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**National Highway
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Final Report

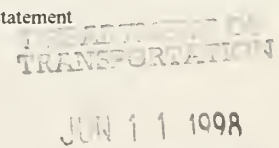
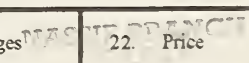
Final Report of a 1992 Chevrolet Caprice into a 30.5 CM Diameter Pole Barrier in Support of CRASH3 Damage Algorithm Reformulation

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16. Abstract Five (5) 30.5 cm diameter pole barrier impact tests were conducted for research and development in support of the CRASH3 damage algorithm reformulation. These tests were conducted on a 1992 Chevrolet Caprice, VIN 1G1BL5377NW138766, at Transportation Research Center Inc. on October 6, 1994. The following five tests were conducted on the vehicle:																																			
<table border="1"> <thead> <tr> <th>Test No.</th> <th>Date</th> <th>Time</th> <th>Speed (Kph)</th> <th>Maximum Cumulative Crush (mm)</th> </tr> </thead> <tbody> <tr> <td>941006-1</td> <td>10/06/94</td> <td>0850</td> <td>8.4</td> <td>12</td> </tr> <tr> <td>941006-2</td> <td>10/06/94</td> <td>1028</td> <td>15.9</td> <td>352</td> </tr> <tr> <td>941006-3</td> <td>10/06/94</td> <td>1138</td> <td>16.3</td> <td>508</td> </tr> <tr> <td>941006-4</td> <td>10/06/94</td> <td>1343</td> <td>31.9</td> <td>732</td> </tr> <tr> <td>941006-5</td> <td>10/06/94</td> <td>1526</td> <td>56.3</td> <td>1078</td> </tr> </tbody> </table>						Test No.	Date	Time	Speed (Kph)	Maximum Cumulative Crush (mm)	941006-1	10/06/94	0850	8.4	12	941006-2	10/06/94	1028	15.9	352	941006-3	10/06/94	1138	16.3	508	941006-4	10/06/94	1343	31.9	732	941006-5	10/06/94	1526	56.3	1078
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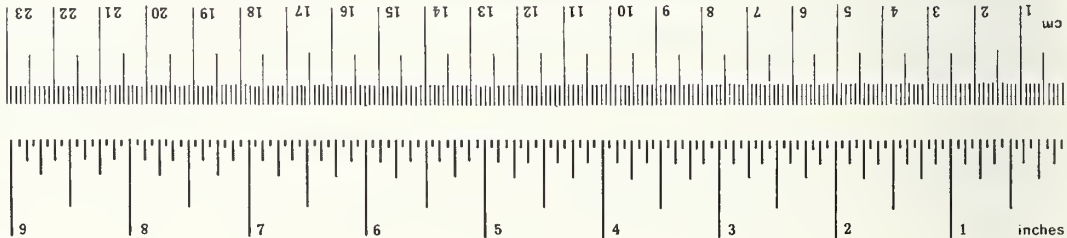
METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH				
in	inches	*2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
AREA				
in ²	square inches	6.5	square centimeters	cm ²
ft ²	square feet	0.09	square meters	m ²
yd ²	square yards	0.8	square meters	m ²
mi ²	square miles	2.6	square kilometers	km ²
	acres	0.4	hectares	ha
MASS (weight)				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
VOLUME				
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft ³	cubic feet	0.03	cubic meters	m ³
yd ³	cubic yards	0.76	cubic meters	m ³
TEMPERATURE (exact)				
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

Approximate Conversions from Metric Measures

When You Know	Multiply by	To Find	Symbol
LENGTH			
millimeters	0.04	inches	in
centimeters	0.4	inches	in
meters	3.3	feet	ft
meters	1.1	yards	yd
kilometers	0.6	miles	mi
AREA			
square centimeters	0.16	square inches	in ²
square meters	1.2	square yards	yd ²
square kilometers	0.4	square miles	mi ²
hectares (10,000 m ²)	2.5	acres	acres
MASS (weight)			
grams	0.035	ounces	oz
kilograms	2.2	pounds	lb
tonnes (1000 kg)	1.1	short tons	
VOLUME			
milliliters	0.03	fluid ounces	fl oz
liters	2.1	pints	pt
liters	1.06	quarts	qt
liters	0.26	gallons	gal
cubic meters	35	cubic feet	ft ³
cubic meters	1.3	cubic yards	yd ³
TEMPERATURE (exact)			
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature



* 1 in = 2.54 (exactly). For other exact conversions and more detailed tables, see NBS Misc. Publ. 286, Units of Weights and Measures, Price \$2.25, SD Catalog No. C13.10:286.

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Section 1.0

Purpose and Test Procedure

Purpose and Test Procedure

The purpose of the five (5) 30.5 cm diameter pole barrier impact tests was for research and development in support of the CRASH3 damage algorithm reformulation.

The 1992 Chevrolet Caprice was equipped with a 5.7-liter, 8-cylinder, in-line, gasoline engine with a 4-speed automatic transmission. A third axle was placed 643 mm behind the vehicle's front wheel centerline to raise the front wheels so that it could withstand five (5) impacts. The test weight of the vehicle with third axle was 1906 kilograms.

The vehicle was instrumented with eleven (11) accelerometers oriented to measure vehicle X-, Y-, and Z-axis accelerations.

Each crash test event was recorded by three (3) high-speed motion picture cameras operating at approximately 1000 frames per second.

Section 2.0

Vehicle and Test Data

Table 1 Test Vehicle Information, Cont'd.

Weight Of Test Vehicle As Received (With Maximum Fluids):

Right Front	530	KG	Right Rear	382	KG
Left Front	516	KG	Left Rear	370	KG
Total Front Weight	1046	KG	(58.2% Of Total Vehicle Weight)		
Total Rear Weight	752	KG	(41.8% Of Total Vehicle Weight)		
Total Delivered Weight	1798	KG			

Weight Of Test Vehicle¹:

Right Front ²	684	KG	Right Rear	266	KG
Left Front ²	703	KG	Left Rear	253	KG
Total Front Weight ²	1387	KG	(72.8% Of Total Vehicle Weight)		
Total Rear Weight	519	KG	(27.2% Of Total Vehicle Weight)		
Total Test Weight ¹	1906	KG			

Weight Of Ballast Secured In Vehicle Cargo Area: 0 KG

Components Removed To Meet Target Test Weight: None

CG = 1270 MM Rearward of Front Wheel Centerline

¹ Weight of third axle included in total test weight.

² The front wheel weights are for third axle wheels.

TABLE 2
PROFILE MEASUREMENTS AT VEHICLE BUMPER HEIGHT 444 MM

LOCATION	0	1	2	3	4	5	6	7	
PRE-TEST	X 2870	Y 2800	X 2725	Y 425	X 2575	Y 434	X 2425	Y 432	X 2350
POST-TEST 1	X 2870	Y 2800	X 2725	Y 425	X 2575	Y 434	X 2425	Y 432	X 2350
POST-TEST 2	X 2870	Y 2800	X 2725	Y 425	X 2575	Y 434	X 2425	Y 432	X 2350
POST-TEST 3	X 2873	Y 2800	X 2725	Y 414	X 2578	Y 418	X 2428	Y 416	X 2356
POST-TEST 4	X 2894	Y 2823	X 2747	Y 405	X 2599	Y 406	X 2447	Y 406	X 2376
POST-TEST 5	X 2890	Y 2821	X 2750	Y 452	X 2596	Y 448	X 2445	Y 462	X 2375

LOCATION	8	9	10	11	12	13	14	15	
PRE-TEST	X 2273	Y 2200	X 2130	Y 432	X 2080	Y 432	X 1838	Y 422	X 1760
POST-TEST 1	X 2273	Y 2200	X 2130	Y 432	X 2080	Y 432	X 1838	Y 422	X 1760
POST-TEST 2	X 2273	Y 2200	X 2130	Y 432	X 2080	Y 432	X 1838	Y 422	X 1760
POST-TEST 3	X 2280	Y 2207	X 2129	Y 418	X 1980	Y 419	X 1826	Y 419	X 1751
POST-TEST 4	X 2300	Y 2229	X 2150	Y 404	X 1999	Y 405	X 1853	Y 400	X 1778
POST-TEST 5	X 2297	Y 2223	X 2151	Y 465	X 1998	Y 475	X 1841	Y 474	X 1780

LOCATION	16	17	18	19	20	21	22	23	
PRE-TEST	X 1680	Y 1605	X 1530	Y 435	X 1385	Y 449	X 1230	Y 459	X 1155
POST-TEST 1	X 1680	Y 1605	X 1530	Y 435	X 1385	Y 449	X 1230	Y 459	X 1155
POST-TEST 2	X 1715	Y 1634	X 1559	Y 424	X 1409	Y 430	X 1261	Y 442	X 1183
POST-TEST 3	X 1676	Y 1619	X 1543	Y 436	X 1396	Y 443	X 1246	Y 459	X 1176
POST-TEST 4	X 1705	Y 1590	X 1516	Y 435	X 1389	Y 437	X 1237	Y 458	X 1159
POST-TEST 5	X 1712	Y 1655	X 1614	Y 432	X 1415	Y 512	X 1284	Y 568	X 1220

All measurements are in millimeters. Column readings are 75 millimeters apart starting on the left side of the vehicle.

All X-axis measurements taken from a reference plane 5526 millimeters from and parallel to the rear bumper.

All Y-axis measurements taken from a reference plane 1200 millimeters from and parallel to the vehicle's longitudinal centerline

TABLE 2
PROFILE MEASUREMENTS AT VEHICLE BUMPER HEIGHT 444 MM

LOCATION	24	25	26	27	28	29	30	31								
PRE-TEST	X 1080	Y 470	X 1010	Y 480	X 940	Y 476	X 865	Y 481	X 785	Y 480	X 710	Y 480	X 635	Y 492	X 560	Y 498
POST-TEST 1	X 1080	Y 470	X 1010	Y 480	X 940	Y 476	X 865	Y 481	X 785	Y 480	X 710	Y 482	X 629	Y 491	X 556	Y 498
POST-TEST 2	X 1111	Y 457	X 1036	Y 465	X 958	Y 465	X 883	Y 469	X 805	Y 478	X 708	Y 460	X 633	Y 478	X 562	Y 497
POST-TEST 3	X 1103	Y 474	X 1024	Y 483	X 948	Y 488	X 868	Y 493	X 797	Y 505	X 655	Y 498	X 593	Y 549	X 506	Y 570
POST-TEST 4	X 1091	Y 479	X 1015	Y 409	X 932	Y 491	X 857	Y 494	X 768	Y 503	X 625	Y 491	X 580	Y 550	X 374	Y 589
POST-TEST 5	X 1150	Y 600	X 1072	Y 637	X 1003	Y 645	X 920	Y 655	X 814	Y 661	X 664	Y 663	X 605	Y 726	X 420	Y 820

LOCATION	32	33	34	35	36	37	38	39								
PRE-TEST	X 480	Y 503	X 410	Y 518	X 330	Y 539	X 270	Y 571	X 205	Y 585	X 179	Y 677	X 155	Y 752	X 138	Y 825
POST-TEST 1	X 479	Y 504	X 405	Y 519	X 332	Y 536	X 265	Y 566	X 214	Y 582	X 174	Y 679	X 152	Y 752	X 137	Y 823
POST-TEST 2	X 479	Y 512	X 410	Y 534	X 333	Y 553	X 264	Y 585	X 224	Y 631	X 210	Y 710	X 223	Y 794	X 233	Y 870
POST-TEST 3	X 432	Y 585	X 360	Y 609	X 292	Y 654	X 230	Y 691	X 198	Y 753	X 211	Y 828	X 235	Y 899	X 270	Y 970
POST-TEST 4	X 322	Y 643	X 289	Y 695	X 246	Y 761	X 222	Y 834	X 230	Y 905	X 266	Y 970	X 315	Y 1030	X 366	Y 1072
POST-TEST 5	X 408	Y 894	X 401	Y 967	X 413	Y 1045	X 430	Y 1117	X 461	Y 1192	X 540	Y 1215	X 602	Y 1237	X 660	Y 1276

LOCATION	40	41	42	43	44	45	46	47								
PRE-TEST	X 131	Y 902	X 117	Y 979	X 104	Y 1046	X 94	Y 1020	X 86	Y 1199	X 81	Y 1271	X 88	Y 1341	X 76	Y 1427
POST-TEST 1	X 122	Y 897	X 116	Y 973	X 103	Y 1047	X 96	Y 1122	X 93	Y 1197	X 91	Y 1269	X 88	Y 1342	X 88	Y 1423
POST-TEST 2	X 252	Y 940	X 278	Y 1026	X 294	Y 1095	X 325	Y 1166	X 351	Y 1244	X 390	Y 1293	X 440	Y 1328	X 387	Y 1369
POST-TEST 3	X 310	Y 1047	X 352	Y 1100	X 389	Y 1168	X 433	Y 1241	X 483	Y 1286	X 548	Y 1338	X 596	Y 1343	X 527	Y 1402
POST-TEST 4	X 436	Y 1119	X 500	Y 1159	X 662	Y 1205	X 629	Y 1244	X 692	Y 1273	X 758	Y 1295	X 820	Y 1336	X 780	Y 1445
POST-TEST 5	X 736	Y 1302	X 808	Y 1324	X 880	Y 1324	X 953	Y 1341	X 1035	Y 1377	X 1097	Y 1373	X 1161	Y 1371	X 1154	Y 1439

All measurements are in millimeters. Column readings are 75 millimeters apart starting on the left side of the vehicle.

All X-axis measurements taken from a reference plane 5526 millimeters from and parallel to the rear bumper.

All Y-axis measurements taken from a reference plane 1200 millimeters from and parallel to the vehicle's longitudinal centerline

TABLE 2

PROFILE MEASUREMENTS AT VEHICLE BUMPER HEIGHT 444 MM

LOCATION	72	73	74	75	76	77	78	79								
PRE-TEST	X 1308	Y 2328	X 1384	Y 2331	X 1448	Y 2334	X 1535	Y 2321	X 1602	Y 2328	X 1676	Y 2333	X 1755	Y 2337	X 1831	Y 2336
POST-TEST 1	X 1308	Y 2328	X 1384	Y 2331	X 1448	Y 2334	X 1535	Y 2321	X 1602	Y 2328	X 1676	Y 2333	X 1755	Y 2337	X 1831	Y 2336
POST-TEST 2	X 1318	Y 2325	X 1390	Y 2325	X 1465	Y 2325	X 1543	Y 2319	X 1615	Y 2329	X 1689	Y 2329	X 1772	Y 2334	X 1831	Y 2336
POST-TEST 3	X 1395	Y 2344	X 1460	Y 2346	X 1530	Y 2347	X 1617	Y 2343	X 1688	Y 2352	X 1762	Y 2354	X 1847	Y 2355	X 1923	Y 2359
POST-TEST 4	X 1298	Y 2293	X 1367	Y 2340	X 1444	Y 2301	X 1520	Y 2302	X 1585	Y 2311	X 1695	Y 2332	X 1763	Y 2332	X 1844	Y 2337
POST-TEST 5	X 1371	Y 2282	X 1443	Y 2313	X 1500	Y 2325	X 1540	Y 2288	X 1646	Y 2319	X 1738	Y 2358	X 1810	Y 2371	X 1883	Y 2369

LOCATION	80	81	82	83	84	85	86	87								
PRE-TEST	X 1899	Y 2344	X 1976	Y 2348	X 2049	Y 2351	X 2128	Y 2352	X 2203	Y 2352	X 2274	Y 2345	X 2348	Y 2344	X 2424	Y 2344
POST-TEST 1	X 1899	Y 2344	X 1976	Y 2348	X 2049	Y 2351	X 2128	Y 2352	X 2203	Y 2352	X 2274	Y 2345	X 2348	Y 2344	X 2424	Y 2344
POST-TEST 2	X 1899	Y 2344	X 1976	Y 2348	X 2049	Y 2351	X 2128	Y 2352	X 2203	Y 2352	X 2274	Y 2345	X 2348	Y 2344	X 2424	Y 2344
POST-TEST 3	X 1994	Y 2360	X 2068	Y 2366	X 2143	Y 2353	X 2217	Y 2351	X 2297	Y 2351	X 2369	Y 2349	X 2442	Y 2350	X 2518	Y 2355
POST-TEST 4	X 1912	Y 2334	X 1991	Y 2339	X 2064	Y 2328	X 2138	Y 2331	X 2211	Y 2331	X 2290	Y 2332	X 2363	Y 2337	X 2442	Y 2334
POST-TEST 5	X 1950	Y 2375	X 2026	Y 2373	X 2101	Y 2367	X 2174	Y 2369	X 2255	Y 2370	X 2325	Y 2373	X 2398	Y 2374	X 2475	Y 2374

LOCATION	88	89	90	91	92	93	94	95									
PRE-TEST	X 2500	Y 2351	X 2576	Y 2356	X 2648	Y 2356	X 2724	Y 2356	X 2799	Y 2352	X 2874	Y 2351					
POST-TEST 1	X 2500	Y 2351	X 2576	Y 2356	X 2648	Y 2356	X 2724	Y 2356	X 2799	Y 2352	X 2874	Y 2351					
POST-TEST 2	X 2500	Y 2351	X 2576	Y 2356	X 2648	Y 2356	X 2724	Y 2356	X 2799	Y 2352	X 2874	Y 2351					
POST-TEST 3	X 2596	Y 2355	X 2672	Y 2355	X 2744	Y 2355	X 2821	Y 2355	X 2892	Y 2351	X 2972	Y 2348					
POST-TEST 4	X 2511	Y 2336	X 2593	Y 2336	X 2662	Y 2336	X 2740	Y 2336	X 2812	Y 2338	X 2890	Y 2338					
POST-TEST 5	X 2550	Y 2369	X 2626	Y 2365	X 2697	Y 2365	X 2773	Y 2366	X 2838	Y 2367	X 2920	Y 2369					

All measurements are in millimeters. Column readings are 75 millimeters apart starting on the left side of the vehicle.

All X-axis measurements taken from a reference plane 5526 millimeters from and parallel to the rear bumper.

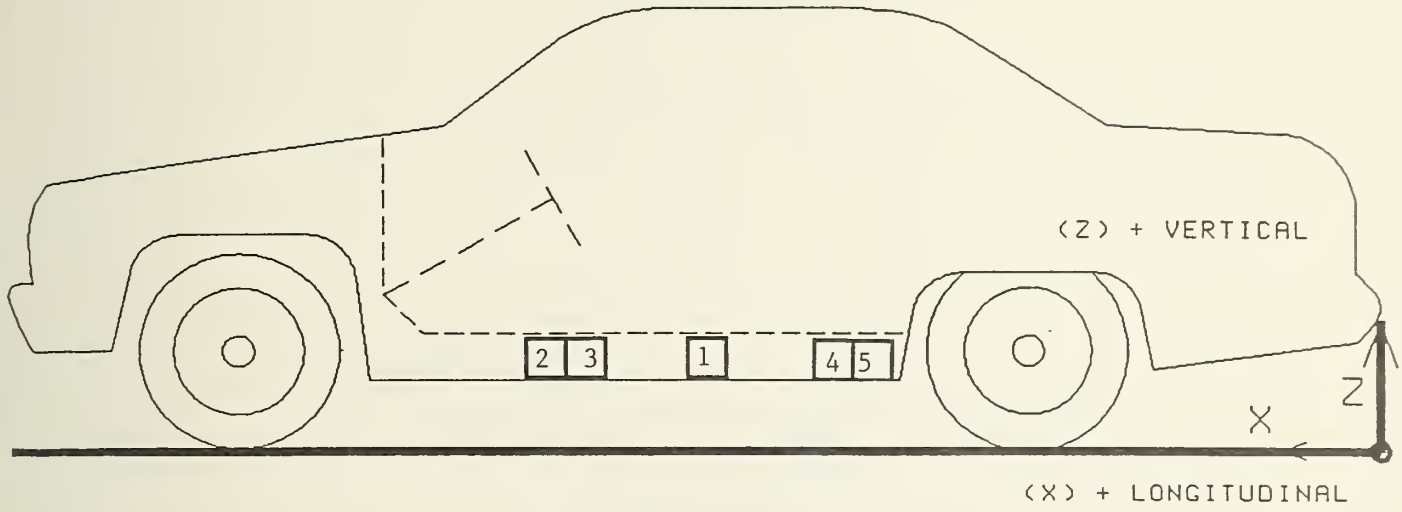
All Y-axis measurements taken from a reference plane 1200 millimeters from and parallel to the vehicle's longitudinal centerline

Data Acquisition Explanations

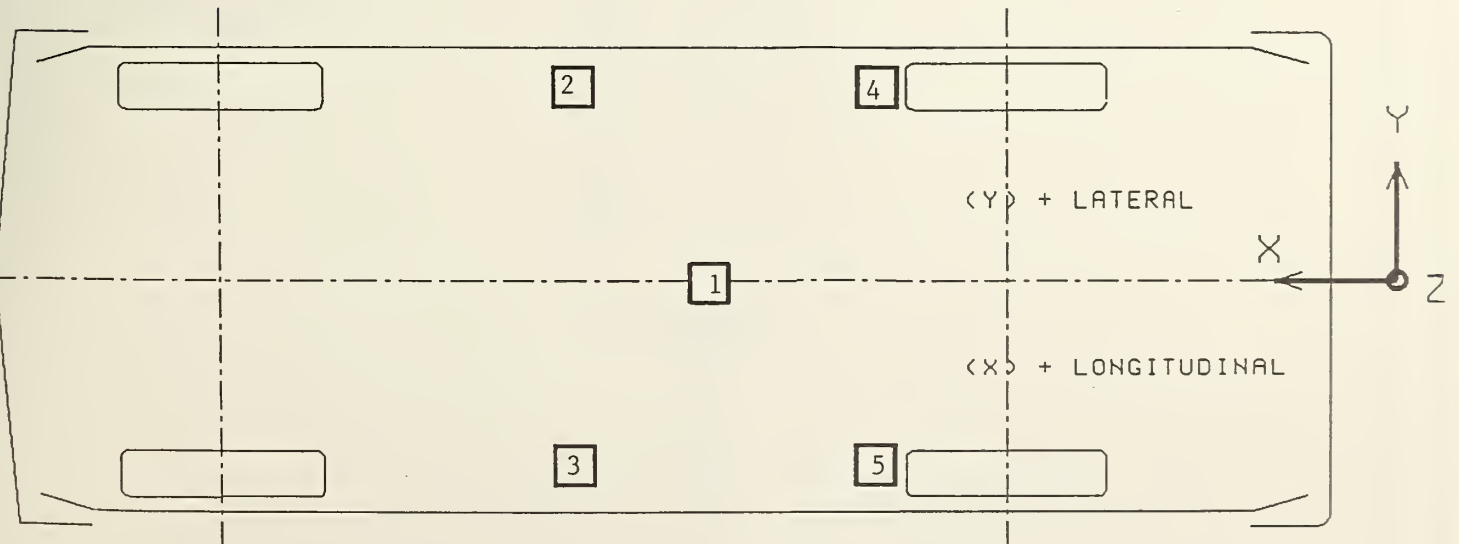
The vehicle's right rear seat crossmember Y-axis acceleration data channel, TRRYG1, did not return to zero after the impact event on Tests 2, 4, and 5. This anomaly affected the computations of the vehicle's right rear seat crossmember Y-axis velocity and displacement.

The vehicle's center of gravity X-axis acceleration data channel, VCGXG1, exceeded its full scale output between 35 and 45 milliseconds on Test 5. This anomaly affected the computations of the vehicle's center of gravity resultant acceleration, resultant velocity, X-axis velocity, resultant displacement, and X-axis displacement.

Figure 1 Vehicle Accelerometer Placement

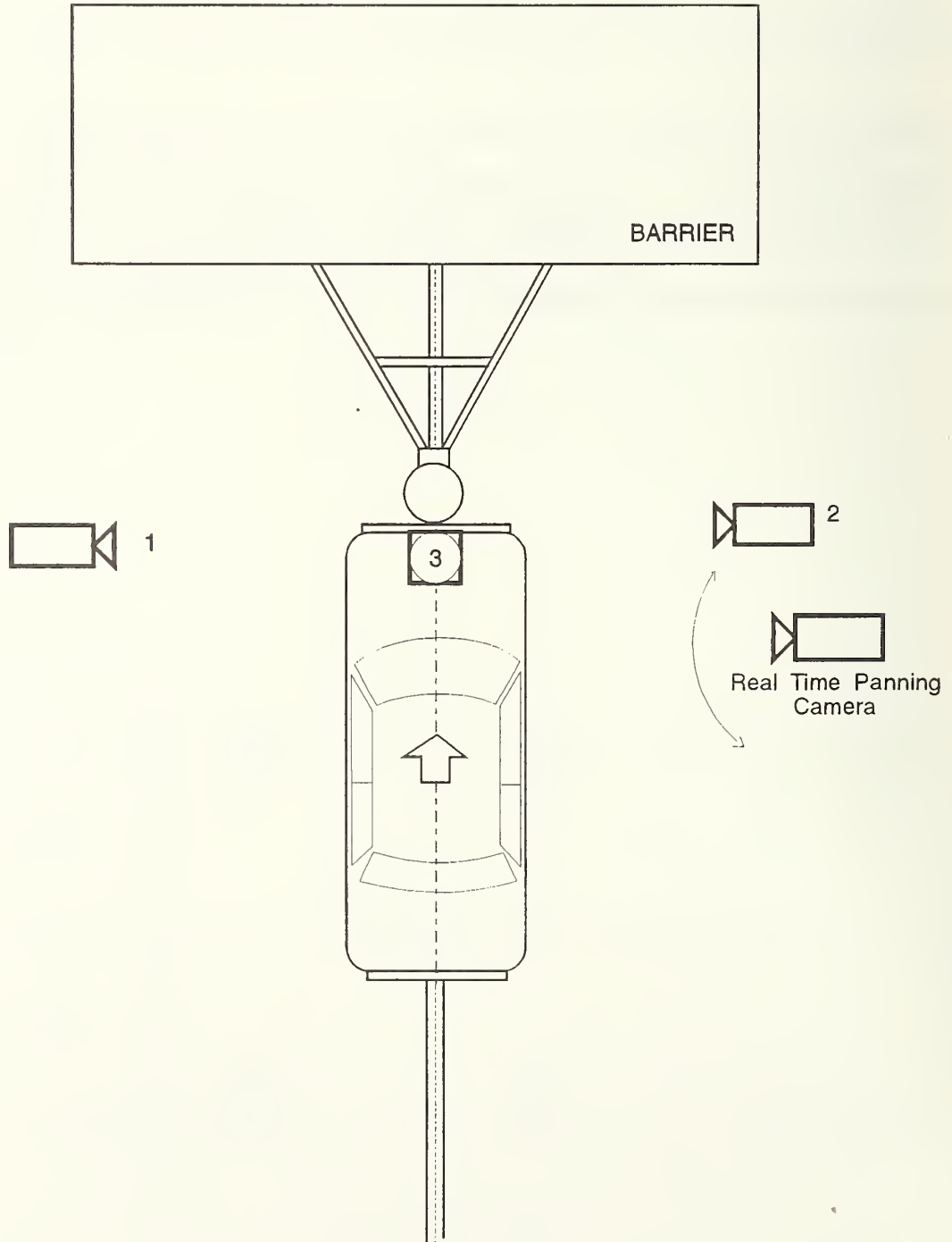


SIDE VIEW



BOTTOM VIEW

Figure 2 Camera Positions



Section 3.0

Test 941006-1 Summary

Table 3 Test Conditions

Test No. 941006-1

Date of Test: 10/06/94

Time of Test: 8:50

Ambient Temperature at Impact Area: 16° C

Intended Impact Velocity: 8.0 kph

Actual Impact Velocity: Primary = 8.4 kph
 Secondary = 8.4 kph

Subject Vehicle Data

Length of Direct Contact Damage: 154 mm

Maximum Cumulative Crush at
Vehicle Bumper Height: 12 mm

Vehicle Attitudes:

Post-Test: LF: 820; RF: 811; LR: 634; RR: 624

All distance measurements are in millimeters.

Table 4 Vehicle Crush At Vehicle Bumper Height

Test No. 941006-1

FL	=	523
C1	=	2
C2	=	8
C3	=	1
C4	=	11
C5	=	5
C6	=	6

NOTE: FL is the post-test length of the damaged surface.

Measurements C1 - C6 were spaced equally apart over the post-impact length of the damaged surface. This distance is defined as length "FL" on the vehicle crush profile plot.

All measurements are in millimeters.

Figure 3 Vehicle Profile At Bumper Height
Test 1

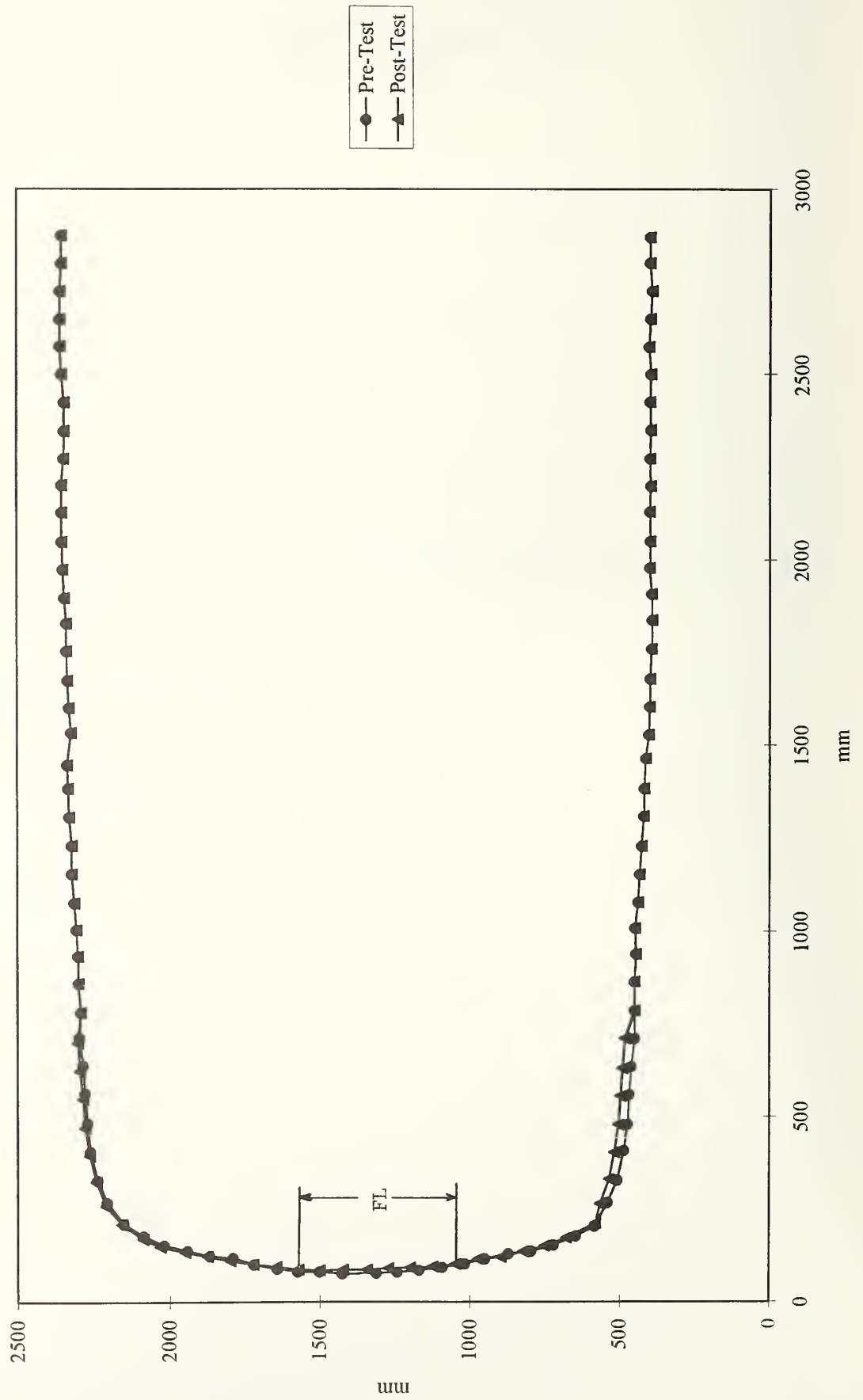


Table 5 Impacted Vehicle Measurements

Test No.: 941006-1 Vehicle Make/Model: Chevrolet/Caprice

No.	Type of measurement	Pre-test	Post-test	Diff.
X1	Total length of vehicle at centerline	5450	5438	12
X2	Rear surface of vehicle to front of engine block	4530	NA ¹	NA ¹
X3	Rear surface of vehicle to firewall	3941	NA ¹	NA ¹
X4	Rear surface of vehicle to upper leading edge of right door	3823	3823	0
X5	Rear surface of vehicle to upper leading edge of left door	3826	3826	0
X6	Rear surface of vehicle to lower leading edge of right door	3796	3796	0
X7	Rear surface of vehicle to lower leading edge of left door	3812	3812	0
X8	Rear surface of vehicle to upper trailing edge of right door	2606	2606	0
X9	Rear surface of vehicle to upper trailing edge of left door	2616	2616	0
X10	Rear surface of vehicle to lower trailing edge of right door	2631	2631	0
X11	Rear surface of vehicle to lower trailing edge of left door	2636	2636	0
X12	Rear surface of vehicle to bottom of "A" post on right side	3772	3772	0
X13	Rear surface of vehicle to bottom of "A" post on left side	3787	3787	0
X14	Rear surface of vehicle to firewall - right side	4089	NA ¹	NA ¹
X15	Rear surface of vehicle to firewall - left side	4040	NA ¹	NA ¹
X16	Rear surface of vehicle to steering wheel center	3208	3208	0
X17	Center of steering column to "A" post	325	325	0
X18	Center of steering column to headliner	376	376	0
X19	Rear surface of vehicle to right side of front bumper	5314	5314	0
X20	Rear surface of vehicle to left side of front bumper	5321	5321	0
X21	Length of engine block	521	NA ¹	NA ¹

¹ The vehicle's crush obstructed the measurement.

All measurements are in millimeters.

Table 6 Vehicle Accelerometer Locations And Data Summary

Test No. 941006-1

TEST NUMBER: No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
1 VEHICLE CENTER OF GRAVITY	2997 mm	0 mm	516 mm		
LONGITUDINAL				0.6 g @ 285.2 ms	2.9 g @ 56.4 ms
LATERAL				0.5 g @ 254.7 ms	0.7 g @ 43.5 ms
VERTICAL				1.7 g @ 67.5 ms	0.9 g @ 188.6 ms
RESULTANT				3.2 g @ 74.6 ms	
2 LEFT FRONT SILL	2309 mm	719 mm	450 mm		
LONGITUDINAL				0.3 g @ 289.8 ms	3.2 g @ 43.4 ms
LATERAL				1.0 g @ 294.9 ms	0.5 g @ 25.9 ms
3 RIGHT FRONT SILL	2230 mm	-719 mm	445 mm		
LONGITUDINAL				0.5 g @ 280.0 ms	3.1 g @ 87.5 ms
LATERAL				0.5 g @ 55.0 ms	0.6 g @ 295.0 ms
4 LEFT REAR SEAT CROSSMEMBER	2030 mm	366 mm	395 mm		
LONGITUDINAL				0.6 g @ 305.0 ms	3.7 g @ 87.4 ms
LATERAL				0.8 g @ 190.6 ms	0.7 g @ 34.3 ms
5 RIGHT REAR SEAT CROSSMEMBER	2031 mm	-366 mm	411 mm		
LONGITUDINAL				0.6 g @ 289.1 ms	3.9 g @ 89.4 ms
LATERAL				1.4 g @ 113.6 ms	0.5 g @ 41.4 ms

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

Table 7 Camera Information

Test No. 941006-1

<u>Camera Number</u>	<u>Location</u>	<u>Type</u>	<u>Lens (mm)</u>	<u>Speed (fps)</u>	<u>Purpose of Camera Data</u>
1	Left tight	Photosonic	13	1000	Impact overall
2	Right tight	Photosonic	13	1000	Impact overall
3	Overhead	Photosonic	13	998	Impact overall



Section 4.0

Test 941006-2 Summary

Table 9 Vehicle Crush At Vehicle Bumper Height

Test No. 941006-2

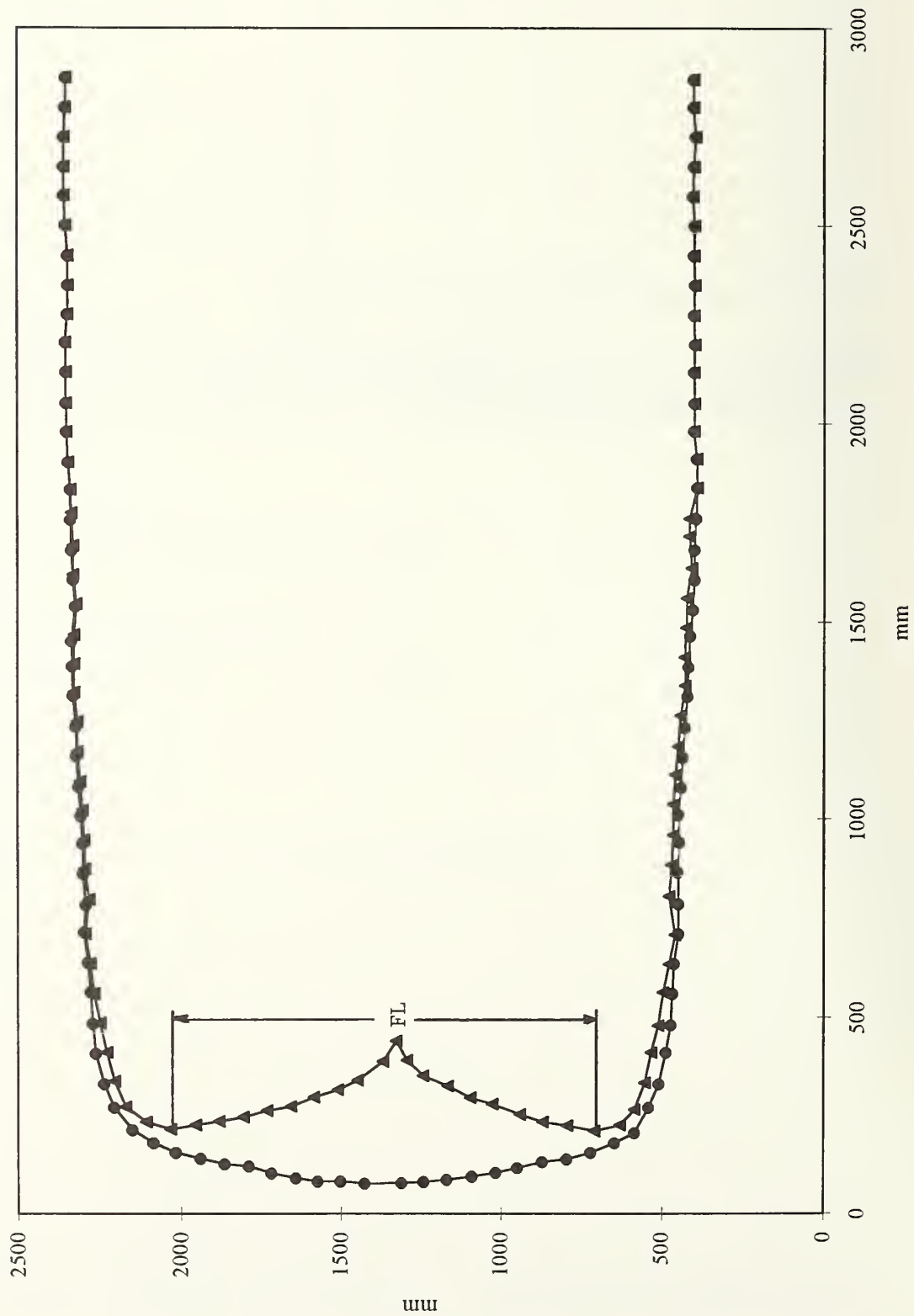
FL	=	1476
C1	=	19
C2	=	116
C3	=	255
C4	=	231
C5	=	118
C6	=	20

NOTE: FL is the post-test length of the damaged surface.

Measurements C1 - C6 were spaced equally apart over the post-impact length of the damaged surface. This distance is defined as length "FL" on the vehicle crush profile plot.

All measurements are in millimeters.

Figure 4 Vehicle Profile At Bumper Height
Test 2



● Pre-Test
▲ Post-Test

Table 10 Impacted Vehicle Measurements

Test No.: 941006-2

Vehicle Make/Model: Chevrolet/Caprice

No.	Type of measurement	Pre-test	Post-test	Diff.
X1	Total length of vehicle at centerline	5438	5139	299
X2	Rear surface of vehicle to front of engine block	NA ¹	NA ¹	NA ¹
X3	Rear surface of vehicle to firewall	NA ¹	NA ¹	NA ¹
X4	Rear surface of vehicle to upper leading edge of right door	3823	3826	-3
X5	Rear surface of vehicle to upper leading edge of left door	3826	3822	4
X6	Rear surface of vehicle to lower leading edge of right door	3796	3788	8
X7	Rear surface of vehicle to lower leading edge of left door	3812	3793	19
X8	Rear surface of vehicle to upper trailing edge of right door	2606	2609	-3
X9	Rear surface of vehicle to upper trailing edge of left door	2616	2610	6
X10	Rear surface of vehicle to lower trailing edge of right door	2631	2622	9
X11	Rear surface of vehicle to lower trailing edge of left door	2636	2614	22
X12	Rear surface of vehicle to bottom of "A" post on right side	3772	3774	-2
X13	Rear surface of vehicle to bottom of "A" post on left side	3787	3767	20
X14	Rear surface of vehicle to firewall - right side	NA ¹	NA ¹	NA ¹
X15	Rear surface of vehicle to firewall - left side	NA ¹	NA ¹	NA ¹
X16	Rear surface of vehicle to steering wheel center	3208	3214	-6
X17	Center of steering column to "A" post	325	325	0
X18	Center of steering column to headliner	376	374	2
X19	Rear surface of vehicle to right side of front bumper	5314	5294	20
X20	Rear surface of vehicle to left side of front bumper	5321	5302	19
X21	Length of engine block	NA ¹	NA ¹	NA ¹

¹ The vehicle's crush obstructed the measurement.

All measurements are in millimeters.

Table 11 Vehicle Accelerometer Locations And Data Summary

Test No. 941006-2

TEST NUMBER: No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
1 VEHICLE CENTER OF GRAVITY	2997 mm	0 mm	516 mm		
LONGITUDINAL				0.6 g @ 258.8 ms	6.5 g @ 100.4 ms
LATERAL				0.9 g @ 72.2 ms	1.2 g @ 133.7 ms
VERTICAL				3.2 g @ 64.2 ms	2.4 g @ 94.3 ms
RESULTANT				7.1 g @ 100.6 ms	
2 LEFT FRONT SILL	2309 mm	719 mm	450 mm		
LONGITUDINAL				0.3 g @ 258.5 ms	6.3 g @ 105.0 ms
LATERAL				1.3 g @ 74.6 ms	0.9 g @ 30.5 ms
3 RIGHT FRONT SILL	2230 mm	-719 mm	445 mm		
LONGITUDINAL				0.7 g @ 248.4 ms	5.8 g @ 99.2 ms
LATERAL				0.8 g @ 47.1 ms	0.9 g @ 66.5 ms
4 LEFT REAR SEAT CROSSMEMBER	2030 mm	366 mm	395 mm		
LONGITUDINAL				0.6 g @ 248.2 ms	6.7 g @ 96.9 ms
LATERAL				0.6 g @ 111.8 ms	1.1 g @ 137.1 ms
5 RIGHT REAR SEAT CROSSMEMBER	2031 mm	-366 mm	411 mm		
LONGITUDINAL				1.0 g @ 251.2 ms	6.9 g @ 97.5 ms
LATERAL ¹				3.2 g @ 99.0 ms	10.0 g @ 309.4 ms

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

¹ See DATA ACQUISITION EXPLANATIONS

Table 12 Camera Information

Test No. 941006-2

<u>Camera Number</u>	<u>Location</u>	<u>Type</u>	<u>Lens (mm)</u>	<u>Speed (fps)</u>	<u>Purpose of Camera Data</u>
1	Left tight	Photosonic	13	1002	Impact overall
2	Right tight	Photosonic	13	1000	Impact overall
3	Overhead	Photosonic	13	998	Impact overall



Section 5.0

Test 941006-3 Summary

Table 13 Test Conditions

Test No. 941006-3

Date of Test: 10/06/94

Time of Test: 11:38

Ambient Temperature at Impact Area: 19° C

Intended Impact Velocity: 16.1 kph

Actual Impact Velocity: Primary = 16.3 kph
 Secondary = 16.3 kph

Subject Vehicle Data

Length of Direct Contact Damage: 402 mm

Maximum Cumulative Crush at
Vehicle Bumper Height: 508 mm

Vehicle Attitudes:

Post-Test: LF: 824; RF: 815; LR: 635; RR: 619

All distance measurements are in millimeters.

Table 14 Vehicle Crush At Vehicle Bumper Height

Test No. 941006-3

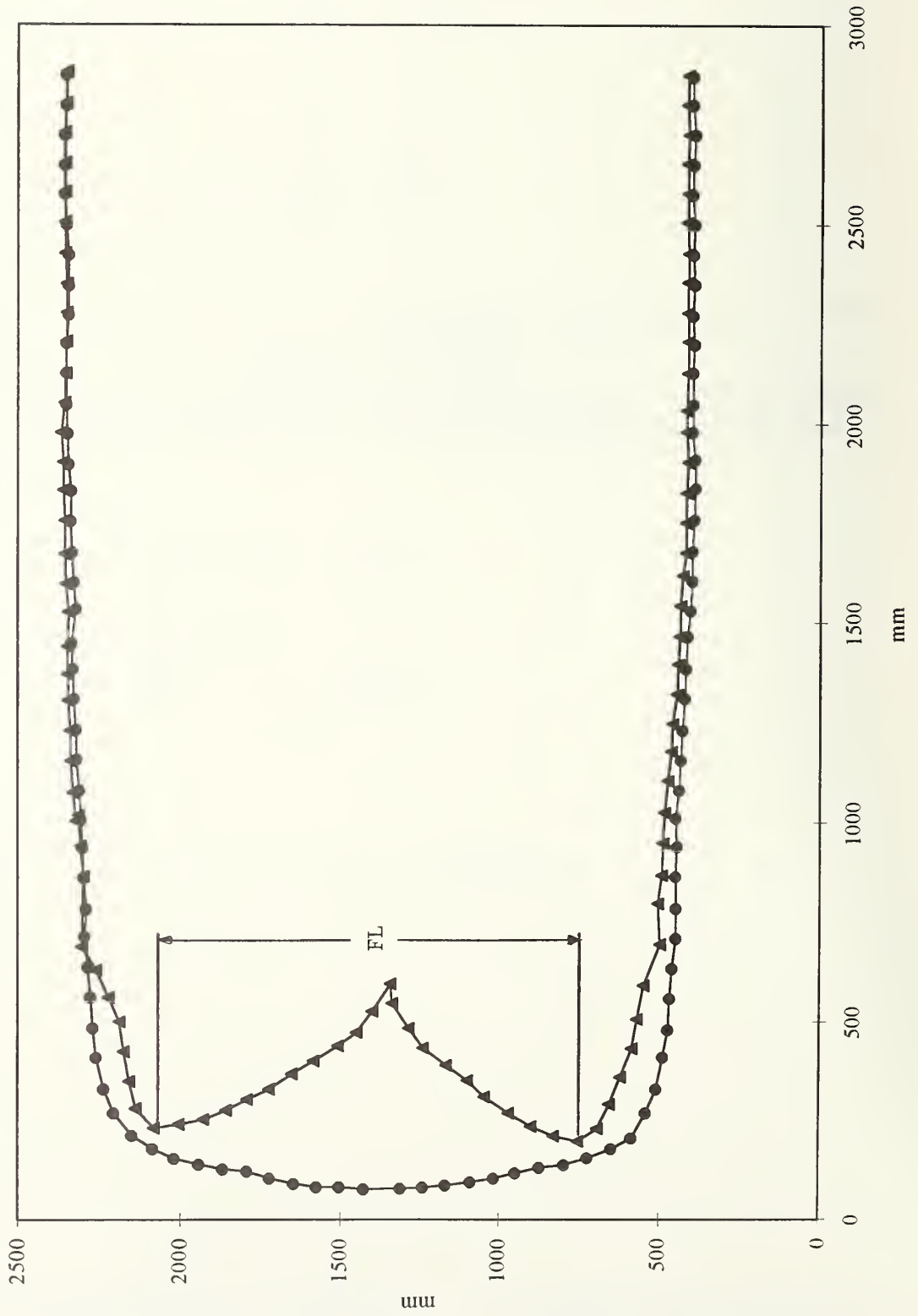
FL	=	1390
C1	=	-7
C2	=	132
C3	=	347
C4	=	345
C5	=	170
C6	=	19

NOTE: FL is post-test length of damaged surface.

Measurements C1 - C6 were spaced equally apart over the post-impact length of the damaged surface. This distance is defined as length "FL" on the vehicle crush profile plot.

All measurements are in millimeters.

Figure 5 Vehicle Profile At Bumper Height
Test 3



● Pre-Test
▲ Post-Test

Table 15 Impacted Vehicle Measurements

Test No.: 941006-3

Vehicle Make/Model: Chevrolet/Caprice

No.	Type of measurement	Pre-test	Post-test	Diff.
X1	Total length of vehicle at centerline	5139	4999	140
X2	Rear surface of vehicle to front of engine block	NA ¹	NA ¹	NA ¹
X3	Rear surface of vehicle to firewall	NA ¹	NA ¹	NA ¹
X4	Rear surface of vehicle to upper leading edge of right door	3826	3809	17
X5	Rear surface of vehicle to upper leading edge of left door	3822	3818	4
X6	Rear surface of vehicle to lower leading edge of right door	3788	3773	15
X7	Rear surface of vehicle to lower leading edge of left door	3793	3783	10
X8	Rear surface of vehicle to upper trailing edge of right door	2609	2589	20
X9	Rear surface of vehicle to upper trailing edge of left door	2610	2609	1
X10	Rear surface of vehicle to lower trailing edge of right door	2622	2608	14
X11	Rear surface of vehicle to lower trailing edge of left door	2614	2608	6
X12	Rear surface of vehicle to bottom of "A" post on right side	3774	3760	14
X13	Rear surface of vehicle to bottom of "A" post on left side	3767	3776	-10
X14	Rear surface of vehicle to firewall - right side	NA ¹	NA ¹	NA ¹
X15	Rear surface of vehicle to firewall - left side	NA ¹	NA ¹	NA ¹
X16	Rear surface of vehicle to steering wheel center	3214	3218	-4
X17	Center of steering column to "A" post	325	336	-11
X18	Center of steering column to headliner	374	380	-6
X19	Rear surface of vehicle to right side of front bumper	5294	5295	-1
X20	Rear surface of vehicle to left side of front bumper	5302	5328	-26
X21	Length of engine block	NA ¹	NA ¹	NA ¹

¹ The vehicle's crush obstructed the measurement.

All measurements are in millimeters.

Table 16 Vehicle Accelerometer Locations And Data Summary

Test No. 941006-3

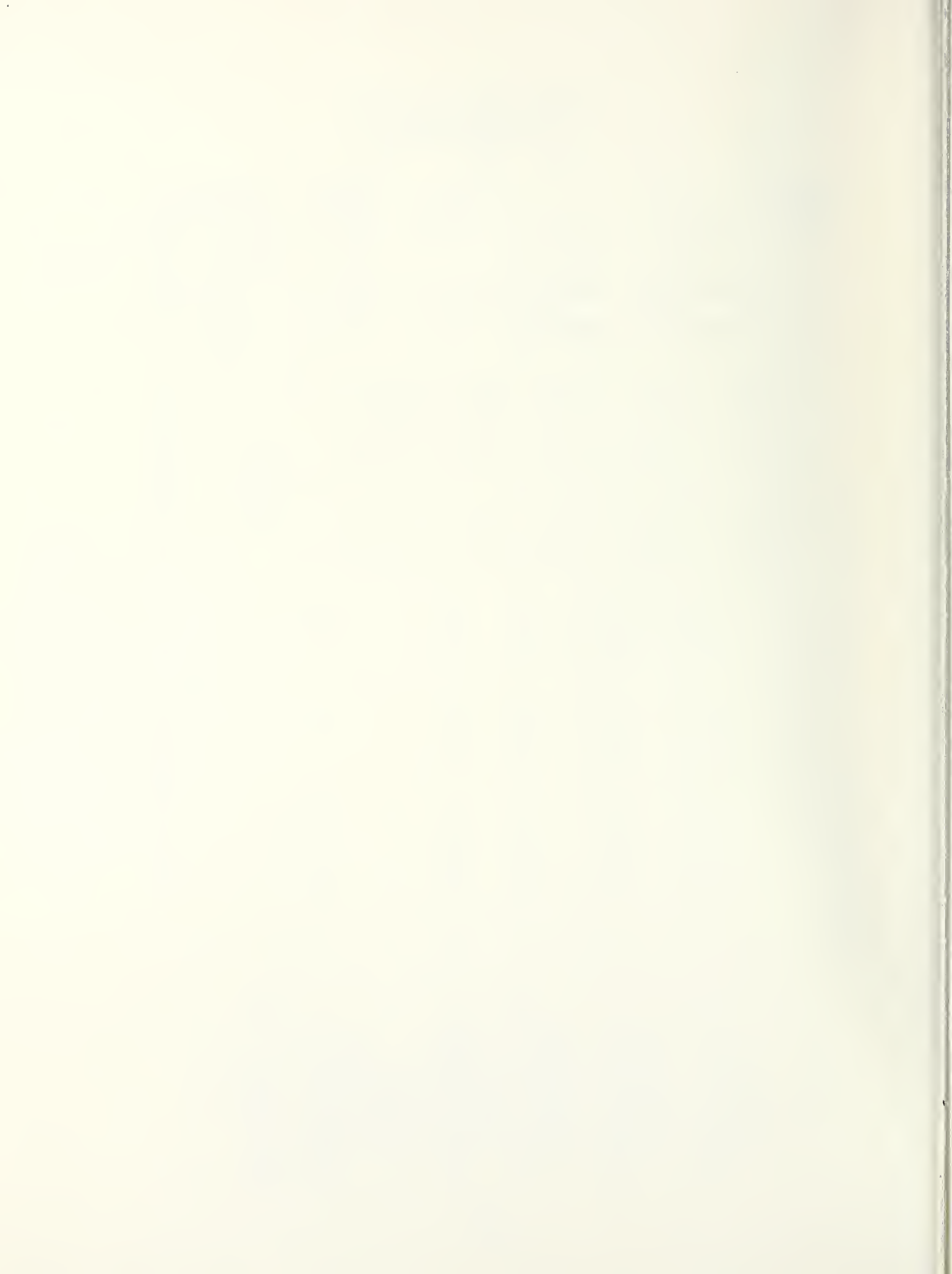
TEST NUMBER: No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
1 VEHICLE CENTER OF GRAVITY	2997 mm	0 mm	516 mm		
LONGITUDINAL				0.9 g @ 198.1 ms	11.6 g @ 35.7 ms
LATERAL				3.5 g @ 36.3 ms	1.7 g @ 41.3 ms
VERTICAL				13.1 g @ 52.4 ms	6.7 g @ 66.6 ms
RESULTANT				15.4 g @ 52.4 ms	
2 LEFT FRONT SILL	2309 mm	719 mm	450 mm		
LONGITUDINAL				0.5 g @ 195.0 ms	11.9 g @ 33.9 ms
LATERAL				2.5 g @ 47.3 ms	3.0 g @ 54.3 ms
3 RIGHT FRONT SILL	2230 mm	-719 mm	445 mm		
LONGITUDINAL				0.7 g @ 187.5 ms	11.3 g @ 35.6 ms
LATERAL				2.0 g @ 57.8 ms	1.8 g @ 39.9 ms
4 LEFT REAR SEAT CROSSMEMBER	2030 mm	366 mm	395 mm		
LONGITUDINAL				0.6 g @ 181.8 ms	15.4 g @ 34.8 ms
LATERAL				1.9 g @ 35.0 ms	2.3 g @ 54.6 ms
5 RIGHT REAR SEAT CROSSMEMBER	2031 mm	-366 mm	411 mm		
LONGITUDINAL				1.9 g @ 47.3 ms	13.9 g @ 36.7 ms
LATERAL				7.3 g @ 91.5 ms	0.7 g @ 27.3 ms

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

Table 17 Camera Information

Test No. 941006-3

<u>Camera Number</u>	<u>Location</u>	<u>Type</u>	<u>Lens (mm)</u>	<u>Speed (fps)</u>	<u>Purpose of Camera Data</u>
1	Left tight	Photosonic	13	1002	Impact overall
2	Right tight	Photosonic	13	1000	Impact overall
3	Overhead	Photosonic	13	998	Impact overall



Section 6.0

Test 941006-4 Summary

Table 19 Vehicle Crush At Vehicle Bumper Height

Test No. 941006-4

FL	=	1044
C1	=	-48
C2	=	181
C3	=	554
C4	=	569
C5	=	360
C6	=	34

NOTE: FL is post-test length of damaged surface.

Measurements C1 - C6 were spaced equally apart over the post-impact length of the damaged surface. This distance is defined as length "FL" on the vehicle crush profile plot.

All measurements are in millimeters.

Figure 6 Vehicle Profile At bumper Height
Test 4

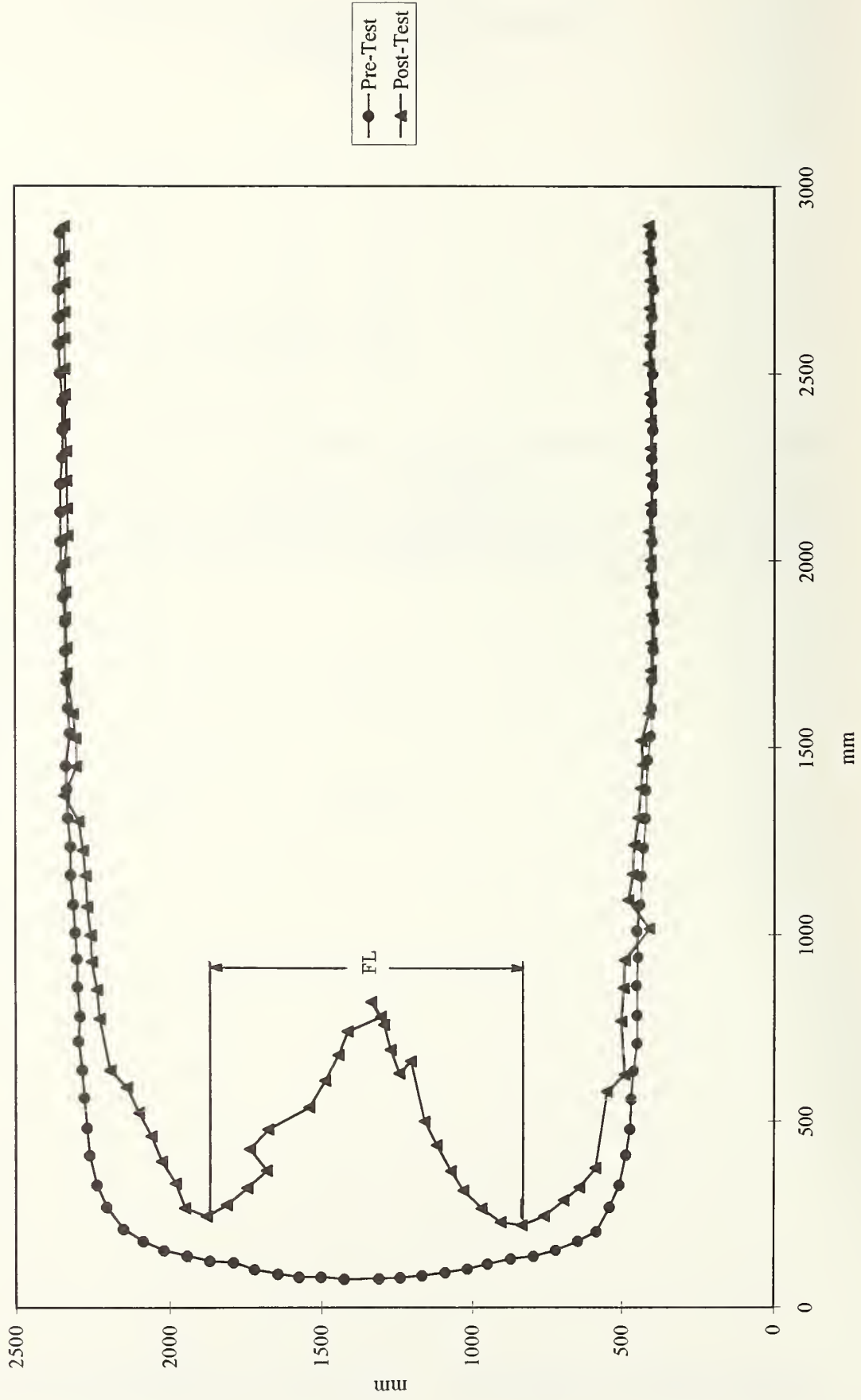


Table 20 Impacted Vehicle Measurements

Test No.: 941006-4 Vehicle Make/Model: Chevrolet/Caprice

No.	Type of measurement	Pre-test	Post-test	Diff.
X1	Total length of vehicle at centerline	4999	4746	253
X2	Rear surface of vehicle to front of engine block	NA ¹	NA ¹	NA ¹
X3	Rear surface of vehicle to firewall	NA ¹	NA ¹	NA ¹
X4	Rear surface of vehicle to upper leading edge of right door	3809	3824	-15
X5	Rear surface of vehicle to upper leading edge of left door	3818	3816	2
X6	Rear surface of vehicle to lower leading edge of right door	3773	3791	-18
X7	Rear surface of vehicle to lower leading edge of left door	3783	3800	-17
X8	Rear surface of vehicle to upper trailing edge of right door	2589	2607	-18
X9	Rear surface of vehicle to upper trailing edge of left door	2609	2596	13
X10	Rear surface of vehicle to lower trailing edge of right door	2608	2622	-14
X11	Rear surface of vehicle to lower trailing edge of left door	2608	2615	-7
X12	Rear surface of vehicle to bottom of "A" post on right side	3760	3770	-10
X13	Rear surface of vehicle to bottom of "A" post on left side	3776	3768	8
X14	Rear surface of vehicle to firewall - right side	NA ¹	NA ¹	NA ¹
X15	Rear surface of vehicle to firewall - left side	NA ¹	NA ¹	NA ¹
X16	Rear surface of vehicle to steering wheel center	3218	3243	-25
X17	Center of steering column to "A" post	336	337	-1
X18	Center of steering column to headliner	380	384	-4
X19	Rear surface of vehicle to right side of front bumper	5295	5280	15
X20	Rear surface of vehicle to left side of front bumper	5328	5296	32
X21	Length of engine block	NA ¹	NA ¹	NA ¹

¹ The vehicle's crush obstructed the measurement.

All measurements are in millimeters.

Table 21 Vehicle Accelerometer Locations And Data Summary

Test No. 941006-4

TEST NUMBER: 941006-4 No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
1 VEHICLE CENTER OF GRAVITY	2997 mm	0 mm	516 mm		
LONGITUDINAL				3.9 g @ 86.6 ms	29.4 g @ 55.0 ms
LATERAL				13.7 g @ 48.4 ms	6.5 g @ 54.5 ms
VERTICAL				25.7 g @ 73.4 ms	18.2 g @ 206.6 ms
RESULTANT				32.9 g @ 55.7 ms	
2 LEFT FRONT SILL	2309 mm	719 mm	450 mm		
LONGITUDINAL				3.0 g @ 138.5 ms	32.0 g @ 50.7 ms
LATERAL				5.3 g @ 22.8 ms	7.1 g @ 58.6 ms
3 RIGHT FRONT SILL	2230 mm	-719 mm	445 mm		
LONGITUDINAL				2.8 g @ 138.4 ms	26.9 g @ 52.8 ms
LATERAL				6.5 g @ 56.0 ms	5.8 g @ 15.9 ms
4 LEFT REAR SEAT CROSSMEMBER	2030 mm	366 mm	395 mm		
LONGITUDINAL				8.2 g @ 81.4 ms	50.4 g @ 51.3 ms
LATERAL				3.3 g @ 24.3 ms	4.1 g @ 56.7 ms
5 RIGHT REAR SEAT CROSSMEMBER	2031 mm	-366 mm	411 mm		
LONGITUDINAL				8.1 g @ 83.9 ms	34.5 g @ 60.5 ms
LATERAL ¹				14.1 g @ 203.0 ms	9.4 g @ 81.6 ms

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

¹ See DATA ACQUISITION EXPLANATIONS

Table 22 Camera Information

Test No. 941006-4

<u>Camera Number</u>	<u>Location</u>	<u>Type</u>	<u>Lens (mm)</u>	<u>Speed (fps)</u>	<u>Purpose of Camera Data</u>
1	Left tight	Photosonic	13	1002	Impact overall
2	Right tight	Photosonic	13	1000	Impact overall
3	Overhead	Photosonic	13	1000	Impact overall



Section 7.0

Test 941006-5 Summary

Table 24 Vehicle Crush At Vehicle Bumper Height

Test No. 941006-5

FL	=	899
C1	=	-9
C2	=	198
C3	=	789
C4	=	1007
C5	=	392
C6	=	170

NOTE: FL is post-test length of damaged surface.

Measurements C1 - C6 were spaced equally apart over the post-impact length of the damaged surface. This distance is defined as length "FL" on the vehicle crush profile plot.

All measurements are in millimeters.

Figure 7 Vehicle Profile At Bumper Height
Test 5

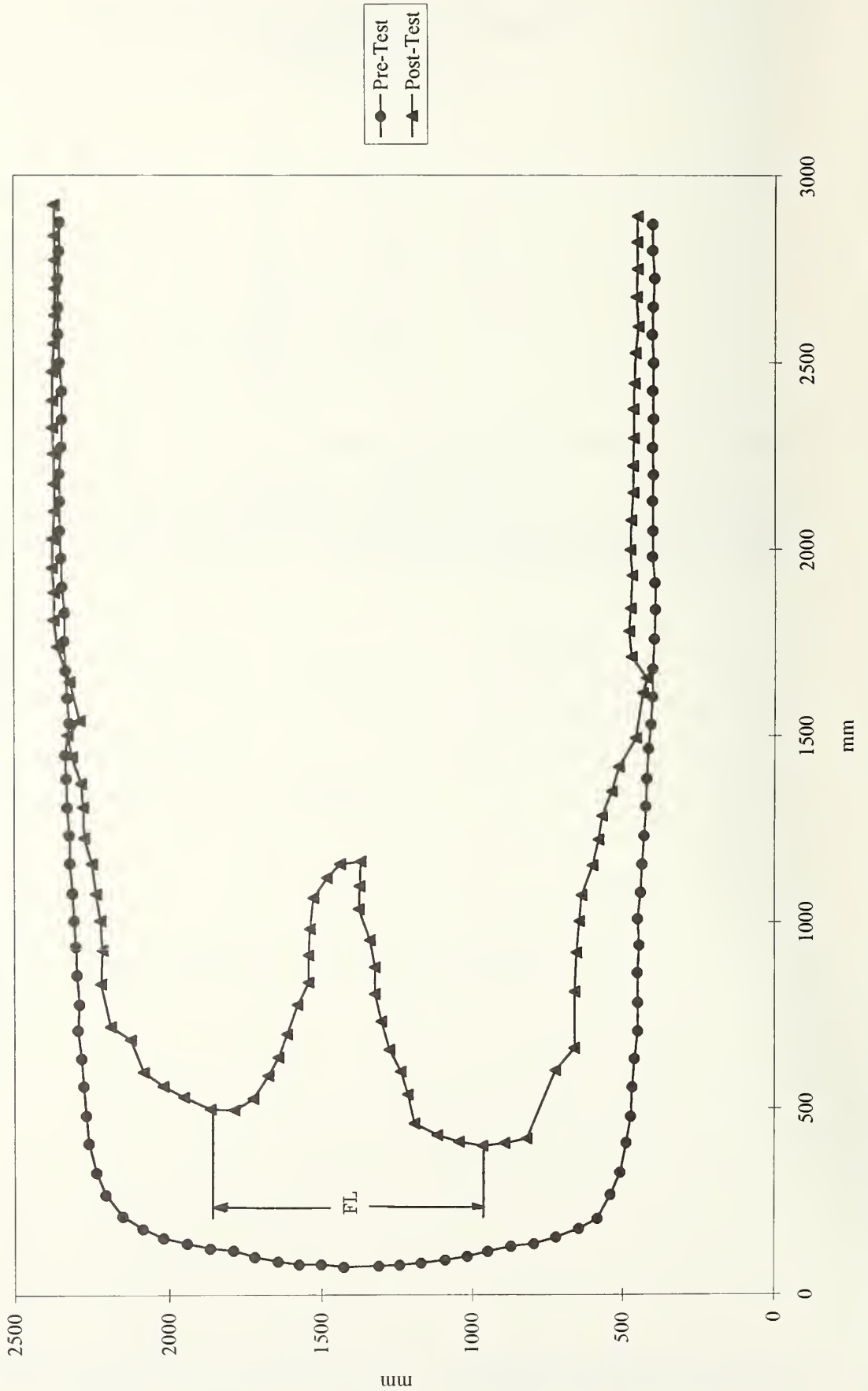


Table 25 Impacted Vehicle Measurements

Test No.: 941006-5

Vehicle Make/Model: Chevrolet/Caprice

No.	Type of measurement	Pre-test	Post-test	Diff.
X1	Total length of vehicle at centerline	4746	4372	374
X2	Rear surface of vehicle to front of engine block	NA ¹	4134	NA ¹
X3	Rear surface of vehicle to firewall	NA ¹	3947	NA ¹
X4	Rear surface of vehicle to upper leading edge of right door	3824	3796	28
X5	Rear surface of vehicle to upper leading edge of left door	3816	3812	4
X6	Rear surface of vehicle to lower leading edge of right door	3791	3766	25
X7	Rear surface of vehicle to lower leading edge of left door	3800	3801	-1
X8	Rear surface of vehicle to upper trailing edge of right door	2607	2581	26
X9	Rear surface of vehicle to upper trailing edge of left door	2596	2598	-2
X10	Rear surface of vehicle to lower trailing edge of right door	2622	2596	26
X11	Rear surface of vehicle to lower trailing edge of left door	2615	2629	-14
X12	Rear surface of vehicle to bottom of "A" post on right side	3770	3727	43
X13	Rear surface of vehicle to bottom of "A" post on left side	3768	3753	15
X14	Rear surface of vehicle to firewall - right side	NA ¹	4280	NA ¹
X15	Rear surface of vehicle to firewall - left side	NA ¹	4062	NA ¹
X16	Rear surface of vehicle to steering wheel center	3243	3226	17
X17	Center of steering column to "A" post	337	290	47
X18	Center of steering column to headliner	384	325	59
X19	Rear surface of vehicle to right side of front bumper	5280	4998	282
X20	Rear surface of vehicle to left side of front bumper	5296	5065	231
X21	Length of engine block	NA ¹	521	NA ¹

¹ The vehicle's crush obstructed the measurement.

All measurements are in millimeters.

Table 26 Vehicle Accelerometer Locations And Data Summary

Test No. 941006-5

TEST NUMBER: No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
1 VEHICLE CENTER OF GRAVITY	2997 mm	0 mm	516 mm		
LONGITUDINAL ¹				69.6 g @ 39.6 ms	126.7 g @ 24.6 ms
LATERAL				16.2 g @ 154.5 ms	39.0 g @ 61.0 ms
VERTICAL				89.7 g @ 38.2 ms	124.1 g @ 28.3 ms
RESULTANT				160.1 g @ 28.2 ms	
2 LEFT FRONT SILL	2309 mm	719 mm	450 mm		
LONGITUDINAL				3.8 g @ 136.9 ms	38.2 g @ 22.5 ms
LATERAL				17.2 g @ 67.8 ms	15.6 g @ 30.6 ms
3 RIGHT FRONT SILL	2230 mm	-719 mm	445 mm		
LONGITUDINAL				3.2 g @ 129.4 ms	41.5 g @ 23.0 ms
LATERAL				16.4 g @ 66.6 ms	13.9 g @ 29.0 ms
4 LEFT REAR SEAT CROSSMEMBER	2030 mm	366 mm	395 mm		
LONGITUDINAL				19.1 g @ 38.3 ms	73.4 g @ 34.2 ms
LATERAL				11.0 g @ 68.7 ms	15.3 g @ 39.1 ms
5 RIGHT REAR SEAT CROSSMEMBER	2031 mm	-366 mm	411 mm		
LONGITUDINAL				12.3 g @ 43.0 ms	68.7 g @ 39.2 ms
LATERAL ¹				2.6 g @ 21.4 ms	23.9 g @ 66.2 ms

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

¹ See DATA ACQUISITION EXPLANATIONS

Table 27 Camera Information

Test No. 941006-5

<u>Camera Number</u>	<u>Location</u>	<u>Type</u>	<u>Lens (mm)</u>	<u>Speed (fps)</u>	<u>Purpose of Camera Data</u>
1	Left tight	Photosonic	13	1000	Impact overall
2	Right tight	Photosonic	13	998	Impact overall
3	Overhead	Photosonic	13	998	Impact overall



List of Photographs

Test No. 941006-1

- A-1. Pre-Test Right Side View
- A-2. Post-Test Right Side View
- A-3. Pre-Test Right Front Three-Quarter View
- A-4. Post-Test Right Front Three-Quarter View
- A-5. Pre-Test Front View
- A-6. Post-Test Front View
- A-7. Pre-Test Left Front Three-Quarter View
- A-8. Post-Test Left Front Three-Quarter View
- A-9. Pre-Test Left Side View
- A-10. Post-Test Left Side View
- A-11. Pre-Test Overhead View





Figure A-1. Pre-Test Right Side View



Figure A-2. Post-Test Right Side View



Figure A-3. Pre-Test Right Front Three-Quarter View



Figure A-4. Post-Test Right Front Three-Quarter View



Figure A-5. Pre-Test Front View



Figure A-6. Post-Test Front View



Figure A-7. Pre-Test Left Front Three-Quarter View



Figure A-8. Post-Test Left Front Three-Quarter View

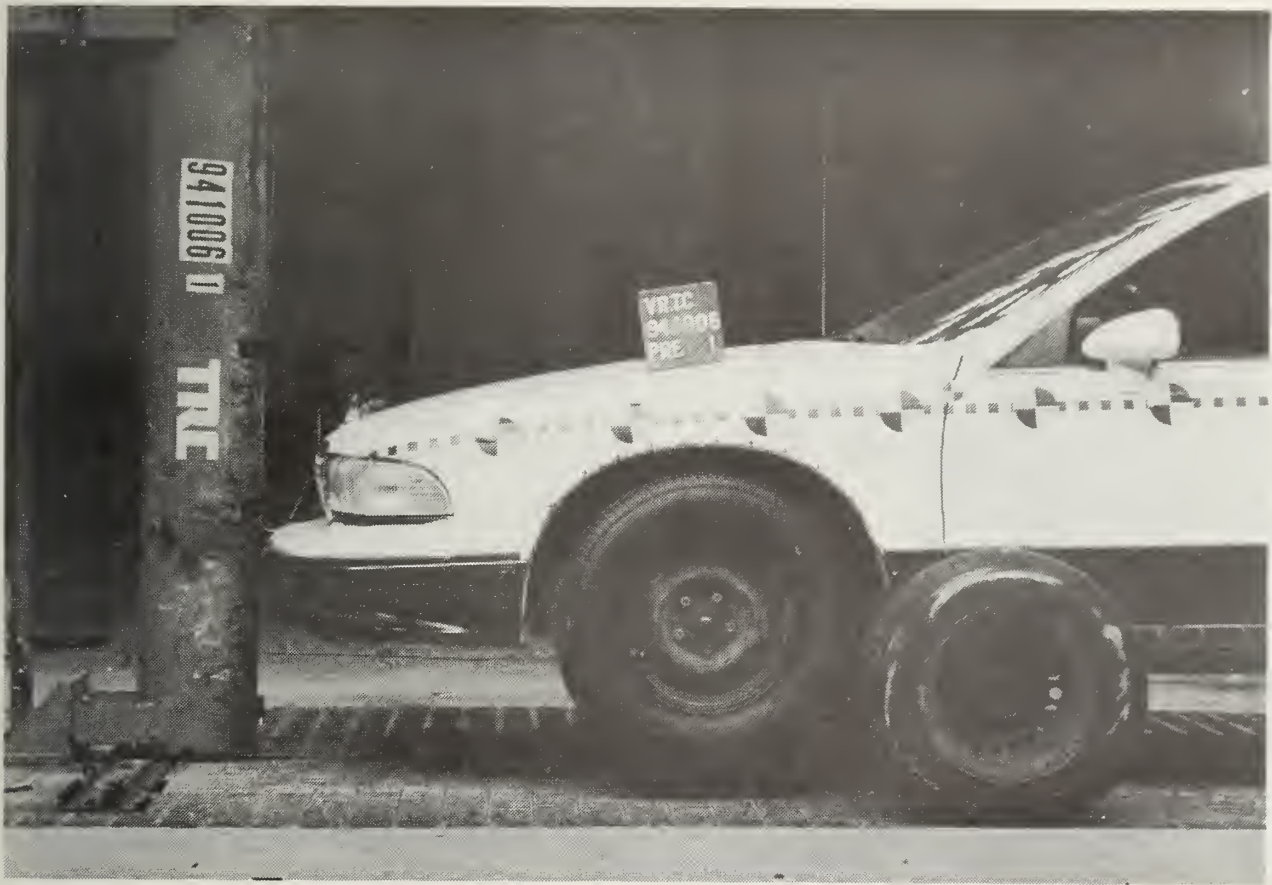


Figure A-9. Pre-Test Left Side View



Figure A-10. Post-Test Left Side View

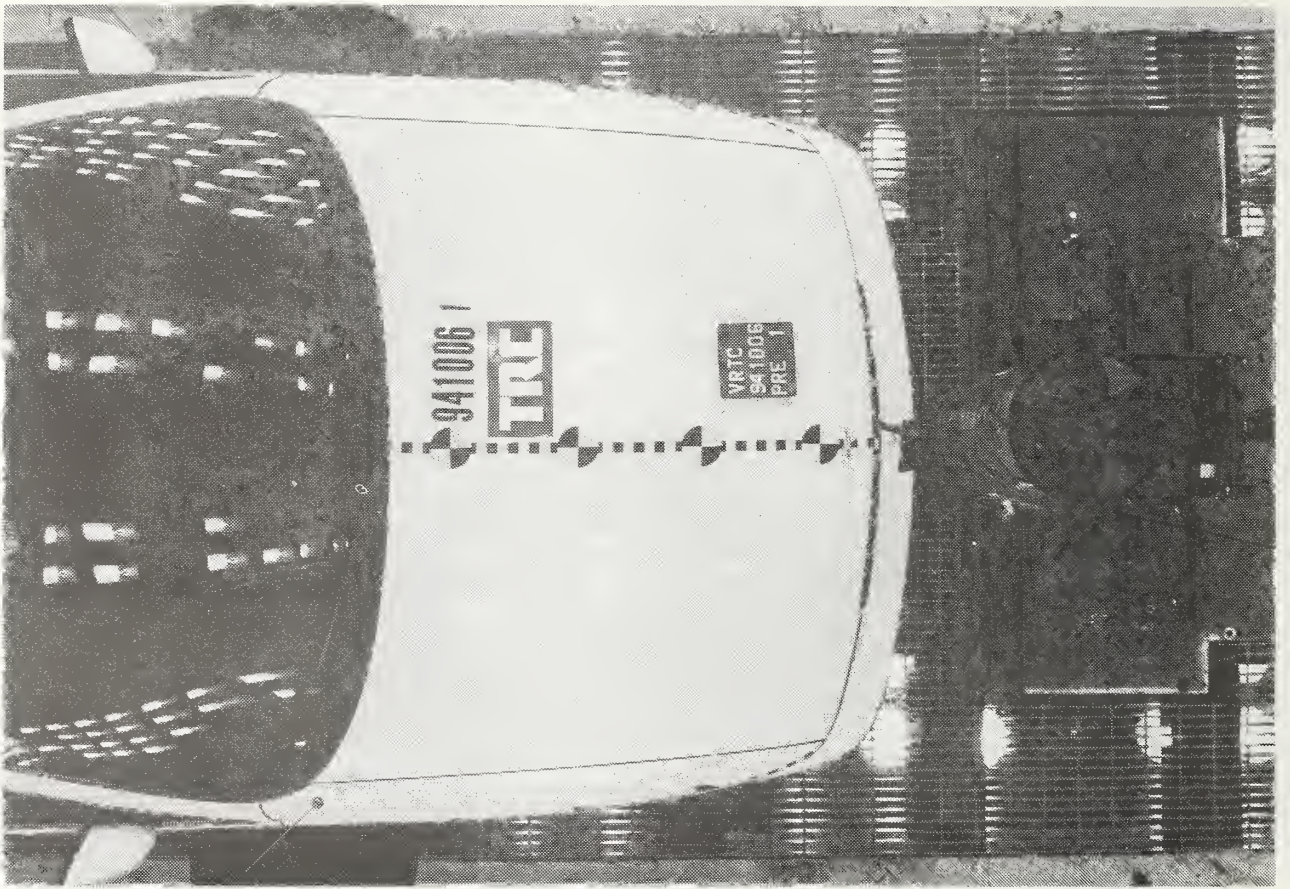


Figure A-11. Pre-Test Overhead View

List of Photographs

Test No. 941006-2

- A-12. Post-Test Right Side View
- A-13. Post-Test Right Front Three-Quarter View
- A-14. Post-Test Front View
- A-15. Post-Test Left Front Three-Quarter View
- A-16. Post-Test Left Side View
- A-17. Pre-Test Overhead View



Figure A-12. Post-Test Right Side View



Figure A-13. Post-Test Right Front Three-Quarter View



Figure A-14. Post-Test Front View



Figure A-15. Post-Test Left Front Three-Quarter View



Figure A-16. Post-Test Left Side View

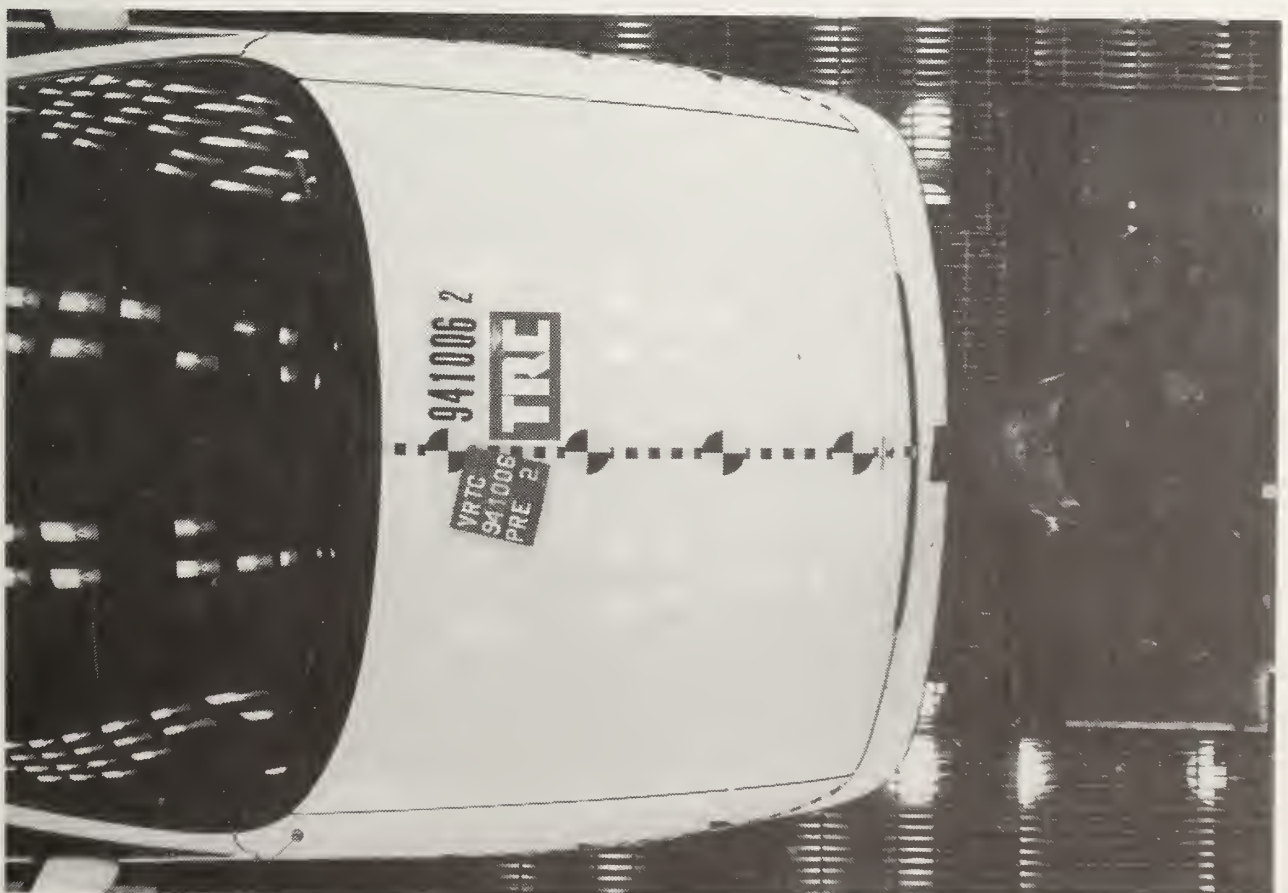


Figure A-17. Pre-Test Overhead View

List of Photographs

Test No. 941006-3

- A-18. Post-Test Right Side View
- A-19. Post-Test Right Front Three-Quarter View
- A-20. Post-Test Front View
- A-21. Post-Test Left Front Three-Quarter View
- A-22. Post-Test Left Side View
- A-23. Pre-Test Overhead View



Figure A-18. Post-Test Right Side View



Figure A-19. Post-Test Right Front Three-Quarter View

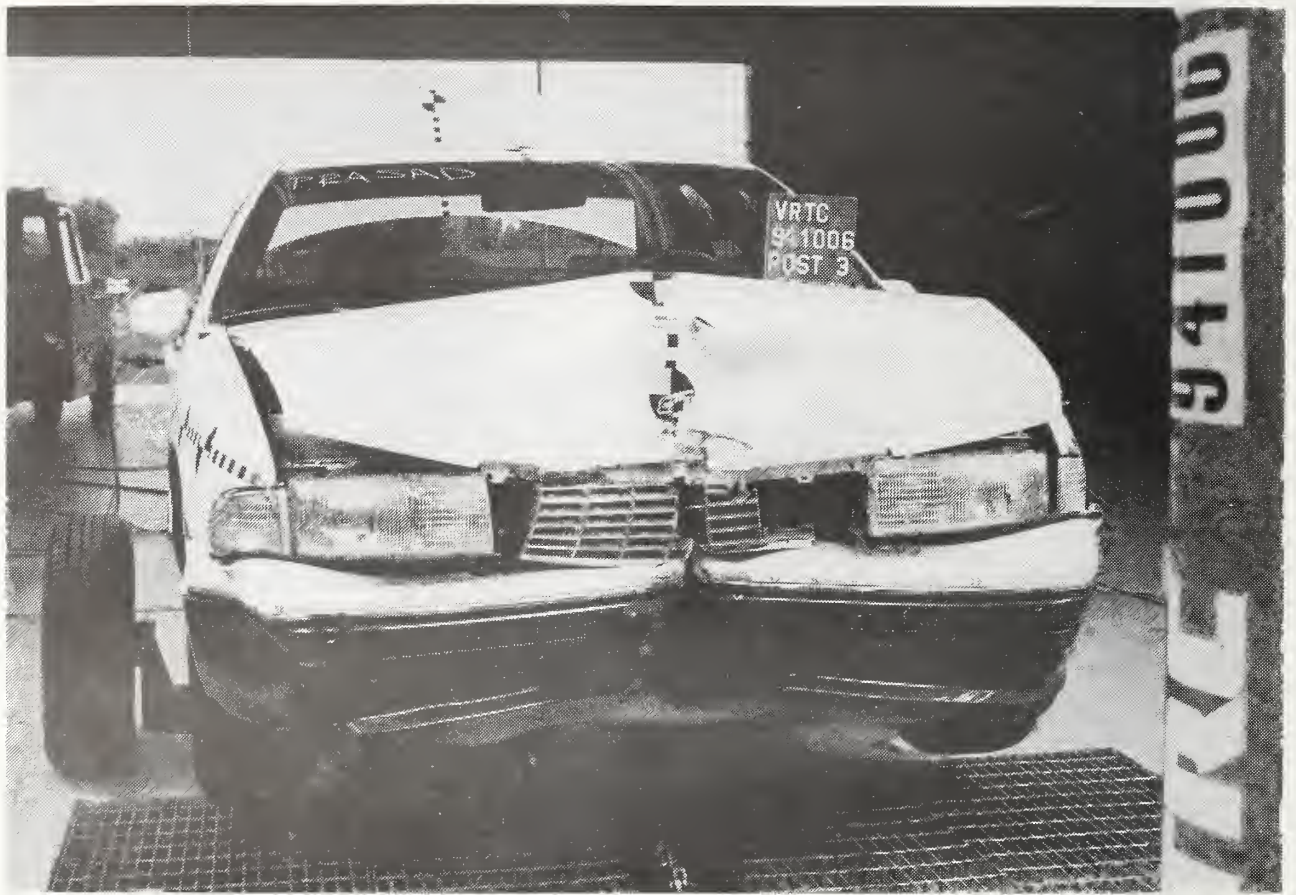


Figure A-20. Post-Test Front View



Figure A-21. Post-Test Left Front Three-Quarter View



Figure A-22. Post-Test Left Side View



Figure A-23. Pre-Test Overhead View

List of Photographs

Test No. 941006-4

- A-24. Post-Test Right Side View
- A-25. Post-Test Right Front Three-Quarter View
- A-26. Post-Test Front View
- A-27. Post-Test Left Front Three-Quarter View
- A-28. Post-Test Left Side View
- A-29. Pre-Test Overhead View



Figure A-24. Post-Test Right Side View



Figure A-25. Post-Test Right Front Three-Quarter View

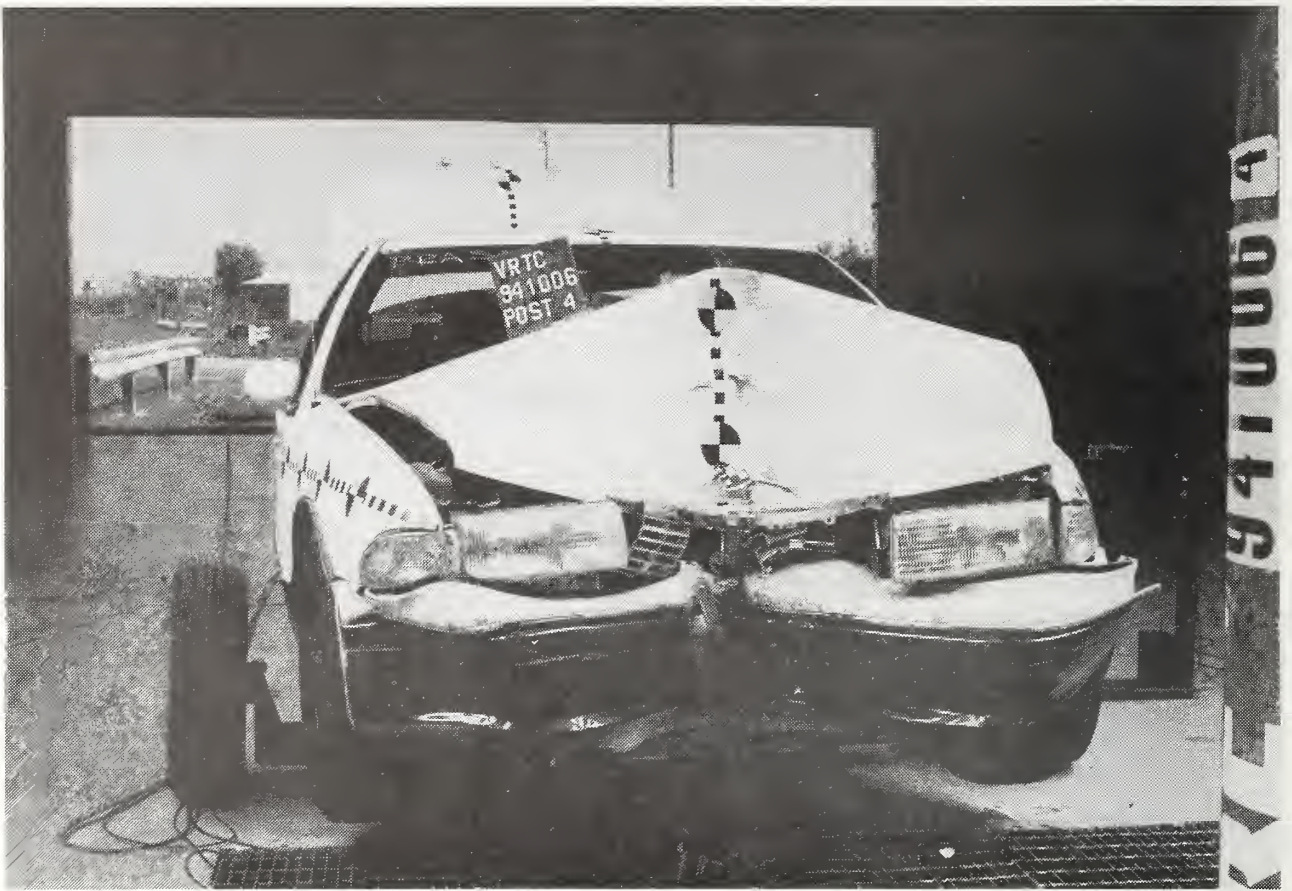


Figure A-26. Post-Test Front View



Figure A-27. Post-Test Left Front Three-Quarter View



Figure A-28. Post-Test Left Side View



Figure A-29. Pre-Test Overhead View

List of Photographs

Test No. 941006-5

- A-30. Post-Test Right Side View
- A-31. Post-Test Right Front Three-Quarter View
- A-32. Post-Test Front View
- A-33. Post-Test Left Front Three-Quarter View
- A-34. Post-Test Left Side View
- A-35. Pre-Test Overhead View





Figure A-30. Post-Test Right Side View



Figure A-31. Post-Test Right Front Three-Quarter View



Figure A-32. Post-Test Front View



Figure A-33. Post-Test Left Front Three-Quarter View

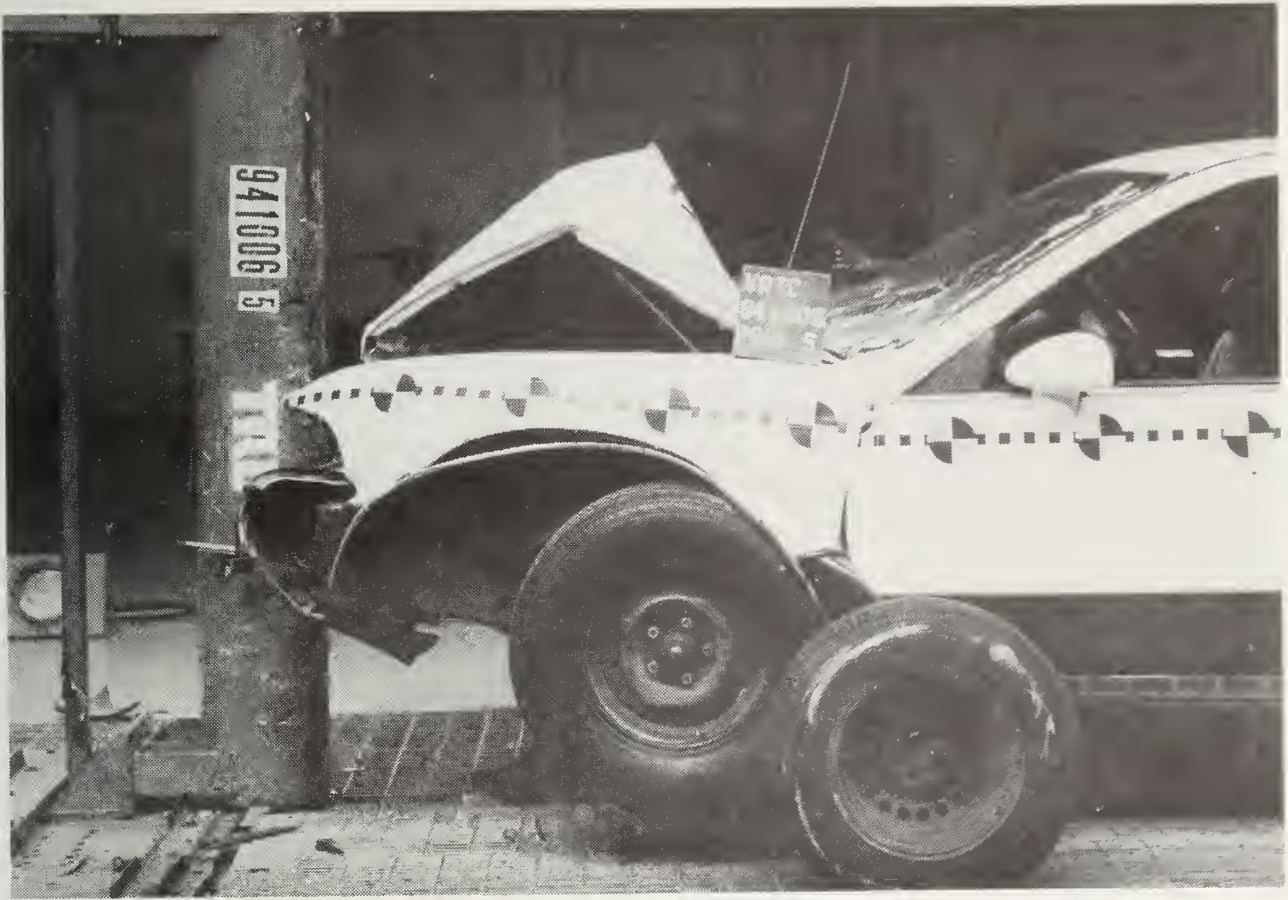


Figure A-34. Post-Test Left Side View

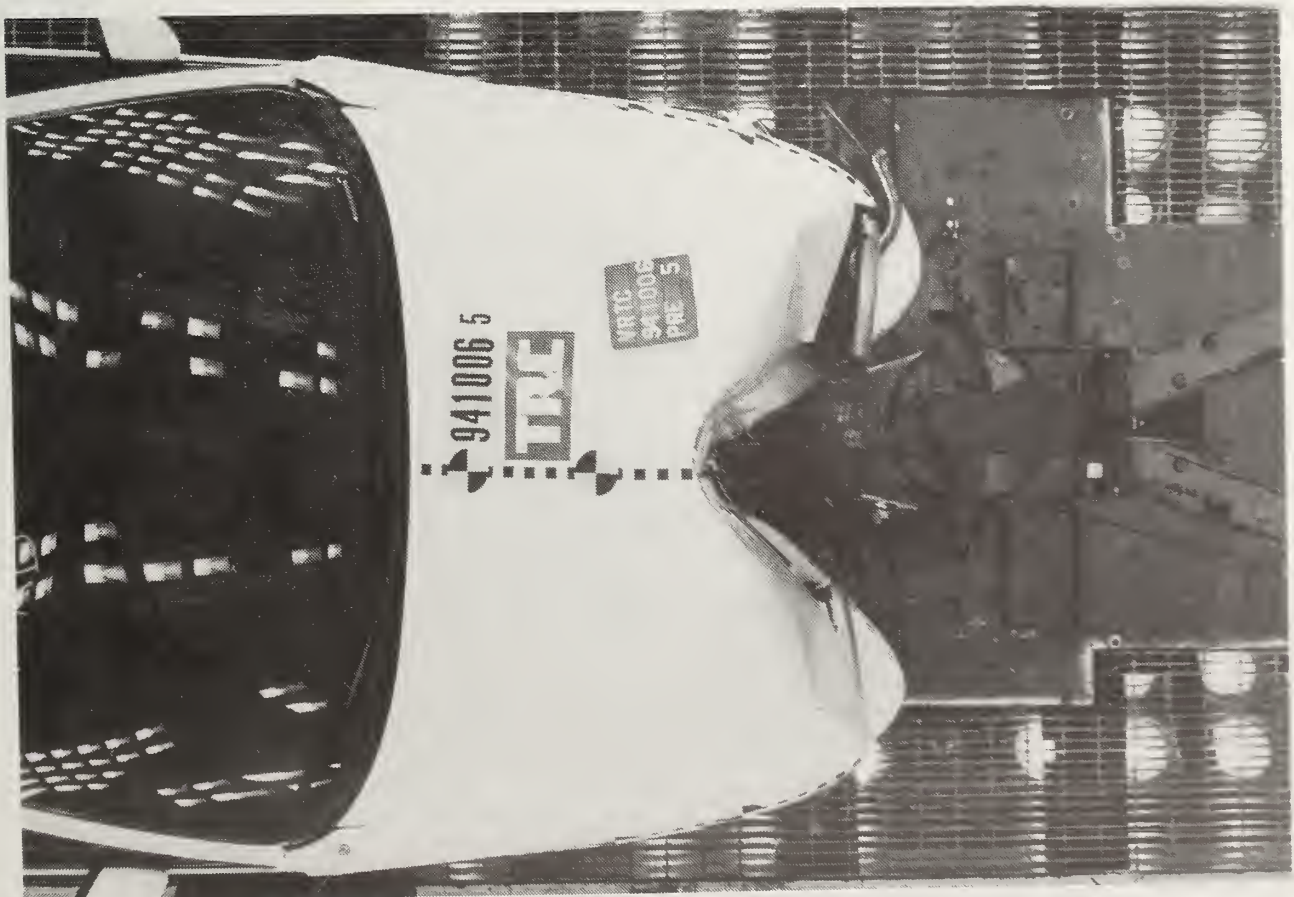


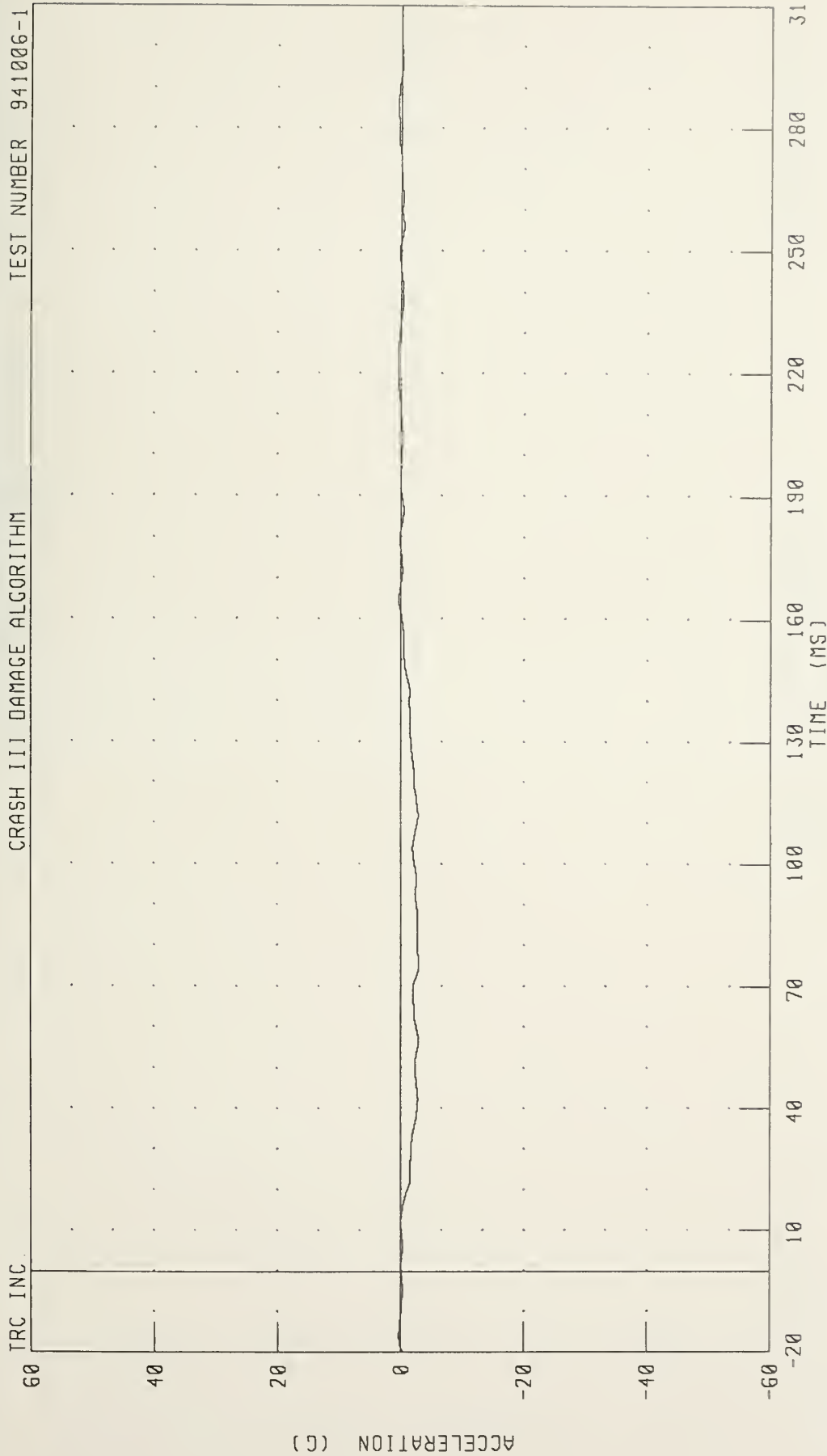
Figure A-35. Pre-Test Overhead View

Data Plots

Test No. 941006-1

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS ACCELERATION

TRC INC. CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-1



CHANNEL: VCGXG1 FILTER: CH. CLASS 60

PEAK DATA 0.56 G @ 285 20 MS, -2.91 G @ 56 40 MS

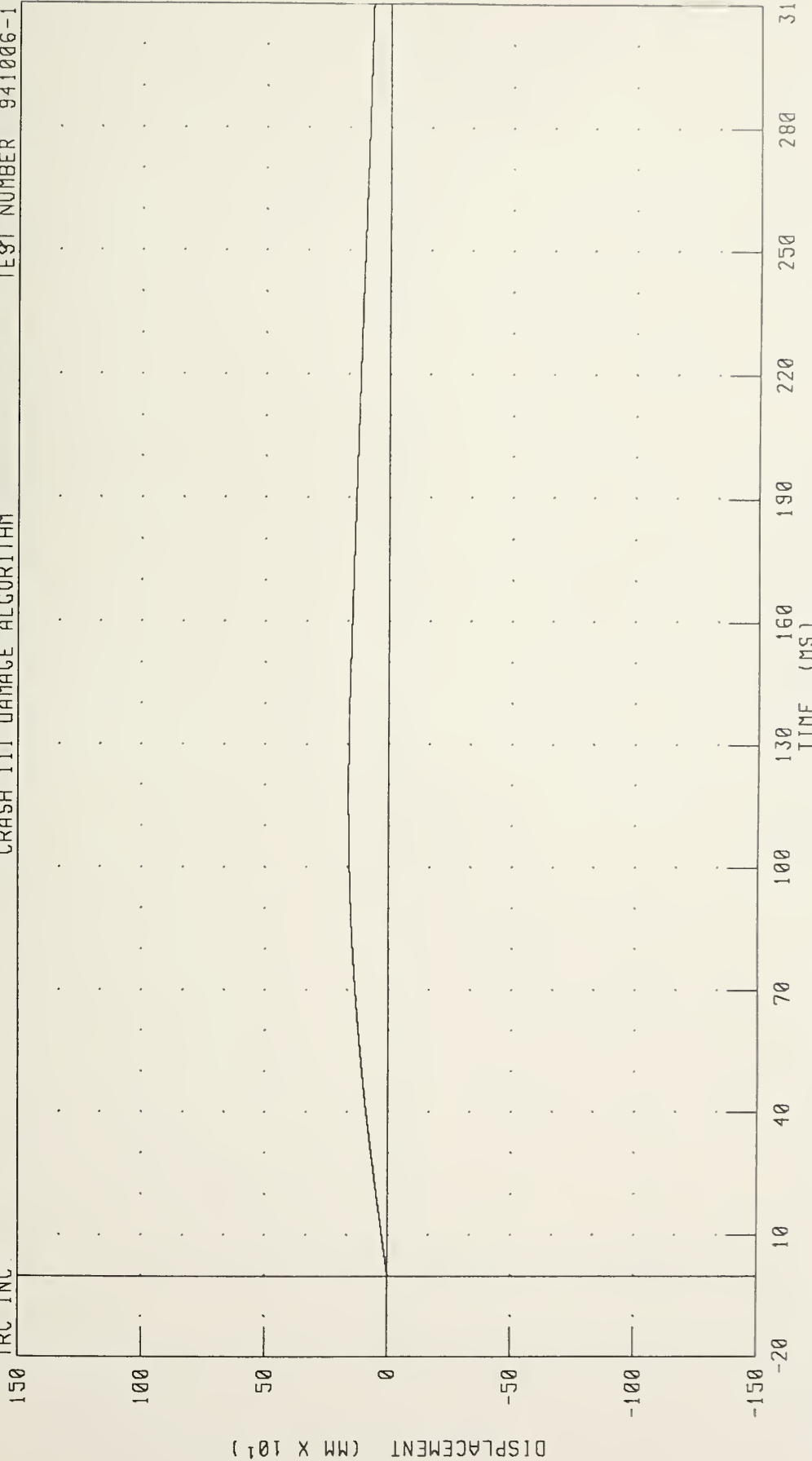
1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM



1992 CHEVROLET CAPRICE INTO 305 MM POLE
 VEHICLE CG X-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-1

TRC INC

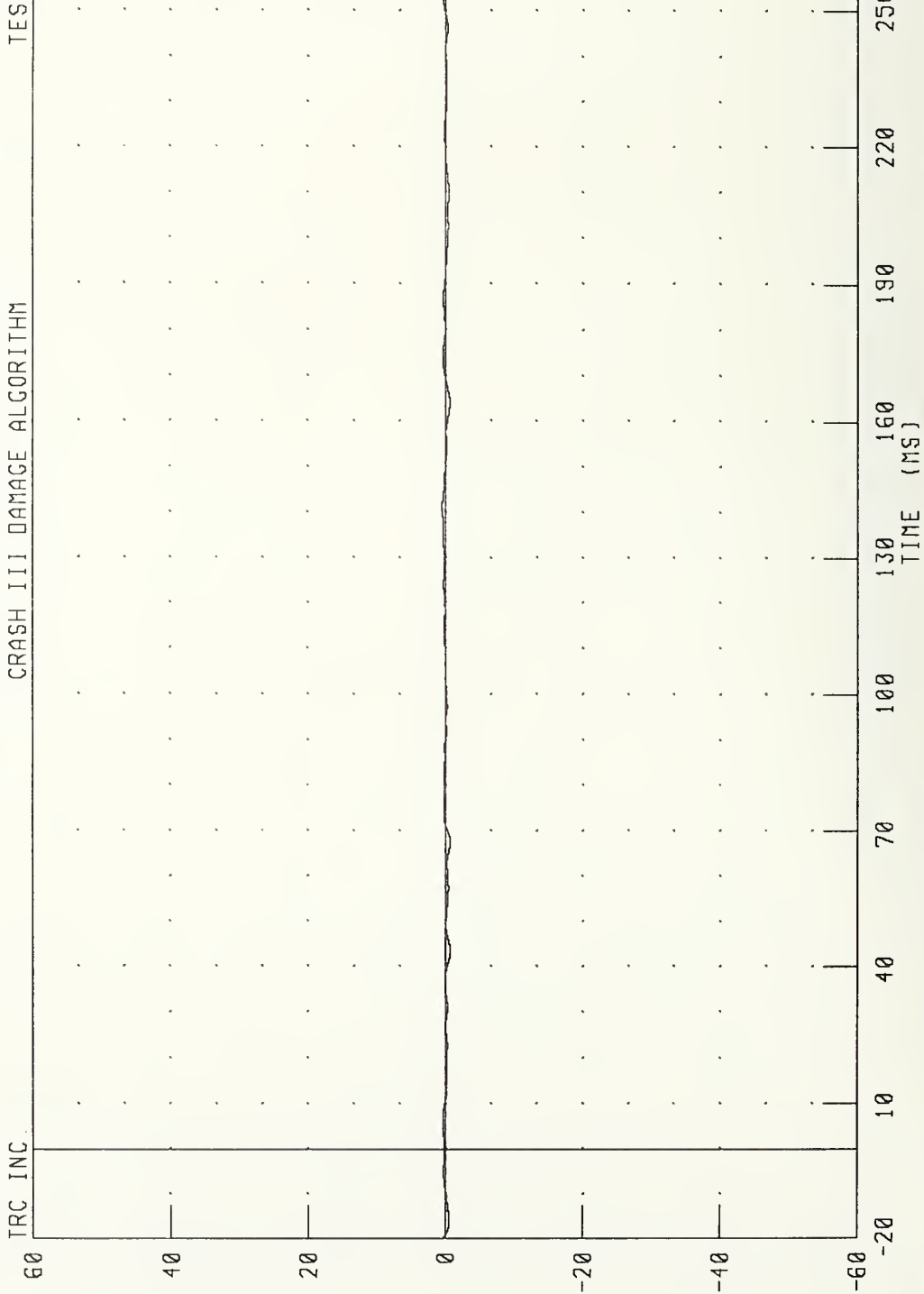


CHANNEL VCGX01 FILTER CH CLASS 180

PEAK DATA 163 73 MM @ 118 72 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

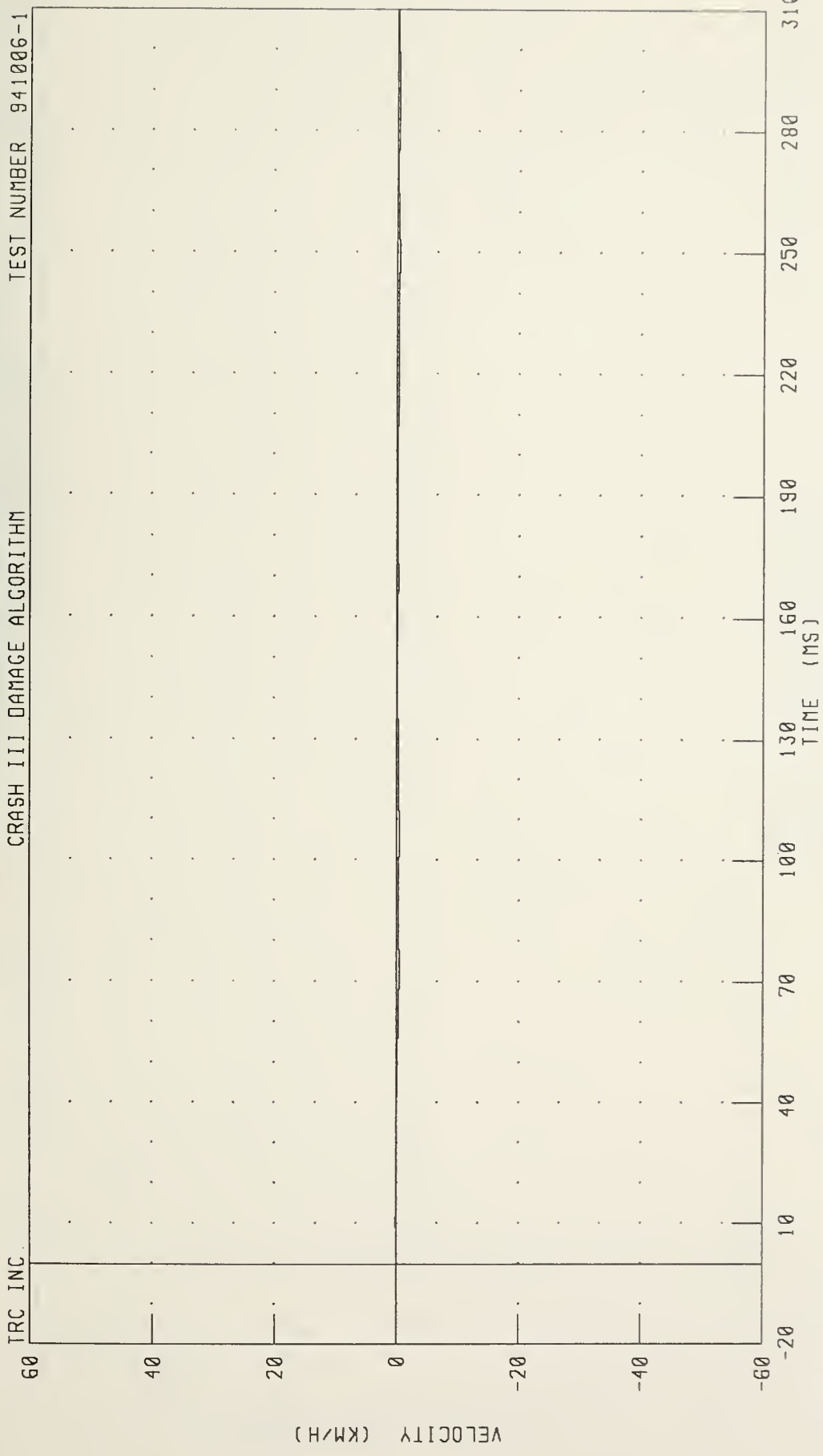
TEST NUMBER 941006-1



TRC INC. CHANNEL: VCGY61 FILTER: CH. CLASS 60
PEAK DATA: 0.55 G @ 254.72 MS; -0.72 G @ 43.52 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 VEHICLE CC Y-AXIS VELOCITY
 CRASH III DAMAGE ALGORITHM

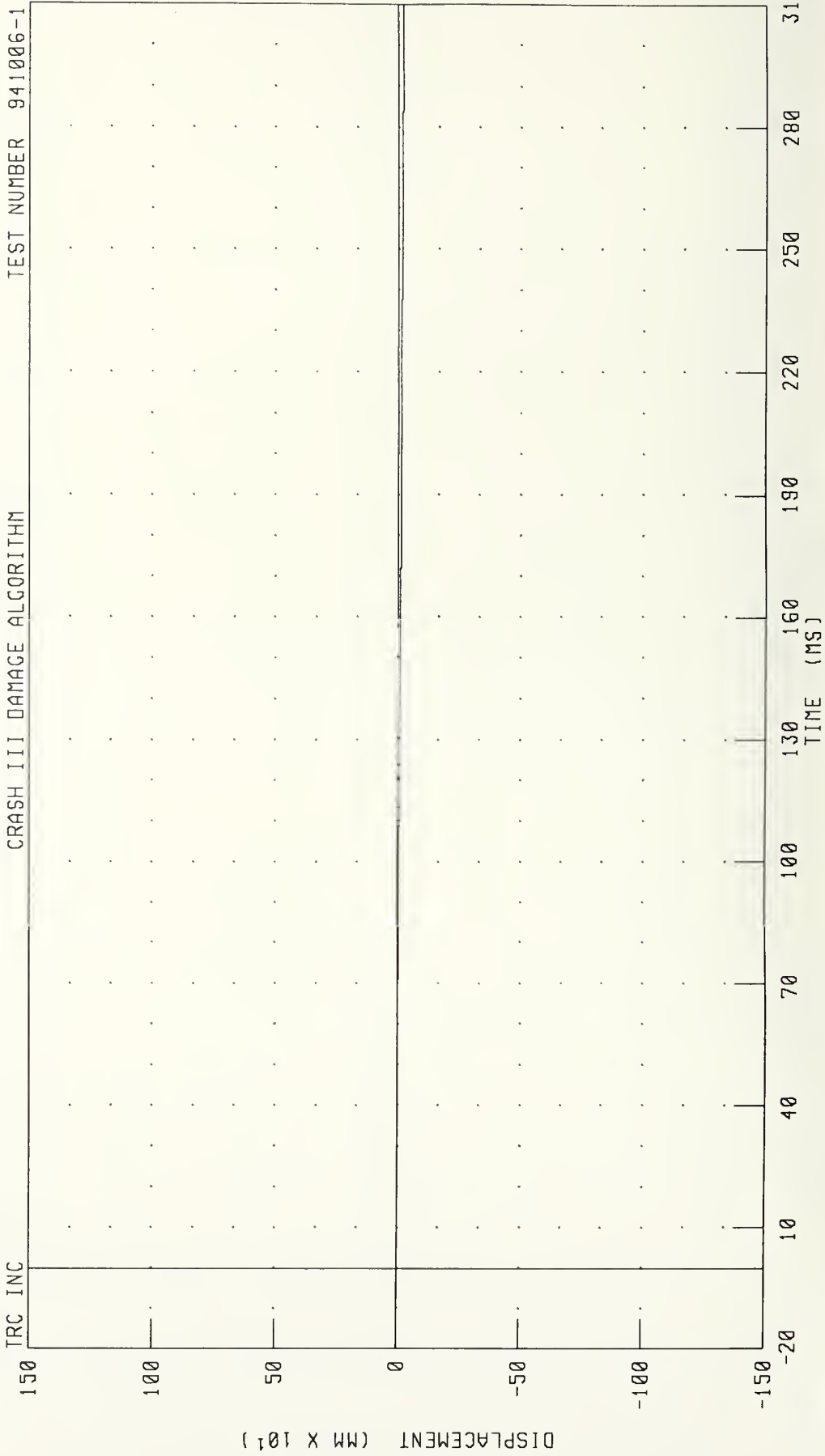
TRC INC. TEST NUMBER 941006-1



CHANNEL: VCGYV1 FILTER: CH. CLASS 180 PEAK DATA: 0.11 KM/H @ 10 48 MS; -0 45 KM/H @ 71 36 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 VEHICLE CG Y-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-1



CHANNEL: VCGYD1 FILTER: CH. CLASS 180

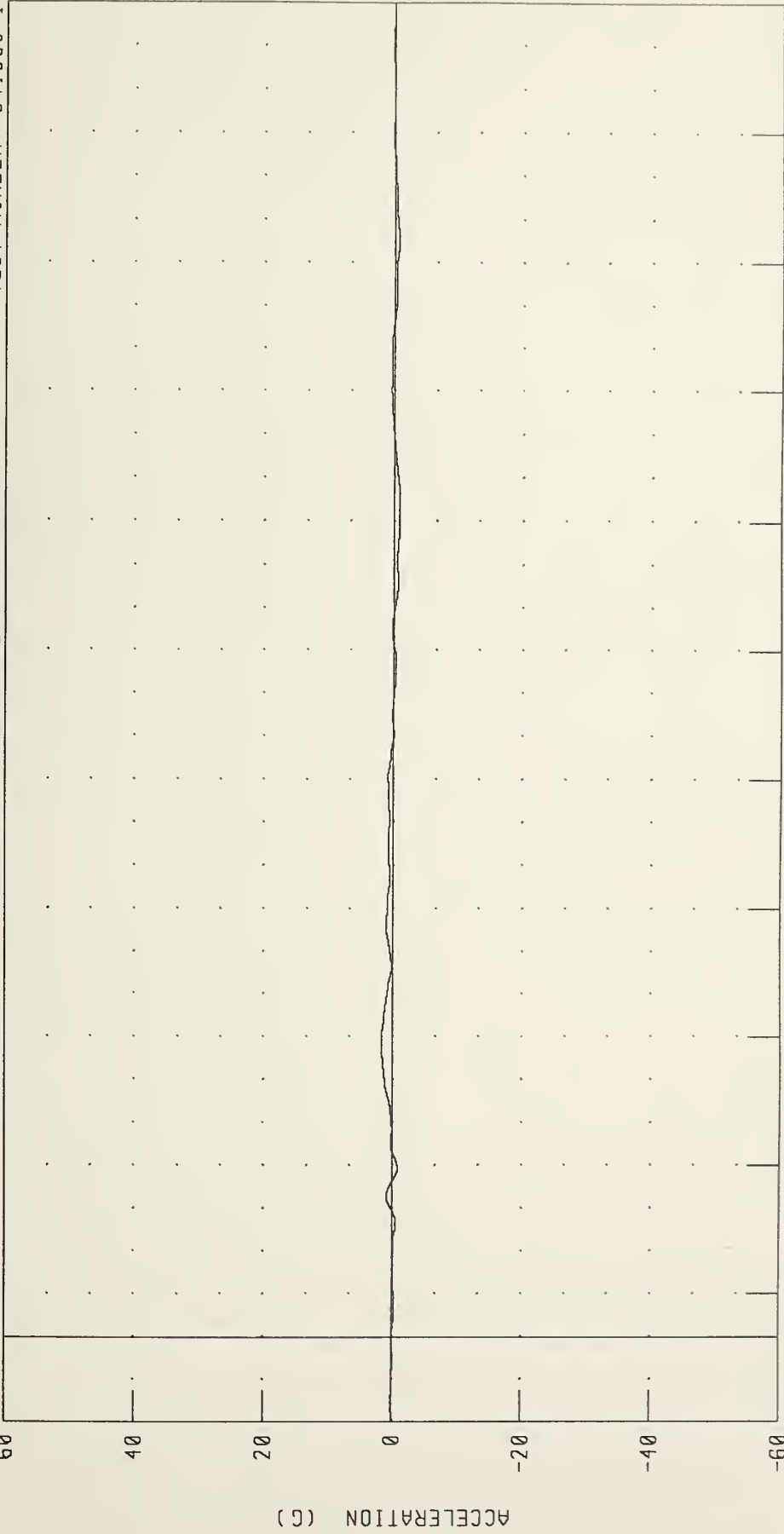
PEAK DATA: 0.35 MM @ 29.36 MS; -20.79 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-1

TRC INC.

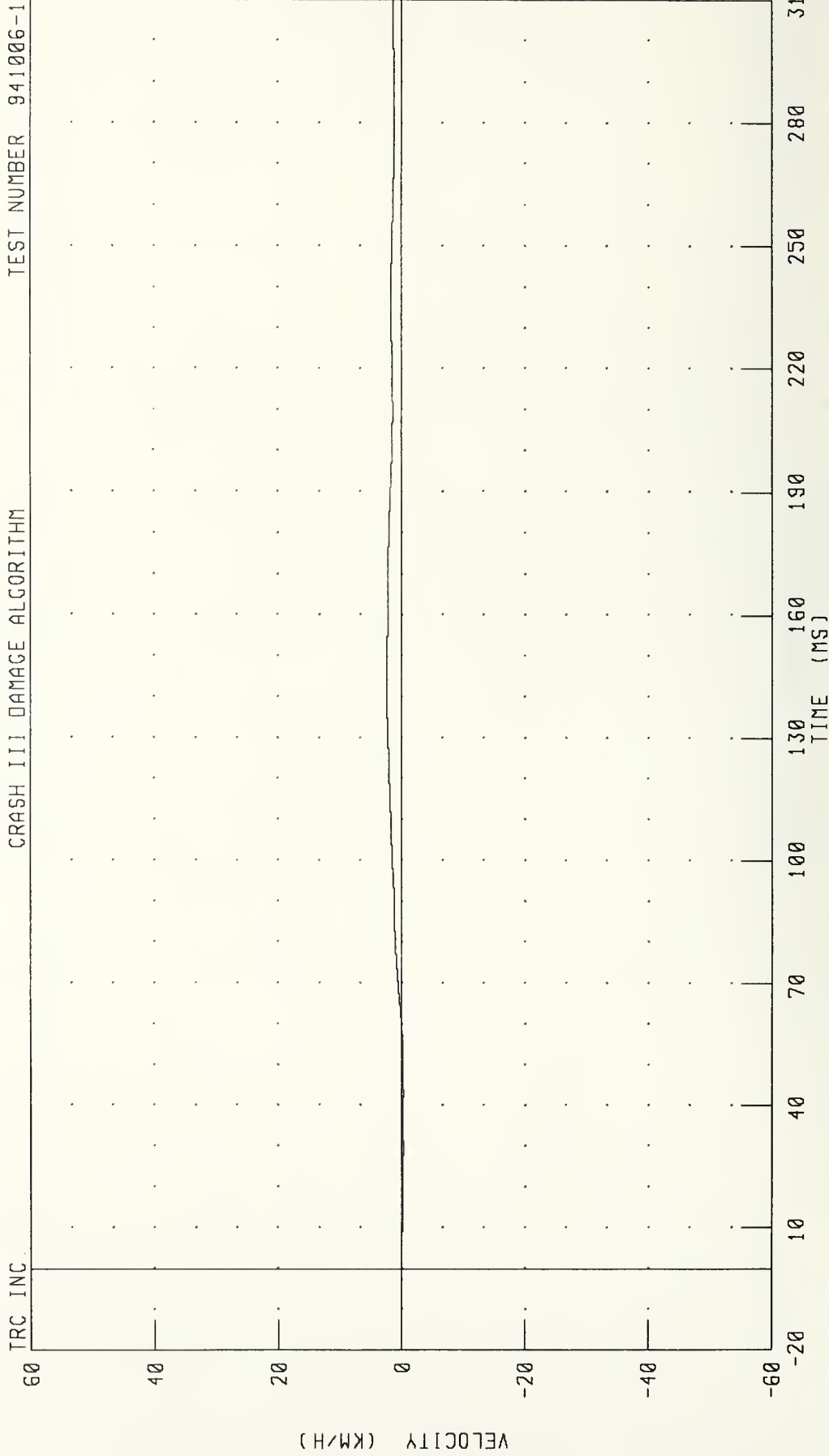
60



CHANNEL VCGZG1 FILTER CH. CLASS 60
PEAK DATA: 1 73 G @ 67 52 MS, -0 89 G @ 188 56 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-1

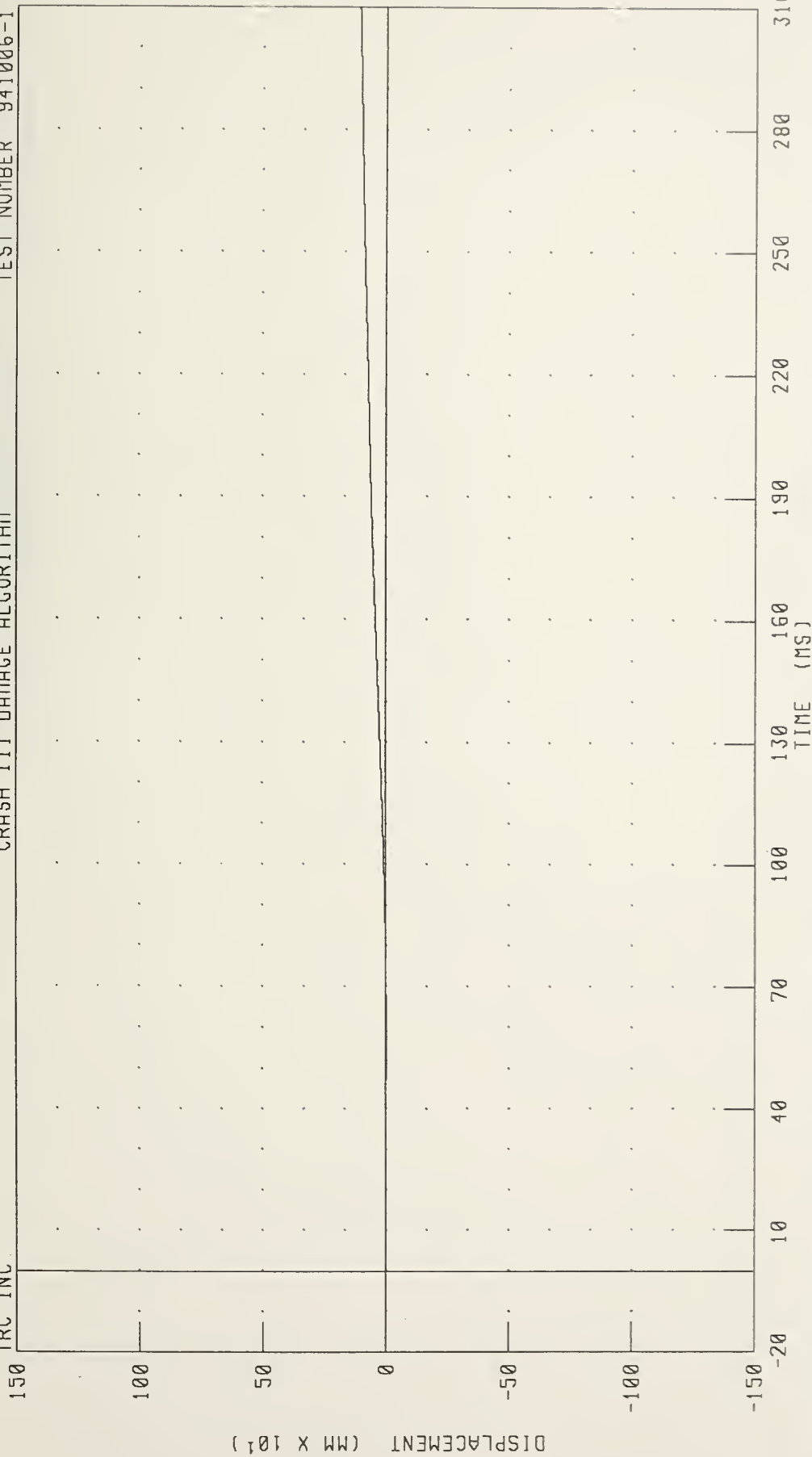


CHANNEL: YCGZV1 FILTER: CH. CLASS 180
PEAK DATA: 2.35 KM/H @ 146.56 MS; -0.27 KM/H @ 296.60 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 VEHICLE CG Z-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-1

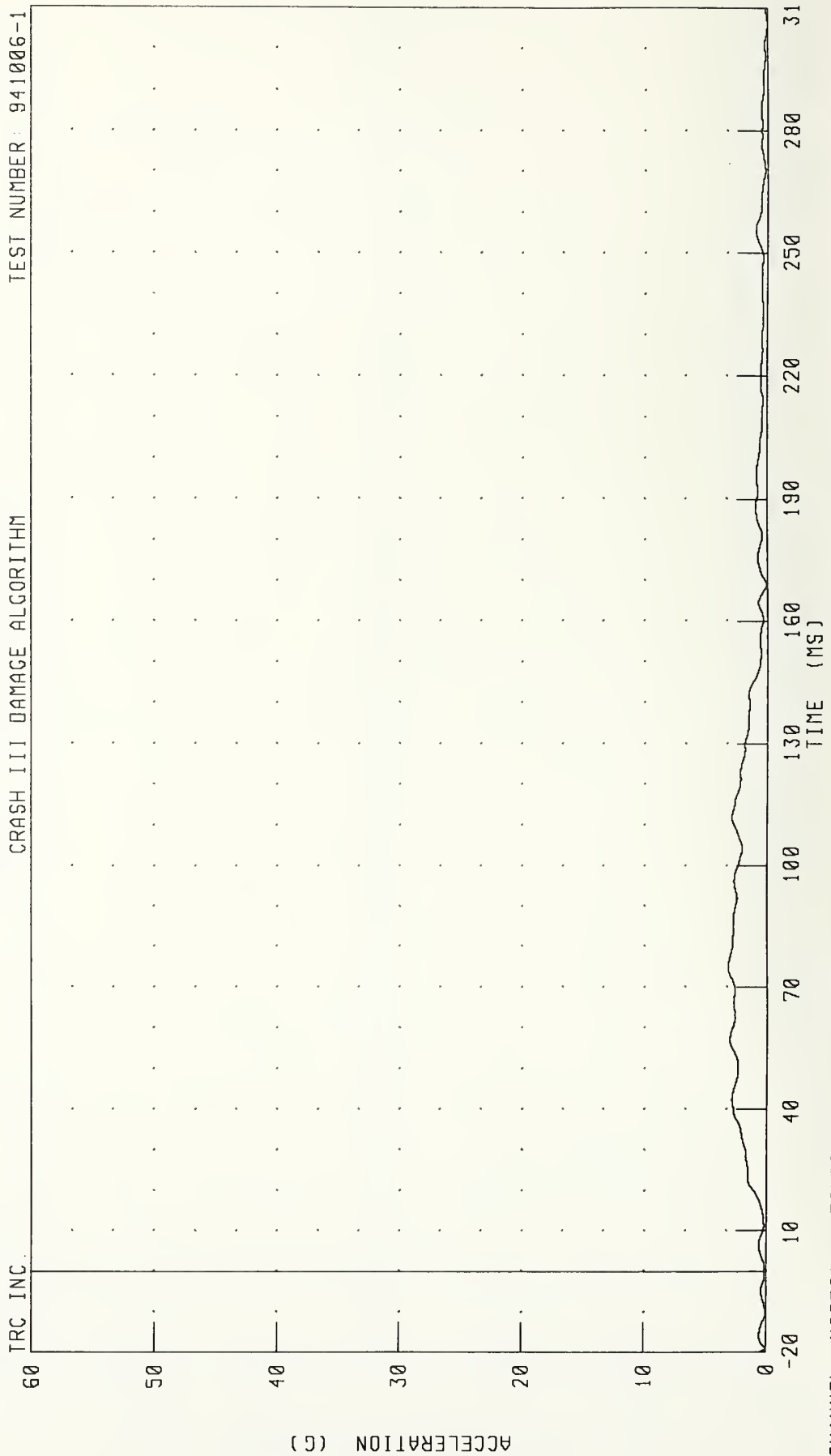
TRC INC



CHANNEL: VCGZ01 FILTER: CH. CLASS 180 PEAK DATA: 108.32 MM @ 310.00 MS, -2.44 MM @ 59.28 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT ACCELERATION
CRASH III DAMAGE ALGORITHM

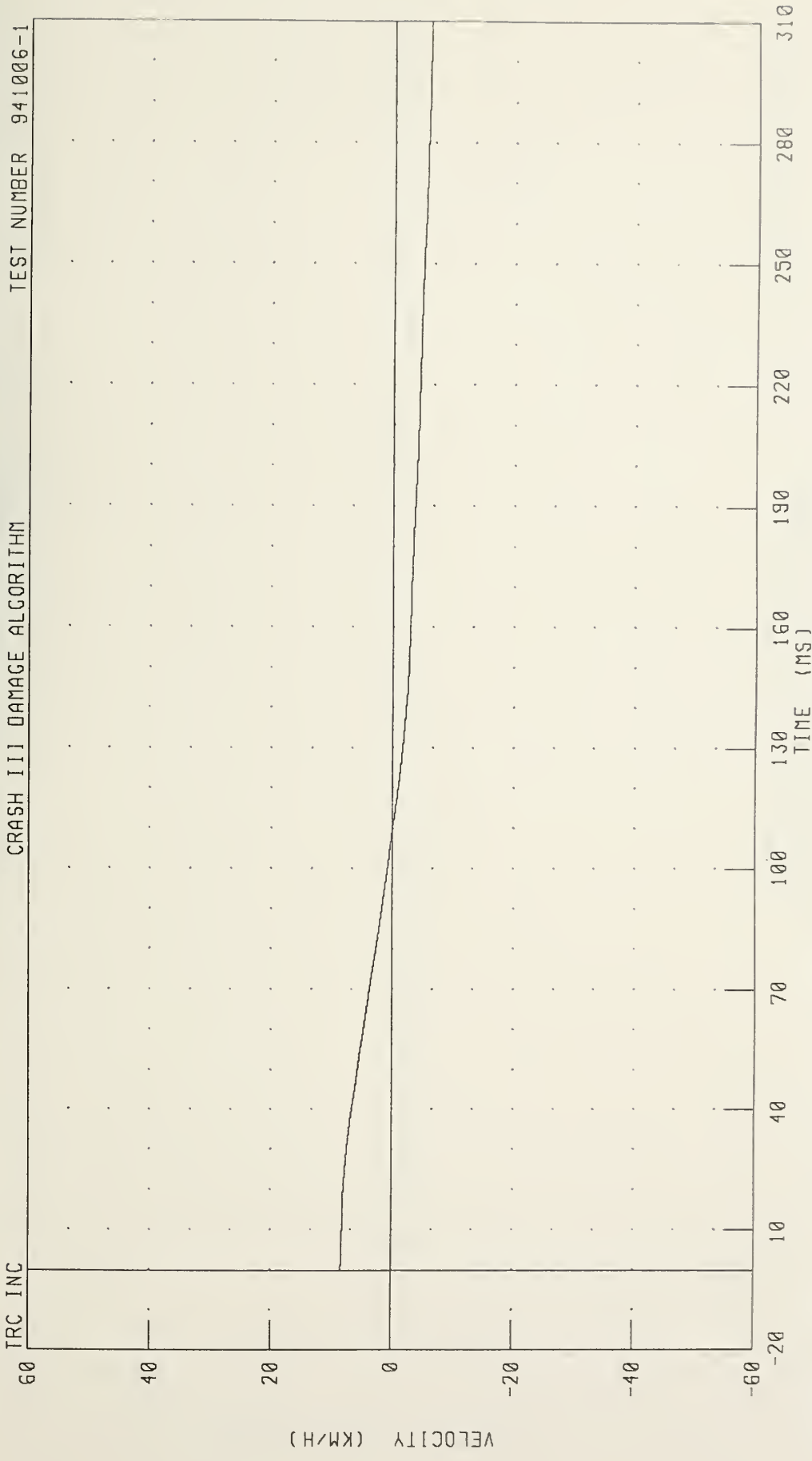
TEST NUMBER: 941006-1



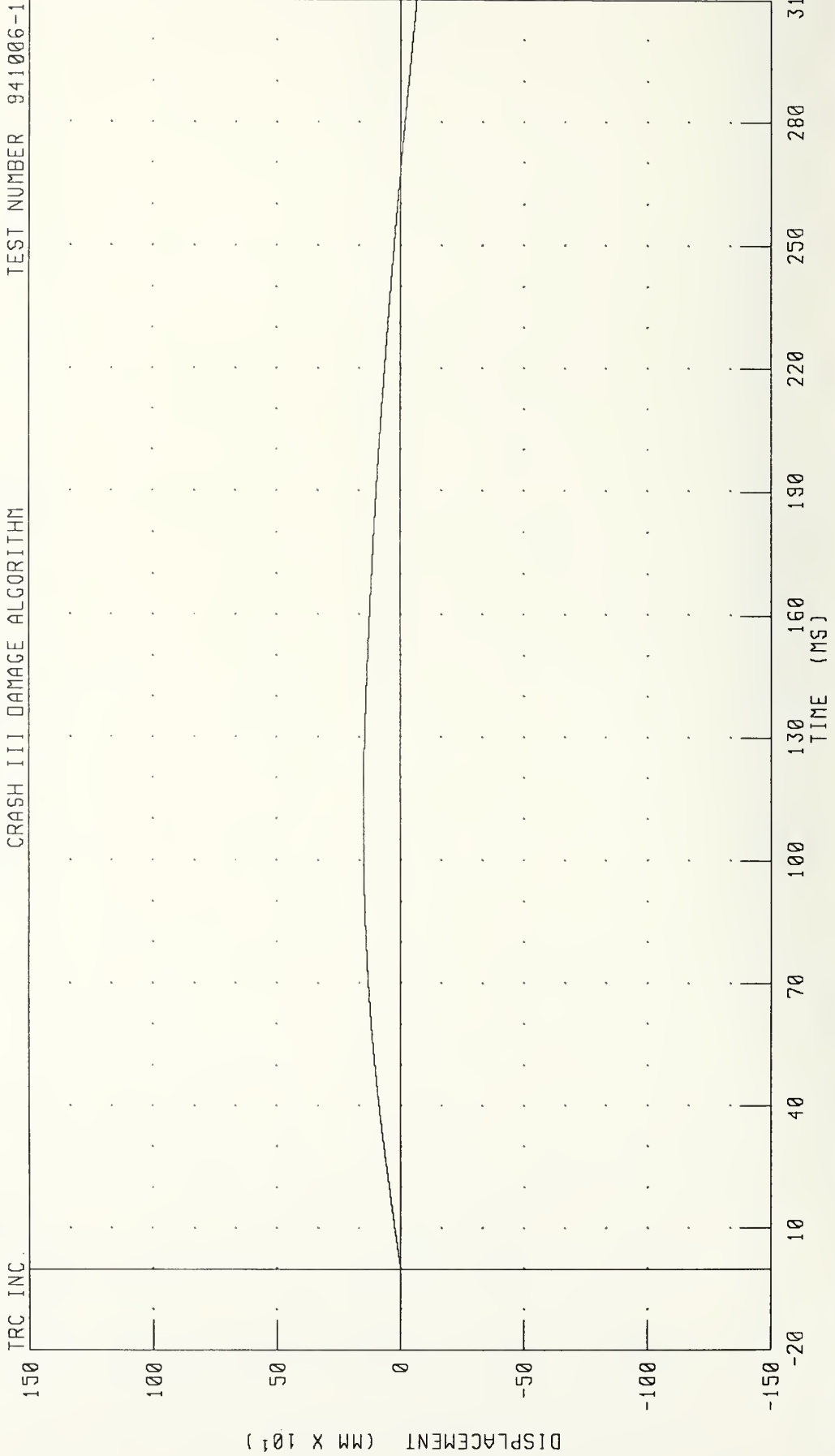
CHANNEL: VCGRG1 FILTER: CH. CLASS 60 PEAK DATA: 3.20 G @ 74.56 MS; 0.06 G @ 306.32 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT VELOCITY

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-1



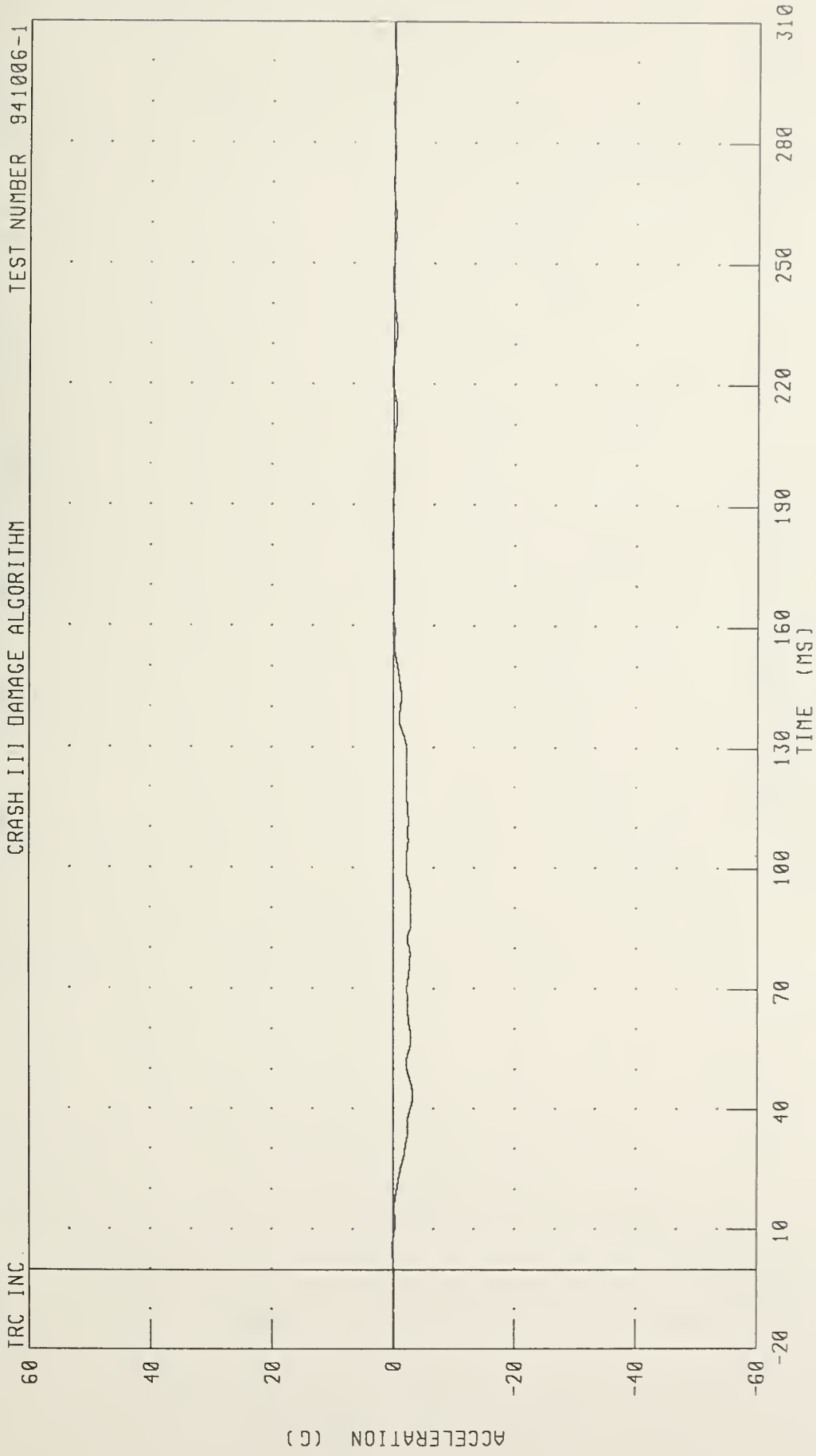
1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT DISPLACEMENT
CRASH III DAMAGE ALGORITHM



CHANNEL: VCGRD1 FILTER: CH. CLASS 180 PEAK DATA: 150.15 MM @ 109.92 MS, -65.49 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-1

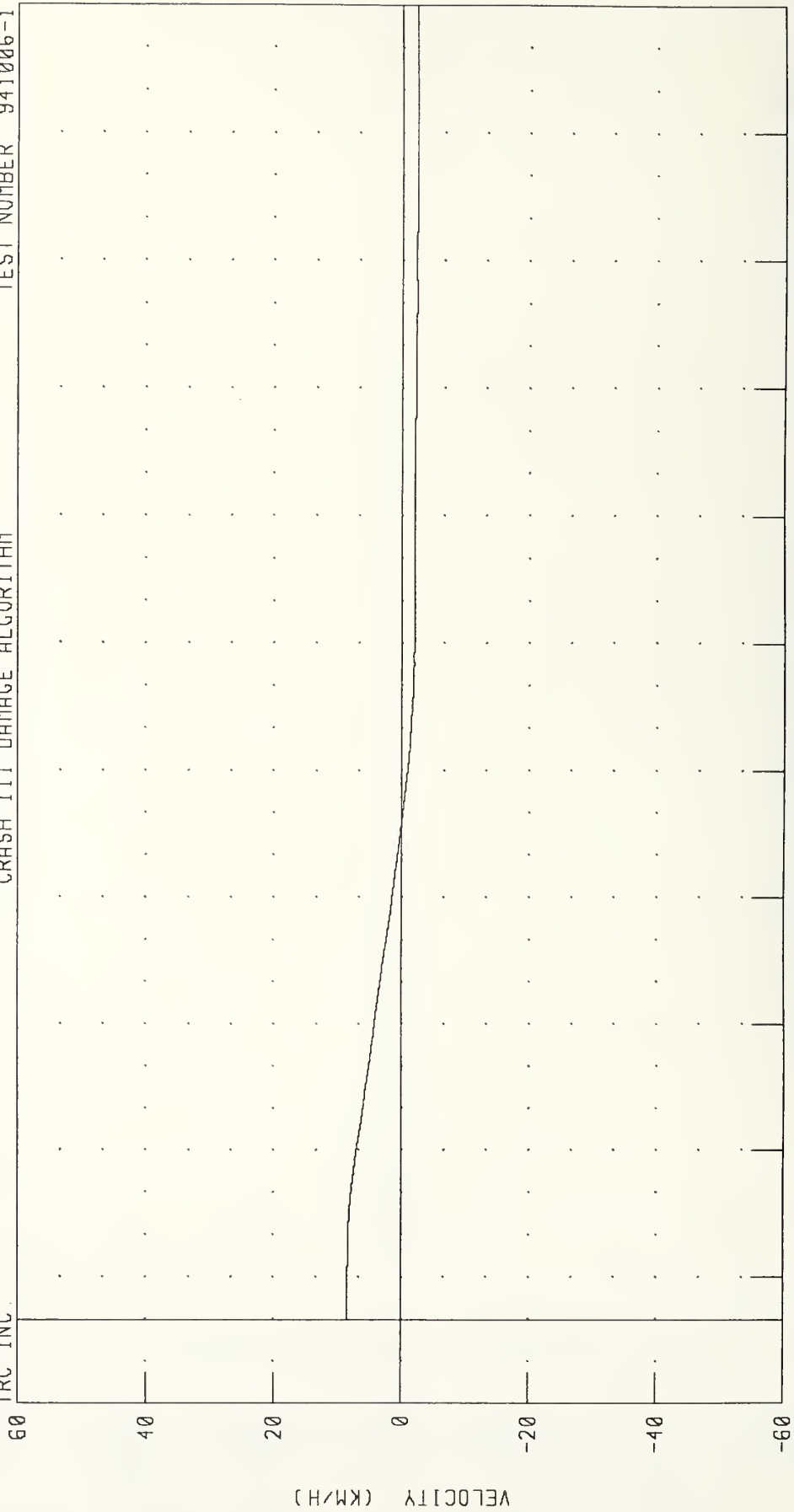


CHANNEL LFSXG1 FILTER: CH. CLASS 60 PEAK DATA 0.27 G @ 289.76 MS, -3.21 G @ 43.36 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS VELOCITY

TRC INC. TEST NUMBER 941006-1

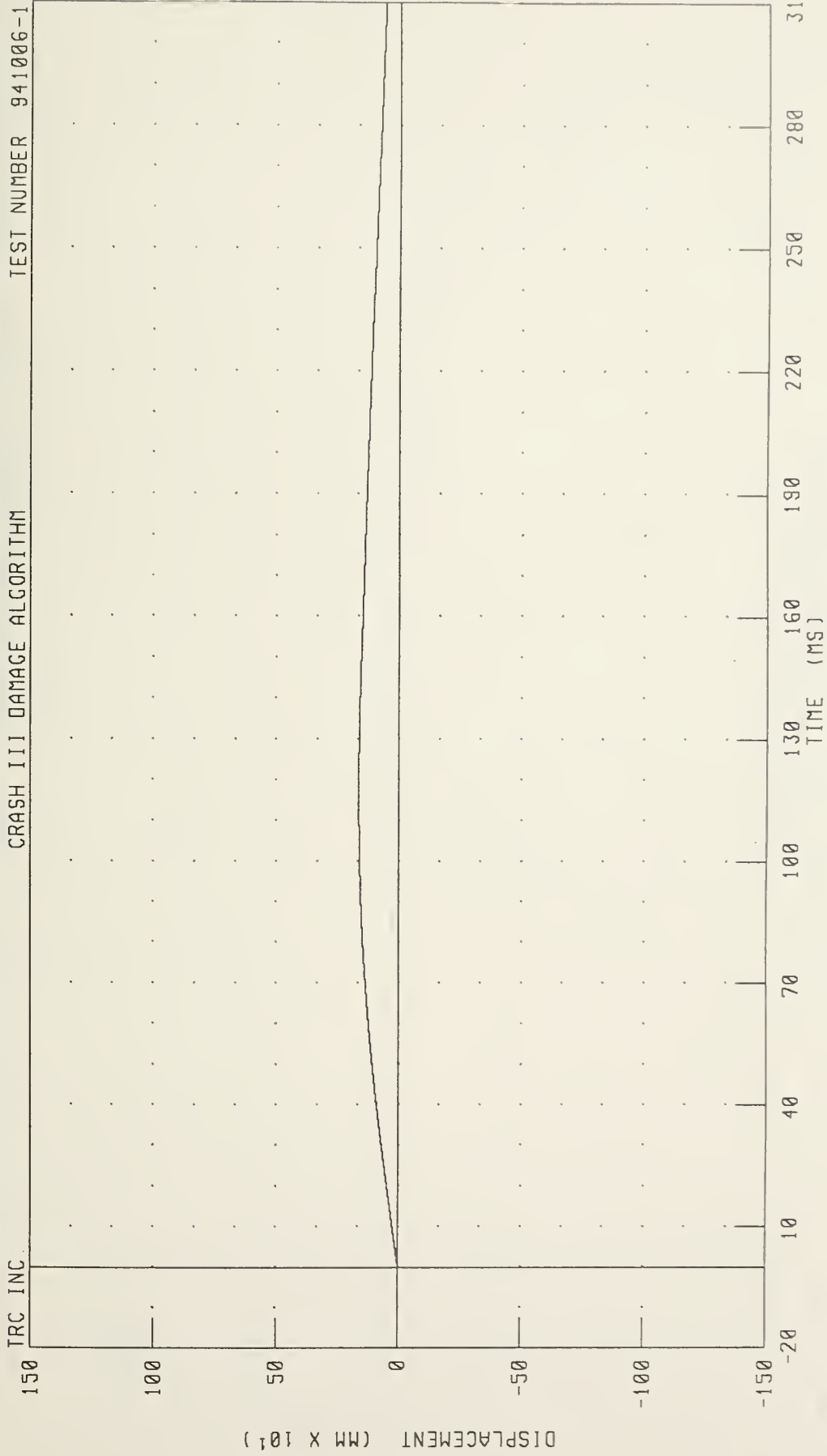
CRASH III DAMAGE ALGORITHM



CHANNEL: LFSXV1 FILTER: CH. CLASS 180
PEAK DATA: 8.43 KM/H @ 6.88 MS; -2.36 KM/H @ 267.92 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 LEFT FRONT SILL X-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

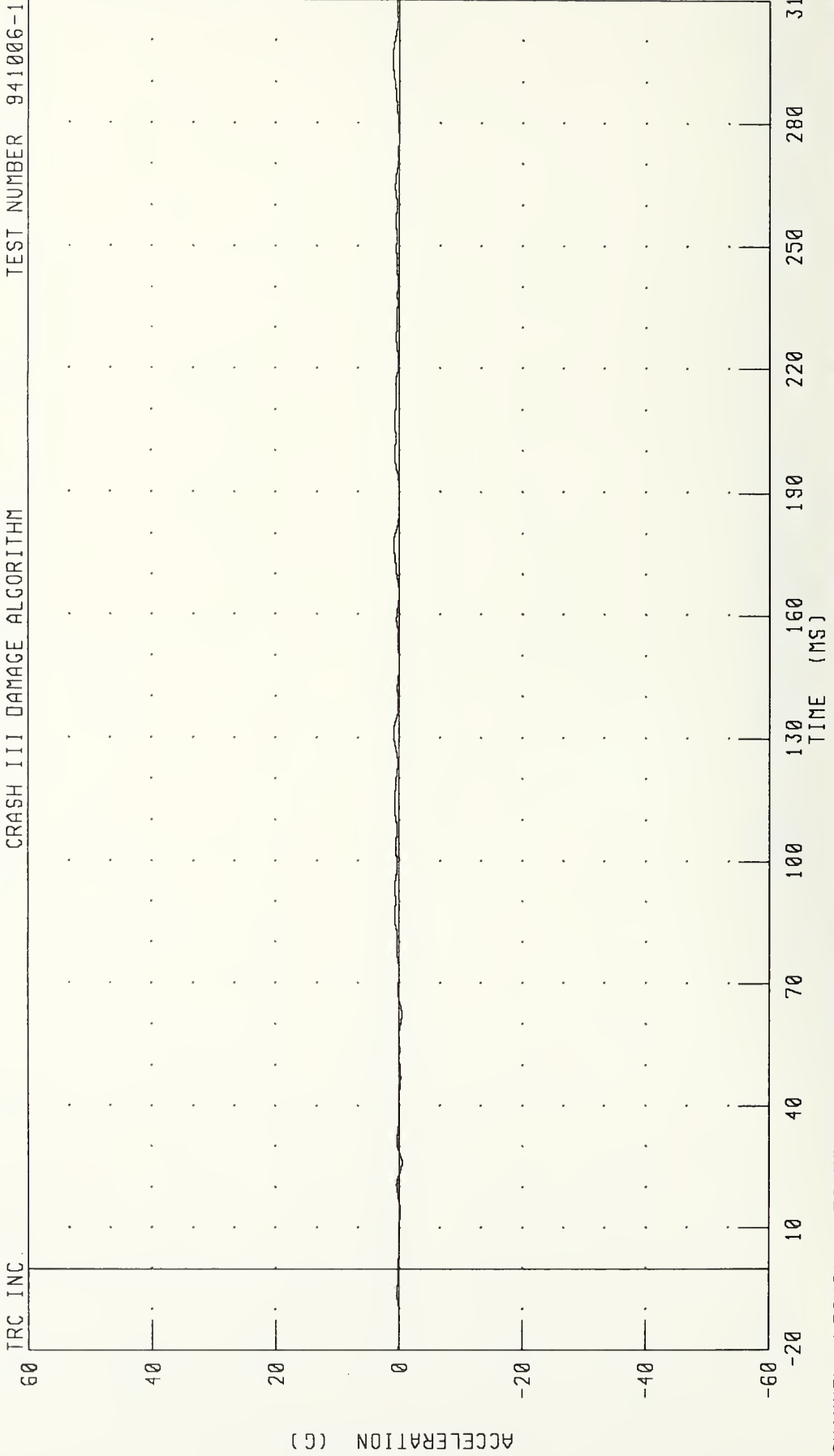
TEST NUMBER 941006-1



CHANNEL LFSX01 FILTER CH CLASS 180 PEAK DATA 164 20 MM @ 117 60 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TRC INC. TEST NUMBER 941006-1

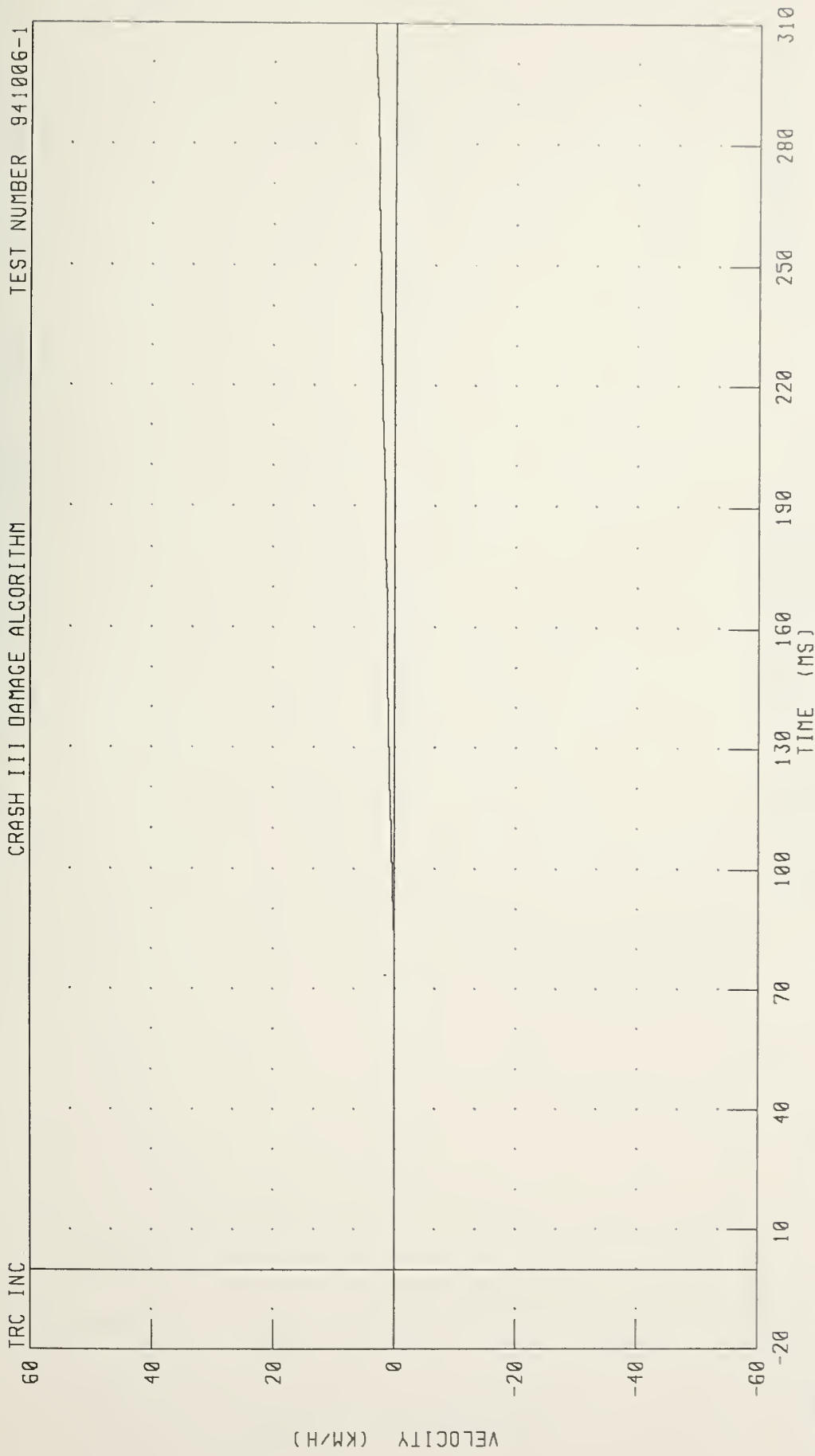


CHANNEL: LFSYG1 FILTER: CH. CLASS 60

PEAK DATA: 1.03 G @ 294.88 MS; -0.47 G @ 25.92 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 LEFT FRONT SILL Y-AXIS VELOCITY

TRC INC CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-1

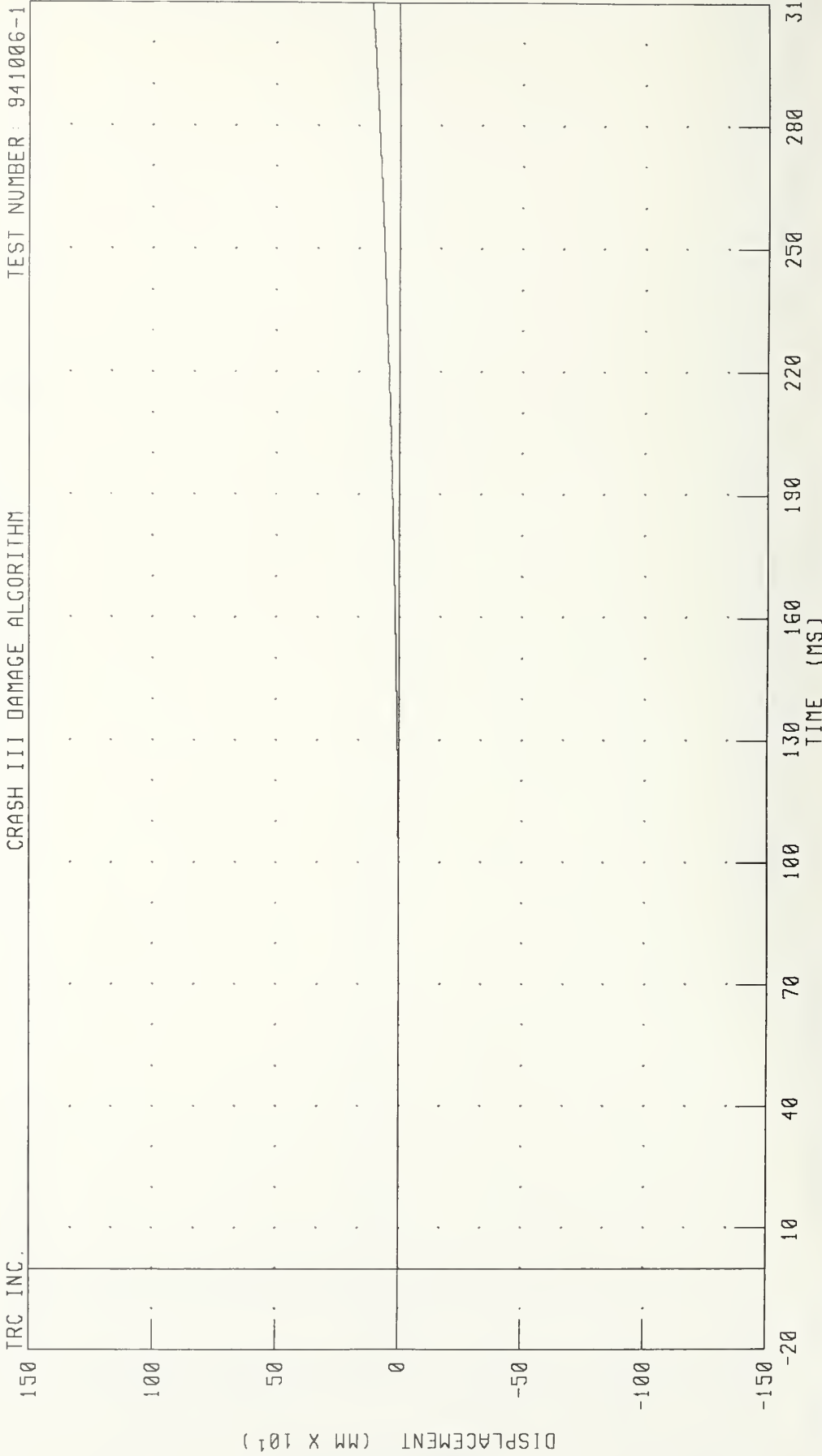


CHANNEL: LFSYV1 FILTER: CH CLASS 180 PEAK DATA: 3.41 KM/H @ 310.00 MS, -0.06 KM/H @ 65.68 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 LEFT FRONT SILL Y-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-1

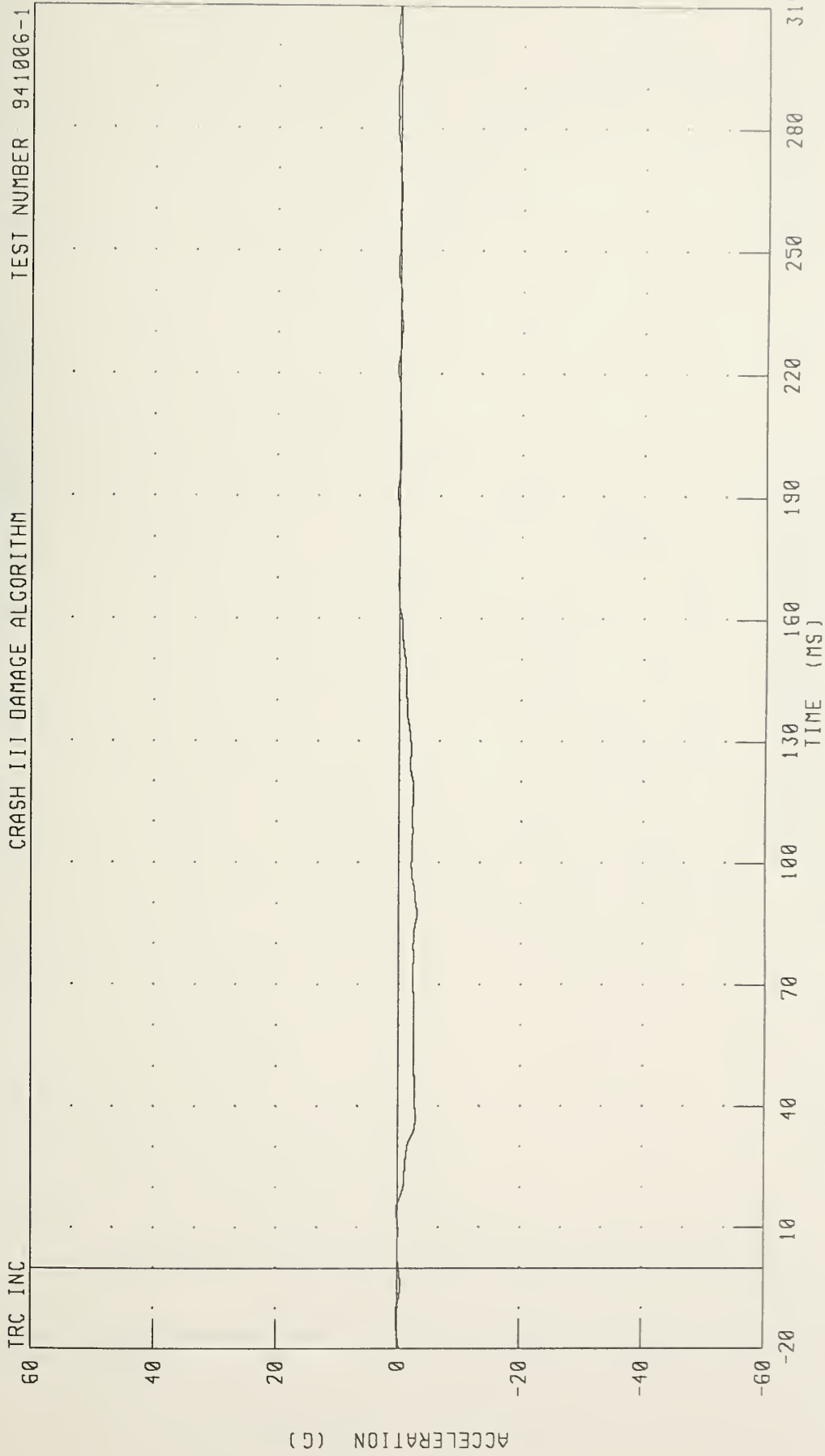


CHANNEL: LFSYD1 FILTER: CH. CLASS 180

PEAK DATA: 109.95 MM @ 310.00 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS ACCELERATION

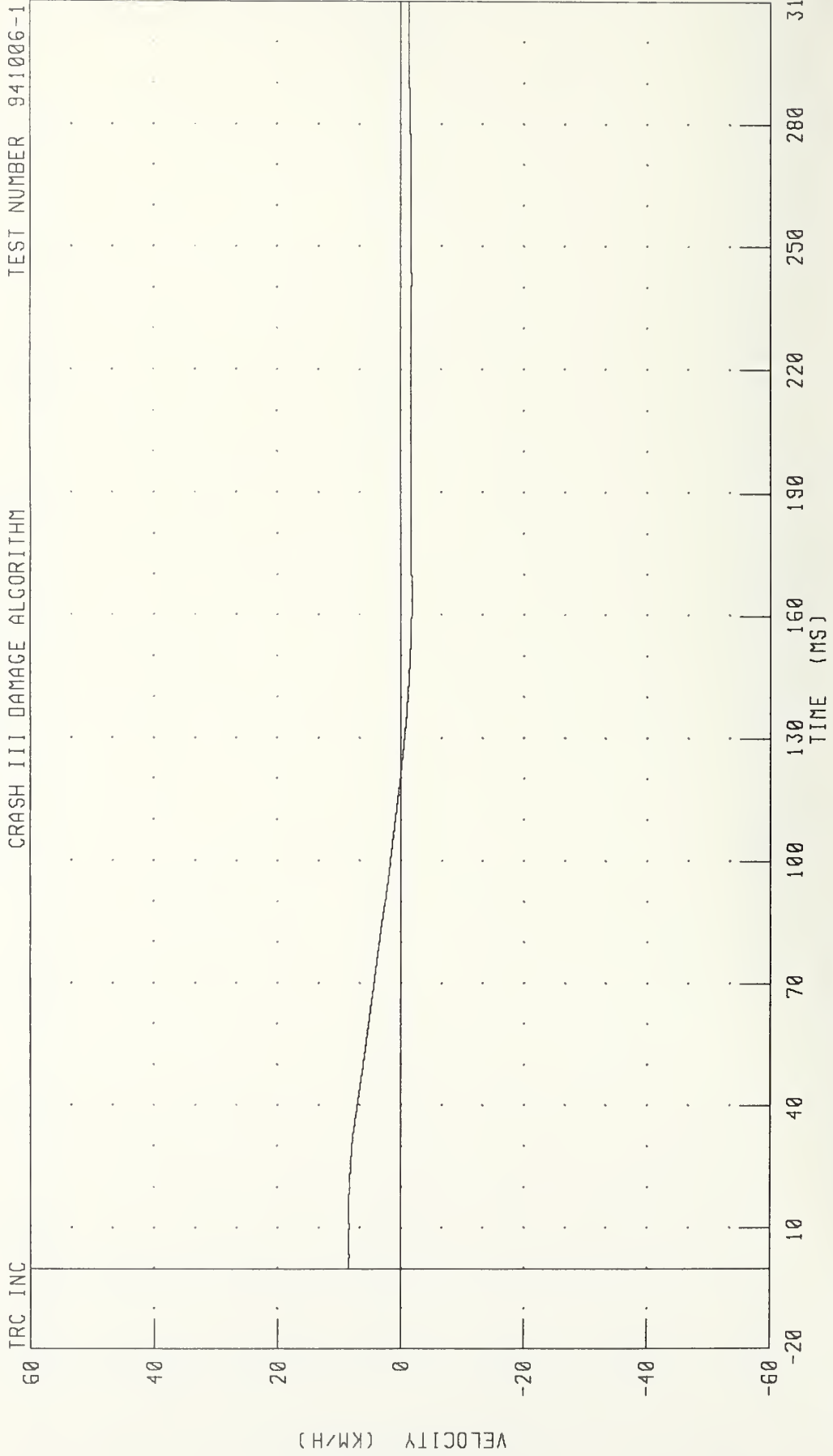
CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-1



PEAK DATA 0 53 G @ 280 00 MS, -3 07 G @ 87 52 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-1

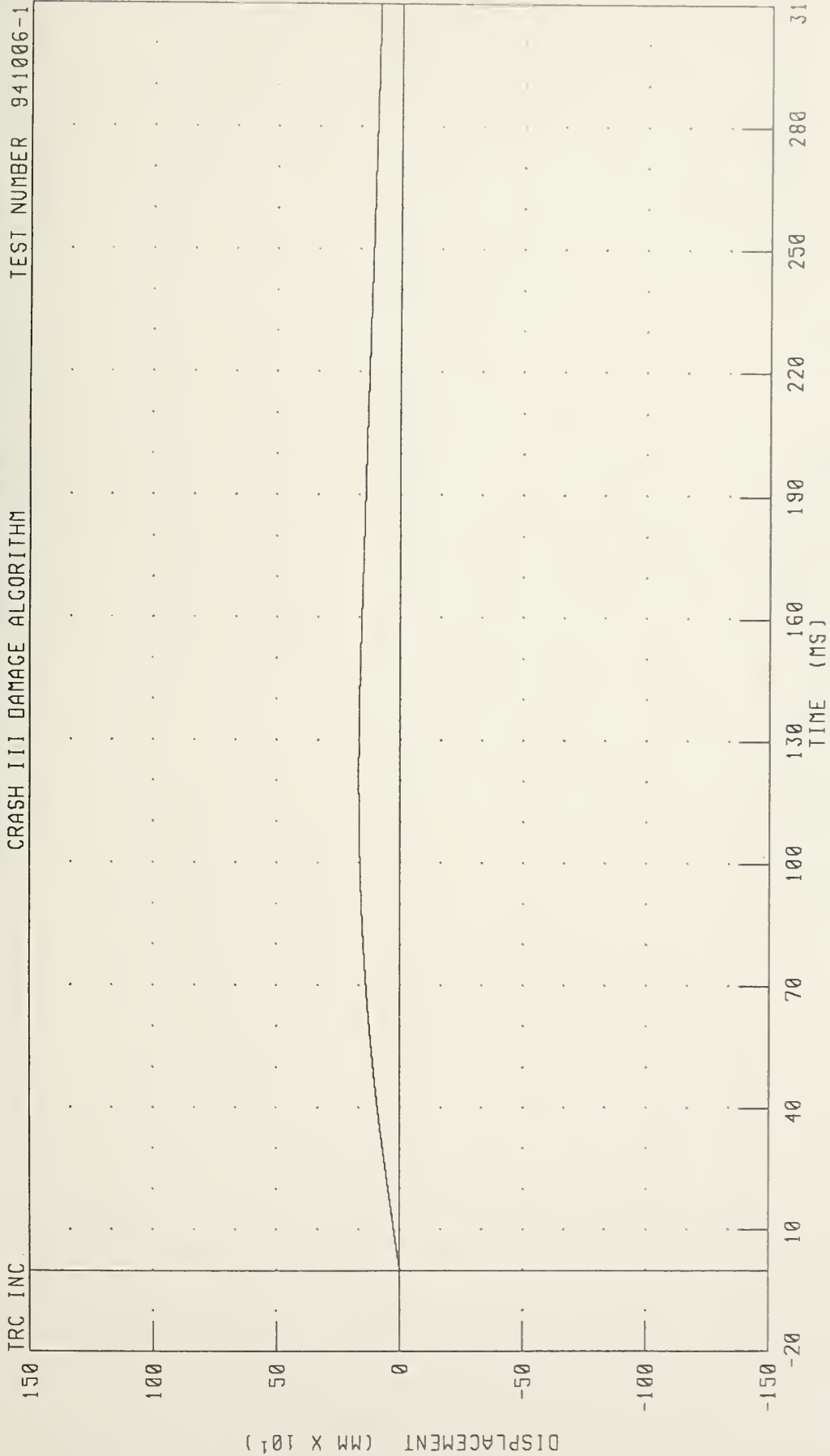


CHANNEL: RFSXV1 FILTER: CH. CLASS 180

PEAK DATA: 8 42 KM/H @ 15.84 MS; -1.80 KM/H @ 162.24 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS DISPLACEMENT

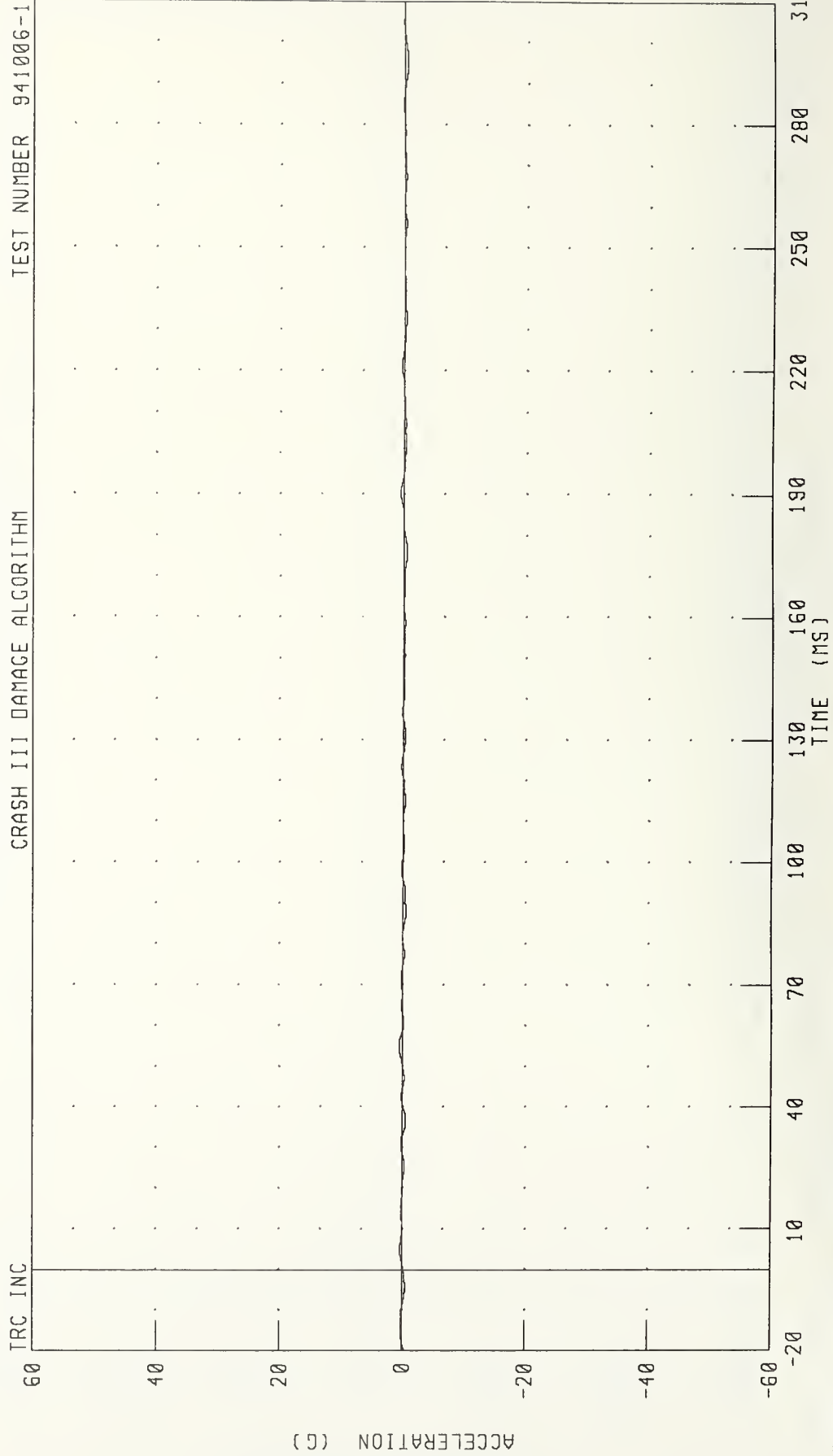
CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-1



CHANNEL: RFSXD1 FILTER: CH CLASS 180 PEAK DATA: 167.69 MM @ 121.04 MS, 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-1

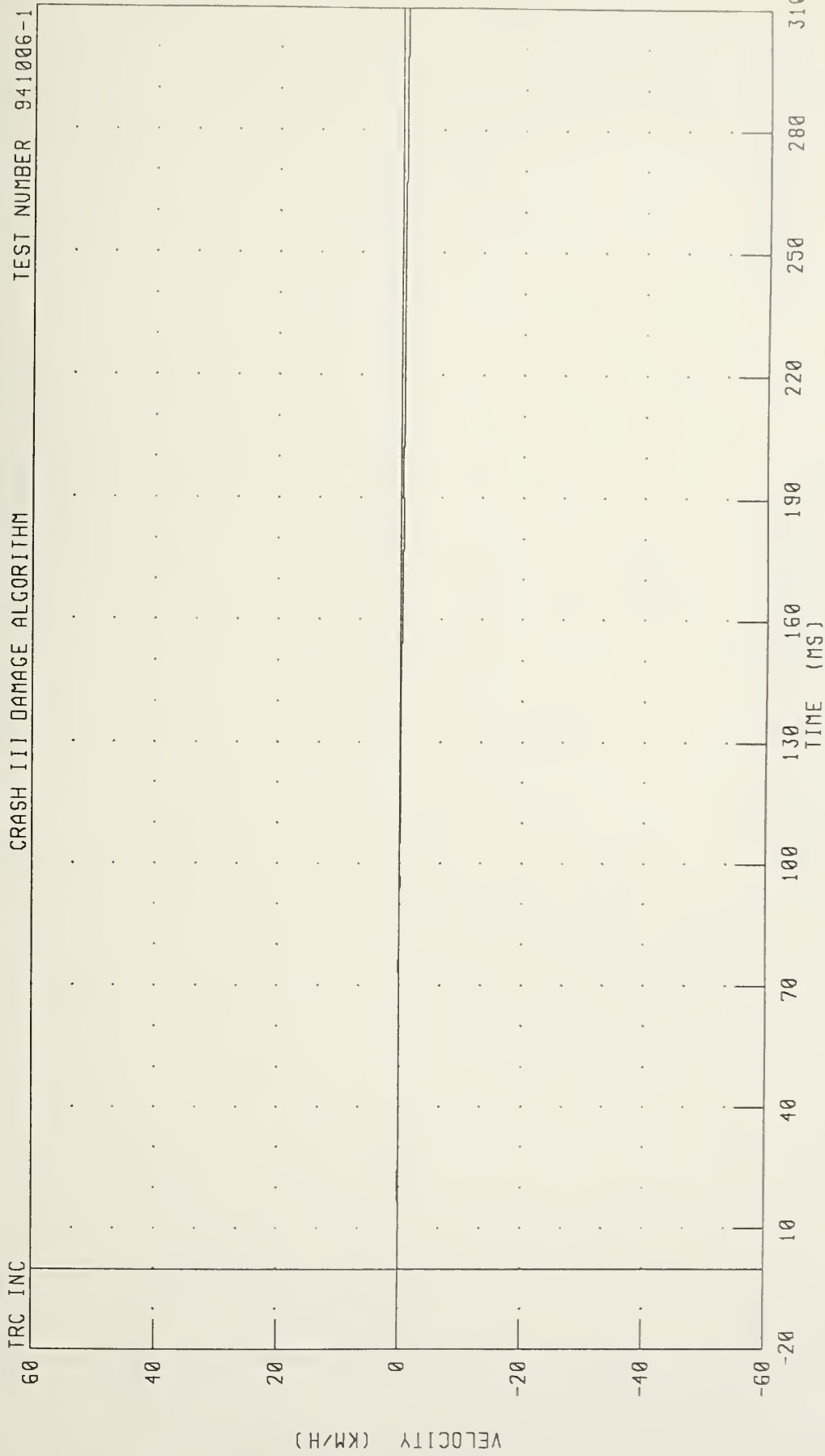


CHANNEL: RFSYG1 FILTER: CH. CLASS 60

PEAK DATA: 0 55 G @ 55 04 MS; -0 58 G @ 294 96 MS

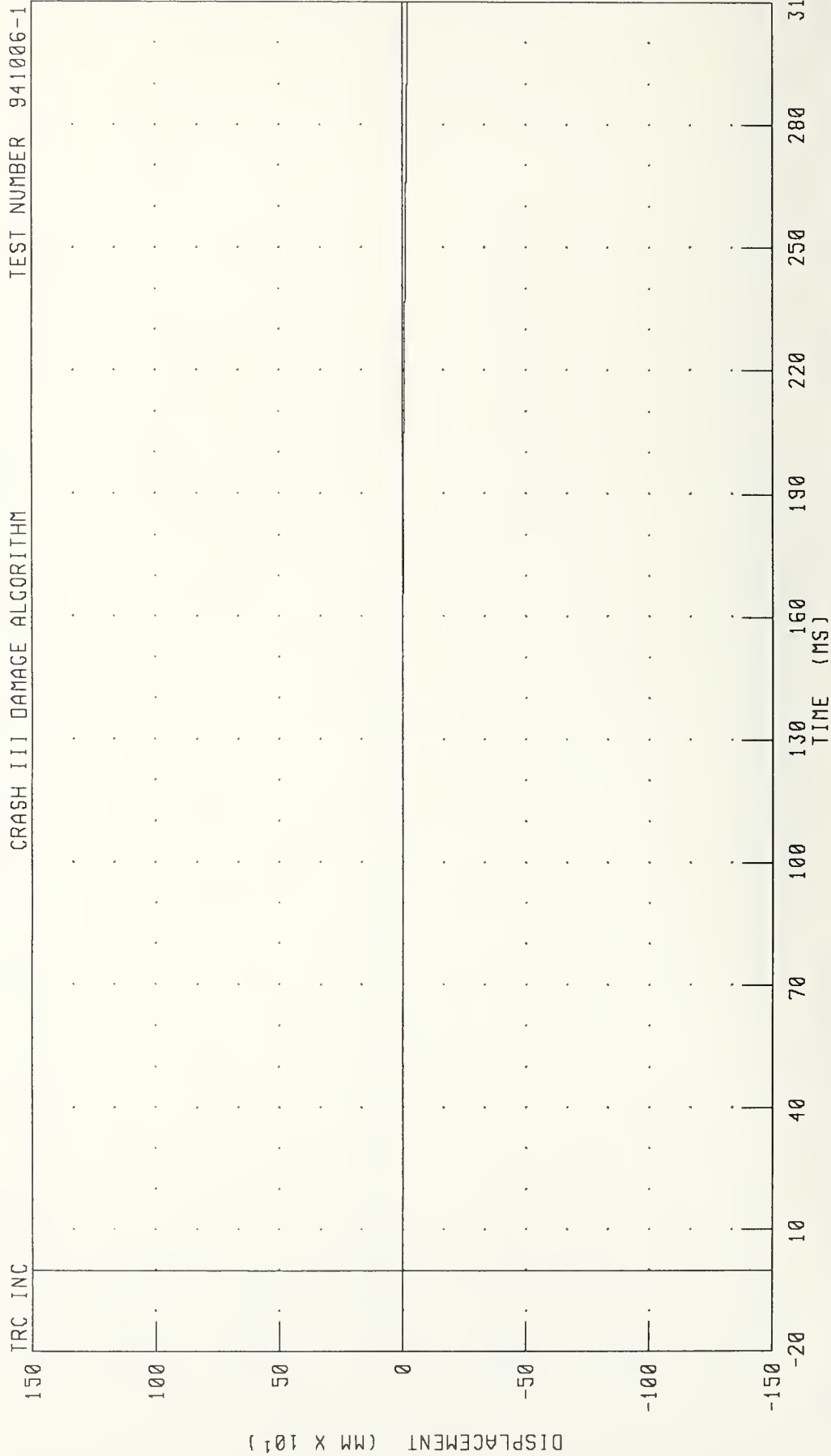
1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL Y-AXIS VELOCITY

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-1



1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT FRONT SILL Y-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

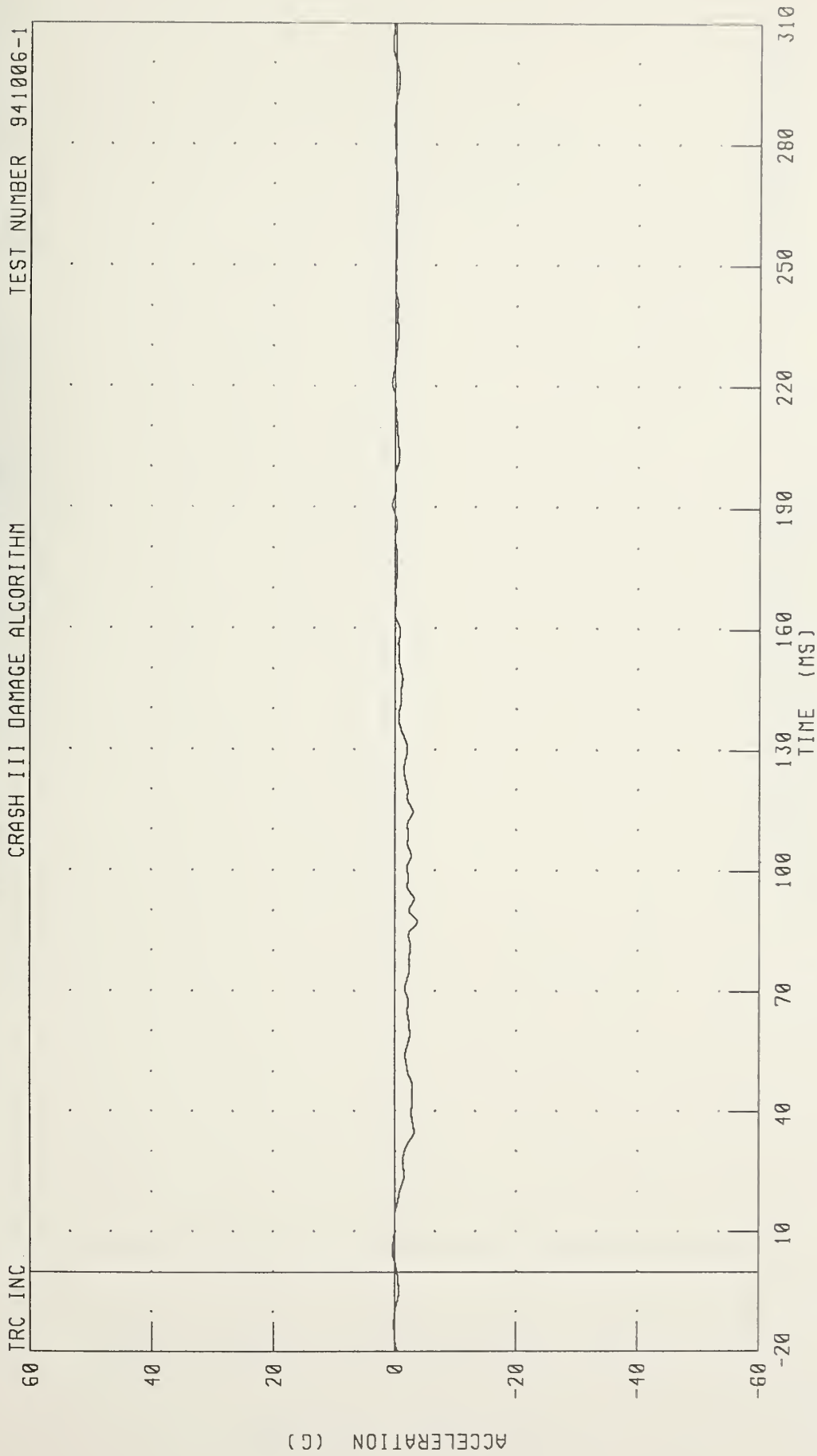
TEST NUMBER 941006-1



CHANNEL: RFSYD1 FILTER: CH. CLASS 180 PEAK DATA: 1.16 MM @ 88.00 MS; -22.87 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS ACCELERATION

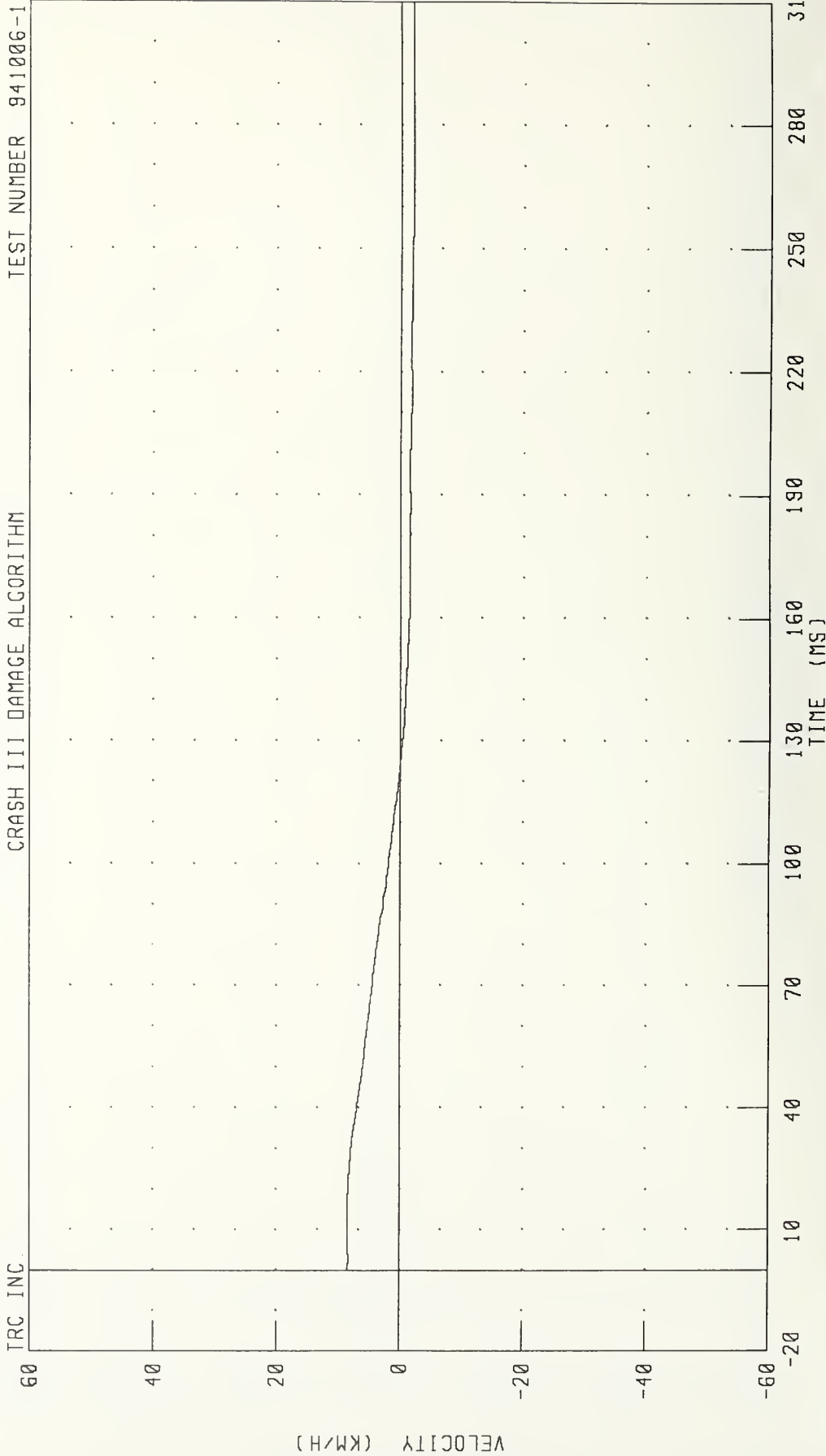
CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-1



TRC INC
60
40
20
0
-20
-40
-60
10 40 70 100 130 160 190 220 250 280 310
CHANNEL: TLRXG1 FILTER: CH. CLASS 60
PEAK DATA 0.57 G @ 305.04 MS, -3.68 G @ 87.36 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

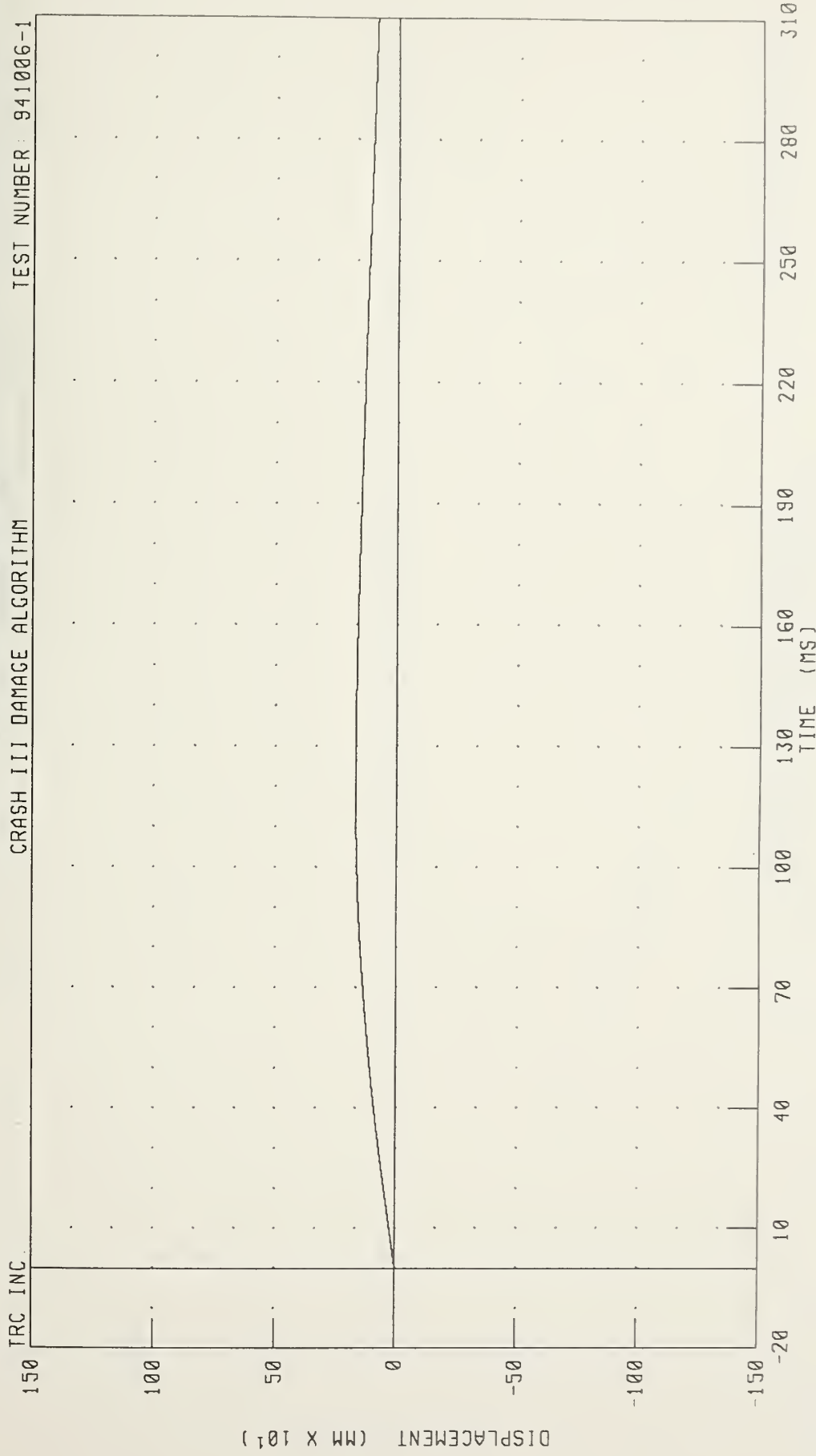
TEST NUMBER 941006-1



CHANNEL: TLRXV1 FILTER: CH CLASS 180
PEAK DATA: 8.45 KM/H @ 15.28 MS; -2.10 KM/H @ 300.56 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

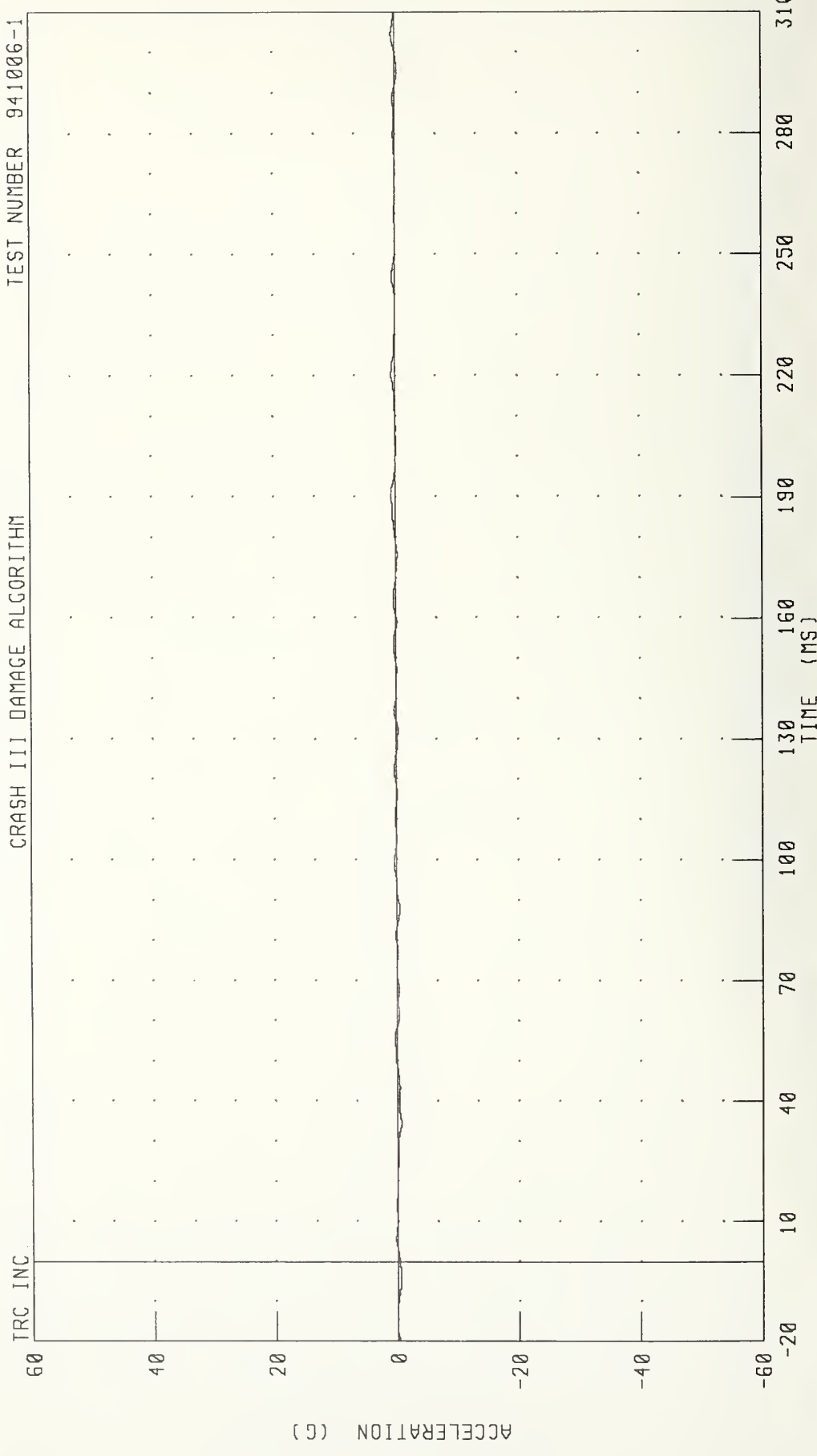
TEST NUMBER: 941006-1



CHANNEL: TLRXD1 FILTER: CH. CLASS 180
PEAK DATA: 170 45 MM @ 123 84 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

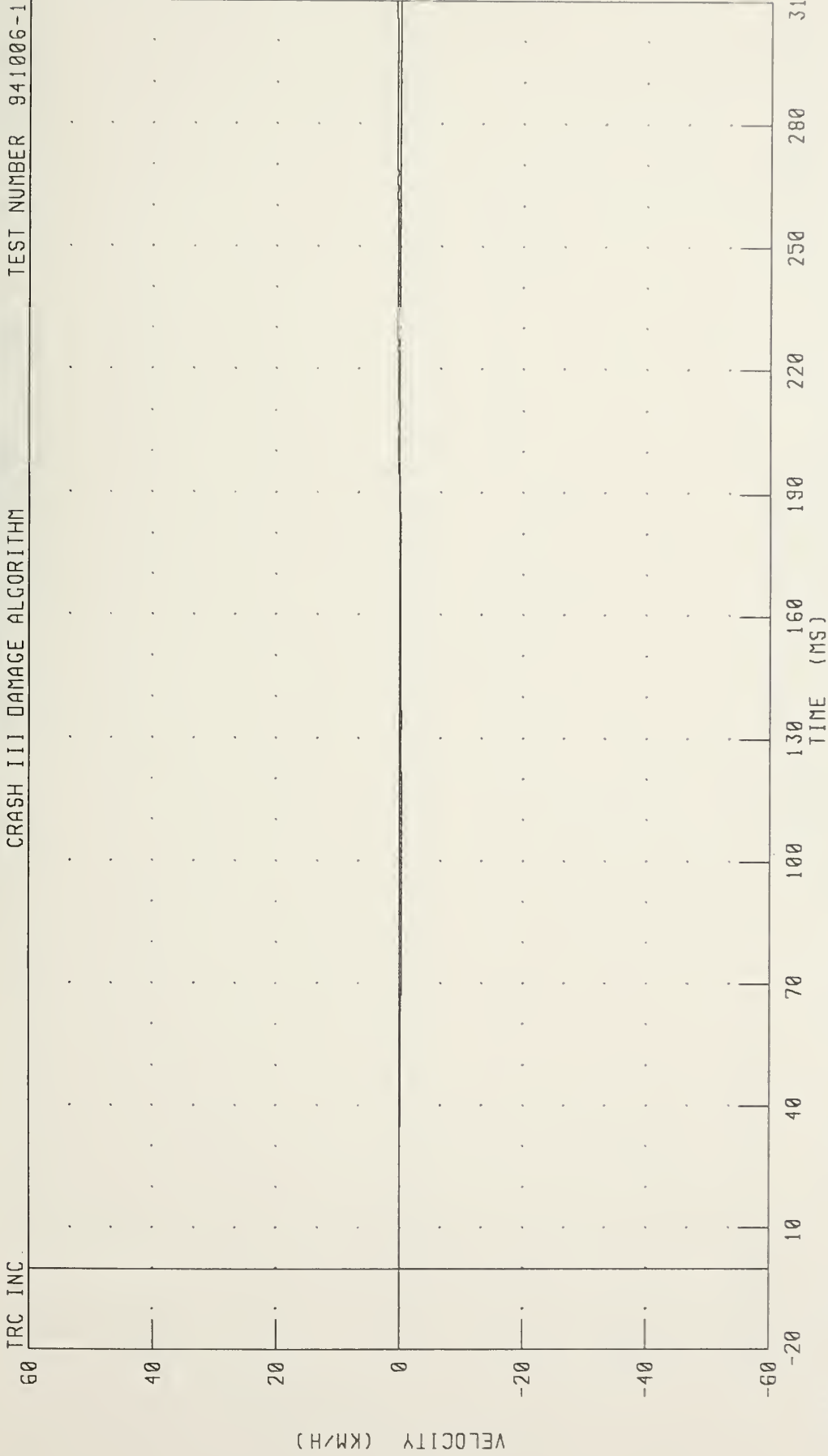
TEST NUMBER 941006-1



TRC INC. CHANNEL: TLRYG1 FILTER: CH. CLASS 60
PEAK DATA: 0.76 G @ 190.56 MS, -0.68 G @ 34.32 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 LEFT REAR SEAT Y-AXIS VELOCITY
 CRASH III DAMAGE ALGORITHM

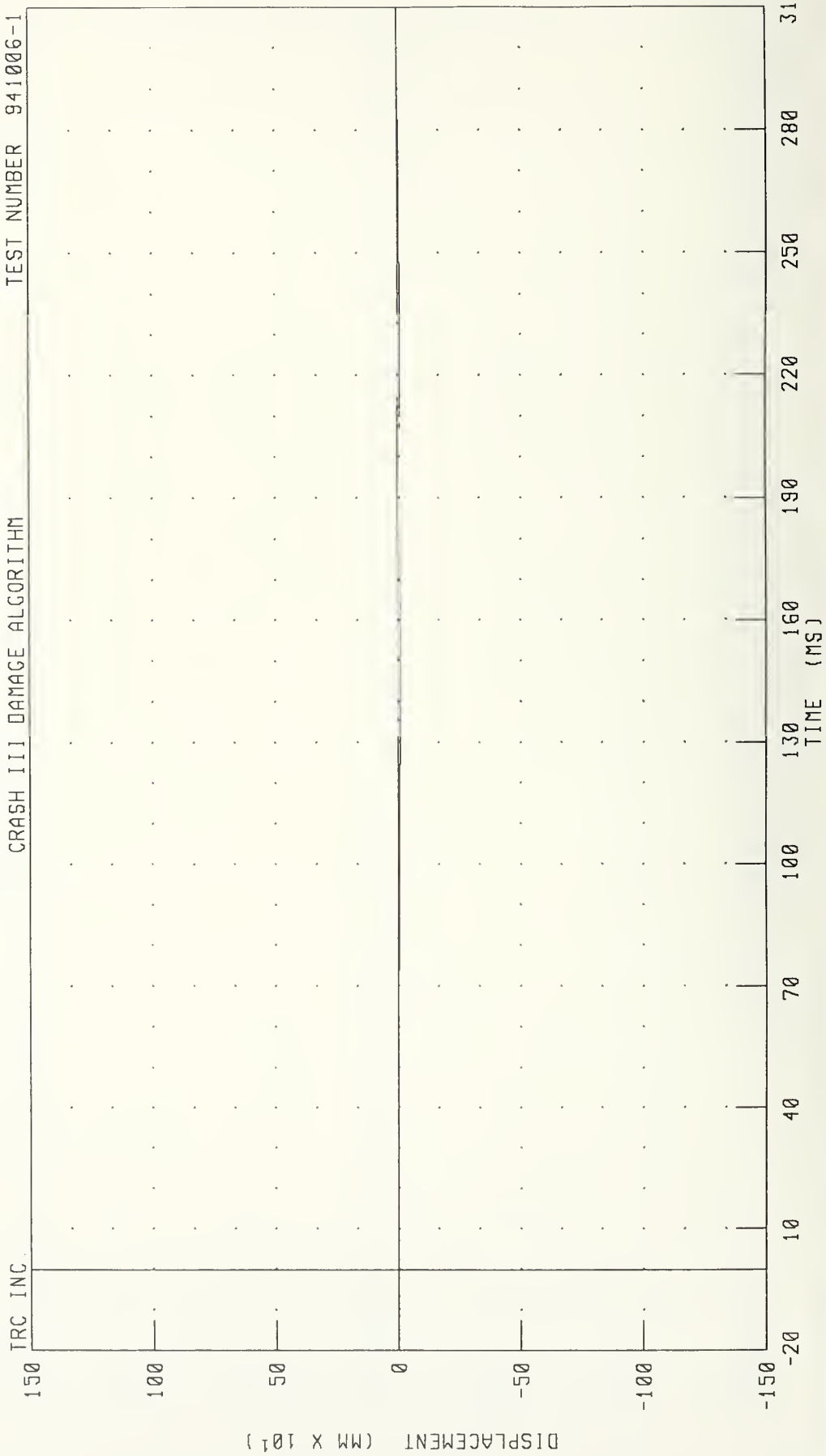
TRC INC. TEST NUMBER 941006-1



CHANNEL TLRYV1 FILTER CH CLASS 180 PEAK DATA 0 63 KM/H @ 309 12 MS, -0 38 KM/H @ 95 36 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT Y-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

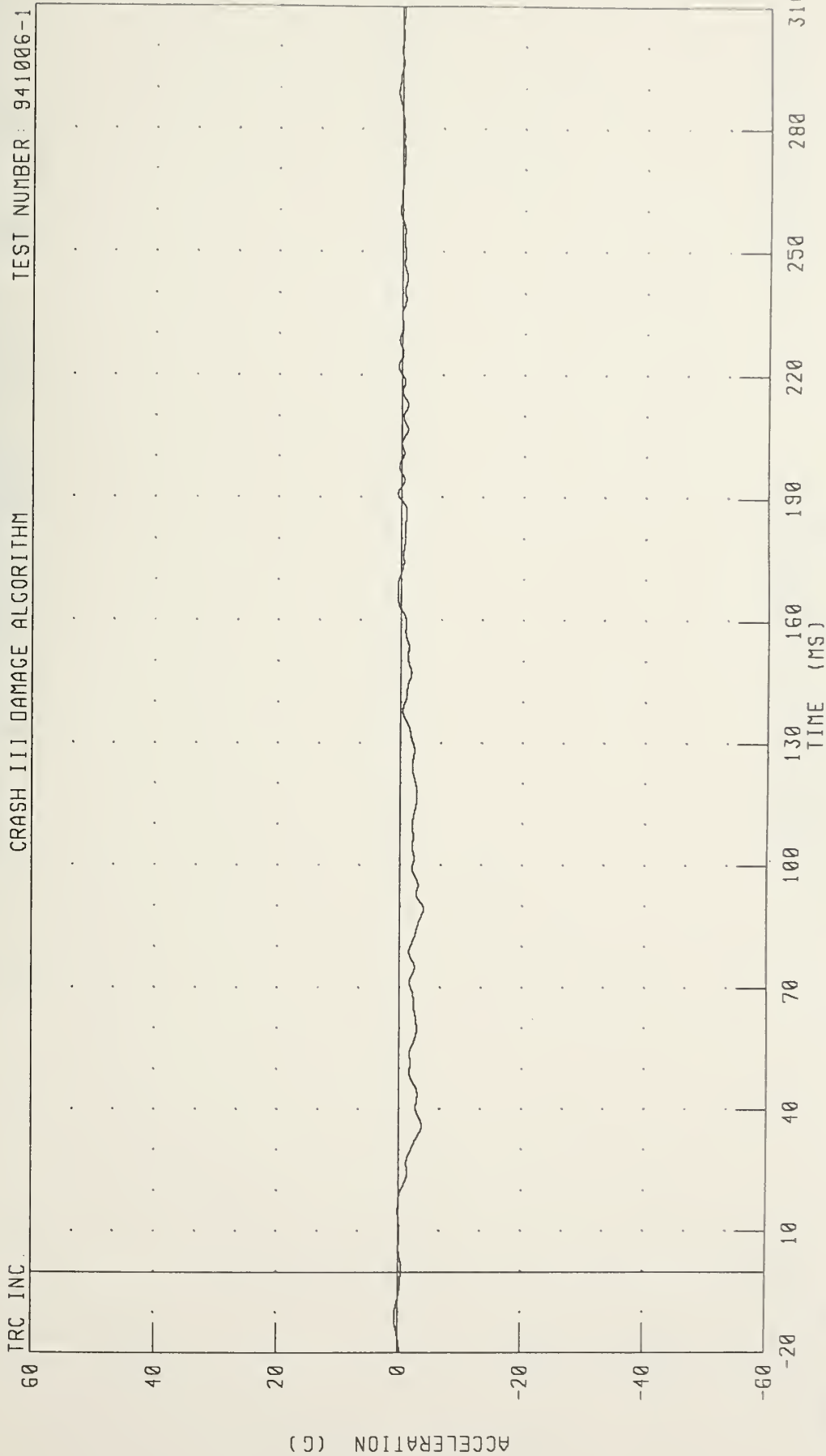
TEST NUMBER 941006-1



CHANNEL: TLRYD1 FILTER: CH. CLASS 180 PEAK DATA: 2.29 MM @ 310.00 MS; -9.13 MM @ 189.92 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-1

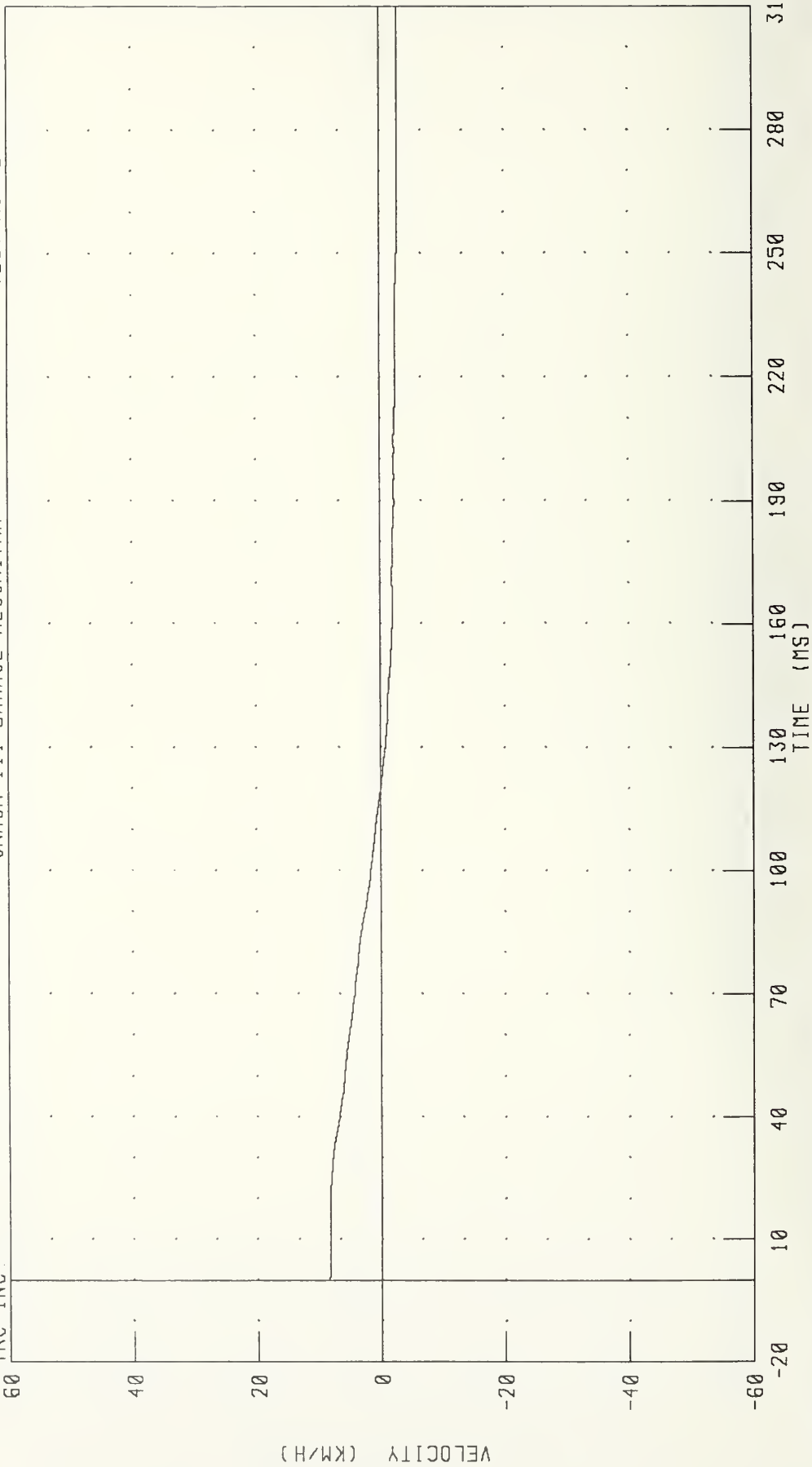


CHANNEL TRRXG1 FILTER CH. CLASS 60 PEAK DATA 0 63 G @ 289 12 MS, -3 89 G @ 89 36 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-1

TRC INC



CHANNEL: TRRXV1 FILTER: CH. CLASS 180

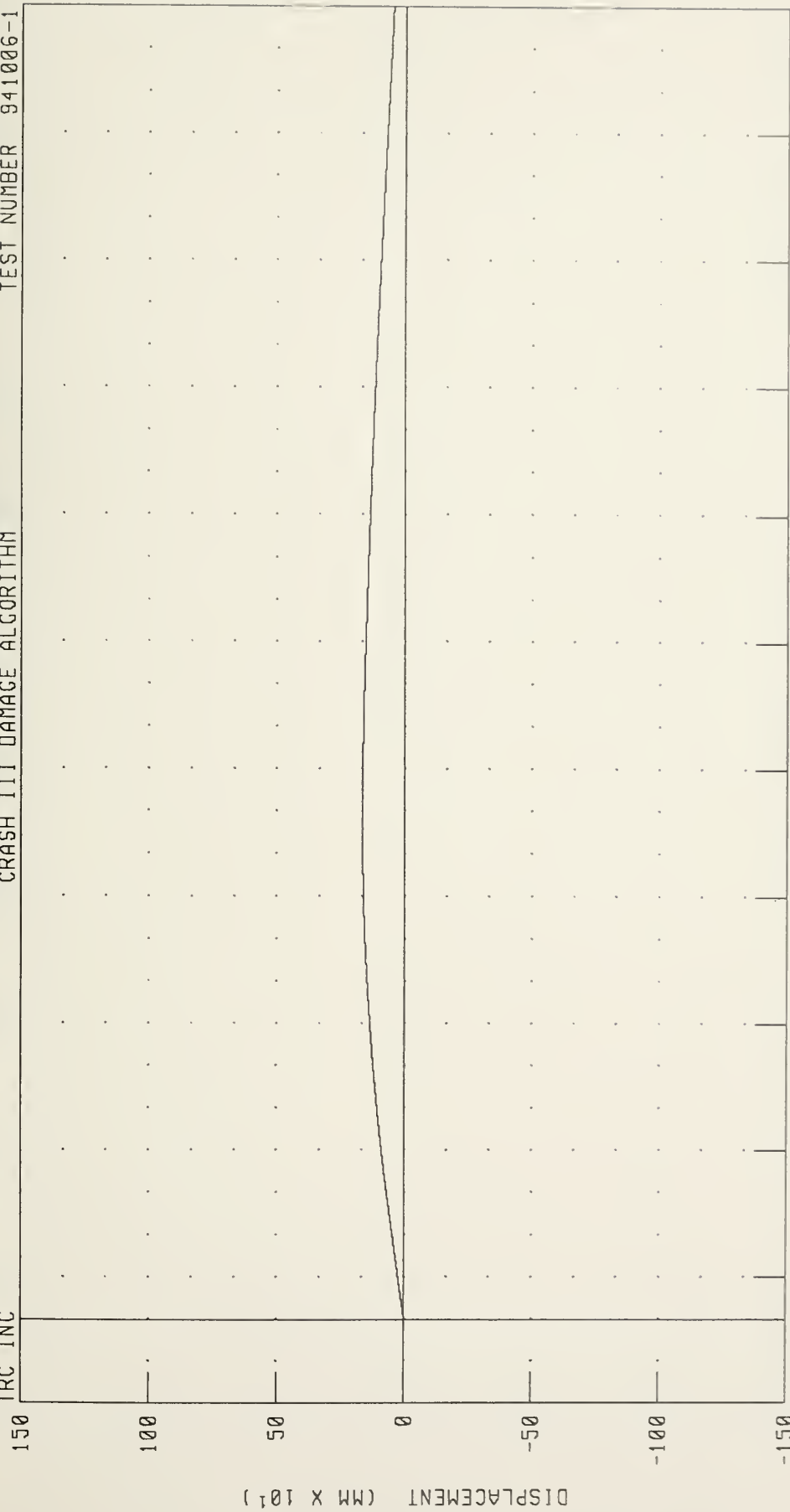
PEAK DATA: 8.40 KM/H @ 0.00 MS, -2.95 KM/H @ 282.64 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT REAR SEAT X-AXIS DISPLACEMENT

TEST NUMBER 941006-1

CRASH III DAMAGE ALGORITHM

TRC INC

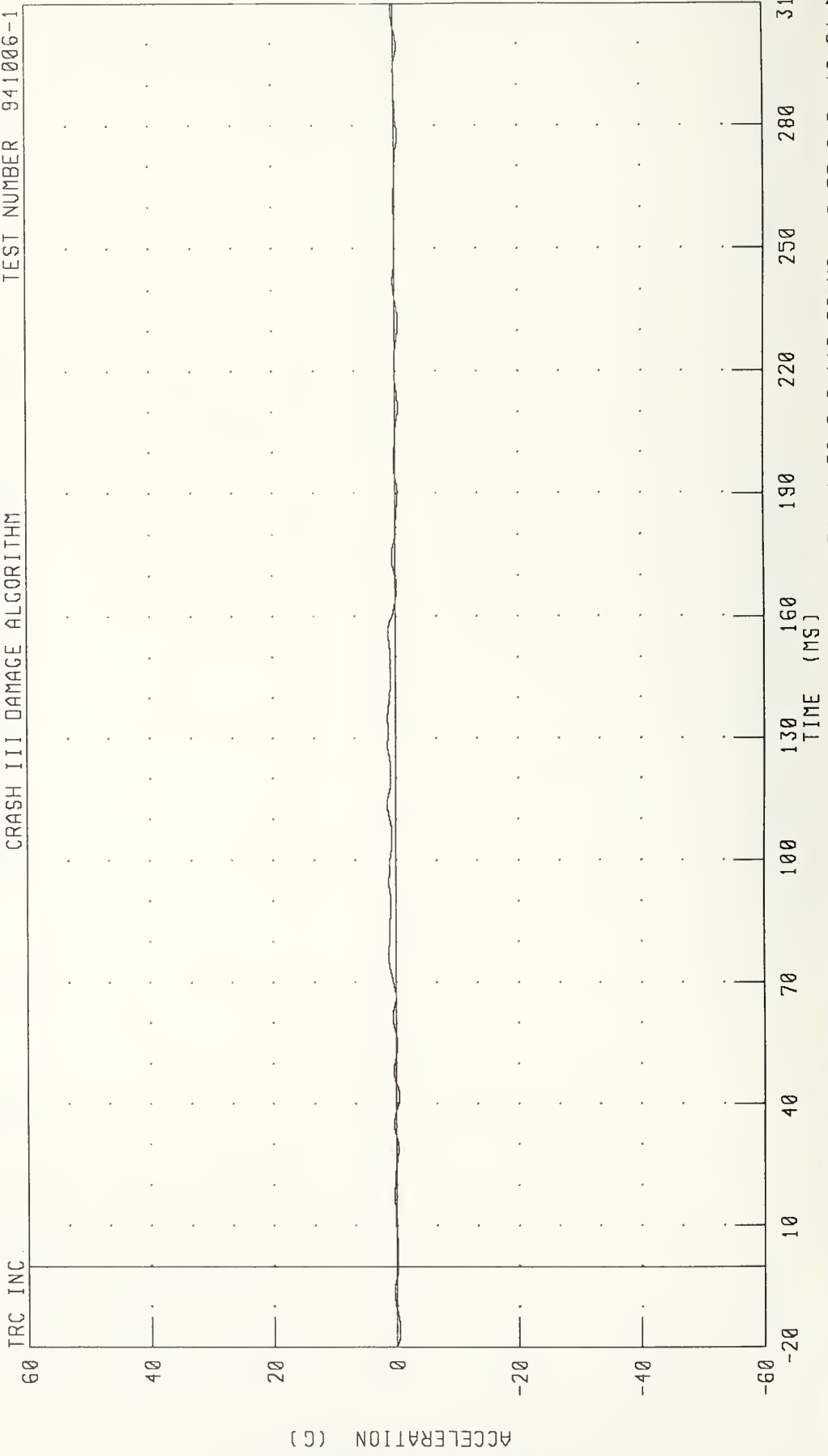


CHANNEL: TRRX01 FILTER: CH CLASS 180

PEAK DATA 165 96 MM @ 120 00 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-1

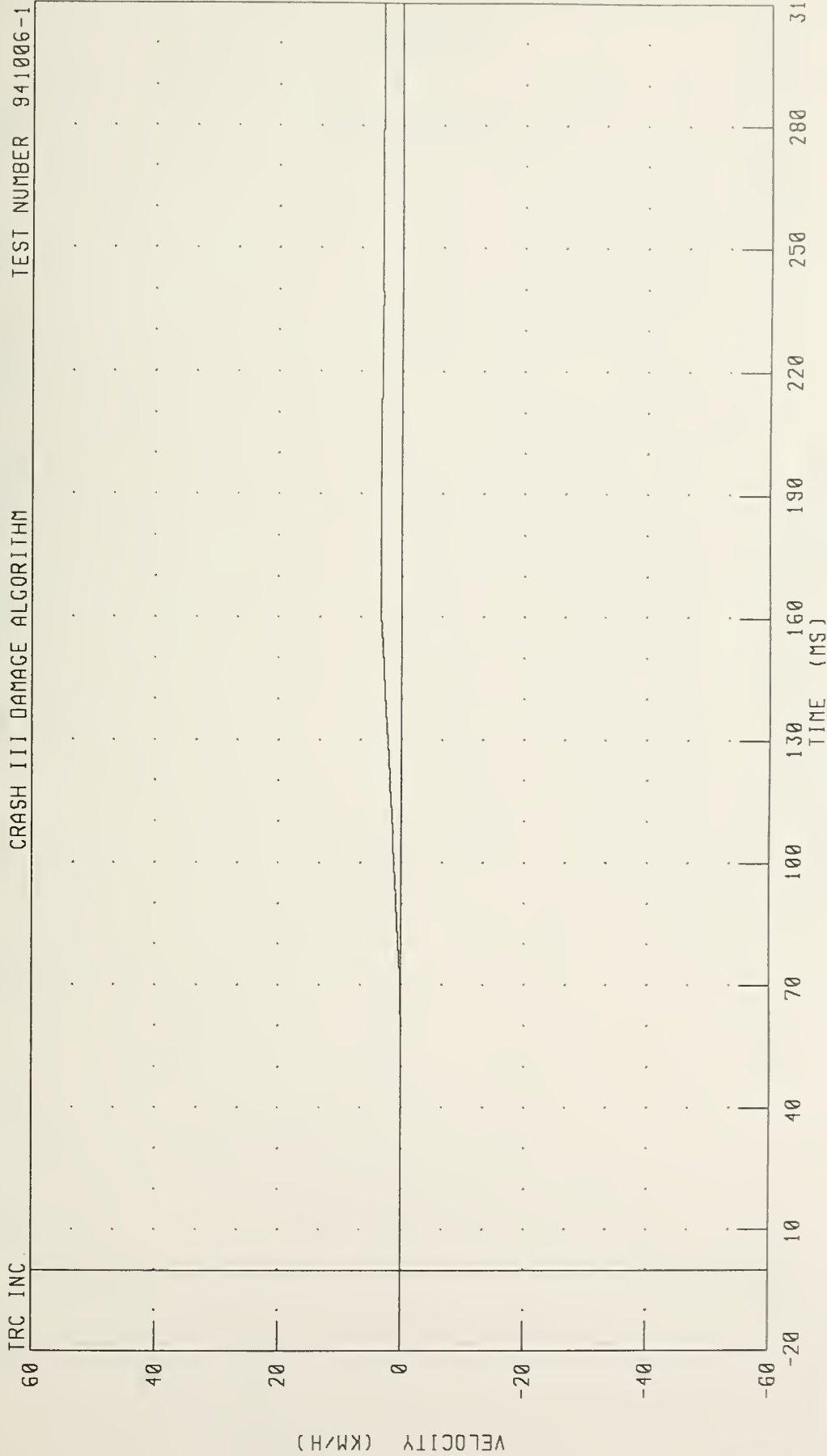


CHANNEL: TRRYG1 FILTER: CH. CLASS 60

PEAK DATA: 1.39 G @ 113.60 MS; -0.55 G @ -16.24 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT REAR SEAT Y-AXIS VELOCITY

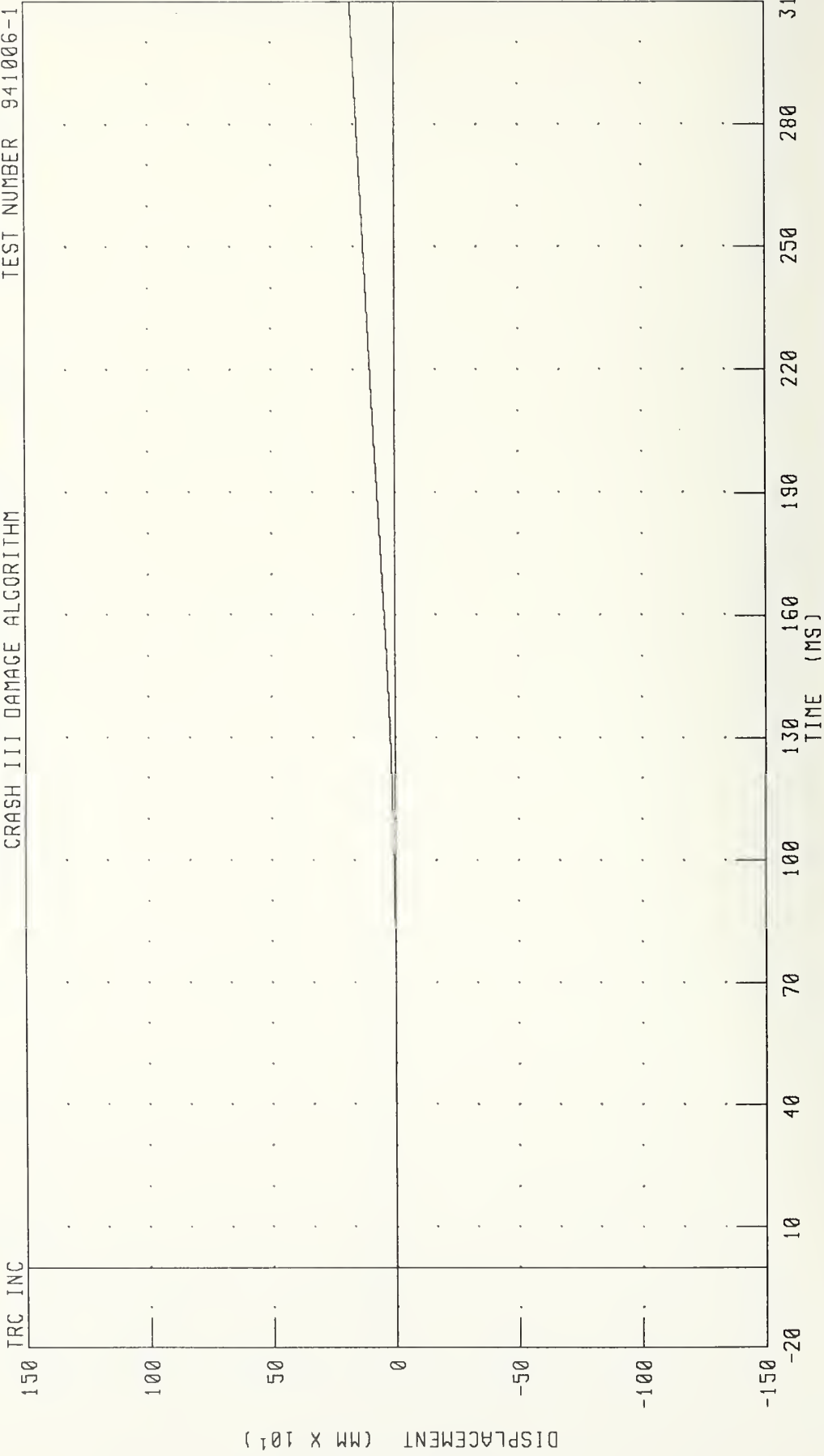
CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-1



TRC INC. CHANNEL: TRRYV1 FILTER: CH. CLASS 180
 PEAK DATA: 3.46 KM/H @ 178.88 MS, -0.03 KM/H @ 8.72 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-1



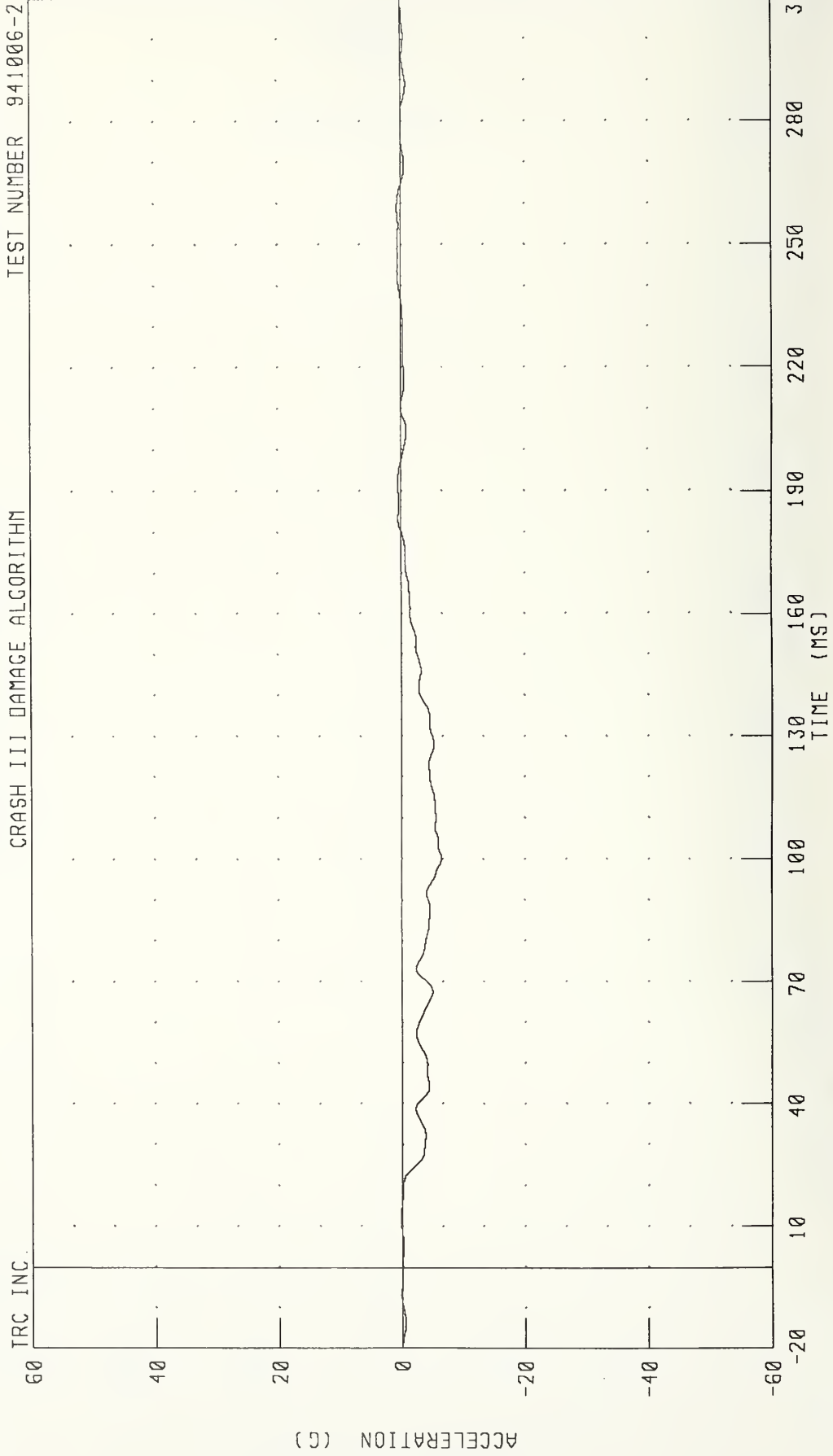
CHANNEL: TRRYD1 FILTER: CH. CLASS 180

PEAK DATA: 178.88 MM @ 310.00 MS; -0.09 MM @ 15.28 MS

Data Plots

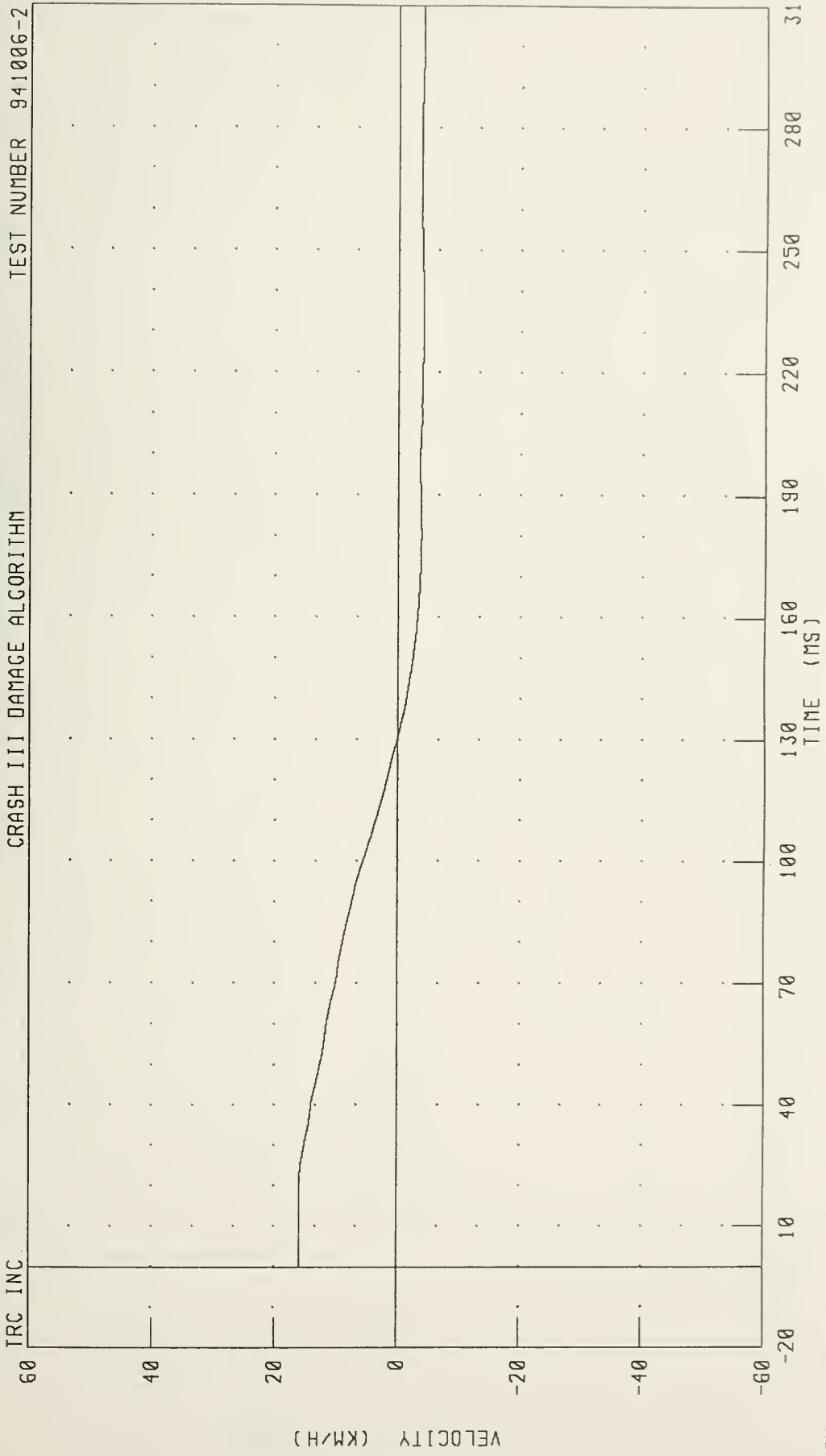
Test No. 941006-2

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM



1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CC X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2



CHANNEL VCGXV1 FILTER CH CLASS 180 PEAK DATA 15.91 KM/H @ 16.32 MS, -4.10 KM/H @ 236.96 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2



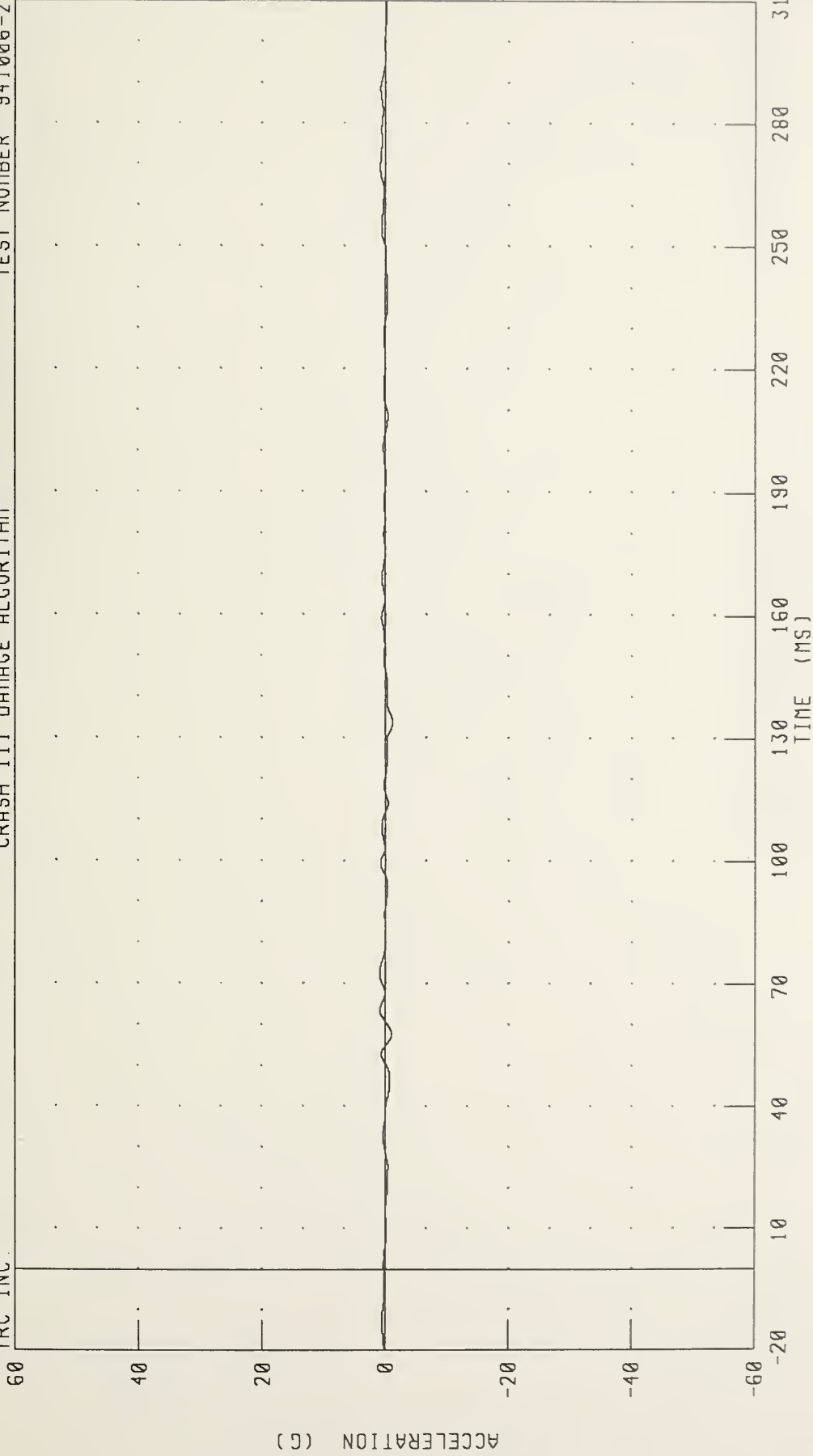
CHANNEL: VCGXD1 FILTER: CH. CLASS 180

PEAK DATA: 363.91 MM @ 130.48 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

TRC INC.

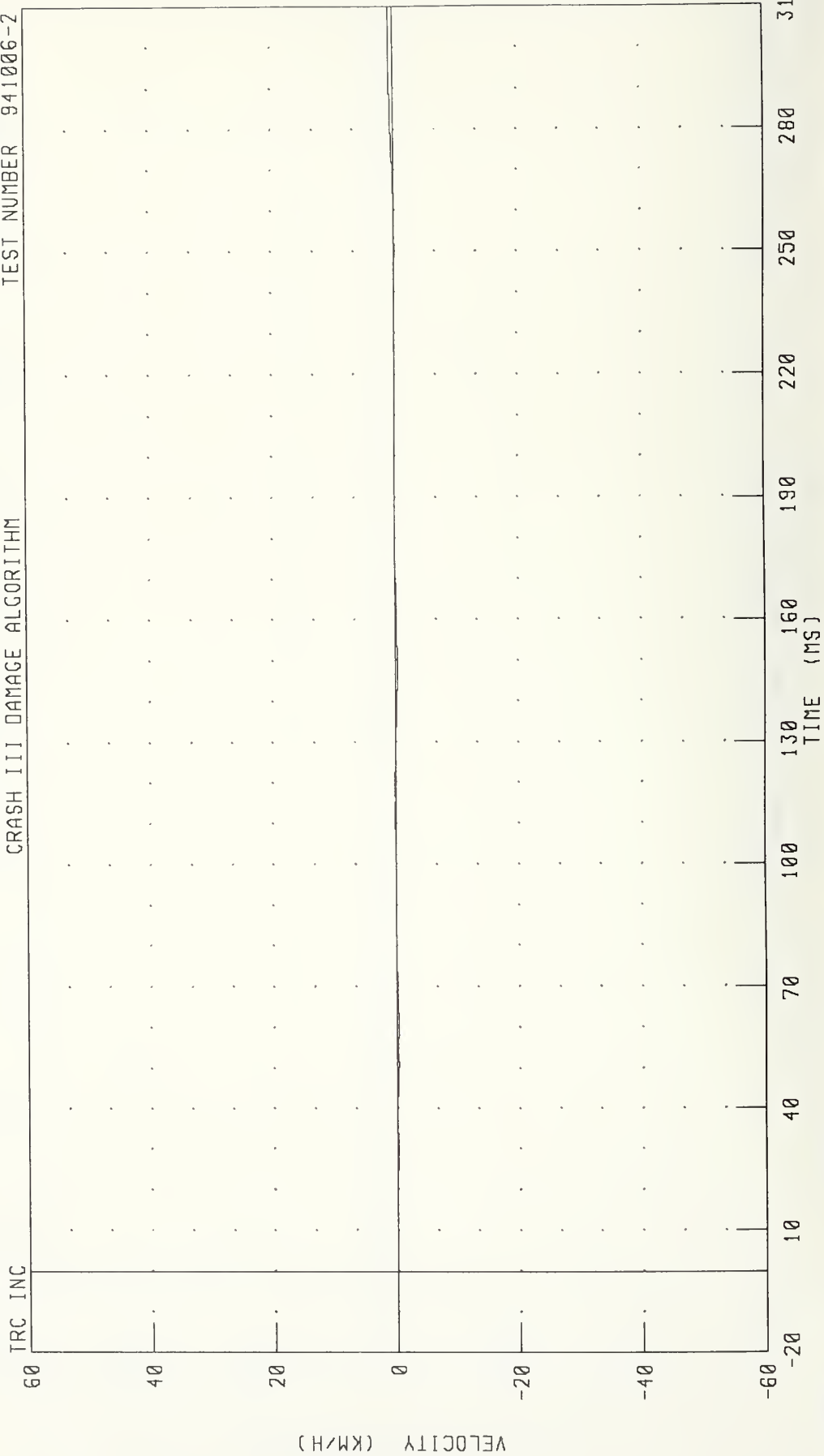


CHANNEL: VCGY1 FILTER: CH CLASS 60

PEAK DATA: 0.91 G @ 72.24 MS, -1.22 G @ 133.68 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 VEHICLE CG Y-AXIS VELOCITY
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

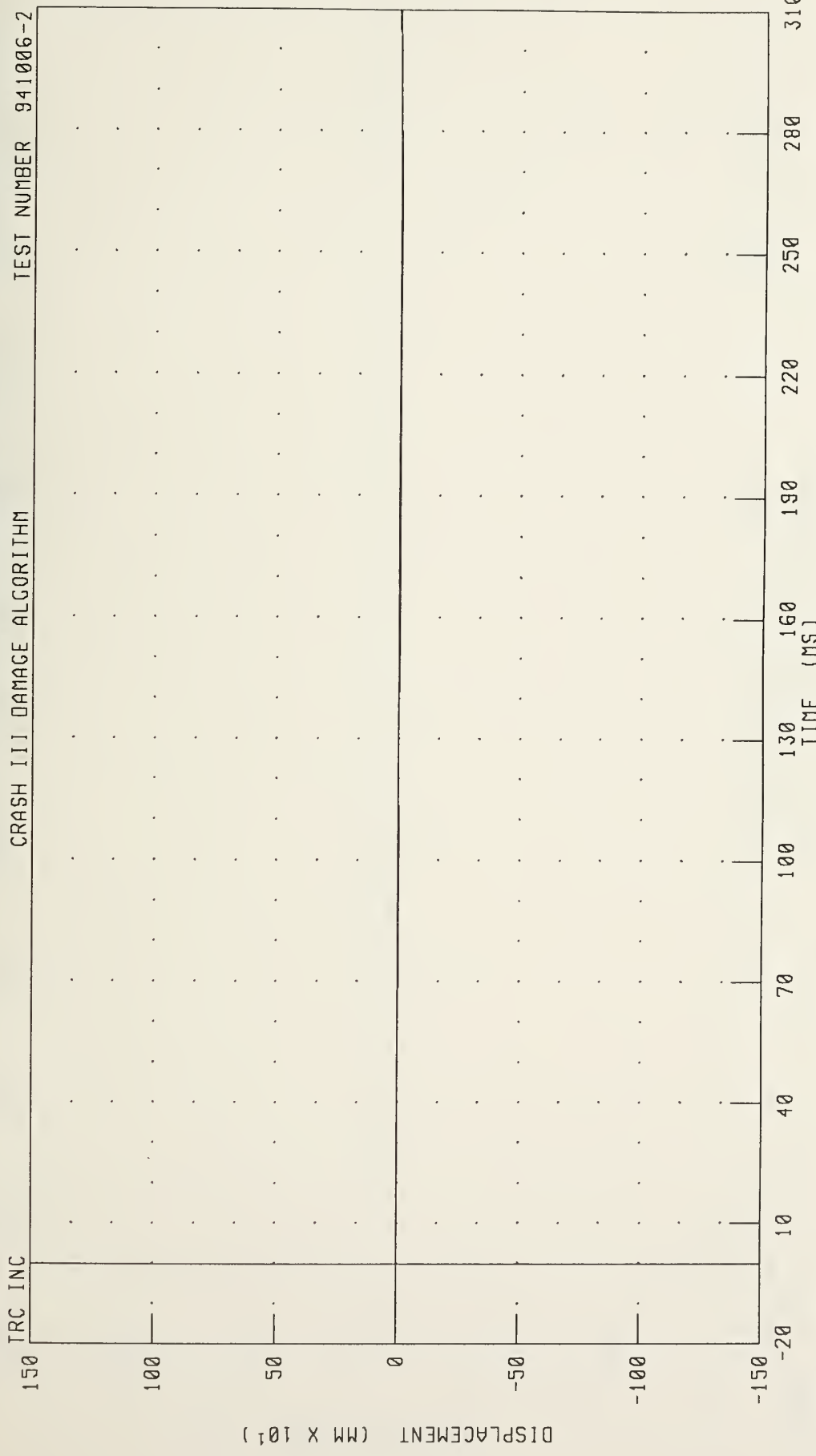


CHANNEL: VCGYV1 FILTER: CH. CLASS 180

PEAK DATA: 0.73 KM/H @ 303.60 MS, -0.33 KM/H @ 61.20 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 VEHICLE CG Y-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

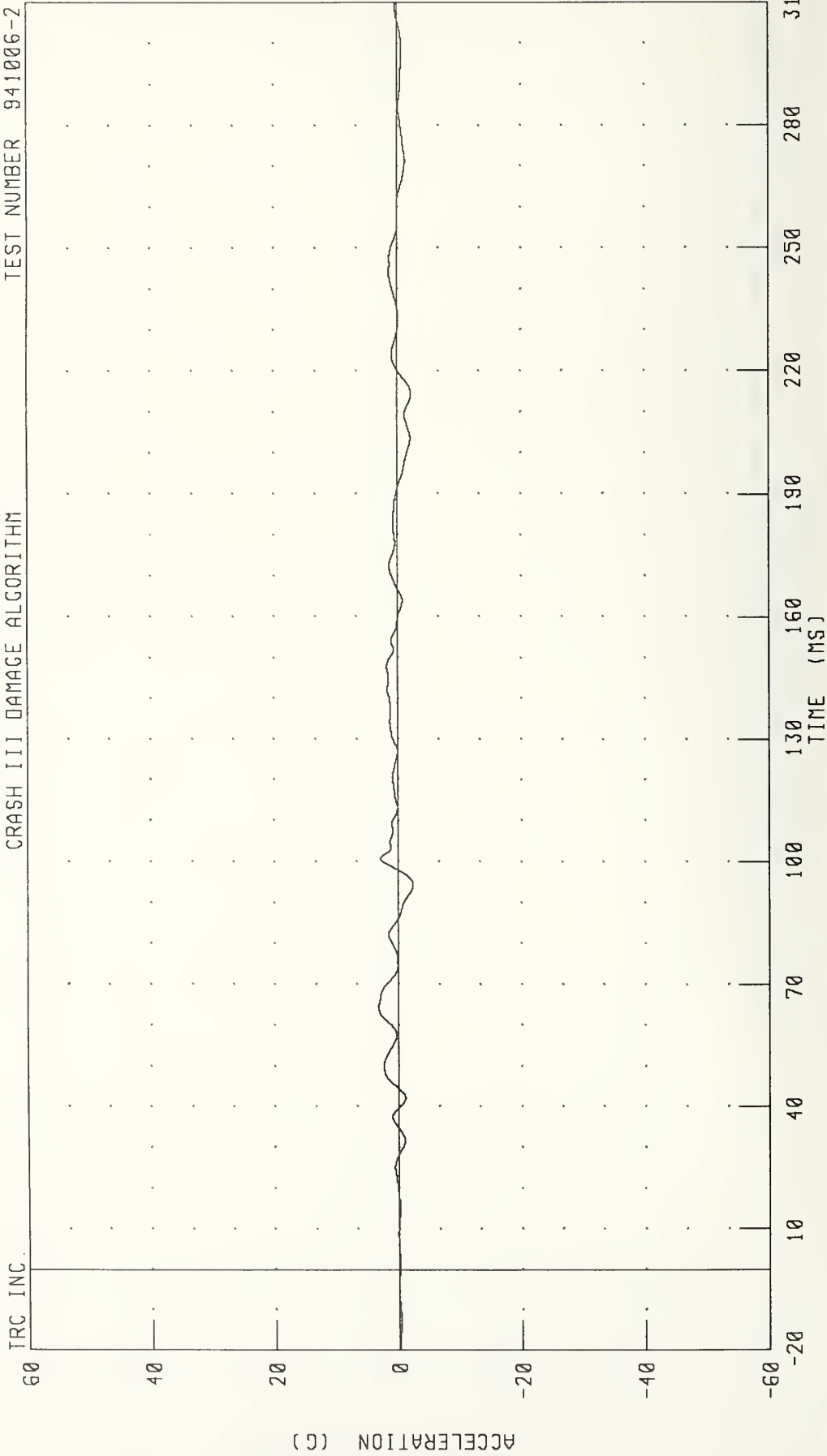
TEST NUMBER 941006-2



CHANNEL: VCGYD1 FILTER: CH. CLASS 180
 PEAK DATA: 3.46 MM @ 310 00 MS; -3.57 MM @ 179.76 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CC Z-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

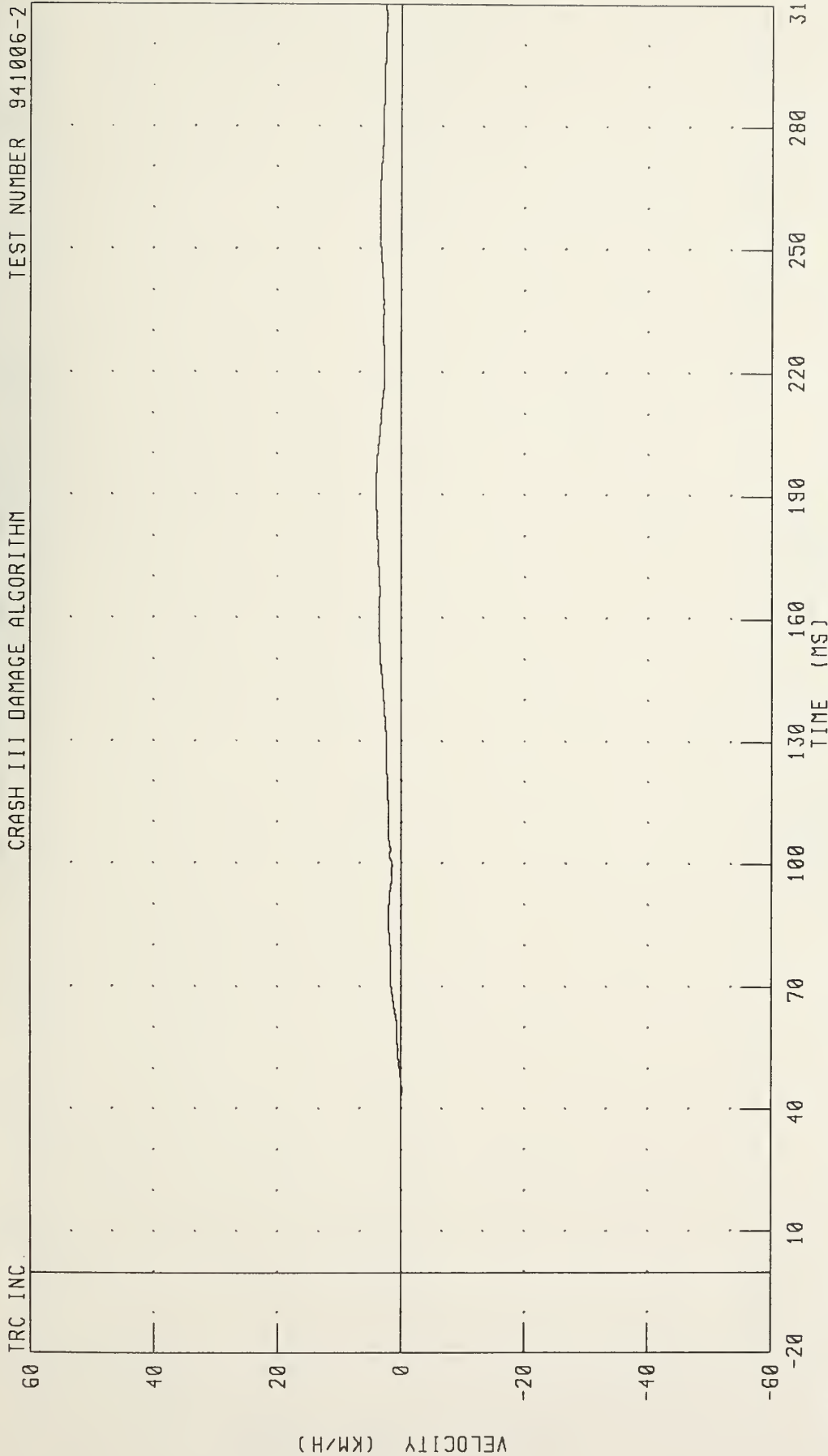


CHANNEL: VCCZG1 FILTER: CH. CLASS 60

PEAK DATA: 3.21 G @ 64.24 MS; -2.43 G @ 94.32 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

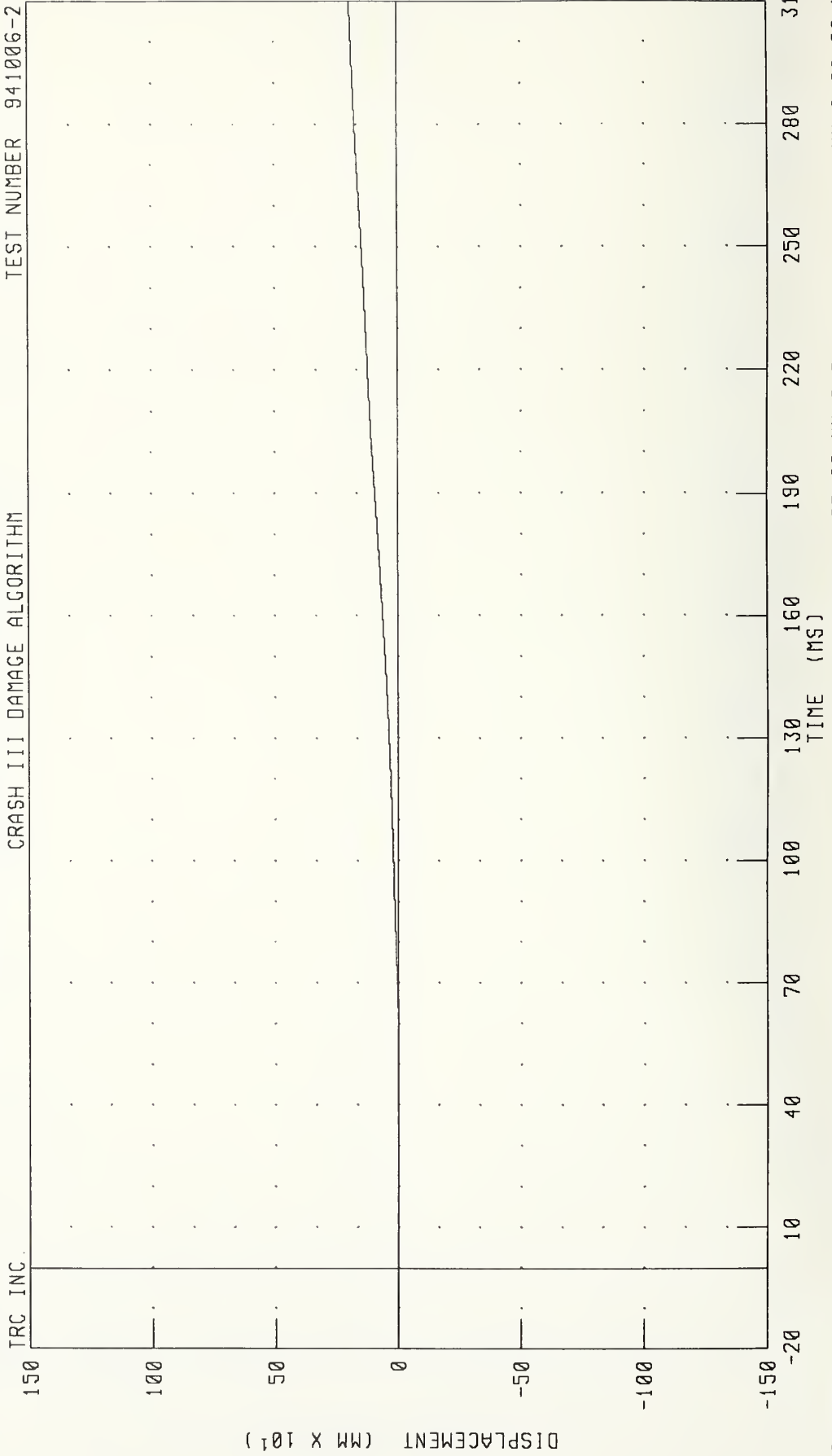
TEST NUMBER 941006-2



CHANNEL: VCGZV1 FILTER: CH. CLASS 180 PEAK DATA: 4.06 KM/H @ 191.76 MS; -0.09 KM/H @ 44.96 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

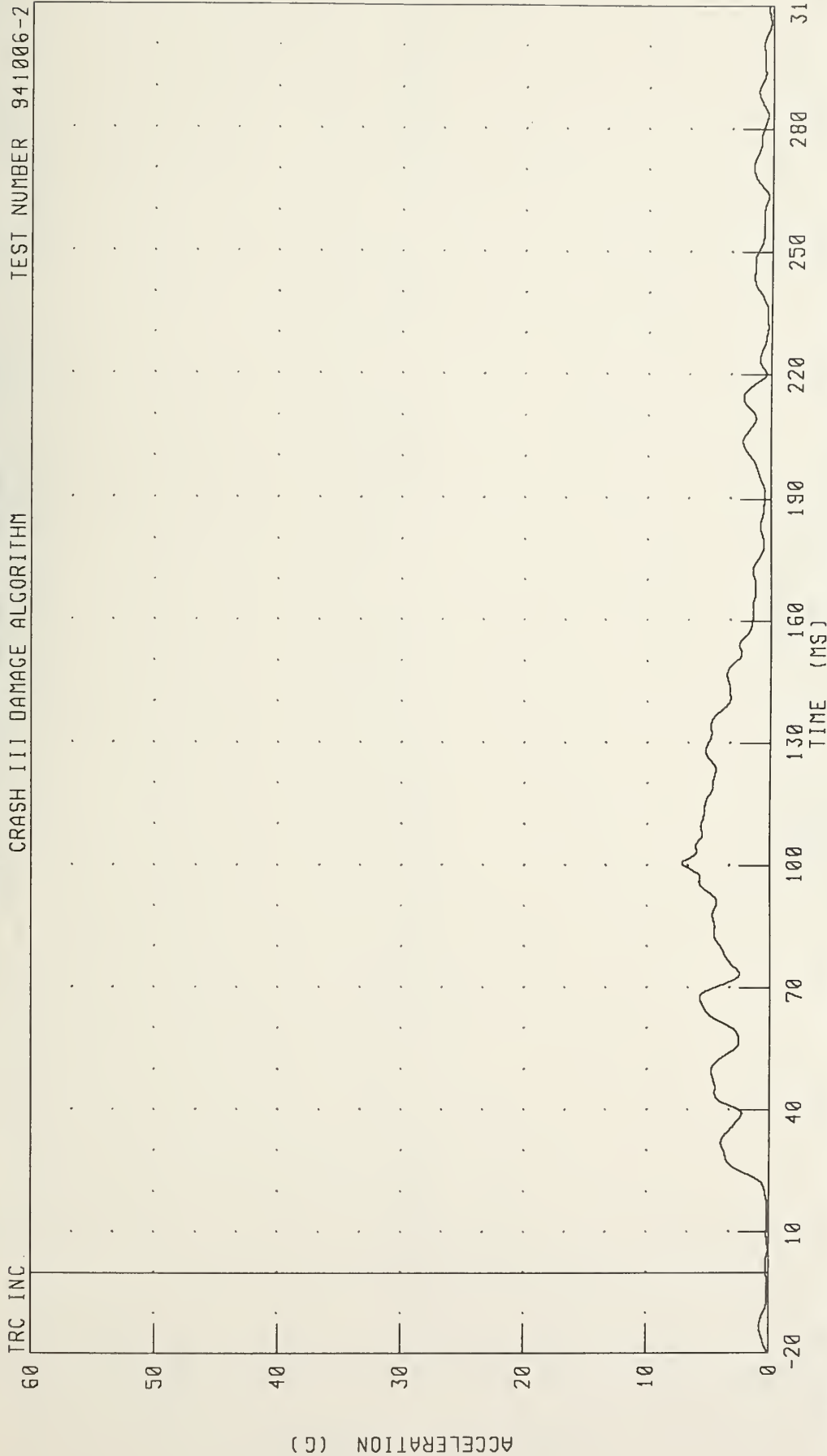


CHANNEL: VCGZD1 FILTER: CH CLASS 180

PEAK DATA: 195.29 MM @ 310.00 MS; -0.11 MM @ 22.96 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT ACCELERATION

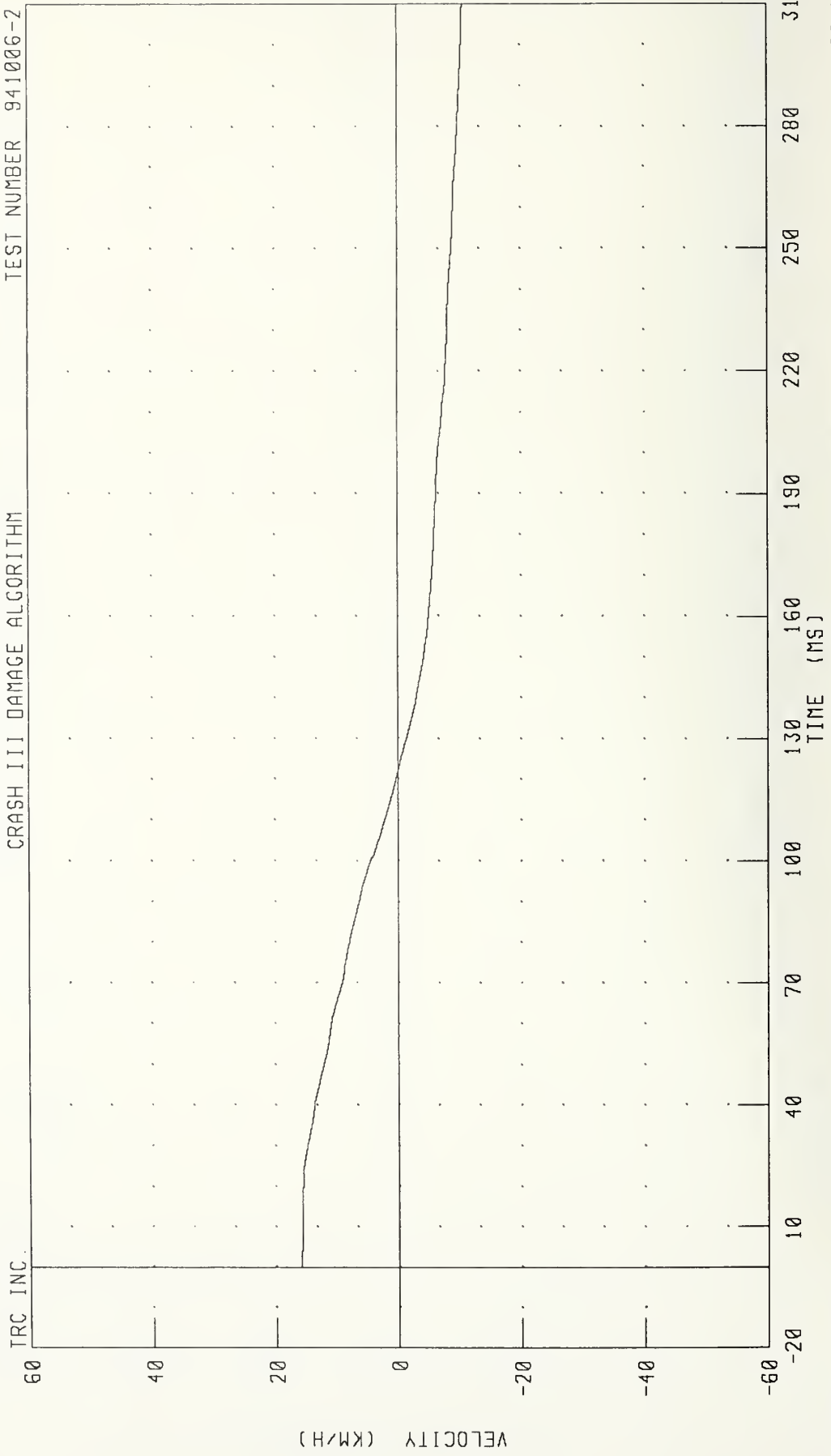
CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-2



CHANNEL: VCGRG1 FILTER: CH. CLASS 60 PEAK DATA: 7.13 G @ 100.56 MS; 0.10 G @ -20.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

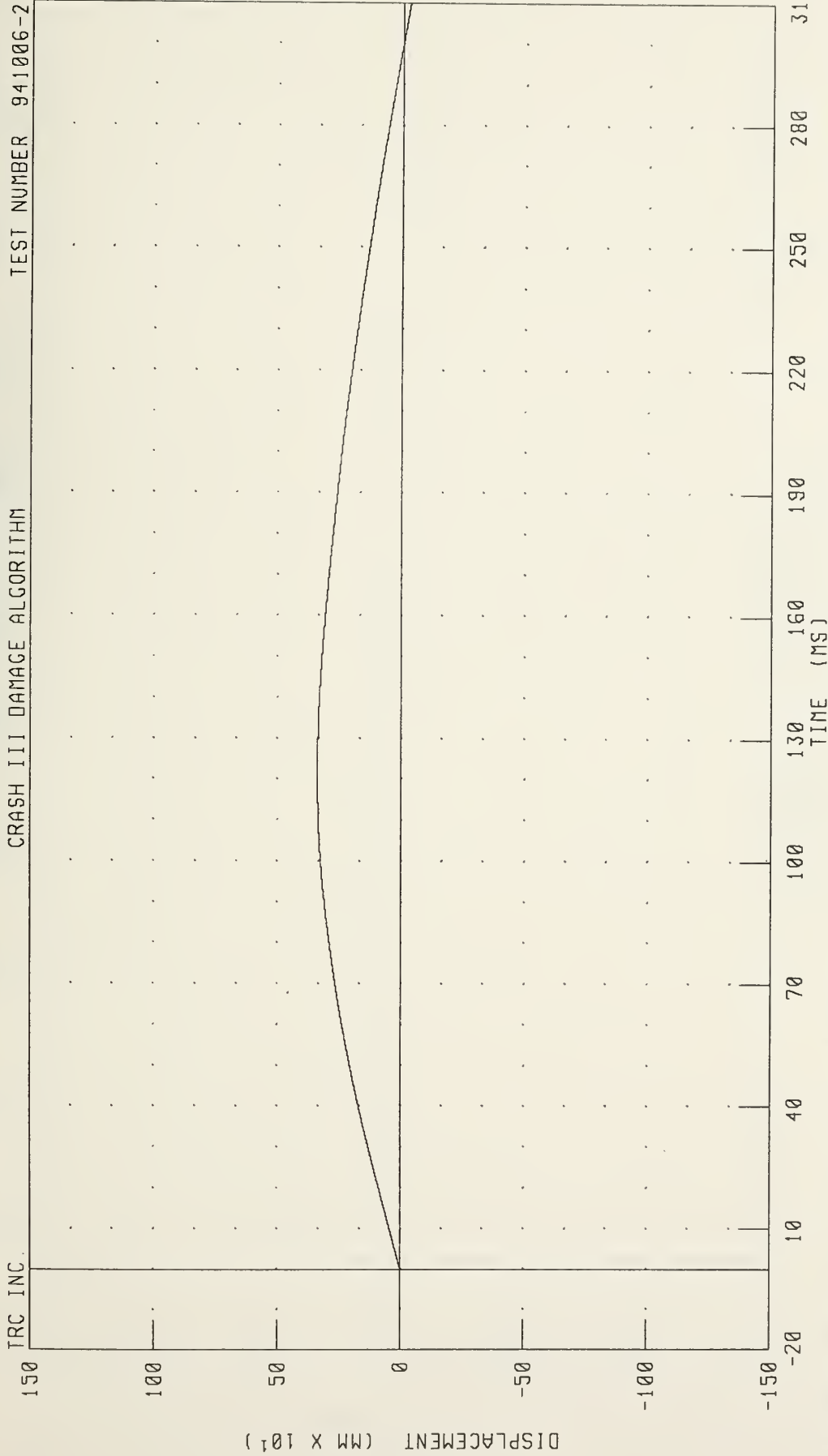


CHANNEL: VCGRV1 FILTER: CH. CLASS 180

PEAK DATA: 15.90 KM/H @ 0.00 MS; -10.59 KM/H @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT DISPLACEMENT
CRASH III DAMAGE ALGORITHM

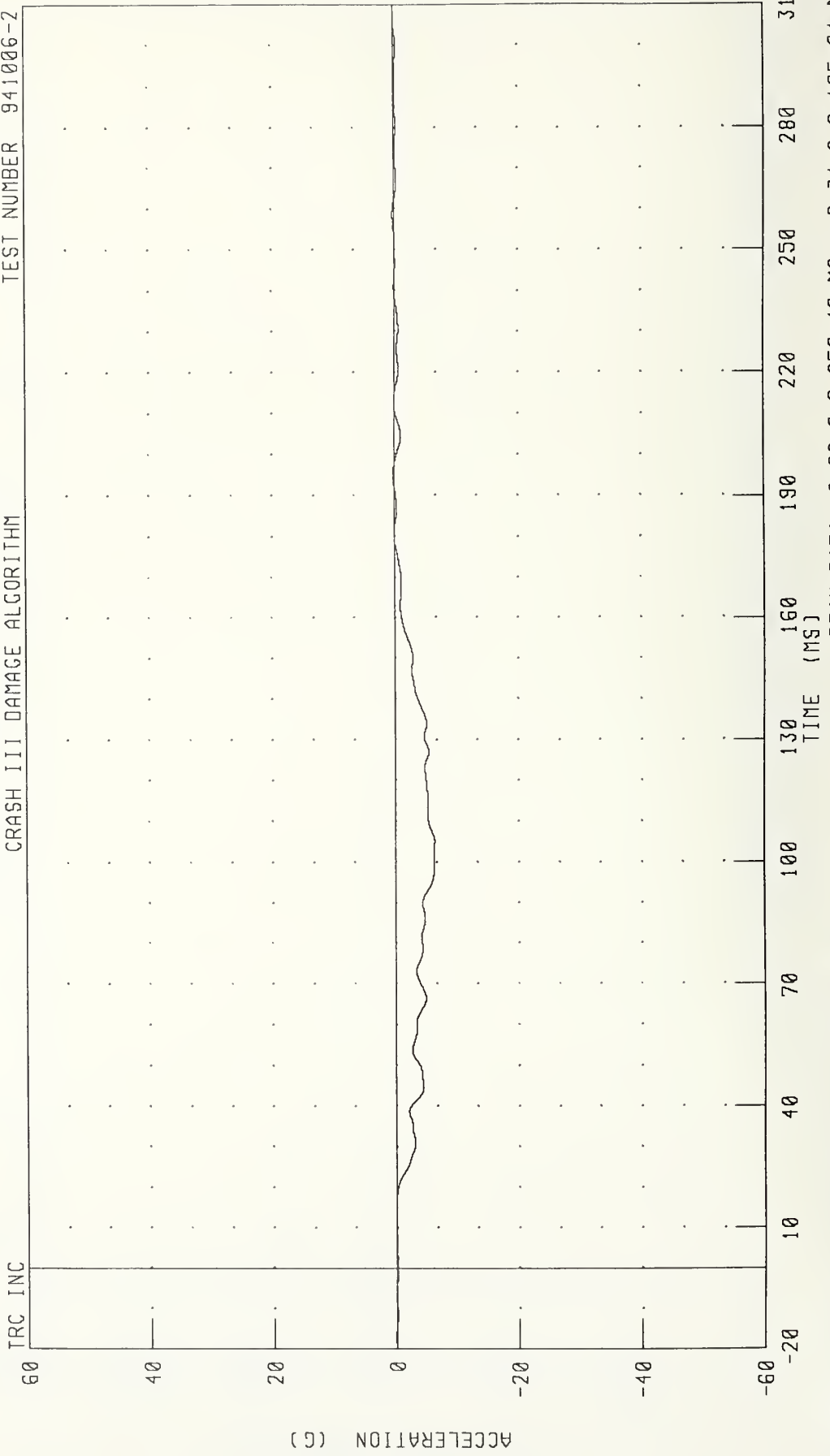
TEST NUMBER 941006-2



CHANNEL: VCGRD1 FILTER: CH. CLASS 180 PEAK DATA: 338.35 MM @ 122.08 MS, -28.54 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

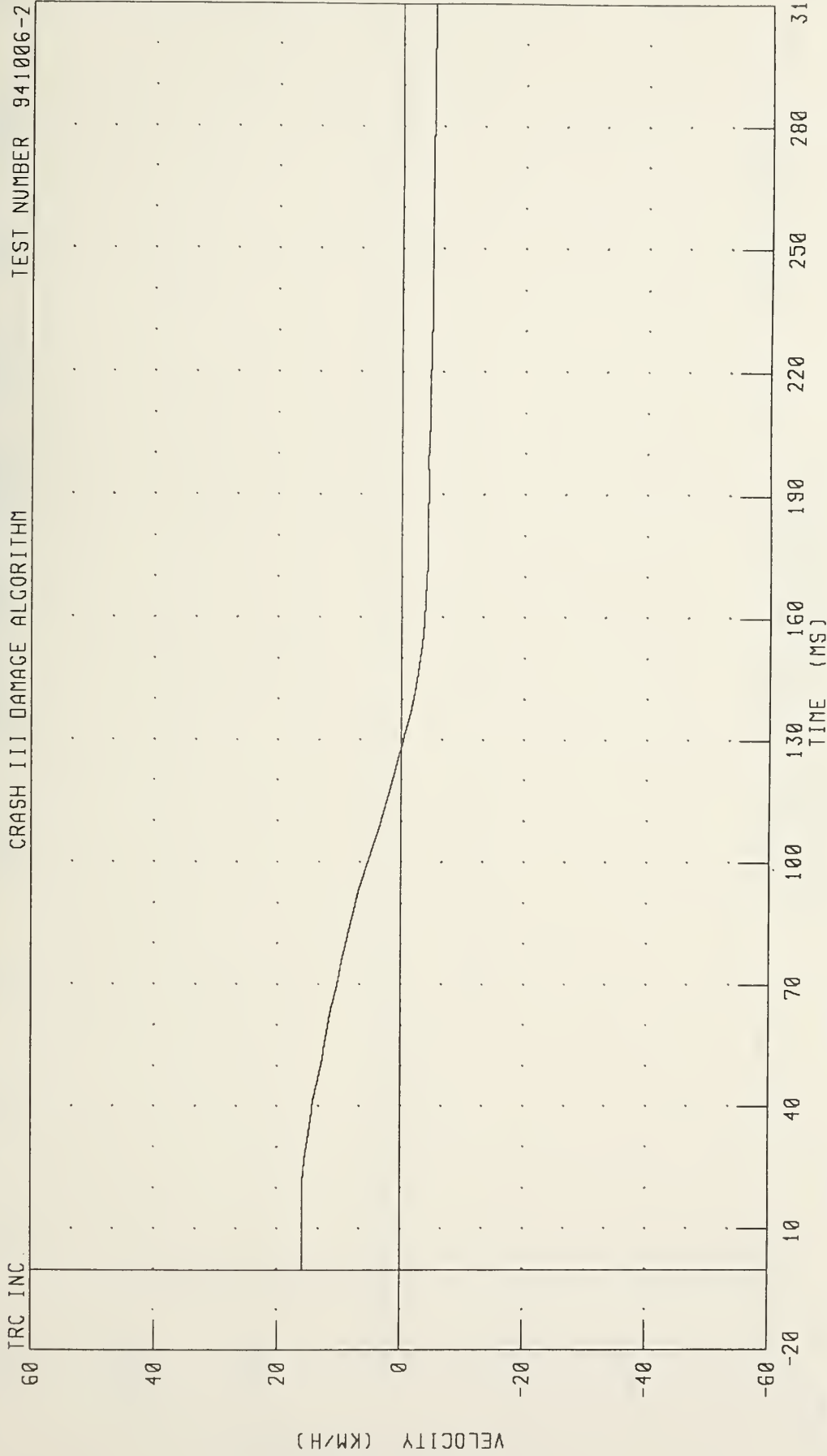


CHANNEL: LFSXG1 FILTER: CH CLASS 60

PEAK DATA: 0.28 G @ 258.48 MS; -6.34 G @ 105.04 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

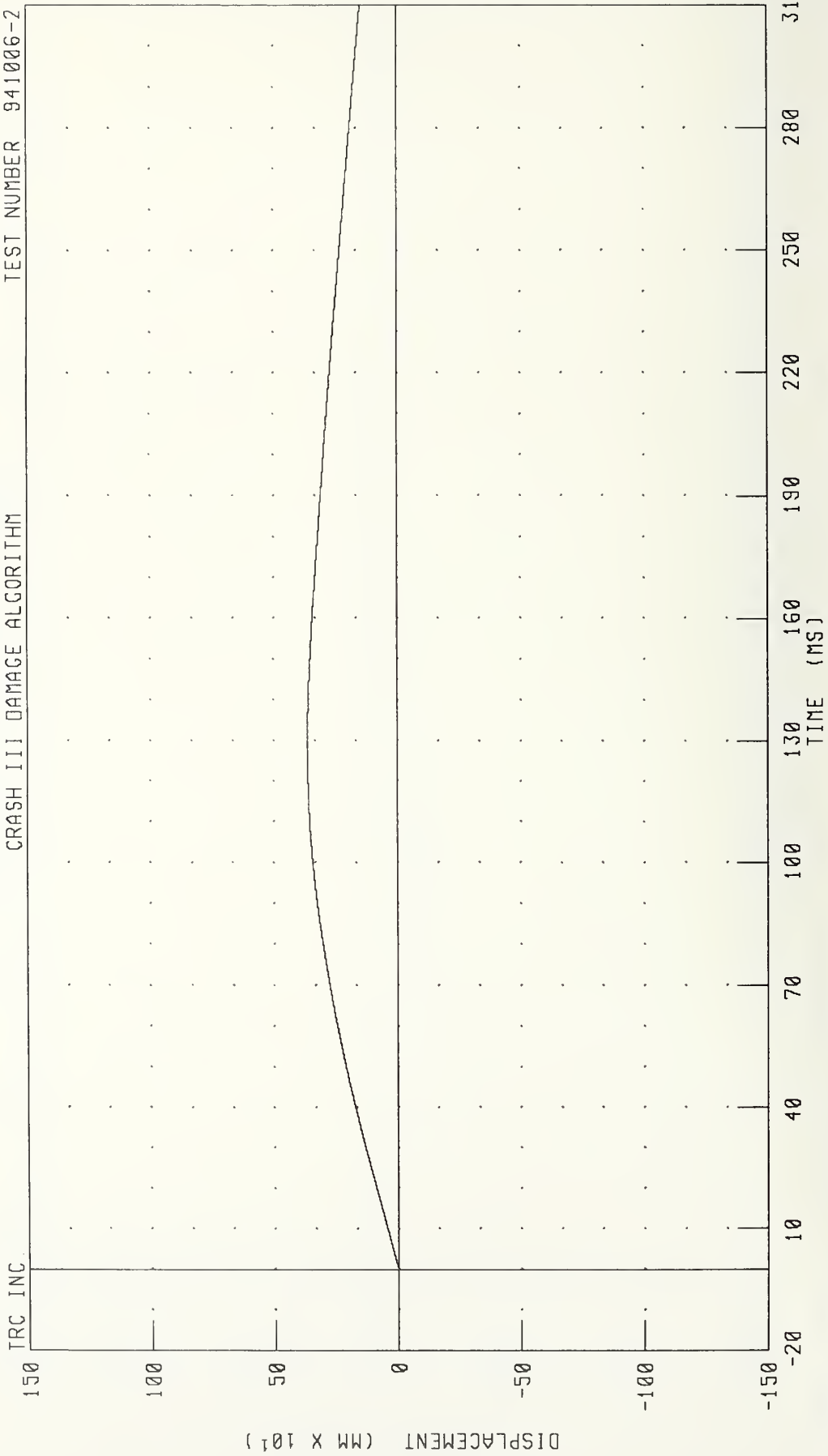


CHANNEL: LFSXV1 FILTER: CH. CLASS 180

PEAK DATA: 15.90 KM/H @ 0.00 MS; -5.22 KM/H @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

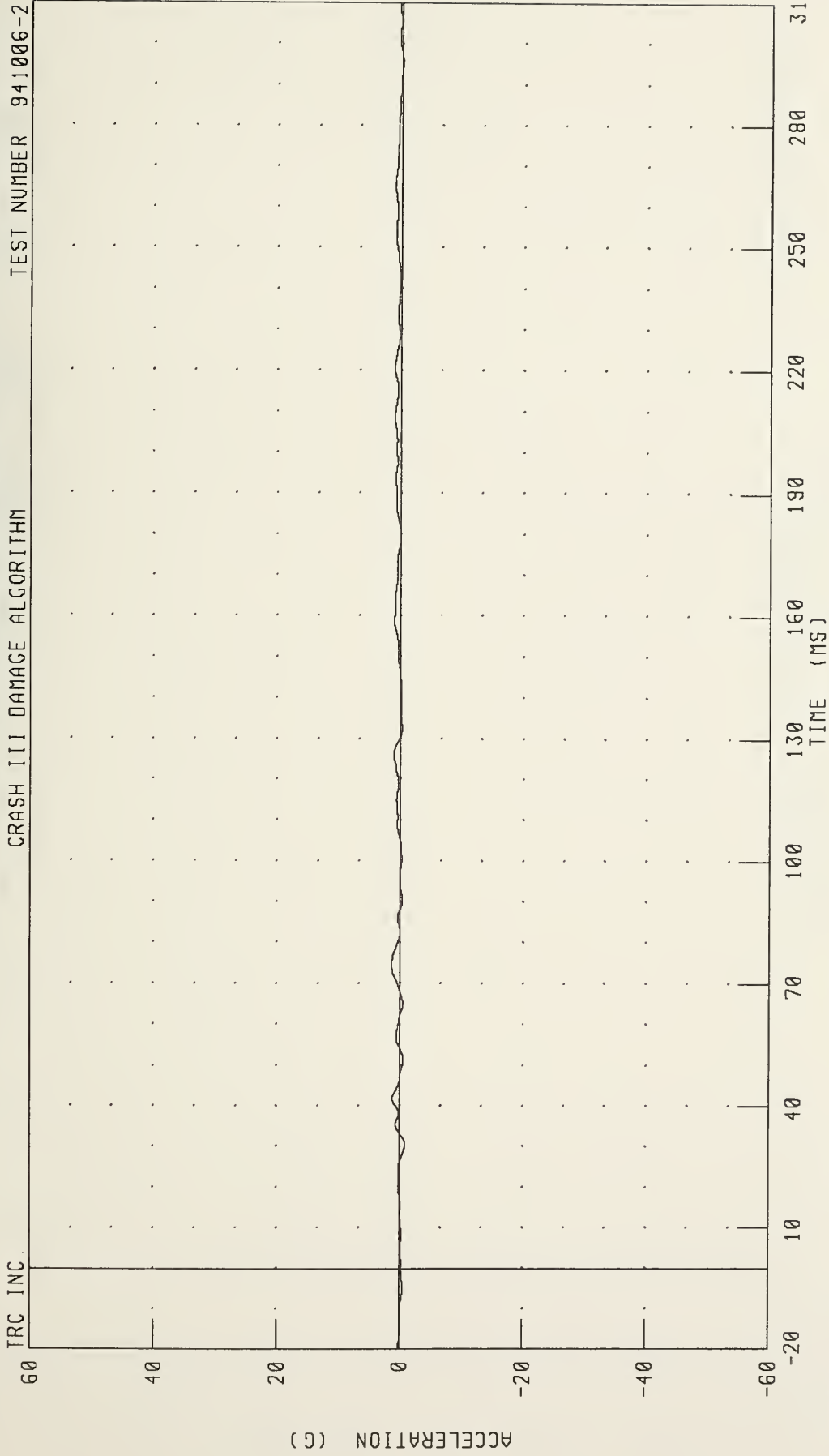


CHANNEL: LFSXD1 FILTER: CH. CLASS 180

PEAK DATA: 364.18 MM @ 127.92 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

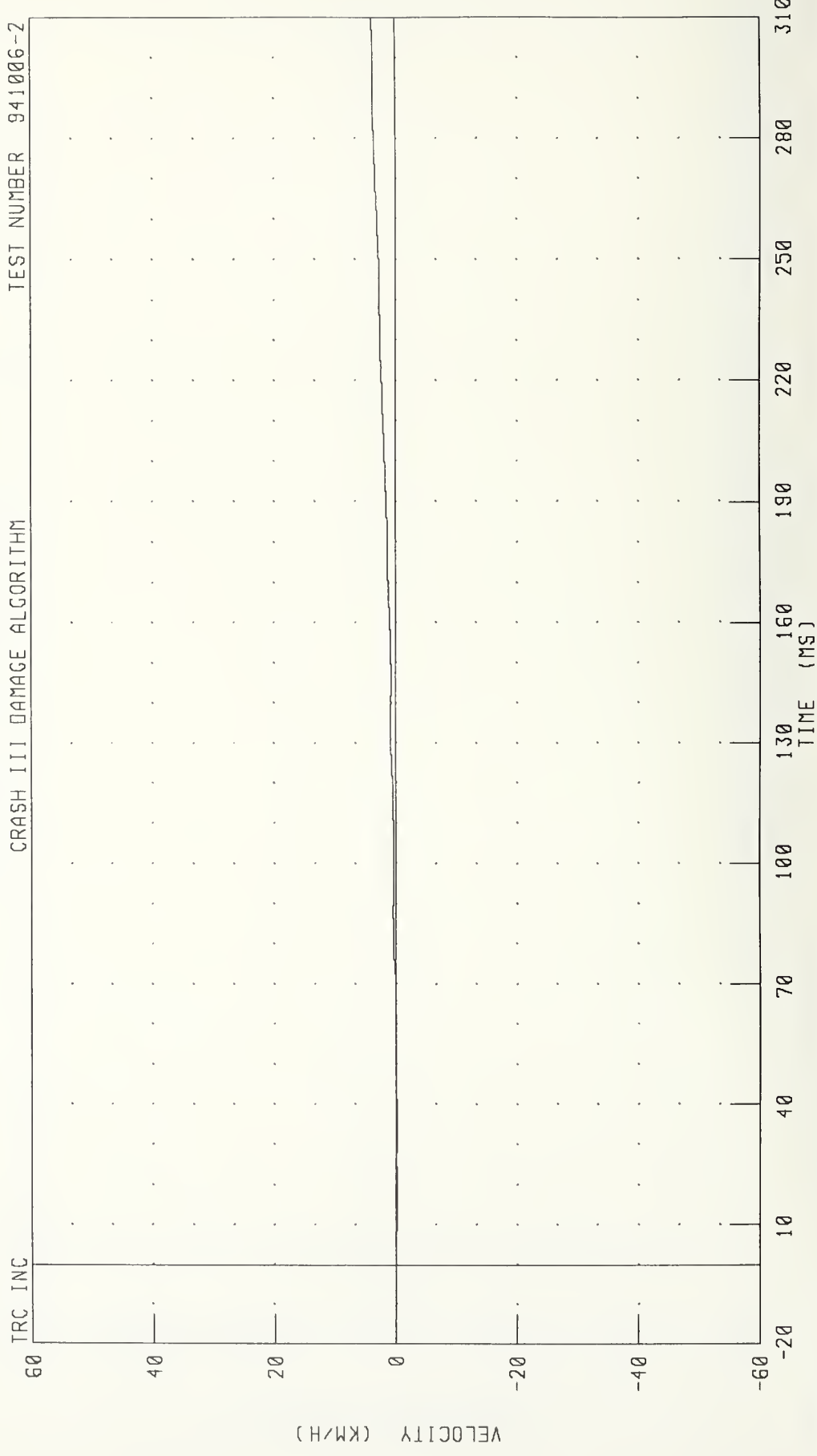
TEST NUMBER 941006-2



CHANNEL: LFSYG1 FILTER: CH. CLASS 60 PEAK DATA: 1.32 G @ 74.56 MS; -0.86 G @ 30.48 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 LEFT FRONT SILL Y-AXIS VELOCITY
 CRASH III DAMAGE ALGORITHM

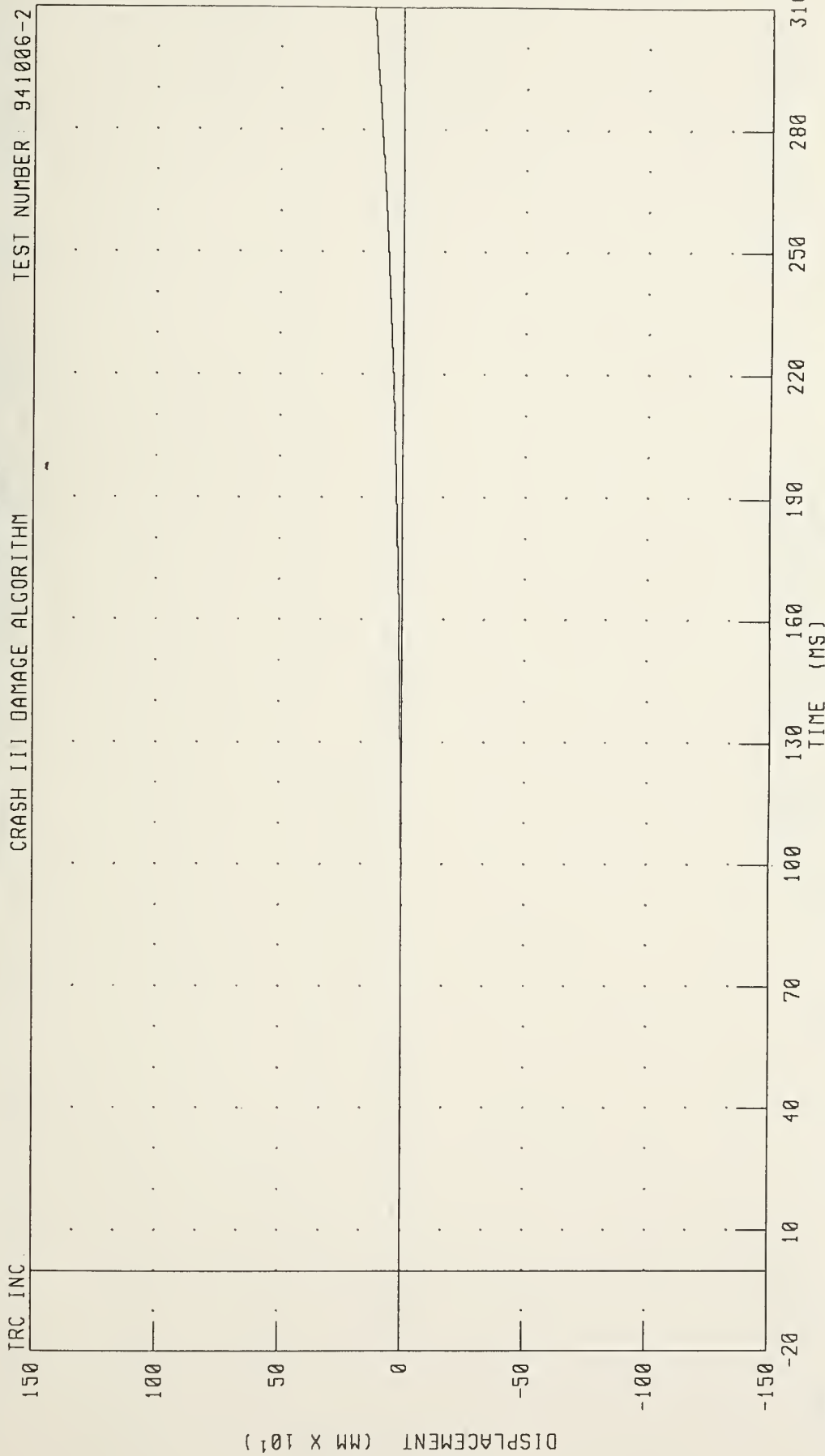
TEST NUMBER 941006-2



CHANNEL: LFSYV1 FILTER: CH. CLASS 180
 PEAK DATA: 3.85 KM/H @ 310.00 MS, -0.21 KM/H @ 32.96 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 LEFT FRONT SILL Y-AXIS DISPLACEMENT

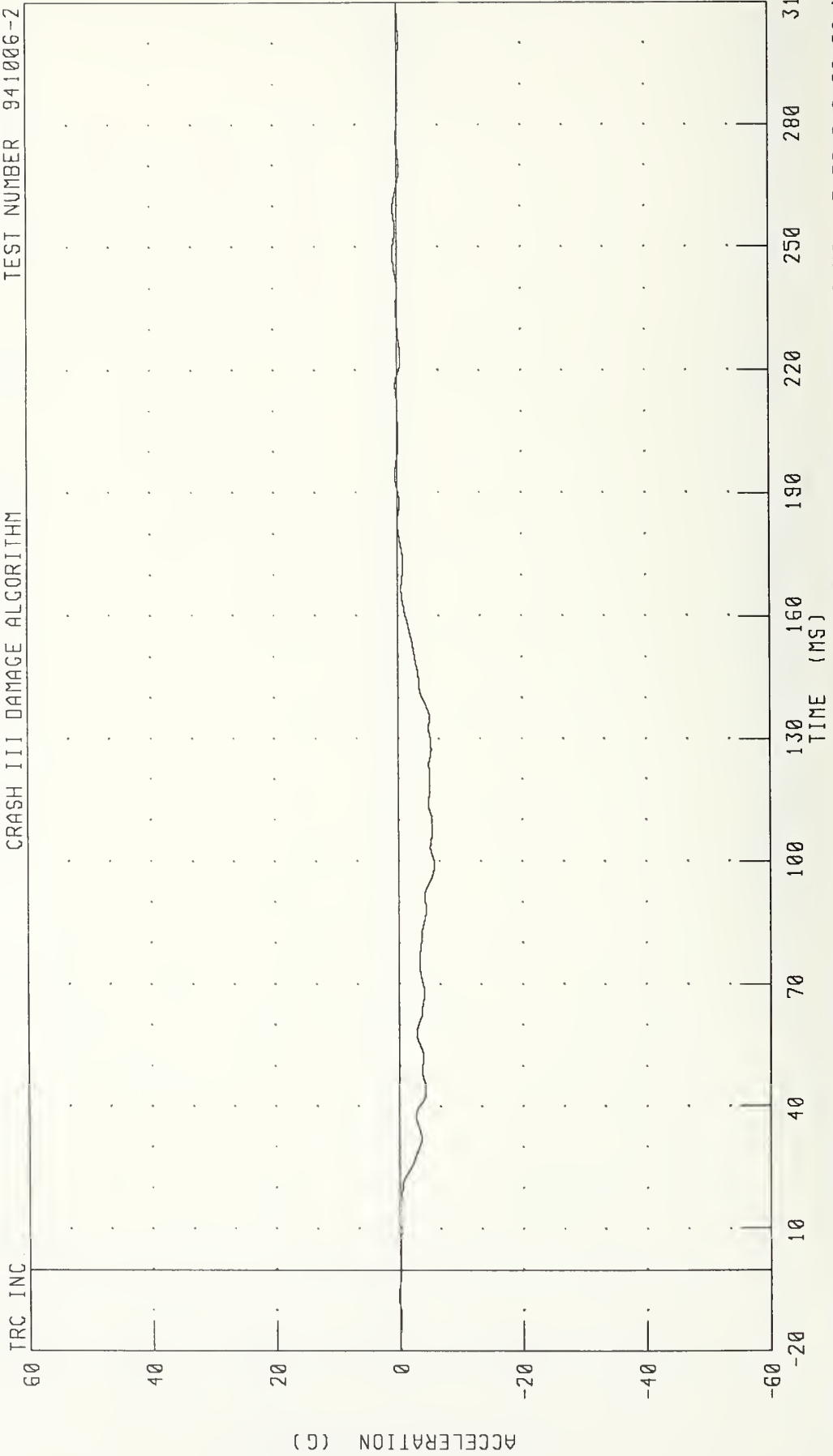
CRASH III DAMAGE ALGORITHM TEST NUMBER: 941006-2



CHANNEL: LFSYD1 FILTER: CH. CLASS 180 PEAK DATA: 119.87 MM @ 310.00 MS, -1.12 MM @ 42.32 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

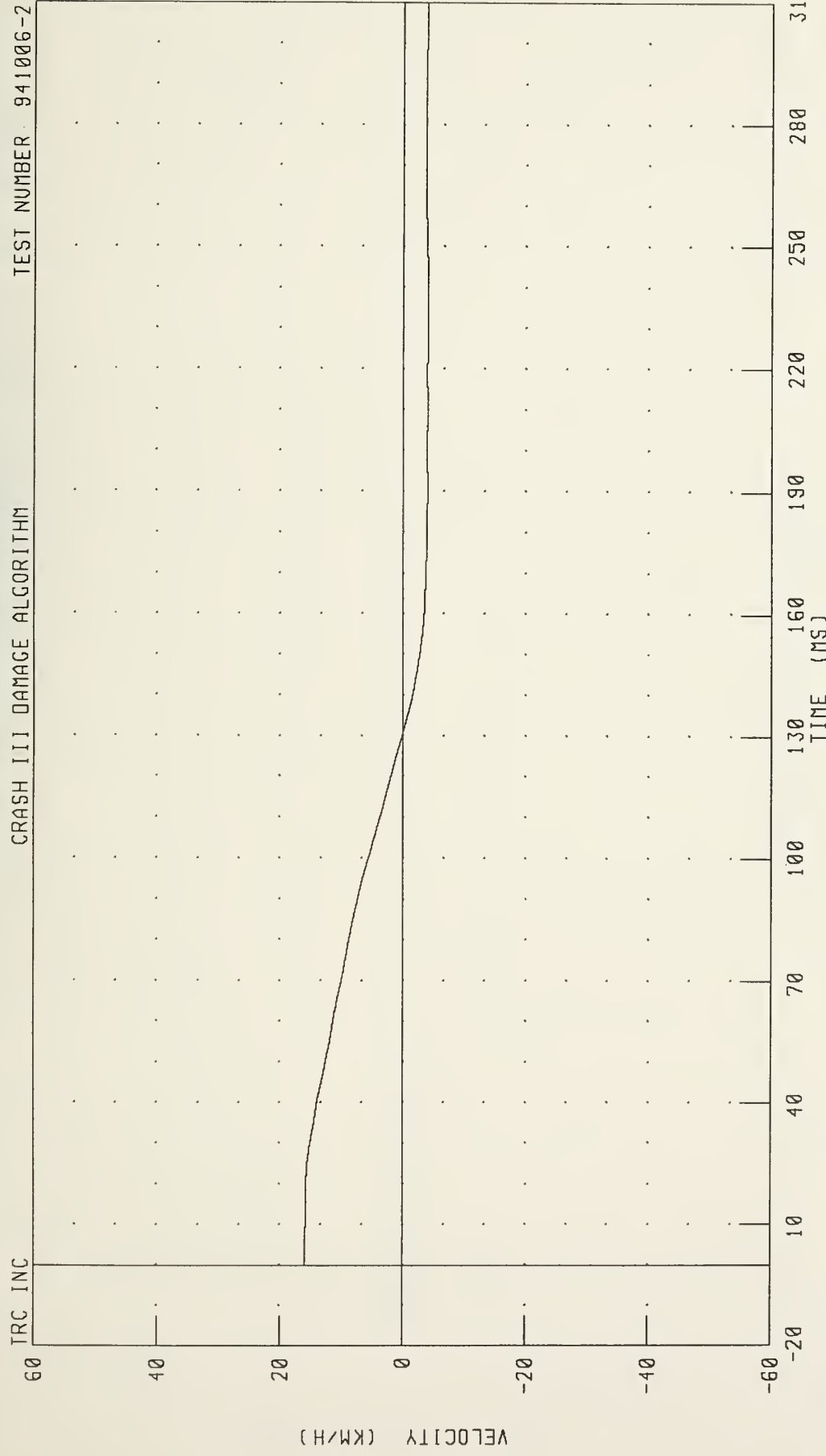


CHANNEL: RFSXG1 FILTER: CH. CLASS 60

PEAK DATA: 0.75 G @ 248.40 MS; -5.76 G @ 99.20 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT FRONT SILL X-AXIS VELOCITY
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2



CHANNEL: RFSXV1 FILTER: CH. CLASS 180 PEAK DATA: 15.90 KM/H @ 0.00 MS; -4.08 KM/H @ 232.96 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT FRONT SILL X-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

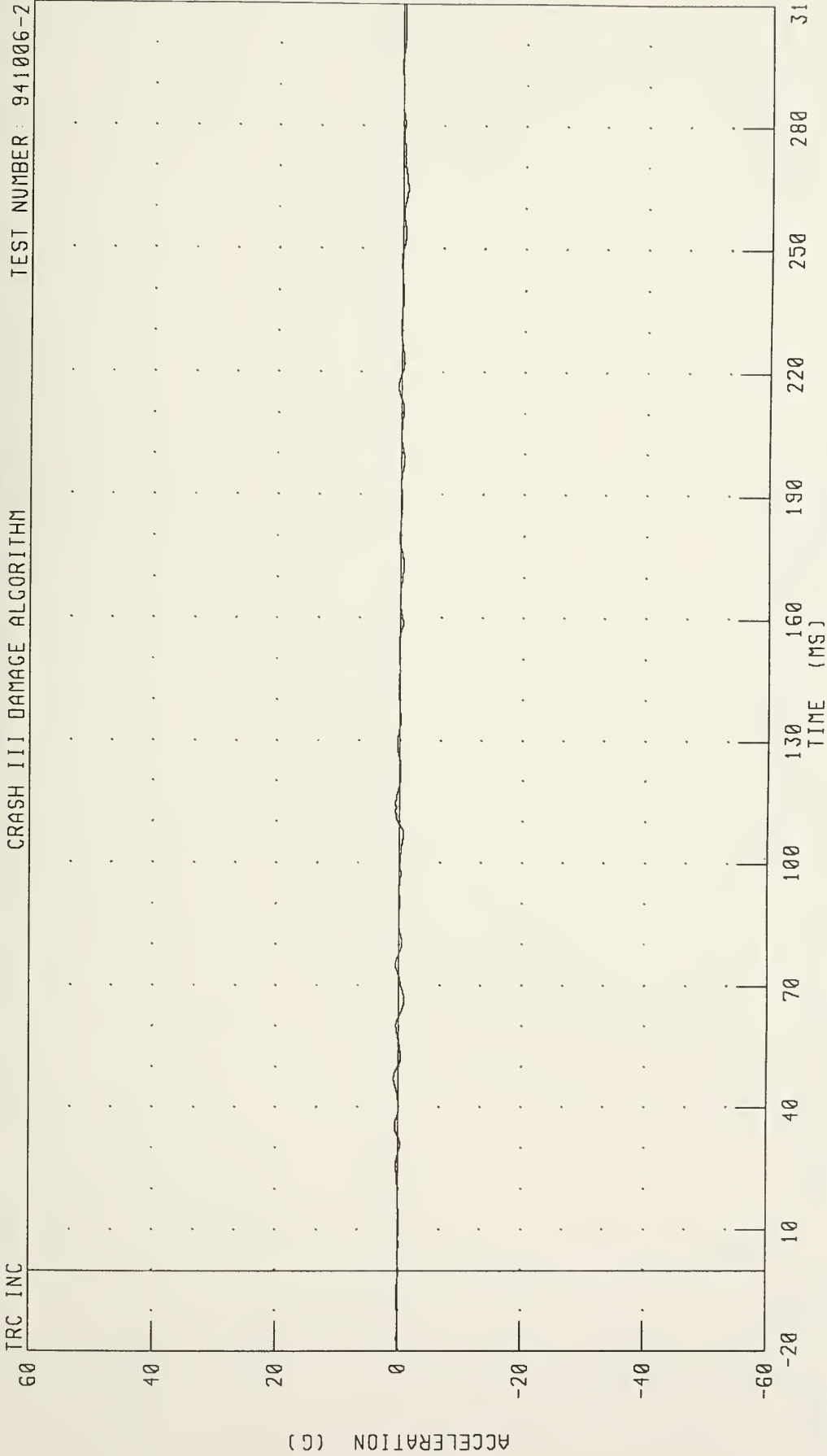


CHANNEL: RFSXD1 FILTER: CH. CLASS 180

PEAK DATA: 361.47 MM @ 130.64 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL Y-AXIS ACCELERATION

CRASH III DAMAGE ALGORITHM TEST NUMBER: 941006-2

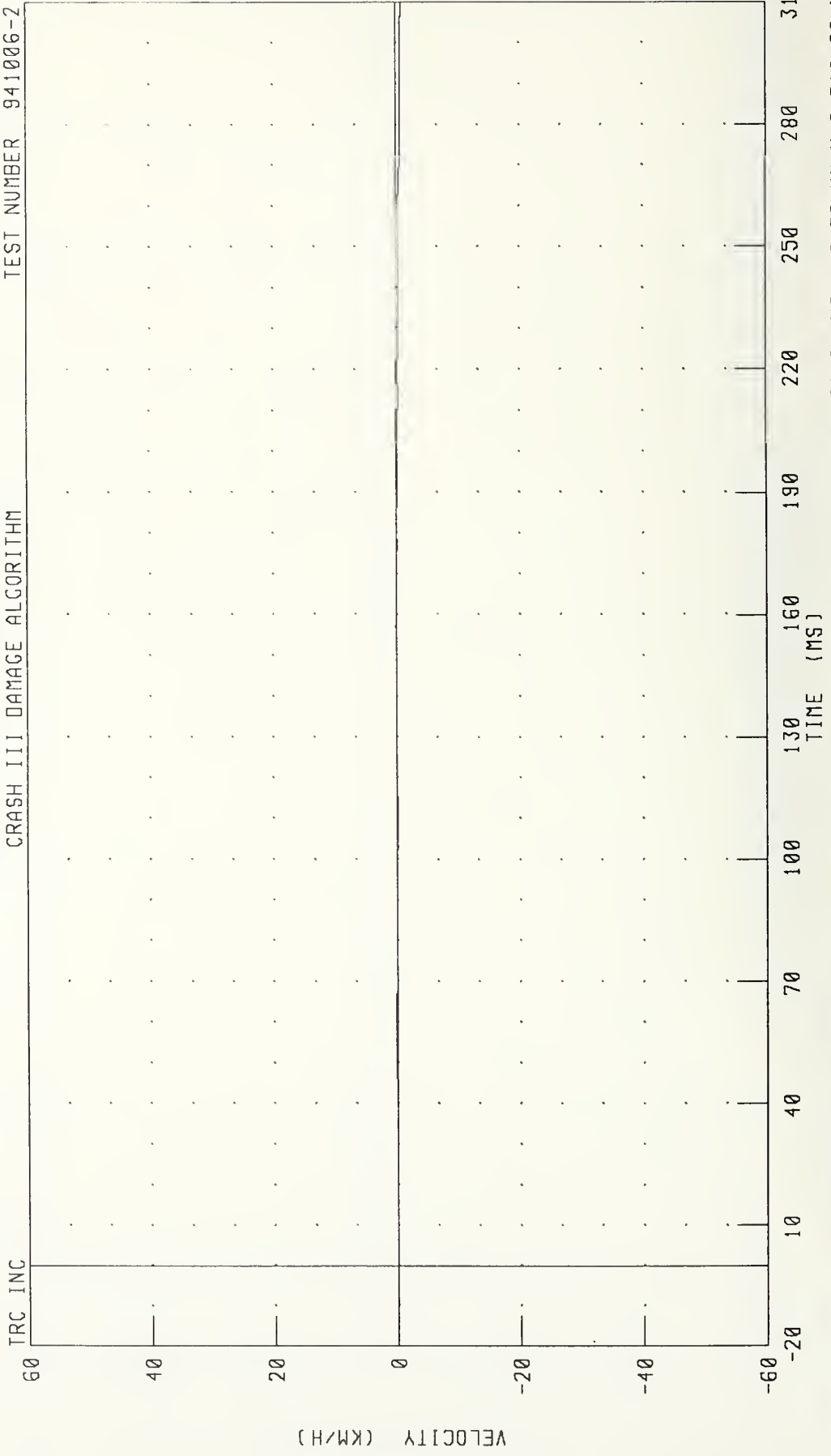


CHANNEL: RFSYGI FILTER: CH. CLASS 60

PEAK DATA: 0.79 G @ 47.12 MS, -0.88 G @ 66.48 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT FRONT SILL Y-AXIS VELOCITY
 CRASH III DAMAGE ALGORITHM

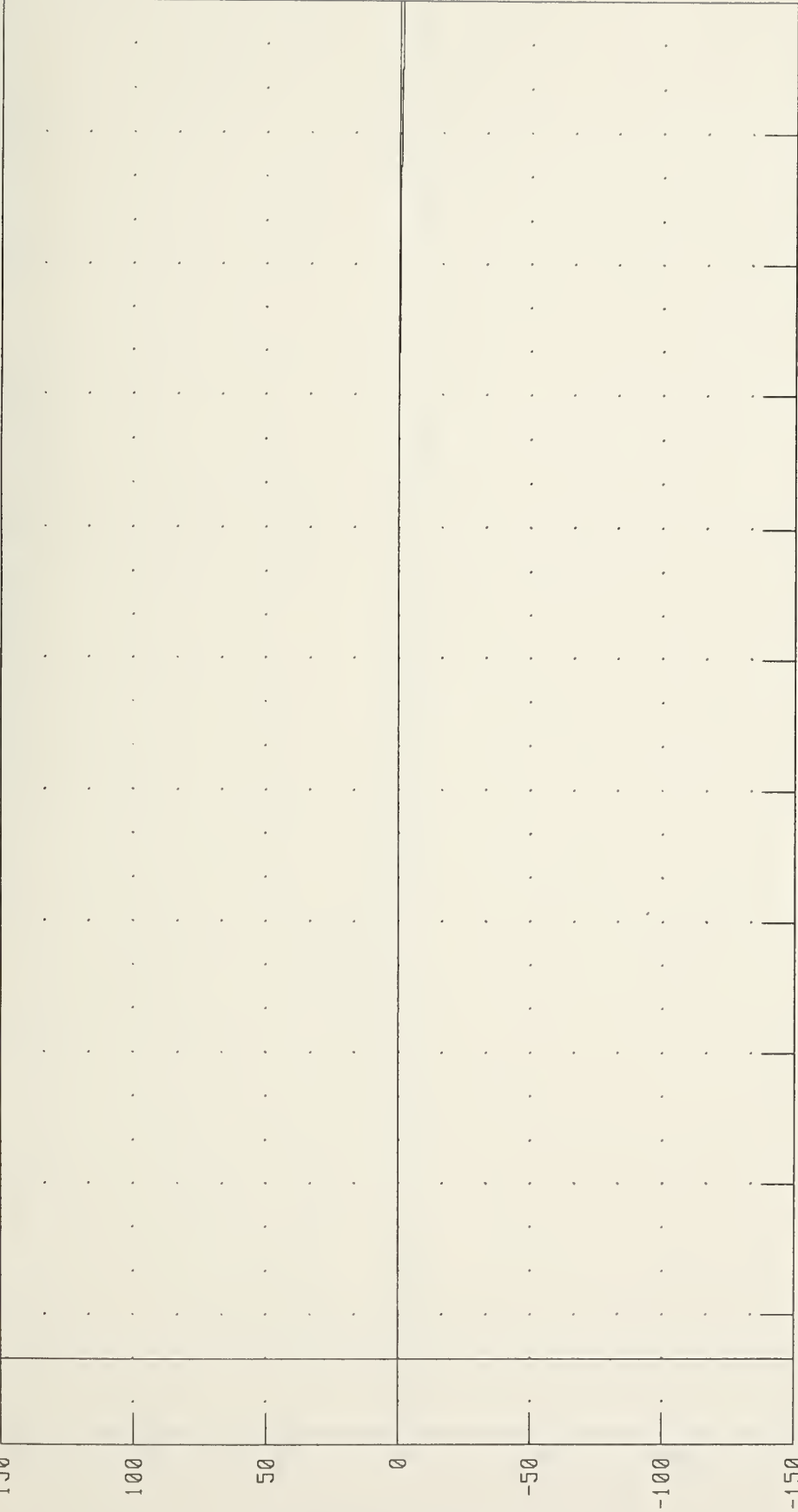
TEST NUMBER 941006-2



1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL Y-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

TRC INC



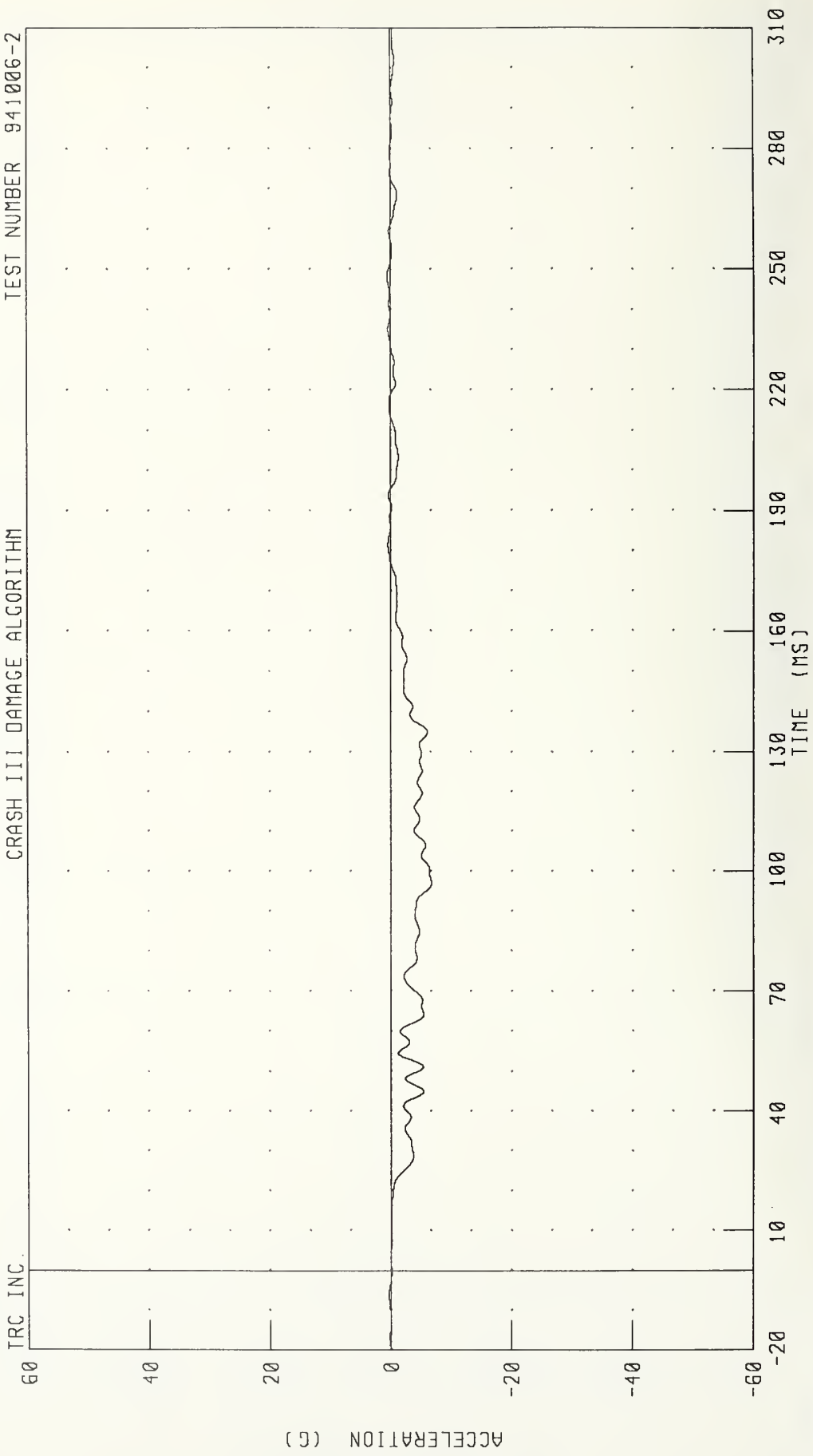
CHANNEL: RFSYD1 FILTER: CH. CLASS 180

PEAK DATA: 1.18 MM @ 90.56 MS; -13.31 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS ACCELERATION

CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2



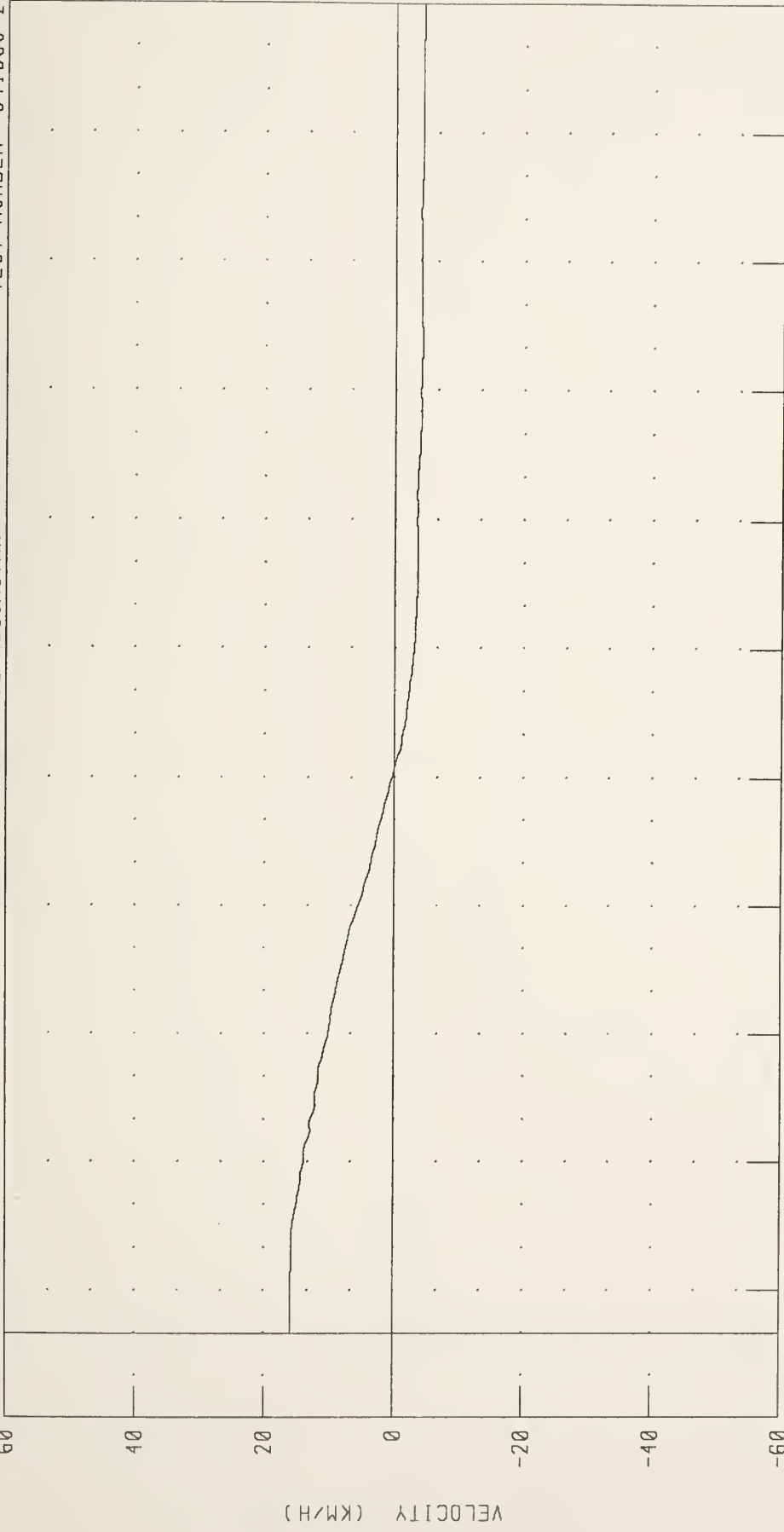
CHANNEL: TLRXG1 FILTER: CH. CLASS 60

PEAK DATA: 0.59 G @ 248.16 MS; -6.74 G @ 96.88 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2

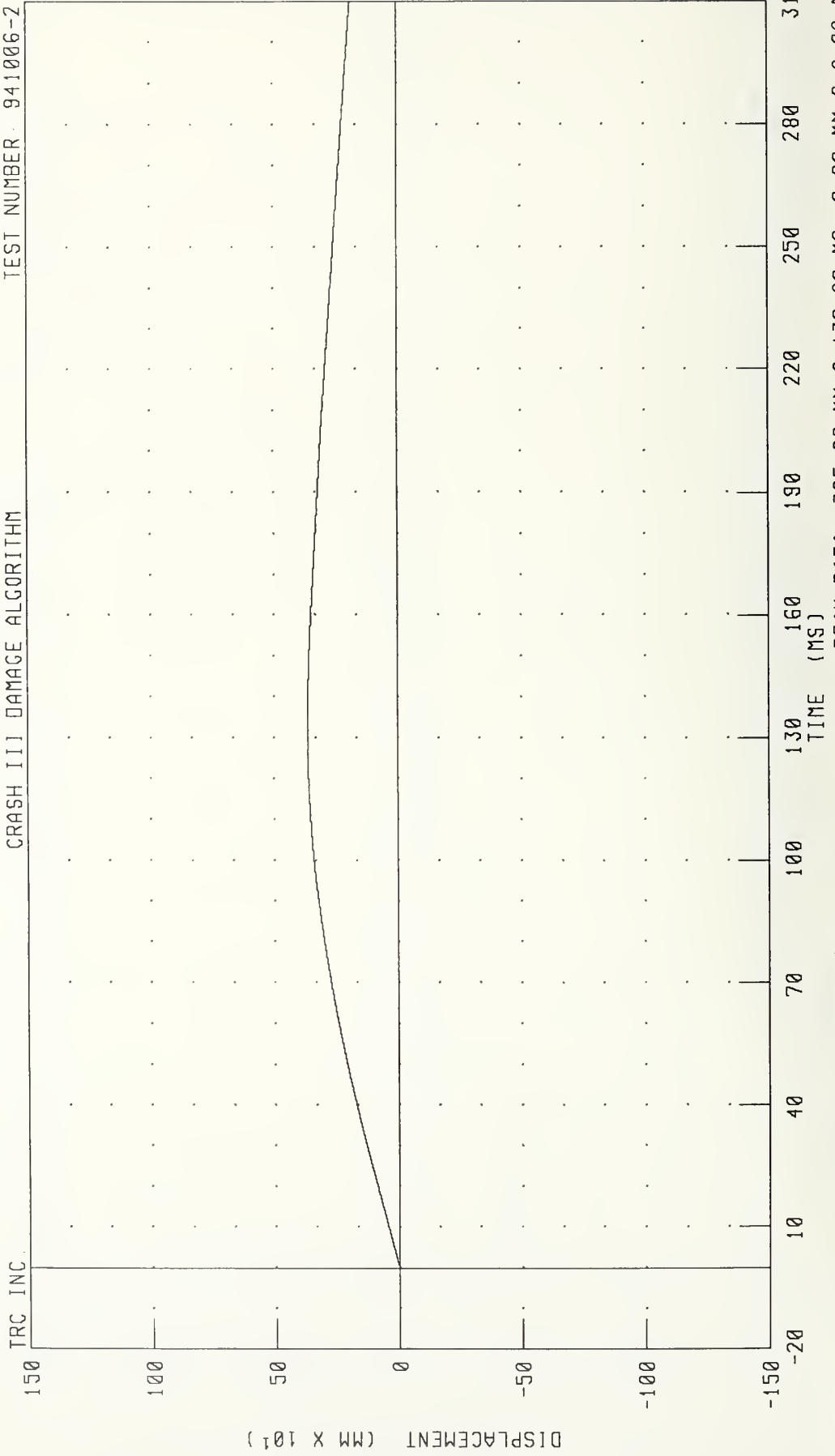
TRC INC



CHANNEL: TLRXV1 FILTER: CH. CLASS 180
PEAK DATA: 15.90 KM/H @ 5.44 MS; -4.45 KM/H @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-2

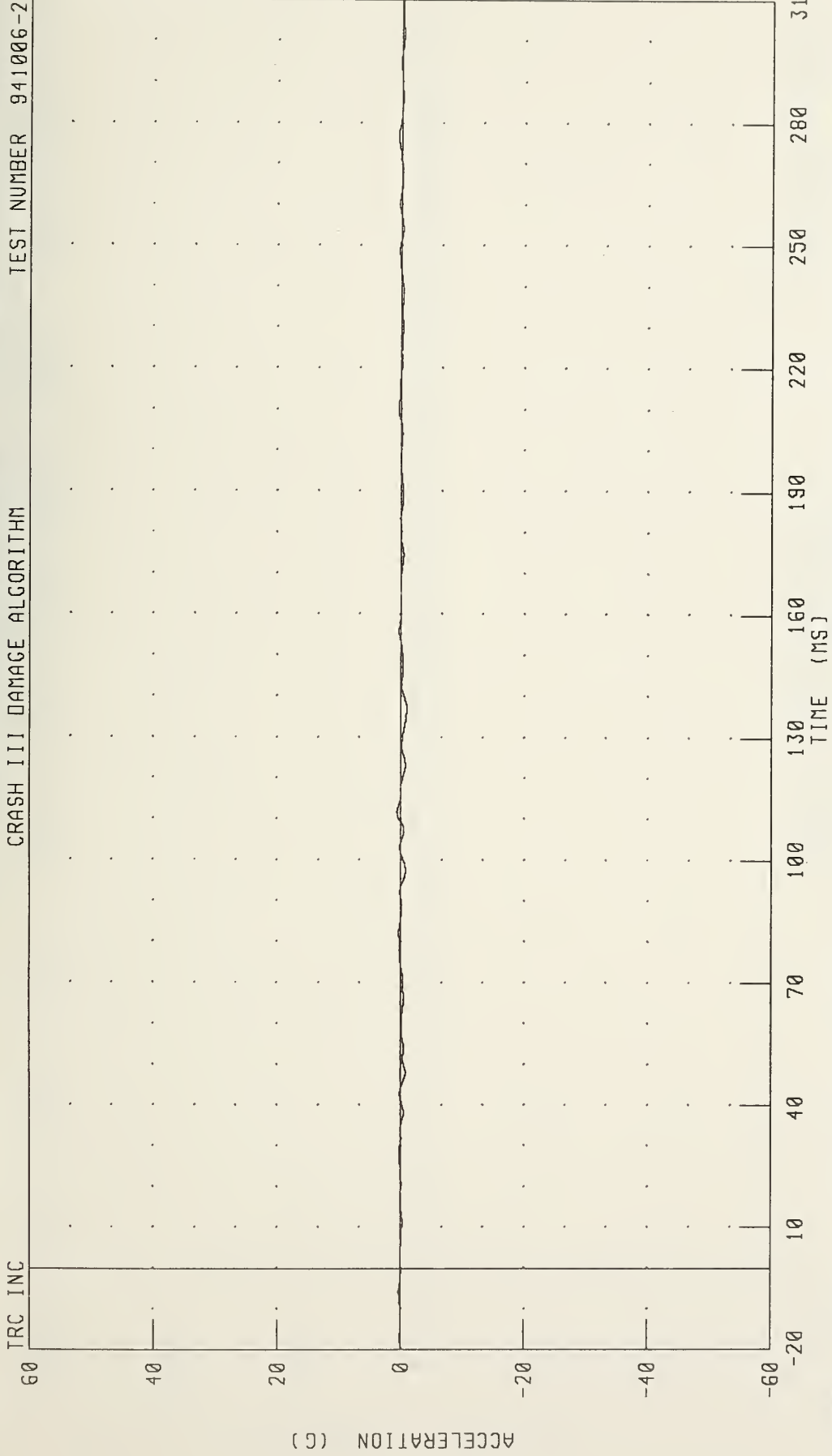


CHANNEL: TLRXD1 FILTER: CH. CLASS 180

PEAK DATA: 365.68 MM @ 132.00 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

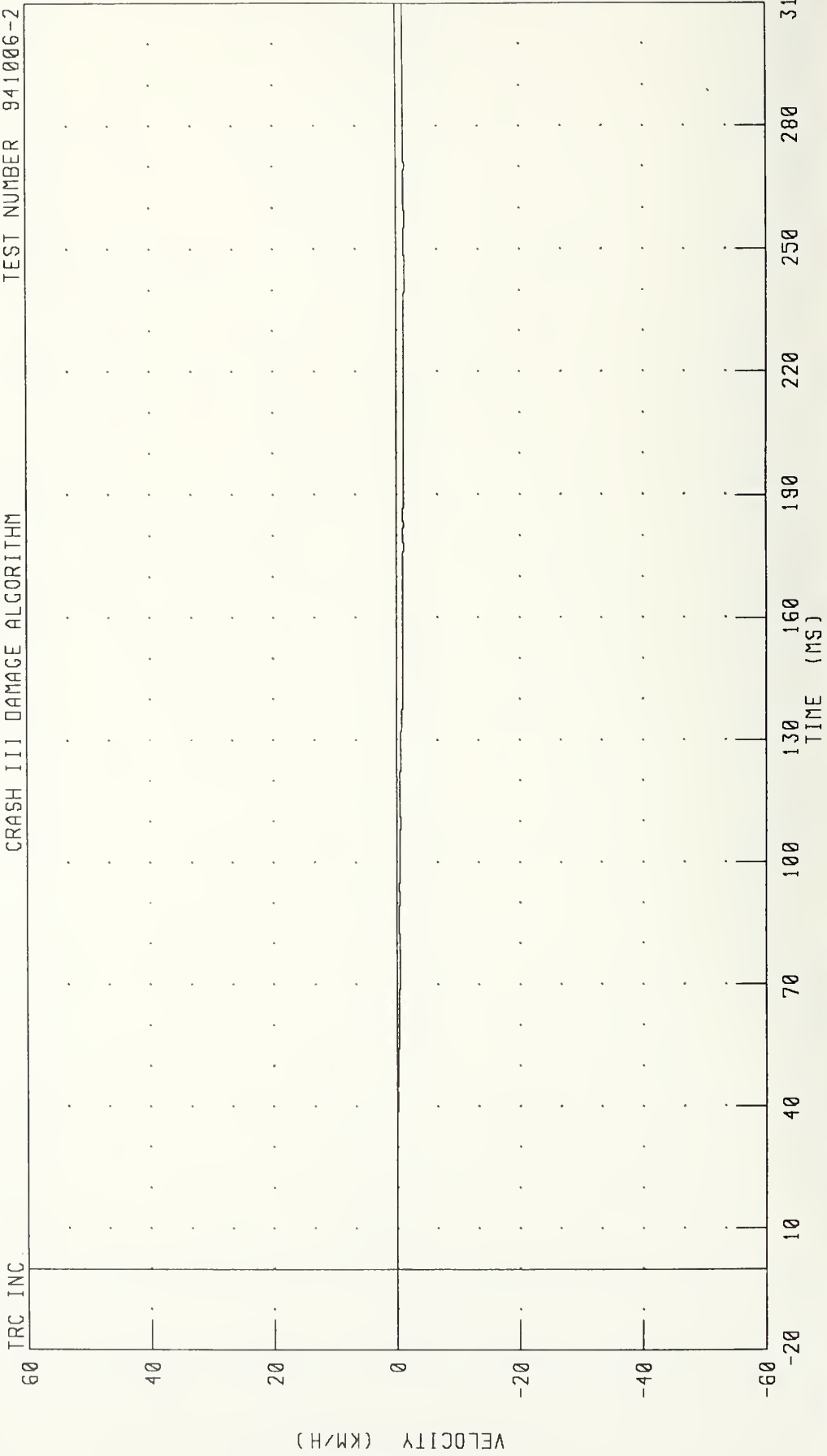
TEST NUMBER 941006-2



CHANNEL: TLRYG1 FILTER: CH. CLASS 60 PEAK DATA: 0.61 G @ 111.76 MS, -1.07 G @ 137.12 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT Y-AXIS VELOCITY

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-2

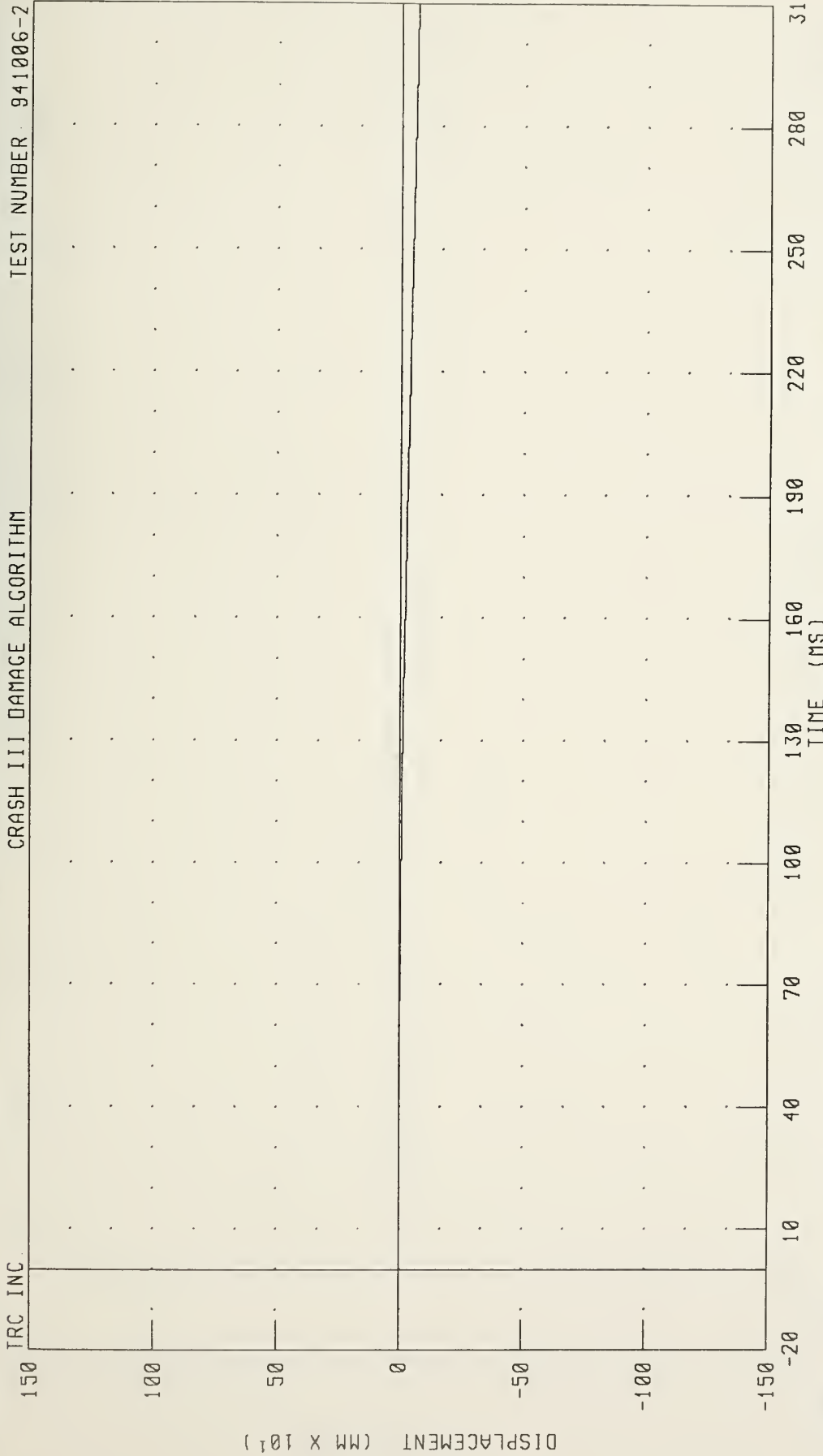


CHANNEL: TLRYV1 FILTER: CH. CLASS 180

PEAK DATA: 0.01 KM/H @ 4.96 MS; -1.29 KM/H @ 243.12 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 LEFT REAR SEAT Y-AXIS DISPLACEMENT

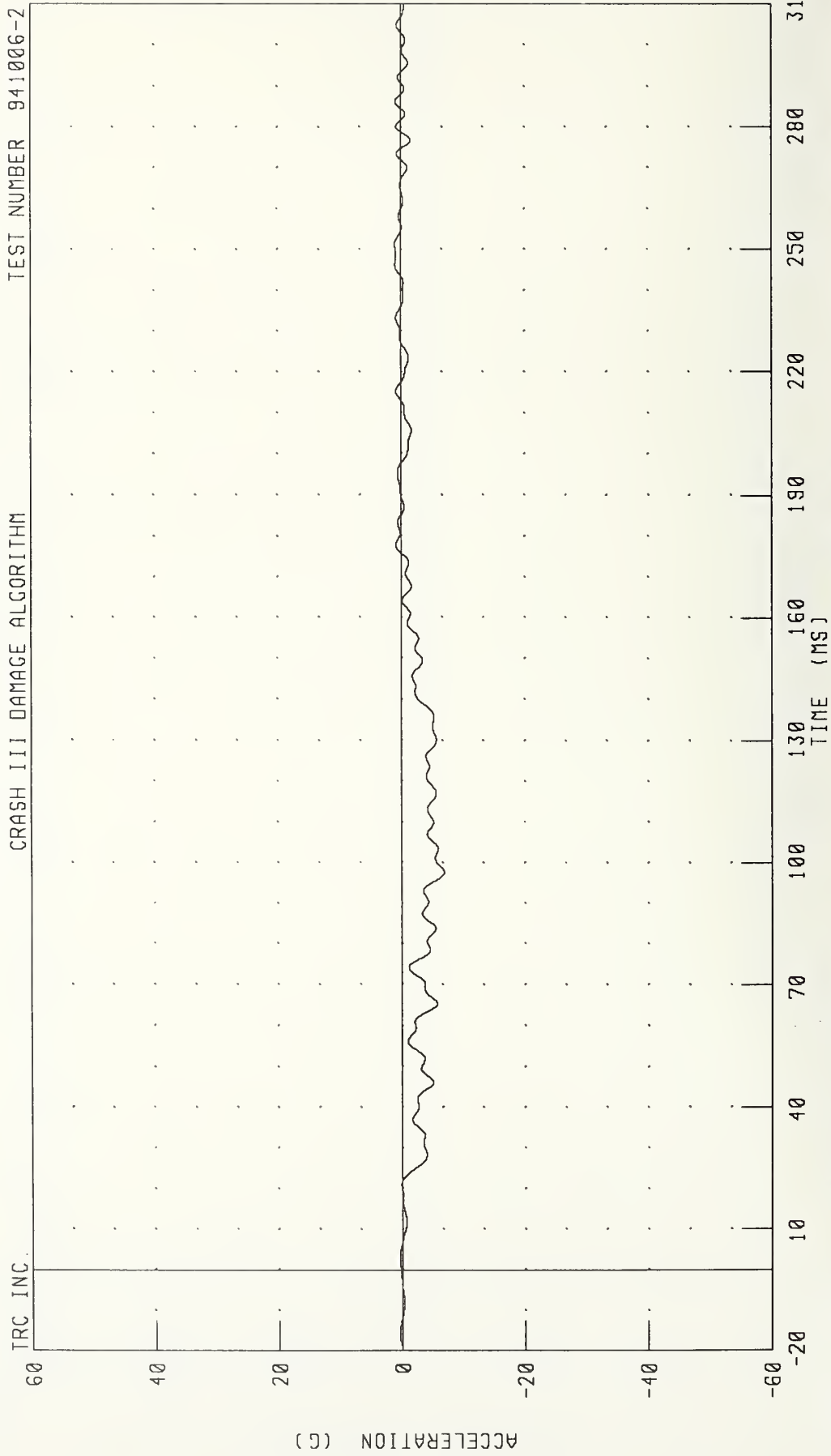
CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-2



CHANNEL: TLRYD1 FILTER: CH CLASS 180 PEAK DATA: 0.01 MM @ 6.40 MS; -67.44 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-2



CHANNEL: TRRXG1 FILTER: CH. CLASS 60

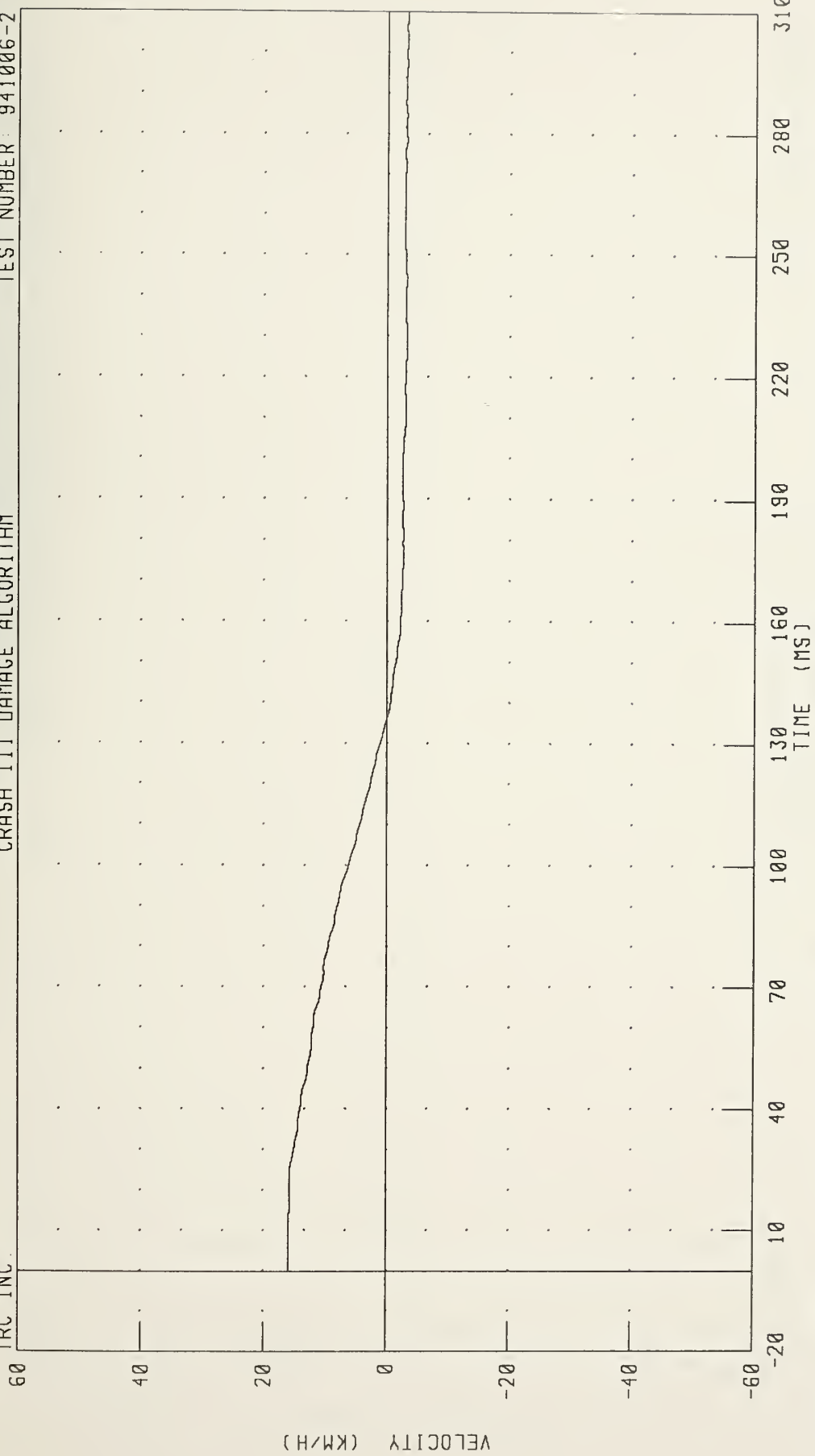
PEAK DATA: 0.99 G @ 251.20 MS; -6.90 G @ 97.52 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS VELOCITY

TEST NUMBER: 941006-2

CRASH III DAMAGE ALGORITHM

TRC INC.

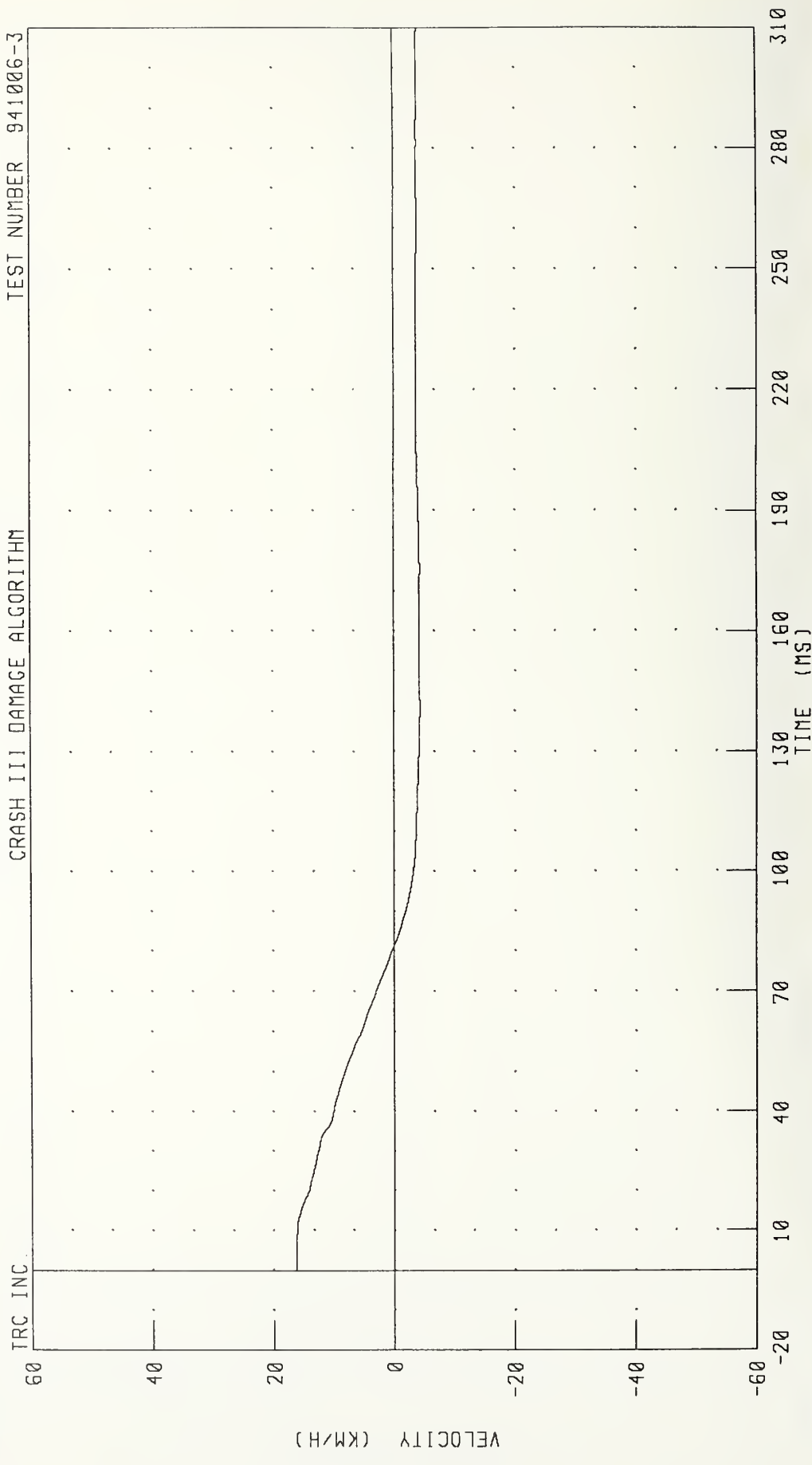


CHANNEL: TRRXV1 FILTER: CH. CLASS 180

PEAK DATA: 15.97 KM/H @ 5.76 MS; -3.24 KM/H @ 303.12 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT FRONT SILL X-AXIS VELOCITY
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3



CHANNEL: RFSXV1 FILTER: CH. CLASS 180 PEAK DATA: 16.33 KM/H @ 0.56 MS; -4.33 KM/H @ 140.32 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

TRC INC.

150

100

50

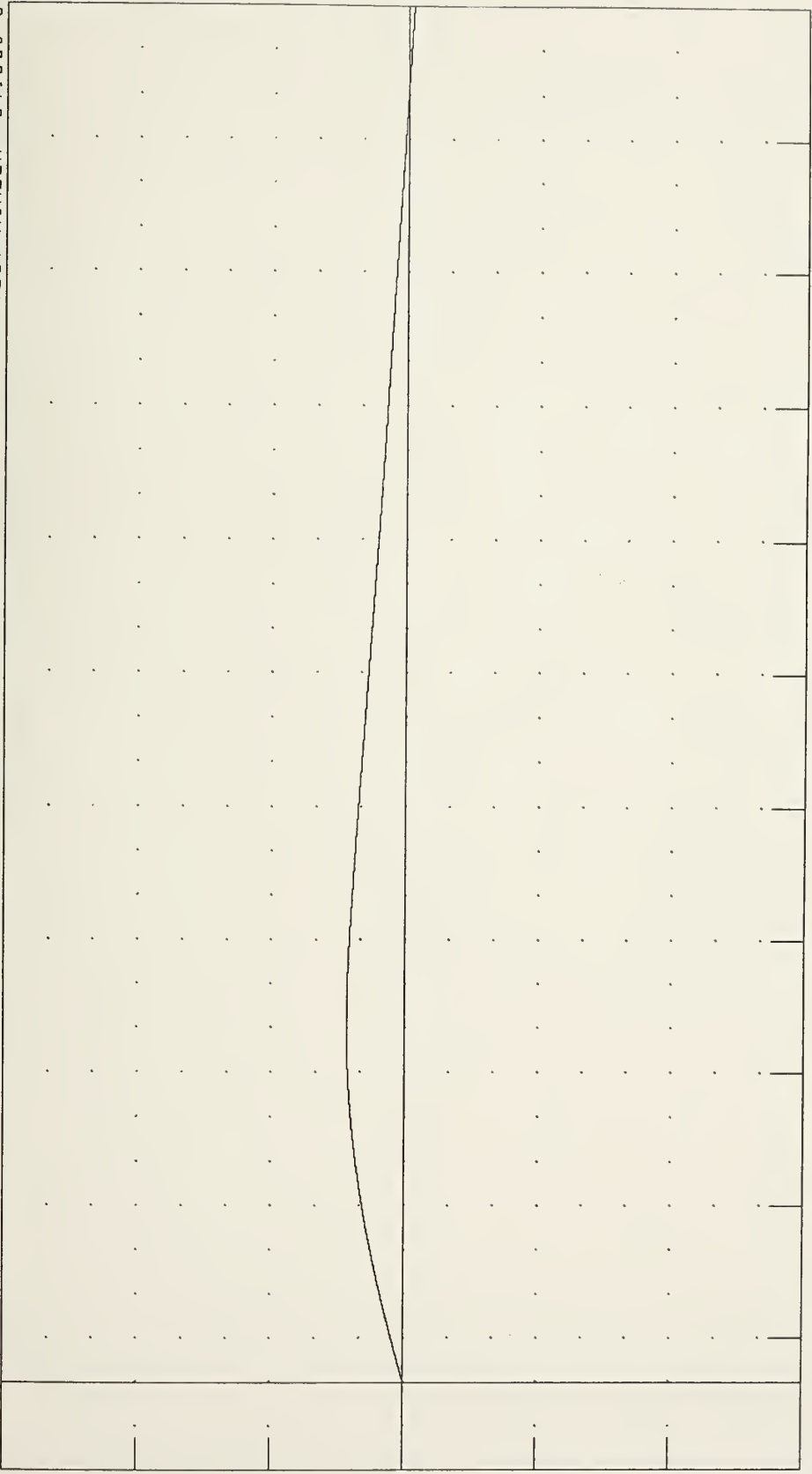
0

-50

-100

-150

DISPLACEMENT (MM X 10¹)



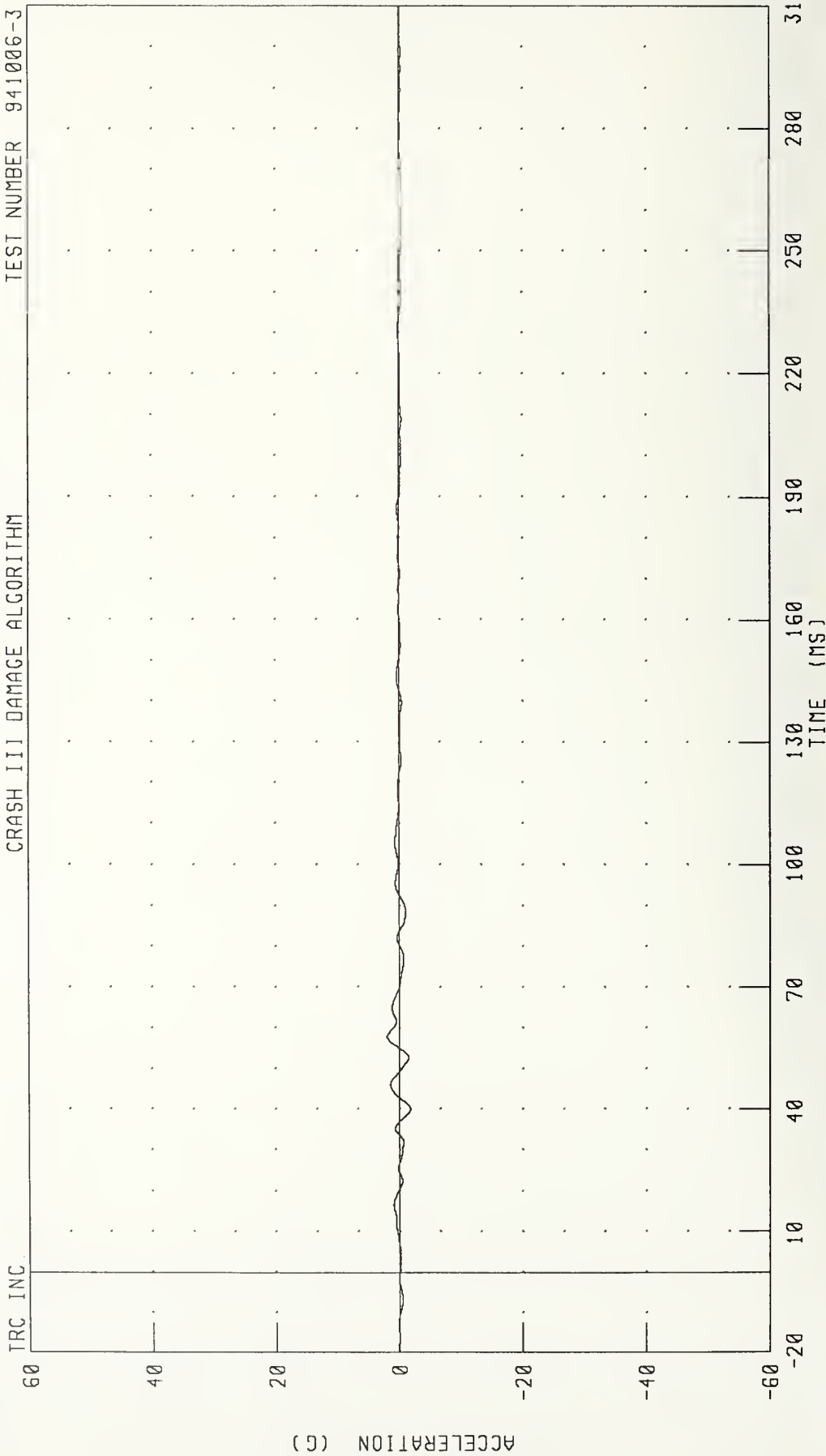
310 280 250 220 190 160 130
TIME (MS)

CHANNEL: RFSXD1 FILTER: CH. CLASS 180

PEAK DATA: 218.17 MM @ 81.36 MS, -20.46 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL Y-AXIS ACCELERATION

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-3



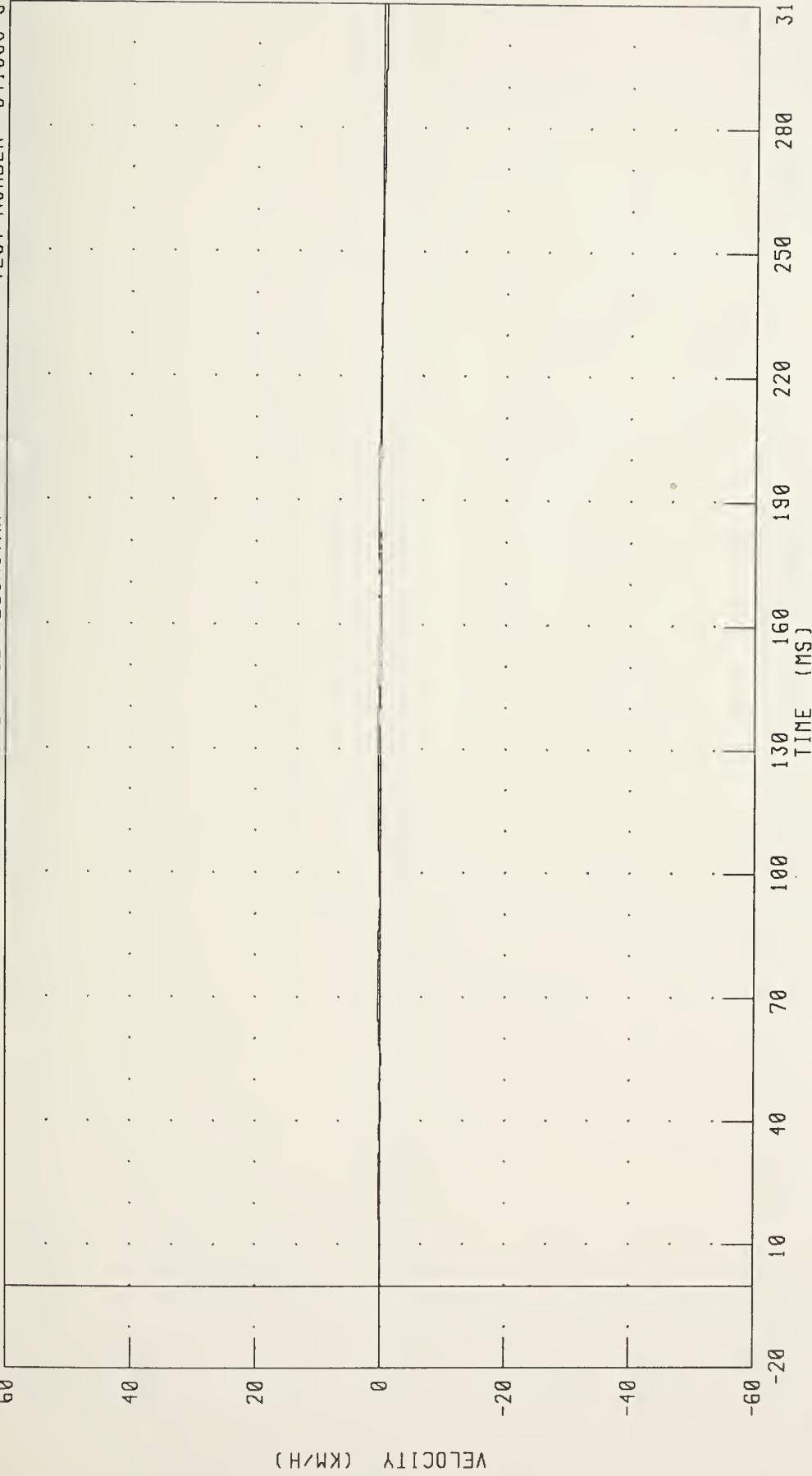
TRC INC
CHANNEL: RFSYG1 FILTER: CH. CLASS 60

PEAK DATA: 1.97 G @ 57.84 MS; -1.79 G @ 39.92 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL Y-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

TRC INC



CHANNEL: RFSYV1 FILTER: CH. CLASS 180

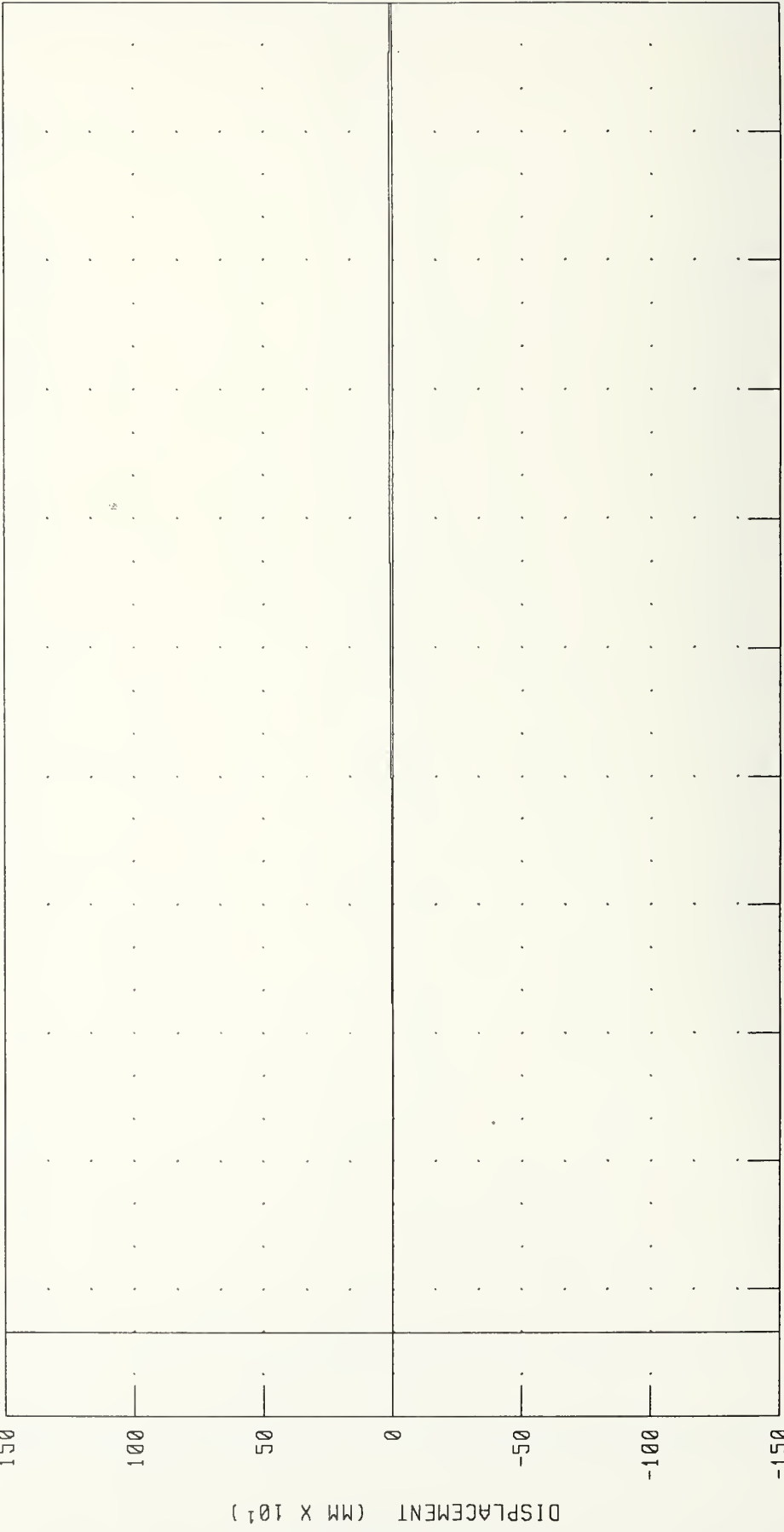
PEAK DATA: 0.43 KM/H @ 122.72 MS; -0.53 KM/H @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT FRONT SILL Y-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

TRC INC

150



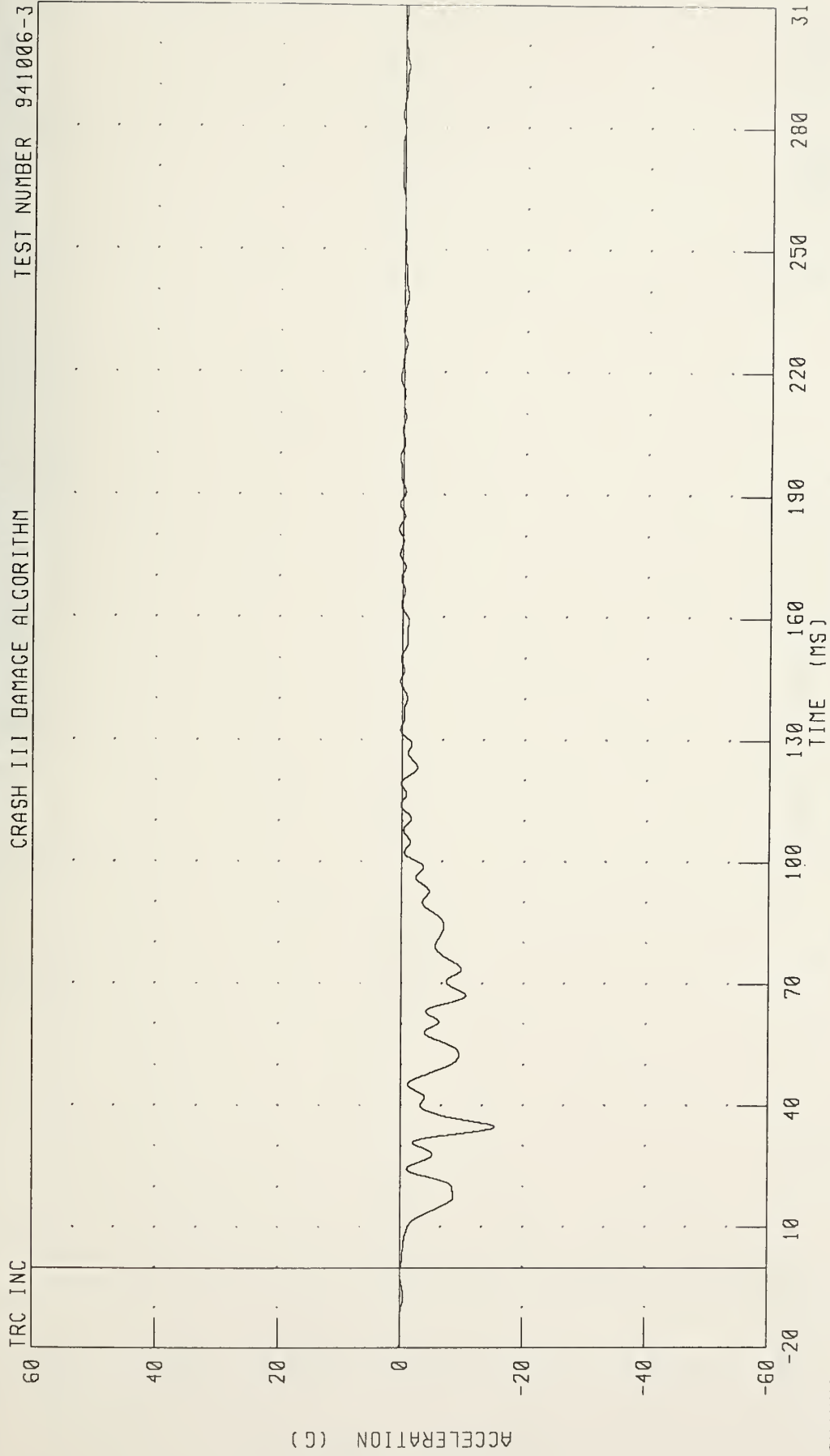
DISPLACEMENT (MM X 10¹)

TIME (MS)

CHANNEL RFSYD1 FILTER: CH CLASS 180 PEAK DATA: 14.46 MM @ 248.00 MS; -0.08 MM @ 11.28 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3



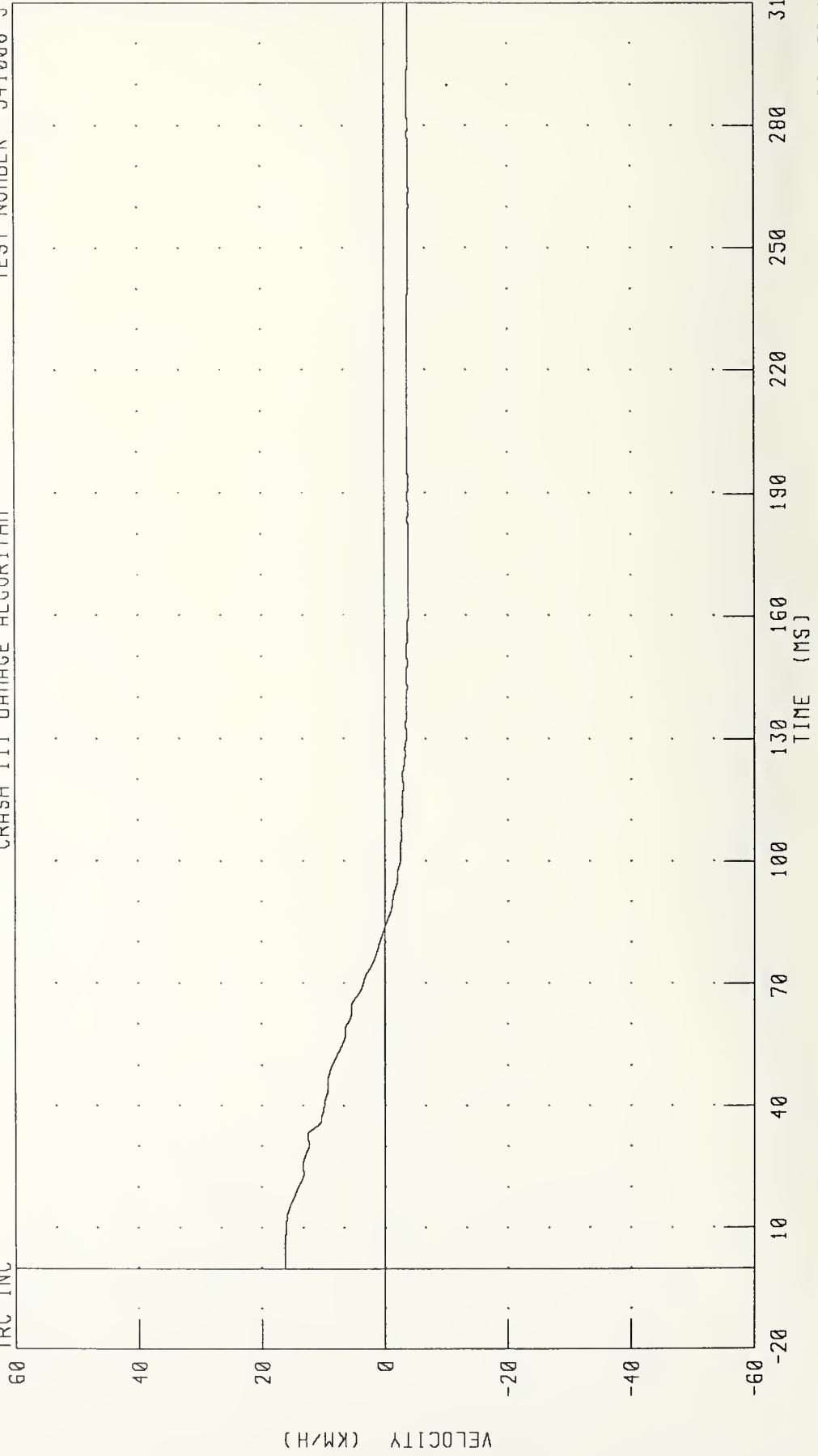
CHANNEL: TLRXG1 FILTER: CH. CLASS 60

PEAK DATA: 0.65 G @ 181.76 MS; -15.35 G @ 34.80 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

TRC INC

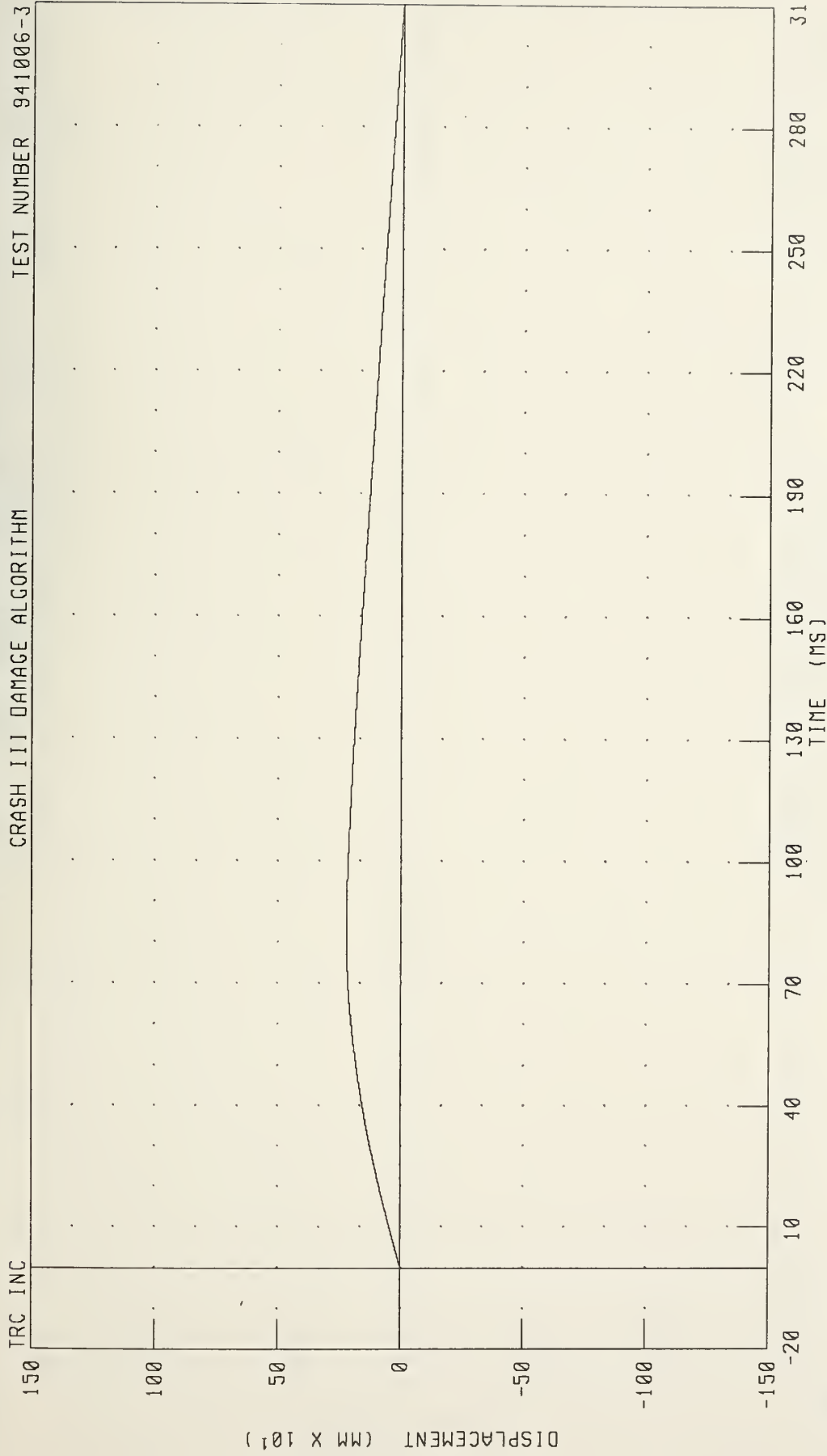


CHANNEL: TLRXV1 FILTER: CH. CLASS 180

PEAK DATA: 16.30 KM/H @ 0.72 MS; -3.98 KM/H @ 264.08 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

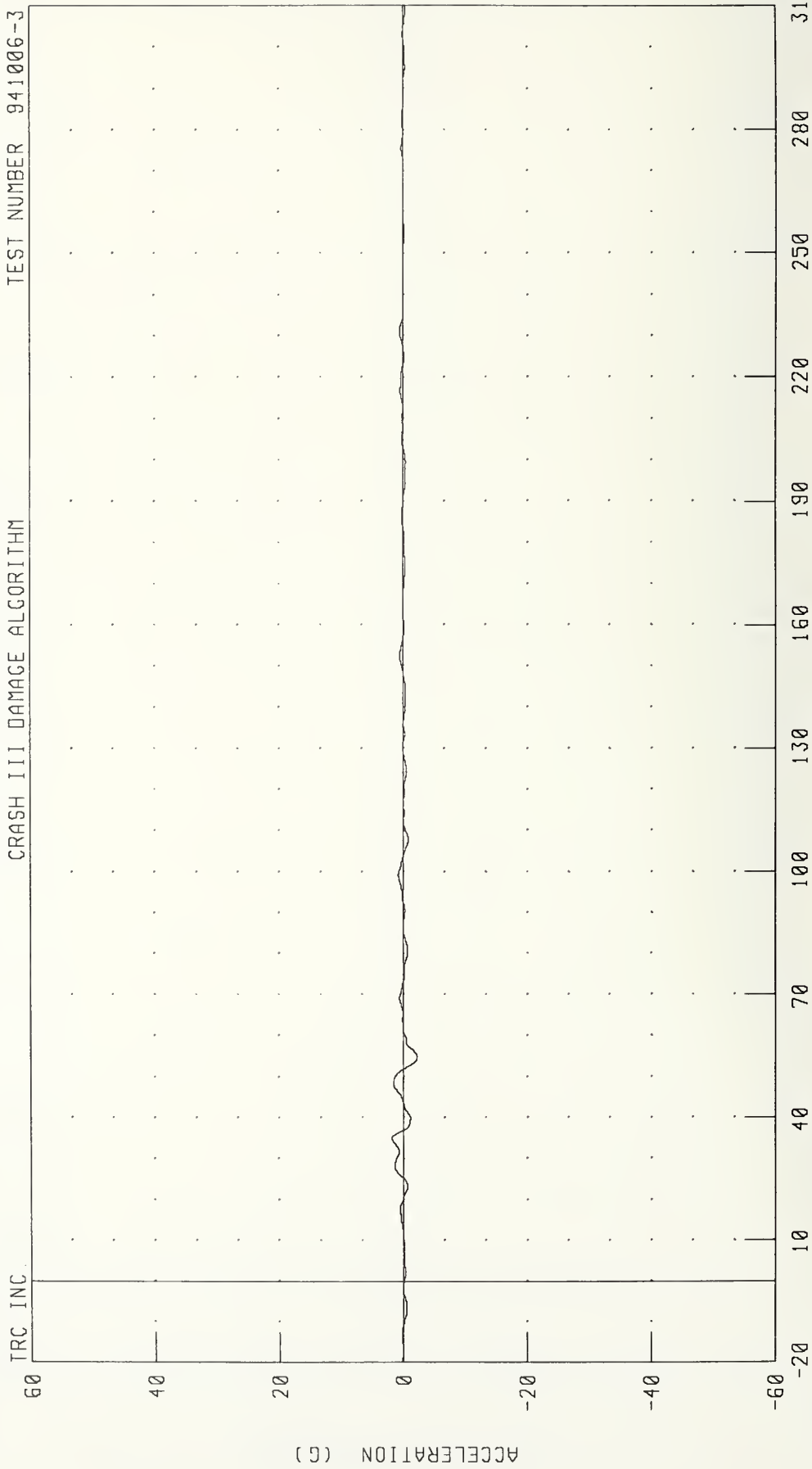


CHANNEL: TLRXD1 FILTER: CH. CLASS 180

PEAK DATA: 221.89 MM @ 83.76 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

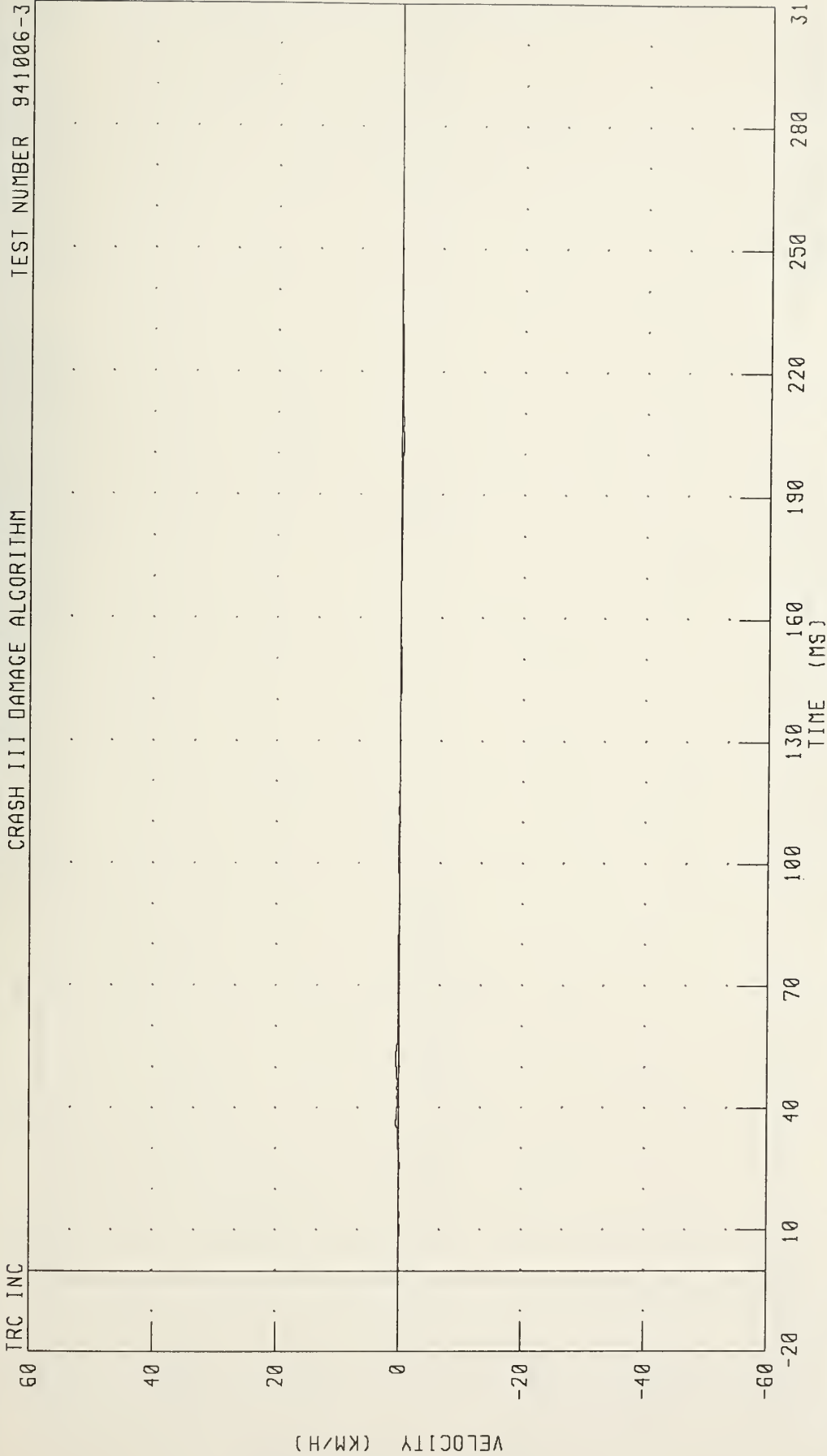
TEST NUMBER 941006-3



CHANNEL: TLRYG1 FILTER: CH CLASS 60 PEAK DATA: 1.88 G @ 34.96 MS, -2.27 G @ 54.56 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT Y-AXIS VELOCITY

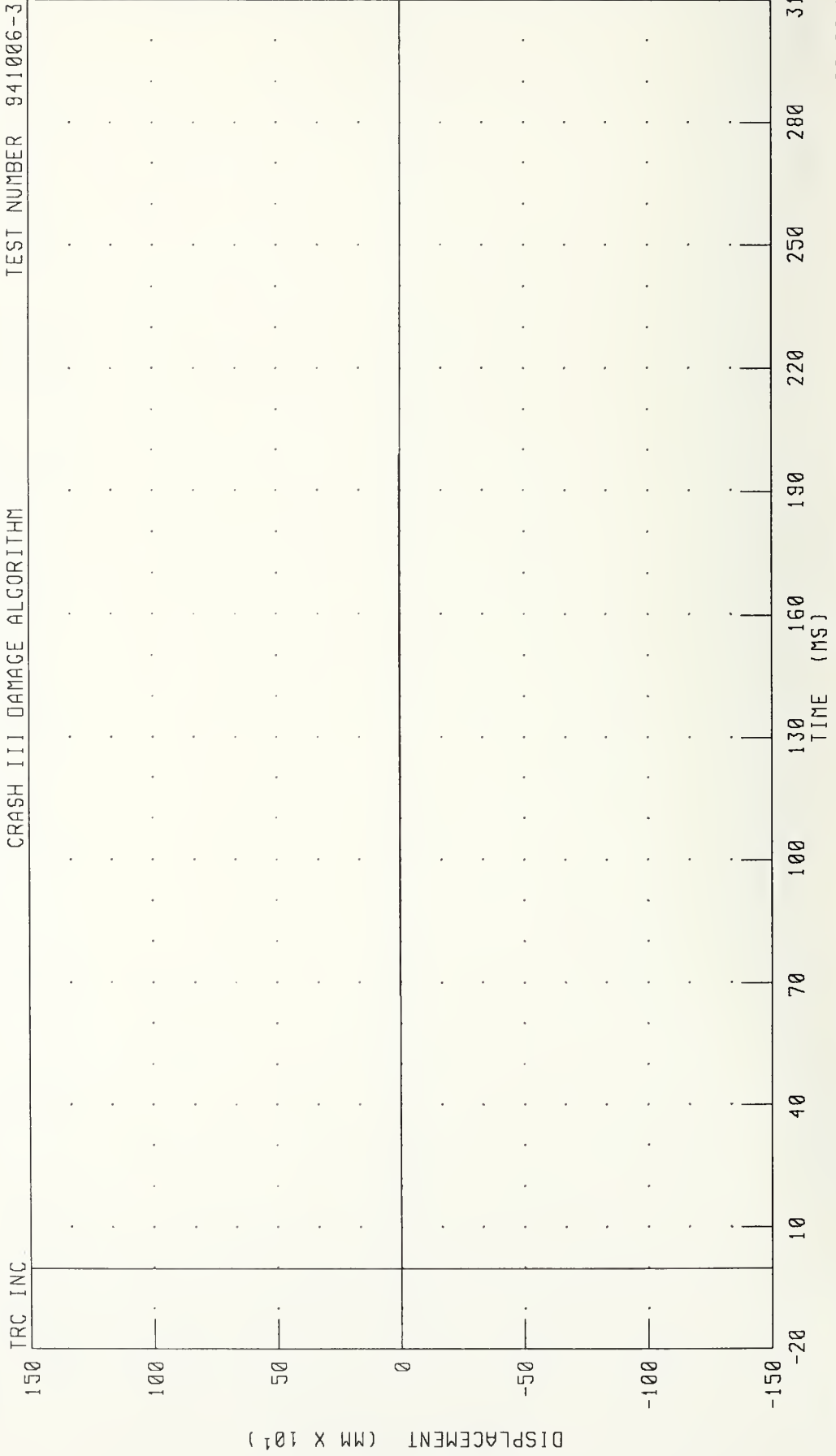
TRC INC
CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-3



CHANNEL: TLRYV1 FILTER: CH CLASS 180 PEAK DATA: 0 54 KM/H @ 52 56 MS; -0 28 KM/H @ 202 40 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 LEFT REAR SEAT Y-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

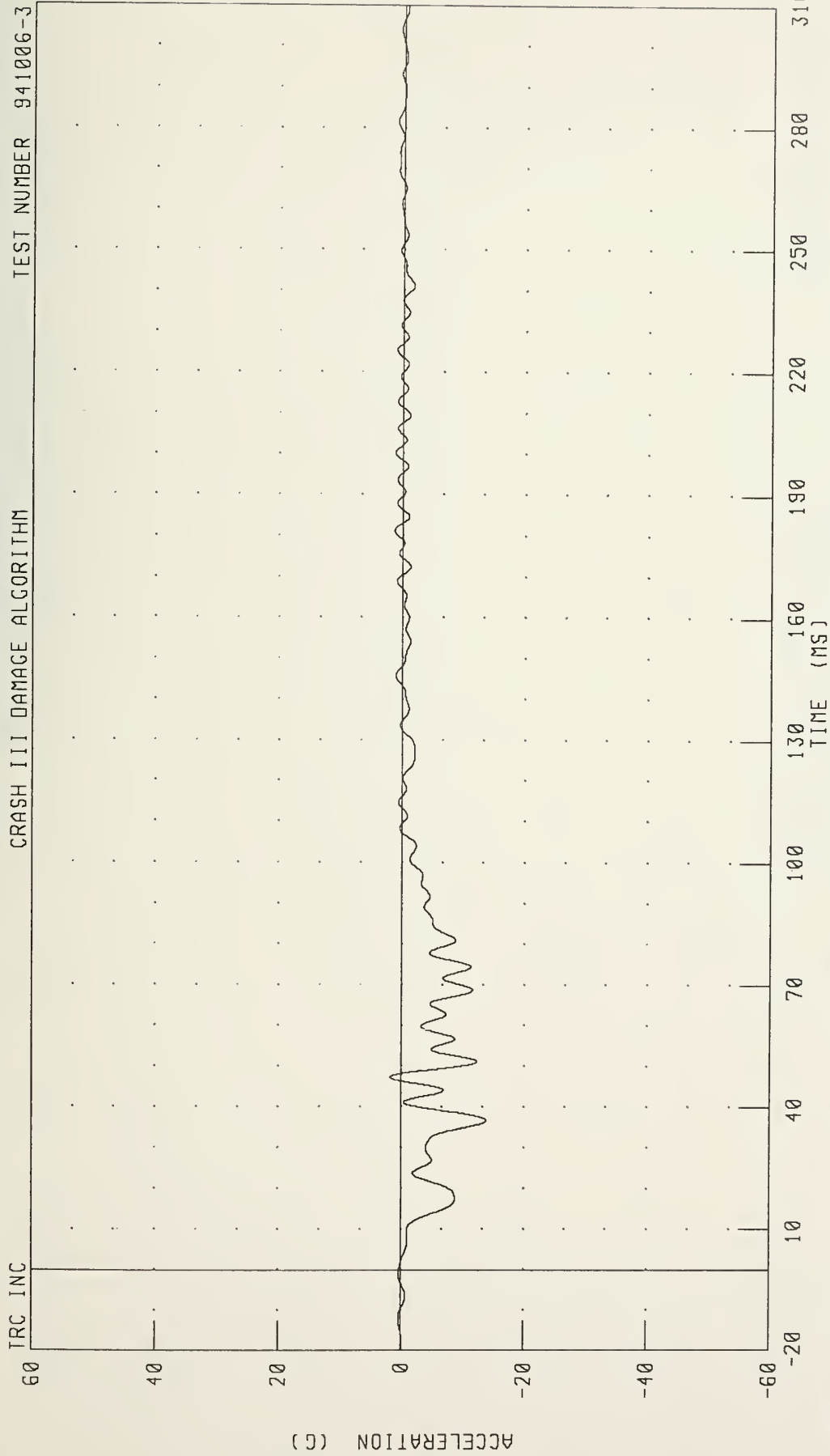


CHANNEL: TLRYD1 FILTER: CH. CLASS 180 PEAK DATA: 4.50 MM @ 126.16 MS; -0.34 MM @ 27.28 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS ACCELERATION

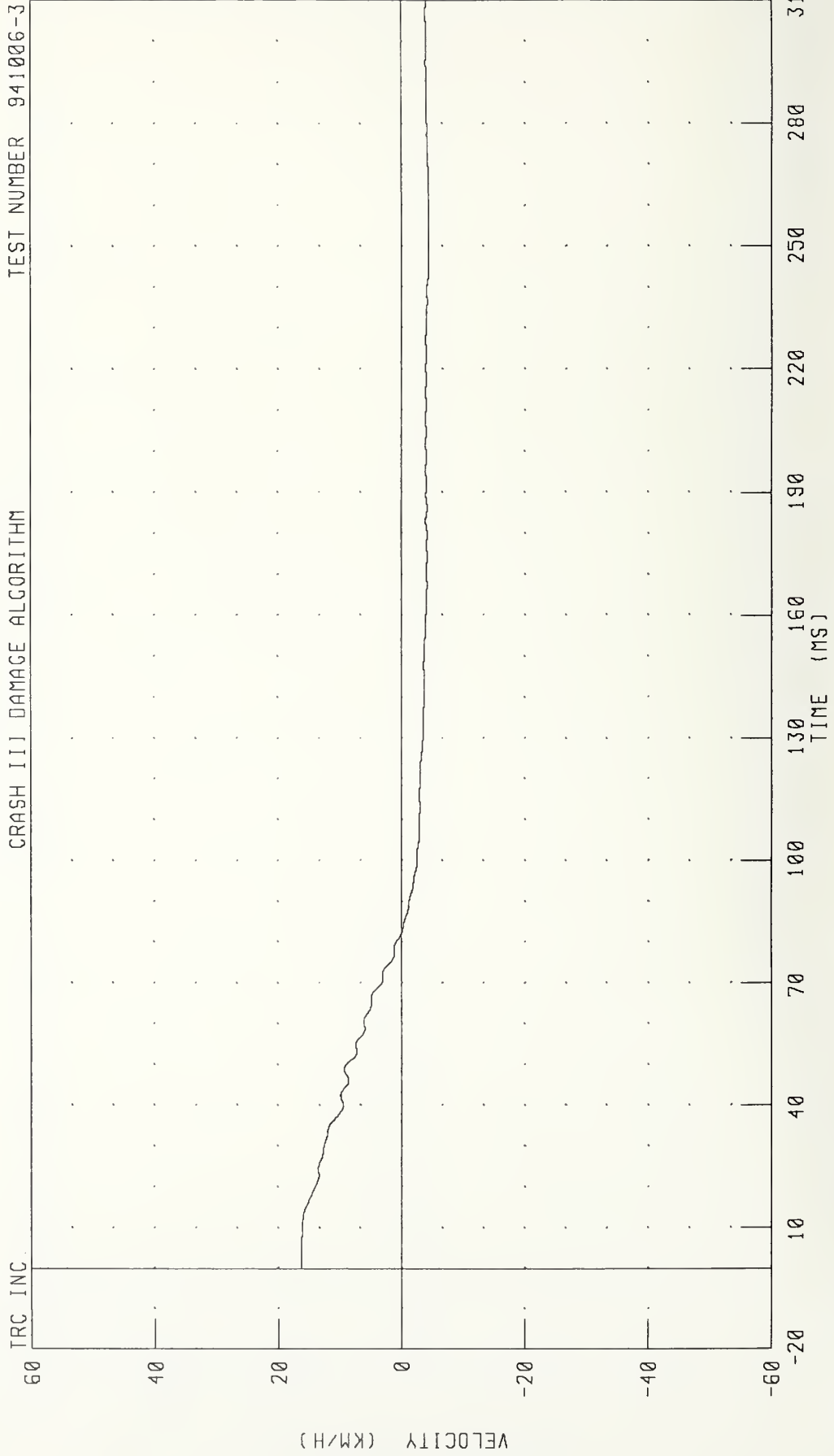
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3



1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3



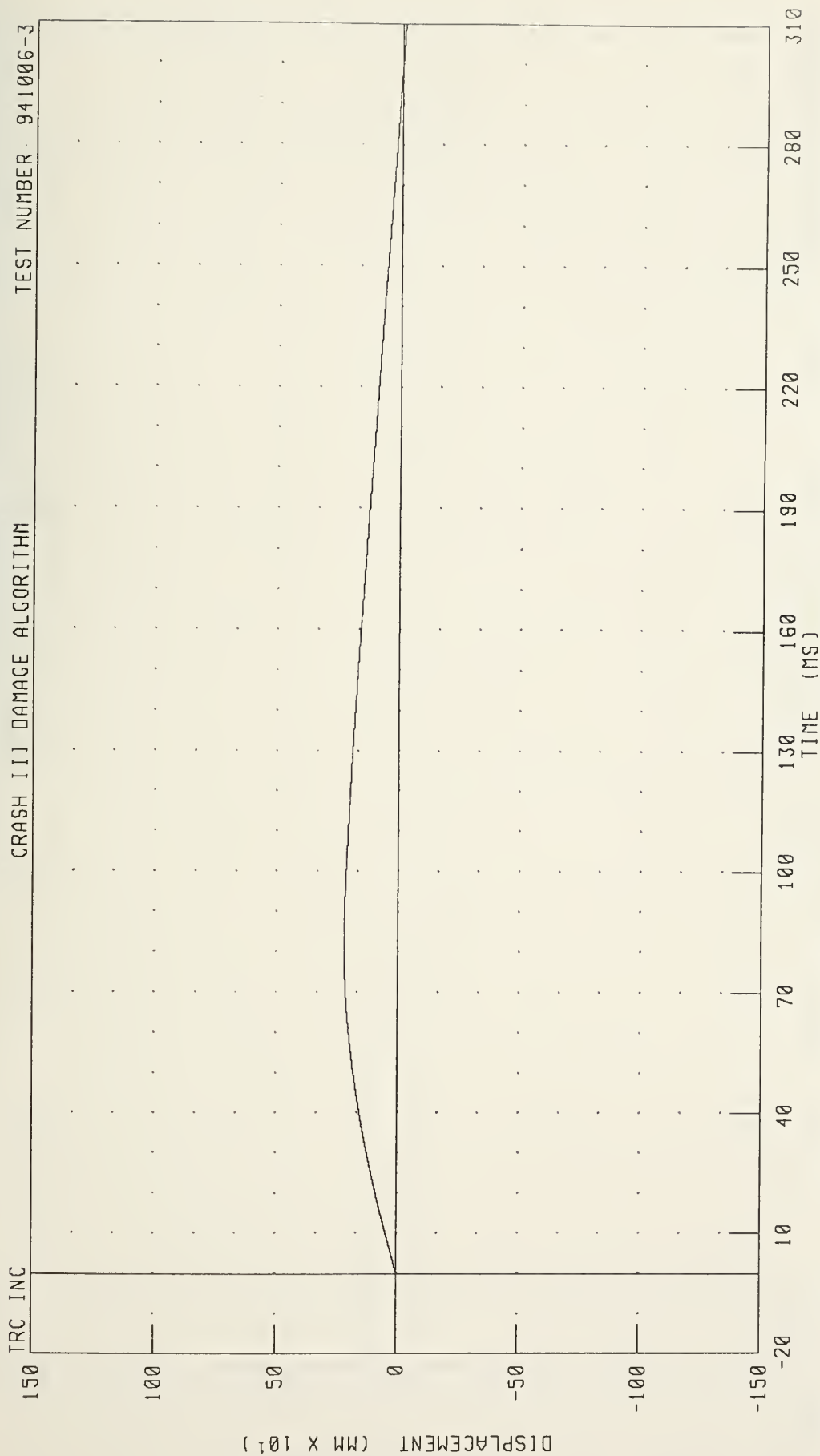
CHANNEL: TRRXV1 FILTER: CH CLASS 180

PEAK DATA: 16.31 KM/H @ 104 MS; -4.42 KM/H @ 254.88 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-3

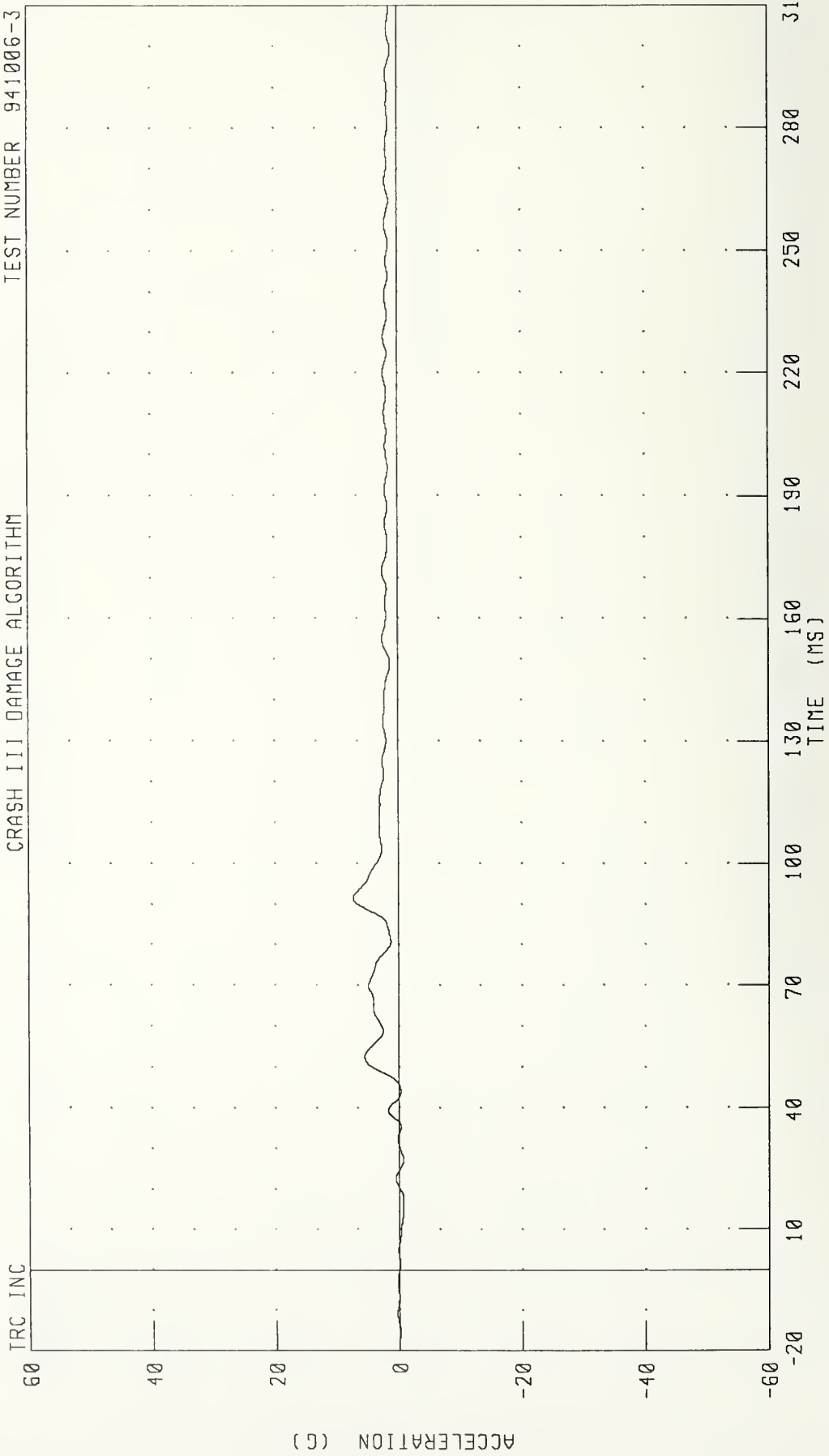


CHANNEL: TRRXD1 FILTER: CH. CLASS 180

PEAK DATA: 221.43 MM @ 82.08 MS, -12.06 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

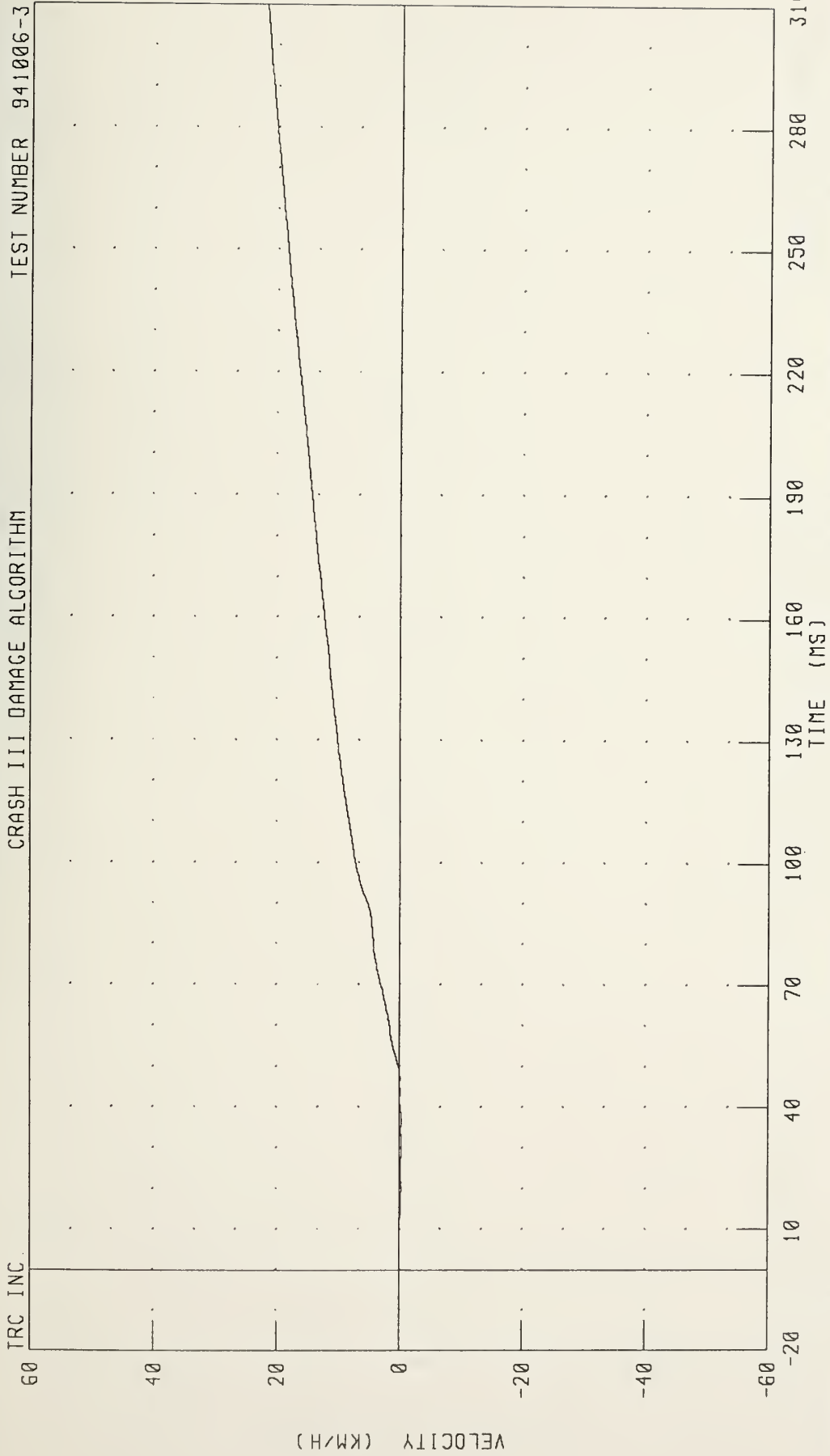


CHANNEL: TRRYG1 FILTER: CH. CLASS 60

PEAK DATA: 7.33 G @ 91.52 MS; -0.73 G @ 27.28 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TRC INC. TEST NUMBER 941006-3

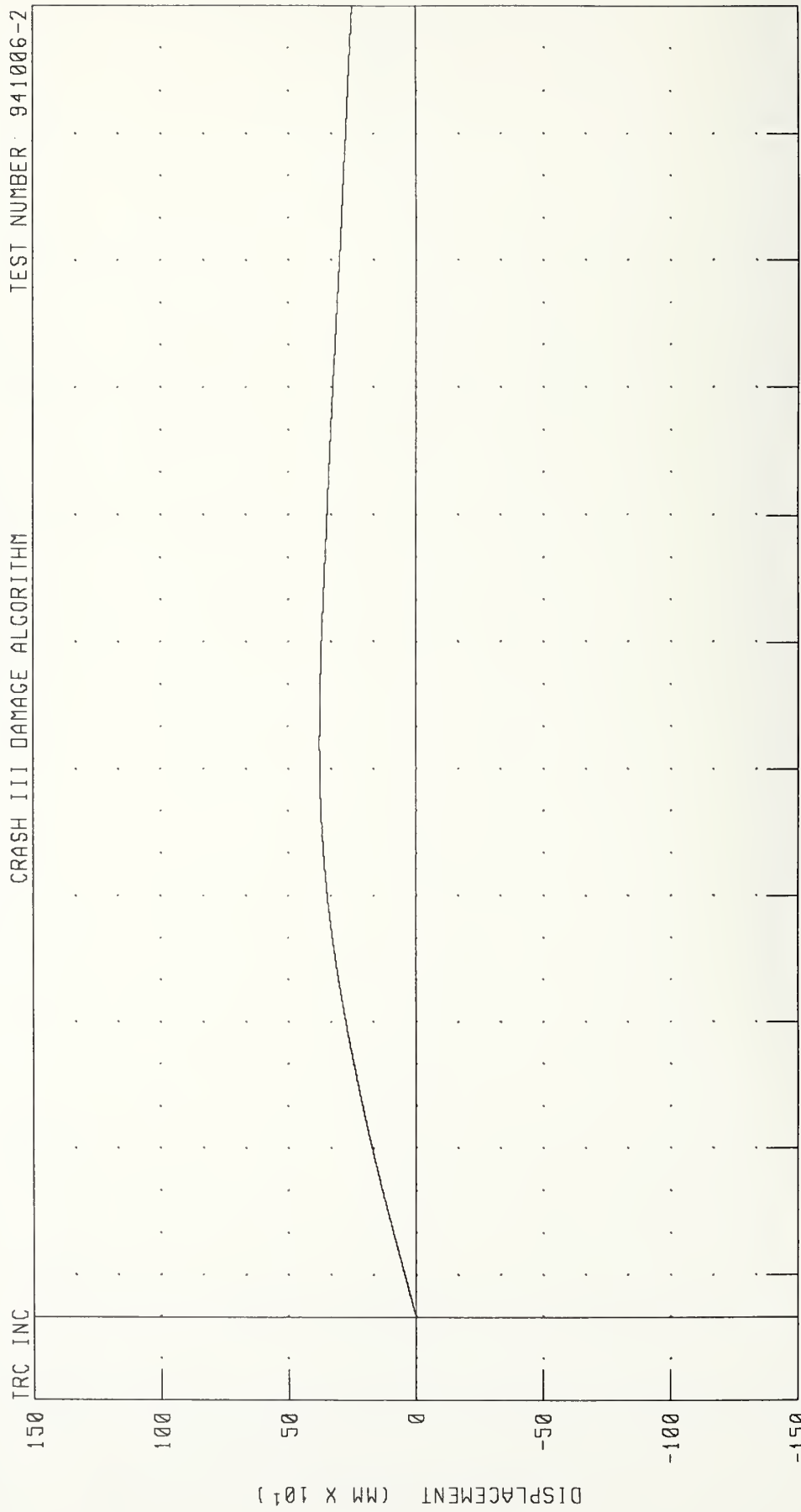


CHANNEL: TRRYV1 FILTER: CH. CLASS 180 PEAK DATA: 22.01 KM/H @ 310.00 MS; -0.33 KM/H @ 37.36 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS DISPLACEMENT

TEST NUMBER: 941006-2

CRASH III DAMAGE ALGORITHM



TRC INC

150

100

50

0

-50

-100

-150

-20

10

40

70

100

130

160

190

220

250

280

310

TIME (MS)

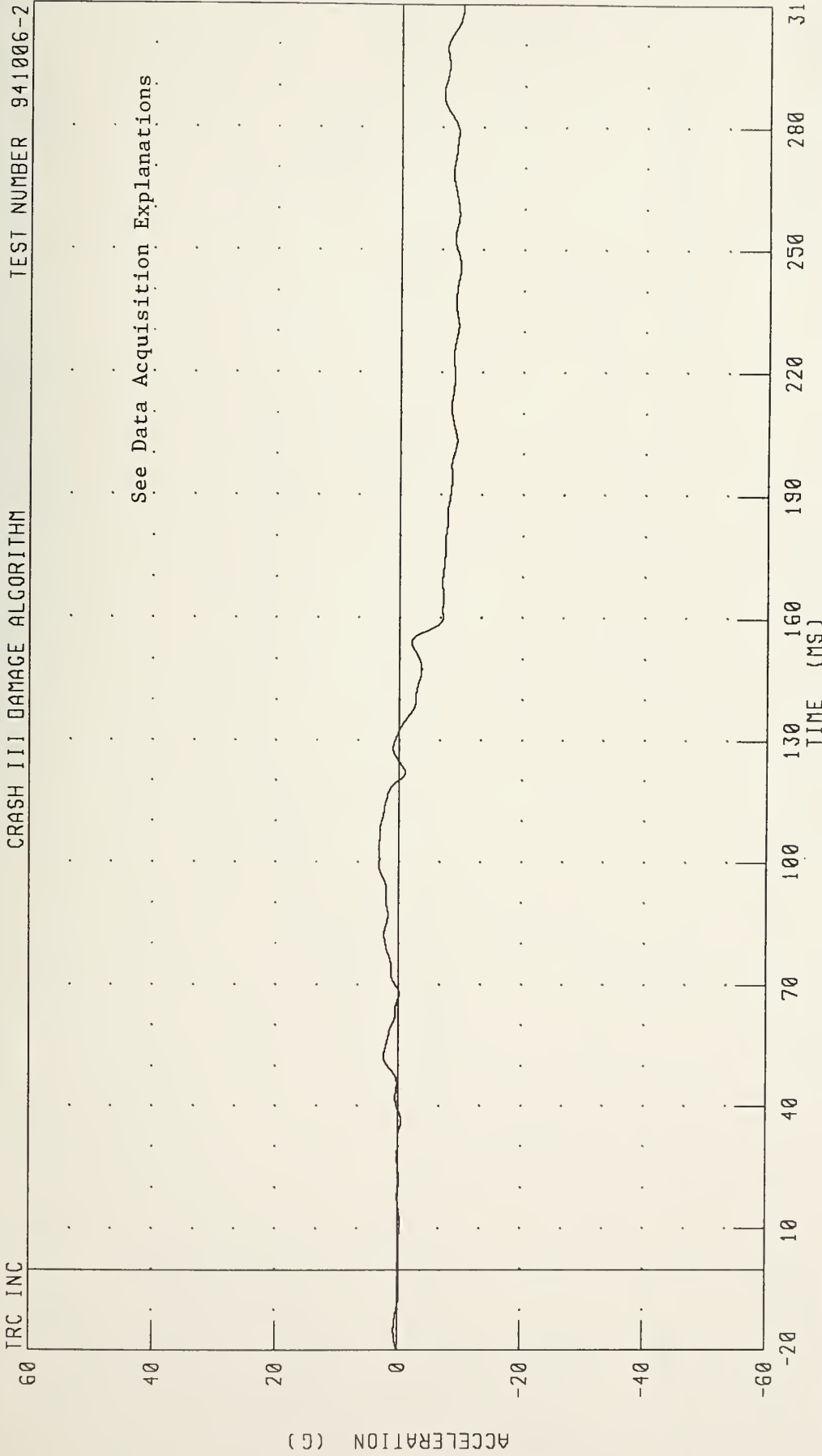
CHANNEL: TRRXD1 FILTER: CH CLASS 180

PEAK DATA: 379.21 MM @ 136.00 MS; 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS ACCELERATION

TRC INC
TEST NUMBER 941006-2

CRASH III DAMAGE ALGORITHM



CHANNEL: TRRYG1 FILTER: CH. CLASS 60

PEAK DATA: 3.22 G @ 99.04 MS; -9.95 G @ 309.36 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS VELOCITY

TEST NUMBER 941006-2

CRASH III DAMAGE ALGORITHM

TRC INC



60
40
20
0
-20
-40
-60

10 40 70 100 130 160 190 220 250 280 310

TIME (MS)

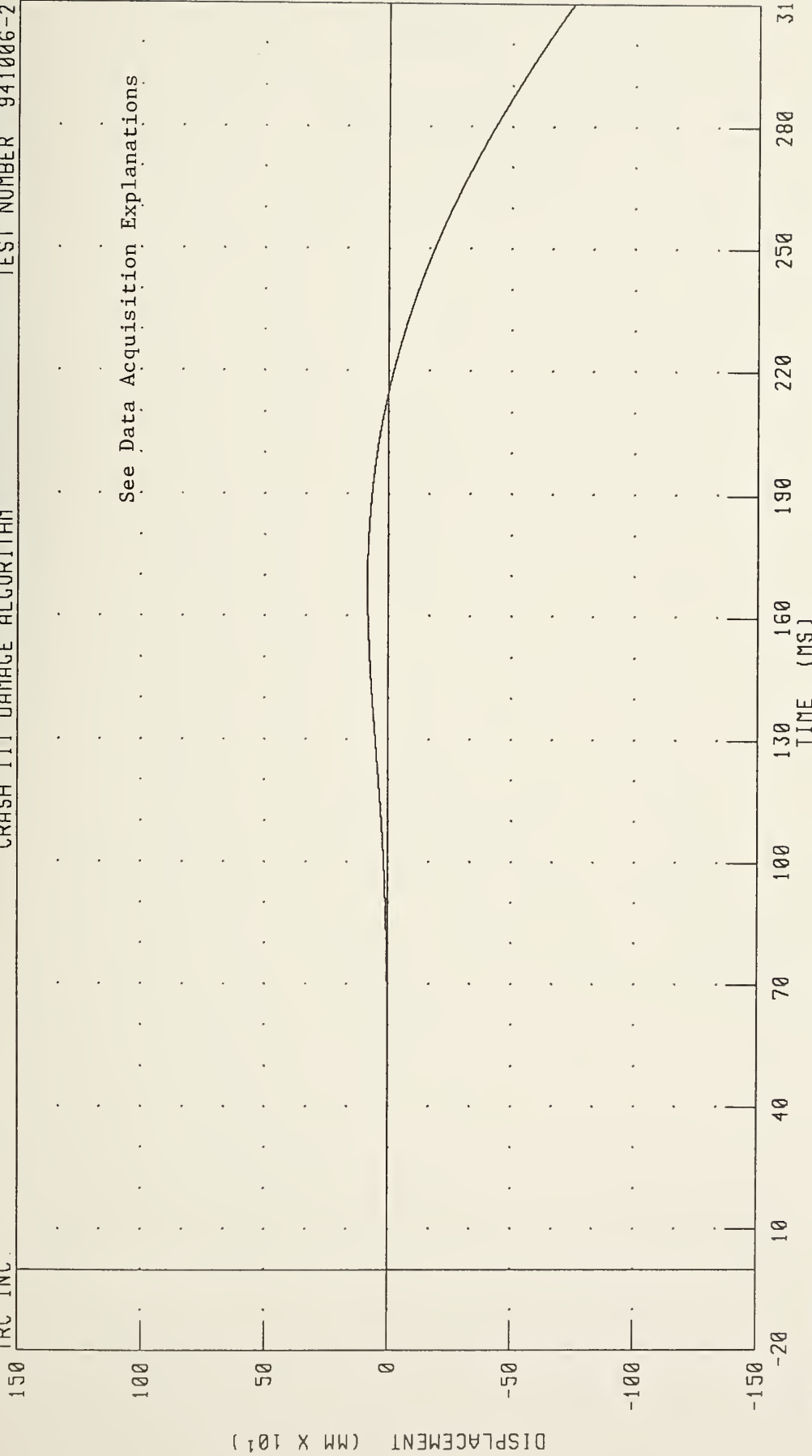
CHANNEL: TRRYV1 FILTER: CH. CLASS 180

PEAK DATA: 4.77 KM/H @ 132.88 MS, -42.77 KM/H @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-2

TRC INC.



See Data Acquisition Explanations

CHANNEL: TRRYD1 FILTER: CH. CLASS 180 PEAK DATA: 84.65 MM @ 167.60 MS, -750.40 MM @ 310.00 MS

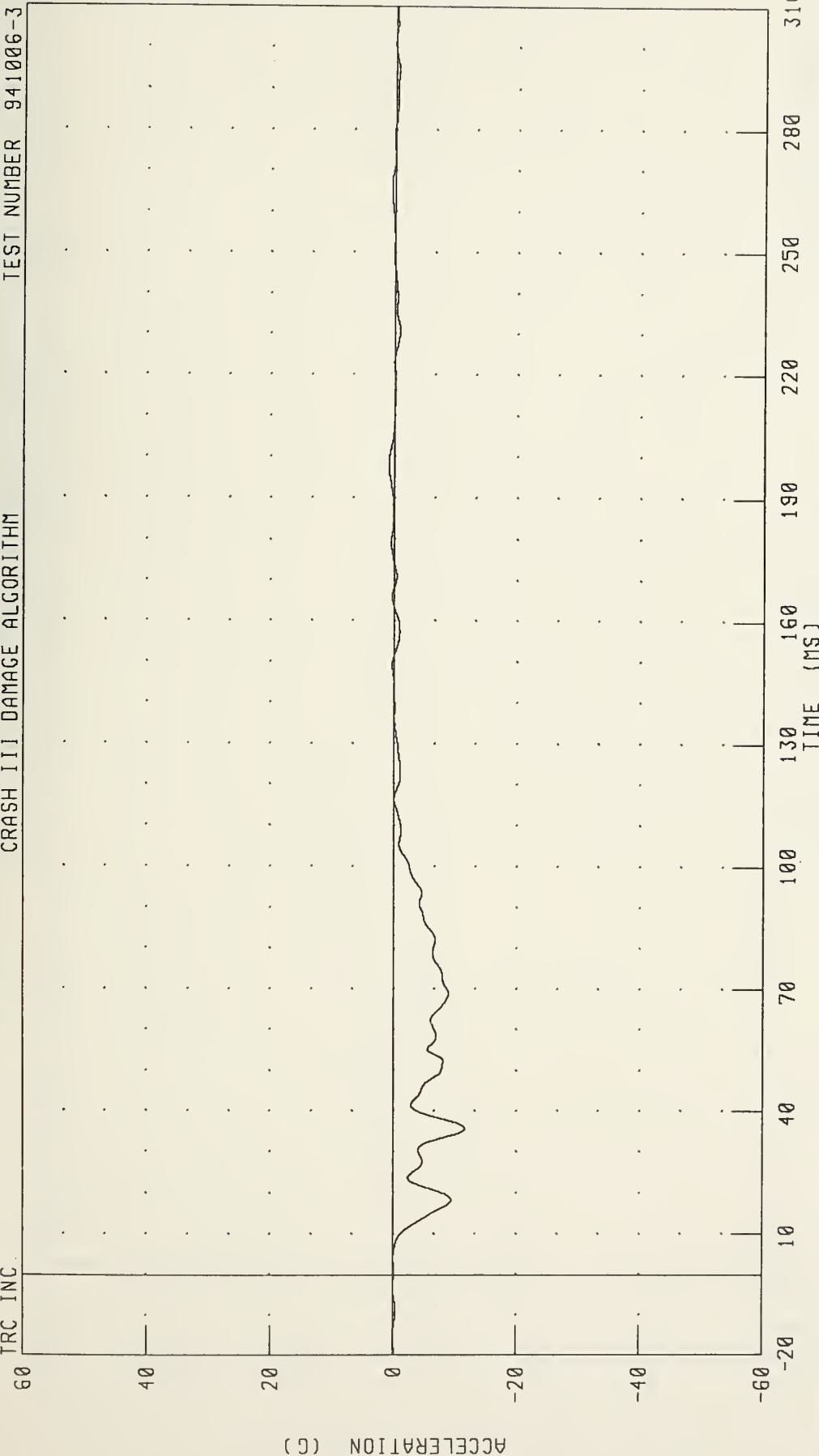
Data Plots

Test No. 941006-3

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

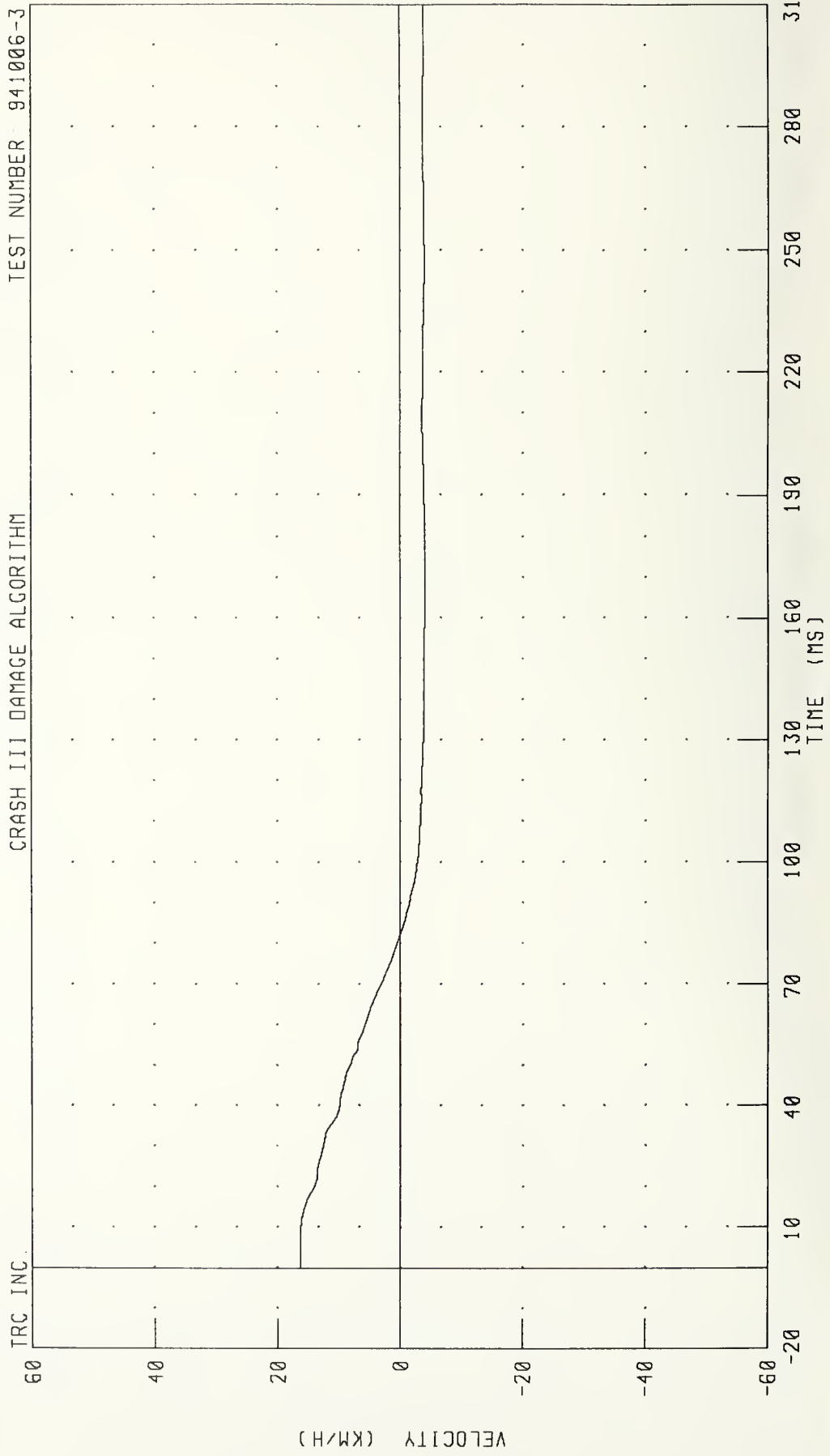
TRC INC.



CHANNEL: VCGXG1 FILTER: CH. CLASS 60 PEAK DATA: 0.93 G @ 198.08 MS, -11.64 G @ 35.68 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

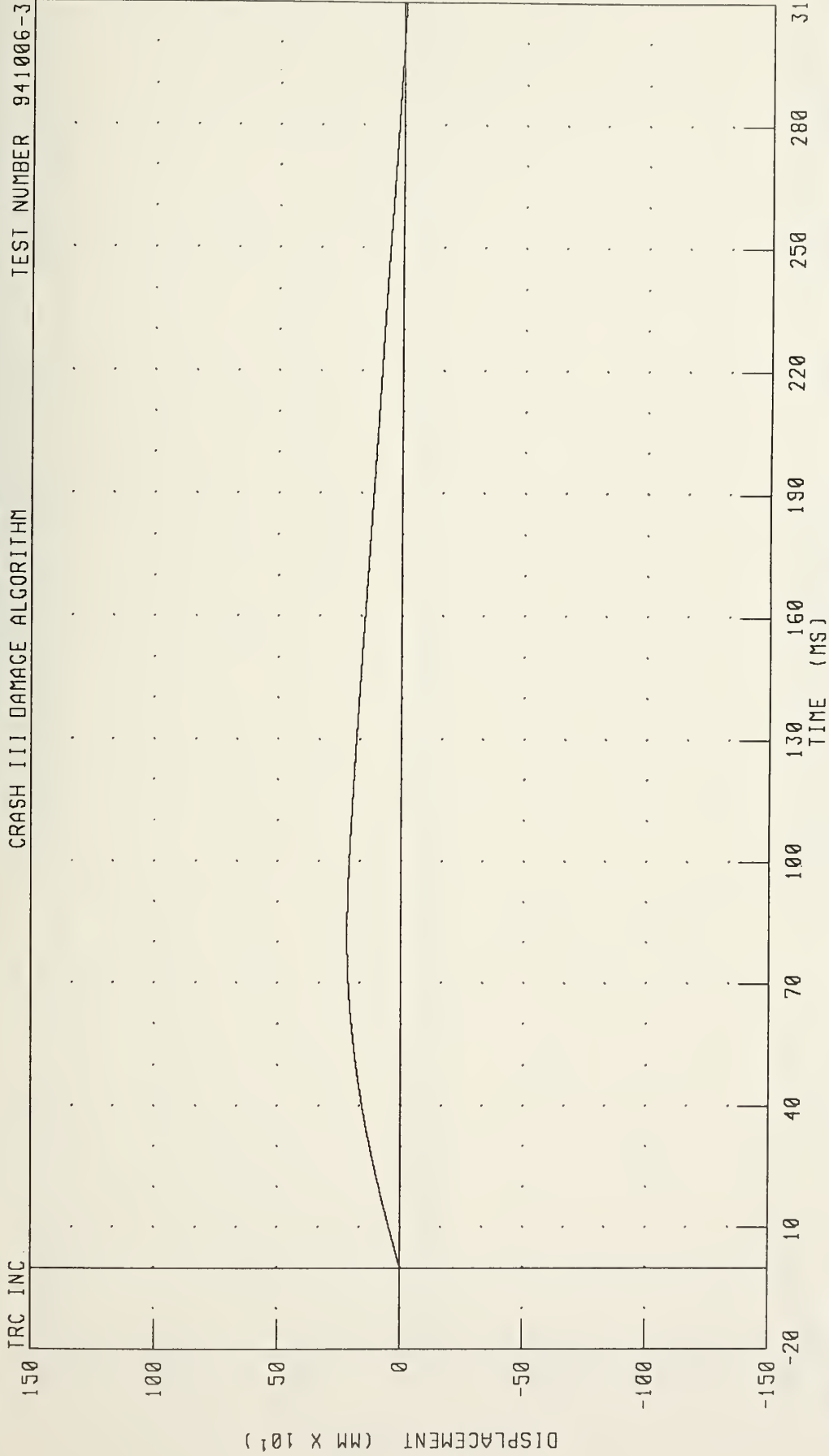
TEST NUMBER: 941006-3



CHANNEL: VCCXVI FILTER: CH. CLASS 180

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

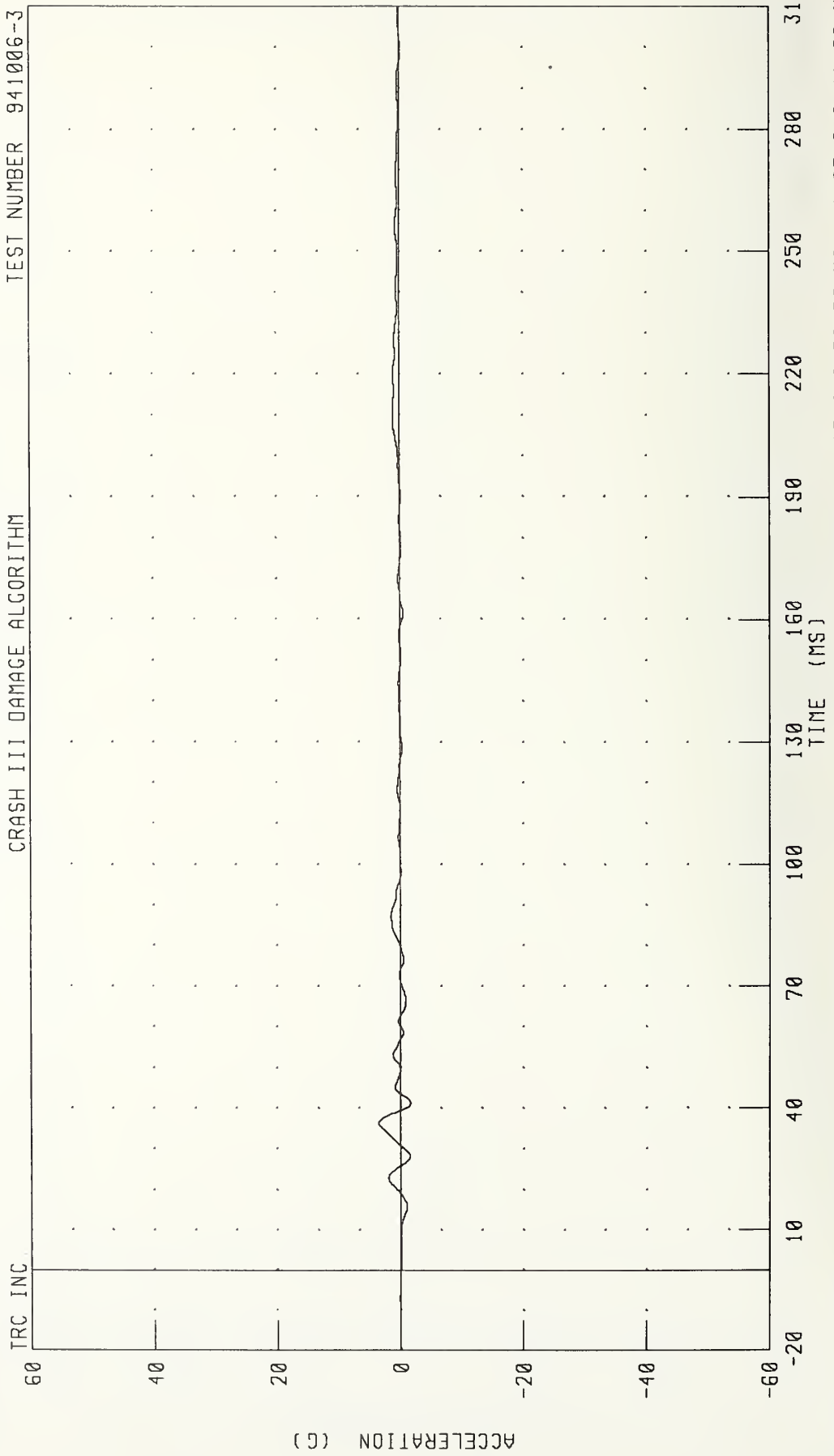


CHANNEL: VCGXD1 FILTER: CH. CLASS 180

PEAK DATA: 219.13 MM @ 82.24 MS, -10.03 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

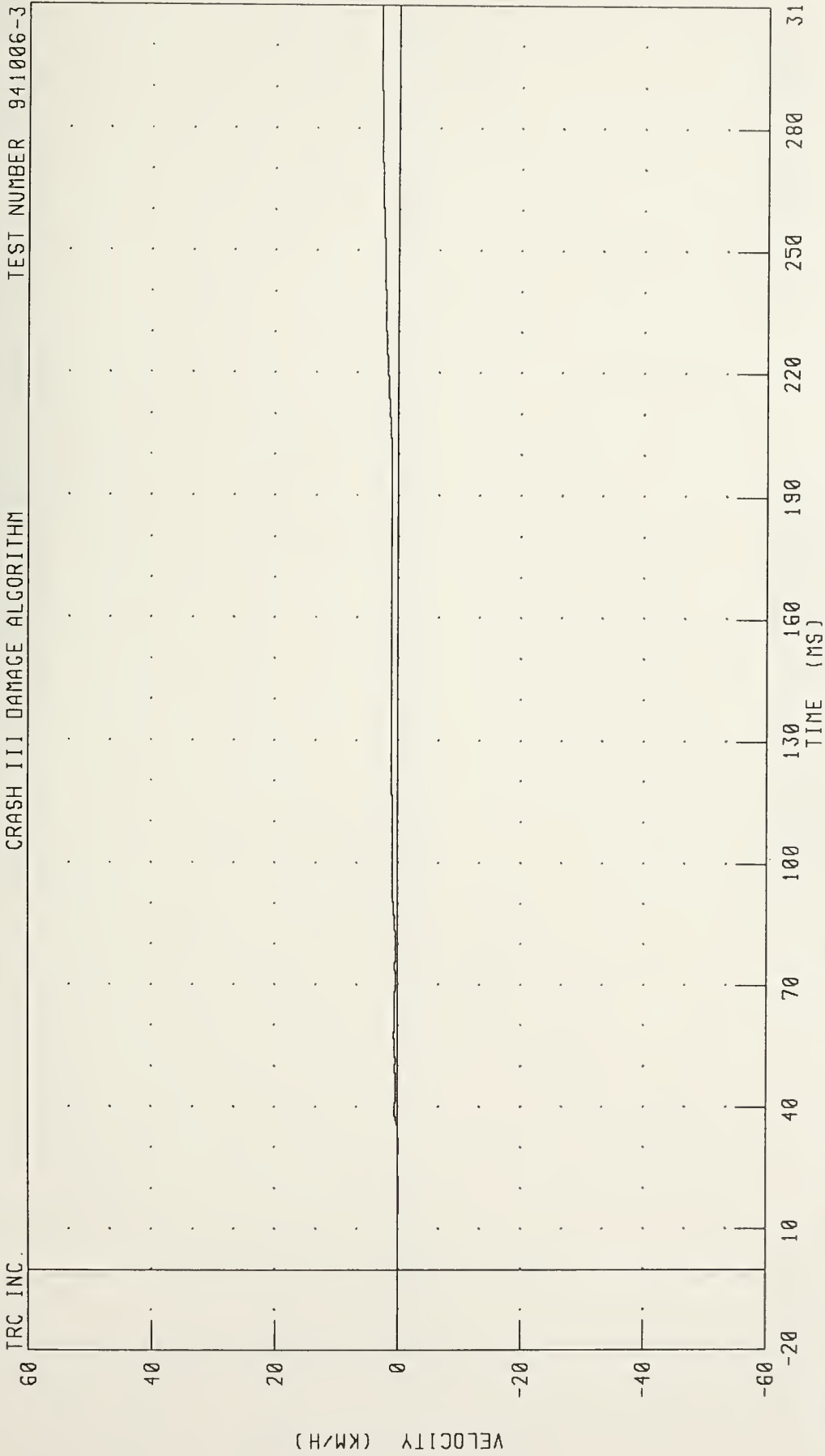


CHANNEL: YCGY61 FILTER: CH. CLASS 60

PEAK DATA: 3.53 G @ 36.32 MS; -1.65 G @ 41.28 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CC Y-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

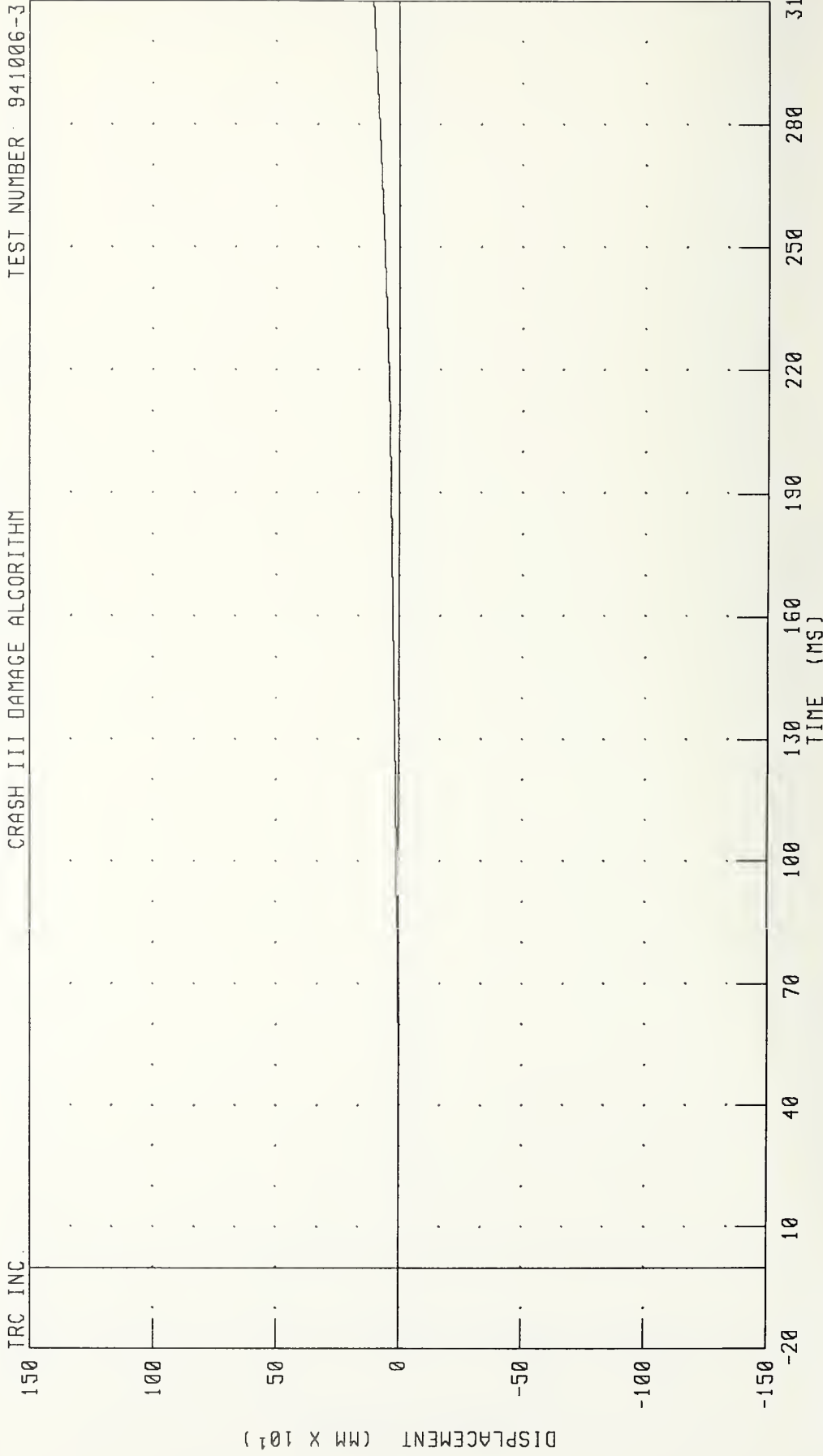
TRC INC. TEST NUMBER 941006-3



CHANNEL: VCGYV1 FILTER: CH. CLASS 180 PEAK DATA: 2.88 KM/H @ 310.00 MS; -0.24 KM/H @ 19.68 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Y-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

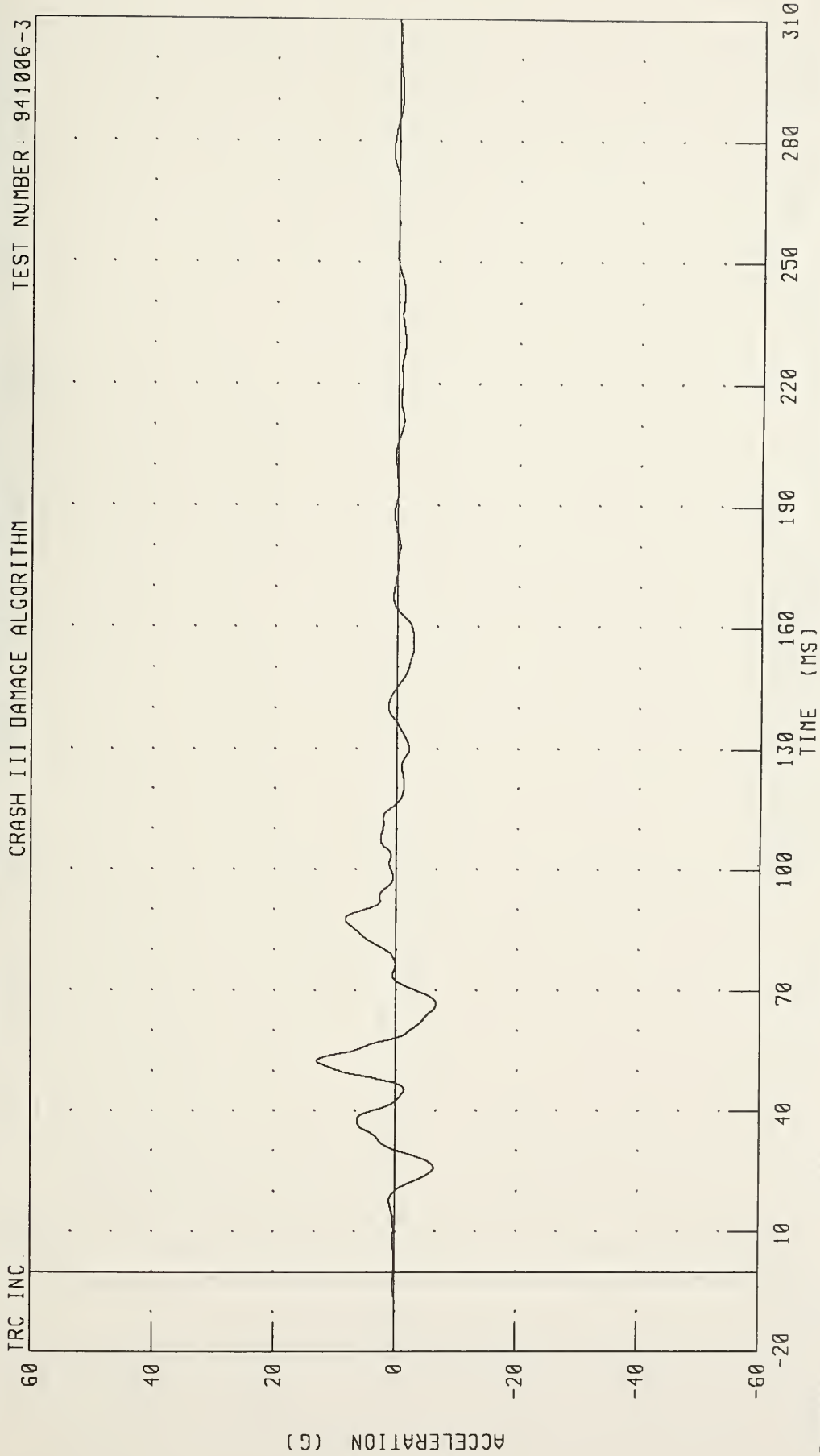
TEST NUMBER: 941006-3



CHANNEL: VCGYD1 FILTER: CH. CLASS 180 PEAK DATA: 105.02 MM @ 310.00 MS, -0.71 MM @ 34.16 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CC Z-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-3

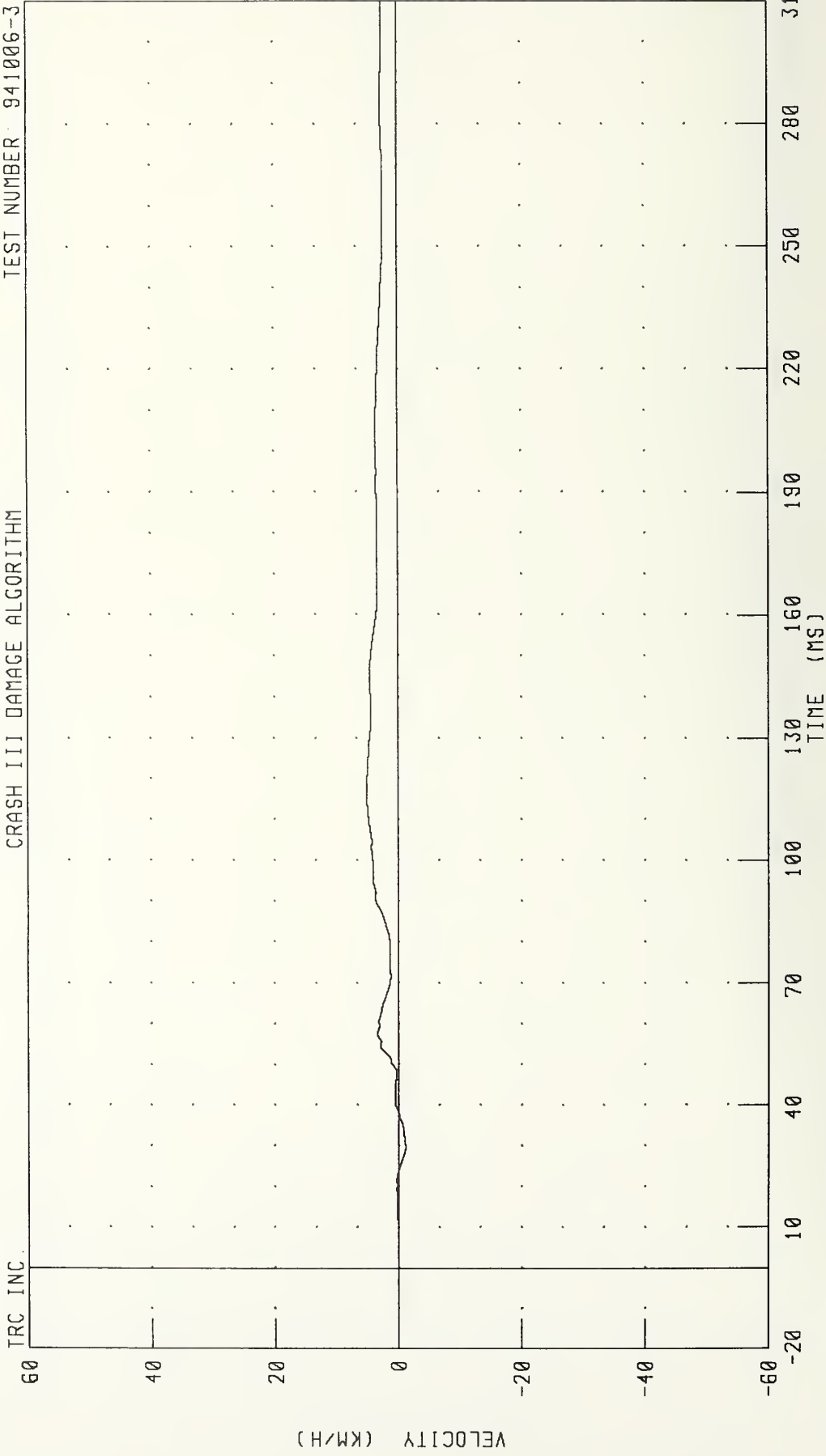


TRC INC.

CHANNEL: VCGZG1 FILTER: CH CLASS 60
PEAK DATA: 13.07 G @ 52.40 MS; -6.68 G @ 66.56 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CC Z-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-3



CHANNEL: VCGZY1 FILTER: CH. CLASS 180

PEAK DATA: 5.18 KM/H @ 115.52 MS; -1.12 KM/H @ 29.76 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-3

TRC INC.

150

100

50

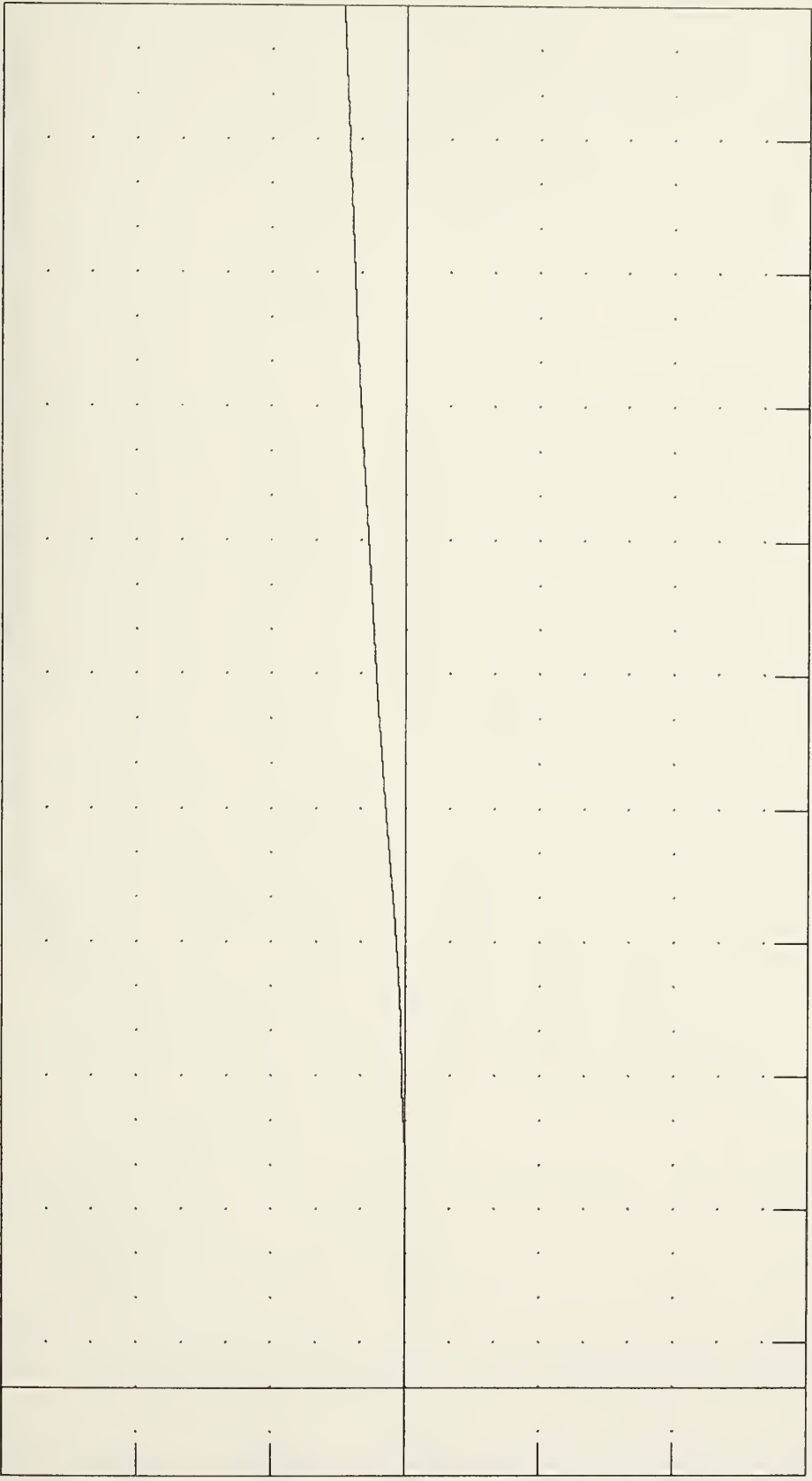
0

-50

-100

-150

DISPLACEMENT (MM X 10¹)



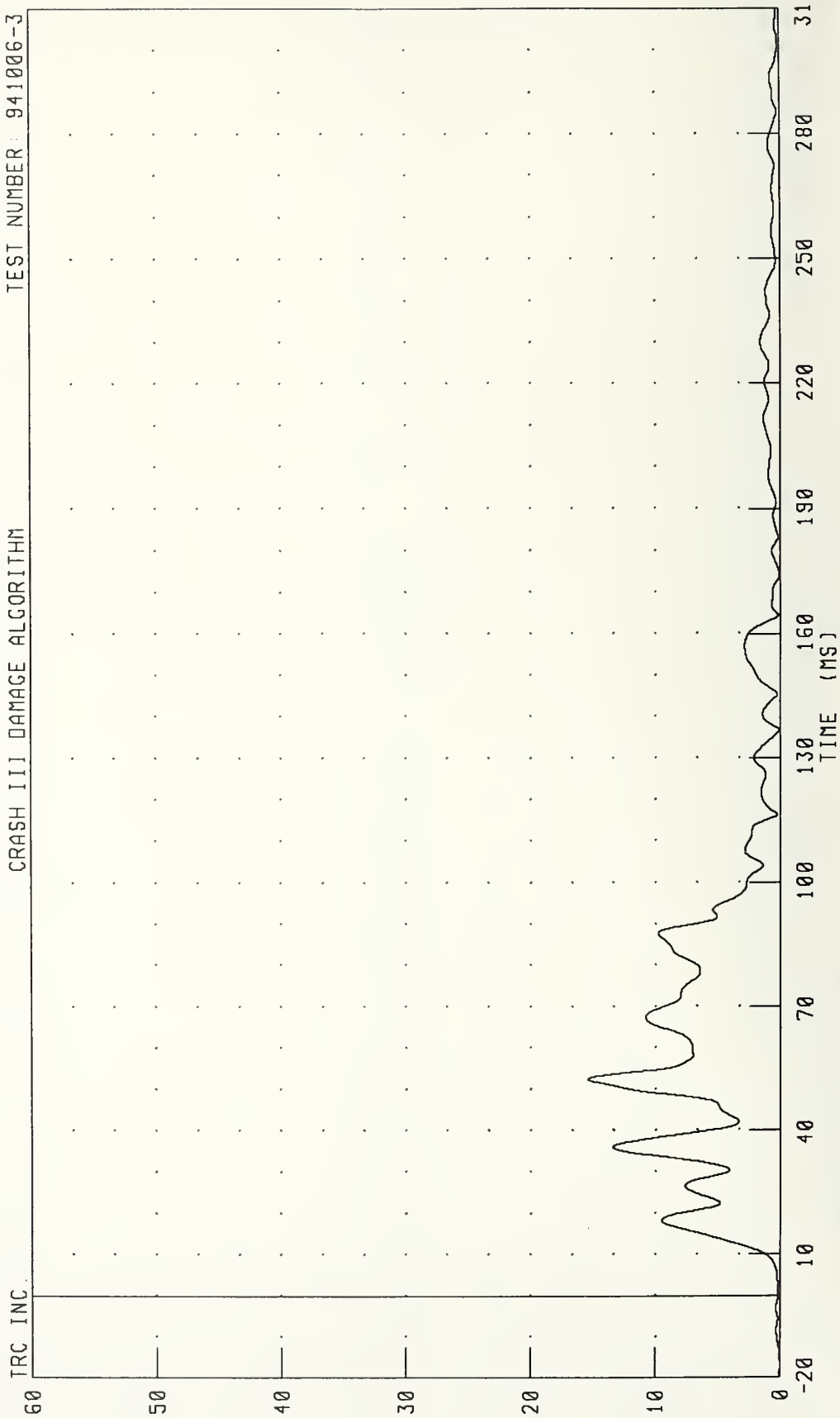
310 280 250 220 190 160 130
TIME (MS)

CHANNEL: VCGZD1 FILTER: CH. CLASS 180

PEAK DATA: 233.50 MM @ 310.00 MS, -1.91 MM @ 38.40 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-3



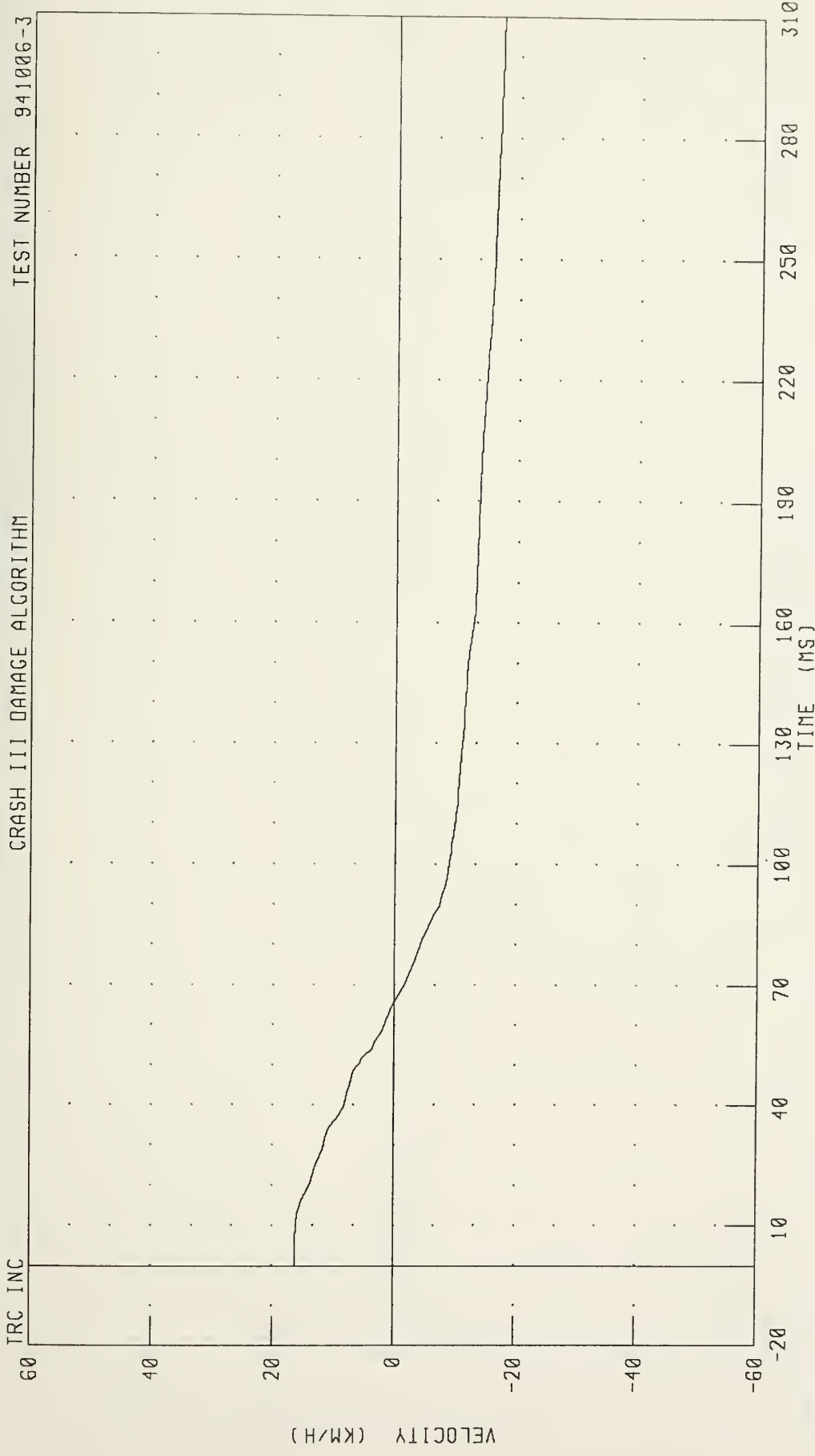
TRC INC.

CHANNEL: VCGRG1 FILTER: CH. CLASS 60

PEAK DATA: 15.42 G @ 52.40 MS, 0.02 G @ -17.12 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT VELOCITY
CRASH III DAMAGE ALGORITHM

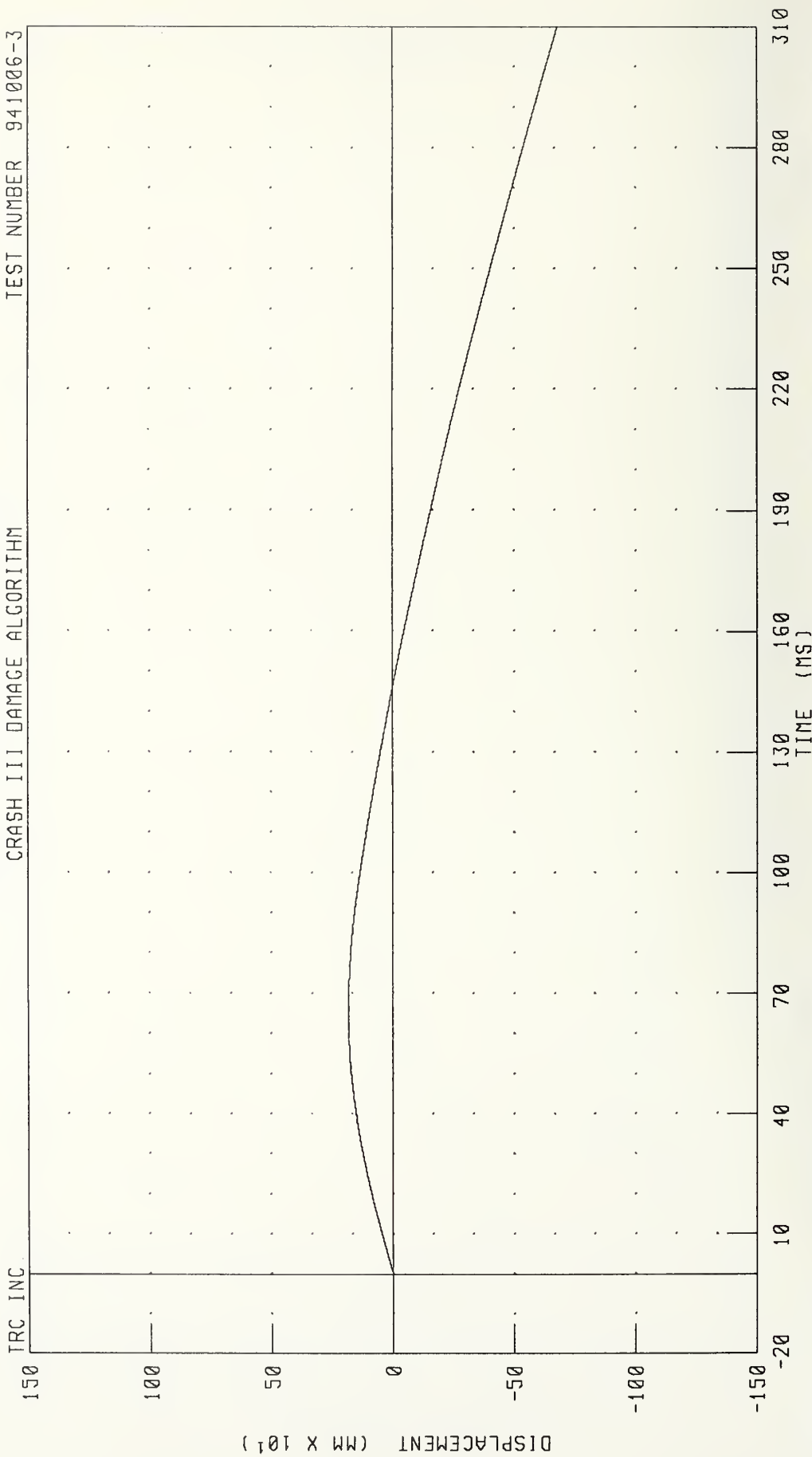
TEST NUMBER 941006-3



CHANNEL: VCGRV1 FILTER: CH. CLASS 180
PEAK DATA 16 30 KM/H @ 0.00 MS; -17.21 KM/H @ 310 00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT DISPLACEMENT
CRASH III DAMAGE ALGORITHM

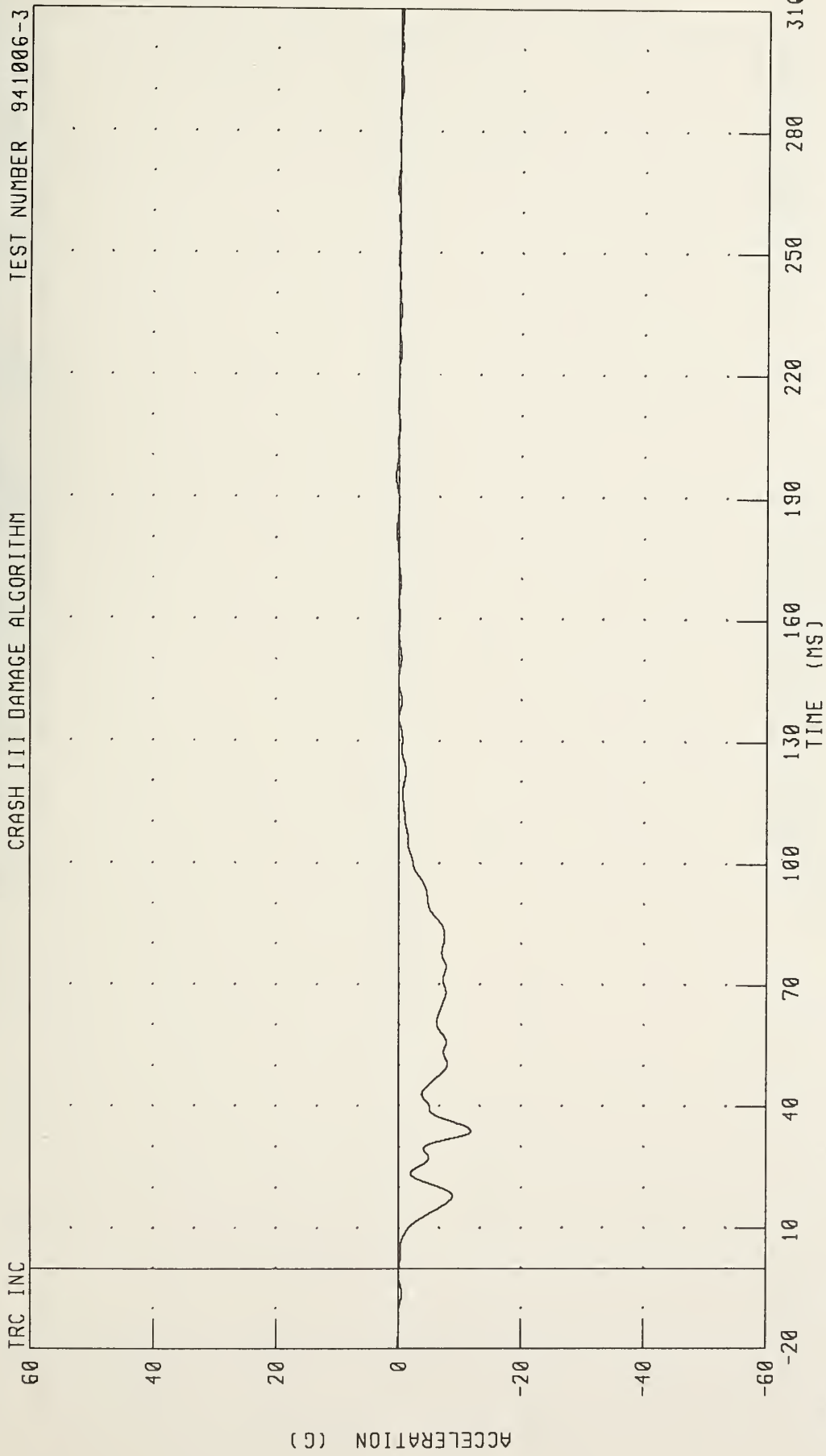
TEST NUMBER 941006-3



CHANNEL: VCGRD1 FILTER: CH CLASS 180
PEAK DATA: 183.25 MM @ 65.76 MS; -678.92 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3



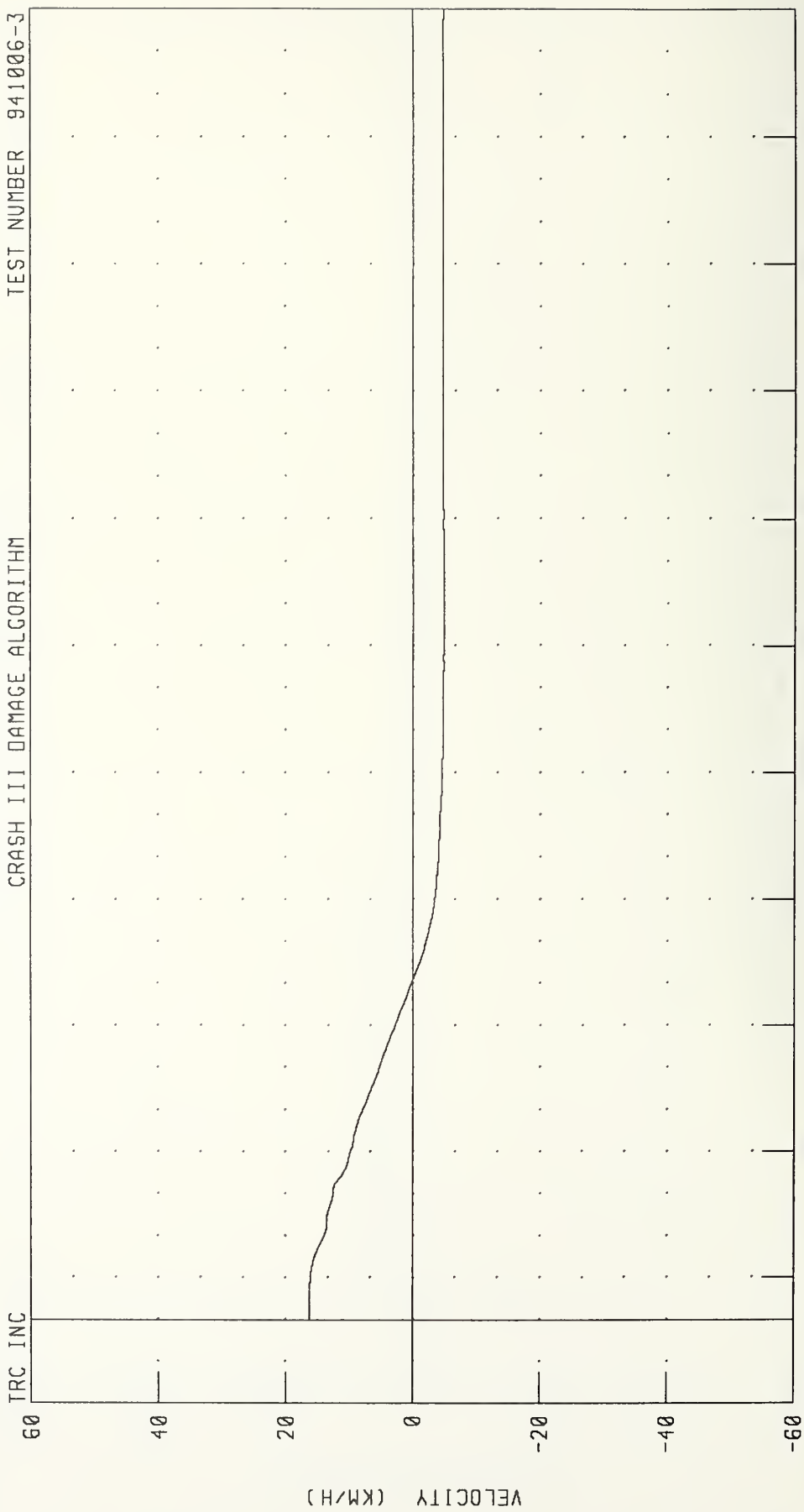
CHANNEL: LFSXG1 FILTER: CH. CLASS 60

PEAK DATA: 0.47 G @ 195.04 MS; -11.86 G @ 33.92 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

TRC INC



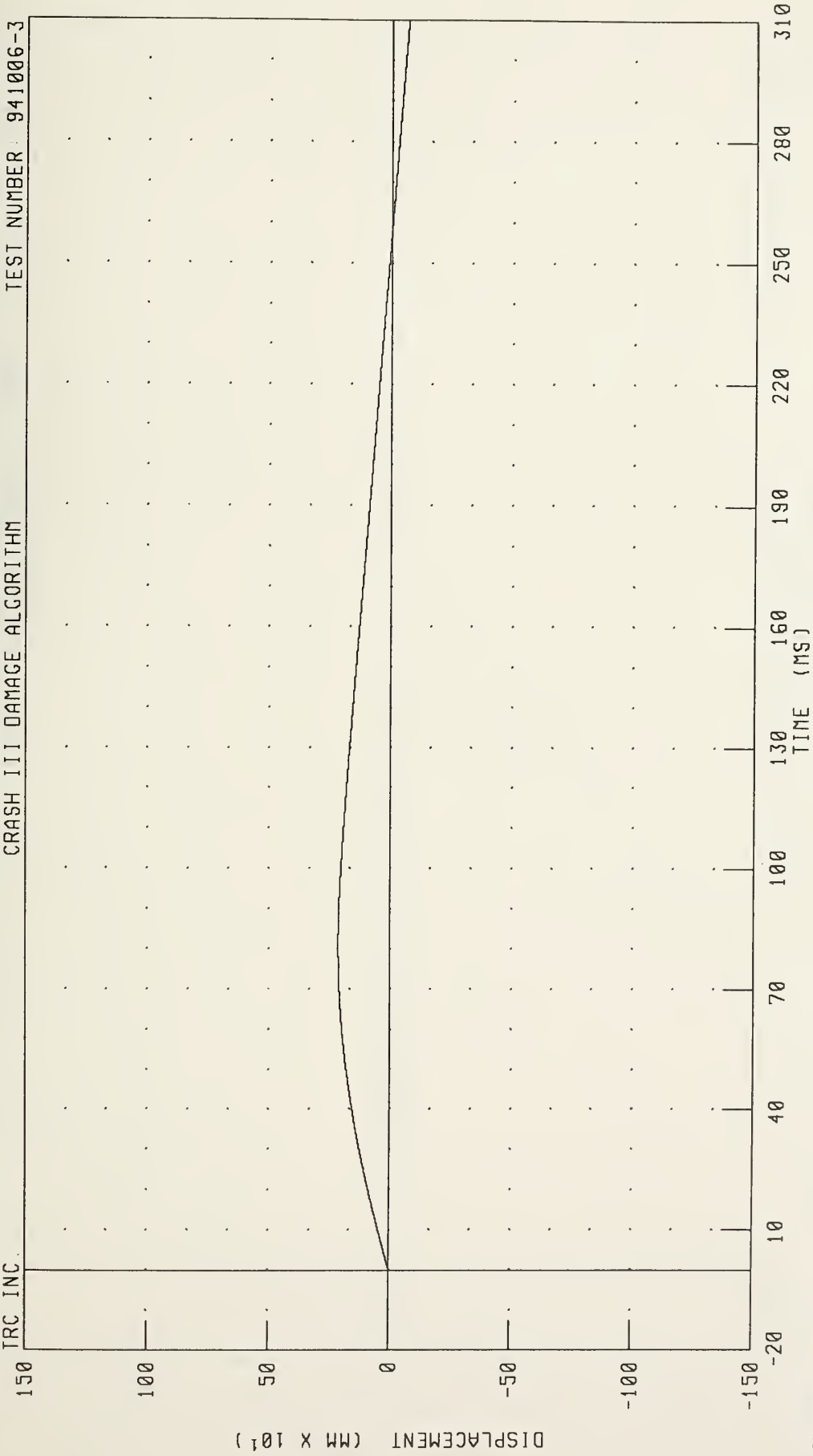
PEAK DATA: 16.30 KM/H @ 0.40 MS, -4.91 KM/H @ 172.56 MS

CHANNEL: LFSXV1 FILTER: CH. CLASS 180

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-3

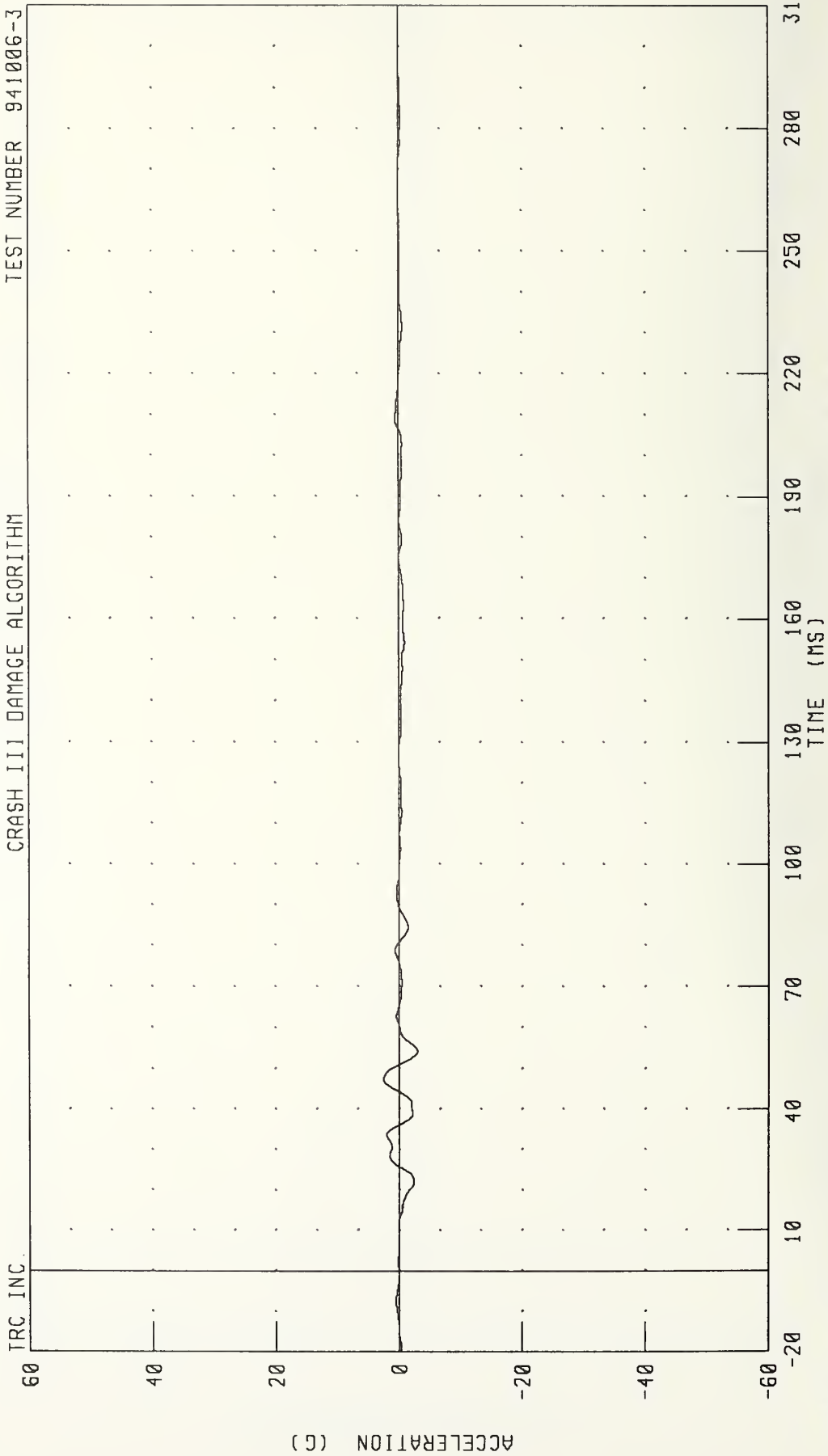
TRC INC.



CHANNEL: LFSXD1 FILTER: CH. CLASS 180 PEAK DATA: 214.37 MM @ 80.88 MS; -68.45 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

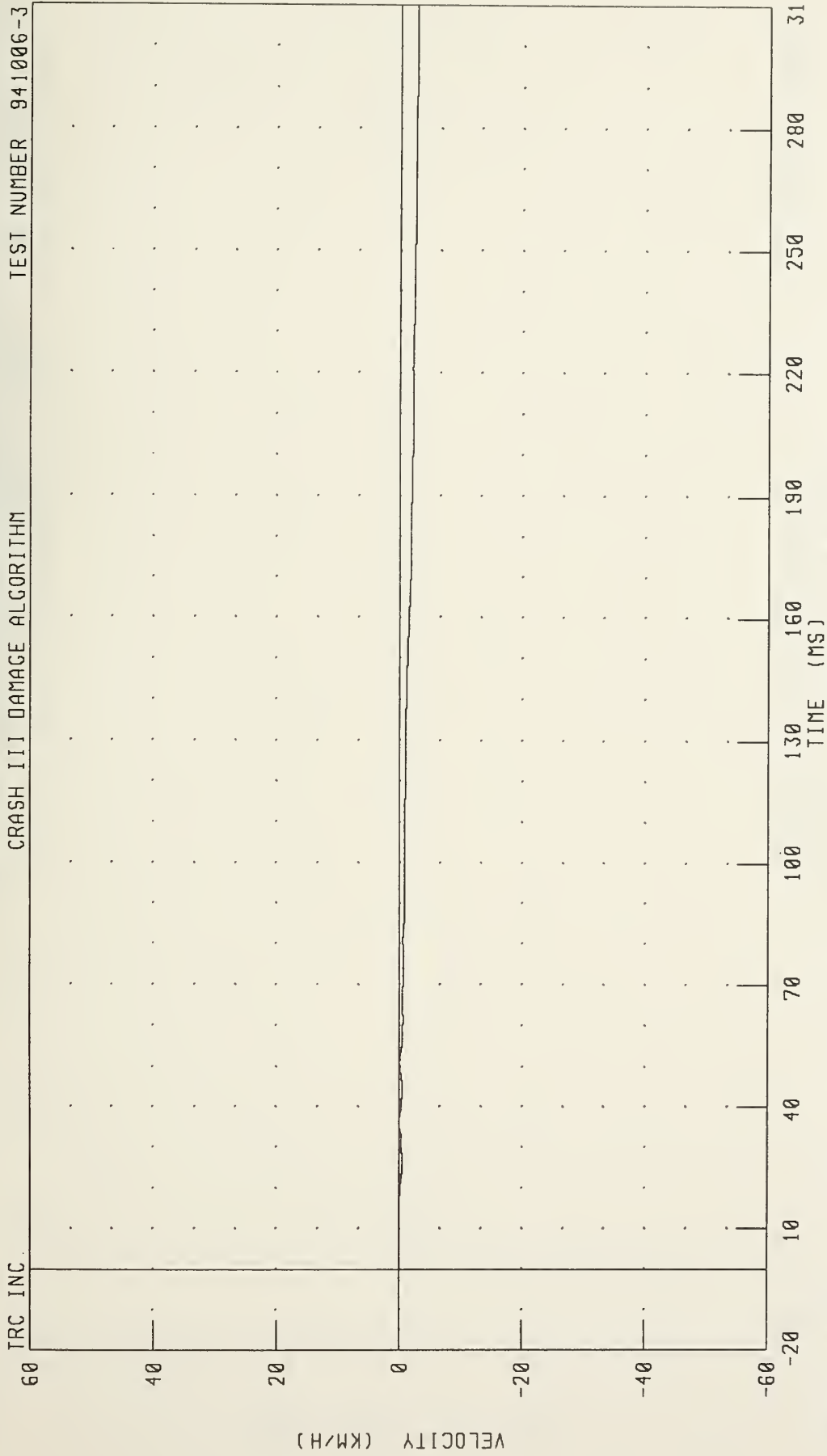


CHANNEL: LFSYG1 FILTER: CH. CLASS 60

PEAK DATA: 2.54 G @ 47.28 MS; -2.98 G @ 54.32 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS VELOCITY

TRC INC. CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-3

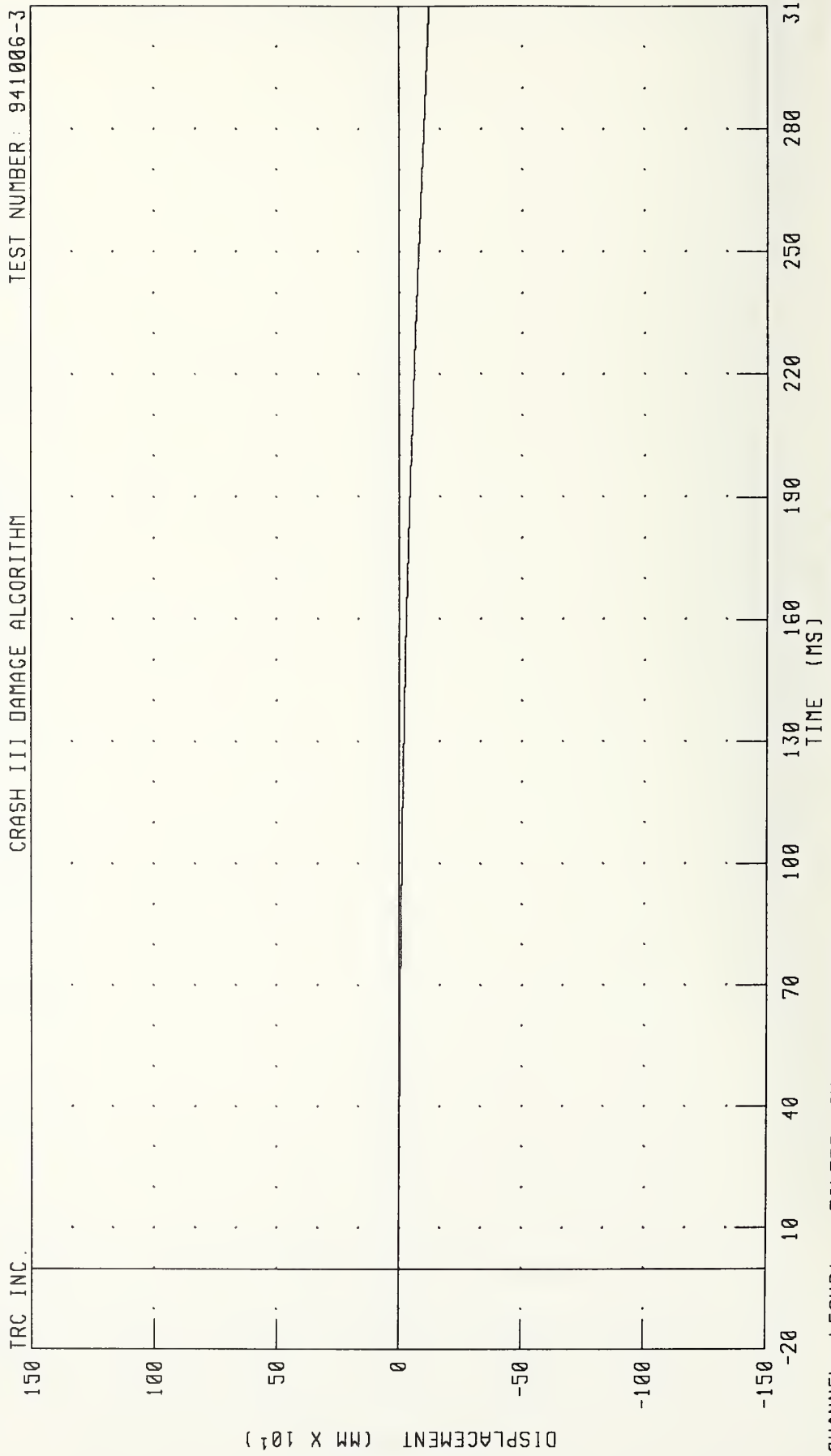


CHANNEL: LFSYV1 FILTER: CH. CLASS 180

PEAK DATA: 0.04 KM/H @ 13.84 MS; -2.66 KM/H @ 297.92 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM TEST NUMBER: 941006-3



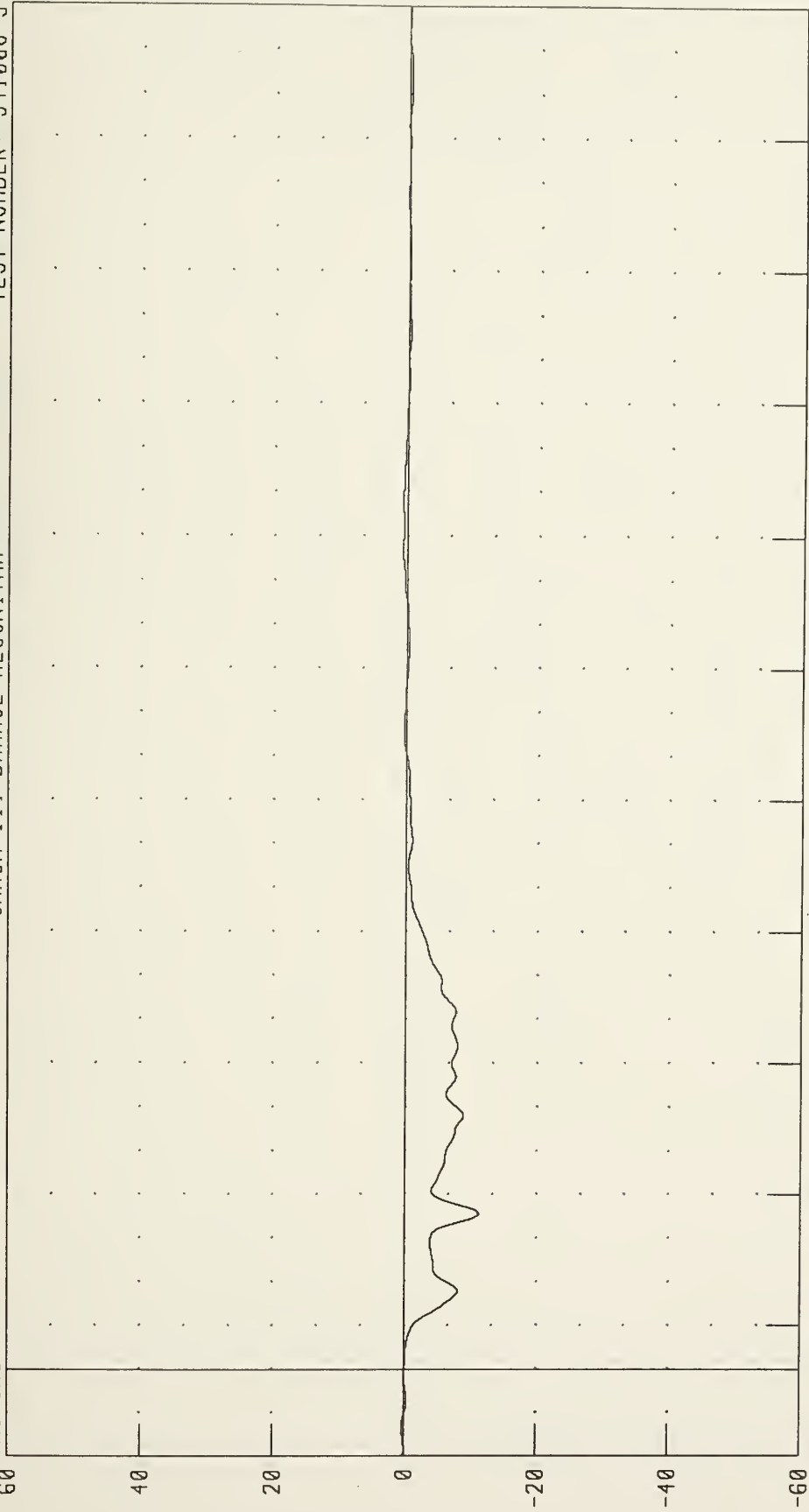
CHANNEL: LFSYD1 FILTER: CH. CLASS 180

PEAK DATA: 0.06 MM @ 14.88 MS; -123.47 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-3

TRC INC
60



ACCELERATION (G)

TIME (MS) 130 160 190 220 250 280 310

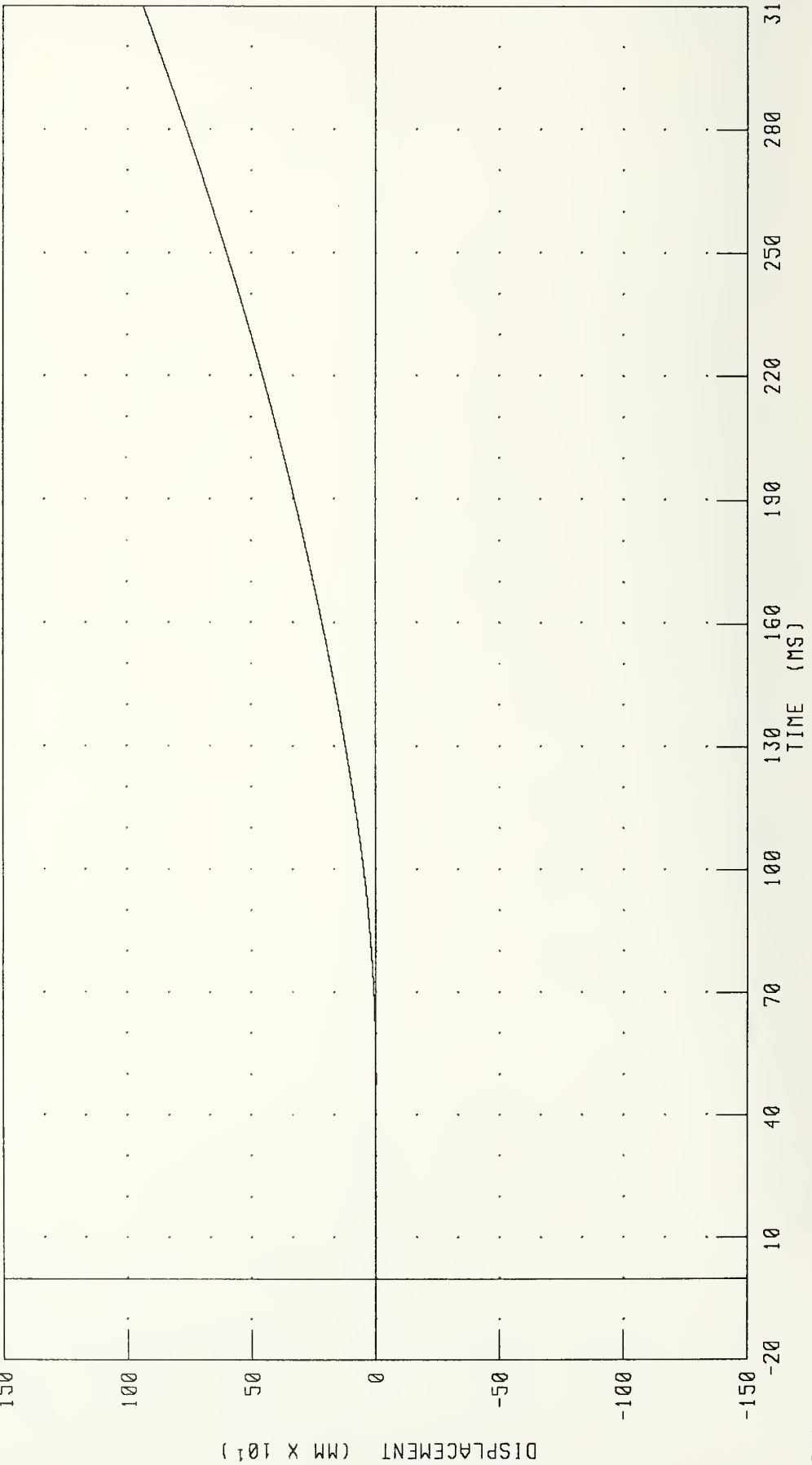
CHANNEL: RFSXG1 FILTER: CH. CLASS 60

PEAK DATA: 0.74 G @ 187.52 MS; -11.27 G @ 35.60 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-3

TRC INC.



CHANNEL: TRRYD1 FILTER: CH. CLASS 180

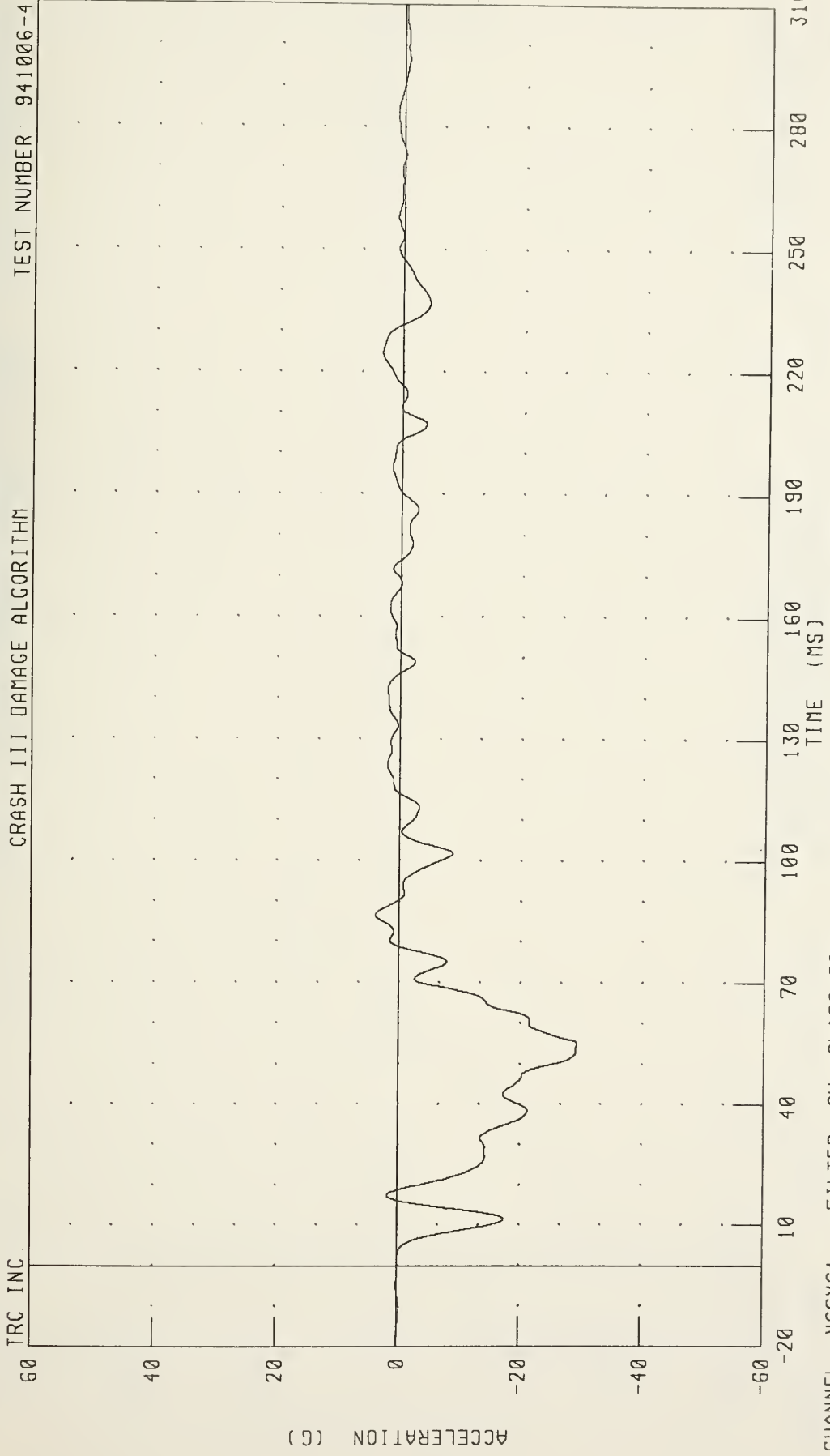
PEAK DATA: 938.49 MM @ 310.00 MS, -1.94 MM @ 48.88 MS

Data Plots

Test No. 941006-4

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

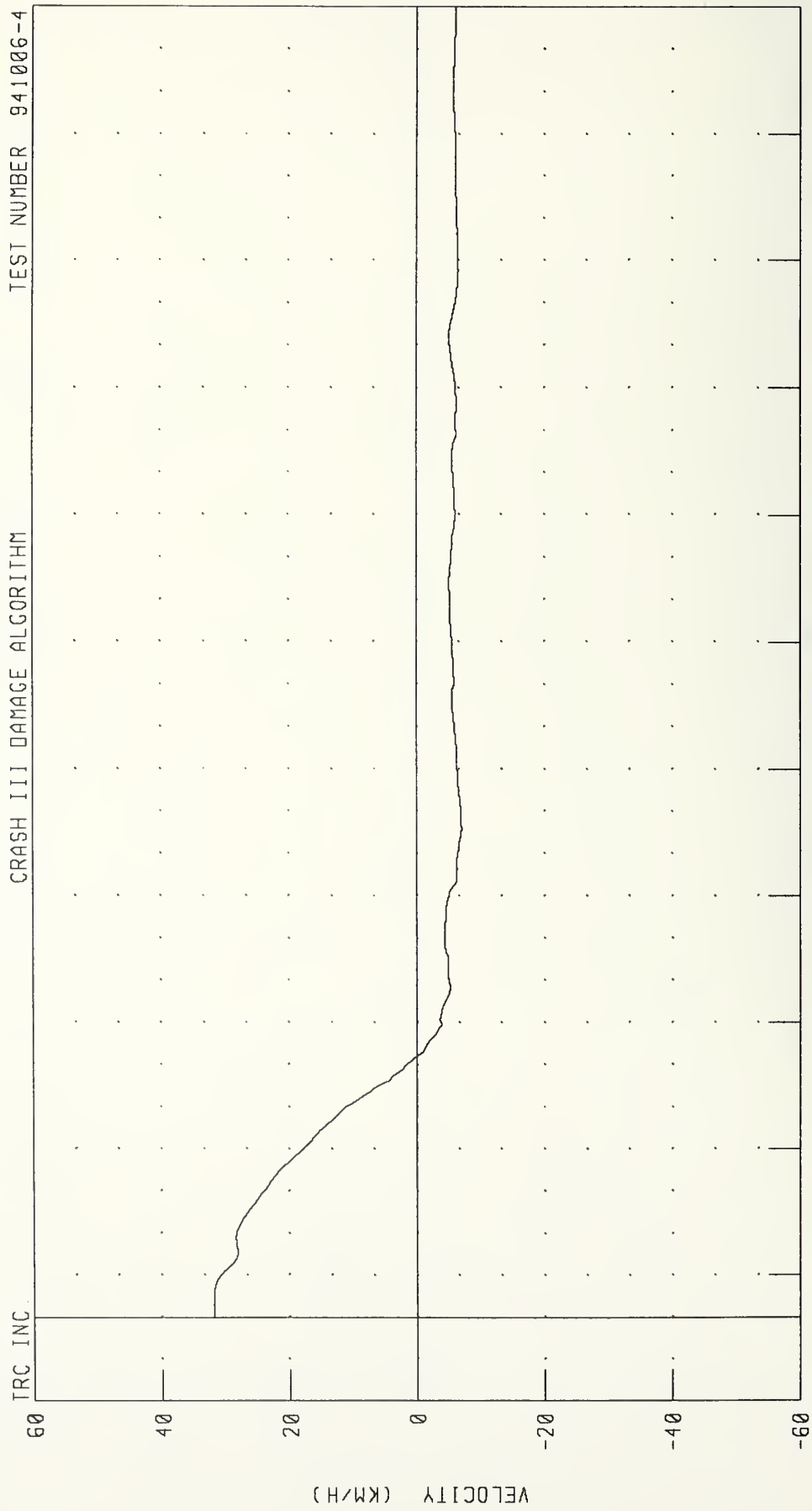
TEST NUMBER 941006-4



CHANNEL VCGXG1 FILTER: CH. CLASS 60
PEAK DATA: 390 G @ 86.64 MS; -2936 G @ 55.04 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4



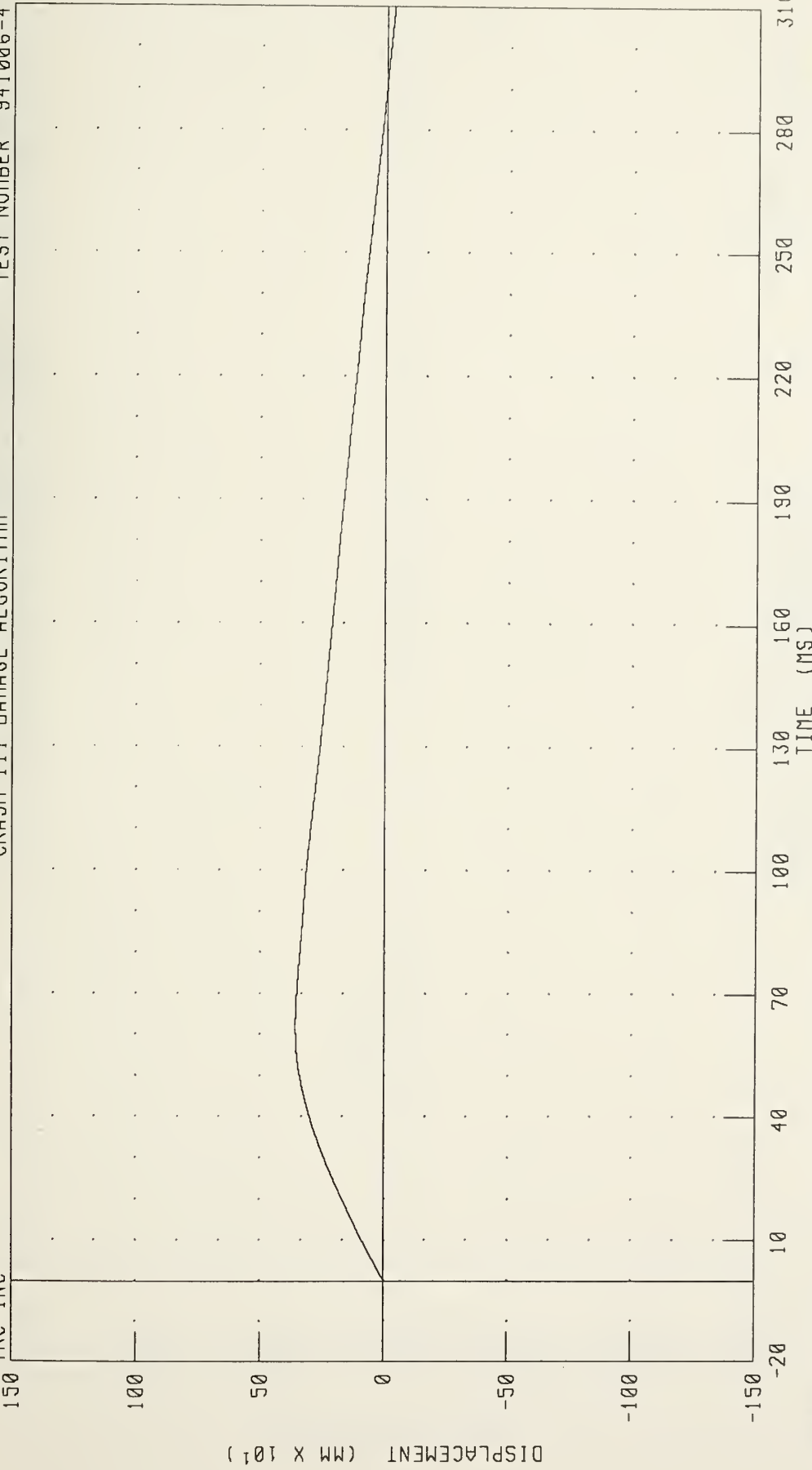
CHANNEL: VCGYV1 FILTER: CH. CLASS 180

PEAK DATA: 31.90 KM/H @ 115.92 MS; -7.04 KM/H @ 115.92 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CC X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

TRC_INC

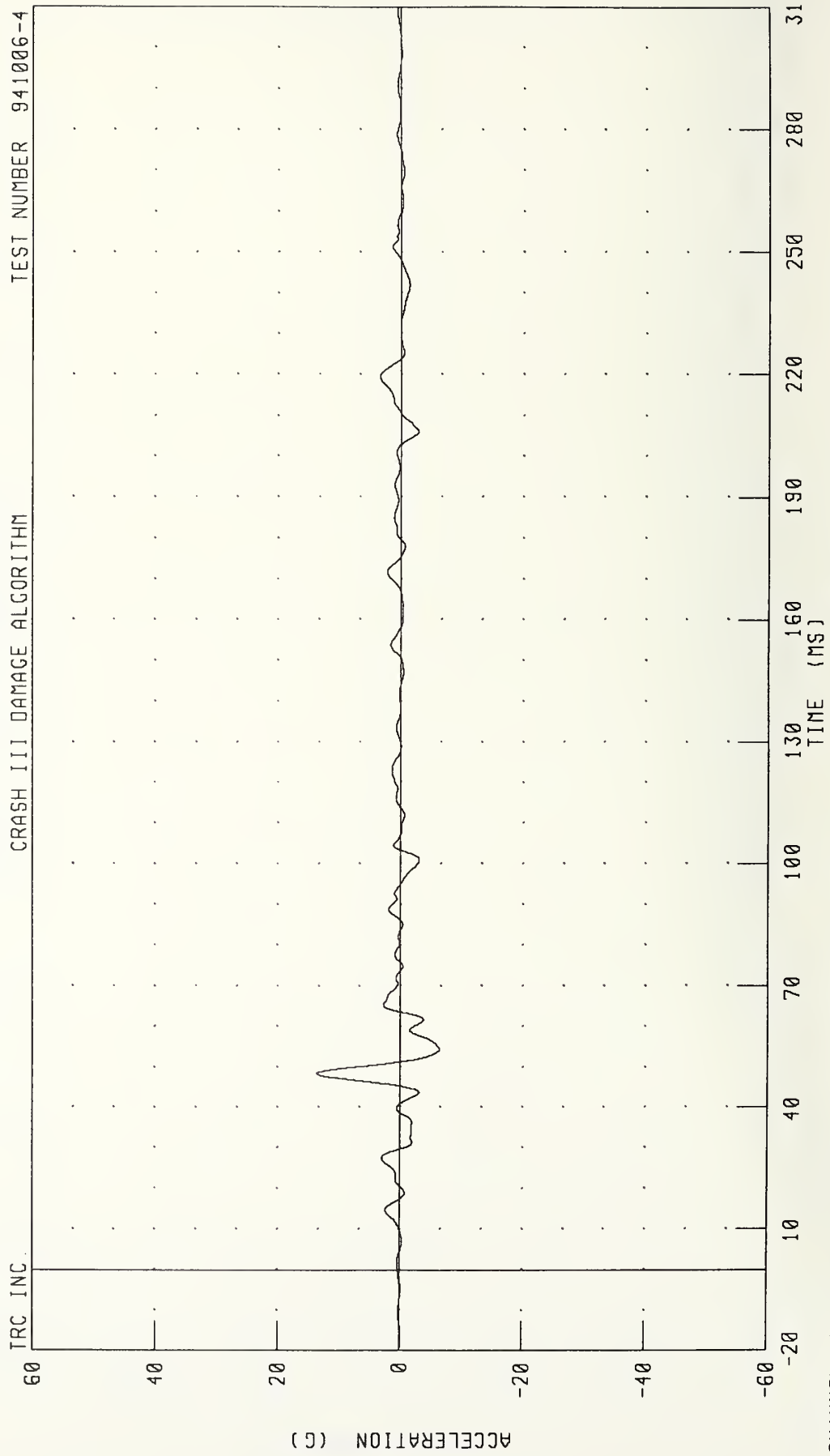


CHANNEL: VCCXD1 FILTER: CH. CLASS 180

PEAK DATA: 358.29 MM @ 62.08 MS; -31.44 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

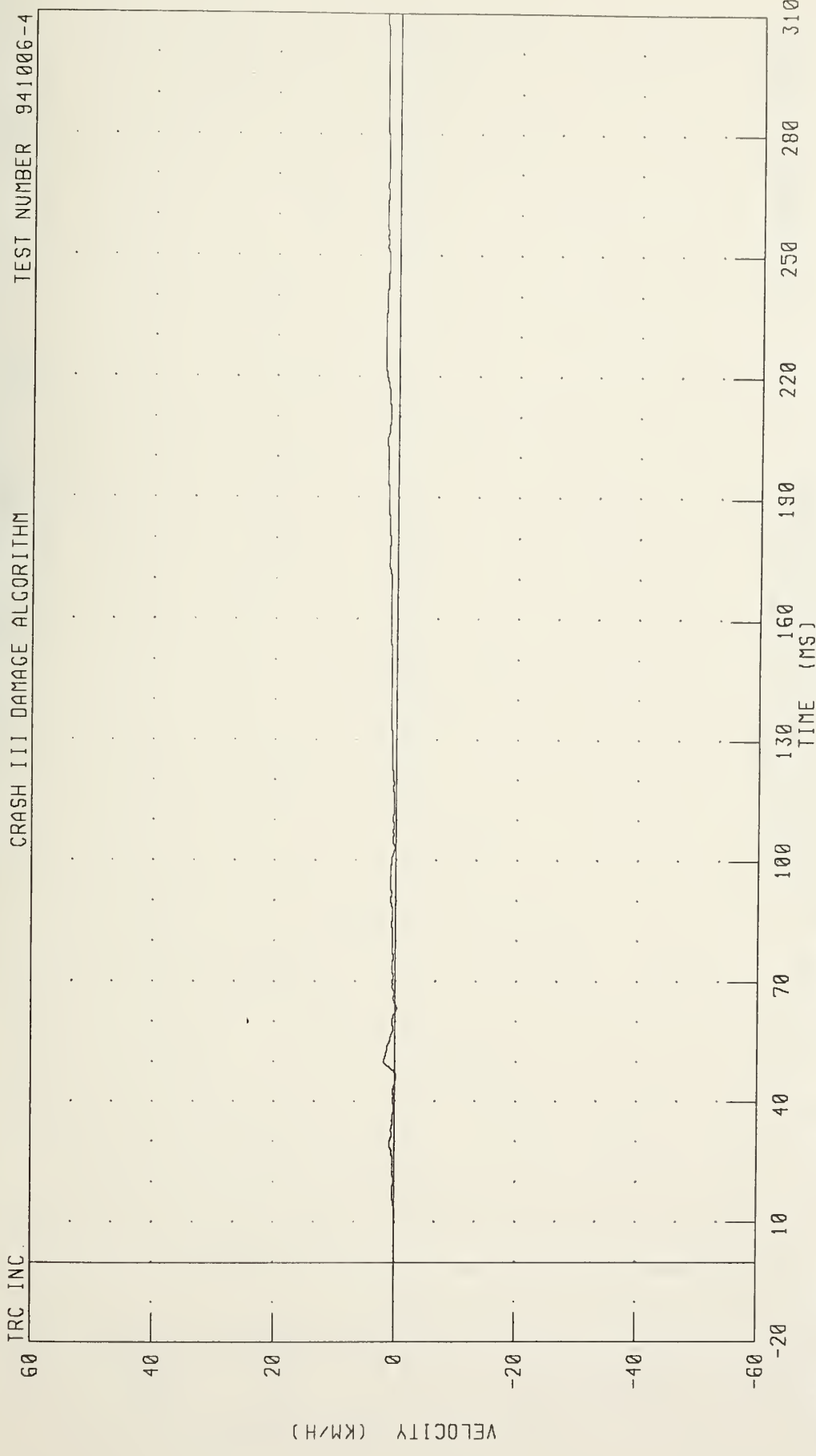


CHANNEL VCGY61 FILTER CH. CLASS 60

PEAK DATA: 13.68 G @ 48.40 MS, -6.46 G @ 54.48 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Y-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

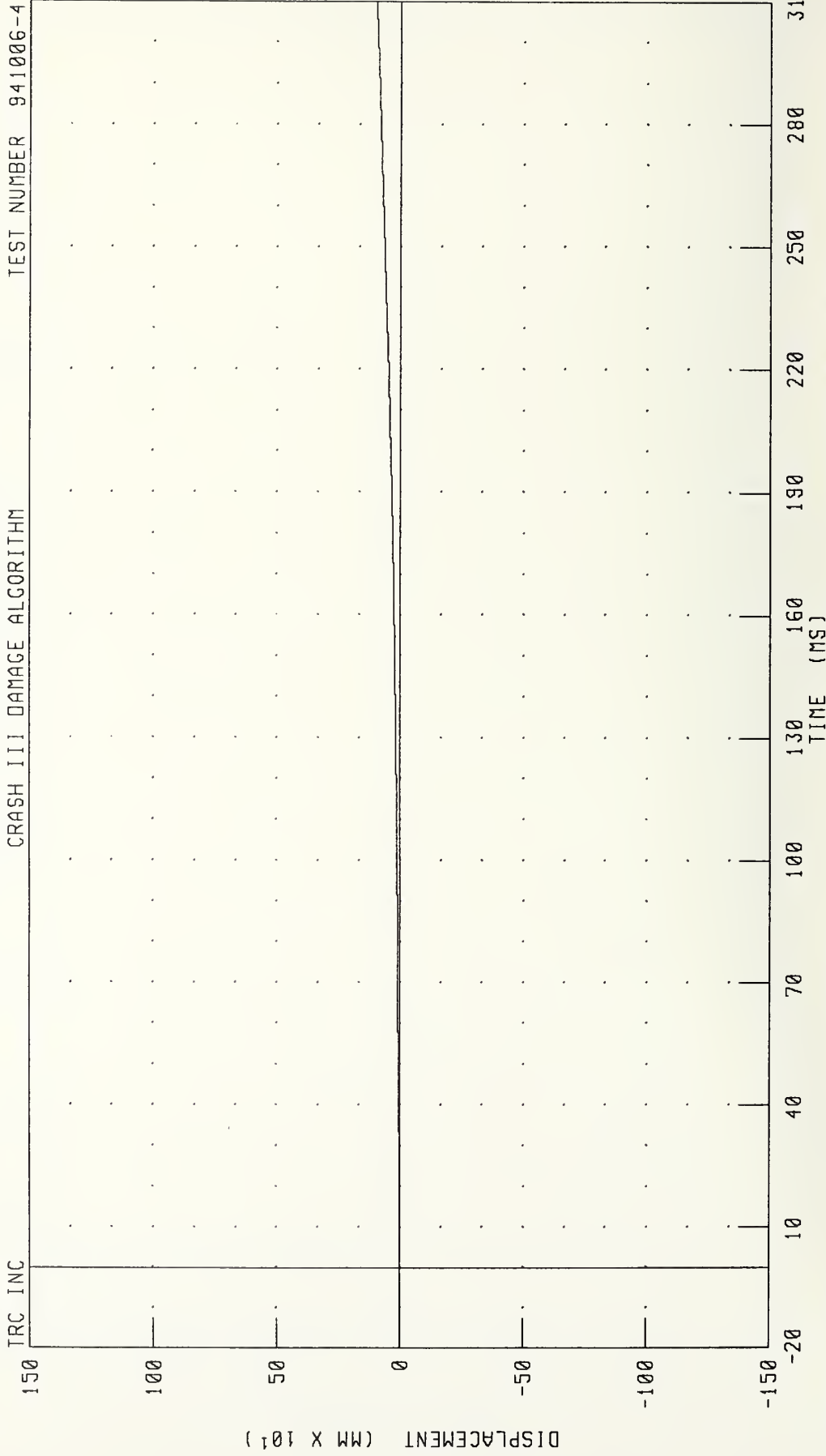
TEST NUMBER 941006-4



TRC INC. CHANNEL: VCGYV1 FILTER: CH CLASS 180
PEAK DATA: 2.24 KM/H @ 223.20 MS; -0.26 KM/H @ 63.44 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 VEHICLE CG Y-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

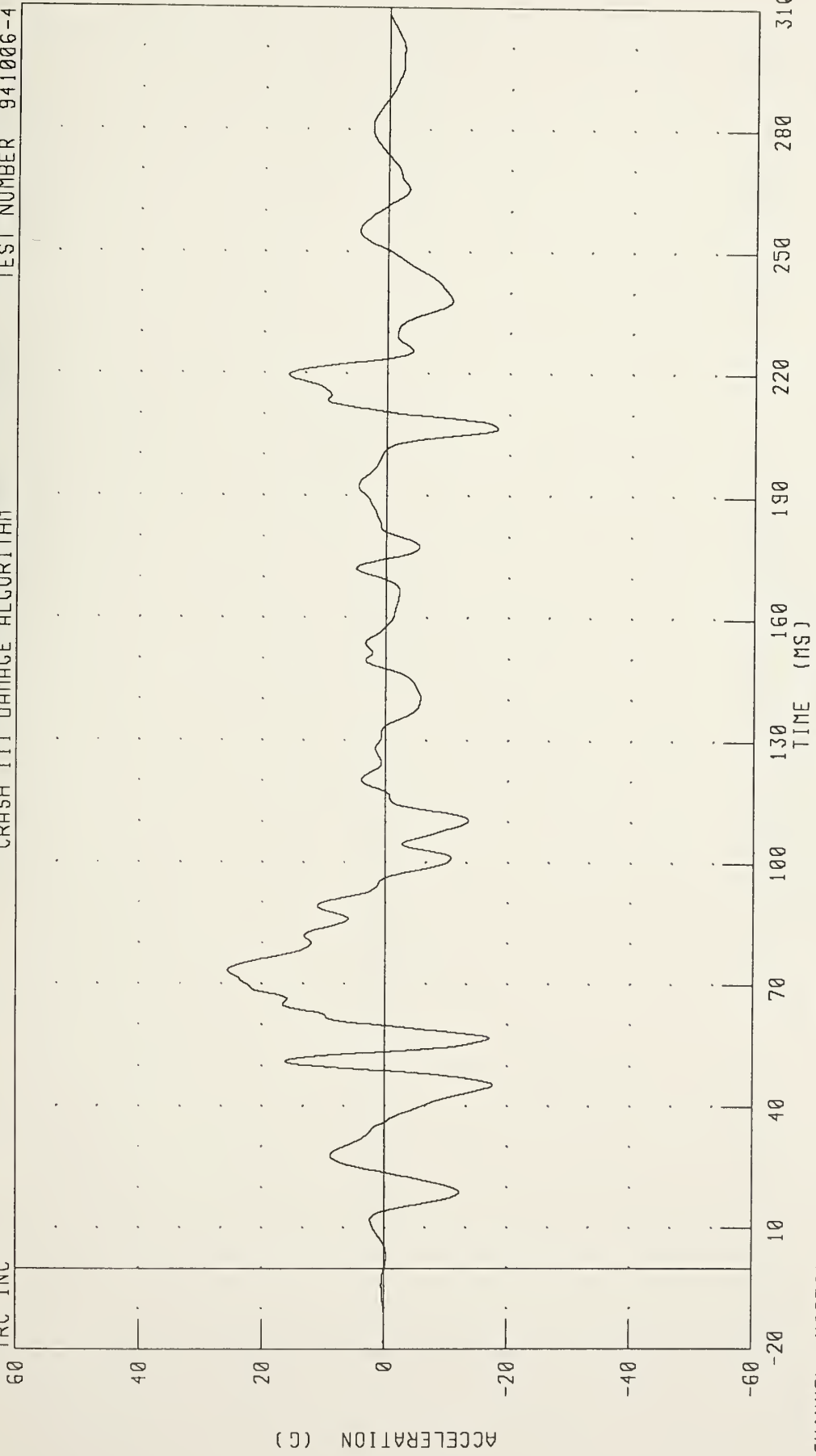


CHANNEL: VCCYD1 FILTER: CH CLASS 180 PEAK DATA: 98.02 MM @ 310.00 MS, 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

TRC_INC



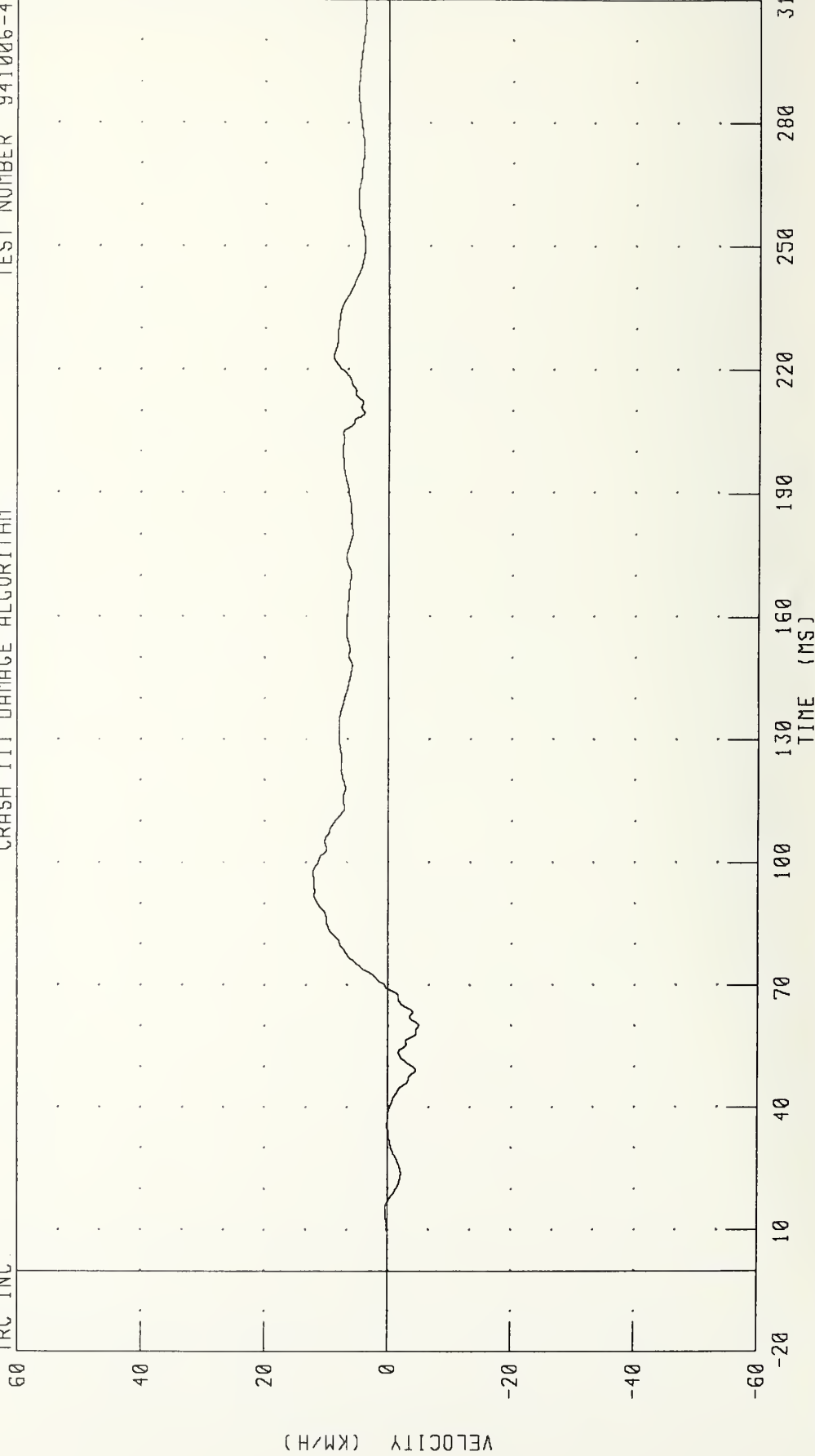
CHANNEL: VCGZG1 FILTER: CH CLASS 60

PEAK DATA: 25.67 G @ 73.36 MS, -18.17 G @ 206.64 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

TRC INC

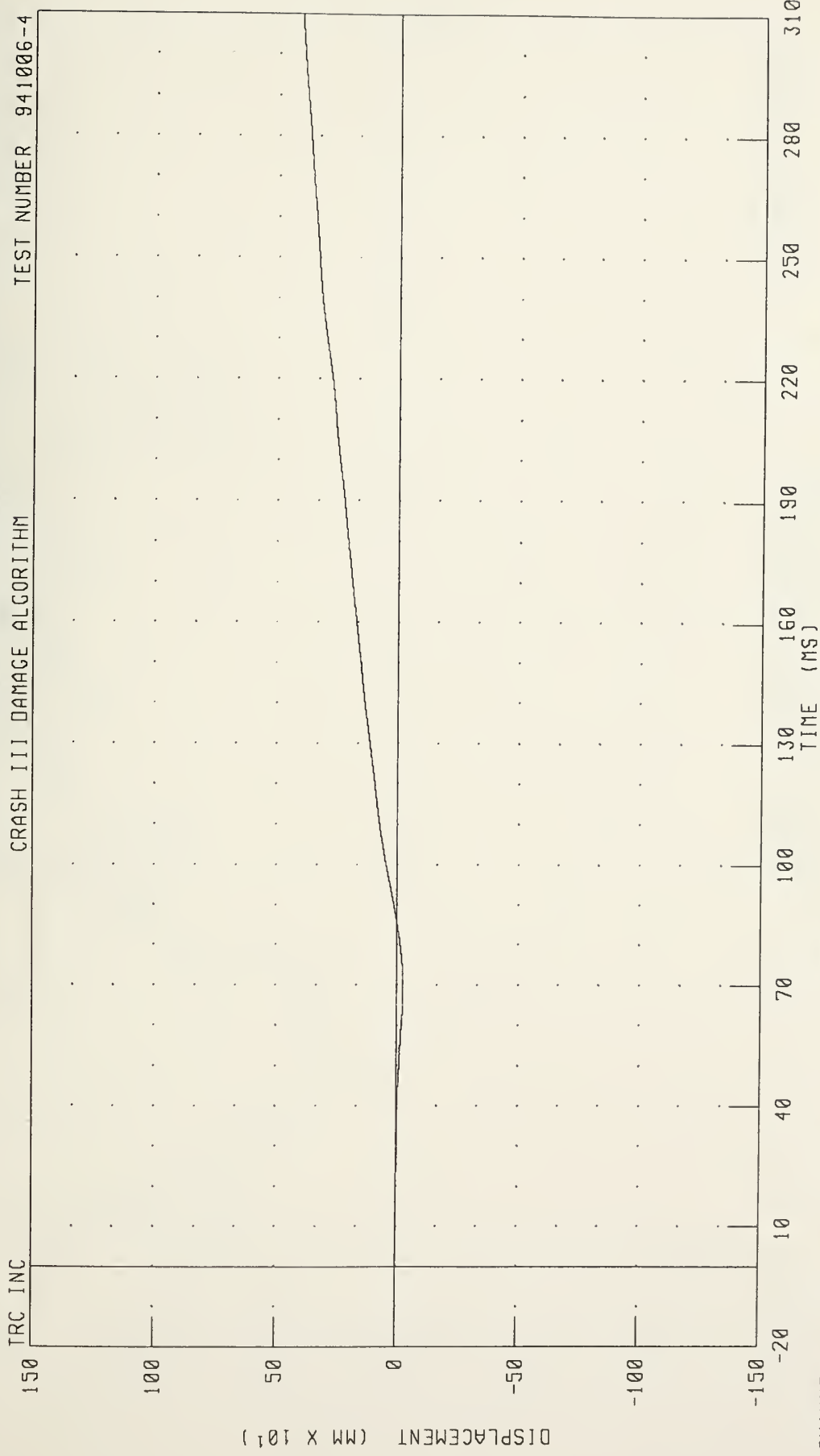


CHANNEL : VCGZV1 FILTER : CH CLASS 180

PEAK DATA : 12.17 KM/H @ 97.52 MS ; -5.03 KM/H @ 60.24 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

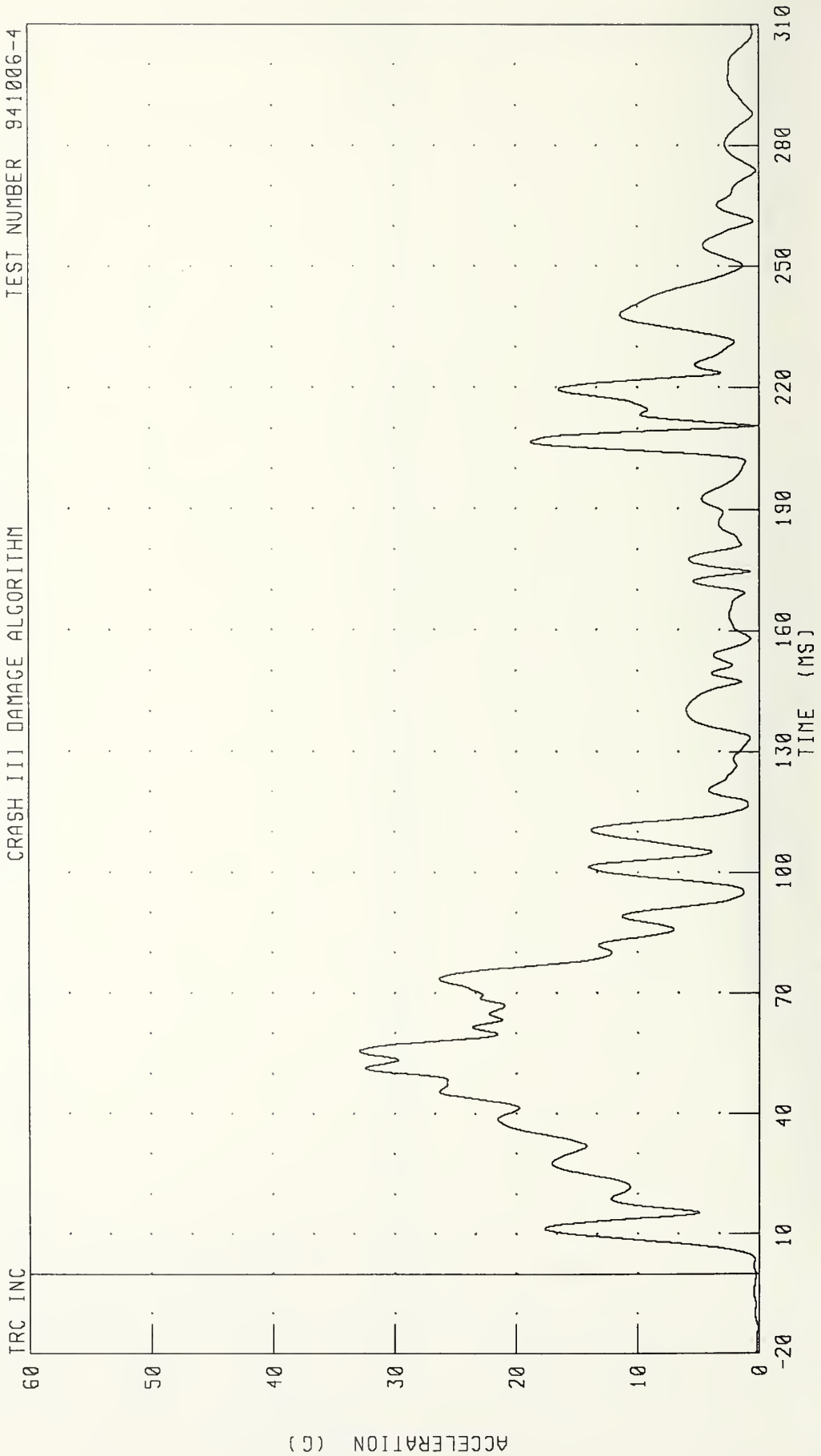
TEST NUMBER 941006-4



CHANNEL: VCGZ01 FILTER: CH CLASS 180 PEAK DATA: 408 37 MM @ 310 00 MS, -27 13 MM @ 69 04 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4



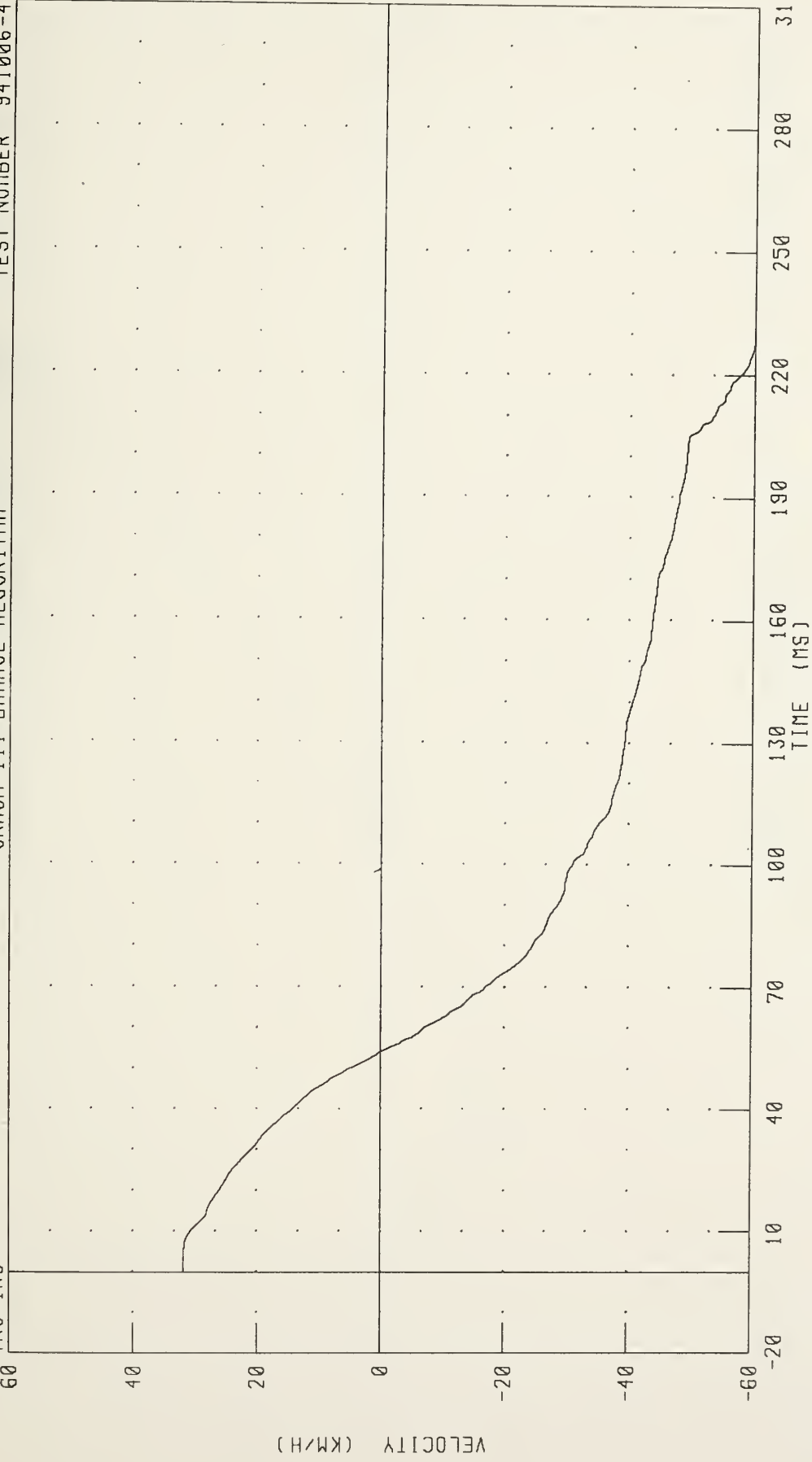
CHANNEL: VCGRG1 FILTER: CH CLASS 60

PEAK DATA: 32.92 G @ 55.68 MS; 0.11 G @ -13.60 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

TRC INC

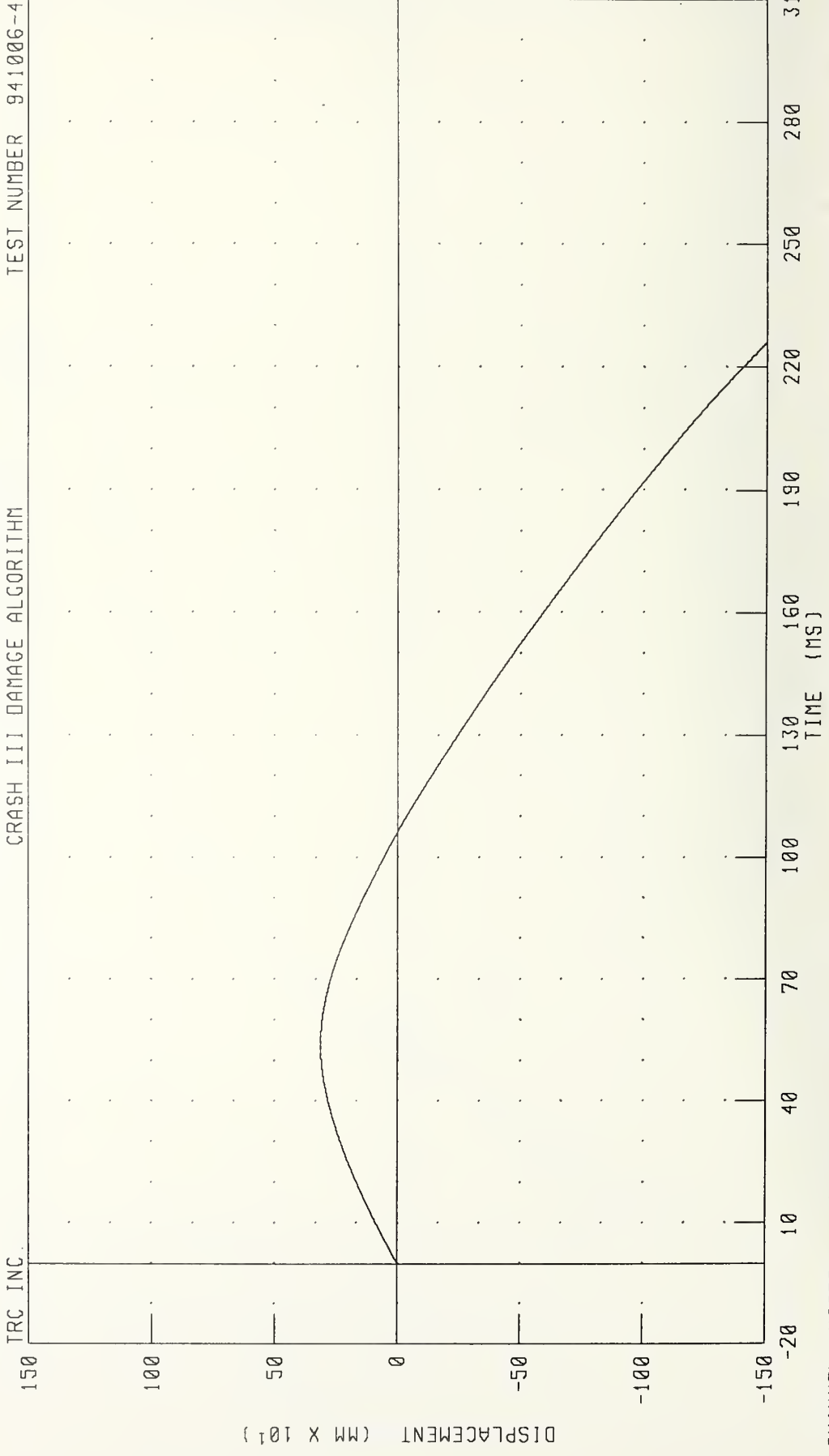


CHANNEL: VCGRV1 FILTER: CH CLASS 180

PEAK DATA: 31.90 KM/H @ 0.00 MS; -70.27 KM/H @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

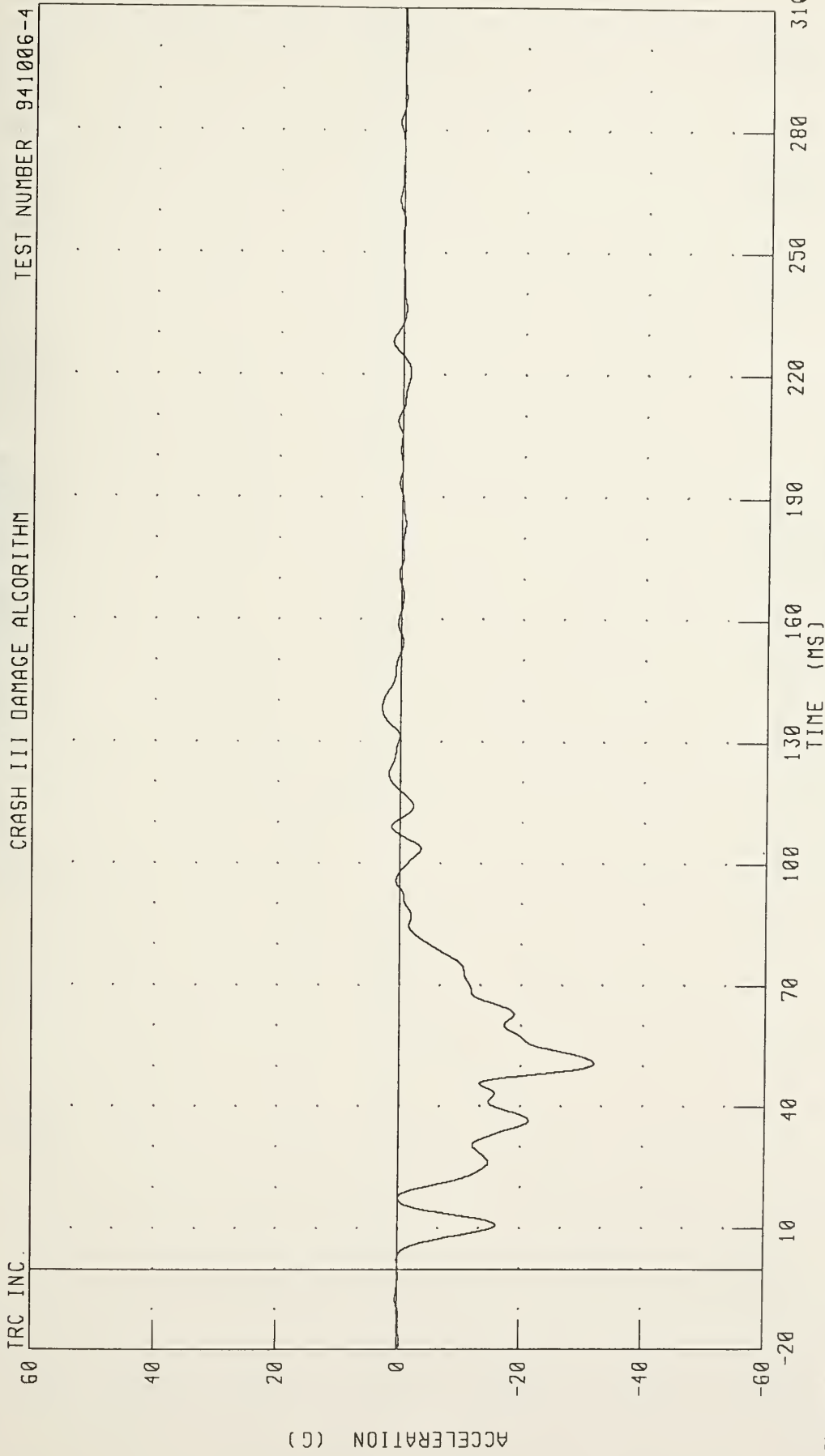


CHANNEL: VCGRD1 FILTER: CH. CLASS 180

PEAK DATA 313.45 MM @ 54.08 MS, -3049.55 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TRC INC. TEST NUMBER 941006-4

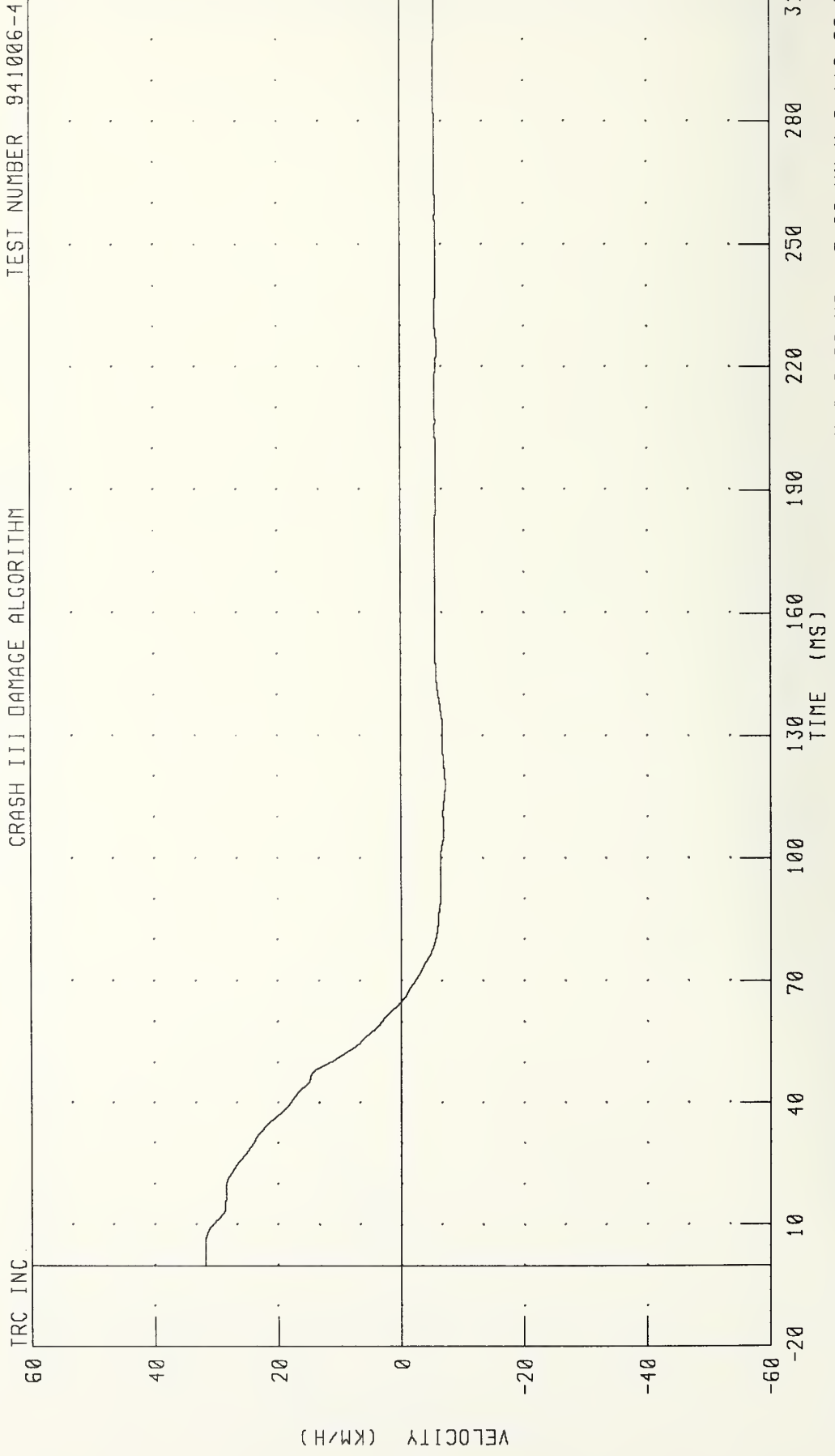


CHANNEL: LFSXG1 FILTER: CH CLASS 60

PEAK DATA: 3.01 G @ 138.48 MS, -31.97 G @ 50.72 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

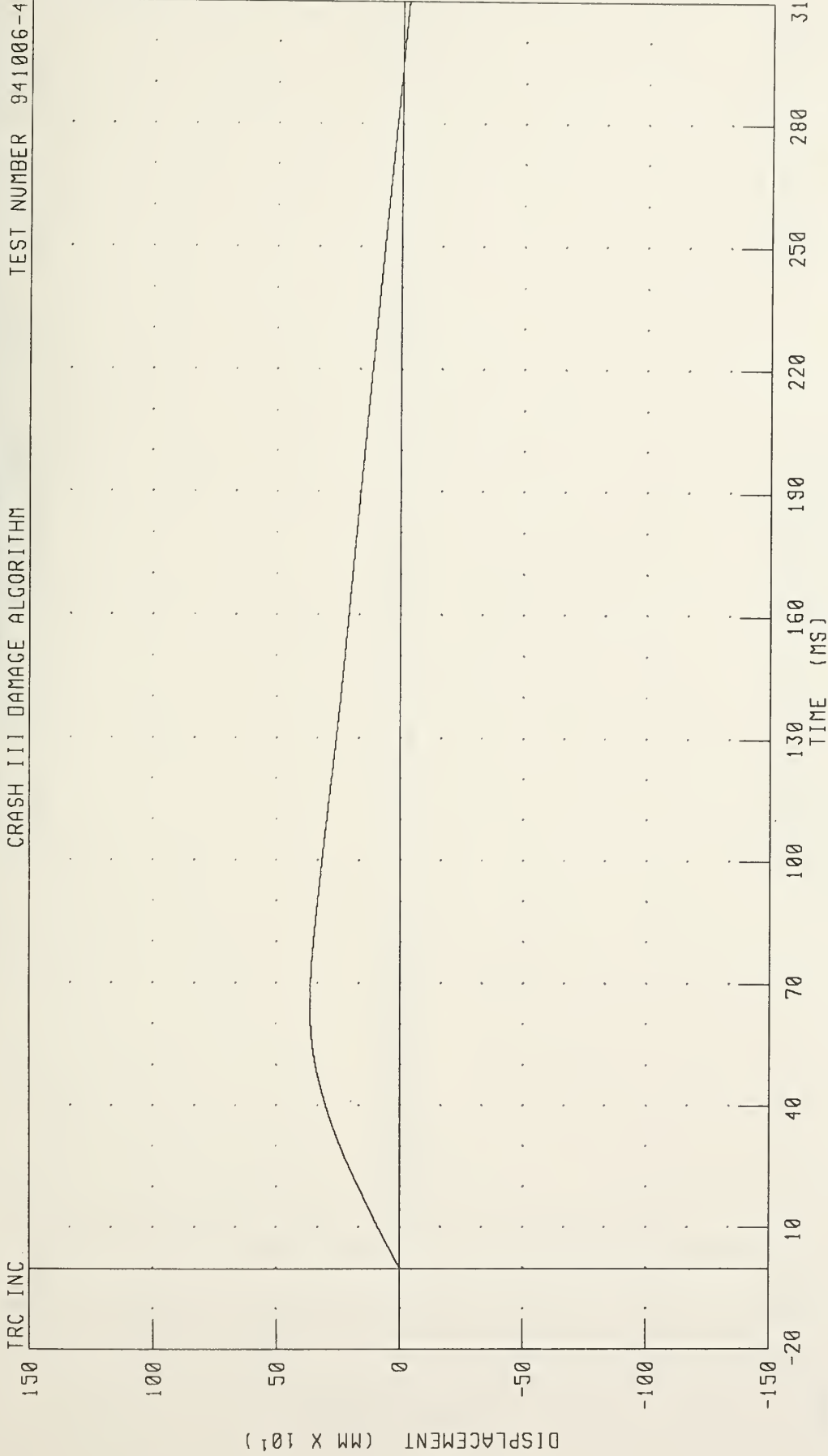


CHANNEL: LFSXV1 FILTER: CH. CLASS 180

PEAK DATA: 31.90 KM/H @ 0.00 MS; -7.22 KM/H @ 118.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM
TEST NUMBER 941006-4

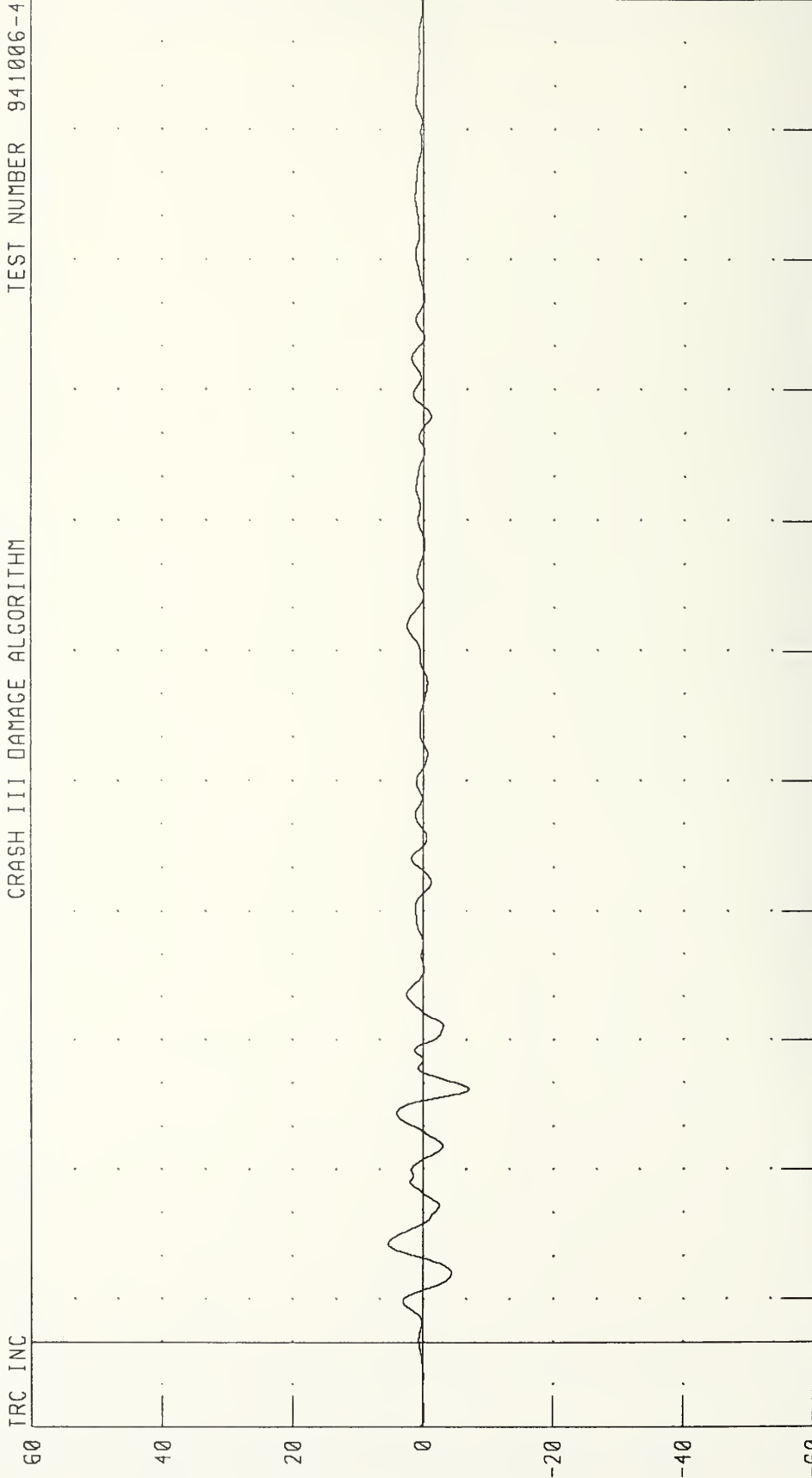


CHANNEL: LFSXD1 FILTER: CH. CLASS 180

PEAK DATA: 364.87 MM @ 64.88 MS, -24.30 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

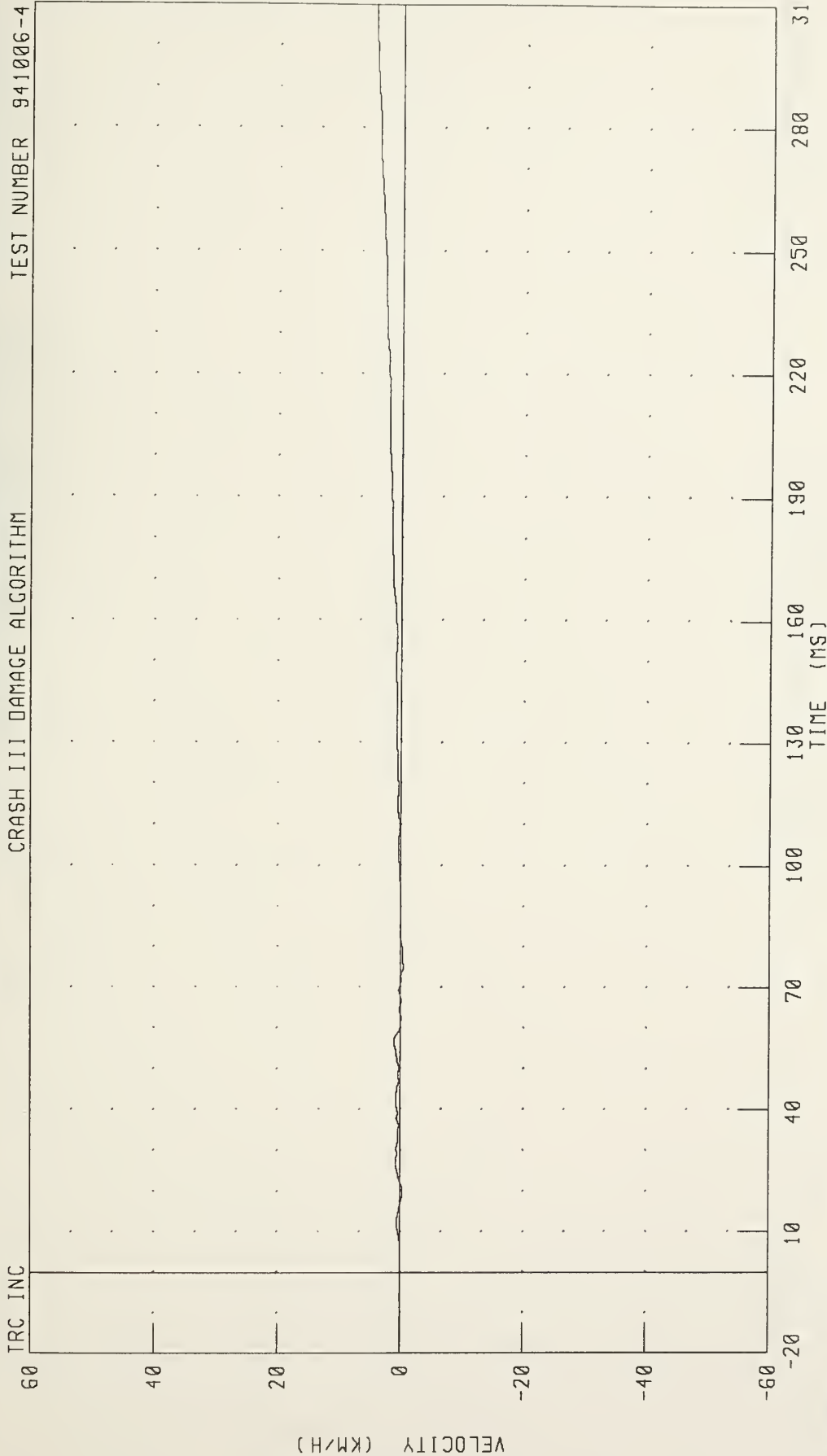


CHANNEL: LFSYG1 FILTER: CH. CLASS 60

PEAK DATA: 5.35 G @ 22.80 MS; -7.06 G @ 58.64 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS VELOCITY

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-4



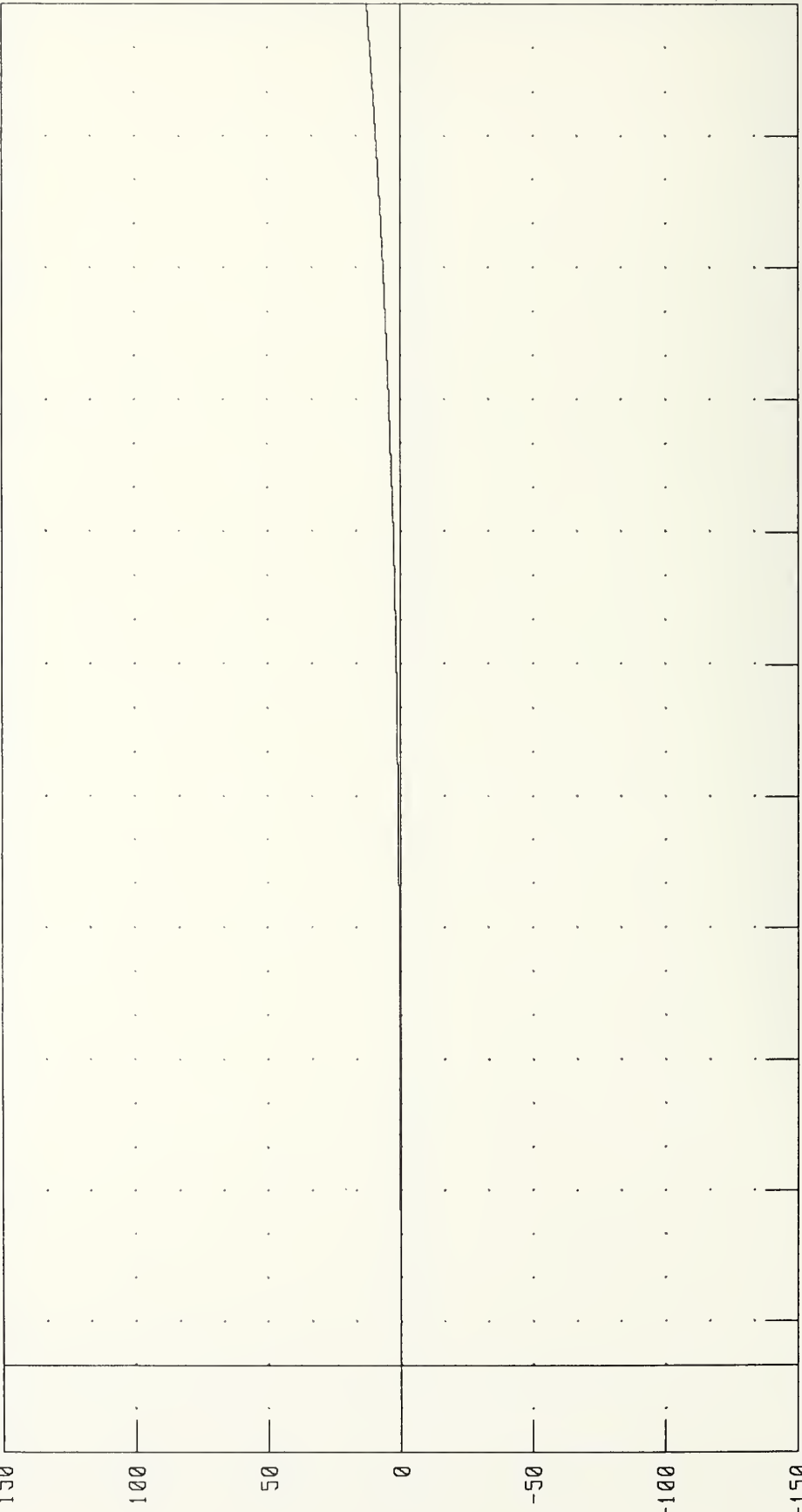
CHANNEL: LFSYV1 FILTER: CH. CLASS 180

PEAK DATA: 4.47 KM/H @ 310.00 MS; -0.48 KM/H @ 74.96 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

TRC INC.



DISPLACEMENT (MM X 10¹)

150

100

50

0

-50

-100

-150

TRC INC.

10 40 70 100 130 160 190 220 250 280 310

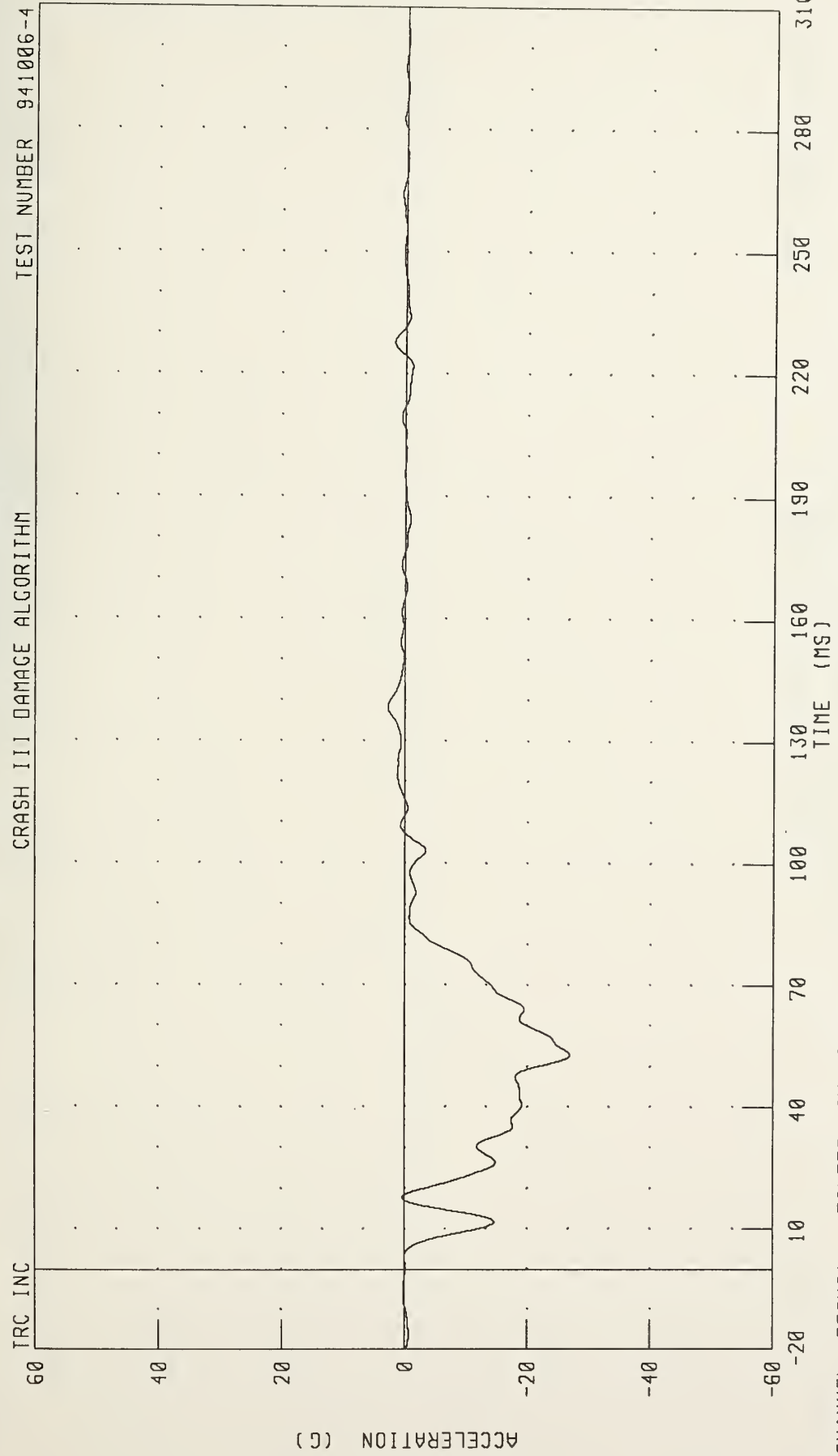
TIME (MS)

CHANNEL: LFSYD1 FILTER: CH. CLASS 180

PEAK DATA: 127.06 MM @ 310.00 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

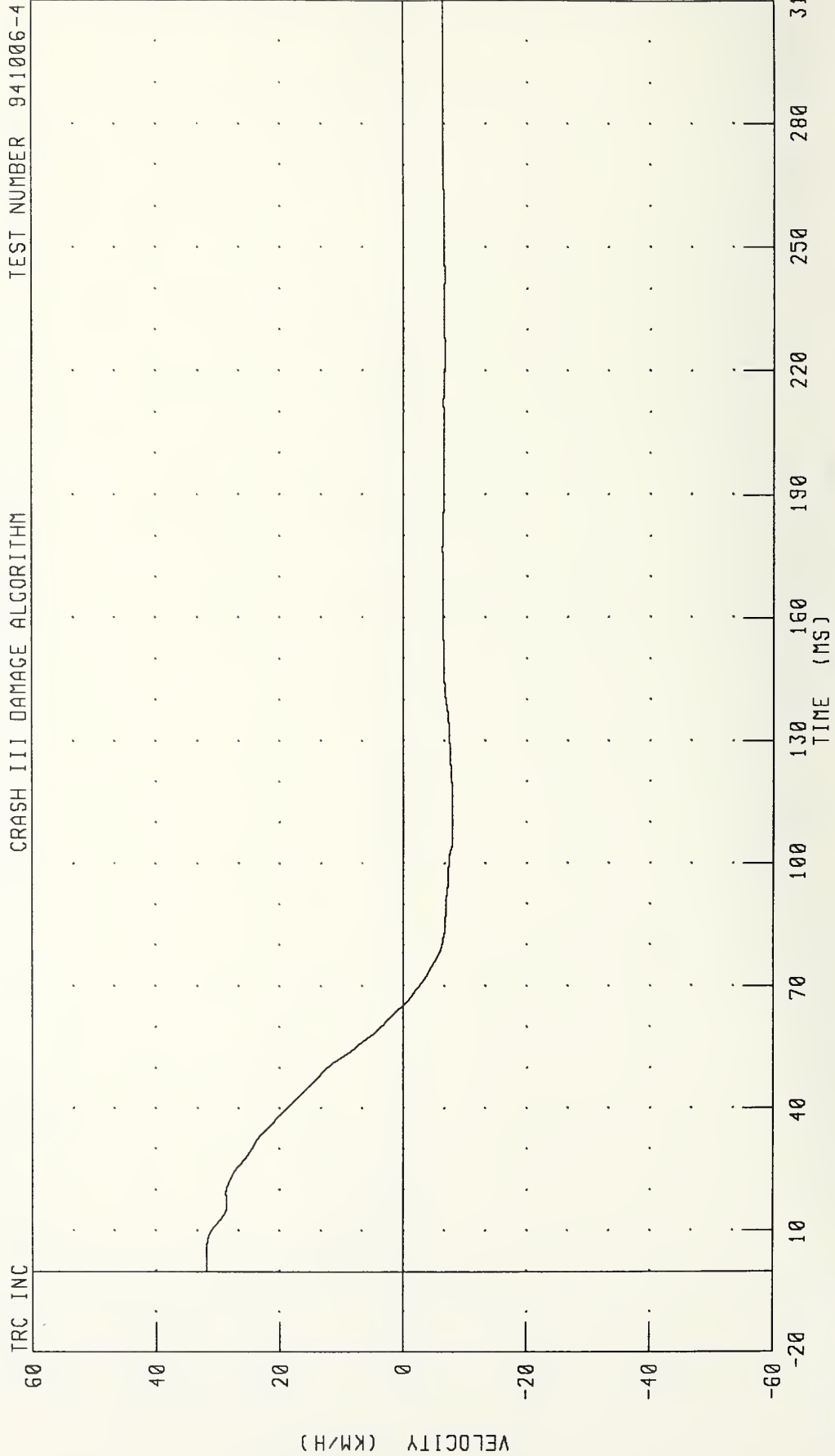


CHANNEL: RFSXG1 FILTER: CH. CLASS 60

PEAK DATA: 2.79 G @ 138.40 MS; -26.93 G @ 52.80 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TRC INC TEST NUMBER 941006-4

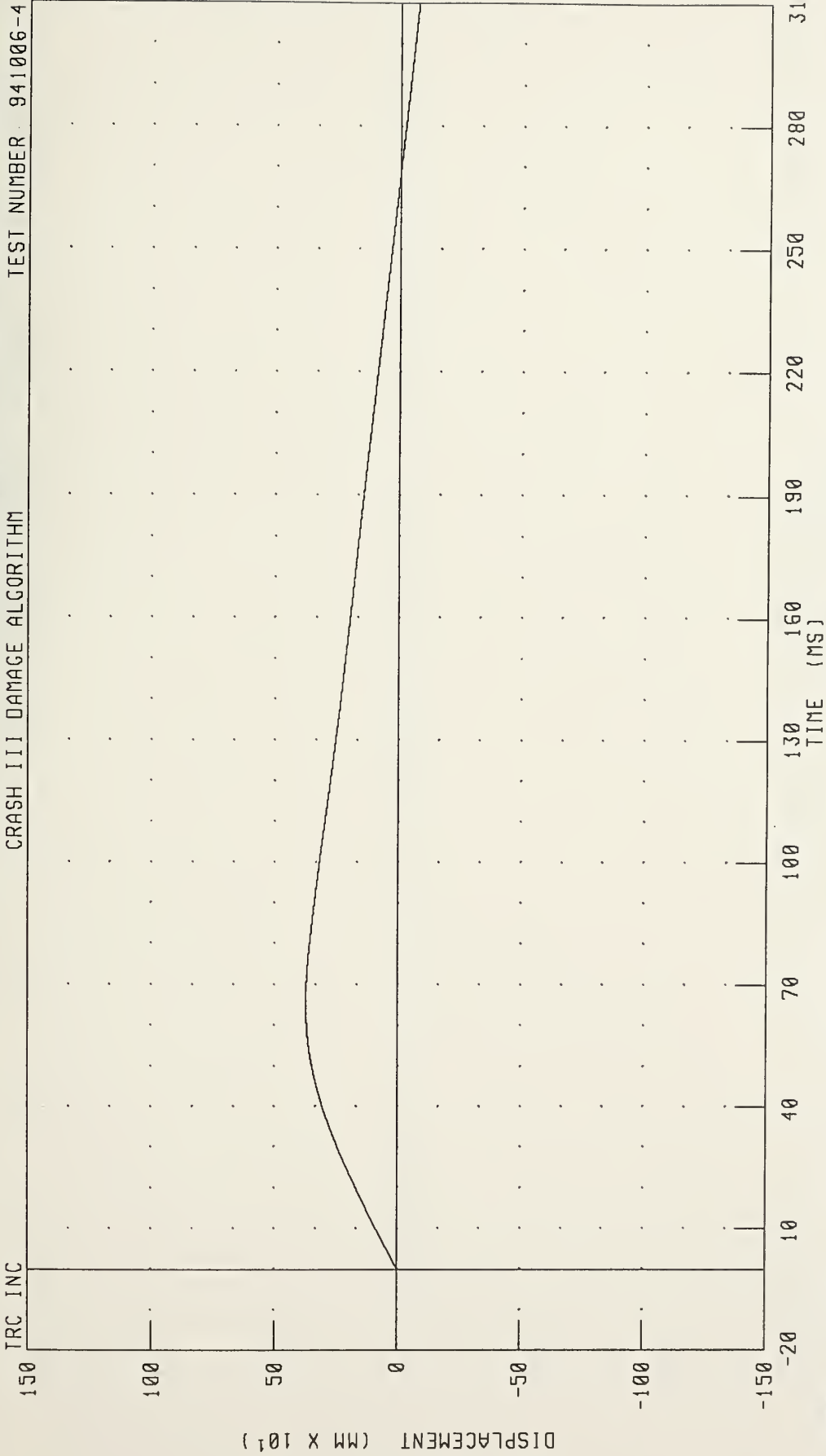


CHANNEL : RFSXV1 FILTER : CH. CLASS 180 PEAK DATA : 31.90 KM/H @ 0.00 MS; -7.99 KM/H @ 107.92 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

TRC INC

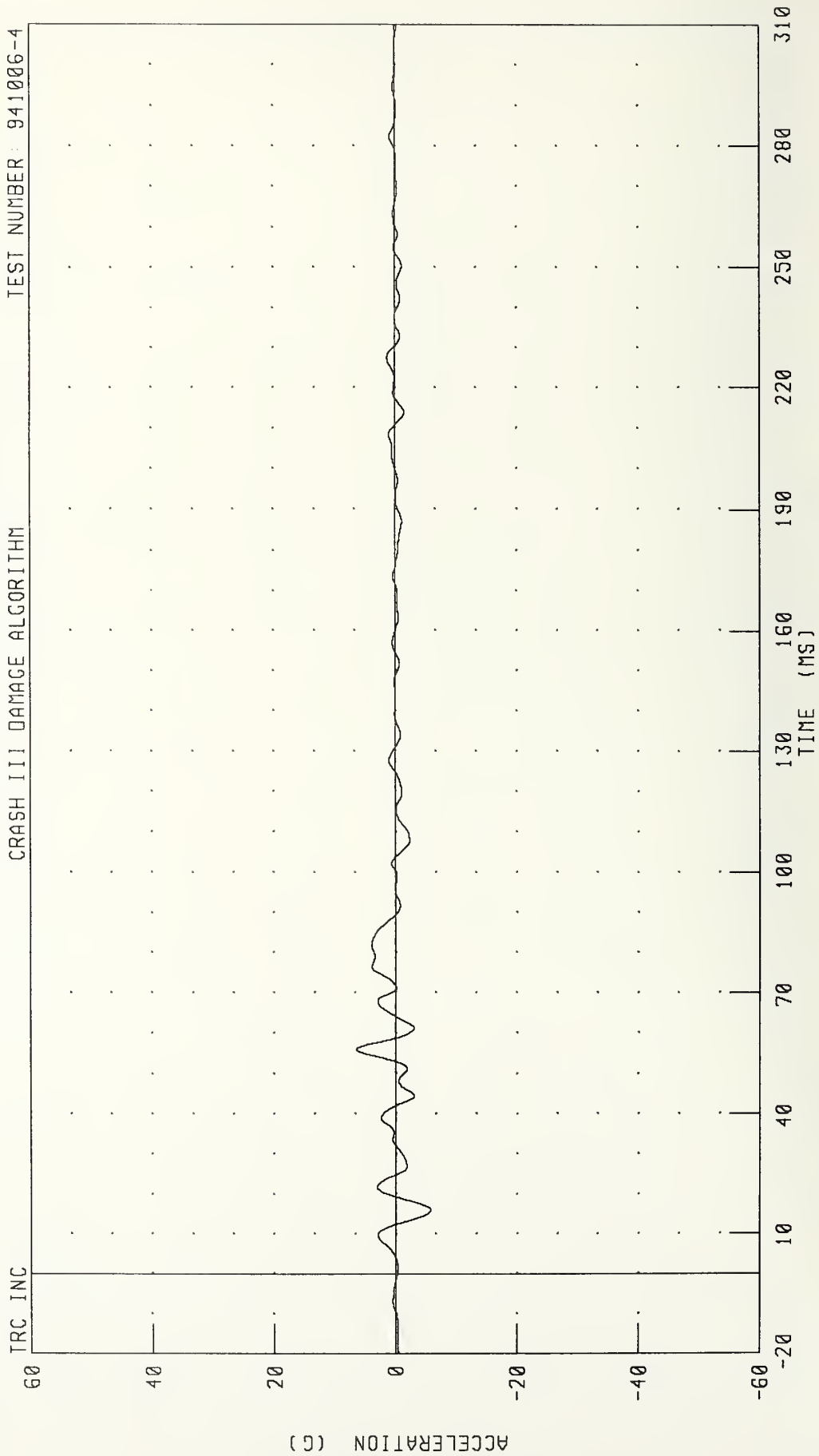


CHANNEL: RFSXD1 FILTER: CH. CLASS 180

PEAK DATA: 372.91 MM @ 65.36 MS; -73.84 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

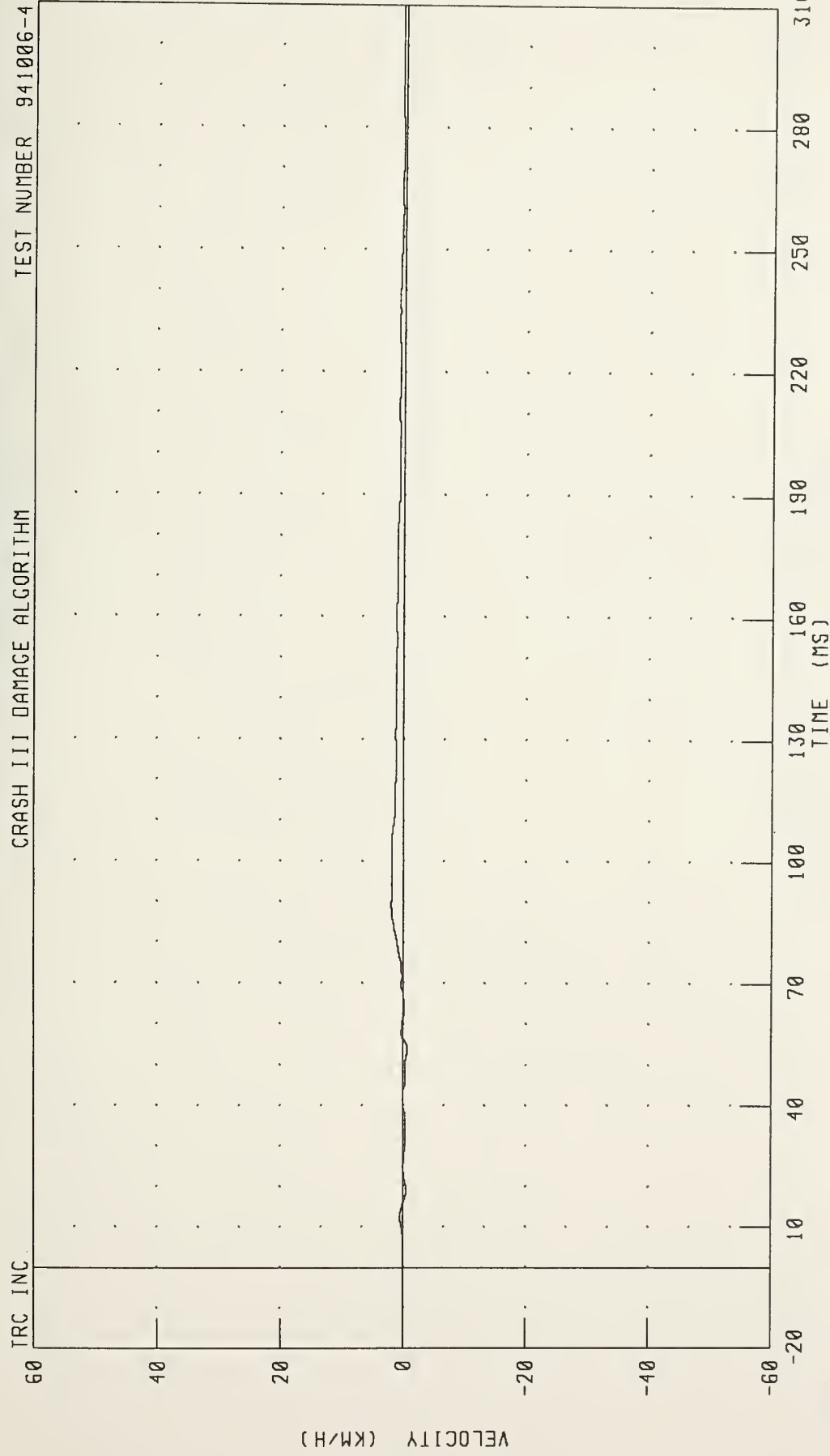
TEST NUMBER: 941006-4



CHANNEL: RFSYG1 FILTER: CH. CLASS 60 PEAK DATA: 6.52 G @ 56.00 MS; -5.75 G @ 15.92 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT FRONT SILL Y-AXIS VELOCITY
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

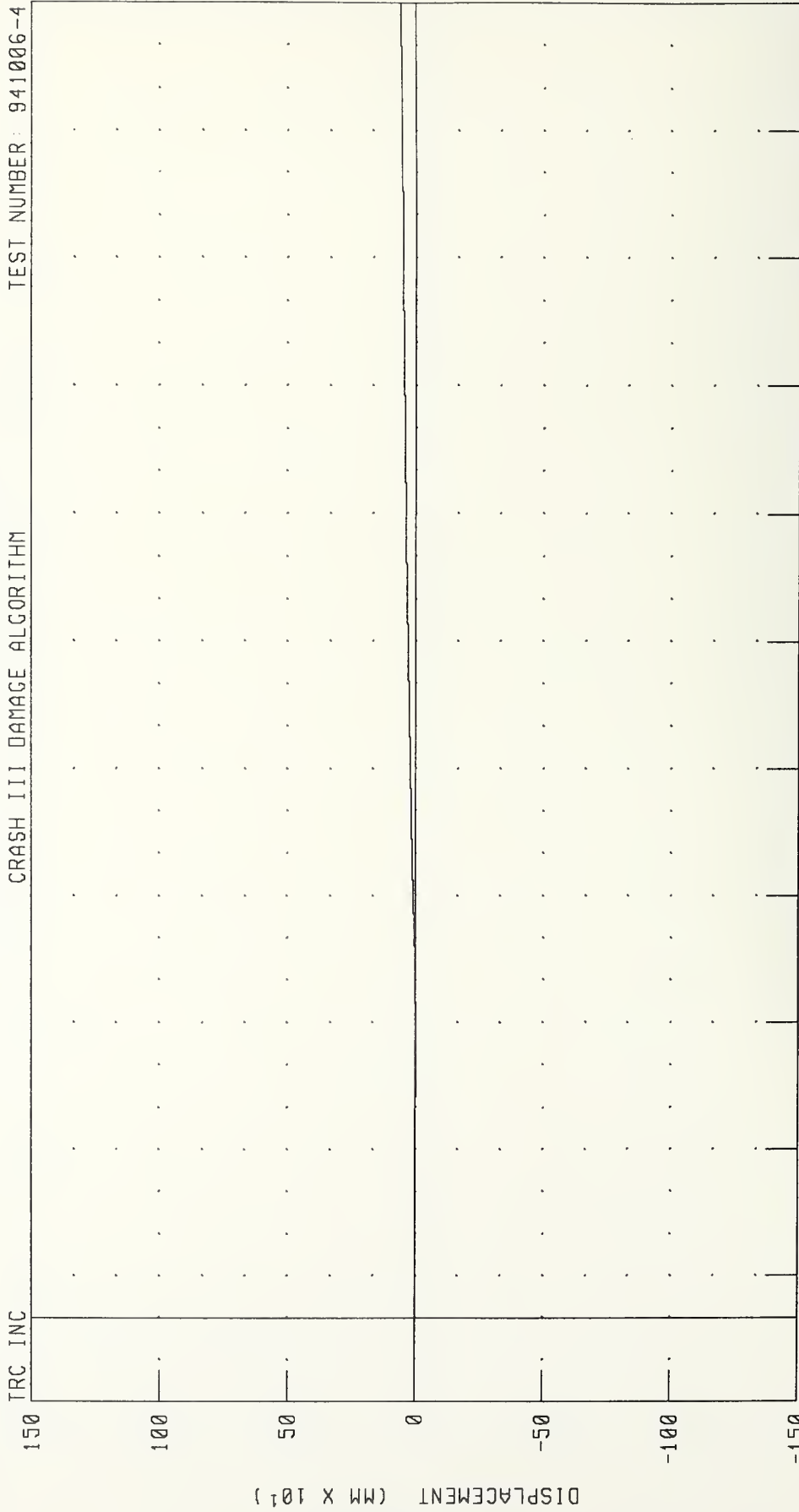


CHANNEL: RFSYV1 FILTER: CH. CLASS 180

PEAK DATA: 1.97 KM/H @ 89.28 MS; -0.63 KM/H @ 54.32 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT FRONT SILL Y-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-4

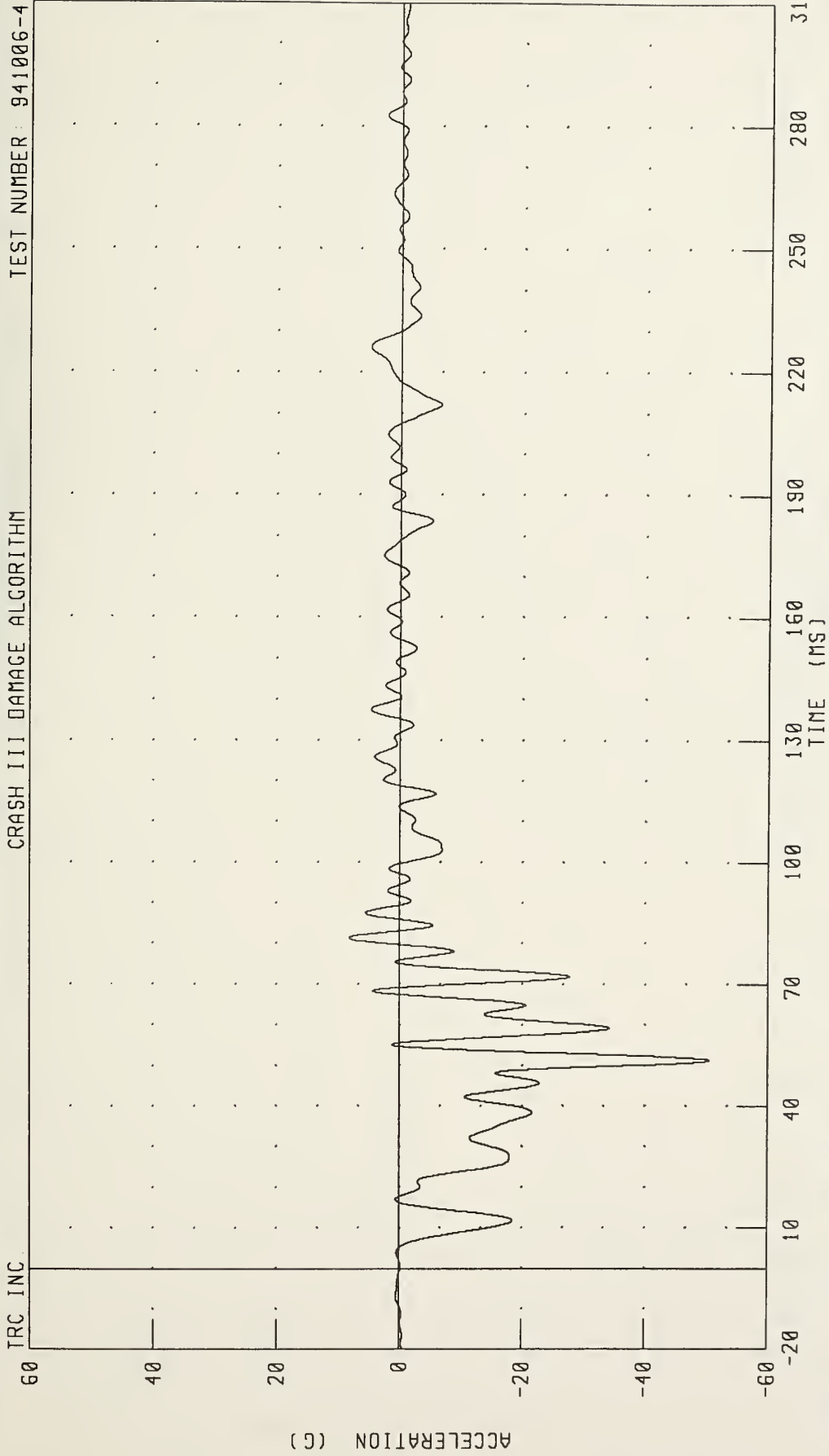


CHANNEL: RFSYD1 FILTER: CH. CLASS 180

PEAK DATA: 58.80 MM @ 310.00 MS; -2.48 MM @ 56.32 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-4

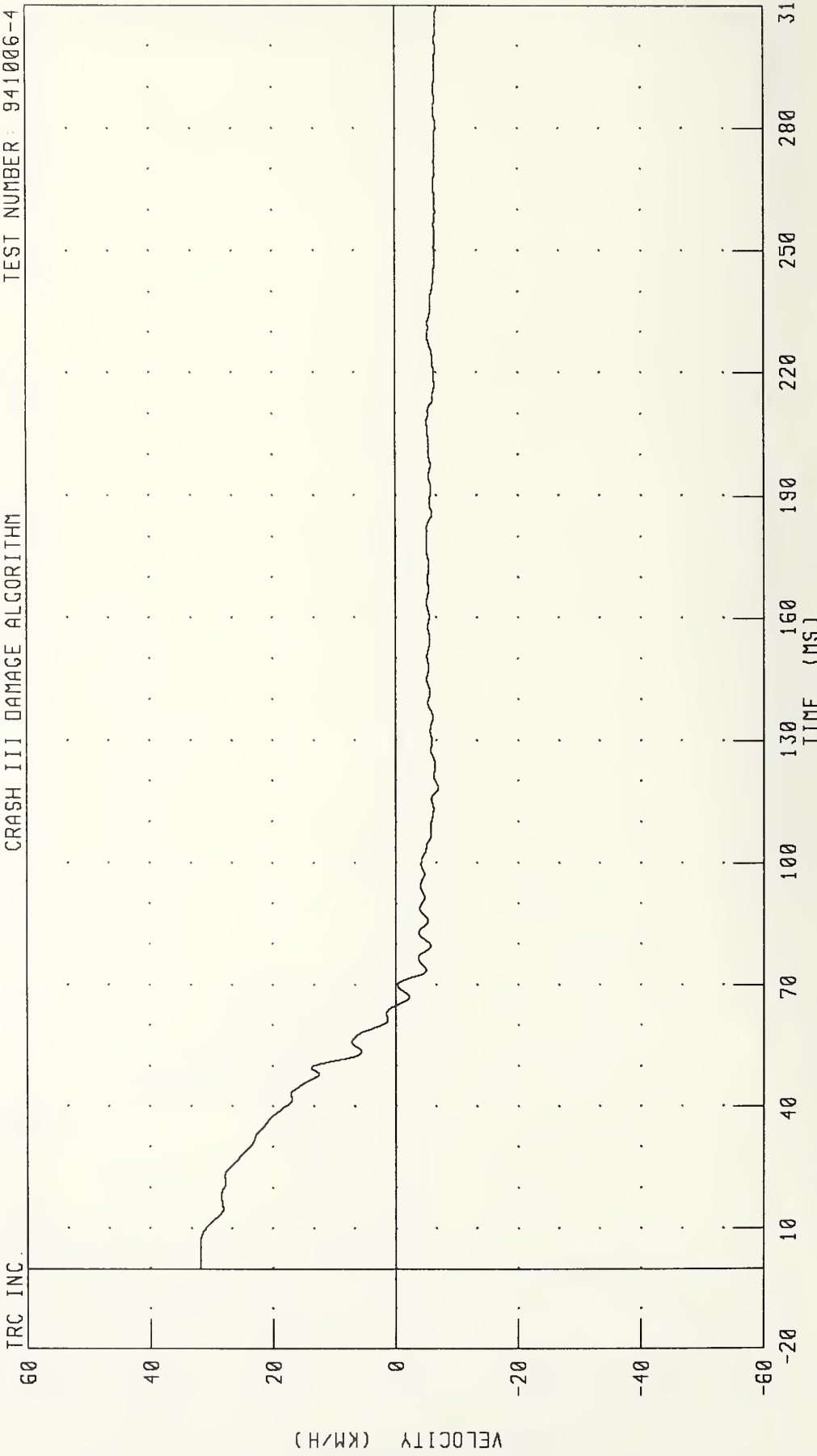


CHANNEL: TLRXG1 FILTER: CH. CLASS 60

PEAK DATA: 8.18 G @ 81.36 MS, -50.44 G @ 51.28 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4



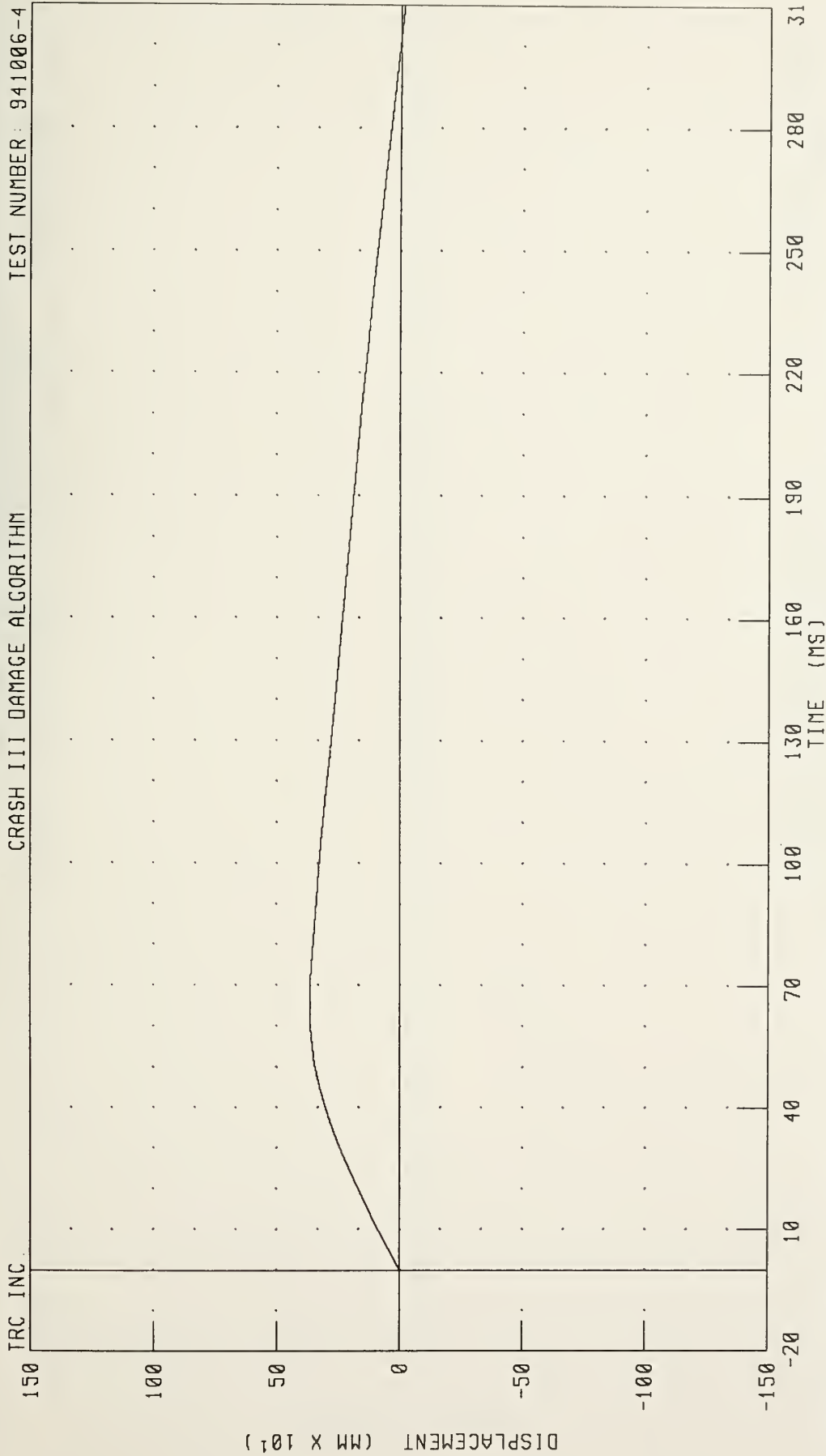
CHANNEL: TLRXV1 FILTER: CH. CLASS 180

PEAK DATA: 31.90 KM/H @ 0.00 MS; -6.97 KM/H @ 118.40 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-4

TRC INC.

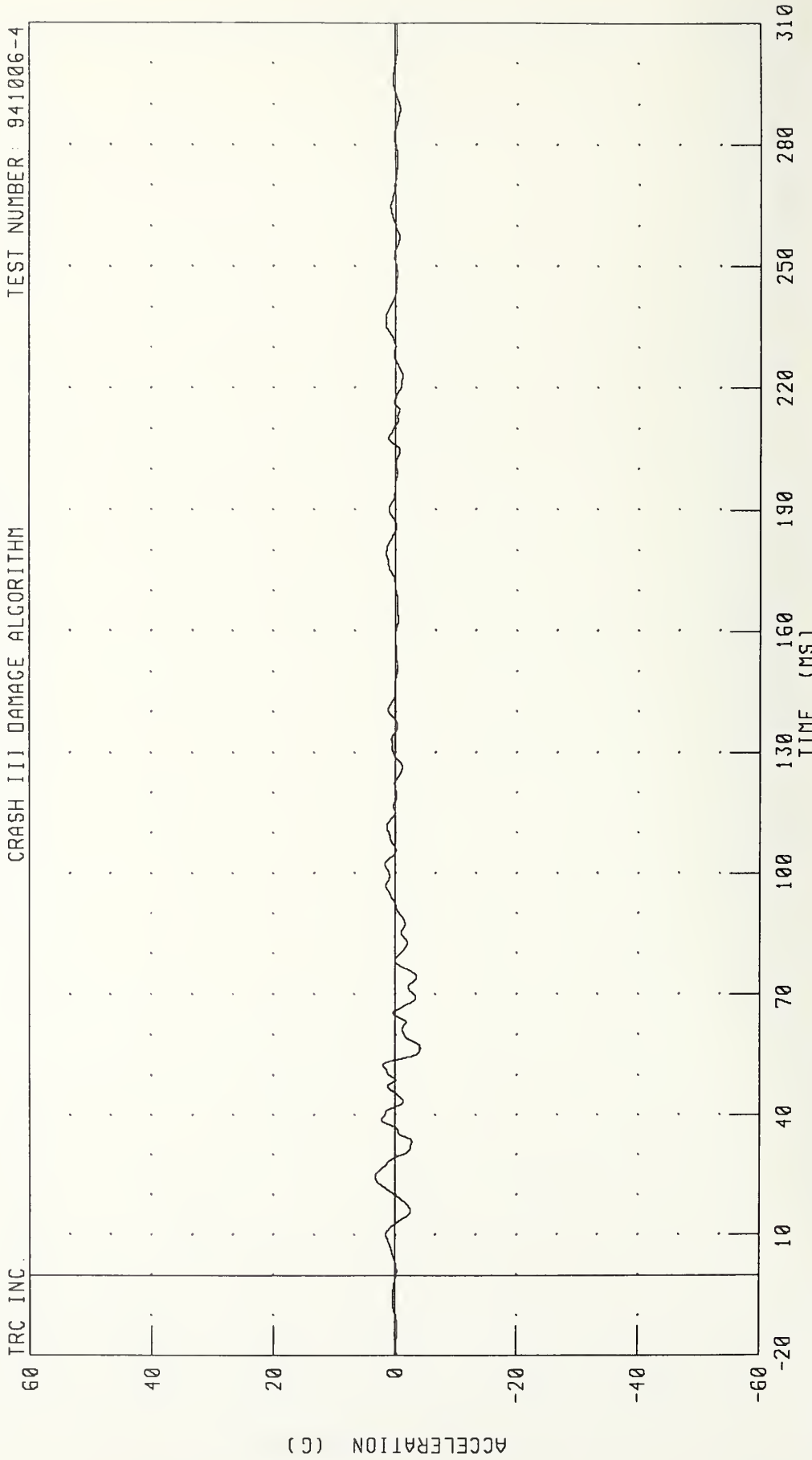


CHANNEL: TLRX01 FILTER: CH. CLASS 180

PEAK DATA: 365.45 MM @ 64.96 MS; -14.42 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-4

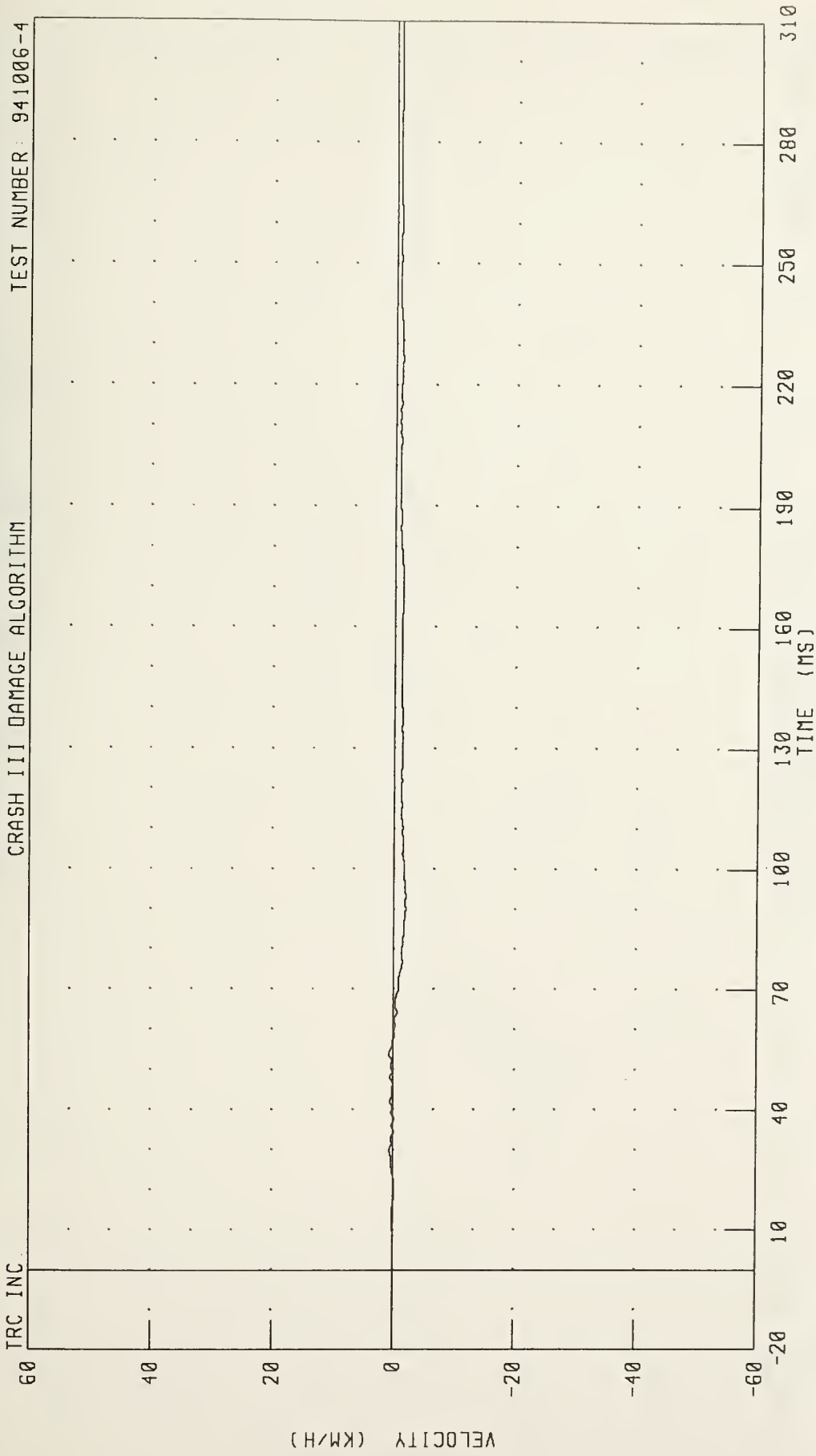


TRC INC.

CHANNEL: TLRYG1 FILTER: CH. CLASS 60
PEAK DATA: 3.27 G @ 24.32 MS; -4.14 G @ 56.72 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT Y-AXIS VELOCITY

CRASH III DAMAGE ALGORITHM TEST NUMBER: 941006-4



TRC INC

CHANNEL: TLRYV1 FILTER: CH. CLASS 180

PEAK DATA: 0.77 KM/H @ 53.76 MS; -1.96 KM/H @ 93.28 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 LEFT REAR SEAT Y-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-4

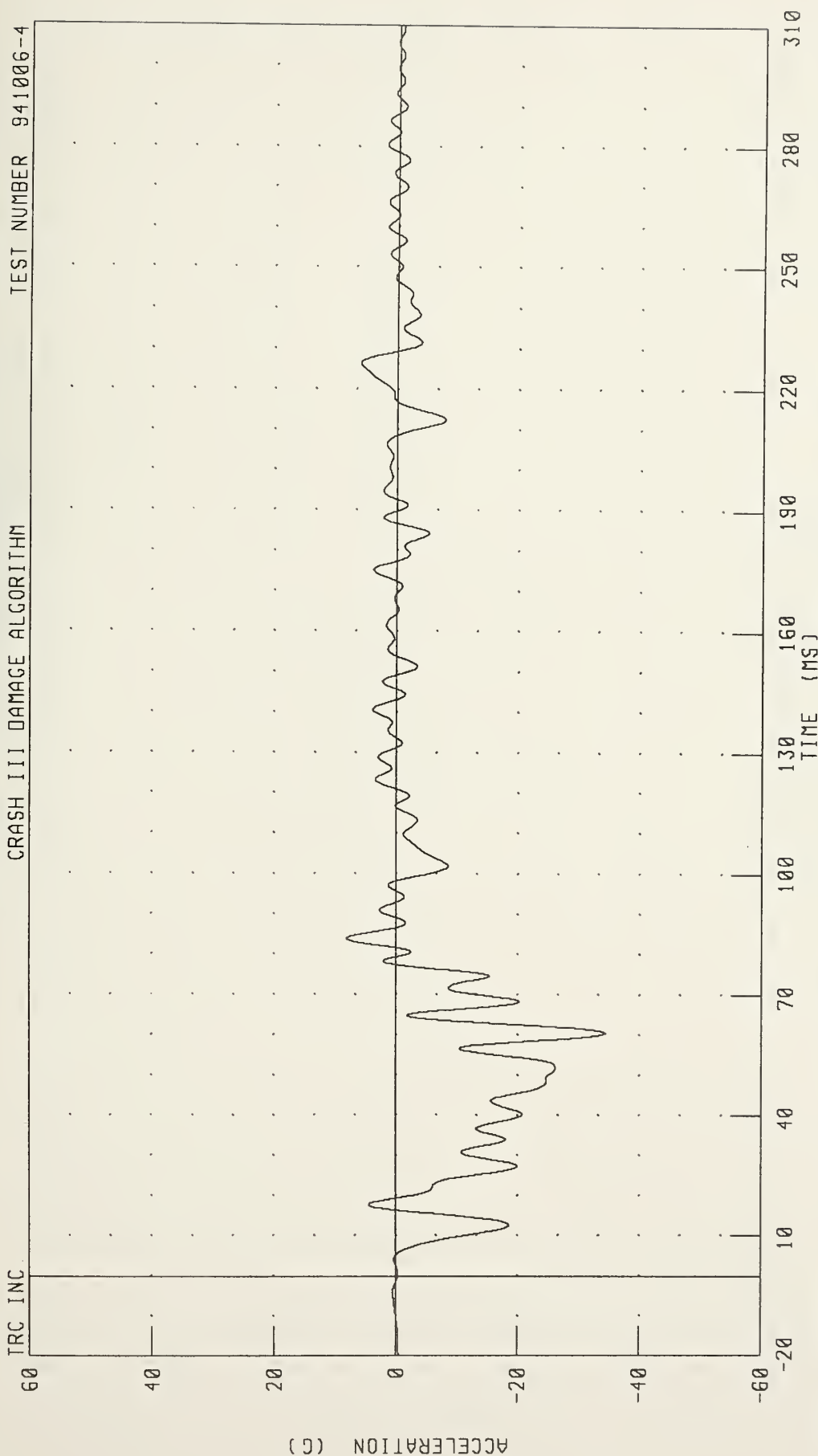


CHANNEL: TLRD1 FILTER: CH. CLASS 180

PEAK DATA: 2.69 MM @ 57.60 MS; -69.78 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

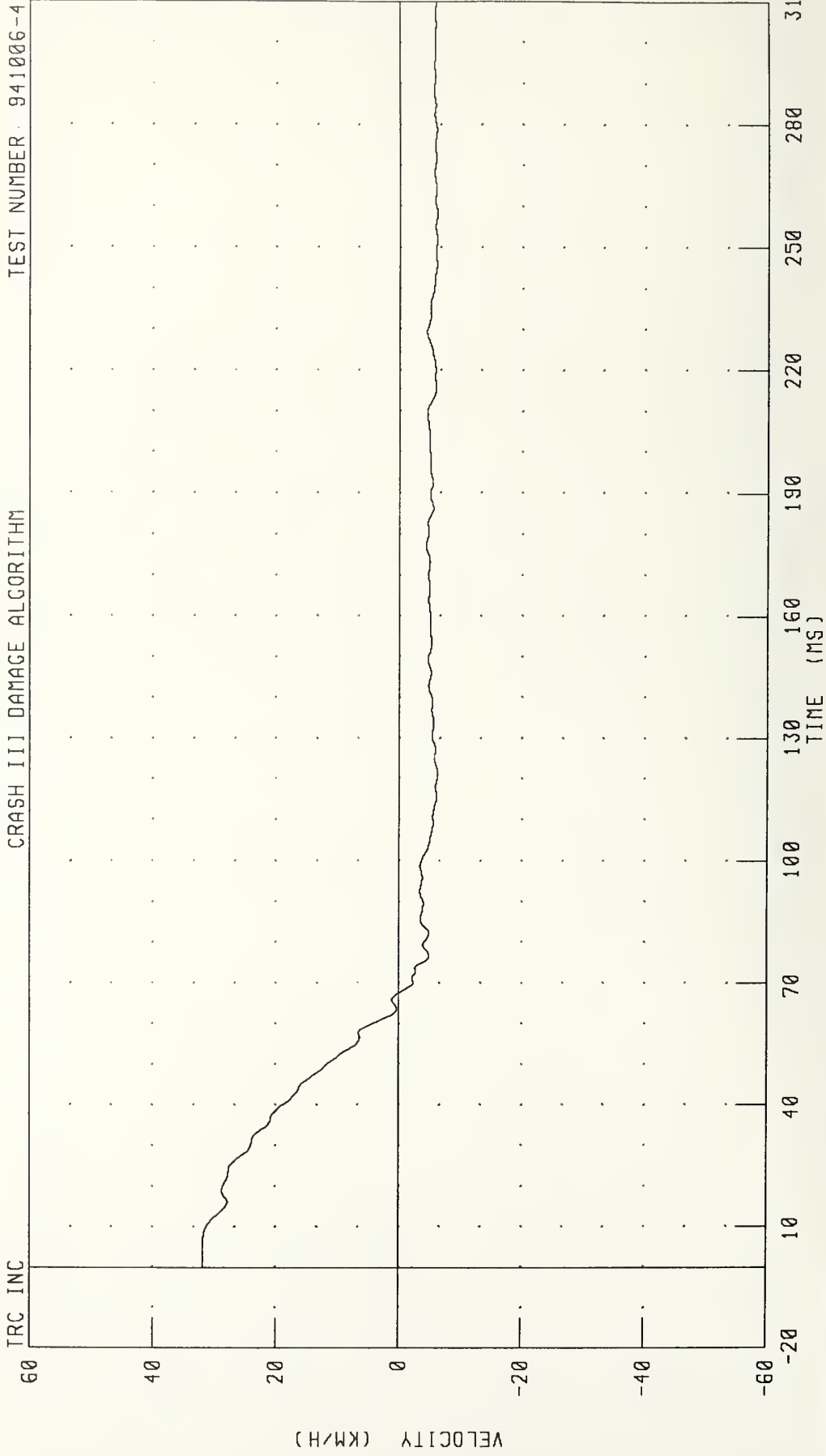


CHANNEL: TRRXG1 FILTER: CH. CLASS 60

PEAK DATA: 8.14 G @ 83.92 MS; -34.45 G @ 60.48 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS VELOCITY

CRASH III DAMAGE ALGORITHM TEST NUMBER: 941006-4

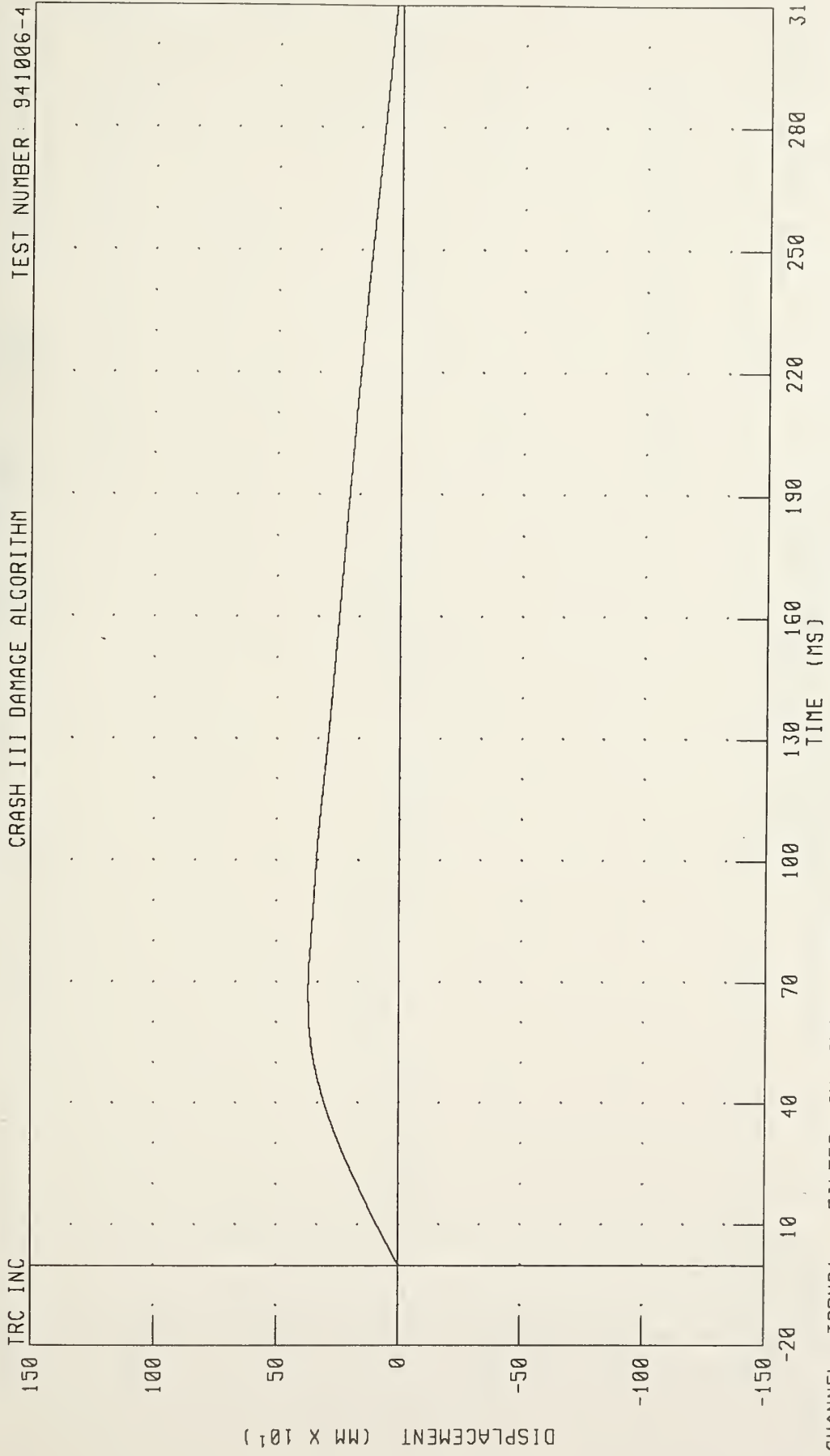


CHANNEL: TRRXV1 FILTER: CH. CLASS 180

PEAK DATA: 31.90 KM/H @ 0.00 MS; -6.32 KM/H @ 120.96 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM TEST NUMBER: 941006-4

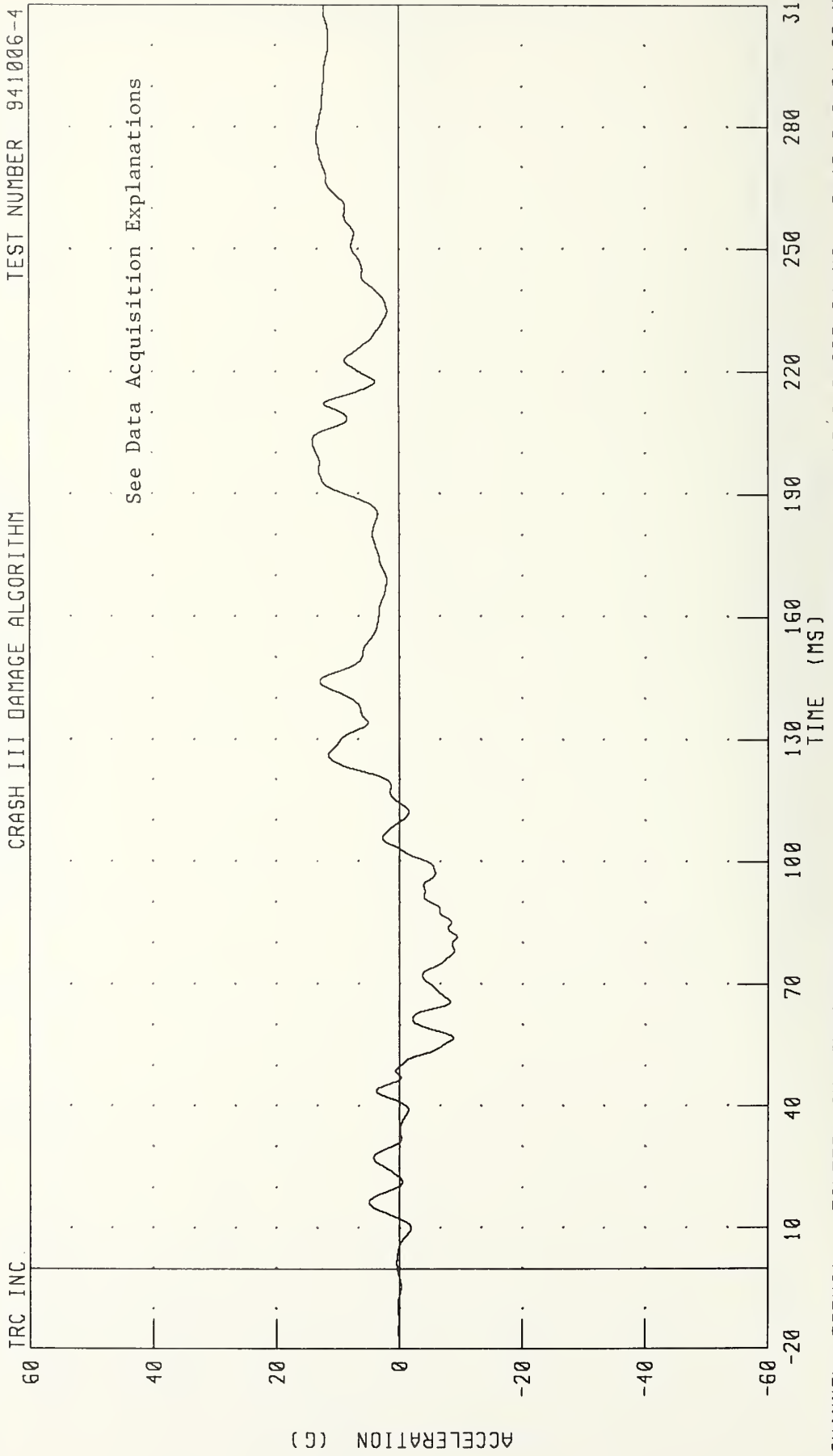


CHANNEL: TRRXD1 FILTER: CH. CLASS 180

PEAK DATA: 371.14 MM @ 67.60 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-4

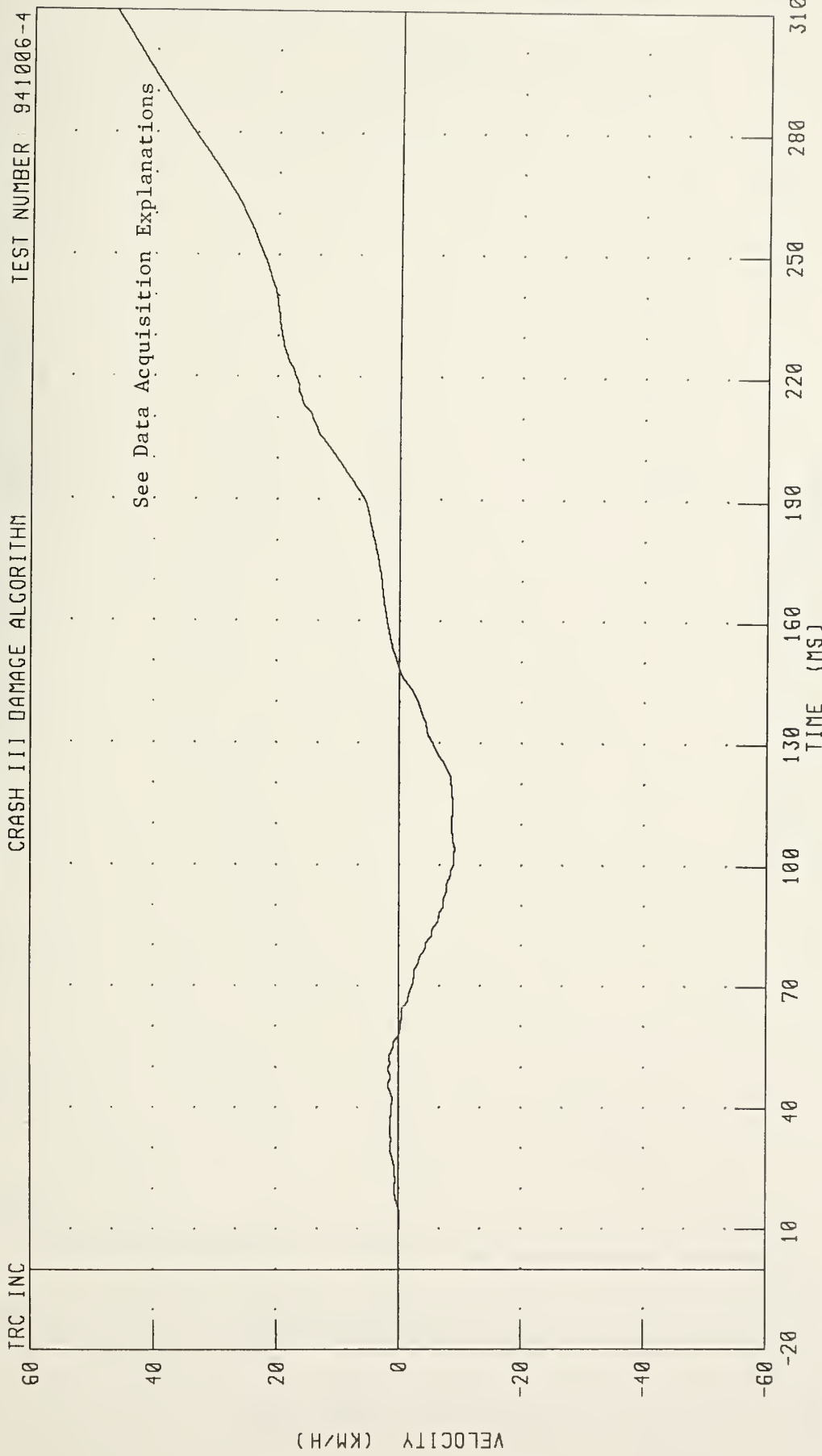


CHANNEL: TRRYG1 FILTER: CH CLASS 60

PEAK DATA: 14.13 G @ 203.04 MS; -9.40 G @ 81.60 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-4

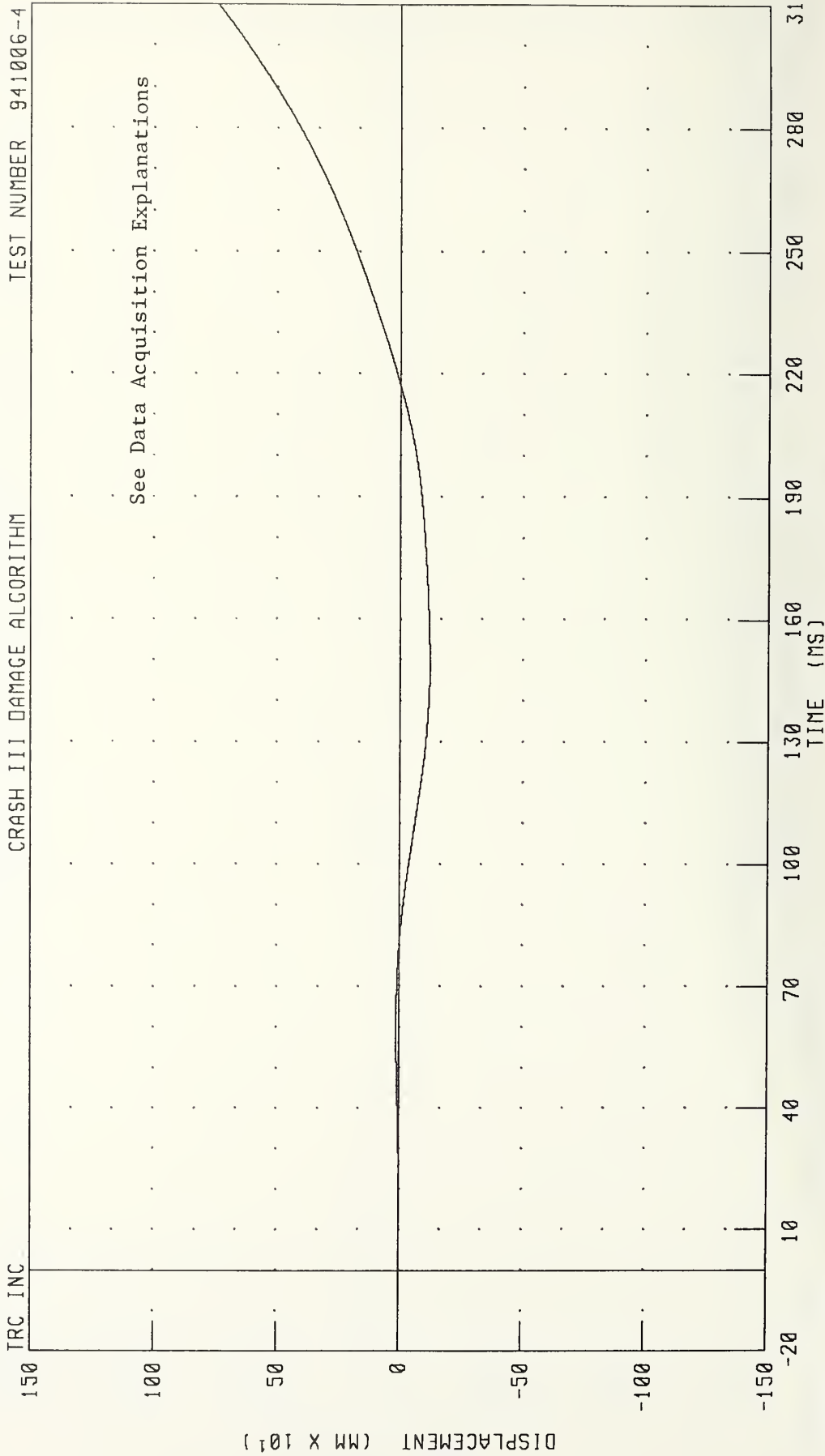


CHANNEL: TRRYV1 FILTER: CH. CLASS 180

PEAK DATA: 46.66 KM/H @ 310.00 MS; -9.11 KM/H @ 104.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS DISPLACEMENT

TRC_INC CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-4



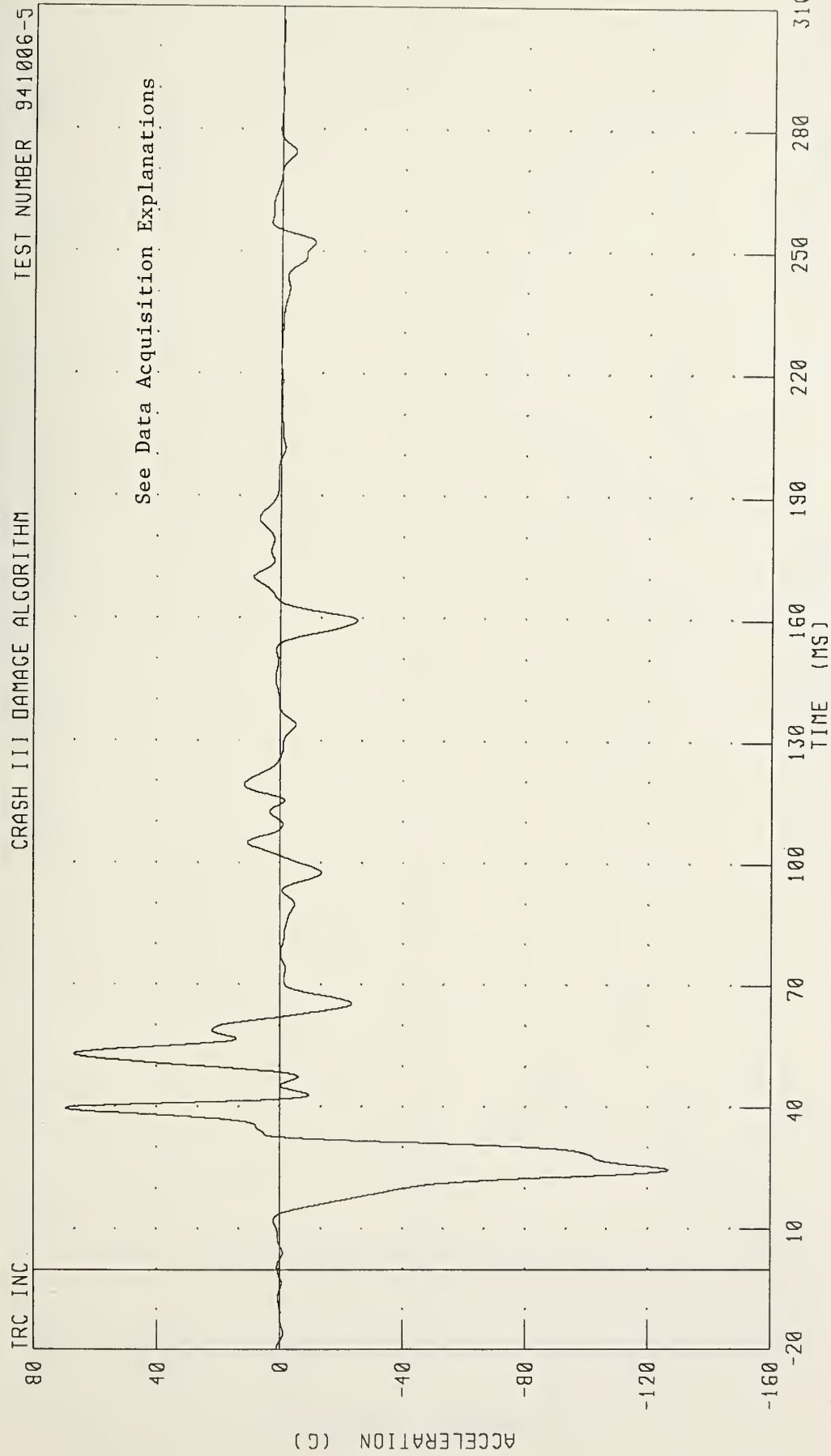
CHANNEL: TRRYD1 FILTER: CH. CLASS 180 PEAK DATA: 743.73 MM @ 310.00 MS; -121.31 MM @ 148.40 MS

Data Plots

Test No. 941006-5

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CC X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TRC INC.
TEST NUMBER 941006-5

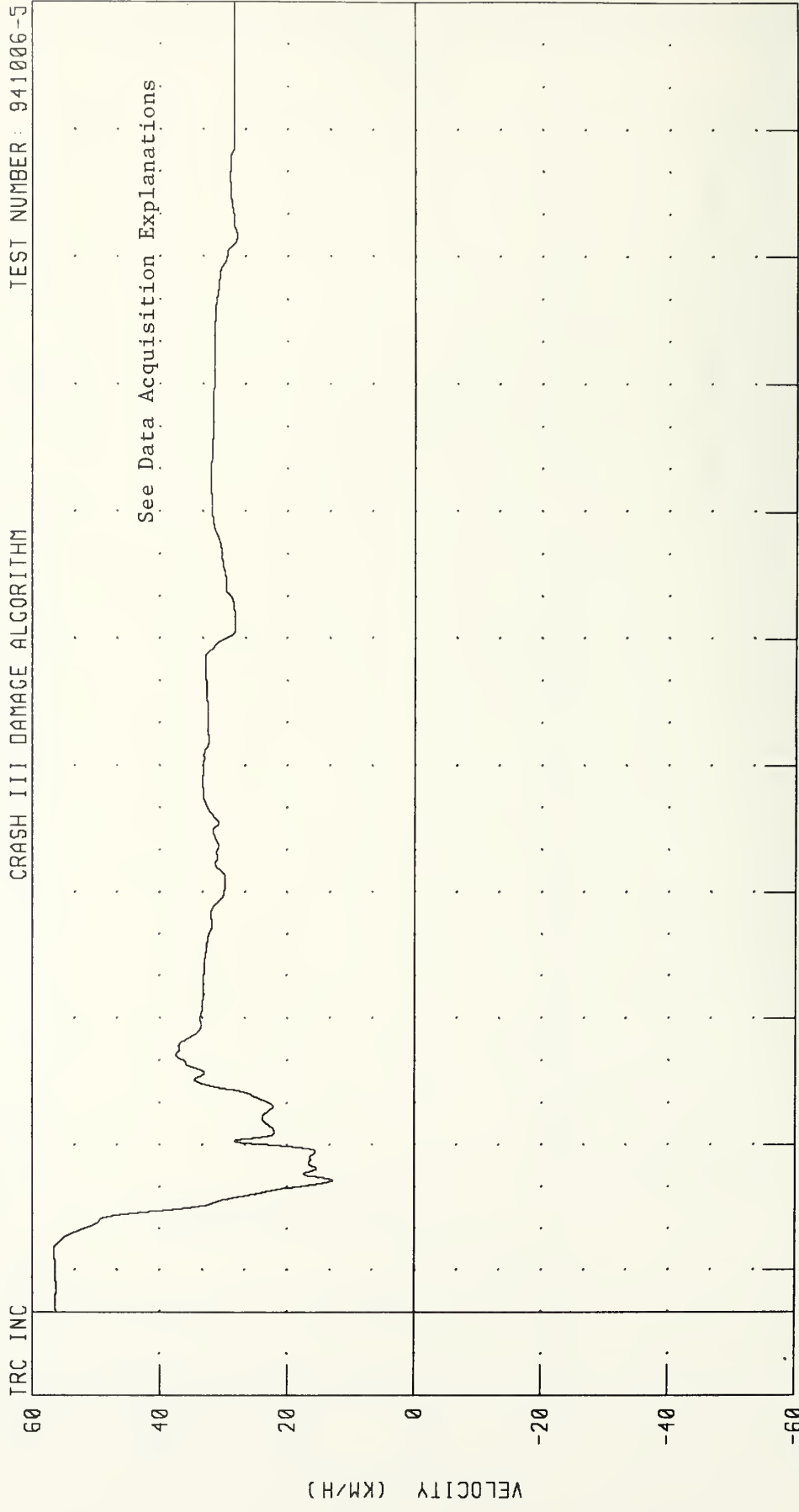


CHANNEL: VCGXG1 FILTER: CH CLASS 60

PEAK DATA: 69.58 G @ 39.60 MS; -126.70 G @ 24.56 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-5



CHANNEL: VCGXV1 FILTER: CH. CLASS 180 PEAK DATA: 56.63 KM/H @ 14.56 MS; 12.88 KM/H @ 31 60 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-5

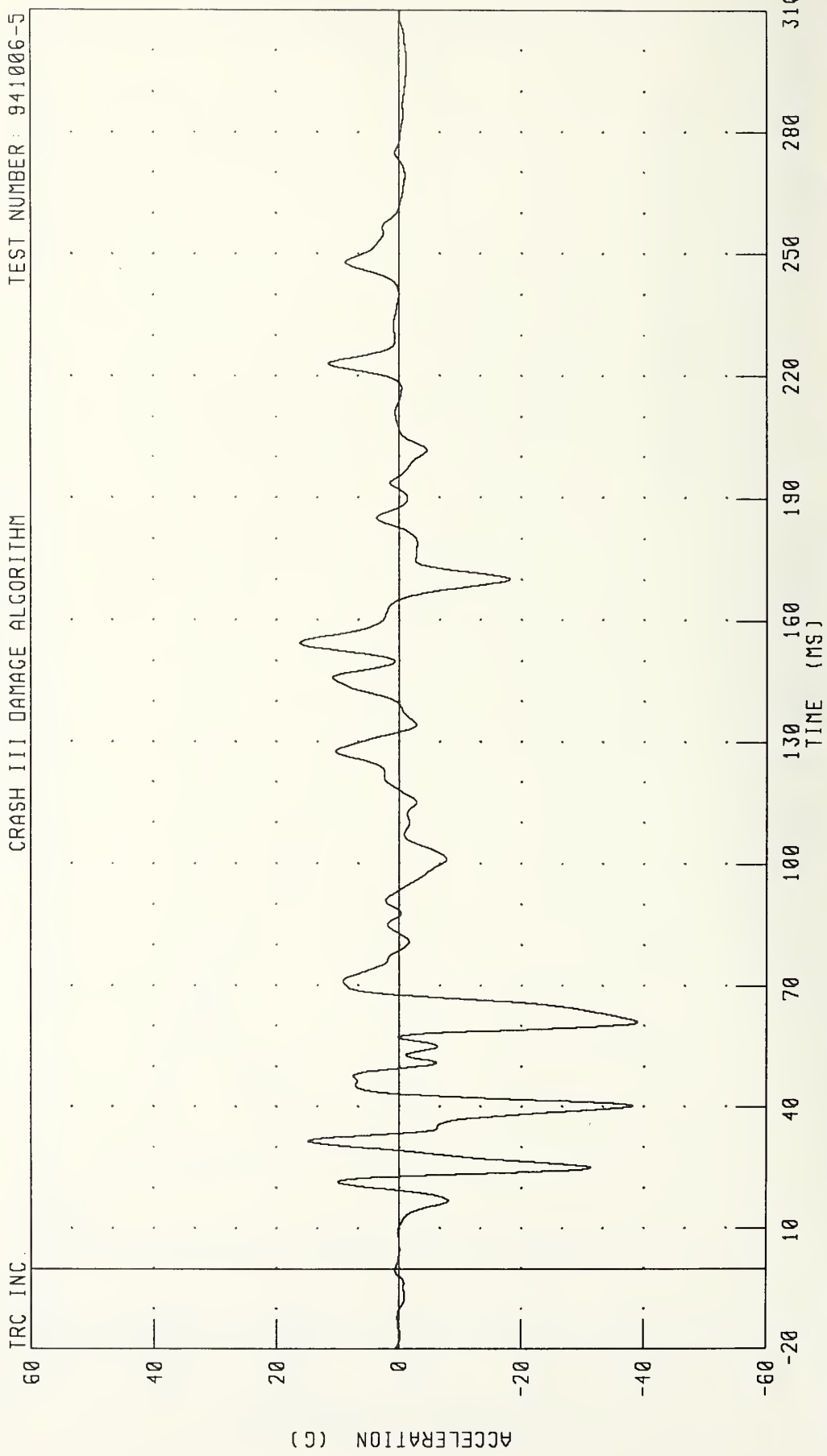


CHANNEL: VCGXD1 FILTER: CH. CLASS 180

PEAK DATA: 2766 15 MM @ 310 00 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-5

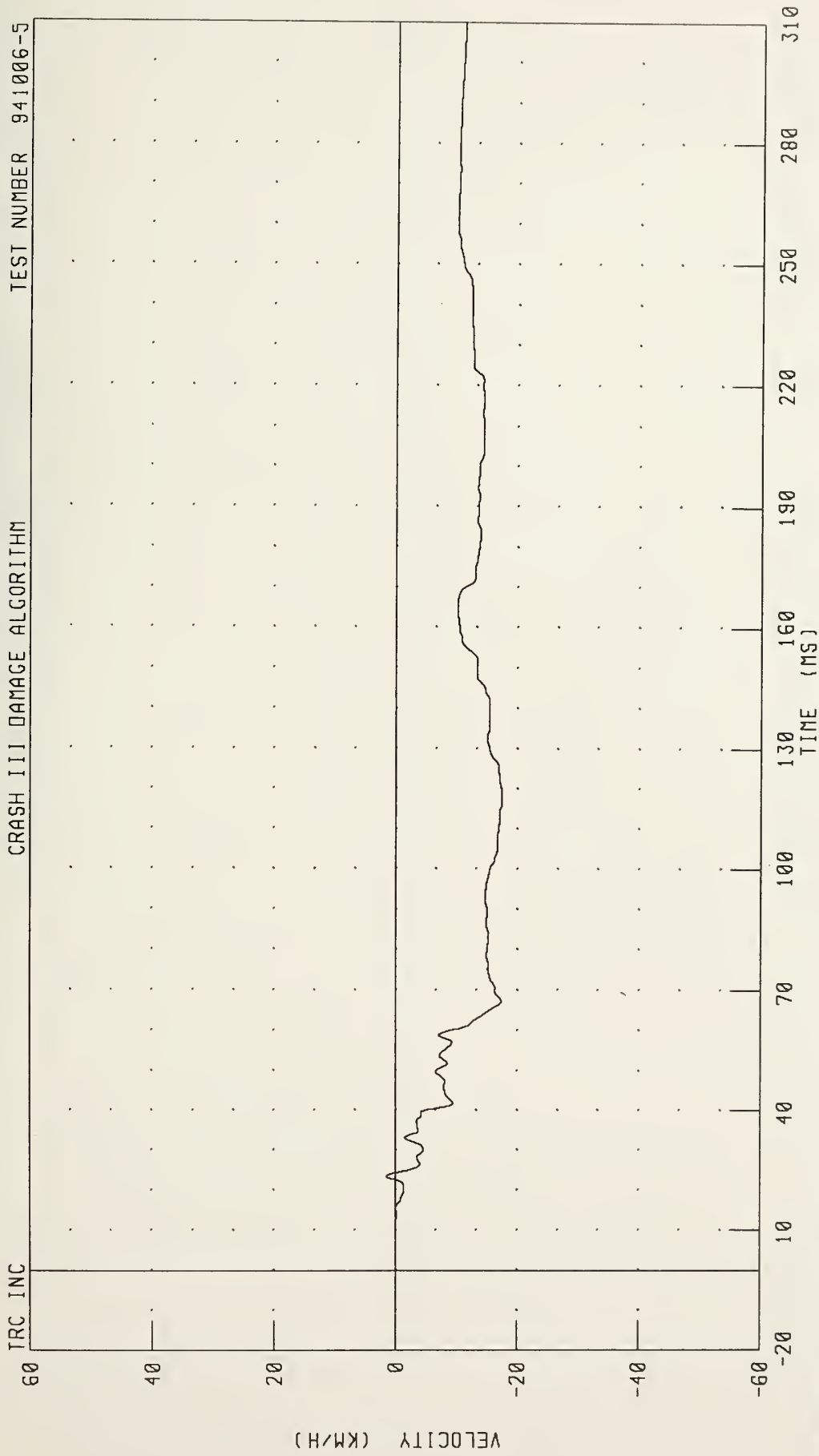


CHANNEL: VCGYG1 FILTER: CH. CLASS 60

PEAK DATA: 16.21 G @ 154.48 MS, -39.00 G @ 61.04 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Y-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

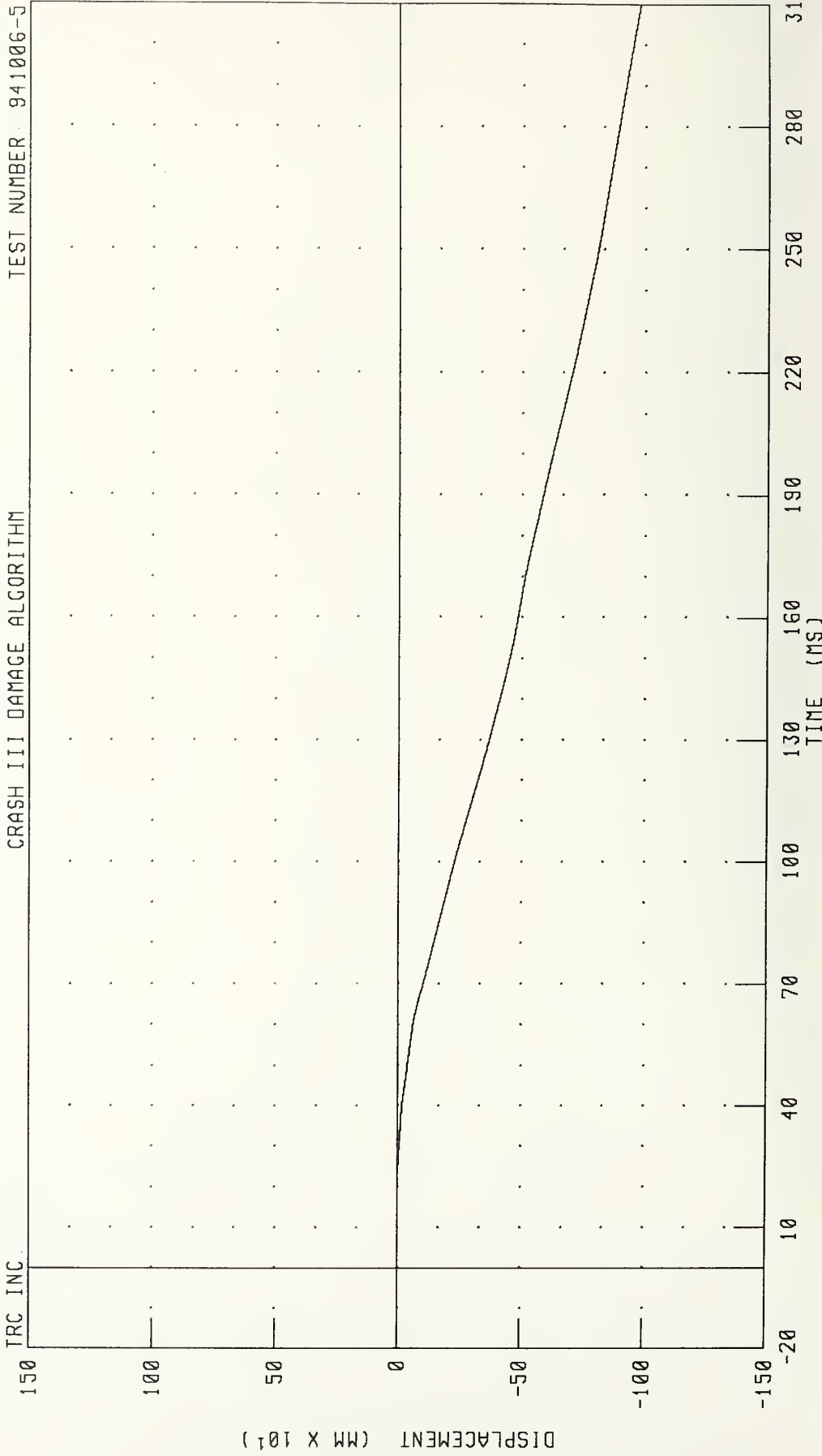
TEST NUMBER 941006-5



CHANNEL: VCGYV1 FILTER: CH. CLASS 180
PEAK DATA: 1.53 KM/H @ 23.44 MS, -17.47 KM/H @ 116.32 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Y-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TRC INC. TEST NUMBER: 941006-5

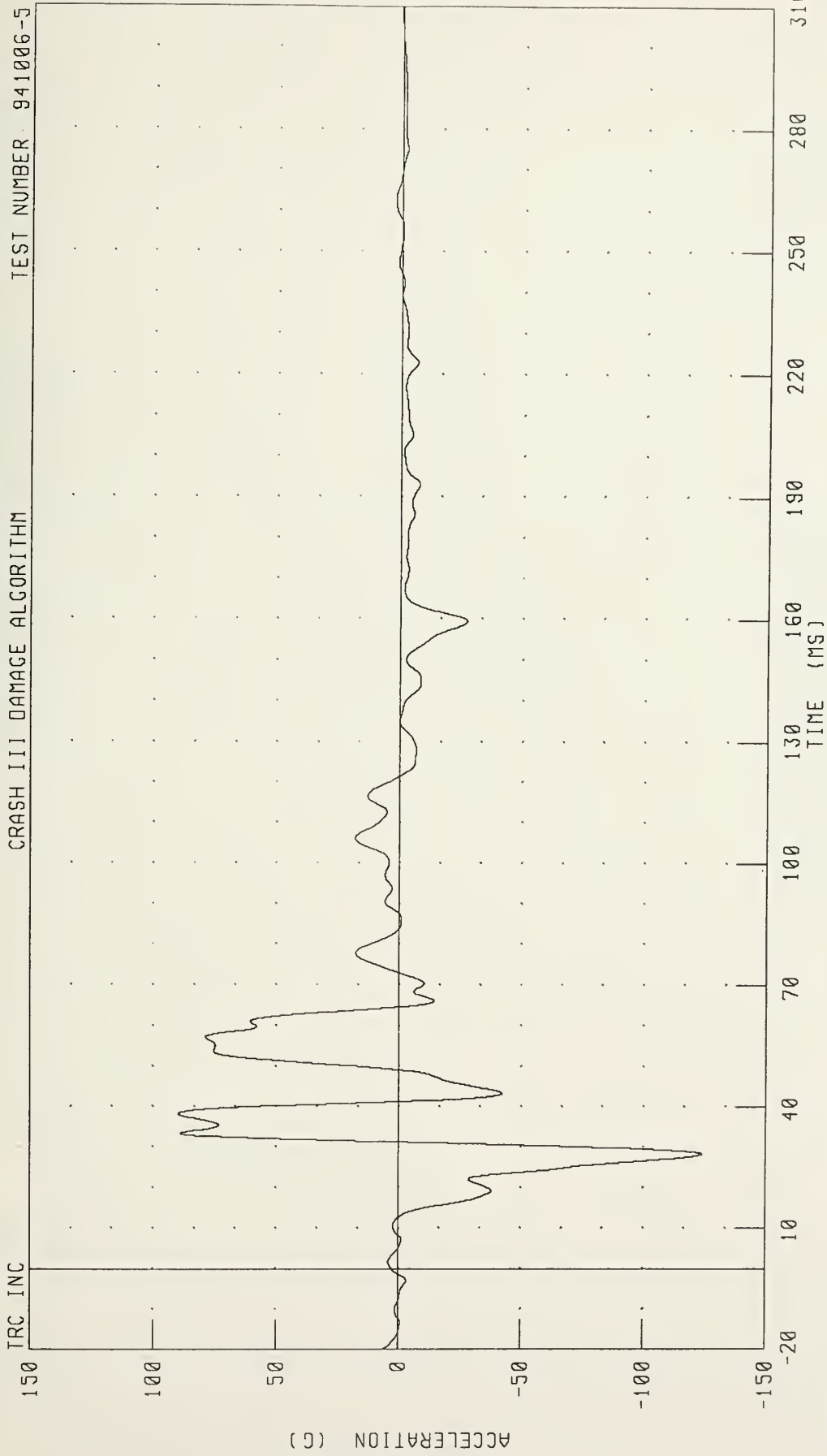


CHANNEL: VCGYD1 FILTER: CH. CLASS 180

PEAK DATA: 0.02 MM @ 11.68 MS, -981.44 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-5

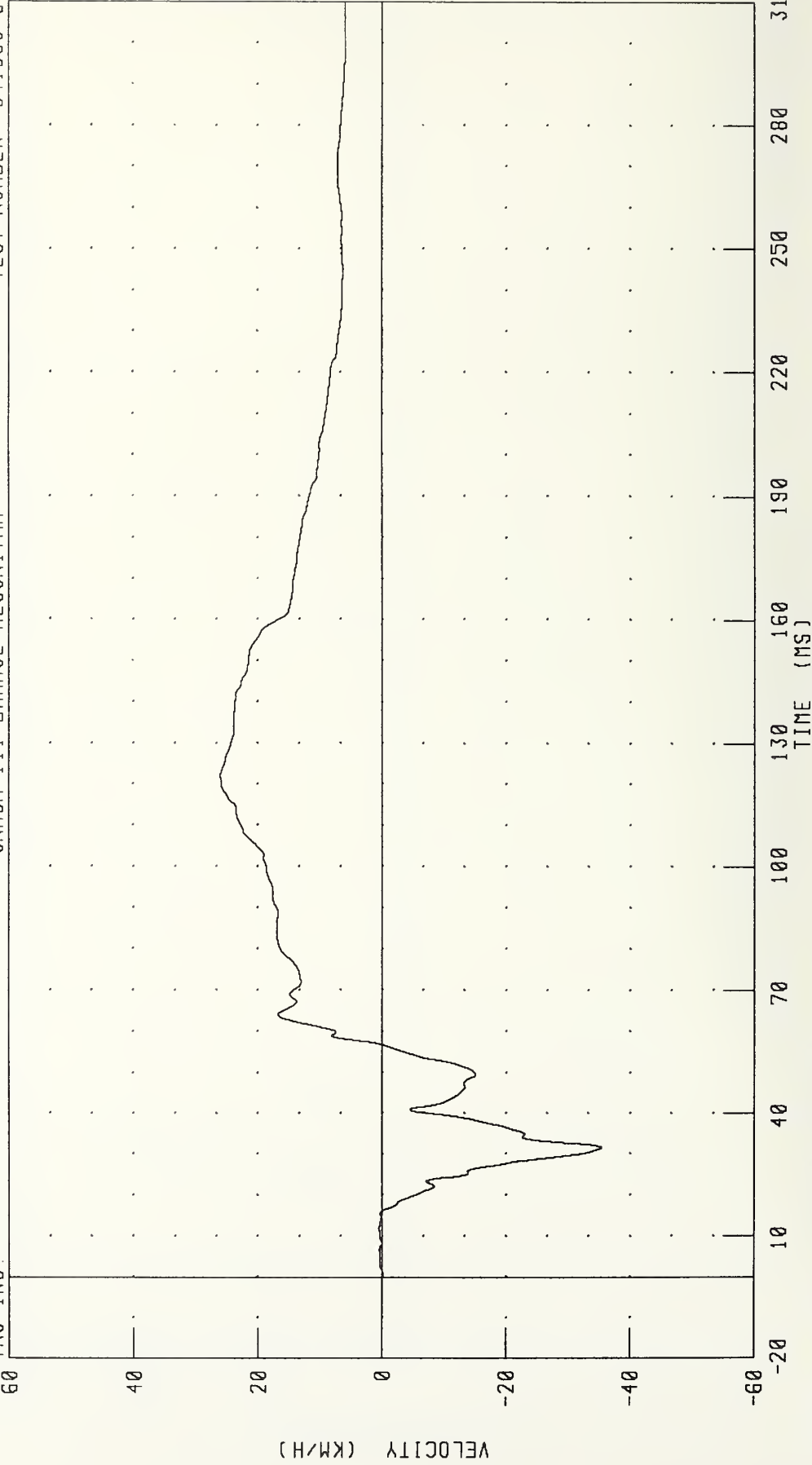


CHANNEL VCGZG1 FILTER: CH. CLASS 60 PEAK DATA: 89.75 G @ 38 24 MS; -124.10 G @ 28 32 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-5

TRC INC.

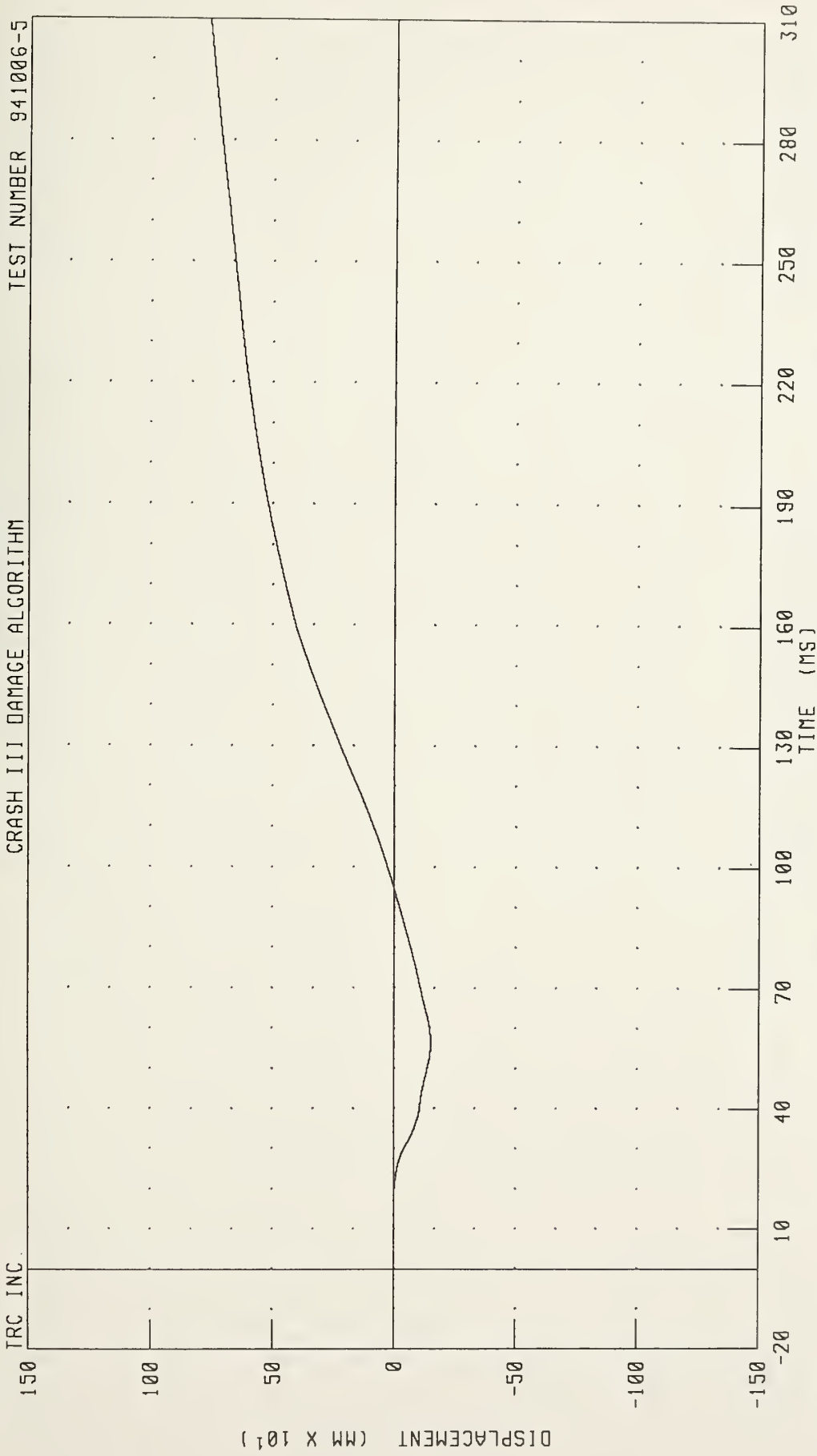


CHANNEL: VCGZY1 FILTER: CH. CLASS 180

PEAK DATA: 26.04 KM/H @ 122.08 MS; -35.45 KM/H @ 31.60 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG Z-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5

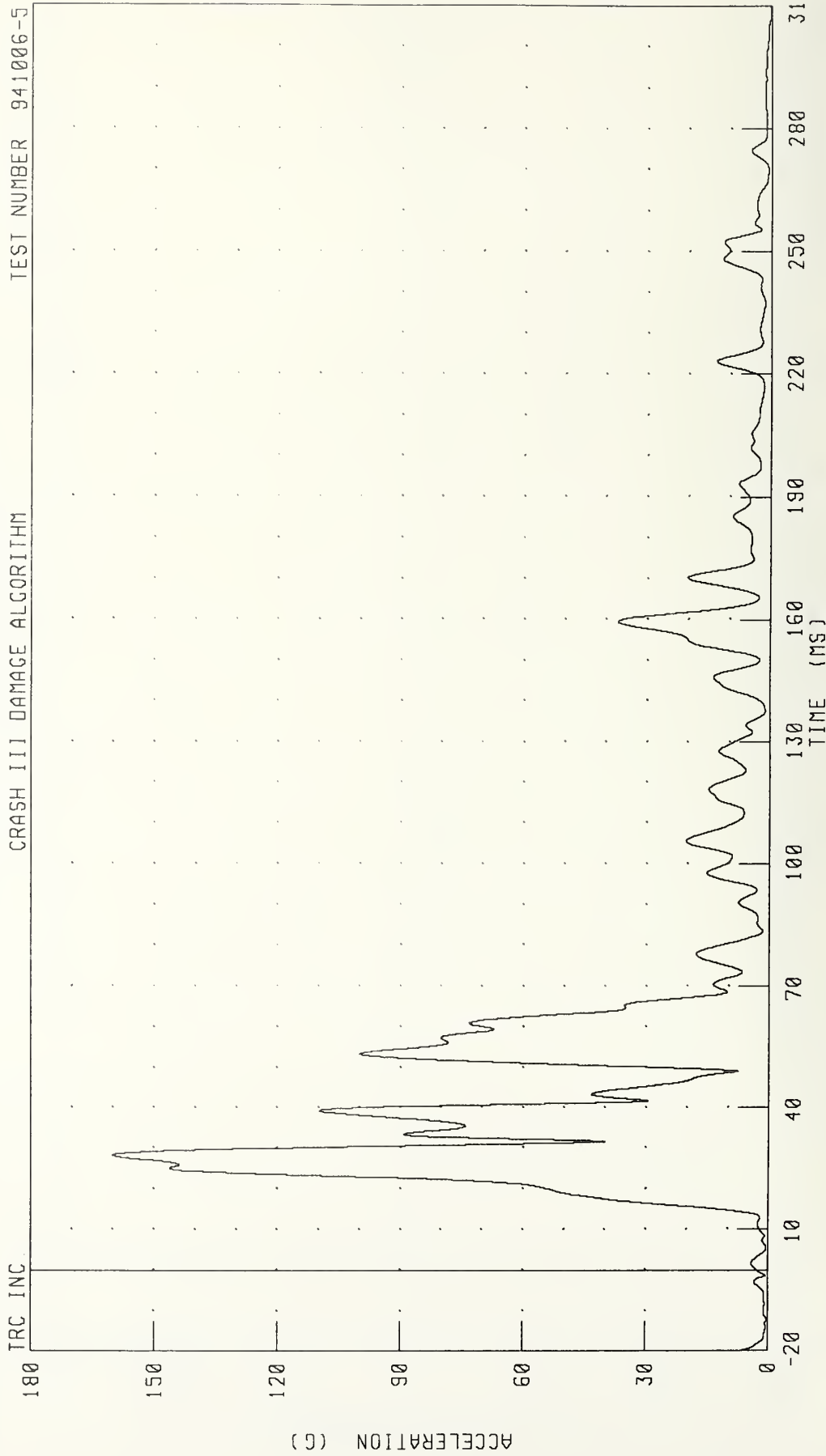


CHANNEL: VCGZ01 FILTER: CH. CLASS 180

PEAK DATA: 767.03 NM @ 310 00 MS, -151.89 NM @ 56 80 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5



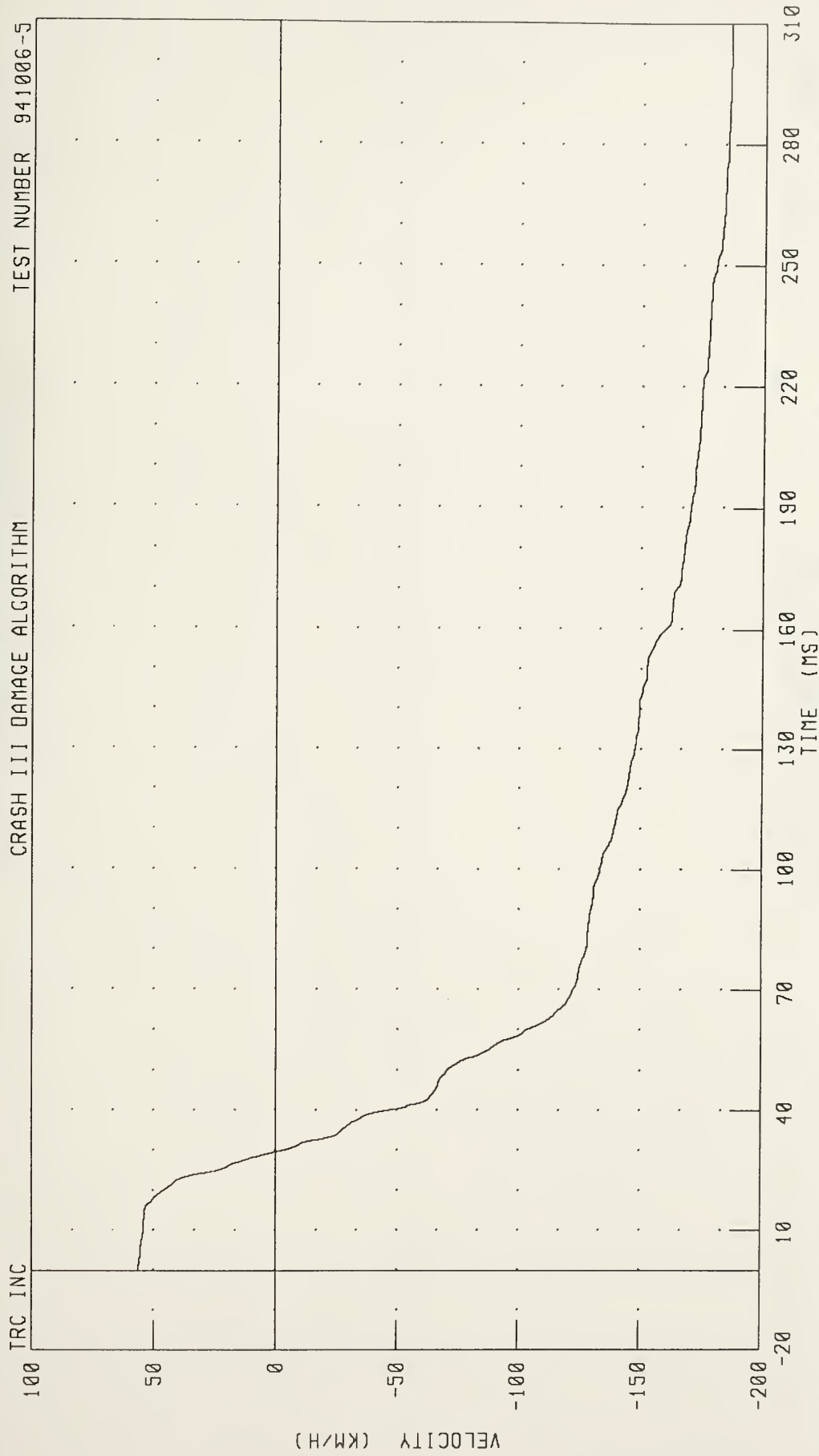
CHANNEL: VCGRG1 FILTER: CH CLASS 60

PEAK DATA: 160.15 G @ 28.16 MS; 0.30 G @ -12.24 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5

TRC INC



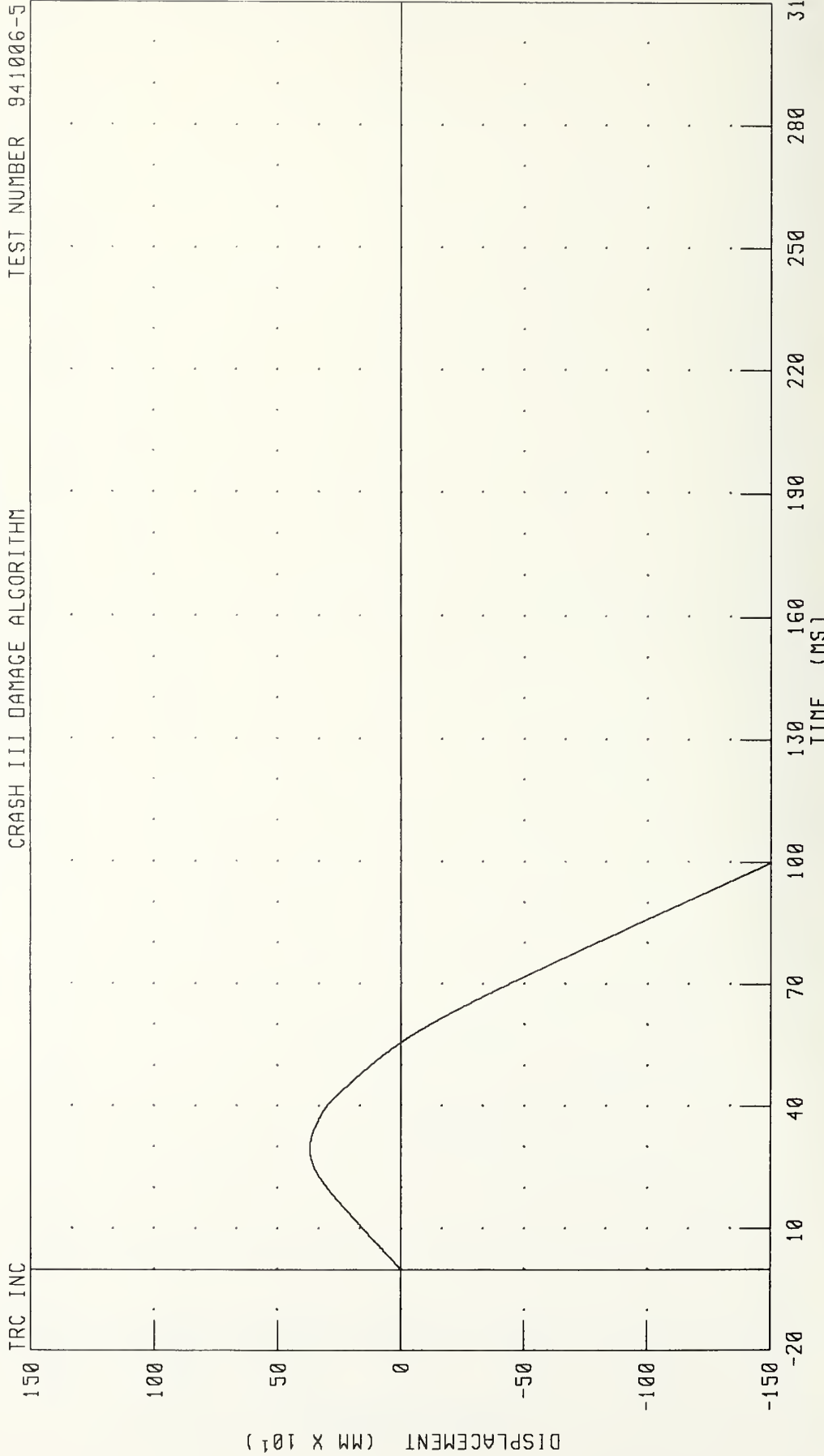
CHANNEL: VCGRV1 FILTER: CH. CLASS 180

PEAK DATA: 56.30 KM/H @ 0 00 MS;

-185.99 KM/H @ 310 00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
VEHICLE CG RESULTANT DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5

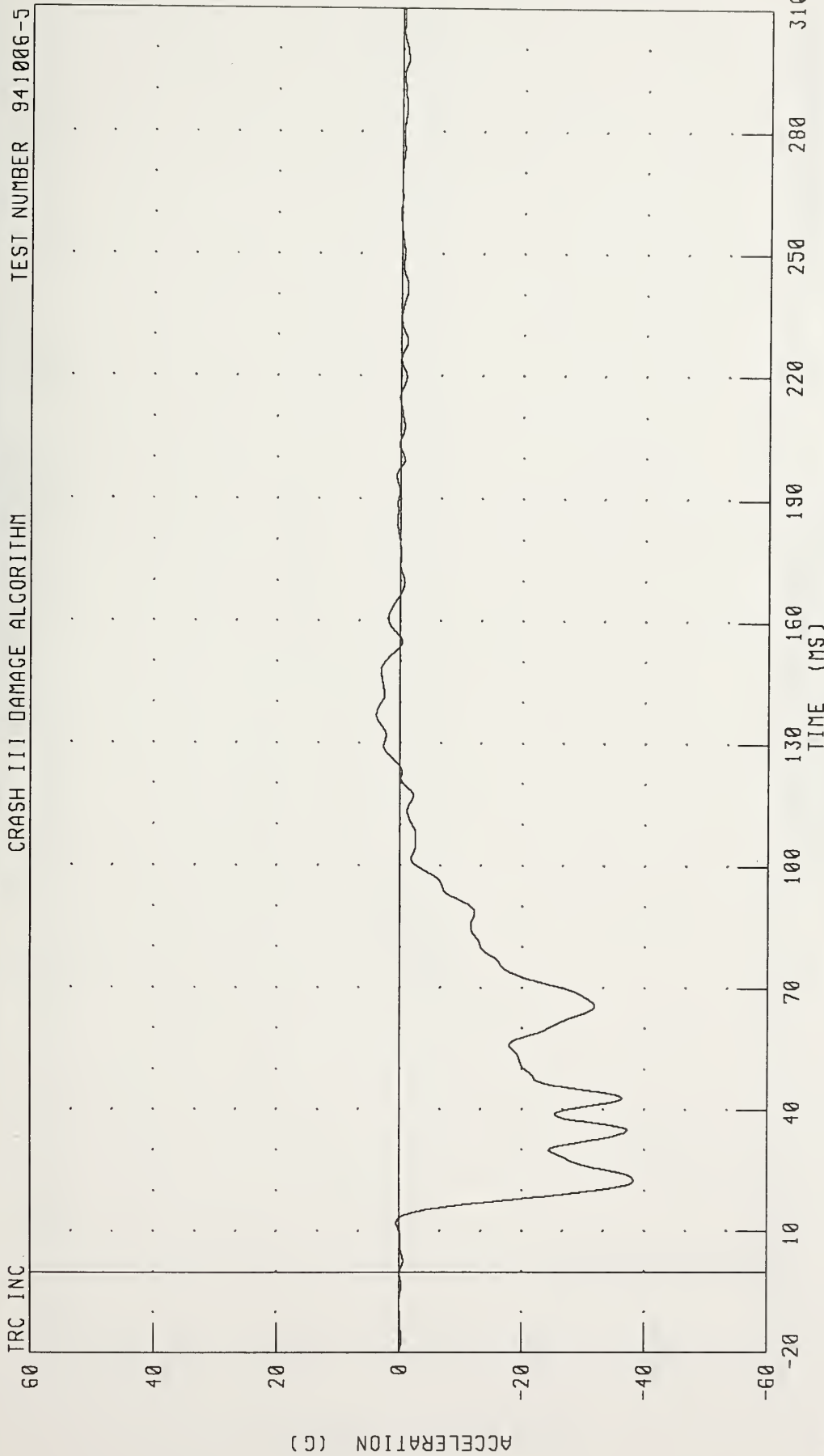


CHANNEL: VCGRD1 FILTER: CH. CLASS 180

PEAK DATA: 369.36 MM @ 29.60 MS; -11321.78 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5



CHANNEL: LFSXG1 FILTER: CH CLASS 60

PEAK DATA: 3.83 G @ 136.88 MS; -38.21 G @ 22.48 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TRC INC

TEST NUMBER 941006-5

60

40

20

0

-20

-40

-60

10

40

70

100

130

160

190

220

250

280

310

TIME (MS)

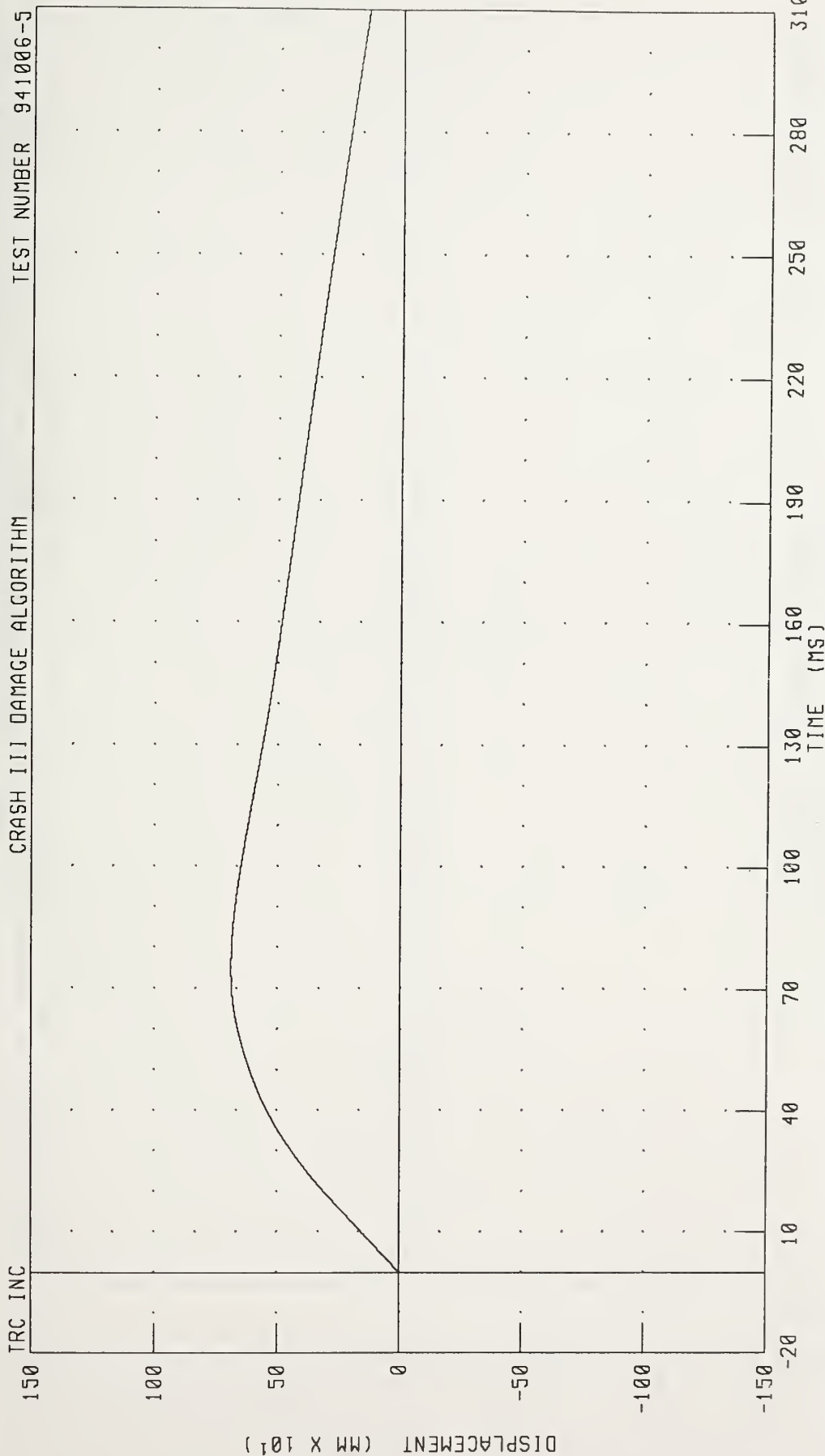
PEAK DATA: 56.32 KM/H @ 0.88 MS; -10.89 KM/H @ 124.16 MS

CHANNEL: LFSXV1 FILTER: CH. CLASS 180

VELOCITY (KM/H)

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL X-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

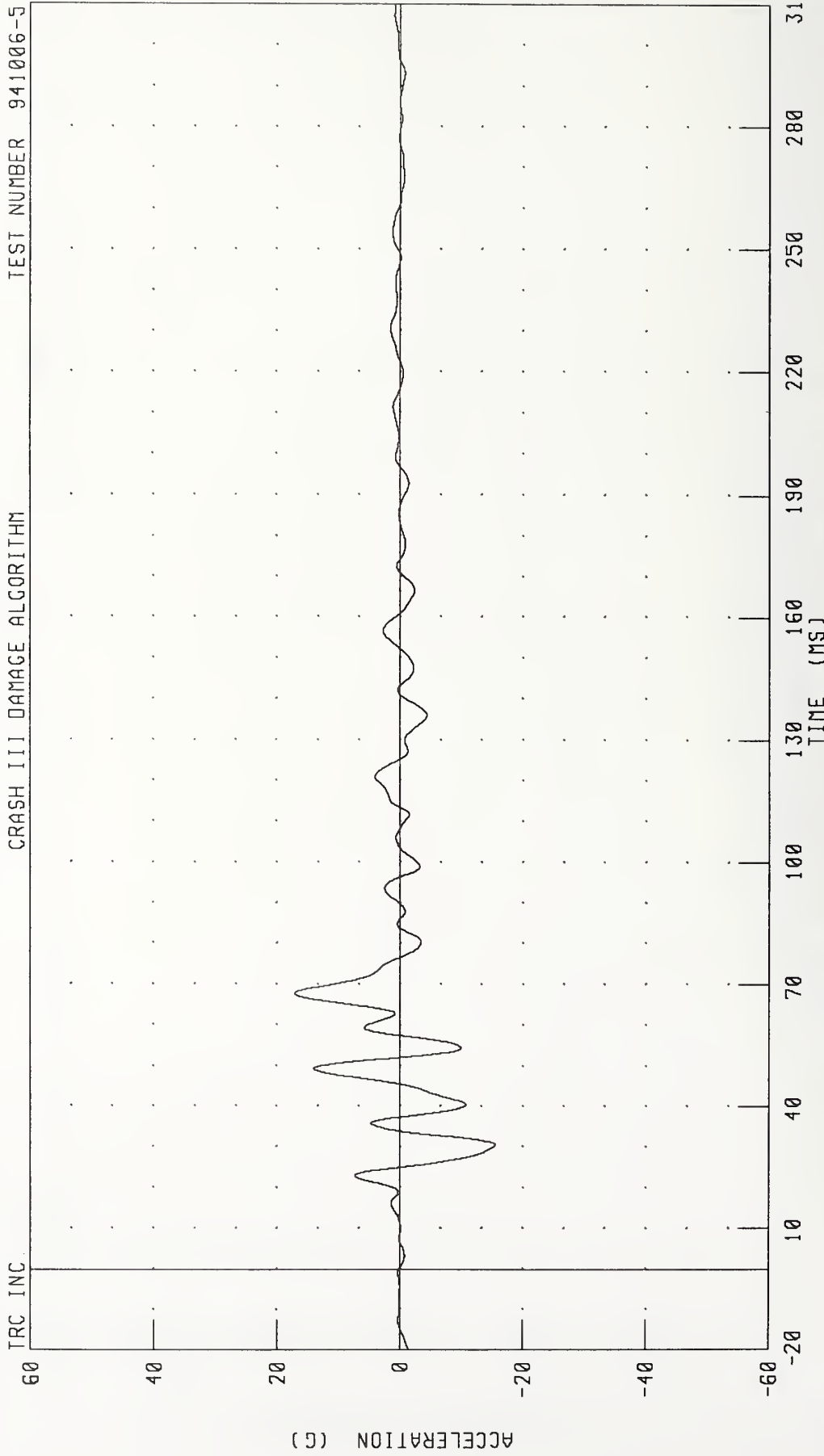
TEST NUMBER 941006-5



CHANNEL: LFSXD1 FILTER: CH CLASS 180 PEAK DATA: 688.56 MM @ 75.12 MS; 0 00 MM @ 0 00 MS

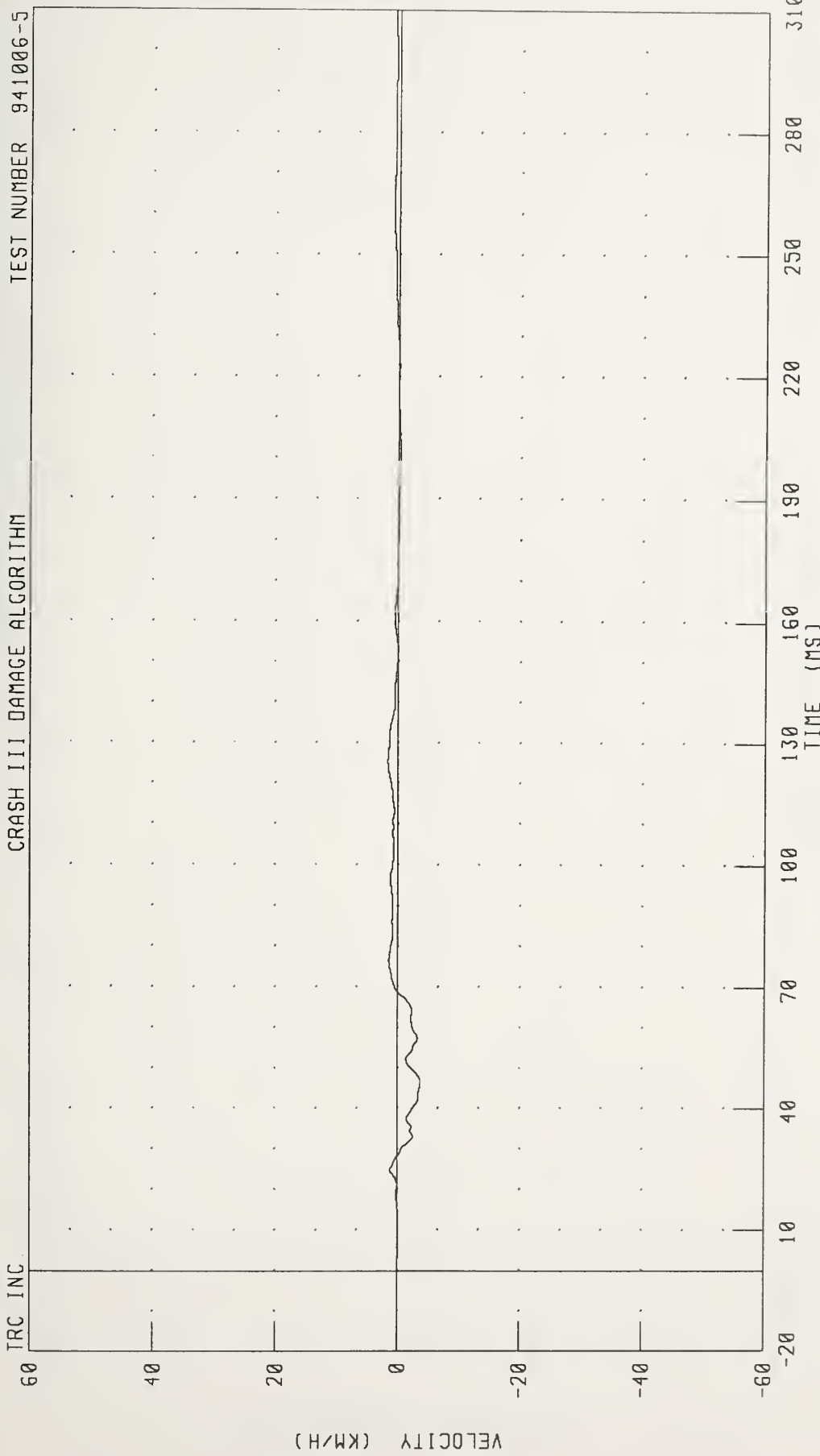
1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5



CHANNEL: LFSYG1 FILTER: CH CLASS 60

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM



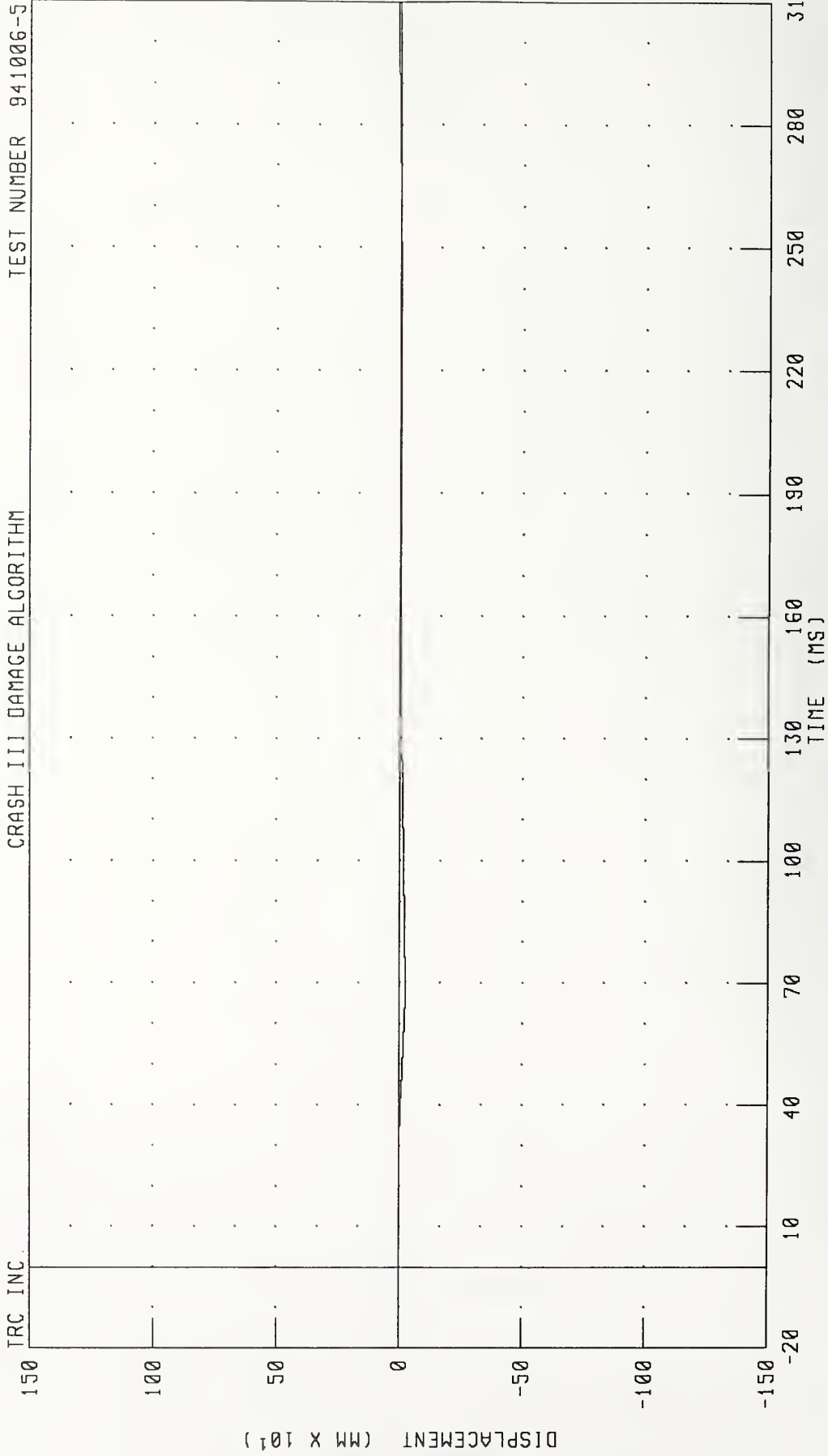
TRC INC.

TEST NUMBER 941006-5

CHANNEL: LFSYV1 FILTER: CH. CLASS 180
PEAK DATA: 1.63 KM/H @ 125.20 MS, -3.73 KM/H @ 46.88 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT FRONT SILL Y-AXIS DISPLACEMENT

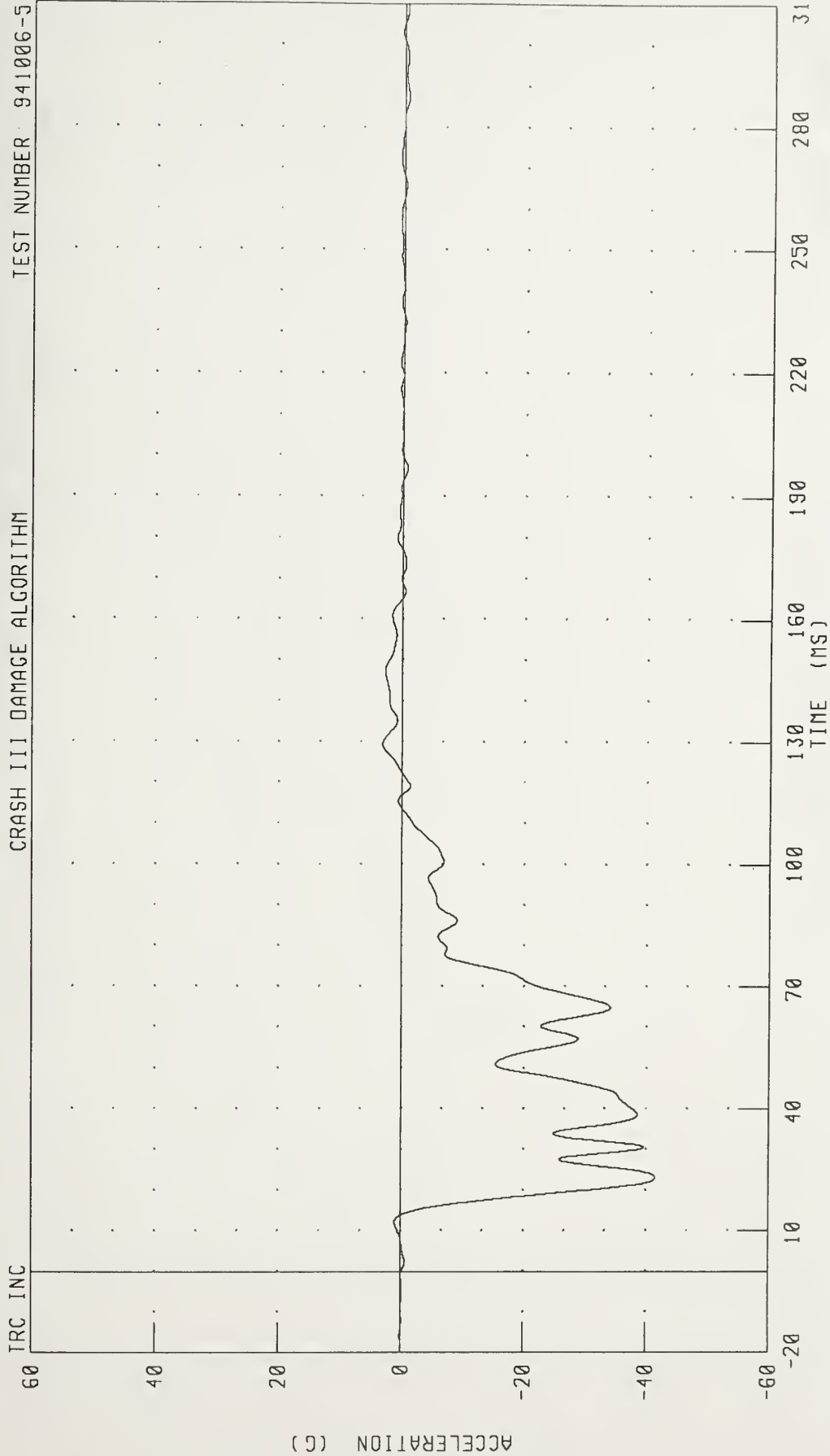
CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-5



CHANNEL: LFSYD1 FILTER: CH CLASS 180
PEAK DATA: 9.54 MM @ 310.00 MS; -24.95 MM @ 68.72 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

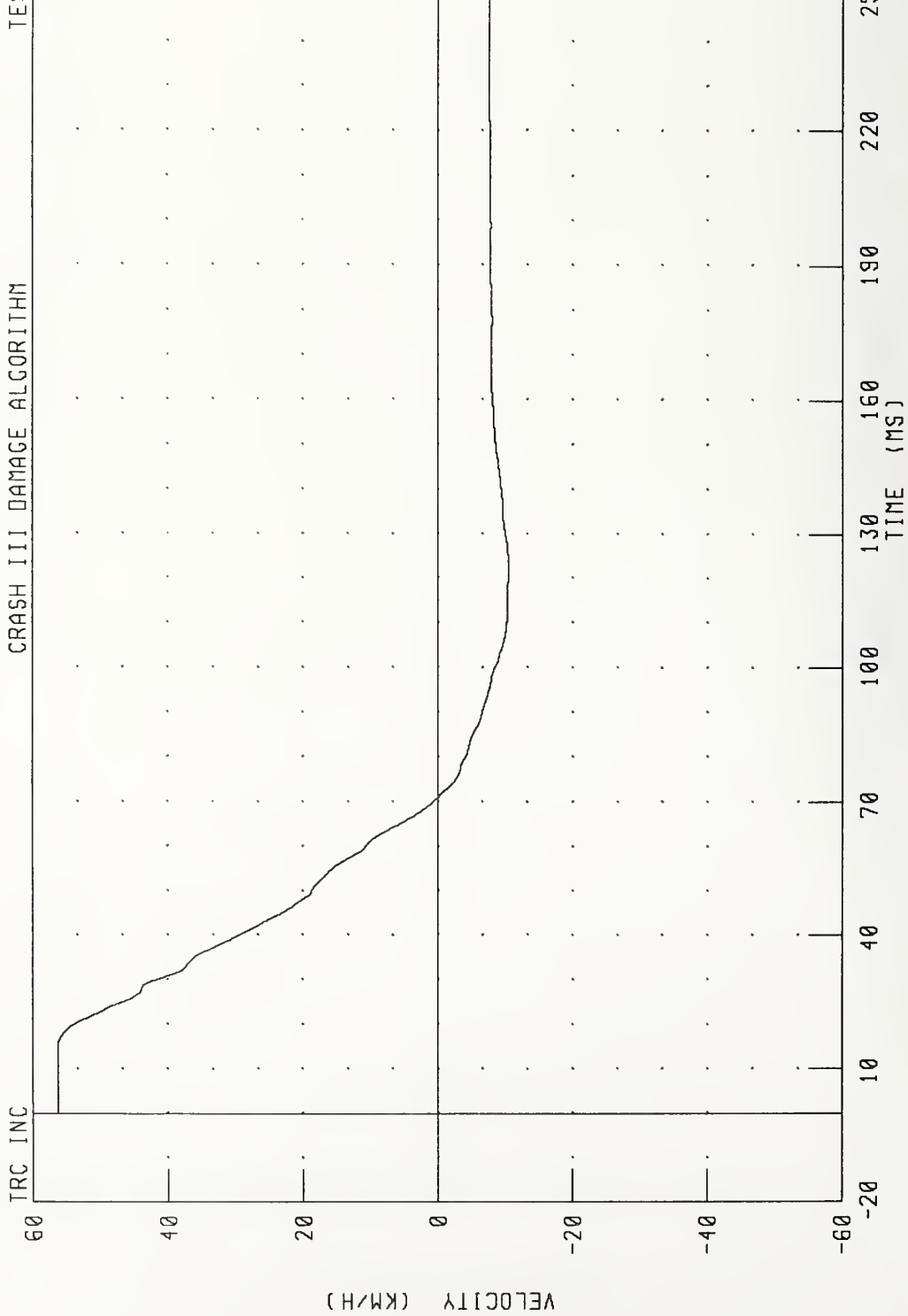
TEST NUMBER 941006-5



CHANNEL RFSXG1 FILTER: CH. CLASS 60 PEAK DATA: 3.16 G @ 129.36 MS, -41.53 G @ 23.04 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5

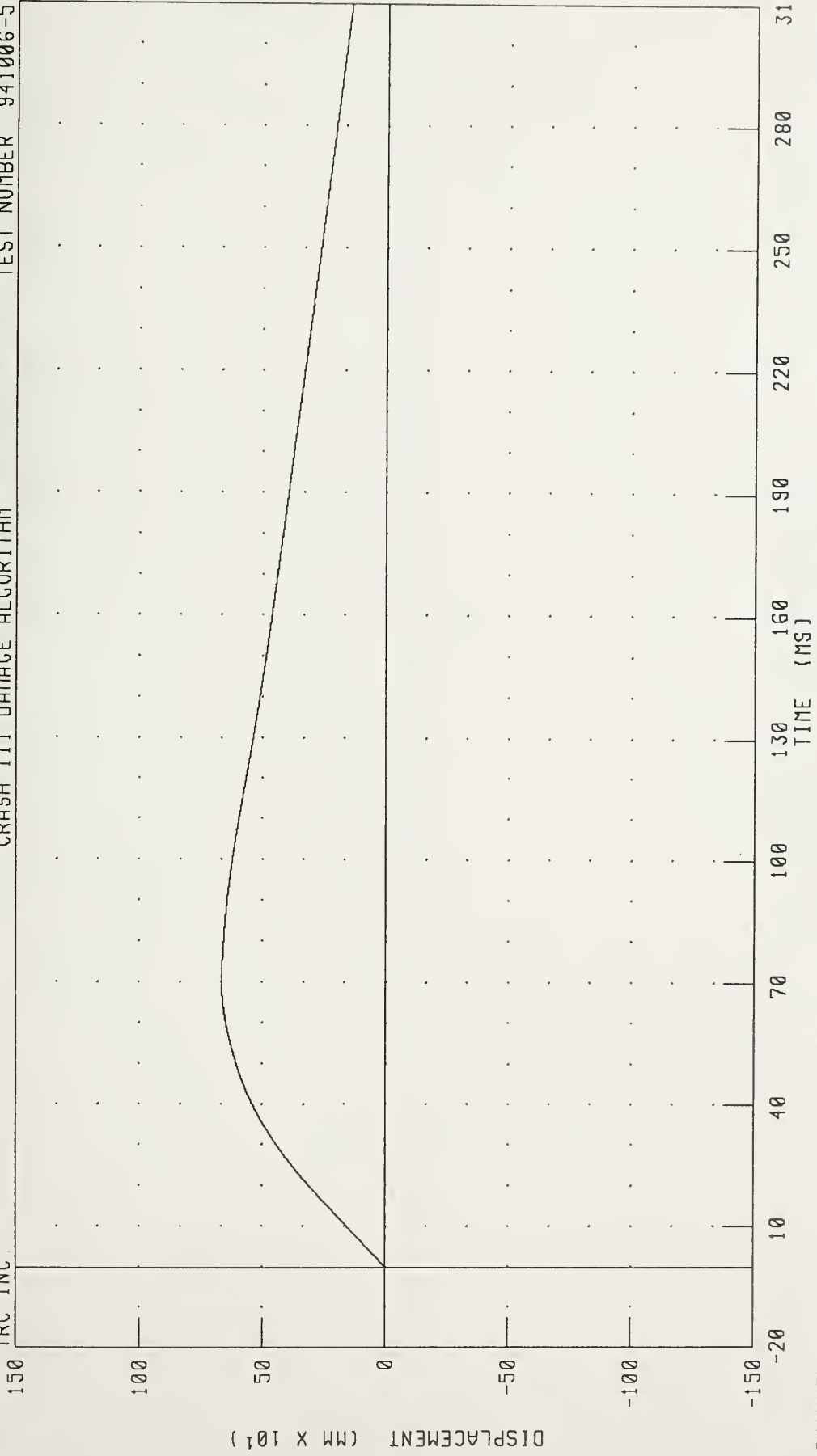


CHANNEL : RFSXV1 FILTER : CH. CLASS 180
PEAK DATA : 56.31 KM/H @ 0.56 MS, -10.48 KM/H @ 120.08 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL X-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-5

TRC INC

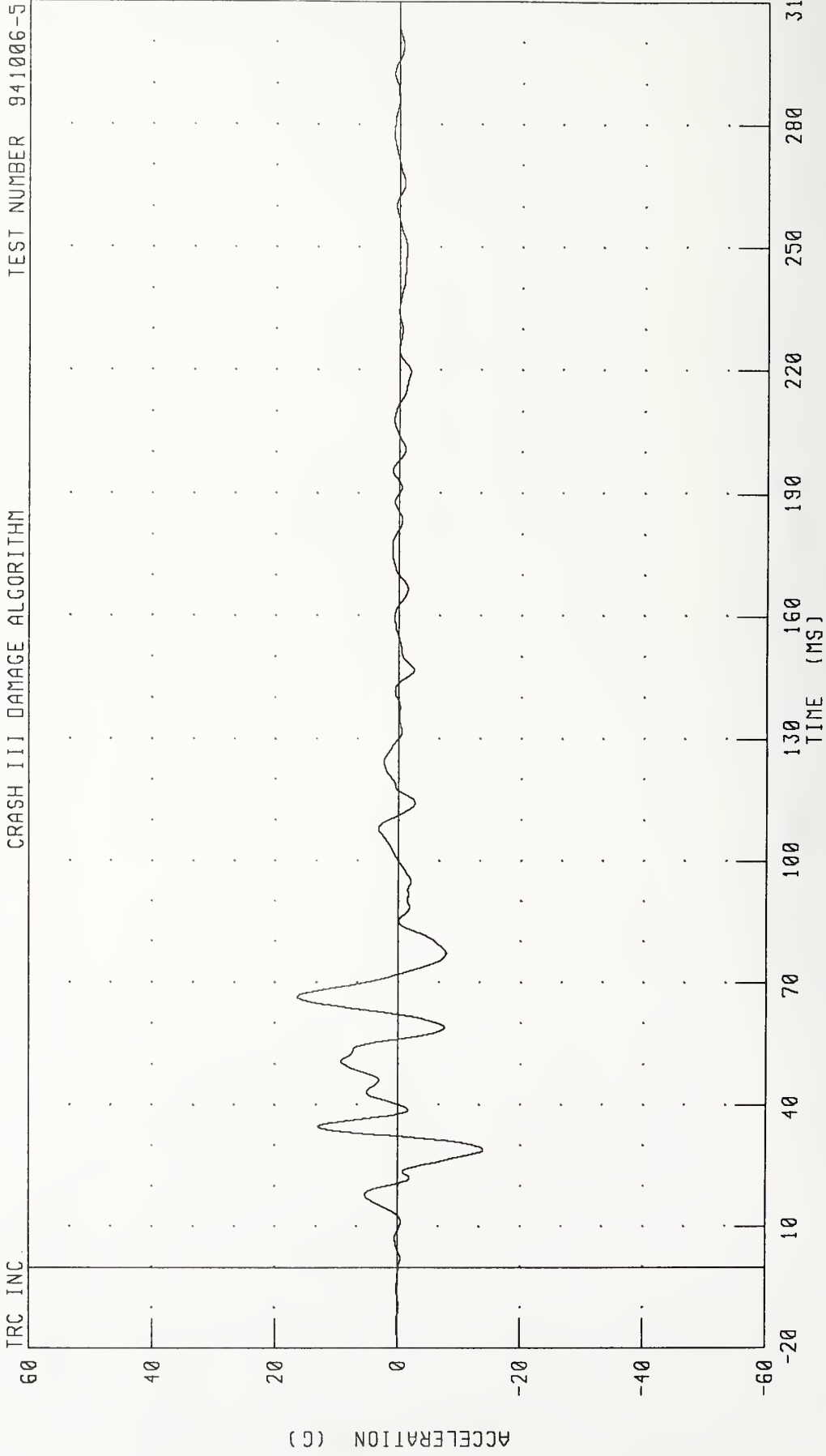


CHANNEL: RFSXD1 FILTER: CH. CLASS 180

PEAK DATA: 664.78 MM @ 71.04 MS; 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5

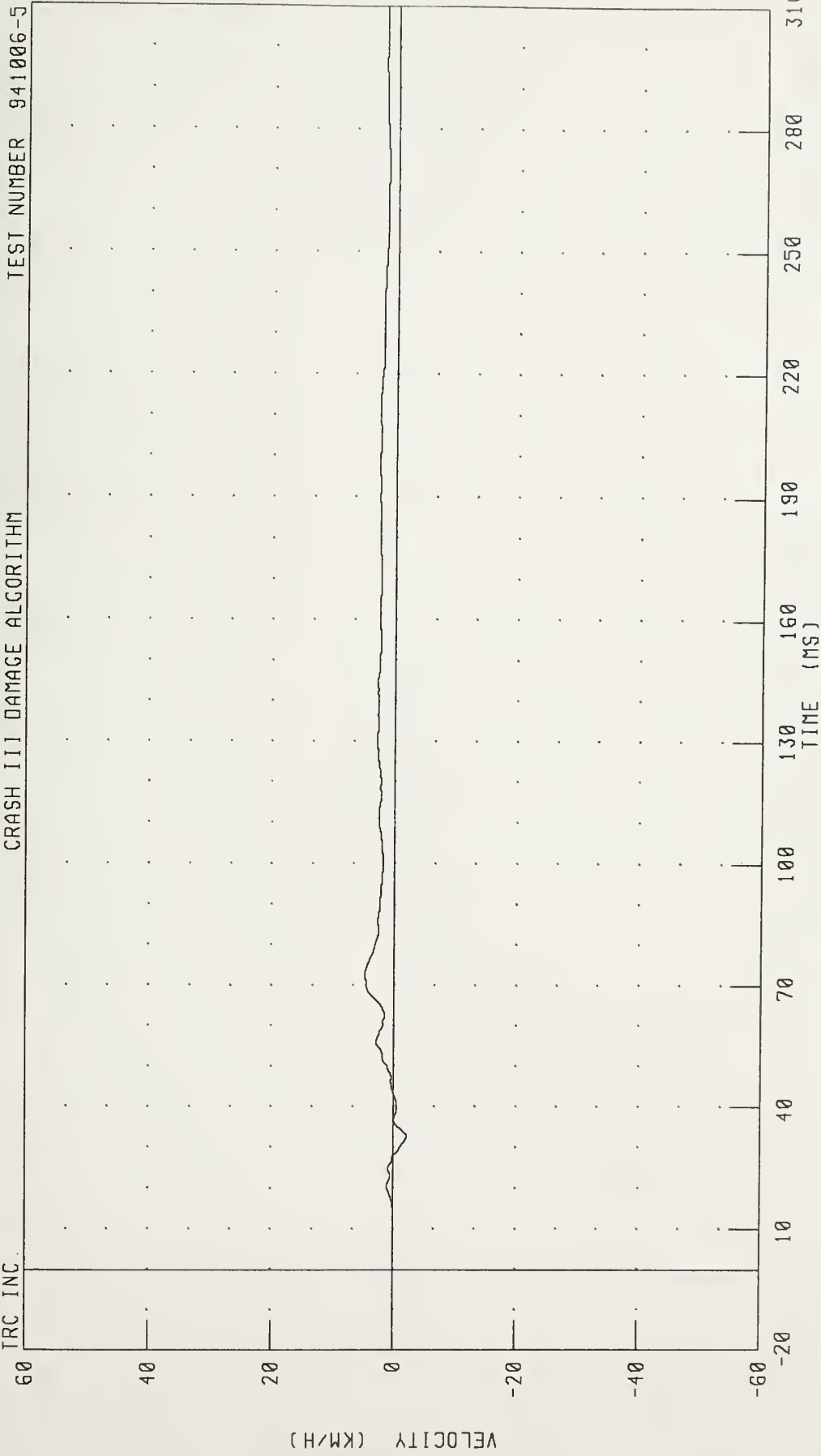


CHANNEL: RFSYG1 FILTER: CH. CLASS 60

PEAK DATA: 16.42 G @ 66.56 MS, -13.92 G @ 28.96 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT FRONT SILL Y-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TRC INC. TEST NUMBER 941006-5

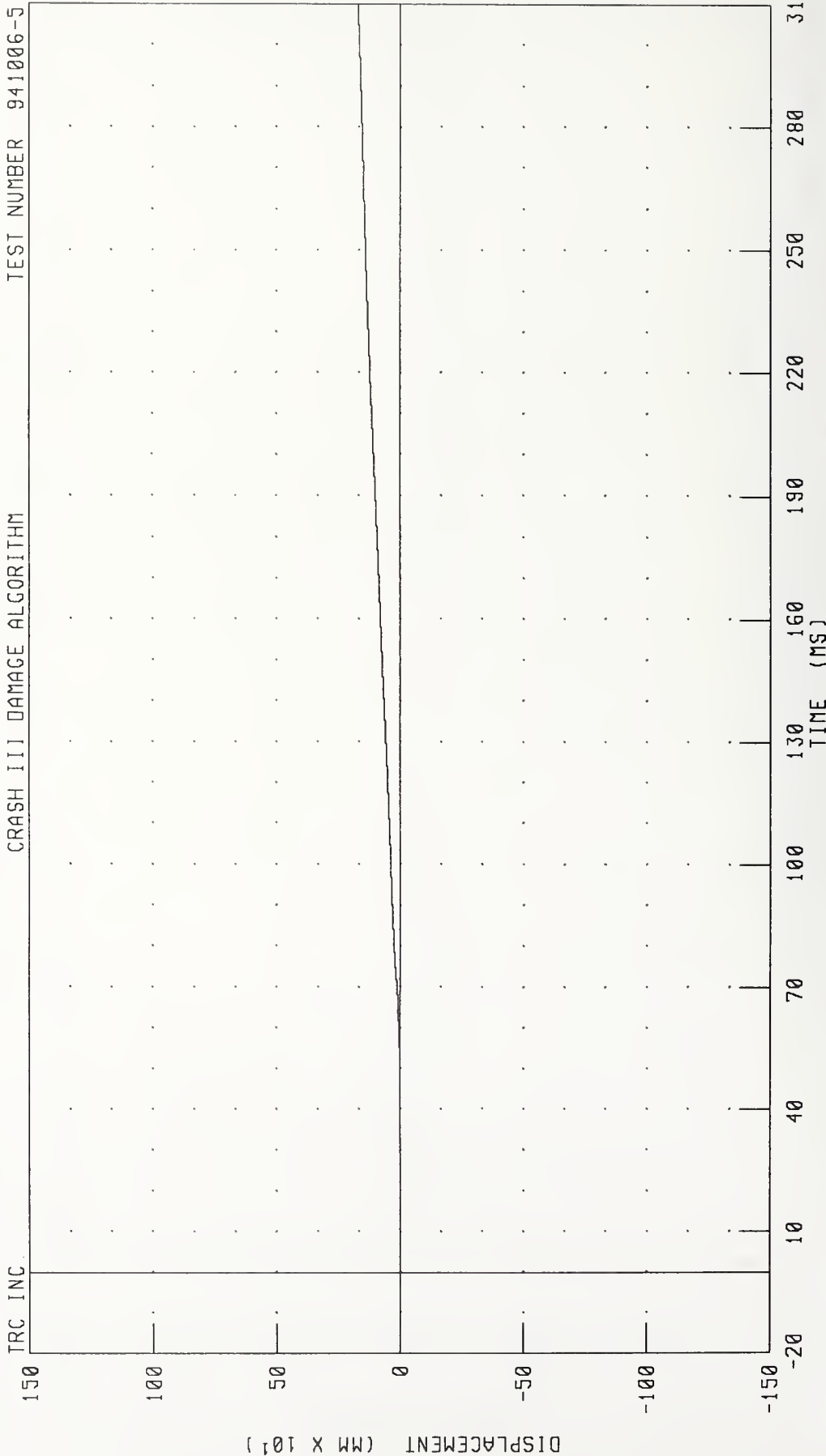


CHANNEL: RFSYV1 FILTER: CH. CLASS 180

PEAK DATA: 4.73 KM/H @ 72.56 MS; -2.16 KM/H @ 32.80 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 RIGHT FRONT SILL Y-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5

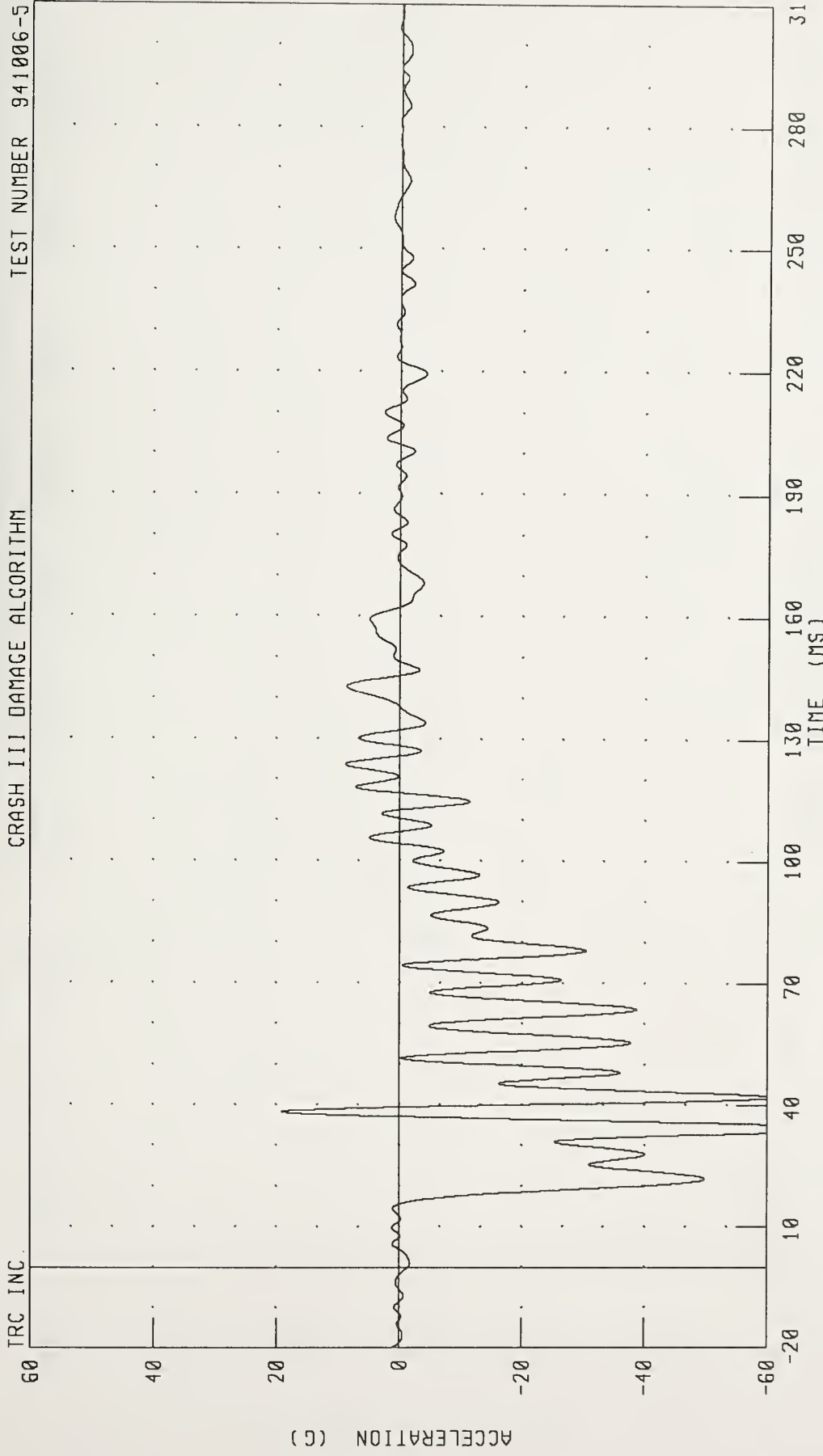


CHANNEL: RFSY01 FILTER: CH. CLASS 180

PEAK DATA: 170.14 MM @ 310.00 MS; -1.36 MM @ 43.12 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

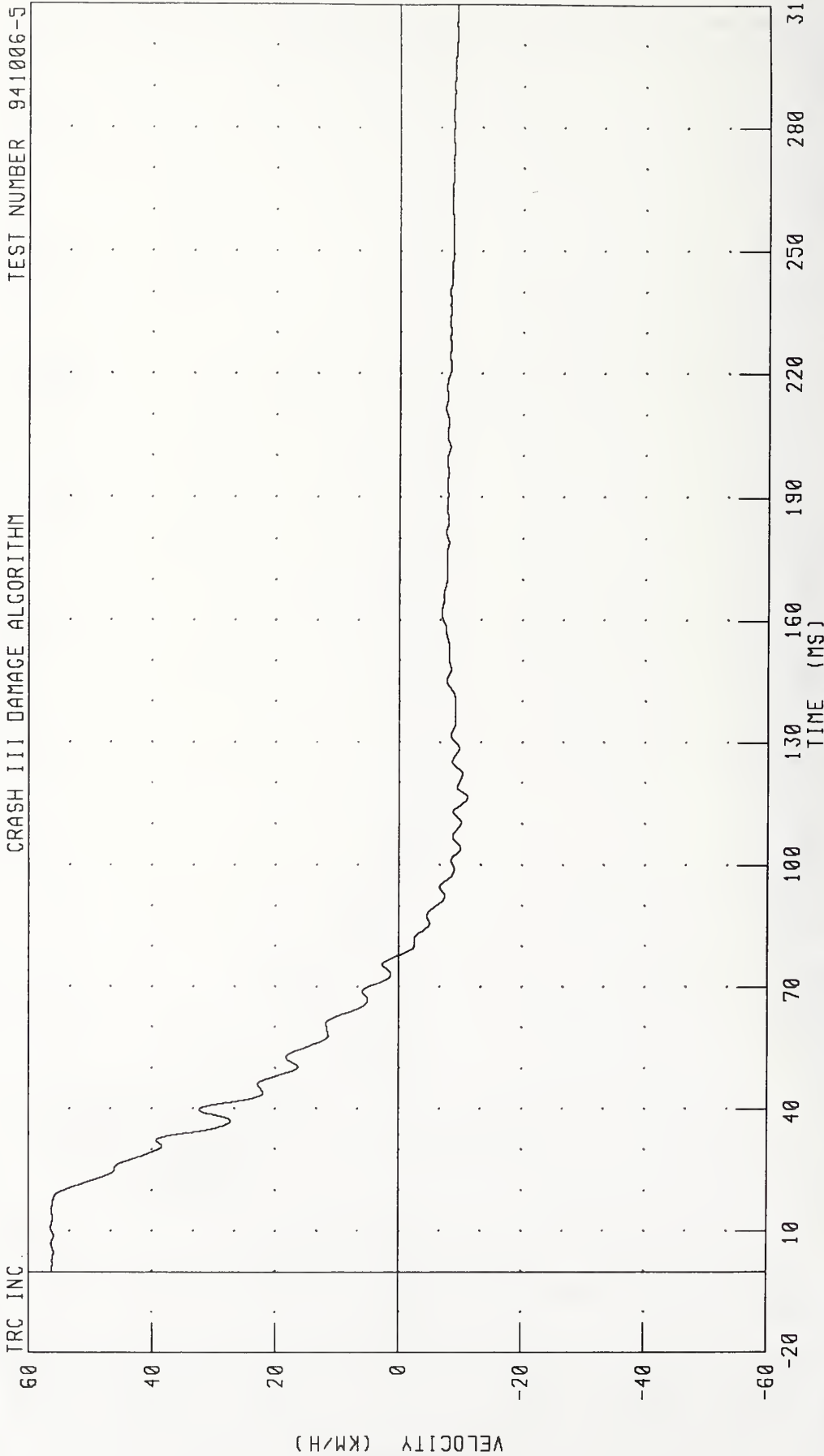
TEST NUMBER 941006-5



CHANNEL: TLRXG1 FILTER: CH. CLASS 60

PEAK DATA: 19.06 G @ 38.32 MS, -73.45 G @ 34.16 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

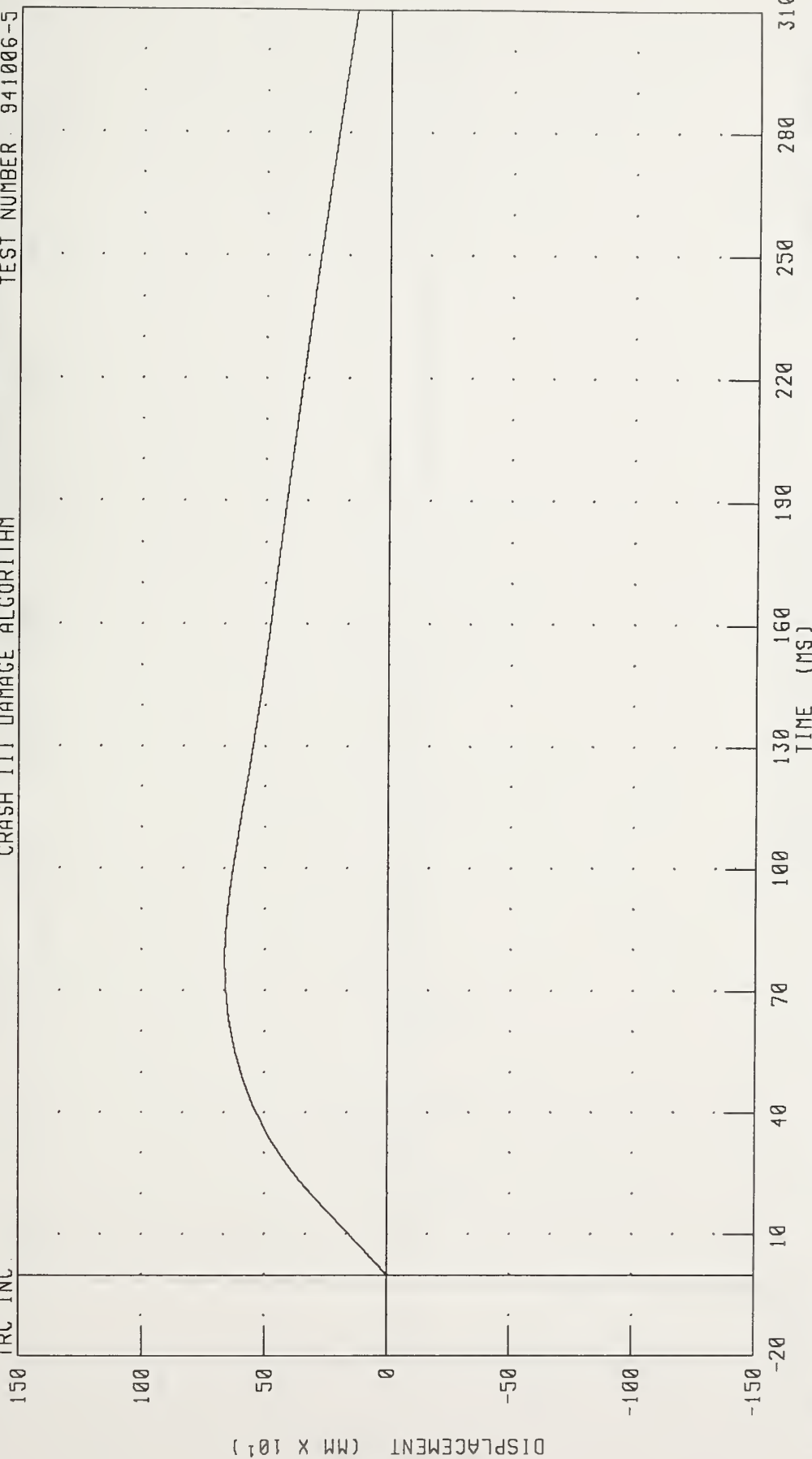


1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT X-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM

TEST NUMBER: 941006-5

TRC INC.

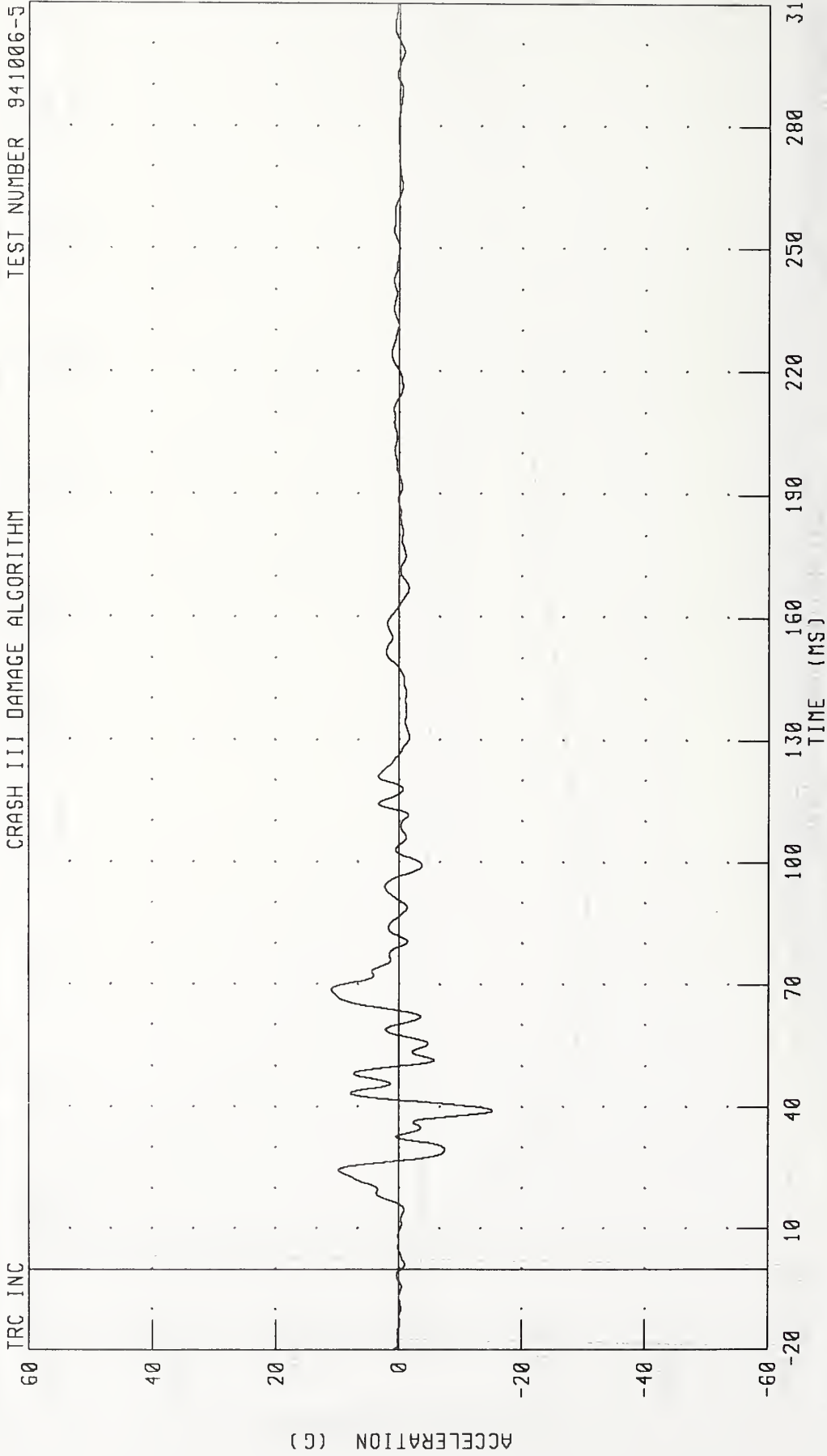


CHANNEL: TLRXD1 FILTER: CH. CLASS 180

PEAK DATA: 664.10 MM @ 77.84 MS, 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5

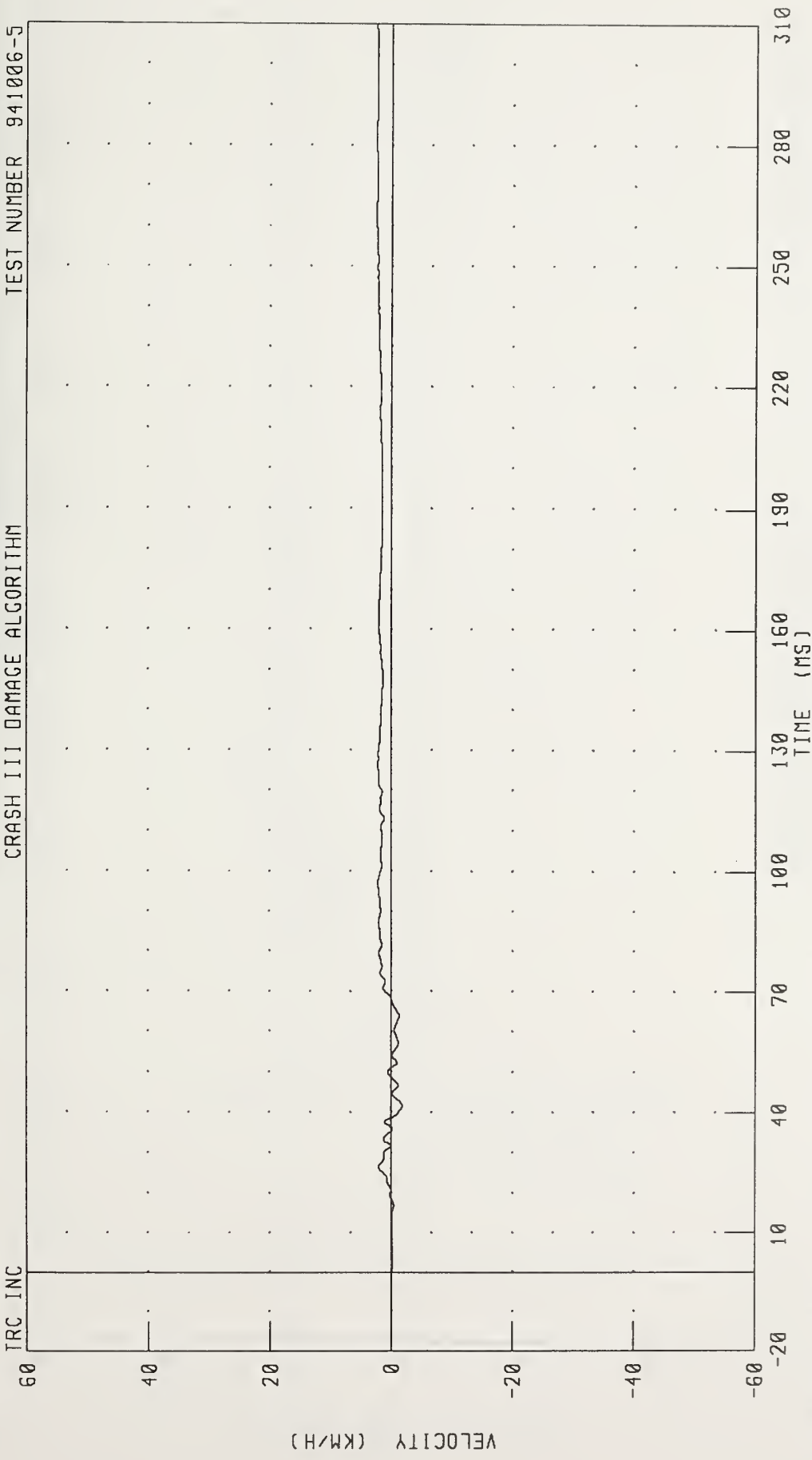


CHANNEL: TLRYG1 FILTER: CH. CLASS 60

PEAK DATA: 11.02 G @ 68.72 MS; -15.30 G @ 39.12 MS

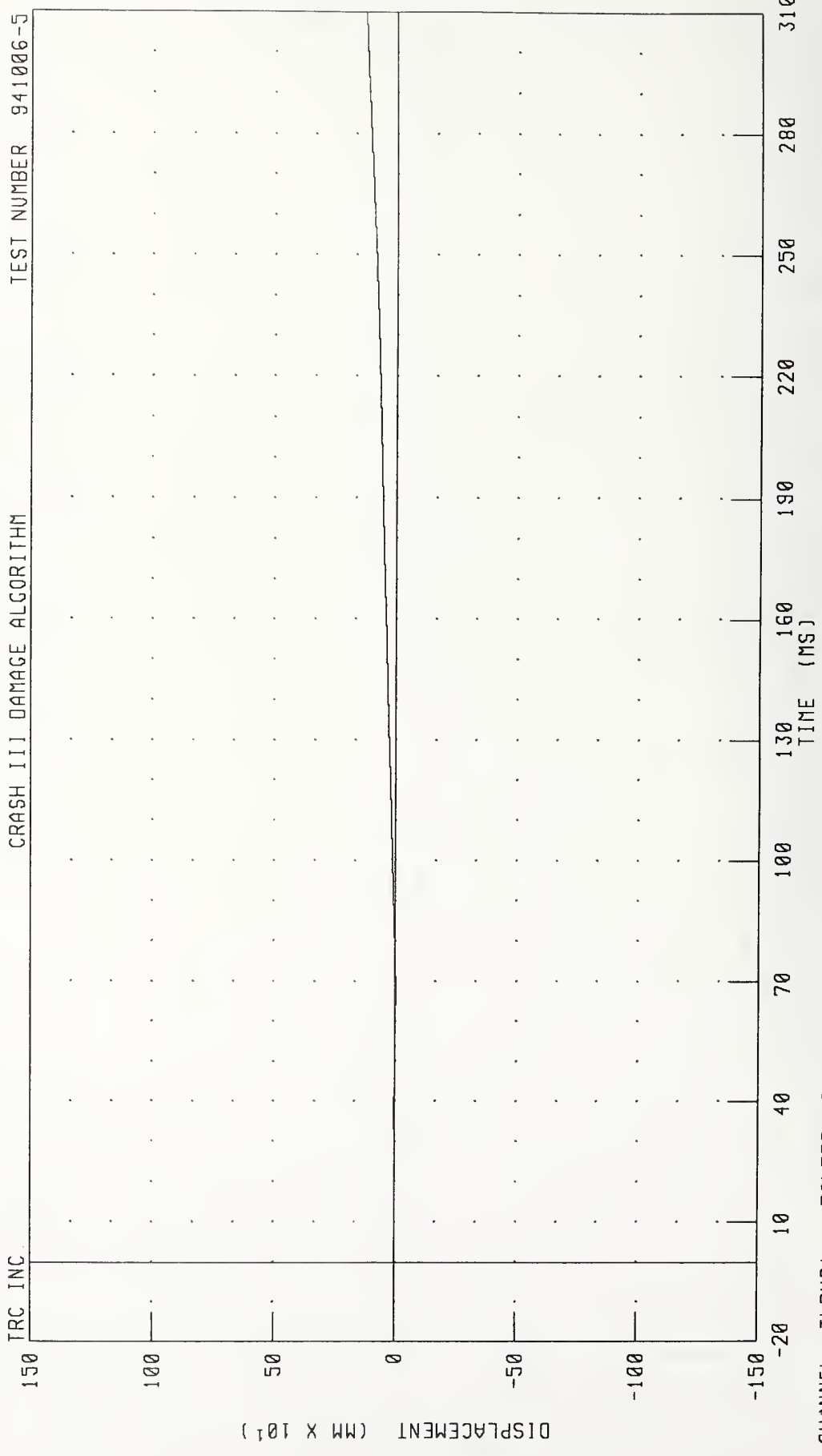
1992 CHEVROLET CAPRICE INTO 305 MM POLE
LEFT REAR SEAT Y-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5



CHANNEL: TLRYV1 FILTER: CH. CLASS 180 PEAK DATA: 2.53 KM/H @ 261.68 MS; -1.84 KM/H @ 41.52 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
 LEFT REAR SEAT Y-AXIS DISPLACEMENT
 CRASH III DAMAGE ALGORITHM

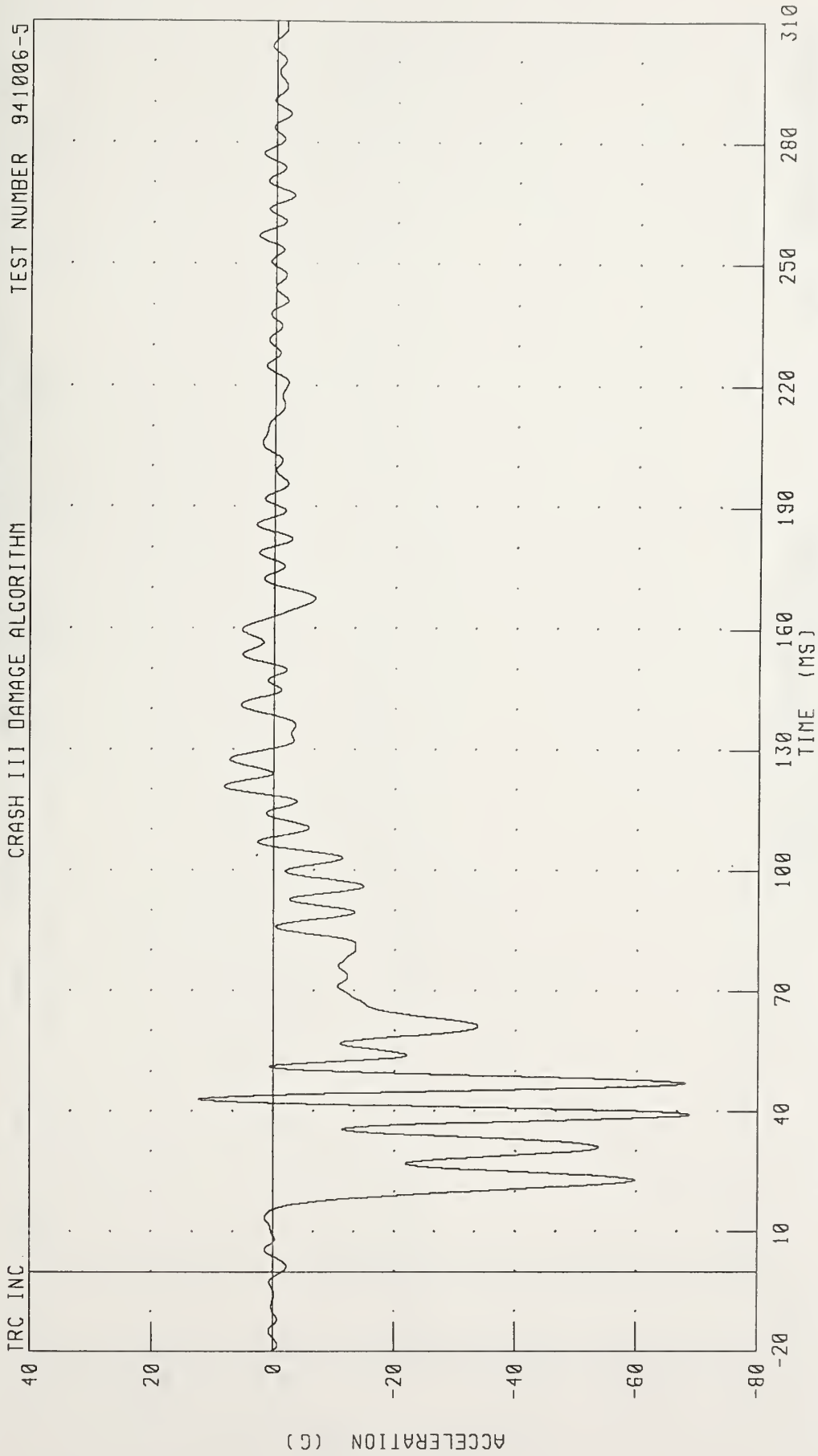


CHANNEL TLR01 FILTER: CH. CLASS 180

PEAK DATA: 127.32 MM @ 310.00 MS, -2.59 MM @ 68.24 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5

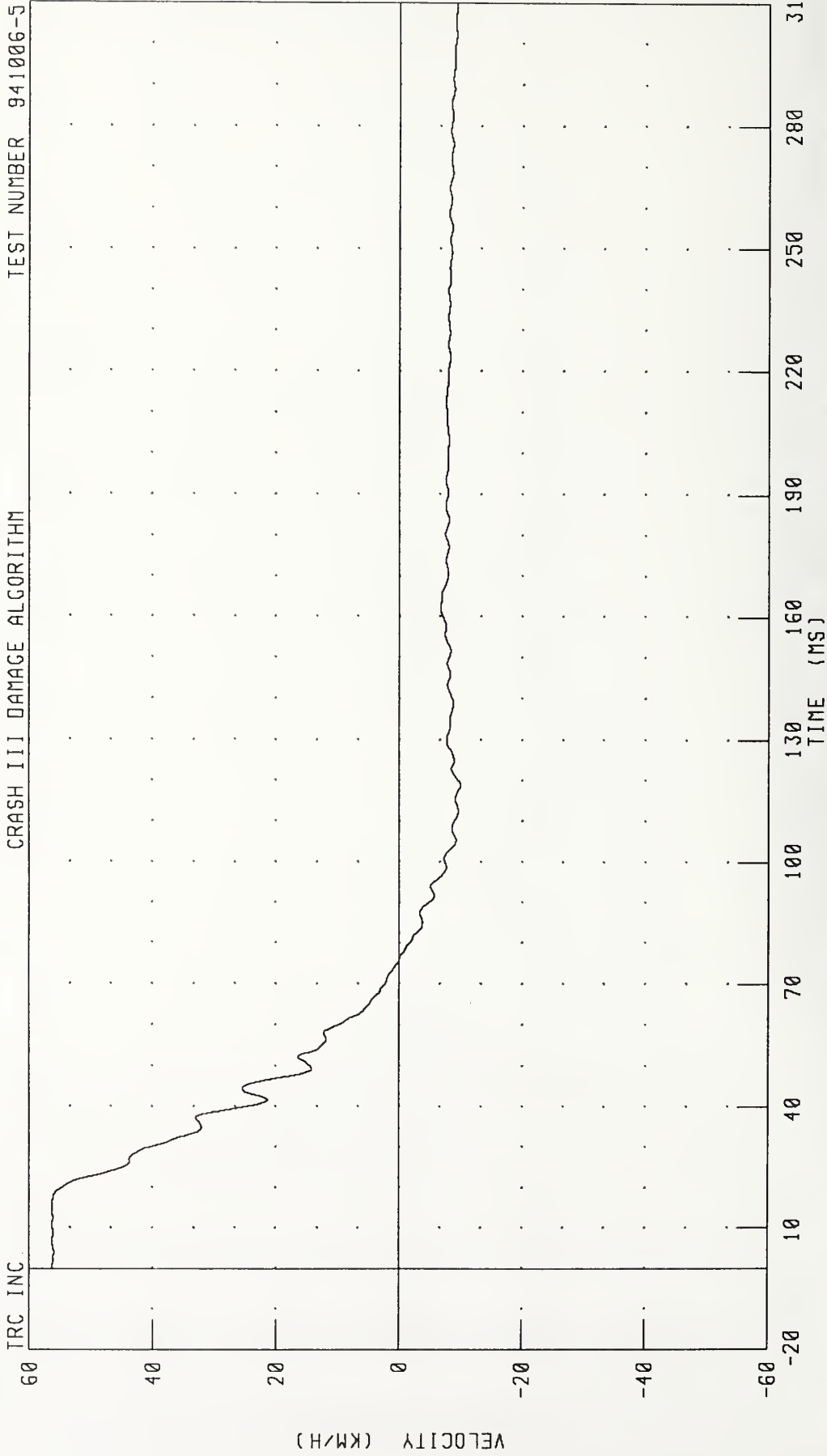


CHANNEL TRRXG1 FILTER CH CLASS 60

PEAK DATA: 12.33 G @ 43 04 MS, -68.70 G @ 39 20 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS VELOCITY

TRC INC. CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-5

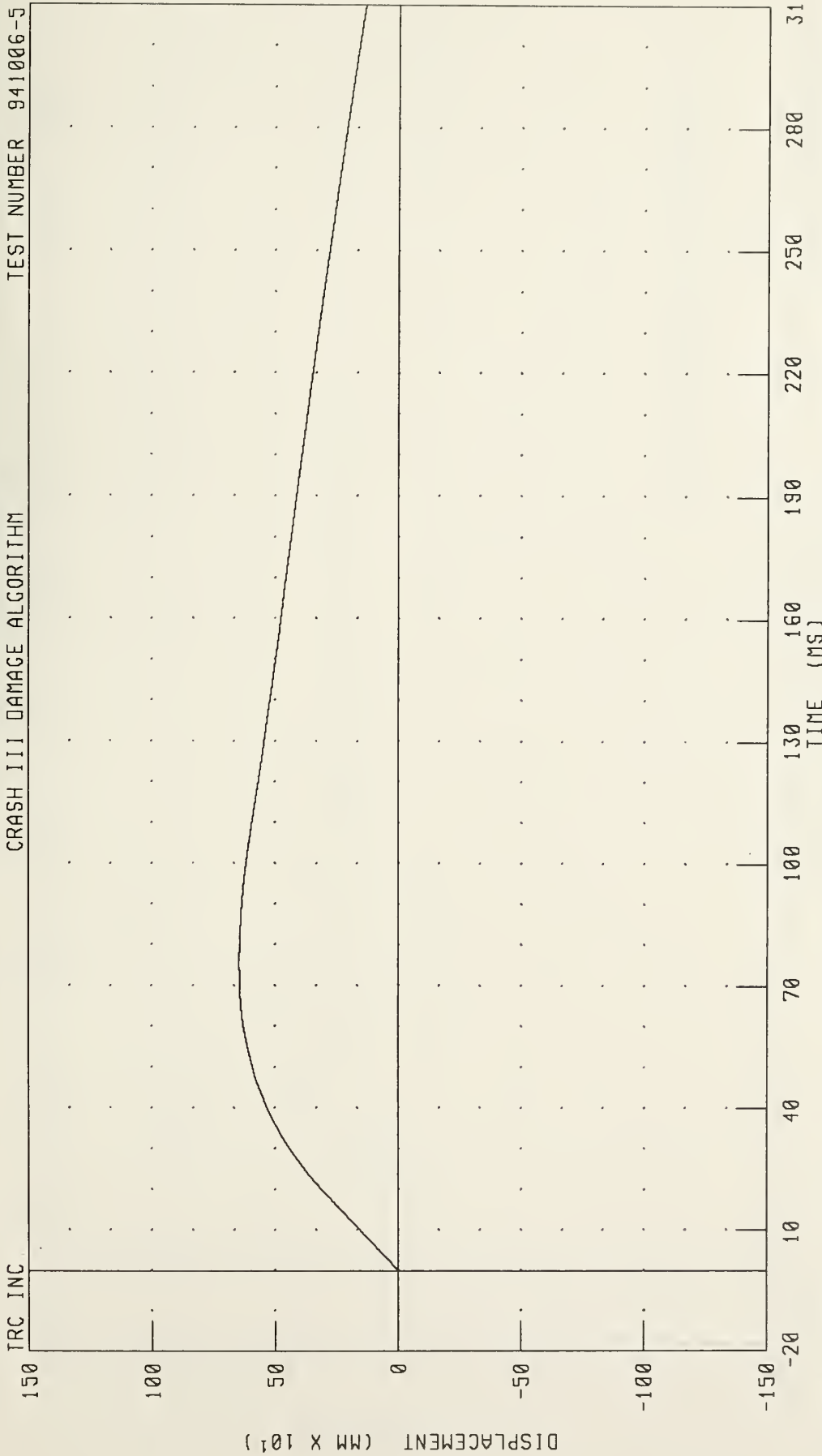


CHANNEL: TRRXV1 FILTER: CH. CLASS 180

PEAK DATA: 56.30 KM/H @ 0.00 MS; -10.05 KM/H @ 118.96 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT X-AXIS DISPLACEMENT

CRASH III DAMAGE ALGORITHM TEST NUMBER 941006-5



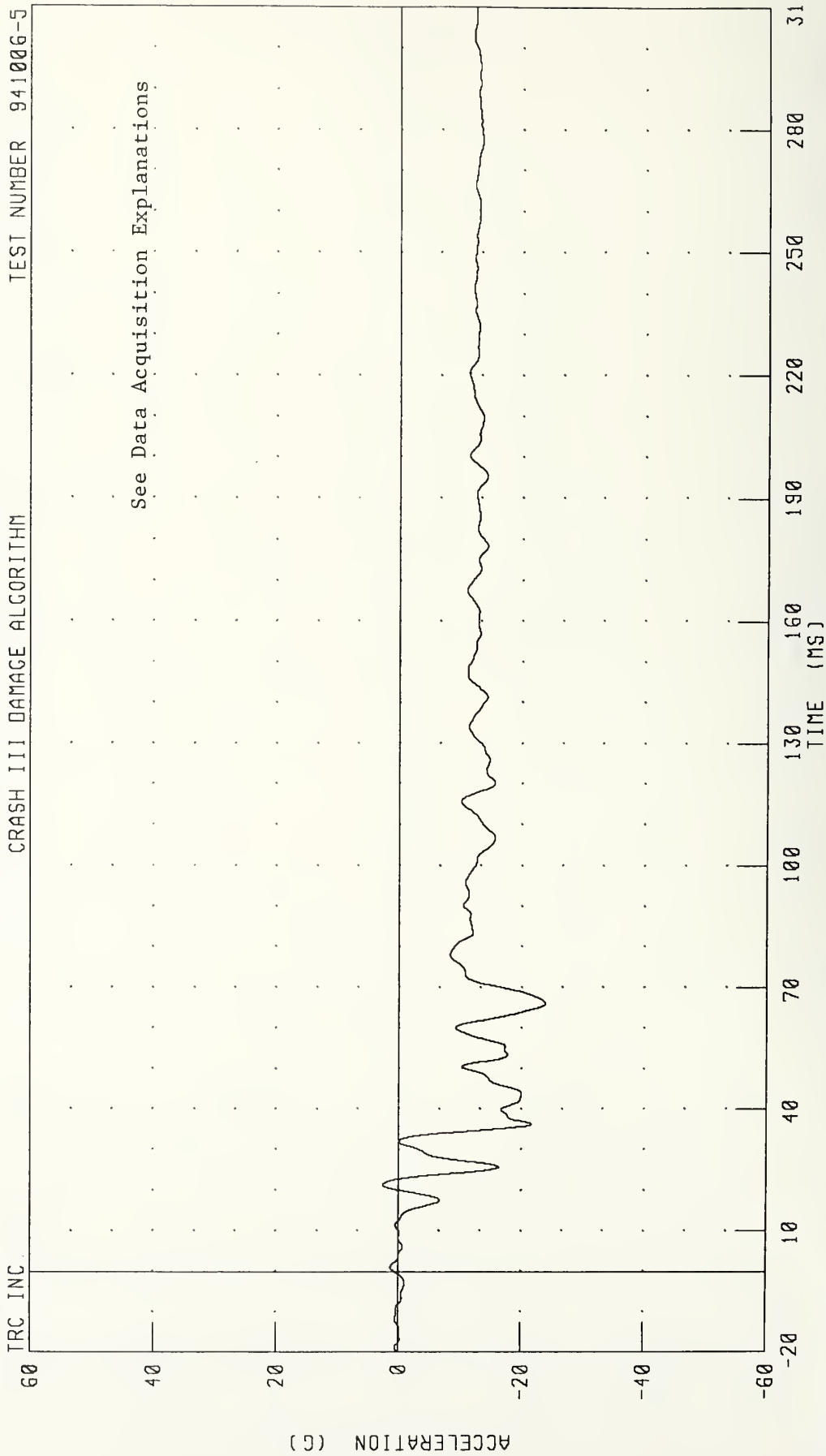
CHANNEL: TRRXD1 FILTER: CH. CLASS 180

TIME (MS)

PEAK DATA: 646.16 MM @ 75.68 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS ACCELERATION
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5

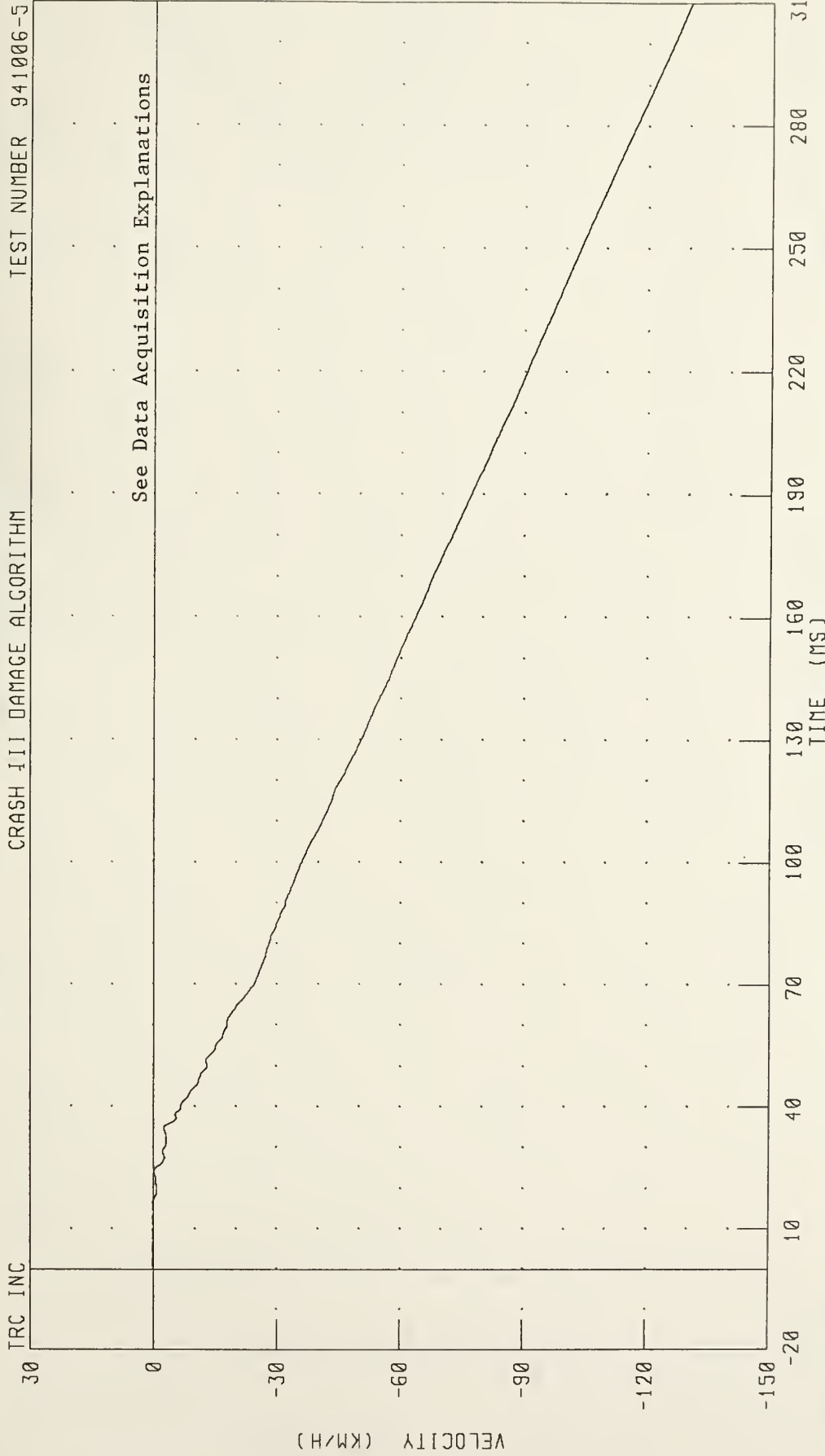


CHANNEL: TTRYG1 FILTER: CH CLASS 60

PEAK DATA: 2.63 G @ 21.36 MS, -23.94 G @ 66.16 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS VELOCITY
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5

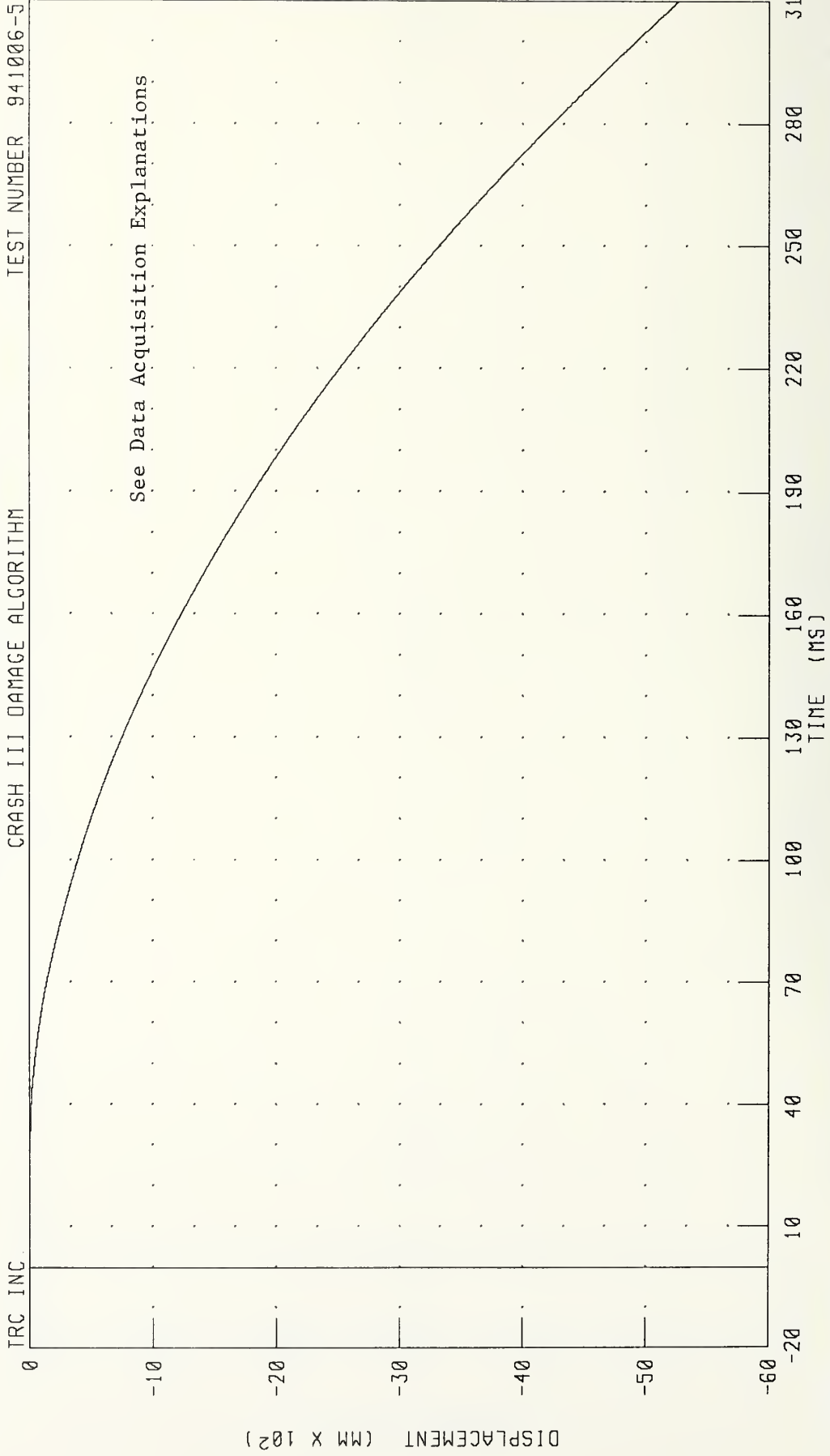


CHANNEL: TRRYV1 FILTER: CH CLASS 180

PEAK DATA: 0.31 KM/H @ 2.00 MS; -130.45 KM/H @ 310.00 MS

1992 CHEVROLET CAPRICE INTO 305 MM POLE
RIGHT REAR SEAT Y-AXIS DISPLACEMENT
CRASH III DAMAGE ALGORITHM

TEST NUMBER 941006-5



CHANNEL: TRRYD1 FILTER: CH. CLASS 180

PEAK DATA: 0.73 MM @ 16.96 MS, -5269.71 MM @ 310.00 MS

Appendix C

Miscellaneous Test Information

Vehicle Accelerometer Information

No.	Location	Axis	Manufacturer	Model	Serial Number	Orientation (+ Sensing)
1	Vehicle center of gravity	X	Endevco	7264	CW87H	Front
		Y	Endevco	7264	FH41J	Right
		Z	Endevco	7264	CJ75H	Up
2	Left front sill	X	Endevco	7264	DW12J	Front
		Y	Endevco	7264	CR26HT	Right
3	Right front sill	X	Endevco	7264	CH74H	Front
		Y	Endevco	7264	BW77J	Left
4	Left rear seat crossmember	X	Endevco	7264	CP90H	Front
		Y	Endevco	7264	CM27H	Left
5	Right rear seat crossmember	X	Endevco	7264	AGRF4	Front
		Y	Endevco	7264	DR49JT	Right

Sign Convention

All Dummy, Barrier And Vehicle Channels:

+X: Forward

+Y: Leftward

+Z: Upward

+Force: Tension

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