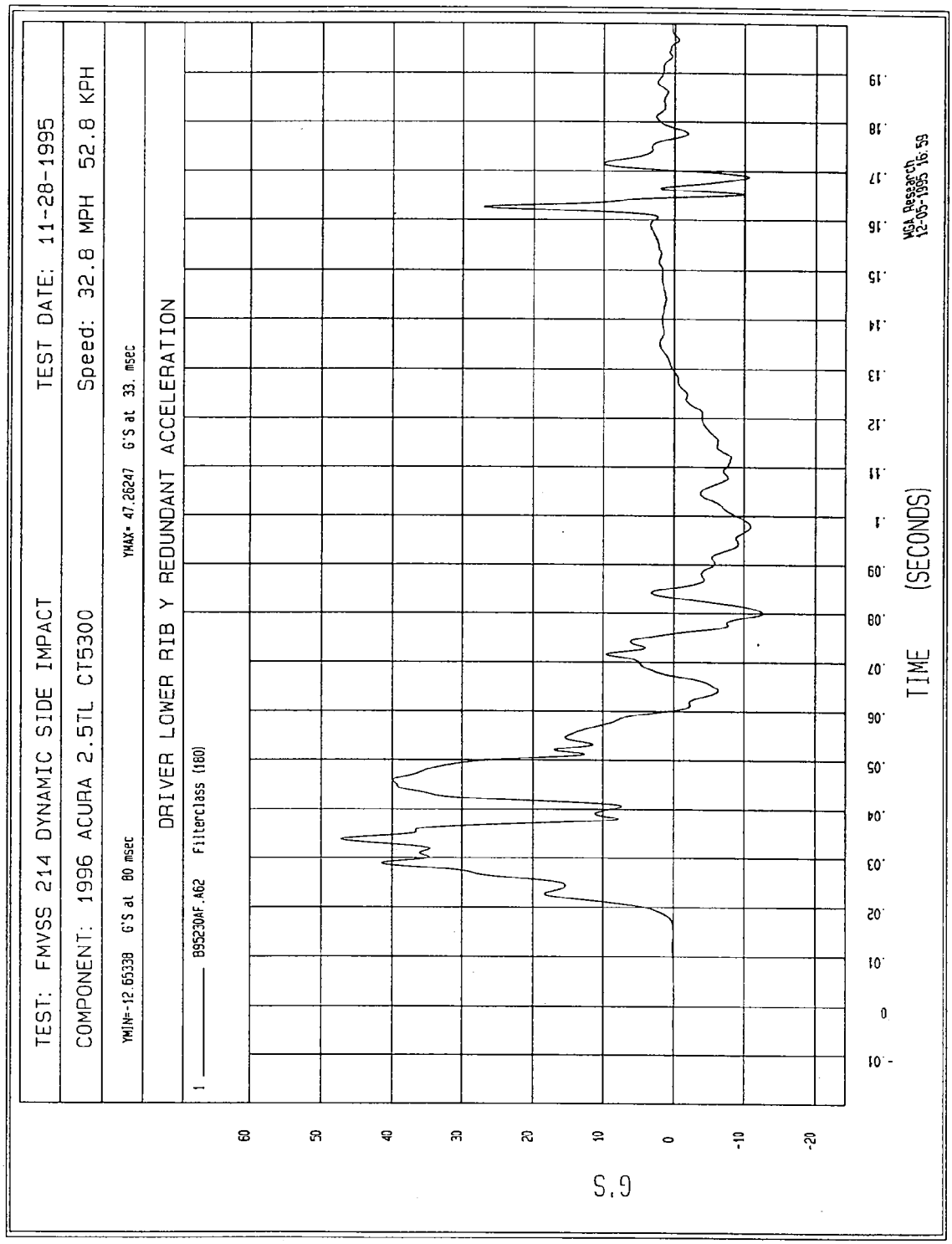
TIME Seconds
MGA Research
12-05-1995 17:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-12.65338 G'S at 80 msec
YMAX= 47.26247 G'S at 33. msec
DRIVER LOWER RIB Y REDUNDANT ACCELERATION
1 B95230AF.A62 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G'S
TIME (SECONDS)
-.01
0
.10
.20
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.04
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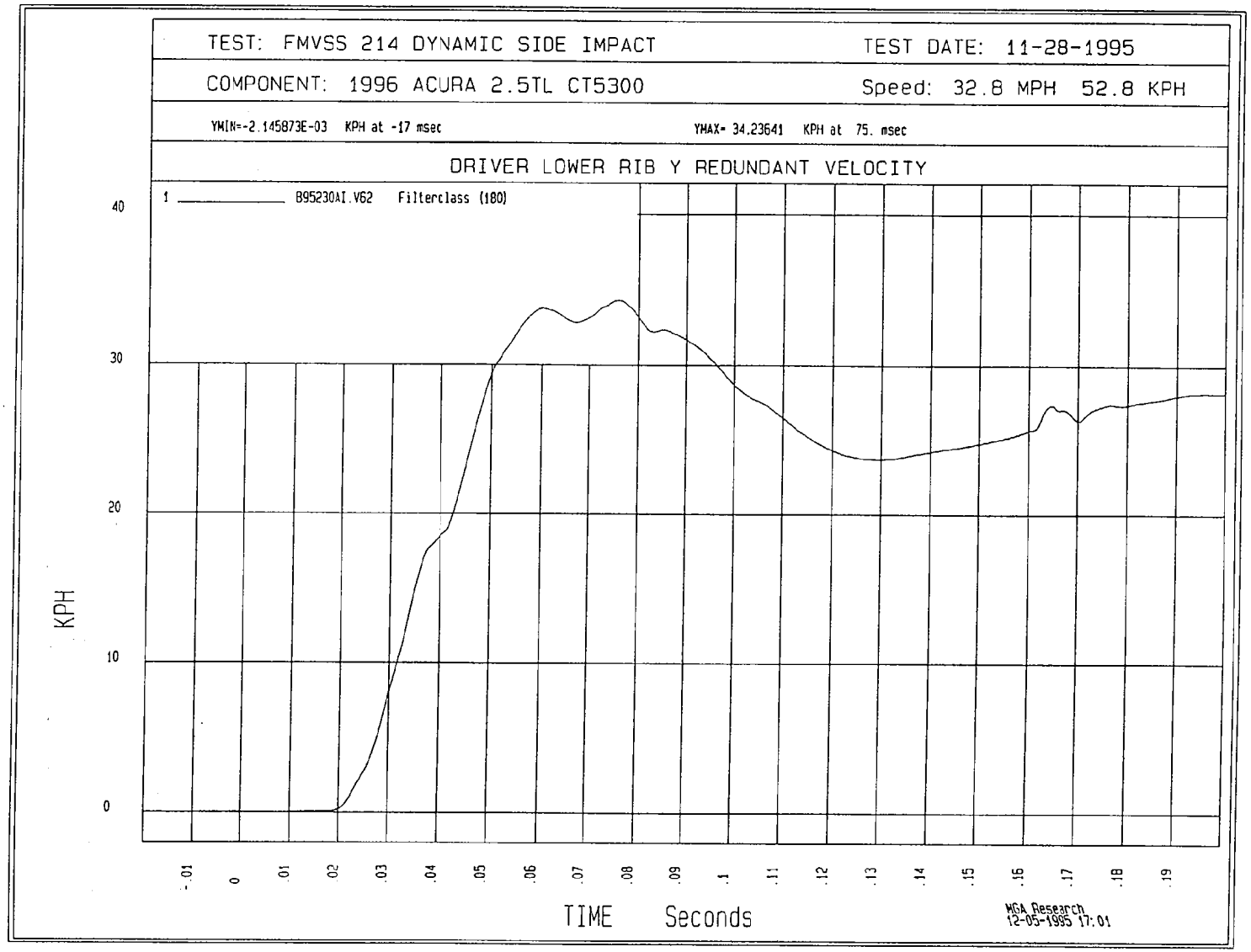
MGA Research
12-05-1995 16:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-2.145873E-03 KPH at -17 msec
YMAX= 34.23641 KPH at 75. msec
DRIVER LOWER RIB Y REDUNDANT VELOCITY
1 B95230AI.V62 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
.06
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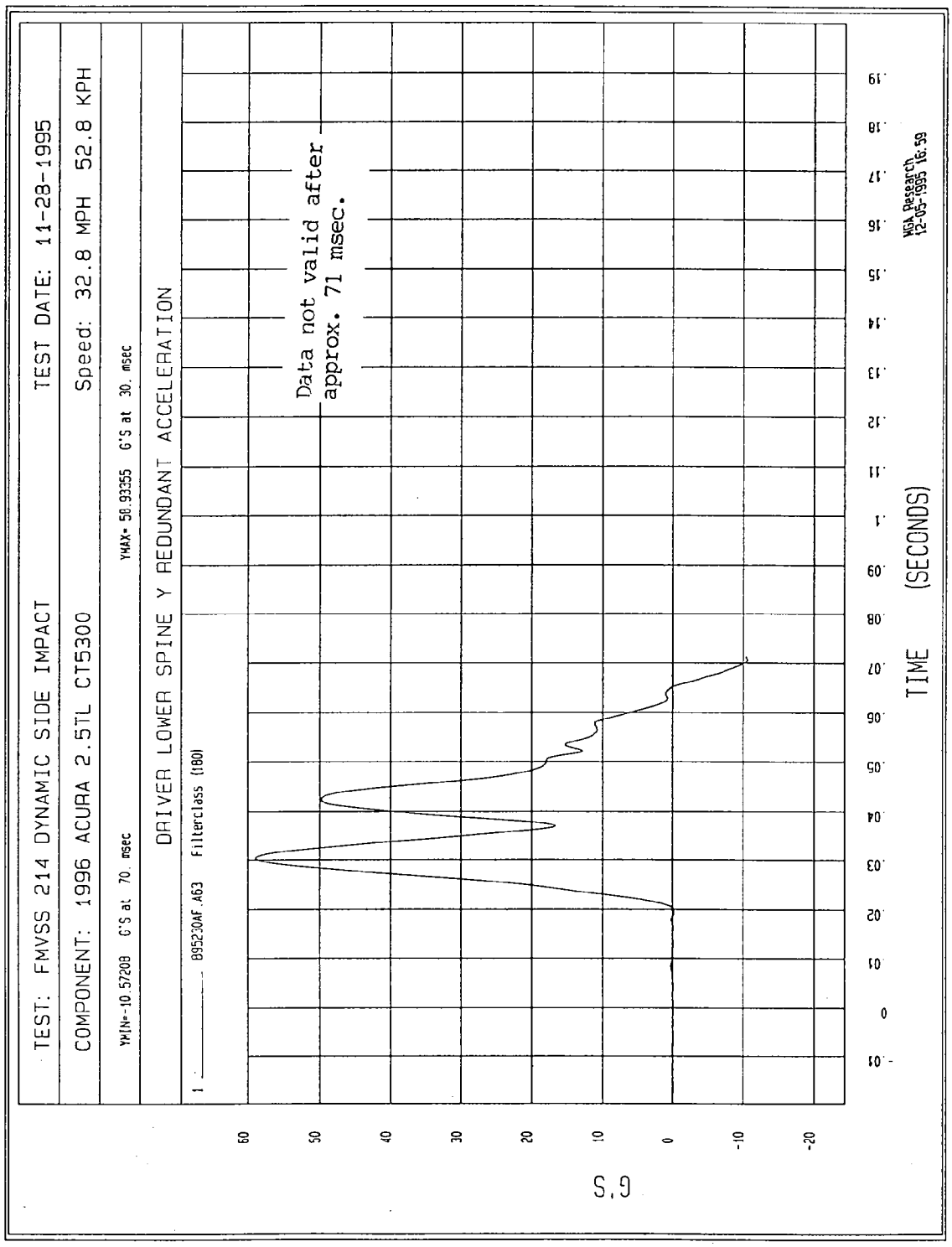
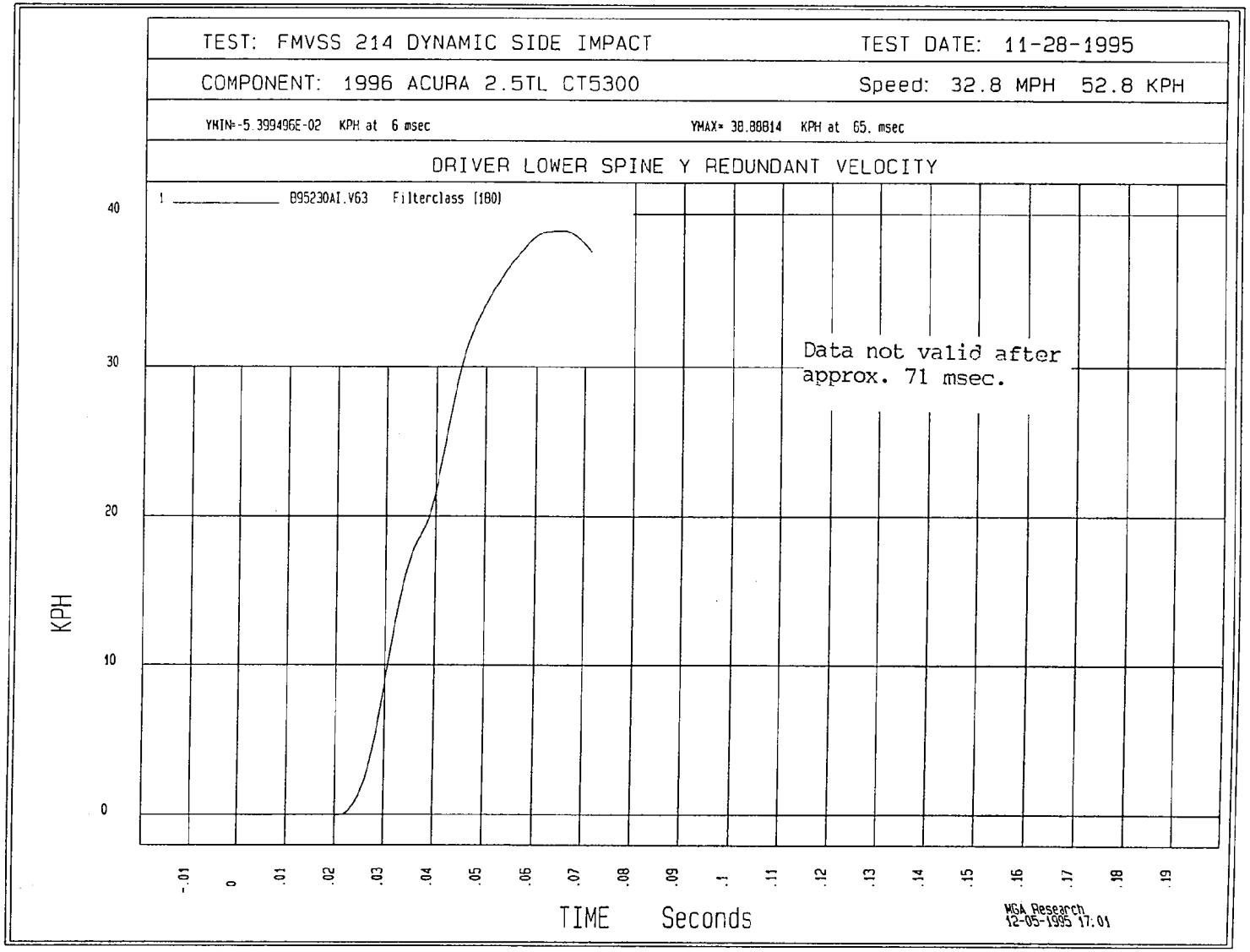
TIME Seconds
MGA Research
12-05-1995 17:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-10.57208 G'S at 70. msec
YMAX= 58.93355 G'S at 30. msec
DRIVER LOWER SPINE Y REDUNDANT ACCELERATION
1 _____ B95230AF.A63 Filterclass (180)
Data not valid after approx. 71 msec.
G'S
TIME (SECONDS)
MGA Research 12-05-1995 16:59


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-5.399496E-02 KPH at 6 msec
YMAX= 38.88814 KPH at 65. msec
DRIVER LOWER SPINE Y REDUNDANT VELOCITY
1 B95230AI.V63 Filterclass (180)
Data not valid after approx. 71 msec.
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
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.07
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.14
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.17
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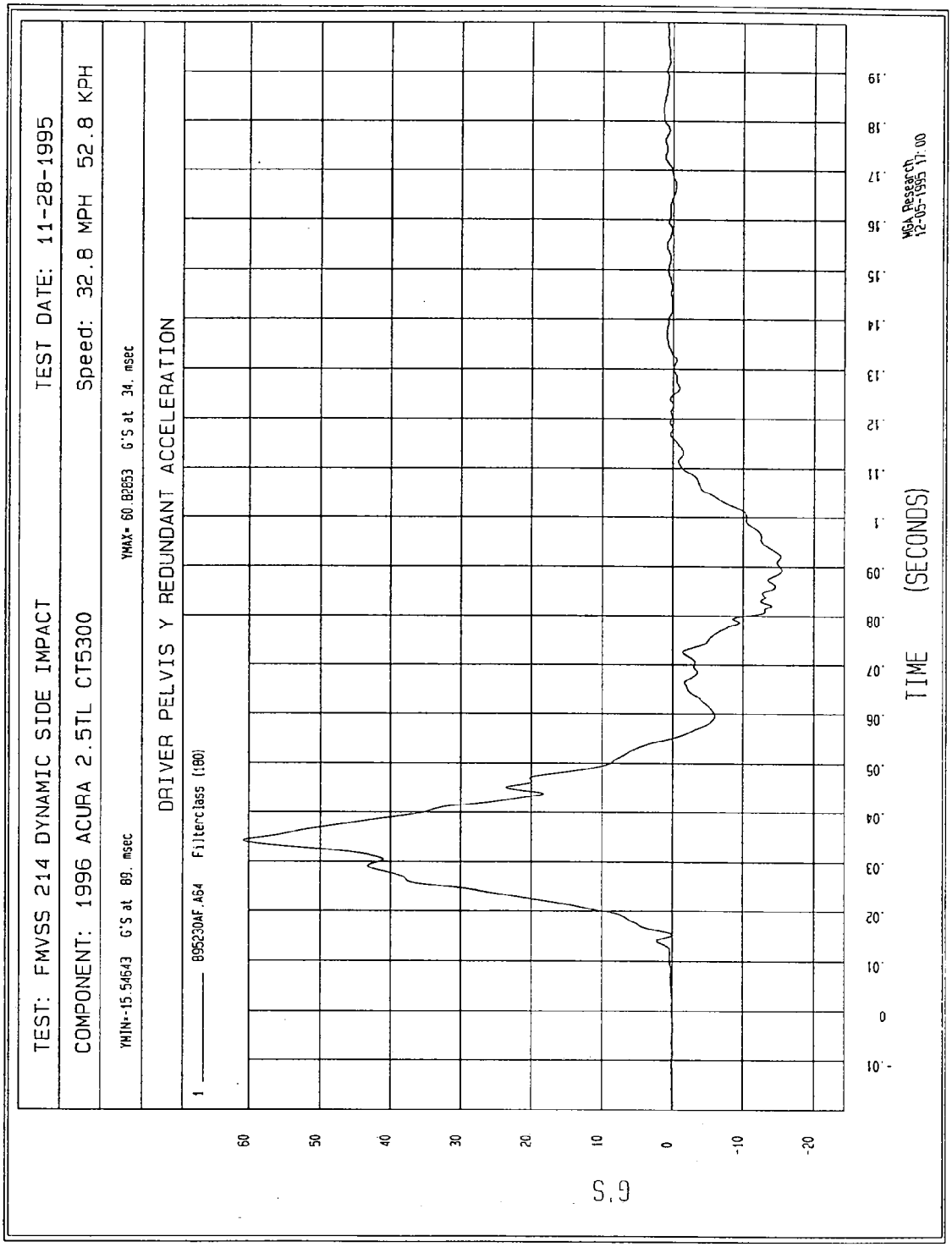
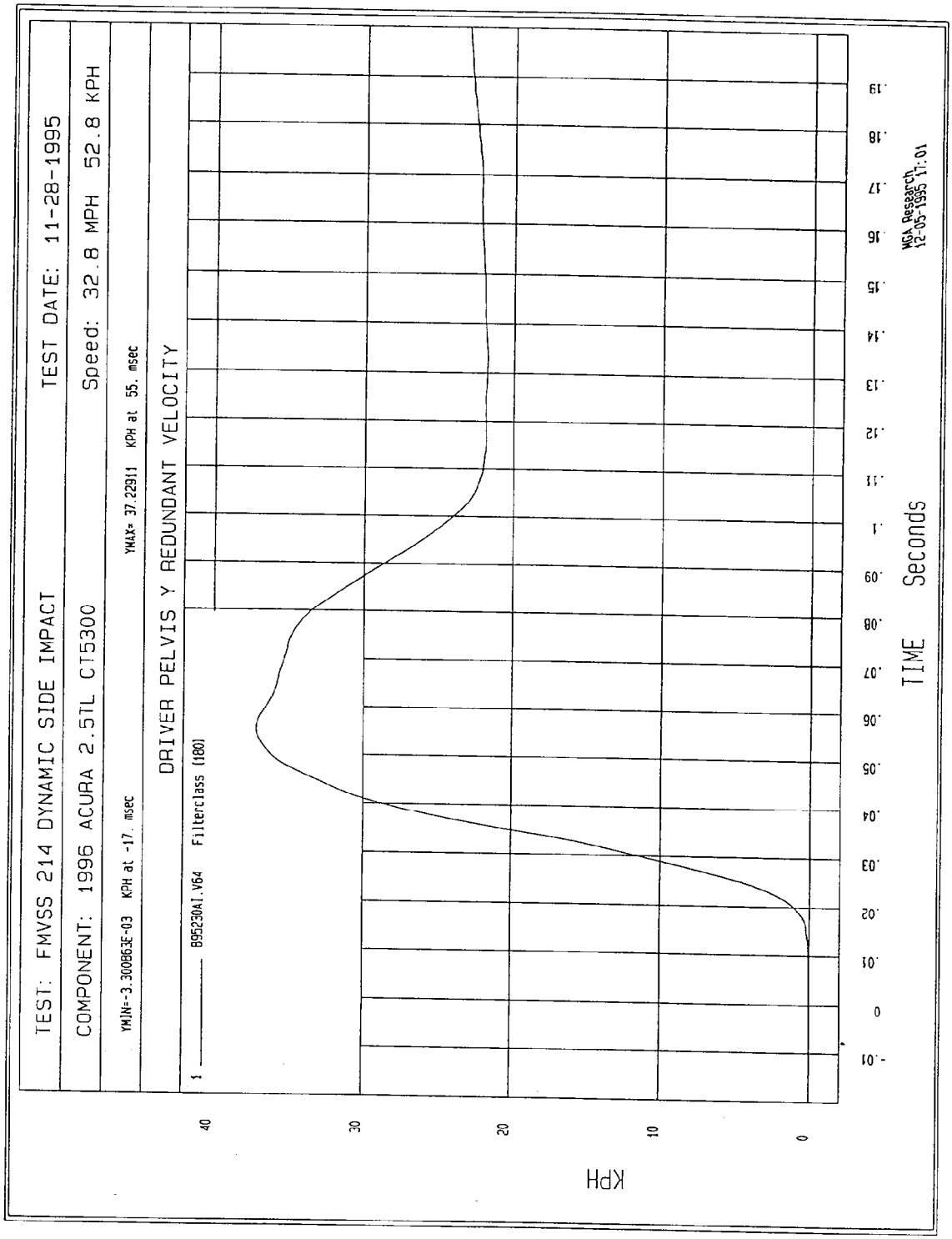
.19
TIME Seconds
MGA Research
12-05-1995 17:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-15.54643 G'S at 89. msec
YMAX= 60.82653 G'S at 34. msec
DRIVER PELVIS Y REDUNDANT ACCELERATION
1 _____ B95230AF.A64 Filterclass (180)
MGA Research
12-05-1995 17:00
G'S
TIME (SECONDS)


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-3.300863E-03 KPH at -17. msec
YMAX= 37.22911 KPH at 55. msec
DRIVER PELVIS Y REDUNDANT VELOCITY
1 B95230AI.V64 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
.06
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.1
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.13
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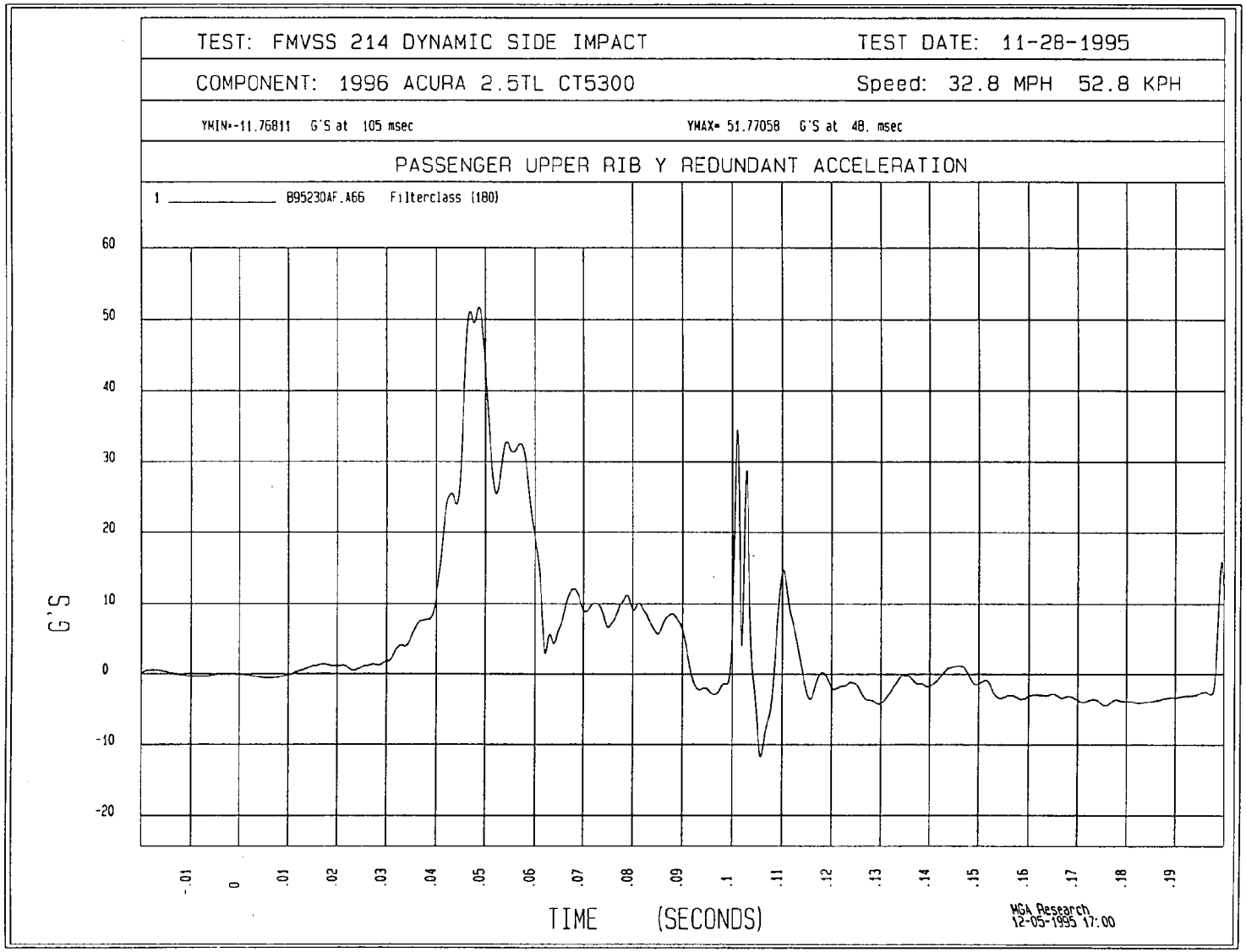
TIME Seconds
MGA Research
12-05-1995 17:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-11.76811 G'S at 105 msec
YMAX= 51.77058 G'S at 48. msec
PASSENGER UPPER RIB Y REDUNDANT ACCELERATION
1 B95230AF.A66 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
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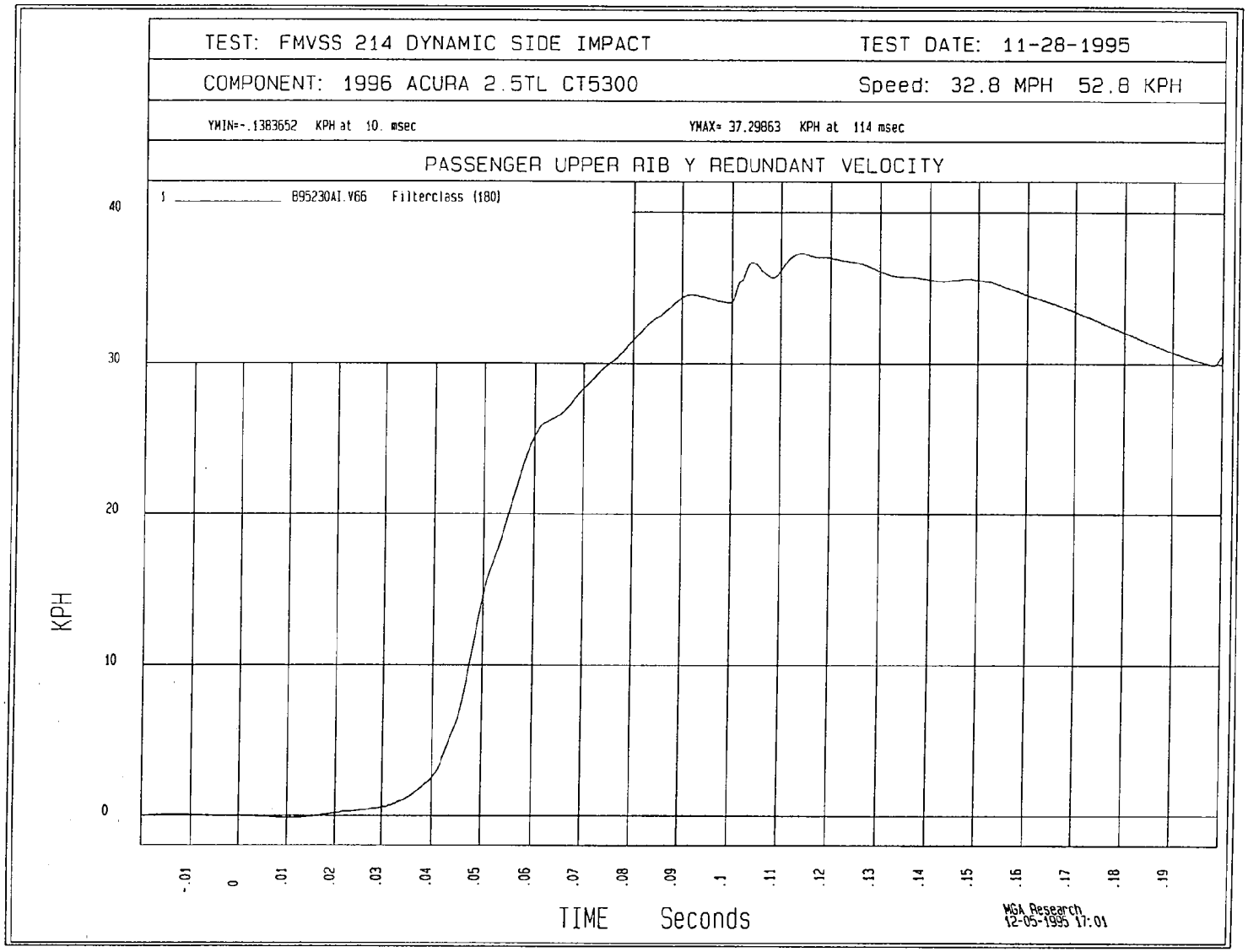
TIME (SECONDS)
MGA Research
12-05-1995 17:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-.1383652 KPH at 10. msec
YMAX= 37.29863 KPH at 114 msec
PASSENGER UPPER RIB Y REDUNDANT VELOCITY
1 B95230AI.V66 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
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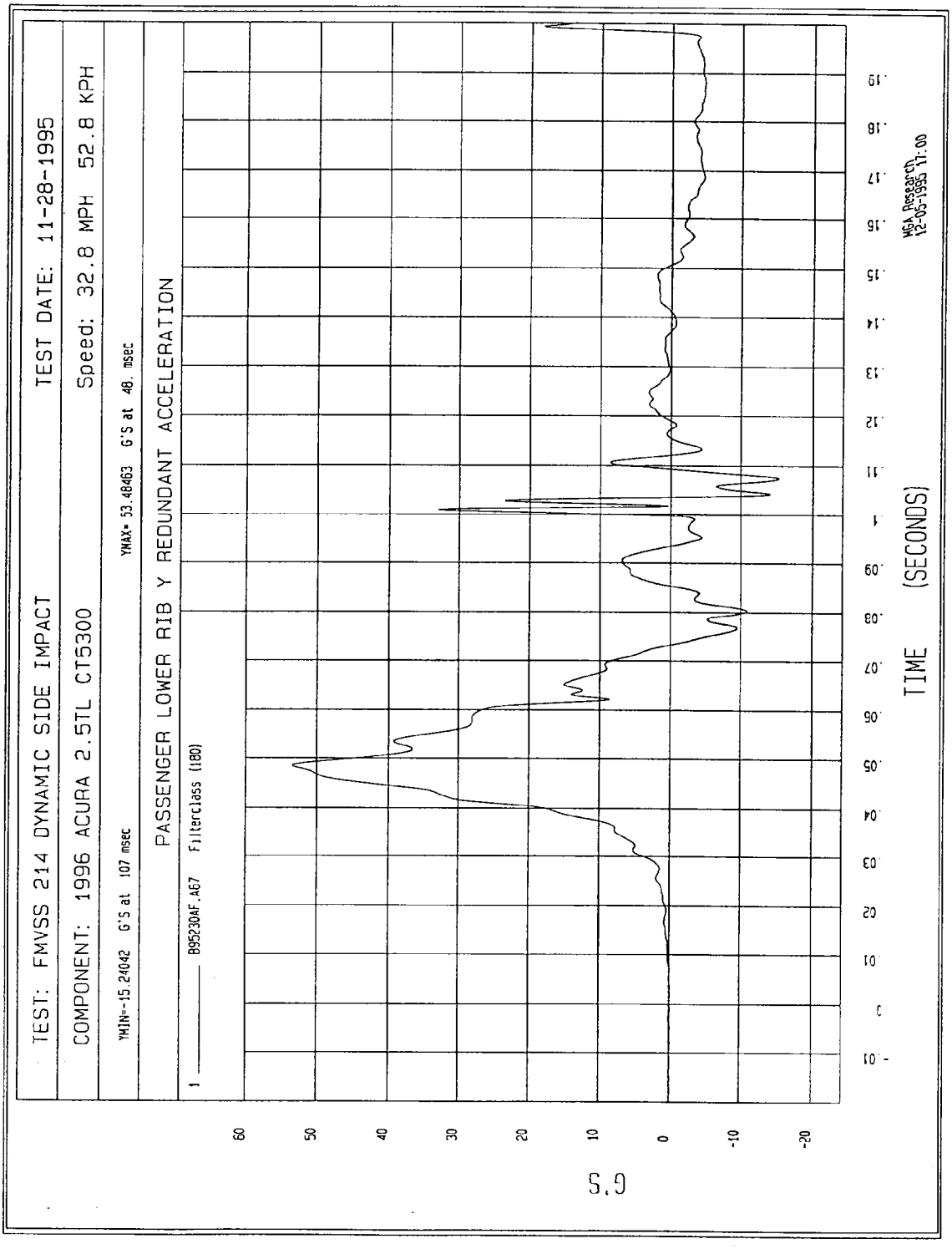
TIME Seconds
MGA Research
12-05-1995 17:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-15.24042 G'S at 107 msec
YMAX= 53.48463 G'S at 48. msec
PASSENGER LOWER RIB Y REDUNDANT ACCELERATION
1 B95230AF.A67 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
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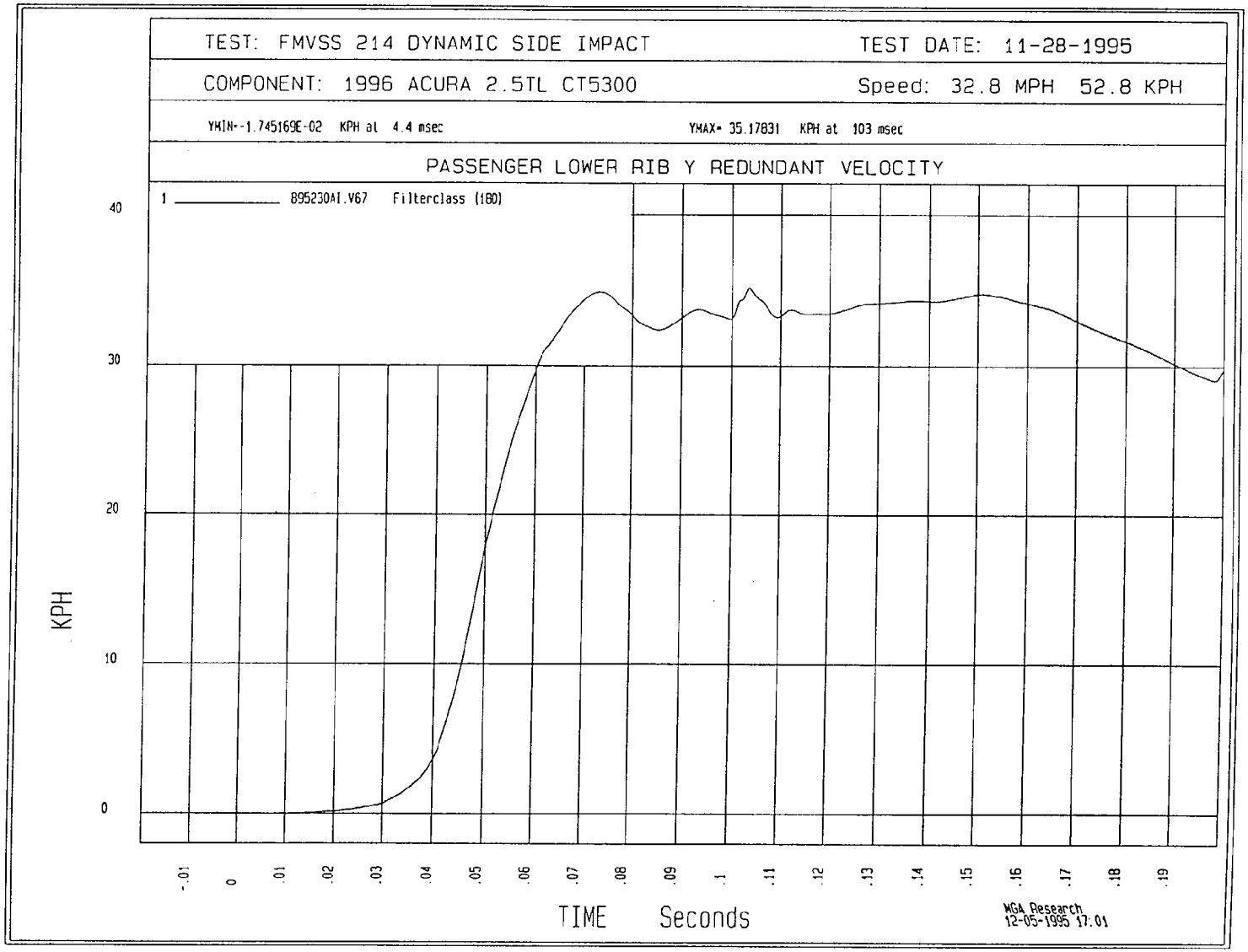
TIME (SECONDS)
MGA Research
12-05-1995 11:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.745169E-02 KPH at 4.4 msec
YMAX= 35.17831 KPH at 103 msec
PASSENGER LOWER RIB Y REDUNDANT VELOCITY
1 895230AI.V67 Filterclass (180)
KPH
40
30
20
10
0
-.01
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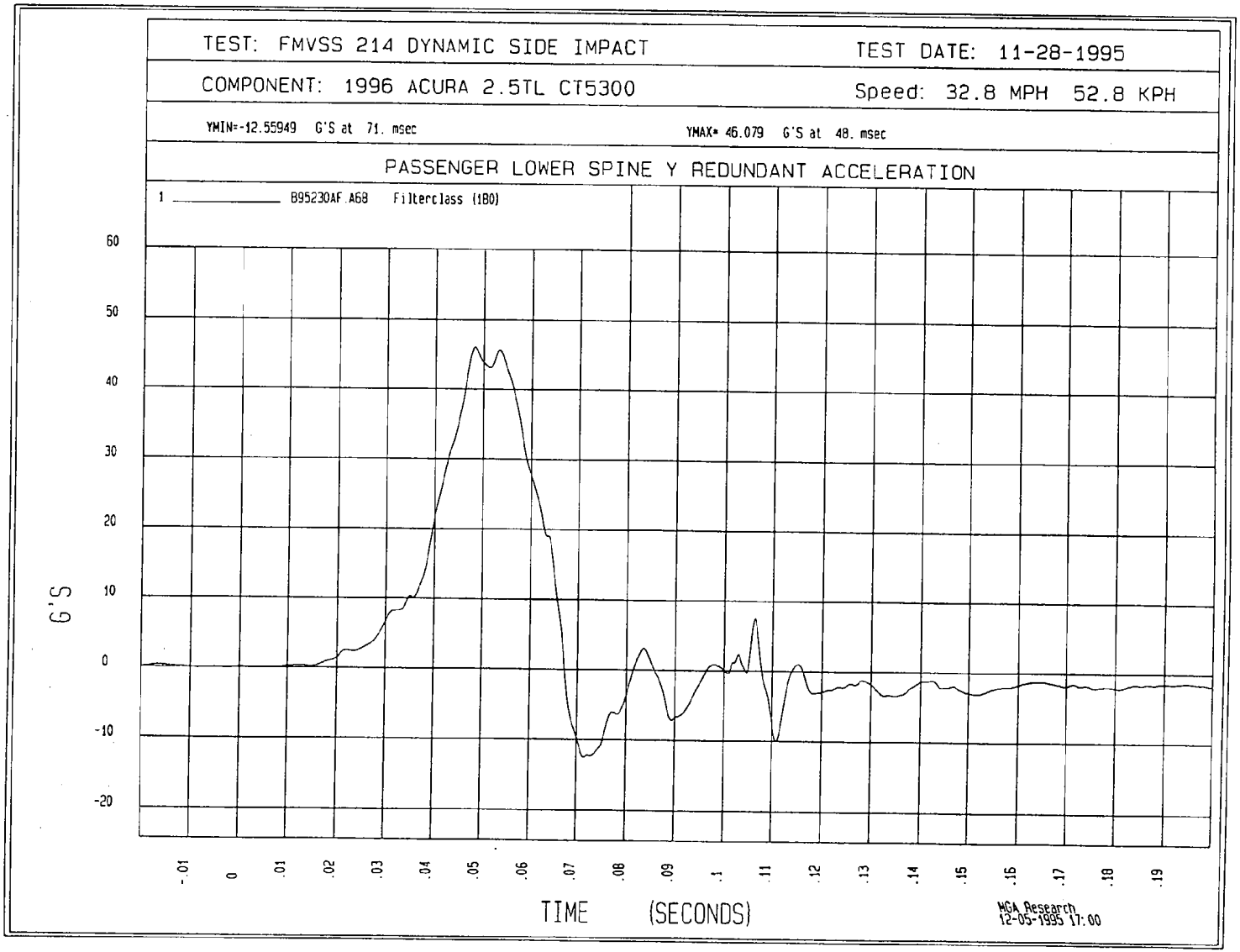
TIME Seconds
WGA Research
12-05-1995 17:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-12.55949 G'S at 71. msec
YMAX= 46.079 G'S at 48. msec
PASSENGER LOWER SPINE Y REDUNDANT ACCELERATION
1 B95230AF.A68 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
.03
.04
.05
.06
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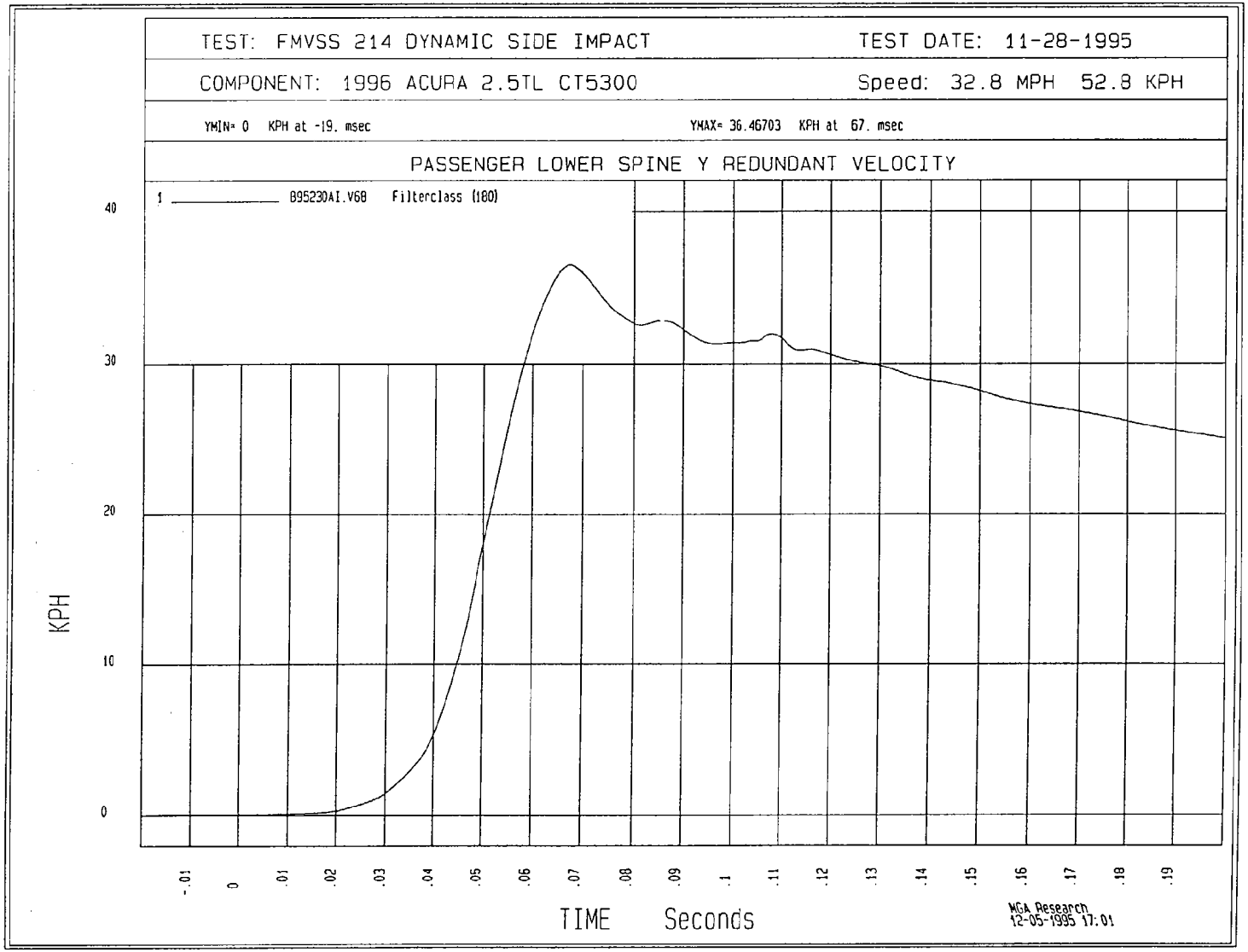
TIME (SECONDS)
MGA Research
12-05-1995 17:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN= 0 KPH at -19. msec
YMAX= 36.46703 KPH at 67. msec
PASSENGER LOWER SPINE Y REDUNDANT VELOCITY
1 B95230AI.V68 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
.03
.04
.05
.06
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.09
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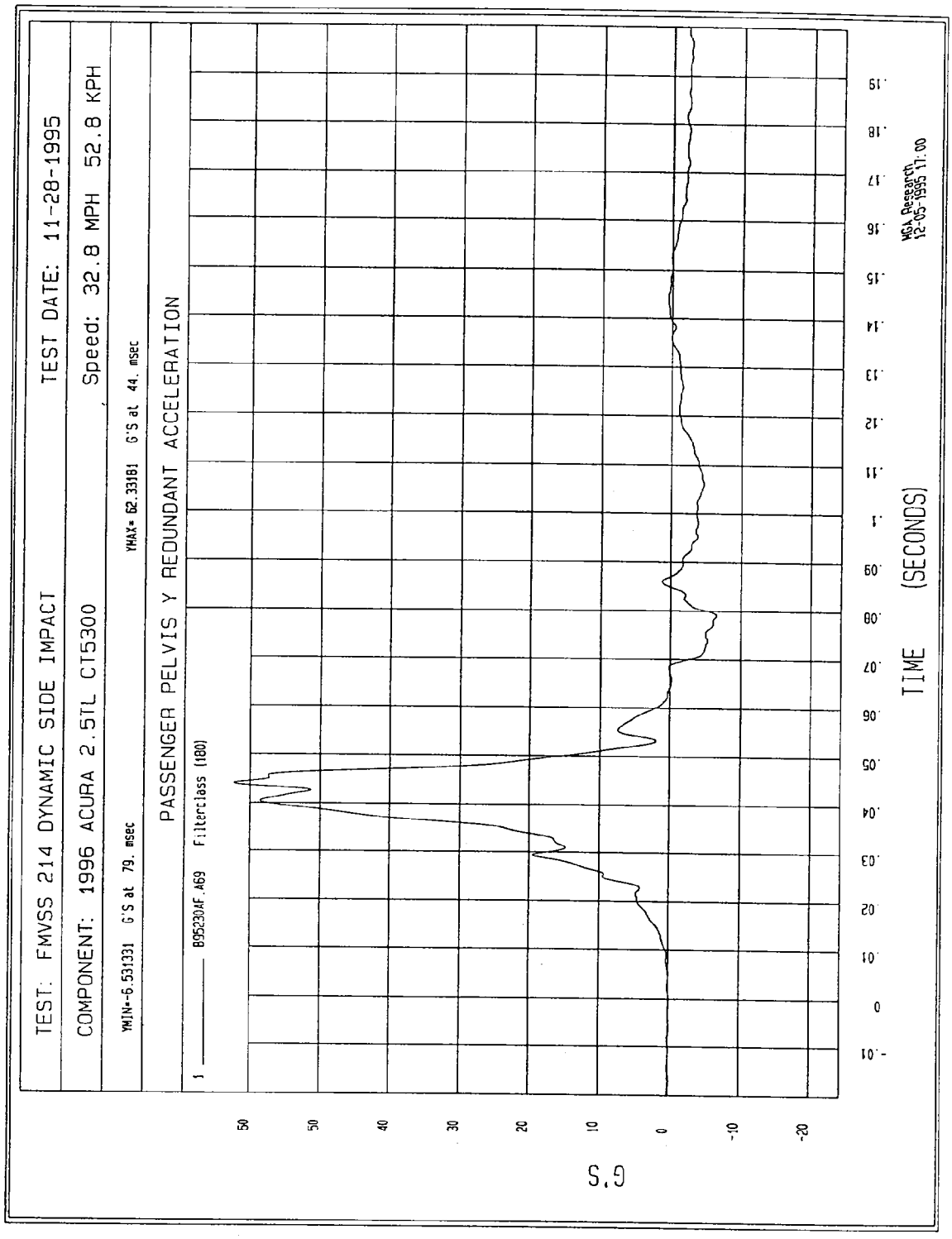
TIME Seconds
MGA Research
12-05-1995 17:01


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-6.531331 G'S at 79. msec
YMAX= 62.33181 G'S at 44. msec
PASSENGER PELVIS Y REDUNDANT ACCELERATION
1 B95230AF.A69 Filterclass (180)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
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.04
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.06
.07
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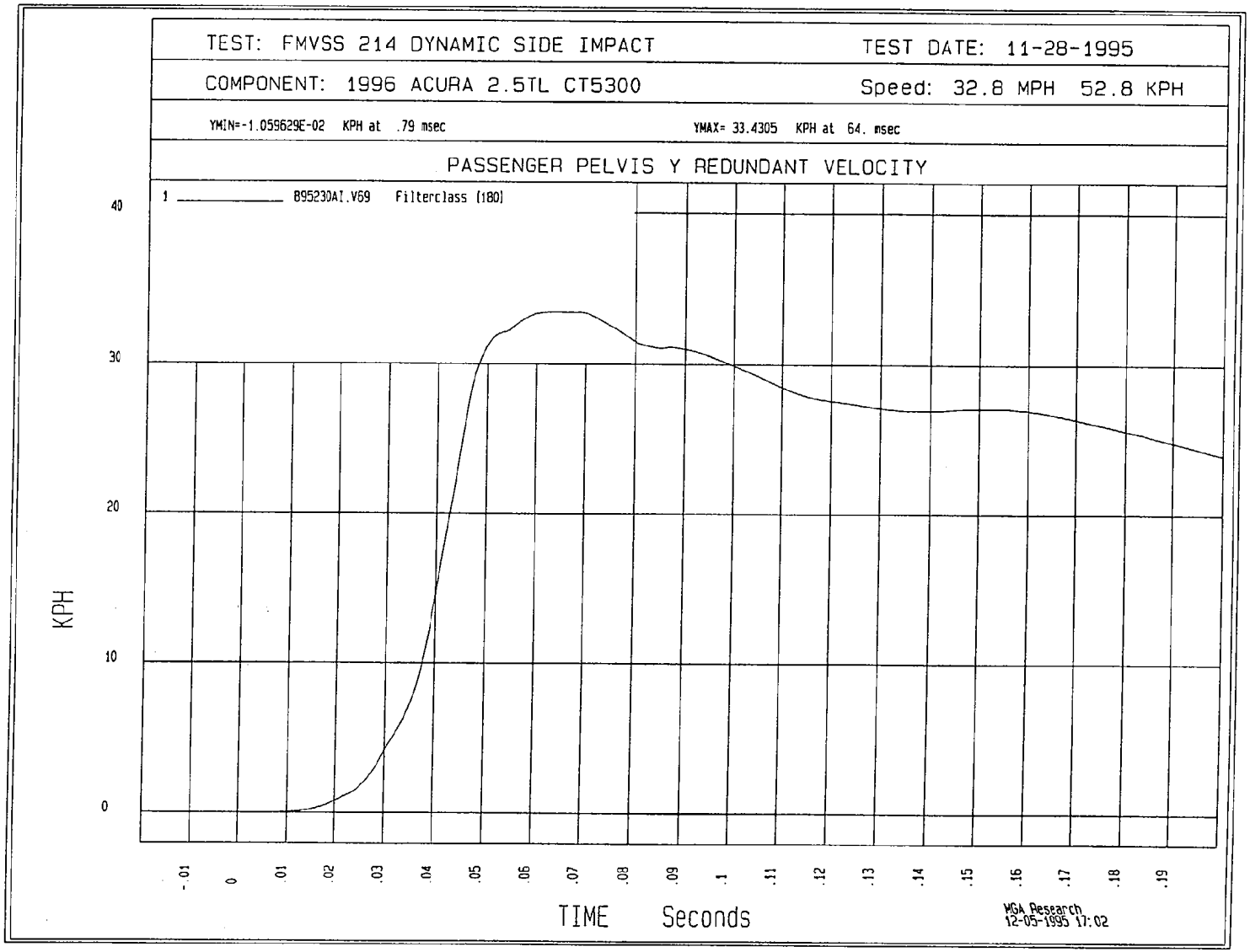
TIME (SECONDS)
MGA Research
12-05-1995 17:00


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-1.059629E-02 KPH at .79 msec
YMAX= 33.4305 KPH at 64. msec
PASSENGER PELVIS Y REDUNDANT VELOCITY
1 B95230AI.V69 Filterclass (180)
KPH
40
30
20
10
0
-.01
0
.01
.02
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.04
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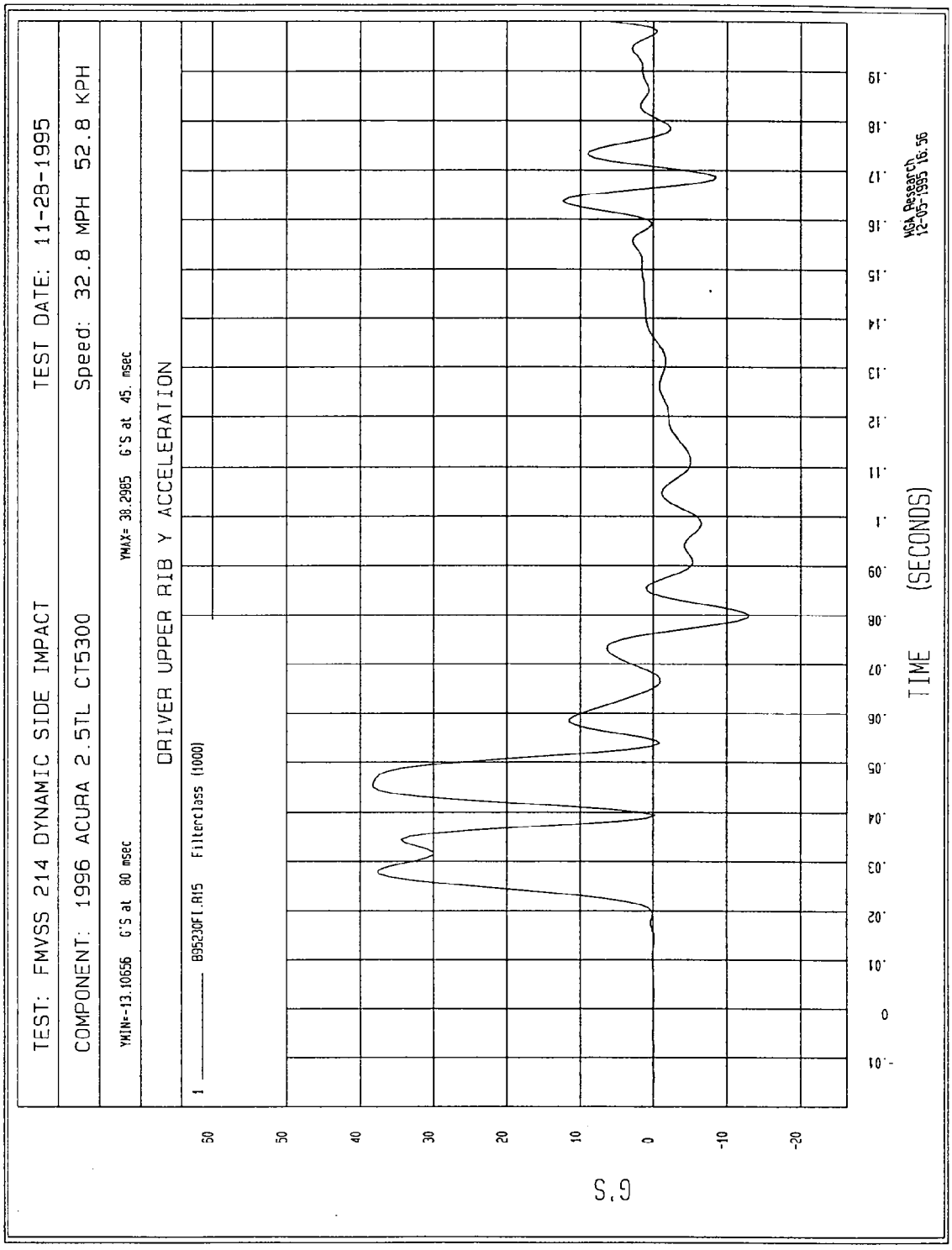
TIME Seconds
MGA Research
12-05-1995 17:02

FINITE IMPULSE RESPONSE (FIR) FILTERED DATA


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-13.10656 G'S at 80 msec
YMAX= 38.2985 G'S at 45. msec
DRIVER UPPER RIB Y ACCELERATION
1 B95230FI.A15 Filterclass (1000)
50
40
30
20
10
0
-10
-20
-.01
0
.01
.02
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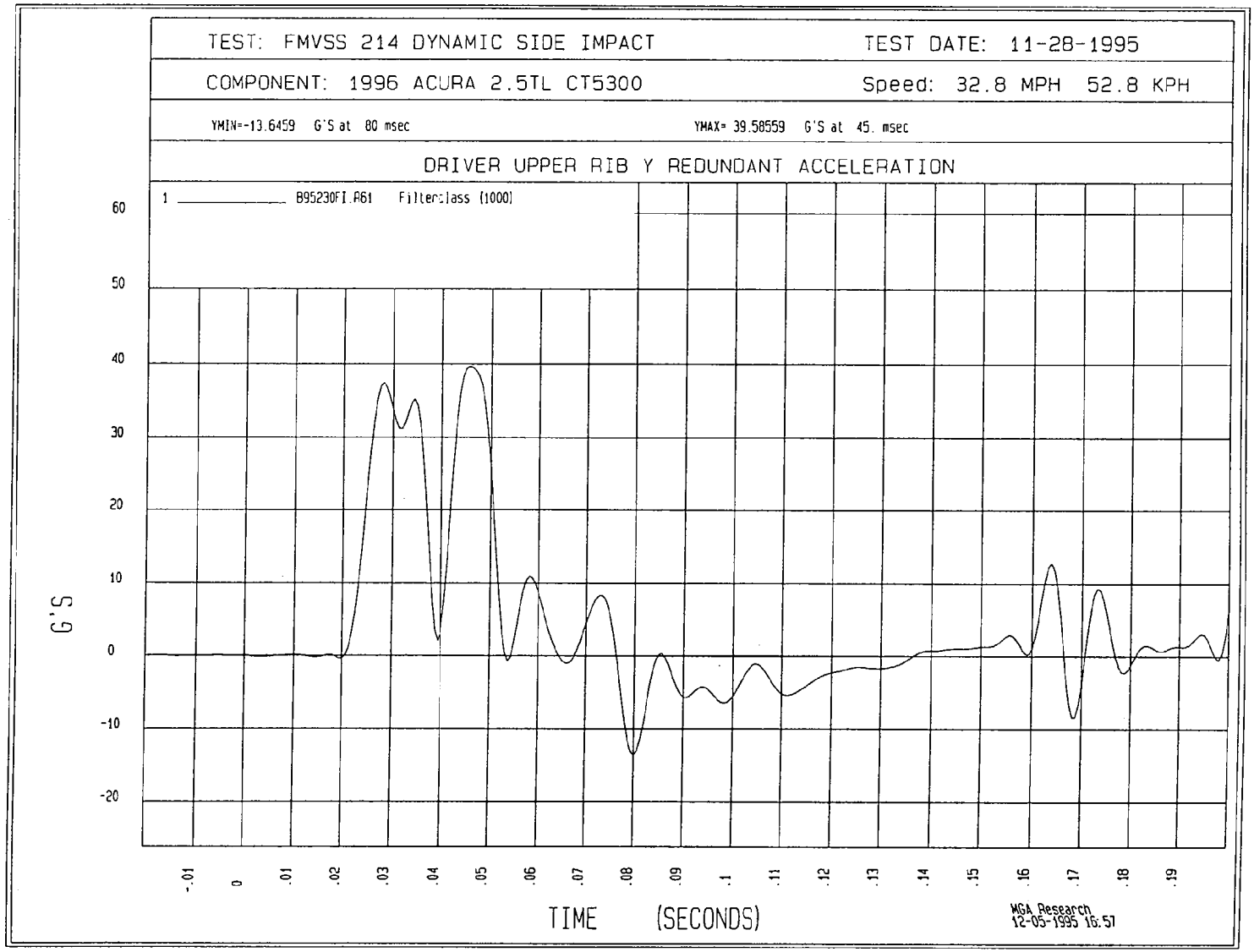
.19
TIME (SECONDS)
MGA Research
12-05-1995 16:56
G's


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-13.6459 G'S at 80 msec
YMAX= 39.58559 G'S at 45. msec
DRIVER UPPER RIB Y REDUNDANT ACCELERATION
1 B95230FI.A61 Filter Class (1000)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
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.01
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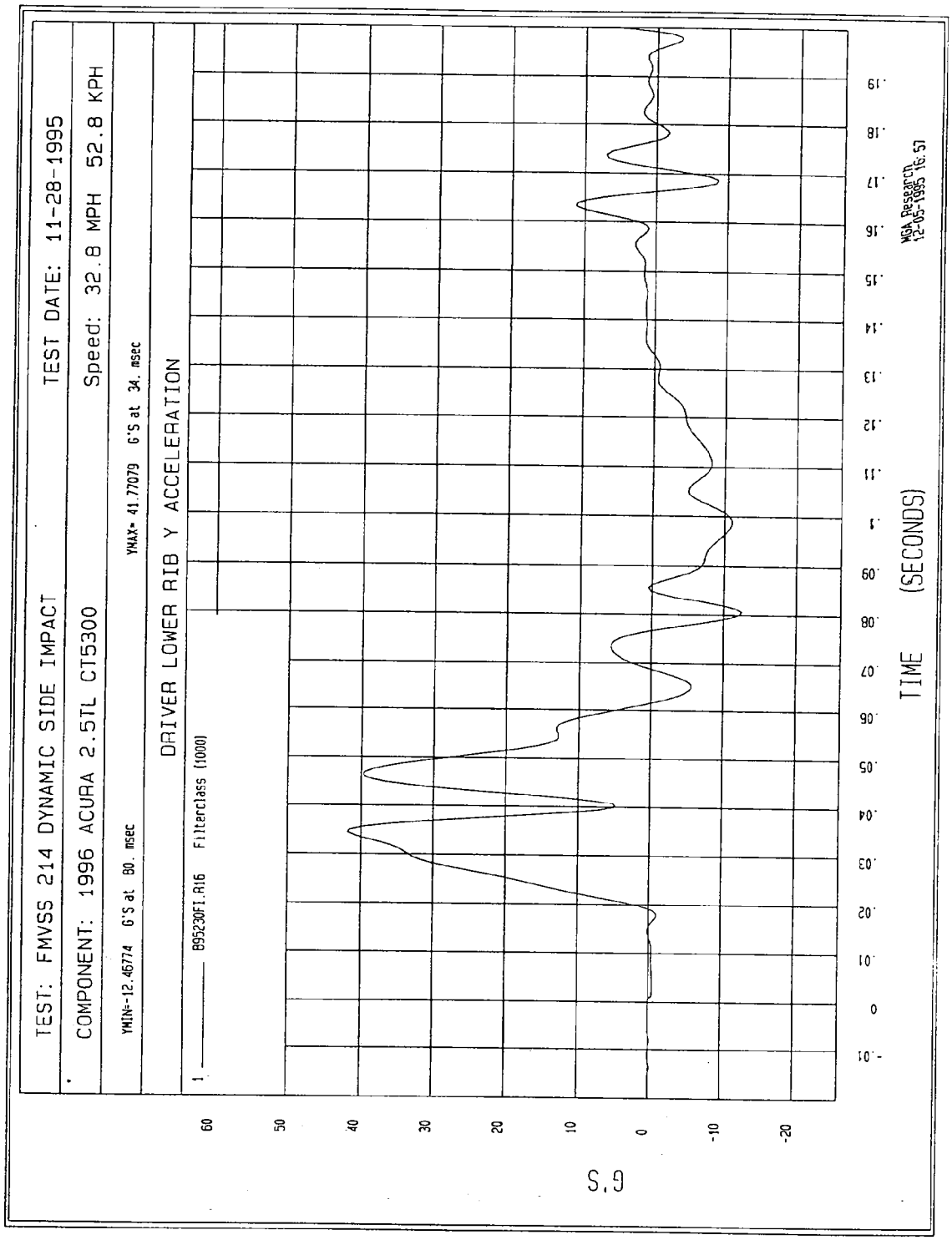
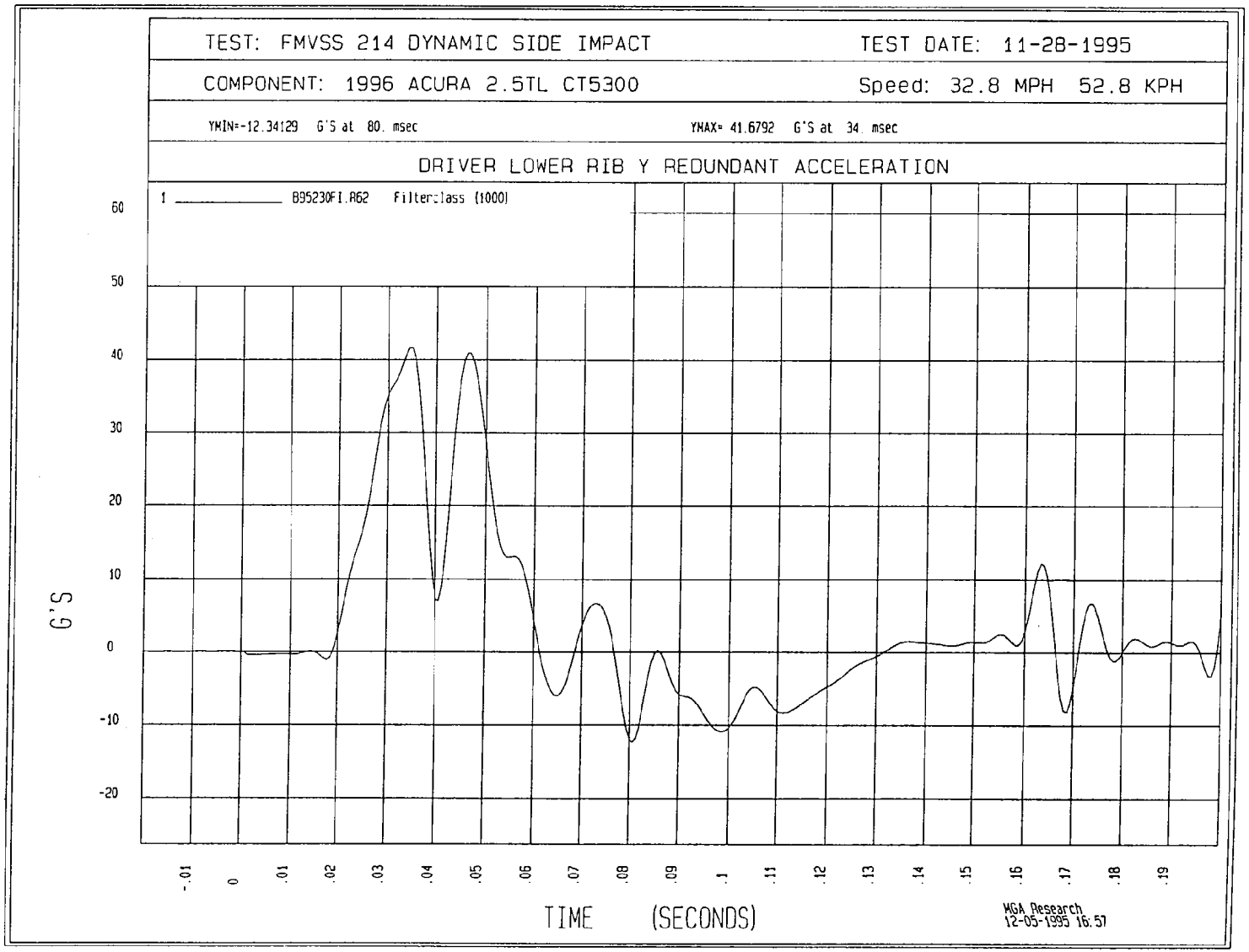
TIME (SECONDS)
MGA Research
12-05-1995 16:57


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-12.46774 G'S at 80. msec
YMAX= 41.77079 G'S at 34. msec
DRIVER LOWER RIB Y ACCELERATION
1 B95230FI.R16 Filterclass (1000)
G'S
TIME (SECONDS)
MGA Research
12-05-1995 16:57


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-12.34129 G'S at 80. msec
YMAX= 41.6792 G'S at 34. msec
DRIVER LOWER RIB Y REDUNDANT ACCELERATION
1 B95230FI.R62 Filter:Class (1000)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
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.01
.02
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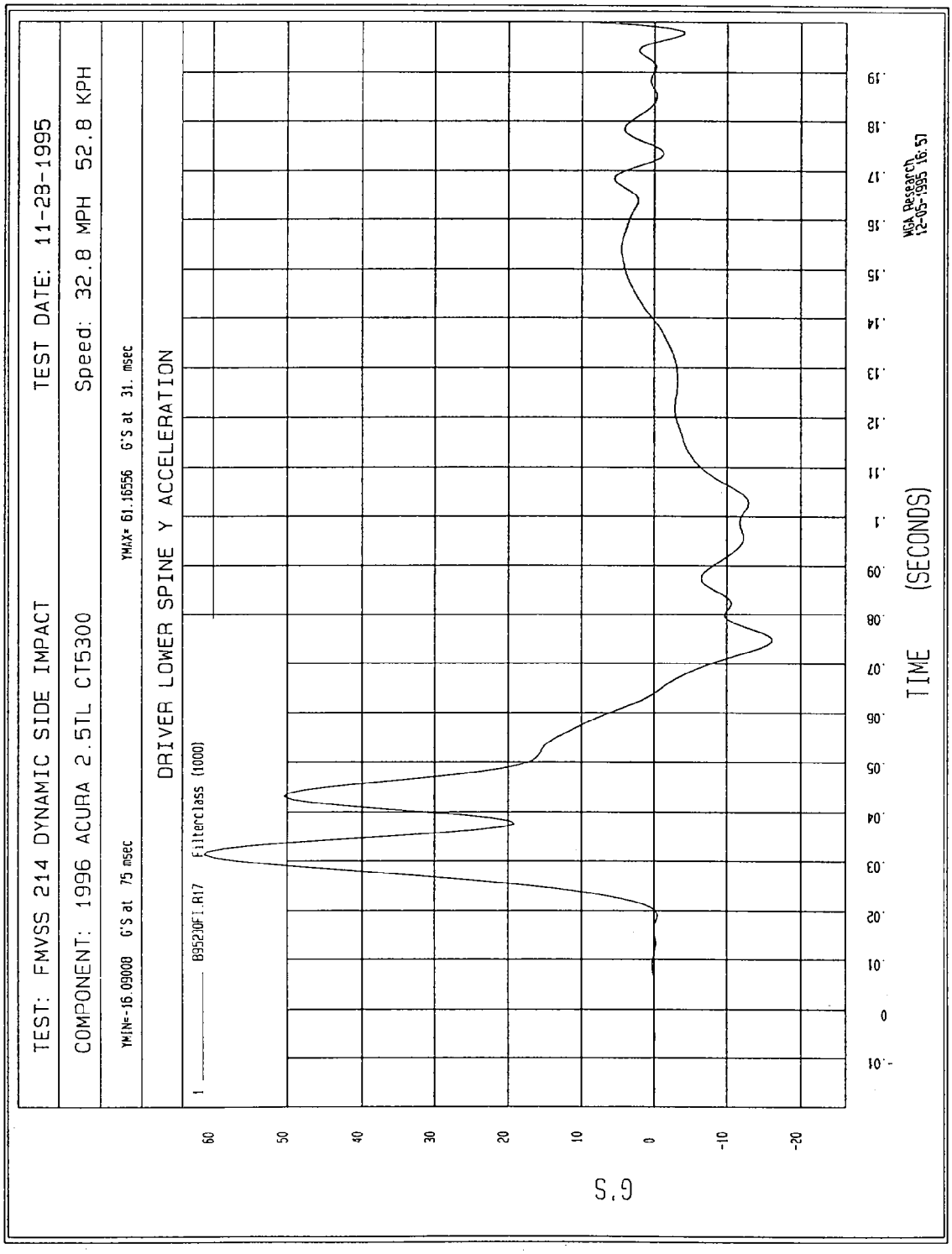
TIME (SECONDS)
MGA Research
12-05-1995 16:57


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-16.09008 G'S at 75 msec
YMAX= 61.16556 G'S at 31. msec
DRIVER LOWER SPINE Y ACCELERATION
1 B95210F1.R17 filterclass (1000)
60
50
40
30
20
10
0
-10
-20
G'S
.01
0
.10
.02
.03
.04
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.06
.07
.08
.09
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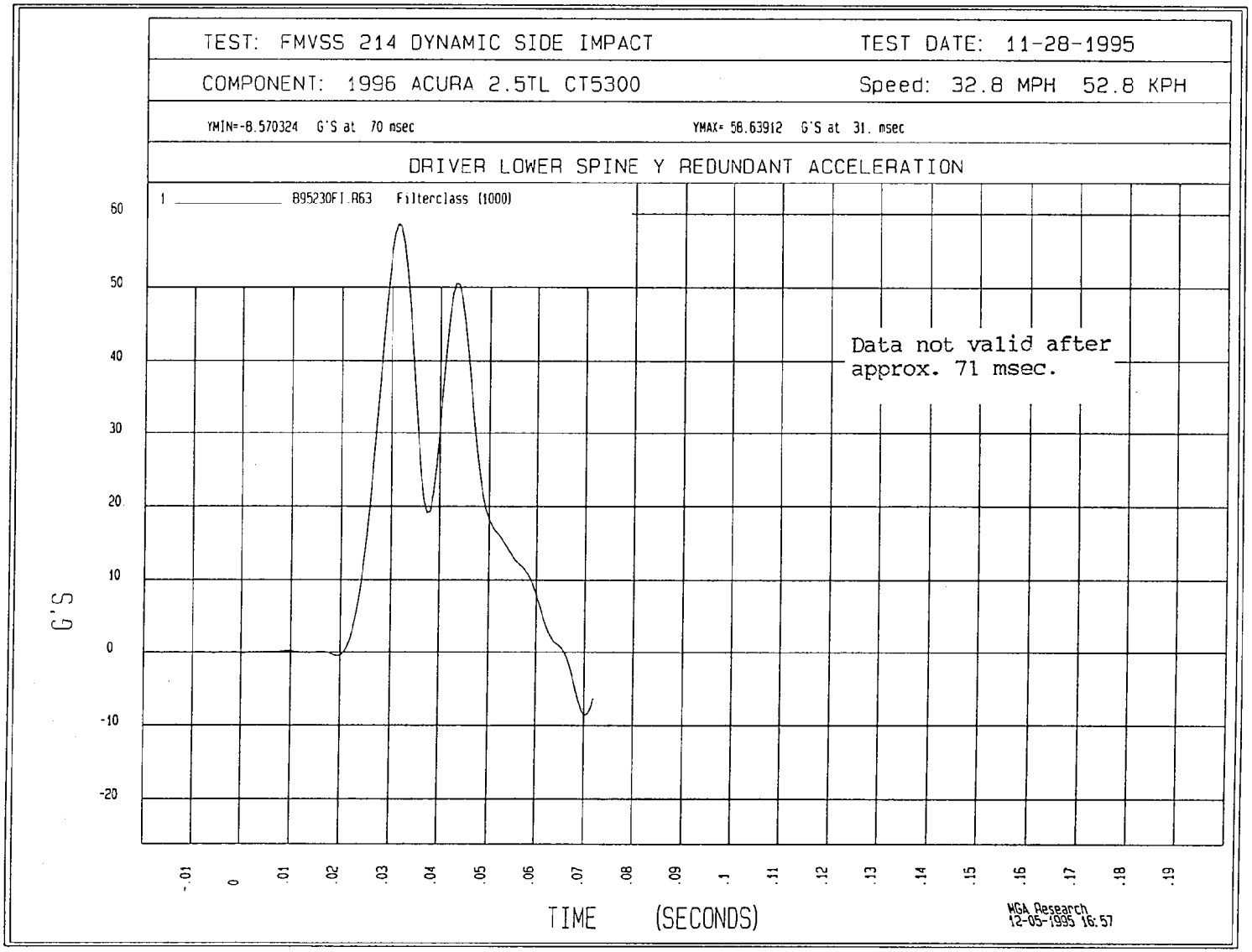
TIME (SECONDS)
MGA Research
12-05-1995 16:57


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-8.570324 G'S at 70 msec
YMAX= 58.63912 G'S at 31. msec
DRIVER LOWER SPINE Y REDUNDANT ACCELERATION
1 B95230FI.R63 Filterclass (1000)
Data not valid after approx. 71 msec.
G'S
60
50
40
30
20
10
0
-10
-20
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
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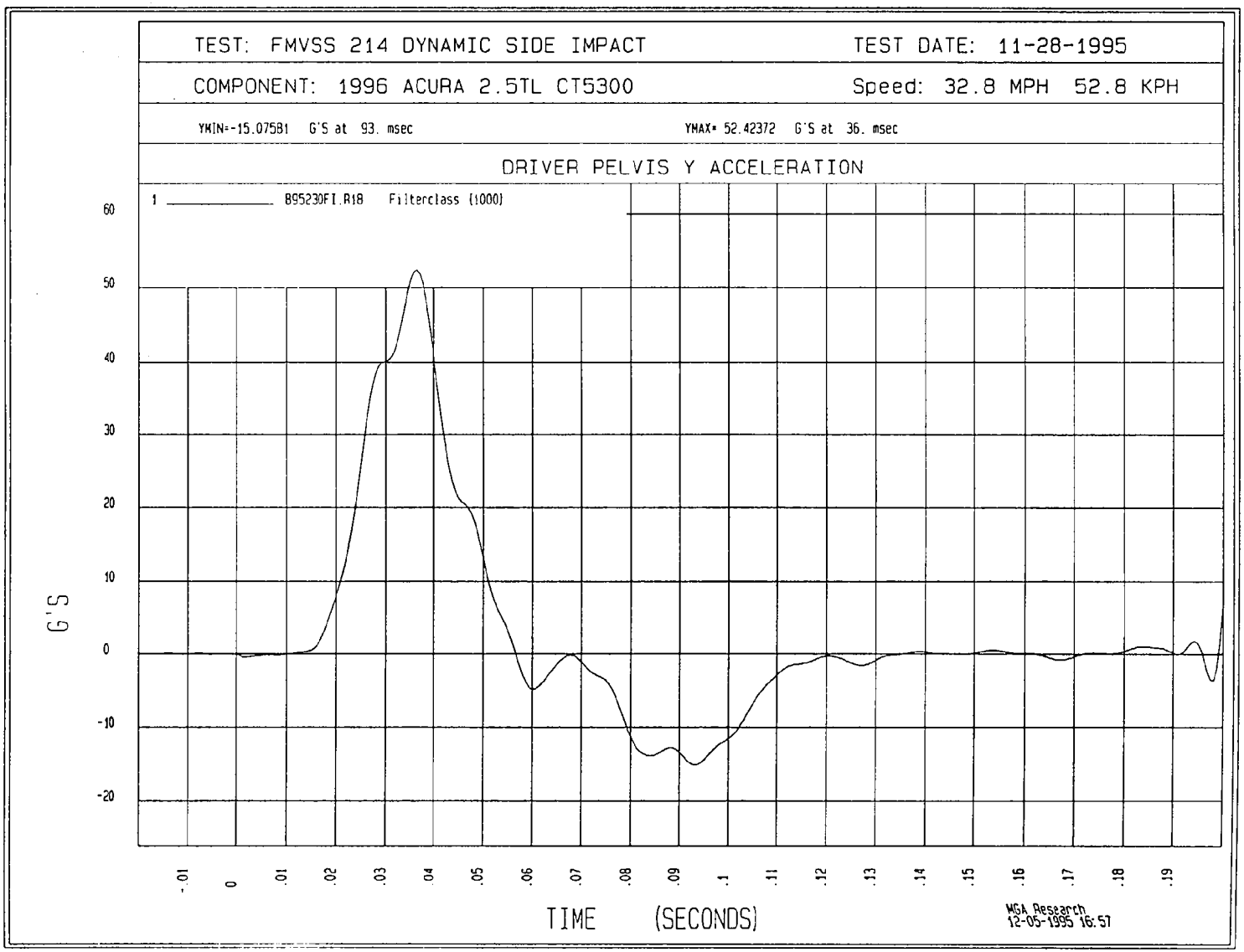
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
12-05-1995 16:57


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-15.07581 G'S at 93. msec
YMAX= 52.42372 G'S at 36. msec
DRIVER PELVIS Y ACCELERATION
1 B95230FI.R18 Filterclass (1000)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
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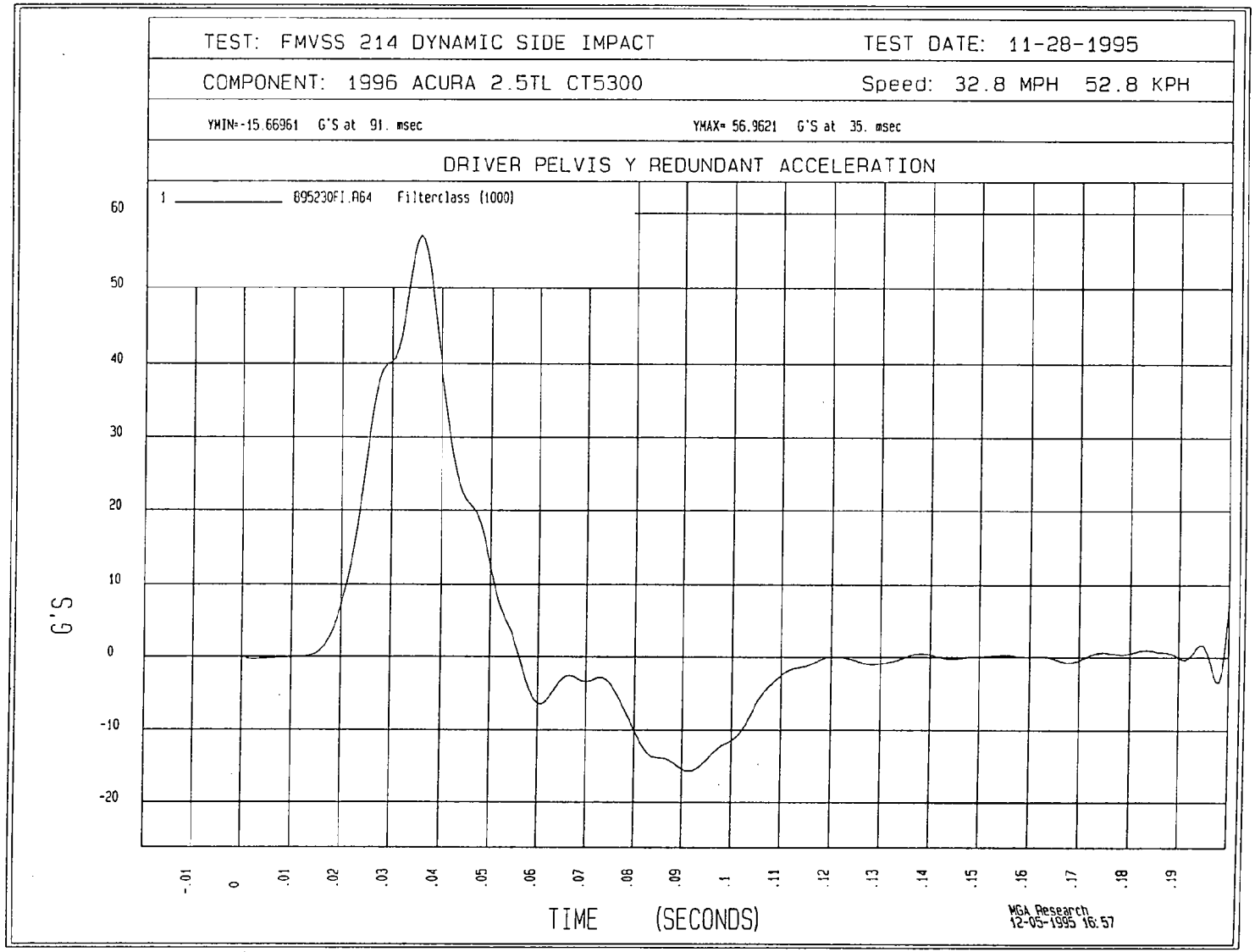
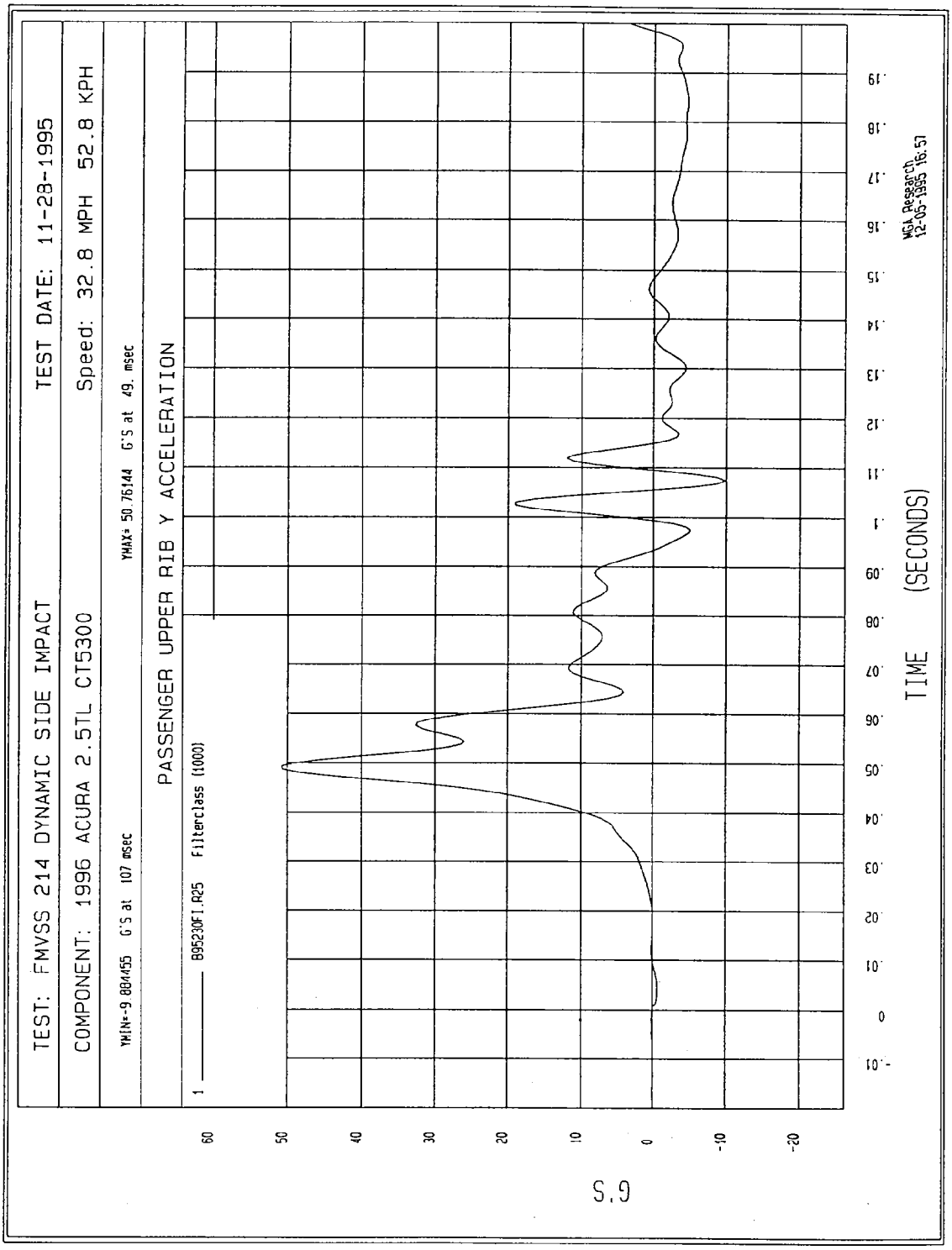
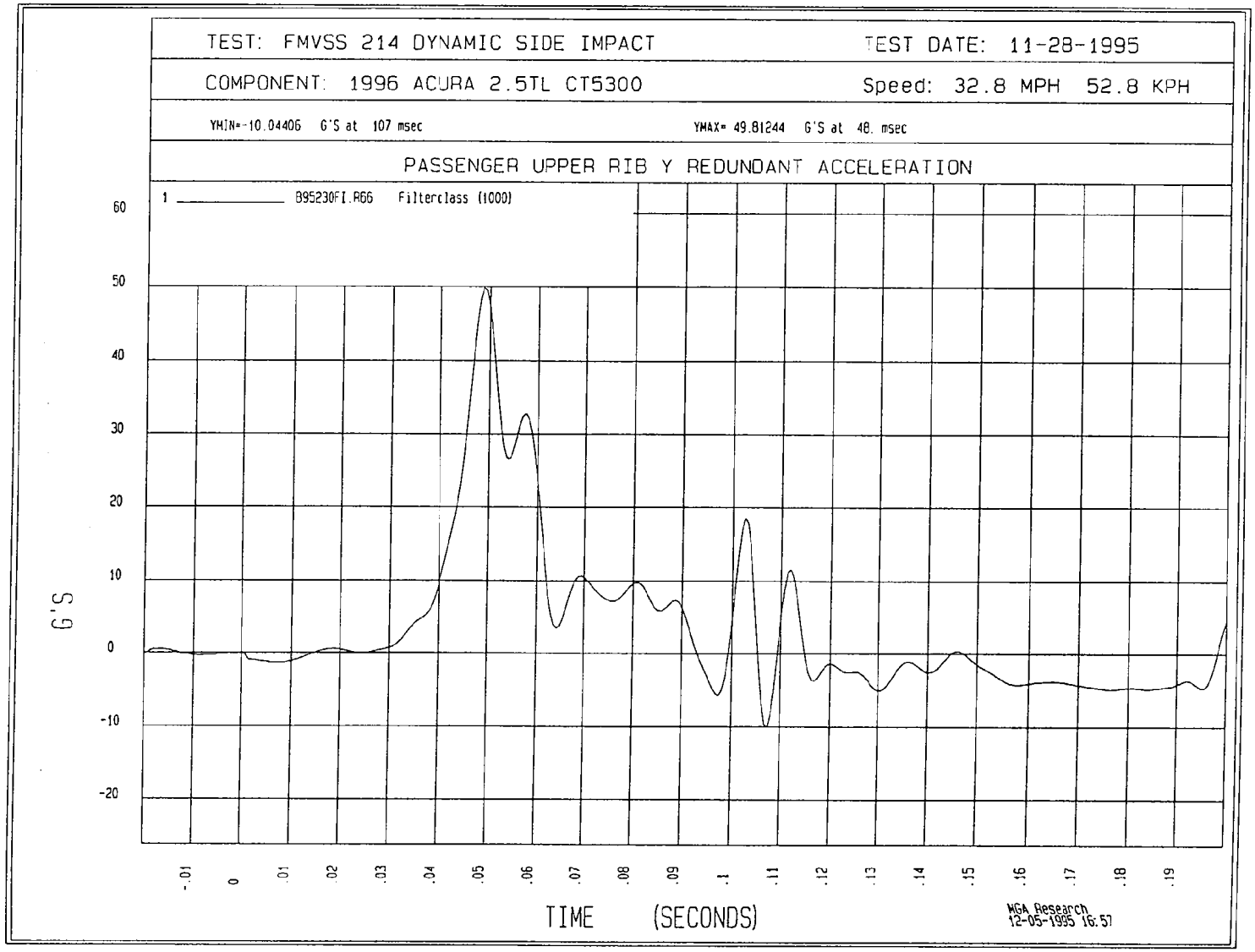
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
12-05-1995 16:57


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-15.66961 G'S at 91. msec
YMAX= 56.9621 G'S at 35. msec
DRIVER PELVIS Y REDUNDANT ACCELERATION
1 895230FI.A64 Filterclass (1000)
60
50
40
30
20
10
0
-10
-20
G'S
-.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
12-05-1995 16:57


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-9 804155 G'S at 107 msec
YMAX= 50.76144 G'S at 49. msec
PASSENGER UPPER RIB Y ACCELERATION
1 B95230F1.R25 Filterclass (1000)
60
50
40
30
20
10
0
-10
-20
-.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
12-05-1995 16:57
G's


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-10.04406 G'S at 107 msec
YMAX= 49.81244 G'S at 48. msec
PASSENGER UPPER RIB Y REDUNDANT ACCELERATION
1 B95230FI.R66 Filterclass (1000)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
.03
.04
.05
.06
.07
.08
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.1
.11
.12
.13
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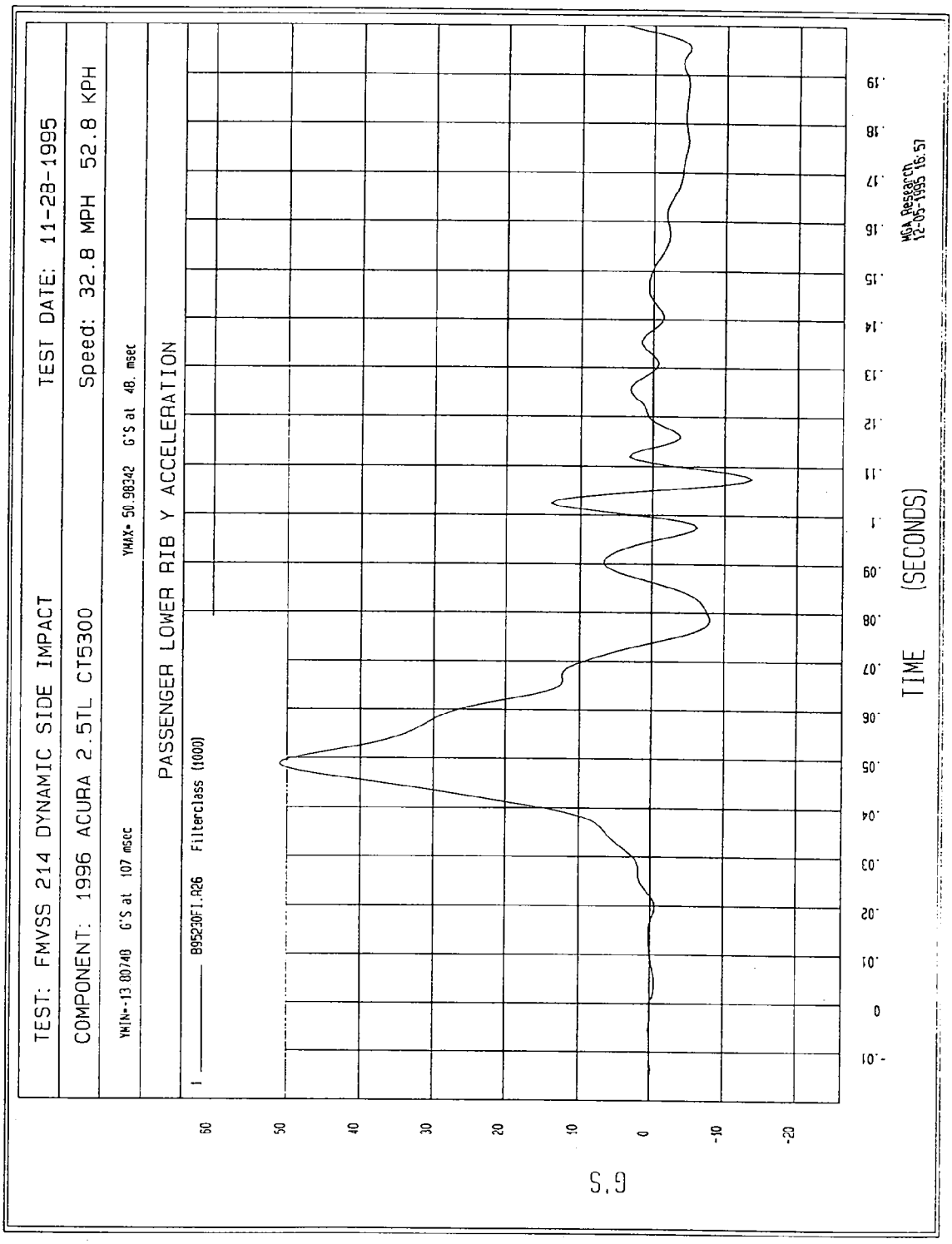
TIME (SECONDS)
MGA Research
12-05-1995 16:57


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-13.00740 G'S at 107 msec
YMAX= 50.98342 G'S at 48. msec
PASSENGER LOWER RIB Y ACCELERATION
1 B95230FI.A26 Filterclass (1000)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
.03
.04
.05
.06
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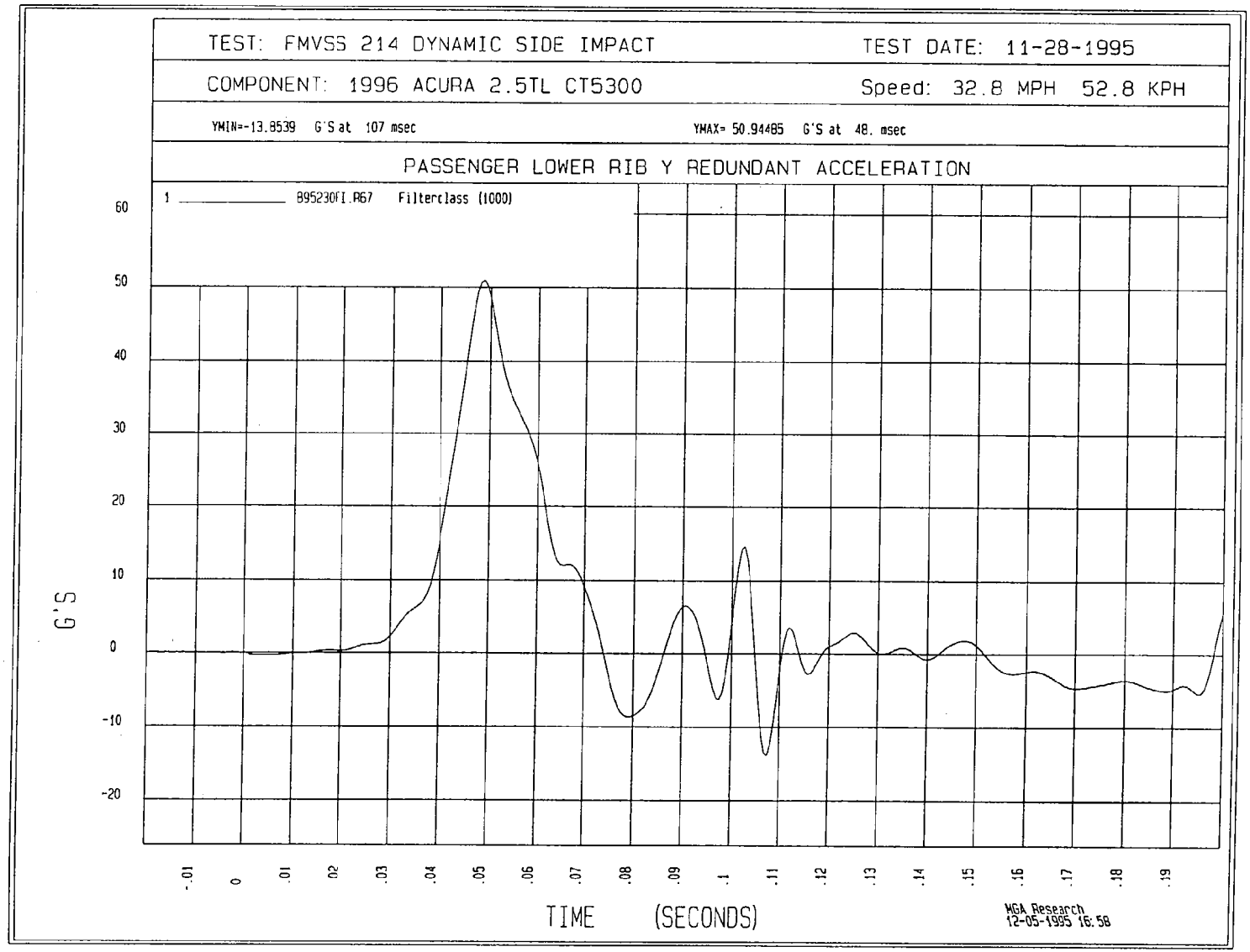
TIME (SECONDS)
MGA Research
12-05-1995 16:57


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-13.8539 G'S at 107 msec
YMAX= 50.94485 G'S at 48. msec
PASSENGER LOWER RIB Y REDUNDANT ACCELERATION
1 B95230FI.A67 Filterclass (1000)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
.03
.04
.05
.06
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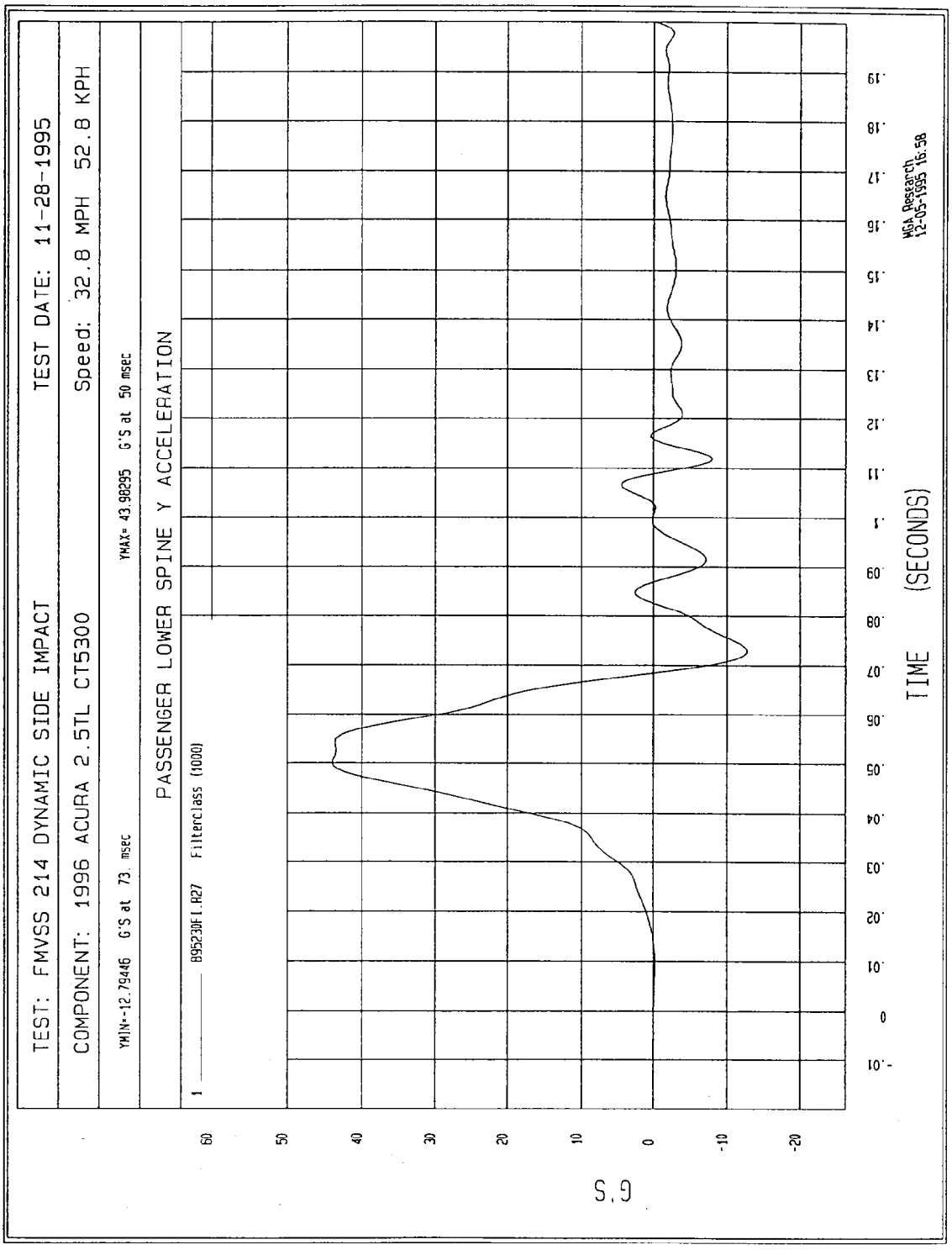
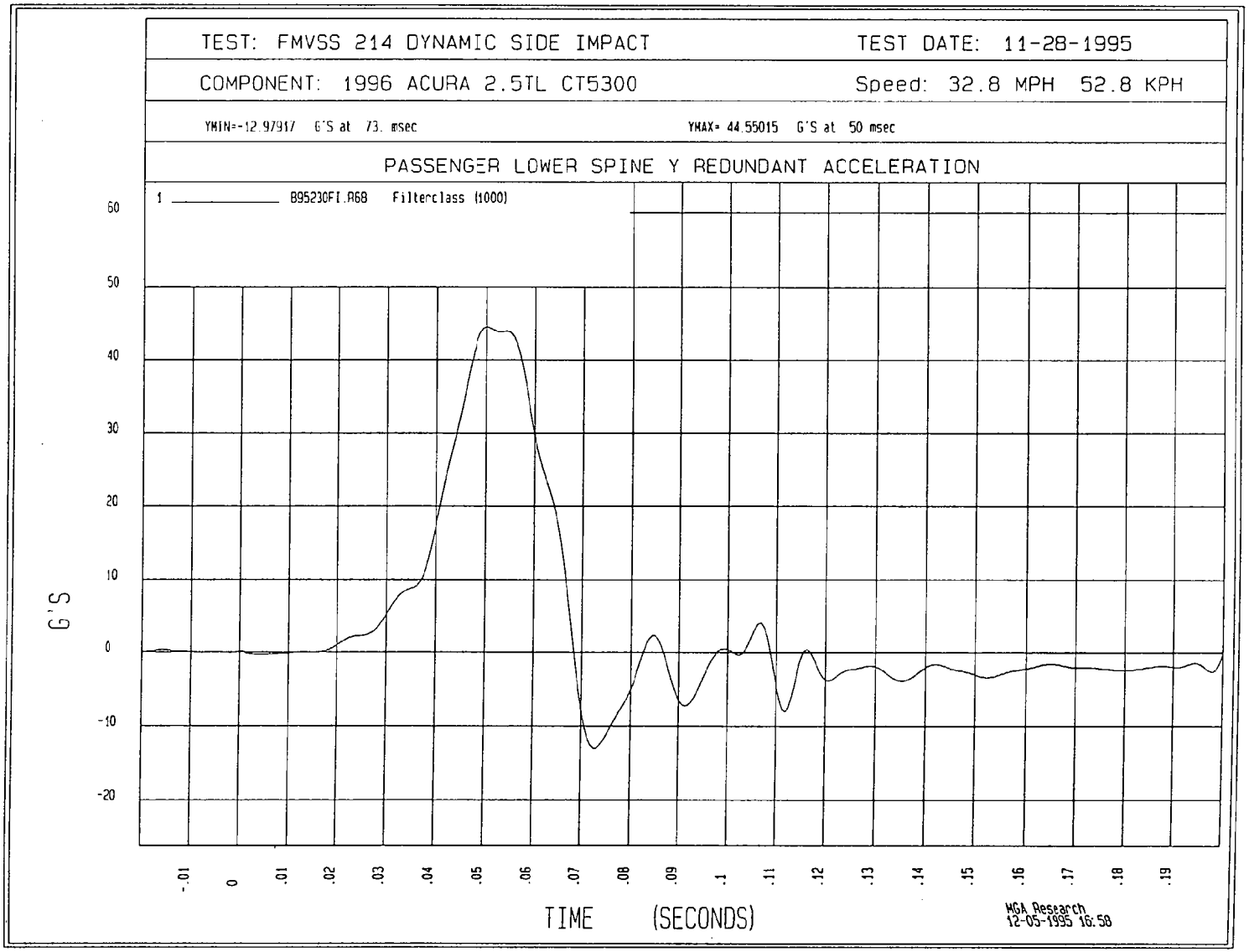
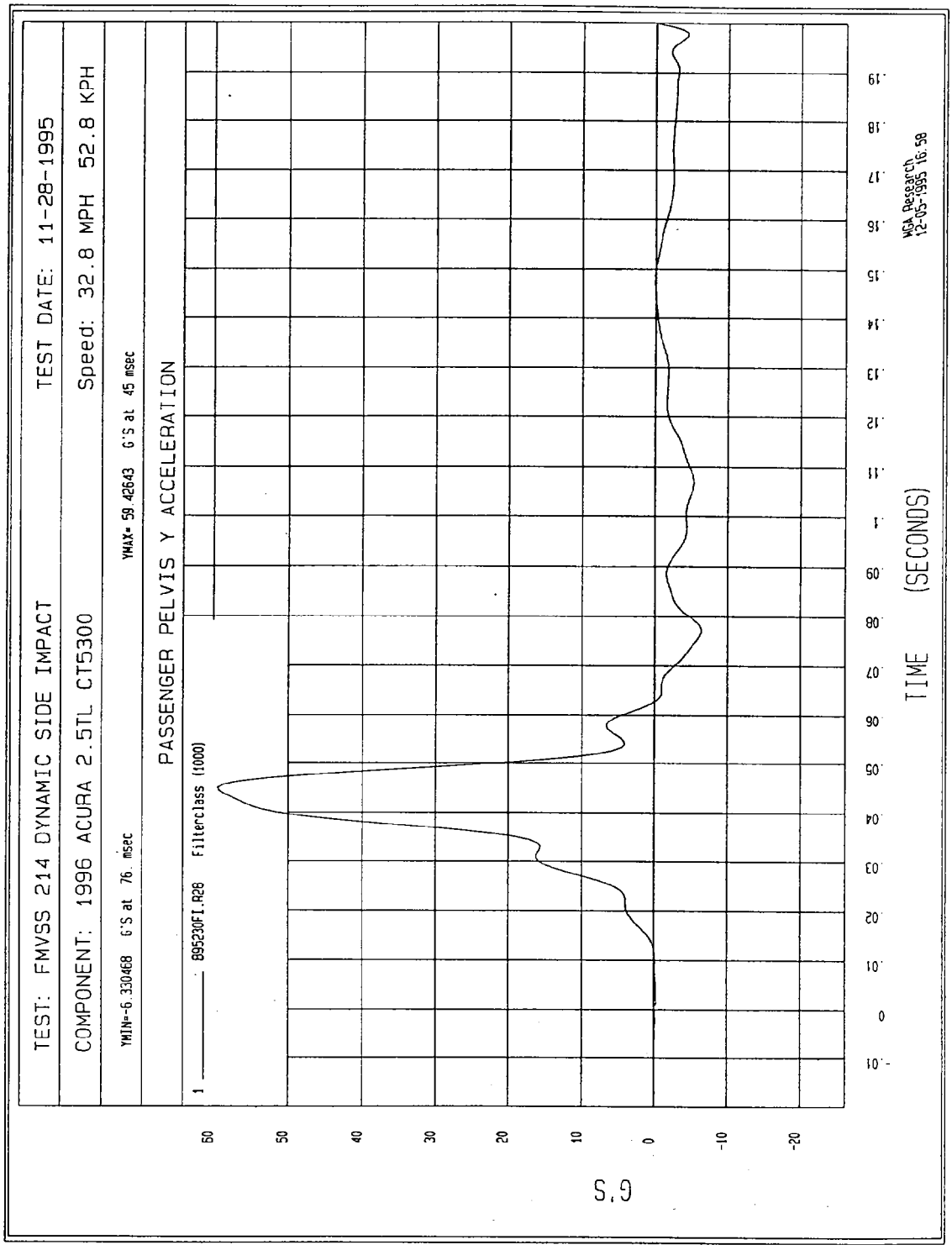
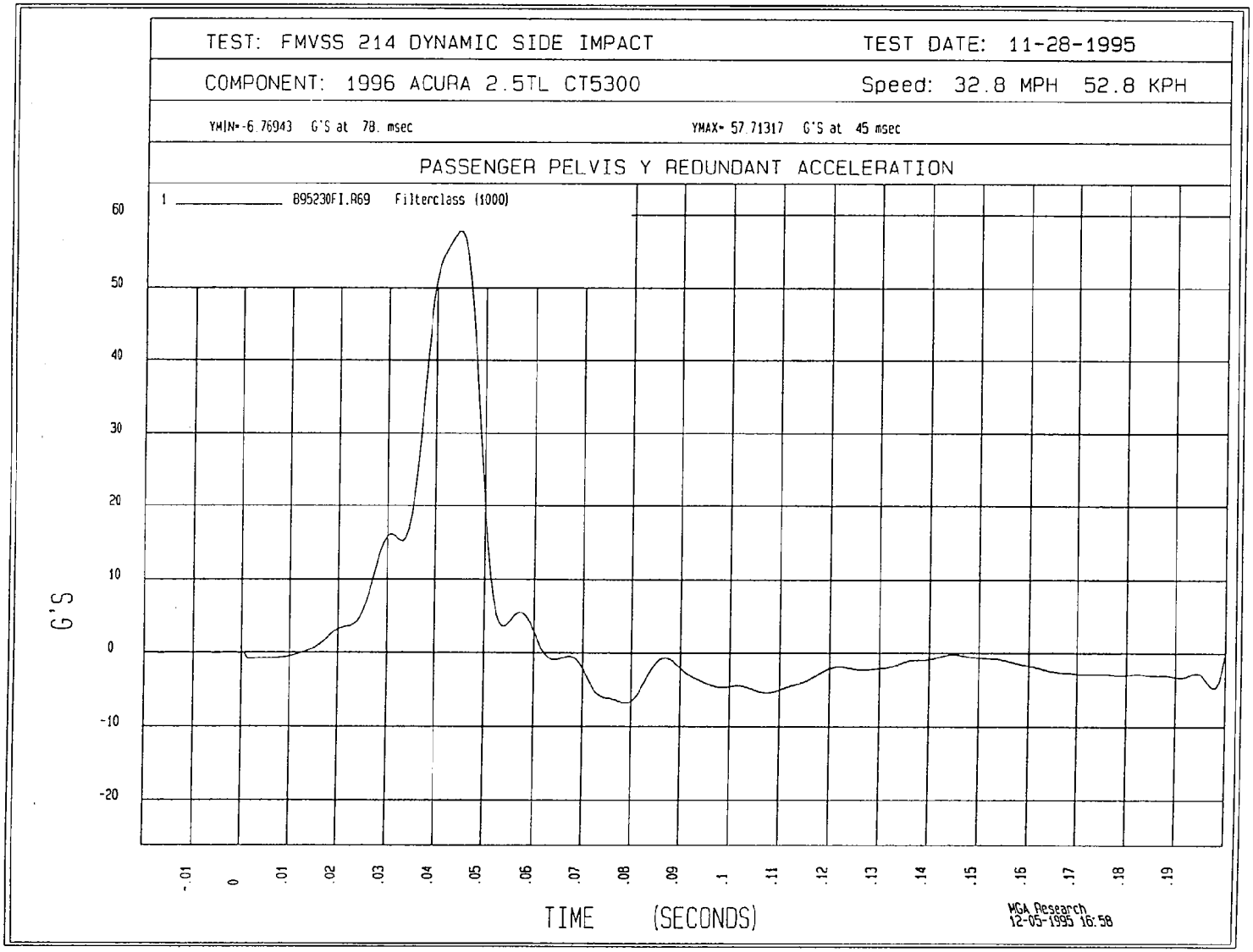
TIME (SECONDS)
MGA Research
12-05-1995 16:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-12.79446 G'S at 73 msec
YMAX= 43.98295 G'S at 50 msec
PASSENGER LOWER SPINE Y ACCELERATION
1 B95230F1.A27 Filterclass (1000)
G'S
TIME (SECONDS)
MGA Research
12-05-1995 16:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-12.97917 G'S at 73. msec
YMAX= 44.55015 G'S at 50 msec
PASSENGER LOWER SPINE Y REDUNDANT ACCELERATION
1 B95230FI.A68 Filterclass (1000)
60
50
40
30
20
10
0
-10
-20
G'S
-.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
12-05-1995 16:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-6.330468 G'S at 76. msec
YMAX= 59.42643 G'S at 45 msec
PASSENGER PELVIS Y ACCELERATION
1 _____ 895230FI.R26 Filterclass (1000)
60
50
40
30
20
10
0
-10
-20
G'S
.10
0
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13
.14
.15
.16
.17
.18
.19
TIME (SECONDS)
MGA Research
12-05-1995 16:58


TEST: FMVSS 214 DYNAMIC SIDE IMPACT
TEST DATE: 11-28-1995
COMPONENT: 1996 ACURA 2.5TL CT5300
Speed: 32.8 MPH 52.8 KPH
YMIN=-6.76943 G'S at 78. msec
YMAX= 57.71317 G'S at 45 msec
PASSENGER PELVIS Y REDUNDANT ACCELERATION
1 B95230FI.R69 Filterclass (1000)
60
50
40
30
20
10
0
-10
-20
G'S
-.01
0
.01
.02
.03
.04
.05
.06
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.09
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.17
.18
.19
TIME (SECONDS)
MGA Research
12-05-1995 16:58

APPENDIX C

SID CONFIGURATION AND PERFORMANCE VERIFICATION

REPORT NO. MGA-96-DC05

DUMMY PERFORMANCE CALIBRATIONS

FMVSS 214 - SIDE IMPACT TEST

HONDA MOTOR COMPANY
1996 ACURA 2.5 TL 4-DOOR SEDAN
NHTSA NO. CT5300

MGA PROVING GROUNDS
5000 WARREN ROAD
BURLINGTON, WI 53105

Test Date: November 28, 1995

Report Date: December 6, 1995

FINAL REPORT

Prepared For:

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

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DUMMY S/N: 270	PRE-TEST CERTIFICATION DATA	1-1
DUMMY S/N: 269	PRE-TEST CERTIFICATION DATA	2-1
DUMMY S/N: 270	POST-TEST CERTIFICATION DATA	3-1
DUMMY S/N: 269	POST-TEST CERTIFICATION DATA	4-1
DUMMY S/N: 270	POST-TEST INSPECTION CHECKLIST	5-1
DUMMY S/N: 269	POST-TEST INSPECTION CHECKLIST	6-1

PRE-TEST CERTIFICATION DATA

Driver Dummy Serial Number: 270

Calibration Test Results Summary

Dummy 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: November 14, 1995

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height	35.0" - 35.8"	35.3
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"	20.7
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: November 8, 1995

DUMMY NUMBER: 270 TEST NUMBER: D951672

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
PROBE SPEED	13.8 - 14.2 fps	14.0
UPPER RIB	37 - 46 g's	39
LOWER RIB	37 - 46 g's	38
LOWER SPINE	15 - 22 g's	21

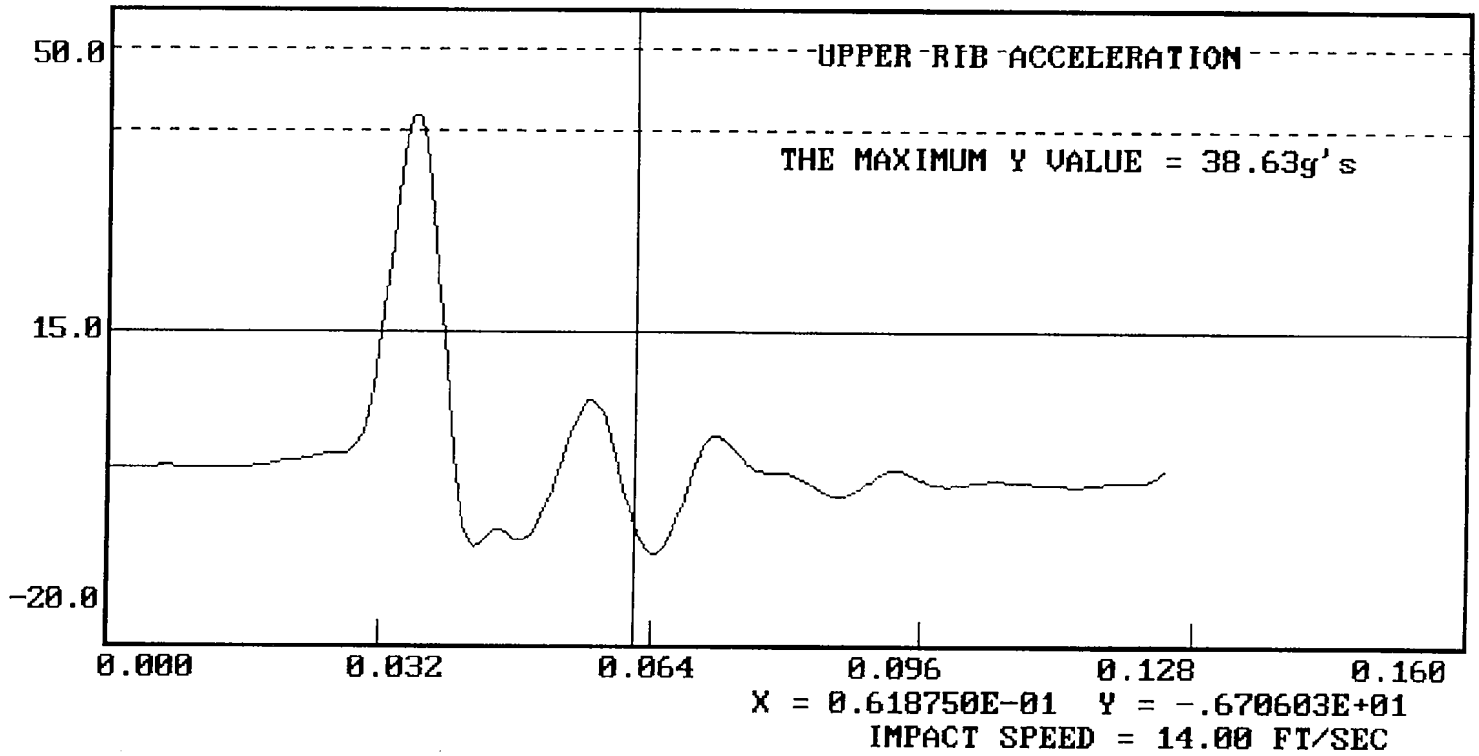
TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

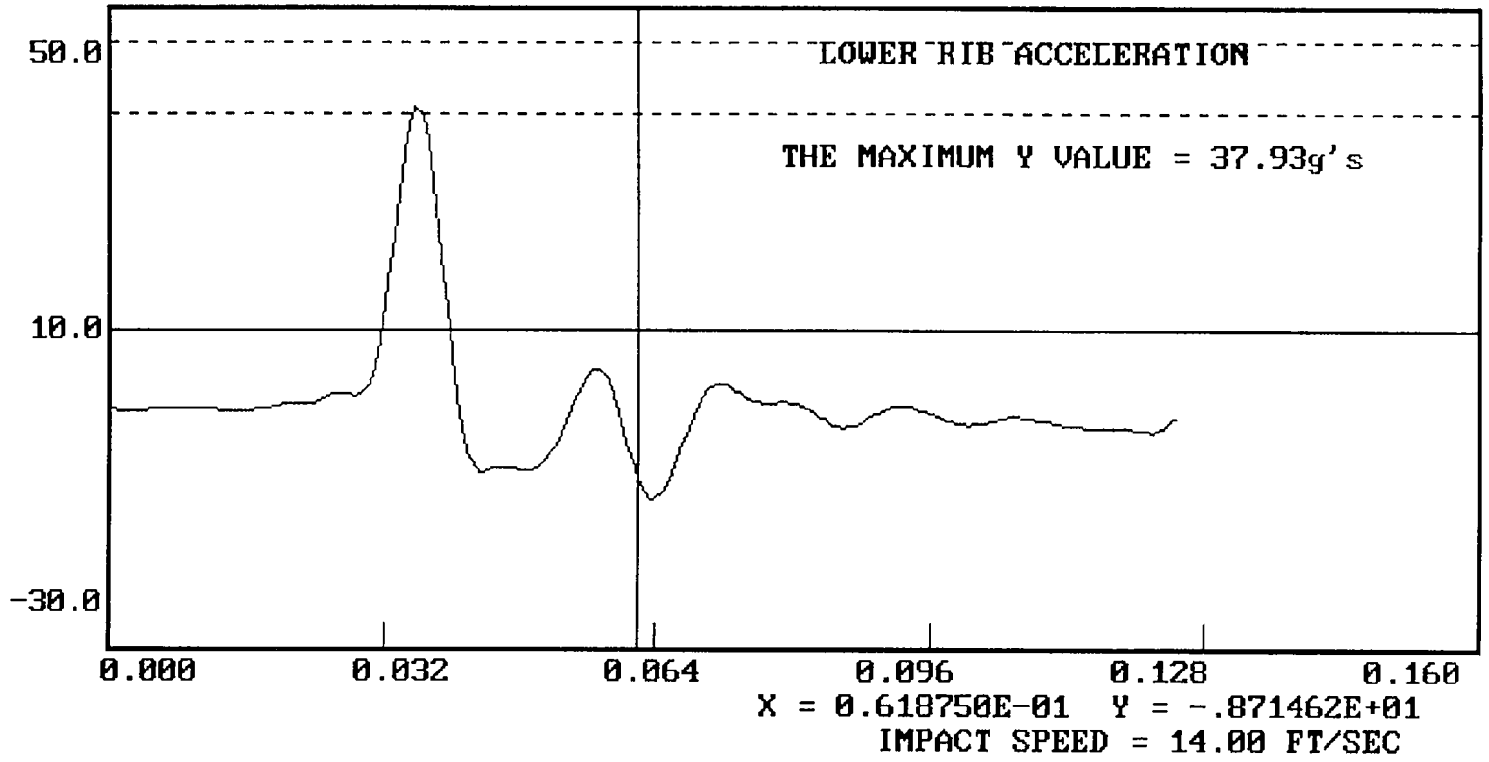
DUMMY CALIBRATION - THORAX IMPACT
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))

11-08-1995 10:51

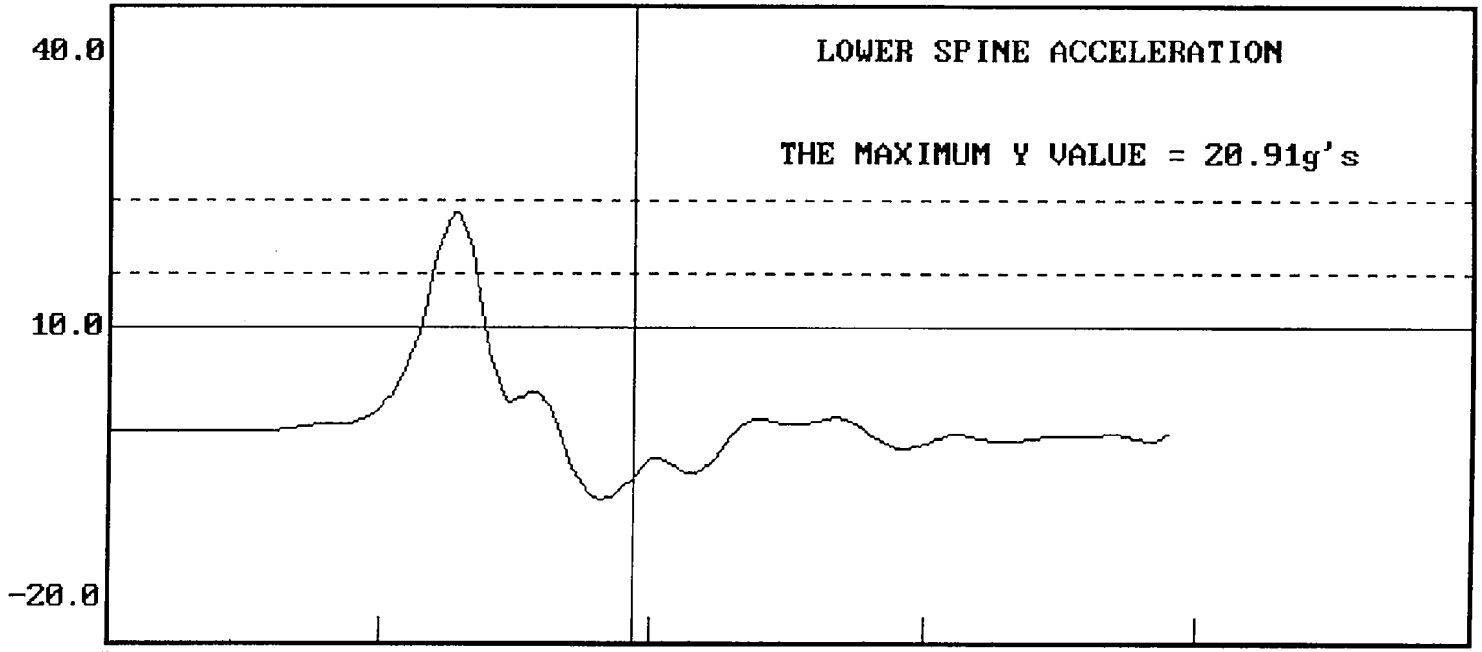


X = 0.618750E-01 Y = -.670603E+01
IMPACT SPEED = 14.00 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 11-08-1995 10:51
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))



DUMMY CALIBRATION - THORAX IMPACT 11-08-1995 10:51
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.424133E+01
IMPACT SPEED = 14.00 FT/SEC

MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: November 8, 1995

DUMMY NUMBER: 270 TEST NUMBER: D951673

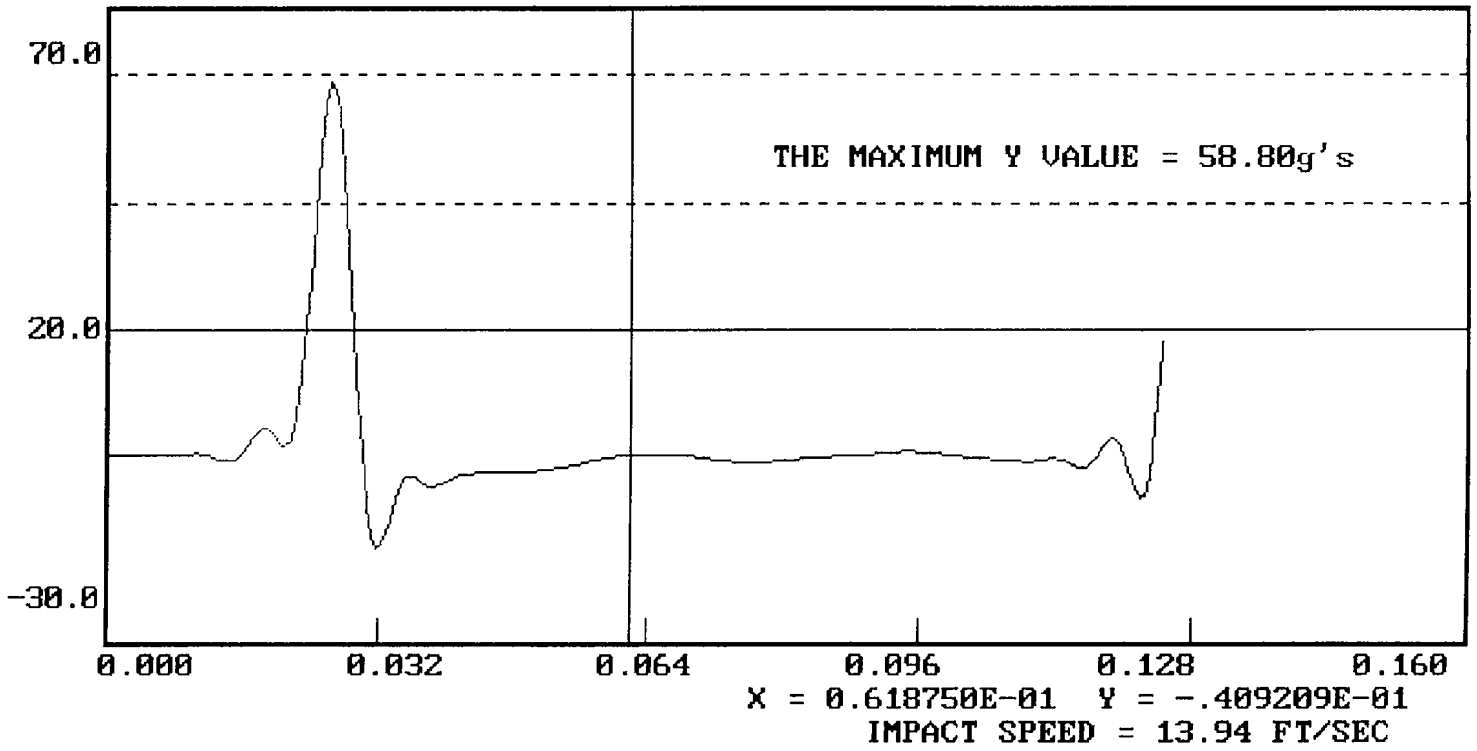
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
PROBE SPEED	13.8 - 14.2 f/s	13.9
PELVIS ACCELERATION	40 - 60 g's	59

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - PELVIS IMPACT 11-08-1995 11:09
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.409209E-01
IMPACT SPEED = 13.94 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

SIDE IMPACT DUMMY (SID)

DATE: November 14, 1995

DUMMY NUMBER: 270 TEST NUMBER: D951674

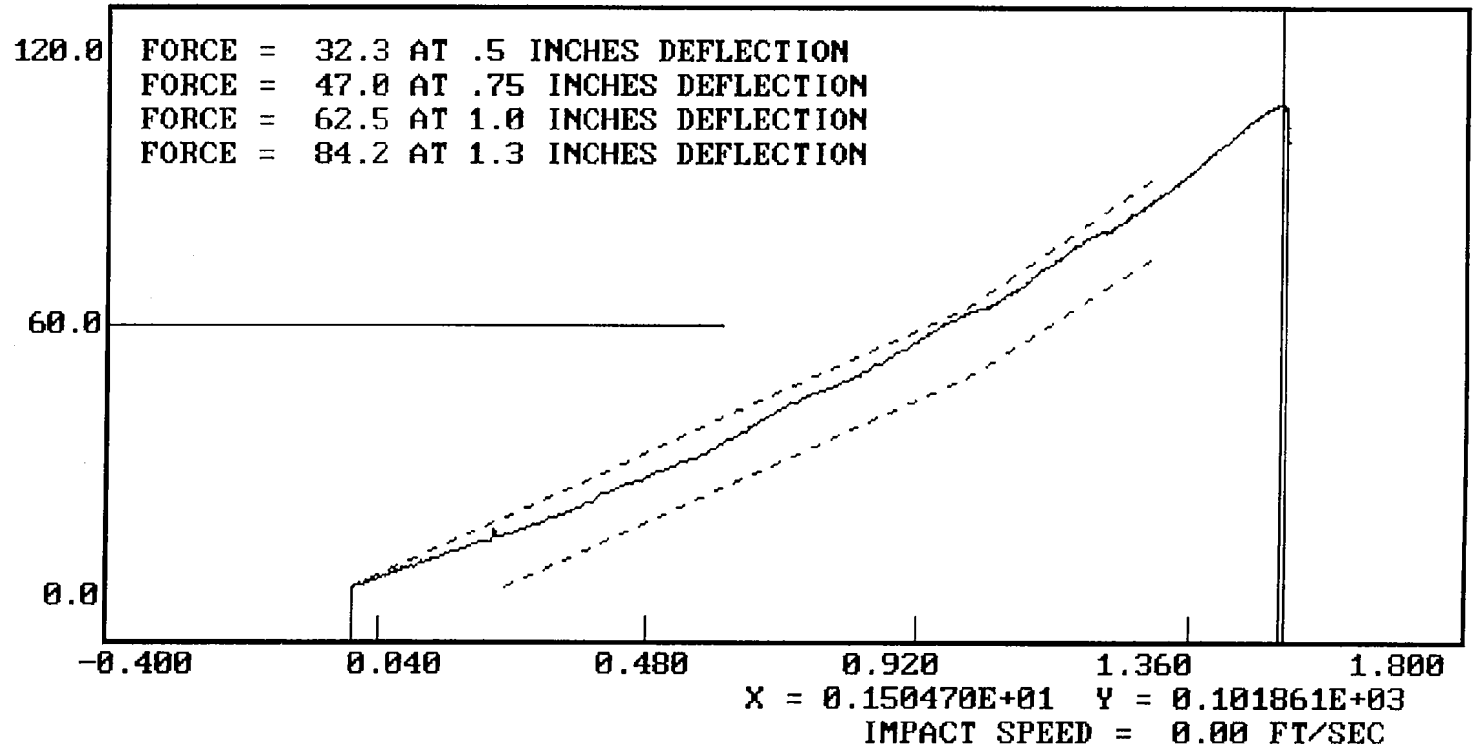
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	15%
FORCE @ 0.5 in	23.3 - 36.5 lbs	32.3
FORCE @ 0.75 in	36.7 - 49.8 lbs	47.0
FORCE @ 1.0 in	50 - 63 lbs	63
FORCE @ 1.3 in	73 - 88 lbs	84

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - ABDOMEN COMPRESSION 11-14-1995 08:48
DUMMY # 270
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: November 10, 1995

DUMMY NUMBER: 270 TEST NUMBER: D951675

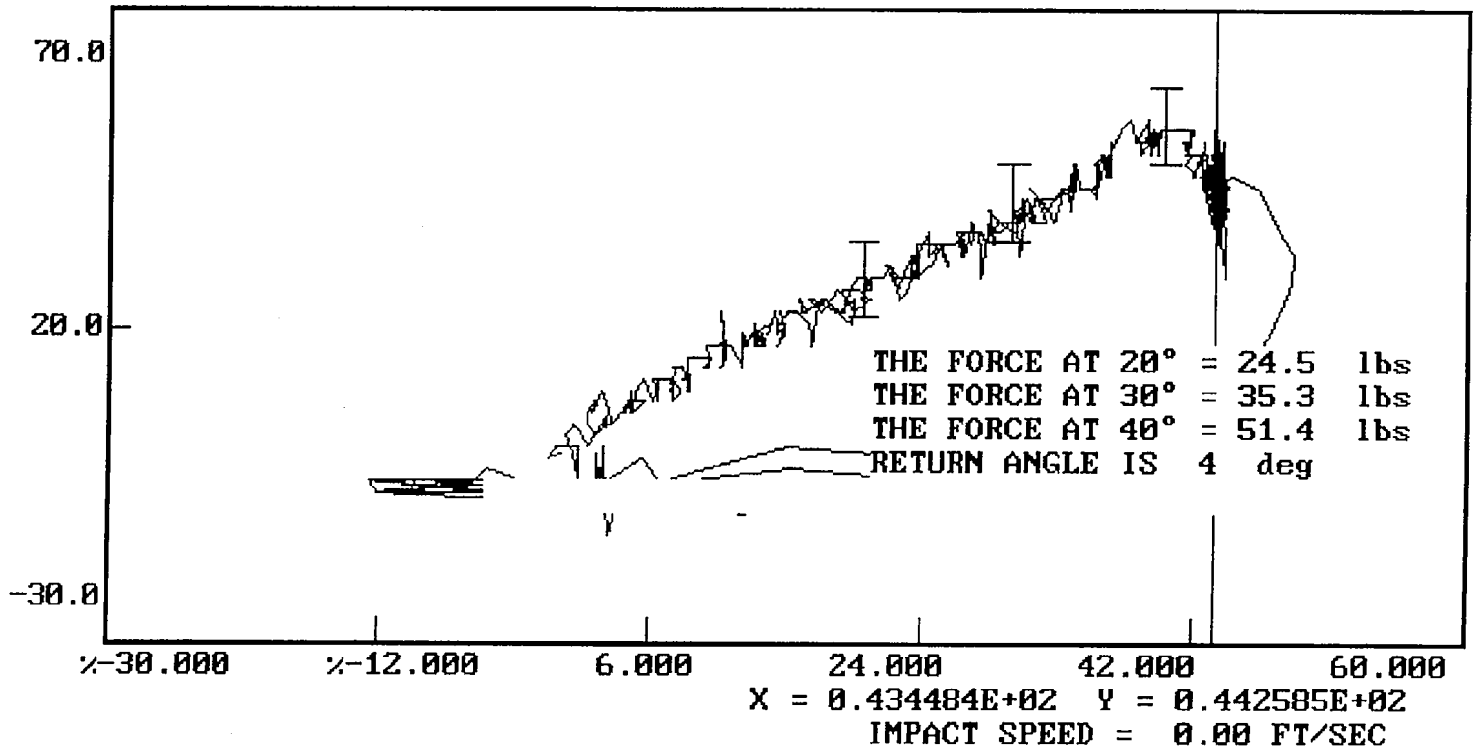
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	22%
FORCE @ 0°	0 - 6 lbs	0
FORCE @ 20°	22 - 34 lbs	25
FORCE @ 30°	34 - 46 lbs	35
FORCE @ 40°	46 - 58 lbs	51
RETURN ANGLE	12° maximum	4°

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - LUMBAR FLEXION 11-10-1995 16:23
DUMMY # 270
FORCE () VS. TORSO ROTATION (DEGREES)



PRE-TEST CERTIFICATION DATA

Passenger Dummy Serial Number: 269

Calibration Test Results Summary

Passenger 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: November 14, 1995

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height	35.0" - 35.8"	35.1
RH - Rib Height	19.75" - 20.50"	20.10
HP - Hip Pivot Height	3.9" ref.	3.9
RD - Rib From Back Line	9.0" to 9.5"	9.3
KV - Knee Pivot From Back Line	20.1" - 20.7"	20.5
SW - Knee Pivot to Floor	19.3" - 19.9"	19.4
HW - Hip Width	14.0" - 15.4"	15.1

MEASUREMENTS BY: _____

APPROVED BY: _____

MGA RESEARCH CORPORATION

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: November 8, 1995

DUMMY NUMBER: 269 TEST NUMBER: D951662

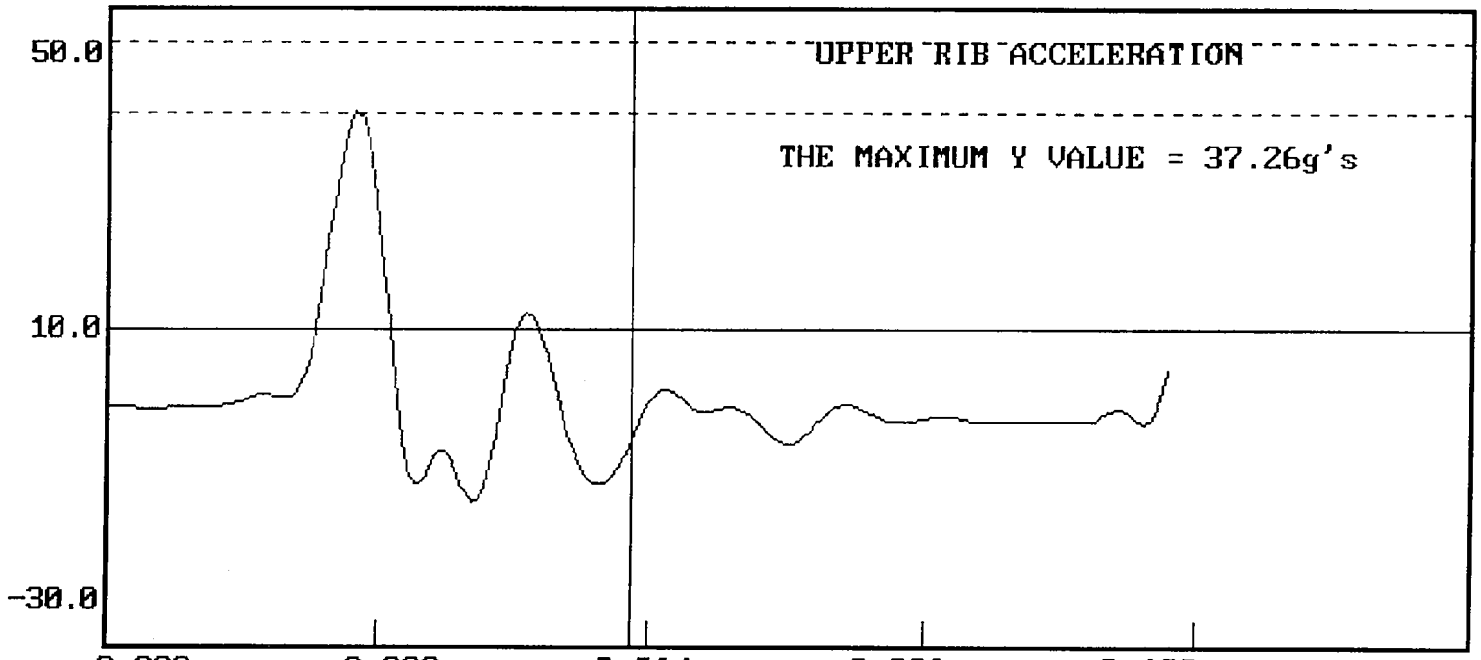
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
PROBE SPEED	13.8 - 14.2 fps	14.0
UPPER RIB	37 - 46 g's	37
LOWER RIB	37 - 46 g's	39
LOWER SPINE	15 - 22 g's	20

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - THORAX IMPACT 11-08-1995 09:41
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))



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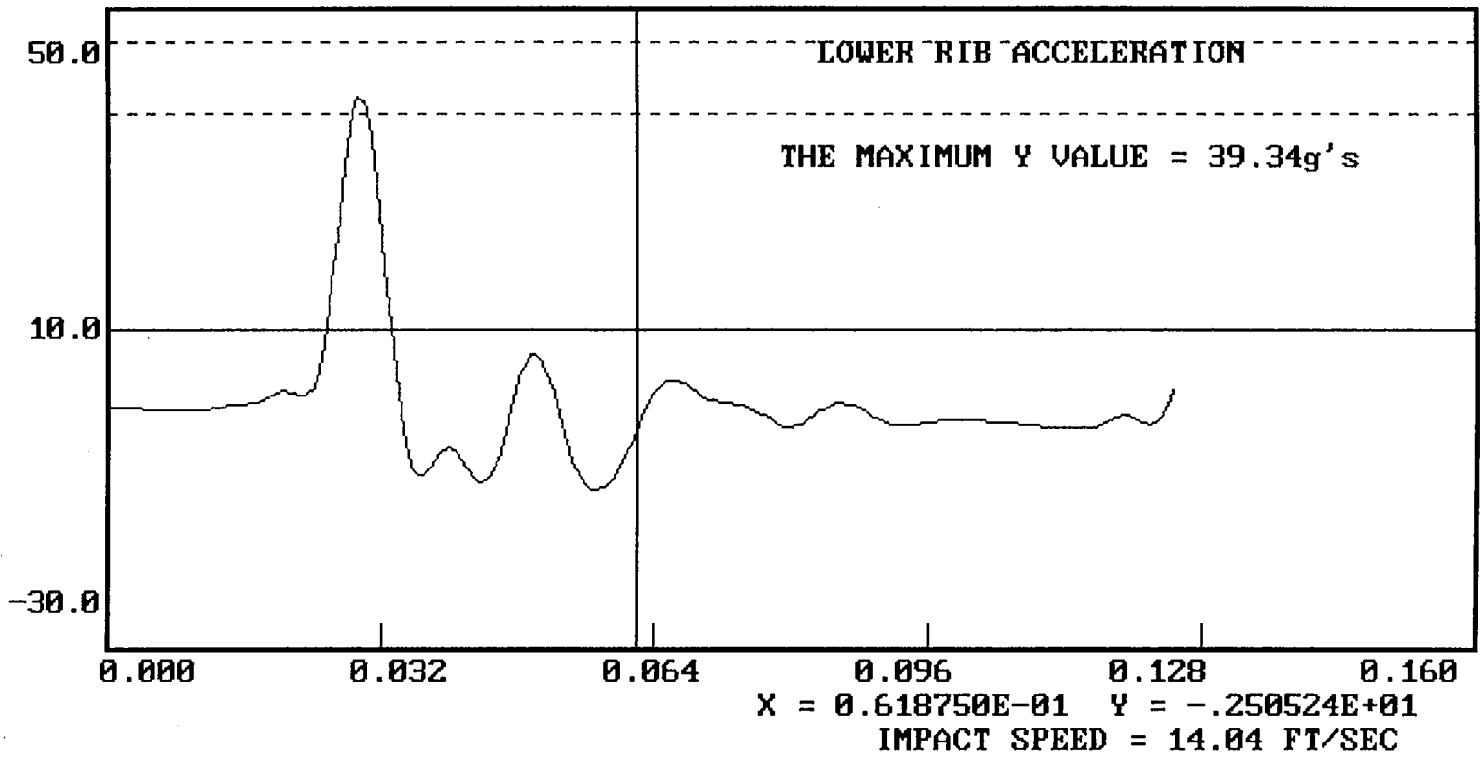
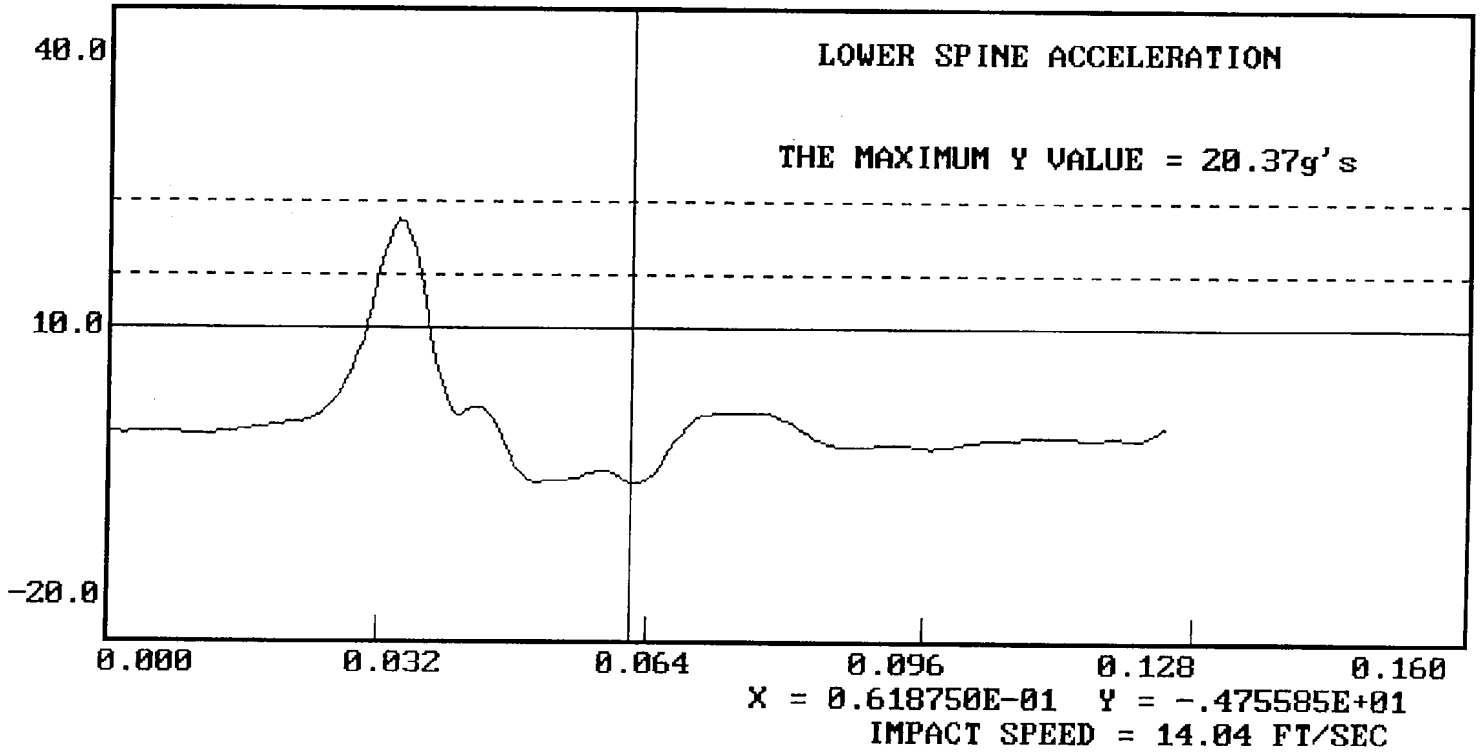
IMPACT SPEED = 14.04 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT 11-08-1995 09:41
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))



DUMMY CALIBRATION - THORAX IMPACT
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))

11-08-1995 09:41



X = 0.618750E-01 Y = -.475585E+01
IMPACT SPEED = 14.04 FT/SEC

MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: November 8, 1995

DUMMY NUMBER: 269 TEST NUMBER: D951663

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
PROBE SPEED	13.8 - 14.2 f/s	14.0
PELVIS ACCELERATION	40 - 60 g's	56

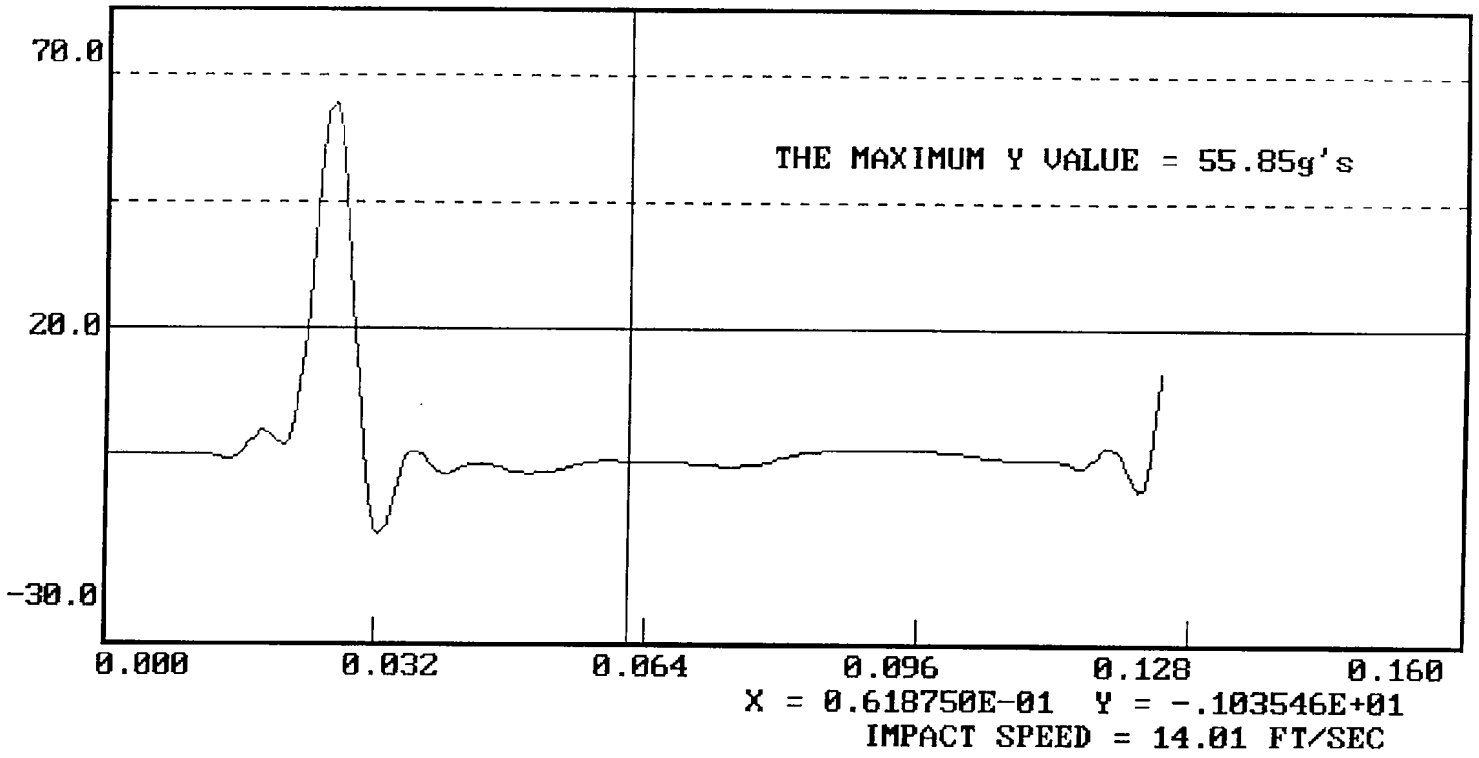
TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - PELVIS IMPACT
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))

11-08-1995 10:15



MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

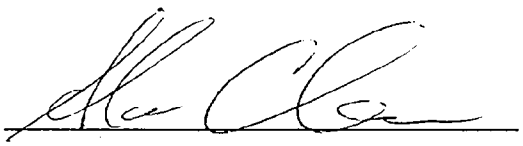
SIDE IMPACT DUMMY (SID)

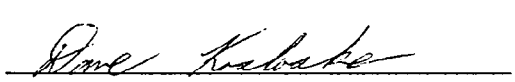
DATE: November 14, 1995

DUMMY NUMBER: 269 TEST NUMBER: D951664

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	15%
FORCE @ 0.5 in	23.3 - 36.5 lbs	33.1
FORCE @ 0.75 in	36.7 - 49.8 lbs	45.5
FORCE @ 1.0 in	50 - 63 lbs	59
FORCE @ 1.3 in	73 - 88 lbs	80

TEST MEETS SPECIFICATIONS

TECHNICIAN 

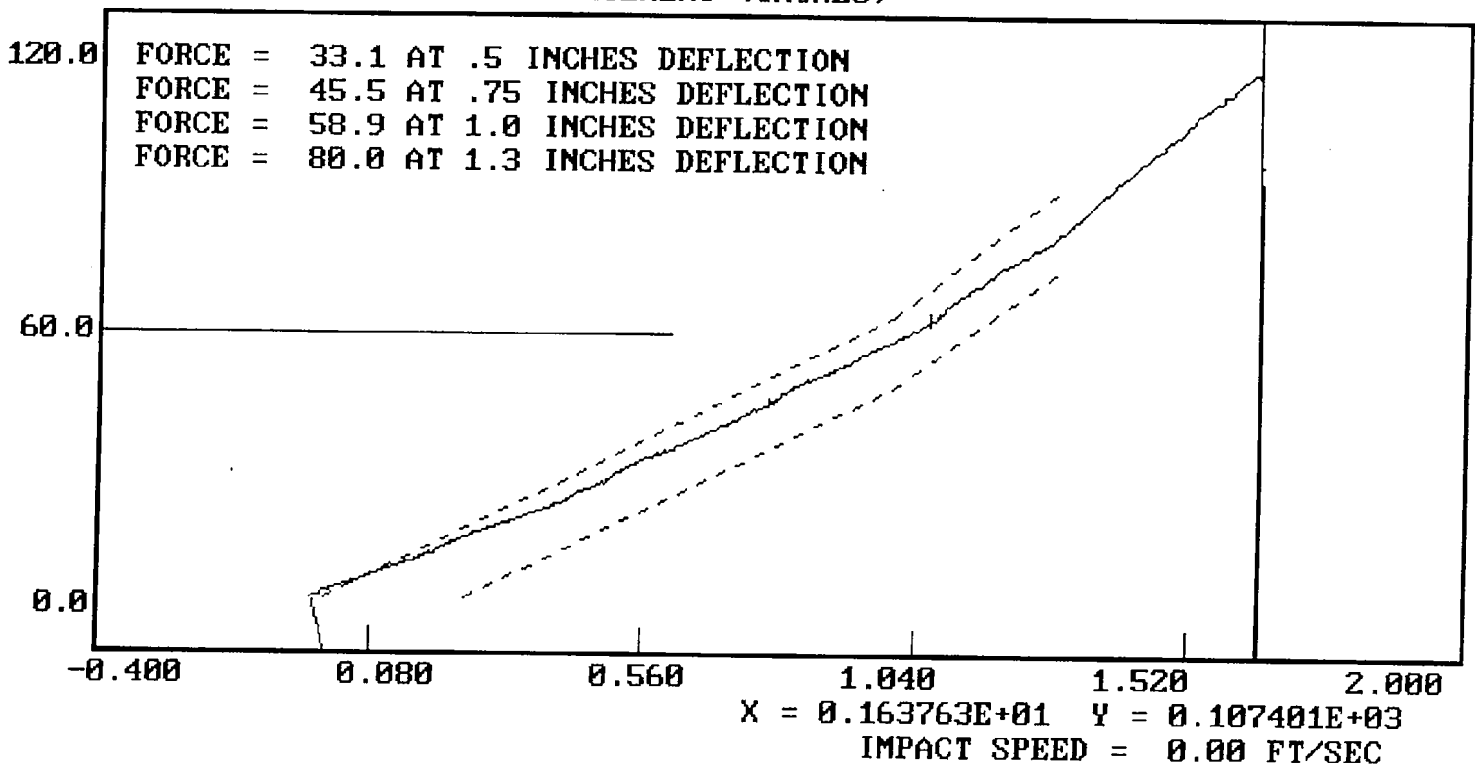
APPROVED BY 

DUMMY CALIBRATION - ABDOMEN COMPRESSION

11-14-1995 08:39

DUMMY # 269

ABDOMEN FORCE () VS. ABDOMEN DISPLACEMENT (INCHES)



MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

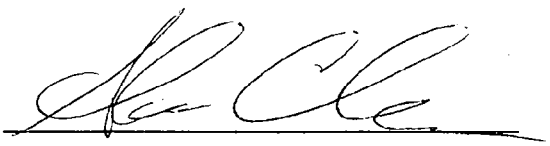
SIDE IMPACT DUMMY (SID)

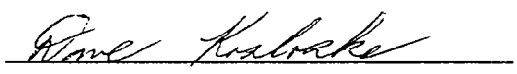
DATE: November 10, 1995

DUMMY NUMBER: 269 TEST NUMBER: D951665

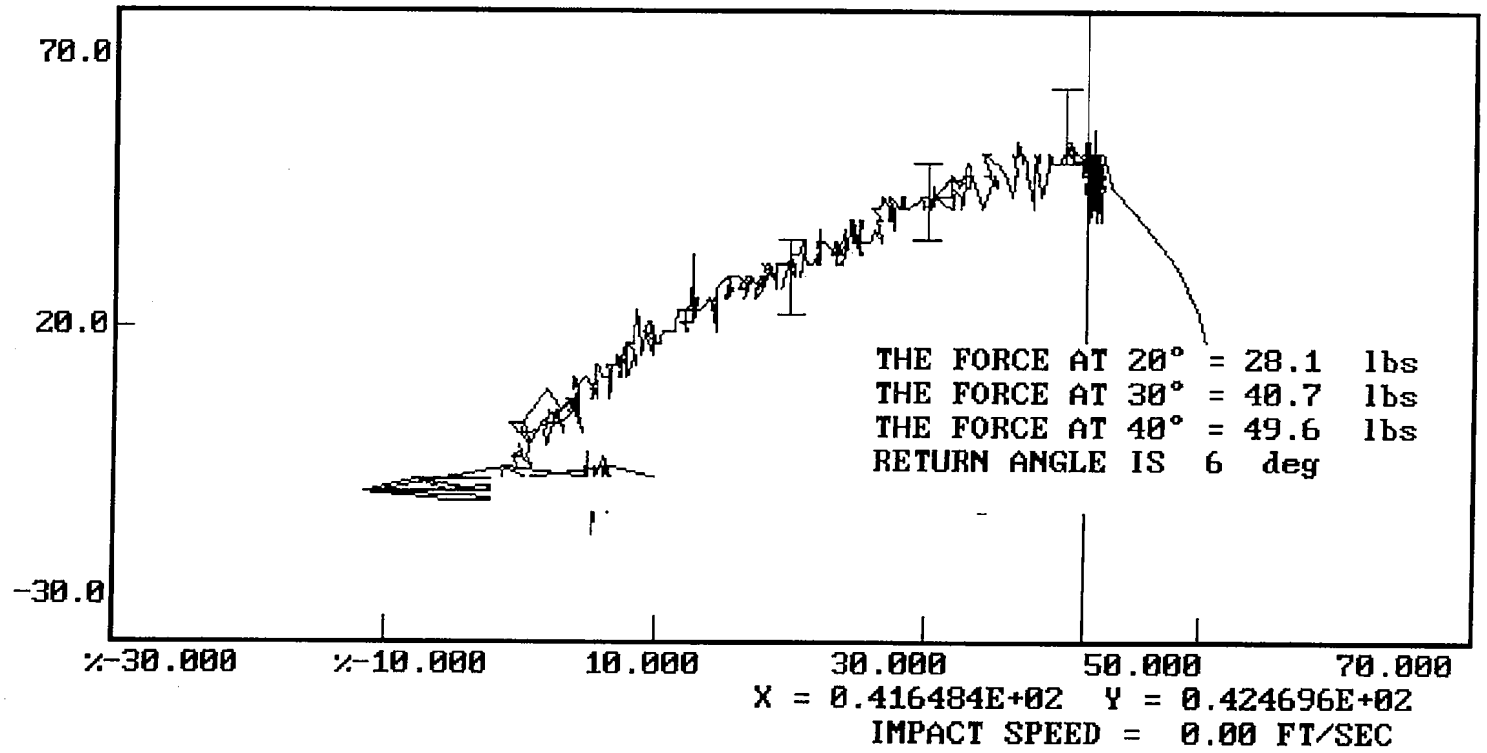
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
FORCE @ 0°	0 - 6 lbs	0
FORCE @ 20°	22 - 34 lbs	28
FORCE @ 30°	34 - 46 lbs	41
FORCE @ 40°	46 - 58 lbs	50
RETURN ANGLE	12° maximum	6°

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - LUMBAR FLEXION 11-10-1995 13:49
DUMMY # 269
FORCE () VS. TORSO ROTATION (DEGREES)



POST-TEST CERTIFICATION DATA

Driver Dummy Serial Number: 270

Calibration Test Results Summary

Dummy Serial Number: 270

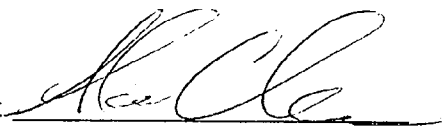
Post-Test Calibration

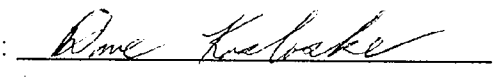
External Dimensions:	The dummy passed all external dimension requirements.
Thorax Impact Test:	The thorax passed all impact test requirements.
Pelvic Impact Test:	The pelvis passed all impact test requirements.
Abdominal Compression Test:	The abdomen passed all compression test requirements.
Lumbar Flexion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

SIDE IMPACT DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA

DUMMY NO.: 270 DATE OF VERIFICATION: December 7, 1995

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height	35.0" - 35.8"	35.3
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"	20.7
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 5, 1995

DUMMY NUMBER: 270 TEST NUMBER: D952002

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
PROBE SPEED	13.8 - 14.2 fps	13.9
UPPER RIB	37 - 46 g's	41
LOWER RIB	37 - 46 g's	45
LOWER SPINE	15 - 22 g's	20

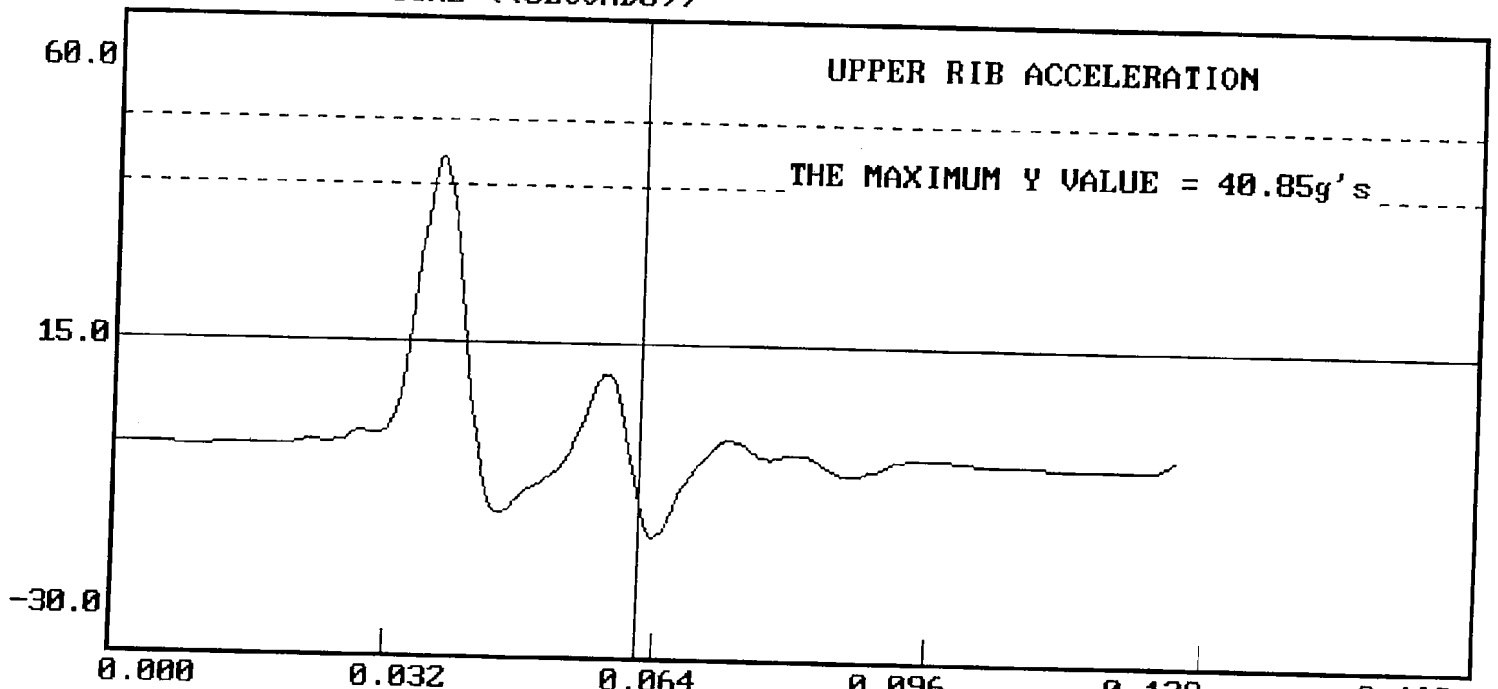
TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

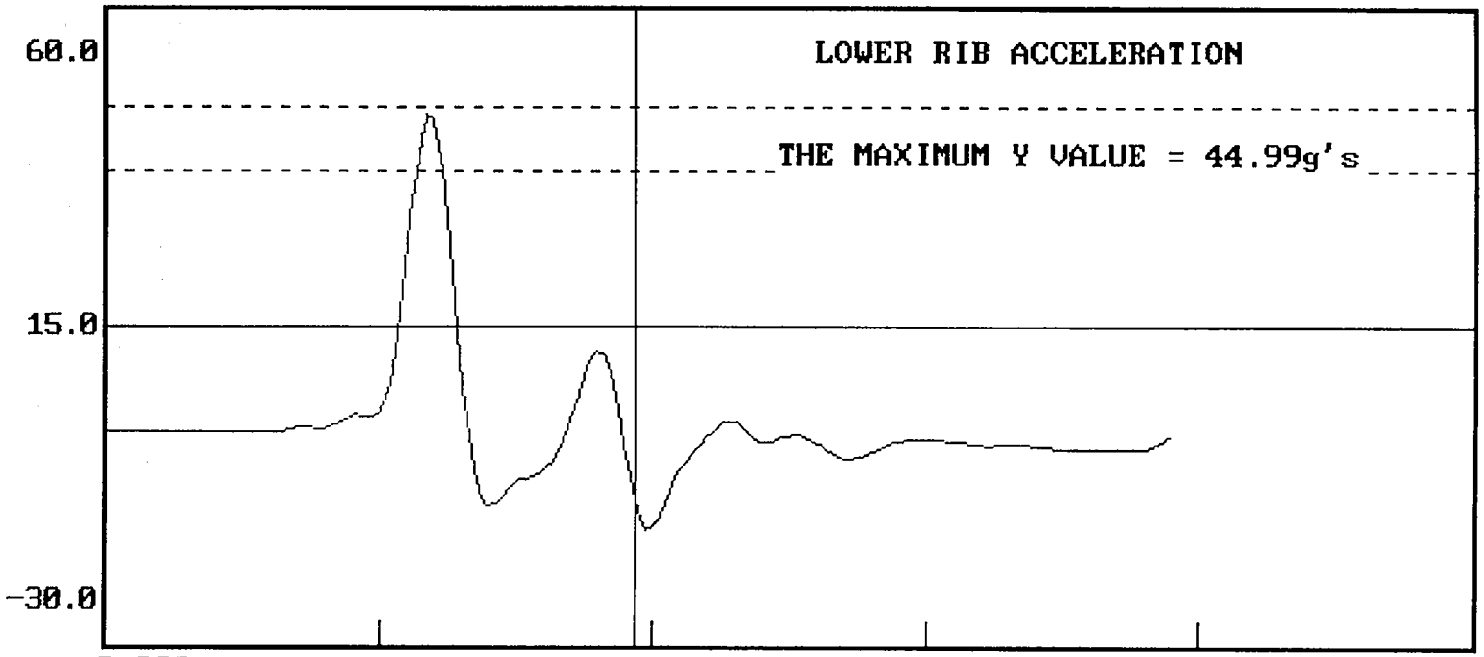
DUMMY CALIBRATION - THORAX IMPACT
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))

12-05-1995 22:44



X = 0.618750E-01 Y = -.824572E+01
IMPACT SPEED = 13.91 FT/SEC

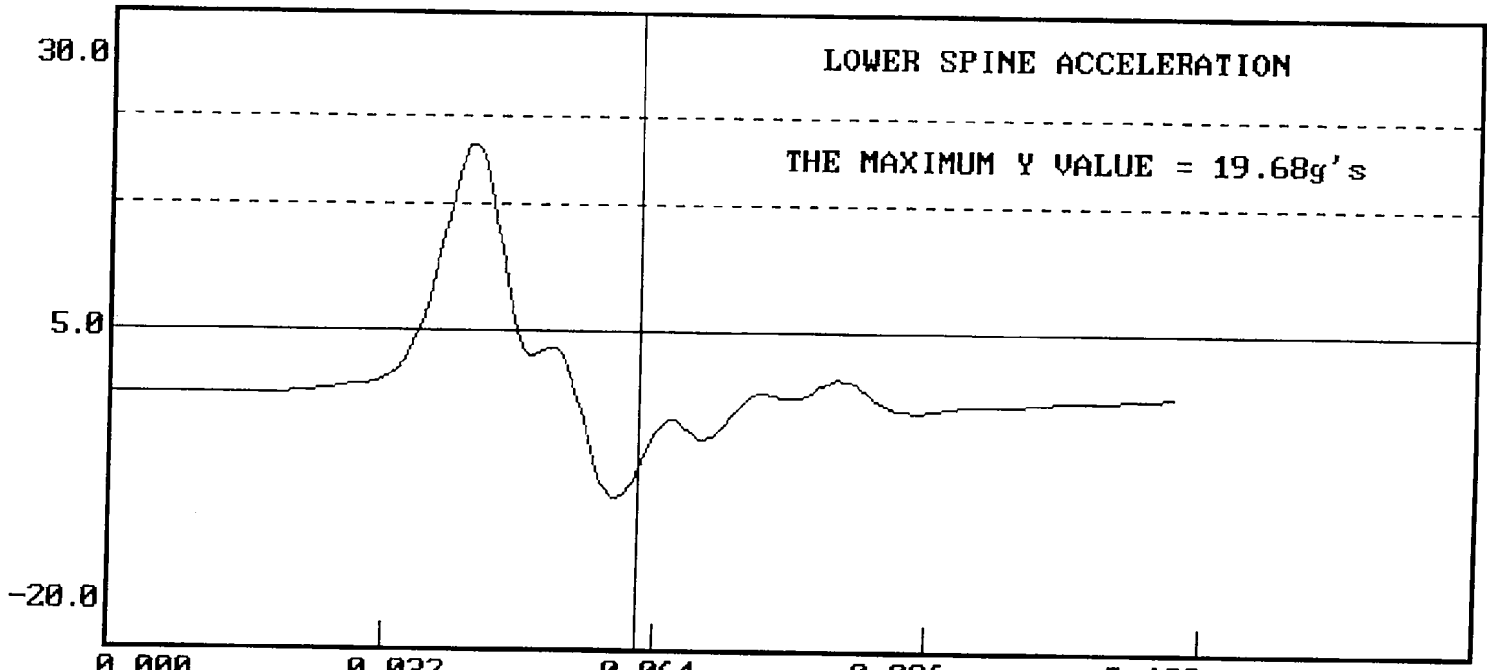
DUMMY CALIBRATION - THORAX IMPACT 12-05-1995 22:44
DUMMY # 270
ACCELERATION (G'S) VS. TIME ((SECONDS))



X = 0.618750E-01 Y = -.992732E+01
IMPACT SPEED = 13.91 FT/SEC

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

12-05-1995 22:44



X = 0.618750E-01 Y = -.562361E+01
IMPACT SPEED = 13.91 FT/SEC

MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 5, 1995

DUMMY NUMBER: 270 TEST NUMBER: D952003

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
PROBE SPEED	13.8 - 14.2 f/s	13.9
PELVIS ACCELERATION	40 - 60 g's	55

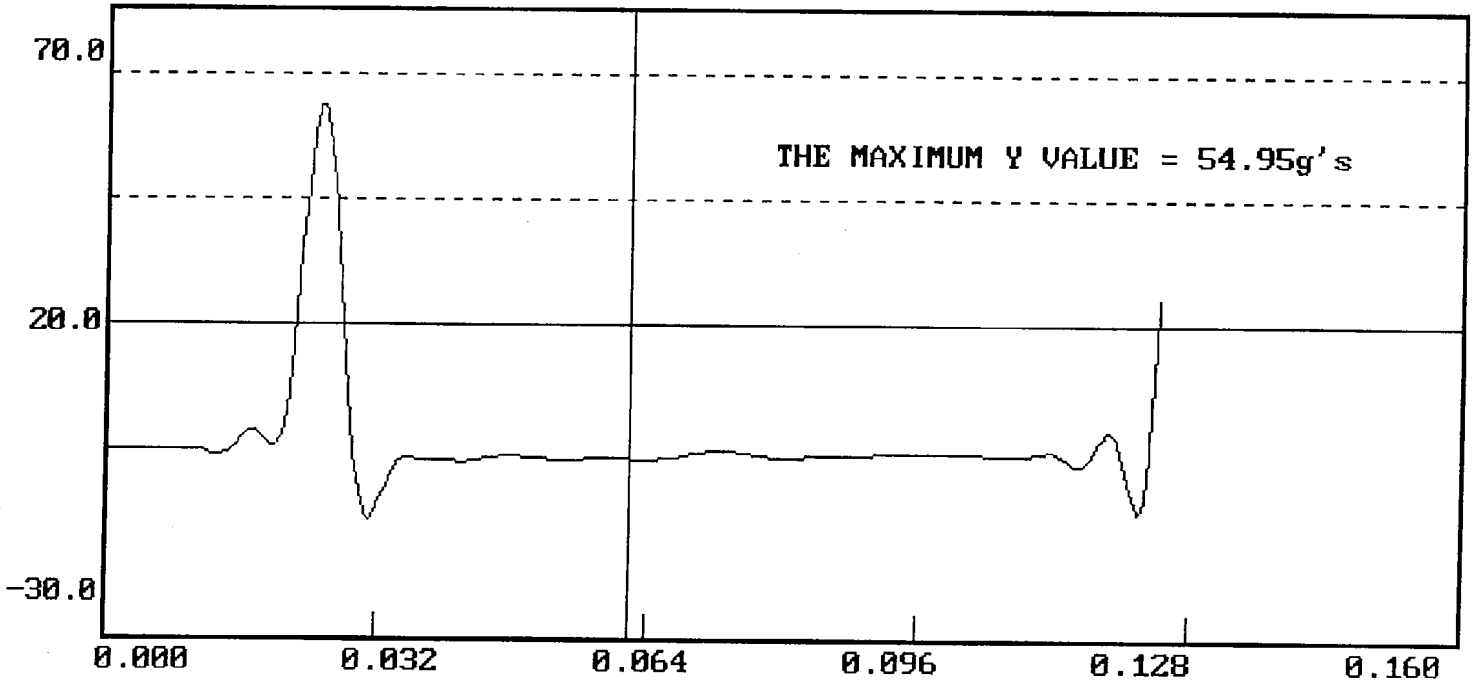
TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

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

12-05-1995 22:53



X = 0.618750E-01 Y = -.132461E+01
IMPACT SPEED = 13.91 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

SIDE IMPACT DUMMY (SID)

DATE: December 7, 1995

DUMMY NUMBER: 270 TEST NUMBER: D952004

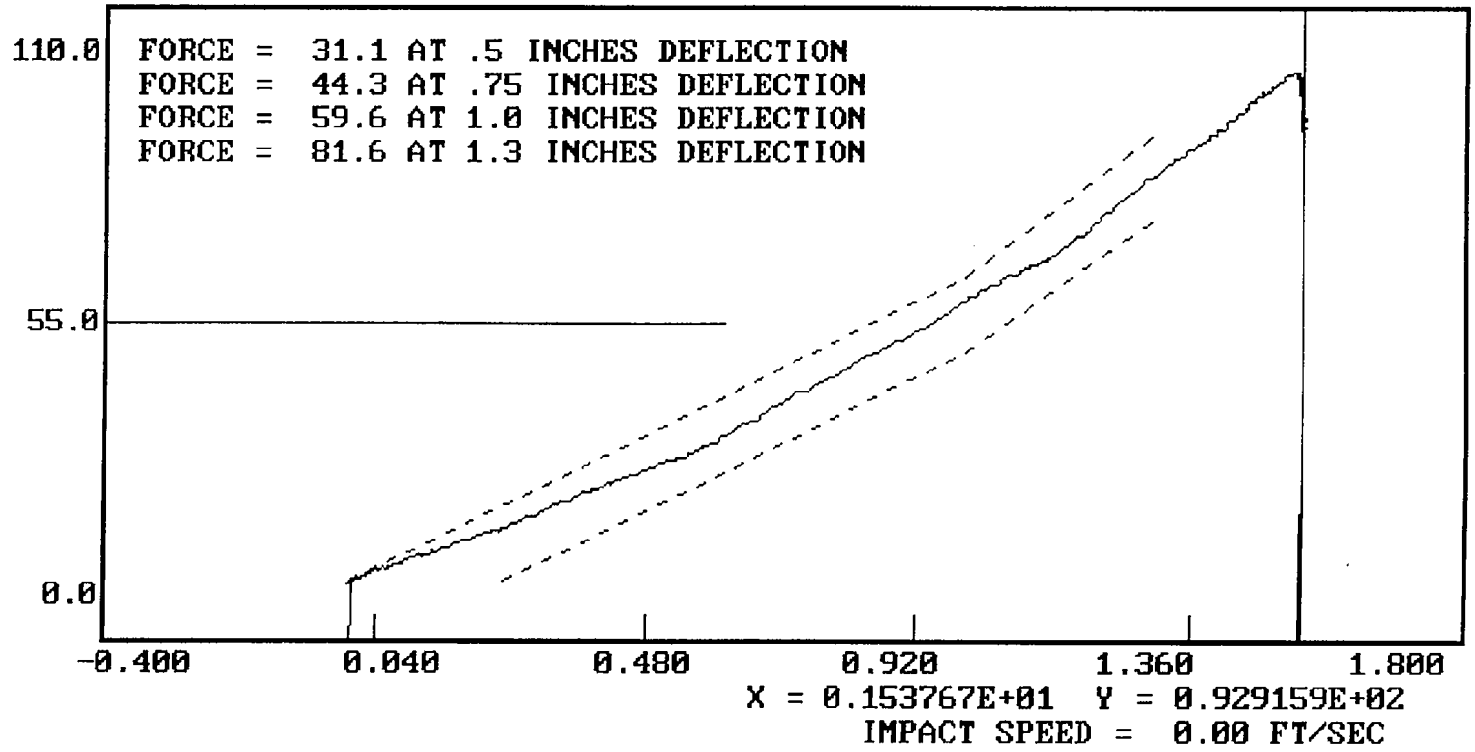
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
FORCE @ 0.5 in	23.3 - 36.5 lbs	31.1
FORCE @ 0.75 in	36.7 - 49.8 lbs	44.3
FORCE @ 1.0 in	50 - 63 lbs	60
FORCE @ 1.3 in	73 - 88 lbs	82

TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - ABDOMEN COMPRESSION 12-07-1995 16:41
DUMMY # 270
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

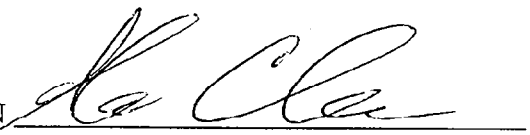
SIDE IMPACT DUMMY (SID)

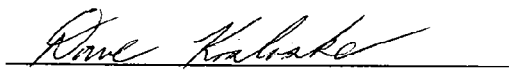
DATE: December 6, 1995

DUMMY NUMBER: 270 TEST NUMBER: D952005

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	13%
FORCE @ 0°	0 - 6 lbs	0
FORCE @ 20°	22 - 34 lbs	27
FORCE @ 30°	34 - 46 lbs	39
FORCE @ 40°	46 - 58 lbs	53
RETURN ANGLE	12° maximum	3°

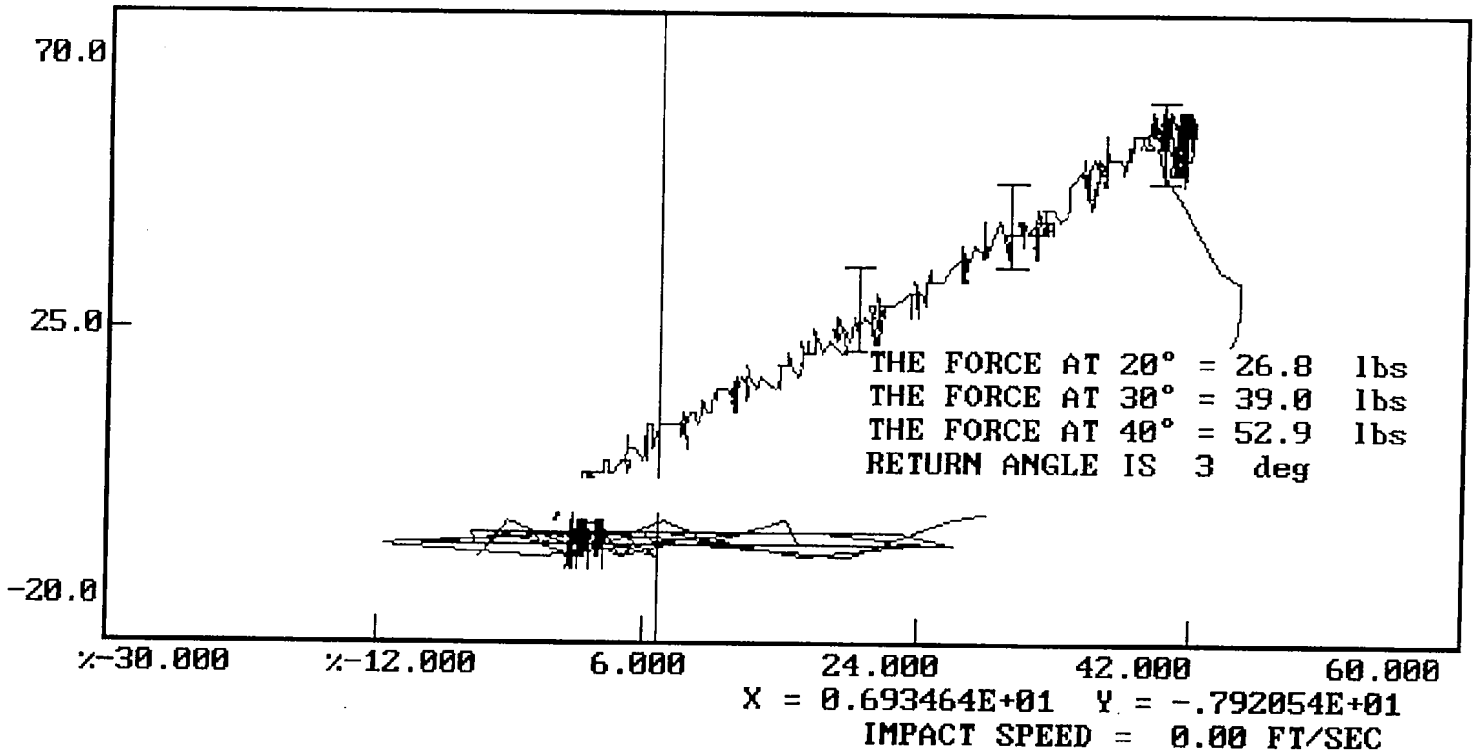
TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - LUMBAR FLEXION
DUMMY # 270
FORCE (LBS) VS. TORSO ROTATION (DEGREES)

12-06-1995 08:43



X = 0.693464E+01 Y = -.792054E+01
IMPACT SPEED = 0.00 FT/SEC

POST-TEST CERTIFICATION DATA

Passenger Dummy Serial Number: 269

Calibration Test Results Summary

Dummy Serial Number: 269

Post-Test Calibration

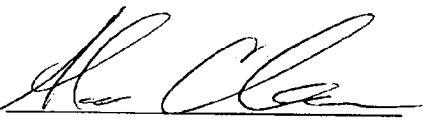
External Dimensions:	The dummy passed all external dimension requirements.
Thorax Impact Test:	The thorax passed all impact test requirements.
Pelvic Impact Test:	The pelvis passed all impact test requirements.
Abdominal Compression Test:	The abdomen passed all compression test requirements.
Lumbar Flexion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

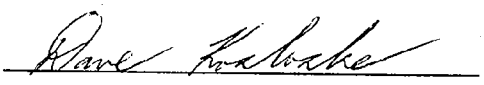
SIDE IMPACT DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA

DUMMY NO.: 269

DATE OF VERIFICATION: December 7, 1995

DESCRIPTION	SPECIFICATION	TEST RESULTS
SH - Seated Height	35.0" - 35.8"	35.1
RH - Rib Height	19.75" - 20.50"	20.10
HP - Hip Pivot Height	3.9" ref.	3.9
RD - Rib From Back Line	9.0" to 9.5"	9.3
KV - Knee Pivot From Back Line	20.1" - 20.7"	20.5
SW - Knee Pivot to Floor	19.3" - 19.9"	19.4
HW - Hip Width	14.0" - 15.4"	15.1

MEASUREMENTS BY: 

APPROVED BY: 

MGA RESEARCH CORPORATION

THORAX IMPACT TEST

SIDE IMPACT DUMMY (SID)

DATE: December 5, 1995

DUMMY NUMBER: 269 TEST NUMBER: D951992

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
PROBE SPEED	13.8 - 14.2 fps	14.0
UPPER RIB	37 - 46 g's	40
LOWER RIB	37 - 46 g's	39
LOWER SPINE	15 - 22 g's	21

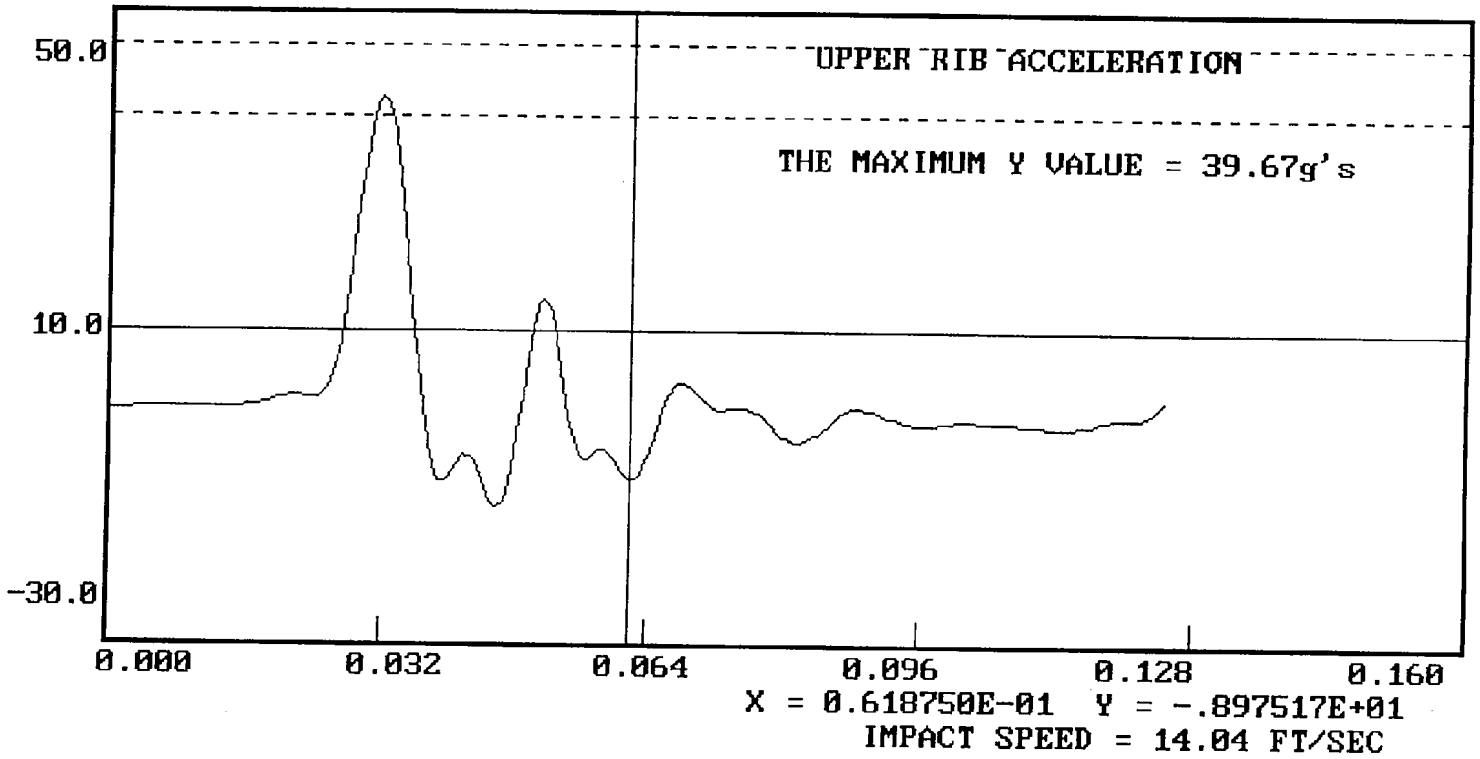
TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - THORAX IMPACT
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))

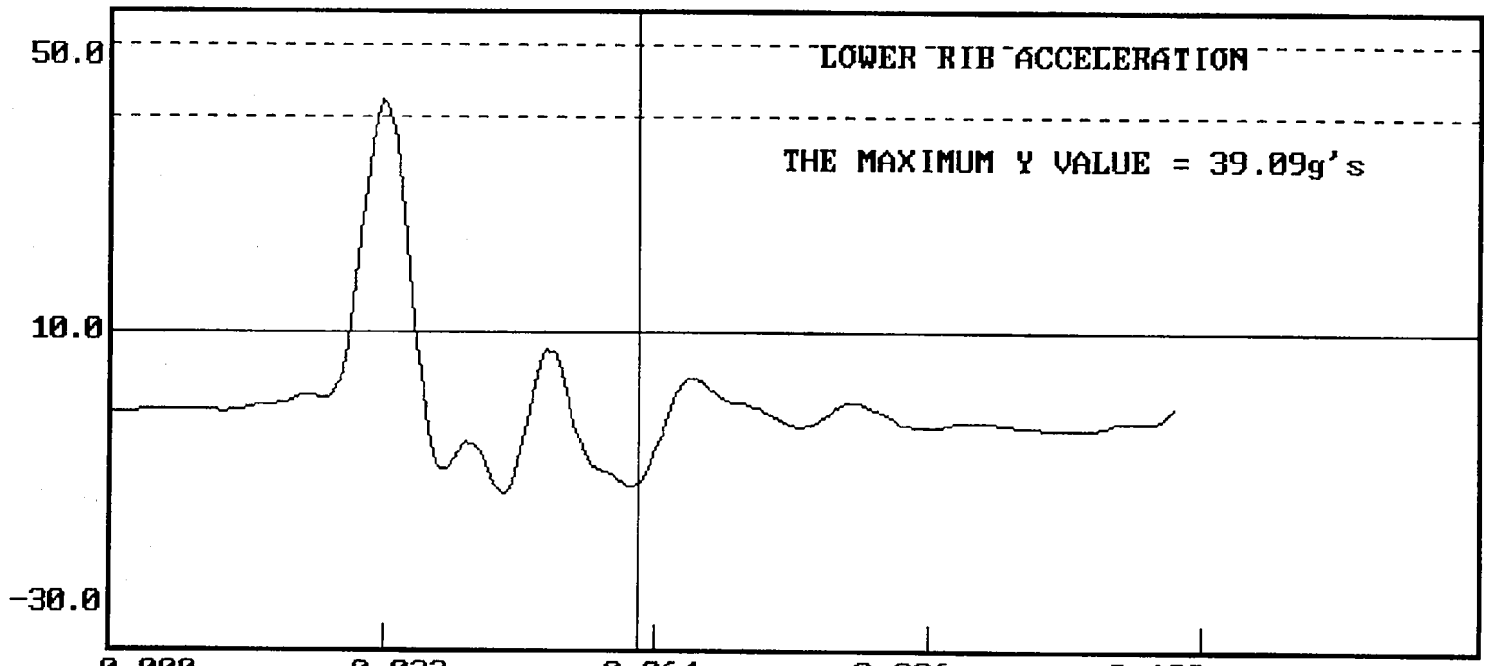
12-05-1995 16:23



X = 0.618750E-01 Y = -.897517E+01
IMPACT SPEED = 14.04 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))

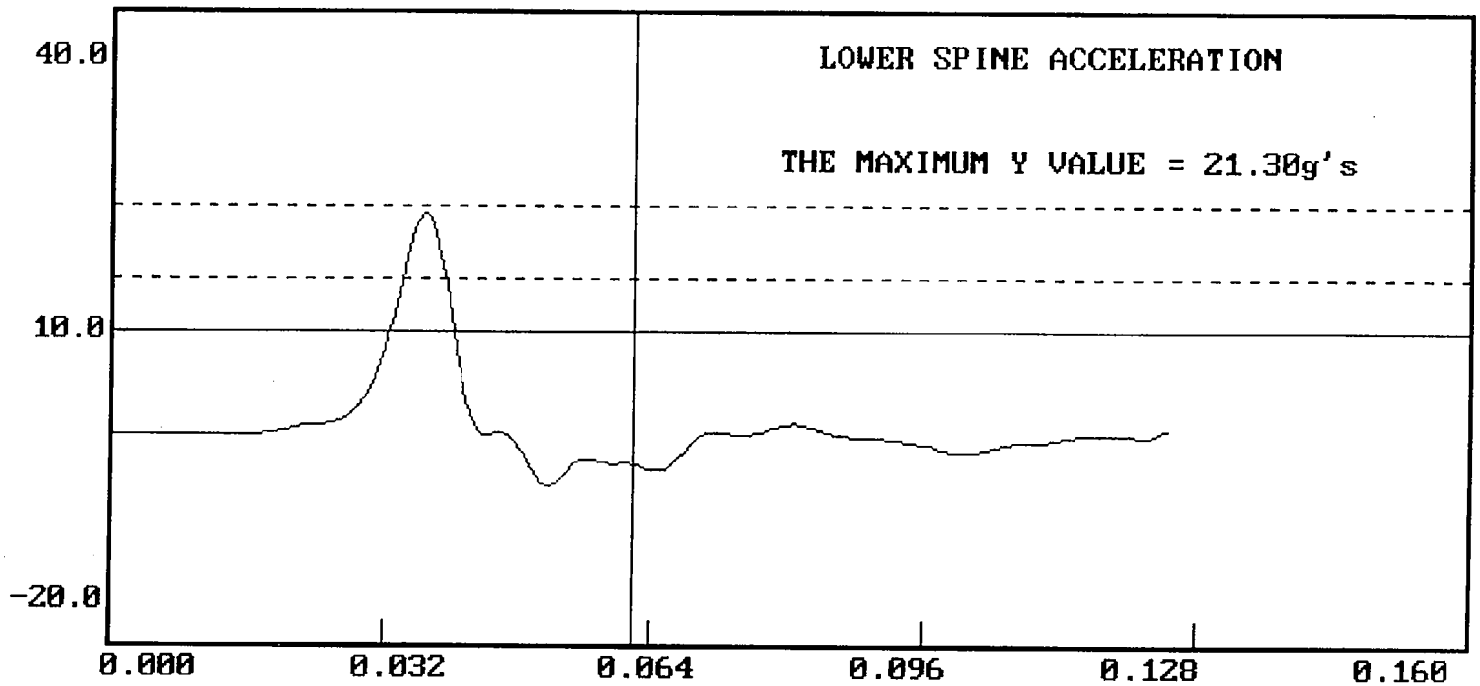
12-05-1995 16:23



X = 0.618750E-01 Y = -.907843E+01
IMPACT SPEED = 14.04 FT/SEC

DUMMY CALIBRATION - THORAX IMPACT
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))

12-05-1995 16:23



X = 0.618750E-01 Y = -.263878E+01
IMPACT SPEED = 14.04 FT/SEC

MGA RESEARCH CORPORATION

PELVIS IMPACT TEST

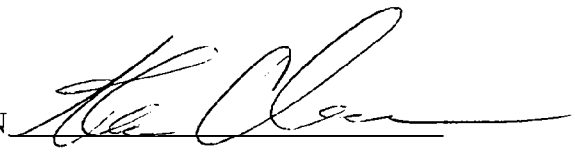
SIDE IMPACT DUMMY (SID)

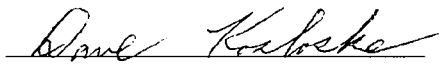
DATE: December 5, 1995

DUMMY NUMBER: 269 TEST NUMBER: D951993

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
PROBE SPEED	13.8 - 14.2 f/s	13.9
PELVIS ACCELERATION	40 - 60 g's	59

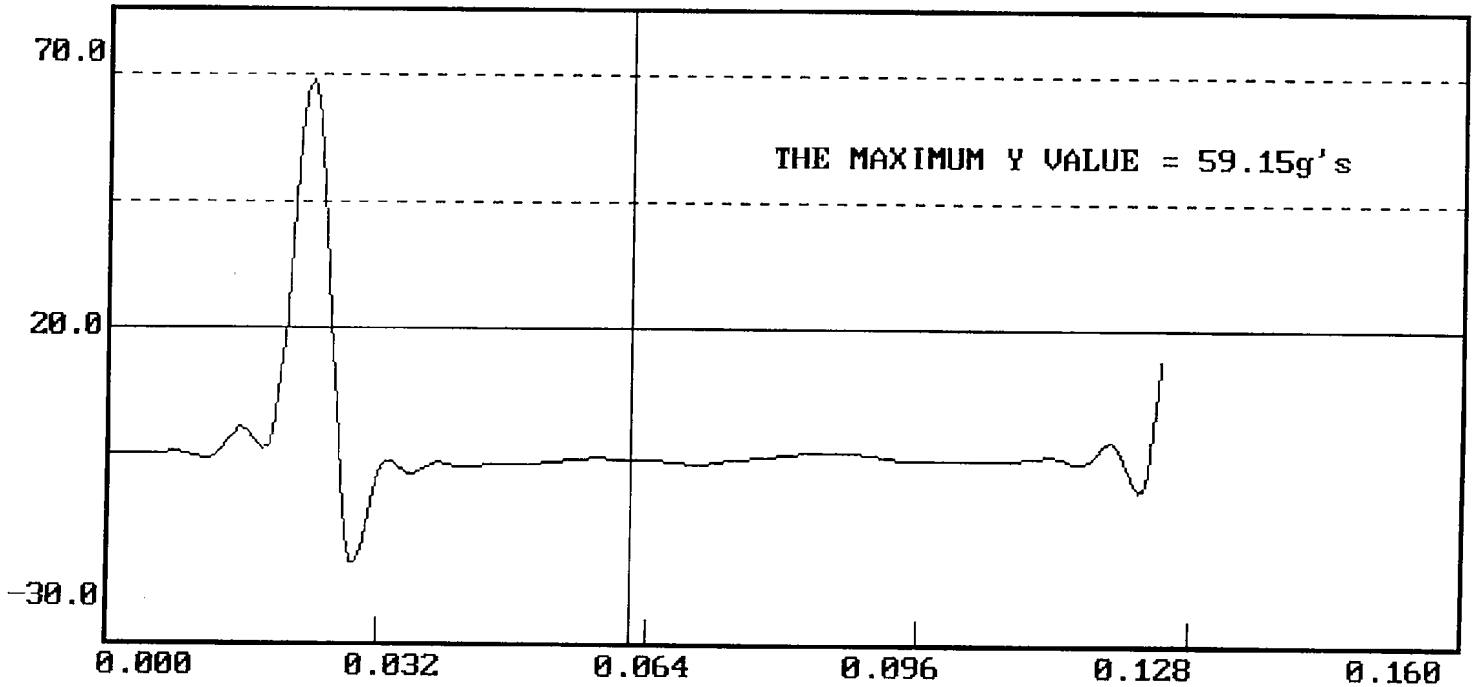
TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - PELVIS IMPACT
DUMMY # 269
ACCELERATION (G'S) VS. TIME ((SECONDS))

12-05-1995 16:40



X = 0.618750E-01 Y = -.780352E+00
IMPACT SPEED = 13.94 FT/SEC

MGA RESEARCH CORPORATION

ABDOMINAL COMPRESSION TEST
(PRELOAD = 10 LBS)

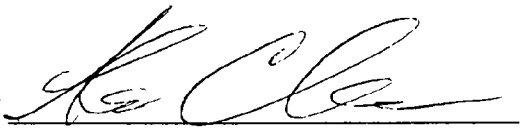
SIDE IMPACT DUMMY (SID)

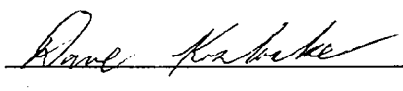
DATE: December 7, 1995

DUMMY NUMBER: 269 TEST NUMBER: D951994

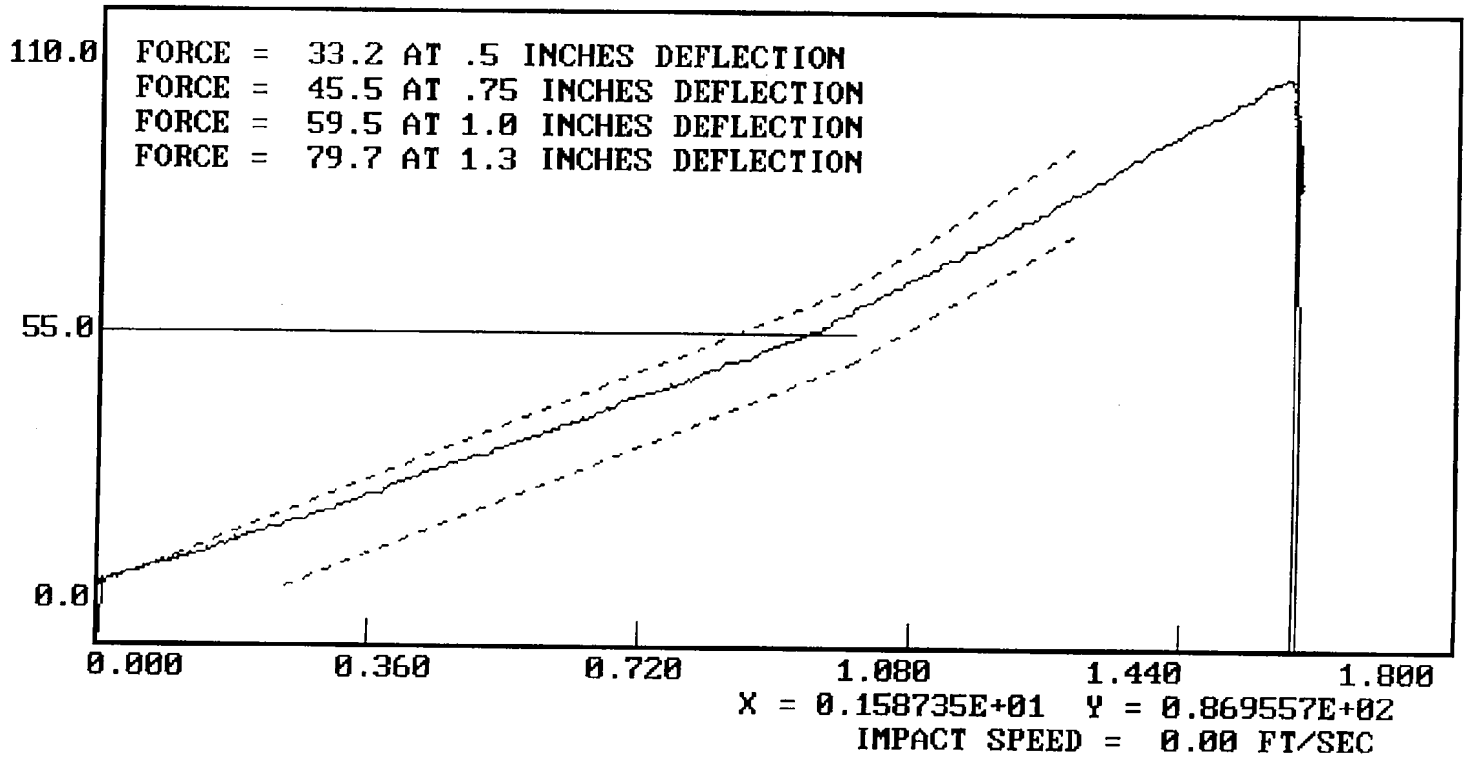
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
FORCE @ 0.5 in	23.3 - 36.5 lbs	33.2
FORCE @ 0.75 in	36.7 - 49.8 lbs	45.5
FORCE @ 1.0 in	50 - 63 lbs	60
FORCE @ 1.3 in	73 - 88 lbs	80

TEST MEETS SPECIFICATIONS

TECHNICIAN 

APPROVED BY 

DUMMY CALIBRATION - ABDOMEN COMPRESSION 12-07-1995 16:35
DUMMY # 269
ABDOMEN FORCE (LBS) VS. ABDOMEN DISPLACEMENT (INCHES)



MGA RESEARCH CORPORATION

LUMBAR FLEXION TEST

SIDE IMPACT DUMMY (SID)

DATE: December 6, 1995

DUMMY NUMBER: 269 TEST NUMBER: D951995

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE	66 - 78° F	70°
RELATIVE HUMIDITY	10 - 70%	12%
FORCE @ 0°	0 - 6 lbs	0
FORCE @ 20°	22 - 34 lbs	29
FORCE @ 30°	34 - 46 lbs	39
FORCE @ 40°	46 - 58 lbs	53
RETURN ANGLE	12° maximum	2°

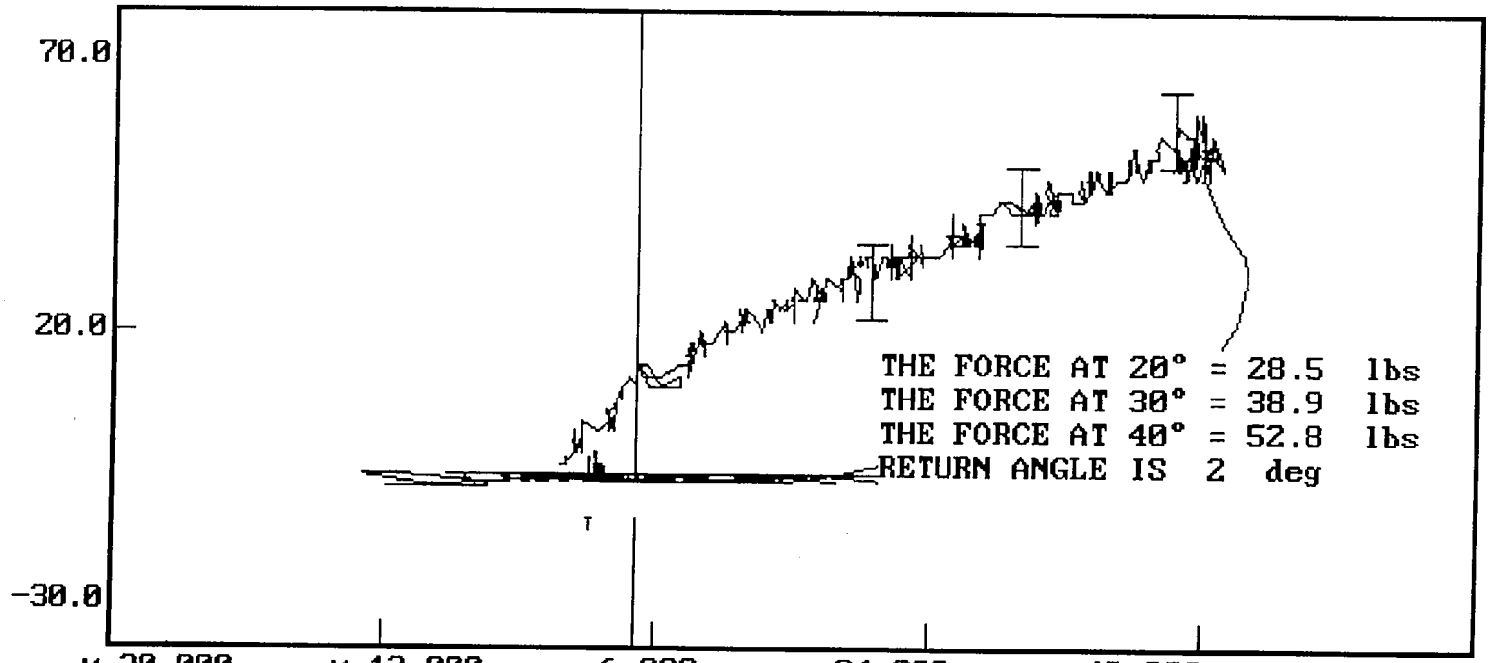
TEST MEETS SPECIFICATIONS

TECHNICIAN

APPROVED BY

DUMMY CALIBRATION - LUMBAR FLEXION
DUMMY # 269
FORCE (LBS) VS. TORSO ROTATION (DEGREES)

12-06-1995 08:24



X = 0.464489E+01 Y = -.277299E+01
IMPACT SPEED = 0.00 FT/SEC

POST-TEST DRIVER DUMMY INSPECTION CHECKLIST

Type: Side Impact Dummy

Serial Number: 270

Inspected By: Al Chalmers

Date: December 7, 1995

Part	Items Checked	Comments
Skin	visual inspection	OK
Head	visual, ballast, accelerometer mount	OK
Neck	visual, cable torque	OK
Spine box	visual, ballast, weldment, accelerometer mount	OK
Rib cage	visual, measure, stiffeners	OK
Sternum	visual	OK
Lumbar spine	visual	OK
Abdomen	visual	OK
Pelvis	visual, palpate, accelerometer mount	OK
Upper legs	visual	OK
Knees	visual, stops, inserts	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: 269

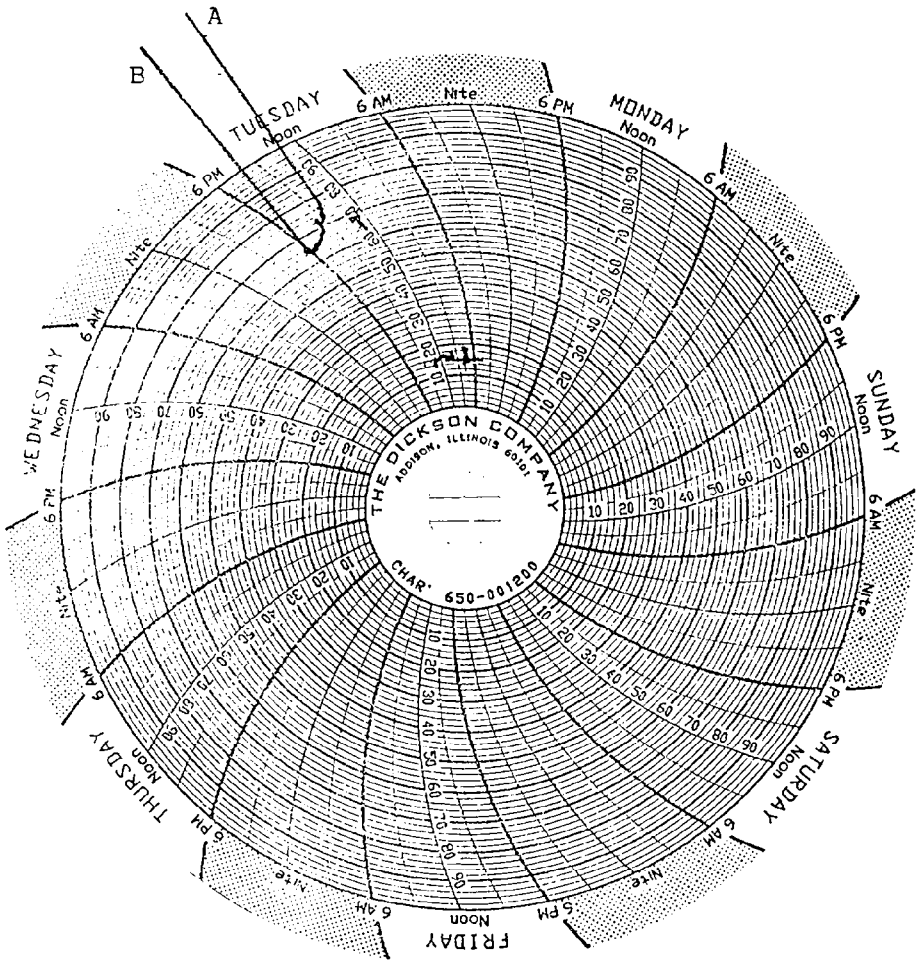
Inspected By: Al Chalmers

Date: December 7, 1995

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

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

VEHICLE AND DUMMY TEMPERATURE



A = Dummies placed in vehicle
B = Test conducted

Note: Temperature was approved by the NHTSA COTR

APPENDIX D

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

DUMMY AND VEHICLE CALIBRATION DATA

INSTRUMENTS FOR DRIVER DUMMY NO. 270

	DRIVER		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Upper Rib Y	AP1H2	Endevco	September 25, 1995
Lower Rib Y	AJ9C2	Endevco	September 25, 1995
Lower Spine Y	AP207	Endevco	September 25, 1995
Pelvis Y	ALCH7	Endevco	September 15, 1995
Upper Rib Redundant Y	AH0B0	Endevco	September 25, 1995
Lower Rib Redundant Y	AJTT2	Endevco	September 25, 1995
Lower Spine Redundant Y	AP1T8	Endevco	September 25, 1995
Pelvis Redundant Y	AJ420	Endevco	September 15, 1995

INSTRUMENTS FOR PASSENGER DUMMY NO. 269

	LEFT REAR PASSENGER		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Upper Rib Y	AJ9D6	Endevco	June 07, 1995
Lower Rib Y	AJ412	Endevco	June 12, 1995
Lower Spine Y	AJ816	Endevco	June 07, 1995
Pelvis Y	AHTC3	Endevco	June 07, 1995
Upper Rib Redundant Y	AJ9D8	Endevco	June 07, 1995
Lower Rib Redundant Y	AHRP6	Endevco	June 13, 1995
Lower Spine Redundant Y	AHT20	Endevco	June 07, 1995
Pelvis Redundant Y	AGP53	Endevco	June 07, 1995

VEHICLE INSTRUMENT CALIBRATION

	VEHICLE ACCELEROMETERS		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Moving Barrier CG X	F12-X03	Entran	August 02, 1995
Moving Barrier CG Y	L14-D17	Entran	October 23, 1995
Moving Barrier CG Z	L18-E14	Entran	October 23, 1995
Moving Barrier Rear Axle X	C25-A01	Entran	October 05, 1995
Moving Barrier Rear Axle Y	C25-A08	Entran	October 24, 1995
Left Mid A-Post Y	C06-G22	Entran	September 29, 1995
Left Lower A-Post Y	L14-D16	Entran	October 24, 1995
Left Mid B-Post Y	L18-E15	Entran	October 24 1995
Left Lower B-Post Y	L18-E12	Entran	October 24, 1995
Rear Floorpan Above Axle X	H07-A03	Entran	September 15, 1995
Rear Floorpan Above Axle Y	L18-E18	Entran	October 23, 1995
Rear Floorpan Above Axle Z	H07-A20	Entran	September 05, 1995
Driver Seat Track Y	L14-D22	Entran	October 23, 1995
Right Side Sill at Front Seat X	L18-G02	Entran	October 24, 1995
Right Side Sill at Front Seat Y	F12-X10	Entran	August 01, 1995
Right Side Sill at Front Seat Z	E25-G04	Entran	June 28, 1995
Right Side Sill at Rear Seat X	L14-D11	Entran	October 23, 1995
Right Side Sill at Rear Seat Y	D06-A06	Entran	October 23, 1995
Right Side Sill at Rear Seat Z	B02-G02	Entran	September 29, 1995
Left Side Sill at Front Seat Y	F07-A06	Entran	August 01, 1995

VEHICLE INSTRUMENT CALIBRATION

	VEHICLE ACCELEROMETERS		
	SERIAL NO	MANUFACTURER	CALIBRATION DATE
Left Side Sill at Rear Seat Y	L18-E01	Entran	October 23, 1995
Right Rear Occupant Compartment Y	H07-A17	Entran	September 29, 1995
Vehicle CG X	L18-E10	Entran	October 23, 1995
Vehicle CG Y	F07-A04	Entran	August 01, 1995
Vehicle CG Z	G19-G12	Entran	September 15, 1995

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