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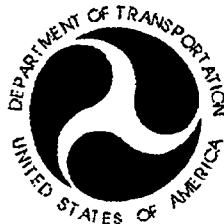
REPORT NUMBER: 214-TRC-98-001

**SAFETY COMPLIANCE TESTING FOR FMVSS 214
SIDE IMPACT PROTECTION - PASSENGER CARS**

**1998 DODGE NEON
2-DOOR COUPE**

NHTSA NUMBER: CW0300

**TRANSPORTATION RESEARCH CENTER INC.
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**October 27, 1997
FINAL REPORT**

**U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Enforcement
Office of Vehicle Compliance
400 Seventh Street, S. W.
Room No. 6115 (NSA-30)
Washington, DC 20590**

This Final Test Report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, under Contract No. DTNH22-97-C-21033. This publication is distributed by the U. S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings, and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

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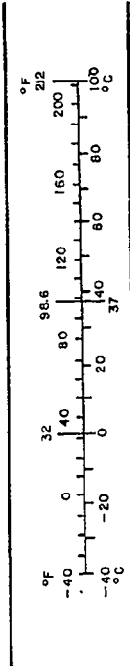
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16. Abstract This 48/24 kph 90° Impact (Moving Deformable Barrier) Compliance Test was conducted on the subject 1998 Dodge Neon 2-Door Coupe in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-214D-04 to determine FMVSS 214 Side Impact Protection compliance. This test was conducted at Transportation Research Center Inc. in East Liberty, Ohio, on October 27, 1997. The impact velocity of the Moving Deformable Barrier (MDB) was 52.8 kph, and the ambient temperature at the struck (driver's) side of the target vehicle at the time of impact was 21° C. The target vehicles post-test maximum crush was 282 mm at Level 3. The test or target vehicle's performance is given below: <table border="0"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Front SID</u></th> <th></th> <th style="text-align: center;"><u>Rear SID</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Left Upper Rib Acceleration:</td> <td style="text-align: center;">52</td> <td>g's</td> <td style="text-align: center;">49</td> <td>g's</td> </tr> <tr> <td>Left Lower Rib Acceleration:</td> <td style="text-align: center;">63</td> <td>g's</td> <td style="text-align: center;">52</td> <td>g's</td> </tr> <tr> <td>Lower Spine Acceleration:</td> <td style="text-align: center;">67</td> <td>g's</td> <td style="text-align: center;">80</td> <td>g's</td> </tr> <tr> <td>Thoracic Trauma Index, (TTI):</td> <td style="text-align: center;">65</td> <td>g's</td> <td style="text-align: center;">66</td> <td>g's</td> </tr> <tr> <td>Pelvis Acceleration (PEV):</td> <td style="text-align: center;">79</td> <td>g's</td> <td style="text-align: center;">105</td> <td>g's</td> </tr> </tbody> </table> The two doors on the struck side of the vehicle did not separate from the body at the hinges or latches and the opposite doors did not open during side impact event.					<u>Front SID</u>		<u>Rear SID</u>		Left Upper Rib Acceleration:	52	g's	49	g's	Left Lower Rib Acceleration:	63	g's	52	g's	Lower Spine Acceleration:	67	g's	80	g's	Thoracic Trauma Index, (TTI):	65	g's	66	g's	Pelvis Acceleration (PEV):	79	g's	105	g's
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17. Key Words Compliance Testing Side Impact Protection FMVSS 214 Side Impact Dummy (SID)		18. Distribution Statement Copies of this report are available from: NHTSA Technical Reference Division Room 5108 (NAD-52) 400 Seventh Street, S.W. Washington, DC 20590 Telephone No. 9202) 366-4946 Attn: Robert Hornicle																															
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METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH								
in	inches	2.5	centimeters	mm	millimeters	0.04	inches	in
ft	feet	30	centimeters	cm	centimeters	0.4	inches	in
yd	yards	0.9	meters	m	meters	3.3	feet	ft
mi	miles	1.6	kilometers	km	kilometers	1.1	yards	yd
AREA								
in ²	square inches	6.5	square centimeters	cm ²	square centimeters	0.16	square inches	in ²
ft ²	square feet	0.09	square meters	m ²	square meters	1.2	square yards	yd ²
yd ²	square yards	0.8	square meters	km ²	square kilometers	0.4	square miles	mi ²
mi ²	square miles	2.6	square kilometers	ha	hectares (10,000 m ²)	2.5	acres	
MASS (weight)								
oz	ounces	28	grams	g	grams	0.035	ounces	oz
lb	pounds	0.45	kilograms	kg	kilograms	2.2	pounds	lb
	short tons (2000 lb)	0.9	tonnes	t	tonnes (1000 kg)	1.1	short tons	
VOLUME								
tsp	teaspoons	5	milliliters	ml	milliliters	0.03	fluid ounces	fl oz
Tbsp	tablespoons	15	milliliters	ml	liters	2.1	pints	pt
fl oz	fluid ounces	30	milliliters	ml	liters	1.06	quarts	qt
c	cups	0.24	liters	l	liters	0.26	gallons	gal
pt	pints	0.47	liters	l	cubic meters	35	cubic feet	ft ³
qt	quarts	0.95	liters	l	cubic meters	1.3	cubic yards	yd ³
gal	gallons	3.8	liters	l	TEMPERATURE (exact)			
ft ³	cubic feet	0.03	cubic meters	m ³	°C	Celsius temperature	Fahrenheit temperature	°F
yd ³	cubic yards	0.76	cubic meters	m ³	TEMPERATURE (exact)			
					°F	Fahrenheit temperature	Celsius temperature	°C



* 1 in = 2.54 (exact). For other exact conversions and more detailed tables, see NBS Mon. Publ. 286, Units of Weights and Measures, Price \$2.25, SD Catalog No. C13.10.286.

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SECTION 1

PURPOSE AND TEST PROCEDURE

This side impact test is part of the FMVSS 214 Side Impact Protection Compliance Test Program sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-97-C-21033. The purpose of this test was to evaluate side impact protection in a 1998 Dodge Neon 2-Door Coupe. The test was conducted in accordance with the Office of Vehicle Safety Compliance's Laboratory Test Procedure (TP-214D-04, dated September 1, 1995).

SECTION 2

SUMMARY OF SIDE IMPACT TEST

A 1998 Dodge Neon 2-Door Coupe was impacted on the left or driver's side by a Moving Deformable Barrier (MDB) which was moving forward in a 27° crabbed position to the monorail at a velocity of 52.8 kph (32.8 mph). The target vehicle was stationary and was positioned at an angle of 63° to the line of forward motion. The side impact test was conducted by Transportation Research Center Inc. in East Liberty, Ohio on October 27, 1997. Pre- and post-test photographs of the test vehicle, the moving deformable barrier (MDB), and the side impact dummies (SIDs) are included in appendix A.

Two restrained Side Impact Dummies (SIDs) were placed in the driver (Pos. #1) and left rear (Pos. #4) designated seating positions according to the instructions specified in the OVSC Side Impact Laboratory Test Procedure (TP-214D-04, dated September 1, 1995). Both SIDs were certified prior to this test. The side impact test was documented by one real-time camera and 9 high-speed cameras. Camera locations and other pertinent camera information are included in this report.

The SIDs were instrumented with the following accelerometers:

1. Left Upper Rib (LUR) uniaxial and redundant accelerometer (Y-direction)
2. Left Lower Rib (LLR) uniaxial and redundant accelerometer (Y-direction)
3. Lower Thoracic Spine (T₁₂) uniaxial and redundant accelerometer (Y-direction)
4. Pelvic (PEV) section uniaxial and redundant accelerometer (Y-direction)

A summary of the side impact dummy (SID) configuration and verification test data can be found in Appendix C. A total of 41 channels of data were recorded. Appendix B contains the vehicle, MDB, and dummy response data traces.

The following table summarizes the results of the test.

Injury Criteria	Front SID	Rear SID
TTI (g)	65	66
PEV (g)	79	105

Data Acquisition Explanations

The vehicle's right rear occupant compartment Y-axis acceleration, RRTYG1, exceeded its maximum range during impact.

The vehicle's left side upper A-post Y-axis acceleration, LMAYG1, recorded questionable data after approximately 50 milliseconds. The acceleration never returned to zero, which affected the velocity of the data channel.

SECTION 3

SUMMARY OF TEST RESULTS

DATA SHEET 1

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 1998 Dodge Neon 2-Door Coupe
 Vehicle Body Color: Blue VIN: 1B3ES42C1WD500427
 Vehicle NHTSA No.: CW0300 Month & Year of Manufacture: 06/97
 Engine Data: 4 Cylinders; - CID; 2.0 Liters; - cc
 Engine Placement: - Longitudinal; or X Lateral
 Transmission: 3 Speed; - Manual; X Automatic; - Overdrive
 Final Drive: - Rear Wheel Drive; X Front Wheel Drive; - Four-Wheel
 Odometer Reading: 48 km
 Options: X A/C; X Power steering; X Pwr. brakes; - Pwr. windows

DATA FROM TIRE PLACARD

Tire Pressure* (at capacity); 220 kPa FRONT
220 kPa REAR

Recommended Tire Size: P185/65R14

Tires on Test Vehicle: P185/65R14 Manufacturer: Goodyear

Vehicle Capacity Data:

Number of Occupants: 2 Front; 3 Rear; - 3rd seat; 5 Total
 Type of Front Seats: X Bucket; - Bench; - Split bench
 Type of Front Seat Back: - Fixed; X Adjustable with X Lever or - Knob
 Vehicle Max Capacity Loading = 392.0 kg (A)
 No. of Occupants x 68.04 kg. = 340.2 kg (B)
 Vehicle Cargo Capacity = 51.8 kg (A-B)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

Left Front	=	<u>377.8</u>	kg	Left Rear	=	<u>197.3</u>	kg
Right Front	=	<u>370.6</u>	kg	Right Rear	=	<u>199.6</u>	kg
TOTAL FRONT	=	<u>748.4</u>	kg	TOTAL REAR	=	<u>396.9</u>	kg
% of Total Weight	=	<u>65.3</u>	%	% of Total Weight	=	<u>34.7</u>	%
TOTAL WEIGHT	=	<u>1,145.3</u>	kg				

* Tire pressure used in test.

DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight With Max. Fluids = 1145.3 kg (A)
 Maximum Cargo Carrying Capacity Of Test Vehicle = 52.0 kg (B)
 Weight Of Instrumented Side Impact Dummies (1 Or 2 X 79.0 kg) = 158.0 kg (C)
 TEST VEHICLE TARGET WEIGHT: = 1,355.3 kg (A+B+C)

FULLY LOADED TEST VEHICLE (UDW + 1 OR 2 SID(s) + CARGO):

Left Front	=	<u>430.0</u>	kg	Left Rear	=	<u>287.6</u>	kg
Right Front	=	<u>374.2</u>	kg	Right Rear	=	<u>260.8</u>	kg
TOTAL FRONT	=	<u>804.2</u>	kg	TOTAL REAR	=	<u>548.4</u>	kg
% of Total Weight	=	<u>59.5</u>	%	% of Total Weight	=	<u>40.5</u>	%
TOTAL WEIGHT	=	<u>1,352.6</u>	kg				

AS TESTED WEIGHT OF TEST VEHICLE (1 OR 2 SID(s) + CARGO + EQUIPMENT & INSTRUMENTATION)

Left Front	=	<u>420.5</u>	kg	Left Rear	=	<u>285.5</u>	kg
Right Front	=	<u>379.5</u>	kg	Right Rear	=	<u>264.5</u>	kg
TOTAL FRONT	=	<u>800.0</u>	kg	TOTAL REAR	=	<u>550.0</u>	kg
% of Total Weight	=	<u>59.3</u>	%	% of Total Weight	=	<u>40.7</u>	%
TOTAL WEIGHT	=	<u>1,350.0</u>	kg				

TEST VEHICLE ATTITUDE (ALL DIMENSIONS IN MILLIMETERS):

AS DELIVERED:

Left Front 671 Right Front 672 Left Rear 682 Right Rear 684

FULLY LOADED:

Left Front 645 Right Front 665 Left Rear 638 Right Rear 655

READY FOR TEST:

Left Front 645 Right Front 649 Left Rear 641 Right Rear 655

TEST VEHICLE WHEELBASE: 2635 millimeters

C.G. = 1,073.5 millimeters rearward of front wheel centerline

TOTAL VEHICLE LENGTH:

Right Side = ----- millimeters

Left Side = ----- millimeters

Centerline = ----- millimeters

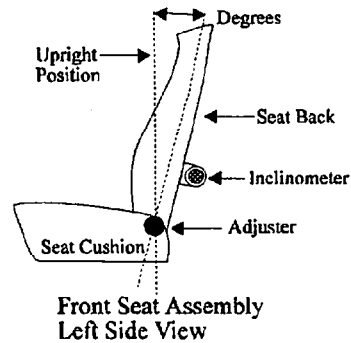
DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

Nominal Design Riding Position for adjustable driver and passenger seat backs. Please describe how to position the inclinometer to measure the seat back angle. Include description of the location of the adjustment latch detent, if applicable.



FRONT SEAT CUSHION PLACEMENT: Mid position

Total Length Of Adjustment Travel: ----- millimeters

Total Number Of Adjustment Positions Or Detents: 24

FRONT SEAT BACK ADJUSTMENT POSITION: Insert 6 mm pin in gage hole when sector gear touches setup pin the seat back is at design angle.

Seat Back Torso Angle: 18 degrees

SECOND POSITION SEAT:

Total Length Of Fore/Aft Adjustment Travel: N/A millimeters

Seat Back Adjustment Position: N/A

ADJUSTABLE STEERING COLUMN POSITION: Mid-position

WINDOW POSITIONS: Left Front: Closed Left Rear: Closed
Right Front: Open Right Rear: Open

Note: Windows will be in closed position on struck side of test vehicle and in open position on opposite side.

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

47.5 liters (fuel tank usable capacity)

43.7 liters used in test (92% - 94% of fuel tank usable capacity)

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

Wheelbase = 2635 millimeters

Impact point is 378 millimeters rearward of front axle centerline
(which is 940 millimeters forward of the wheelbase midpoint)

Actual Impact Point is 370 millimeters rearward of front axle centerline

DATA SHEET 2

TEST VEHICLE SUMMARY OF RESULTS

VEHICLE IDENTIFICATION:

Vehicle Year/Make/Model: 1998 Dodge Neon

Body Style: 2-Door Coupe

VIN: 1B3ES42C1WD500427

NHTSA No.: CW0300

Test Date: October 27, 1997

Overall Length = ----- millimeters; Overall Width = 1692 millimeters

VEHICLE TEST WEIGHT (Pre-Test):

Left Front = 420.5 kg Left Rear = 285.5 kg

Right Front = 379.5 kg Right Rear = 264.5 kg

TOTAL FRONT = 800.0 kg TOTAL REAR = 550.0 kg

TOTAL VEHICLE WEIGHT 1,350.0 kg

Wheelbase = 2635 millimeters

Longitudinal C.G. From Center Of Front Axle = 1073.5 millimeters

Impact Angle With Respect To Impactor = 90 degrees

ACTUAL IMPACT POINT:

Actual Impact Point is 8 mm forward of nominal impact ref. line (Lateral)

Actual Impact Point is 5 mm above nominal impact point (Vertical)

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (240 mm above ground) = 95 millimeters

2. LEVEL 2 (436 mm above ground) = 271 millimeters

3. LEVEL 3 (587 mm above ground) = 282 millimeters

4. LEVEL 4 (842 mm above ground) = 232 millimeters

5. LEVEL 5 (1,310 mm above ground) = 67 millimeters

Maximum Post-Test Intrusion = 282 millimeters

OCCUPANTS:

Front Passenger:

Rear Passenger:

Dummy Identification 051

052

Restraints Used 3-point active seat belt

3-point active seat belt

INSTRUMENTATION:

Number Of Vehicle Data Channels: = 21

Number Of Cameras: Onboard = 3

Offboard = 6

TOTAL = 9

DATA SHEET 3

MOVING DEFORMABLE BARRIER(MDB) SUMMARY

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

MDB FACE MANUFACTURER AND SERIAL NUMBER:

Plascore, Inc.: 034C0897, 035C0897, 036C0897, 172B0597

POSITION OF IMPACT (MDB) ON MONORAIL:

Crabbed 27° to the left

MDB DETAILS:

Overall Width of Framework Carriage	=	<u>1251</u>	millimeters
Overall Length of Mdb (Incl. honeycomb impact face)	=	<u>4115</u>	millimeters
Wheelbase of Framework Carriage	=	<u>2591</u>	millimeters
Tread of Framework Carriage (Front & Rear)	=	<u>1880</u>	millimeters
C.G. Location Rearward of Front Axle	=	<u>1115</u>	millimeters

MDB WEIGHT:

Left Front	=	<u>500.5</u>	kg	Left Rear	=	<u>411.0</u>	kg
Right Front	=	<u>272.5</u>	kg	Right Rear	=	<u>172.5</u>	kg
TOTAL FRONT	=	<u>773.0</u>	kg	TOTAL REAR	=	<u>583.5</u>	kg
TOTAL MDB WEIGHT	=	<u>1,356.5</u>	kg				
Impact Angle (MDB C/L to Target Vehicle C/L)	=	<u>90</u>	degrees				
Impact Speed	=	<u>52.8</u>	kph				

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

1. Row A at Center of Bumper Level	=	<u>216</u>	millimeters
2. Row B at Top of Bumper Level	=	<u>187</u>	millimeters
3. Row C at Mid Level	=	<u>152</u>	millimeters
4. Row D at Top of Stack Level	=	<u>162</u>	millimeters

INSTRUMENTATION:

Number of MDB Data Channels = 5

DATA SHEET 4

POST-TEST OBSERVATIONS

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

VISIBLE DUMMY CONTACT POINTS:

	<u>LEFT FRONT SID</u>	<u>LEFT REAR SID</u>
Head:	<u>Side window</u>	<u>Side header</u>
Upper Torso:	<u>N/A</u>	<u>N/A</u>
Lower Torso:	<u>N/A</u>	<u>N/A</u>
Left Knee:	<u>Steering column</u>	<u>Seat back</u>
Right Knee:	<u>Steering column</u>	<u>Seat back</u>

DOOR OPENING:

	<u>LEFT DOOR</u>	<u>RIGHT DOOR</u>
Front:	<u>Tools</u>	<u>Easy</u>
Rear:	<u>Tools</u>	<u>Easy</u>

MDB DISTANCE FROM TARGET IMPACT POINT:

Vertical: 5 mm above target
Horizontal: 8 mm forward of target

ARM REST LOCATIONS:

Front: 279 mm below the bottom of the window
Rear:

SEAT MOVEMENT:

Front: Seat was pushed against center console
Rear: None

GLAZING DAMAGE:

Windshield: Left edge of windshield cracked
Window: Left driver window and left rear passenger window shattered at impact

PILLAR PERFORMANCE:

No visible tears or separations

SILL SEPARATION:

None

OTHER NOTABLE IMPACT EFFECTS:

The driver and passenger airbags did not deploy.

SECTION 4

OCCUPANT AND VEHICLE INFORMATION

DATA SHEET 5

SID INSTRUMENTATION DATA

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

TEST NUMBER: 971027

DRIVER DUMMY SERIAL NUMBER: 051

POSITIVE
DIRECTION

NEGATIVE
DIRECTION

LEFT UPPER RIB ACCELERATION

LATERAL (P)	52.3 g	@ 38.8 ms	9.7 g	@ 74.4 ms
LATERAL (R)	52.3 g	@ 38.8 ms	9.7 g	@ 74.4 ms

LEFT LOWER RIB ACCELERATION

LATERAL (P)	62.9 g	@ 39.4 ms	10.0 g	@ 88.1 ms
LATERAL (R)	62.6 g	@ 39.4 ms	10.3 g	@ 88.1 ms
TTI d (P)	64.9			
TTI d (R)	65.3			

LOWER SPINE ACCELERATION

LATERAL (P)	66.9 g	@ 40.0 ms	12.5 g	@ 64.4 ms
LATERAL (R)	68.1 g	@ 40.0 ms	12.5 g	@ 64.4 ms

PELVIS ACCELERATION

LATERAL (P)	79.2 g	@ 33.7 ms	8.4 g	@ 98.1 ms
LATERAL (R)	76.8 g	@ 33.7 ms	8.3 g	@ 97.5 ms

POSITIVE DIRECTION

LONGITUDINAL: FORWARD
LATERAL: RIGHTWARD
VERTICAL: DOWNWARD

NEGATIVE DIRECTION

LONGITUDINAL: REARWARD
LATERAL: LEFTWARD
VERTICAL: UPWARD

DATA SHEET 5 (continued)

SID INSTRUMENTATION DATA

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

TEST NUMBER: 971027

PASSENGER DUMMY SERIAL NUMBER: 052

POSITIVE
DIRECTION

NEGATIVE
DIRECTION

LEFT UPPER RIB ACCELERATION

LATERAL (P)	48.7 g	@ 47.5 ms	5.5 g	@ 140.0 ms
LATERAL (R)	47.5 g	@ 47.5 ms	5.3 g	@ 140.0 ms

LEFT LOWER RIB ACCELERATION

LATERAL (P)	51.5 g	@ 50.6 ms	8.0 g	@ 121.9 ms
LATERAL (R)	51.7 g	@ 50.6 ms	8.5 g	@ 121.9 ms
TTI d (P)	65.5			
TTI d (R)	65.3			

LOWER SPINE ACCELERATION

LATERAL (P)	79.5 g	@ 49.4 ms	19.4 g	@ 69.4 ms
LATERAL (R)	78.9 g	@ 49.4 ms	19.2 g	@ 69.4 ms

PELVIS ACCELERATION

LATERAL (P)	105.2 g	@ 46.3 ms	5.9 g	@ 120.6 ms
LATERAL (R)	104.5 g	@ 46.3 ms	6.0 g	@ 120.6 ms

POSITIVE DIRECTION

LONGITUDINAL: FORWARD
LATERAL: RIGHTWARD
VERTICAL: DOWNWARD

NEGATIVE DIRECTION

LONGITUDINAL: REARWARD
LATERAL: LEFTWARD
VERTICAL: UPWARD

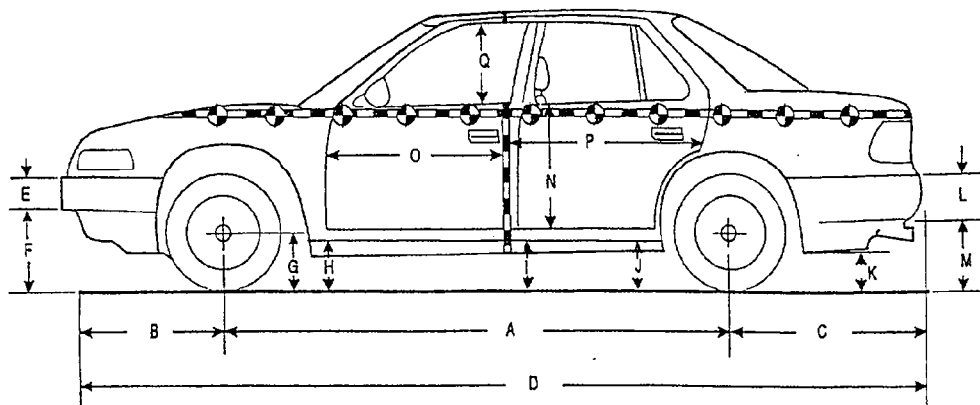
DATA SHEET 6

VEHICLE SIDE MEASUREMENTS

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

Measurements were not taken.



LEFT SIDE VIEW

Note: All dimensions are in millimeters with tolerance of ± 3 mm

	Pre-Test (as delivered)	Pre-Test (as tested)	Post-Test (as tested)	Change
A	N/A	N/A	N/A	N/A
B	N/A	N/A	N/A	N/A
C	N/A	N/A	N/A	N/A
D	N/A	N/A	N/A	N/A
E	N/A	N/A	N/A	N/A
F	N/A	N/A	N/A	N/A
G	N/A	N/A	N/A	N/A
H	N/A	N/A	N/A	N/A
I	N/A	N/A	N/A	N/A
J	N/A	N/A	N/A	N/A
J	N/A	N/A	N/A	N/A
K	N/A	N/A	N/A	N/A
L	N/A	N/A	N/A	N/A
M	N/A	N/A	N/A	N/A
N	N/A	N/A	N/A	N/A
O	N/A	N/A	N/A	N/A
P	N/A	N/A	N/A	N/A
Q	N/A	N/A	N/A	N/A
R	N/A	N/A	N/A	N/A
S	N/A	N/A	N/A	N/A
T	N/A	N/A	N/A	N/A

D = Length at centerline
T = Width at B-pillar

E&L = Bumper Thickness
J1 = To Pinch Weld

R = Right Side Length
J2 = To Sill

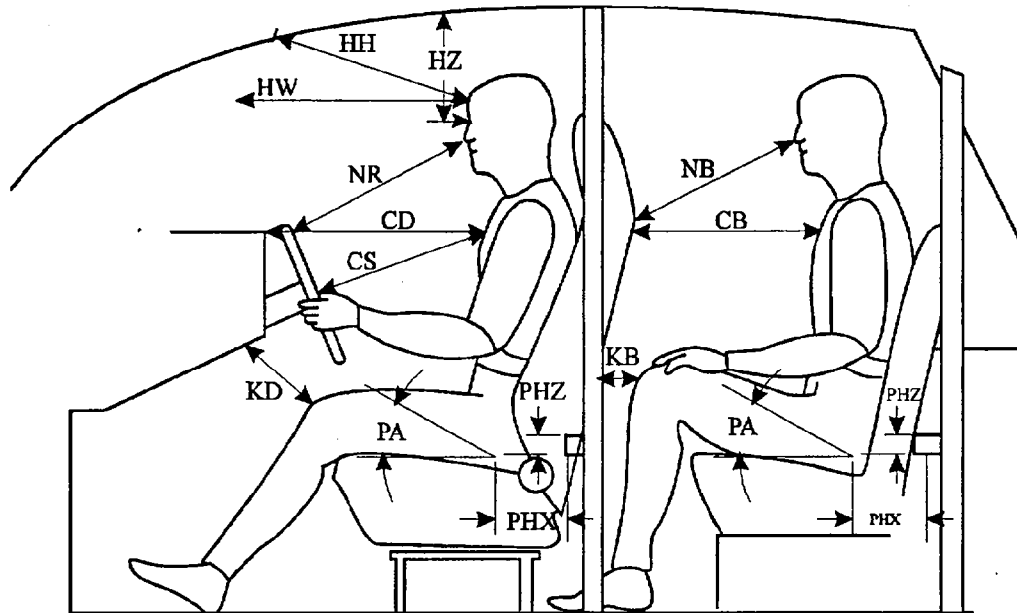
S = Left Side Length

DATA SHEET 7

SID LONGITUDINAL CLEARANCE DIMENSIONS

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300



LEFT SIDE VIEW

Note: All dimensions are in millimeters with tolerance of ± 3 mm

	DRIVER ID #051	LEFT REAR PASS. ID#052
HH	394	N/A
HW	587	N/A
HZ	123	43
NR/NB	N/A	N/A
CD/CB	547	573
CS	324	N/A
KDL(KDA°)/KBL(KDA°)	82/N/A	157/N/A
KDR(KBA°)/KBR(KBA°)	53/N/A	155/N/A
PA°	24	23.9
PHX	504	432
PHZ	125	100

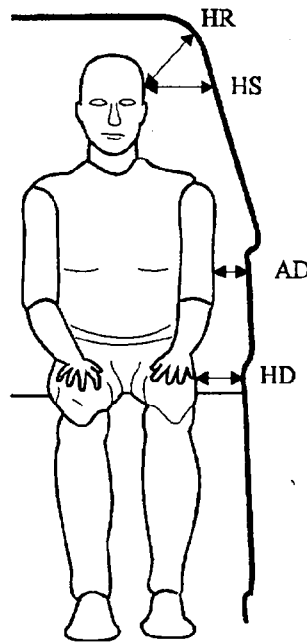
Note: 2-door vehicle shown. Rear dummy PHX and PHZ measurements for 4-door vehicle would use the C-post striker as a reference point.

DATA SHEET 8

SID LATERAL CLEARANCE DIMENSIONS

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300



Note: All dimensions are in millimeters with tolerance of ± 3 mm

	DRIVER ID #051		LEFT REAR PASS. ID#052	
HR	187		144	
HS	223		188	
AD*	LOWER: 105	UPPER: N/A	LOWER: 105	UPPER: N/A
HD	101		197	

* Lower measurement is taken laterally at center of the lower rib accelerometer height from the SID arm segment to the closest part of the vehicle side.

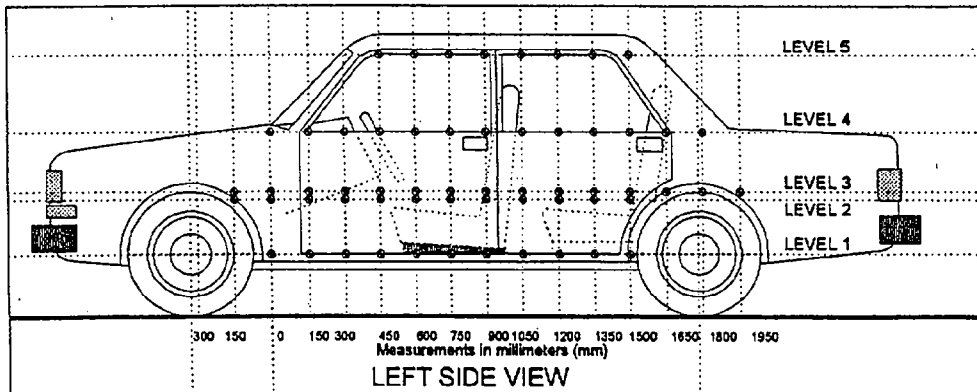
Upper measurement is taken laterally at center of the upper rib accelerometer height from the SID arm segment to the closest part of the vehicle side.

DATA SHEET 9

VEHICLE SIDE MEASUREMENTS

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300



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

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

Measurements along the vertical 750 mm line shown above:

Level 5 @ Window Top	=	<u>1310</u>	millimeters
Level 4 @ Window Sill	=	<u>842</u>	millimeters
Level 3 @ Mid Door	=	<u>587</u>	millimeters
Level 2 @ Occupant H-Point	=	<u>436</u>	millimeters
Level 1 @ Axle Centerline Height (or Sill Top Height)	=	<u>240</u>	millimeters

DATA SHEET 10
VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 1998 Dodge Neon 2-Door Coupe NHTSA No.: CW0300

Location	Height	(mm) From Impact Point														
		-300	-150	0	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800
Level 1 Side Sill	Pre	512	X	421	455	448	449	451	448	450	447	448	445	446	455	450
	Post	X	X	470	525	540	532	536	536	540	538	542	532	541	545	510
	Crush	X	X	-49	-70	-92	-83	-85	-88	-90	-91	-94	-87	-95	-90	-60
Level 2 H-Point	Pre	X	X	399	401	392	394	390	387	384	390	387	384	390	397	395
	Post	X	X	492	592	645	647	656	656	655	654	647	615	600	615	577
	Crush	X	X	-93	-191	-253	-253	-266	-269	-271	-264	-260	-231	-210	-218	-182
Level 3 Mid-Door	Pre	X	390	381	388	376	378	370	368	365	367	365	363	363	366	365
	Post	X	442	472	565	646	637	642	642	636	649	636	617	624	632	605
	Crush	X	-52	-91	-177	-270	-259	-272	-274	-271	-282	-271	-254	-261	-266	-240
Level 4 Window Sill	Pre	X	497	482	472	455	454	442	430	425	422	415	404	404	398	394
	Post	X	525	518	535	585	582	581	591	593	600	604	619	633	630	579
	Crush	-30	-28	-36	-63	-130	-128	-139	-161	-168	-178	-189	-215	-229	-232	-185
Level 5 Window Top	Pre	X	X	X	X	X	X	X	685	663	666	670	663	666	653	657
	Post	X	X	X	X	X	X	X	718	700	720	737	730	710	685	691
	Crush	X	X	X	X	X	X	X	-33	-37	-54	-67	-67	-44	-32	-34

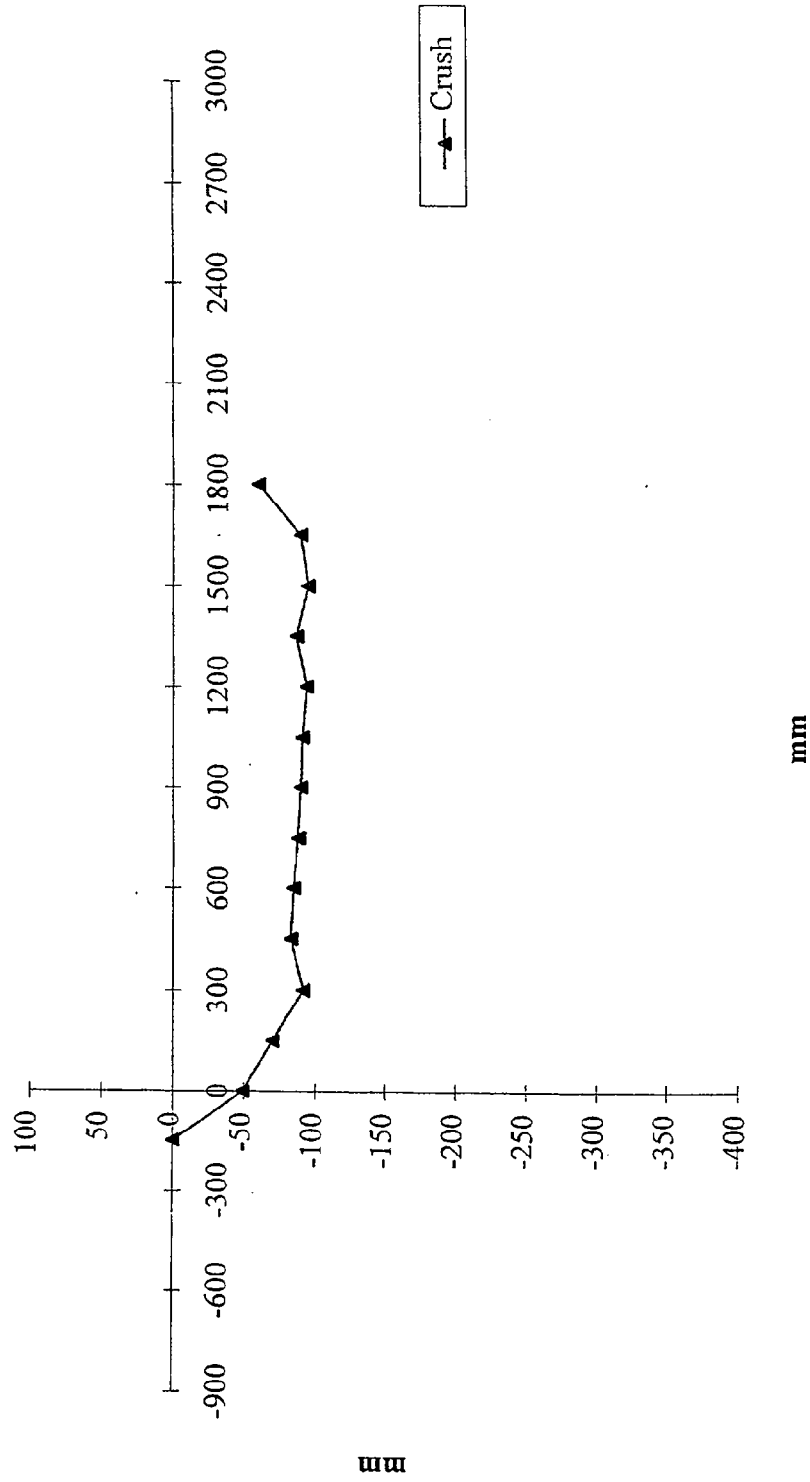
DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

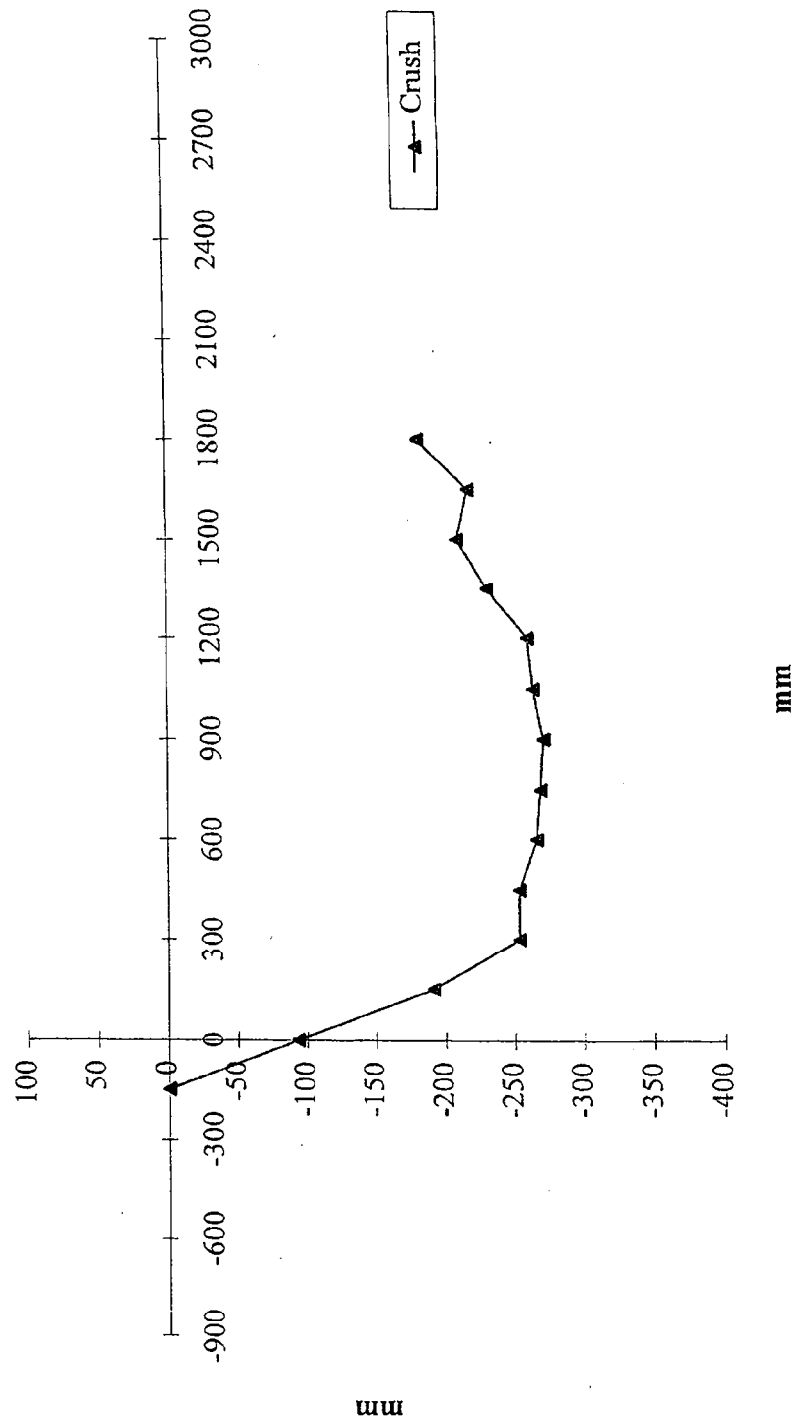
Side Profile Level 1
240 mm Above Ground



DATA SHEET 10 (continued)
VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 1998 Dodge Neon 2-Door Coupe NHTSA No.: CW0300

Side Profile Level 2
436 mm Above Ground



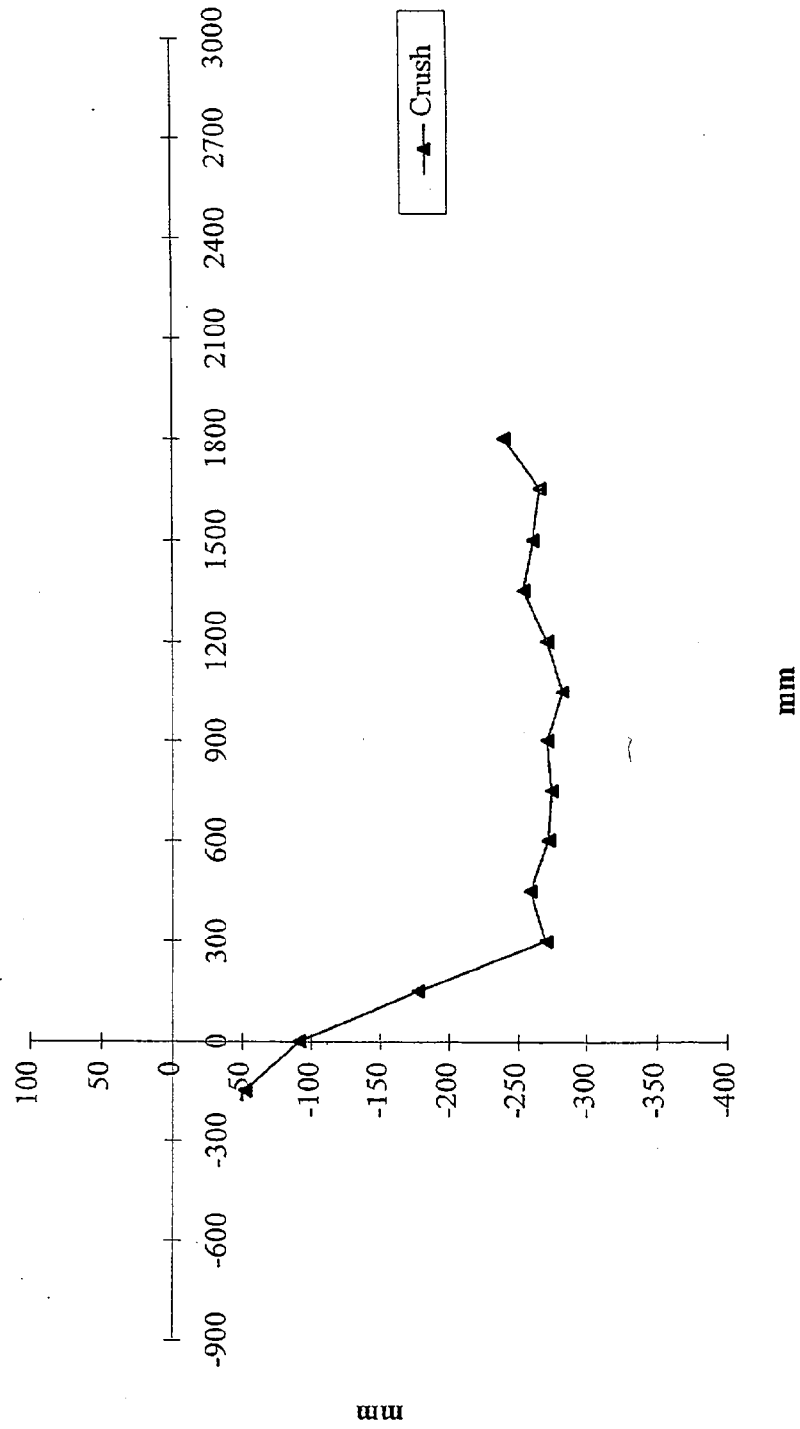
DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

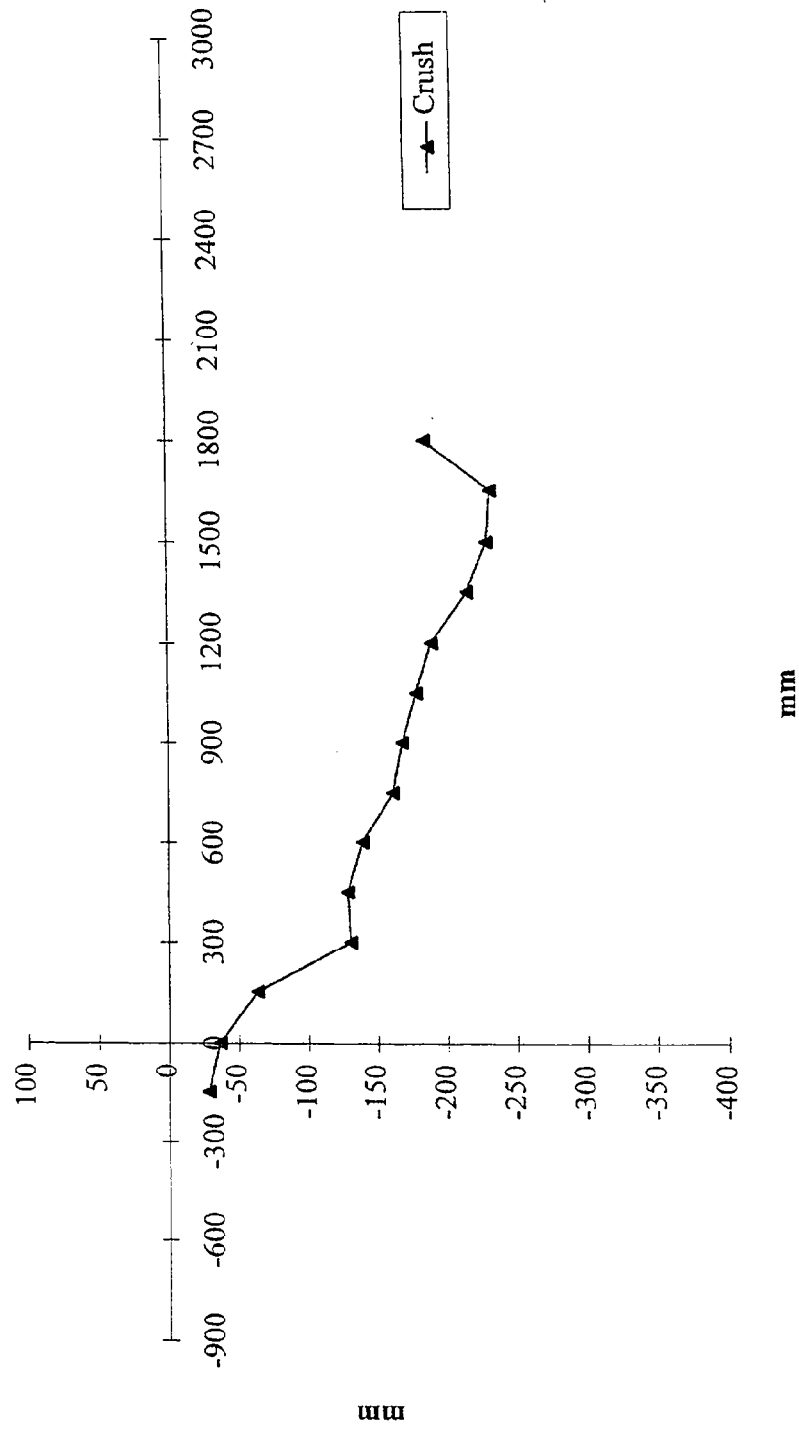
Side Profile Level 3
587 mm Above Ground



DATA SHEET 10 (continued)
VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 1998 Dodge Neon 2-Door Coupe NHTSA No.: CW0300

Side Profile Level 4
842 mm Above Ground



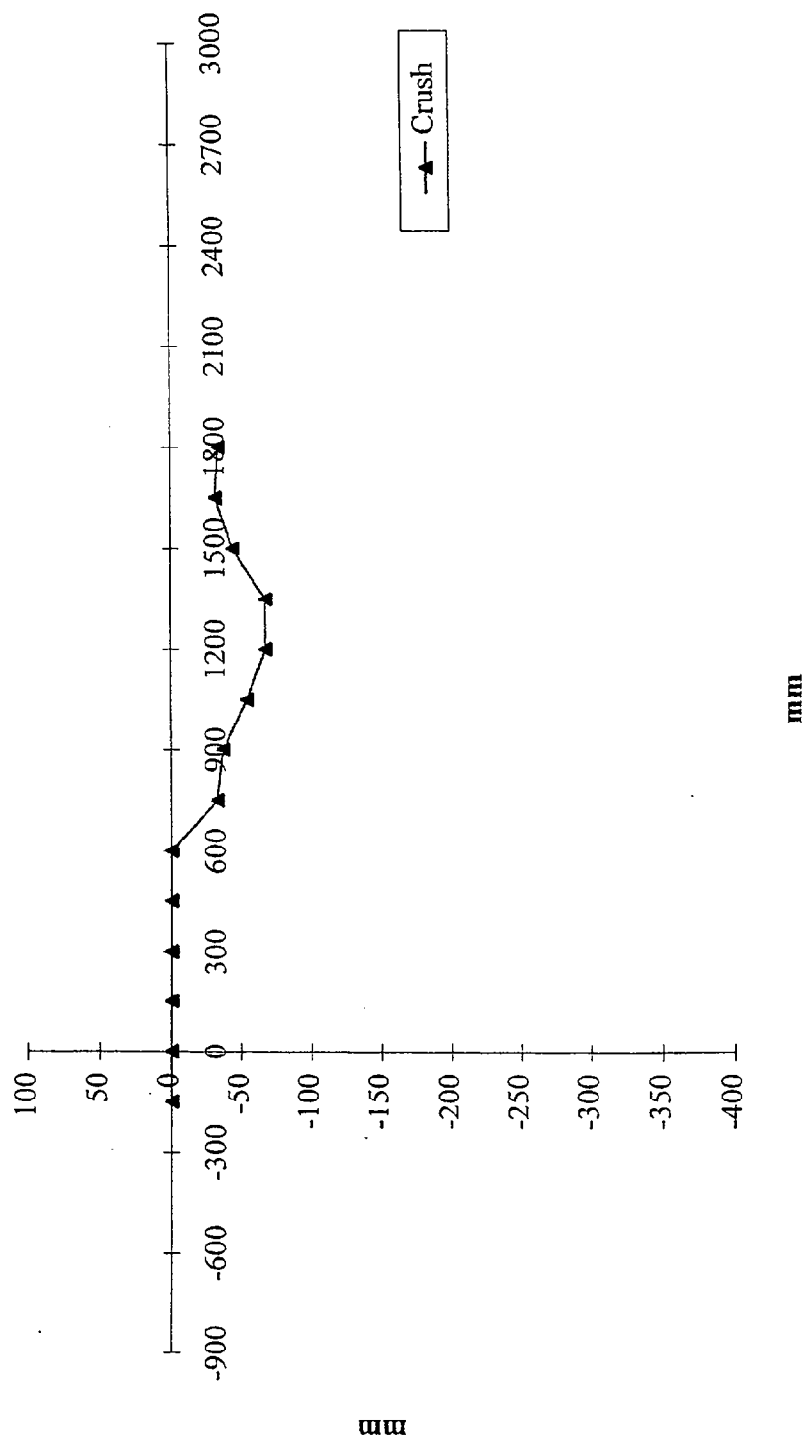
DATA SHEET 10 (continued)

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

NHTSA No.: CW0300

Vehicle: 1998 Dodge Neon 2-Door Coupe

Side Profile Level 5
1310 mm Above Ground

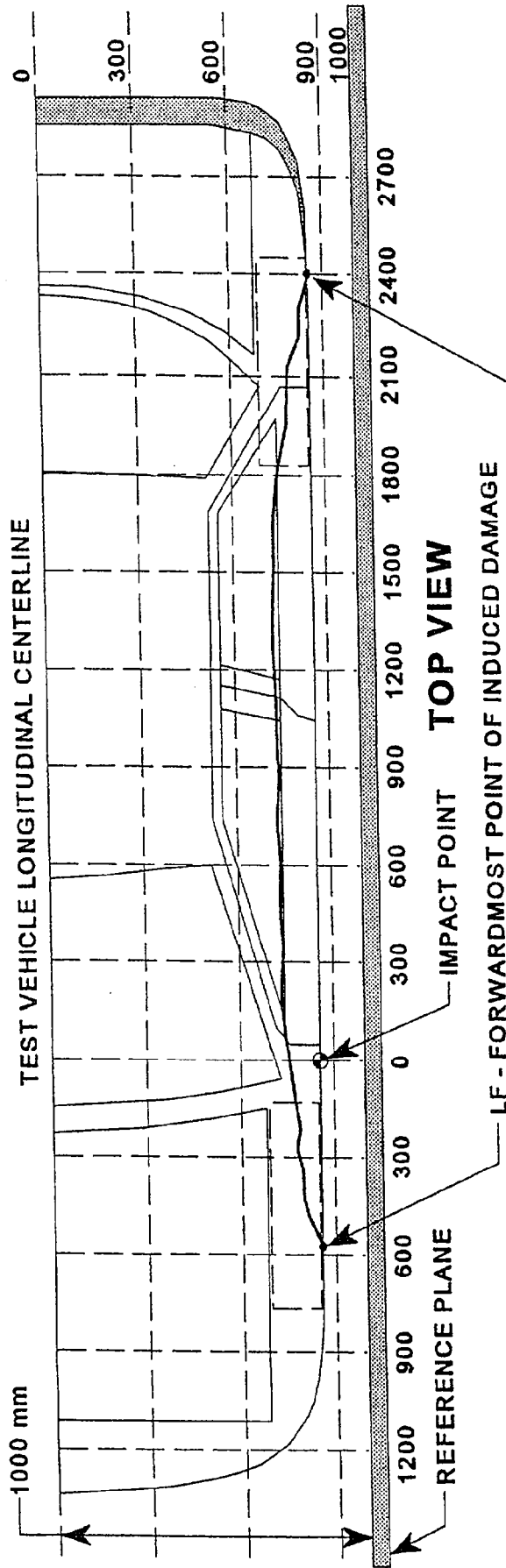


DATA SHEET 11

VEHICLE DAMAGE PROFILE DISTANCES

Vehicle: 1998 Dodge Neon 2-Door Coupe NHTSA No.: CW0300

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 rearend of vehicle) is considered positive (+).

DPD Measurements	Post-Test (mm)	Pre-Test (mm)	Static Crush (mm)
1 (LF = -150 mm)	442.0	390.0	52.0
2 240	613.6	380.8	232.8
3 630	642.0	369.6	272.4
4 1020	646.4	366.6	279.8
5 1410	619.8	363.0	256.8
6 (LR = 1800 mm)	605.0	365.0	240.0

DATA SHEET 12

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE

(Grid as looking at MDB from front)

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

		Distance Right of Center (mm)									Distance Left of Center (mm)								
Location	Height At CL	800	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	800	
Top Stack Level Level 4	810	-128	-99	-91	-93	-89	-9	-96	-104	-93	-91	-94	-87	-93	-93	-94	-114	-162	
Mid Level Level 3	685	-141	-108	-100	-117	-93	-99	-96	-105	-95	-93	-93	-89	-92	-96	-91	-100	-152	
Top Bumper Level 2	560	-136	-144	-153	-187	-138	-108	-98	-107	-97	-101	-101	-101	-105	-110	-109	-127	-153	
Mid Bumper Level 1	432	-190	-193	-198	-216	-192	-155	-131	-129	-120	-119	-119	-120	-123	-124	-125	-148	-180	

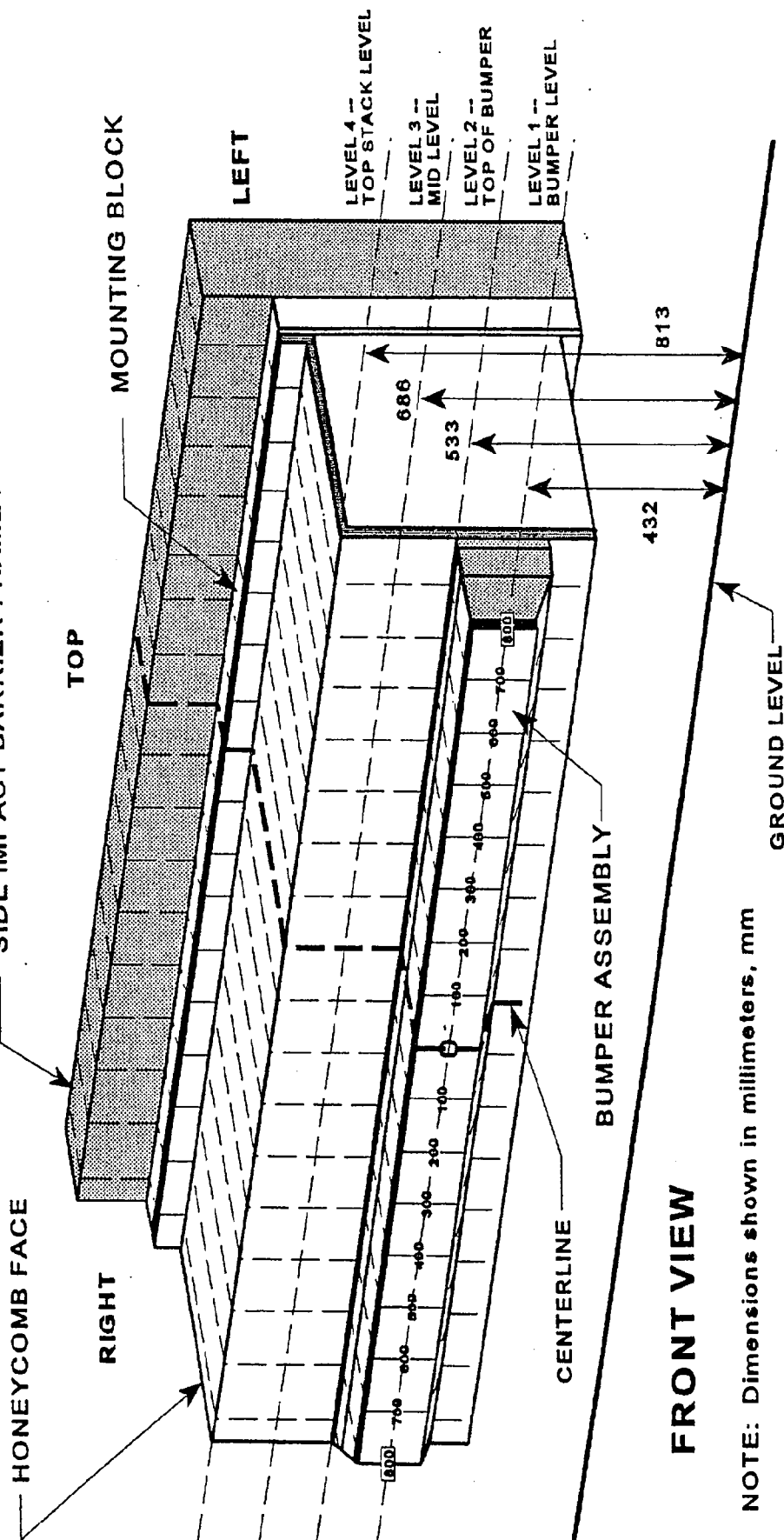
All measurements are in millimeters and have a tolerance of ± 3 mm.

DATA SHEET 12 (continued)

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE

Vehicle: 1998 Dodge Neon 2-Door Coupe NHTSA No.: CW0300

SIDE IMPACT BARRIER FRAME ASSEMBLY



FRONT VIEW

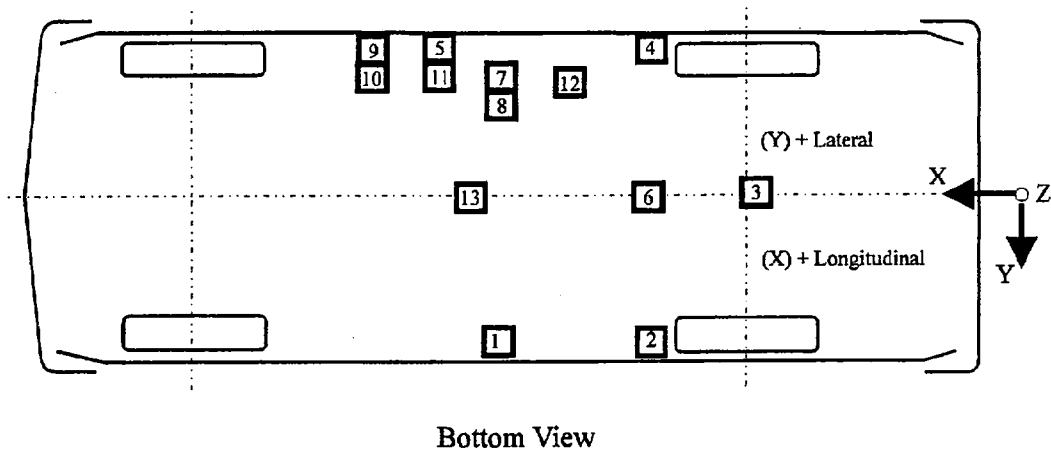
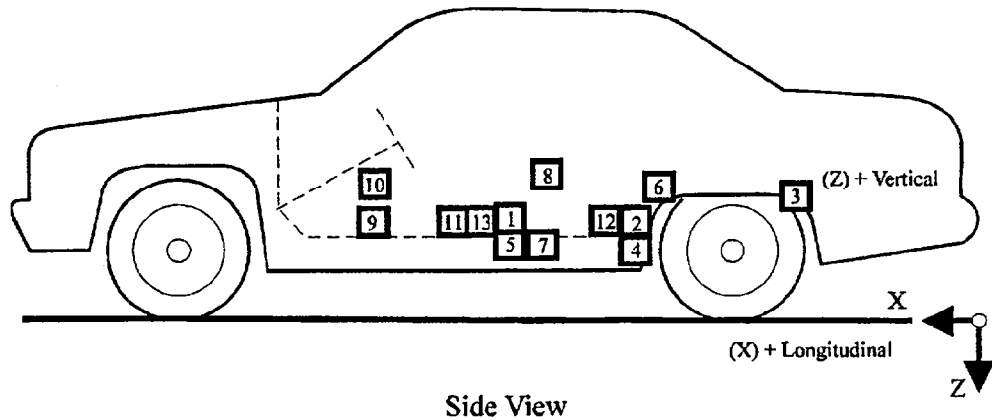
NOTE: Dimensions shown in millimeters, mm

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300



- 1-Right Front Sill
- 2-Right Rear Sill
- 3-Rear Floorpan Sill
- 4-Left Rear Sill
- 5-Left Front Sill
- 6-Right Rear Seat
- 7-Left Side Lower B-pillar

- 8-Left Side Middle B-pillar
- 9-Left Side Lower A-pillar
- 10-Left Side Middle A-pillar
- 11-Left Side Front Seat Rack at H-point
- 12-Left Side Rear Seat Track at H-point
- 13-Vehicle Center of Gravity

DATA SHEET 13 (continued)

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 1998 Dodge Neon 2-Door Coupe NHTSA No.: CW0300

TEST NUMBER: 971027
No. LOCATION

	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
1 RIGHT FRONT SILL	PRE 2732 mm POST 2732 mm	655 mm 655 mm	280 mm 300 mm		
LONGITUDINAL			7.5 g	@ 30.7 ms	@ 13.4 ms
LATERAL			29.6 g	@ 7.8 ms	@ 50.9 ms
VERTICAL			8.7 g	@ 53.6 ms	@ 10.2 ms
RESULTANT			30.3 g	@ 7.8 ms	
2 RIGHT REAR SILL	PRE 1852 mm POST 1862 mm	655 mm 655 mm	265 mm 282 mm		
LONGITUDINAL			10.9 g	@ 30.6 ms	@ 13.5 ms
LATERAL			50.6 g	@ 19.3 ms	@ 49.4 ms
VERTICAL			5.0 g	@ 36.0 ms	@ 17.2 ms
RESULTANT			51.4 g	@ 19.3 ms	
3 REAR FLOORPAN SILL	PRE 885 mm POST 889 mm	0 mm 10 mm	300 mm 338 mm		
LONGITUDINAL			19.7 g	@ 29.3 ms	@ 32.8 ms
LATERAL			27.1 g	@ 32.8 ms	@ 87.8 ms
VERTICAL			14.0 g	@ 29.8 ms	@ 39.2 ms
RESULTANT			34.4 g	@ 29.4 ms	
4 LEFT REAR SILL	PRE 1822 mm POST 1810 mm	-655 mm -590 mm	273 mm 309 mm		
LATERAL			60.4 g	@ 7.1 ms	@ 17.5 ms

DATA SHEET 13 (continued)

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 1998 Dodge Neon 2-Door Coupe NHTSA No.: CW0300

TEST NUMBER: 971027 No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
5 LEFT FRONT SILL	PRE 2762 mm	-655 mm	270 mm		
LATERAL	POST 2765 mm	-591 mm	290 mm	40.6 g @ 6.1 ms	27.9 g @ 15.8 ms
6 RIGHT REAR SEAT	PRE 1662 mm	580 mm	415 mm		
LATERAL ¹	POST 1676 mm	580 mm	449 mm	58.8 g @ 7.4 ms	82.1 g @ 11.2 ms
7 LEFT SIDE LOWER B-PILLAR	PRE 1714 mm	-685 mm	500 mm		
LATERAL	POST 1715 mm	-400 mm	568 mm	162.1 g @ 4.4 ms	141.8 g @ 18.6 ms
8 LEFT SIDE MIDDLE B-PILLAR	PRE 2942 mm	-671 mm	960 mm		
LATERAL	POST 2595 mm	-436 mm	888 mm	124.3 g @ 14.3 ms	68.7 g @ 21.0 ms
9 LEFT SIDE LOWER A-PILLAR	PRE 2942 mm	-690 mm	450 mm		
LATERAL	POST 2935 mm	-632 mm	444 mm	99.1 g @ 5.8 ms	85.9 g @ 23.2 ms

DATA SHEET 13 (continued)

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 1998 Dodge Neon 2-Door Coupe NHTSA No.: CW0300

TEST NUMBER: 971027
No. LOCATION

	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
10 LEFT SIDE MIDDLE A-PILLAR LATERAL ¹	PRE 1615 mm POST 2930 mm	-690 mm -601 mm	760 mm 656 mm	@ 5.8 ms @ 56.2 g	@ 53.6 ms @ 41.2 g
11 LEFT SIDE FRONT SEAT TRACK AT H-POINT LATERAL	PRE 2225 mm POST 2220 mm	-655 mm -640 mm	148 mm 115 mm	@ 5.9 ms @ 53.8 g	@ 9.8 ms @ 23.9 g
12 LEFT SIDE REAR SEAT TRACK AT H-POINT LATERAL	PRE 1325 mm POST 1320 mm	-712 mm -689 mm	180 mm 709 mm	@ 15.2 ms @ 126.2 g	@ 19.8 ms @ 82.1 g
13 VEHICLE CENTER OF GRAVITY LONGITUDINAL LATERAL VERTICAL RESULTANT	PRE 2300 mm POST 2300 mm	0 mm 10 mm	327 mm 364 mm	@ 51.7 ms @ 35.4 g @ 24.5 g @ 36.1 g	@ 34.5 ms @ 51.8 ms @ 37.0 ms @ 10.7 g @ 5.2 g @ 9.4 g

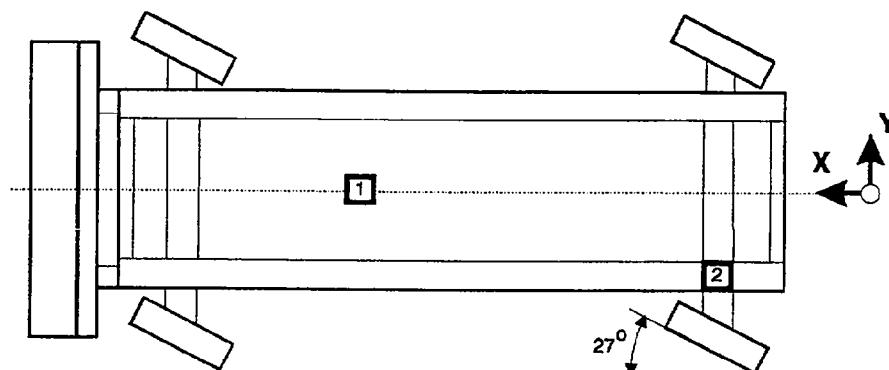
REFERENCE: X: + FORWARD FROM REAR BUMPER
Y: + RIGHTWARD FROM VEHICLE CENTERLINE
Z: + UPWARD FROM GROUND LEVEL

DATA SHEET 14

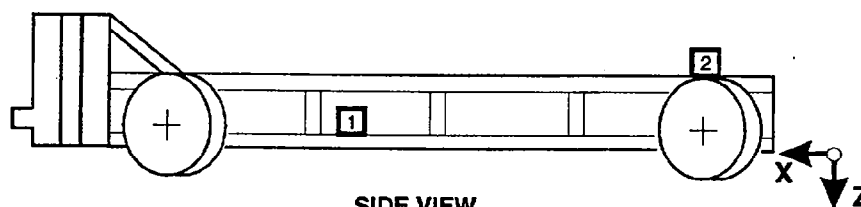
MDB ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300



TOP VIEW



SIDE VIEW

Accel. No.	Location	Coordinates (millimeters)			Positive Direction		Negative Direction	
		X*	Y*	Z*	Max (g)	Time (msec)	Max (g)	Time (msec)
1	MDB Center of Gravity	1835	0	291				
	Longitudinal X				17.4	43.7	1.0	165.5
	Lateral Y				1.5	64.7	8.4	37.4
	Vertical Z				12.3	124.0	11.8	175.6
	Resultant R				20.0	37.0		
2	Rear Frame Member	385	-638	621				
	Longitudinal X				21.2	36.5	2.1	100.6
	Lateral Y				4.7	38.8	2.0	165.3

*Reference: X=Rear Bumper (+ Forward)

Y=Vehicle Centerline (+ To Right)

Z=Ground Level (+ Up)

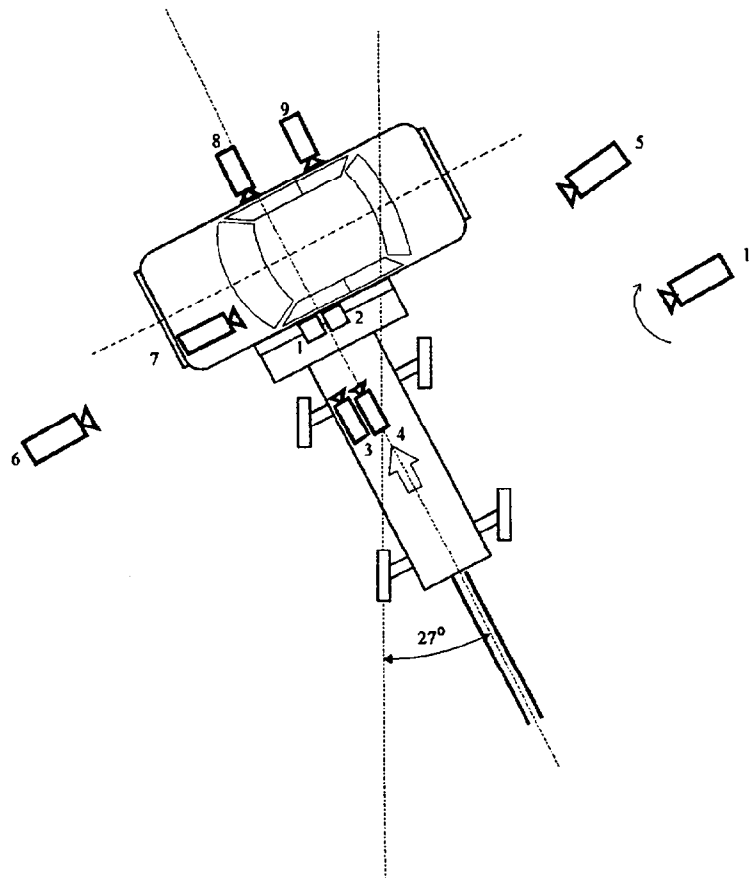
All measurements accurate to within ± 3 mm.

DATA SHEET 15

HIGH-SPEED CAMERA LOCATIONS AND DATA SUMMARY

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300



Camera Number	Location	Location, mm			Lens (mm)	Speed (fps)
		X	Y	Z		
1	Overhead wide	1,142	1,811	10,866	8	1000
2	Overhead tight	1,142	1,378	10,866	25	980
3	Onboard MDB left side	-2,707	-29	1,185	25	955
4	Onboard MDB center	-3,731	1,016	2,110	13	802
5	Right side	6,945	13,520	1,260	13	992
6	Left side	-5,354	-2,835	1,260	13	845
7	Onboard vehicle front	NA	NA	NA	8	818
8	Onboard side front door	NA	NA	NA	8	765
9	Onboard side rear door	NA	NA	NA	8	992
10	Real-time Panning	NA	NA	NA	16	24

+X: Rearward from impact point

+Y: Toward right from impact point

+Z: Upward from ground level

SECTION 5

VEHICLE FUEL SYSTEM INTEGRITY

DATA SHEET 16

FMVSS 301 FUEL SYSTEM INTEGRITY DATA

NHTSA NO.: CW0300 TEST DATE: October 27, 1997

Vehicle Mfg./Make/Model : 1998 Dodge Neon Coupe

TEST VEHICLE IMPACT TYPE : Frontal (48.28 kph)
 Oblique (48.28 kph) with ° barrier
face first contacting the (driver/passenger) side
 Rear Moving Barrier (48.28 kph)
 Lateral Moving Barrier (32.19 kph)
 X Side Impact Moving Deformable Barrier
(53.91 kph) contacting the driver side

FUEL SPILLAGE MEASUREMENT:

1. From impact until vehicle motion ceases
2. For five-minute period after vehicle motion ceases
3. For next 25 minutes.

ACTUAL	MAXIMUM ALLOWED
0 g	28 g
0 g	142 g
0 g	28 g/1 min.

SOLVENT SPILLAGE DETAILS :

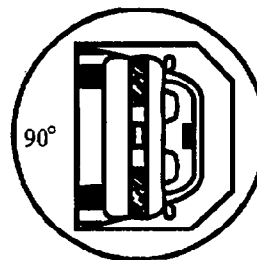
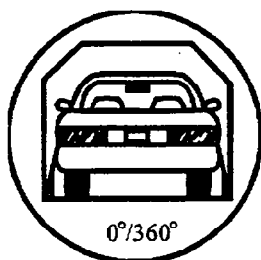
None

DATA SHEET 17
ROLLOVER DATA

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

0 - 90 Degrees



1. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time 1 minutes 2 seconds
(Spec. Range = 1 to 3 minutes)

FMVSS 301 Postion Hold Time + 5 minutes 0 seconds

TOTAL 6 minutes 2 seconds

Next whole minute interval 7 minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE :

0 g	0 g	0 g	N/A
-----	-----	-----	-----

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S):

None

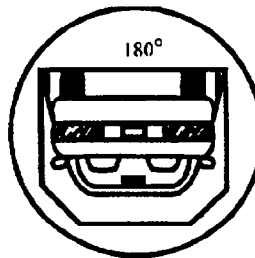
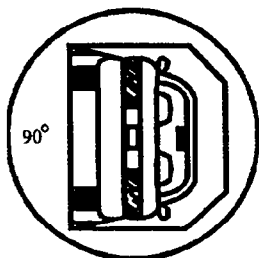
DATA SHEET 17 (continued)

ROLLOVER DATA

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

90 - 180 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time 1 minutes 2 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Postion Hold Time + 5 minutes 0 seconds

TOTAL 6 minutes 2 seconds

Next whole minute interval 7 minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE :

0 g	0 g	0 g	N/A
-----	-----	-----	-----

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S):

None

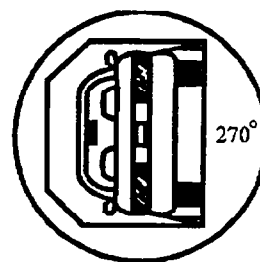
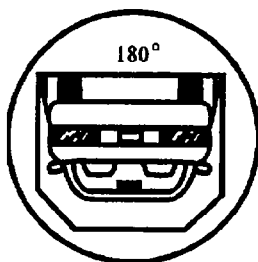
DATA SHEET 17 (continued)

ROLLOVER DATA

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

180 - 270 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time 1 minutes 2 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Postion Hold Time + 5 minutes 0 seconds

TOTAL 6 minutes 2 seconds

Next whole minute interval 7 minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE :

0 g	0 g	0 g	N/A
-----	-----	-----	-----

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S):

None

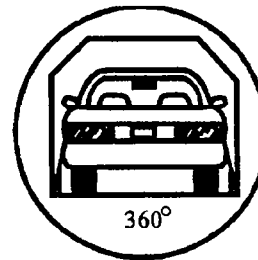
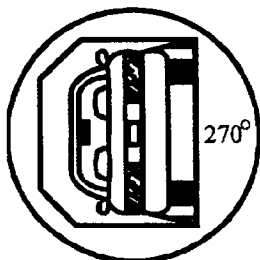
DATA SHEET 17 (continued)

ROLLOVER DATA

Vehicle: 1998 Dodge Neon 2-Door Coupe

NHTSA No.: CW0300

270 - 360 Degrees



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD :

Rollover Fixture 90° Rotation Time 1 minutes 2 seconds

(Spec. Range = 1 to 3 minutes)

FMVSS 301 Postion Hold Time + 5 minutes 0 seconds

TOTAL 6 minutes 2 seconds

Next whole minute interval 7 minutes

II. FMVSS 301 REQUIREMENTS :

(1) Time Period

First 5 minutes FROM onset of rotation	6th min.	7th min.	8th min. (if required)
--	----------	----------	------------------------

(2) Maximum Allowable Solvent Spillage

142 g	28 g	28 g	28 g
-------	------	------	------

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE :

0 g	0 g	0 g	N/A
-----	-----	-----	-----

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S):

None

Appendix A

Photographs

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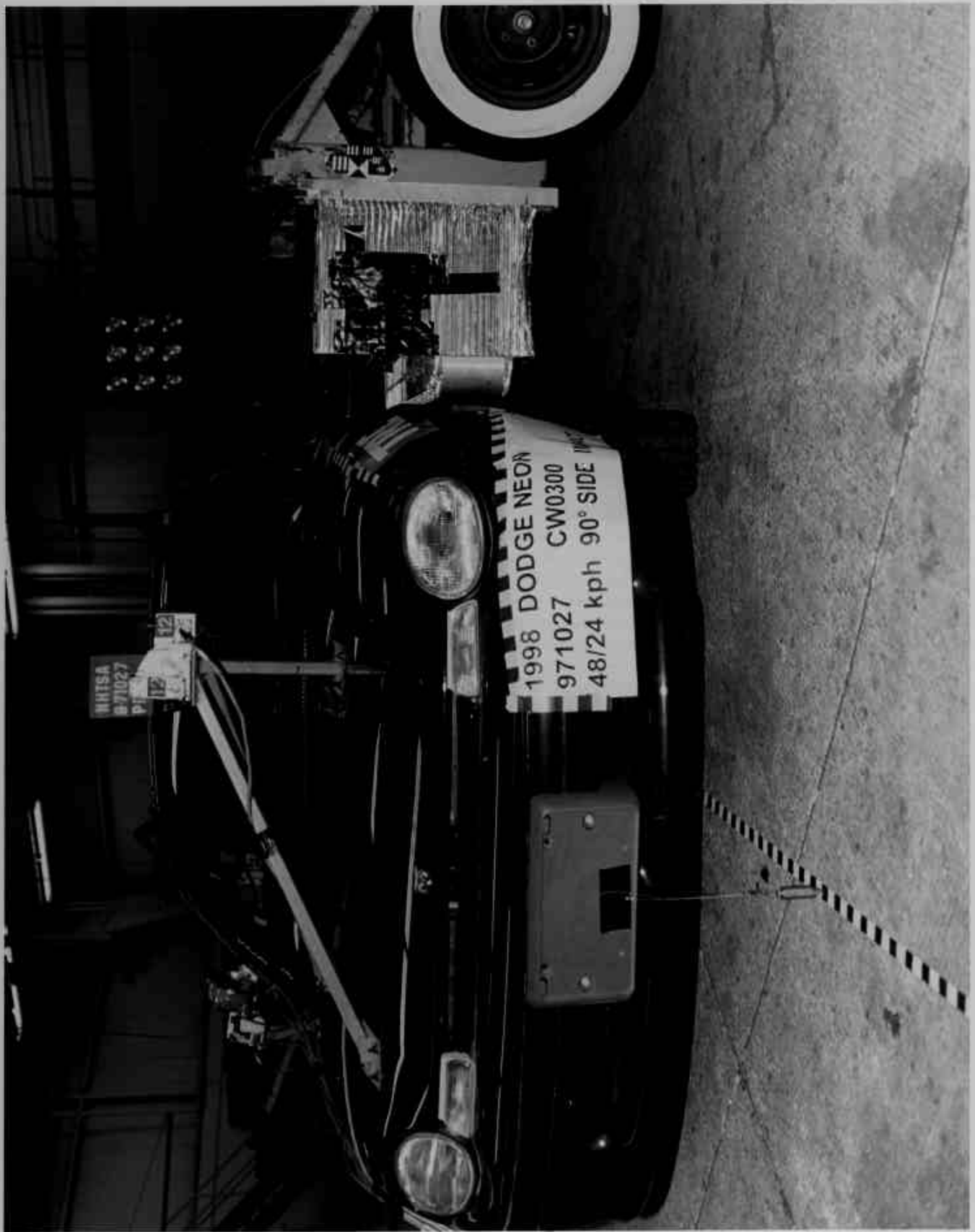


Figure A-1 Pre-Test Front View of Test Vehicle
A-3

971027

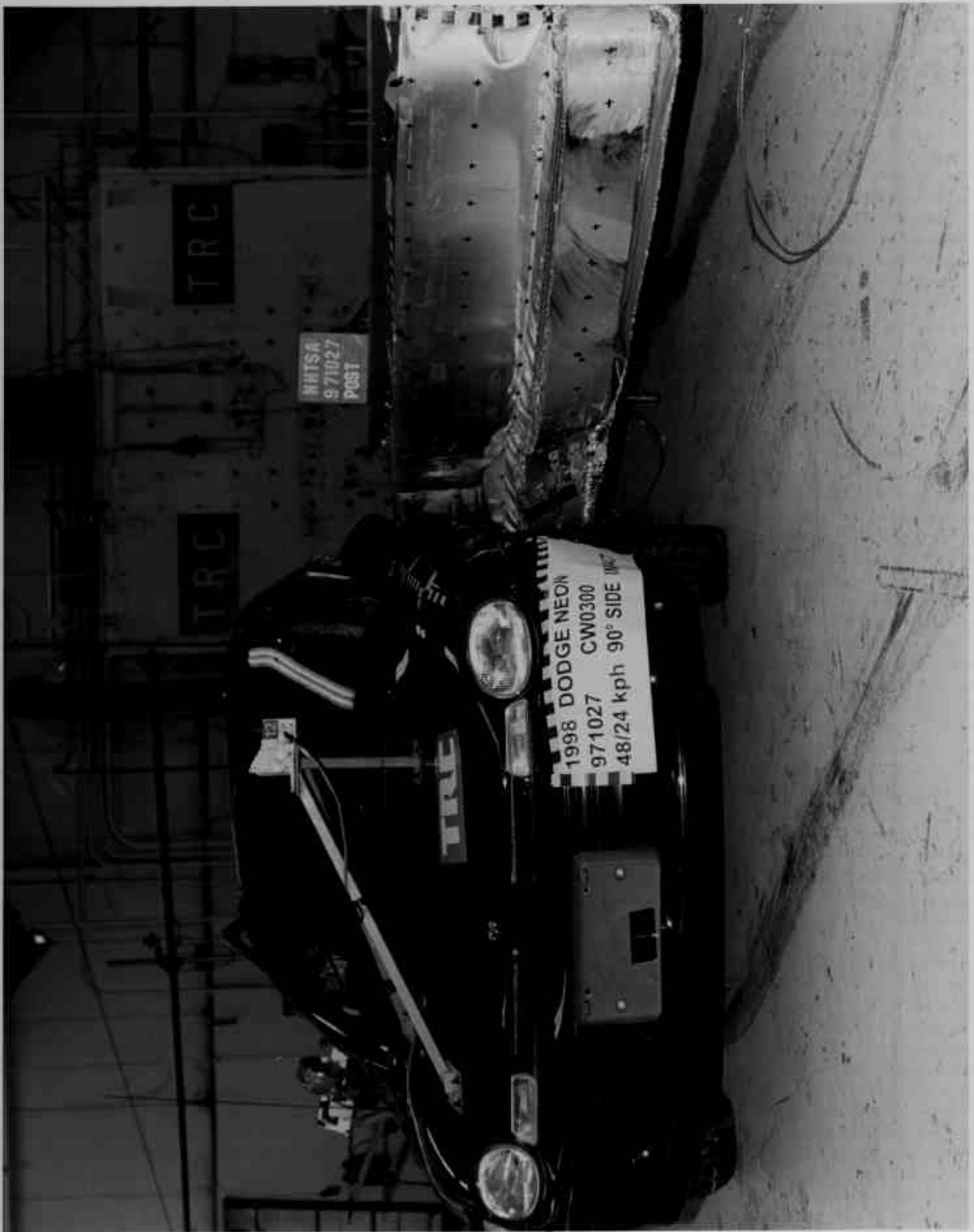


Figure A-2 Post-Test Front View of Test Vehicle
A-4

971027



Figure A-3 Pre-Test Rear View of Test Vehicle
A-5

971027

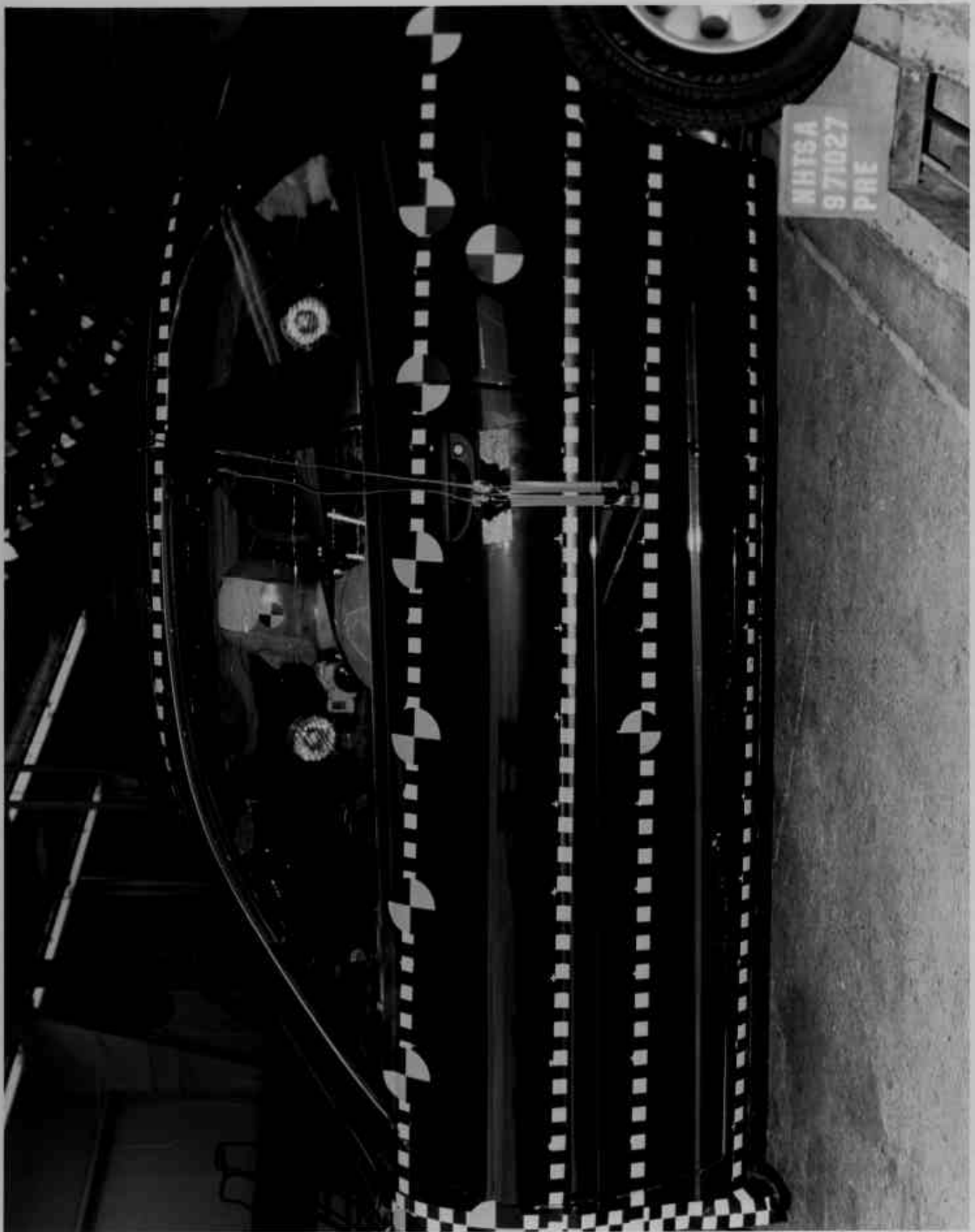


Figure A-4 Pre-Test Impacted Side View of Test Vehicle
A-6

971027

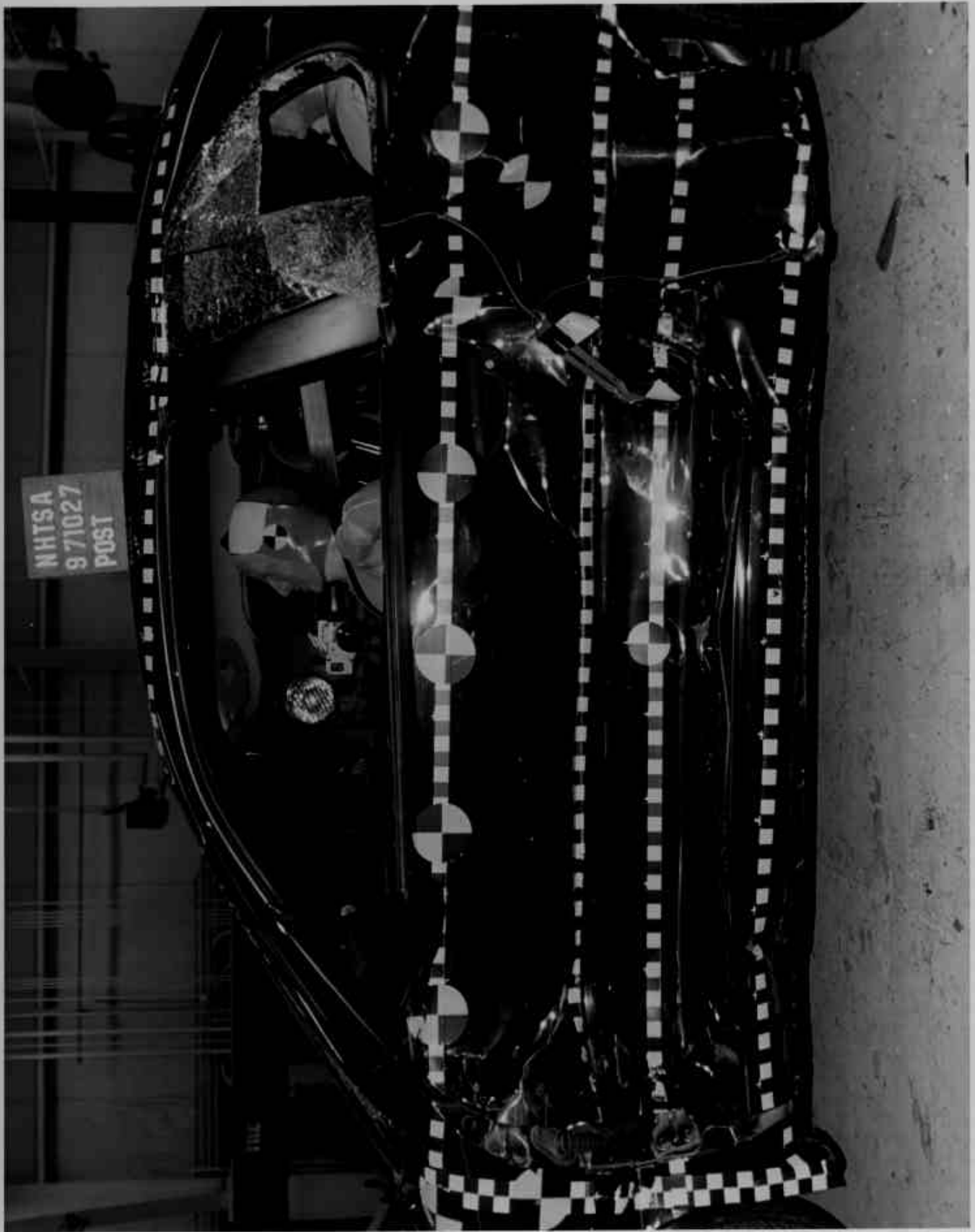


Figure A-5 Post-Test Impacted Side View of Test Vehicle
A-7

971027

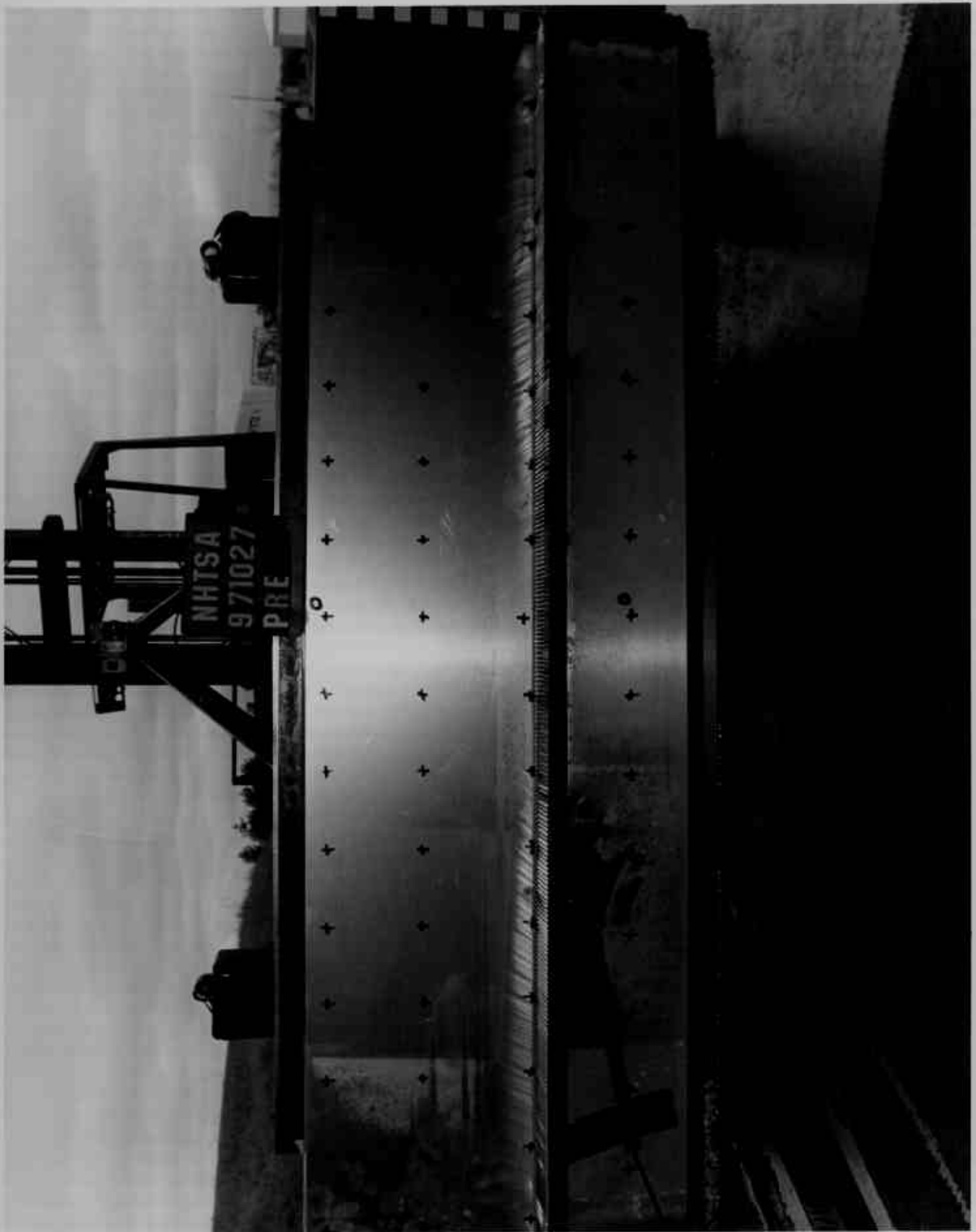


Figure A-6 Pre-Test Frontal View of Impactor Face
A-8

971027



Figure A-7 Post-Test Frontal View of Impactor Face
A-9

971027



Figure A-8 Pre-Test Left Side View of Impactor Face
A-10

971027

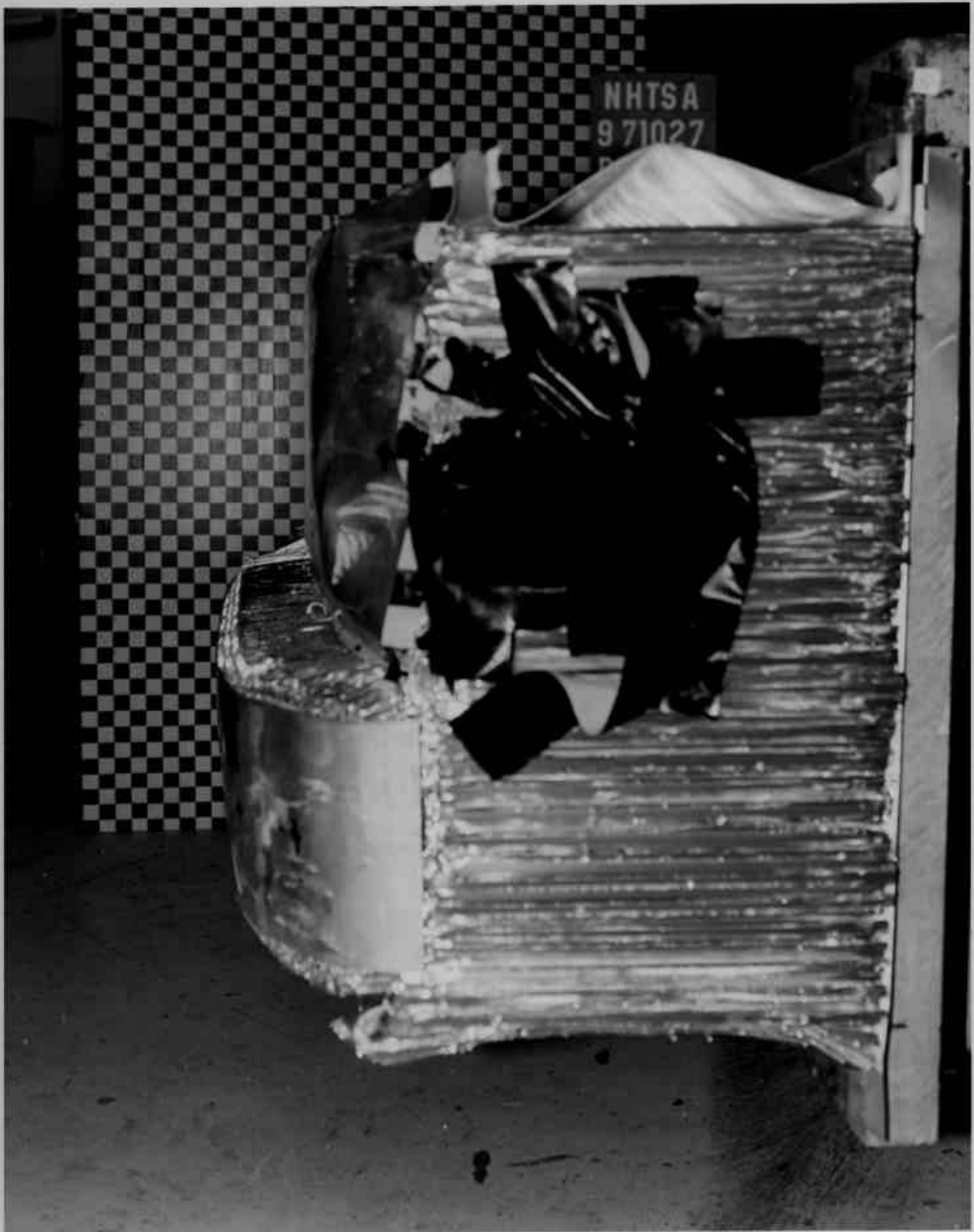


Figure A-9 Post-Test Left Side View of Impactor Face
A-11

971027

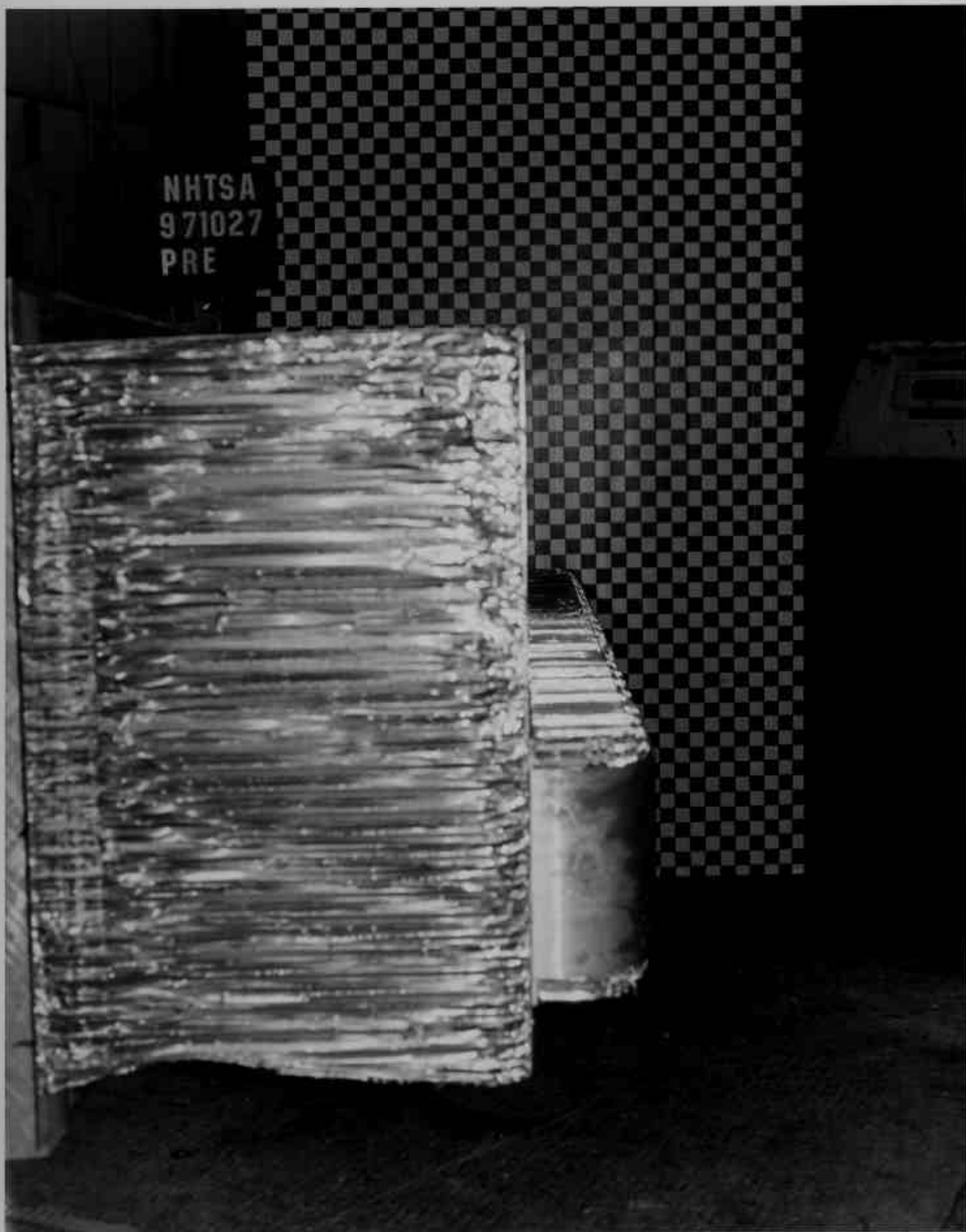


Figure A-10 Pre-Test Right Side View of Impactor Face
A-12

971027



Figure A-11 Post-Test Right Side View of Impactor Face
A-13

971027

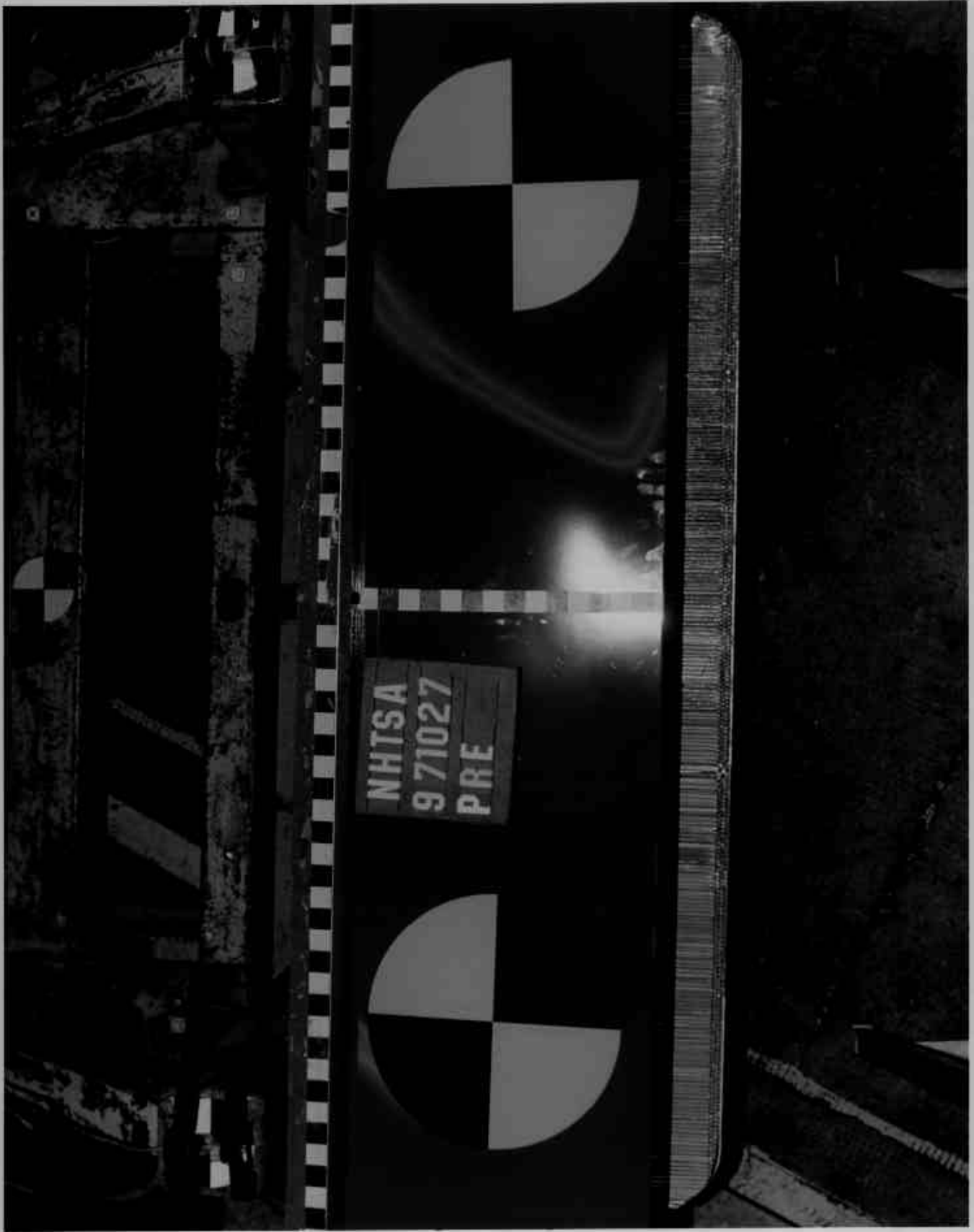


Figure A-12 Pre-Test Top View of Impactor Face
A-14

971027



Figure A-13 Pre-Test Overhead View of Aligned MDB and Vehicle
A-15

971027

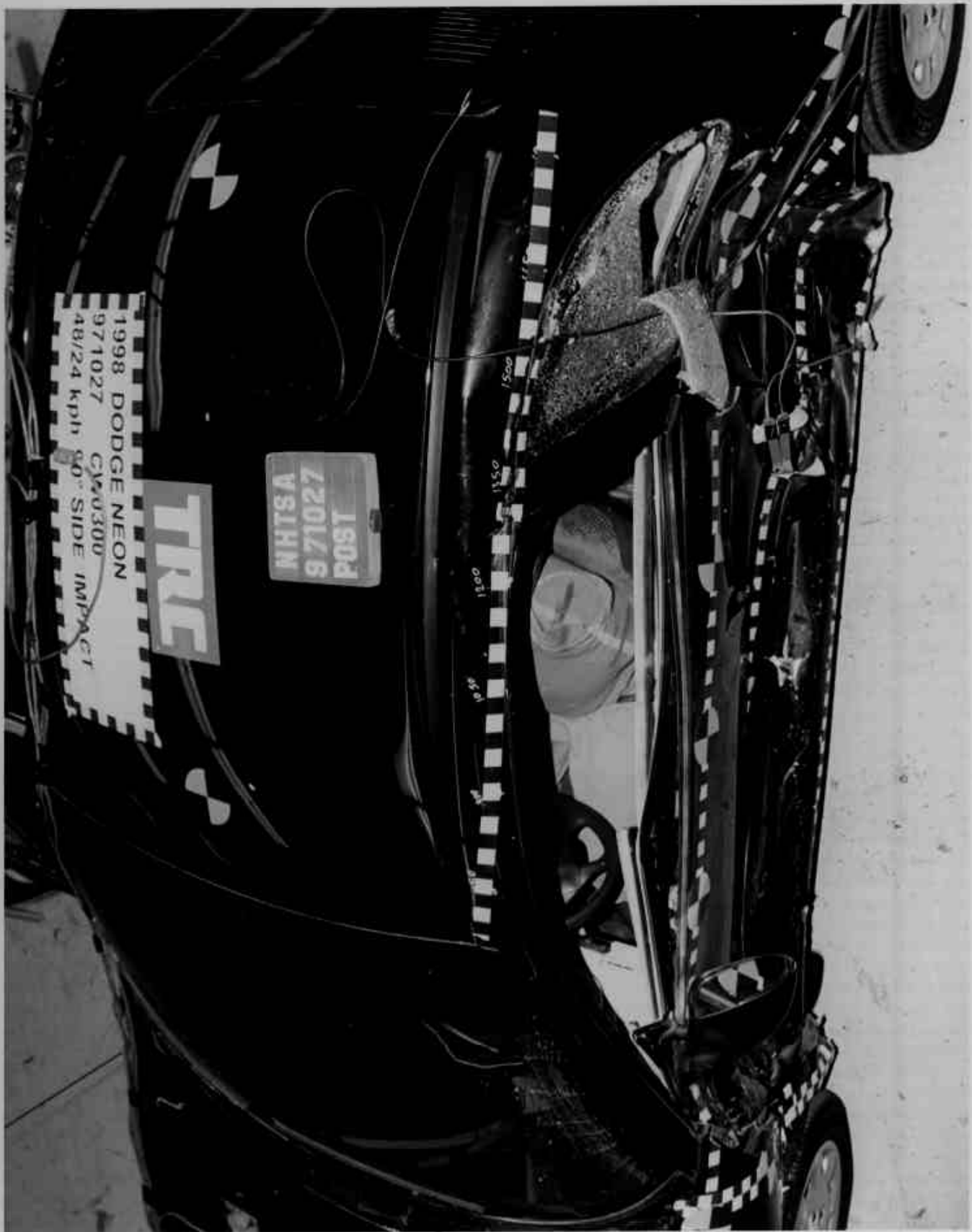


Figure A-14 Post-Test Overhead View of Vehicle

A-16

971027



Figure A-15 Pre-Test Right Occupant Compartment View of Front SID

A-17

971027



Figure A-16 Post-Test Right Occupant Compartment View of Front SID
A-18 971027



Figure A-17 Pre-Test Right Occupant Compartment View of Rear SID
A-19

971027



Figure A-18 Post-Test Right Occupant Compartment View of Rear SID
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Figure A-19 Pre-Test Left Occupant Compartment View of Front SID
A-21 971027



Figure A-20 Post-Test Left Occupant Compartment View of Front SID

A-22

971027

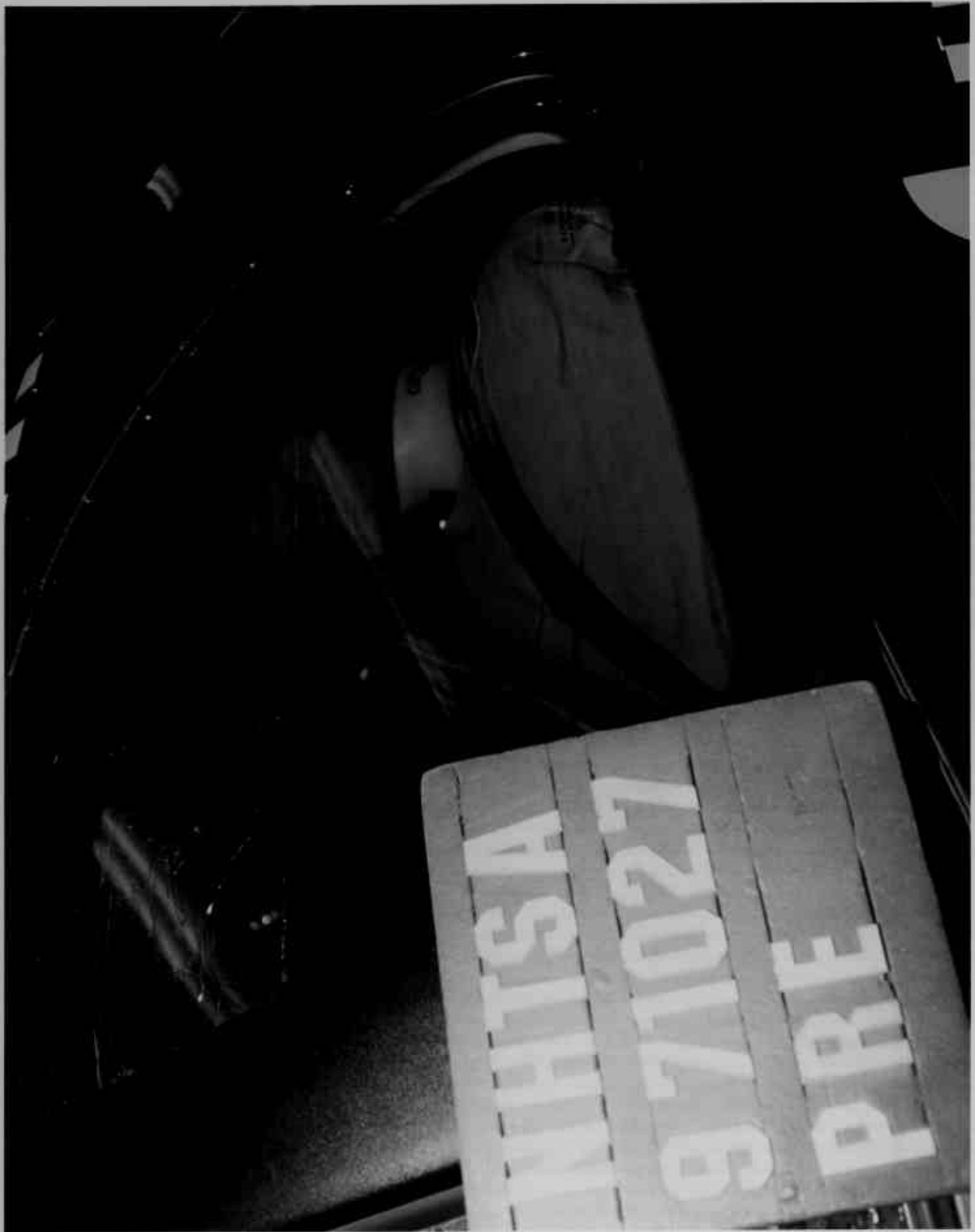


Figure A-21 Pre-Test Left Occupant Compartment View of Rear SID

A-23

971027



Figure A-22 Post-Test Left Occupant Compartment View of Rear SID

A-24

971027



Figure A-23 Post-Test Interior of Front Door Showing SID Impact Locations
A-25 971027



Figure A-24 Post-Test Interior of Rear Door Showing SID Impact Locations

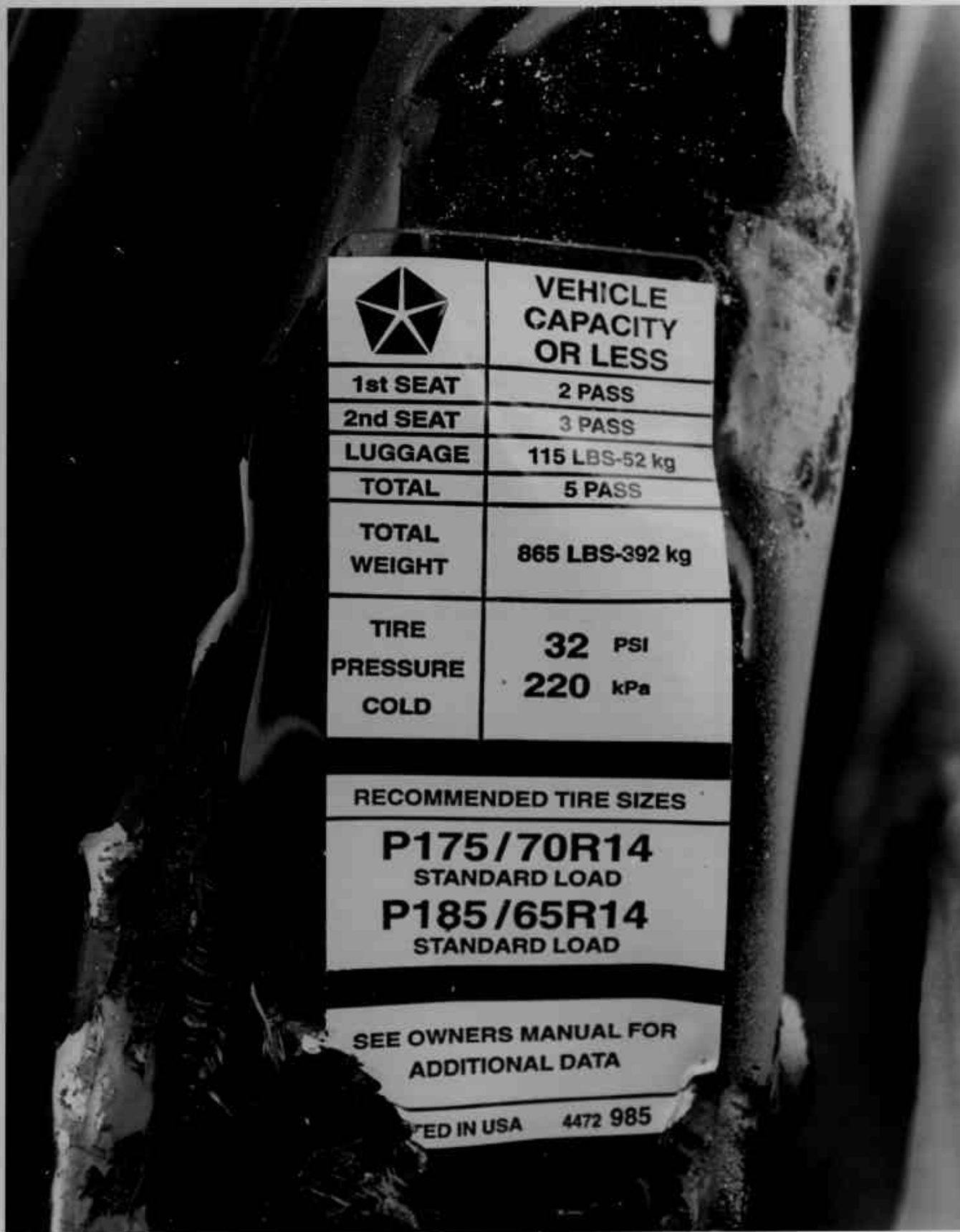
A-26

971027



Figure A-25 Pre-Test Vehicle Certification Label View
A-27

971027



	VEHICLE CAPACITY OR LESS
1st SEAT	2 PASS
2nd SEAT	3 PASS
LUGGAGE	115 LBS-52 kg
TOTAL	5 PASS
TOTAL WEIGHT	865 LBS-392 kg
TIRE PRESSURE COLD	32 PSI 220 kPa
RECOMMENDED TIRE SIZES	
P175/70R14 STANDARD LOAD	
P185/65R14 STANDARD LOAD	
SEE OWNERS MANUAL FOR ADDITIONAL DATA	
MADE IN USA 4472 985	

Figure A-26 Pre-Test Vehicle Recommended Tire Pressure Label View

Appendix B

Data Plots

Table of Data Plots

Driver and Passenger Dummy Instrumentation Plots

Acceleration Data - Filter Class 1000

Integration Data - Filter Class 1000

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3	DRIVER LOWER RIB Y-AXIS ACCELERATION	B-9
4	DRIVER LOWER RIB Y-AXIS VELOCITY	B-10
5	DRIVER LOWER SPINE Y-AXIS ACCELERATION	B-11
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9	LEFT REAR PASSENGER UPPER RIB Y-AXIS ACCELERATION	B-15
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11	LEFT REAR PASSENGER LOWER RIB Y-AXIS ACCELERATION	B-17
12	LEFT REAR PASSENGER LOWER RIB Y-AXIS VELOCITY	B-18
13	LEFT REAR PASSENGER LOWER SPINE Y-AXIS ACCELERATION	B-19
14	LEFT REAR PASSENGER LOWER SPINE Y-AXIS VELOCITY	B-20
15	LEFT REAR PASSENGER PELVIS Y-AXIS ACCELERATION	B-21
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Test Vehicle Instrumentation Plots

Acceleration Data - Filter Class 60

Integration Data - Filter Class 180

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18	RIGHT SIDE SILL AT FRONT SEAT X-AXIS VELOCITY	B-25
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20	RIGHT SIDE SILL AT FRONT SEAT Y-AXIS VELOCITY	B-27
21	RIGHT SIDE SILL AT FRONT SEAT Z-AXIS ACCELERATION	B-28
22	RIGHT SIDE SILL AT FRONT SEAT Z-AXIS VELOCITY	B-29
23	RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION	B-30
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26	RIGHT SIDE SILL AT REAR SEAT Y-AXIS ACCELERATION	B-33

27	RIGHT SIDE SILL AT REAR SEAT Y-AXIS VELOCITY	B-34
28	RIGHT SIDE SILL AT REAR SEAT Z-AXIS ACCELERATION	B-35
29	RIGHT SIDE SILL AT REAR SEAT Z-AXIS VELOCITY	B-36
30	RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION	B-37
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34	REAR FLOORPAN ABOVE AXLE Y-AXIS VELOCITY	B-41
35	REAR FLOORPAN ABOVE AXLE Z-AXIS ACCELERATION	B-42
36	REAR FLOORPAN ABOVE AXLE Z-AXIS VELOCITY	B-43
37	REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION	B-44
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63	FRONT SEAT TRACK Y-AXIS VELOCITY	B-70
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65	REAR SEAT TRACK Y-AXIS VELOCITY	B-72
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67	VEHICLE CENTER OF GRAVITY X-AXIS VELOCITY	B-74
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69	VEHICLE CENTER OF GRAVITY Y-AXIS VELOCITY	B-76
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72	VEHICLE CENTER OF GRAVITY RESULTANT ACCELERATION	B-79

MDB Instrumentation Plots
Acceleration Data - Filter Class 60
Integration Data - Filter Class 180

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74	MDB CENTER OF GRAVITY X-AXIS VELOCITY	B-82
75	MDB CENTER OF GRAVITY Y-AXIS ACCELERATION	B-83
76	MDB CENTER OF GRAVITY Y-AXIS VELOCITY	B-84
77	MDB CENTER OF GRAVITY Z-AXIS ACCELERATION	B-85
78	MDB CENTER OF GRAVITY Z-AXIS VELOCITY	B-86
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80	MDB REAR X-AXIS ACCELERATION	B-88
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Acceleration Data - FIR Filtered

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85	DRIVER UPPER RIB Y-AXIS VELOCITY	B-94
86	DRIVER LOWER RIB Y-AXIS ACCELERATION	B-95
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88	DRIVER LOWER SPINE Y-AXIS ACCELERATION	B-97
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95	PASSENGER LOWER RIB Y-AXIS VELOCITY	B-104
96	PASSENGER LOWER SPINE Y-AXIS ACCELERATION	B-105
97	PASSENGER LOWER SPINE Y-AXIS VELOCITY	B-106
98	PASSENGER PELVIS Y-AXIS ACCELERATION	B-107
99	PASSENGER PELVIS Y-AXIS VELOCITY	B-108

Driver and Passenger Dummy Instrumentation Plots

Acceleration Data - FIR Filtered - Redundant

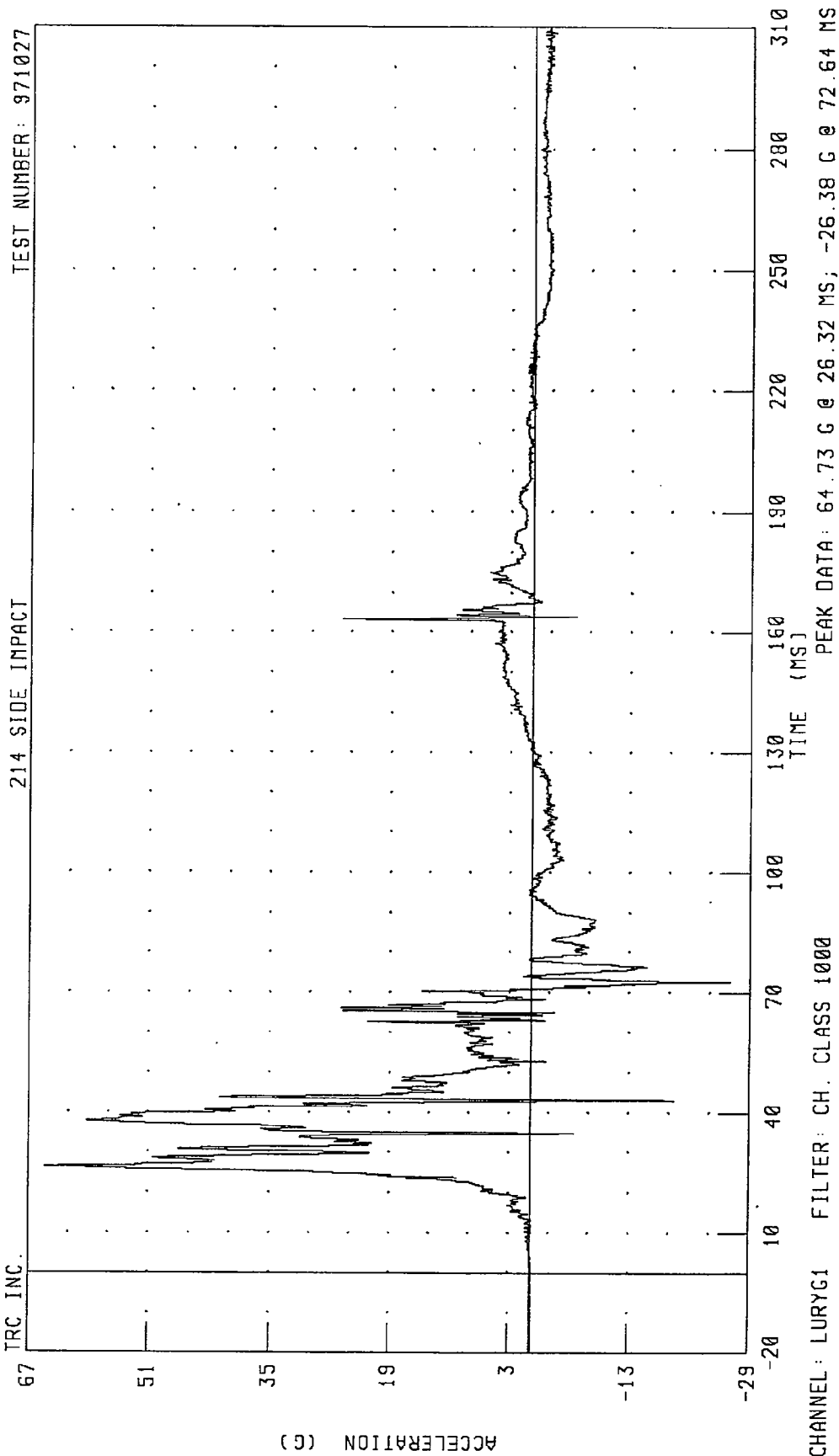
<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
100	DRIVER UPPER RIB Y-AXIS REDUNDANT ACCELERATION	B-110
101	DRIVER UPPER RIB Y-AXIS REDUNDANT VELOCITY	B-111
102	DRIVER LOWER RIB Y-AXIS REDUNDANT ACCELERATION	B-112
103	DRIVER LOWER RIB Y-AXIS REDUNDANT VELOCITY	B-113
104	DRIVER LOWER SPINE Y-AXIS REDUNDANT ACCELERATION	B-114
105	DRIVER LOWER SPINE Y-AXIS REDUNDANT VELOCITY	B-115
106	DRIVER PELVIS Y-AXIS REDUNDANT ACCELERATION	B-116
107	DRIVER PELVIS Y-AXIS REDUNDANT VELOCITY	B-117
108	PASSENGER UPPER RIB Y-AXIS REDUNDANT ACCELERATION	B-118
109	PASSENGER UPPER RIB Y-AXIS REDUNDANT VELOCITY	B-119
110	PASSENGER LOWER RIB Y-AXIS REDUNDANT ACCELERATION	B-120
111	PASSENGER LOWER RIB Y-AXIS REDUNDANT VELOCITY	B-121
112	PASSENGER LOWER SPINE Y-AXIS REDUNDANT ACCELERATION	B-122
113	PASSENGER LOWER SPINE Y-AXIS REDUNDANT VELOCITY	B-123
114	PASSENGER PELVIS Y-AXIS REDUNDANT ACCELERATION	B-124
115	PASSENGER PELVIS Y-AXIS REDUNDANT VELOCITY	B-125

Driver and Passenger Dummy Instrumentation Plots

Acceleration Data - Filter Class 1000

Integration Data - Filter Class 1000

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1988 DODGE NEON
DRIVER UPPER RIB Y-AXIS ACCELERATION



MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER UPPER RIB Y-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER 971027

TRC INC.

384

320

VELOCITY (KM/H X 10⁻¹)

256

192

128

64

0

-20

TIME (MS)

130

160

190

220

250

280

310

340

370

400

430

460

490

520

550

580

610

640

670

700

730

760

790

820

850

880

910

940

970

1000

1030

1060

1090

1120

1150

1180

1210

1240

1270

1300

1330

1360

1390

1420

1450

1480

1510

1540

1570

1600

1630

1660

1690

1720

1750

1780

1810

1840

1870

1900

1930

1960

1990

2020

2050

2080

2110

2140

2170

2200

2230

2260

2290

2320

2350

2380

2410

2440

2470

2500

2530

2560

2590

2620

2650

2680

2710

2740

2770

2800

2830

2860

2890

2920

2950

2980

3010

3040

3070

3100

3130

3160

3190

3220

3250

3280

3310

3340

3370

3400

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3970

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4060

4090

4120

4150

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4210

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6610

6640

6670

6700

6730

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6790

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6880

6910

6940

6970

7000

7030

7060

7090

7120

7150

7180

7210

7240

7270

7300

7330

7360

7390

7420

7450

7480

7510

7540

7570

7600

7630

7660

7690

7720

7750

7780

7810

7840

7870

7900

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8170

8200

8230

8260

8290

8320

8350

8380

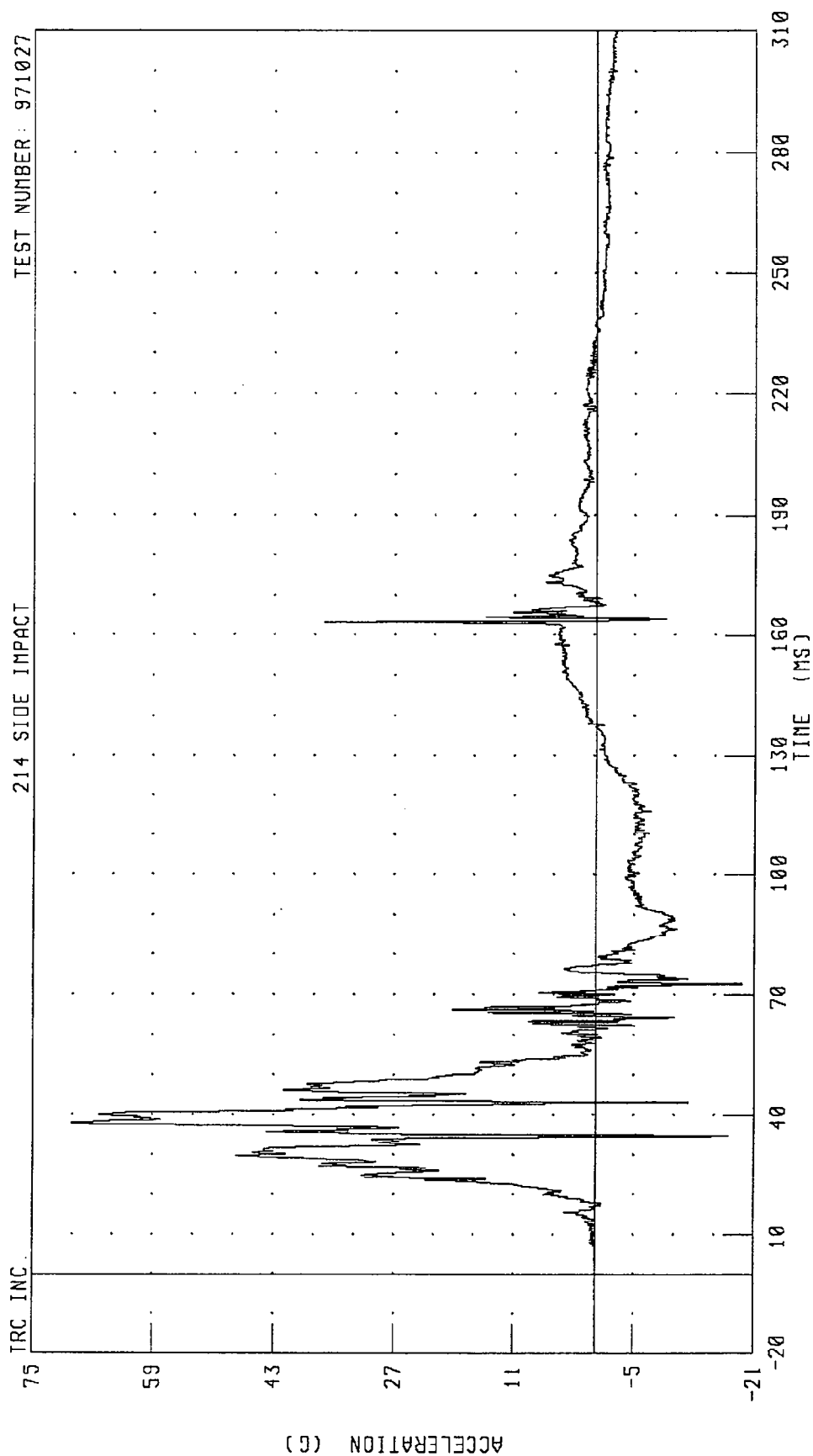
8410

8440

8470

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER LOWER RIB Y-AXIS ACCELERATION
 214 SIDE IMPACT

TEST NUMBER: 971027



CHANNEL: LLRYG1 FILTER: CH. CLASS 1000

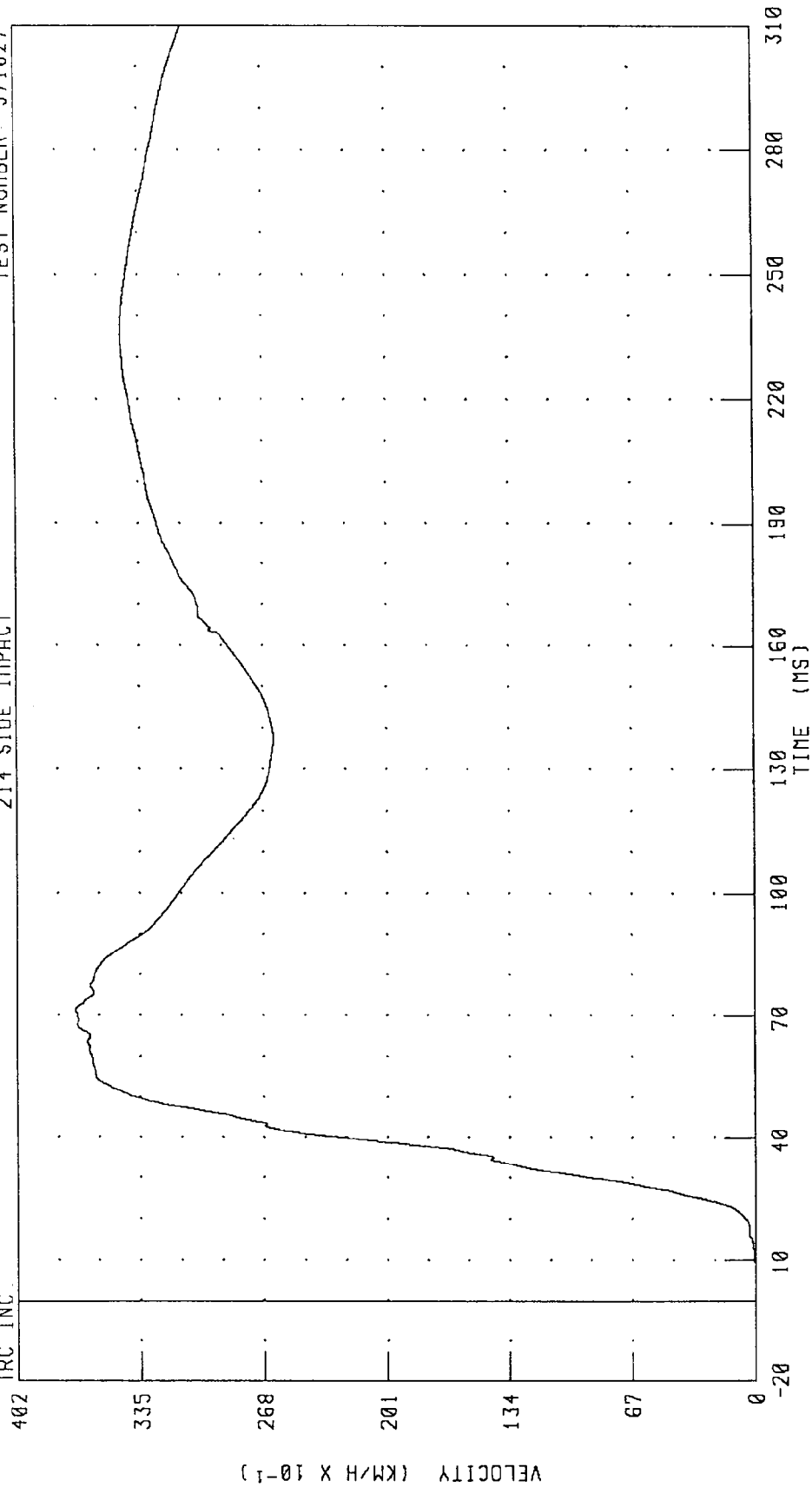
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MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
DRIVER LOWER RIB Y-AXIS VELOCITY

TEST NUMBER 971027

214 SIDE IMPACT

TRC INC

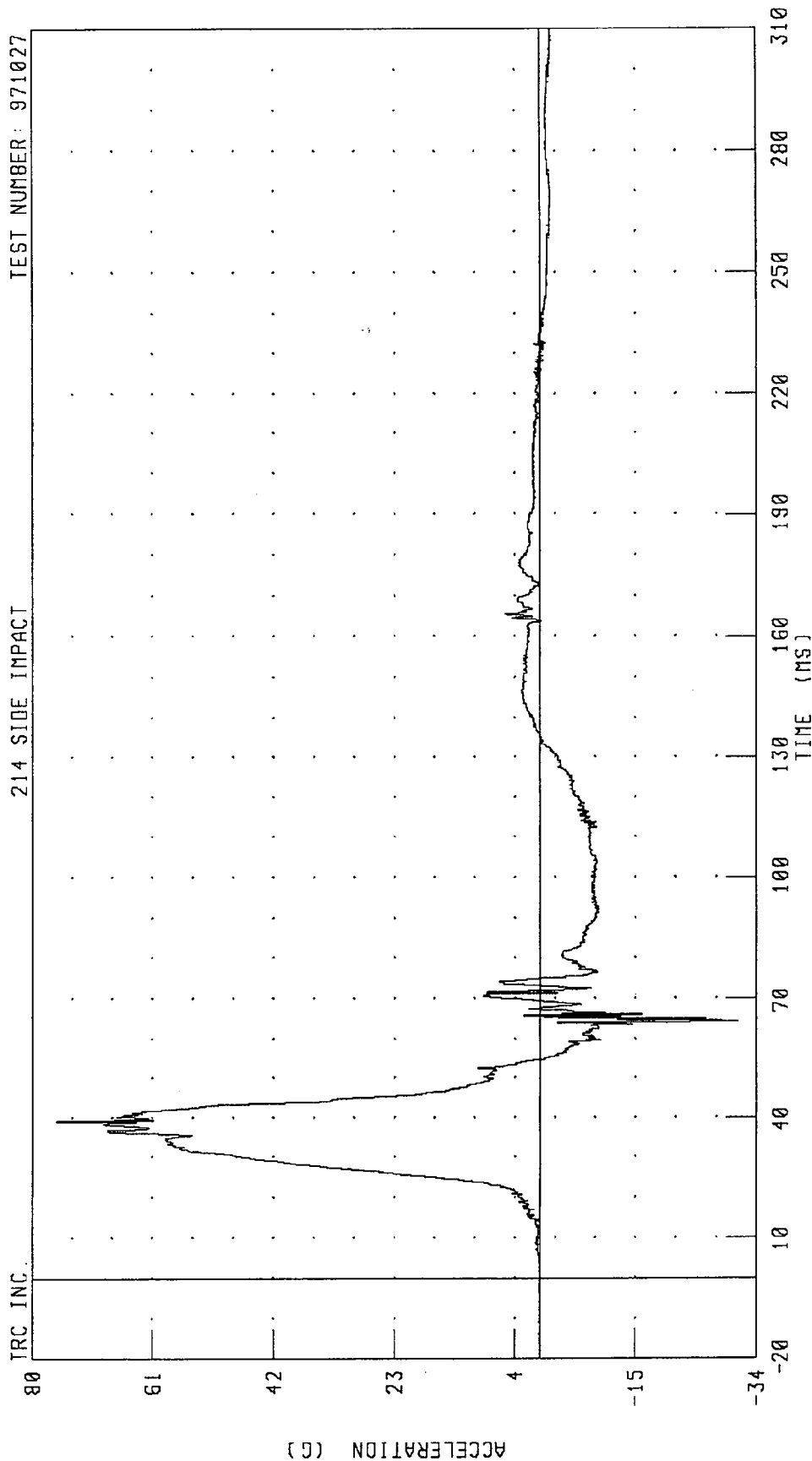


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MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER LOWER SPINE Y-AXIS ACCELERATION
 214 SIDE IMPACT

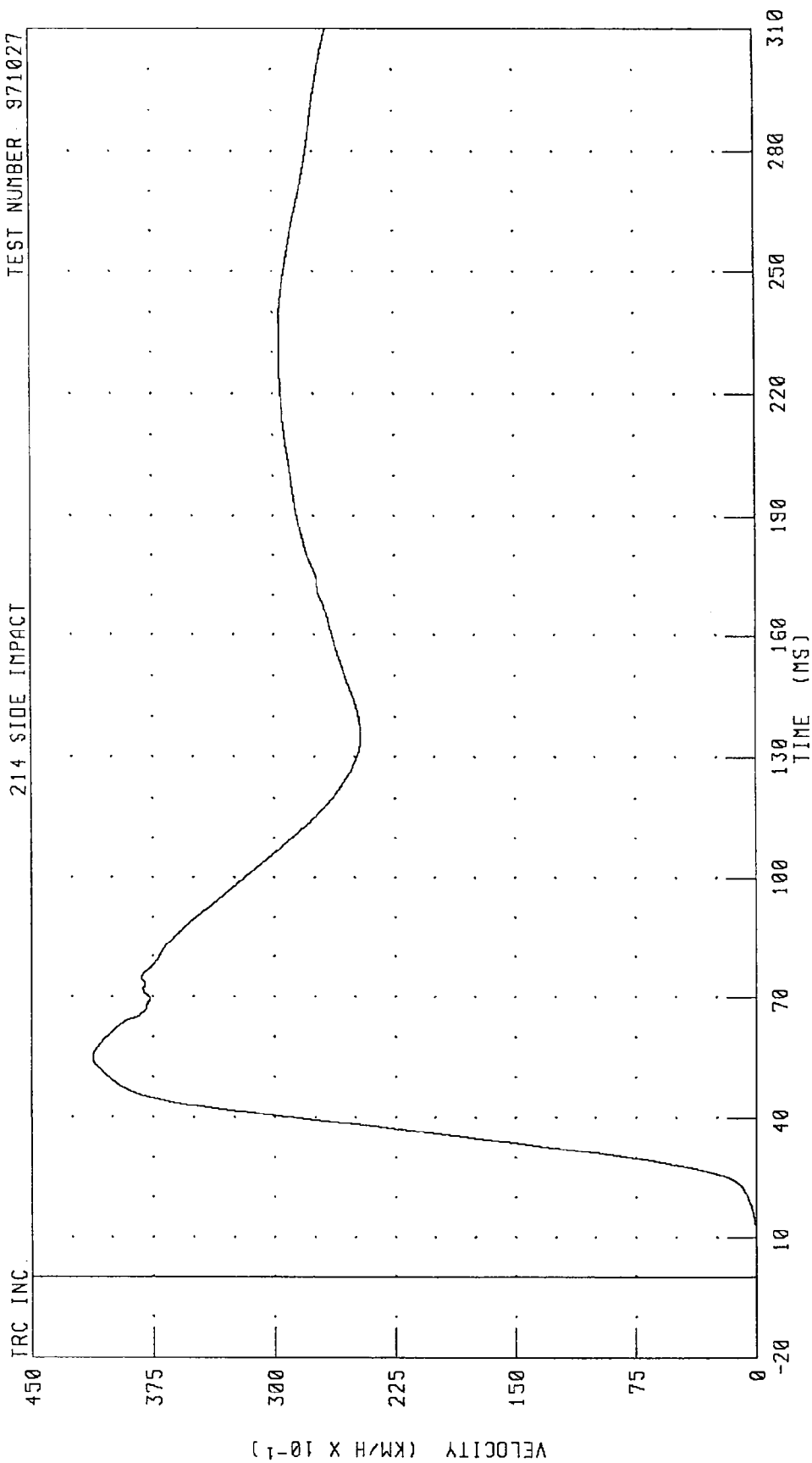
TEST NUMBER: 971027



CHANNEL: T12YG1 FILTER: CH. CLASS 1000

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1988 DODGE NEON
 DRIVER LOWER SPINE Y-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER 971027



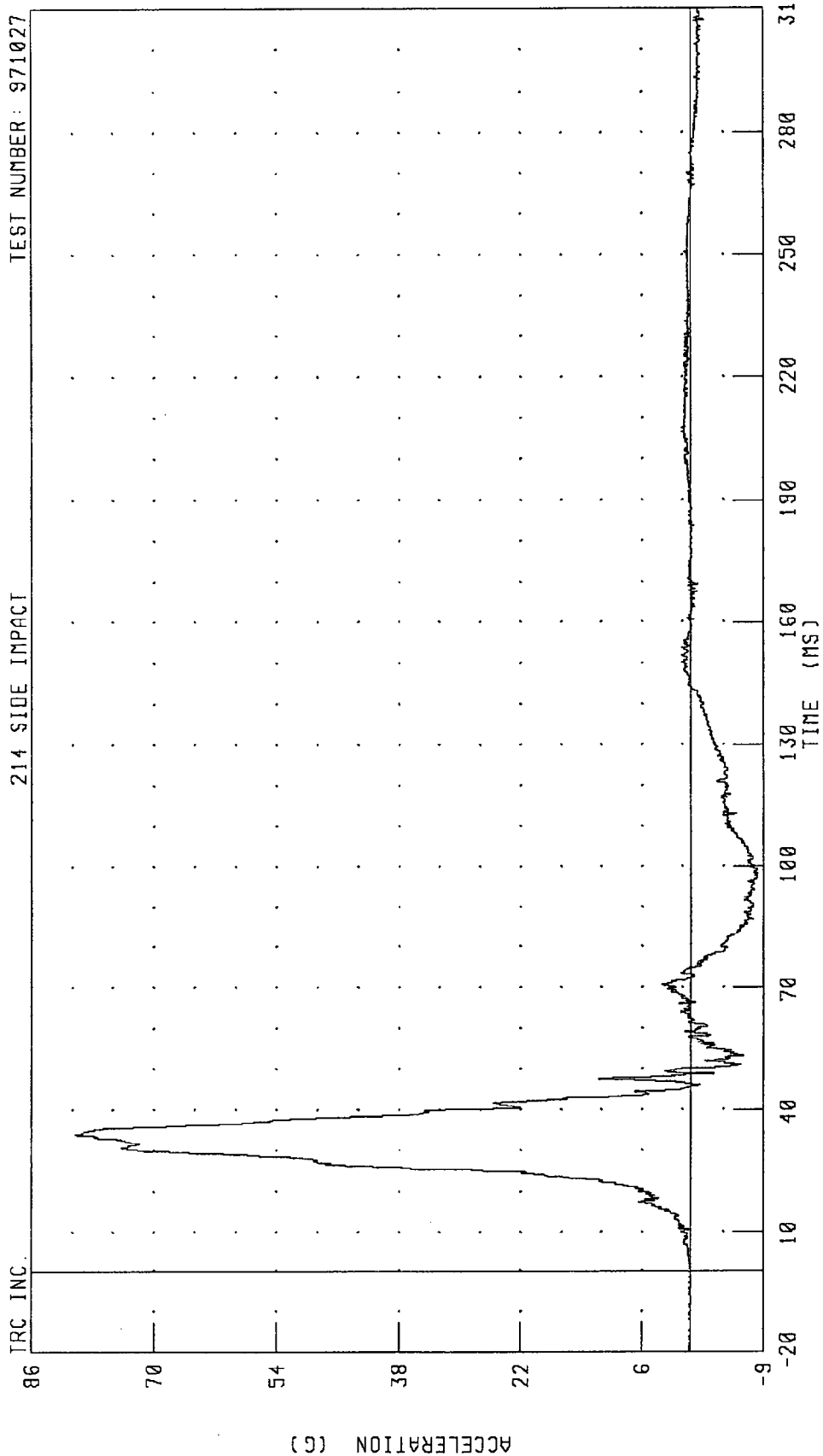
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CHANNEL: T12YU1 FILTER: CH. CLASS 1000

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
DRIVER PELVIS Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT



CHANNEL: PEVYG1 FILTER: CH. CLASS 1000

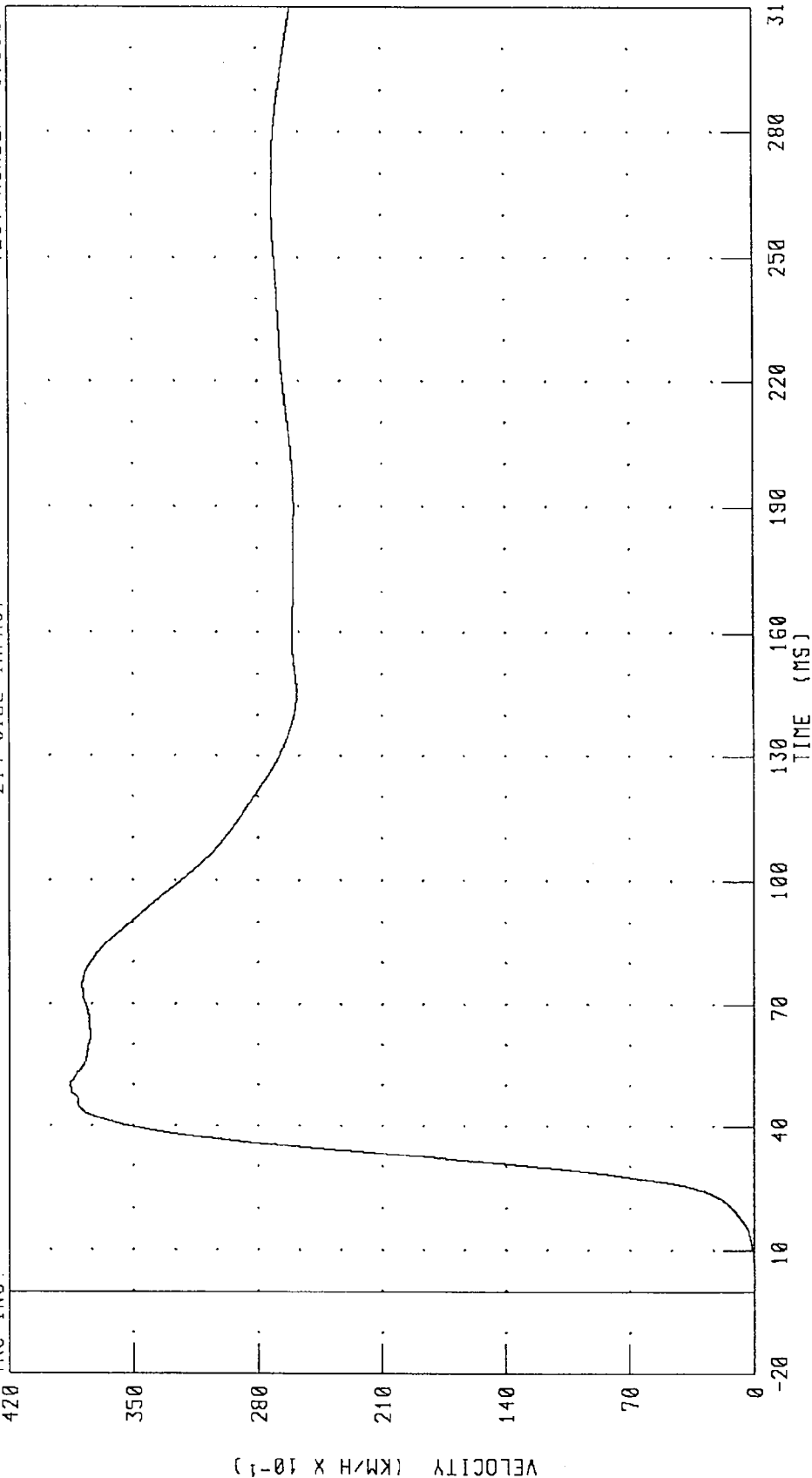
PEAK DATA: 80.63 G @ 34.08 MS; -8.74 G @ 97.20 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER PELVIS Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: PEVYU1 FILTER: CH. CLASS 1000

PEAK DATA: 38.57 KM/H @ 50.16 MS; 0.00 KM/H @ 2.08 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER UPPER RIB Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

87

62

37

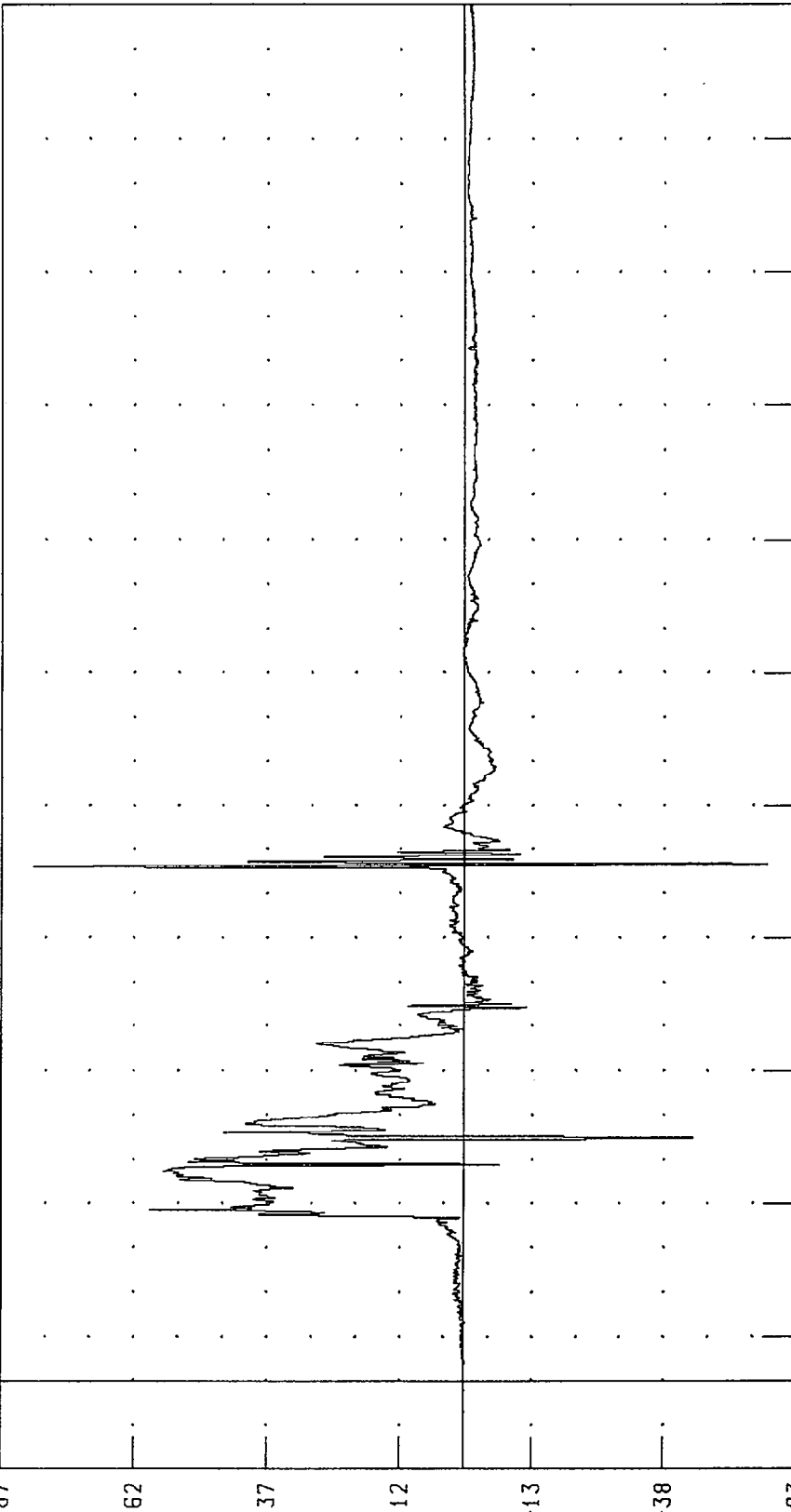
12

-13

-38

-63

ACCELERATION (G)



PEAK DATA: 81.07 G @ 116.24 MS; -57.46 G @ 116.72 MS

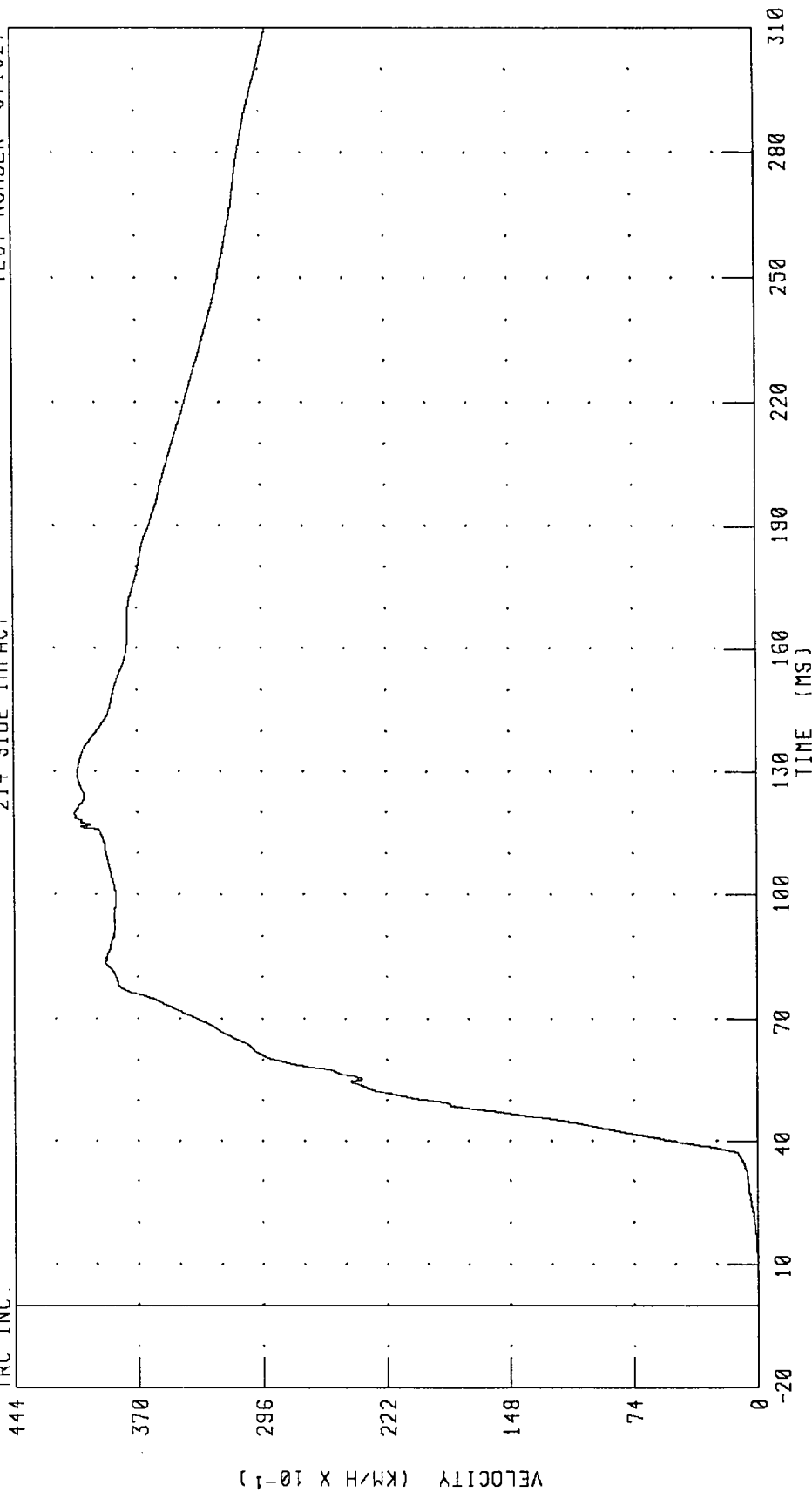
CHANNEL: LURYG4 FILTER: CH. CLASS 1000

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER UPPER RIB Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



PEAK DATA: 40.76 KM/H @ 119.68 MS; 0.00 KM/H @ 4.40 MS

CHANNEL: LURYU4 FILTER: CH. CLASS 1000

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 LEFT REAR PASSENGER LOWER RIB Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

110

75

40

5

-30

-65

-100

ACCELERATION (G)

TIME (MS)

310

280

250

220

190

160

130

100

70

40

10

PEAK DATA: 100.33 G @ 116.24 MS; -91.30 G @ 116.72 MS

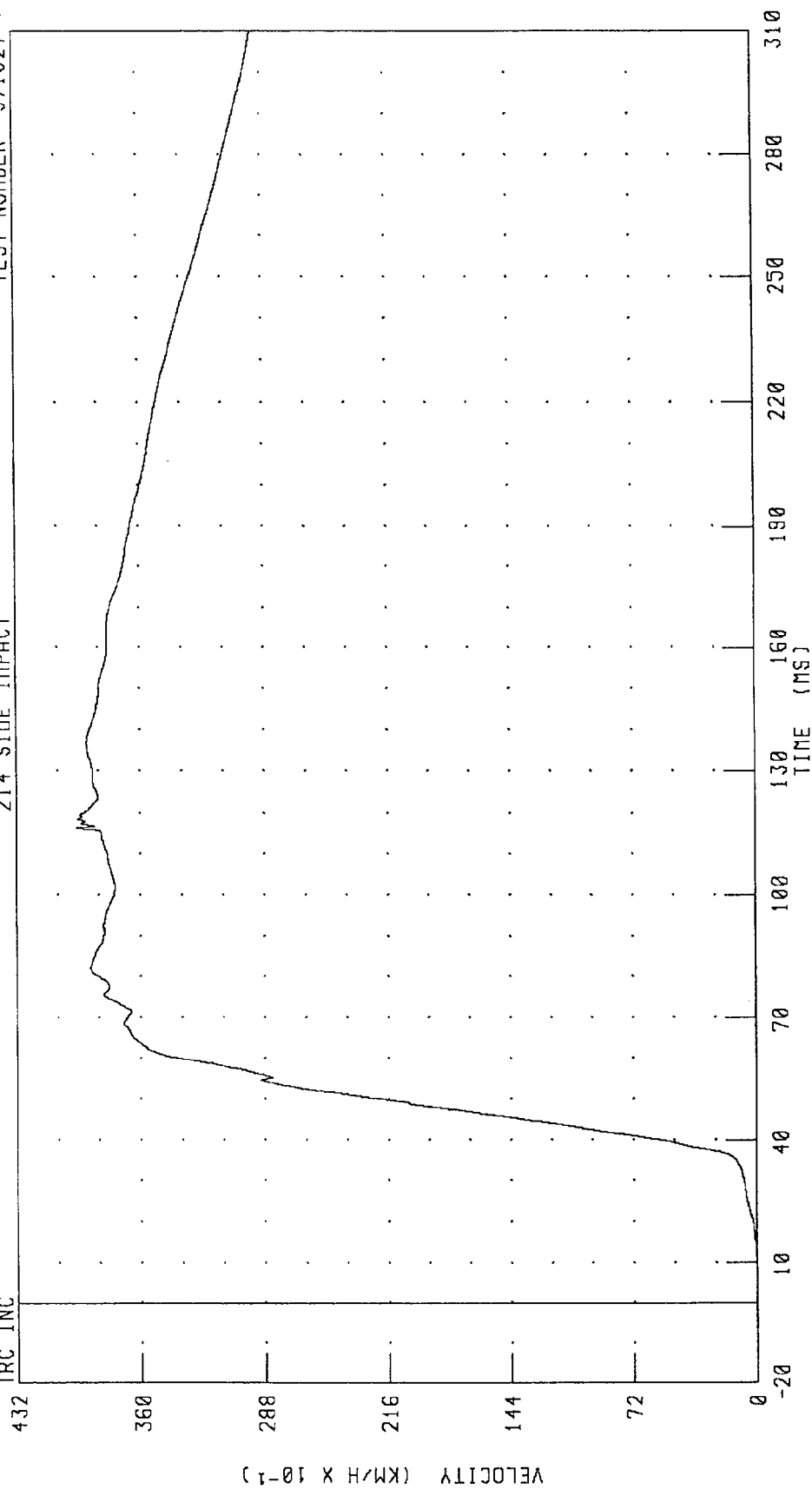
CHANNEL: LLRYG4 FILTER: CH. CLASS 1000

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER LOWER RIB Y-AXIS VELOCITY

TEST NUMBER: 971027

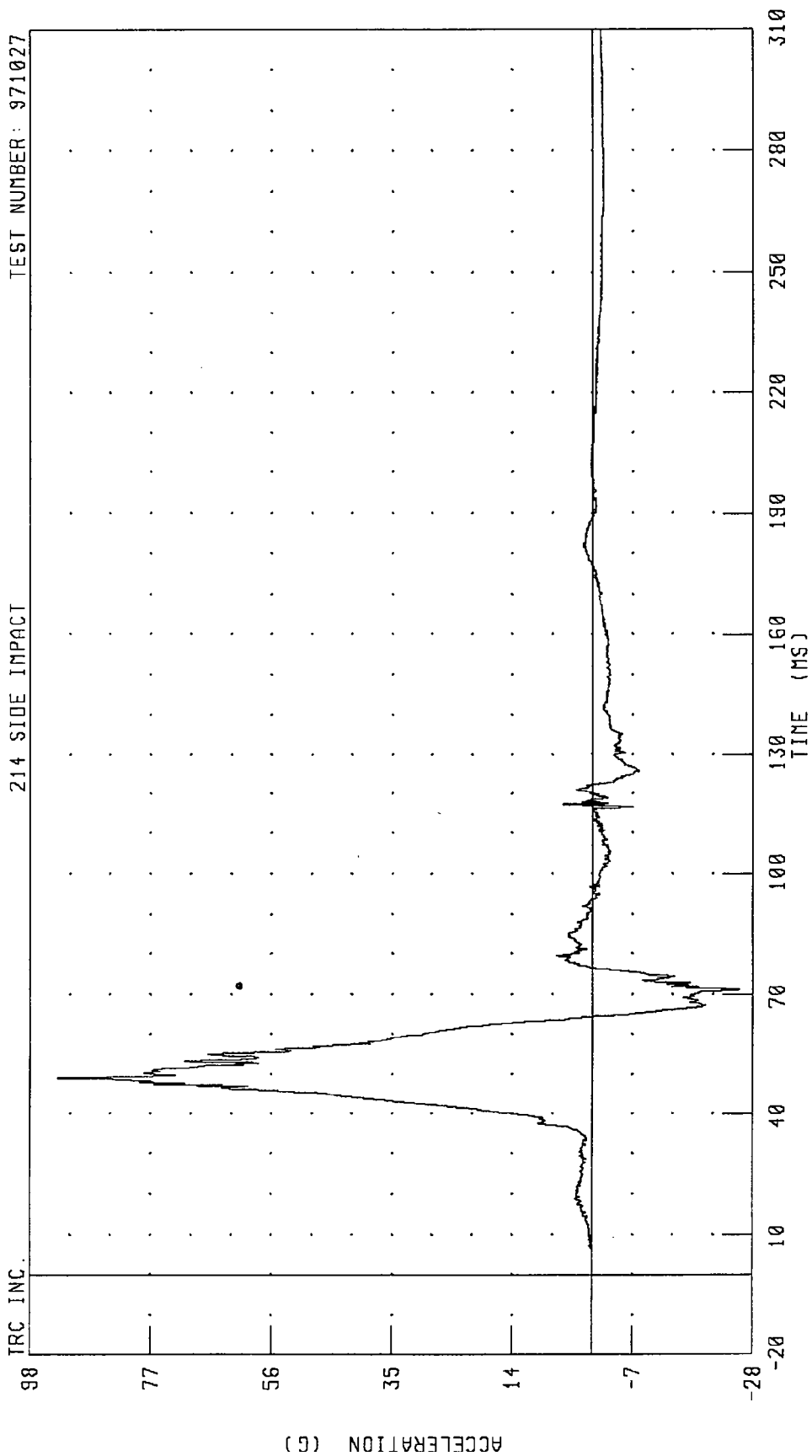
214 SIDE IMPACT

TRC INC



CHANNEL: LRLRYU4 FILTER: CH. CLASS 1000

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 LEFT REAR PASSENGER LOWER SPINE Y-AXIS ACCELERATION



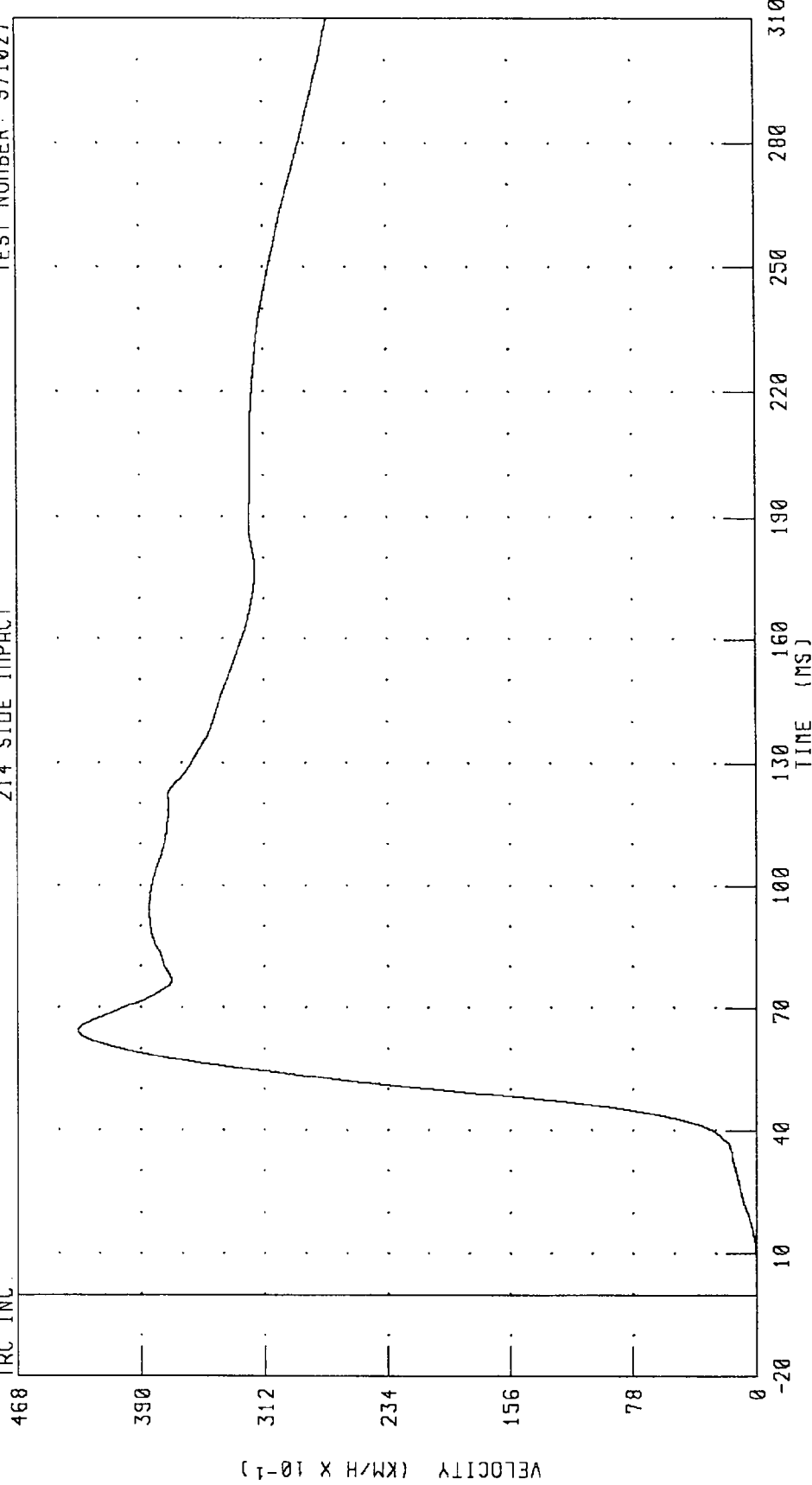
CHANNEL: T12YG4 FILTER: CH. CLASS 1000

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 LEFT REAR PASSENGER LOWER SPINE Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



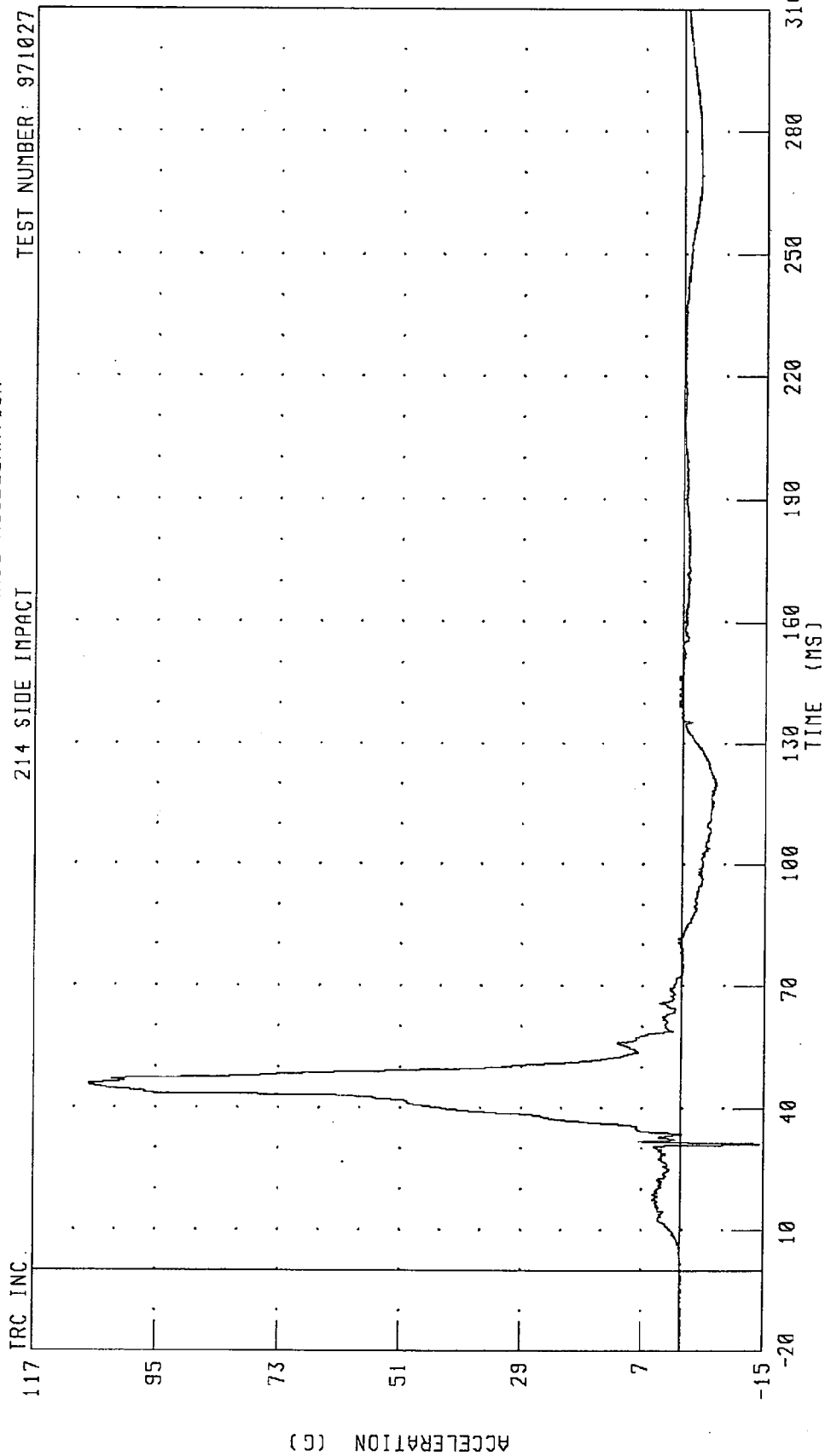
PEAK DATA: 42.96 KM/H @ 64.48 MS; 0.00 KM/H @ 1.52 MS

CHANNEL: T12YU4 FILTER: CH. CLASS 1000

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER PELVIS Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT



PEAK DATA: 107.01 G @ 45.84 MS; -14.13 G @ 31.12 MS

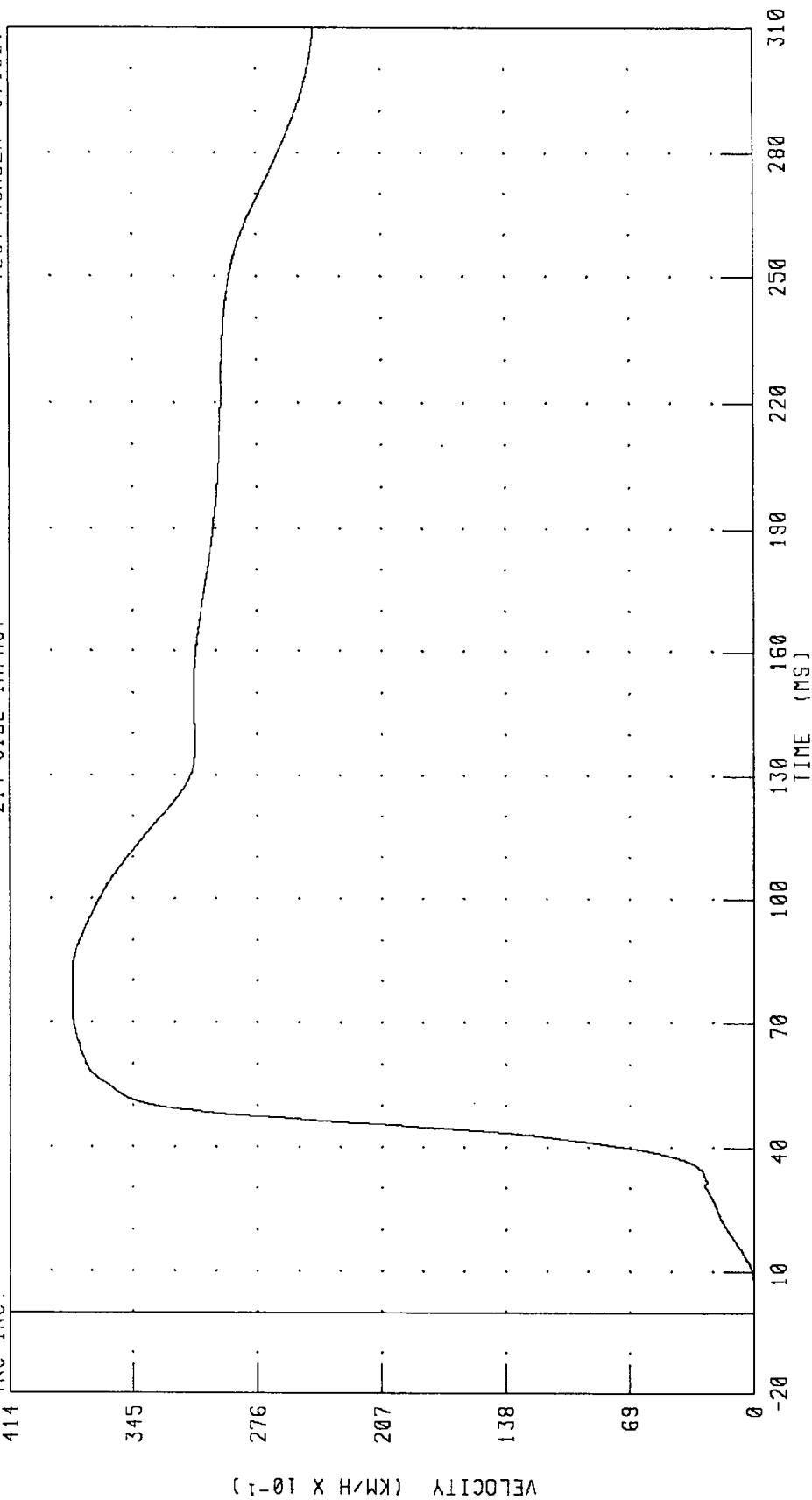
CHANNEL: PEVYG4 FILTER: CH. CLASS 1000

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER PELVIS Y-AXIS VELOCITY

TEST NUMBER 971027

214 SIDE IMPACT

TRC INC.



PEAK DATA: 37.90 KM/H @ 72.56 MS; 0.00 KM/H @ 0.08 MS

CHANNEL: PEVYU4 FILTER: CH. CLASS 1000

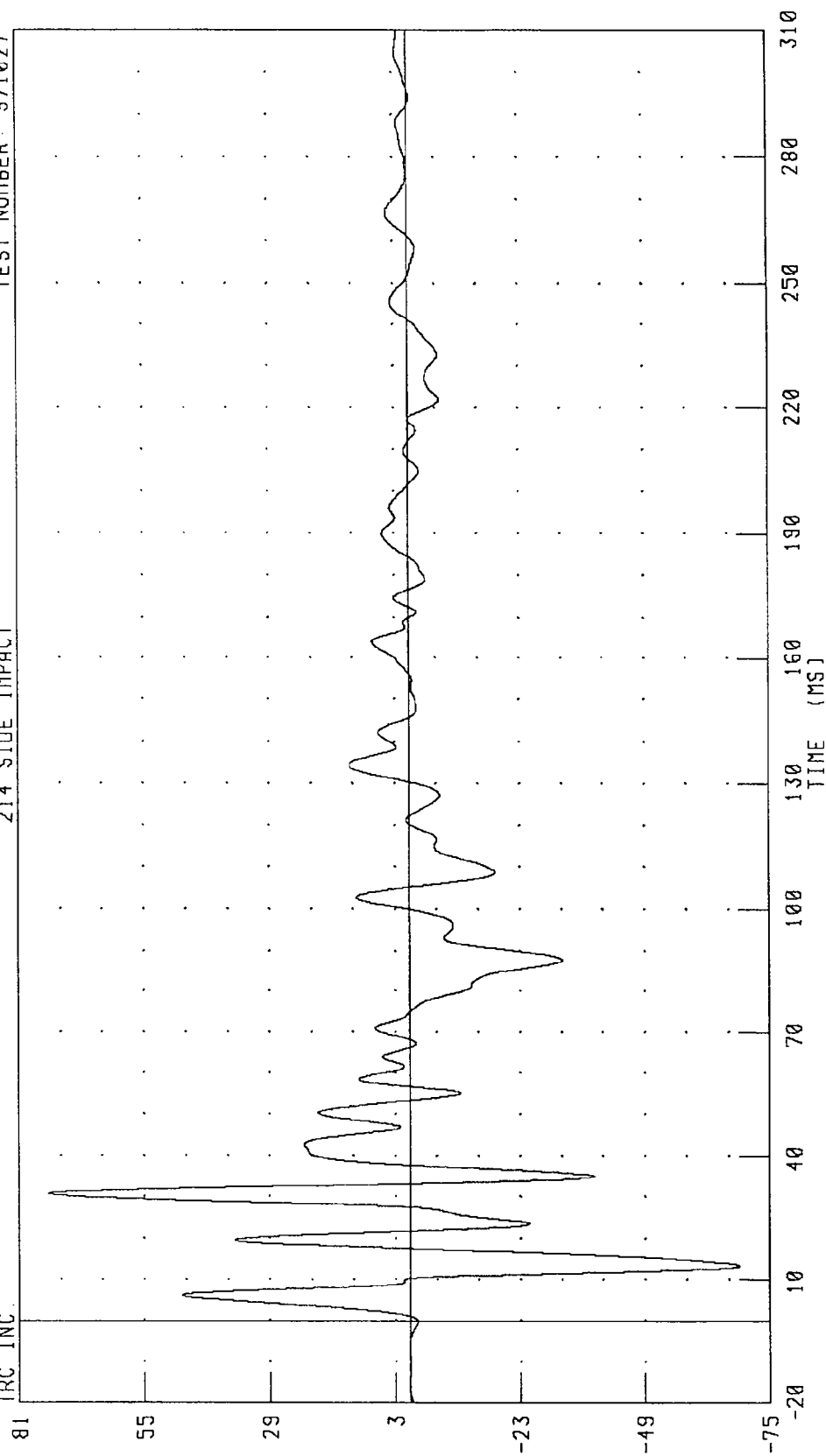
Test Vehicle Instrumentation Plots
Acceleration Data - Filter Class 60
Integration Data - Filter Class 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 RIGHT SIDE SILL AT FRONT SEAT X-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

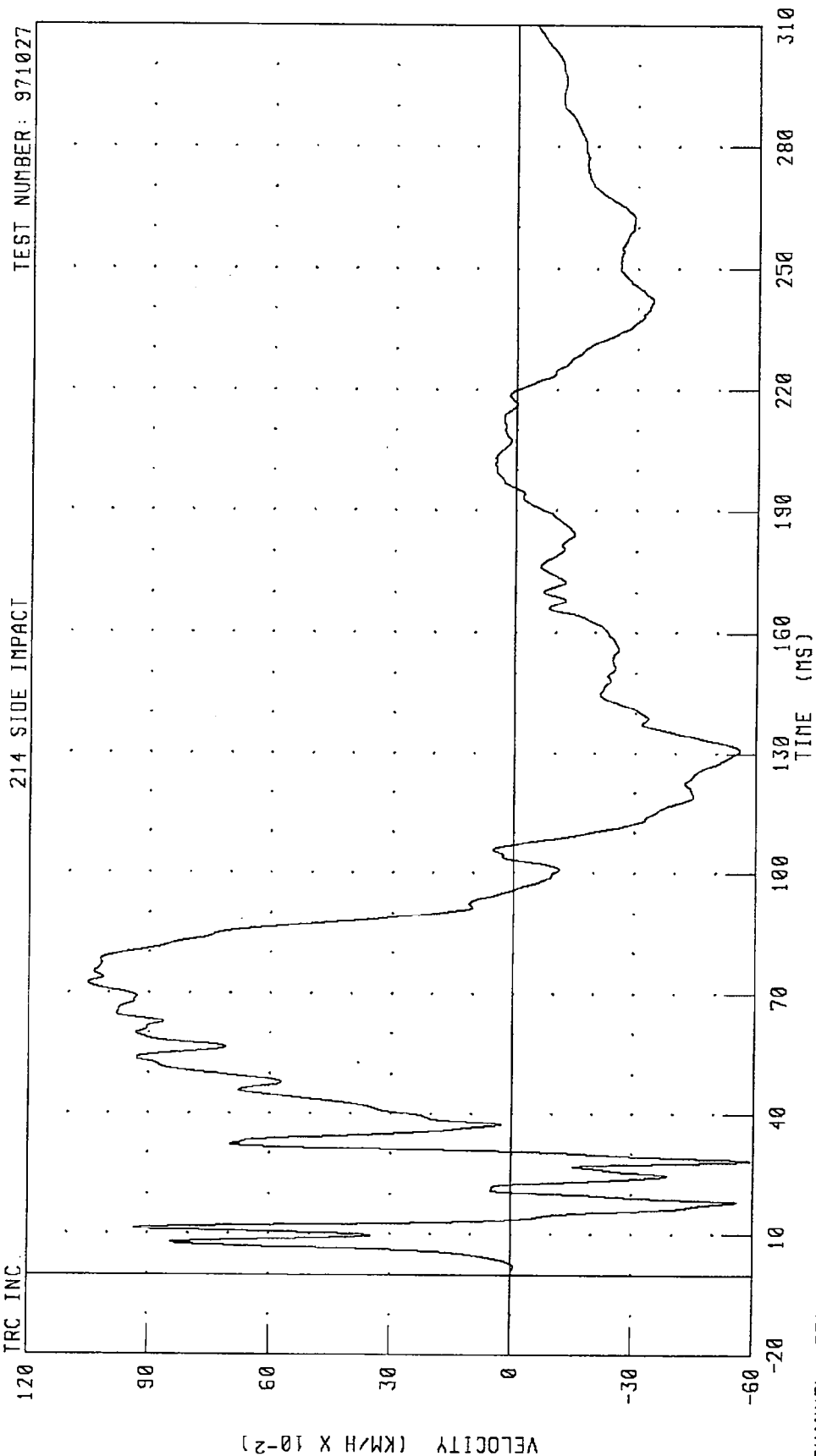
TRC INC.



CHANNEL: RFSXG1 FILTER: CH. CLASS 60

PEAK DATA: 7.48 G @ 30.72 MS; -6.87 G @ 13.36 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
RIGHT SIDE SILL AT FRONT SEAT X-AXIS VELOCITY



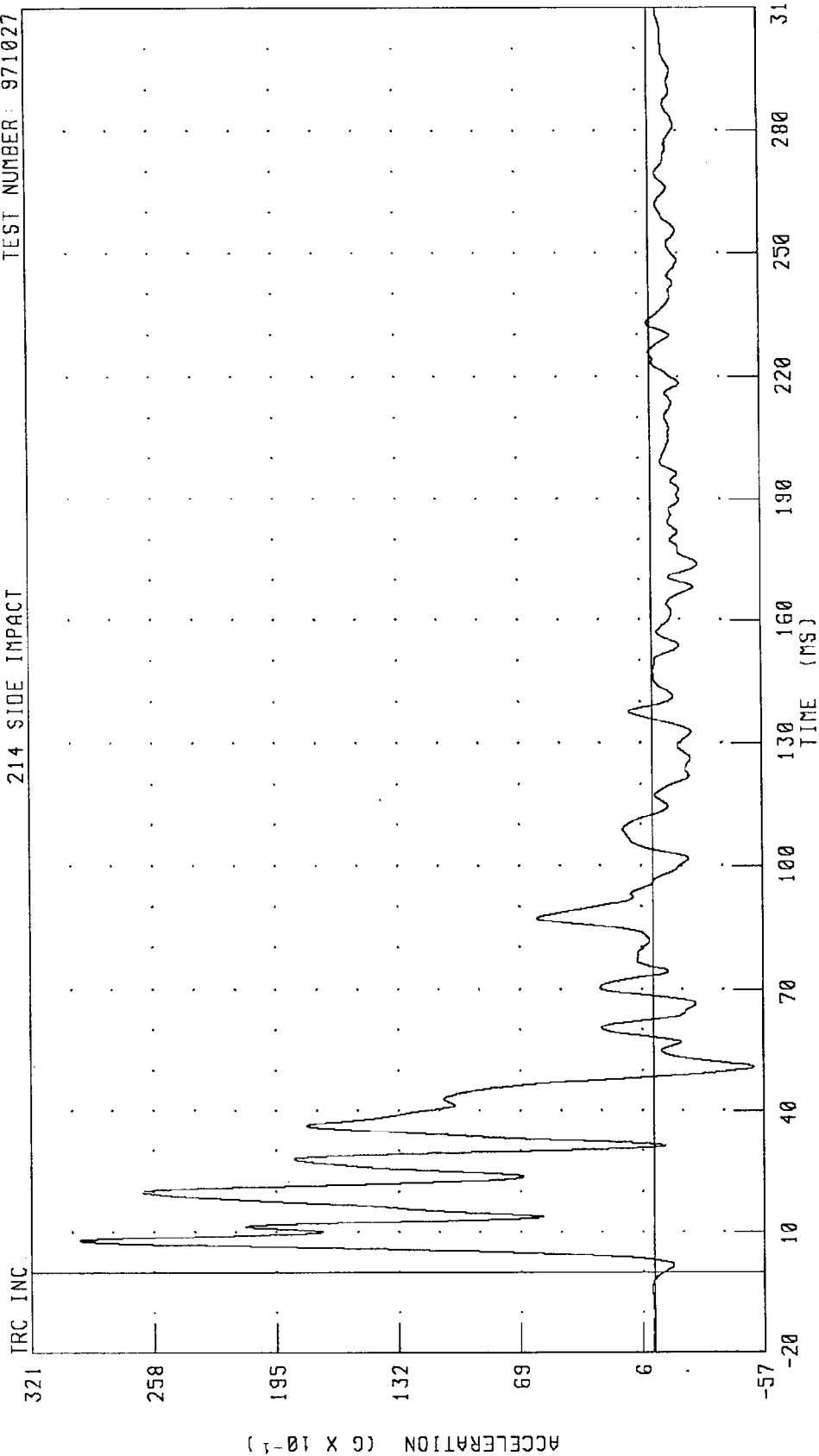
PEAK DATA: 1.05 KM/H @ 72.48 MS; -0.59 KM/H @ 28.40 MS

CHANNEL: RFSXV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1988 DODGE NEON
RIGHT SIDE SILL AT FRONT SEAT Y-AXIS ACCELERATION

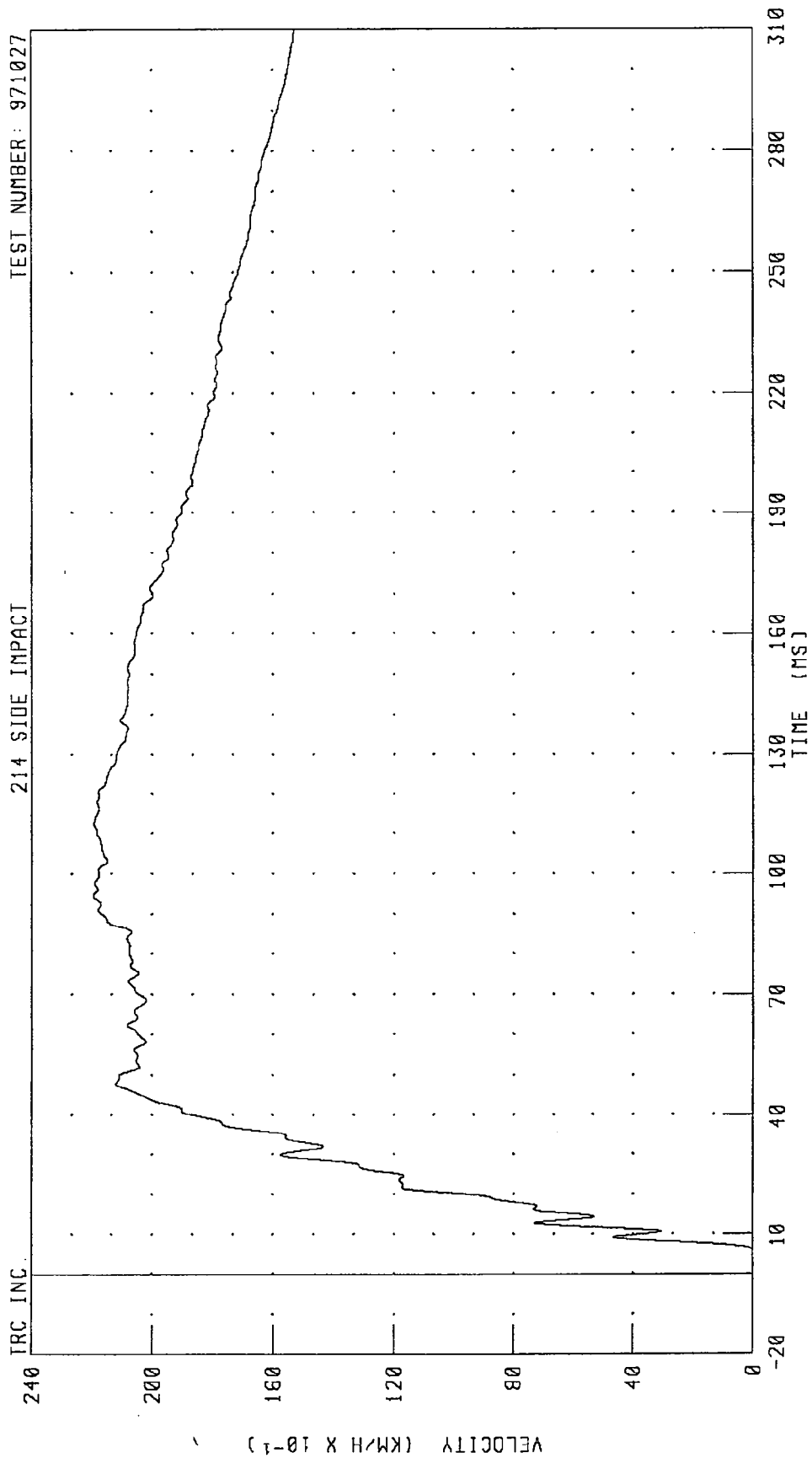
TEST NUMBER: 971027

214 SIDE IMPACT



CHANNEL: RFSYG1 FILTER: CH. CLASS 60

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
RIGHT SIDE SILL AT FRONT SEAT Y-AXIS VELOCITY



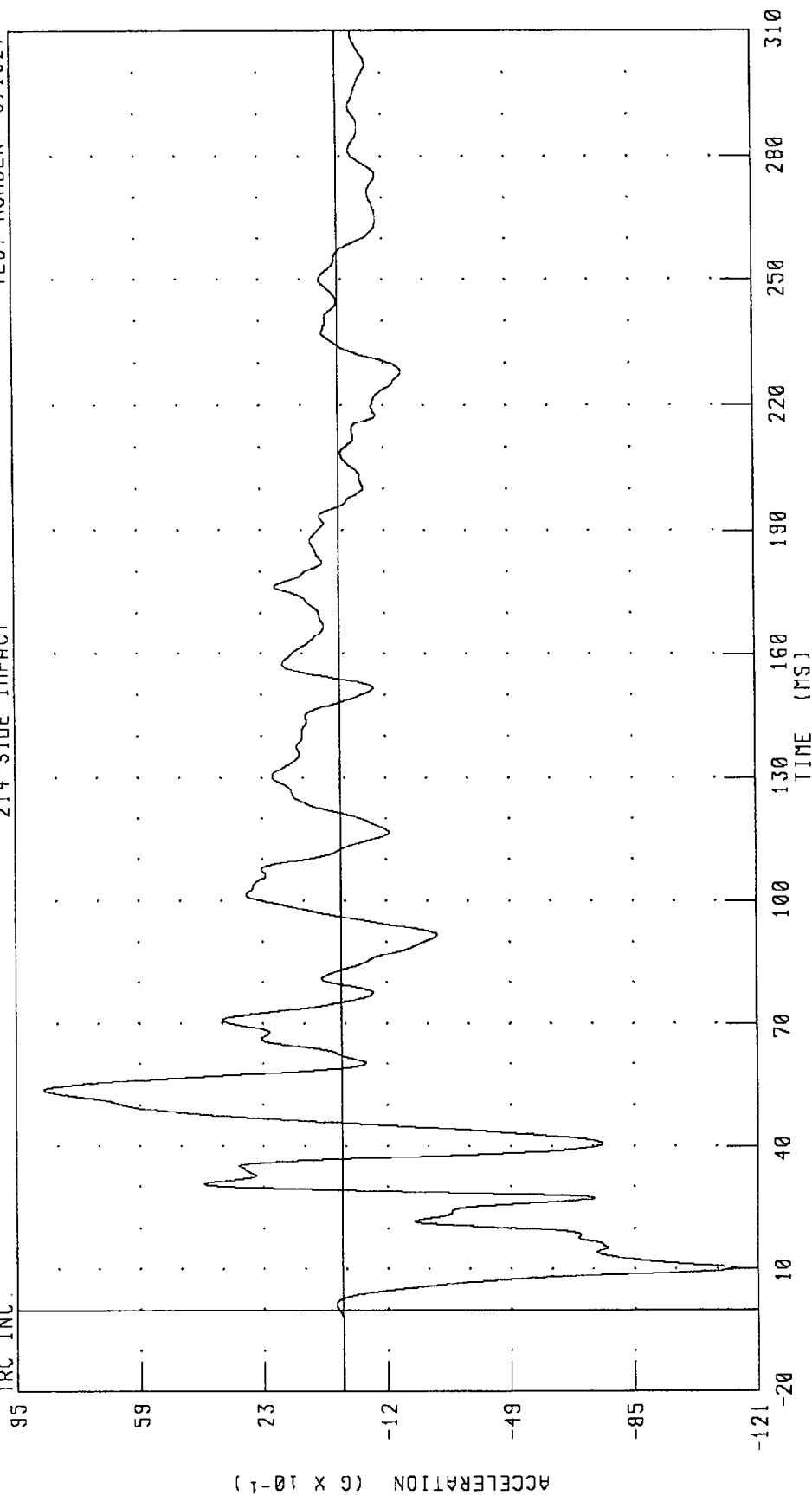
CHANNEL: RFSYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
RIGHT SIDE SILL AT FRONT SEAT Z-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



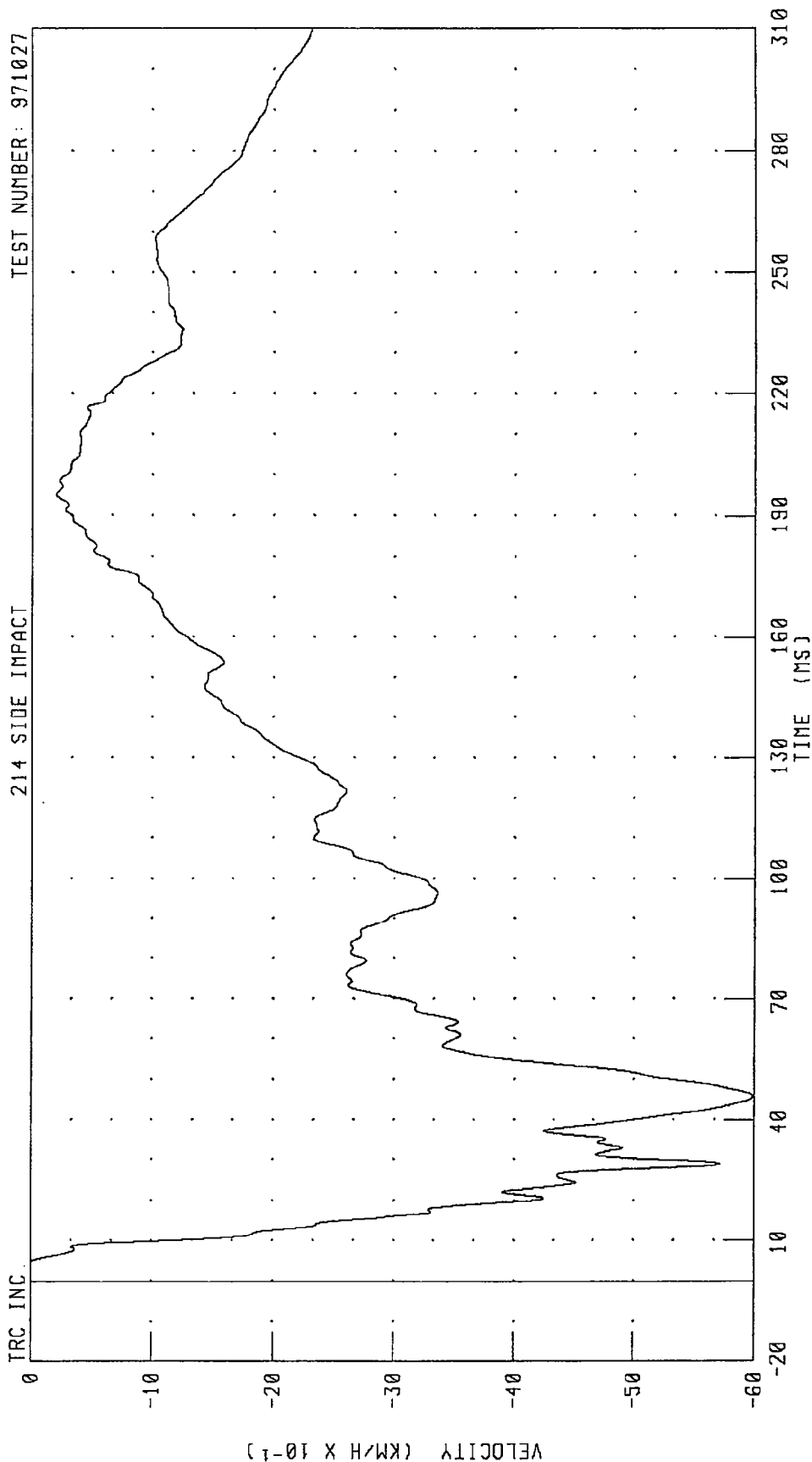
CHANNEL: RFSZG1 FILTER: CH. CLASS 60

PEAK DATA: 8.71 G @ 53.60 MS, -11.44 G @ 10.16 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 RIGHT SIDE SILL AT FRONT SEAT Z-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT



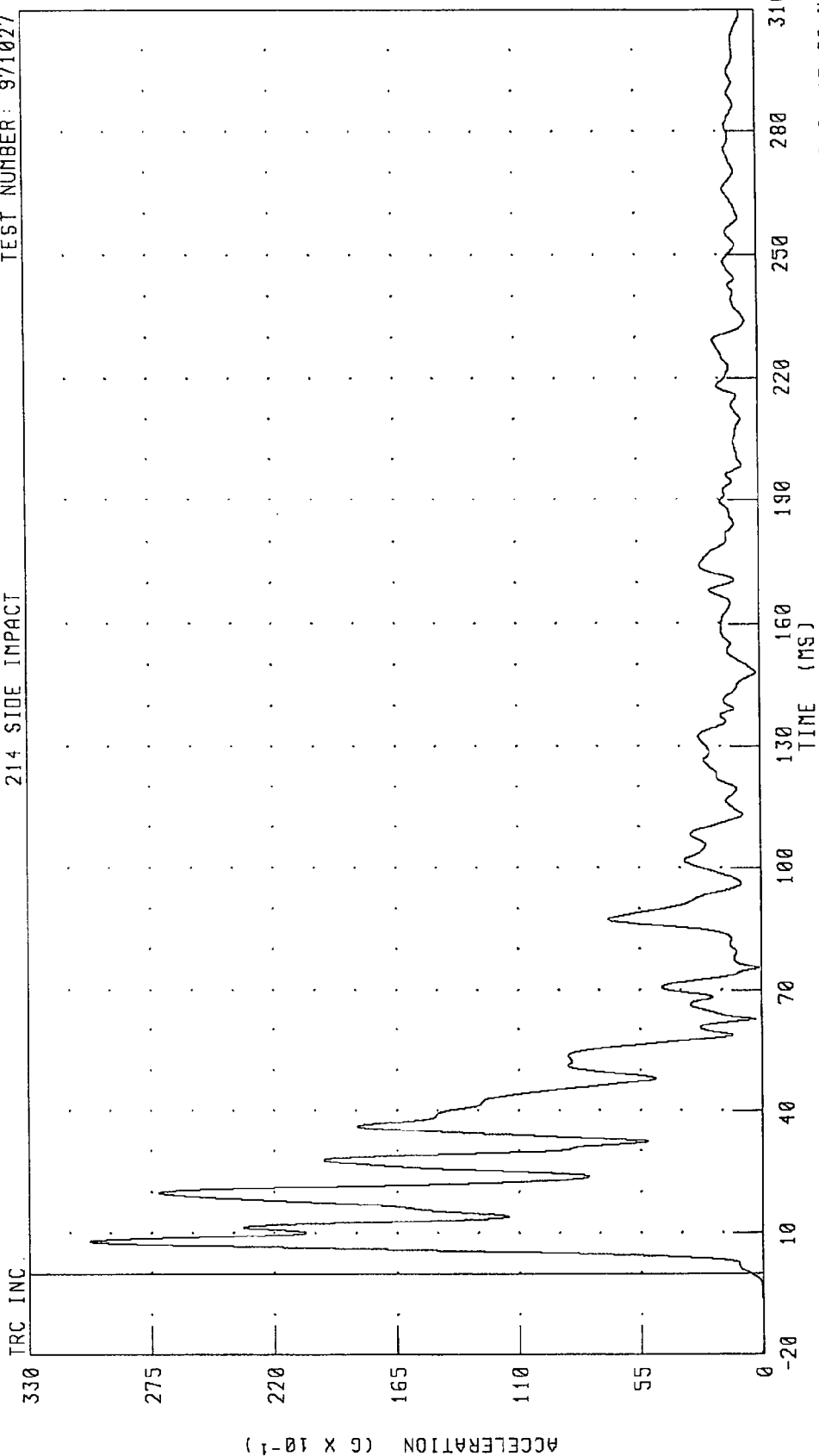
PEAK DATA: 0.01 KM/H @ 3.60 MS; -5.99 KM/H @ 45.68 MS

CHANNEL: RFSZV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT



CHANNEL: RFSRG1 FILTER: CH. CLASS 60

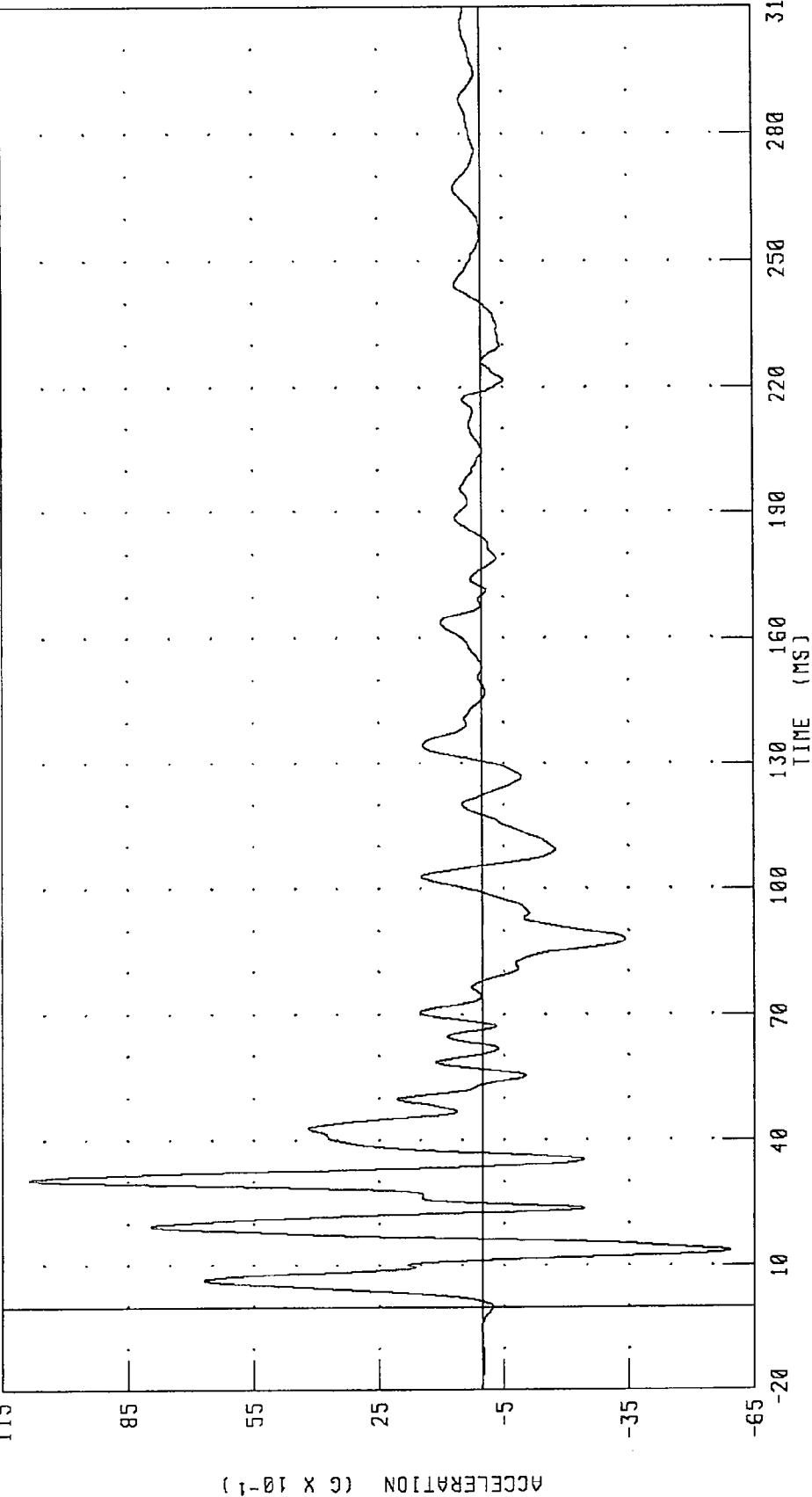
PEAK DATA: 30.28 G @ 7.76 MS; 0.01 G @ -17.60 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
RIGHT SIDE SILL AT REAR SEAT X-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

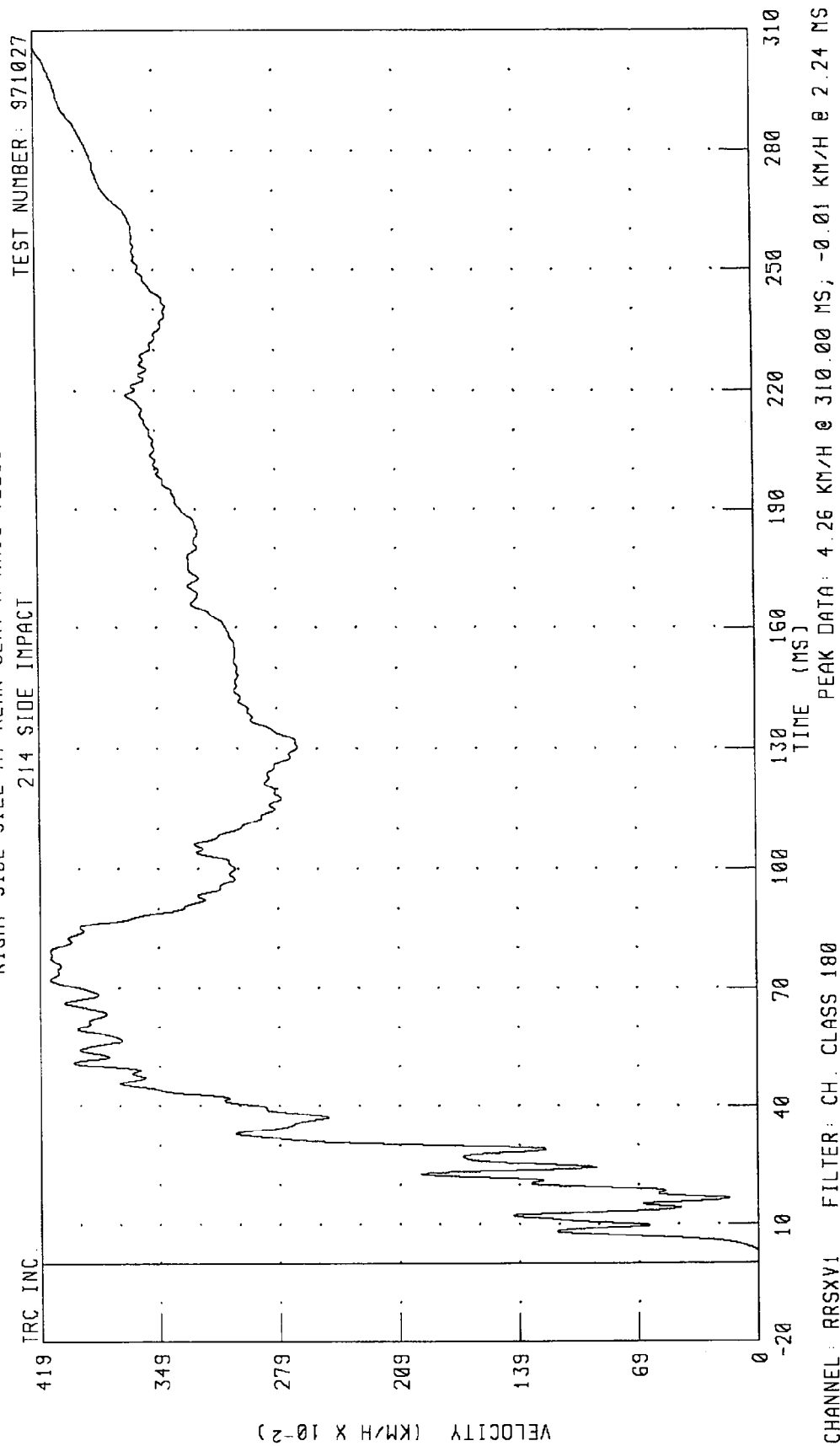
TRC INC.



CHANNEL: RRSXG1 FILTER: CH. CLASS 60

PEAK DATA: 10.85 G @ 30.56 MS; -5.94 G @ 13.52 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
RIGHT SIDE SILL AT REAR SEAT X-AXIS VELOCITY

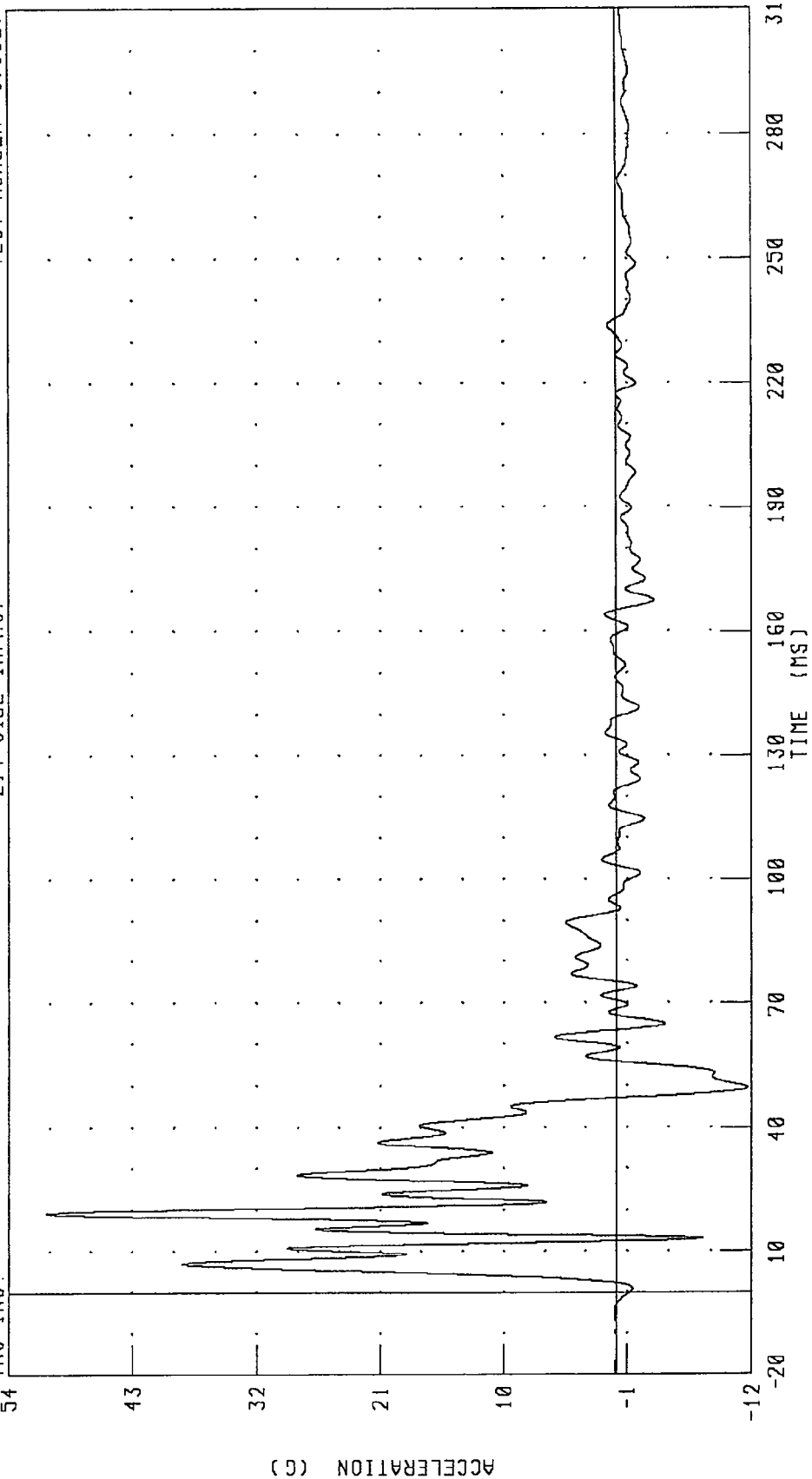


MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
RIGHT SIDE SILL AT REAR SEAT Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: RRSYG1 FILTER: CH. CLASS 60

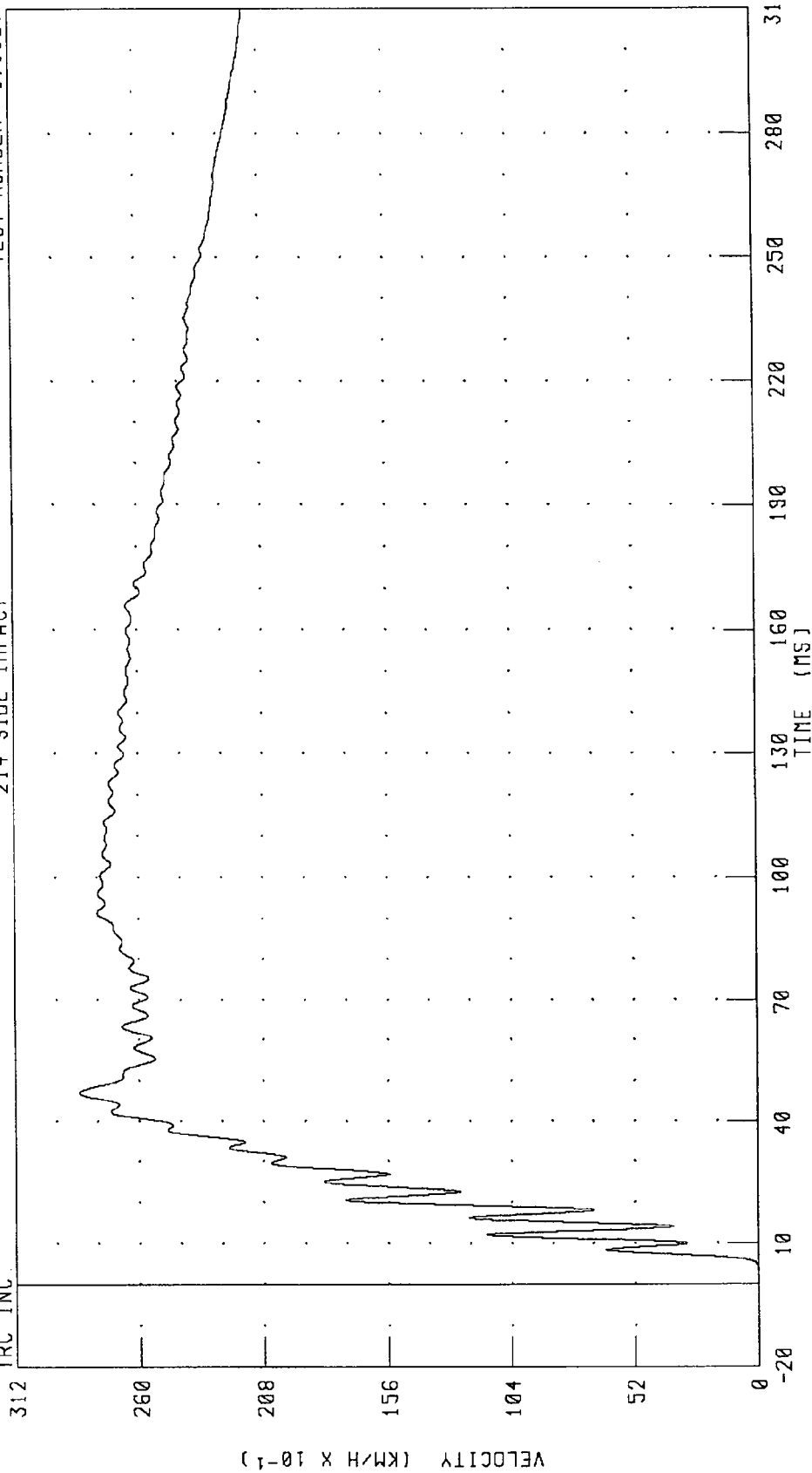
PEAK DATA: 50.65 G @ 19.28 MS; -11.57 G @ 49.44 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
RIGHT SIDE SILL AT REAR SEAT Y-AXIS VELOCITY

TEST NUMBER 971027

214 SIDE IMPACT

IRC INC



PEAK DATA: 28.51 KM/H @ 47.04 MS, -0.02 KM/H @ 2.96 MS

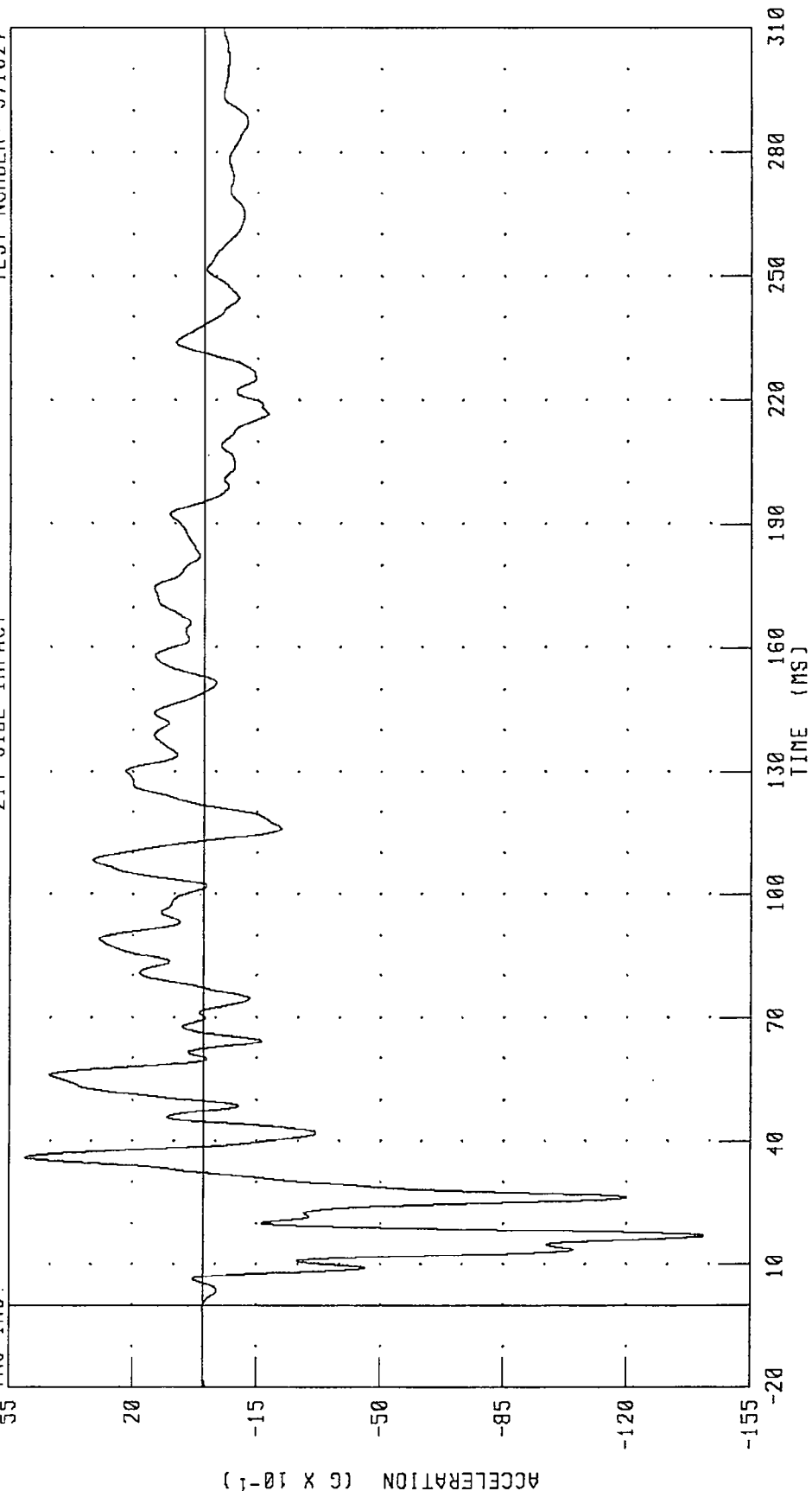
CHANNEL: RRSYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
RIGHT SIDE SILL AT REAR SEAT Z-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

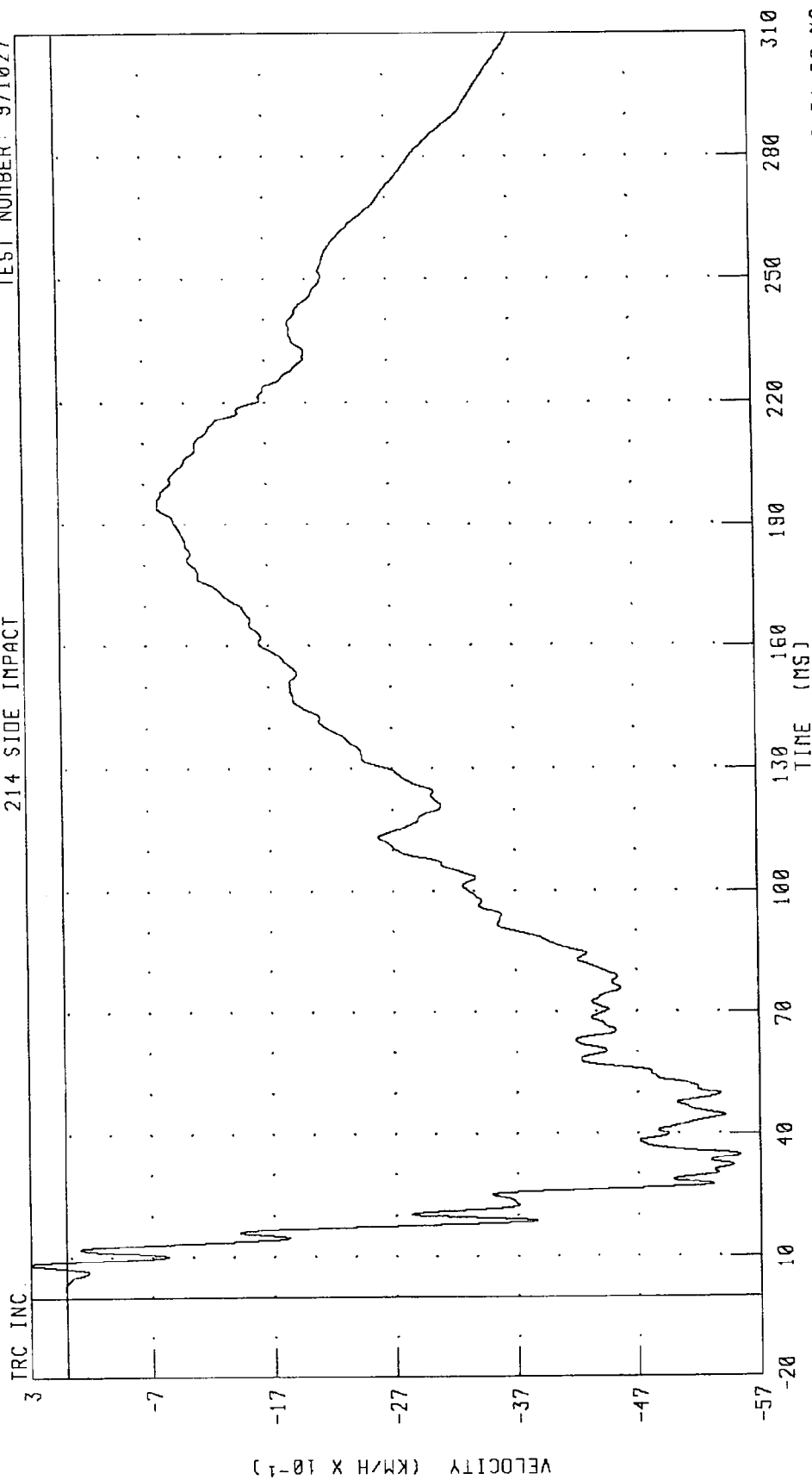


CHANNEL: RRSZG1 FILTER: CH. CLASS 60

PEAK DATA: 5.03 G @ 36.00 MS, -14.20 G @ 17.20 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 RIGHT SIDE SILL AT REAR SEAT Z-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER: 971027

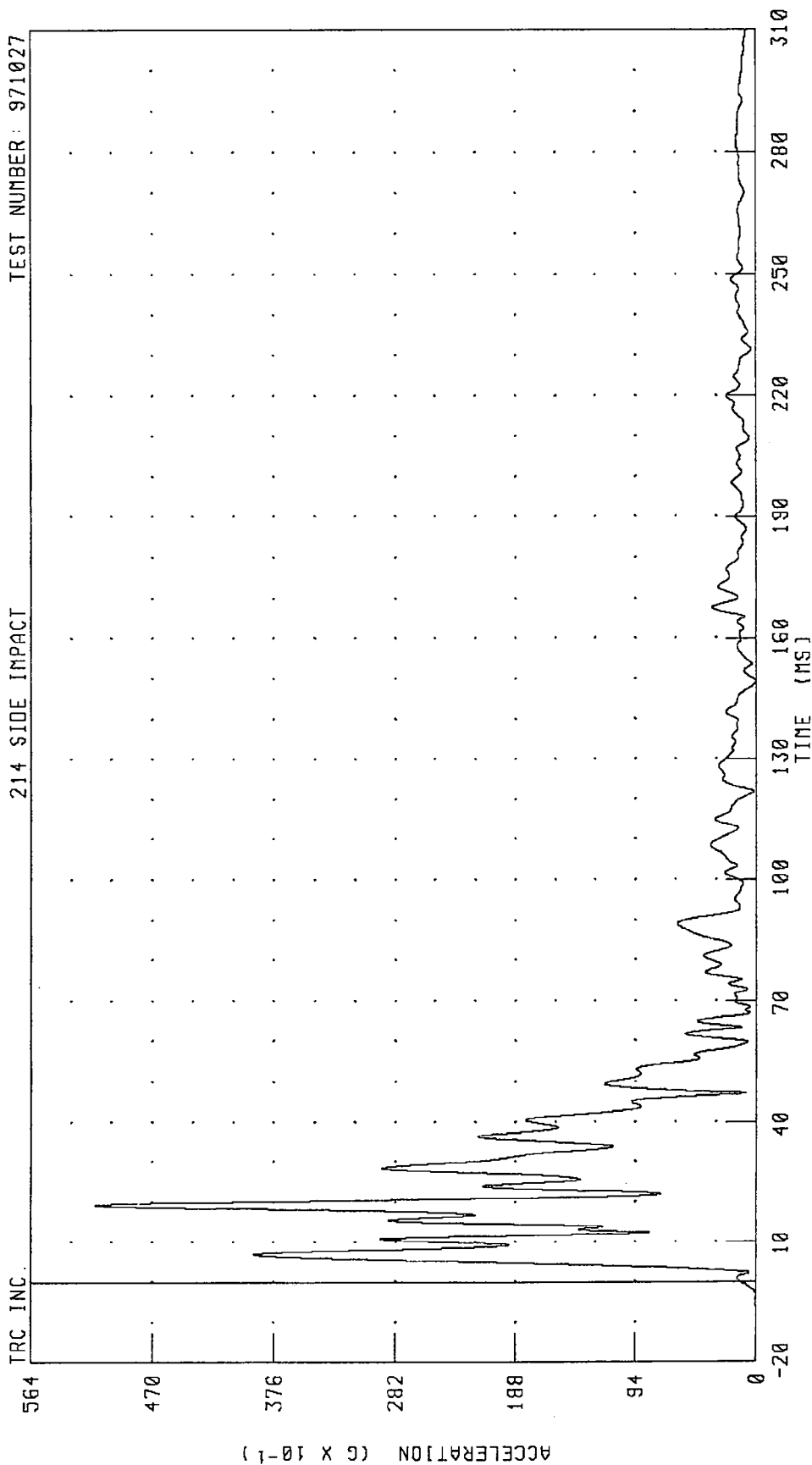


CHANNEL: RRSZY1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION
 214 SIDE IMPACT

TEST NUMBER: 971027

TRC INC.

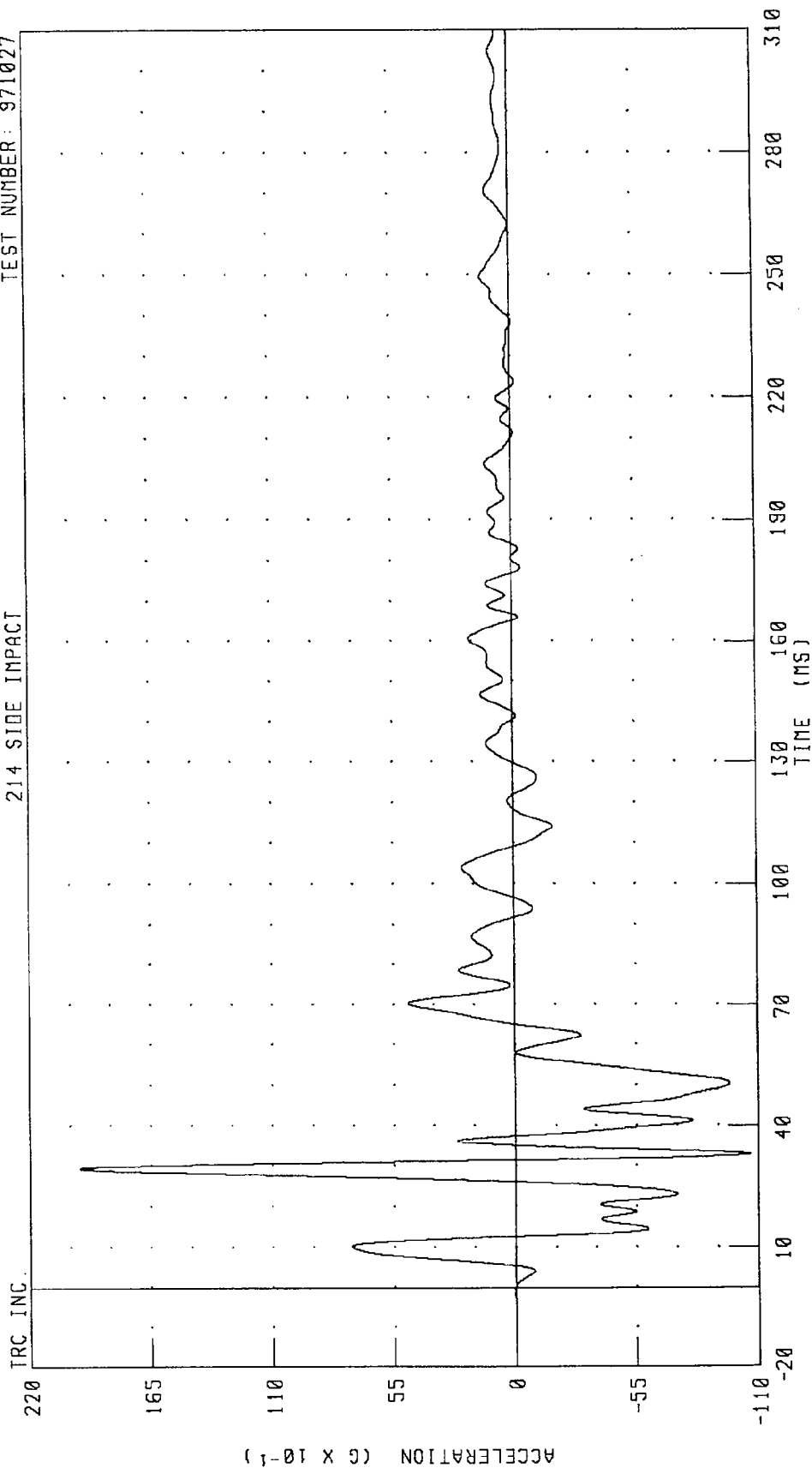


CHANNEL: RRSRG1 FILTER: CH. CLASS 60

PEAK DATA: 51.39 G @ 19.28 MS, 0.00 G @ -14.72 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 REAR FLOORPAN ABOVE AXLE X-AXIS ACCELERATION
 214 SIDE IMPACT

TEST NUMBER: 971027

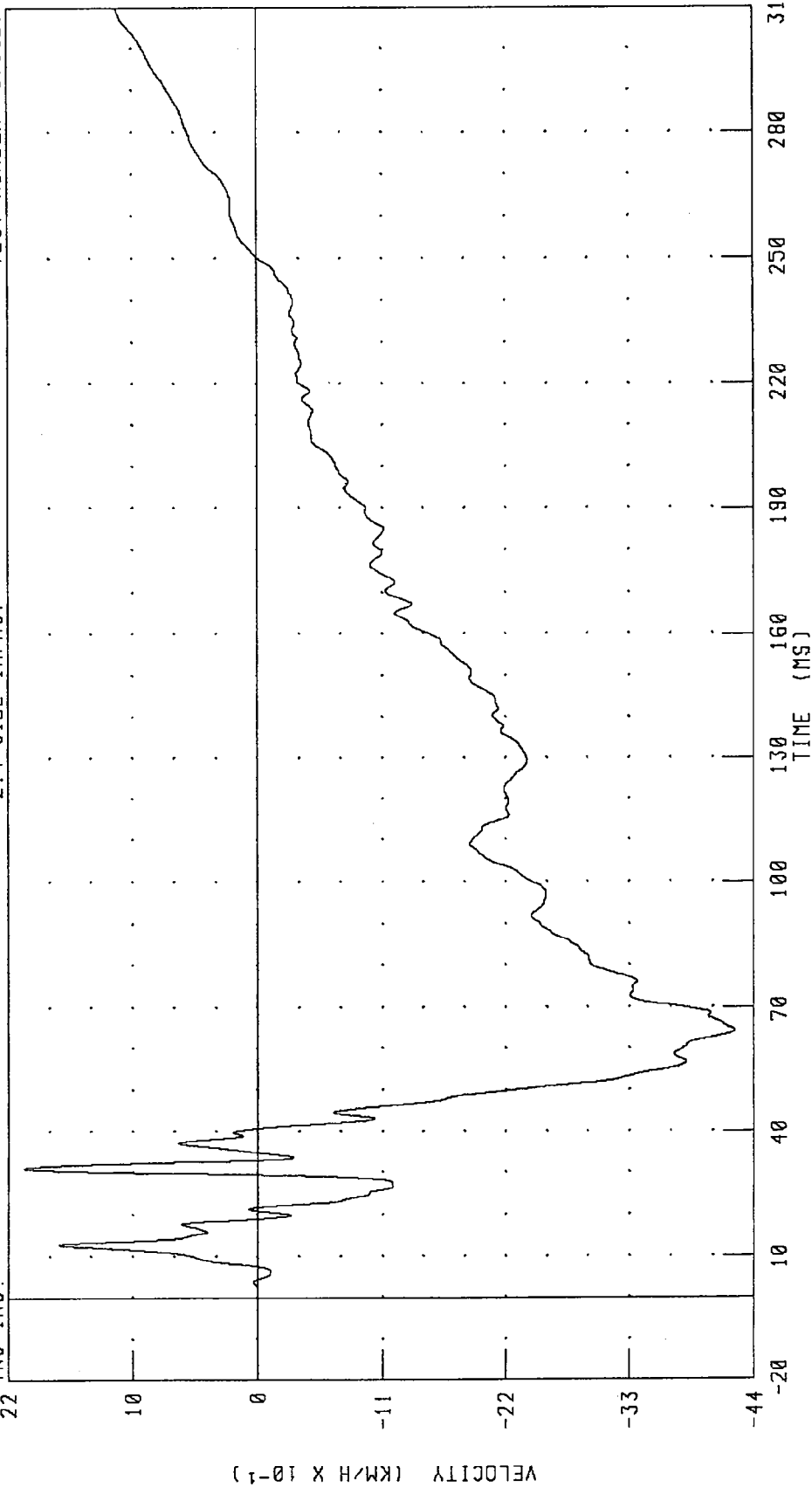


CHANNEL: RDKXG1 FILTER: CH. CLASS 60

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 REAR FLOORPAN ABOVE AXLE X-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER: 971027

TRC INC.



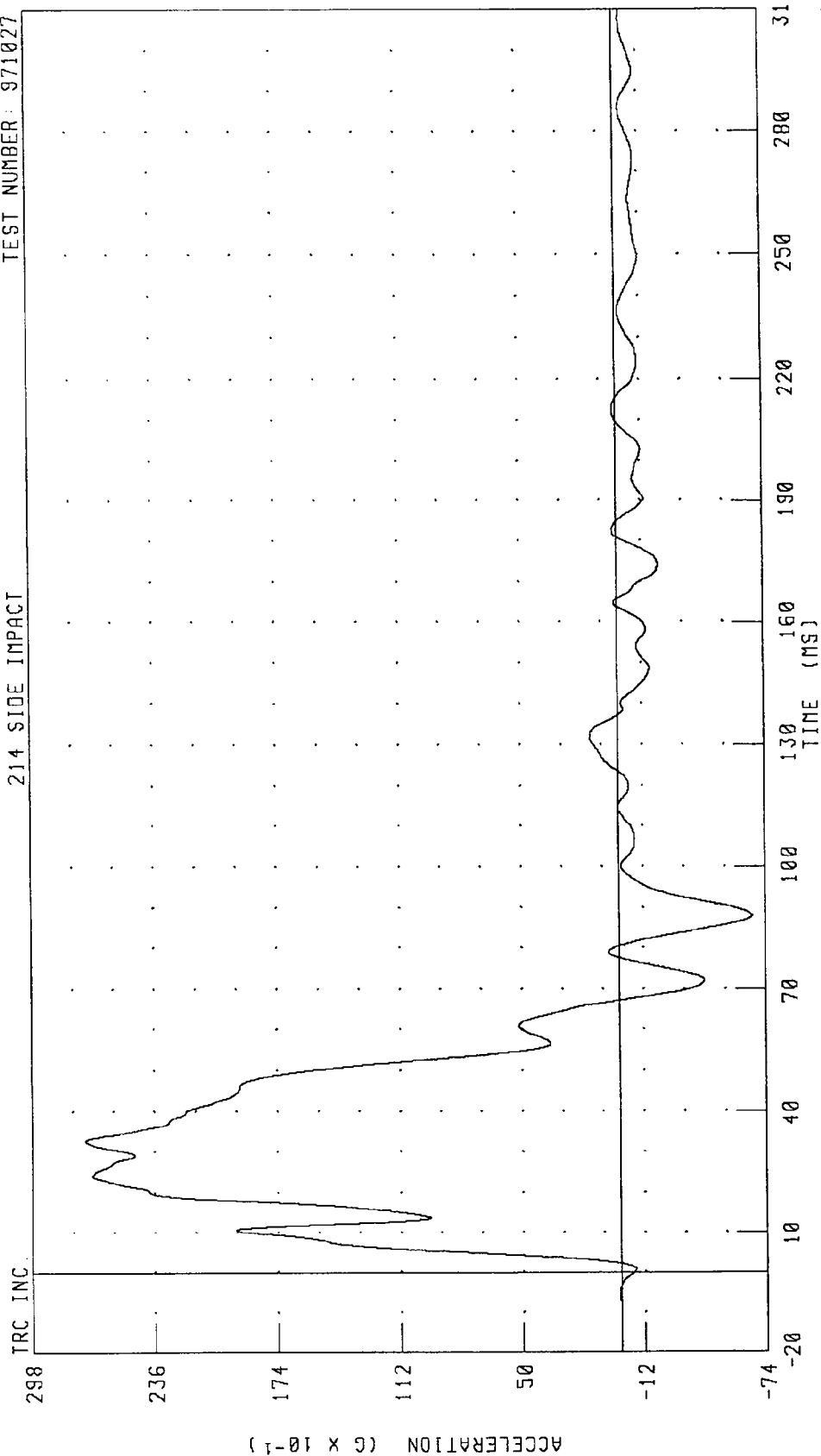
CHANNEL: RDKXY1 FILTER: CH. CLASS 180

PEAK DATA: 2.05 KM/H @ 31.04 MS; -4.23 KM/H @ 64.40 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 REAR FLOORPAN ABOVE AXLE Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT



PEAK DATA: 27.12 G @ 32.80 MS; -6.73 G @ 87.76 MS

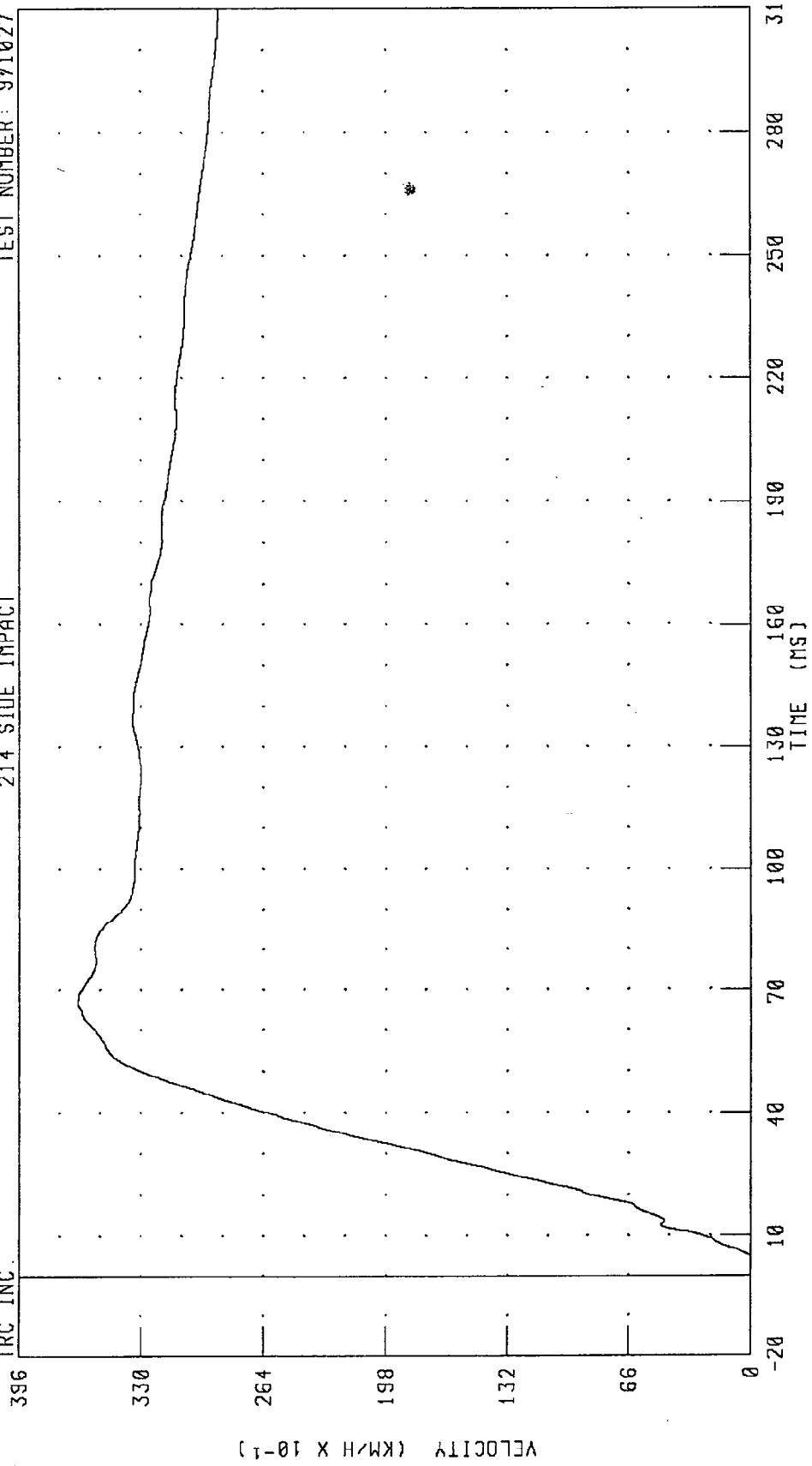
CHANNEL: RDKY61 FILTER: CH CLASS 60

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 REAR FLOORPAN ABOVE AXLE Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



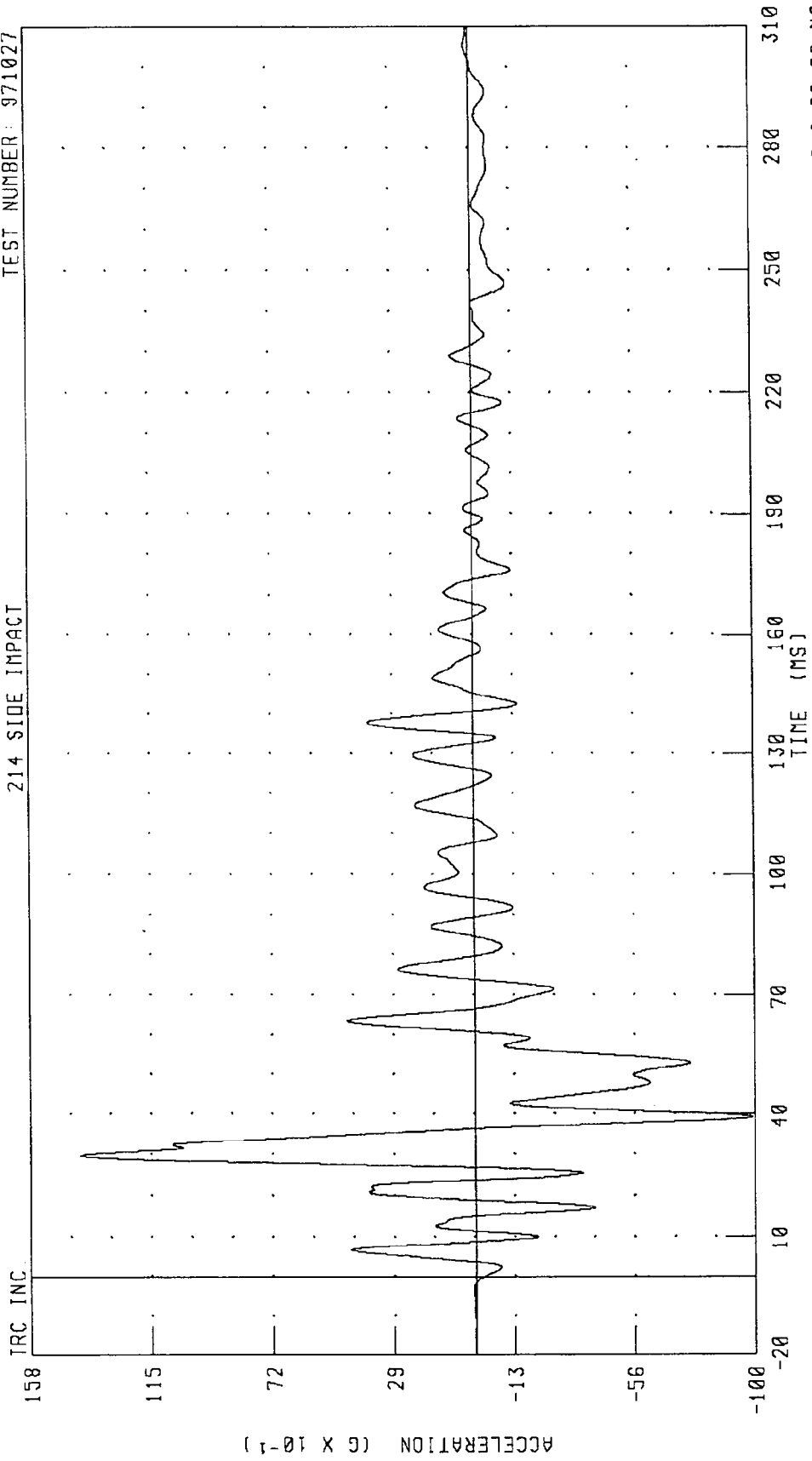
CHANNEL: ROKYV1 FILTER: CH. CLASS 180

PEAK DATA: 36.43 KM/H @ 66.72 MS, -0.06 KM/H @ 3.68 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 REAR FLOORPAN ABOVE AXLE Z-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT



CHANNEL: RDKZG1 FILTER: CH. CLASS 60

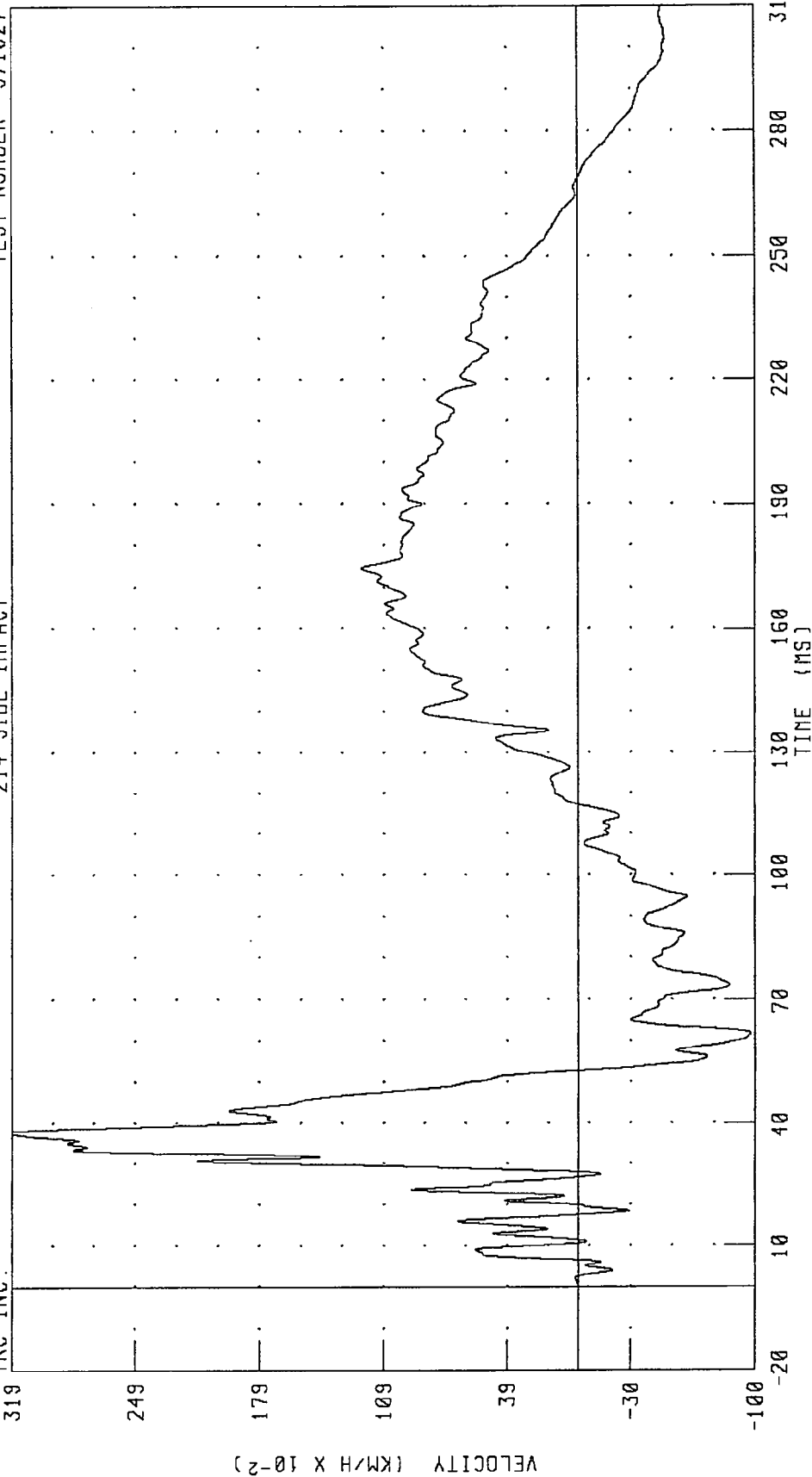
PEAK DATA: 14.01 G @ 29.76 MS; -9.90 G @ 39.20 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 REAR FLOORPAN ABOVE AXLE Z-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



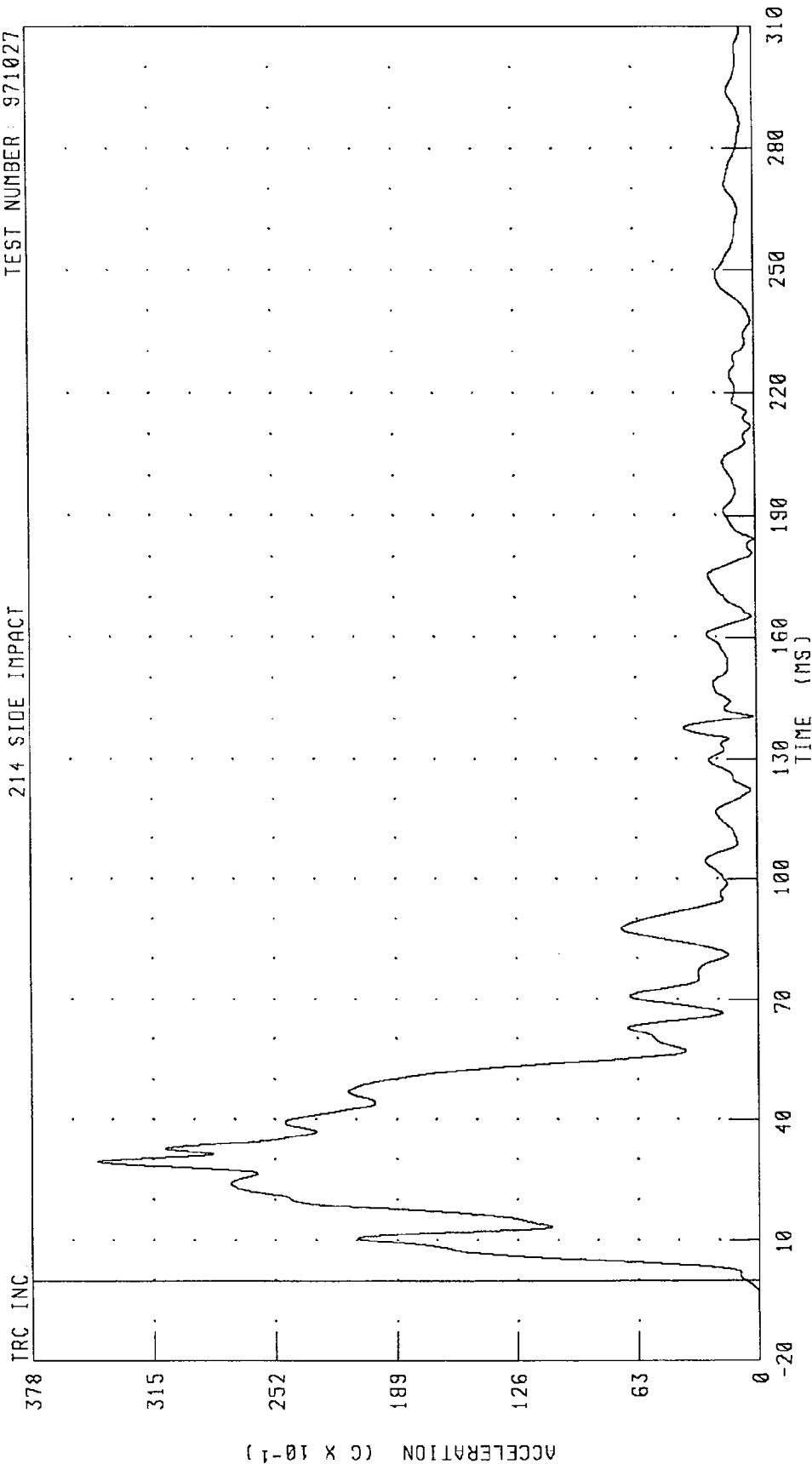
PEAK DATA: 3.23 KM/H @ 37.84 MS; -0.98 KM/H @ 61.68 MS

CHANNEL: RDKZV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT



CHANNEL: RDKRG1 FILTER: CH. CLASS 60

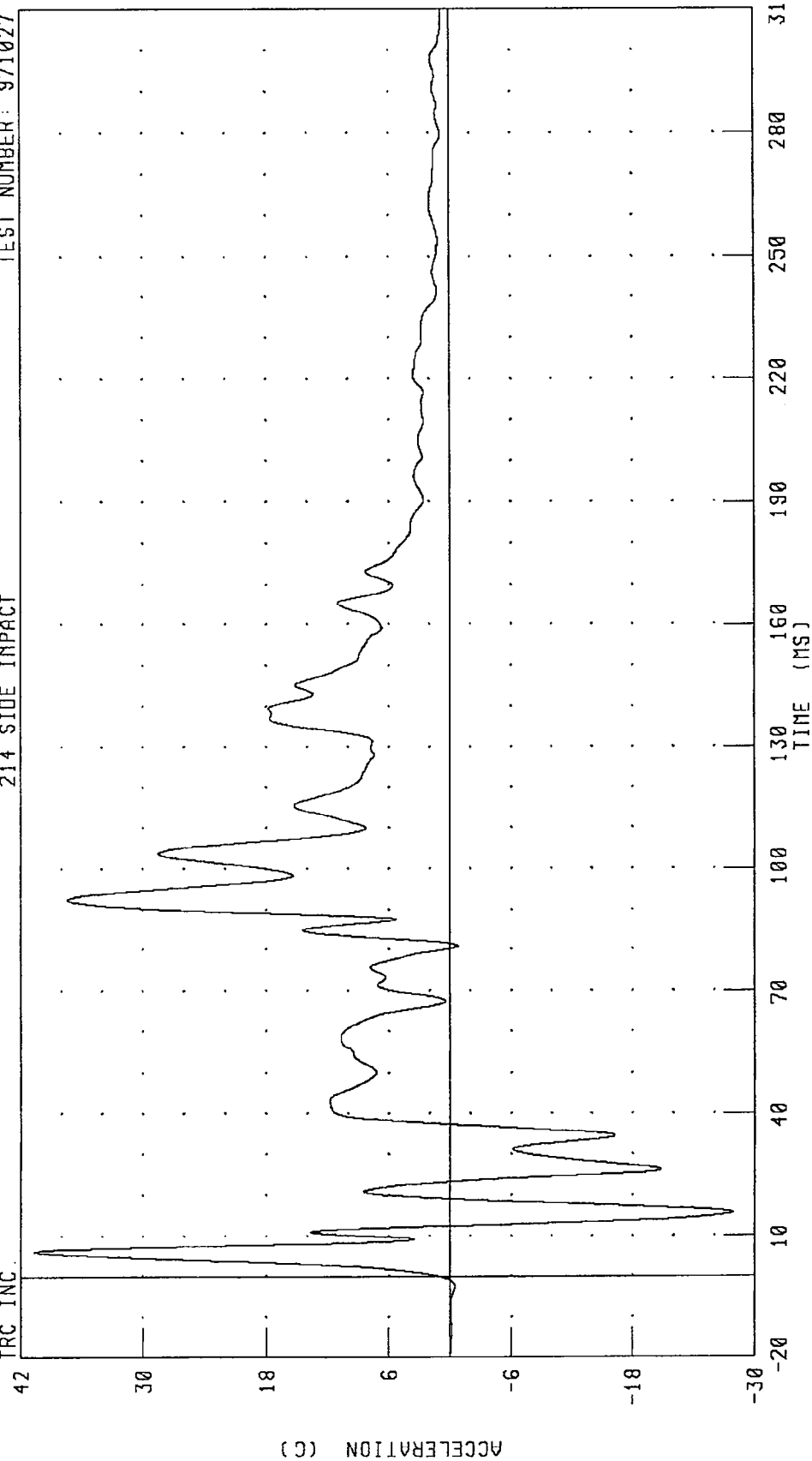
PEAK DATA: 34.40 G @ 29.44 MS; 0.01 G @ -20.00 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT SIDE SILL AT FRONT SEAT Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: LFSYG1 FILTER: CH. CLASS 60

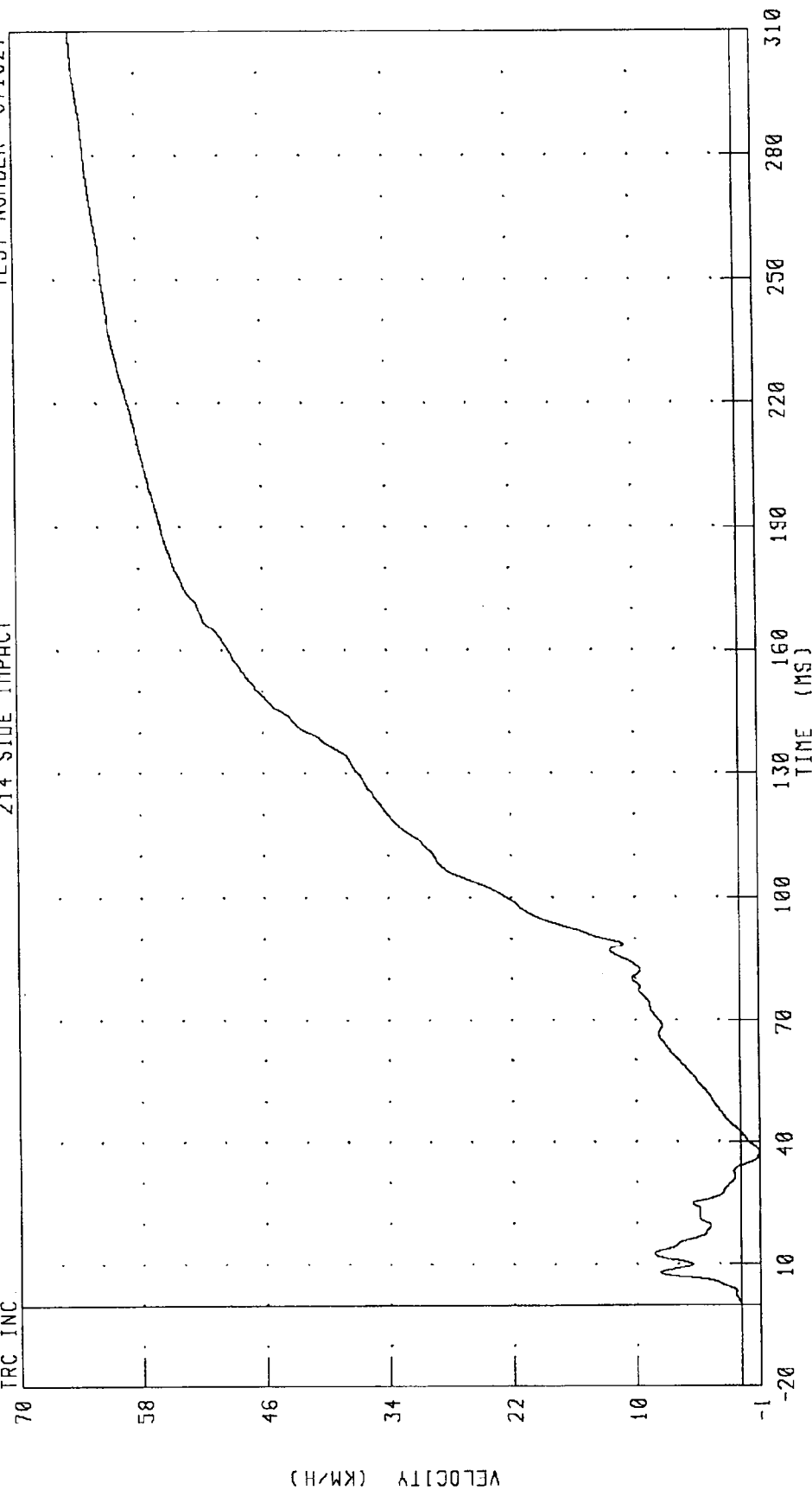
PEAK DATA: 40.64 G @ 6.08 MS; -27.91 G @ 15.76 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT SIDE SILL AT FRONT SEAT Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



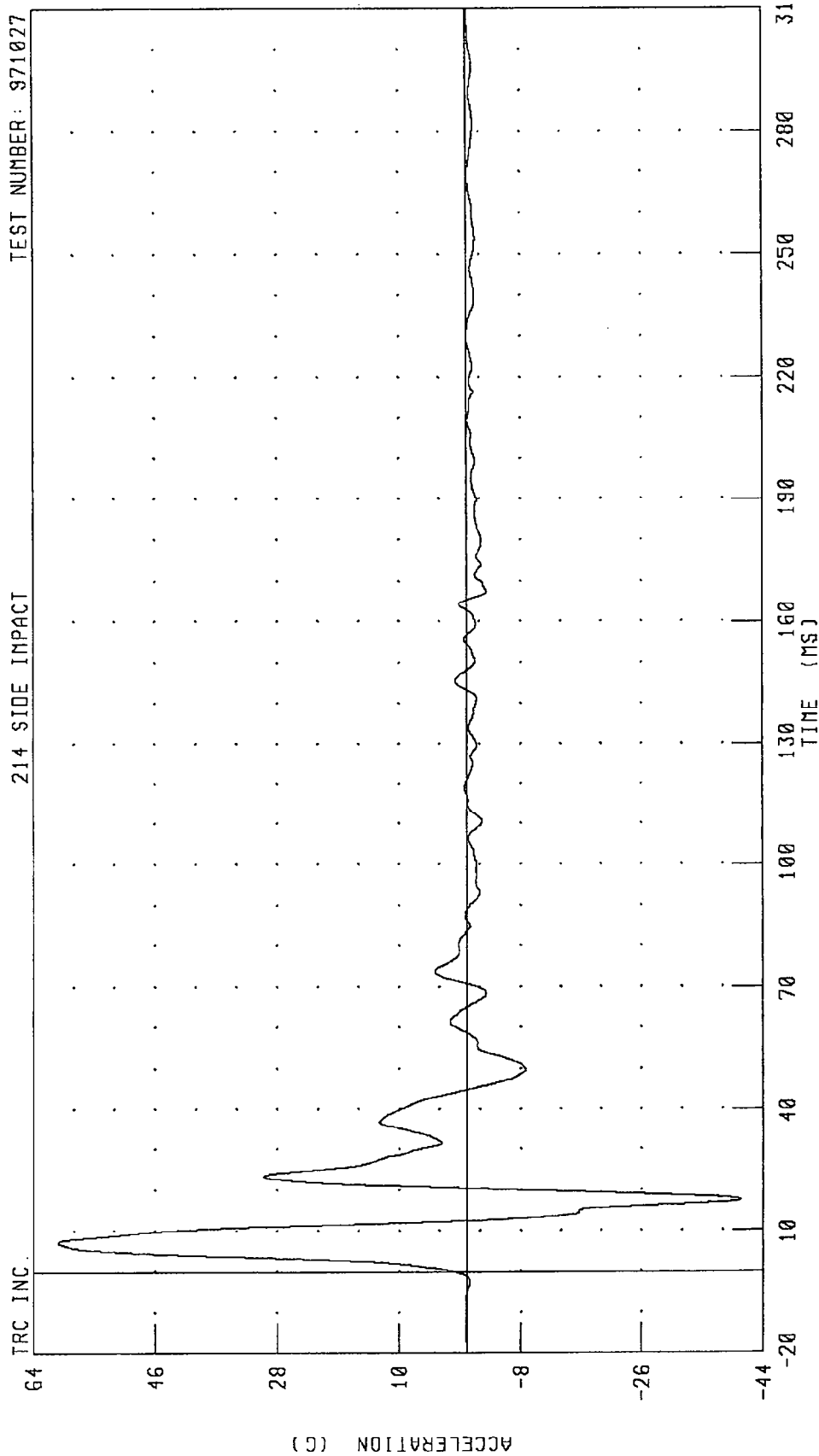
PEAK DATA: 64.51 KM/H @ 310.00 MS; -1.80 KM/H @ 37.60 MS

CHANNEL: LFSYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1988 DODGE NEON
LEFT SIDE SILL AT REAR SEAT Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT



CHANNEL: LRSYG1 FILTER: CH. CLASS 60

PEAK DATA: 60.37 G @ 7.12 MS; -40.79 G @ 17.52 MS

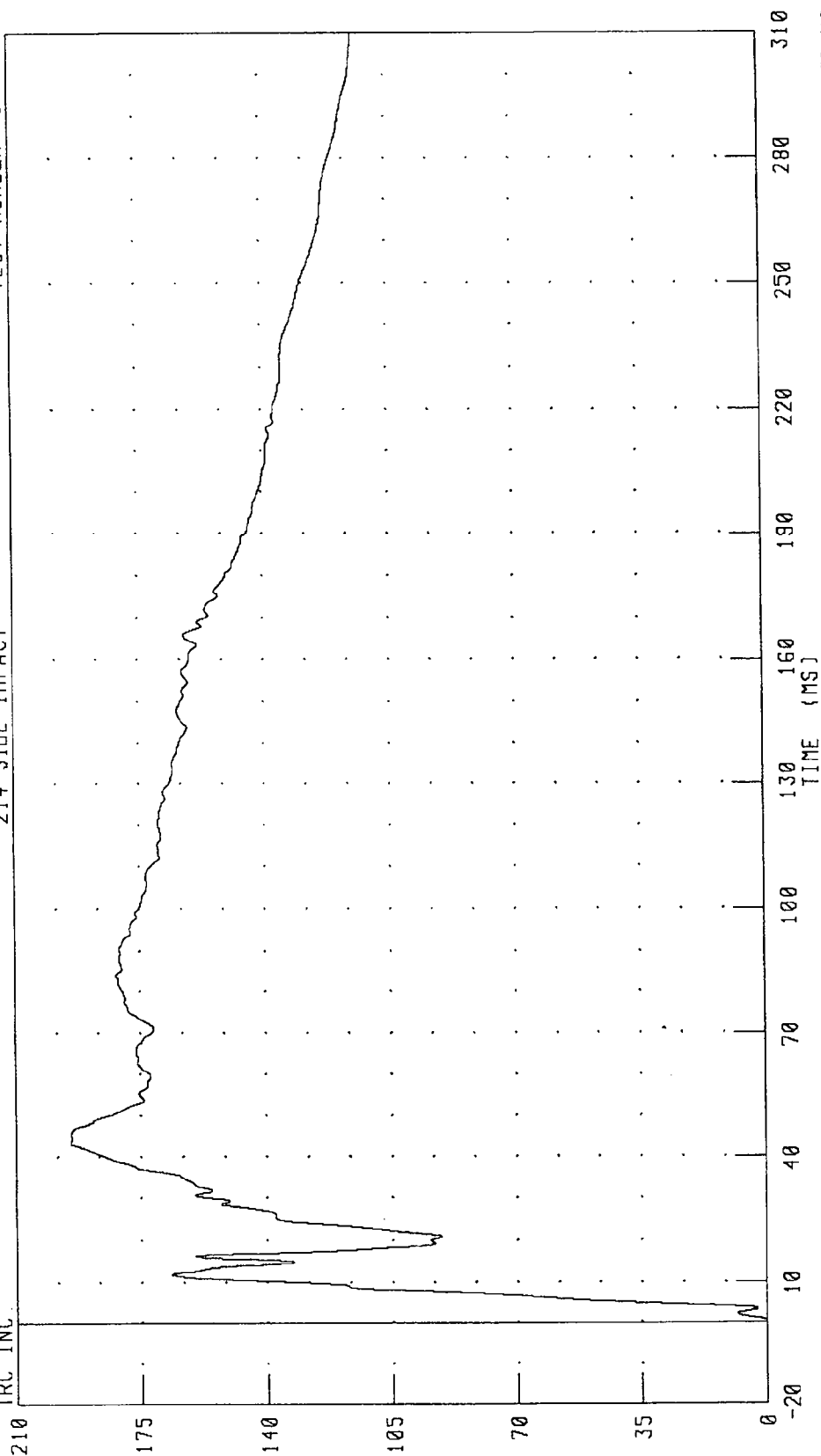
MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT SIDE SILL AT REAR SEAT Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC

VELOCITY (KM/H X 10⁻¹)



CHANNEL: LRSYV1 FILTER: CH. CLASS 180

PEAK DATA: 19.46 KM/H @ 43.52 MS; 0.00 KM/H @ 0.00 MS

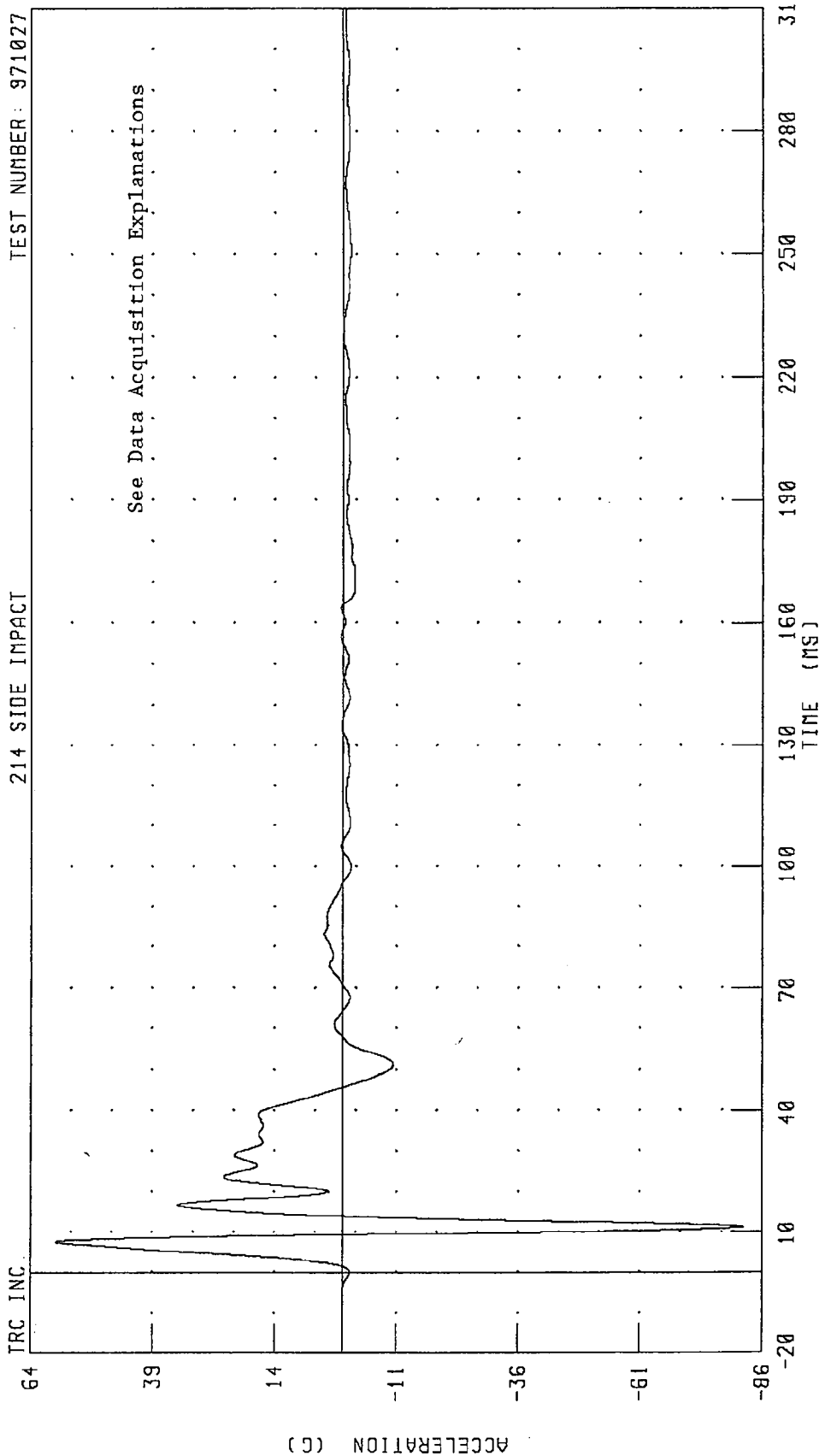
Left Front Door On Centerline Accelerometer #6 Was Not Installed
(no accessible mounting location)

Left Front Door On Centerline Accelerometer #6 Was Not Installed
(no accessible mounting location)

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
RIGHT REAR OCCUPANT COMPARTMENT Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

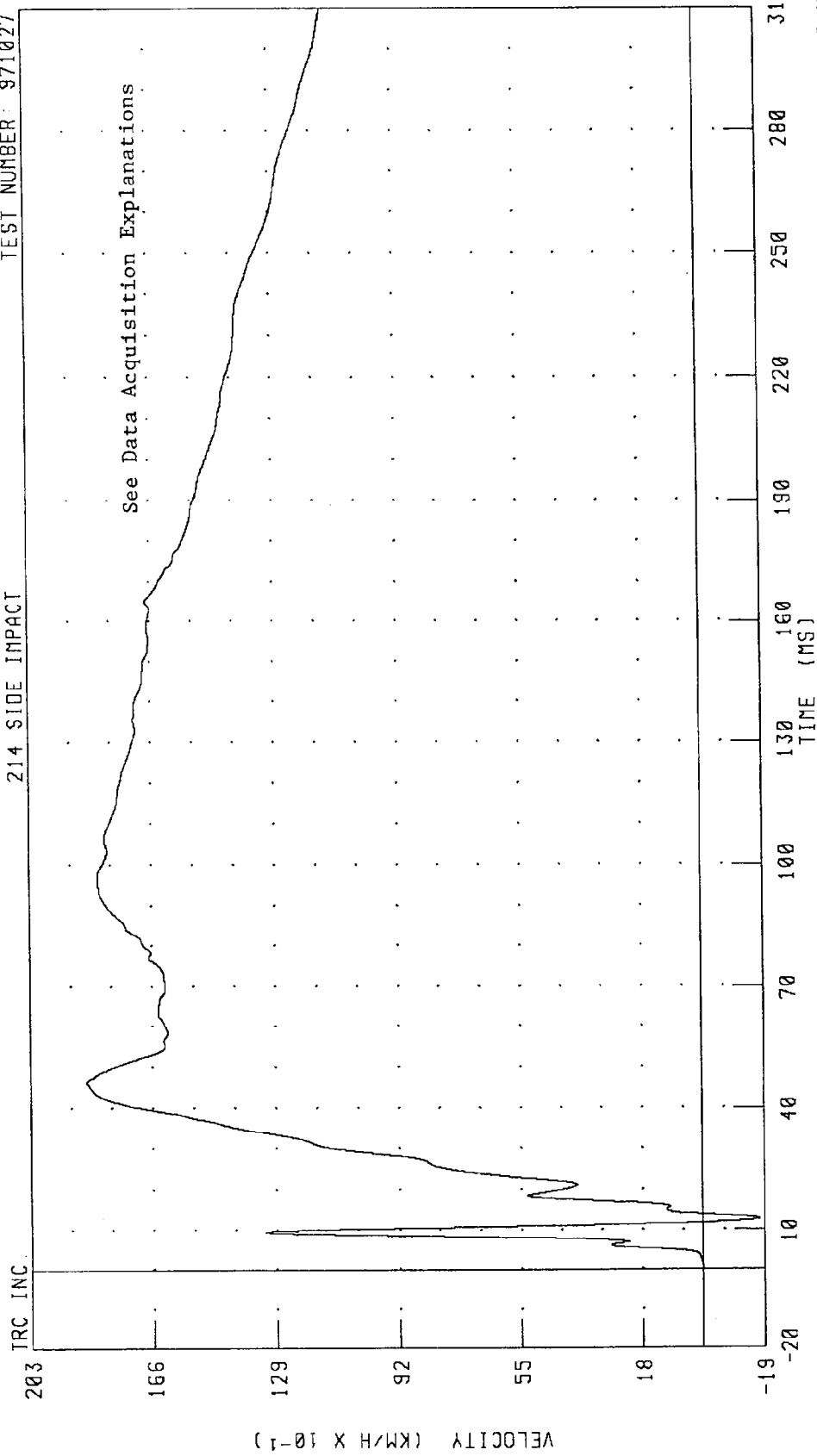


CHANNEL: RRTYG1 FILTER: CH. CLASS 60

PEAK DATA: 58.77 G @ 7.44 MS; -82.10 G @ 11.20 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 RIGHT REAR OCCUPANT COMPARTMENT Y-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER: 971027



PEAK DATA: 18.60 KM/H @ 46.40 MS; -1.74 KM/H @ 12.72 MS

CHANNEL: ARTYV1 FILTER: CH. CLASS 180

Mid Rear Of Left Front Door Accelerometer #8 Was Not Installed
(no accessible mounting location)

Mid Rear Of Left Front Door Accelerometer #8 Was Not Installed
(no accessible mounting location)

Left Front Door Upper Centerline Accelerometer #9 Was Not Installed
(no accessible mounting location)

Left Front Door Upper Centerline Accelerometer #9 Was Not Installed
(no accessible mounting location)

Mid Rear Of Left Rear Door Accelerometer #10 Was Not Installed
(no accessible mounting location)

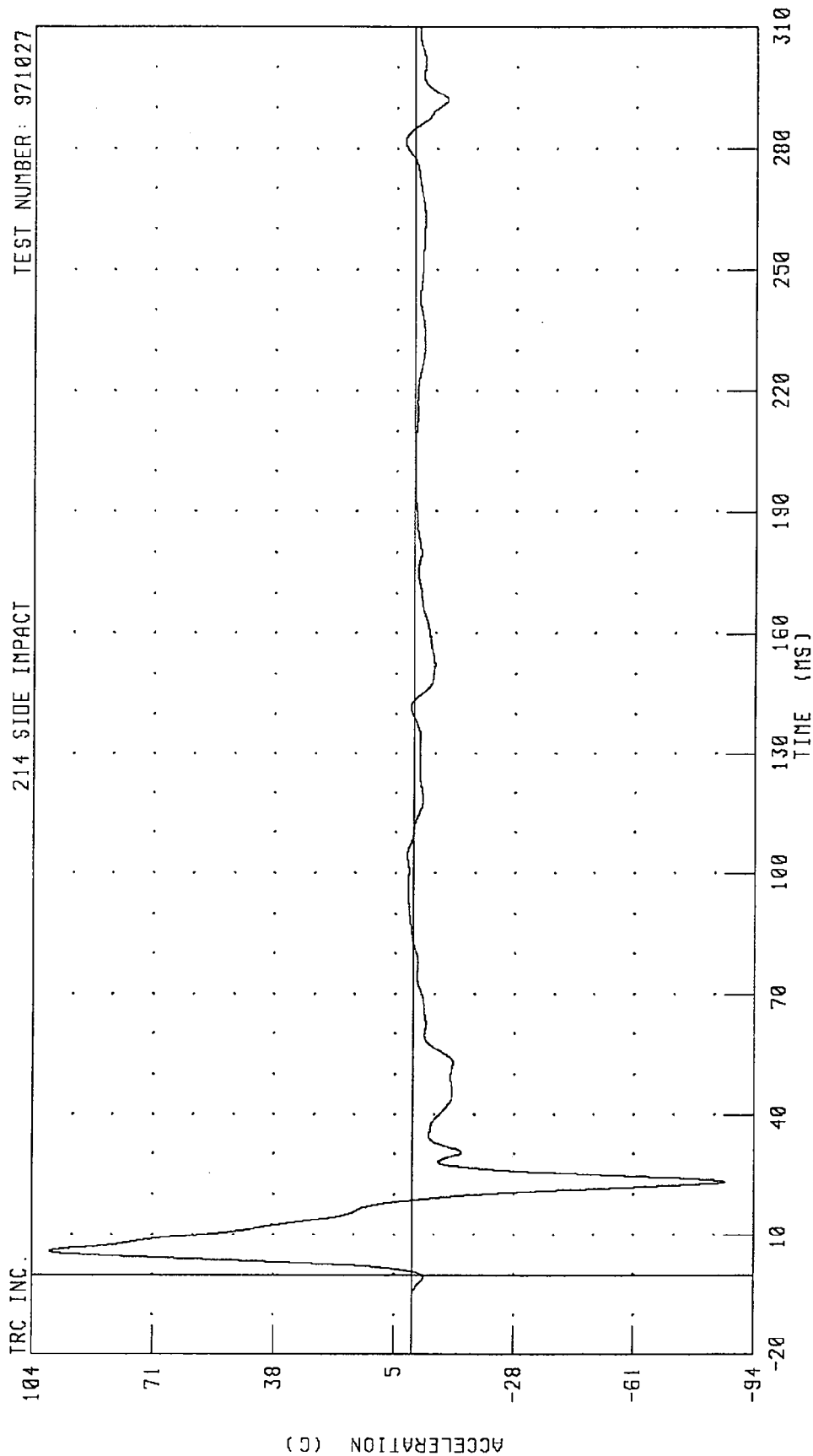
Mid Rear Of Left Rear Door Accelerometer #10 Was Not Installed
(no accessible mounting location)

Left Rear Door Upper Centerline Accelerometer #11 Was Not Installed
(no accessible mounting location)

Left Rear Door Upper Centerline Accelerometer #11 Was Not Installed
(no accessible mounting location)

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 LOWER A-POST Y-AXIS ACCELERATION
 214 SIDE IMPACT

TEST NUMBER: 971027

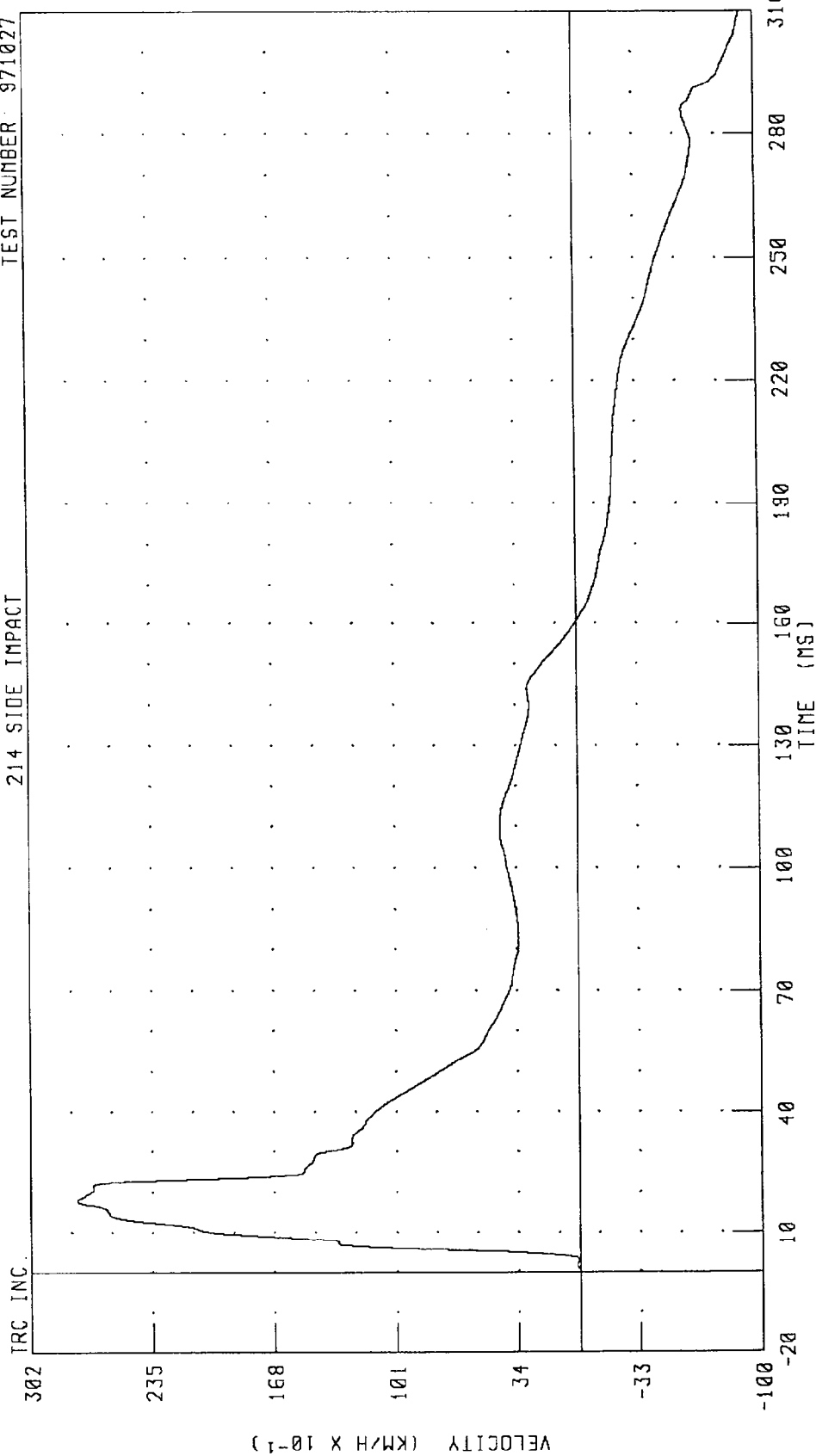


PEAK DATA: 99.12 G @ 5.84 MS, -85.95 G @ 23.20 MS

CHANNEL: LAYC1 FILTER: CH. CLASS 60

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 LOWER A-POST Y-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER 971027

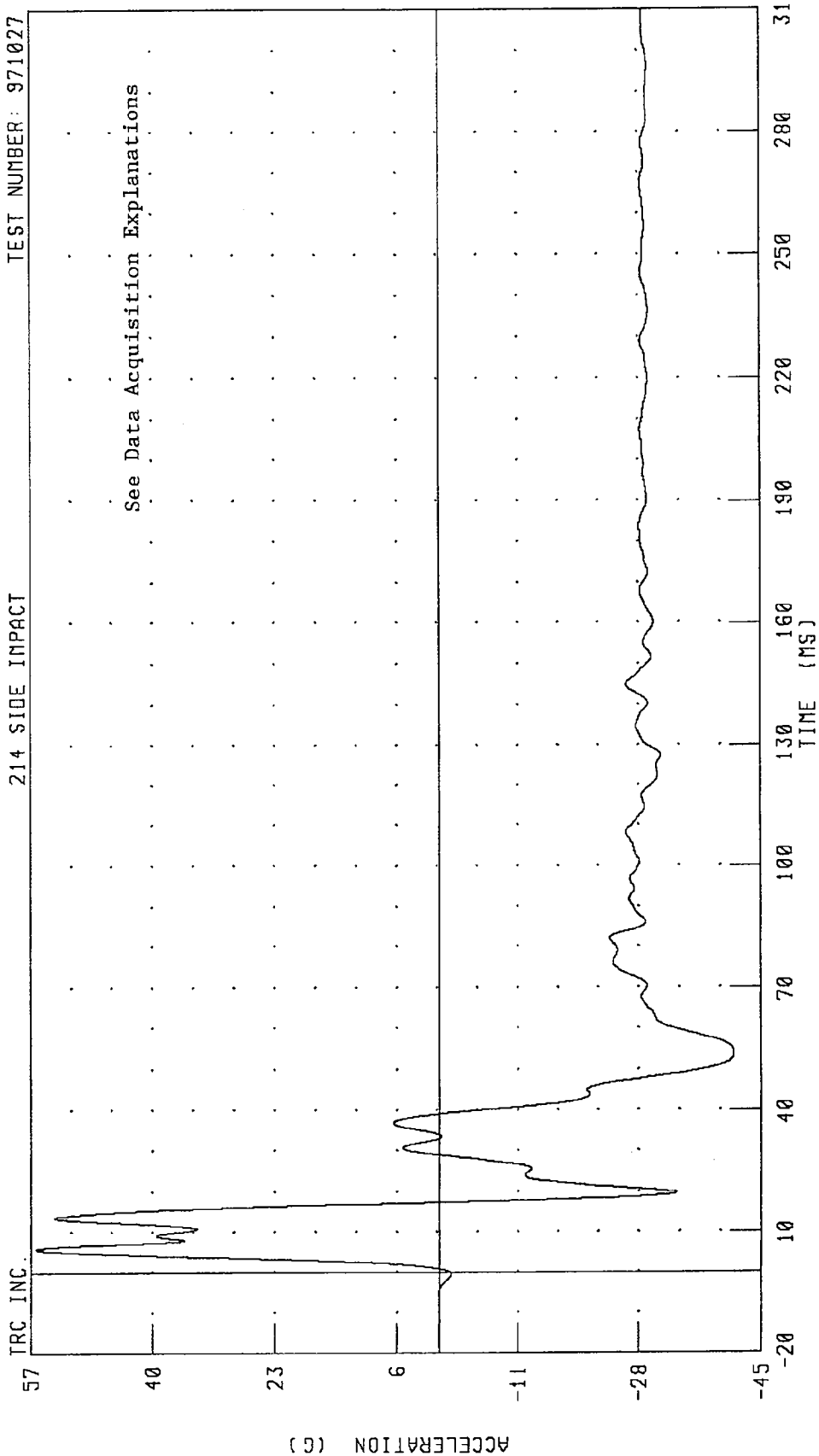


PEAK DATA: 27.66 KM/H @ 17.84 MS; -9.23 KM/H @ 310.00 MS

CHANNEL: LLAYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1988 DODGE NEON
UPPER A-POST Y-AXIS ACCELERATION
214 SIDE IMPACT

TEST NUMBER: 971027



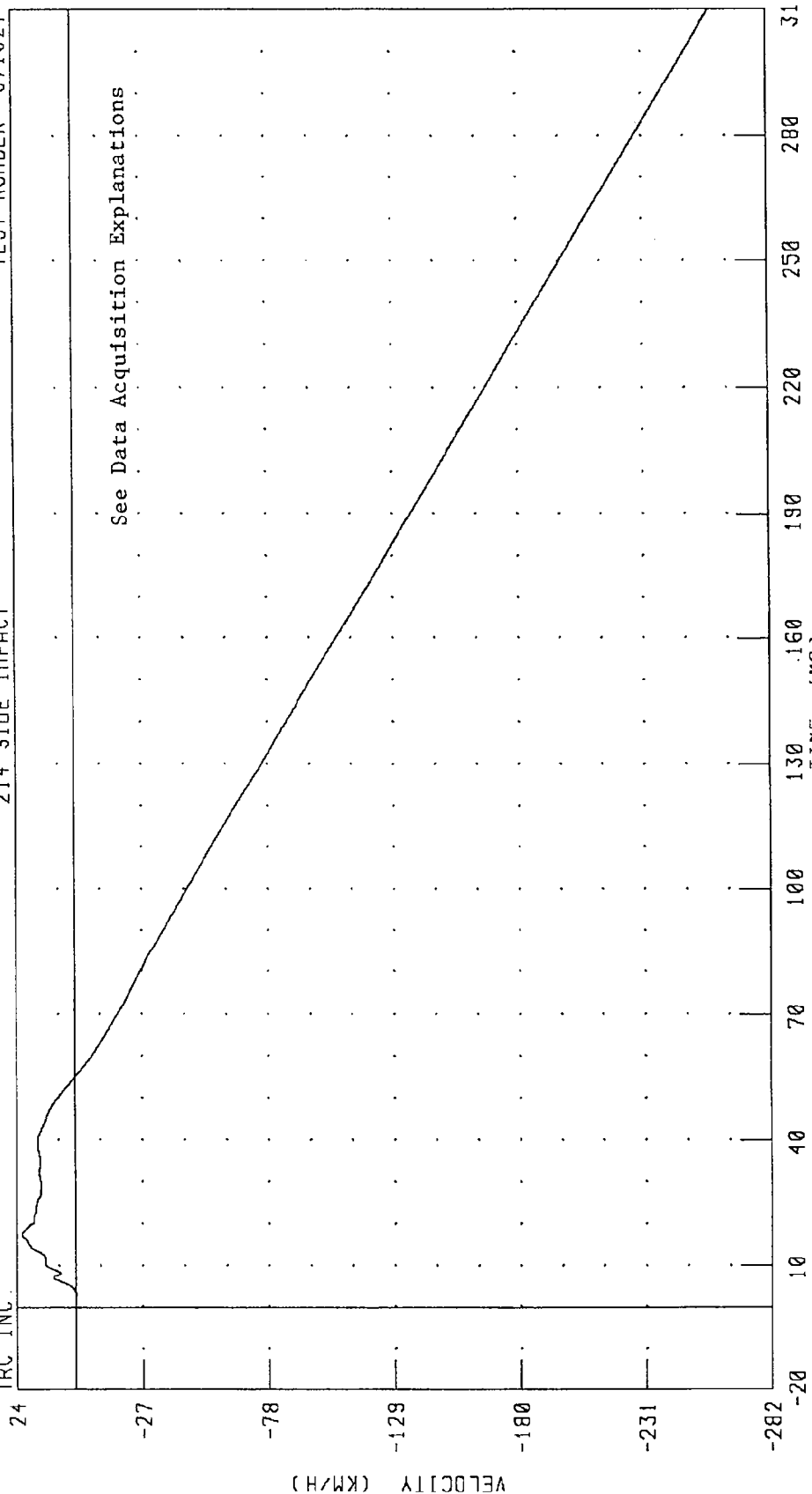
CHANNEL: L MAYG1 FILTER: CH. CLASS 60

PEAK DATA: 56.21 G @ 5.76 MS; -41.22 G @ 53.60 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
UPPER A-POST Y-AXIS VELOCITY
214 SIDE IMPACT

TEST NUMBER: 971027

TRC INC.



PEAK DATA: 21 90 KM/H @ 17.36 MS; -258.67 KM/H @ 310.00 MS

CHANNEL: LMAYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 LOWER B-POST Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

IRC INC.

180

125

70

15

-40

-95

-150

ACCELERATION (G)

TIME (MS)

310

280

250

220

190

160

130

100

70

40

10

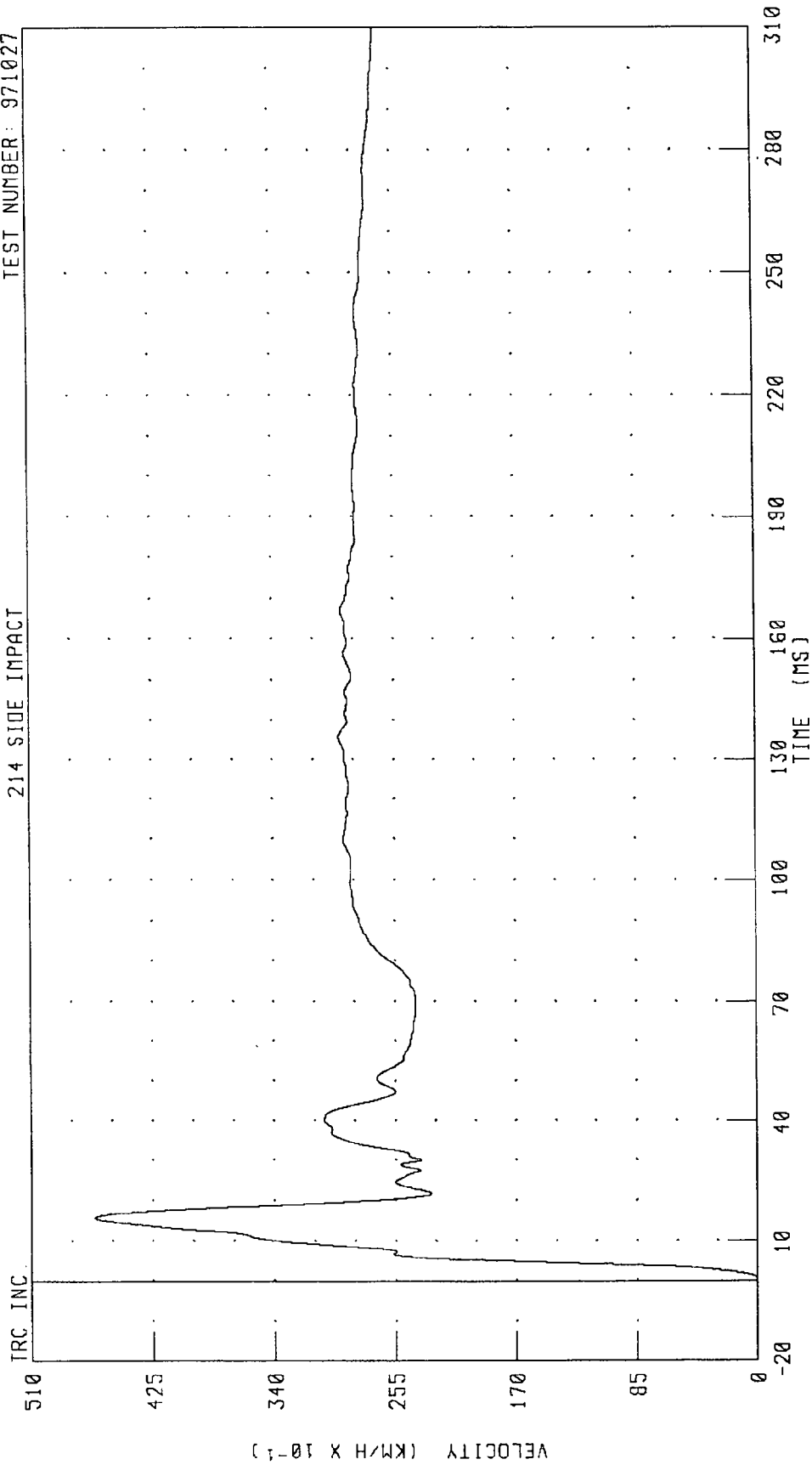
-20

PEAK DATA: 162.06 G @ 4.40 MS; -141.80 G @ 18.64 MS

CHANNEL: LLBYG1 FILTER: CH. CLASS 60

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 LOWER B-POST Y-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER: 971027

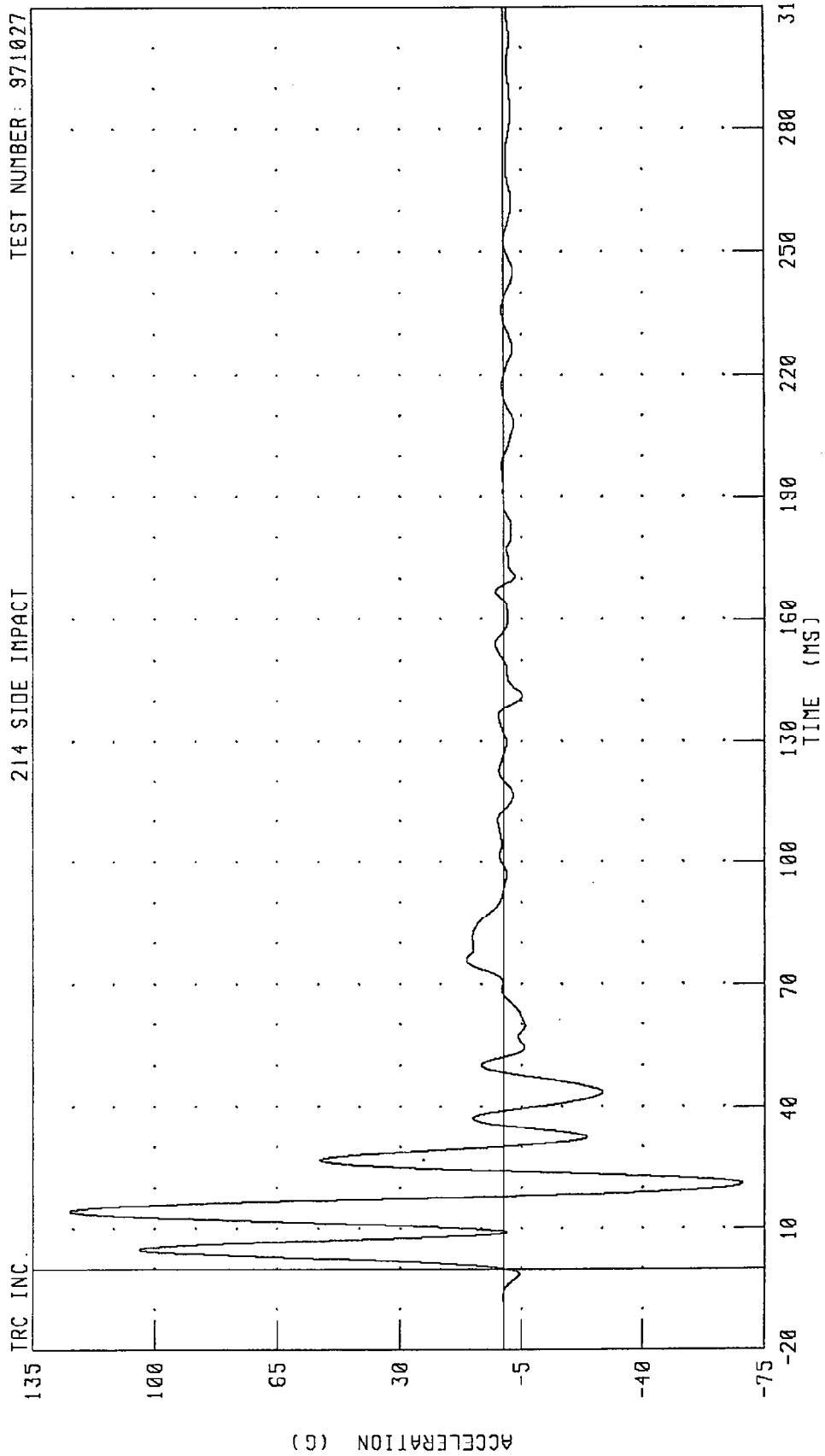


PEAK DATA: 46.58 KM/H @ 15.68 MS; 0.00 KM/H @ 0.00 MS

CHANNEL: LLBYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
UPPER B-POST Y-AXIS ACCELERATION
214 SIDE IMPACT

TEST NUMBER: 971027



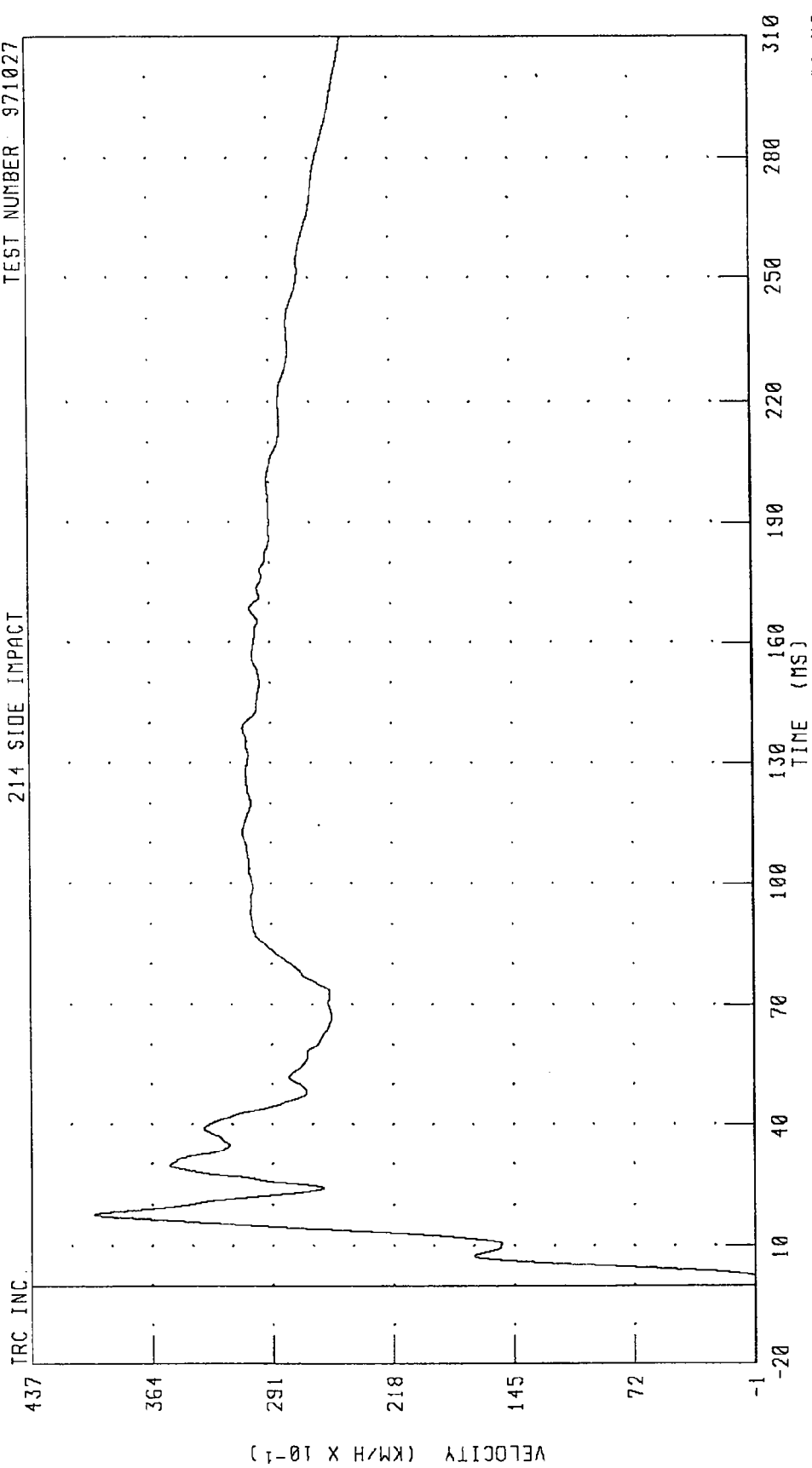
CHANNEL: LMBY61 FILTER: CH. CLASS 60

971027

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
UPPER B-POST Y-AXIS VELOCITY

TEST NUMBER 971027

214 SIDE IMPACT

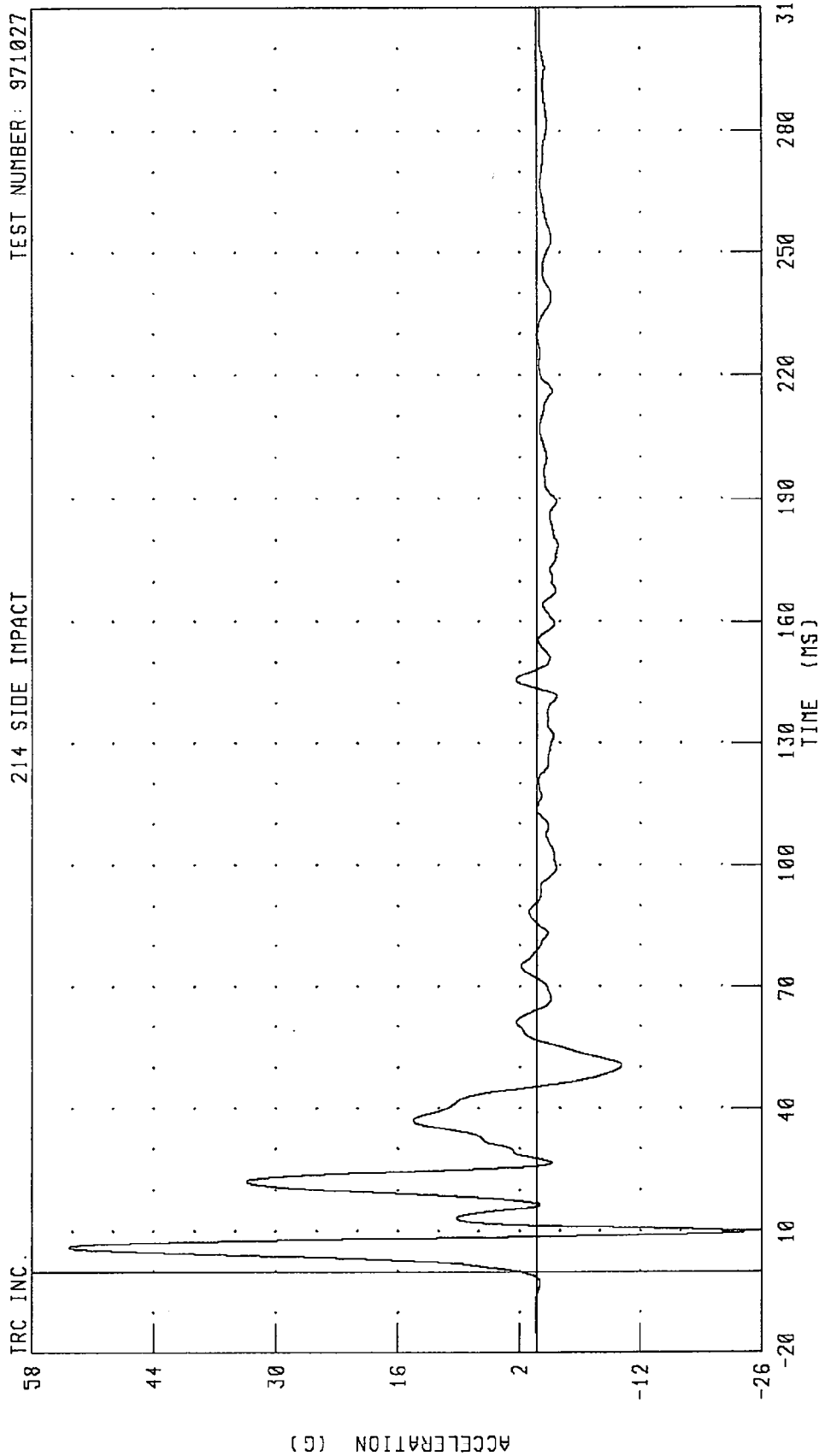


CHANNEL: LMBYV1 FILTER: CH. CLASS 180

PEAK DATA: 39.89 KM/H @ 17.68 MS; -0.16 KM/H @ 1.76 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
FRONT SEAT TRACK Y-AXIS ACCELERATION
214 SIDE IMPACT

TEST NUMBER: 971027



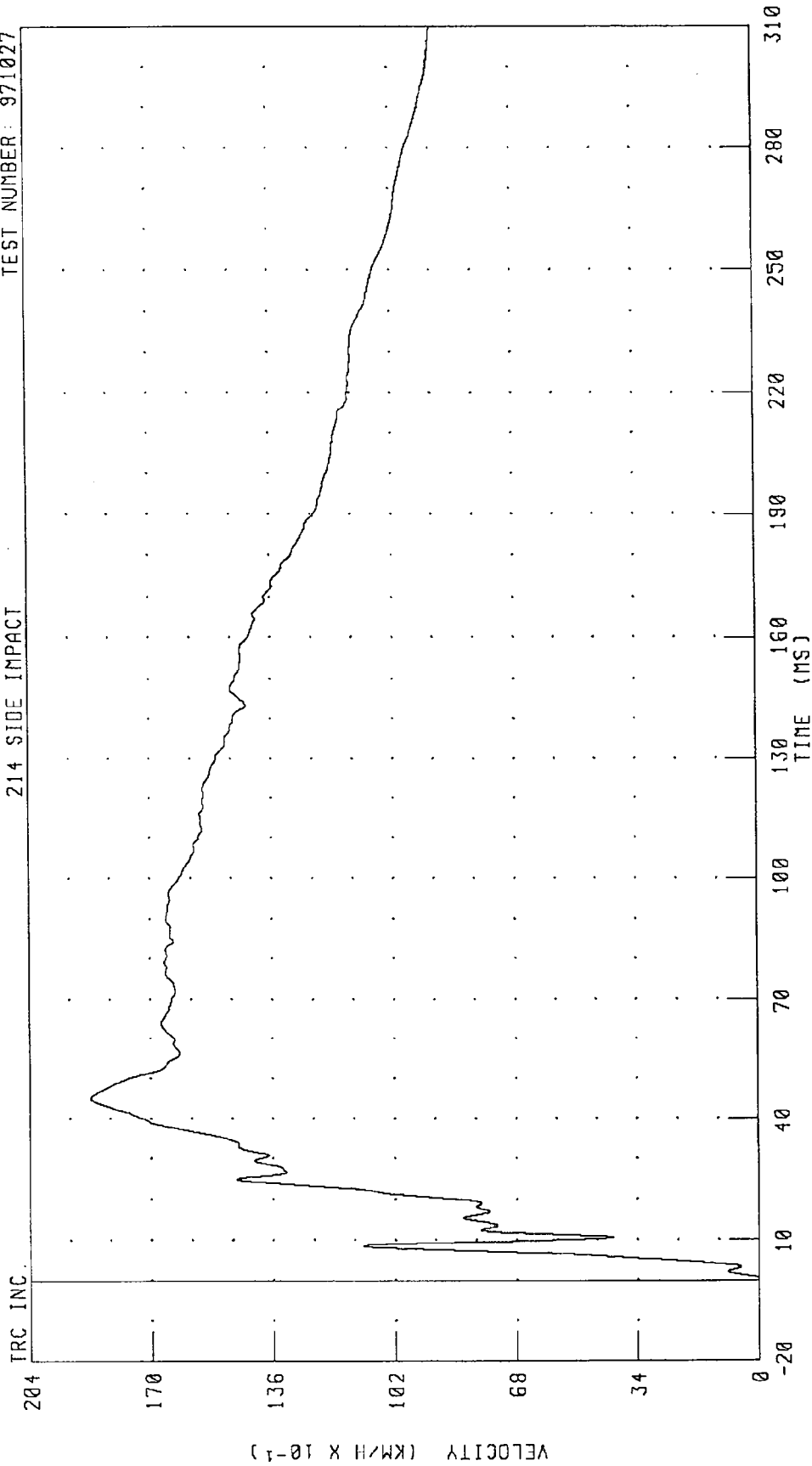
CHANNEL: LFTYG1 · FILTER: CH. CLASS 60

PEAK DATA: 53.76 G @ 5.92 MS; -23.93 G @ 9.76 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1988 DODGE NEON
FRONT SEAT TRACK Y-AXIS VELOCITY

TEST NUMBER: 971027

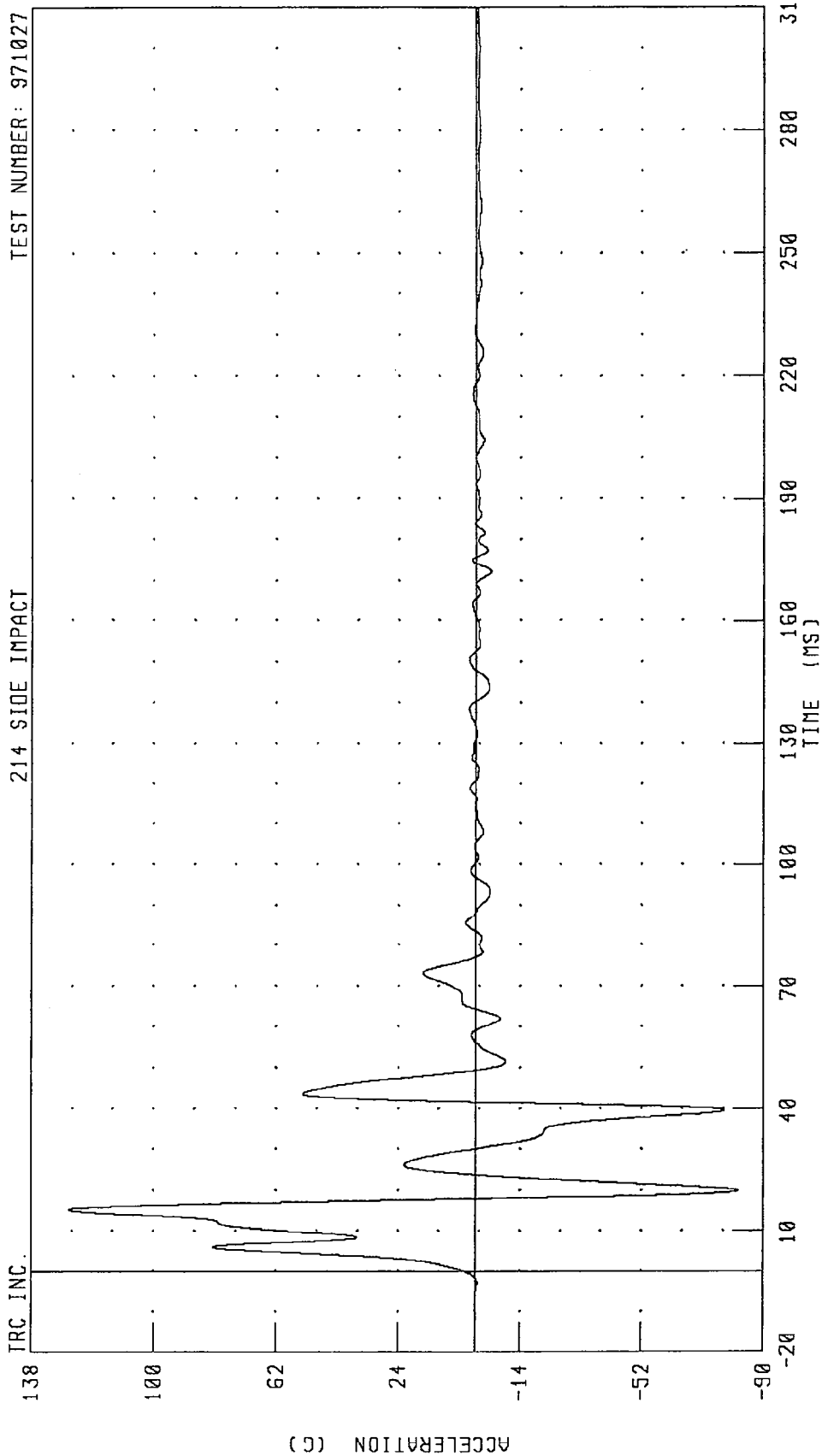
214 SIDE IMPACT



CHANNEL: LFTYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 REAR SEAT TRACK Y-AXIS ACCELERATION
 214 SIDE IMPACT

TEST NUMBER: 971027

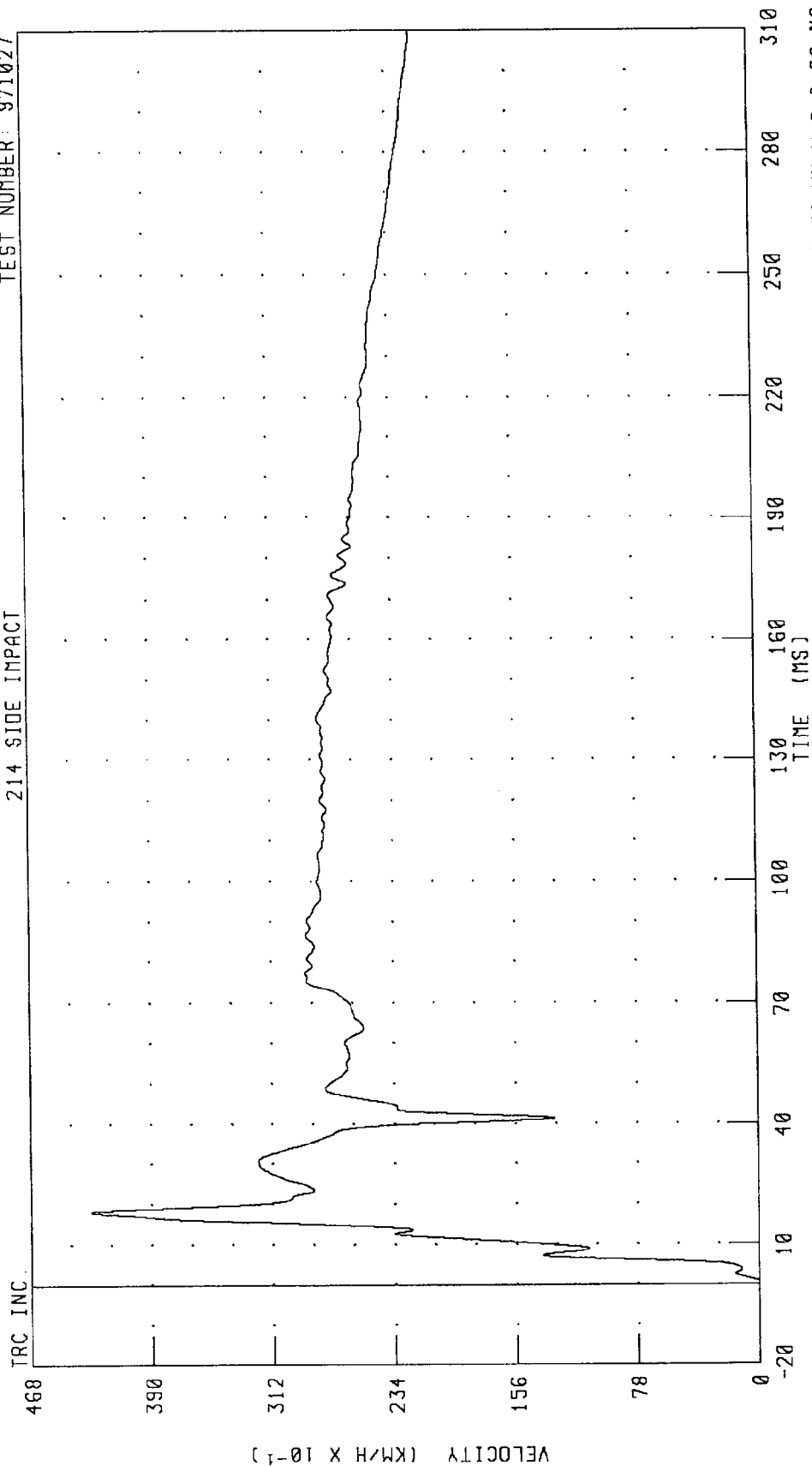


CHANNEL: LRTYG1 FILTER: CH. CLASS 60

PEAK DATA: 126.21 G @ 15.20 MS; -82.10 G @ 19.84 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 REAR SEAT TRACK Y-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER: 971027



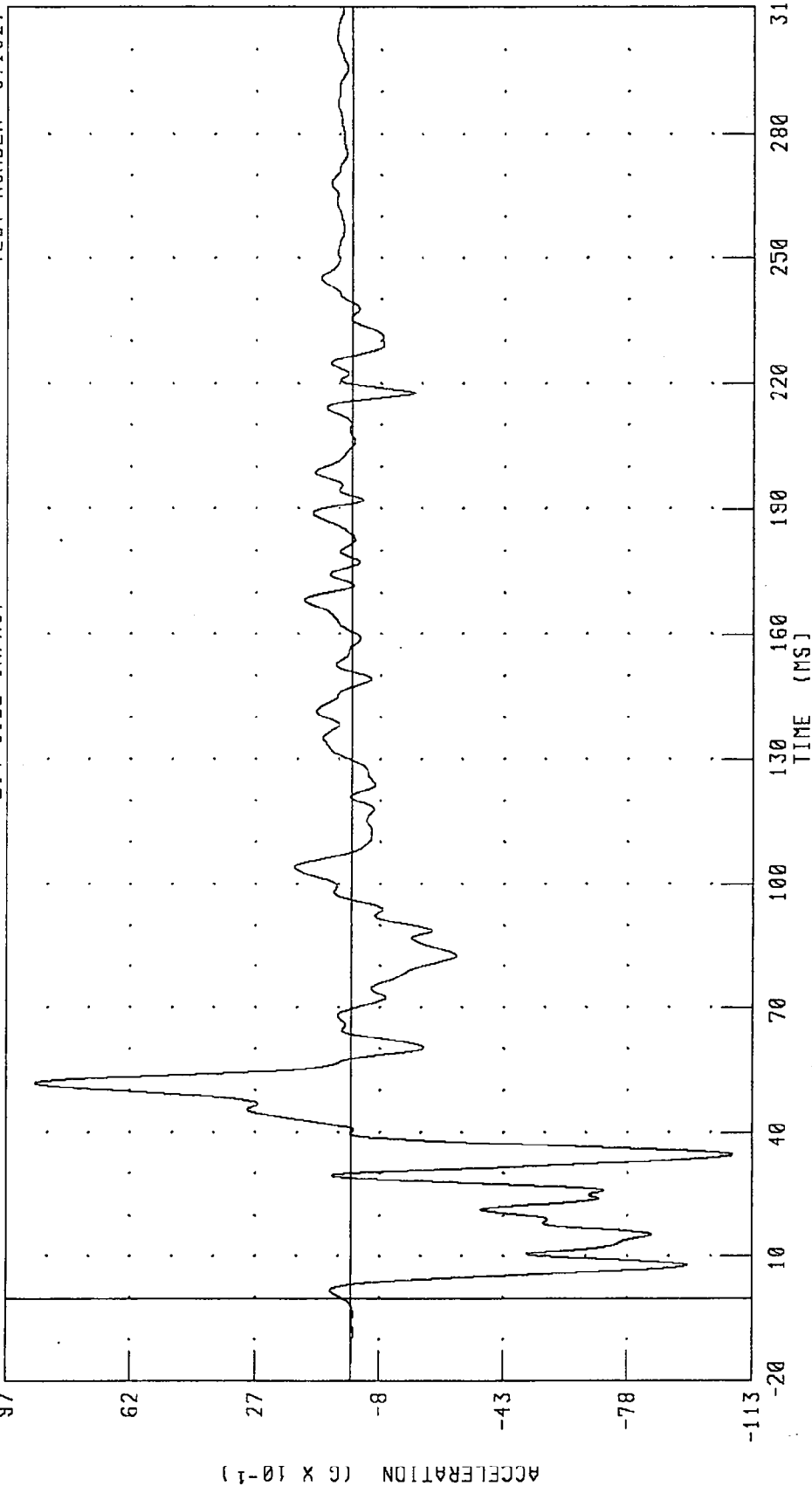
CHANNEL: LRTYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
VEHICLE CENTER OF GRAVITY X-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



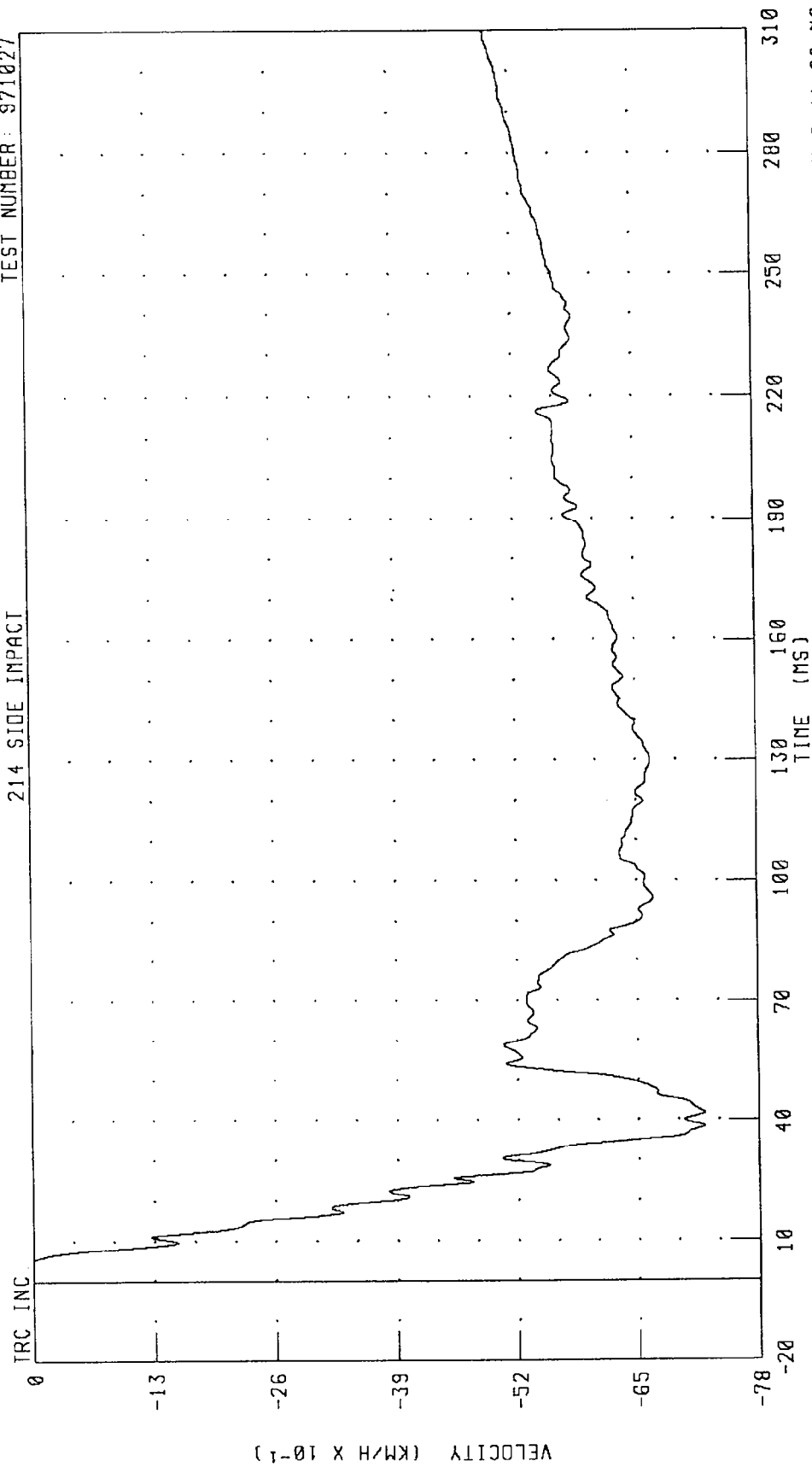
CHANNEL: VCGXG1 FILTER: CH. CLASS 60

PEAK DATA: 8.90 G @ 51.68 MS; -10.73 G @ 34.48 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
VEHICLE CENTER OF GRAVITY X-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT



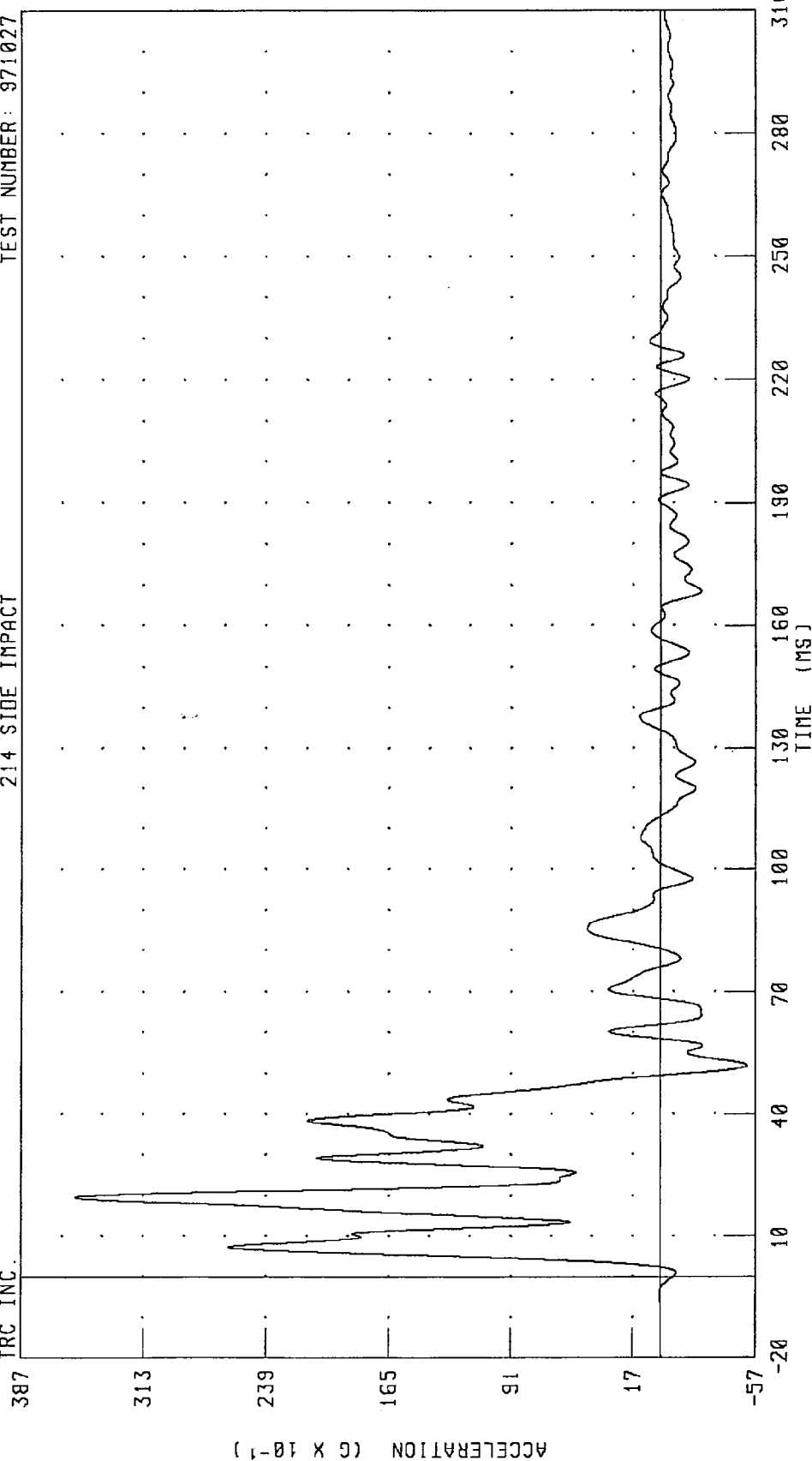
CHANNEL: VCGXV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
VEHICLE CENTER OF GRAVITY Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

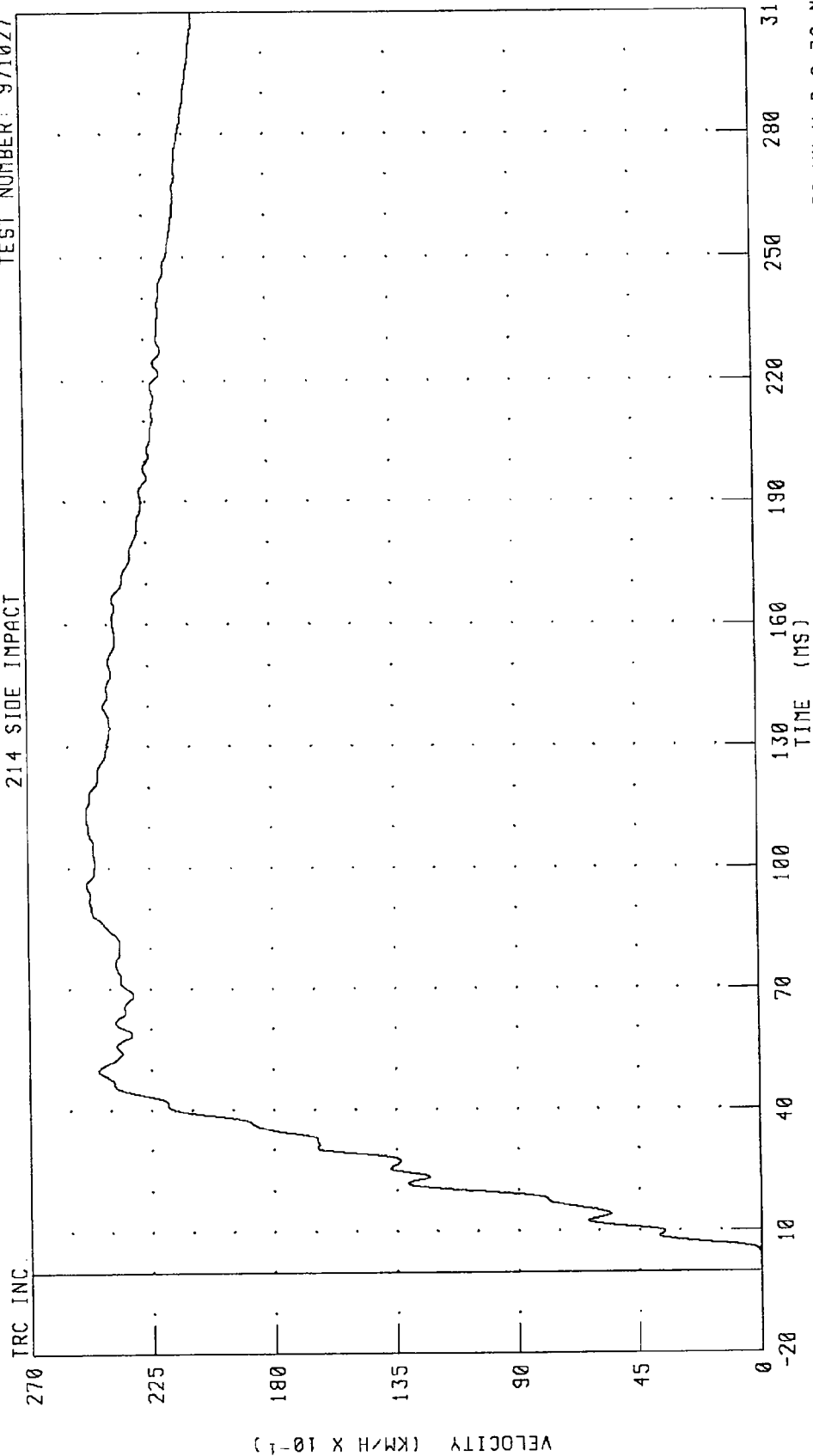


CHANNEL: VCGY01 FILTER: CH. CLASS 60

PEAK DATA: 35.42 G @ 19.60 MS; -5.20 G @ 51.84 MS

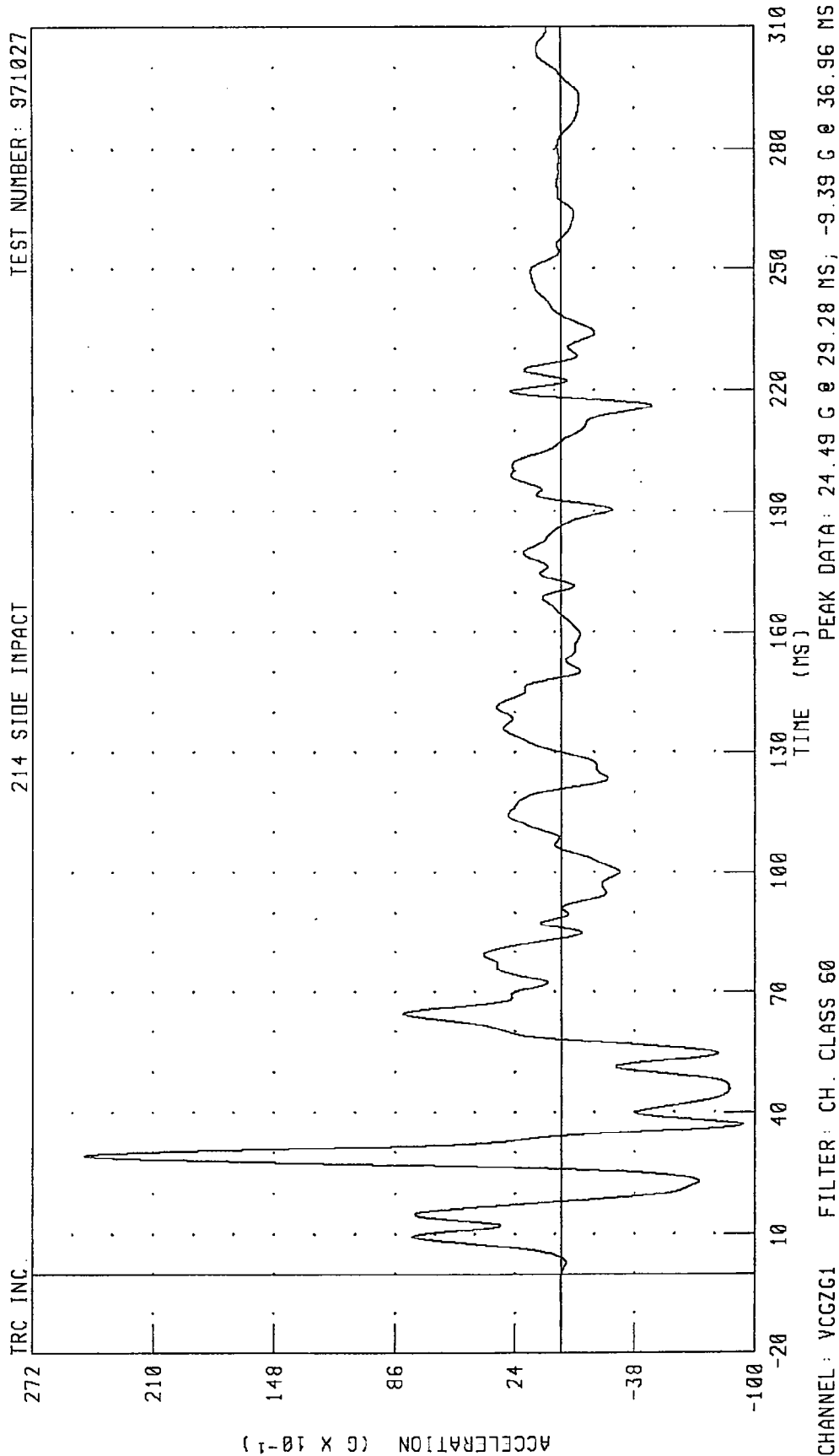
MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 VEHICLE CENTER OF GRAVITY Y-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER: 971027



CHANNEL: VCGYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
VEHICLE CENTER OF GRAVITY Z-AXIS ACCELERATION

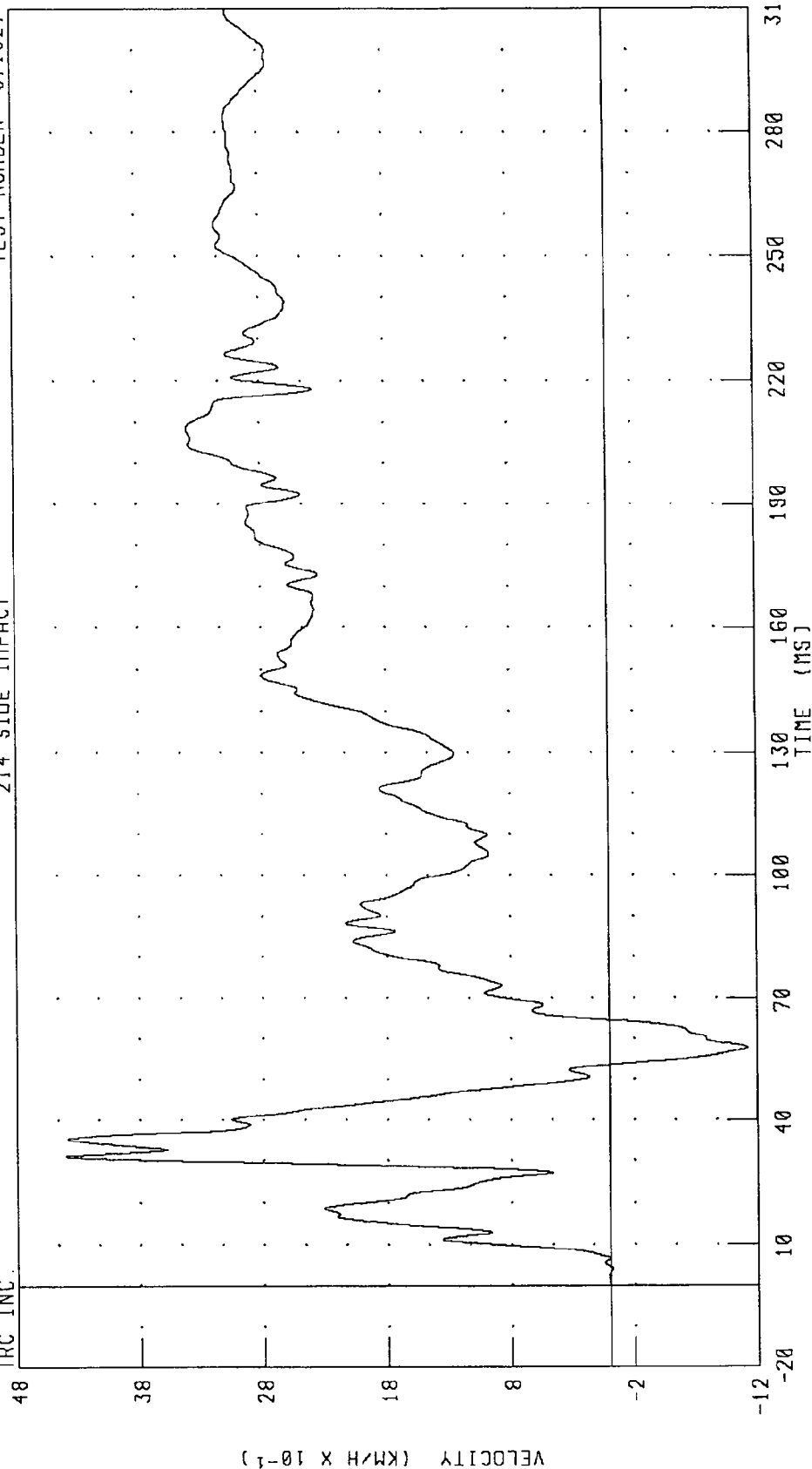


MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
VEHICLE CENTER OF GRAVITY Z-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: VCGZV1 FILTER: CH. CLASS 180

PEAK DATA: 4.41 KM/H @ 31.12 MS, -1.12 KM/H @ 57.76 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
VEHICLE CENTER OF GRAVITY RESULTANT ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

396

330

264

198

132

66

0

ACCELERATION (G X 10⁻¹)

TIME (MS)

310

280

250

220

190

160

130

100

70

40

10

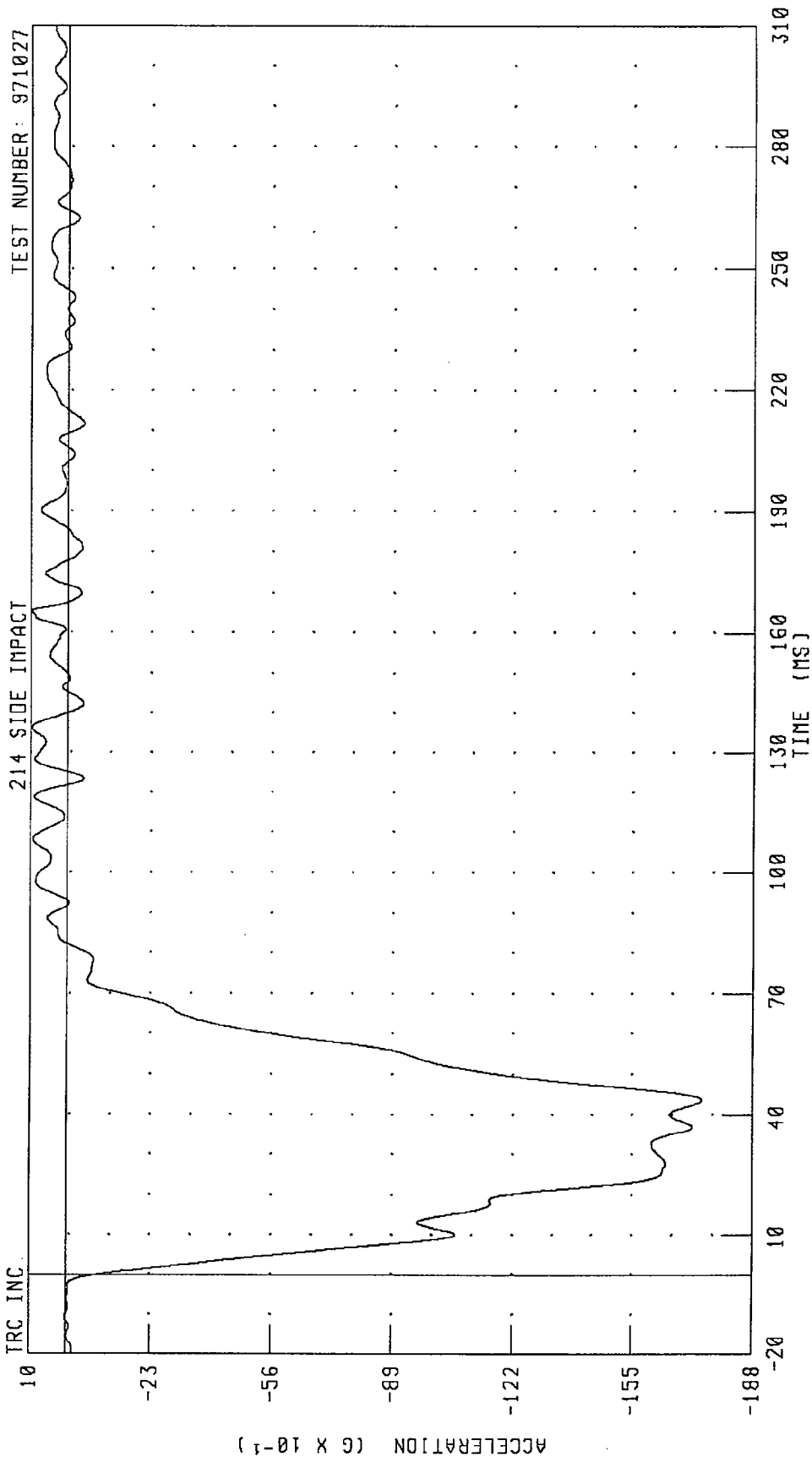
-20

PEAK DATA: 36.10 G @ 19.60 MS; 0.01 G @ -19.04 MS

CHANNEL: VCGRG1 FILTER: CH. CLASS 60

MDB Instrumentation Plots
Acceleration Data - Filter Class 60
Integration Data - Filter Class 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
MOVING DEFORMABLE BARRIER CENTER OF GRAVITY X-AXIS ACCELERATION



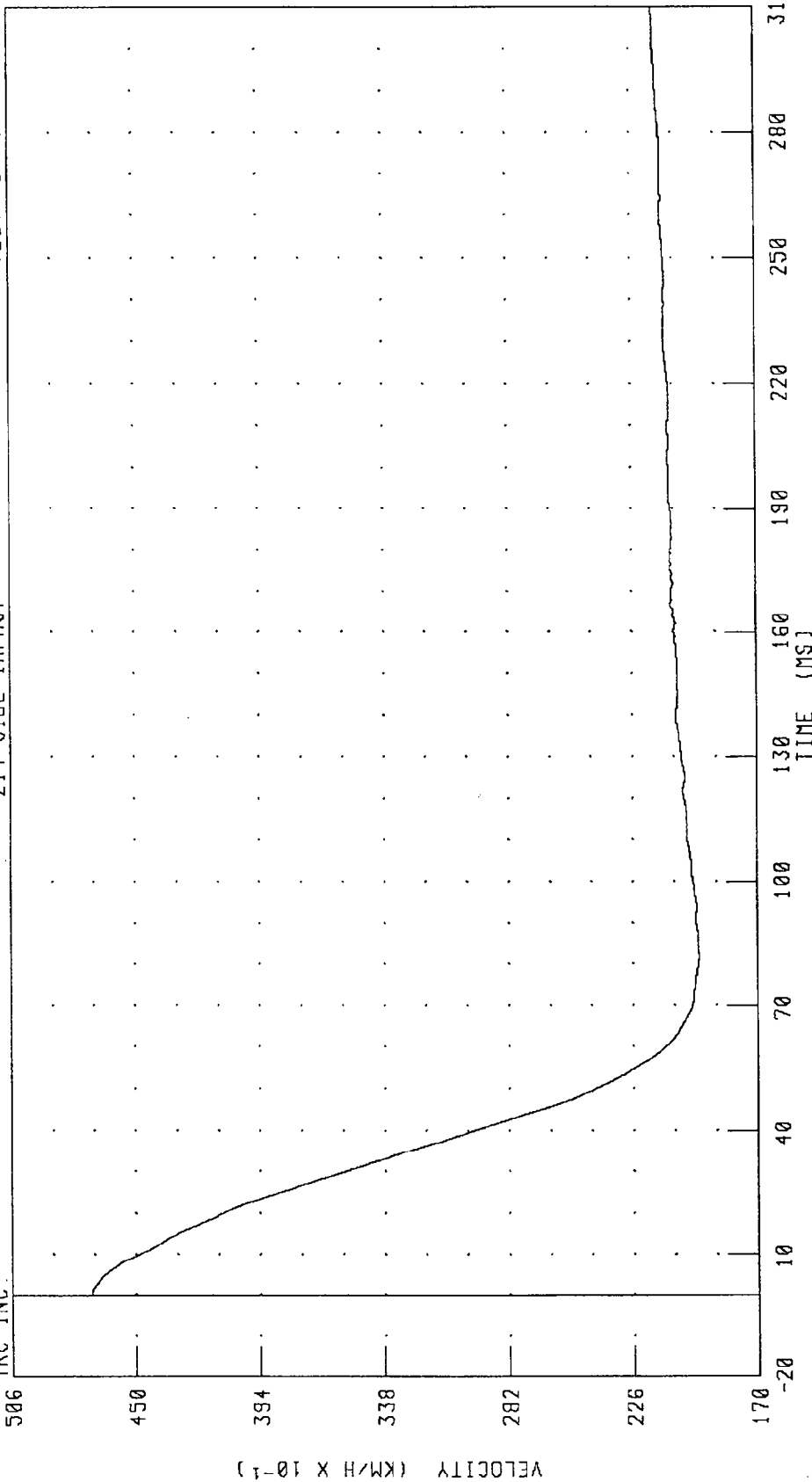
CHANNEL: BCGXG1 FILTER: CH. CLASS 60

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
MOVING DEFORMABLE BARRIER CENTER OF GRAVITY X-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: BCGXV1 FILTER: CH. CLASS 180

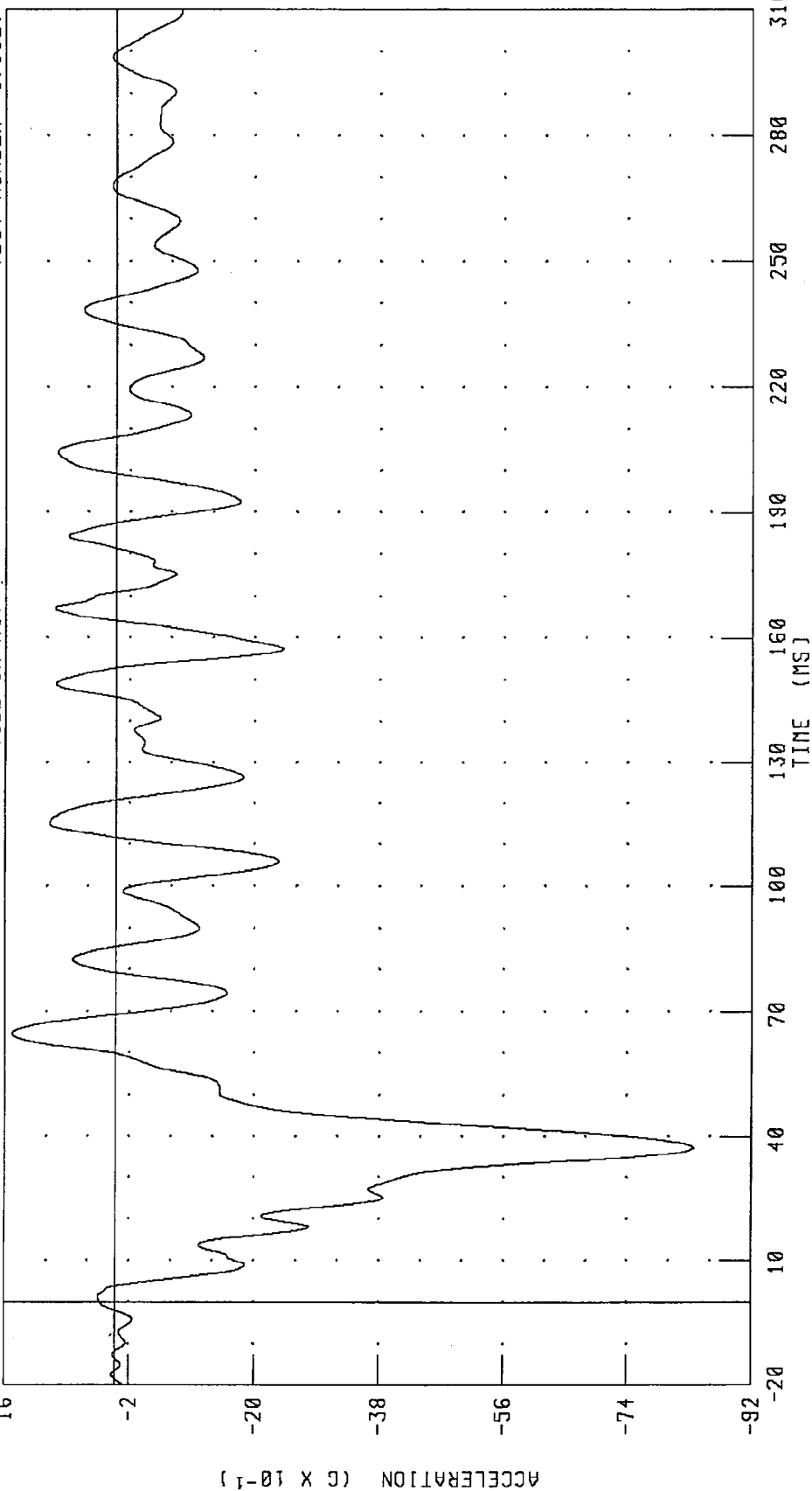
PEAK DATA: 47.00 KM/H @ 0.32 MS, 19.64 KM/H @ 81.76 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 MOVING DEFORMABLE BARRIER CENTER OF GRAVITY Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



PEAK DATA: 1.49 G @ 64.72 MS; -8.36 G @ 37.44 MS

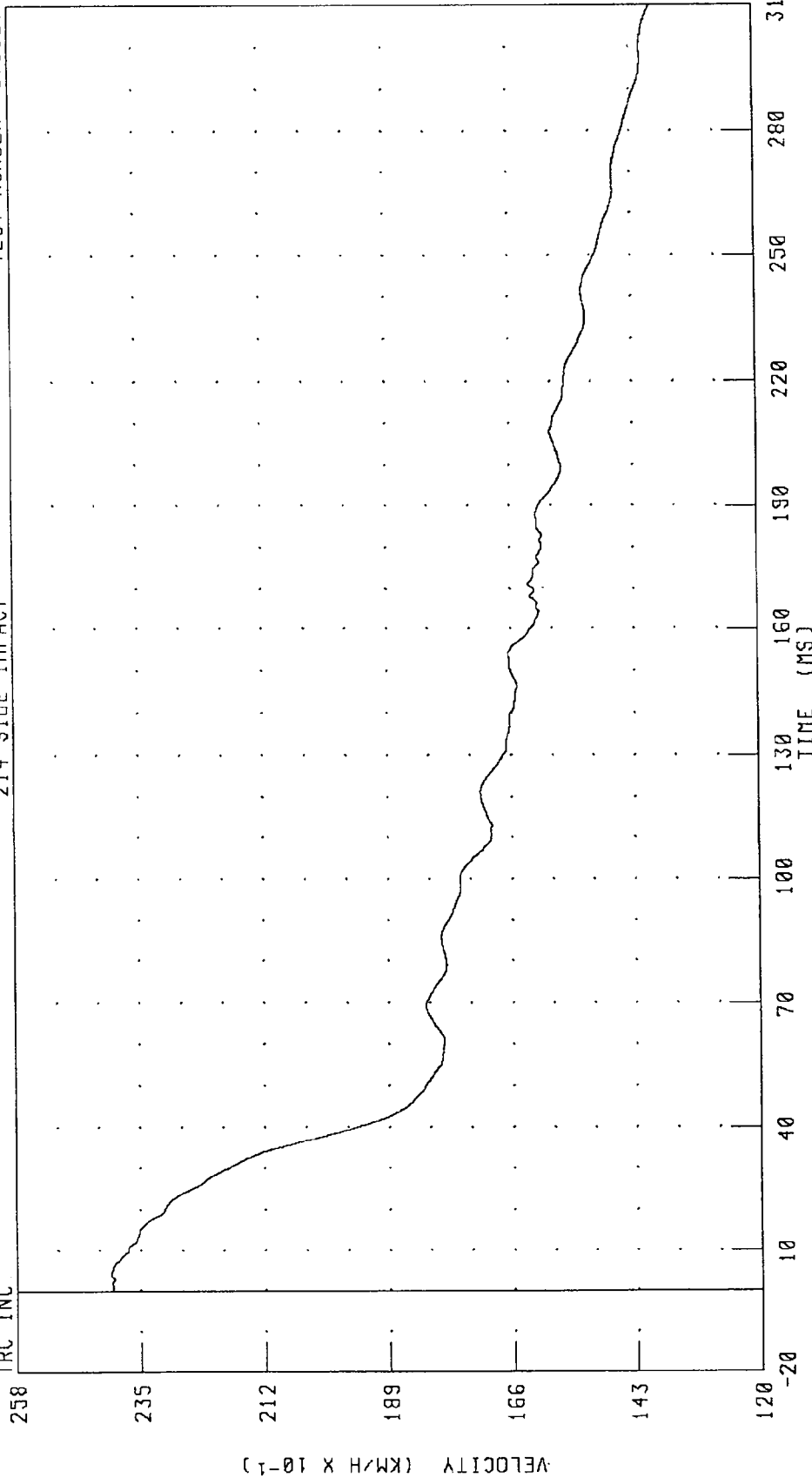
CHANNEL: BCCYG1 FILTER: CH. CLASS 60

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 MOVING DEFORMABLE BARRIER CENTER OF GRAVITY Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC



PEAK DATA: 24.04 KM/H @ 4.16 MS; 13.90 KM/H @ 310.00 MS

CHANNEL: BCCYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
MOVING DEFORMABLE BARRIER CENTER OF GRAVITY Z-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

120

76

32

-12

-56

-100

-144

ACCELERATION (G X 10⁻¹)

310

280

250

220

190

160

130

100

70

40

10

-20

TIME (MS)

CHANNEL: BCGZG1 FILTER: CH. CLASS 60

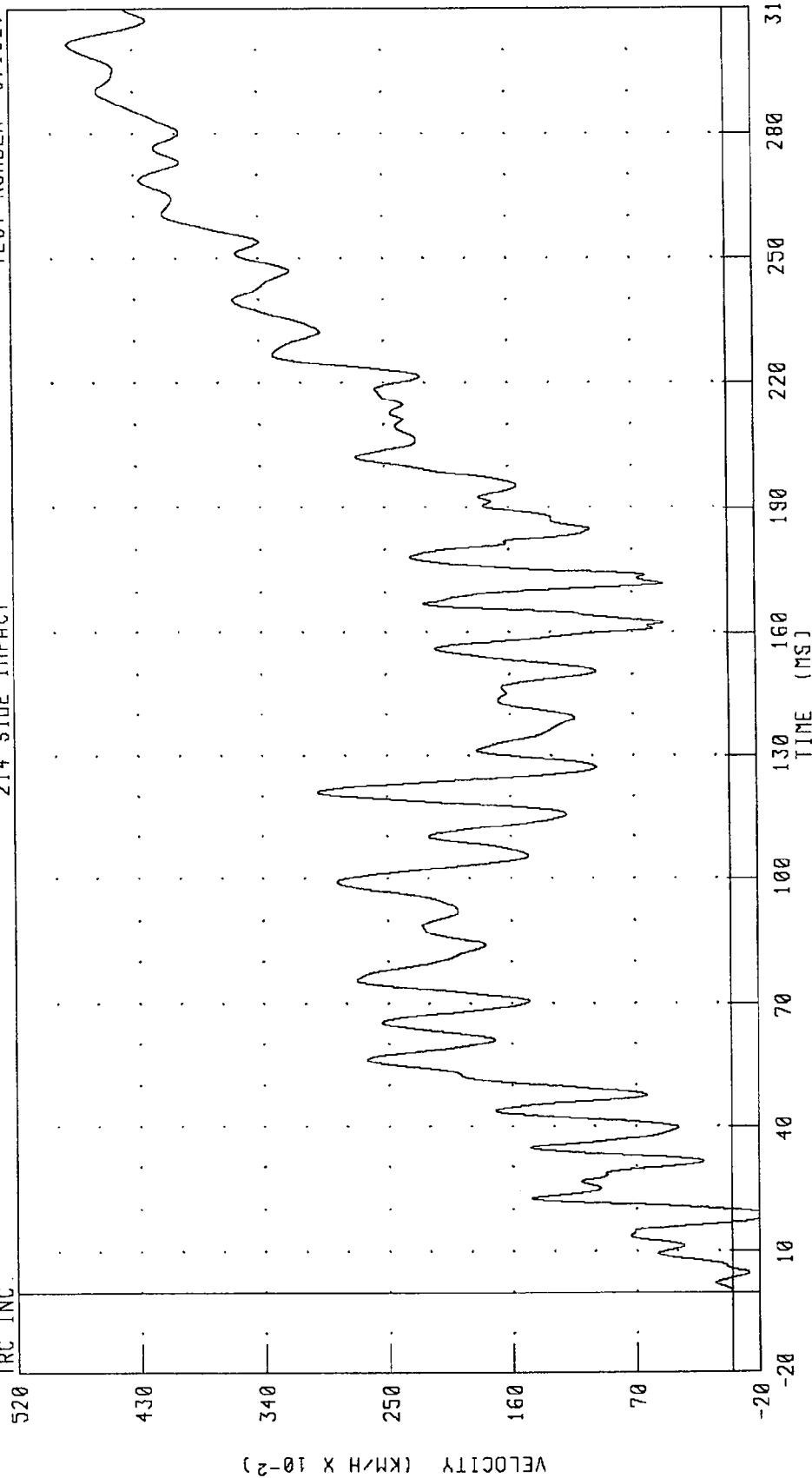
PEAK DATA: 11.77 G @ 175.60 MS; -12.34 G @ 124.00 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 MOVING DEFORMABLE BARRIER CENTER OF GRAVITY Z-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



PEAK DATA: 4.78 KM/H @ 301.52 MS; -0.25 KM/H @ 18.64 MS

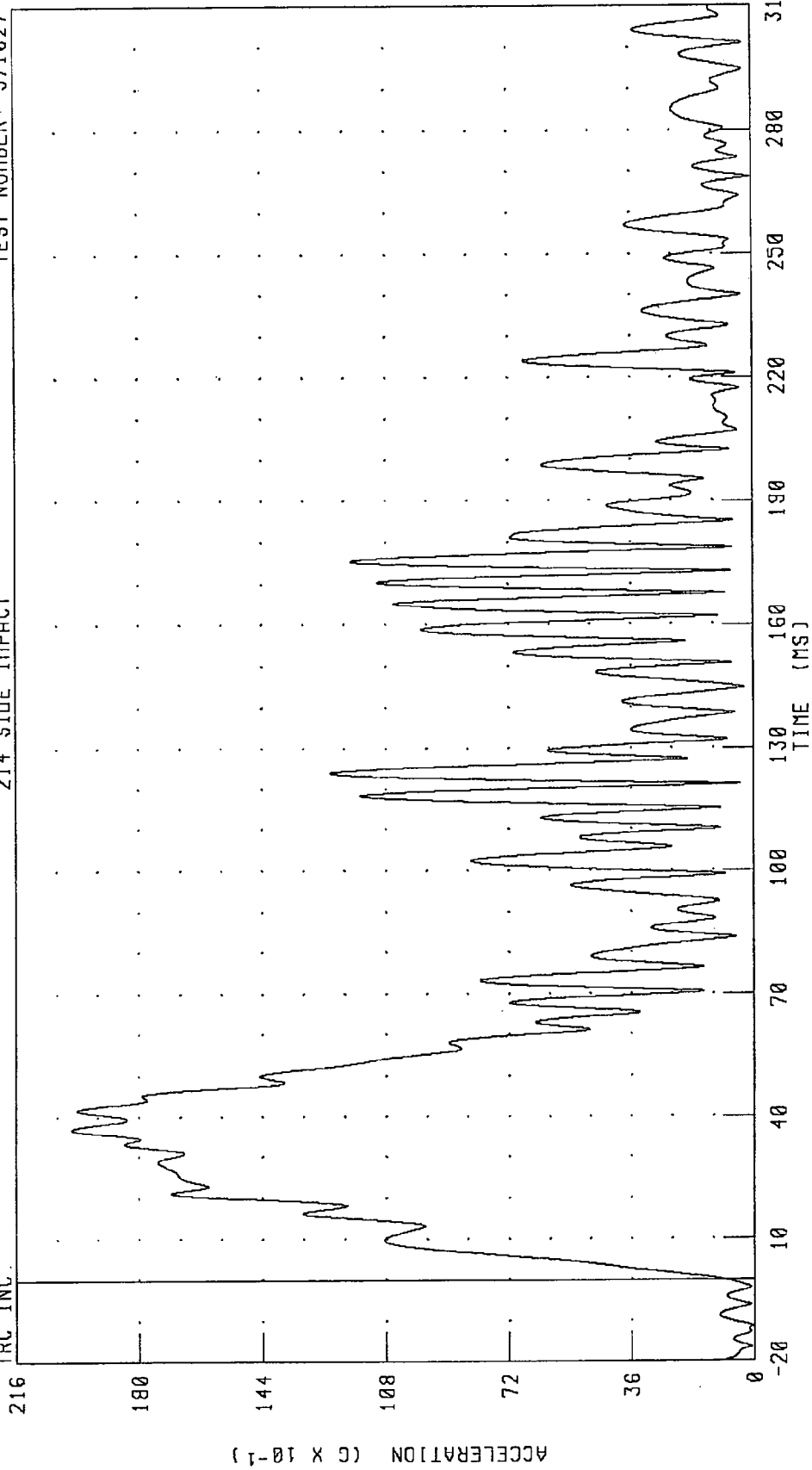
CHANNEL: BCGZV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 MOVING DEFORMABLE BARRIER CENTER OF GRAVITY RESULTANT ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: BCCRG1 FILTER: CH. CLASS 60

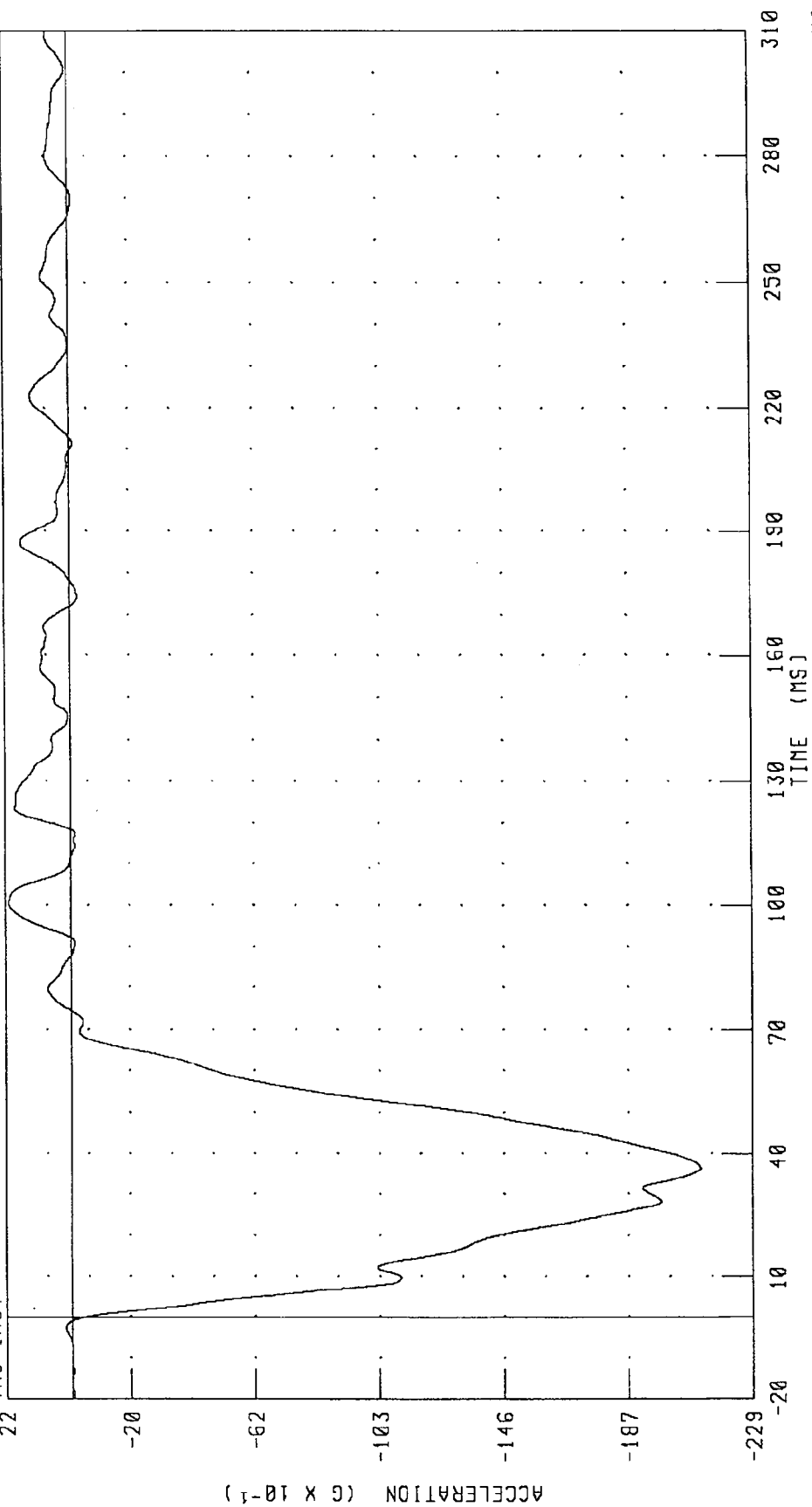
PEAK DATA: 19.99 G @ 37.04 MS; 0.04 G @ -11.44 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
MOVING DEFORMABLE BARRIER REAR X-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



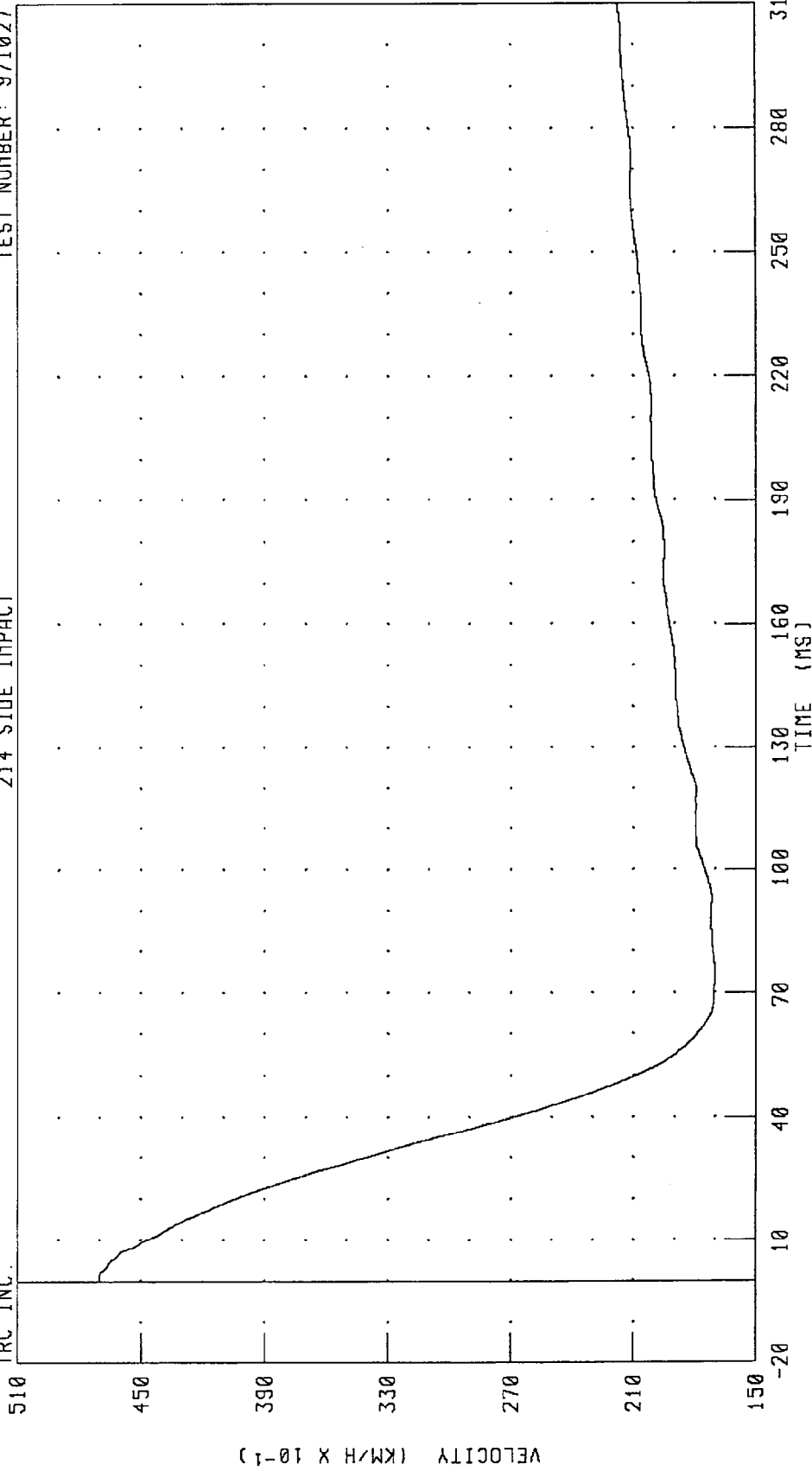
CHANNEL: LRRXG1 FILTER: CH. CLASS 60

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
MOVING DEFORMABLE BARRIER REAR X-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: LRRXV1 FILTER: CH. CLASS 180

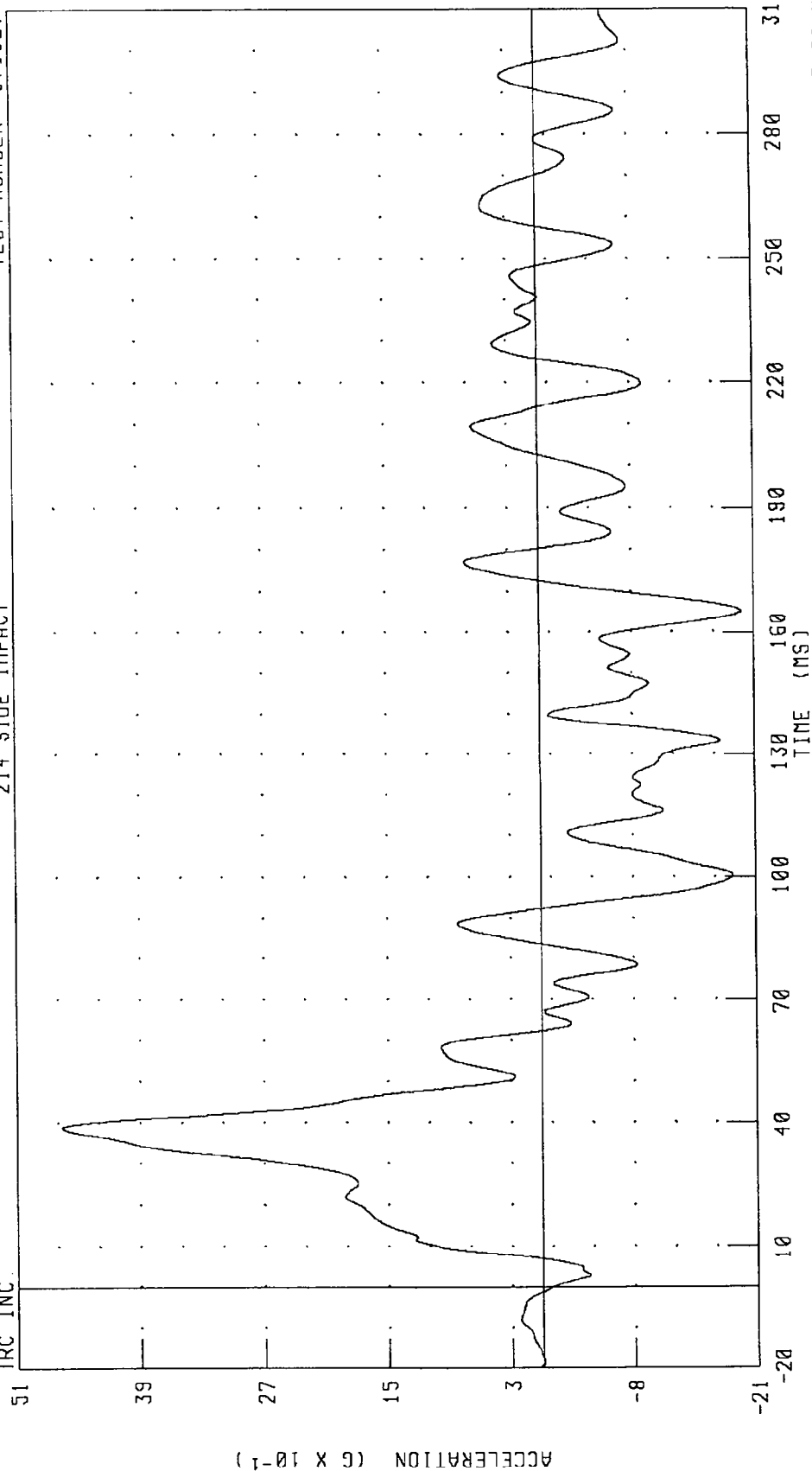
PEAK DATA: 47.01 KM/H @ 1.04 MS; 16.99 KM/H @ 74.96 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
MOVING DEFORMABLE BARRIER REAR Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: LRRYG1 FILTER: CH. CLASS 60

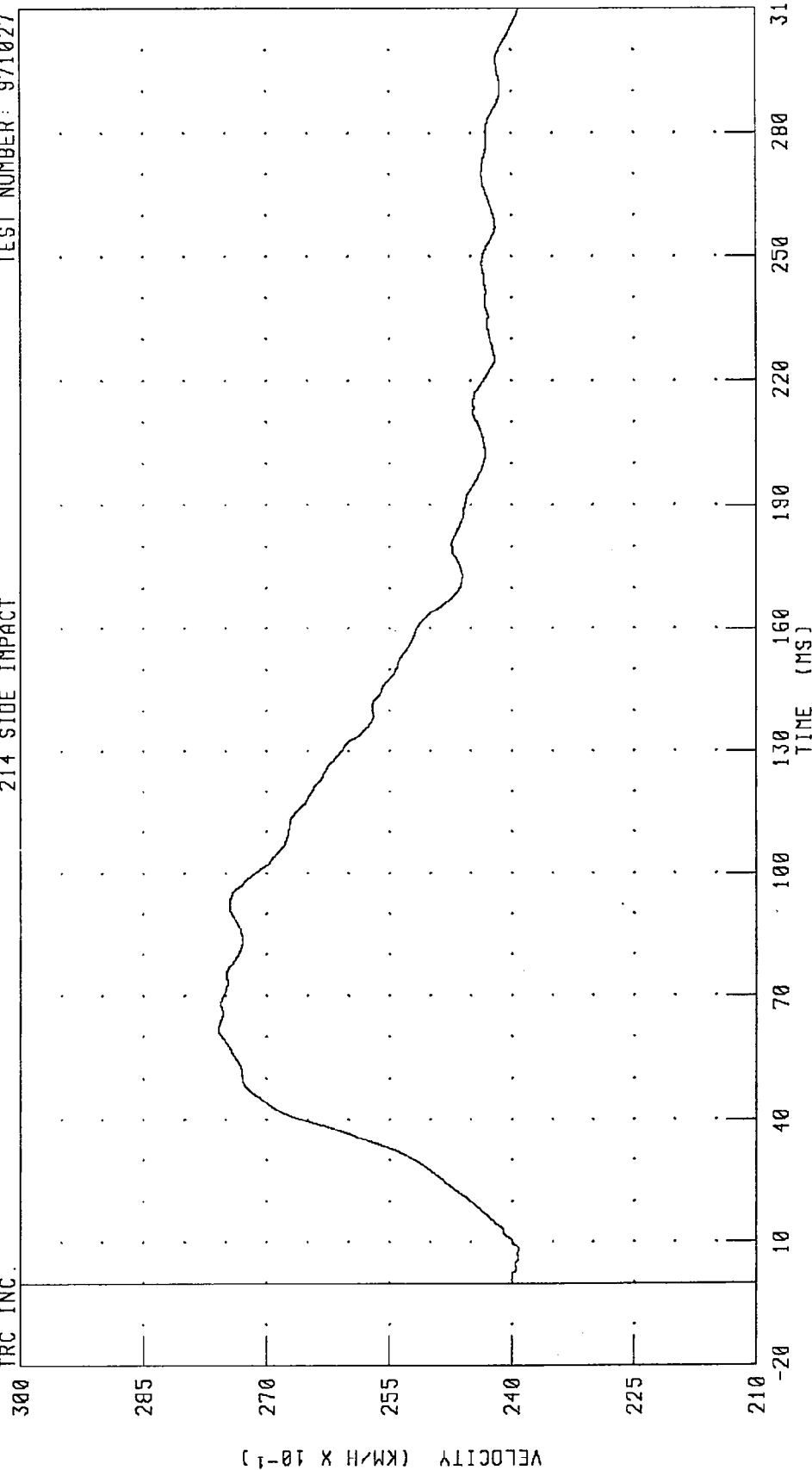
PEAK DATA: 4.66 G @ 38.80 MS; -1.97 G @ 165.28 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
MOVING DEFORMABLE BARRIER REAR Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: LRRYV1 FILTER: CH. CLASS 180

PEAK DATA: 27.59 KM/H @ 61.84 MS; 23.90 KM/H @ 310.00 MS

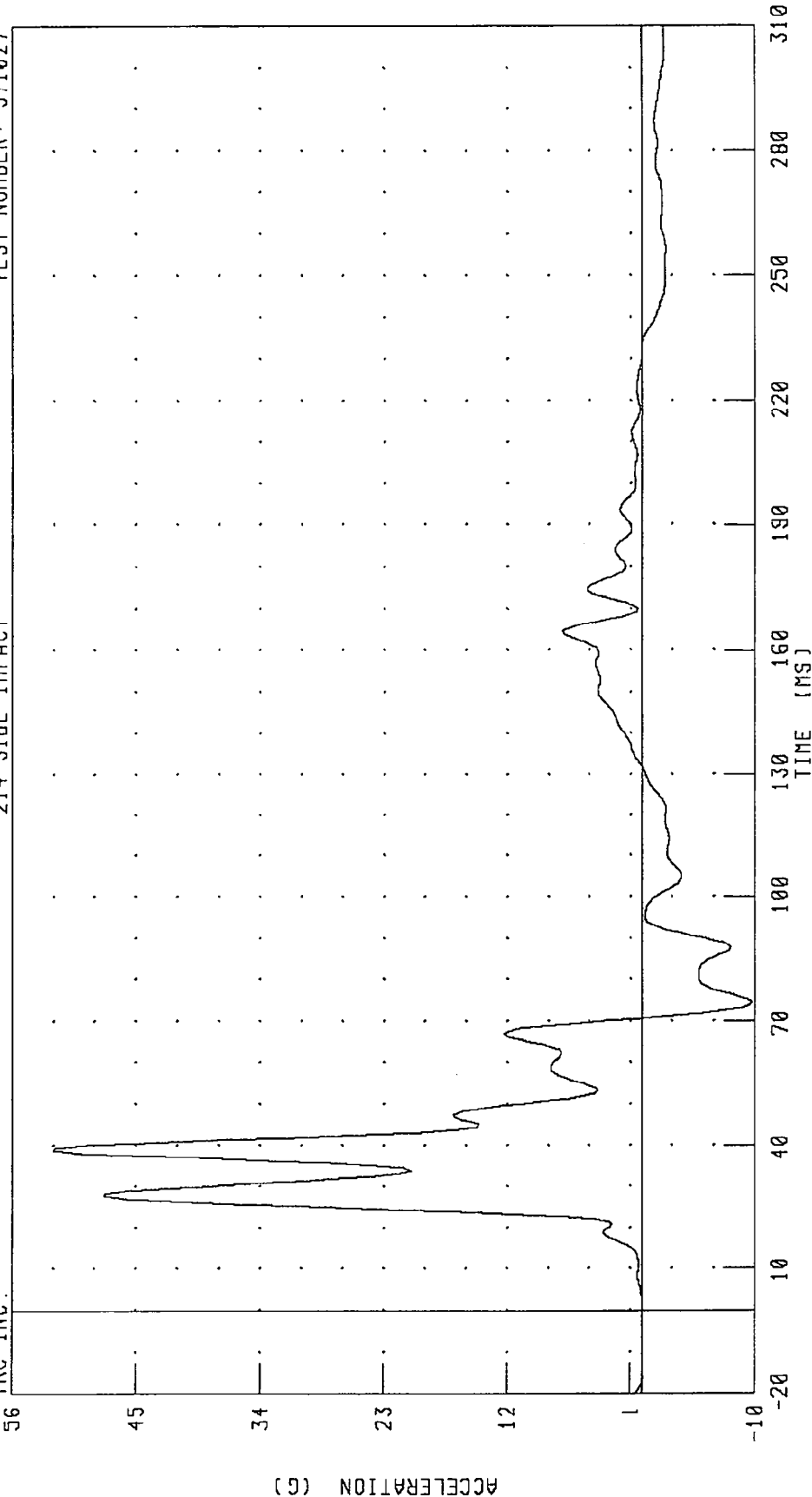
Driver and Passenger Dummy Instrumentation Plots
Acceleration Data - FIR Filtered - Primary

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER UPPER RIB Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

IRC INC.



CHANNEL: LURYG1 FILTER: FIR 100

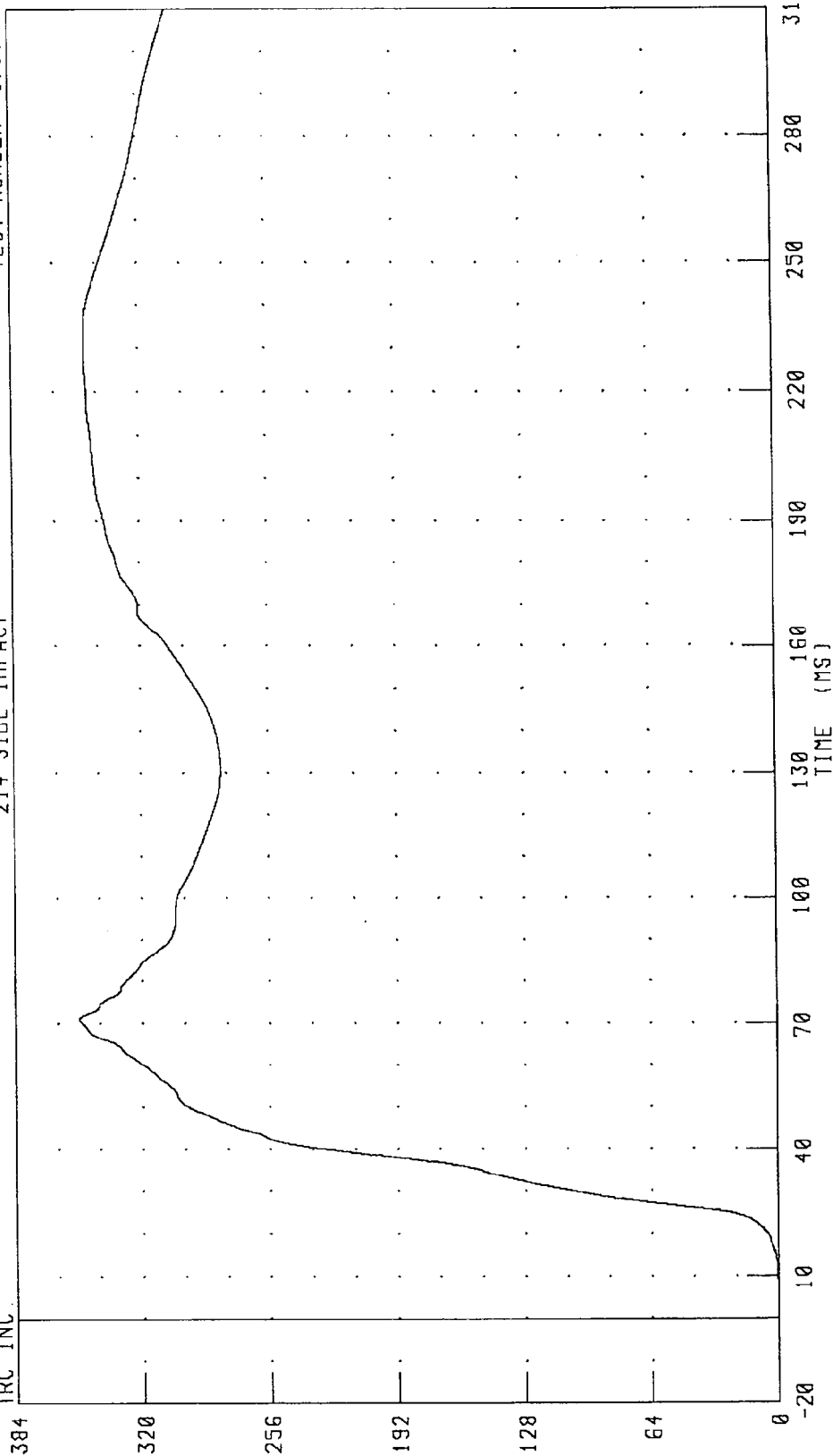
PEAK DATA: 52.32 G @ 38.75 MS; -9.65 G @ 74.37 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
DRIVER UPPER RIB Y-AXIS VELOCITY
214 SIDE IMPACT

TEST NUMBER: 971027

TRC INC.

VELOCITY (KM/H X 10⁻¹)



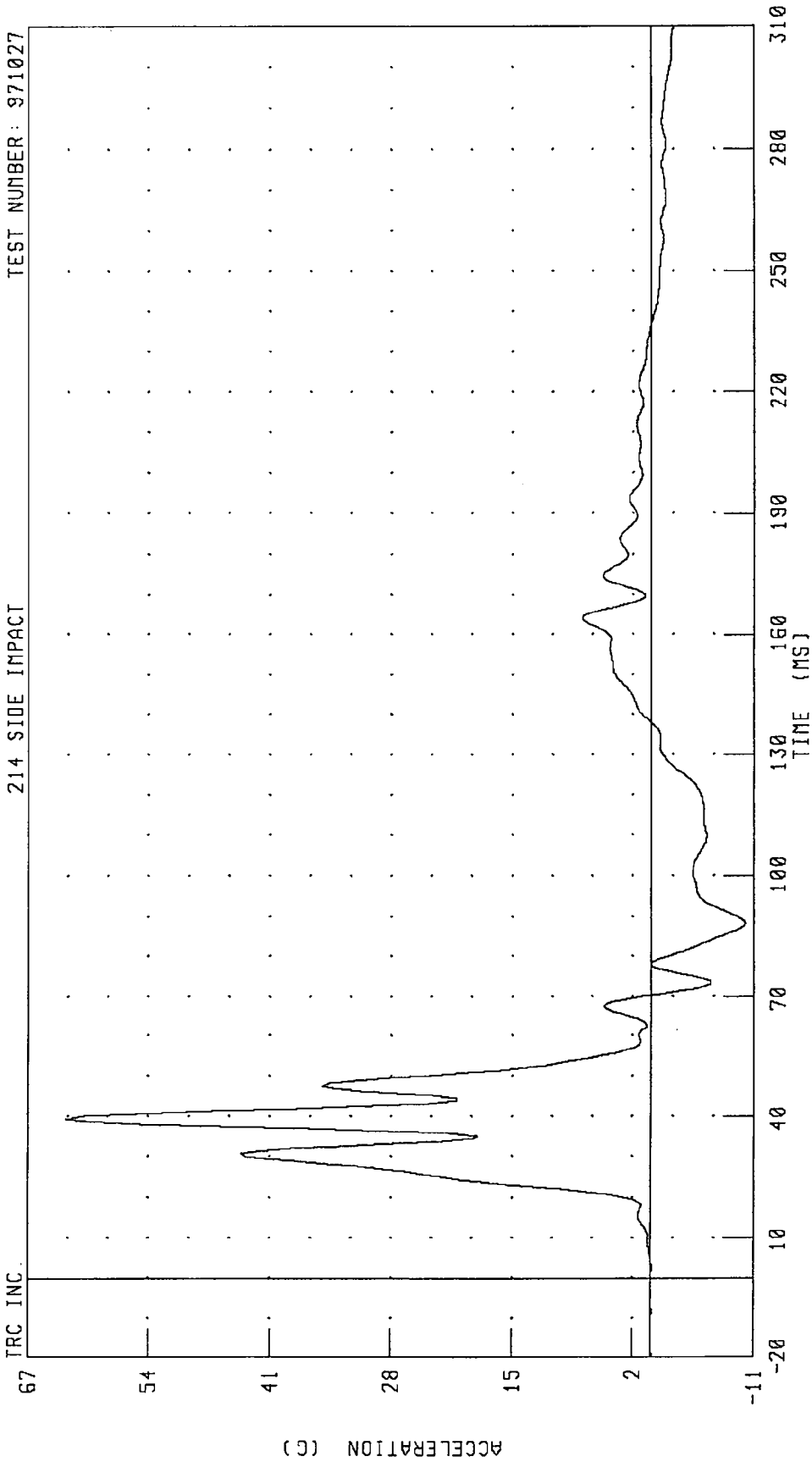
PEAK DATA: 35.20 KM/H @ 70.96 MS; 0.00 KM/H @ 1.68 MS

CHANNEL: LURYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
DRIVER LOWER RIB Y-AXIS ACCELERATION
214 SIDE IMPACT

TEST NUMBER: 971027

TRC INC.

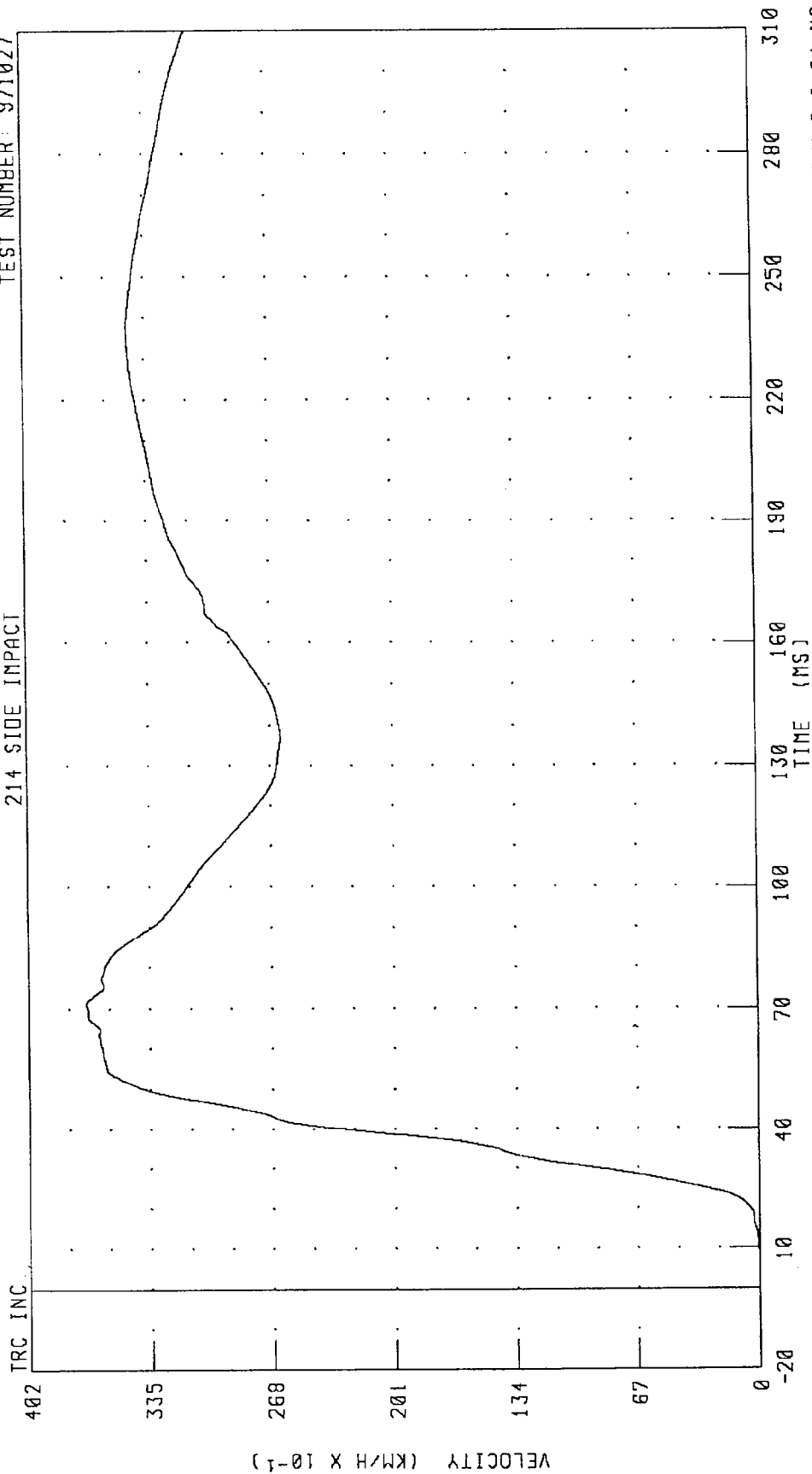


CHANNEL: LLRYG1 FILTER: FIR 100

PEAK DATA: 62.92 G @ 39.38 MS; -10.05 G @ 88.13 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER LOWER RIB Y-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER: 971027



CHANNEL: LLRYV1 FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
DRIVER LOWER SPINE Y-AXIS ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

71

57

43

29

15

1

-13

ACCELERATION (G)

TIME (MS)

310

280

250

220

190

160

130

100

70

40

10

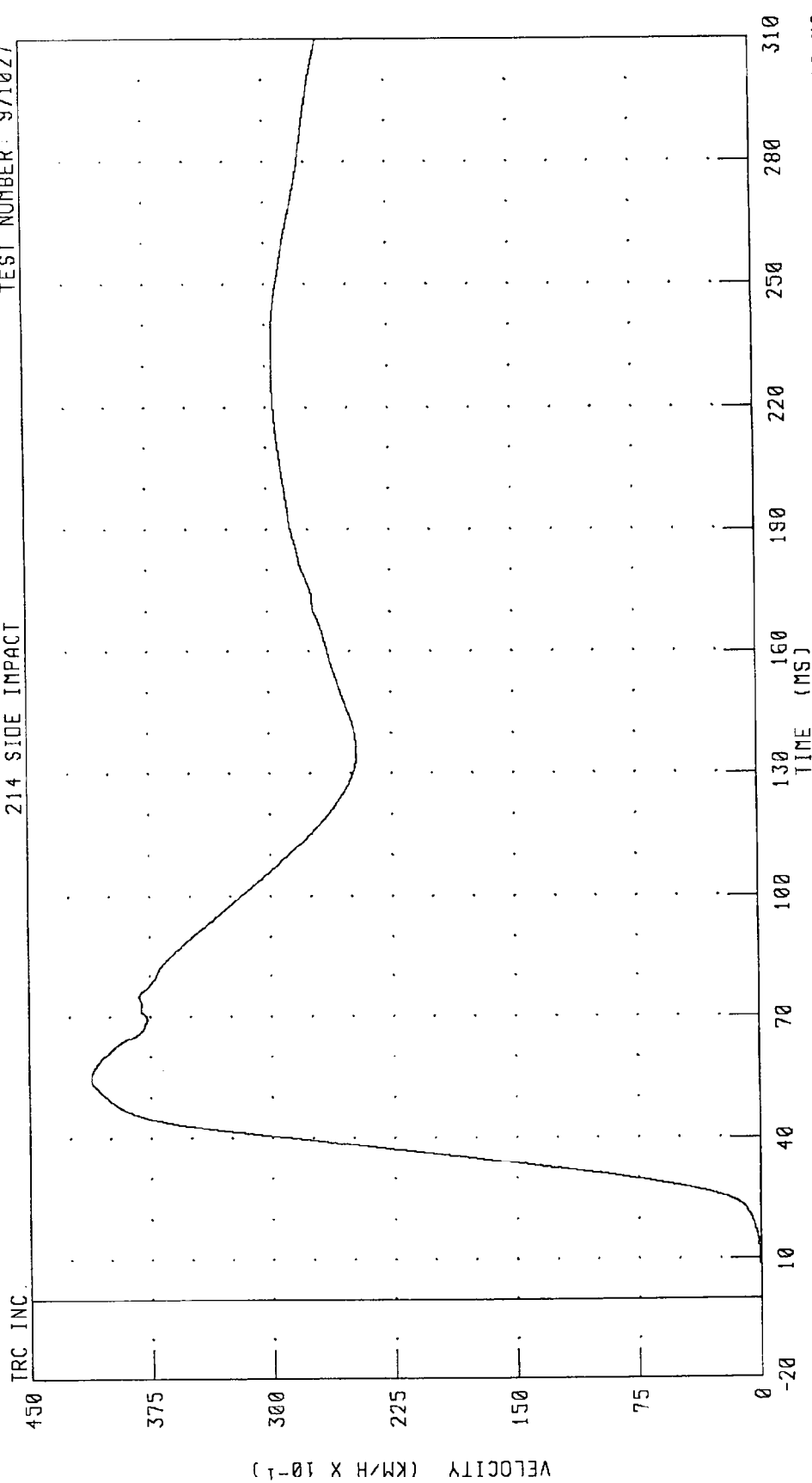
-20

CHANNEL: T12YG1 FILTER: FIR 100

PEAK DATA: 66.93 G @ 40.00 MS; -12.52 G @ 64.38 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER LOWER SPINE Y-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER: 971027

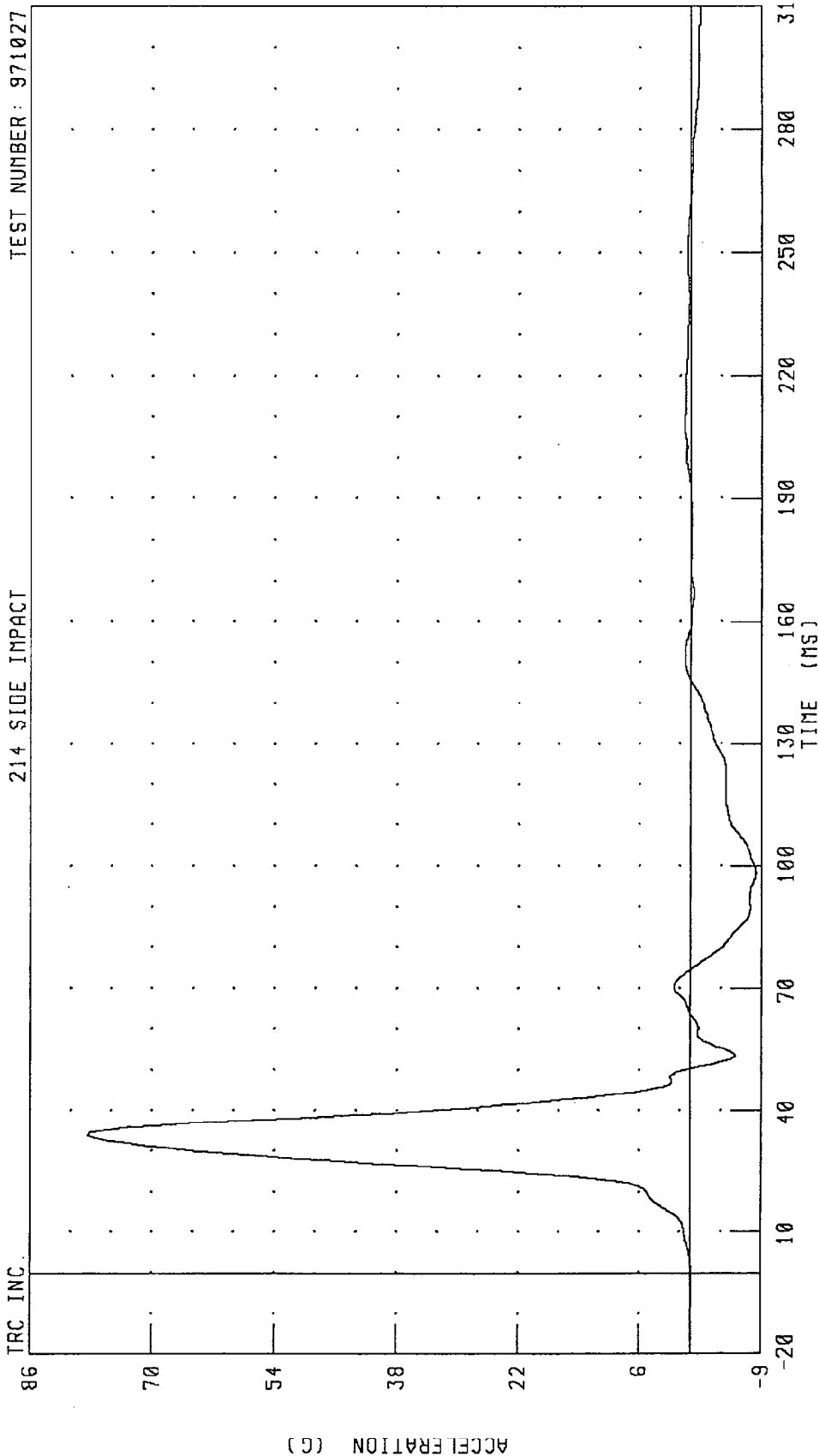


CHANNEL: T12YV1 FILTER: CH. CLASS 180

PEAK DATA: 41.20 KM/H @ 54.64 MS; 0.00 KM/H @ 1.12 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER PELVIS Y-AXIS ACCELERATION
 214 SIDE IMPACT

TEST NUMBER: 971027



PEAK DATA: 79.20 G @ 33.75 MS; -8.40 G @ 98.12 MS

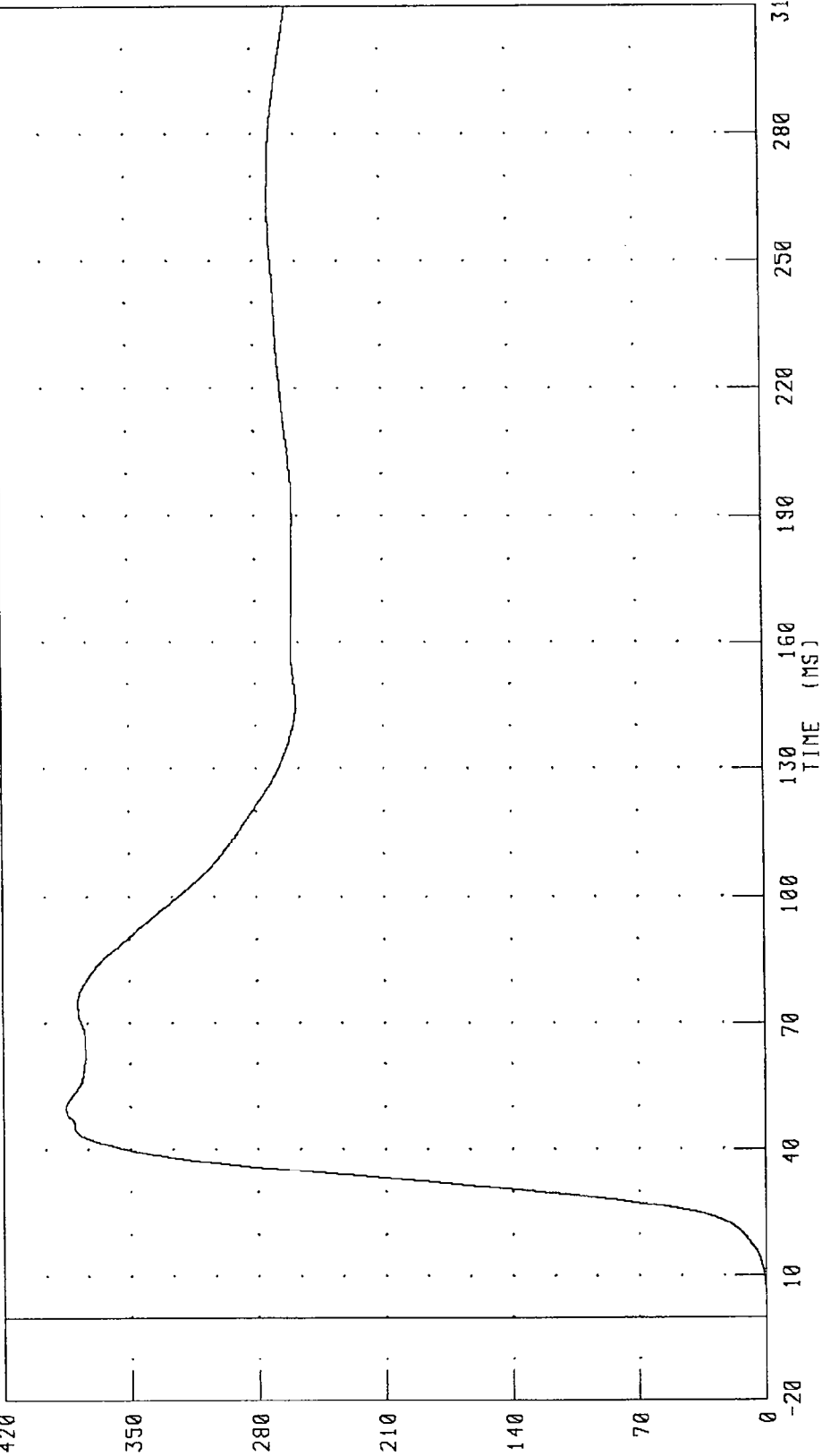
CHANNEL: PEVYG1 FILTER: FIR 100

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1988 DODGE NEON
 DRIVER PELVIS Y-AXIS VELOCITY
 214 SIDE IMPACT

TEST NUMBER: 971027

IRC INC.

VELOCITY (KM/H X 10⁻¹)



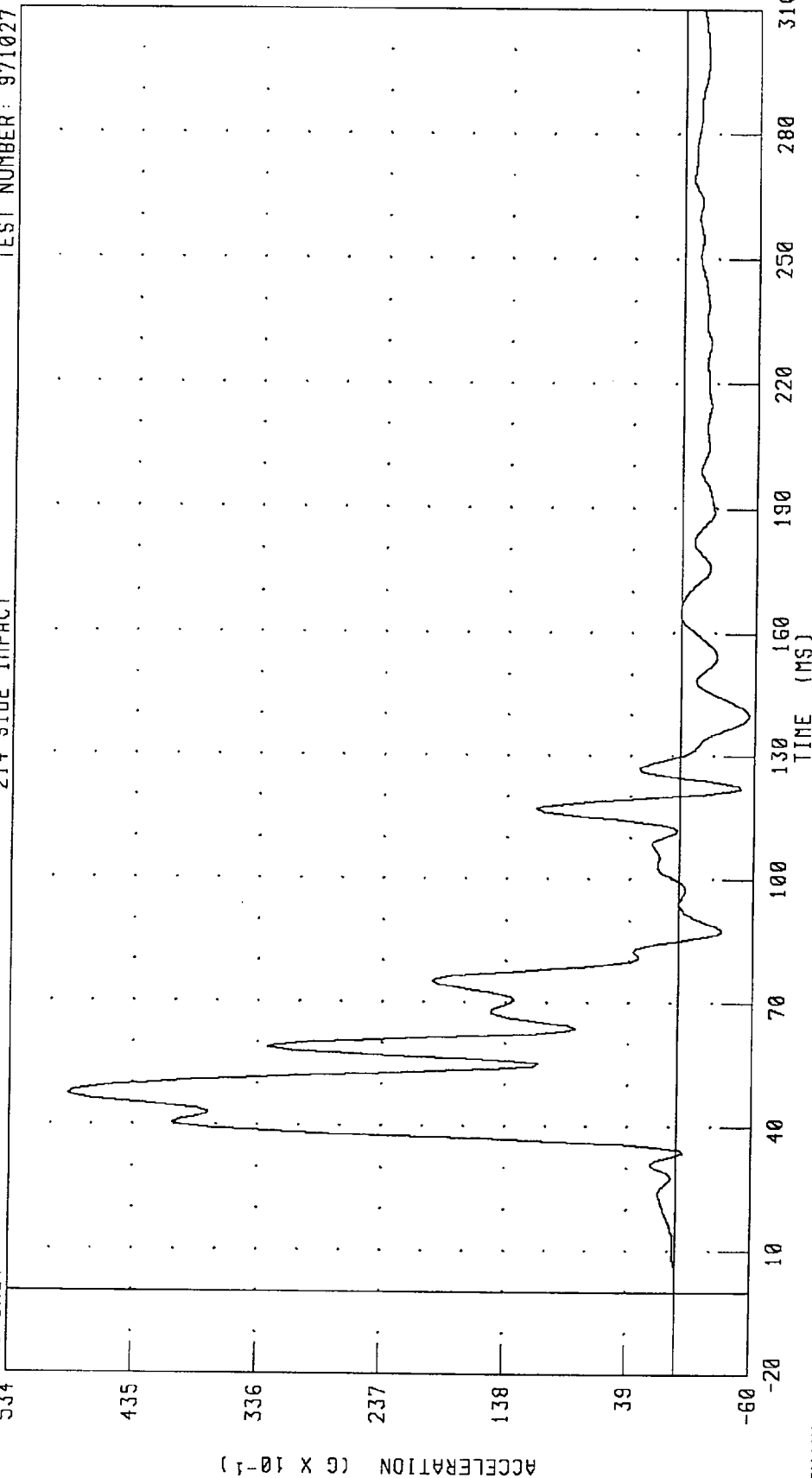
CHANNEL: PEVYV1 FILTER: CH. CLASS 180

PEAK DATA: 38.55 KM/H @ 49.84 MS; 0.00 KM/H @ 1.60 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 LEFT REAR PASSENGER UPPER RIB Y-AXIS ACCELERATION
 214 SIDE IMPACT

TEST NUMBER: 971027

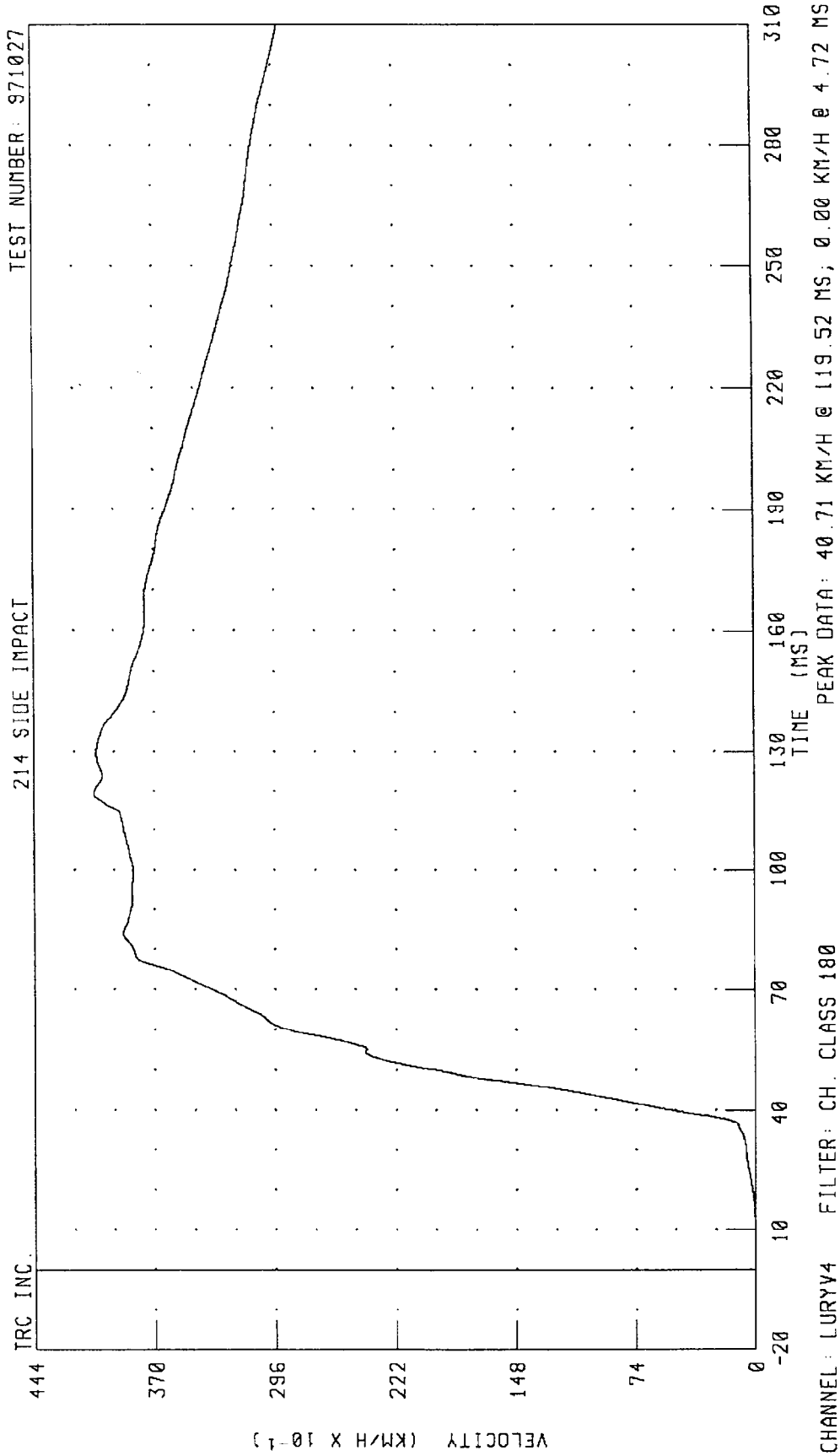
TRC INC.



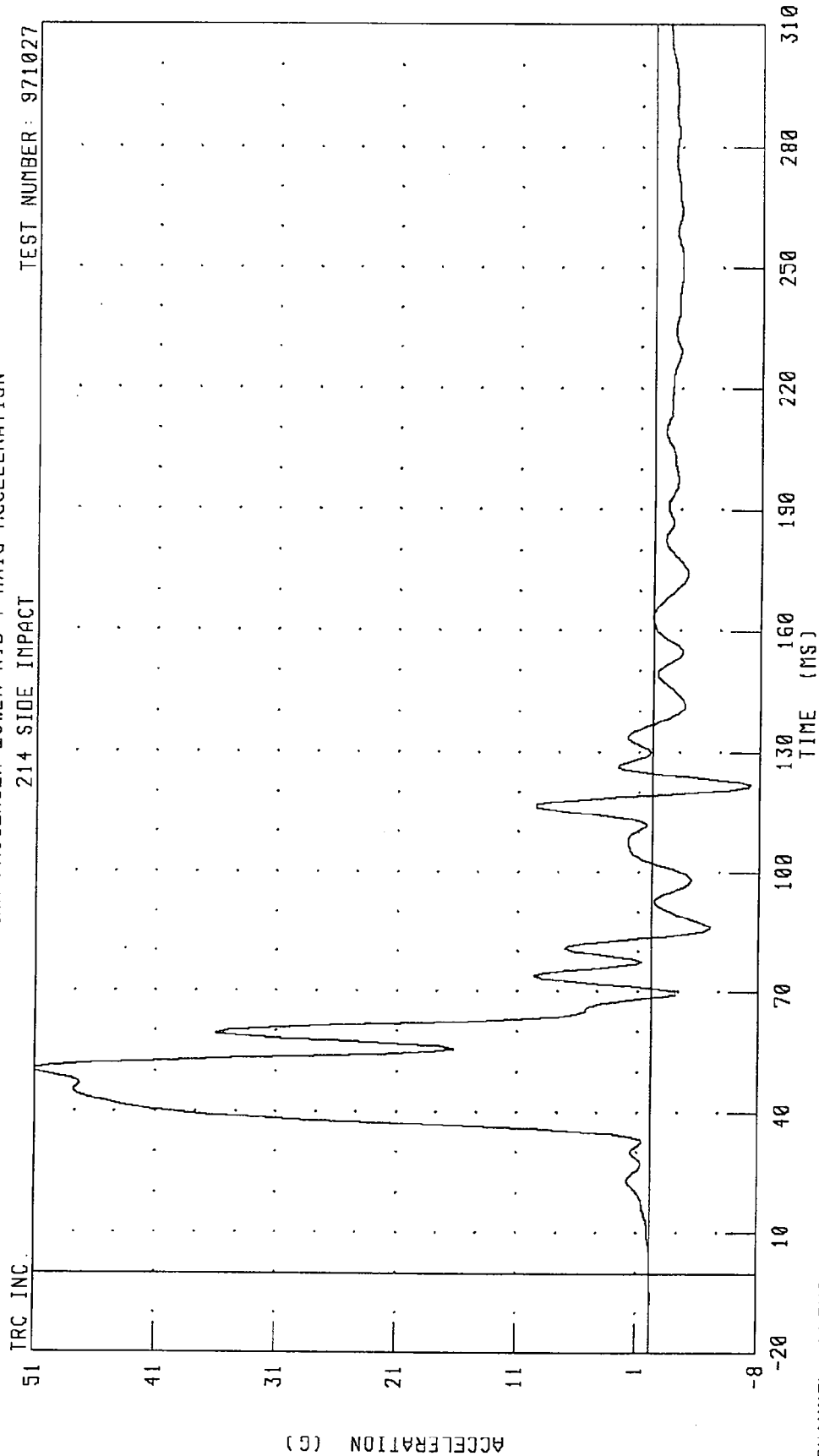
CHANNEL: LURYG4 FILTER: FIR 100

PEAK DATA: 48.68 G @ 47.50 MS; -5.50 G @ 140.00 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER UPPER RIB Y-AXIS VELOCITY



MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER LOWER RIB Y-AXIS ACCELERATION

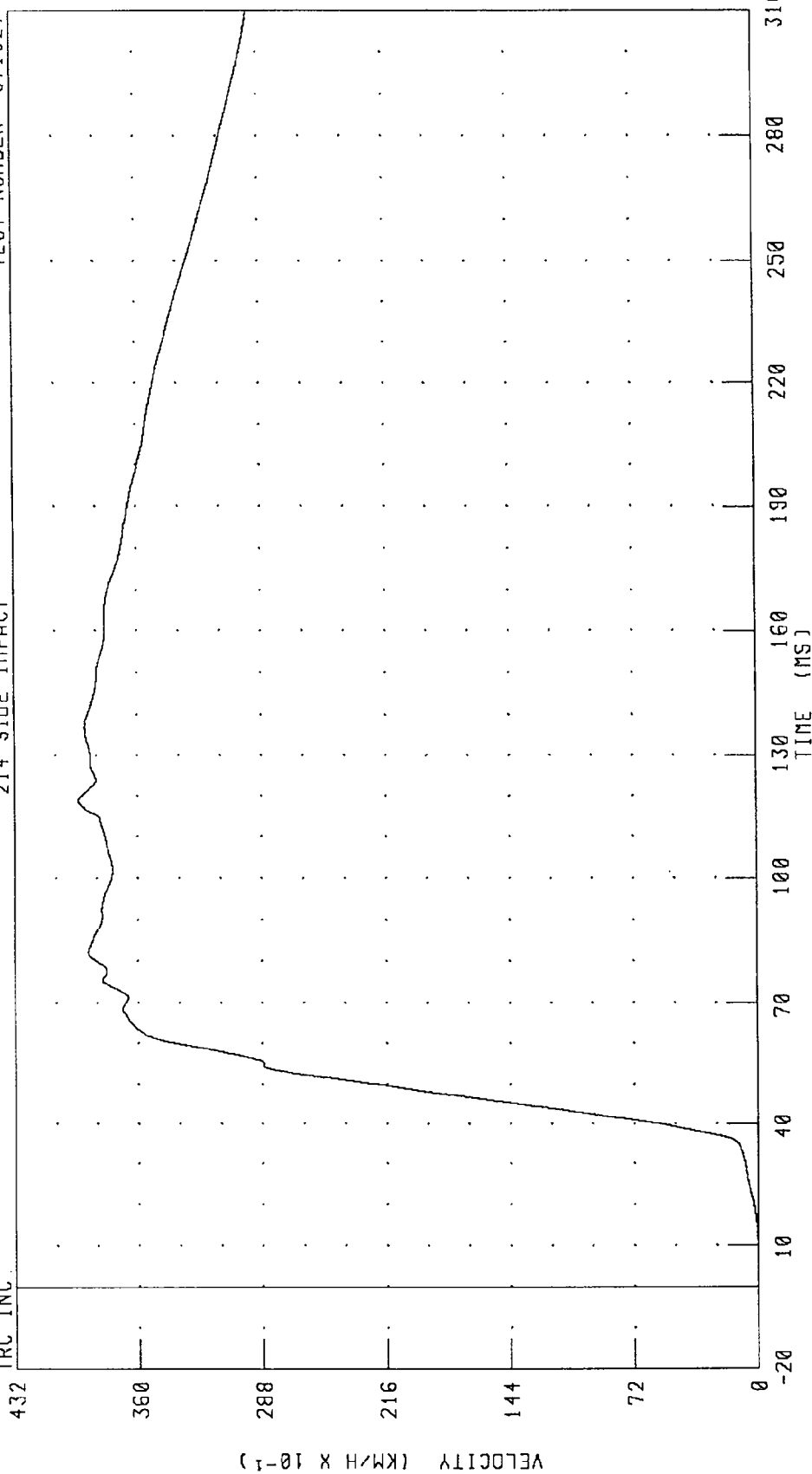


MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER LOWER RIB Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

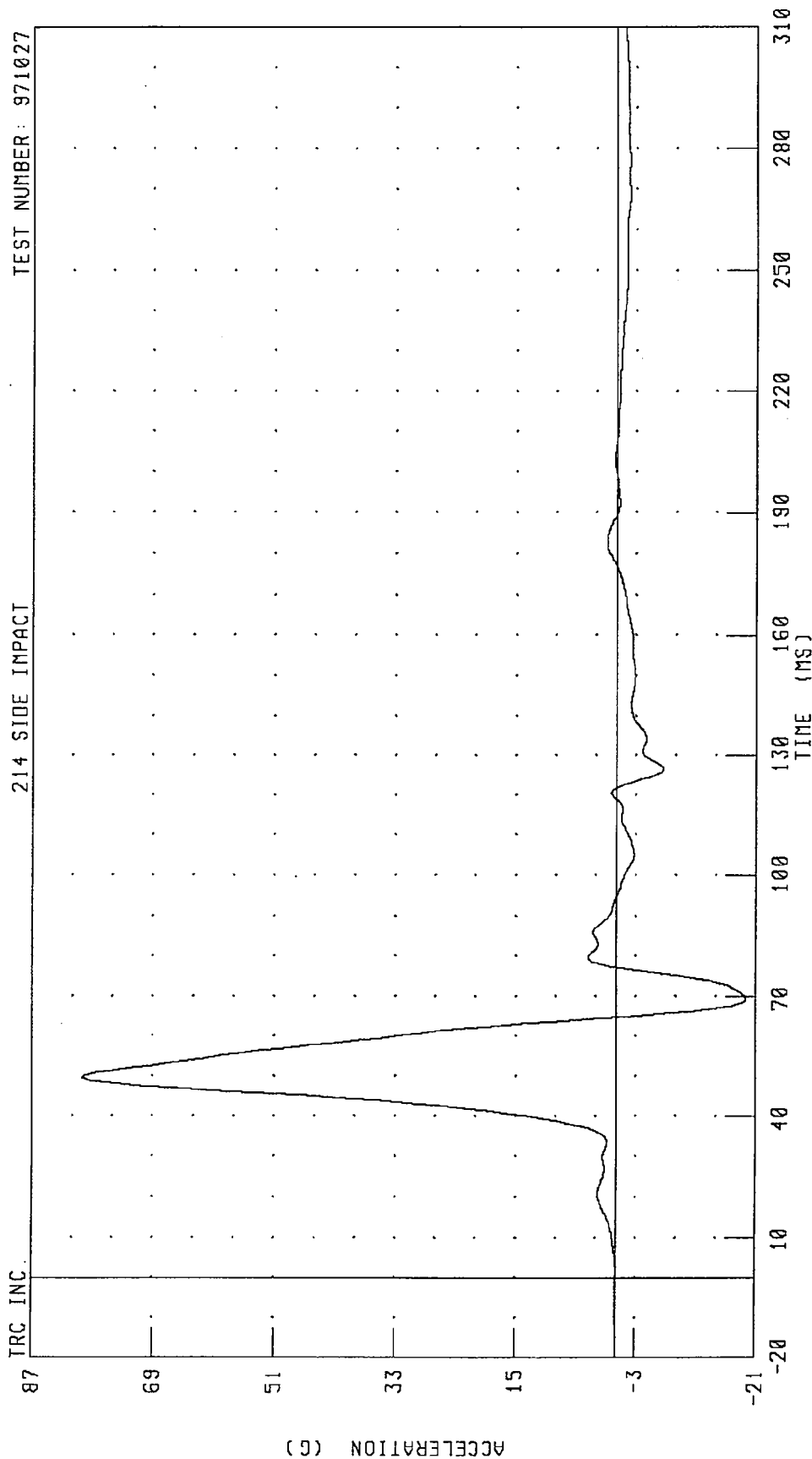
TRC INC



CHANNEL: LLRYV4 FILTER: CH. CLASS 180

PEAK DATA: 39.48 KM/H @ 118.88 MS; 0.00 KM/H @ 0.00 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1988 DODGE NEON
 LEFT REAR PASSENGER LOWER SPINE Y-AXIS ACCELERATION
 214 SIDE IMPACT



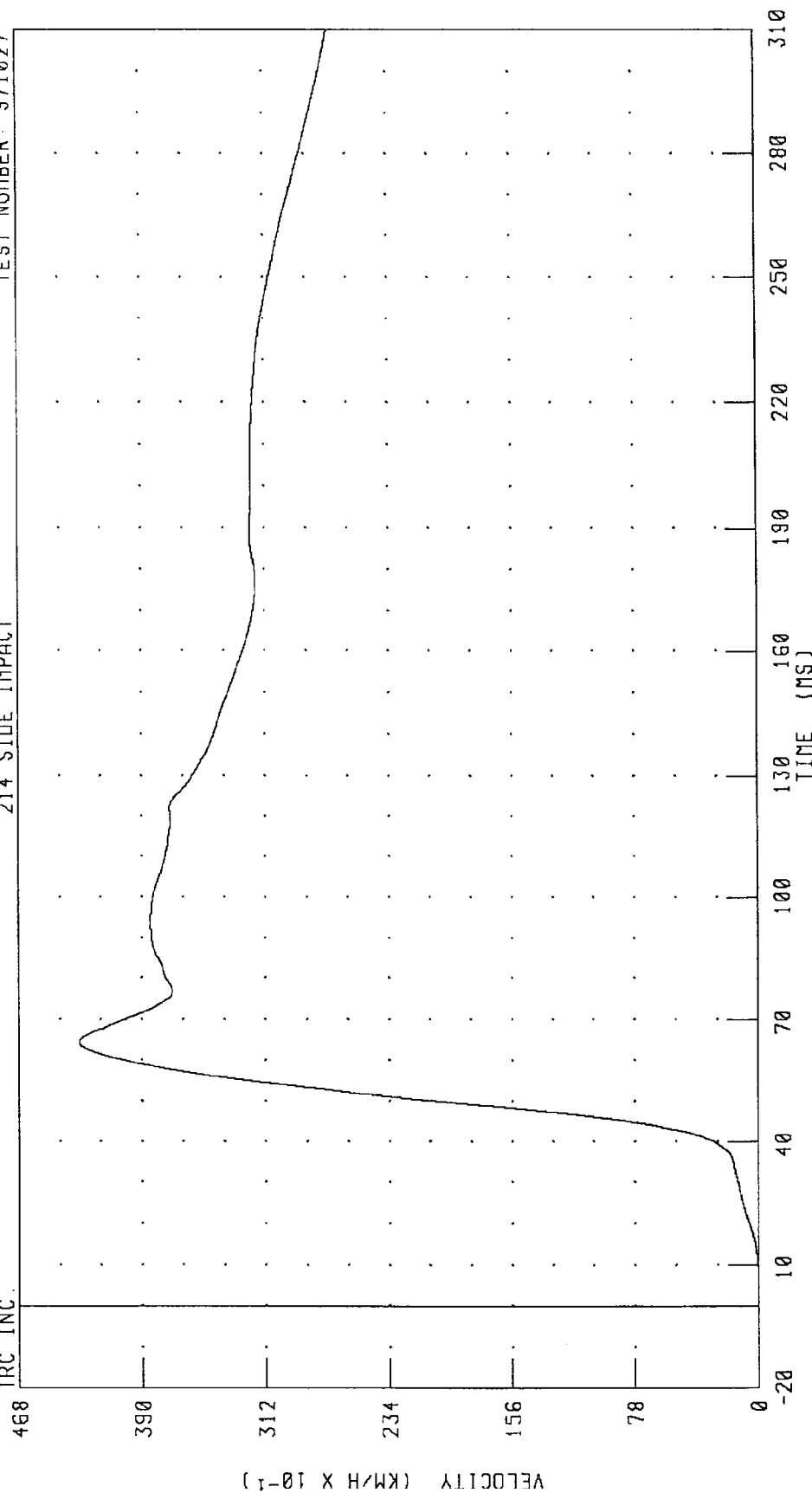
CHANNEL: T12YC4 FILTER: FIR 100

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER LOWER SPINE Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

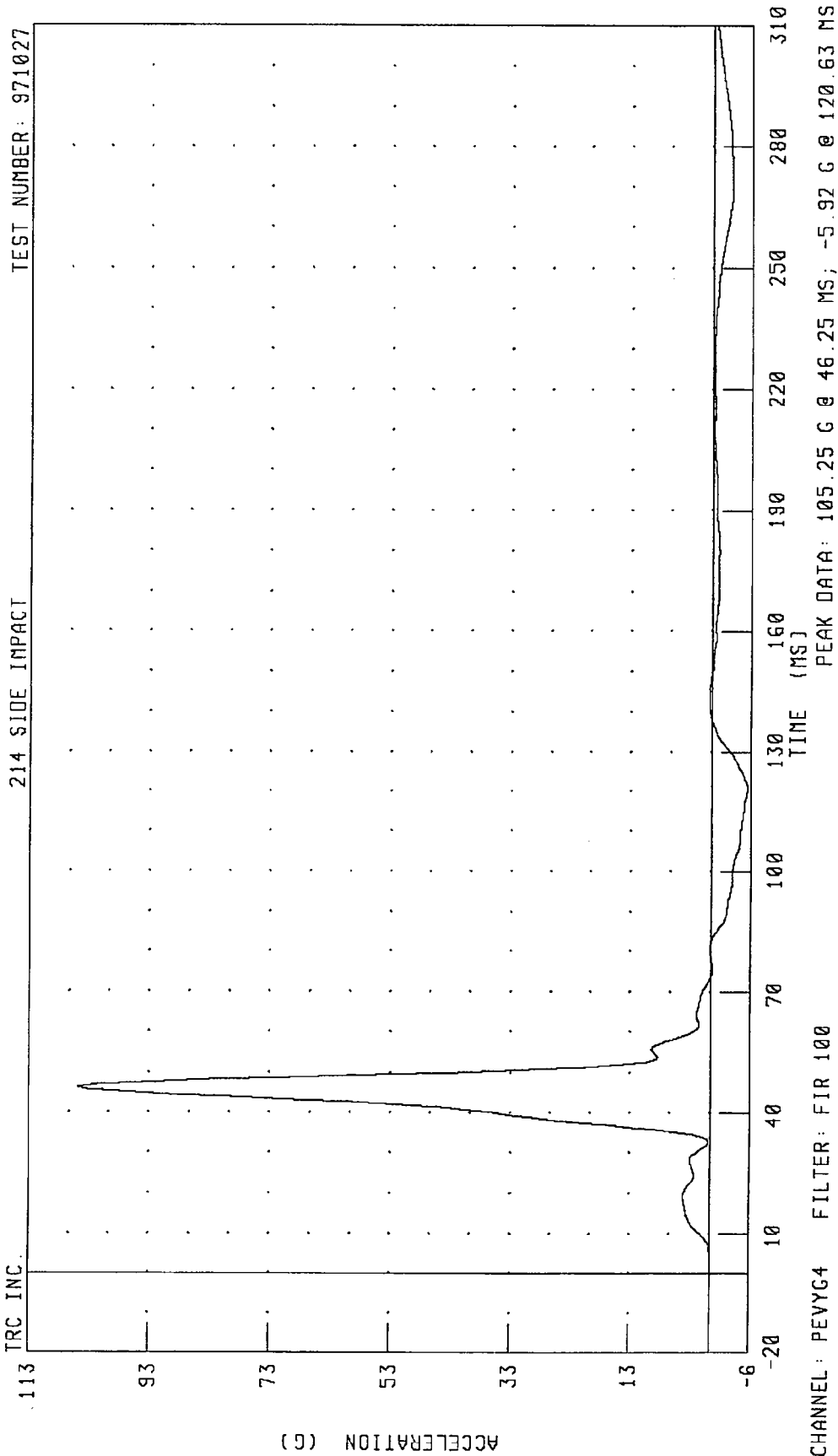
TRC INC.



CHANNEL: T12YV4 FILTER: CH. CLASS 180

PEAK DATA: 42.96 KM/H @ 64.40 MS; 0.00 KM/H @ 0.00 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1988 DODGE NEON
LEFT REAR PASSENGER PELVIS Y-AXIS ACCELERATION

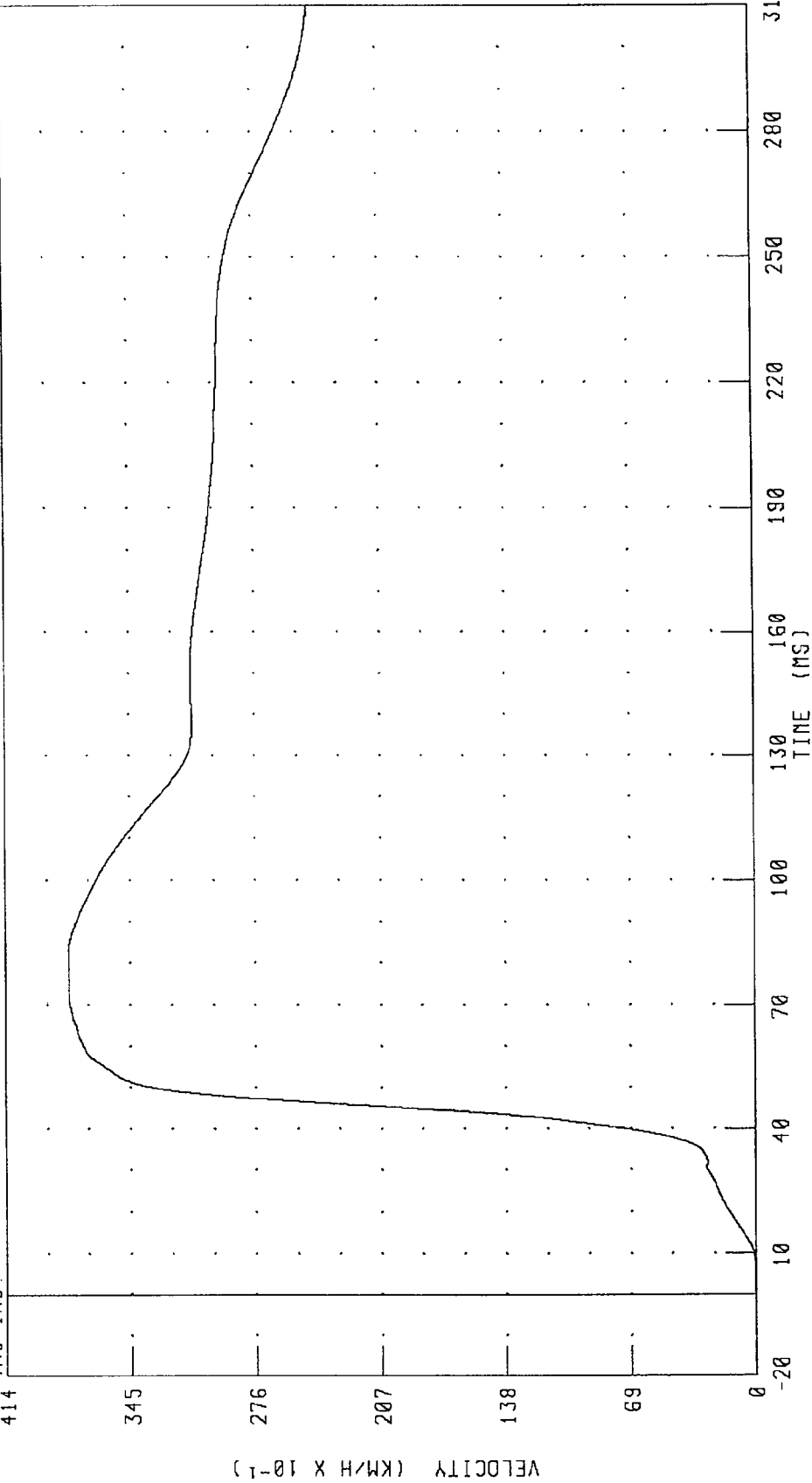


MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER PELVIS Y-AXIS VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



PEAK DATA: 37.89 KM/H @ 72.88 MS; 0.00 KM/H @ 0.00 MS

CHANNEL: PEVYV4 FILTER: CH. CLASS 180

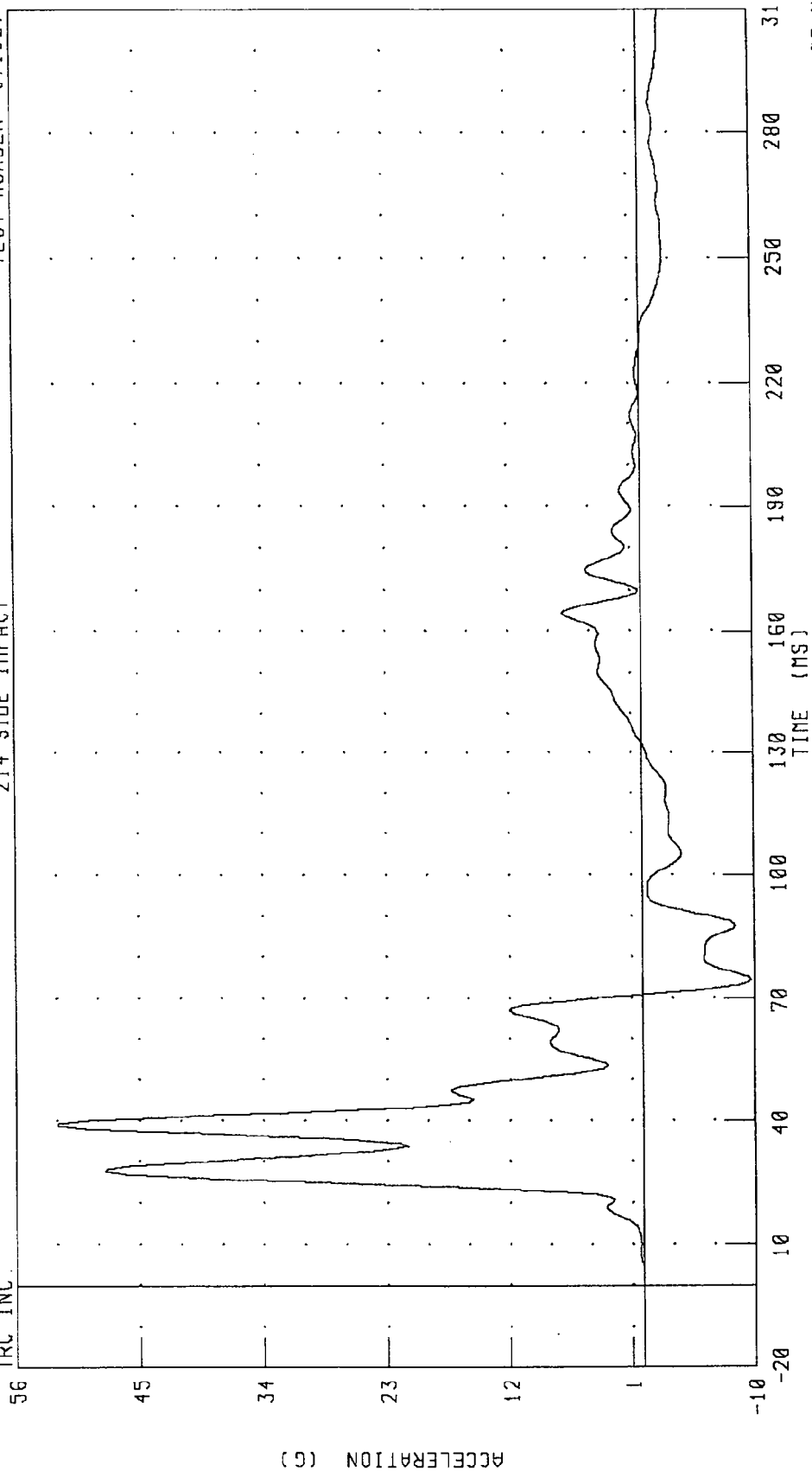
Driver and Passenger Dummy Instrumentation Plots
Acceleration Data - FIR Filtered - Redundant

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER UPPER RIB Y-AXIS REDUNDANT ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: LURYR1 FILTER: FIR 100

PEAK DATA: 52.29 G @ 38.75 MS; -9.66 G @ 74.37 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER UPPER RIB Y-AXIS REDUNDANT VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

390

325

VELOCITY (KM/H X 10⁻¹)

260

195

130

65

0

-20

10

40

70

100

130

160

190

220

250

280

310

TIME (MS)

CHANNEL: LURYVI FILTER: CH. CLASS 180

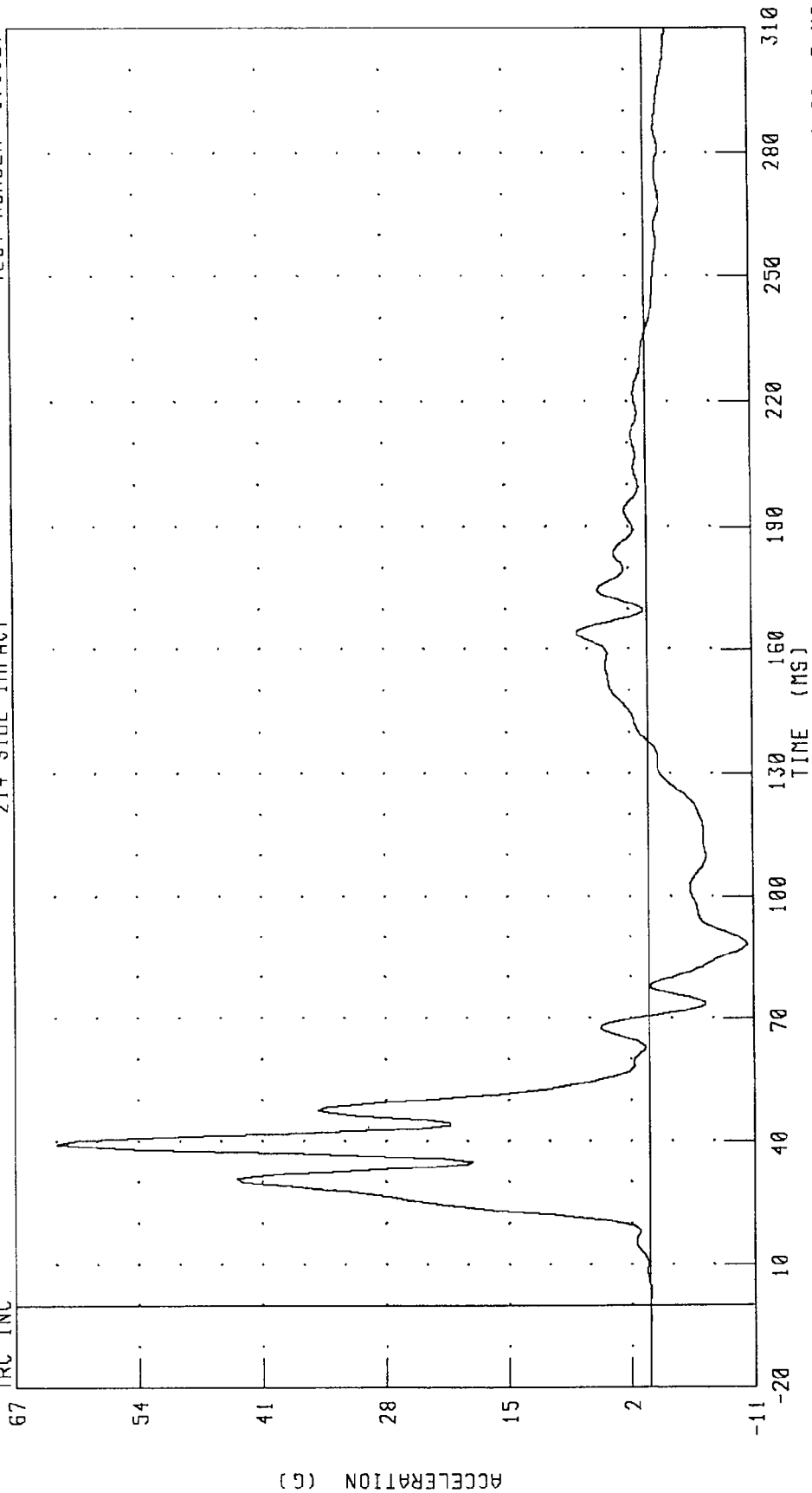
PEAK DATA: 35.63 KM/H @ 71.04 MS; 0.00 KM/H @ 0.00 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER LOWER RIB Y-AXIS REDUNDANT ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC



CHANNEL: LLRYR1 FILTER: FIR 100

PEAK DATA: 62.61 G @ 39.38 MS; -10.29 G @ 88.13 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER LOWER RIB Y-AXIS REDUNDANT VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

488

340

272

204

136

68

0

VELOCITY (KM/H X 10⁻¹)

TIME (MS)

310

280

250

220

190

160

130

100

70

40

10

CHANNEL: LLRYVI FILTER: CH. CLASS 180

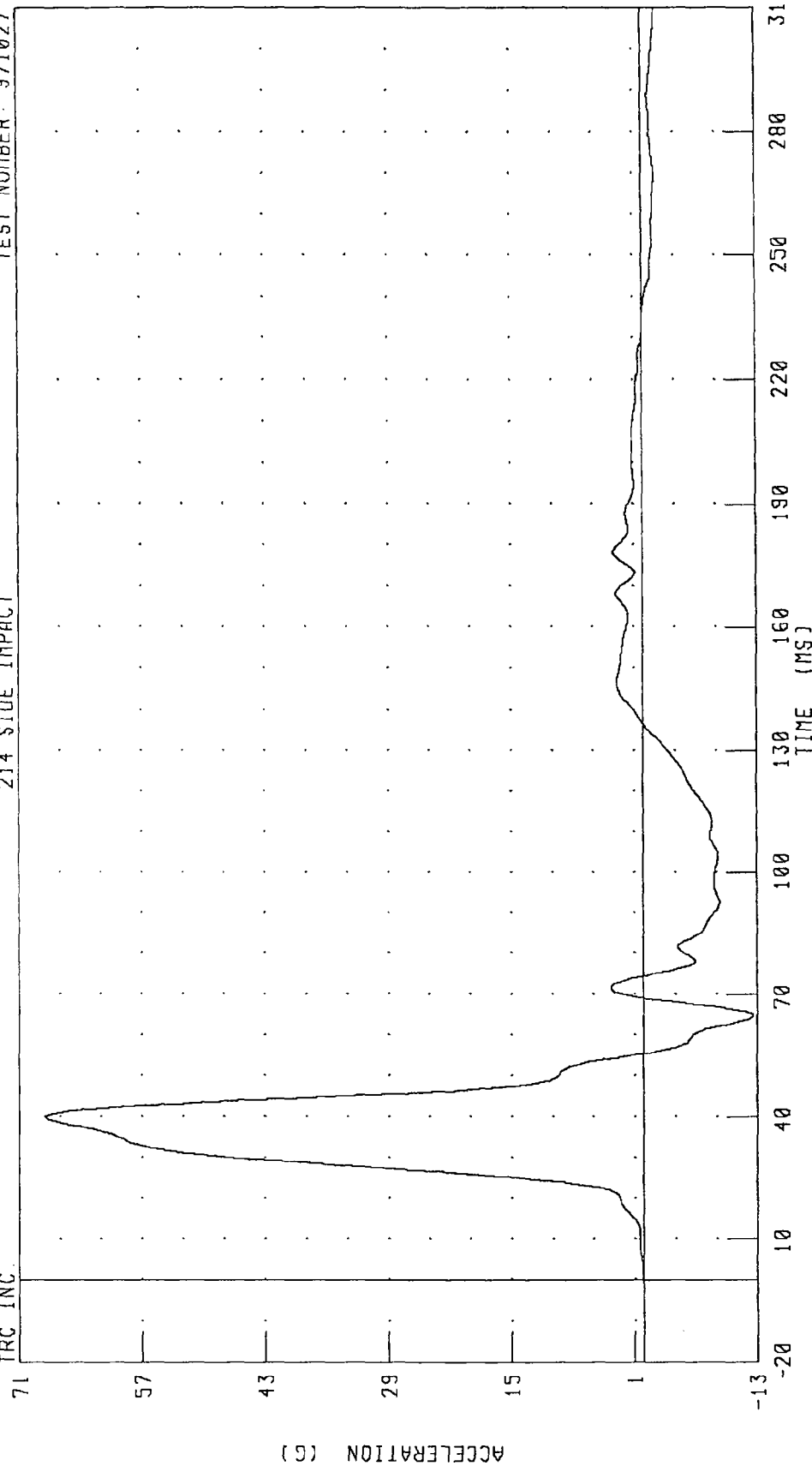
PEAK DATA: 37.14 KM/H @ 71.28 MS; 0.00 KM/H @ 3.68 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
DRIVER LOWER SPINE Y-AXIS REDUNDANT ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: T12YR1 FILTER: FIR 100

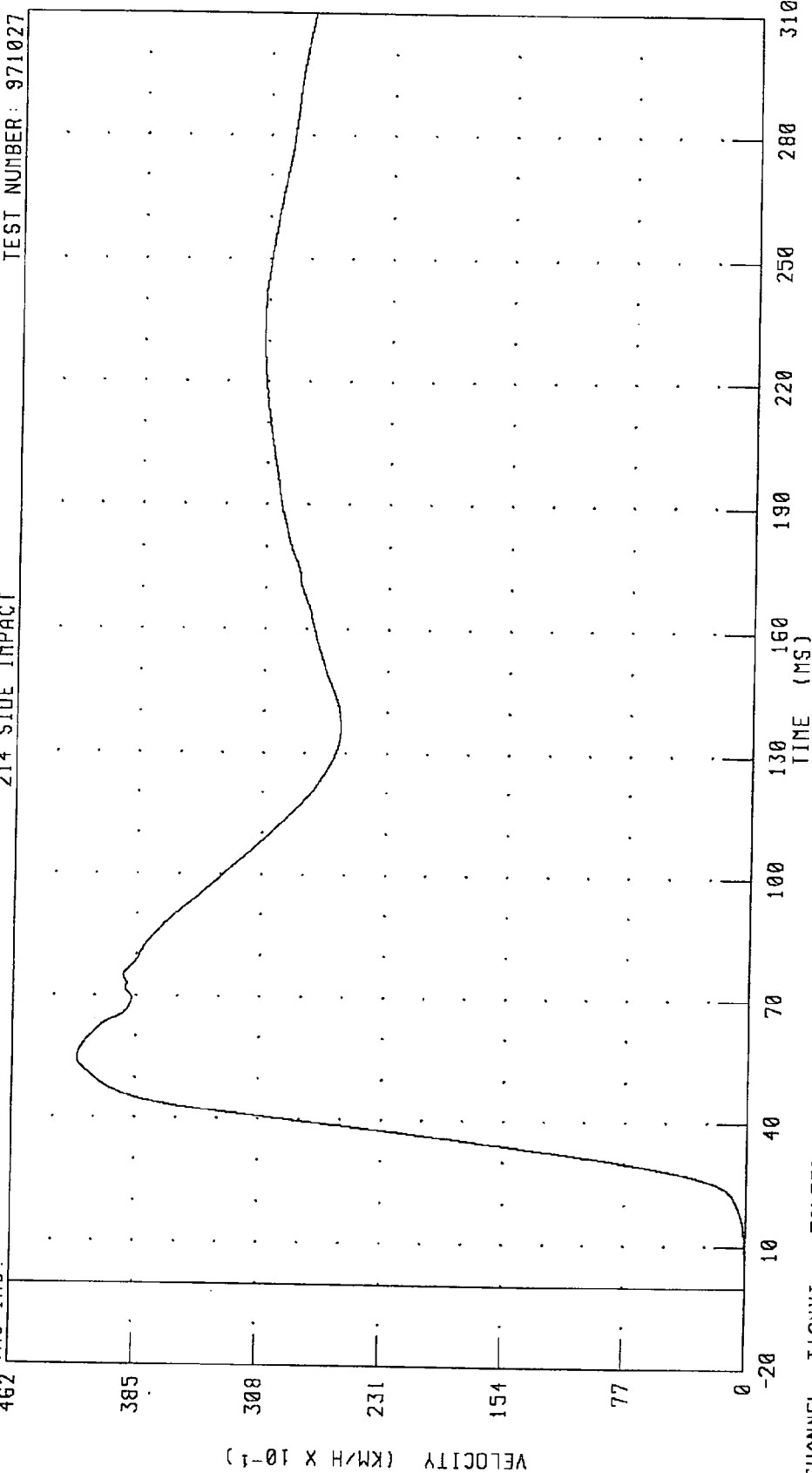
PEAK DATA: 68.07 G @ 40.00 MS; -12.53 G @ 64.38 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER LOWER SPINE Y-AXIS REDUNDANT VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

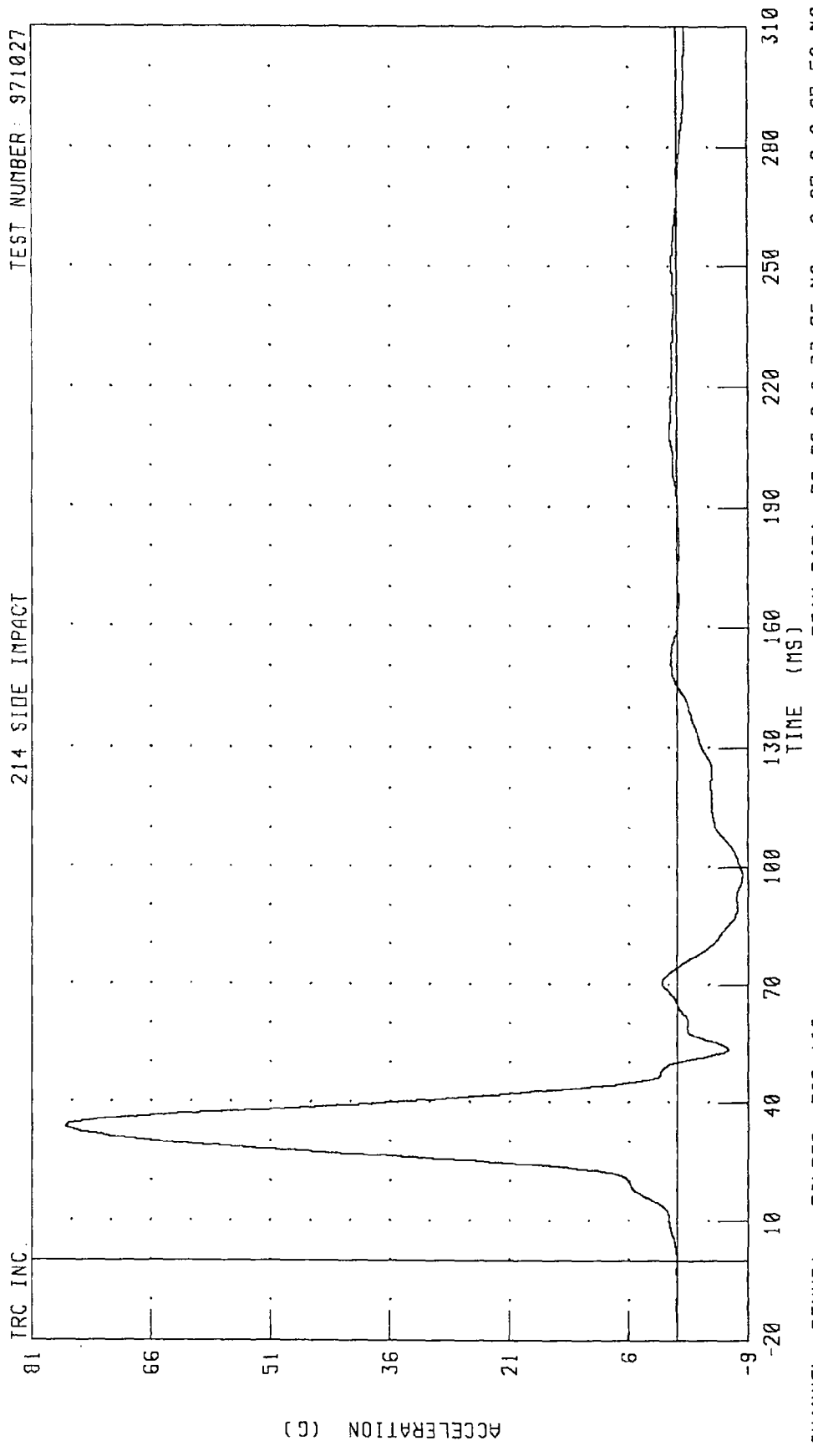


CHANNEL: T12YVI FILTER: CH. CLASS 180

PEAK DATA: 42.15 KM/H @ 54.80 MS; 0.00 KM/H @ 0.00 MS

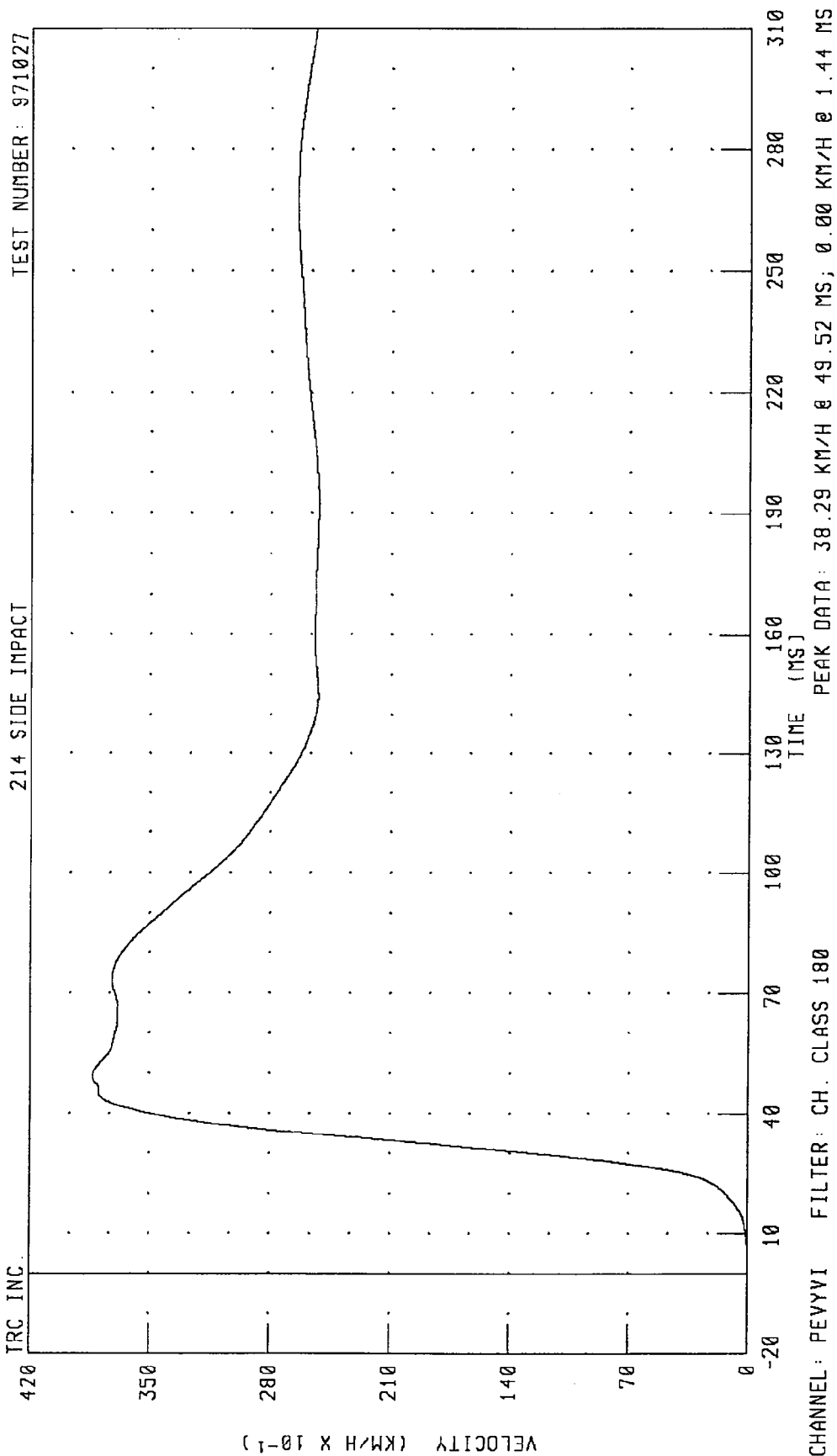
MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER PELVIS Y-AXIS REDUNDANT ACCELERATION
 214 SIDE IMPACT

TEST NUMBER: 971027



CHANNEL: PEVYR1 FILTER: FIR 100
 PEAK DATA: 76.79 G @ 33.75 MS, -8.27 G @ 97.50 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 DRIVER PELVIS Y-AXIS REDUNDANT VELOCITY

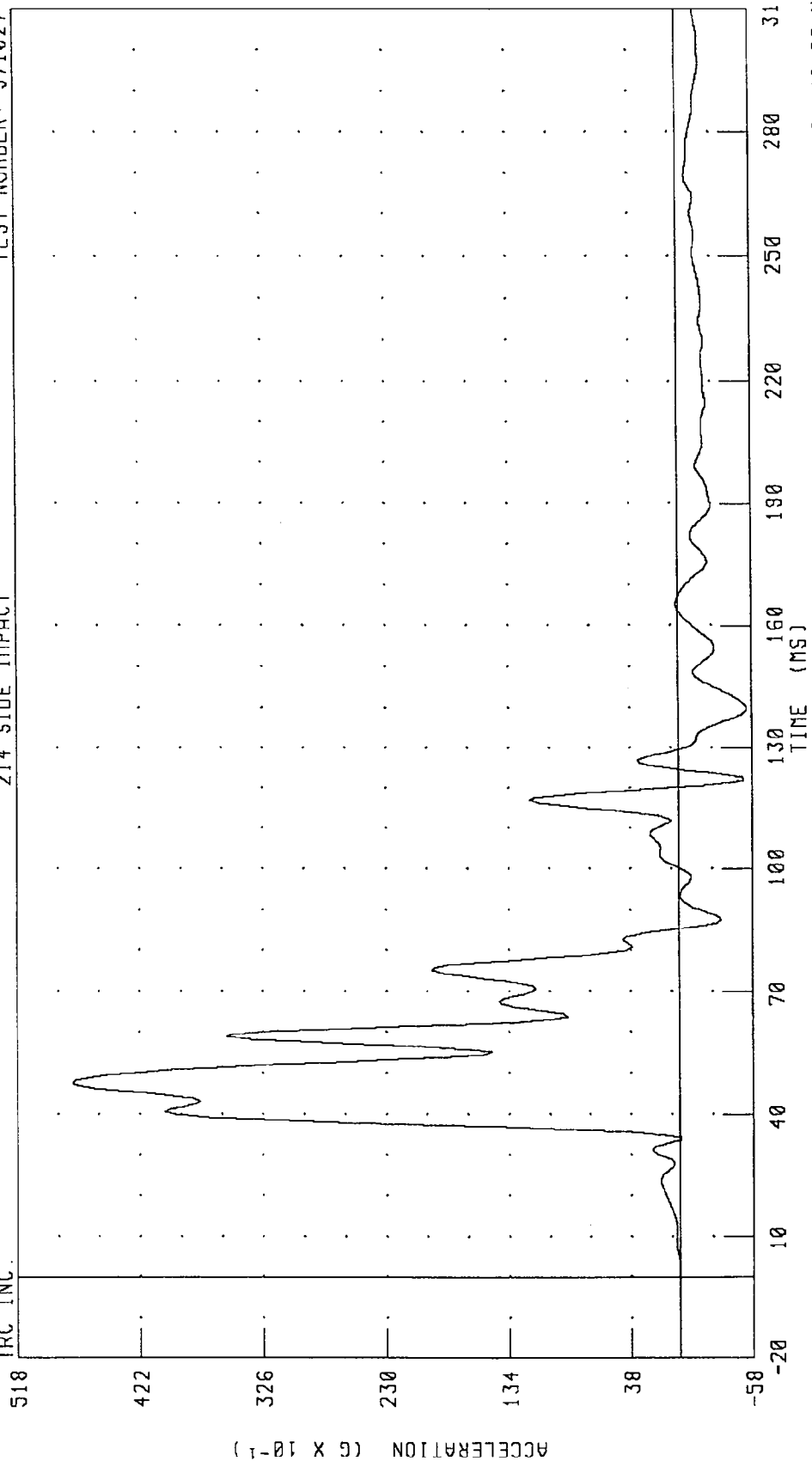


MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER UPPER RIB Y-AXIS REDUNDANT ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

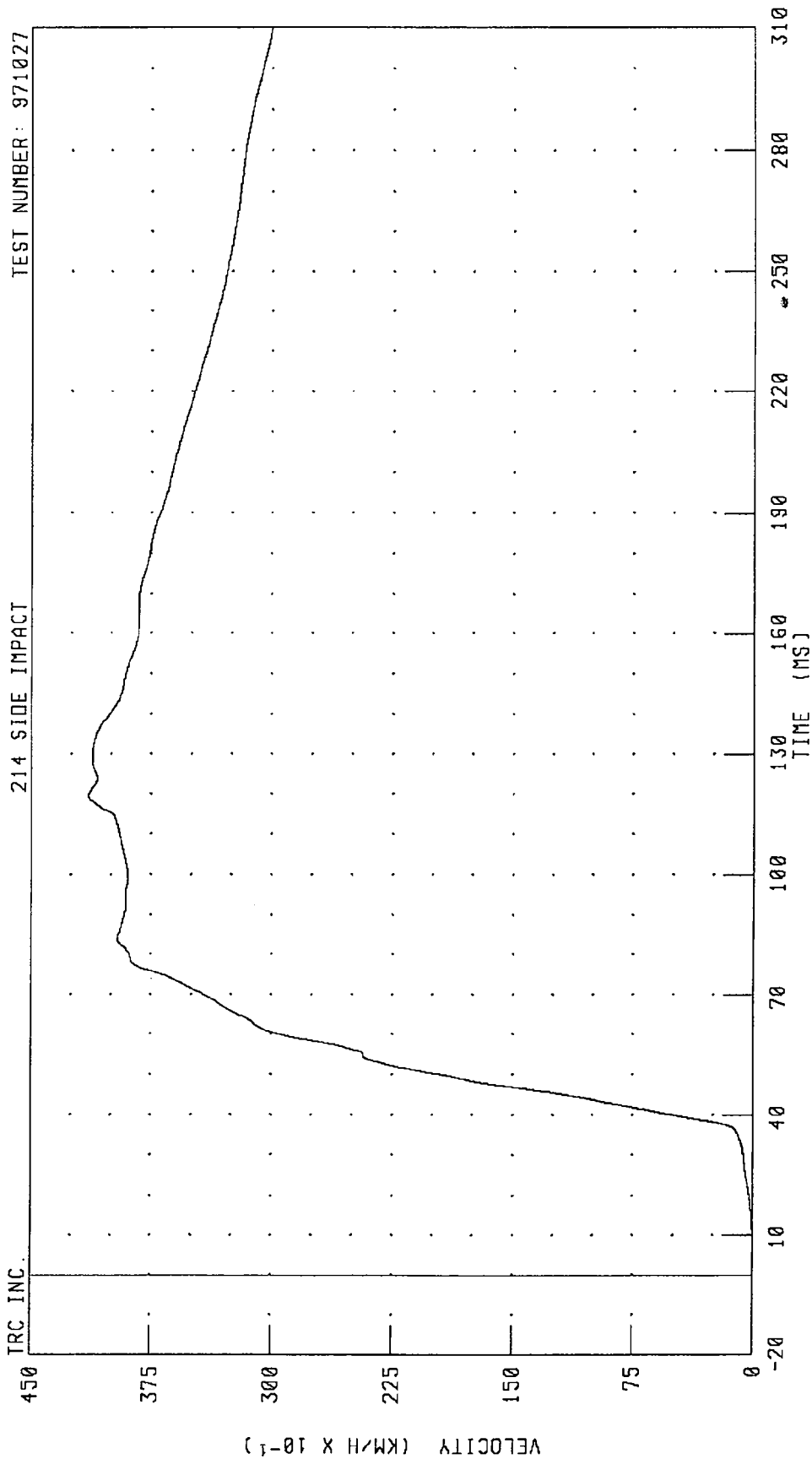
TRC INC.



CHANNEL: LURYR4 FILTER: FIR 100

PEAK DATA: 47.51 G @ 47.50 MS; -5.34 G @ 140.00 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER UPPER RIB Y-AXIS REDUNDANT VELOCITY



PEAK DATA: 41.42 KM/H @ 119.60 MS; 0.00 KM/H @ 1.12 MS

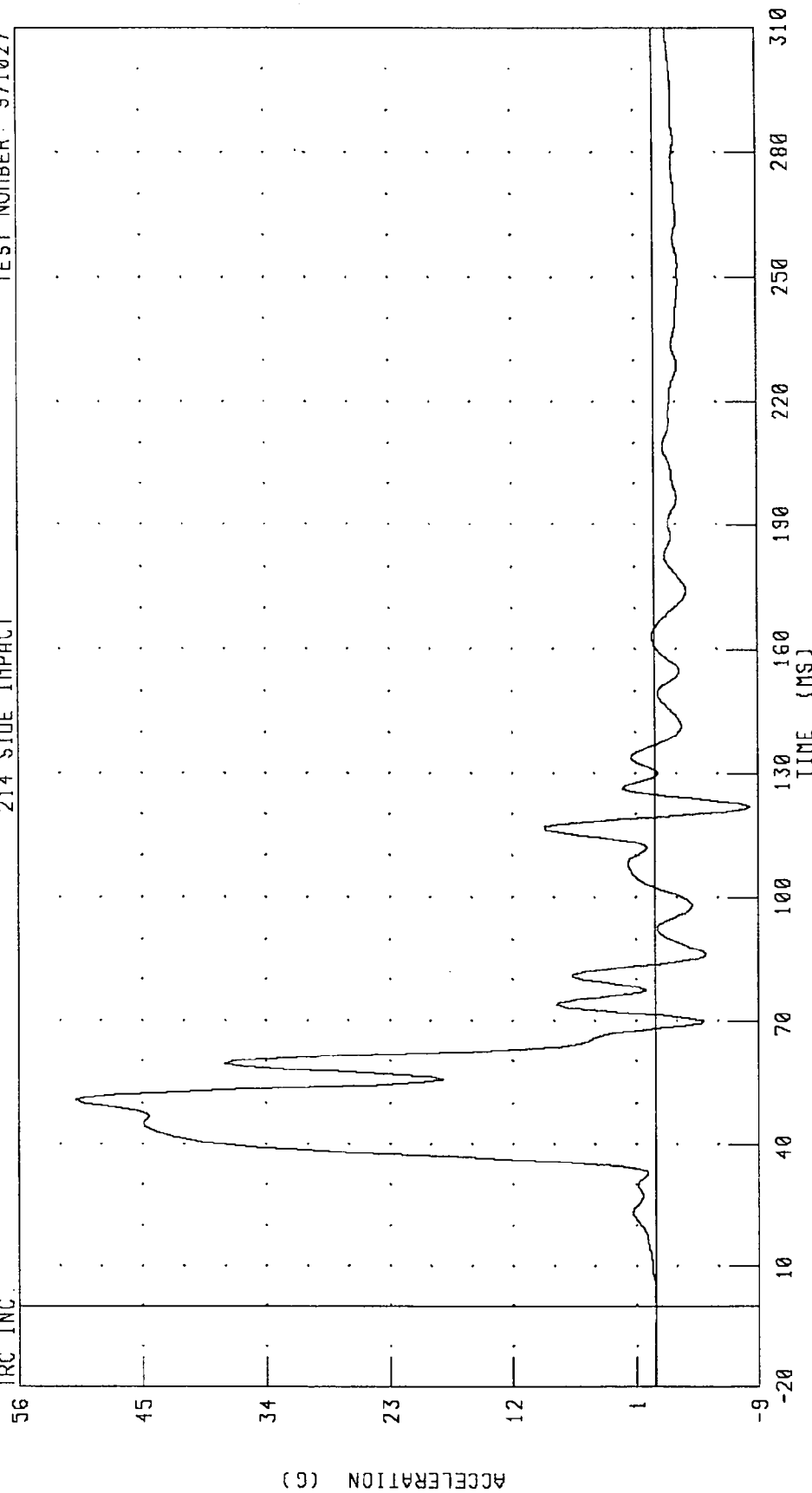
CHANNEL: LURYVJ FILTER: CH. CLASS 180

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER LOWER RIB Y-AXIS REDUNDANT ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: LLRYR4 FILTER: FIR 100

PEAK DATA: 51.66 G @ 50.63 MS, -8.48 G @ 121.87 MS

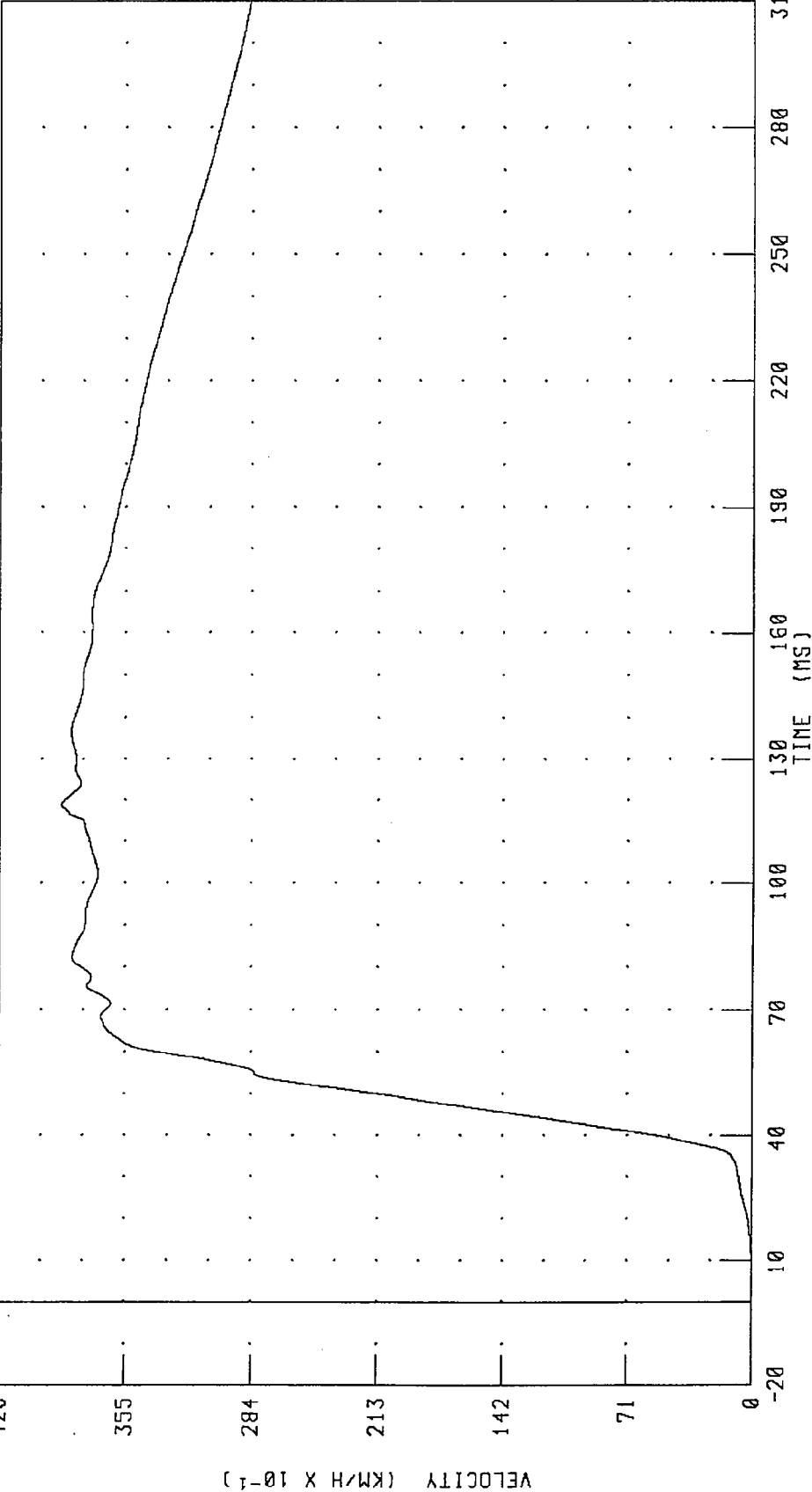
MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER LOWER RIB Y-AXIS REDUNDANT VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.

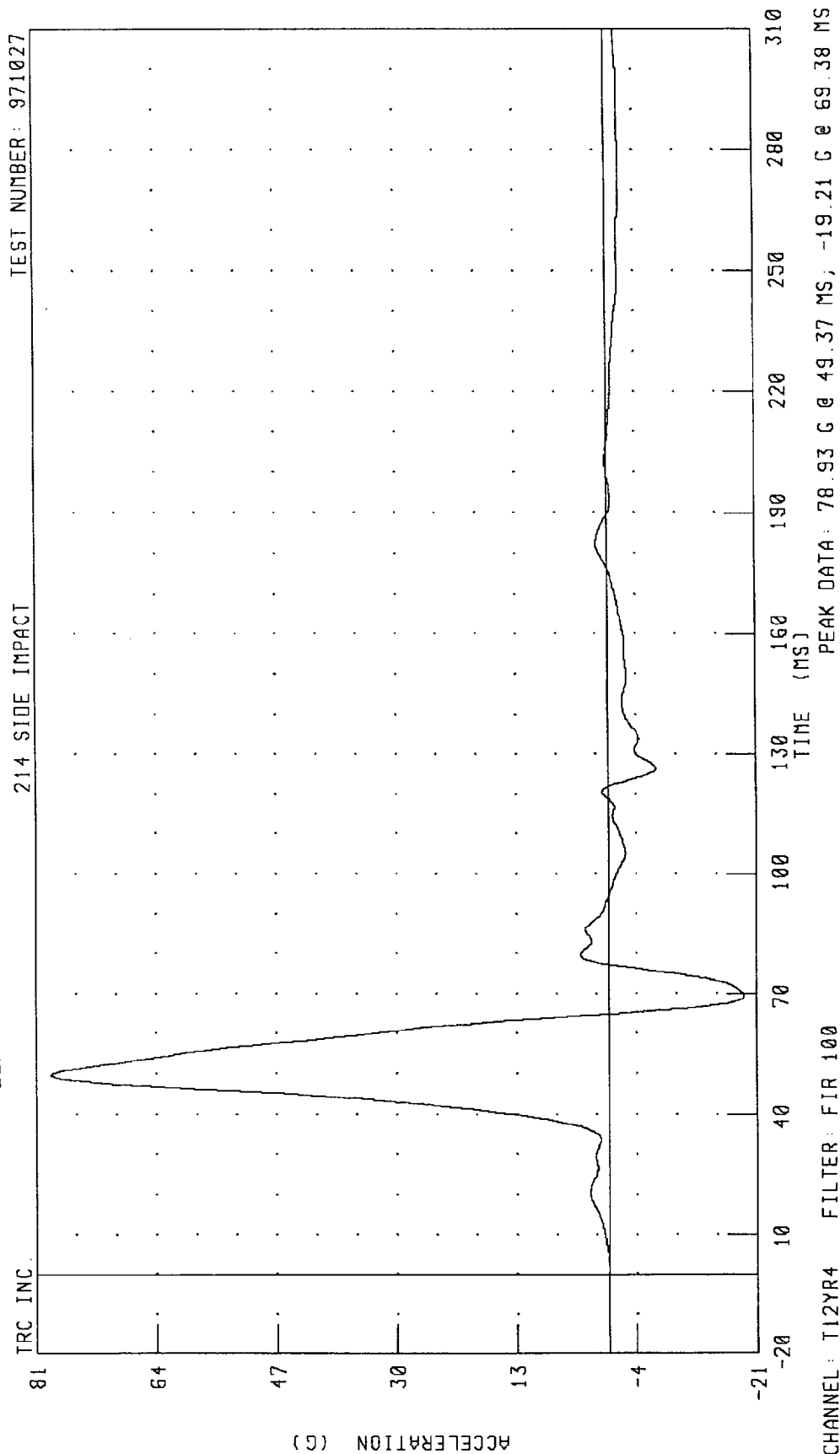
426



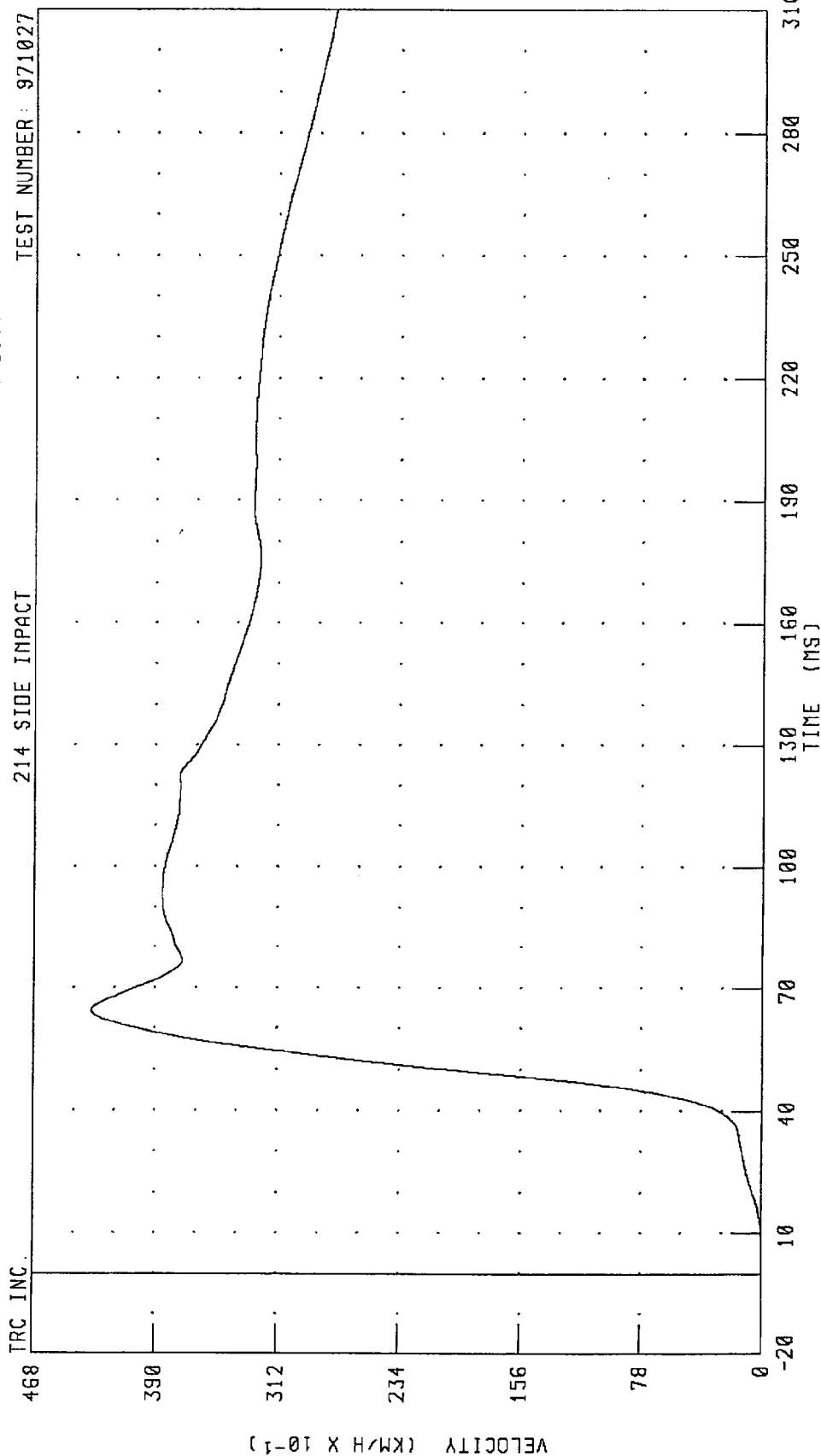
CHANNEL: LRLVJ FILTER: CH. CLASS 180

PEAK DATA: 39.11 KM/H @ 118.96 MS; 0.00 KM/H @ 0.56 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
 LEFT REAR PASSENGER LOWER SPINE Y-AXIS REDUNDANT ACCELERATION



MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER LOWER SPINE Y-AXIS REDUNDANT VELOCITY



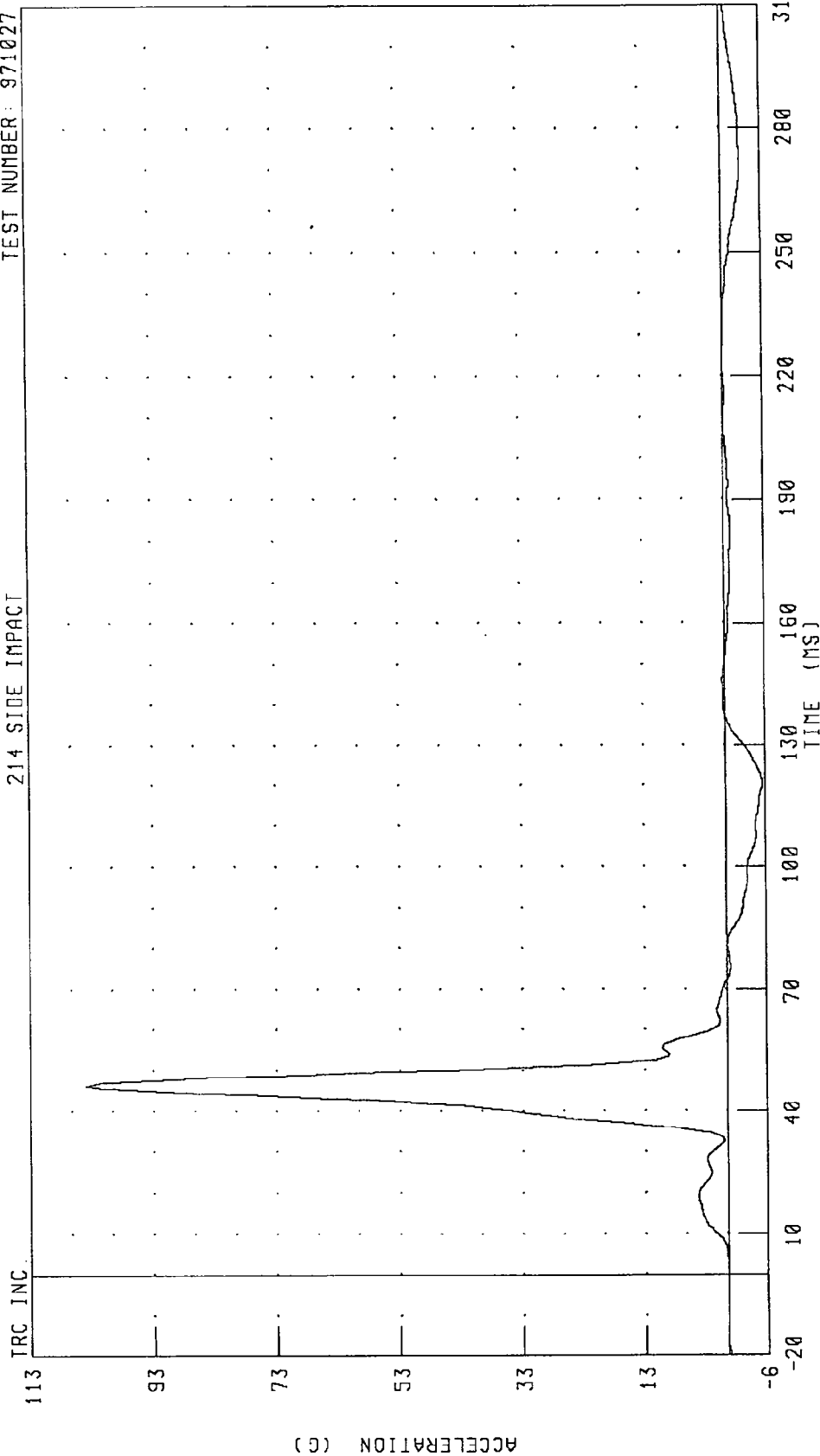
CHANNEL: T12YVJ FILTER: CH. CLASS 180

PEAK DATA: 43.06 KM/H @ 64.48 MS; 0.00 KM/H @ 0.88 MS

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1998 DODGE NEON
LEFT REAR PASSENGER PELVIS Y-AXIS REDUNDANT ACCELERATION

TEST NUMBER: 971027

214 SIDE IMPACT



PEAK DATA: 104.48 G @ 46.25 MS; -5.96 G @ 120.63 MS

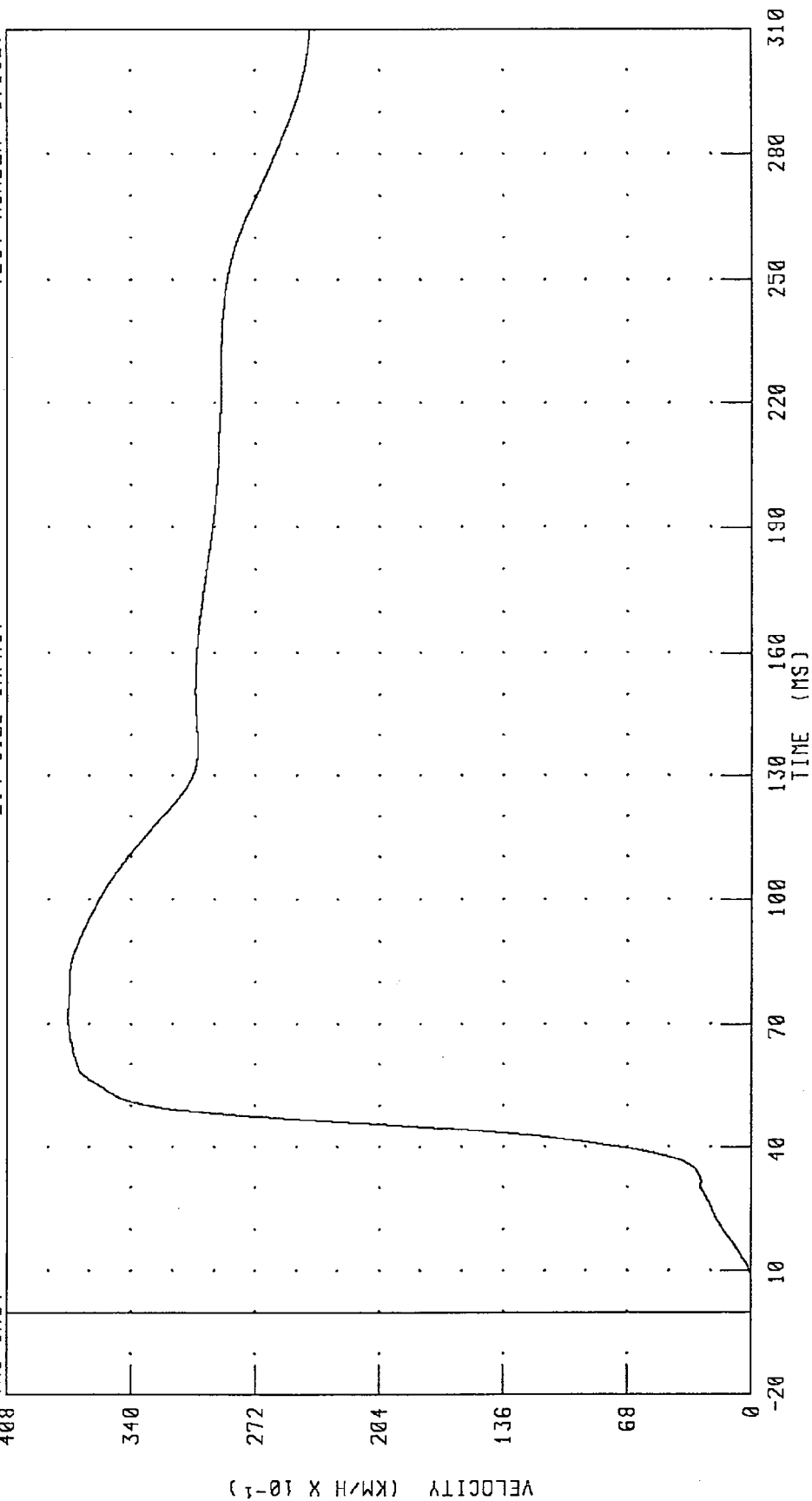
CHANNEL: PEVYR4 FILTER: FIR 100

MOVING DEFORMABLE BARRIER INTO LEFT SIDE OF 1988 DODGE NEON
LEFT REAR PASSENGER PELVIS Y-AXIS REDUNDANT VELOCITY

TEST NUMBER: 971027

214 SIDE IMPACT

TRC INC.



CHANNEL: PEVYVJ FILTER: CH. CLASS 180

PEAK DATA: 37.44 KM/H @ 71.84 MS; 0.00 KM/H @ 2.32 MS

APPENDIX C

SID CONFIGURATION AND PERFORMANCE VERIFICATION DATA

**SUMMARY
SID PRE-TEST AND POST-TEST CALIBRATION**

CONFIGURED FOR LEFT SIDE IMPACT

Date: 10/24/97, 11/03/97 TRC sequential test number: ED5101
Laboratory Technician: S. Ericksen, B. Crabtree

Test Parameter	Specification	SID 051		SID 052	
		Pre-	Post-	Pre-	Post-
		Test	Test	Test	Test
SH - seated height (mm)	889-900	894.1	894.1	894.1	894.1
RH - Rib Height (mm)	501-520	515.6	515.6	508.0	508.0
HP - Hip Pivot Height (mm)	99 ref	99.1	99.1	99.1	99.1
RD - Rib from Back Line (mm)	229-241	241.3	241.3	236.2	236.2
KV - Knee Pivot from Back Line (mm)	511-526	525.8	525.8	525.8	525.8
SW - Knee Pivot to Floor (mm)	490-506	492.8	492.8	490.2	490.2
HW - Hip Width (mm)	356-391	370.8	370.8	373.4	373.4
THORAX IMPACTS					
Temperature (°C)	18.9-25.5	21.1	21.1	21.1	21.1
Relative Humidity (%)	10-70	26	30	25	30
Probe Speed (m/s)*	4.27-4.33	4.31	4.28	4.29	4.31
Upper Rib (g's)*	37-46	37.5	33.0	42.4	45.3
Lower Rib (g's)	37-46	38.9	32.8	40.0	43.1
Lower Spine (g's)	15-22	16.5	14.1	16.2	17.9
PELVIS IMPACTS					
Temperature (°C)	18.9-25.5	21.1	21.1	21.1	21.1
Relative Humidity (%)	10-70	25	30	25	30
Probe Speed (m/s)	4.27-4.33	4.23	4.23	4.23	4.22
Pelvis (g's)	40-60	44.8	42.4	55.6	52.5

*Remarks: The post-test thorax impacts on SID #051 did not pass.
The probe speed was not within specification.

Calibration Test Results

Pre-Test

SID: 051

Configured for Left Side Impact

External Dimensions:	The dummy passed all external dimension requirements.
Lateral Thorax Impact Test:	The lateral thorax passed all impact test requirements.
Pelvis Impact Tests:	The lateral pelvis passed all impact test requirements.
Thorax Shock Absorbers:	The thorax passed all shock absorber requirements.

TRANSPORTATION RESEARCH CENTER INC.
SIDE IMPACT DUMMY
EXTERNAL DIMENSIONS
LEFT SIDE CONFIGURATION
SN SN51 VECTOR

24-OCT-97

TRC INC. TEST NO: ED5101 572F SN51 EXT.DIMENSION CAL01

DIMENSIONS WITH CHEST JACKET INSTALLED			
SYMB	DESCRIPTION	SPECIFICATION	TEST RESULTS
	TEMPERATURE		21.1 DEG. C
	RELATIVE HUMIDITY		60.0 %
SH	SEATED HEIGHT	889 - 909 MM	894.1 MM
HP	HIP PIVOT HEIGHT	99 MM REF.	99.1 MM
KH	KNEE PIVOT FROM BACKLINE	511 - 526 MM	525.8 MM
KV	KNEE PIVOT FROM FLOOR	490 - 506 MM	492.8 MM
HW	HIP WIDTH	356 - 391 MM	370.8 MM
DIMENSIONS WITH CHEST JACKET REMOVED			
SYMB	DESCRIPTION	SPECIFICATION	TEST RESULTS
RH	RIB HEIGHT	501 - 520 MM	515.6 MM
RD	RIB FROM BACKLINE	229 - 241 MM	241.3 MM
RW-1	TOP RIB WIDTH FROM C/L	165. - 180 MM	175.3 MM
RW-2	BOTTOM RIB WIDTH FROM C/L	165 - 180 MM	175.3 MM
	DIFFERENCE BETWEEN TOP & BOTTOM RIB WIDTH FROM C/L	≤ 2.5 MM	0.0 MM

DUMMY MEETS SPECIFICATIONS

TECHNICIAN

Scott Puckett

RUN NUMBER: 111997.1307

TRANSPORTATION RESEARCH CENTER INC.

LATERAL THORAX IMPACT TEST

SIDE IMPACT DUMMY

24-OCT-97

LEFT SIDE CONFIGURATION

TRC INC.

TEST NO: STL5101D

572F SN51 LEFT THORAX CAL01

TEST PARAMETER	SPECIFICATION (ABSOLUTE VALUE)	TEST RESULTS
TEMPERATURE	18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY	10 - 70 %	26.0 %
PENDULUM VELOCITY	4.21 - 4.32 M/S	4.31 M/S
PEAK ACCELERATION: UPPER RIB BAR	37 - 46 G	-37.5 G
PEAK ACCELERATION: LOWER RIB BAR	37 - 46 G	-38.9 G
PEAK ACCELERATION: LOWER THORACIC SPINE	15 - 22 G	-16.5 G

TEST MEETS SPECIFICATIONS

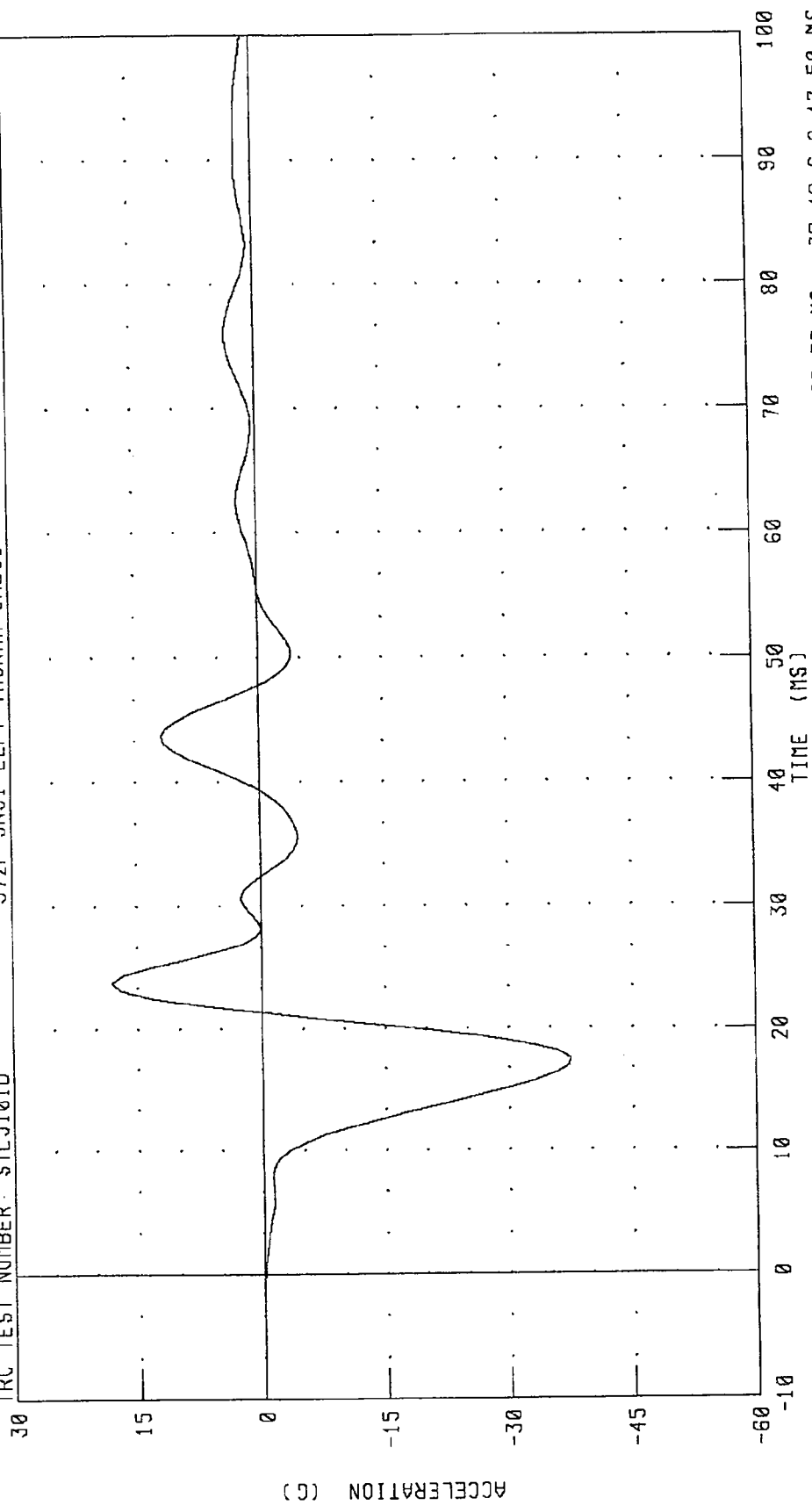
TECHNICIAN

Byg Calh

RUN NUMBER: 102497.0843;1

PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)
 LEFT UPPER RIB ACCELERATION Y AXIS

TRC TEST NUMBER: STL5101D 572F SN51 LEFT THORAX CAL01 RUN NUMBER: 102497.0844,1

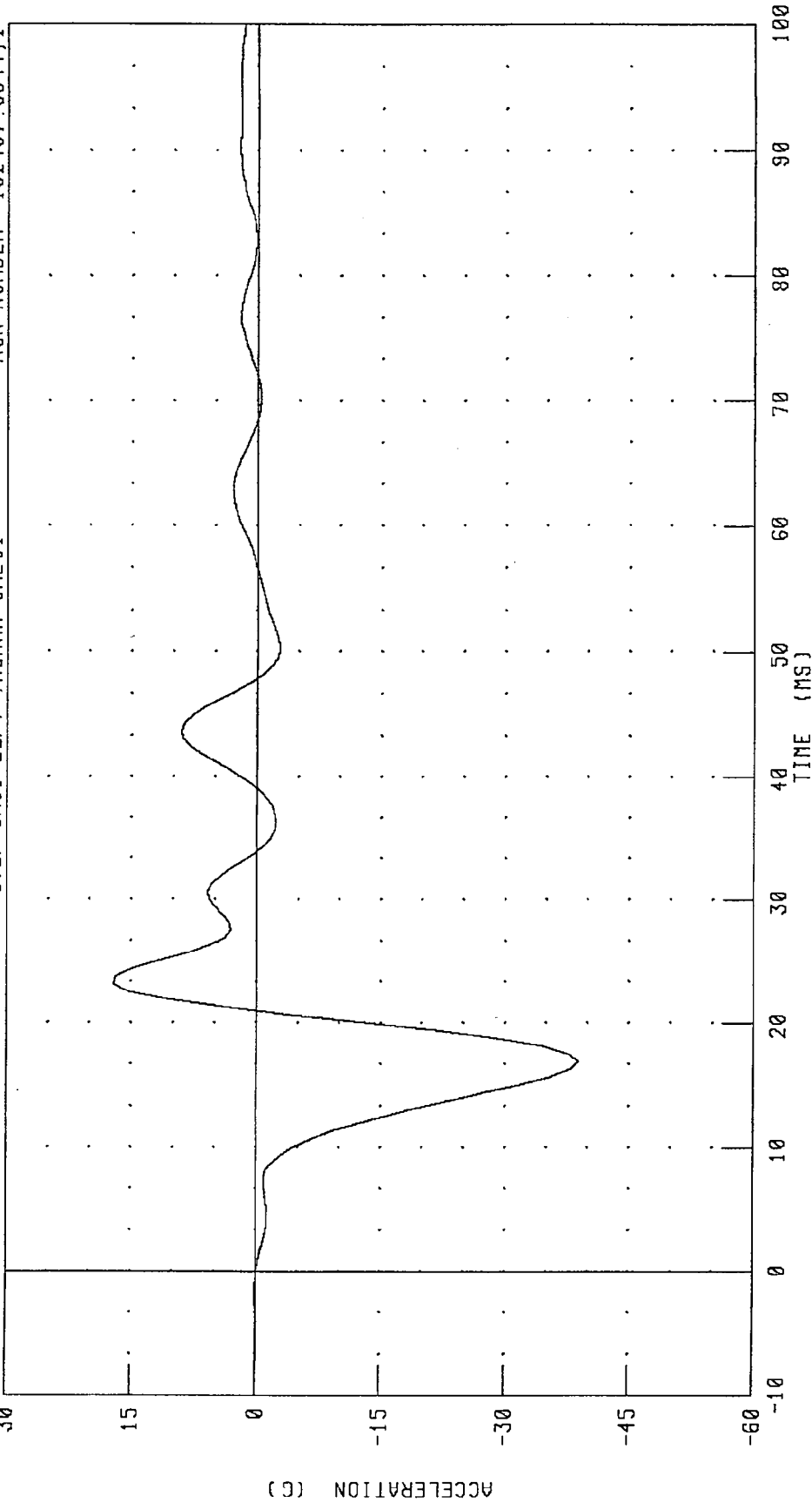


CHANNEL: LURYG FILTER: FIR 100

PEAK DATA: 18.05 G @ 23.75 MS; -37.49 G @ 17.50 MS

PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)
LEFT LOWER RIB ACCELERATION Y AXIS

IRC TEST NUMBER: STL5101D 572F SN51 LEFT THORAX CAL01 RUN NUMBER: 102497.0844;1



CHANNEL: LLRYG FILTER: FIR 100 PEAK DATA: 17.20 G @ 23.13 MS; -38.91 G @ 16.87 MS

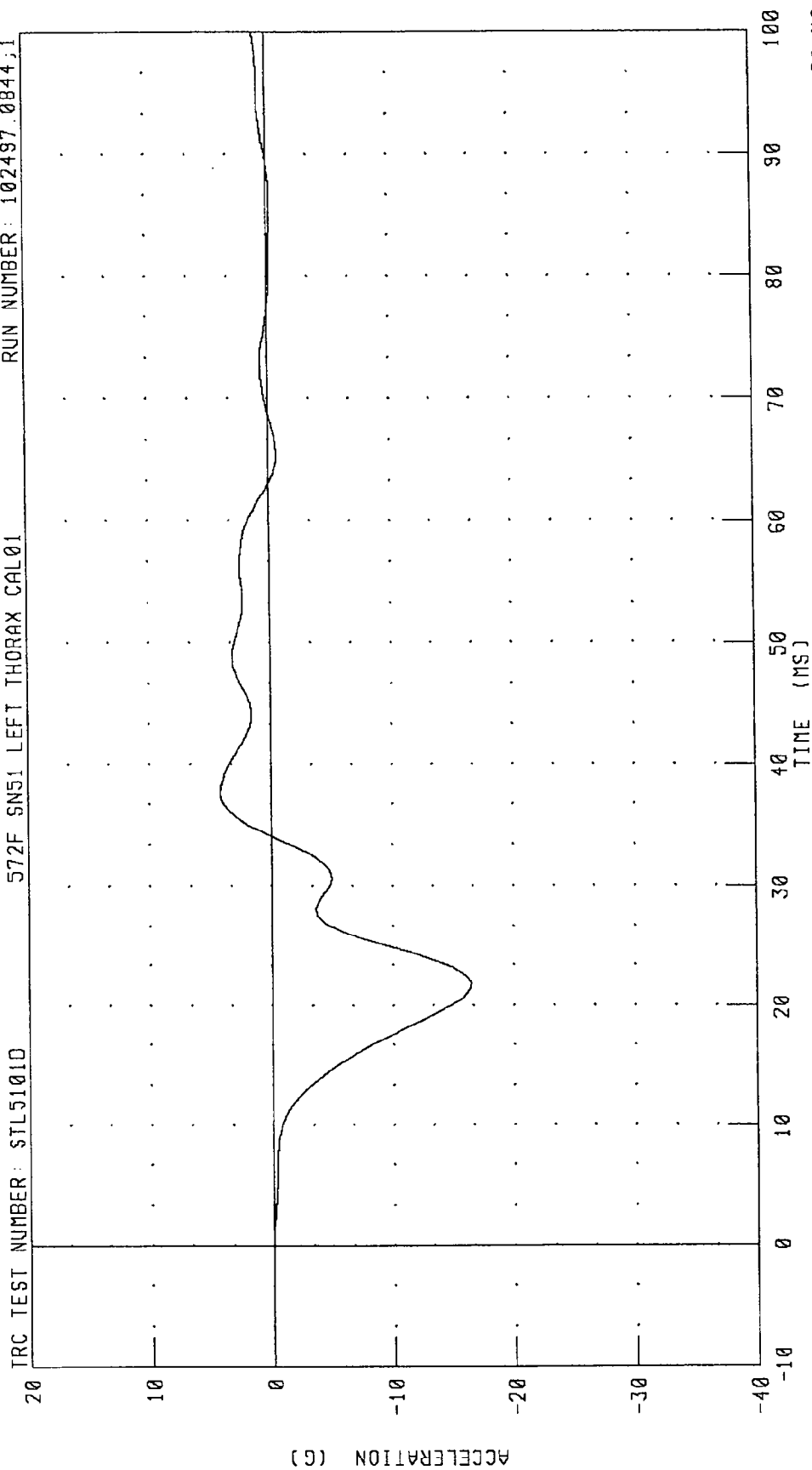
PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)

LOWER SPINE ACCELERATION Y AXIS

572F SN51 LEFT THORAX CAL01

TRC TEST NUMBER: STL5101D

RUN NUMBER: 102497.0844,1



CHANNEL: T12YG FILTER: FIR 100

PEAK DATA: 4.19 G @ 37.50 MS; -16.49 G @ 21.88 MS

TRANSPORTATION RESEARCH CENTER INC.

LATERAL PELVIS IMPACT TEST

SIDE IMPACT DUMMY

23-OCT-97

LEFT SIDE CONFIGURATION

TRC INC.

TEST NO: SPL5101

572F SN51 LEFT PELVIS CAL01

TEST PARAMETER	SPECIFICATION (ABSOLUTE VALUE)	TEST RESULTS
TEMPERATURE	18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY	10 - 70 %	25.0 %
PENDULUM VELOCITY	4.27 - 4.33 M/S	4.23 M/S *
PEAK PELVIC ACCELERATION	40 - 60 G	-44.8 G
TIME ABOVE 20 G LEVEL	3 - 7 MS	5.7 MS
IS ACCELERATION CURVE UNIMODAL?	YES	YES

* TEST DOES NOT MEET SPECIFICATIONS

TECHNICIAN

V. Z. Watter

RUN NUMBER: 102397.1358;1

PART 572-F S.I.D. PELVIS CALIBRATION - (LEFT SIDE IMPACT)

PELVIS ACCELERATION Y AXIS

572F SN51 LEFT PELVIS CAL01

RUN NUMBER: 102397.1359;1

TRC TEST NUMBER: SPL5101

40

20

ACCELERATION (G)

-20

-40

-60

-80

TIME (MS)

PEAK DATA: 5.89 G @ 23.75 MS; -44.82 G @ 10.00 MS

CHANNEL: PEVYG FILTER: FIR 100

TRANSPORTATION RESEARCH CENTER INC.

THORACIC SHOCK ABSORBER TESTS

SIDE IMPACT DUMMY

23-OCT-97

TRC INC.

572F SN51 DAMPER TEST CAL01

TEST NUMBER: DP5101A

TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE		18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY		10 - 70 %	25.0 %
VELOCITY	FORCE	856 - 1146 N	908 N
3.07 M/S	DISPLACEMENT	30.2 - 35.2 MM	30.9 MM
VELOCITY	FORCE	1759 - 2131 N	1797 N
4.29 M/S	DISPLACEMENT	31.7 - 37.3 MM	34.7 MM
VELOCITY	FORCE	3743 - 4448 N	4134 N
6.10 M/S	DISPLACEMENT	33.3 - 39.5 MM	37.6 MM

DAMPER SETTING = 5.8

TEST MEETS SPECIFICATIONS

TECHNICIAN Byg Cull

RUN NUMBER: 102397.1049;3

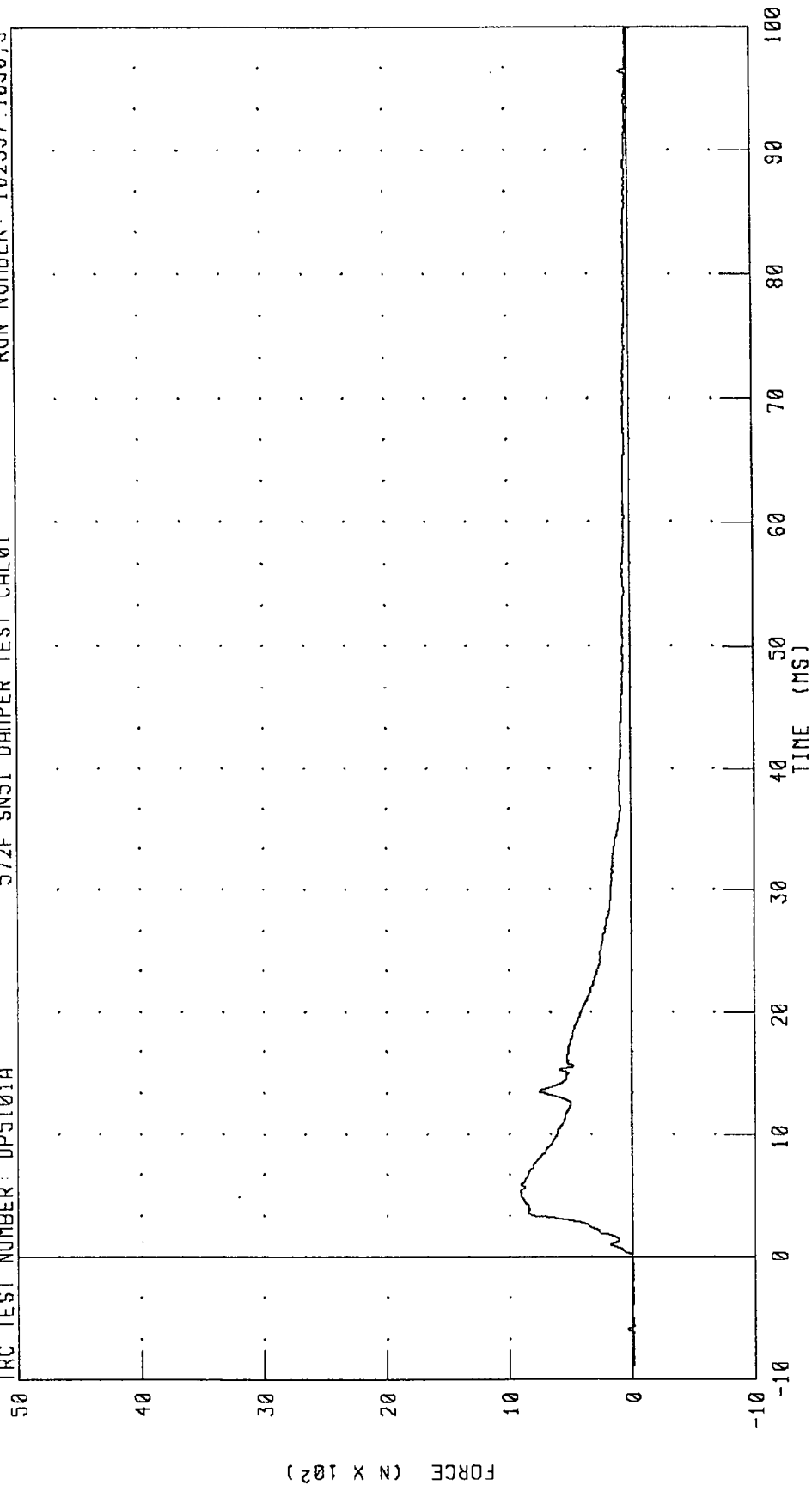
PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (3.0 M/SEC)

SHOCK ABSORBER RESISTIVE FORCE

572F SN51 DAMPER TEST CAL01

TRC TEST NUMBER: DP5101A

RUN NUMBER: 102397.1050,3



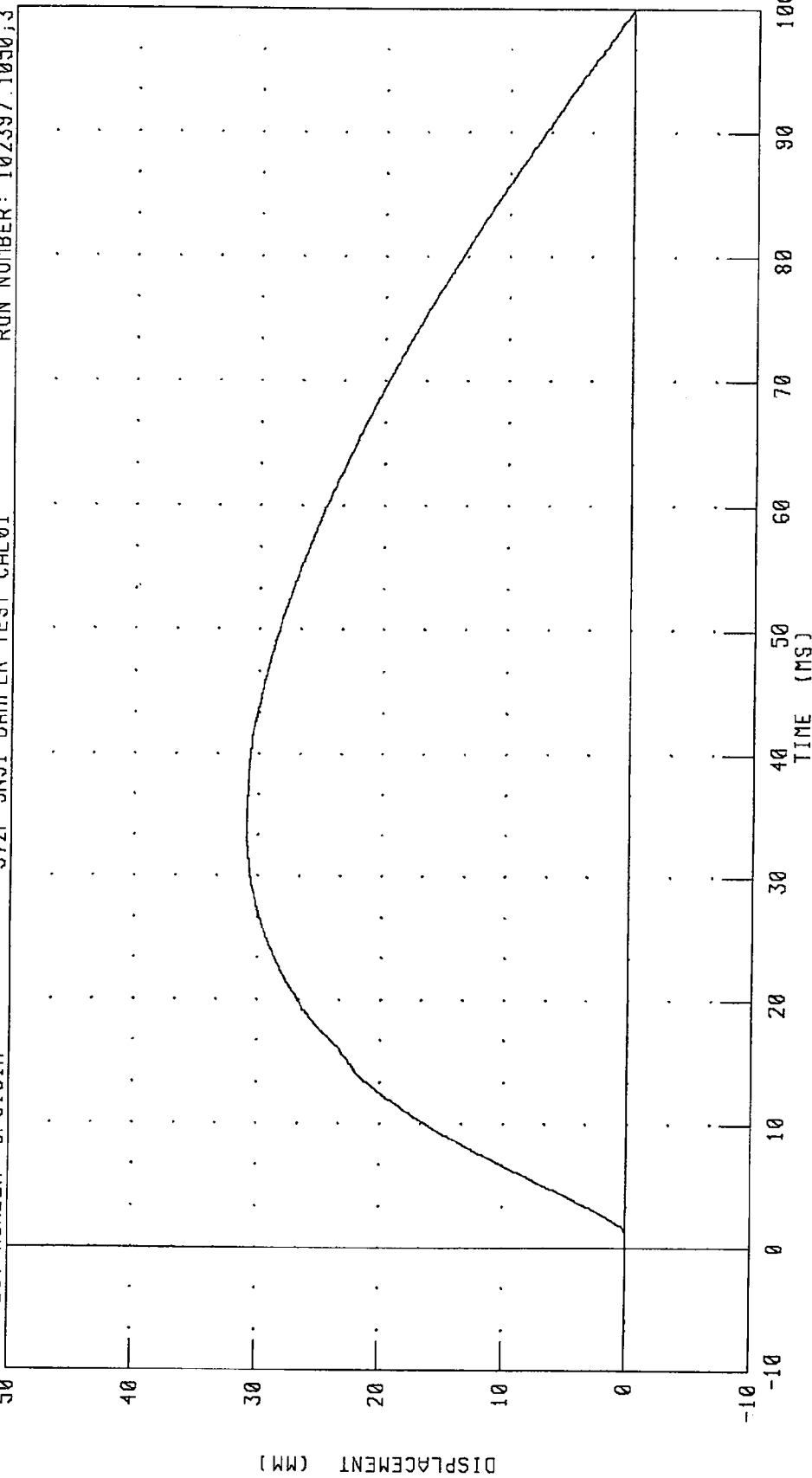
CHANNEL: DAMPF FILTER: CH. CLASS 1000

PEAK DATA: 907.79 N @ 5.04 MS; -169.14 N @ 100.00 MS

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (3.0 M/SEC)

SHOCK ABSORBER DISPLACEMENT

IRC TEST NUMBER: DP5101A 572F SN51 DAMPER TEST CAL01 RUN NUMBER: 102397.1050;3

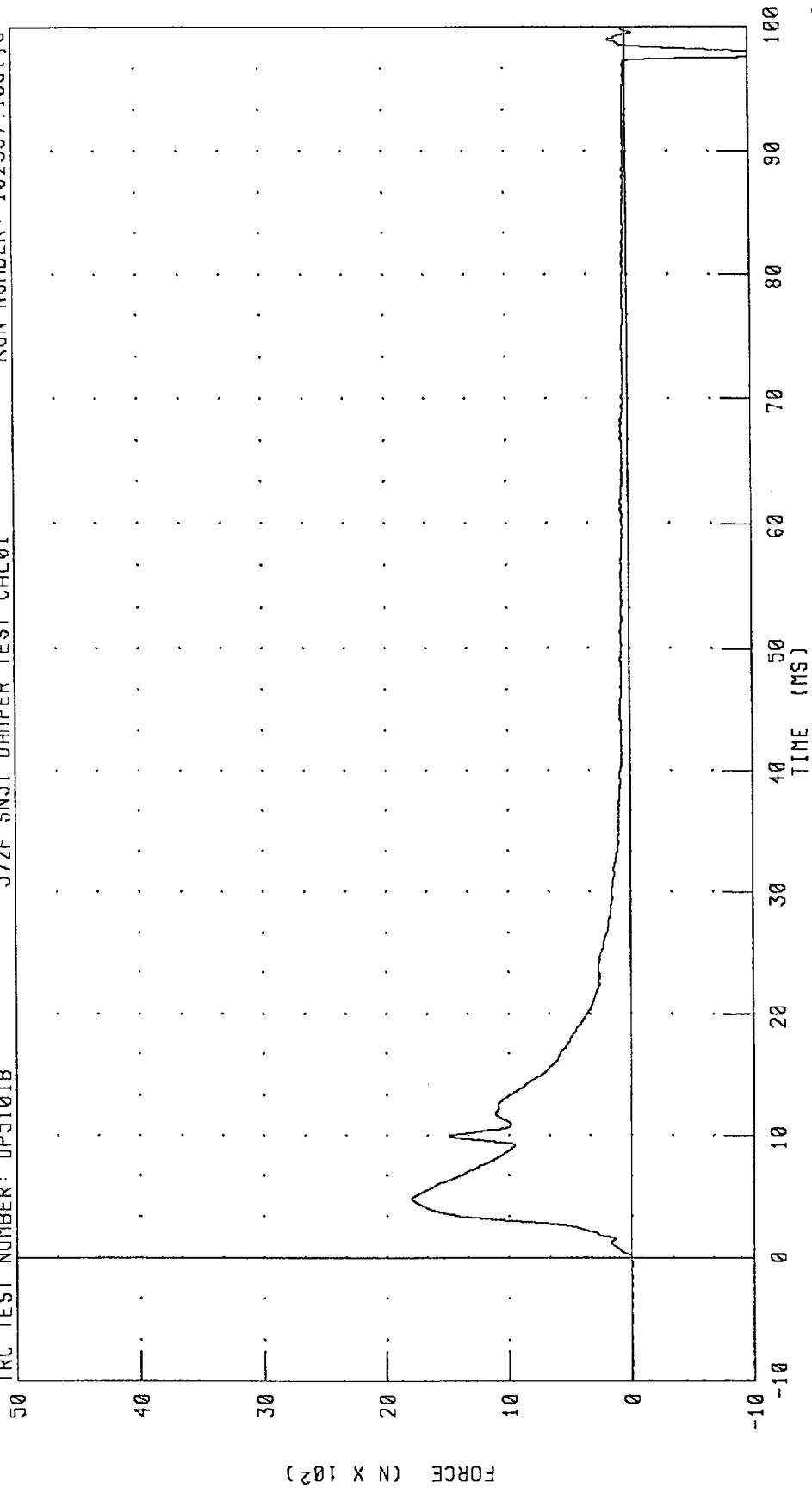


CHANNEL: CSTYD FILTER: CH. CLASS 1000

PEAK DATA: 30.93 MM @ 34.24 MS, -0.10 MM @ -5.92 MS

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (4.3 M/SEC)
SHOCK ABSORBER RESISTIVE FORCE

TRC TEST NUMBER: DP5101B 572F SN51 DAMPER TEST CAL01 RUN NUMBER: 102397.1051.9

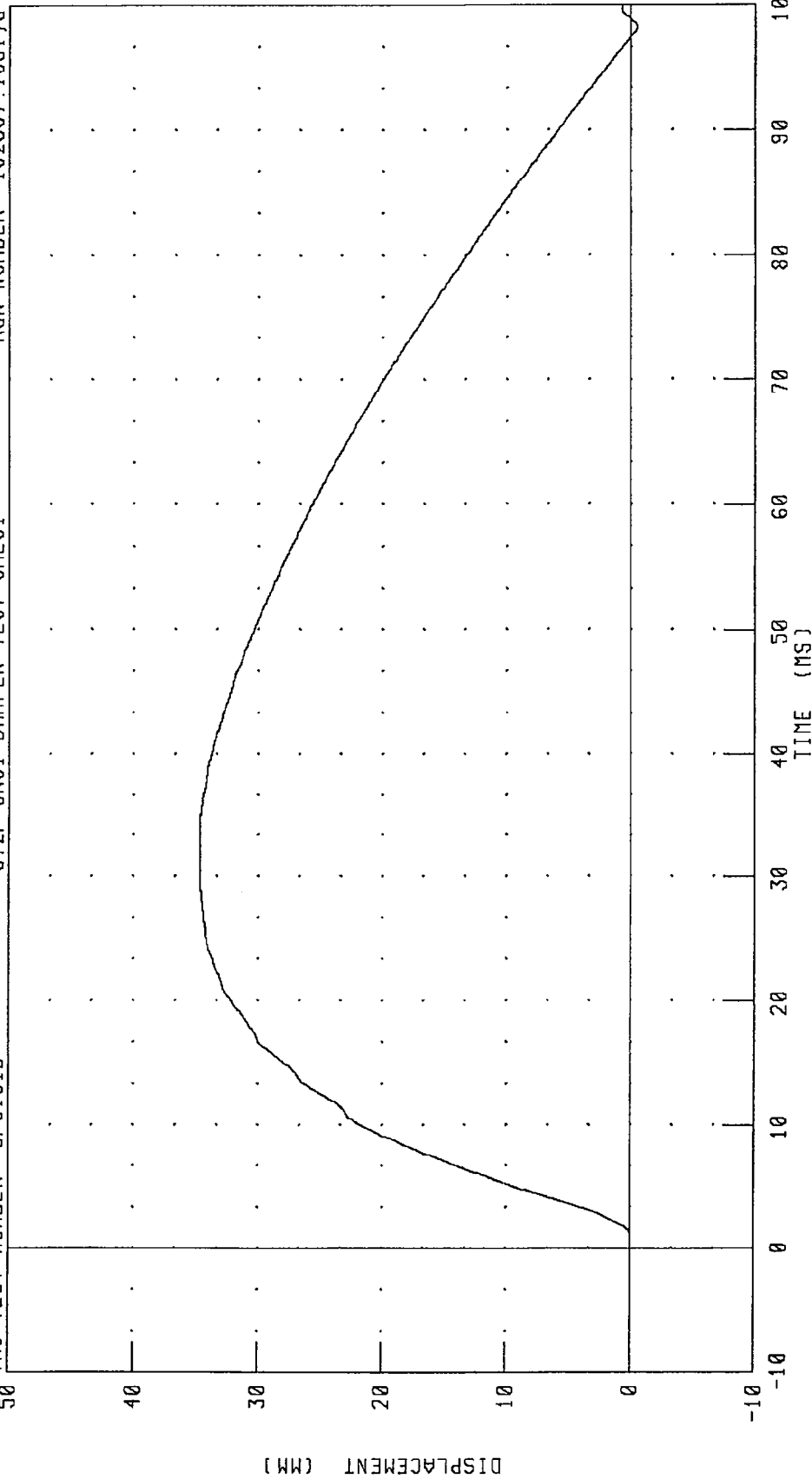


CHANNEL: DAMPF FILTER: CH. CLASS 1000

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (4.3 M/SEC)

SHOCK ABSORBER DISPLACEMENT

TRC TEST NUMBER: DP5101B 572F SN51 DAMPER TEST CAL01 RUN NUMBER: 102397.1051,8



CHANNEL: CSTYD FILTER: CH. CLASS 1000

PEAK DATA: 34.68 MM @ 30.48 MS, -0.51 MM @ 98.24 MS

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (6.1 M/SEC)

SHOCK ABSORBER RESISTIVE FORCE

572F SN51 DAMPER TEST CAL01

TRC TEST NUMBER: DP5101C

50

40

30

20

10

0

-10

TIME (MS)

40 50 60 70 80 90 100

PEAK DATA: 4133.83 N @ 3.44 MS; -1466.62 N @ 88.80 MS

CHANNEL: DAMPF FILTER: CH. CLASS 1000

971027

C-16

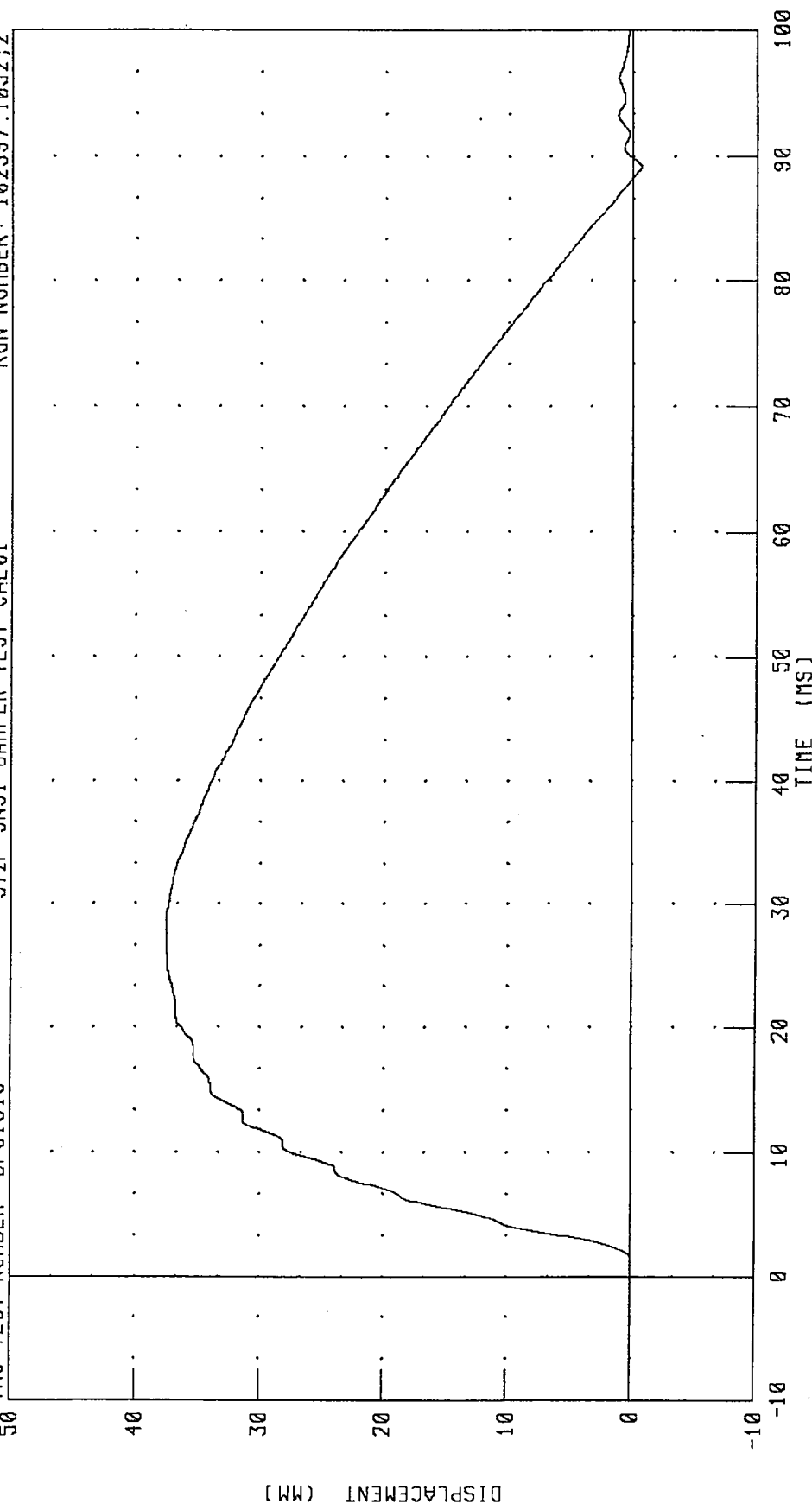
PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (6.1 M/SEC)

SHOCK ABSORBER DISPLACEMENT

TRC TEST NUMBER: DP5101C

572F SN51 DAMPER TEST CAL01

RUN NUMBER: 102397.1052;2



CHANNEL: CSTYD FILTER: CH. CLASS 1000

PEAK DATA: 37.57 NM @ 26.96 MS; -0.65 MM @ 89.20 MS

Calibration Test Results

Pre-Test

SID: 052

Configured for Left Side Impact

External Dimensions:	The dummy passed all external dimension requirements.
Lateral Thorax Impact Test:	The lateral thorax passed all impact test requirements.
Pelvis Impact Tests:	The lateral pelvis passed all impact test requirements.
Thorax Shock Absorbers:	The thorax passed all shock absorber requirements.

TRANSPORTATION RESEARCH CENTER INC.
SIDE IMPACT DUMMY
EXTERNAL DIMENSIONS
LEFT SIDE CONFIGURATION
SN SN52 VECTOR

24-OCT-97

TRC INC. TEST NO: ED5201 572F SN52 EXT.DIMENSION CAL01

DIMENSIONS WITH CHEST JACKET INSTALLED			
SYMB	DESCRIPTION	SPECIFICATION	TEST RESULTS
	TEMPERATURE		21.1 DEG. C
	RELATIVE HUMIDITY		60.0 %
SH	SEATED HEIGHT	889 - 909 MM	894.1 MM
HP	HIP PIVOT HEIGHT	99 MM REF.	99.1 MM
KH	KNEE PIVOT FROM BACKLINE	511 - 526 MM	525.8 MM
KV	KNEE PIVOT FROM FLOOR	490 - 506 MM	490.2 MM
HW	HIP WIDTH	356 - 391 MM	373.4 MM
DIMENSIONS WITH CHEST JACKET REMOVED			
SYMB	DESCRIPTION	SPECIFICATION	TEST RESULTS
RH	RIB HEIGHT	501 - 520 MM	508.0 MM
RD	RIB FROM BACKLINE	229 - 241 MM	236.2 MM
RW-1	TOP RIB WIDTH FROM C/L	165. - 180 MM	180.3 MM
RW-2	BOTTOM RIB WIDTH FROM C/L	165 - 180 MM	180.3 MM
	DIFFERENCE BETWEEN TOP & BOTTOM RIB WIDTH FROM C/L	≤ 2.5 MM	0.0 MM

DUMMY MEETS SPECIFICATIONS

TECHNICIAN

Scott Lusk

RUN NUMBER: 111997.1313

TRANSPORTATION RESEARCH CENTER INC.

LATERAL THORAX IMPACT TEST

SIDE IMPACT DUMMY

23-OCT-97

LEFT SIDE CONFIGURATION

TRC INC.

TEST NO: STL5201

572F SN52 LEFT THORAX CAL01

TEST PARAMETER	SPECIFICATION (ABSOLUTE VALUE)	TEST RESULTS
TEMPERATURE	18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY	10 - 70 %	25.0 %
PENDULUM VELOCITY	4.21 - 4.32 M/S	4.29 M/S
PEAK ACCELERATION: UPPER RIB BAR	37 - 46 G	-42.4 G
PEAK ACCELERATION: LOWER RIB BAR	37 - 46 G	-40.0 G
PEAK ACCELERATION: LOWER THORACIC SPINE	15 - 22 G	-16.2 G

TEST MEETS SPECIFICATIONS

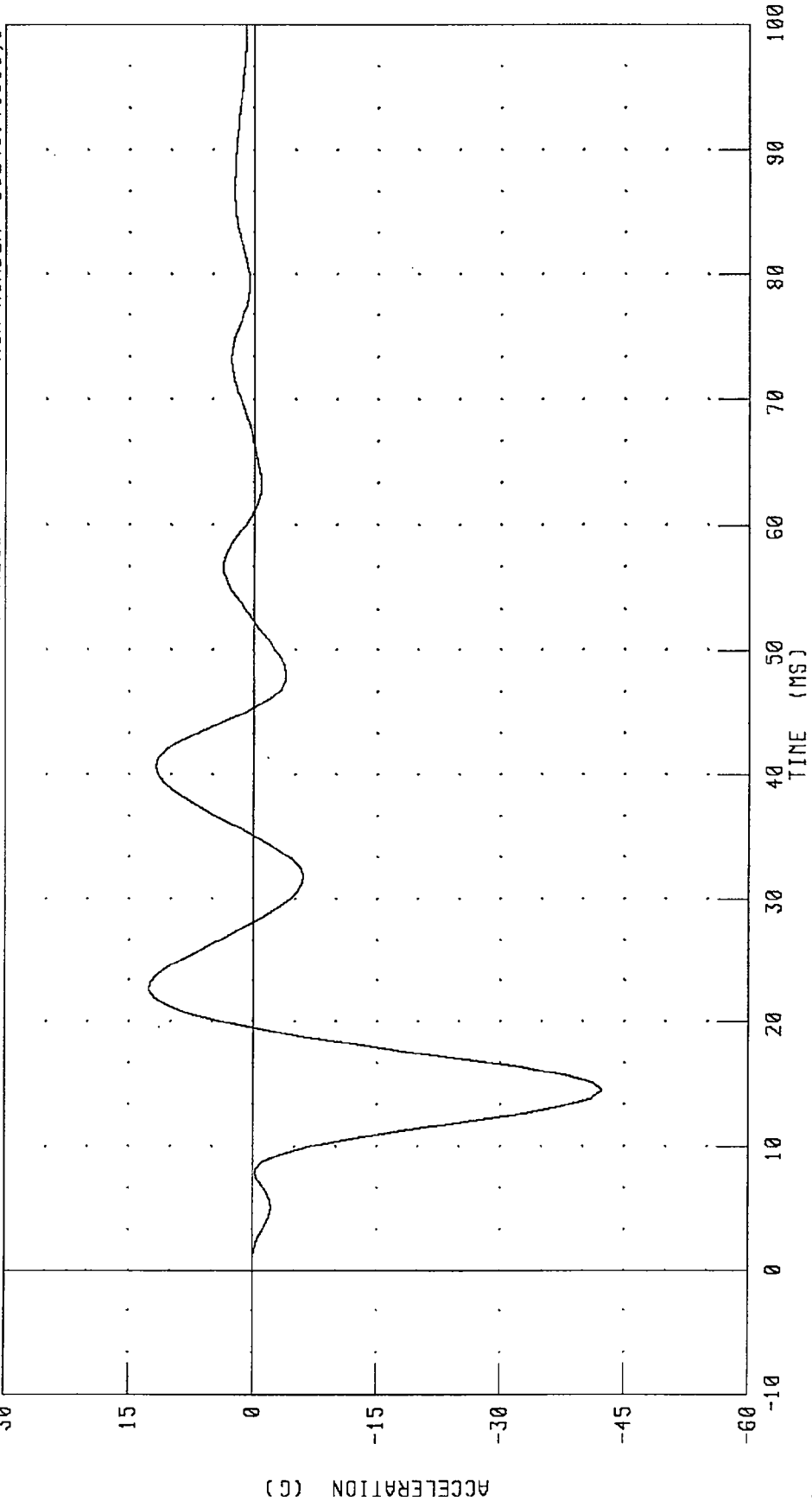
TECHNICIAN

By Calk

RUN NUMBER: 102497.1012;1

PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)
 LEFT UPPER RIB ACCELERATION Y AXIS

TRC TEST NUMBER: STL5201 572F SN52 LEFT THORAX CAL01 RUN NUMBER: 102497.1013,1



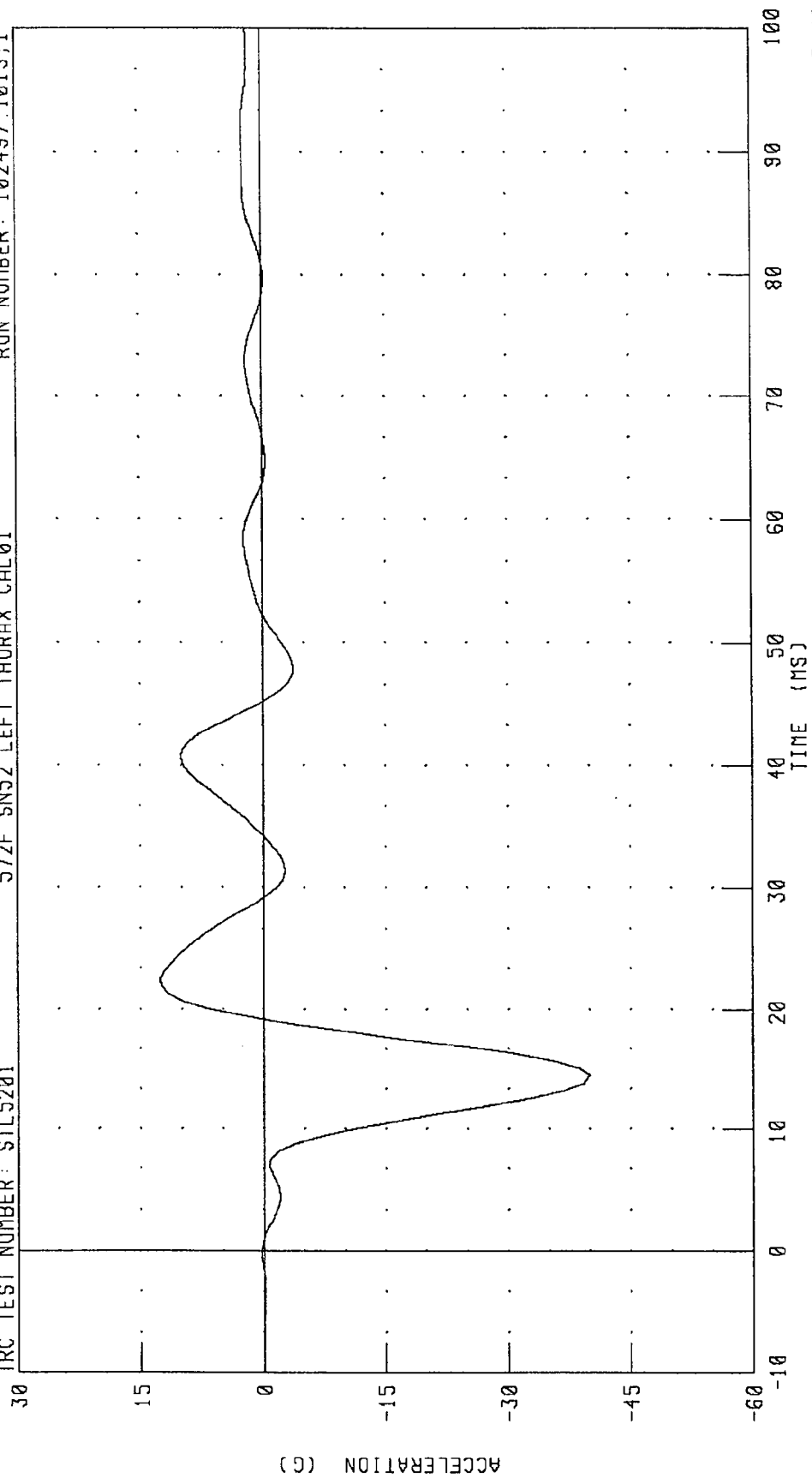
CHANNEL: LURYG FILTER: FIR 100 PEAK DATA: 12.62 G @ 22.50 MS; -42.36 G @ 14.37 MS

PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)
LEFT LOWER RIB ACCELERATION Y AXIS

RUN NUMBER: 102497.1013;1

572F SN52 LEFT THORAX CAL01

TRC TEST NUMBER: STL5201



CHANNEL: LLRYG FILTER: FIR 100 PEAK DATA: 12.51 G @ 22.50 MS; -40.01 G @ 14.37 MS

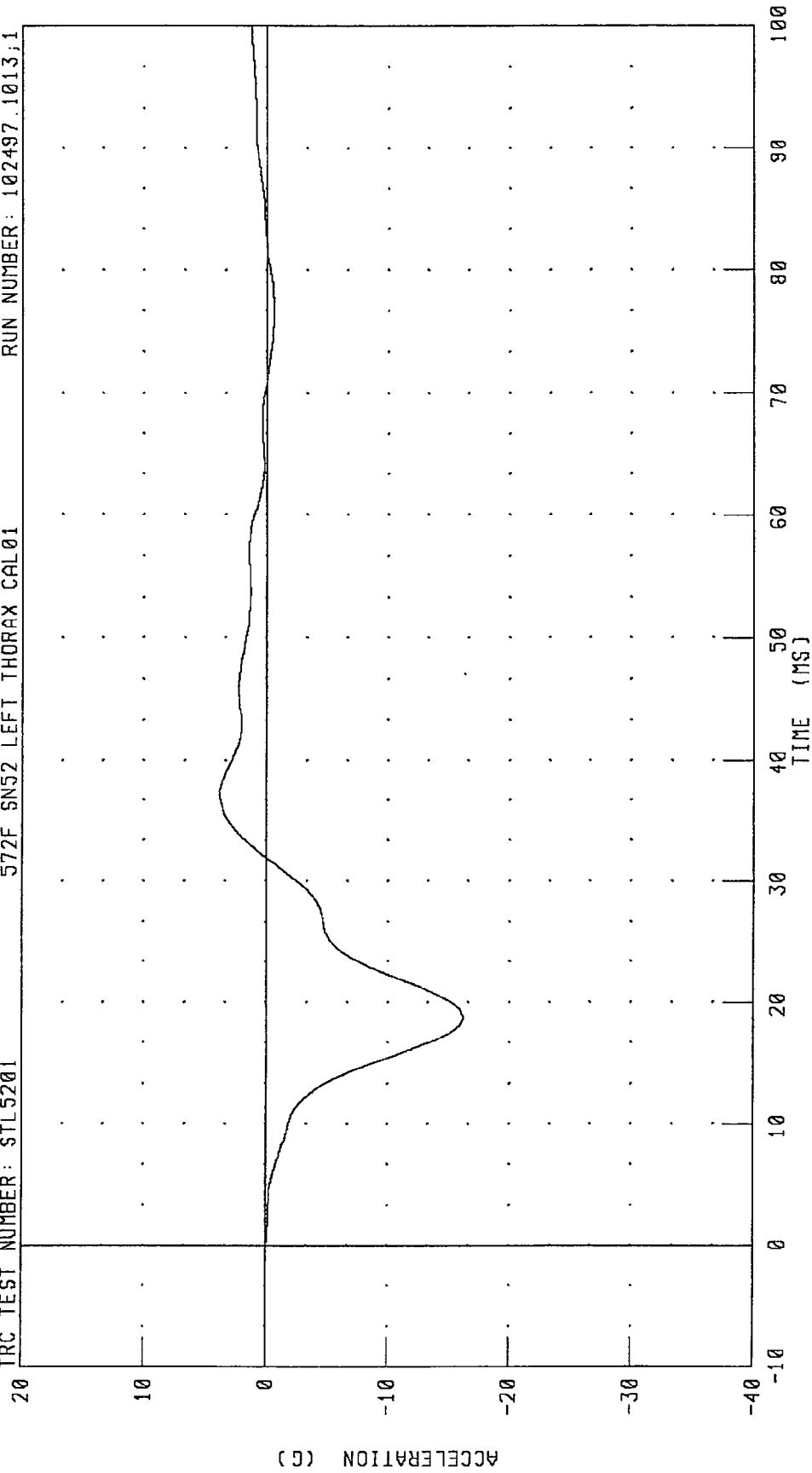
PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)

LOWER SPINE ACCELERATION Y AXIS

TRC TEST NUMBER: STL5201

572F SN52 LEFT THORAX CAL01

RUN NUMBER: 102497.1013,1



PEAK DATA: 3.77 G @ 36.88 MS; -16.24 G @ 18.75 MS

CHANNEL: T12YG FILTER: FIR 100

TRANSPORTATION RESEARCH CENTER INC.

LATERAL PELVIS IMPACT TEST

SIDE IMPACT DUMMY

24-OCT-97

LEFT SIDE CONFIGURATION

TRC INC.

TEST NO: SPL5201

572F SN52 LEFT PELVIS CAL01

TEST PARAMETER	SPECIFICATION (ABSOLUTE VALUE)	TEST RESULTS
TEMPERATURE	18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY	10 - 70 %	25.0 %
PENDULUM VELOCITY	4.27 - 4.33 M/S	4.23 M/S *
PEAK PELVIC ACCELERATION	40 - 60 G	-55.6 G
TIME ABOVE 20 G LEVEL	3 - 7 MS	5.7 MS
IS ACCELERATION CURVE UNIMODAL?	YES	YES

* TEST DOES NOT MEET SPECIFICATIONS

TECHNICIAN V. J. W. [Signature]

RUN NUMBER: 102497.0930;1

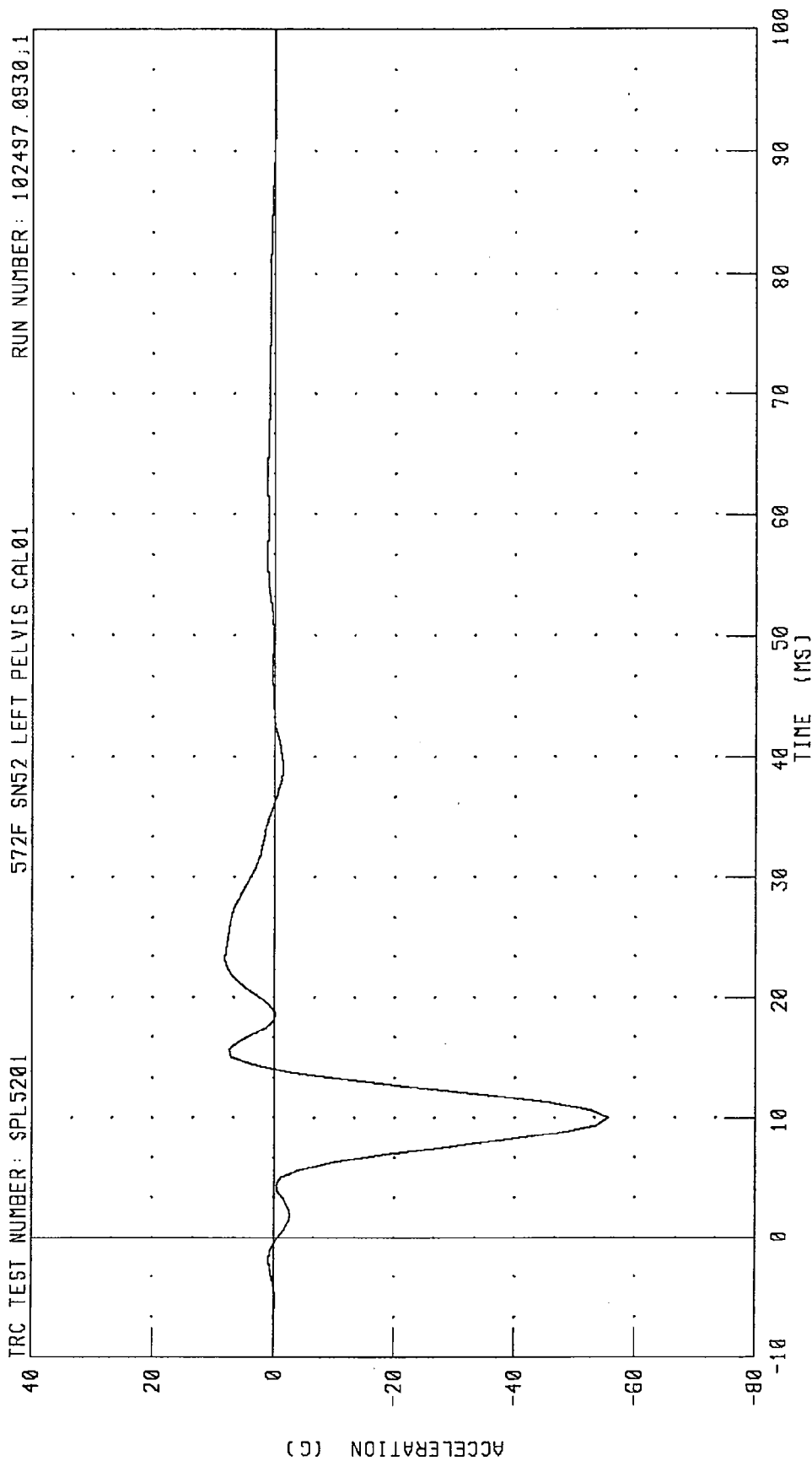
PART 572-F S.I.D. PELVIS CALIBRATION - (LEFT SIDE [IMPACT])

PELVIS ACCELERATION Y AXIS

572F SN52 LEFT PELVIS CAL01

TRC TEST NUMBER: SPL5201

RUN NUMBER: 102497.0930;1



CHANNEL: PEVYG FILTER: FIR 100

TRANSPORTATION RESEARCH CENTER INC.

THORACIC SHOCK ABSORBER TESTS

SIDE IMPACT DUMMY

23-OCT-97

TRC INC.

572F SN52 DAMPER TEST CAL01

TEST NUMBER: DP5201A

TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE		18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY		10 - 70 %	25.0 %
VELOCITY	FORCE	838 - 1125 N	891 N
3.06 M/S	DISPLACEMENT	30.2 - 35.2 MM	33.6 MM
VELOCITY	FORCE	1733 - 2100 N	1740 N
4.28 M/S	DISPLACEMENT	31.6 - 37.2 MM	36.6 MM
VELOCITY	FORCE	3743 - 4448 N	4044 N
6.10 M/S	DISPLACEMENT	33.3 - 39.5 MM	38.6 MM

DAMPER SETTING = 6.0

TEST MEETS SPECIFICATIONS

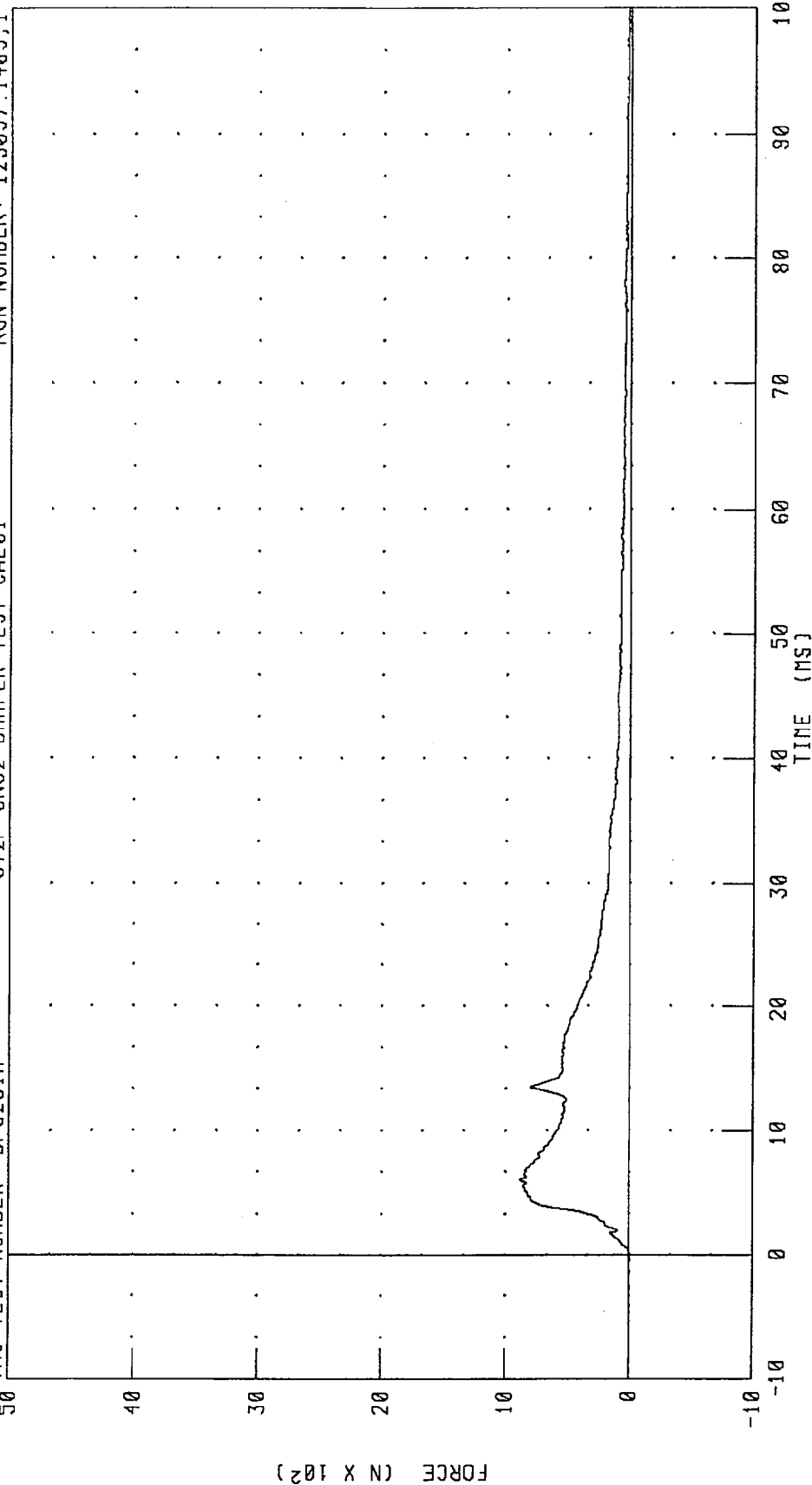
TECHNICIAN *J. Watter*

RUN NUMBER: 102397.1128;1

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (3.0 M/SEC)

SHOCK ABSORBER RESISTIVE FORCE

TRC TEST NUMBER: DP5201A 572F SN52 DAMPER TEST CAL01 RUN NUMBER: 123097.1405;1



CHANNEL: DAMPF FILTER: CH. CLASS 1000

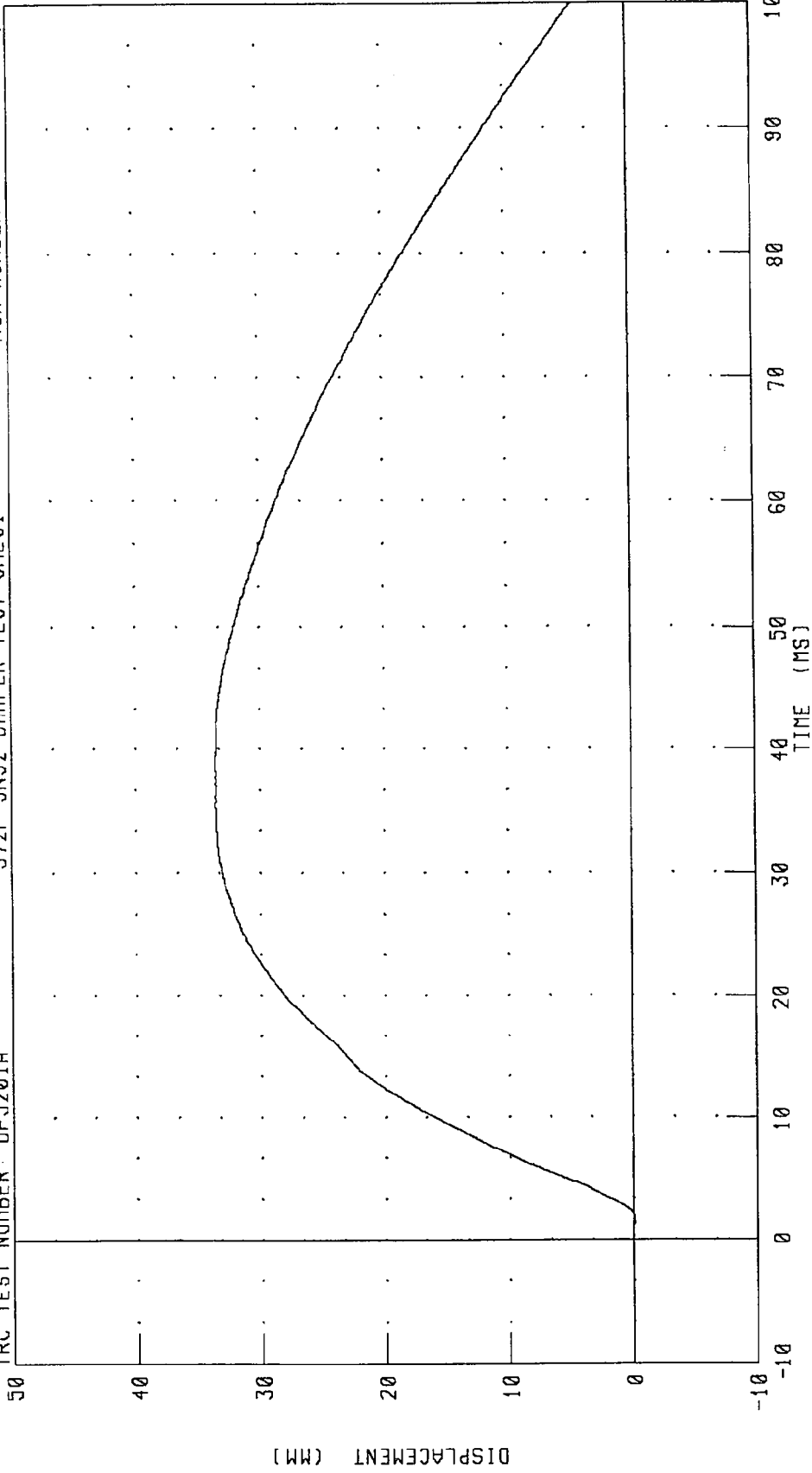
PEAK DATA: 891.16 N @ 6.08 MS; -3.33 N @ -3.28 MS

PART 572-F S I D. THORACIC SHOCK ABSORBER CALIBRATION (3.0 M/SEC)

SHOCK ABSORBER DISPLACEMENT

572F SN52 DAMPER TEST CAL01 RUN NUMBER: 123097.1405,1

IRC TEST NUMBER: DP5201A

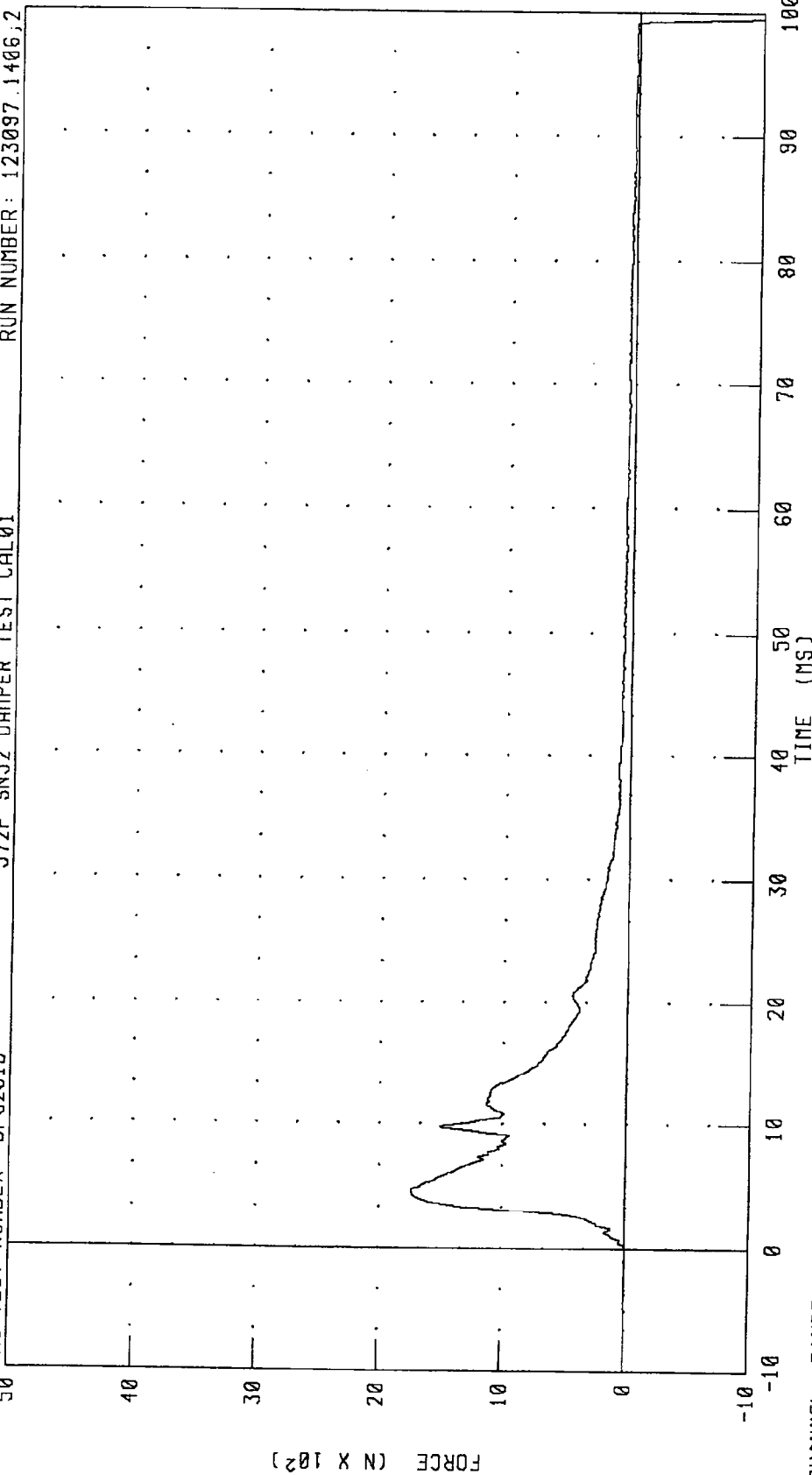


PEAK DATA: 33.60 MM @ 37.20 MS; -0.07 MM @ 1.76 MS

CHANNEL: CSTYD FILTER: CH. CLASS 1000

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (4.3 M/SEC)
SHOCK ABSORBER RESISTIVE FORCE

IRC TEST NUMBER: DP5201B 572F SN52 DAMPER TEST CAL01 RUN NUMBER: 123097 1406,2



CHANNEL: DAMPF FILTER: CH. CLASS 1000

PEAK DATA: 1739.52 N @ 4.64 MS; -1409.80 N @ 99.68 MS

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (4.3 M/SEC)

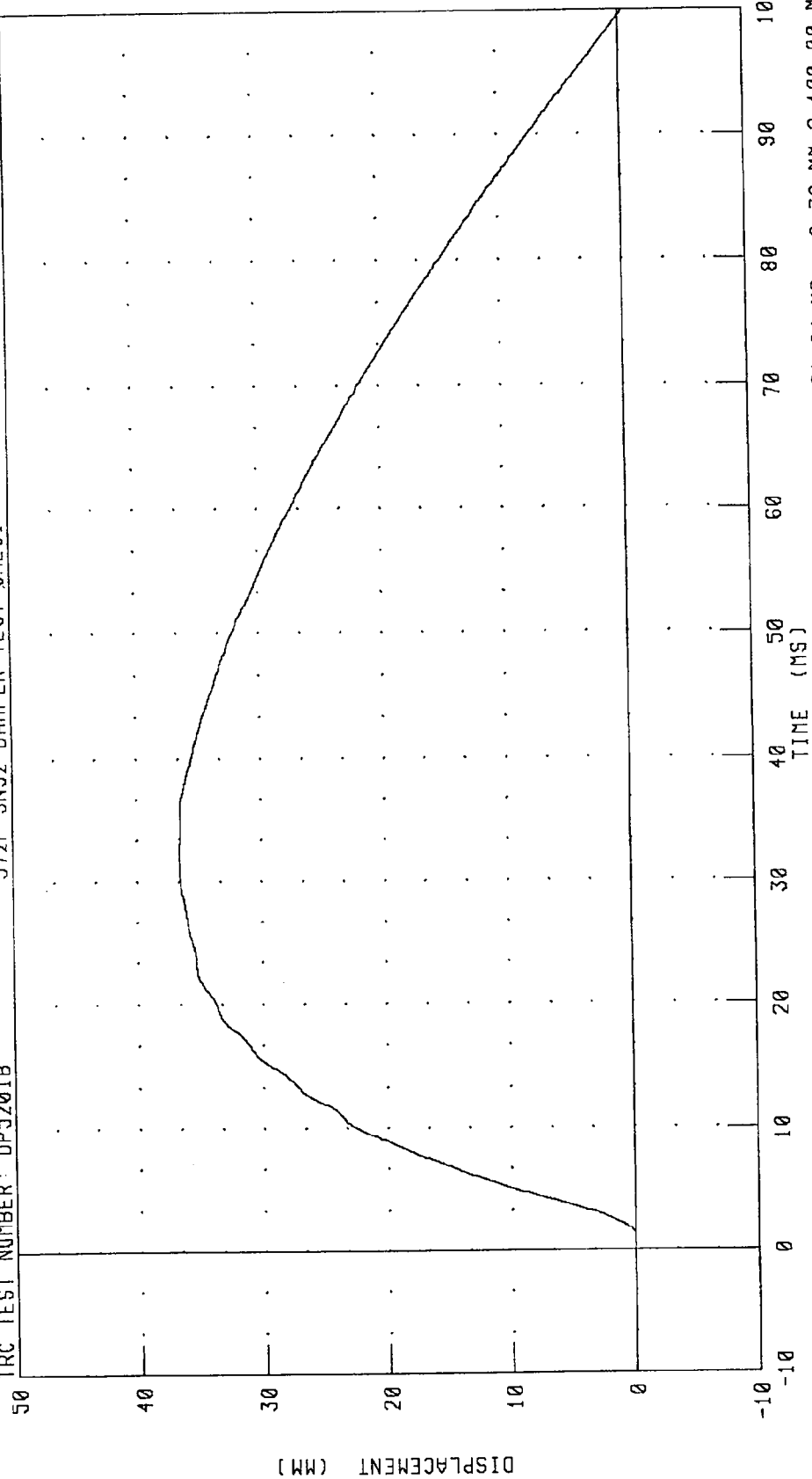
SHOCK ABSORBER DISPLACEMENT

572F SN52 DAMPER TEST CAL01

TRC TEST NUMBER: DP5201B

572F SN52 DAMPER TEST CAL01

RUN NUMBER: 123097.1406;2

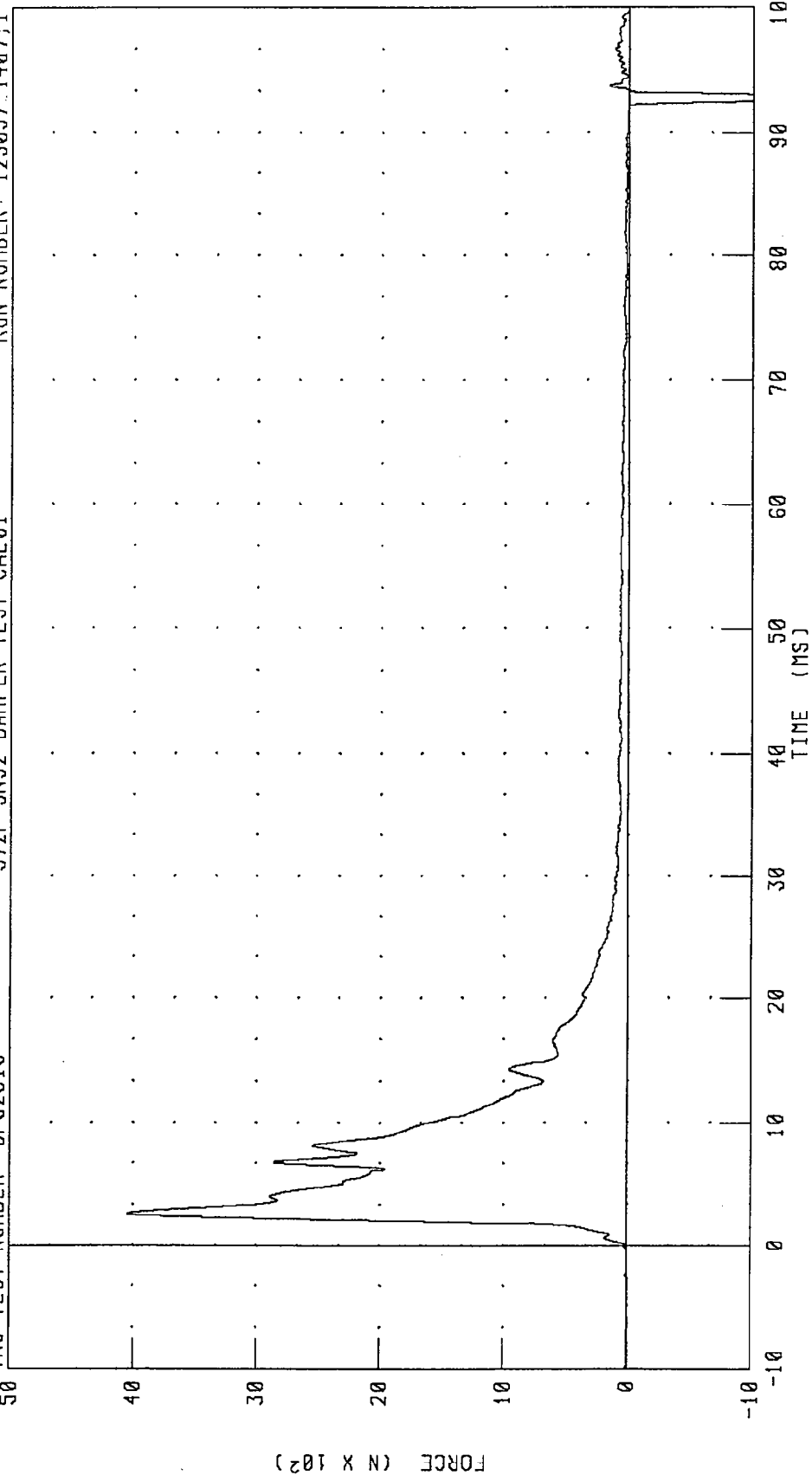


CHANNEL: CSTYD FILTER: CH. CLASS 1000

PEAK DATA: 36.62 MM @ 31.04 MS; -0.30 MM @ 100.00 MS

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (6.1 M/SEC)
SHOCK ABSORBER RESISTIVE FORCE

TRC TEST NUMBER: DP5201C 572F SN52 DAMPER TEST CAL01 RUN NUMBER: 123097.1407.1



PEAK DATA: 4044.21 N @ 2.56 MS; -1420.21 N @ 92.72 MS

CHANNEL: DAMPF FILTER: CH. CLASS 1000

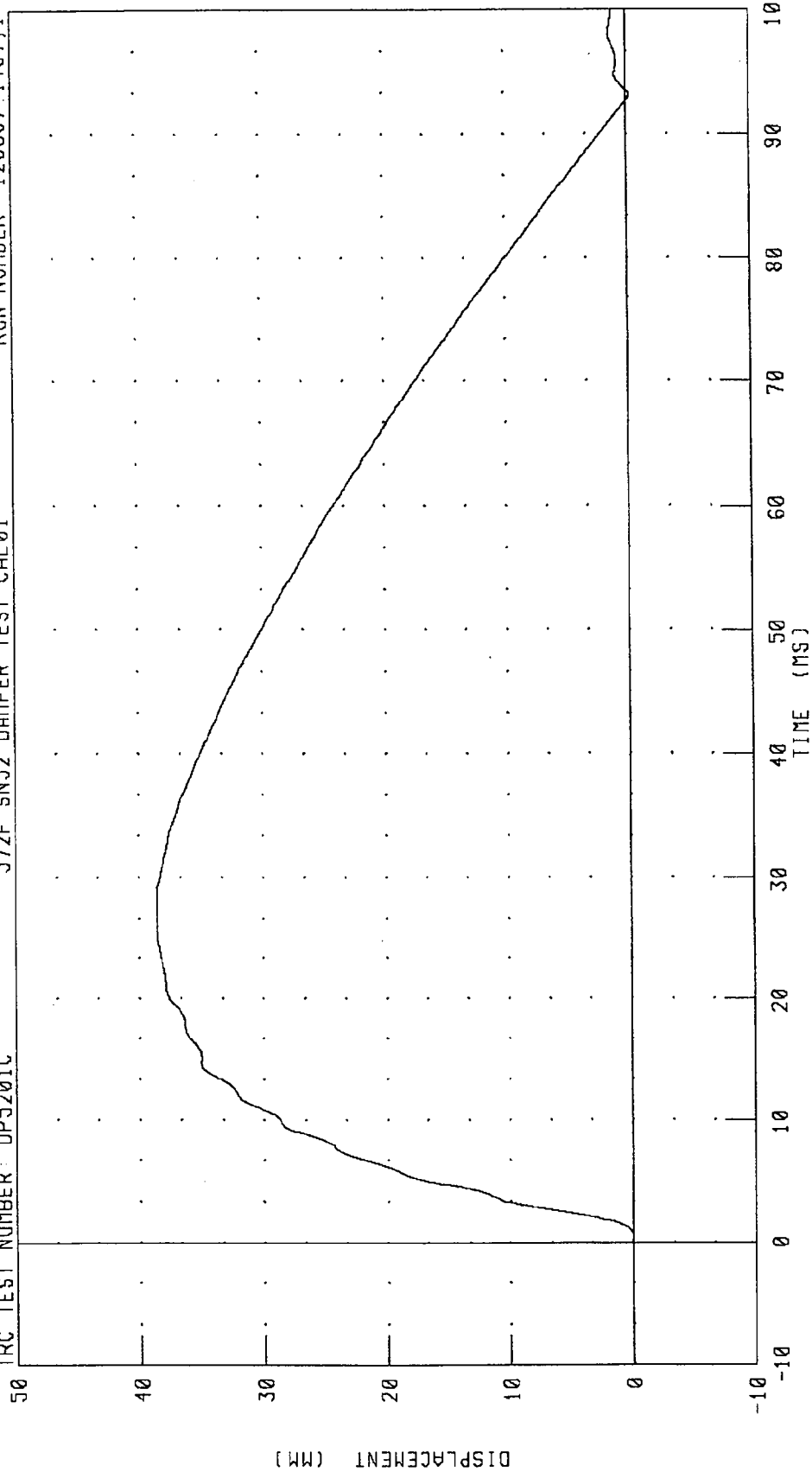
PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (6.1 M/SEC)

SHOCK ABSORBER DISPLACEMENT

TRC TEST NUMBER: DP5201C

572F SN52 DAMPER TEST CAL01

RUN NUMBER: 123097.1407.1



PEAK DATA: 38.58 MM @ 26.56 MS, -0.26 MM @ 93.12 MS

CHANNEL: CSTYD FILTER: CH. CLASS 1000

Calibration Test Results

Post-Test

SID: 051

Configured for Left Side Impact

External Dimensions:	The dummy passed all external dimension requirements.
Lateral Thorax Impact Test:	The lateral thorax did not pass all impact test requirements.
Pelvis Impact Tests:	The lateral pelvis passed all impact test requirements.
Thorax Shock Absorbers:	The thorax passed all shock absorber requirements.

TRANSPORTATION RESEARCH CENTER INC.
SIDE IMPACT DUMMY
EXTERNAL DIMENSIONS
LEFT SIDE CONFIGURATION
SN SN51 VECTOR

03-NOV-97

TRC INC. TEST NO: ED5102 572F SN51 EXT.DIMENSION CAL02

DIMENSIONS WITH CHEST JACKET INSTALLED			
SYMB	DESCRIPTION	SPECIFICATION	TEST RESULTS
	TEMPERATURE		21.1 DEG. C
	RELATIVE HUMIDITY		60.0 %
SH	SEATED HEIGHT	889 - 909 MM	894.1 MM
HP	HIP PIVOT HEIGHT	99 MM REF.	99.1 MM
KH	KNEE PIVOT FROM BACKLINE	511 - 526 MM	525.8 MM
KV	KNEE PIVOT FROM FLOOR	490 - 506 MM	492.8 MM
HW	HIP WIDTH	356 - 391 MM	370.8 MM
DIMENSIONS WITH CHEST JACKET REMOVED			
SYMB	DESCRIPTION	SPECIFICATION	TEST RESULTS
RH	RIB HEIGHT	501 - 520 MM	515.6 MM
RD	RIB FROM BACKLINE	229 - 241 MM	241.3 MM
RW-1	TOP RIB WIDTH FROM C/L	165. - 180 MM	175.3 MM
RW-2	BOTTOM RIB WIDTH FROM C/L	165 - 180 MM	175.3 MM
	DIFFERENCE BETWEEN TOP & BOTTOM RIB WIDTH FROM C/L	≤ 2.5 MM	0.0 MM

DUMMY MEETS SPECIFICATIONS

TECHNICIAN

Scott Tucker

RUN NUMBER: 111997.1307

TRANSPORTATION RESEARCH CENTER INC.

LATERAL THORAX IMPACT TEST

SIDE IMPACT DUMMY

03-NOV-97

LEFT SIDE CONFIGURATION

TRC INC.

TEST NO: STL5102

572F SN51 LEFT THORAX CAL02

TEST PARAMETER	SPECIFICATION (ABSOLUTE VALUE)	TEST RESULTS
TEMPERATURE	18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY	10 - 70 %	30.0 %
PENDULUM VELOCITY	4.21 - 4.32 M/S	4.28 M/S
PEAK ACCELERATION: UPPER RIB BAR	37 - 46 G	-33.0 G *
PEAK ACCELERATION: LOWER RIB BAR	37 - 46 G	-32.8 G *
PEAK ACCELERATION: LOWER THORACIC SPINE	15 - 22 G	-14.1 G *

* TEST DOES NOT MEET SPECIFICATIONS

TECHNICIAN

Scott Ruckler

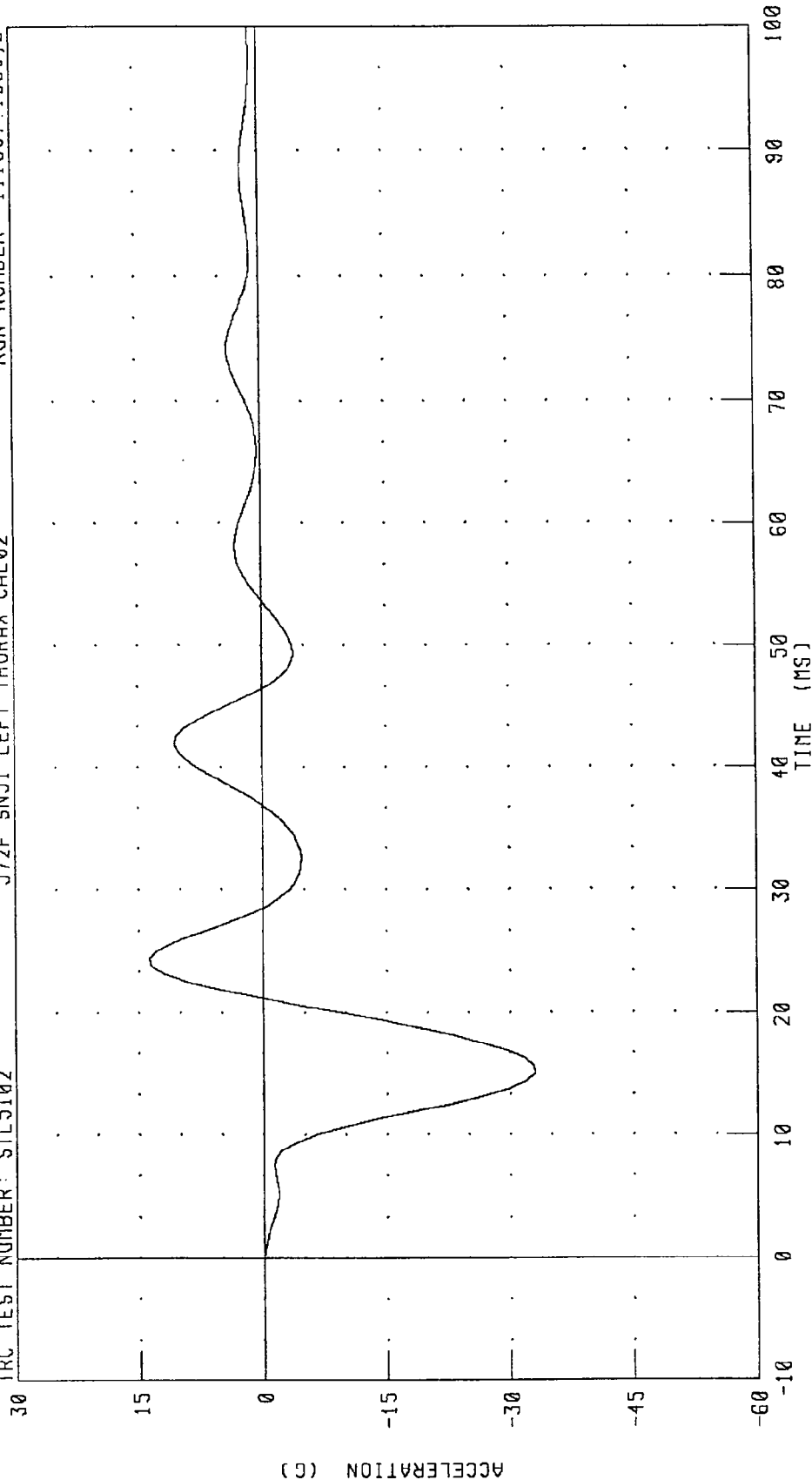
RUN NUMBER: 110397.1014;2

PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)
 LEFT UPPER RIB ACCELERATION Y AXIS

RUN NUMBER: 111997.1509;2

572F SN51 LEFT THORAX CAL02

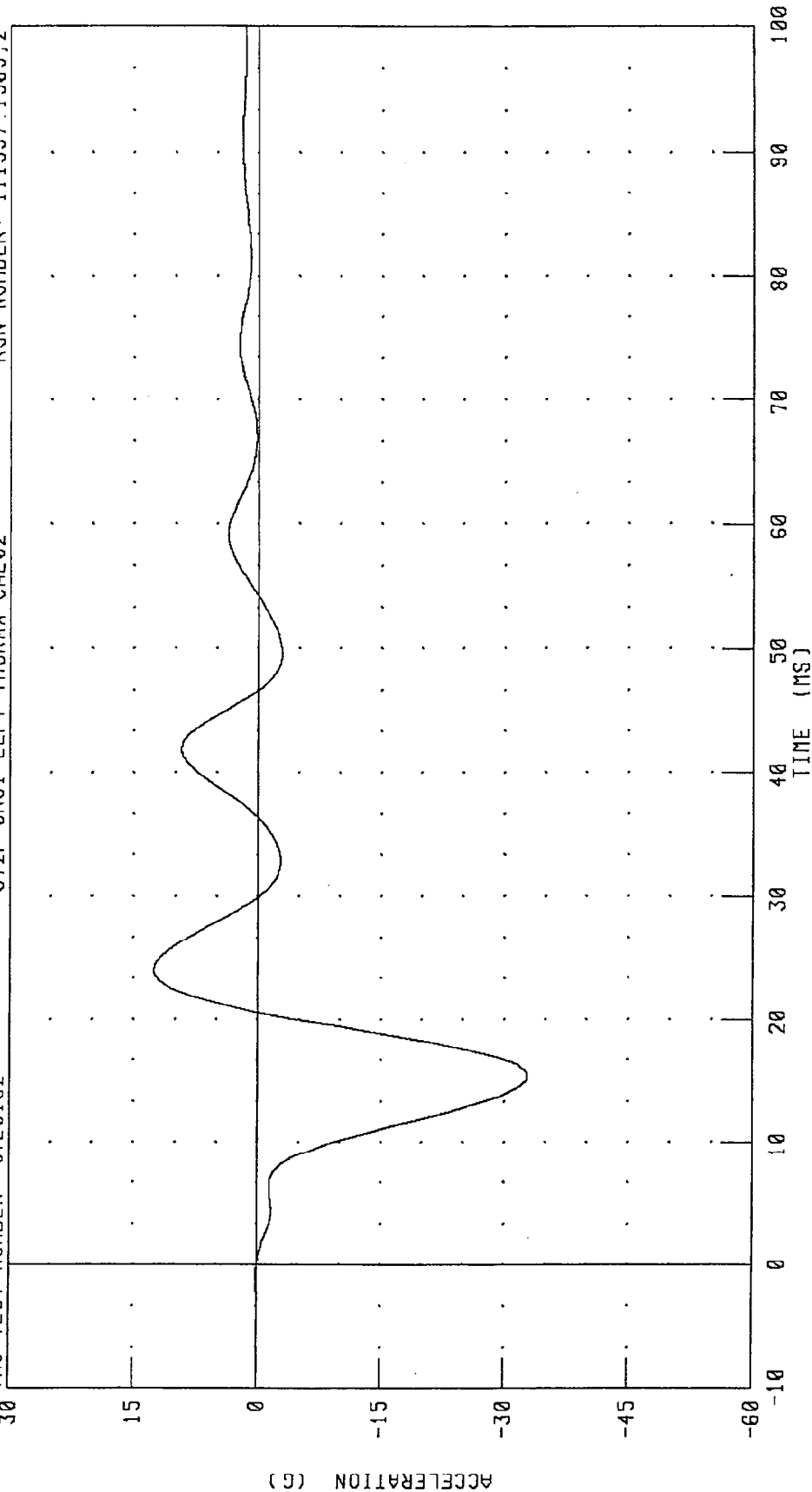
IRC TEST NUMBER: STL5102



CHANNEL: LURYC FILTER: FIR 100

PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)
LEFT LOWER RIB ACCELERATION Y AXIS

TRC TEST NUMBER: STL5102 572F SN51 LEFT THORAX CAL02 RUN NUMBER: 111997.1509;2



CHANNEL: LLRYG FILTER: FIR 100 PEAK DATA: 12.56 G @ 23.75 MS; -32.80 G @ 15.63 MS

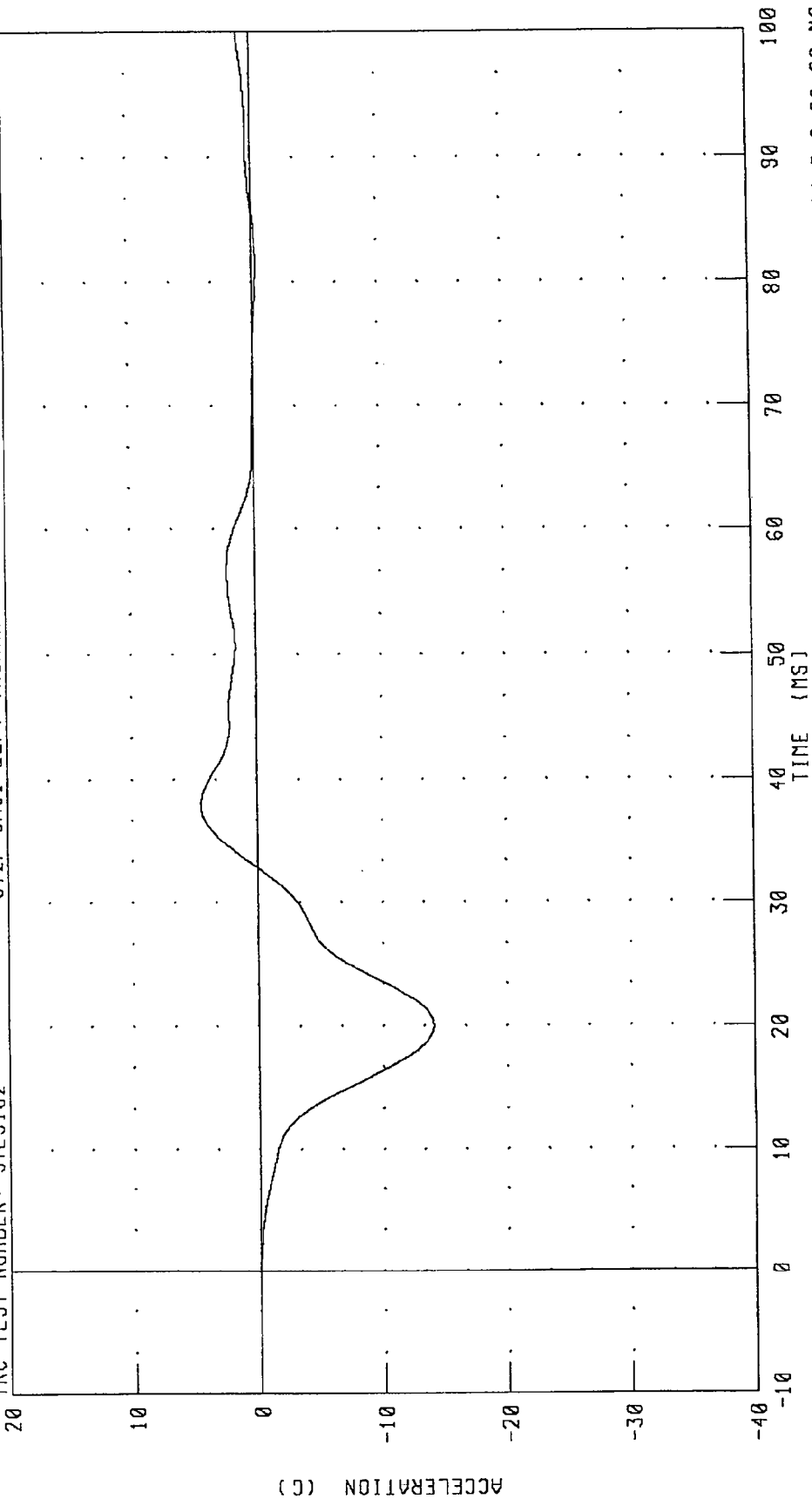
PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)

LOWER SPINE ACCELERATION Y AXIS

572F SN51 LEFT THORAX CAL02

TRC TEST NUMBER: STL5102

RUN NUMBER: 111997.1509;2



PEAK DATA: 4.52 G @ 38.13 MS; -14.14 G @ 20.00 MS

CHANNEL: T12YC FILTER: FIR 100

TRANSPORTATION RESEARCH CENTER INC.

LATERAL PELVIS IMPACT TEST

SIDE IMPACT DUMMY

03-NOV-97

LEFT SIDE CONFIGURATION

TRC INC.

TEST NO: SPL5102

572F SN51 LEFT PELVIS CAL02

TEST PARAMETER	SPECIFICATION (ABSOLUTE VALUE)	TEST RESULTS
TEMPERATURE	18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY	10 - 70 %	30.0 %
PENDULUM VELOCITY	4.21 - 4.32 M/S	4.23 M/S
PEAK PELVIC ACCELERATION	40 - 60 G	-42.4 G
TIME ABOVE 20 G LEVEL	3 - 7 MS	5.7 MS
IS ACCELERATION CURVE UNIMODAL?	YES	YES

TEST MEETS SPECIFICATIONS

TECHNICIAN

By Calt

RUN NUMBER: 110397.0935;2

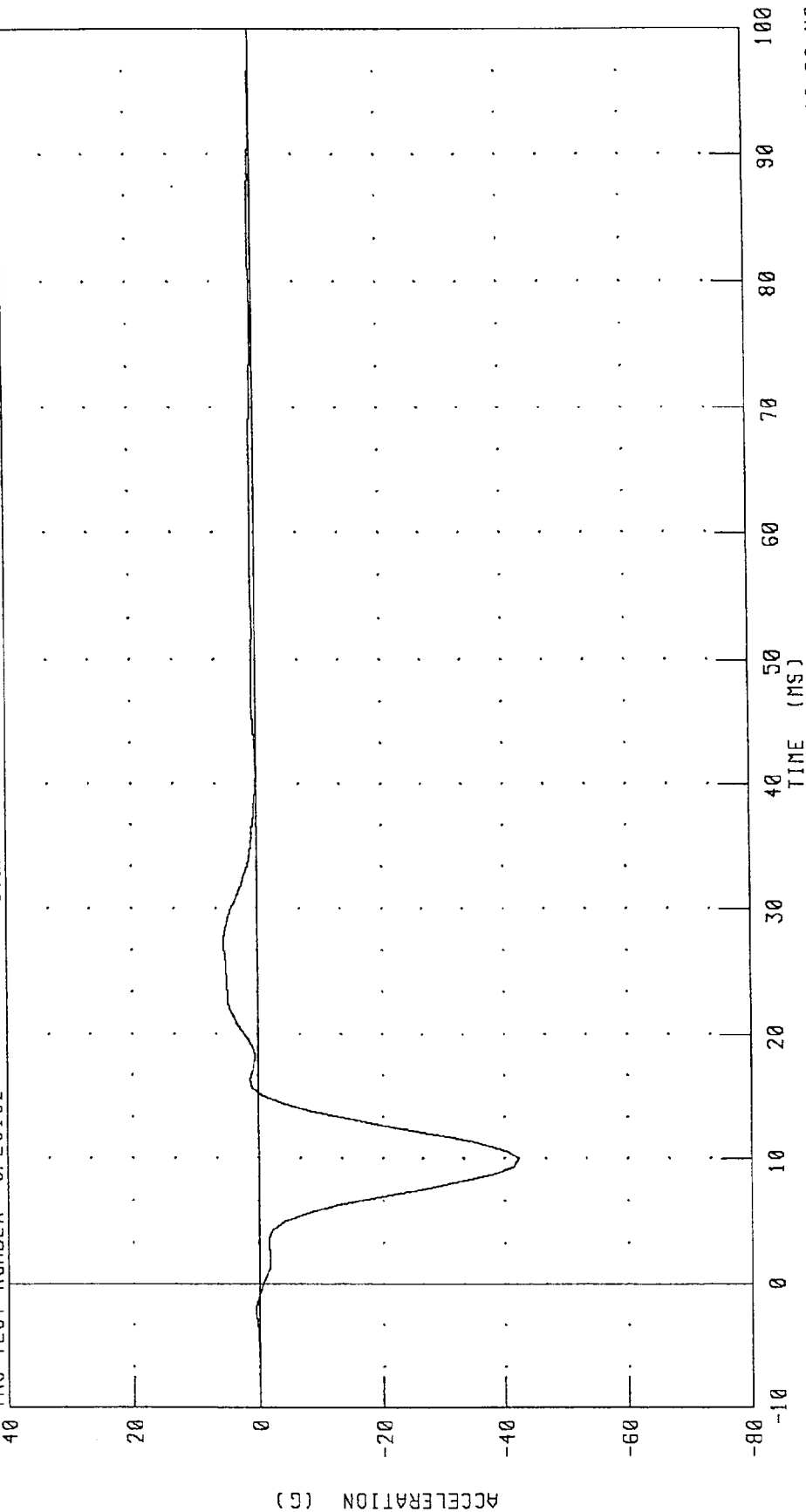
PART 572-F S.I.D. PELVIS CALIBRATION - (LEFT SIDE IMPACT)

PELVIS ACCELERATION Y AXIS

572F SN51 LEFT PELVIS CAL02

TRC TEST NUMBER: SPL5102

RUN NUMBER: 110397.0936.2



CHANNEL: PEVYG FILTER: FIR 100

PEAK DATA: 5.34 G @ 26.87 MS, -42.43 G @ 10.00 MS

TRANSPORTATION RESEARCH CENTER INC.

THORACIC SHOCK ABSORBER TESTS

SIDE IMPACT DUMMY

03-NOV-97

TRC INC.

572F SN51 DAMPER TEST CAL02

TEST NUMBER: DP5102A

TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE		18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY		10 - 70 %	30.0 %
VELOCITY 3.07 M/S	FORCE	856 - 1146 N	902 N
	DISPLACEMENT	30.2 - 35.2 MM	31.3 MM
VELOCITY 4.29 M/S	FORCE	1759 - 2131 N	1812 N
	DISPLACEMENT	31.7 - 37.3 MM	34.4 MM
VELOCITY 6.10 M/S	FORCE	3743 - 4448 N	4322 N
	DISPLACEMENT	33.3 - 39.5 MM	37.5 MM

DAMPER SETTING = 5.8

TEST MEETS SPECIFICATIONS

TECHNICIAN

R. C. Alt

RUN NUMBER: 110397.0850;1

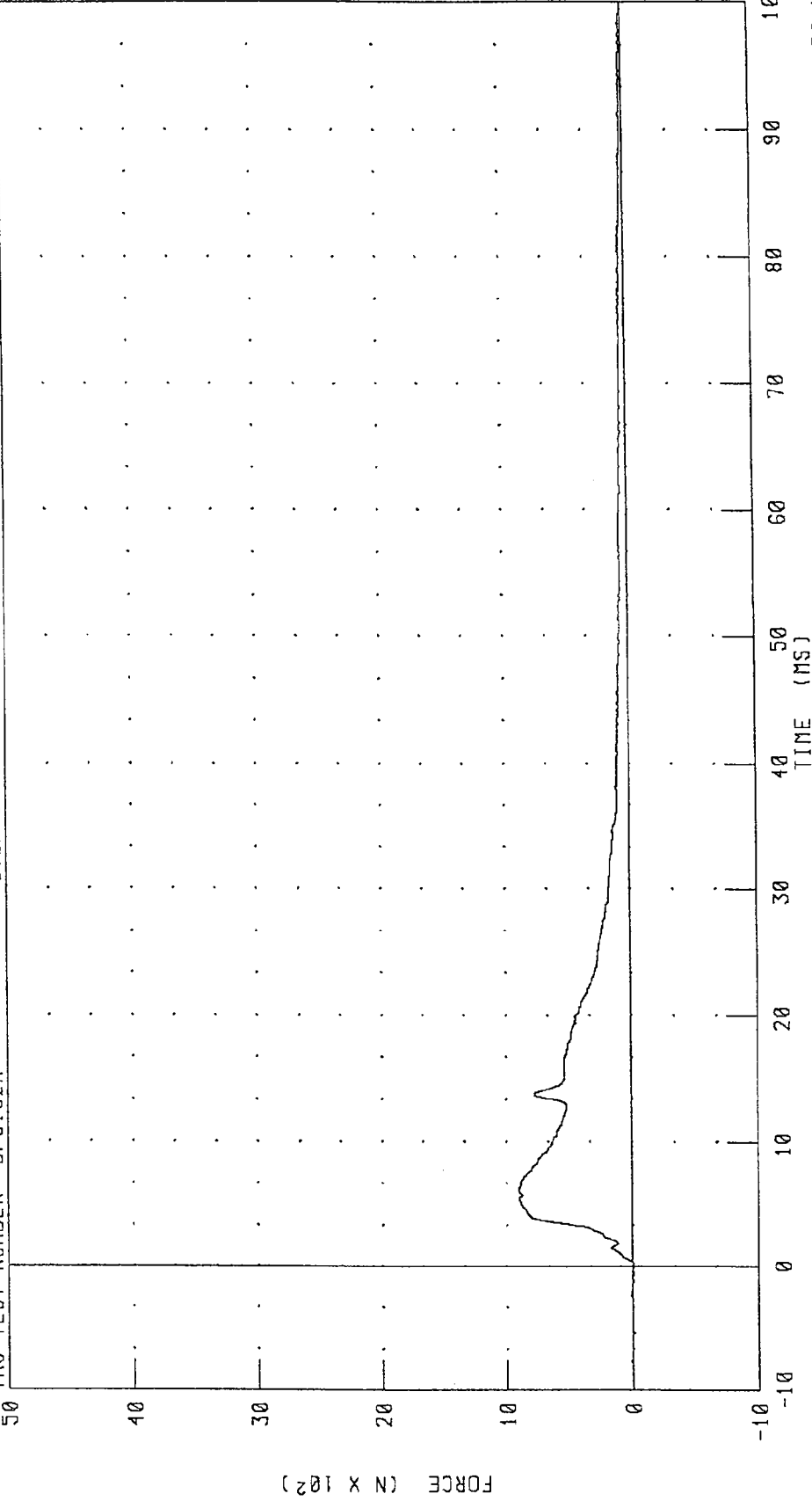
PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (3.0 M/SEC)

SHOCK ABSORBER RESISTIVE FORCE

572F SN51 DAMPER TEST CAL02

TRC TEST NUMBER: DP5102A

RUN NUMBER: 110397.0851,1

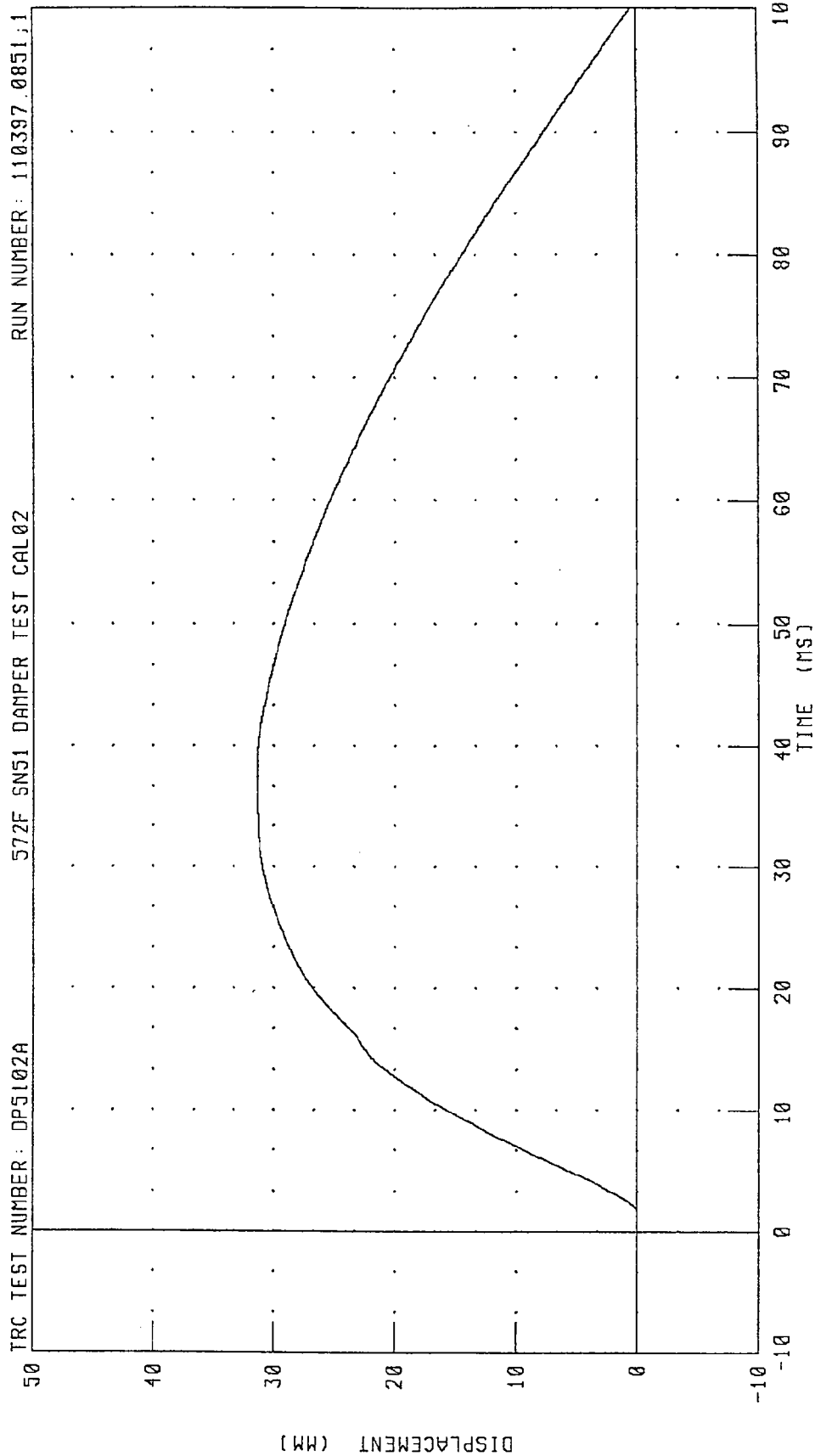


CHANNEL: DAMPF FILTER: CH. CLASS 1000

PEAK DATA: 902.49 N @ 5.44 MS; -11.17 N @ -5.36 MS

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (3.0 M/SEC)
 SHOCK ABSORBER DISPLACEMENT
 572F SN51 DAMPER TEST CAL02

TRC TEST NUMBER: DP5102A RUN NUMBER: 110397.0851;1

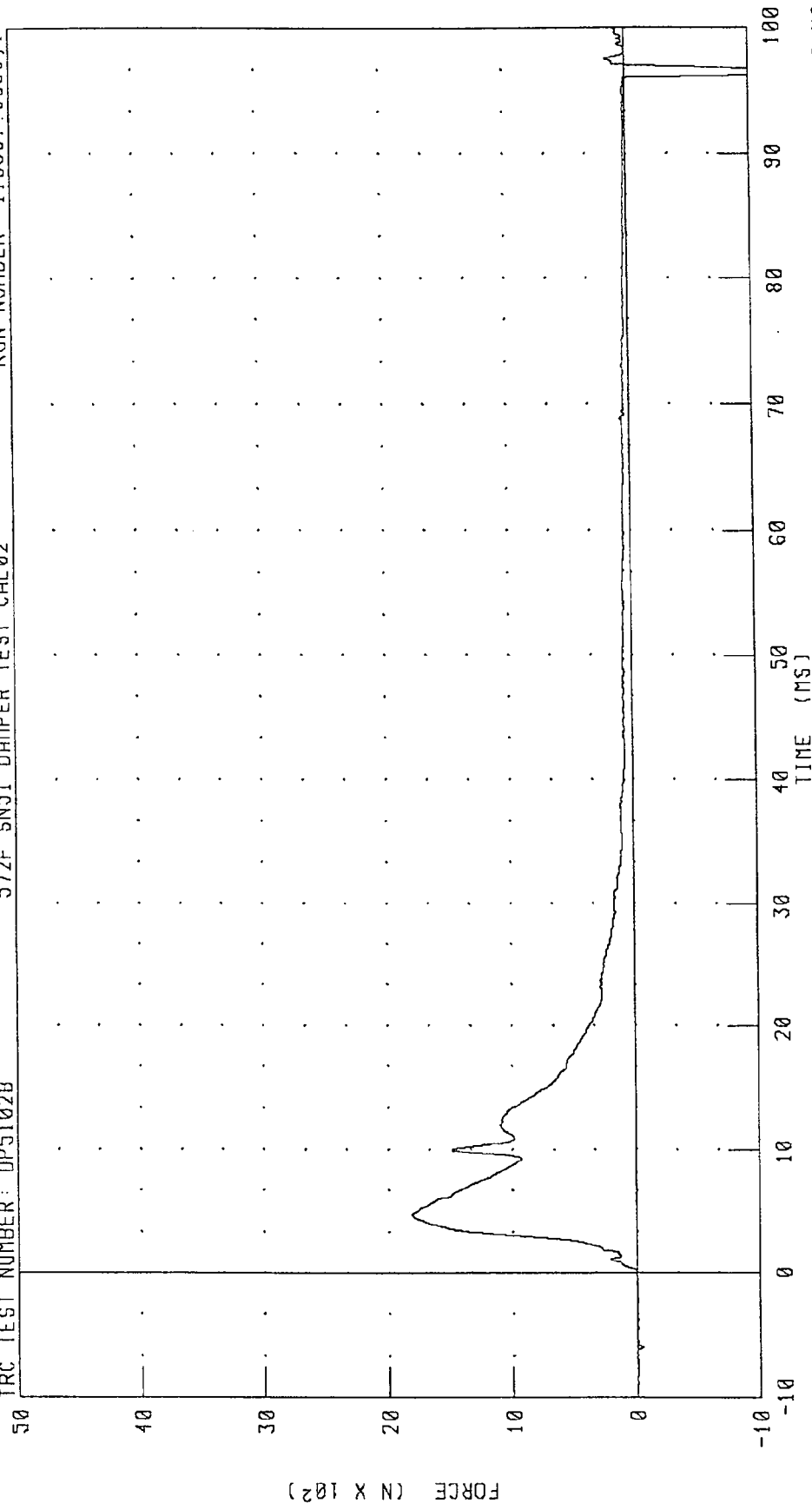


PEAK DATA: 31.31 MM @ 39.76 MS, -0.01 MM @ -5.60 MS

CHANNEL: CSTYD FILTER: CH. CLASS 1000

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (4.3 M/SEC)
SHOCK ABSORBER RESISTIVE FORCE

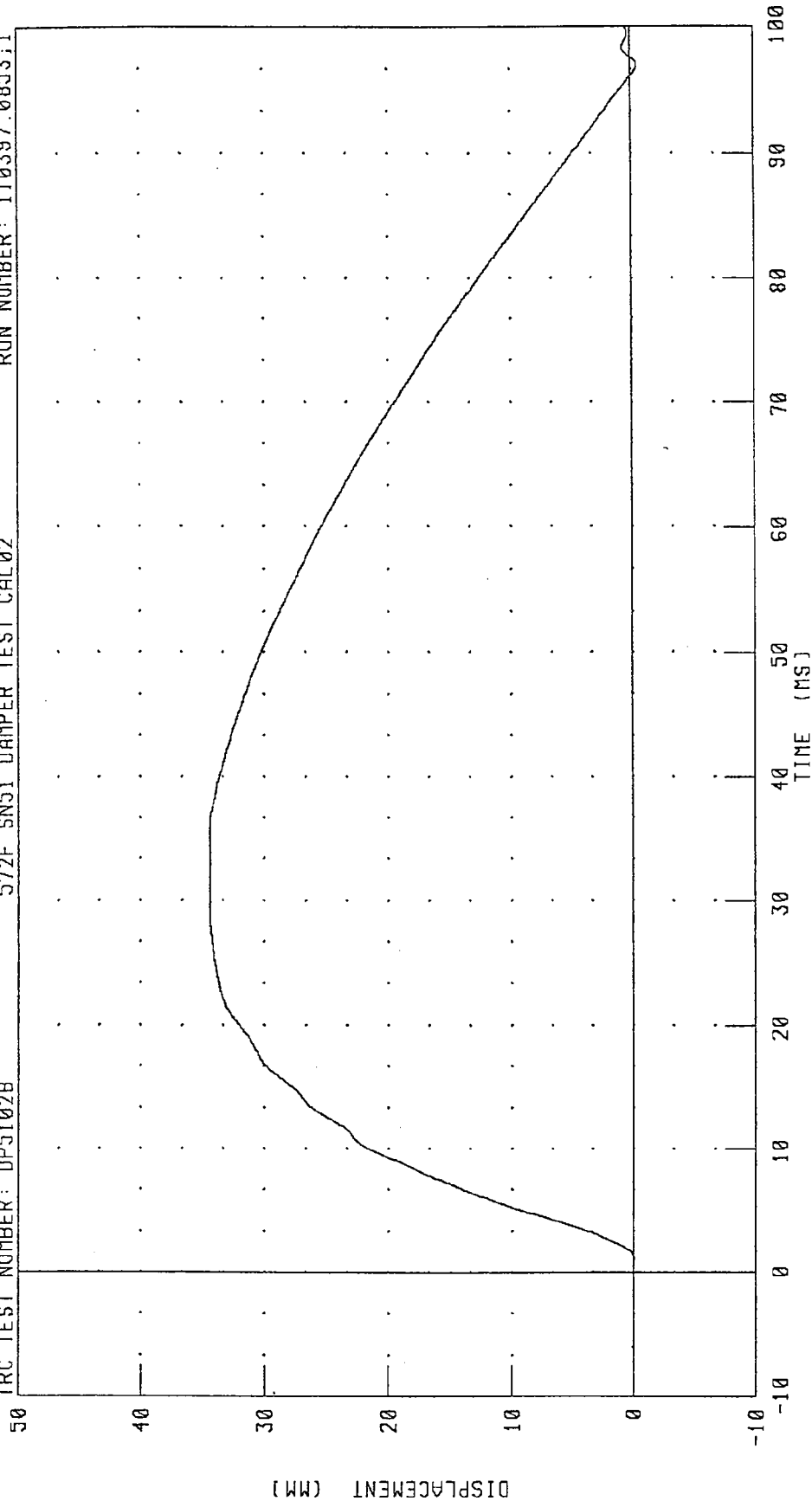
TRC TEST NUMBER: DP5102B 572F SN51 DAMPER TEST CAL02 RUN NUMBER: 110397.0853;1



CHANNEL: DAMPF FILTER: CH. CLASS 1000 PEAK DATA: 1812.12 N @ 4.72 MS, -1480.92 N @ 96.48 MS

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (4.3 M/SEC)
 SHOCK ABSORBER DISPLACEMENT

TRC TEST NUMBER: DP5102B 572F SN51 DAMPER TEST CAL02 RUN NUMBER: 110397.0853;1



CHANNEL: CSTDYD FILTER: CH. CLASS 1000

PEAK DATA: 34.42 MM @ 29.68 MS; -0.49 MM @ 96.96 MS

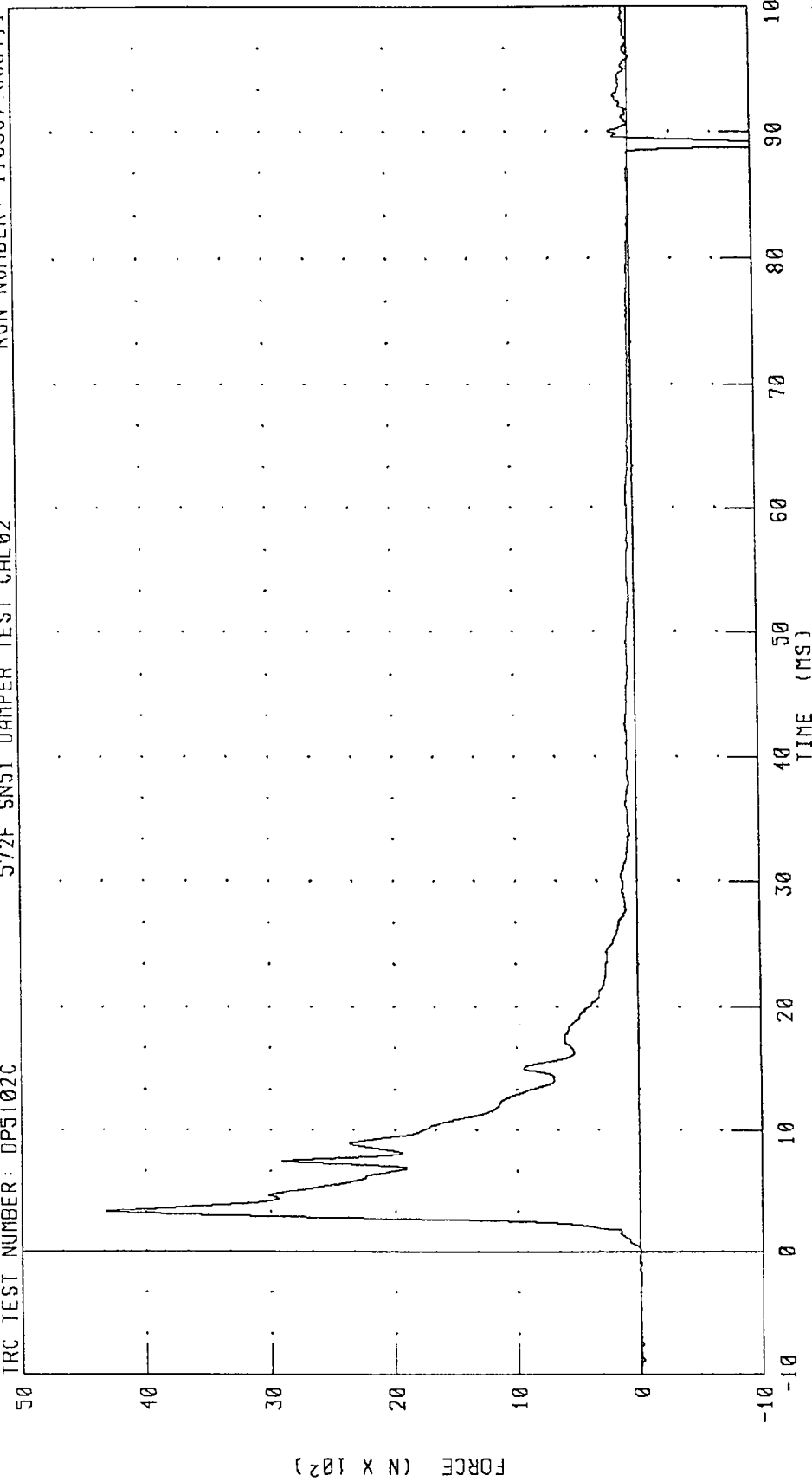
PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (5.1 M/SEC)

SHOCK ABSORBER RESISTIVE FORCE

572F SN51 DAMPER TEST CAL02 RUN NUMBER: 110397.0854;1

TRC TEST NUMBER: DP5102C

50



CHANNEL: DAMPF FILTER: CH. CLASS 1000

PEAK DATA: 4321.71 N @ 3.36 MS; -1574.85 N @ 88.96 MS

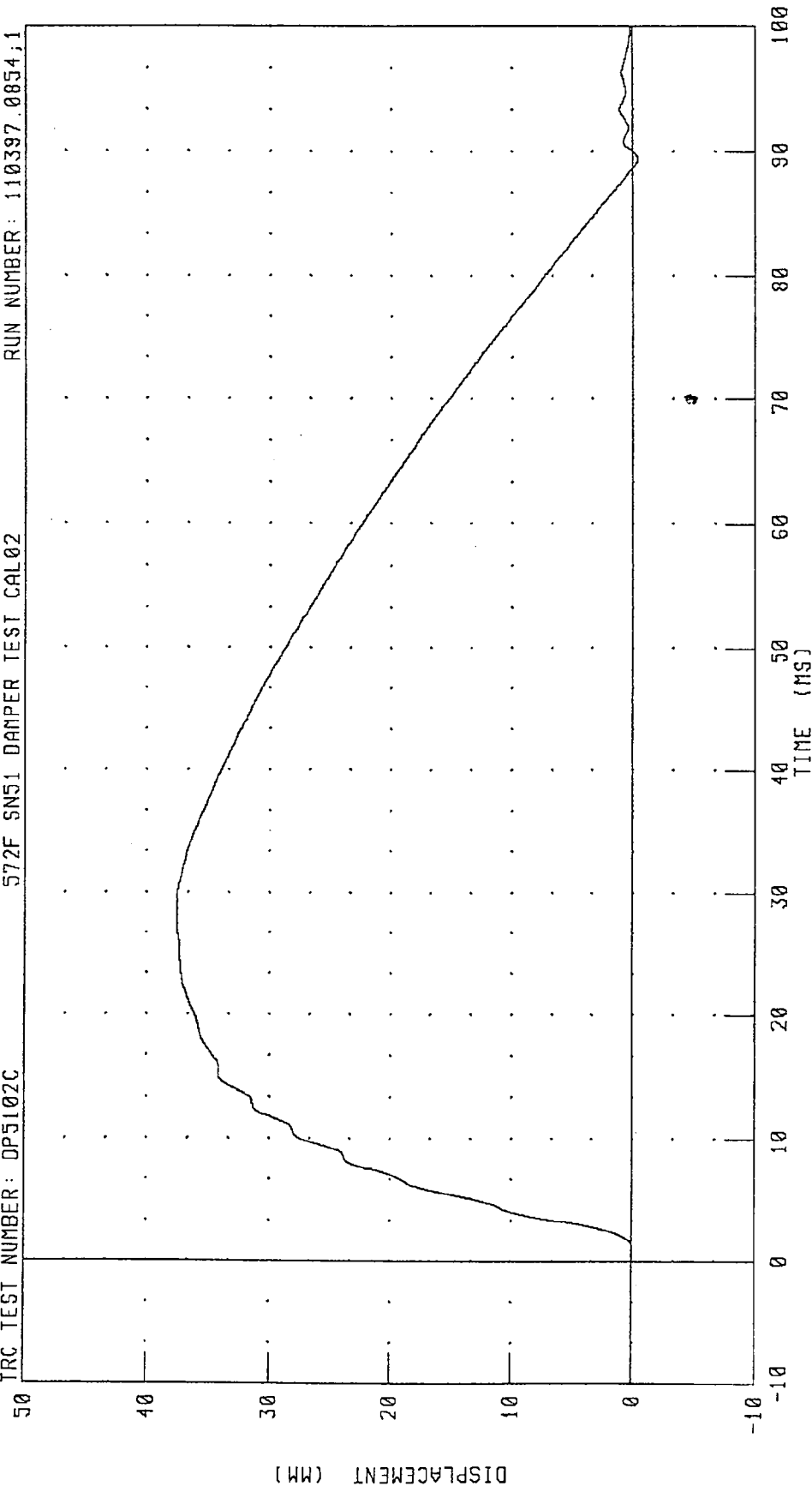
PART 572-F S.I.O. THORACIC SHOCK ABSORBER CALIBRATION (6.1 M/SEC)

SHOCK ABSORBER DISPLACEMENT

TRC TEST NUMBER: DP5102C

572F SN51 DAMPER TEST CAL02

RUN NUMBER: 110397.0854;1



CHANNEL: CSTYD FILTER: CH. CLASS 1000

PEAK DATA: 37.51 MM @ 28.48 MS; -0.43 MM @ 89.44 MS

Calibration Test Results

Post-Test

SID: 052

Configured for Left Side Impact

External Dimensions:	The dummy passed all external dimension requirements.
Lateral Thorax Impact Test:	The lateral thorax passed all impact test requirements.
Pelvis Impact Tests:	The lateral pelvis passed all impact test requirements.
Thorax Shock Absorbers:	The thorax passed all shock absorber requirements.

TRANSPORTATION RESEARCH CENTER INC.
SIDE IMPACT DUMMY
EXTERNAL DIMENSIONS
LEFT SIDE CONFIGURATION
SN SN52 VECTOR

03-NOV-97

TRC INC. TEST NO: ED5202 572F SN52 EXT.DIMENSION CAL02

DIMENSIONS WITH CHEST JACKET INSTALLED			
SYMB	DESCRIPTION	SPECIFICATION	TEST RESULTS
	TEMPERATURE		21.1 DEG. C
	RELATIVE HUMIDITY		60.0 %
SH	SEATED HEIGHT	889 - 909 MM	894.1 MM
HP	HIP PIVOT HEIGHT	99 MM REF.	99.1 MM
KH	KNEE PIVOT FROM BACKLINE	511 - 526 MM	525.8 MM
KV	KNEE PIVOT FROM FLOOR	490 - 506 MM	490.2 MM
HW	HIP WIDTH	356 - 391 MM	373.4 MM
DIMENSIONS WITH CHEST JACKET REMOVED			
SYMB	DESCRIPTION	SPECIFICATION	TEST RESULTS
RH	RIB HEIGHT	501 - 520 MM	508.0 MM
RD	RIB FROM BACKLINE	229 - 241 MM	236.2 MM
RW-1	TOP RIB WIDTH FROM C/L	165. - 180 MM	180.3 MM
RW-2	BOTTOM RIB WIDTH FROM C/L	165 - 180 MM	180.3 MM
	DIFFERENCE BETWEEN TOP & BOTTOM RIB WIDTH FROM C/L	≤ 2.5 MM	0.0 MM

DUMMY MEETS SPECIFICATIONS

TECHNICIAN

Scott Tucker

RUN NUMBER: 111997.1313

TRANSPORTATION RESEARCH CENTER INC.

LATERAL THORAX IMPACT TEST

SIDE IMPACT DUMMY

03-NOV-97

LEFT SIDE CONFIGURATION

TRC INC.

TEST NO: STL5202

572F SN52 LEFT THORAX CAL02

TEST PARAMETER	SPECIFICATION (ABSOLUTE VALUE)	TEST RESULTS
TEMPERATURE	18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY	10 - 70 %	30.0 %
PENDULUM VELOCITY	4.21 - 4.32 M/S	4.31 M/S
PEAK ACCELERATION: UPPER RIB BAR	37 - 46 G	-45.3 G
PEAK ACCELERATION: LOWER RIB BAR	37 - 46 G	-43.1 G
PEAK ACCELERATION: LOWER THORACIC SPINE	15 - 22 G	-17.9 G

TEST MEETS SPECIFICATIONS

TECHNICIAN

B. C. H.

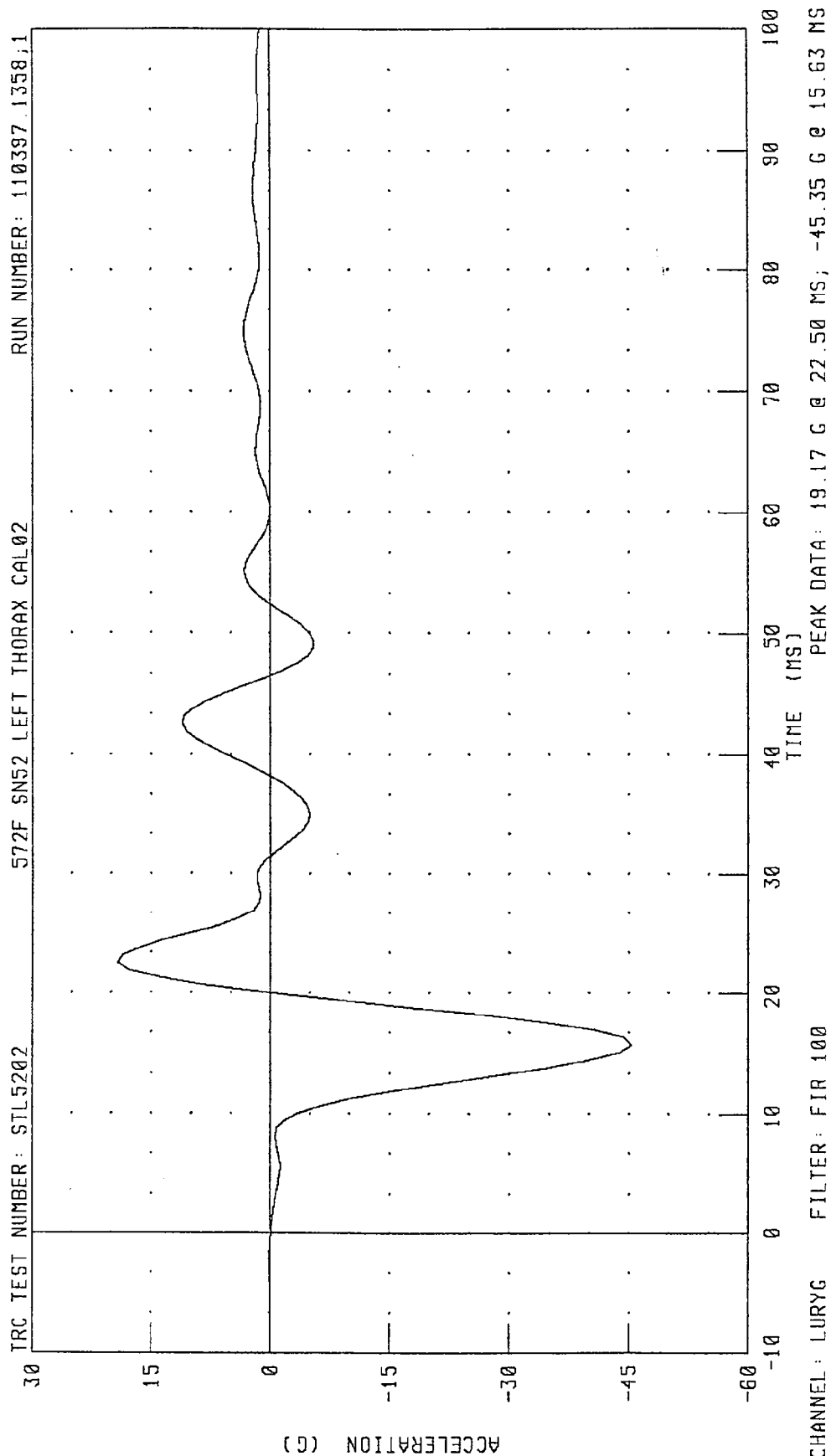
RUN NUMBER: 110397.1357;1

PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)
LEFT UPPER RIB ACCELERATION Y AXIS

TRC TEST NUMBER: STL5202

572F SN52 LEFT THORAX CAL02

RUN NUMBER: 110397.1358;1



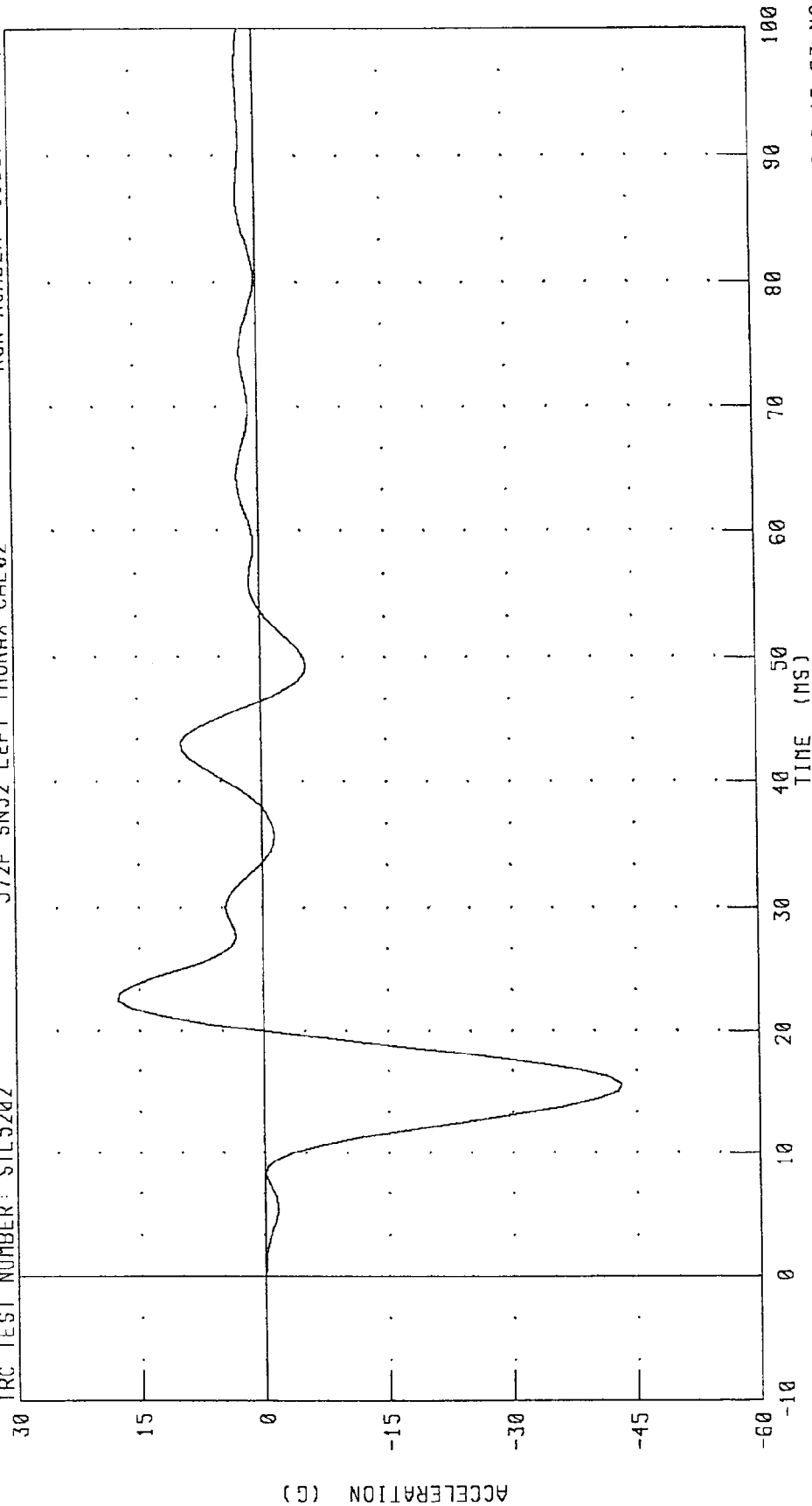
CHANNEL: LURYG FILTER: FIR 100

PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)
LEFT LOWER RIB ACCELERATION Y AXIS

RUN NUMBER: 110397.1358,1

572F SN52 LEFT THORAX CAL02

TRC TEST NUMBER: STL5202

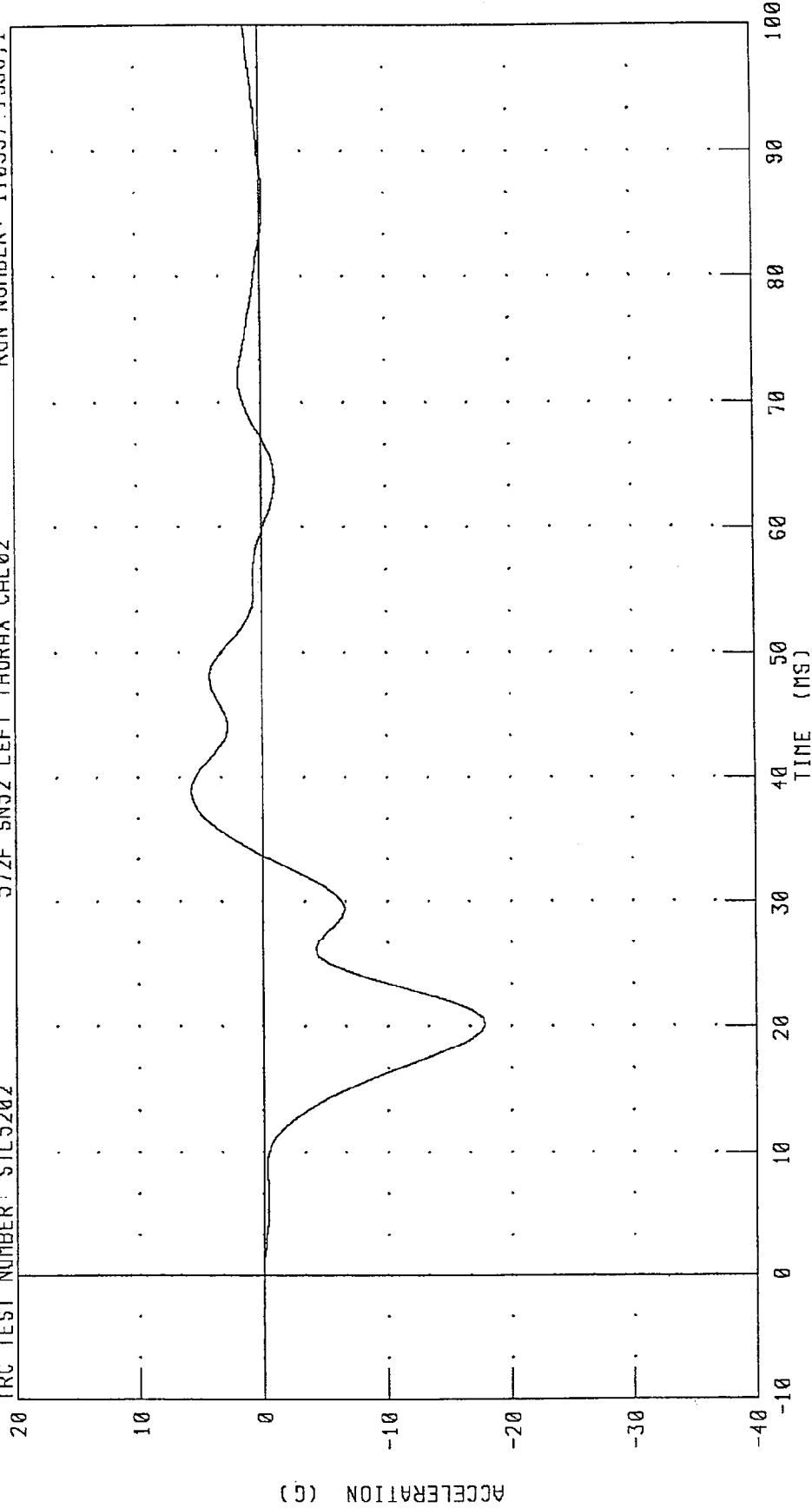


CHANNEL: LLRYG FILTER: FIR 100

PEAK DATA: 17.59 G @ 22.50 MS, -43.14 G @ 15.63 MS

PART 572-F S.I.D. THORAX CALIBRATION - (LEFT SIDE IMPACT)
 LOWER SPINE ACCELERATION Y AXIS

TRC TEST NUMBER: STL5202 572F SN52 LEFT THORAX CAL02 RUN NUMBER: 110397.1358;1



CHANNEL: T12YG FILTER: FIR 100

PEAK DATA: 5.75 G @ 38.75 MS; -17.91 G @ 20.00 MS

TRANSPORTATION RESEARCH CENTER INC.

LATERAL PELVIS IMPACT TEST

SIDE IMPACT DUMMY

03-NOV-97

LEFT SIDE CONFIGURATION

TRC INC.

TEST NO: SPL5202

572F SN52 LEFT PELVIS CAL02

TEST PARAMETER	SPECIFICATION (ABSOLUTE VALUE)	TEST RESULTS
TEMPERATURE	18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY	10 - 70 %	30.0 %
PENDULUM VELOCITY	4.21 - 4.32 M/S	4.22 M/S
PEAK PELVIC ACCELERATION	40 - 60 G	-52.5 G
TIME ABOVE 20 G LEVEL	3 - 7 MS	5.7 MS
IS ACCELERATION CURVE UNIMODAL?	YES	YES

TEST MEETS SPECIFICATIONS

TECHNICIAN

By Calt

RUN NUMBER: 110397.1404;1

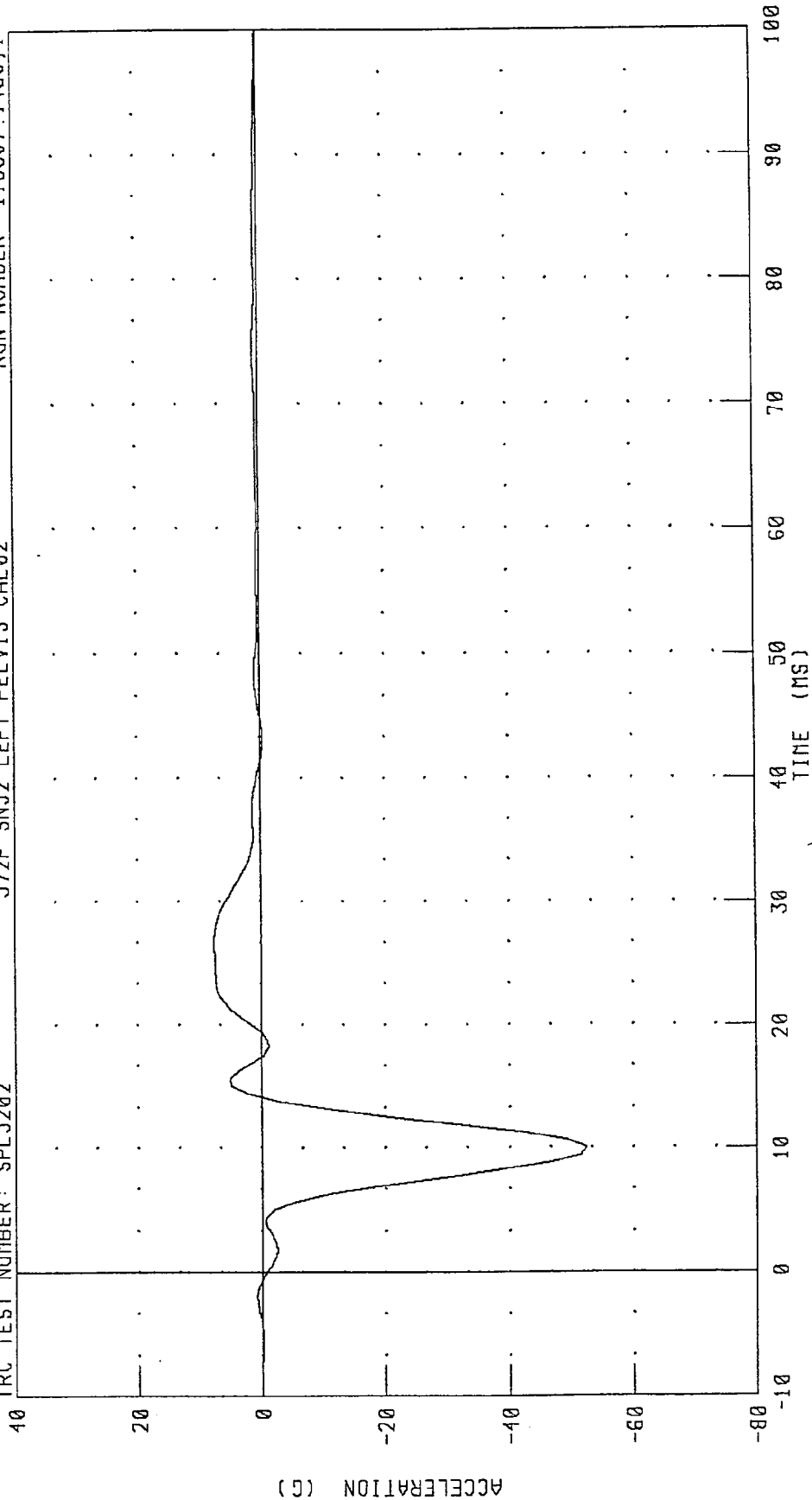
PART 572-F S.I.D. PELVIS CALIBRATION - (LEFT SIDE IMPACT)

PELVIS ACCELERATION Y AXIS

572F SN52 LEFT PELVIS CAL02

TRC TEST NUMBER: SPL5202

RUN NUMBER: 110397.1405;1



CHANNEL: PEVYG FILTER: FIR 100

TRANSPORTATION RESEARCH CENTER INC.

THORACIC SHOCK ABSORBER TESTS

SIDE IMPACT DUMMY

03-NOV-97

TRC INC.

572F SN52 DAMPER TEST CAL02

TEST NUMBER: DP5202A

TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE		18.9 - 25.5 C	21.1 DEG. C
RELATIVE HUMIDITY		10 - 70 %	30.0 %
VELOCITY	FORCE	838 - 1125 N	865 N
3.05 M/S	DISPLACEMENT	30.2 - 35.2 MM	32.8 MM
VELOCITY	FORCE	1733 - 2100 N	1791 N
4.28 M/S	DISPLACEMENT	31.6 - 37.2 MM	35.8 MM
VELOCITY	FORCE	3824 - 4542 N	4134 N
6.14 M/S	DISPLACEMENT	33.3 - 39.6 MM	38.2 MM

DAMPER SETTING = 6.0

TEST MEETS SPECIFICATIONS

TECHNICIAN

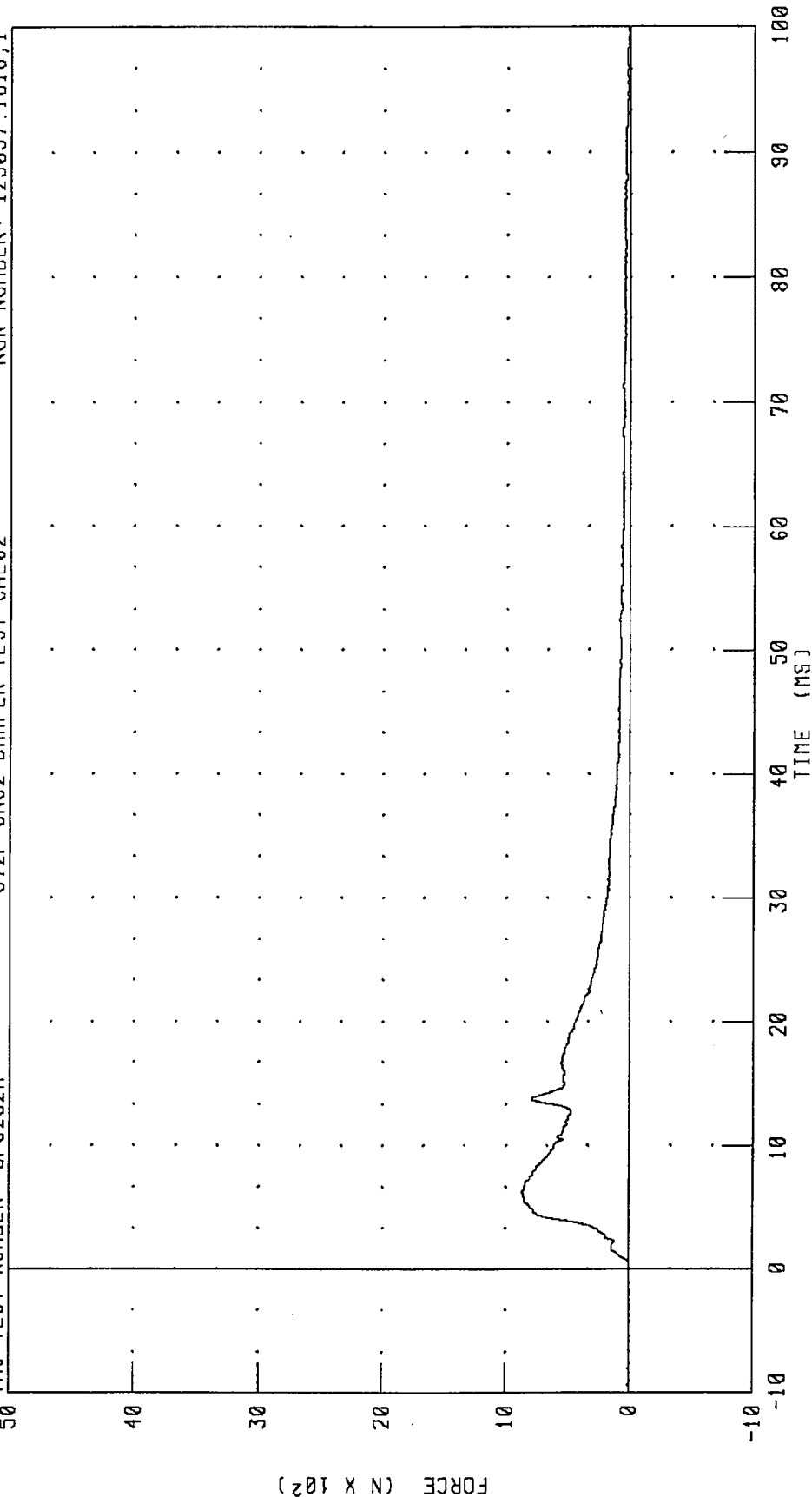
K.F. Watters

RUN NUMBER: 110397.1252;1

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (3.0 M/SEC)

SHOCK ABSORBER RESISTIVE FORCE

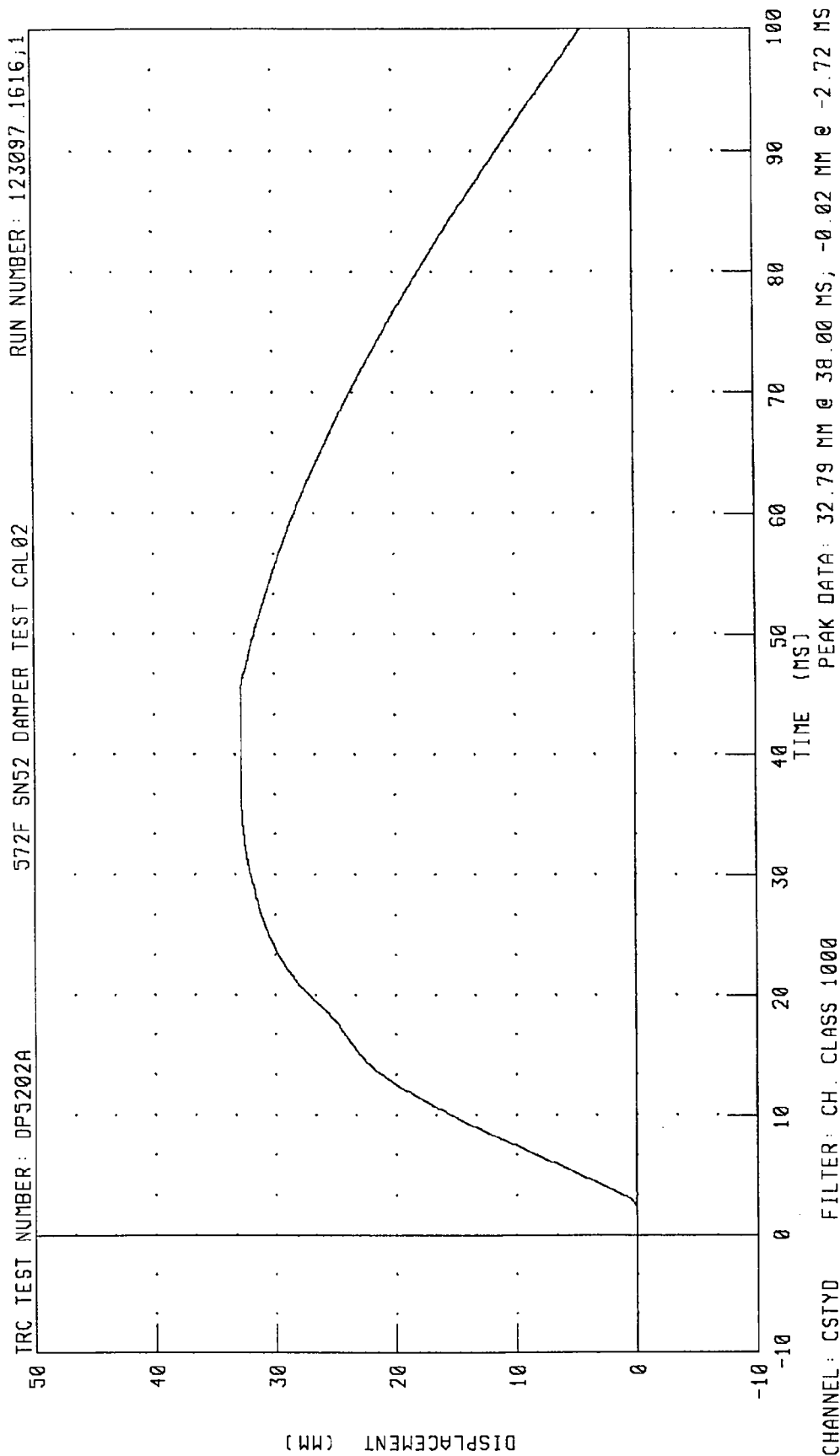
TRC TEST NUMBER: DP5202A 572F SN52 DAMPER TEST CAL02 RUN NUMBER: 123097.1616;1



PEAK DATA: 864.70 N @ 6.24 MS; -2.63 N @ -2.56 MS

CHANNEL: DAMPF FILTER: CH. CLASS 1000

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (3.0 M/SEC)
SHOCK ABSORBER DISPLACEMENT



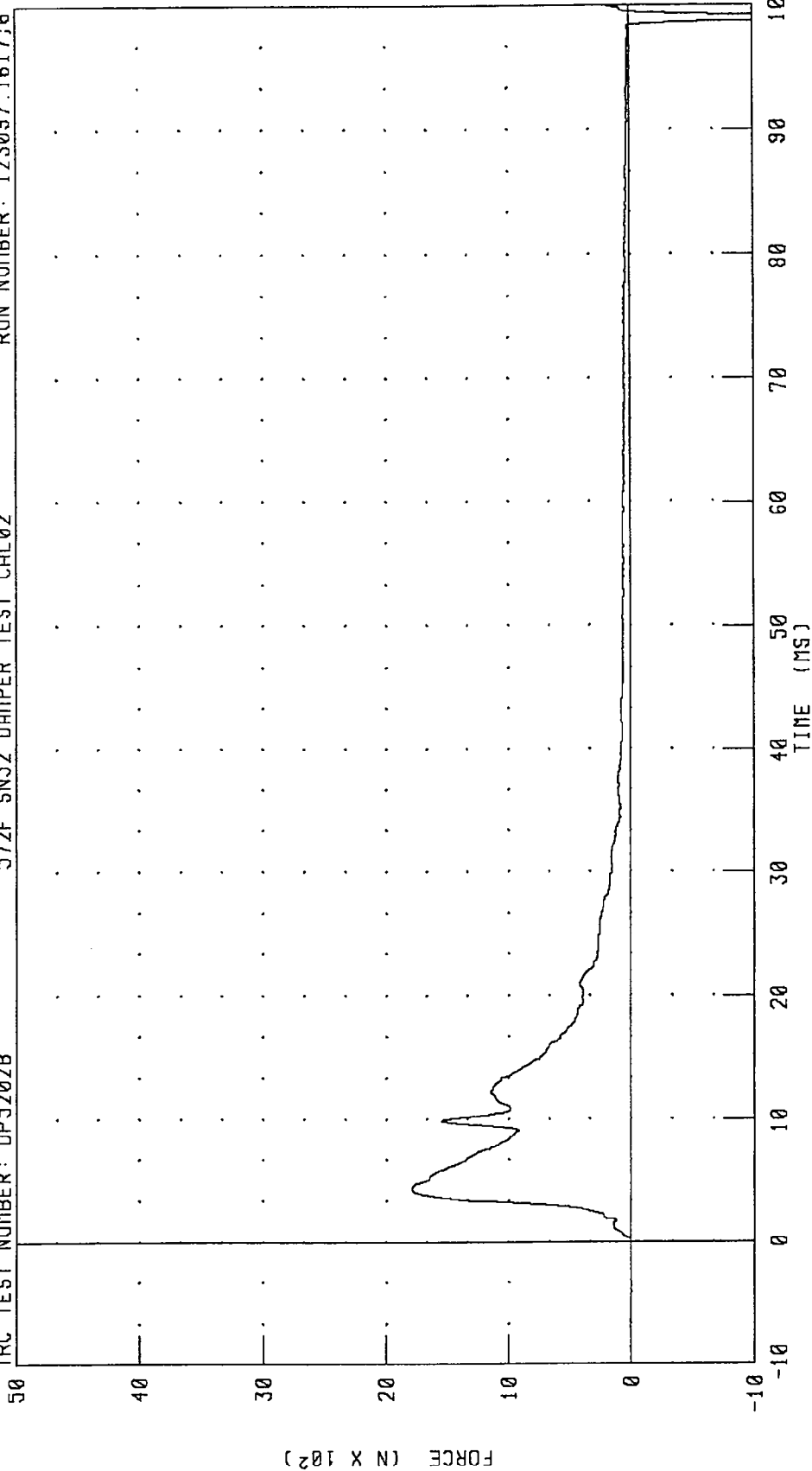
PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (4.3 M/SEC)

SHOCK ABSORBER RESISTIVE FORCE

572F SN52 DAMPER TEST CAL02

TRC TEST NUMBER: DP5202B

RUN NUMBER: 123097.1617;6



PEAK DATA: 1791.30 N @ 4.32 MS; -1672.24 N @ 98.96 MS

CHANNEL: DAMPF FILTER: CH. CLASS 1000

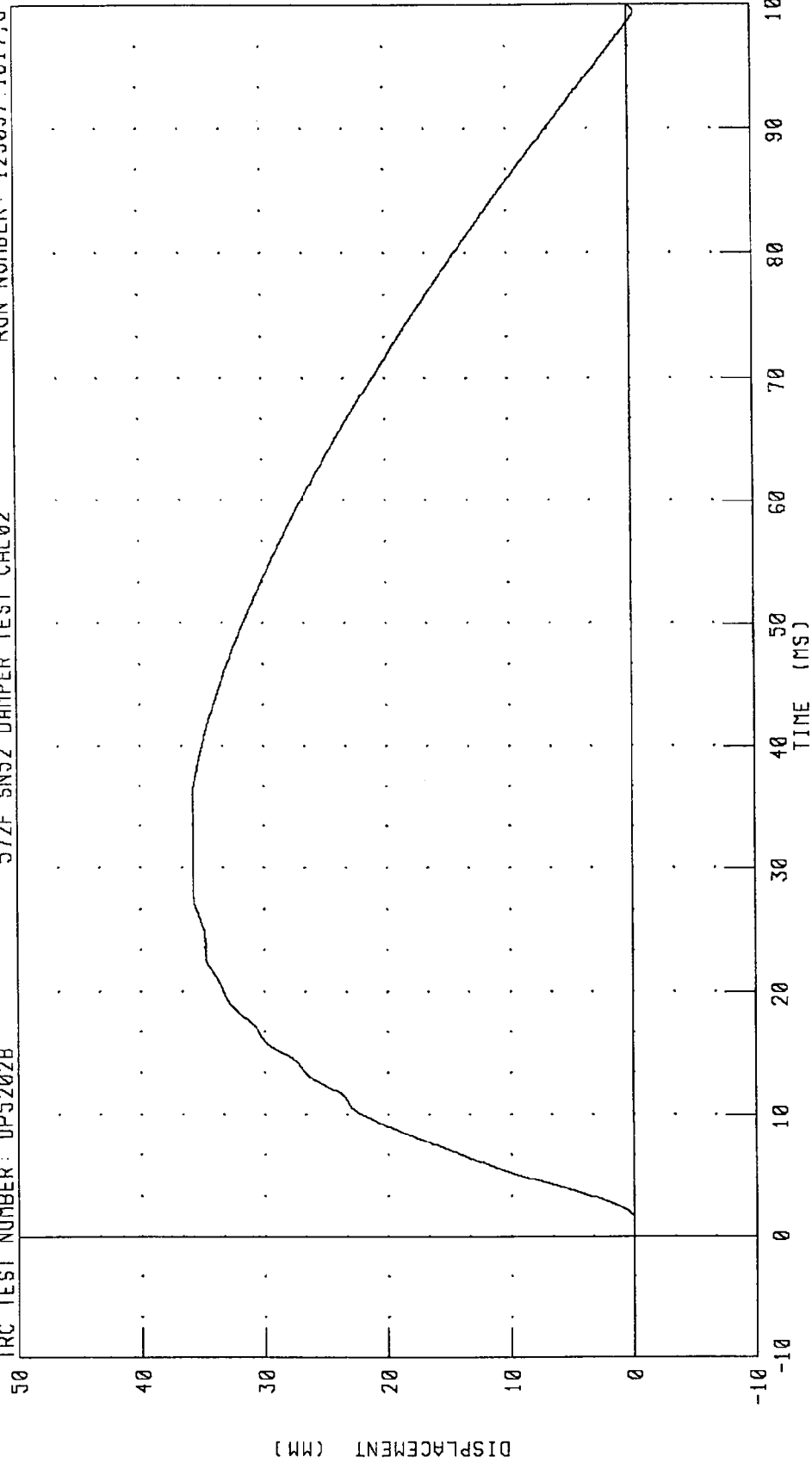
PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (4.3 M/SEC)

SHOCK ABSORBER DISPLACEMENT

TRC TEST NUMBER: DP5202B

572F SN52 DAMPER TEST CAL02

RUN NUMBER: 123097.1617,6



CHANNEL: CSTYD FILTER: CH. CLASS 1000

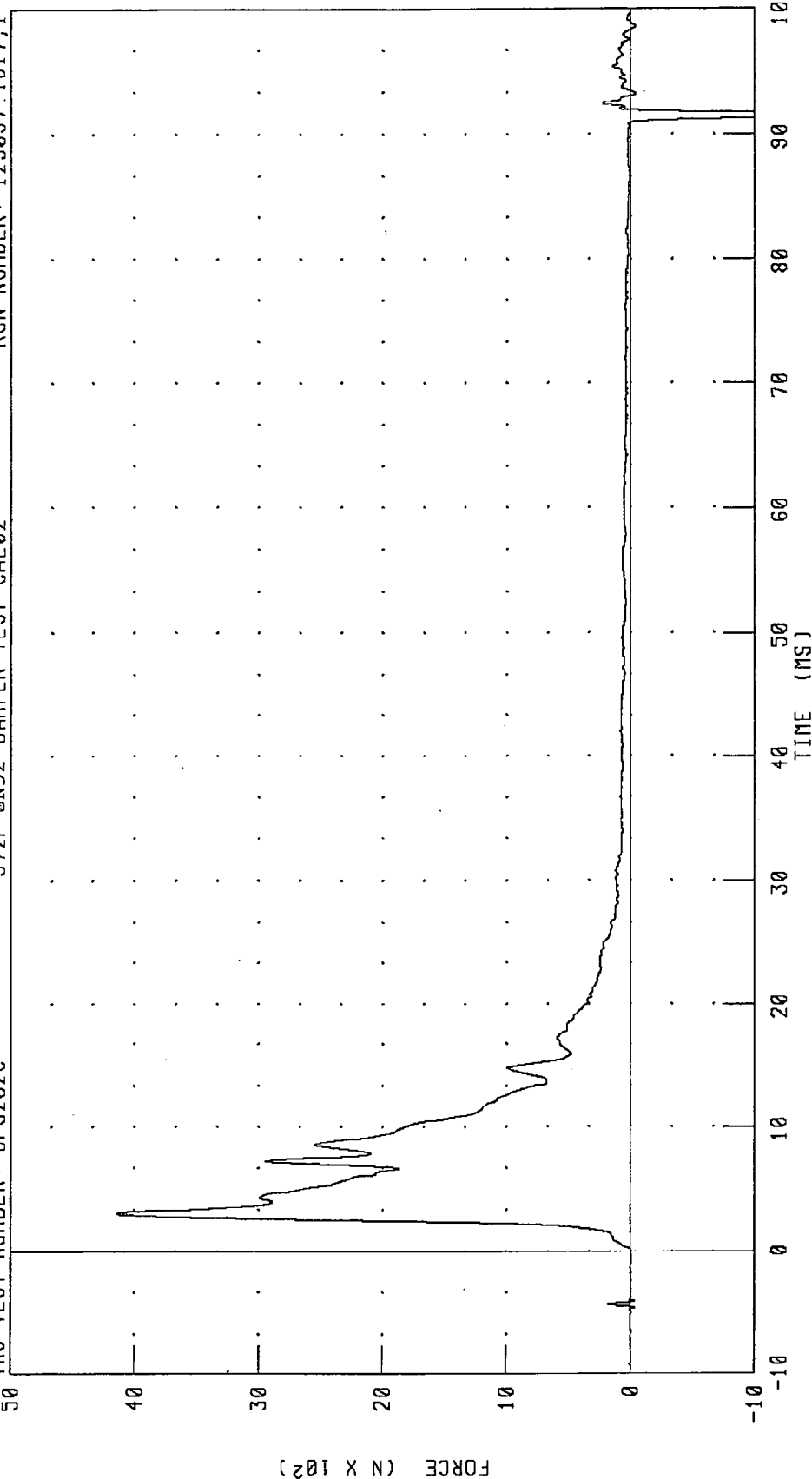
PEAK DATA: 35.77 MM @ 35.60 MS; -0.48 MM @ 99.44 MS

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (6.1 M/SEC)
SHOCK ABSORBER RESISTIVE FORCE

TRC TEST NUMBER: DP5202C

572F SN52 DAMPER TEST CAL02

RUN NUMBER: 123097.1617,1



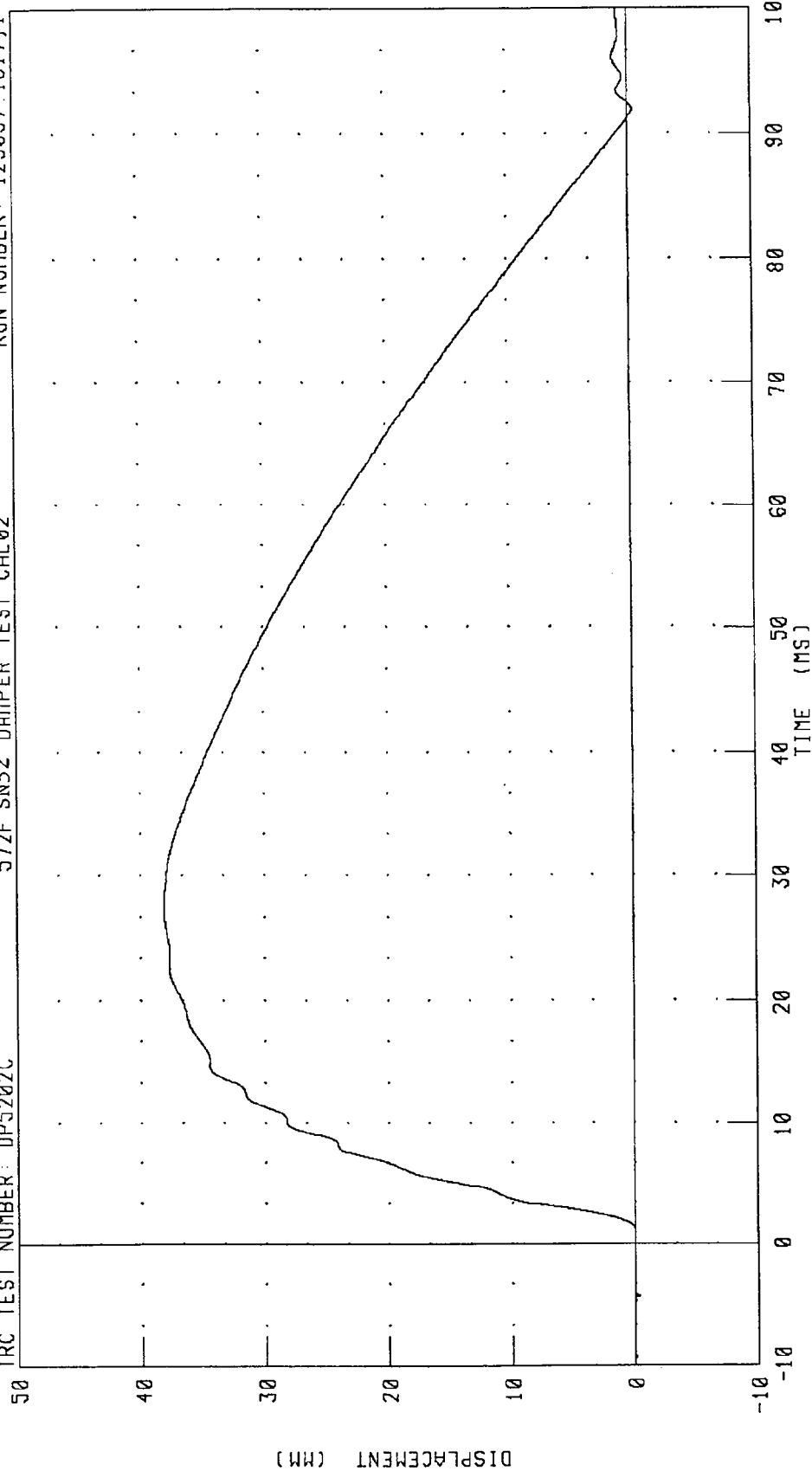
PEAK DATA: 4133.94 N @ 3.04 MS, -1811.42 N @ 91.52 MS

CHANNEL: DAMPF FILTER: CH. CLASS 1000

PART 572-F S.I.D. THORACIC SHOCK ABSORBER CALIBRATION (6.1 M/SEC)
 SHOCK ABSORBER DISPLACEMENT
 572F SN52 DAMPER TEST CAL02

RUN NUMBER: 123097.1617.1

TRC TEST NUMBER: DP5202C



CHANNEL: CSTYD FILTER: CH. CLASS 1000

APPENDIX D

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

SID INSTRUMENTATION

FRONT SID NO.: 051			
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
Upper Rib	J22075	Endevco	10/97
Lower Rib	J22047	Endevco	10/97
Lower Spine	J19577	Endevco	10/97
Pelvis	J22197	Endevco	10/97
Upper Rib Redundant	J20184	Endevco	10/97
Lower Rib Redundant	J22046	Endevco	10/97
Lower Spine Redundant	J20024	Endevco	10/97
Pelvis Redundant	J20387	Endevco	10/97

REAR SID NO.: 052			
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
Upper Rib	J20148	Endevco	10/97
Lower Rib	J18811	Endevco	10/97
Lower Spine	J19303	Endevco	10/97
Pelvis	J20243	Endevco	10/97
Upper Rib Redundant	J20005	Endevco	10/97
Lower Rib Redundant	J20561	Endevco	10/97
Lower Spine Redundant	J20025	Endevco	10/97
Pelvis Redundant	J20462	Endevco	10/97

VEHICLE AND MDB INSTRUMENTATION

	REAR SID NO.: 052		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
Right Front Sill (X)	AC701	Endevco	06/97
Right Front Sill (Y)	J20252	Endevco	08/97
Right Front Sill (Z)	AJ8J9	Endevco	05/97
Right Rear Sill (X)	J15389	Endevco	08/97
Right Rear Sill (Y)	J18841	Endevco	10/97
Right Rear Sill (Z)	J20037	Endevco	08/97
Rear Floorpan Above Axle (X)	J13237	Endevco	09/97
Rear Floorpan Above Axle (Y)	10189	Endevco	10/97
Rear Floorpan Above Axle (Z)	J19954	Endevco	08/97
Left Rear Sill (Y)	10081	Endevco	10/97
Left Front Sill (Y)	J10928	Endevco	09/97
Right Rear Seat Occupant Comp. (Y)	CA57H	Endevco	10/97
Lower Left B-Pillar (Y)	A29DJ	Endevco	10/97
Middle Left B-Pillar (Y)	CD74H	Endevco	10/97
Lower Left A-Pillar (Y)	J19727	Endevco	06/97
Middle Left A-Pillar (Y)	FH18J	Endevco	08/97
Front Seat Track (Y)	J14167	Endevco	06/97
Rear Seat Track (Y)	AMT83	Endevco	06/97
Vehicle CG (X)	J14337	Endevco	08/97
Vehicle CG (Y)	J10997	Endevco	06/97
Vehicle CG (Z)	J20348	Endevco	10/97
Mdb CG (X)	J19629	Endevco	08/97
Mdb CG (Y)	J20185	Endevco	10/97
Mdb CG (Z)	J15388	Endevco	10/97
MDB Rear Frame Member (X)	J14177	Endevco	06/97
MDB Rear Frame Member (Y)	J19942	Endevco	08/97