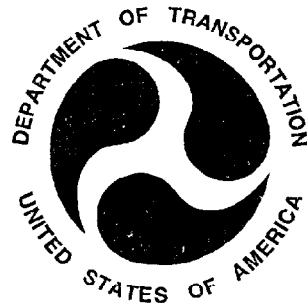


V2738
2076

1997 FORD MUSTANG 2 DOOR COUPE
"EU 96/27/EC SIDE IMPACT TEST"

MGA PROVING GROUNDS
5000 WARREN ROAD
BURLINGTON, WI 53105



Test Date: October 9, 1997

Report Date: December 19, 1997

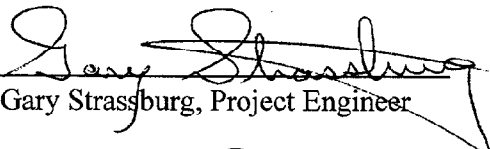
FINAL REPORT

Prepared For:

U.S. DEPARTMENT OF TRANSPORTATION
VOLPE NATIONAL TRANSPORTATION SYSTEM CENTER
55 BROADWAY, KENDALL SQUARE
CAMBRIDGE, MA 02142

This Final Report was prepared for the U.S. Department of Transportation, Volpe National Transportation System Center, under Contract No. DTRS-57-95-C-00010.

This document is disseminated under the sponsorship of the U. S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its content or use thereof.

Approved By: 
Gary Strassburg, Project Engineer

Approval Date: 4-22-98

FINAL REPORT ACCEPTED BY (OVSC):

Accepted By: _____
Contract Technical Manager

Acceptance Date: _____

TABLE OF CONTENTS

<u>Section</u>		<u>Page No.</u>
1	PURPOSE AND TEST PROCEDURE	1-1
2	SUMMARY OF LATERAL TEST	2-1
3	LATERAL IMPACT DUMMY (EUROSID-1) AND VEHICLE TEST DATA	3-1
4	OCCUPANT AND VEHICLE INFORMATION	4-1
APPENDIX A	PHOTOGRAPHS	
APPENDIX B	VEHICLE AND EUROSID-1 RESPONSE DATA	
APPENDIX C	OVERPLOT DATA	
APPENDIX D	EUROSID-1 CONFIGURATION AND PERFORMANCE VERIFICATION	
APPENDIX E	TEST EQUIPMENT LIST AND CALIBRATION INFORMATION	
APPENDIX F	STATIC CRUSH	

SECTION 1
PURPOSE AND TEST PROCEDURE

This lateral impact test is part of Contract No. DTRS-57-97-C-00010, sponsored by the National Highway Traffic Safety Administration (NHTSA). The purpose of this test was to evaluate a 1997 Ford Mustang 2 Door Coupe when subjected to a 50 kph lateral impact conducted in accordance with Directive 97/27/EC of the European Parliament and of the council of May 20, 1996.

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

SECTION 2
SUMMARY OF LATERAL IMPACT TEST

A 1997 Ford Mustang 2 Door Coupe was impacted on the left or driver's side by a Moving Deformable Barrier (MDB) which was moving forward at a velocity of 31.24 mph (50.3 kph). The target vehicle was stationary and was positioned perpendicular to the line of forward motion of the moving deformable barrier. The lateral impact test was conducted by MGA Research Corporation in Burlington, Wisconsin, on October 9, 1997. Pre- and post-test photographs of the test vehicle, the MDB and the European Side Impact Dummy (EuroSID-1) are included in Appendix A.

One European Side Impact Dummies (EuroSID-1s) was placed in the driver designated seating position according to instructions specified in the Lateral Impact Directive which is dated May 20, 1996. The impact side left rear seating position was ballasted to simulate the mass of a EuroSID-1 dummy. The lateral impact event was documented by 10 high speed cameras and one real-time camera. Camera locations and other pertinent camera information can be found in this report.

Appendix B contains the vehicle and dummy response data traces. A summary of the lateral impact dummy (EuroSID-1) configuration and performance verification test data is shown in Appendix D. Dummy and vehicle calibration data can be found in Appendix E of this report.

The following tables summarize the results of the Lateral Side Impact test:

		DRIVER
(1) Head Performance Criteria		
≤ 1000	T ₁	58.9
	T ₂	62.1
	HPC	33.4
(2) Thorax Performance Criteria		
(2.1) Chest Deflection ≤ 42 mm	Upper Rib Deflection	23.5 @ 49 msec.
	Mid Rib Deflection	39.8 @ 49 msec.
	Lower Rib Deflection	14.7 @ 49 msec.
(2.2) Viscous Criteria ≤ 1.0	Upper Rib	.28 @ 44 msec.
	Middle Rib	.69 @ 44 msec.
	Lower Rib	.19 @ 43 msec.
(3) Abdominal Protection Criterion		
≤ 2500 N	Front Abdominal Force	325 @ 41 msec.
	Mid Abdominal Force	995 @ 40 msec.
	Rear Abdominal Force	981 @ 40 msec.
	Sum of Abdominal Force	2295 @ 40 msec.
(4) Pelvis Performance Criterion		
≤ 6000 N	Pubic Symphysis Force	4827 @ 38 msec.

		DRIVER
HIC	T ₁	48.8
	T ₂	79.5
	T ₂ - T ₁	30.7
	HIC	85.3

FIR FILTERED	DRIVER
UPPER RIB (g's)	77.8 @ 42 msec
MIDDLE RIB (g's)	107.5 @ 39 msec.
LOWER RIB (g's)	135.7 @ 41 msec.
LOWER SPINE (g's)	67.6 @ 41 msec.
PELVIS (g's)	71.3 @ 38 msec.
TTI (g's)	101.7
FILTERED AT SAE CLASS 180	
UPPER RIB (g's)	80.5 @ 42 msec.
MID RIB (g's)	186.1 @ 67 msec.
LOWER RIB (g's)	162.8 @ 41 msec.
LOWER SPINE (g's)	71.4 @ 40 msec.
PELVIS (g's)	89.0 @ 40 msec.

CONTACTS	DRIVER
HEAD (ms)	50
SHOULDER (ms)	19
UPPER RIB (ms)	32
MIDDLE RIB (ms)	34
LOWER RIB (ms)	36
ABDOMEN (ms)	28
PELVIS (ms)	23

TEST NOTES

Although not used in the European Lateral Impact testing, ballast for a rear struck side (passenger) EuroSID-1 dummy was placed in the target test vehicle. Due to interference between the EuroSID-1 rear seat dummies head and the back glass, the EuroSID-1 dummy was not placed in the impact side rear seating position. The driver and vehicle were instrumented with additional transducers to provide data beyond the requirements of the European Lateral Impact requirements. Whenever possible, the European Lateral Impact Standards were followed.

The measured "R" point location (impact of barrier centerline) using the "H" point machine did not match the "R" point location supplied by the manufacturer.

Measured = 458 mm forward of front door striker

Supplied = 441 mm forward of front door striker

The test conducted using the manufacturer supplied "R" point location.

The upper and lower barrier face height dimensions varied between 236 mm and 238 mm. A gap existed between the upper and lower faces, but the total height between top and bottom of the barrier face was 500 mm.

SECTION 3
LATERAL IMPACT DUMMY (EUROSID-1) AND
VEHICLE TEST DATA

DATA SHEET NO. 1
GENERAL VEHICLE TEST PARAMETER DATA

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

VIN: 1FALP4041VF104221

Vehicle Body Color: Red Build Date: 8-96

Engine Data: 6 Cylinders; CID; 3.8 Liter; cc

Placement Longitudinal; Lateral

Transmission: 3 speed; Manual; Automatic; Overdrive

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

Odometer Reading 29 miles

Options: A/C; Pwr. Steering; Pwr. Brakes; Pwr. Windows;

Cruise Control; Tilt Wheel; Power Door Locks; Telescoping Column

DATA FROM TIRE PLACARD:

Tire Pressure (at capacity): 35 Psi FRONT

35 Psi REAR

Recommended Tire Size: P205/65R15

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

Vehicle Capacity Data:

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

Type of Front Seats: Bucket; Bench; Split Bench

Type of Front Seat Back: Fixed; Adjustable with Knob

Vehicle Maximum Capacity Loading = 317.5 kg (A)

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

Cargo Capacity (A-B) = 45.3 kg

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

WEIGHT OF TEST VEHICLE WITH MAXIMUM FLUIDS AND FUEL:

Right Front	=	<u>404.6</u>	kg	Right Rear	=	<u>311.2</u>	kg
Left Front	=	<u>415.9</u>	kg	Left Rear	=	<u>305.7</u>	kg
TOTAL FRONT	=	<u>820.5</u>	kg	TOTAL REAR	=	<u>616.9</u>	kg
% of Total Vehicle Weight	=	<u>57</u>	%;	% of Total Weight	=	<u>43</u>	%
TOTAL WEIGHT	=	<u>1437.4</u>	kg				

WEIGHT OF TEST VEHICLE WITHOUT FUEL:

TOTAL WEIGHT = 1393.0 kg

WEIGHT OF FUEL:

TOTAL WEIGHT = 44.4 kg

WEIGHT OF TEST VEHICLE WITH 90% OF FUEL MASS (UNLADEN WEIGHT):

TOTAL WEIGHT = 1433.0 kg

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Year/Make/Model/Body Style: 1997/Ford Mustang/2 Door Coupe

Test Date: October 9, 1997

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Weight of Test Vehicle with 90% Fuel Mass (mass unladen) = 1433.0 kg
Weight of 2 EuroSID-1 Dummies and Instrumentation = 200.0 kg
(100 kg allotted for each EuroSID-1 plus instrumentation per EU Directive 96/27/EC)
TEST VEHICLE TARGET WEIGHT ($\pm 1\%$) = 1633.0 kg

ACTUAL WEIGHT OF TEST VEHICLE WITH 2 DUMMIES

Right Front = 407.3 kg Right Rear = 369.2 kg
Left Front = 468.1 kg Left Rear = 372.0 kg
TOTAL FRONT = 875.4 kg TOTAL REAR = 741.2 kg
% of Total Weight = 54 % % of Total Weight = 46 %
TOTAL TEST WEIGHT = 1616.6 kg

TEST VEHICLE ATTITUDE:

CURB WEIGHT ATTITUDE:

Right Front 720 mm Left Front 709 mm Right Rear 738 mm Left Rear 730 mm

TEST ATTITUDE:

Right Front 712 mm Left Front 690 mm Right Rear 698 mm Left Rear 685 mm

Test Vehicle Wheelbase: 2574 mm

C.G. As Tested = 1180 mm rearward of front wheel centerline

GENERAL VEHICLE TEST PARAMETER DATA (Cont'd)

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997

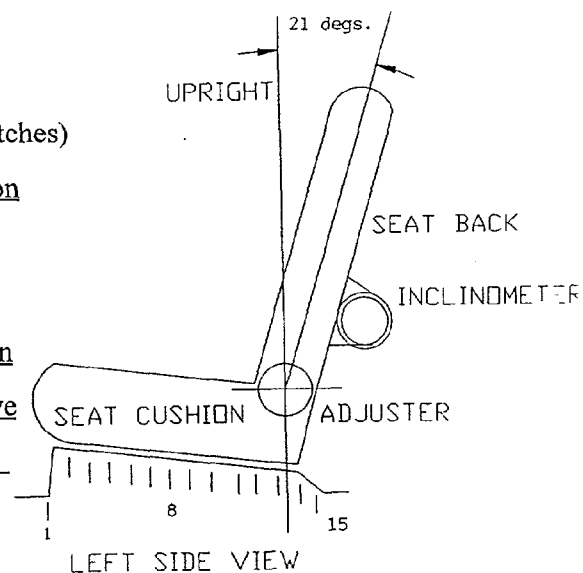
FRONT SEAT CUSHION PLACEMENT:

Total Length of Adjustment Travel: 182 mm (15 notches)

Test Position: 8th notch from foremost locking position

FRONT SEAT BACK ADJUSTMENT POSITION:

Seat Back Angle = 21° measured on seat back frame on outboard rear side surface 13" above pivot



REAR SEAT: Contoured

Total Length of Fore/Aft Adjustment Travel: Non Adjustable

Seat Back Adjustment Position: Non Adjustable

ADJUSTABLE STEERING COLUMN POSITION: Mid Position (3rd of 5 positions)

WINDOW POSITIONS: Left Front Closed Left Rear Closed

Right Front Closed Right Rear Closed

AMOUNT OF WATER IN FUEL TANK:

Weight of full fuel = 44.4 kg

90% of fuel mass = 40.0 kg

Test mass added = 40.0 kg

LOCATION OF IMPACT POINT ON TEST VEHICLE SIDE TO BE IMPACTED (R Point):

Impact point is 441 mm forward of the lower rear corner of driver door

Impact point is 1408 mm rearward of the front axle centerline

DATA SHEET NO. 2
TEST VEHICLE SUMMARY OF RESULTS

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997

Overall Length of Vehicle = 4550 mm

Overall Width at B-Post = 1766 mm

WEIGHT AS TESTED:

Right Front = 407.3 kg

Right Rear = 369.2 kg

Left Front = 468.1 kg

Left Rear = 372.0 kg

TOTAL FRONT = 875.4 kg

TOTAL REAR = 741.2 kg

% of Total Weight = 54 %

% of Total Weight = 46 %

TOTAL VEHICLE WEIGHT = 1616.6 kg

Wheelbase = 2574 mm

Longitudinal C.G. from Center of Front Axle = 1180 mm

Impact Angle with Respect to Impactor = 90 degrees

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (265 mm above ground) = 266 mm

2. LEVEL 2 (488 mm above ground) = 333 mm

3. LEVEL 3 (578 mm above ground) = 335 mm

4. LEVEL 4 (875 mm above ground) = 156 mm

5. LEVEL 5 (1252 mm above ground) = 22 mm

Maximum Post-Test Intrusion = 335 mm @ Level 3

OCCUPANTS:

	<u>Left Front Passenger</u>	<u>Left Rear Passenger</u>
Type of Dummy	<u>EuroSID-1</u>	<u>N/A</u>
Restraints Used	<u>type II belt</u>	<u>N/A</u>

TEST VEHICLE SUMMARY OF RESULTS (Cont'd)

CAMERAS:

Number of Cameras: Onboard Vehicle	=	<u>3</u>
Offboard Vehicle	=	<u>6</u>
Deformable Barrier	=	<u>1</u>
TOTAL	=	<u>10</u>

DATA SHEET NO. 3

MOVING DEFORMABLE BARRIER (MDB) SUMMARY OF RESULTS

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997

POSITION OF IMPACT (MDB) ON MONORAIL:

Crabbed 0°

MDB DETAILS:

Wheelbase of Framework Carriage = 2998 mm
Track width (Front & Rear) = 1499 mm
C.G. Location Rearward of Front Axle = 1016 mm
C.G. Location From Center Line = -3.2 mm
C.G. Location Above Ground Level = 500 mm

MDB WEIGHT:

Right Front = 313.4 kg Right Rear = 165.6 kg
Left Front = 322.5 kg Left Rear = 160.6 kg
TOTAL FRONT = 635.9 kg TOTAL REAR = 326.2 kg
TOTAL MDB WEIGHT = 962.1 kg

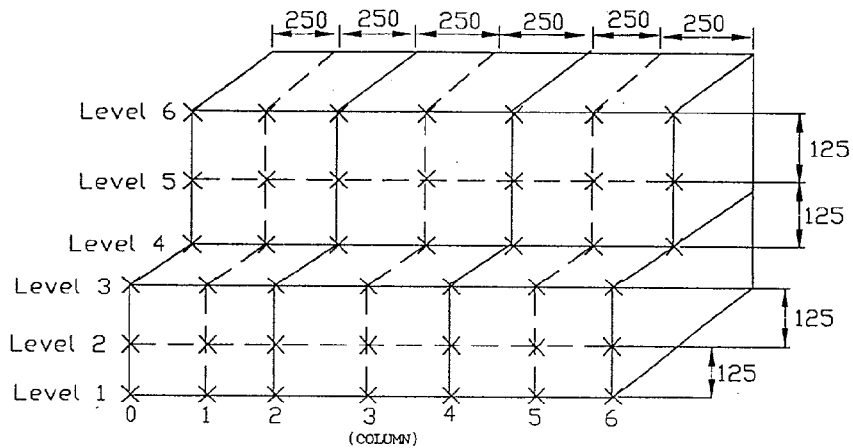
Impact Angle (MDB C/L to Target Vehicle C/L) = 90° degrees

Impact Speed = Primary: 50.27 kph Secondary: 50.28 kph

CRASH TEST SUMMARY FOR SIDE IMPACTOR (Cont'd)

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

Level 1	Column 0	= <u>380</u> mm
Level 2	Column 6	= <u>347</u> mm
Level 3	Column 6	= <u>353</u> mm
Level 4	Column 6	= <u>369</u> mm
Level 5	Column 6	= <u>324</u> mm
Level 6	Column 6	= <u>341</u> mm



INSTRUMENTATION:

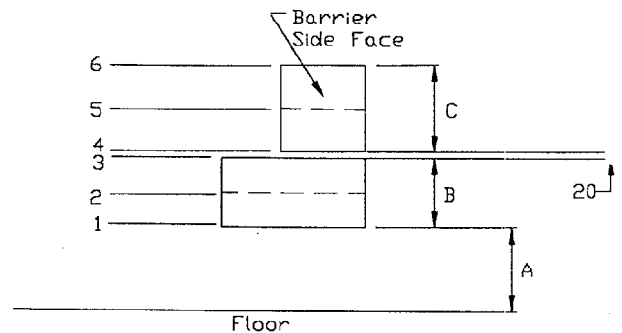
Number of MDB Data Channels = 11

BARRIER FACE MEASUREMENTS POSITIONED AGAINST VEHICLE

Dimensions in mm

	Right	Left
(A)	300	300
(B)	239	236
(C)	240	238

Right Side/Left Side



DATA SHEET NO. 4
POST-TEST OBSERVATIONS

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997

VISIBLE DUMMY CONTACT POINTS:

	<u>LEFT FRONT EUROSID-1</u>
Head	<u>to side header</u>
Arm	<u>to upper door</u>
Upper Rib	<u>to mid door</u>
Mid Rib	<u>to mid door</u>
Lower Rib	<u>to mid door</u>
Abdomen	<u>to armrest</u>
Pelvis	<u>to armrest</u>

DOOR OPENING:

	<u>LEFT SIDE</u>	<u>RIGHT SIDE</u>
Front	<u>remained closed</u>	<u>remained closed</u>
Rear	<u>N/A</u>	<u>N/A</u>

MDB DISTANCE FROM TARGET IMPACT POINT:

Horizontal: 13 mm rearward Vertical: 4 mm high

ARM REST LOCATIONS:

Front: 242 mm from bottom of window
Rear: 302 mm from bottom of window

POST-TEST OBSERVATIONS (Cont'd)

SEAT CRUSH:

Front Seat Back: 99 mm Front Seat Cushion: 97 mm

Left Rear Seat Back: 9 mm Rear Seat Cushion: 69 mm

GLAZING DAMAGE:

Both impact side windows and windshield cracked

PILLAR PERFORMANCE:

"B" Post torn in two 260 mm above sill on impacted side

SILL SEPARATION:

No separation noted

OTHER NOTABLE IMPACT EFFECTS:

Frontal airbags did not deploy

SECTION 4
OCCUPANT AND VEHICLE INFORMATION

DATA SHEET NO. 5
LATERAL IMPACT DUMMY (EUROSID-1) INSTRUMENTATION DATA

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997

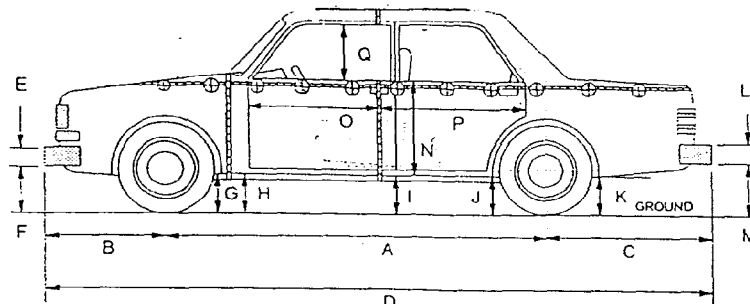
FIR FILTERED

Front EuroSID-1 ID #169					
	Pos. Direct.		Neg. Direct		Time (msec)
	Max (g)	Time (msec)	Max (g)	Time (msec)	
RIB ACCELERATIONS					
Left Upper Rib (LUR) Y	77.8	42	-25.8	47	
Left Middle Rib (LMR) Y	107.5	39	-28.1	62	
Left Lower Rib (LLR) Y	135.7	41	-20.1	56	
SPINE ACCELERATIONS					
Lower Lateral Y	67.6	41	-12.9	81	
PELVIS ACCELERATIONS					
Lateral Y	71.3	38	-26.9	68	

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

EuroSID-1 Manufacture Dates: E1-169 - 4/19/96

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)

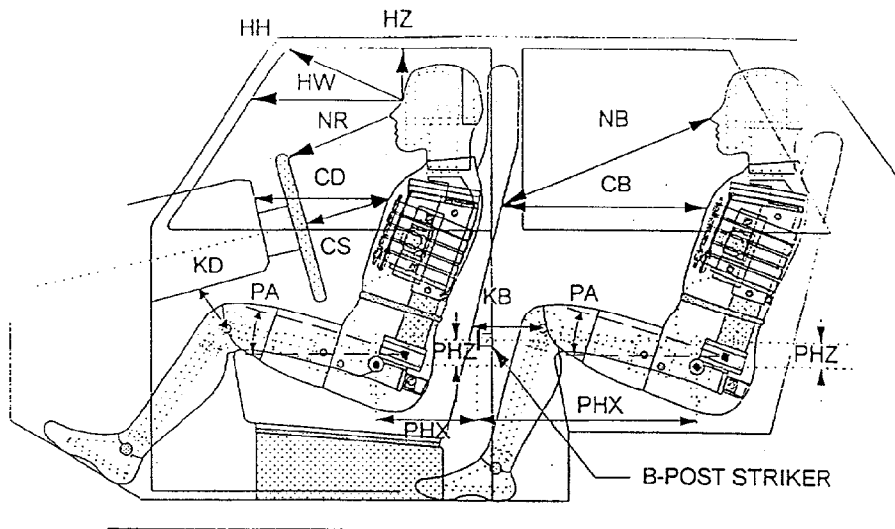
	PRE-TEST	POST-TEST	Δ CHANGE
A	2574	2564	10
B	994	995	1
C	982	993	11
D	4550	4652	102
E	200	200	0
F	364	380	16
G	164	152	12
H	155	143	12
I	154	145	9
J1/J2	167/158	158/150	9/8
K	258	278	20
L	205	205	0
M	398	412	14
N	685	670	15
O	683	552	131
P	781	757	24
Q	338	305	33
R	4355	4355	0
S	4355	4328	27
T	1766	1670	96

DATA SHEET NO. 7

LATERAL IMPACT DUMMY (EUROSID-1) LONGITUDINAL CLEARANCE DIMENSIONS

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997



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

	FRONT EuroSID-1 ID #169
HH	294
HW	414
HZ	112
NR	399
CD	530
CS	310
KDL (KDA°)	*
KDR (KDA°)	*
PA°	N/A
PHX	569
PHZ	137

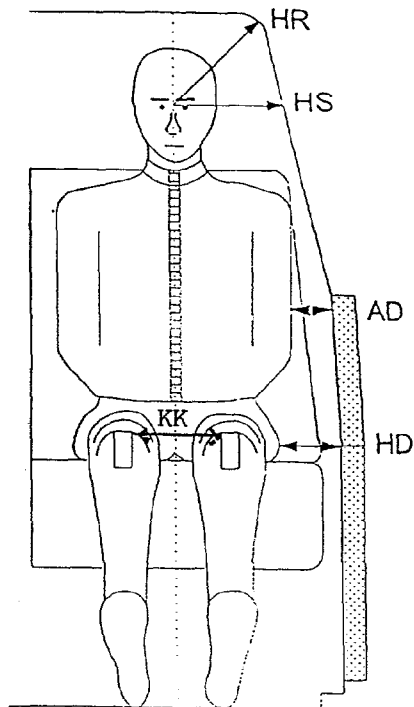
NOTE: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle use the B-post striker as reference point.

* Measurements not available

DATA SHEET NO. 8
LATERAL IMPACT DUMMY (EUROSID-1) LATERAL CLEARANCE DIMENSIONS

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997



NOTE: All dimensions are in mm

	FRONT EuroSID-1 ID #169
HR	128
HS	272
AD	65
HD	120
KK	270

DATA SHEET NO. 9
DUMMY POSITIONING - DRIVER

Driver H-Point

HP to Striker X = 135

HP to Striker Z = 757

Driver Dummy Position

HP to Striker X = 569

HP to Striker Z = 137

H-Point Machine

Left Knee = 122°

Right Knee = NR

Left Foot = 98°

Right Foot = 82°

Left Leg = 134°

Right Leg = 80°

Hip Angle = 94°

Back Angle = 225°

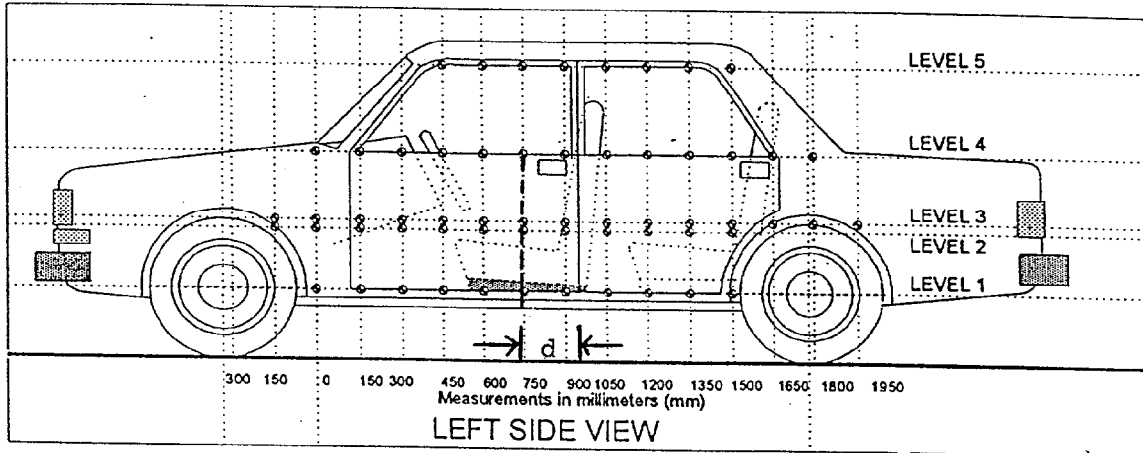
NR = Not recorded

DATA SHEET NO. 10

VEHICLE SIDE MEASUREMENTS

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997



- 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

Lateral Impact Line = |

$d = 441$ mm from front door striker centerline
 = 1408 mm rearward of the front axle centerline
 0 is the impact point (barrier face left from corner)
 for the FMVSS 214D test

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

MEASUREMENTS ALONG THE VERTICAL IMPACT LINE

- Level 1 @ Axle Centerline Height
(or Sill Top Height) = 265 mm
- Level 2 @ Occupant H-Point = 488 mm
- Level 3 @ Mid Door = 578 mm
- Level 4 @ Window Sill = 875 mm
- Level 5 @ Window Top = 1252 mm

Right/Left Vehicle Pitch Angle: .2° nose down (measured at the right side sill)

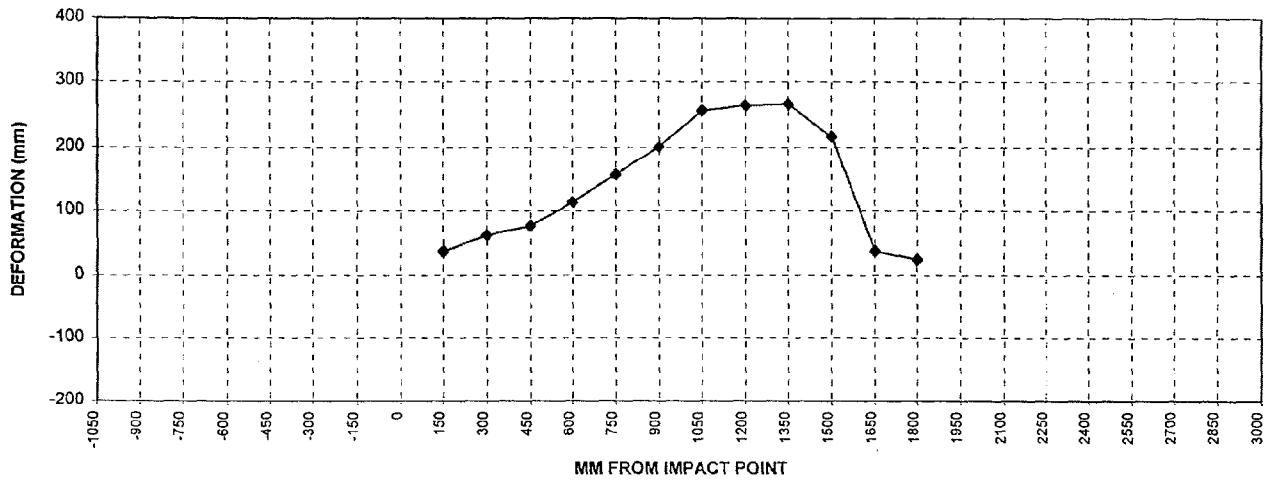
Vehicle Roll Angle: .3° left side down (measured at center of trunk deck crossmember)

DATA SHEET NO. 11
VEHICLE EXTERIOR CRUSH PROFILES

Longitudinal Distance (mm)	Level 1 - Axle Centerline		
	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1050			
-900			
-750			
-600			
-450			
-300			
-150			
0 (impact point)			
150	763	800	37
300	767	829	62
450	767	843	76
600	767	880	113
750	766	922	156
900	766	967	201
1050	760	1016	256
1200	760	1024	264
1350	760	1026	266
1500	755	972	217
1650	747	785	38
1800	742	767	25
1950			
2100			
2250			
2400			
2550			
2700			
2850			
3000			

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



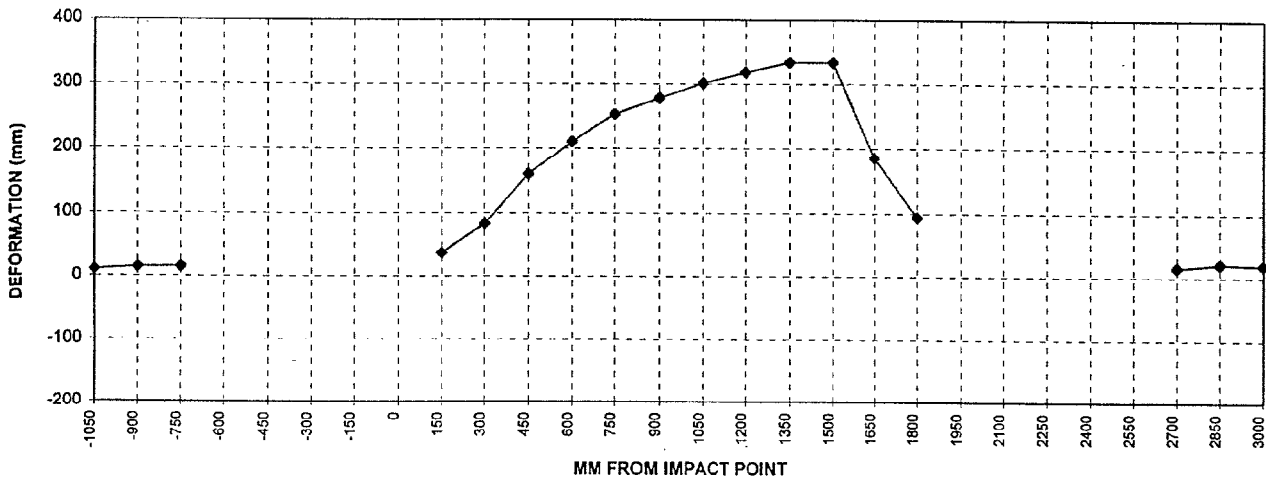
LEVEL 1 - AXLE CENTERLINE

DATA SHEET NO. 11 (Cont'd)
VEHICLE EXTERIOR CRUSH PROFILES

Longitudinal Distance (mm)	Level 2 - Occupant H Point		
	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1050	772	783	11
-900	745	760	15
-750	728	744	16
-600			
-450			
-300			
-150			
0 (impact point)			
150	727	764	37
300	730	813	83
450	732	891	159
600	732	942	210
750	734	987	253
900	734	1012	278
1050	734	1035	301
1200	733	1051	318
1350	733	1066	333
1500	732	1065	333
1650	732	917	185
1800	694	788	94
1950			
2100			
2250			
2400			
2550			
2700	727	743	16
2850	748	770	22
3000	782	802	20

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



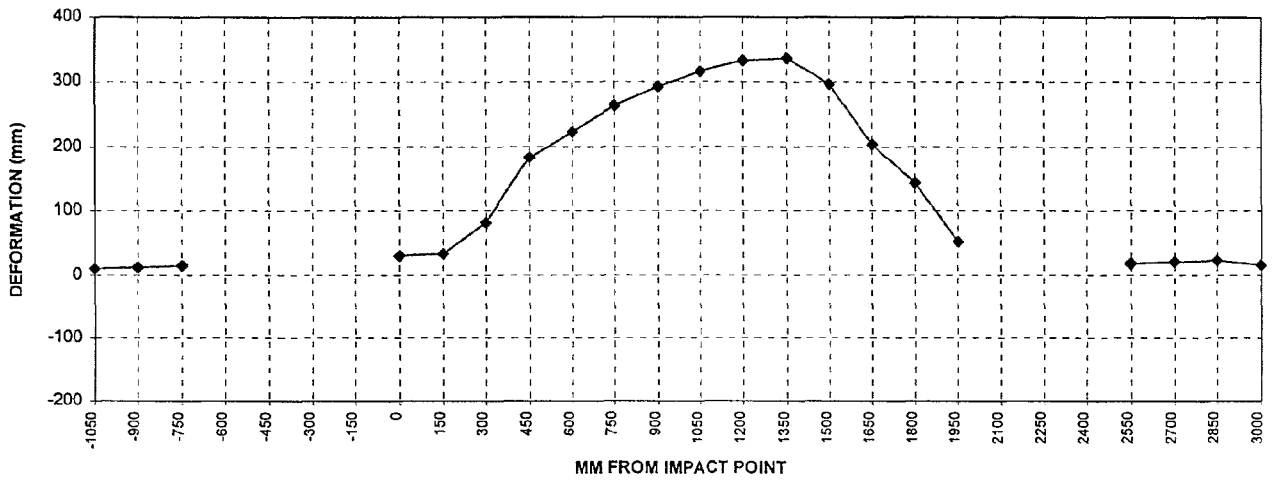
LEVEL 2 - OCCUPANT H-POINT

DATA SHEET NO. 11 (Cont'd)
VEHICLE EXTERIOR CRUSH PROFILES

	Level 3 - Mid Door		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1050	771	781	10
-900	738	750	12
-750	717	732	15
-600			
-450			
-300			
-150			
0 (impact point)	710	740	30
150	714	747	33
300	717	798	81
450	720	903	183
600	722	945	223
750	722	985	263
900	722	1014	292
1050	722	1037	315
1200	721	1052	331
1350	718	1053	335
1500	717	1013	296
1650	706	910	204
1800	694	837	143
1950	674	726	52
2100			
2250			
2400			
2550	702	720	18
2700	724	745	21
2850	753	776	23
3000	788	804	16

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



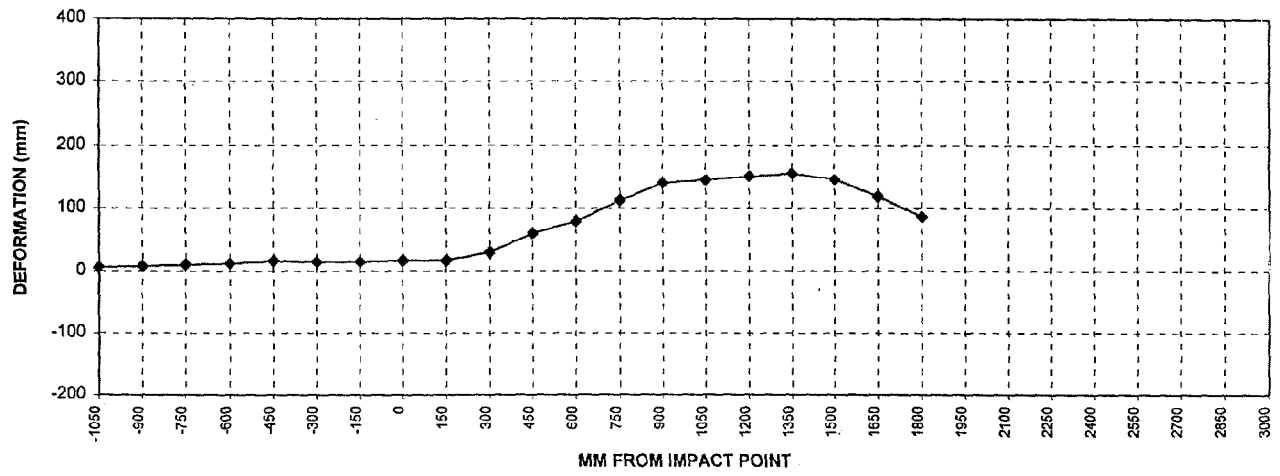
LEVEL 3 - MID DOOR

DATA SHEET NO. 11 (Cont'd)
VEHICLE EXTERIOR CRUSH PROFILES

	Level 4 - Window Sill		
Longitudinal Distance (mm)	Pre-Test (mm)	Post-Test (mm)	Static Crush (mm)
-1050	840	846	6
-900	807	815	8
-750	784	794	10
-600	768	780	12
-450	758	774	16
-300	755	770	15
-150	755	770	15
0 (impact point)	757	774	17
150	762	779	17
300	764	794	30
450	767	827	60
600	773	852	79
750	774	886	112
900	774	914	140
1050	777	922	145
1200	775	926	151
1350	775	931	156
1500	772	918	146
1650	775	894	119
1800	772	859	87
1950			
2100			
2250			
2400			
2550			
2700			
2850			
3000			

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



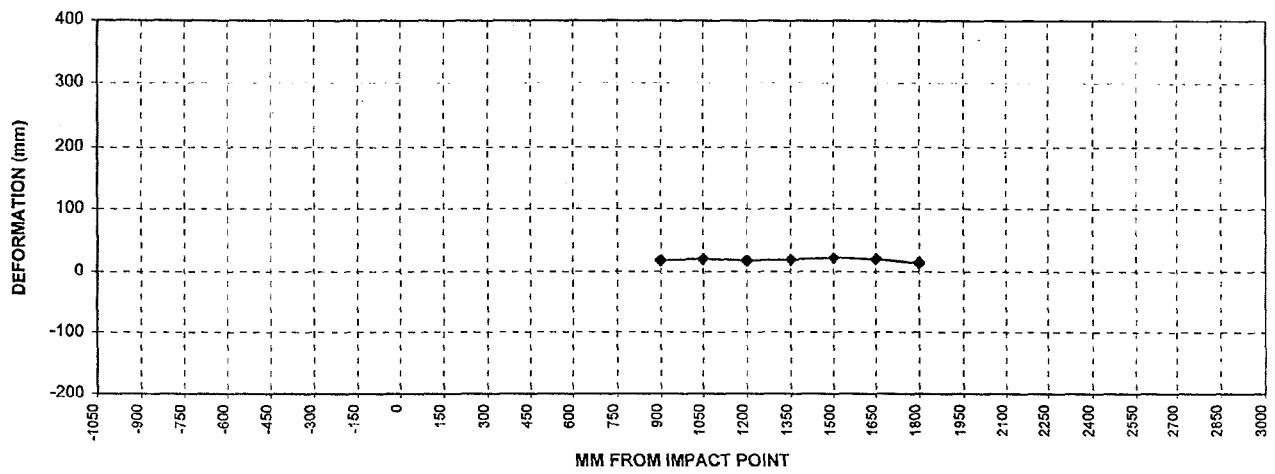
LEVEL 4 - WINDOW SILL

DATA SHEET NO. 11 (Cont'd)
VEHICLE EXTERIOR CRUSH PROFILES

	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	964	982	18
1050	962	982	20
1200	968	986	18
1350	968	987	19
1500	968	990	22
1650	974	994	20
1800	988	1002	14
1950			
2100			
2250			
2400			
2550			
2700			
2850			
3000			

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

VEHICLE EXTERIOR STATIC CRUSH (Cont'd)



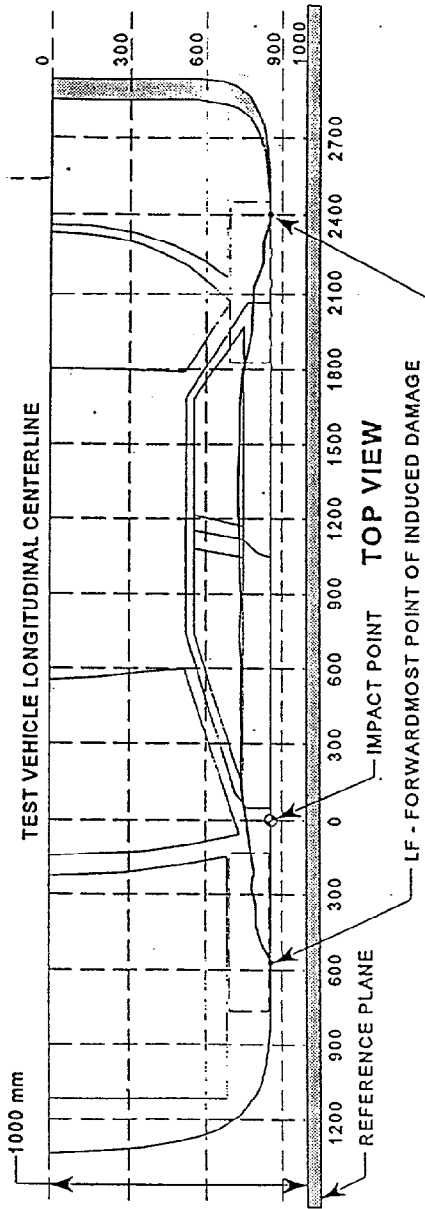
LEVEL 5 - WINDOW TOP

DATA SHEET NO. 12
VEHICLE DAMAGE PROFILE DISTANCES

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997

NOTE: All measurements are in millimeters (mm) and should be accurate to ± 3 mm.



MEASUREMENT CONVENTIONS:
 LR - REARWARDMOST POINT OF INDUCED DAMAGE
 Forward of the impact point (towards front of vehicle) is considered negative (-)
 Rearward of the impact point (toward rear of vehicle) is considered positive (+).

Maximum Crush Level: 488 mm Location: 1395 mm Depth: 338 mm

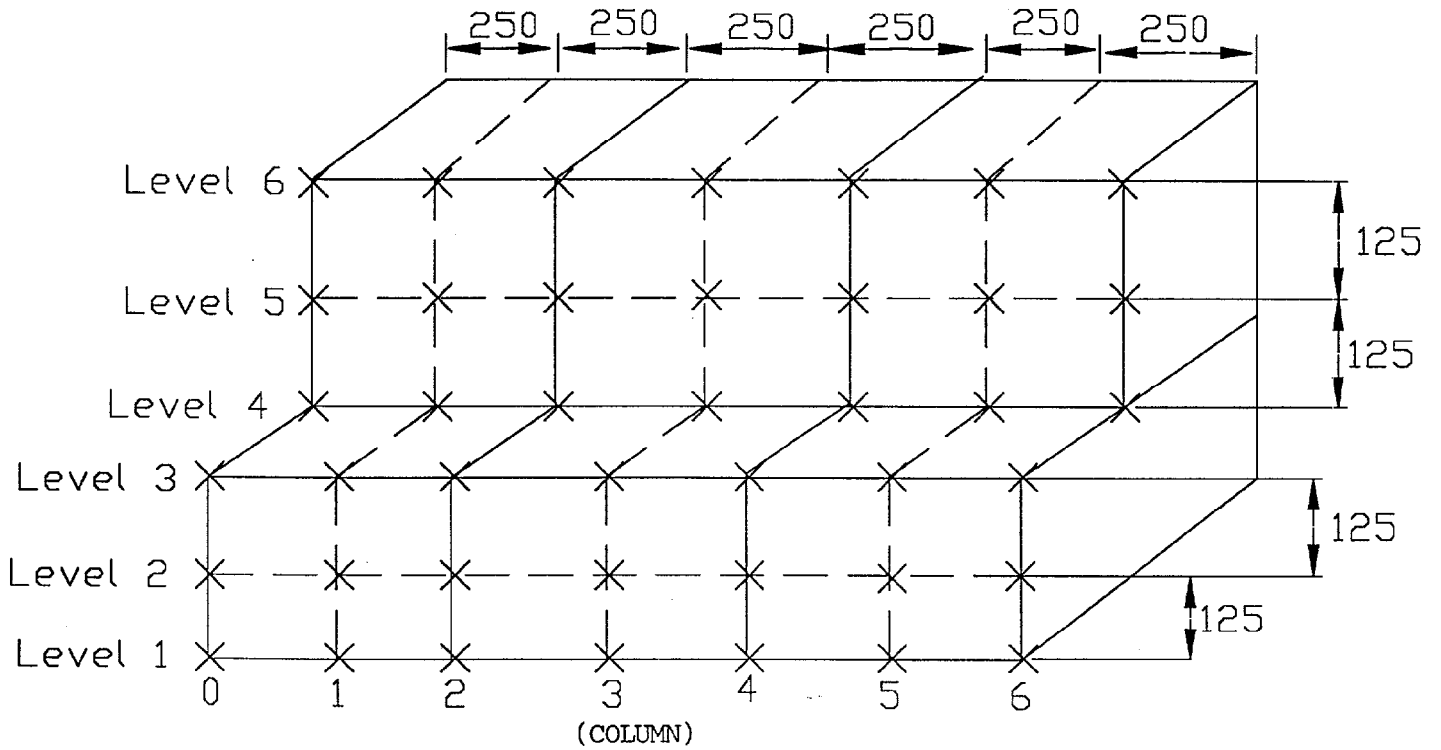
LEVEL	DPD MEASUREMENTS	STATIC CRUSH (mm)
4	1. (LF = <u>-1050</u> mm)	0
4	2. <u>-246</u> mm	13
3	3. <u>630</u> mm	212
2	4. <u>1395</u> mm	338
4	5. <u>2190</u> mm	44
4	6. (LR = <u>3000</u> mm)	0

DATA SHEET NO. 13

EXTERIOR STATIC CRUSH FOR SIDE IMPACTOR

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997

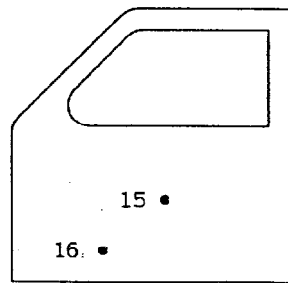
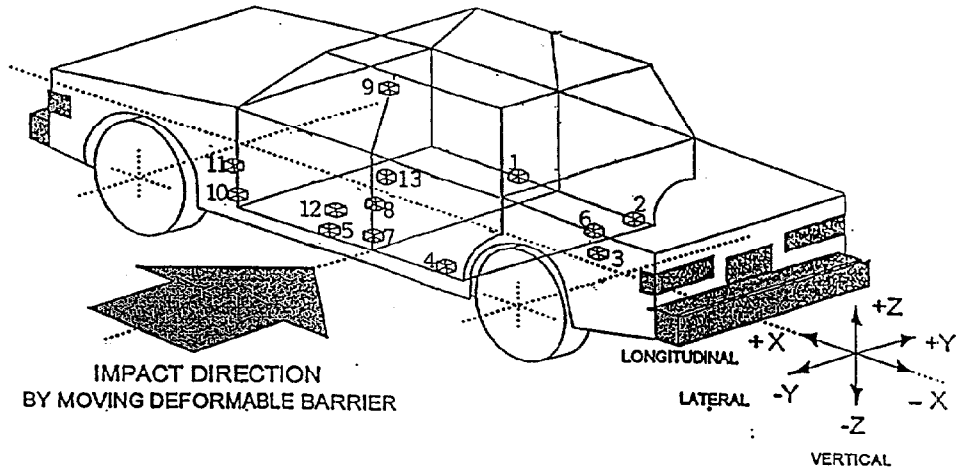


LEVEL	COLUMN						
	0	1	2	3	4	5	6
6	252	291	111	116	171	235	341
5	247	193	88	72	109	192	324
4	253	182	72	47	91	172	309
3	278	224	112	103	140	222	353
2	333	334	113	97	120	213	347
1	380	363	148	89	139	235	344

DATA SHEET 14
TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997



Front

- | | |
|----------------------------------|----------------------------|
| 1 - Right Side Sill @ Front Seat | 10 - Left Lower A Post |
| 2 - Right Side Sill @ Rear Seat | 11 - Left Mid A Post |
| 3 - Rear Floorpan Above Axle | 12 - Driver Seat Track |
| 4 - Left Side Sill @ Rear Seat | 13 - Vehicle C.G. |
| 5 - Left Side Sill @ Front Seat | 15 - Left Front Door Mid |
| 6 - Right Rear Occ. Compartment | 16 - Left Front Door Lower |
| 7 - Left Lower B Post | |
| 8 - Left Mid B Post | |
| 9 - Left Upper B Post | |

DATA SHEET NO. 14
TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY
 Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe
 Test Date: October 9, 1997

Accel. No.	Description	Coordinates (mm)*			Long. (X) Maximums (g's)		Lat. (Y) Maximums (g's)		Vert. (Z) Maximums (g's)		Resultant (g's)
		X	Y	Z	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	
1	Right Side Sill @ Front Seat	2331	656	200	4.9	1.3	16.5	2.0	4.4	3.6	16.5
2	Right Side Sill @ Rear Seat	1439	659	206	4.5	1.0	15.3	2.0	3.2	3.3	15.5
3	Rr. Floorpan Above Axle	1140	0	557	2.5	1.7	13.8	2.1	5.1	5.9	14.7
4	Left Side Sill @ Rr. Seat	1442	-664	201	---	---	20.5	2.7	---	---	---
5	Left Side Sill @ Frt. Seat	2334	-667	193	---	---	18.8	7.4	---	---	---
6	Right Rear Occupant Compartment	1747	348	773	---	---	14.2	2.1	---	---	---
7	Left Lower B Post	1748	-674	300	---	---	19.5	2.2	---	---	---
8	Left Mid B Post	1687	-682	755	---	---	59.7	70.9	---	---	---
9	Left Upper B Post	1625	-403	1312	---	---	33.3	-16.0	---	---	---
10	Left Lower A Post	2853	-691	331	---	---	26.4	9.2	---	---	---
11	Left Mid A Post	2919	-768	830	---	---	19.5	3.5	---	---	---
12	Driver Left Seat Track	1882	-535	260	---	---	70.1	28.0	---	---	---
13	Vehicle CG	2162	-55	490	16.4	17.5	60.8	46.4	56.8	63.1	70.9
15	Left Front Door Mid	2282	-740	650	---	---	196.1	106.1	---	---	---
16	Left Front Door Lower	2480	-738	520	---	---	228.9	104.2	---	---	---

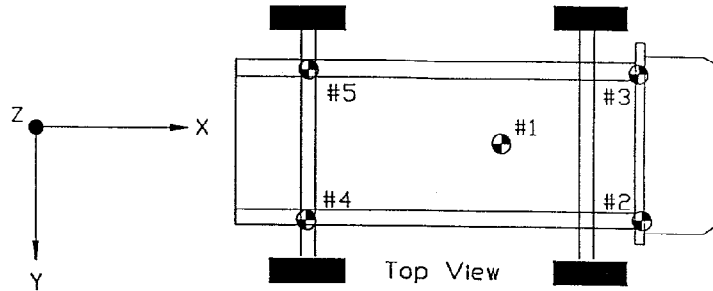
*Reference: X - Rear Bumper (+ Forward)
 Y - Vehicle Centerline (+ To right)
 Z - Ground Level (+ Up)

DATA SHEET NO. 15

MOVING DEFORMABLE BARRIER (MDB) ACCELEROMETER LOCATIONS AND DATA SUMMARY

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997



Acce l. No.	Description	Coordinates (mm)*			(+ Positive)		(-) Negative	
		X	Y	Z	Max. (g)	Time (msec)	Max. (g)	Time (msec)
1	MDB Center of Gravity	2220	0	462				
	Longitudinal (X)	---	---	---	.7	125	18.6	41
	Lateral (Y)	---	---	---	4.3	431	1.6	22
	Vertical (Z)	---	---	---	4.9	11	5.2	22
	Resultant (R)	---	---	---	19.0	43	---	---
2	Right Rear Frame Member	215	595	670				
	Right Longitudinal (X)	---	---	---	1.1	128	21.0	40
	Right Lateral (Y)	---	---	---	3.6	79	2.1	40
3	Left Rear Frame Member	230	-525	670				
	Left Longitudinal (X)	---	---	---	.8	136	18.3	42
	Left Lateral (Y)	---	---	---	3.9	80	3.5	43
4	Right Front Face	3650	765	770				
	Right Face (X)	---	---	---	1.5	-20	20.7	40
	Right Face (Y)	---	---	---	3.1	51	2.8	19
5	Left Front Face	3655	-780	770				
	Left Face (X)	---	---	---	1.6	132	21.8	43
	Left Face (Y)	---	---	---	1.0	104	5.0	19

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

DATA SHEET NO. 16
HIGH SPEED CAMERA LOCATIONS AND DATA

Year/Make/Model/Body Style: 1997/Ford/Mustang/2 Door Coupe

Test Date: October 9, 1997

View	Coordinates (mm)*			Angle	Lens (mm)	Film Speed (fps)
	X	Y	Z			
Real Time					13	
Left Overall	-100	-8050	1670	90°	13	1005
Left Impact Oblique	-3500	-8100	1050		25	810
Left Pointer Close-Up	-1700	-2270	760		35	769
Onboard Hood					13	NR
Onboard Hood Angle					13	NR
Onboard Rear					13	1036
Right Overall	-180	7500	1670		13	1015
Right Impact Oblique	-5880	8440	1080		25	909
Top Overall	430	0	5000		8	1015
Top Impact	0	0	5000		13	1015
Cart					13	1000

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

APPENDIX A - PHOTOGRAPHS

TABLE OF PHOTOGRAPHS

	<u>Page No.</u>
Photo No. A-1 - Pre-Test Front View of Test Vehicle	A-1
Photo No. A-2 - Post-Test Front View of Test Vehicle	A-1
Photo No. A-3 - Pre-Test Rear View of Test Vehicle	A-2
Photo No. A-4 - Post-Test Rear View of Test Vehicle	A-2
Photo No. A-5 - Pre-Test Left Side View of Test Vehicle	A-3
Photo No. A-6 - Post-Test Left Side View of Test Vehicle	A-3
Photo No. A-7 - Pre-Test MDB Positioned Against Vehicle (left side)	A-4
Photo No. A-8 - Pre-Test MDB Positioned Against Vehicle (right side)	A-4
Photo No. A-9 - Pre-Test MDB Position Against Vehicle Overhead View	A-5
Photo No. A-10 - Post-Test MDB Positioned Against Vehicle (left side)	A-6
Photo No. A-11 - Post-Test MDB Positioned Against Vehicle (right side)	A-6
Photo No. A-12 - Post-Test Vehicle Overhead View	A-7
Photo No. A-13 - Pre-Test MDB Top View	A-8
Photo No. A-14 - Post-Test MDB Top View	A-8
Photo No. A-15 - Pre-Test MDB Front View	A-9
Photo No. A-16 - Post-Test MDB Front View	A-9
Photo No. A-17 - Pre-Test MDB Left Side View	A-10
Photo No. A-18 - Post-Test MDB Left Side View	A-10
Photo No. A-19 - Pre-Test MDB Right Side View	A-11
Photo No. A-20 - Post-Test MDB Right Side View	A-11
Photo No. A-21 - Pre-Test Driver Dummy Right Side View	A-12
Photo No. A-22 - Post-Test Driver Dummy Right Side View	A-12
Photo No. A-23 - Pre-Test Driver Dummy Left Side View	A-13
Photo No. A-24 - Post-Test Driver Dummy Left Side View	A-13
Photo No. A-25 - Pre-Test Driver Dummy Left Side View (Door Open)	A-14
Photo No. A-26 - Pre-Test Driver Shoulder and Door Top View	A-15
Photo No. A-27 - Post-Test Driver Shoulder and Door Top View	A-15
Photo No. A-28 - Post-Test Driver Dummy Contact	A-16

TABLE OF PHOTOGRAPHS

	<u>Page No.</u>
Photo No. A-29 - Pre-Test Left Rear Passenger Dummy Right Side View	A-17
Photo No. A-30 - Pre-Test Left Rear Passenger Dummy Head View	A-18
Photo No. A-31 - Pre-Test Left Rear Passenger Dummy Head Contact View	A-18
Photo No. A-32 - Pre-Test Left Front Impact Point on Vehicle	A-19
Photo No. A-33 - Post-Test Left Front Impact Point on Vehicle	A-19
Photo No. A-34 - Left Front Attitude Point	A-20
Photo No. A-35 - Right Front Attitude Point	A-20
Photo No. A-36 - Left Rear Attitude Point	A-21
Photo No. A-37 - Right Rear Attitude Point	A-21
Photo No. A-38 - Vehicle Certification Label	A-22
Photo No. A-39 - Tire Placard	A-22

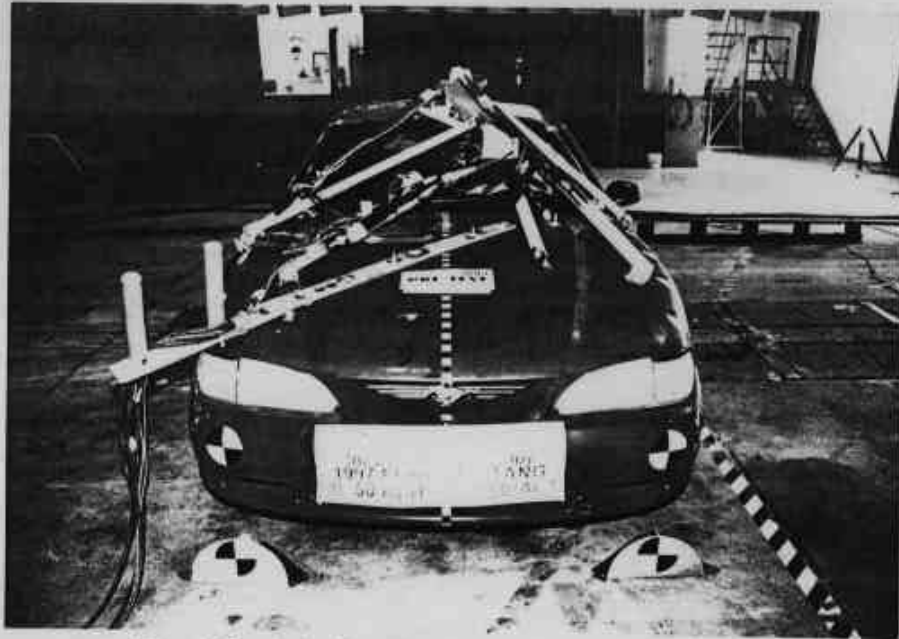


Photo No. A-1 - Pre-Test Front View of Test Vehicle

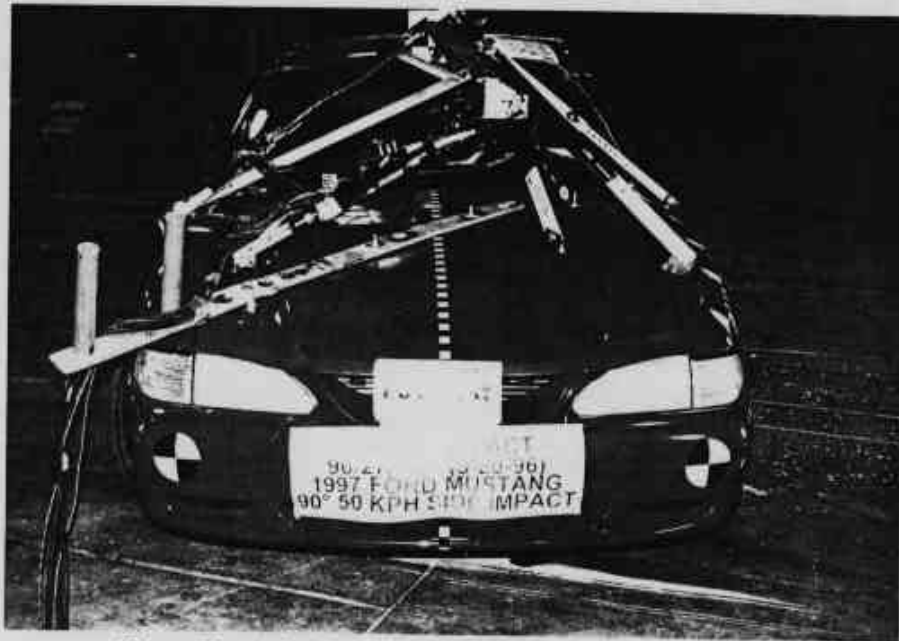


Photo No. A-2 - Post-Test Front View of Test Vehicle

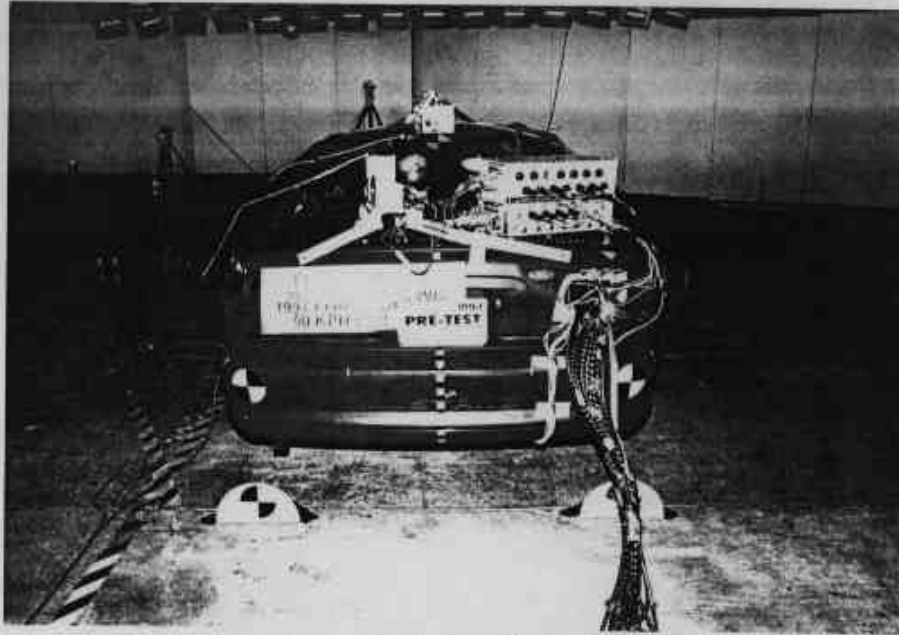


Photo No. A-3 - Pre-Test Rear View of Test Vehicle

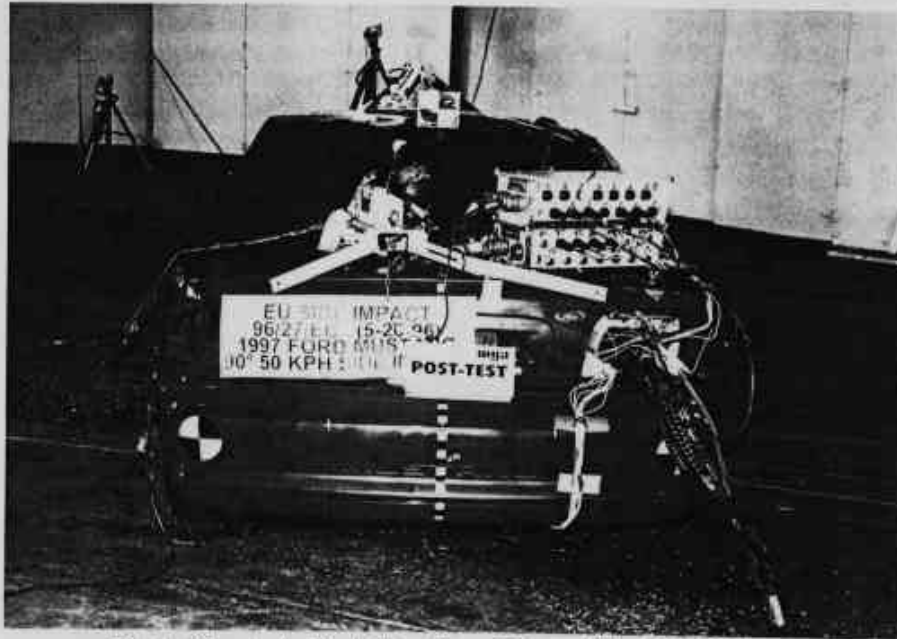


Photo No. A-4 - Post-Test Rear View of Test Vehicle



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



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

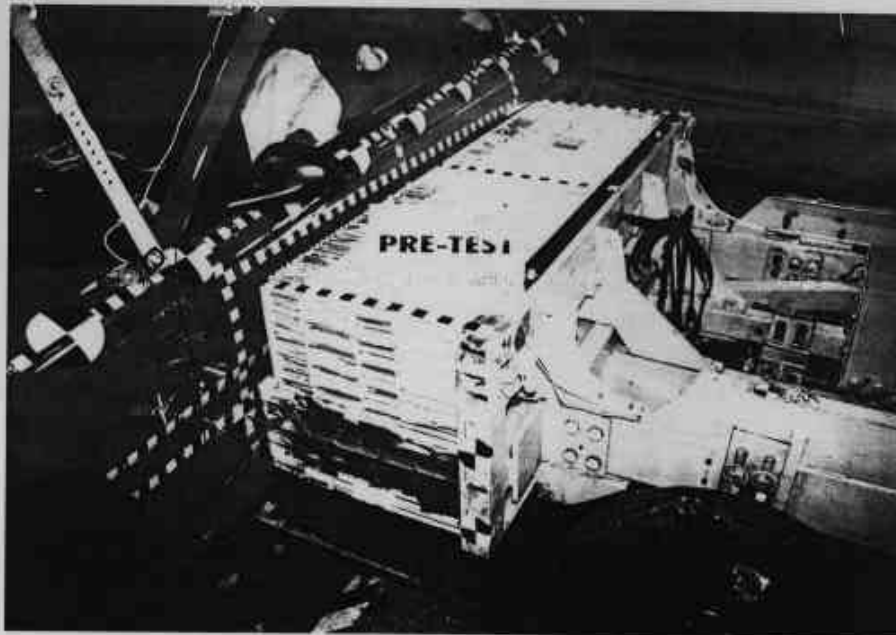


Photo No. A-7 - Pre-Test MDB Positioned Against Vehicle (left side)

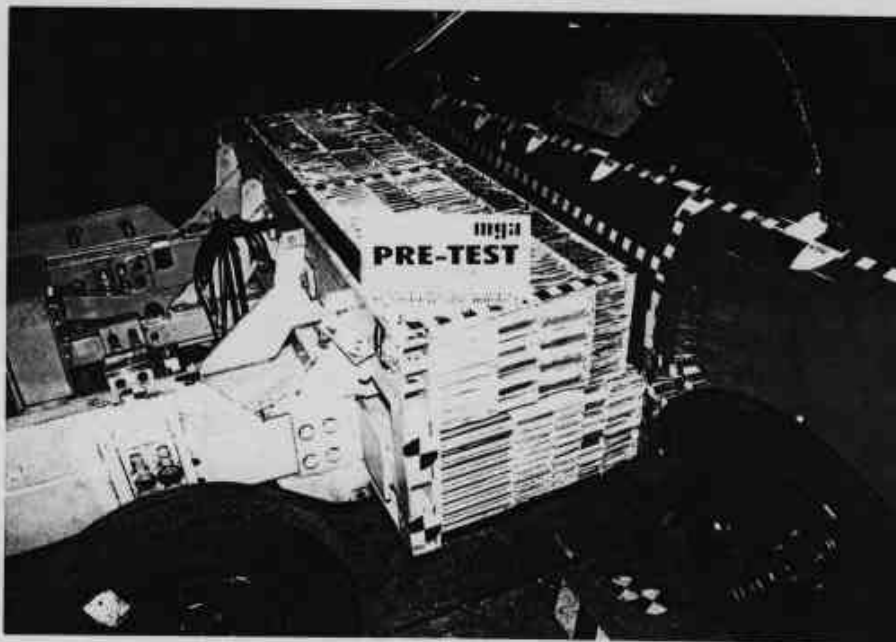


Photo No. A-8 - Pre-Test MDB Positioned Against Vehicle (right side)

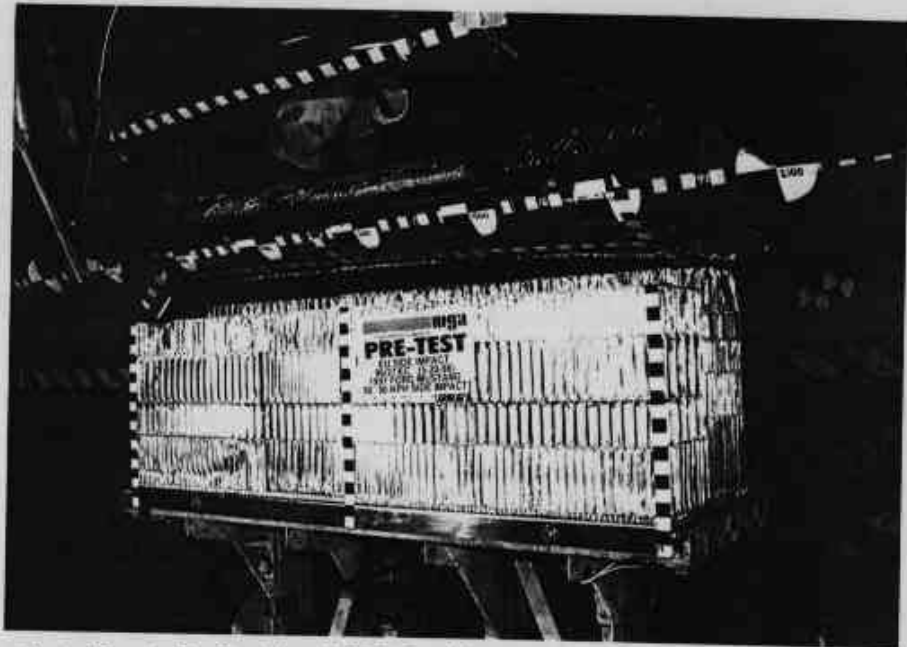


Photo No. A-9 - Pre-Test MDB Position Against Vehicle Overhead View

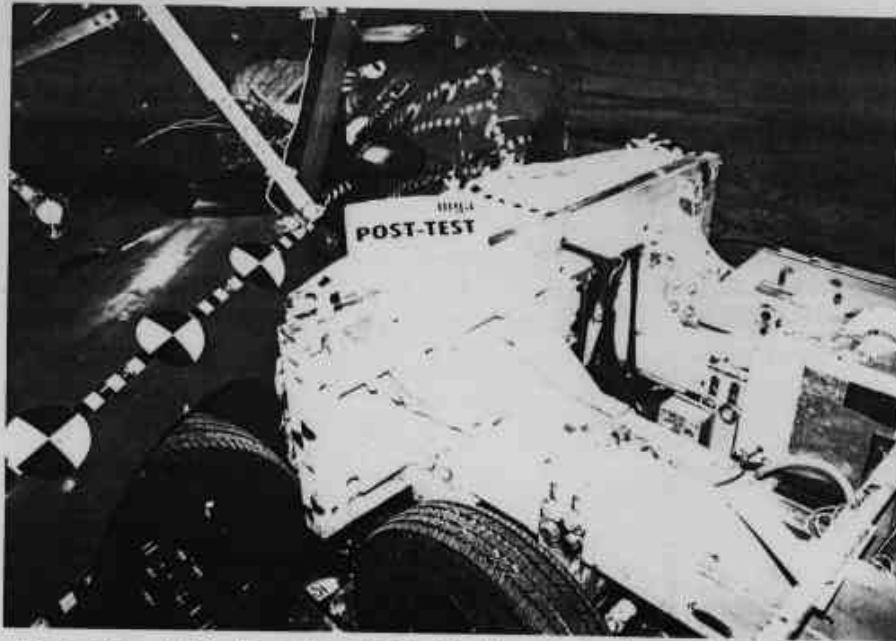


Photo No. A-10 - Post-Test MDB Positioned Against Vehicle (left side)

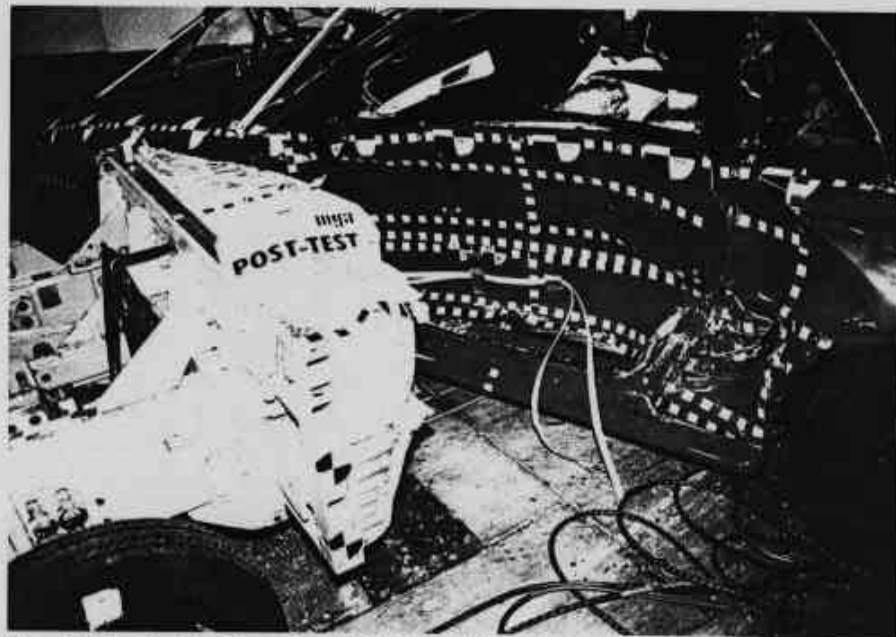


Photo No. A-11 - Post-Test MDB Positioned Against Vehicle (right side)

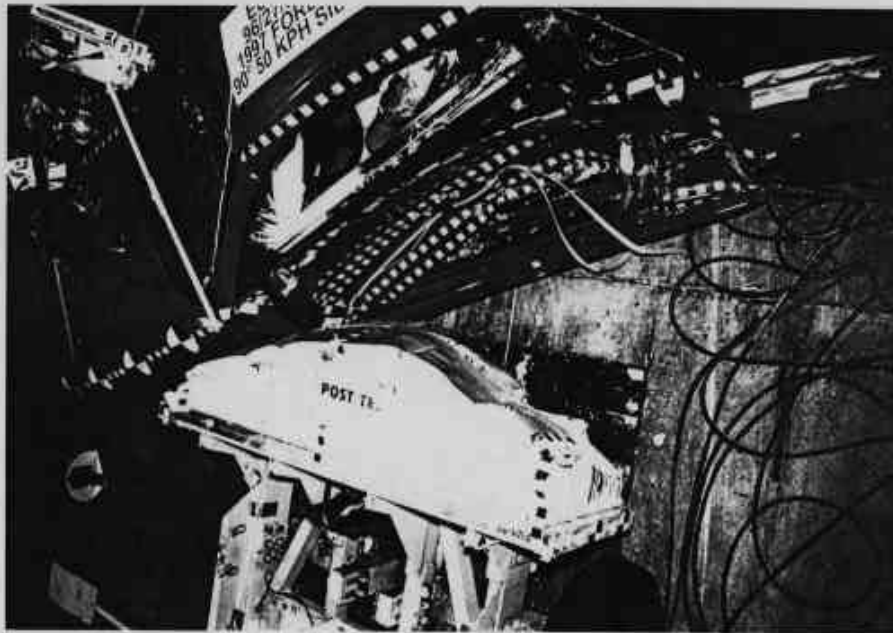


Photo No. A-12 - Post-Test Vehicle Overhead View

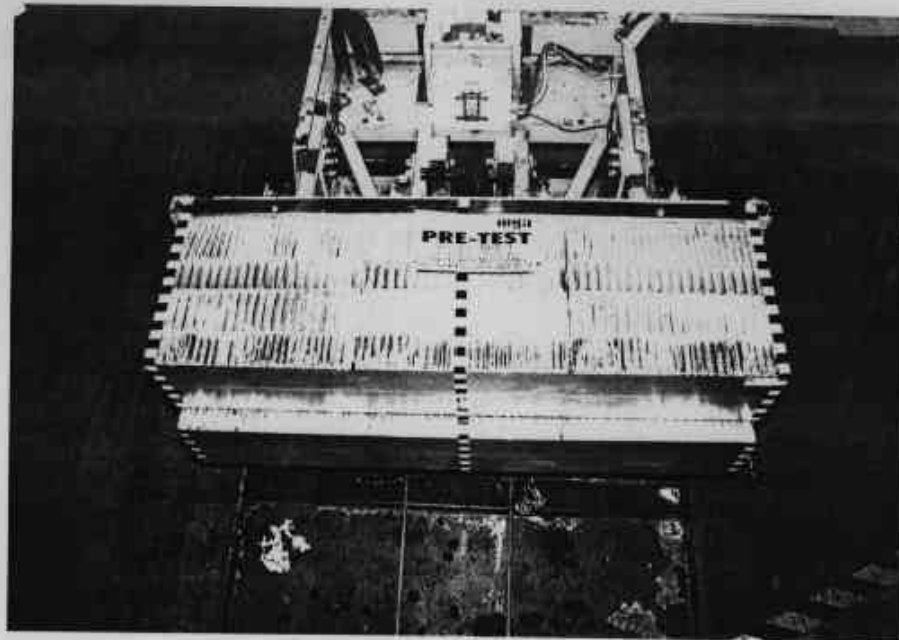


Photo No. A-13 - Pre-Test MDB Top View

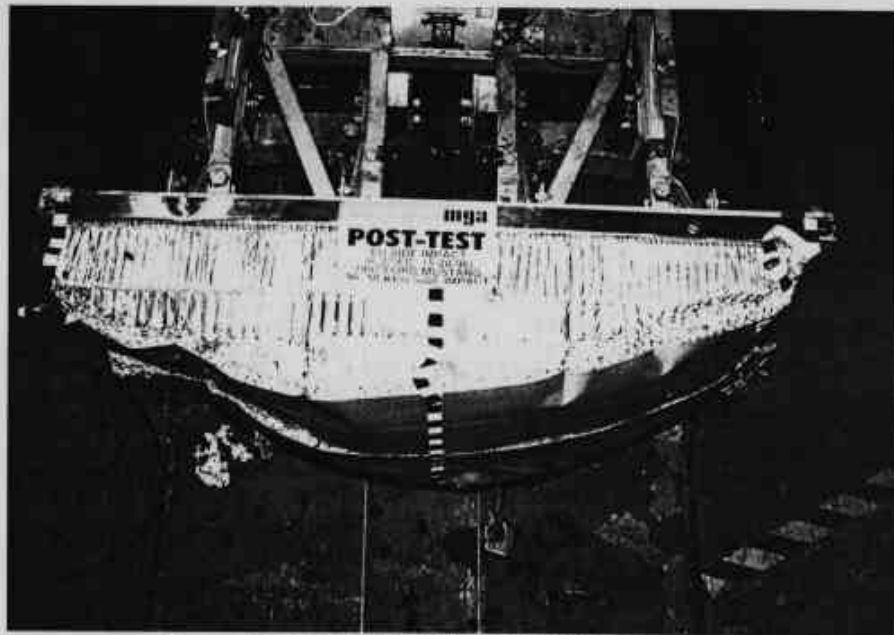


Photo No. A-14 - Post-Test MDB Top View

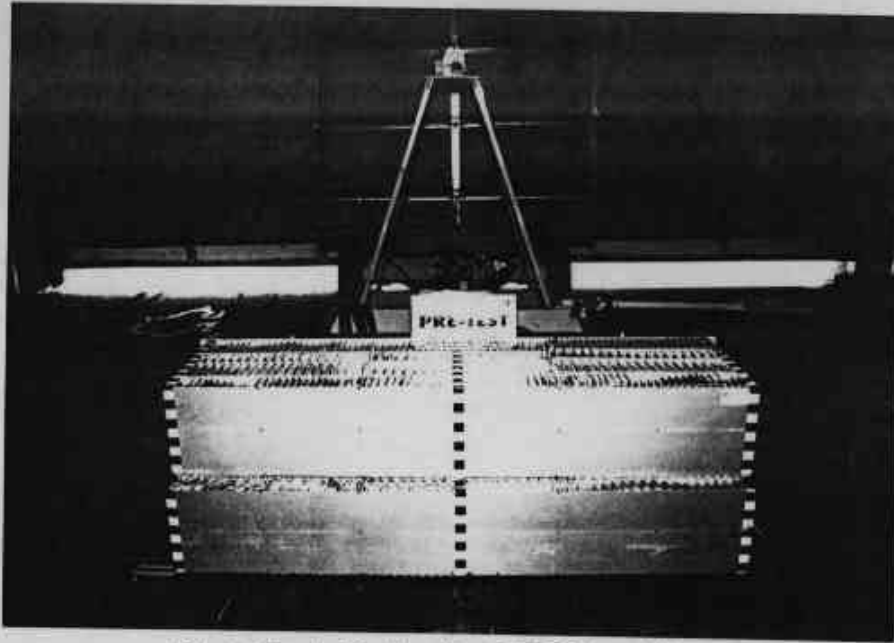


Photo No. A-15 - Pre-Test MDB Front View

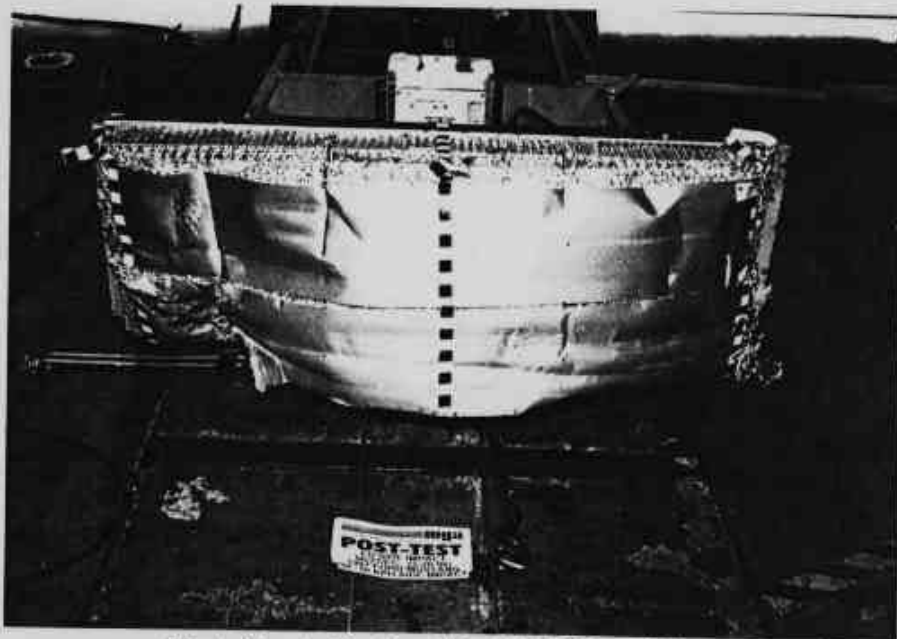


Photo No. A-16 - Post-Test MDB Front View

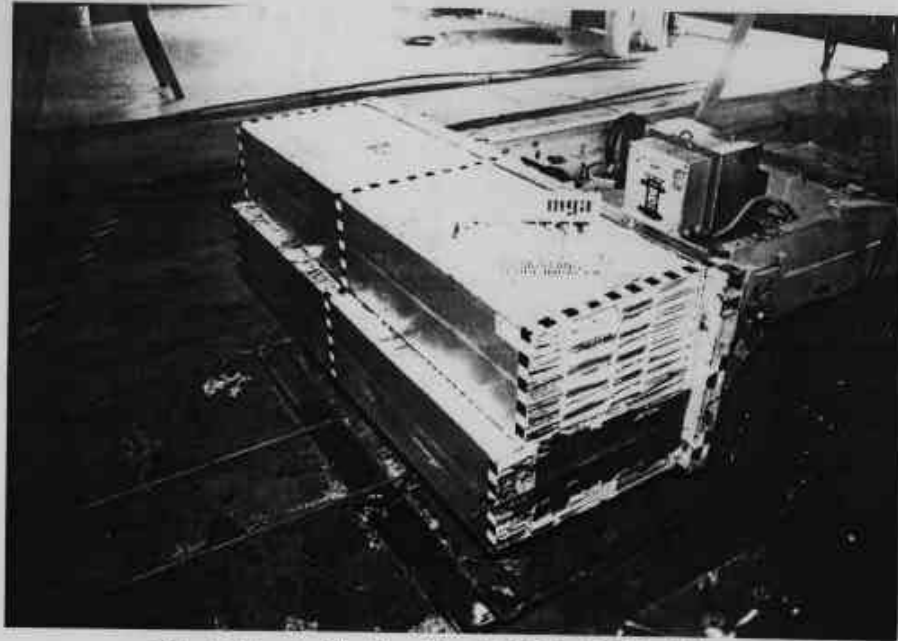


Photo No. A-17 - Pre-Test MDB Left Side View

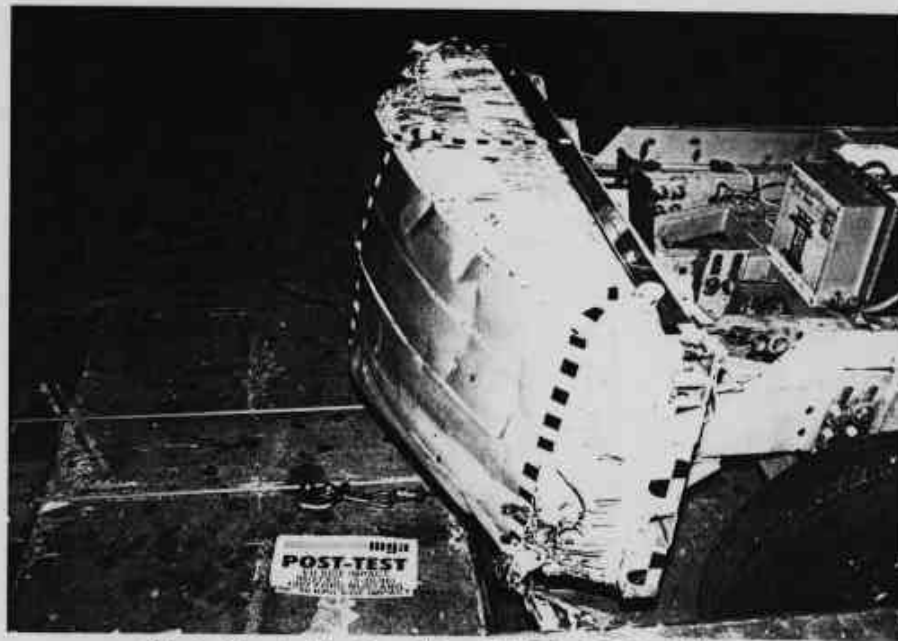


Photo No. A-18 - Post-Test MDB Left Side View

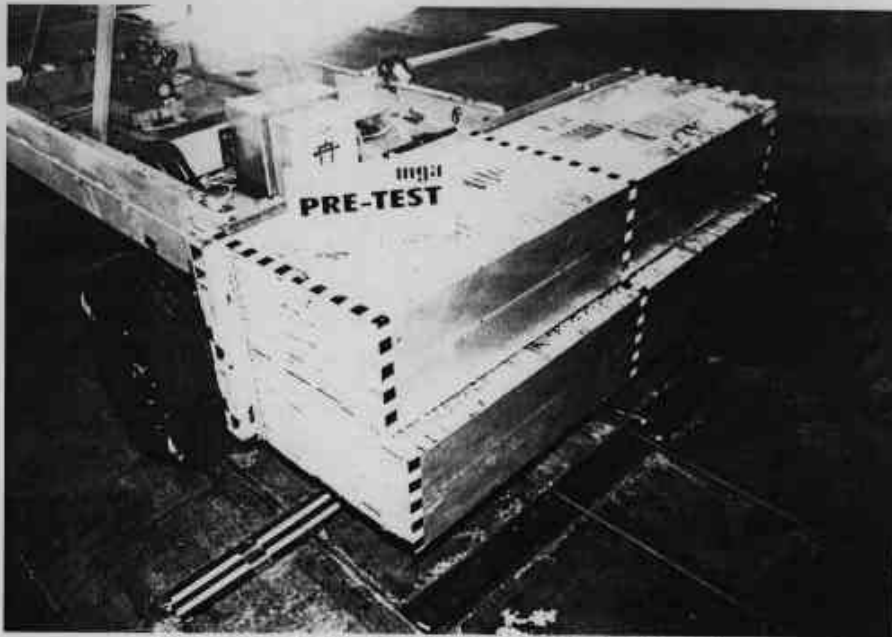


Photo No. A-19 - Pre-Test MDB Right Side View

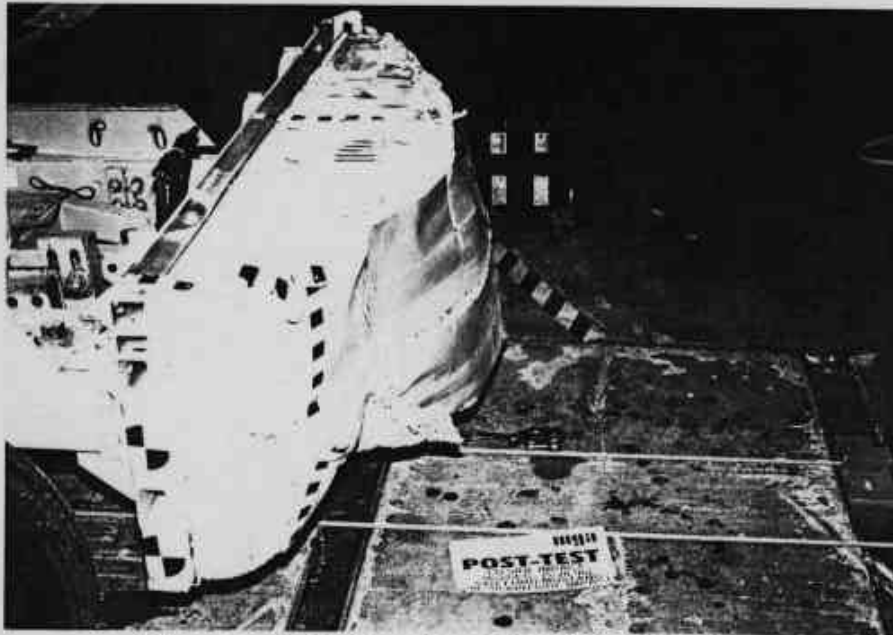


Photo No. A-20 - Post-Test MDB Right Side View



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



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

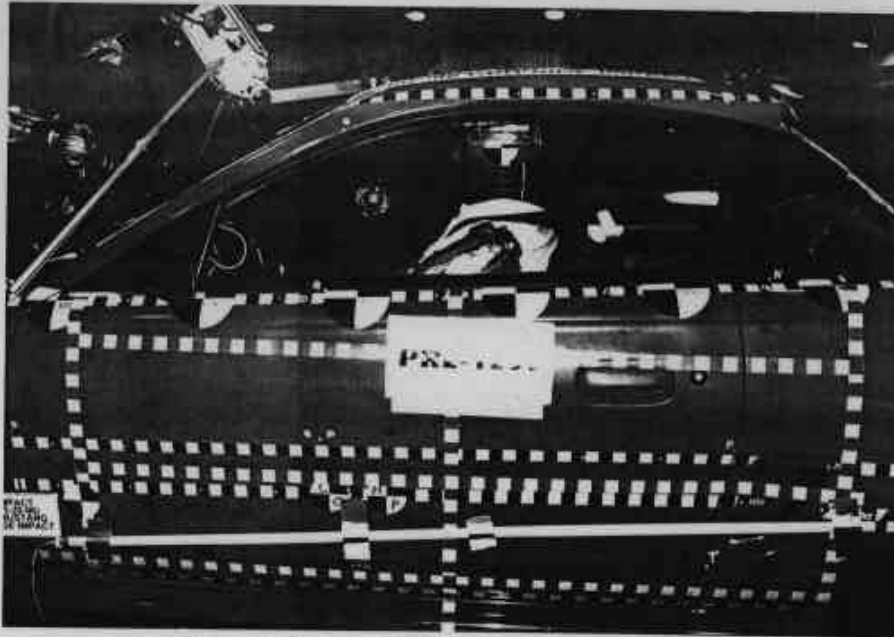


Photo No. A-23 - Pre-Test Driver Dummy Left Side View



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



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



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

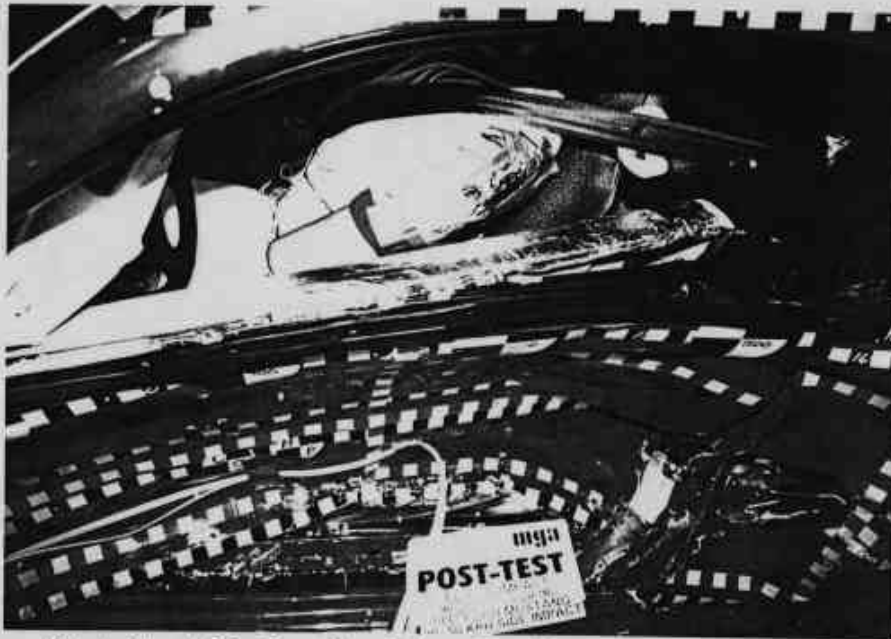


Photo No. A-27 - Post-Test Driver Shoulder and Door Top View



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



Photo No. A-29 - Pre-Test Left Rear Passenger Dummy Right Side View



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



Photo No. A-31 - Pre-Test Left Rear Passenger Dummy Head Contact View



Photo No. A-32 - Pre-Test Left Front Impact Point on Vehicle



Photo No. A-33 - Post-Test Left Front Impact Point on Vehicle

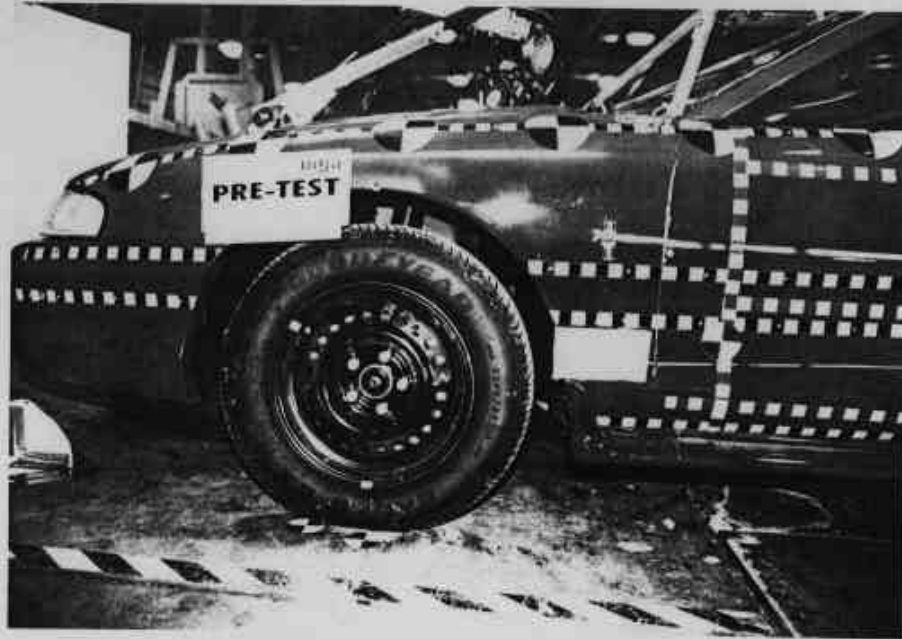


Photo No. A-34 - Left Front Attitude Point



Photo No. A-35 - Right Front Attitude Point



Photo No. A-36 - Left Rear Attitude Point



Photo No. A-37 - Right Rear Attitude Point



Photo No. A-38 - Vehicle Certification Label



Photo No. A-39 - Tire Placard

APPENDIX B - VEHICLE AND EUROSID-1 RESPONSE DATA

Table of Data Plots

<u>Vehicle:</u>	<u>Page No.</u>
Figure B-1 - Left Lower A-Post Y Acceleration vs. Time	B-1
Figure B-2 - Left Lower A-Post Y Velocity vs. Time	B-2
Figure B-3 - Left Mid A-Post Y Acceleration vs. Time	B-3
Figure B-4 - Left Mid A-Post Y Velocity vs. Time	B-4
Figure B-5 - Left Upper B-Post Y Acceleration vs. Time	B-5
Figure B-6 - Left Upper B-Post Y Velocity vs. Time	B-6
Figure B-7 - Left Lower B-Post Y Acceleration vs. Time	B-7
Figure B-8 - Left Lower B-Post Y Velocity vs. Time	B-8
Figure B-9 - Left Mid B-Post Y Acceleration vs. Time	B-9
Figure B-10 - Left Mid B-Post Y Velocity vs. Time	B-10
Figure B-11 - Left Side Sill at Front Seat Y Acceleration vs. Time	B-11
Figure B-12 - Left Side Sill at Front Seat Y Velocity vs. Time	B-12
Figure B-13 - Left Side Sill at Rear Seat Y Acceleration vs. Time	B-13
Figure B-14 - Left Side Sill at Rear Seat Y Velocity vs. Time	B-14
Figure B-15 - Right Side Sill at Front Seat X Acceleration vs. Time	B-15
Figure B-16 - Right Side Sill at Front Seat X Velocity vs. Time	B-16
Figure B-17 - Right Side Sill at Front Seat Y Acceleration vs. Time	B-17
Figure B-18 - Right Side Sill at Front Seat Y Velocity vs. Time	B-18
Figure B-19 - Right Side Sill at Front Seat Z Acceleration vs. Time	B-19
Figure B-20 - Right Side Sill at Front Seat Z Velocity vs. Time	B-20
Figure B-21 - Right Side Sill at Front Seat Resultant Acceleration vs. Time	B-21
Figure B-22 - Right Side Sill at Rear Seat X Acceleration vs. Time	B-22
Figure B-23 - Right Side Sill at Rear Seat X Velocity vs. Time	B-23
Figure B-24 - Right Side Sill at Rear Seat Y Acceleration vs. Time	B-24
Figure B-25 - Right Side Sill at Rear Seat Y Velocity vs. Time	B-25
Figure B-26 - Right Side Sill at Rear Seat Z Acceleration vs. Time	B-26
Figure B-27 - Right Side Sill at Rear Seat Z Velocity vs. Time	B-27
Figure B-28 - Right Side Sill at Rear Seat Resultant Acceleration vs. Time	B-28
Figure B-29 - Vehicle CG X Acceleration vs. Time	B-29

Table of Data Plots

<u>Vehicle (Cont'd):</u>	<u>Page No.</u>
Figure B-30 - Vehicle CG X Velocity vs. Time	B-30
Figure B-31 - Vehicle CG Y Acceleration vs. Time	B-31
Figure B-32 - Vehicle CG Y Velocity vs. Time	B-32
Figure B-33 - Vehicle CG Z Acceleration vs. Time	B-33
Figure B-34 - Vehicle CG Z Velocity vs. Time	B-34
Figure B-35 - Vehicle CG Resultant Acceleration vs. Time	B-35
Figure B-36 - Left Driver Seat Track Y Acceleration vs. Time	B-36
Figure B-37 - Left Driver Seat Track Y Velocity vs. Time	B-37
Figure B-38 - Right Rear Occupant Compartment Y Acceleration vs. Time	B-38
Figure B-39 - Right Rear Occupant Compartment Y Velocity vs. Time	B-39
Figure B-40 - Rear Floorpan Above Axle X Acceleration vs. Time	B-40
Figure B-41 - Rear Floorpan Above Axle X Velocity vs. Time	B-41
Figure B-42 - Rear Floorpan Above Axle Y Acceleration vs. Time	B-42
Figure B-43 - Rear Floorpan Above Axle Y Velocity vs. Time	B-43
Figure B-44 - Rear Floorpan Above Axle Z Acceleration vs. Time	B-44
Figure B-45 - Rear Floorpan Above Axle Z Velocity vs. Time	B-45
Figure B-46 - Rear Floorpan Above Axle Resultant Acceleration vs. Time	B-46
Figure B-47 - Left Front Door @ Mid Torso Y Acceleration vs. Time	B-47
Figure B-48 - Left Front Door @ Mid Torso Y Velocity vs. Time	B-48
Figure B-49 - Left Front Door @ Lower Torso Y Acceleration vs. Time	B-49
Figure B-50 - Left Front Door @ Lower Torso Y Velocity vs. Time	B-50
Figure B-51 - Moving Barrier CG X Acceleration vs. Time	B-51
Figure B-52 - Moving Barrier CG X Velocity vs. Time	B-52
Figure B-53 - Moving Barrier CG Y Acceleration vs. Time	B-53
Figure B-54 - Moving Barrier CG Y Velocity vs. Time	B-54
Figure B-55 - Moving Barrier CG Z Acceleration vs. Time	B-55
Figure B-56 - Moving Barrier CG Z Velocity vs. Time	B-56
Figure B-57 - Moving Barrier CG Resultant Acceleration vs. Time	B-57
Figure B-58 - Moving Barrier Left Face X Acceleration vs. Time	B-58

Table of Data Plots

<u>Vehicle (Cont'd):</u>	<u>Page No.</u>
Figure B-59 - Moving Barrier Left Face X Velocity vs. Time	B-59
Figure B-60 - Moving Barrier Left Face Y Acceleration vs. Time	B-60
Figure B-61 - Moving Barrier Left Face Y Velocity vs. Time	B-61
Figure B-62 - Moving Barrier Right Face X Acceleration vs. Time	B-62
Figure B-63 - Moving Barrier Right Face X Velocity vs. Time	B-63
Figure B-64 - Moving Barrier Right Face Y Acceleration vs. Time	B-64
Figure B-65 - Moving Barrier Right Face Y Velocity vs. Time	B-65
Figure B-66 - Moving Barrier Left Rear Frame X Acceleration vs. Time	B-66
Figure B-67 - Moving Barrier Left Rear Frame X Velocity vs. Time	B-67
Figure B-68 - Moving Barrier Left Rear Frame Y Acceleration vs. Time	B-68
Figure B-69 - Moving Barrier Left Rear Frame Y Velocity vs. Time	B-69
Figure B-70 - Moving Barrier Right Rear Frame X Acceleration vs. Time	B-70
Figure B-71 - Moving Barrier Right Rear Frame X Velocity vs. Time	B-71
Figure B-72 - Moving Barrier Right Rear Frame Y Acceleration vs. Time	B-72
Figure B-73 - Moving Barrier Right Rear Frame Y Velocity vs. Time	B-73
Figure B-74 - MDB CG and Vehicle Right Sill Y Velocity vs. Time	B-74
Figure B-75 - MDB CG and Vehicle Right Sill Y Displacement vs. Time	B-75
 <u>Occupant:</u>	
Figure B-76 - Driver Head X Acceleration vs. Time	B-76
Figure B-77 - Driver Head X Velocity vs. Time	B-77
Figure B-78 - Driver Head Y Acceleration vs. Time	B-78
Figure B-79 - Driver Head Y Velocity vs. Time	B-79
Figure B-80 - Driver Head Z Acceleration vs. Time	B-80
Figure B-81 - Driver Head Z Velocity vs. Time	B-81
Figure B-82 - Driver Head Resultant Acceleration vs. Time	B-82
Figure B-83 - Driver Upper Spine X Acceleration vs. Time	B-83
Figure B-84 - Driver Upper Spine X Velocity vs. Time	B-84
Figure B-85 - Driver Upper Spine Y Acceleration vs. Time	B-85

Table of Data Plots

<u>Occupant (Cont'd):</u>	<u>Page No.</u>
Figure B-86 - Driver Upper Spine Y Velocity vs. Time	B-86
Figure B-87 - Driver Upper Spine Z Acceleration vs. Time	B-87
Figure B-88 - Driver Upper Spine Z Velocity vs. Time	B-88
Figure B-89 - Driver Upper Rib Y Acceleration vs. Time	B-89
Figure B-90 - Driver Upper Rib Y Velocity vs. Time	B-90
Figure B-91 - Driver Upper Rib Y Displacement vs. Time	B-91
Figure B-92 - Driver Mid Rib Y Acceleration vs. Time	B-92
Figure B-93 - Driver Mid Rib Y Velocity vs. Time	B-93
Figure B-94 - Driver Mid Rib Y Displacement vs. Time	B-94
Figure B-95 - Driver Lower Rib Y Acceleration vs. Time	B-95
Figure B-96 - Driver Lower Rib Y Velocity vs. Time	B-96
Figure B-97 - Driver Lower Rib Y Displacement vs. Time	B-97
Figure B-98 - Driver Front Abdominal Force vs. Time	B-98
Figure B-99 - Driver Mid Abdominal Force vs. Time	B-99
Figure B-100 - Driver Rear Abdominal Force vs. Time	B-100
Figure B-101 - Sum of Driver Abdominal Forces vs. Time	B-101
Figure B-102 - Driver Pubic Symphysis Force vs. Time	B-102
Figure B-103 - Driver Lower Spine X Acceleration vs. Time	B-103
Figure B-104 - Driver Lower Spine X Velocity vs. Time	B-104
Figure B-105 - Driver Lower Spine Y Acceleration vs. Time	B-105
Figure B-106 - Driver Lower Spine Y Velocity vs. Time	B-106
Figure B-107 - Driver Lower Spine Z Acceleration vs. Time	B-107
Figure B-108 - Driver Lower Spine Z Velocity vs. Time	B-108
Figure B-109 - Driver Pelvis X Acceleration vs. Time	B-109
Figure B-110 - Driver Pelvis X Velocity vs. Time	B-110
Figure B-111 - Driver Pelvis Y Acceleration vs. Time	B-111
Figure B-112 - Driver Pelvis Y Velocity vs. Time	B-112
Figure B-113 - Driver Pelvis Z Acceleration vs. Time	B-113
Figure B-114 - Driver Pelvis Z Velocity vs. Time	B-114

Table of Data Plots

<u>FIR Filtered:</u>	<u>Page No.</u>
Figure B-115- Driver Upper Spine X Acceleration vs. Time	B-115
Figure B-116 - Driver Upper Spine Y Acceleration vs. Time	B-116
Figure B-117 - Driver Upper Spine Z Acceleration vs. Time	B-117
Figure B-118 - Driver Upper Rib Y Acceleration vs. Time	B-118
Figure B-119 - Driver Mid Rib Y Acceleration vs. Time	B-119
Figure B-120 - Driver Lower Rib Y Acceleration vs. Time	B-120
Figure B-121 - Driver Lower Spine X Acceleration vs. Time	B-121
Figure B-122 - Driver Lower Spine Y Acceleration vs. Time	B-122
Figure B-123 - Driver Lower Spine Z Acceleration vs. Time	B-123
Figure B-124 - Driver Pelvis X Acceleration vs. Time	B-124
Figure B-125 - Driver Pelvis Y Acceleration vs. Time	B-125
Figure B-126 - Driver Pelvis Z Acceleration vs. Time	B-126
<u>Relative Displacements:</u>	
Figure B-127 - MDB CG X Minus Right Front Sill Y Displacement vs. Time	B-127
Figure B-128 - Left Front Door @ Mid Torso Minus Right Front Sill Displacement	B-128
Figure B-129 - Left Front Door @ Lower Torso Minus Right Front Sill Displacement	B-129
Figure B-130 - Driver Upper Rib Y Acceleration vs. Front Door @ Mid Torso Intrusion	B-130
Figure B-131 - Driver Upper Rib Y Displacement vs. Front Door @ Mid Torso Intrusion	B-131
Figure B-132 - Driver Mid Rib Y Acceleration vs. Front Door @ Mid Torso Intrusion	B-132
Figure B-133 - Driver Mid Rib Y Displacement vs. Front Door @ Mid Torso Intrusion	B-133
Figure B-134 - Driver Lower Rib Y Acceleration vs. Front Door @ Mid Torso Intrusion	B-134
Figure B-135 - Driver Lower Rib Y Displacement vs. Front Door @ Mid Torso Intrusion	B-135
Figure B-136 - Driver Upper Spine Y Acceleration vs. Front Door @ Mid Torso Intrusion	B-136

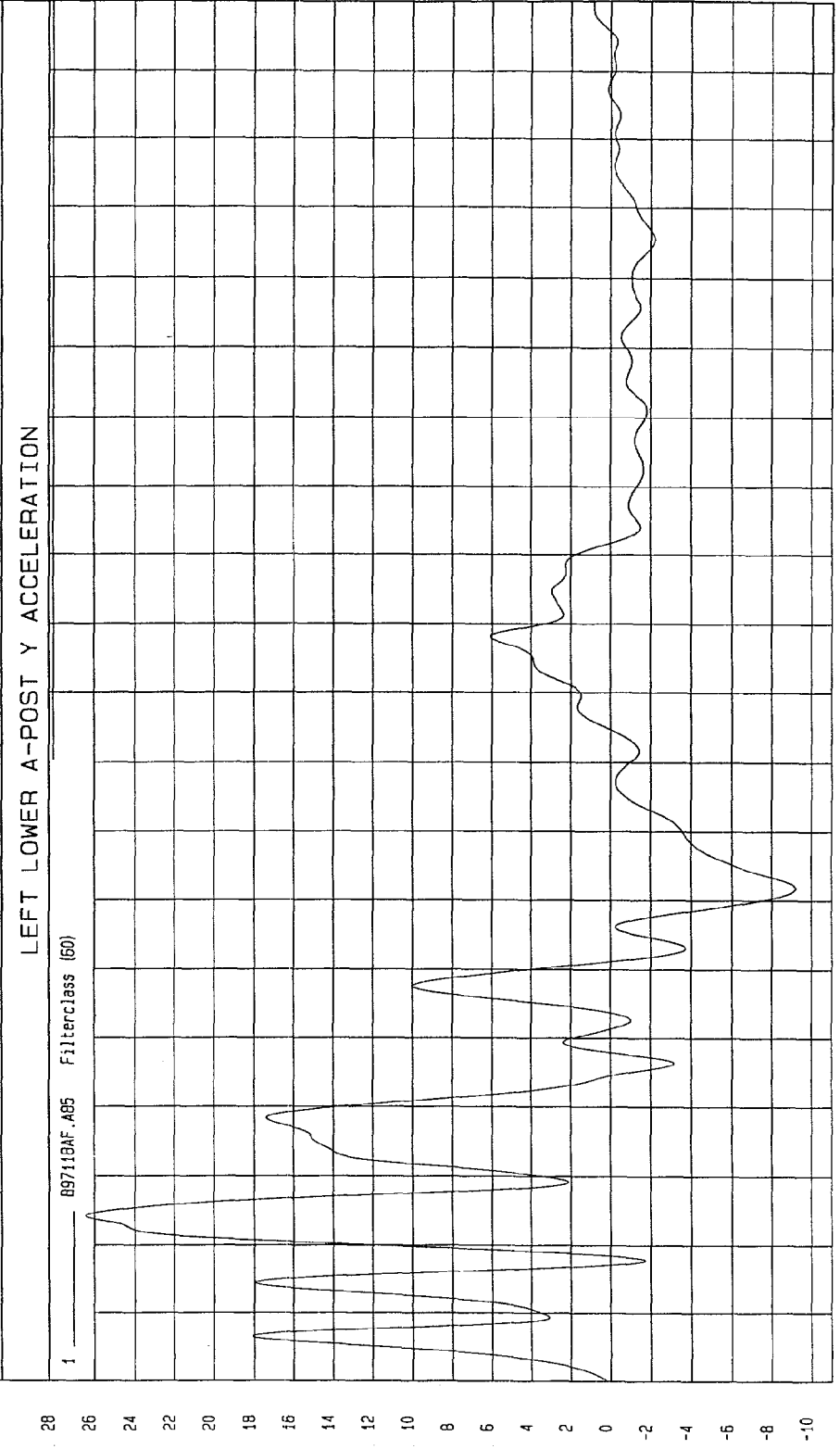
Table of Data Plots

<u>Relative Displacements (Cont'd):</u>	<u>Page No.</u>
Figure B-137 - Driver Lower Spine Y Acceleration vs. Front Door @ Lower Torso Intrusion	B-137
Figure B-138 - Driver Pelvis Y Acceleration vs. Front Door @ Lower Torso Intrusion	B-138
Figure B-139 - Driver Upper Rib Y Viscous Criteria vs. Front Door @ Mid Torso Intrusion	B-139
Figure B-140 - Driver Mid Rib Y Viscous Criteria vs. Front Door @ Mid Torso Intrusion	B-140
Figure B-141 - Driver Lower Rib Y Viscous Criteria vs. Front Door @ Mid Torso Intrusion	B-141
Figure B-142 - Driver Pubis Symphysis Force vs. Front Door @ Lower Torso Intrusion	B-142
Figure B-143 - Driver Summed Abdominal Force vs. Front Door @ Lower Torso Intrusion	B-143
Figure B-144 - Driver Head Resultant Acceleration vs. Front Door @ Mid Torso Intrusion	B-144
 <u>Viscous Criteria:</u>	
Figure B-145 - Driver Viscous Chest Criteria (Upper Rib) vs. Time	B-145
Figure B-146 - Driver Viscous Chest Criteria (Mid Rib) vs. Time	B-146
Figure B-147 - Driver Viscous Chest Criteria (Lower Rib) vs. Time	B-147
 <u>Dummy Contacts:</u>	
Figure B-148 - Driver Head Contact vs. Time	B-148
Figure B-149 - Driver Shoulder Contact vs. Time	B-149
Figure B-150 - Driver Upper Rib Contact vs. Time	B-150
Figure B-151 - Driver Mid Rib Contact vs. Time	B-151
Figure B-152 - Driver Lower Rib Contact vs. Time	B-152
Figure B-153 - Driver Pelvis Contact vs. Time	B-153
Figure B-154 - Driver Abdomen Contact vs. Time	B-154

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -9.20 G'S at 72 msec Maximum = 26.42 G'S at 24 msec



WGA Research Co.
11-01-1997 13:18

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

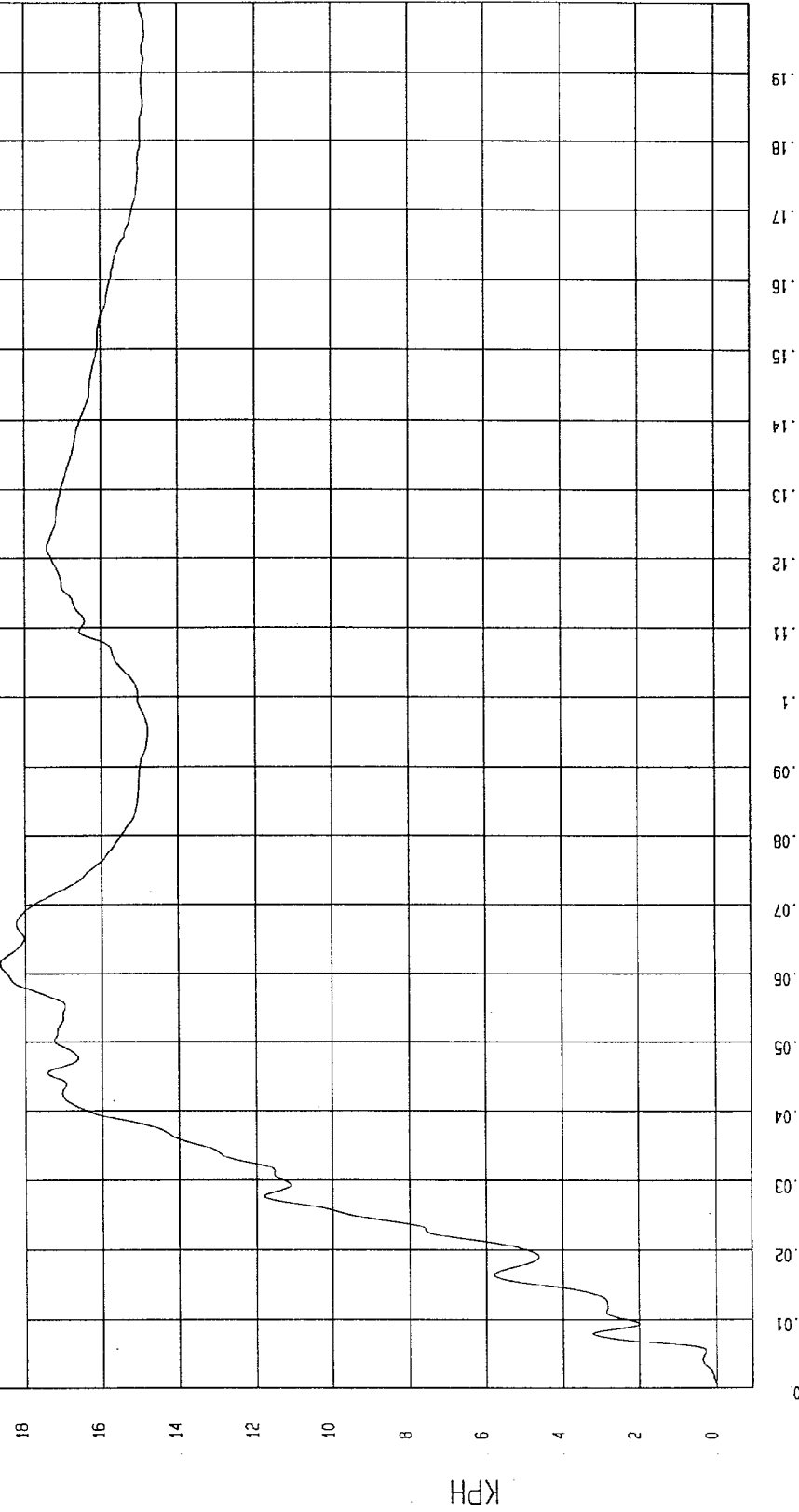
COMPONENT: 1997 FORD MUSTANG

Maximum = 18.65 KPH at 61 msec

Minimum = -5.27E-03 KPH at -1 msec

LEFT LOWER A-POST Y VELOCITY

1 897118A1.V05 Filterclass (180)



NCA Research
11-07-1997 13:19

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

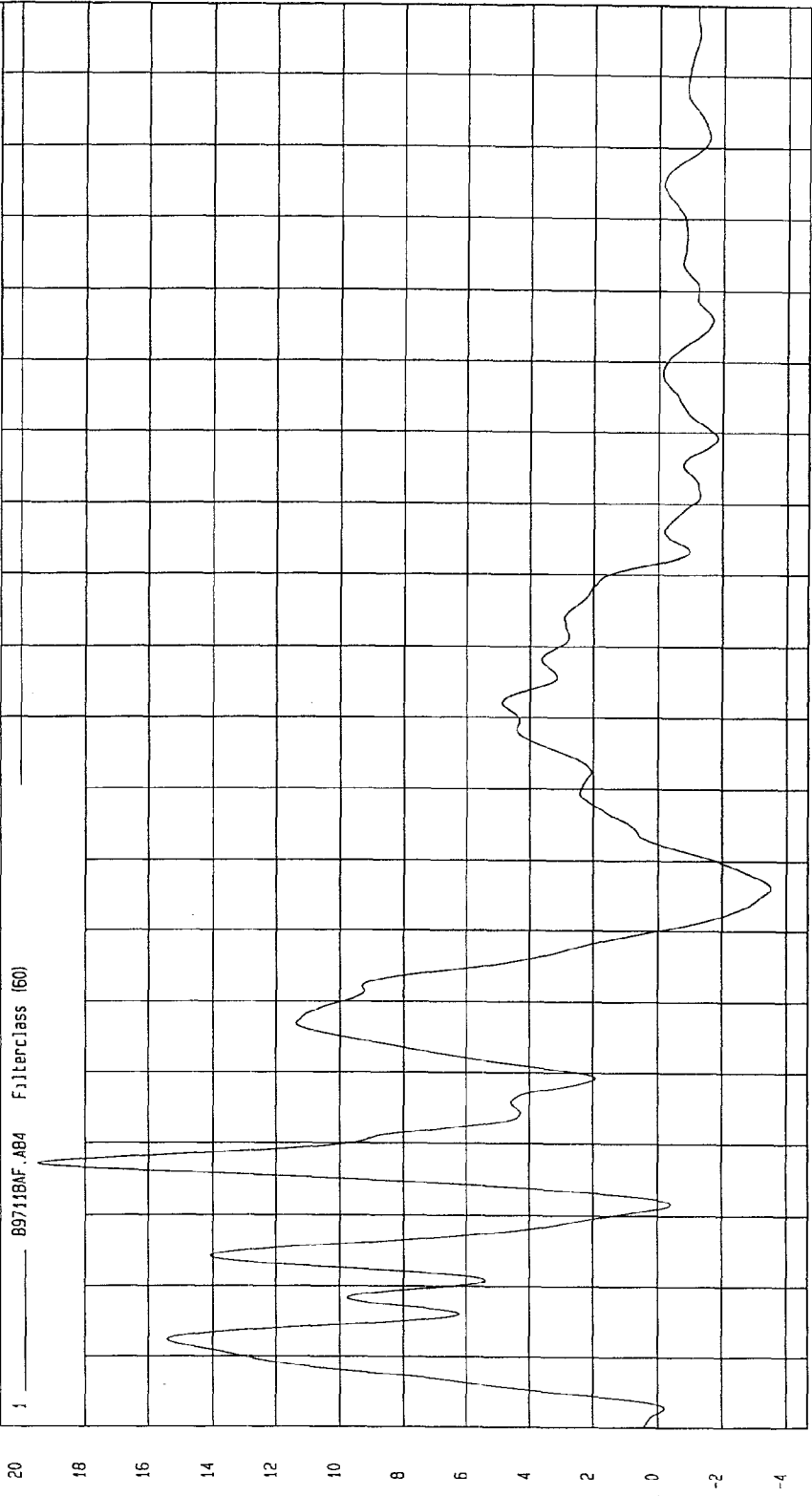
Speed: 31.24 MPH 50.3 KPH

COMPONENT: 1997 FORD MUSTANG

Maximum = 19.47 G'S at 37 msec

Minimum = -3.52 G'S at 76 msec

LEFT MID A-POST Y ACCELERATION



NGA Research
11-01-1997 13.18

TIME (SECONDS)

G.S

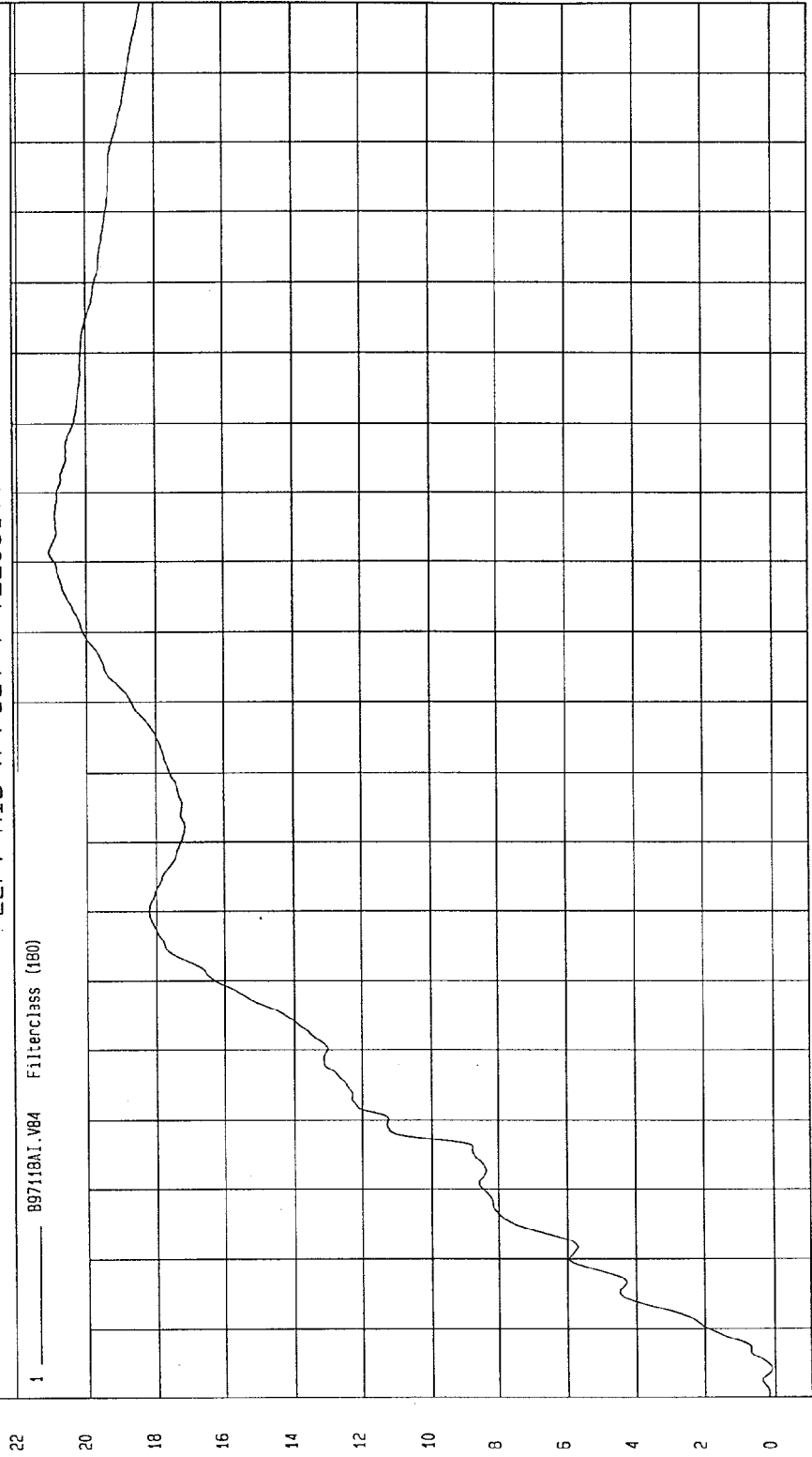
TEST: EU 96/27/EC SIDE IMPACT
TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG
Speed: 31.24 MPH 50.3 KPH

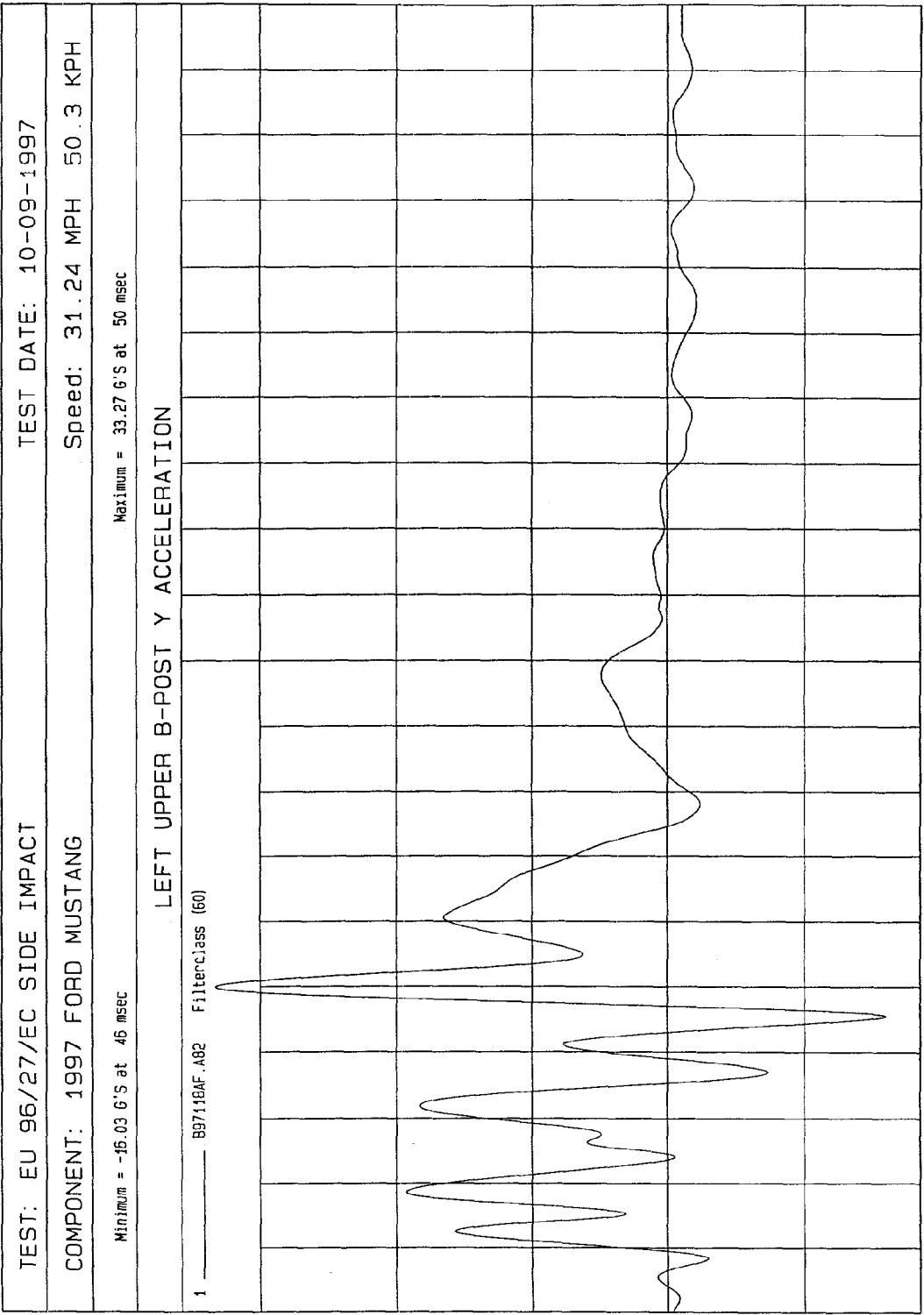
Minimum = 0 KPH at -20 msec
Maximum = 21.07 KPH at 121 msec

LEFT MID A-POST Y VELOCITY

1 ——— B97118A1.V84 Filterclass (180)



TIME Seconds
MCA Research
11-07-1997 13:18



MSA Research
01-05-1998 11:32

TIME (SECONDS)

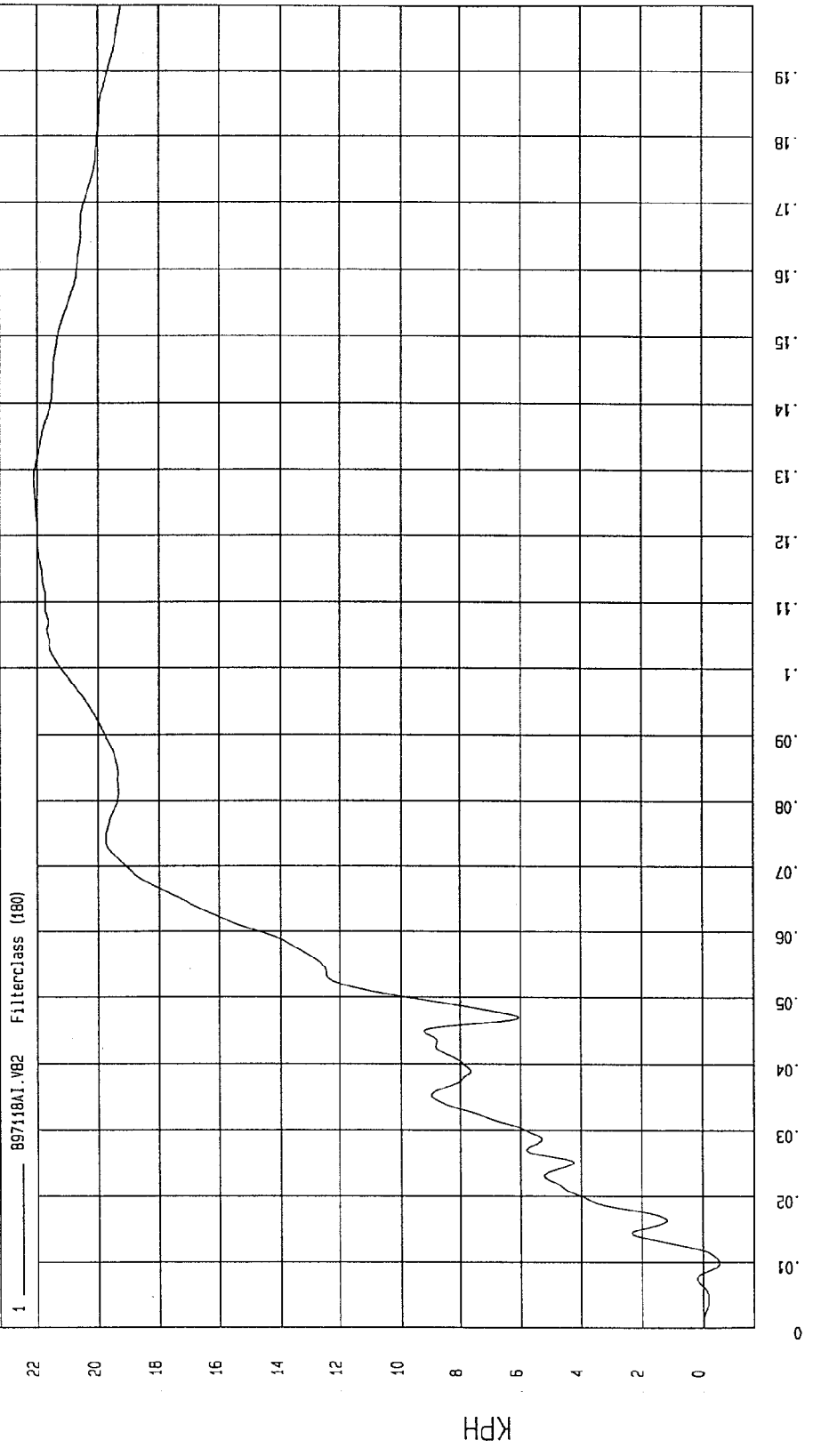
G.S

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -.55 KPH at 10 msec
Maximum = 22.11 KPH at 129 msec

LEFT UPPER B-POST Y VELOCITY



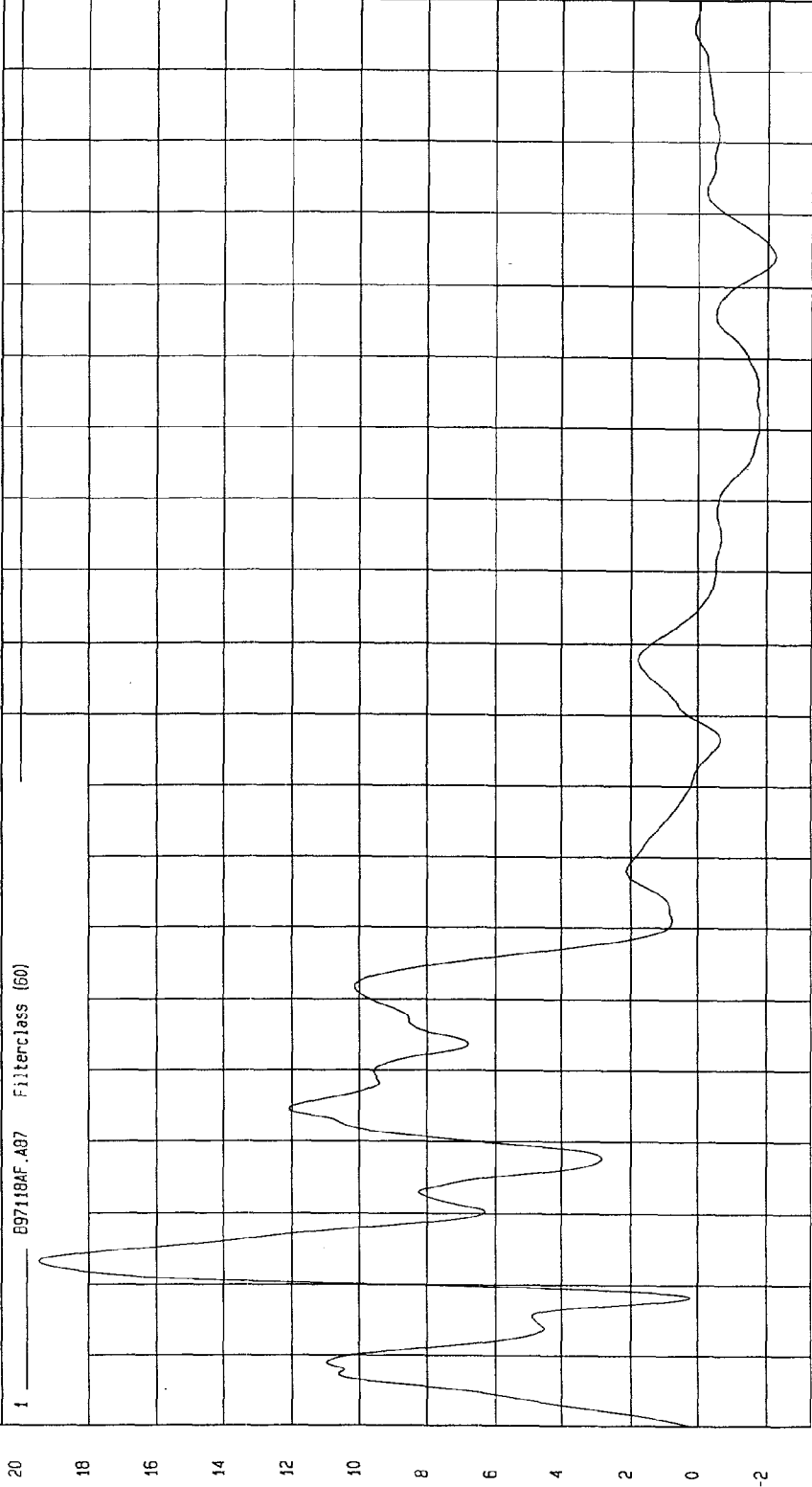
MCA Research
01-05-1998 11:34

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -2.23 G'S at 154 msec Maximum = 19.47 G'S at 23 msec

LEFT LOWER B-POST Y ACCELERATION



MSA Research
11-01-1997 13:19

G.S

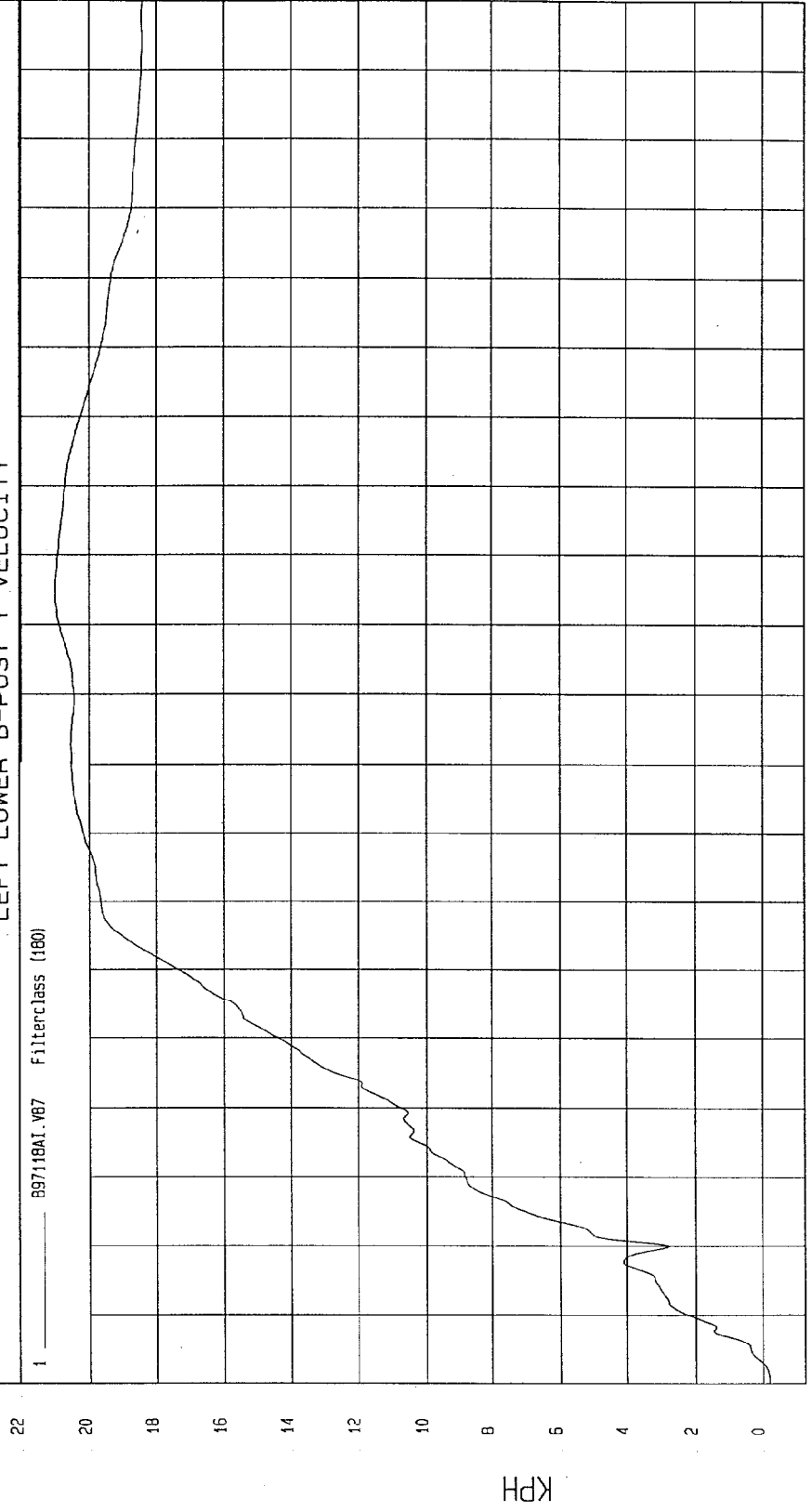
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -18 KPH at 0 msec Maximum = 20.99 KPH at 114 msec

LEFT LOWER B-POST Y VELOCITY

1 897118A1.V67 Filterclass (180)



TIME Seconds

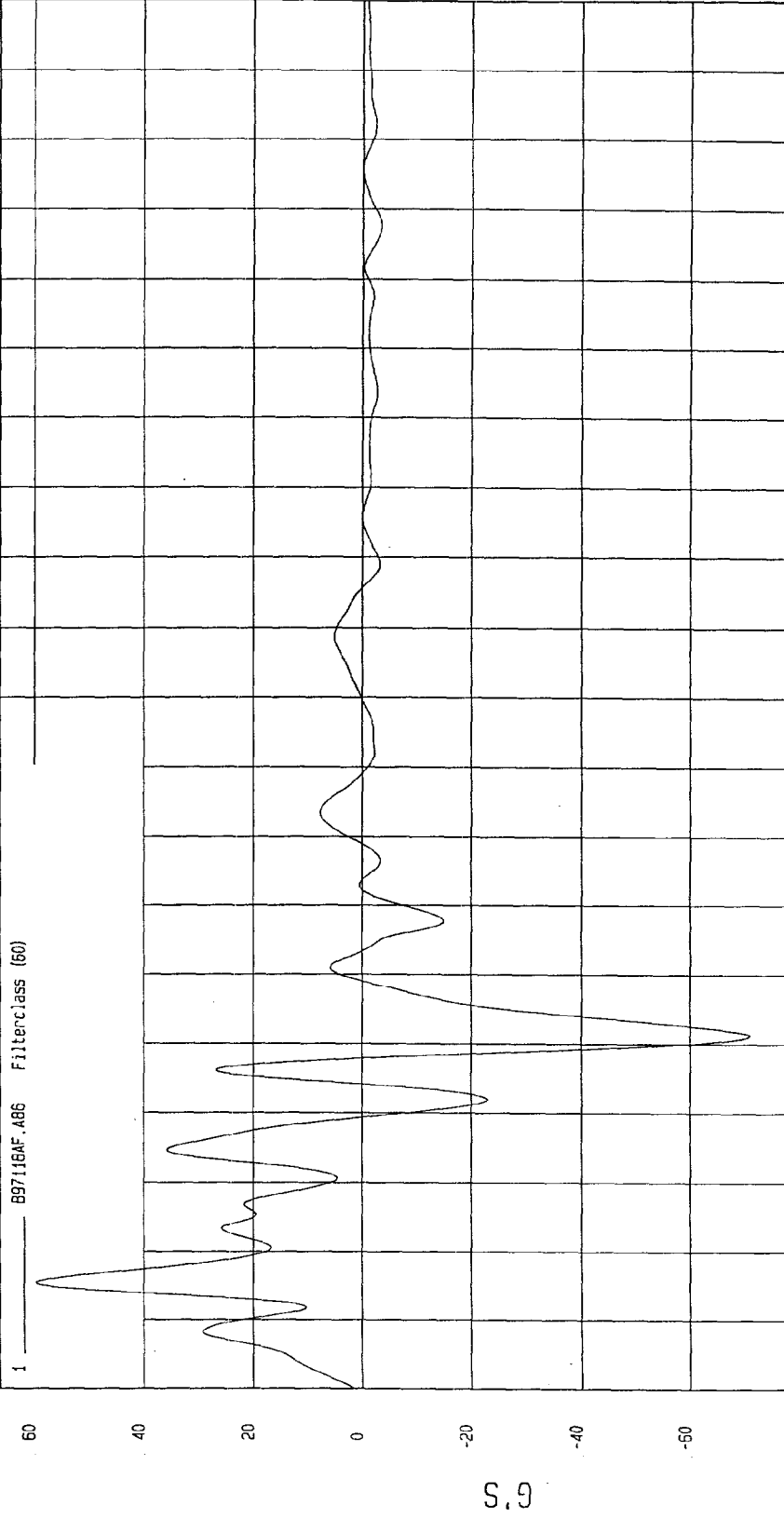
MCA Research
11-07-1997 13:19

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -70.89 G'S at 51 msec Maximum = 59.70 G'S at 15 msec

LEFT MID B-POST Y ACCELERATION



MSA Research
11-07-1997 13.19

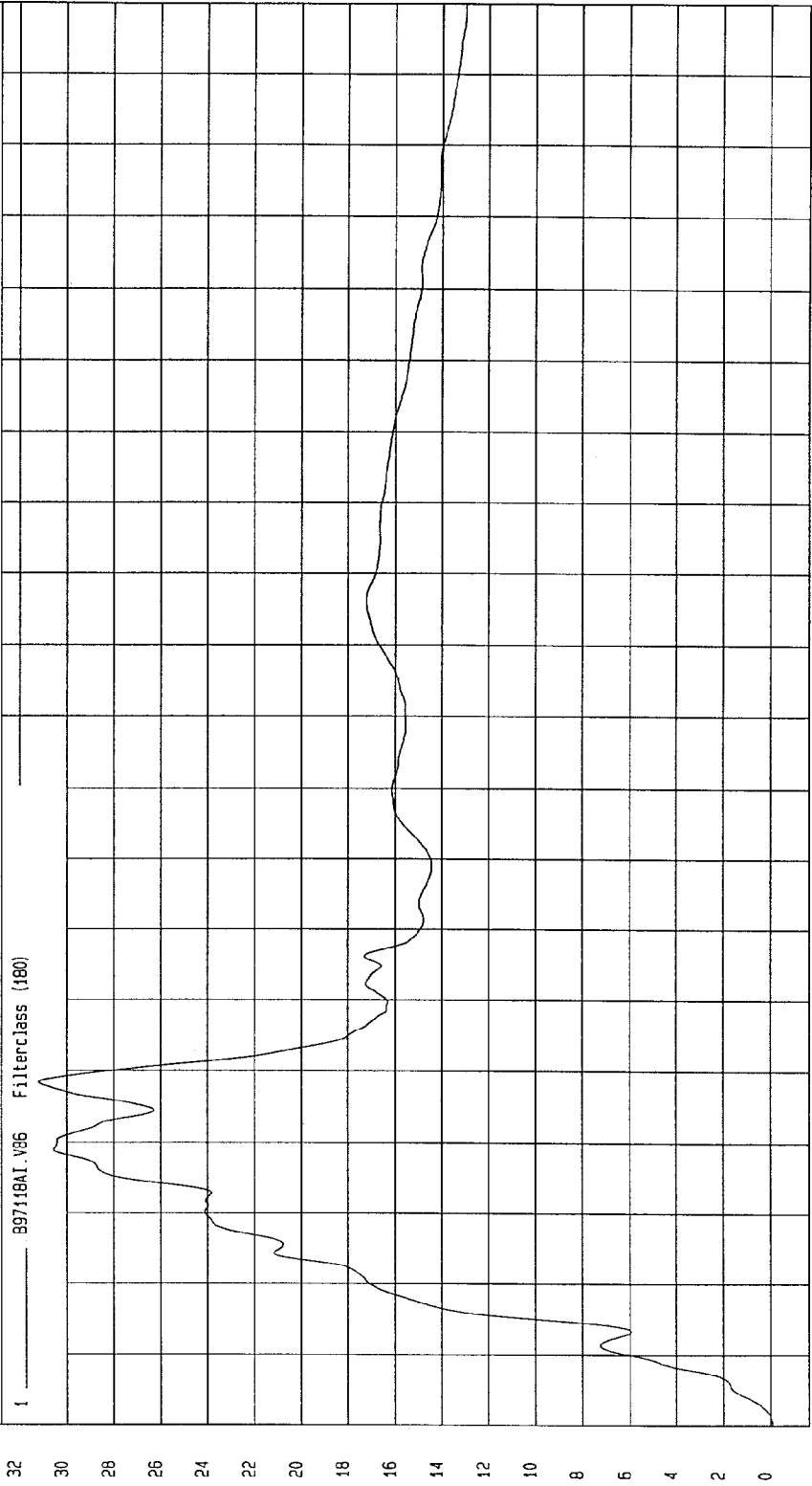
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -0.09 KPH at 0 msec Maximum = 31.20 KPH at 48 msec

LEFT MID B-POST Y VELOCITY

1 897118A1.V36 Filterclass (180)



MPA Research
11-07-1997 13:49

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

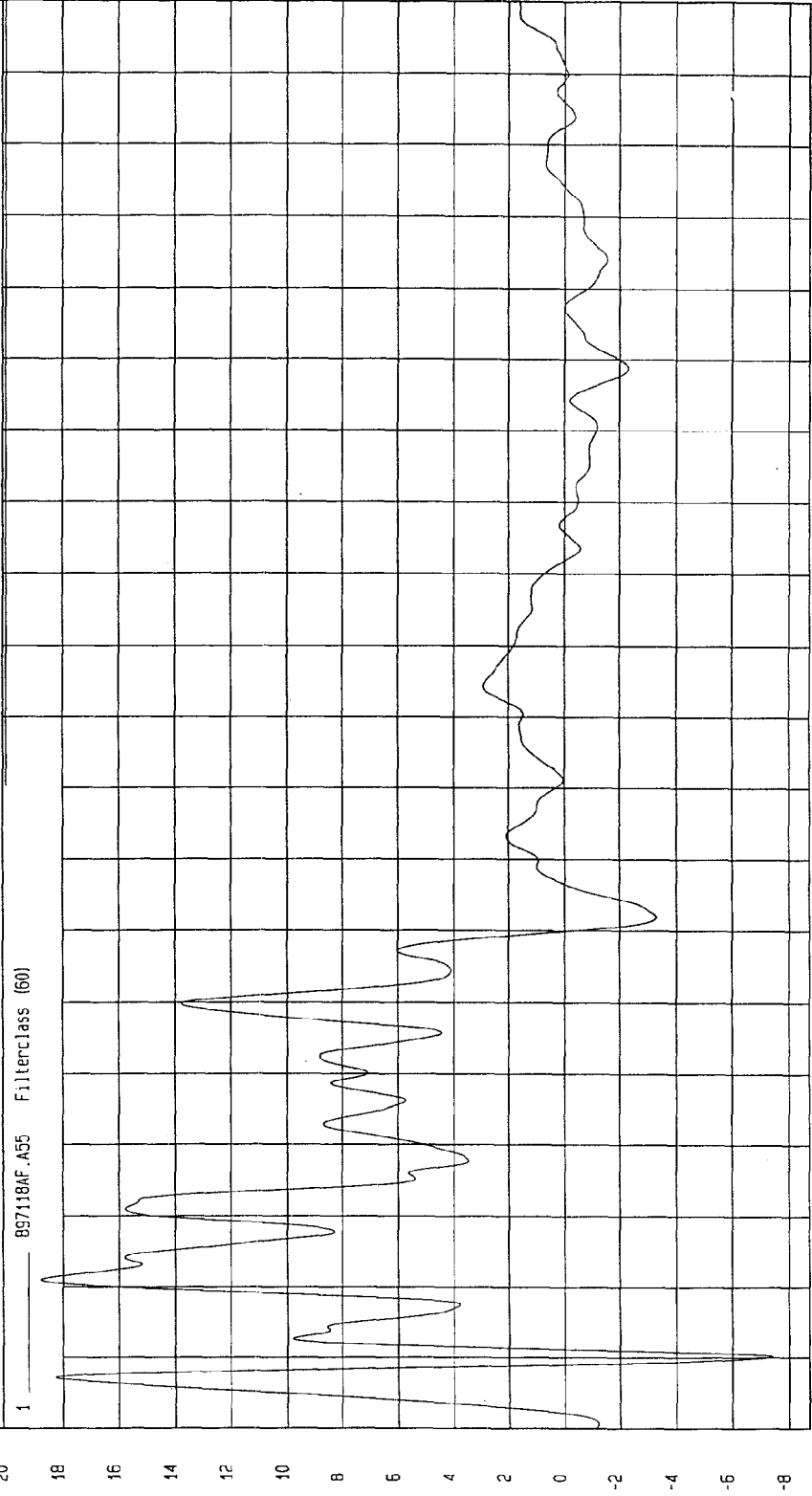
Speed: 31.24 MPH 50.3 KPH

COMPONENT: 1997 FORD MUSTANG

Minimum = -7.41 G'S at 10 msec

Maximum = 18.79 G'S at 21 msec

LEFT SIDE SILL AT FRONT SEAT Y ACCELERATION



TIME (SECONDS)

WGA Research
11-07-1997 13:14

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

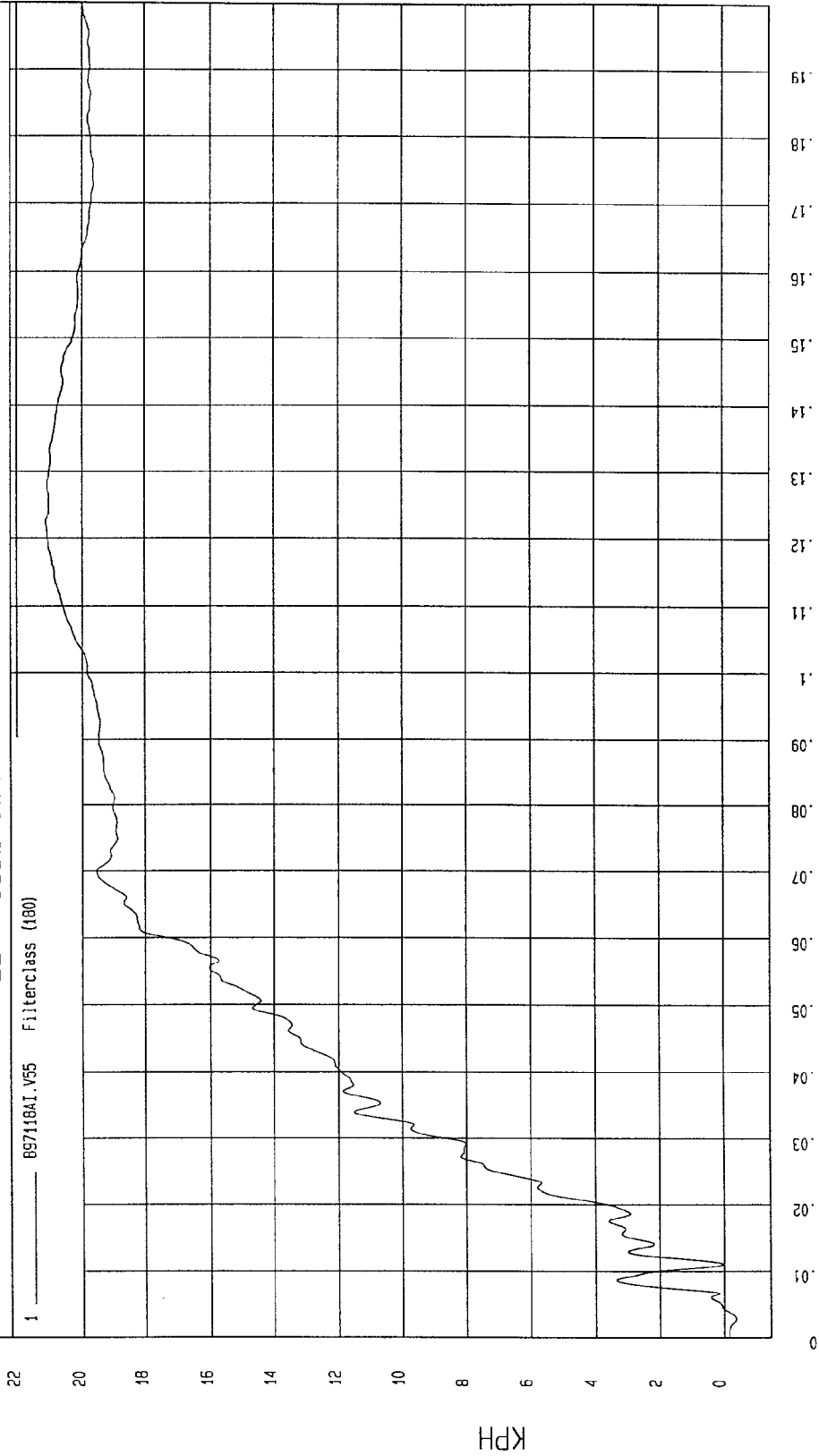
COMPONENT: 1997 FORD MUSTANG

Minimum = - .35 KPH at 3 msec

Maximum = 21.11 KPH at 123 msec

LEFT SIDE SILL AT FRONT SEAT Y VELOCITY

1 _____ 697118A1.V55 Filterclass (180)



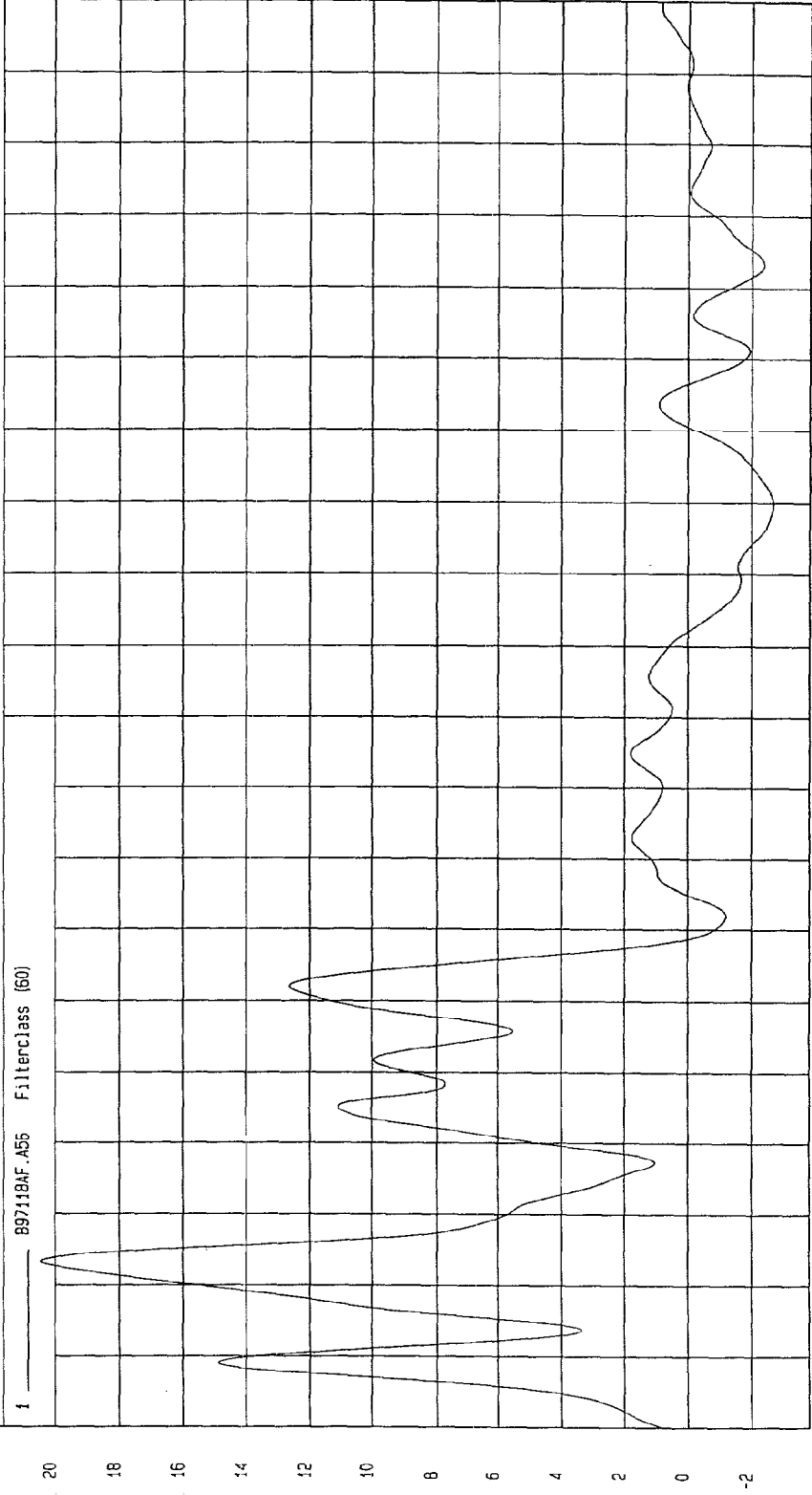
MPA Research
11-01-1997 13:14

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -2.67 G'S at 130 msec Maximum = 20.45 G'S at 23 msec

LEFT SIDE SILL AT REAR SEAT Y ACCELERATION



MGA Research
11-07-1997 13:14

TIME (SECONDS)

G'S

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG

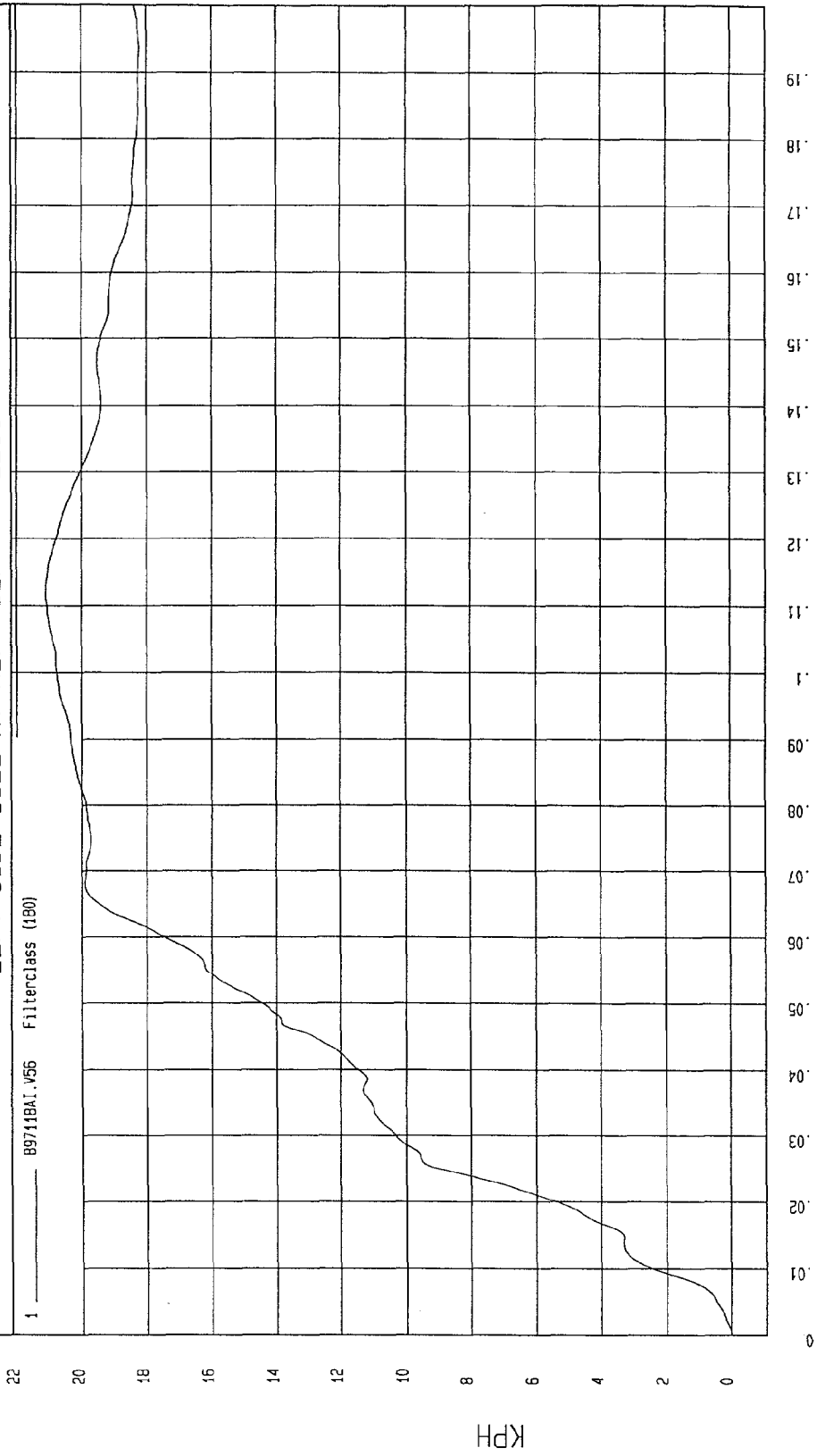
Speed: 31.24 MPH 50.3 KPH

Minimum = -2.29E-02 KPH at -13 msec

Maximum = 21.11 KPH at 112 msec

LEFT SIDE SILL AT REAR SEAT Y VELOCITY

1 ——— B9711BA1.V56 Filterclass (180)



TIME Seconds

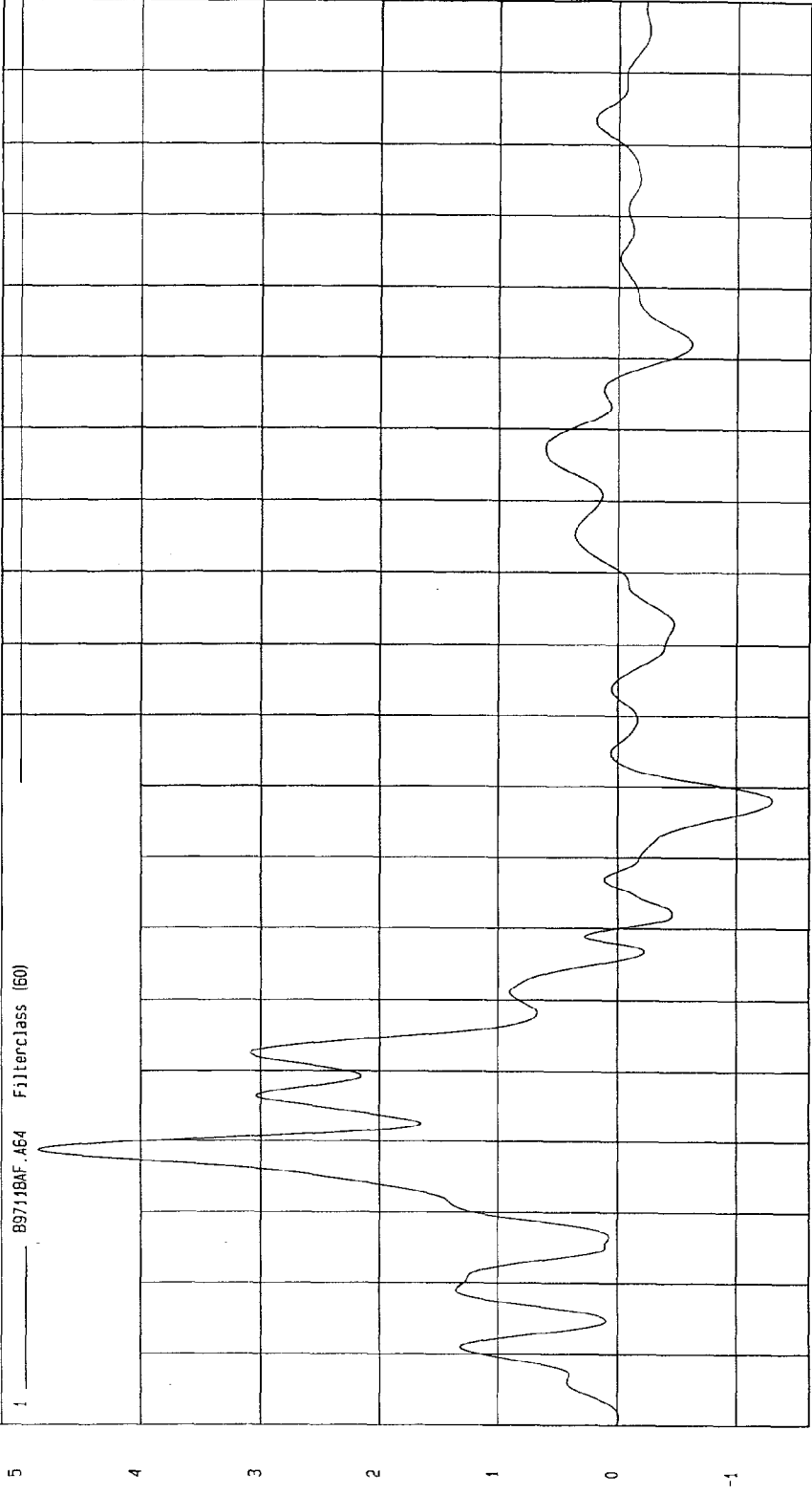
MGA Research
11-01-1997 13.14

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -1.30 G'S at 88 msec Maximum = 4.85 G'S at 39 msec

RIGHT SIDE SILL AT FRONT SEAT X ACCELERATION



TIME (SECONDS)

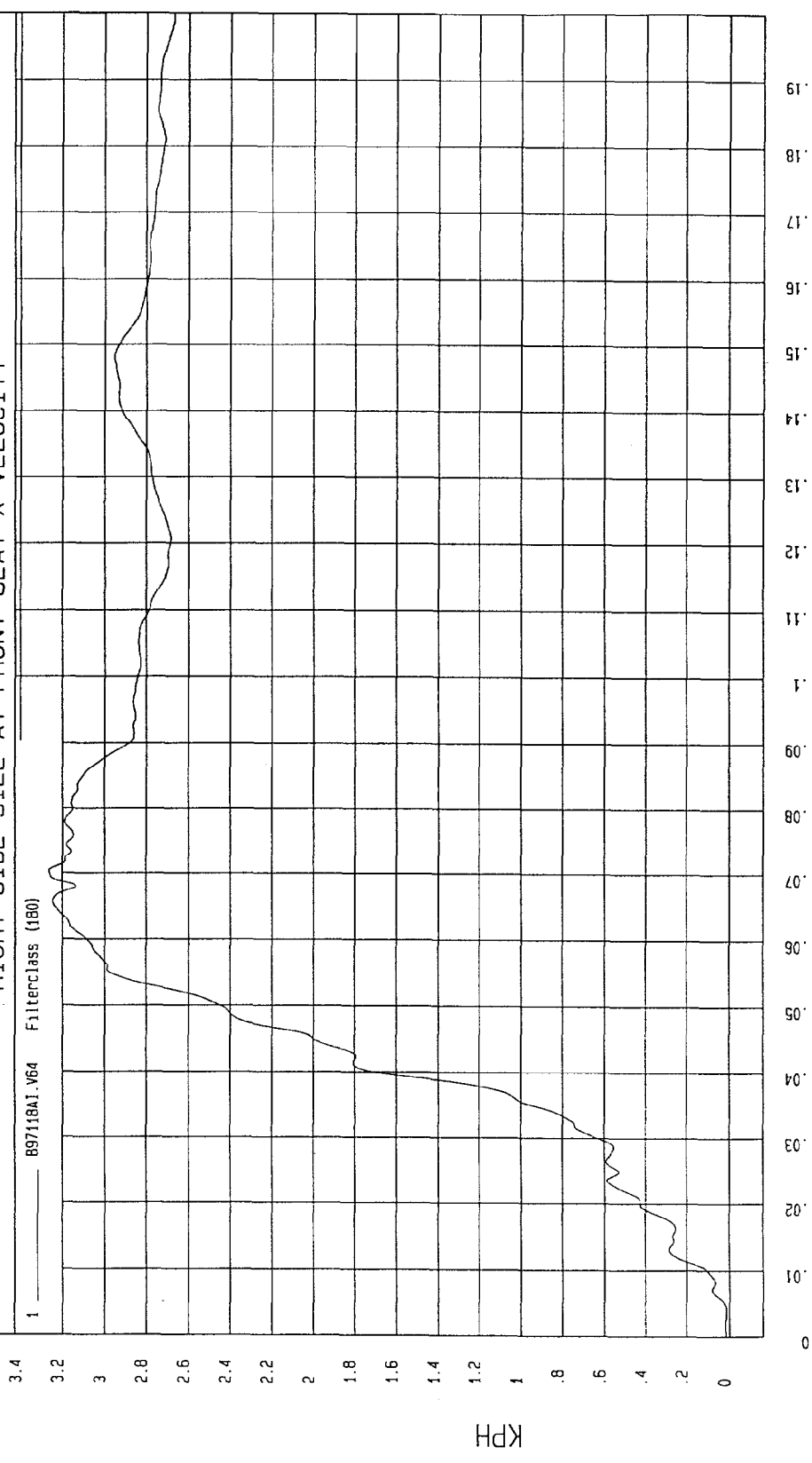
MGA Research
11-01-1997 13.14

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -1.61E-03 KPH at -10 msec
Maximum = 3.26 KPH at 70 msec

RIGHT SIDE SILL AT FRONT SEAT X VELOCITY



MGA Research
11-07-1997 13.14

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

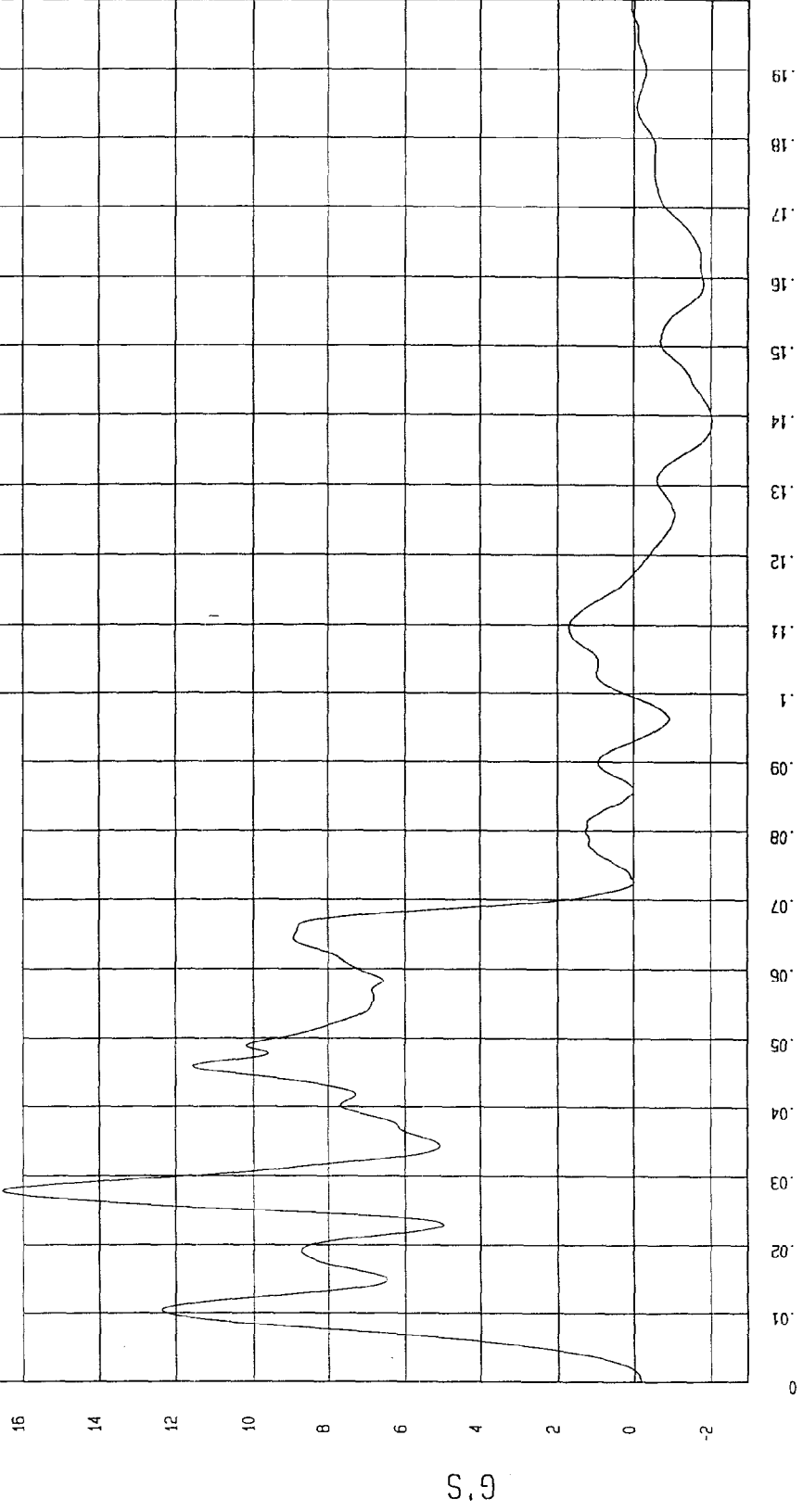
COMPONENT: 1997 FORD MUSTANG

Maximum = 16.53 G's at 28 msec

Minimum = -2.03 G's at 139 msec

RIGHT SIDE SILL AT FRONT SEAT Y ACCELERATION

1 ——— B971104F.A65 Filterclass (60)



MSA Research
11-07-1997 13.14

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

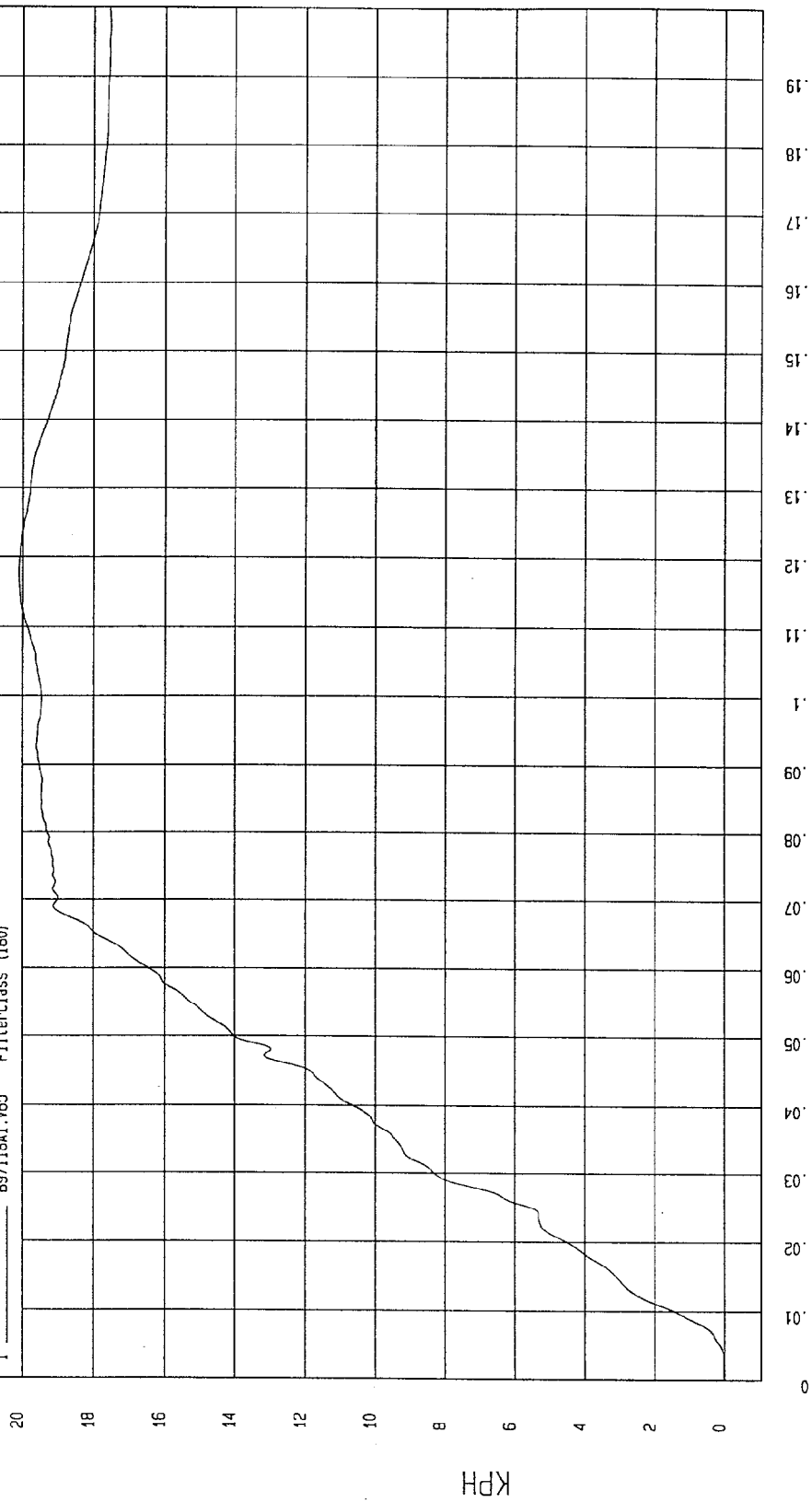
COMPONENT: 1997 FORD MUSTANG

Minimum = 0 KPH at -20 msec

Maximum = 20.11 KPH at 118 msec

RIGHT SIDE SILL AT FRONT SEAT Y VELOCITY

1 B97118A1.V65 Filterclass (180)



TIME Seconds

MEV Research
11-01-1997 13:15

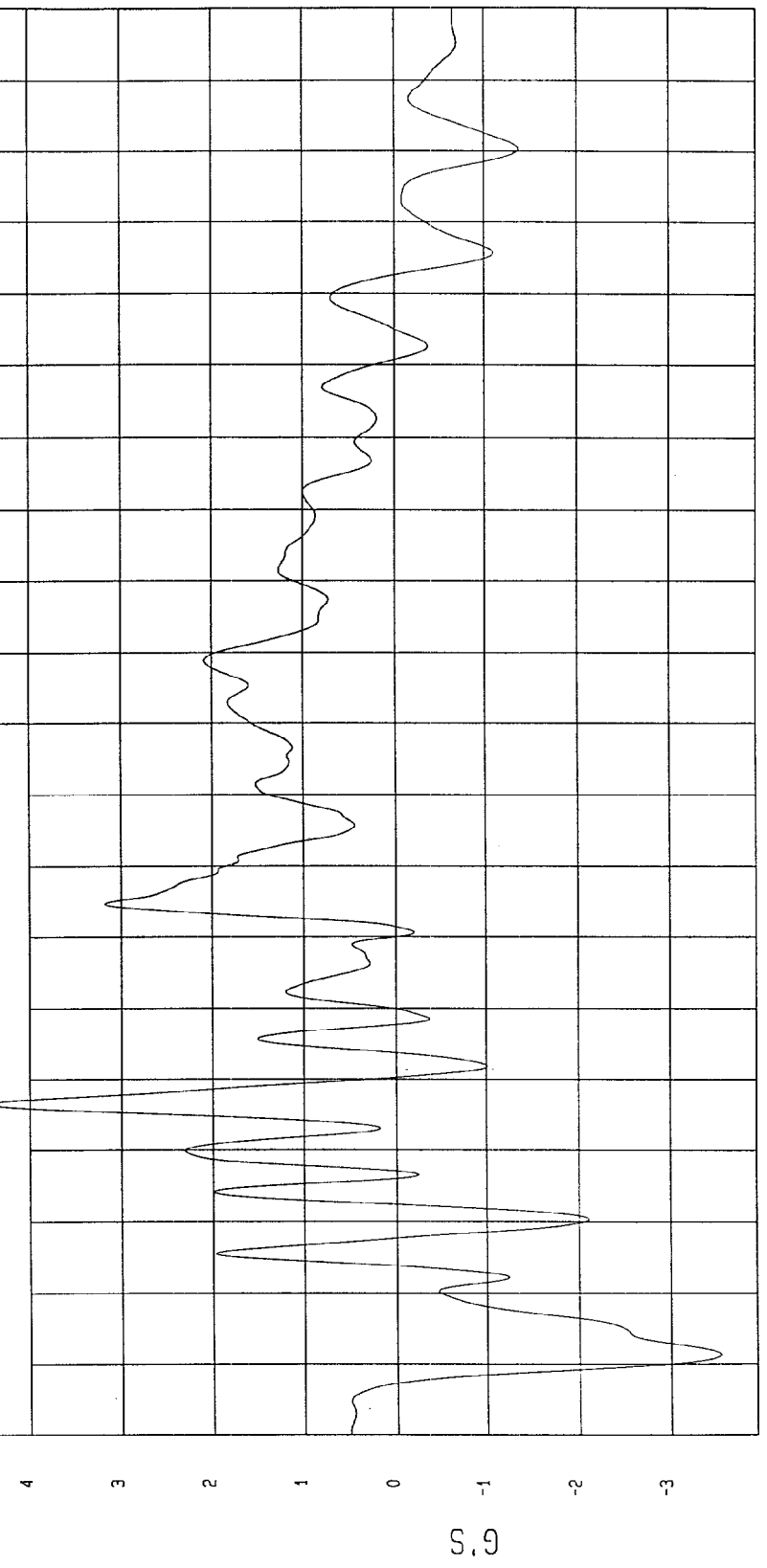
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -3.55 G'S at 11 msec Maximum = 4.44 G'S at 46 msec

RIGHT SIDE SILL AT FRONT SEAT Z ACCELERATION

1 _____ B9718AF.A65 Filterclass (60)



TIME (SECONDS) MSA Research 11-07-1997 13: 15

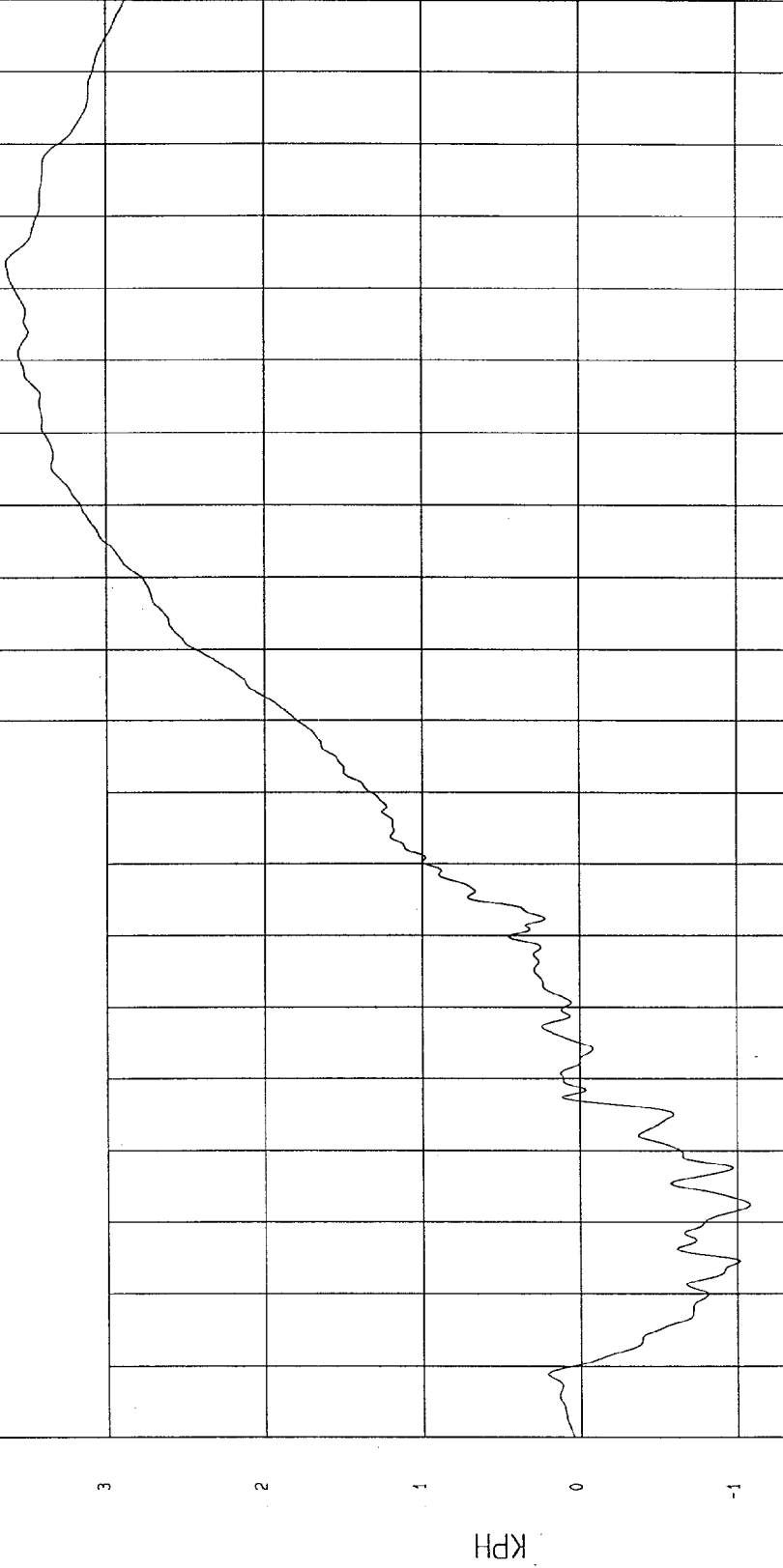
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -1.08 KPH at 32 msec Maximum = 3.63 KPH at 164 msec

RIGHT SIDE SILL AT FRONT SEAT Z VELOCITY

1 ——— 897118A1.V65 Filterclass (180)



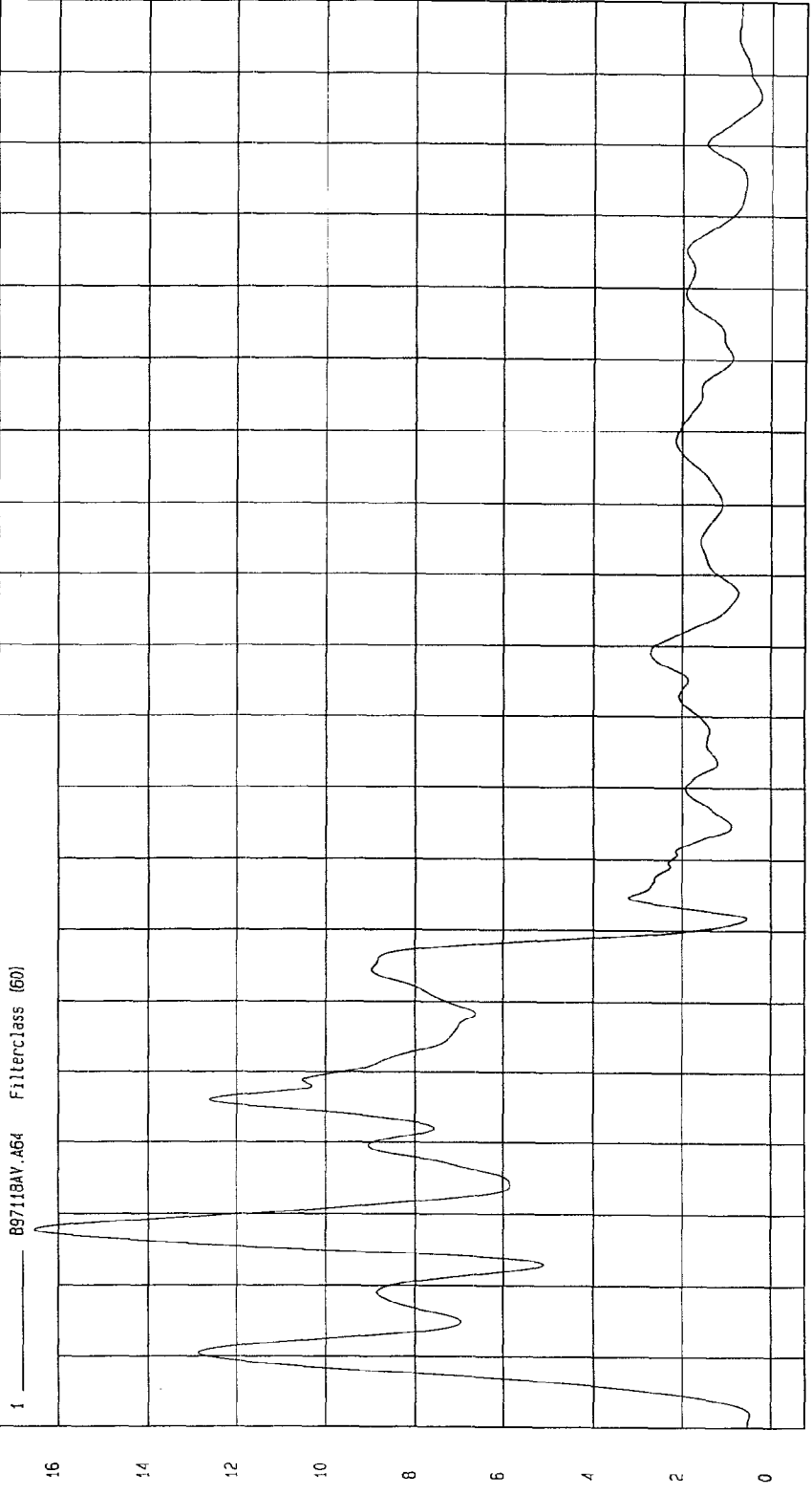
TIME Seconds
MCA Research
11-01-1997 13:15

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = 6.69E-02 G'S at -10 msec Maximum = 16.53 G'S at 28 msec

RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION



MGA Research
11-07-1997 13:15

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

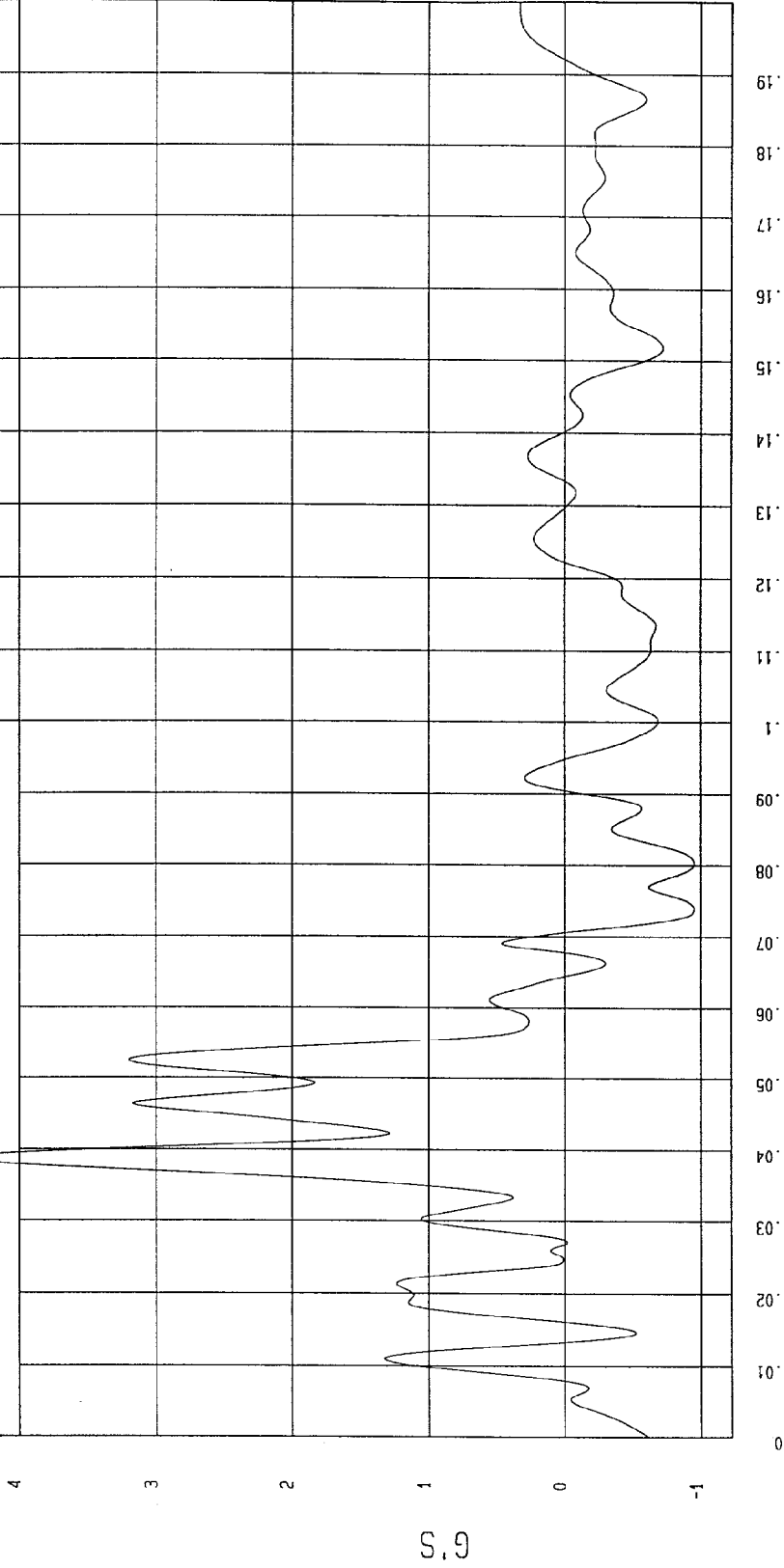
COMPONENT: 1997 FORD MUSTANG

Maximum = 4.46 G'S at 39 msec

Minimum = -.95 G'S at 80 msec

RIGHT SIDE SILL AT REAR SEAT X ACCELERATION

1 B97118AF.A67 Filter: class (50)



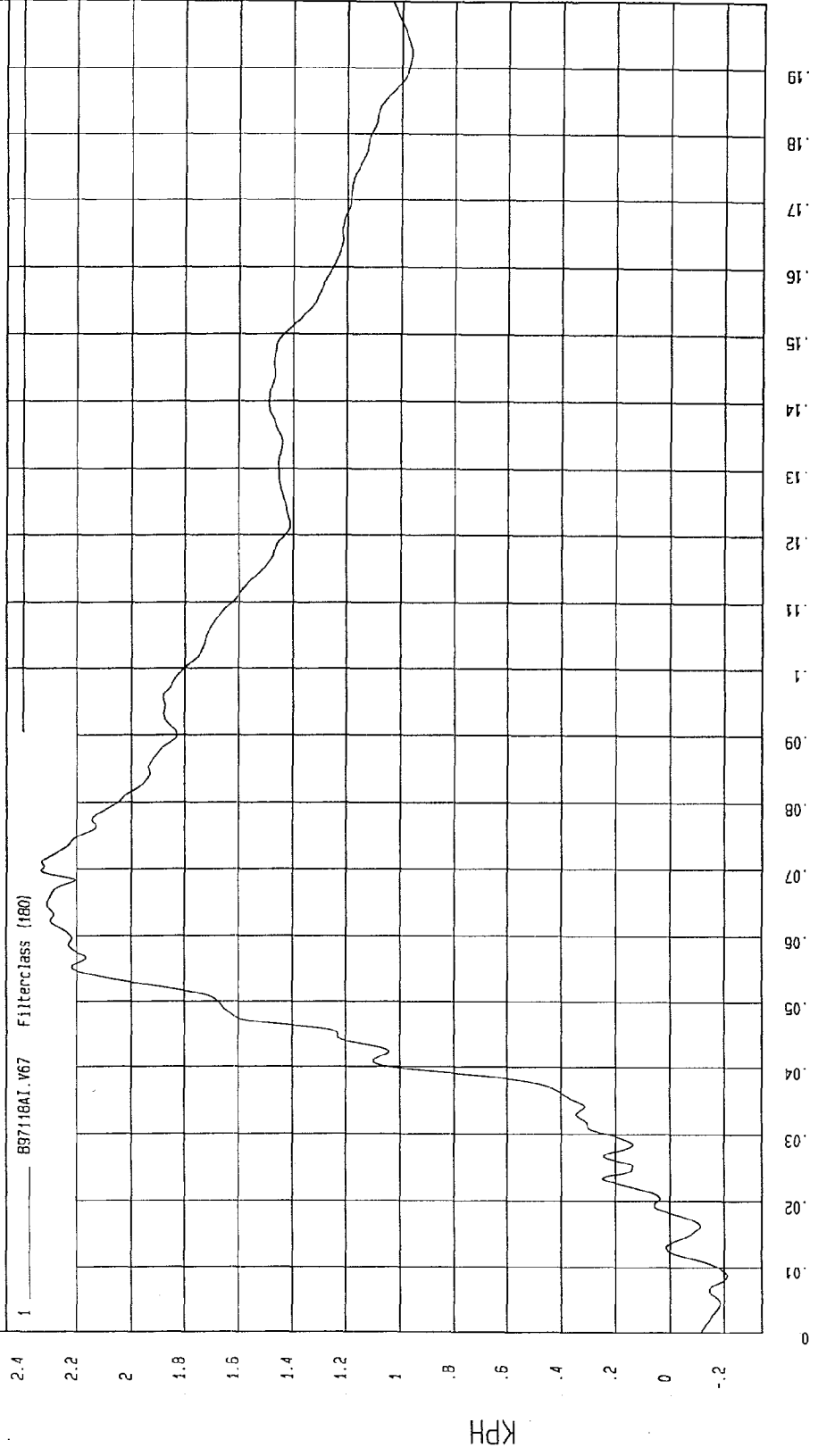
MSA Research
11-07-1997 13.15

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -21 KPH at 9 msec Maximum = 2.33 KPH at 70 msec

RIGHT SIDE SILL AT REAR SEAT X VELOCITY



MPA Research
11-07-1997 13:15

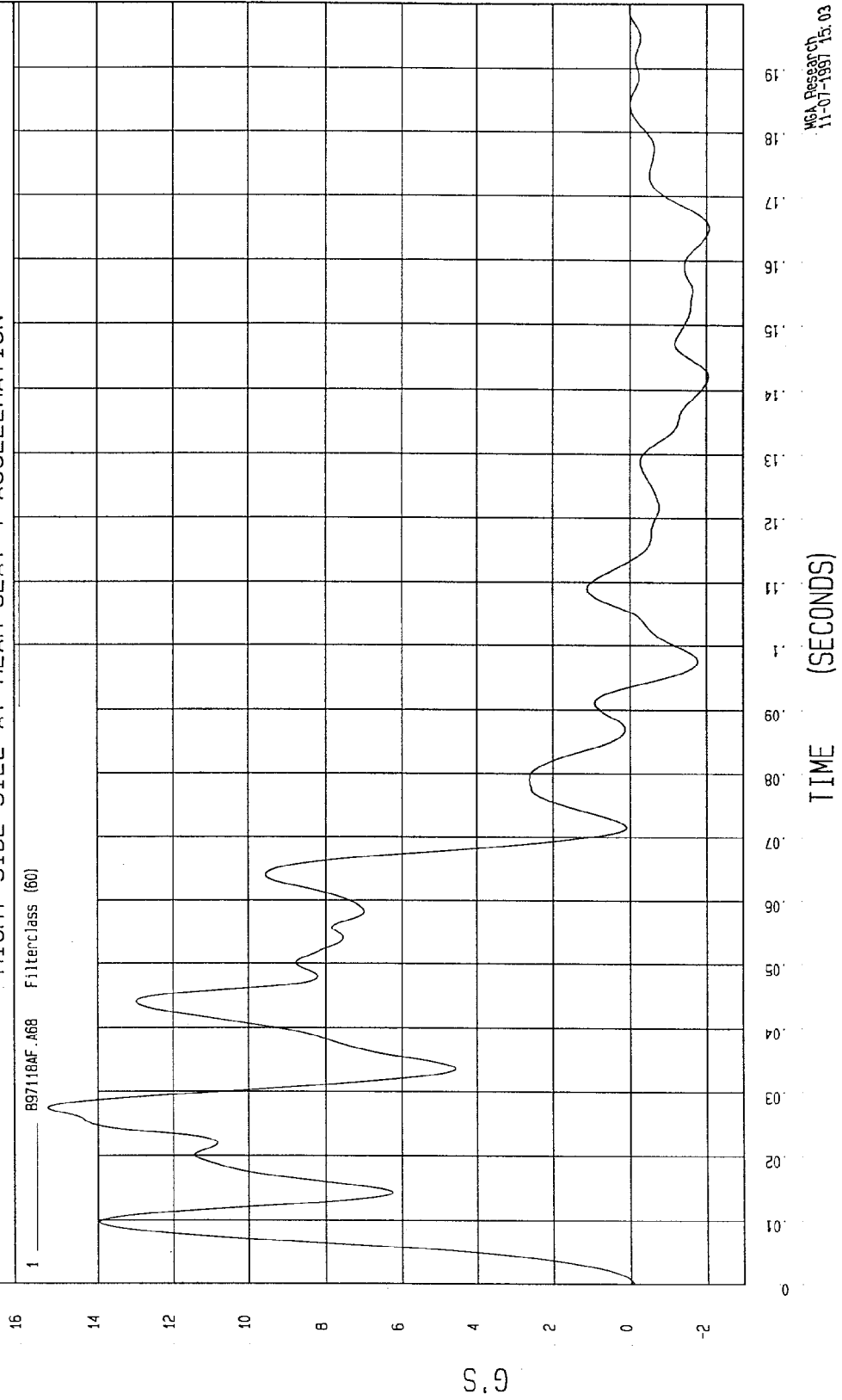
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -2.05 G'S at 165 msec Maximum = 15.27 G'S at 28 msec

RIGHT SIDE SILL AT REAR SEAT Y ACCELERATION

1 B97118AF.A68 Filterclass (60)



MGA Research
11-07-1997 15:03

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG

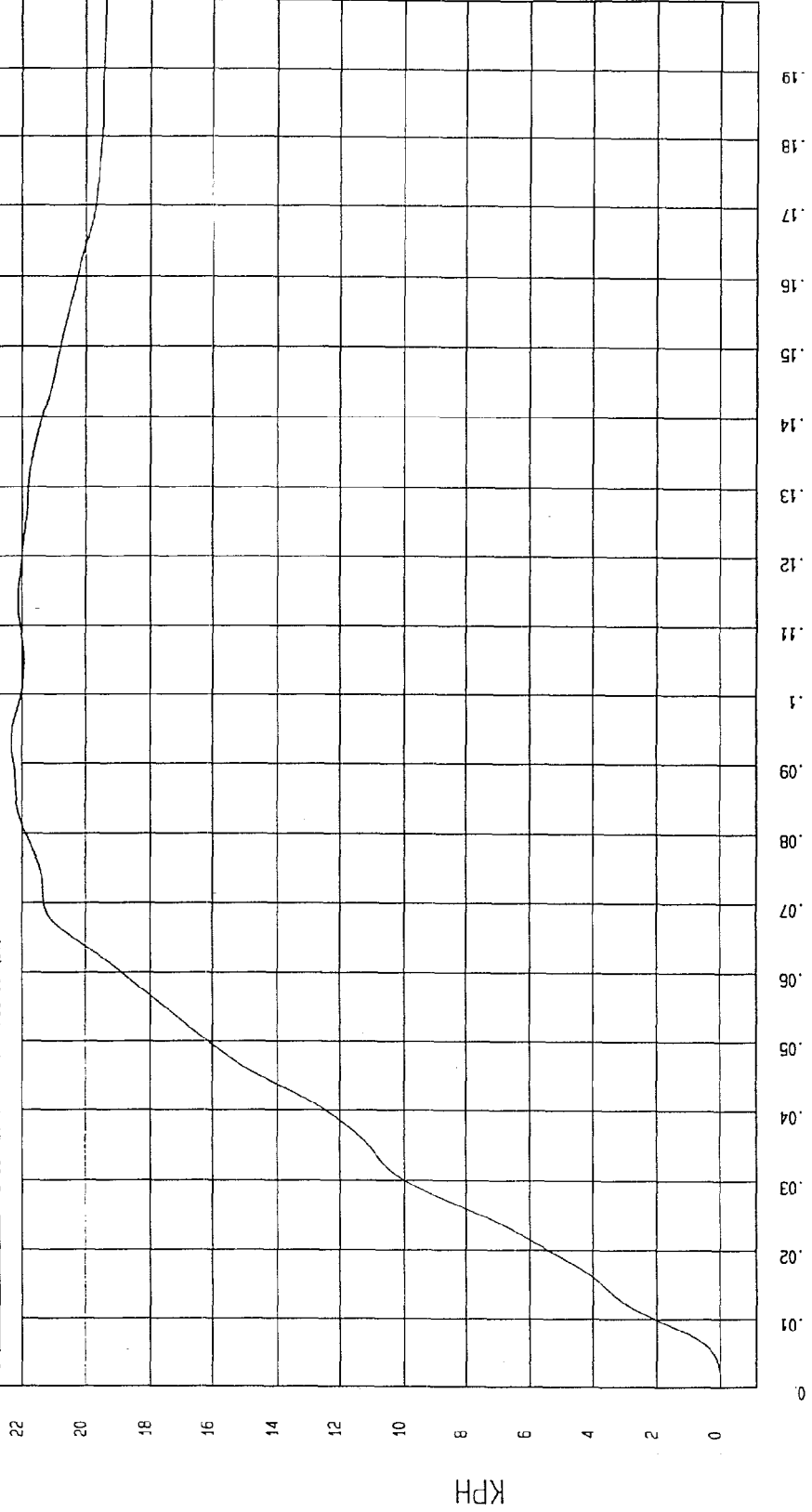
Speed: 31.24 MPH 50.3 KPH

Minimum = -2.69E-03 KPH at 1 msec

Maximum = 22.33 KPH at 94 msec

RIGHT SIDE SILL AT REAR SEAT Y VELOCITY

1 997118A1.V68 Filterclass (50)



MCA Research
11-07-1997 15:03

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

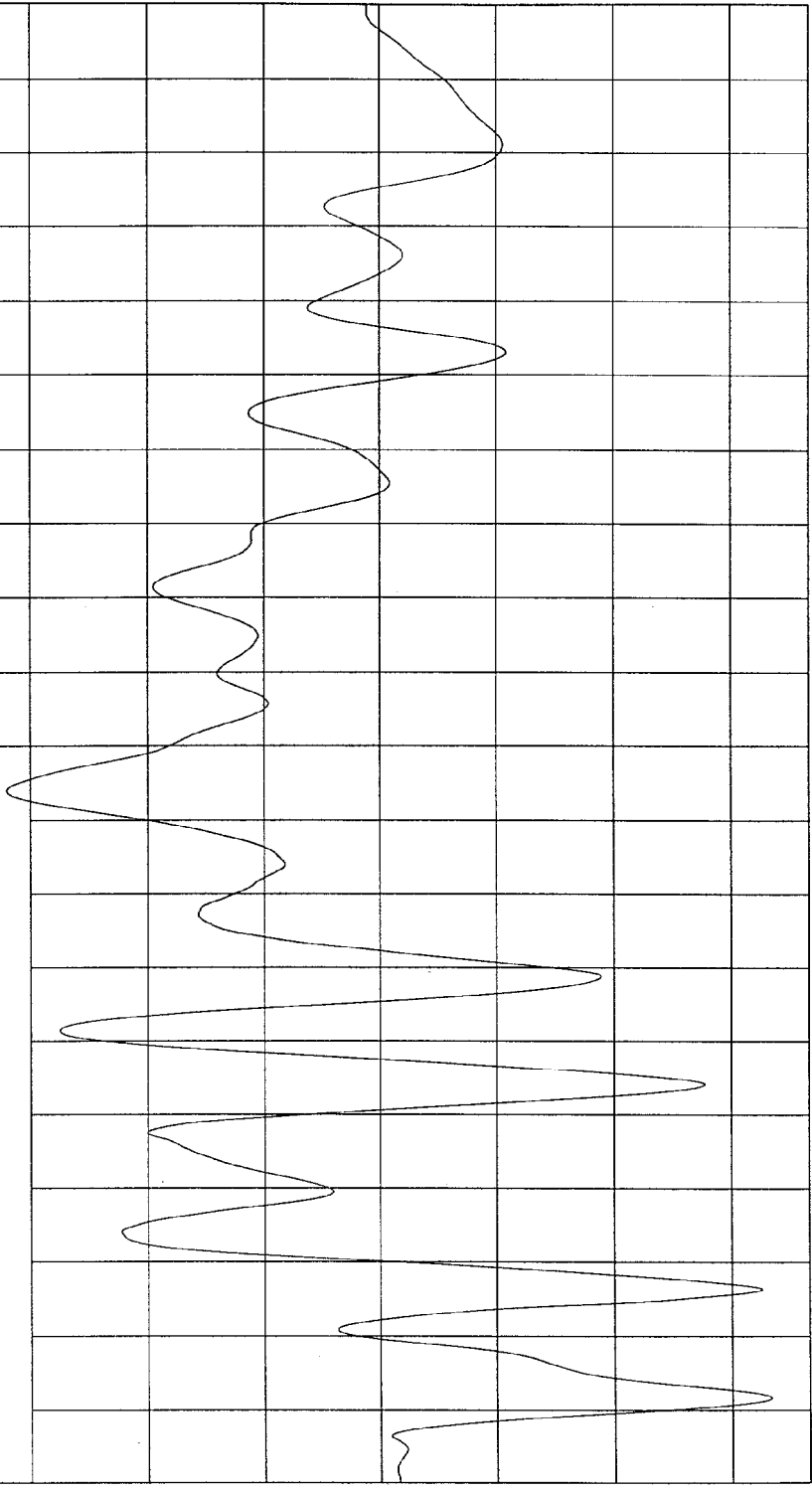
COMPONENT: 1997 FORD MUSTANG

Maximum = 3.20 G's at 94 msec

Minimum = -3.33 G's at 12 msec

RIGHT SIDE SILL AT REAR SEAT Z ACCELERATION

1 ——— 897118AF.A69 FilterClass (50)



MECA Research
11-07-1997 13:16

TIME (SECONDS)

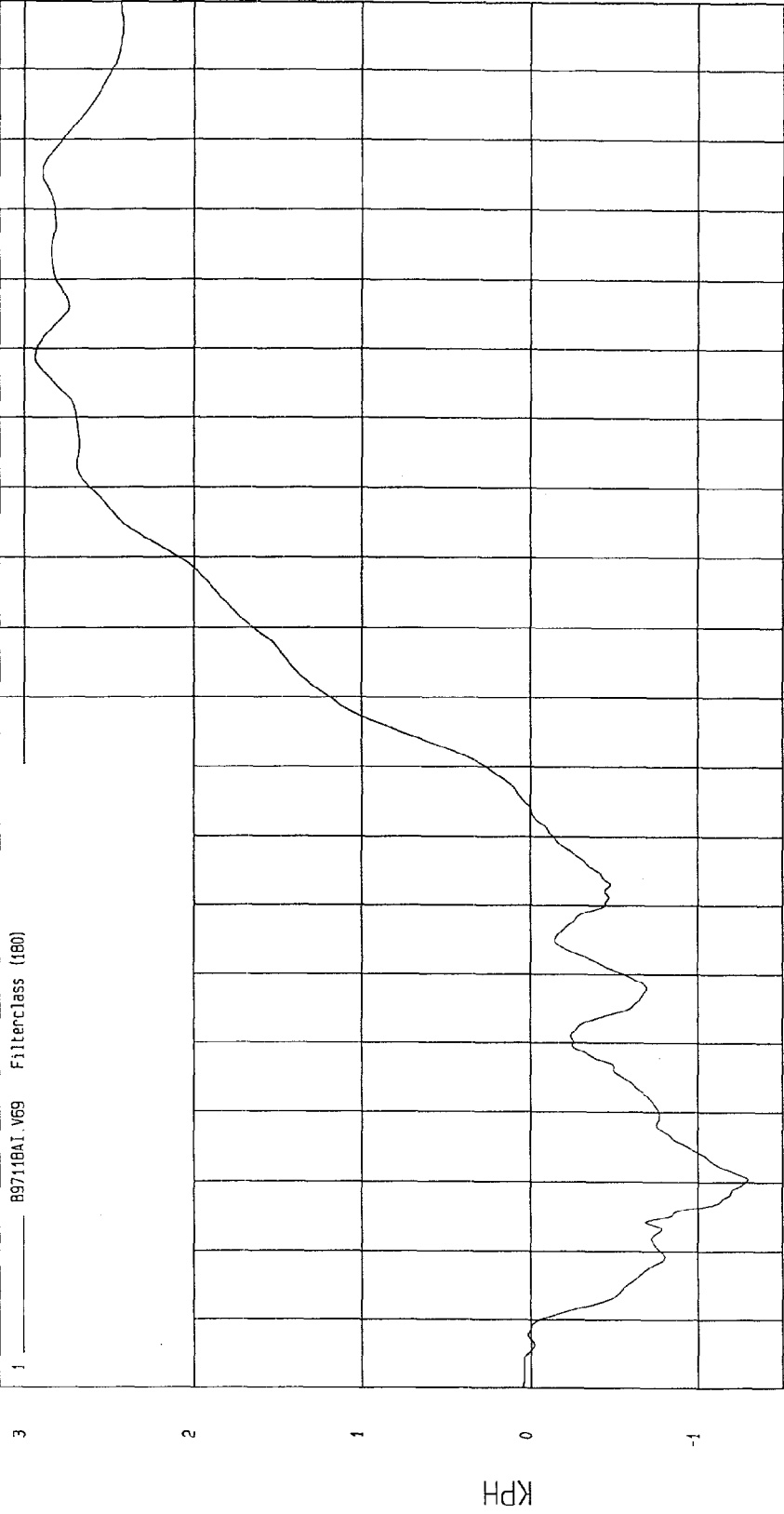
G.S.

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -1.29 KPH at 30 msec Maximum = 2.93 KPH at 149 msec

RIGHT SIDE SILL AT REAR SEAT Z VELOCITY



MECA Research
11-07-1997 13: 16

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

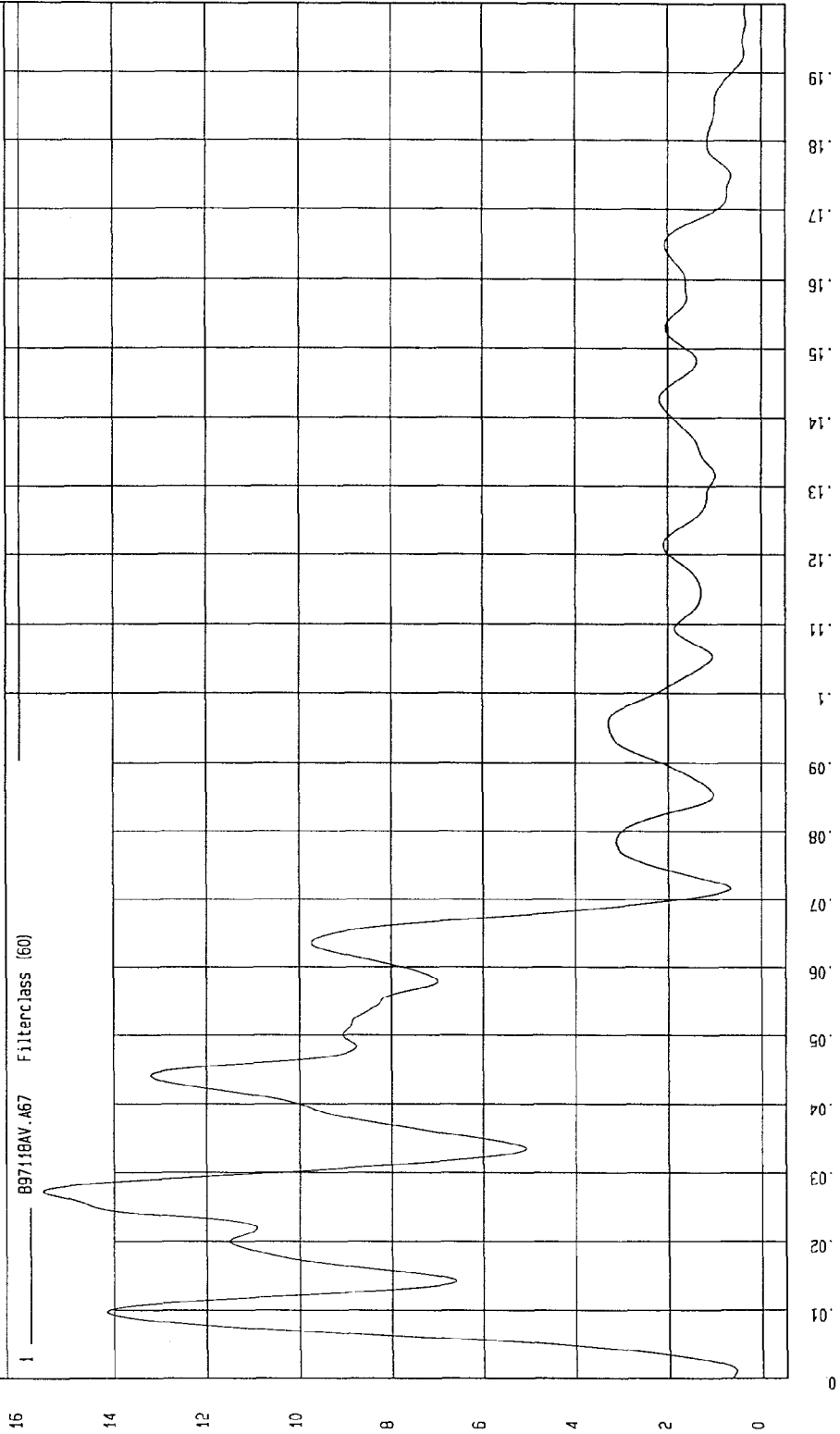
COMPONENT: 1997 FORD MUSTANG

Maximum = 15.53 G'S at 27 msec

Minimum = .24 G'S at -15 msec

RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION

1 89718AV.A67 Filterclass (60)



MSA Research Co.
11-07-1997 13.16

TIME (SECONDS)

G.S

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

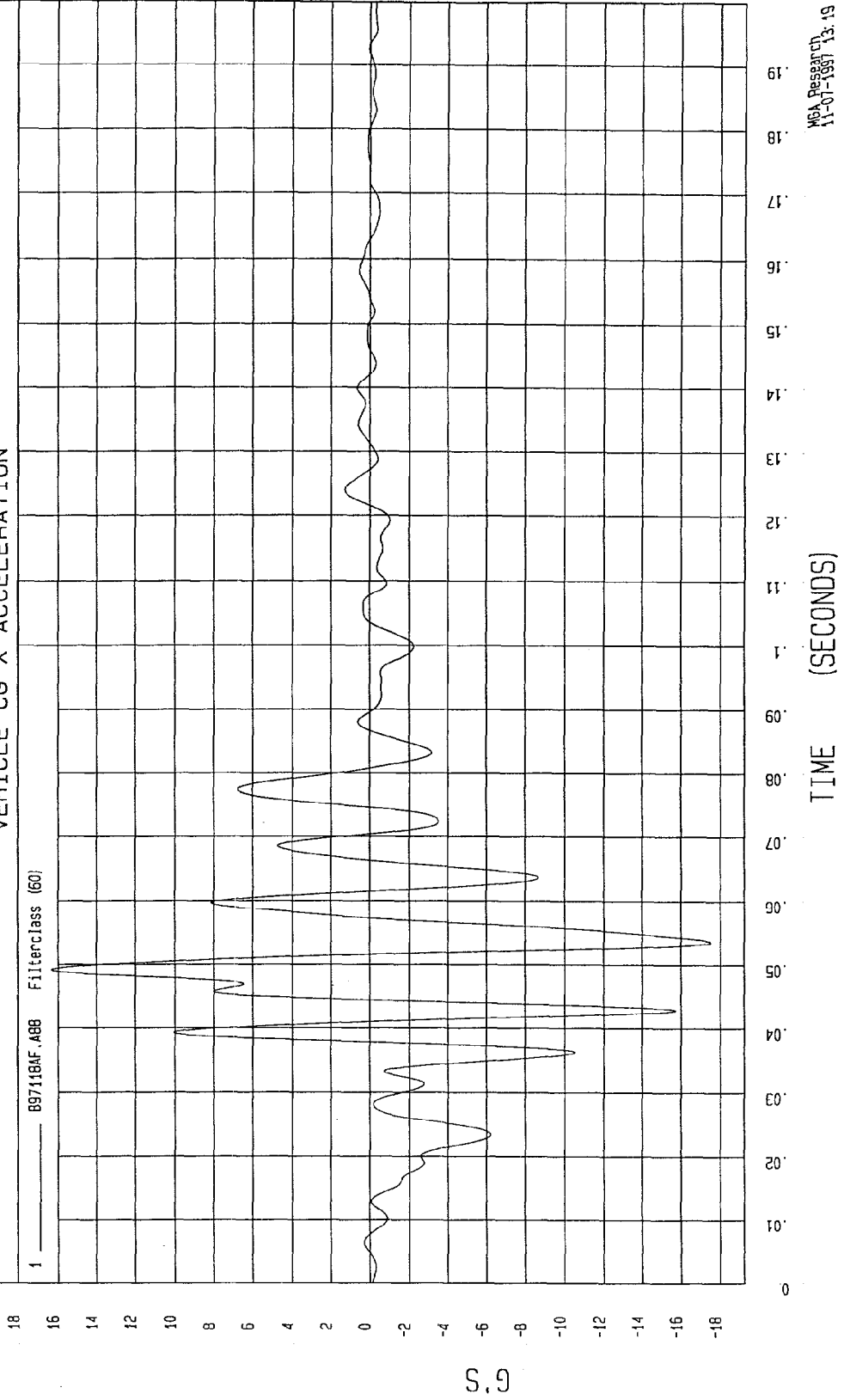
TEST: EU 96/27/EC SIDE IMPACT

COMPONENT: 1997 FORD MUSTANG

Maximum = 16.35 G'S at 49 msec

Minimum = -17.53 G'S at 54 msec

VEHICLE CG X ACCELERATION



TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

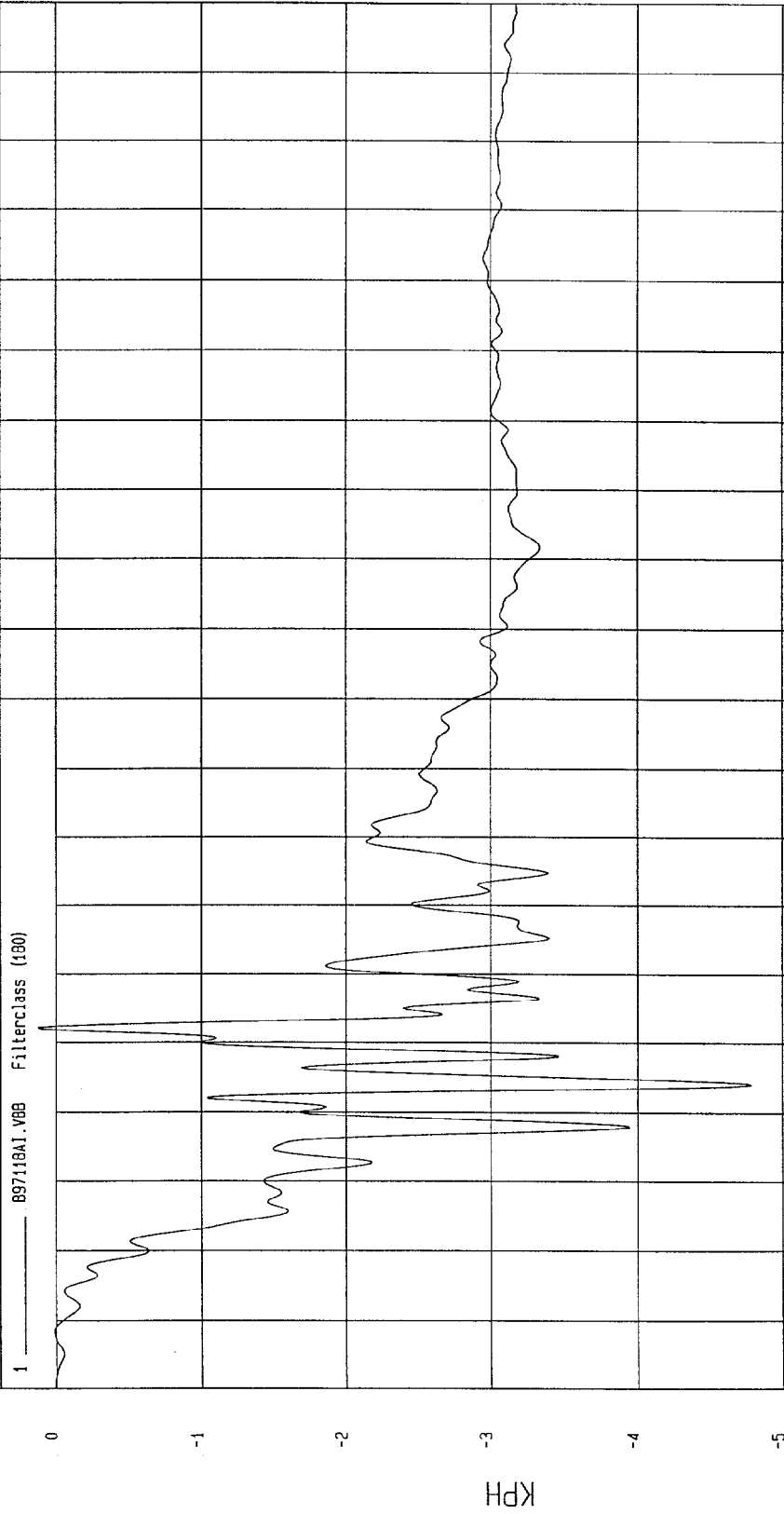
COMPONENT: 1997 FORD MUSTANG

Maximum = .13 KPH at 52 msec

Minimum = -4.79 KPH at 44 msec

VEHICLE CG X VELOCITY

1 ——— B97118A1.V8B Filterclass (190)



MEV Research
11-07-1997 13:19

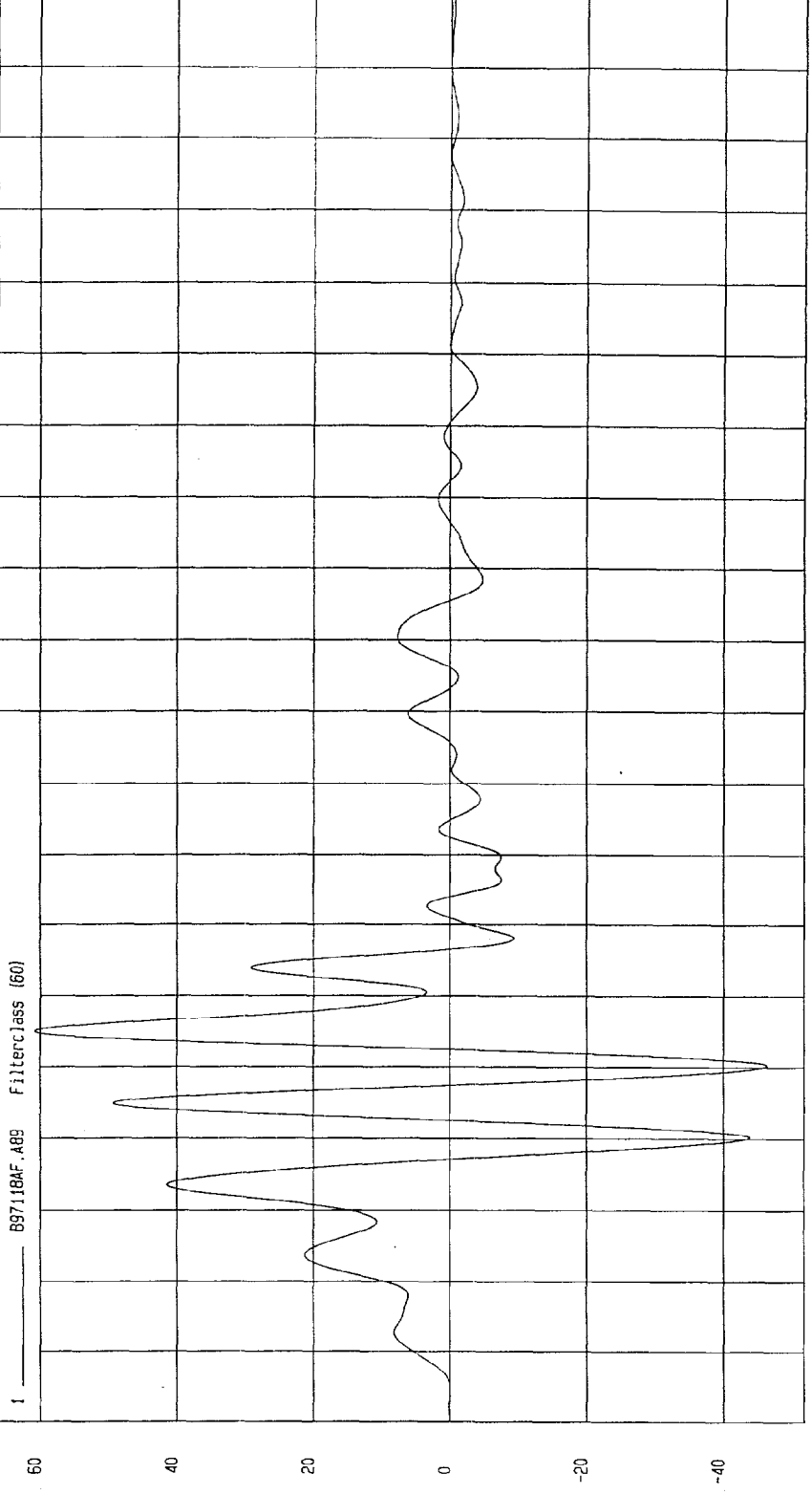
TIME
Seconds

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -46.36 G'S at 50 msec Maximum = 60.77 G'S at 55 msec

VEHICLE CG Y ACCELERATION



MSA Research
11-07-1997 13:20

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

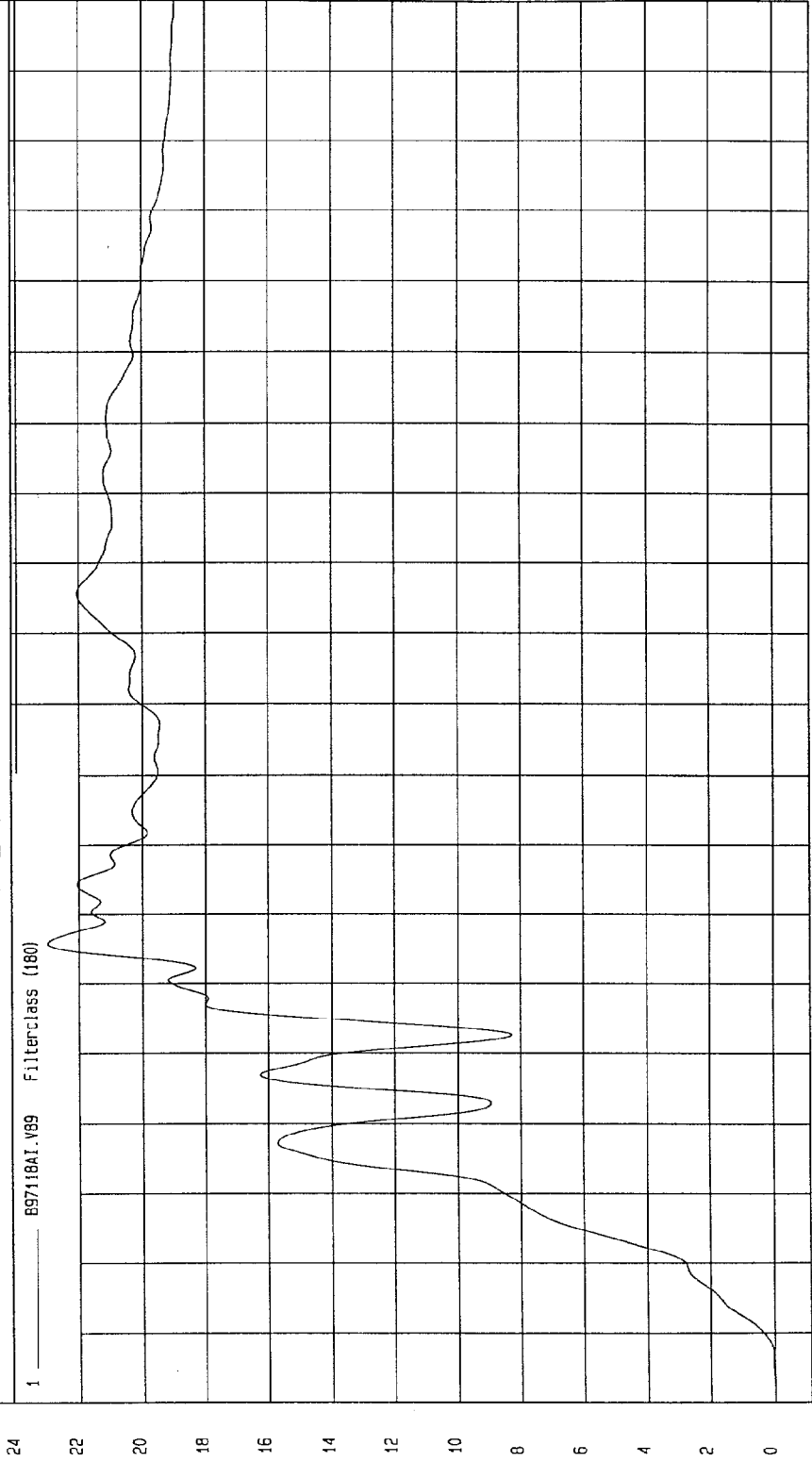
COMPONENT: 1997 FORD MUSTANG

Minimum = -2.35E-02 KPH at -1 msec

Maximum = 23.00 KPH at 66 msec

VEHICLE CG Y VELOCITY

1 ——— B97118A1.V89 Filterclass (180)



TIME Seconds

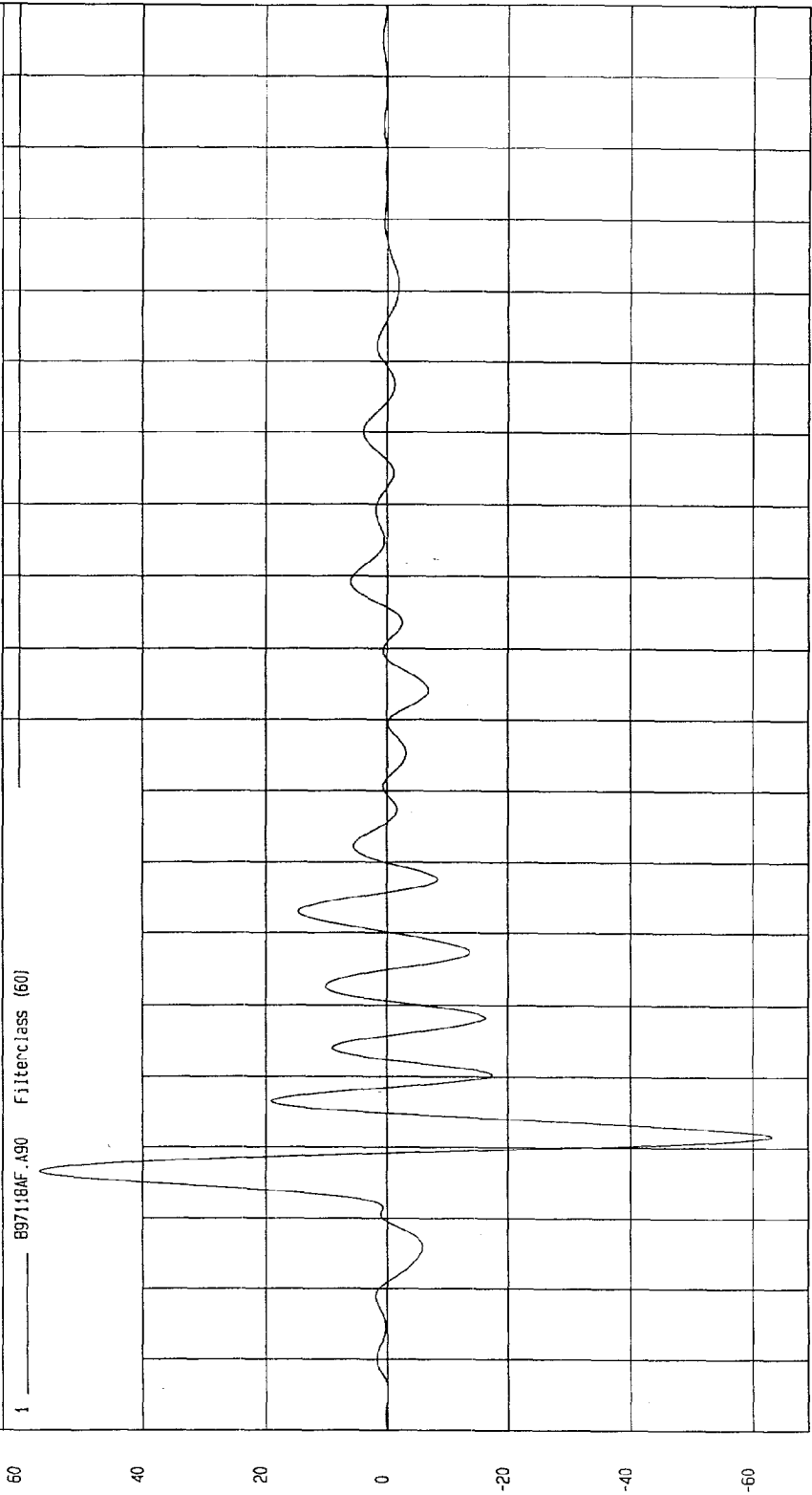
MGA Research
11-07-1997 13:20

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -63.08 G'S at 42 msec Maximum = 56.78 G'S at 37 msec

VEHICLE CG Z ACCELERATION



MSA Research
11-07-1997 13:20

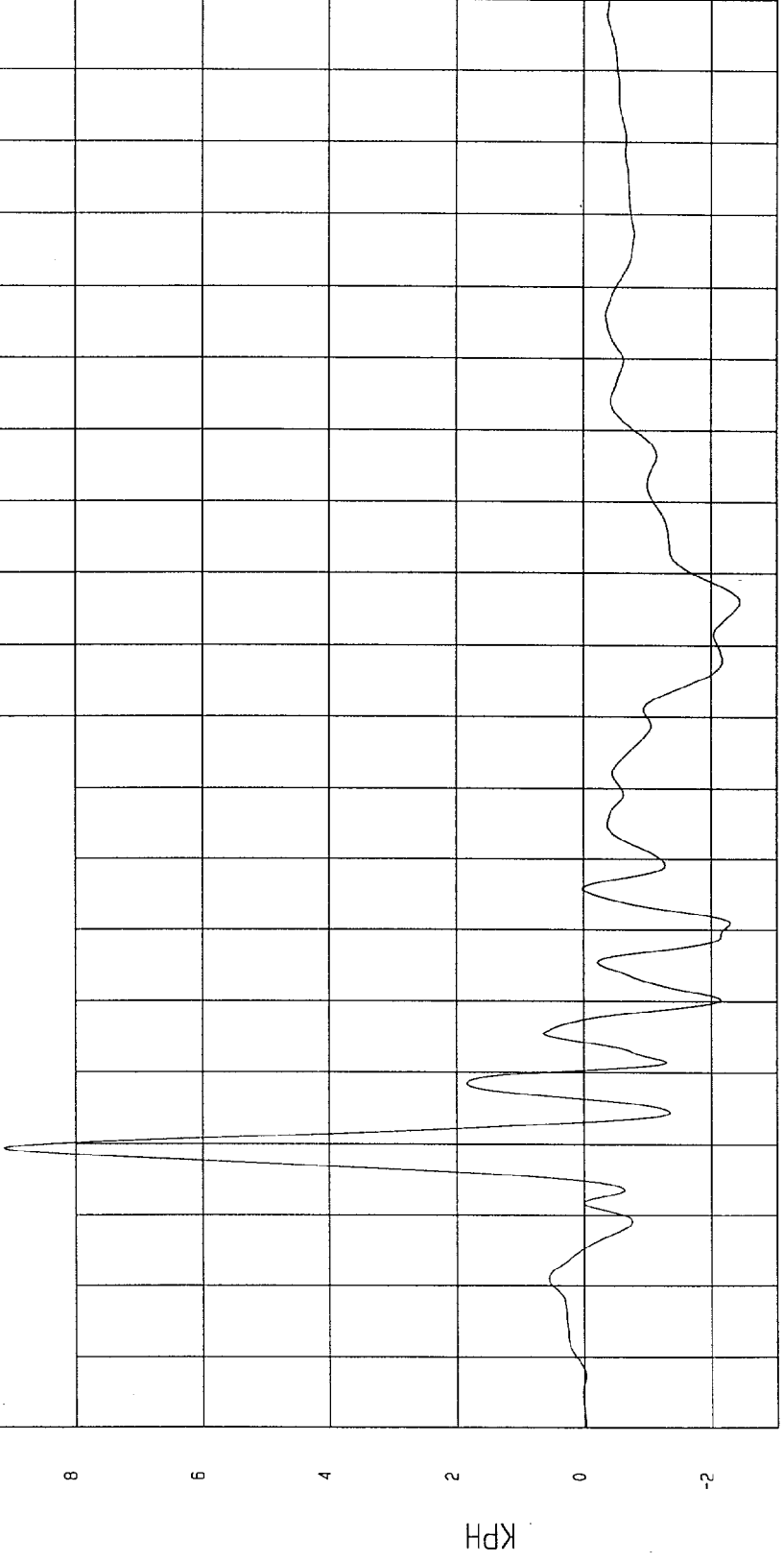
TEST: EU 96/27/EC SIDE IMPACT
TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG
Speed: 31.24 MPH 50.3 KPH

Minimum = -2.44 KPH at 116 msec
Maximum = 9.13 KPH at 39 msec

VEHICLE CG Z VELOCITY

1 ——— BS7118A1.V90 Filterclass (180)



TIME Seconds
MCA Research
11-07-1997 13.20

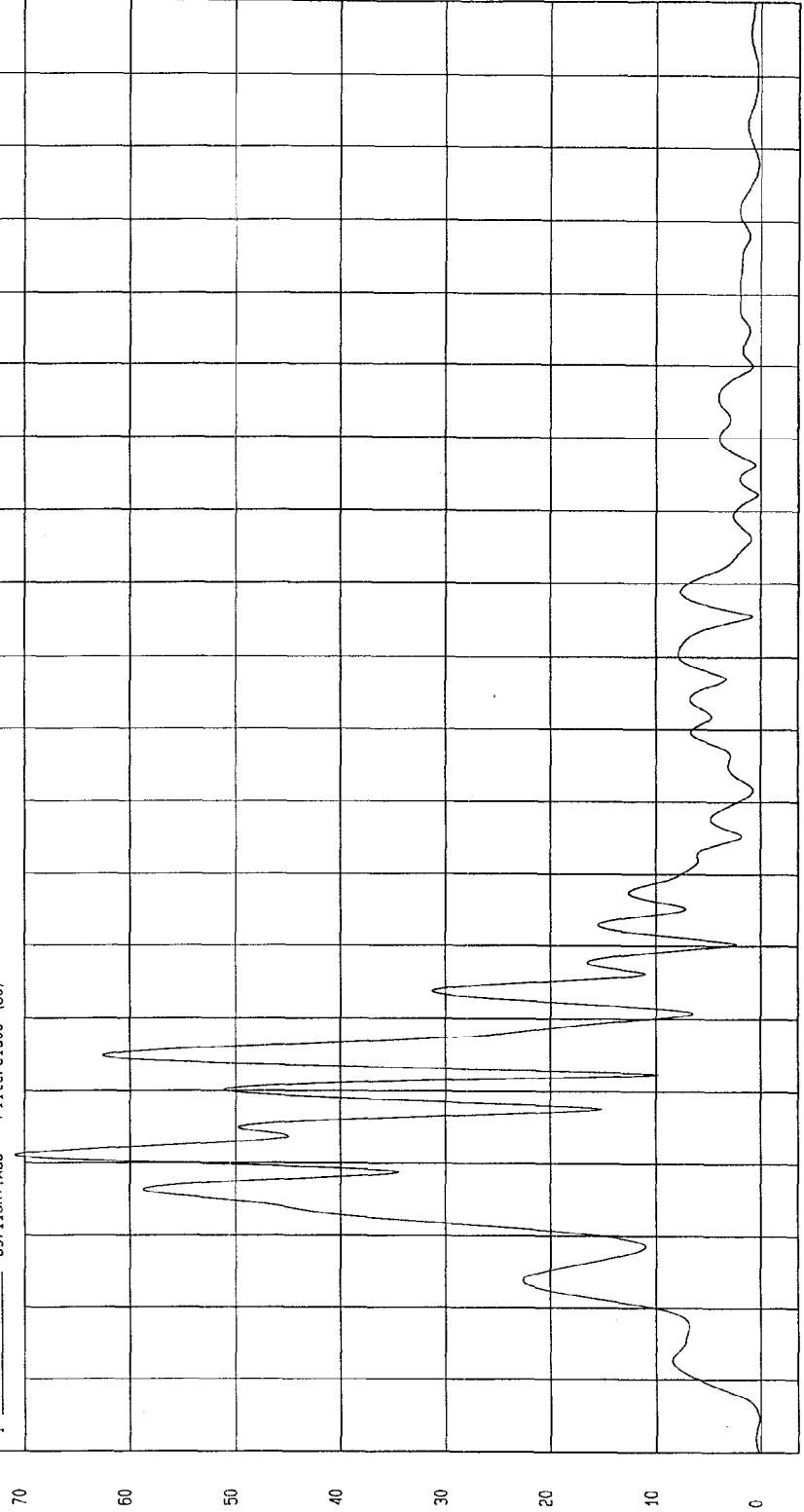
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

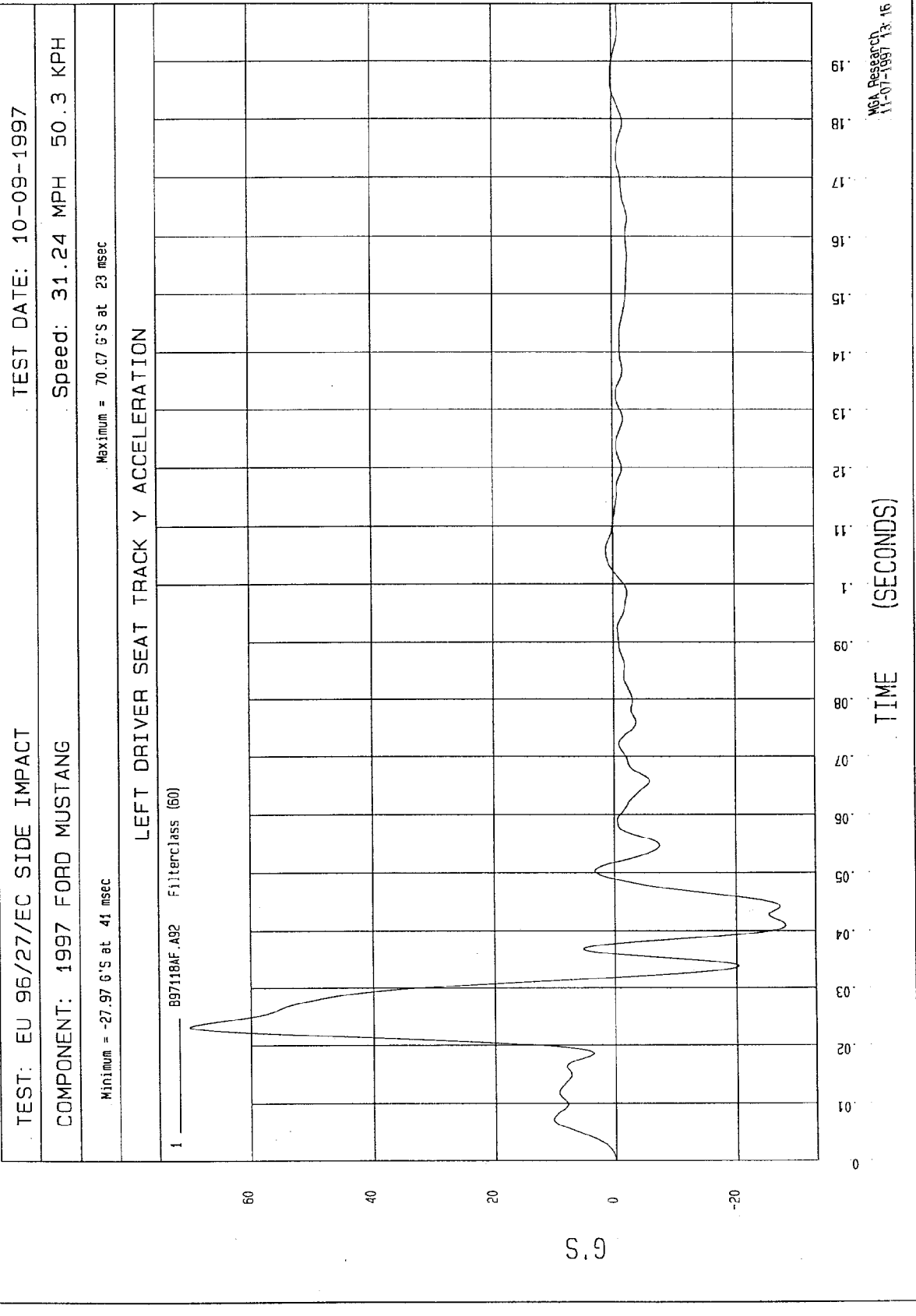
Minimum = 7.40E-03 G'S at -13 msec
Maximum = 70.94 G'S at 41 msec

VEHICLE CG RESULTANT ACCELERATION

1 897118AV.A88 Filterclass (60)



MEV Research
11-01-1997 13:20

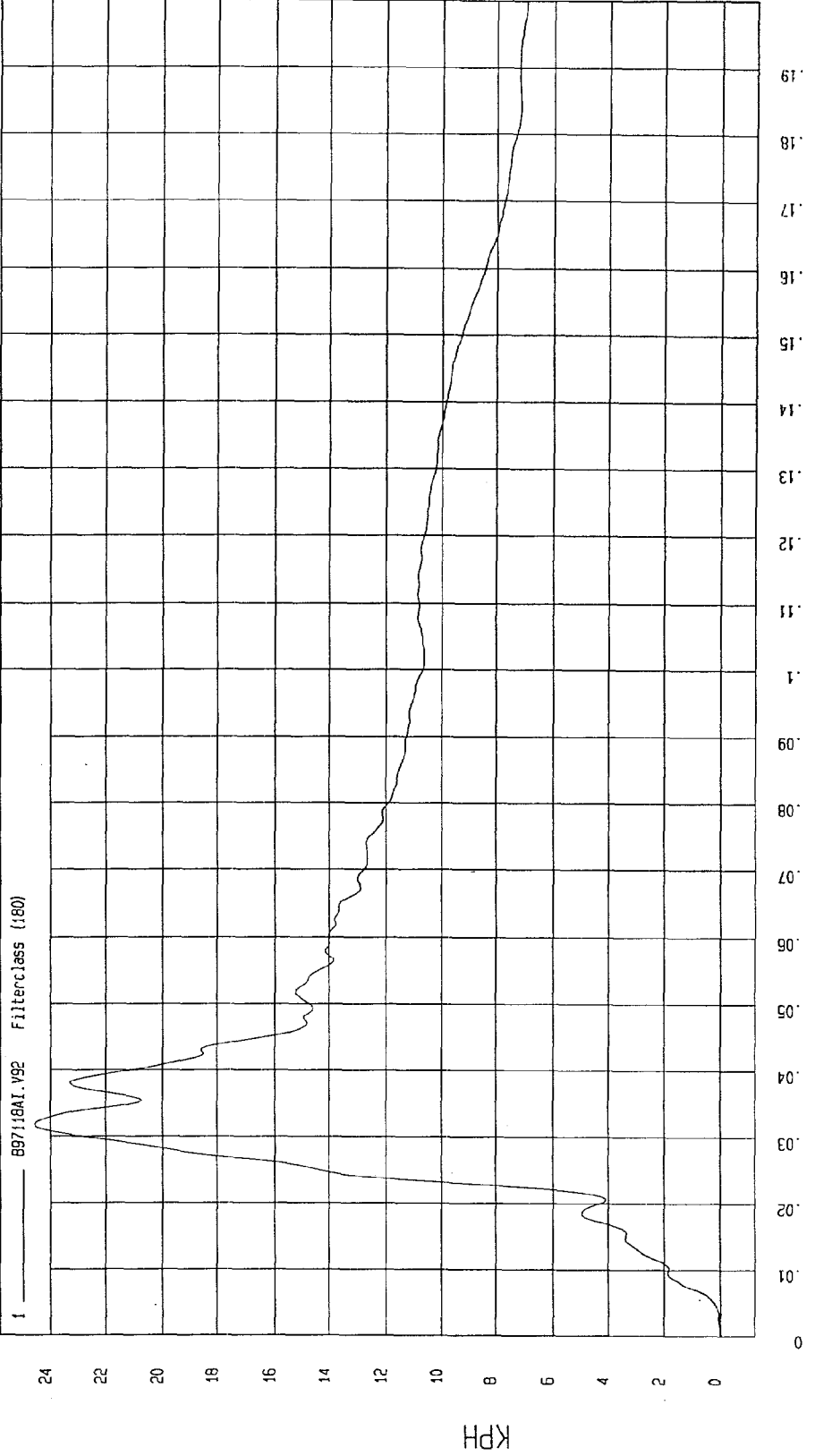


TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -2.70E-02 KPH at -1 msec
Maximum = 24.55 KPH at 32 msec

LEFT DRIVER SEAT TRACK Y VELOCITY



MGA Research
11-07-1997 13:16

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

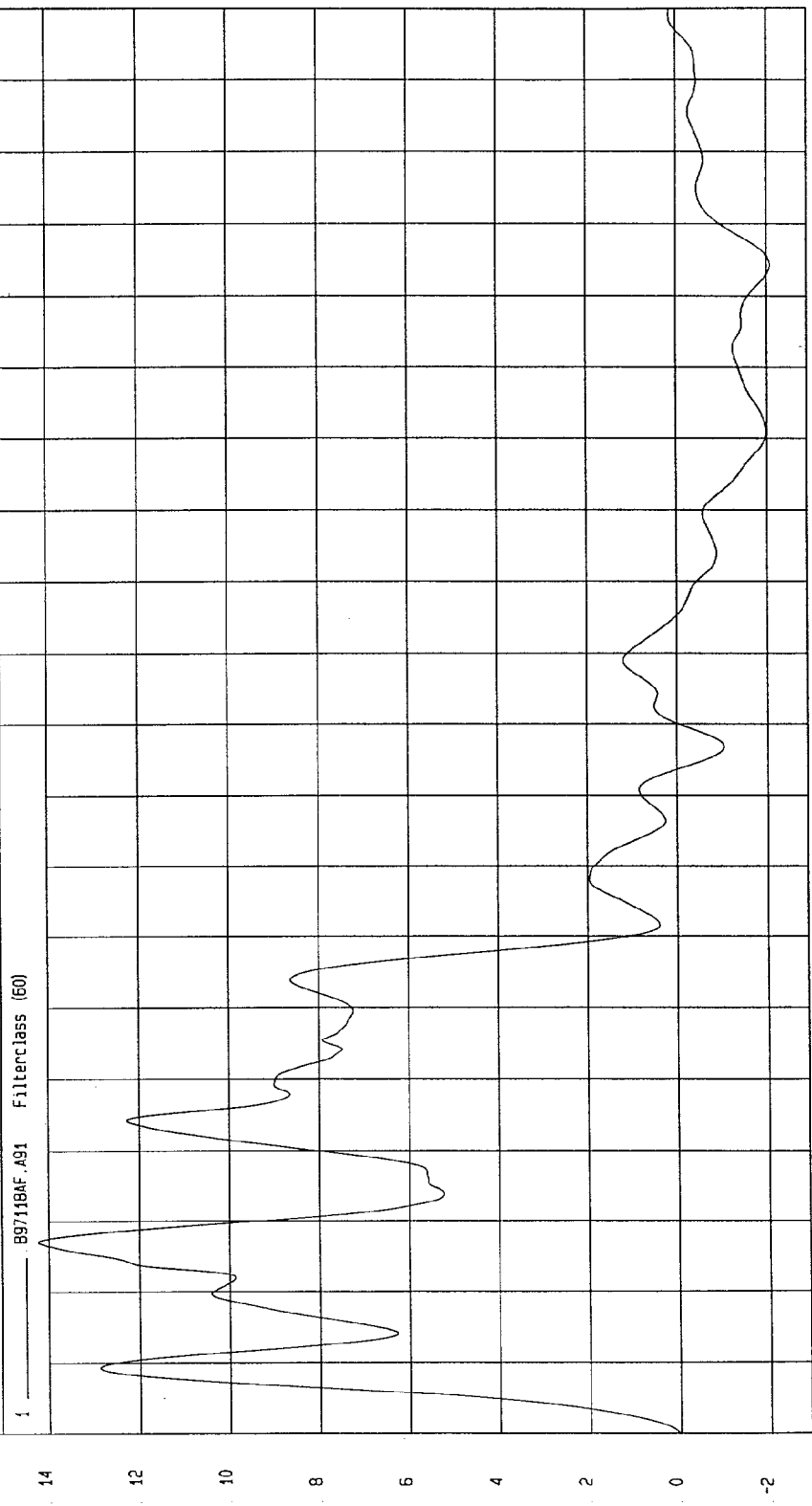
Speed: 31.24 MPH 50.3 KPH

COMPONENT: 1997 FORD MUSTANG

Maximum = 14.23 G'S at 27 msec

Minimum = -2.07 G'S at 164 msec

RIGHT REAR OCCUPANT COMPARTMENT Y ACCELERATION



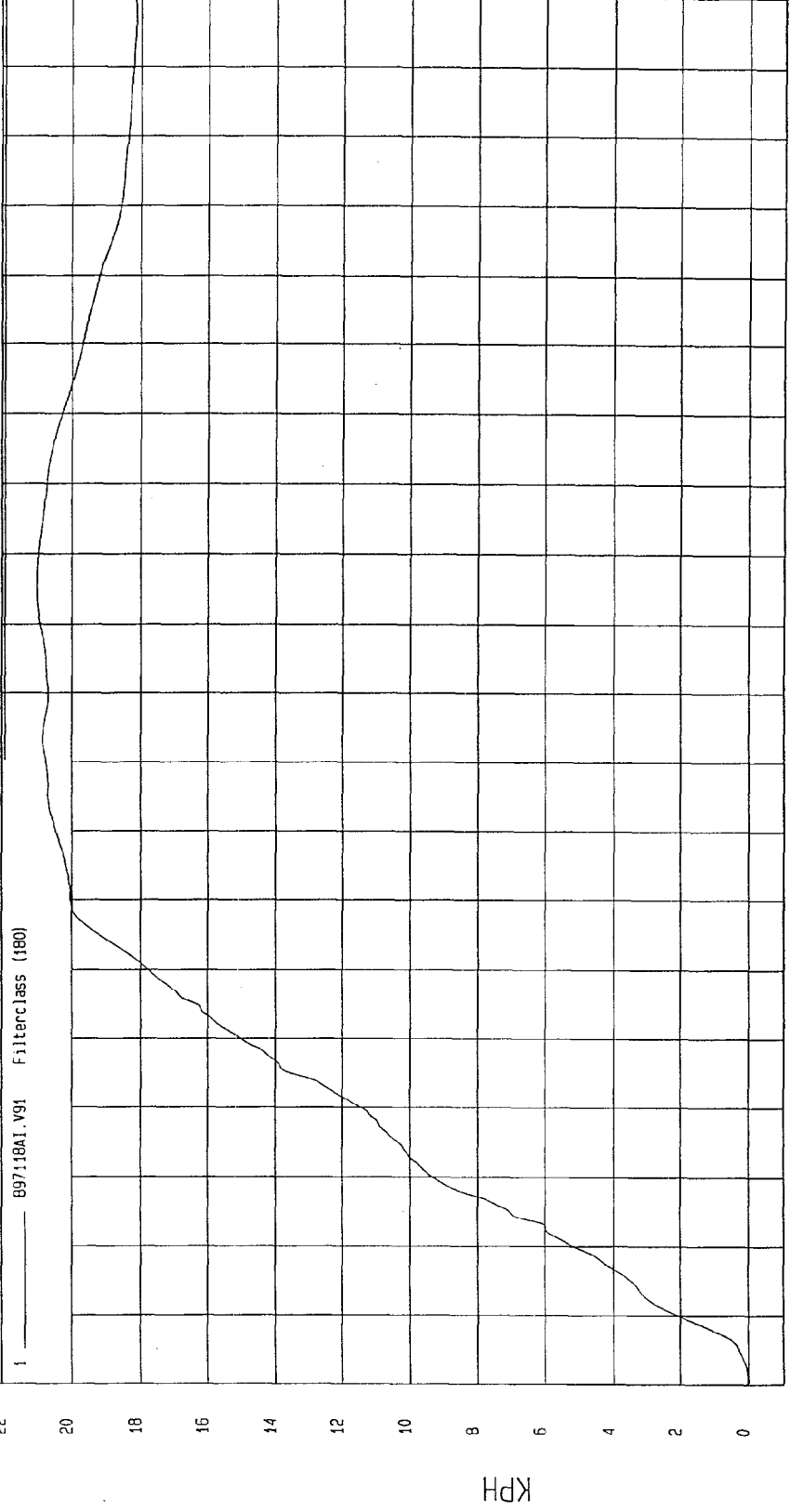
MGA Research
11-01-1997 13:19

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = 0 KPH at -20 msec Maximum = 21.05 KPH at 115 msec

RIGHT REAR OCCUPANT COMPARTMENT Y VELOCITY



MGA Research
11-07-1997 13:18

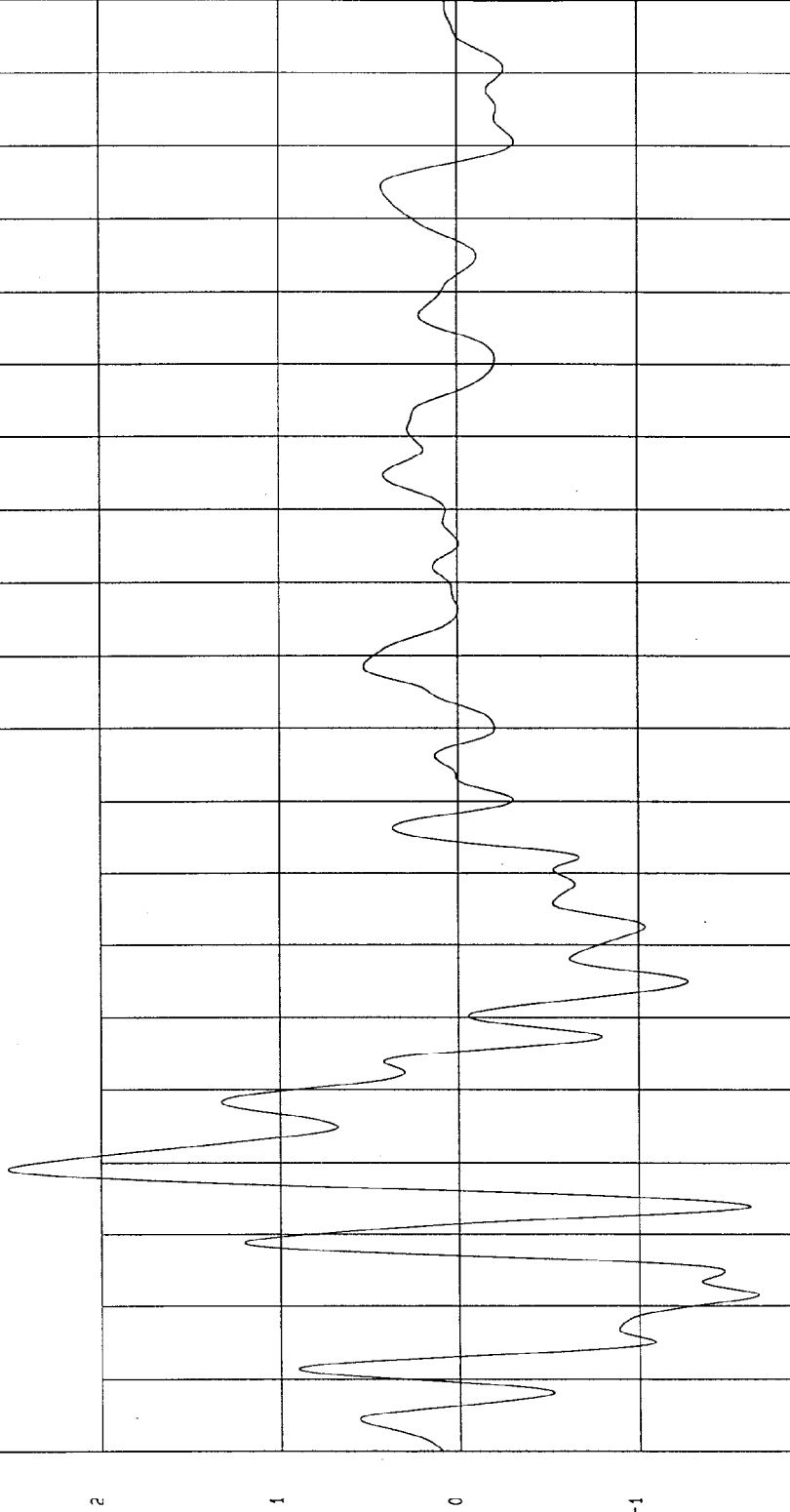
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -1.66 G'S at 22 msec
Maximum = 2.51 G'S at 39 msec

FEAR FLOORPAN ABOVE AXLE X ACCELERATION

1 ——— 097110AF.A08 FilterClass (60)



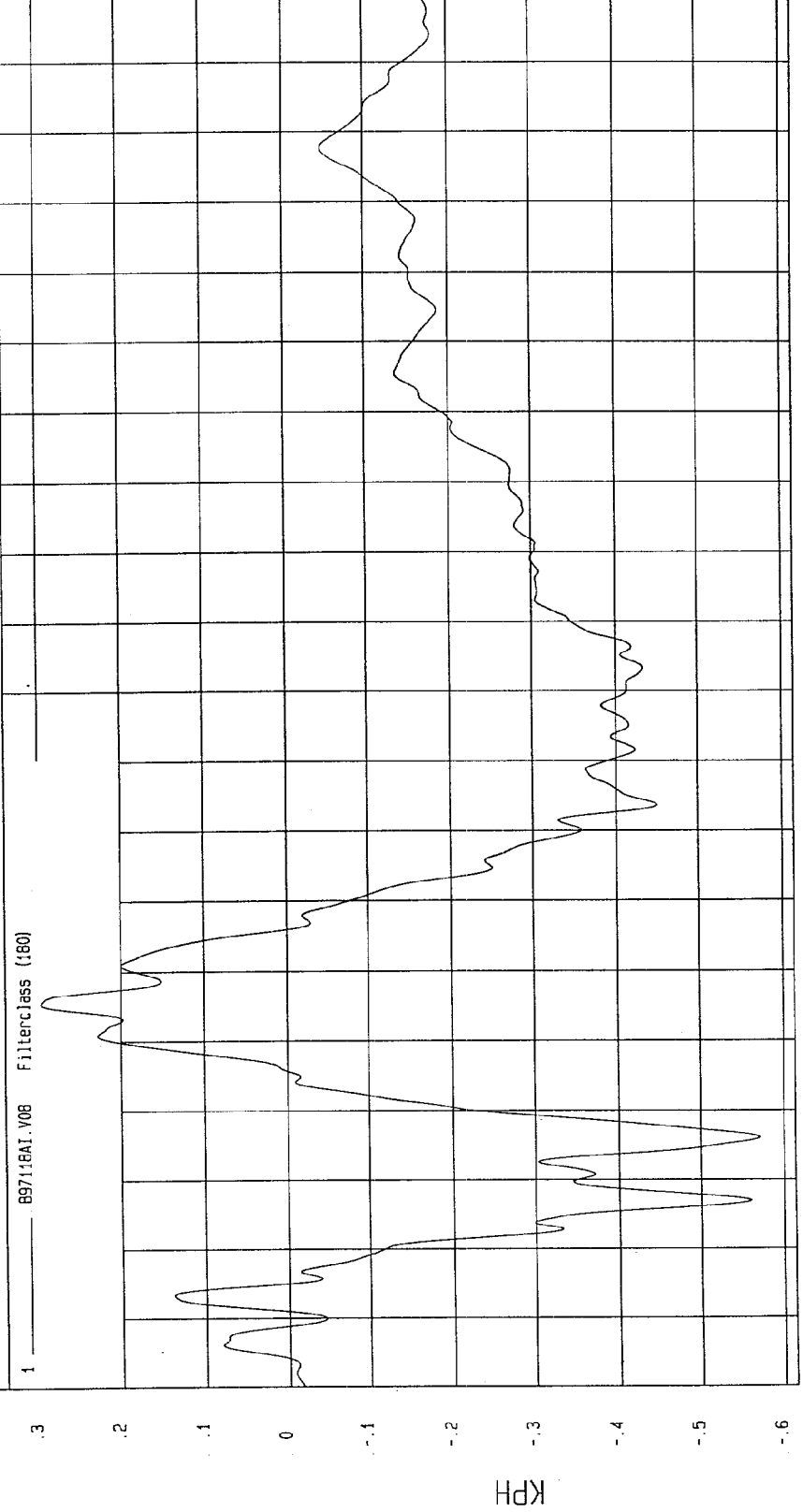
NCA Research
11-07-1997 13.17

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -.57 KPH at 36 msec Maximum = .29 KPH at 55 msec

REAR FLOORPAN ABOVE AXLE X VELOCITY



TIME Seconds

MCA Research
11-07-1997 13.17

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

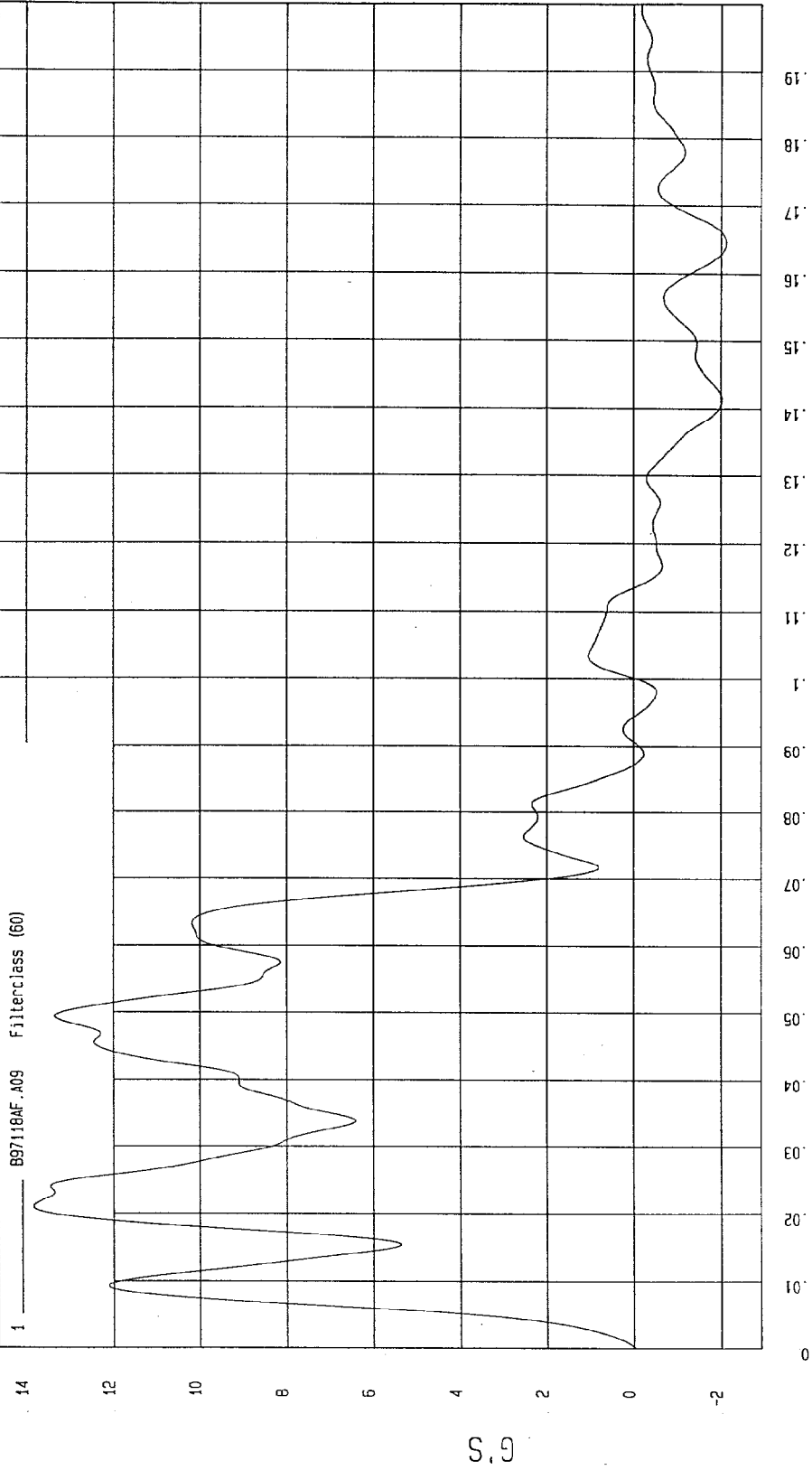
COMPONENT: 1997 FORD MUSTANG

Maximum = 13.84 G'S at 21 msec

Minimum = -2.12 G'S at 164 msec

REAR FLOORPAN ABOVE AXLE Y ACCELERATION

1 897118AF.A09 Filterclass (60)



MSA Research
11-07-1997 13.17

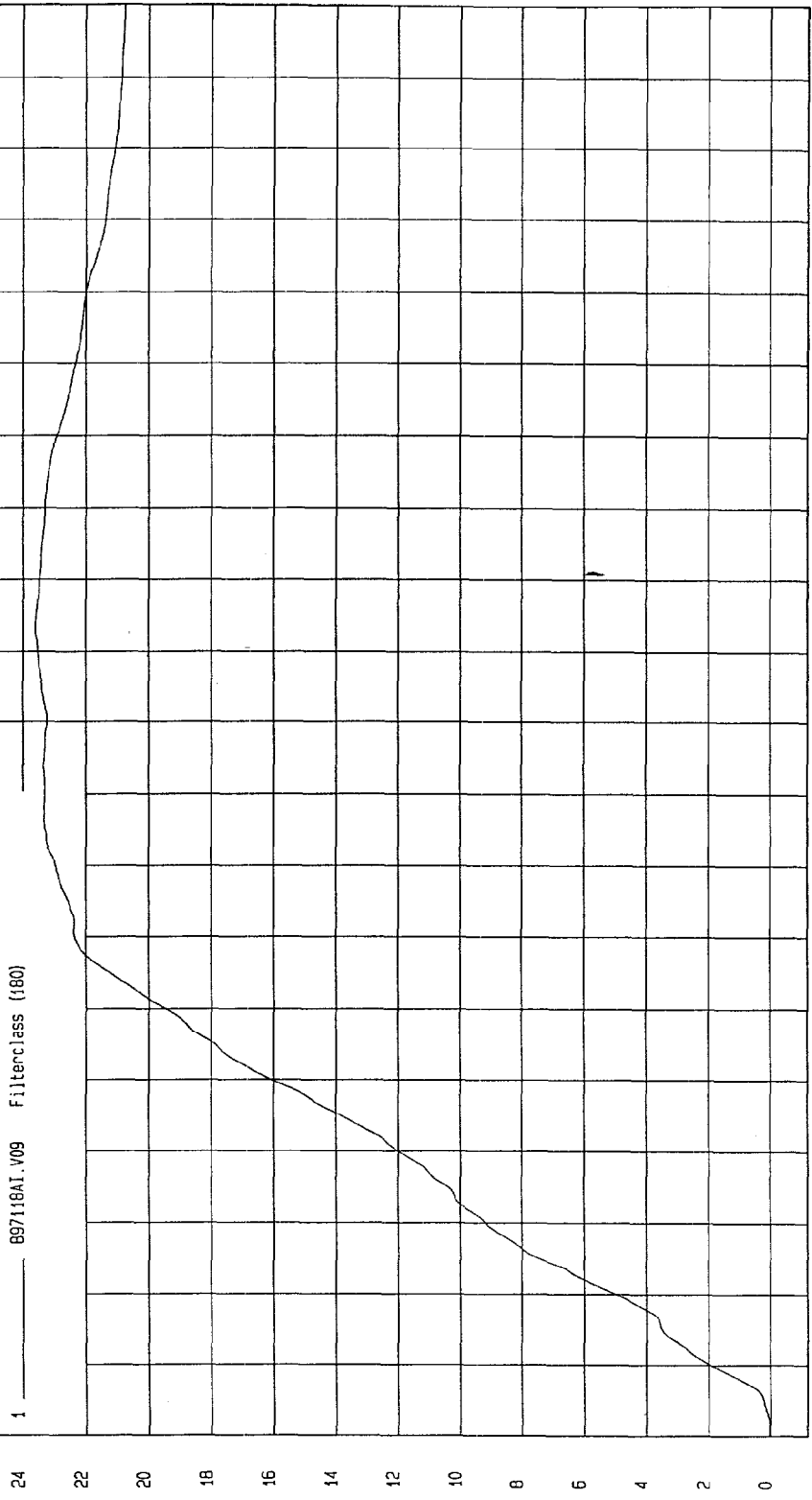
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = 0 KPH at -20 msec
Maximum = 23.62 KPH at 113 msec

REAR FLOORPAN ABOVE AXLE Y VELOCITY

1 ——— 897118A1.V09 Filterclass (180)



MCA Research
11-01-1997 13:17

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

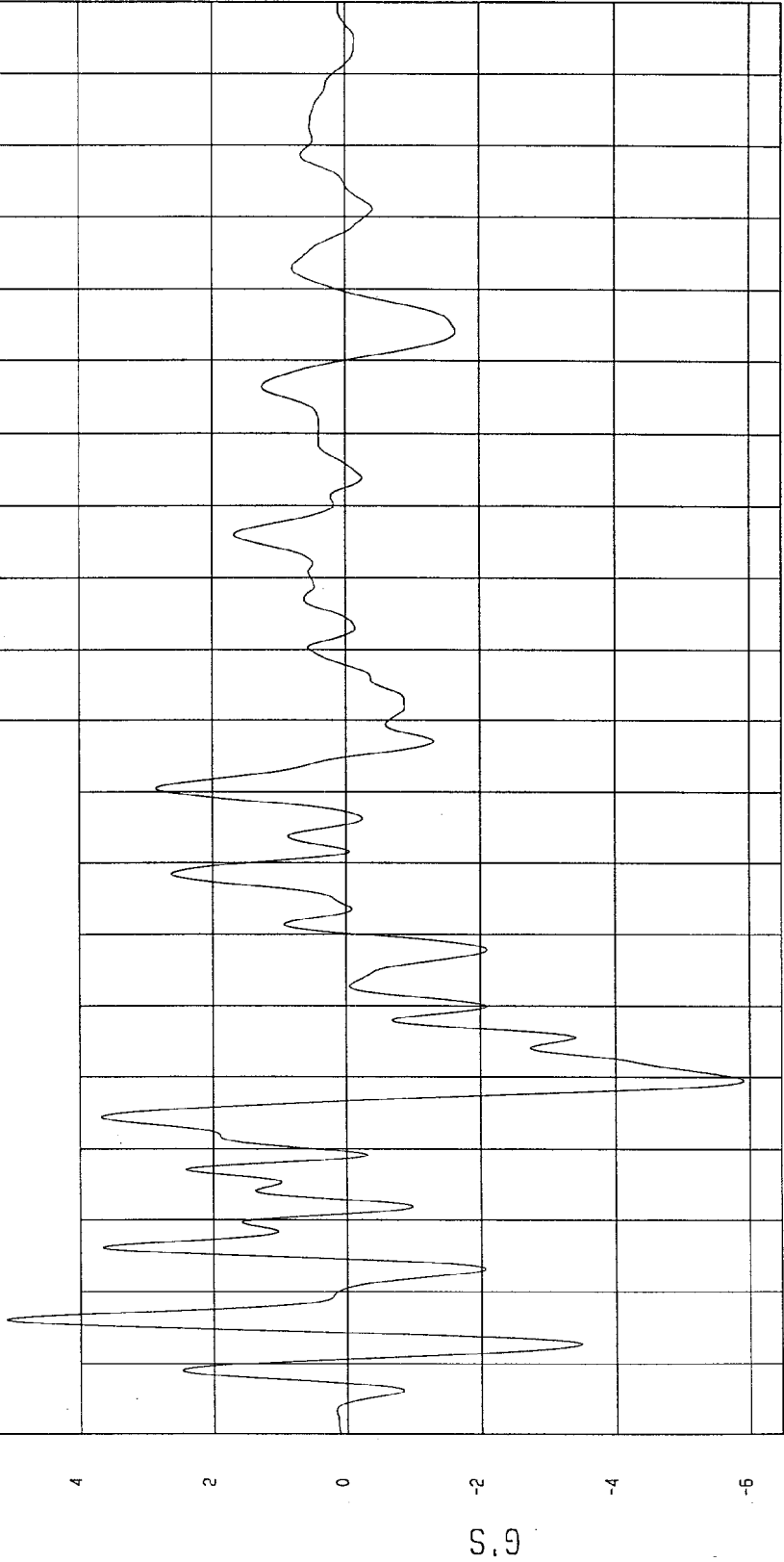
COMPONENT: 1997 FORD MUSTANG

Maximum = 5.09 G'S at 16 msec

Minimum = -5.91 G'S at 50 msec

REAR FLOORPAN ABOVE AXLE Z ACCELERATION

1 B971BAF.A10 Filterclass (50)



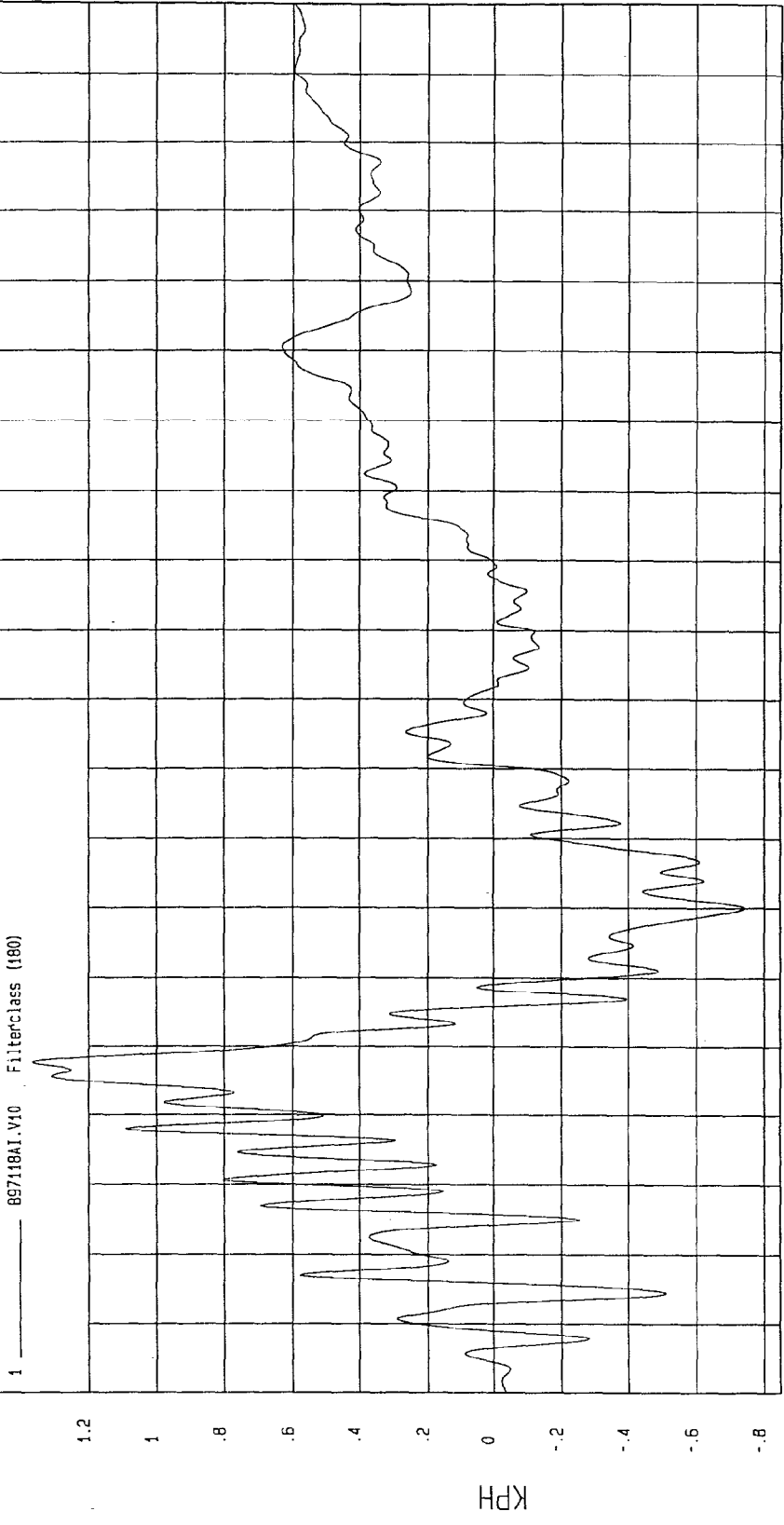
MSA Report.ctb
11-07-1997 13:17

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -0.74 KPH at 70 msec Maximum = 1.36 KPH at 48 msec

REAR FLOORPAN ABOVE AXLE Z VELOCITY



KPH

TIME Seconds

MGA Research
11-07-1997 13:17

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

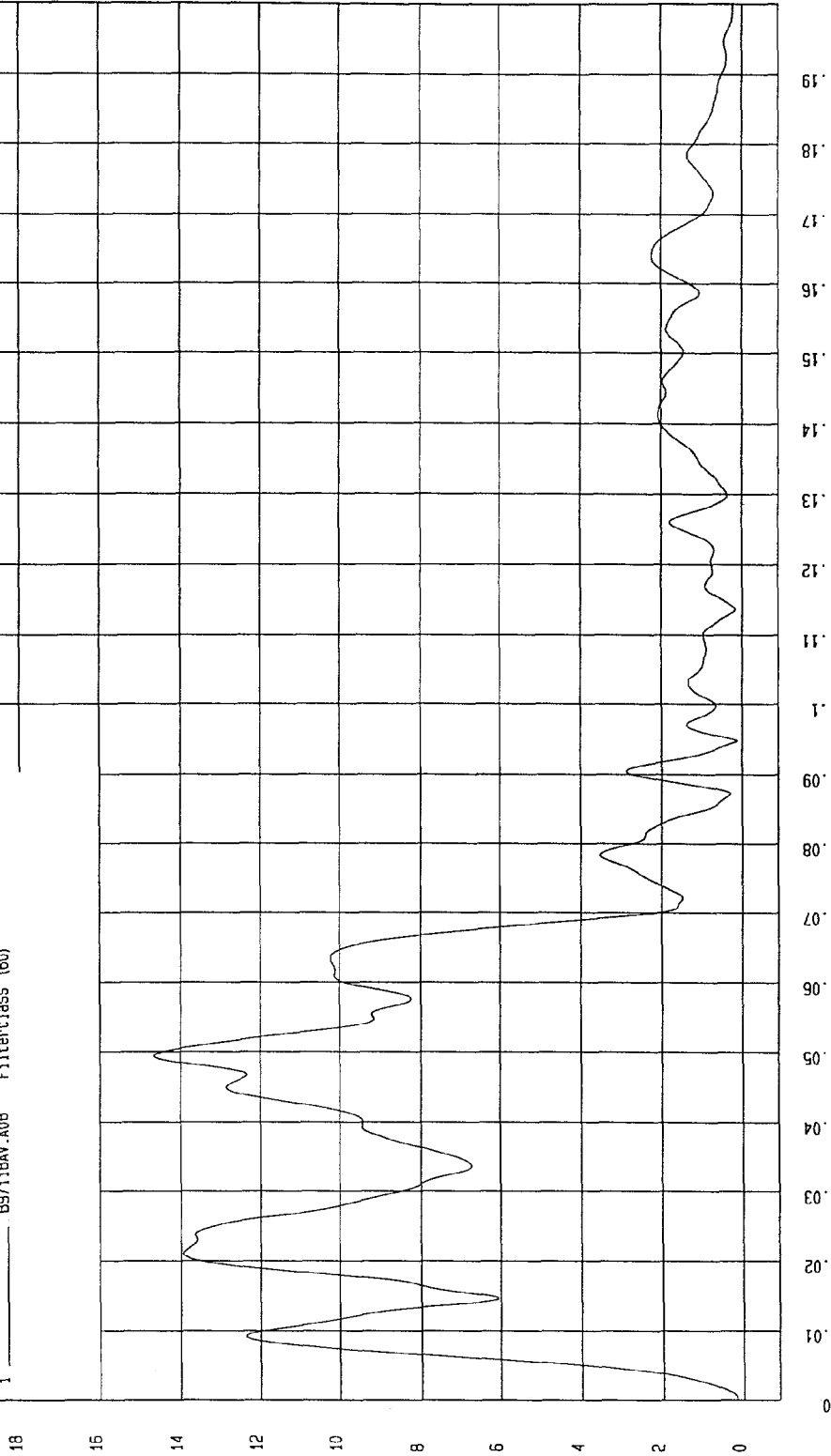
COMPONENT: 1997 FORD MUSTANG

Maximum = 14.65 G'S at 49 msec

Minimum = 1.24E-02 G'S at -5 msec

REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION

1 ——— B97116AV.A08 Filterclass (60)



MCA Research
11-01-1997 13.17

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

COMPONENT: 1997 FORD MUSTANG

Maximum = 196.11 G'S at 10 msec

Minimum = -106.14 G'S at 14 msec

LEFT FRONT DOOR @ MID TORSO Y ACCELERATION

Filterclass (60)

B9718AF.A75

1

200
180
160
140
120
100
80
60
40
20
0
-20
-40
-60
-80
-100
-120

G.S

0 .01 .02 .03 .04 .05 .06 .07 .08 .09 .1 .11 .12 .13 .14 .15 .16 .17 .18 .19

TIME (SECONDS)

MOA Research
11-07-1997 13.20

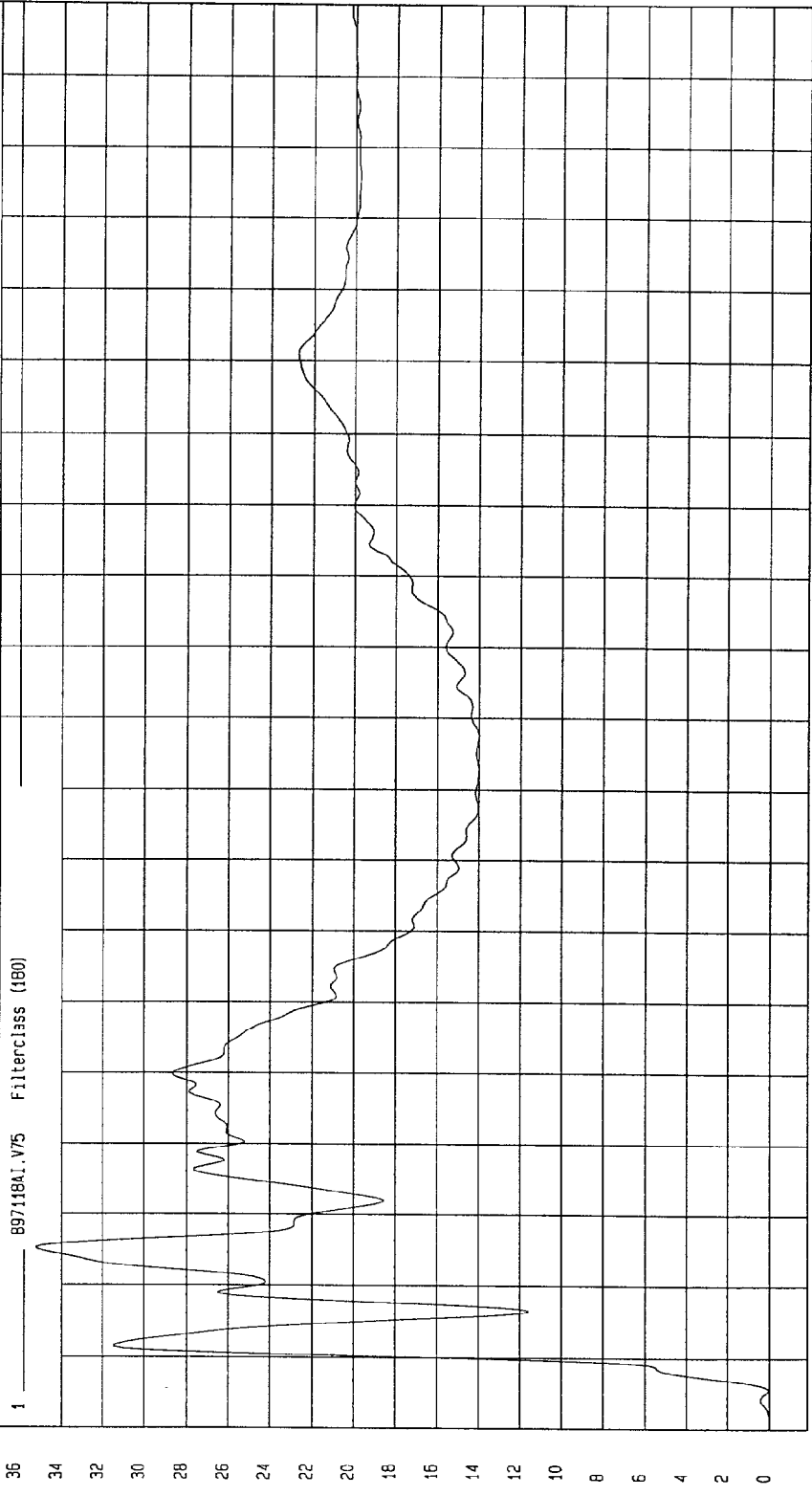
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -4.55E-02 KPH at -6 msec
Maximum = 35.21 KPH at 25 msec

LEFT FRONT DOOR @ MID TORSO Y VELOCITY

1 897118A1.V75 Filterclass (180)



TIME Seconds

MCA Research
11-01-1997 12:20

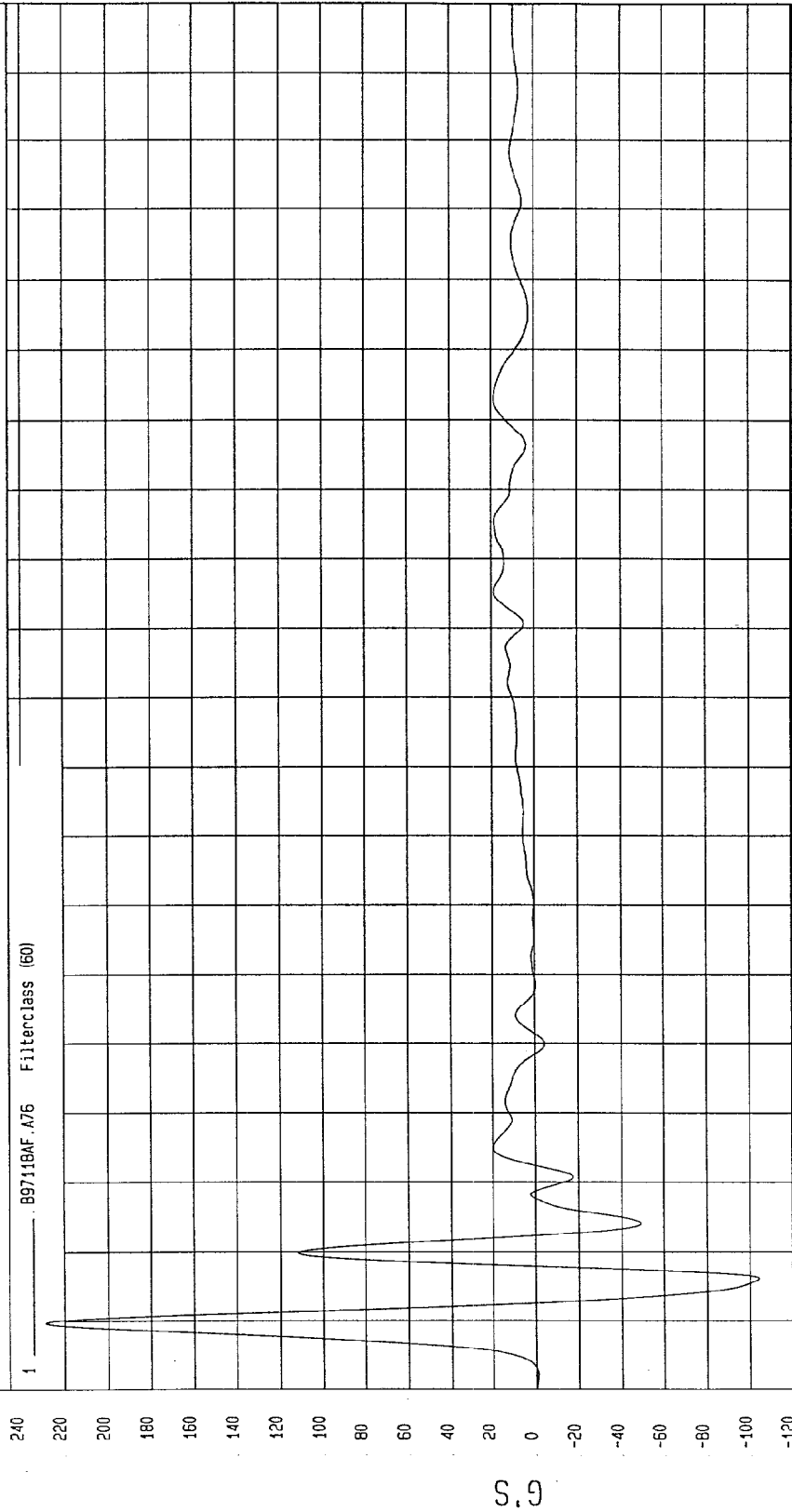
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -104.15 G'S at .16 msec
Maximum = 228.90 G'S at 10 msec

LEFT FRONT DOOR @ LOWER TORSO Y ACCELERATION

1 _____ .89711BAF.A76 Filterclass (60)



MGA Research
11-07-1997 13:21

TIME (SECONDS)

G.S

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

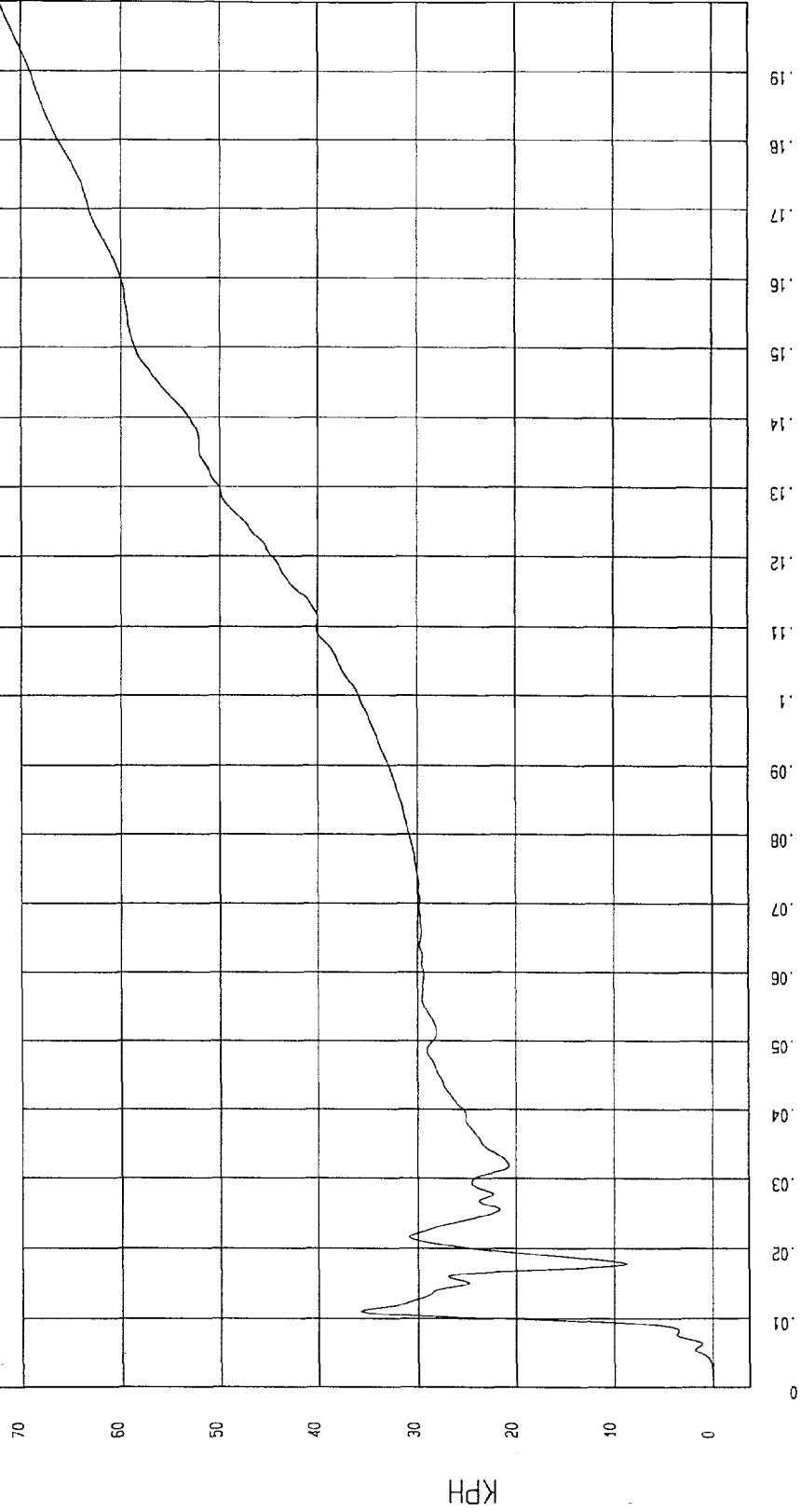
COMPONENT: 1997 FORD MUSTANG

Maximum = 72.35 KPH at 200 msec

Minimum = -3.99E-02 KPH at -12 msec

LEFT FRONT DOOR @ LOWER TORSO Y VELOCITY

1 ——— 897118A1.V75 Filterclass (180)



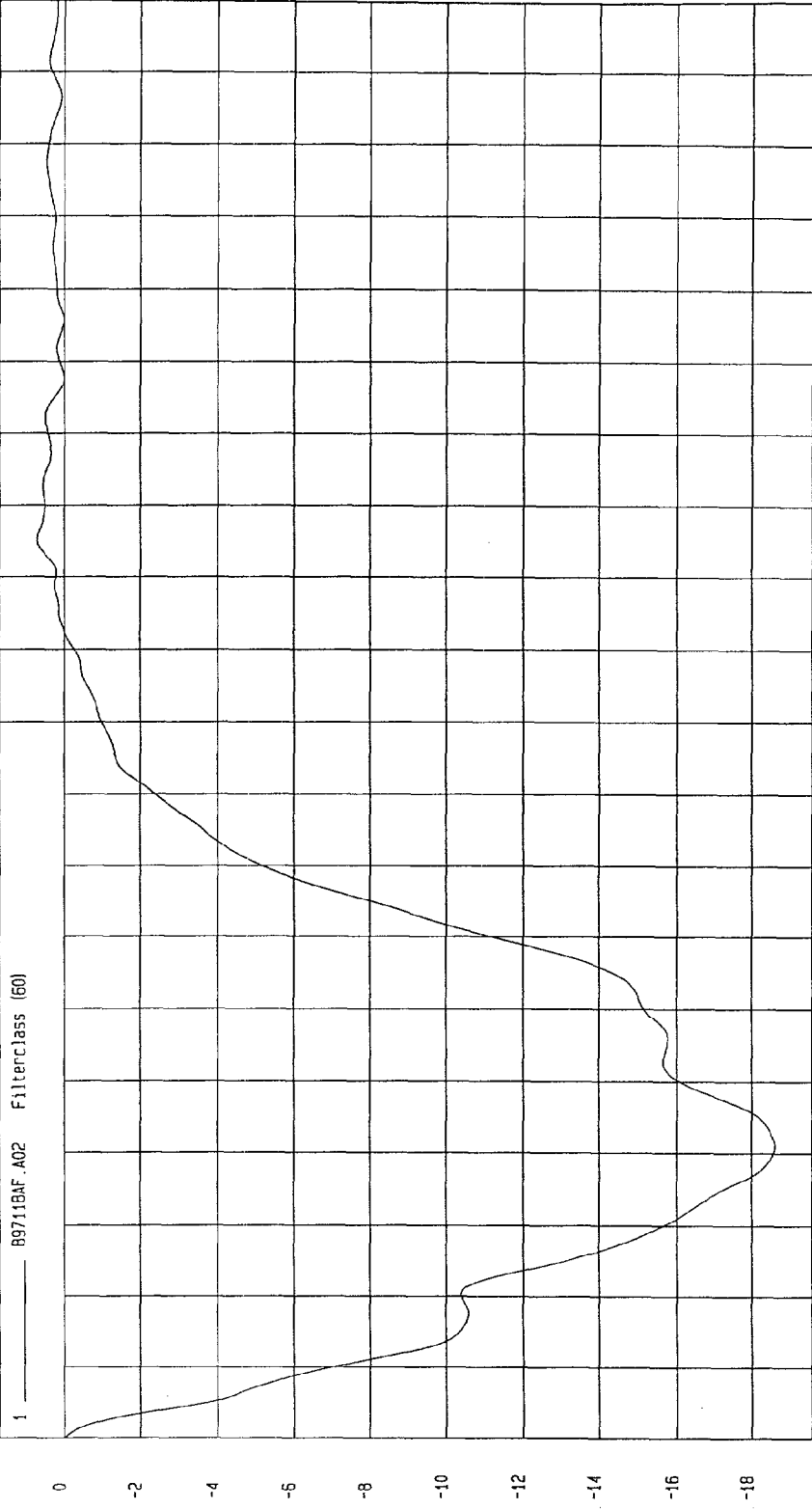
MGA Research
11-07-1997 13:21

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -18.60 G'S at 41 msec Maximum = .70 G'S at 125 msec

MOVING BARRIER CG X ACCELERATION



TIME (SECONDS)

MSA Research
11-07-1997 13:21

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

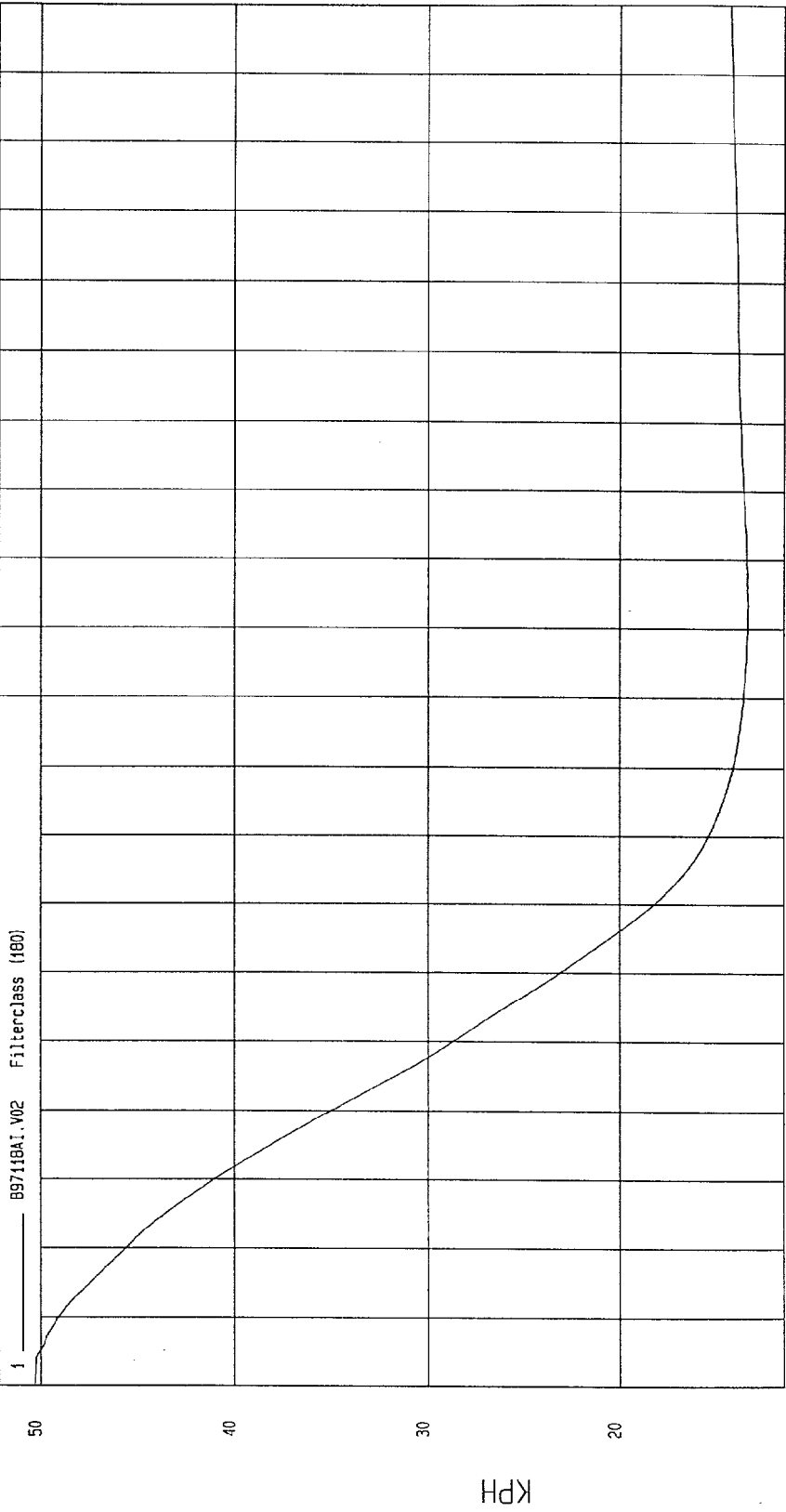
COMPONENT: 1997 FORD MUSTANG

Maximum = 50.31 KPH at -17 msec

Minimum = 13.38 KPH at 114 msec

MOVING BARRIER CG X VELOCITY

1 — B9718A1.V02 Filterclass (180)



MCA Research
11-07-1997 13: 21

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

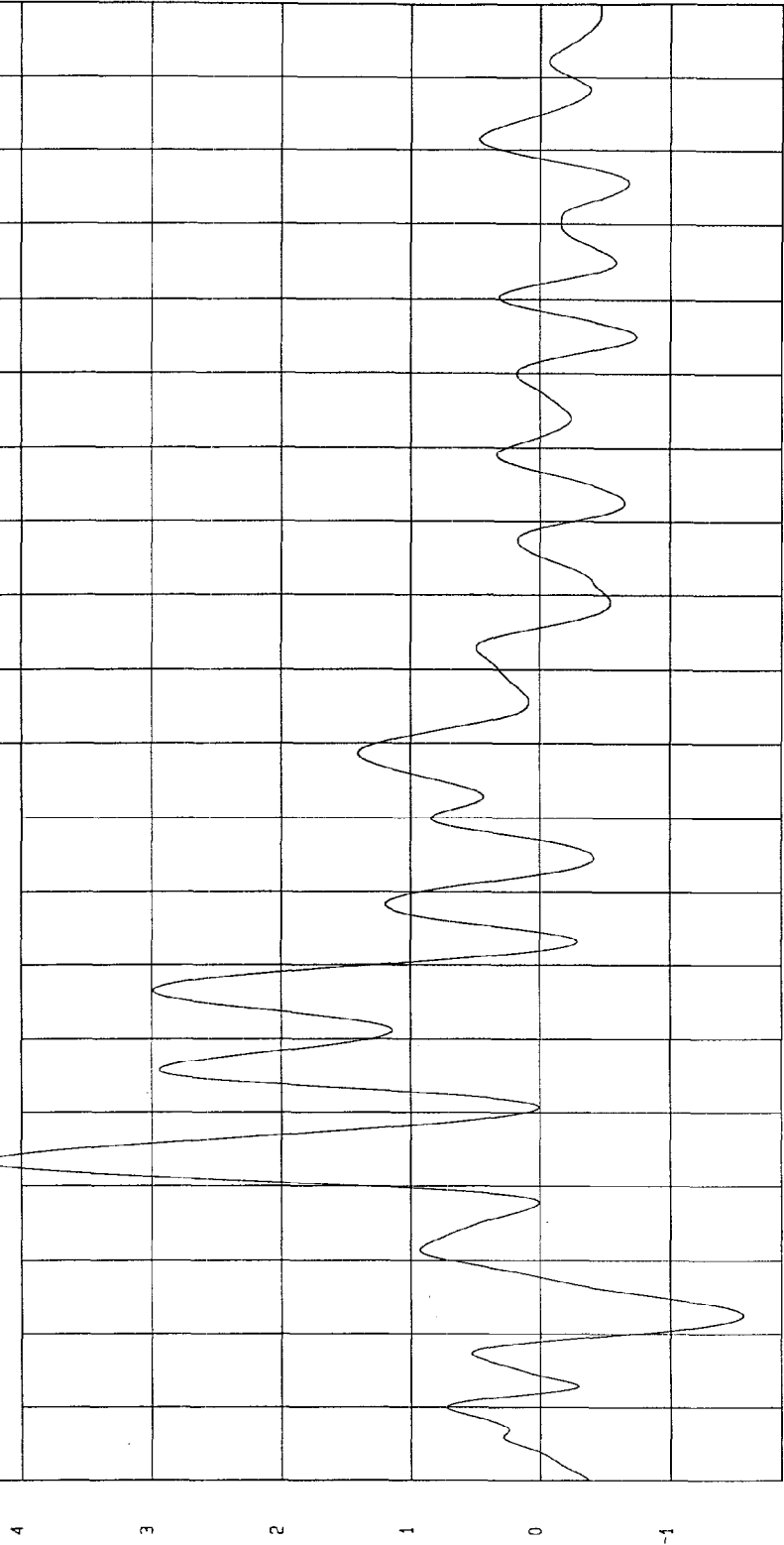
COMPONENT: 1997 FORD MUSTANG

Maximum = 4.28 G'S at 43 msec

Minimum = -1.56 G'S at 22 msec

MOVING BARRIER CG Y ACCELERATION

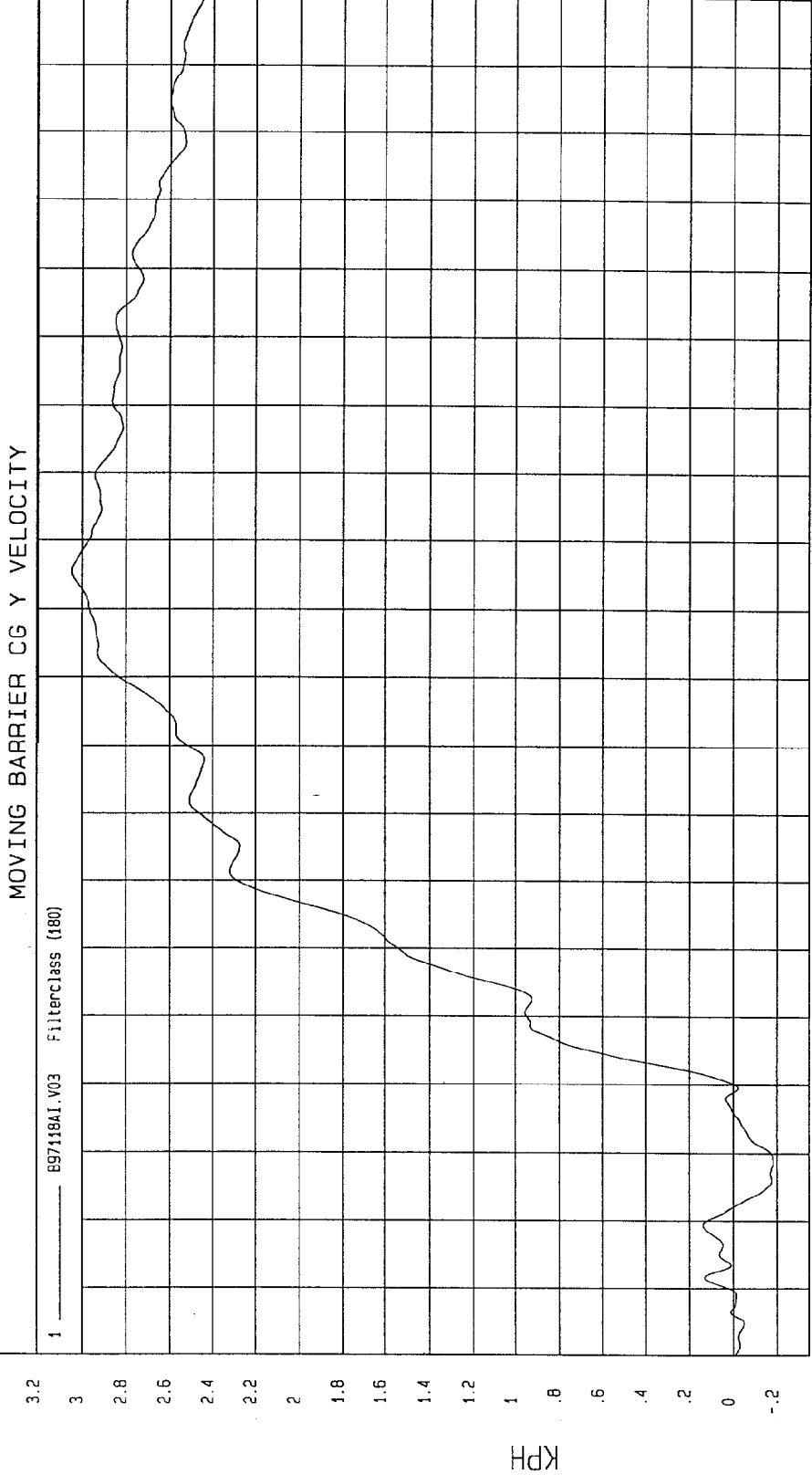
1 ——— 897118AF.A03 Filterclass (60)



MGA Research
11-07-1997 13:21

TEST: EU.96/27/EC SIDE IMPACT TEST DATE: 10-09-1997
 COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -.18 KPH at 29 msec Maximum = 3.04 KPH at 116 msec



1 B9711841.V03 Filterclass (180)

TIME Seconds

NCA Research
11-01-1997 13.21

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

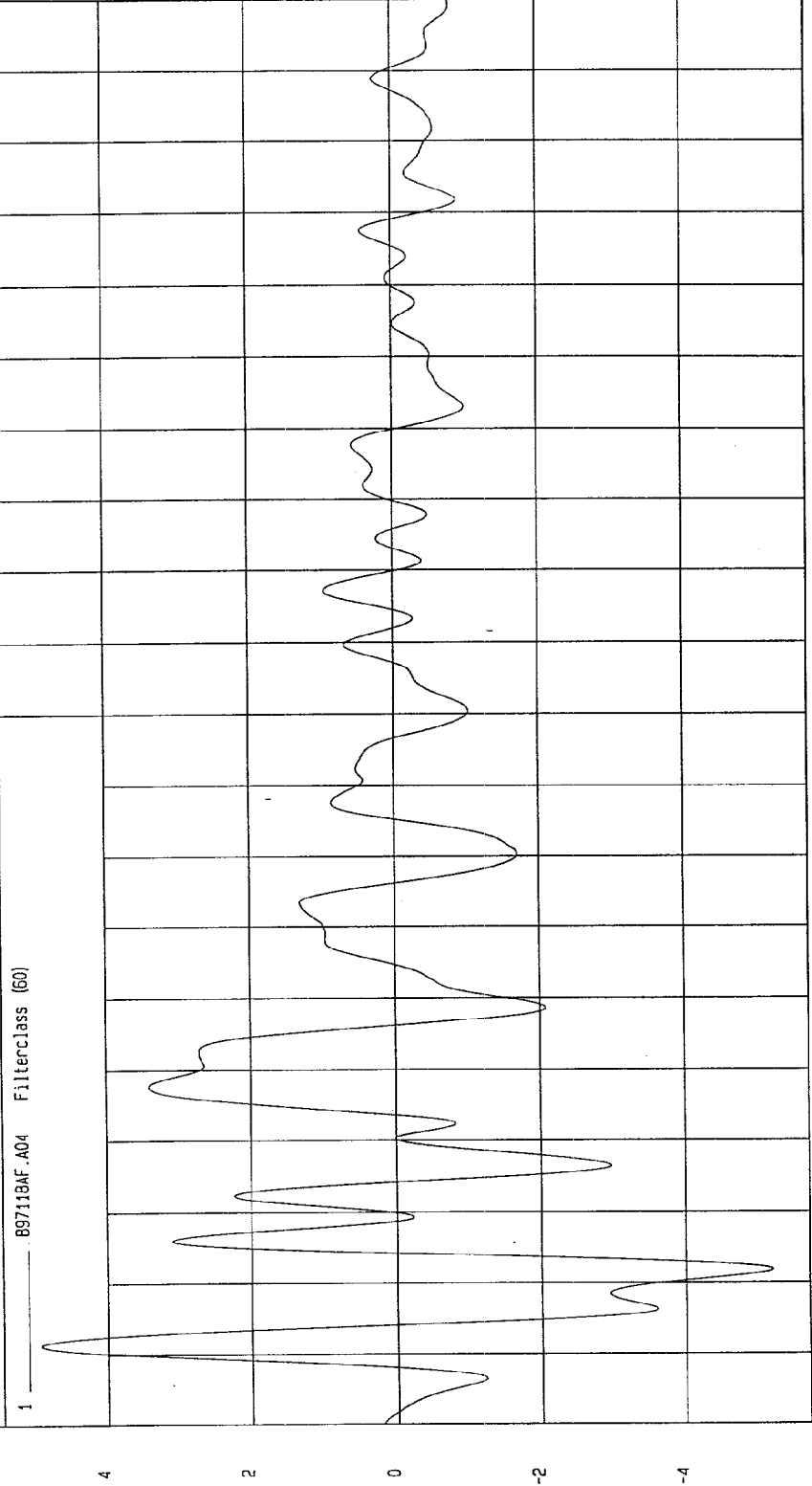
COMPONENT: 1997 FORD MUSTANG

Speed: 31.24 MPH 50.3 KPH

Minimum = -5.19 G'S at 22 msec

Maximum = 4.91 G'S at 11 msec

MOVING BARRIER CG Z ACCELERATION



MCA Research
11-07-1997 13:21

TIME (SECONDS)

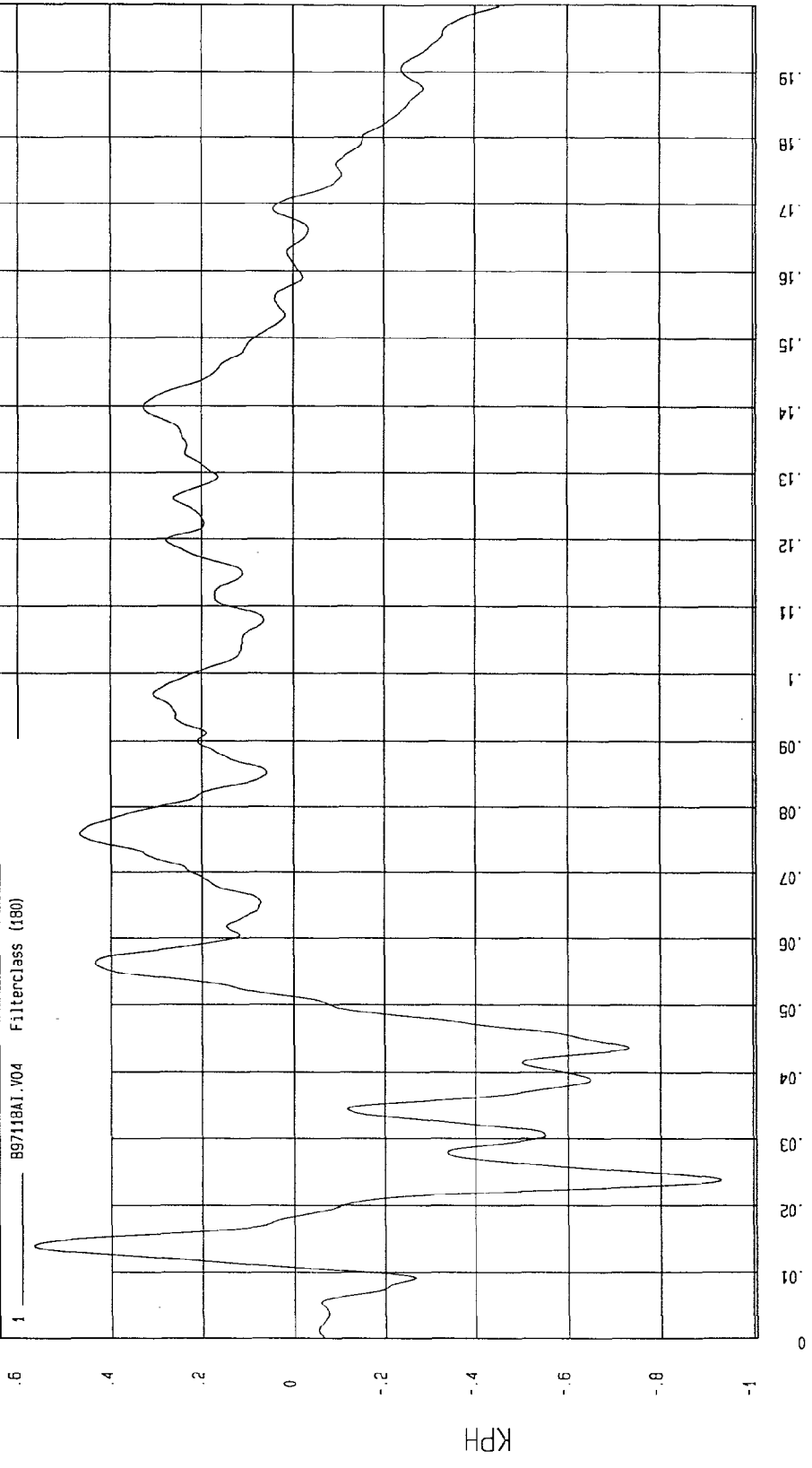
G.S

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997
COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -.93 KPH at 24 msec Maximum = .56 KPH at 14 msec

MOVING BARRIER CG Z VELOCITY

1 B97118A1.V04 FilterClass (180)



MCA Research
11-01-1997 13:22

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = .11 G'S at -.11 msec Maximum = 18.97 G'S at 43 msec

MOVING BARRIER CG RESULTANT ACCELERATION



MCA Research
11-07-1997 13:22

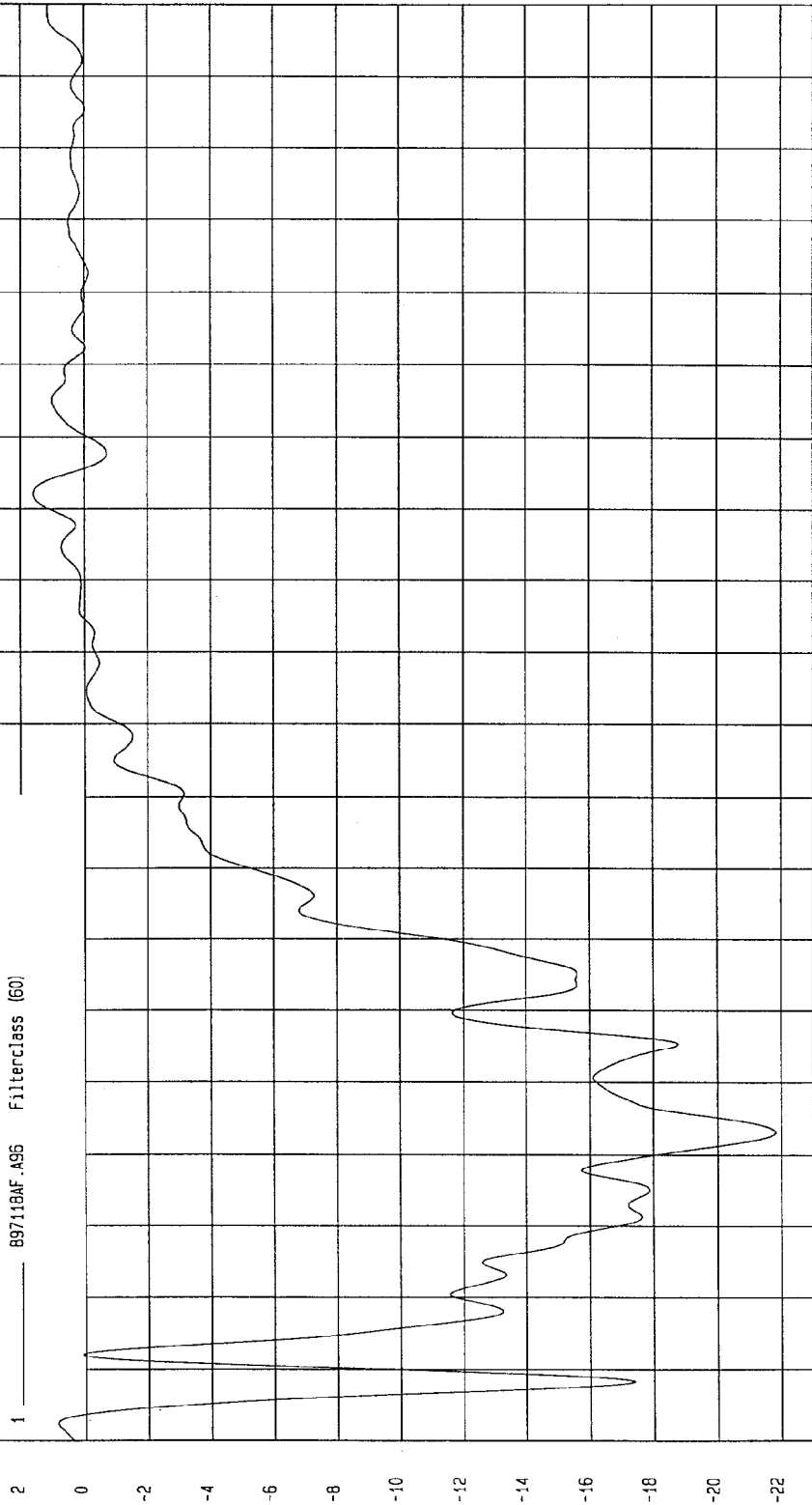
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -21.82 G'S at 43 msec
Maximum = 1.60 G'S at 132 msec

MOVING BARRIER LEFT FACE X ACCELERATION

1 89711BAF.A95 Filterclass (60)

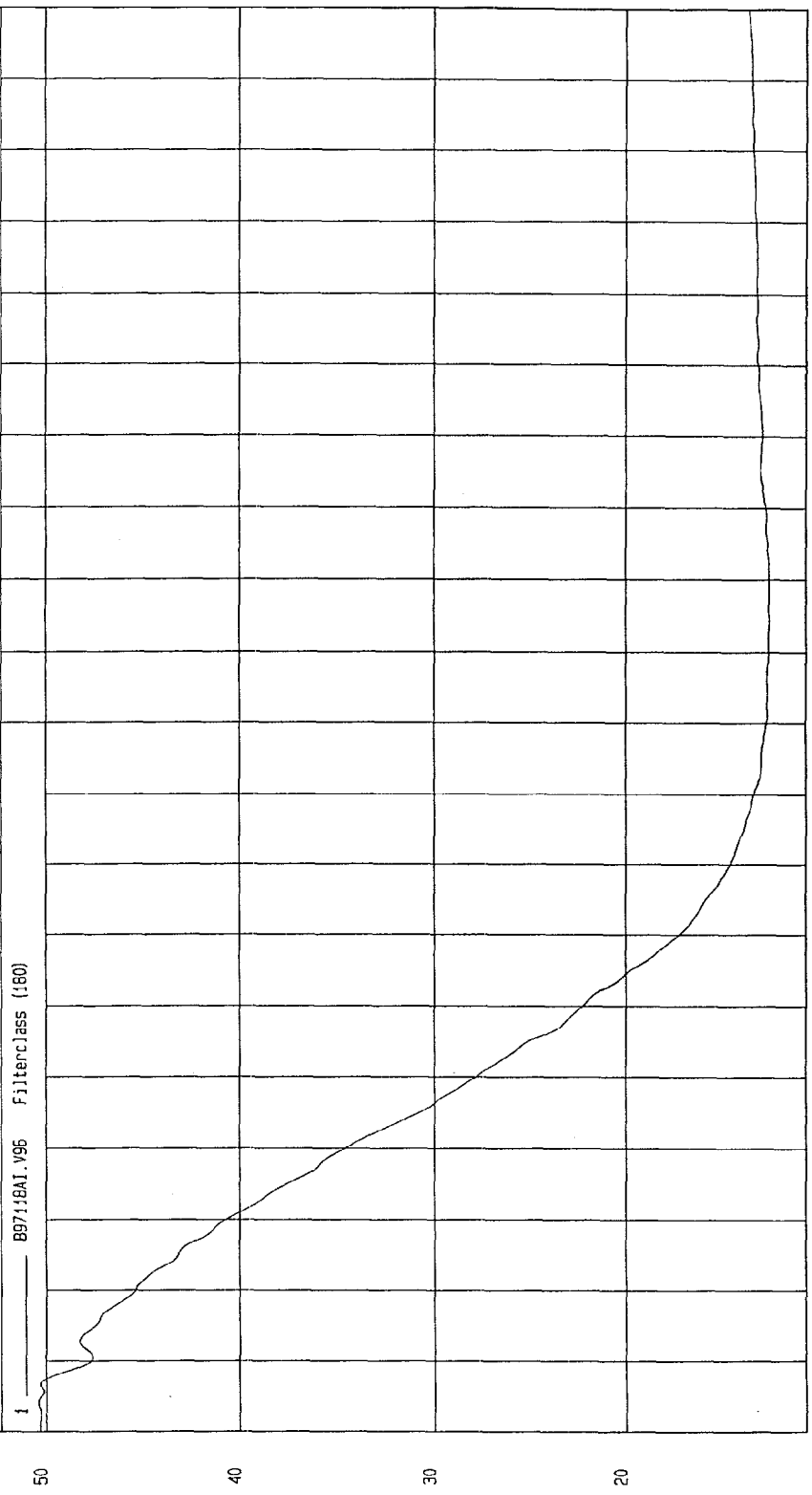


TIME (SECONDS)

MCA Research
11-01-1997 13.23

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997
 COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH
 Minimum = 12.56 KPH at 114 msec Maximum = 50.42 KPH at 4 msec

MOVING BARRIER LEFT FACE X VELOCITY



MCA Research
 11-07-1997 12:23

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

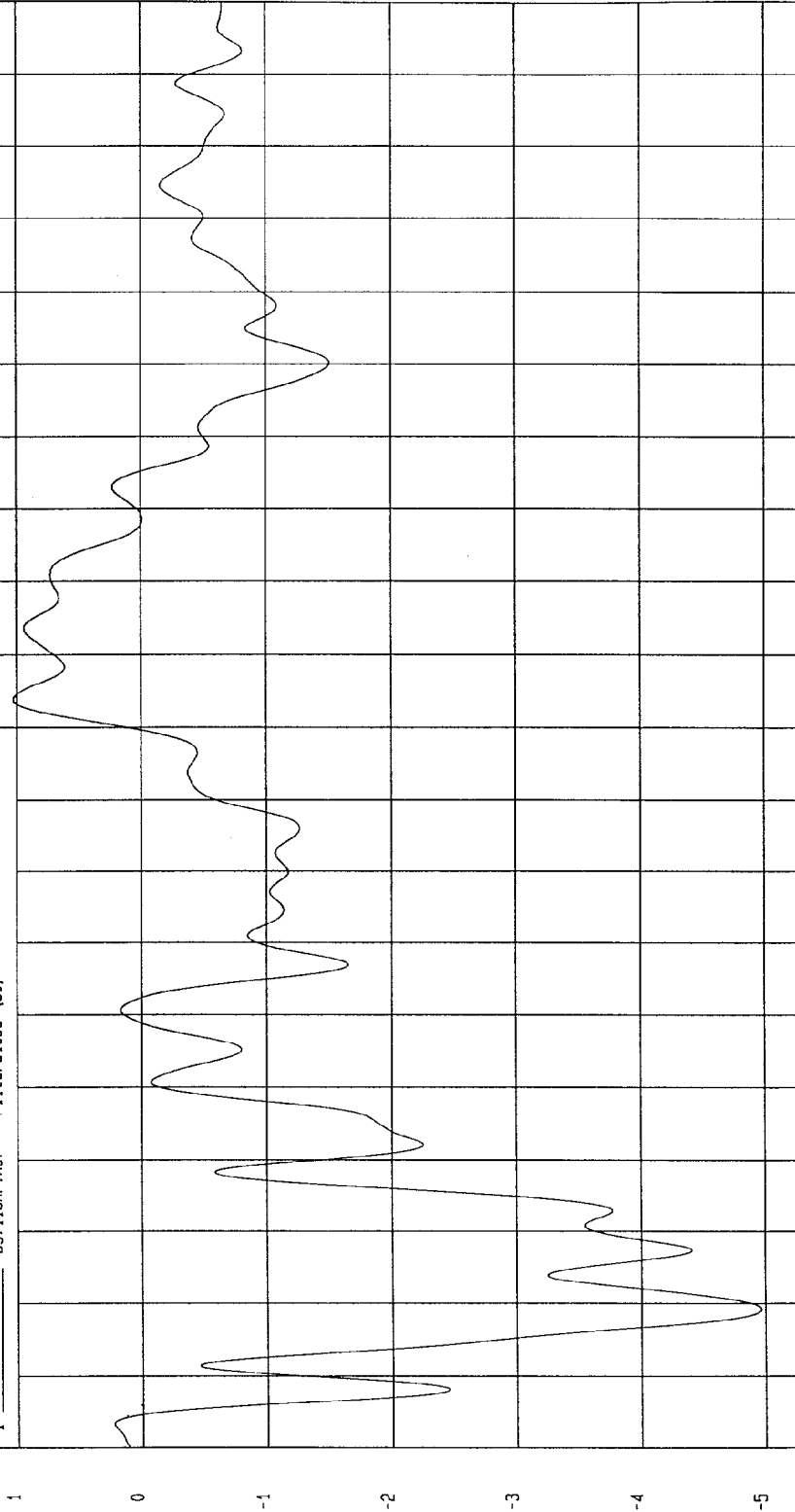
COMPONENT: 1997 FORD MUSTANG

Maximum = 1.02 G'S at 104 msec

Minimum = -4.96 G'S at 19 msec

MOVING BARRIER LEFT FACE Y ACCELERATION

1 897148AF-A97 FilterClass (50)



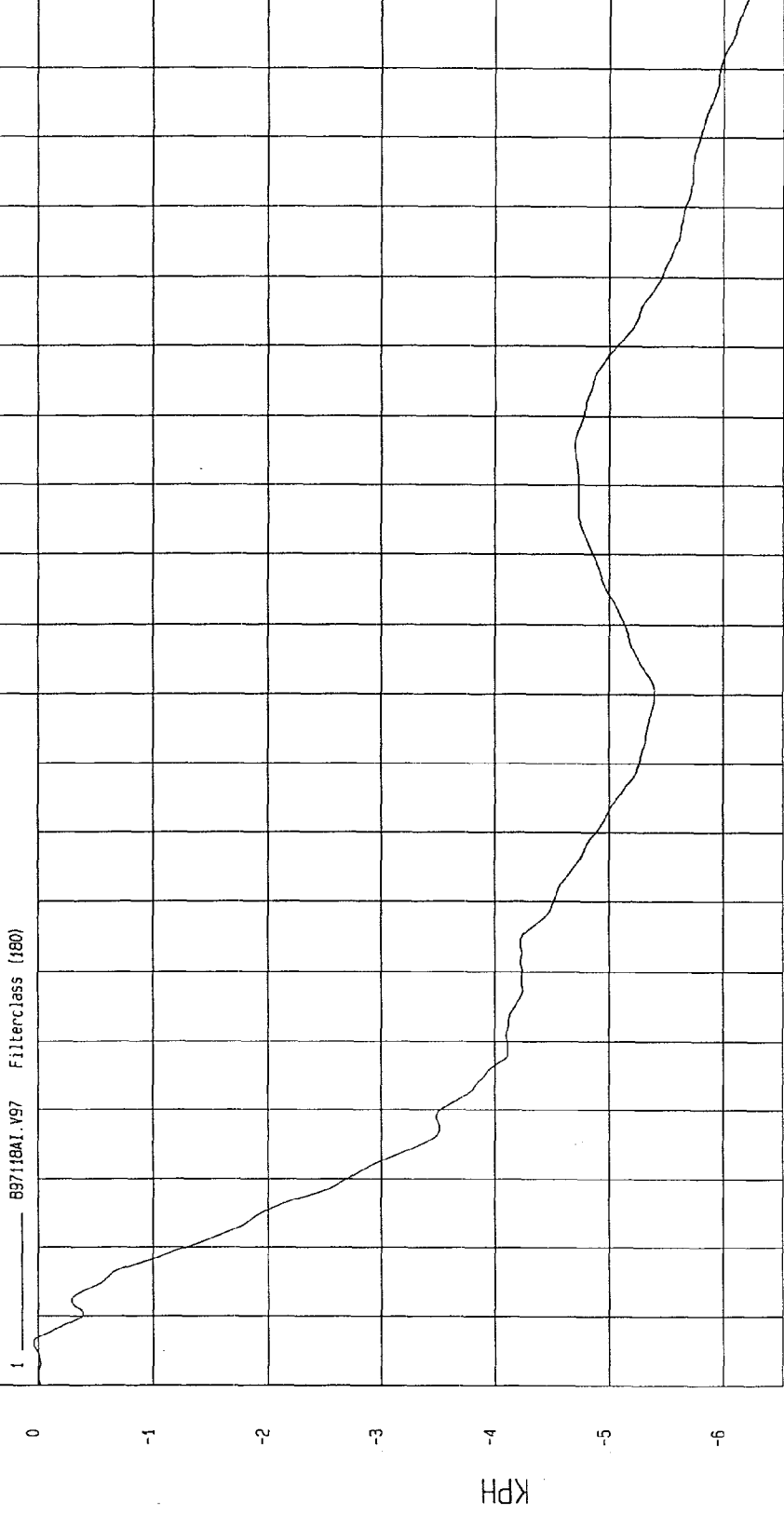
MECA Research
11-107-1997 13:24

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -6.20 KPH at 200 msec Maximum = 4.20E-02 KPH at 6 msec

MOVING BARRIER LEFT FACE Y VELOCITY



TIME Seconds
MGA Research
11-07-1997 13:24

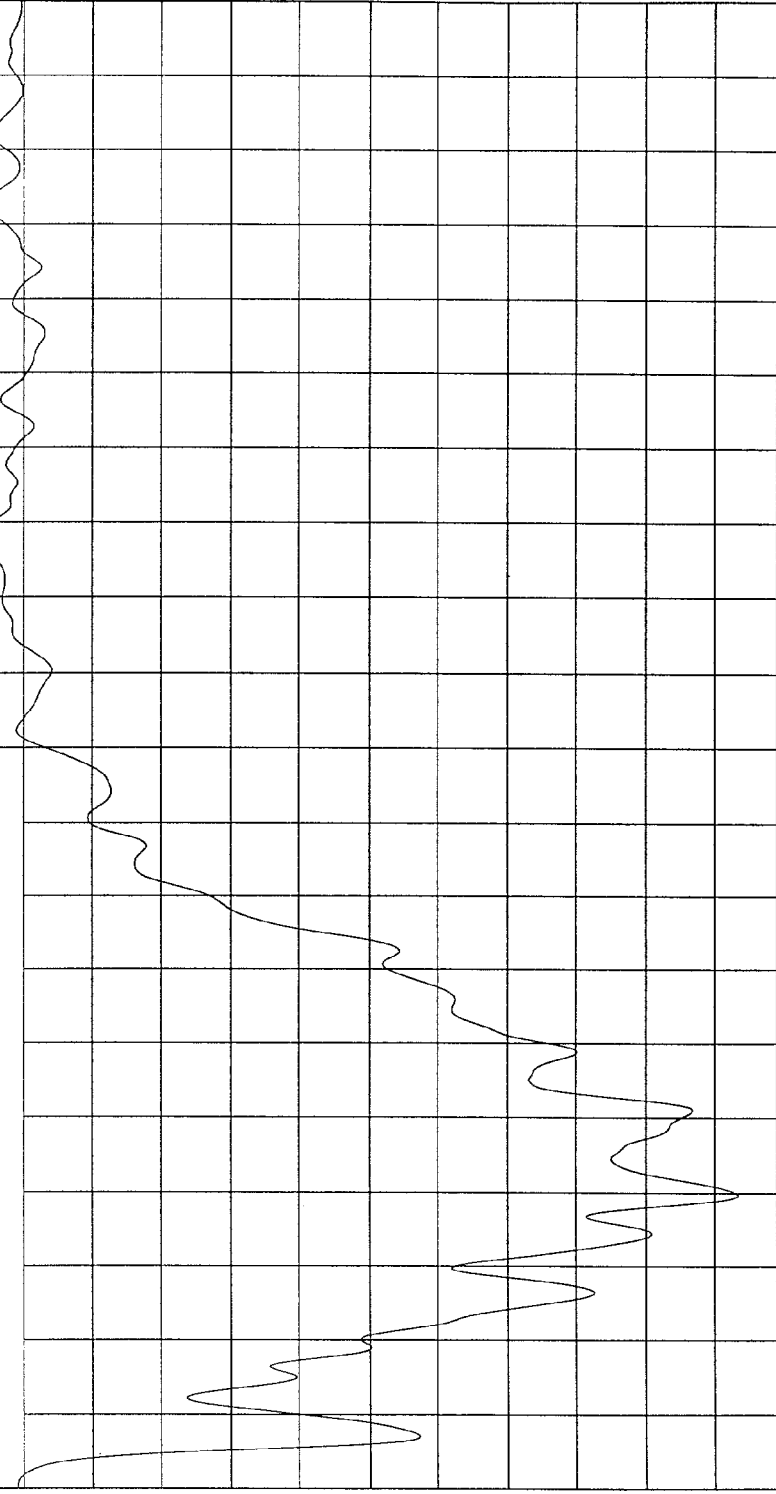
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -20.67 G'S at 40 msec Maximum = 1.54 G'S at -20 msec

MOVING BARRIER RIGHT FACE X ACCELERATION

1 097110AF.A98 Filterclass (50)



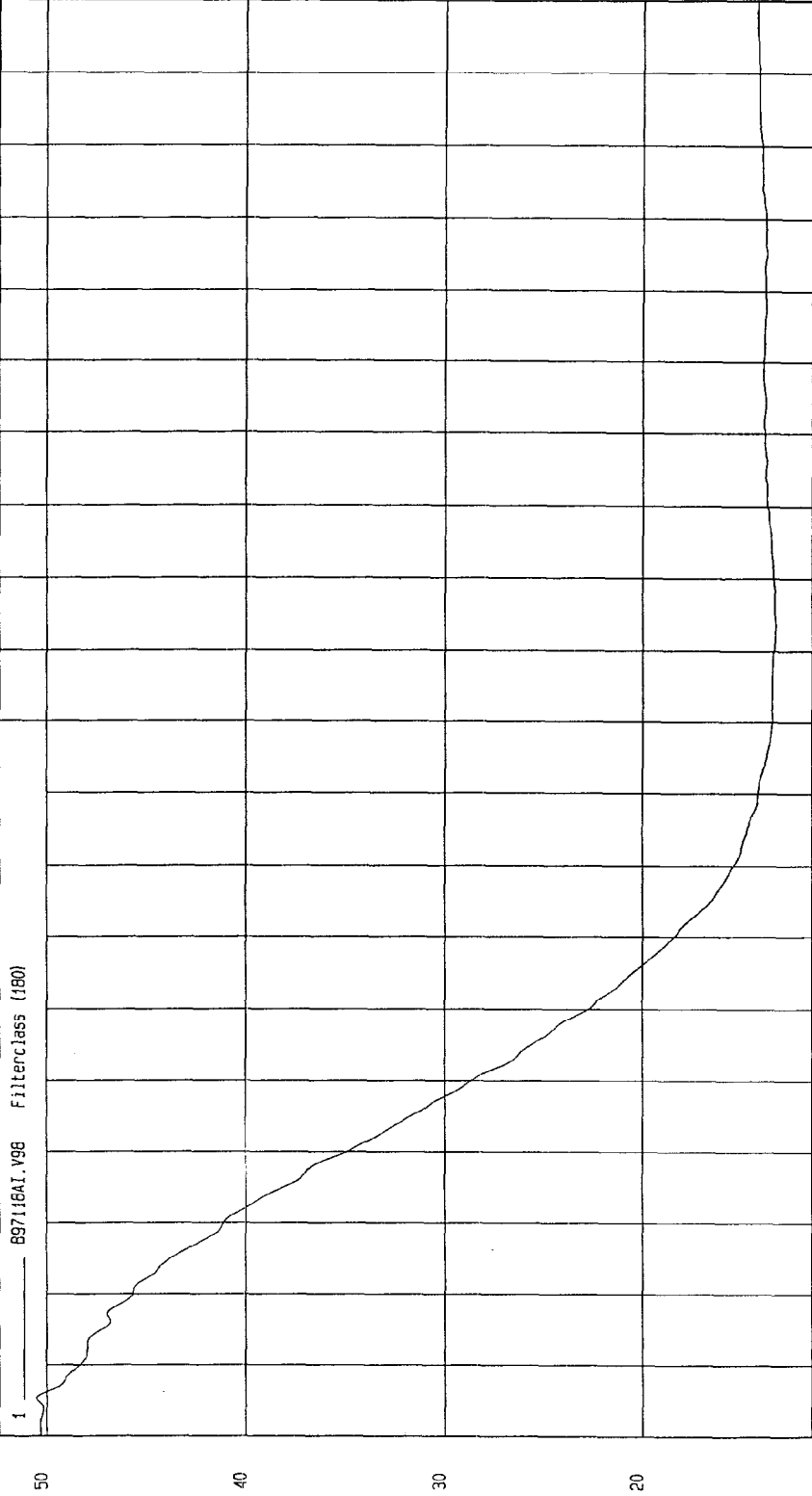
MVA Research
11-01-1997 13:24

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = 13.31 KPH at 114 msec Maximum = 50.53 KPH at 5 msec

MOVING BARRIER RIGHT FACE X VELOCITY



MOA Research
11-07-1997 13:24

TIME Seconds

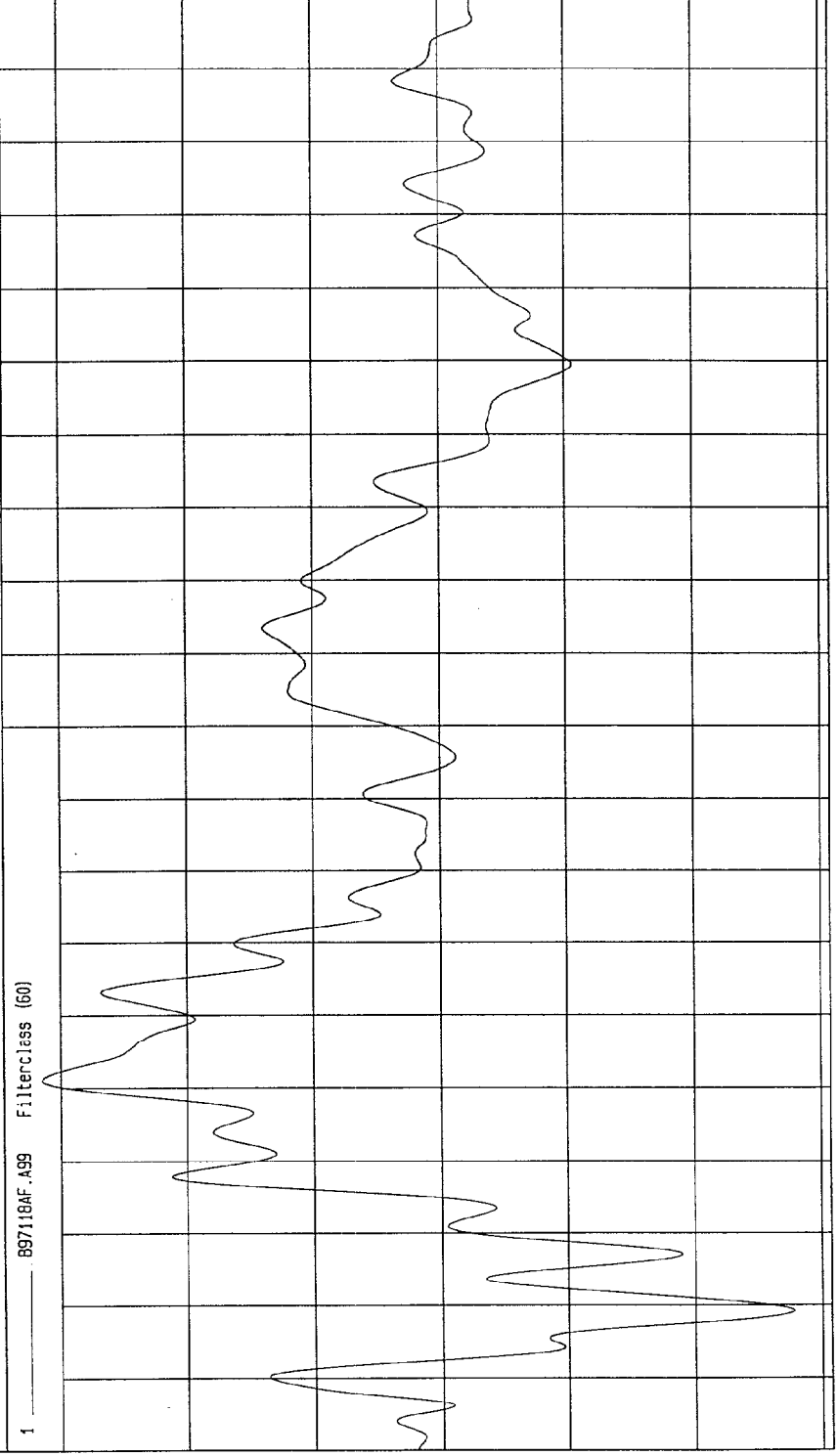
KPH

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -2.77 G'S at 19 msec Maximum = 3.14 G'S at 51 msec

MOVING BARRIER RIGHT FACE Y ACCELERATION



TIME (SECONDS)

NSA Research
11-07-1997 13:24

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG

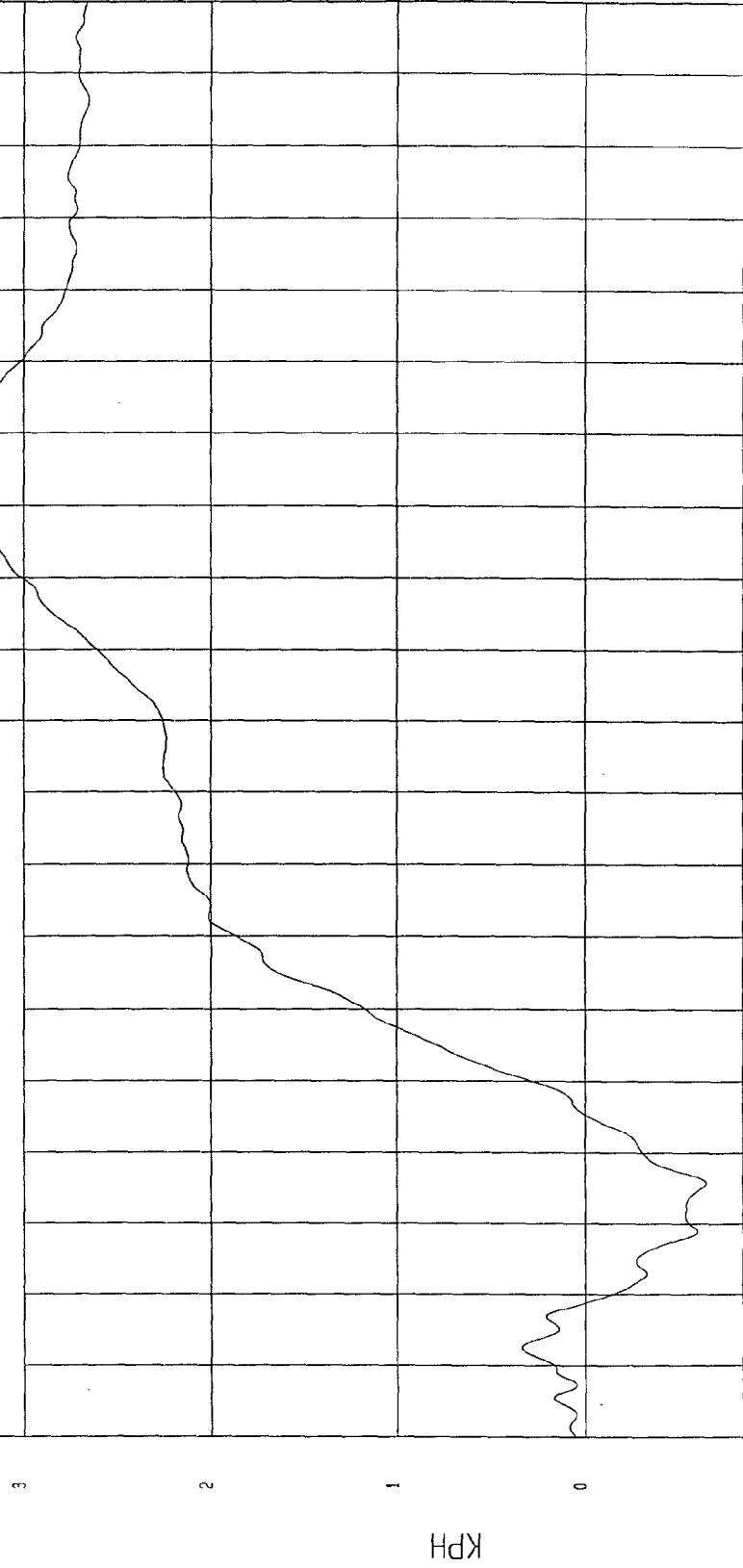
Speed: 31.24 MPH 50.3 KPH

Minimum = -.64 KPH at 36 msec

Maximum = 3.29 KPH at 136 msec

MOVING BARRIER RIGHT FACE Y VELOCITY

1 ——— 897118A1.V99 Filterclass (180)



NCA Research
11-07-1997 13.24

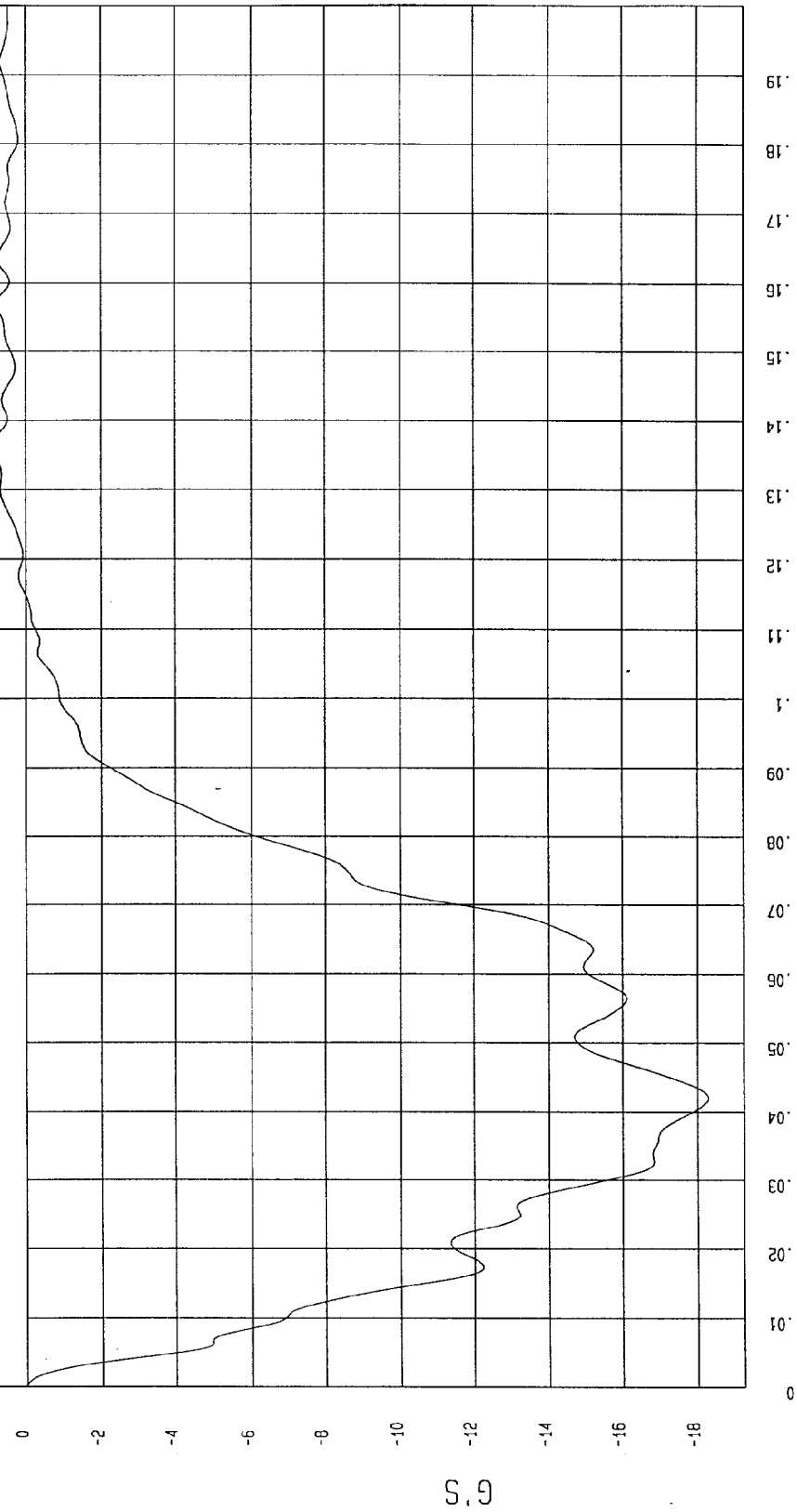
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -18.28 G'S at 42 msec
Maximum = .84 G'S at 136 msec

MOVING BARRIER LEFT REAR FRAME X ACCELERATION

1 89718MF.A05 Filterclass (50)



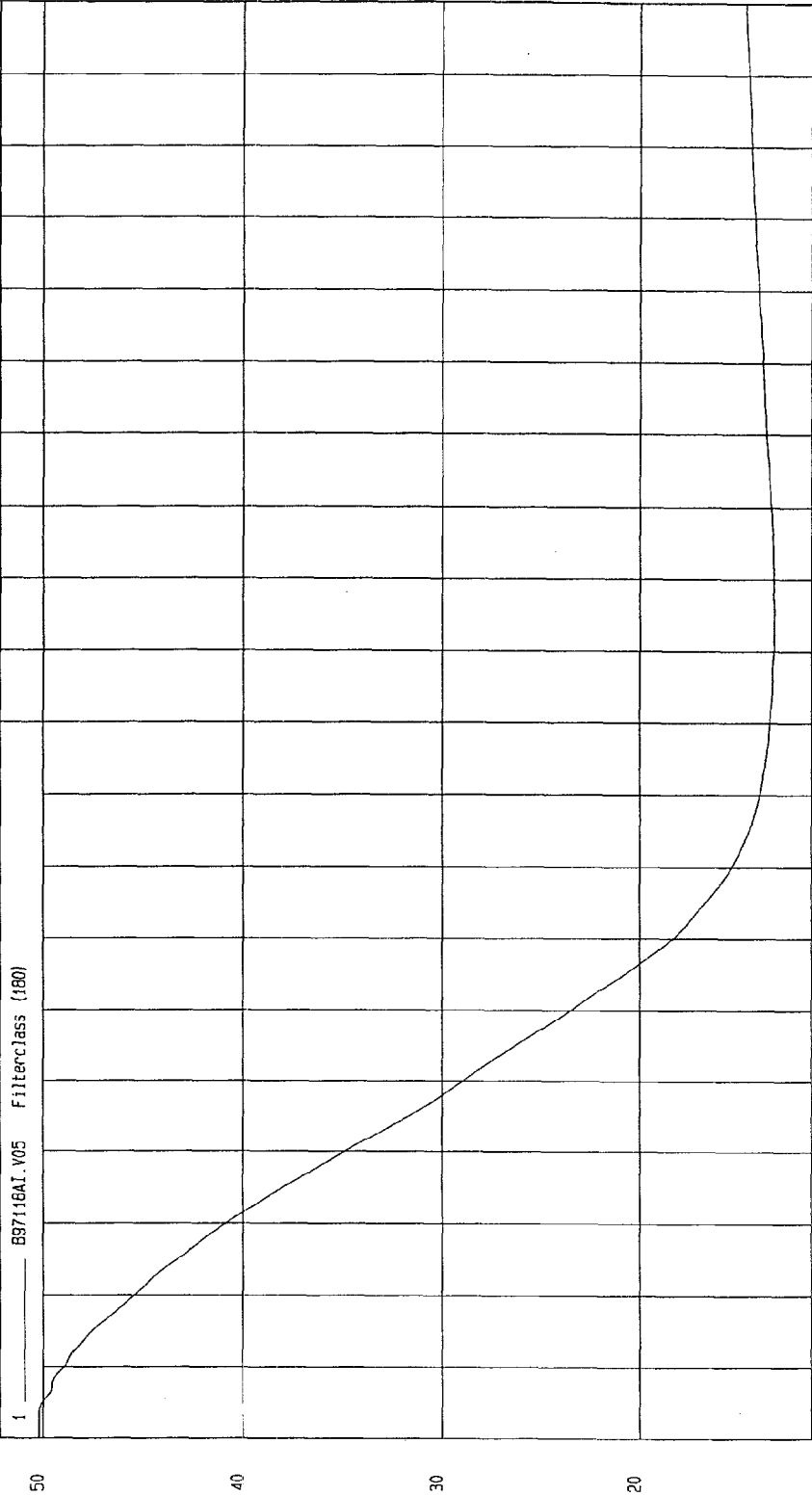
MCA Research
10-09-1997 13:22

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = 13.25 KPH at .116 msec Maximum = 50.30 KPH at .16 msec

MOVING BARRIER LEFT REAR FRAME X VELOCITY



MPA Research
11-01-1997 13:23

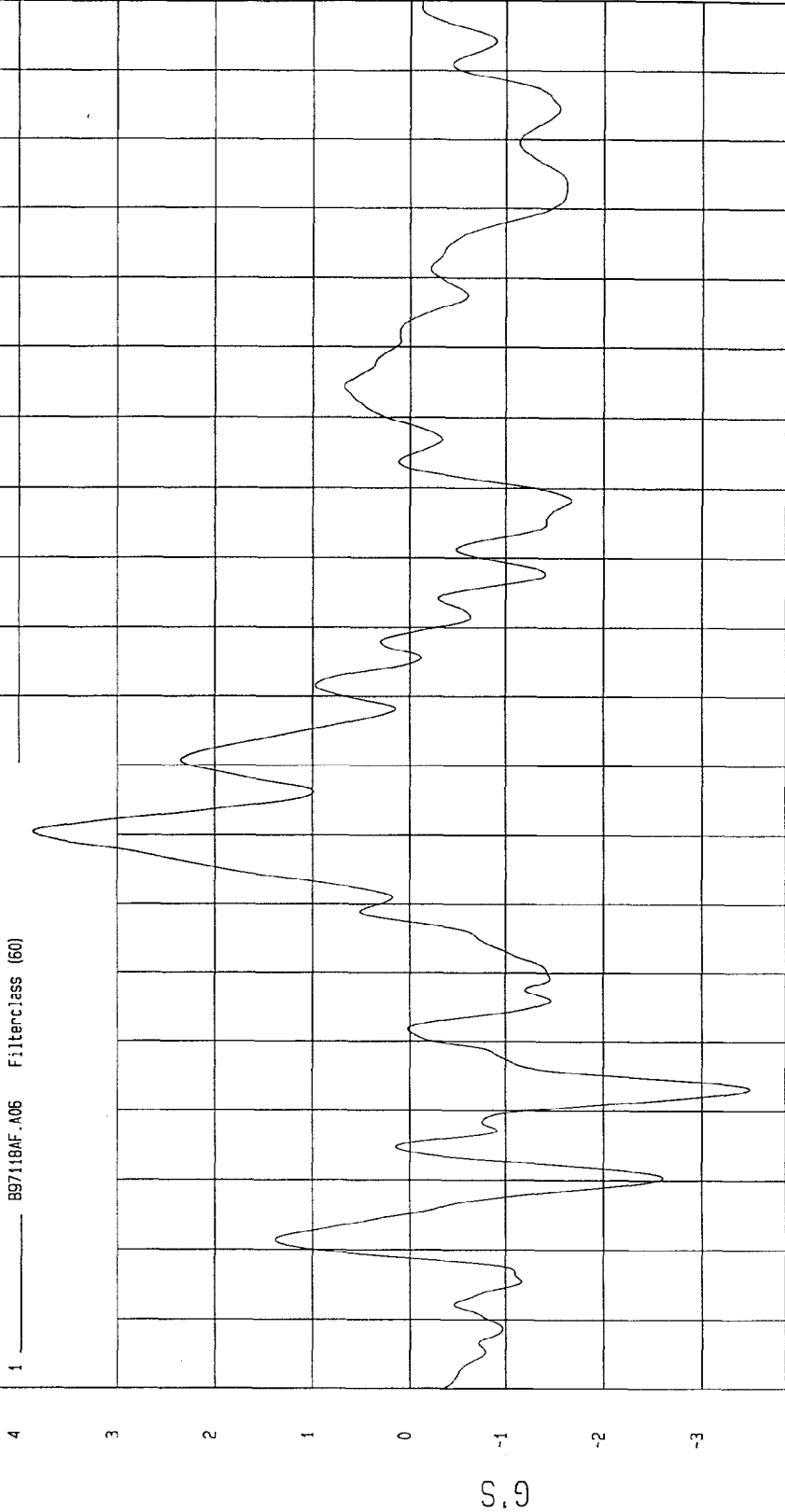
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -3.48 G'S at 43 msec Maximum = 3.85 G'S at 80 msec

MOVING BARRIER LEFT REAR FRAME Y ACCELERATION

1 B97118AF.A06 Filtercless (60)



MCA Research
11-01-1997 13:23

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

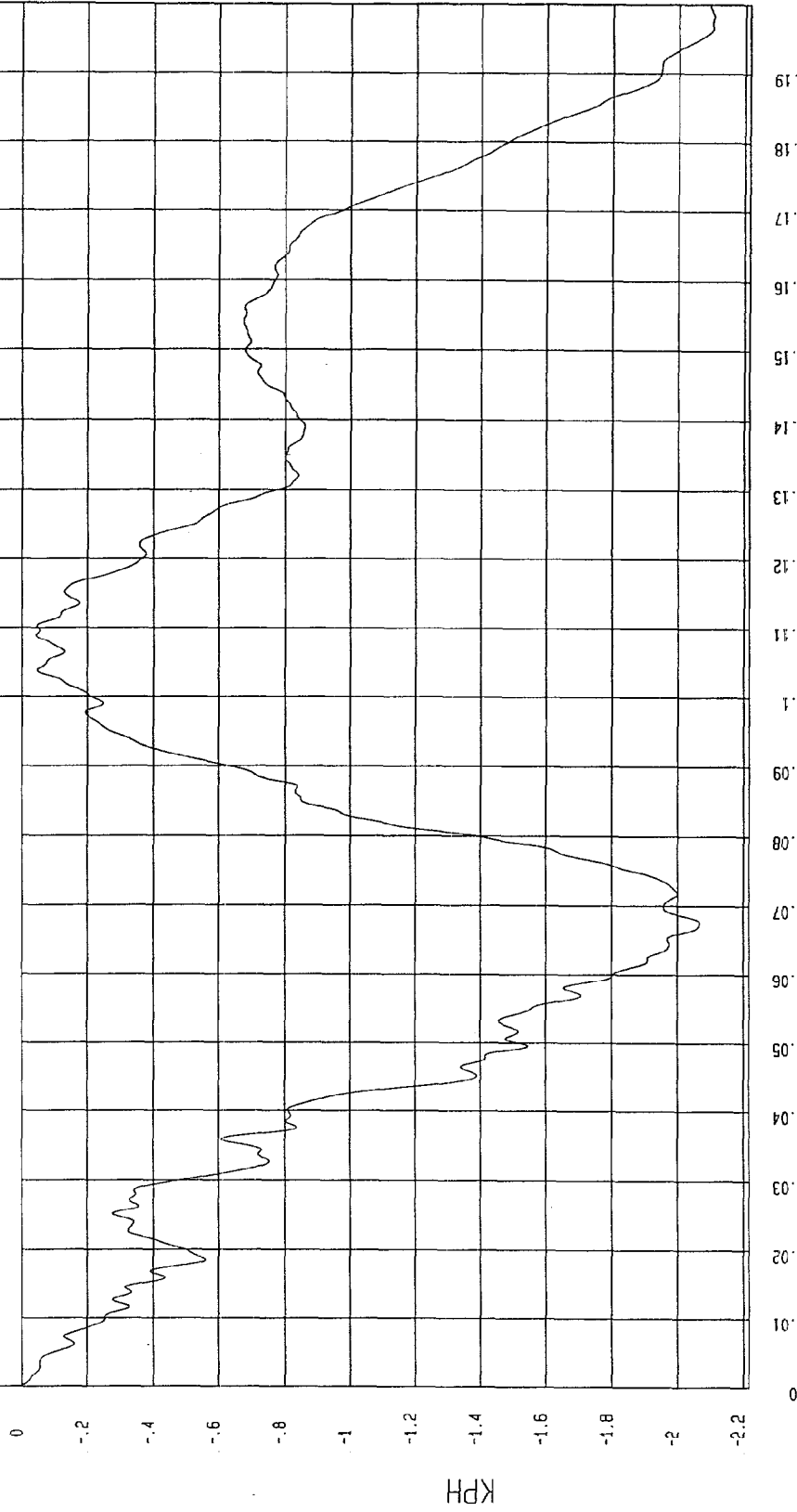
COMPONENT: 1997 FORD MUSTANG

Maximum = 6.40E-02 KPH at -f5 msec

Minimum = -2.10 KPH at 198 msec

MOVING BARRIER LEFT REAR FRAME Y VELOCITY

1 ——— 897118A1.V06 FilterClass (180)



MEA Research
11-07-1997 13:23

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

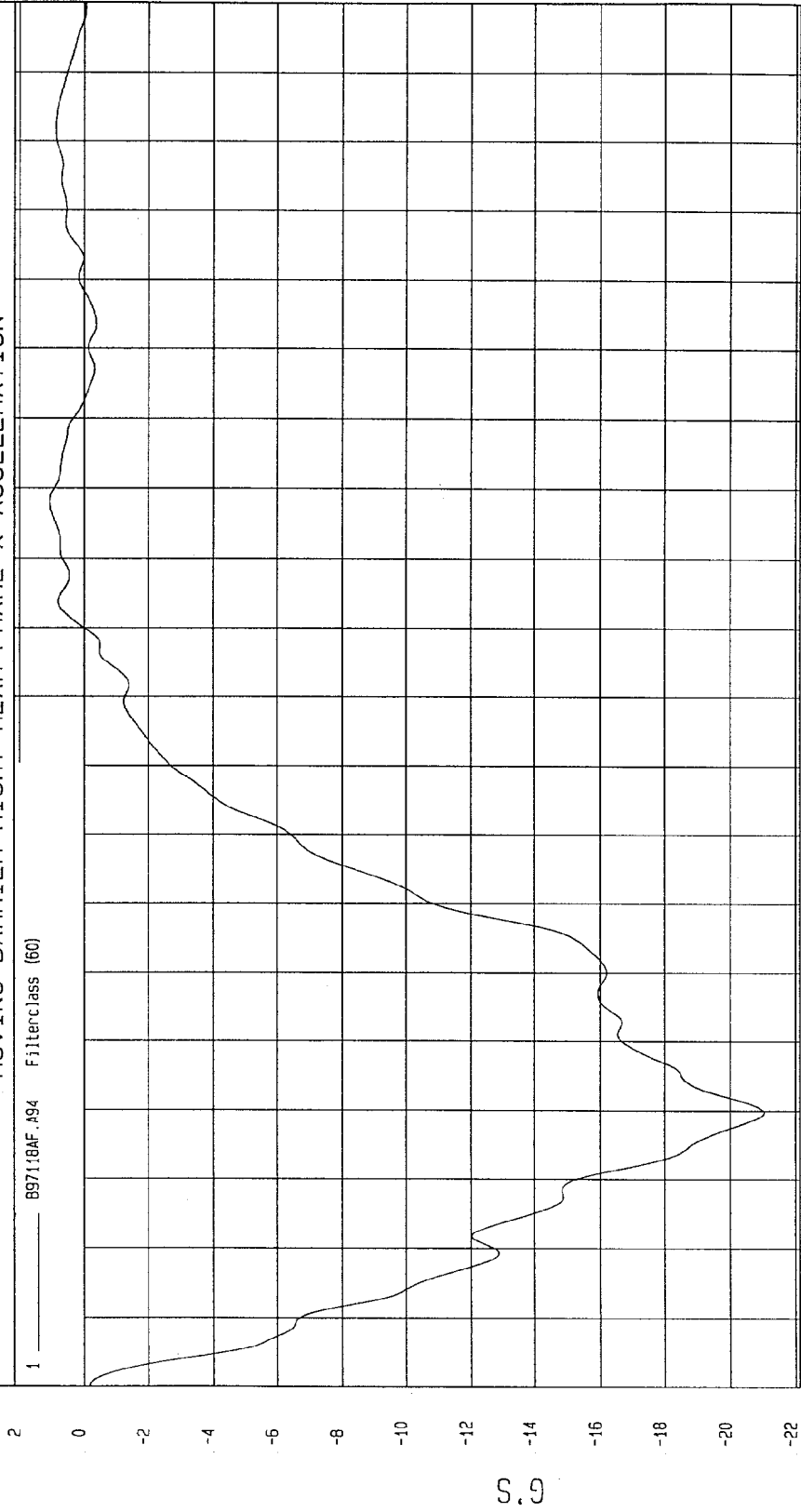
COMPONENT: 1997 FORD MUSTANG

Maximum = 1.05 G'S at 128 msec

Minimum = -21.03 G'S at 40 msec

MOVING BARRIER RIGHT REAR FRAME X ACCELERATION

1 _____ 89711BAF.A94 Filterclass (60)



MGA Research
11-07-1997 13:22

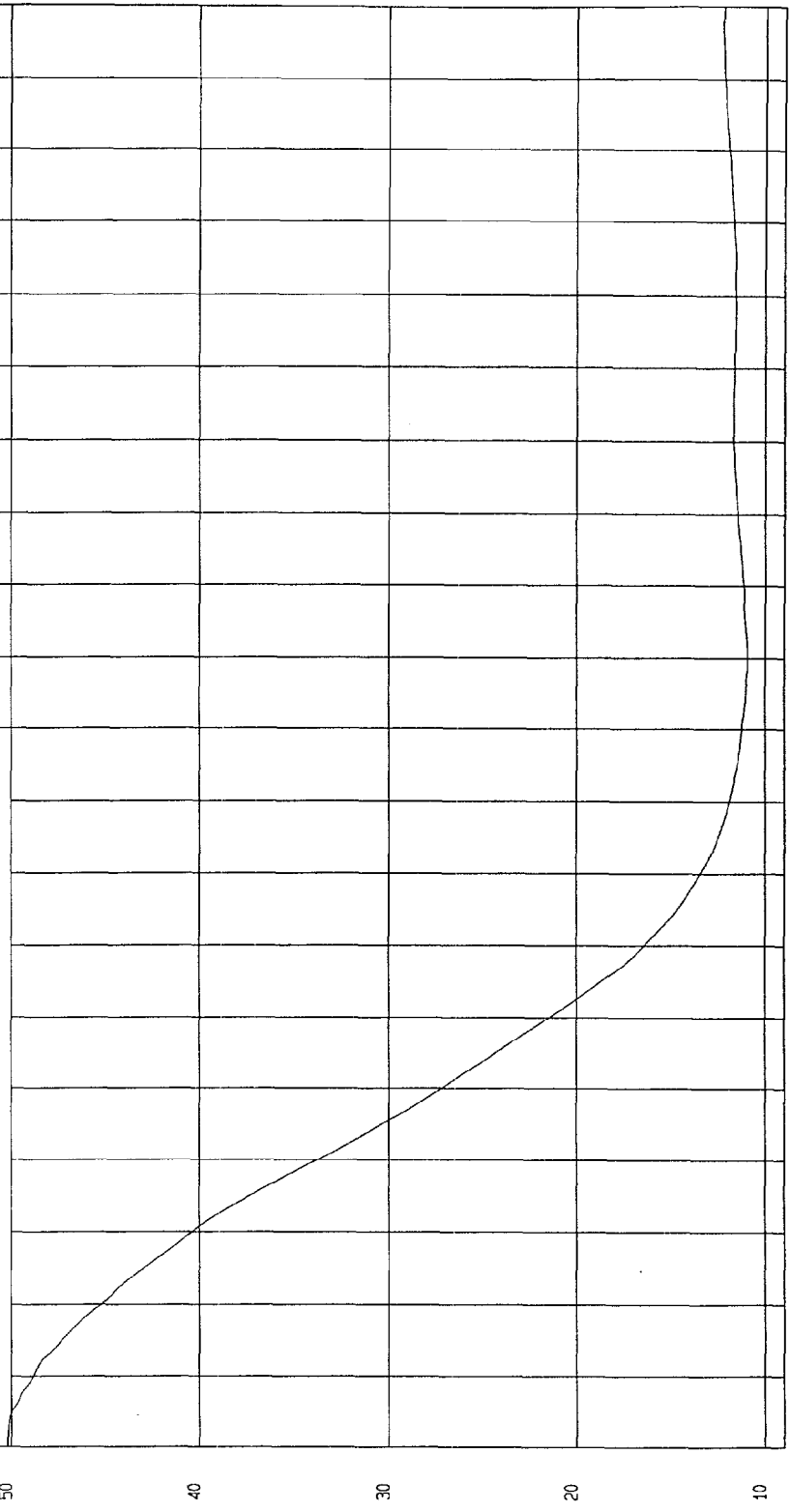
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = 10.93 KPH at 110 msec
Maximum = 50.30 KPH at -19 msec

MOVING BARRIER RIGHT REAR FRAME X VELOCITY

1 B97118A1.V94 Filterclass (180)



MSA Research
11-01-1997 13:22

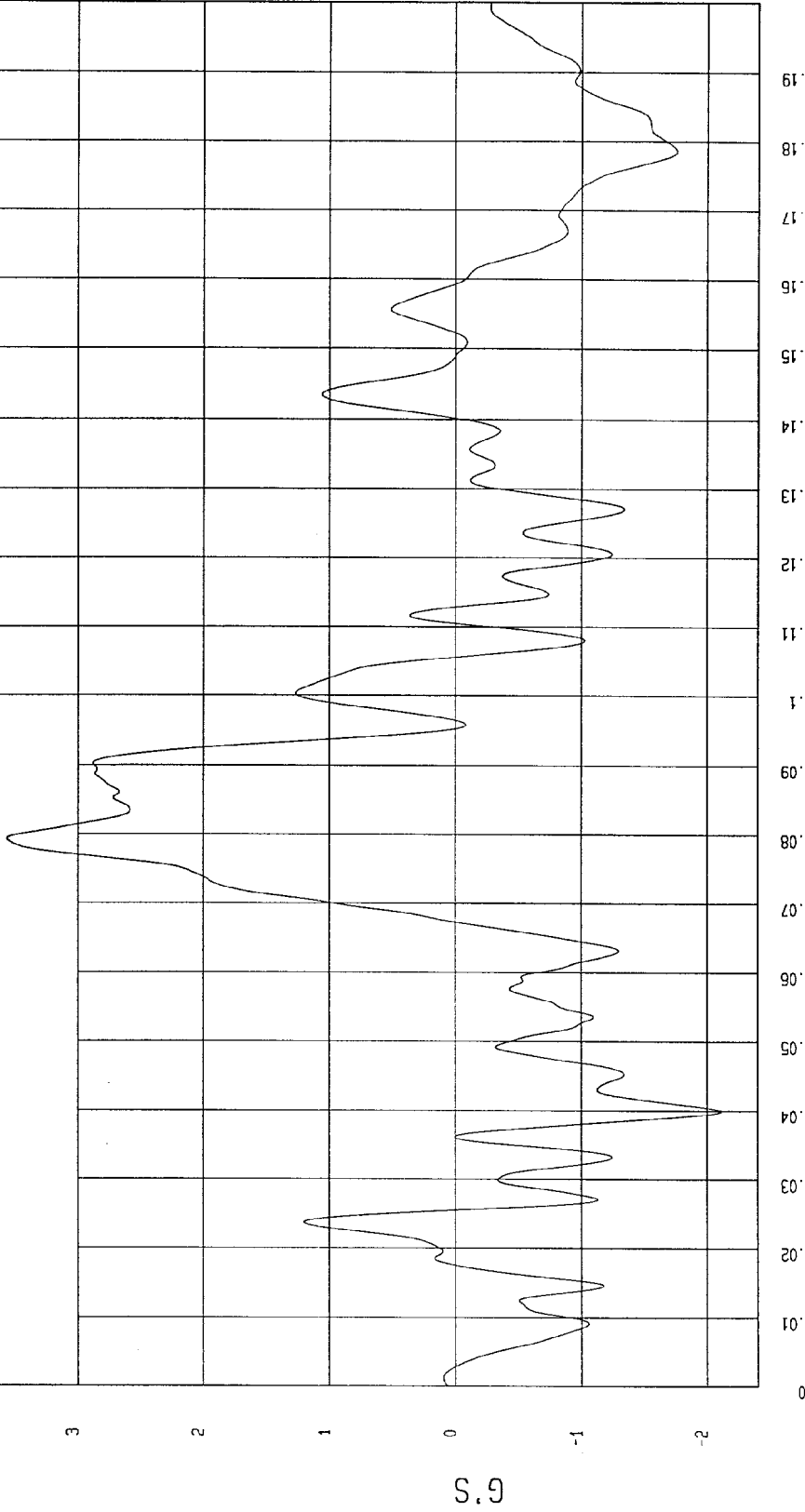
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -2.11 G'S at 40 msec Maximum = 3.56 G'S at 79 msec

MOVING BARRIER RIGHT REAR FRAME Y ACCELERATION

1 _____ B9719AF.A95 Filterclass (60)



MOA Research
11-01-1997 13:22

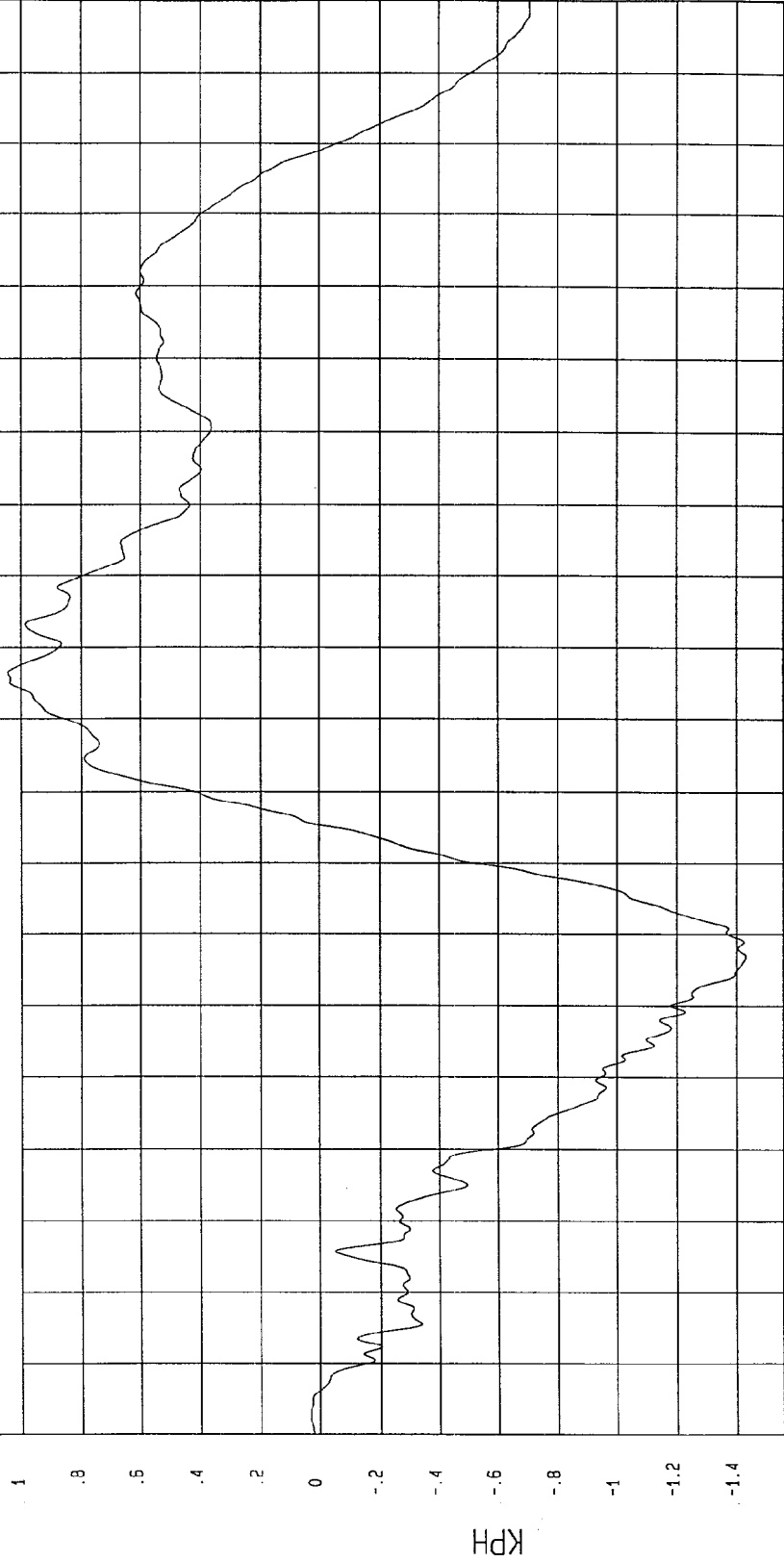
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -1.43 KPH at 67 msec
Maximum = 1.04 KPH at 106 msec

MOVING BARRIER RIGHT REAR FRAME Y VELOCITY

1 B9718A1.V95 Filterclass (180)



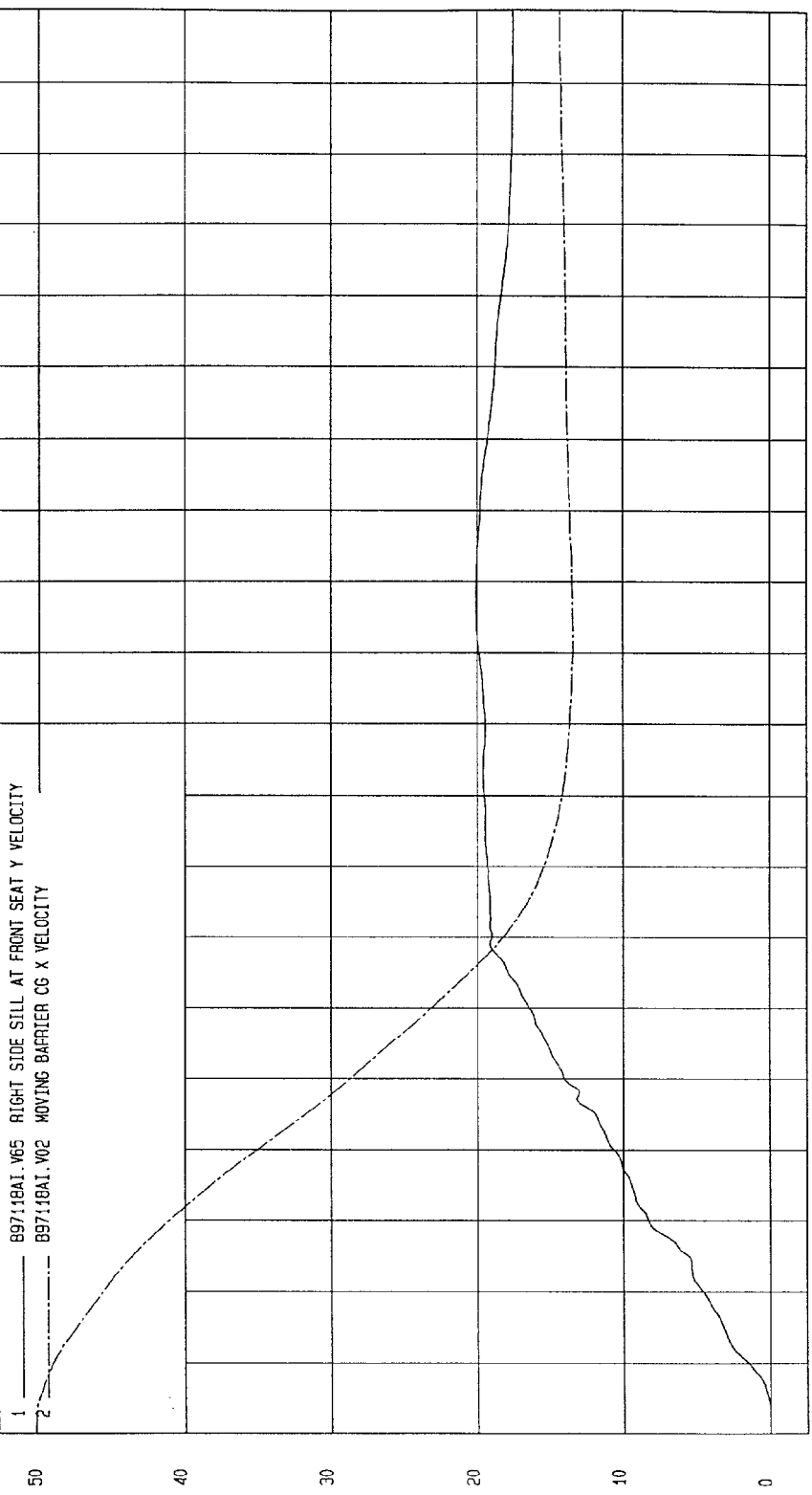
TIME Seconds
MGA Research
11-07-1997 13.22

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

MDB CG X AND VEHICLE RIGHT SILL Y VELOCITY

1 ——— B9711BA1.V65 RIGHT SIDE SILL AT FRONT SEAT Y VELOCITY
2 - - - B9711BA1.V02 MOVING BARRIER CG X VELOCITY



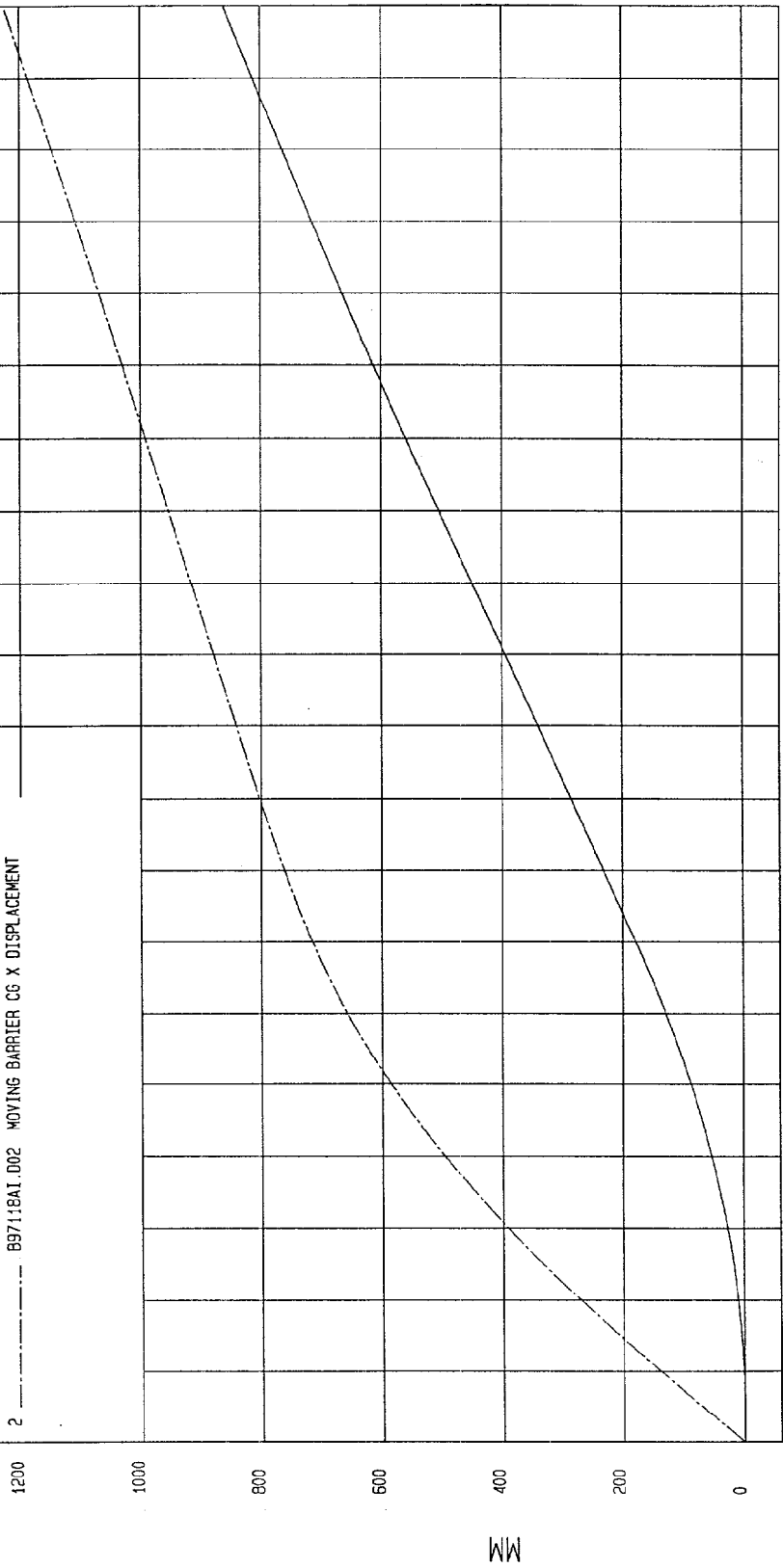
TIME Seconds
MGA Research
11-07-1997 13:25

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

MDB CG X AND VEHICLE RIGHT SILL Y DISPLACEMENT

1 B97118A1.065 RIGHT SIDE SILL AT FRONT SEAT Y DISPLACEMENT
2 B97118A1.002 MOVING BARRIER CG X DISPLACEMENT



WEA Research
11-07-1997 13:25

TIME Seconds

MM

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG

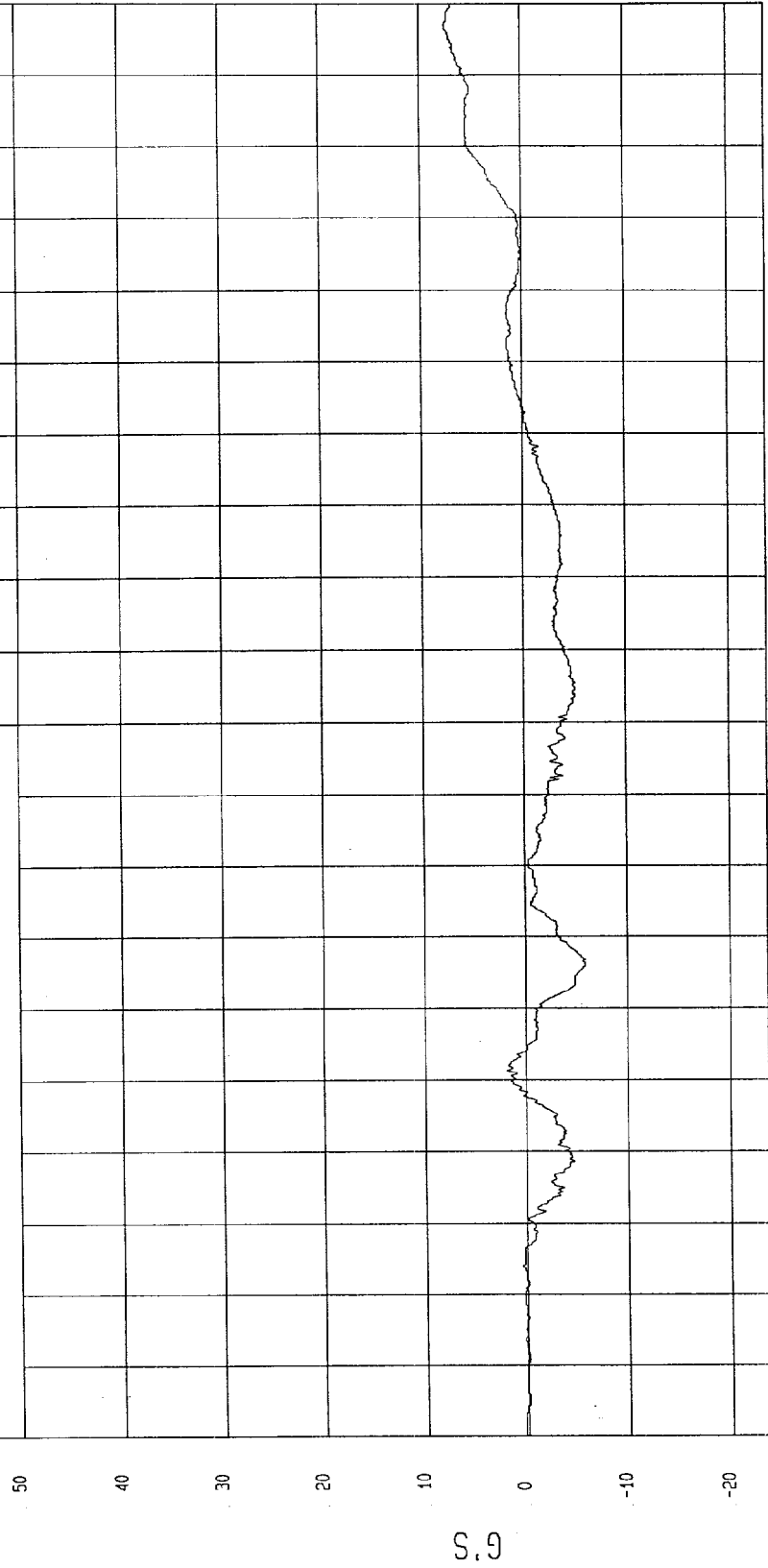
Speed: 31.24 MPH 50.3 KPH

Minimum = -5.73 G'S at 66 msec

Maximum = 7.50 G'S at 196 msec

DRIVER HEAD X ACCELERATION

1 _____ 89718AT.A12 Filterclass (1000)



TIME (SECONDS)

NSA Research
0A-12-1998 14: 12

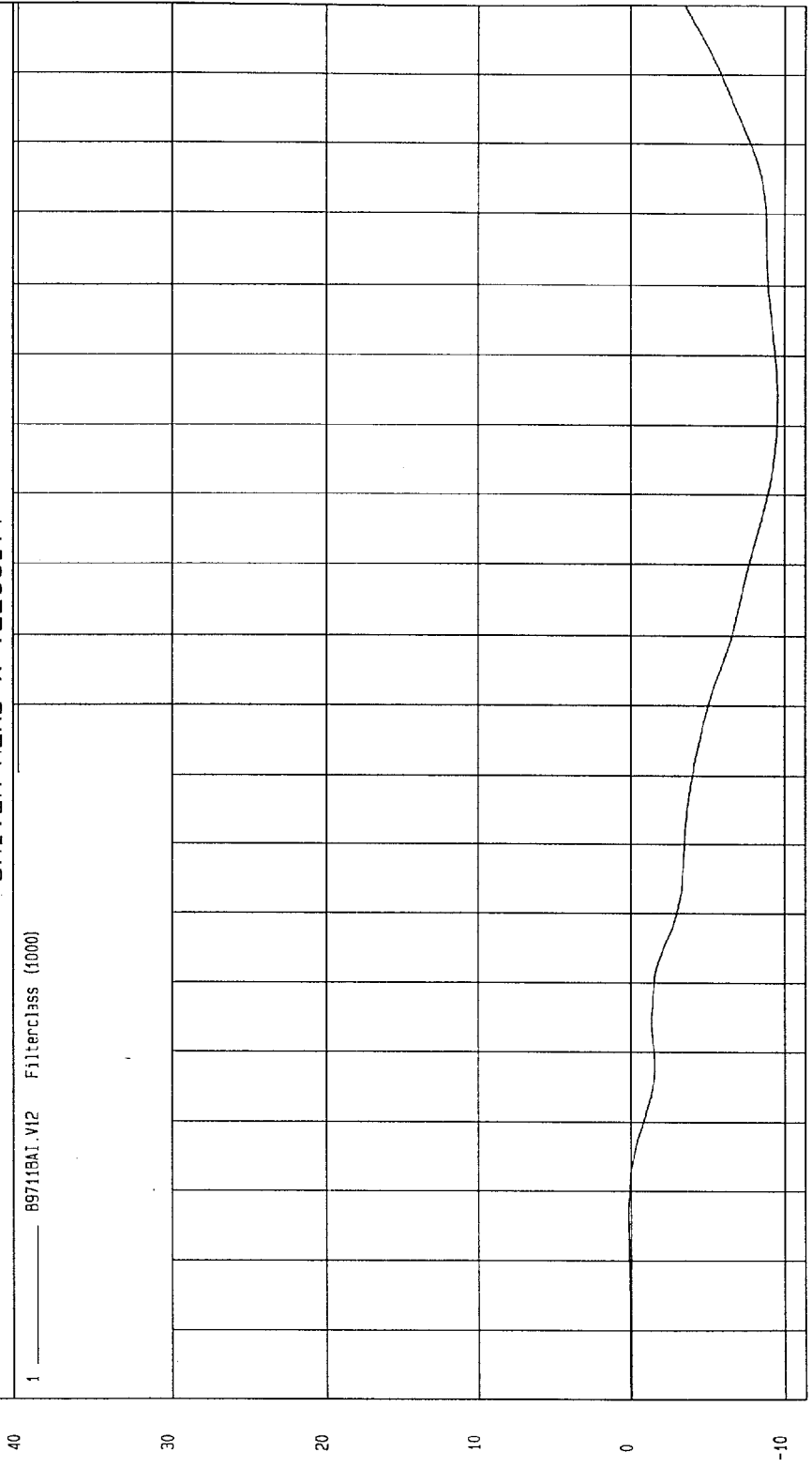
TEST: EU 96/27/EC SIDE IMPACT
TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG
Speed: 31.24 MPH 50.3 KPH

Minimum = -9.55 KPH at 144 msec
Maximum = .17 KPH at 27 msec

DRIVER HEAD X VELOCITY

1 ——— B97118A1.V12 Filterclass (1000)



TIME Seconds
MGA Research
11-07-1997 12:09

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG

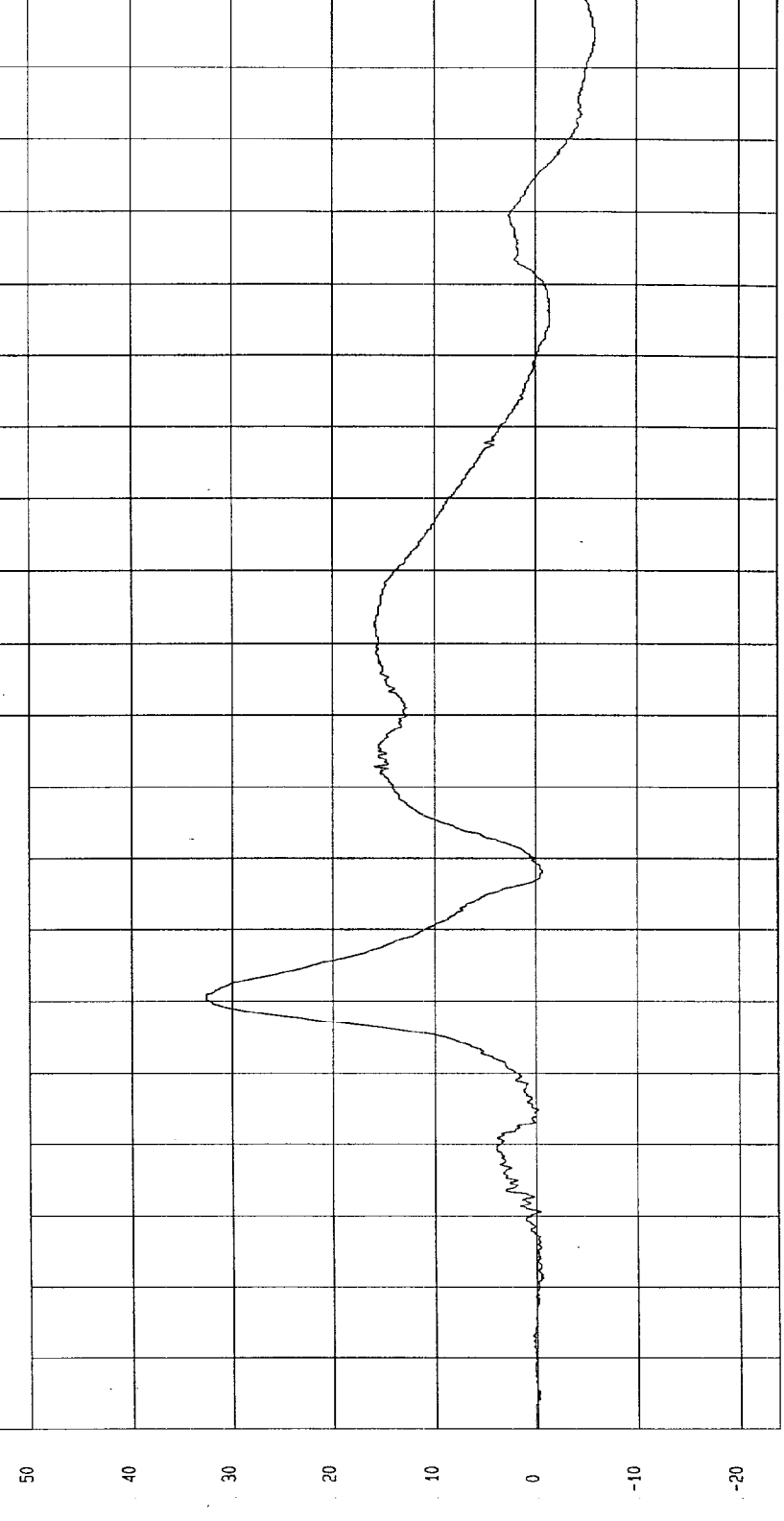
Speed: 31.24 MPH 50.3 KPH

Minimum = -5.84 G'S at 193 msec

Maximum = 32.54 G'S at 60 msec

DRIVER HEAD Y ACCELERATION

1 — 897118AT.A13 Filterclass (1000)



MGA Research
04-12-1998 14: 12

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

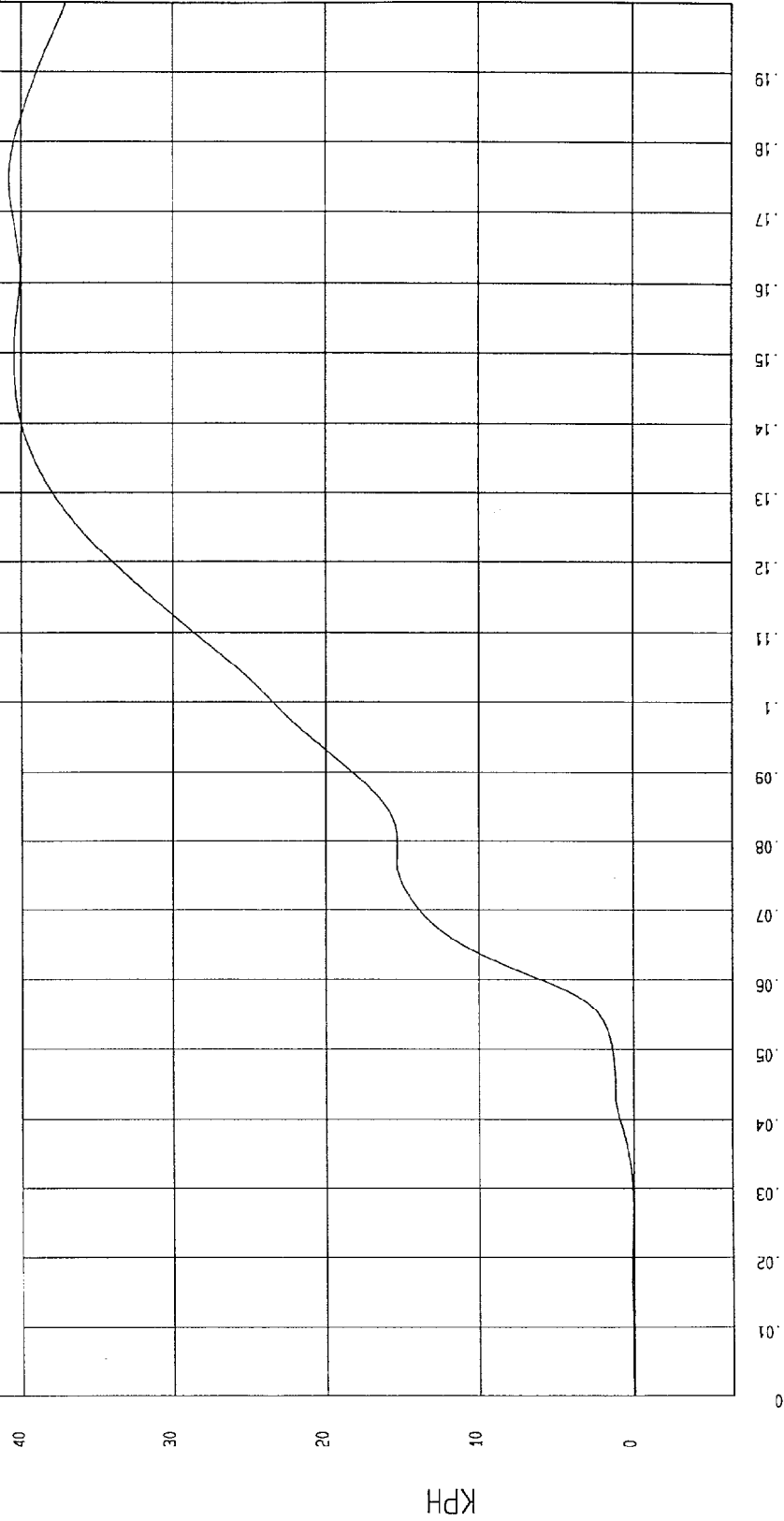
COMPONENT: 1997 FORD MUSTANG

Maximum = 40.81 KPH at 175 msec

Minimum = -4.31E-02 KPH at -11 msec

DRIVER HEAD Y VELOCITY

1 89718A1.V13 Filterclass (1000)



MCA Research
11-07-1997 12:06

TIME Seconds

KPH

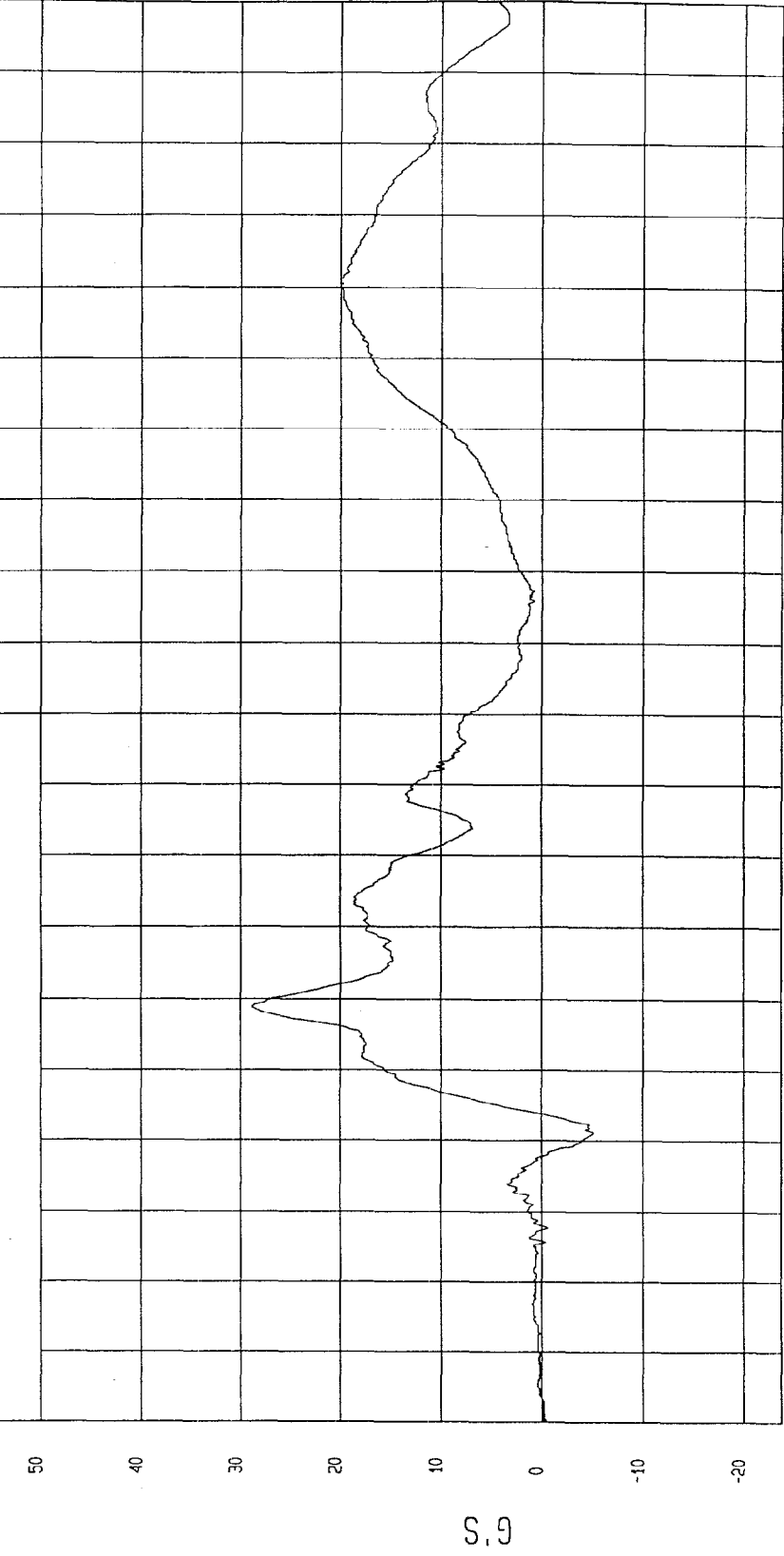
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -5.01 G'S at 41 msec Maximum = 28.86 G'S at 59 msec

DRIVER HEAD Z ACCELERATION

1 ——— B971BAT.A14 Filterclass (1000)



TIME (SECONDS) MCA Research 04-12-1998 14:12

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

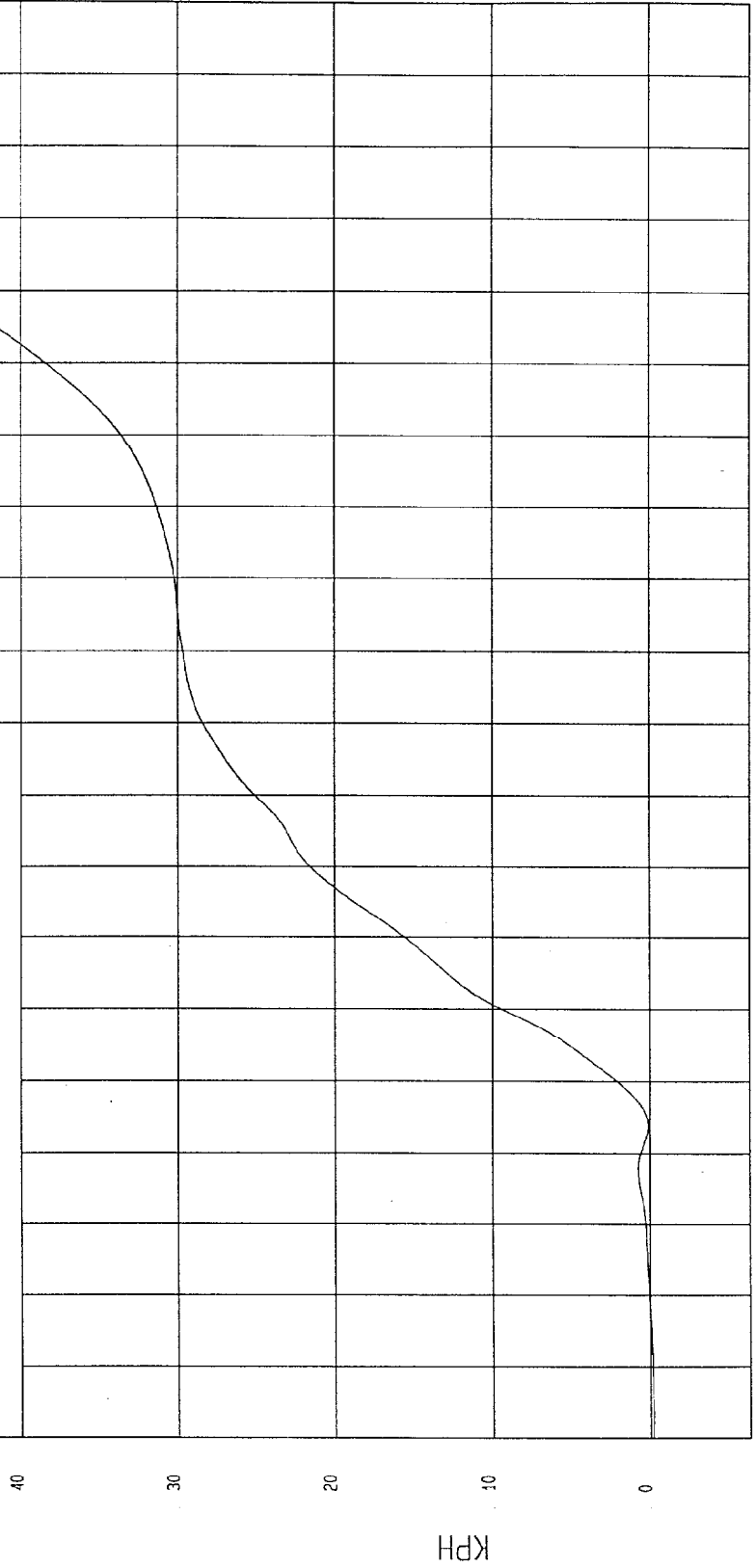
COMPONENT: 1997 FORD MUSTANG

Maximum = 62.42 KPH at 200 msec

Minimum = -22 KPH at 3 msec

DRIVER HEAD Z VELOCITY

1 ——— 897148A1.V14 Filterclass (1000)



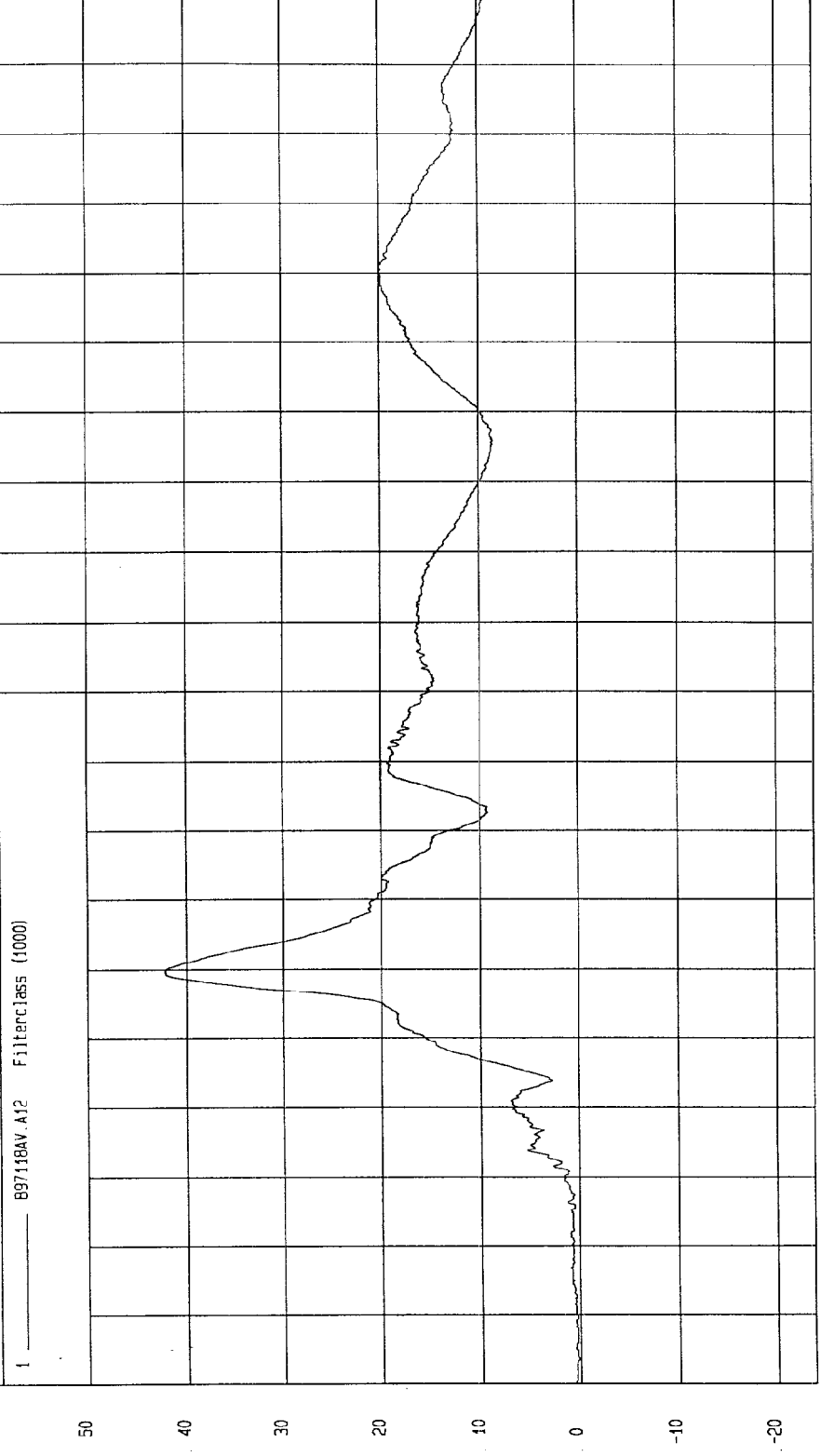
TIME Seconds
MGA Research
11-07-1997 12:08

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = 8.56E-02 G'S at -20 msec Maximum = 42.16 G'S at 60 msec

DRIVER HEAD RESULTANT ACCELERATION



TIME (SECONDS)

MGA Research
0A-12-1998 1A:12

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

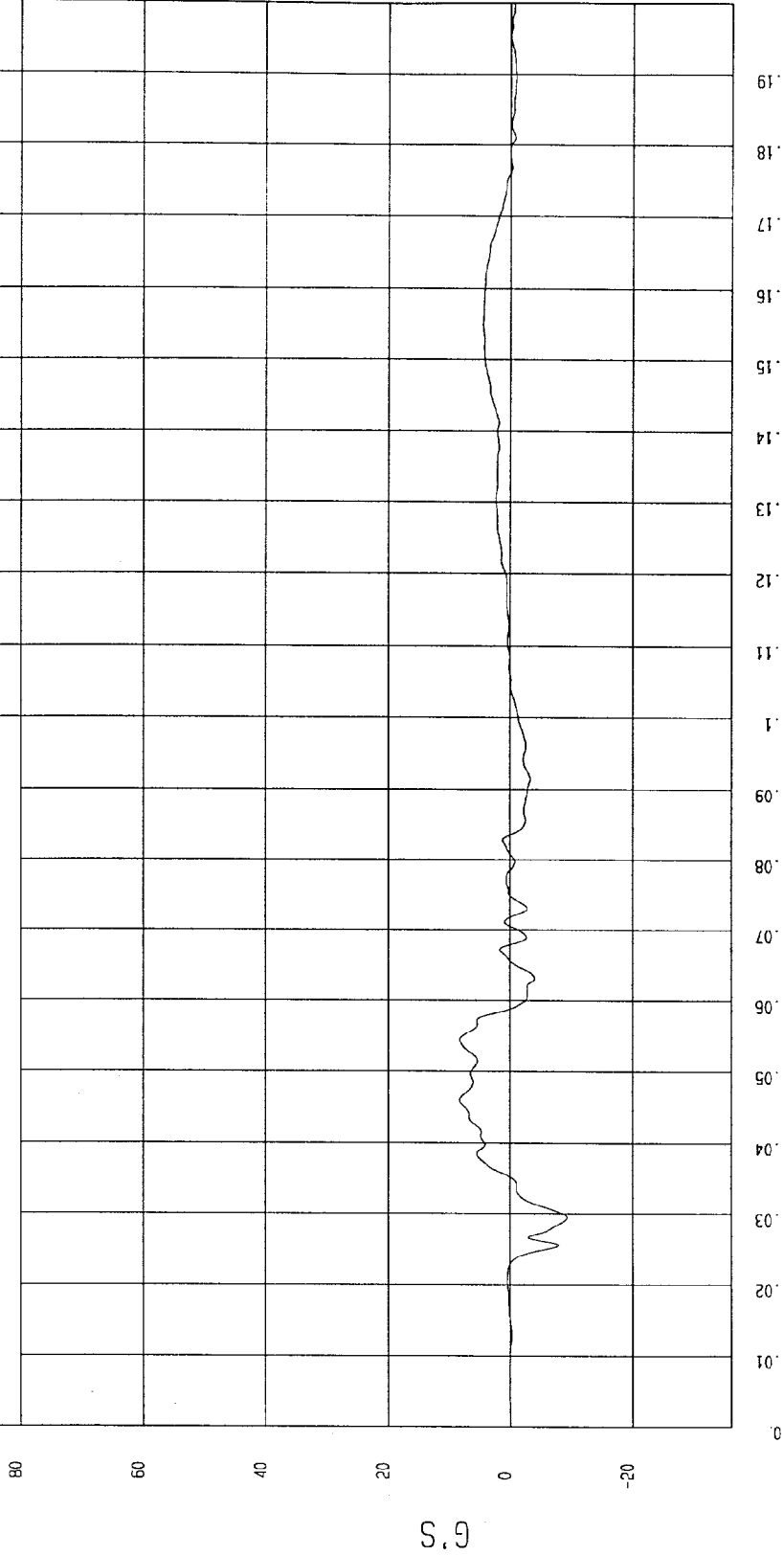
COMPONENT: 1997 FORD MUSTANG

Maximum = 8.24 G'S at 46 msec

Minimum = -9.13 G'S at 30 msec

DRIVER UPPER SPINE X ACCELERATION

1 _____ B9718AF.A42 Filterclass (180)



MSA Research
11-07-1997 12:09

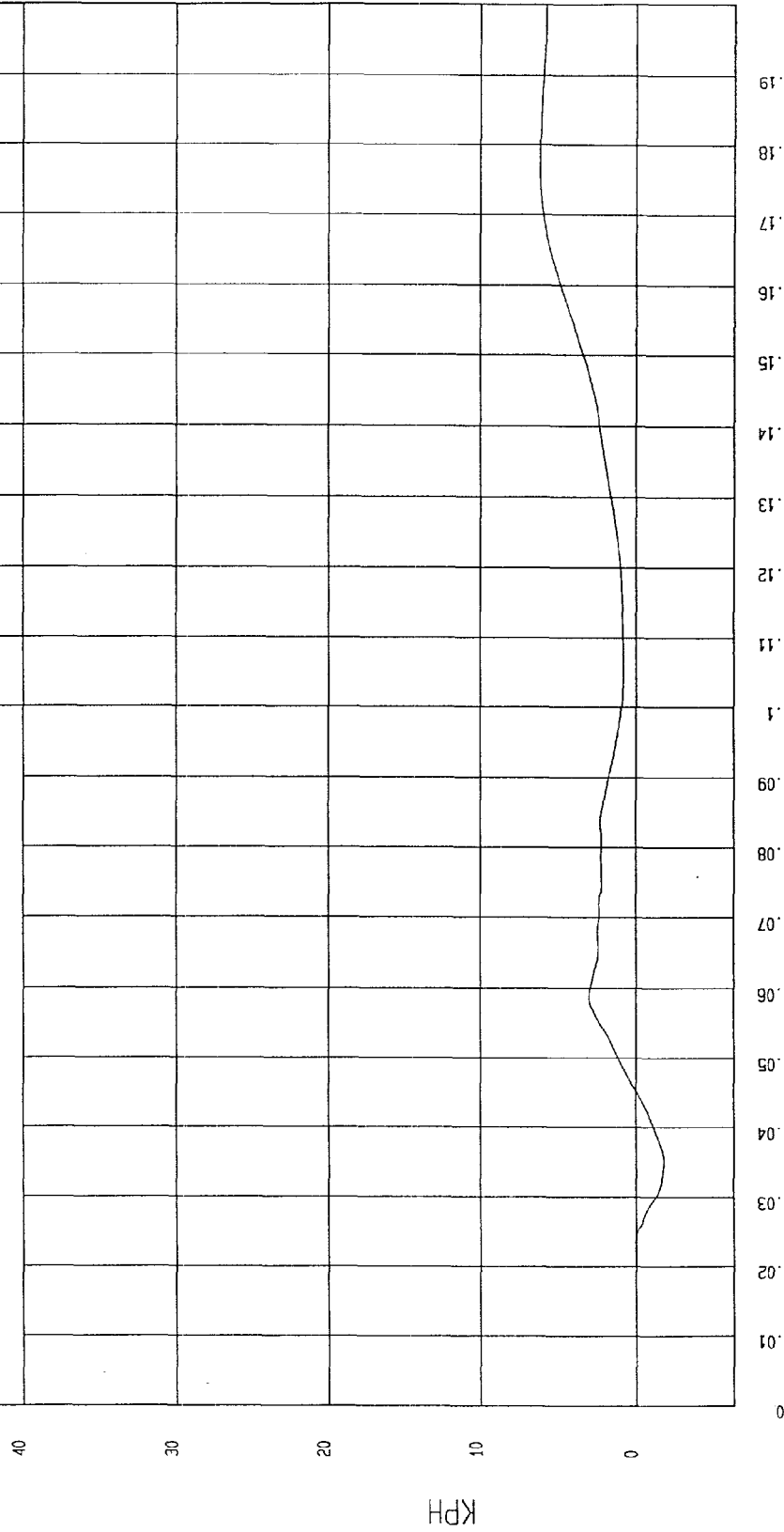
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -1.77 KPH at .35 msec
Maximum = 6.22 KPH at .176 msec

DRIVER UPPER SPINE X VELOCITY

1 ——— B97118A1.V42 FilterClass (180)



NCA Research
11-01-1997 12:09

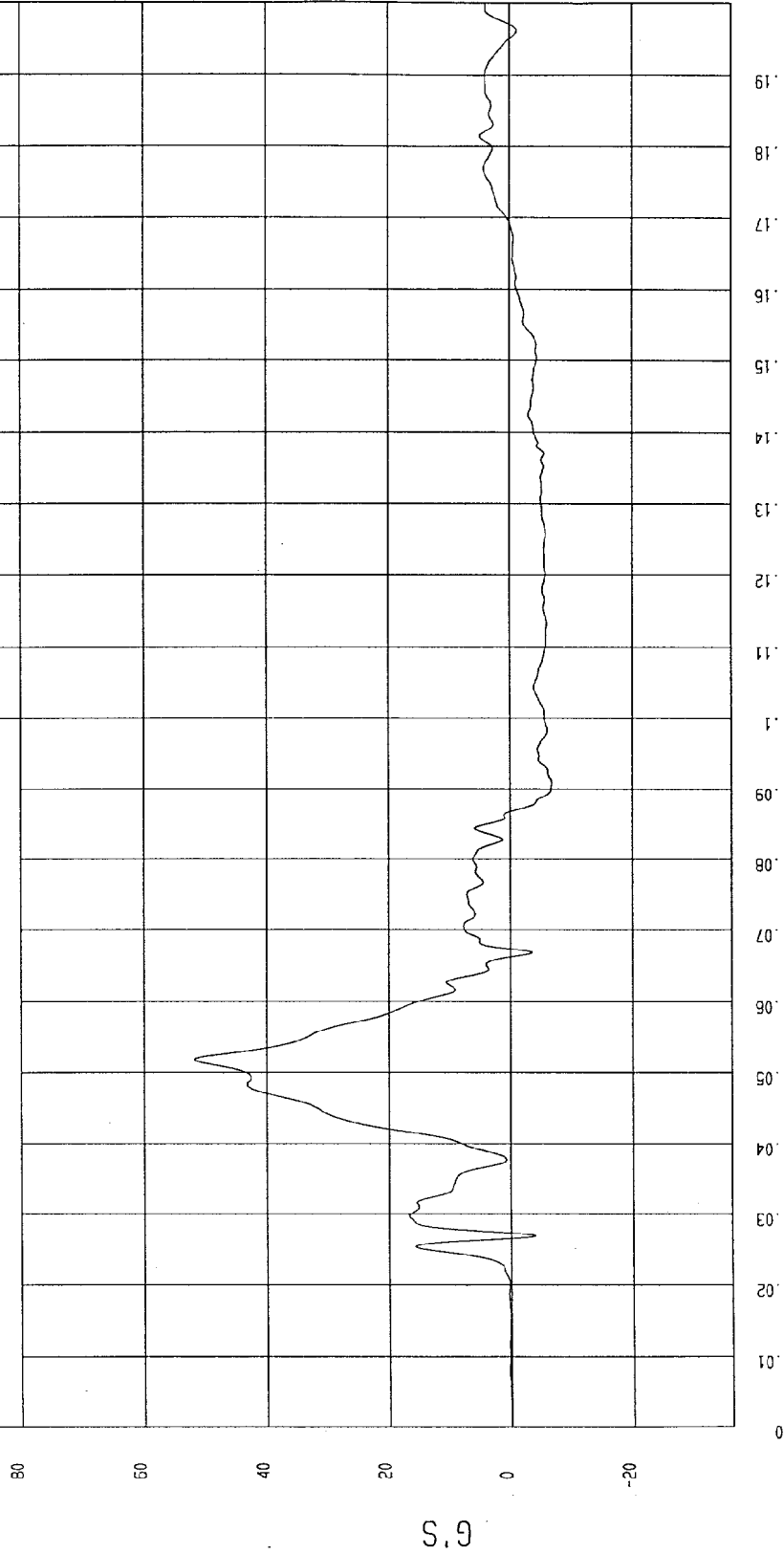
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -6.74 G'S at 91 msec
Maximum = 51.66 G'S at 52 msec

DRIVER UPPER SPINE Y ACCELERATION

1 _____ B97180AF.A43 Filterclass (180)



MGA Research
11-07-1997 12:09

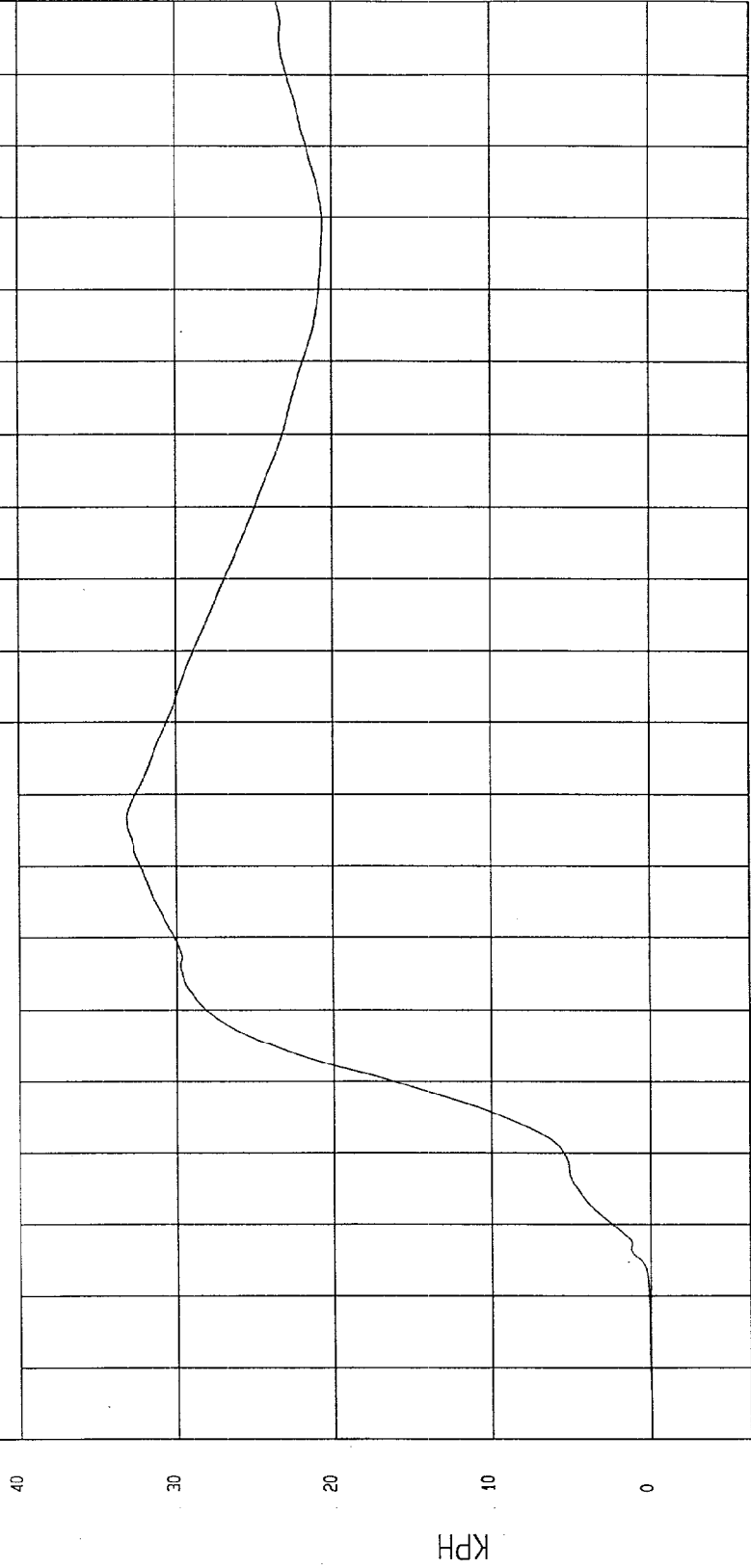
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -4.80E-03 KPH at -13 msec
Maximum = 33.11 KPH at 87 msec

DRIVER UPPER SPINE Y VELOCITY

1 ——— B97118A1.V43 Filterclass (160)



MCA Research
11-01-1997 12.09

TIME Seconds

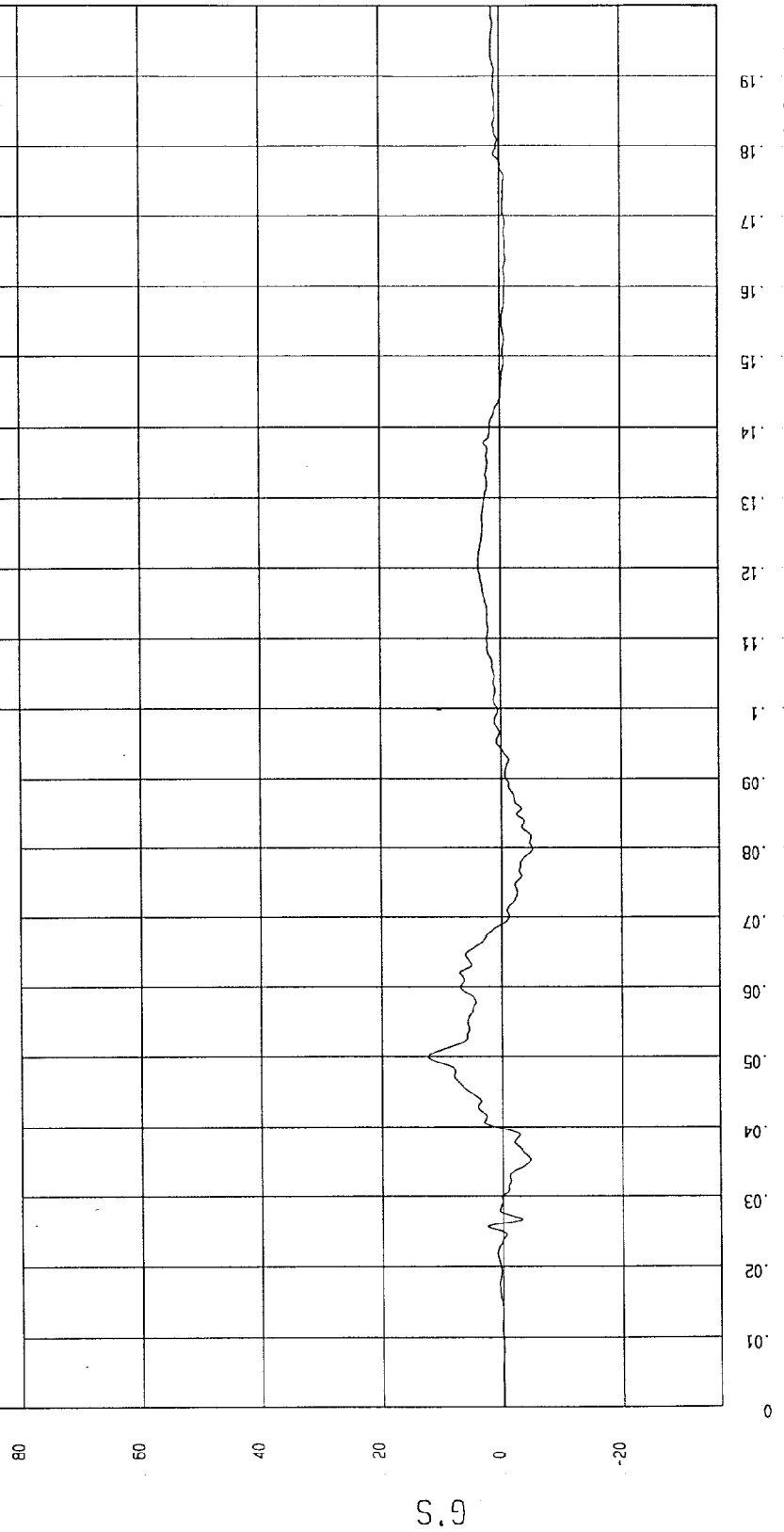
KPH

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997
COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -5.07 G'S at 80 msec Maximum = 12.35 G'S at 50 msec

DRIVER UPPER SPINE Z ACCELERATION

1 _____ B97118AF.A44 Filter:1ass (180)



MCA Research
11-07-1997 12.09

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

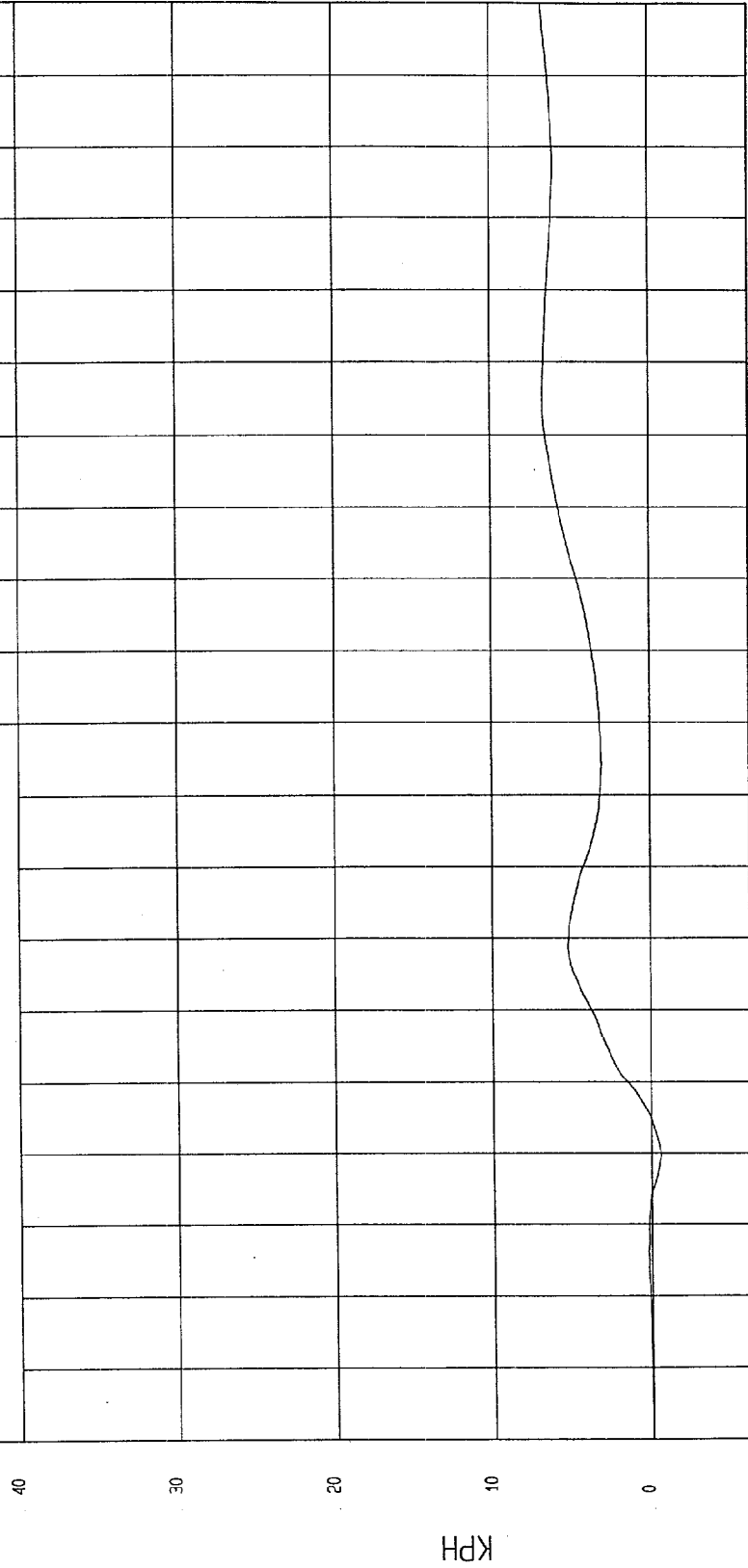
COMPONENT: 1997 FORD MUSTANG

Maximum = 6.72 KPH at 200 msec

Minimum = -5.9 KPH at 40 msec

DRIVER UPPER SPINE Z VELOCITY

1 897118A1.V44 FilterClass (180)



MCA Research
11-07-1997 12:09

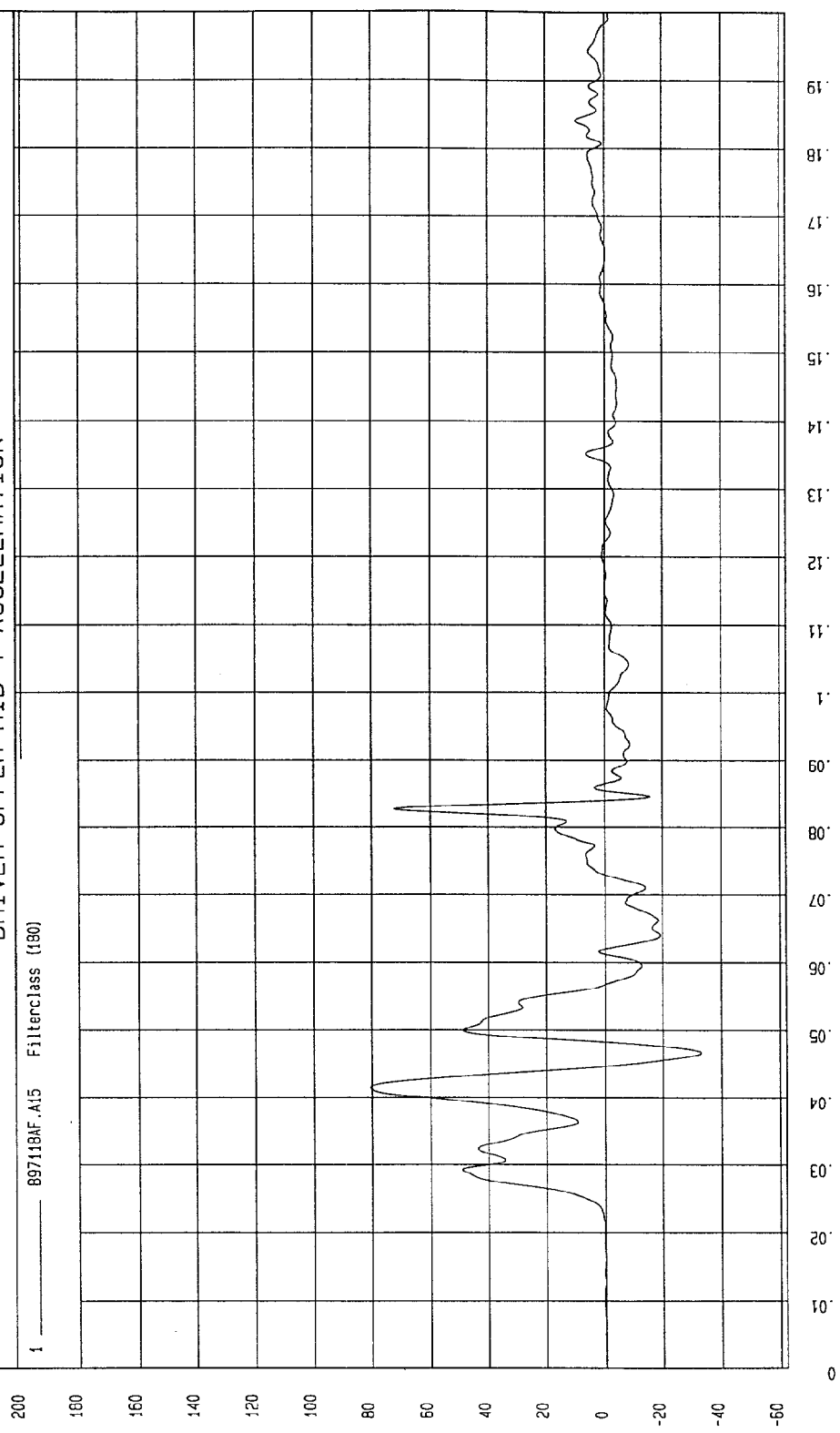
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -33.03 G'S at 47 msec
Maximum = 80.50 G'S at 42 msec

DRIVER UPPER RIB Y ACCELERATION

1 897148AF.A15 Filterclass (190)



MCA Research
11-07-1997 12:06

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

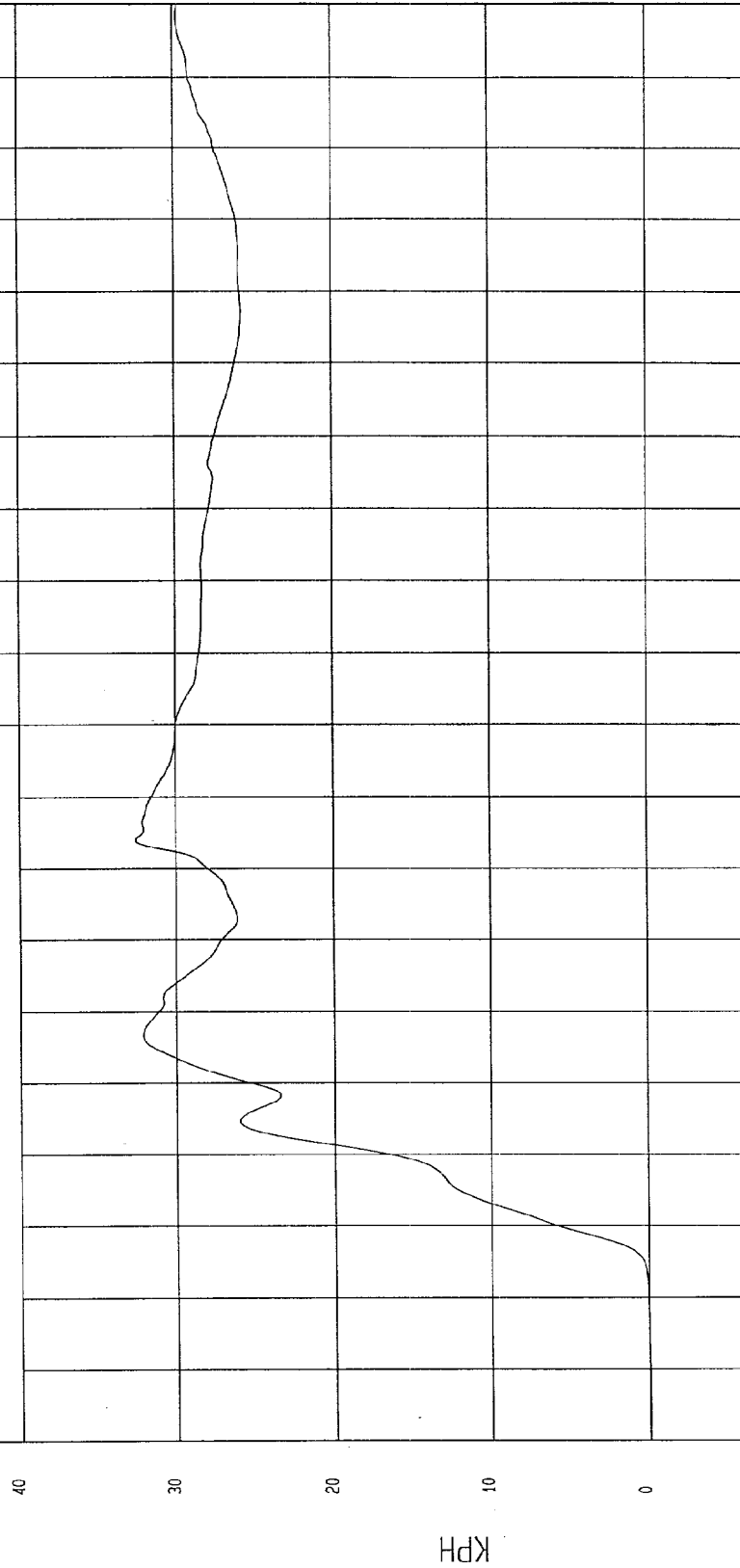
COMPONENT: 1997 FORD MUSTANG

Maximum = 32.58 KPH at 84 msec

Minimum = -8.61E-02 KPH at 4 msec

DRIVER UPPER RIB Y VELOCITY

1 ——— 897118A1.V15 FilterClass (180)



WCA Research
11-07-1997 12:08

TIME Seconds

KPH

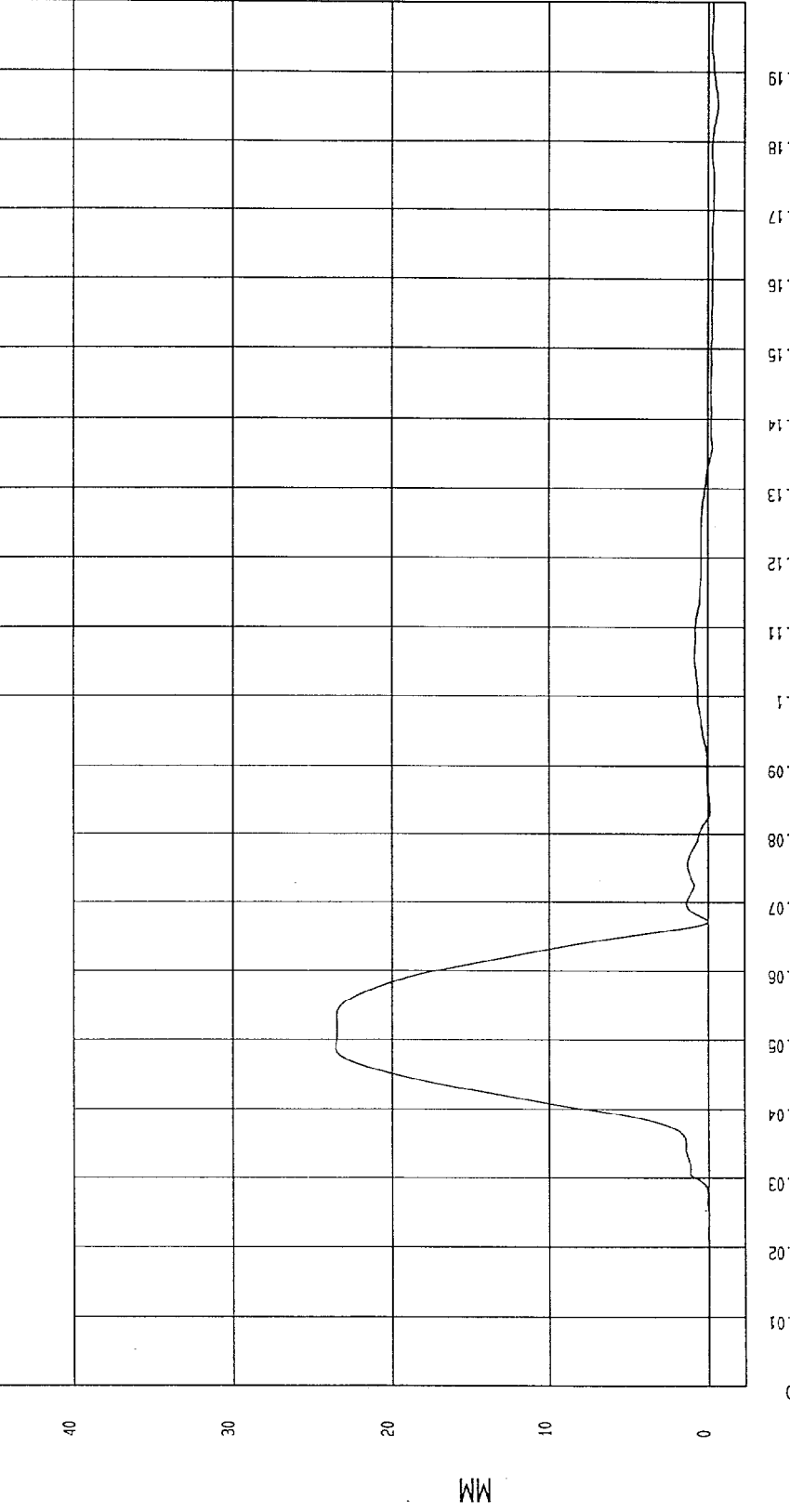
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -.60 MM at 185 msec
Maximum = 23.47 MM at 49 msec

DRIVER UPPER RIB Y DISPLACEMENT

1 ——— 8971180F.058 FilterClass (180)



MGA Research
11-07-1997 12:06

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

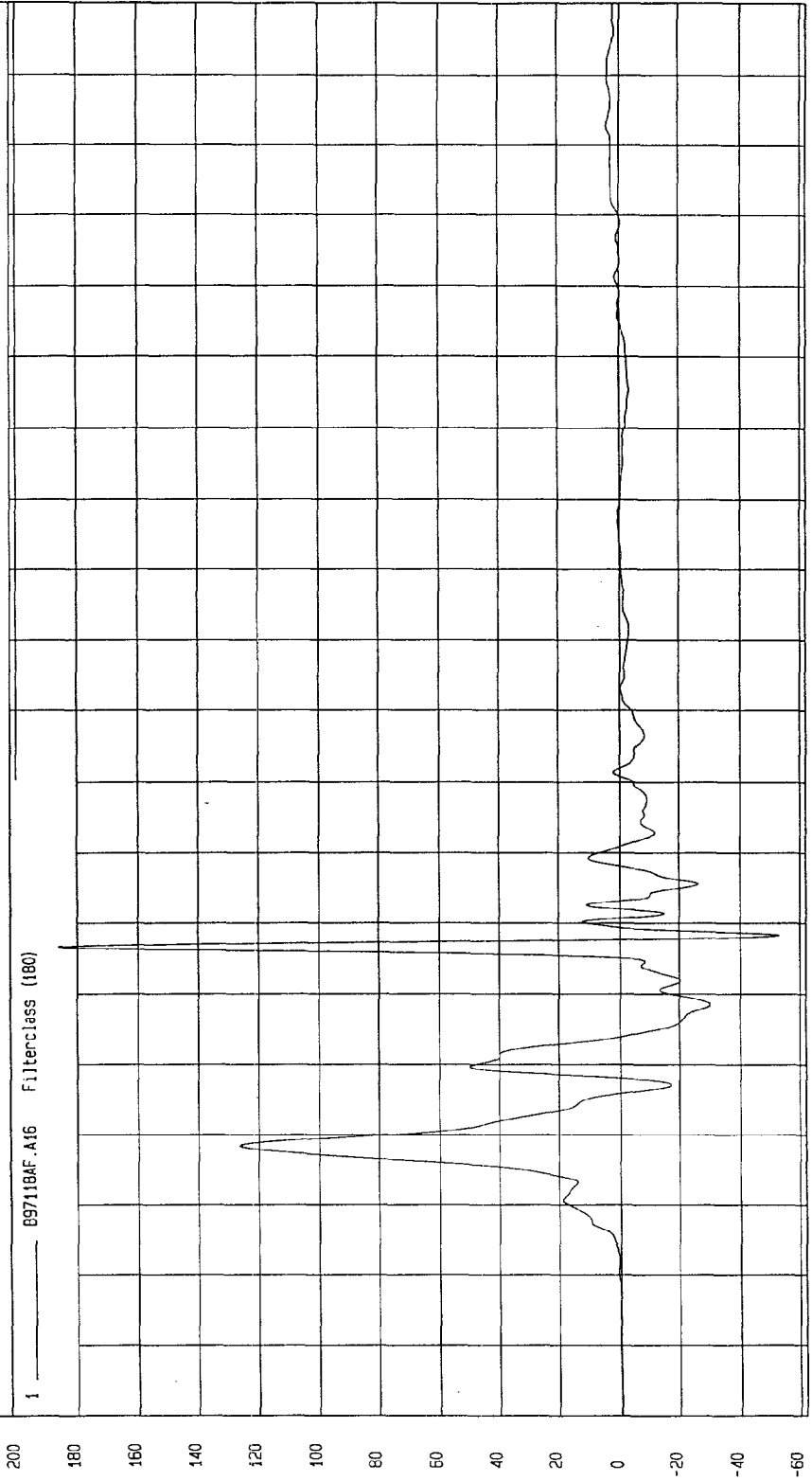
COMPONENT: 1997 FORD MUSTANG

Minimum = -52.79 G'S at 68 msec

Maximum = 186.13 G'S at 67 msec

DRIVER MID RIB Y ACCELERATION

1 B97118AF.A16 Filterclass (180)



MECA Research
11-07-1997 12:06

TIME (SECONDS)

G.S

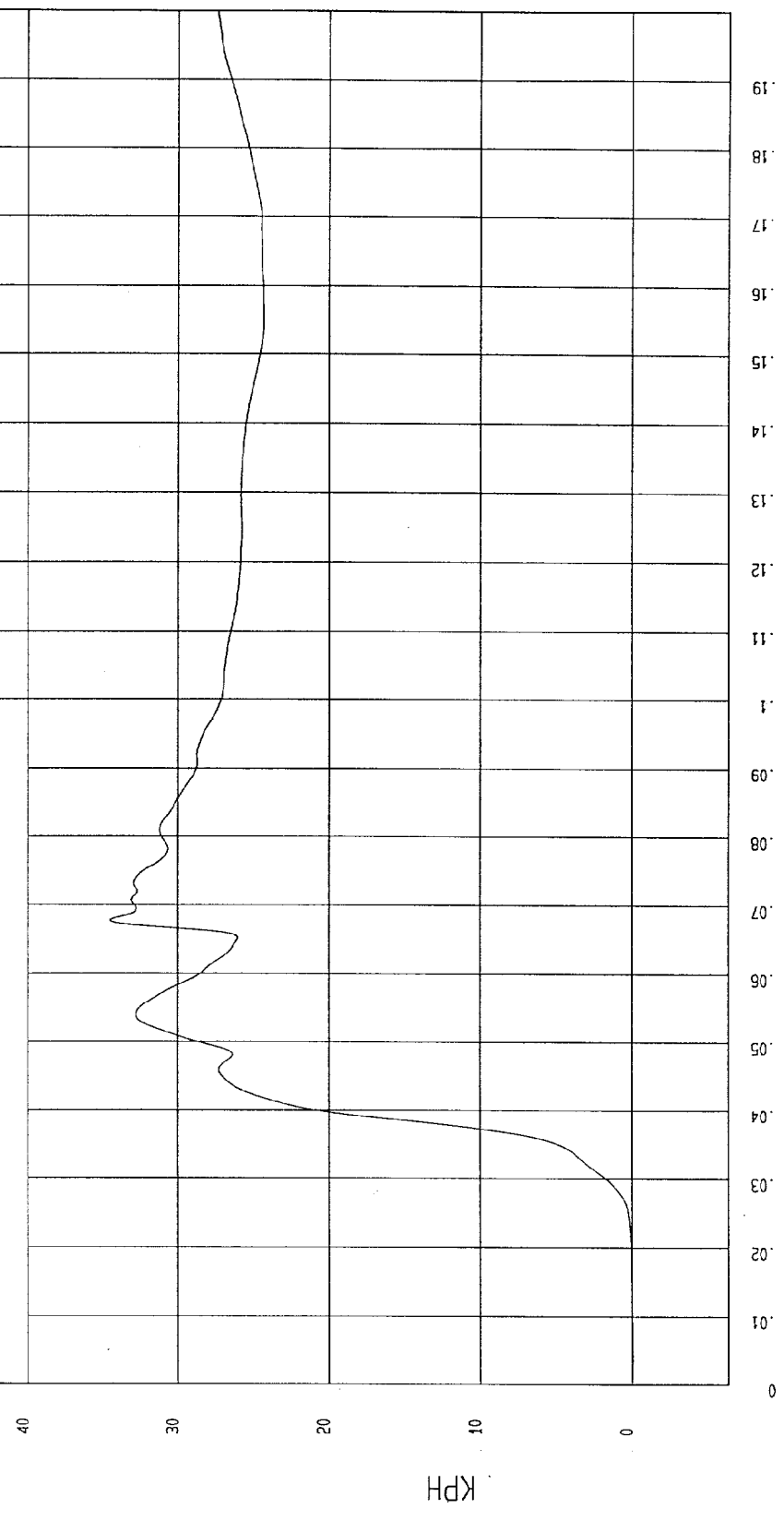
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -5.88E-02 KPH at 4 msec
Maximum = 34.58 KPH at 68 msec

DRIVER MID RIB Y VELOCITY

1 ——— 897118A1.V16 Filterclass (180)



MECA Research
11-07-1997 12:08

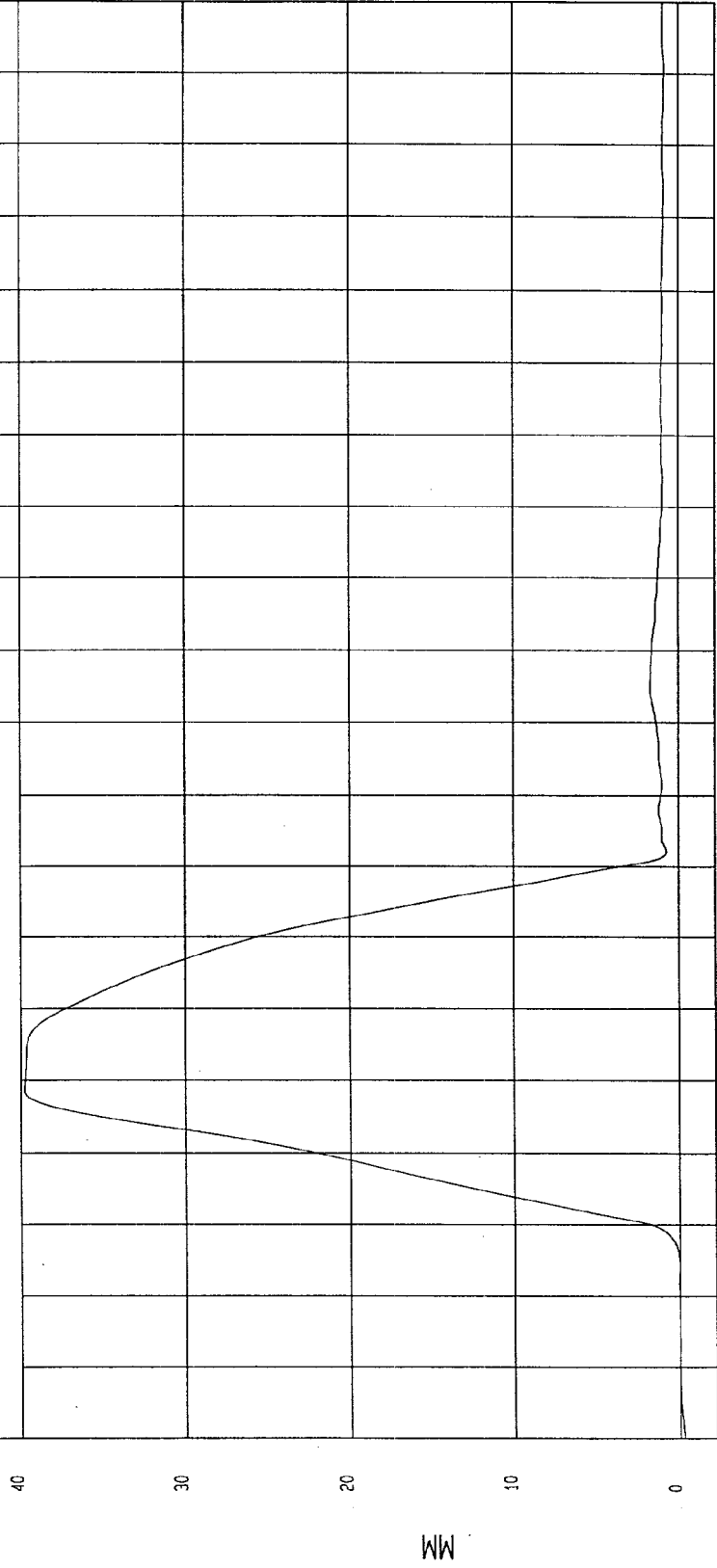
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -.40 MM at -3 msec
Maximum = 39.81 MM at 49 msec

DRIVER MID RIB Y DISPLACEMENT

1 ——— 89718DF.059 Filterclass (480)



MCA Research
11-07-1997 12.06

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

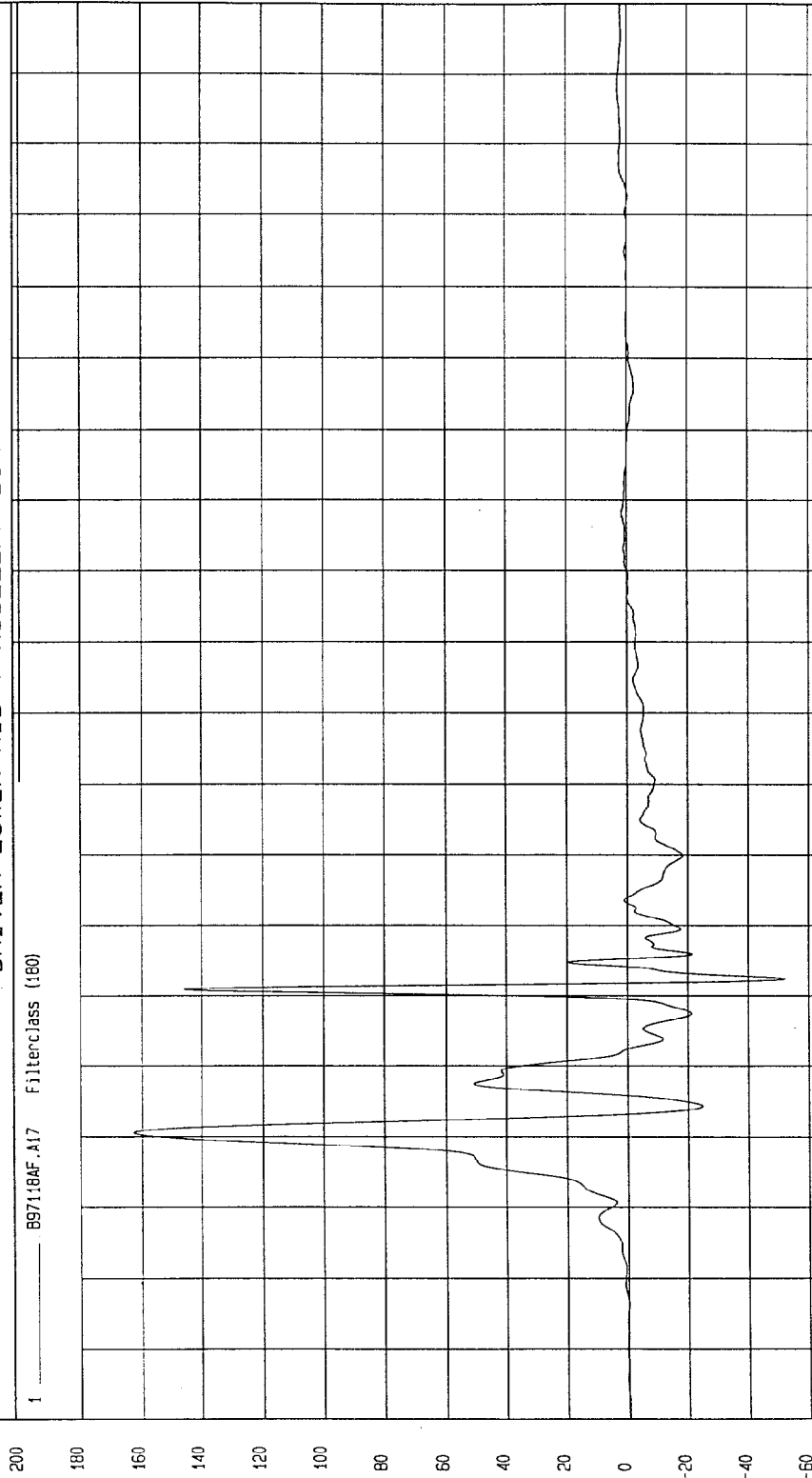
COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -51.85 G'S at 52 msec

Maximum = 162.83 G'S at 41 msec

DRIVER LOWER RIB Y ACCELERATION

1 897118AF.A17 FiltercJass (180)



TIME (SECONDS)

MCA Research
11-07-1997 12:06

G.S

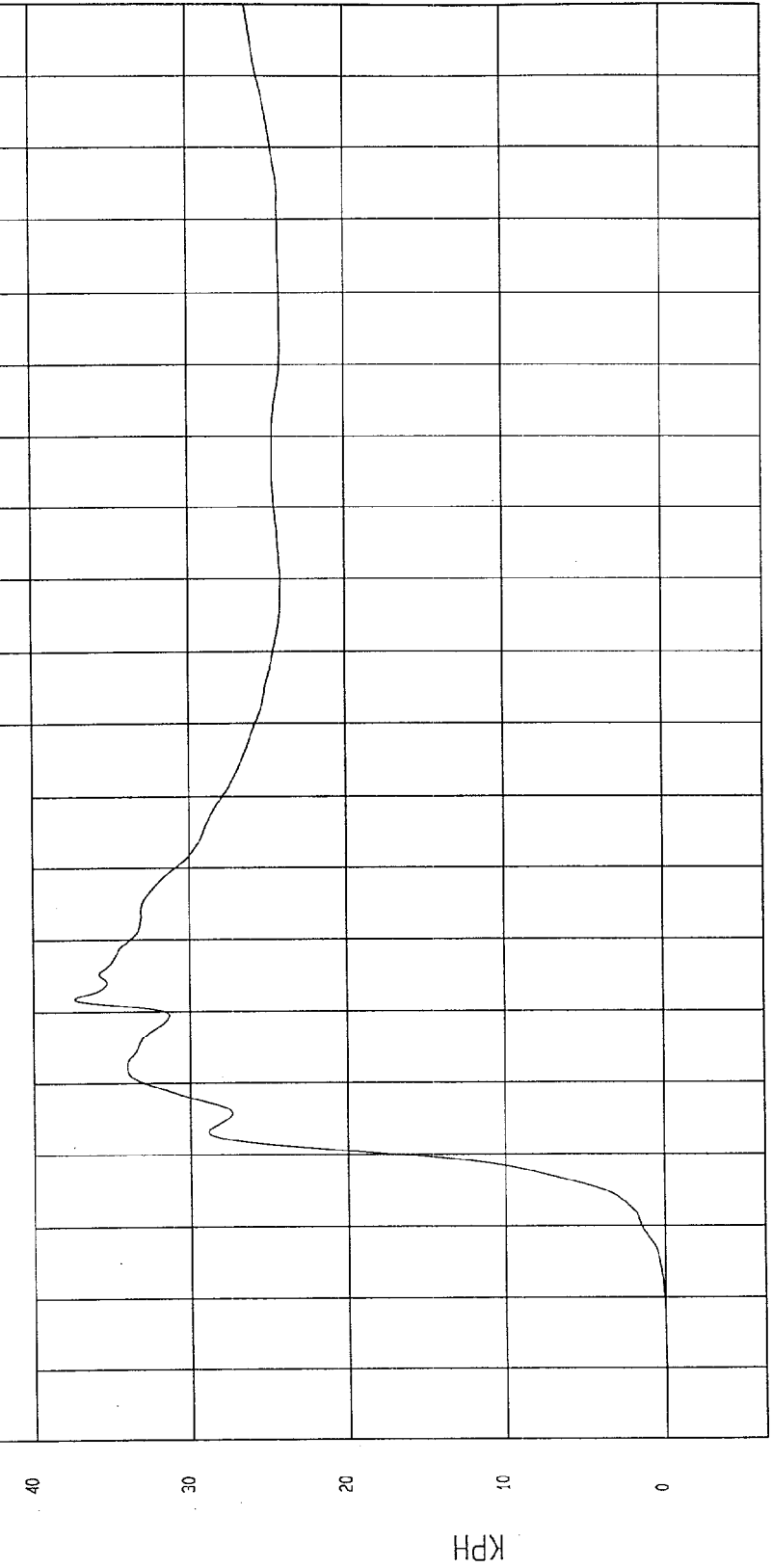
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -8.39E-02 KPH at 4 msec Maximum = 37.38 KPH at 62 msec

DRIVER LOWER RIB Y VELOCITY

1 897158A1.V17 Filterclass (180)



TIME Seconds
MVA Research
11-01-1997 12:09

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

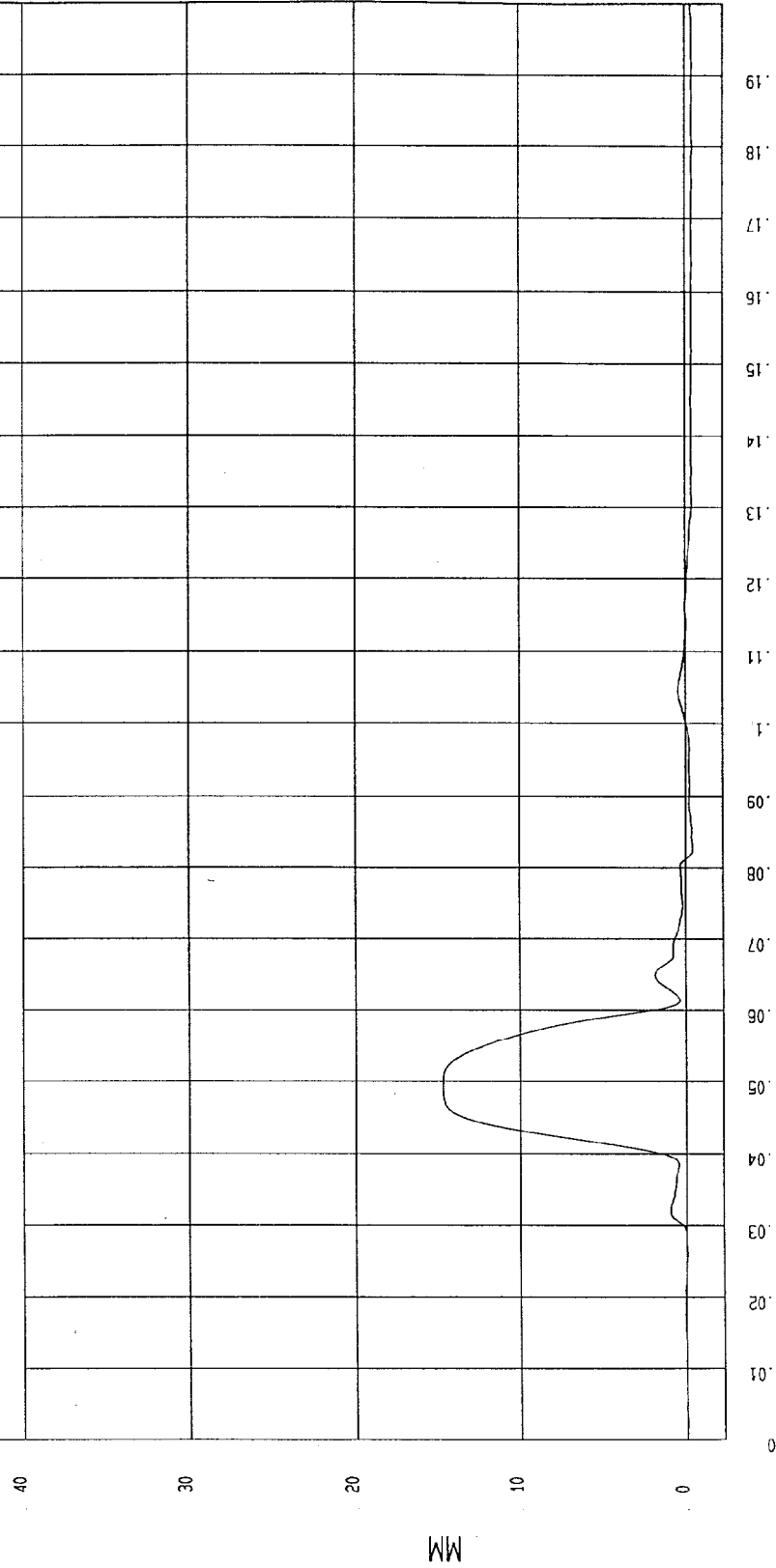
COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -.44 MM at 83 msec

Maximum = 14.69 MM at 49 msec

DRIVER LOWER RIB Y DISPLACEMENT

1 ——— 897180F.D60 Filterclass (180)



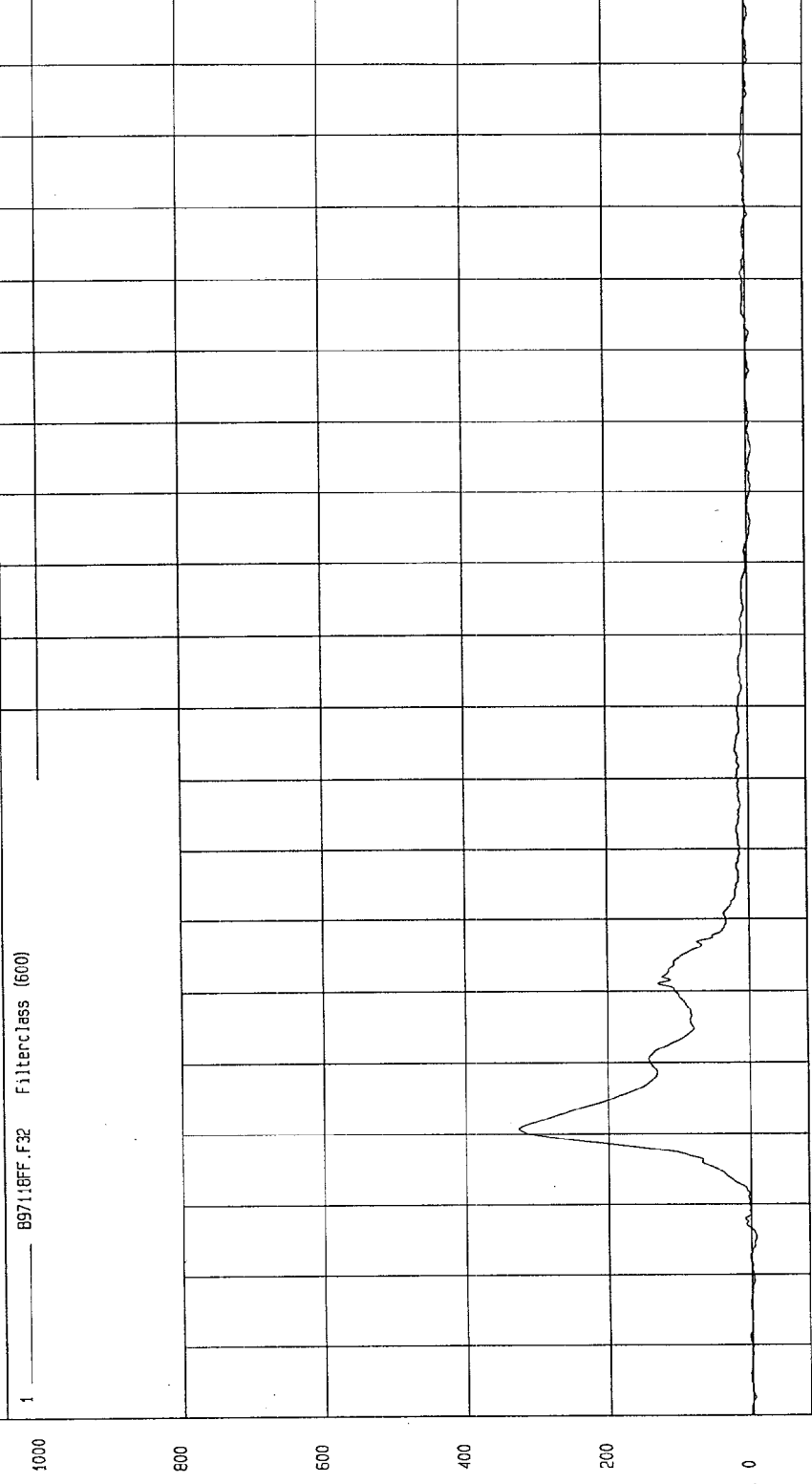
MCA Research
11-07-1997 12:06

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -7.44 N at 136 msec Maximum = 324.46 N at 41 msec

DRIVER FRONT ABDOMINAL FORCE



TIME (SECONDS)

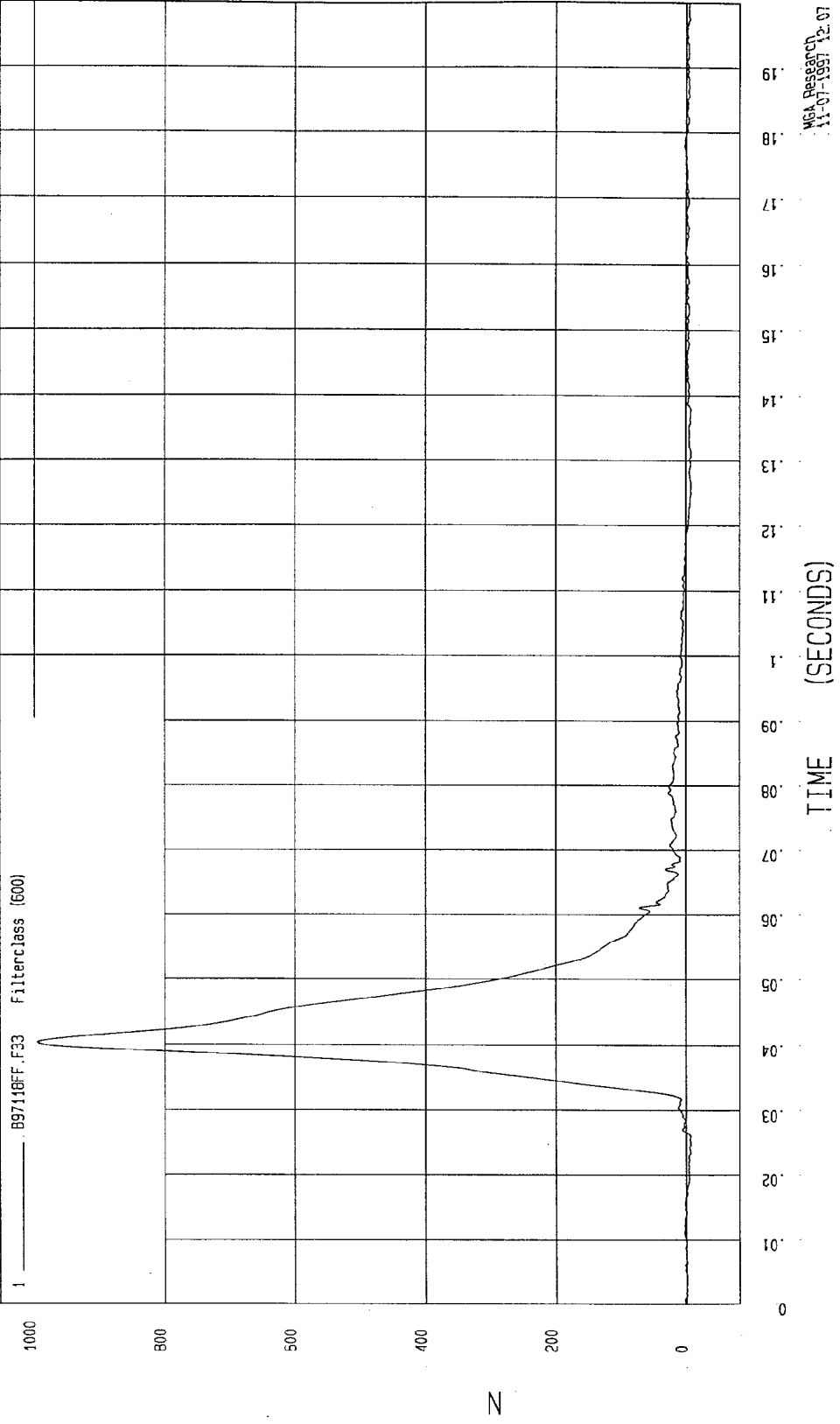
MSA Research
11-07-1997 12:07

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -7.52 N at 131 msec
Maximum = 994.81 N at 40 msec

DRIVER MID ABDOMINAL FORCE



WCA Research
11-07-1997 12:07

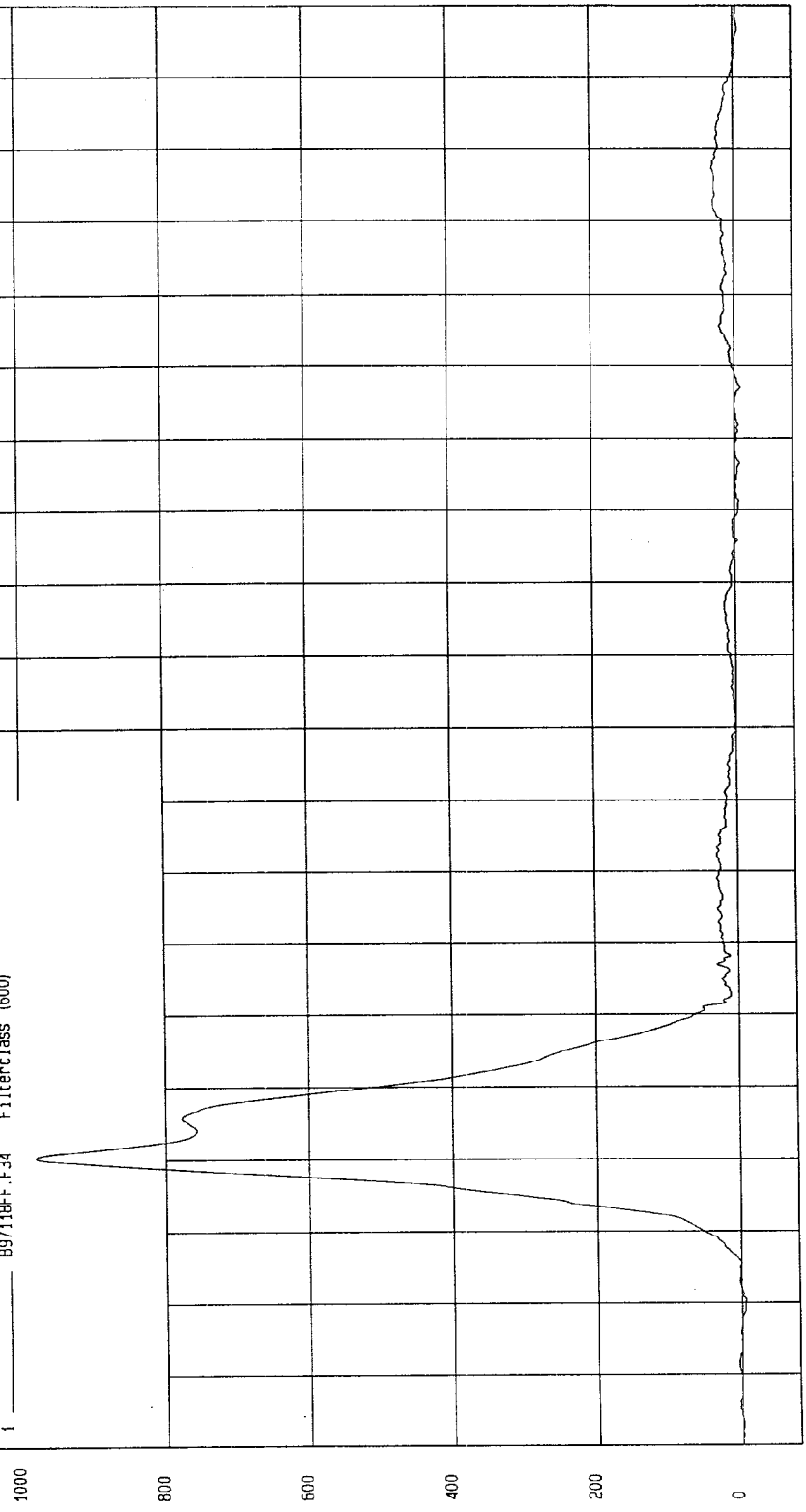
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -8.73 N at 147 msec Maximum = 980.50 N at 40 msec

DRIVER REAR ABDOMINAL FORCE

1 B97118FF.F34 Filterclass (600)



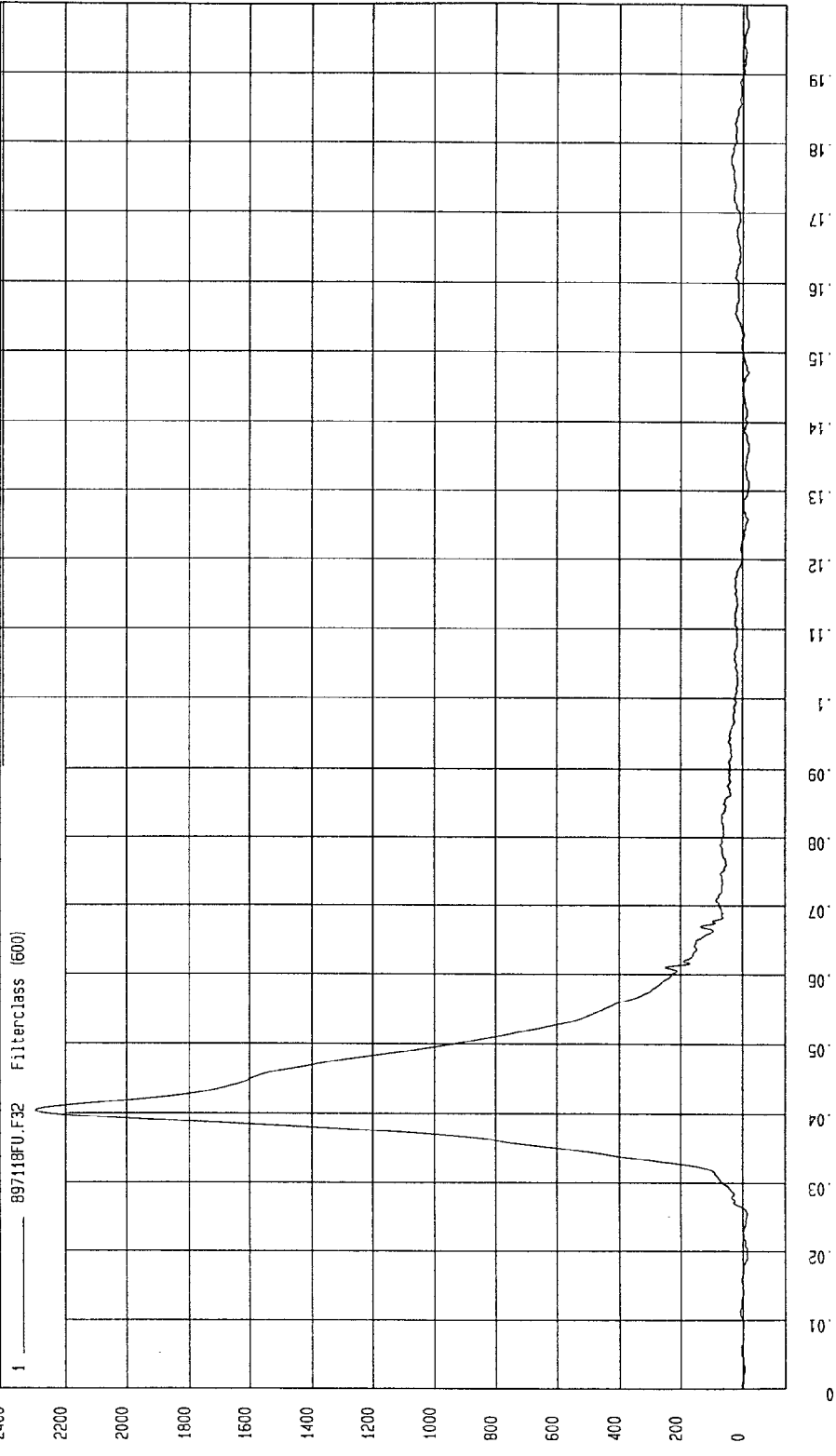
TIME (SECONDS) WEA Research 11-01-1997 12:07

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -19.46 N at 136 msec
Maximum = 2295.40 N at 40 msec

SUM OF DRIVER ABDOMINAL FORCES



ME Research
11-07-1997 12:07

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

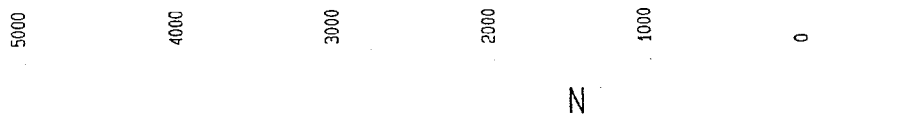
COMPONENT: 1997 FORD MUSTANG

Maximum = 4827.31 N at 38 msec

Minimum = -80.87 N at 181 msec

DRIVER PUBIC SYMPHYSIS FORCE

1 — 897138F.F35 Filterclass (600)



MSA Research
11-01-1997 12.07

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

TEST: EU 96/27/EC SIDE IMPACT

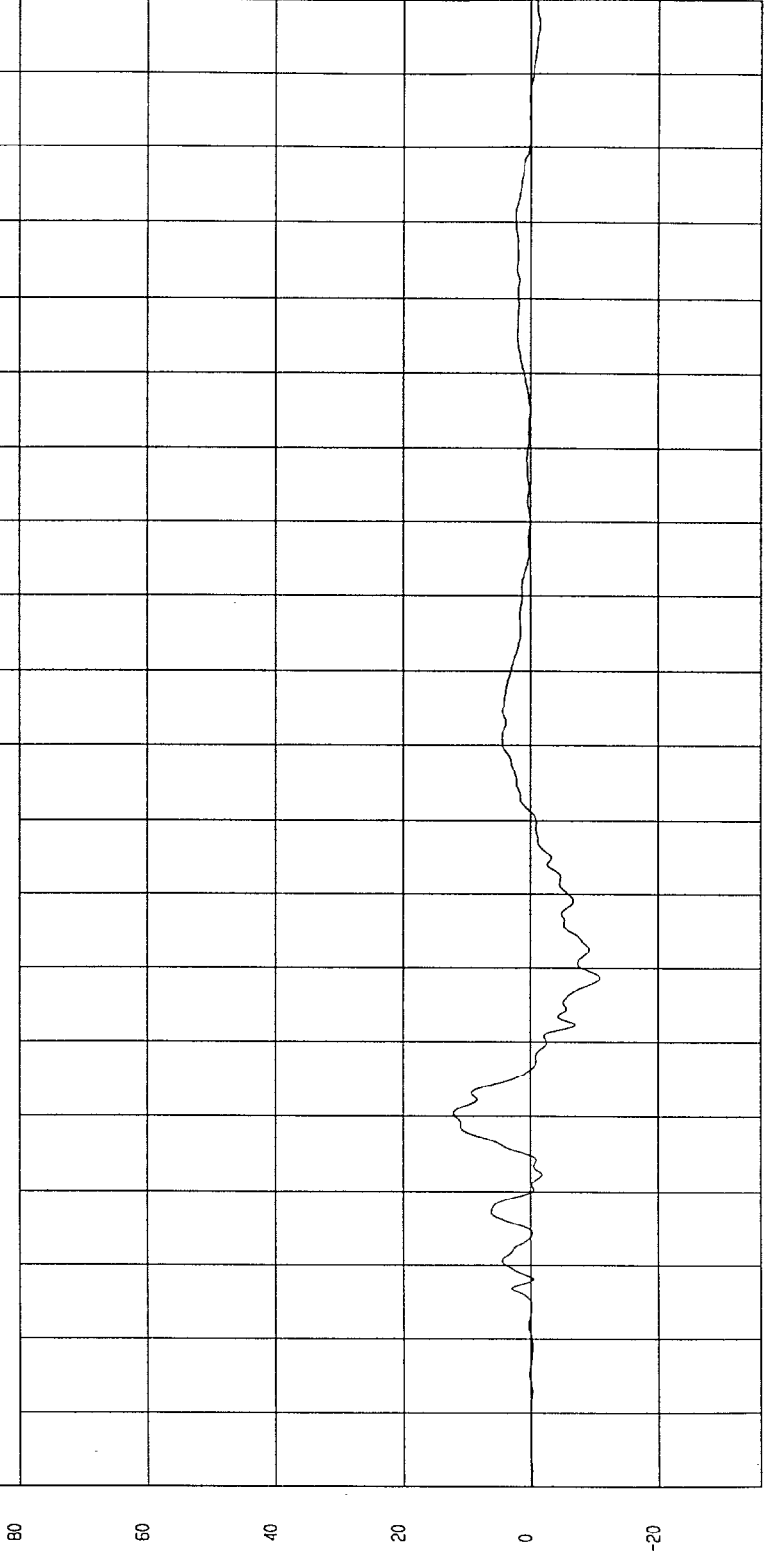
COMPONENT: 1997 FORD MUSTANG

Maximum = 12.06 G'S at 50 msec

Minimum = -10.84 G'S at 69 msec

DRIVER LOWER SPINE X ACCELERATION

1 ——— 89718AF.A18 Filterclass (180)



MCA Research
11-07-1997 12.09

TIME (SECONDS)

G'S

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

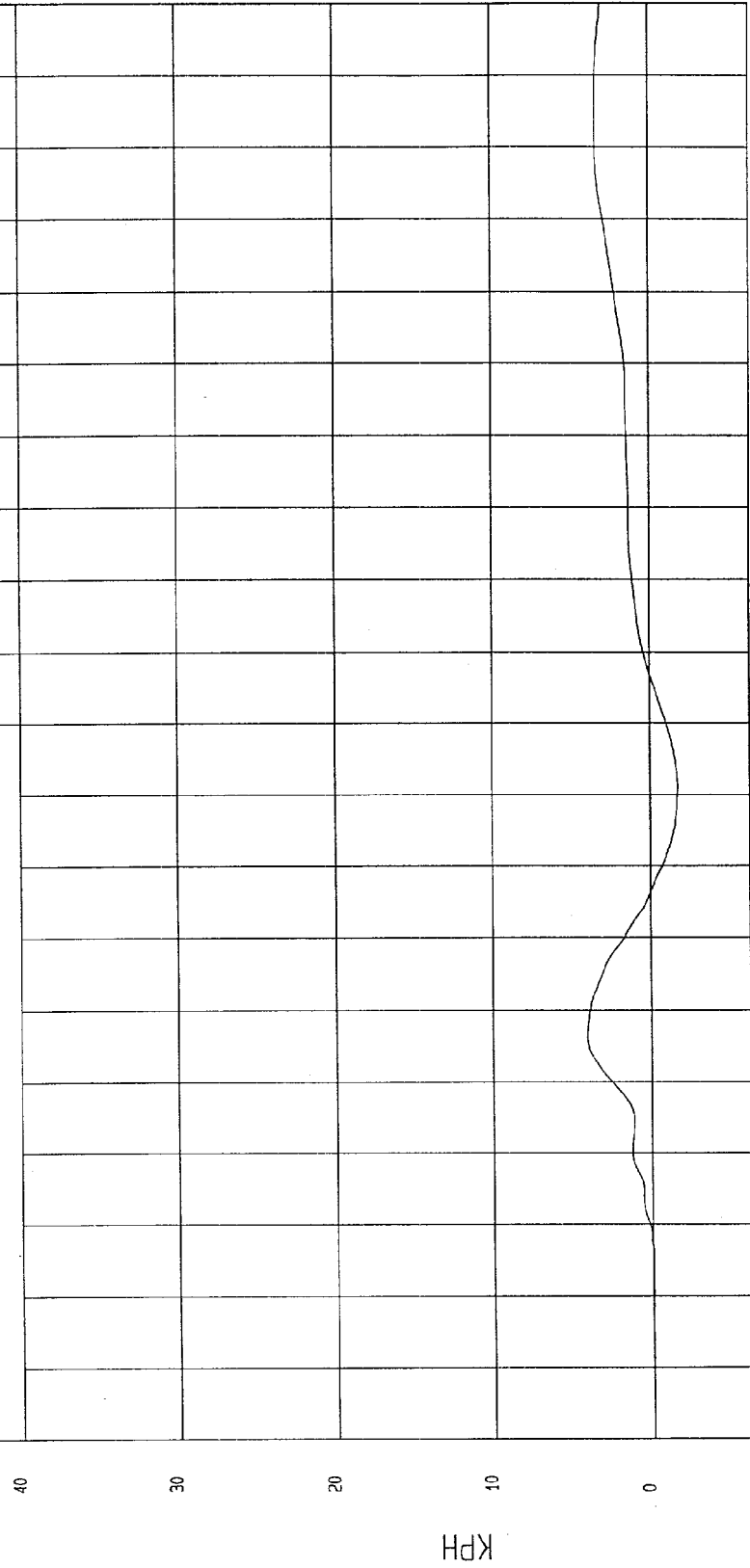
COMPONENT: 1997 FORD MUSTANG

Minimum = -1.74 KPH at 91 msec

Maximum = 4.04 KPH at 56 msec

DRIVER LOWER SPINE X VELOCITY

1 _____ 89718A1.V18 Filterclass (180)



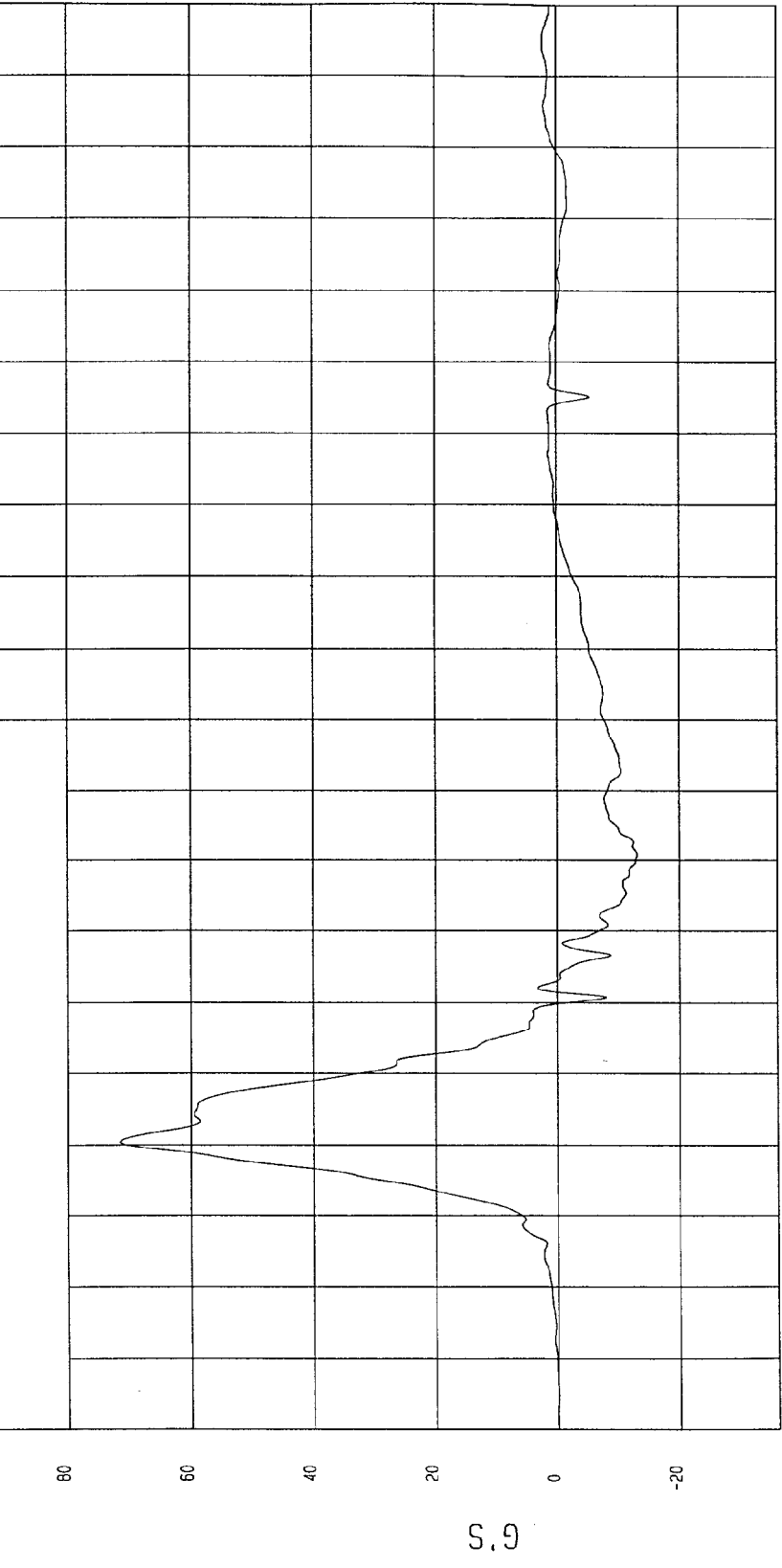
MGA Research
11-07-1997 12:09

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997
COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -13.47 G'S at 81 msec Maximum = 71.37 G'S at 40 msec

DRIVER LOWER SPINE Y ACCELERATION

1 .89718AF.A:9 Filterclass (180)



TIME (SECONDS) MGA Research 11-07-1997 12:09

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

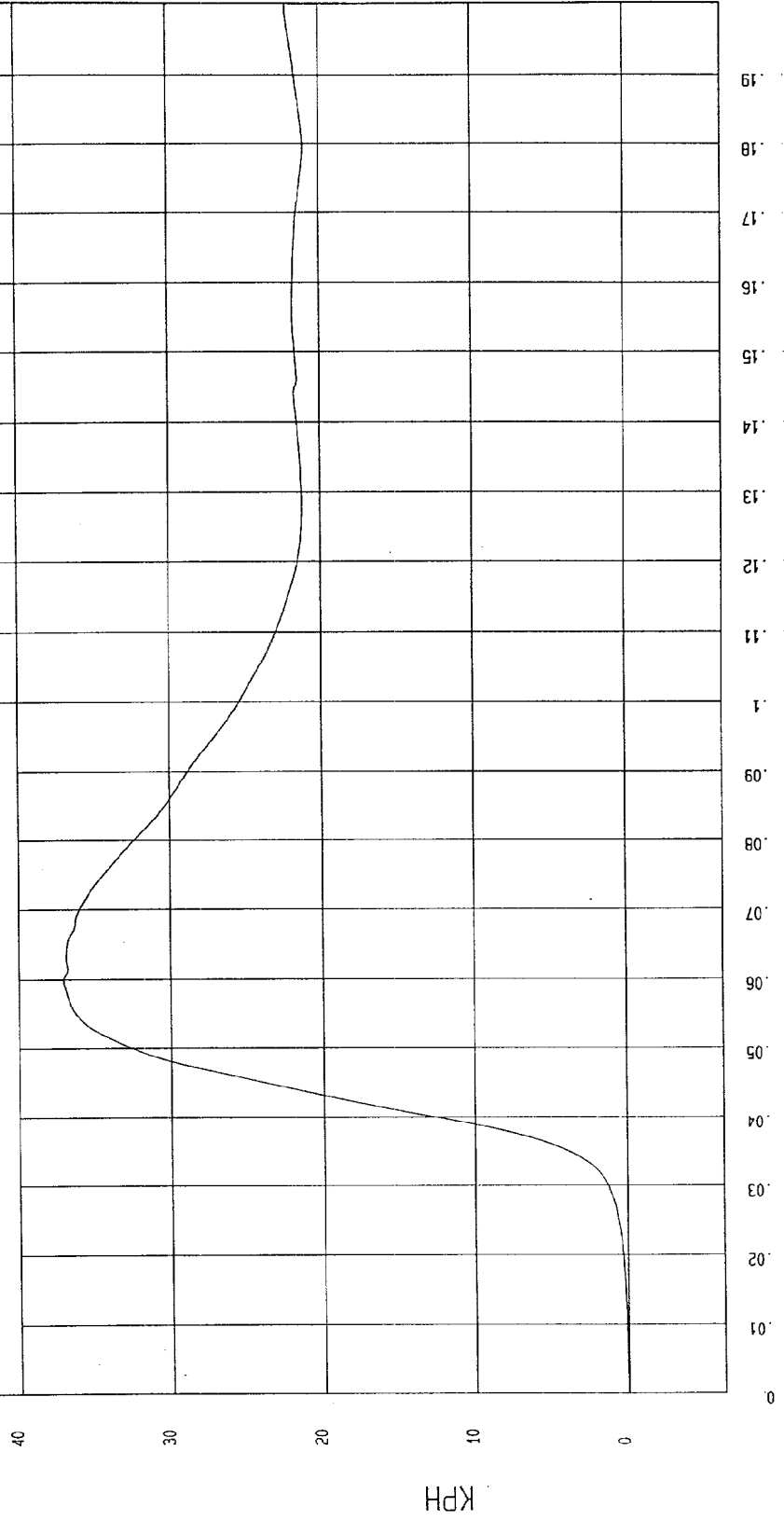
COMPONENT: 1997 FORD MUSTANG

Maximum = 37.05 KPH at 60 msec

Minimum = -1.78E-02 KPH at -11 msec

DRIVER LOWER SPINE Y VELOCITY

1 ——— .897118A1.V19 Filterclass (180)



WGA Research
11-07-1997 12.09

TIME Seconds

KPH

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

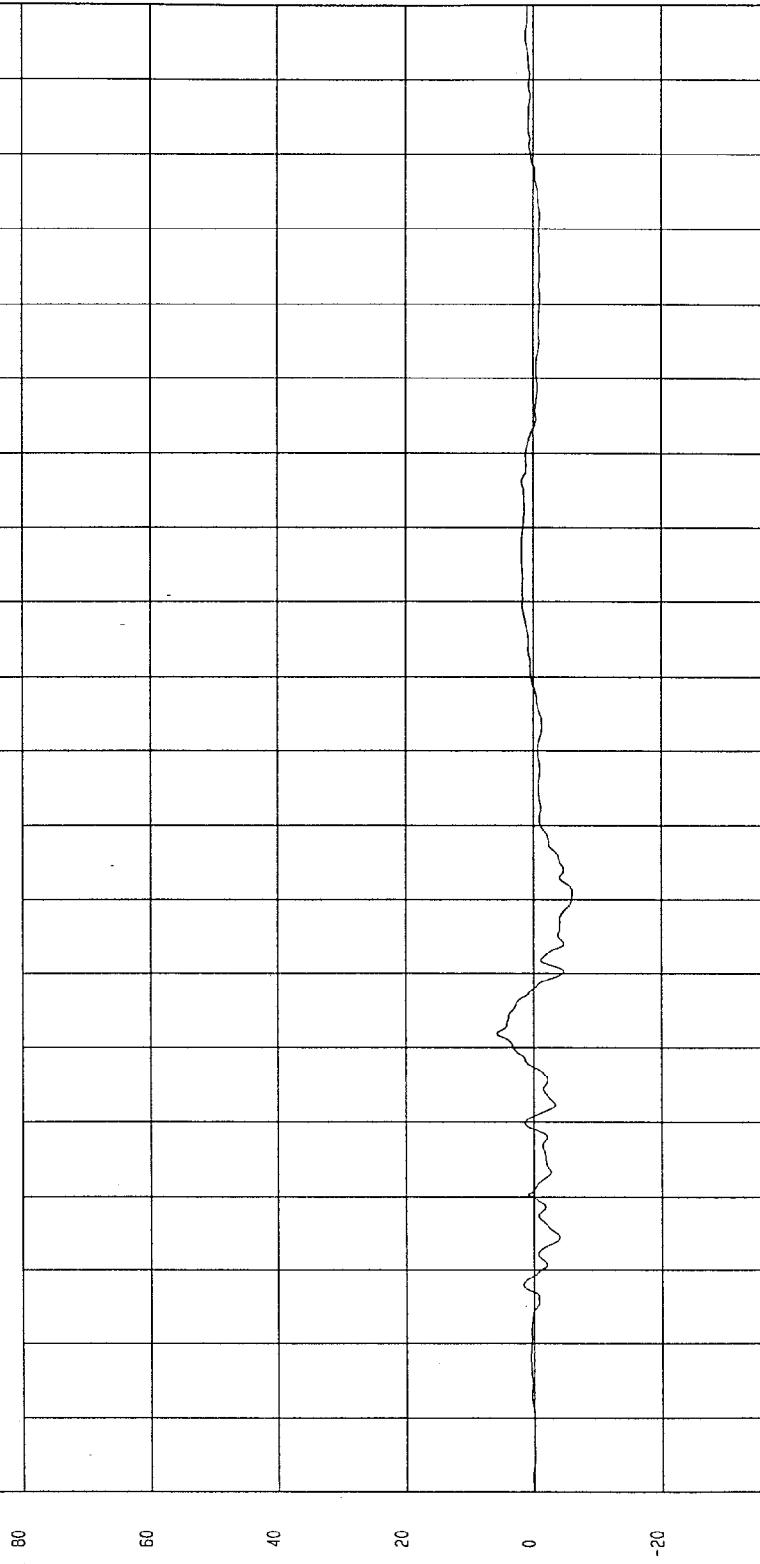
COMPONENT: 1997 FORD MUSTANG

Maximum = 5.67 G'S at 62 msec

Minimum = -6.19 G'S at 81 msec

DRIVER LOWER SPINE Z ACCELERATION

1 ——— .897118AF.A20 Filterclass (180)



MCA Research
11-01-1997 12:10

TIME (SECONDS)

G.S

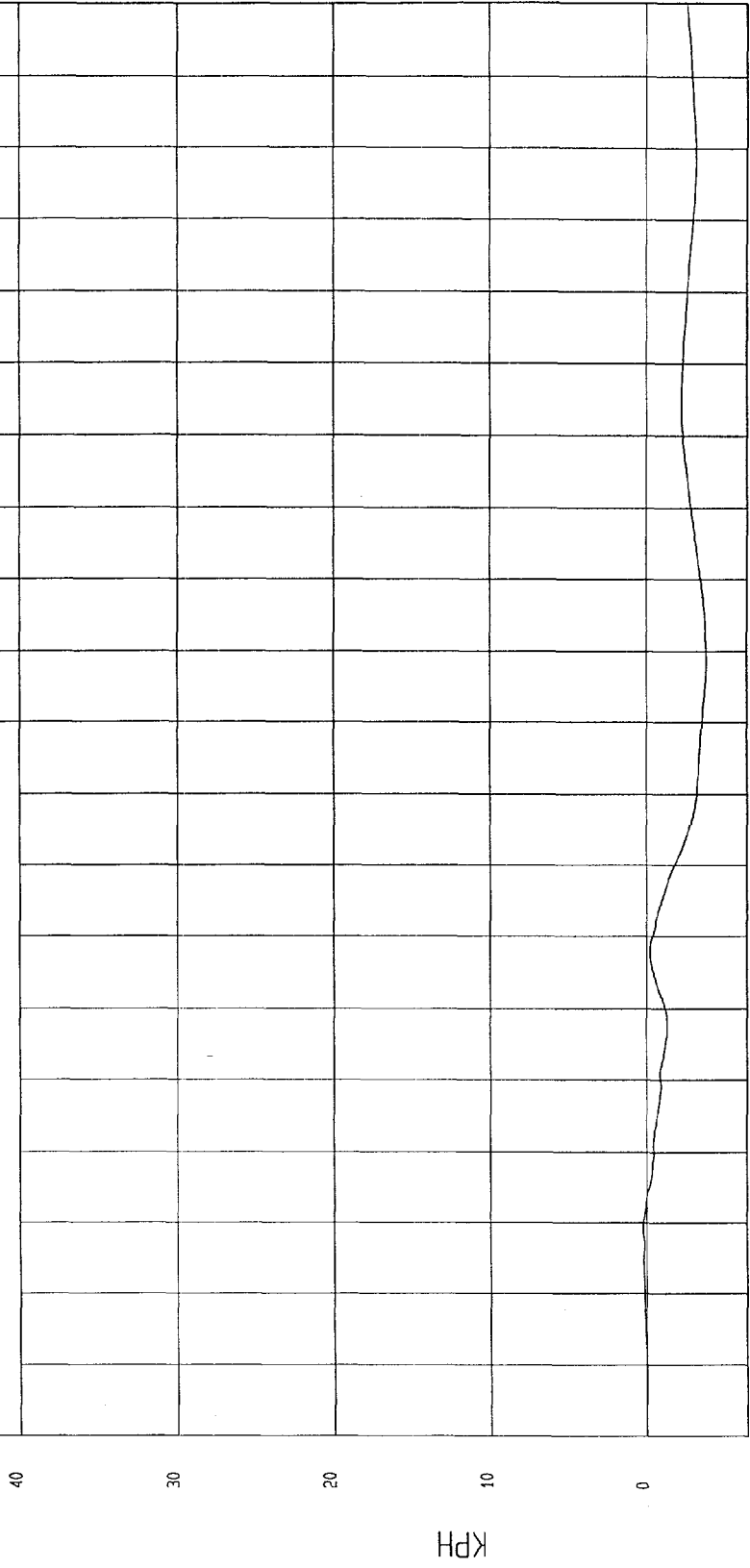
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -3.76 KPH at 109 msec
Maximum = .22 KPH at 29 msec

DRIVER LOWER SPINE Z VELOCITY

1 ——— B97118A1.V20 Filterclass (480)



MCA Research
11-07-1997 12:10

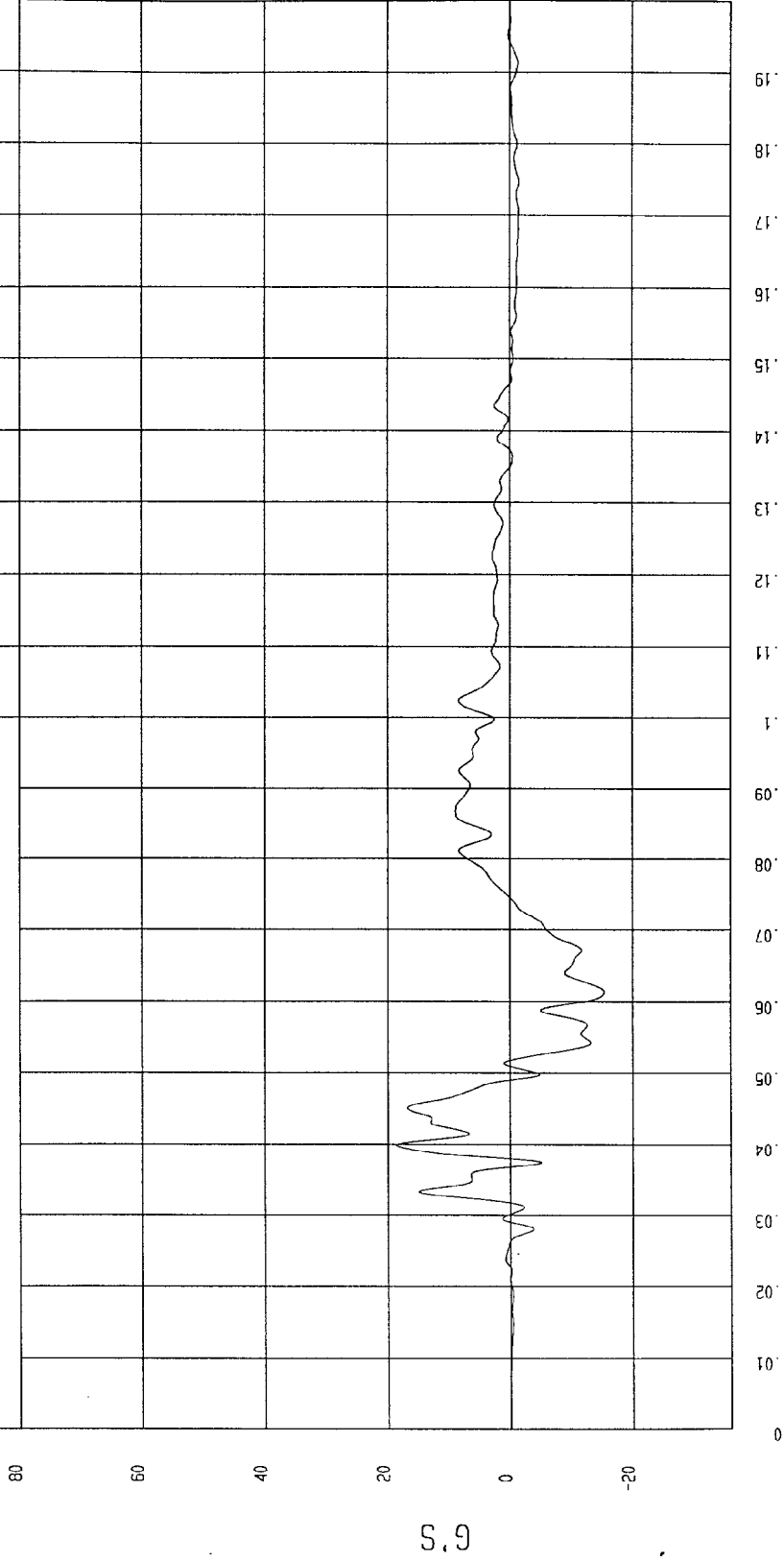
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -15.35 G'S at 61 msec
Maximum = 18.52 G'S at 40 msec

DRIVER PELVIS X ACCELERATION

1 _____ 897119AF.A45 Filterclass (180)



MCA Research
11-07-1997 12.10

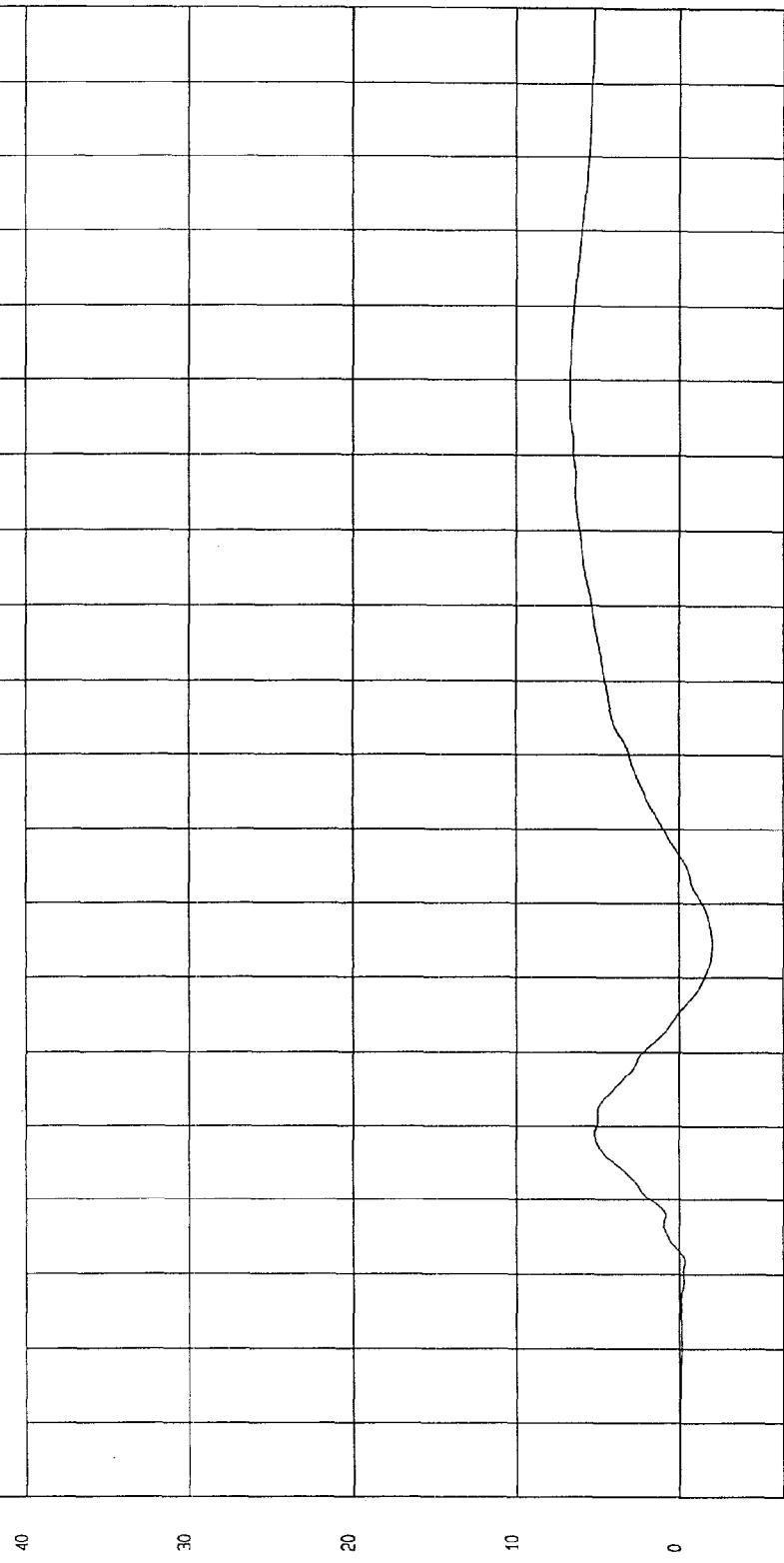
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -2.05 KPH at 74 msec Maximum = 6.70 KPH at 146 msec

DRIVER PELVIS X VELOCITY

1 ——— 697118A1.V45 filterclass (180)



MSA Research
11-07-1997 12.10

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

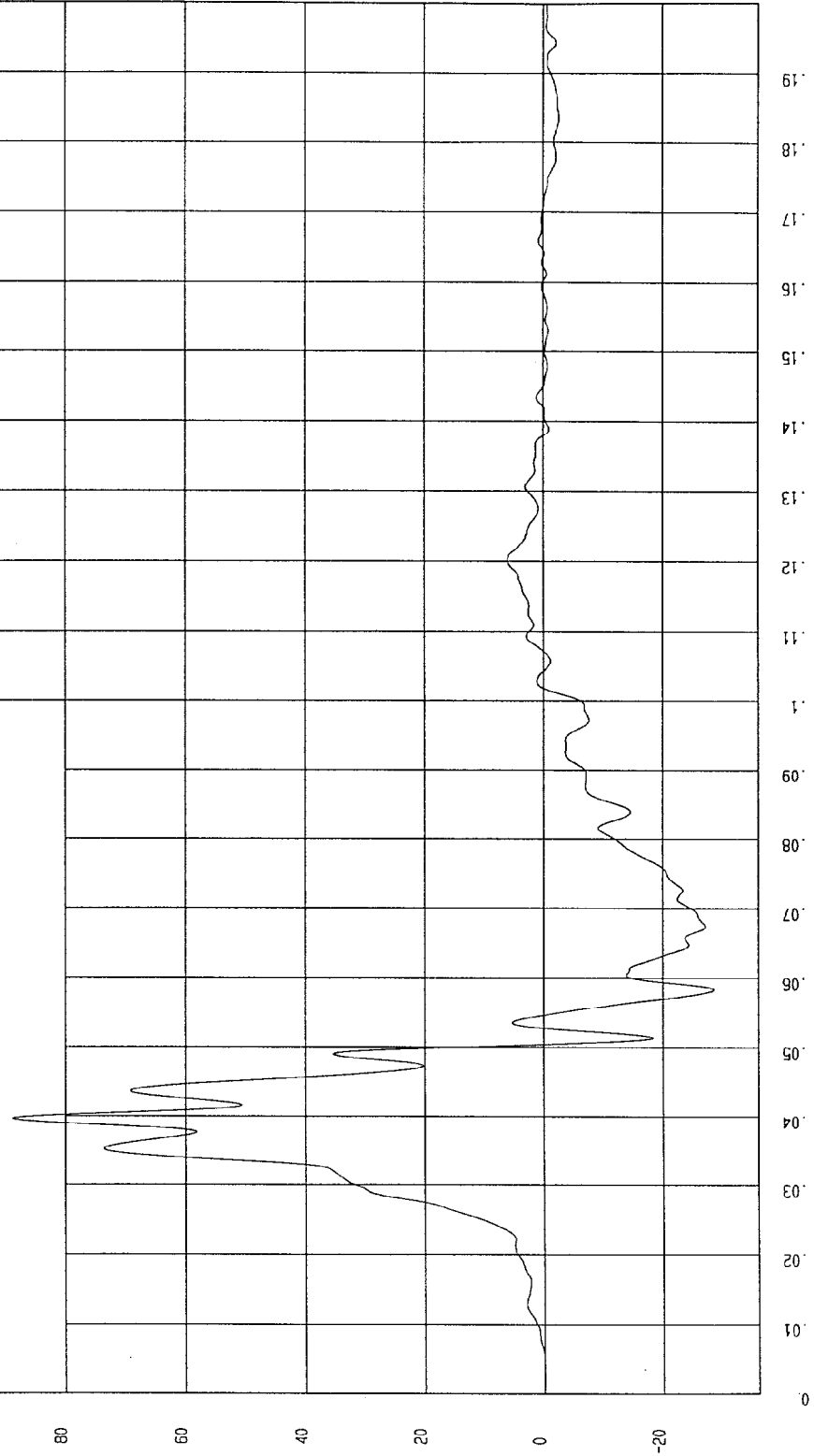
COMPONENT: 1997 FORD MUSTANG

Maximum = 88.95 G'S at 40 msec

Minimum = -28.56 G'S at 58 msec

DRIVER PELVIS Y ACCELERATION

1 897115AF.A46 Filterclass (180)



M&A Research
11-07-1997 12:10

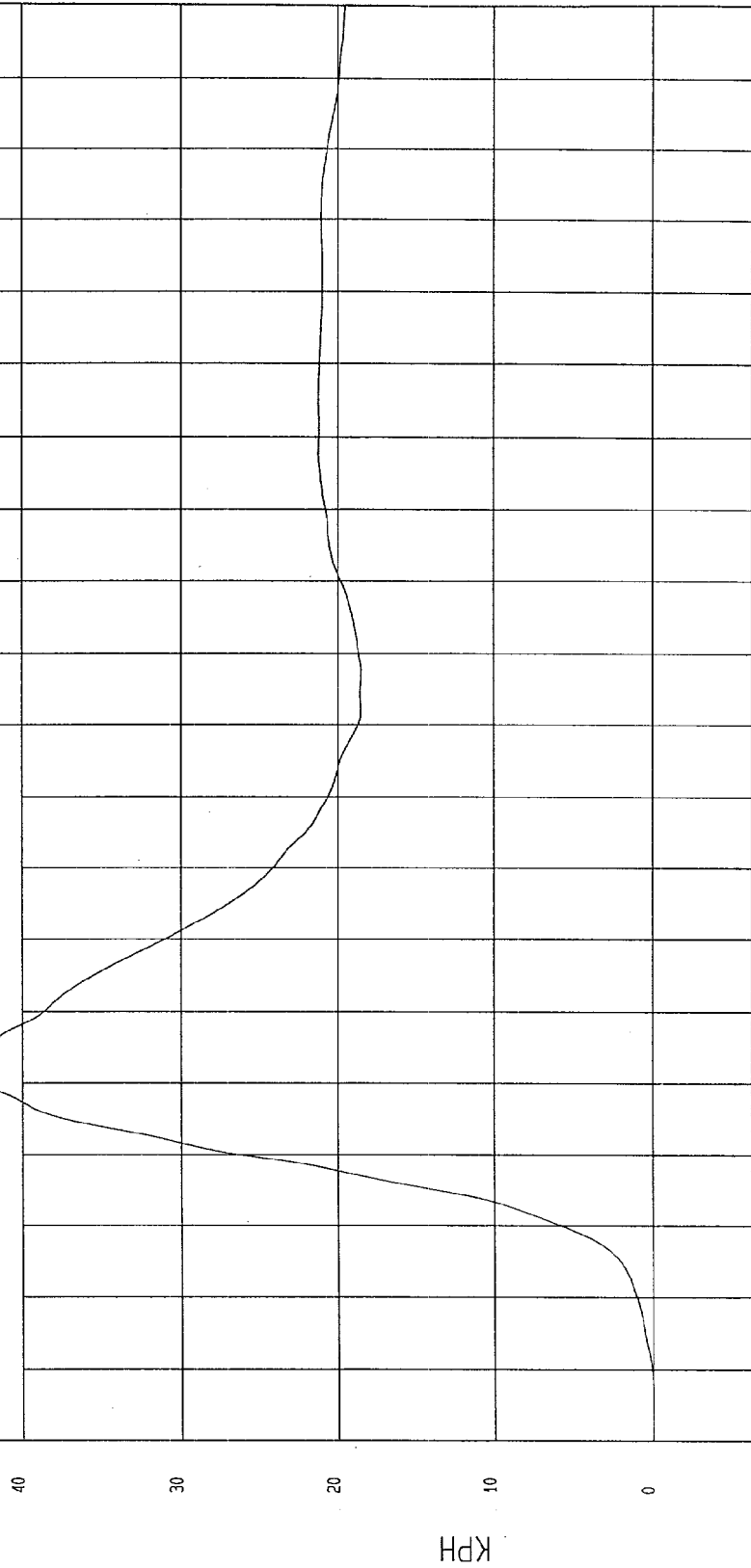
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -5.13E-03 KPH at -13 msec
Maximum = 42.69 KPH at 50 msec

DRIVER PELVIS Y VELOCITY

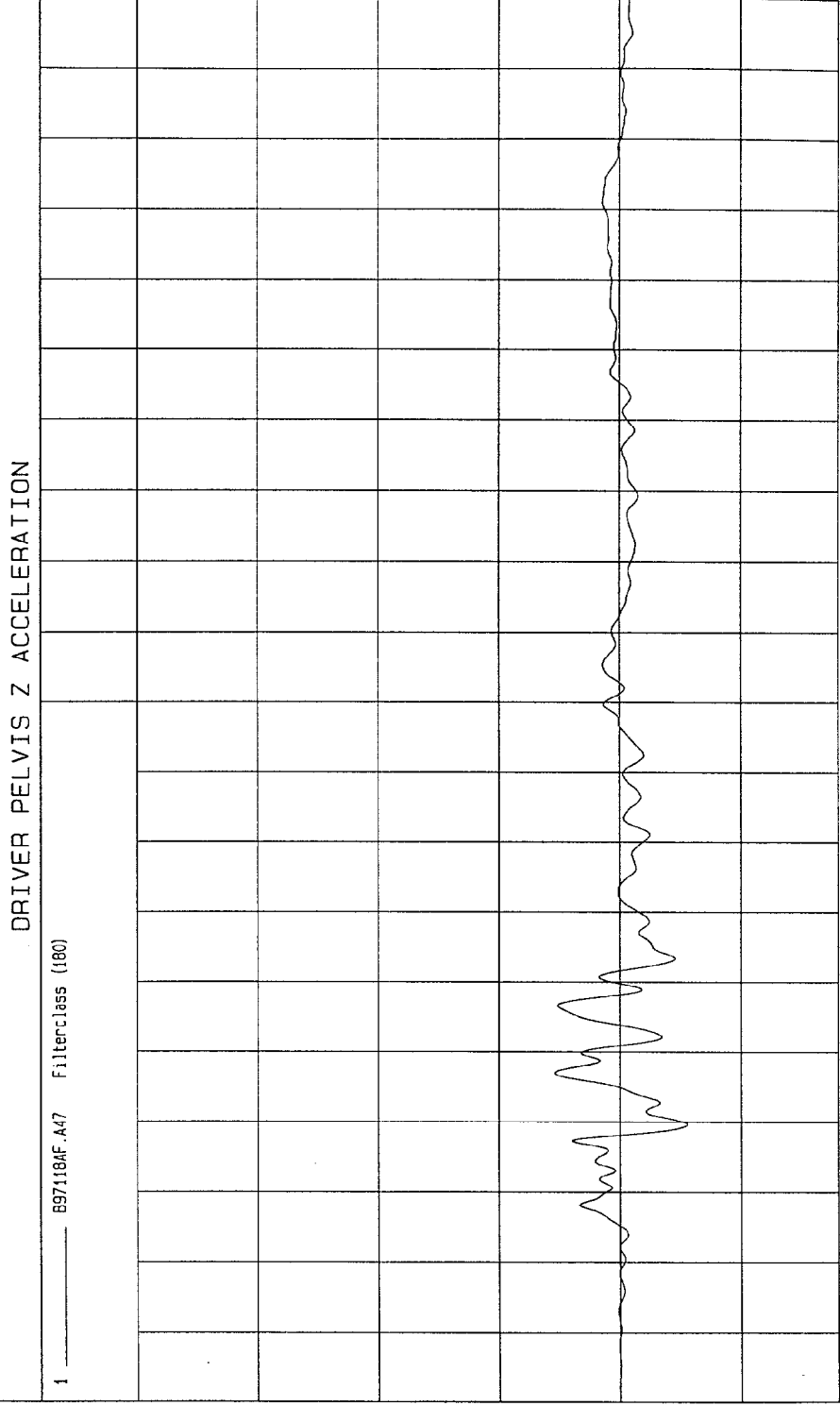
1 89718A1.V46 Filterclass (180)



TIME Seconds
MGA Research
11-01-1997 12:10

TEST: EU 96/27/EC SIDE IMPACT
TEST DATE: 10-09-1997
COMPONENT: 1997 FORD MUSTANG
Speed: 31.24 MPH 50.3 KPH

Minimum = -11.08 G'S at 40 msec
Maximum = 10.74 G'S at 47 msec



TIME (SECONDS)

MGA Research Co.
11-07-1997 12:10

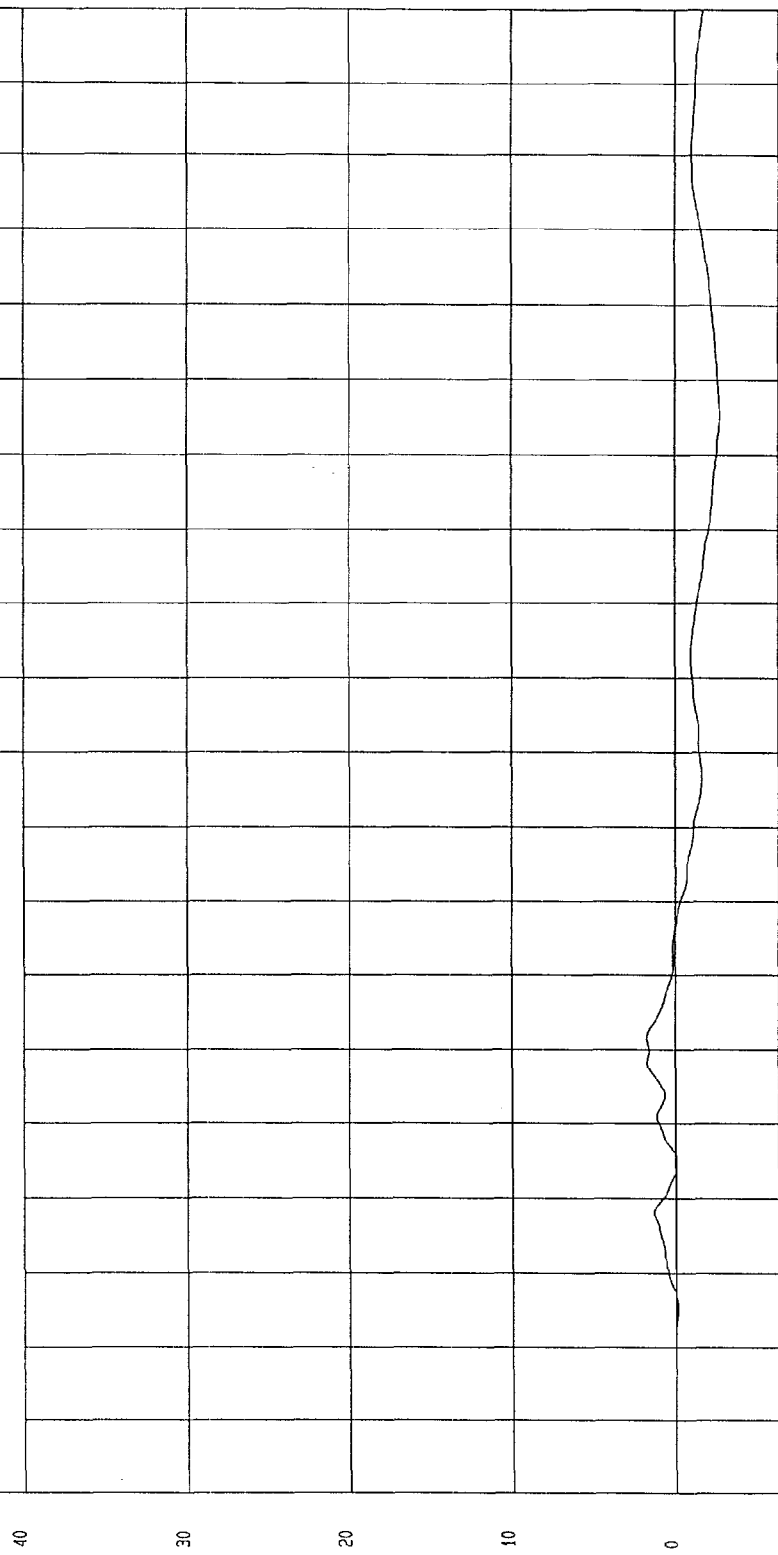
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -2.78 KPH at 145 msec
Maximum = 1.72 KPH at 62 msec

DRIVER PELVIS Z VELOCITY

1 897118A1.V47 Filterclass (180)



WCA Research
11-07-1997 12:10

TIME Seconds

KPH

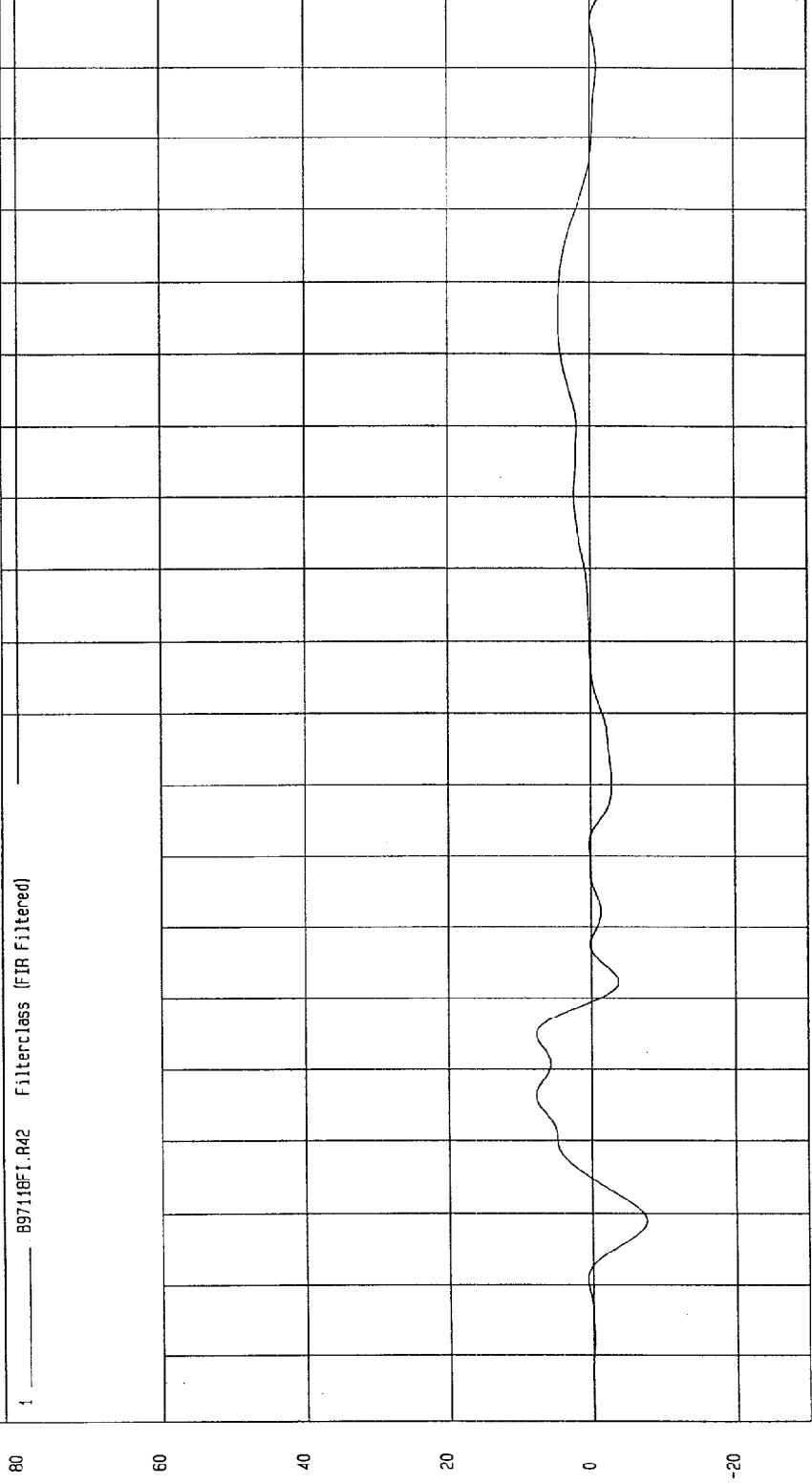
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -7.50 G'S at 29 msec Maximum = 7.72 G'S at 46 msec

DRIVER UPPER SPINE X ACCELERATION

1 897110F1.R42 Filterclass (FIR Filtered)



NSA Research
04-12-1998 14:10

TIME (SECONDS)

G.S

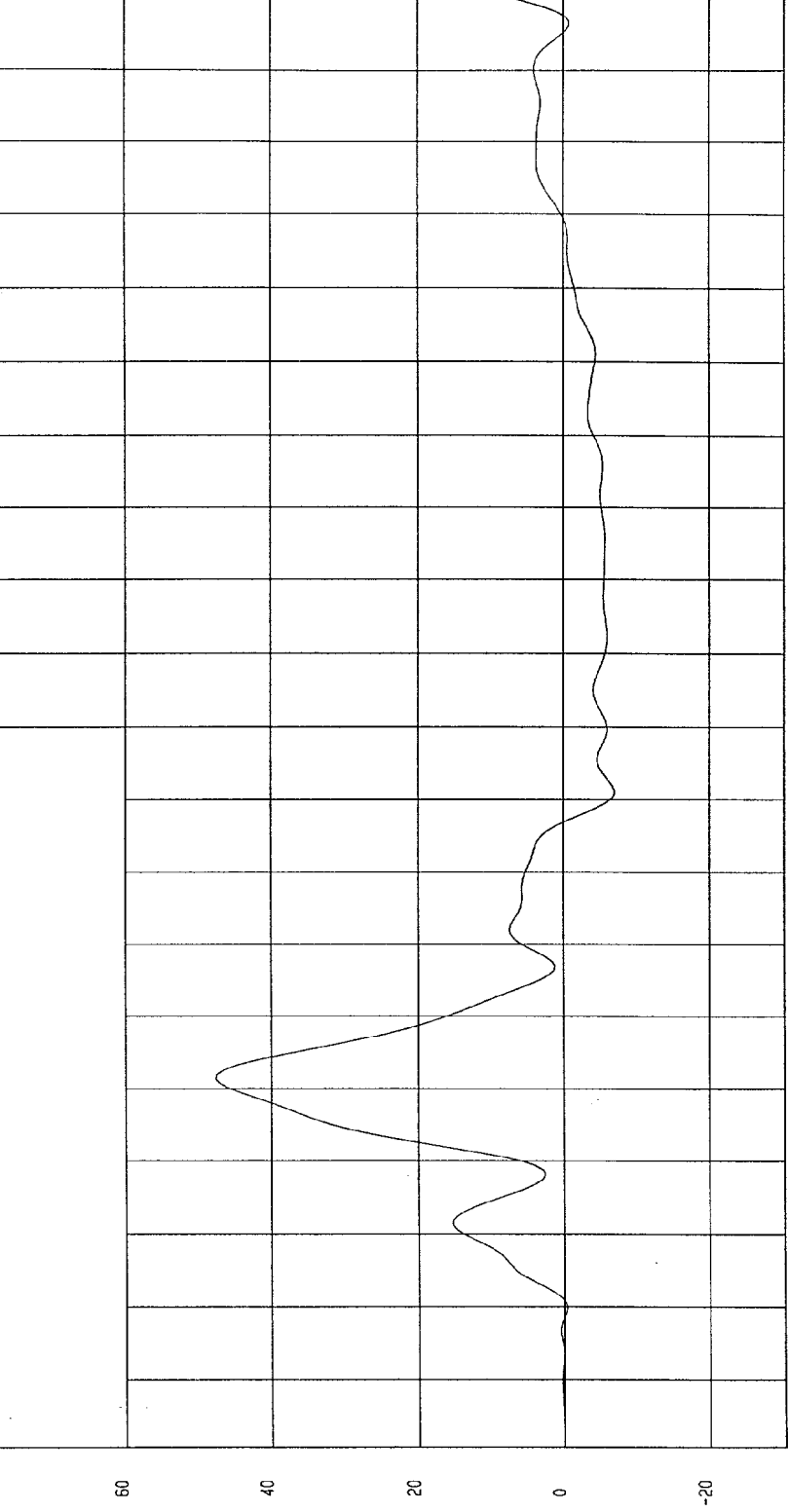
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -6.96 G'S at 91 msec Maximum = 47.45 G'S at 51 msec

DRIVER UPPER SPINE Y ACCELERATION

1 897116FI.R43 FilterClass (FIR Filtered)



MCA Research
04-12-1998 14:10

TIME (SECONDS)

G'S

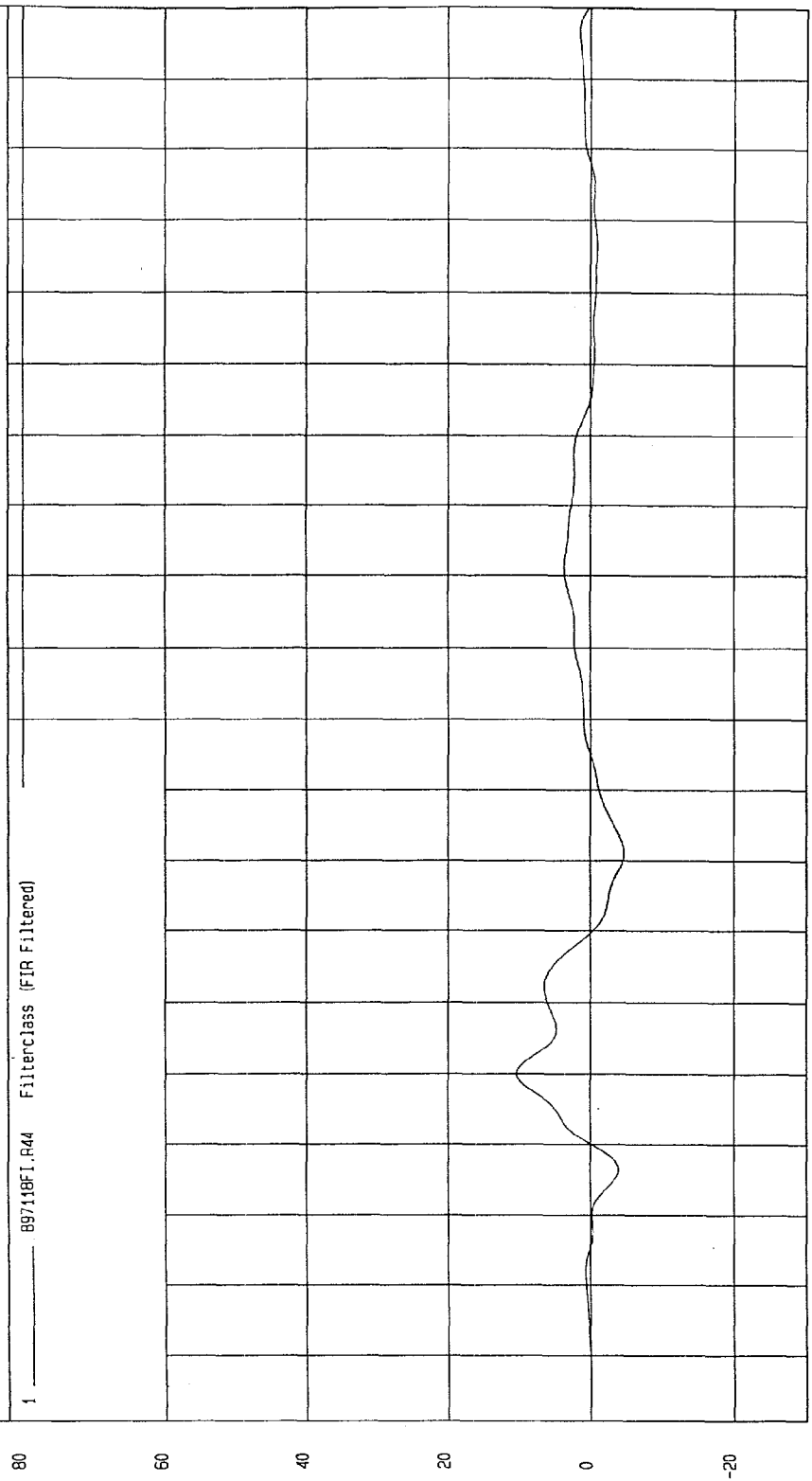
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -4.67 G'S at 61 msec Maximum = 10.39 G'S at 50 msec

DRIVER UPPER SPINE Z ACCELERATION

1 897118F1.R44 FilterClass (FIR Filtered)



NGA Research
04-12-1998 14: 10

TIME (SECONDS)

G.S

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

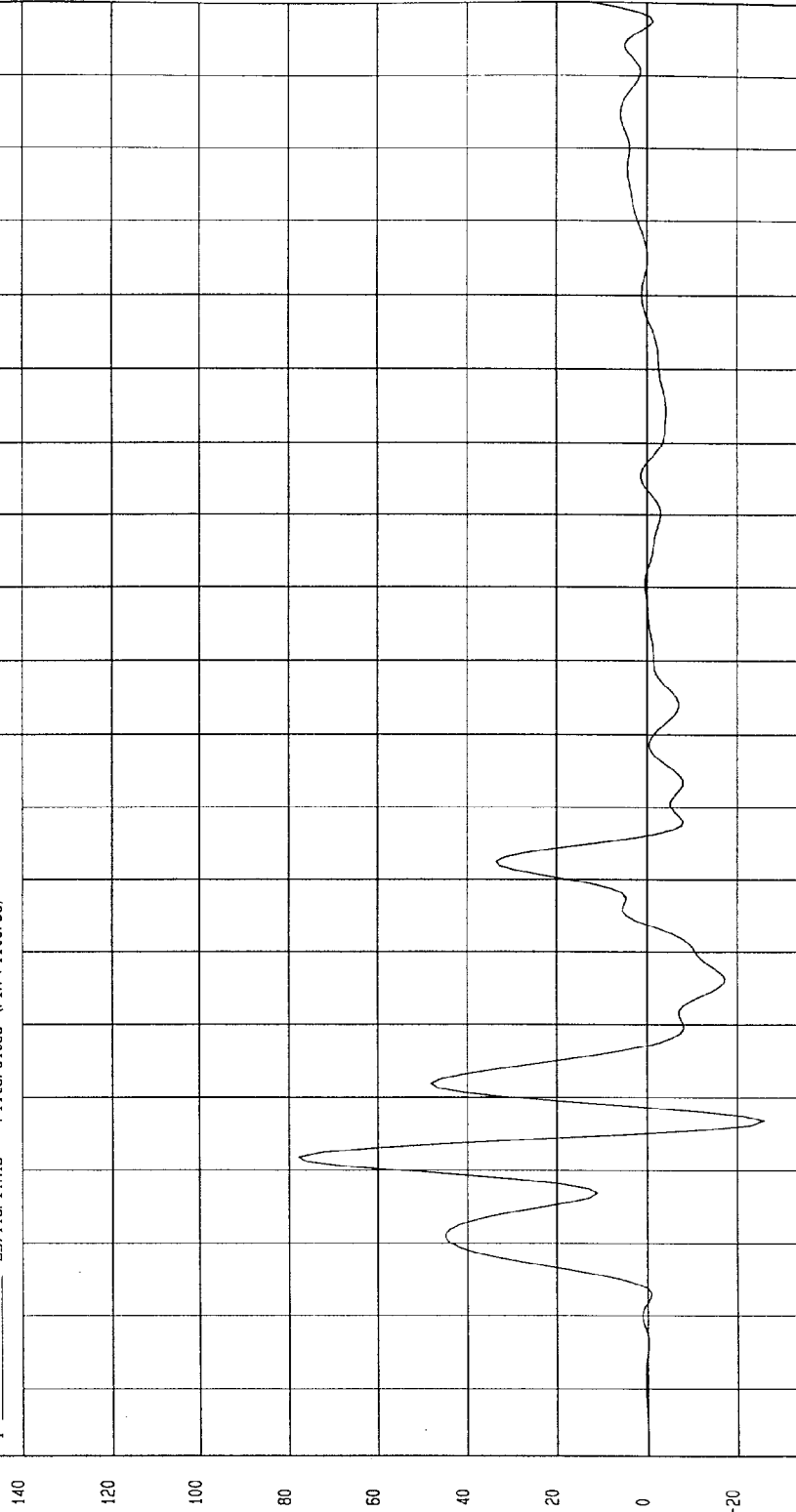
COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -25.80 G'S at 47 msec

Maximum = 77.83 G'S at 42 msec

DRIVER UPPER RIB Y ACCELERATION

1 897118F1.R15 FilterClass (FIR Filtered)



MSA Research
04-12-1998 14.10

TIME (SECONDS)

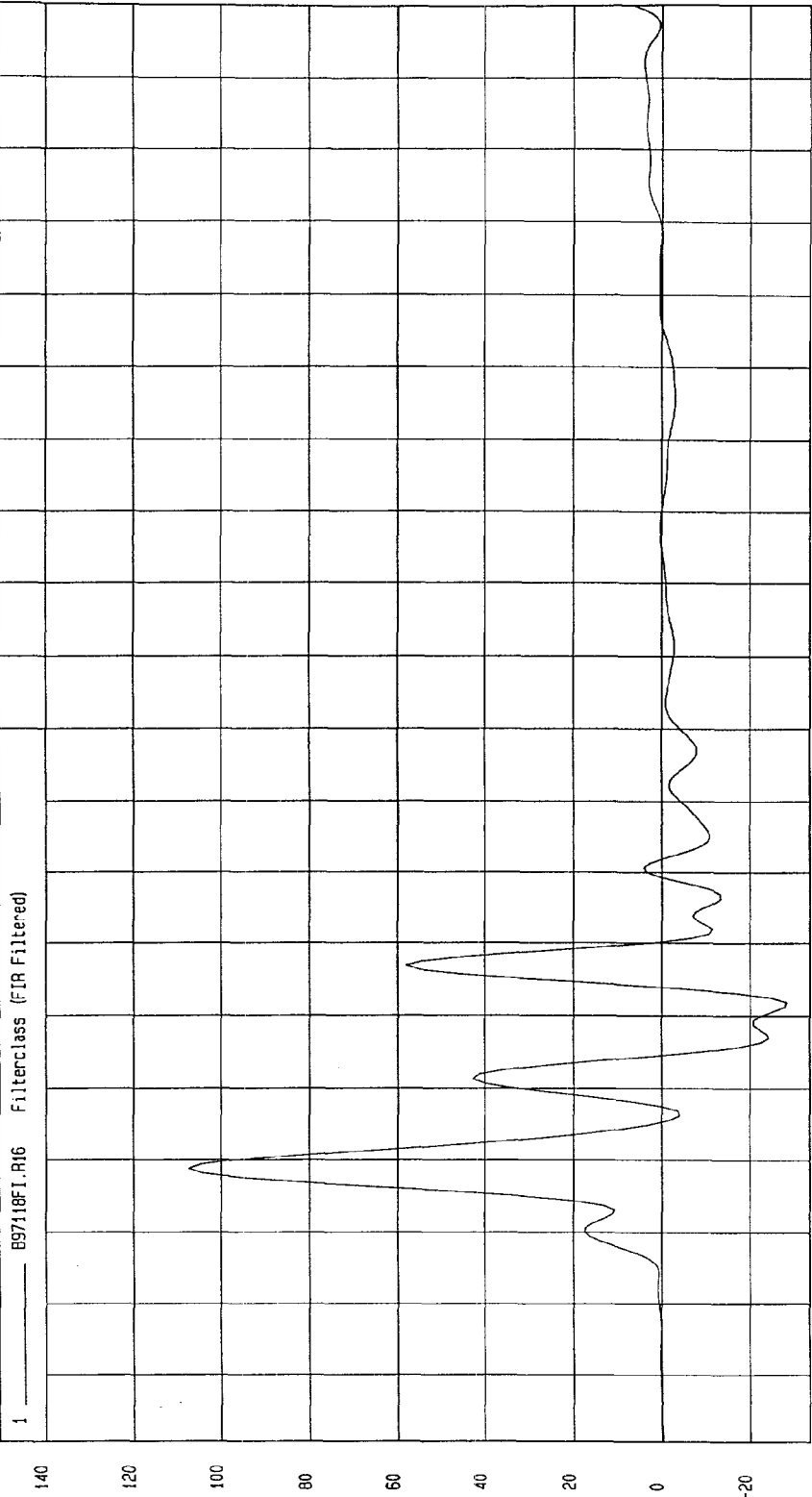
G.S

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -28.14 G'S at 62 msec
Maximum = 107.47 G'S at 39 msec

DRIVER MID RIB Y ACCELERATION



NSA Research
04-12-1998 14:10

TIME (SECONDS)

G.S

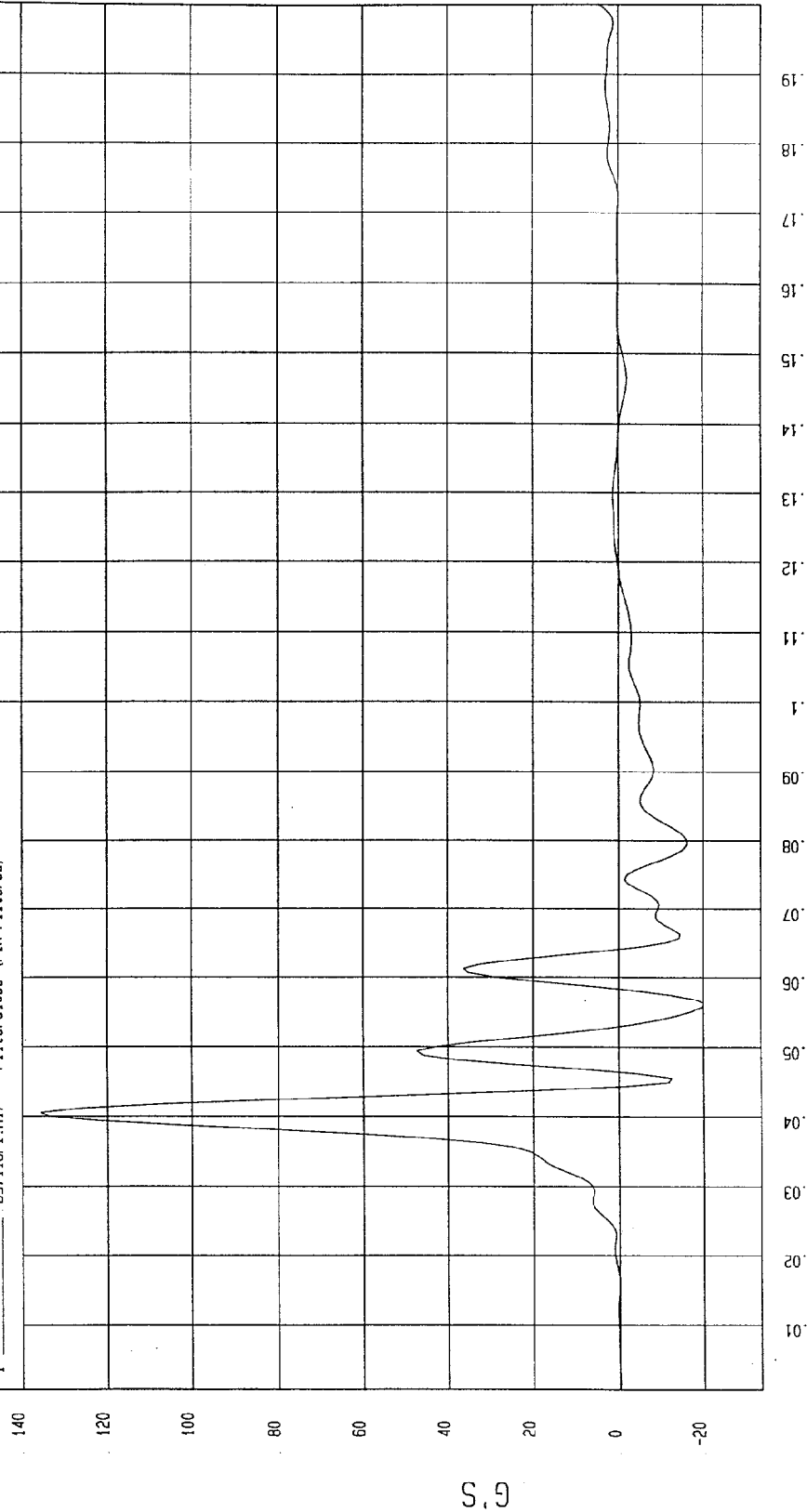
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -20.07 G'S at 56 msec

DRIVER LOWER RIB Y ACCELERATION

1 897118F1.R17 FilterClass (FIR Filtered)



MCA Research
09-12-1998 14:40

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

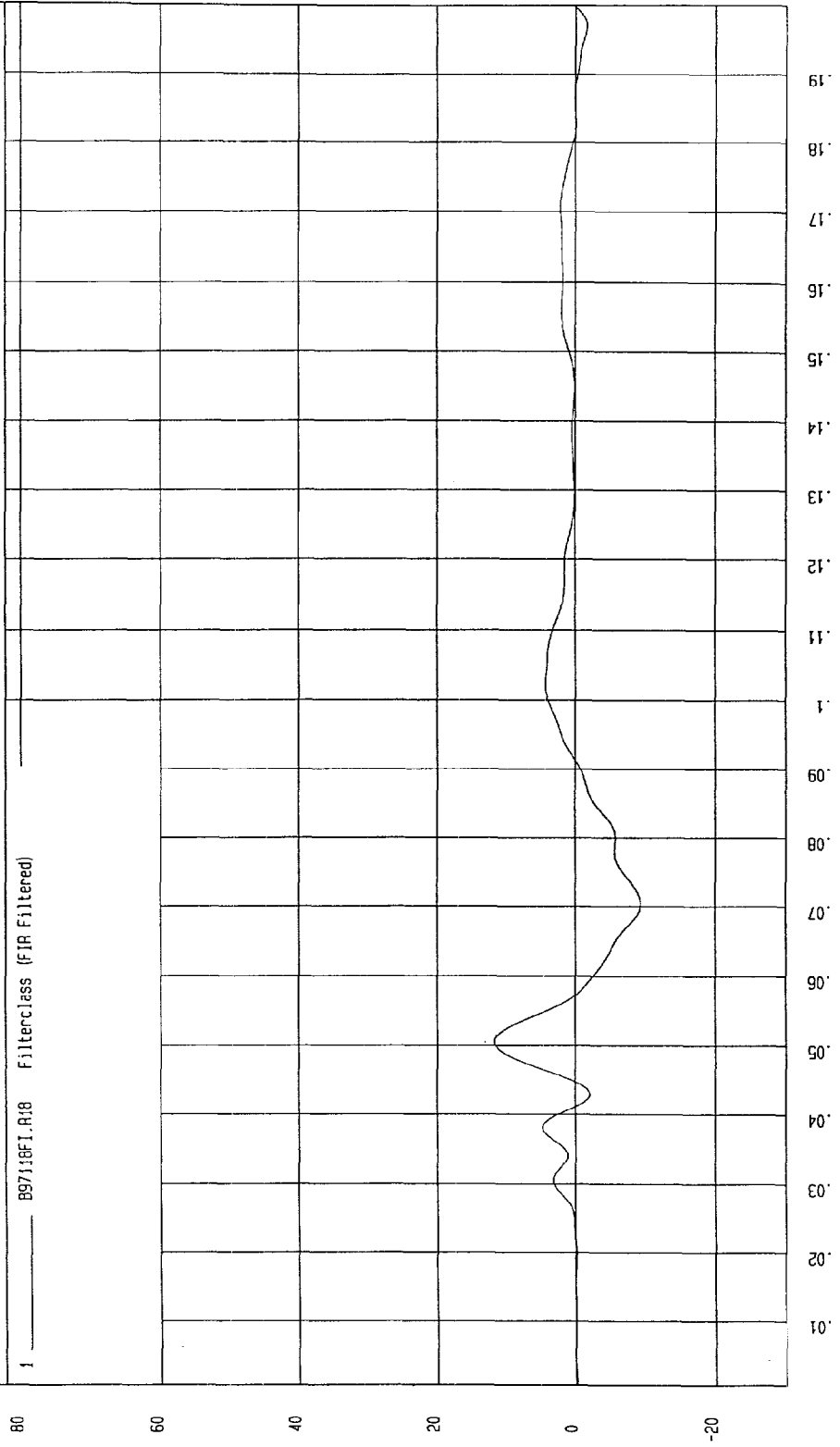
COMPONENT: 1997 FORD MUSTANG

Maximum = 11.61 G'S at 51 msec

Minimum = -9.23 G'S at 70 msec

DRIVER LOWER SPINE X ACCELERATION

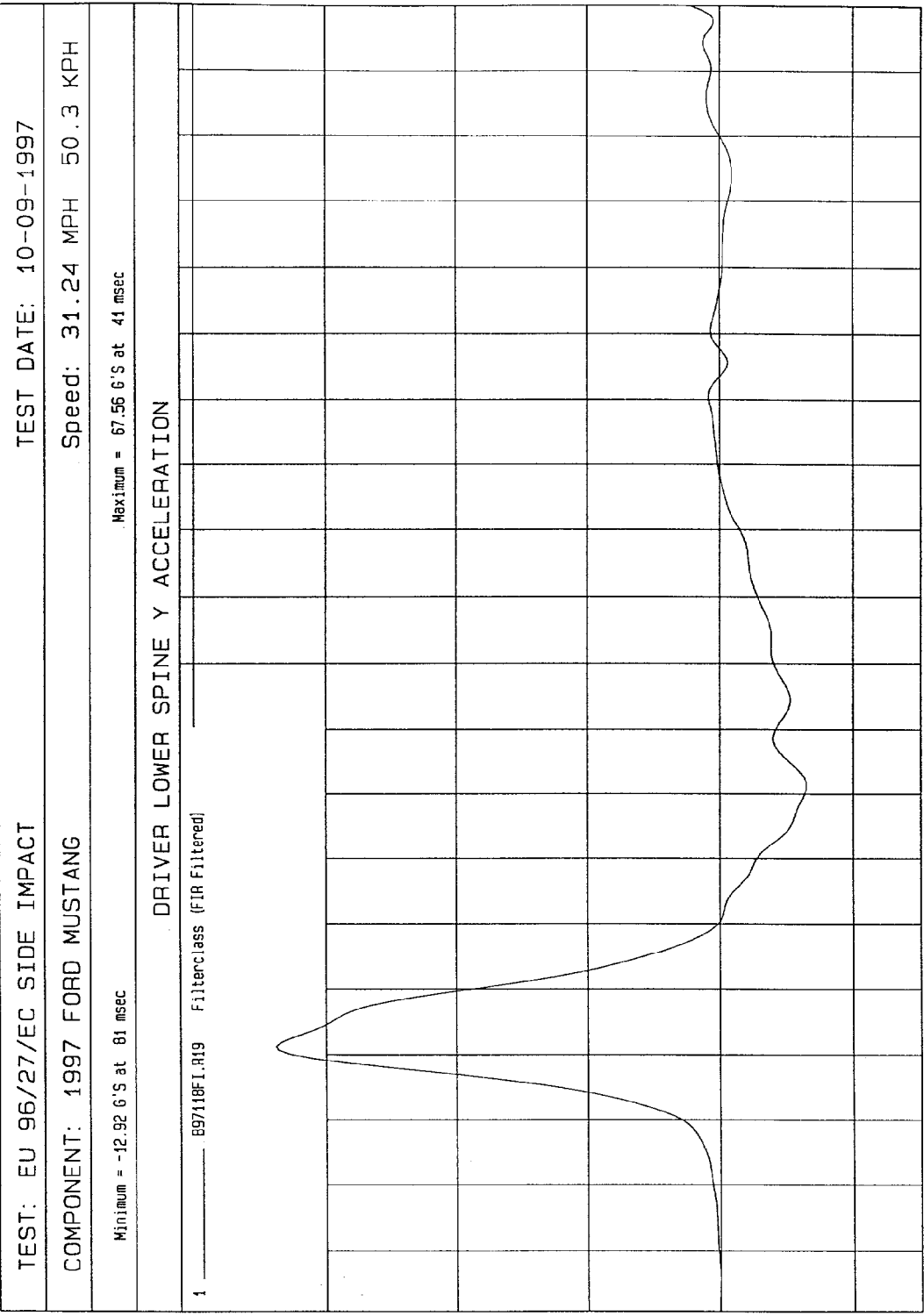
1 B97118F1.R18 Filterclass (FIR Filtered)



MGA Research
04-12-1998 1A:10

TIME (SECONDS)

G.S



MCA Research
04-12-1996 14.12

TIME (SECONDS)

G.S

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG

Speed: 31.24 MPH 50.3 KPH

Minimum = -5.68 G'S at 81 msec

Maximum = 4.69 G'S at 63 msec

DRIVER LOWER SPINE Z ACCELERATION

1 ——— B97118F1.R20 Filterclass (FIR Filtered)

80

60

40

20

0

-20

G'S

.01

.02

.03

.04

.05

.06

.07

.08

.09

.10

.11

.12

.13

.14

.15

.16

.17

.18

.19

TIME (SECONDS)

MGA Research
04-12-1998 14.12

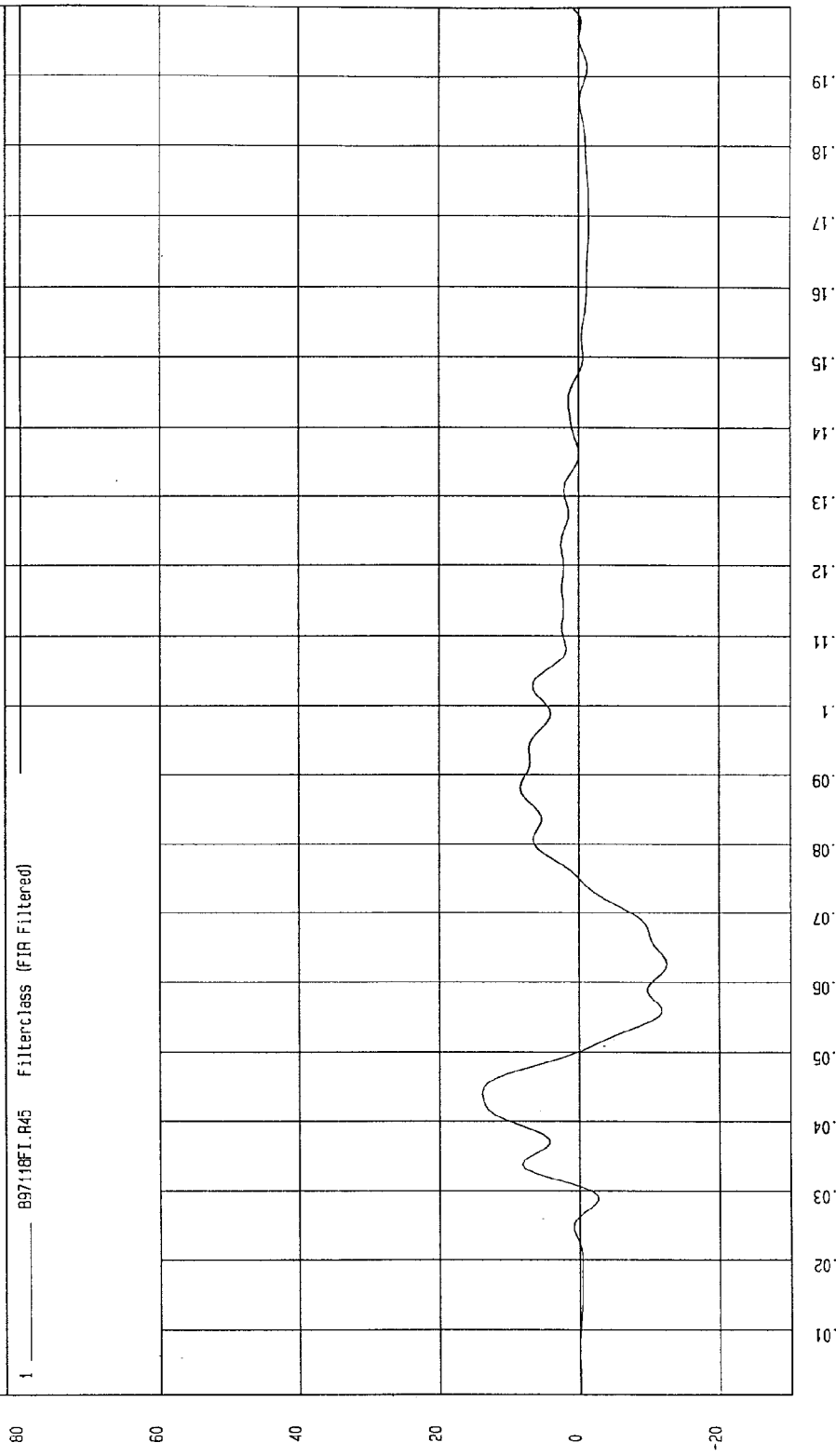
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

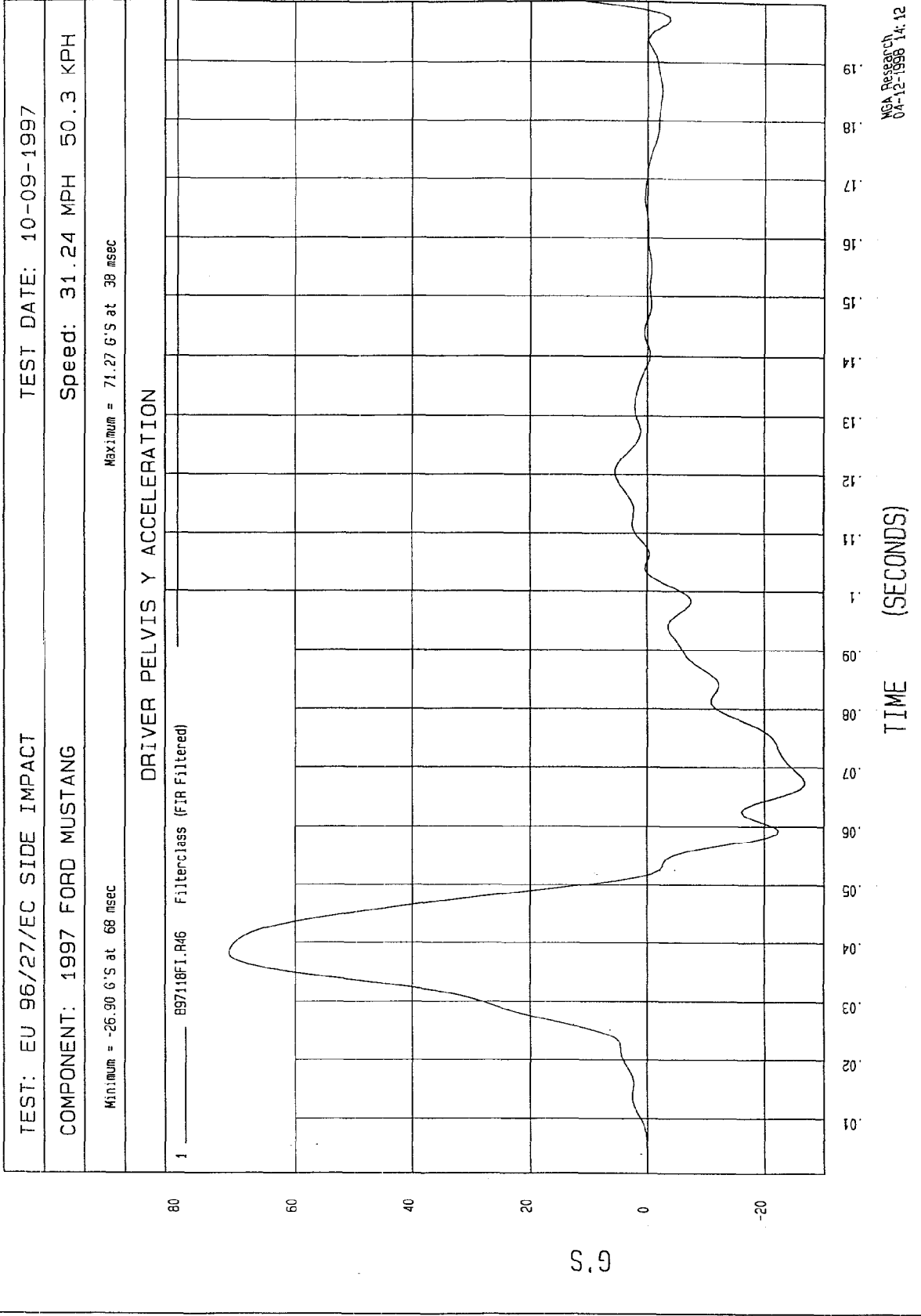
Minimum = -12.58 G'S at 52 msec
Maximum = 13.75 G'S at 44 msec

DRIVER PELVIS X ACCELERATION

1 897118F1.R45 Filterclass (FIR Filtered)



NCA Research
09-12-1998 14:12



MCA Research
0A-12-1998 1.4: 12

TIME (SECONDS)

G.S

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

COMPONENT: 1997 FORD MUSTANG

Maximum = 8.52 G'S at 48 msec

Minimum = -8.56 G'S at 41 msec

DRIVER PELVIS Z ACCELERATION

1 897110FI.R47 Filterclass (FIR Filtered)

80
60
40
20
0
-20

G.S

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9

TIME (SECONDS)

MCA Research
04-12-1998 14:12

RELATIVE DISPLACEMENTS

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

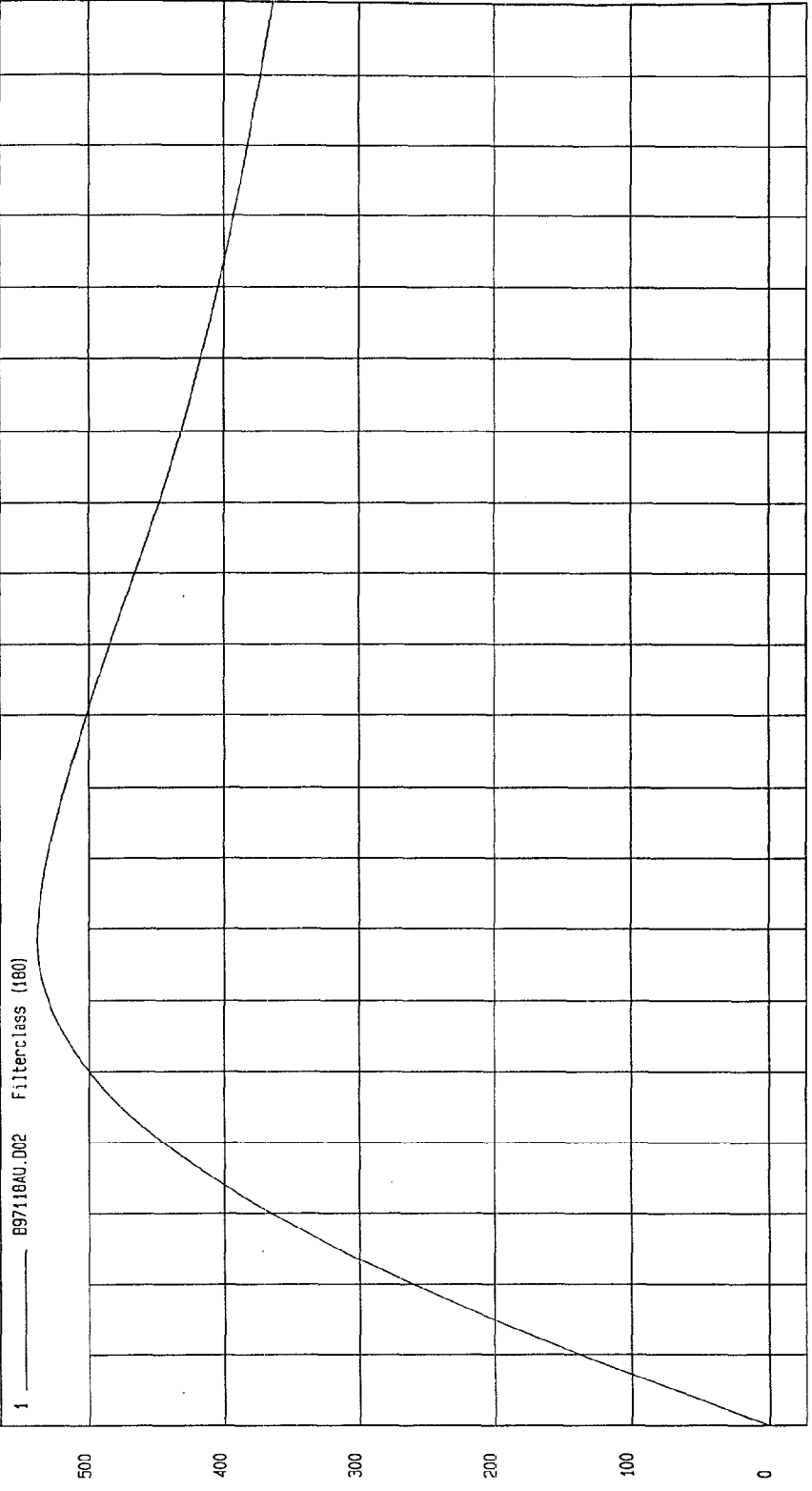
COMPONENT: 1997 FORD MUSTANG

Minimum = 0 MM at 0 msec

Maximum = 537.73 MM at 68 msec

Cart CG X minus Right Front Sill Y Displacement

1 — B97118AU.D02 Filterclass (180)



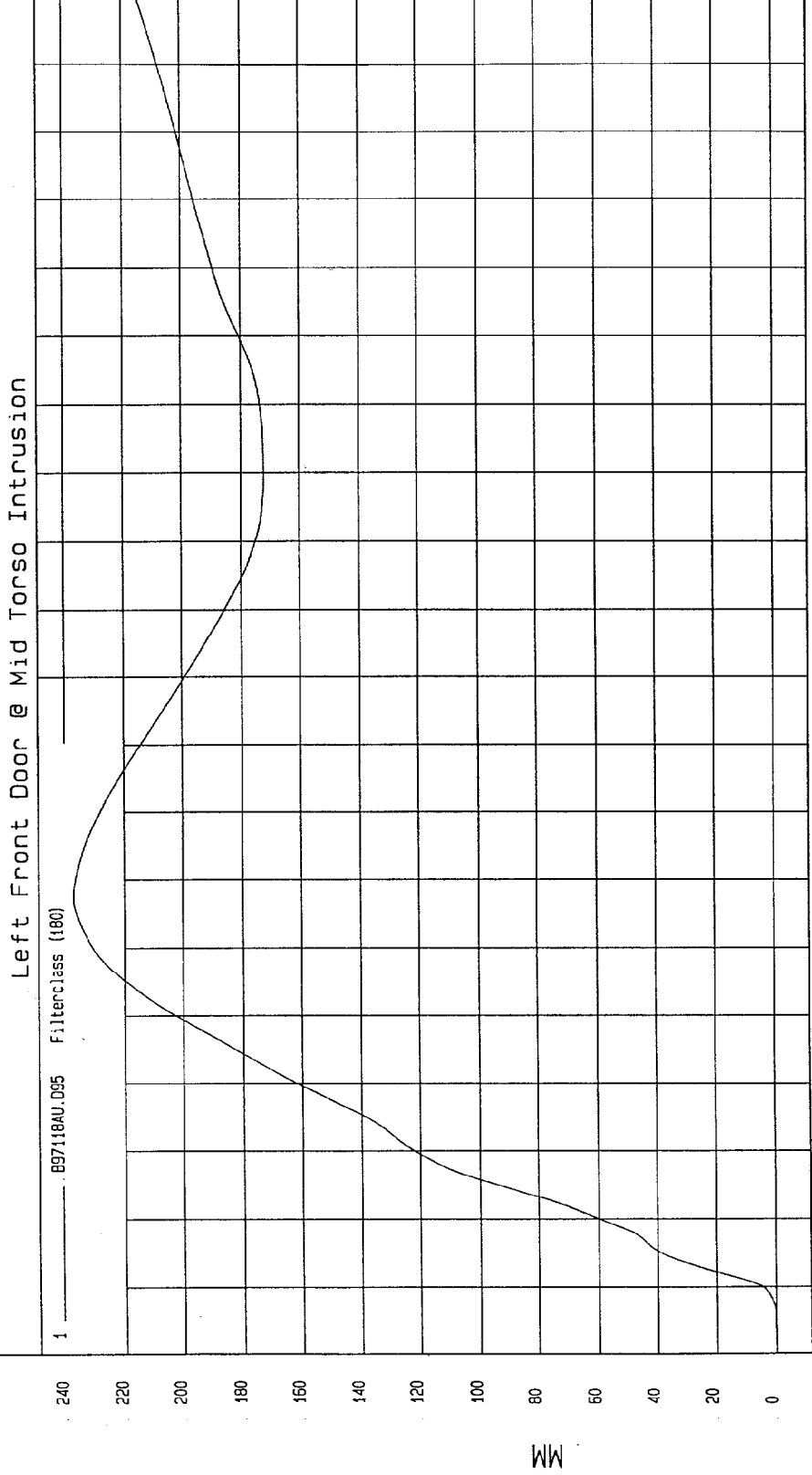
MGA Research
01-05-1998 14:57

TIME Seconds

MM

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997
 COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = 0 MM at 0 msec Maximum = 237.06 MM at 67 msec



MM

TIME Seconds

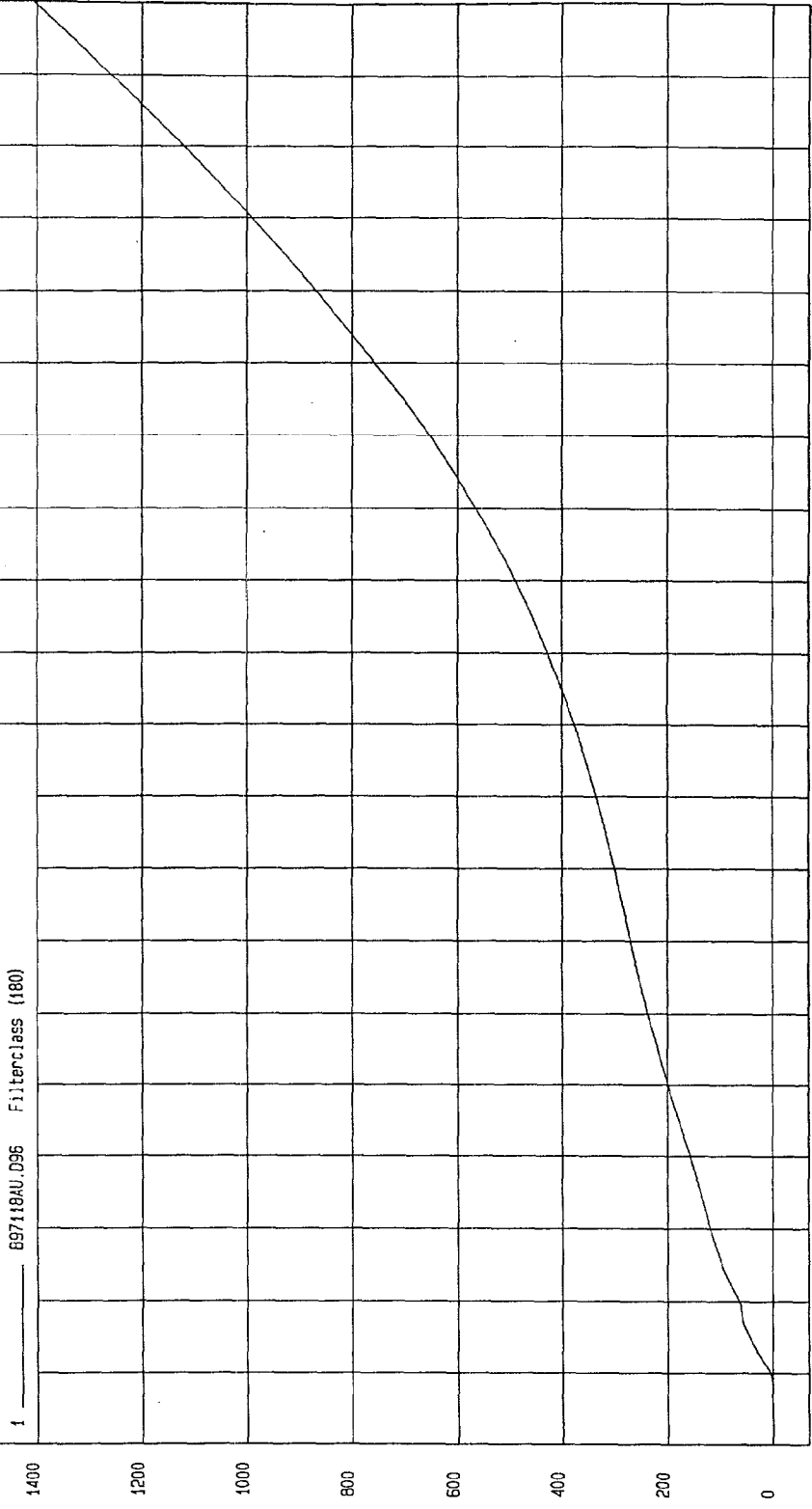
MCA Research
01-05-1998 11:25

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = 0 MM at 0 msec Maximum = 1405.90 MM at 200 msec

Left Front Door @ Lower Torso Intrusion



1
69718AU.D96 Filterclass (180)
TIME Seconds
MGA Research
01-05-1998 11:25

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

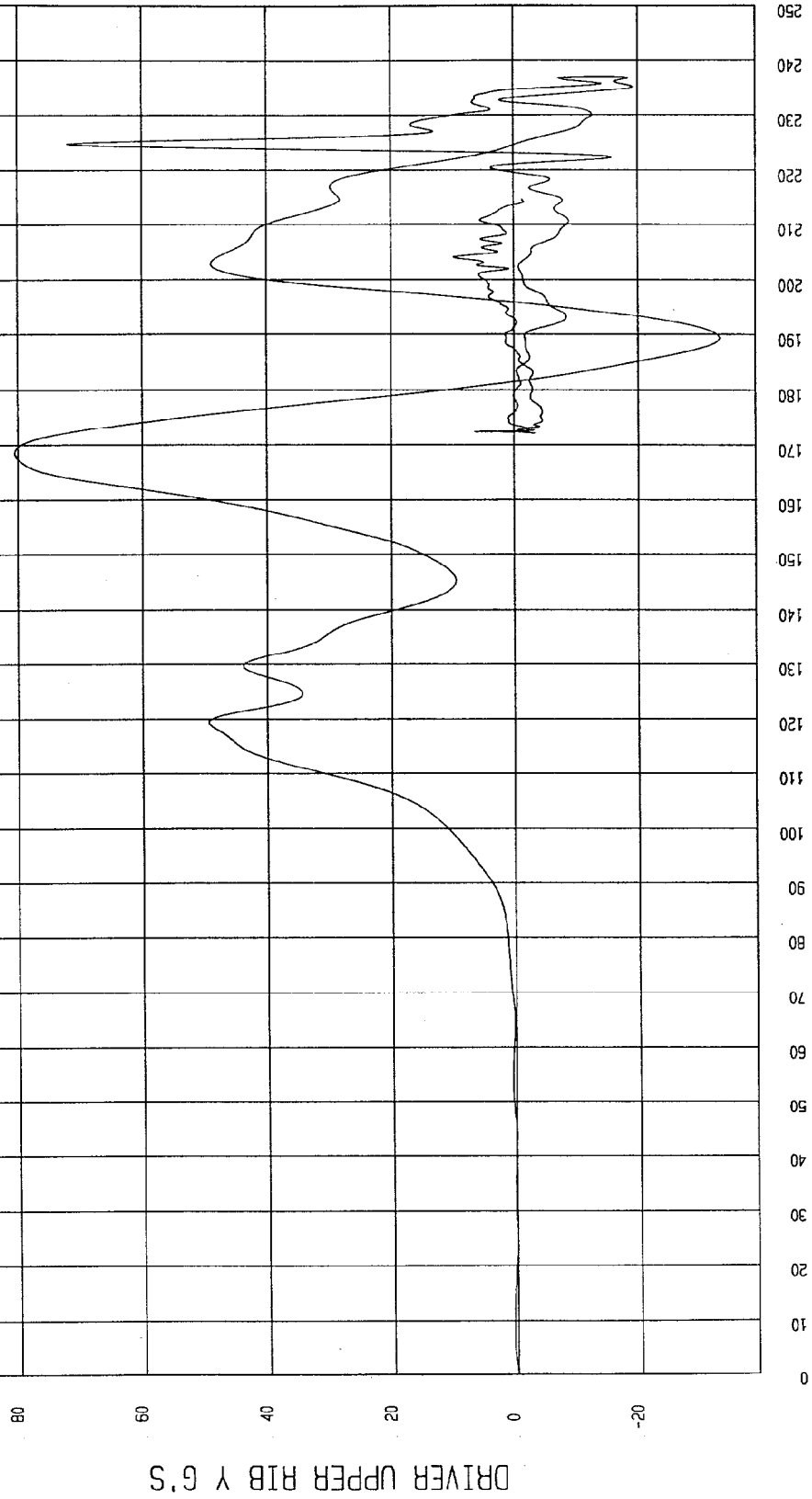
COMPONENT: 1997 FORD MUSTANG

Speed: 31.24 MPH 50.3 KPH

Minimum = -33.03 G'S at 189 MM

Maximum = 60.50 G'S at 168 MM

Driver Upper Rib Y Acceleration vs. Front Door @ Mid Torso Intrusion



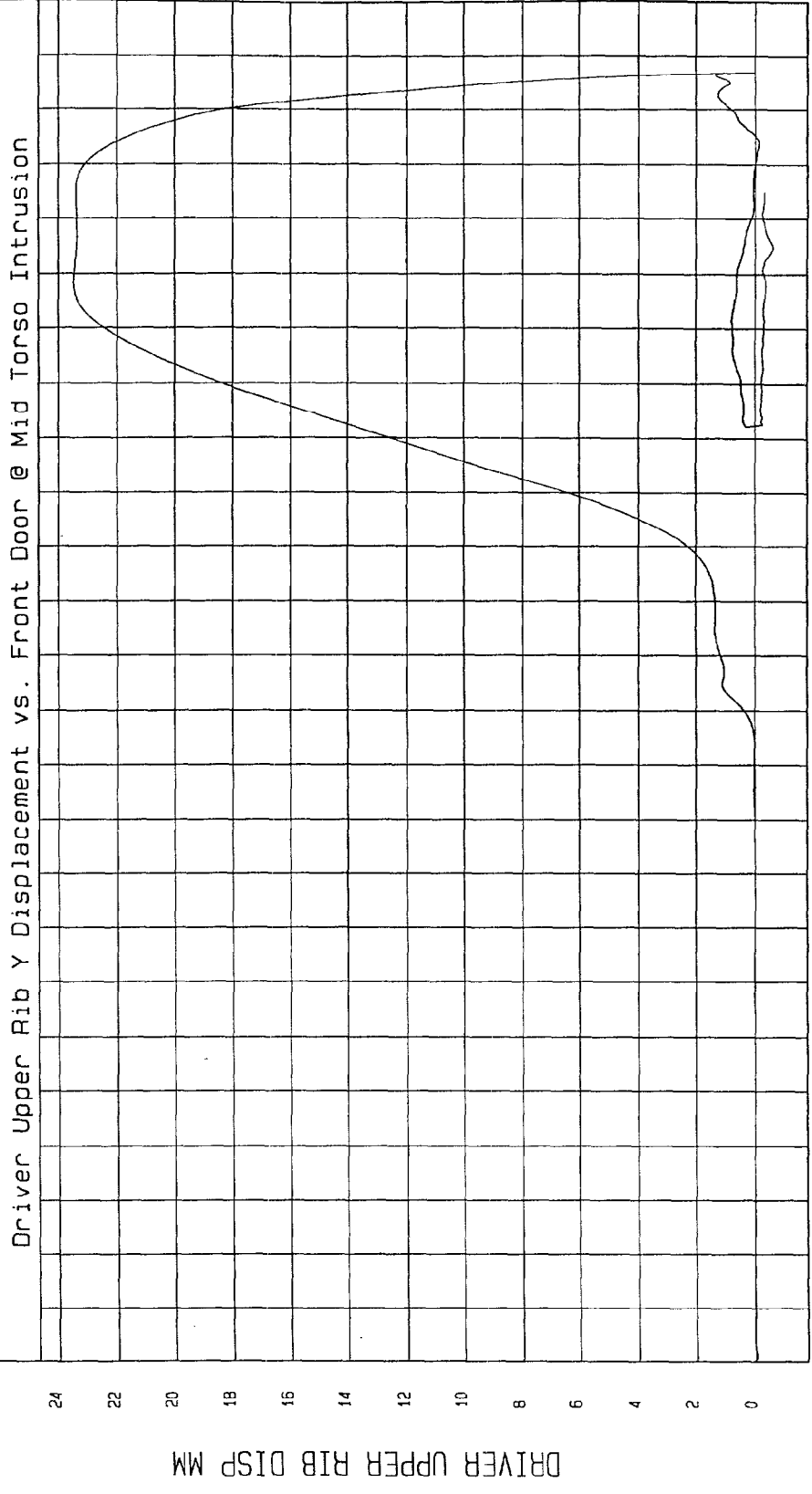
MCA Research
01-06-1998 11:25

LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -.60 MM at 205 MM Maximum = 23.47 MM at 198 MM



0 2 4 6 8 10 12 14 16 18 20 22 24
LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM
MGA Research
01-05-1998 11:25

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

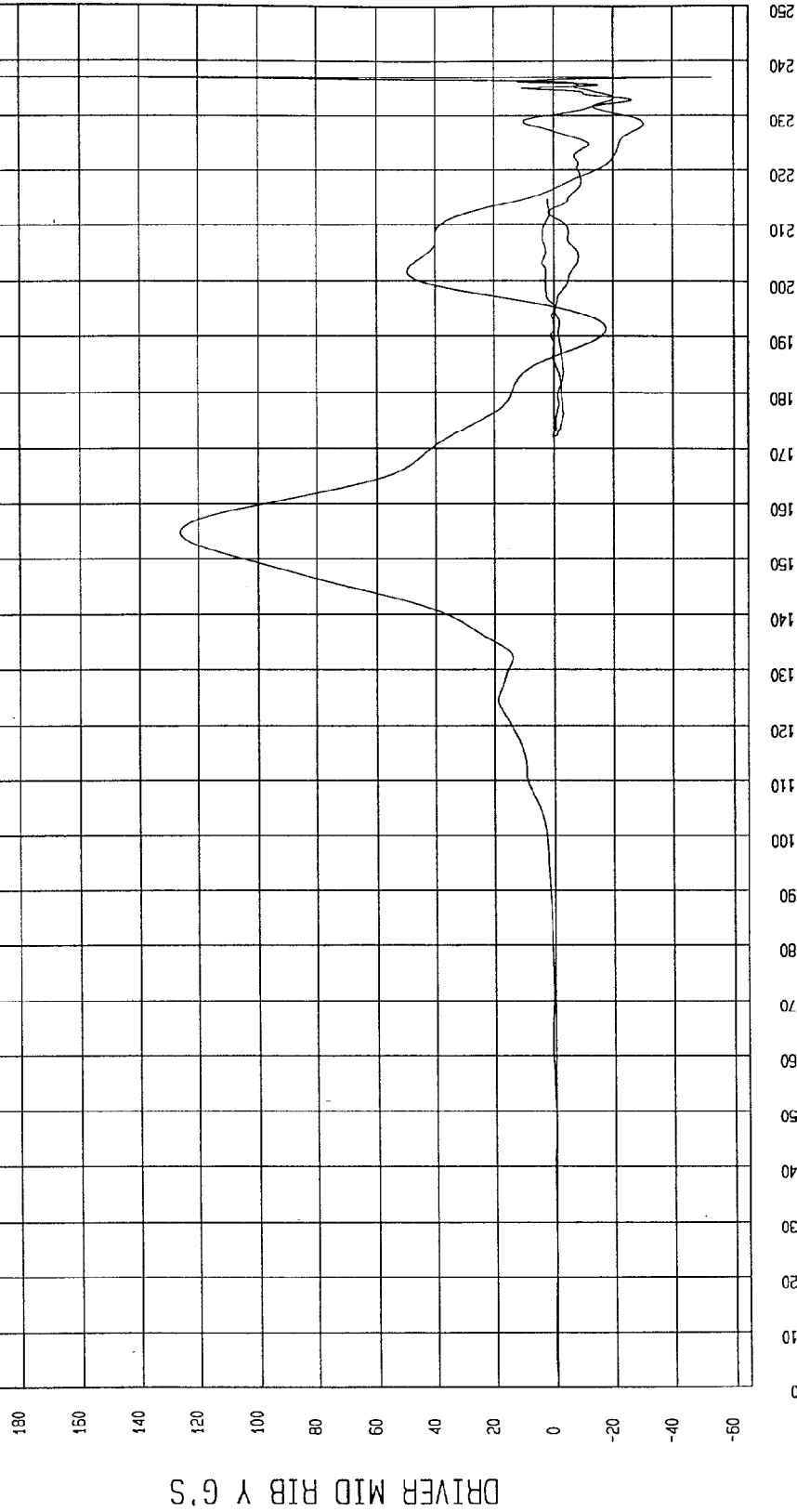
COMPONENT: 1997 FORD MUSTANG

Speed: 31.24 MPH 50.3 KPH

Minimum = -52.79 G'S at 237 MM

Maximum = 186.13 G'S at 237 MM

Driver Mid Rib Y Acceleration vs. Front Door @ Mid Torso Intrusion



MSA Research
01-05-1998 11:25

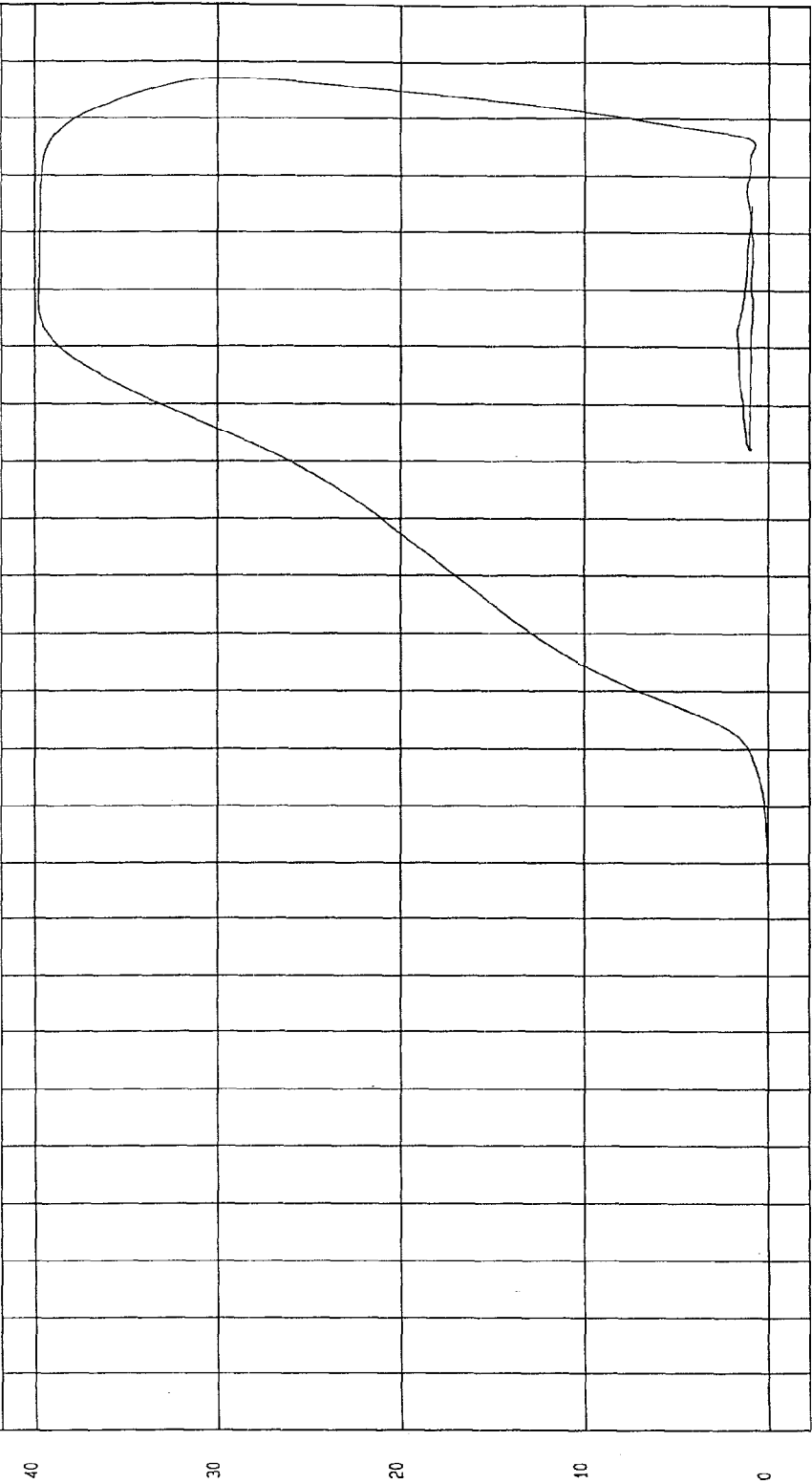
LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -25 MM at 0 MM Maximum = 39.81 MM at 197 MM

Driver Mid Rib Y Displacement vs. Front Door @ Mid Torso Intrusion



LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM
MCA Research
01-05-1998 11:26

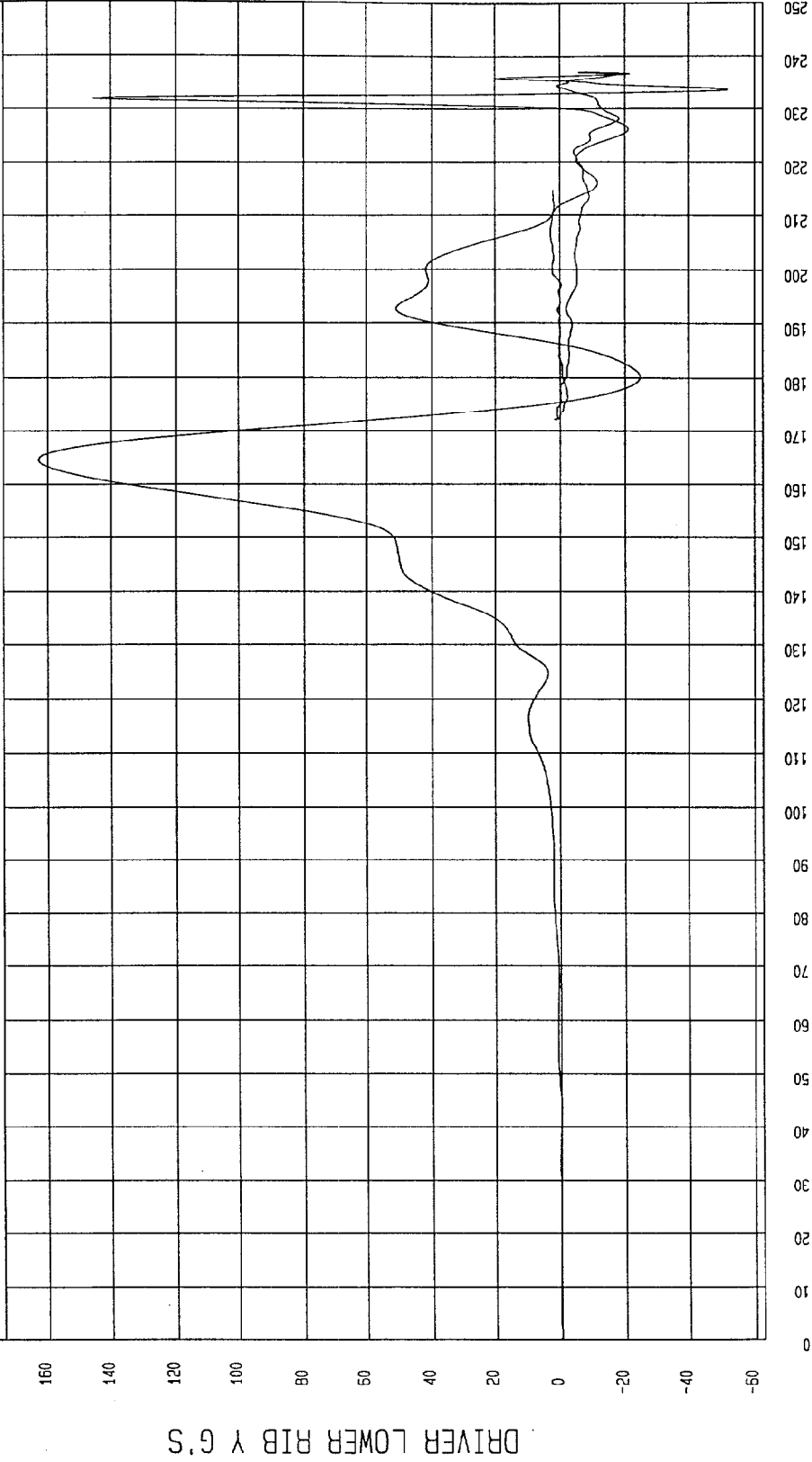
DRIVER MID RIB DISP MM

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -51.85 G'S at 234 MM
Maximum = 162.83 G'S at 164 MM

Driver Lower Rib Y Acceleration vs. Front Door @ Mid Torso Intrusion



WDA Research
01-05-1998 11:26

LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

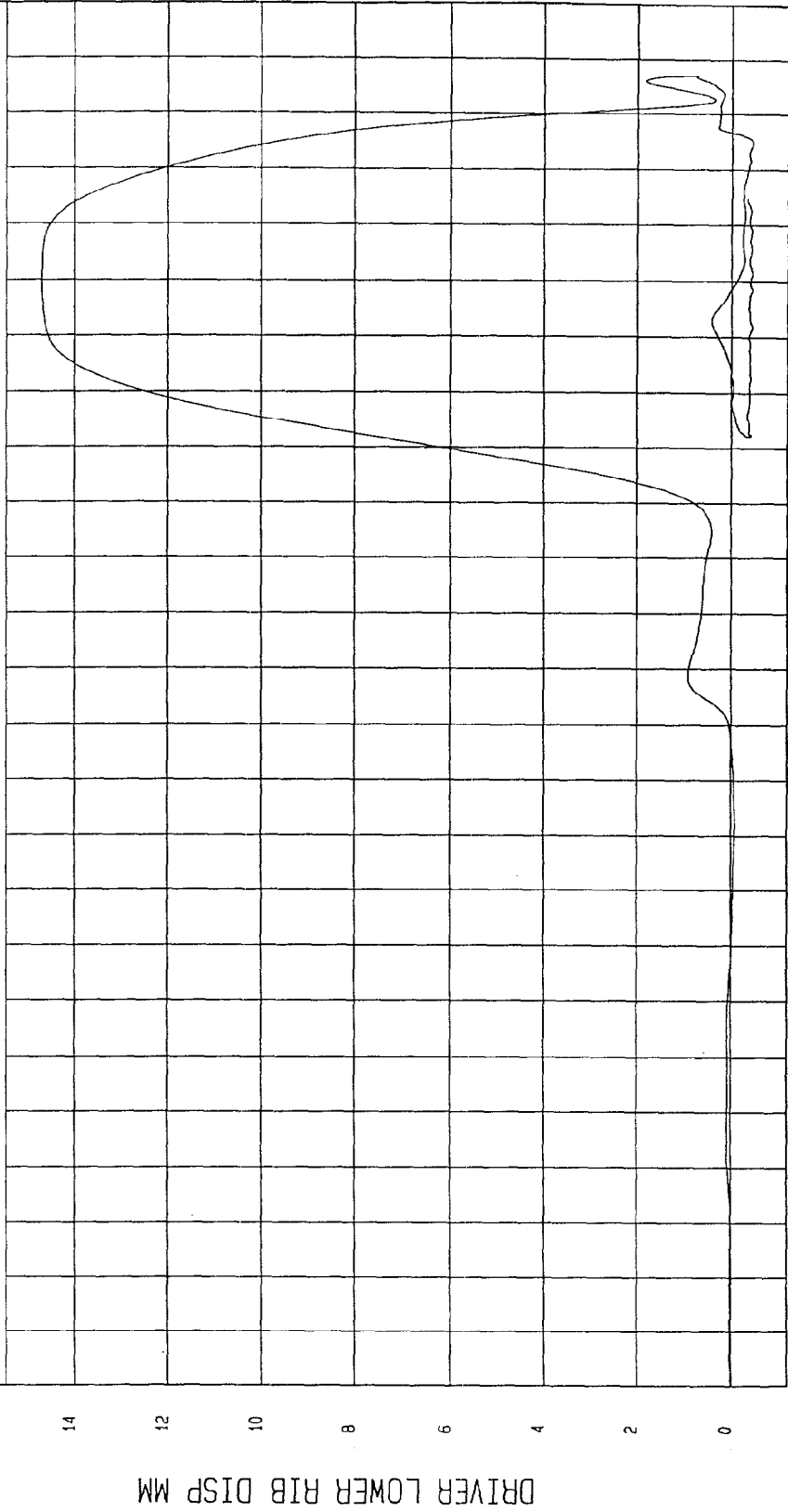
COMPONENT: 1997 FORD MUSTANG

Speed: 31.24 MPH 50.3 KPH

Minimum = -.44 MM at 225 MM

Maximum = 14.69 MM at 199 MM

Driver Lower Rib Y Displacement vs. Front Door @ Mid Torso Intrusion



MCA Research
01-05-1998 11:26

LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

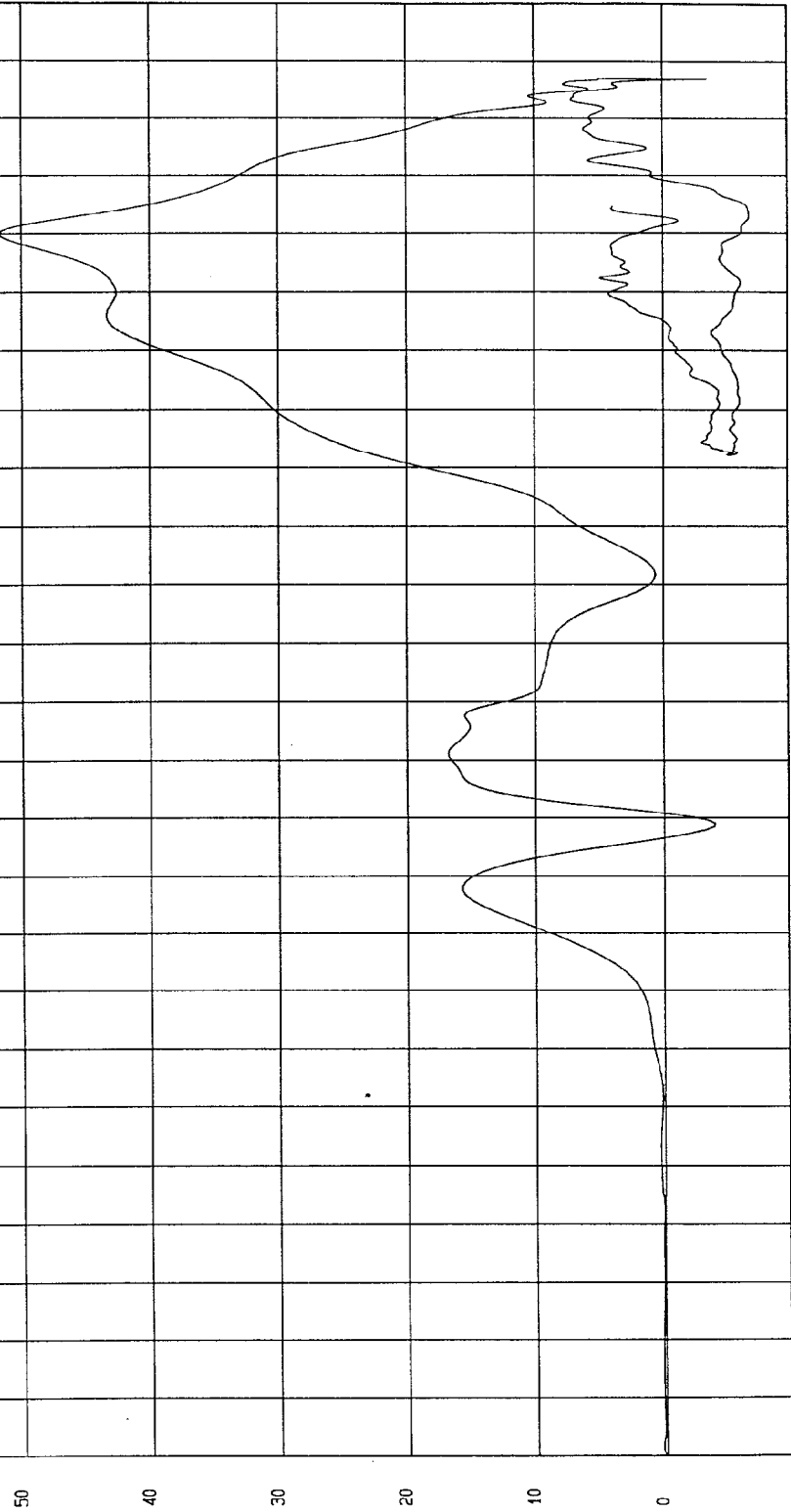
COMPONENT: 1997 FORD MUSTANG

Maximum = 51.66 G'S at 209 MM

Minimum = -6.74 G'S at 213 MM

Driver Upper Spine Acceleration vs. Front Door @ Mid Torso Intrusion

DRIVER UPPER SPINE Y G'S



MSA Research
01-03-1998 11:26

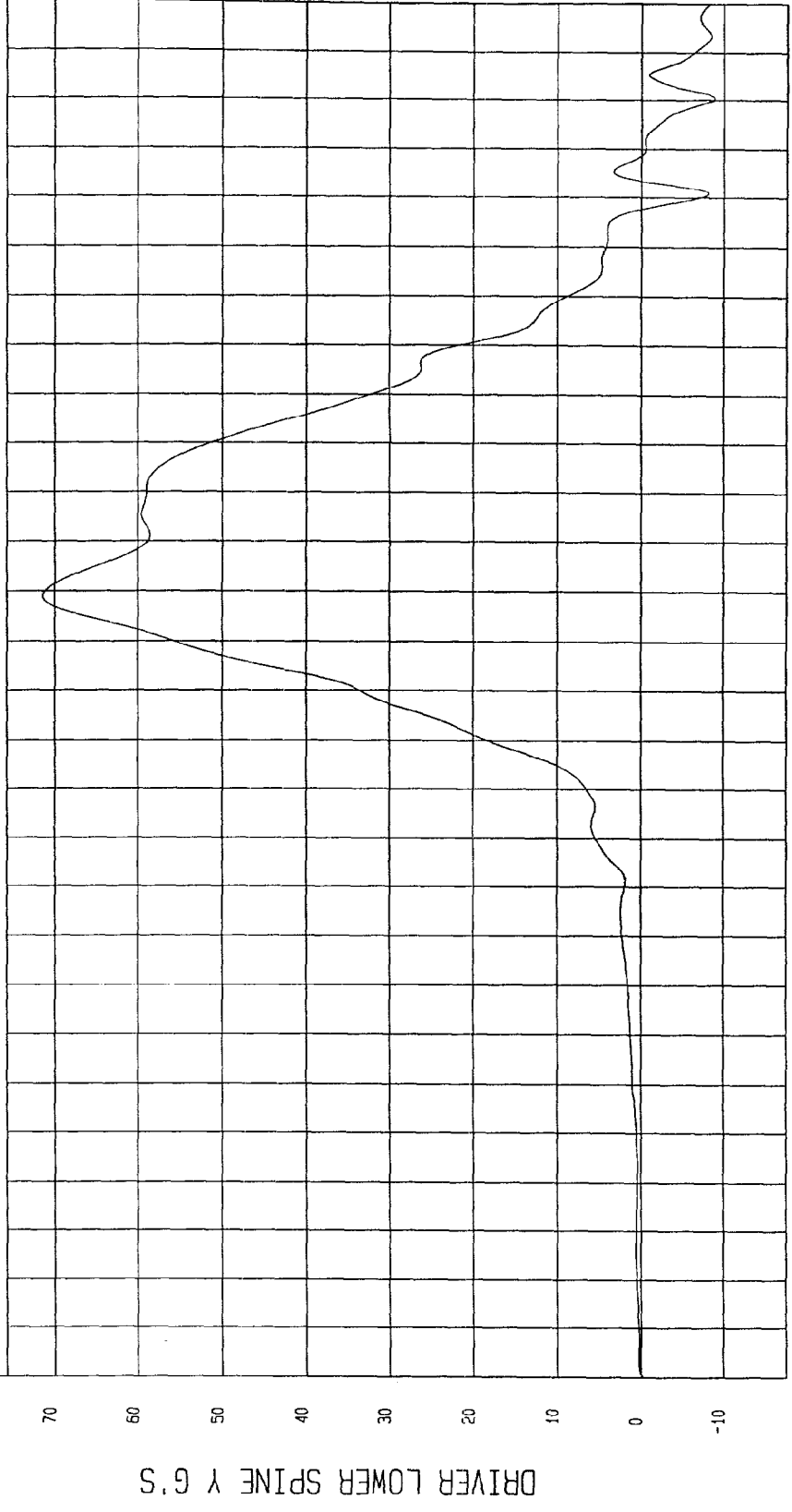
LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -13.17 G'S at 304 MM Maximum = 71.37 G'S at 159 MM

Driver Lower Spine Y Acceleration vs. Front Door @ Lower Torso Intrusion



LEFT FRONT DOOR @ LOWER TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM
MGA Research Corp.
01-05-1998 11:26

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

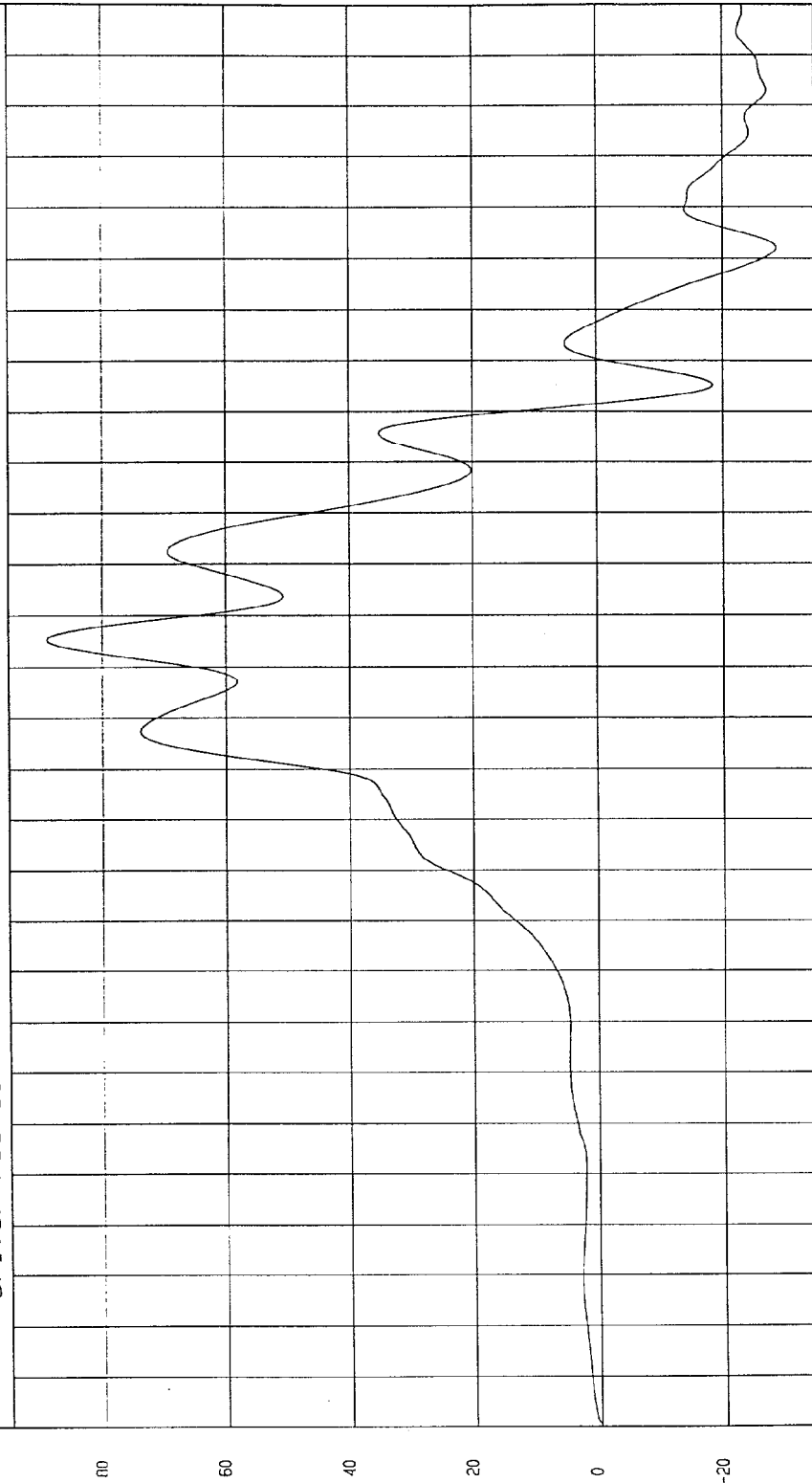
Speed: 31.24 MPH 50.3 KPH

COMPONENT: 1997 FORD MUSTANG

Maximum = 88.96 G'S at 155 MM

Minimum = -28.56 G'S at 232 MM

Driver Pelvis Y Acceleration vs. Front Door @ Lower Torso Intrusion



MSA Research
01-05-1998 11:27

LEFT FRONT DOOR @ LOWER TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

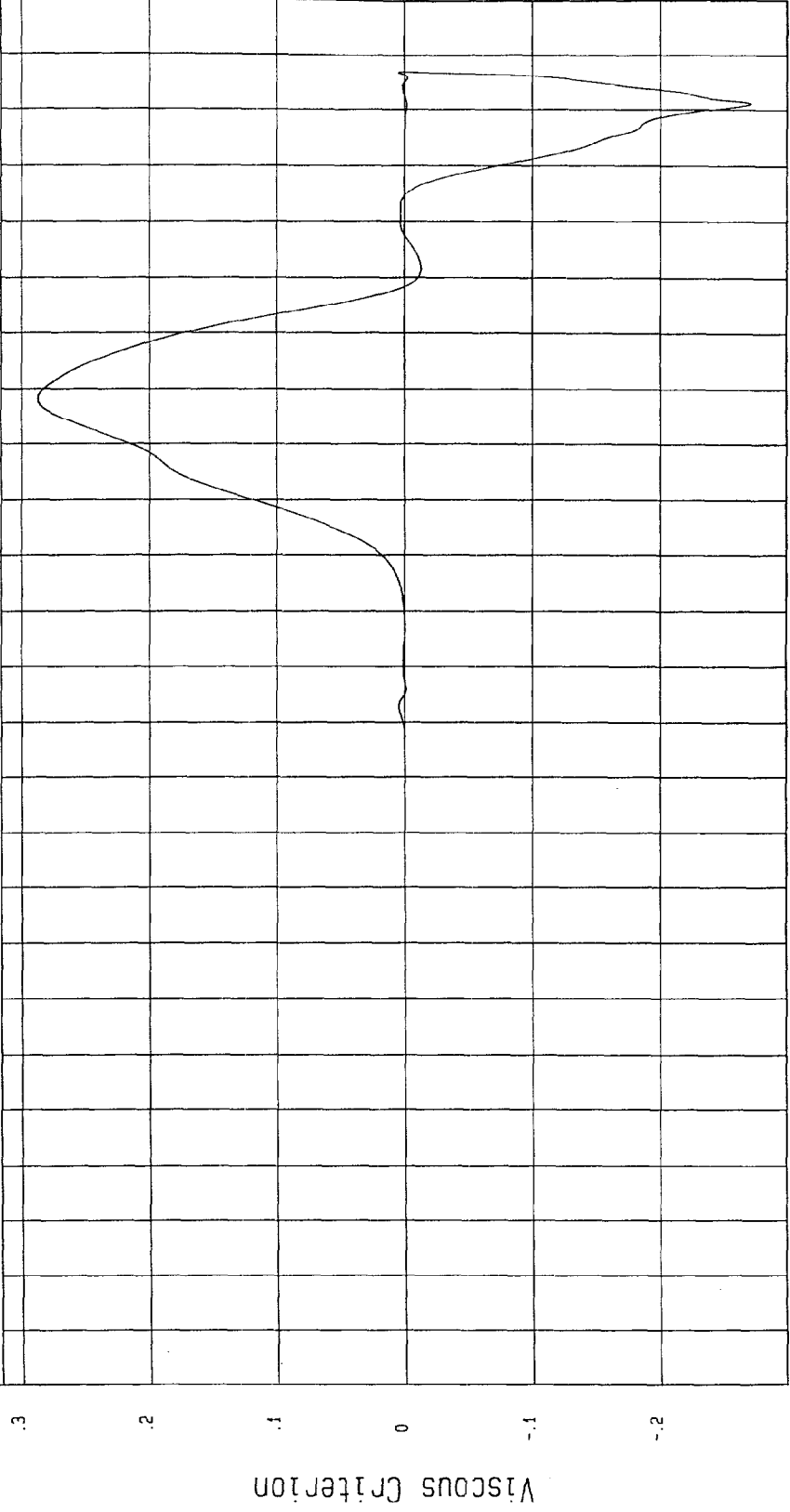
DRIVER PELVIS Y G'S

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -.27 at 231 MM Maximum = .28 at 178 MM

Driver Upper Rib Y Viscous Criteria vs. Front Door @ Mid Torso Intrusion



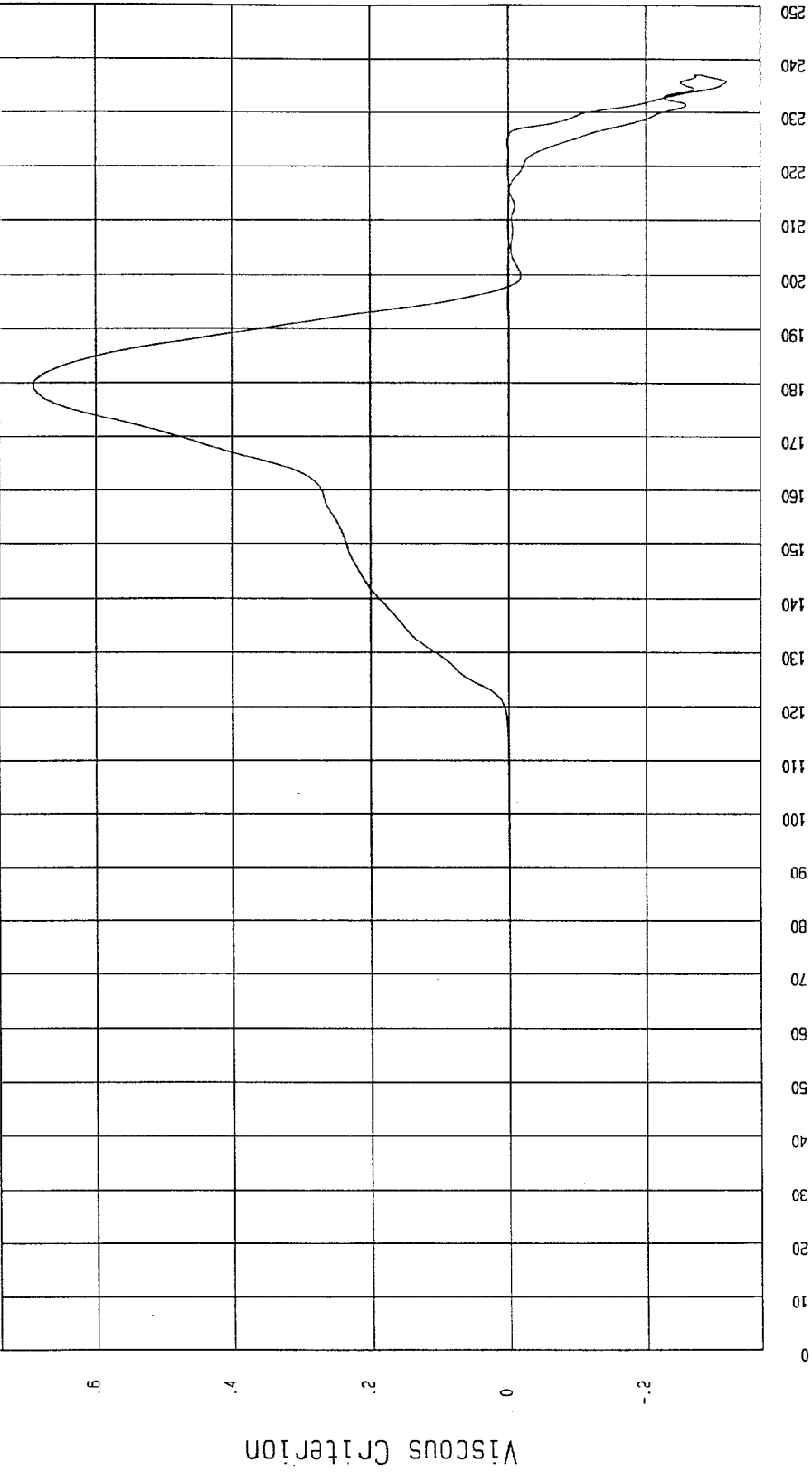
LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM
MCA Research
01-05-1998 11:25

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -.31 at 236 MM Maximum = .69 at 179 MM

Driver Mid Rib Y Viscous Criteria vs. Front Door @ Mid Torso Intrusion



LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

MCA Research
01-05-1998 11:26

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

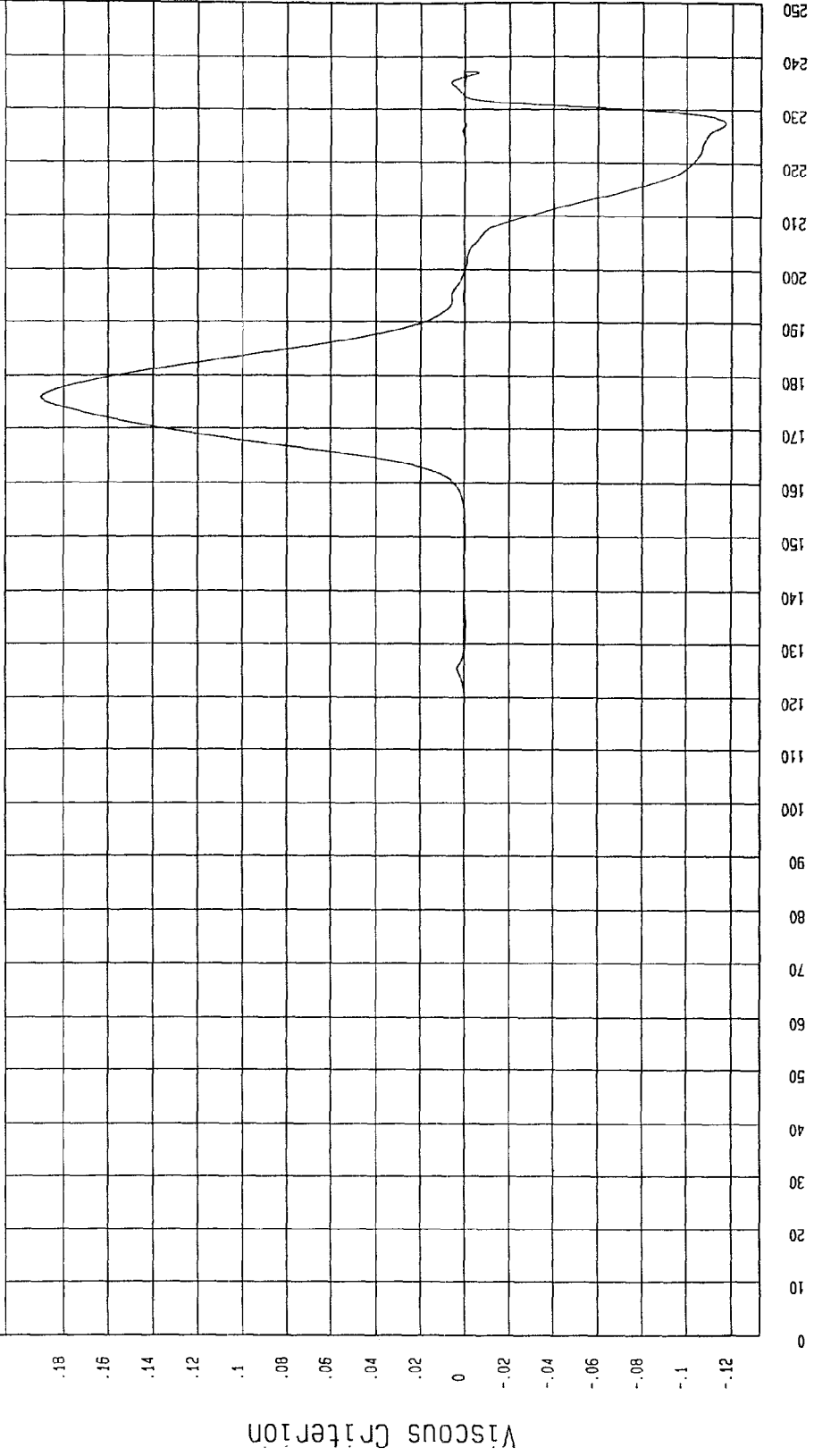
TEST: EU 96/27/EC SIDE IMPACT

COMPONENT: 1997 FORD MUSTANG

Minimum = -.11 at 227 MM

Maximum = .19 at 175 MM

Driver Lower Rib Y Viscous Criteria vs. Front Door @ Mid Torso Intrusion



MOA Research
01-05-1998 11:26

LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

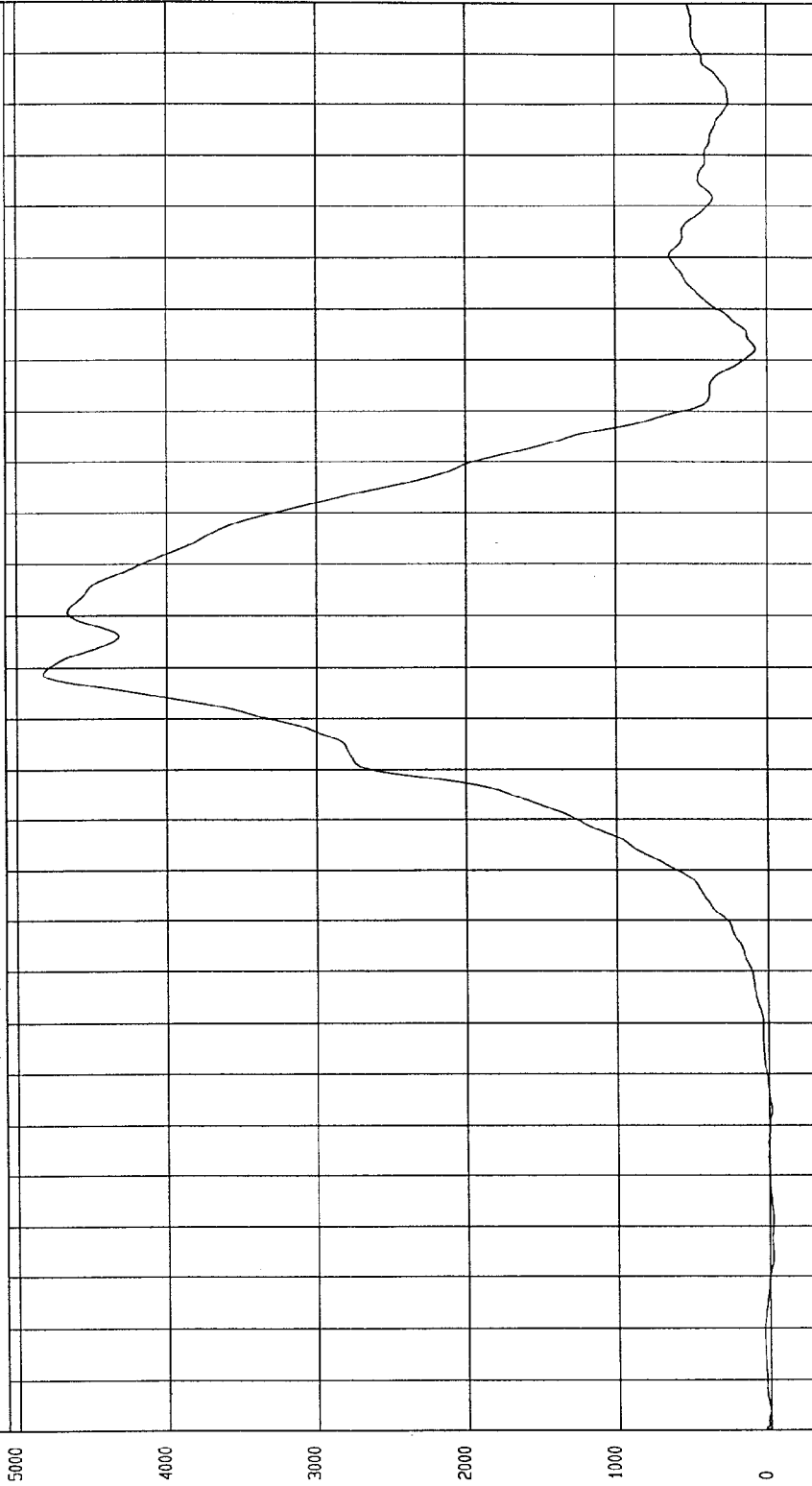
Speed: 31.24 MPH 50.3 KPH

COMPONENT: 1997 FORD MUSTANG

Maximum = 4827.31 N at 148 MM

Minimum = -80.87 N at 113 MM

Driver Pubic Symphysis Force vs. Front Door @ Lower Torso Intrusion



MCA Research
01-05-1998 11:27

LEFT FRONT DOOR @ LOWER TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

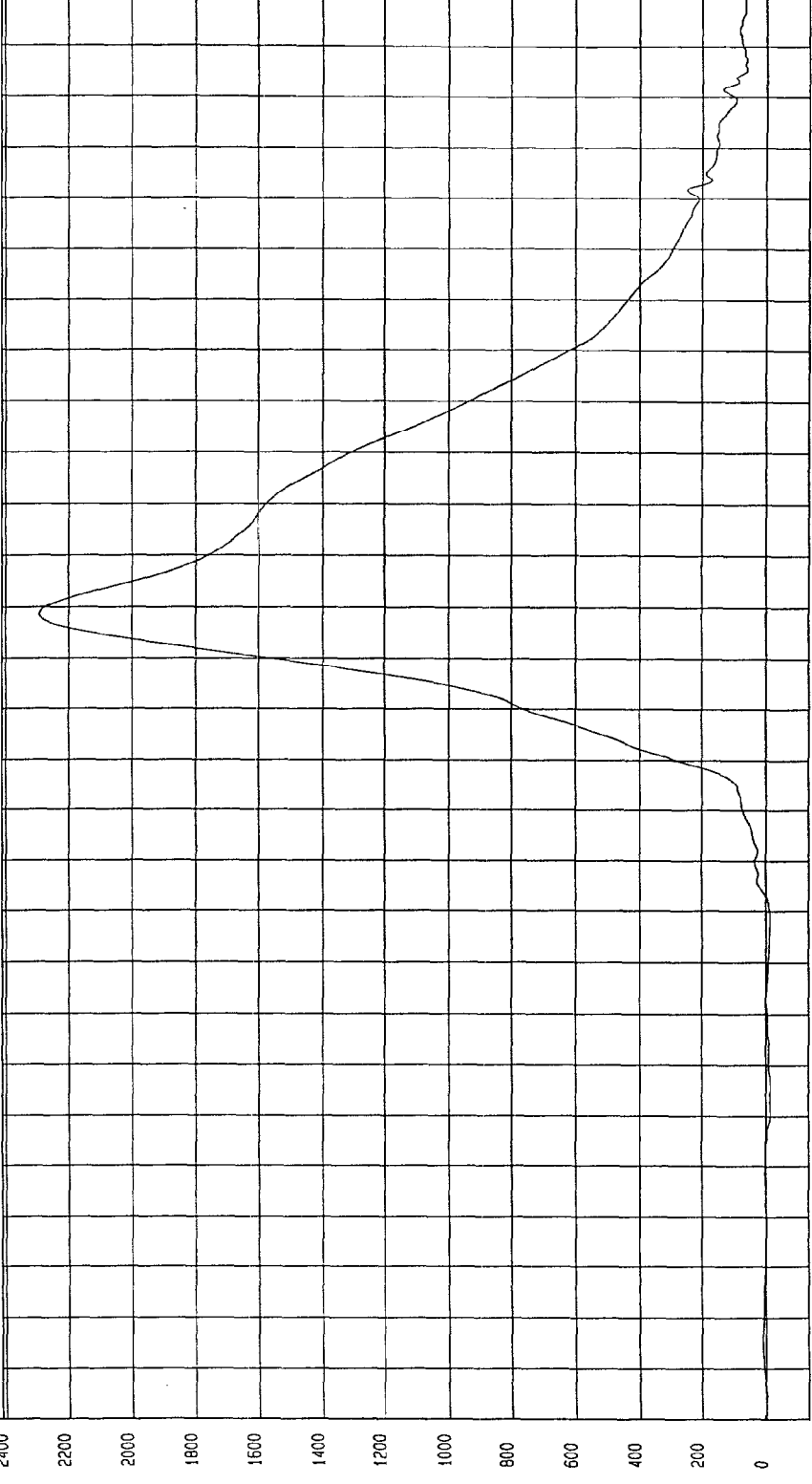
DRIVER PUBIC FORCE Y N

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -19.46 N at 622 MM Maximum = 2295.40 N at 158 MM

Driver Summed Abdominal Force vs. Front Door @ Lower Torso Intrusion



LEFT FRONT DOOR @ LOWER TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

MCA Research
01-05-1998 11:27

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

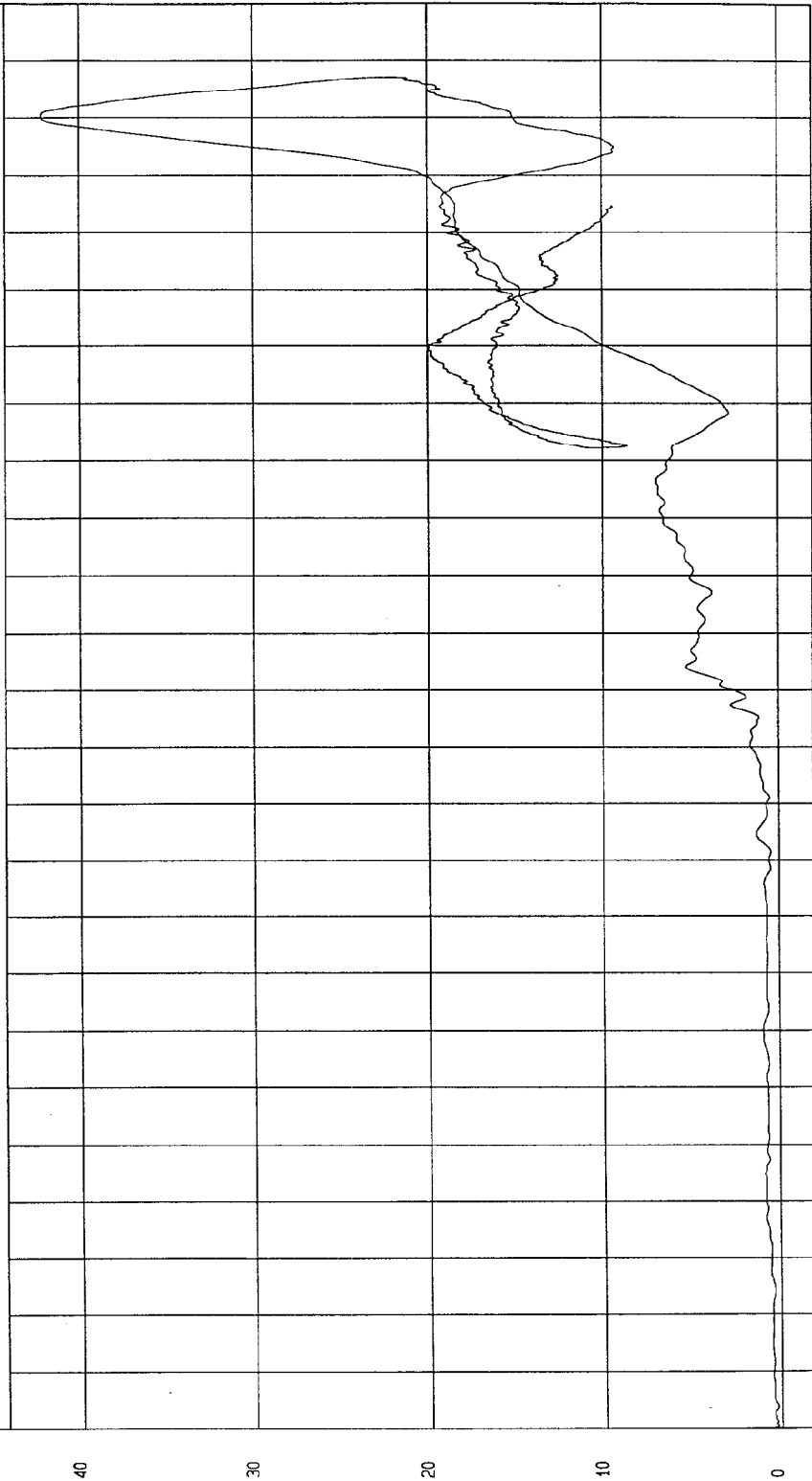
COMPONENT: 1997 FORD MUSTANG

Maximum = 42.12 G'S at 230 MM

Minimum = .10 G'S at 0 MM

Driver Head Resultant Acceleration vs. Front Door @ Mid Torso Intrusion

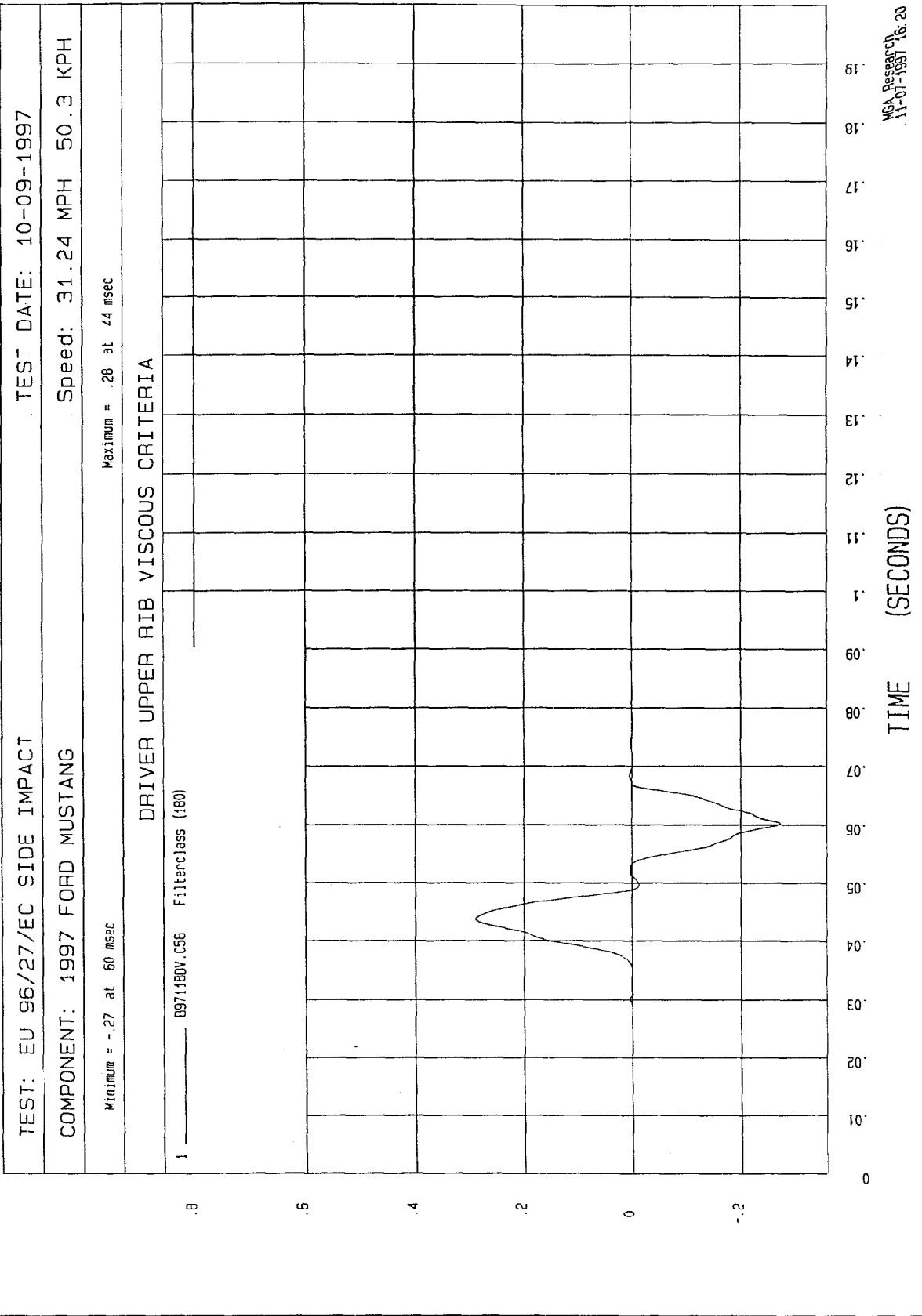
DRIVER HEAD RESULTANT ACCELERATION G'S



MCA Research
01-05-1998 11:27

LEFT FRONT DOOR @ MID TORSO MINUS RIGHT FRONT SILL DISPLACEMENT MM

VISCOUS CRITERIA DATA



TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

Speed: 31.24 MPH 50.3 KPH

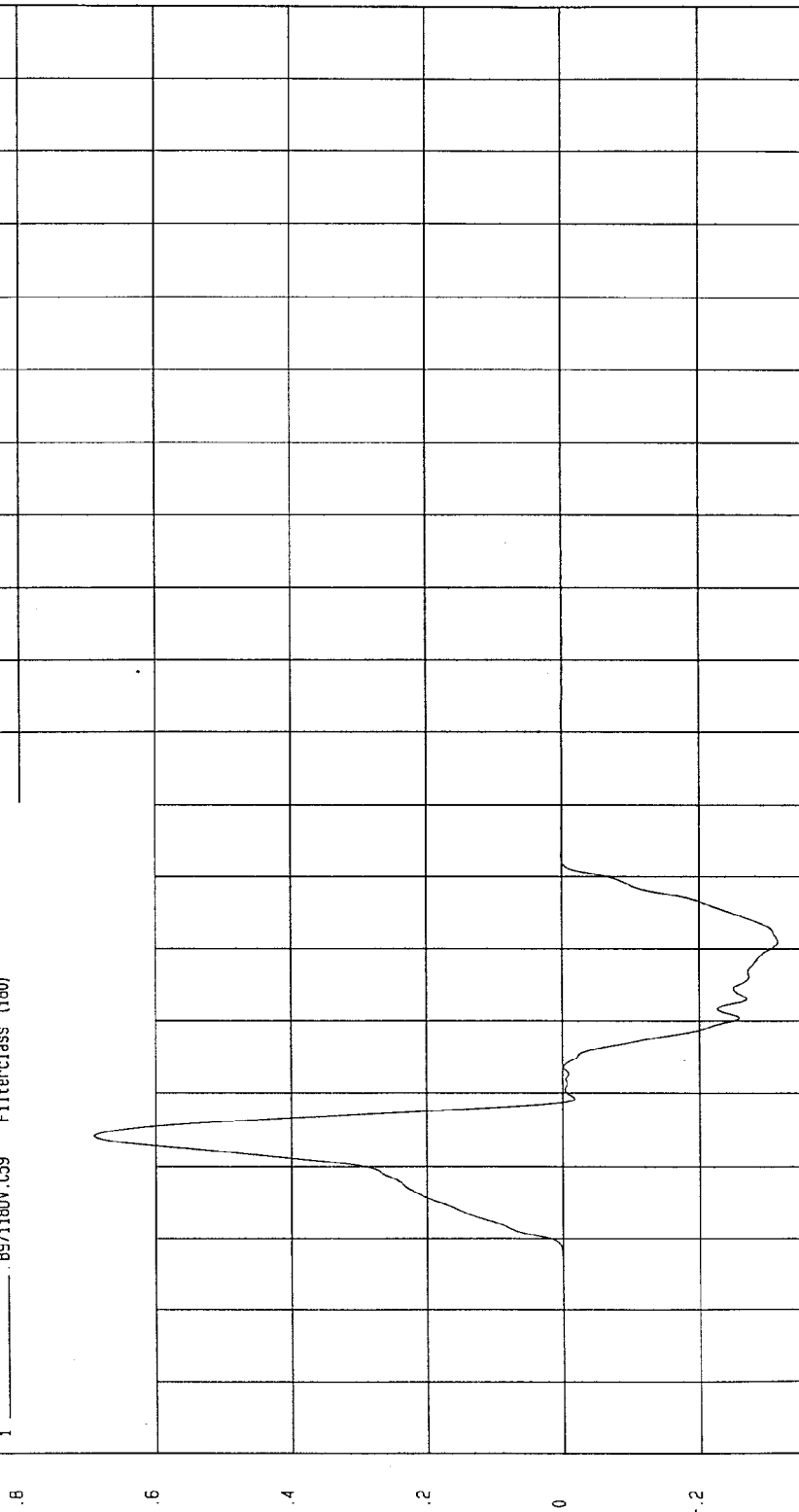
COMPONENT: 1997 FORD MUSTANG

Maximum = .69 at 44 msec

Minimum = -.31 at 71 msec

DRIVER MID RIB VISCOUS CRITERIA

1 _____ .8971180V.C59 Filterclass (180)



TIME (SECONDS)

MGA Research
11-01-1997 15:20

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

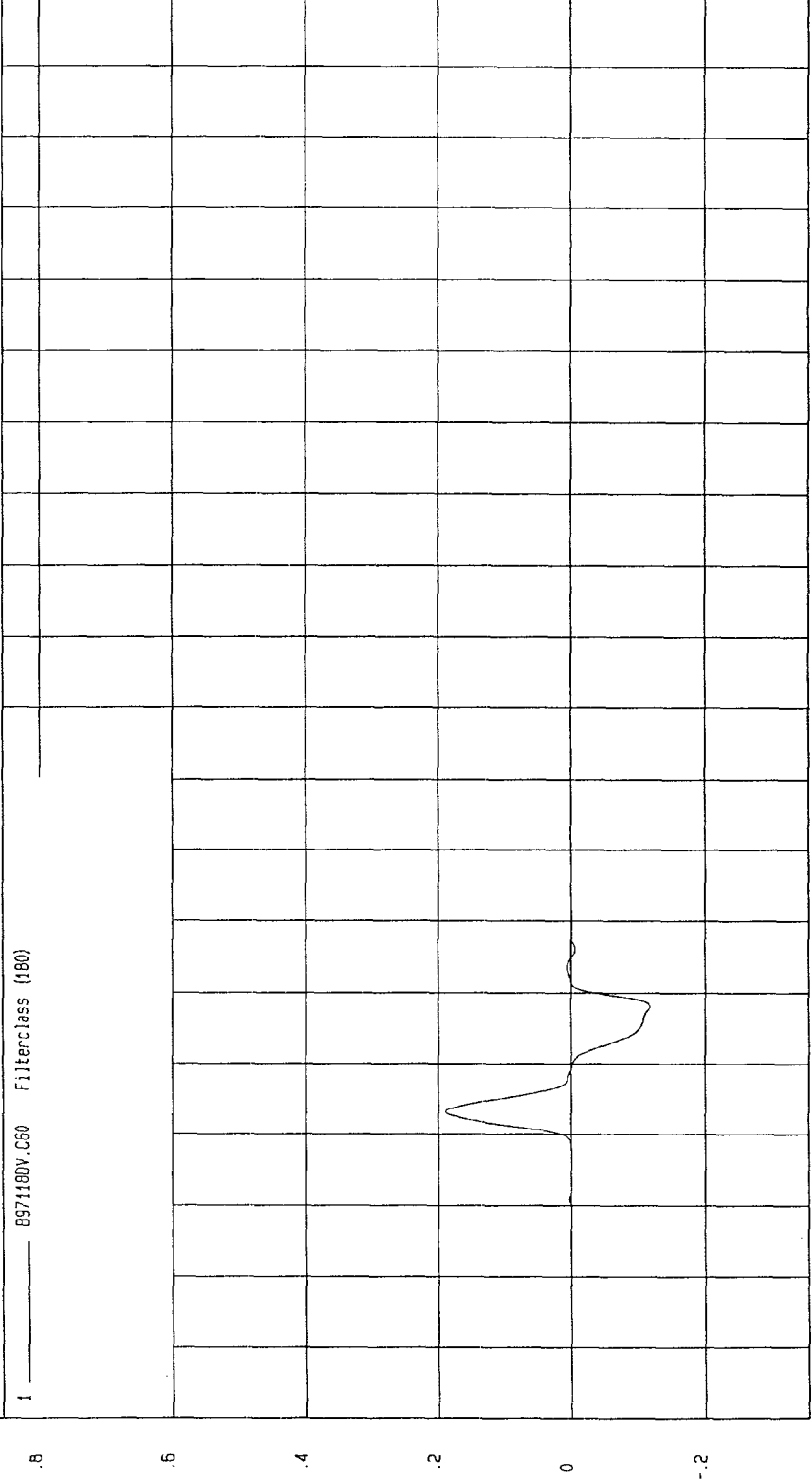
Speed: 31.24 MPH 50.3 KPH

COMPONENT: 1997 FORD MUSTANG

Minimum = -.11 at 58 msec

Maximum = .19 at 43 msec

DRIVER LOWER RIB VISCOUS CRITERIA



MCA Research
11-07-1997 18:20

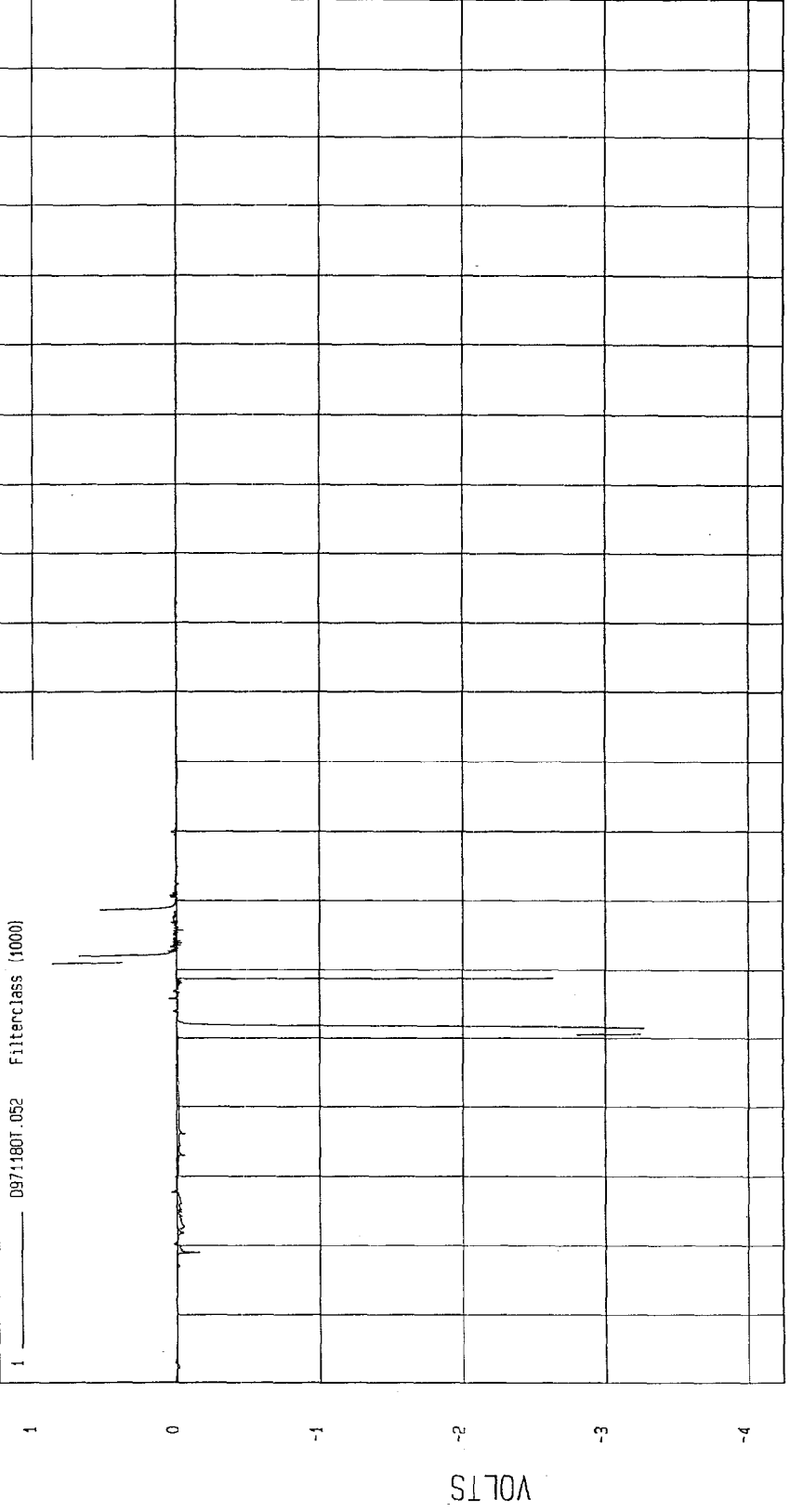
TIME (SECONDS)

TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -3.27 VOLTS at 52 msec Maximum = 1.32 VOLTS at 50 msec

DRIVER HEAD CONTACT



MGA Research
11-01-1997 15:54

TEST: EU 96/27/EC SIDE IMPACT

TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG

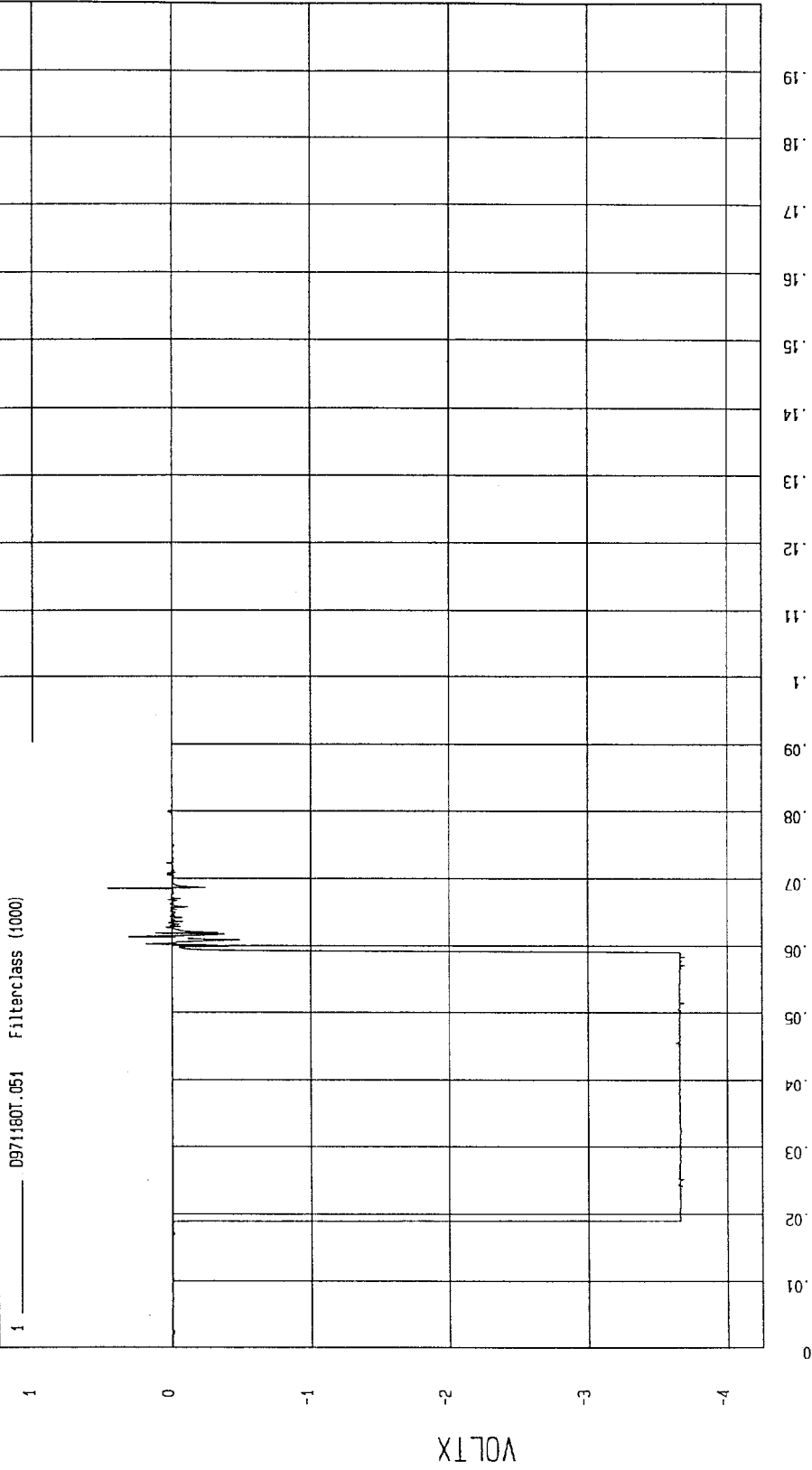
Speed: 31.24 MPH 50.3 KPH

Minimum = -3.69 VOLTX at 57 msec

Maximum = 1.31 VOLTX at 61 msec

DRIVER SHOULDER CONTACT

1 _____ 0971180T.051 Filterclass (1000)



MSA Research
11-07-1997 15.55

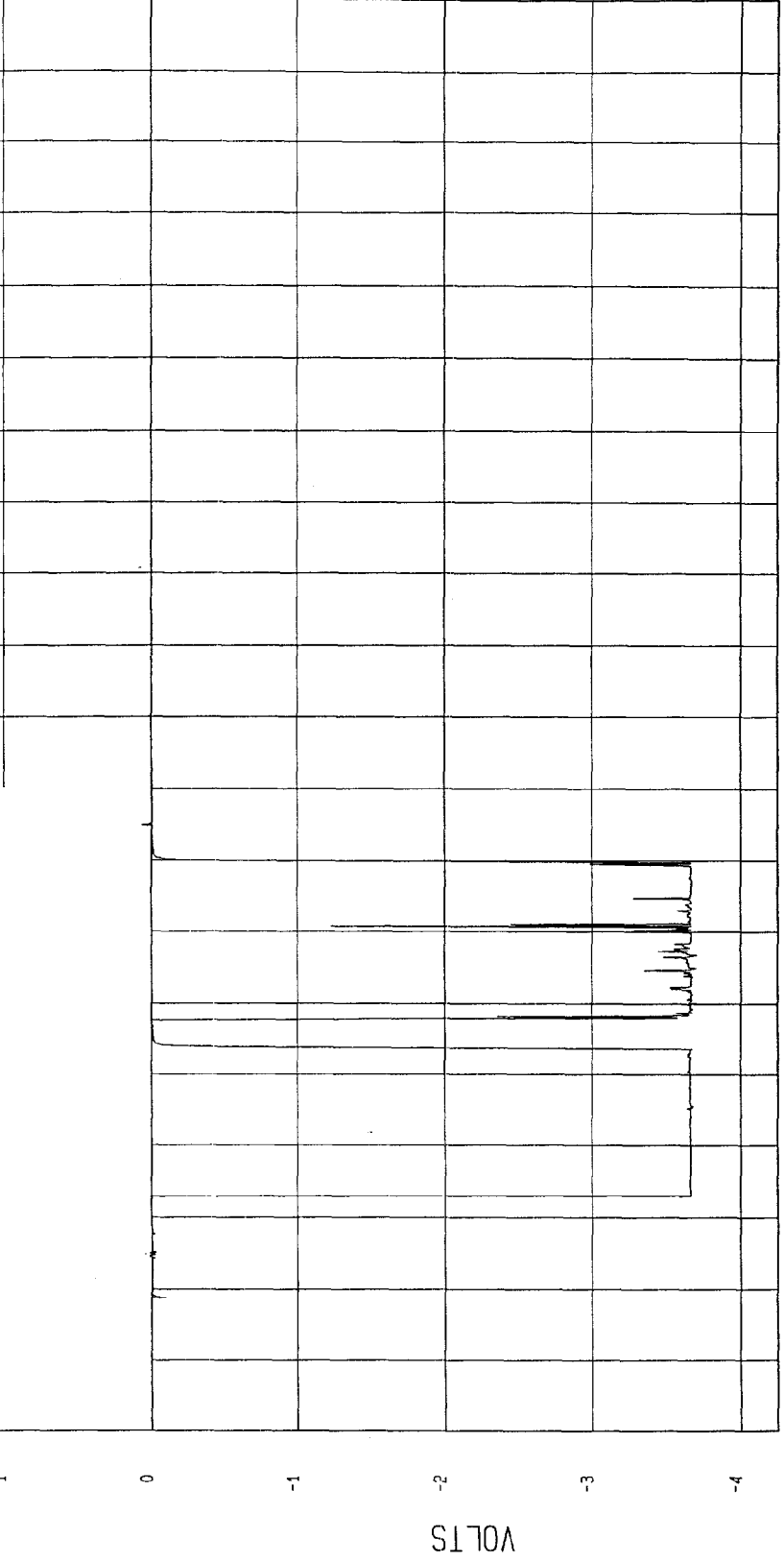
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH *50.3 KPH

Minimum = -3.70 VOLTS at 60 msec Maximum = .06 VOLTS at 85 msec

DRIVER UPPER RIB CONTACT

1 0971160T 054 FilterClass (1000)



MGA Research
11-07-1997 15:55

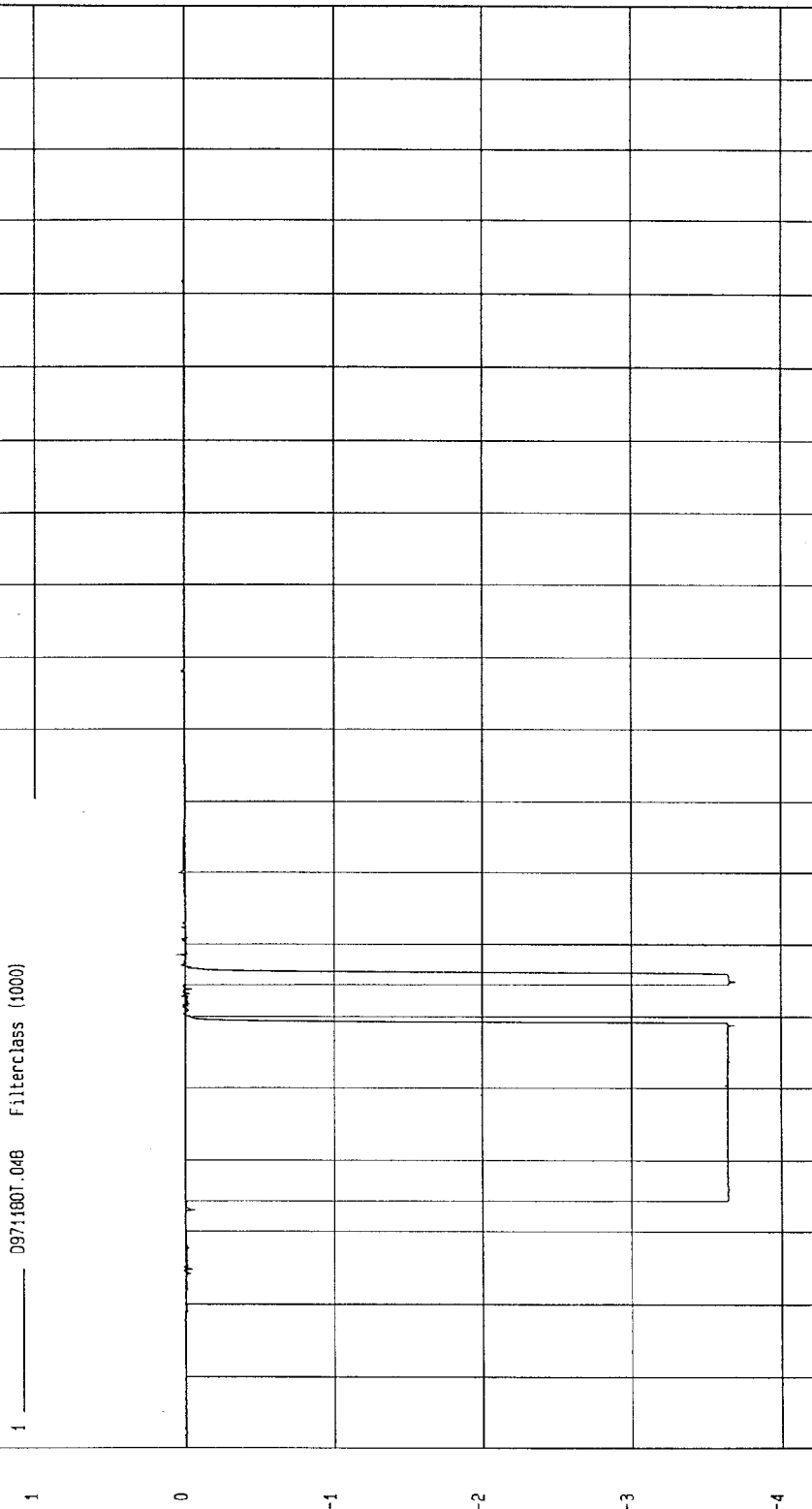
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -3.69 VOLTS at 65 msec
Maximum = 5.56E-02 VOLTS at 68 msec

DRIVER MID RIB CONTACT

1 ——— D97180T.048 Filterclass (1000)



MOA Research
11-07-1997 15:55

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

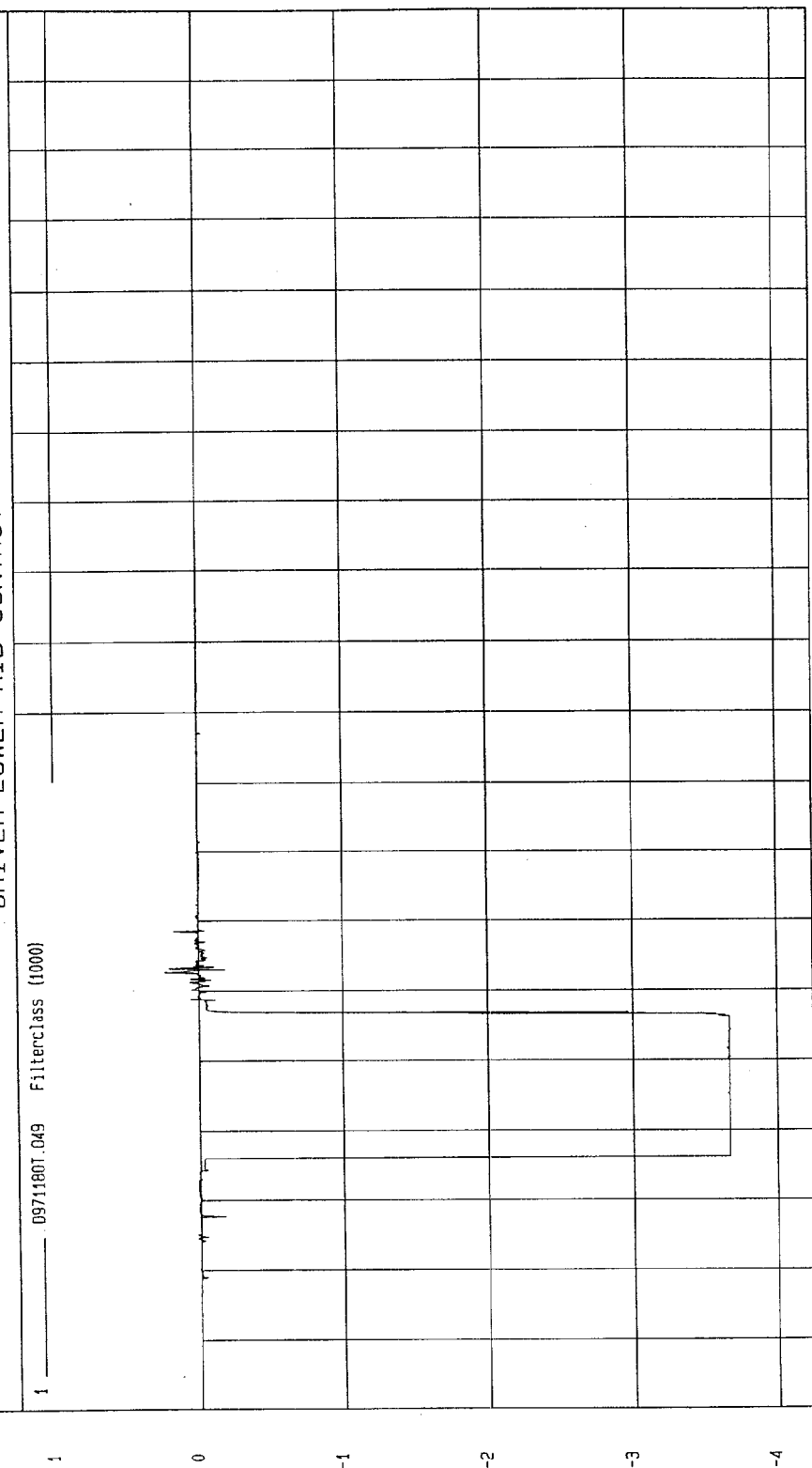
COMPONENT: 1997 FORD MUSTANG

Maximum = .22 VOLTS at 63 msec

Minimum = -3.67 VOLTS at 50 msec

DRIVER LOWER RIB CONTACT

1 ——— 0971180T.049 Filterclass (1000)



MSA Research
11-01-1997 15:55

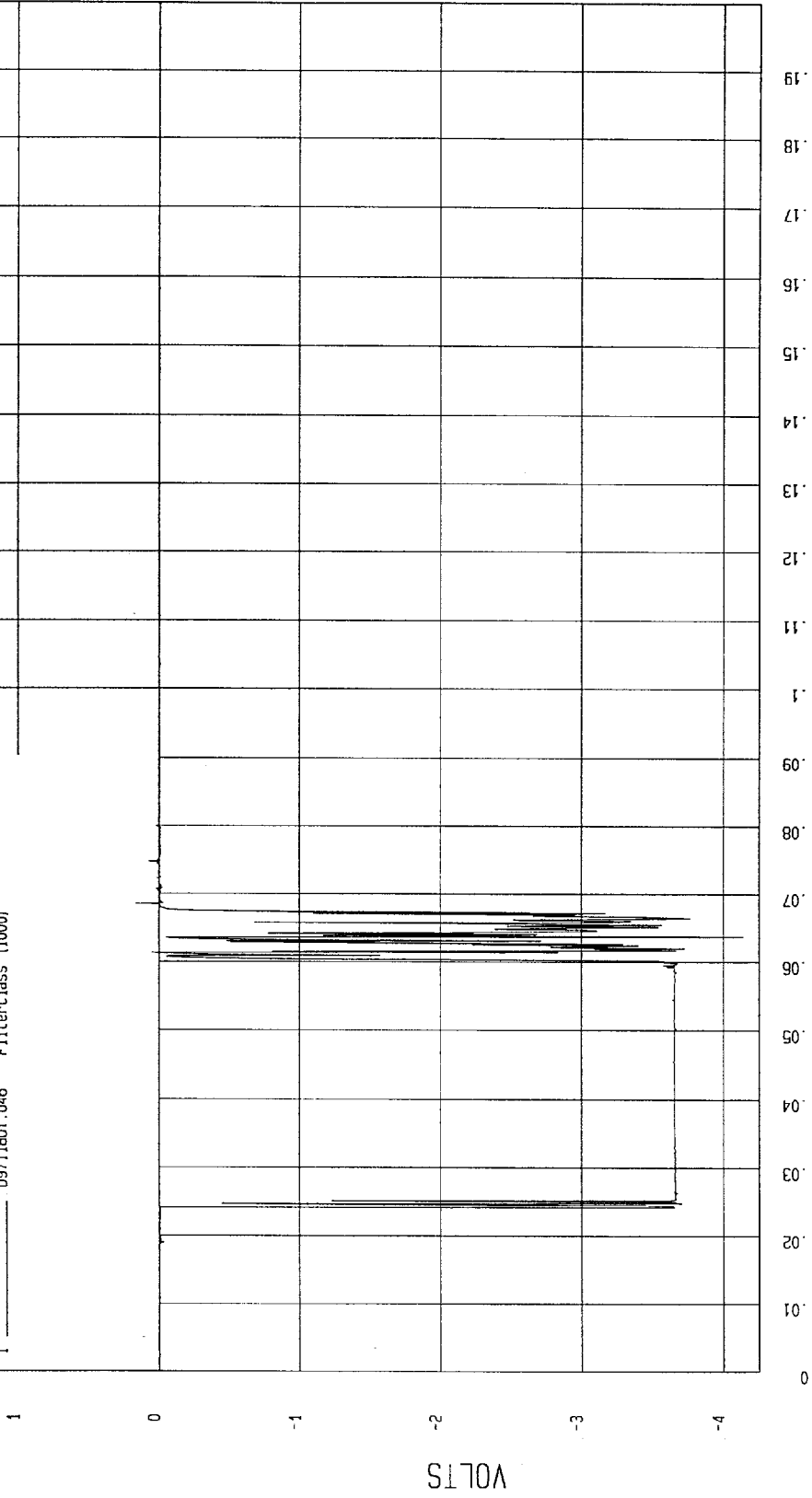
TEST: EU 96/27/EC SIDE IMPACT TEST DATE: 10-09-1997

COMPONENT: 1997 FORD MUSTANG Speed: 31.24 MPH 50.3 KPH

Minimum = -4.13 VOLTS at 64 msec
Maximum = .16 VOLTS at 68 msec

DRIVER PELVIS CONTACT

1 _____ 097:180T.046 Filterclass (1000)



MOA Research
11-07-1997 13:55

TEST DATE: 10-09-1997

TEST: EU 96/27/EC SIDE IMPACT

Speed: 31.24 MPH 50.3 KPH

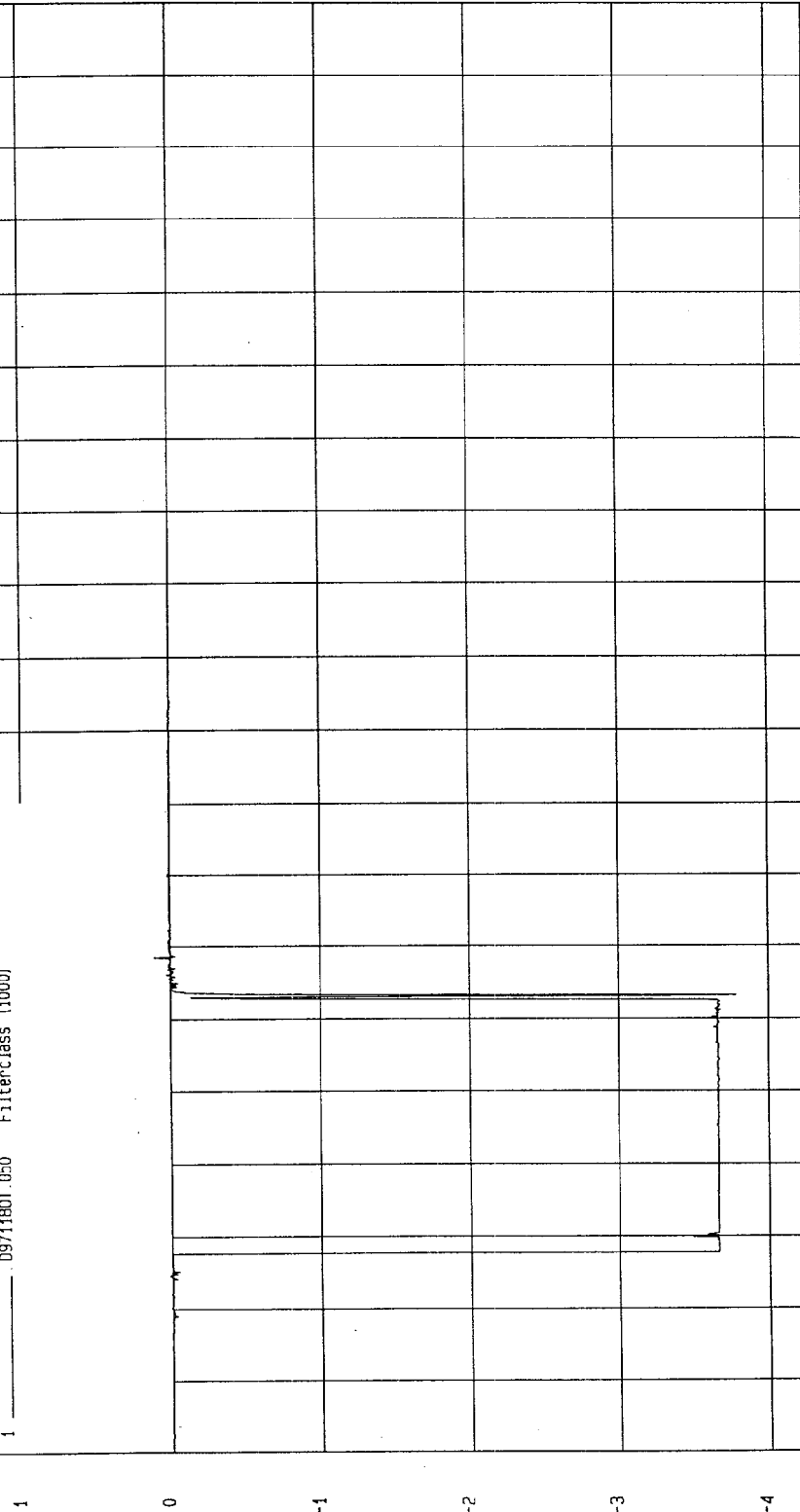
COMPONENT: 1997 FORD MUSTANG

Maximum = .10 VOLTS at 68 msec

Minimum = -3.78 VOLTS at 63 msec

DRIVER ABDOMEN CONTACT

1 .0971180T.050 Filterclass (1000)



MGA Research
11-07-1997 15:55

APPENDIX C
OVERPLOT DATA

This section contains overplot data from the European Lateral Impact testing conducted at MGA Research on October, 9, 1997 and the FMVSS 214D Side Impact testing conducted at MGA Research on November 1, 1997.

	<u>European Lateral Impact</u>	<u>FMVSS 214D</u>
Vehicle	1997 Ford Mustang	1996 Ford Mustang
Test Weight (kg)	1616.6	1616.7
Impact Speed (kph)	50.3	52.8
Driver Dummy	EuroSID-1	SID
Passenger Dummy	**	SID
Impact Angle (°)	90°	90°
Crab Angle (°)	0°	27°
Driver (TTI)*	101.5	56
Passenger (TTI)*	**	49

* These values are calculated using the FMVSS 214D injury criteria.

** Left rear passenger was not run.

Table of Data Plots

<u>Overplot Data:</u>	<u>Page No.</u>
Figure C-1 - Driver Head X Accelerations vs. Time	C-1
Figure C-2 - Driver Head X Velocities vs. Time	C-2
Figure C-3 - Driver Head Y Accelerations vs. Time	C-3
Figure C-4 - Driver Head Y Velocities vs. Time	C-4
Figure C-5 - Driver Head Z Accelerations vs. Time	C-5
Figure C-6 - Driver Head Z Velocities vs. Time	C-6
Figure C-7 - Driver Head Resultant Accelerations vs. Time	C-7
Figure C-8 - Driver Upper Rib Y Accelerations vs. Time (FIR Filtered)	C-8
Figure C-9 - Driver Upper Rib Y Velocities vs. Time (Filterclass 180)	C-9
Figure C-10 - Driver Lower Rib Y Accelerations vs. Time (FIR Filtered)	C-10
Figure C-11 - Driver Lower Rib Y Velocities vs. Time (Filterclass 180)	C-11
Figure C-12 - Driver Lower Spine Y Accelerations vs. Time (FIR Filtered)	C-12
Figure C-13 - Driver Lower Spine Y Velocities vs. Time (Filterclass 180)	C-13
Figure C-14 - Driver Pelvis Y Accelerations vs. Time (FIR Filtered)	C-14
Figure C-15 - Driver Pelvis Y Velocities vs. Time (Filterclass 180)	C-15
Figure C-16 - Right Front Sill X Accelerations vs. Time (Filter Class 60)	C-16
Figure C-17 - Right Front Sill X Velocities vs. Time (Filter Class 180)	C-17
Figure C-18 - Right Front Sill Y Accelerations vs. Time (Filter Class 60)	C-18
Figure C-19 - Right Front Sill Y Velocities vs. Time (Filter Class 180)	C-19
Figure C-20 - Right Front Sill Z Accelerations vs. Time (Filter Class 60)	C-20
Figure C-21 - Right Front Sill Z Velocities vs. Time (Filter Class 180)	C-21
Figure C-22 - Right Front Sill Resultant Accelerations (Filter Class 60)	C-22
Figure C-23 - Right Rear Sill X Accelerations vs. Time (Filter Class 60)	C-23
Figure C-24 - Right Rear Sill X Velocities vs. Time (Filter Class 180)	C-24
Figure C-25 - Right Rear Sill Y Accelerations vs. Time (Filter Class 60)	C-25
Figure C-26 - Right Rear Sill Y Velocities vs. Time (Filter Class 180)	C-26
Figure C-27 - Right Rear Sill Z Acceleration vs. Time (Filter Class 60)	C-27
Figure C-28 - Right Rear Sill Z Velocities vs. Time (Filter Class 180)	C-28
Figure C-29 - Right Rear Sill Resultant Accelerations (Filter Class 60)	C-29

Table of Data Plots

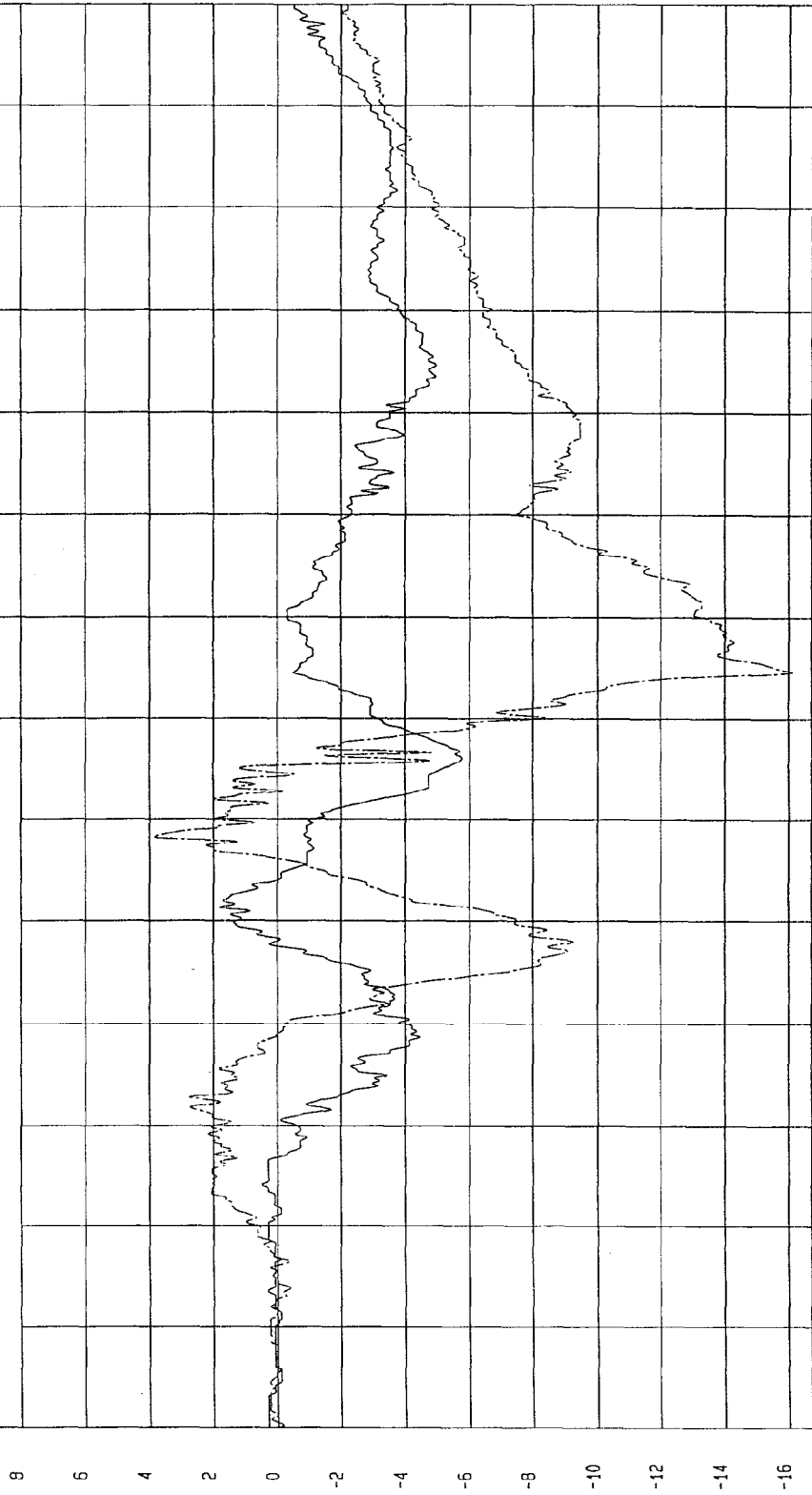
<u>Overplot Data (Cont'd):</u>	<u>Page No.</u>
Figure C-30 - Left Front Sill Y Accelerations vs. Time (Filter Class 60)	C-30
Figure C-31 - Left Front Sill Y Velocities vs. Time (Filter Class 180)	C-31
Figure C-32 - Left Rear Sill Y Accelerations vs. Time (Filterclass 60)	C-32
Figure C-33 - Left Rear Sill Y Velocities vs. Time (Filter Class 180)	C-33
Figure C-34 - Driver Seat Track Y Acceleration vs. Time (Filter Class 60)	C-34
Figure C-35 - Driver Seat Track Y Velocities vs. Time (Filter Class 180)	C-35
Figure C-36 - Vehicle Rear Axle X Accelerations vs. Time (Filter Class 60)	C-36
Figure C-37 - Vehicle Rear Axle X Velocities vs. Time (Filter Class 180)	C-37
Figure C-38 - Vehicle Rear Axle Y Accelerations vs. Time (Filter Class 60)	C-38
Figure C-39 - Vehicle Rear Axle Y Velocities vs. Time (Filter Class 180)	C-39
Figure C-40 - Vehicle Rear Axle Z Accelerations vs. Time (Filter Class 60)	C-40
Figure C-41 - Vehicle Rear Axle Z Velocities vs. Time (Filter Class 180)	C-41
Figure C-42 - Vehicle Rear Axle Resultant Accelerations vs. Time (Filter Class 60)	C-42
Figure C-43 - Left Mid A-Post Y Accelerations vs. Time (Filter Class 60)	C-43
Figure C-44 - Left Mid A-Post Y Velocities vs. Time (Filter Class 180)	C-44
Figure C-45 - Left Lower A-Post Y Accelerations vs. Time (Filterclass 60)	C-45
Figure C-46 - Left Lower A-Post Y Velocities vs. Time (Filterclass 180)	C-46
Figure C-47 - Left Lower B-Post Y Accelerations vs. Time (Filterclass 60)	C-47
Figure C-48 - Left Lower B-Post Y Velocities vs. Time (Filterclass 180)	C-48
Figure C-49 - Level 1 Sill Deformation	C-49
Figure C-50 - Level 2 Sill Deformation	C-50
Figure C-51 - Level 3 Sill Deformation	C-51
Figure C-52 - Level 4 Sill Deformation	C-52
Figure C-53 - Level 5 Sill Deformation	C-53

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER HEAD X ACCELERATIONS

1 ——— EU SIDE 897118AF .A12 DRIVER HEAD X
2 - - - - FMVSS 214 895201AF .A12 DRIVER HEAD X



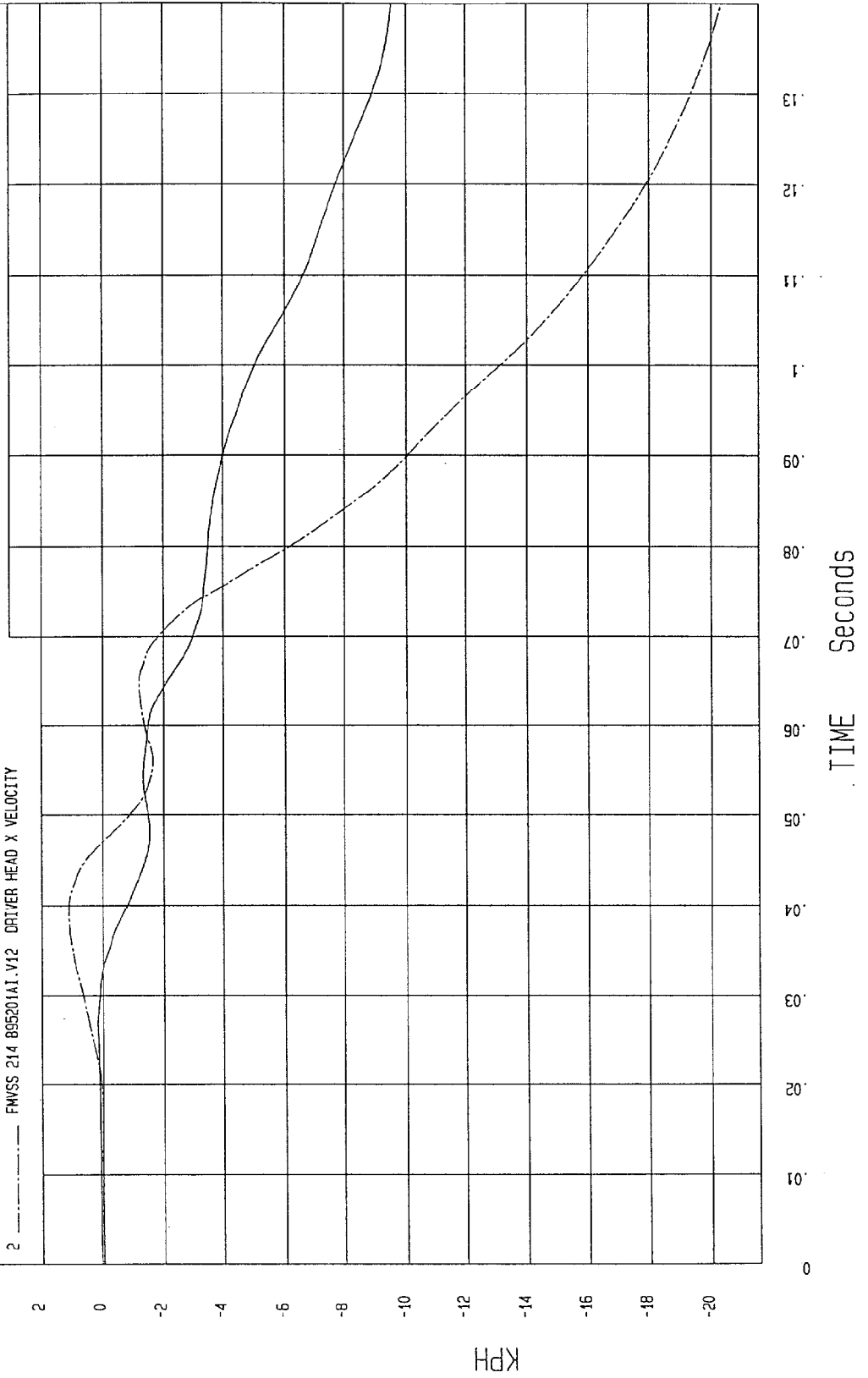
G

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER HEAD X VELOCITIES

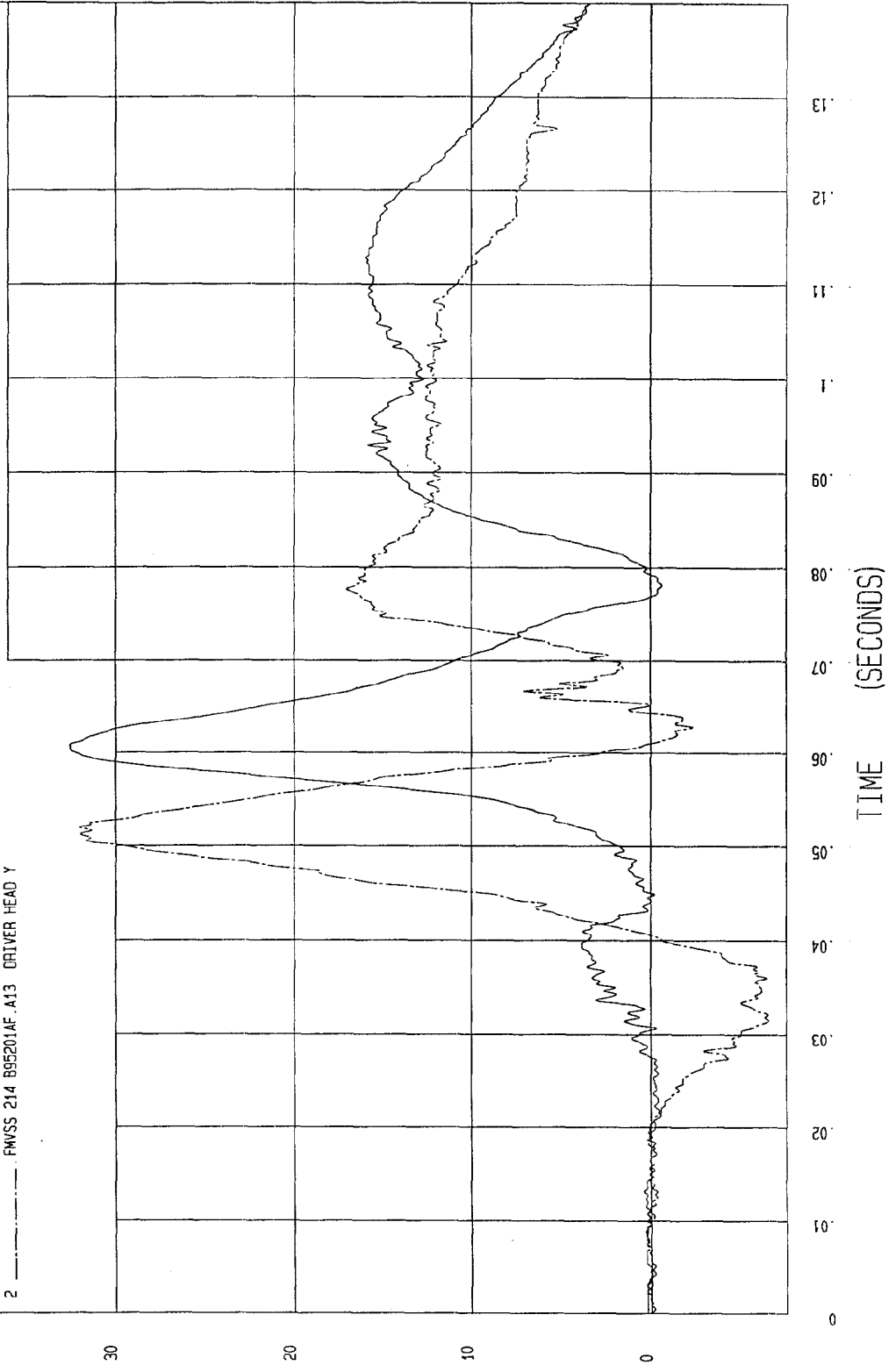
- 1 ——— EU SIDE B97118A1.V12 DRIVER HEAD X VELOCITY
- 2 - - - - - FMVSS 214 895201A1.V12 DRIVER HEAD X VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER HEAD Y ACCELERATIONS

- 1 ——— EU SIDE B97118AF.A13 DRIVER HEAD Y
- 2 - - - - FMVSS 214 B95201AF.A13 DRIVER HEAD Y



G.S

TEST: FMVSS 214 - EU SIDE IMPACT

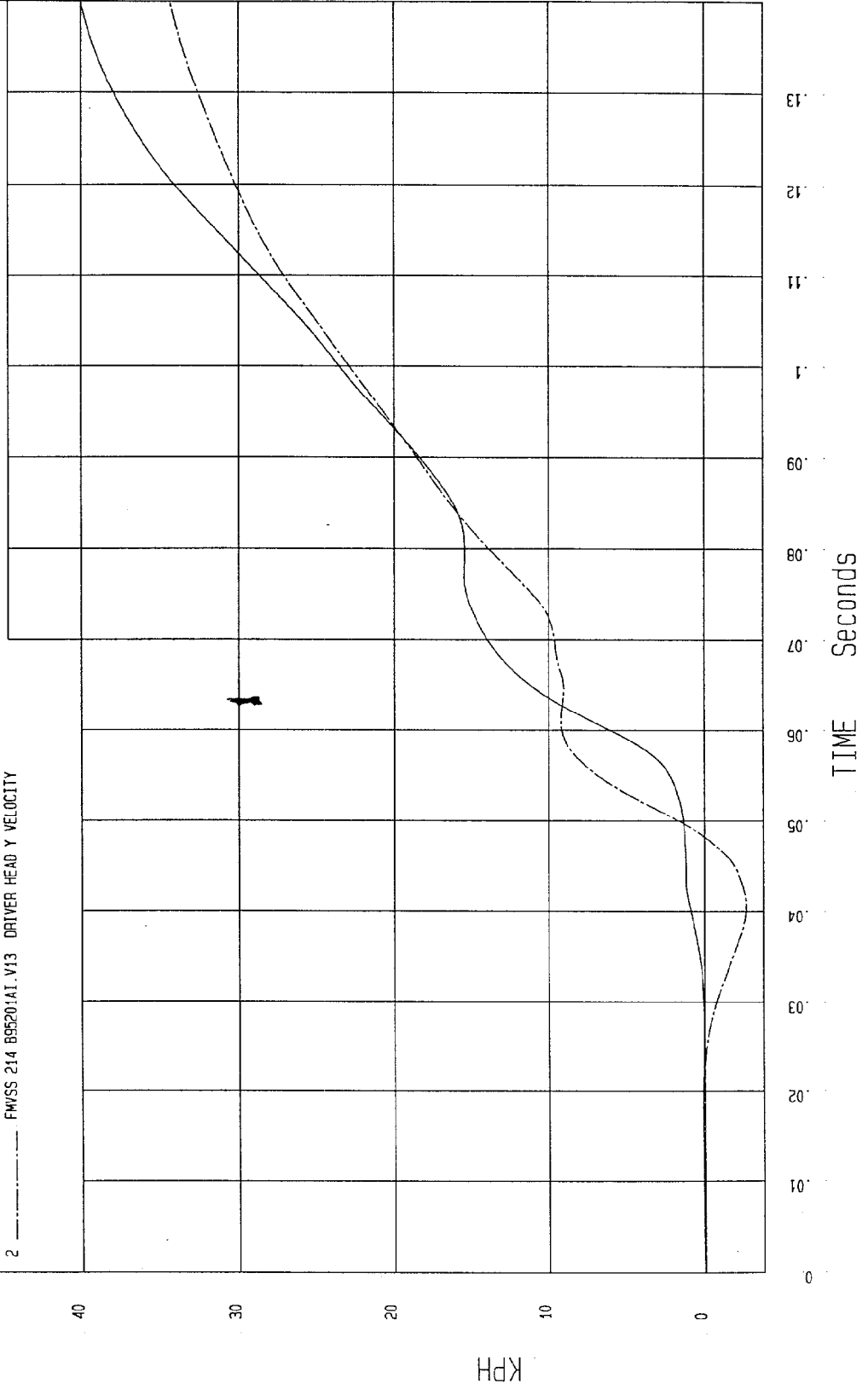
EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG

FMVSS 214 SPEED = 52.8 KPH

DRIVER HEAD Y VELOCITIES

- 1 ——— EU SIDE 897118A1.V13 DRIVER HEAD Y VELOCITY
- 2 - - - - - FMVSS 214 895201A1.V13 DRIVER HEAD Y VELOCITY

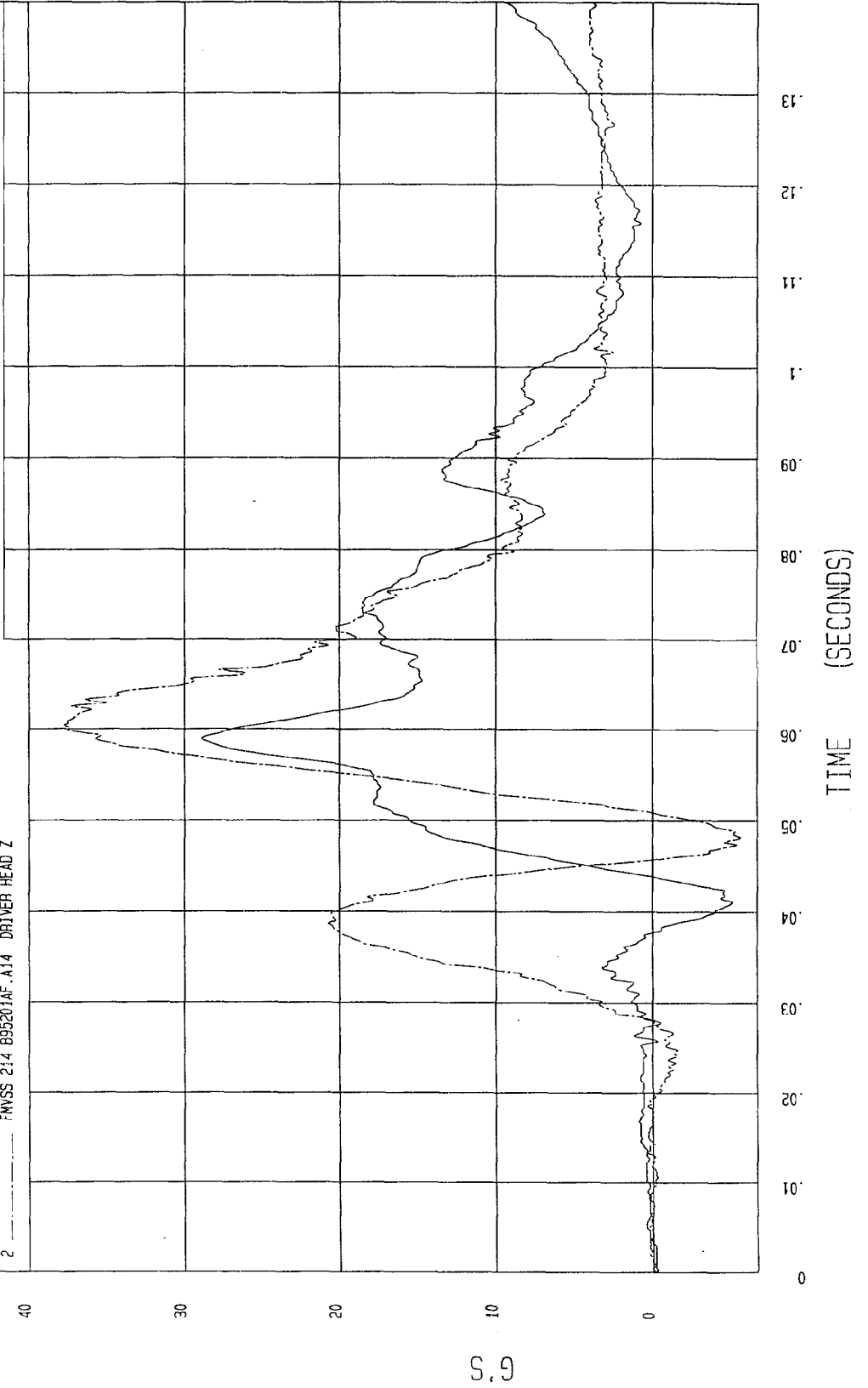


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER HEAD Z ACCELERATIONS

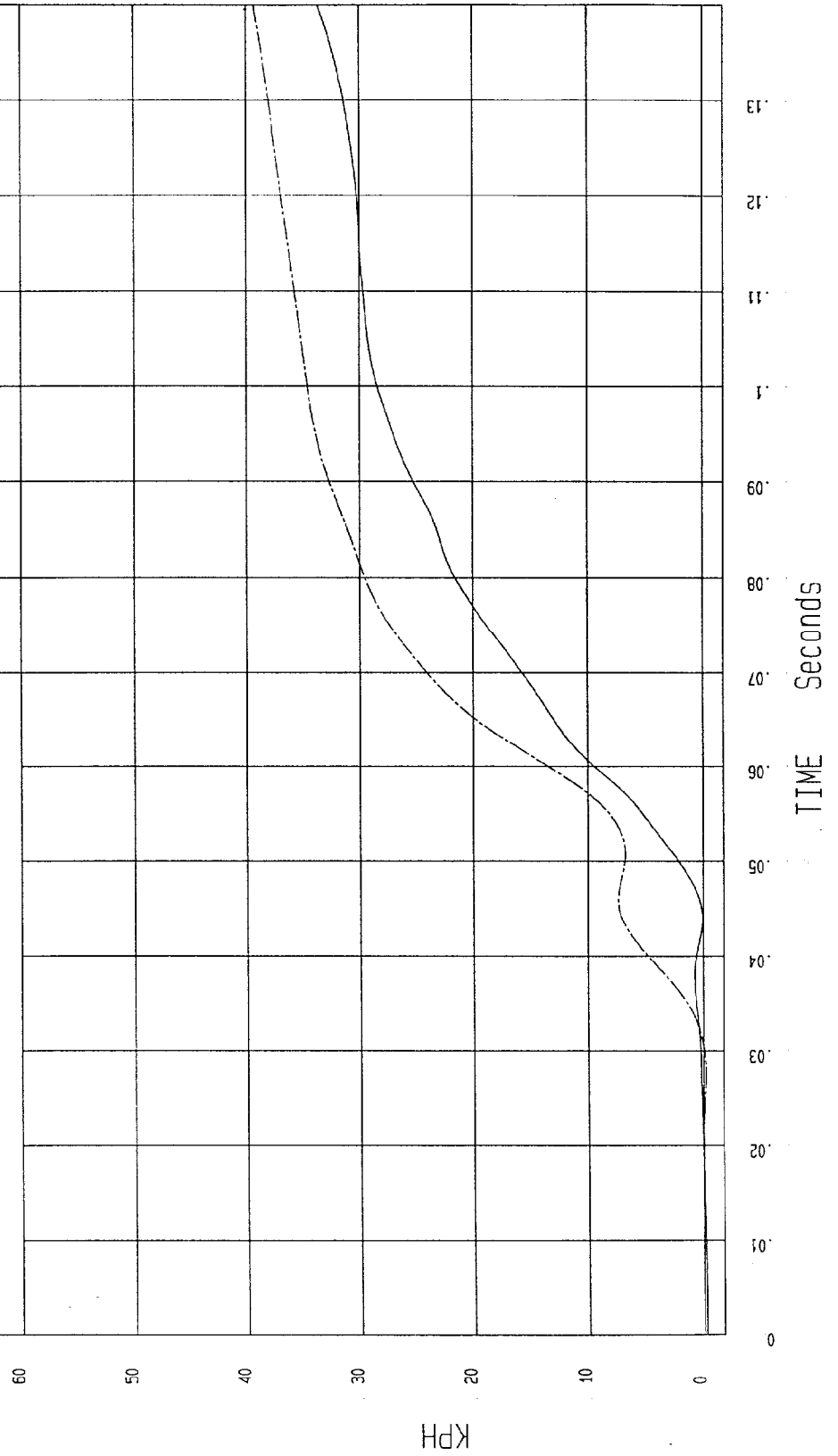
1 ——— EU SIDE 897118AF.A14 DRIVER HEAD Z
2 - - - - FMVSS 214 895201AF.A14 DRIVER HEAD Z



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER HEAD Z VELOCITIES

1 ——— EU SIDE B97118A1.V14 DRIVER HEAD Z VELOCITY
2 - - - - FMVSS 214 B95201A1.V14 DRIVER HEAD Z VELOCITY

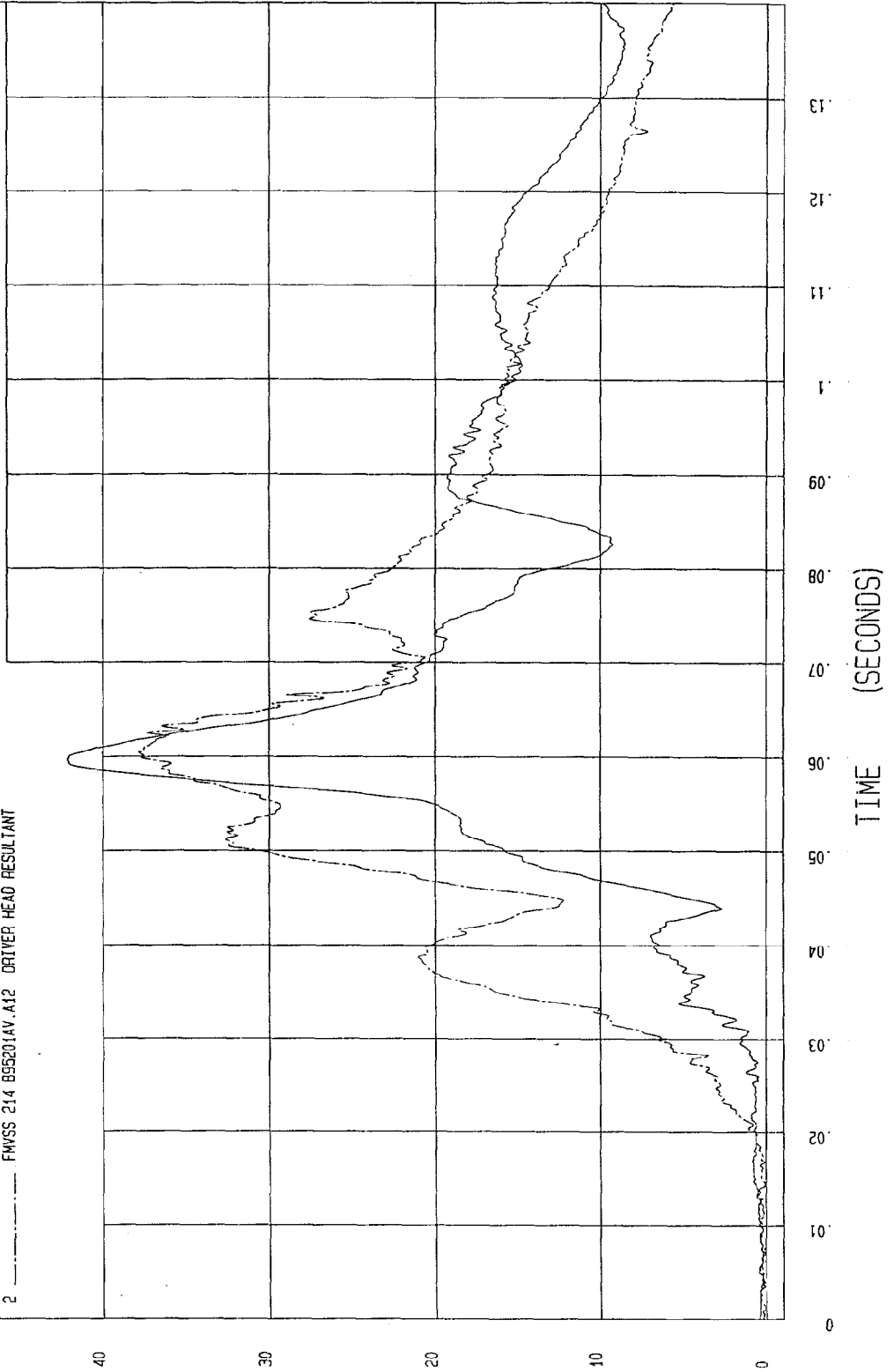


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER HEAD RESULTANT ACCELERATIONS

- 1 ——— EU SIDE B97118AV.A12 DRIVER HEAD RESULTANT ACCELERATION
- 2 - - - - FMVSS 214 B95201AV.A12 DRIVER HEAD RESULTANT



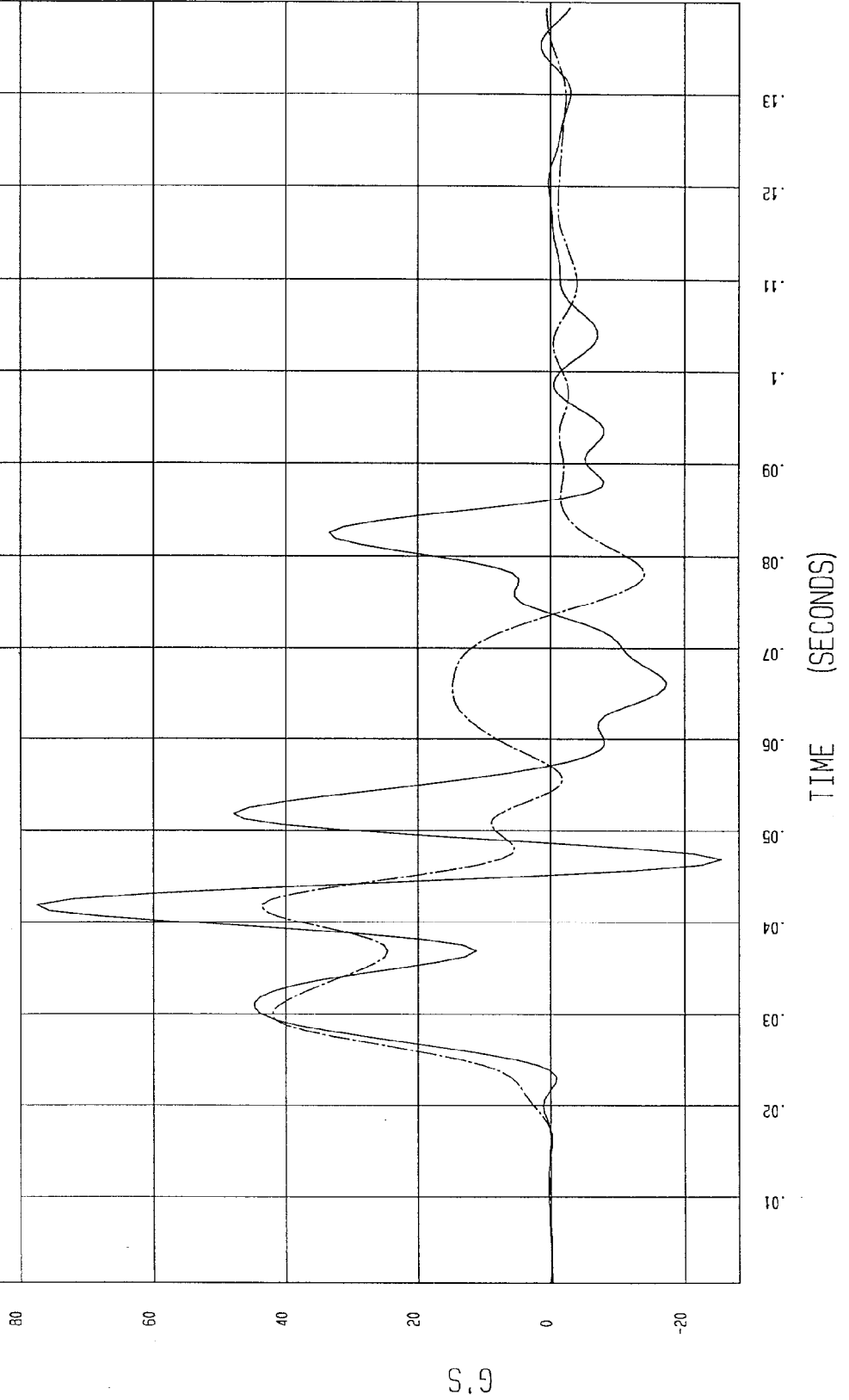
G.G

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER UPPER RIB Y ACCELERATIONS (FIR FILTERED)

1 ——— EU SIDE B97148FT.R15 DRIVER UPPER RIB Y
2 - - - - - FMVSS 214 B95201F1.R15 DRIVER UPPER RIB Y

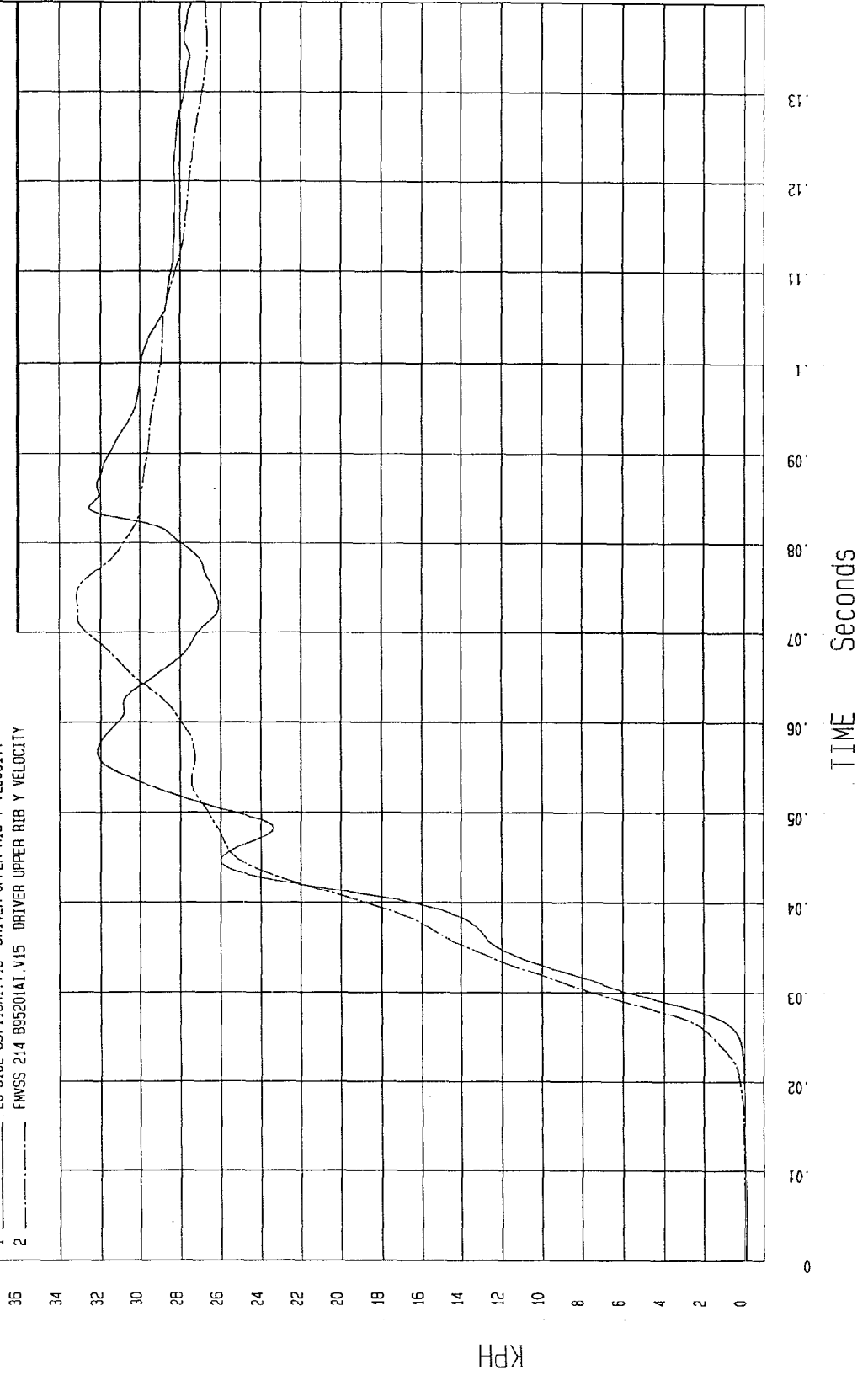


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER UPPER RIB Y VELOCITIES (FILTERCLASS 180)

1 ——— EU SIDE 897118A1.V15 DRIVER UPPER RIB Y VELOCITY
2 - - - - FMVSS 214 895201A1.V15 DRIVER UPPER RIB Y VELOCITY

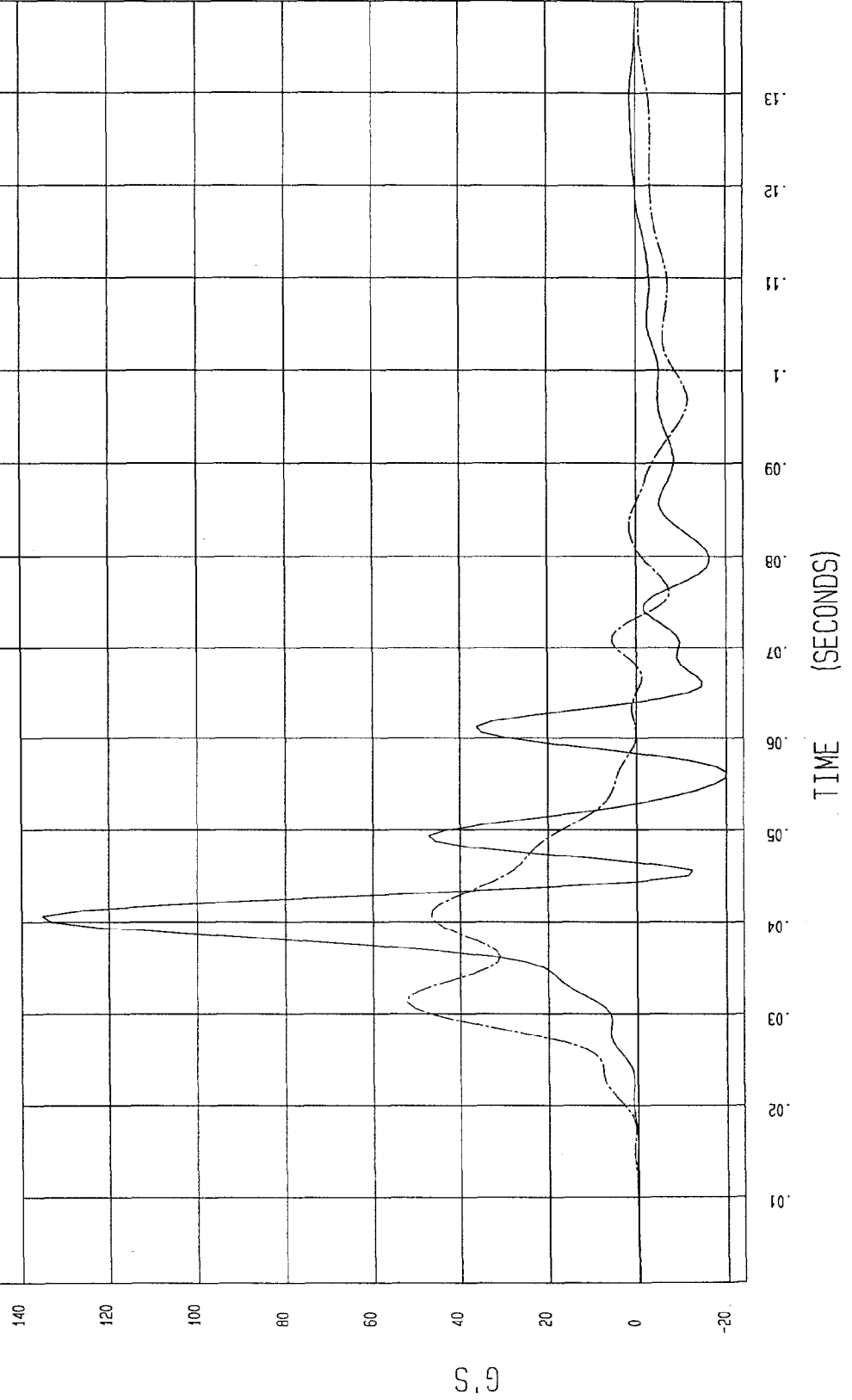


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER LOWER RIB Y ACCELERATIONS (FIR FILTERED)

1 ——— EU SIDE 89719F1.R17 DRIVER LOWER RIB Y
2 - - - - - FMVSS 214 89520.F1.R16 DRIVER LOWER RIB Y

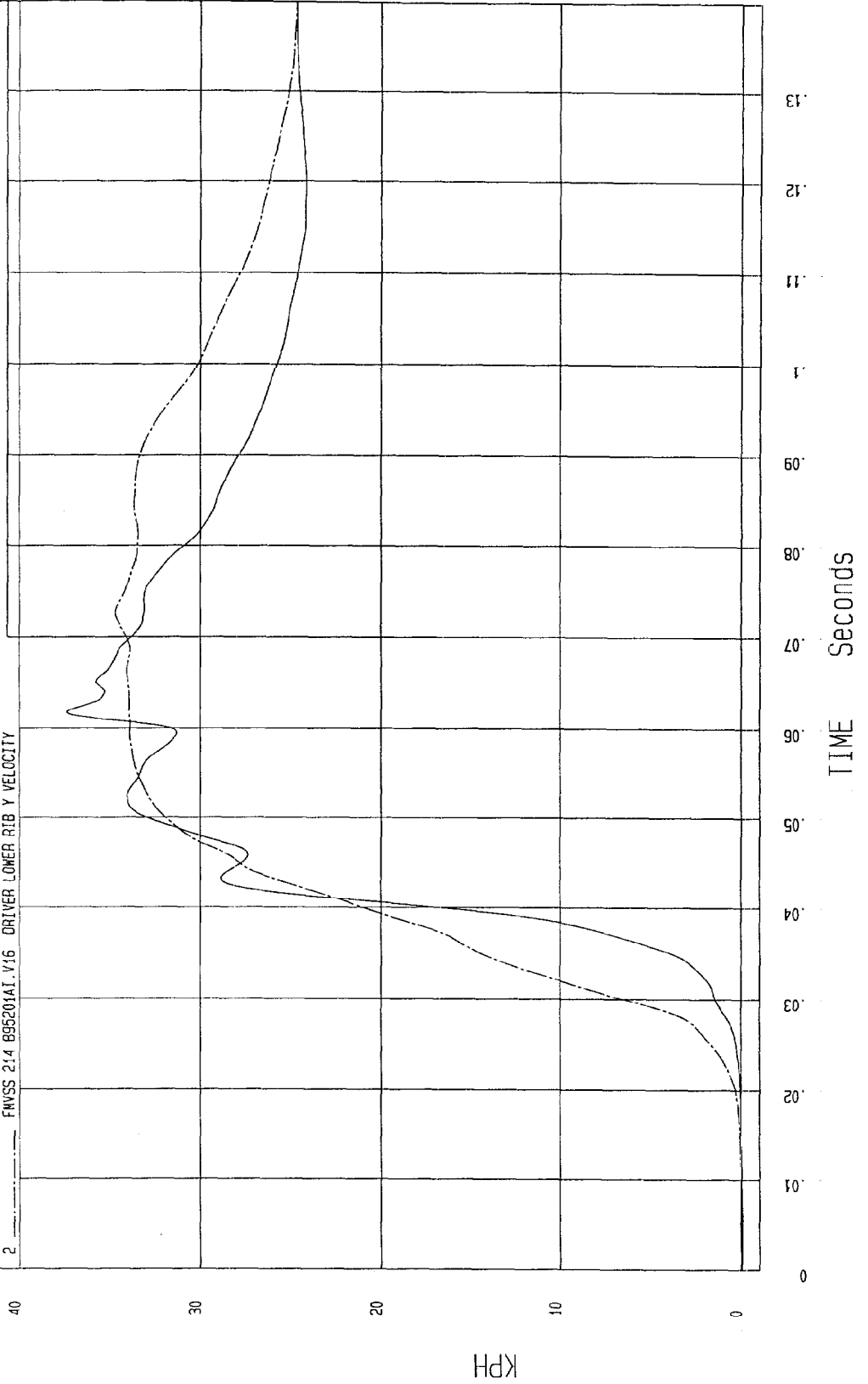


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER LOWER RIB Y VELOCITIES (FILTERCLASS 180)

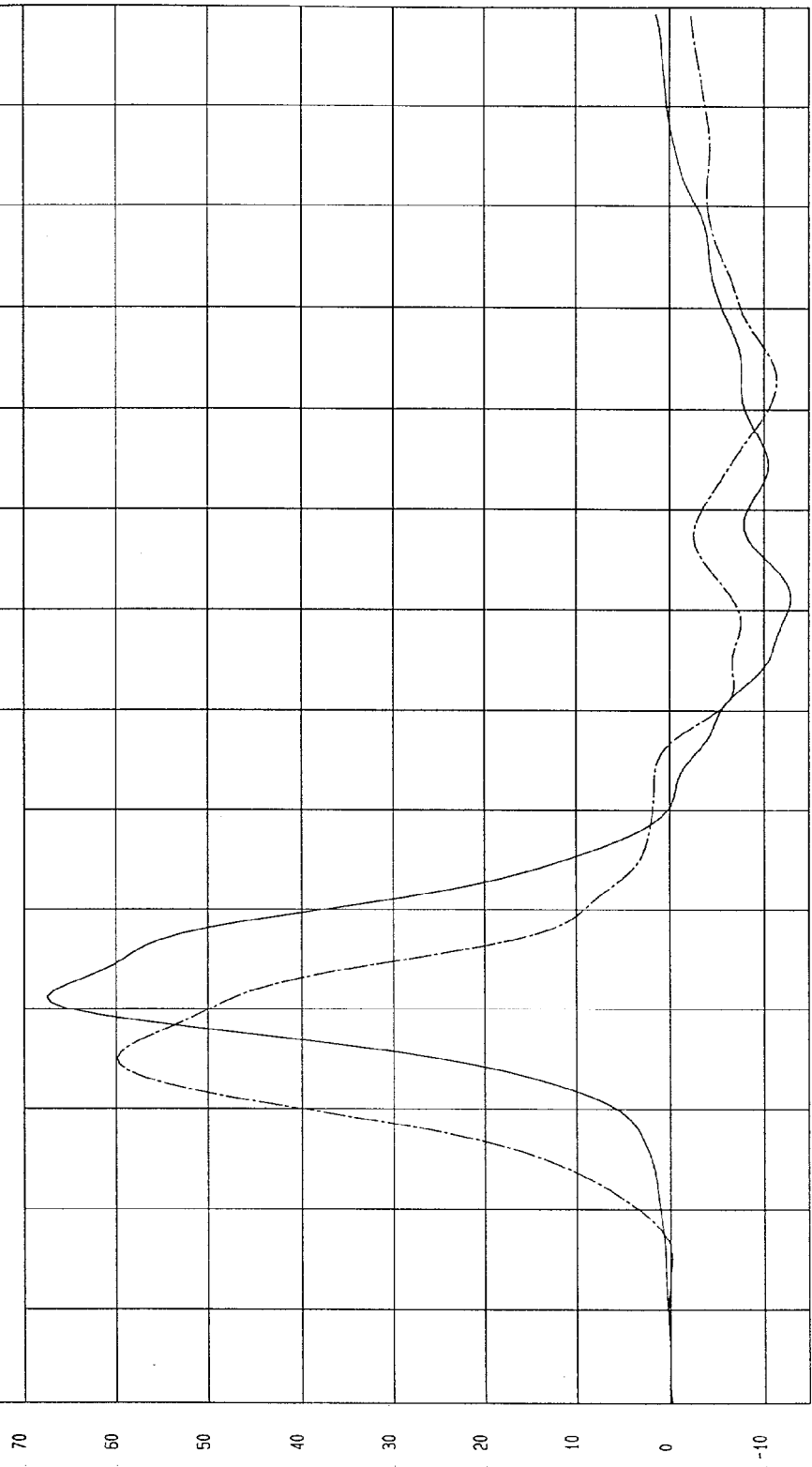
1 ——— EU SIDE 897118A1.V17 DRIVER LOWER RIB Y VELOCITY
2 - - - - FMVSS 214 895201A1.V16 DRIVER LOWER RIB Y VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER LOWER SPINE Y ACCELERATIONS (FIR FILTERED)

1 ——— EU SIDE B9716FI.R19 DRIVER LOWER SPINE Y
2 - - - - FMVSS 214 B9520FI.R17 DRIVER LOWER SPINE Y



G.S

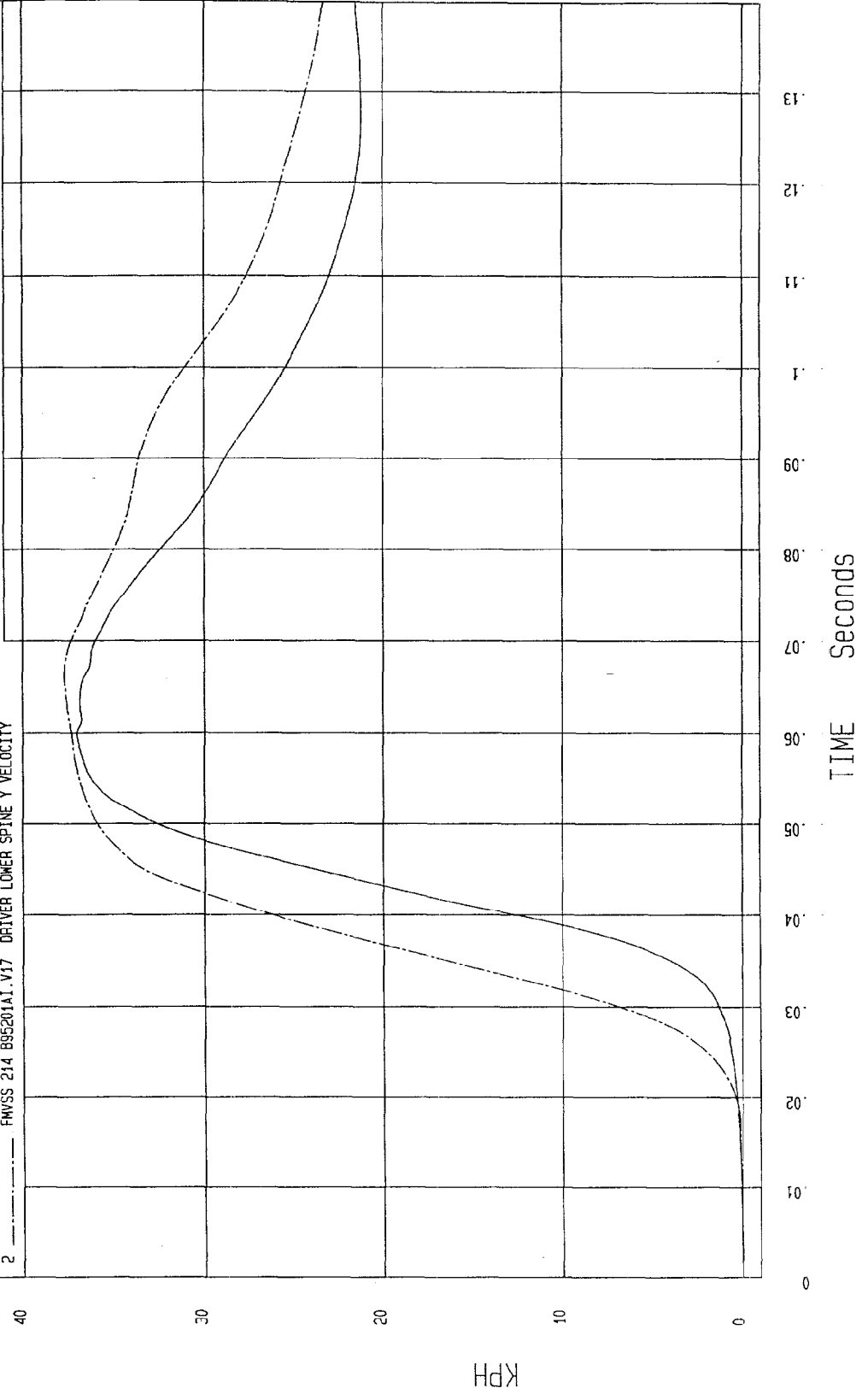
TIME (SECONDS)

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER LOWER SPINE Y VELOCITIES (FILTERCLASS 180)

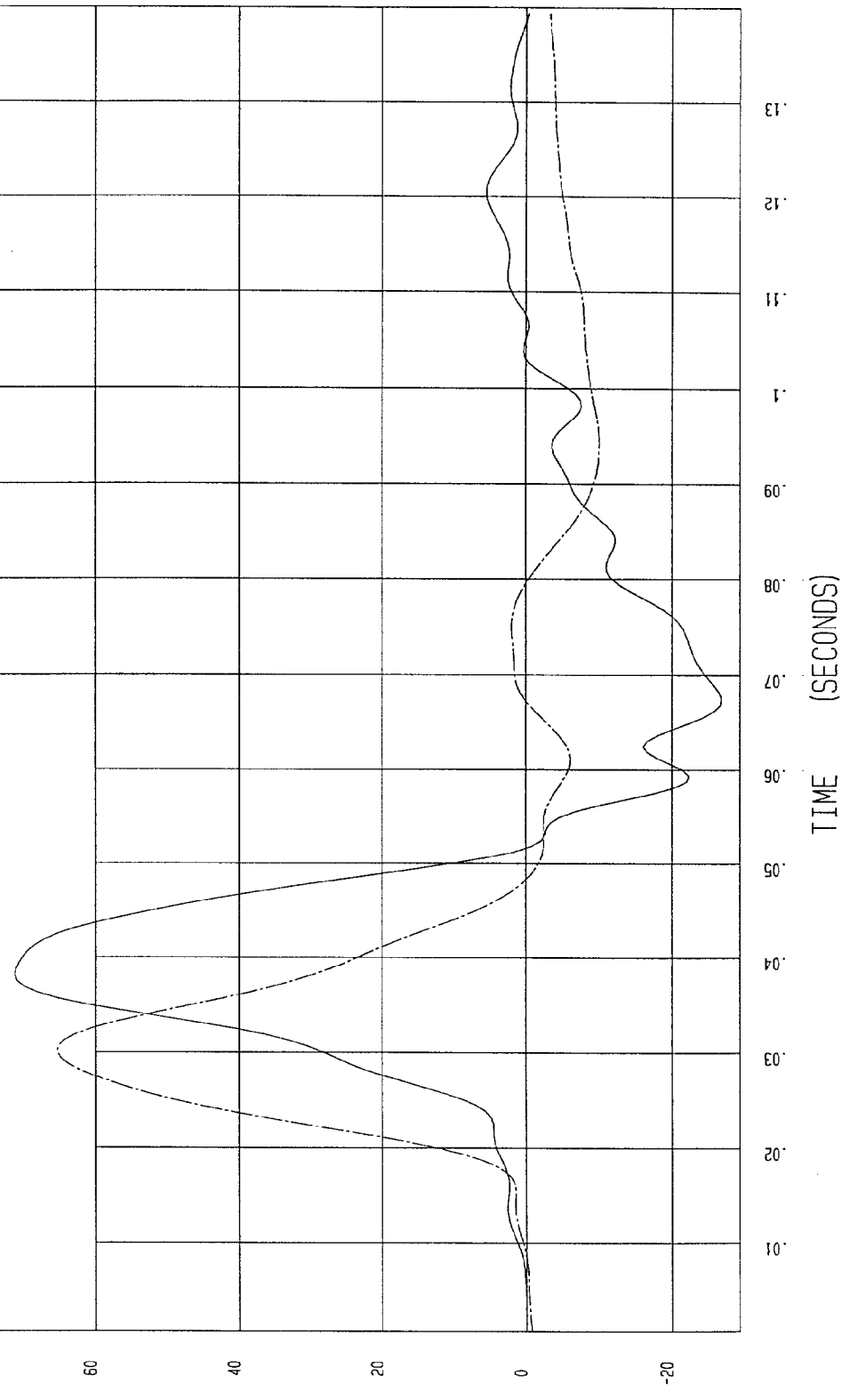
- 1 ——— EU SIDE B97118A1.V19 DRIVER LOWER SPINE Y VELOCITY
- 2 - - - - - FMVSS 214 B95201A1.V17 DRIVER LOWER SPINE Y VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER PELVIS Y ACCELERATIONS (FIR FILTERED)

1 ——— EU SIDE B97118F1.R46 DRIVER PELVIS Y
2 - - - - FMVSS 214 B95201F1.R18 DRIVER PELVIS Y

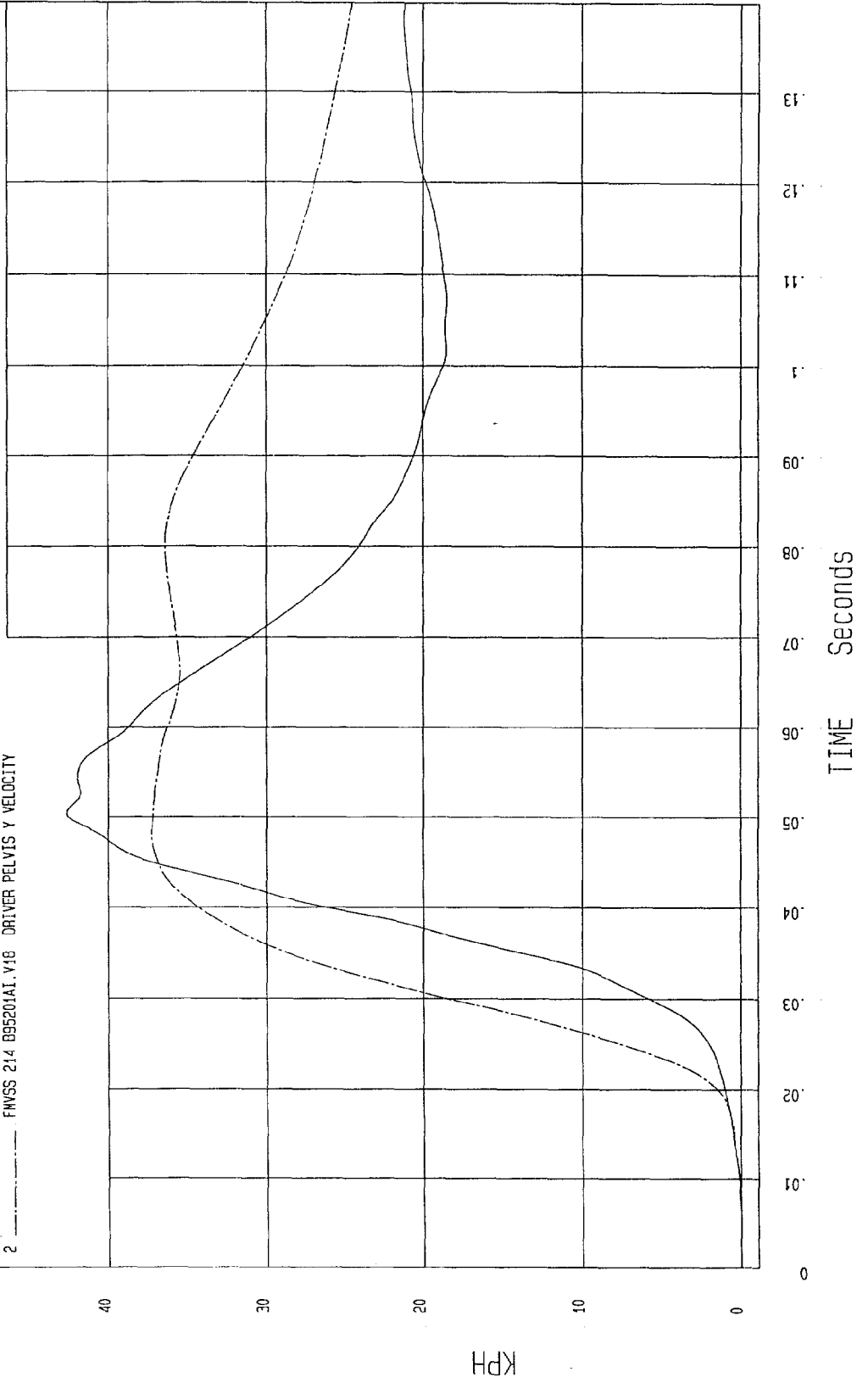


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER PELVIS Y VELOCITIES (FILTERCLASS 180)

1 _____ EU SIDE 897118A1.V46 DRIVER PELVIS Y VELOCITY
2 - - - - - FMVSS 214 095201A1.V18 DRIVER PELVIS Y VELOCITY

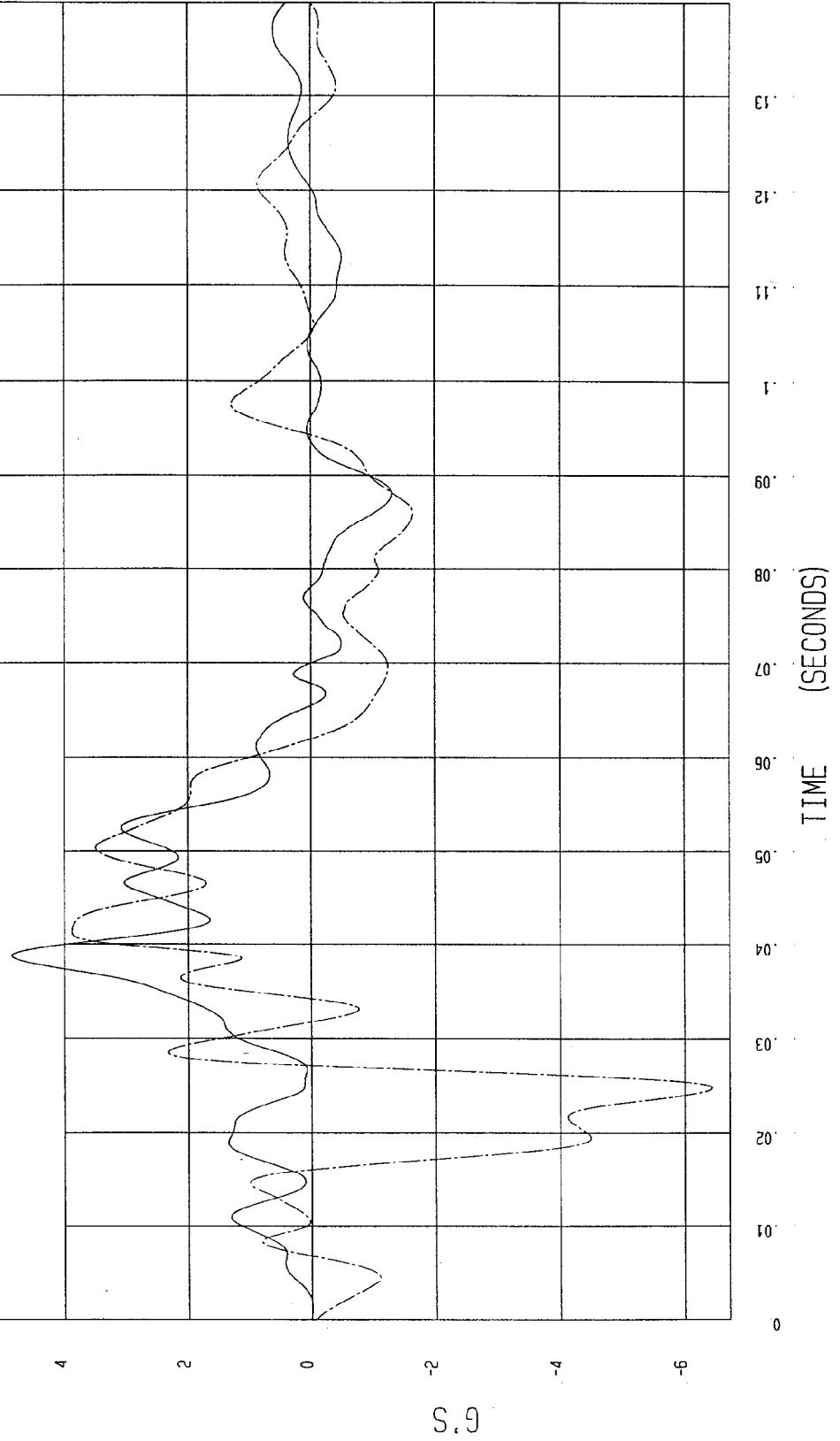


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT FRONT SILL X ACCELERATIONS (FILTER CLASS 60)

- 1 ——— EU SIDE B9711BAF.A64 RIGHT SIDE SILL @ FRONT SEAT X
- 2 - - - - - FMVSS 214 B95201AF.A32 RIGHT FRONT SILL X

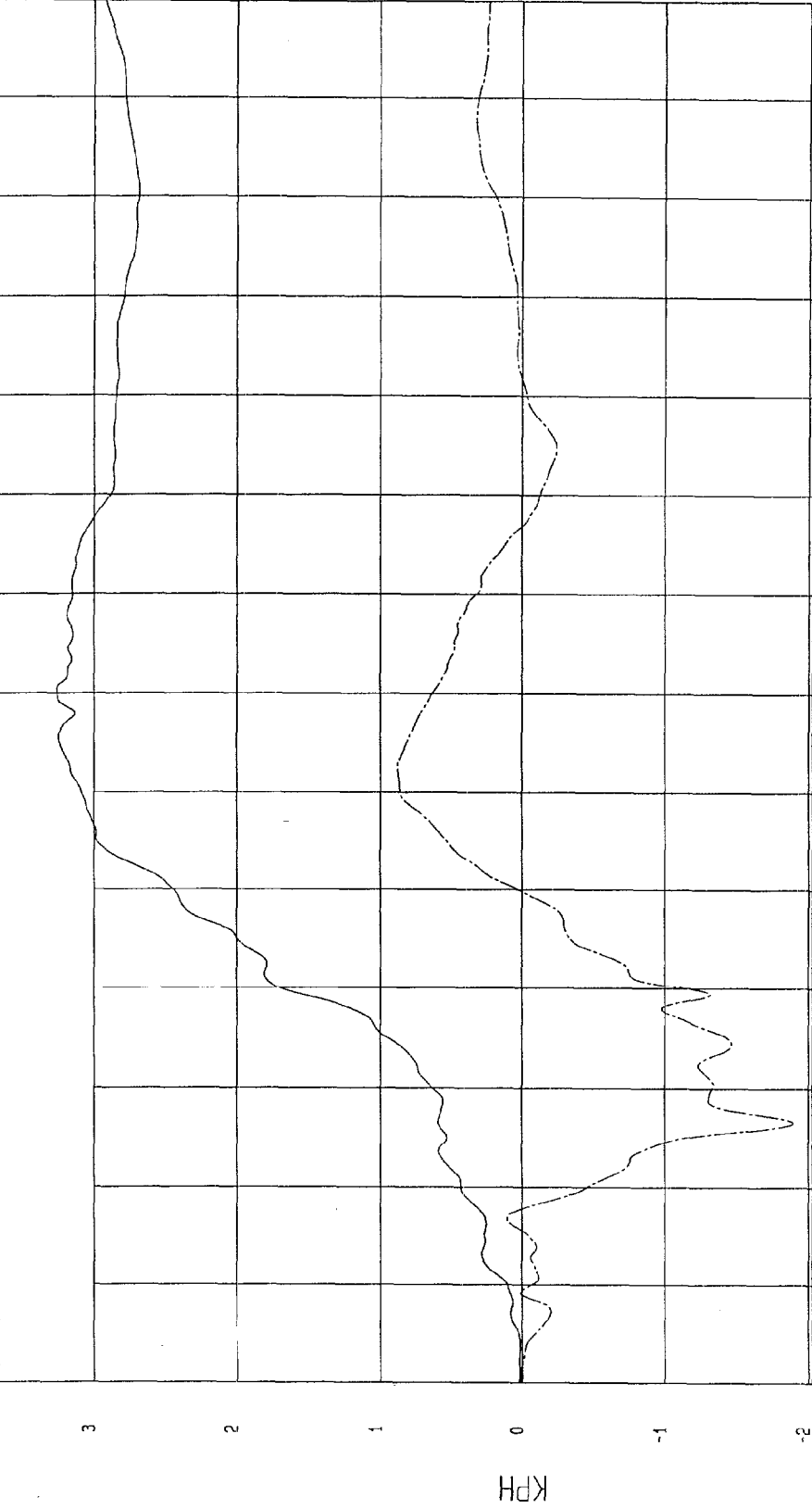


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT FRONT SILL X VELOCITIES (FILTER CLASS 180)

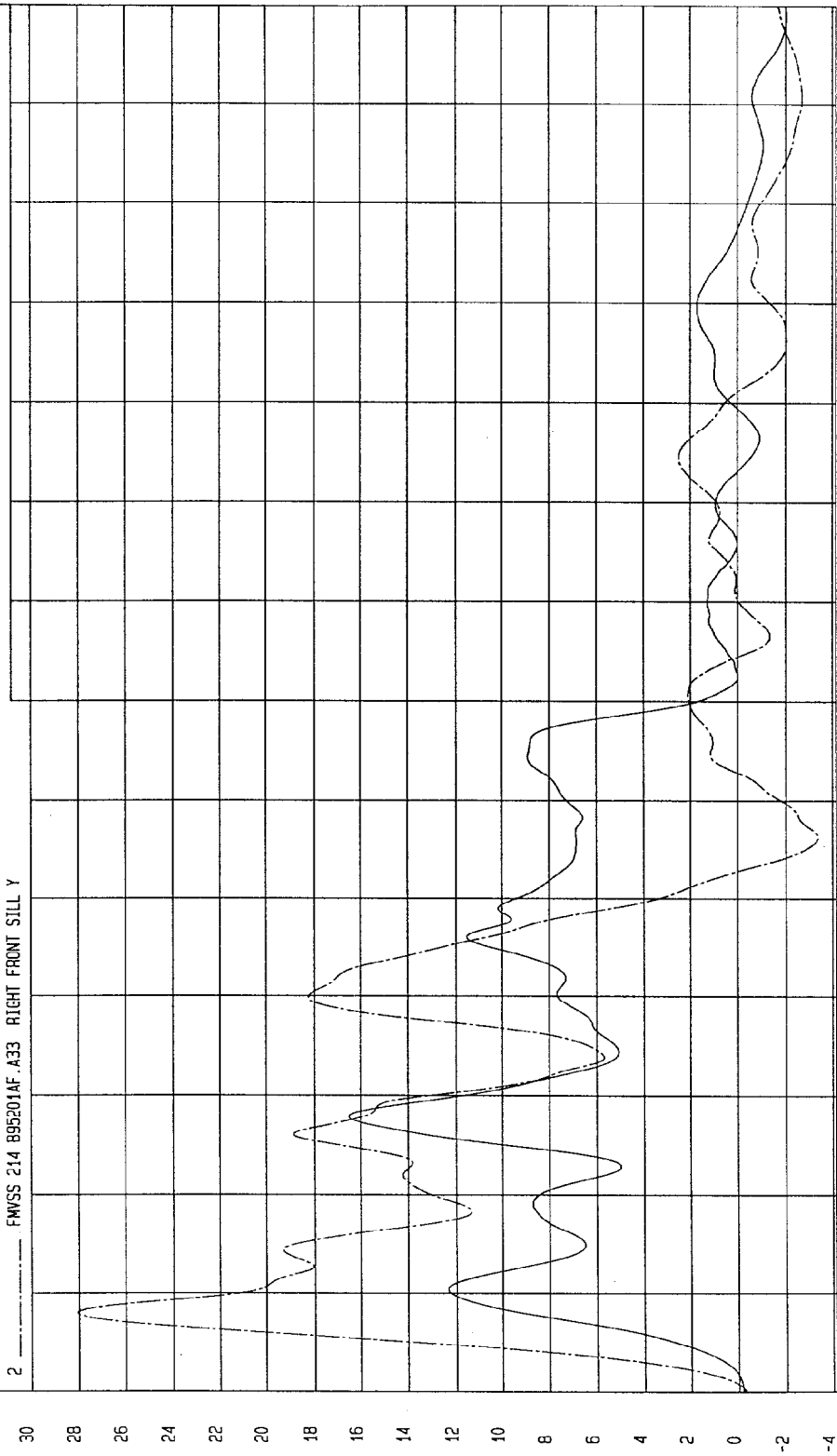
1 ——— EU SIDE B97118A1.V64 RIGHT SIDE SILL AT FRONT SEAT X VELOCITY
2 - - - - FMVSS 214 B95231A1.V32 RIGHT SIDE SILL AT FRONT SEAT X VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
 COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT FRONT SILL Y ACCELERATIONS (FILTER CLASS 60)

1 ——— EU SIDE B97113AF .A65 RIGHT SIDE SILL @ FRONT SEAT Y
 2 - - - - FMVSS 214 B95201AF .A33 RIGHT FRONT SILL Y



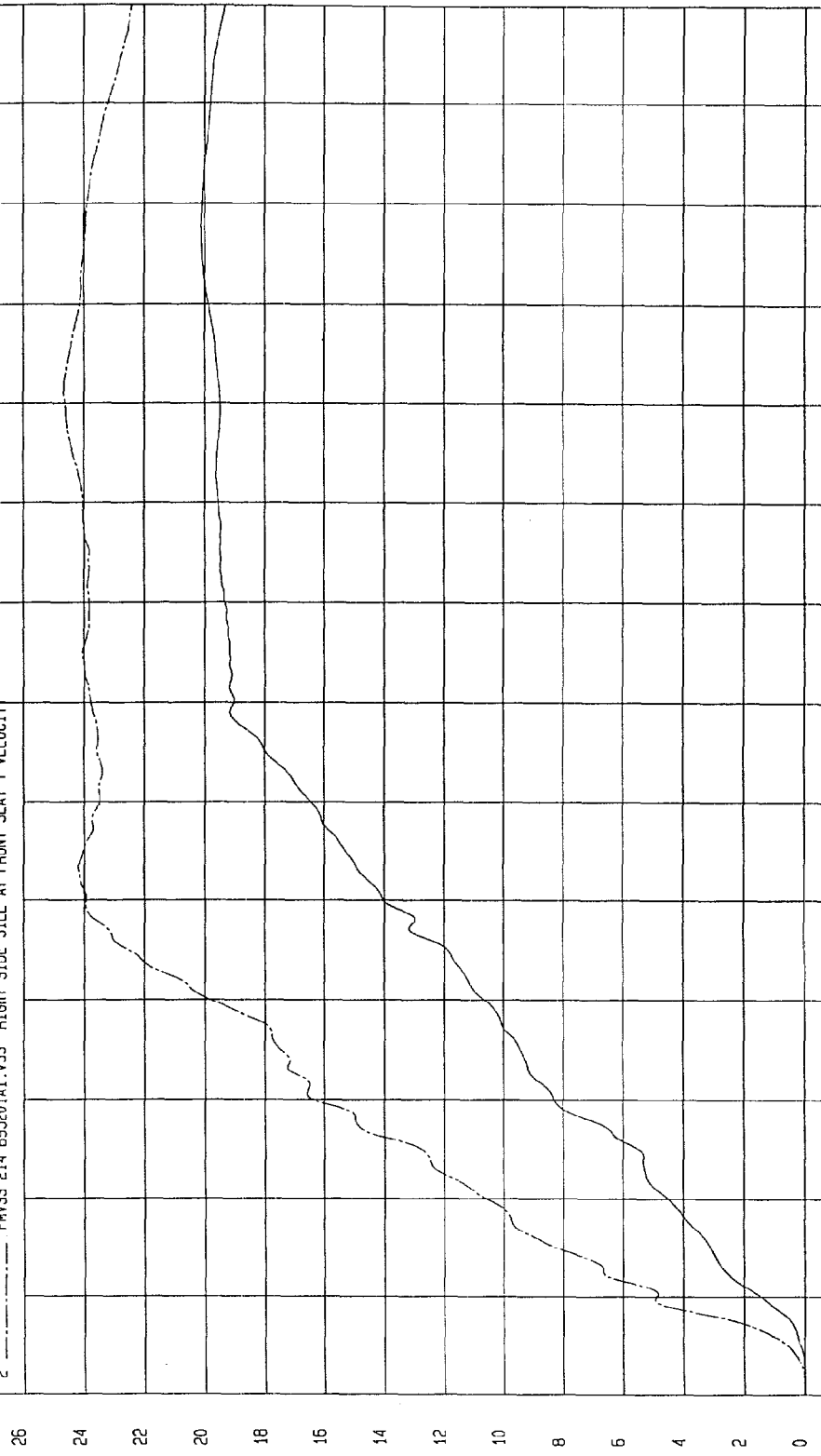
S.D

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT FRONT SILL Y VELOCITIES (FILTER CLASS 180)

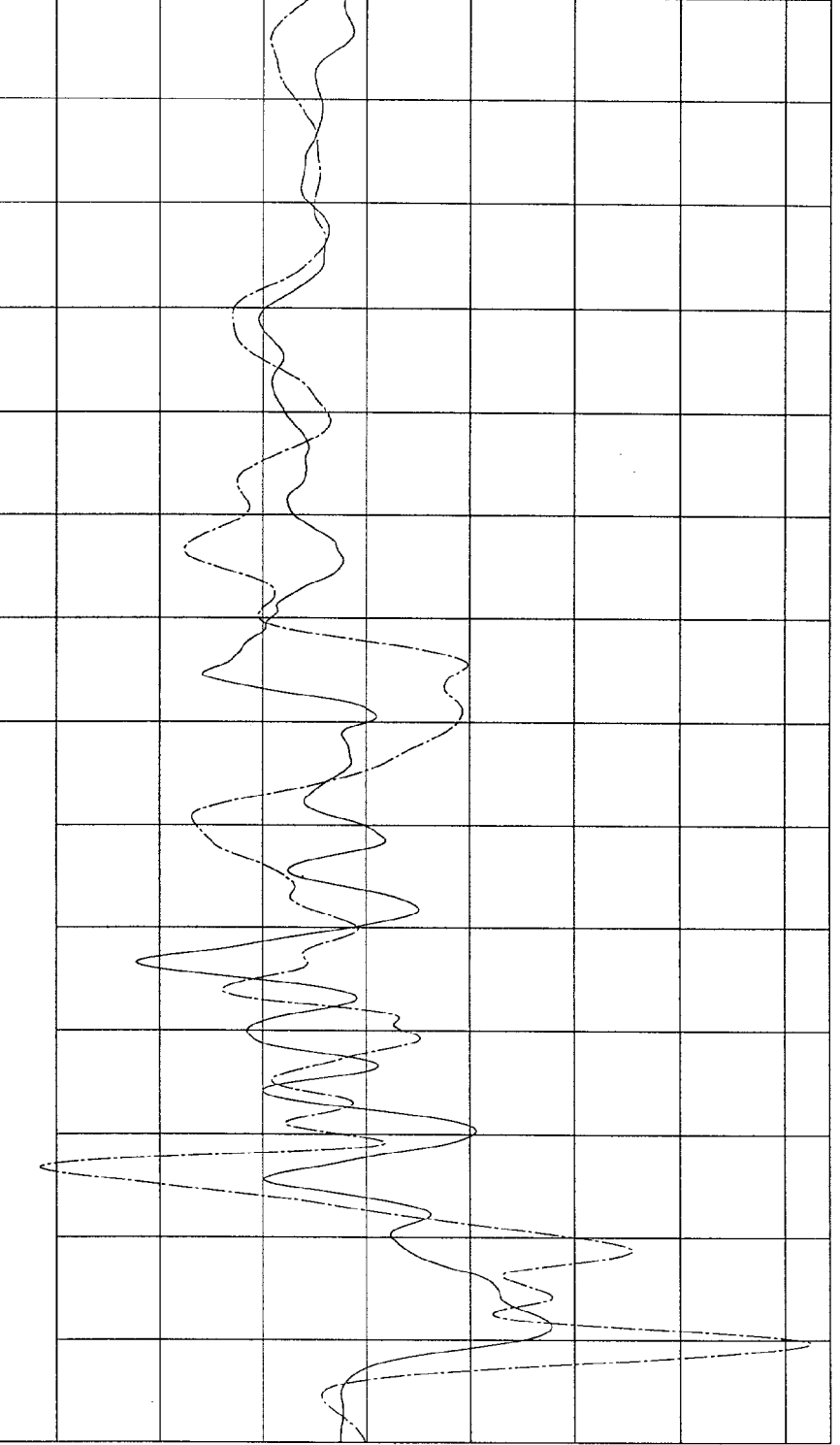
1 ——— EU SIDE 897118A1.V65 RIGHT SIDE SILL AT FRONT SEAT Y VELOCITY
2 - - - - FMVSS 214 895201A1.V33 RIGHT SIDE SILL AT FRONT SEAT Y VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT FRONT SILL Z ACCELERATIONS (FILTER CLASS 60)

1 - - - - - EU SIDE B97118AF.A66 RIGHT SIDE SILL @ FRONT SEAT Z
2 - - - - - FMVSS 214 B95201AF.A34 RIGHT FRONT SILL Z



6
4
2
0
-2
-4
-6
-8

0
.01
.02
.03
.04
.05
.06
.07
.08
.09
.1
.11
.12
.13

TIME (SECONDS)

G'S

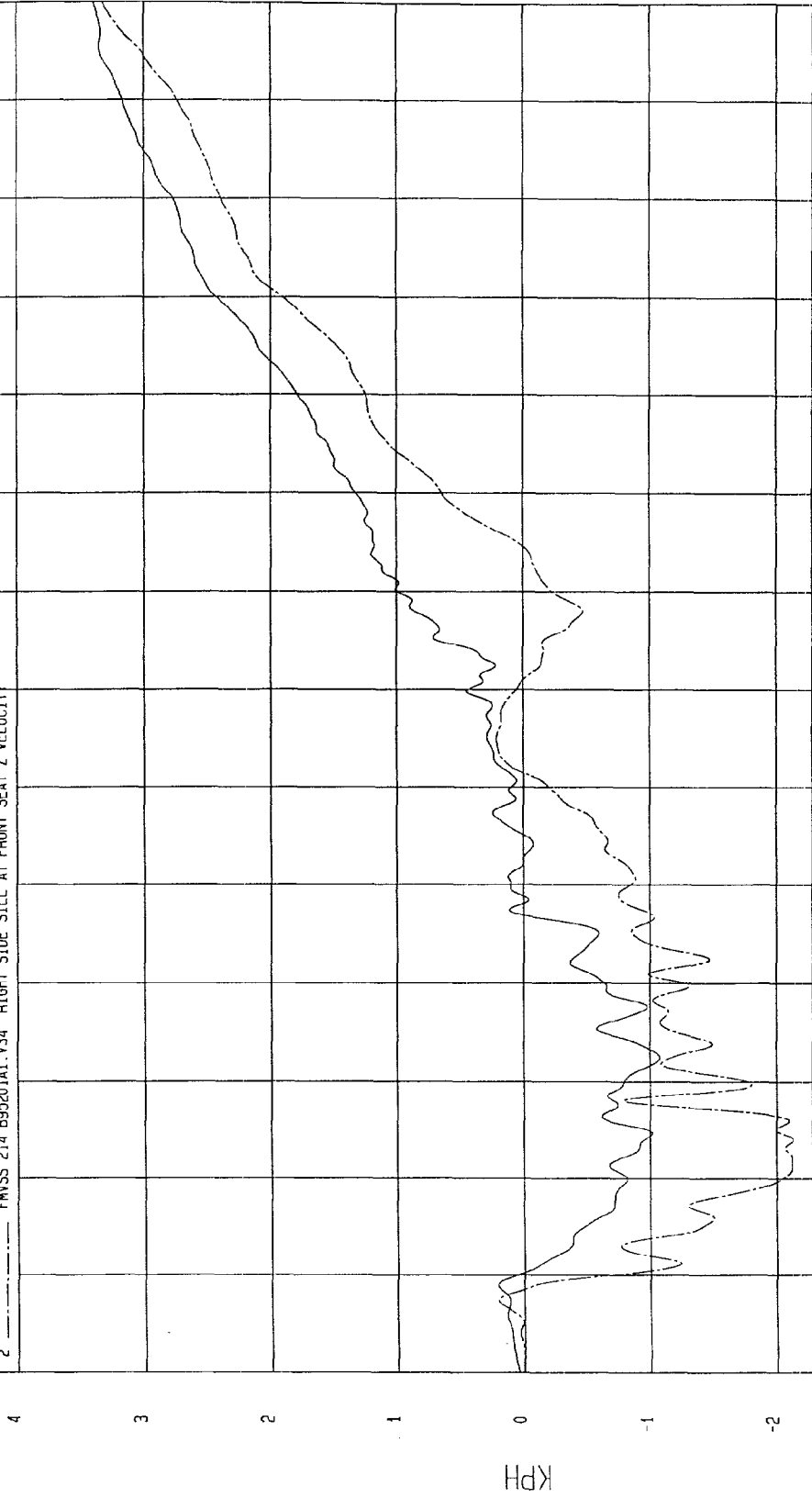
TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT FRONT SILL Z VELOCITIES (FILTER CLASS 180)

1 ——— EU SIDE 897118A1.V66 RIGHT SIDE SILL AT FRONT SEAT Z VELOCITY

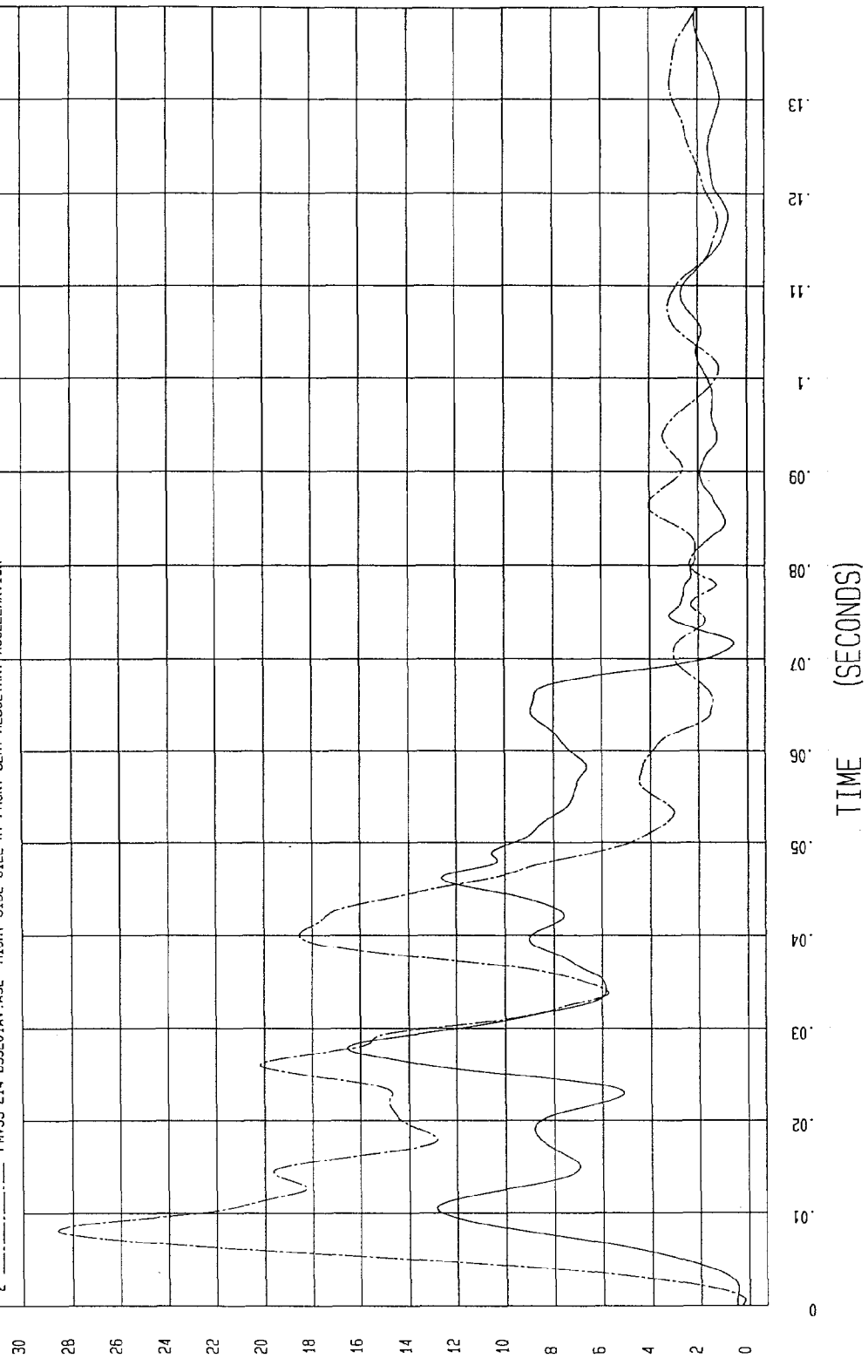
2 - - - - - FMVSS 214 895201A1.V34 RIGHT SIDE SILL AT FRONT SEAT Z VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
 COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT FRONT SILL RESULTANT ACCELERATIONS (FILTER CLASS 60)

1 ——— EU SIDE B9718AY.A64 RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION
 2 - - - - - FMVSS 214 B95201AV.A32 RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION



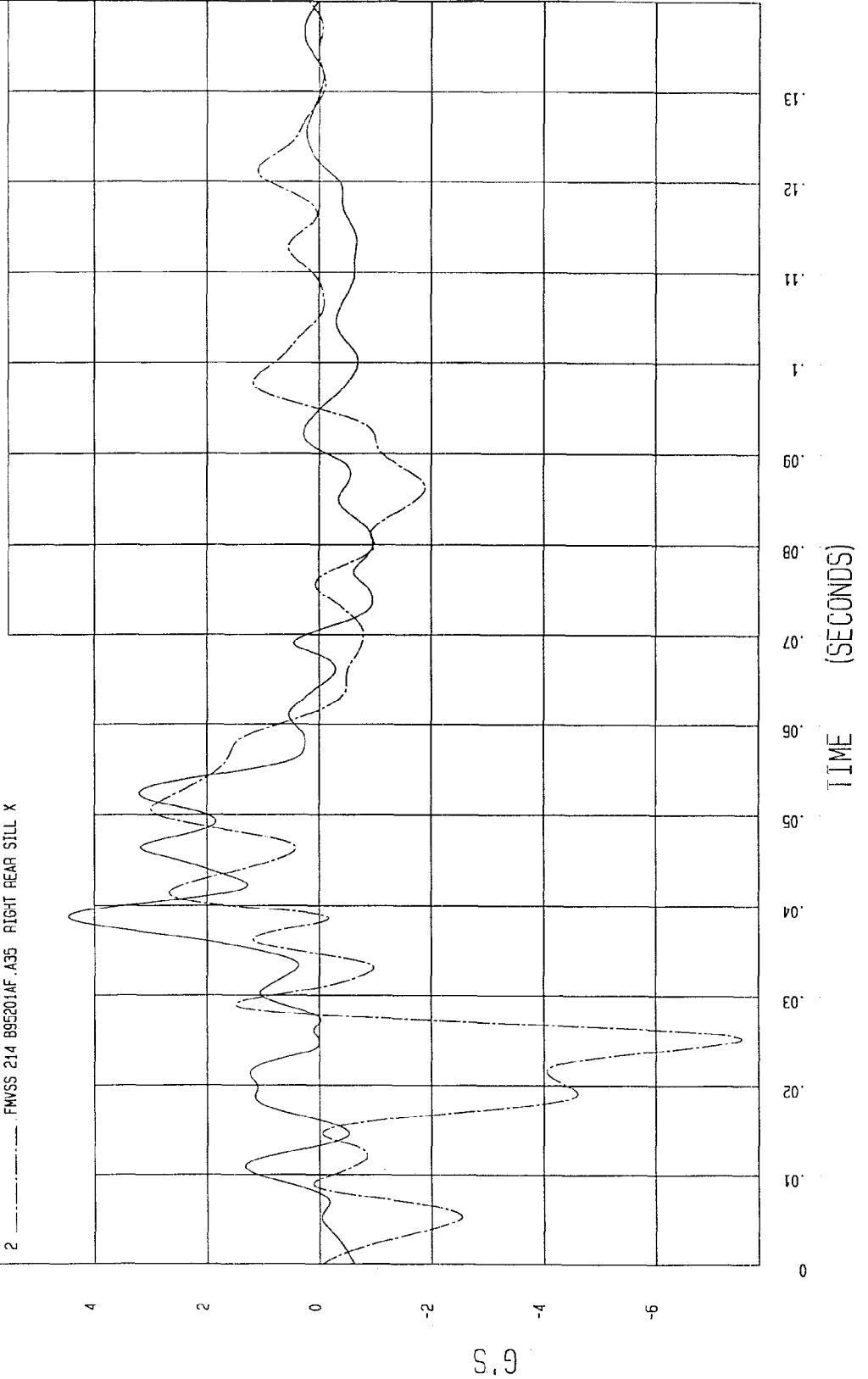
G.S.

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED - 52.8 KPH

RIGHT REAR SILL X ACCELERATIONS (FILTER CLASS 60)

1 _____ EU SIDE 897118AF .A67 RIGHT SIDE SILL @ REAR SEAT X
2 FMVSS 214 B95201AF .A35 RIGHT REAR SILL X

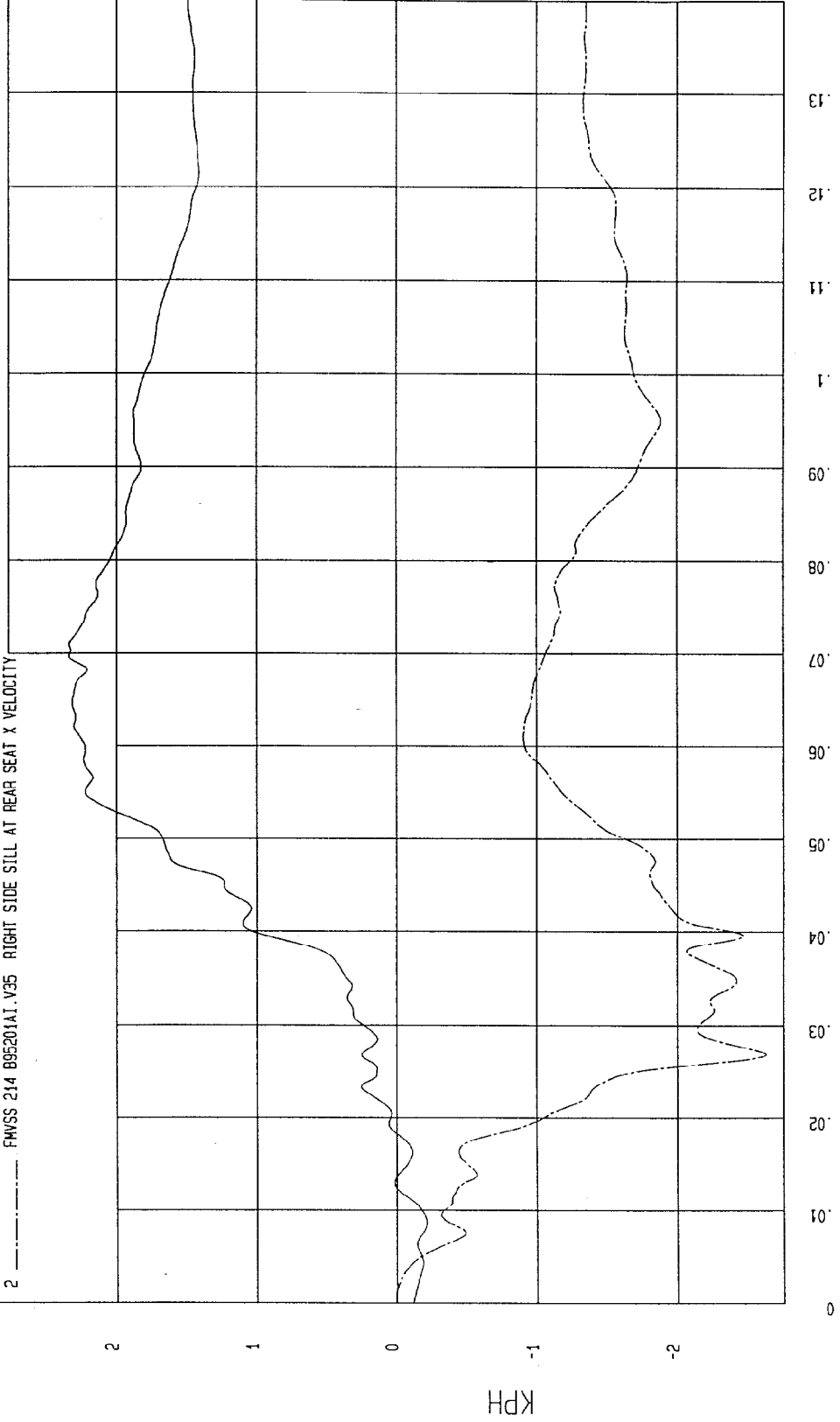


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT REAR SILL X VELOCITIES (FILTER CLASS 180)

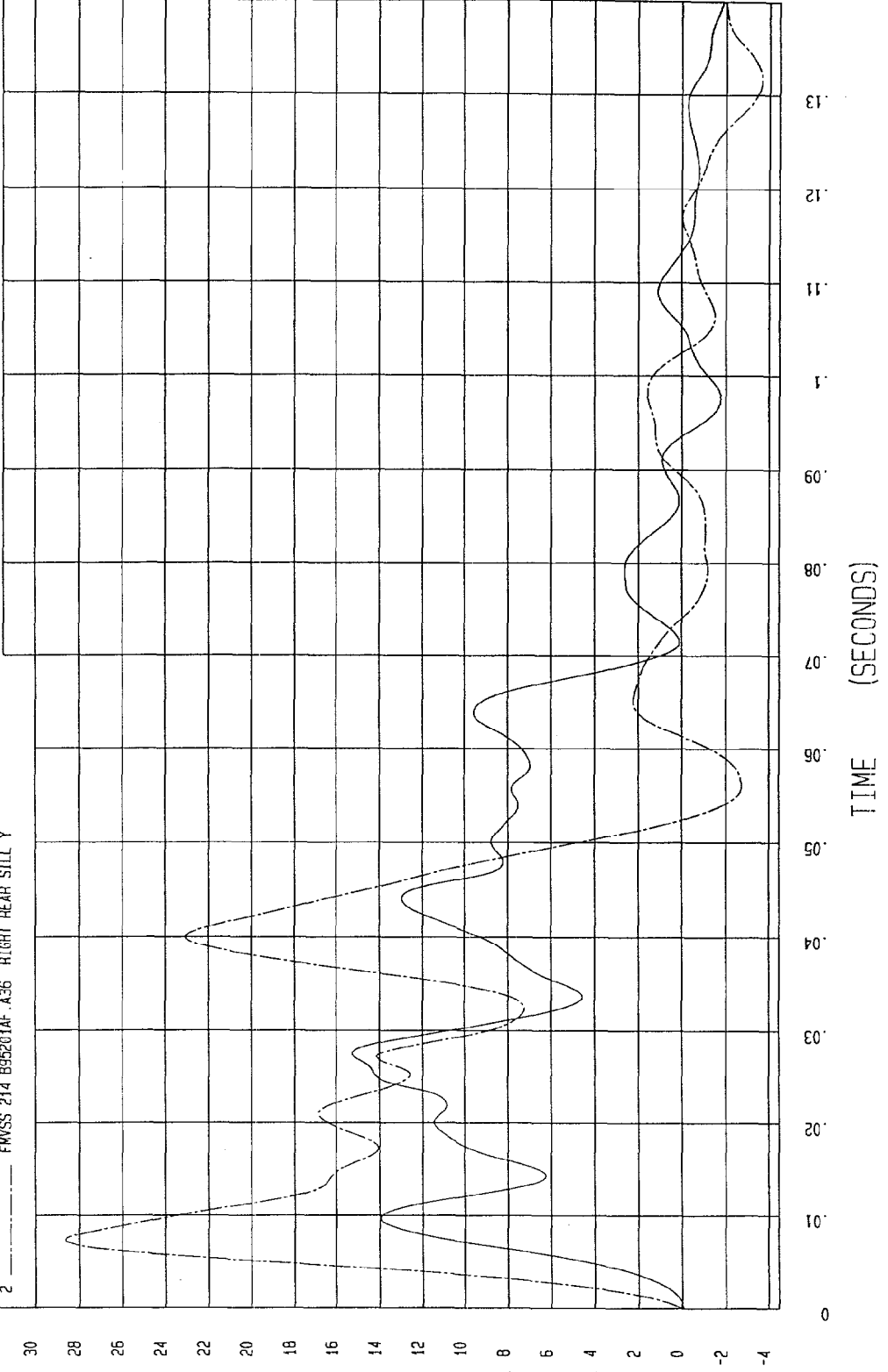
1 ——— EU SIDE B9711BA1.V67 RIGHT SIDE SILL AT REAR SEAT X VELOCITY
2 - - - - - FMVSS 214 B95201A1.V95 RIGHT SIDE SILL AT REAR SEAT X VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT REAR SILL Y ACCELERATIONS (FILTER CLASS 60)

1 ——— EU SIDE B9718AF .A68 RIGHT SIDE SILL @ REAR SEAT Y
2 - - - - FMVSS 214 B95201AF .A36 RIGHT REAR SILL Y

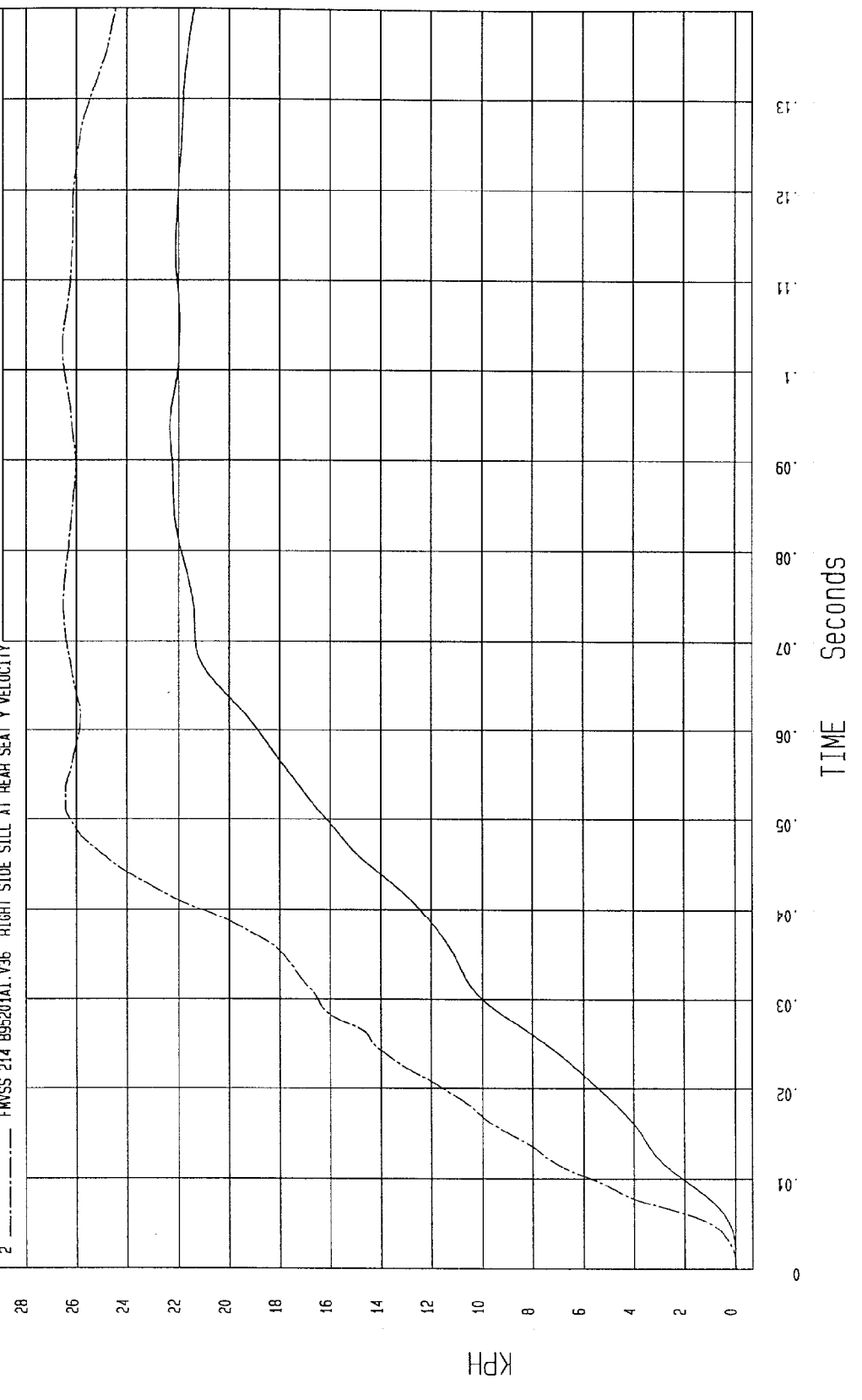


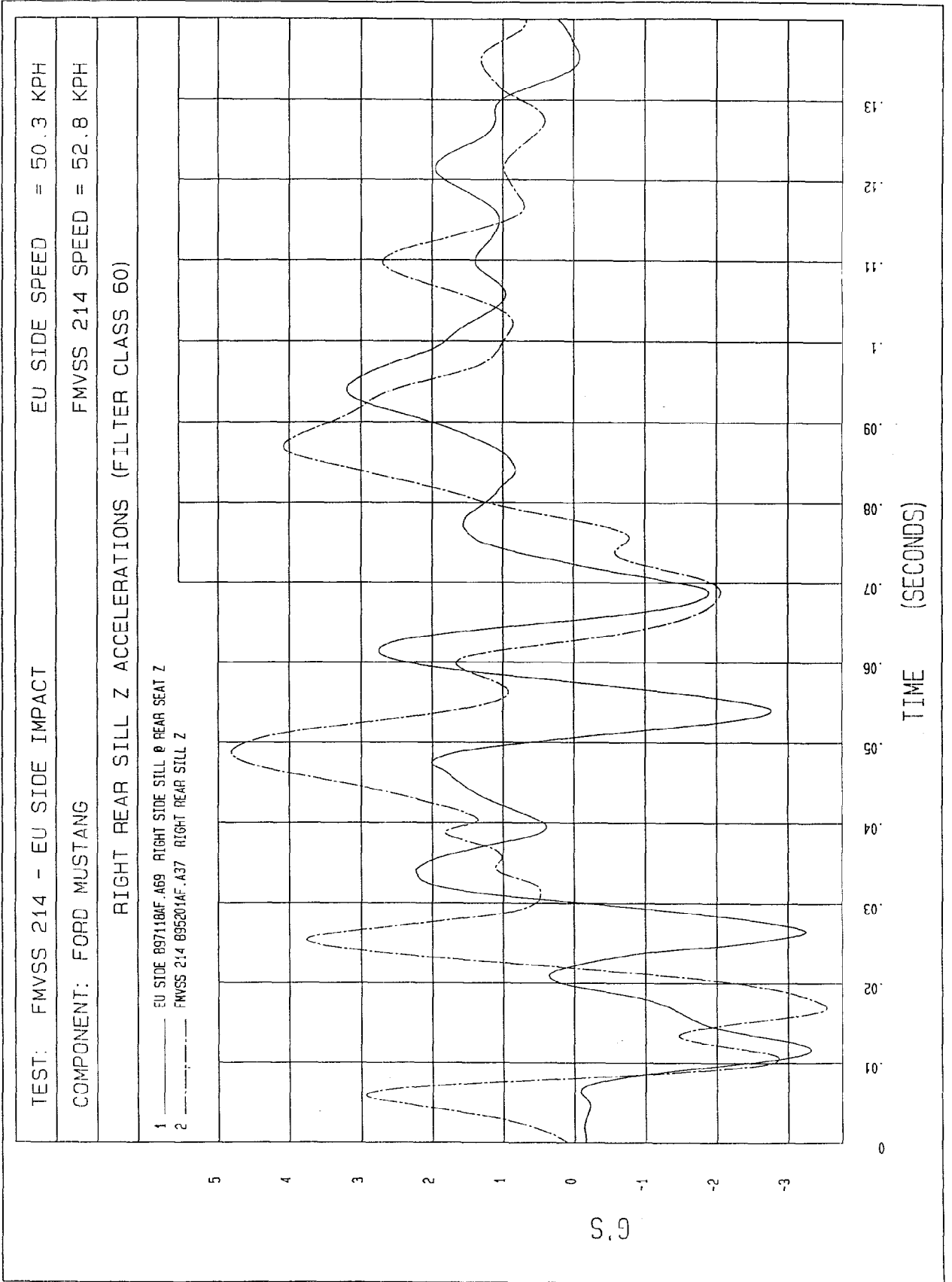
G.S

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
 COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT REAR SILL Y VELOCITIES (FILTER CLASS 180)

1 ——— EU SIDE B97118A1.V68 RIGHT SIDE SILL AT REAR SEAT Y VELOCITY
 2 - - - - FMVSS 214 B95201A1.V36 RIGHT SIDE SILL AT REAR SEAT Y VELOCITY

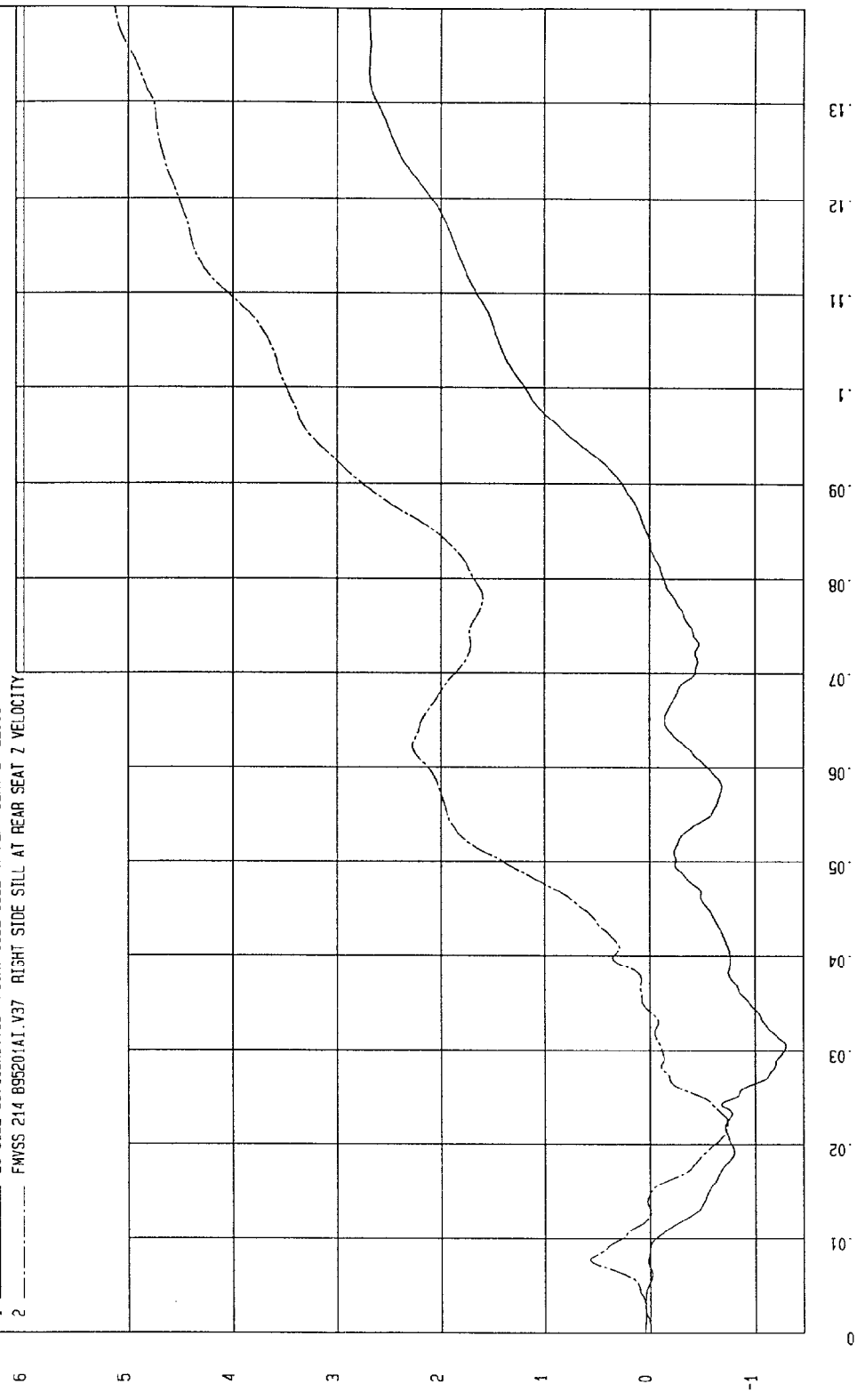




TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
 COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT REAR SILL Z VELOCITIES (FILTER CLASS 180)

1 ——— EU SIDE 897118A1.V69 RIGHT SIDE SILL AT REAR SEAT Z VELOCITY
 2 - - - - FMVSS 214 895201A1.V37 RIGHT SIDE SILL AT REAR SEAT Z VELOCITY

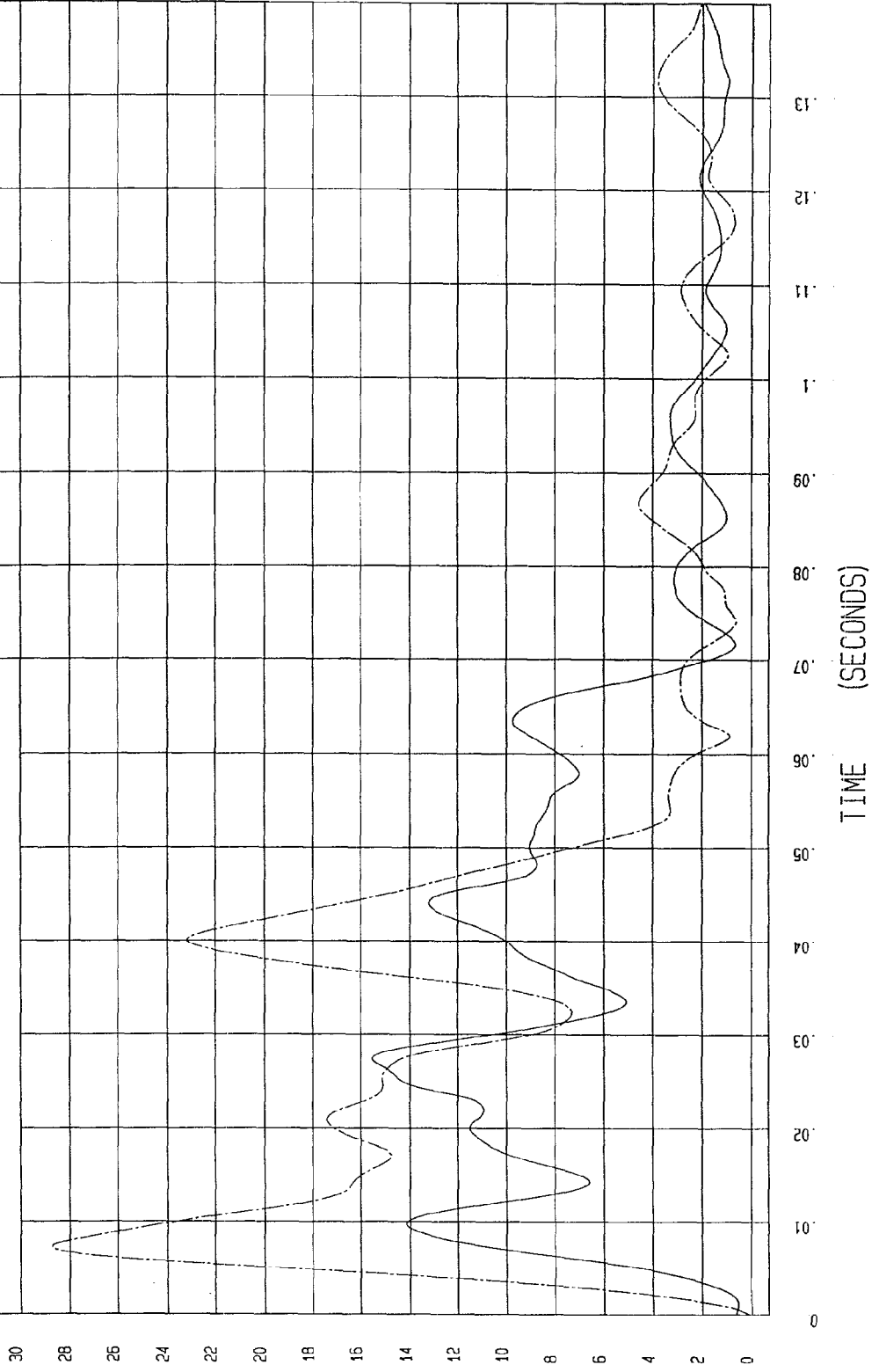


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

RIGHT REAR SILL RESULTANT ACCELERATIONS (FILTER CLASS 60)

1 ——— EU SIDE B9718AV.A67 RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION
2 - - - - FMVSS 214 B95201AV.A35 RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION

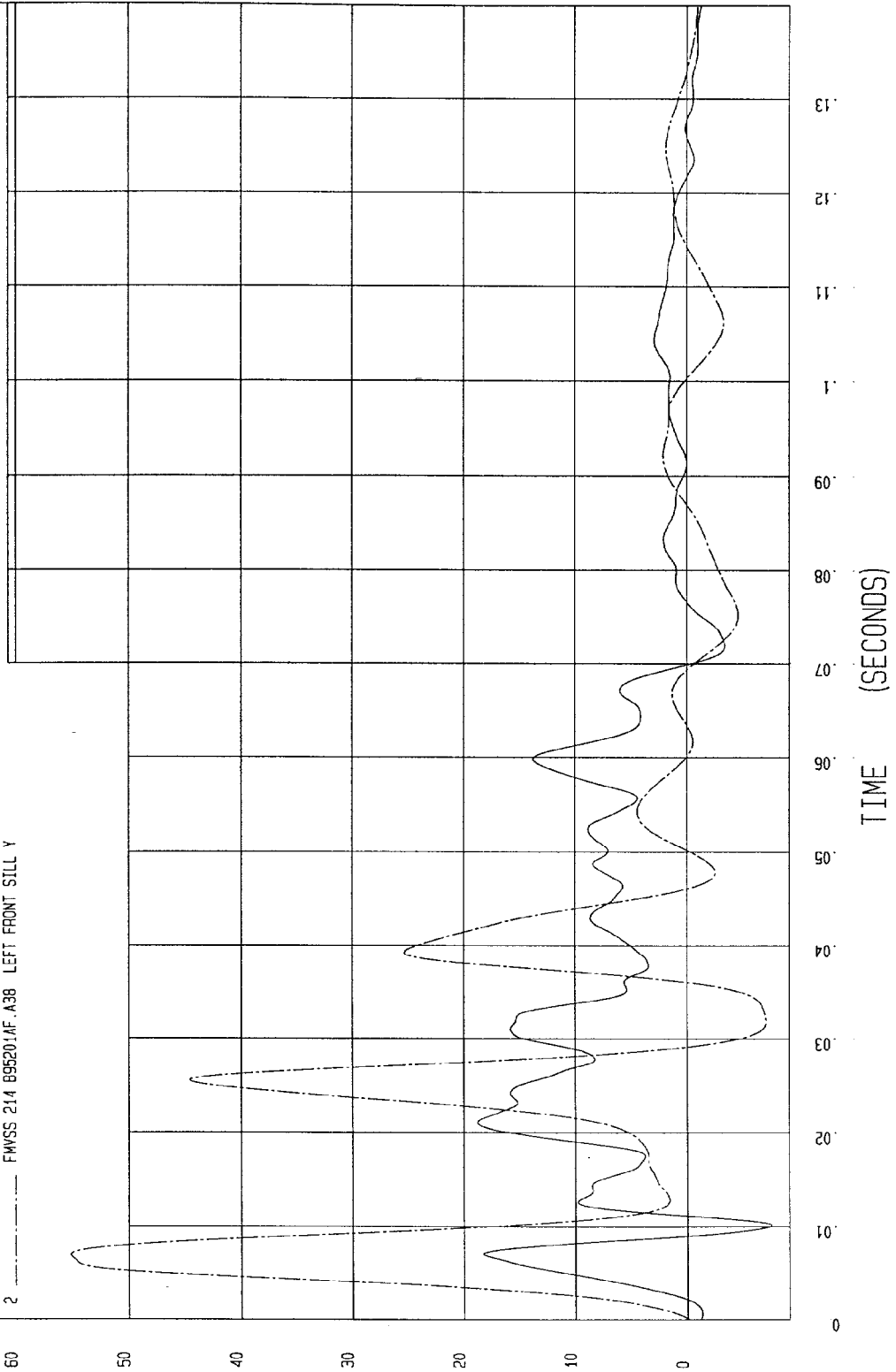


G

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

LEFT FRONT SILL Y ACCELERATIONS (FILTER CLASS 60)

1 ——— EU SIDE B97118AF.A55 LEFT FRONT SILL Y
2 - - - - FMVSS 214 895201AF.A38 LEFT FRONT SILL Y



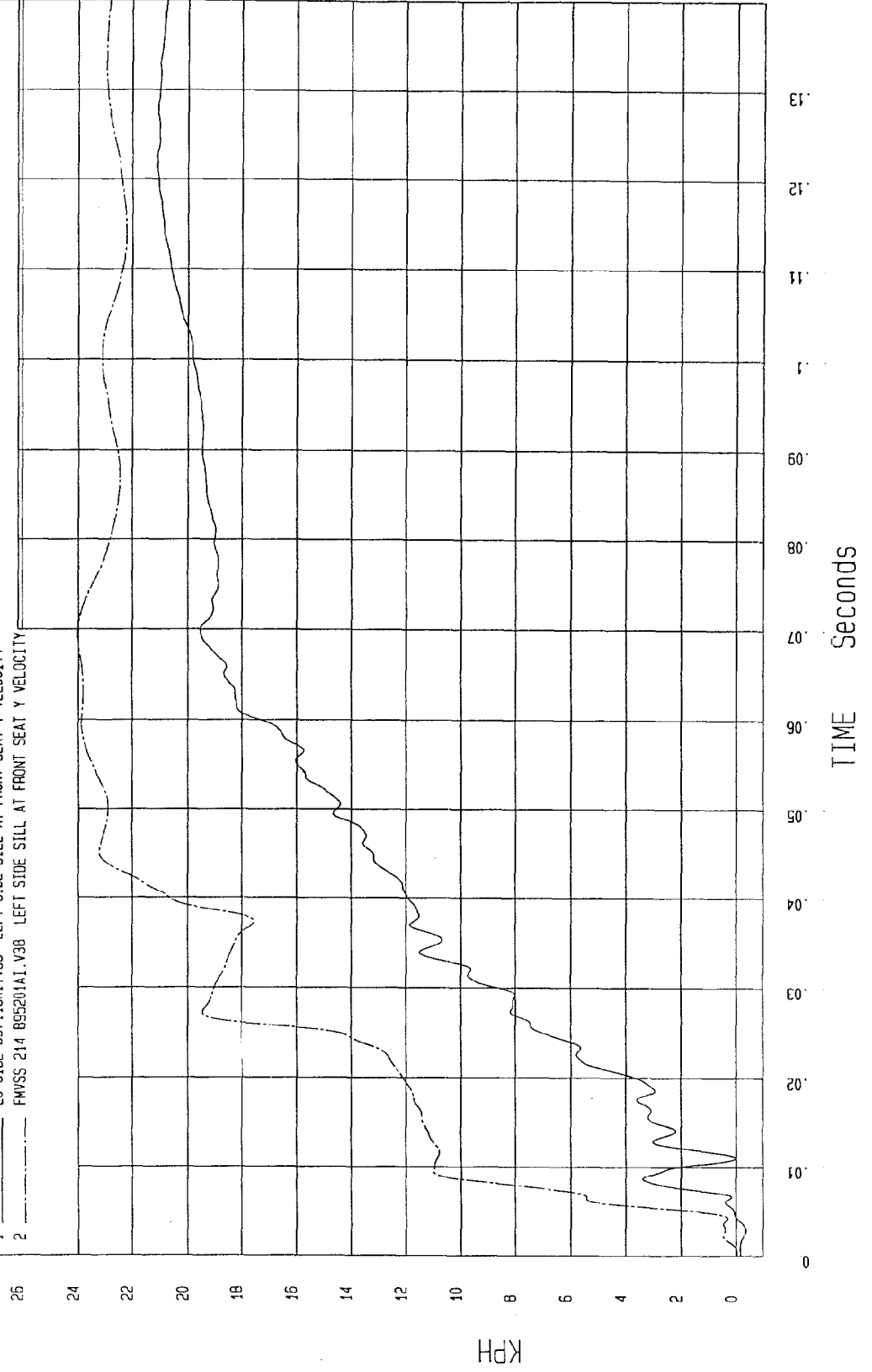
G.S

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

LEFT FRONT SILL Y VELOCITIES (FILTER CLASS 180)

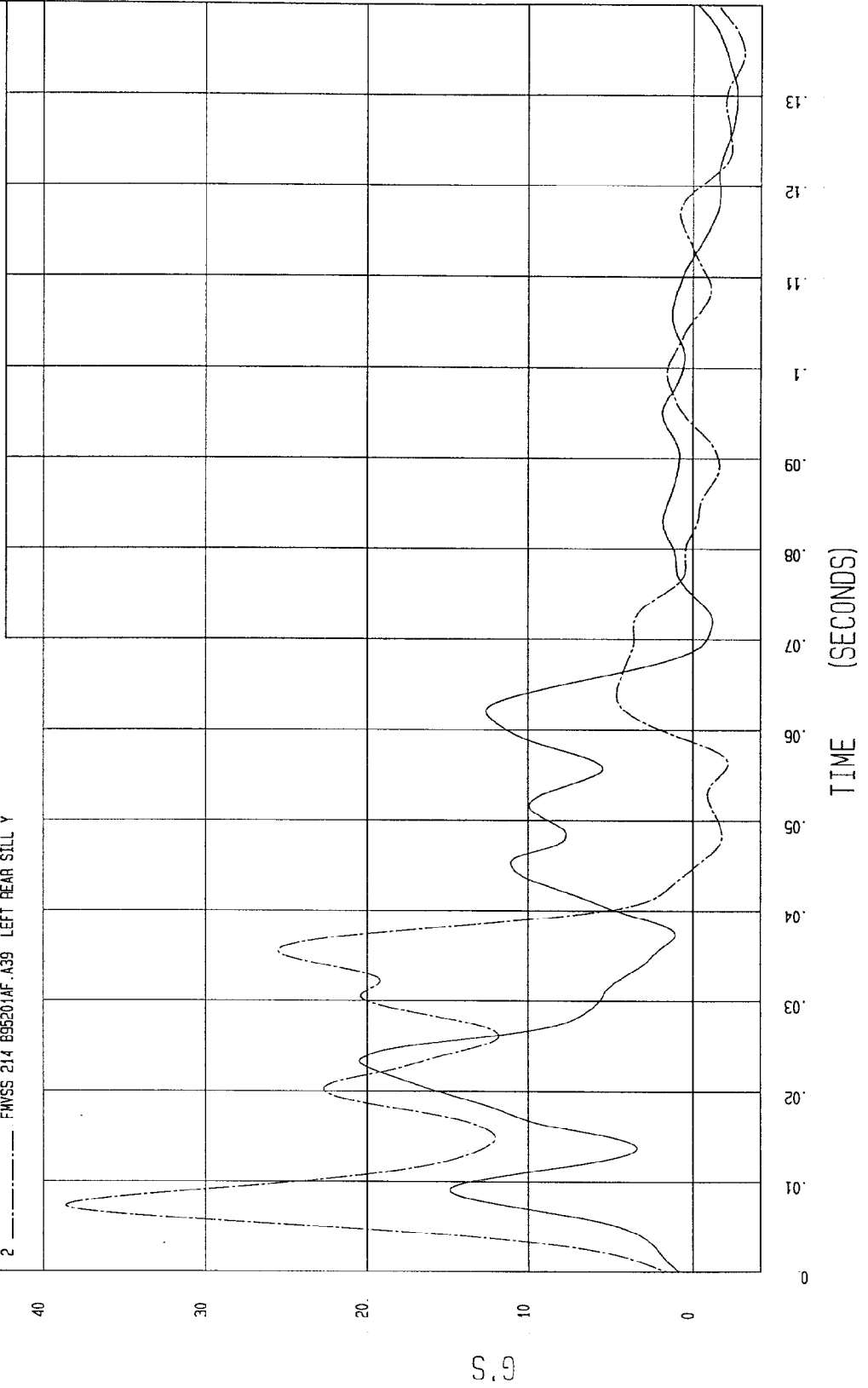
1 ——— EU SIDE 89718041.V55 LEFT SIDE SILL AT FRONT SEAT Y VELOCITY
2 - - - - FMVSS 214 895201A1.V38 LEFT SIDE SILL AT FRONT SEAT Y VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

LEFT REAR SILL Y ACCELERATIONS (FILTER CLASS 60)

1 ——— EU SIDE B9718AF.A56 LEFT REAR SILL Y
2 - - - - - FMVSS 214 B95201AF.A39 LEFT REAR SILL Y

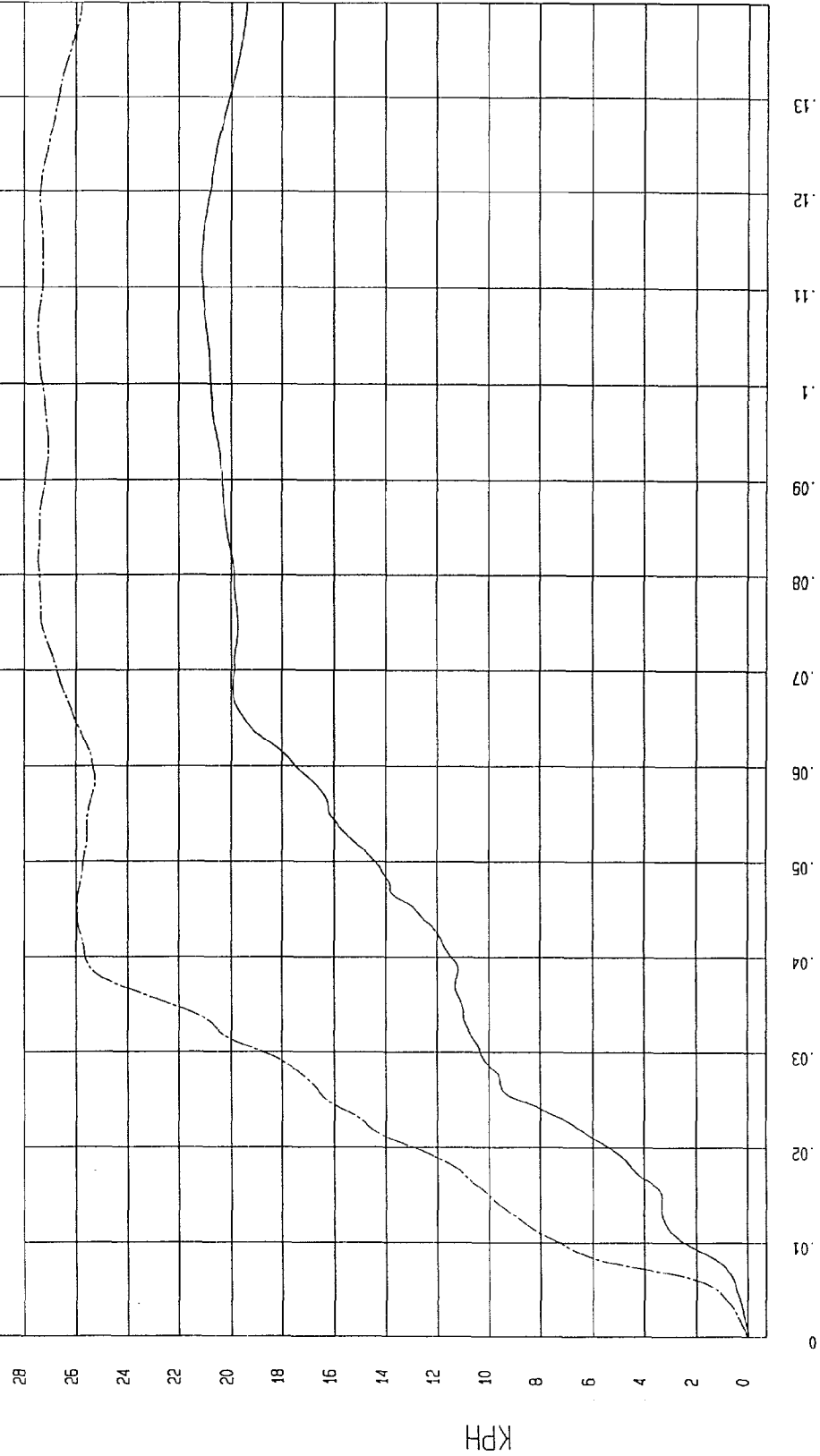


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

LEFT REAR SILL Y VELOCITIES (FILTER CLASS 180)

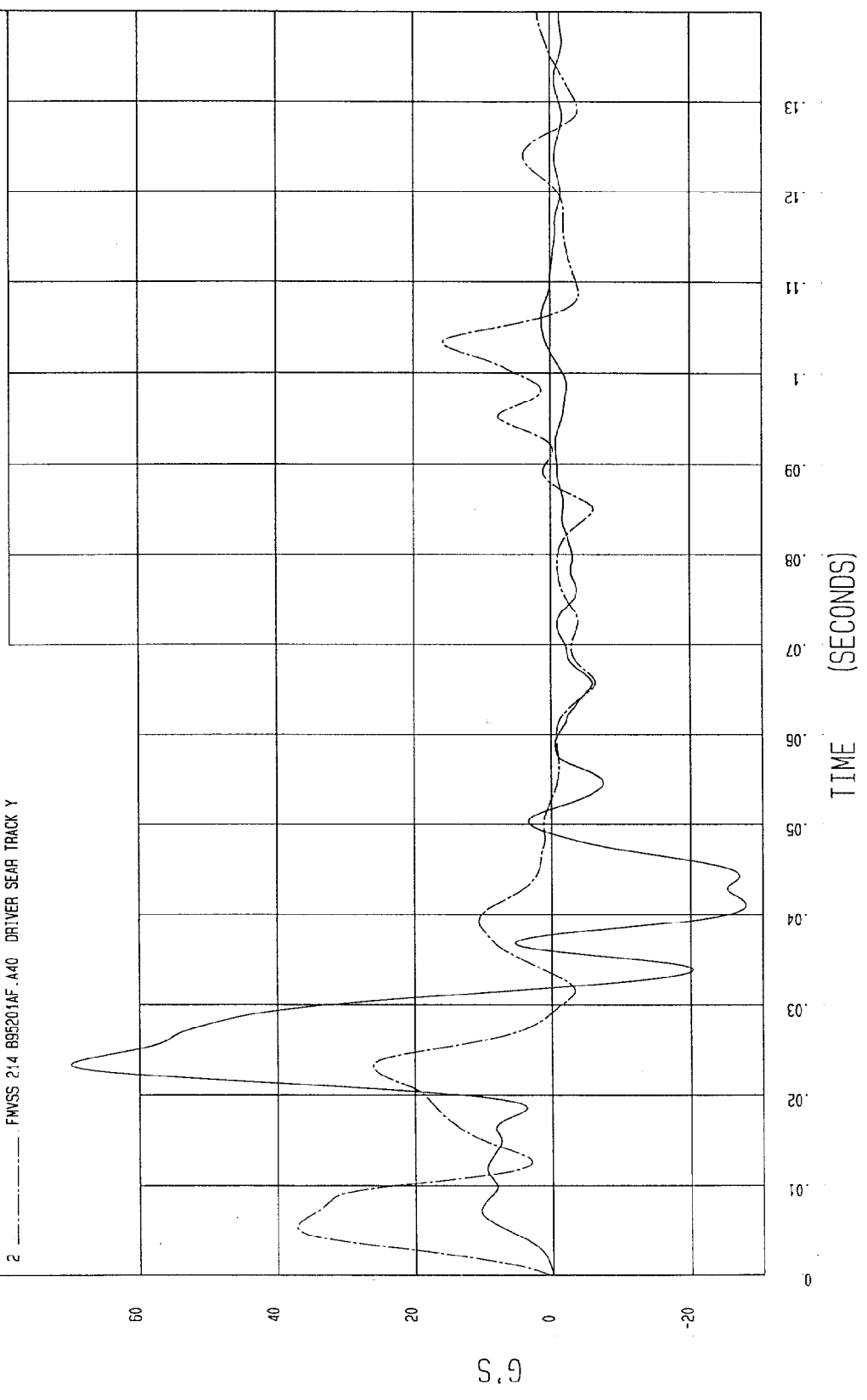
1 _____ EU SIDE 897118A1.V56 LEFT SIDE SILL AT REAR SEAT Y VELOCITY
2 - - - - - FMVSS 214 895201A1.V39 LEFT SIDE SILL AT REAR SEAT Y VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER SEAT Y ACCELERATIONS (FILTER CLASS 60)

1 _____ EU SIDE B9718AF.A92 DRIVER SEAT TRACK Y
2 - - - - - FMVSS 214 B95201AF.A40 DRIVER SEAT TRACK Y

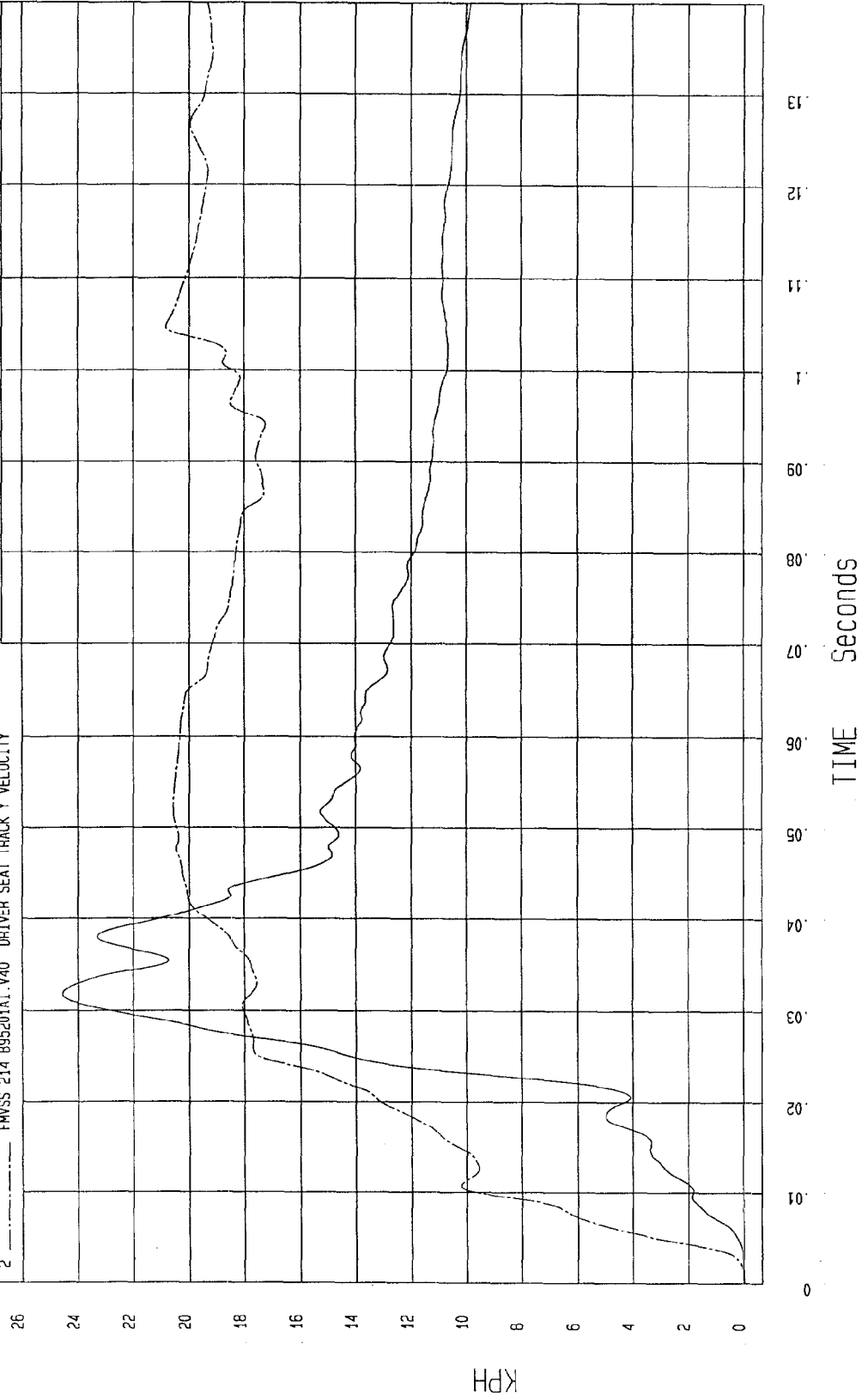


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

DRIVER SEAT Y VELOCITIES (FILTER CLASS 180)

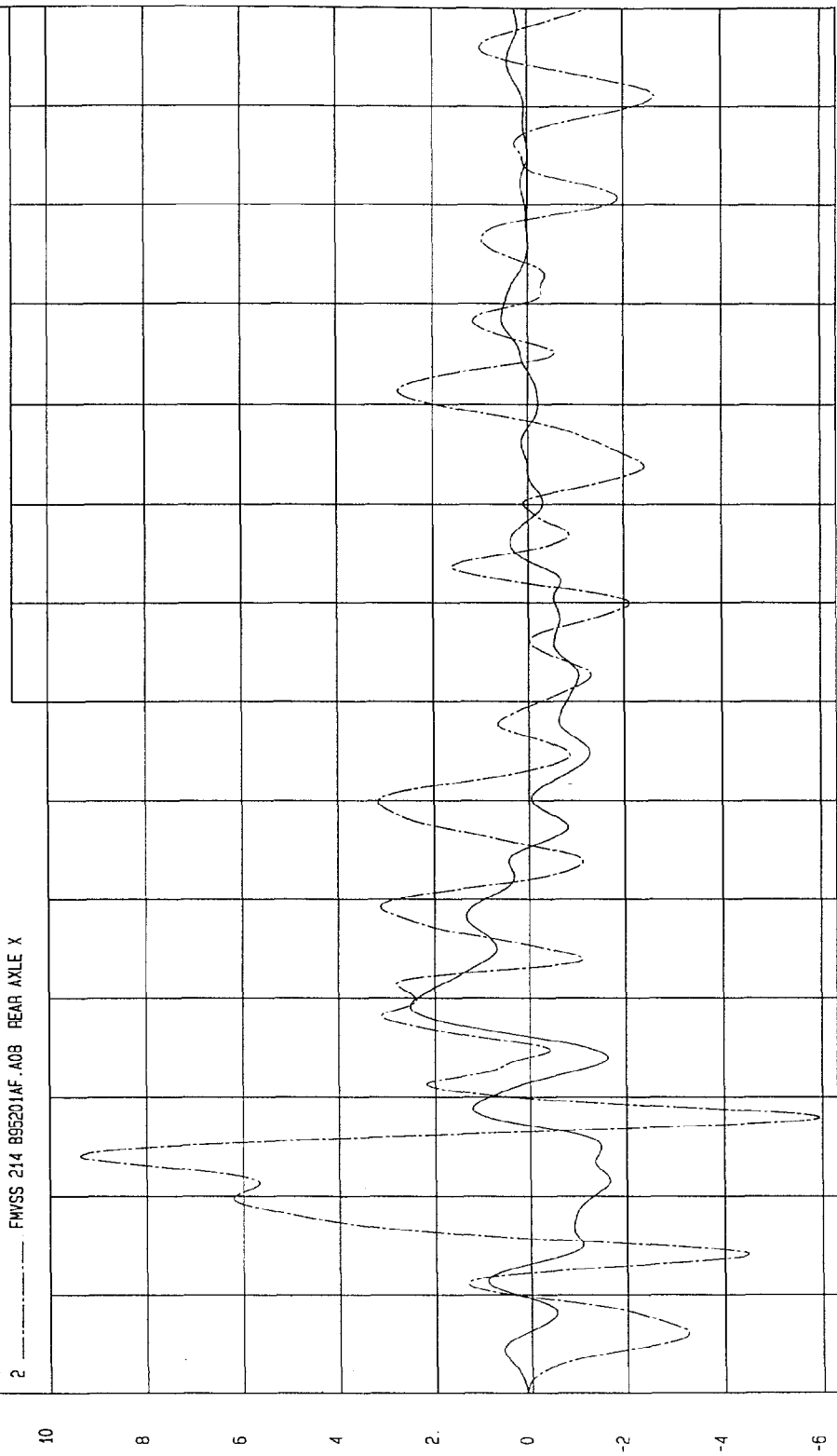
1 ——— EU SIDE B97118A1.V92 LEFT DRIVER SEAT TRACK Y VELOCITY
2 - - - - FMVSS 214 B95201A1.V40 DRIVER SEAT TRACK Y VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

VEHICLE REAR AXLE X ACCELERATIONS (FILTER CLASS 50)

1 _____ EU SIDE B97118AF.A08 REAR AXLE X
2 - - - - - FMVSS 214 B95201AF.A08 REAR AXLE X



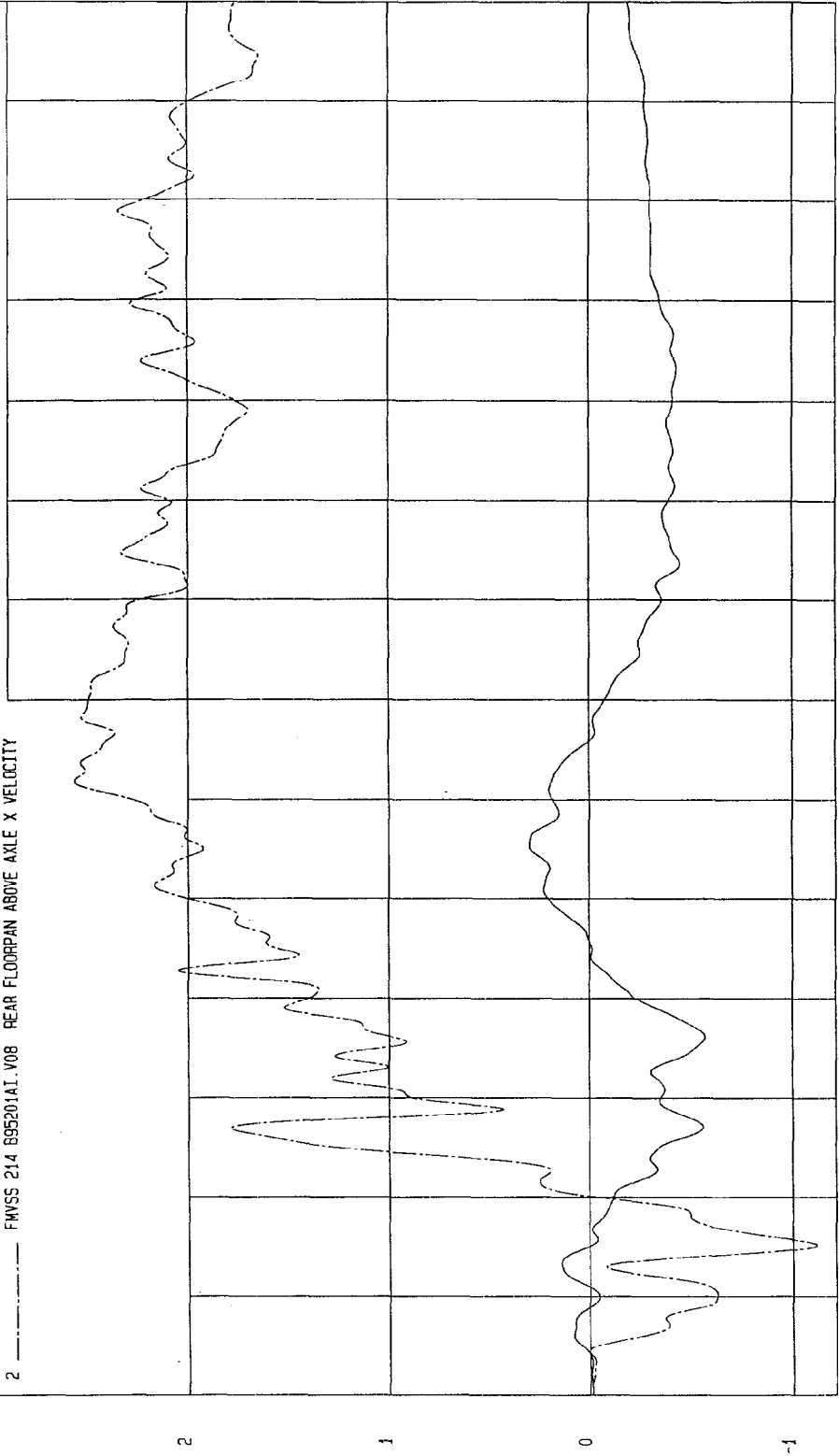
TIME (SECONDS)

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

VEHICLE REAR AXLE X VELOCITIES (FILTER CLASS 180)

1 ——— EU SIDE 897118A1.V08 REAR FLOORPAN ABOVE AXLE X VELOCITY
2 - - - - FMVSS 214 895201A1.V08 REAR FLOORPAN ABOVE AXLE X VELOCITY



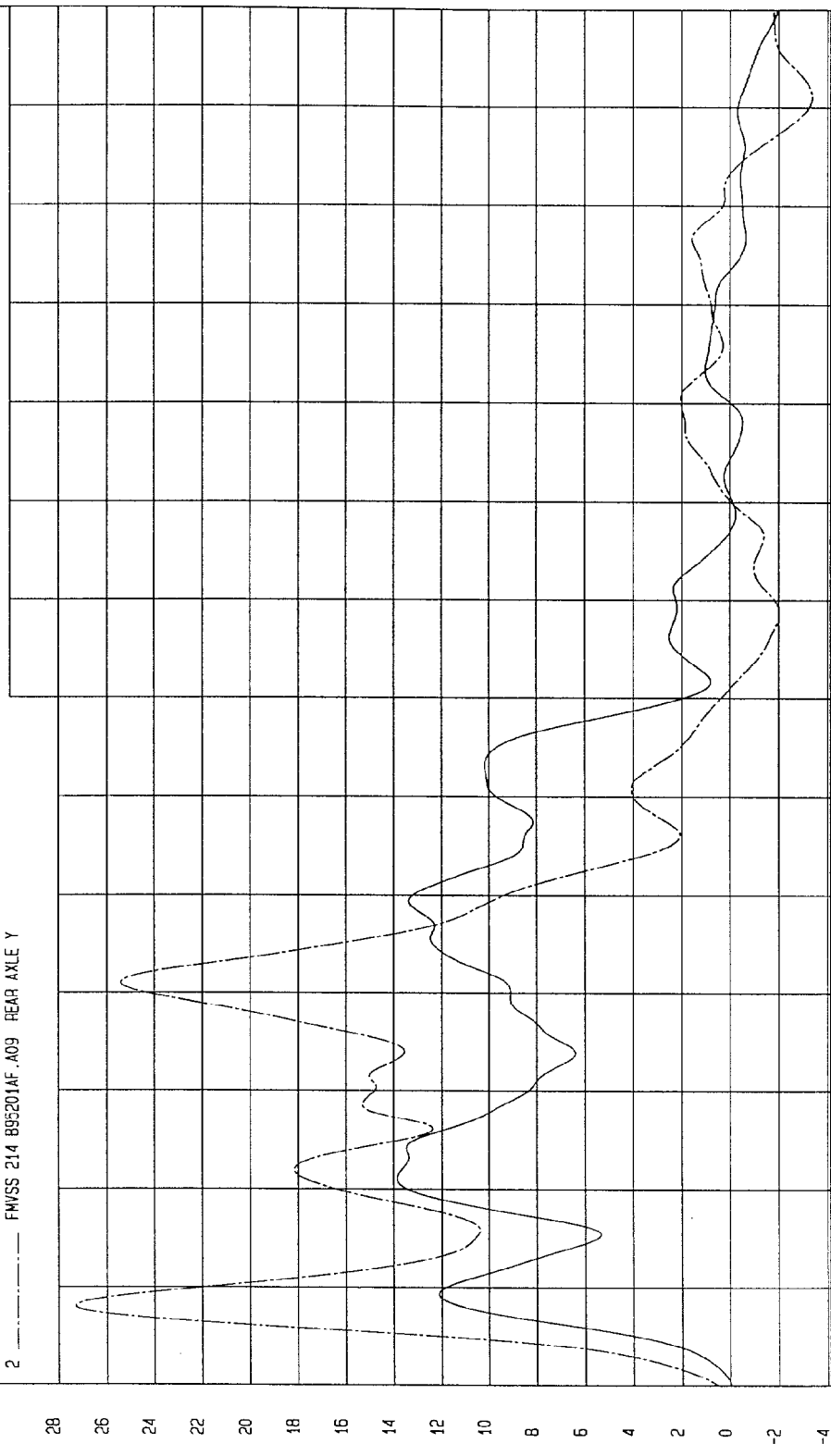
TIME Seconds

KPH

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
 COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

VEHICLE REAR AXLE Y ACCELERATIONS (FILTER CLASS 60)

1 ——— EU SIDE B97110AF.A09 REAR AXLE Y
 2 - - - - FMVSS 214 B95201AF.A09 REAR AXLE Y



TIME (SECONDS)

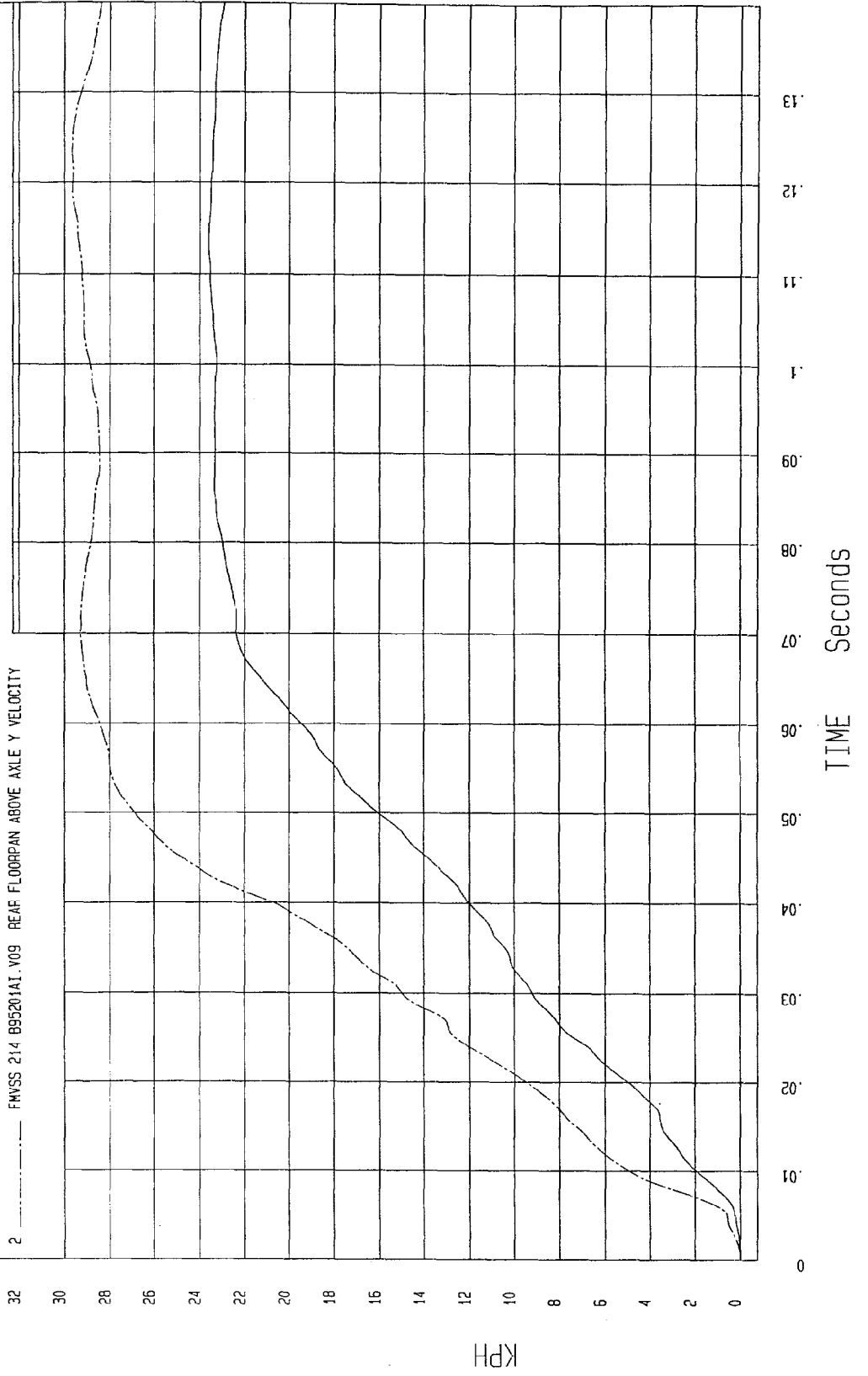
G's

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

VEHICLE REAR AXLE Y VELOCITIES (FILTER CLASS 180)

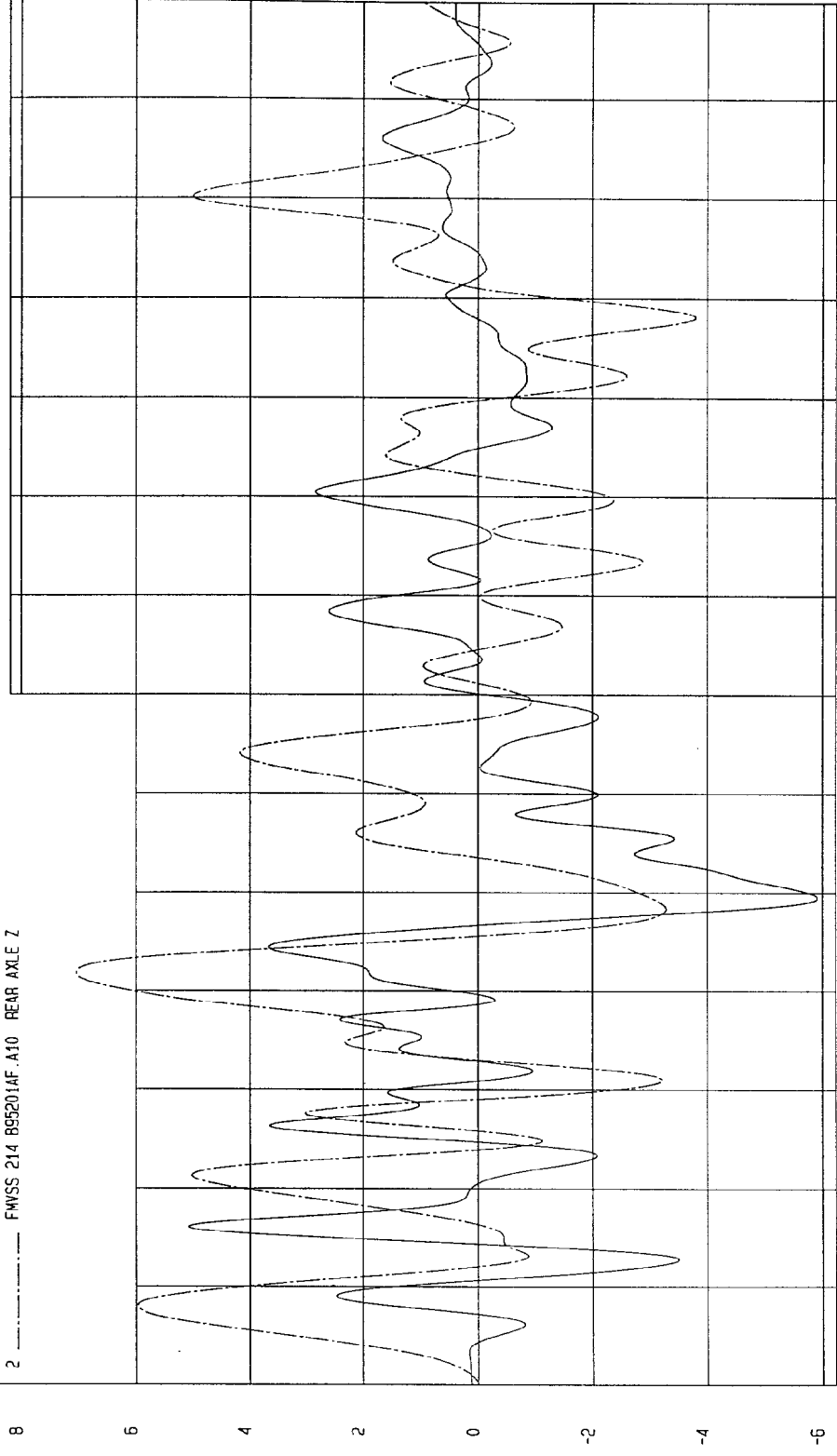
1 ——— EU SIDE B97118A1.V09 REAR FLOORPAN ABOVE AXLE Y VELOCITY
2 - - - - - FMVSS 214 B95201A1.V09 REAR FLOORPAN ABOVE AXLE Y VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

VEHICLE REAR AXLE Z ACCELERATIONS (FILTER CLASS 60)

1 ——— EU SIDE 89718AF.A10 REAR AXLE Z
2 - - - - FMVSS 214 8952014F.A10 REAR AXLE Z



TIME (SECONDS)

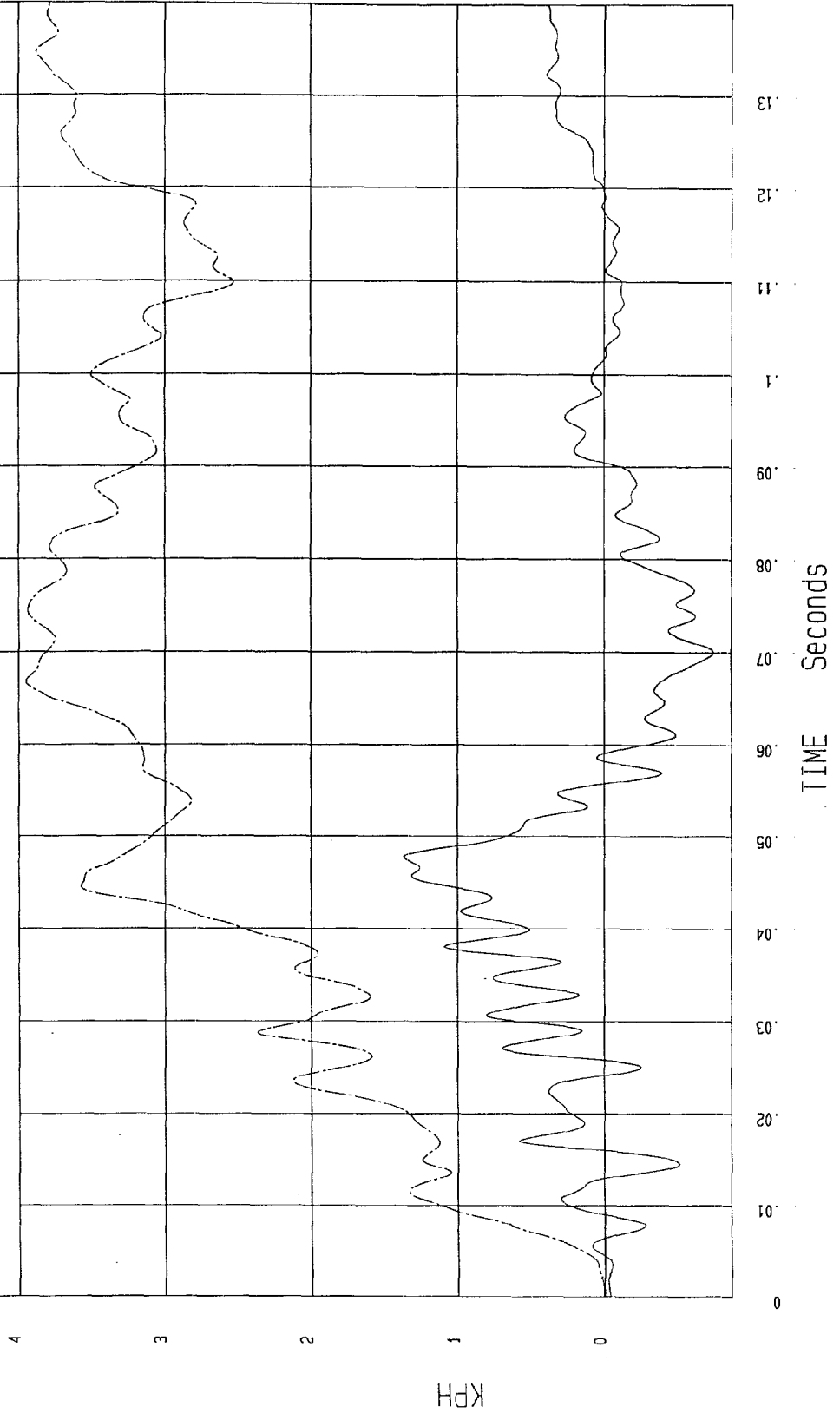
S.G

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

VEHICLE REAR AXLE Z VELOCITIES (FILTER CLASS 180)

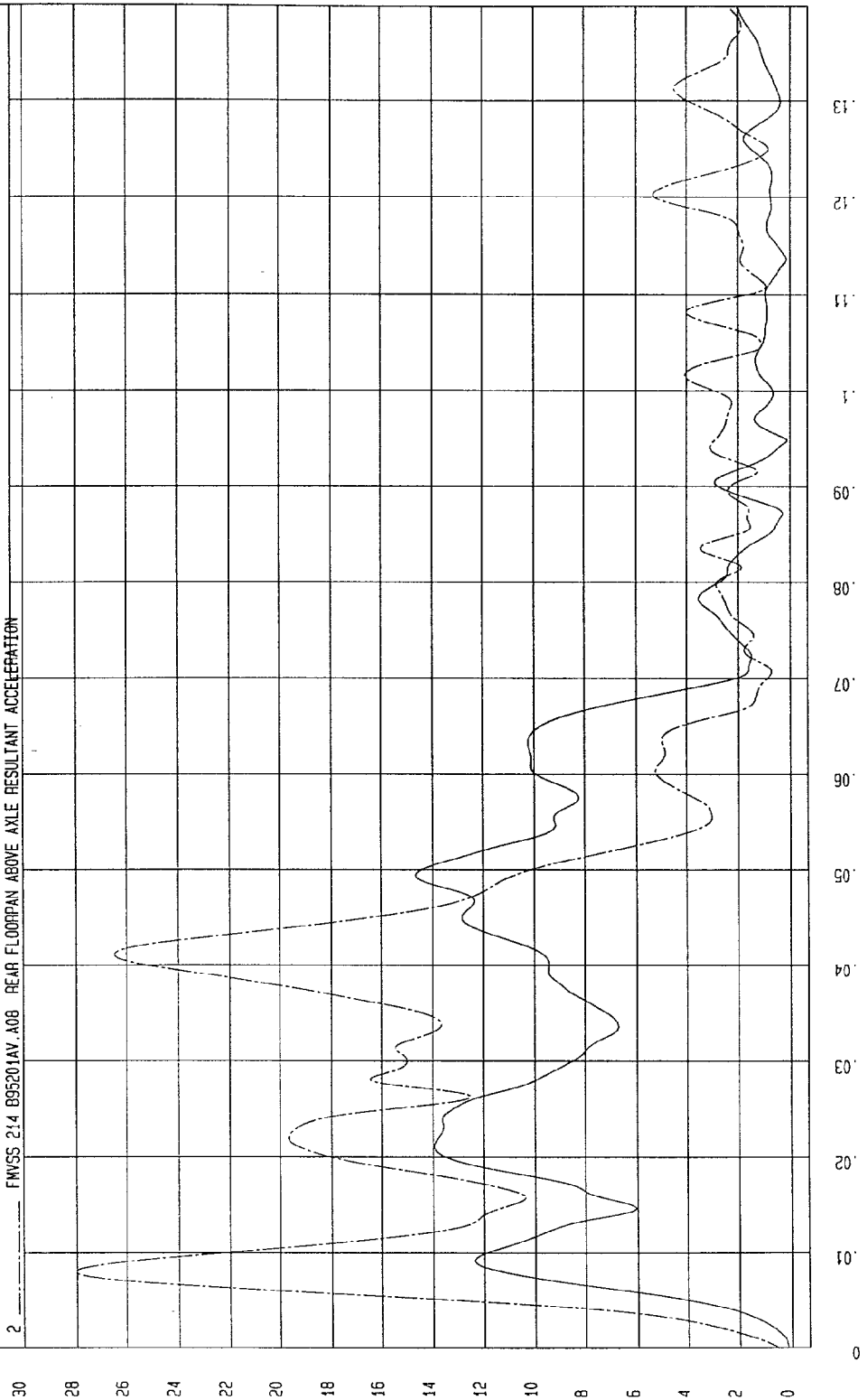
- 1 ——— EU SIDE 897118A1.V10 REAR FLOORPAN ABOVE AXLE Z VELOCITY
- 2 - - - - FMVSS 214 895201A1.V10 REAR FLOORPAN ABOVE AXLE Z VELOCITY



TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
 COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

VEHICLE REAR AXLE RESULTANT ACCELERATIONS (FILTER CLASS 60)

1 ——— EU SIDE B97118AV.A08 REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION
 2 - - - - FMVSS 214 B95201AV.A08 REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION



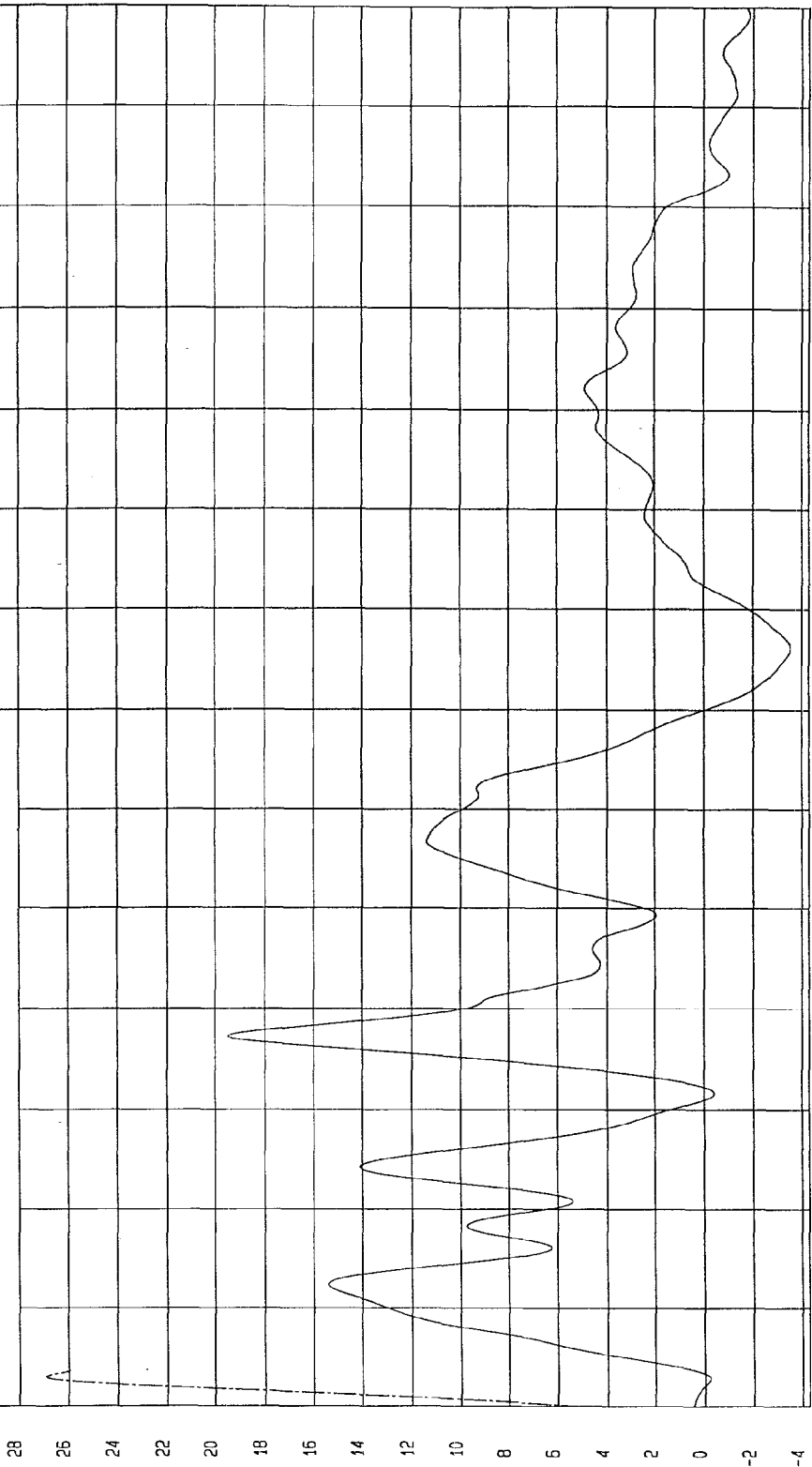
S.9

TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

LEFT MID A-POST Y ACCELERATIONS (FILTER CLASS 60)

1 ——— EU SIDE 897118AF.A84 LEFT MID A POST Y
2 - - - - FMVSS 214 895201AF.A19 LEFT MID A POST Y



TIME (SECONDS)

G.S

TEST: FMVSS 214 - EU SIDE IMPACT

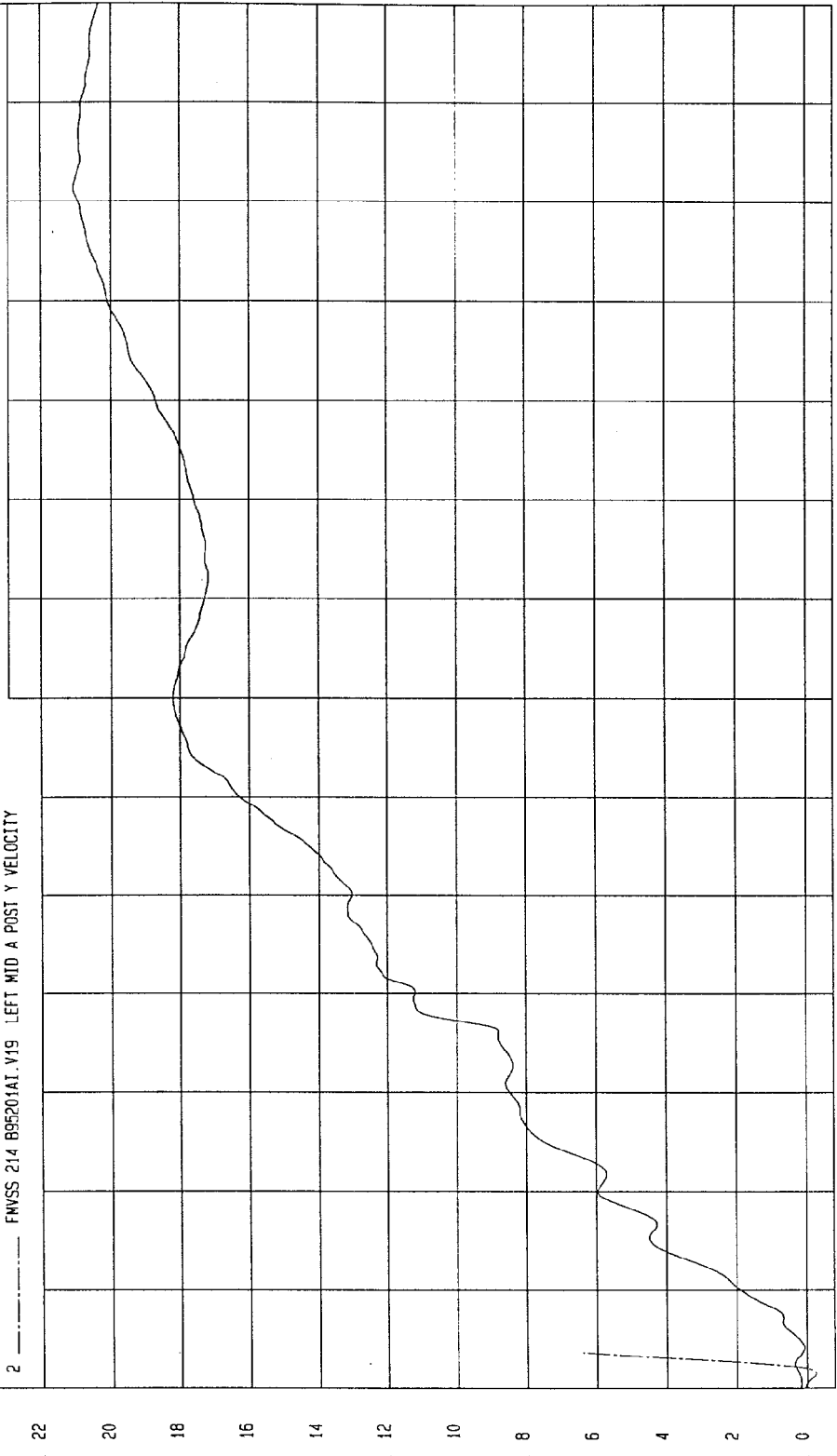
EU SIDE SPEED = 50.3 KPH

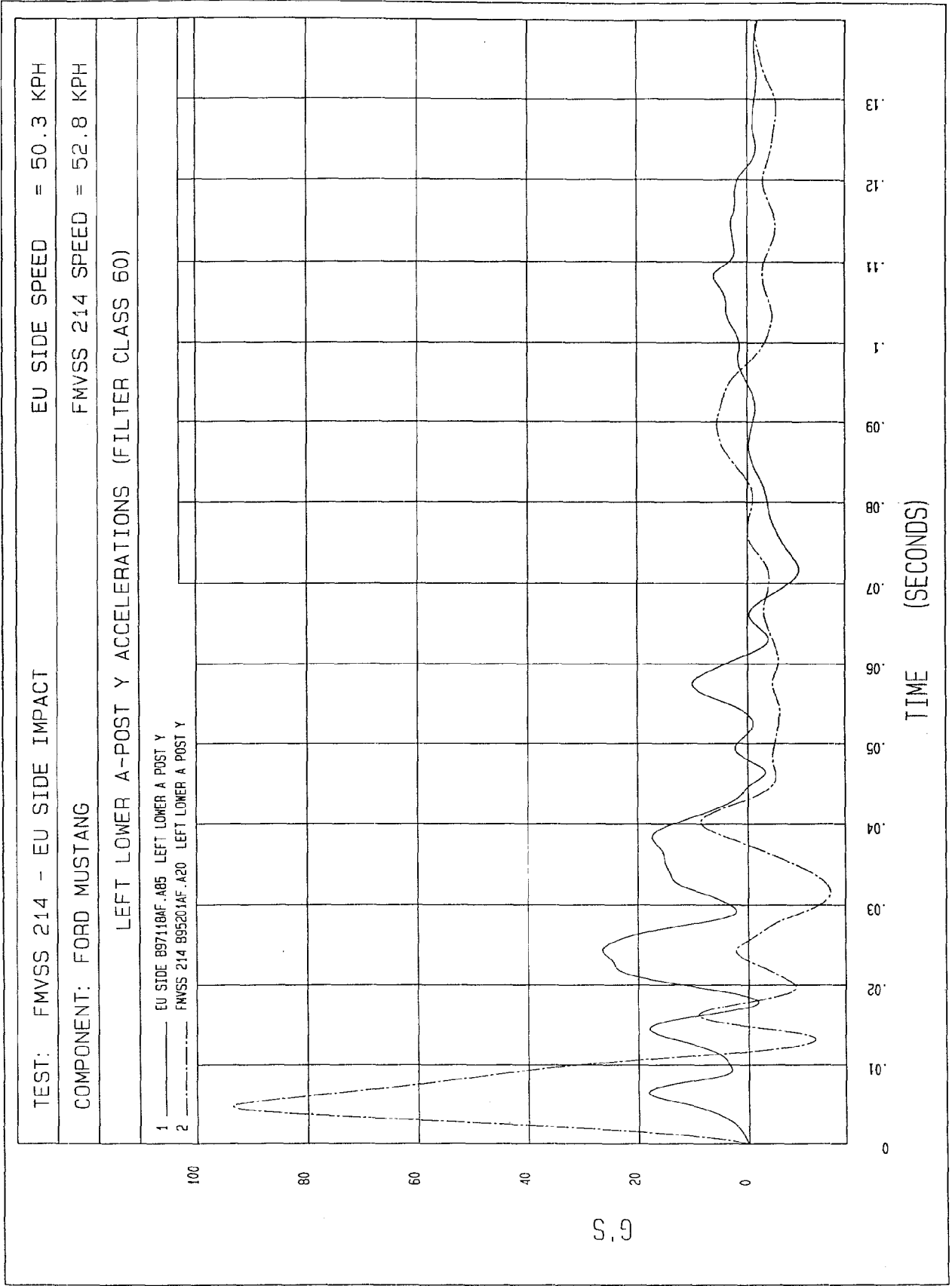
COMPONENT: FORD MUSTANG

FMVSS 214 SPEED = 52.8 KPH

LEFT MID A-POST Y VELOCITIES (FILTER CLASS 180)

1 ——— EU SIDE B971.8A1.V84 LEFT MID A-POST Y VELOCITY
2 - - - - - FMVSS 214 B95201A1.V19 LEFT MID A-POST Y VELOCITY

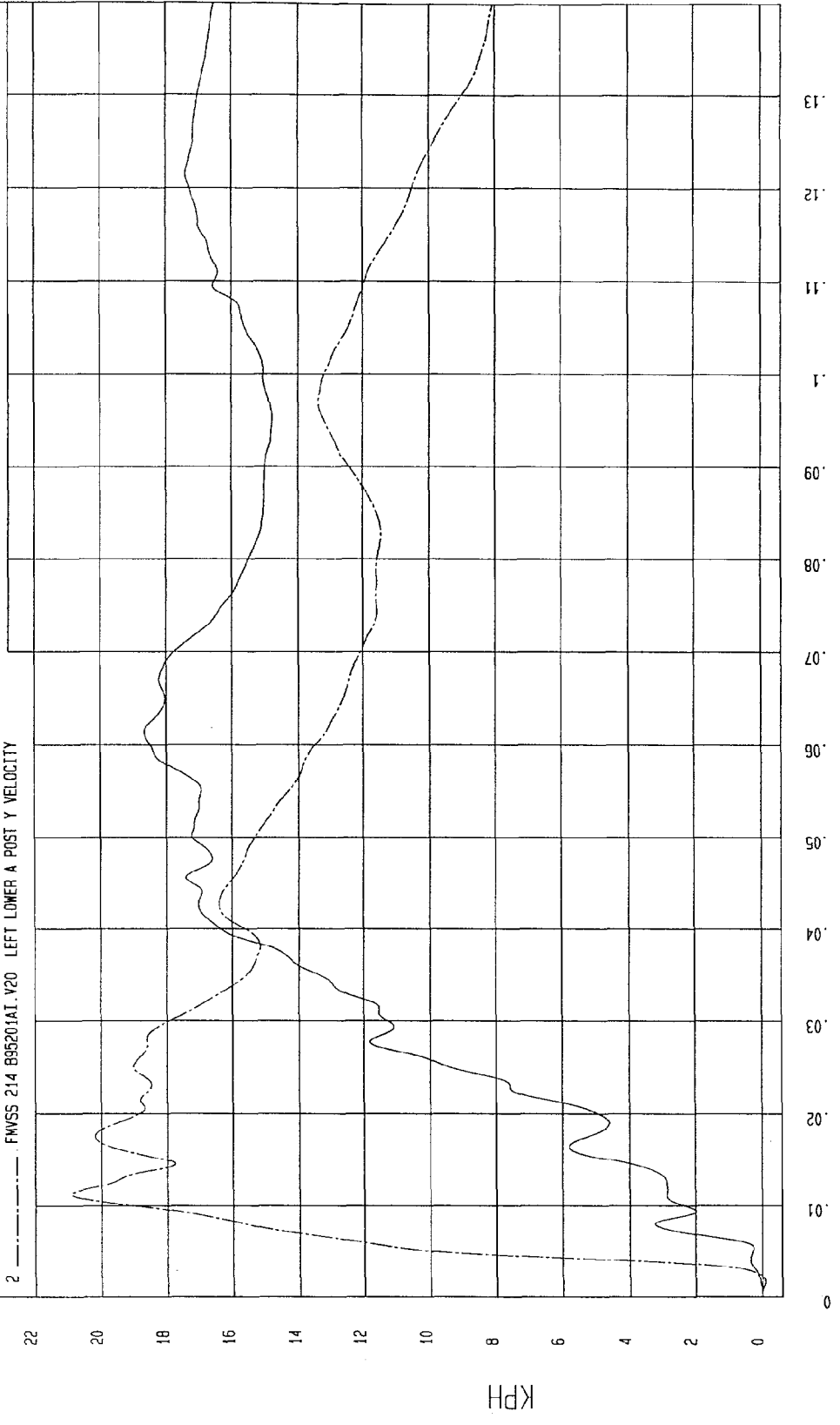




TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH
 COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

LEFT LOWER A-POST Y VELOCITIES (FILTER CLASS 180)

1 ——— EU SIDE B9718A1.V85 LEFT LOWER A-POST Y VELOCITY
 2 - - - - FMVSS 214 B95201A1.V20 LEFT LOWER A POST Y VELOCITY

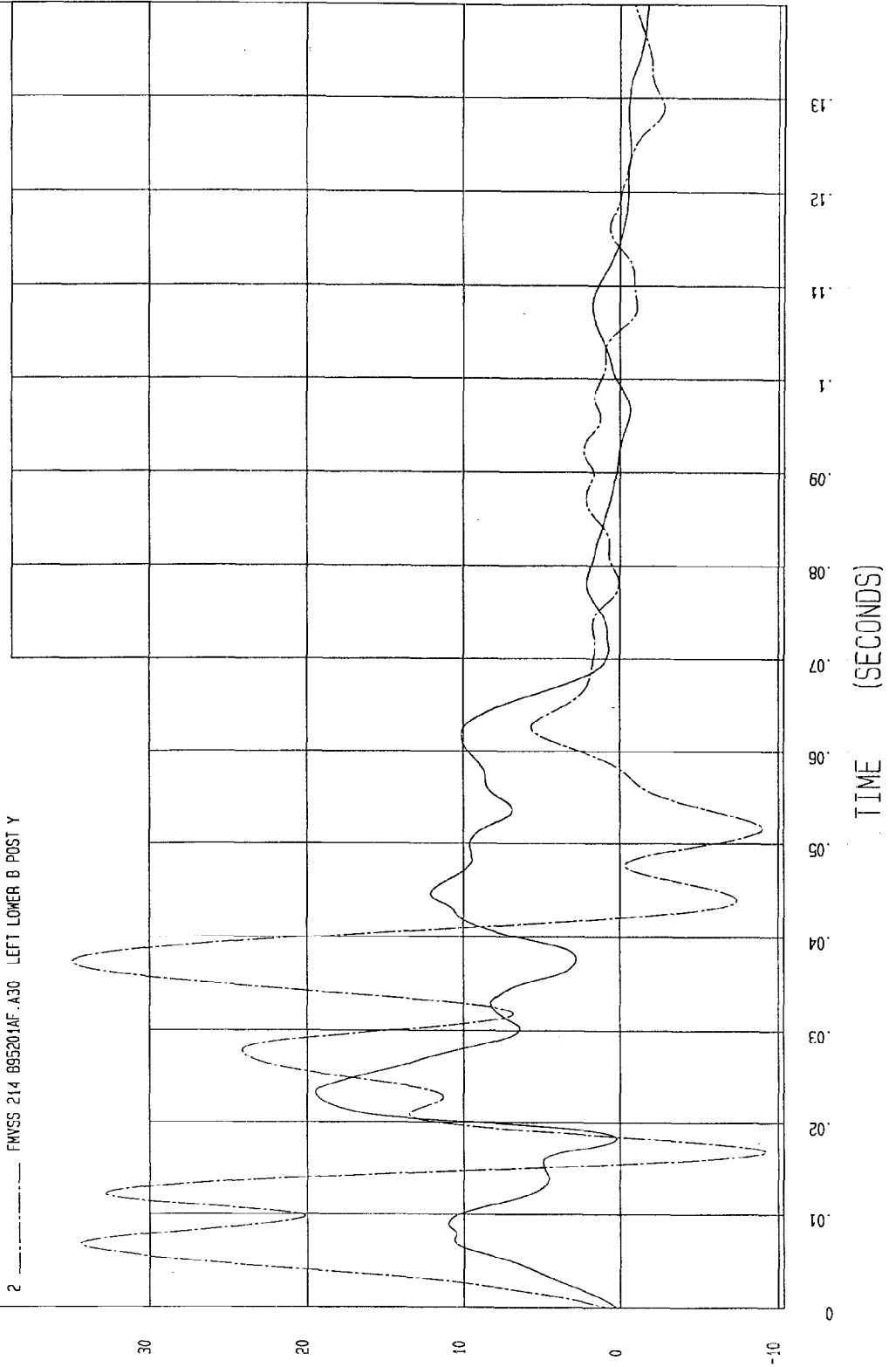


TEST: FMVSS 214 - EU SIDE IMPACT EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG FMVSS 214 SPEED = 52.8 KPH

LEFT LOWER B-POST Y ACCELERATIONS (FILTER CLASS 50)

1 ——— EU SIDE 897118AF.A87 LEFT LOWER B POST Y
2 - - - - - FMVSS 214 895201AF.A30 LEFT LOWER B POST Y



TEST: FMVSS 214 - EU SIDE IMPACT

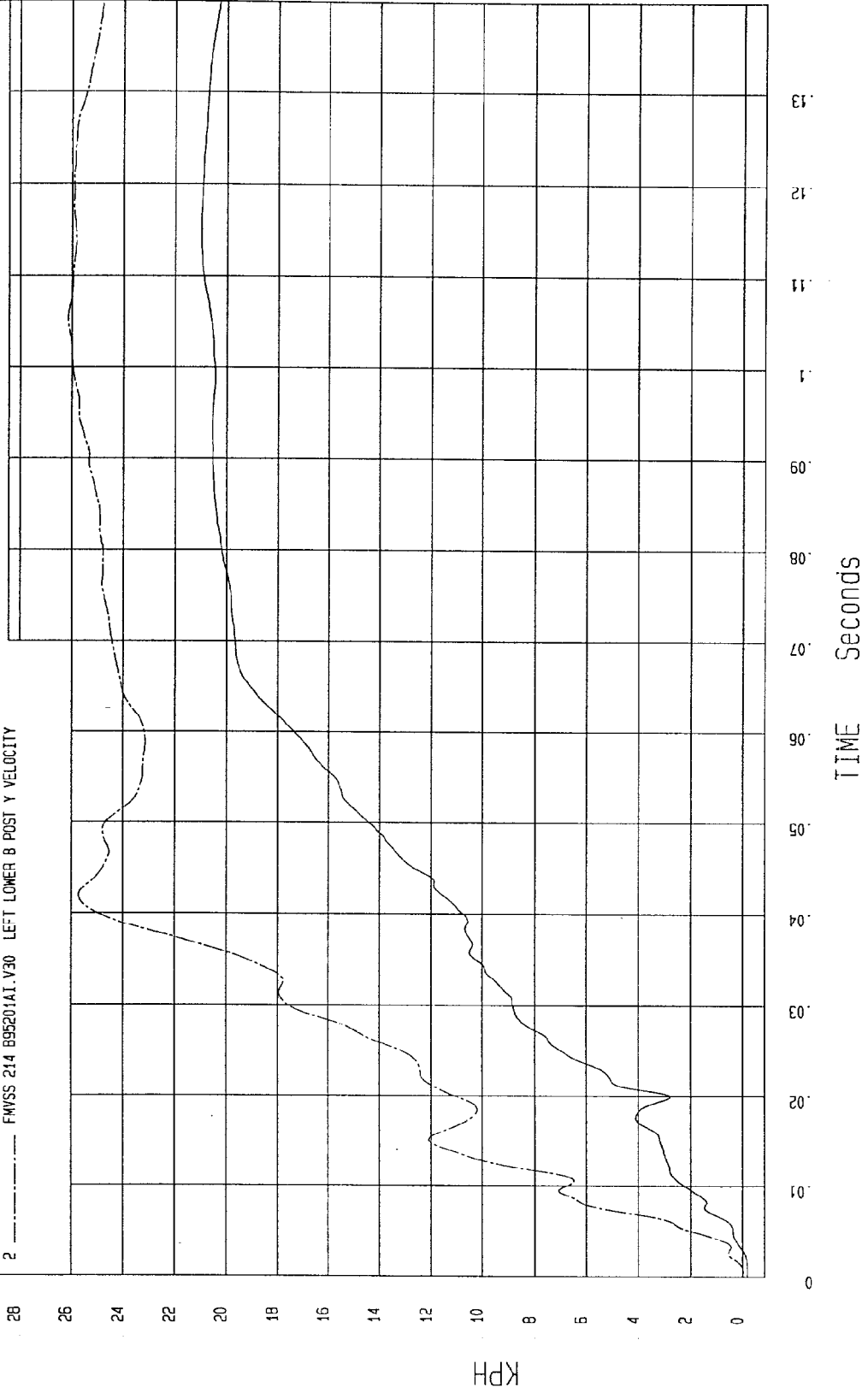
EU SIDE SPEED = 50.3 KPH

COMPONENT: FORD MUSTANG

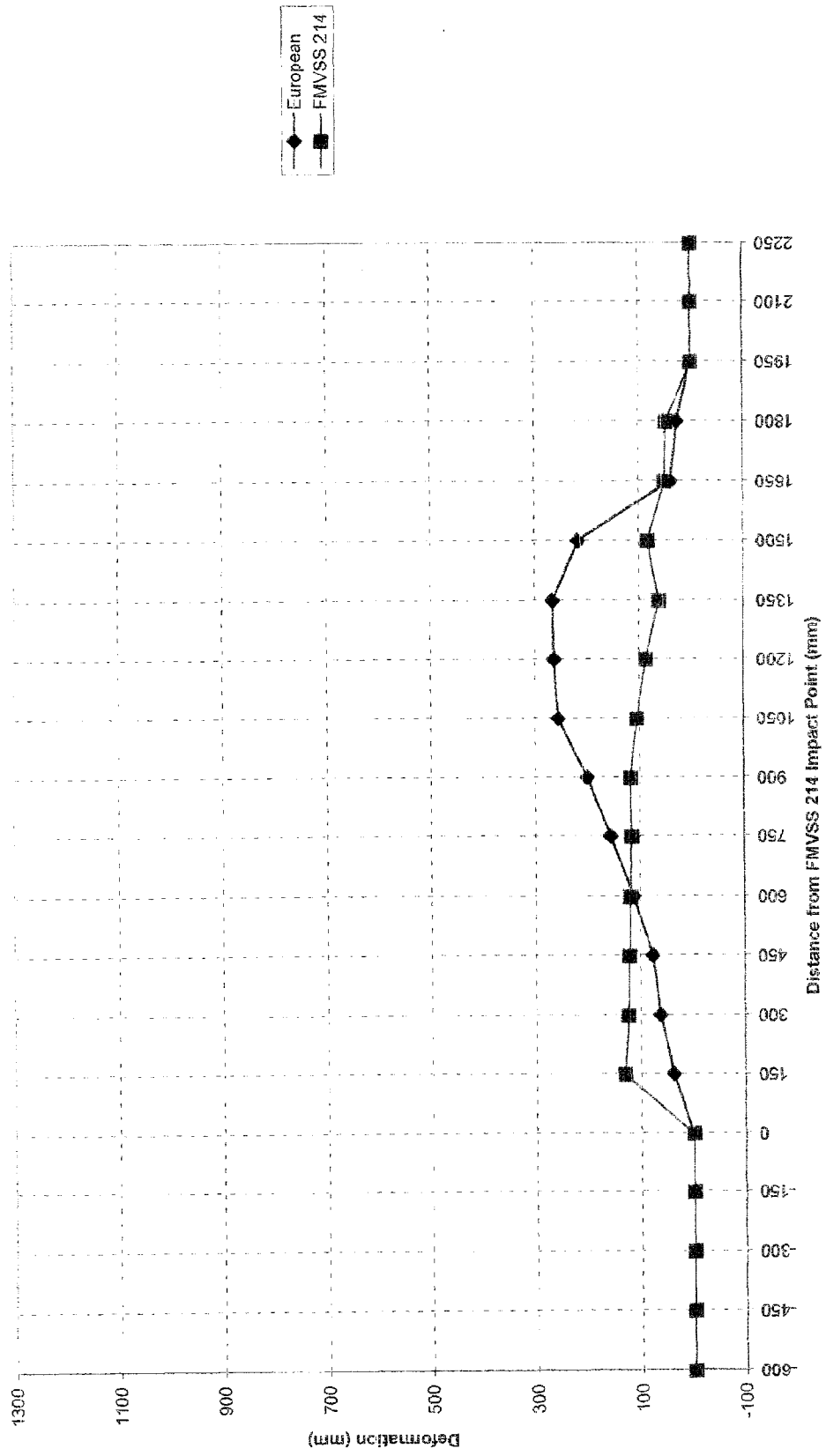
FMVSS 214 SPEED = 52.8 KPH

LEFT LOWER B-POST Y VELOCITIES (FILTER CLASS 180)

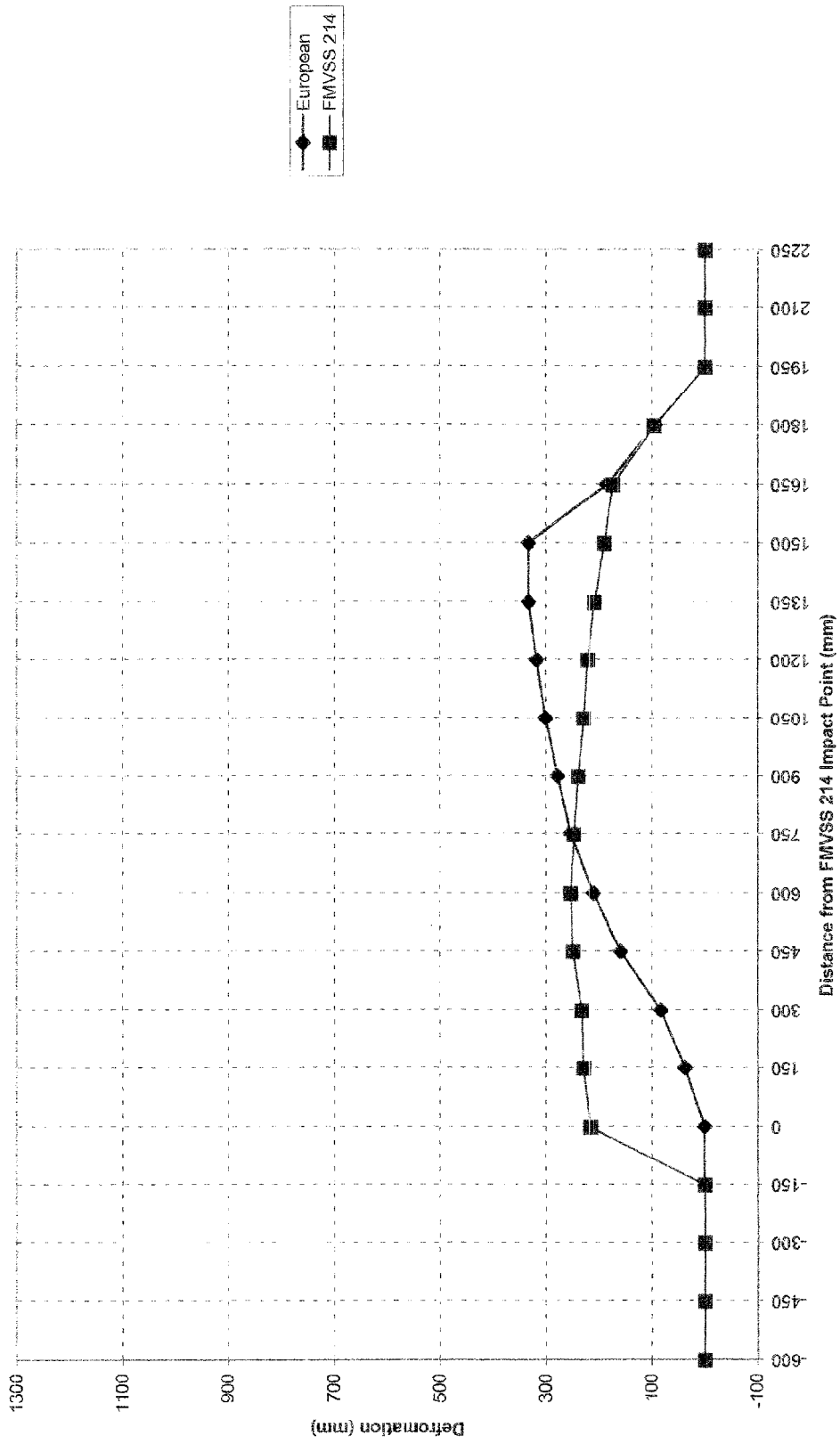
- 1 ——— EU SIDE B971B81.V87 LEFT LOWER B-POST Y VELOCITY
- 2 - - - - - FMVSS 214 B95201A1.V30 LEFT LOWER B POST Y VELOCITY



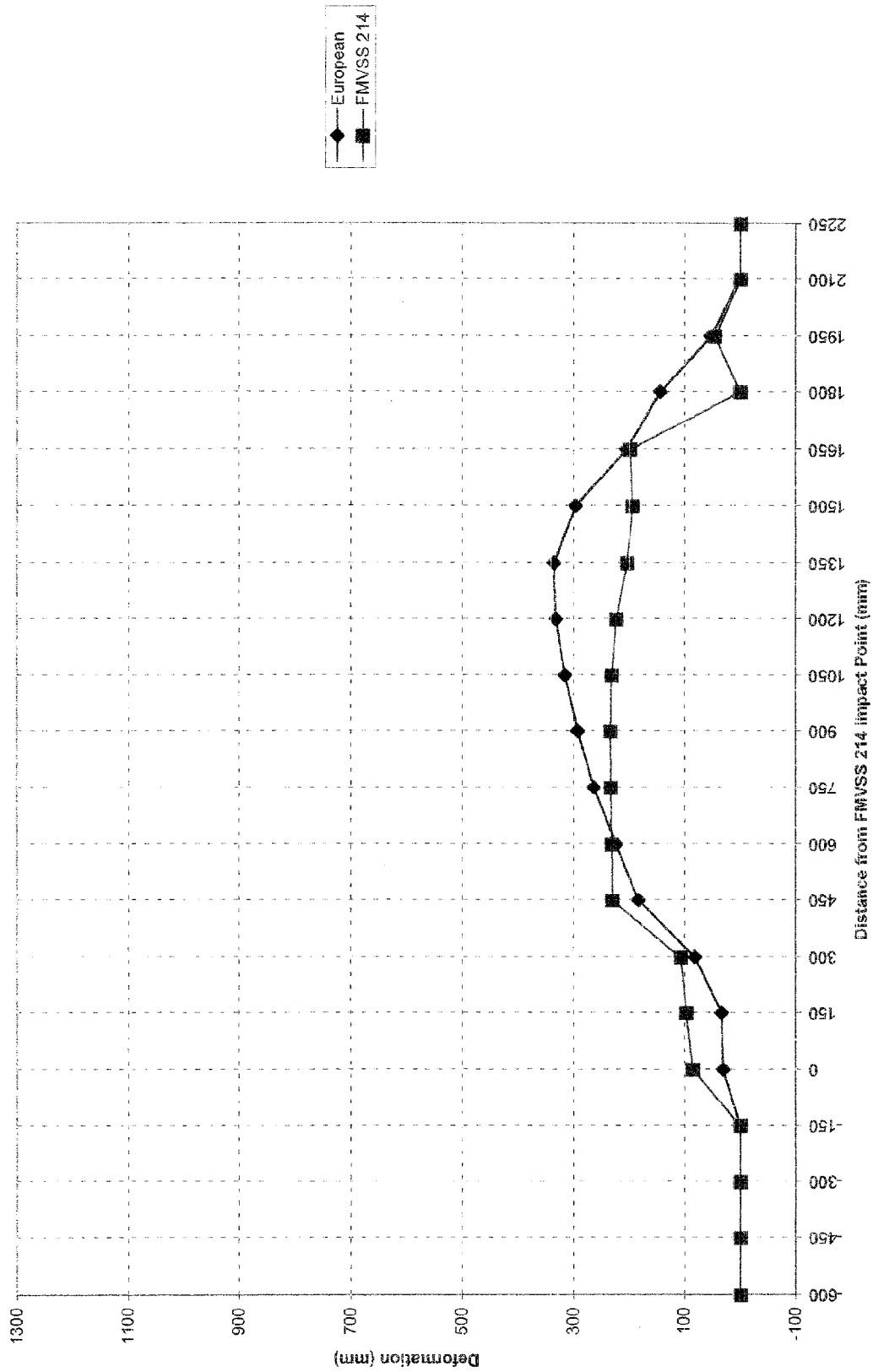
Level 1: Sill Deformation



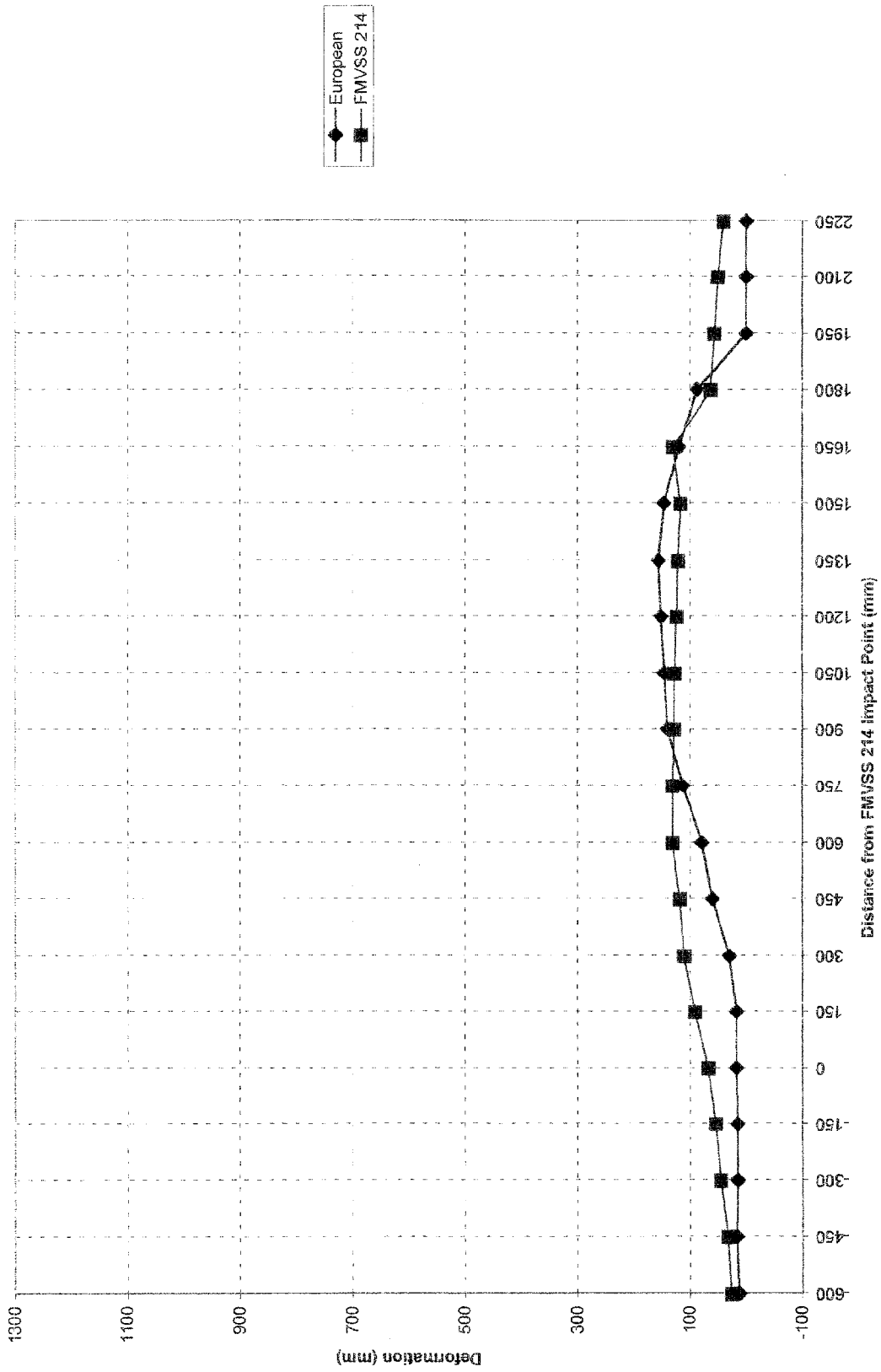
Level 2: Occupant H-Point Deformation



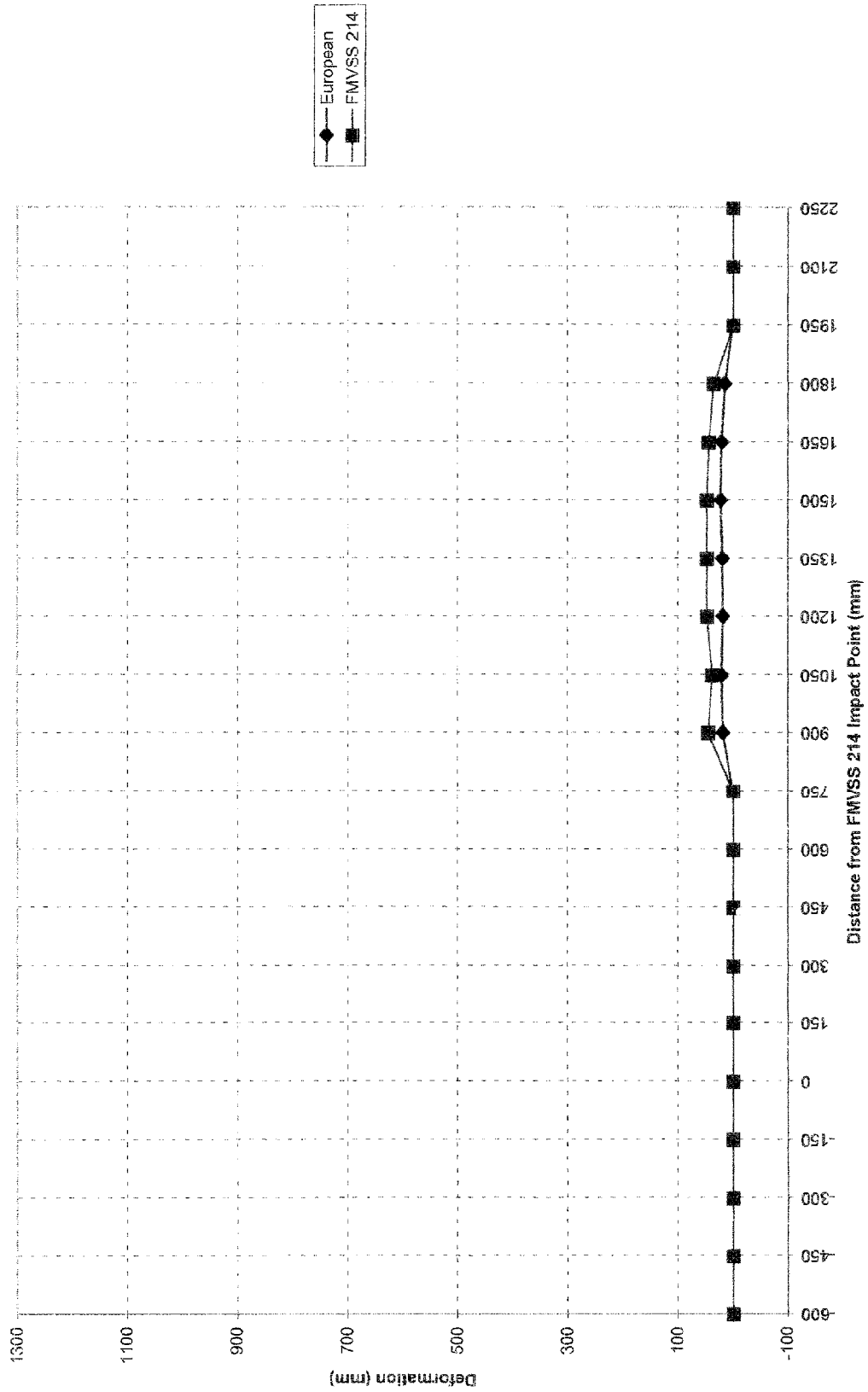
Level 3: Mid Door Deformation



Level 4: Window Sill Deformation



Level 5: Window Top Deformation



APPENDIX D
EUROSID-1 CONFIGURATION AND
PERFORMANCE VERIFICATION

EUROSID DUMMY PRE-TEST CALIBRATION DATA SUMMARY SHEET

Dummy #: E1- 169

Calibration Date: October 9, 1997

1.0 Head Drop Test

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	37%
Max. Resultant Acceleration	100 - 150 g's	148
Time of Max. Res. Acceleration		2.3 msec.

Calibrated By: Tim Michnay

Date: October 8, 1997

2.0 Neck Pendulum Test

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	46%
Pendulum Speed	10.83 - 11.48 ft/sec	11.11
Max. Pendulum Acceleration		-29.21
Time Max. Pend. Acceleration		9.73
Maximum Flexion Angle	46.0 - 56.0 deg.	52.1
Time of Max. Flexion Angle	50.0 - 62.0 ms	59.1
Maximum Angle Theta (A)	30.0 - 34.0 deg	31.6
Time of Max. Theta (A)	50.0 - 60.0 ms	56.1
Maximum Angle Theta (B)	26.0 - 30.0 deg.	28.9
Time of Max. Theta (B)	50.0 - 60.0 ms	54.2

Calibrated By: Tim Michnay

Date: October 8, 1997

3.0 Shoulder Impact Test

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	54%
Pendulum Speed	13.78 - 14.43 ft/sec	13.86
Max. Pendulum Acceleration	7.5 - 10.5 g's	9.6
Time of Max. Pendulum Acceleration		6.3

Calibrated By: Tim Michnay

Date: October 9, 1997

4.0 Upper Rib

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	46%
Displacement at 3.28 ft/sec	.39 - .55 in	.45
Displacement at 6.56 ft/sec	.93 - 1.08 in	.96
Displacement at 9.84 ft/sec	1.42 - 1.57 in	1.49
Displacement at 13.12 ft/sec	1.81 - 2.00 in	1.88

Calibrated By: Tim Michnay

Date: October 8, 1997

5.0 Middle Rib

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	46%
Displacement at 3.28 ft/sec	.39 - .55 in	.42
Displacement at 6.56 ft/sec	.93 - 1.08 in	1.00
Displacement at 9.84 ft/sec	1.42 - 1.57 in	1.55
Displacement at 13.12 ft/sec	1.81 - 2.00 in	1.95

Calibrated By: Tim Michnay

Date: October 8, 1997

6.0 Lower Rib

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	46%
Displacement at 3.28 ft/sec	.39 - .55 in	.45
Displacement at 6.56 ft/sec	.93 - 1.08 in	.96
Displacement at 9.84 ft/sec	1.42 - 1.57 in	1.48
Displacement at 13.12 ft/sec	1.81 - 2.00 in	1.87

Calibrated By: Tim Michnay

Date: October 8, 1997

7.0 Abdomen Test

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	40%
Probe Speed	20.34 - 20.99 ft/sec	20.75
Maximum Impact Force	2136 - 2495 lbs	2439
Time of Maximum Force	8.8 - 10.4 ms	9.6
Max. Total Abdomen Force	1326 - 1776 lbs	1365
Time of Max. Total Force	8.5 - 10.1 ms	9.9

Calibrated By: Tim Michnay

Date: October 9, 1997

8.0 Lumbar Spine Test

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	71°
Laboratory Relative Humidity	10% - 70%	35%
Pendulum Speed	19.52 - 20.17 ft/sec	19.78
Max. Pendulum Acceleration		-31.3
Time Max. Pend. Acceleration		10.0
Maximum Flexion Angle	45.0 - 55.0 deg.	47.5
Time of Max. Flexion Angle	39.0 - 53.0 ms	46.1
Maximum Angle Theta (A)	31.0 - 35.0 deg	31.4
Time of Max. Theta (A)	45.0 - 55.0 ms	46.0
Maximum Angle Theta (B)	27.0 - 31.0 deg.	28.4
Time of Max. Theta (B)	45.0 - 55.0 ms	46.3

Calibrated By: First Technology Safety Systems Date: September 23, 1997

9.0 Pelvis Test

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	52%
Pendulum Speed	13.77 - 14.43 ft/sec	13.93
Maximum Impactor Force	989 - 1214 lbs	1188
Time of Max. Impactor Force	10.3 - 15.5 ms	13.3
Maximum Pubic Force	233.8 - 368.7 lbs	324.0
Time of Max. Pubic Force	9.9 - 15.9 ms	15.6

Calibrated By: Tim Michnay

Date: October 9, 1997

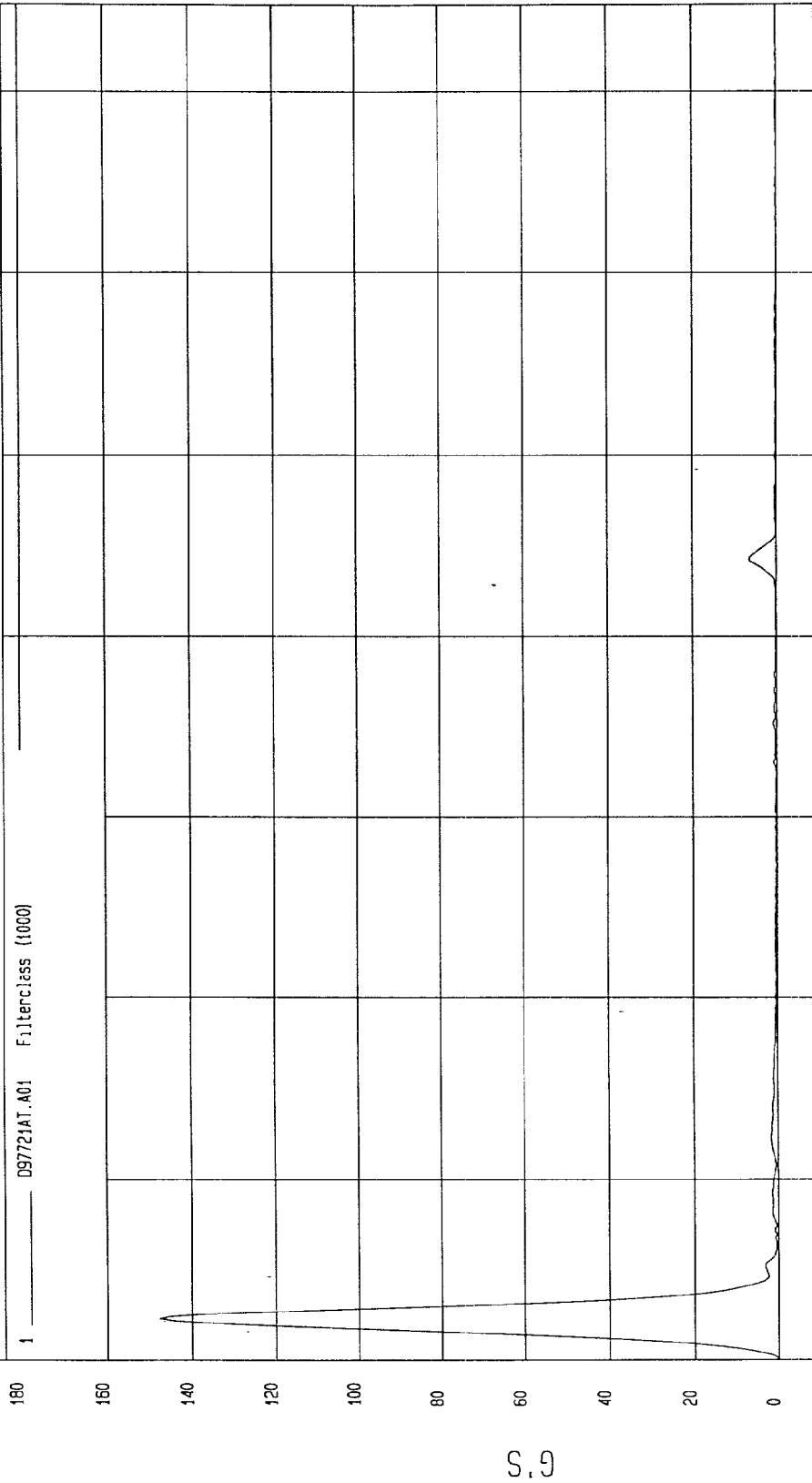
TEST: DUMMY CALIBRATION - HEAD DROP TEST DATE: 10-08-1997 - 17:32:13

COMPONENT: DUMMY # E1-169

Minimum = 2.02E-02 G'S at 32.3 msec Maximum = 147.62 G'S at 2.25 msec

PEAK RESULTANT ACCELERATION

1 _____ D97721AT.A01 Filterclass (1000)



MCA Research
10-08-1997 17:33

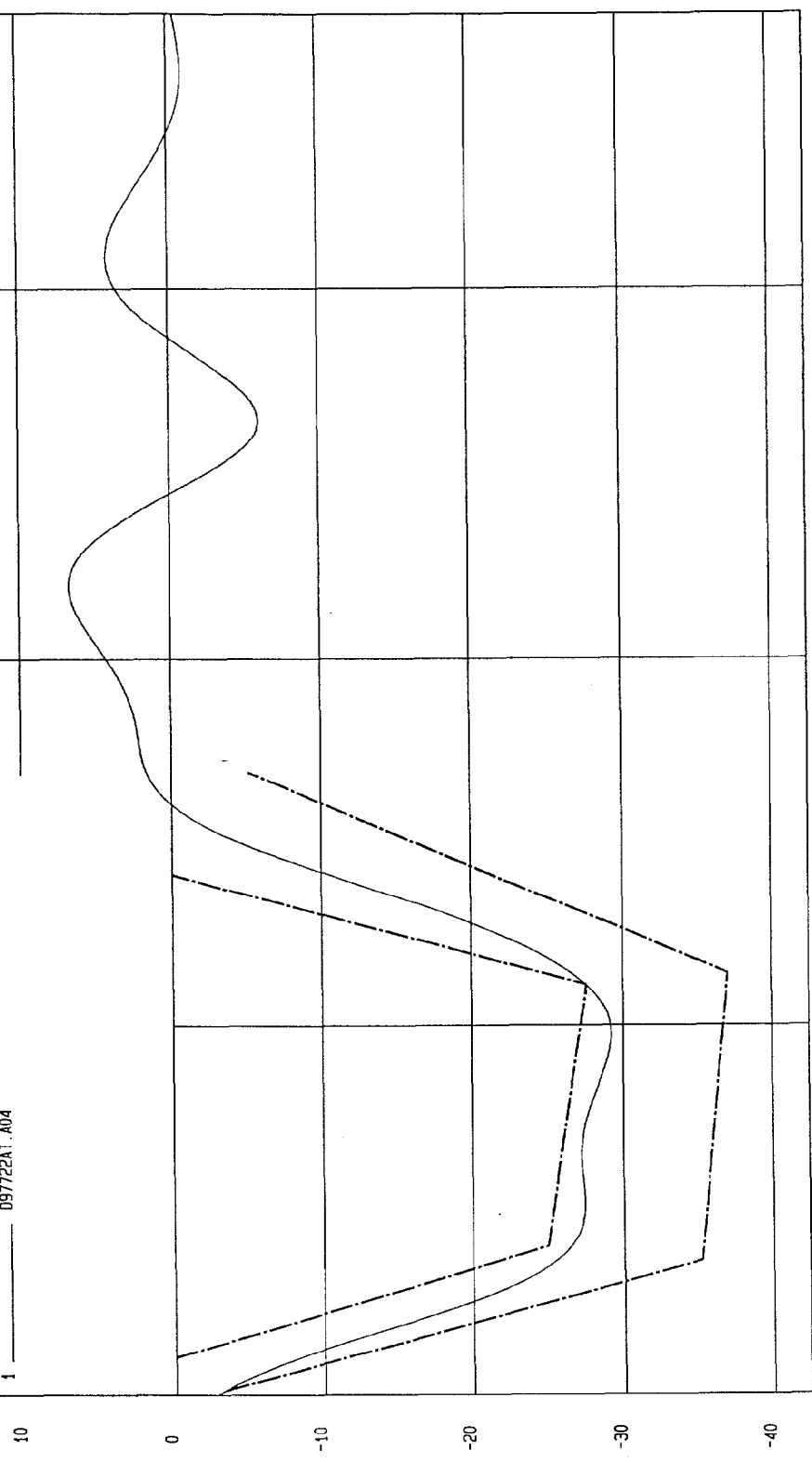
TEST: DUMMY CALIBRATION - NECK BENDING TEST DATE: 10-08-1997 - 15:01

COMPONENT: DUMMY # E1-169 Velocity: 11.106 FT/SEC 3.39 M/SEC

Minimum = -29.21 G'S at 9.73 msec Maximum = 6.67 G'S at 21.9 msec

PENDULUM ACCELERATION

1 ——— 097722AT.A04



MOA Research
10-08-1997 16:43

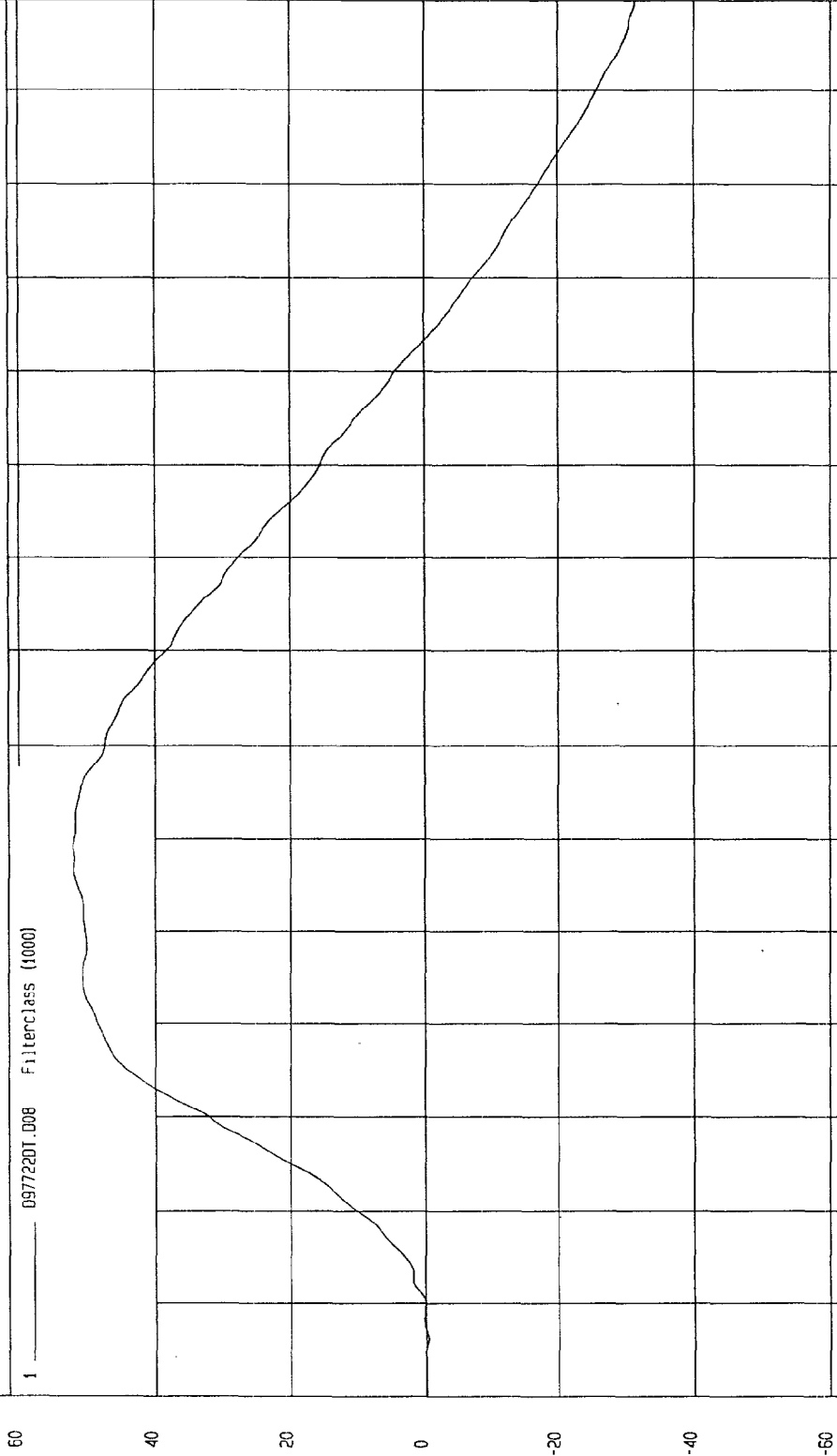
TEST: DUMMY CALIBRATION - NECK BENDING TEST DATE: 10-08-1997 - 15:01

COMPONENT: DUMMY # E1-169 Velocity: 11.11 FT/SEC 3.39 M/SEC

Minimum = -32.91 DEG at 156. msec

Maximum = 52.08 DEG at 59.1 msec

FLEXION ANGLE



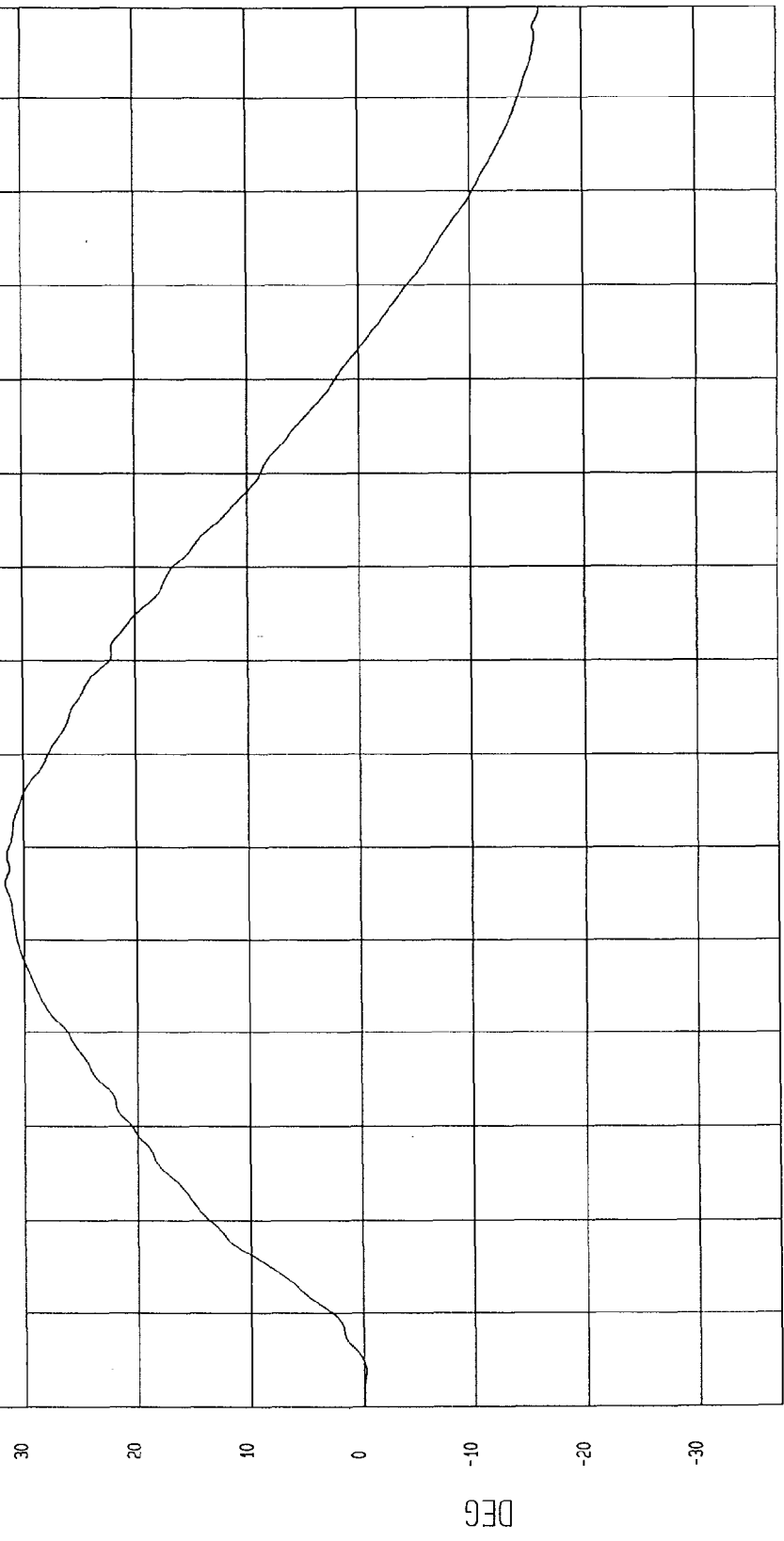
WCA Research
10-08-1997 16:44

TEST: DUMMY CALIBRATION - NECK BENDING TEST DATE: 10-08-1997 - 15:01
COMPONENT: DUMMY # E1-169 Velocity: 11.11 FT/SEC 3.39 M/SEC

Minimum = -16.70 DEG at 155. msec Maximum = 31.64 DEG at 56.1 msec

THETA A

1 _____ 09772201.005 Filterclass (1000)



MCA Research
10-08-1997 16:44
TIME (SECONDS)

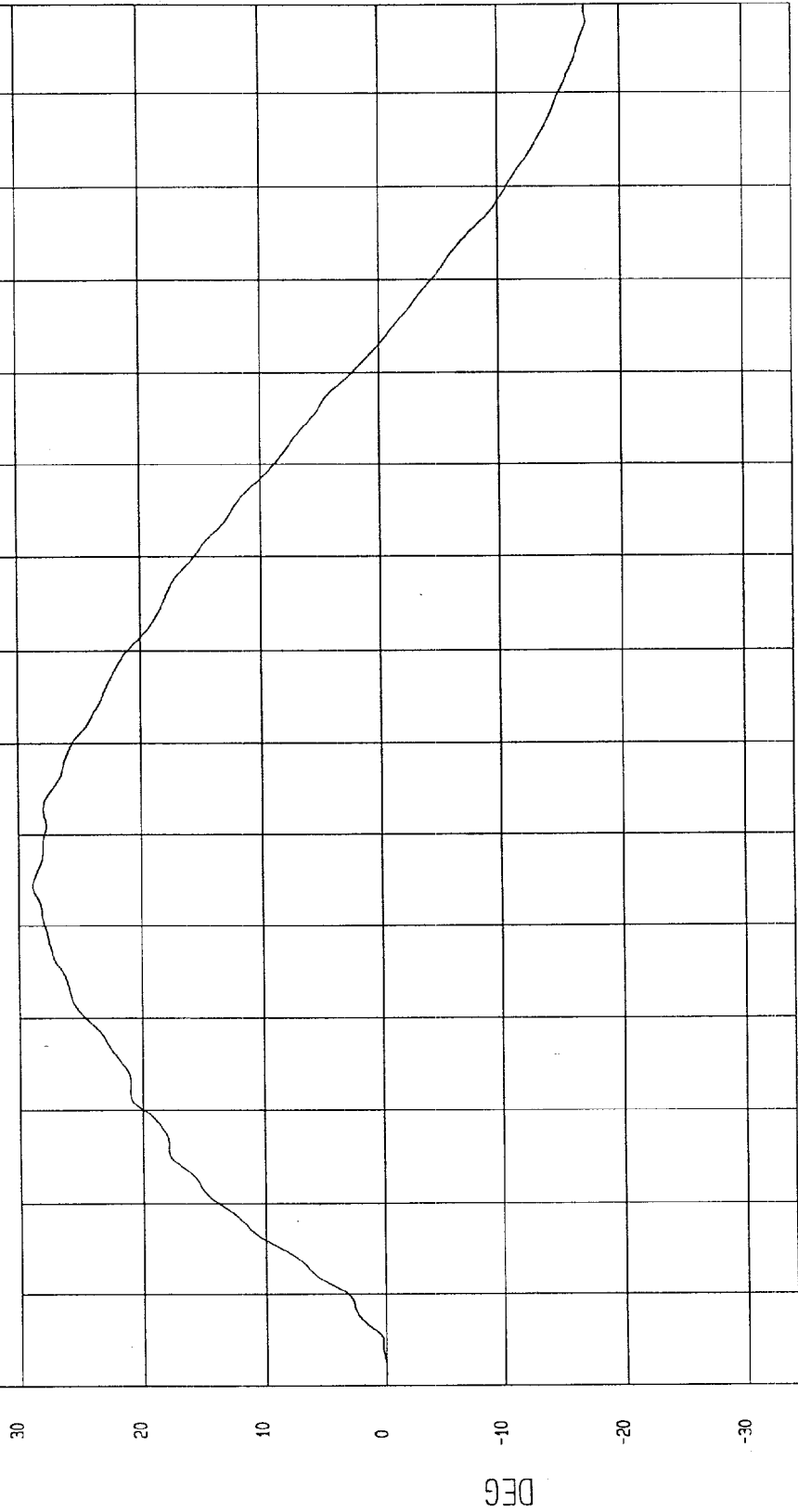
TEST: DUMMY CALIBRATION - NECK BENDING TEST DATE: 10-08-1997 - 15:01

COMPONENT: DUMMY # E1-169 Velocity: 11.11 FT/SEC 3.39 M/SEC

Minimum = -17.75 DEG at 158. msec Maximum = 28.85 DEG at 54.2 msec

THETA B

1 ——— D977220T.006 Filterclass (1000)



MCA Research
10-08-1997 16.45

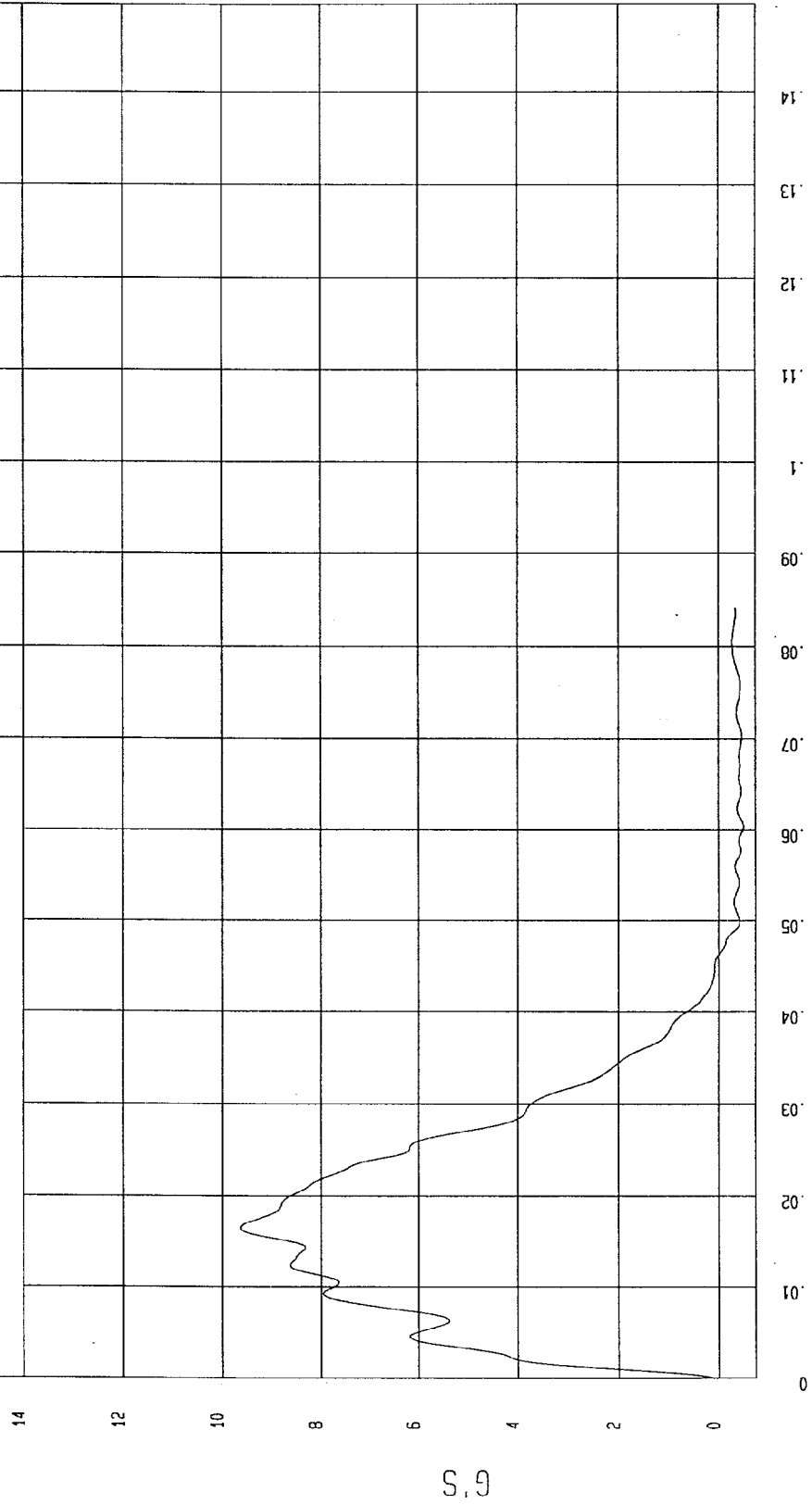
TEST: SHOULDER IMPACT TEST DATE: 10-09-1997 - 09:37:42

COMPONENT: DUMMY # E1-169 Velocity: 13.86 FT/SEC 4.22 M/SEC

Minimum = -.51 G'S at 60.4 msec Maximum = 9.63 G'S at 16.3 msec

PENDULUM ACCELERATION

1 ——— D97723AT.A01 Filterclass (1000)



MGA Research
10-09-1997 09:37

TEST: EUROSID RIB MODULE TEST DATE: 10-08-1997 - 16:06

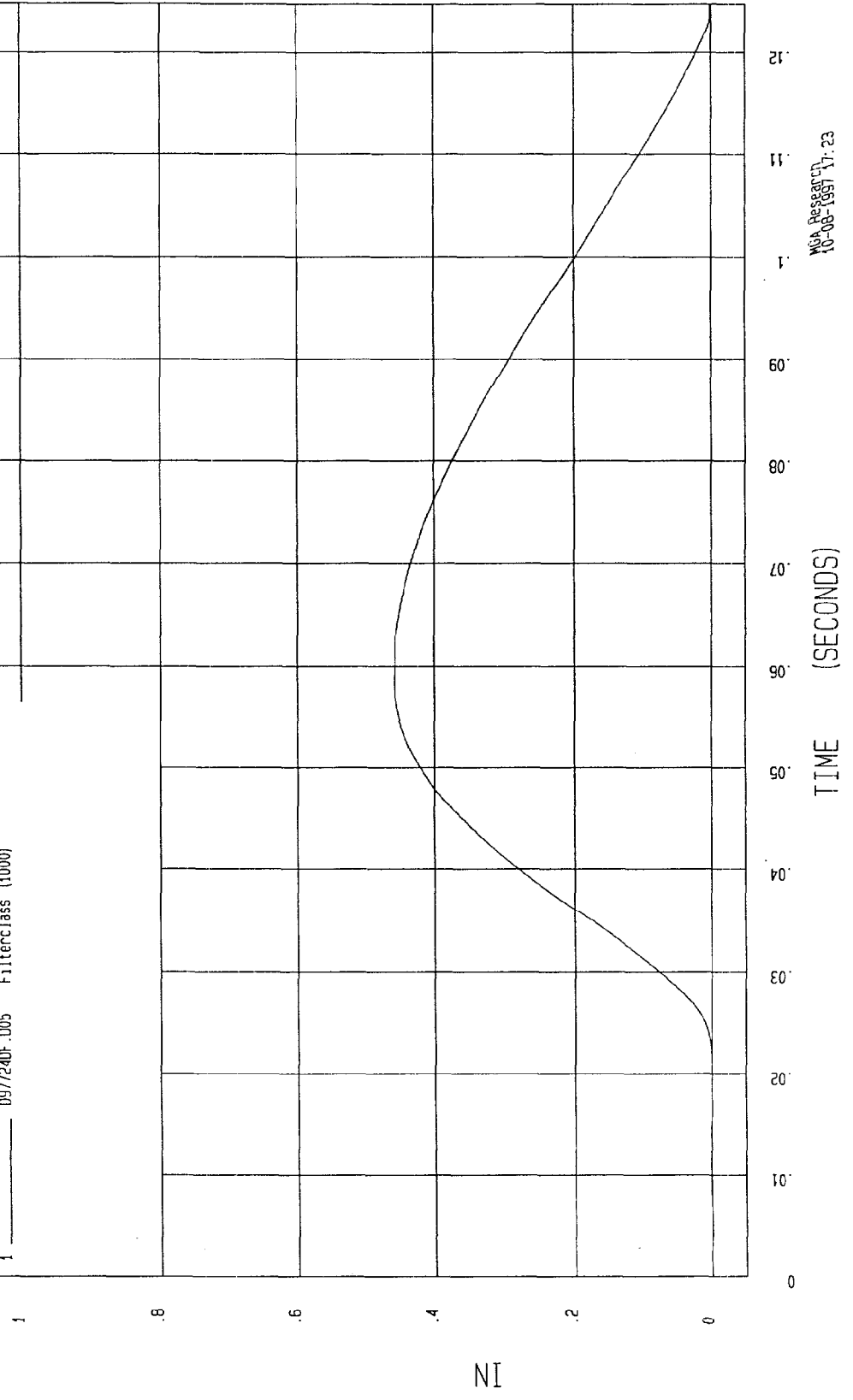
COMPONENT: DUMMY # E1-169 Velocity: 3.28 FT/SEC 1 M/SEC

Minimum = -8.69E-04 IN at 16.7 msec

Maximum = .45 IN at 58.4 msec

UPPER RIB DISPLACEMENT

1 _____ 0977240F.D05 Filterclass (1000)

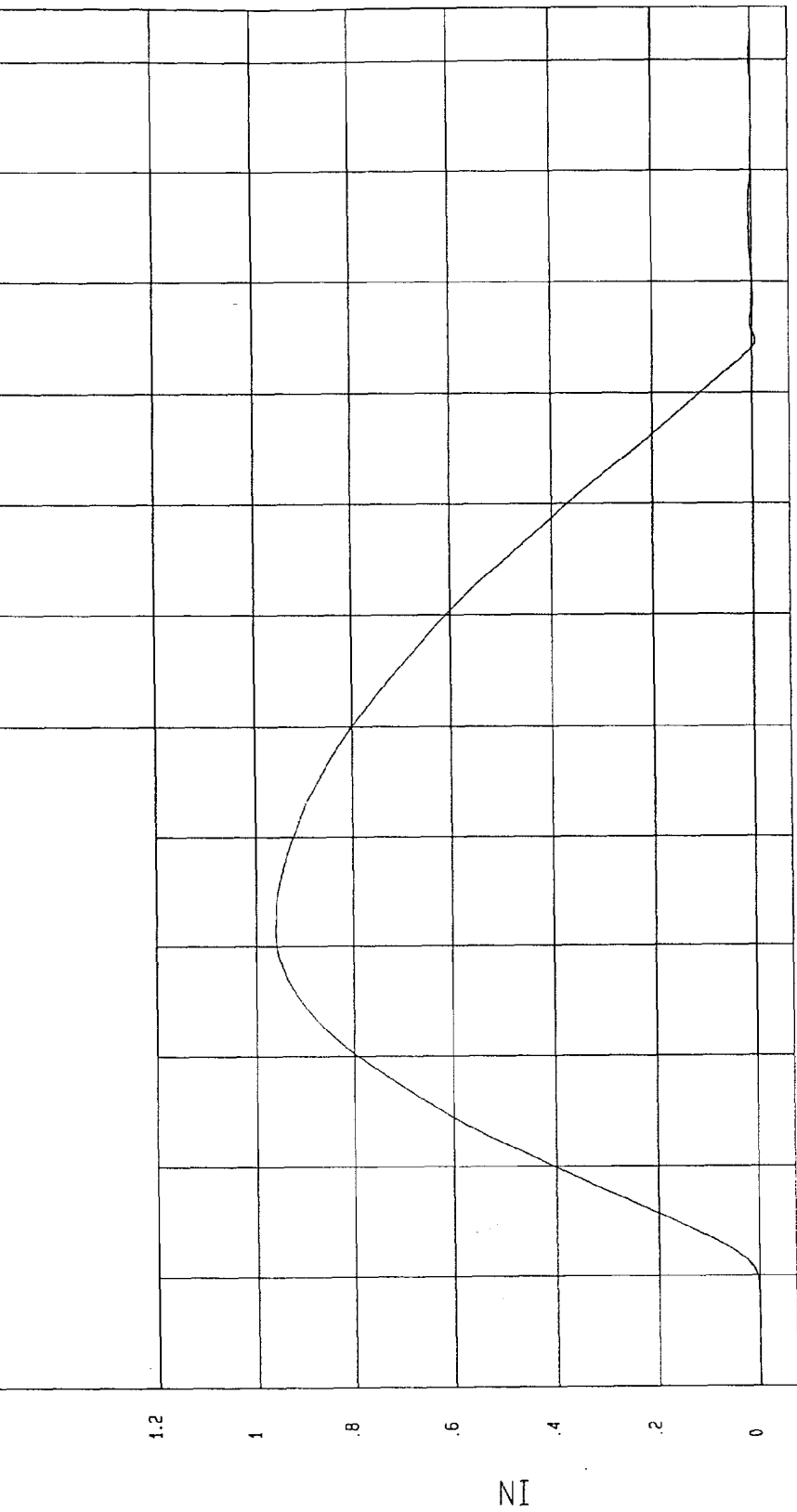


MSA Research
10-08-1997 17:23

TEST: EUROSID RIB MODULE TEST DATE: 10-08-1997 - 16:13
COMPONENT: DUMMY # E1-169 Velocity: 6.56 FT/SEC 2 M/SEC

Minimum = -6.23E-03 IN at 94.7 msec Maximum = .96 IN at 41.4 msec

UPPER RIB DISPLACEMENT
1 _____ 097724DF.006 Filterclass (1000)



MCA Research
01-09-1998 16:11

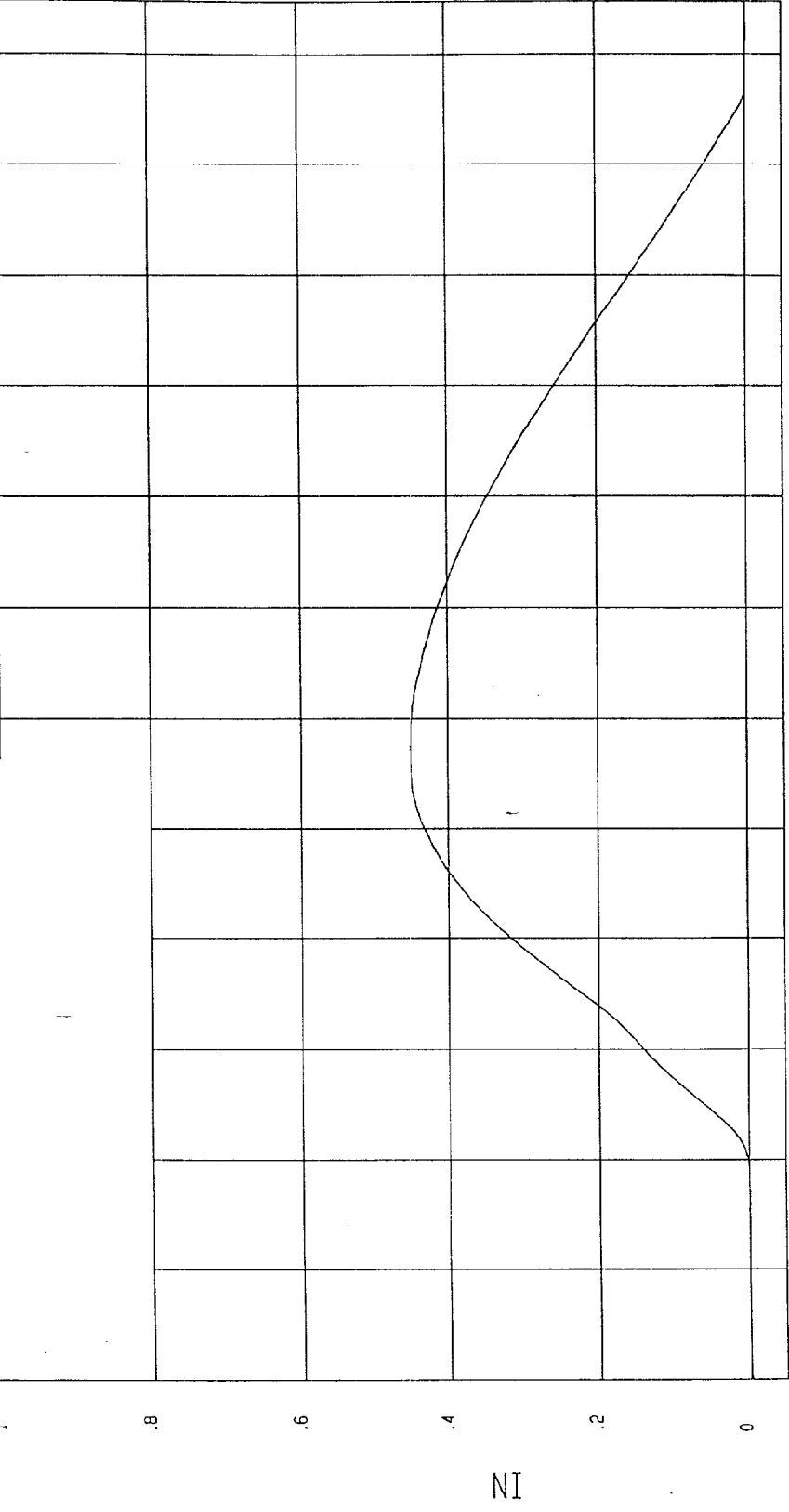
TEST: EUROSID RIB MODULE TEST DATE: 10-08-1997 - 17:02

COMPONENT: DUMMY # E1-169 Velocity: 3.28 FT/SEC 1 M/SEC

Minimum = -2.28E-03 IN at 0 msec Maximum = .45 IN at 57.2 msec

LOWER RIB DISPLACEMENT

1 0977260F.005 Filterclass (1000)



MGA Research
10-08-1997 17:49

TEST: EUROSID RIB MODULE TEST DATE: 10-08-1997 - 17: 10

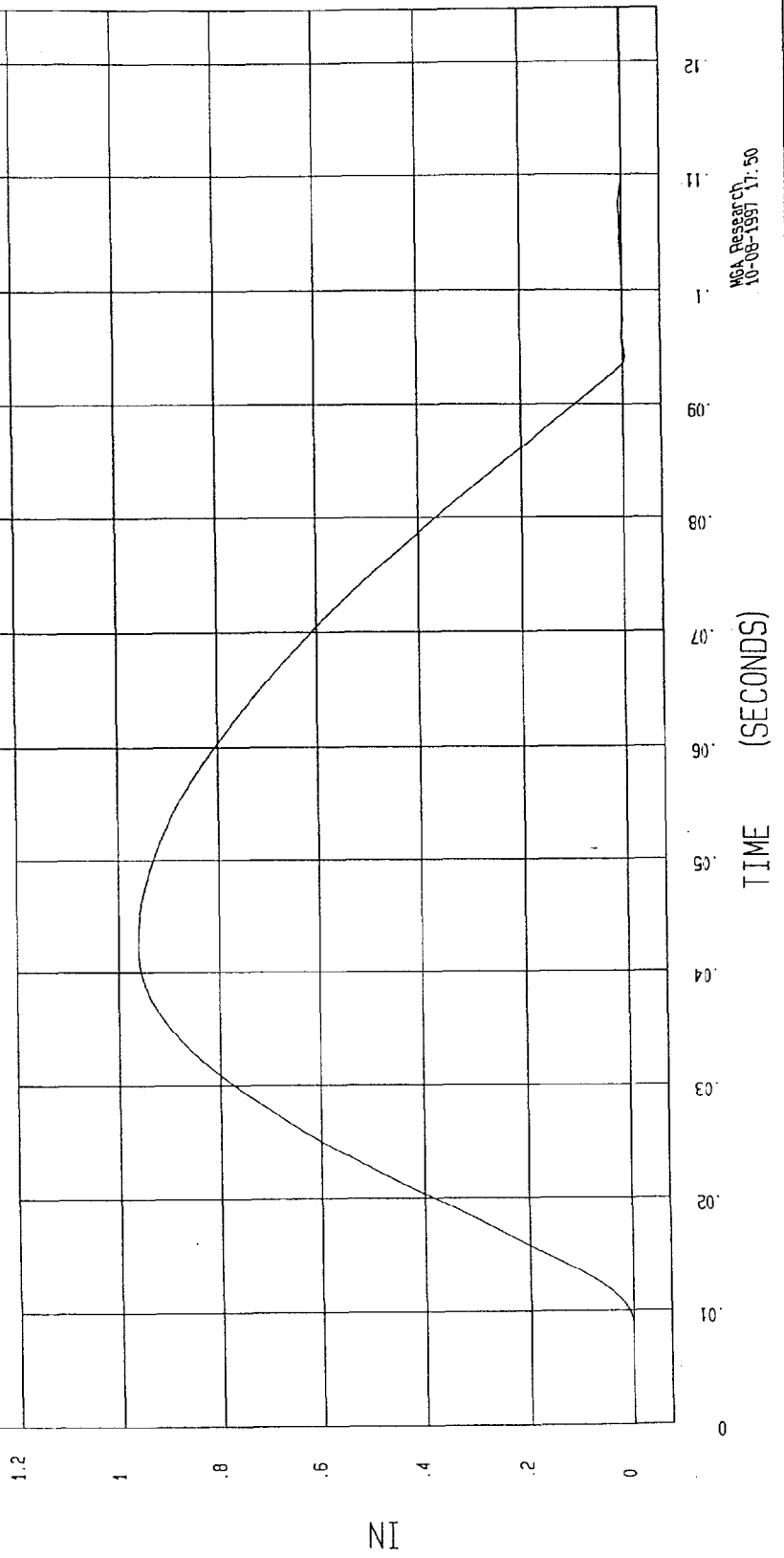
COMPONENT: DUMMY # E1-169 Velocity: 6.56 FT/SEC 2 M/SEC

Minimum = -4.50E-03 IN at 94.2 msec

Maximum = .96 IN at 42.3 msec

LOWER RIB DISPLACEMENT

1 _____ 0977260F.006 Filterclass (1000)



MSA Research
10-08-1997 17: 50

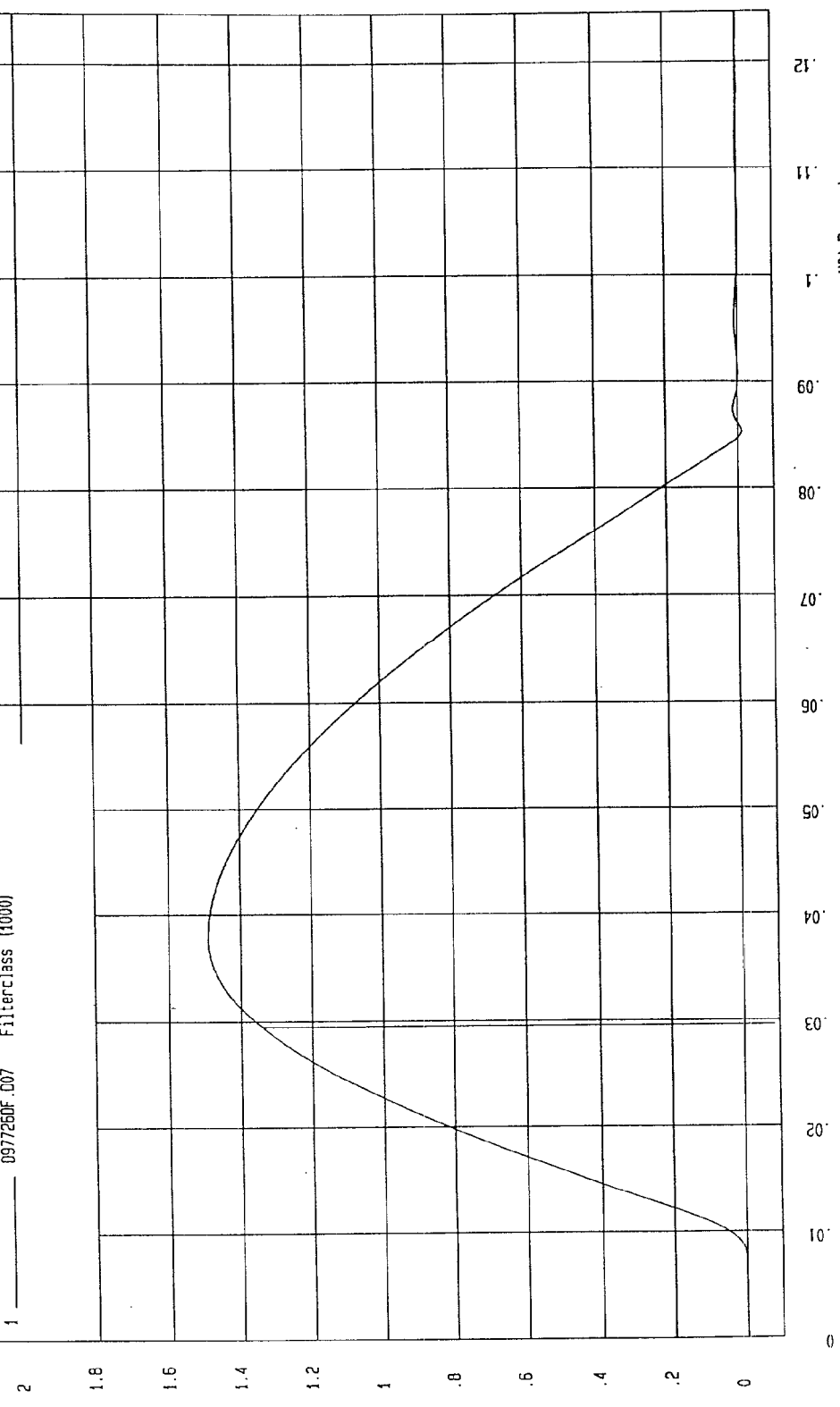
TEST: EUROSID RIB MODULE TEST DATE: 10-08-1997 - 17:18

COMPONENT: DUMMY # E1-169 Velocity: 9.84 FT/SEC 3 M/SEC

Minimum = -1.02E-02 IN at 85.2 msec
Maximum = 1.46 IN at 37.6 msec

LOWER RIB DISPLACEMENT

1 ——— 0977260F.D07 Filterclass (1000)



M&A Research
10-08-1997 18:02

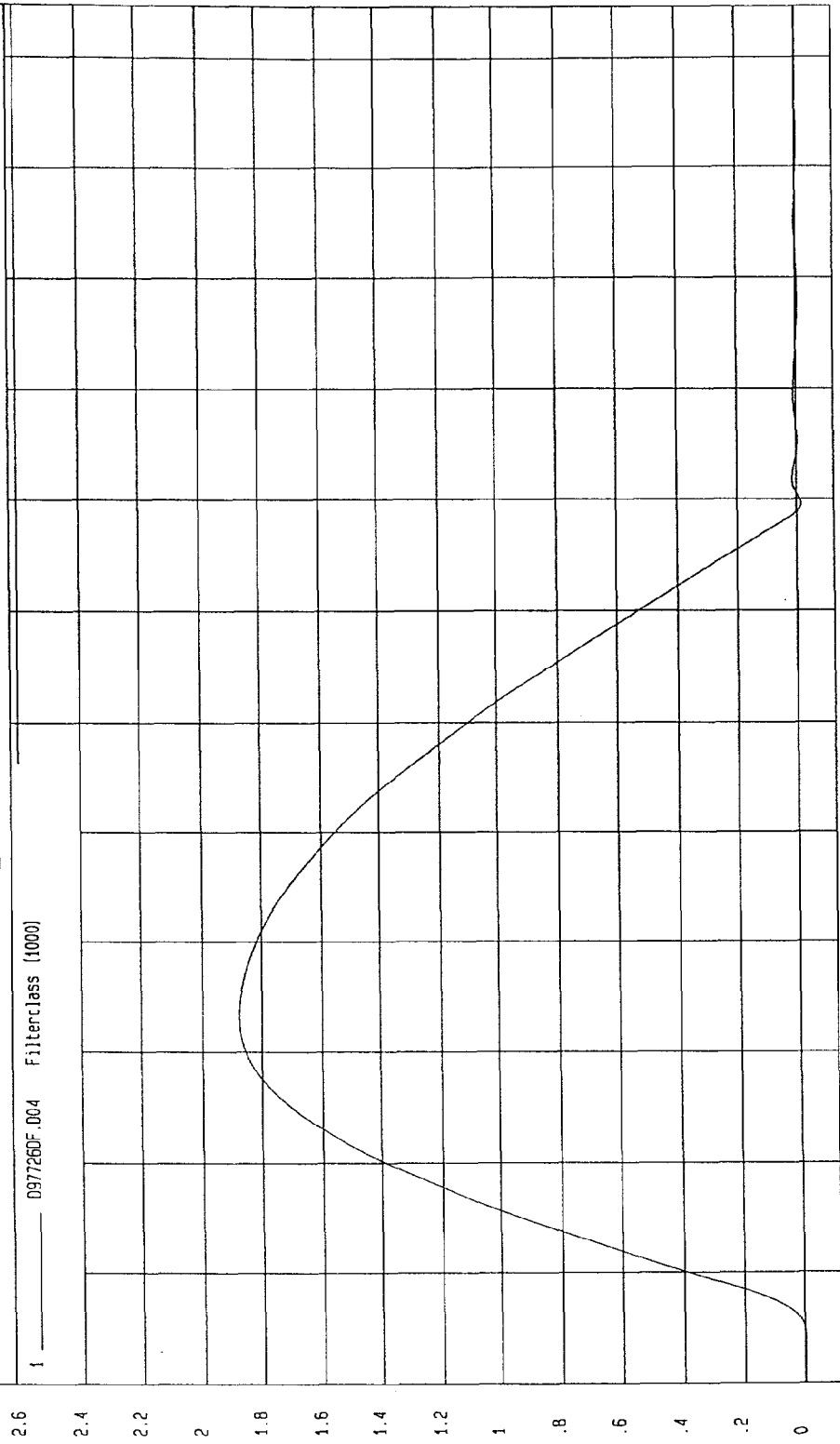
TEST: EUROSID RIB MODULE
COMPONENT: DUMMY # E1-169

TEST DATE: 10-08-1997 - 16:55
Velocity: 13.12 FT/SEC 4 M/SEC

Minimum = -.01 IN at 79.6 msec
Maximum = 1.87 IN at 33.4 msec

LOWER RIB DISPLACEMENT

1 _____ 0977260F.004 Filterclass (1000)



MGA Research
10-08-1997 17.49

TEST: EUROSID RIB MODULE TEST DATE: 10-08-1997 - 16: 21

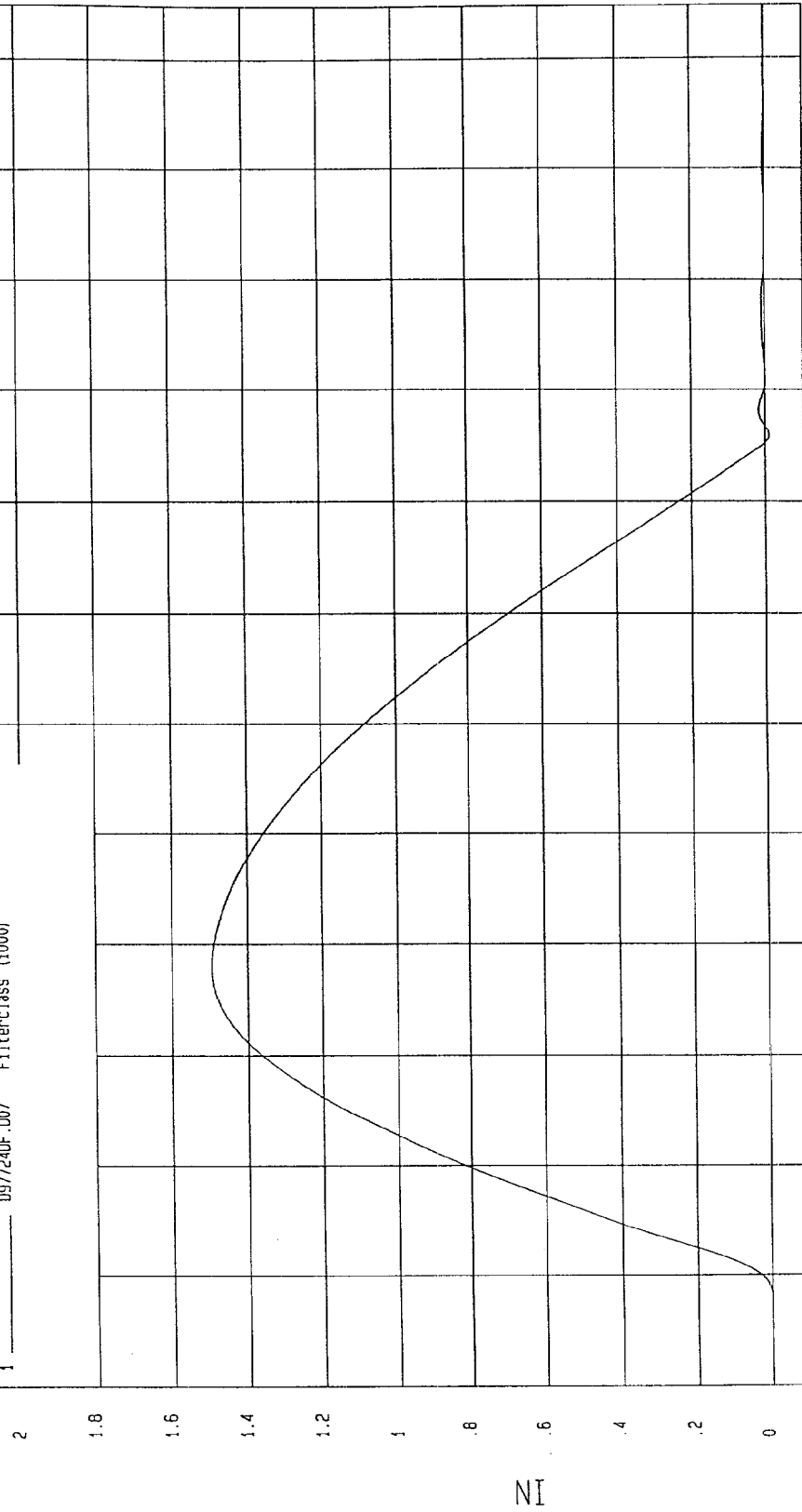
COMPONENT: DUMMY # E1-169 Velocity: 9.84 FT/SEC 3 M/SEC

Minimum = -1.07E-02 IN at 85.8 msec

Maximum = 1.49 IN at 37.8 msec

UPPER RIB DISPLACEMENT

1 0977240F.007 Filterclass (1000)



MGA Research
10-08-1997 17:25

TEST: EUROSID RIB MODULE

TEST DATE: 10-08-1997 - 15:57

COMPONENT: DUMMY # E1-169

Velocity: 13.12 FT/SEC 4 M/SEC

Minimum = -1.17E-02 IN at 80.6 msec

Maximum = 1.88 IN at 34.3 msec

UPPER RIB DISPLACEMENT

1 ——— 097724DF.D04 Filterclass (1000)

2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
.8
.6
.4
.2
0

IN

0 .01 .02 .03 .04 .05 .06 .07 .08 .09 .10 .11 .12

TIME (SECONDS)

MCA Research
10-08-1997 17:23

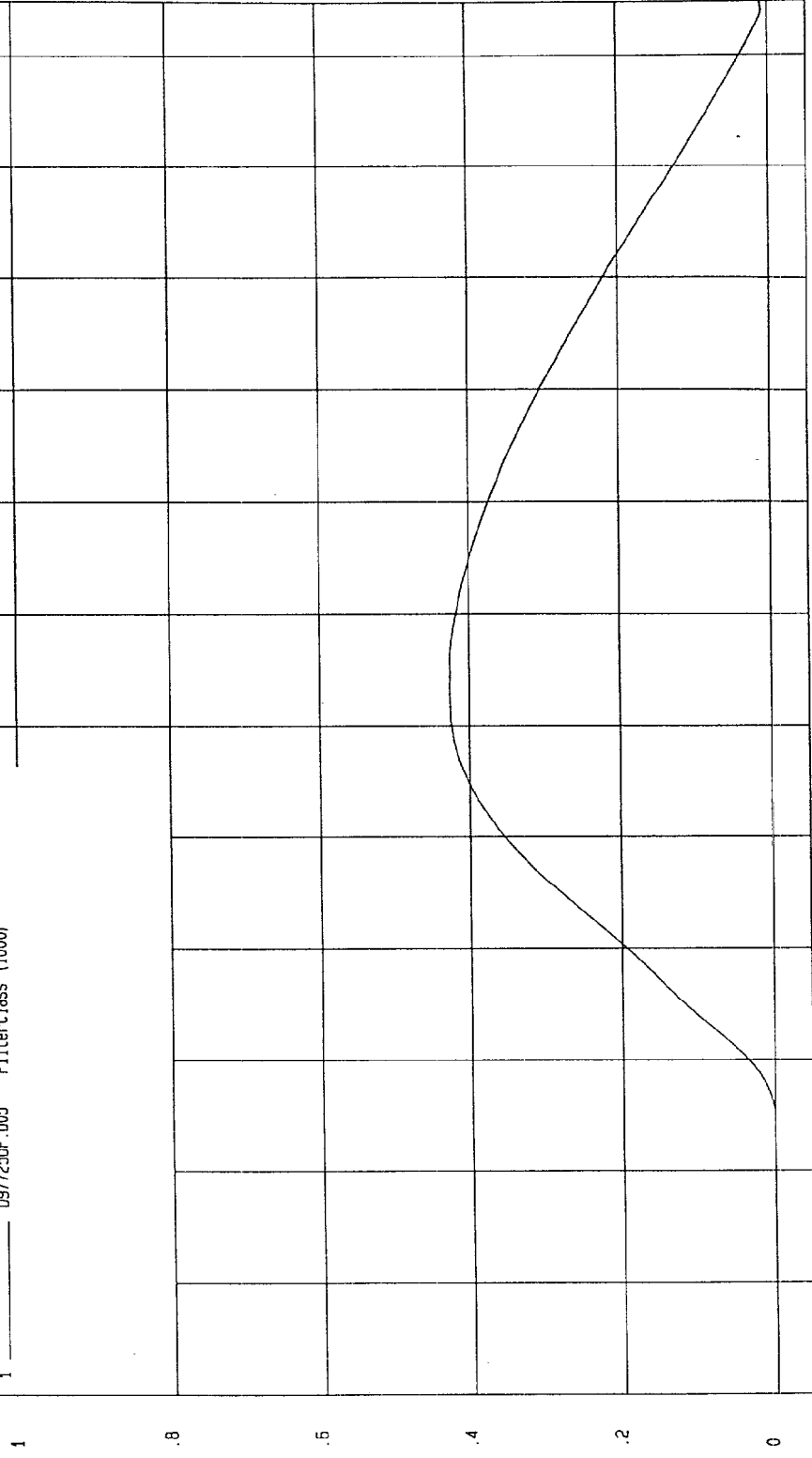
TEST: EUROSID RIB MODULE TEST DATE: 10-08-1997 - 16:35

COMPONENT: DUMMY # E1-169 Velocity: 3.28 FT/SEC 1 M/SEC

Minimum = -1.27E-04 IN at 19.5 msec Maximum = .42 IN at 63.0 msec

MIDDLE RIB DISPLACEMENT

1 ——— 097725DF.005 Filterclass (1000)



MCA Research
10-08-1997 17:29

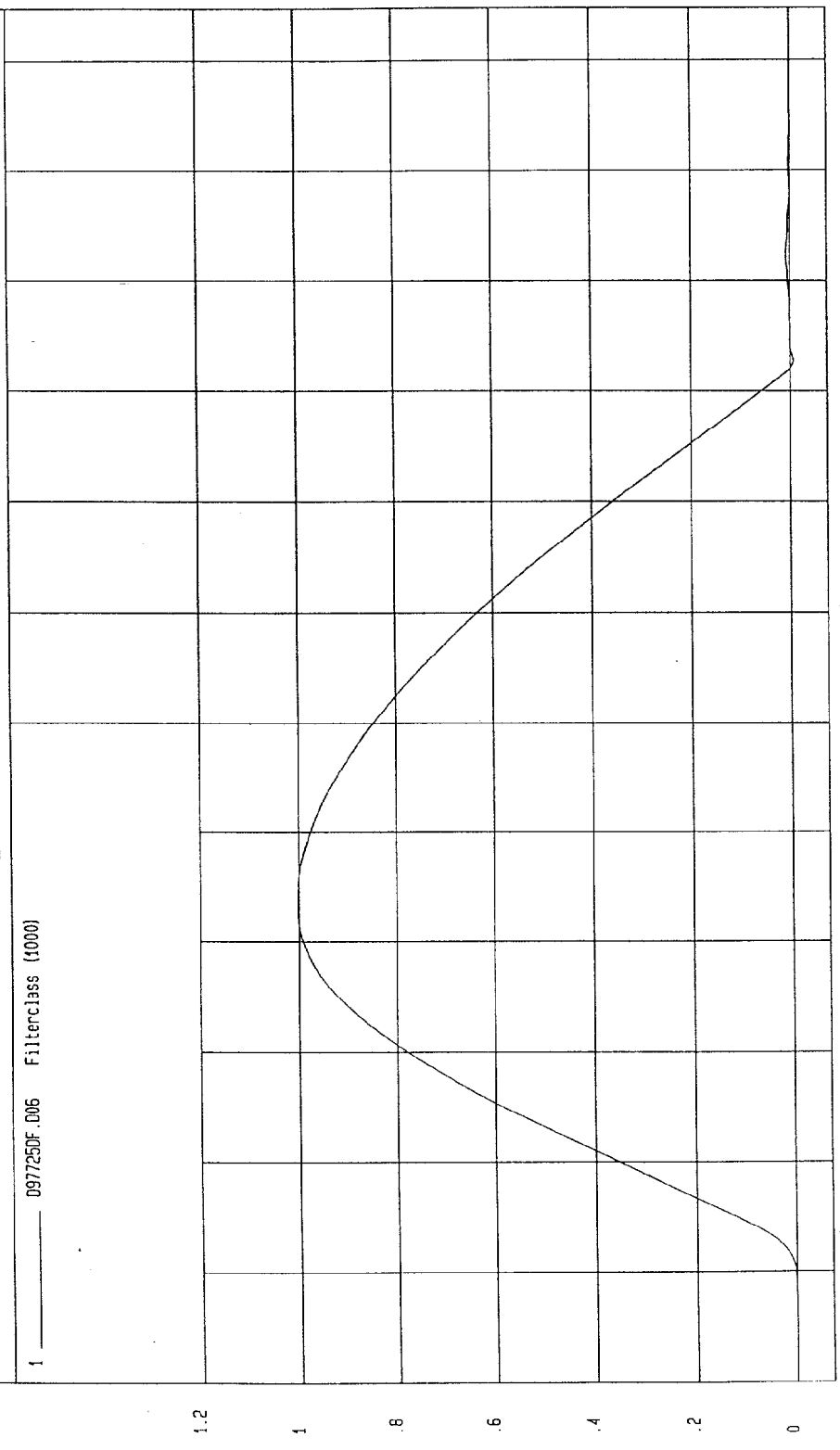
TEST: EUROSID RIB MODULE TEST DATE: 10-08-1997 - 16: 42

COMPONENT: DUMMY # E1-169 Velocity: 6.56 FT/SEC 2 M/SEC

Minimum = -6.73E-03 IN at 92.7 msec
Maximum = 1.00 IN at 42.9 msec

MIDDLE RIB DISPLACEMENT

1 ——— 0977250F.D06 Filterclass (1000)



TIME (SECONDS)

MGA Research
10-08-1997 17:29

TEST: EUORSID RIB MODULE TEST DATE: 10-08-1997 - 16: 50

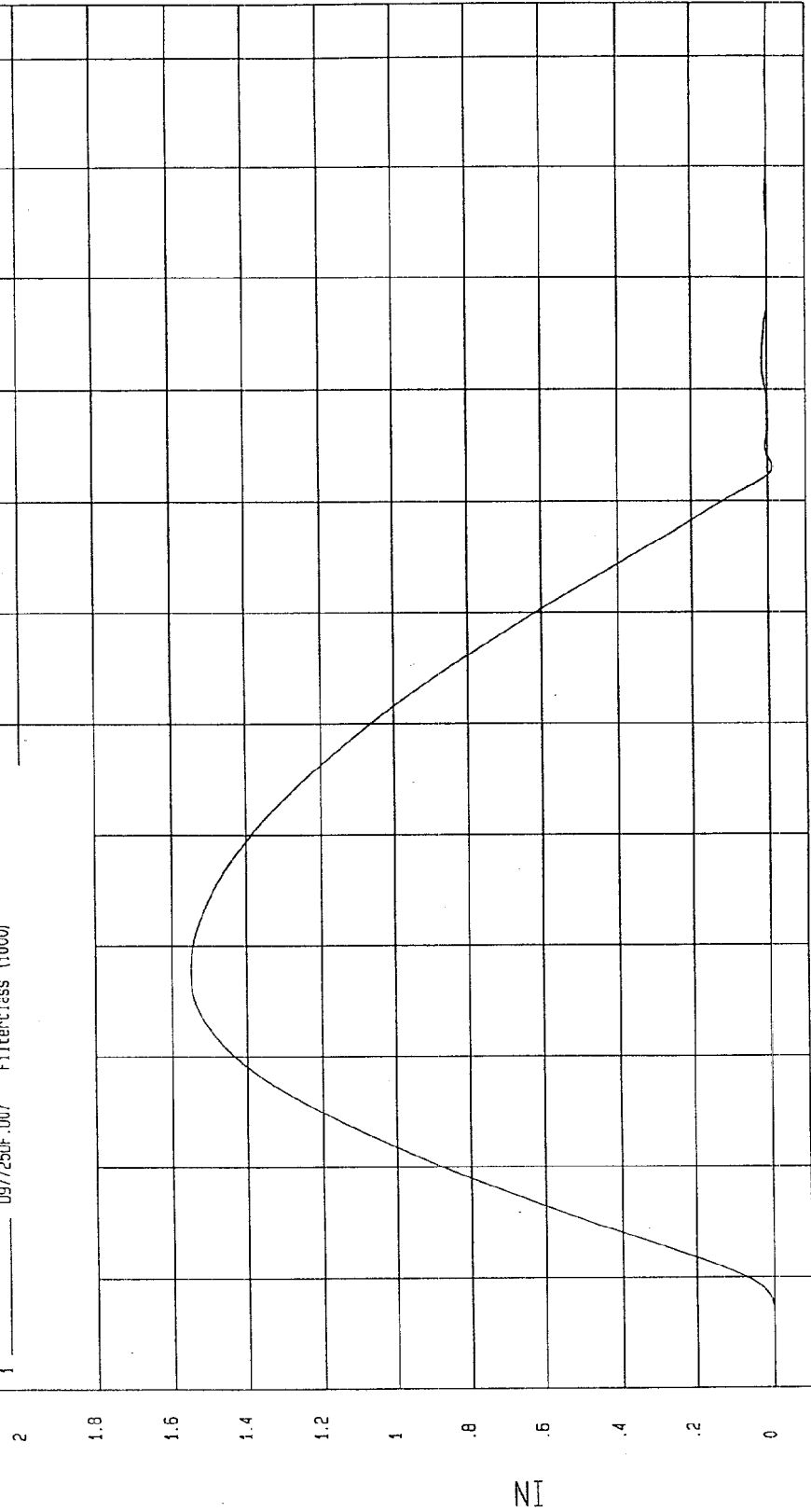
COMPONENT: DUMMY # E1-169 Velocity: 9.84 FT/SEC 3 M/SEC

Minimum = -1.16E-02 IN at 83.1 msec

Maximum = 1.55 IN at 37.4 msec

MIDDLE RIB DISPLACEMENT

1 097725DF.007 Filterclass (1000)



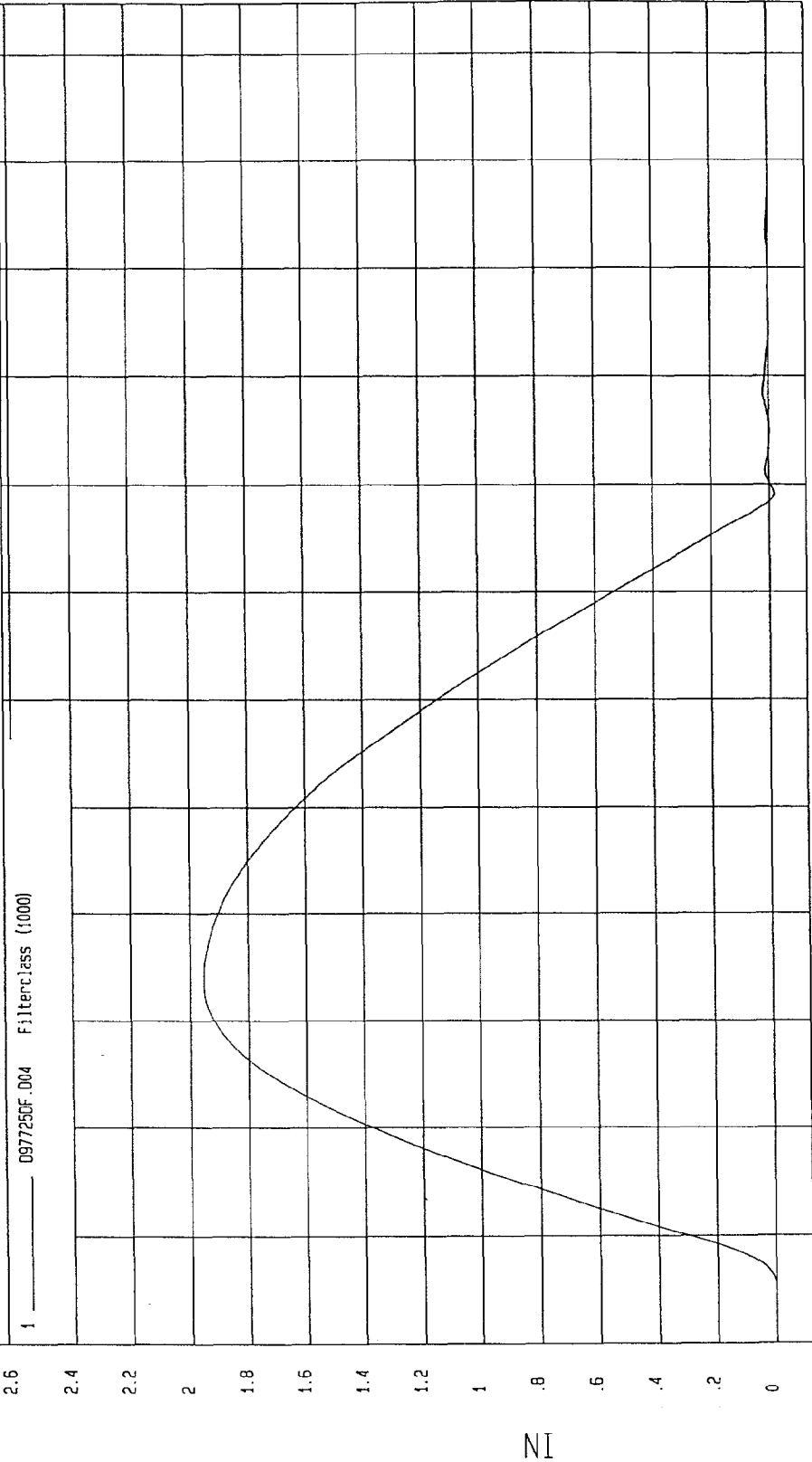
MCA Research
10-08-1997 17:29

TEST: EUROSID RIB MODULE TEST DATE: 10-08-1997 - 16:26

COMPONENT: DUMMY # E1-169 Velocity: 13.12 FT/SEC 4 M/SEC

Minimum = -1.62E-02 IN at 79.1 msec Maximum = 1.95 IN at 33.7 msec

MIDDLE RIB DISPLACEMENT



1 0977250F.004 Filterclass (1000)

MCA Research
10-08-1997 17:29

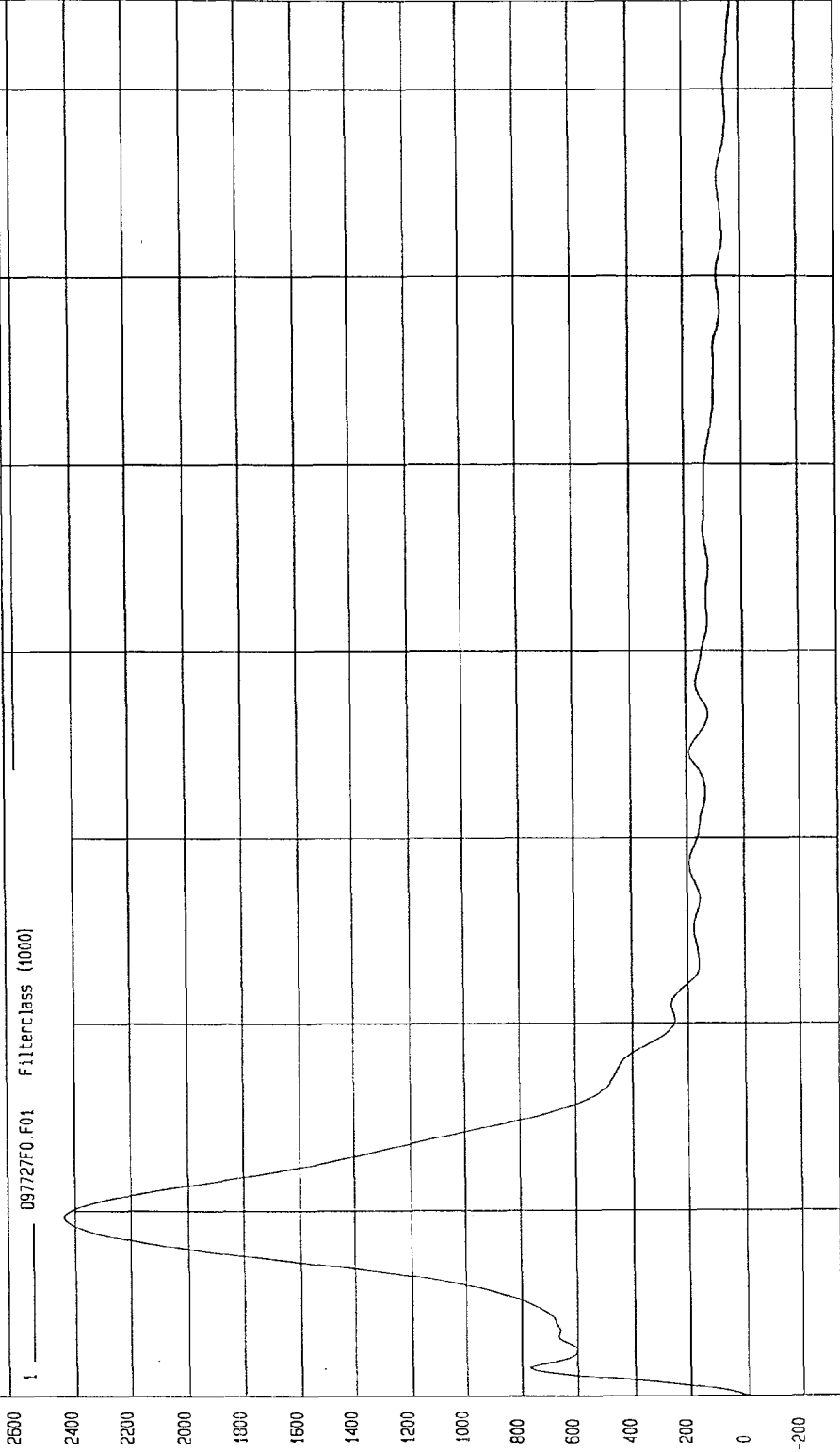
TEST: ABDOMEN IMPACT TEST DATE: 10-09-1997 - 12:55:51

COMPONENT: DUMMY # E1-169 Velocity: 20.75 FT/SEC 6.32 M/SEC

Minimum = -3.59 G's at 85.2 msec Maximum = 2439.25 G's at 9.61 msec

PROBE FORCE

1 097727F0.F01 Filterclass (1000)



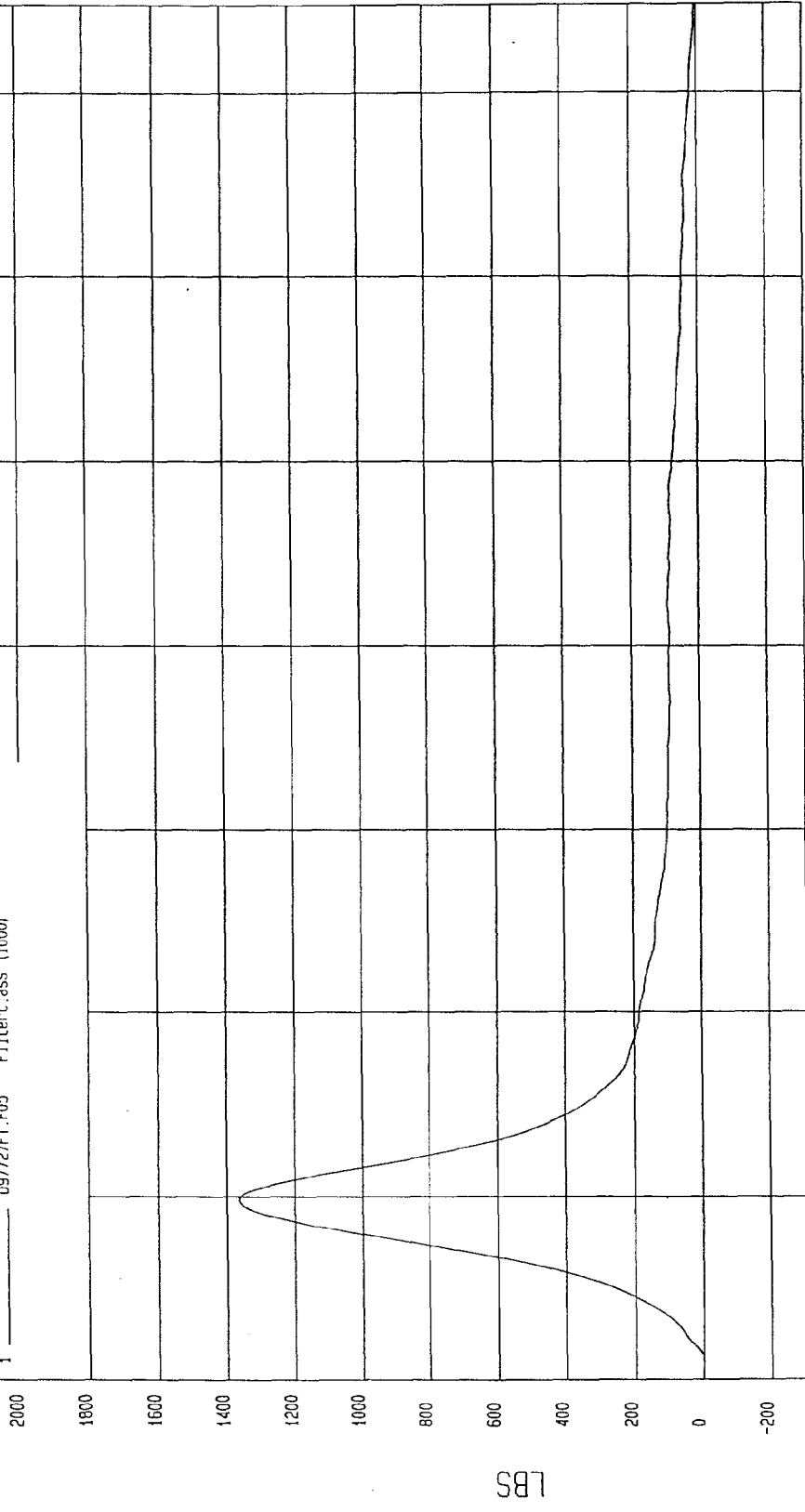
MSA Research
10-09-1997 12:57

TEST: ABDOMEN IMPACT
TEST DATE: 10-09-1997 - 12:57:01
COMPONENT: DUMMY # E1-169
Velocity: 20.75 FT/SEC 6.32 M/SEC

Minimum = -2.58 LBS at 90.2 msec
Maximum = 1355.20 LBS at 9.86 msec

ABDOMEN FORCE

1 _____ 09772/FT.F05 Filterclass (1000)



TIME (SECONDS)

NSA Research
10-09-1997 12:57

EUROSID-1

COMMENTS: MGA

TEST : EUROSID-1 SPINE CERTIFICATION

Part number : SM9647-2

Temperature : 22 deg C

Test number : 20404

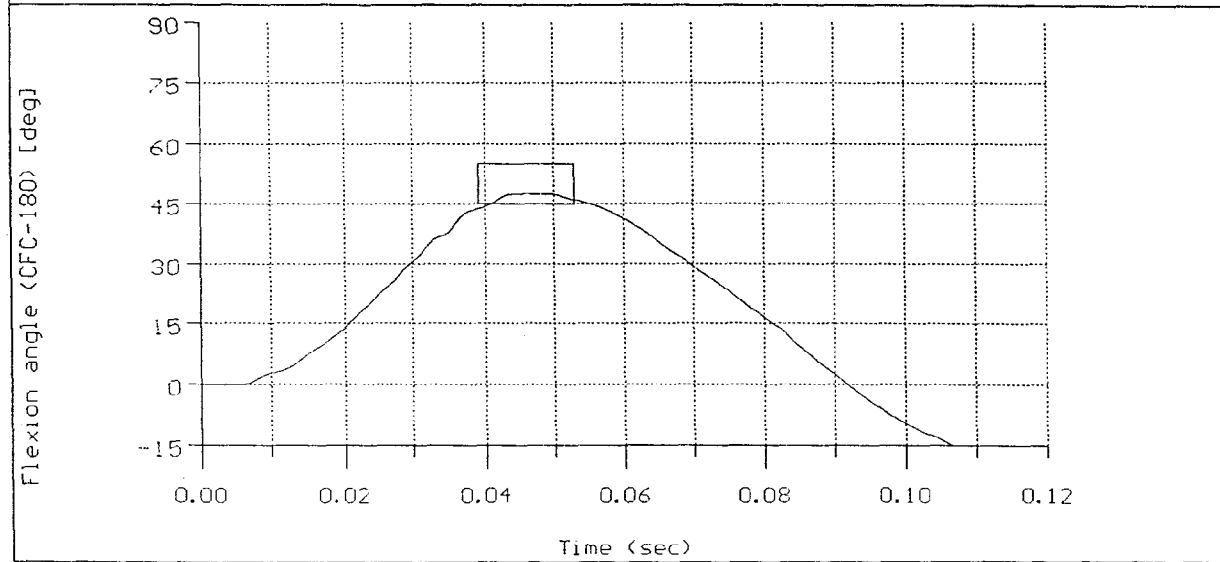
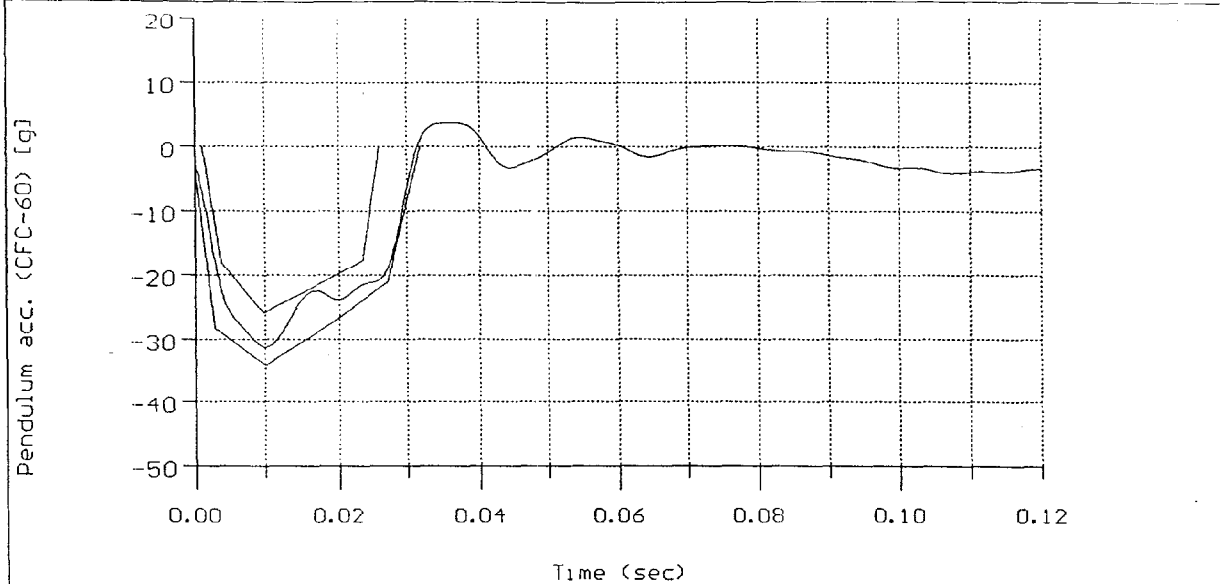
Rel. Humidity : 35 %

Impact side : LHS

Technician : DP

Spine length :

Test date : 23-SEPTEMBER-1997



Parameter	Specification	Result	Passed/Failed
Pendulum Speed	5.95 - 6.15 m/s	6.03 m/s	
Maximum pendulum acc.		-31.3 g	
Time of max pend. acc.		10.0 msec	
Maximum flexion angle	45.0 - 55.0 deg	47.5 deg	
Time of max. flex. angle	39.0 - 53.0 msec	46.1 msec	

EUROSID-1

COMMENTS: MGA

TEST : EUROSID-1 SPINE CERTIFICATION

Part number : SM9647-2

Temperature : 22 deg C

Test number : 20404

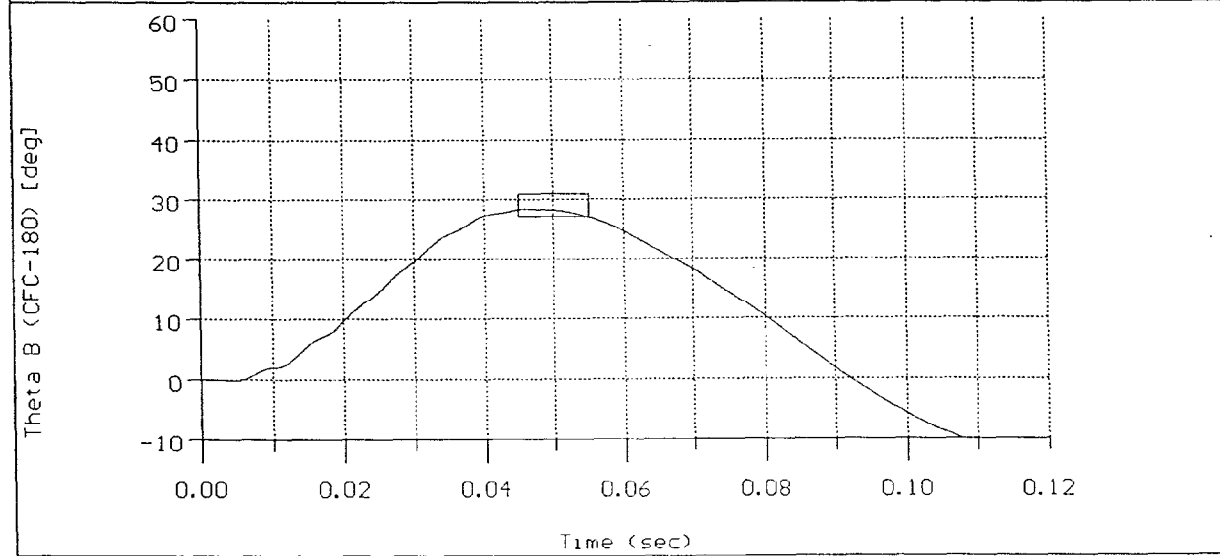
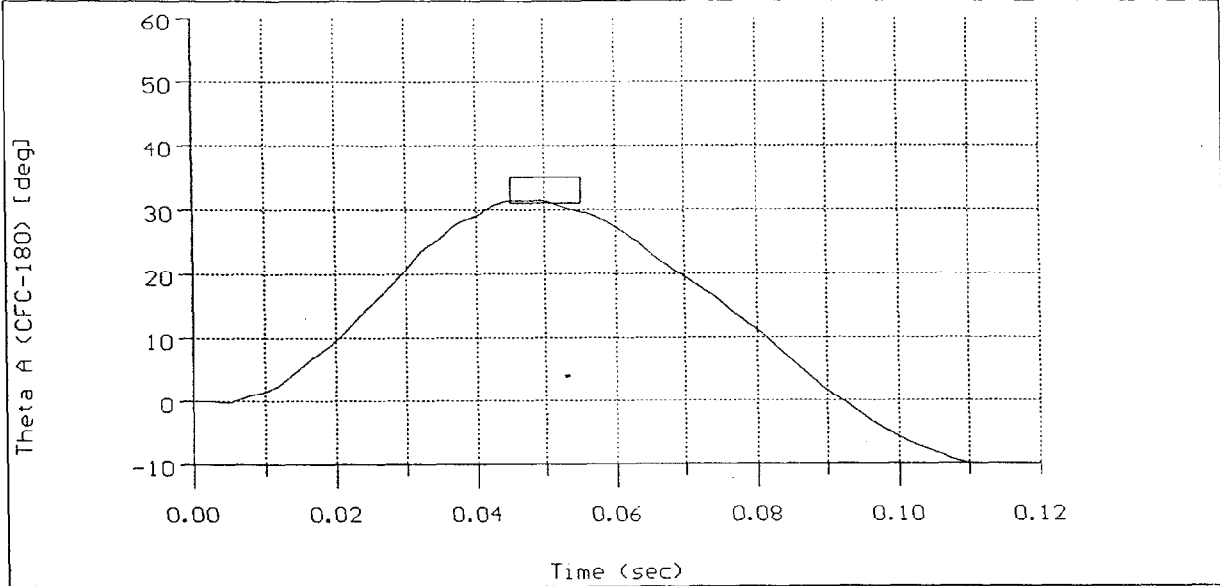
Rel. Humidity : 35 %

Impact side : LHS

Technician : DP

Spine length :

Test date : 23-SEPTEMBER-1997



Parameter	Specification	Result	Passed/Failed
Maximum Theta(A)	31.0 - 35.0 deg	31.4 deg	
Time of max. Theta(A)	45.0 - 55.0 msec	46.0 msec	
Maximum Theta(B)	27.0 - 31.0 deg	28.4 deg	
Time of max. Theta(B)	45.0 - 55.0 msec	46.3 msec	

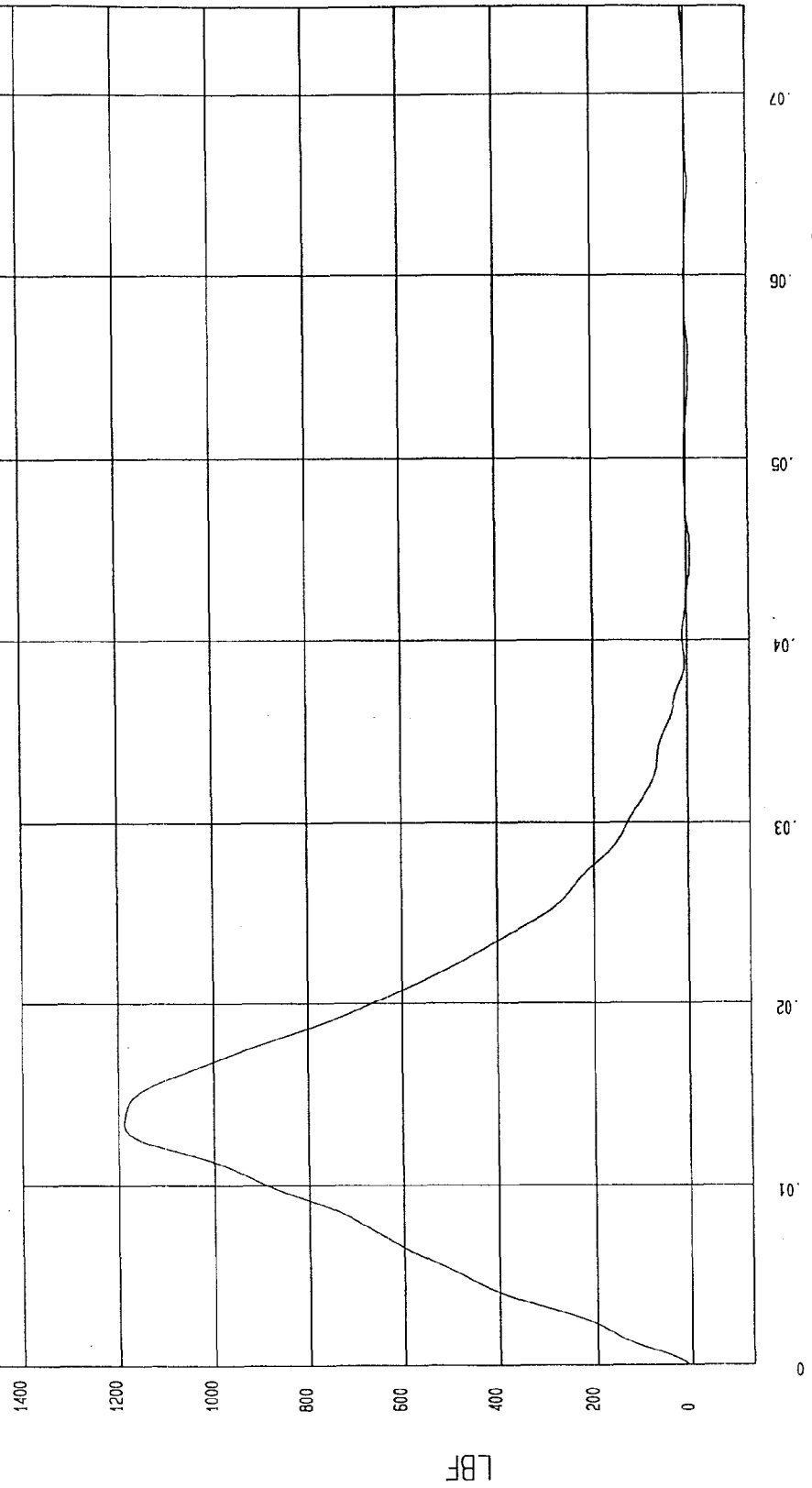
TEST: DUMMY CALIBRATION - PELVIS IMPACT TEST DATE: 10-09-1997 - 10:21:25

COMPONENT: DUMMY # E1-169 Velocity: 13.93 FT/SEC 4.25 M/SEC

Minimum = -7.21 LBF at 45.1 msec Maximum = 1187.8 LBF at 13.3 msec

IMPACTOR FORCE

1 ——— 097729FT.F01 Filterclass (4000)



MCA Research
10-09-1997 10:23

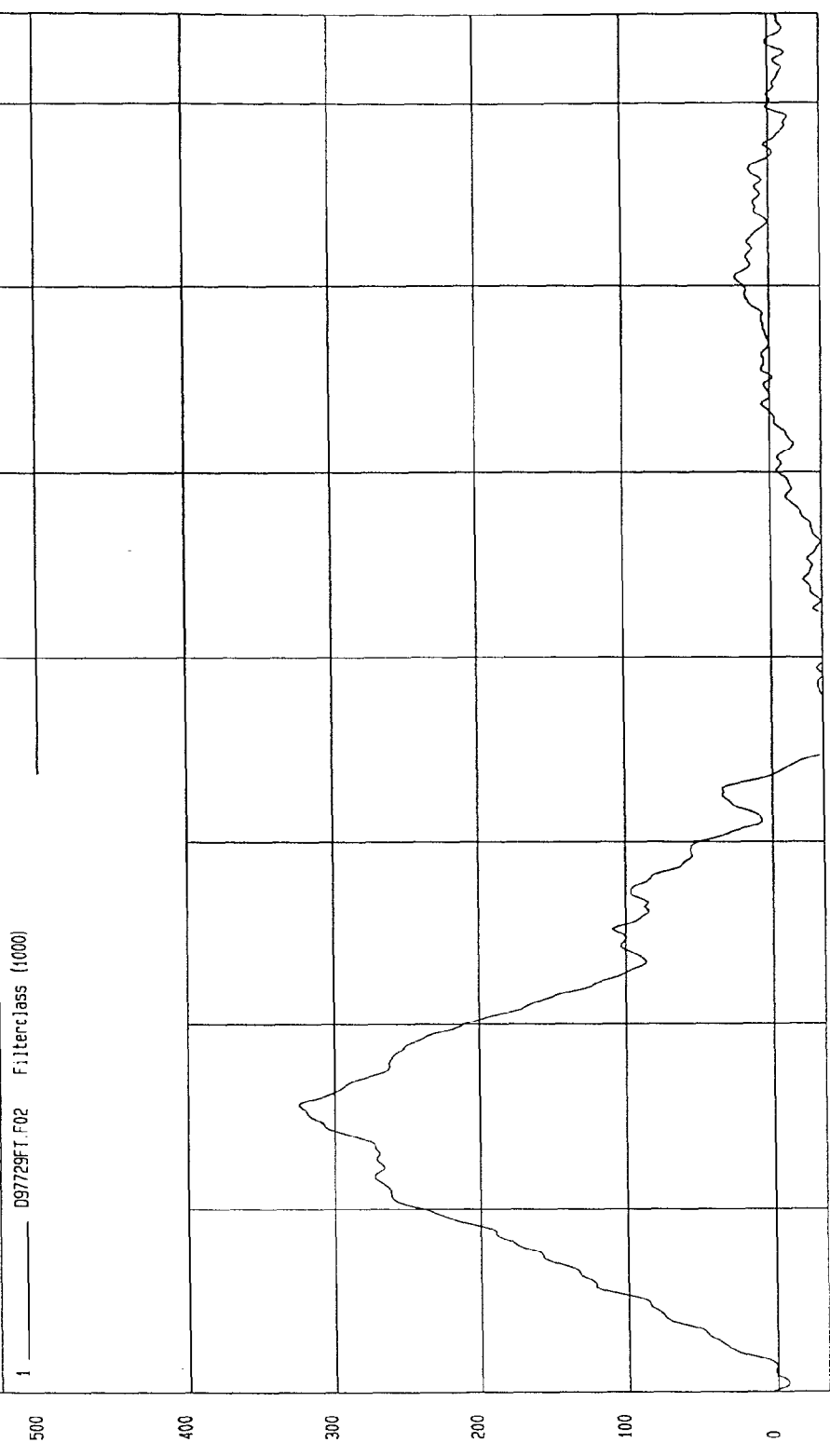
TEST: DUMMY CALIBRATION - PELVIS IMPACT TEST DATE: 10-09-1997 - 10:22:51

COMPONENT: DUMMY # E1-169 Velocity: 13.93 FT/SEC 4.25 M/SEC

Minimum = -56.23 LBS at 35.4 msec Maximum = 324.15 LBS at 15.6 msec

PUBIC FORCE

1 ——— D97729FT.F02 Filterclass (1000)



TIME (SECONDS)

HCA Research
10-09-1997 10:23

EUROSID DUMMY POST-TEST CALIBRATION DATA SUMMARY SHEET

Dummy #: E1-169

Calibration Date: January 9, 1998

1.0 Head Drop Test

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	18%
Max. Resultant Acceleration	100 - 150 g's	136
Time of Max. Res. Acceleration		2.3 msec.

Calibrated By: Tim Michnay

Date: January 9, 1998

2.0 Neck Pendulum Test

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	18%
Pendulum Speed	10.83 - 11.48 ft/sec	11.23
Max. Pendulum Acceleration		-32.77
Time Max. Pend. Acceleration		9.73
Maximum Flexion Angle	46.0 - 56.0 deg.	53.3
Time of Max. Flexion Angle	50.0 - 62.0 ms	58.5
Maximum Angle Theta (A)	30.0 - 34.0 deg	31.1
Time of Max. Theta (A)	50.0 - 60.0 ms	58.5
Maximum Angle Theta (B)	26.0 - 30.0 deg.	28.5
Time of Max. Theta (B)	50.0 - 60.0 ms	52.0

Calibrated By: Tim Michnay

Date: January 9, 1998

3.0 Shoulder Impact Test

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	18%
Pendulum Speed	13.78 - 14.43 ft/sec	14.04
Max. Pendulum Acceleration	7.5 - 10.5 g's	9.4
Time of Max. Pendulum Acceleration		16.2

Calibrated By: Tim Michnay

Date: January 8, 1998

4.0 Upper Rib

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	18%
Displacement at 3.28 ft/sec	.39 - .55 in	.52
Displacement at 6.56 ft/sec	.93 - 1.08 in	1.02
Displacement at 9.84 ft/sec	1.42 - 1.57 in	1.54
Displacement at 13.12 ft/sec	1.81 - 2.00 in	1.99

Calibrated By: Tim Michnay

Date: January 9, 1998

5.0 Middle Rib

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	18%
Displacement at 3.28 ft/sec	.39 - .55 in	.49
Displacement at 6.56 ft/sec	.93 - 1.08 in	1.04
Displacement at 9.84 ft/sec	1.42 - 1.57 in	1.63*
Displacement at 13.12 ft/sec	1.81 - 2.00 in	2.03*

Calibrated By: Tim Michnay

Date: January 9, 1998

* Failure - does not meet specifications

6.0 Lower Rib

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	18%
Displacement at 3.28 ft/sec	.39 - .55 in	.45
Displacement at 6.56 ft/sec	.93 - 1.08 in	.99
Displacement at 9.84 ft/sec	1.42 - 1.57 in	1.53
Displacement at 13.12 ft/sec	1.81 - 2.00 in	1.95

Calibrated By: Tim Michnay

Date: January 9, 1998

7.0 Abdomen Test

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	18%
Probe Speed	20.34 - 20.99 ft/sec	20.80
Maximum Impact Force	2136 - 2495 lbs	2413
Time of Maximum Force	8.8 - 10.4 ms	9.4
Max. Total Abdomen Force	1326 - 1776 lbs	1370
Time of Max. Total Force	8.5 - 10.1 ms	9.4

Calibrated By: Tim Michnay

Date: January 8, 1998

8.0 **Lumbar Spine Test**

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	18%
Pendulum Speed	19.52 - 20.17 ft/sec	20.04
Max. Pendulum Acceleration		-29.6
Time Max. Pend. Acceleration		10.3
Maximum Flexion Angle	45.0 - 55.0 deg.	47.9
Time of Max. Flexion Angle	39.0 - 53.0 ms	48.1
Maximum Angle Theta (A)	31.0 - 35.0 deg	34.3
Time of Max. Theta (A)	45.0 - 55.0 ms	47.9
Maximum Angle Theta (B)	27.0 - 31.0 deg.	30.7
Time of Max. Theta (B)	45.0 - 55.0 ms	46.5

Calibrated By: Tim Michnay

Date: January 9, 1998

9.0 **Pelvis Test**

	SPECIFICATION	MEASUREMENT
Laboratory Temperature	65° - 71° F	70°
Laboratory Relative Humidity	10% - 70%	18%
Pendulum Speed	13.77 - 14.43 ft/sec	14.29
Maximum Impactor Force	989 - 1214 lbs	1189
Time of Max. Impactor Force	10.3 - 15.5 ms	14.4
Maximum Pubic Force	233.8 - 368.7 lbs	319.2
Time of Max. Pubic Force	9.9 - 15.9 ms	15.8

Calibrated By: Tim Michnay

Date: January 8, 1998

TEST: DUMMY CALIBRATION - HEAD DROP TEST DATE: 01-09-1998 - 15:01:29

COMPONENT: DUMMY # E1-169

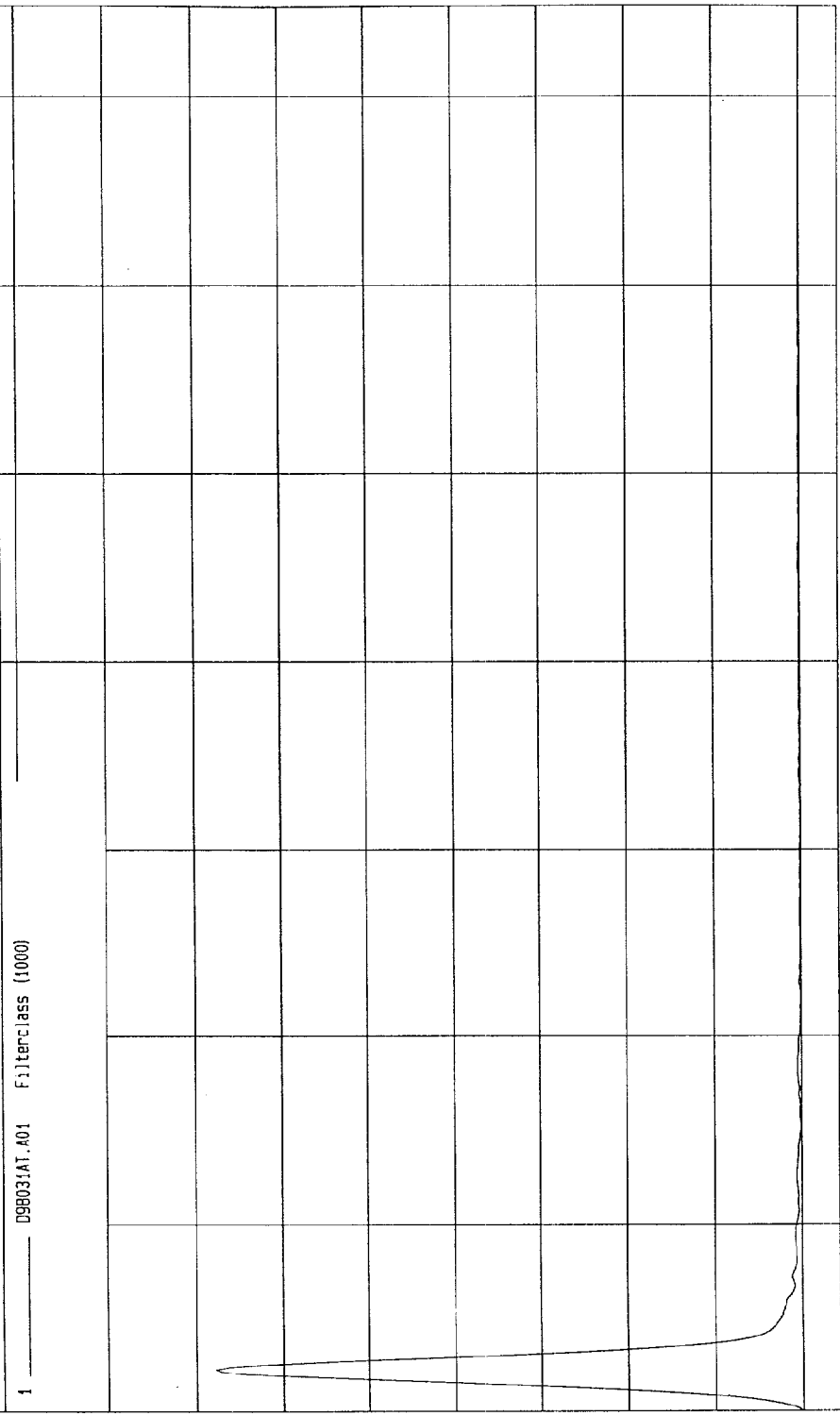
Minimum = 4.05E-02 G'S at 81.8 msec

Maximum = 135.55 G'S at 2.25 msec

PEAK RESULTANT ACCELERATION

1 _____ D98031AT.A01 Filterclass (1000)

180
160
140
120
100
80
60
40
20
0



G.S

TIME (SECONDS)

WCA Research
01-09-1998 15:02

TEST: DUMMY CALIBRATION - NECK BENDING TEST DATE: 01-09-1998 - 13:52

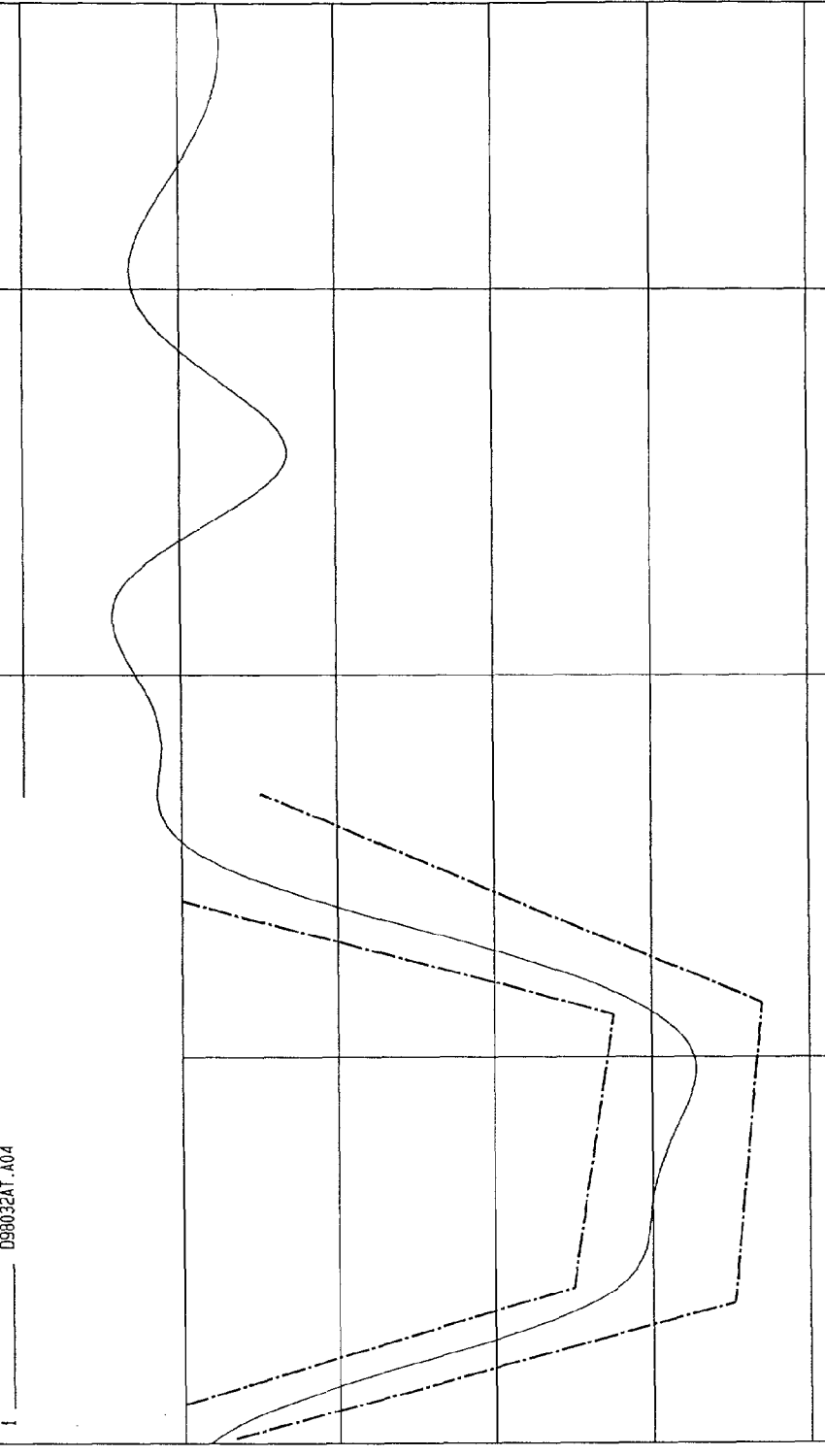
COMPONENT: DUMMY # E1-169 Velocity: 11.235 FT/SEC 3.42 M/SEC

Minimum = -32.77 G'S at 9.73 msec Maximum = 5.12 G'S at 49.0 msec

PENDULUM ACCELERATION

1 ——— D98032AT.A04

10
0
-10
-20
-30
-40



30

20

10

0

TIME (SECONDS)

MGA Research
01-09-1998 13:55

S.9

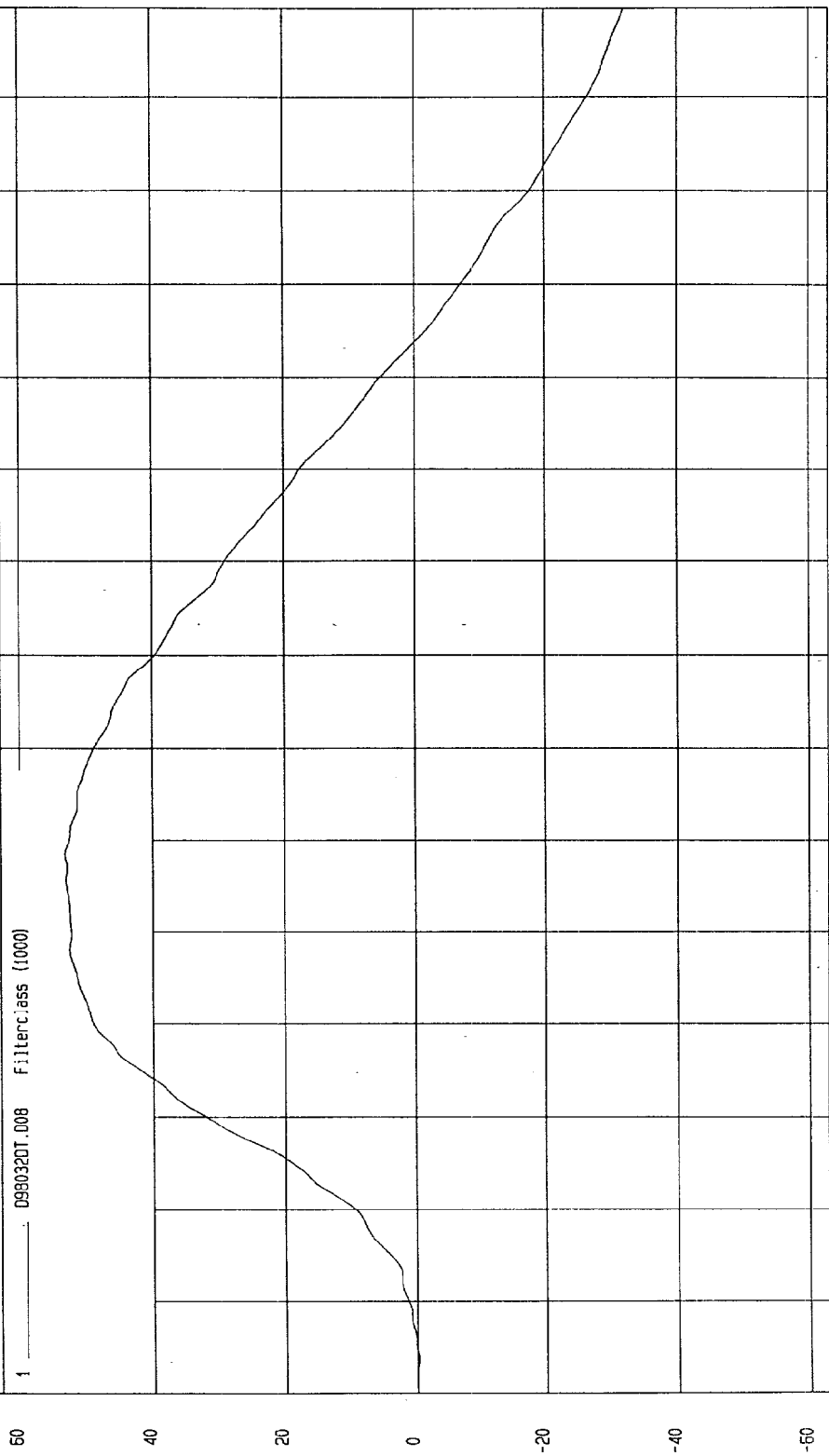
TEST: DUMMY CALIBRATION - NECK BENDING TEST DATE: 01-09-1998 - 13:52

COMPONENT: DUMMY # E1-169 Velocity: 11.23 FT/SEC 3.42 M/SEC

Minimum = -32.61 DEG at 153. msec Maximum = 53.26 DEG at 58.5 msec

FLEXION ANGLE

1 _____ D98032DT.008 Filter: class (1000)



WCA Research
01-09-1998 13:58

TEST: DUMMY CALIBRATION - NECK BENDING TEST DATE: 01-09-1998 - 13:52

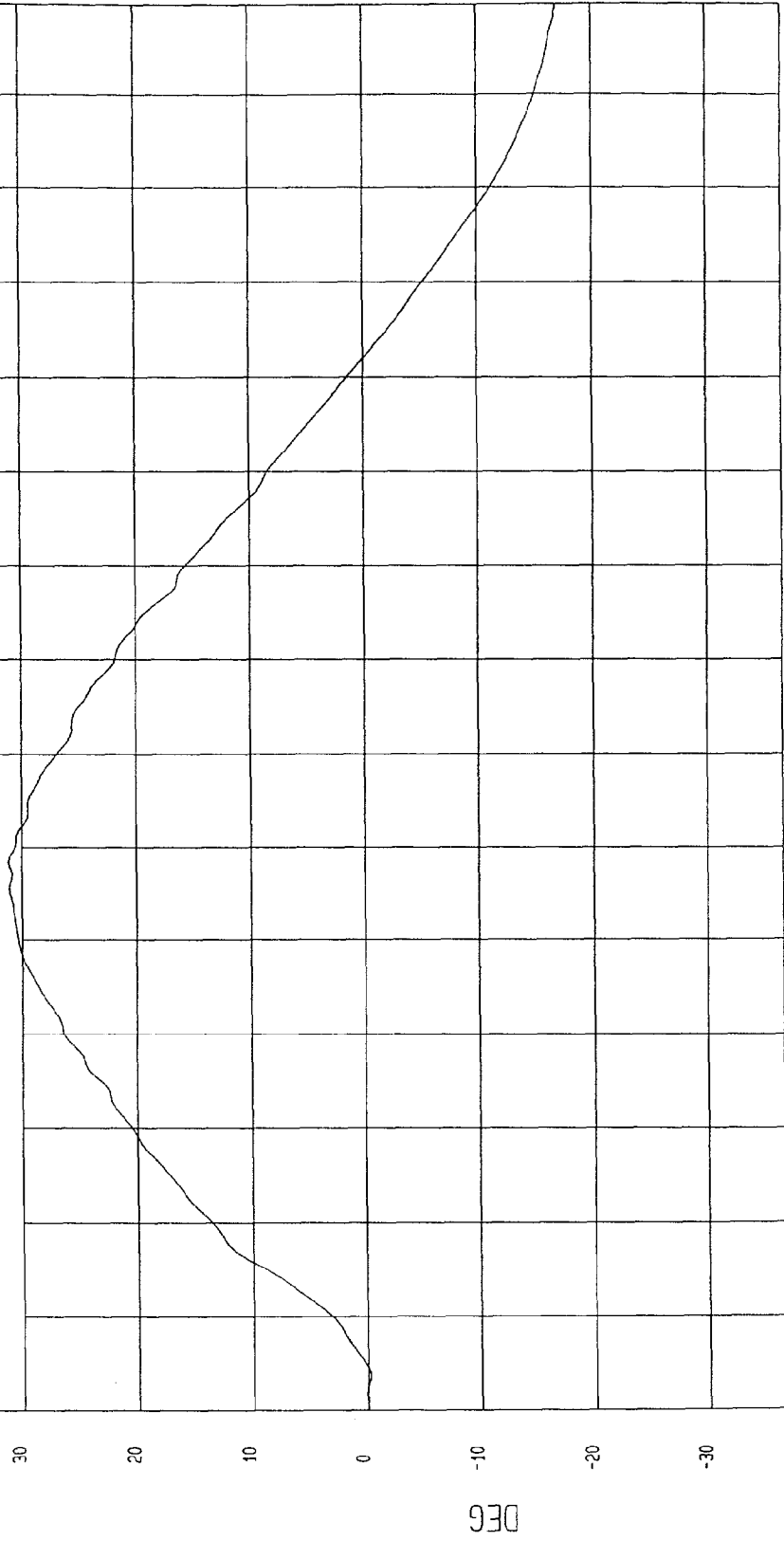
COMPONENT: DUMMY # E1-169 Velocity: 11.23 FT/SEC 3.42 M/SEC

Minimum = -17.17 DEG at 153. msec

Maximum = 31.14 DEG at 58.5 msec

THETA A

1 ——— 0980320T.005 Filterclass (1000)



TIME (SECONDS)

MCA Research
01-09-1998 13:58

TEST: DUMMY CALIBRATION - NECK BENDING TEST DATE: 01-09-1998 - 13:52

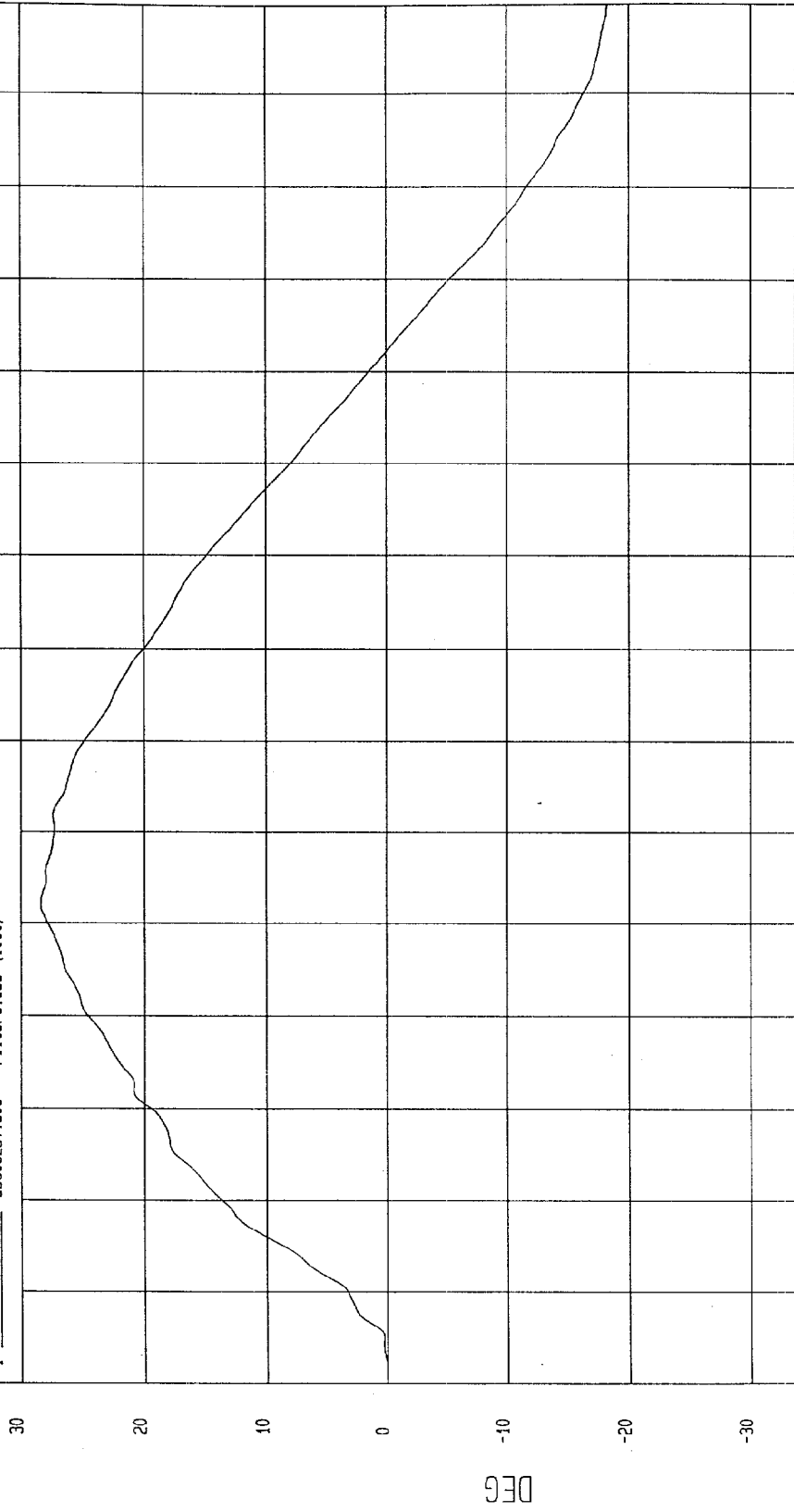
COMPONENT: DUMMY # E1-169 Velocity: 11.23 FT/SEC 3.42 M/SEC

Minimum = -18.74 DEG at 155. msec

Maximum = 28.46 DEG at 52.0 msec

THETA B

1 0980320T.D06 Filterclass (1000)



Web Research
01-09-1998 13:58

TEST: SHOULDER IMPACT TEST DATE: 01-08-1998 - 13: 56: 56

COMPONENT: DUMMY # E1-169 Velocity: 14.04 FT/SEC 4.28 M/SEC

Minimum = -.57 G'S at 55.9 msec

PENDULUM ACCELERATION

1 ——— D98033AT.A01 Filterclass (1000)

14
12
10
8
6
4
2
0

G.S

14

13

12

11

10

09

08

07

06

05

04

03

02

01

0

NCA Research
01-08-1998 13: 57

TIME (SECONDS)

TEST: EUROSID RIB MODULE TEST DATE: 01-09-1998 - 09: 04

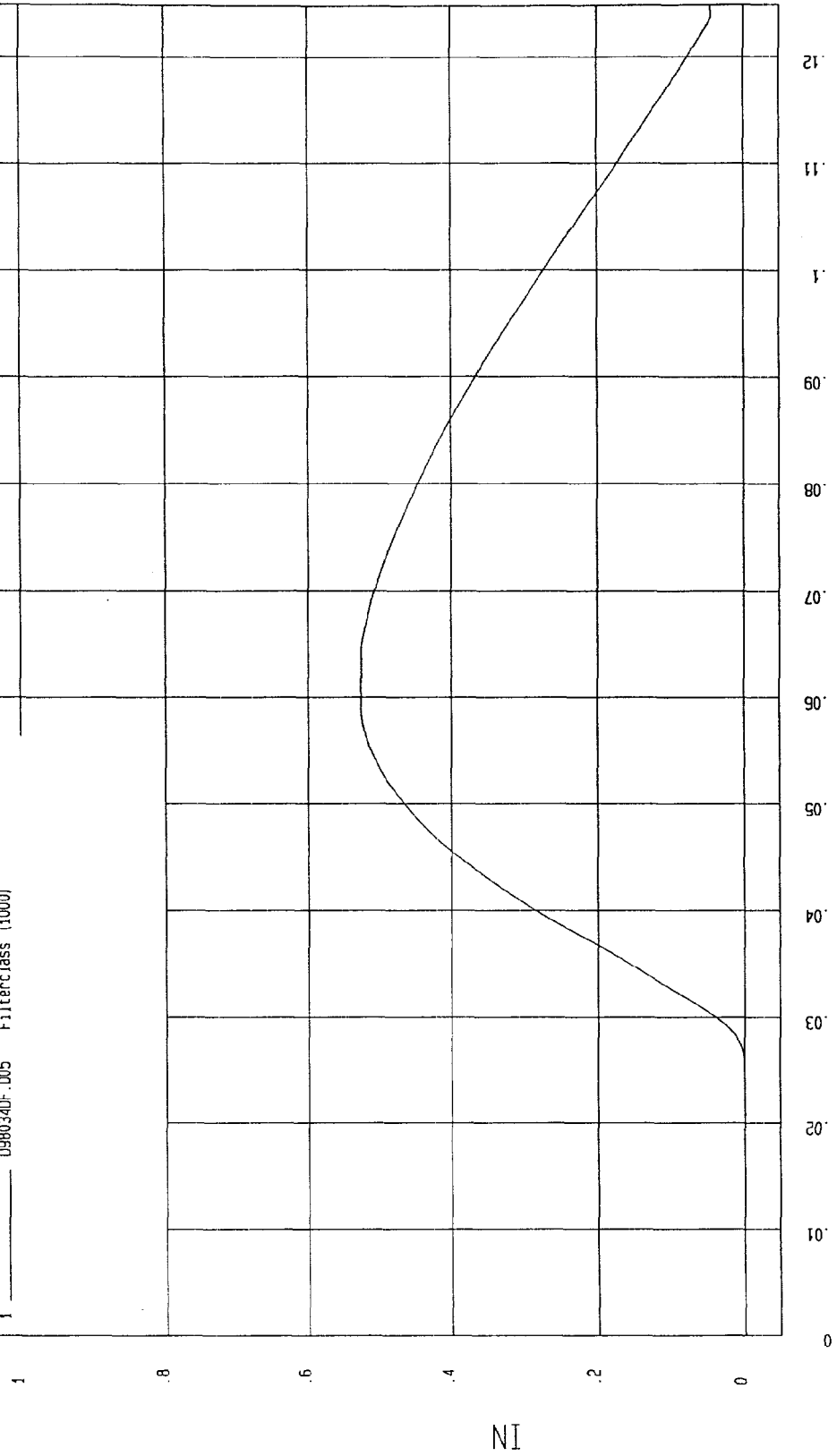
COMPONENT: DUMMY # E1-169 Velocity: 3.28 FT/SEC 1 M/SEC

Minimum = -1.93E-03 IN at 0 msec

Maximum = .92 IN at 58.9 msec

UPPER RIB DISPLACEMENT

1 _____ 0980340F.D05 Filterclass (1000)



MOA Research
01-09-1998 09: 26

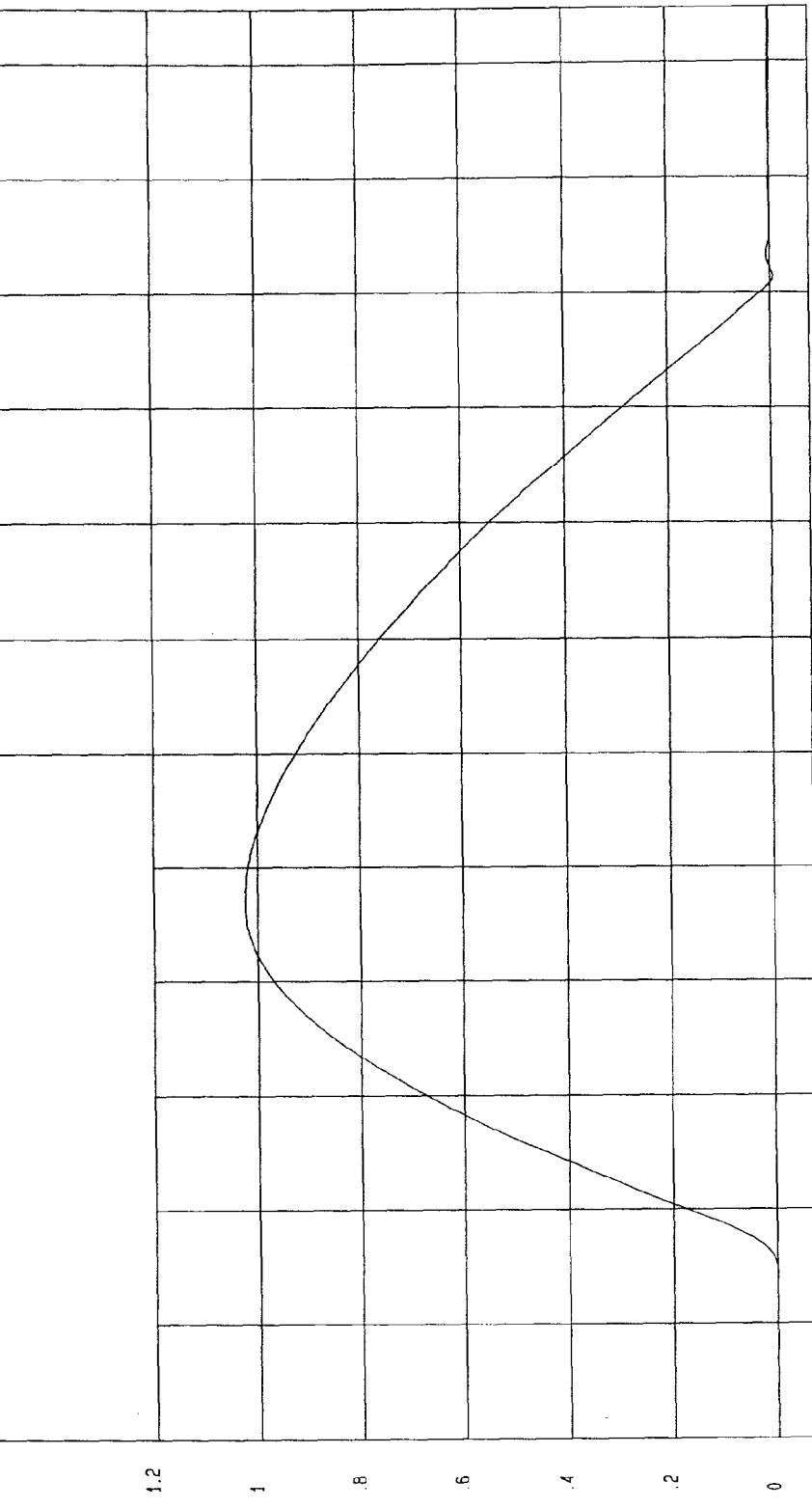
TEST: EUROSID RIB MODULE TEST DATE: 01-09-1998 - 09: 10

COMPONENT: DUMMY # E1-169 Velocity: 6.56 FT/SEC 2 M/SEC

Minimum = -5.50E-03 IN at 101. msec Maximum = 1.02 IN at 46.9 msec

UPPER RIB DISPLACEMENT

1 ——— 0980340F.D06 Filterclass (1000)



TIME (SECONDS)

MPA Research
01-09-1998 09: 28

TEST: EUROSID RIB MODULE TEST DATE: 01-09-1998 - 09:26

COMPONENT: DUMMY # E1-169 Velocity: 9.84 FT/SEC 3 M/SEC

Minimum = -1.32E-02 IN at 89.2 msec
Maximum = 1.54 IN at 39.3 msec

UPPER RIB DISPLACEMENT

1 ——— 098034DF.D07 Filterclass (1000)



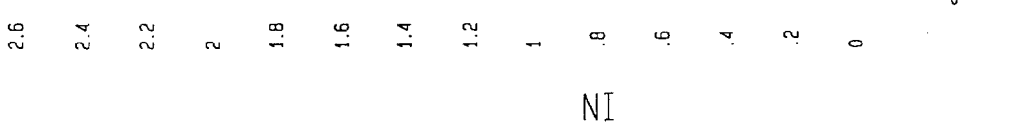
NSA Research
01-09-1998 09:28

TEST: EUROSID RIB MODULE
TEST DATE: 01-09-1998 - 08:58
COMPONENT: DUMMY # E1-169
Velocity: 13.12 FT/SEC 4 M/SEC

Minimum = -1.32E-02 IN at 82.7 msec
Maximum = 1.99 IN at 35.8 msec

UPPER RIB DISPLACEMENT

1 _____ 098034DF.004 Filterclass (1000)



WCA Research
01-09-1998 09:28

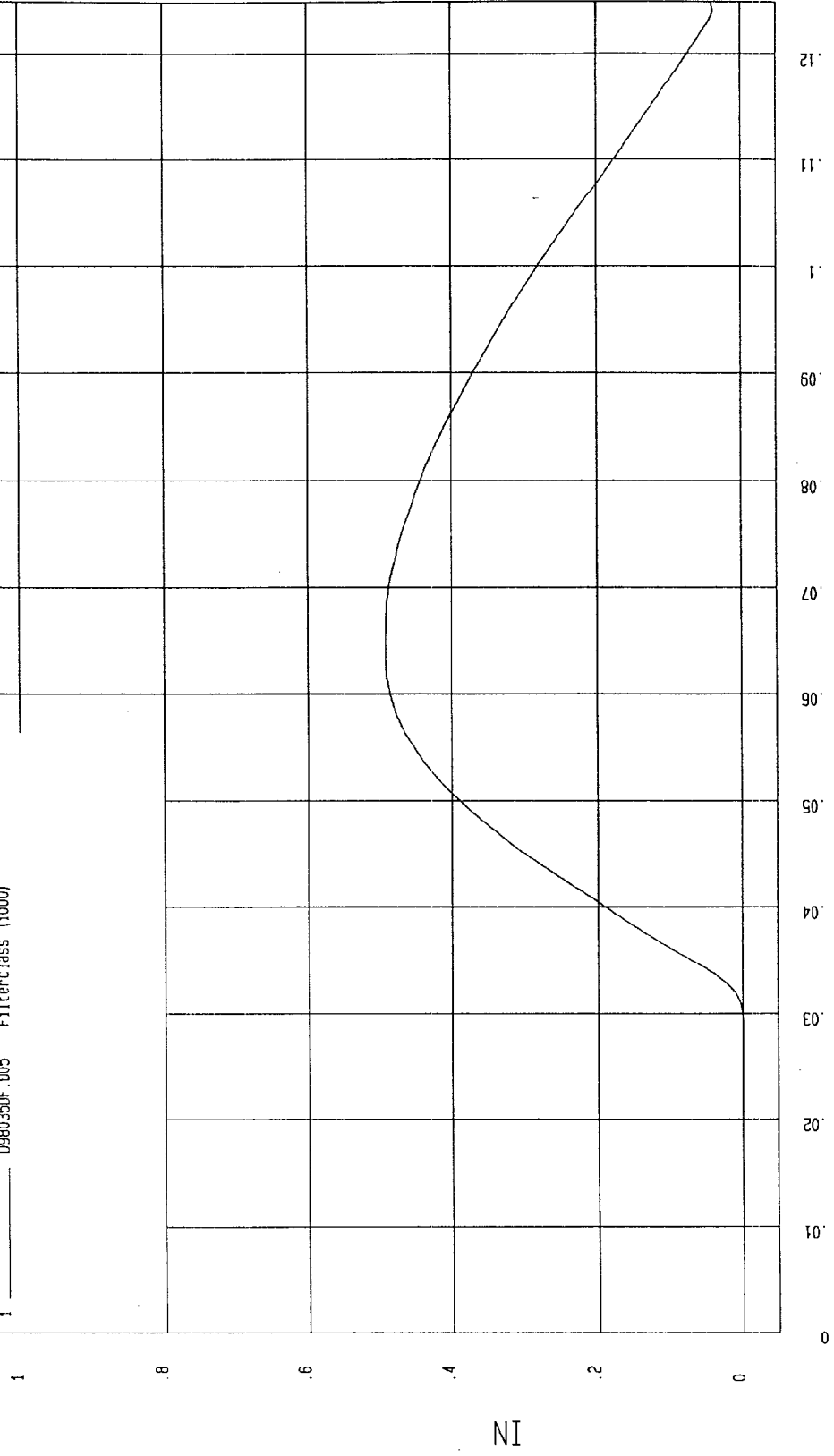
TEST: EUROSID RIB MODULE TEST DATE: 01-09-1998 - 09: 49

COMPONENT: DUMMY # E1-169 Velocity: 3.28 FT/SEC 1 M/SEC

Minimum = -3.27E-04 IN at 28.7 msec
Maximum = .49 IN at 63.6 msec

MIDDLE RIB DISPLACEMENT

1 _____ 0980350F.005 Filterclass (1000)



NSA Research
01-09-1998 10: 14

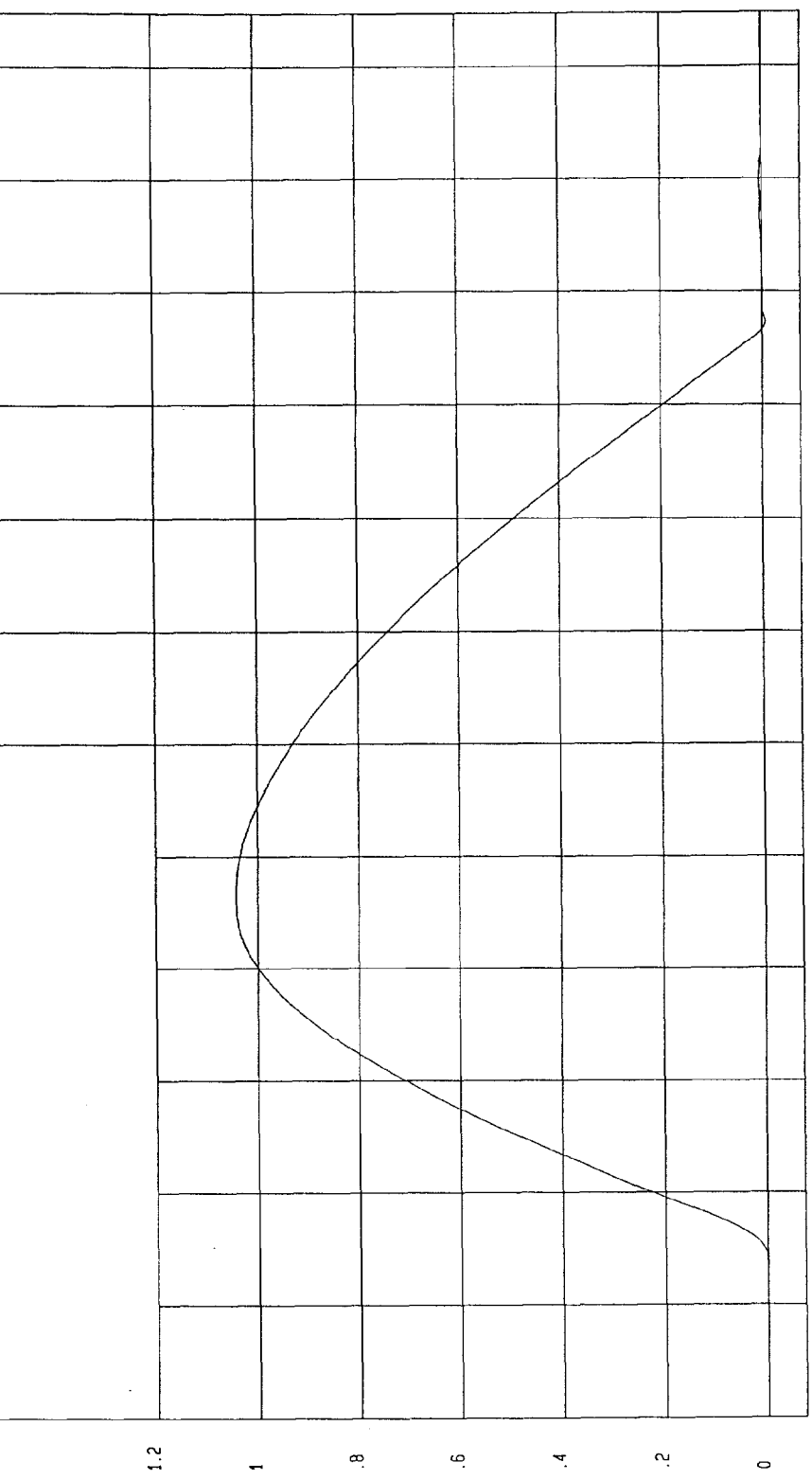
TEST: EUORSID RIB MODULE TEST DATE: 01-09-1998 - 09:58

COMPONENT: DUMMY # E1-169 Velocity: 6.56 FT/SEC 2 M/SEC

Minimum = -6.09E-03 IN at 97.3 msec Maximum = 1.04 IN at 45.9 msec

MIDDLE RIB DISPLACEMENT

1 _____ D98035DF.006 Filterclass (4000)



TIME (SECONDS)

MGA Research
01-09-1998 10:14

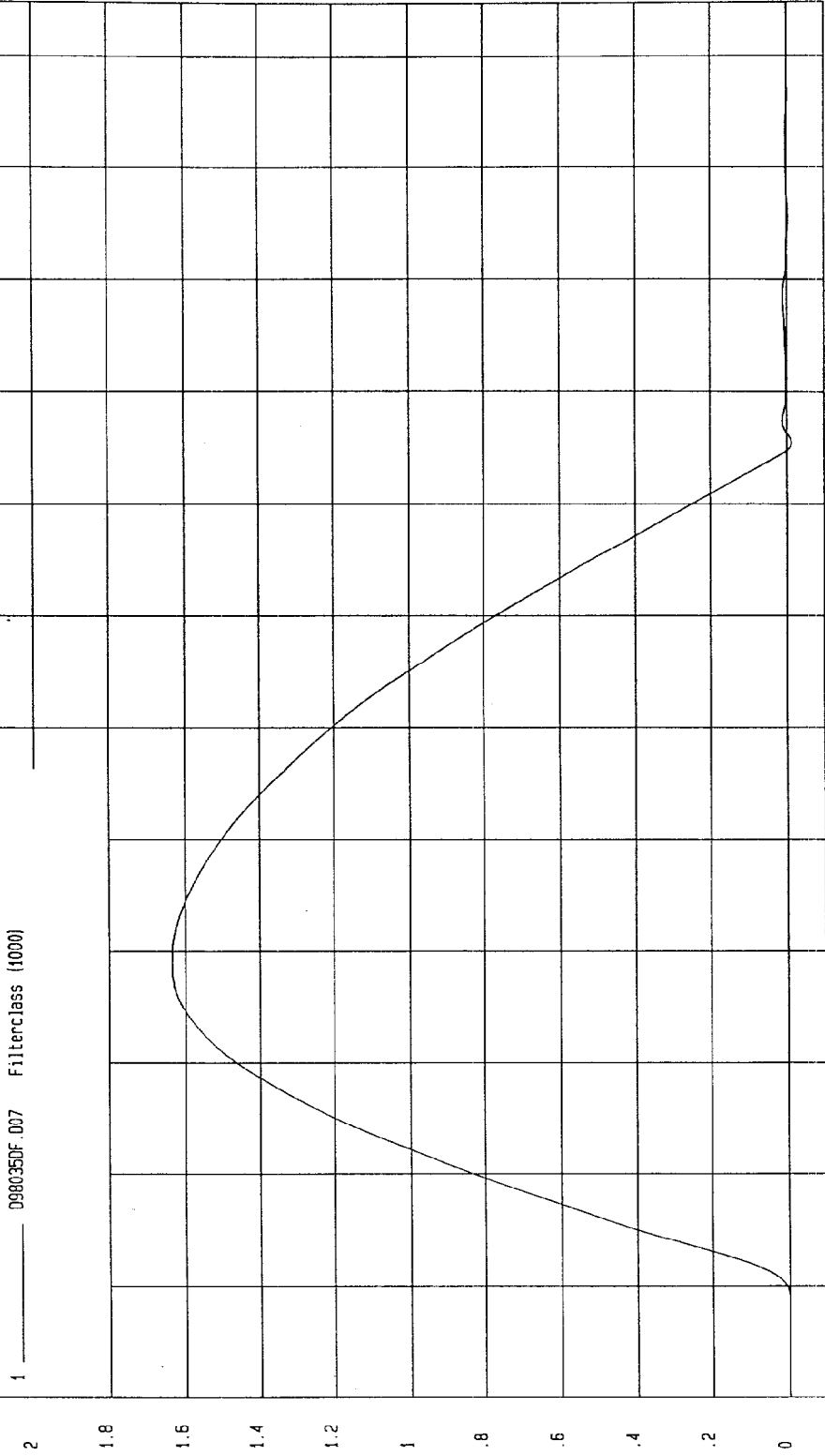
TEST: EUROSID RIB MODULE TEST DATE: 01-09-1998 - 10: 11

COMPONENT: DUMMY # E1-169 Velocity: 9.84 FT/SEC 3 M/SEC

Minimum = -1.27E-02 IN at 85.3 msec Maximum = 1.63 IN at 38.9 msec

MIDDLE RIB DISPLACEMENT

1 ——— 098035DF.007 Filterclass (4000)



MPA Research
01-09-1998 10: 14

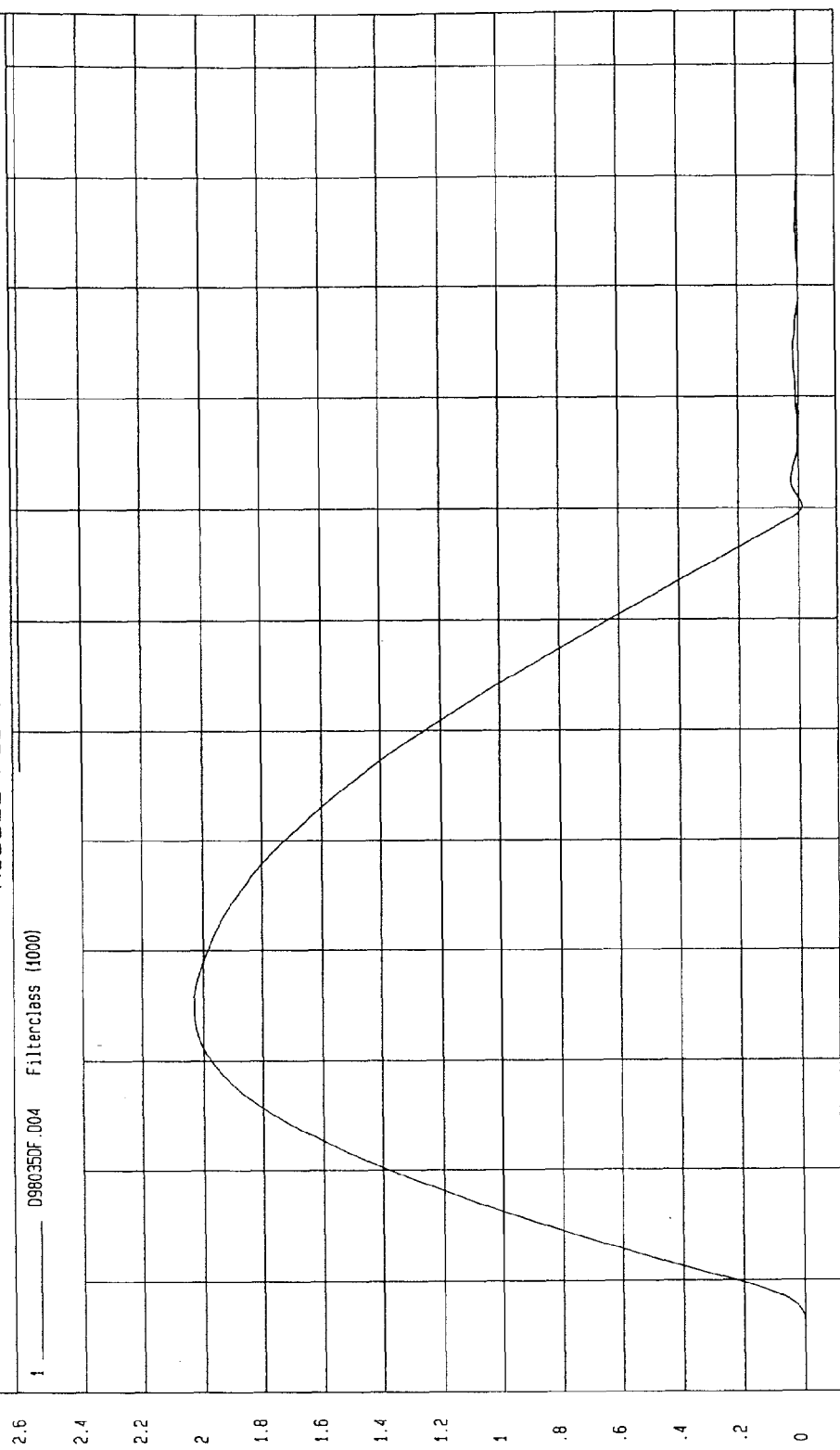
TEST: EUROSID RIB MODULE TEST DATE: 01-09-1998 - 09:43

COMPONENT: DUMMY # E1-169 Velocity: 13.12 FT/SEC 4 M/SEC

Minimum = -1.23E-02 IN at 80.2 msec Maximum = 2.03 IN at 34.5 msec

MIDDLE RIB DISPLACEMENT

1 098035DF.004 Filterclass (1000)



MCA Research
01-09-1998 10:14

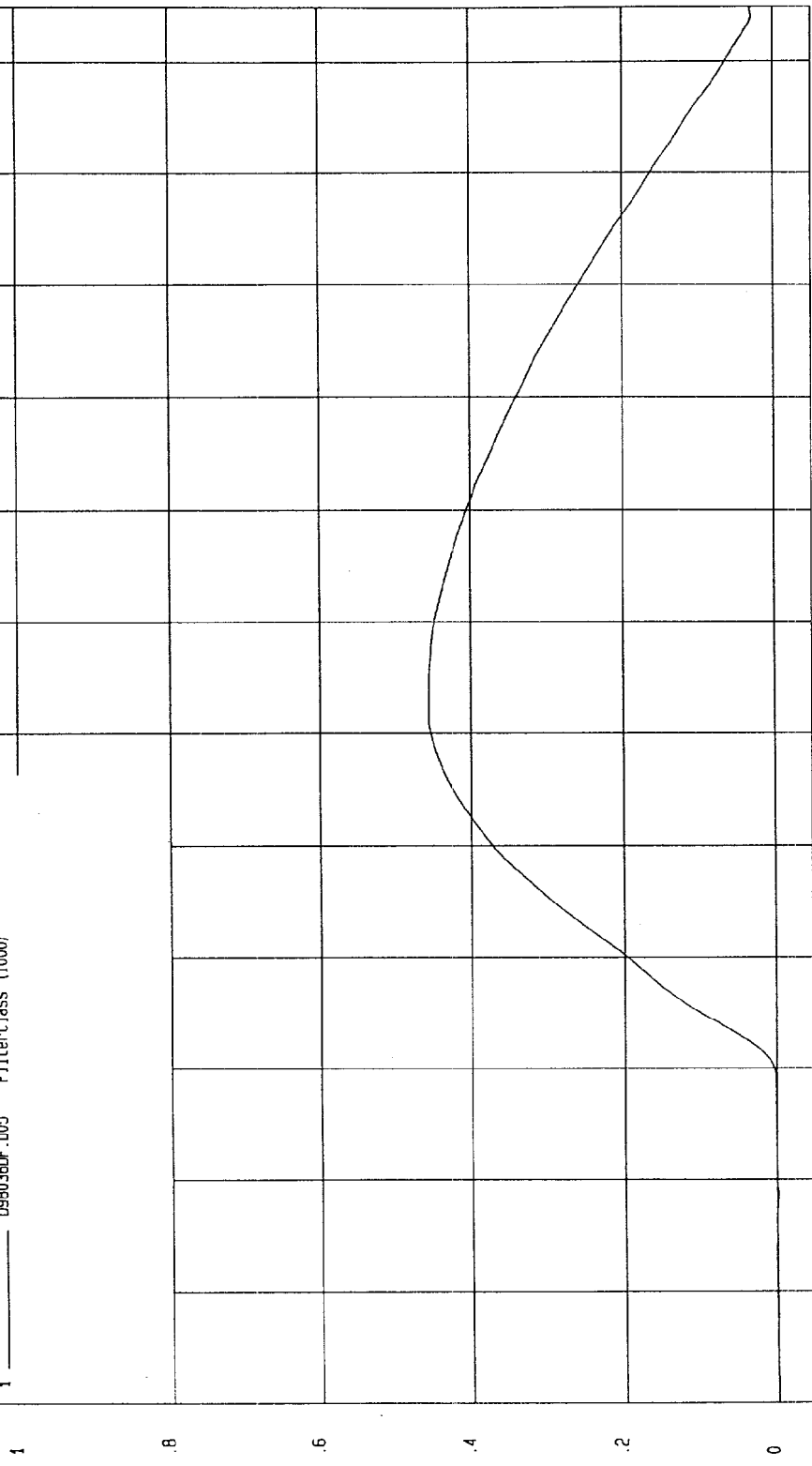
TEST: EUROSID RIB MODULE TEST DATE: 01-09-1998 - 10:29

COMPONENT: DUMMY # E1-169 Velocity: 3.28 FT/SEC 1 M/SEC

Minimum = -1.57E-03 IN at 0 msec

LOWER RIB DISPLACEMENT

1 ——— 098036DF.005 Filterclass (1000)



NCA Research
01-09-1998 11:00

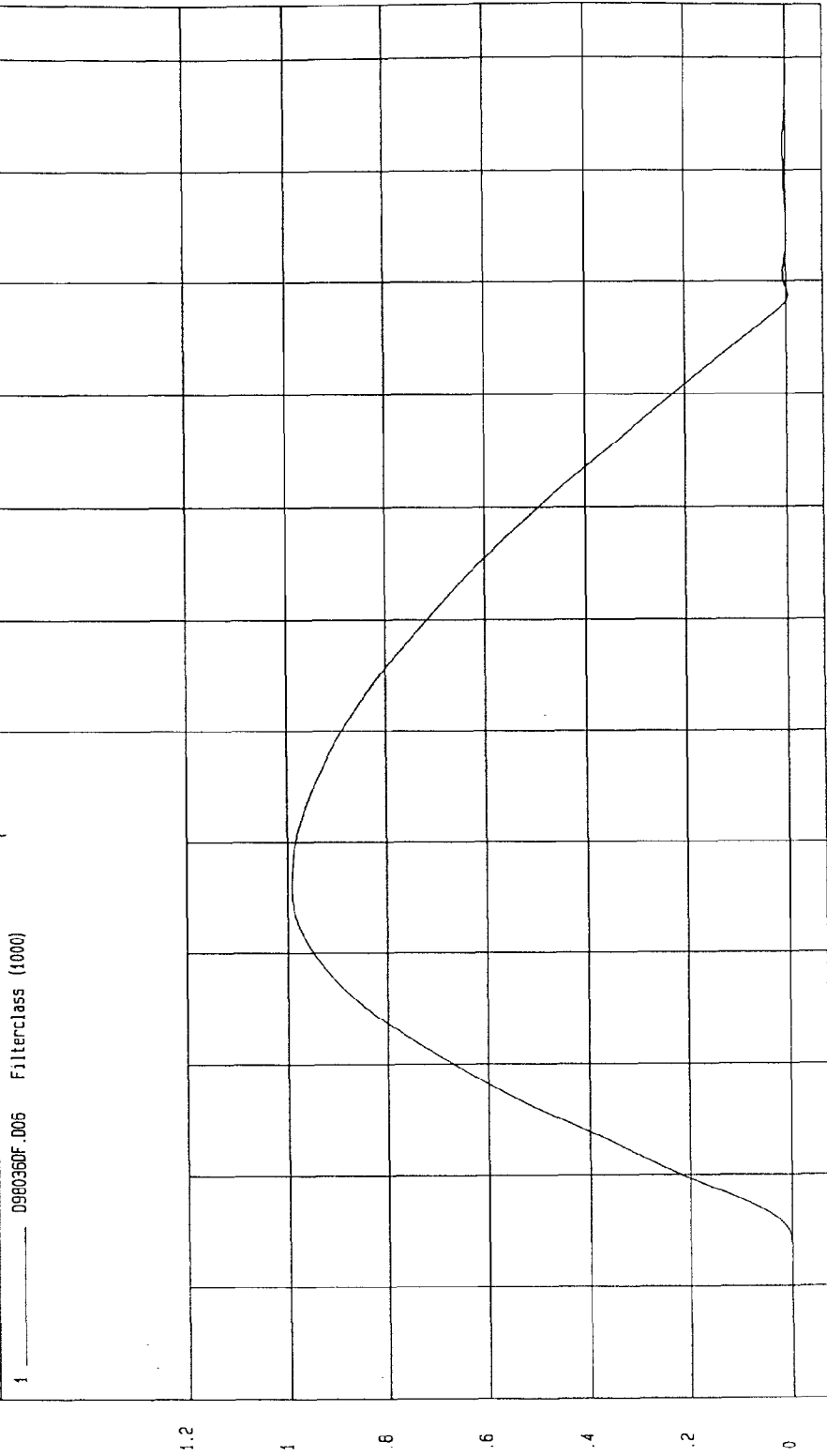
TEST: EUROSID RIB MODULE TEST DATE: 01-09-1998 - 10:45

COMPONENT: DUMMY # E1-169 Velocity: 6.56 FT/SEC 2 M/SEC

Minimum = -3.73E-03 IN at 98.7 msec
Maximum = .99 IN at 46.1 msec

LOWER RIB DISPLACEMENT

1 ——— D980360F .005 Filterclass (1000)



NSA Research
01-09-1998 11:00

TEST: EUROSID RIB MODULE

TEST DATE: 01-09-1998 - 10: 59

COMPONENT: DUMMY # E1-169

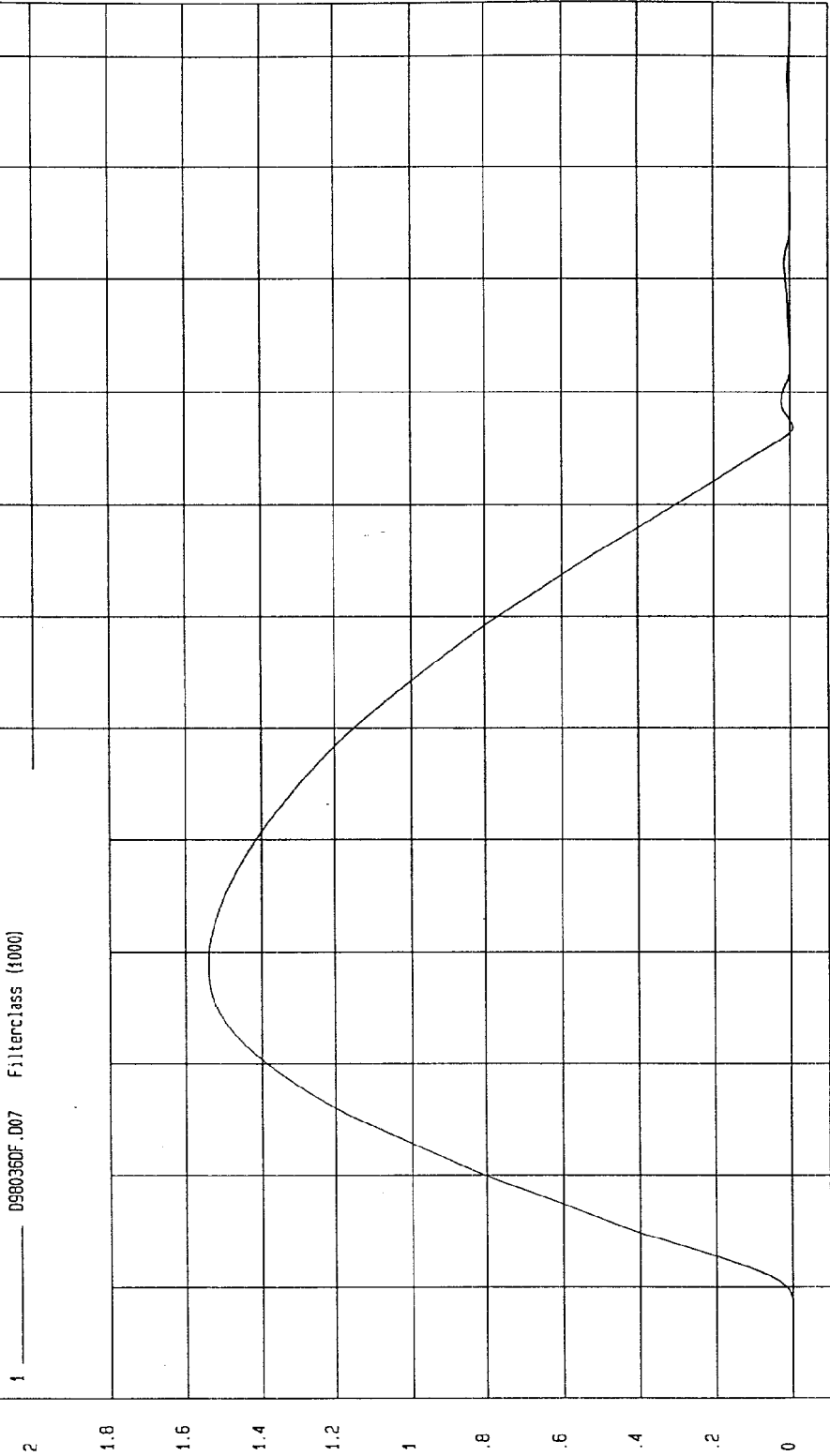
Velocity: 9.84 FT/SEC 3 M/SEC

Minimum = -8.19E-03 IN at 86.8 msec

Maximum = 1.53 IN at 38.8 msec

UPPER RIB DISPLACEMENT

1 _____ 0980360F.007 Filterclass (4000)



W&A Research
01-09-1998 11: 11

TEST: EUROSID RIB MODULE TEST DATE: 01-09-1998 - 10:20

COMPONENT: DUMMY # E1-169 Velocity: 13.12 FT/SEC 4 M/SEC

Minimum = -9.17E-03 IN at 82.3 msec

Maximum = 1.95 IN at 35.6 msec

LOWER RIB DISPLACEMENT

1 _____ 0980360F.004 Filterclass (1000)

2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
.8
.6
.4
.2
0

NI

TIME (SECONDS)
0 .01 .02 .03 .04 .05 .06 .07 .08 .09 .1 .11 .12

MCA Research
01-09-1998 11:10

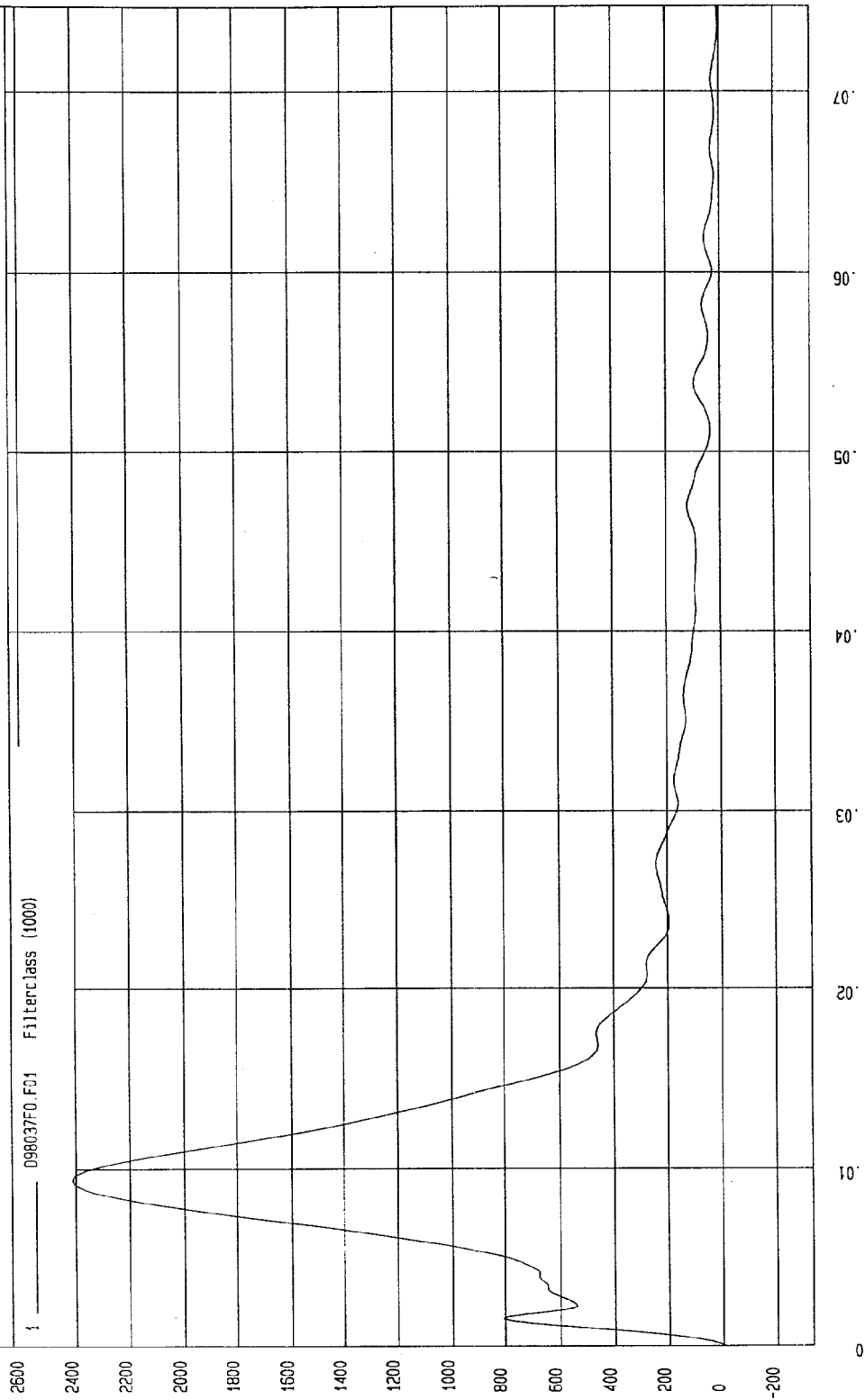
TEST: ABDOMEN IMPACT TEST DATE: 01-08-1998 - 14:28:43

COMPONENT: DUMMY # E1-169 Velocity: 20.8 FT/SEC 6.34 M/SEC

Minimum = -8.36 G'S at 84.8 msec
Maximum = 2412.69 G'S at 9.36 msec

PROBE FORCE

1 ——— 0980370.F01 Filterclass (1000)



MCA Research
01-08-1998 14:30

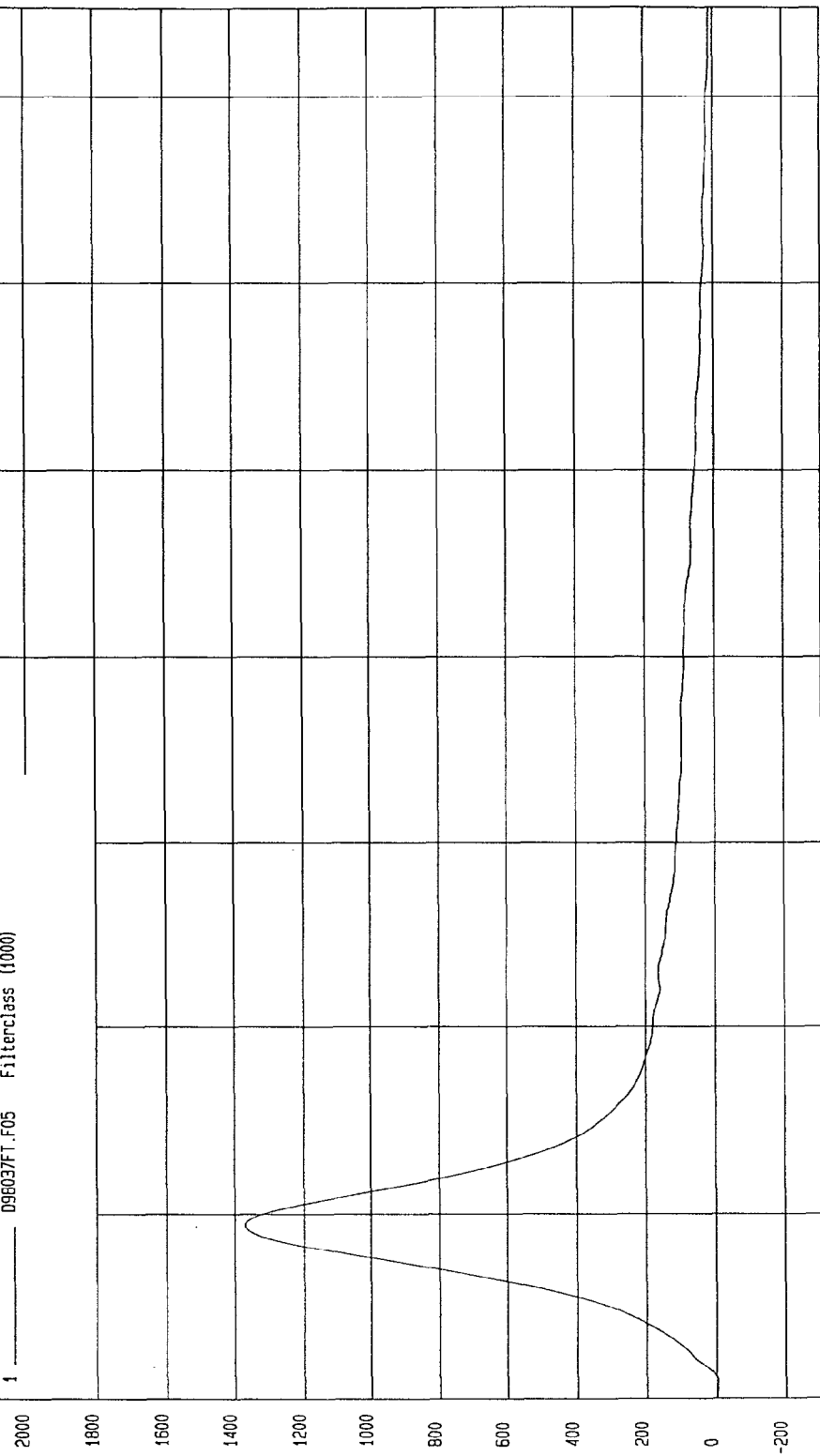
G.S

TEST: ABDOMEN IMPACT TEST DATE: 01-08-1998 - 14:29:35
COMPONENT: DUMMY # E1-169 Velocity: 20.8 FT/SEC 6.34 M/SEC

Minimum = -2.59 LBS at .87 msec Maximum = 1370.36 LBS at 9.36 msec

ABDOMEN FORCE

1 096037F.F05 Filterclass (1000)



TIME (SECONDS)

MGA Research
01-08-1998 14:31

TEST: EUROSID LUMBAR FLEXION

TEST DATE: 01-09-1998 - 12:08

COMPONENT: DUMMY # E1-169

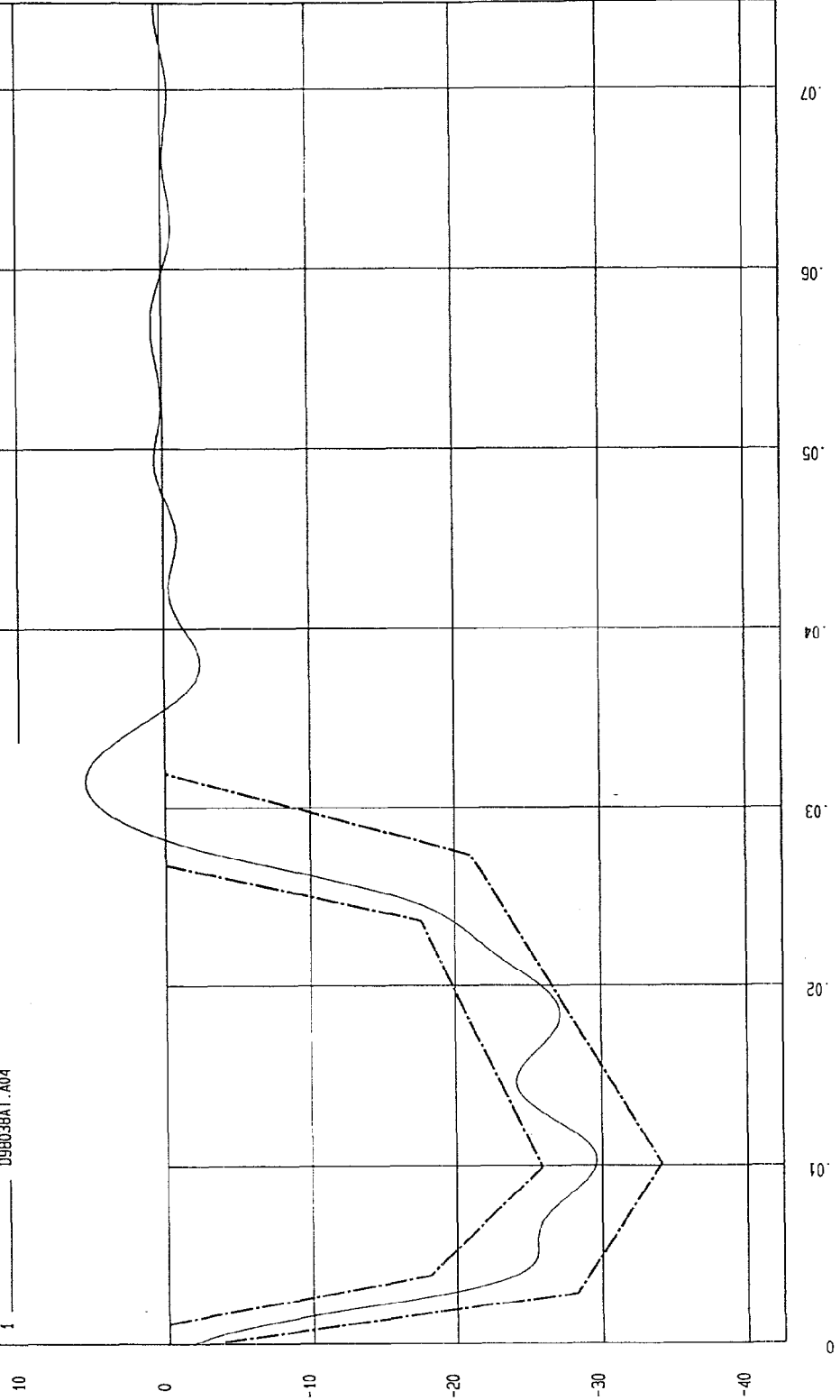
Velocity: 20.04 FT/SEC 6.11 M/SEC

Minimum = -29.61 G'S at 10.3 msec

Maximum = 5.47 G'S at 31.4 msec

PENDULUM ACCELERATION

1 ——— D98038AT.A04



NSA Research
01-09-1998 12:19

S.9

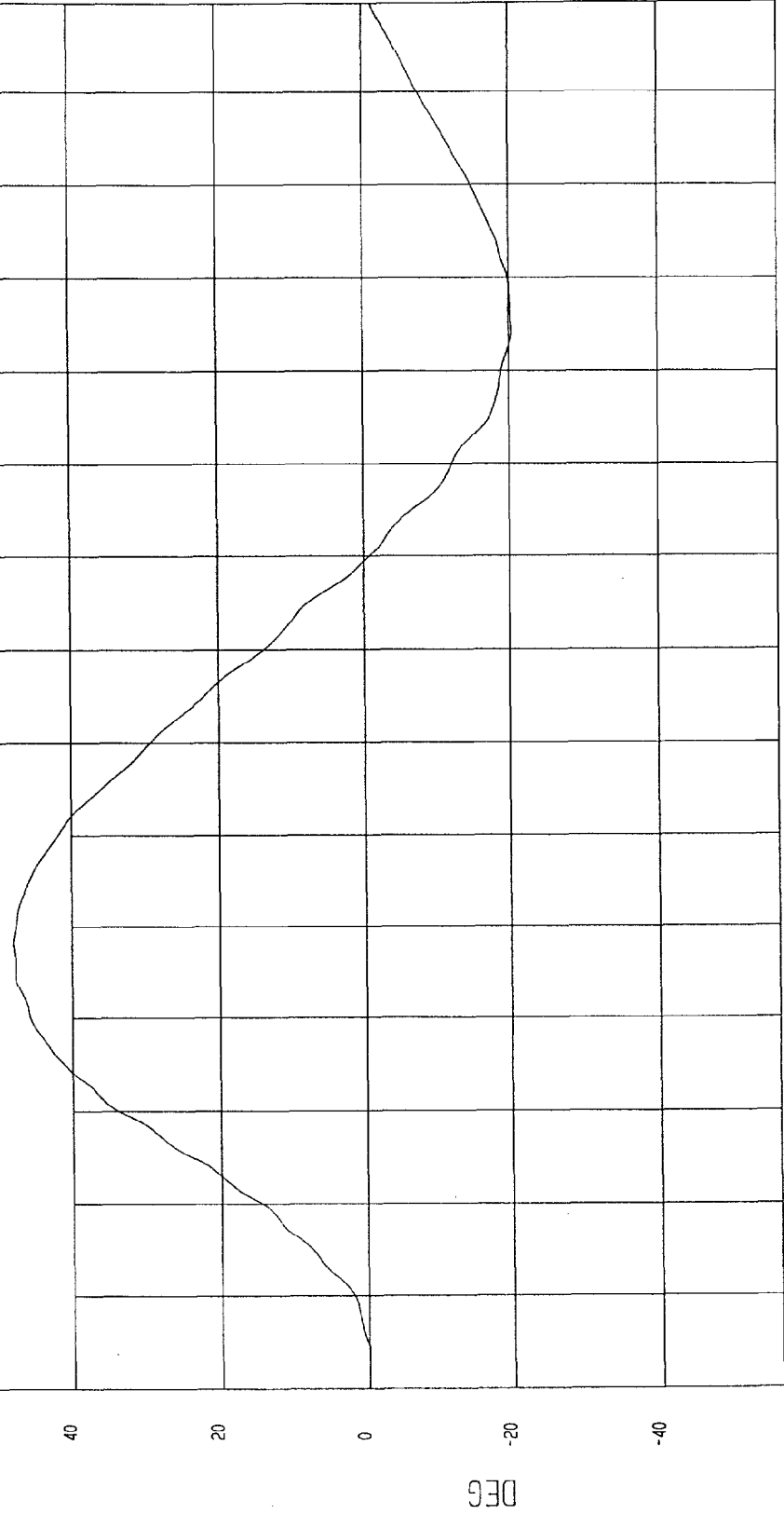
TEST: EUROSID LUMBAR FLEXION TEST DATE: 01-09-1998 - 12:08

COMPONENT: DUMMY # E1-169 Velocity: 20.04 FT/SEC 6.11 M/SEC

Minimum = -20.42 DEG at 114. msec Maximum = 47.93 DEG at 48.1 msec

FLEXION ANGLE

1 _____ D980360T.D08 Filterclass (1000)



WCA Research
01-09-1998 12:22

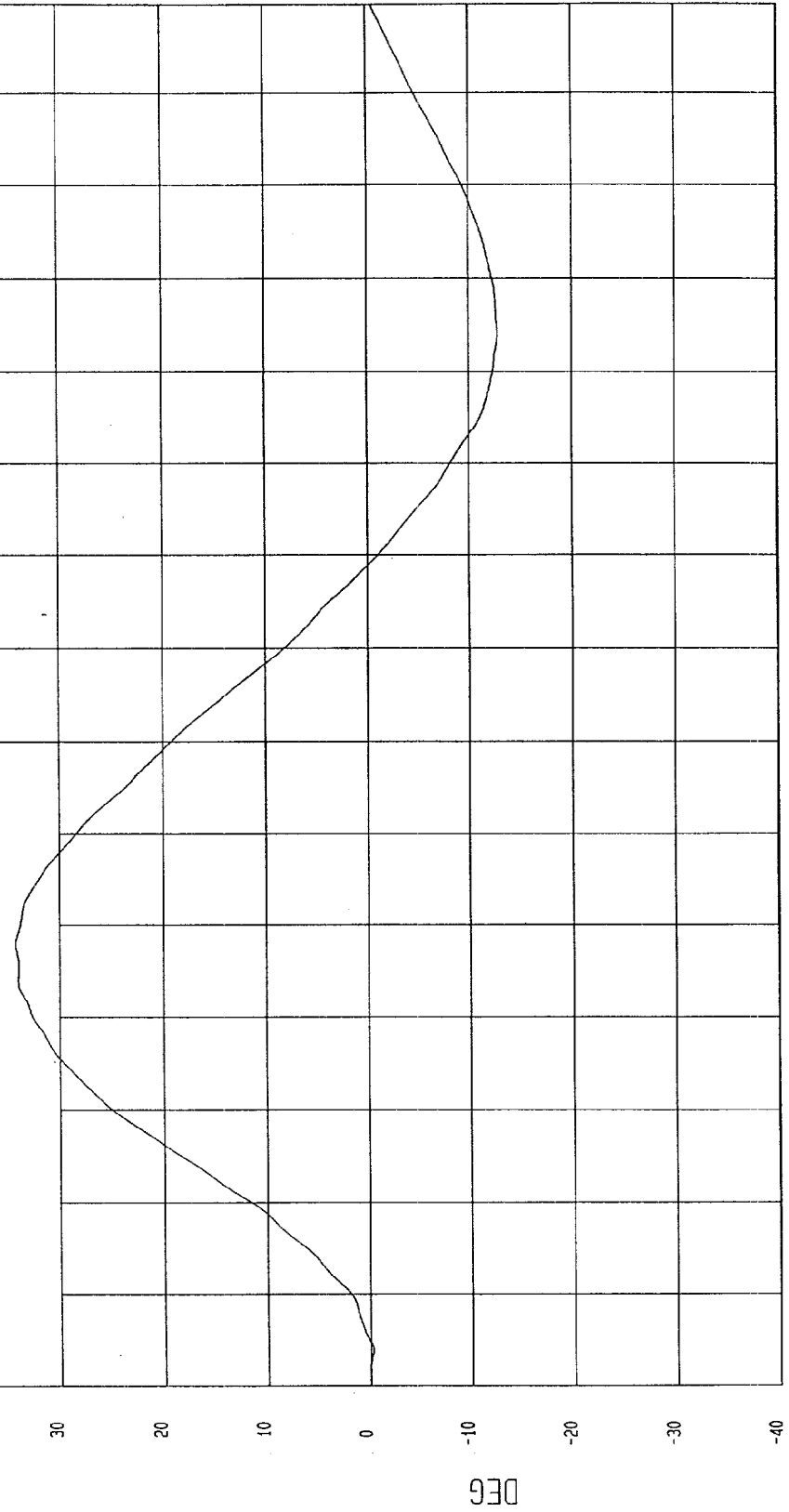
TEST: EUROSID LUMBAR FLEXION TEST DATE: 01-09-1998 - 12:08

COMPONENT: DUMMY # E1-169 Velocity: 20.04 FT/SEC 6.11 M/SEC

Minimum = -12.75 DEG at 113. msec Maximum = 34.29 DEG at 47.9 msec

THETA A

1 ——— 09803901.D05 Filterclass (4000)



MGA Research
01-09-1998 12:23

TEST: EUROSID LUMBAR FLEXION

TEST DATE: 01-09-1998 - 12:14:09

COMPONENT: DUMMY # E1-169

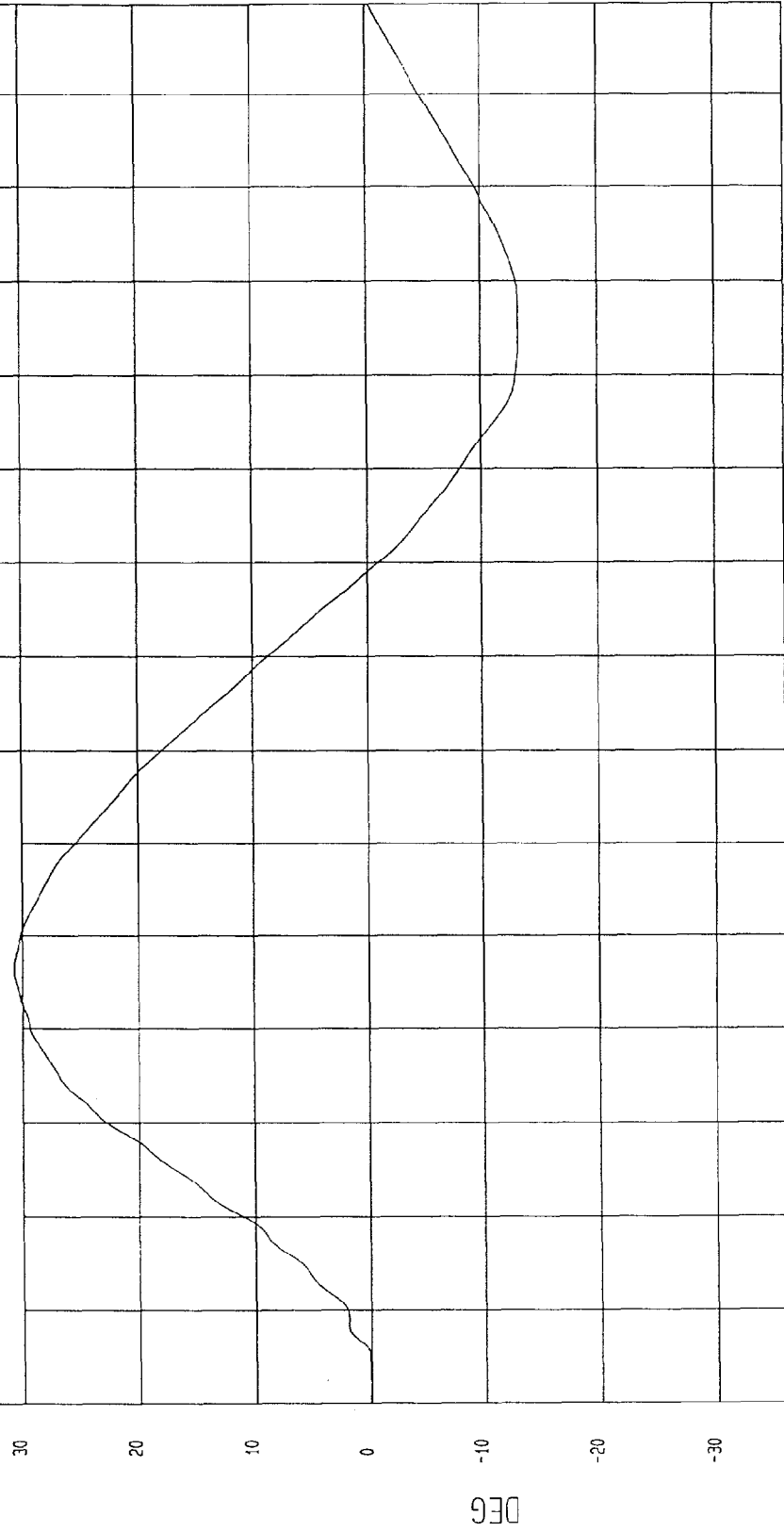
Velocity: 20.04 FT/SEC 6.11 M/SEC

Minimum = -13.26 DEG at 114. msec

Maximum = 30.70 DEG at 46.5 msec

THETA B

1 ——— 0980360T.D06 Filterclass (1000)



TIME (SECONDS)

NGA Research
01-09-1998 12:23

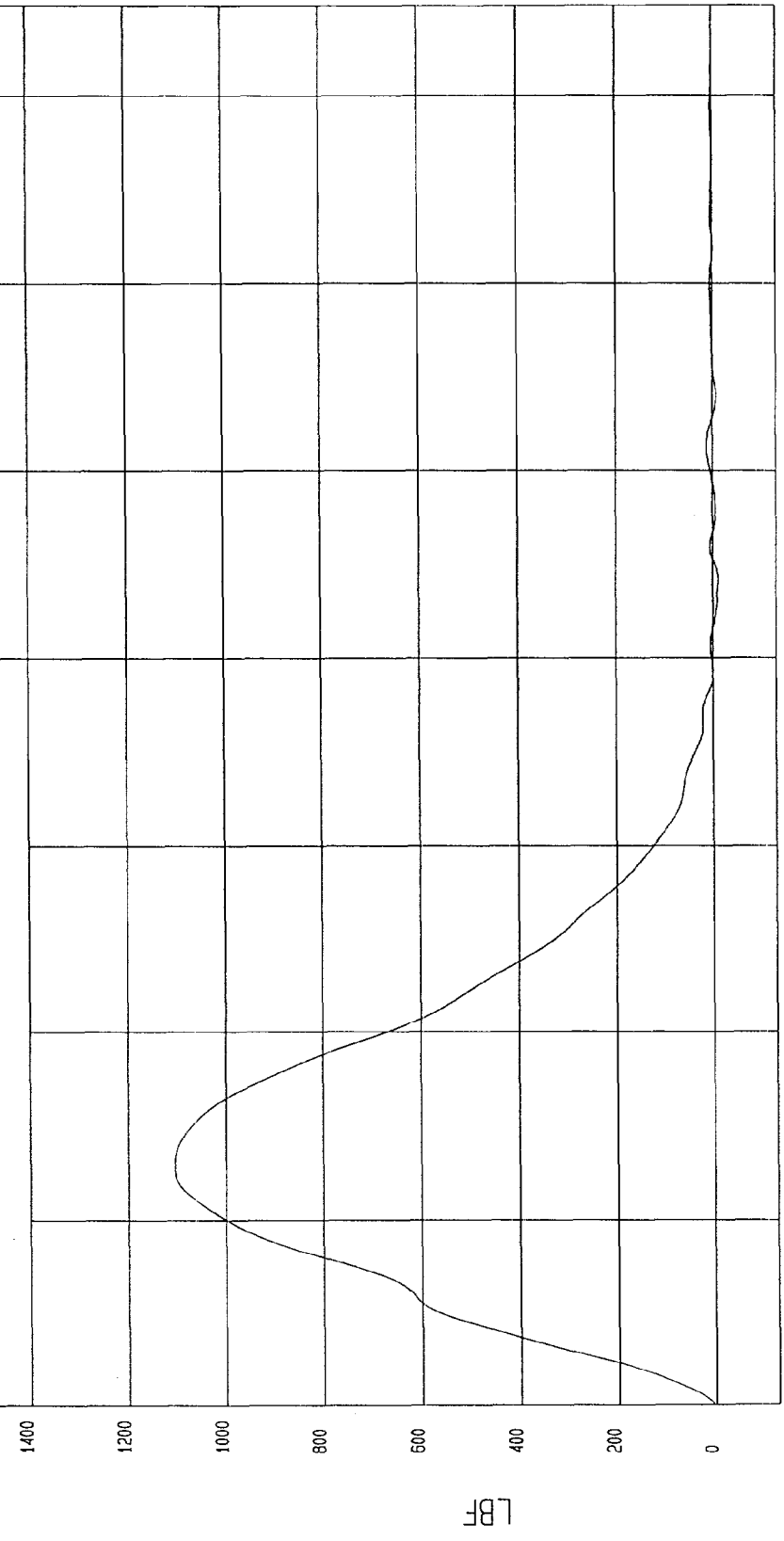
TEST: DUMMY CALIBRATION - PELVIS IMPACT TEST DATE: 01-08-1998 - 15:14:48

COMPONENT: DUMMY # E1-213 Velocity: 14.22 FT/SEC 4.33 M/SEC

Minimum = -11.26 LBF at 44.1 msec Maximum = 1106.37 LBF at 12.7 msec

IMPACTOR FORCE

1 ——— 098049FT.F01 Filterclass (1000)



TIME (SECONDS)

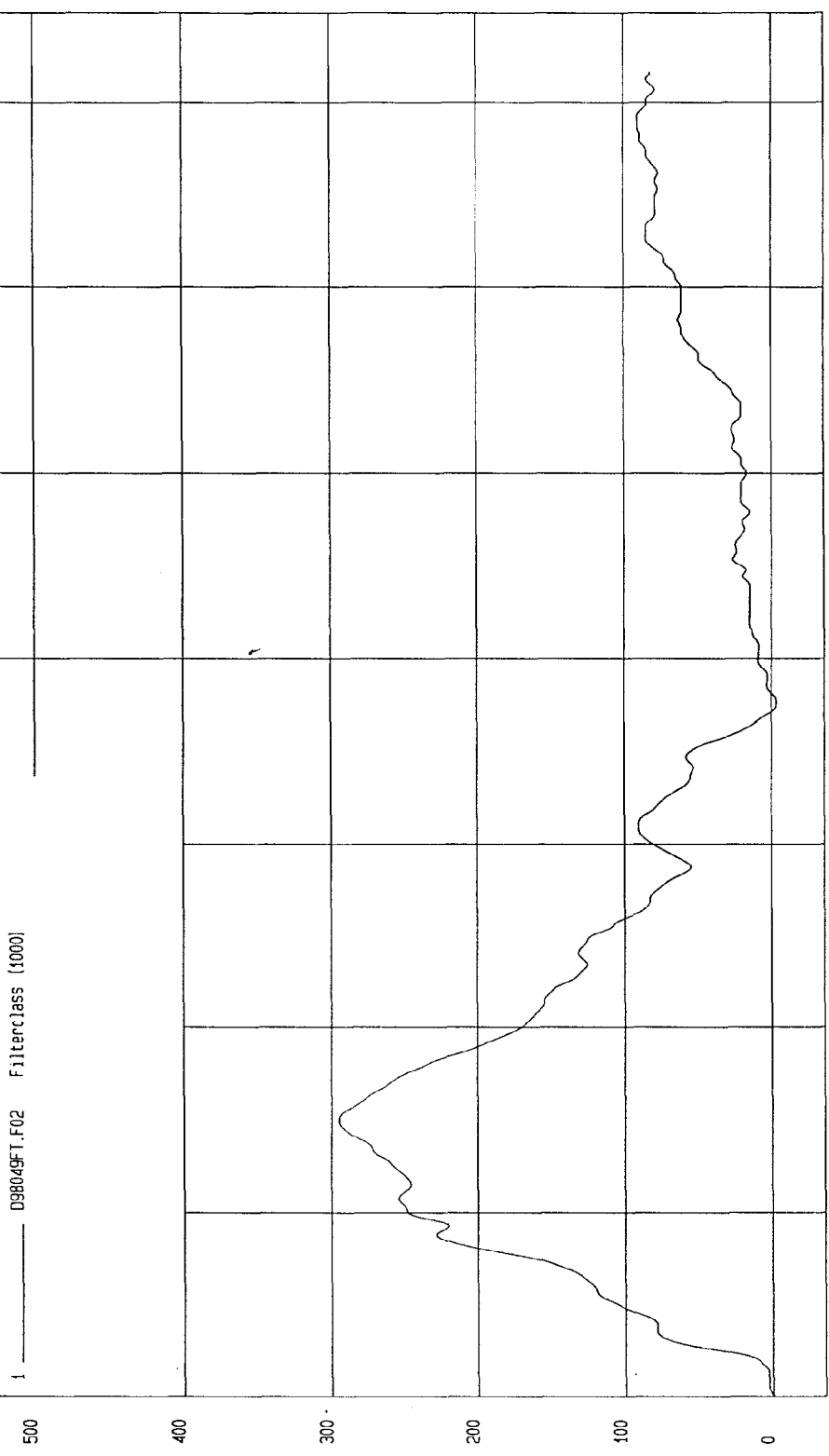
01-08-1998 15:17

TEST: DUMMY CALIBRATION - PELVIS IMPACT TEST DATE: 01-08-1998 - 15:15:26
 COMPONENT: DUMMY # E1-213 Velocity: 14.22 FT/SEC 4.33 M/SEC

Minimum = -3.24 LBS at 37.5 msec Maximum = 294.78 LBS at 14.9 msec

PUBIC FORCE

1 ——— D98049T.F02 Filter:less (1000)



TIME (SECONDS)

MGA Research
 01-08-1998 15.17

POST-TEST DUMMY INSPECTION CHECKLIST

Type: EuroSID 1

Serial Number: E1-169

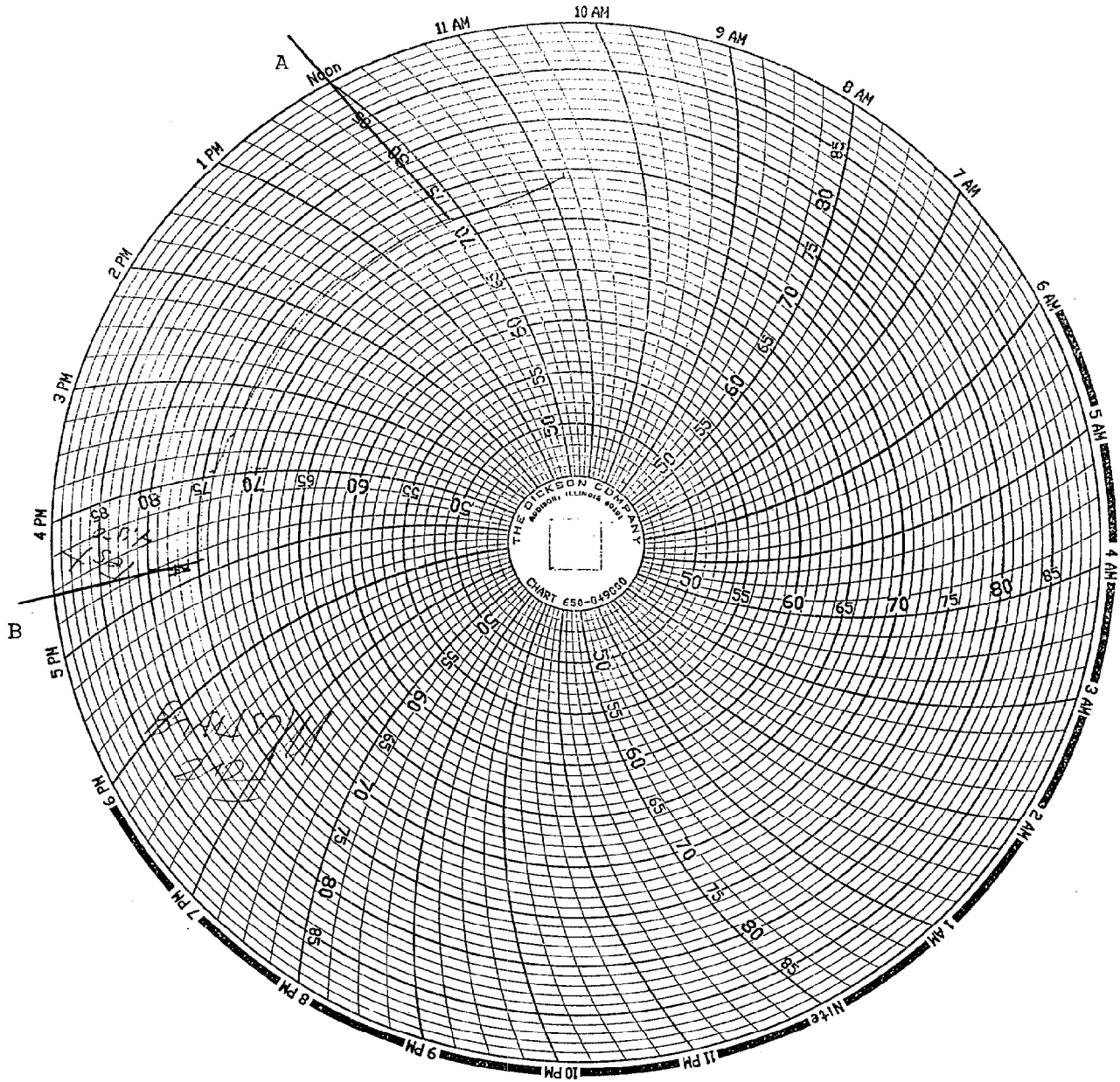
Inspected By: Tim Michnay

Date: January 9, 1998

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

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

DUMMY AND VEHICLE TEMPERATURE



A = Dummy installed in vehicle
B = Test Conducted

APPENDIX E
TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

SID INSTRUMENTATION

DUMMY #	E1-169	EXPOSURE	DATE	TYPE OF TEST	POSITION
CALIBRATION DATE:		1	10/9/97	TTD #4	FRONT
10/9/97		2		=====	=====
		3		=====	=====

<u>POSITION</u>	<u>MFR.</u>	<u>MODEL</u>	<u>SERIAL #</u>	<u>CAL DATE</u>	<u>DLR</u>
HEAD					
HX (B)	ENDEVCO	7264-2000	AP1T8	8/13/97	98.055
HY (L)	ENDEVCO	7264-2000	AP2D7	8/13/97	103.836
HZ (D)	ENDEVCO	7264-2000	AGTM8	8/13/97	115.746
HYR (R)	ENDEVCO	7264-2000	AJ411	8/13/97	114.127
RIBS					
UR (R)	ENDEVCO	7264-2000	AMTA3	6/4/97	111.932
UPPER DISP	NOVOTEC	T-75	46877	8/4/97	-1.086"/V
MR (R)	ENDEVCO	7264-2000	J18925	7/9/97	94.652
MID DISP	NOVOTEC	T-75	46874	8/4/97	-1.065"/V
LR (R)	ENDEVCO	7264-2000	J19173	7/9/97	106.98
LOWER DISP	NOVOTEC	T-75	46878	8/4/97	-1.074"/V
SPINE					
USX (F)	ENDEVCO	7264-2000	ALDC3	8/13/97	106.391
USY (R)	ENDEVCO	7264-2000	ALDM8	8/13/97	115.405
USZ (D)	ENDEVCO	7264-2000	ALA92	8/13/97	111.753
LSX (F)	ENDEVCO	7264-2000	J13653	7/9/97	81.191
LSY (L)	ENDEVCO	7264-2000	J13713	7/9/97	86.905
LSZ (U)	ENDEVCO	7264-2000	J13649	7/9/97	80.37
PELVIS					
PX (F)	ENDEVCO	7264-2000	J13930	7/9/97	79.795
PY (L)	ENDEVCO	7264-2000	J13631	7/9/97	78.09
PZ (U)	ENDEVCO	7264-2000	J13990	7/9/97	84.276
ABDOMEN					
FRONT	DENTON	2631	81	7/8/97	-1330.0 N
MID	DENTON	2631	86	7/8/97	-1377.4 N
REAR	DENTON	2631	79	7/8/97	-1320.6 N
PUBIC	DENTON	3096	136	7/9/97	-14434.9 N

DUMMY INSTRUMENTED BY: TM

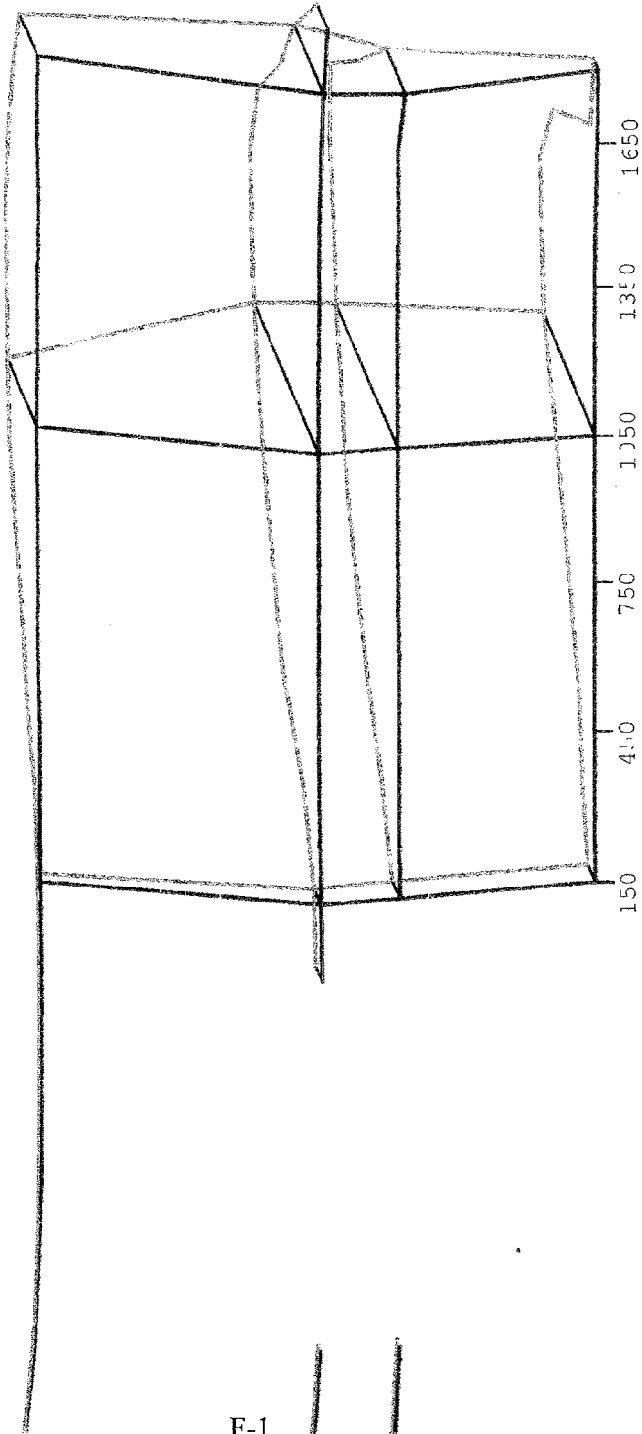
VEHICLE INSTRUMENT CALIBRATION

VEHICLE AND MDB ACCELEROMETERS		
SERIAL NO.	MANUFACTURER	CALIBRATION DATE
J10-E14	Entran	July 14, 1997
B13-Z05	Entran	August 1, 1997
J06-D22	Entran	June 12, 1997
B14-R14	Entran	June 12, 1997
G01-J10	Entran	August 7, 1997
E10-F19	Entran	July 11, 1997
I26-D04	Entran	August 7, 1997
I25-J19	Entran	August 7, 1997
F18-G03	Entran	August 7, 1997
F20-G12	Entran	August 7, 1997
F20-G08	Entran	August 7, 1997
I25-J13	Entran	August 6, 1997
F10-D02	Entran	July 14, 1997
H02-J05	Entran	August 6, 1997
H02-J02	Entran	August 6, 1997
I25-J09	Entran	August 7, 1997
F20-G05	Entran	August 7, 1997
E23-R07	Entran	August 7, 1997
F20-G02	Entran	August 7, 1997
F20-G06	Entran	August 7, 1997
Left Lower A-Post		
Left Mid A-Post		
Left Lower B-Post		
Left Mid B-Post		
Left Side Sill at Front Seat Y		
Left Side Sill at Rear Seat Y		
Right Side Sill at Front Seat X		
Right Side Sill at Front Seat Z		
Right Side Sill at Rear Seat X		
Right Side Sill at Rear Seat Y		
Right Side Sill at Rear Seat Z		
Left Driver Seat Track Y		
Right Rear Occupant Compartment Y		
Rear Floorpan Above Axle X		
Rear Floorpan Above Axle Y		
Rear Floorpan Above Axle Z		
Vehicle C.G. X		
Vehicle C.G. Y		
Vehicle C.G. Z		

VEHICLE INSTRUMENT CALIBRATION

	VEHICLE AND MDB ACCELEROMETERS		
	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Moving Barrier Left Rear Frame X	E10-F04	Entran	August 7, 1997
Moving Barrier Left Rear Frame Y	J04-F14	Entran	August 7, 1997
Moving Barrier Right Rear Frame X	H07-A25	Entran	July 14, 1997
Moving Barrier Right Rear Frame Y	C25-A11	Entran	August 5, 1997
Moving Barrier Left Face X	H02-J16	Entran	August 5, 1997
Moving Barrier Left Face Y	D05-R14	Entran	June 12, 1997
Moving Barrier Right Face X	F11-G08	Entran	August 7, 1997
Moving Barrier Right Face Y	I26-D02	Entran	August 7, 1997
Barrier C.G. X	E13-D01	Entran	August 1, 1997
Barrier C.G. Y	C14-Z08	Entran	August 1, 1997
Barrier C.G. Z	A09-G05	Entran	August 1, 1997
Left Upper B-Post Y	J23-E16	Entran	August 4, 1997
Left Front Door @ Mid Torso	F12-G08	Entran	August 1, 1997
Left Front Door @ Pelvis	J10-E17	Entran	April 23, 1997

1997 Ford Mustang
European Side Impact
Static Vehicle Deformation Measurements



1996 Ford Mustang
FMVSS 214 Side Impact
Vehicle Static Deformation Measurement

