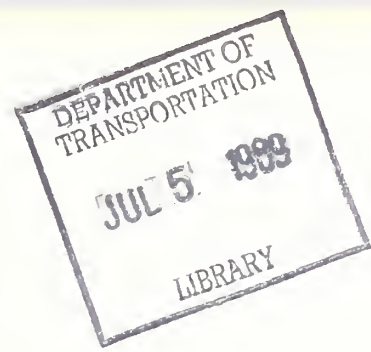




U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**



DOT HS 807 352

October 1988

Final Report

Final Report of Frontal Barrier Impacts of a 1985 Ford Escort 3-Door Hatchback in Support of Crash III Damage Algorithm Reformation



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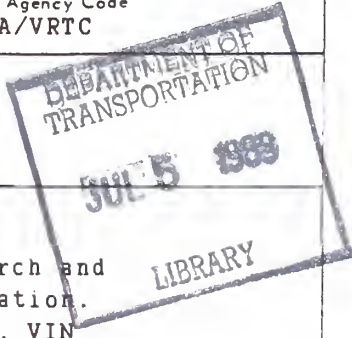
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16. Abstract Six 0° flat frontal barrier impact tests were conducted for research and development in support of the crash III damage algorithm reformulation. These tests were conducted on a 1985 Ford Escort 3-door hatchback, VIN 1FABP0446FW212463, at the Transportation Research Center of Ohio. The following six tests were conducted on one vehicle:				14. Sponsoring Agency Code DOT/NHTSA/VRTC																																				
<table border="1"> <thead> <tr> <th>TEST NO.</th> <th>DATE</th> <th>TIME</th> <th>SPEED (mph)</th> <th>AVERAGE CUMULATIVE CRUSH</th> </tr> </thead> <tbody> <tr> <td>880928-1</td> <td>9/28/88</td> <td>0910</td> <td>10.1</td> <td>2.5</td> </tr> <tr> <td>880928-2</td> <td>9/28/88</td> <td>1000</td> <td>19.8</td> <td>11.4</td> </tr> <tr> <td>880928-3</td> <td>9/28/88</td> <td>1050</td> <td>19.9</td> <td>17.0</td> </tr> <tr> <td>880928-4</td> <td>9/28/88</td> <td>1135</td> <td>18.2</td> <td>21.1</td> </tr> <tr> <td>880928-5</td> <td>9/28/88</td> <td>1305</td> <td>19.3</td> <td>28.2</td> </tr> <tr> <td>880928-6</td> <td>9/28/88</td> <td>1400</td> <td>30.0</td> <td>52.3</td> </tr> </tbody> </table>				TEST NO.	DATE	TIME	SPEED (mph)	AVERAGE CUMULATIVE CRUSH	880928-1	9/28/88	0910	10.1	2.5	880928-2	9/28/88	1000	19.8	11.4	880928-3	9/28/88	1050	19.9	17.0	880928-4	9/28/88	1135	18.2	21.1	880928-5	9/28/88	1305	19.3	28.2	880928-6	9/28/88	1400	30.0	52.3		
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SECTION 1.0
PURPOSE AND TEST SUMMARY

The purpose of the six 0° frontal barrier impact tests was for research and development in support of the CRASH III damage algorithm reformulation.

The 1985 Ford Escort was equipped with a 1.6 liter, 4-cylinder, transverse, gas engine with a 3-speed automatic transmission. The intended total test weight of the vehicle was 2740 pounds. The actual weight was 2765 pounds, including 383 pounds of steel plate ballast secured in the trunk area.

The crash event was recorded by two (2) high-speed cameras.

SECTION 2.0
VEHICLE INFORMATION

TEST VEHICLE INFORMATION

VEHICLE MANUFACTURER: Ford Motor Company VIN: 1FABP0446FW212463
MAKE/MODEL: Ford Escort MODEL YEAR: 1985
BODY STYLE: 3-door hatchback COLOR: blue
ENGINE DATA: TYPE: transverse CYLINDERS: 4 DISPLACEMENT: 1.6 liter
 X GAS, ___DIESEL, ___TURBOCHARGE
TRANSMISSION DATA: 3 SPEED, ___MANUAL, X AUTOMATIC, X FWD, ___RWD, ___4WD
DATE VEHICLE RECEIVED: 9/21/88 ODOMETER READING: 8094.0
DEALER'S NAME AND ADDRESS: NA

ACCESSORIES:

POWER STEERING	No	AUTOMATIC TRANSMISSION	Yes
POWER BRAKES	Yes	AUTOMATIC SPEED CONTROL	No
POWER SEATS	No	TILTING STEERING WHEEL	No
POWER WINDOWS	No	TELESCOPING STEERING WHEEL	No
TINTED GLASS	No	AIR CONDITIONING	Yes
RADIO	Yes	ANTI-SKID BRAKE	No
CLOCK	No	REAR WINDOW DEFROSTER	Yes
OTHER	None		

DATA FROM CERTIFICATION LABEL ON LEFT DOOR FACE OR "B" POST:

VEHICLE MANUFACTURED BY: Ford Motor Company
DATE OF MANUFACTURE: 12/84
GVWR: 3030 LBS.
GAWR: FRONT 1775 LBS.; REAR 1552 LBS.

The front of the vehicle was supported by a dolly.

TEST VEHICLE INFORMATION, CONT'D

WHEELBASE: 94.0

MAXIMUM WIDTH: 66.6

WEIGHT OF TEST VEHICLE WITH REQUIRED OCCUPANTS AND LUGGAGE:

RIGHT FRONT	1018 LBS.	RIGHT REAR	407 LBS.
LEFT FRONT	952 LBS.	LEFT REAR	388 LBS.
TOTAL FRONT WEIGHT	1970 LBS.	(71.2% OF TOTAL VEHICLE WEIGHT)	
TOTAL REAR WEIGHT	795 LBS.	(28.8% OF TOTAL VEHICLE WEIGHT)	
TOTAL TEST WEIGHT	2765 LBS.		

WEIGHT OF BALLAST SECURED IN VEHICLE TRUNK AREA: 383 LBS.

VEHICLE TIRE DATA:

TIRES ON VEHICLE (MFR. & LINE, SIZE): Michelin XH P175/80R13

RECOMMENDED COLD TIRE PRESSURE: FRONT: 35 psi; REAR: 35 psi

SIDEWALL PLY RATING: 1 ply

BIAS PLY, BELTED OR RADIAL? Radial

IS SPARE TIRE "SPACE SAVER"? Yes

IS SPARE TIRE STANDARD EQUIPMENT? No

VEHICLE ATTITUDES:

DELIVERED: LF: 26.8; RF: 27.1; LR: 27.8; RR: 28.0

PRE-TEST: LF: 26.7; RF: 27.1; LR: 27.6; RR: 27.8

POST-TEST: LF: 28.1; RF: 28.3; LR: 24.2; RR: 24.1

ALL DISTANCE MEASUREMENTS ARE IN INCHES.

TEST ANOMALIES

Noise in the form of spikes was observed in the plots for the contact switches OTH1, OTH2, OTH3, OTH4, OTH5. * The switches were used to record the time of vehicle contact with the wall, as well as the time of vehicle separation from the barrier wall. The switches were damaged by the crush of the vehicle's bumper against the rigid barrier. The switches were replaced following each test which contained spikes. This is not the standard use of such switches.

*CONTACT SWITCH MNEMONICS:

OTH1 Vehicle contact switch - Left
OTH2 Vehicle contact switch - Center
OTH3 Vehicle contact switch - Right
OTH4 Barrier contact switch - Left
OTH5 Barrier contact switch - Right

SECTION 3.0

TEST #880928-1 SUMMARY

TEST CONDITIONS:

TEST NUMBER: 880928-1

DATE OF TEST: 9/28/88

TIME OF TEST: 0910

AMBIENT TEMPERATURE AT IMPACT AREA: 71° F

SUBJECT VEHICLE DATA:

	<u>ACTUAL</u>	<u>INTENDED</u>
TEST WEIGHT (lbs.)	2765	2740
VEHICLE ORIENTATION (deg.)	0	0
VEHICLE VELOCITY (mph.)	10.1	10.0
MAXIMUM CRUSH (in.)	3.4	
AVERAGE CRUSH = $\frac{\{C1+C6+C2+C3+C4+C5\}}{5}$ (in.)	2.5	

TEST NUMBER 1

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

No.	LOCATION	X*	Y*	Z*	POSITIVE DIRECTION		NEGATIVE DIRECTION	
					MAX G	MSEC	MAX G	MSEC
1	VEHICLE FRONT FRAME CROSSMEMBER BOTTOM LONGITUDINAL	153.3	20.2	12.4	18.7	33.3	29.1	23.4
2	VEHICLE HOOD LATCH CROSSMEMBER LONGITUDINAL	157.9	0.9	28.8	23.0	36.0	45.2	25.0
3	VEHICLE LEFT FENDER WELL INSIDE LONGITUDINAL	143.9	20.0	25.7	18.9	33.5	27.8	23.8
4	VEHICLE SUSPENSION LONGITUDINAL	134.9	-18.8	34.0	5.9	33.5	23.8	25.9
5	VEHICLE REAR DECK PRIMARY LONGITUDINAL	49.2	0.0	17.8	1.0	150.0	11.1	27.4
6	VEHICLE REAR DECK REDUNDANT LONGITUDINAL	49.2	1.7	17.8	1.0	112.4	11.4	27.3

* ALL MEASUREMENTS OF ACCELEROMETER LOCATIONS ARE IN INCHES.

REFERENCE: X: + FORWARD FROM REAR BUMPER
 Y: + LEFTWARD FROM VEHICLE CENTERLINE
 Z: + UPWARD FROM GROUND LEVEL

TEST #880928-1

AIRBAG SENSOR LOCATIONS AND DATA SUMMARY

NO.	LOCATION	X	Y	Z	SWITCH CLOSURE TIME, (MSEC)
3	VEHICLE LEFT FENDER WELL INSIDE SENSOR #1	143.1	22.2	25.2	45.5
3	VEHICLE LEFT FENDER WELL INSIDE SENSOR #2	148.4	22.2	25.1	No indication of closure

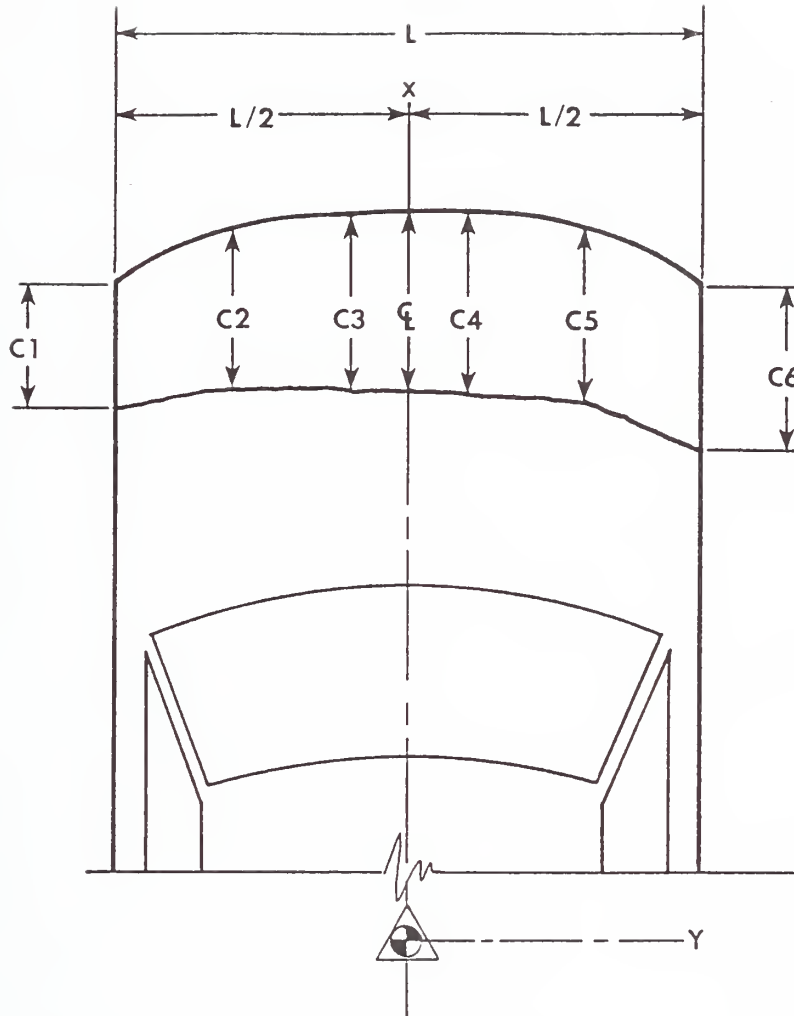
REFERENCE: X: + FORWARD FROM REAR BUMPER
 Y: + LEFTWARD FROM VEHICLE CENTERLINE
 Z: + UPWARD FROM GROUND LEVEL

SENSOR #1 TECHNAR, P/N 86009D001, S/N 27701-57

SENSOR #2 BREED, Model #F134, S/N 7953

CONTACT SWITCH LOCATIONS AND DATA SUMMARY

LOCATION	SEPARATION TIME (MSEC)
VEHICLE CONTACT SWITCH - LEFT	113.4
VEHICLE CONTACT SWITCH - CENTER	115.6
VEHICLE CONTACT SWITCH - RIGHT	116.0
BARRIER CONTACT SWITCH - LEFT	115.6
BARRIER CONTACT SWITCH - RIGHT	109.6



NOTE: L is pre-test length of contact surface.
 $C1$ through $C6$ are spaced equally apart.
 CL is taken at centerline of vehicle.
 All measurements are in inches.

Vehicle 1985 Ford Escort - Test #880928-1

	PRE-TEST	POST-TEST	CRUSH
L	<u>58.5</u>		
C1	<u>160.7</u>	C1 <u>158.1</u>	C1 <u>2.6</u>
C2	<u>163.0</u>	C2 <u>160.5</u>	C2 <u>2.5</u>
C3	<u>164.0</u>	C3 <u>161.1</u>	C3 <u>2.9</u>
C4	<u>164.0</u>	C4 <u>161.4</u>	C4 <u>2.6</u>
C5	<u>163.2</u>	C5 <u>161.0</u>	C5 <u>2.2</u>
C6	<u>160.8</u>	C6 <u>159.2</u>	C6 <u>1.6</u>
CL	<u>164.5</u>	CL <u>161.1</u>	CL <u>3.4</u>

TEST #880928-1

CAMERA INFORMATION

CAMERA NO.	LOCATION	TYPE	LENS (mm)	SPEED (fps)	PURPOSE OF CAMERA DATA
1	Right side wide	Photosonic 1B	25	499	Impact overall
2	Right side tight	Photosonic 1B	50	505	Impact closeup

SECTION 4.0

TEST #880928-2 SUMMARY

TEST CONDITIONS:

TEST NUMBER: 880928-2

DATE OF TEST: 9/28/88

TIME OF TEST: 1000

AMBIENT TEMPERATURE AT IMPACT AREA: 71° F

SUBJECT VEHICLE DATA:

	<u>ACTUAL</u>	<u>INTENDED</u>
TEST WEIGHT (lbs.)	2765	2740
VEHICLE ORIENTATION (deg.)	0	0
VEHICLE VELOCITY (mph.)	19.8	20.0
MAXIMUM CUMULATIVE CRUSH (in.)	12.1	
AVERAGE CUMULATIVE CRUSH $\frac{\{C1+C6+C2+C3+C4+C5\}}{5}$ (in.)	11.4	

VEHICLE ATTITUDES:

POST-TEST: LF: 28.4; RF: 29.8; LR: 23.4; RR: 24.1

TEST NUMBER 2

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

No.	LOCATION	X*	Y*	Z*	POSITIVE DIRECTION		NEGATIVE DIRECTION	
					MAX G	MSEC	MAX G	MSEC
1	VEHICLE FRONT FRAME CROSSMEMBER BOTTOM LONGITUDINAL	153.3	20.2	12.4	19.1	9.6	71.2	13.9
2	VEHICLE HOOD LATCH CROSSMEMBER LONGITUDINAL	157.9	0.9	28.8	89.0	17.5	170.6	13.1
3	VEHICLE LEFT FENDER WELL INSIDE LONGITUDINAL	143.9	20.0	25.7	11.0	41.6	73.5	13.6
4	VEHICLE SUSPENSION LONGITUDINAL	134.9	-18.8	34.0	17.0	20.9	27.0	31.3
5	VEHICLE REAR DECK PRIMARY LONGITUDINAL	49.2	0.0	17.8	2.0	103.1	25.6	51.9
6	VEHICLE REAR DECK REDUNDANT LONGITUDINAL	49.2	1.7	17.8	2.2	103.0	25.5	52.0

* ALL MEASUREMENTS OF ACCELEROMETER LOCATIONS ARE IN INCHES.

REFERENCE: X: + FORWARD FROM REAR BUMPER
 Y: + LEFTWARD FROM VEHICLE CENTERLINE
 Z: + UPWARD FROM GROUND LEVEL

TEST #880928-2

AIRBAG SENSOR LOCATIONS AND DATA SUMMARY

NO.	LOCATION	X	Y	Z	SWITCH CLOSURE TIME, (MSEC)
3	VEHICLE LEFT FENDER WELL INSIDE SENSOR #1	143.1	22.2	25.2	26.6
3	VEHICLE LEFT FENDER WELL INSIDE SENSOR #2	148.4	22.2	25.1	29.8

REFERENCE: X: + FORWARD FROM REAR BUMPER
 Y: + LEFTWARD FROM VEHICLE CENTERLINE
 Z: + UPWARD FROM GROUND LEVEL

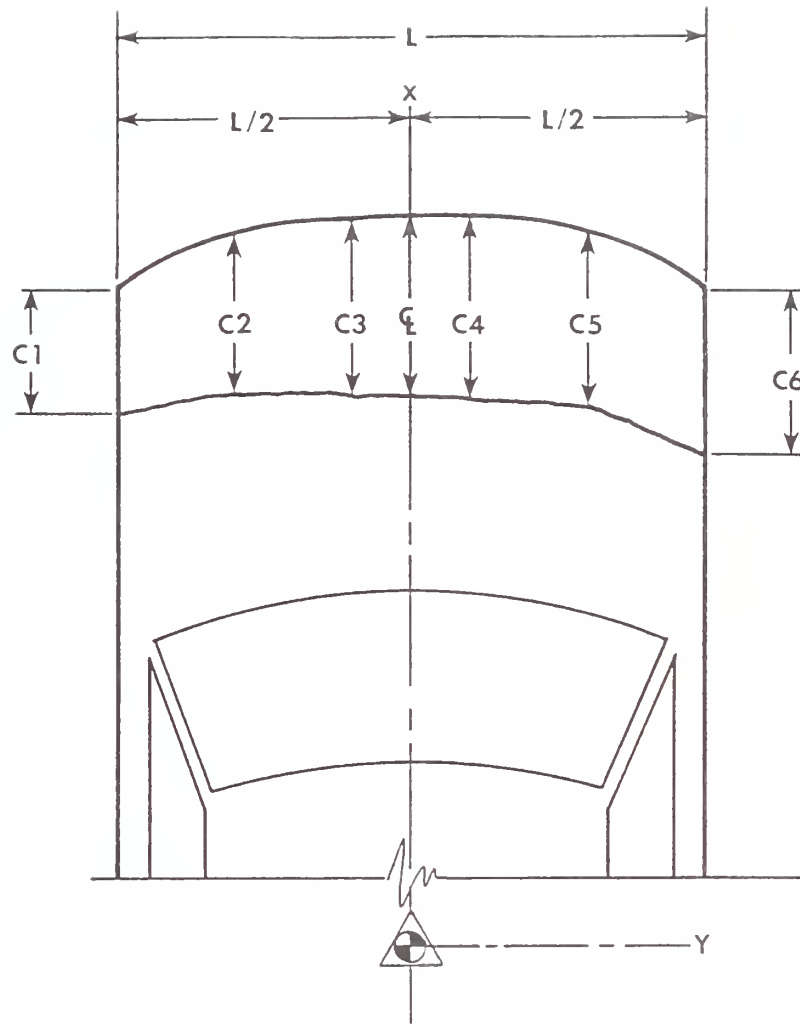
SENSOR #1 TECHNAR, P/N 86009D001, S/N 27701-57

SENSOR #2 BREED, Model #F134, S/N 7953

CONTACT SWITCH LOCATIONS AND DATA SUMMARY

LOCATION	SEPARATION TIME (MSEC)
VEHICLE CONTACT SWITCH - LEFT	80.5
VEHICLE CONTACT SWITCH - CENTER	Y
VEHICLE CONTACT SWITCH - RIGHT	92.2
BARRIER CONTACT SWITCH - LEFT	103.4
BARRIER CONTACT SWITCH - RIGHT	108.2

Y See TEST ANOMALIES



NOTE: L is pre-test length of contact surface.
 $C1$ through $C6$ are spaced equally apart.
 CL is taken at centerline of vehicle.
 All measurements are in inches.

Vehicle 1985 Ford Escort - Test #880928-2

	PRE-TEST*	POST-TEST	CUMULATIVE CRUSH
L	<u>58.5</u>		
C1	<u>160.7</u>	C1 <u>148.7</u>	C1 <u>12.0</u>
C2	<u>163.0</u>	C2 <u>150.9</u>	C2 <u>12.1</u>
C3	<u>164.0</u>	C3 <u>151.9</u>	C3 <u>12.1</u>
C4	<u>164.0</u>	C4 <u>152.5</u>	C4 <u>11.5</u>
C5	<u>163.2</u>	C5 <u>152.6</u>	C5 <u>10.6</u>
C6	<u>160.8</u>	C6 <u>151.2</u>	C6 <u>9.6</u>
CL	<u>164.5</u>	CL <u>152.4</u>	CL <u>12.1</u>

*Pre-test measurements taken from test #880928-1.

TEST #880928-2

CAMERA INFORMATION

<u>CAMERA NO.</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>LENS (mm)</u>	<u>SPEED (fps)</u>	<u>PURPOSE OF CAMERA DATA</u>
1	Right side wide	Photosonic 1B	25	499	Impact overall
2	Right side tight	Photosonic 1B	50	505	Impact closeup

SECTION 5.0

TEST #880928-3 SUMMARY

TEST CONDITIONS:

TEST NUMBER: 880928-3

DATE OF TEST: 9/28/88

TIME OF TEST: 1050

AMBIENT TEMPERATURE AT IMPACT AREA: 72° F

SUBJECT VEHICLE DATA:

	<u>ACTUAL</u>	<u>INTENDED</u>
TEST WEIGHT (lbs.)	2765	2740
VEHICLE ORIENTATION (deg.)	0	0
VEHICLE VELOCITY (mph.)	19.9	20.0
MAXIMUM CUMULATIVE CRUSH (in.)	18.0	
AVERAGE CUMULATIVE CRUSH $\frac{\{C1+C6+C2+C3+C4+C5\}}{5}$ (in.)	17.0	

VEHICLE ATTITUDES:

POST-TEST: LF: 29.5; RF: 29.8; LR: 29.4; RR: 23.6

TEST NUMBER 3

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

No.	LOCATION	X*	Y*	Z*	POSITIVE DIRECTION		NEGATIVE DIRECTION	
					MAX G	MSEC	MAX G	MSEC
5	VEHICLE REAR DECK PRIMARY LONGITUDINAL	49.2	0.0	17.8	1.8	125.9	26.1	48.6
6	VEHICLE REAR DECK REDUNDANT LONGITUDINAL	49.2	1.7	17.8	1.8	127.1	26.5	48.9

* ALL MEASUREMENTS OF ACCELEROMETER LOCATIONS ARE IN INCHES.

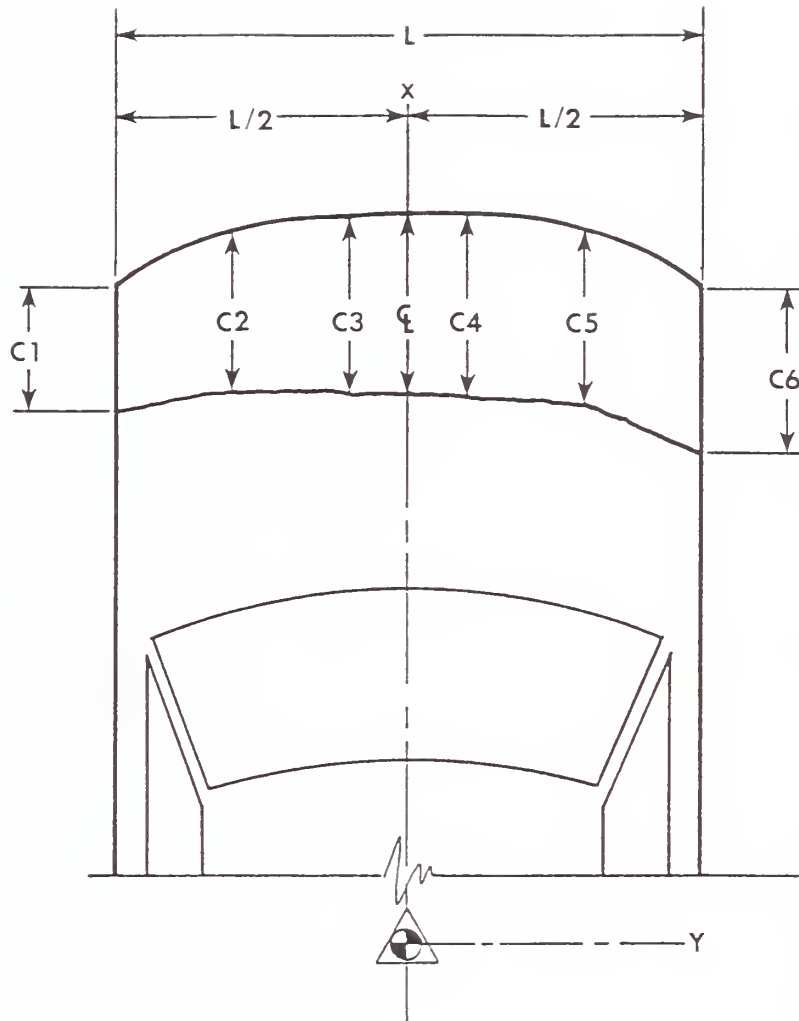
REFERENCE: X: + FORWARD FROM REAR BUMPER
 Y: + LEFTWARD FROM VEHICLE CENTERLINE
 Z: + UPWARD FROM GROUND LEVEL

TEST #880928-3

CONTACT SWITCH LOCATIONS AND DATA SUMMARY

LOCATION	SEPARATION TIME (MSEC)
VEHICLE CONTACT SWITCH - LEFT	80.0
VEHICLE CONTACT SWITCH - CENTER	Y
VEHICLE CONTACT SWITCH - RIGHT	91.1
BARRIER CONTACT SWITCH - LEFT	101.1
BARRIER CONTACT SWITCH - RIGHT	103.8

Y See TEST ANOMALIES



NOTE: L is pre-test length of contact surface.
 $C1$ through $C6$ are spaced equally apart.
 CL is taken at centerline of vehicle.
 All measurements are in inches.

Vehicle 1985 Ford Escort - Test #880928-3

	PRE-TEST*	POST-TEST	CUMULATIVE CRUSH
L	<u>58.5</u>		
C1	<u>160.7</u>	C1 <u>143.6</u>	C1 <u>17.1</u>
C2	<u>163.0</u>	C2 <u>145.8</u>	C2 <u>17.2</u>
C3	<u>164.0</u>	C3 <u>146.4</u>	C3 <u>17.6</u>
C4	<u>164.0</u>	C4 <u>146.8</u>	C4 <u>17.2</u>
C5	<u>163.2</u>	C5 <u>146.5</u>	C5 <u>16.7</u>
C6	<u>160.8</u>	C6 <u>145.1</u>	C6 <u>15.7</u>
CL	<u>164.5</u>	CL <u>146.5</u>	CL <u>18.0</u>

*Pre-test measurements taken from test #880928-1.

TEST #880928-3

CAMERA INFORMATION

<u>CAMERA NO.</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>LENS (mm)</u>	<u>SPEED (fps)</u>	<u>PURPOSE OF CAMERA DATA</u>
1	Right side wide	Photosonic 1B	25	501	Impact overall
2	Right side tight	Photosonic 1B	50	503	Impact closeup

SECTION 6.0

TEST #880928-4 SUMMARY

TEST CONDITIONS:

TEST NUMBER: 880928-4

DATE OF TEST: 9/28/88

TIME OF TEST: 1135

AMBIENT TEMPERATURE AT IMPACT AREA: 72° F

SUBJECT VEHICLE DATA:

	<u>ACTUAL</u>	<u>INTENDED</u>
TEST WEIGHT (lbs.)	2765	2740
VEHICLE ORIENTATION (deg.)	0	0
VEHICLE VELOCITY (mph.)	18.2	18.3
MAXIMUM CUMULATIVE CRUSH (in.)	22.0	
AVERAGE CUMULATIVE CRUSH $\frac{\{C1+C6+C2+C3+C4+C5\}}{5}$ (in.)	21.1	

VEHICLE ATTITUDES:

POST-TEST: LF: 29.0; RF: 30.1; LR: 22.9; RR: 23.6

TEST NUMBER 4

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

No.	LOCATION	X*	Y*	Z*	POSITIVE DIRECTION		NEGATIVE DIRECTION	
					MAX G	MSEC	MAX G	MSEC
5	VEHICLE REAR DECK PRIMARY LONGITUDINAL	49.2	0.0	17.8	4.9	295.5	29.4	26.9
6	VEHICLE REAR DECK REDUNDANT LONGITUDINAL	49.2	1.7	17.8	4.0	295.6	29.0	26.9

* ALL MEASUREMENTS OF ACCELEROMETER LOCATIONS ARE IN INCHES.

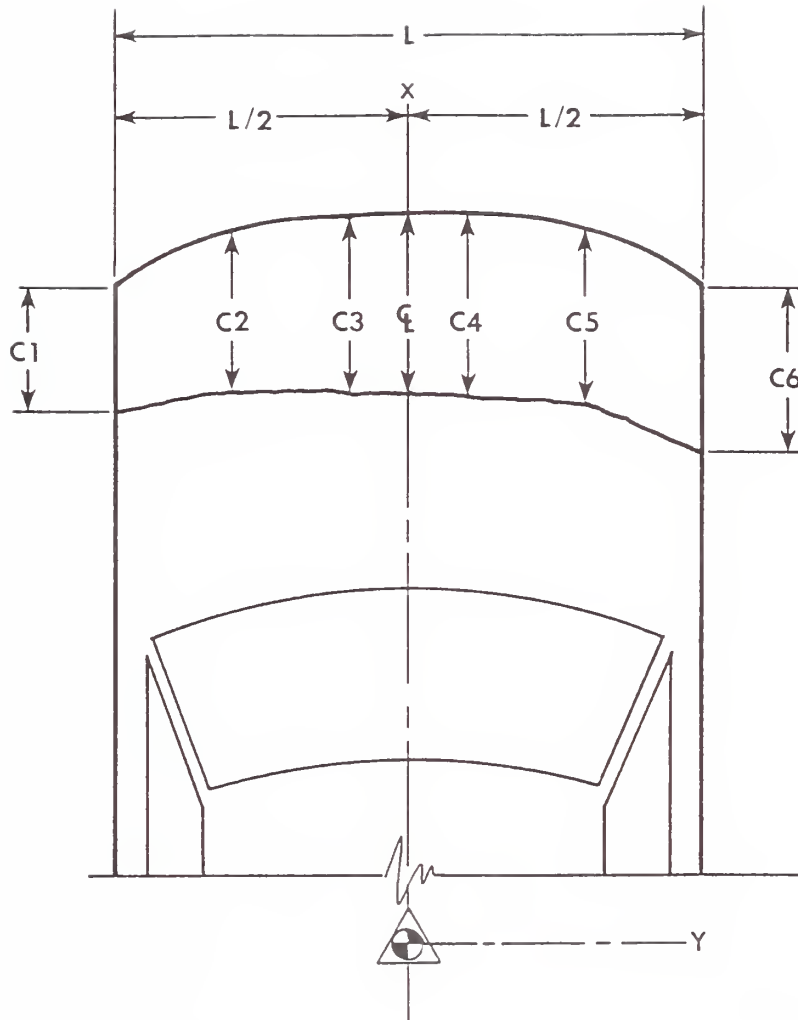
REFERENCE: X: + FORWARD FROM REAR BUMPER
 Y: + LEFTWARD FROM VEHICLE CENTERLINE
 Z: + UPWARD FROM GROUND LEVEL

TEST #880928-4

CONTACT SWITCH LOCATIONS AND DATA SUMMARY

LOCATION	SEPARATION TIME (MSEC)
VEHICLE CONTACT SWITCH - LEFT	109.4
VEHICLE CONTACT SWITCH - CENTER	Y
VEHICLE CONTACT SWITCH - RIGHT	122.1
BARRIER CONTACT SWITCH - LEFT	106.1
BARRIER CONTACT SWITCH - RIGHT	115.0

Y See TEST ANOMALIES



NOTE: L is pre-test length of contact surface.
 $C1$ through $C6$ are spaced equally apart.
 CL is taken at centerline of vehicle.
 All measurements are in inches.

Vehicle 1985 Ford Escort - Test #880928-4

	PRE-TEST*	POST-TEST	CUMULATIVE CRUSH
L	<u>58.5</u>		
$C1$	<u>160.7</u>	$C1$ <u>139.5</u>	$C1$ <u>21.2</u>
$C2$	<u>163.0</u>	$C2$ <u>141.4</u>	$C2$ <u>21.6</u>
$C3$	<u>164.0</u>	$C3$ <u>142.2</u>	$C3$ <u>21.8</u>
$C4$	<u>164.0</u>	$C4$ <u>142.5</u>	$C4$ <u>21.5</u>
$C5$	<u>163.2</u>	$C5$ <u>142.6</u>	$C5$ <u>20.6</u>
$C6$	<u>160.8</u>	$C6$ <u>141.9</u>	$C6$ <u>18.9</u>
CL	<u>164.5</u>	CL <u>142.5</u>	CL <u>22.0</u>

*Pre-test measurements taken from test #880928-1.

TEST #880928-4

CAMERA INFORMATION

<u>CAMERA NO.</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>LENS (mm)</u>	<u>SPEED (fps)</u>	<u>PURPOSE OF CAMERA DATA</u>
1	Right side wide	Photosonic 1B	25	500	Impact overall
2	Right side tight	Photosonic 1B	50	512	Impact closeup

SECTION 7.0

TEST #880928-5 SUMMARY

TEST CONDITIONS:

TEST NUMBER: 880928-5

DATE OF TEST: 9/28/88

TIME OF TEST: 1305

AMBIENT TEMPERATURE AT IMPACT AREA: 72° F

SUBJECT VEHICLE DATA:

	<u>ACTUAL</u>	<u>INTENDED</u>
TEST WEIGHT (lbs.)	2765	2740
VEHICLE ORIENTATION (deg.)	0	0
VEHICLE VELOCITY (mph.)	19.3	19.4
MAXIMUM CUMULATIVE CRUSH (in.)	29.0	
AVERAGE CUMULATIVE CRUSH $\frac{\{C1+C6+C2+C3+C4+C5\}}{5}$ (in.)	28.2	

VEHICLE ATTITUDES:

POST-TEST: LF: 27.4; RF: 30.8; LR: 24.7; RR: 27.8

TEST NUMBER 5

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

No.	LOCATION	X*	Y*	Z*	POSITIVE DIRECTION		NEGATIVE DIRECTION	
					MAX G	MSEC	MAX G	MSEC
5	VEHICLE REAR DECK PRIMARY LONGITUDINAL	49.2	0.0	17.8	2.1	179.8	24.4	25.8
6	VEHICLE REAR DECK REDUNDANT LONGITUDINAL	49.2	1.7	17.8	1.9	111.9	24.6	25.4

* ALL MEASUREMENTS OF ACCELEROMETER LOCATIONS ARE IN INCHES.

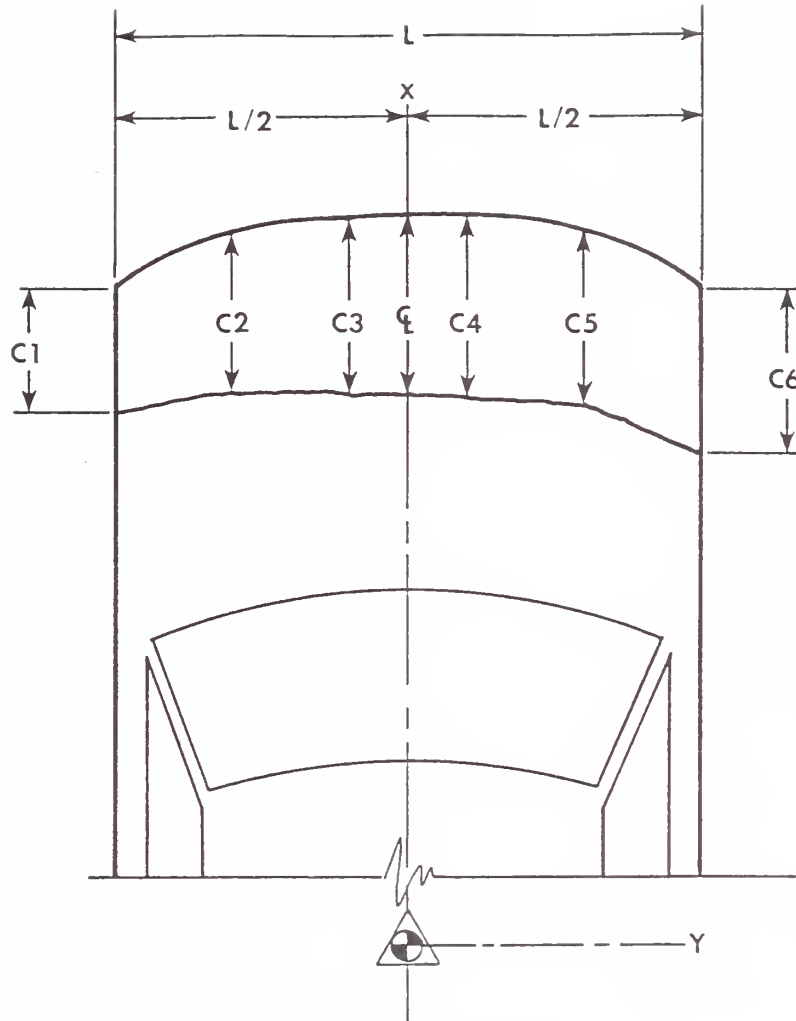
REFERENCE: X: + FORWARD FROM REAR BUMPER
 Y: + LEFTWARD FROM VEHICLE CENTERLINE
 Z: + UPWARD FROM GROUND LEVEL

TEST #880928-5

CONTACT SWITCH LOCATIONS AND DATA SUMMARY

LOCATION	SEPARATION TIME (MSEC)
VEHICLE CONTACT SWITCH - LEFT	153.9γ
VEHICLE CONTACT SWITCH - CENTER	125.0γ
VEHICLE CONTACT SWITCH - RIGHT	151.2
BARRIER CONTACT SWITCH - LEFT	138.9
BARRIER CONTACT SWITCH - RIGHT	134.0

γ See TEST ANOMALIES



NOTE: L is pre-test length of contact surface.
 $C1$ through $C6$ are spaced equally apart.
 CL is taken at centerline of vehicle.
 All measurements are in inches.

Vehicle 1985 Ford Escort - Test #880928-5

	PRE-TEST*		POST-TEST		CUMULATIVE CRUSH
L	<u>58.5</u>				
C1	<u>160.7</u>	C1	<u>132.0</u>	C1	<u>28.7</u>
C2	<u>163.0</u>	C2	<u>134.4</u>	C2	<u>28.6</u>
C3	<u>164.0</u>	C3	<u>135.1</u>	C3	<u>28.9</u>
C4	<u>164.0</u>	C4	<u>135.5</u>	C4	<u>28.5</u>
C5	<u>163.2</u>	C5	<u>135.6</u>	C5	<u>27.6</u>
C6	<u>160.8</u>	C6	<u>135.1</u>	C6	<u>25.7</u>
CL	<u>164.5</u>	CL	<u>135.5</u>	CL	<u>29.0</u>

*Pre-test measurements taken from test #880928-1.

TEST #880928-5

CAMERA INFORMATION

<u>CAMERA NO.</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>LENS (mm)</u>	<u>SPEED (fps)</u>	<u>PURPOSE OF CAMERA DATA</u>
1	Right side wide	Photosonic 1B	25	500	Impact overall
2	Right side tight	Photosonic 1B	50	507	Impact closeup

SECTION 8.0

TEST #880928-6 SUMMARY

TEST CONDITIONS:

TEST NUMBER: 880928-6

DATE OF TEST: 9/28/88

TIME OF TEST: 1400

AMBIENT TEMPERATURE AT IMPACT AREA: 71° F

SUBJECT VEHICLE DATA:

	<u>ACTUAL</u>	<u>INTENDED</u>
TEST WEIGHT (lbs.)	2765	2740
VEHICLE ORIENTATION (deg.)	0	0
VEHICLE VELOCITY (mph.)	30.0	30.0
MAXIMUM CUMULATIVE CRUSH (in.)	53.6	
AVERAGE CUMULATIVE CRUSH $\frac{\{C1+C6+C2+C3+C4+C5\}}{5}$ (in.)	52.3	

VEHICLE ATTITUDES:

POST-TEST: LF: 22.4; RF: 27.2; LR: 22.4; RR: 24.1

TEST NUMBER 6

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

No.	LOCATION	X*	Y*	Z*	POSITIVE DIRECTION		NEGATIVE DIRECTION	
					MAX G	MSEC	MAX G	MSEC
5	VEHICLE REAR DECK PRIMARY LONGITUDINAL	49.2	0.0	17.8	5.4	189.9	25.2	90.5
6	VEHICLE REAR DECK REDUNDANT LONGITUDINAL	49.2	1.7	17.8	6.1	189.9	26.1	92.9

* ALL MEASUREMENTS OF ACCELEROMETER LOCATIONS ARE IN INCHES.

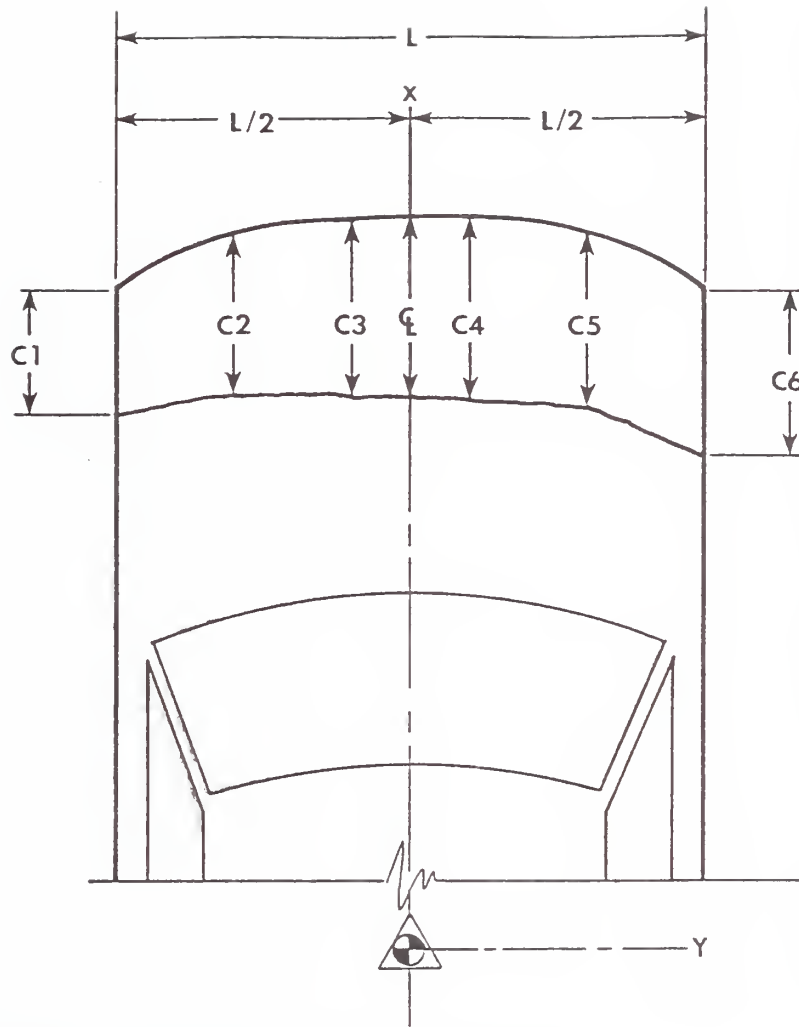
REFERENCE: X: + FORWARD FROM REAR BUMPER
 Y: + LEFTWARD FROM VEHICLE CENTERLINE
 Z: + UPWARD FROM GROUND LEVEL

TEST #880928-6

CONTACT SWITCH LOCATIONS AND DATA SUMMARY

LOCATION	SEPARATION TIME (MSEC)
VEHICLE CONTACT SWITCH - LEFT	188.4
VEHICLE CONTACT SWITCH - CENTER	193.5
VEHICLE CONTACT SWITCH - RIGHT	Y
BARRIER CONTACT SWITCH - LEFT	189.0
BARRIER CONTACT SWITCH - RIGHT	167.1

Y See TEST ANOMALIES



NOTE: L is pre-test length of contact surface.
 C1 through C6 are spaced equally apart.
 CL is taken at centerline of vehicle.
 All measurements are in inches.

Vehicle 1985 Ford Escort - Test #880928-6

	PRE-TEST*	POST-TEST	CUMULATIVE CRUSH
L	<u>58.5</u>		
C1	<u>160.7</u>	C1 <u>110.6</u>	C1 <u>50.1</u>
C2	<u>163.0</u>	C2 <u>112.2</u>	C2 <u>50.8</u>
C3	<u>164.0</u>	C3 <u>111.4</u>	C3 <u>52.6</u>
C4	<u>164.0</u>	C4 <u>110.9</u>	C4 <u>53.1</u>
C5	<u>163.2</u>	C5 <u>109.8</u>	C5 <u>53.4</u>
C6	<u>160.8</u>	C6 <u>107.9</u>	C6 <u>52.9</u>
CL	<u>164.5</u>	CL <u>110.9</u>	CL <u>53.6</u>

*Pre-test measurements taken from test #880928-1.

TEST #880928-6

CAMERA INFORMATION

<u>CAMERA NO.</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>LENS (mm)</u>	<u>SPEED (fps)</u>	<u>PURPOSE OF CAMERA DATA</u>
1	Right side wide	Photosonic 1B	25	500	Impact overall
2	Right side tight	Photosonic 1B	50	507	Impact closeup

APPENDIX A
PHOTOGRAPHS

TEST #880928-1

LIST OF PHOTOGRAPHS

1. PRE-TEST OVERALL LEFT SIDE VIEW
2. POST-TEST OVERALL LEFT SIDE VIEW
3. PRE-TEST OVERALL RIGHT SIDE VIEW
4. POST-TEST OVERALL RIGHT SIDE VIEW
5. PRE-TEST OVERALL FRONT VIEW
6. POST-TEST OVERALL FRONT VIEW
7. PRE-TEST LEFT FRONT VIEW
8. POST-TEST LEFT FRONT VIEW
9. PRE-TEST RIGHT FRONT VIEW
10. POST-TEST RIGHT FRONT VIEW
11. PRE-TEST BARRIER CONTACT SWITCH
12. POST-TEST BARRIER CONTACT SWITCH



Figure A-1. PRE-TEST OVERALL LEFT SIDE VIEW



Figure A-2. POST-TEST OVERALL LEFT SIDE VIEW

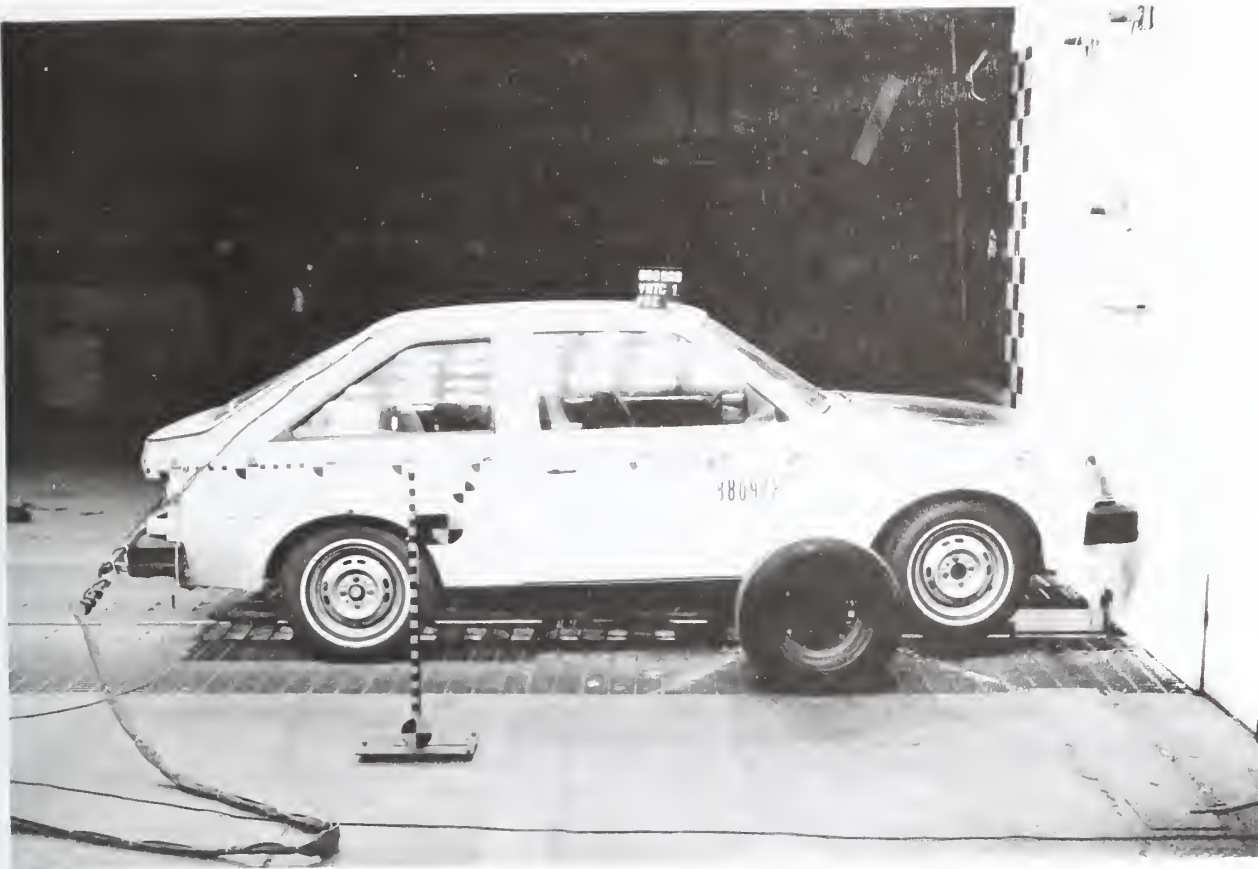


Figure A-3. PRE-TEST OVERALL RIGHT SIDE VIEW



Figure A-4. POST-TEST OVERALL RIGHT SIDE VIEW



Figure A-5. PRE-TEST OVERALL FRONT VIEW



Figure A-6. POST-TEST OVERALL FRONT VIEW



Figure A-7. PRE-TEST LEFT FRONT VIEW



Figure A-8. POST-TEST LEFT FRONT VIEW



Figure A-9. PRE-TEST RIGHT FRONT VIEW



Figure A-10. POST-TEST RIGHT FRONT VIEW



Figure A-11. PRE-TEST BARRIER CONTACT SWITCH

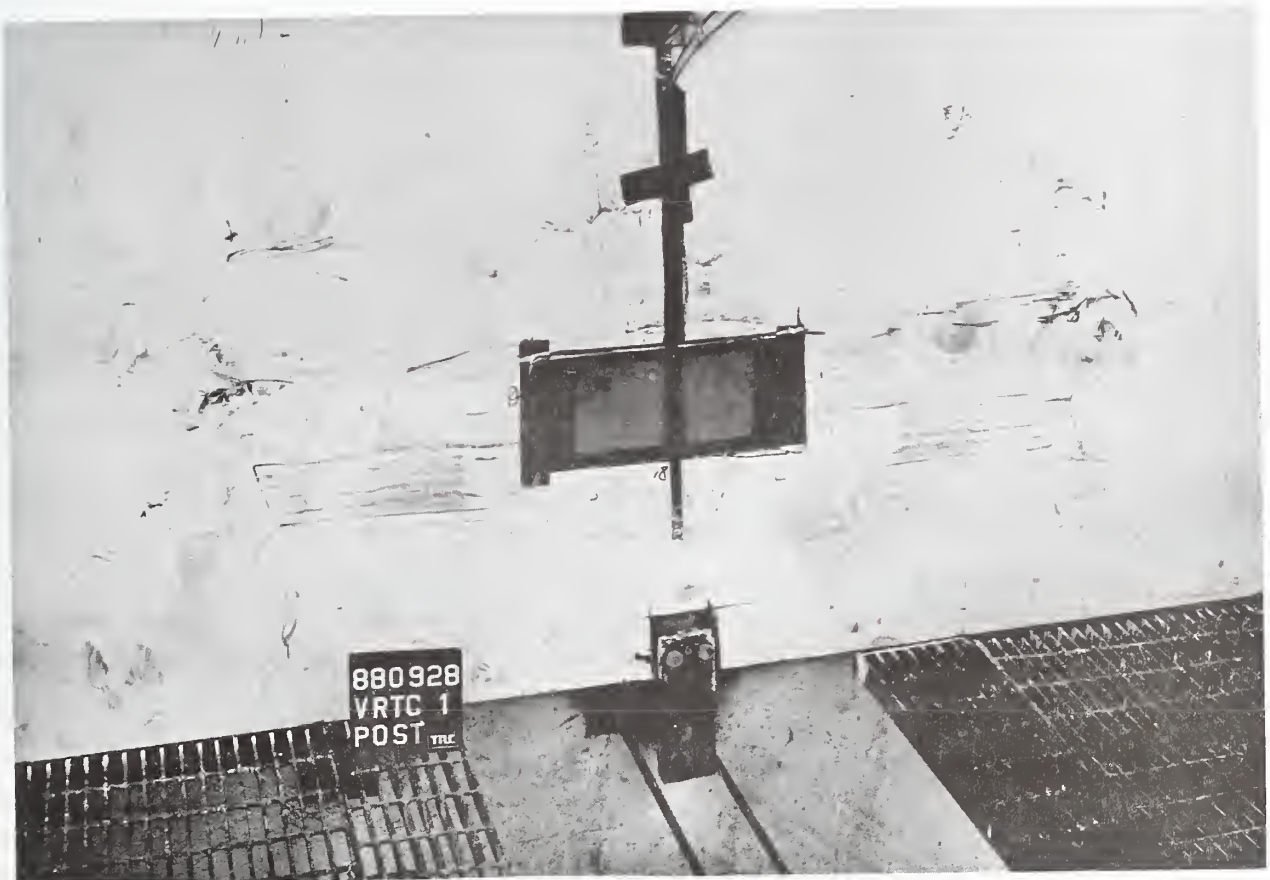


Figure A-12. POST-TEST BARRIER CONTACT SWITCH

TEST #880928-2

LIST OF PHOTOGRAPHS

13. POST-TEST OVERALL LEFT SIDE VIEW
14. POST-TEST OVERALL RIGHT SIDE VIEW
15. POST-TEST OVERALL FRONT VIEW
16. POST-TEST LEFT FRONT VIEW
17. POST-TEST RIGHT FRONT VIEW
18. POST-TEST BARRIER CONTACT SWITCH



Figure A-13. POST-TEST OVERALL LEFT SIDE VIEW



Figure A-14. POST-TEST OVERALL RIGHT SIDE VIEW



Figure A-15. POST-TEST OVERALL FRONT VIEW



Figure A-16. POST-TEST LEFT FRONT VIEW



Figure A-17. POST-TEST RIGHT FRONT VIEW

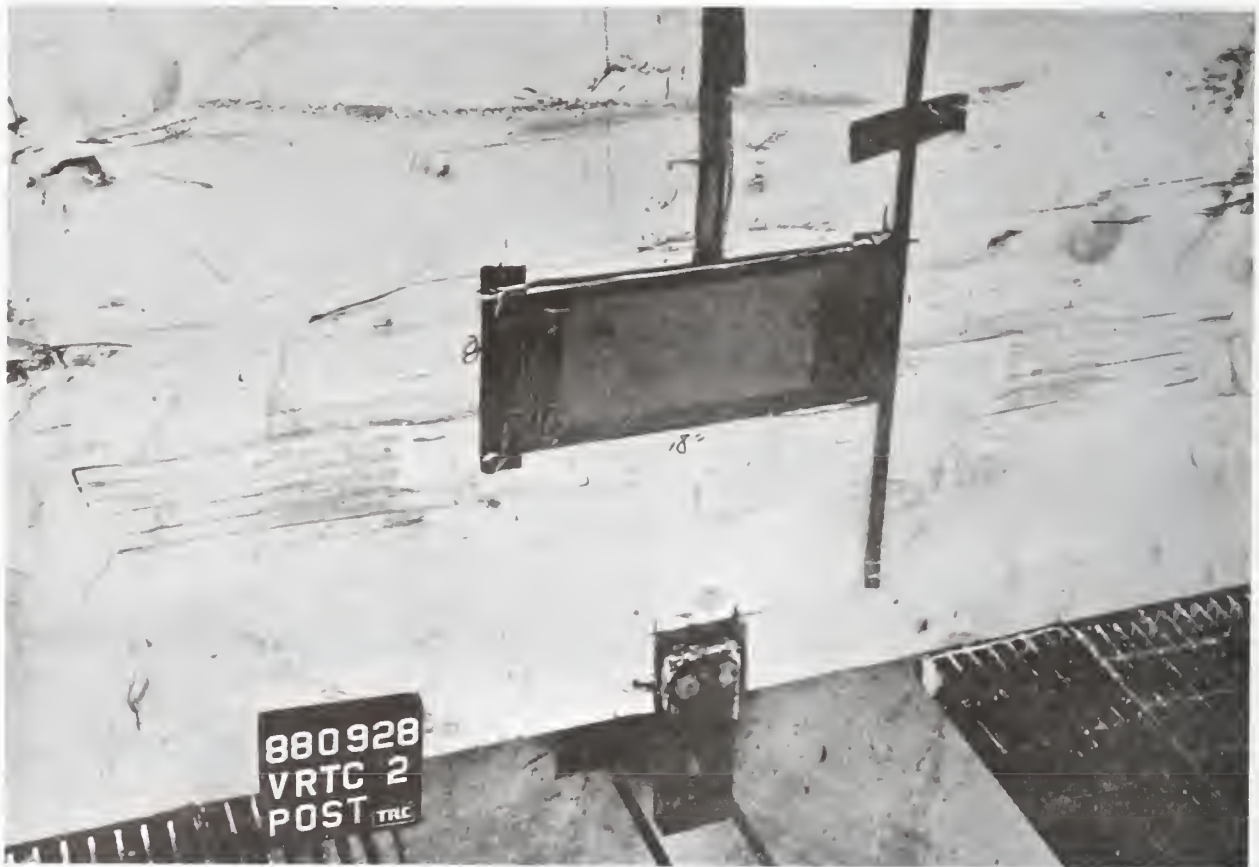


Figure A-18. POST-TEST BARRIER CONTACT SWITCH

TEST #880928-3
LIST OF PHOTOGRAPHS

19. POST-TEST OVERALL LEFT SIDE VIEW
20. POST-TEST OVERALL RIGHT SIDE VIEW
21. POST-TEST OVERALL FRONT VIEW
22. POST-TEST LEFT FRONT VIEW
23. POST-TEST RIGHT FRONT VIEW
24. POST-TEST BARRIER CONTACT SWITCH



Figure A-19. POST-TEST OVERALL LEFT SIDE VIEW



Figure A-20. POST-TEST OVERALL RIGHT SIDE VIEW

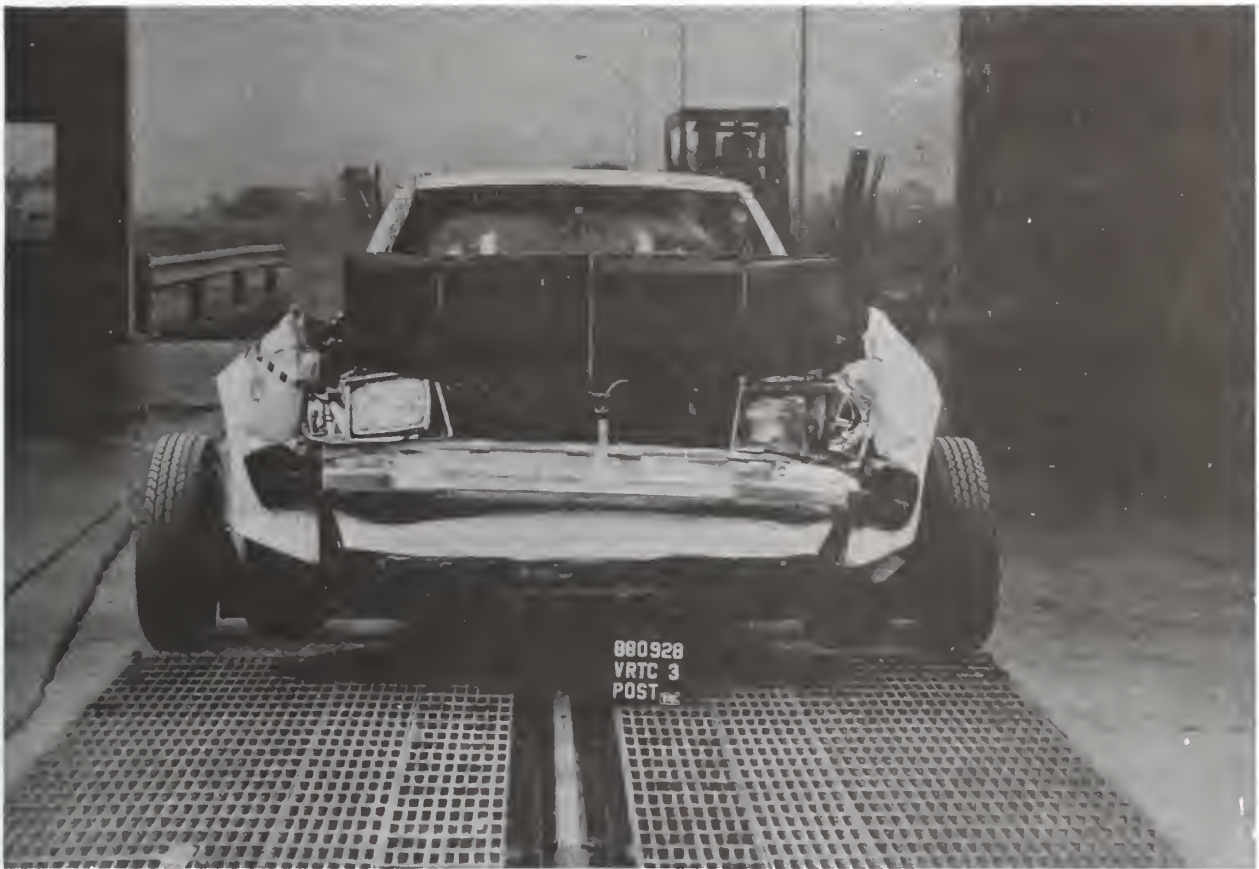


Figure A-21. POST-TEST OVERALL FRONT VIEW



Figure A-22. POST-TEST LEFT FRONT VIEW



Figure A-23. POST-TEST RIGHT FRONT VIEW



Figure A-24. POST-TEST BARRIER CONTACT SWITCH

TEST #880928-4
LIST OF PHOTOGRAPHS

25. POST-TEST OVERALL LEFT SIDE VIEW
26. POST-TEST OVERALL RIGHT SIDE VIEW
27. POST-TEST OVERALL FRONT VIEW
28. POST-TEST LEFT FRONT VIEW
29. POST-TEST RIGHT FRONT VIEW
30. POST-TEST BARRIER CONTACT SWITCH



Figure A-25. POST-TEST OVERALL LEFT SIDE VIEW



Figure A-26. POST-TEST OVERALL RIGHT SIDE VIEW

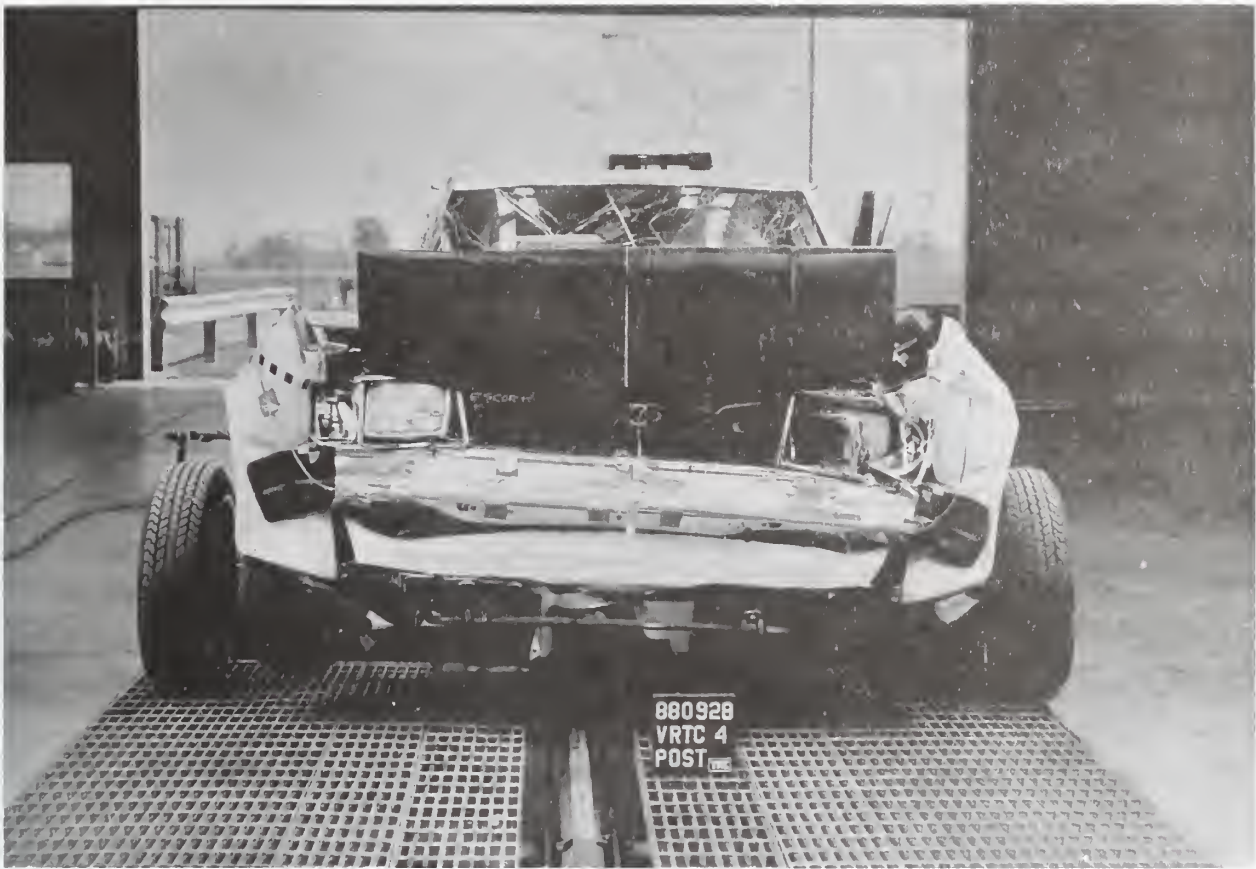


Figure A-27. POST-TEST OVERALL FRONT VIEW



Figure A-28. POST-TEST LEFT FRONT VIEW



Figure A-29. POST-TEST RIGHT FRONT VIEW

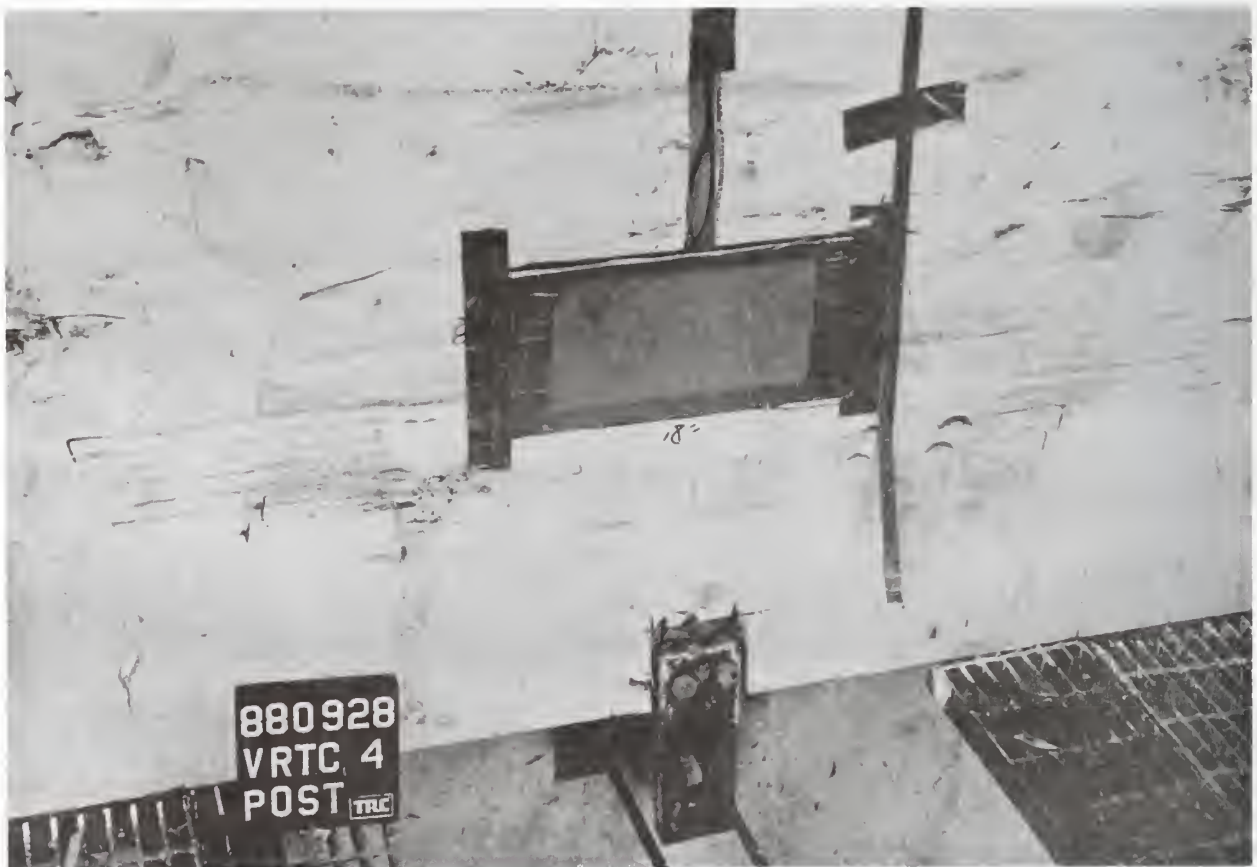


Figure A-30. POST-TEST BARRIER CONTACT SWITCH

TEST #880928-5
LIST OF PHOTOGRAPHS

31. POST-TEST OVERALL LEFT SIDE VIEW
32. POST-TEST OVERALL RIGHT SIDE VIEW
33. POST-TEST OVERALL FRONT VIEW
34. POST-TEST LEFT FRONT VIEW
35. POST-TEST RIGHT FRONT VIEW
36. POST-TEST BARRIER CONTACT SWITCH
37. POST-TEST VEHICLE CLOSEUP - VIEW 1
38. POST-TEST VEHICLE CLOSEUP - VIEW 2
39. POST-TEST VEHICLE CLOSEUP - VIEW 3
40. POST-TEST VEHICLE CLOSEUP - VIEW 4
41. POST-TEST VEHICLE CLOSEUP - VIEW 5



Figure A-31. POST-TEST OVERALL LEFT SIDE VIEW

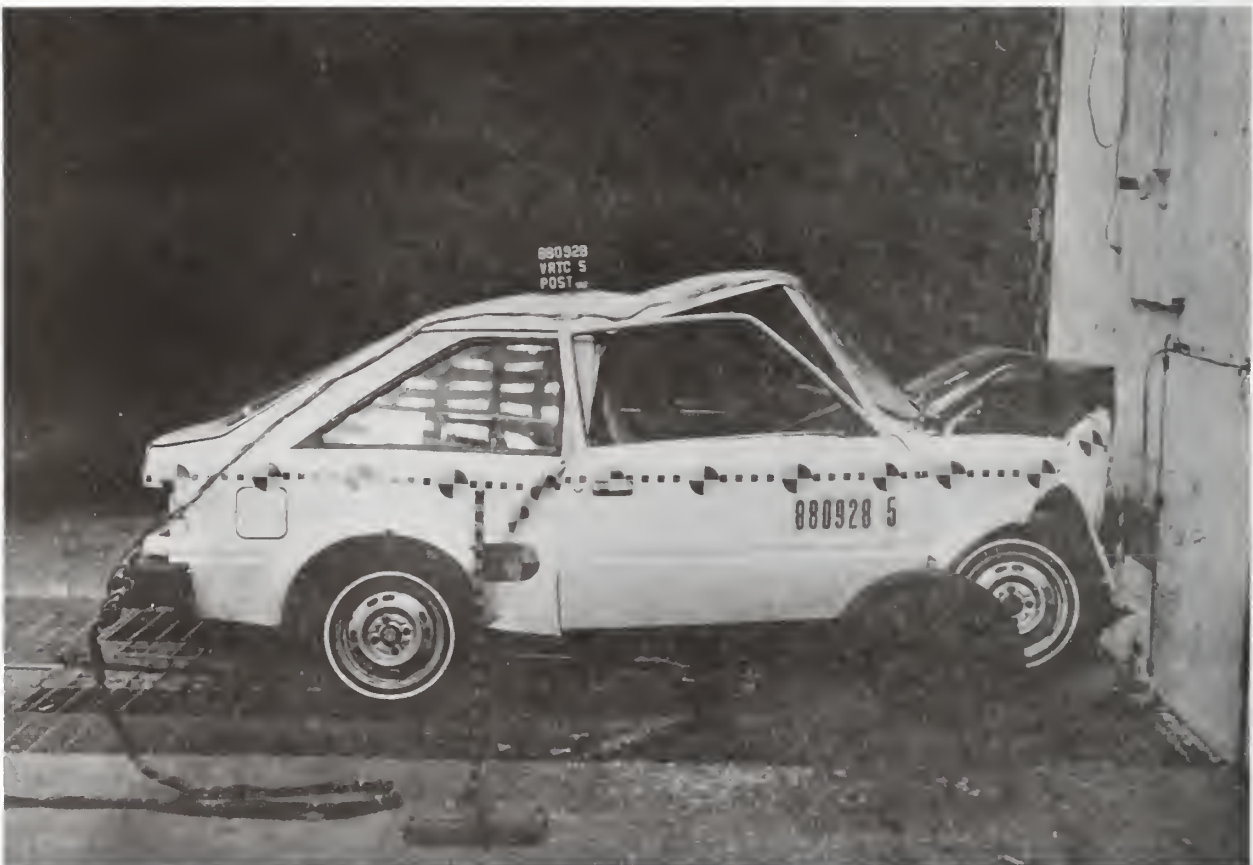


Figure A-32. POST-TEST OVERALL RIGHT SIDE VIEW

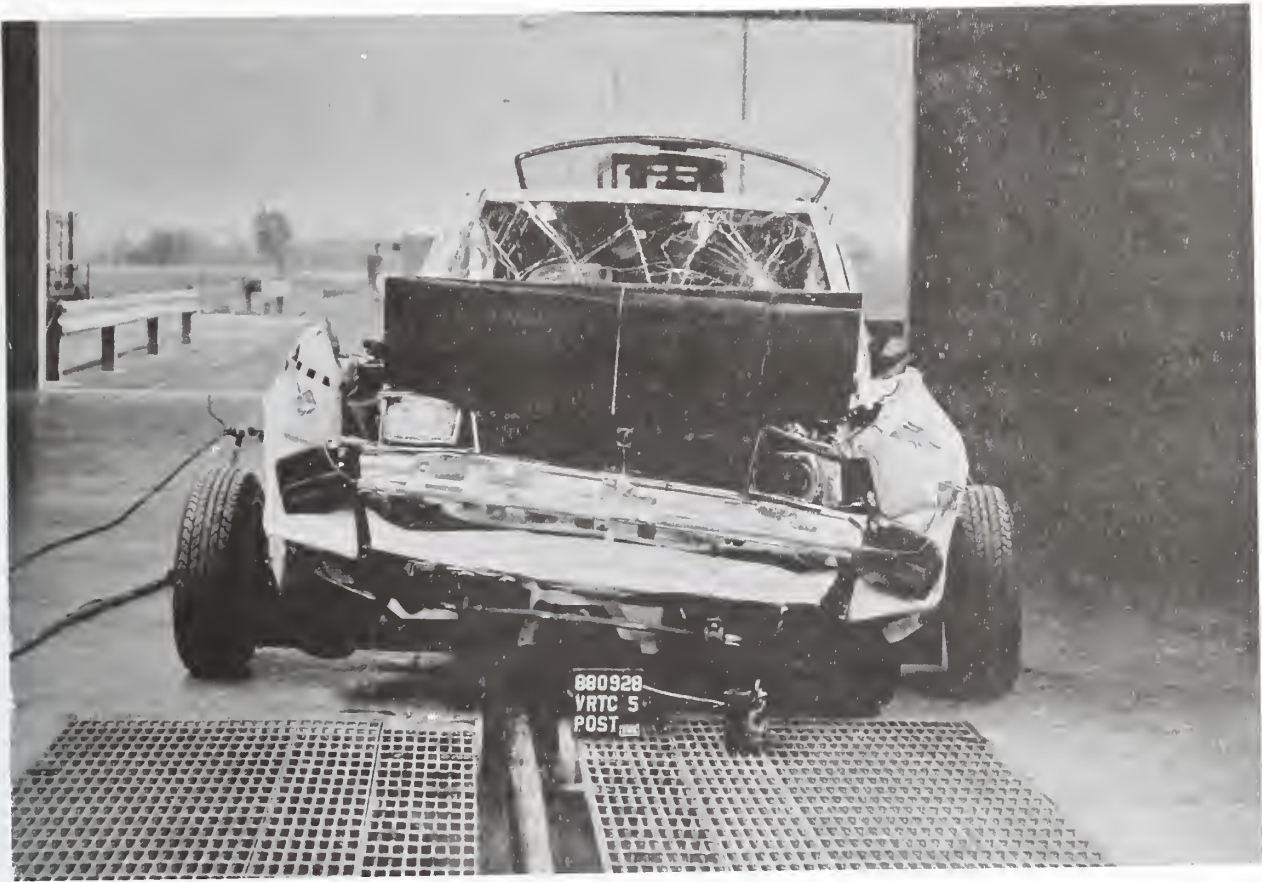


Figure A-33. POST-TEST OVERALL FRONT VIEW



Figure A-34. POST-TEST LEFT FRONT VIEW

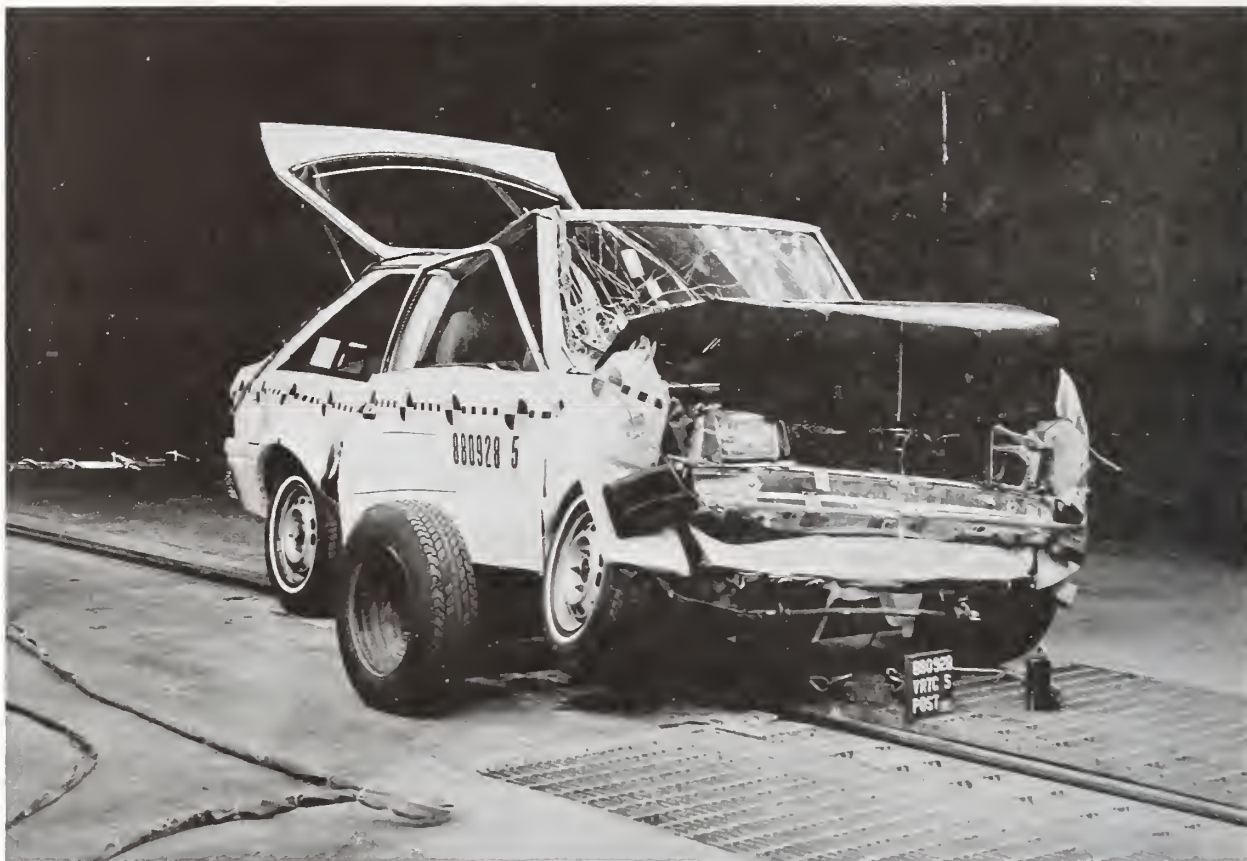


Figure A-35. POST-TEST RIGHT FRONT VIEW



Figure A-36. POST-TEST BARRIER CONTACT SWITCH



Figure A-37. POST-TEST VEHICLE CLOSEUP - VIEW 1



Figure A-38. POST-TEST VEHICLE CLOSEUP - VIEW 2

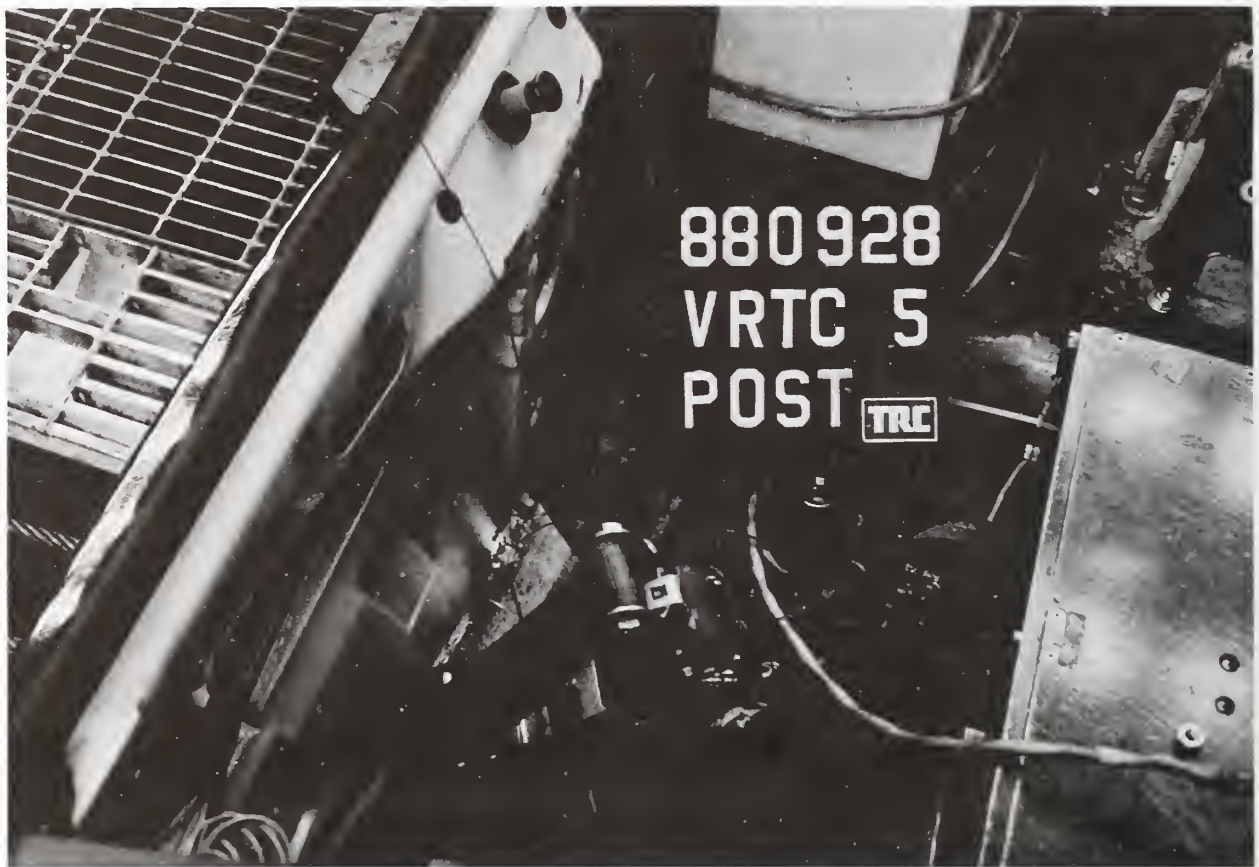


Figure A-39. POST-TEST VEHICLE CLOSEUP - VIEW 3



Figure A-40. POST-TEST VEHICLE CLOSEUP - VIEW 4

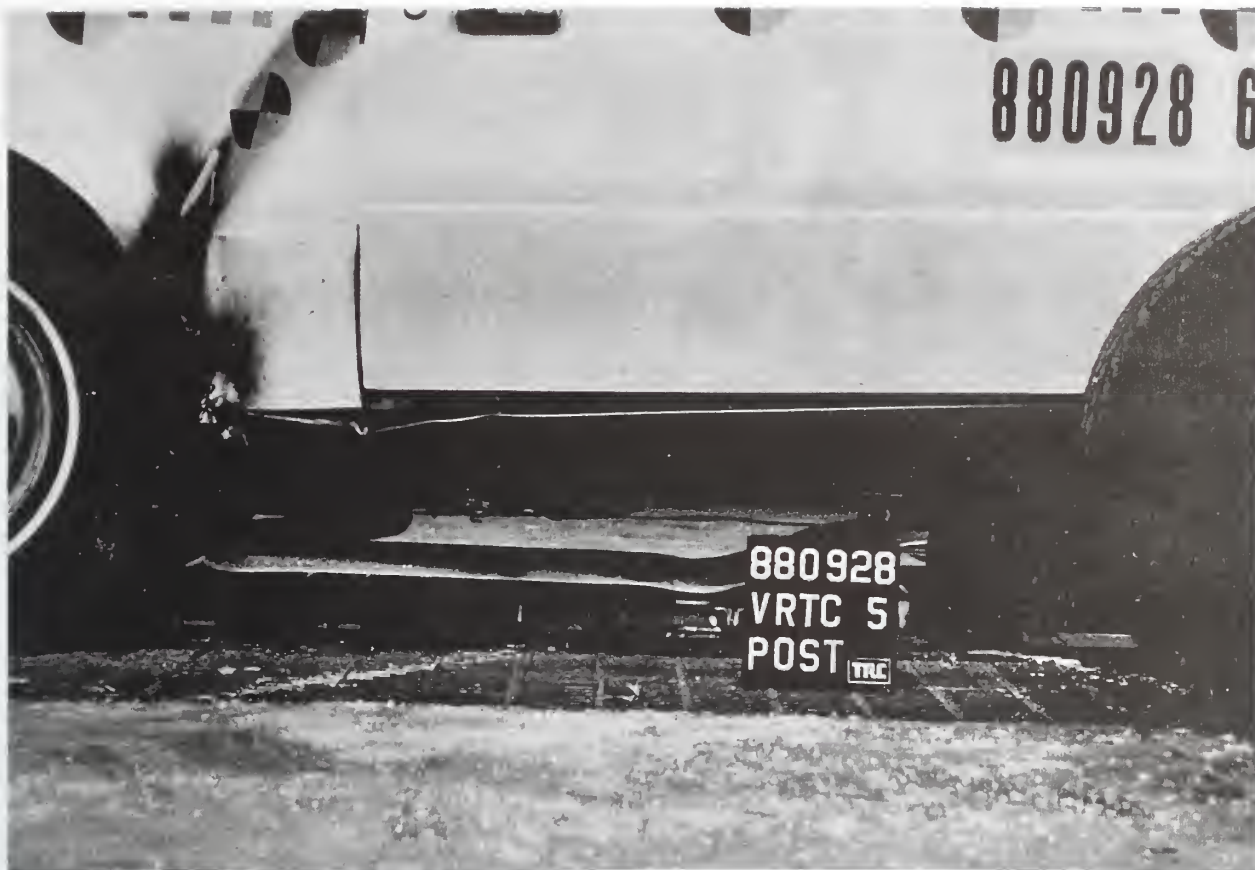


Figure A-41. POST-TEST VEHICLE CLOSEUP - VIEW 5

TEST #880928-6

LIST OF PHOTOGRAPHS

- 42. POST-TEST OVERALL LEFT SIDE VIEW
- 43. POST-TEST OVERALL RIGHT SIDE VIEW
- 44. POST-TEST OVERALL FRONT VIEW
- 45. POST-TEST LEFT FRONT VIEW
- 46. POST-TEST RIGHT FRONT VIEW
- 47. POST-TEST BARRIER CONTACT SWITCH
- 48. POST-TEST VEHICLE CLOSEUP - VIEW 1
- 49. POST-TEST VEHICLE CLOSEUP - VIEW 2
- 50. POST-TEST VEHICLE CLOSEUP - VIEW 3
- 51. POST-TEST VEHICLE CLOSEUP - VIEW 4
- 52. POST-TEST VEHICLE CLOSEUP - VIEW 5
- 53. POST-TEST VEHICLE CLOSEUP - VIEW 6
- 54. POST-TEST VEHICLE CLOSEUP - VIEW 7
- 55. POST-TEST VEHICLE CLOSEUP - VIEW 8



Figure A-42. POST-TEST OVERALL LEFT SIDE VIEW



Figure A-43. POST-TEST OVERALL RIGHT SIDE VIEW

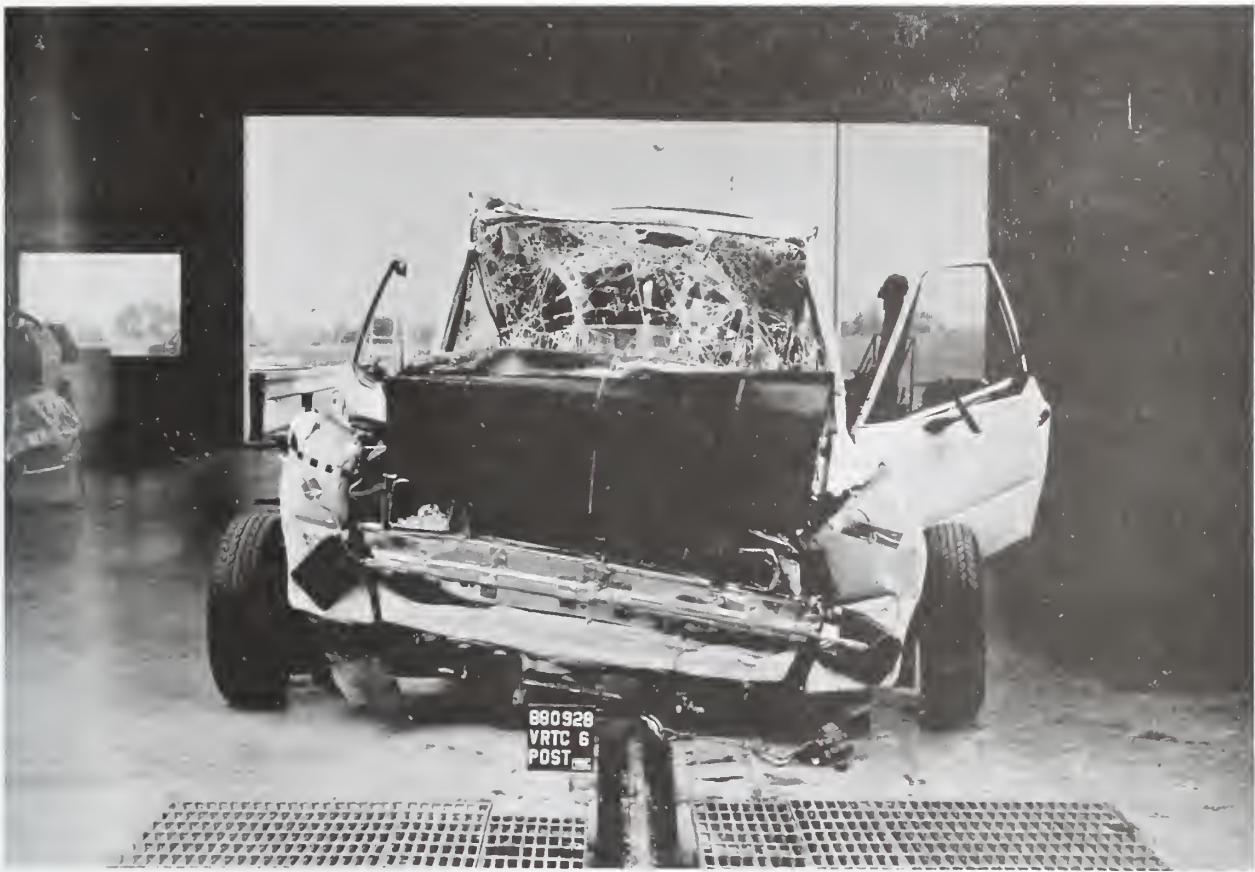


Figure A-44. POST-TEST OVERALL FRONT VIEW



Figure A-45. POST-TEST LEFT FRONT VIEW



Figure A-46. POST-TEST RIGHT FRONT VIEW



Figure A-47. POST-TEST BARRIER CONTACT SWITCH



Figure A-48. POST-TEST VEHICLE CLOSEUP - VIEW 1



Figure A-49. POST-TEST VEHICLE CLOSEUP - VIEW 2



Figure A-50. POST-TEST VEHICLE CLOSEUP - VIEW 3



Figure A-51. POST-TEST VEHICLE CLOSEUP - VIEW 4



Figure A-52. POST-TEST VEHICLE CLOSEUP - VIEW 5



Figure A-53. POST-TEST VEHICLE CLOSEUP - VIEW 6



Figure A-54. POST-TEST VEHICLE CLOSEUP - VIEW 7



Figure A-55. POST-TEST VEHICLE CLOSEUP - VIEW 8

APPENDIX B
DATA PLOTS

VRTC-1 , 880928

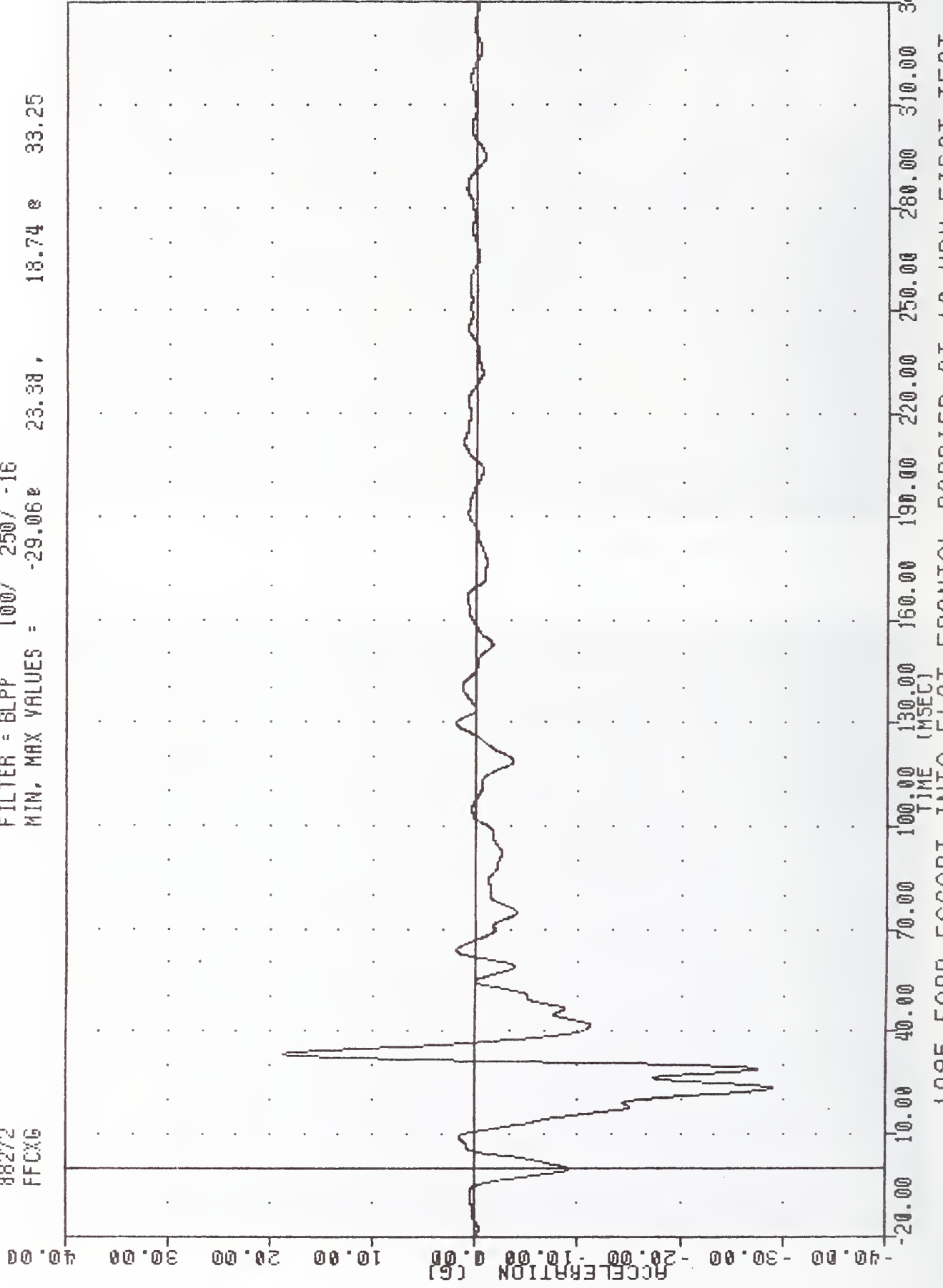
DAMAGE ALGORITHM REFORMULATION

88272

FFCXG

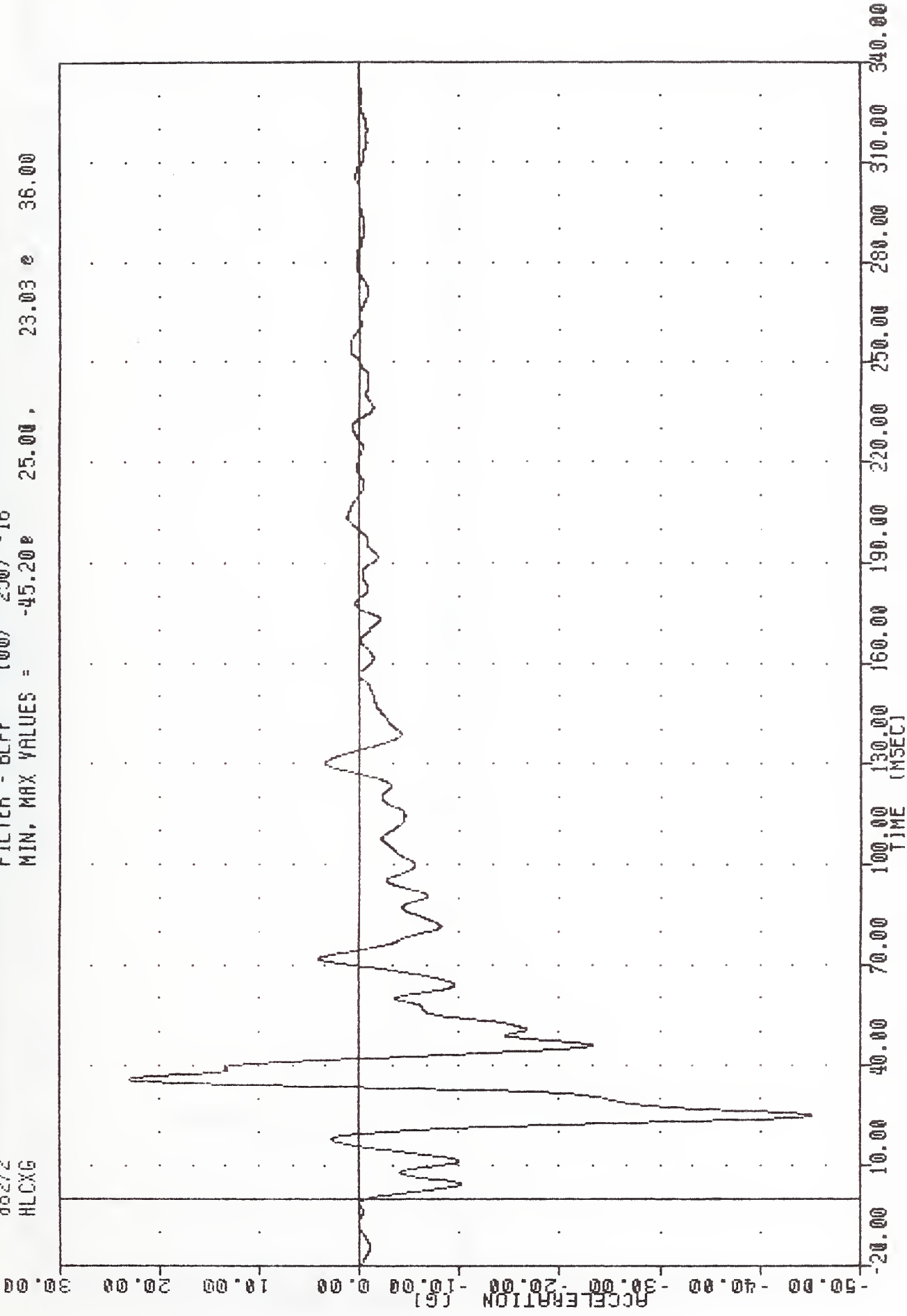
FILTER = BLPP 100/ 250/ -16

MIN. MAX VALUES = -29.06 23.38 , 18.74 33.25



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE FRONT FRAME CROSSMEMBER BOTTOM X AXIS ACCELERATION

VRTC-1 , 880928
DAMAGE ALGORITHM REFORMULATION
88272 FILTER = BLPP 100/ 250/ -16
HLCXG MIN, MAX VALUES = -45.20e 23.03 e 36.00



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE HOOD LATCH CROSSMEMBER X AXIS ACCELERATION

VRTC-1 , 880928

DAMAGE ALGORITHM REFORMULATION

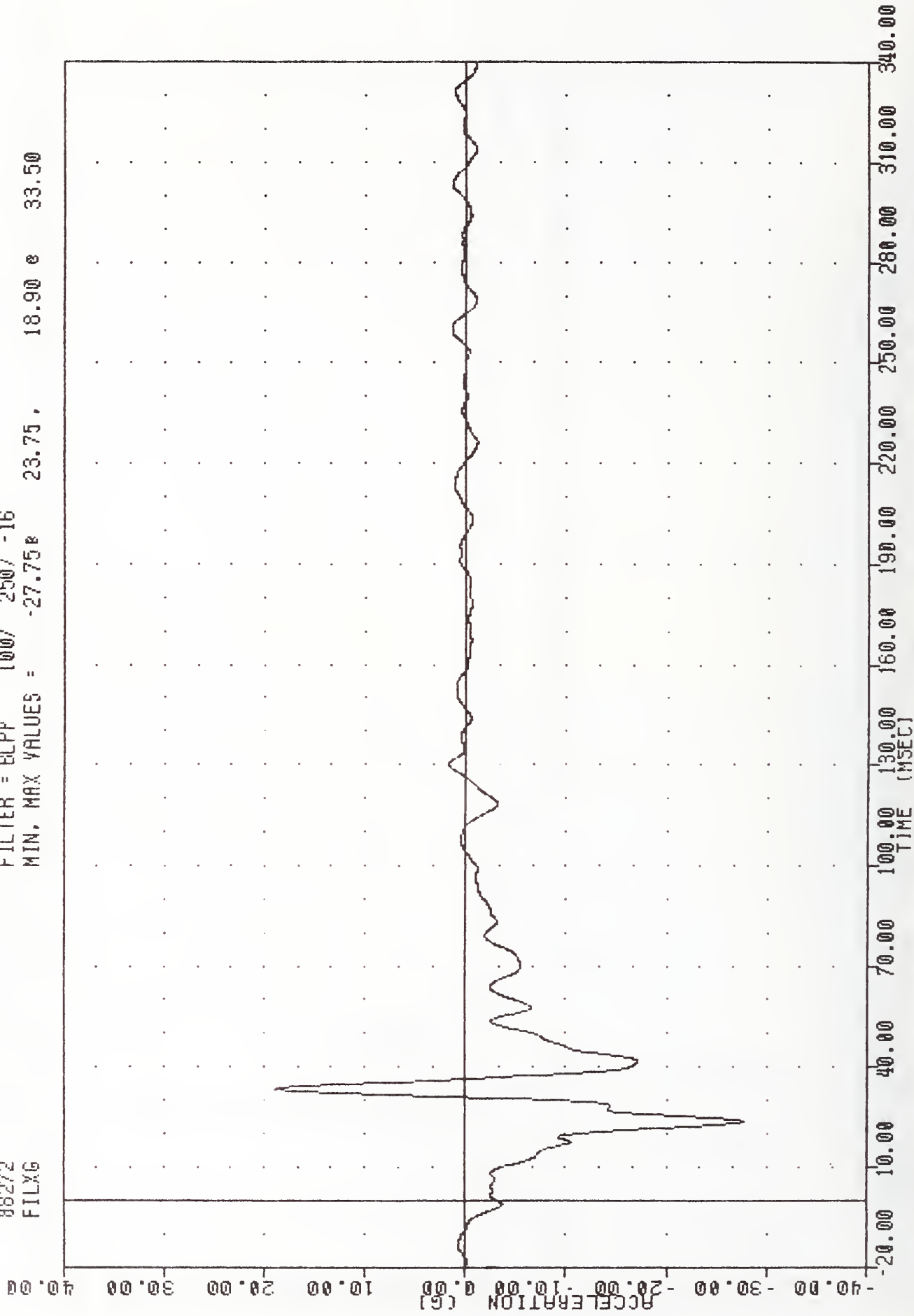
88272

FILXG

FILTER = BLPF 100/ 250/ -16

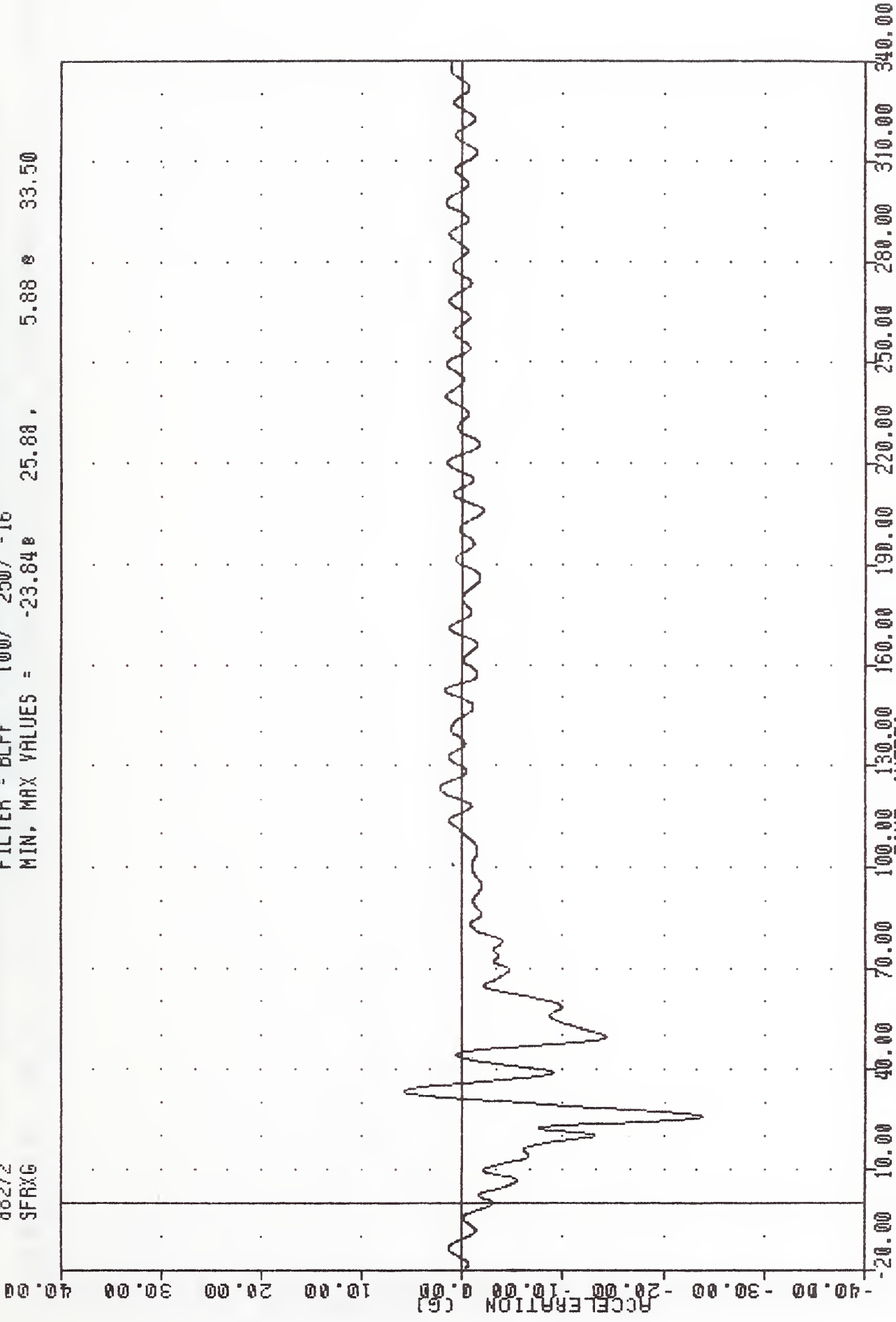
MIN, MAX VALUES = -27.75E

23.75, 18.90 e 33.50



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE LEFT FENDER WELL INSIDE X AXIS ACCELERATION

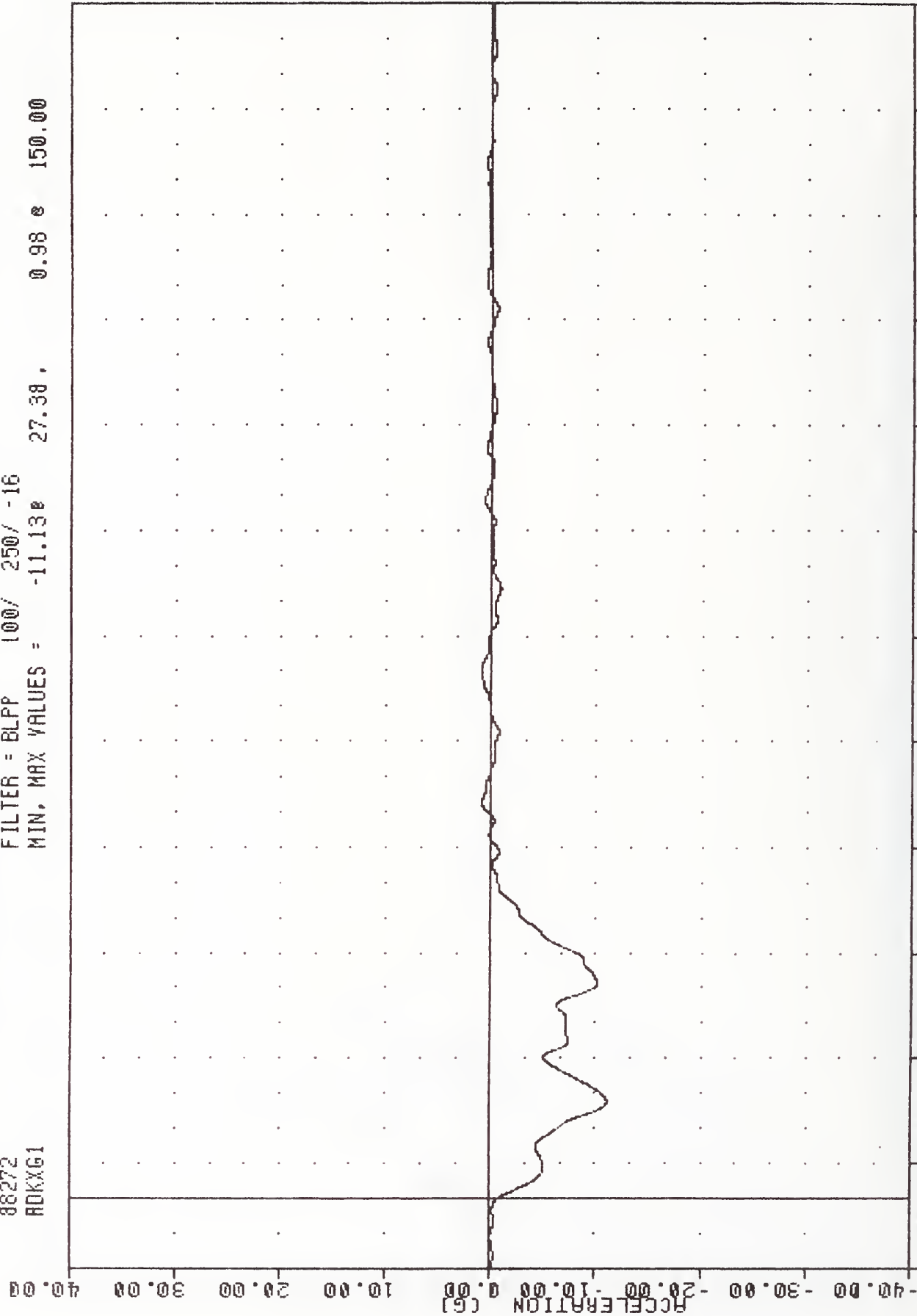
VRTC-1 , 880928
DAMAGE ALGORITHM REFORMULATION
88272 FILTER = BLPP 100/ 250/ -16
SFRXG MIN. MAX VALUES = -23.84 25.88 5.88 33.50



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE SUSPENSION FRONT RIGHT X AXIS ACCELERATION

VRTC-1 , 880928
DAMAGE ALGORITHM REFORMULATION
88272
ADKXG1

FILTER = BLPP 100/ 250/ -16
MIN, MAX VALUES = -11.13 27.38 , 0.98 e 150.00



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE REAR DECK X AXIS ACCELERATION

VRTC-1 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

RDKXV1

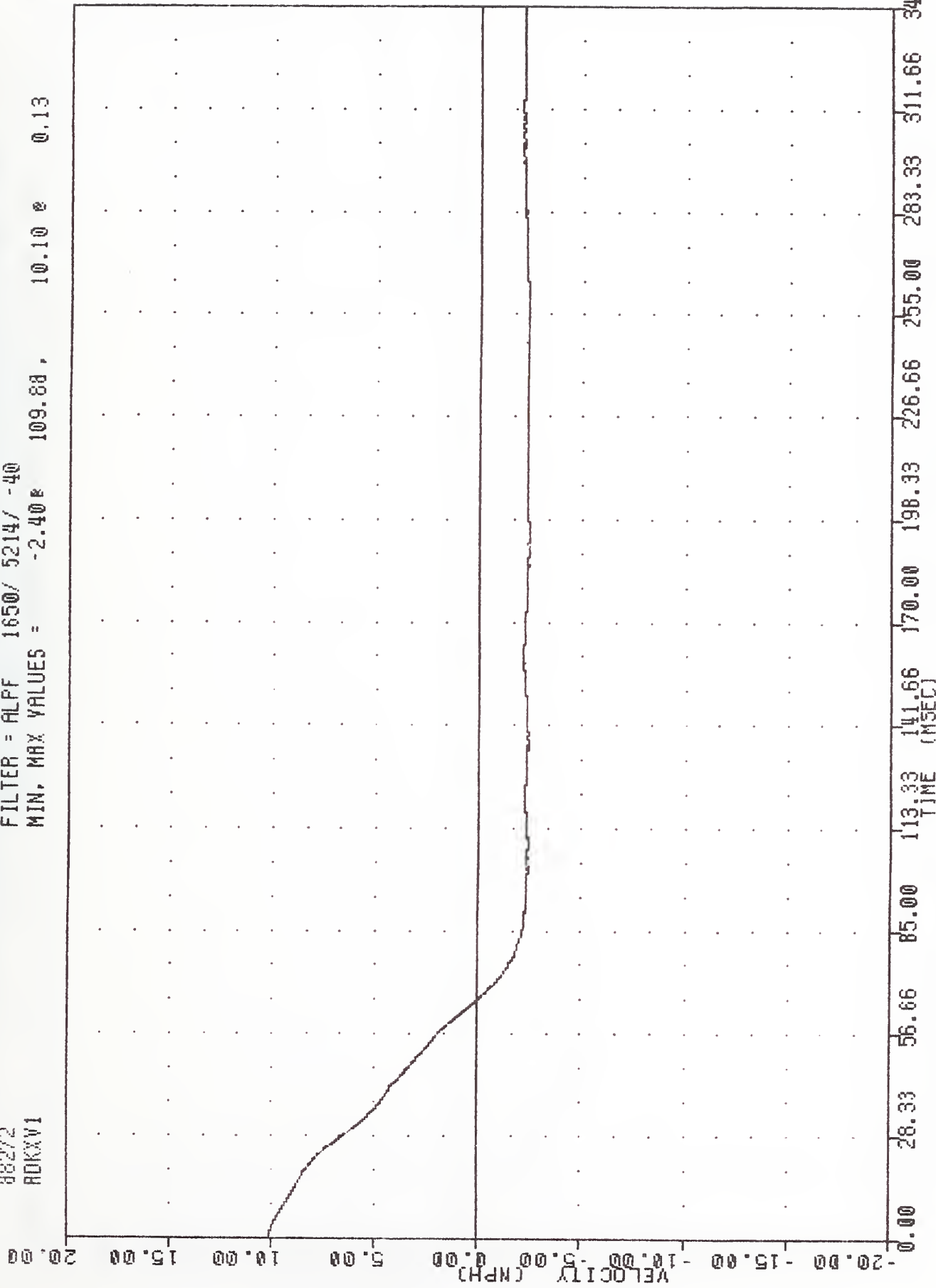
FILTER = ALPF 1650/ 5214/ -40

MIN. MAX VALUES = -2.40E

109.88 ,

10.10 e

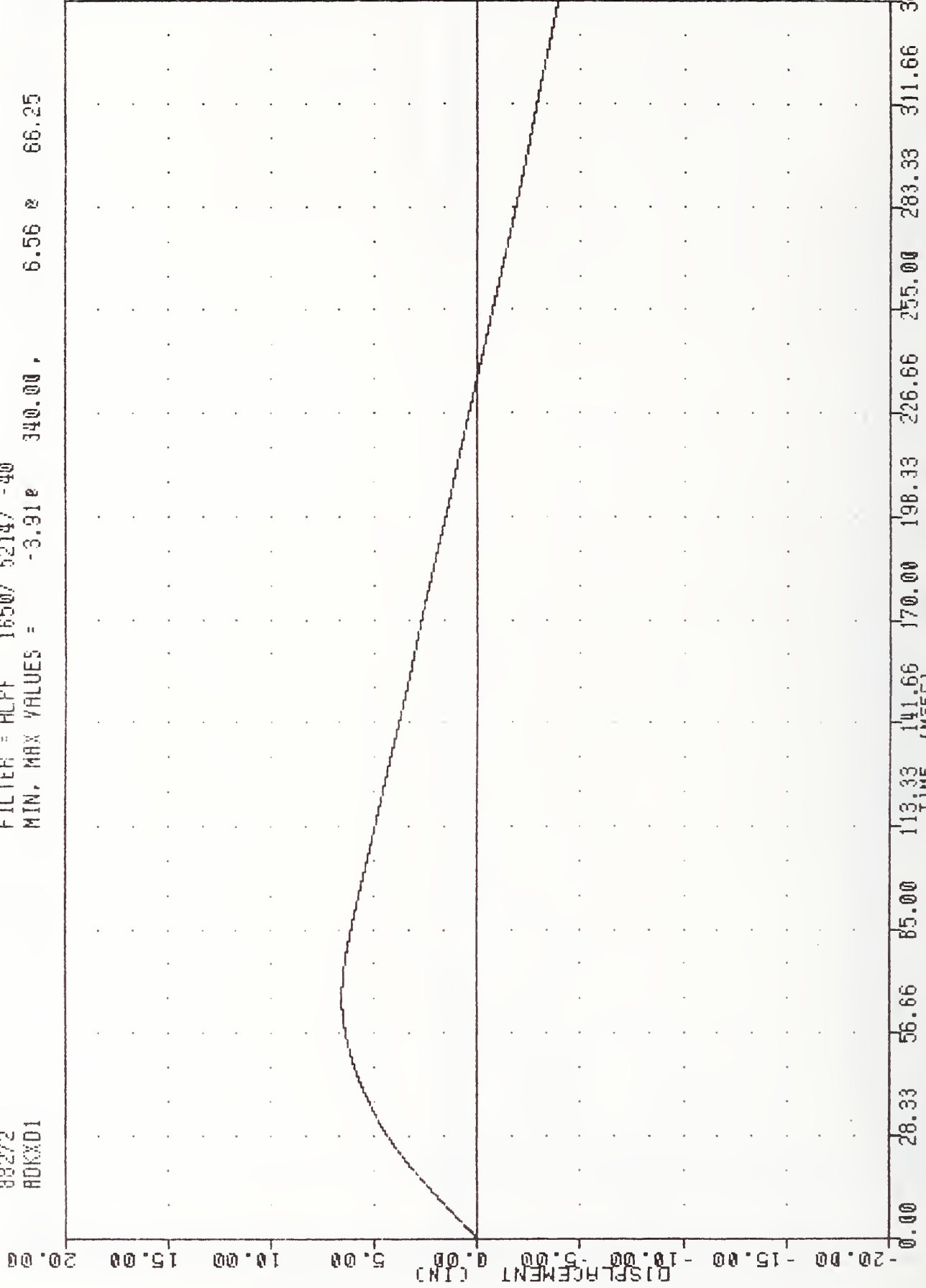
0.13



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE REAR DECK X AXIS VELOCITY

VRTC-1 , 880928
 DAMAGE ALGORITHM REFORMULATION
 88272
 ADKXD1

FILTER = ALPF 1650/ 5214/ -40
 MIN, MAX VALUES = -3.91e 340.00 , 6.56 e 66.25



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
 VEHICLE REAR DECK X AXIS DISPLACEMENT

VRTC-1 , 880928

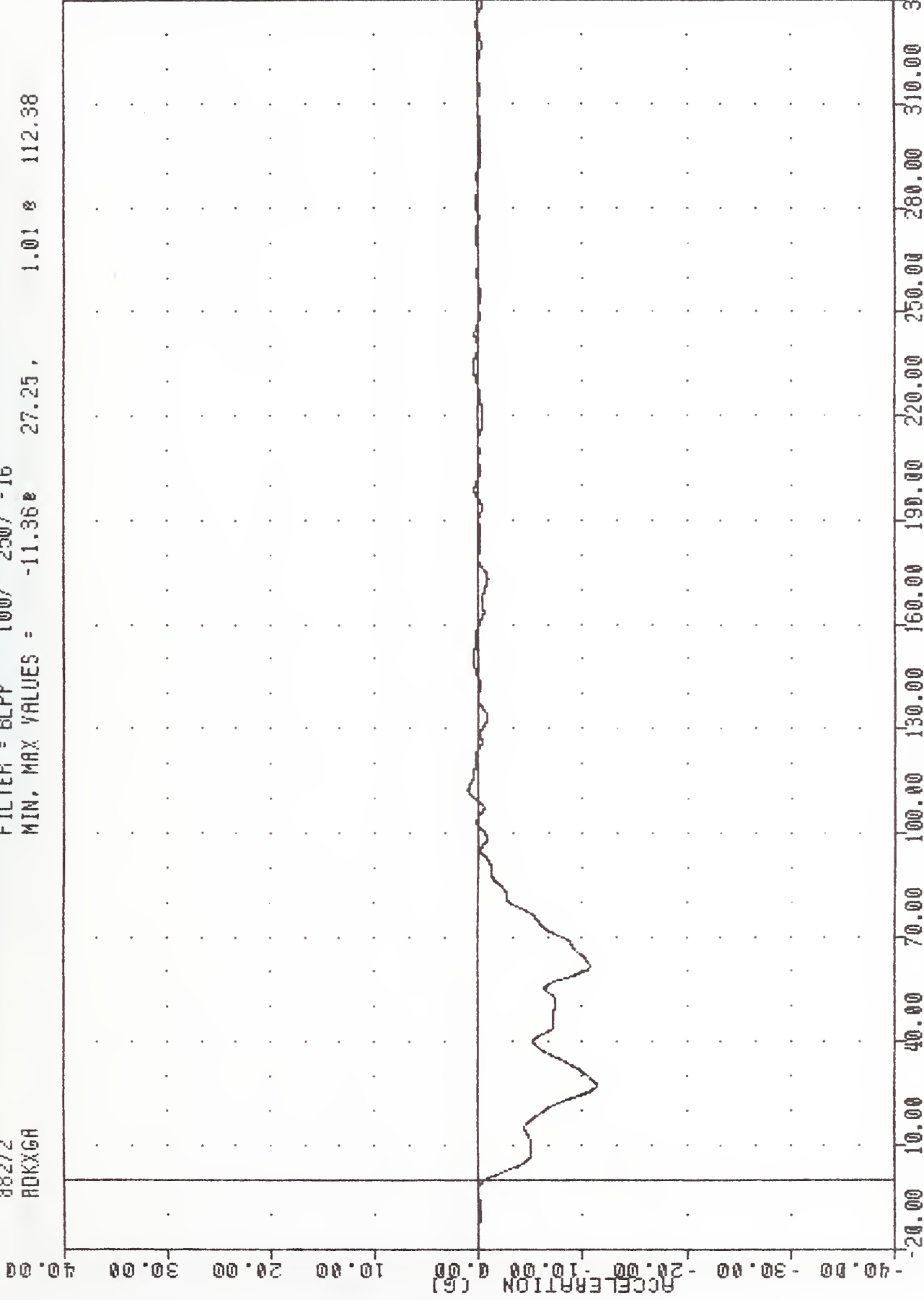
DAMAGE ALGORITHM REFORMULATION

88272

FILTER = BLPP 100/ 250/ -16

RDKXGA

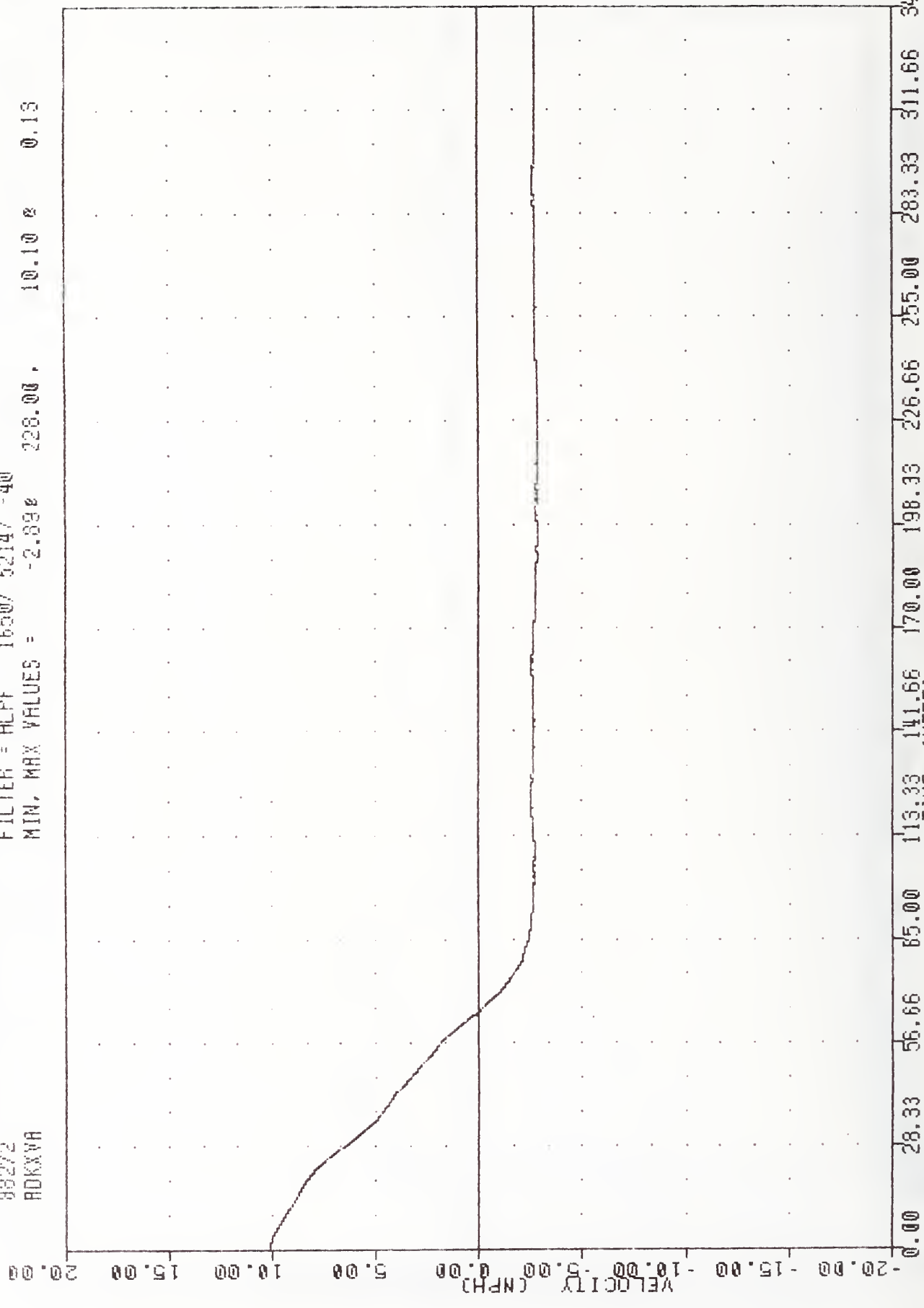
MIN, MAX VALUES = -11.36e 27.25, 1.01 e 112.38



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE REAR DECK X AXIS REDUNDANT ACCELERATION

VRTC-1 , 880928
 DAMAGE ALGORITHM REFORMULATION
 88272
 RDKXVA

FILTER = ALPF 1650/ 5214/ -40
 MIN, MAX VALUES = -2.89e 10.10 e 0.13



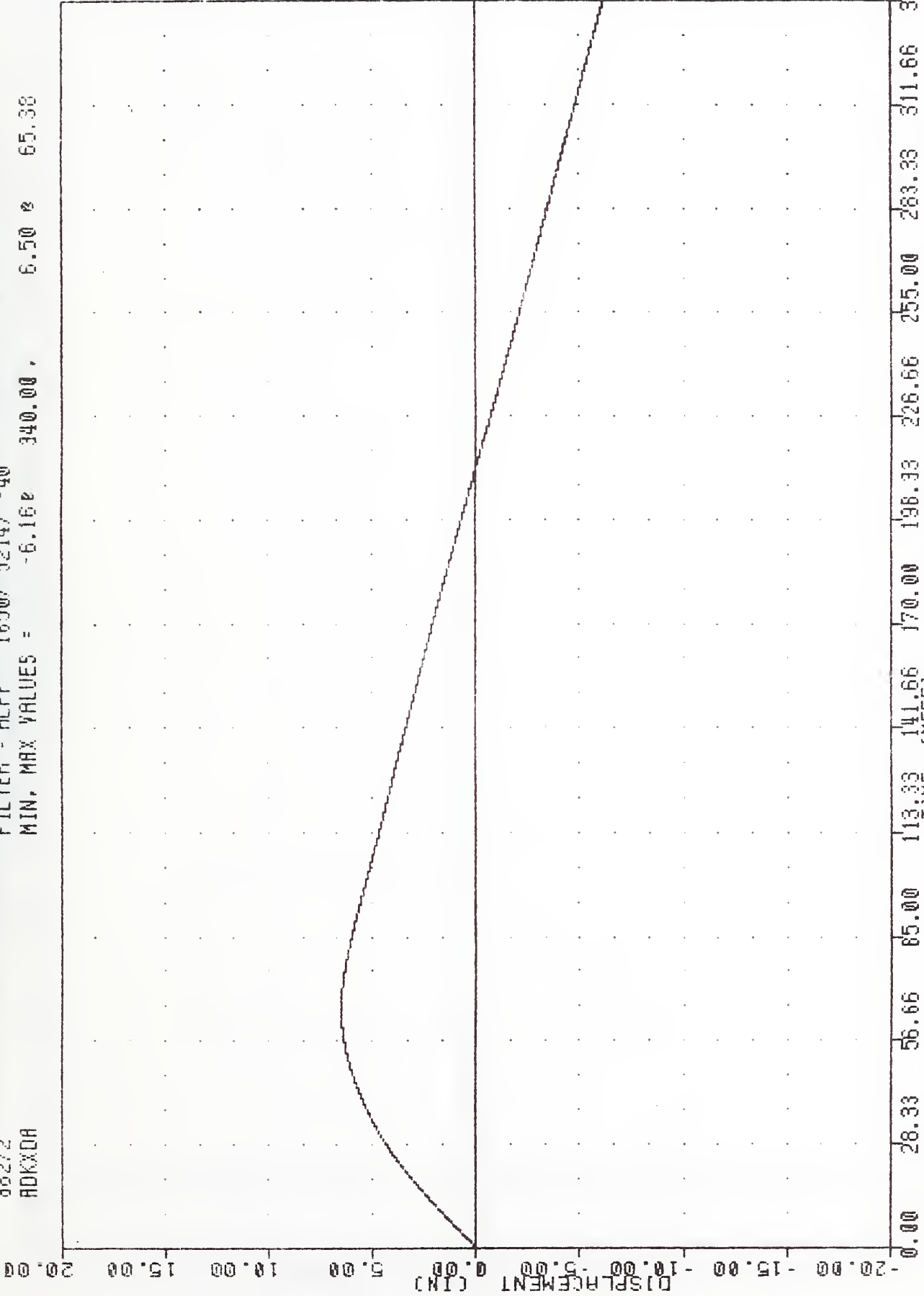
1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
 VEHICLE REAR DECK X AXIS VELOCITY REDUNDANT

VRTC-1 , 880928

DAMAGE ALGORITHM REFORMULATION

88272 FILTER = ALPF 1650/ 5214/ -40

ADKXDA MIN. MAX VALUES = -6.16e 340.00 , 6.50 e 65.38



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE REAR DECK X AXIS DISPLACEMENT REDUNDANT

VRTC-1 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

FILS1

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -6.80e

45.50 , 0.31 e 87.50

10.00

7.50

5.00

2.50

0.00

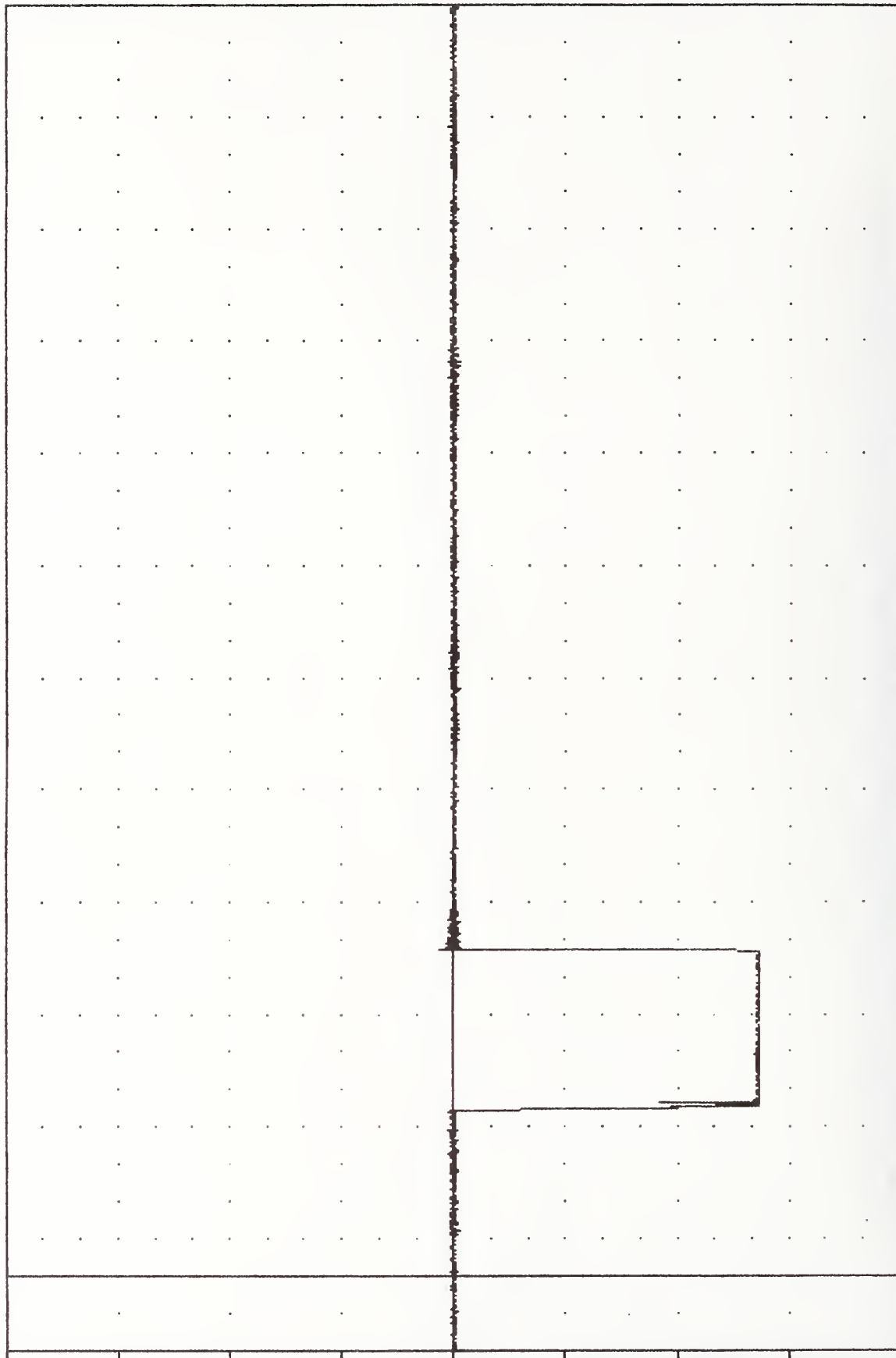
-2.50

-5.00

-7.50

-10.00

VOLTAGE (VOLT)



-20.00 10.00 40.00 70.00 100.00 130.00 160.00 190.00 220.00 250.00 280.00 310.00 340.00
TIME (MSEC)

1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE LEFT FENDER WELL INSIDE SENSOR #1

VRTC-1 , 880928

DAMAGE ALGORITHM REFORMULATION

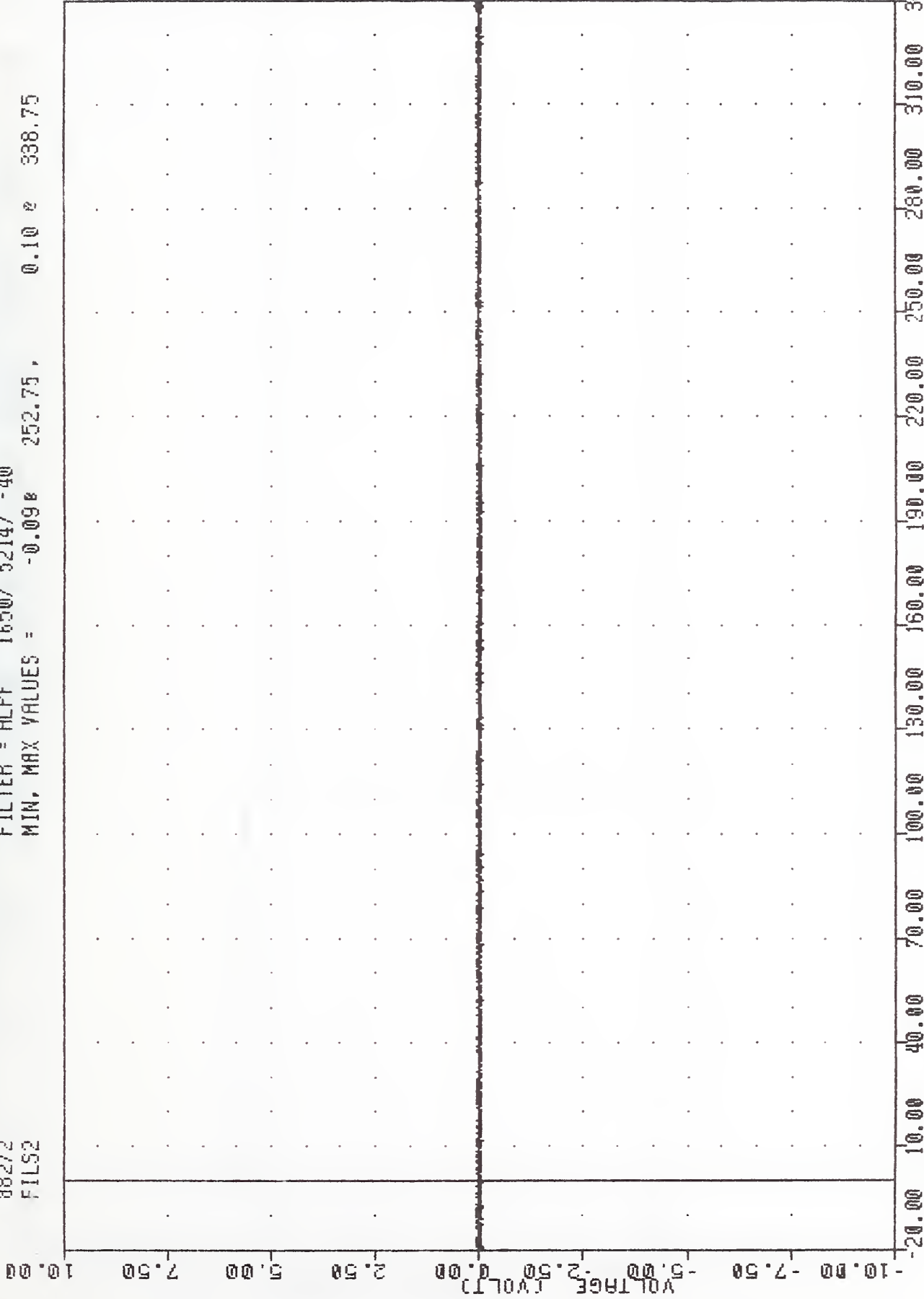
88272

FIL52

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -0.098 252.75 ,

0.10 e 338.75



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE LEFT FENDER WELL INSIDE SENSOR 2

VRTC-1 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

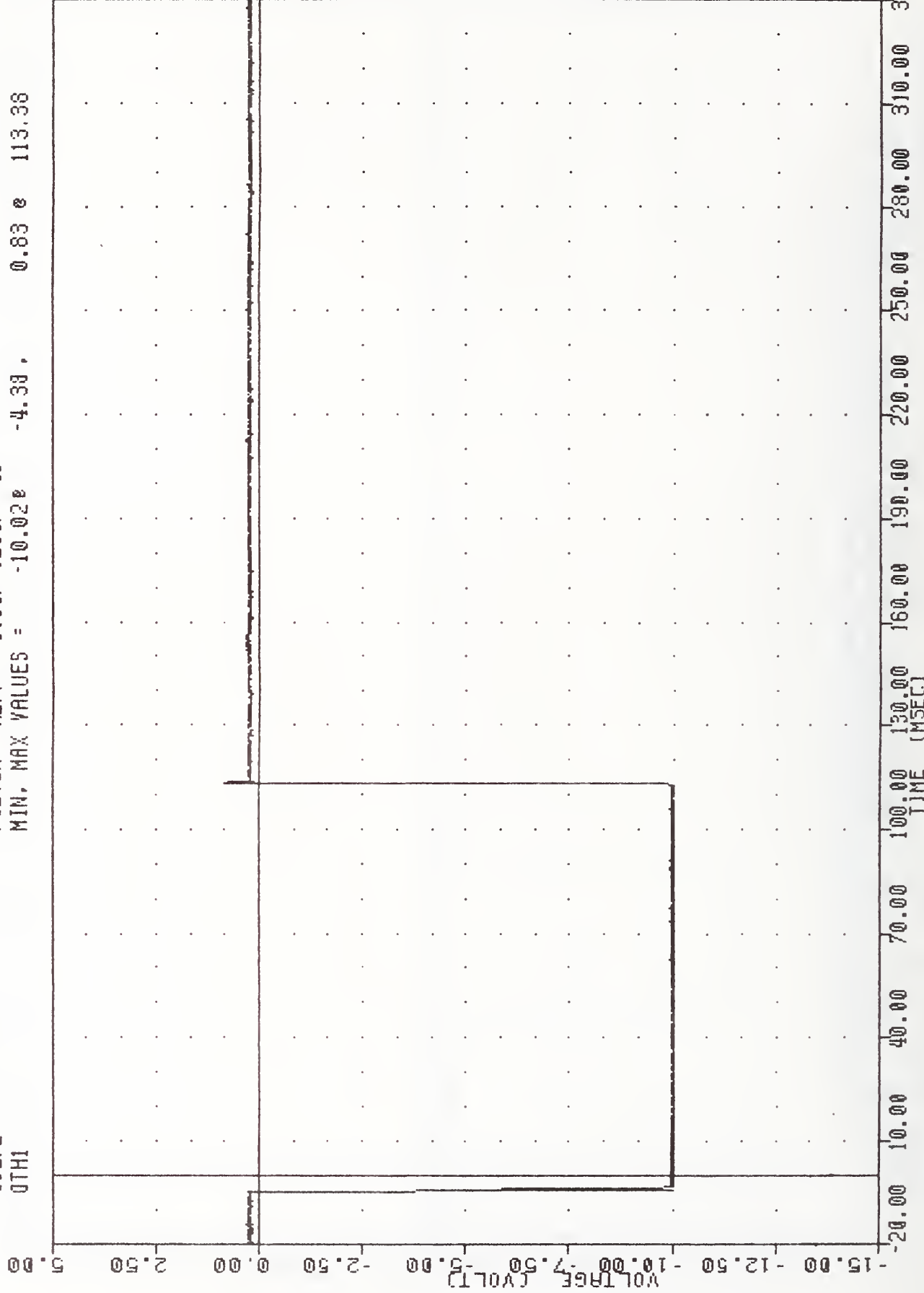
FILTER = ALPF 1650/ 5214/ -40

QTH1

MIN, MAX VALUES = -10.02e

-4.38,

0.83 e 113.38



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE CONTACT SWITCH - LEFT

VRTC-1 , 880928

DAMAGE ALGORITHM REFORMULATION

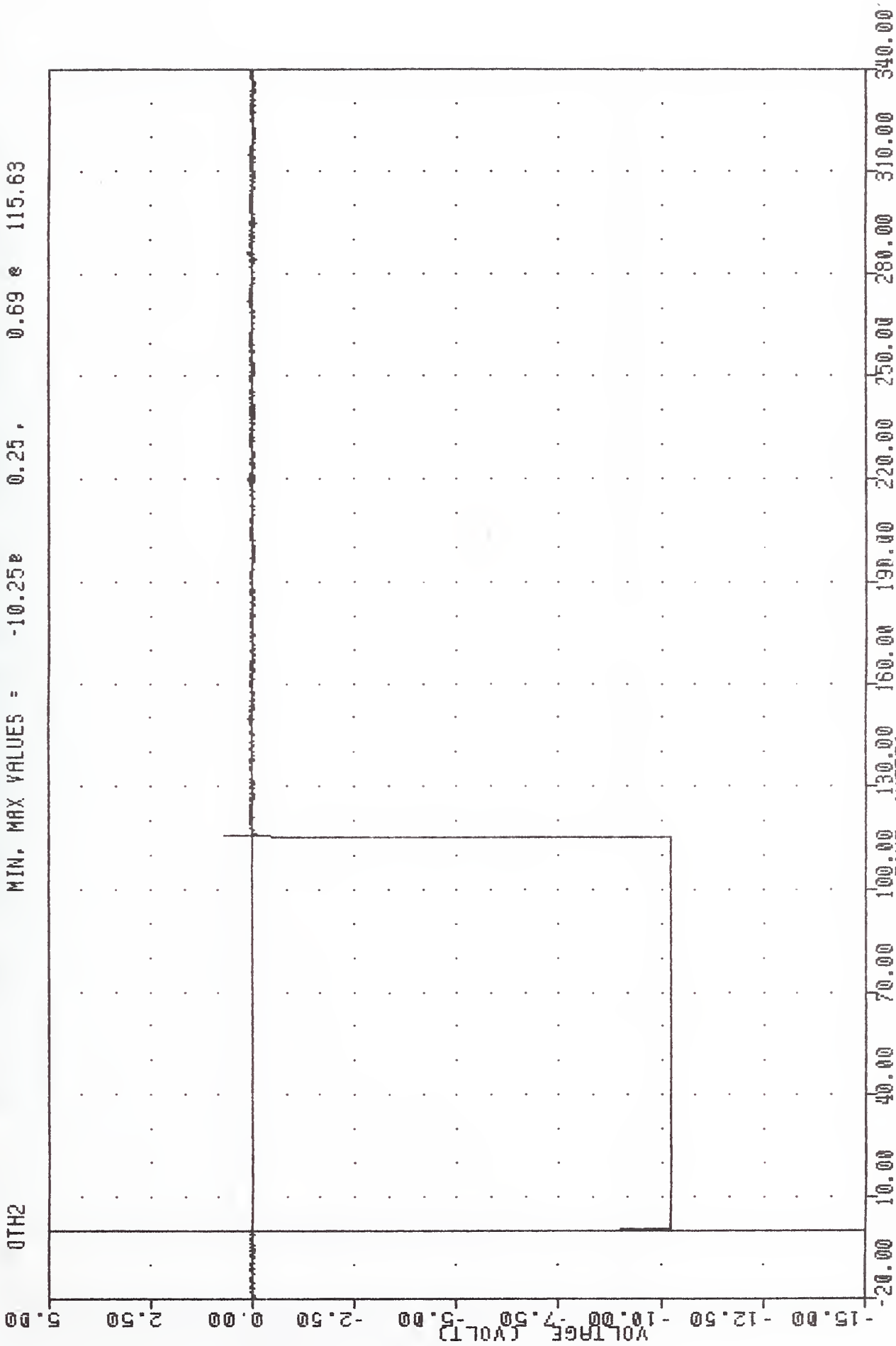
88272

FILTER = ALPF 1650/ 5214/ -40

0TH2

MIN. MAX VALUES = -10.25e

0.25 , 0.69 e 115.63



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE CONTACT SWITCH - CENTER

VRTC-1 , 880928

DAMAGE ALGORITHM REFORMULATION

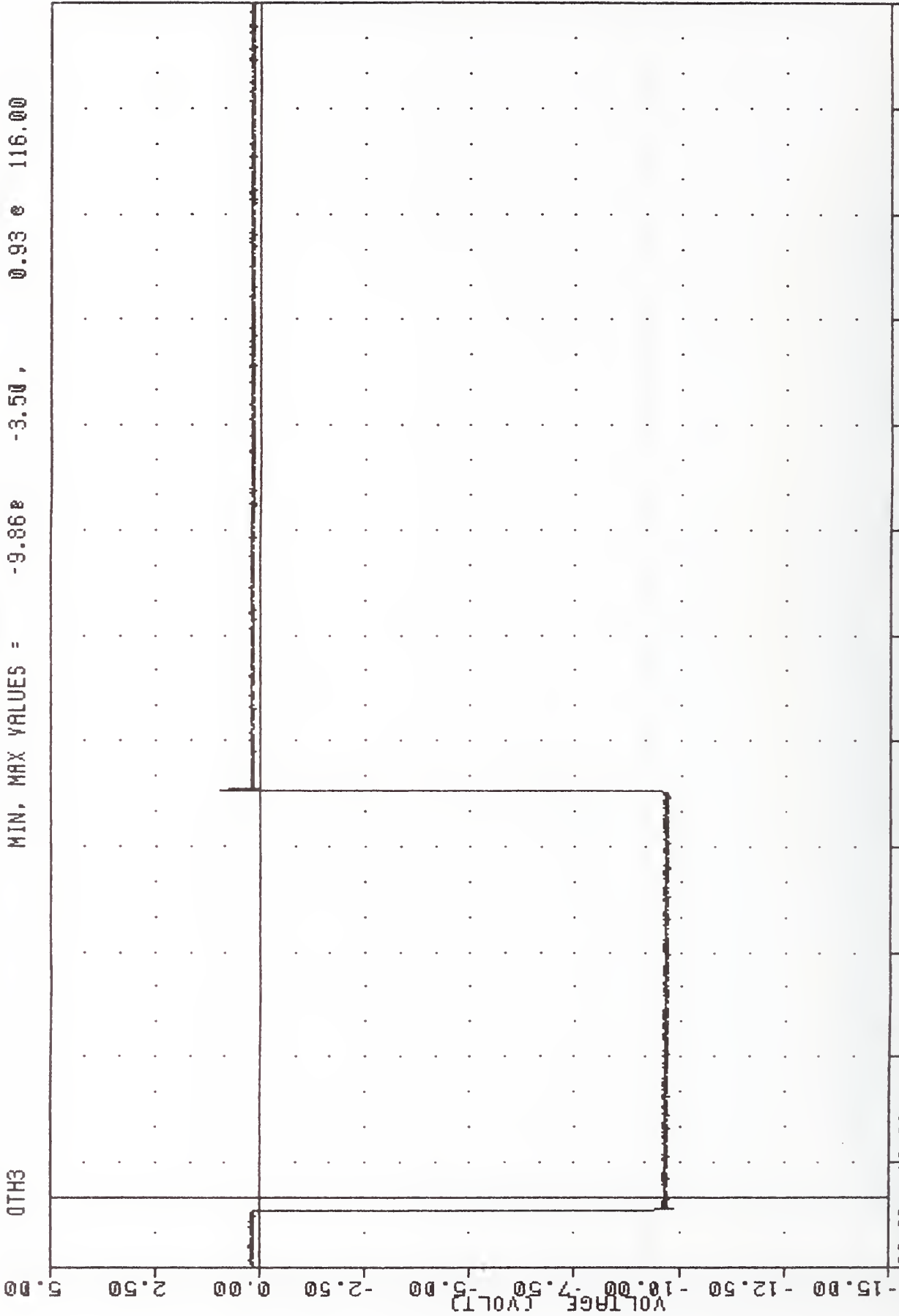
88272

OTH3

FILTER = ALPF 1650/ 5214/ -40

MIN. MAX VALUES = -9.86e -3.50 ,

0.93 e 116.00



-20.00 10.00 40.00 70.00 100.00 130.00 160.00 190.00 220.00 250.00 280.00 310.00 340.00
TIME (MSEC)

1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
VEHICLE CONTACT SWITCH - RIGHT

VRTC-1 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

QTH4

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -10.27e

0.63,

0.75 e

115.63

0.00

2.50

0.00

-2.50

-5.00

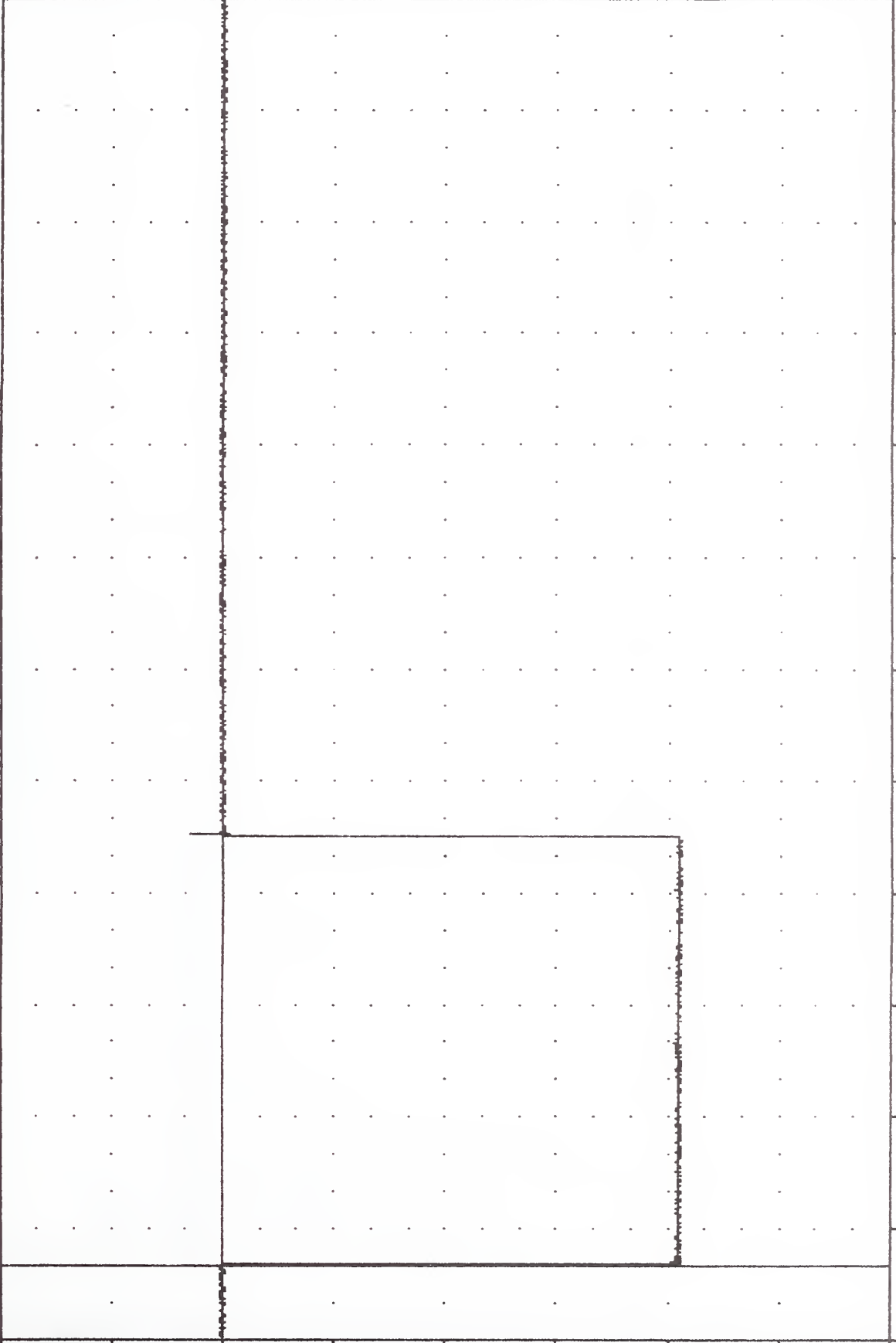
-7.50

-10.00

-12.50

-15.00

VOLTAGE (VOLT)



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST

BARRIER CONTACT SWITCH - LEFT

VRTC-1 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

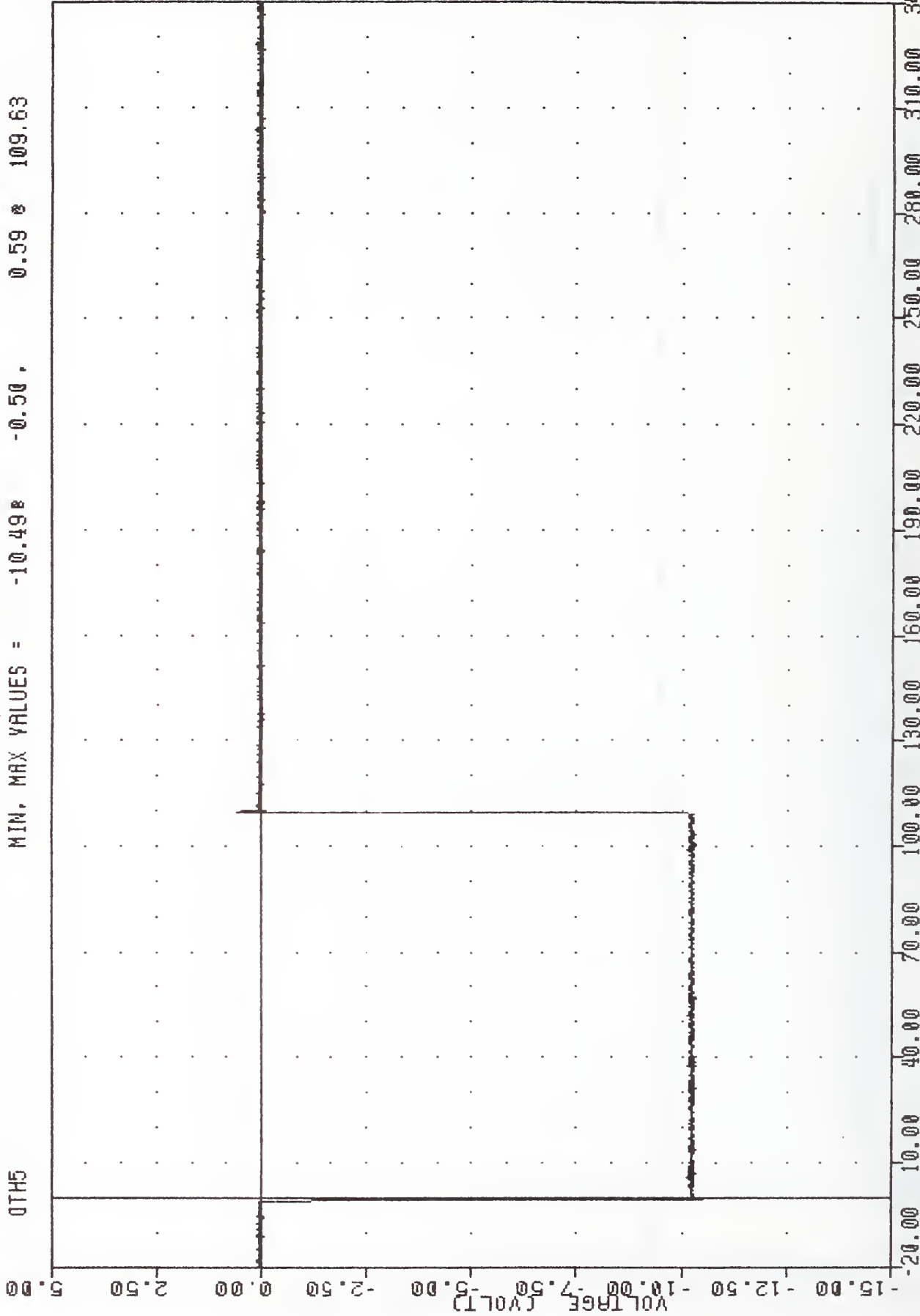
FILTER = ALPF 1650/ 5214/ -40

0TH5

MIN, MAX VALUES = -10.498

0.59 @ 109.63

-0.50 ,



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 10 MPH FIRST TEST
BARRIER CONTACT SWITCH - RIGHT

VRTC-2 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

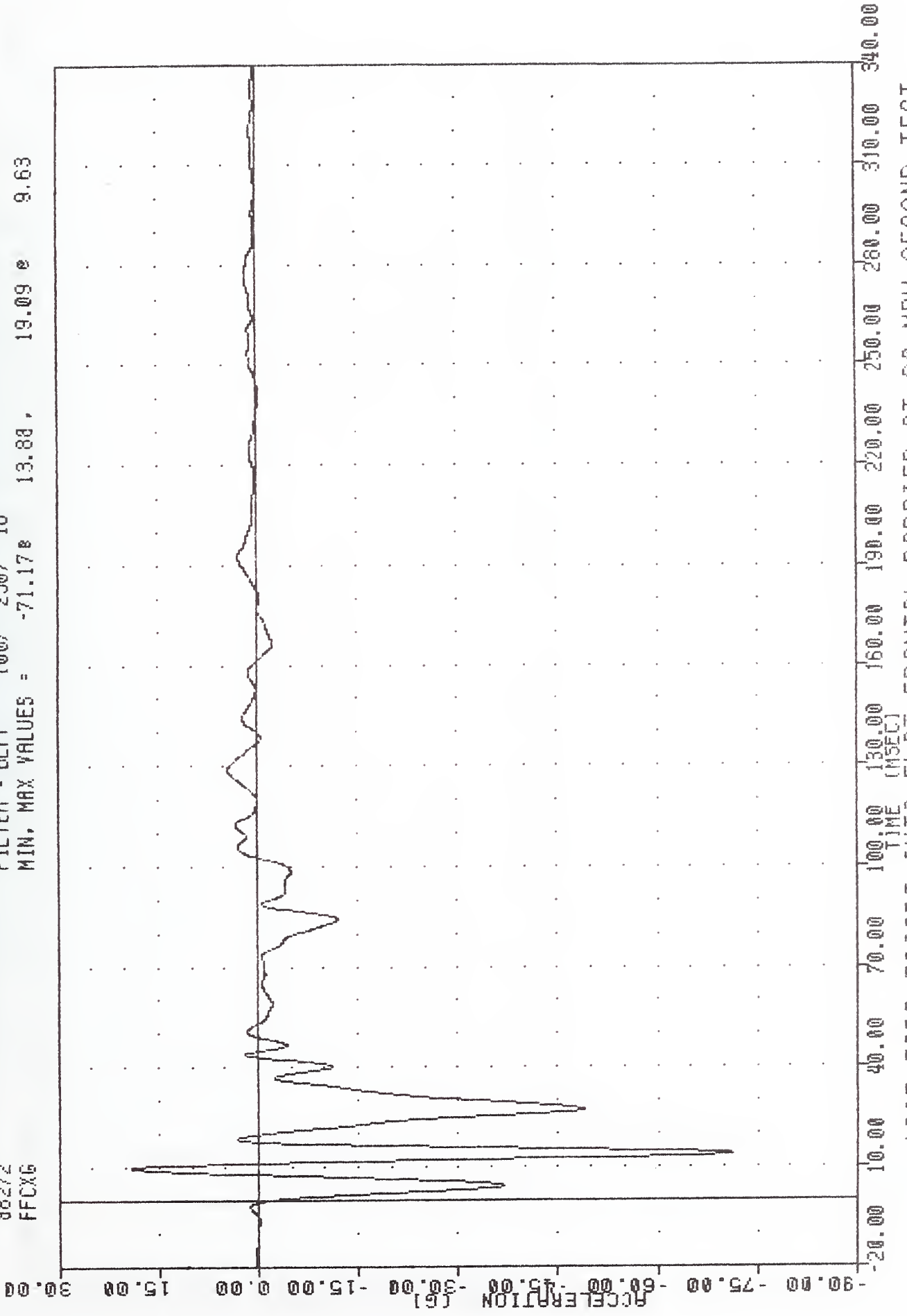
FFCXG

FILTER = BLPP 100/ 250/ -16

MIN. MAX VALUES = -71.17e 13.88 ,

19.09 e

9.63



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE FRONT FRAME CROSSMEMBER BOTTOM X AXIS ACCELERATION

VRTC-2 , 880928

DAMAGE ALGORITHM REFORMULATION

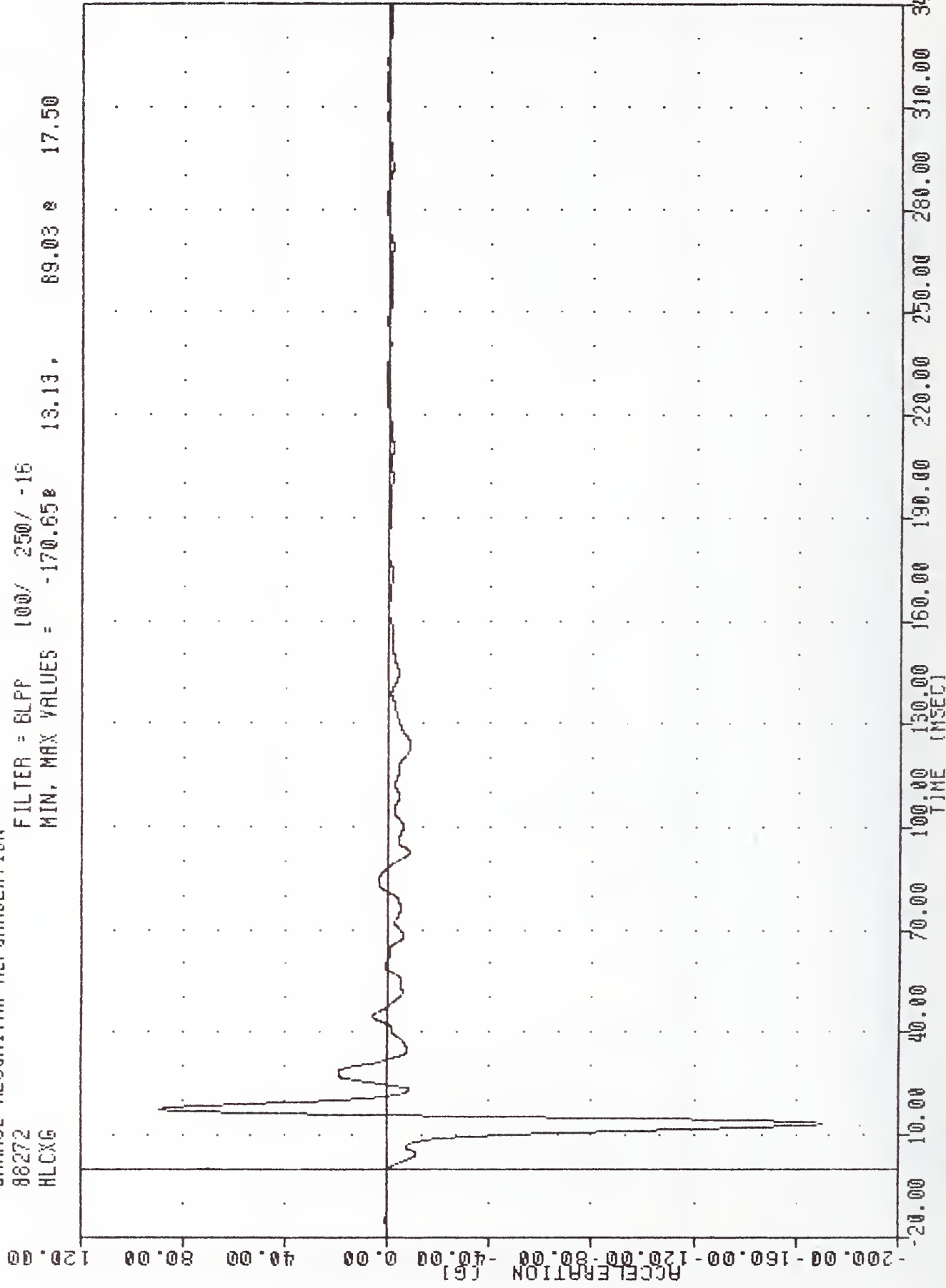
88272

FILTER = BLPF 100/ 250/ -16

HLCXG

MIN, MAX VALUES = -170.658 13.13

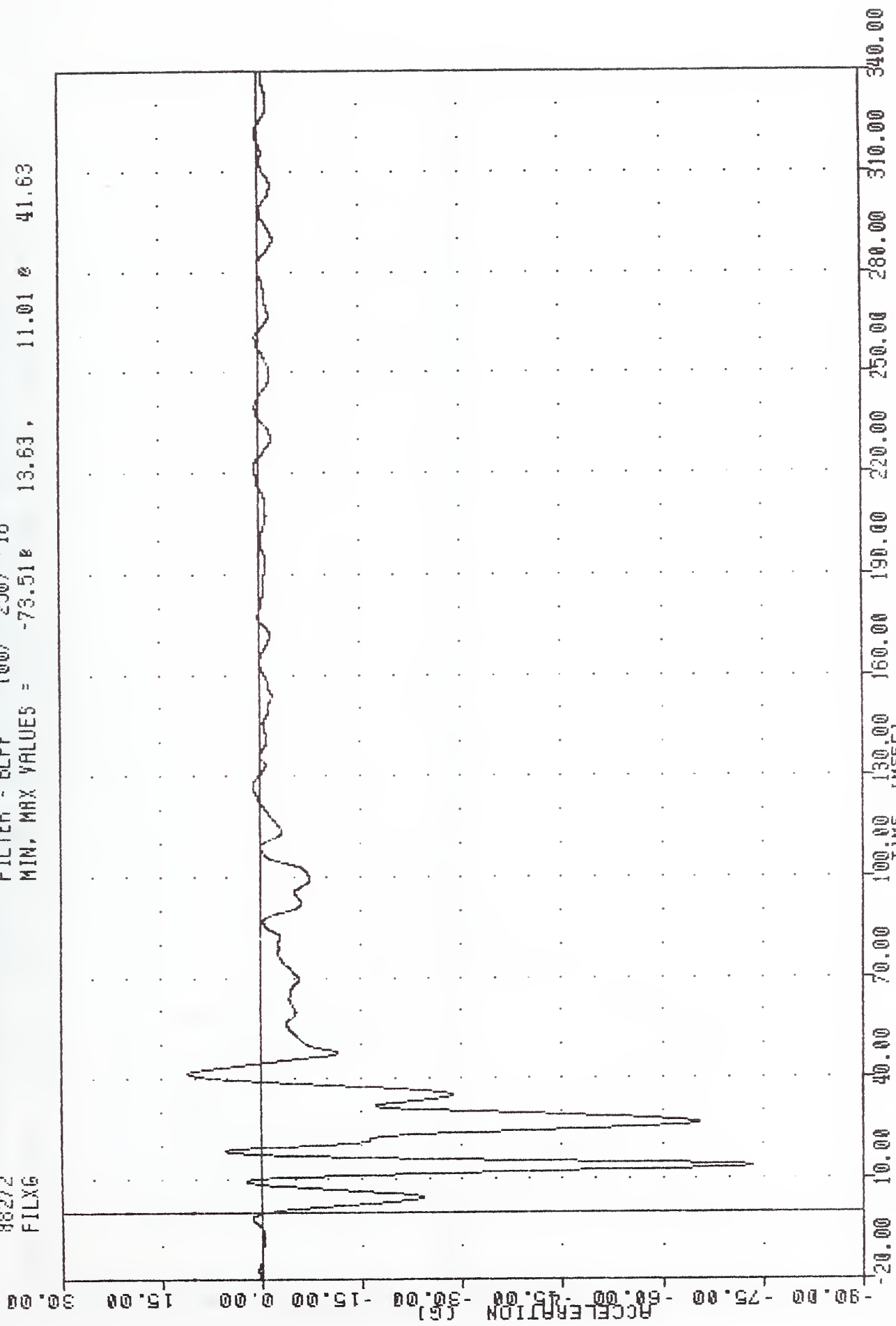
89.03 e 17.50



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE HOOD LATCH CROSSMEMBER X AXIS ACCELERATION

VRTC-2 , 880928
DAMAGE ALGORITHM REFORMULATION
88272
FILX6

FILTER = BLPP 100/ 250/ -16
MIN, MAX VALUES = -73.51# 13.63, 11.01 # 41.63



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE LEFT FENDER WELL INSIDE X AXIS ACCELERATION

VRTC-2 , 880928

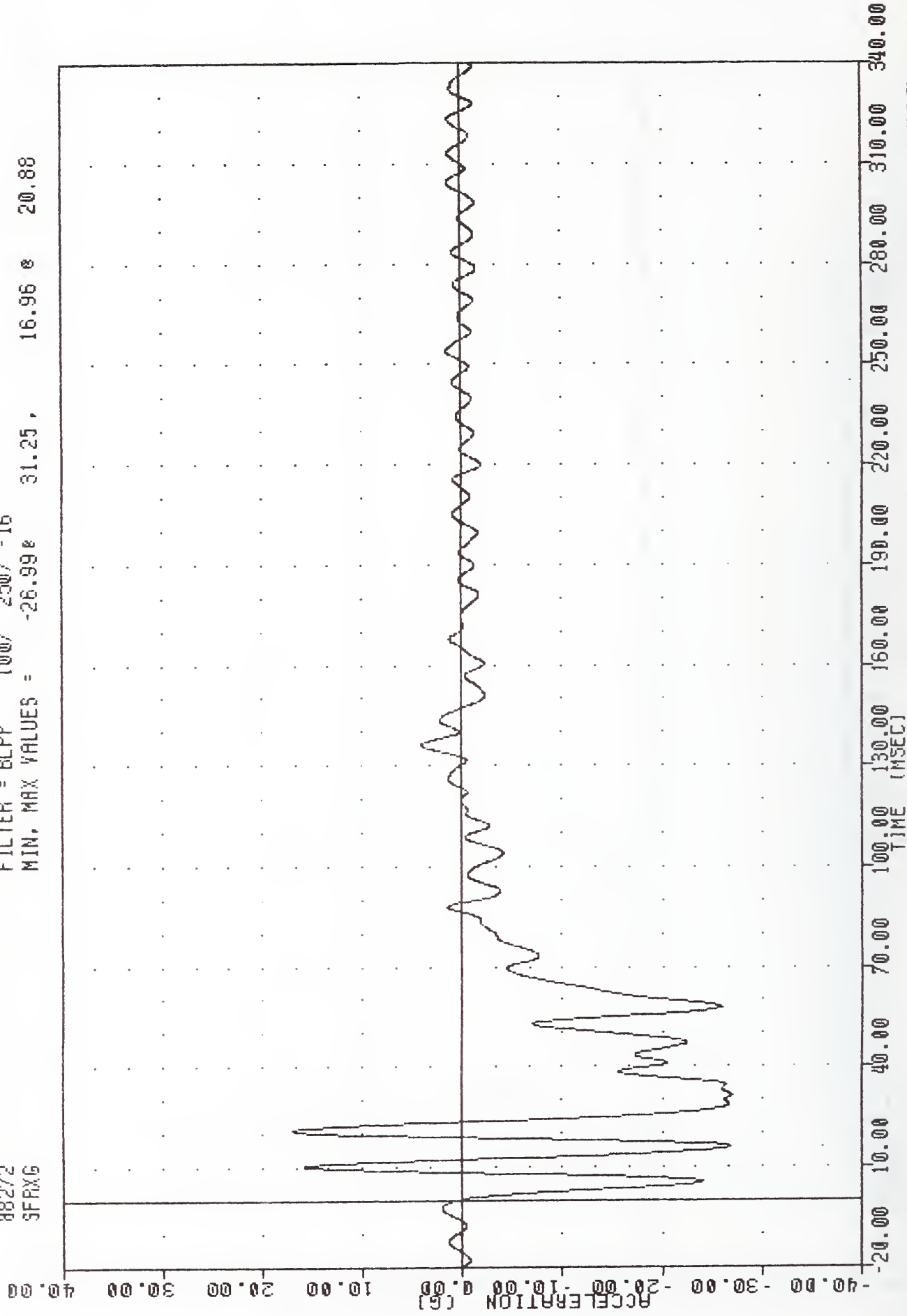
DAMAGE ALGORITHM REFORMULATION

88272

SFRXG

FILTER = BLPP 100/ 250/ -16

MIN. MAX VALUES = -26.99% 31.25 , 16.96 % 20.88



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE SUSPENSION FRONT RIGHT X AXIS ACCELERATION

VRTC-2 , 880928

DAMAGE ALGORITHM REFORMULATION

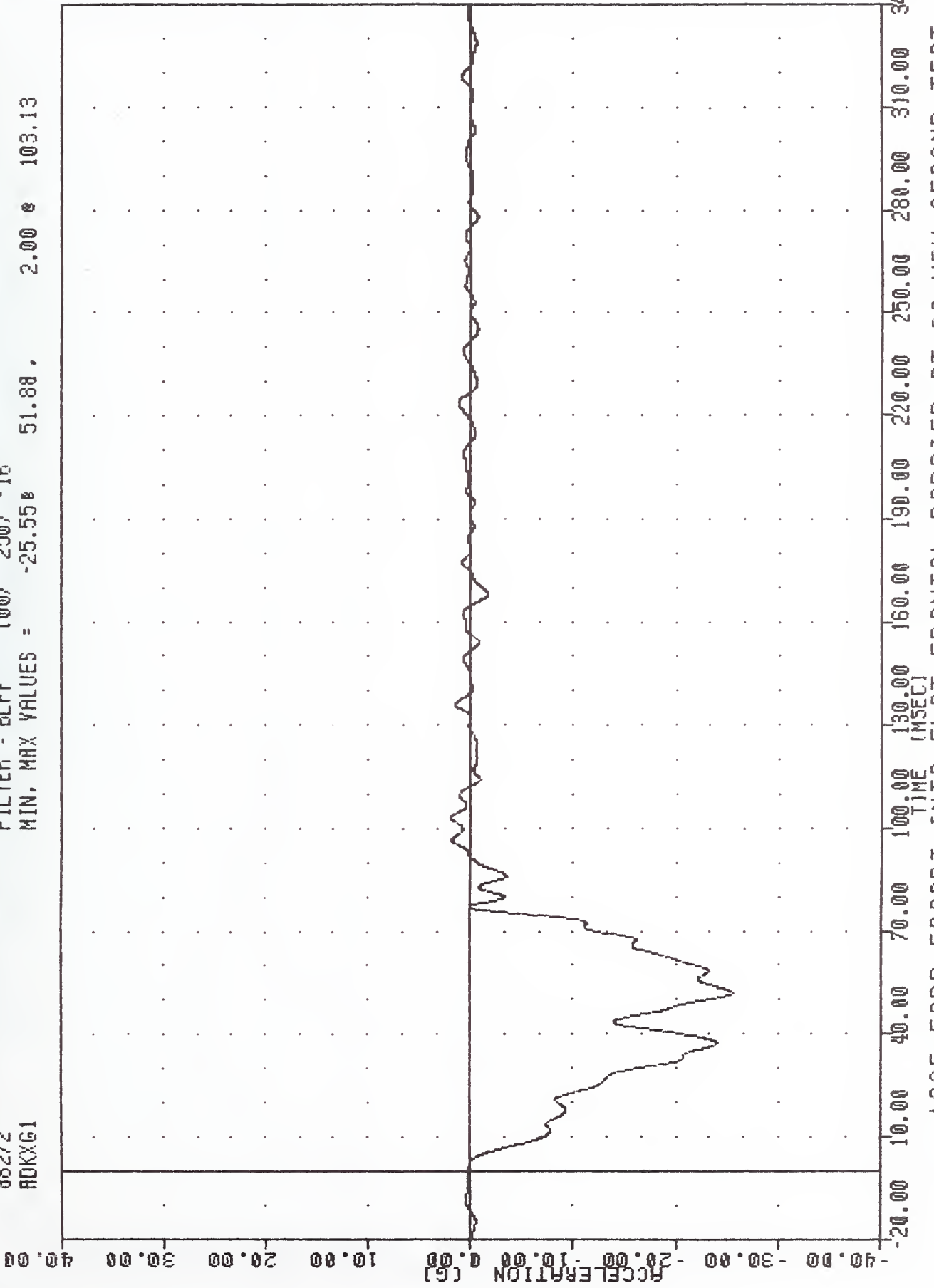
88272

ADKXG1

FILTER = BLPF 100/ 250/ -16

MIN, MAX VALUES = -25.55g 51.88g

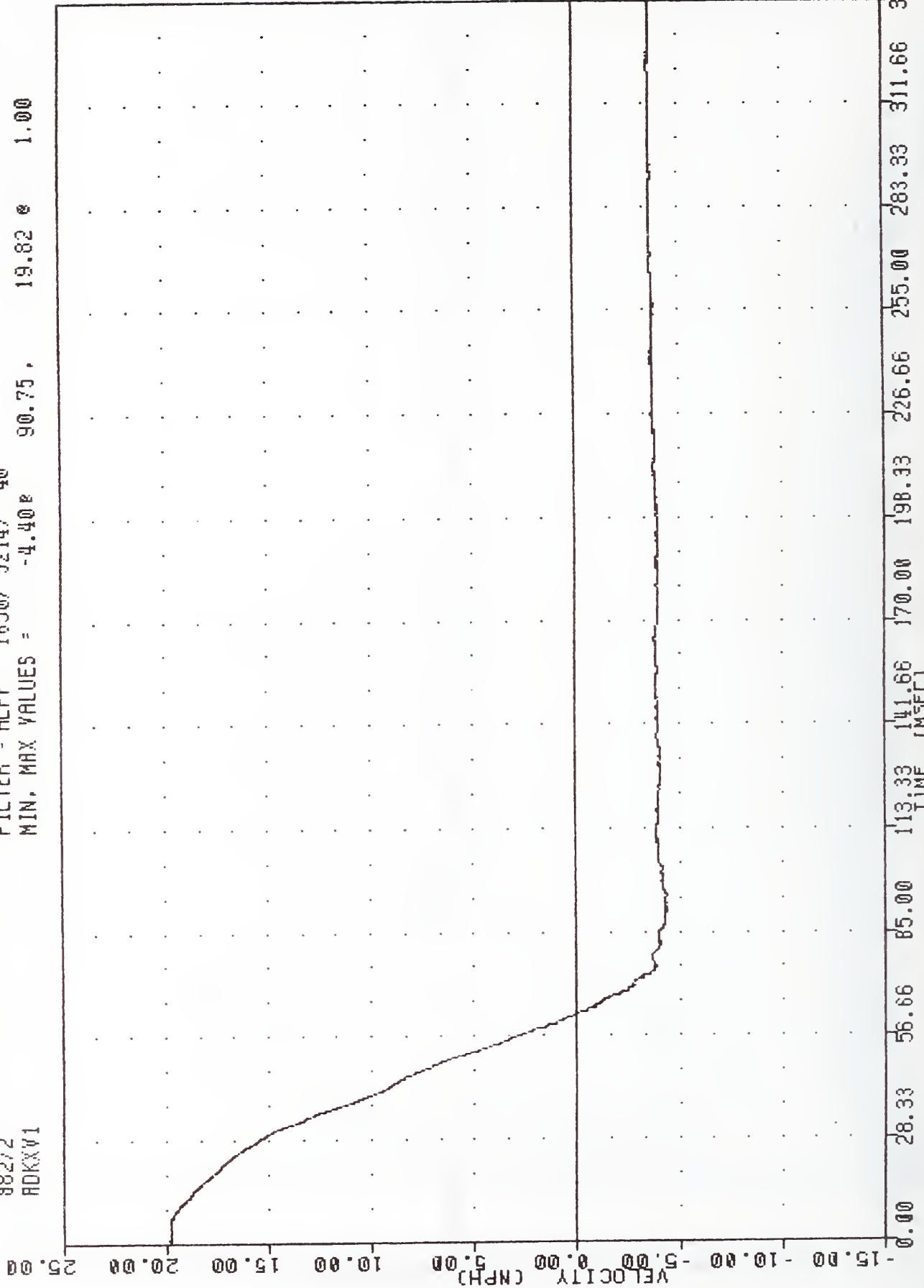
2.00 s 103.13



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE REAR DECK X AXIS ACCELERATION

VRTC-2 , 880928
 DAMAGE ALGORITHM REFORMULATION
 88272
 RDKXV1

FILTER = ALPF 1650/ 5214/ -40
 MIN. MAX VALUES = -4.40R 90.75 , 19.82 e 1.00



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
 VEHICLE REAR DECK X AXIS VELOCITY

VRTC-2 , 880928

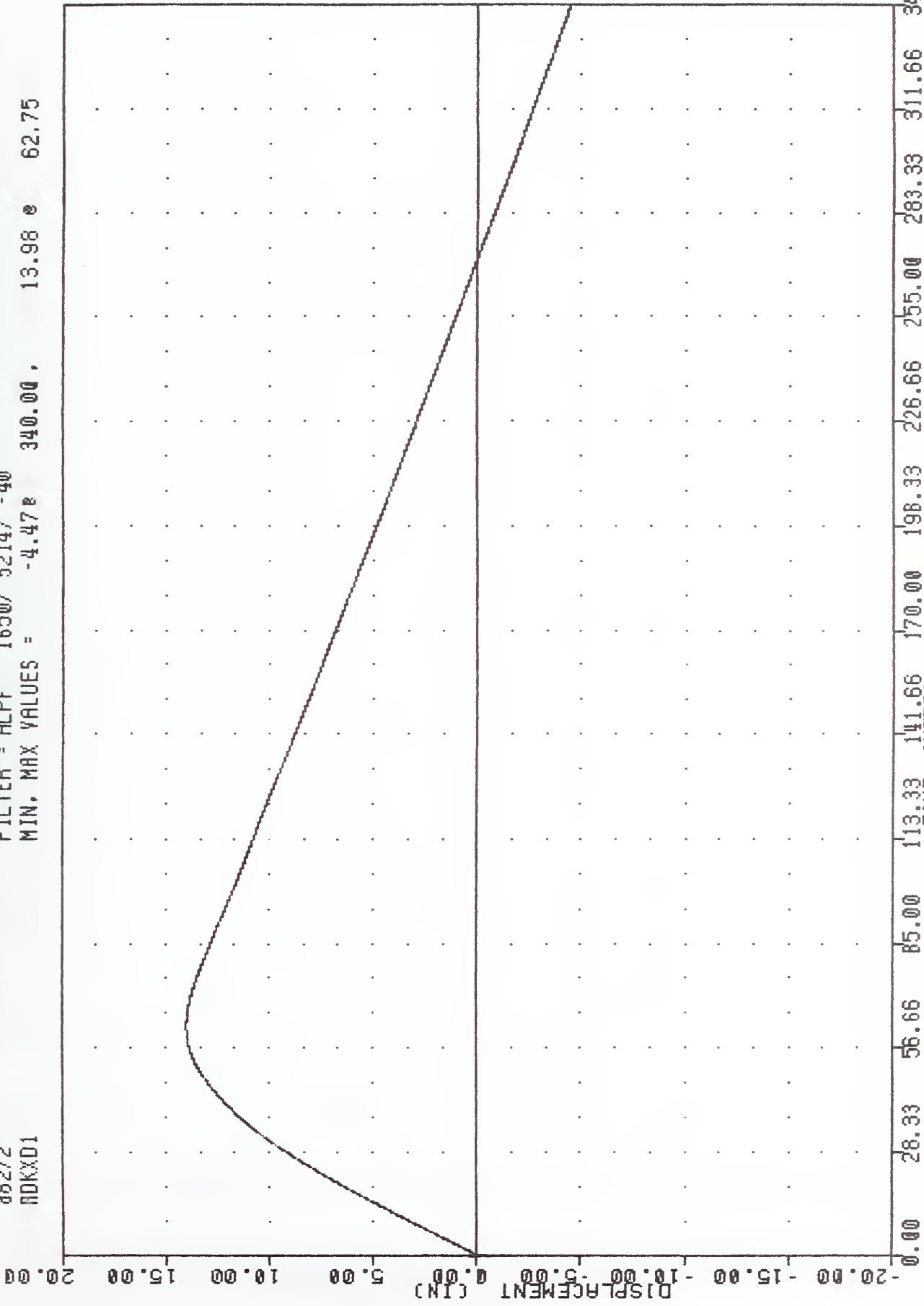
DAMAGE ALGORITHM REFORMULATION

88272

FILTER = ALPF 1650/ 5214/ -40

ADKXD1

MIN. MAX VALUES = -4.478 340.00 , 13.98 e 62.75



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE REAR DECK X AXIS DISPLACEMENT

VRTC-2 , 880928

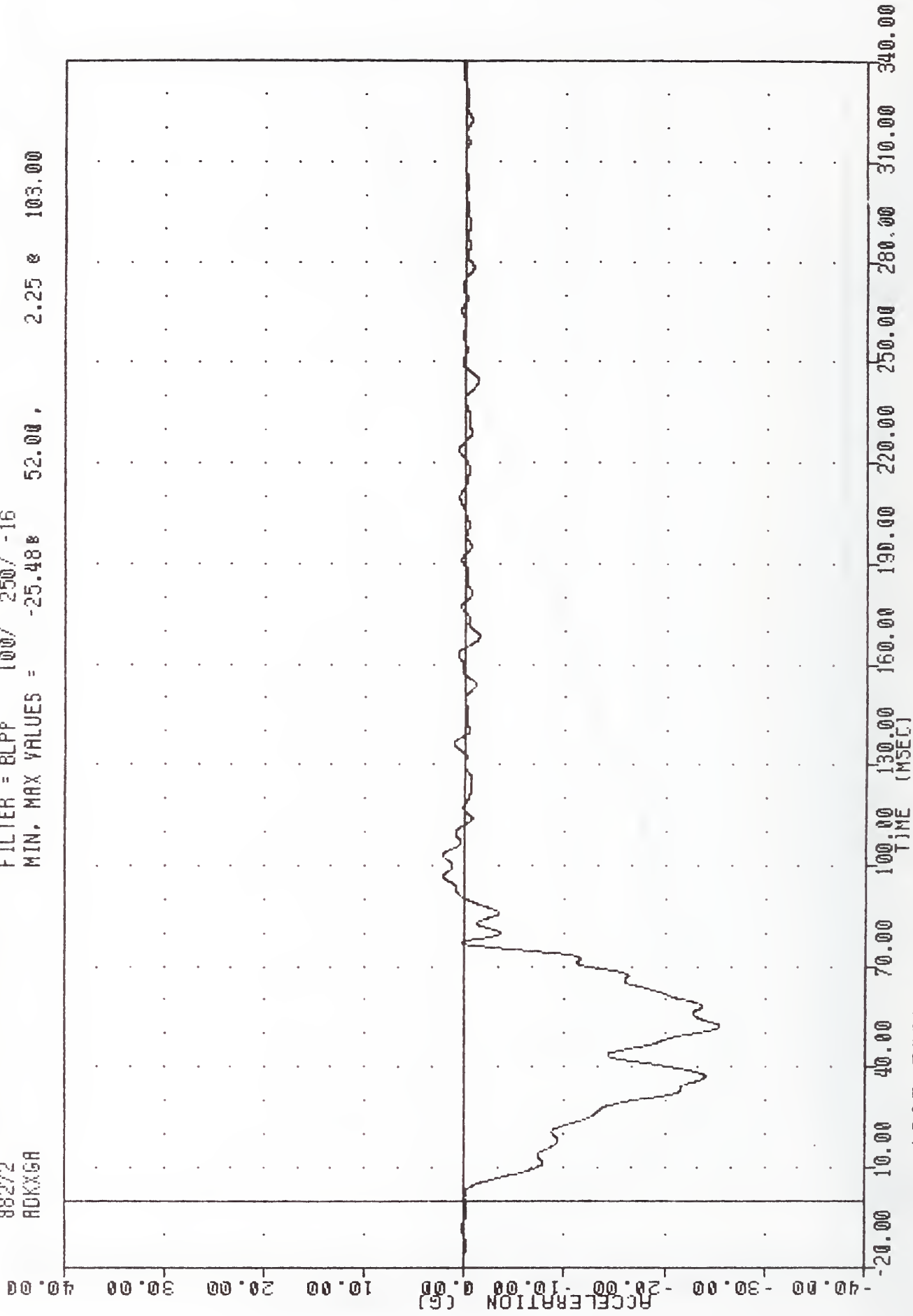
DAMAGE ALGORITHM REFORMULATION

88272

ADKXGA

FILTER = BLPP 100/ 250/ -16

MIN. MAX VALUES = -25.48 52.00 , 2.25 @ 103.00



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE REAR DECK X AXIS REDUNDANT ACCELERATION

VRTC-2 , 880928

DAMAGE ALGORITHM REFORMULATION

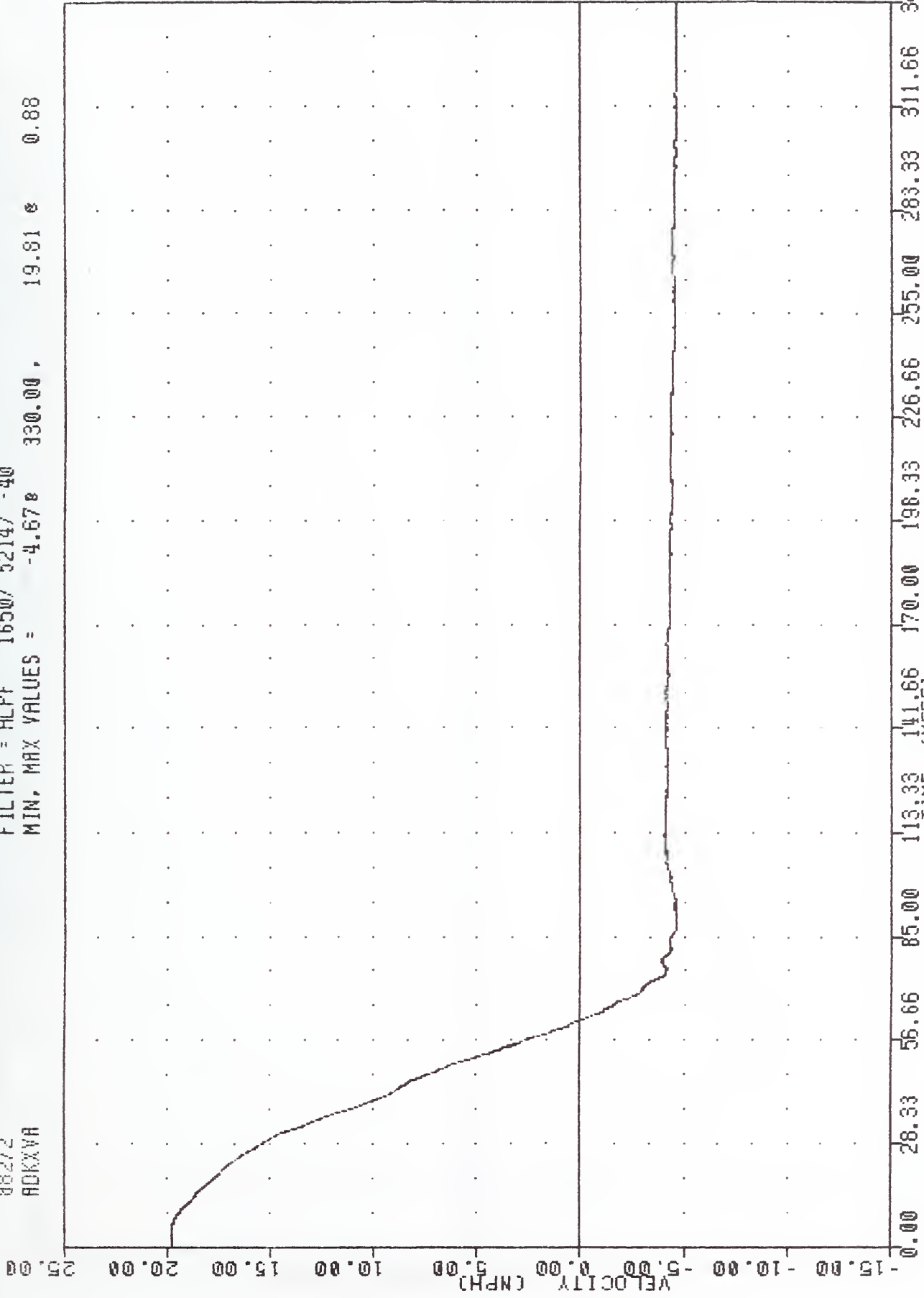
88272

ADKXVA

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -4.67e 330.00 ,

19.91 e 0.88



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE REAR DECK X AXIS VELOCITY REDUNDANT

VRTC-2 , 880928

DAMAGE ALGORITHM REFORMULATION

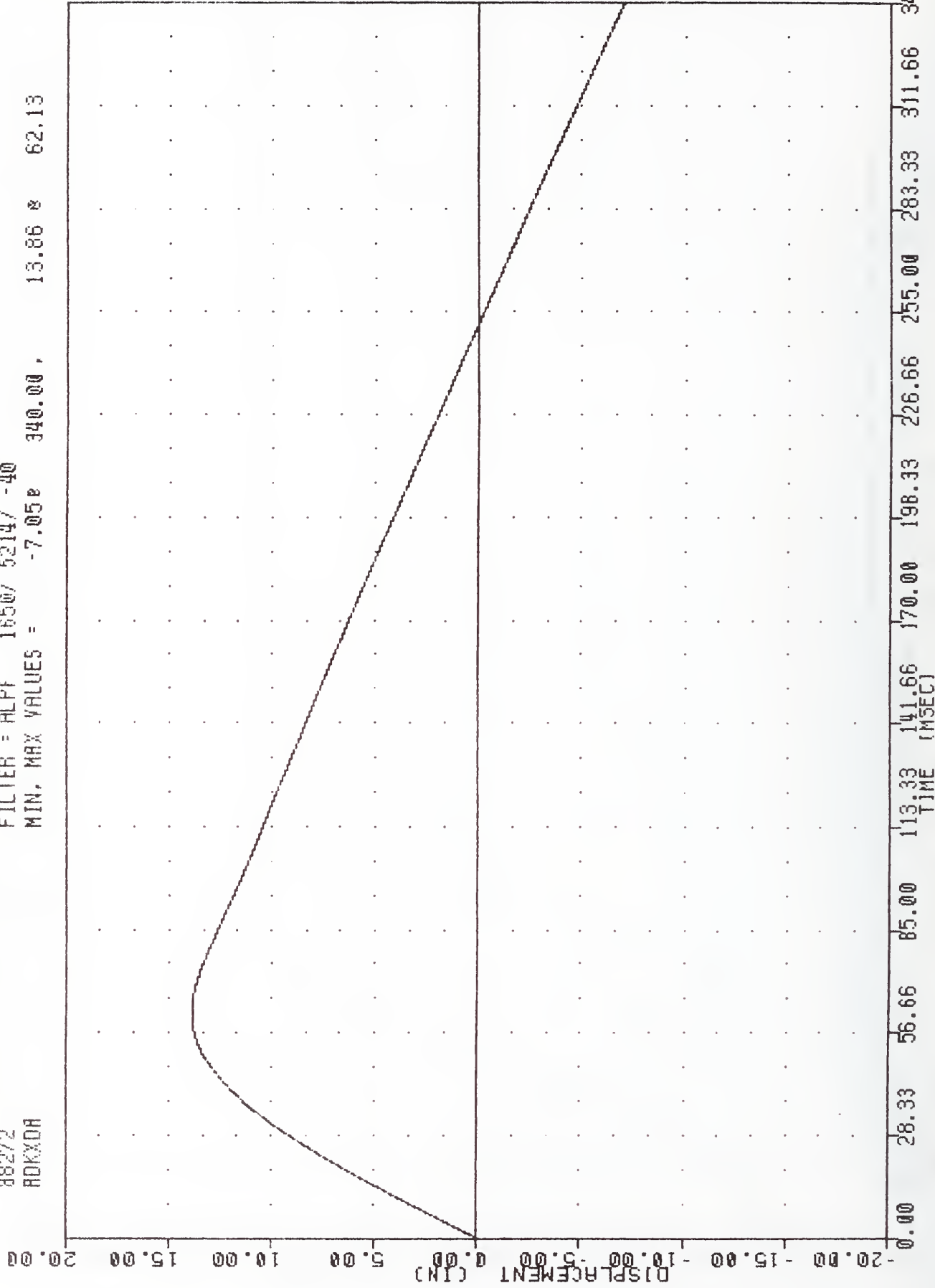
88272

ADKXDA

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -7.05e 340.00 ,

13.86 e 62.13



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE REAR DECK X AXIS DISPLACEMENT REDUNDANT

VRTC-2 , 860928

DAMAGE ALGORITHM REFORMULATION

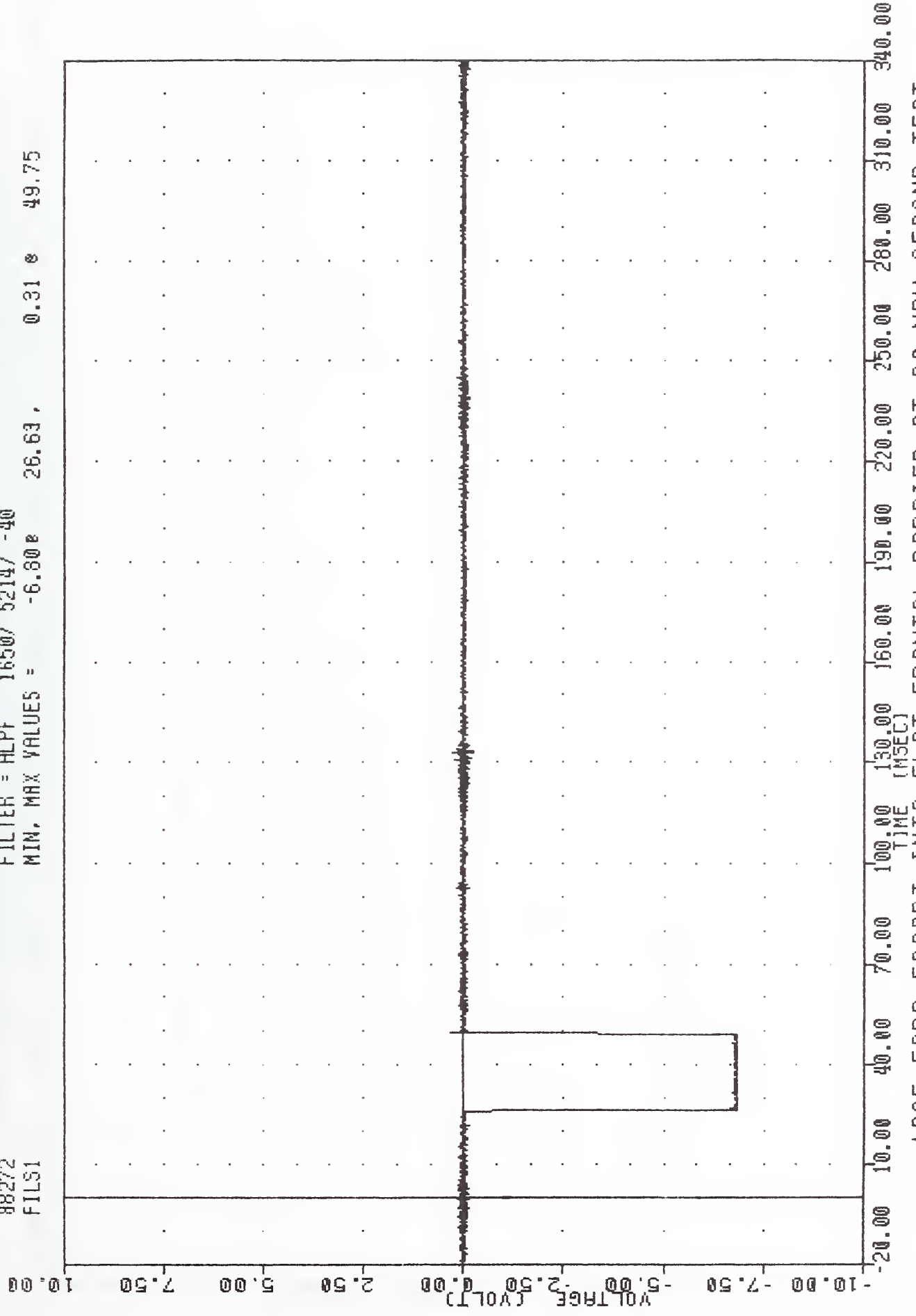
88272

FILS1

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -6.80e 26.63,

0.31 e 49.75



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE LEFT FENDER WELL INSIDE SENSOR #1

VRTC-2 , 880928

DAMAGE ALGORITHM REFORMULATION

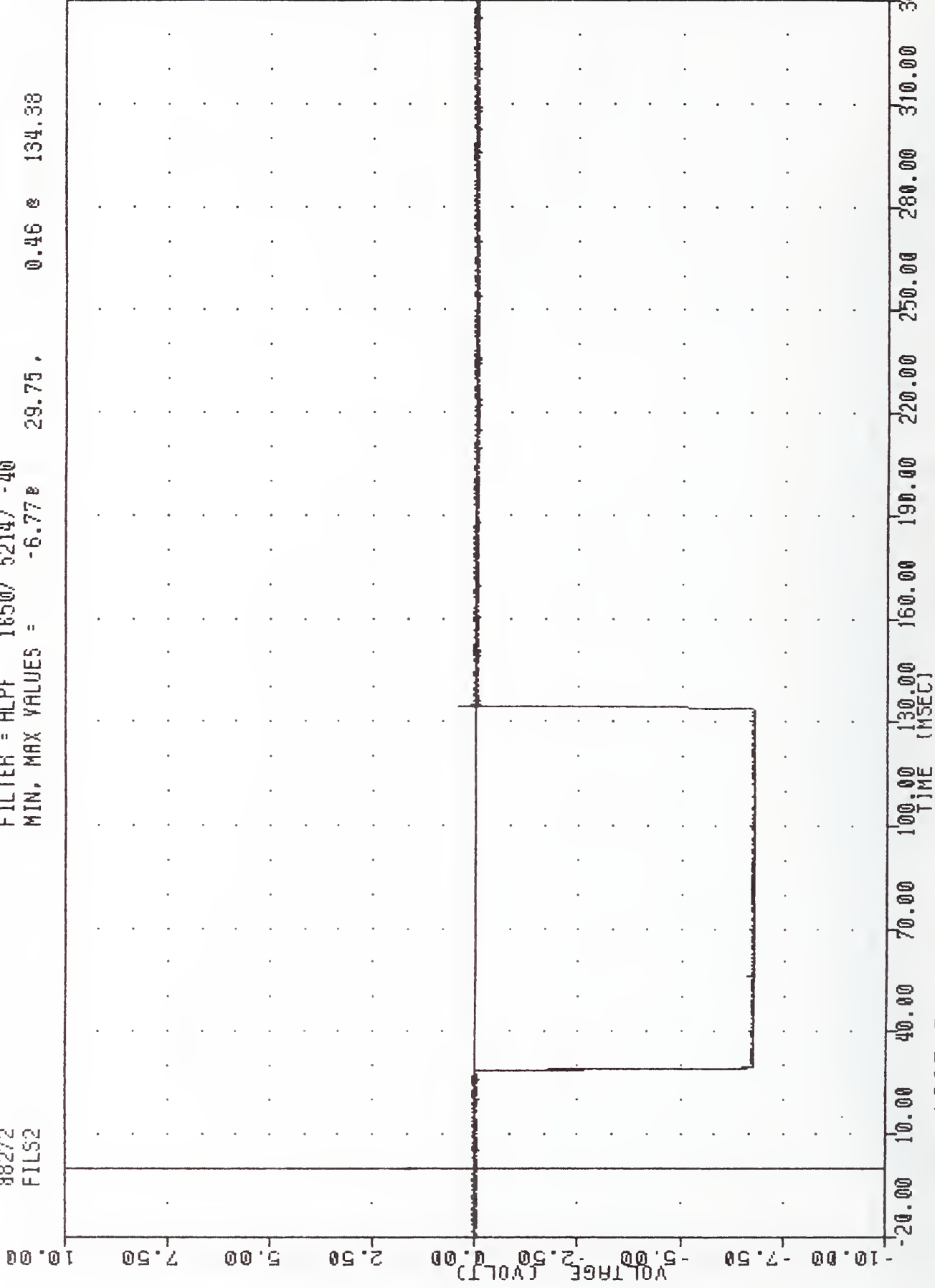
88272

FIL52

FILTER = ALPF 1650/ 5214/ -40

MIN. MAX VALUES = -6.77 29.75,

0.46 134.38



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE LEFT FENDER WELL INSIDE SENSOR #2

VRTC-2 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

0TH1

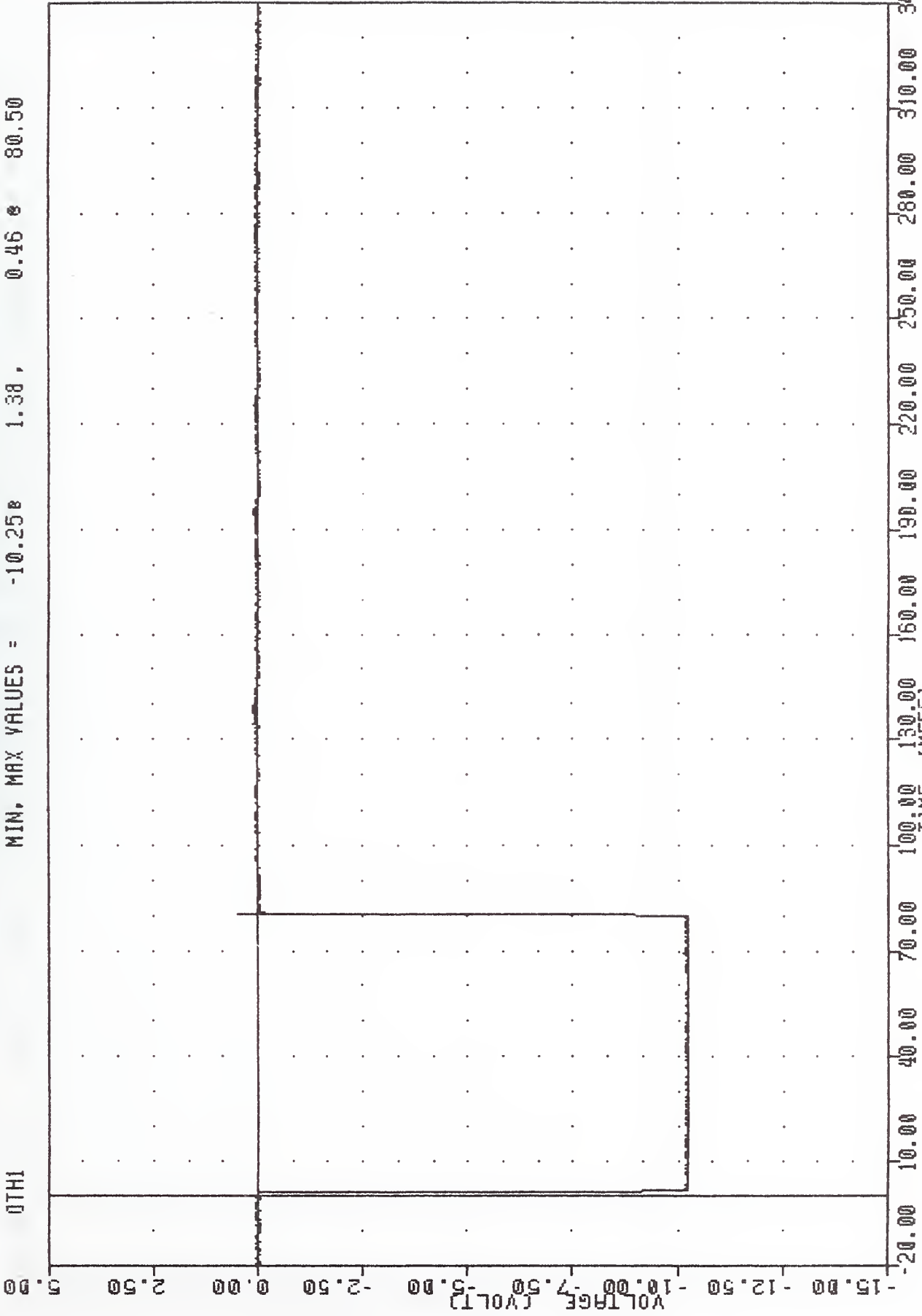
FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -10.25e

1.38,

0.46 e

80.50



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE CONTACT SWITCH - LEFT

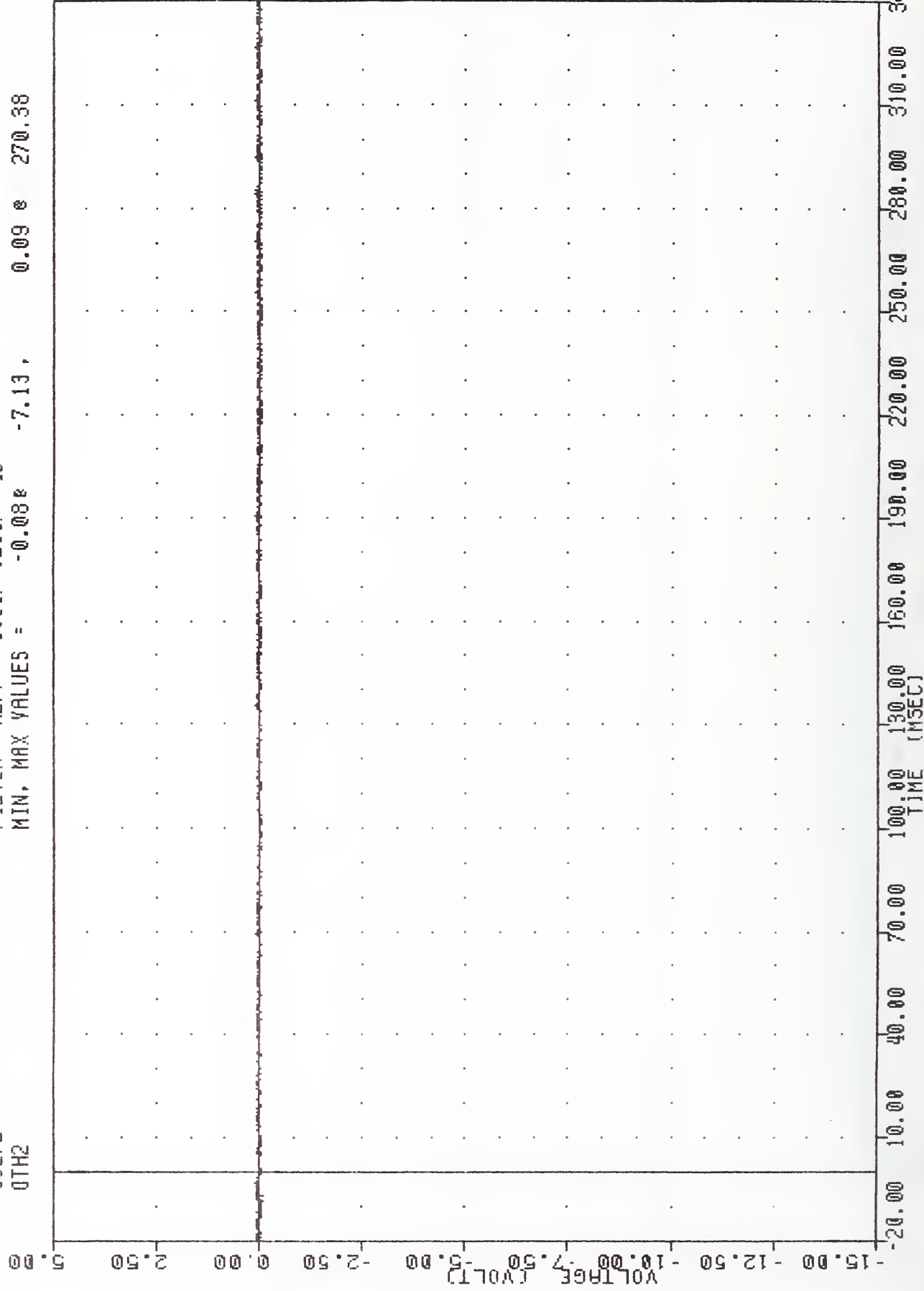
VRTC-2
DAMAGE ALGORITHM REFORMULATION

880928

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -0.08e -7.13, 0.09 e 270.38

88272
0TH2



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE CONTACT SWITCH - CENTER

VRTC-2 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

FILTER = ALPF 1650/ 5214/ -40

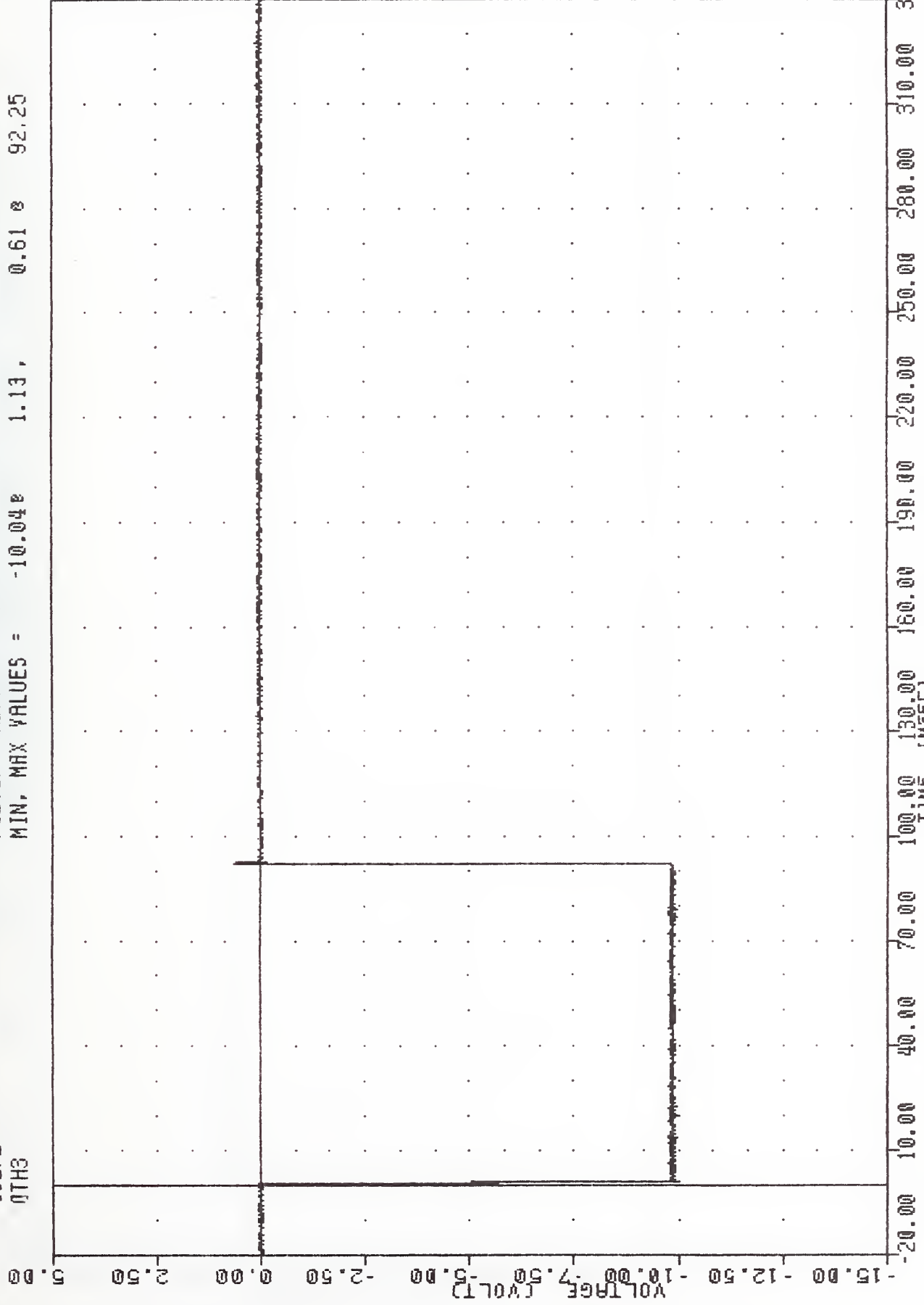
0TH3

MIN. MAX VALUES = -10.04e

1.13,

0.61 @

92.25



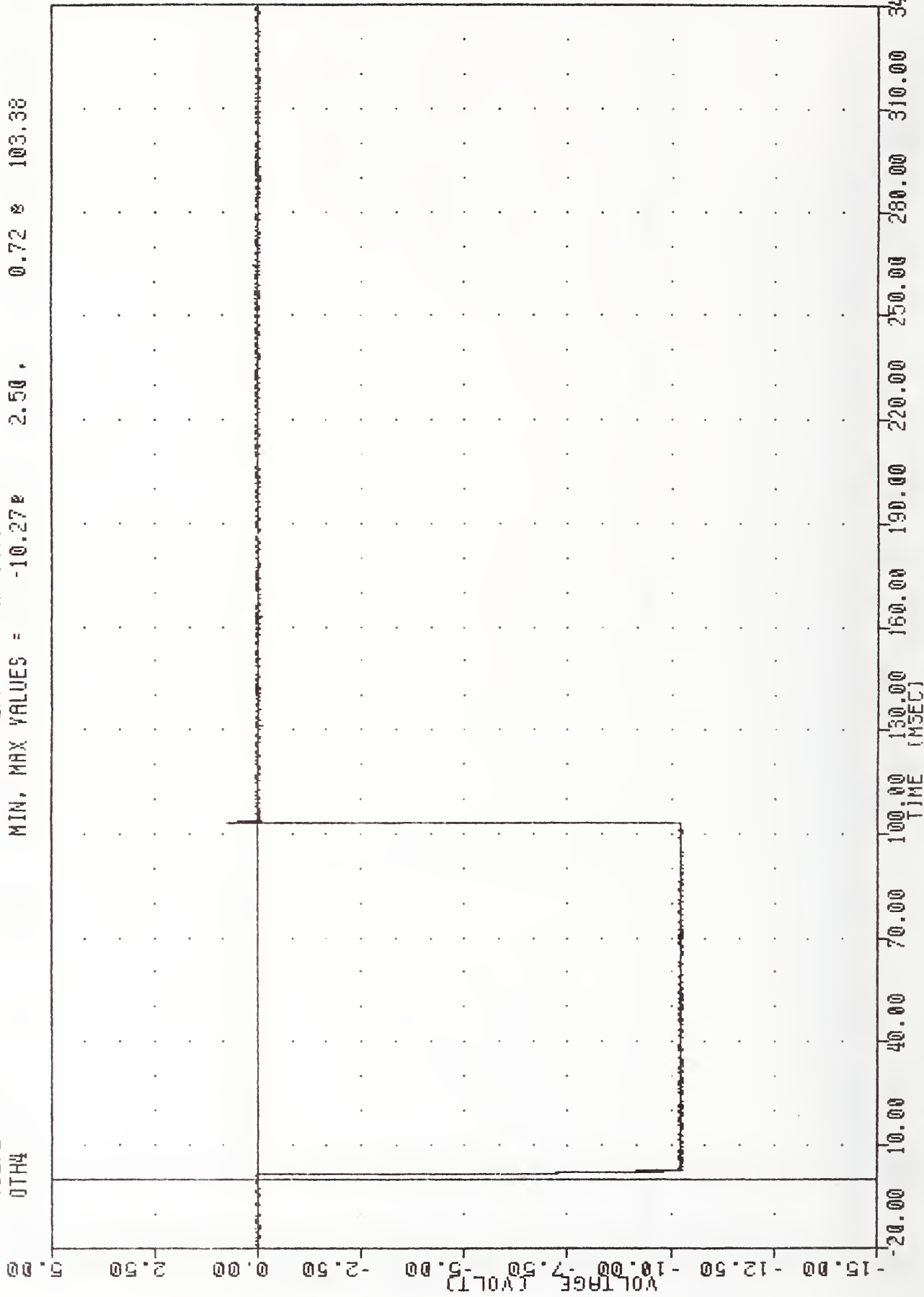
1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
VEHICLE CONTACT SWITCH - RIGHT

VRTC-2 , 880928

DAMAGE ALGORITHM REFORMULATION

88272 FILTER = ALPF 1650/ 5214/ -40

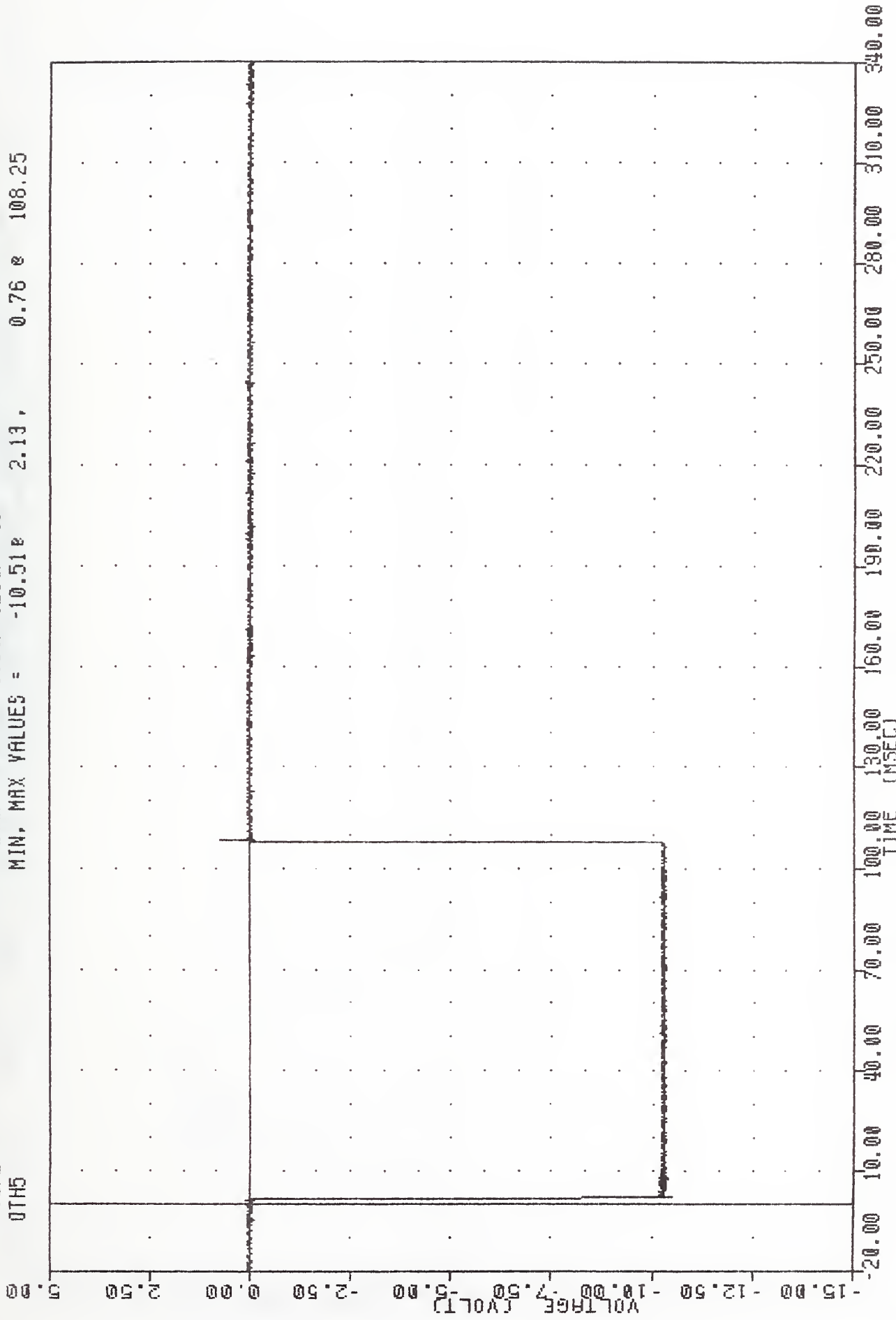
0TH4 MIN, MAX VALUES = -10.27 2.50 , 0.72 103.38



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
BARRIER CONTACT SWITCH - LEFT

VRTC-2 , 880928
DAMAGE ALGORITHM REFORMULATION
88272
0TH5

FILTER = ALPF 1650/ 5214/ -40
MIN, MAX VALUES = -10.51e 2.13, 0.76 e 108.25



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH SECOND TEST
BARRIER CONTACT SWITCH - RIGHT

VRTC-3 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

ADKXG1

FILTER = BLPP 100/ 250/ -16

MIN. MAX VALUES = -26.078 48.63 , 1.82 8 125.88

40.00

30.00

20.00

10.00

ACCELERATION (G)

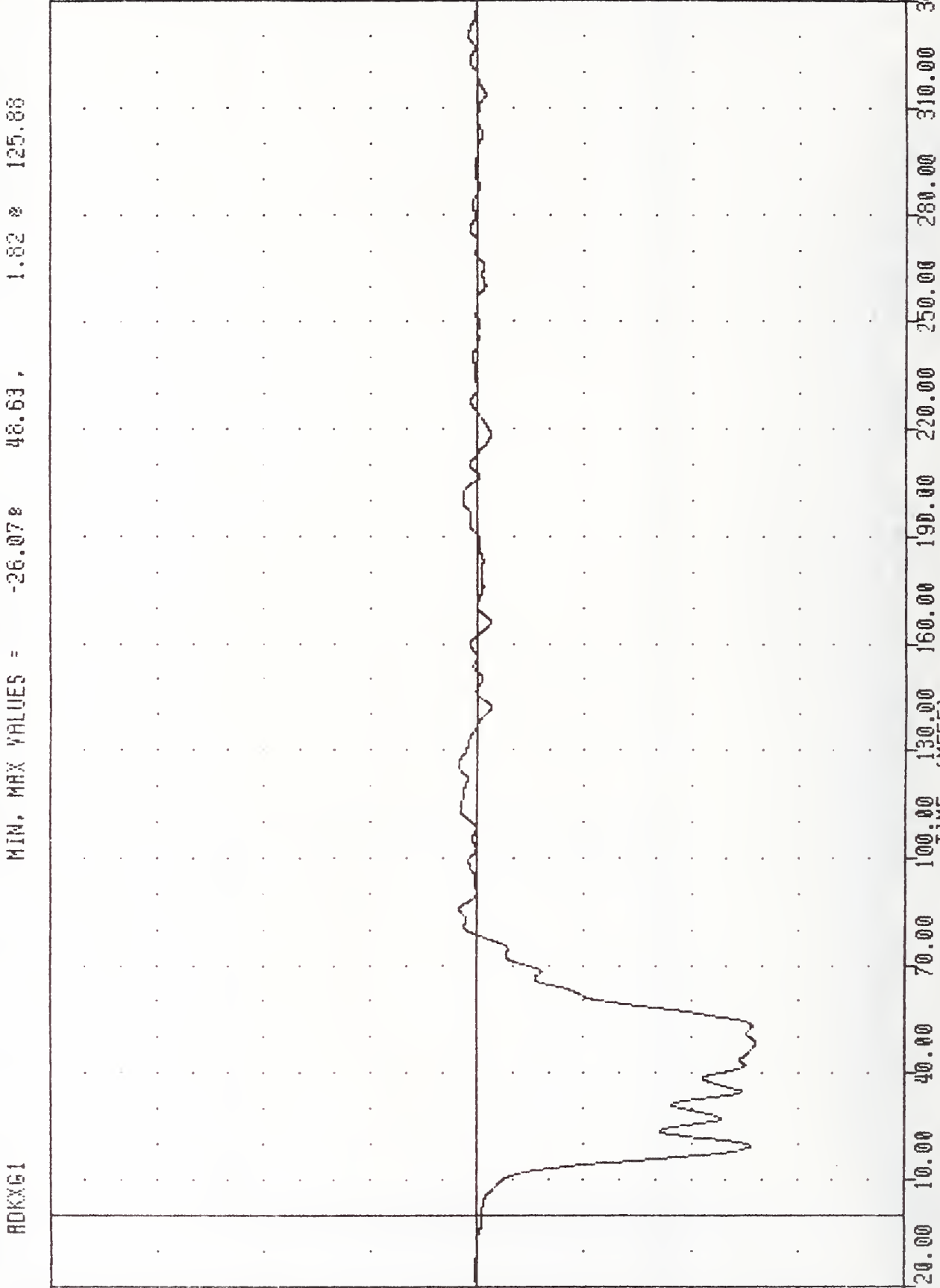
-10.00

-20.00

-30.00

-40.00

-20.00



340.00

310.00

280.00

250.00

220.00

190.00

160.00

130.00

100.00

70.00

40.00

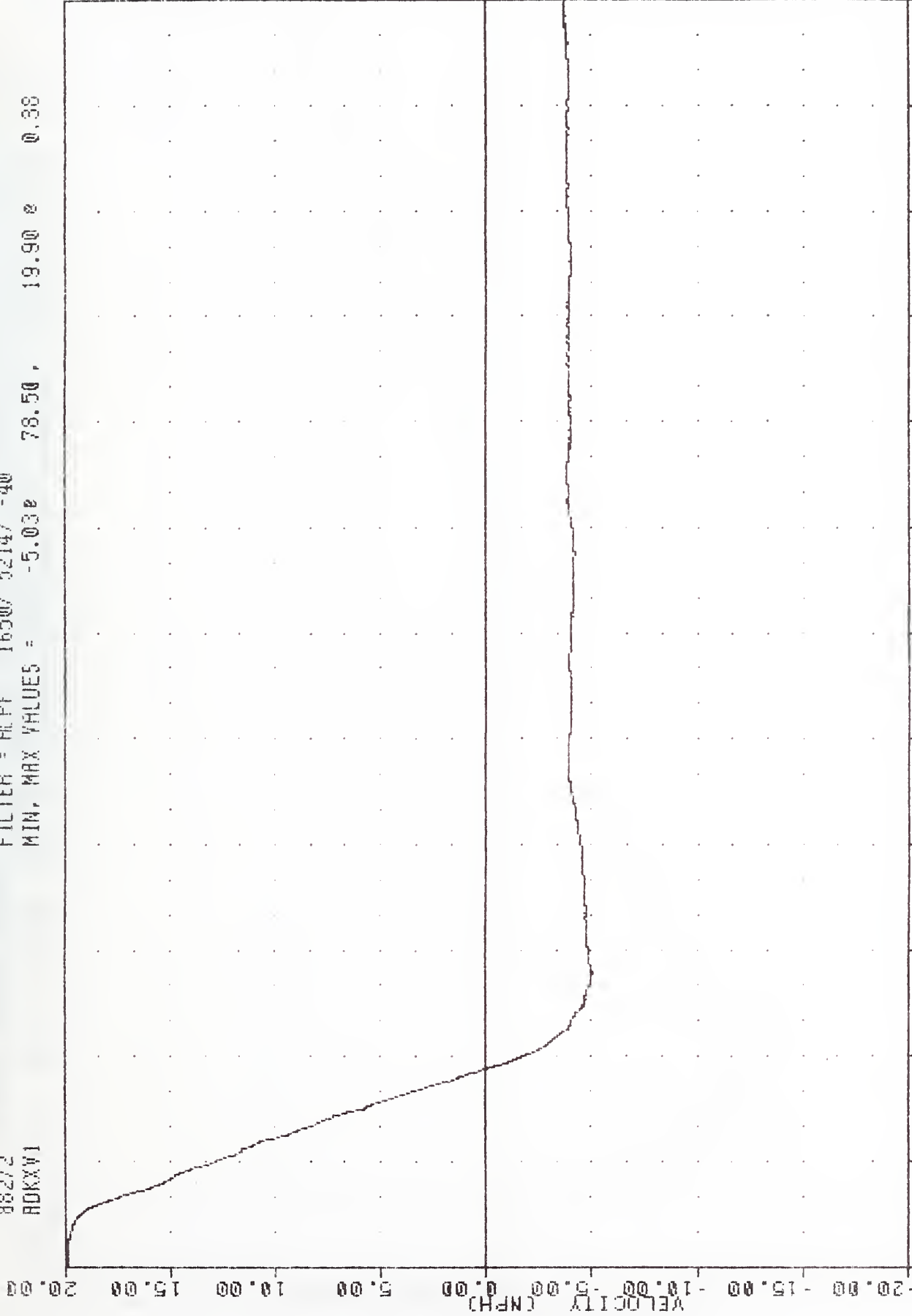
10.00

0.00

1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
VEHICLE REAR DECK X AXIS ACCELERATION

VRTC-3 , 880928
 DAMAGE ALGORITHM REFORMULATION
 88272
 HDKXW1

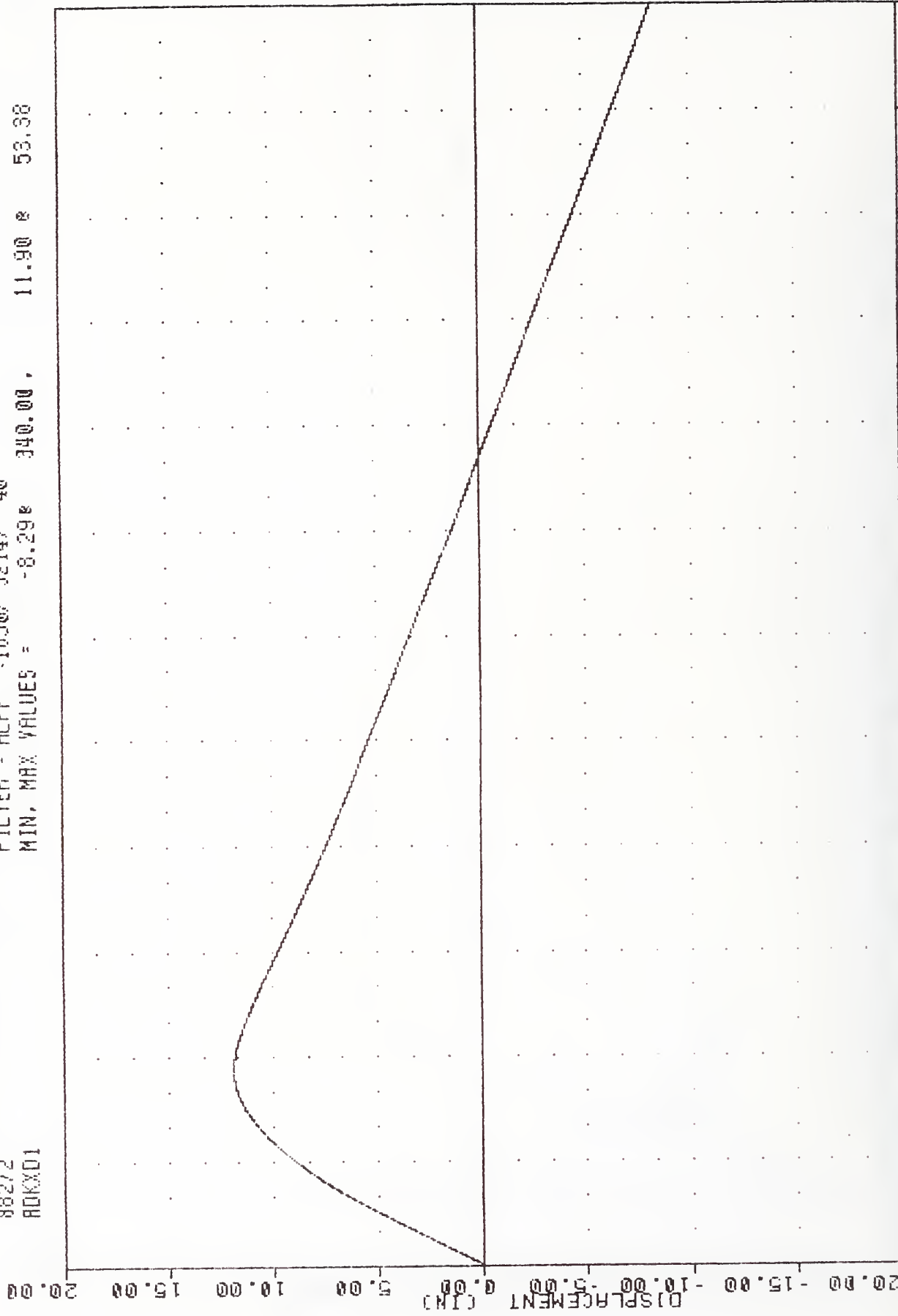
FILTER = ALPF 1650V 5214/ -40
 MIN. MAX VALUES = -5.03e 19.90 e 0.39



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
 VEHICLE REAR DECK X AXIS VELOCITY

VRTC-3 , 880928
 DAMAGE ALGORITHM REFORMULATION
 88272
 ADKXD1

FILTER = ALPF -1650/ 5214/ -40
 MIN, MAX VALUES = -8.29e 340.00 , 11.90 e 53.38



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
 VEHICLE REAR DECK X AXIS DISPLACEMENT

VRTC-3 . 880928

DAMAGE ALGORITHM REFORMULATION

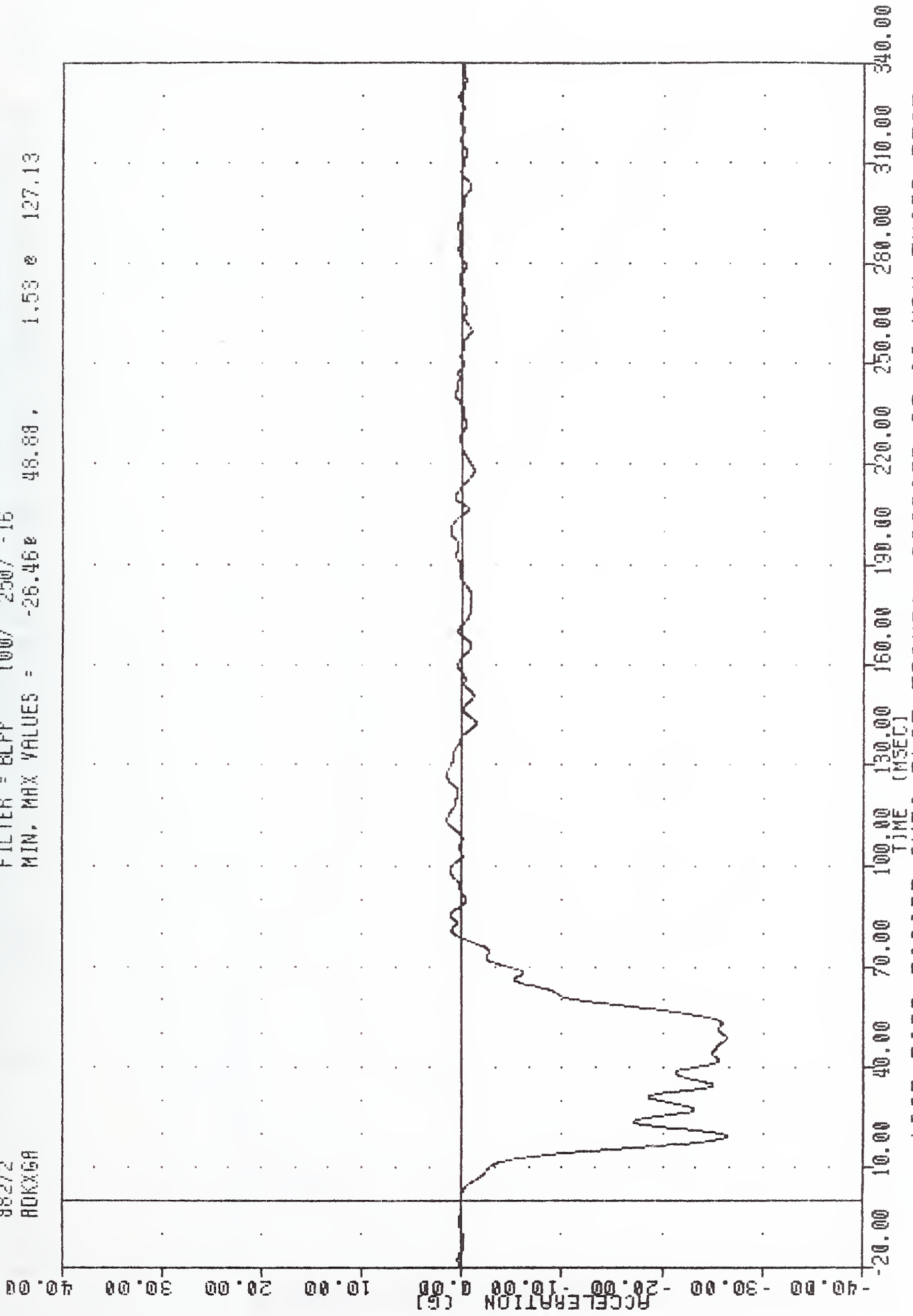
88272

ADKX6A

FILTER = 8LPP 100/ 250/ -16

MIN. MAX VALUES = -26.46e

48.89 . 1.53 e 127.13



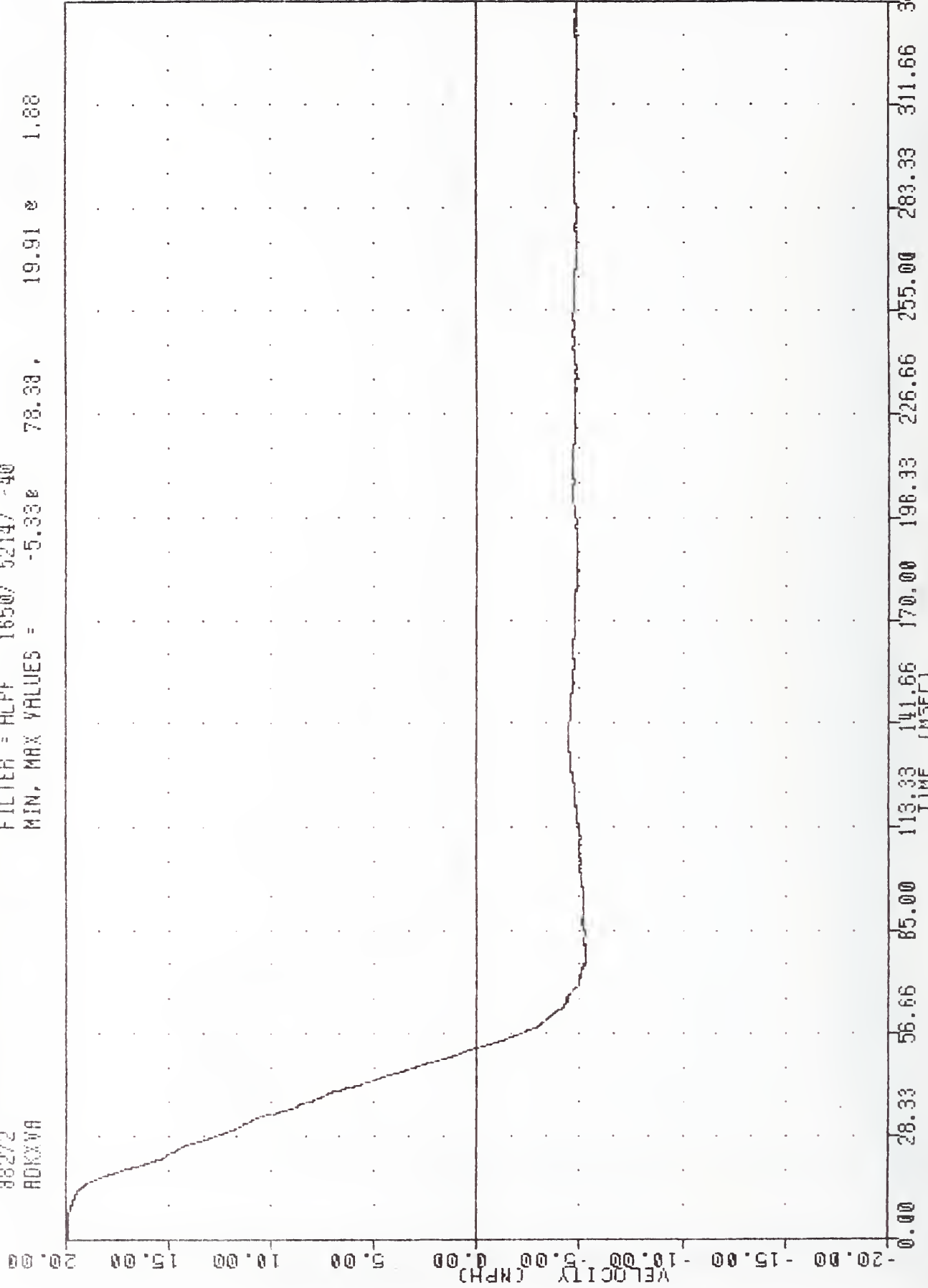
1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
VEHICLE REAR DECK X AXIS REDUNDANT ACCELERATION

WTC-3 , 880926

DAMAGE ALGORITHM REFORMULATION

88272 FILTER = ALPF 1650/ 5214/ -40

ADKXVA MIN. MAX VALUES = -5.33e 78.38 , 19.91 e 1.88



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
VEHICLE REAR DECK X AXIS VELOCITY REDUNDANT

VRTC-3 , 880928

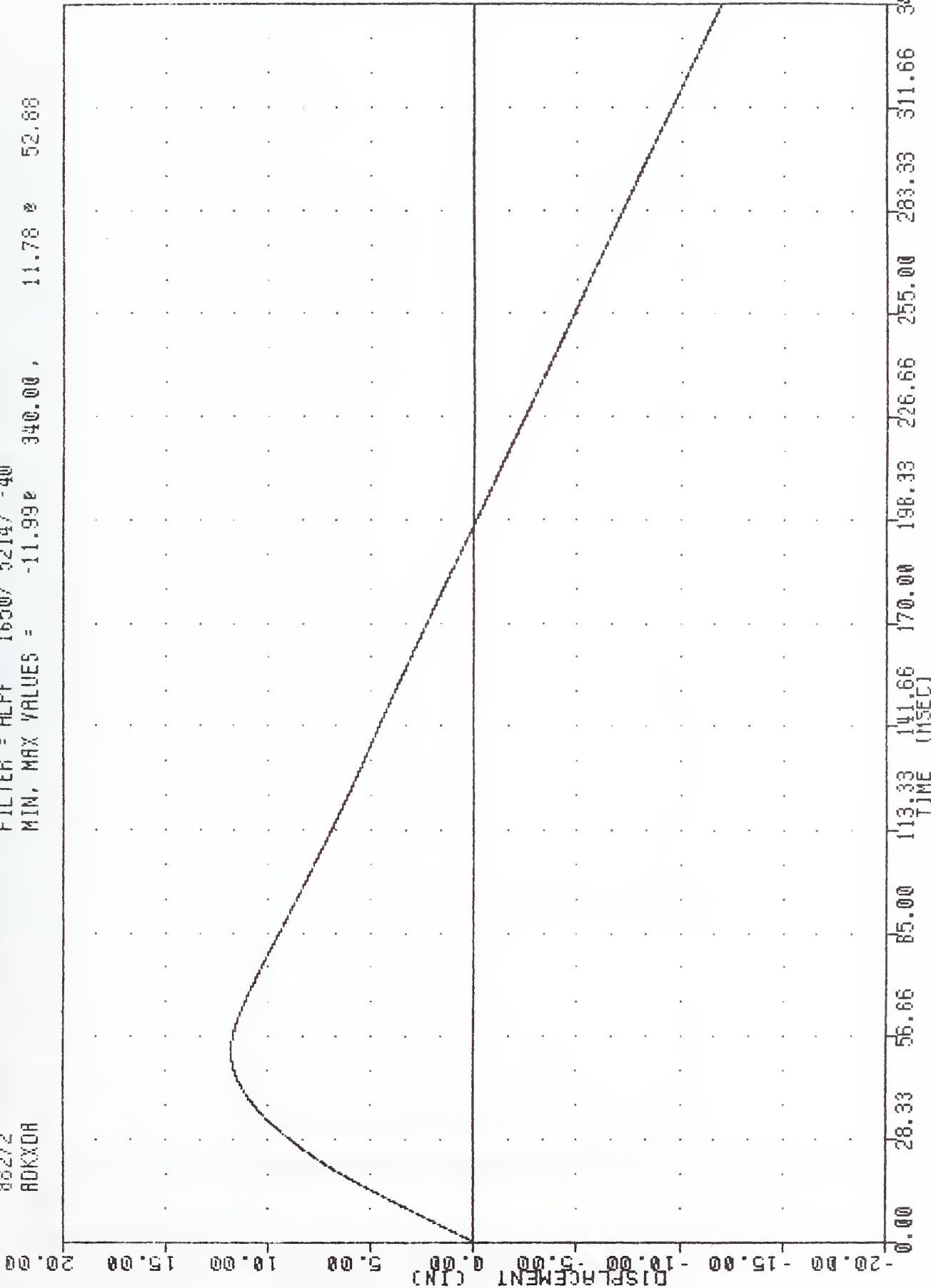
DAMAGE ALGORITHM REFORMULATION

88272

ADKXOR

FILTER = ALPF 1650/ 5214/ -40

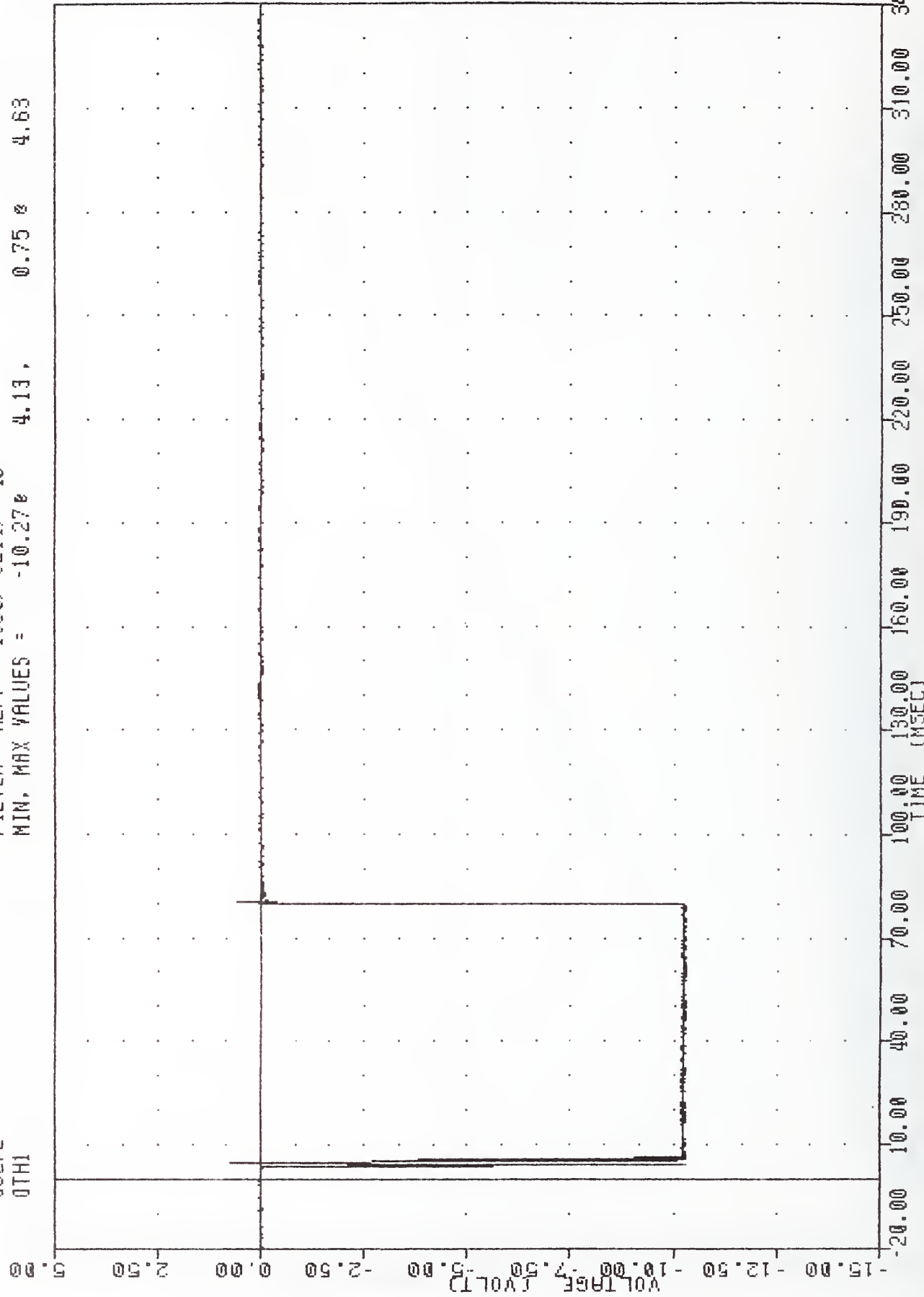
MIN, MAX VALUES = -11.99e 340.00 , 11.78 e 52.88



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
VEHICLE REAR DECK X AXIS DISPLACEMENT REDUNDANT

VRTC-3 , 880928
DAMAGE ALGORITHM REFORMULATION
88272
OTH1

FILTER = ALPF 1650/ 5214/ -40
MIN. MAX VALUES = -10.27e 4.13, 0.75 e 4.63



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
VEHICLE CONTACT SWITCH - LEFT

VRTC-3 , 880928

DAMAGE ALGORITHM REFORMULATION

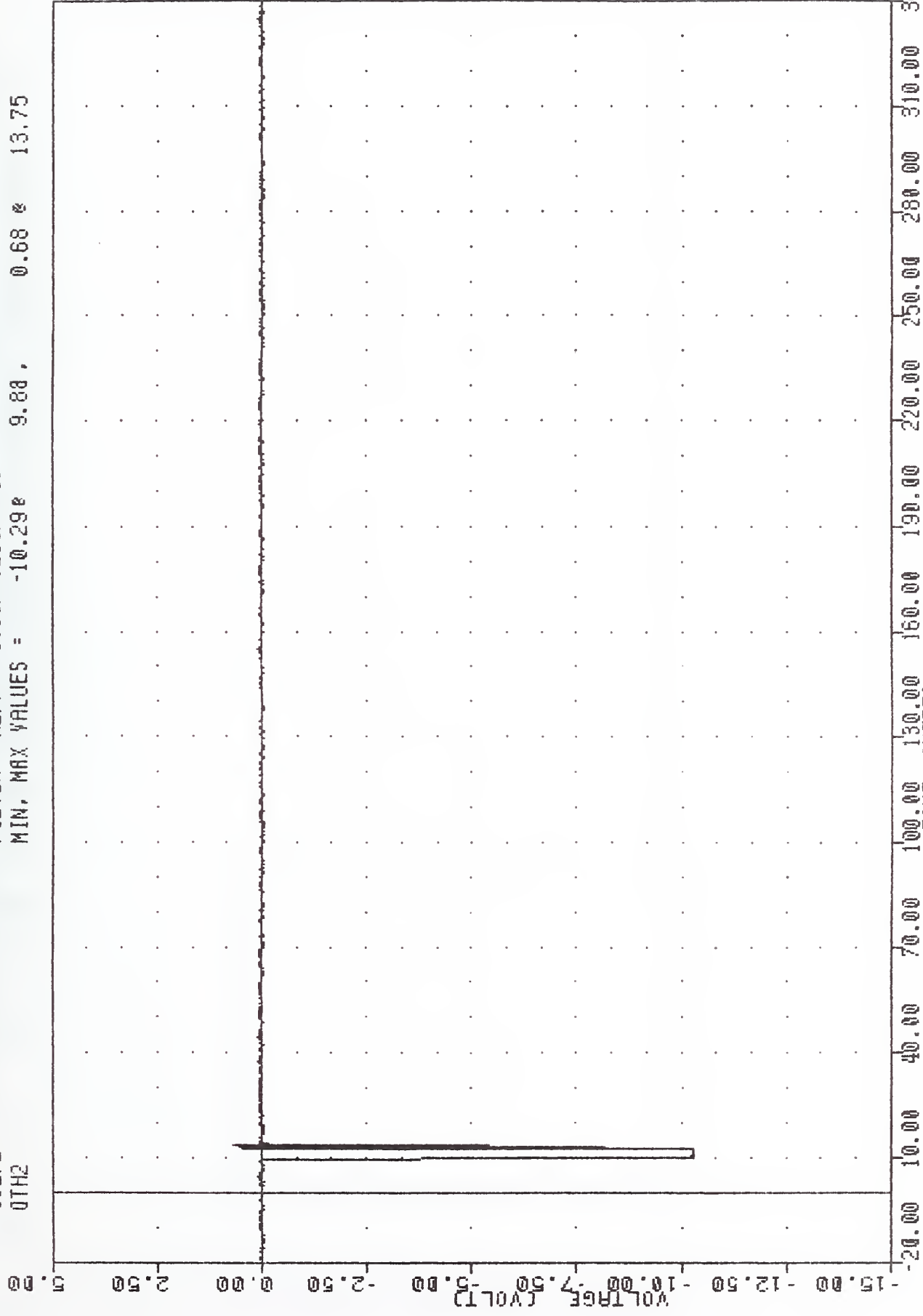
FILTER = ALPF 1650/ 5214/ -40

MIN. MAX VALUES = -10.29e 9.88 ,

0.68 e 13.75

88272

0TH2



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
VEHICLE CONTACT SWITCH - CENTER

VRTC-3 , 880926

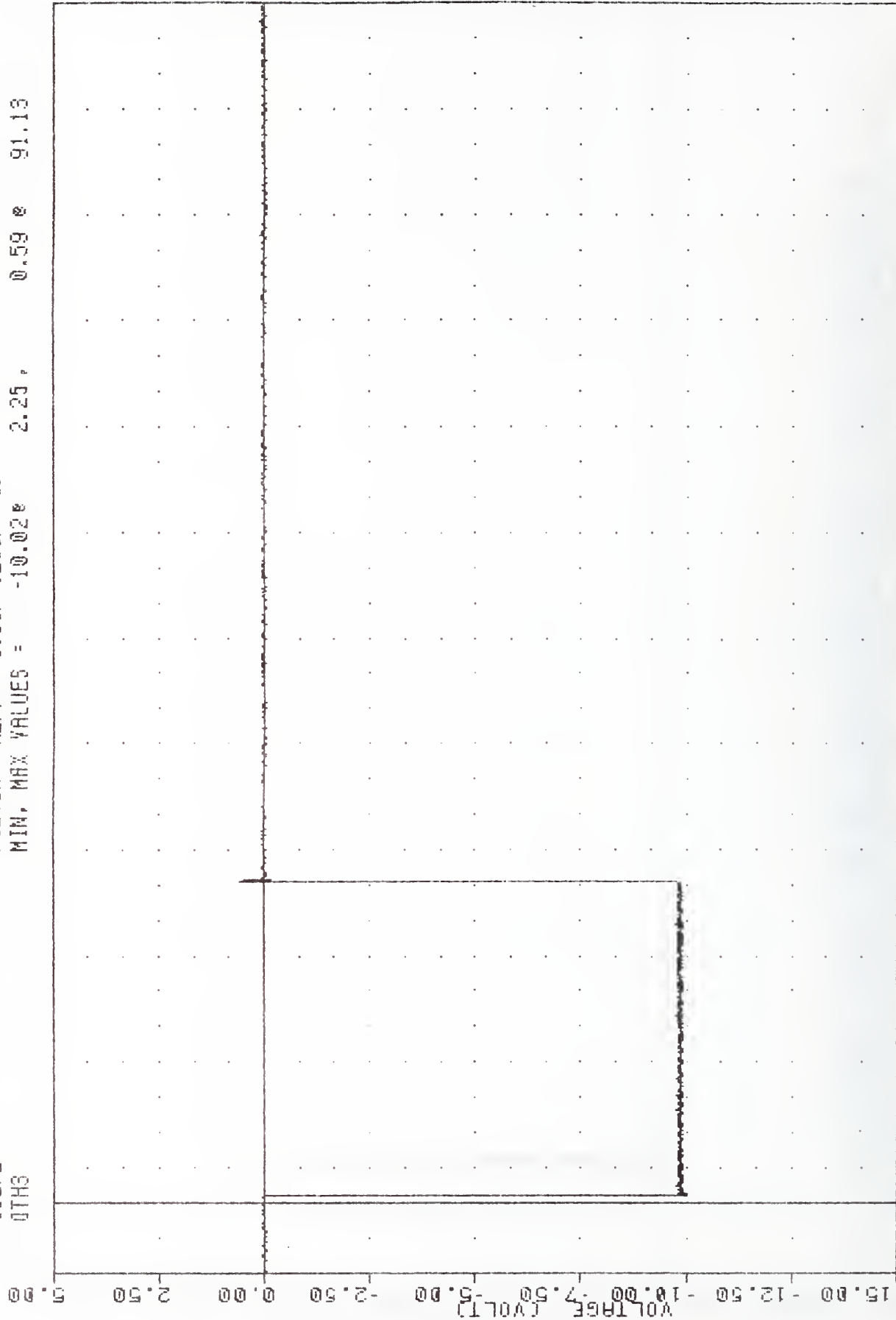
DAMAGE ALGORITHM REFORMULATION

88272

0TH3

FILTER = ALFF 1650/ 5214/ -40

MIN, MAX VALUES = -10.02e 2.25, 0.59 e 91.13



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
VEHICLE CONTACT SWITCH - RIGHT

VRTC-3 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

OTH4

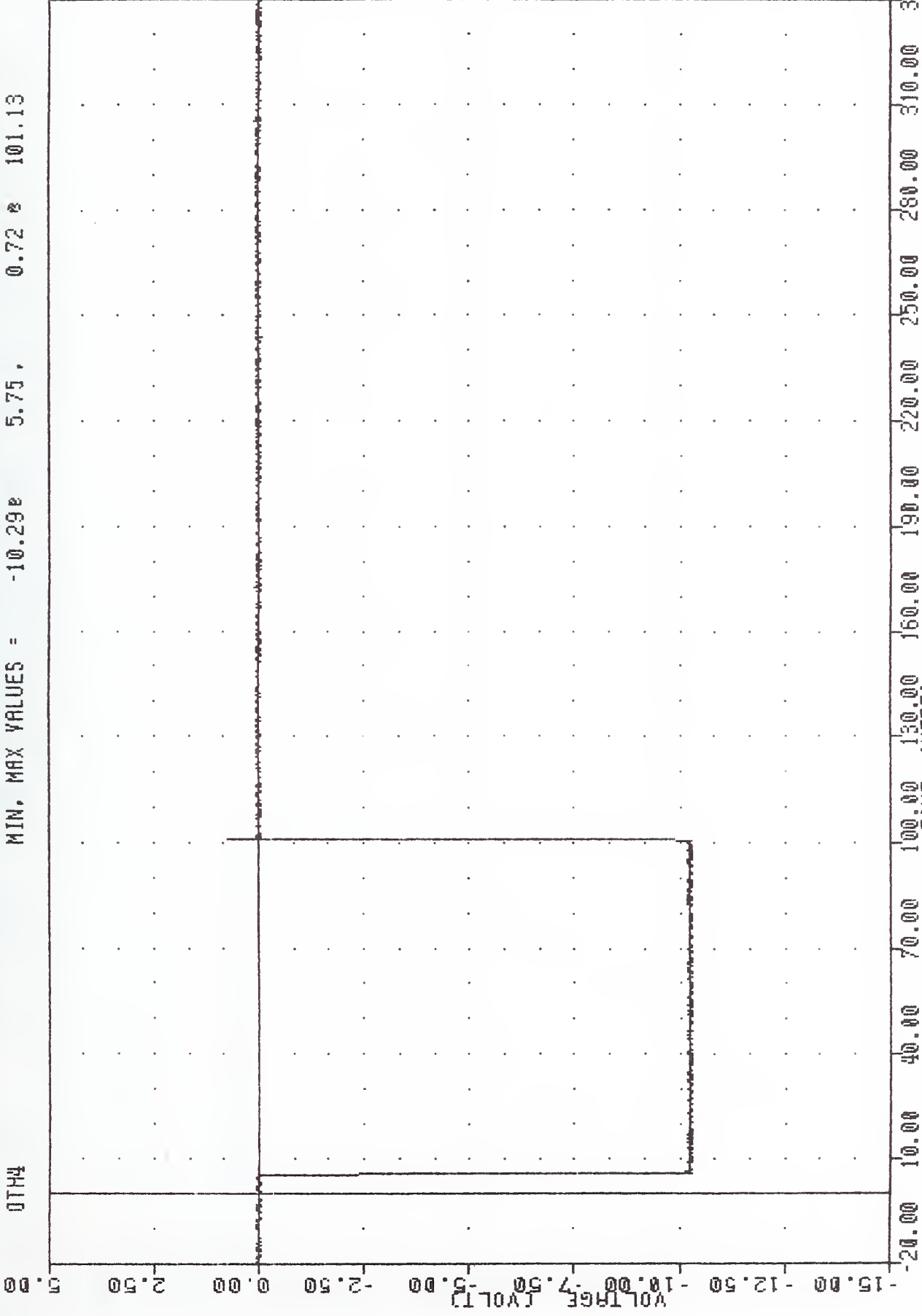
FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -10.29e

5.75 ,

0.72 e

101.13



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
BARRIER CONTACT SWITCH - LEFT

VRTC-3 , 880928

DAMAGE ALGORITHM REFORMULATION

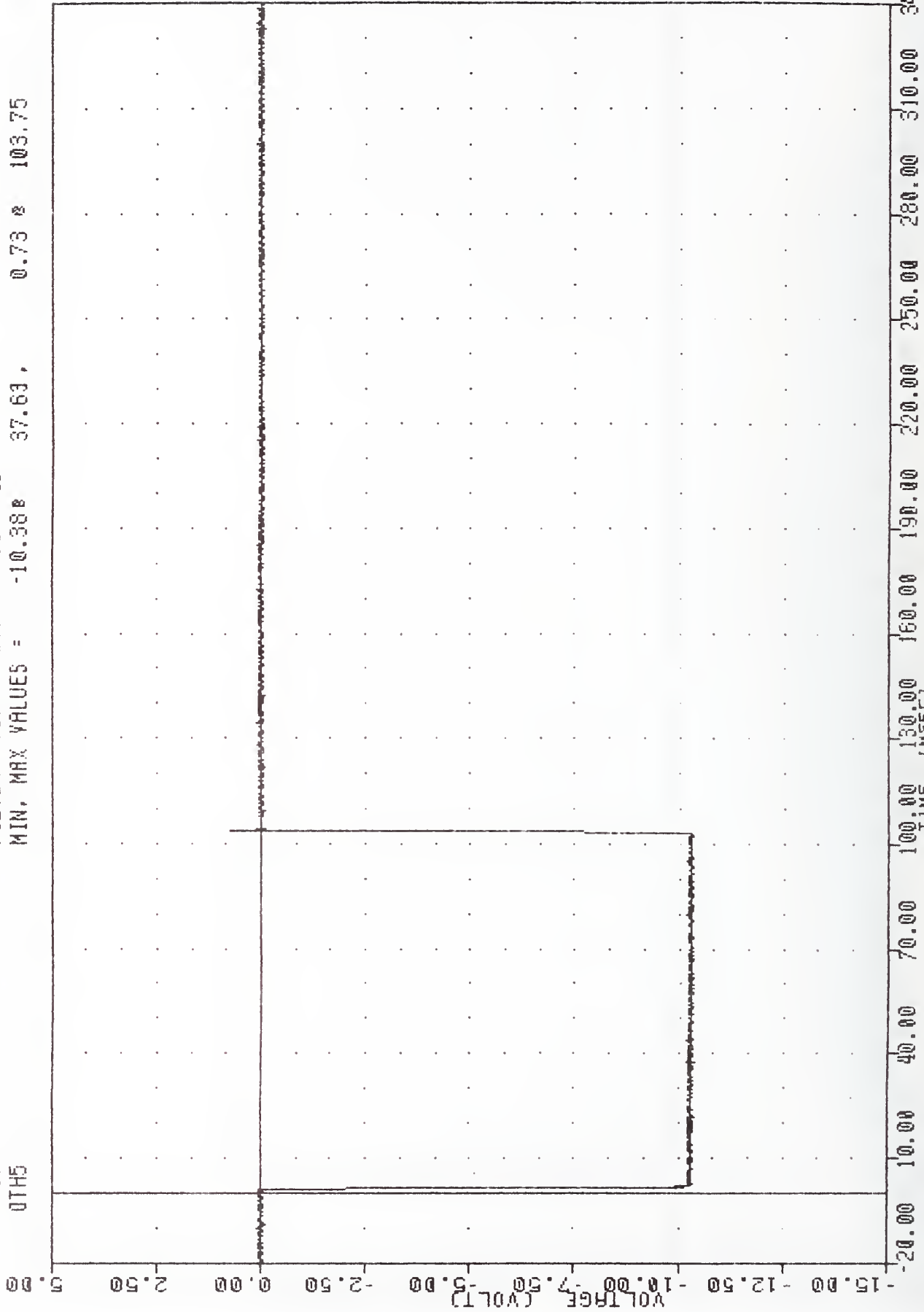
88272

0TH5

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -10.38 37.63

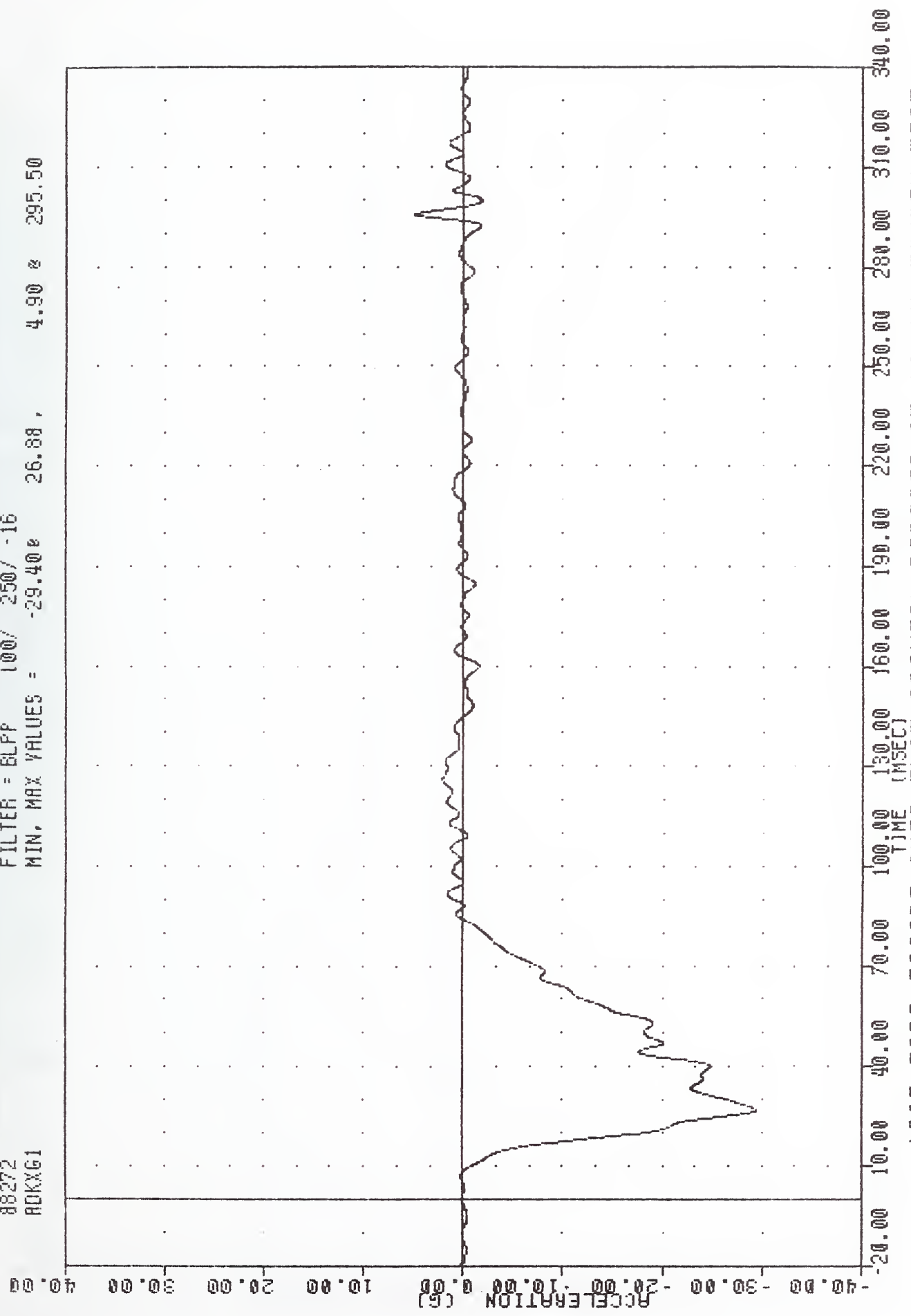
0.73 103.75



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH THIRD TEST
BARRIER CONTACT SWITCH - RIGHT

VRTC-4 , 880928
DAMAGE ALGORITHM REFORMULATION
88272
ADKXG1

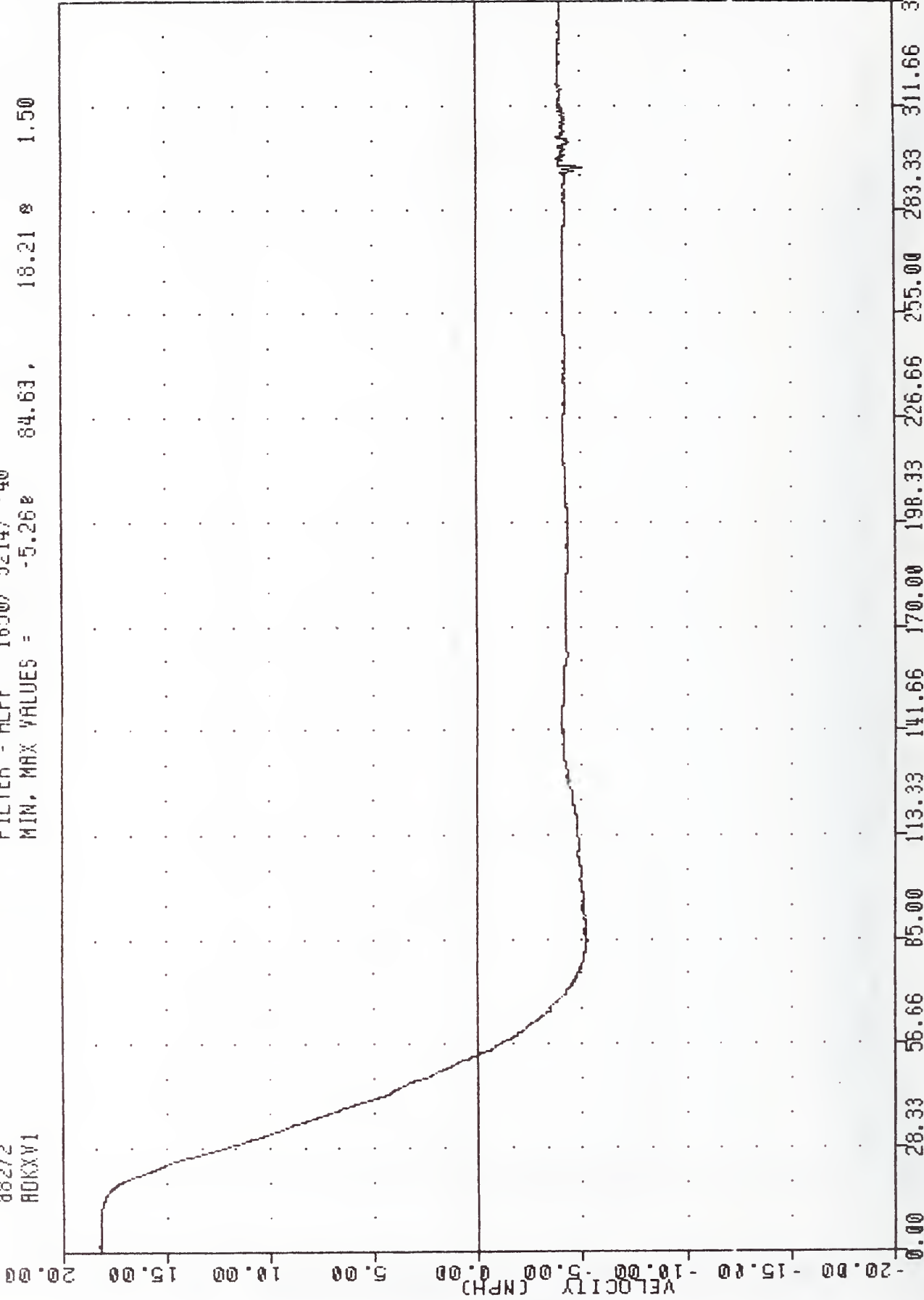
FILTER = BLPP 100/ 250/ -16
MIN. MAX VALUES = -29.40g 26.88g 4.90g 295.50



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST
VEHICLE REAR DECK X AXIS ACCELERATION

VRTC-4 , 880928
DAMAGE ALGORITHM REFORMULATION
88272
ADKXY1

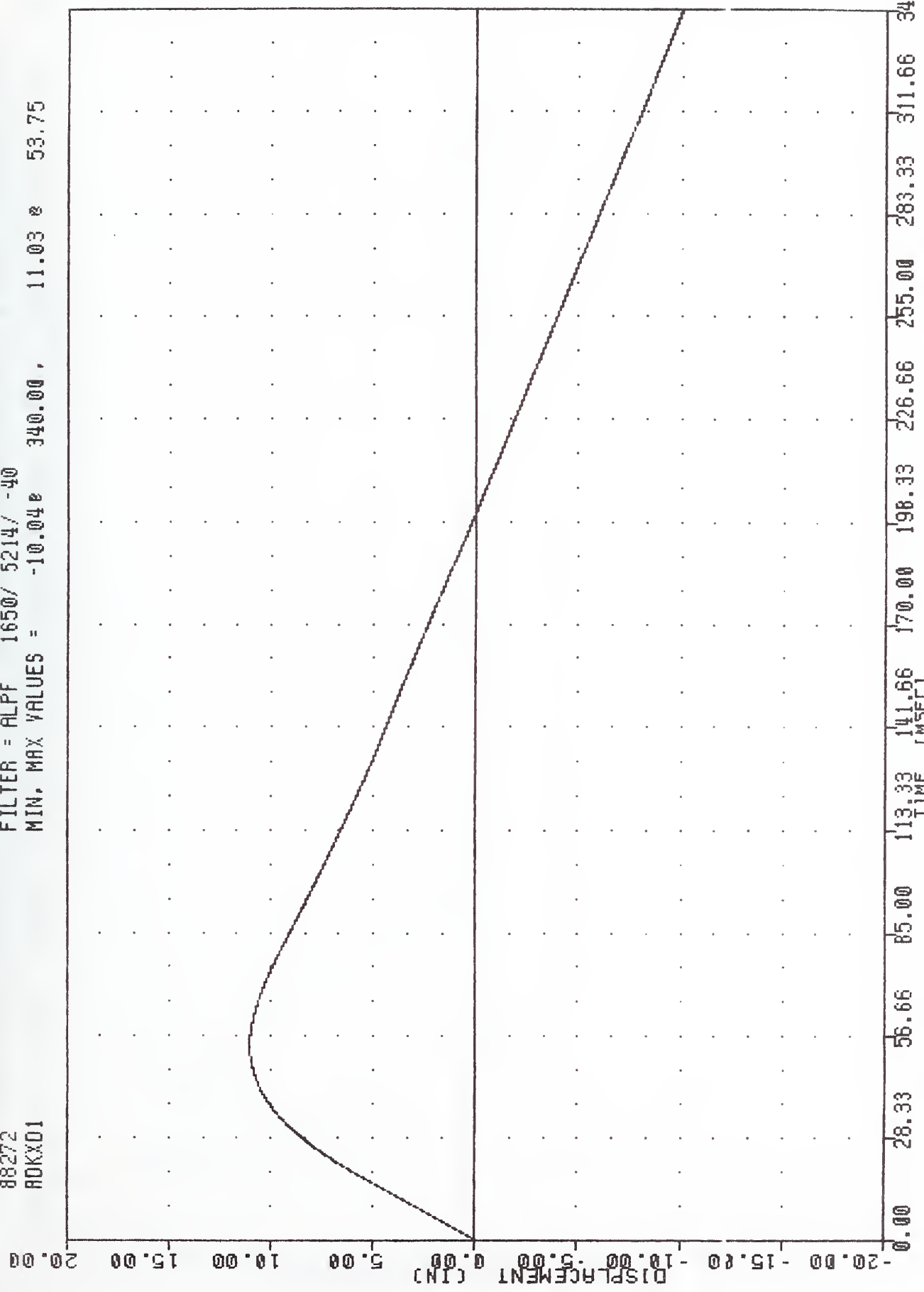
FILTER = ALPF 1650/ 5214/ -40
MIN. MAX VALUES = -5.26e 84.63 , 18.21 e 1.50



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST
VEHICLE REAR DECK X AXIS VELOCITY

VRTC-4 , 880928
DAMAGE ALGORITHM REFORMULATION
88272
ADKX01

FILTER = ALPF 1650/ 5214/ -40
MIN. MAX VALUES = -10.04e 340.00 , 11.03 e 53.75



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST
VEHICLE REAR DECK X AXIS DISPLACEMENT

VRTC-4 , 880928

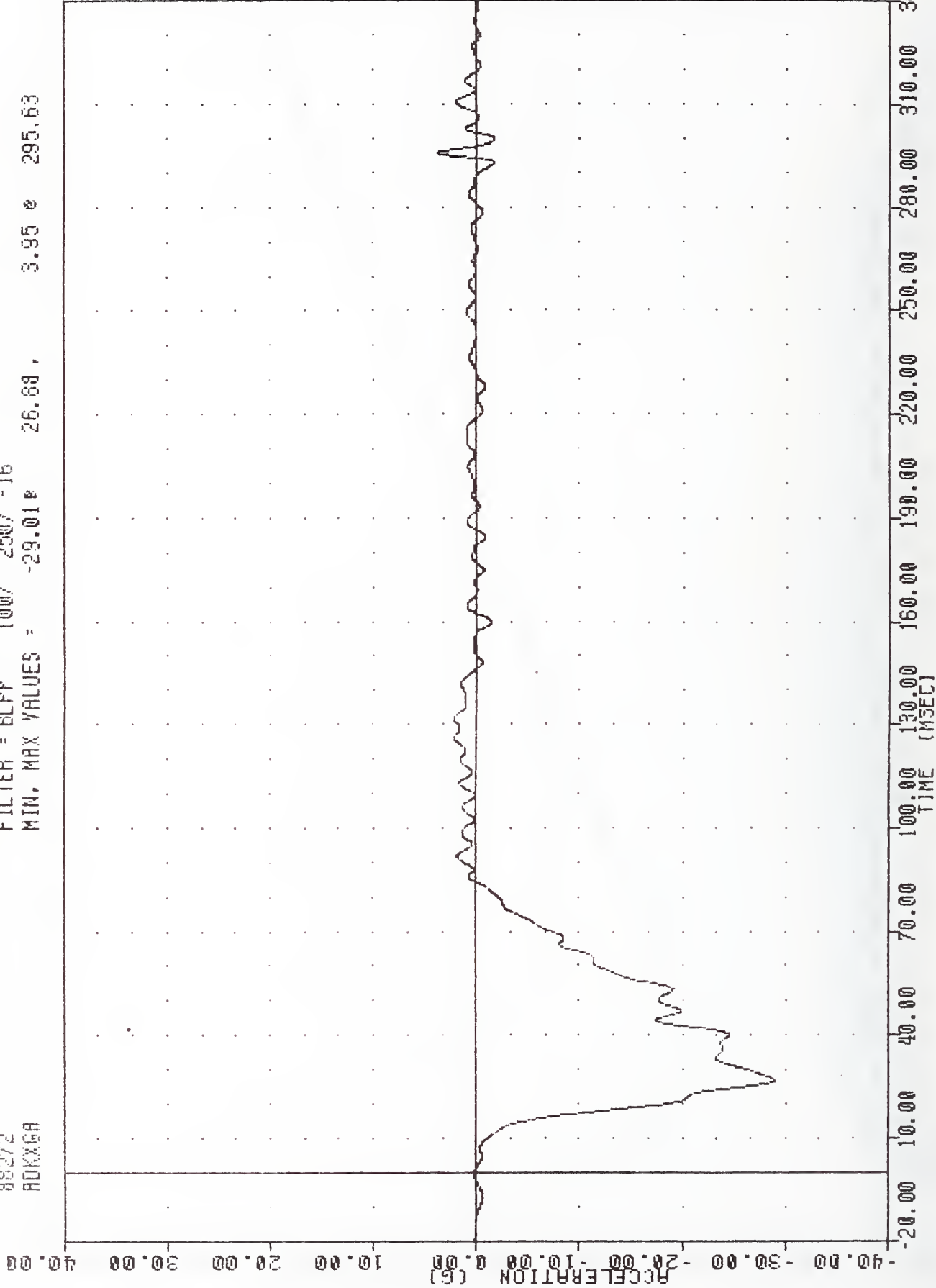
DAMAGE ALGORITHM REFORMULATION

88272

ADKXGA

FILTER = BLFP 100/ 250/ -16

MIN. MAX VALUES = -29.01e 26.68 , 3.95 e 295.63



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST
VEHICLE REAR DECK X AXIS REDUNDANT ACCELERATION

VRTC-4 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

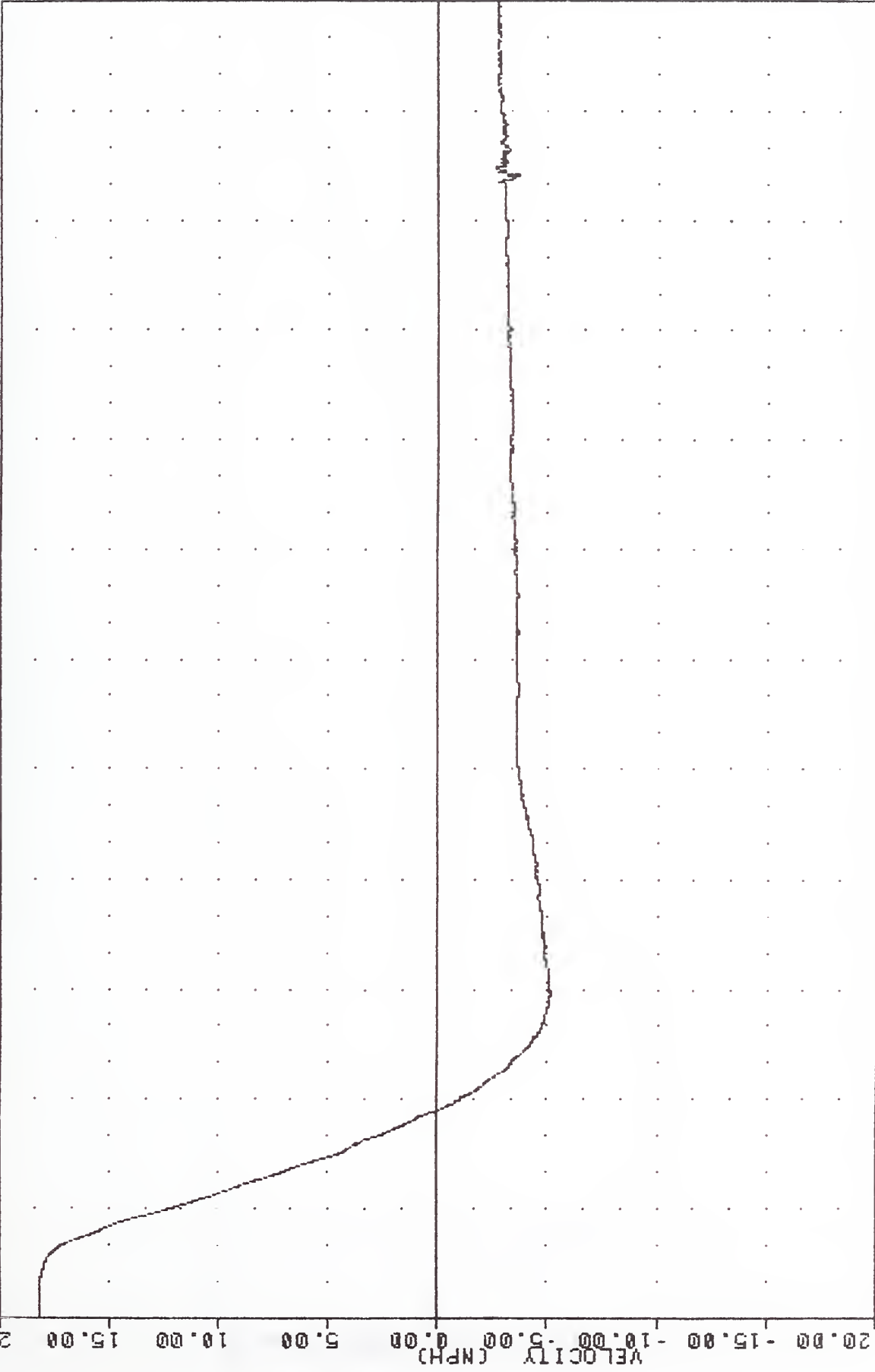
ADKXVA

FILTER = ALPF 1650/ 5214/ -40

MIN. MAX VALUES = -5.18 84.00

18.21 1.63

20.00



0.00 28.33 56.66 85.00 113.33 141.66 170.00 198.33 226.66 255.00 283.33 311.66 340.00

1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST
VEHICLE REAR DECK X AXIS VELOCITY REDUNDANT

VRTC-4 , 880928

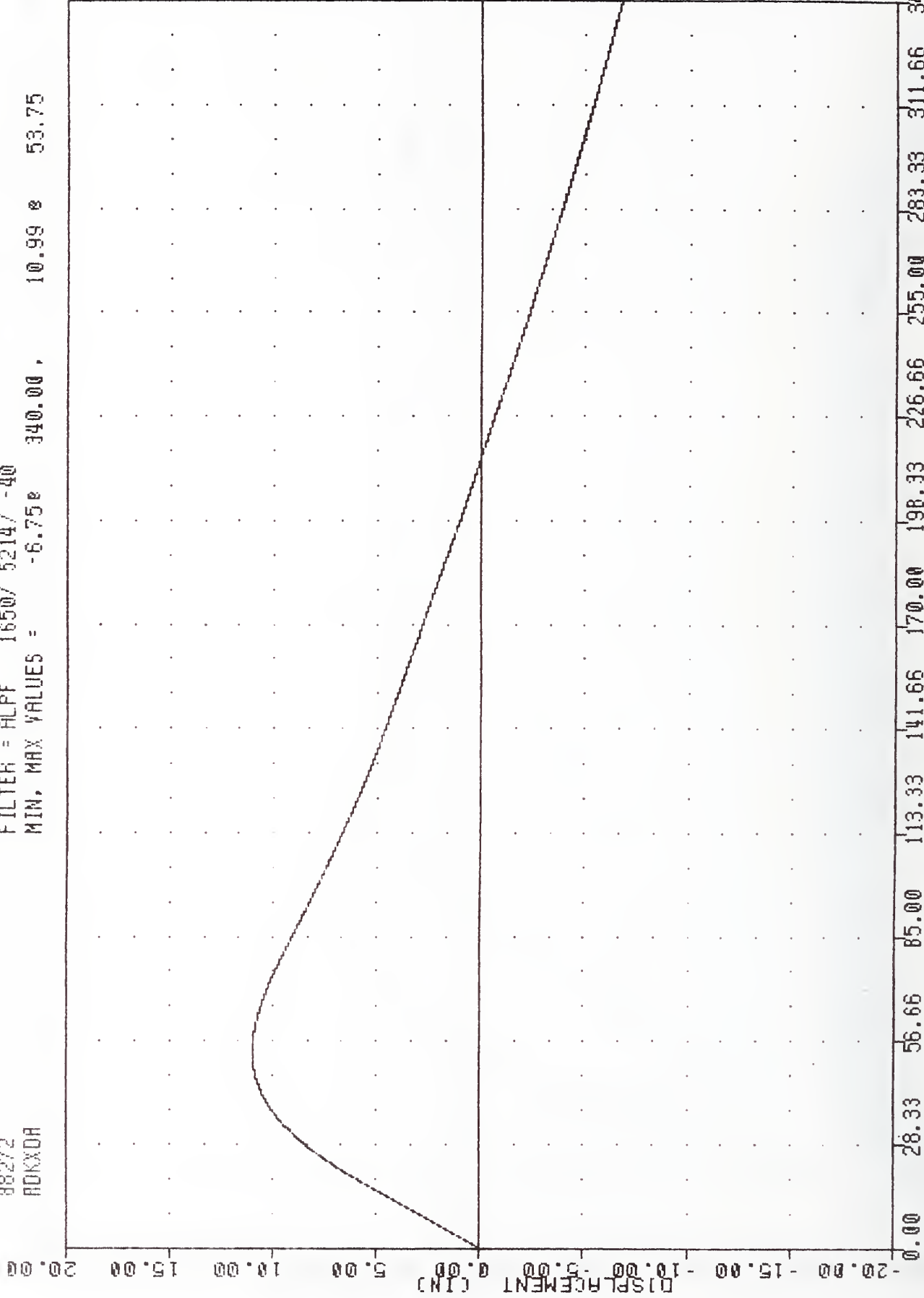
DAMAGE ALGORITHM REFORMULATION

88272

ADKXDA

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -6.75e 340.00 , 10.99 e 53.75



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST
VEHICLE REAR DECK X AXIS DISPLACEMENT REDUNDANT

VRTC-4 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

0TH1

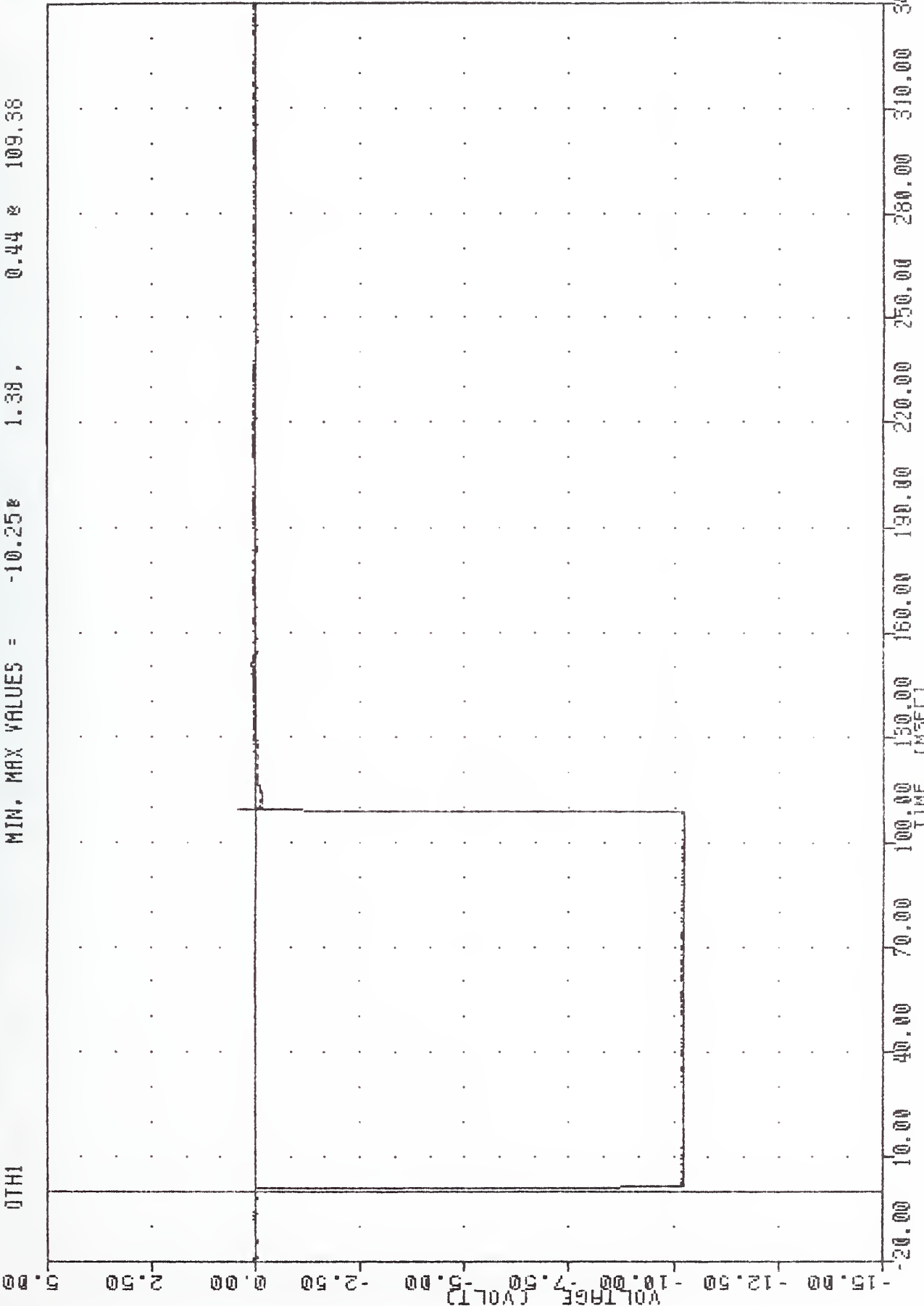
FILTER = ALPF 1650/ 5214/ -40

MIN. MAX VALUES = -10.25*

1.38 ,

0.44 *

109.38



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST
VEHICLE CONTACT SWITCH - LEFT

VRTC-4 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

0TH2

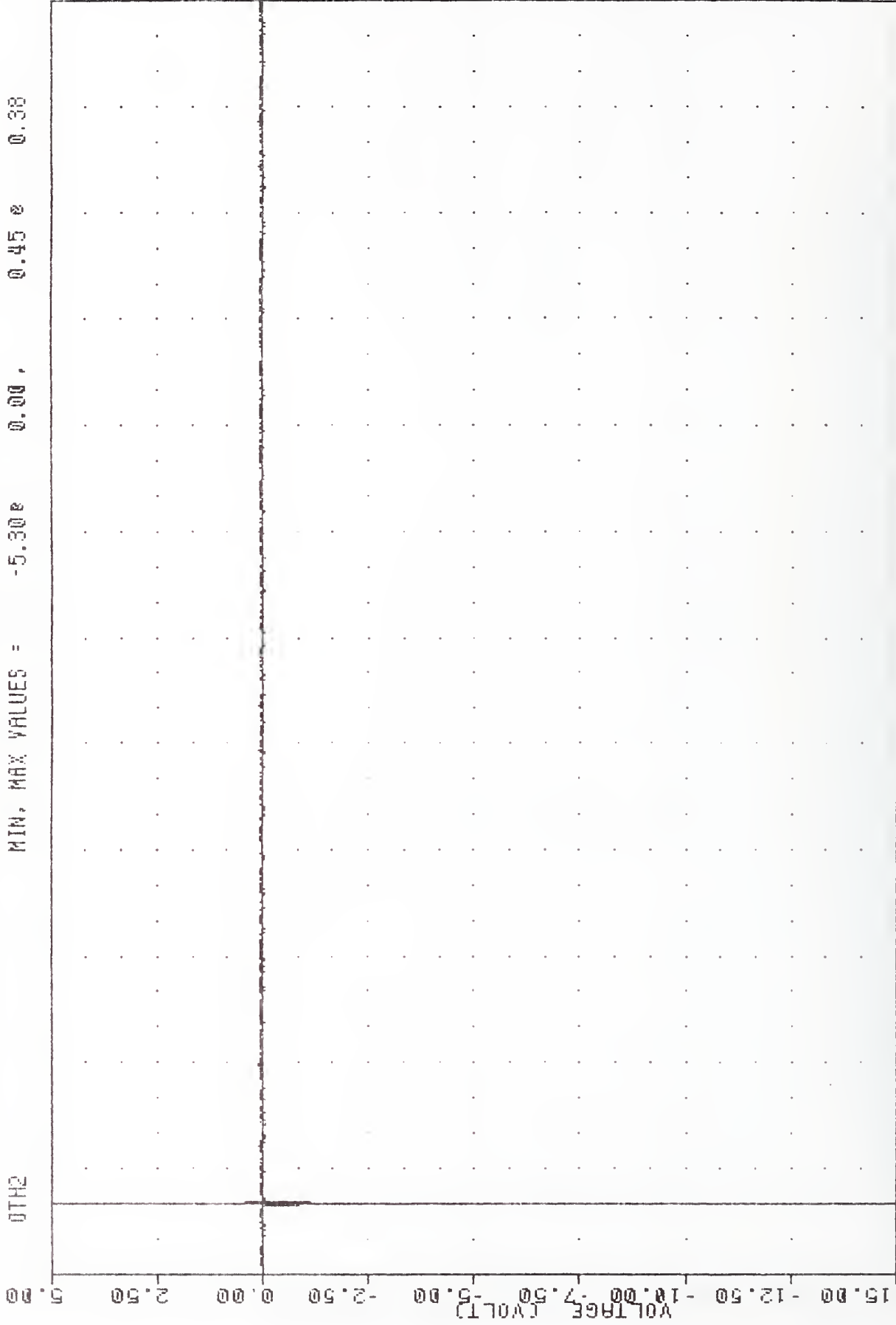
FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -5.30e

0.00 ,

0.45 e

0.38



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST

VEHICLE CONTACT SWITCH - CENTER

VRTC-4 * 880928

DAMAGE ALGORITHM REFORMULATION

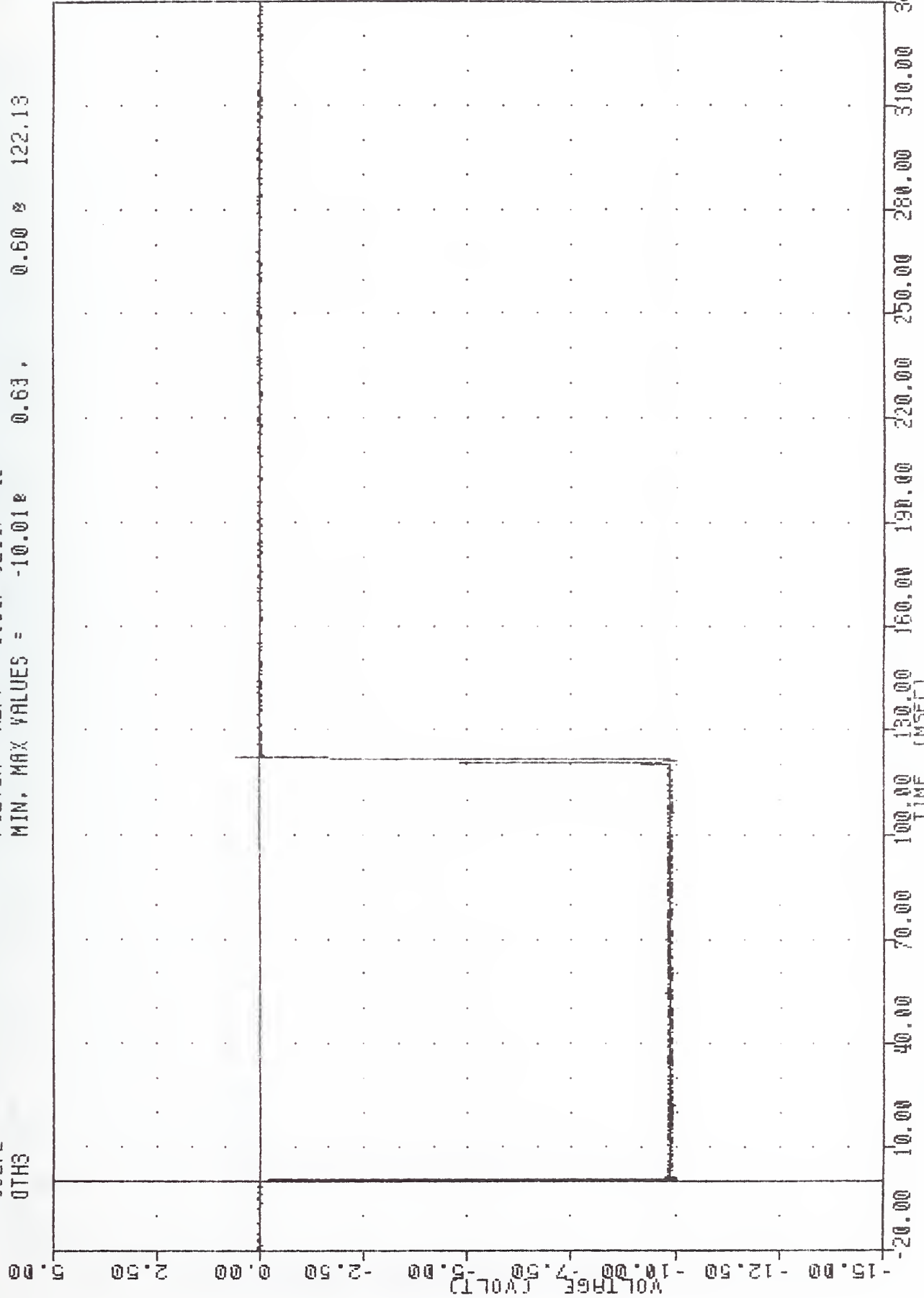
88272

OTHS

FILTER = ALPF 1650/ 5214/ -40

MIN. MAX VALUES = -10.01e 0.63

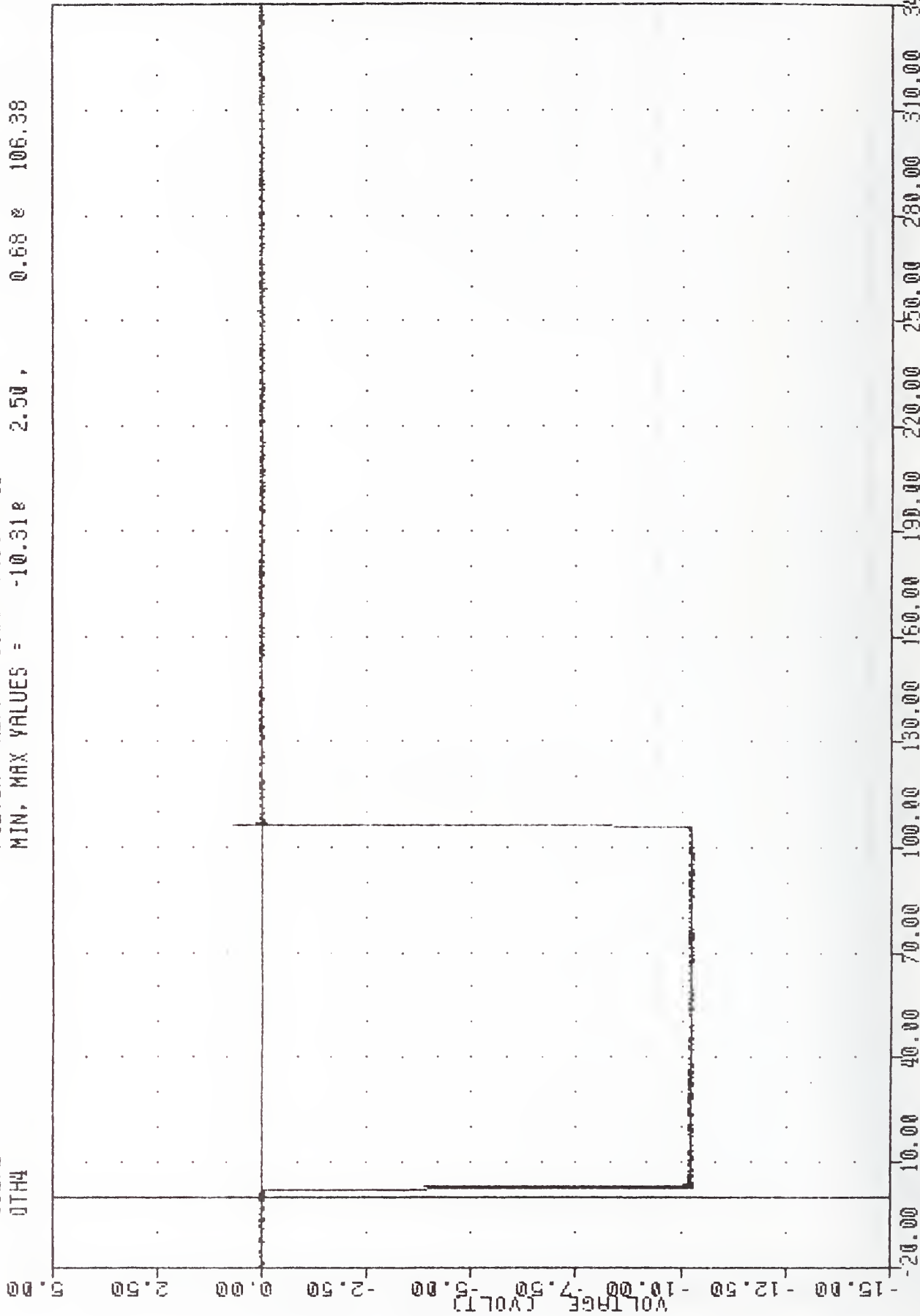
0.60 s 122.13



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST
VEHICLE CONTACT SWITCH - RIGHT

VRTC-4 , 880928
DAMAGE ALGORITHM REFORMULATION
88272
0TH4

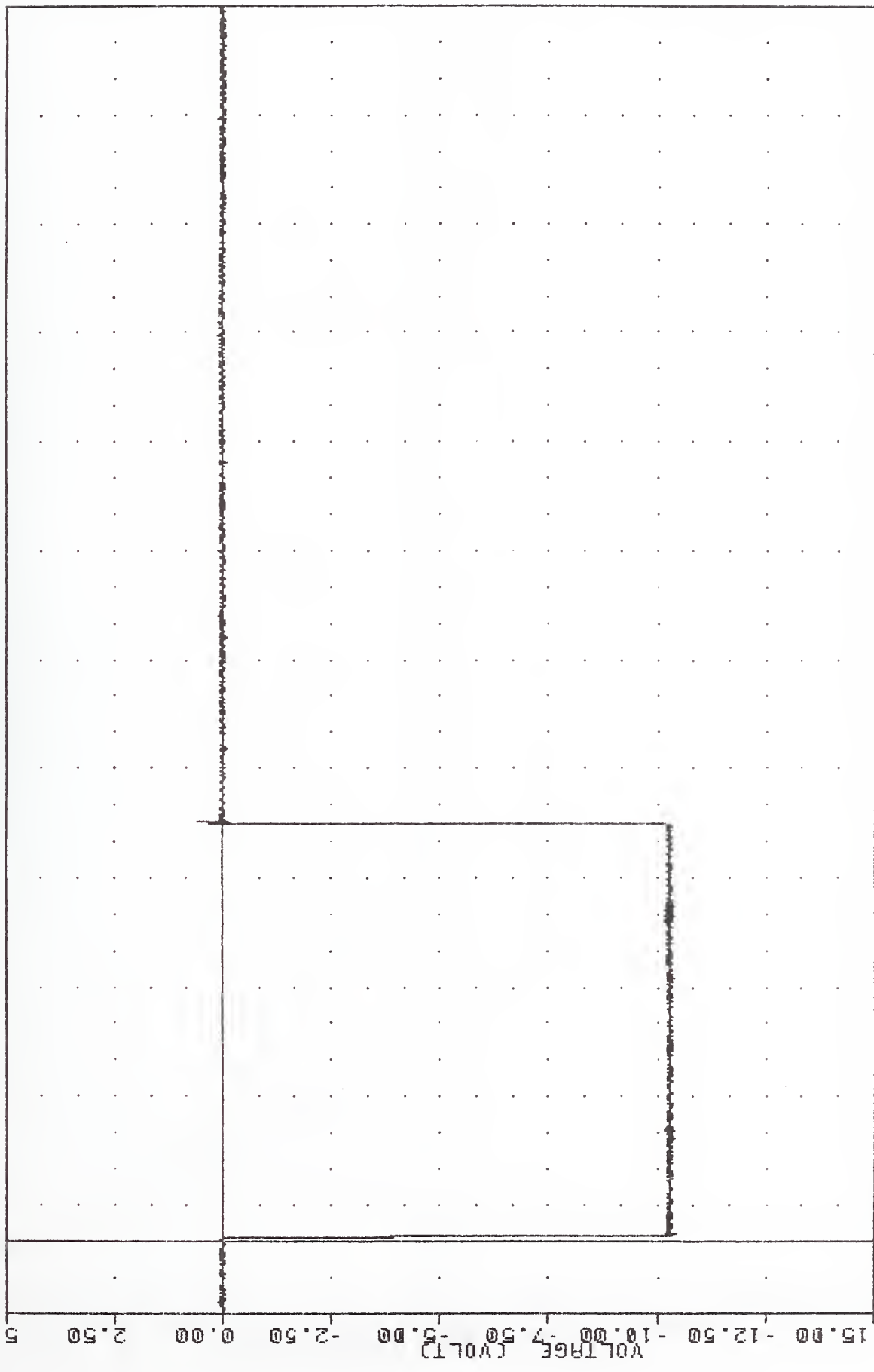
FILTER = ALPF 1650/ 5214/ -40
MIN, MAX VALUES = -10.31e 2.50, 0.68 e 106.38



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST
BARRIER CONTACT SWITCH - LEFT

VRTC-4 , 280928
DAMAGE ALGORITHM REFORMULATION
88272
QTH5

FILTER = ALFF 1650/ 5214/ -40
MIN, MAX VALUES = -10.468 1.88, 0.60 @ 115.13



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 18 MPH FOURTH TEST
BARRIER CONTACT SWITCH - RIGHT

VRTC-5 . 880928

DAMAGE ALGORITHM REFORMULATION

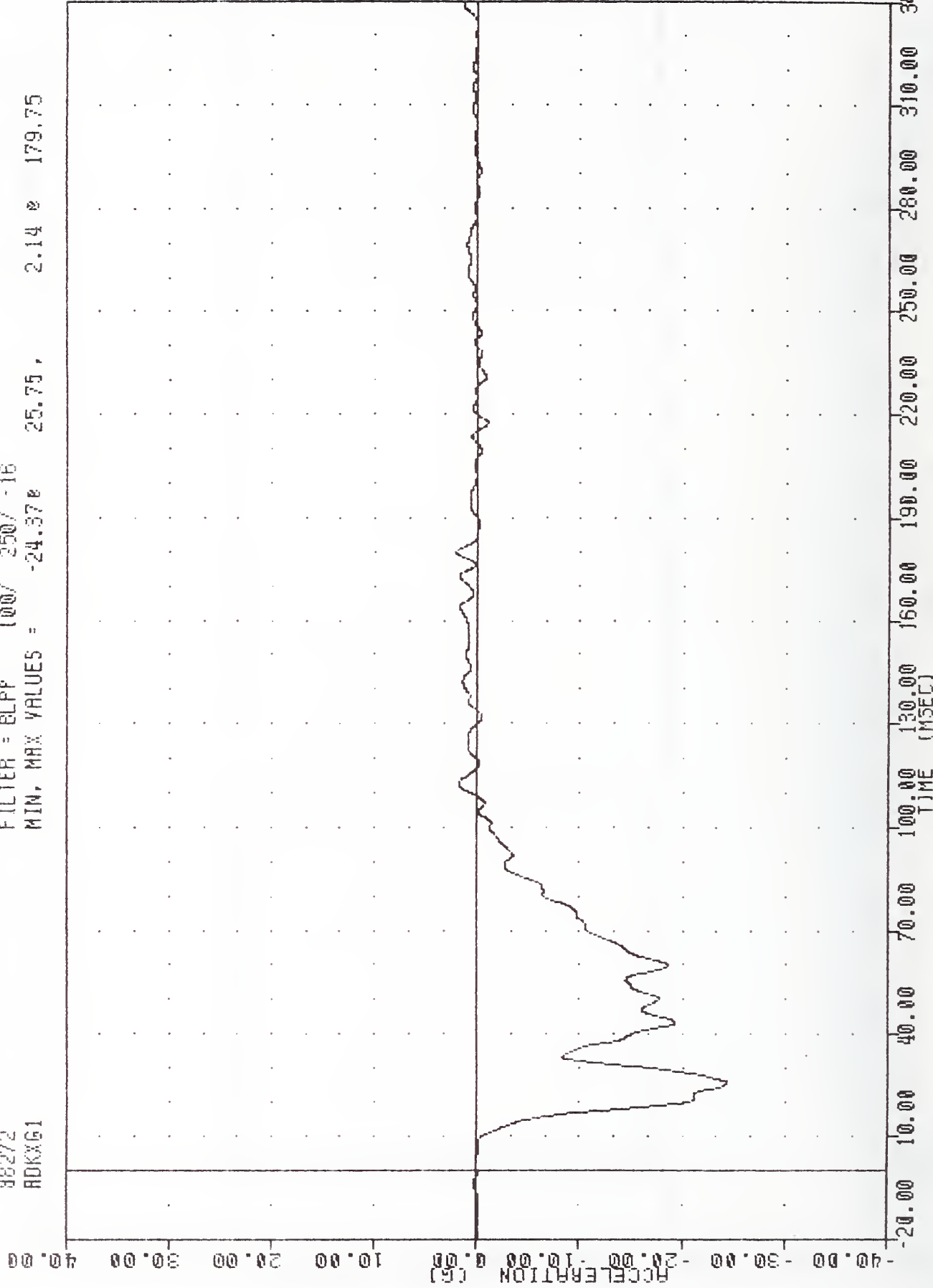
88272

ADKXG1

FILTER = BLPP 100/ 250/ -16

MIN, MAX VALUES = -24.37g

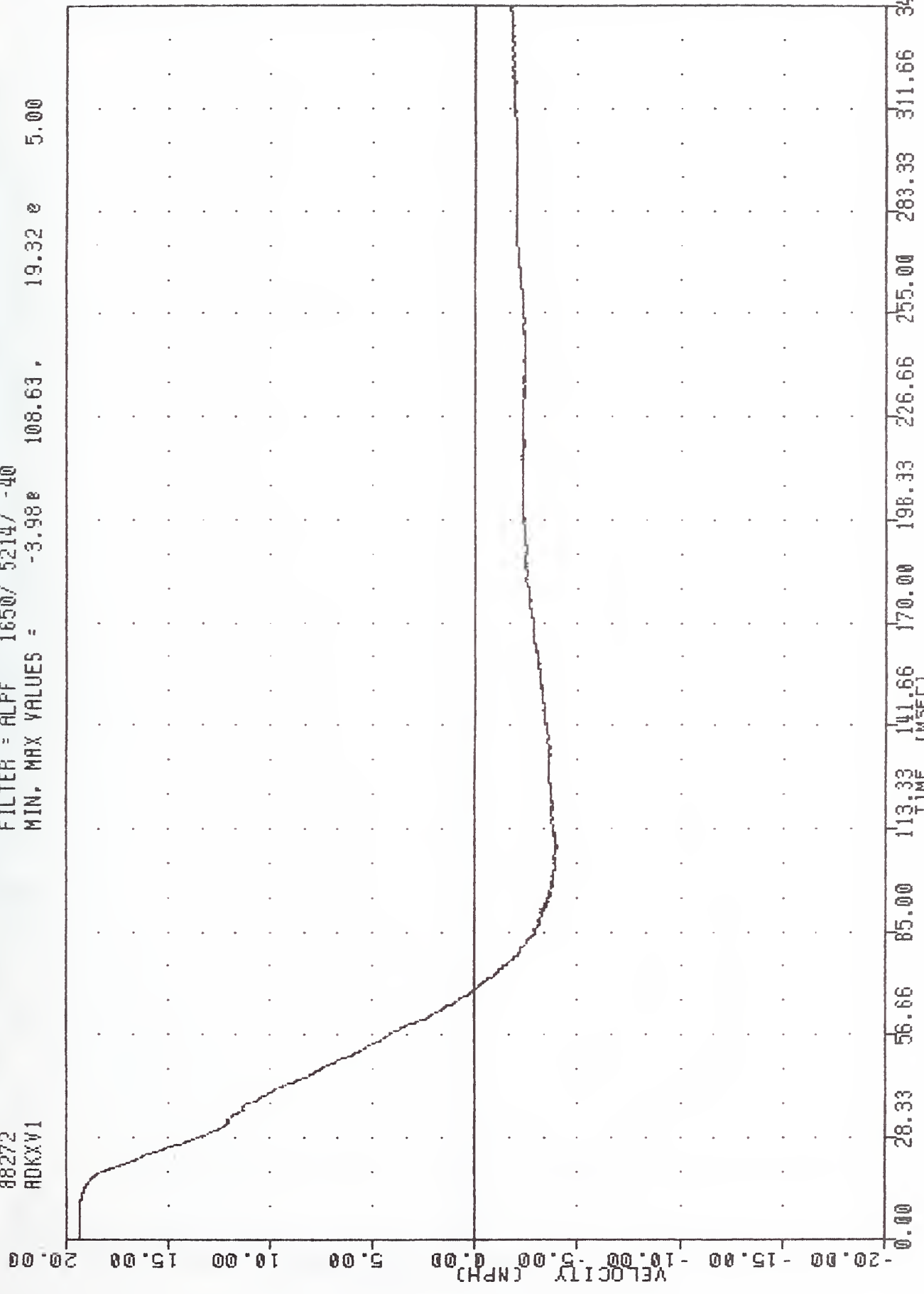
2.14 g 179.75



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST
VEHICLE REAR DECK X AXIS ACCELERATION

VRTC-5 , 880928
 DAMAGE ALGORITHM REFORMULATION
 88272
 ADKXV1

FILTER = ALPF 1650/ 5214/ -40
 MIN. MAX VALUES = -3.98e 108.63 , 19.32 e 5.00



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST
 VEHICLE REAR DECK X AXIS VELOCITY

VRTC-5 , 880928

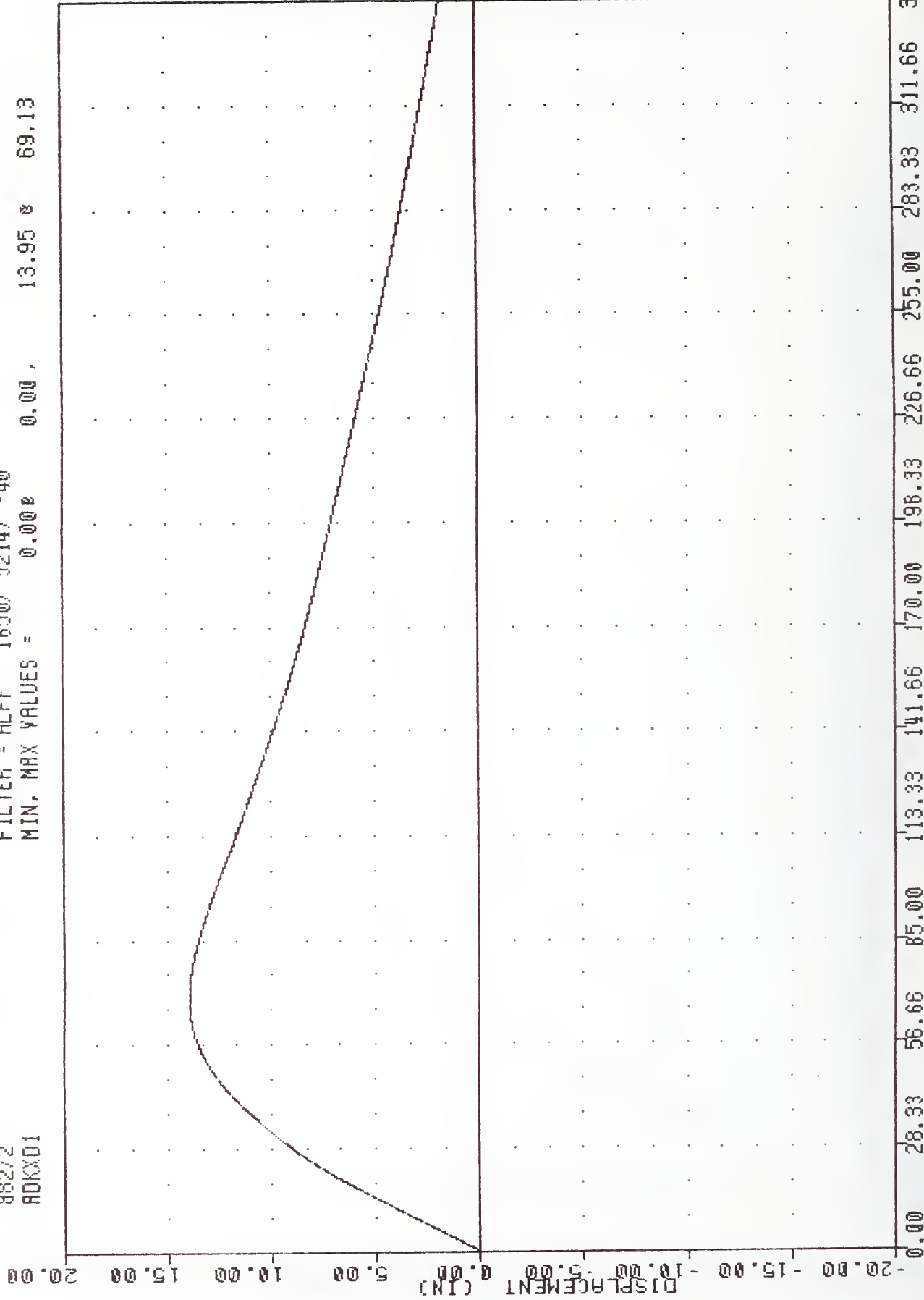
DAMAGE ALGORITHM REFORMULATION

88272

ADKXD1

FILTER = ALFF 1650/ 5214/ -40

MIN. MAX VALUES = 0.00E 0.00 , 13.95 E 69.13



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST
VEHICLE REAR DECK X AXIS DISPLACEMENT

VRTC-5 , 880928

DAMAGE ALGORITHM REFORMULATION

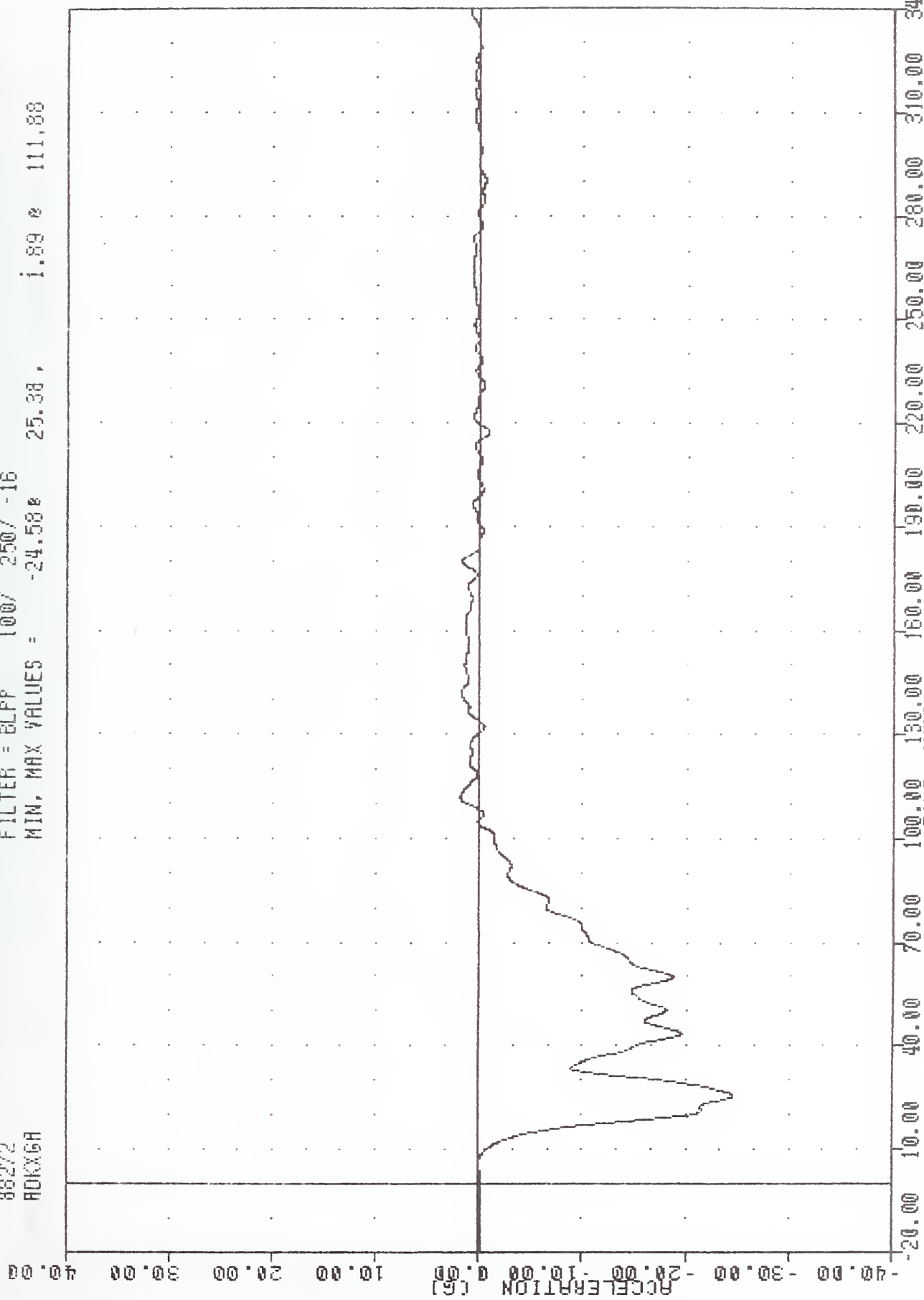
88272

ADKXGA

FILTER = BLPP 100/ 250/ -16

MIN. MAX VALUES = -24.58 25.38

1.89 e 111.88



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST
VEHICLE REAR DECK X AXIS REDUNDANT ACCELERATION

VRTC-5 , 880928

DAMAGE ALGORITHM REFORMULATION

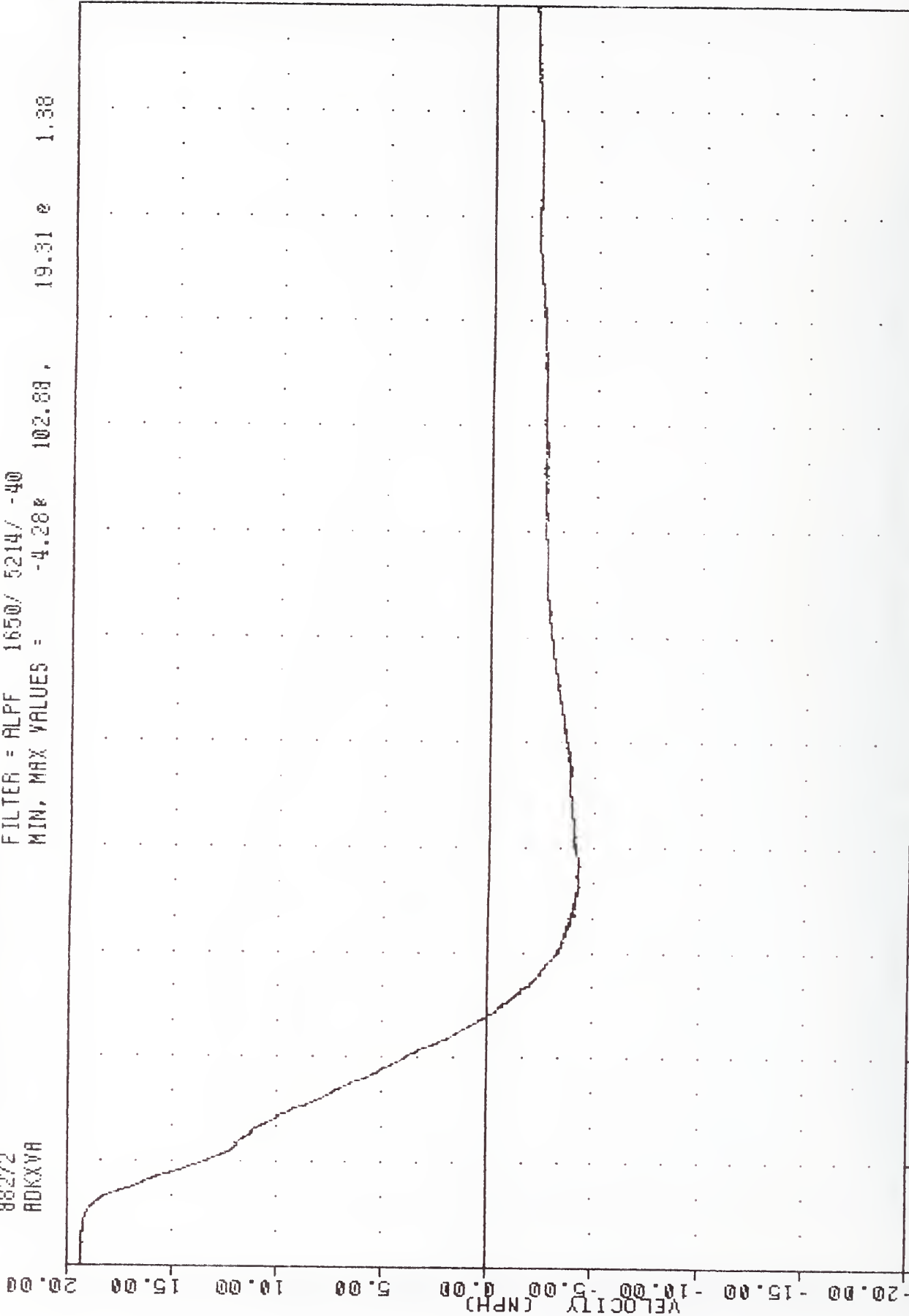
88272

ADKXVA

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -4.28E

19.31 e 1.38



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST
VEHICLE REAR DECK X AXIS VELOCITY REDUNDANT

VRTC-5 , 880928

DAMAGE ALGORITHM REFORMULATION

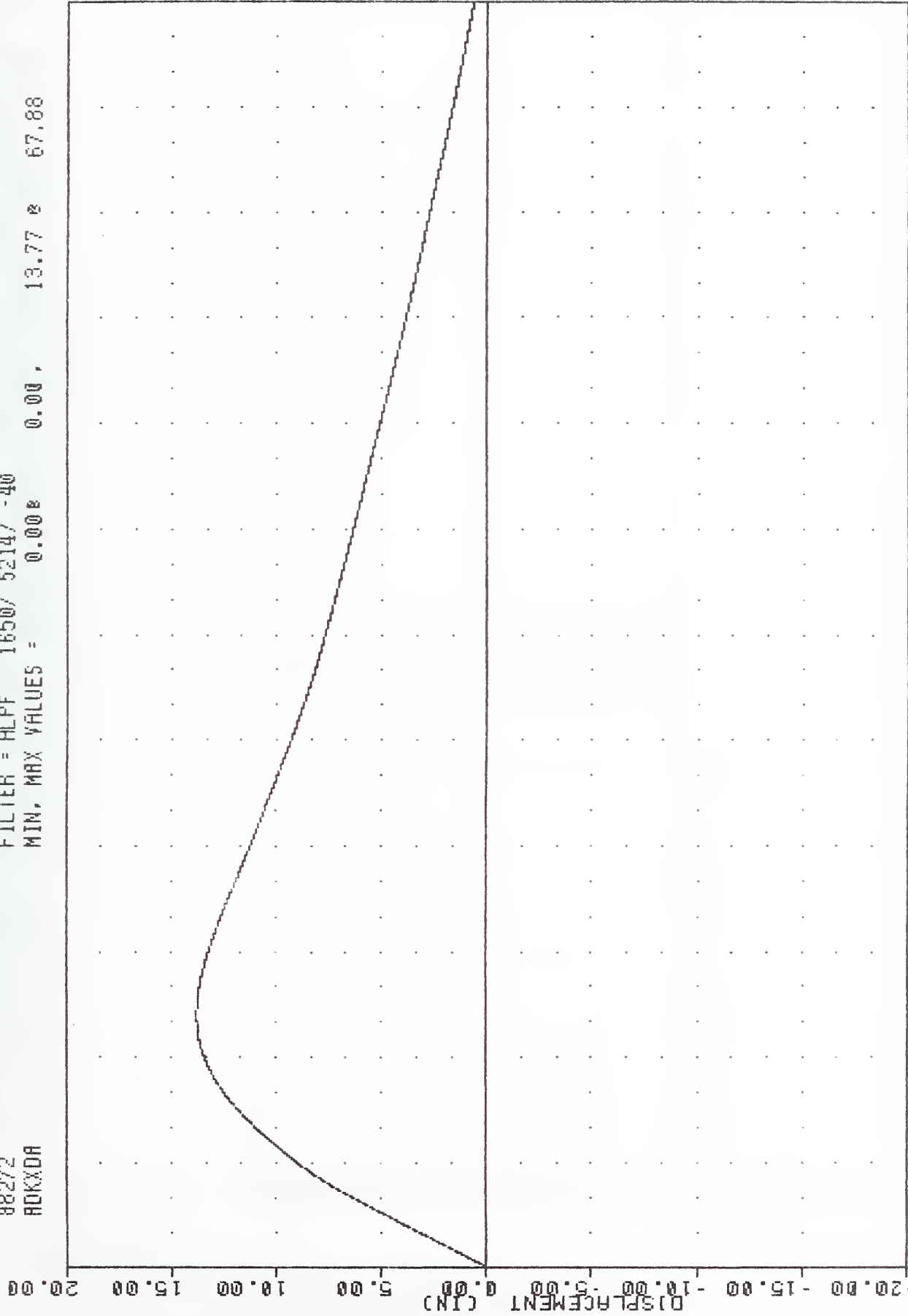
88272

ADKXDA

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = 0.00E

0.00 , 13.77 e 67.88

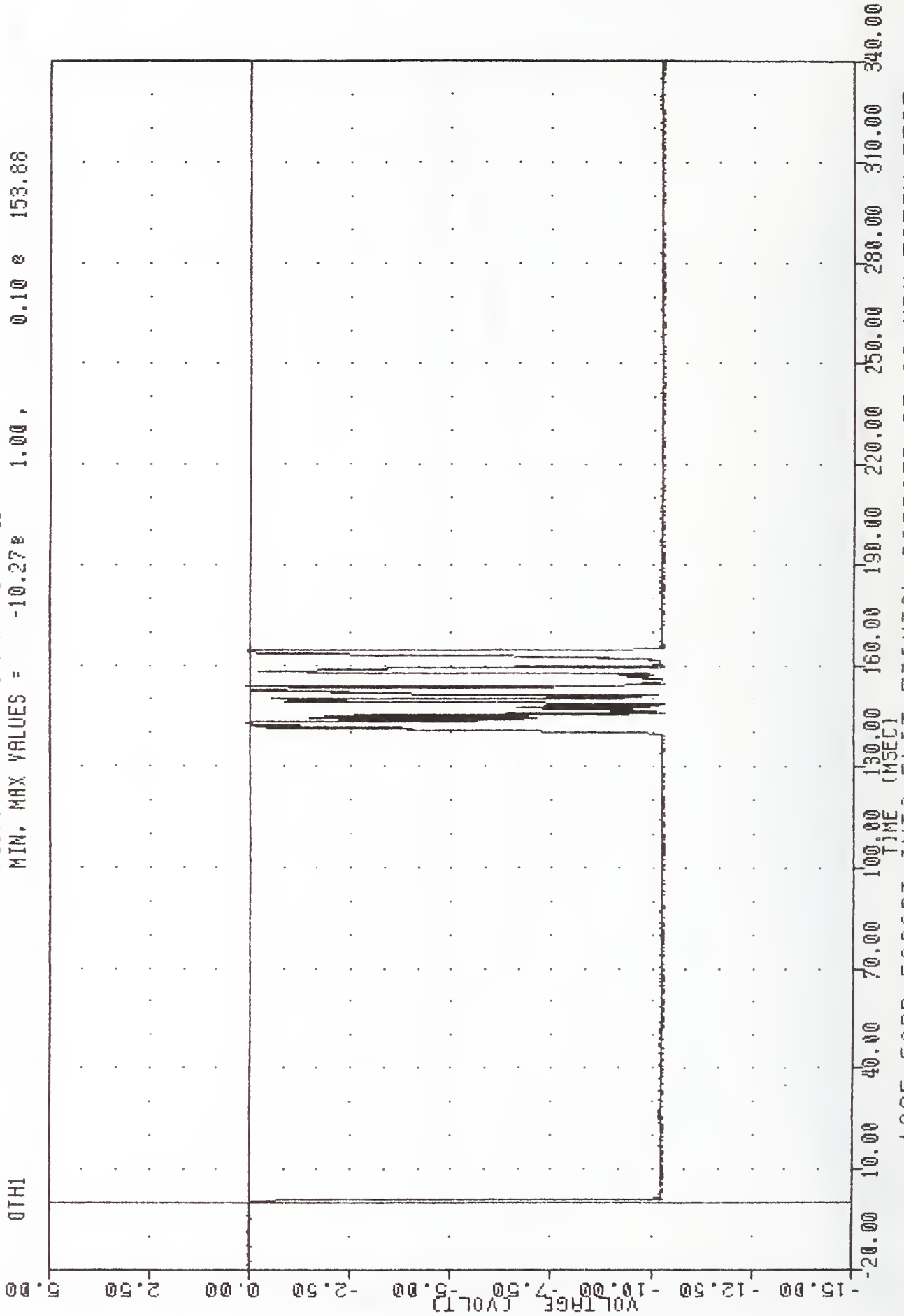


0.00 28.33 56.66 85.00 113.33 141.66 170.00 198.33 226.66 255.00 283.33 311.66 340.00

1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST
VEHICLE REAR DECK X AXIS DISPLACEMENT REDUNDANT

VRTC-5 , 880928
DAMAGE ALGORITHM REFORMULATION
88272
0TH1

FILTER = ALPF 1650/ 5214/ -40
MIN, MAX VALUES = -10.27e 1.00 , 0.10 e 153.88



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST
VEHICLE CONTACT SWITCH - LEFT

VRTC-5 , 880928

DAMAGE ALGORITHM REFORMULATION

FILTER = ALPF 1650/ 5214/ -40

88272

0TH2

3.13

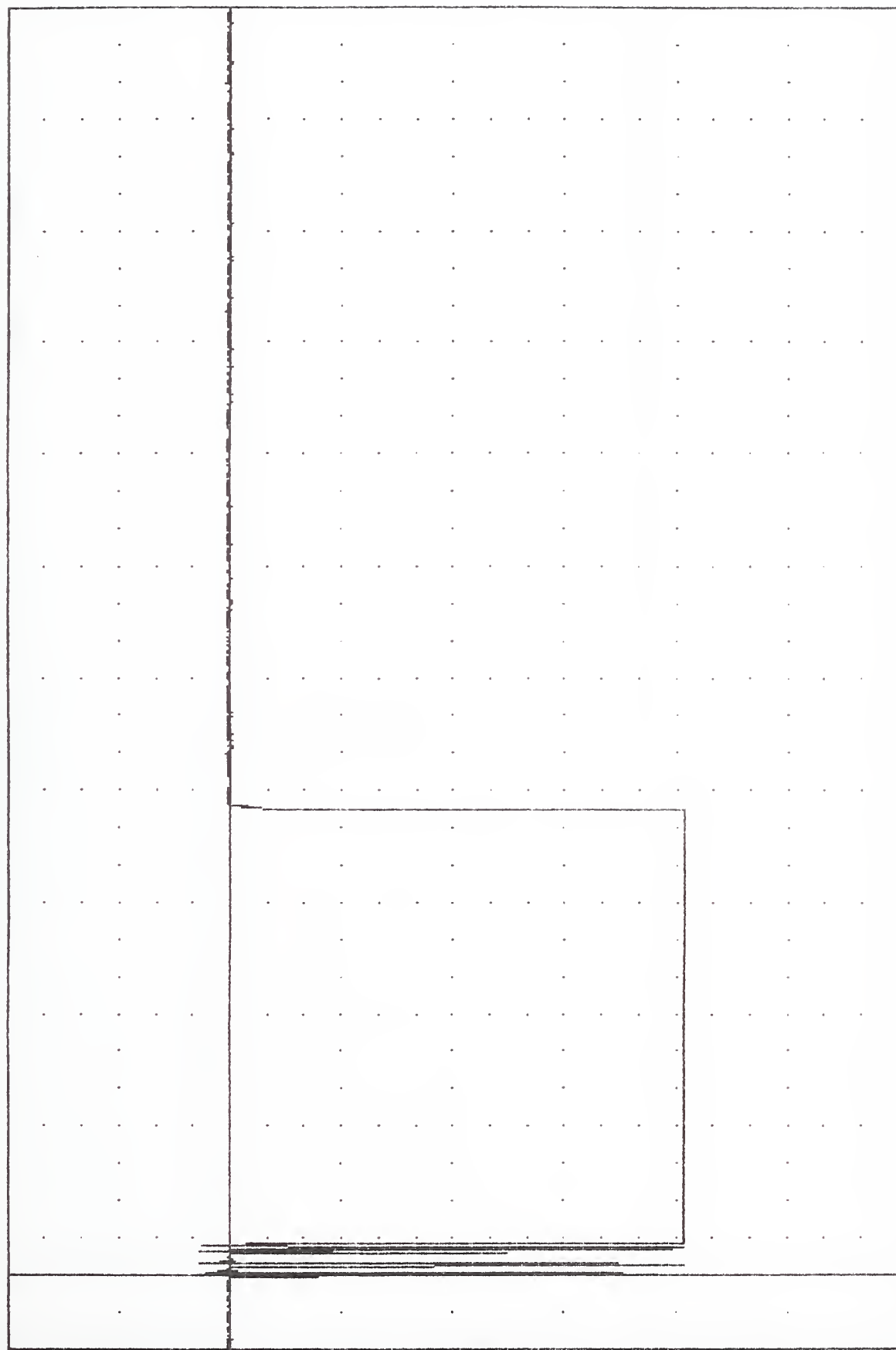
0.00

0.69

-10.20

MIN, MAX VALUES =

VOLTAGE (VOLT)



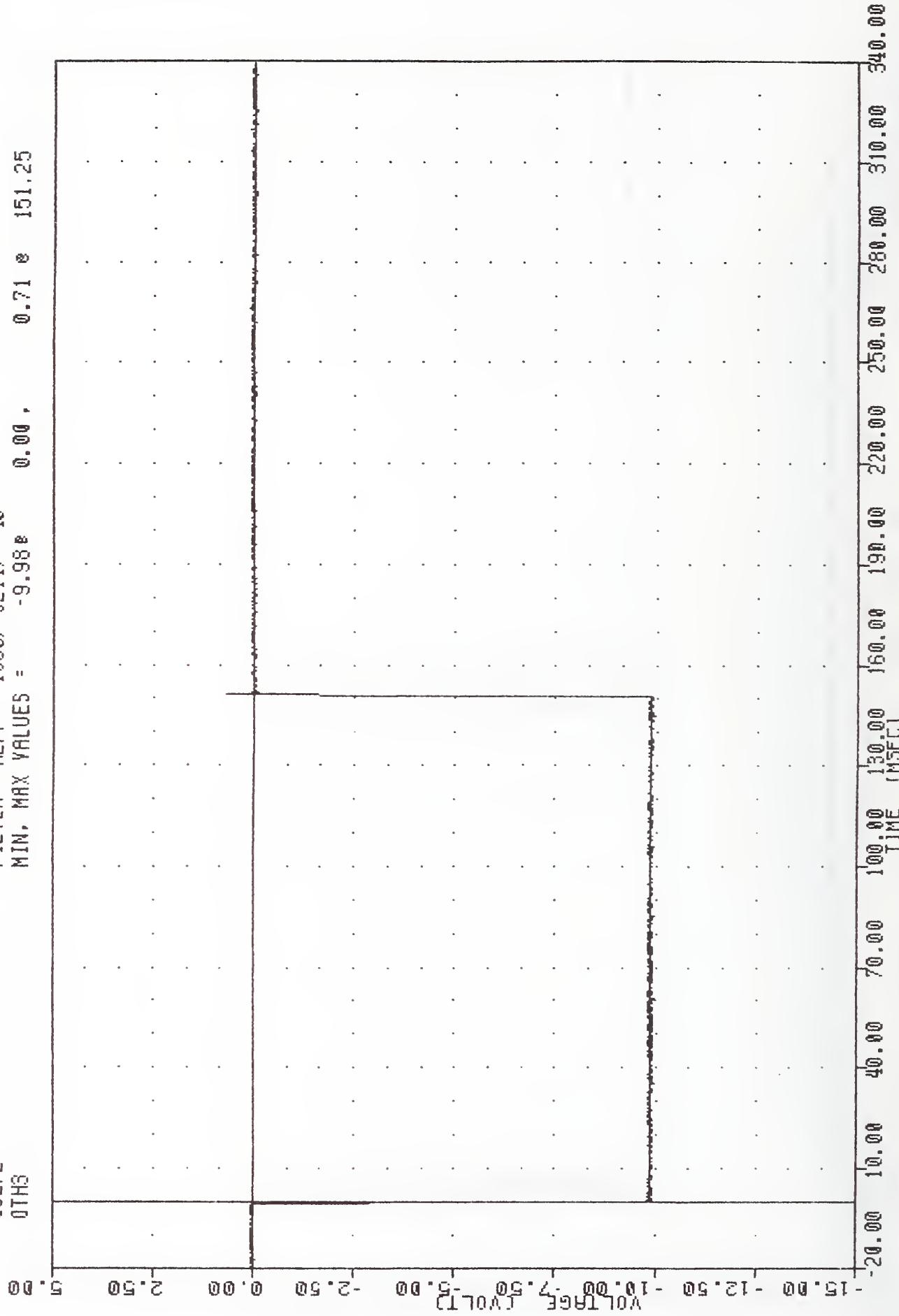
1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST

VEHICLE CONTACT SWITCH - CENTER

VRTC-5 , 880928
DAMAGE ALGORITHM REFORMULATION

88272 FILTER = ALPF 1650/ 5214/ -40

0THS MIN, MAX VALUES = -9.98e 0.00 , 0.71 e 151.25



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST
VEHICLE CONTACT SWITCH - RIGHT

VRTC-5 , 880928

DAMAGE ALGORITHM REFORMULATION

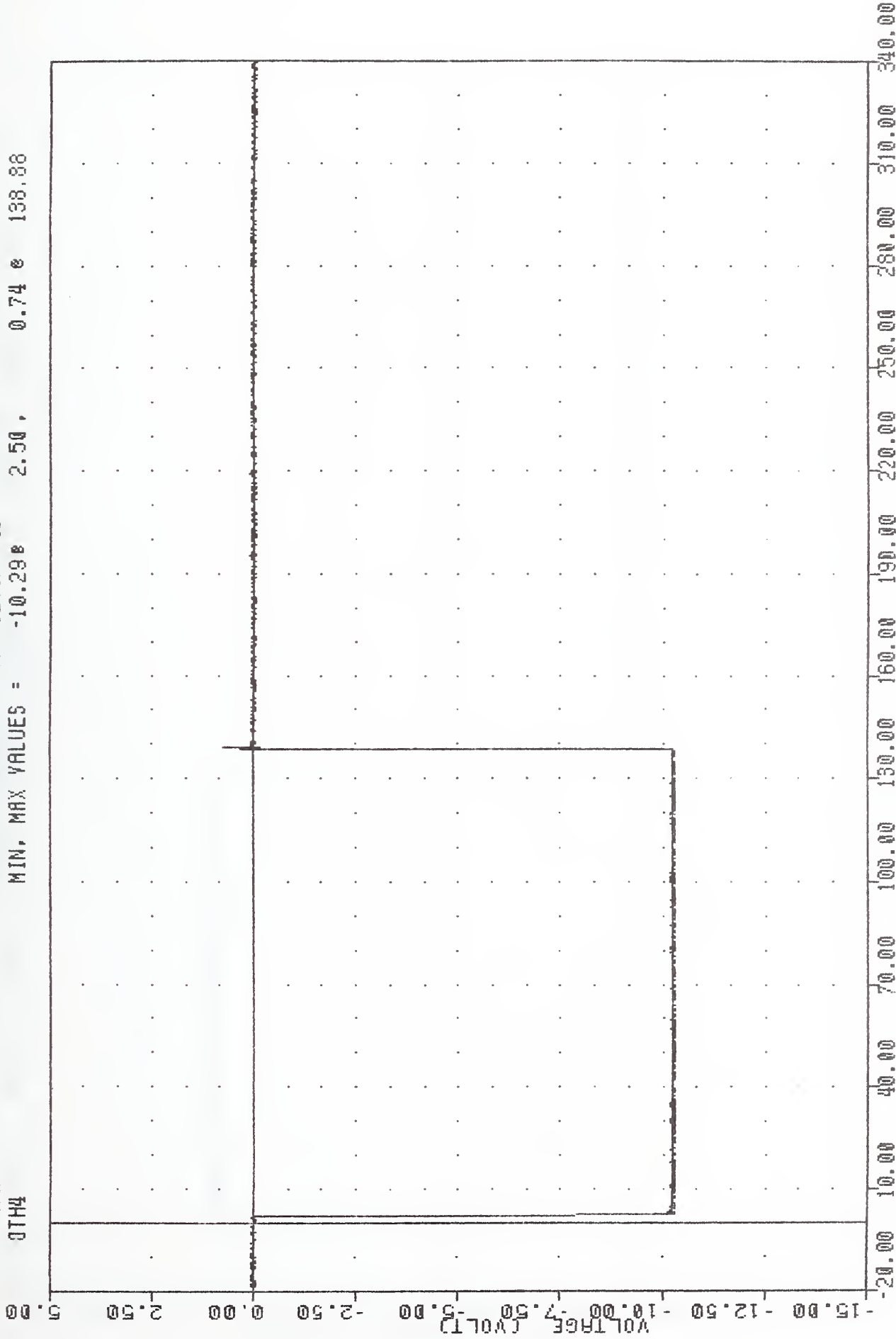
88272

FILTER = ALPF 1650/ 5214/ -40

QTH4

MIN, MAX VALUES = -10.298

2.50, 0.74 e 138.88



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST
BARRIER CONTACT SWITCH - LEFT

VRTC-5 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

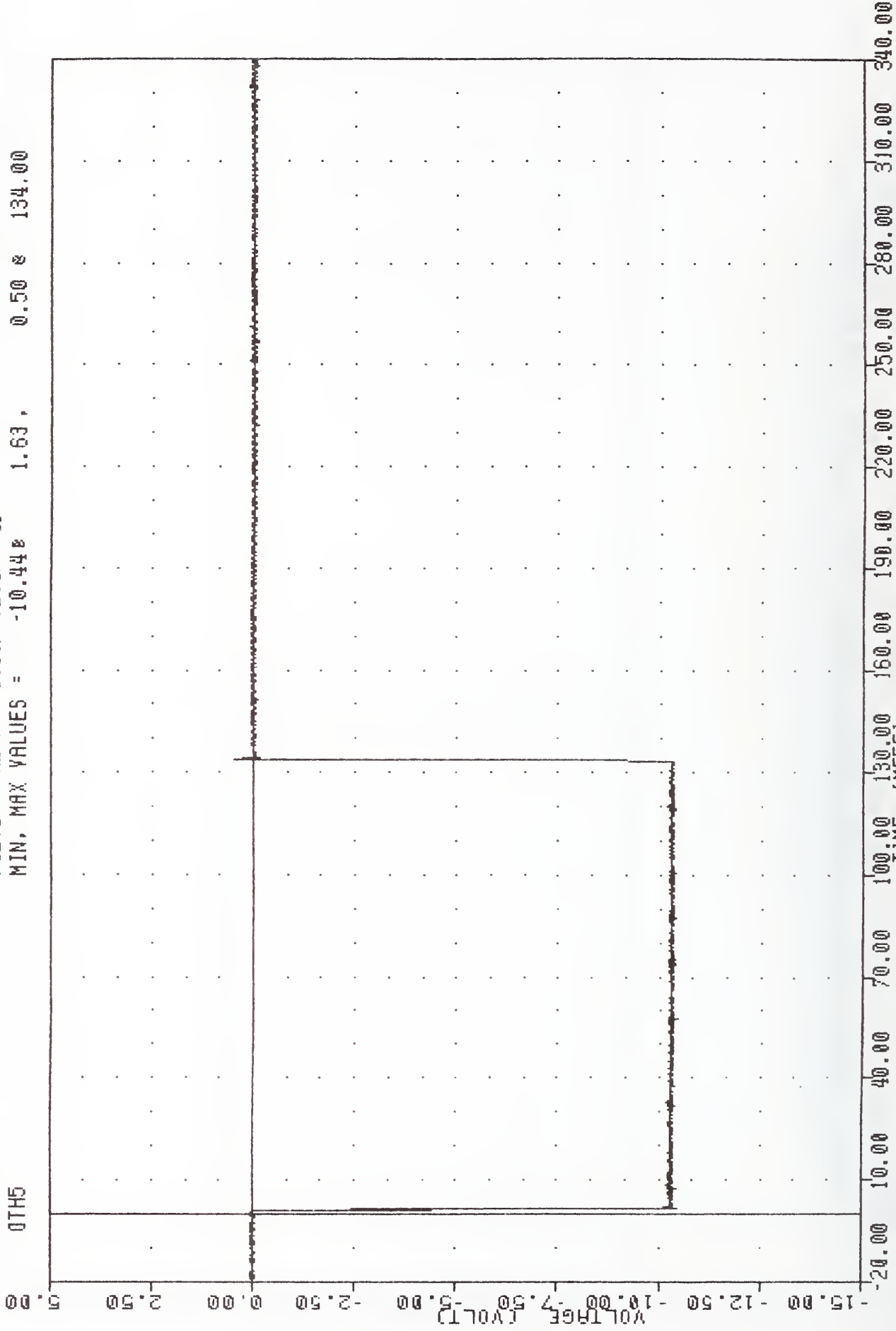
0TH5

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -10.44 &

1.63 ,

0.50 & 134.00



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 20 MPH FIFTH TEST
BARRIER CONTACT SWITCH - RIGHT

VRTC-6 . 880928

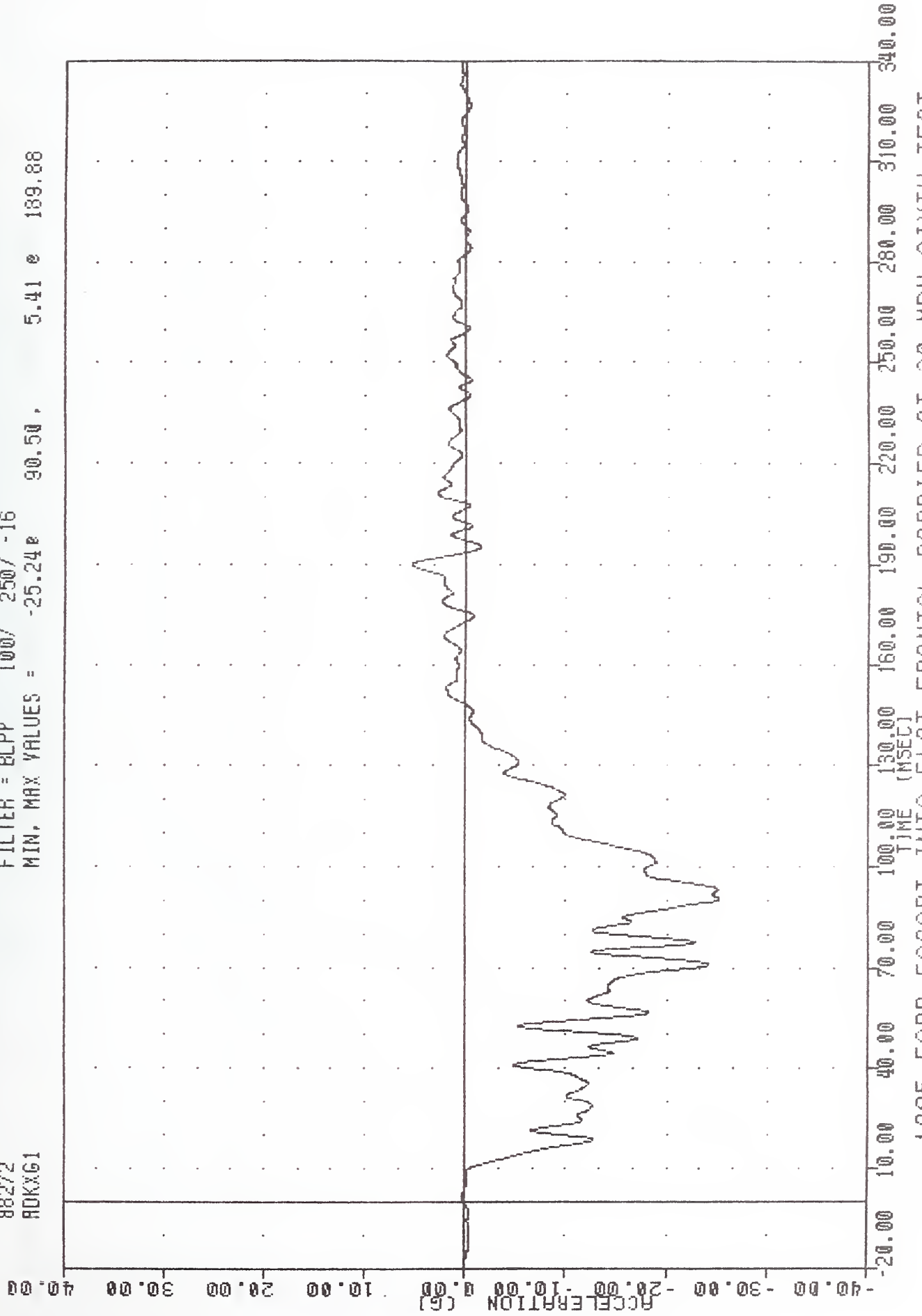
DAMAGE ALGORITHM REFORMULATION

88272

ADKXG1

FILTER = BLPP 100/ 250/ -16

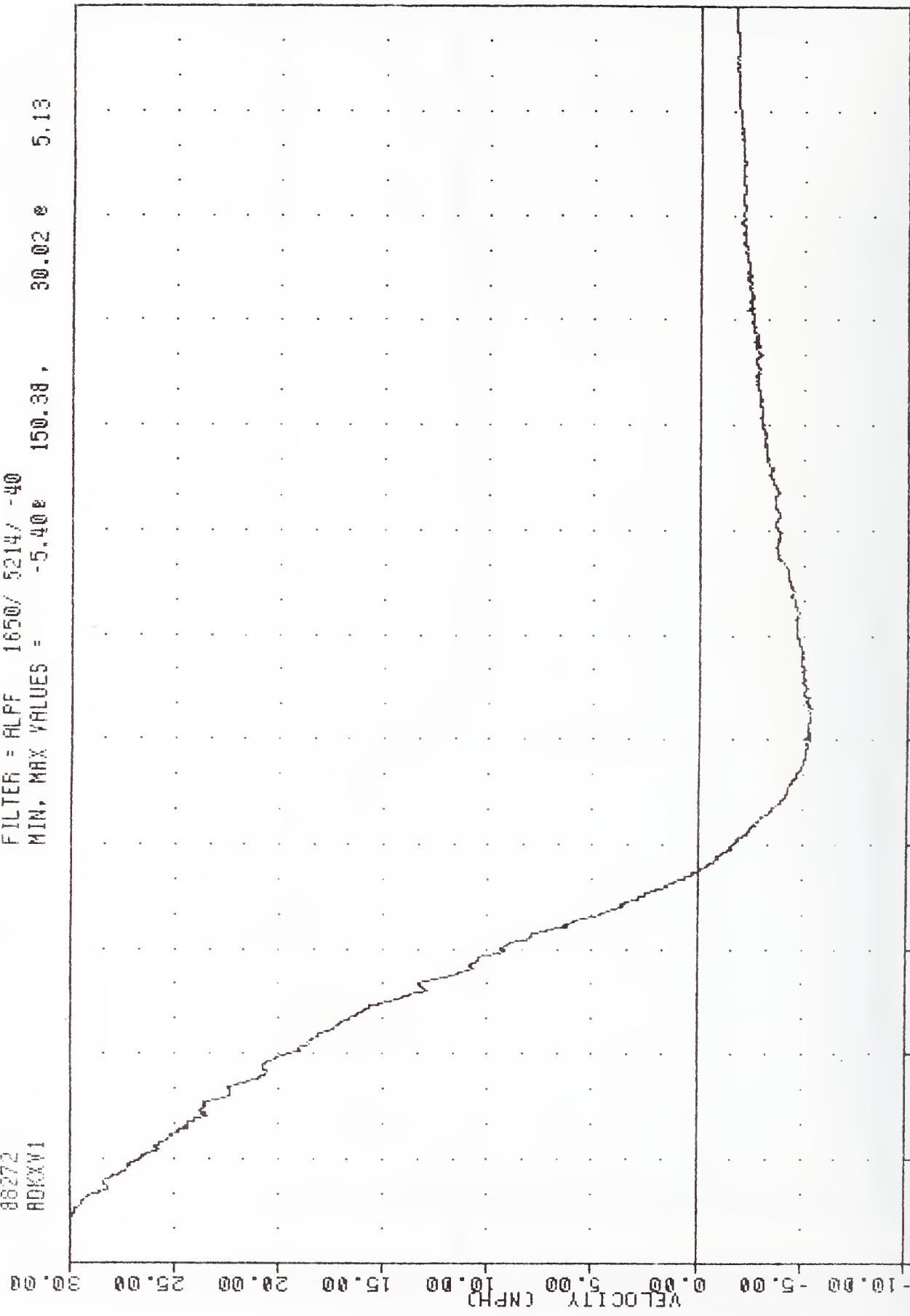
MIN, MAX VALUES = -25.24e 90.50, 5.41 e 189.88



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
VEHICLE REAR DECK X AXIS ACCELERATION

VRTC-6
DAMAGE ALGORITHM REFORMULATION
88272
ADKXV1

FILTER = ALFF 1650/ 5214/ -40
MIN. MAX VALUES = -5.40E 150.38 , 30.02 e 5.13



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
VEHICLE REAR DECK X AXIS VELOCITY

VRTC-6

DAMAGE ALGORITHM REFORMULATION

88272

RDKXD1

080928

FILTER = ALPF 1650/ 5214/ -40

MIN. MAX VALUES = 0.00e 0.00 , 35.04 e 106.00

40.00

35.00

30.00

25.00

20.00

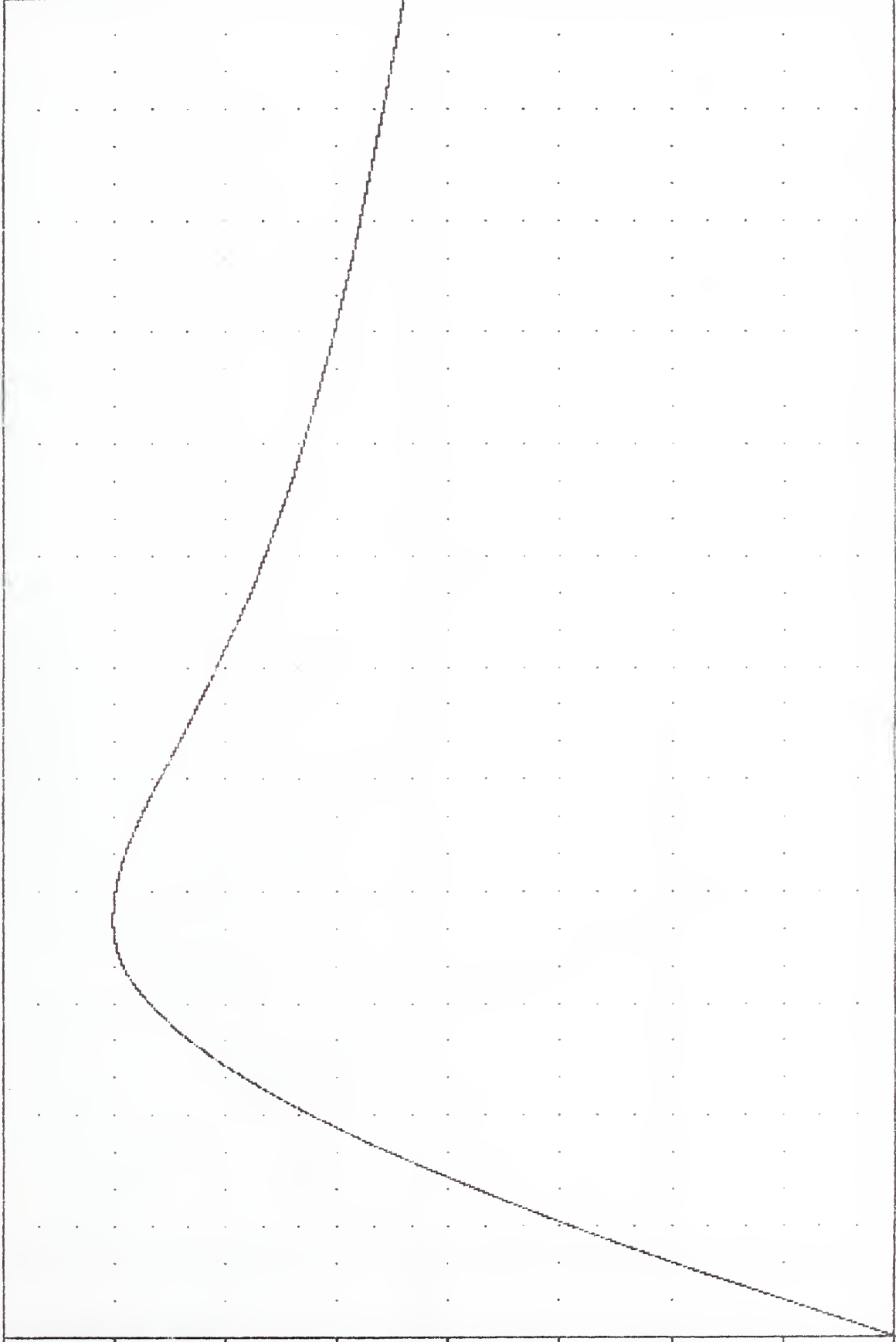
15.00

10.00

5.00

0.00

DISPLACEMENT (IN)



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
VEHICLE REAR DECK X AXIS DISPLACEMENT

VRTC-6 , 880928

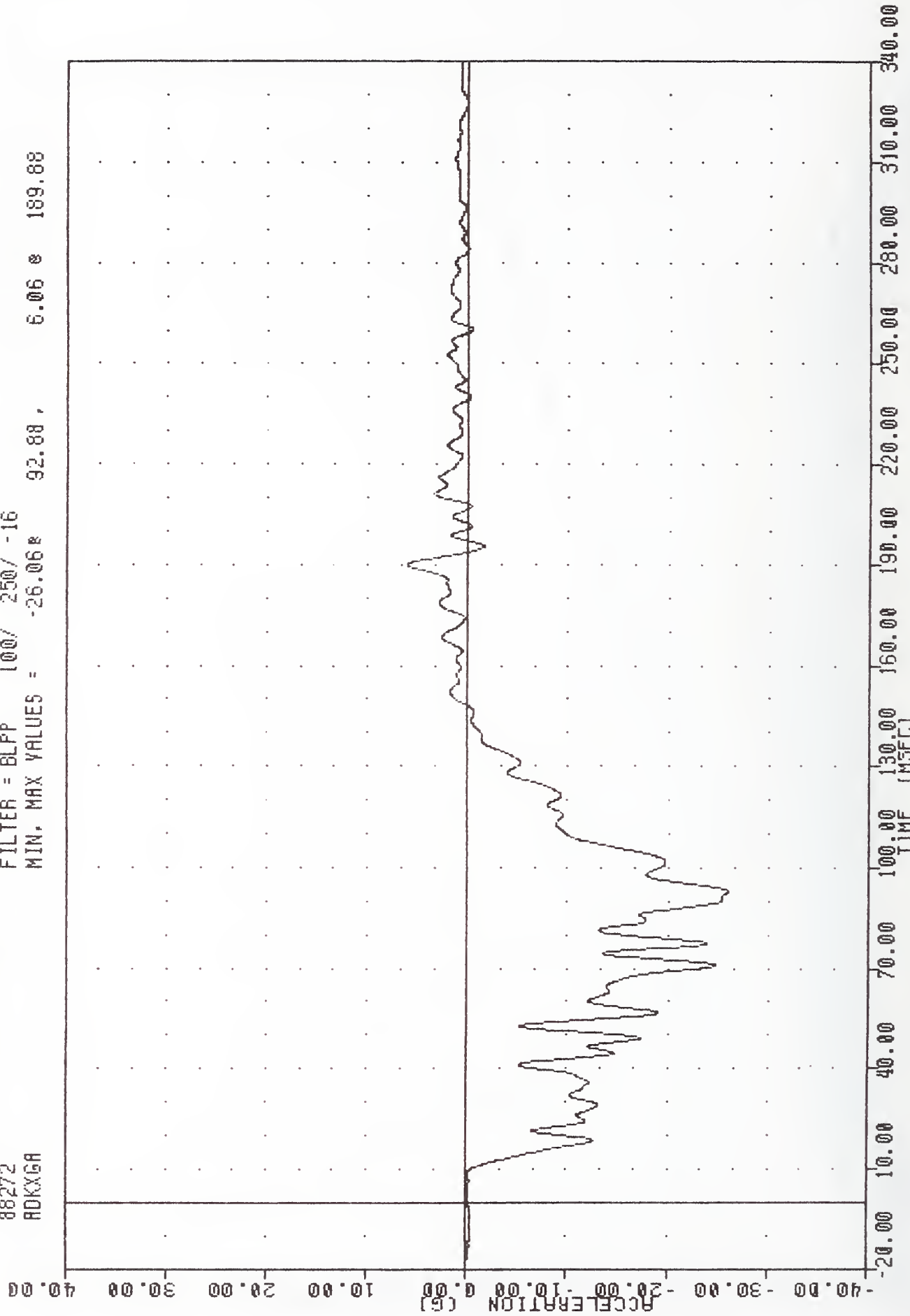
DAMAGE ALGORITHM REFORMULATION

88272

ADKXGA

FILTER = BLFP 100/ 250/ -16

MIN. MAX VALUES = -26.06 92.88 , 6.06 189.88



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
VEHICLE REAR DECK X AXIS REDUNDANT ACCELERATION

VRTC-6 , 880928

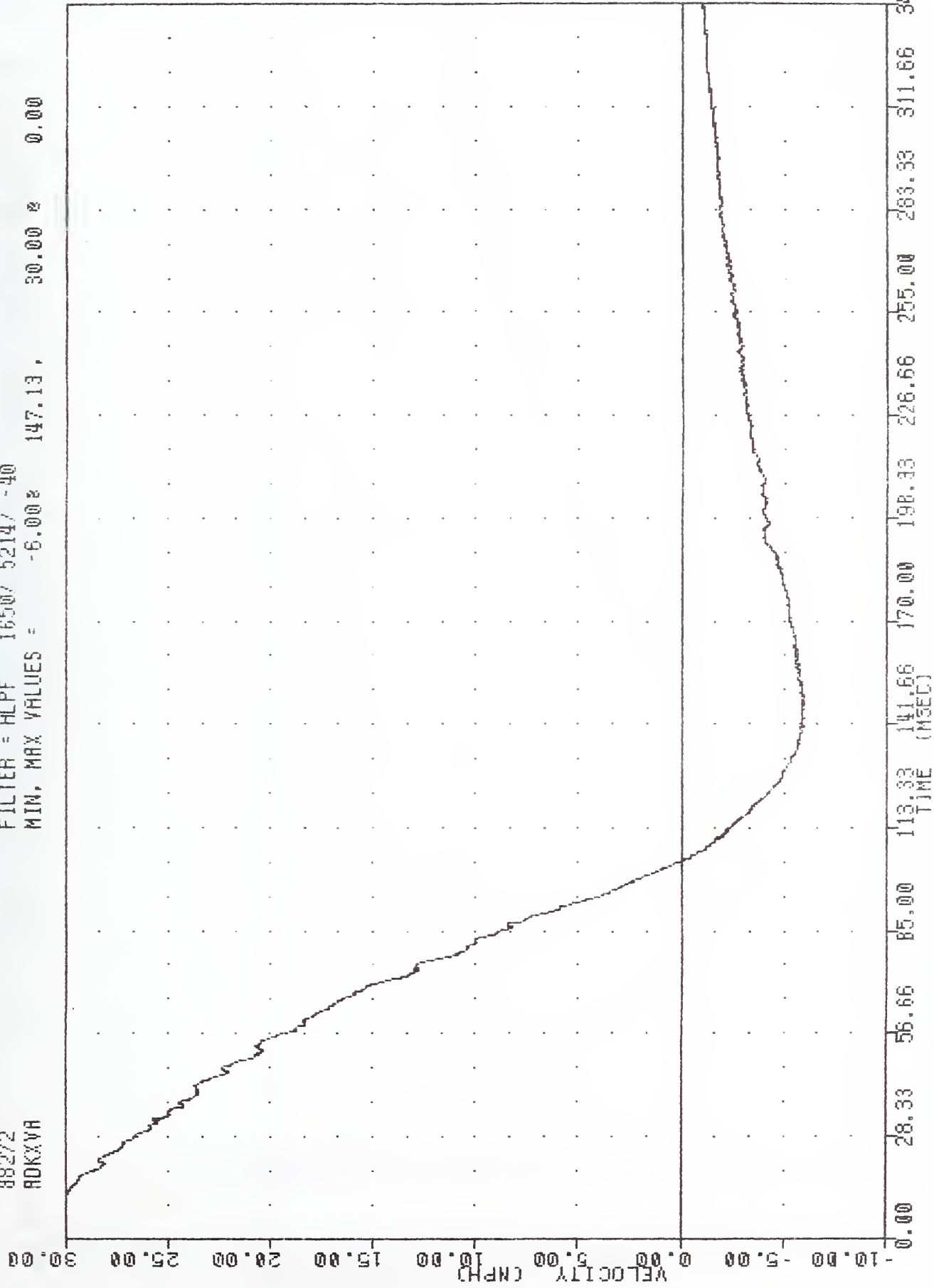
DAMAGE ALGORITHM REFORMULATION

88272

ADKXVA

FILTER = ALPF 1650/ 5214/ -40

MIN, MAX VALUES = -6.00% 147.13, 30.00 % 0.00



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
VEHICLE REAR DECK X AXIS VELOCITY REDUNDANT

VRTC-6 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

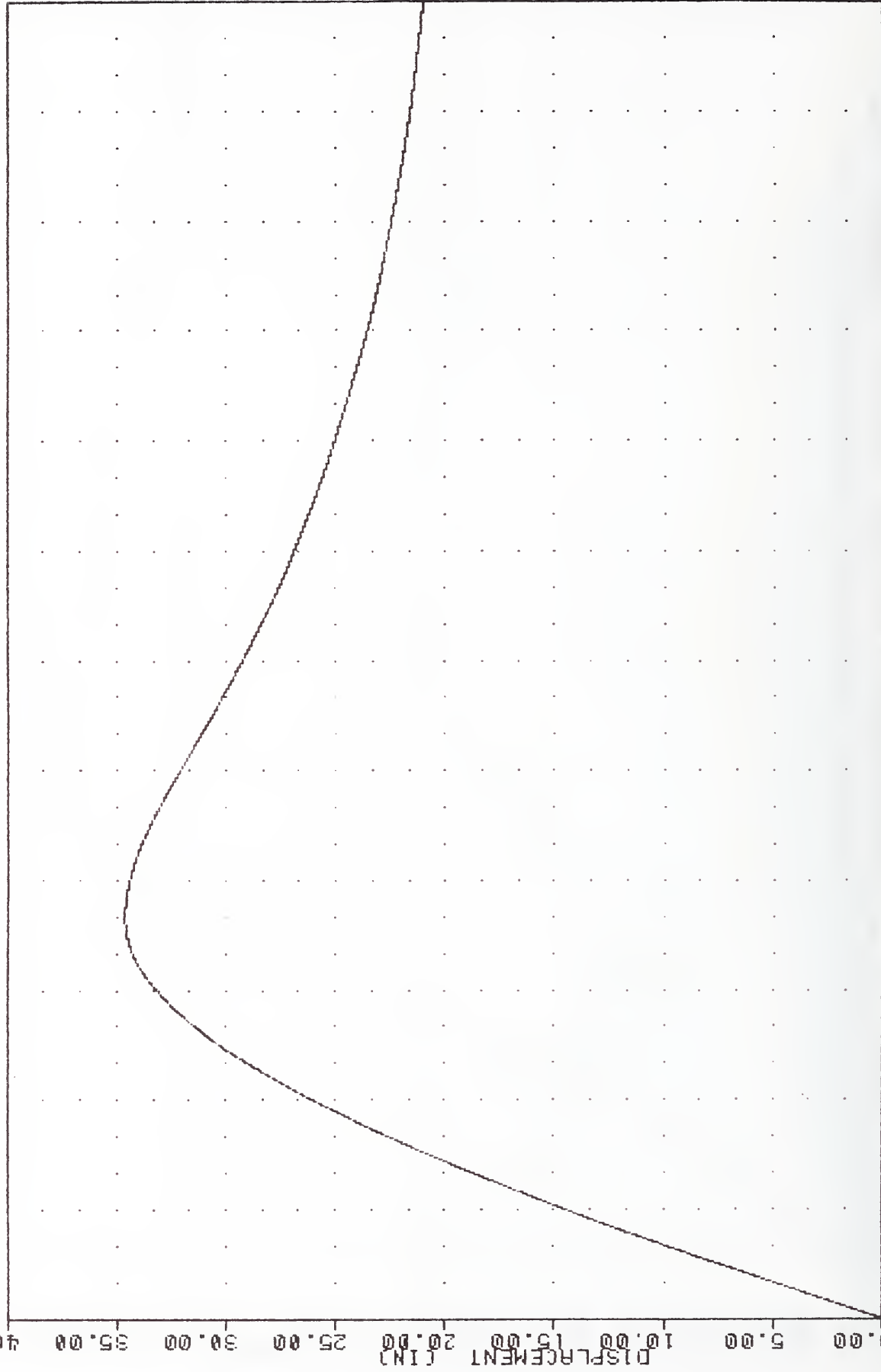
ADKXDR

FILTER = ALPF 1650/ 5214/ -40

MIN. MAX VALUES = 0.00e 0.00 ,

34.62 e 104.00

40.00



0.00 5.00 10.00 15.00 20.00 25.00 30.00 35.00 40.00

0.00 26.33 56.66 85.00 113.33 141.66 170.00 198.33 226.66 255.00 283.33 311.66 340.00

1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
VEHICLE REAR DECK X AXIS DISPLACEMENT REDUNDANT

VRTC-6 , 880928

DAMAGE ALGORITHM REFORMULATION

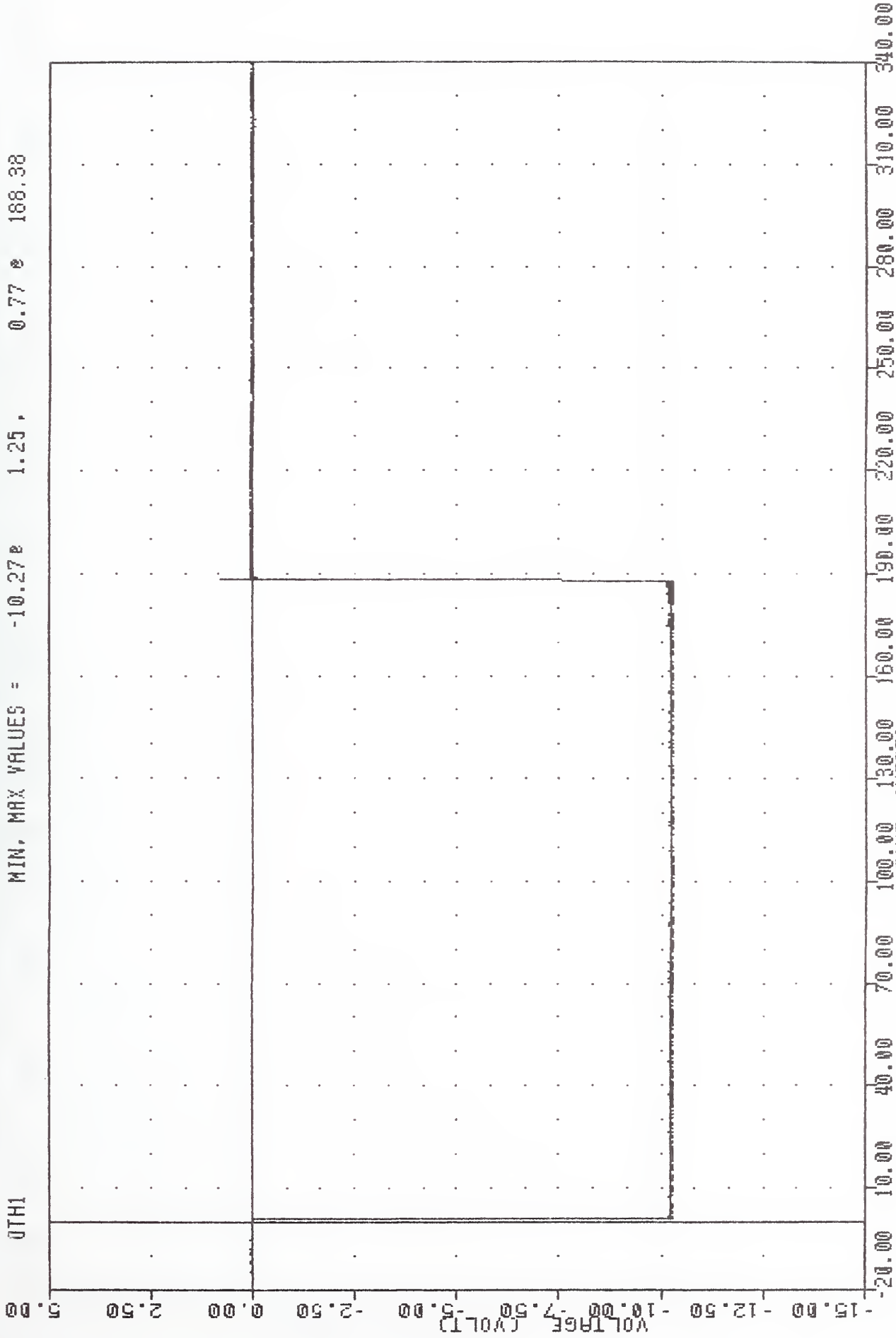
88272

FILTER = ALPF 1650/ 5214/ -40

UTH1

MIN. MAX VALUES = -10.27e

1.25 , 0.77 e 188.38



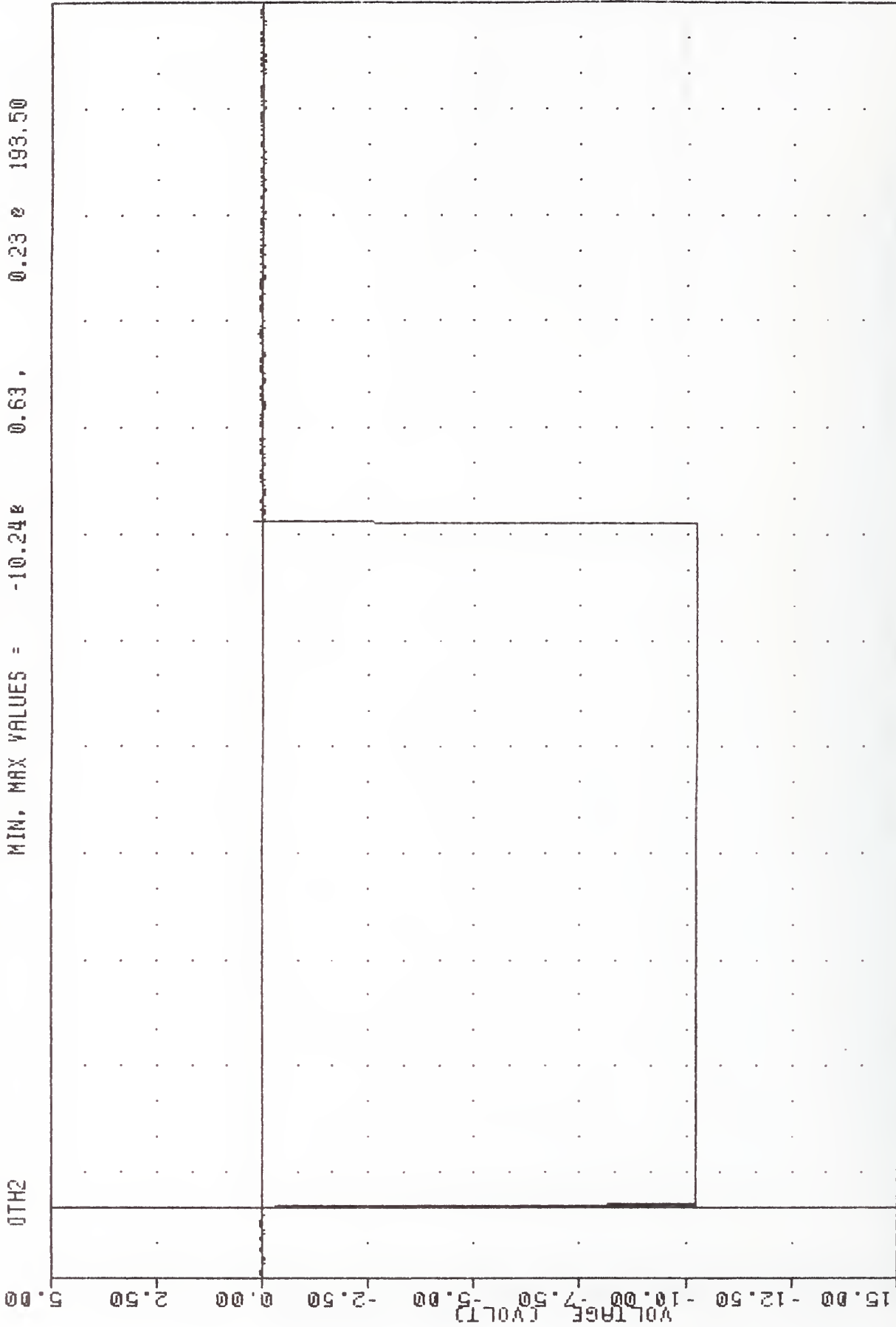
1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
VEHICLE CONTACT SWITCH - LEFT

VRTC-6 , 880928

DAMAGE ALGORITHM REFORMULATION

88272 FILTER = ALPF 1650/ 5214/ -40

0TH2 MIN, MAX VALUES = -10.24e 0.63, 0.23 e 193.50



-20.00 10.00 40.00 70.00 100.00 130.00 160.00 190.00 220.00 250.00 280.00 310.00 340.00
TIME (MSEC)

1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
VEHICLE CONTACT SWITCH - CENTER

VRTC-6 , 880928

DAMAGE ALGORITHM REFORMULATION

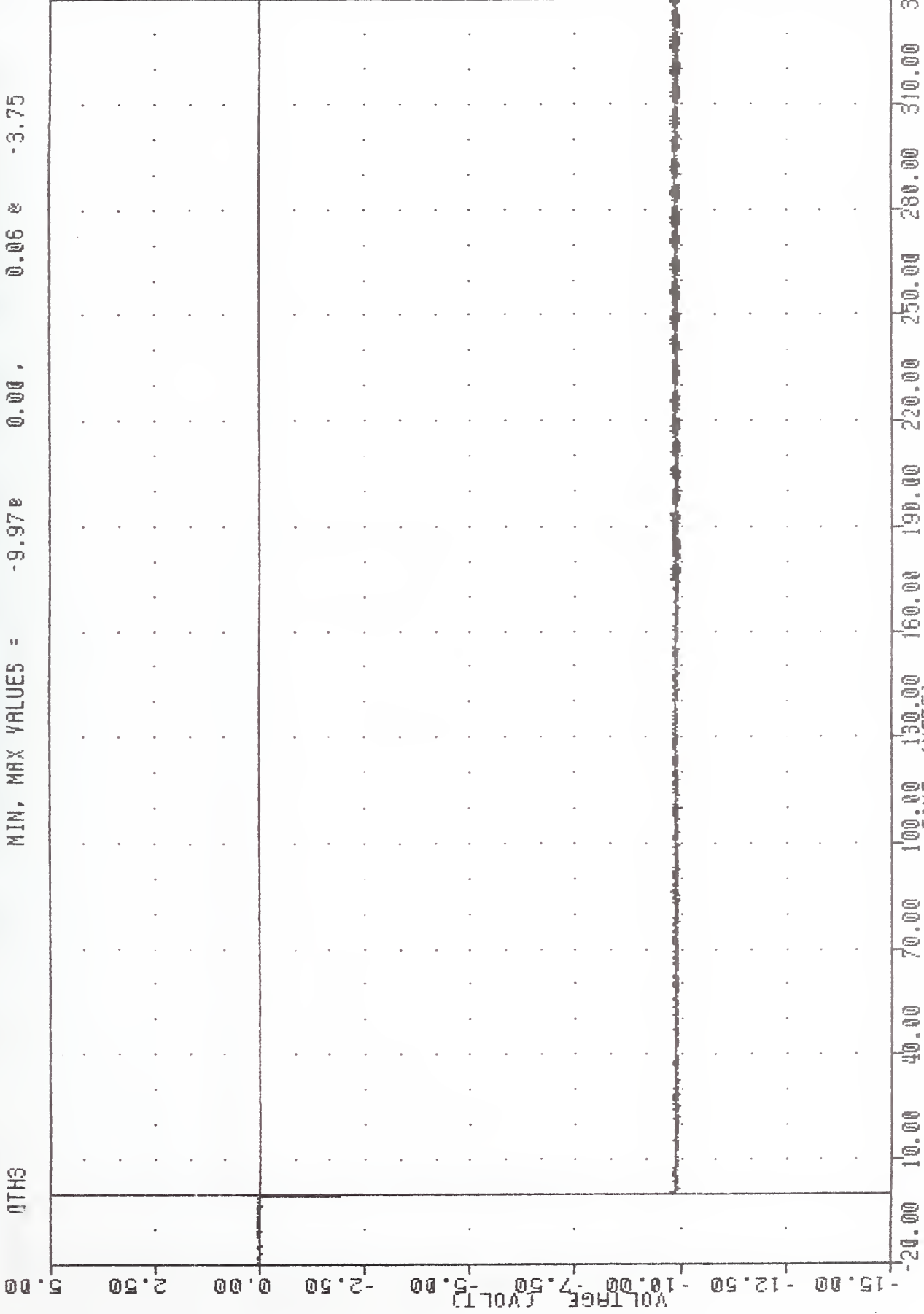
88272

FILTER = ALPF 1650/ 5214/ -40

OTHS

MIN, MAX VALUES = -9.97e 0.00 ,

0.06 e -3.75



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
VEHICLE CONTACT SWITCH - RIGHT

VRTC-6 , 880928

DAMAGE ALGORITHM REFORMULATION

88272

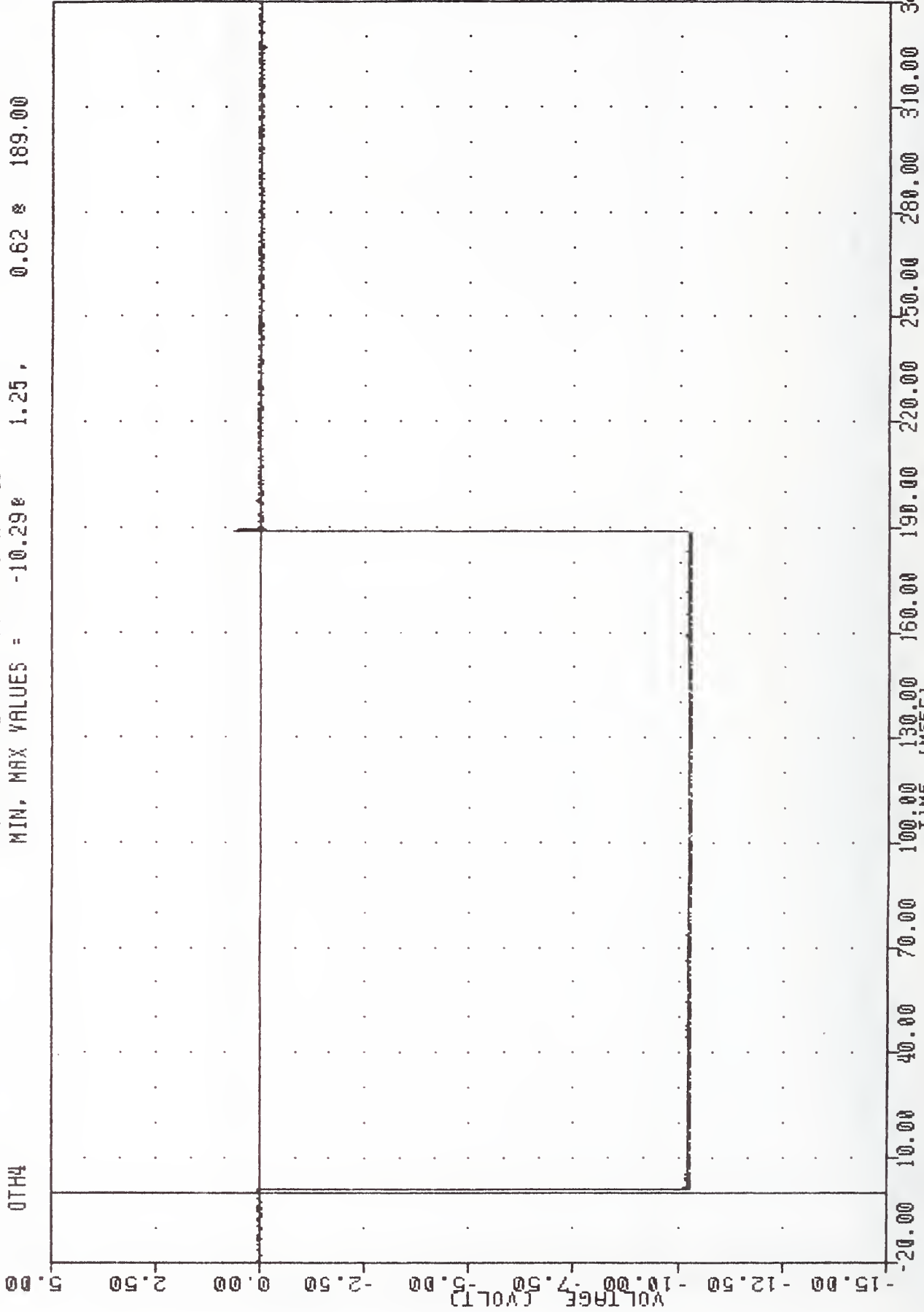
OTH4

FILTER = ALPF 1650/ 5214/ -40

MIN. MAX VALUES = -10.29e

1.25,

0.62 s 189.00



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
BARRIER CONTACT SWITCH - LEFT

VRTC-6 . 880928

DAMAGE ALGORITHM REFORMULATION

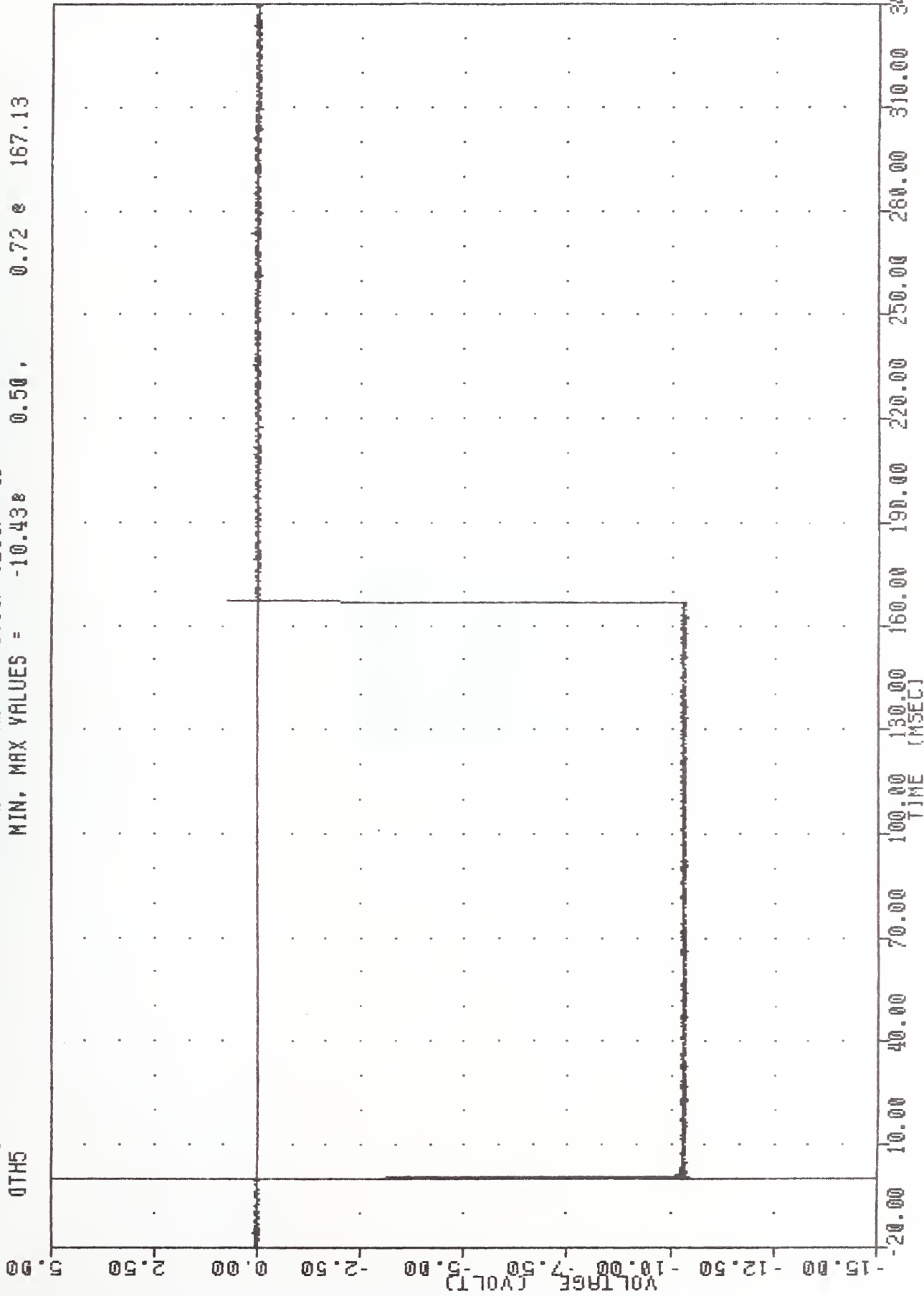
88272

FILTER = ALPF 1650/ 5214/ -40

0TH5

MIN. MAX VALUES = -10.438 0.50,

0.72 e 167.13



1985 FORD ESCORT INTO FLAT FRONTAL BARRIER AT 30 MPH SIXTH TEST
BARRIER CONTACT SWITCH - RIGHT



TL 242 .E61

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