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 Vehicle No. 7-7-12
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FINAL TEST REPORT

**Global Test Operations
 Research and Vehicle Technology**

TO: L. Miskir

Test Order No. T-B9364
 Work Task W. O. No. F09
 Test Date 10/28/99
 Date Reported 1/19/00
 Sheet 1 of 79

SUBJECT: Crash Test 11657 (90° Front Fixed Barrier Impact at 34.9 ± 0.4 mph, 56.2 ± 0.6 km/h) - 2000 Taurus (D186) 4-Door Sedan - 2000 Certification Program

REQUESTED BY: Vehicle Crash Safety Department, Research and Vehicle Technology - L. Miskir

OBJECT: To provide occupant protection data relative to the front barrier impact test requirements of the current FMVSS No. 208 (U.S. CFR Docket No. 98-4358, Canadian Gazette SOR/97-447)

SUMMARY OF TEST RESULTS:

- See Attachment 1 for injury criteria data.
- See Attachment 2 for vehicle observations and non-FMVSS data.

The Test Authorization for this crash indicated that the vehicle is representative of a design level suitable for a certification test. To the best of my knowledge, the crash testing was performed on the same vehicle as identified in the Test Authorization; the results reported herein represent the performance of this specific vehicle, and the testing was performed in accordance with the listed procedures. Any procedure deviations significant to the test objectives above are identified in this report.

S. Lash

Concur: S. Lash
 Section Supervisor
 Operations Engineering Section

R. Oda

R. Oda
 Engineering Technologist

VEHICLE DATA:

Make and Model 2000 Taurus (D186) 4-Door Sedan (Production Vehicle)

ID Numbers 1FAPP35U7YA100137, 306-W-231

Power Train 3.0L, EFI, Automatic (AX4N) Transaxle

Fuel Tank(s) Usable Capacity: 16.0 gal. (60.6L)
Test Condition: Empty

Front Seat(s) Type: Bucket
Cover: Leather
Tracks/Position: 6-Way Power/Mechanical Mid and Down
Seat Backs/Position: Adjustable/27.3° Rear of Vertical
Head Restraints/Position: Adjustable/Up

Restraint System LF: 3-Point Continuous Loop Active Belt with
Pyrotechnic Buckle and Steering Wheel Air Bag
RF: None Used

Occupants LF: 50th Percentile Male, Hybrid III,
Instrumented No. 330
RF: None Used

Test Weight Front: 2279 lb (1034 kg)
Rear: 1588 lb (720 kg)
Total: 3867 lb (1754 kg)

The test weight includes:

- the "as received" unloaded vehicle curb weight
- Minimum production options (simulated)
- 1 occupant (described above)
- 200 lb (90.7 kg) luggage (simulated)

Tires Front: P215/60R16 30 psi (207 kPa)
Rear: P215/60R16 30 psi (207 kPa)
Spare: Removed

Bumpers Front: Fascia/Beam
Rear: Removed

Significant Content or Accessories: Air Conditioning, Power Steering, Power Brakes, Tilt Steering Wheel

GENERAL TEST COMMENTS:**1. Test Procedure**

The test was performed according to the following Corporate test procedure(s):

Occupant Crash Protection, T657-ST-25 dated March 3, 1998.

2. Significant Deviations from T657-ST-25

Only the left front dummy was used.

The fuel system did not contain stockard.

3. Instrumentation: The instrumentation equipment set up for this test was completed following approved procedures which require engineering sign-off after each major step. The instrumentation equipment and systems used meet the SAE J211 June 80 series of recommended practices (Instrumentation for Impact Tests J211, J211a, or J211b) and were calibrated using secondary standards that are traceable to the National Institute of Standards and Technology (NIST).**4. Remarks**

Crash movies, pre- and post-crash still images of the test vehicle and copies of this report are available through the Operations Engineering Section, Safety Laboratories Department, GTO. The crash still images are stored and archived on CD ROMs. The file names of the still images are listed under crash number and a three digit sequence number which are 11657001 through 11657081.

ATTACHMENT 1

Occupant Injury Data (C/FMVSS 208)

	<u>L. P. Dummy</u>
Head Injury Criteria (HIC)	327
Interval	t1
	63 ms
	t2
	99 ms
Chest resultant acceleration level at 3 ms cumulative duration	48 g
Chest Deflection (Hybrid III)	1.3 in
Peak axial compression load:	
Left femur	439 lb
Right femur	499 lb
Peak axial tension load:	
Left femur	323 lb
Right femur	162 lb
Dummy contained within the vehicle during the crash	Yes

The dummy temperature, immediately prior to the test, was within the specified test range of 69°F to 72°F.

Time histories of the dummy instrumentation are included in this report.

ATTACHMENT 2

1.0 Vehicle Crush, Film Analysis and/or Instrumentation Data

	Maximum Dynamic Longitudinal Crush	
	in.	(mm)
Left Side	29.0	(737)
Right Side	28.9	(734)

Time histories of the dummy dynamic displacements obtained from Film Analysis are included in this report.

Time histories of the air bag/sensor(s) are included in this report.

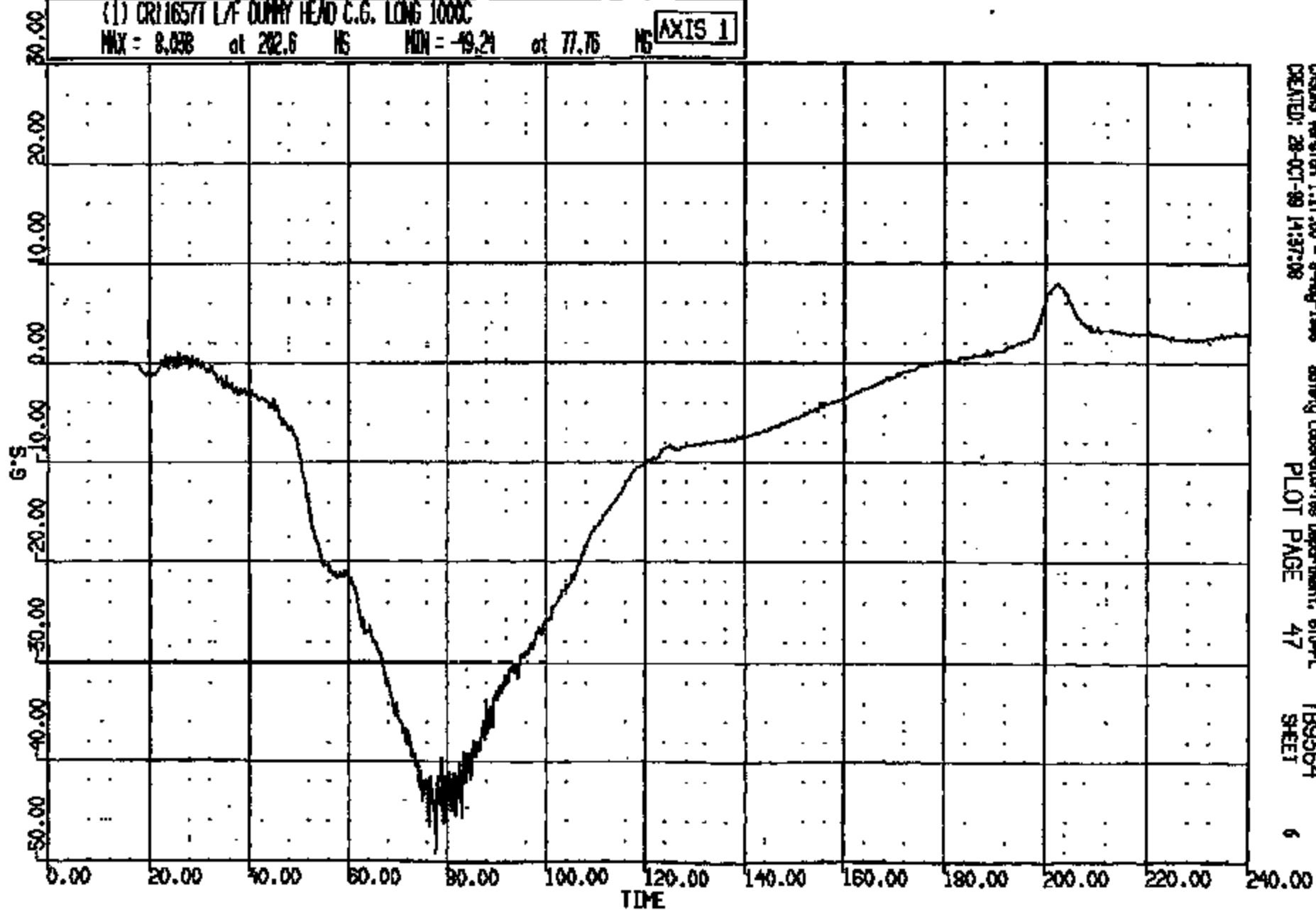
Time histories of the vehicle accelerations and other instrumentation are included in this report.

Time histories of vehicle dynamic displacements obtained from Film Analysis are included in this report.

Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.

CR R: 11657 TO: TB9364 DATE: 991029 15:28:32
2000 D-189

(1) CR11657T L/F DUMMY HEAD C.G. LONG 1000C
MAX = 8.088 at 202.6 NS MIN = -49.24 at 77.76 NS **AXIS 1**



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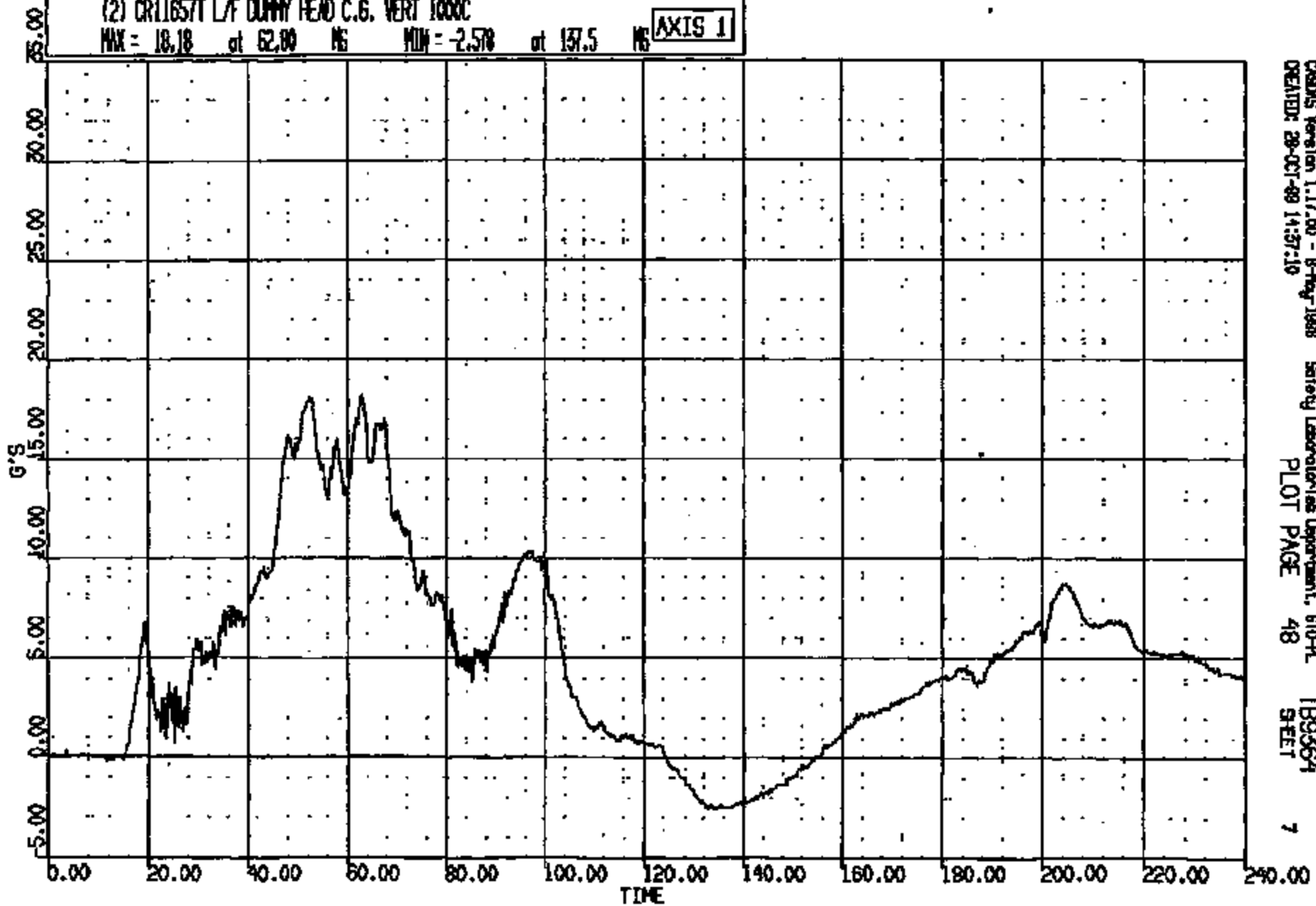
6

CR R: 11657 TO: TB9364 DATE: 881028 15:26:32
2000 D-100

(2) CR11657T L/F DUMMY HEAD C.G. VERT 1000C

MAX = 18.18 at 62.00 MS MIN = -2.578 at 137.5 MS

AXIS 1



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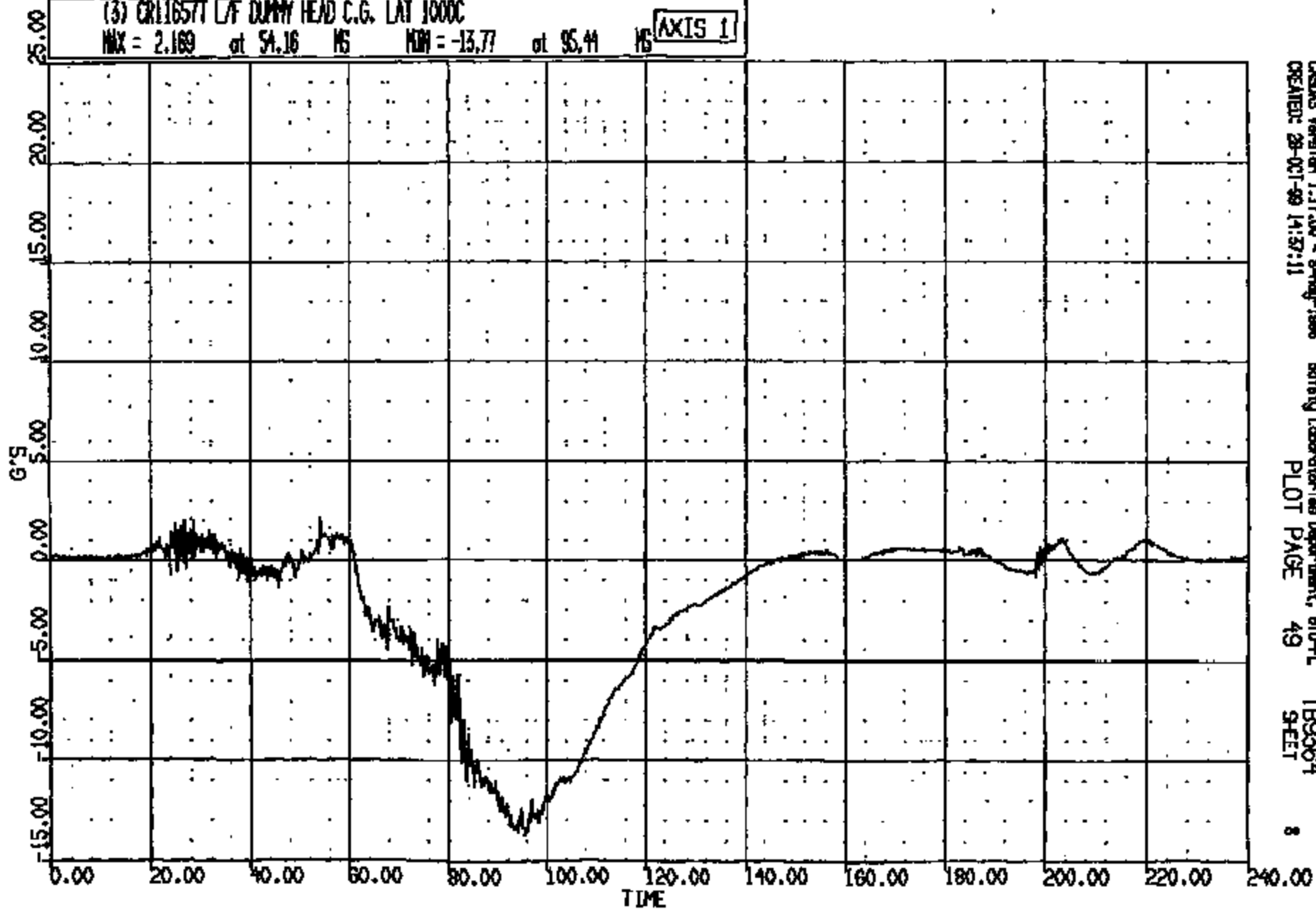
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8000 D-190

(3) CR11657T L/F DUMMY HEAD C.G. LAT 1000C

MAX = 2.169 at 54.16 MS MIN = -13.77 at 95.44 MS

AXIS 1



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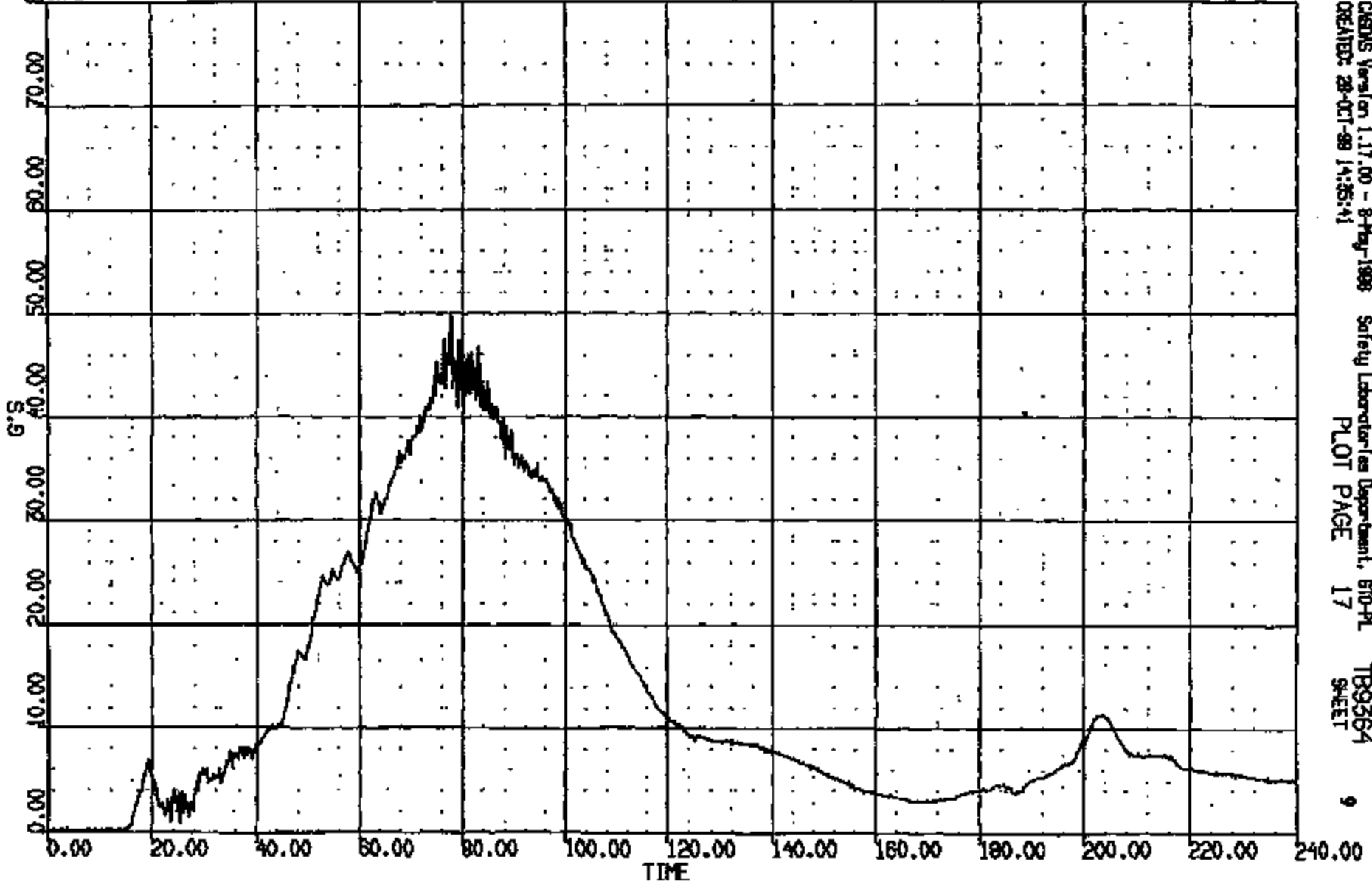
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 IIMV: 877. DUR: 240.0 T1/T2: 50.8 // 108.8
 IIMV: 181. DUR: 88.0 T1/T2: 82.8 // 88.8
 IIMV: 181. DUR: 18.0 T1/T2: 72.8 // 87.8

(1000) CR11657 L/F DUMMY HEAD C.G. RES 1000C
 MAX = 50.07 at 77.75 MS MIN = 0.352E-01 at 0.240 MS **AXIS 1**

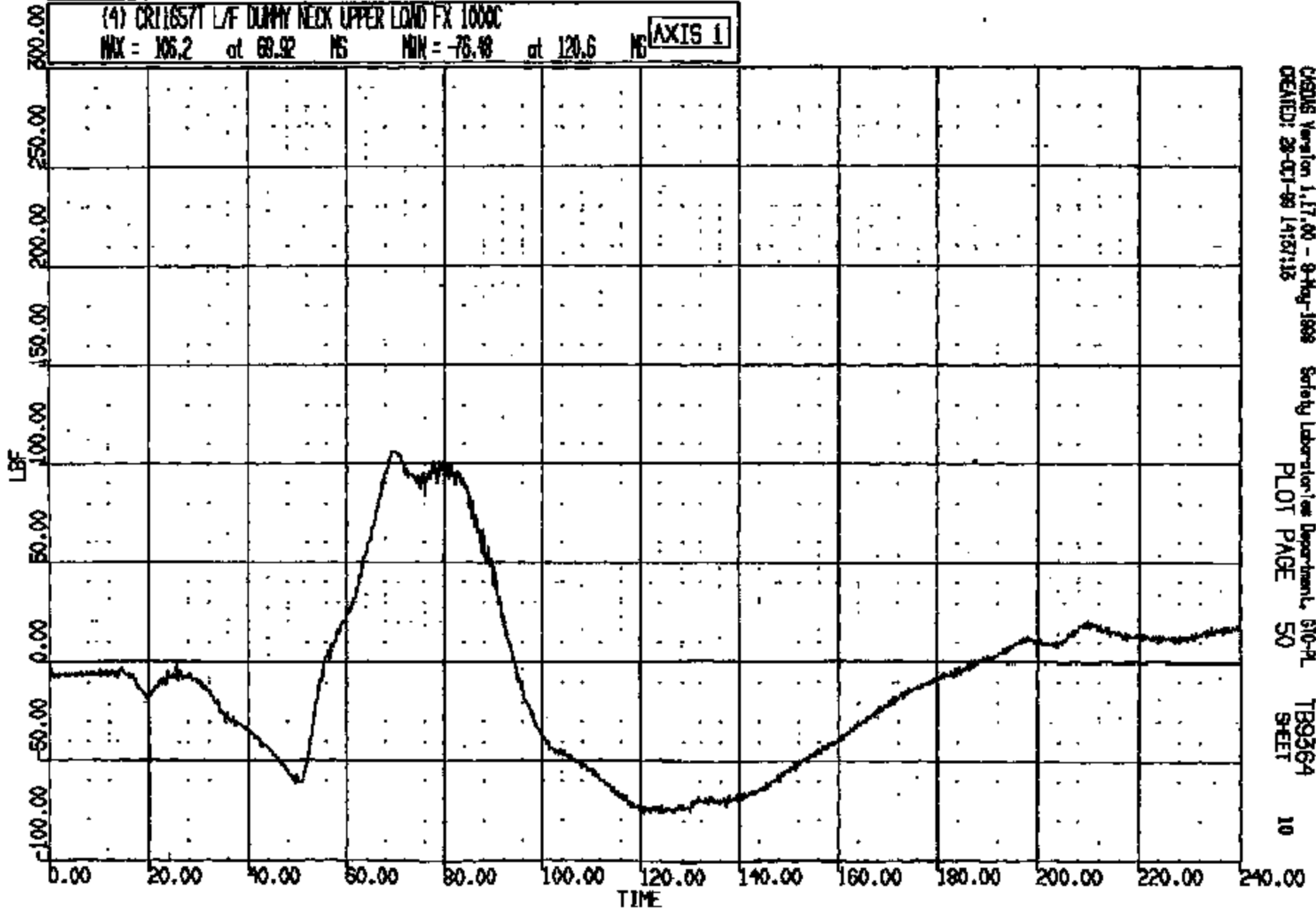


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CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991029 13:29:32
2000 D-166

(4) CRT11657T L/F DUMMY NECK UPPER LOAD FX 1000C
MAX = 106.2 at 69.92 MS MIN = -76.48 at 120.6 MS **AXIS 1**

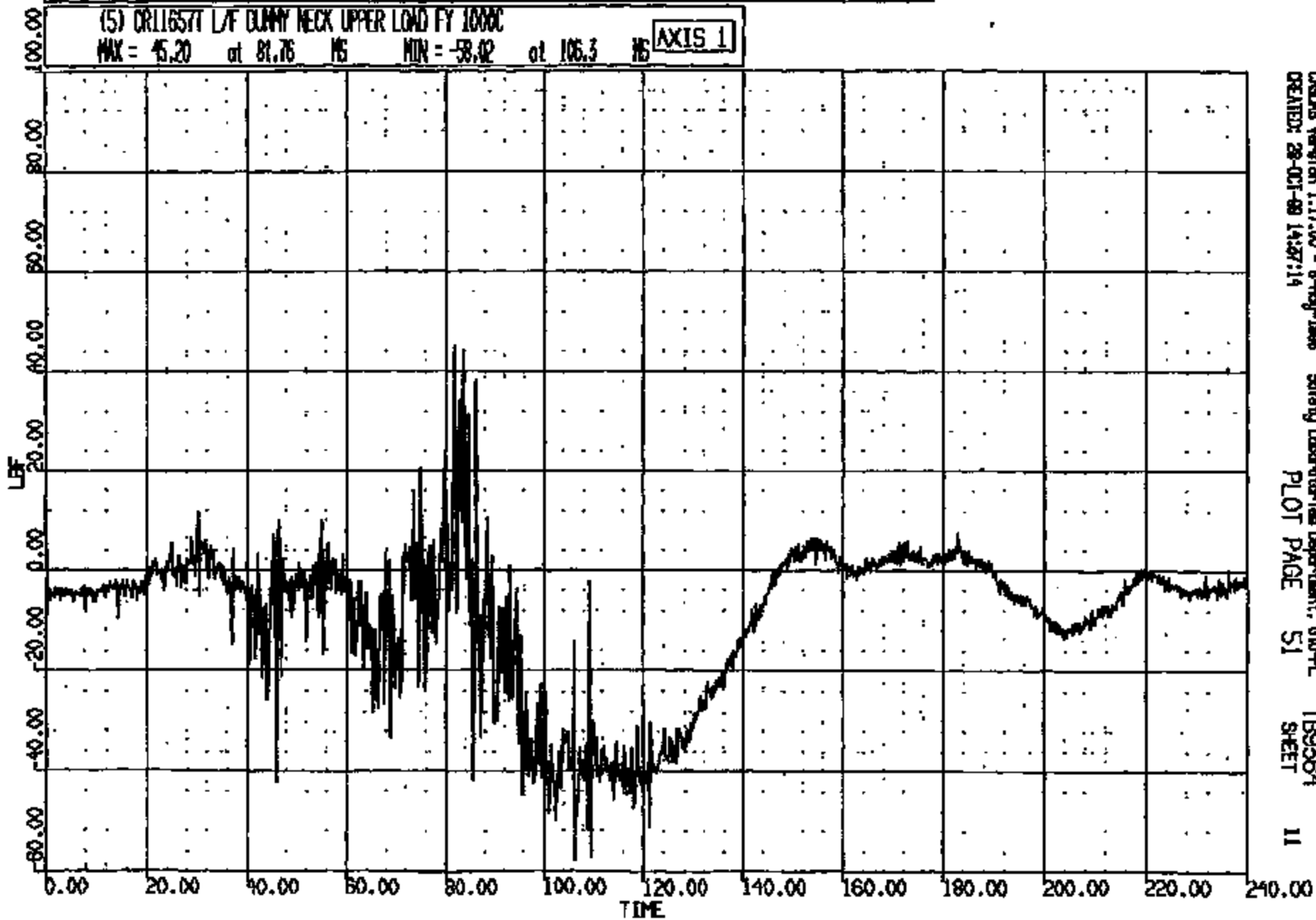


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CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 13:28:32
2000 D-198

(5) CR11657T L/F DUMMY NECK UPPER LOAD FY 1000C
MAX = 45.20 at 81.76 MS MIN = -58.02 at 106.3 MS **AXIS 1**



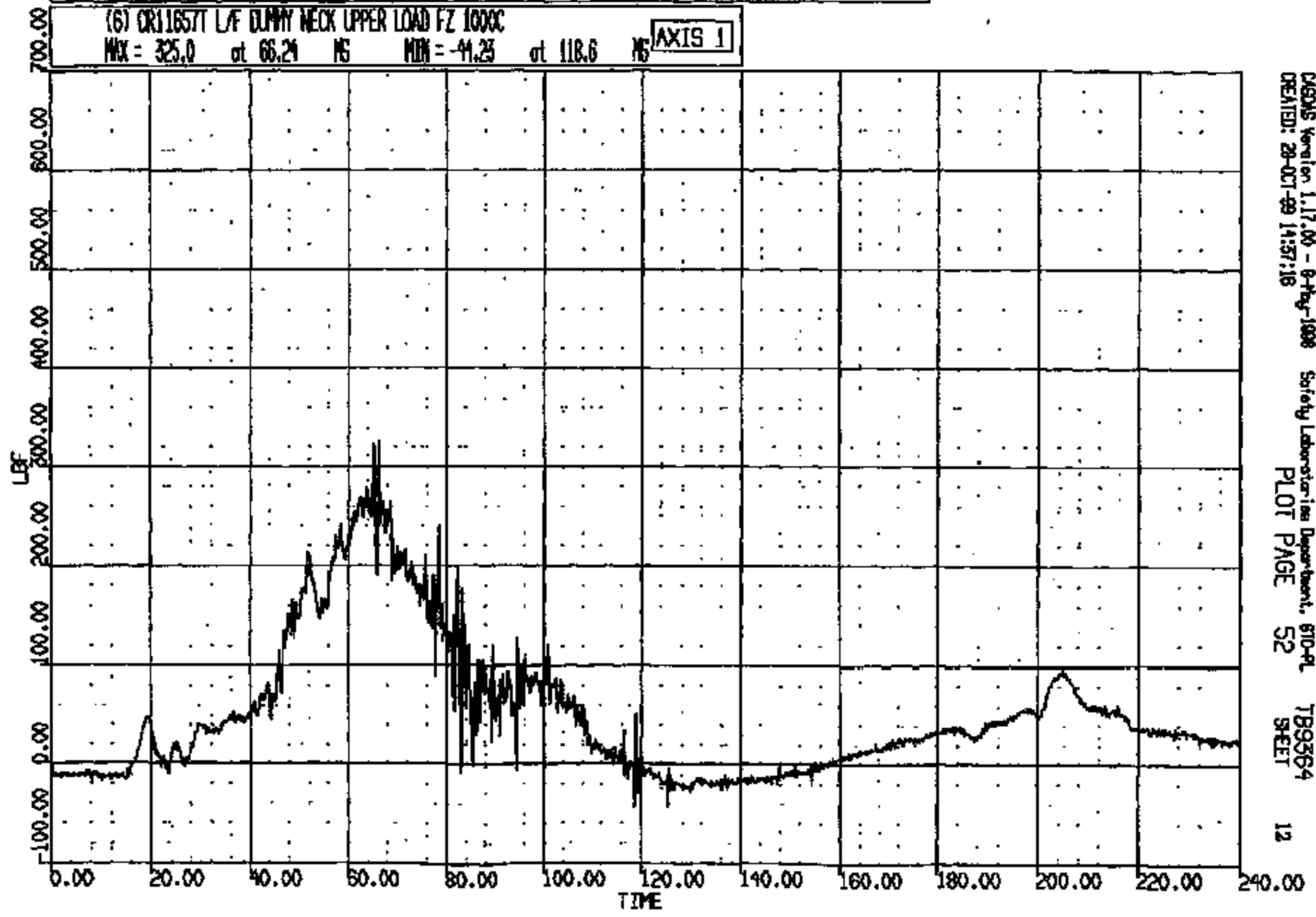
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2000 D-188

(6) CR11657T L/F DUMMY NECK UPPER LOAD FZ 1000C
MAX = 325.0 at 66.24 MS MIN = -44.25 at 118.6 MS **AXIS 1**



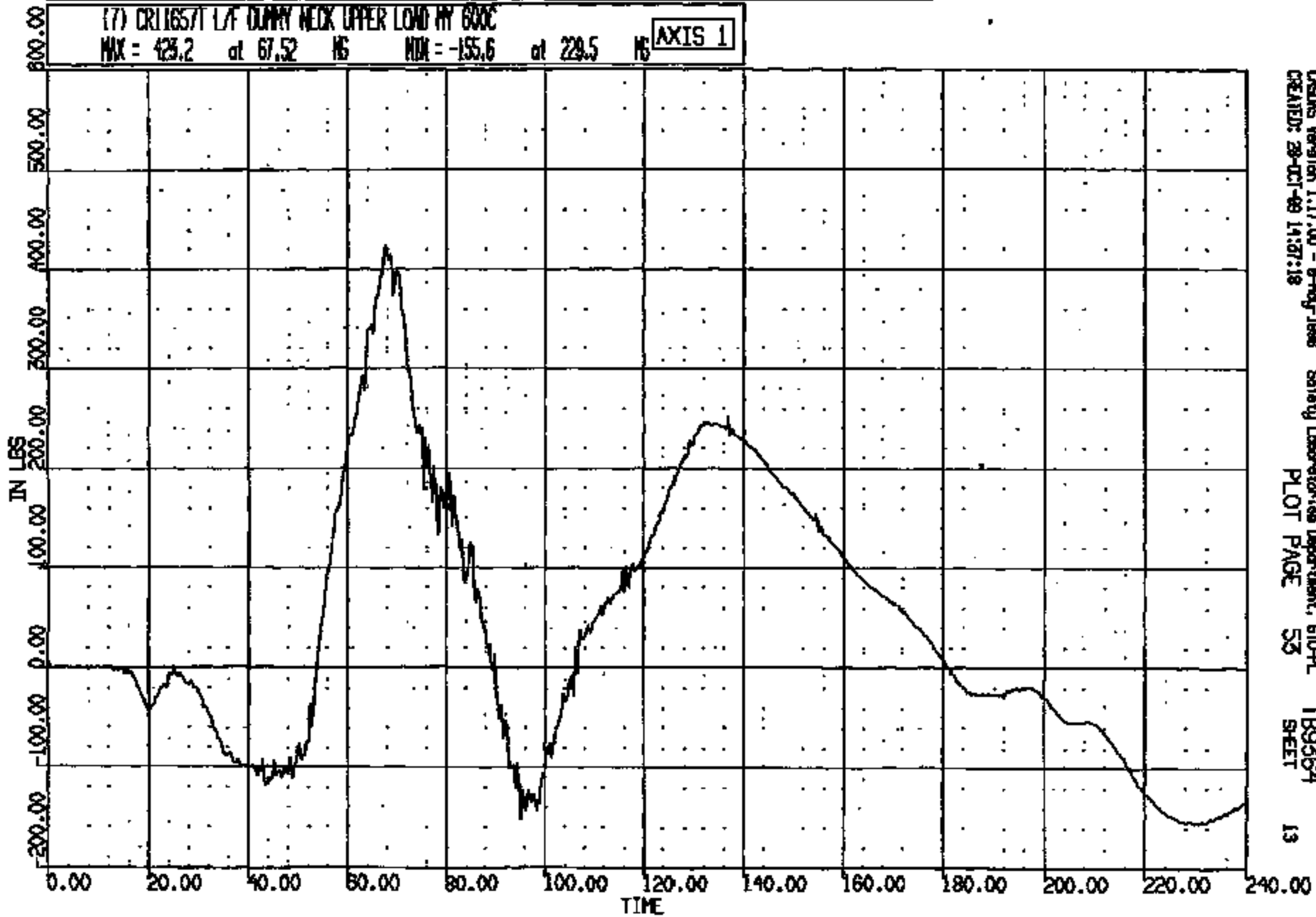
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2000 D-188

(7) CR11657/LF DUMMY NECK UPPER LOAD BY 600C
MAX = 423.2 at 67.52 MS MIN = -155.6 at 229.5 MS

AXIS 1

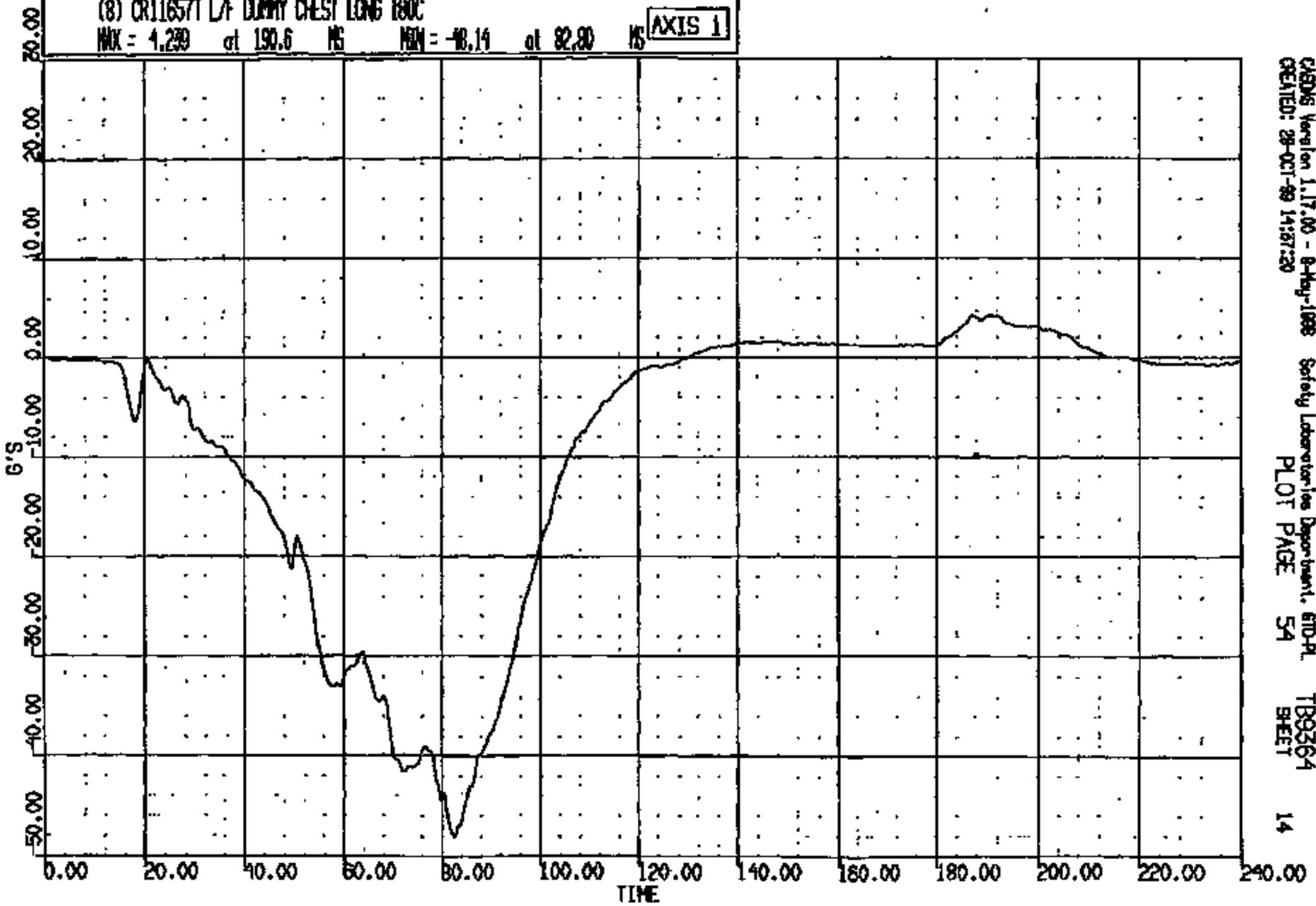


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CRIS 0011657

CR R: 11857 TO: T89564 DATE: 991028 15:28:32
2000 0-188

(8) CR116571 L/F DUMMY CHEST LONG 180C
MAX = 4.239 at 190.6 MS MIN = -48.14 at 82.80 MS **AXIS 1**

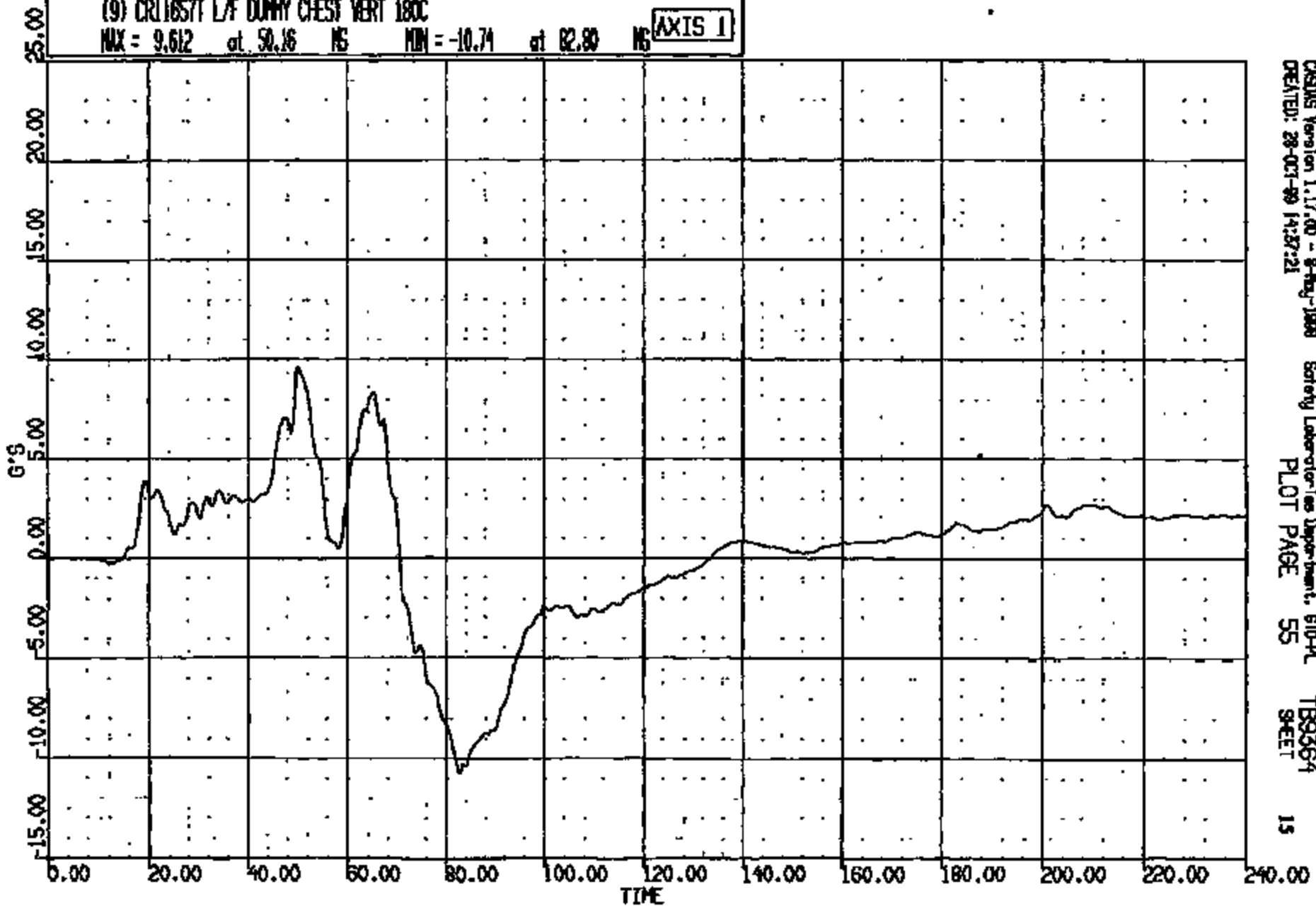


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CRIS 0011657

CR R: 11857 TO: TB9364 DATE: 091028 15:28:32
2000 D-168

(9) CR11857T L/F DUMMY CHEST VERT 180C
MAX = 9.612 at 50.16 NS MIN = -10.74 at 82.80 NS **AXIS 1**



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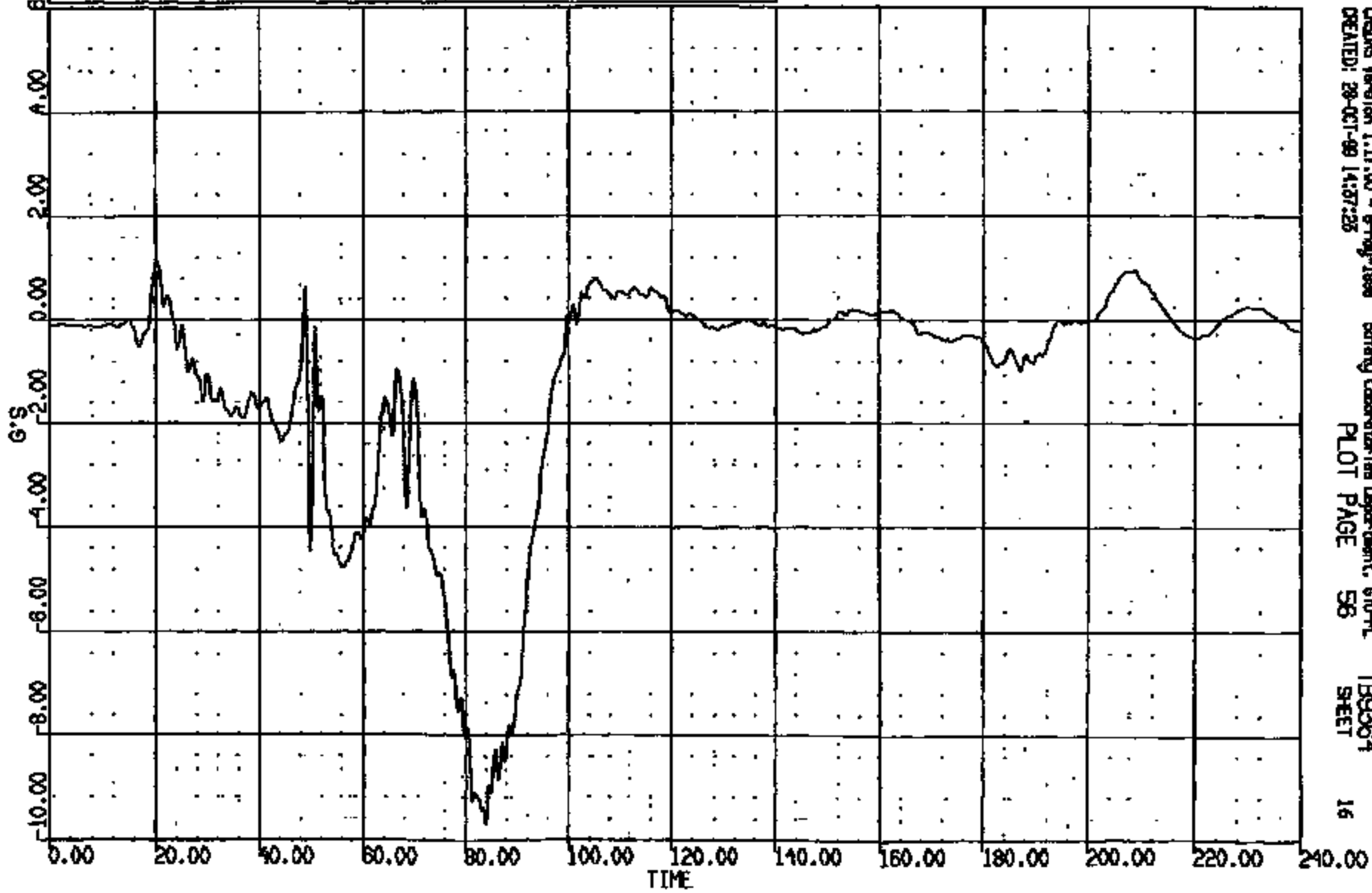
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CR R: 11057 TO: TB9364 DATE: 991028 15:20:52
2000 D-100

(10) CR11657T L/F DUMMY CHEST LAT 180C
MAX = 1.166 at 20.32 MS MIN = -9.714 at 83.92 MS **AXIS 1**

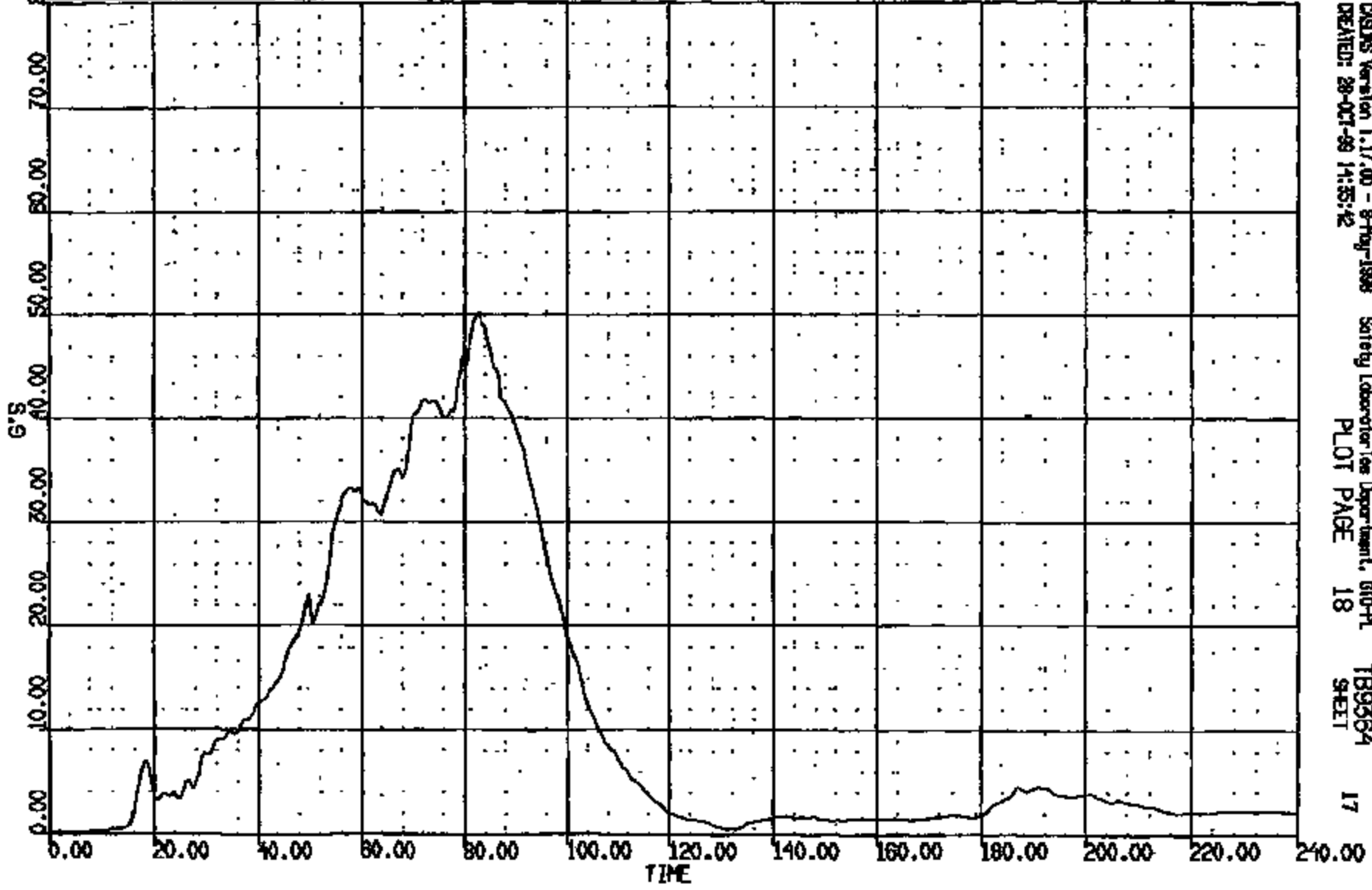


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CRTS 0011657

CR R: 11657 TO: T89564 DATE: 991028 13:28:32
2000 D-188
CUMDUR = 47.888 Duration time = 2.8888

(10005) CR11657T L/F DUMMY CHEST RES 180C
MAX = 50.18 at 82.80 MS MIN = 0.1089 at 0.1600 MS **AXIS 1**

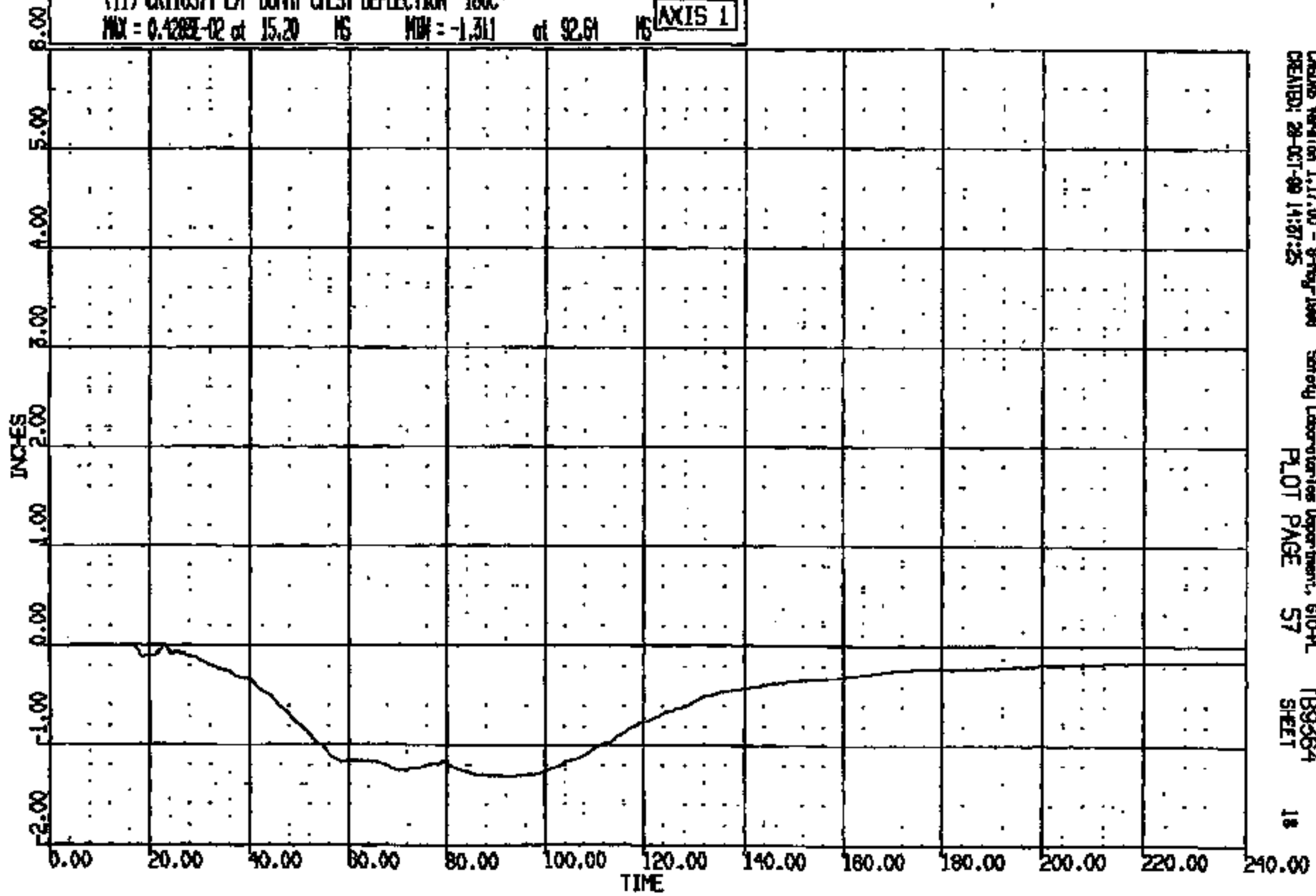


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CR R: 11657 TO: TB9364 DATE: 991028 13:26:32
2000 D-188

(11) CR11657/LA DUMMY CHEST DEFLECTION 180C
MAX = 0.428E-02 at 15.20 MS MIN = -1.311 at 92.61 MS **AXIS 1**



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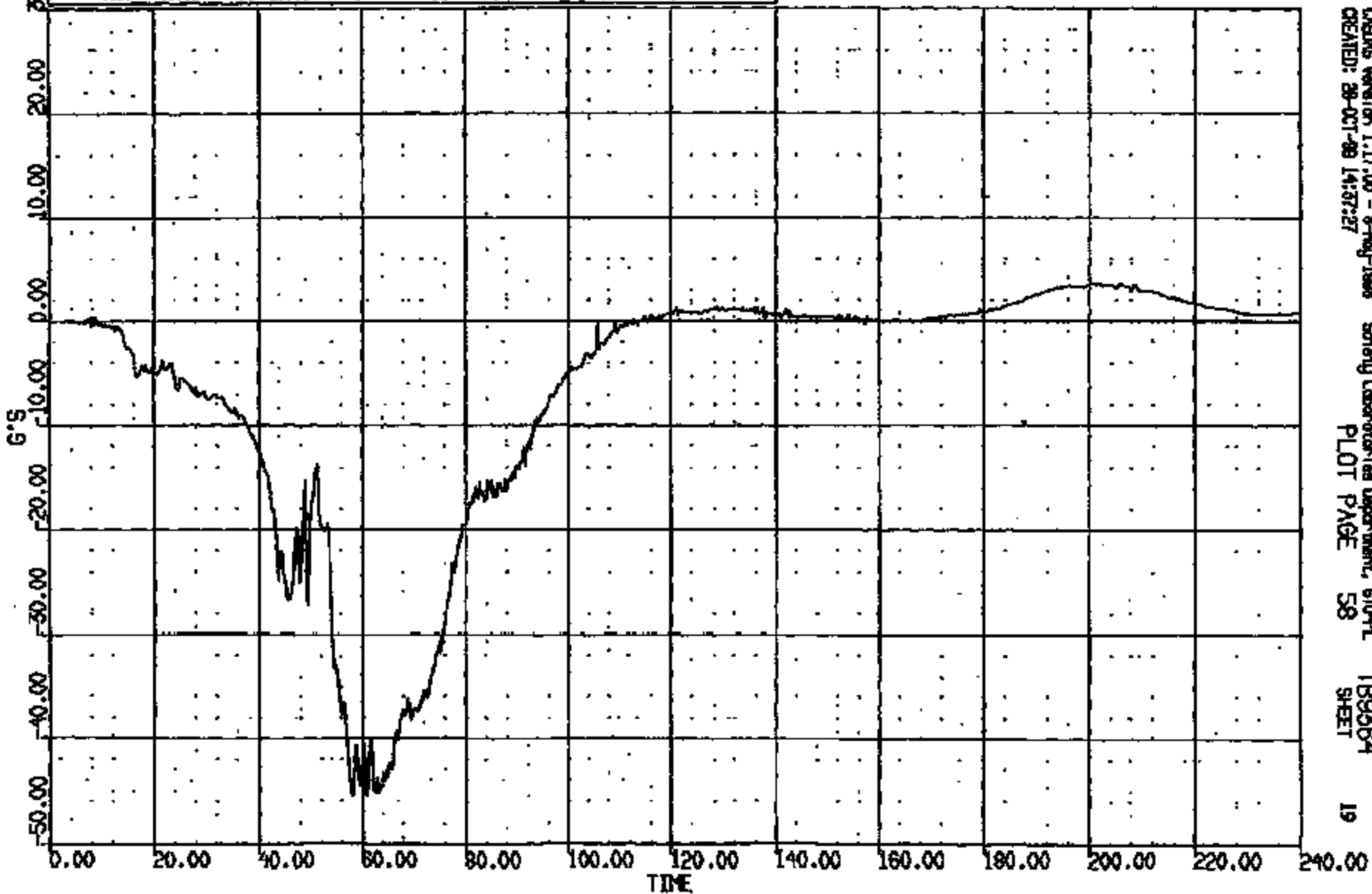
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2000 D-198

(12) CRT1657 L/F DUMMY PELVIS LONG 1000

MAX = 3.632 at 200.8 MS MIN = -45.61 at 58.16 MS

AXIS 1



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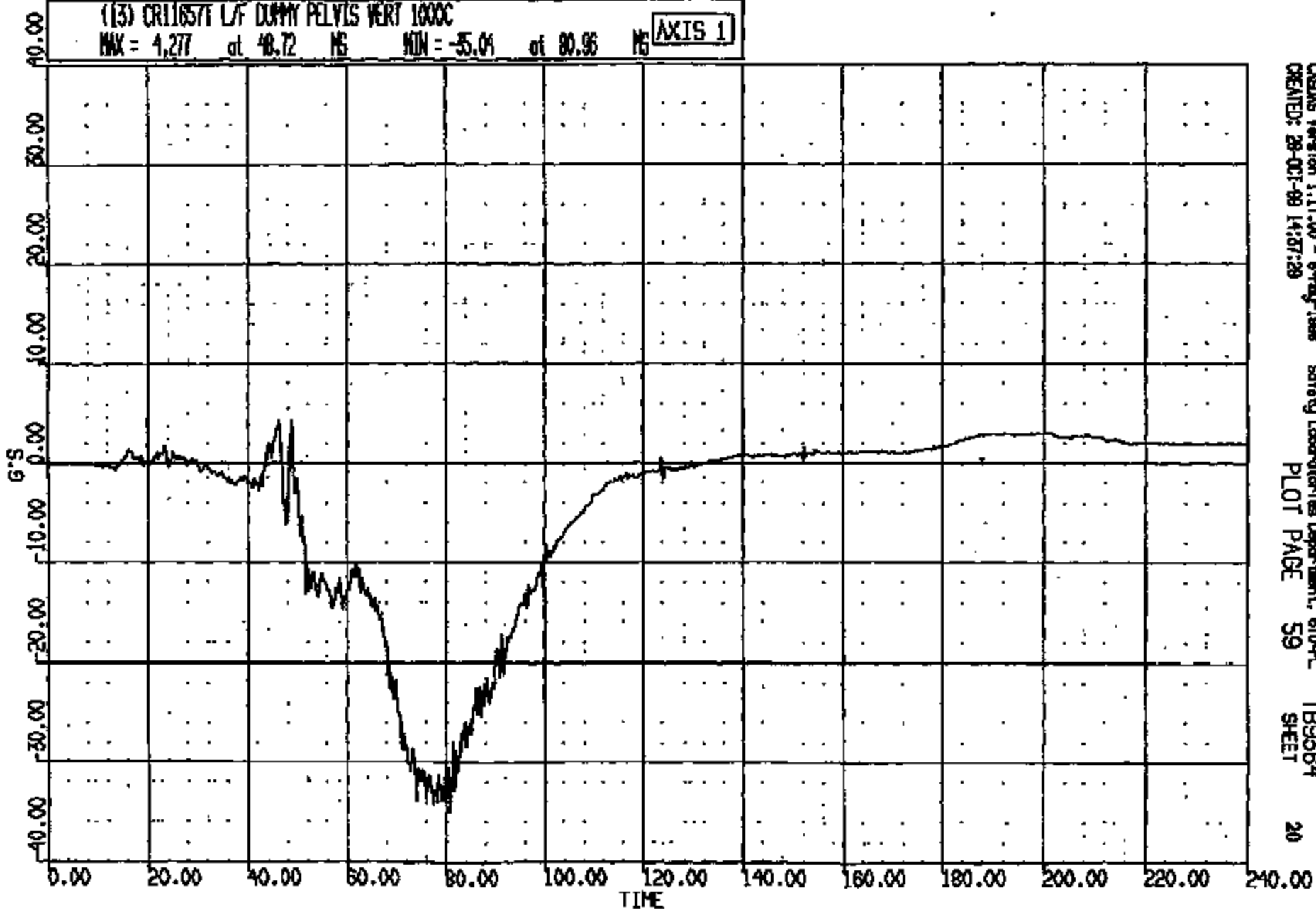
CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 13:26:32
2000 D-18B

(13) CR11657 L/F DUMMY PELVIS VERT 1000C

MAX = 4.277 at 48.72 MS MIN = -35.04 at 80.95 MS

AXIS 1



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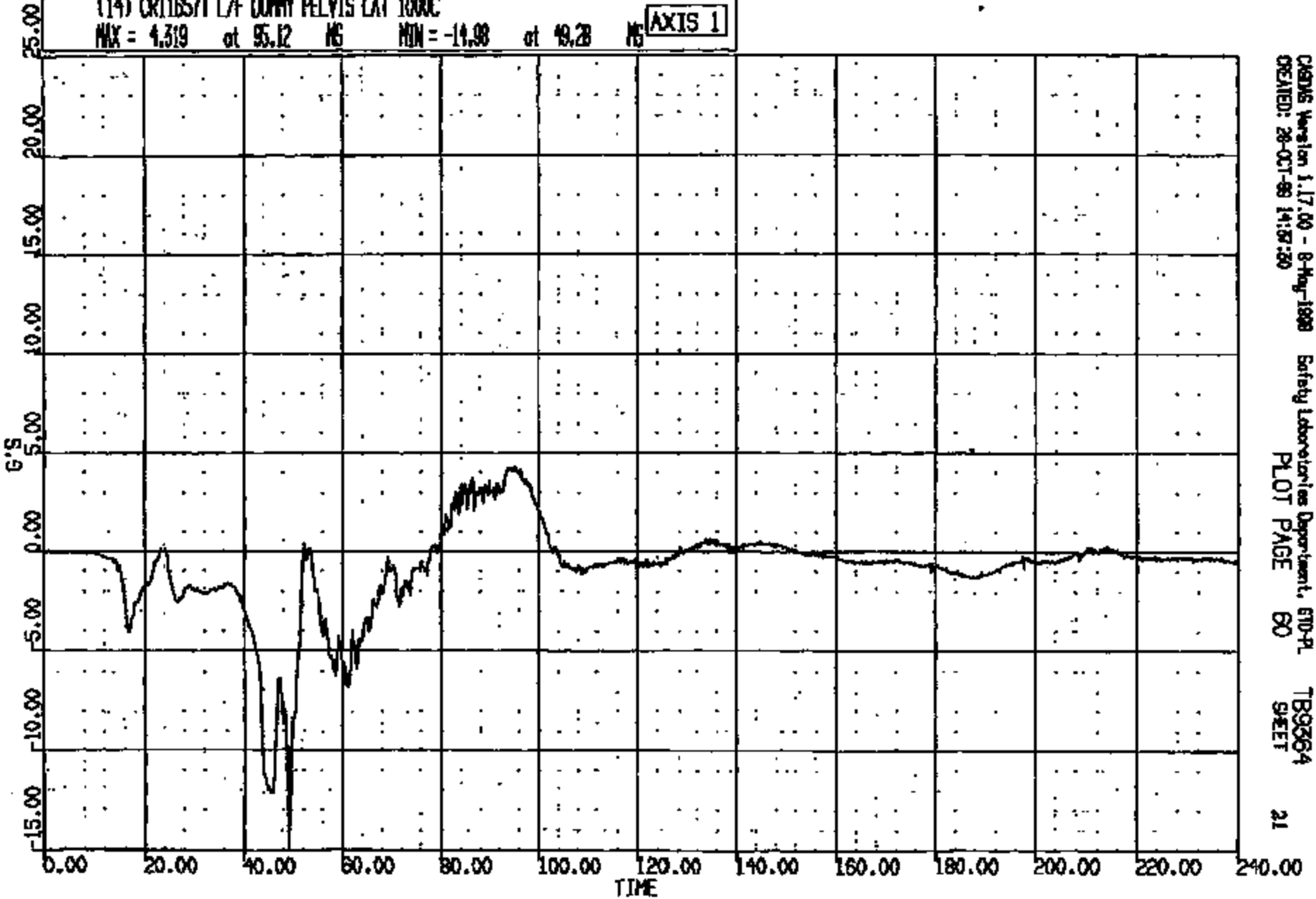
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2000 D-168

(14) CRTS57T L/F DUMMY PELVIS LAT 1000C

MAX = 4.319 at 95.12 MS MIN = -14.98 at 49.28 MS

AXIS 1



CRS05 Version 1.17.00 - 8-May-1999
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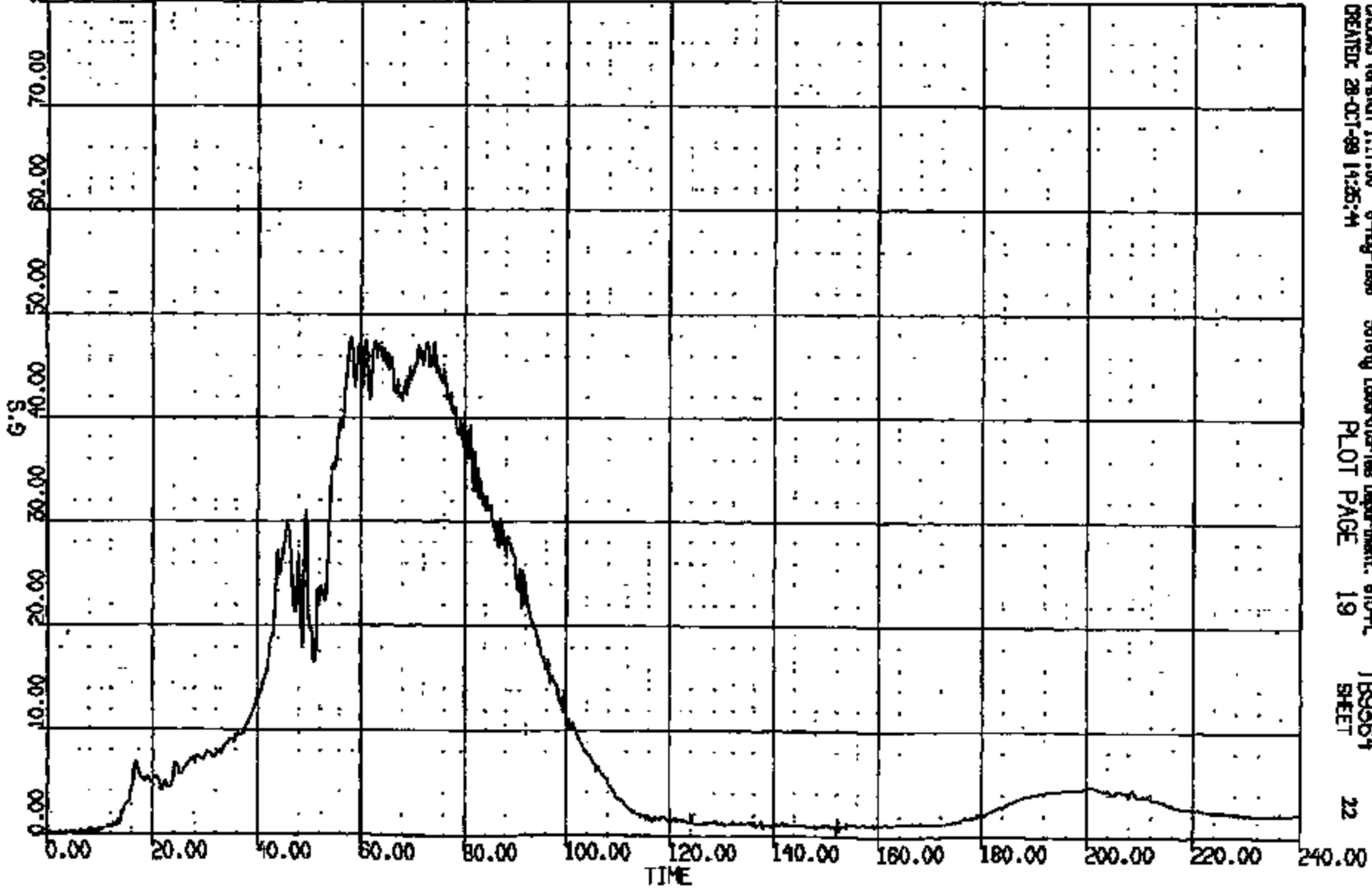
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CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 13:28:32
2000 D-189

(10007) CR11657T LAF DUMM PELVIS RES 1000C
MAX = 47.77 at 58.16 NS NDA = 0.4838E-01 at 1.680 NS **AXIS 1**

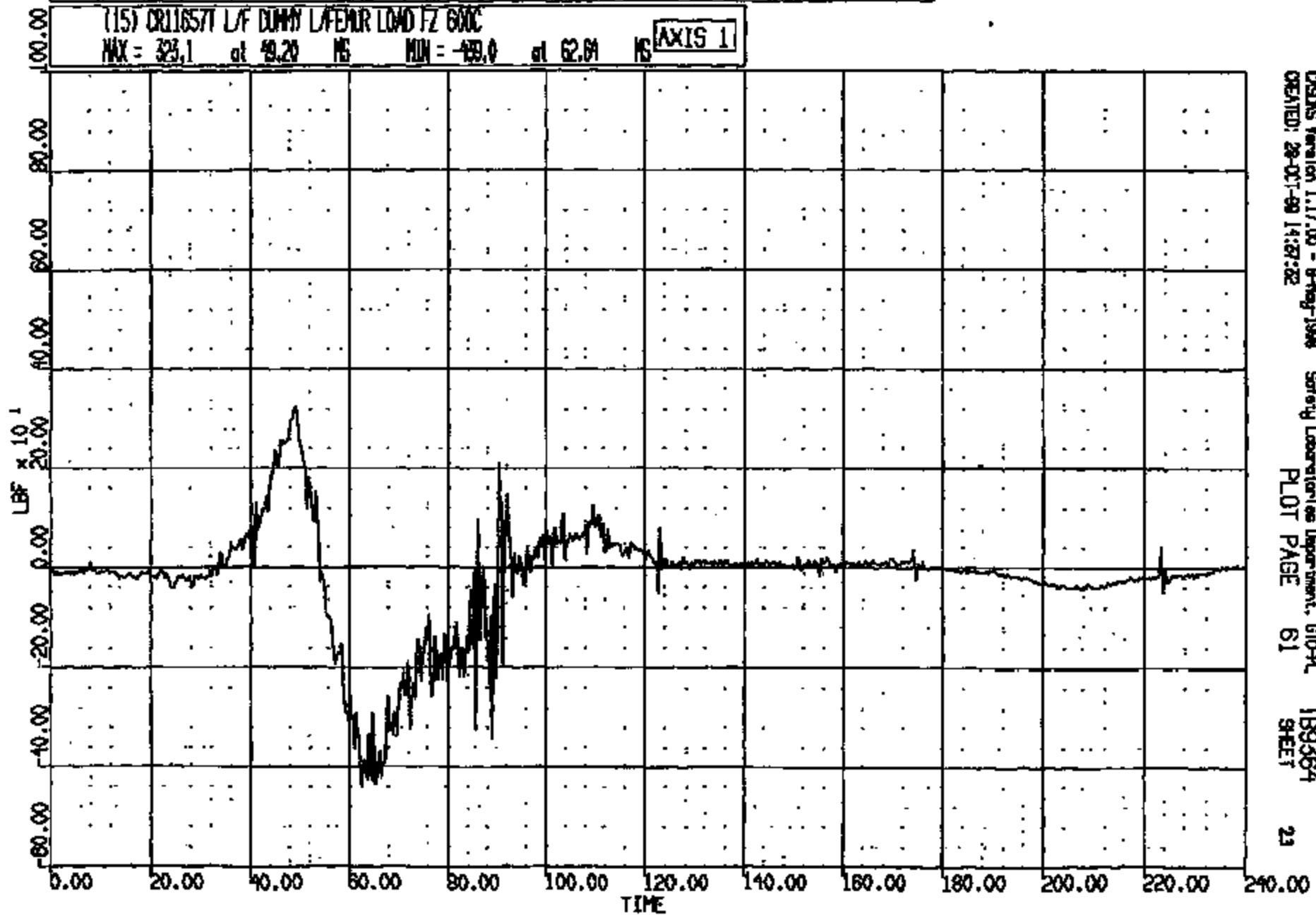


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CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 15:28:32
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(15) CR11657T L/F DUMMY LIFE/R LOAD FZ 600C
MAX = 323.1 at 49.20 MS MIN = -189.0 at 62.04 MS **AXIS 1**



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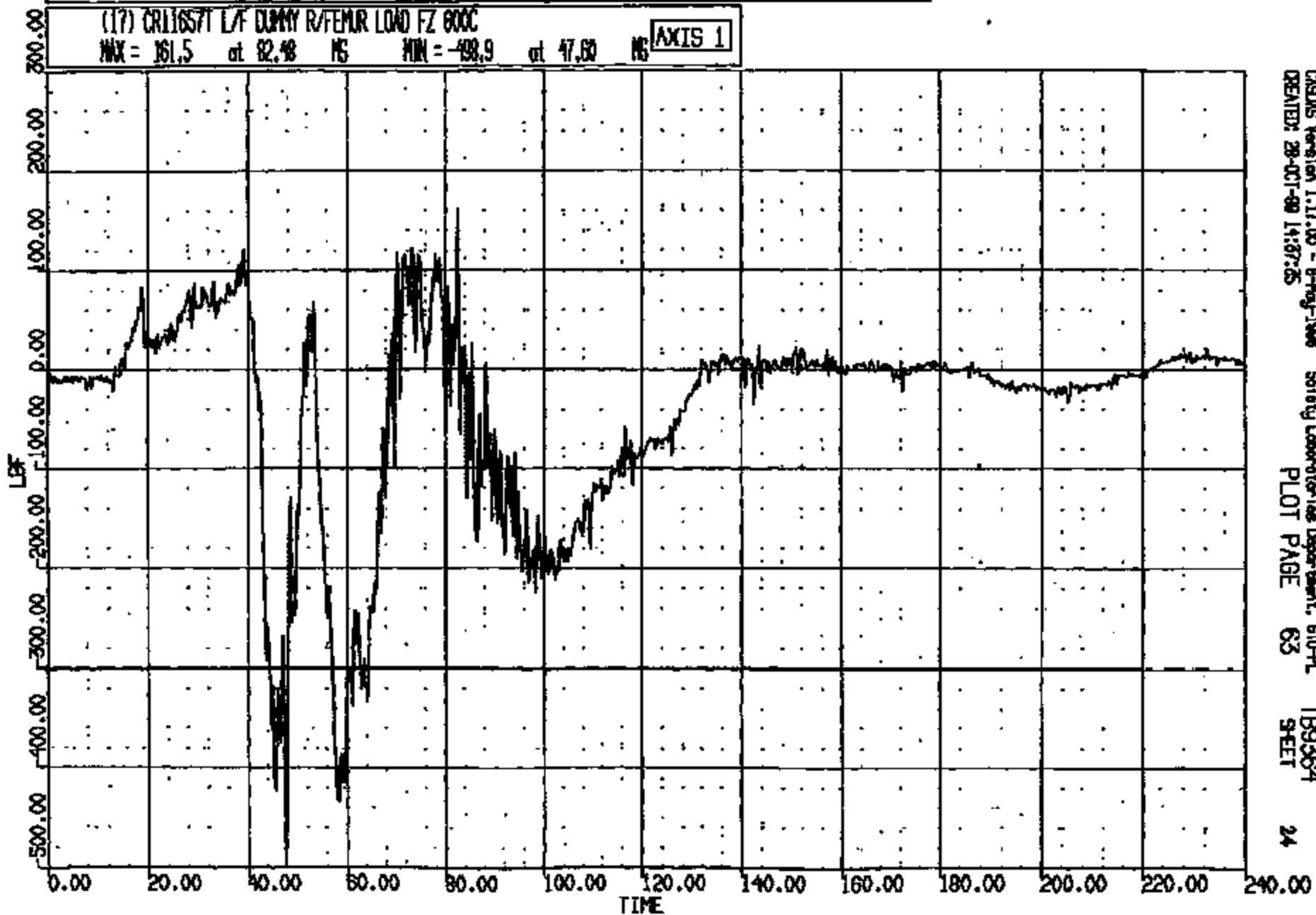
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2000 D-186

(17) CR11657 L/F DUMMY R/FEMUR LOAD FZ 600C

MAX = 161.5 at 82.48 MS MIN = -498.9 at 47.60 MS

AXIS 1



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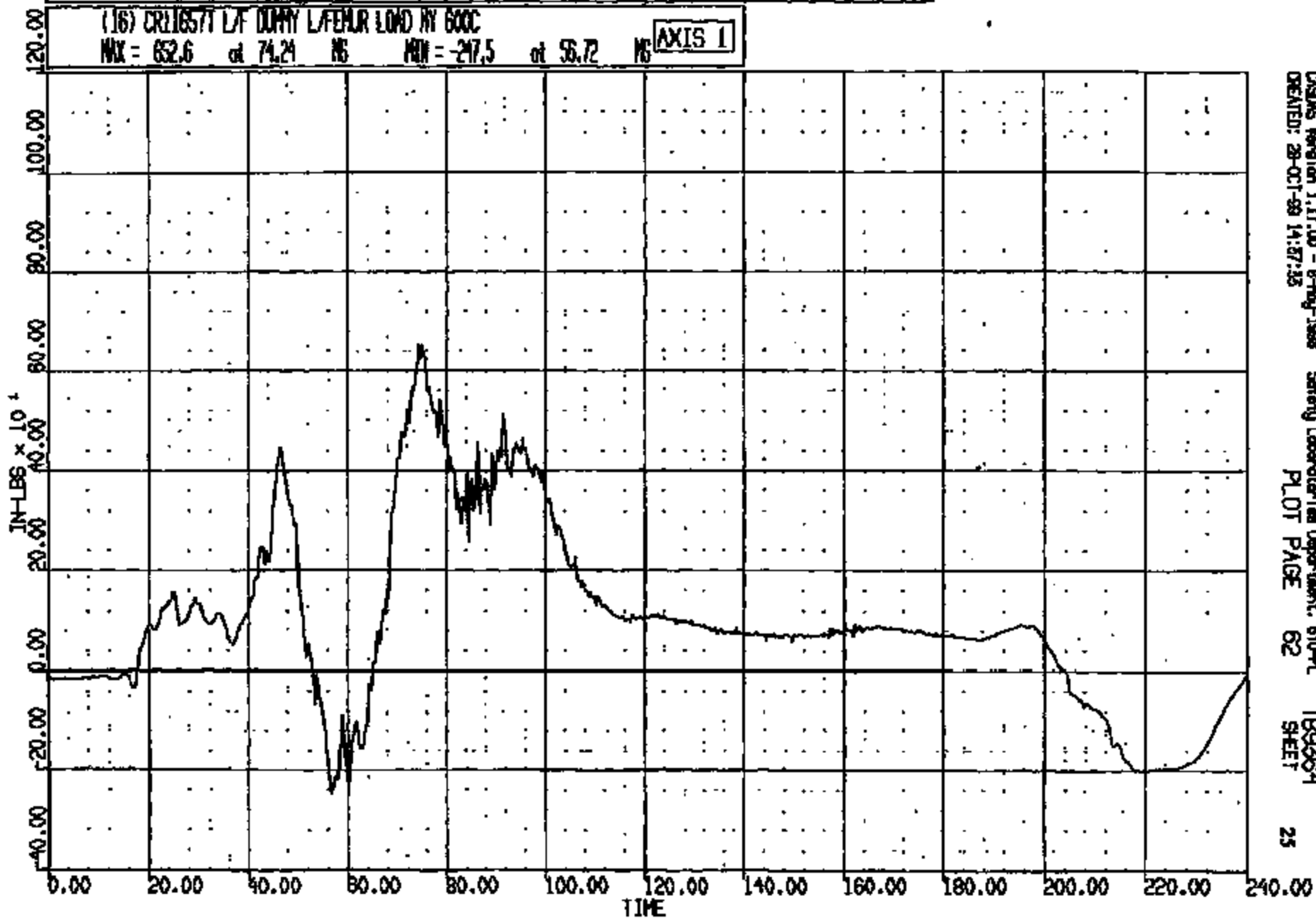
24

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2000 D-188

(16) CR116571 L/F DUMMY L/FEAR LOAD BY 600C

MAX = 652.6 at 74.24 NS MIN = -217.5 at 56.72 NS

AXIS 1



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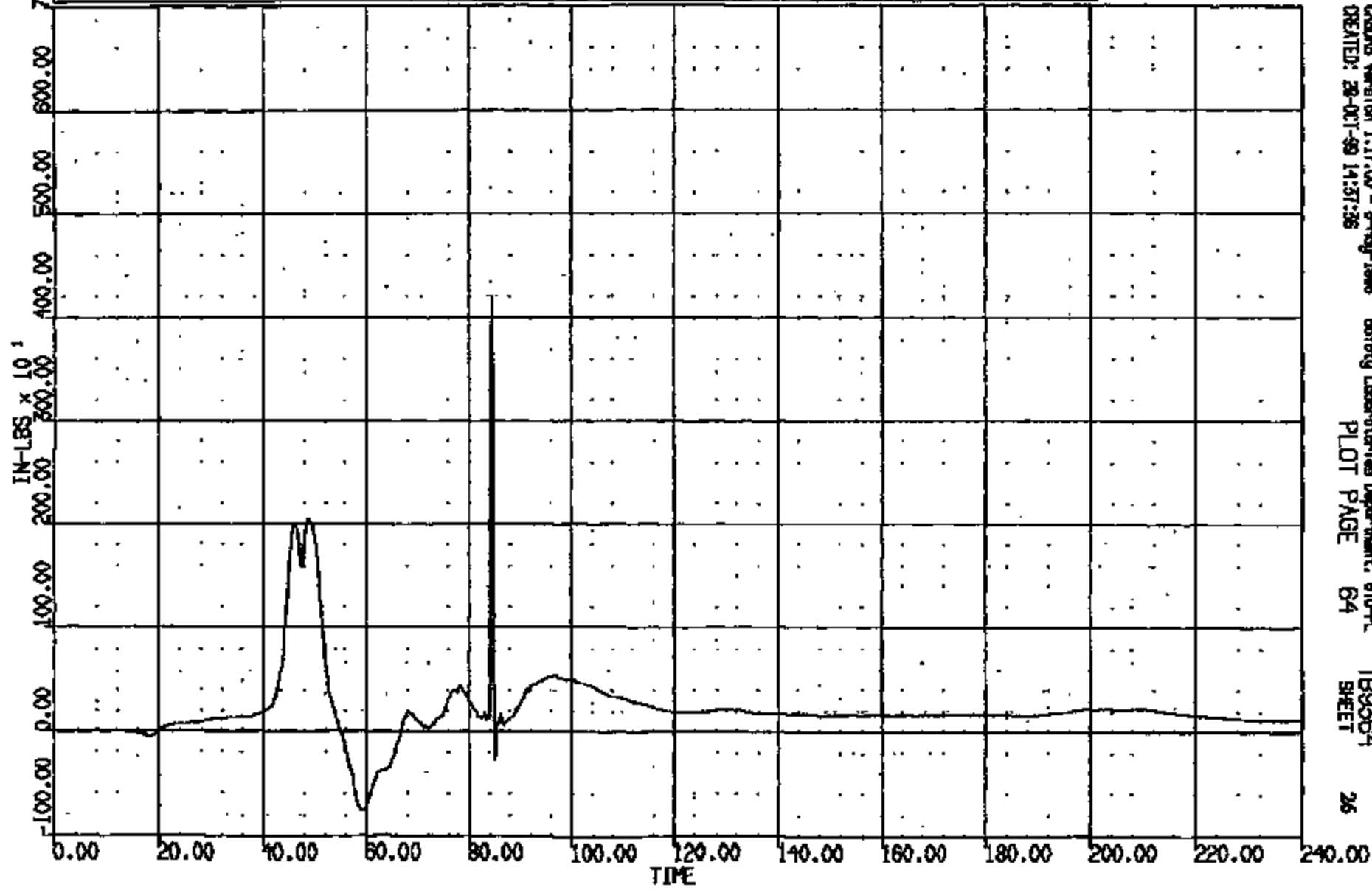
25

CRTS 0011657

CR R: 11657 TD: TB9364 DATE: 991026 15:26:32
2000 D-188

(18) CR11657T L/F DUMMY REFEROR LOAD NY 600C
MAX = 4195. at 84.48 NS MIN = -761.1 at 59.20 NS [AXIS 1]

ANALY KEY:
* - Measured data extended full scale
o - Measured data >90.0% of full scale
g - All data < 15.0% of full scale
- 21 percent effect at T-zero



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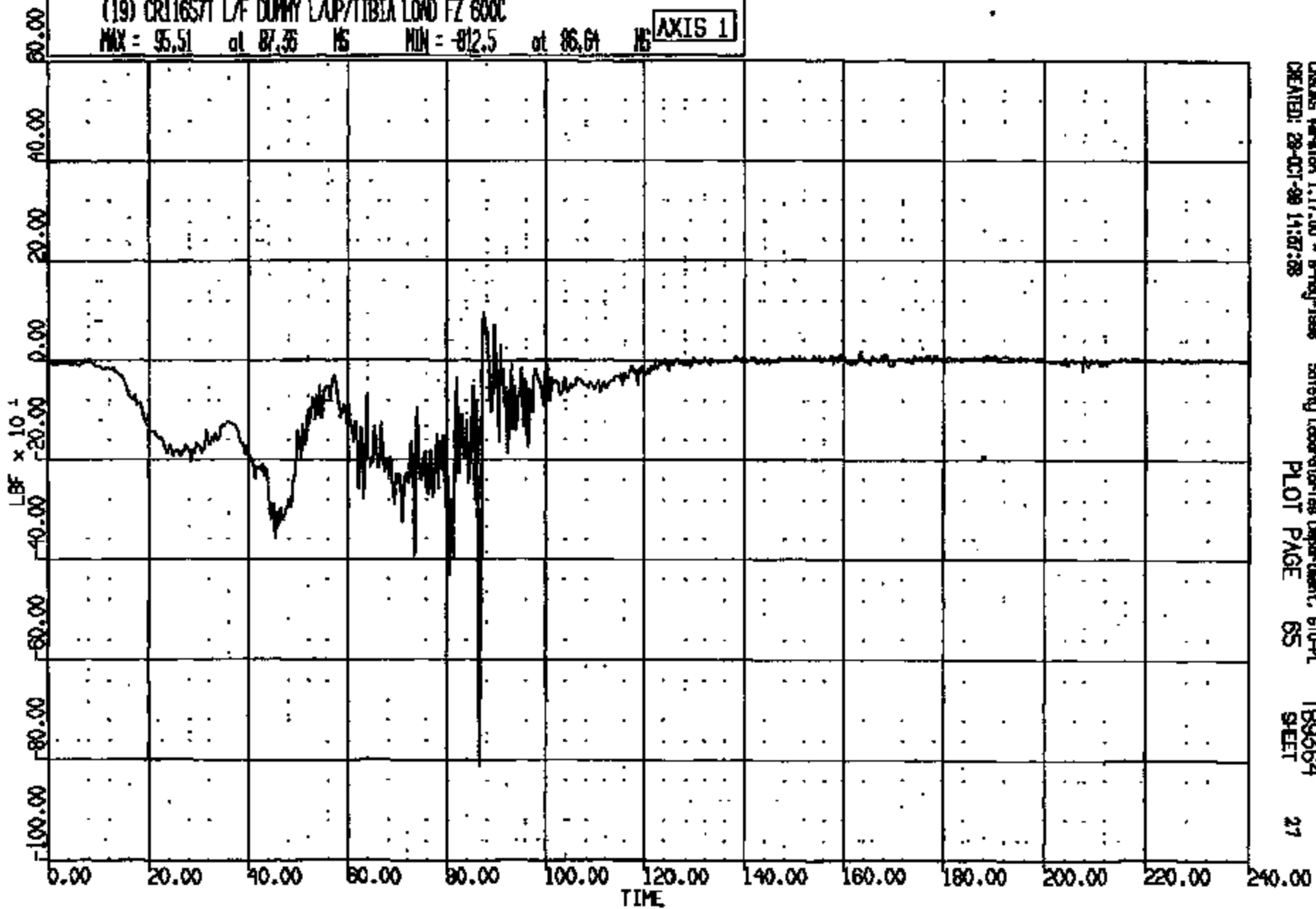
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CR R: 11857 TD: T89364 DATE: 001028 13:28:52
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(19) CR11657T L/F DUMMY LAP/TIBIA LOAD FZ 600C

MAX = 95.51 at 87.36 MS MIN = -812.5 at 86.64 MS

AXIS 1



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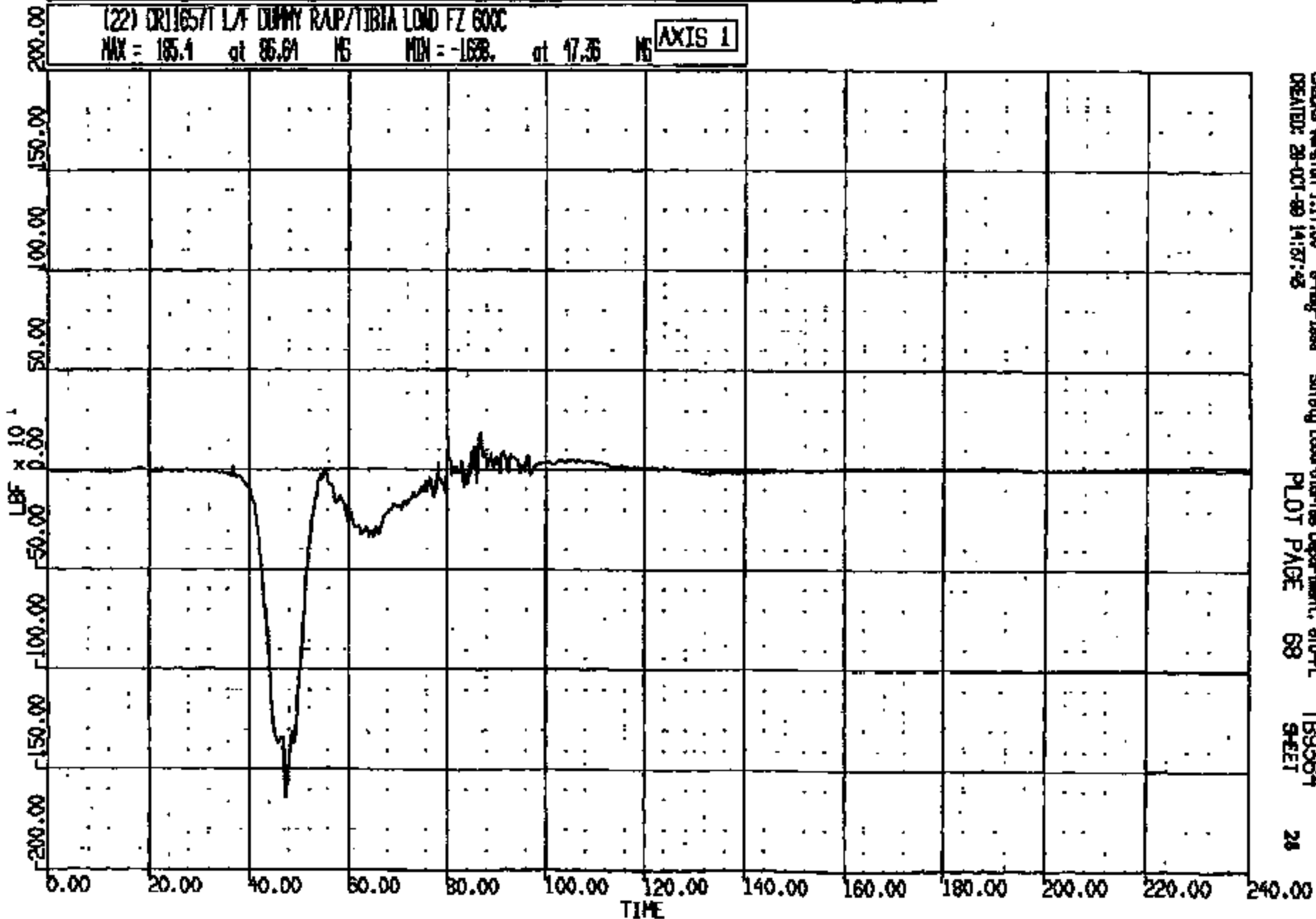
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2000 D-168

(22) CR11657/LF DUMMY RAP/TIBIA LOND FZ 600C

MAX = 185.4 at 86.61 MS MIN = -168.8 at 47.35 MS

AXIS 1



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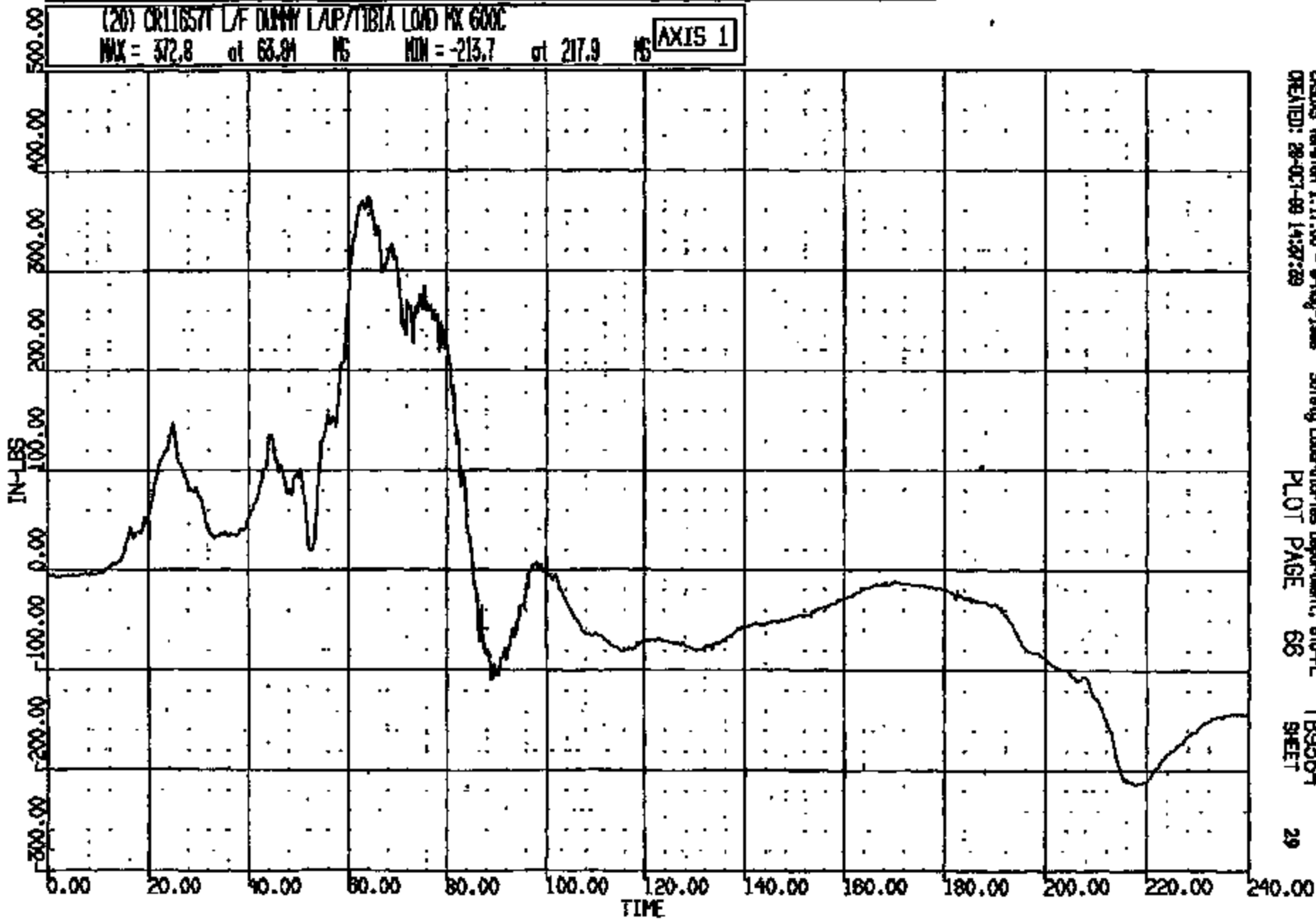
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CR R: 11657 TO: TB9364 DATE: 091028 13:26:52
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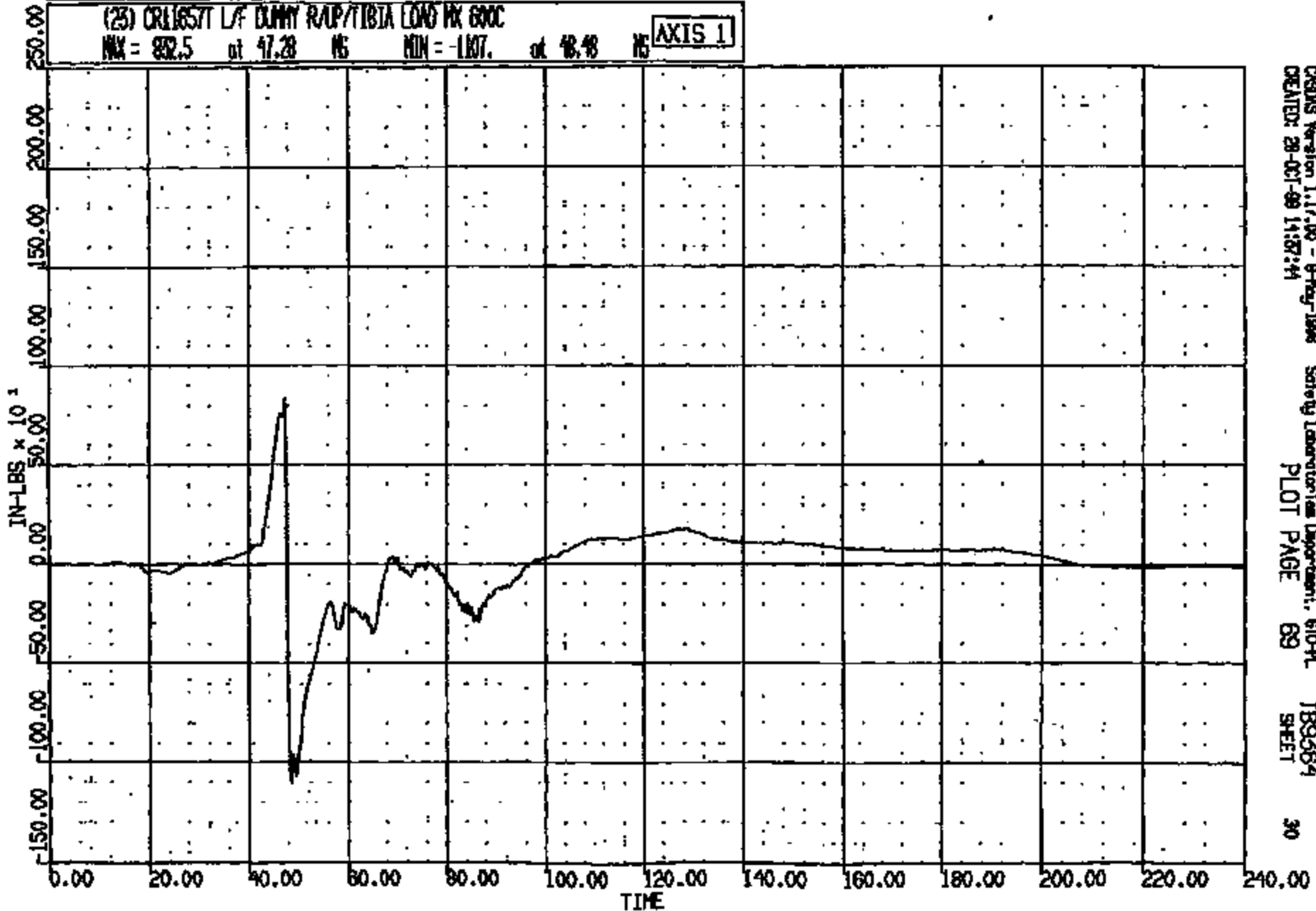
(20) CR11657T L/F DUMMY LAP/TIBIA LOAD FX 600C
MAX = 572.8 at 63.84 MS MIN = -213.7 at 217.9 MS **AXIS 1**



CASUS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
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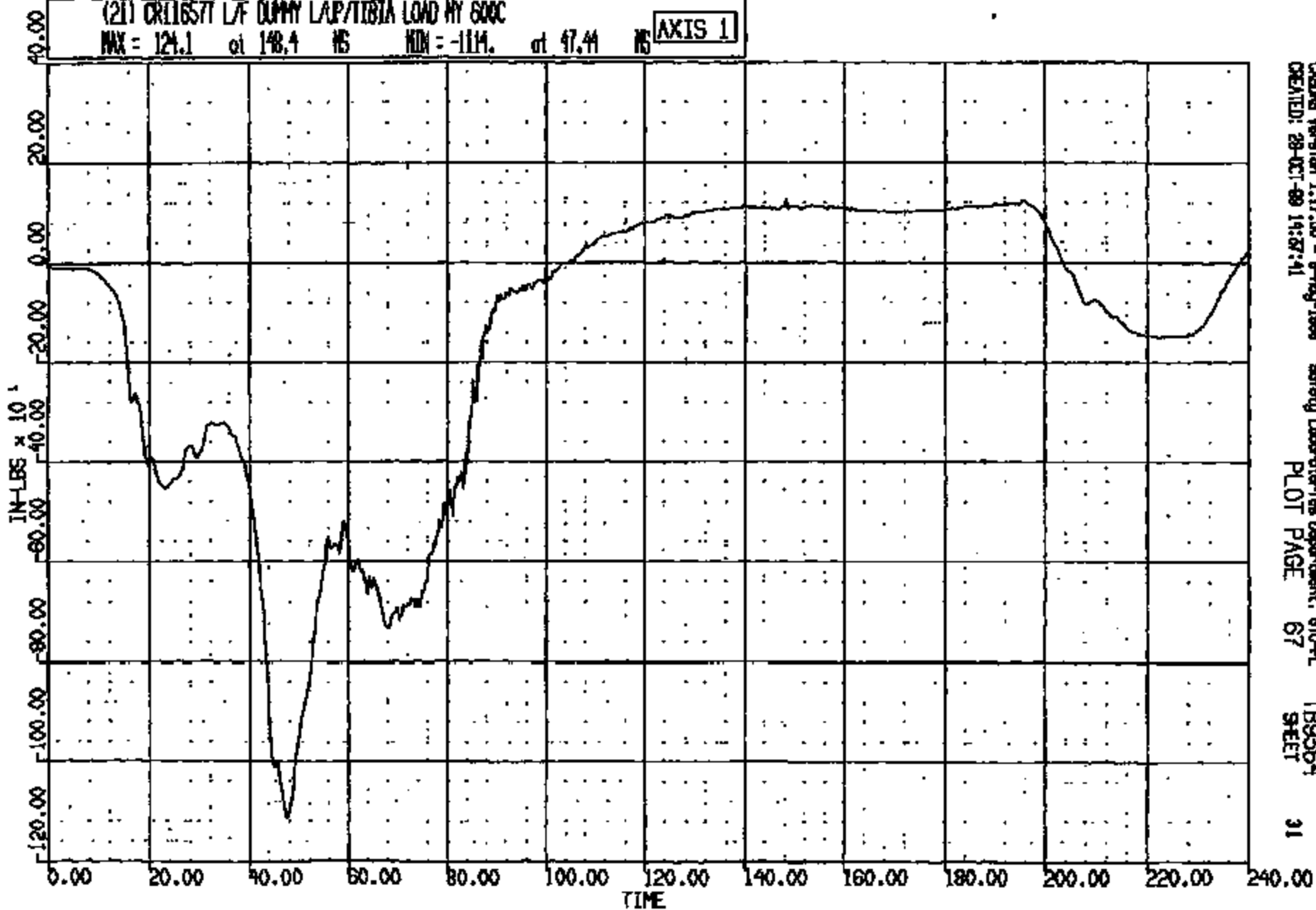
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(21) CR11657 L/F DUMMY LAP/TIBIA LOAD BY 800C

MAX = 124.1 at 148.4 MS MIN = -114. at 47.44 MS

AXIS 1



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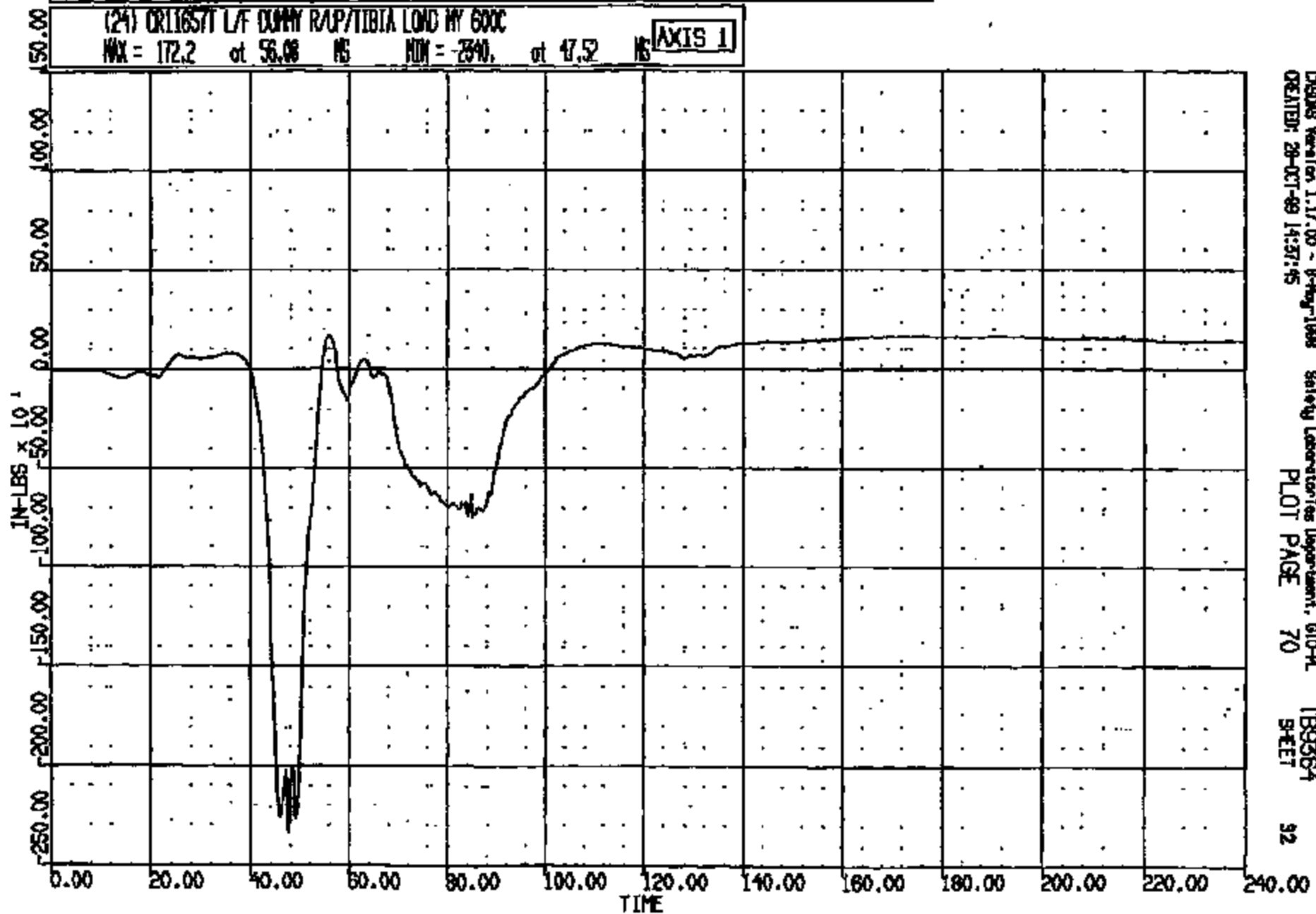
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CRTS 0011657

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2000 0-108

(24) CR11657T L/F DUMMY R/P/TIBIA LOAD BY 600C
MAX = 172.2 at 56.06 MS MIN = -234.0 at 47.52 MS **AXIS 1**



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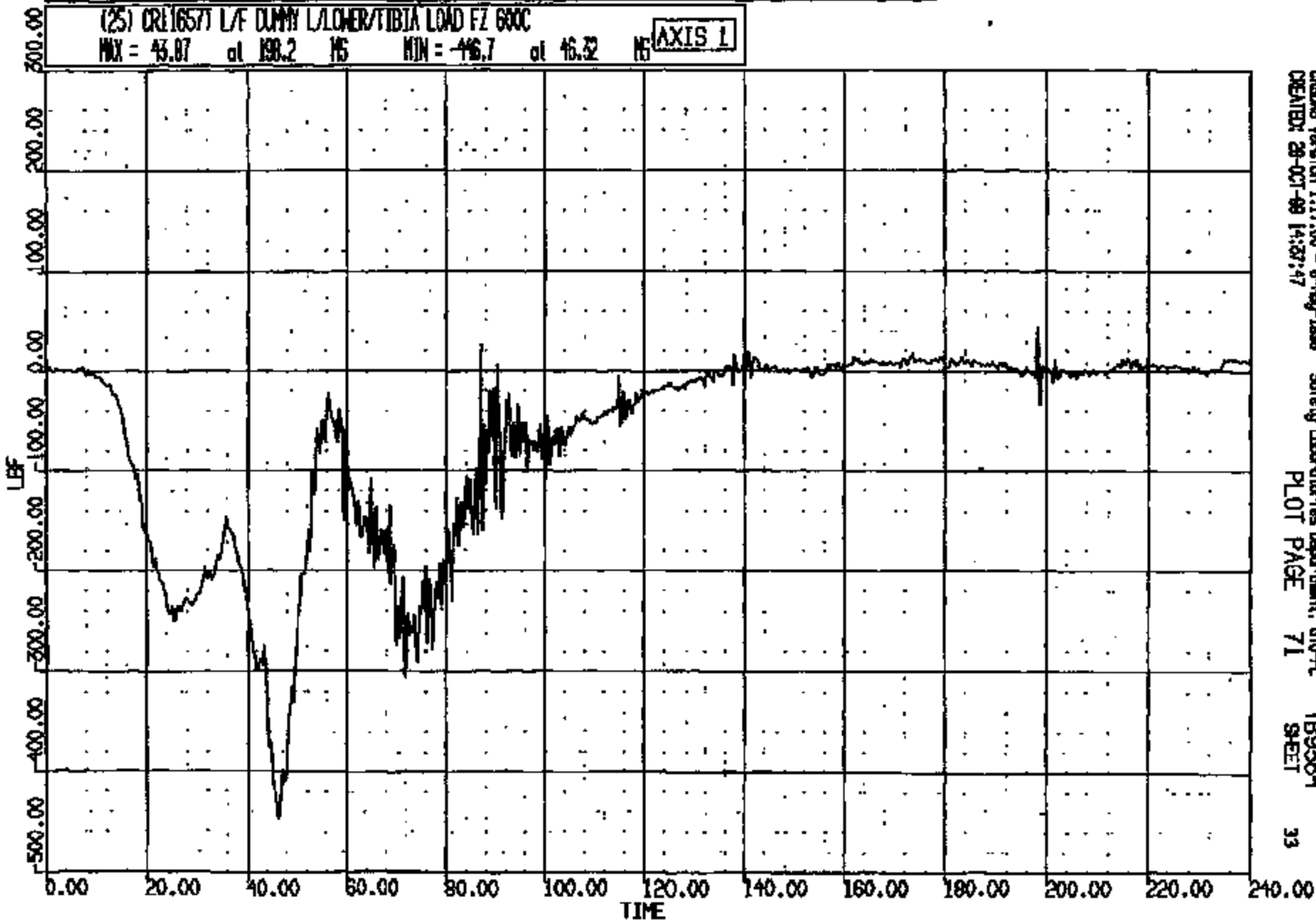
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CR R: 11657 TO: TB9364 DATE: 991028 13:28:32
2000 0-185

(25) CR16577 L/F DUMMY L/LOWER/TIBIA LOAD FZ 600C
MAX = 45.87 at 198.2 MS MIN = -416.7 at 46.32 MS **AXIS 1**



CRS Version 1.17.00 - 8-Aug-1998
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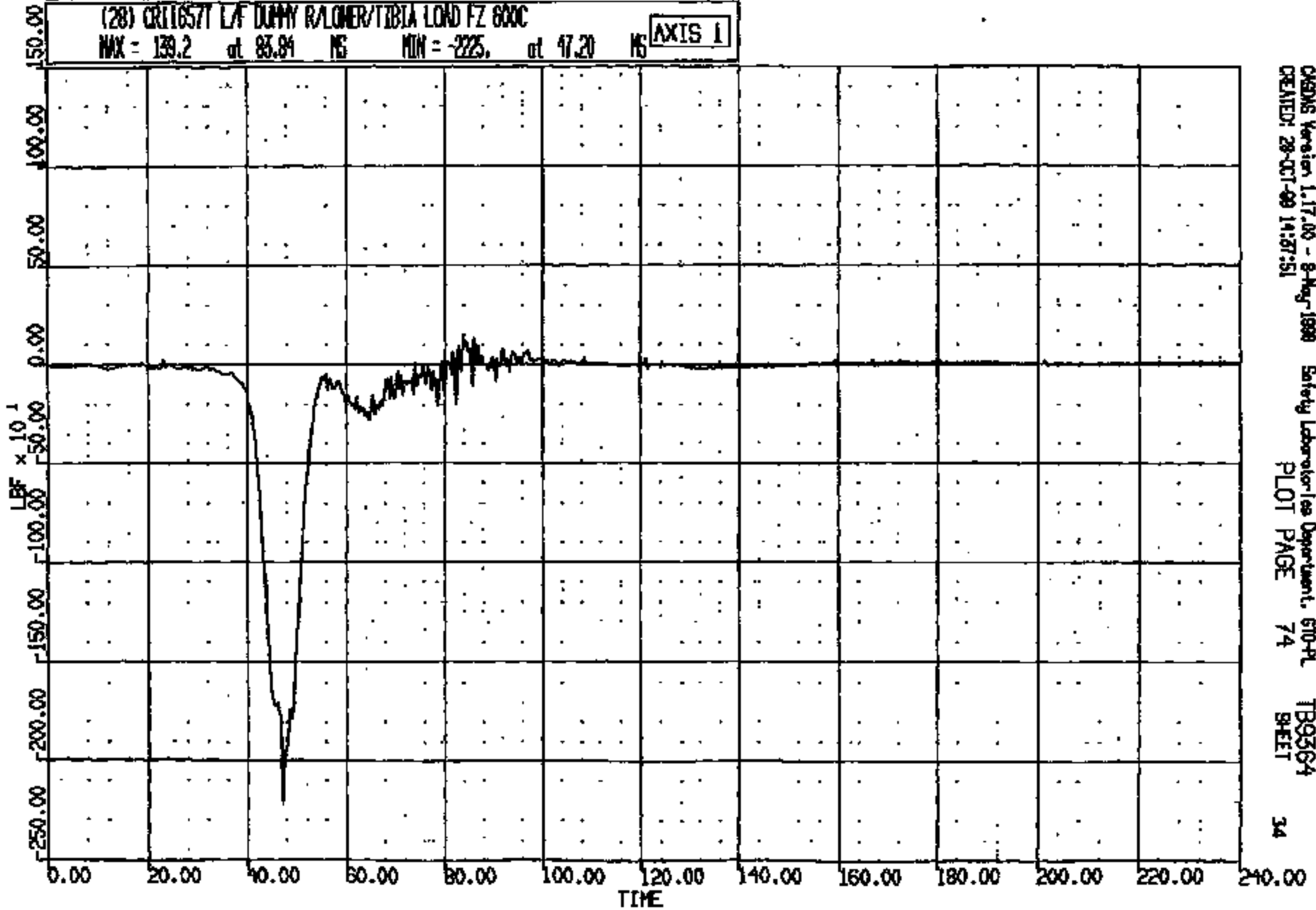
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CR R: 11657 TO: TB9364 DATE: 991028 13:26:32
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(28) CRT16577 L/R DUMMY R/LOWER/TIBIA LOAD FZ 600C

MAX = 139.2 at 85.84 MS MIN = -222.5 at 47.20 MS

AXIS 1



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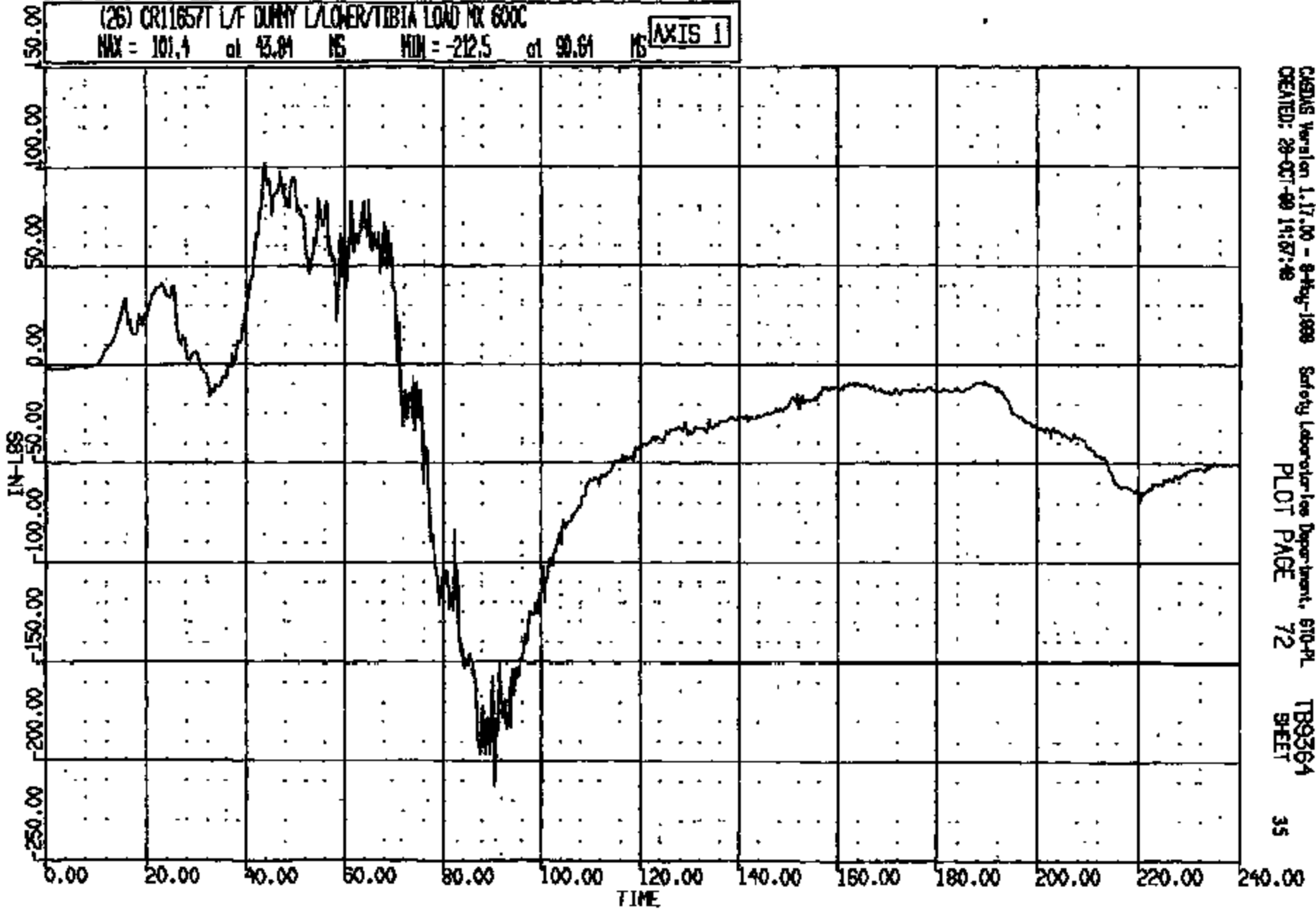
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CR R: 11657 TO: TB9364 DATE: 991028 15:26:52
2000 D-198

(26) CR11657T L/F DUMMY L/LOWER/TIBIA LOAD MX 600C

MAX = 101.4 at 43.84 MS MIN = -212.5 at 90.61 MS

AXIS 1



CASMS Version 1.17.00 - 8-Aug-1998
CREATED: 28-OCT-99 14:57:48

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TB9364
SHEET

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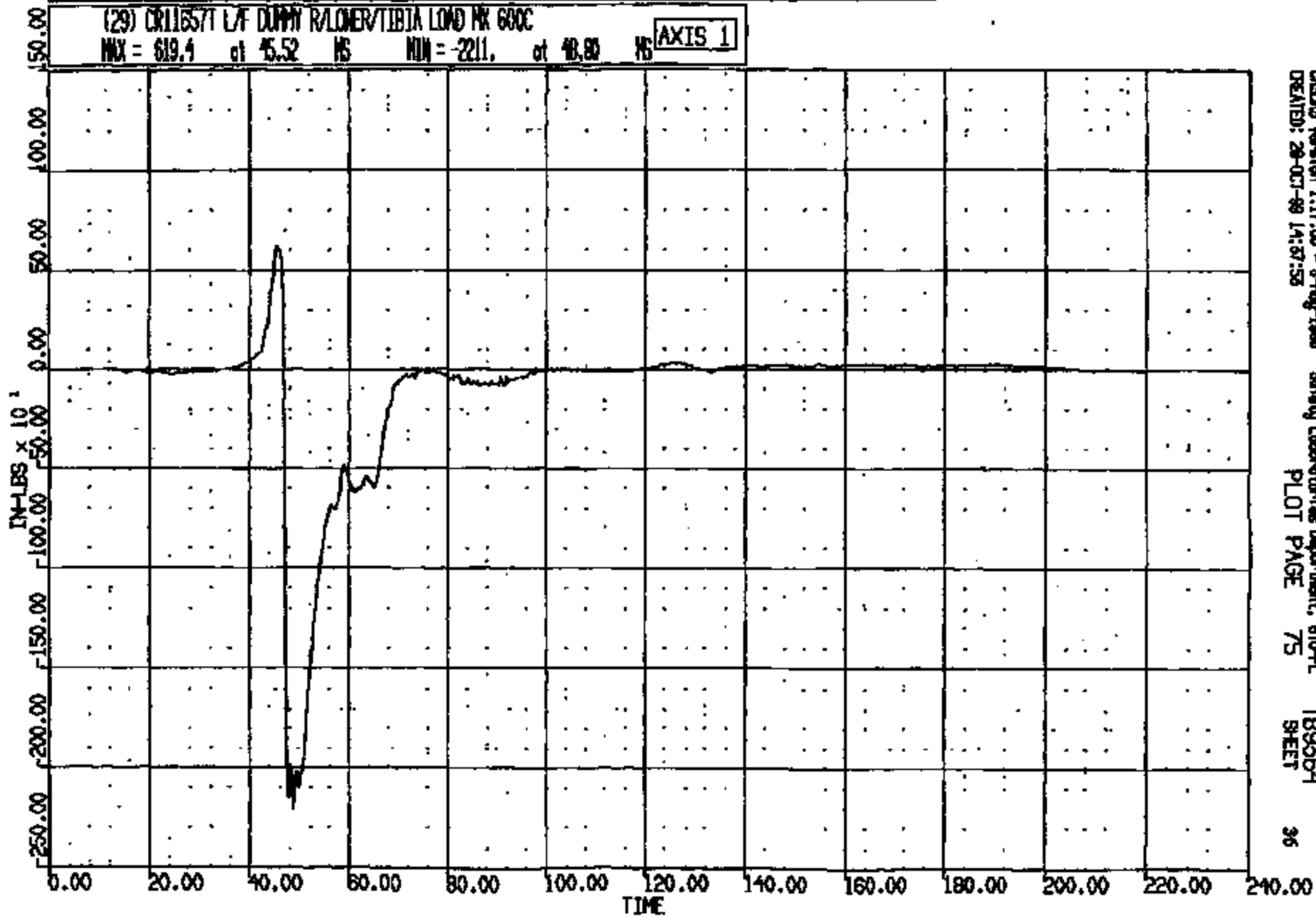
CRIS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 15:28:32
2000 D-188

(29) CR11657T L/F DUMMY R/LONER/TIBIA LOAD MK 600C

MAX = 619.4 at 45.52 MS MIN = -221.1 at 48.80 MS

AXIS 1



CRSIS Version 1.17.00 - 8-May-1998
CREATED: 28-OCT-99 14:57:55

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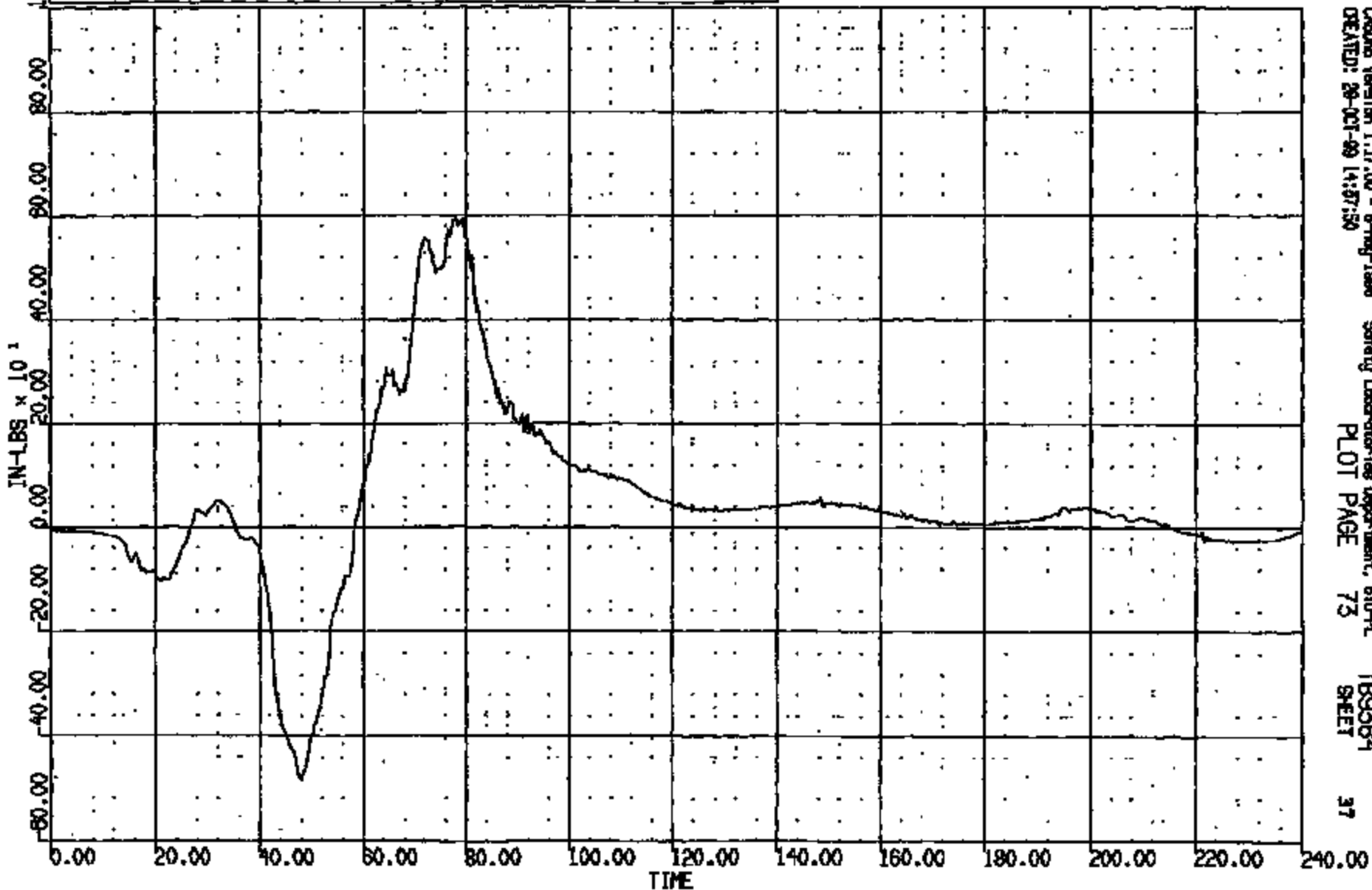
TB9364
SHEET

CR R: 11657 TO: T89584 DATE: 991028 13:28:32
2000 D-188

(27) CR11657 L/F DUMMY L/LOWER/TIBIA LOAD MY 600C

MAX = 585.5 at 78.00 MS MIN = -483.8 at 48.00 MS

AXIS 1



CASME Version 1.17.00 - 8-May-1998
CREATED: 28-OCT-99 14:37:50

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T89364
SHEET

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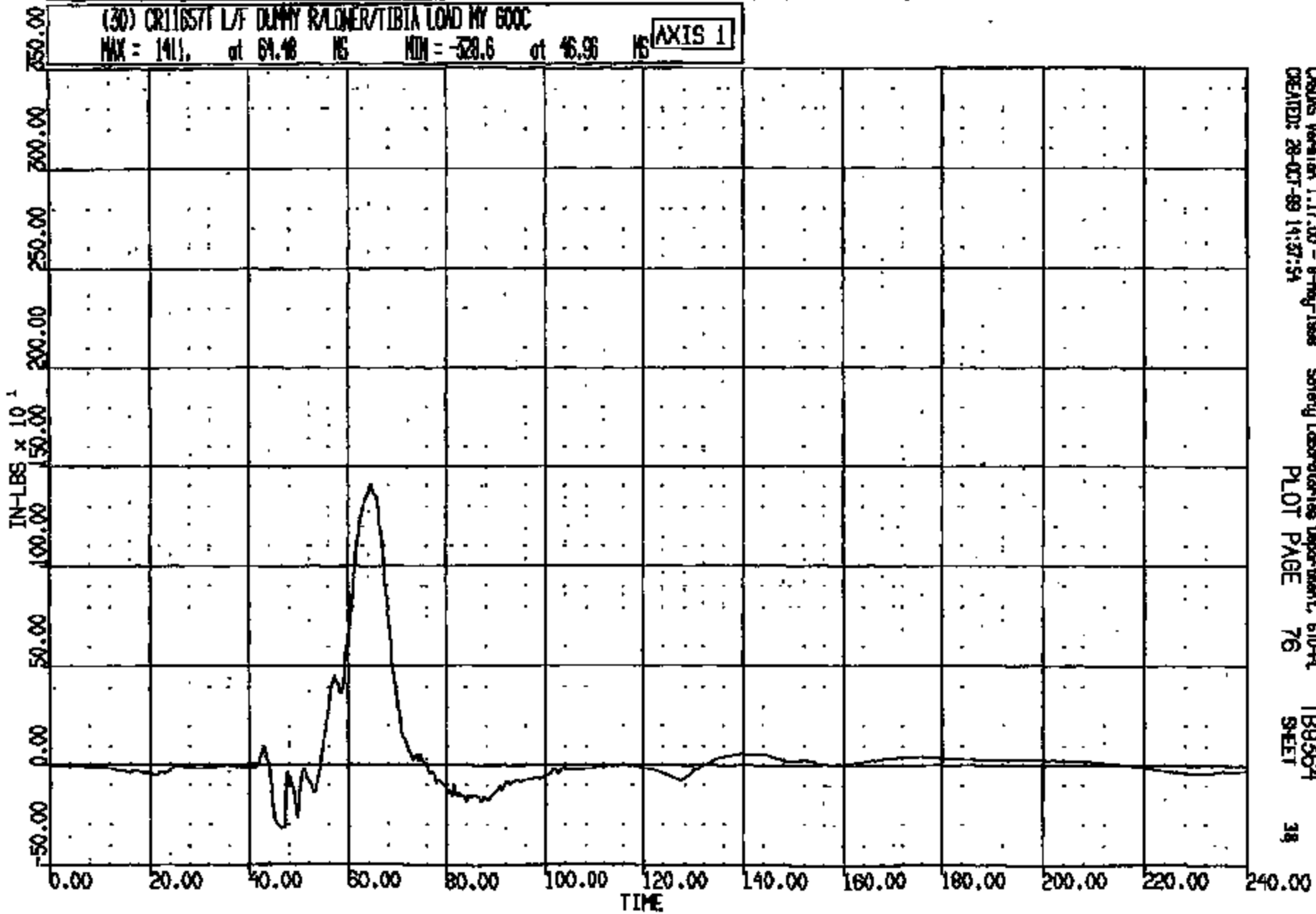
CRIS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 13:26:32
8000 D-188

(30) CR11657T L/F DUMMY R/LOWER/TIBIA LOAD MY 600C

MAX = 141.1 at 64.48 MS MIN = -528.6 at 46.96 MS

AXIS 1



CRYSIS Version 1.17.00 - 8-May-1998
CREATED: 28-OCT-89 14:37:54

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CRIS 0011657

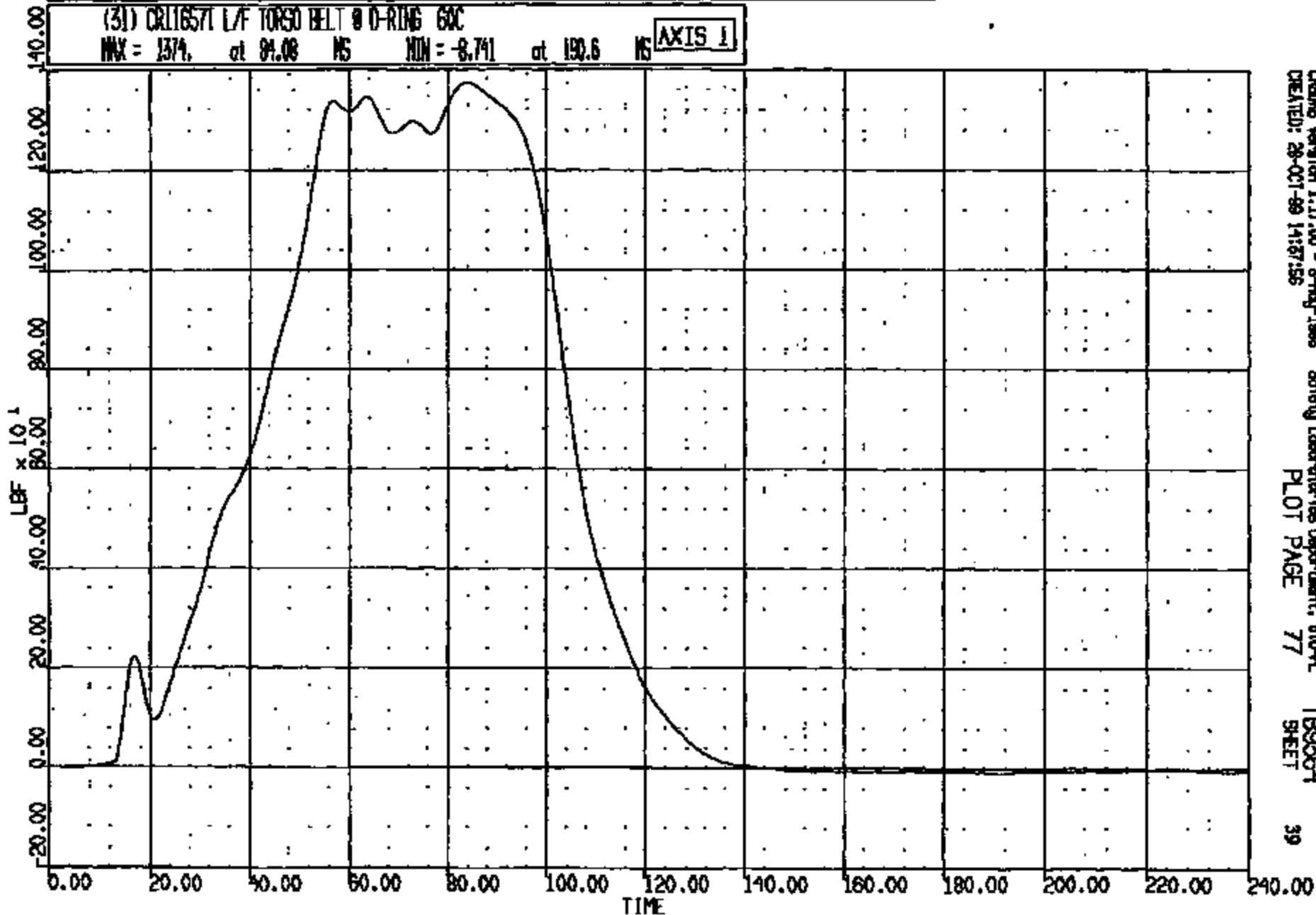
CR R: 11657 TO: TB9364 DATE: 991028 15:26:22

2000 D-186

(3) CRL16571 L/F TORSO BELT @ D-RING 60C

MAX = 137.1 at 84.08 MS MIN = -8.741 at 190.6 MS

AXIS 1



CRAMS Version 1.17.00 - 8-May-1988
CREATED: 28-OCT-89 14:57:55

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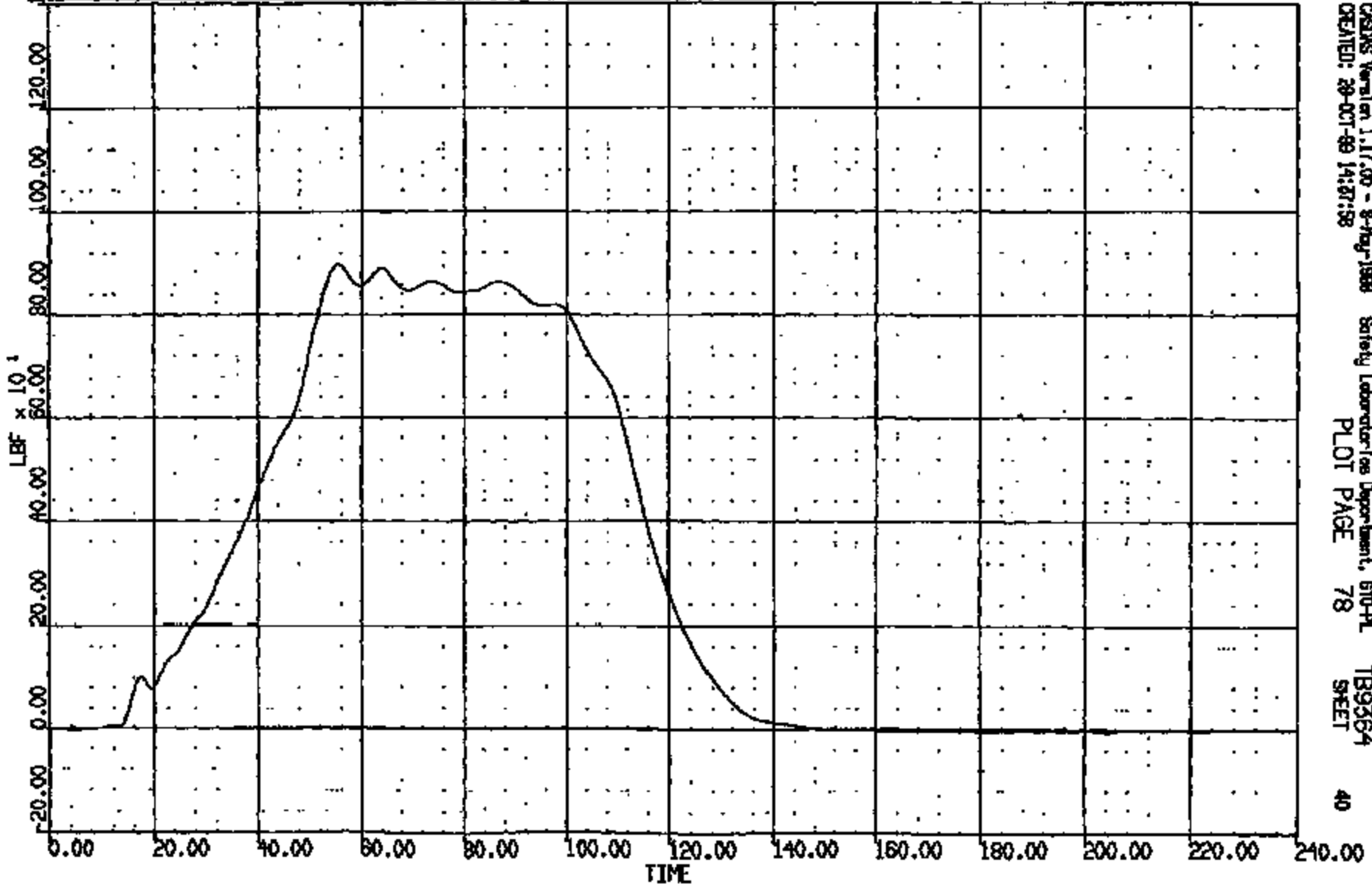
TB9364
SHEET

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CRTS 0011657

CR R: 11657 TO: T89364 DATE: 991028 18:26:32
2000 D-196

(32) CR116577 L/F TORSO BELT & RETRACTOR GOC
MAX = 897.1 at 55.28 MS MIN = -5.830 at 208.1 MS **AXIS 1**

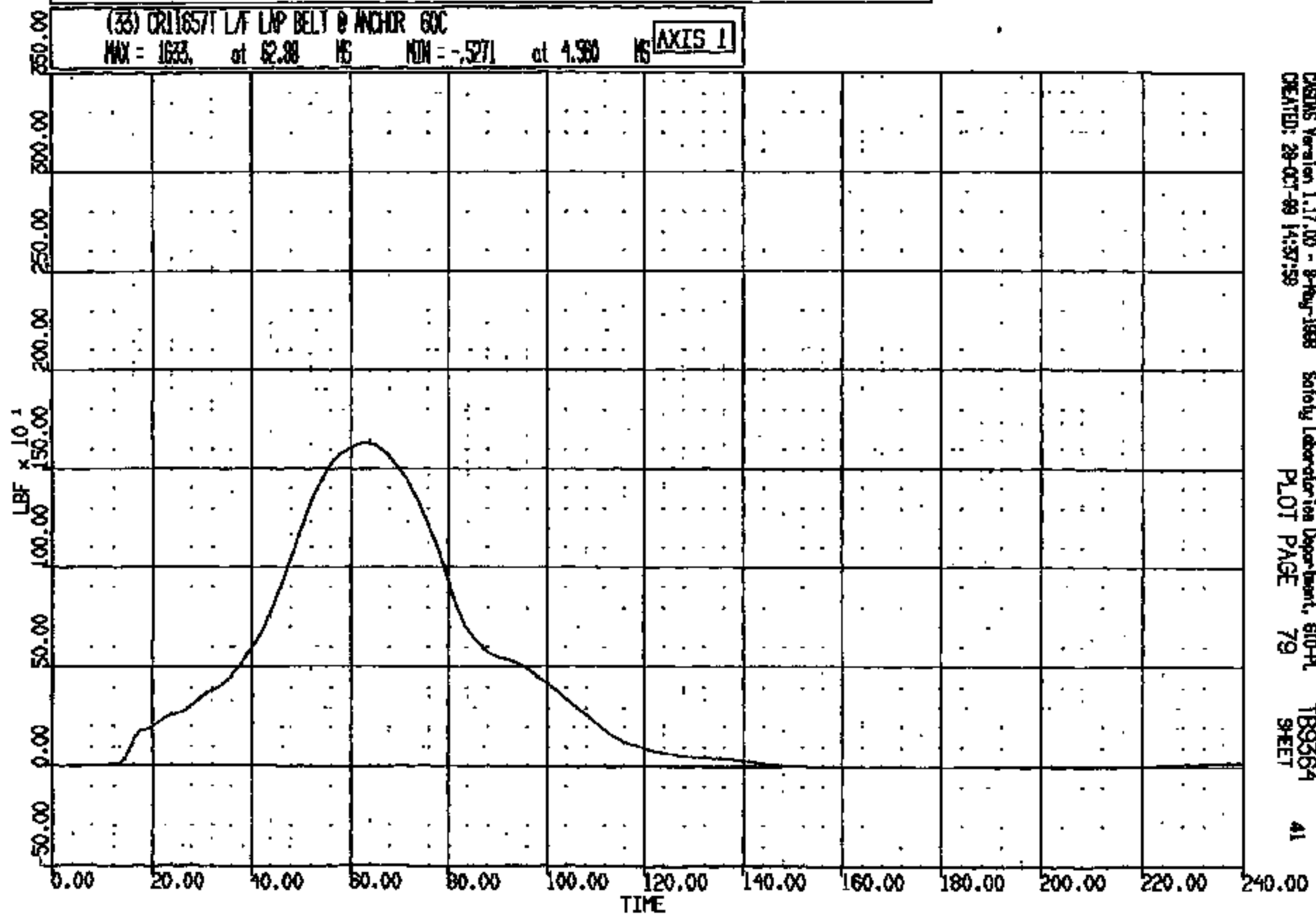


CRSIS Version 1.17.00 - 8-Aug-1999 Safety Laboratories Department, 610-PL TB9364
CREATED: 29-OCT-99 14:57:58 PLOT PAGE 78 SHEET 40

CRIS 0011657

CR #: 11857 TO: TB9364 DATE: 991028 13:26:32
2000 0-186

(33) CR116571 L/F LAP BELT @ ANCHOR 60C
MAX = 1633. at 62.88 MS MIN = -5271 at 1.960 MS **AXIS 1**

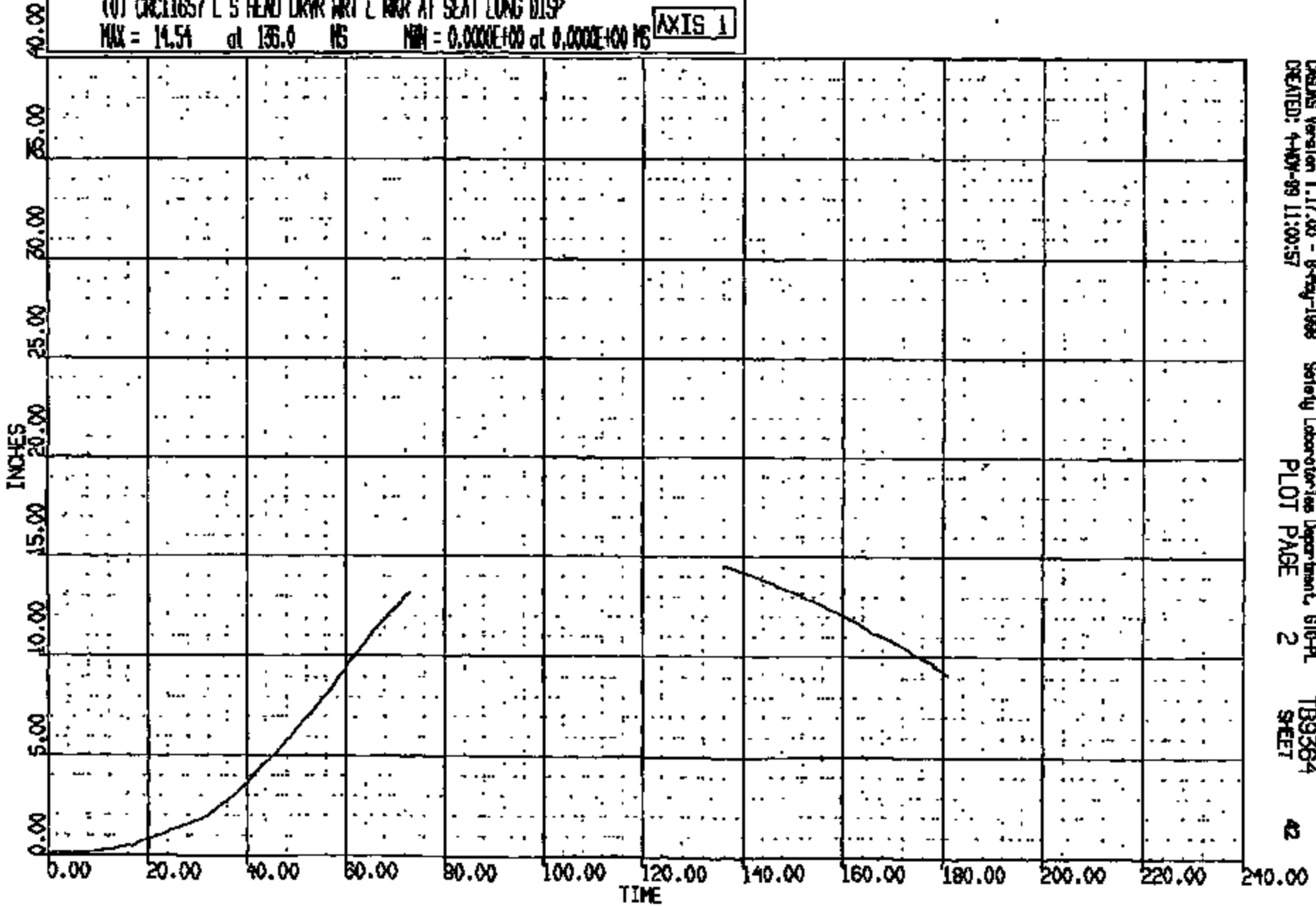


CADMS Version 1.17.00 - 8-Feb-1998 Safety Laboratories Department, 610-PL TB9364
CREATED: 28-OCT-99 14:57:59 PLOT PAGE 79 SHEET 41

CRIS 0011657

CR R: 11657 TO: TB9364 DATE: 001026 13:26:32
2000 D-188

(0) CRCL1657 L S HEAD DRVR WRT L NGR AT SEAT LONG DISP
MAX = 14.54 at 135.0 MS MIN = 0.000E+00 at 0.000E+00 MS **AXIS 1**

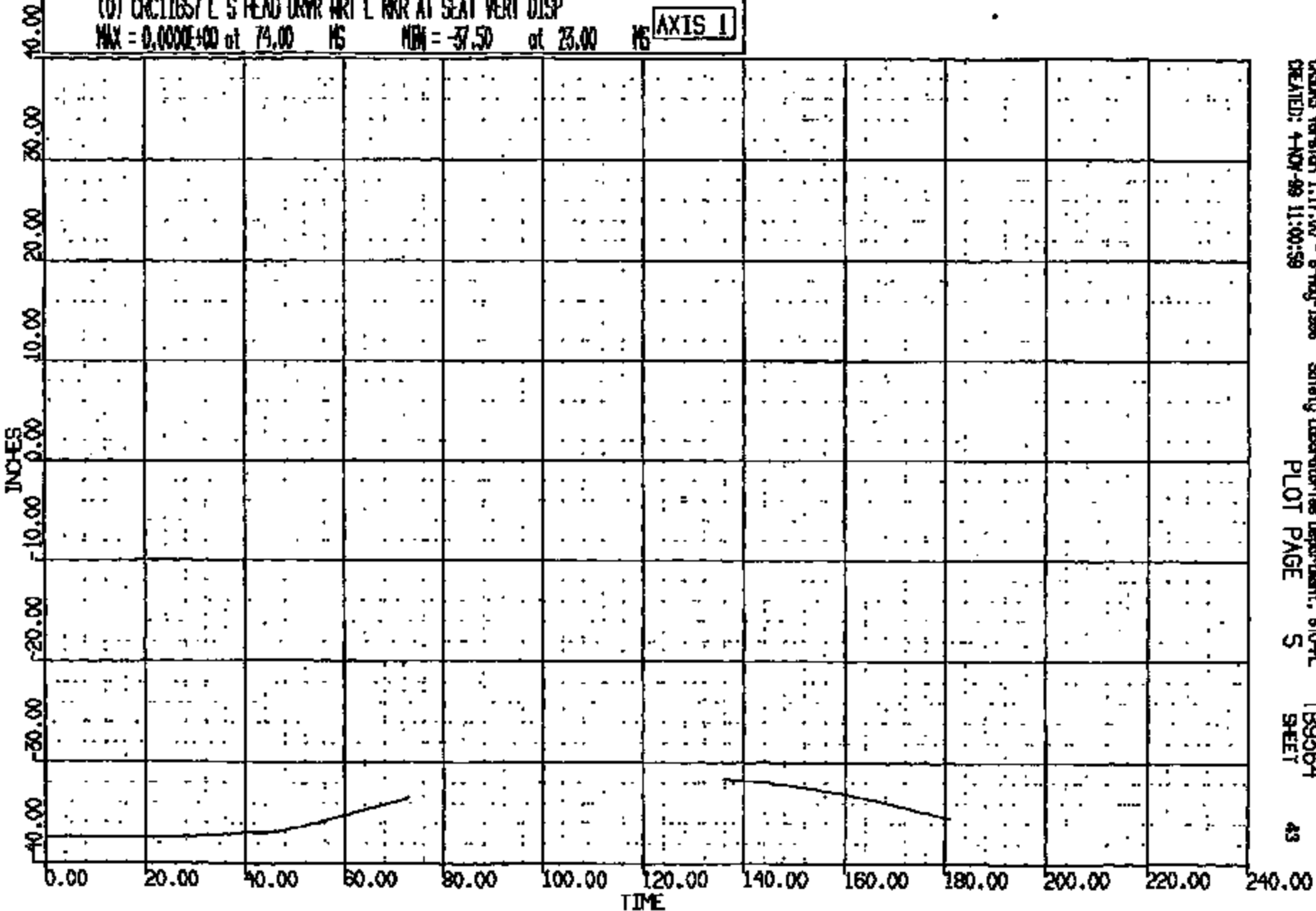


CRSNG Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
CREATED: 4-MAY-99 11:00:57 PLOT PAGE 2 TB9364
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CRTS 0011657

CR R: 11657 TC: T89364 DATE: 991028 13:26:32
2000 D-188

(0) CR11657 L S HEAD DRVR WRT L RWR AT SEAT VERT DISP
MAX = 0.000E+00 at 74.00 MS MIN = -37.50 at 23.00 MS **AXIS 1**



CRSIS Version 1.17.00 - 8-Aug-1998 Safety Laboratories Department, SIO-PL
CREATED: 4-NOV-98 11:00:59 PLOT PAGE 5 TB9364 AS
SHEET

CRIS 0011657

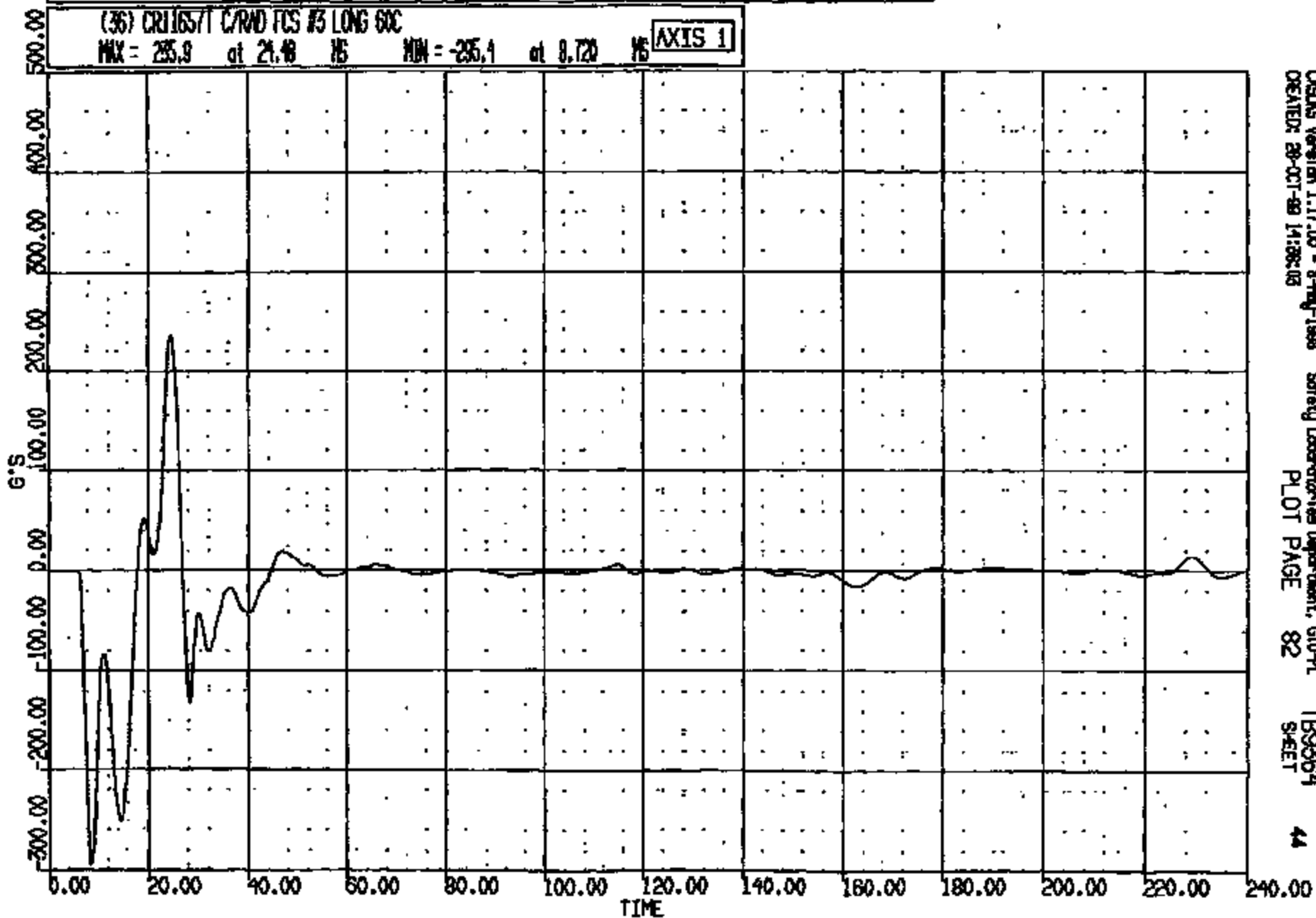
CR R: 11657 TO: TB9364 DATE: 091028 13:28:32

2000 D-188

(36) CR11657T C/RAD FCS #3 LONG 60C

MAX = 235.9 at 21.48 MS MIN = -235.1 at 8.720 MS

AXIS 1



OSDS Version 1.17.00 - 8-May-1998
CREATED: 20-OCT-99 14:38:02

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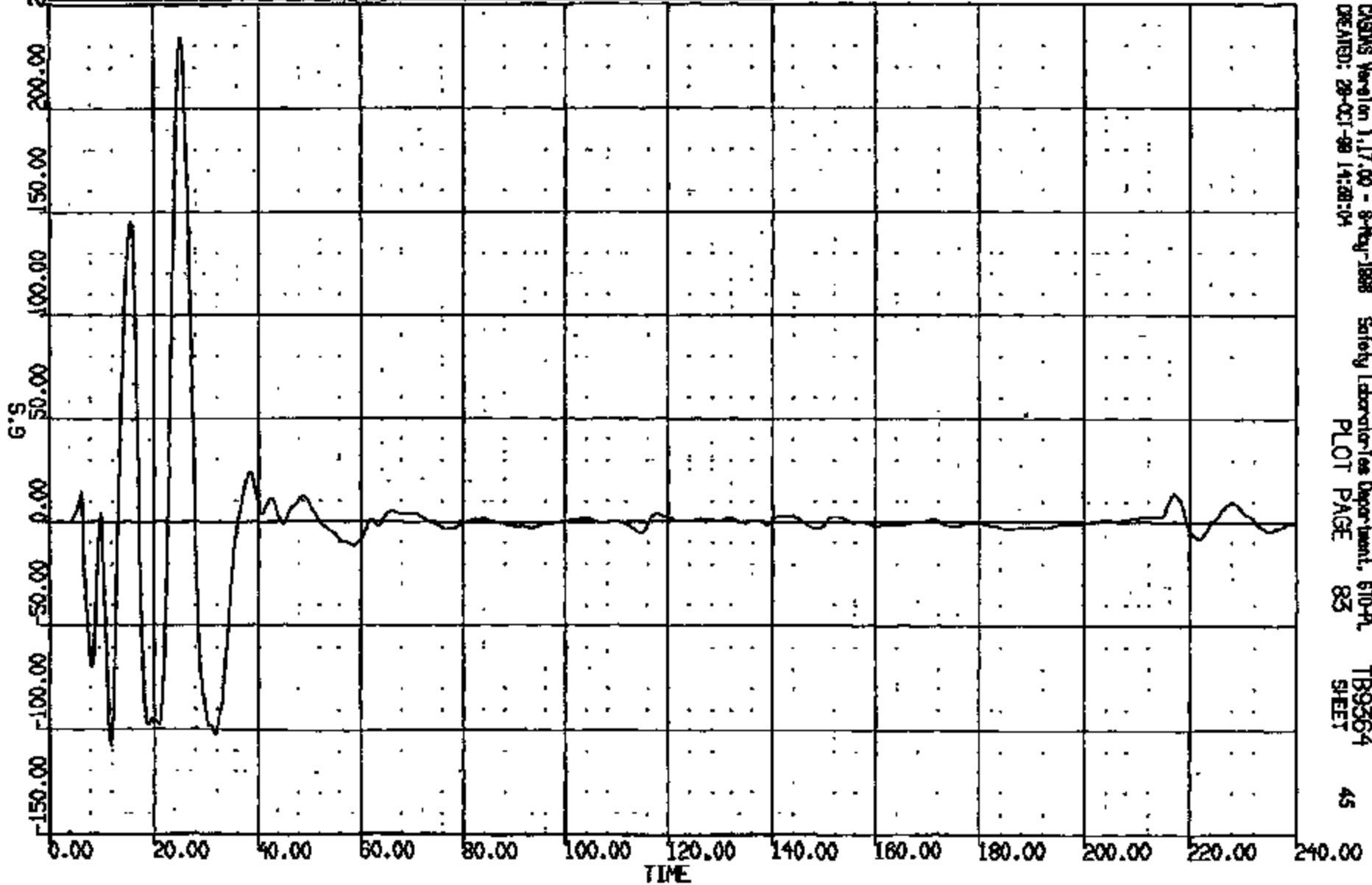
CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 891028 13:26:32
8000 D-18B

(37) CR11657T C/RND FCS #3 VERT 60C

MAX = 233.9 at 25.20 MS MIN = -106.7 at 11.84 MS

AXIS 1



CASINS Version 1.17.00 - 8-May-1988
CREATED: 28-OCT-88 14:28:04

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SHEET

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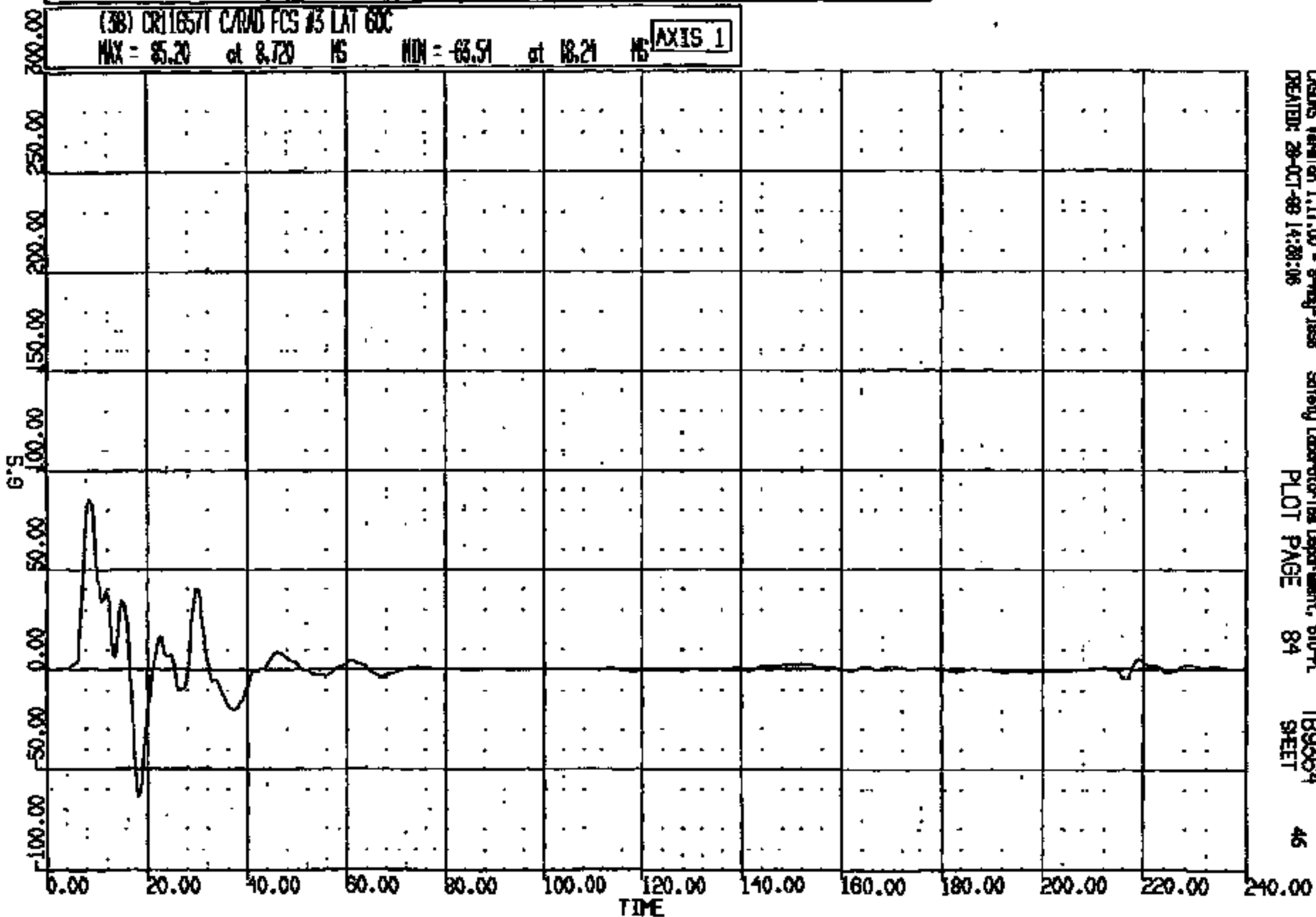
CRIS 0011657

CR R: 11657 TO: TB9364 DATE: 091028 15:26:52
2000 D-10B

(38) CR11657T C/RAD FCS #3 LAT 60C

MAX = 85.20 at 8.72 MS MIN = -63.51 at 18.21 MS

AXIS 1



CRJMS Version 1.17.00 - 8-May-1998
CREATED: 28-OCT-98 14:38:08

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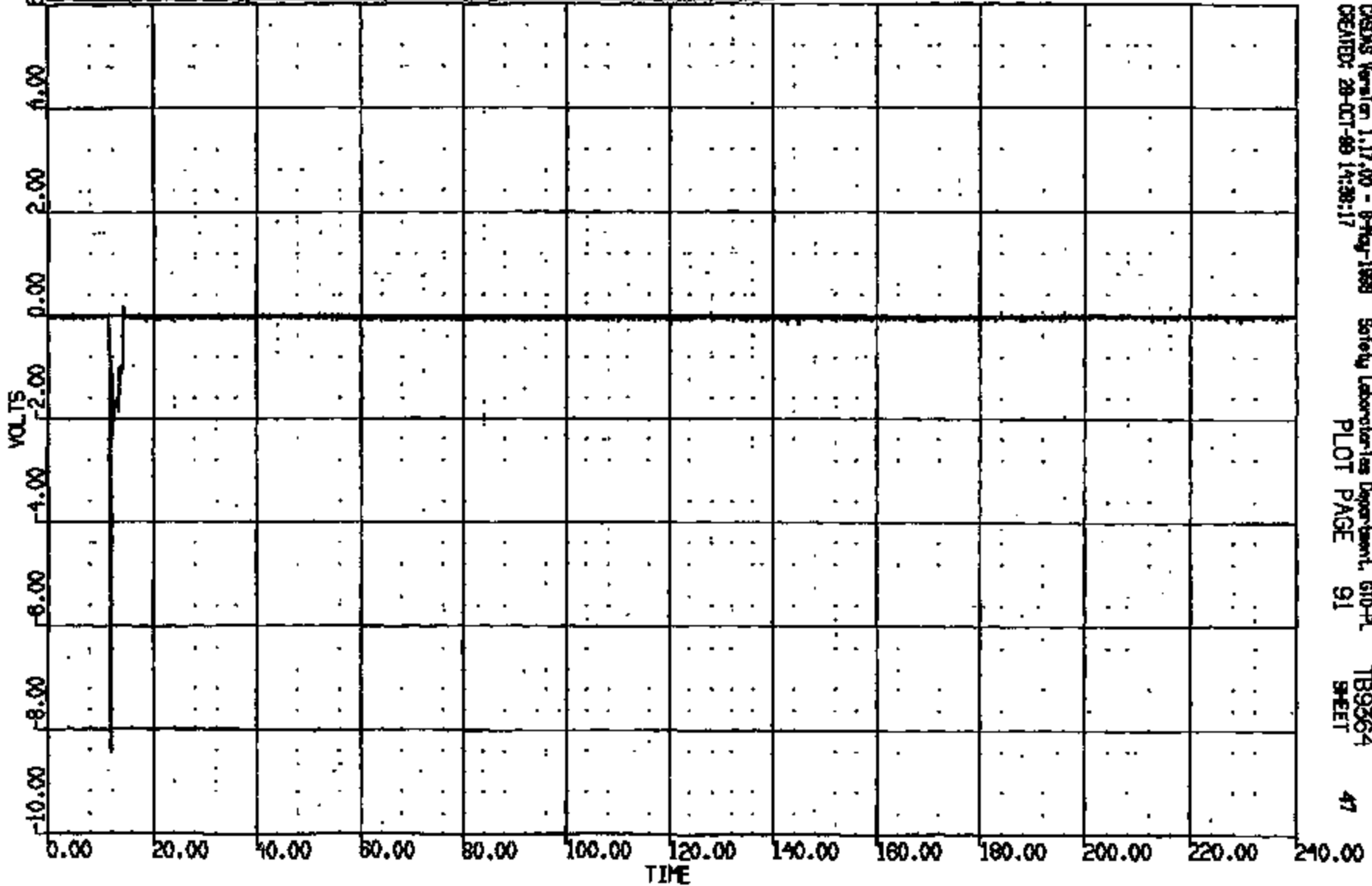
CRIS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 13:28:52
2000 D-186

(45) CRT1657 DRIVER SOLUB VOLTAGE 1ST ST 400C

MAX = 0.1789 at 11.24 MS MIN = -0.172 at 11.76 MS

AXIS 1



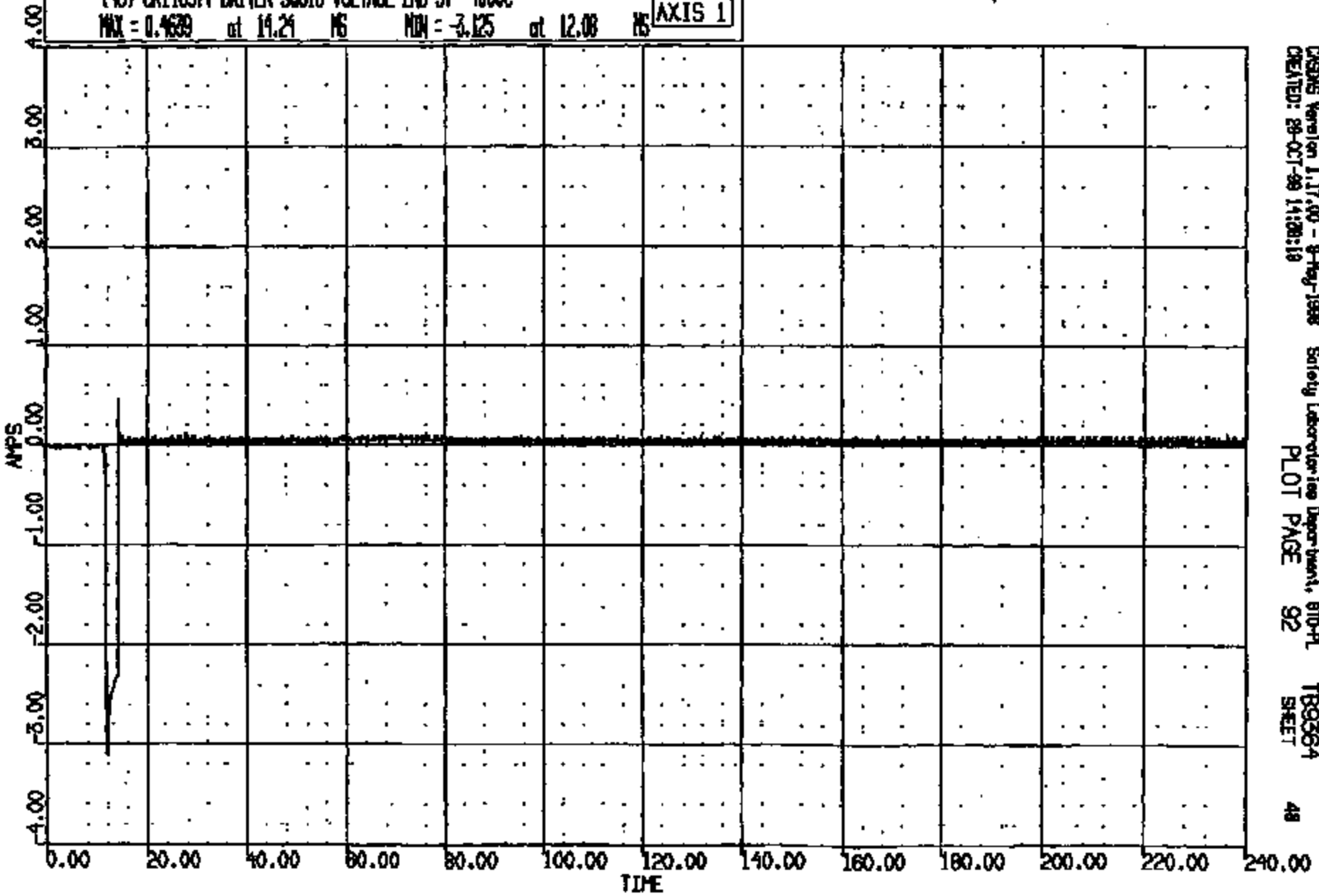
CRSAS Version 1.17.00 - 9-May-1999
CREATED: 28-OCT-99 14:30:17

Safety Laboratories Department, 610-A
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CR R: 11657 TD: TR9364 DATE: 991029 15:29:52
2000 D-198

(46) CR116571 DRIVER SQUIB VOLTAGE 2ND ST 4000C
MAX = 0.4639 at 19.21 MS MIN = -3.125 at 12.08 MS **AXIS 1**

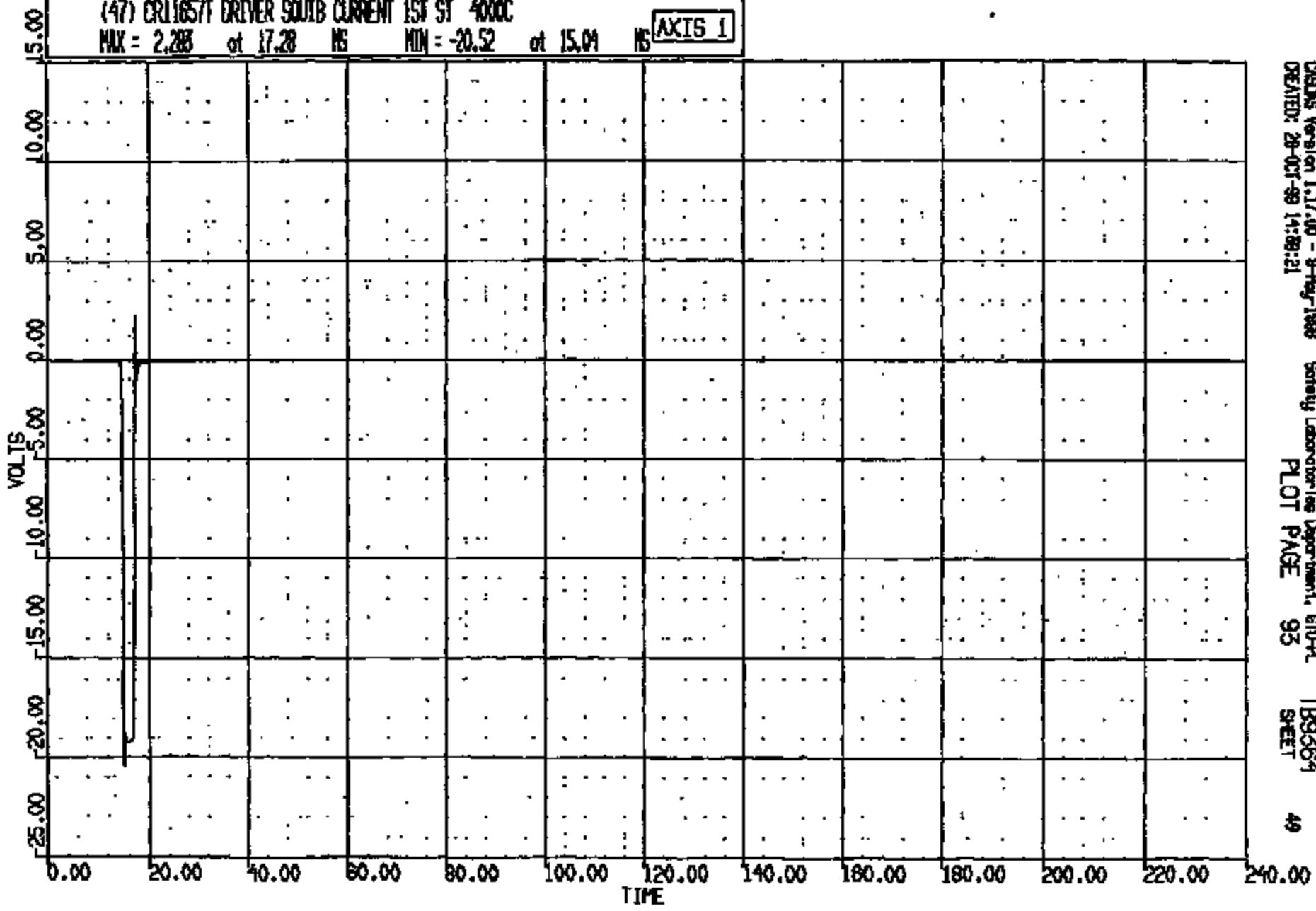


CRAMS Version 1.17.00 - 9-May-1998 Safety Laboratories Department, 610-PL TR9364
CREATED: 99-OCT-29 14:28:19 PLOT PAGE 92 SHEET 48

CRTS 0011657

CR #: 11657 TO: TB9364 DATE: 991028 15:26:52
2000 D-186

(47) CR11657/1 DRIVER SOLID CURRENT 1ST ST 4000C
MAX = 2.283 at 17.28 NS MIN = -20.52 at 15.04 NS AXIS 1

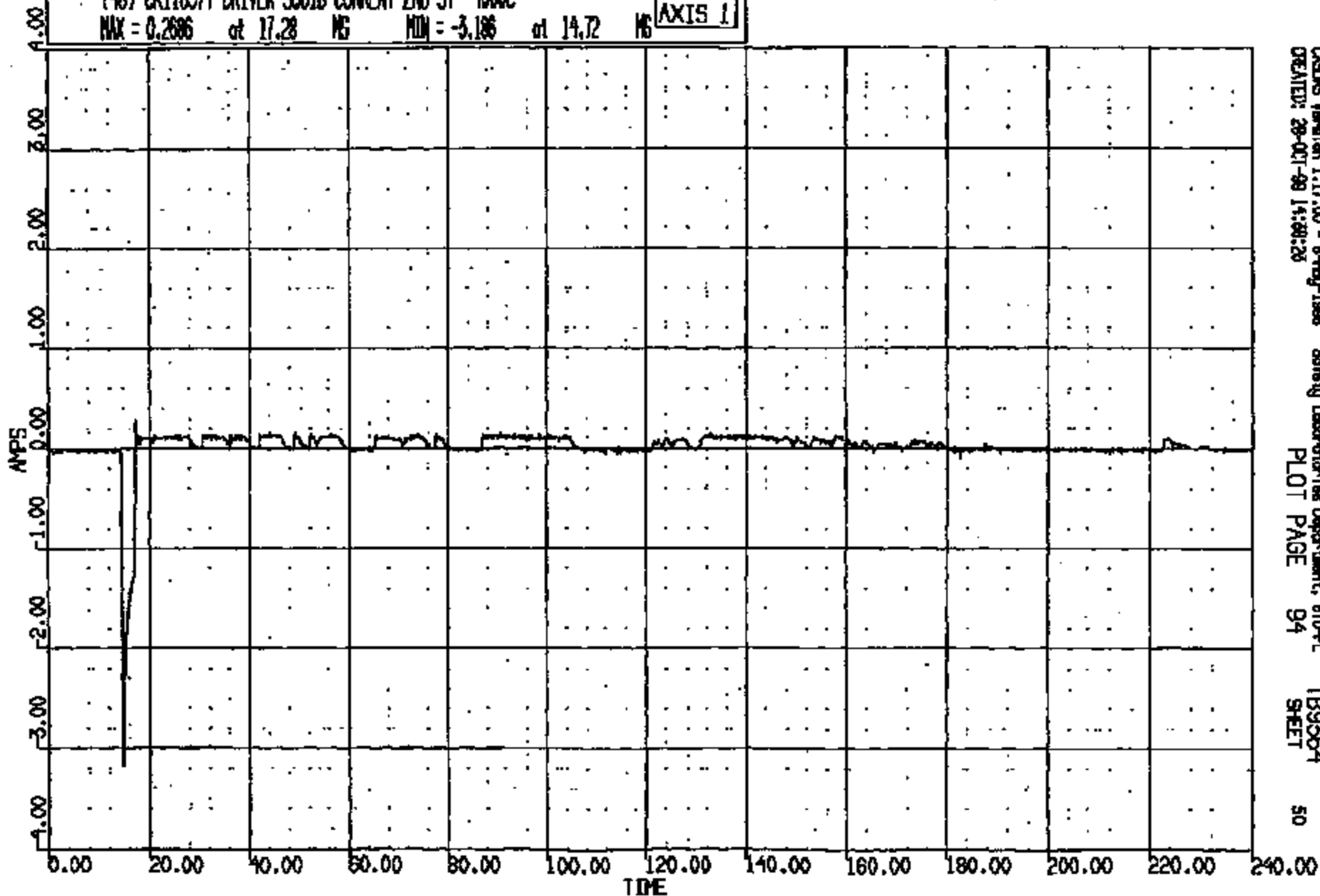


CRIMS Version 1.17.00 - 8-May-1998 Safety Laboratory Department, 610-PL TB9364
CREATED: 28-OCT-99 14:59:21 PLOT PAGE 93 SHEET 49

CRTS 0011657

CR R: 11857 TO: TB9364 DATE: 991028 13:26:52
2000 D-188

(48) CRT1657I DRIVER SOLID CURRENT 2ND ST 4000C
MAX = 0.2686 at 17.28 MS MIN = -3.186 at 14.72 MS AXIS 1



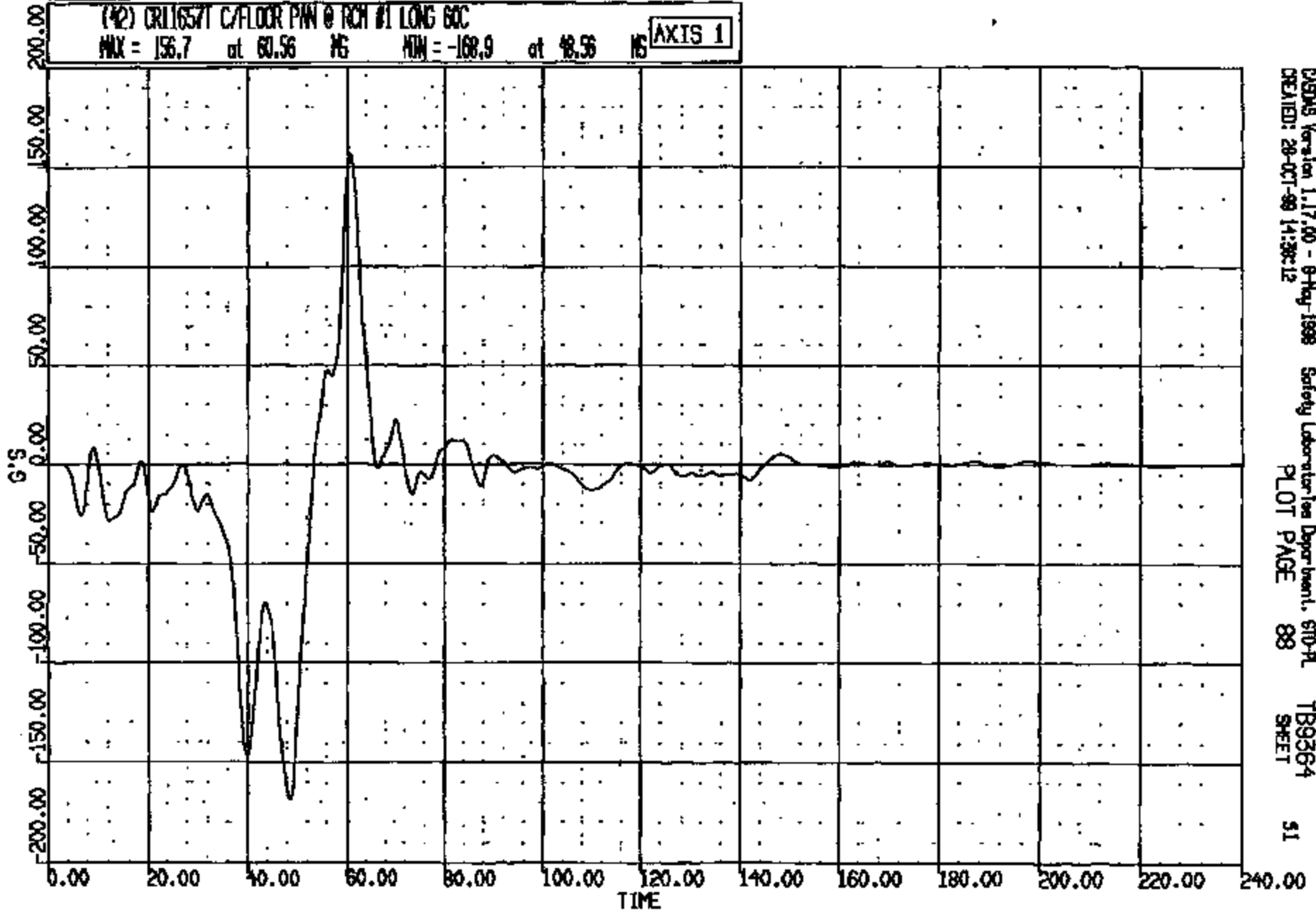
CASIMS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL TB9364
CREATED: 28-OCT-99 14:00:28 PLOT PAGE 94 SHEET 50

CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 13:28:52
2000 D-188

(42) CR116571 C/FLOOR PIN @ RCH #1 LONG 60C
MAX = 156.7 at 60.56 MS MIN = -168.9 at 48.56 MS

AXIS 1



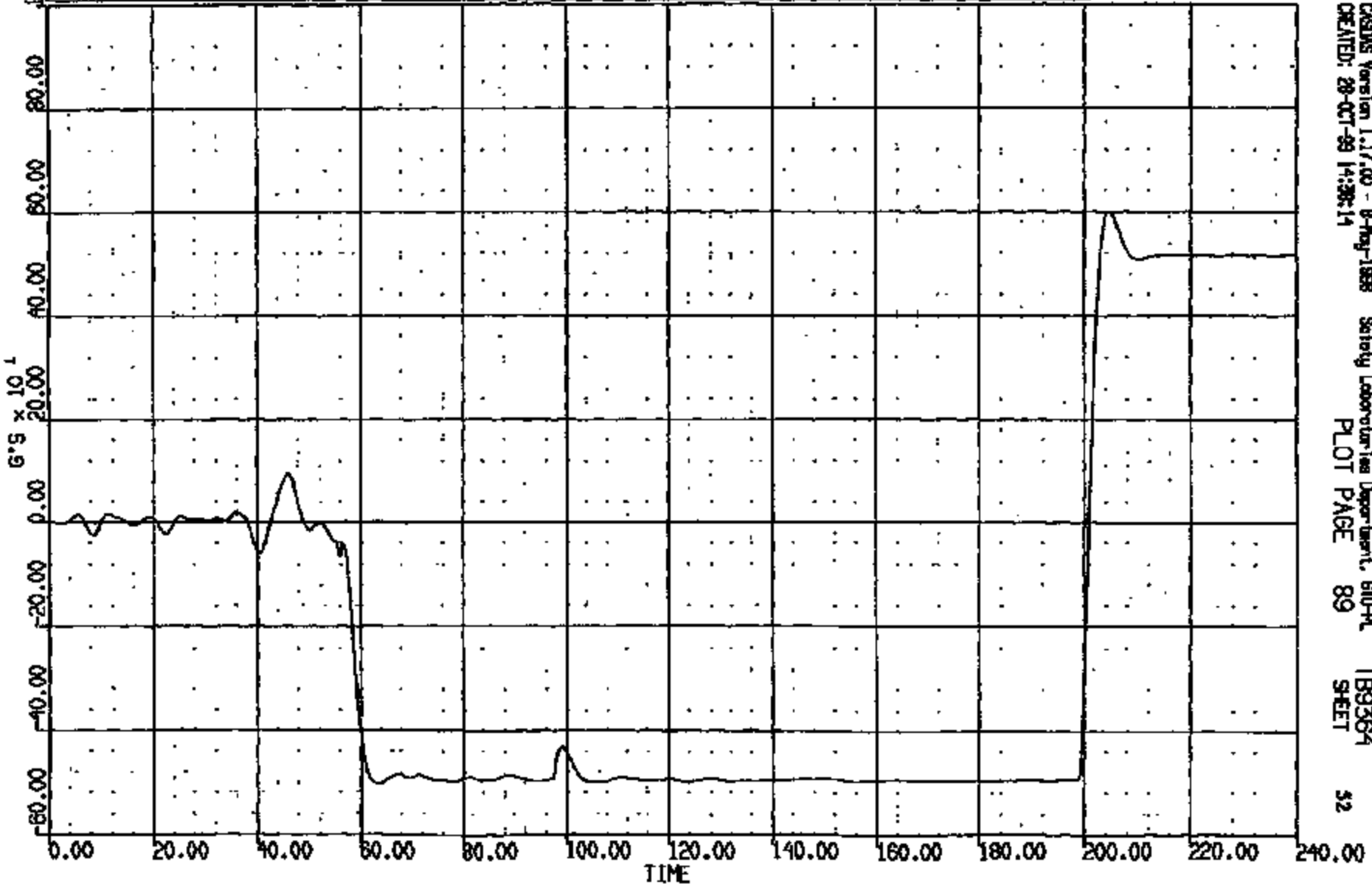
DYNAMS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, STD-PL
CREATED: 28-OCT-99 14:38:12 PLOT PAGE 88 TB9364
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CRIS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 15:26:52
2000 D-188

* (48) CR11657/ C/FLOOR PAN @ RCN #1 VERT 60C
MAX = 600.2 at 209.5 NS MIN = -504.5 at 63.60 NS **AXIS 1**

ANOMALY KEYS:
* - Wiggled data exceeding full scale
o - Wiggled data 750.0% of full scale
x - All data < 12.0% of full scale
- - 0.1 percent offset at T-zero



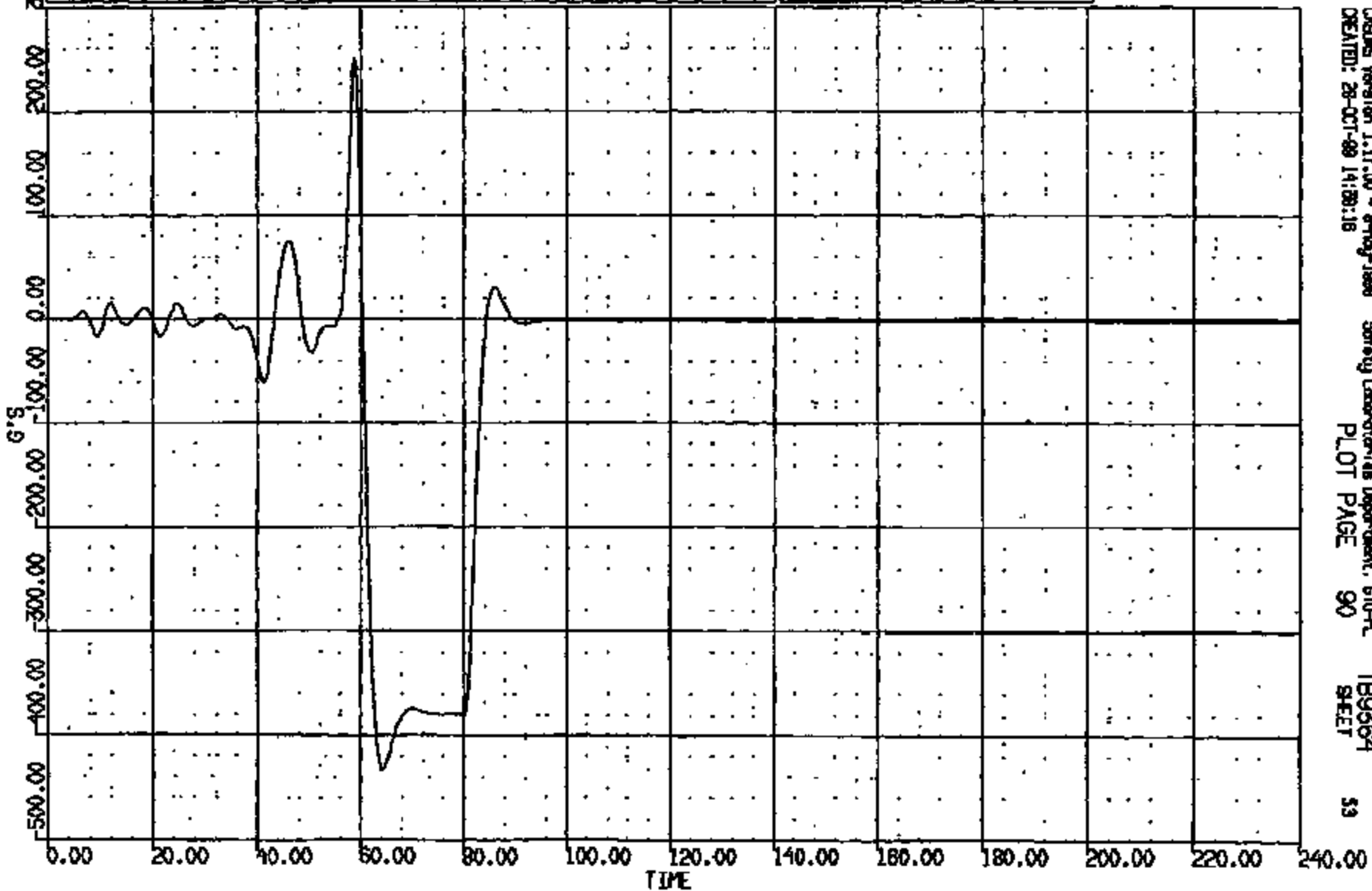
CASYS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL TB9364
CREATED: 28-OCT-99 14:38:14 PLOT PAGE 89 SHEET 52

CRTS 0011657

CR R: 11857 TO: TB9364 DATE: 881028 13:28:32
2000 D-188

(44) CR11857T C/FLOOR PAV @ ROW #1 LAT 60C
MAX = 249.8 at 58.72 MS MIN = -432.5 at 61.32 MS **AXIS 1**

ANALYSIS KEY:
A - Horizontal data exceeded full scale
B - Horizontal data 200.0% of full scale
C - All data < 10.0% of full scale
D - 21 percent of full scale



CRS05 Version 1.17.00 - 8-May-1988
CREATED: 28-OCT-89 14:58:18

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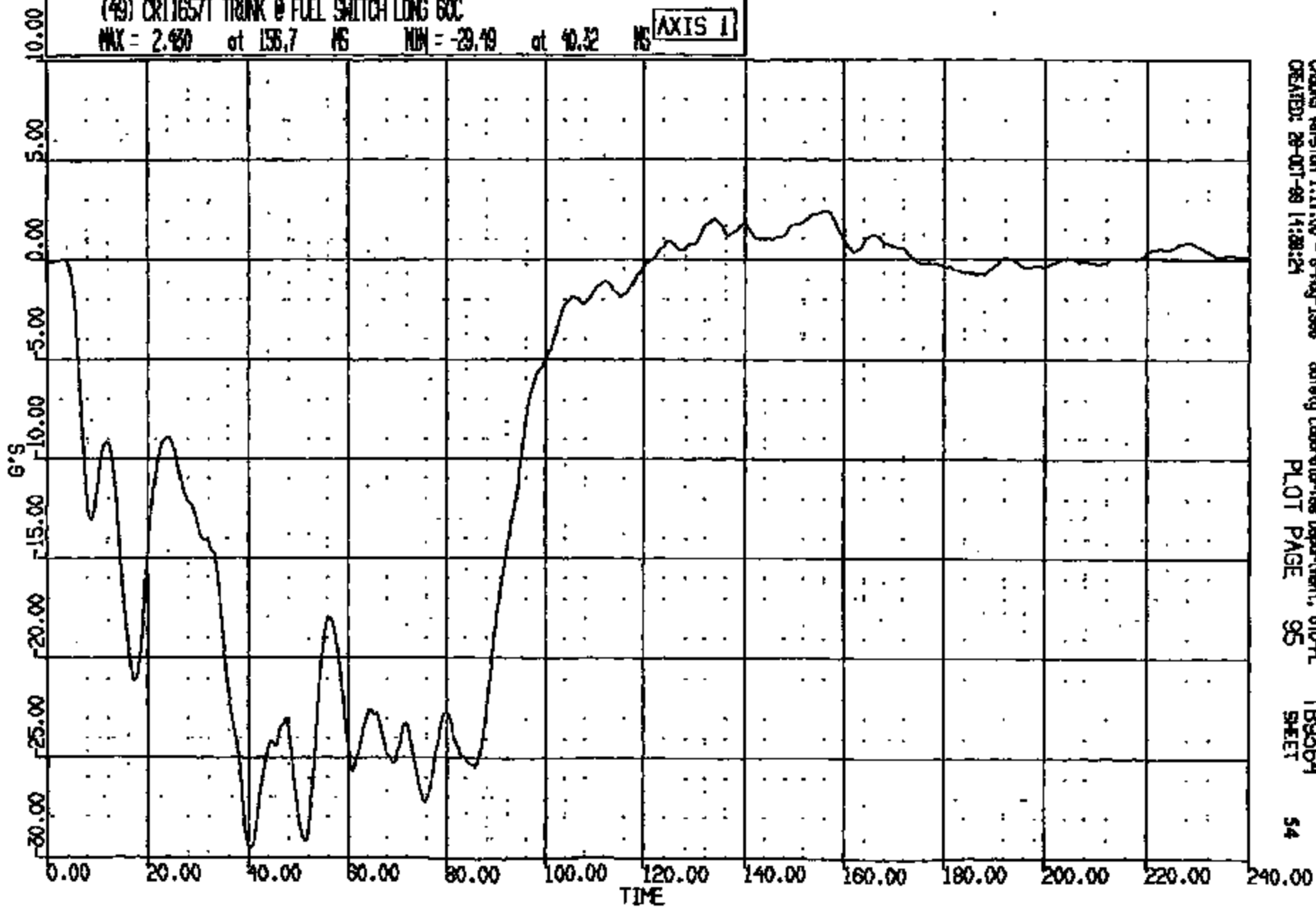
53

CR R: 11657 TO: TB9264 DATE: 991028 13:26:32
2000 D-188

(49) CR11657 TRNK @ FUEL SWITCH LONG 60C

MAX = 2.930 at 136.7 MS MIN = -29.49 at 40.32 MS

AXIS 1



CADDS Version 1.17.00 - 8-May-1998
CREATED: 28-OCT-99 14:38:24

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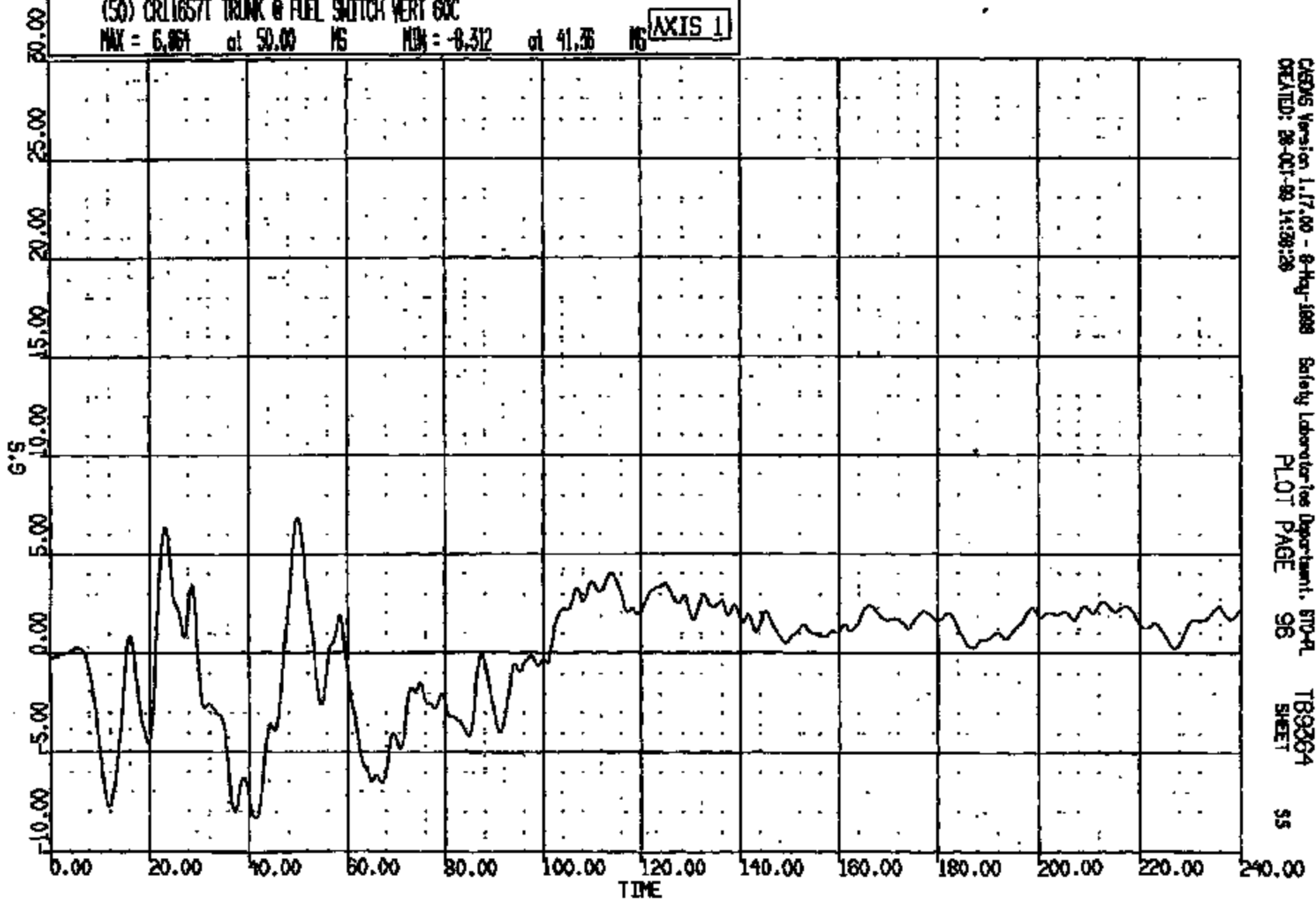
CRTS 0011657

CR R: 11657 TO: T89364 DATE: 091028 13:26:52
2000 D-188

(50) CR11657T TRUNK @ FUEL SWITCH VERT GXC

MAX = 6.061 at 50.00 MS MIN = -8.312 at 41.36 MS

AXIS 1



CRS005 Version 1.17.00 - 8-May-1999
CREATED: 28-OCT-99 14:28:28

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PLOT PAGE 96

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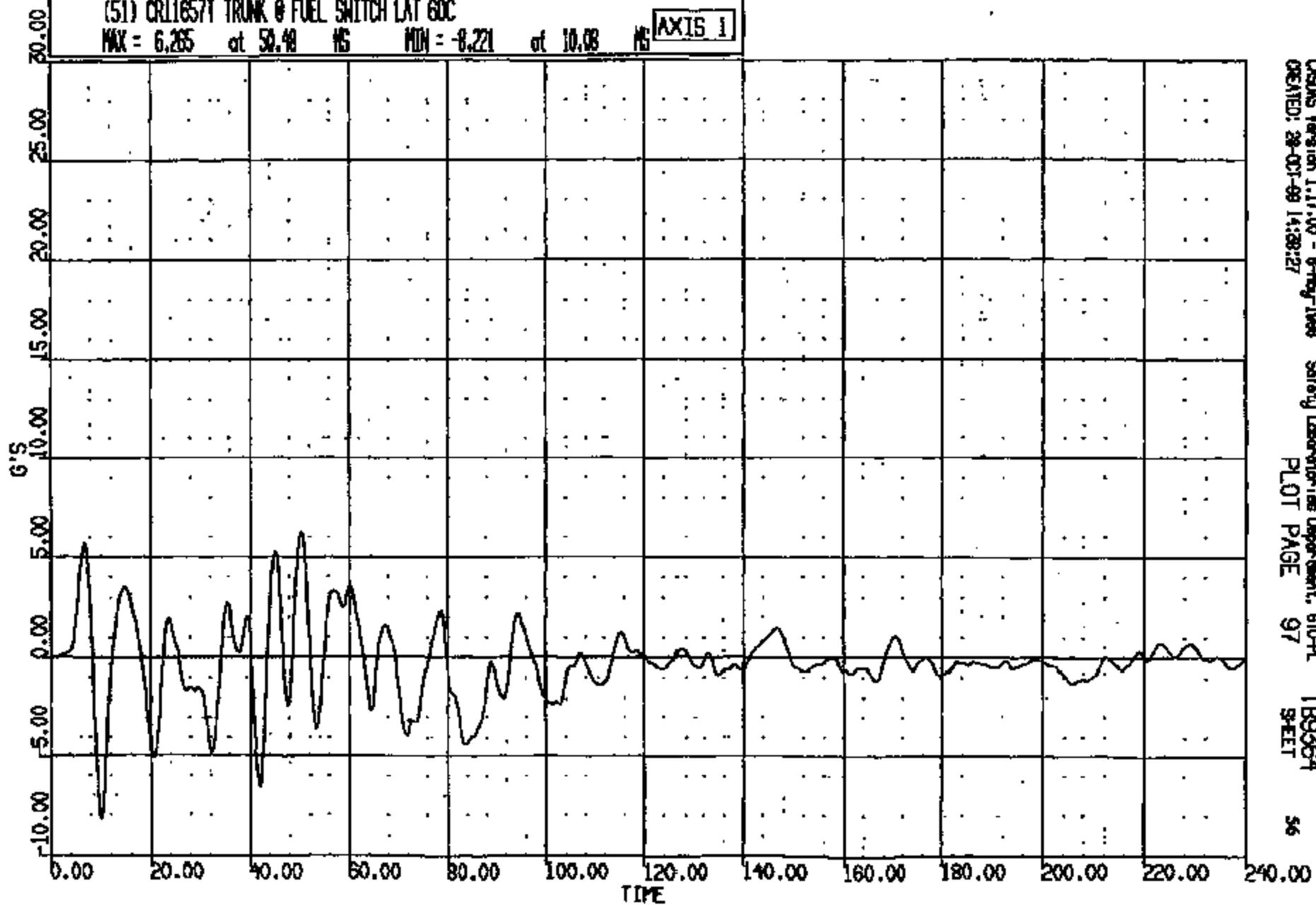
CRIS 0011657

CR R: 11857 TO: TB9364 DATE: 991028 15:25:32
2000 D-185

(51) CR116571 TRUNK @ FUEL SWITCH LAT 60C

MAX = 6.265 at 50.48 MS MIN = -8.221 at 10.08 MS

AXIS 1



CASMS Version 1.17.00 - 8-Aug-1998
CREATED: 28-Oct-99 14:38:27

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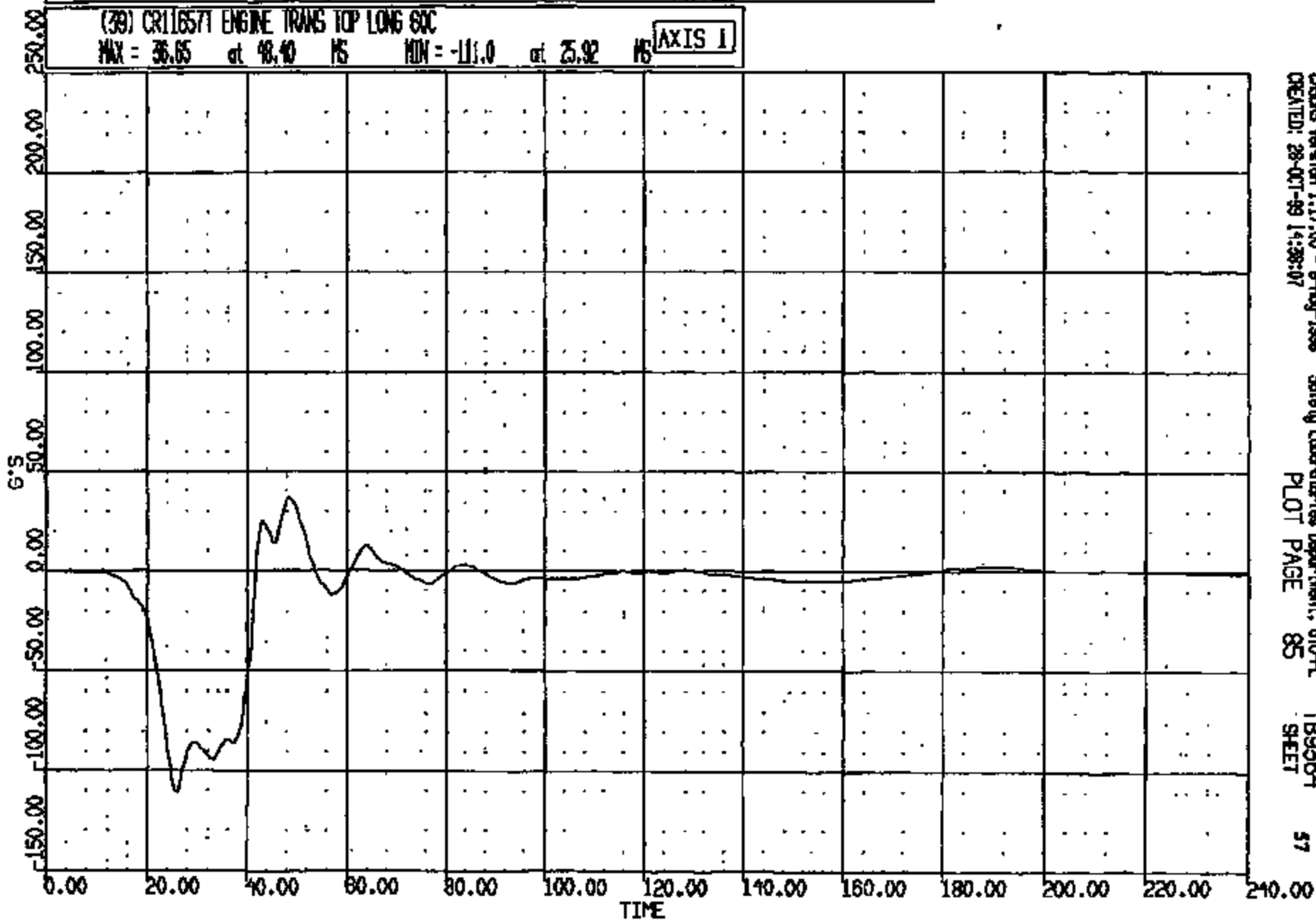
CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 15:28:52
2000 D-188

(39) CR116571 ENGINE TRANS TOP LONG SOC

MAX = 36.65 at 48.40 MS MIN = -111.0 at 25.92 MS

AXIS 1



CRAMS Version 1.17.00 - 9-May-1998
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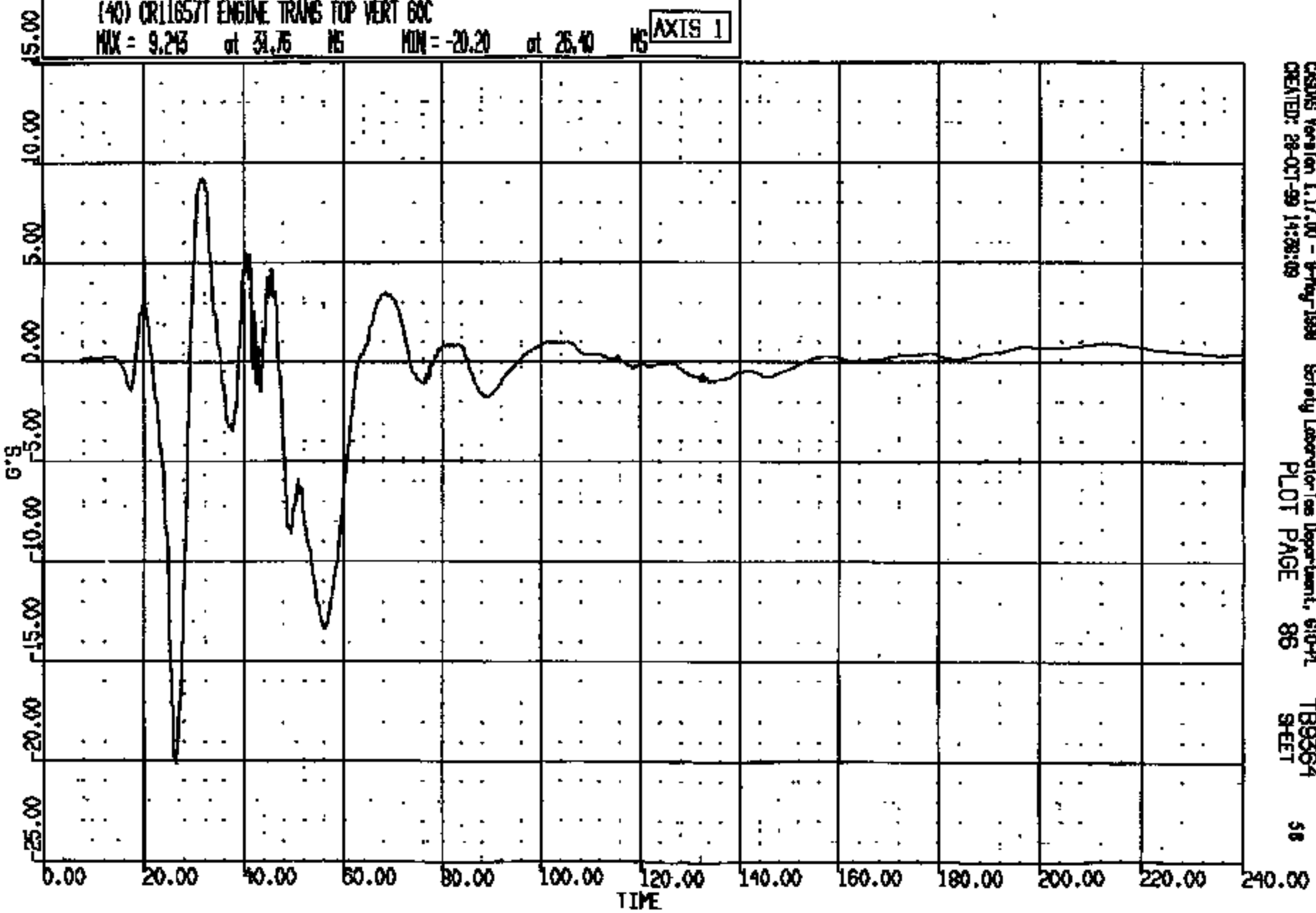
CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 13:28:32
R000 0-188

(40) CR11657T ENGINE TRANS TOP VERT 60C

MAX = 9.243 at 31.75 MS MIN = -20.20 at 25.40 MS

AXIS 1



CASMS Version 1.17.00 - 9-May-1998
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CRTS 0011657

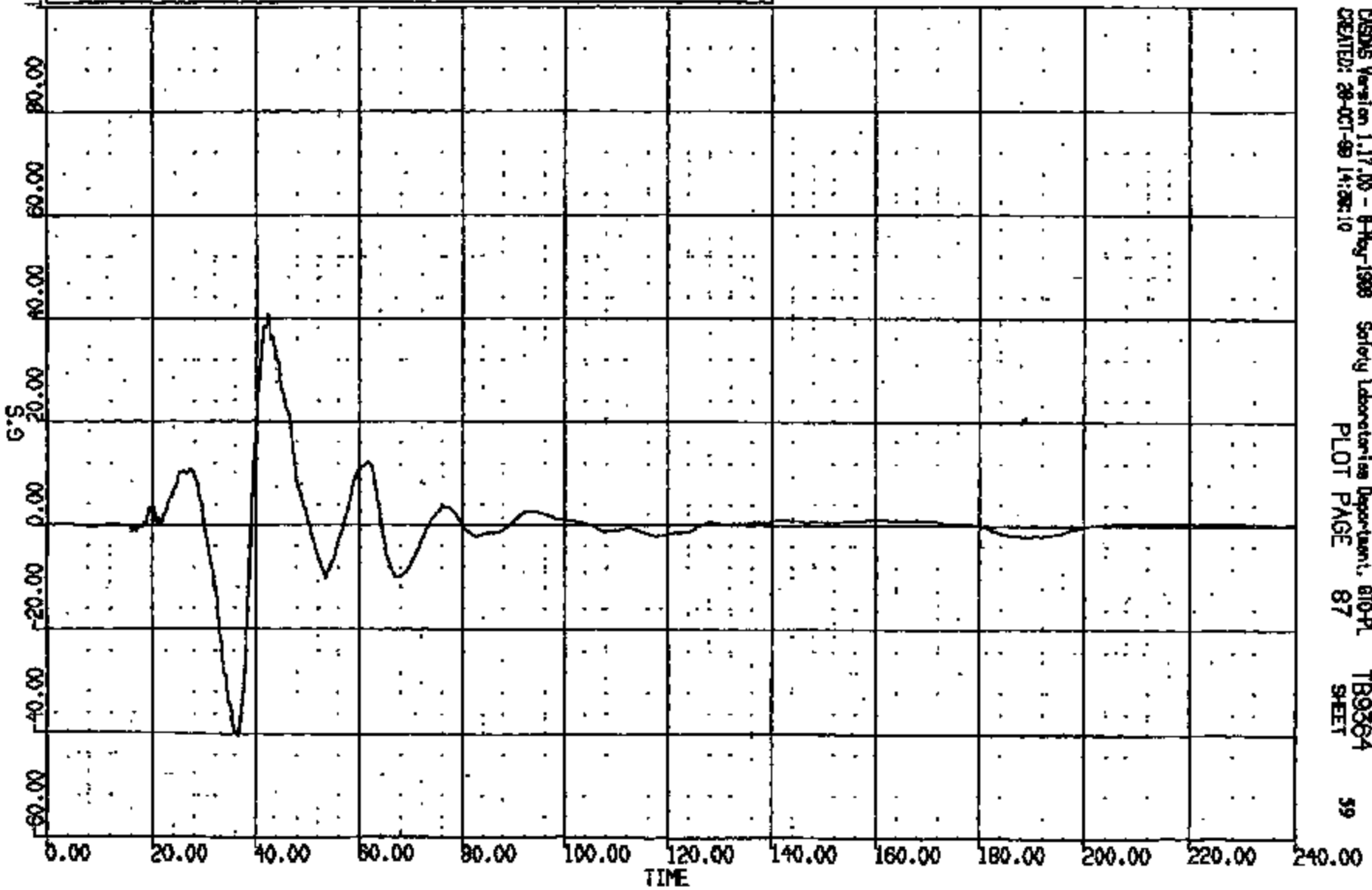
CR R: 11657 TO: TB9364 DATE: 991028 15:28:32

8000 D-198

(4) CR11657 ENGINE TRANS TOP LAT 60C

MAX = 40.72 at 42.40 MS MIN = -40.36 at 36.64 MS

AXIS 1



CSDMS Version 1.17.00 - 8-May-1998
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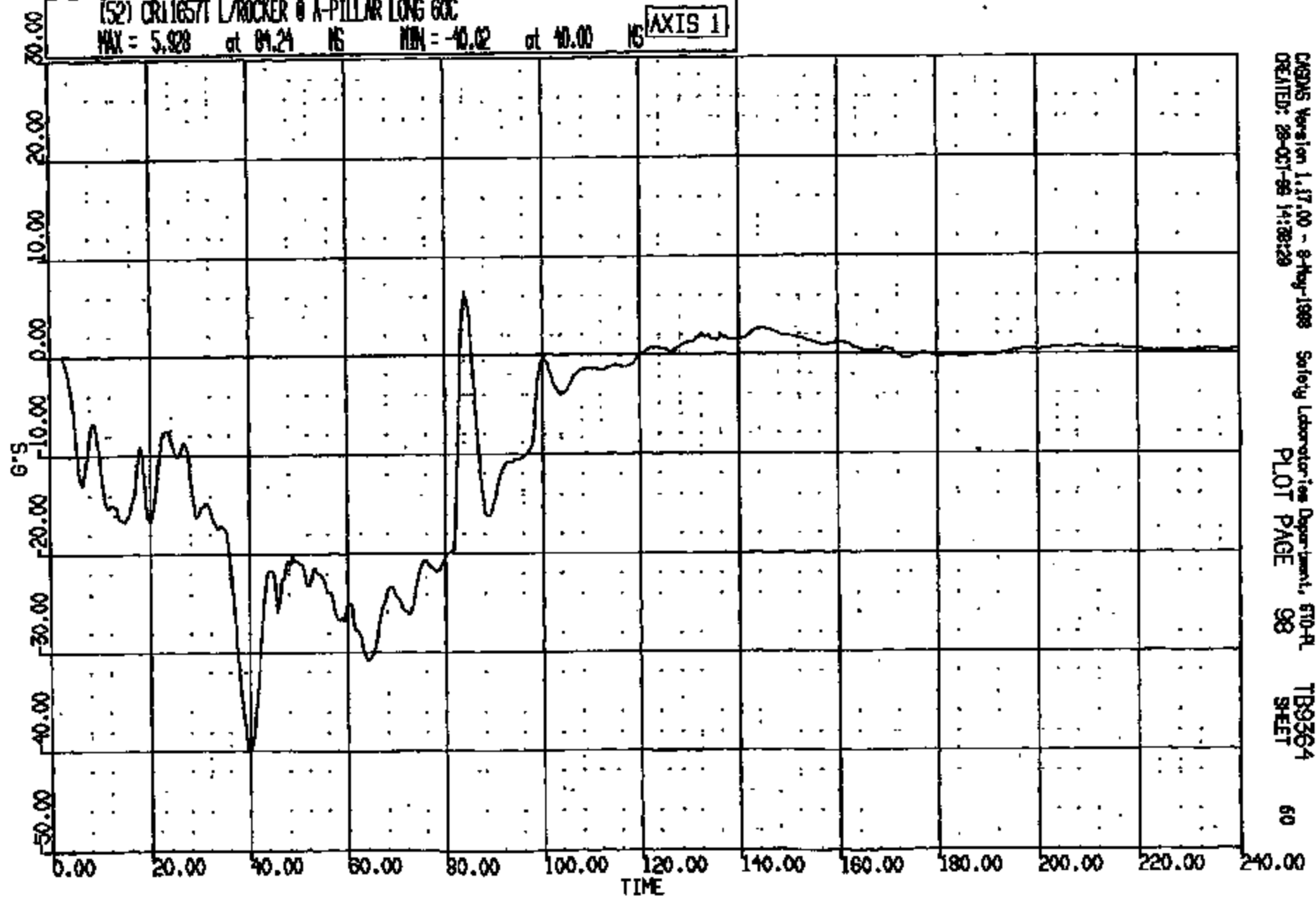
TB9364
SHEET

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CR11657

DR R: 11657 TO: TB9364 DATE: 061028 13:26:52
2000 0-188

(52) CRT1657 L/ROCKER @ A-PILLAR LONG GOC
MAX = 5.928 at 04.24 NS MIN = -40.02 at 40.00 NS **AXIS 1**



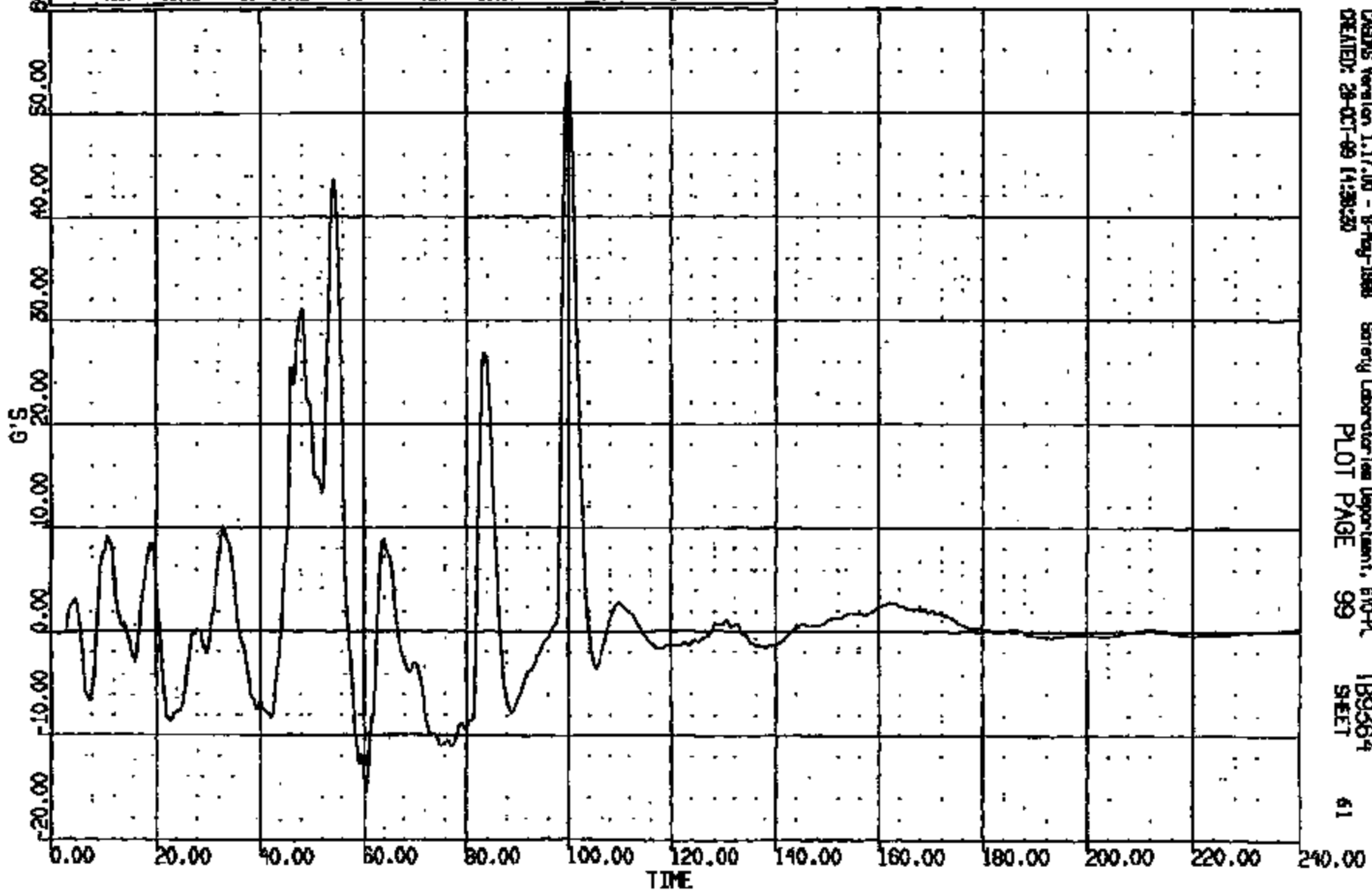
CADDS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-FL
CREATED: 28-OCT-99 14:28:29 PLOT PAGE 98 TB9364 SHEET 60

CRTS 0011657

CR R: 11957 TO: TB9364 DATE: 991028 13:28:52
2000 D-188

(53) CR116571 LADCKER @ A-PILLAR VERT GOC
MAX = 56.51 at 99.92 NS MIN = -15.55 at 60.32 NS

AXIS 1

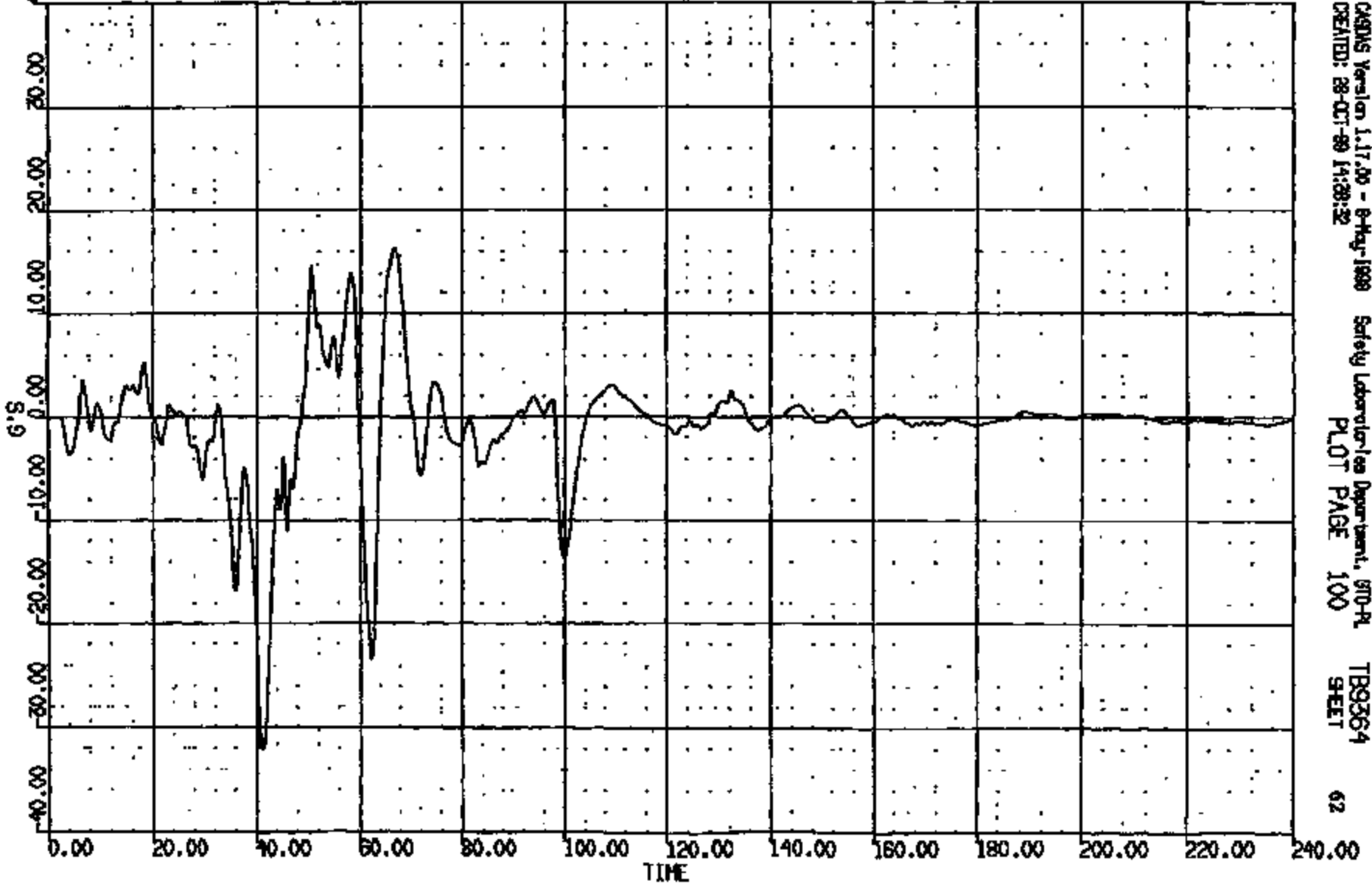


CASINS Version 1.17.00 - 9-May-1999 Safety Laboratories Department, 610-P
CREATED: 28-OCT-99 14:28:20 PLOT PAGE 99 TB9364 SHEET 61

CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 13:28:32
2000 D-198

(54) CR11657 L/ROCKER @ A-PILLAR LAT 60C
MAX = 16.33 at 66.80 NS MIN = -32.26 at 41.20 NS **AXIS 1**



CAQUS Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 670-PL
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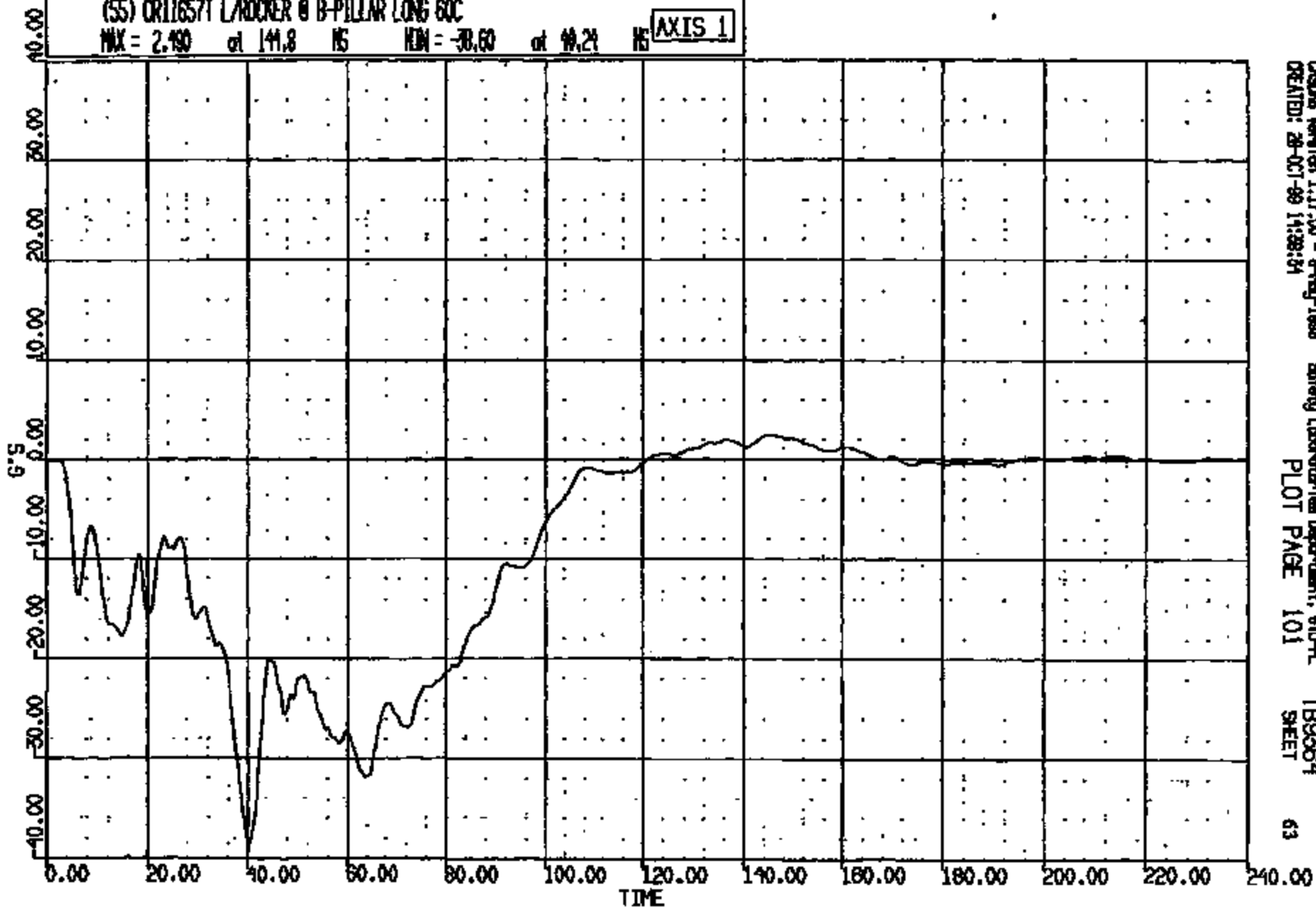
CRTS 0011657

CR N: 11657 TO: TB9364 DATE: 991028 15:28:52
2000 D-188

(55) CR116571 L/ROCKER @ B-PILLAR LONG 60C

MAX = 2.430 at 141.8 MS MIN = -30.60 at 44.24 MS

AXIS 1



CRASH Version 1.17.00 - 8-May-1999
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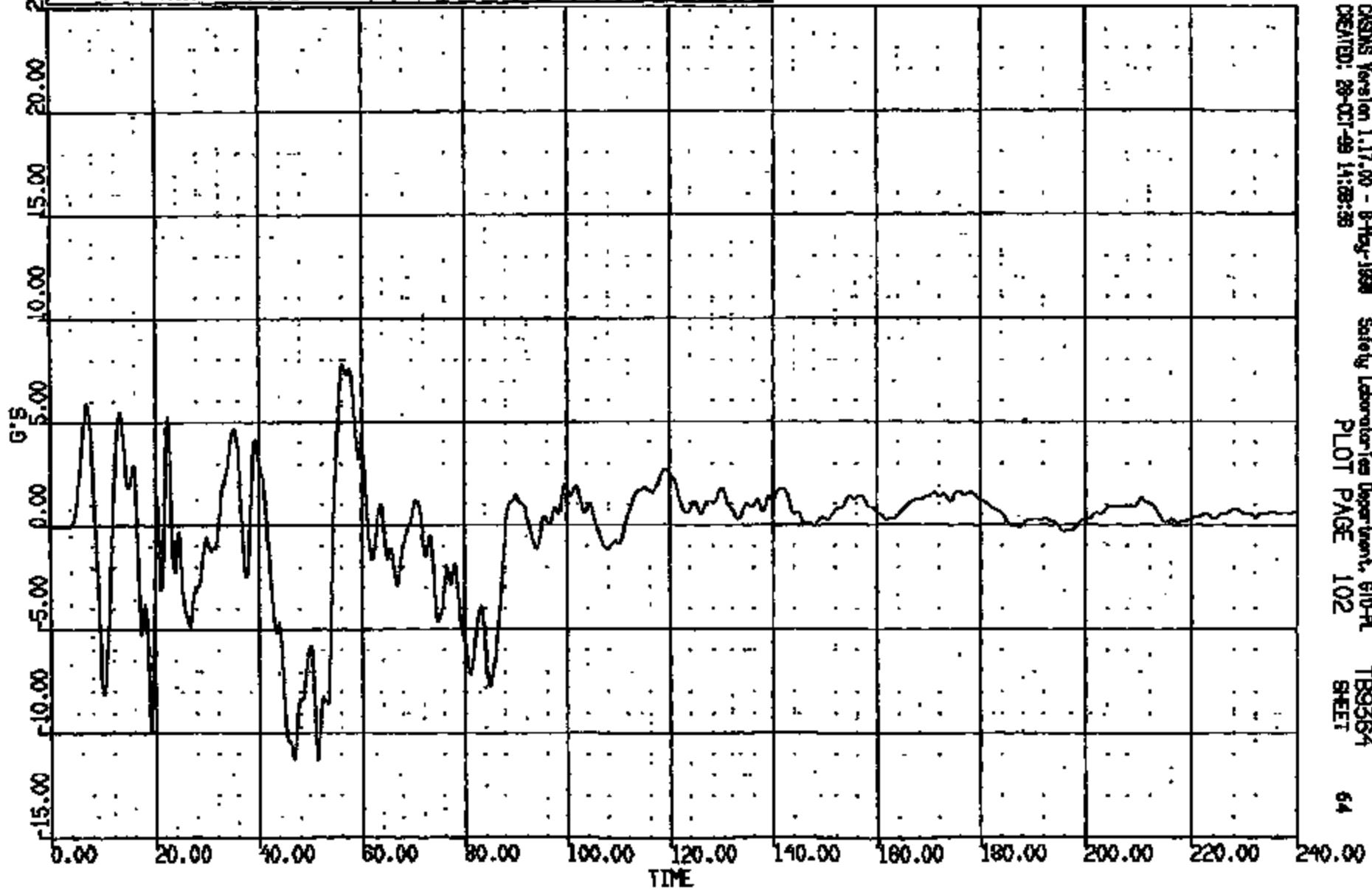
TB9364
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CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 13:28:52
3000 0-188

(56) CRT11657 L/ROCKER @ B-PILLAR VERT 60C
MAX = 7.005 at 56.24 MS MIN = -11.30 at 51.28 MS **AXIS 1**



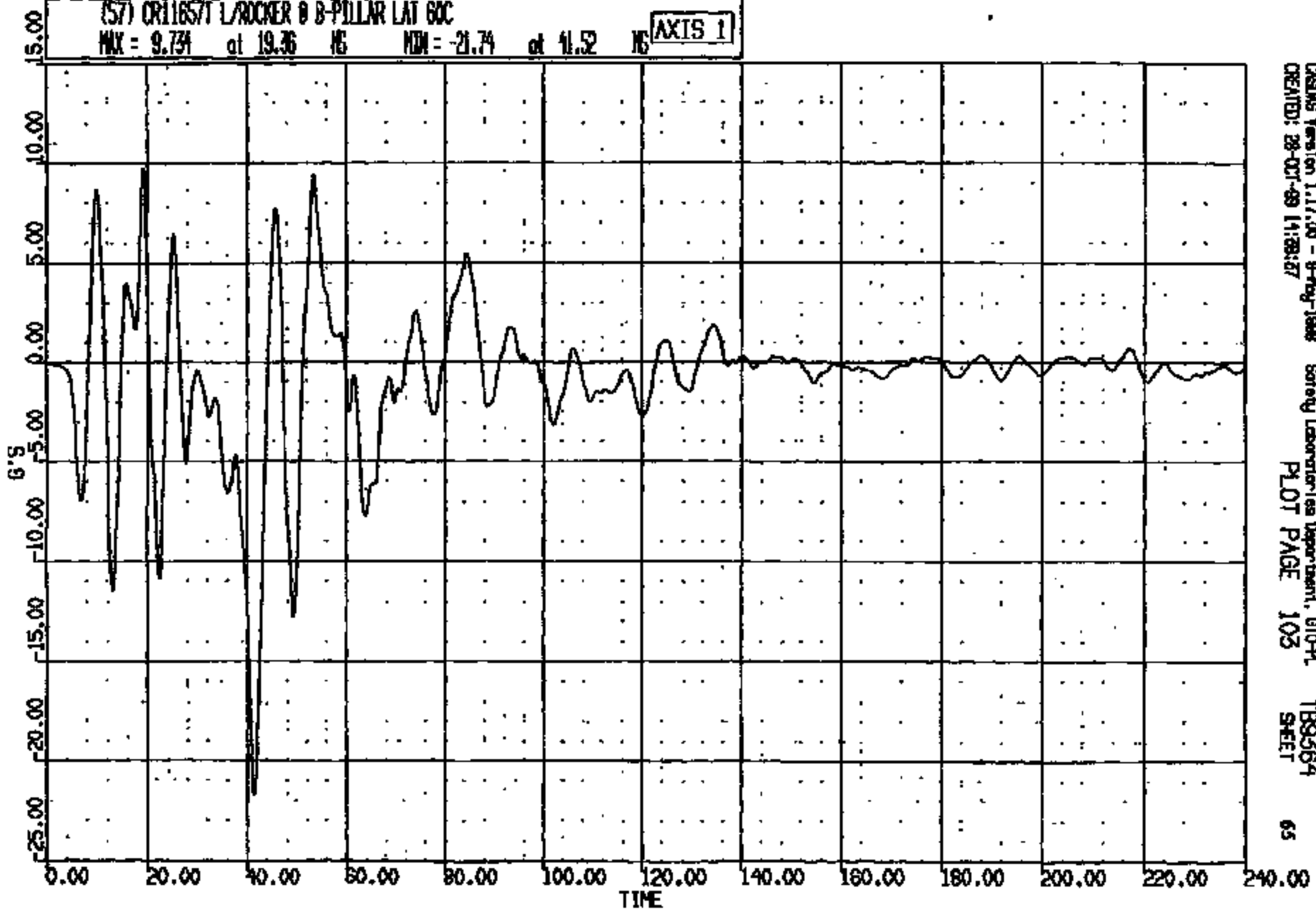
CRS Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 610-A
CREATED: 28-OCT-99 14:28:38 PLOT PAGE 102 TB9364 SHEET 64

CRTS 0011657

CR R: 11657 TO: TR9364 DATE: 991028 15:28:32
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(57) CR11657 L/ROCKER @ B-PILLAR LAT 60C
MAX = 9.734 at 19.36 NG MIN = -21.74 at 41.52 NG

AXIS 1



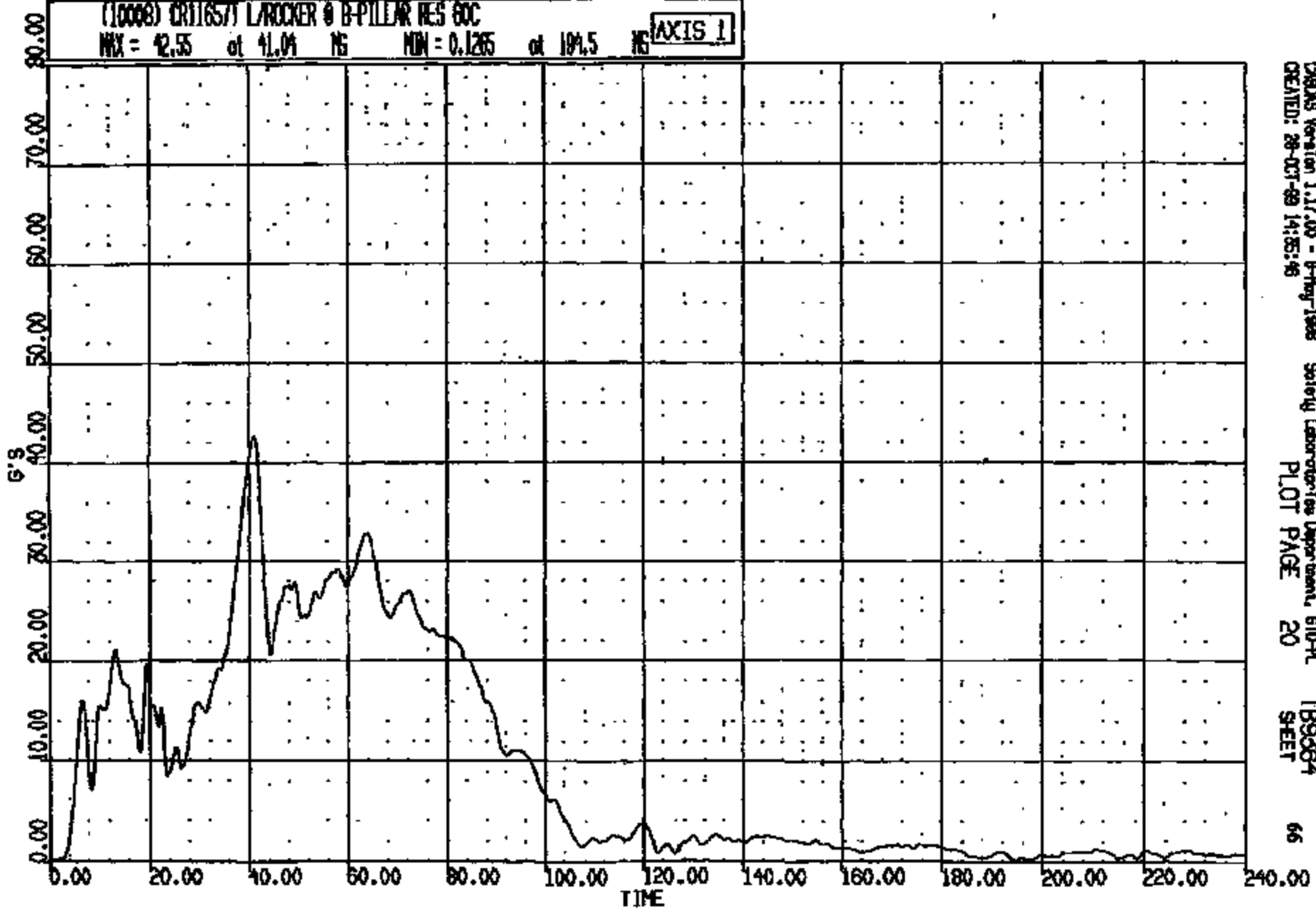
CASYS Version 1.17.00 - 9-May-1998 Safety Laboratories Department, 610-PL TR9364
CREATED: 28-OCT-99 14:28:27 PLOT PAGE 103 SHEET 65

CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 15:20:52
2000 D-188

(10008) CRT1657 L/ROCKER @ B-PILLAR RES 60C
MAX = 42.55 at 41.04 NS MIN = 0.1265 at 104.5 NS

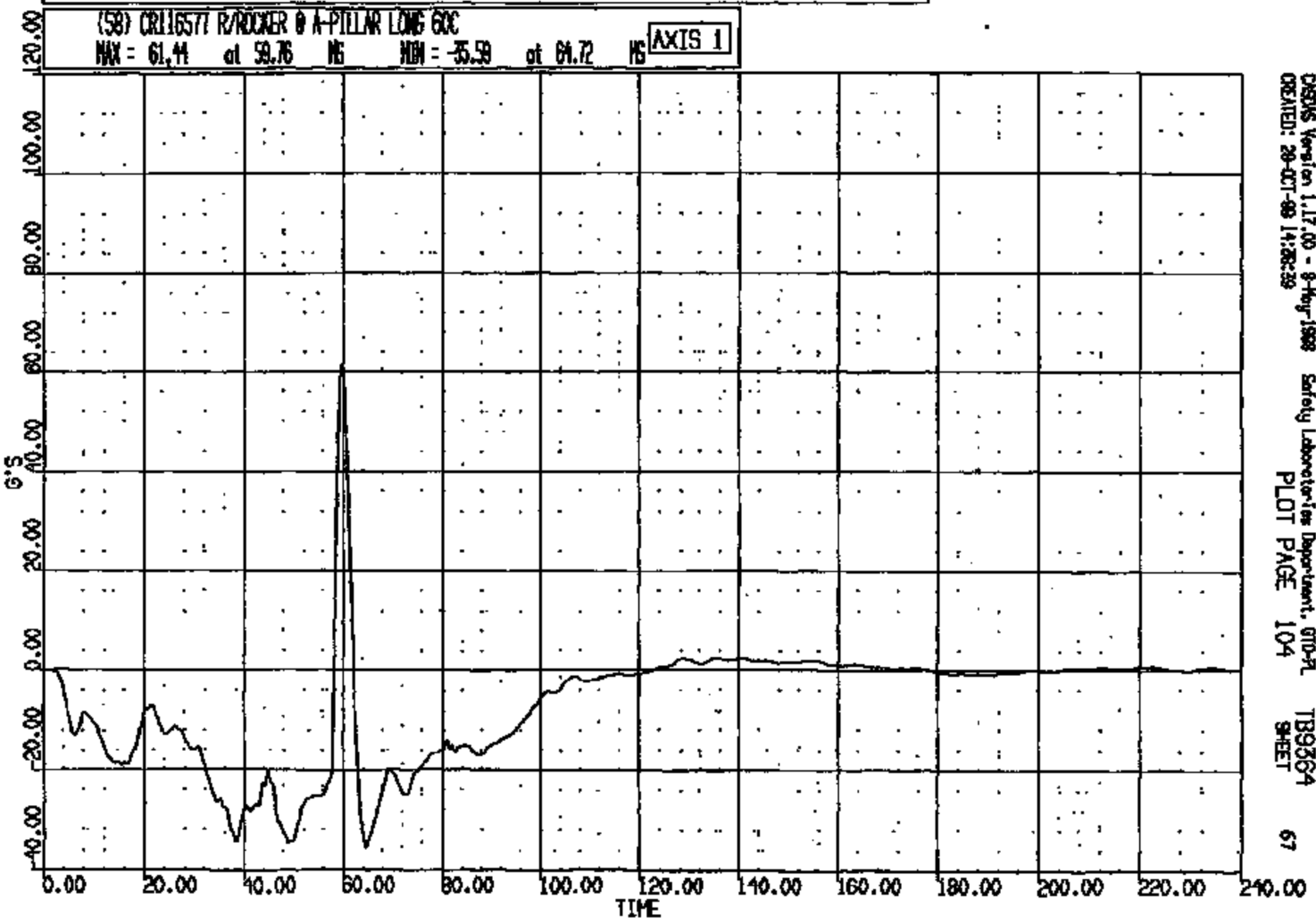
AXIS 1



CHAS Version 1.17.00 - P-Hog-1888 Safety Laboratories Department, 610-PL TB9364
CREATED: 28-OCT-99 14:55:46 PLOT PAGE 20 SHEET 66

CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 991028 13:26:32
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DSDMS Version 1.17.00 - 8-May-1998 Safety Laboratory Department, GTO-PL
CREATED: 29-OCT-99 14:28:39 PLOT PAGE 104 TB9364 SHEET 67

CR11657

CR R: 11657 TO: TB9364 DATE: 991029 15:28:32

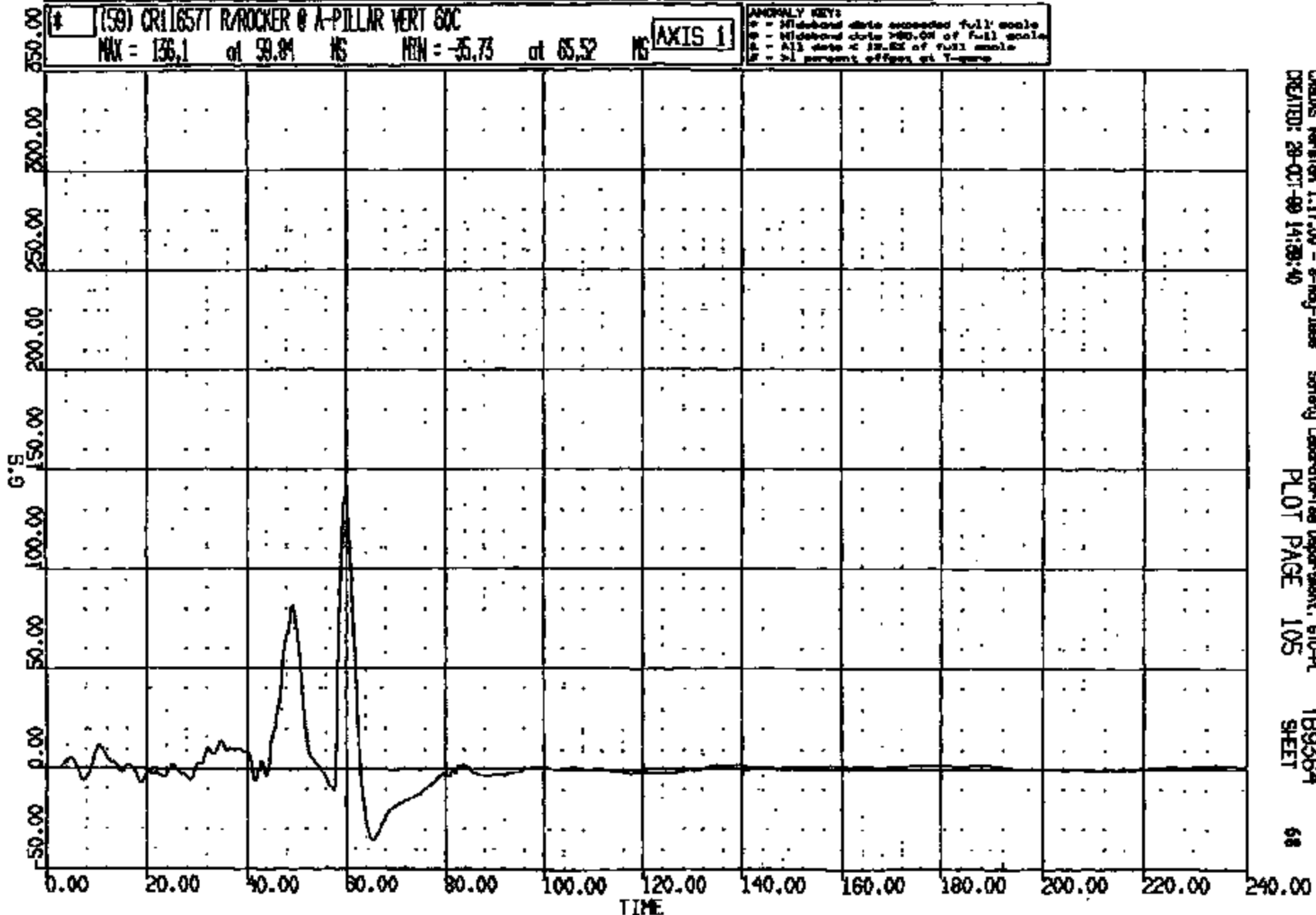
2000 D-188

(59) CR11657T R/ROCKER @ A-PILLAR VERT 60C

MAX = 136.1 at 59.81 MS MIN = -35.73 at 65.52 MS

AXIS 1

ANOMALY KEY:
* = Midboard data exceeded full scale
= Midboard data >90.0% of full scale
+ = All data < 25.0% of full scale
- = 21 percent offset at Y-gate



CRAMS Version 1.17.00 - 8-May-1998
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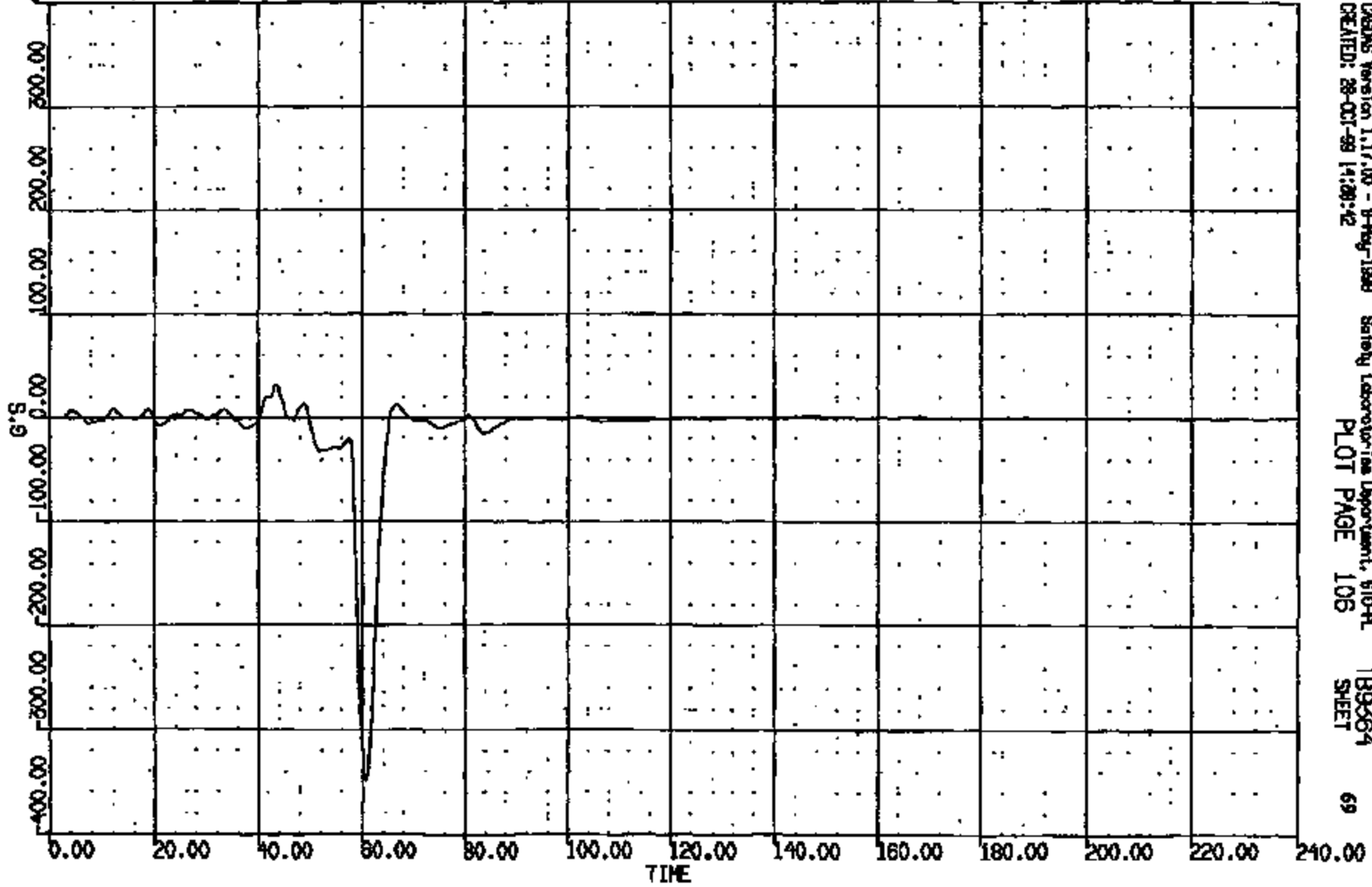
TB9364
SHEET

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CRIS 0011657

CR #: 11657 TD: TB9364 DATE: 991028 13:28:52
2000 D-186

(60) CR11657T R/DOCKER @ A-PILLAR LAT 60C
MAX = 31.78 at 43.44 MS MIN = -350.3 at 60.72 MS **AXIS 1**

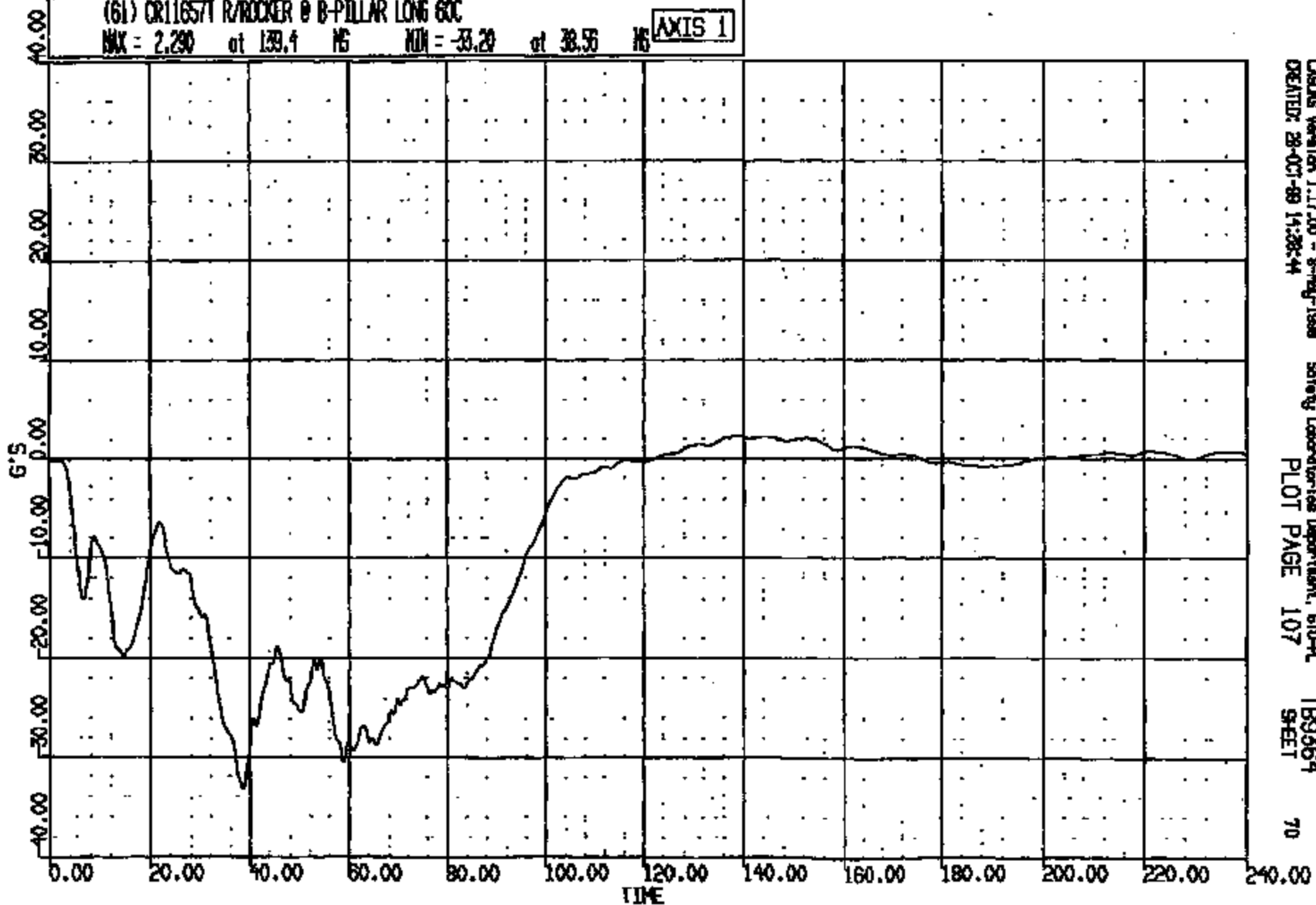


DAQS Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 670-FL TB9364
CREATED: 28-OCT-99 14:28:42 PLOT PAGE 106 SHEET 69

CRTS 0011657

CR R: 11657 TO: TB9364 DATE: 091028 15:26:32
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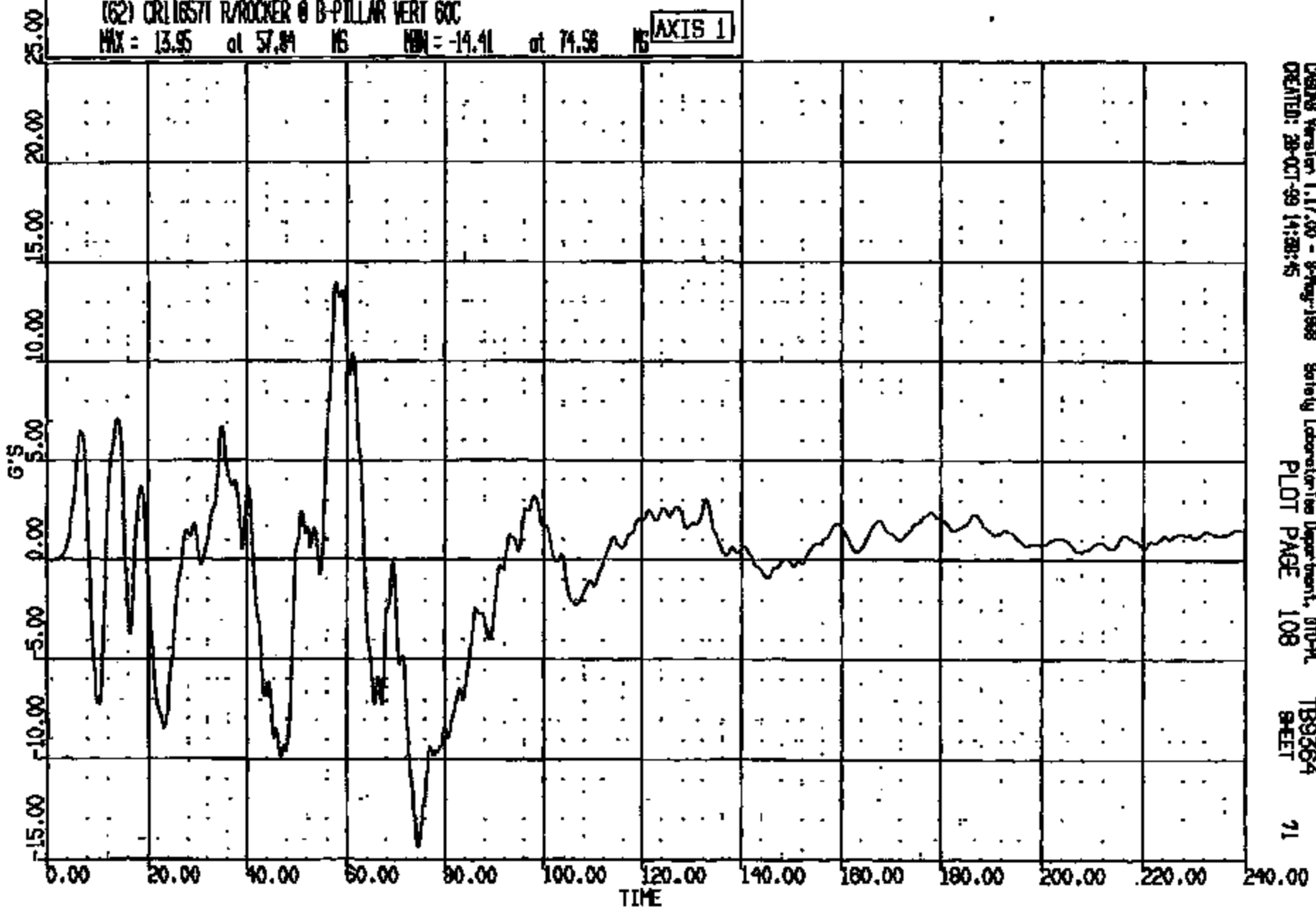
(61) CR11657T R/ROCKER @ B-PILLAR LONG 60C
MAX = 2.290 at 139.4 MS MIN = -33.20 at 38.56 MS **AXIS 1**



CR R: 11557 TO: T89364 DATE: 991028 13:26:52
2000 D-188

(62) CR116571 R/ROCKER @ B-PILLAR VERT 60C
MAX = 13.95 at 57.84 MS MIN = -14.41 at 74.58 MS

AXIS 1

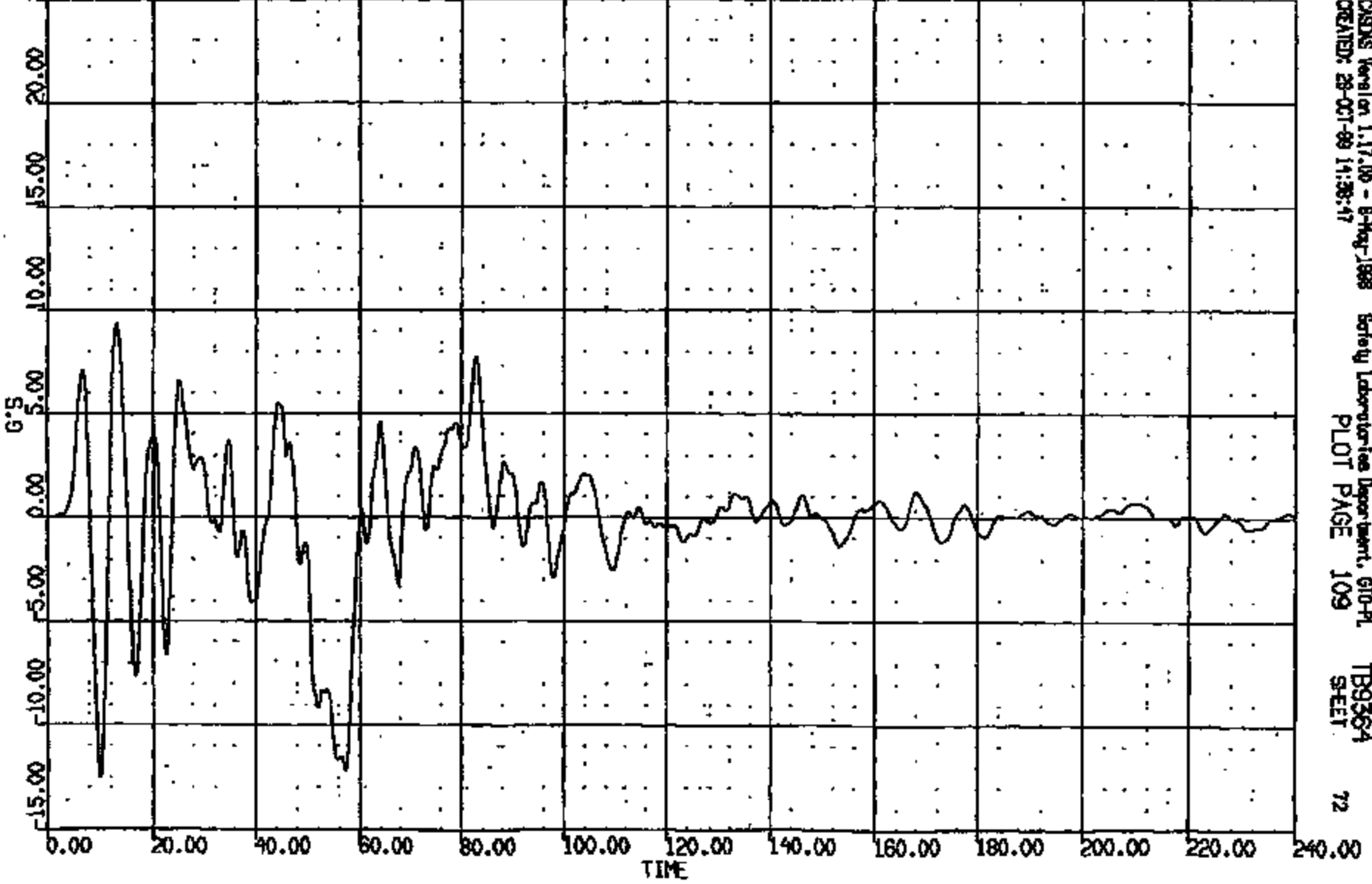


CRS08 Version 1.17.00 - 8-Aug-1998 Safety Laboratories Department, 870-PL
CREATED: 28-OCT-99 14:30:45 PLOT PAGE 108 T89364
SHEET 71

CRIS 0011657

CR R: 11857 TO: TB9364 DATE: 891028 15:26:32
2000 D-188

(63) CR118571 R/ROCKER @ B-PILLAR LAT 60C
MAX = 9.348 at 13.20 MS MIN = -12.54 at 10.08 MS **AXIS 1**



DISKS level on 1.17.00 - 8-May-1988 Safety Laboratories Department, 610-PL
CREATED: 28-OCT-89 14:38:47 PLOT PAGE 109 TB9364 SHEET 72

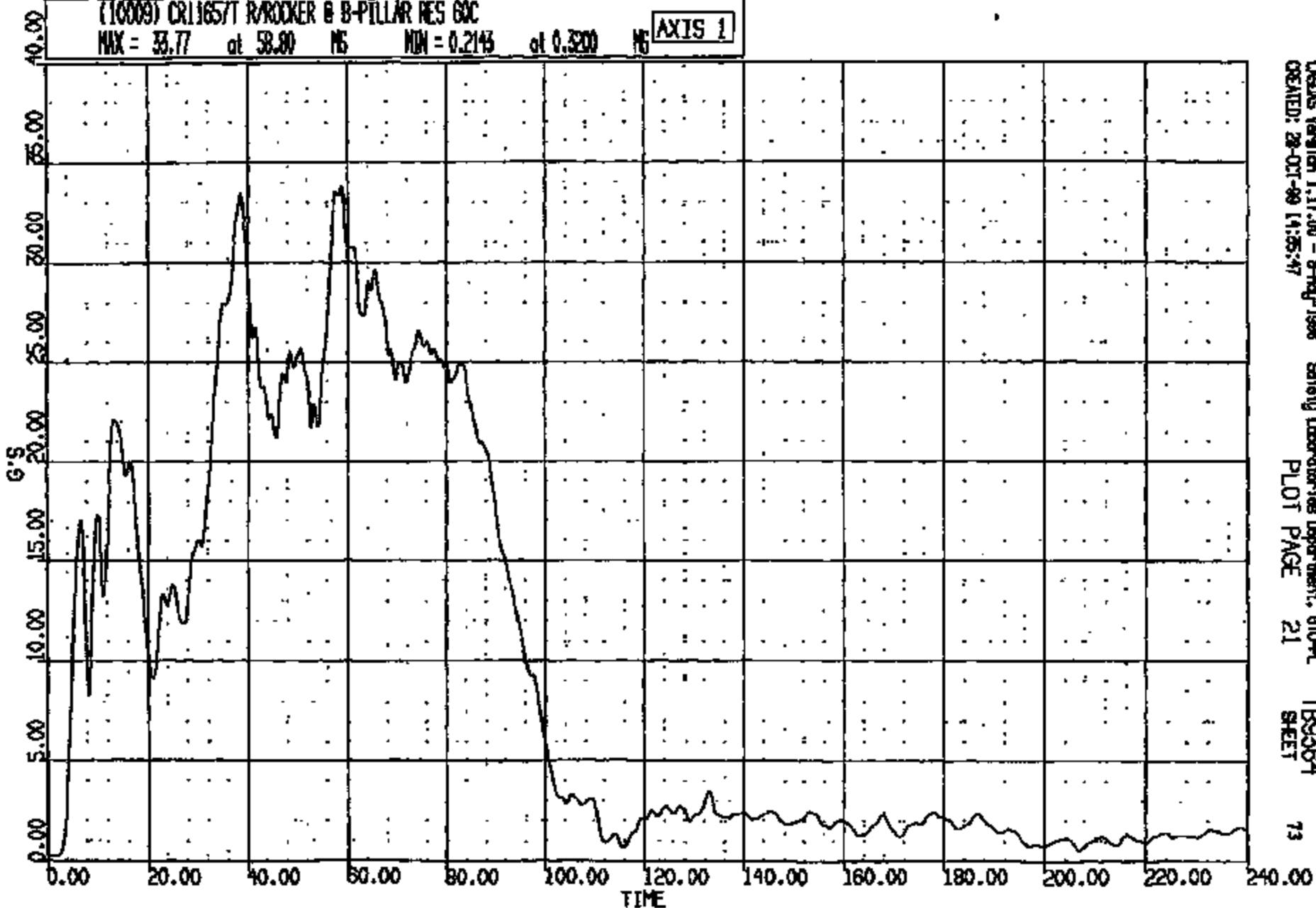
CRIS 0011657

CR R: 11857 TO: TR9364 DATE: 091028 13:28:32
2000 D-188

(10009) CR11657T R/ROCKER @ B-PILLAR NES GC

MAX = 33.77 at 58.80 NS MIN = 0.2143 at 0.3200 NS

AXIS 1



CRSIS Version 1.17.00 - 8-May-1998
CREATED: 28-OCT-99 14:55:47

Safety Laboratories Department, 6104L
PLOT PAGE 21

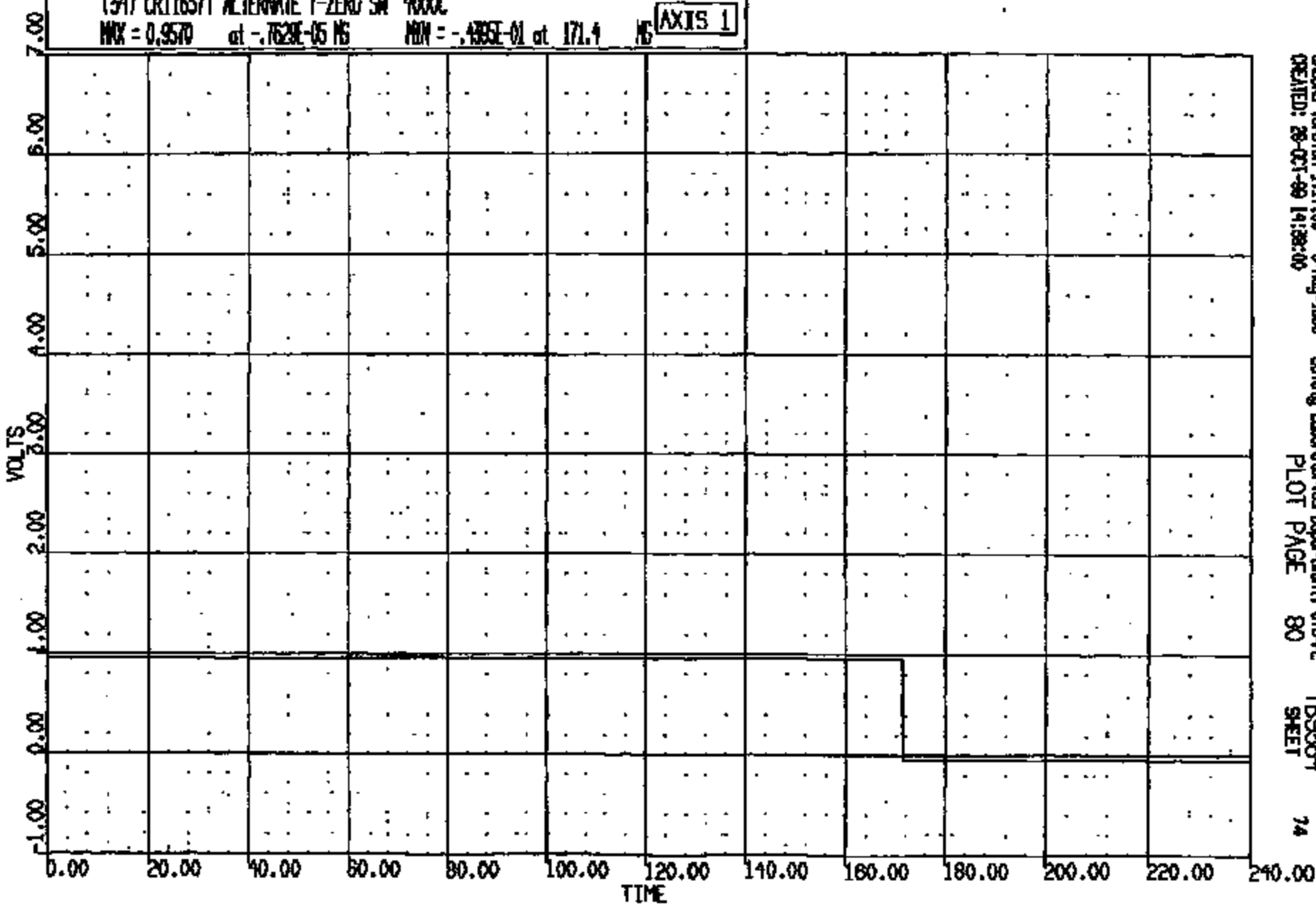
TR9364
SHEET

73

CRIS 0011657

CR R: 11657 TO: TB9364 DATE: 991029 13:26:52
2000 0-186

(34) CRT11657T ALTERNATE T-ZERO SM 4000C
MAX = 0.9570 at -.7620E-05 MS MIN = -.4395E-01 at 171.4 MS AXIS 1

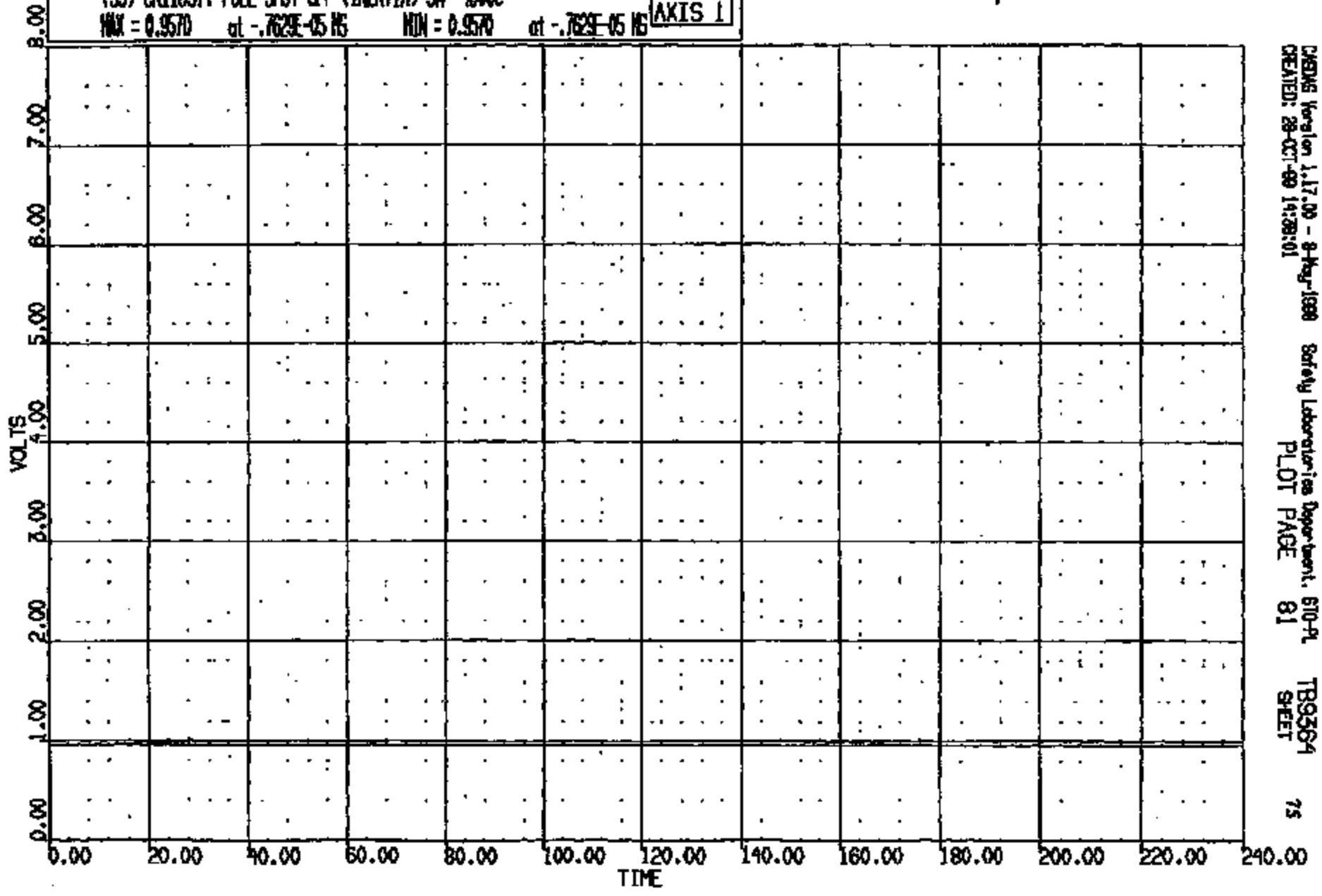


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Safety Laboratories Department, STD-PL
PLOT PAGE 80
TB9364
SHEET 74

CRTS 0011657

CR R: 11657 TO: TR9564 DATE: 991028 13:28:32
2000 D-198

(35) CR116577 FUEL SHUT OFF (INERTIA) SH 4000
MAX = 0.9570 at -.7629E-05 MS MIN = 0.9570 at -.7629E-05 MS **AXIS 1**

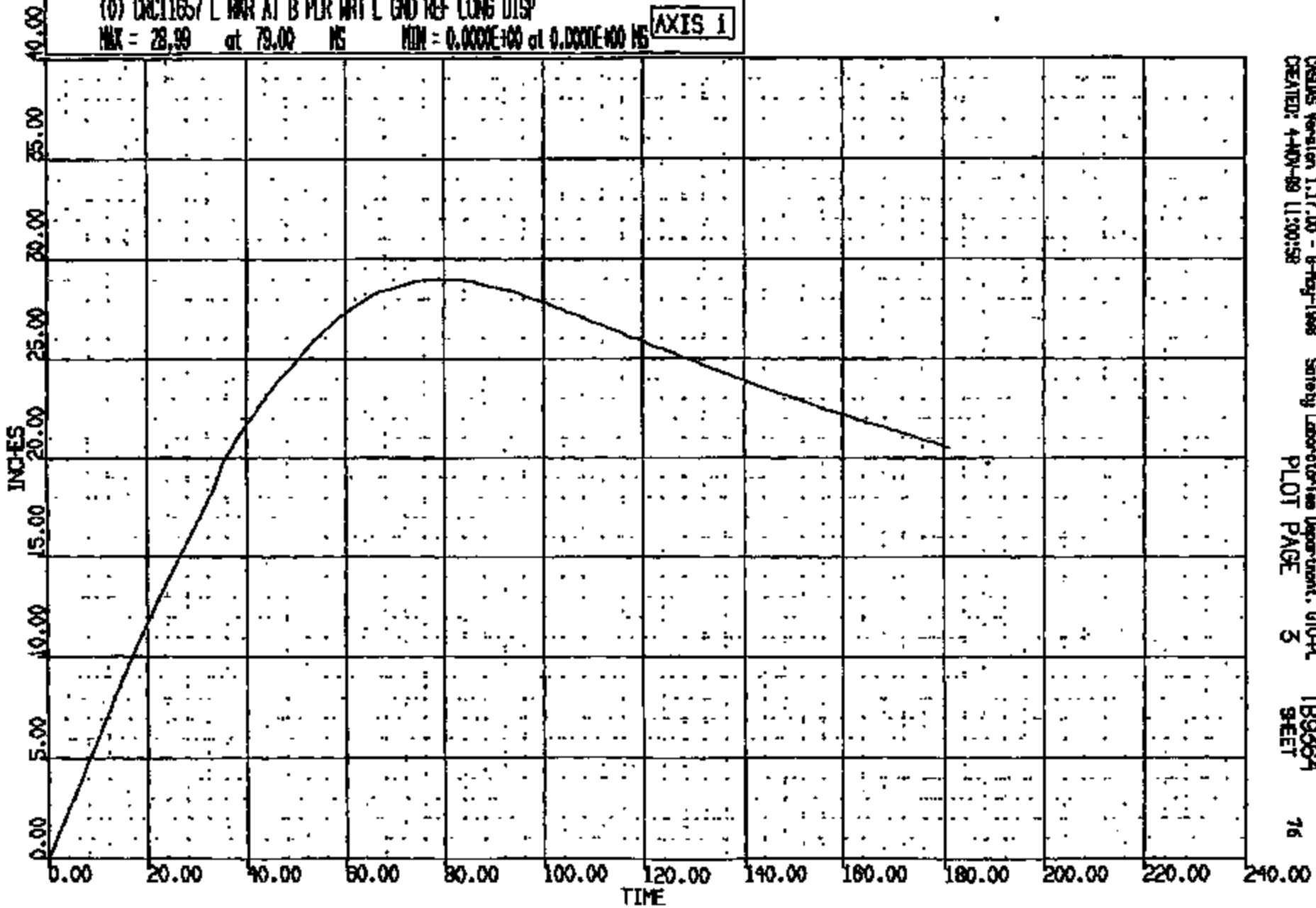


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CREATED: 28-OCT-99 14:28:01 PLOT PAGE 81 TR9564 SHEET 75

CRIS 0011657

CR R: 11657 TO: 799564 DATE: 881026 13:26:32
2000 D-188

(0) DRC11657 L WRR AT B PLR WRT L GND REF LONG DISP
MAX = 28.99 at 79.00 NS MIN = 0.000E+00 at 0.000E+00 NS **AXIS 1**

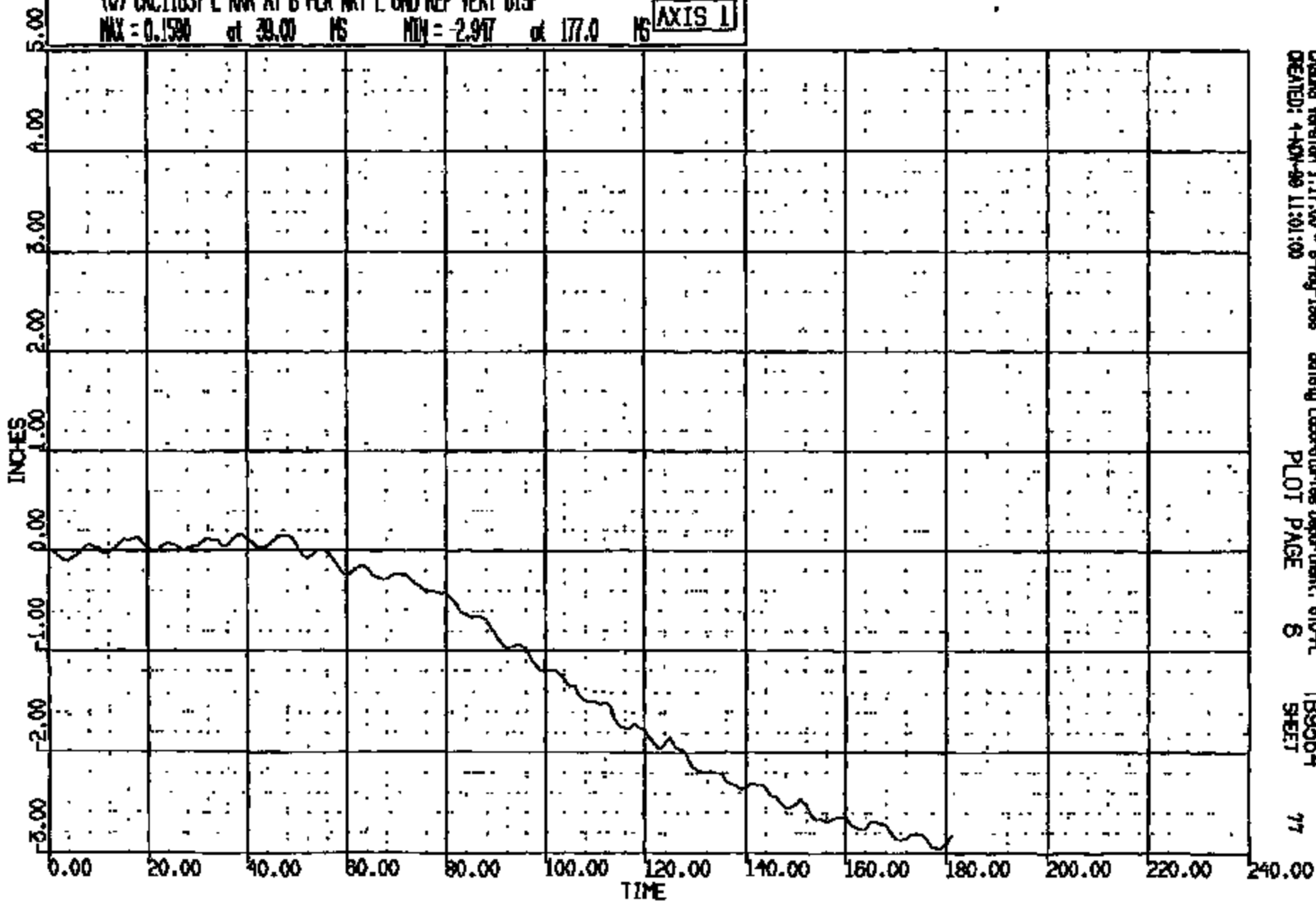


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CREATED: 4-NOV-88 11:00:58 PLOT PAGE 3 SHEET 76

CRTS 0011657

CR #: 11657 TO: T89564 DATE: 091026 18:26:52
2000 D-166

(0) CR:11657 L RFR AT B FLR WRT L GND REF VERT DISP
MAX = 0.1580 at 39.00 MS MIN = -2.917 at 177.0 MS **AXIS 1**



CRS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL TB9564
CREATED: 4-NV-99 11:01:00 PLOT PAGE 6 SHEET 77

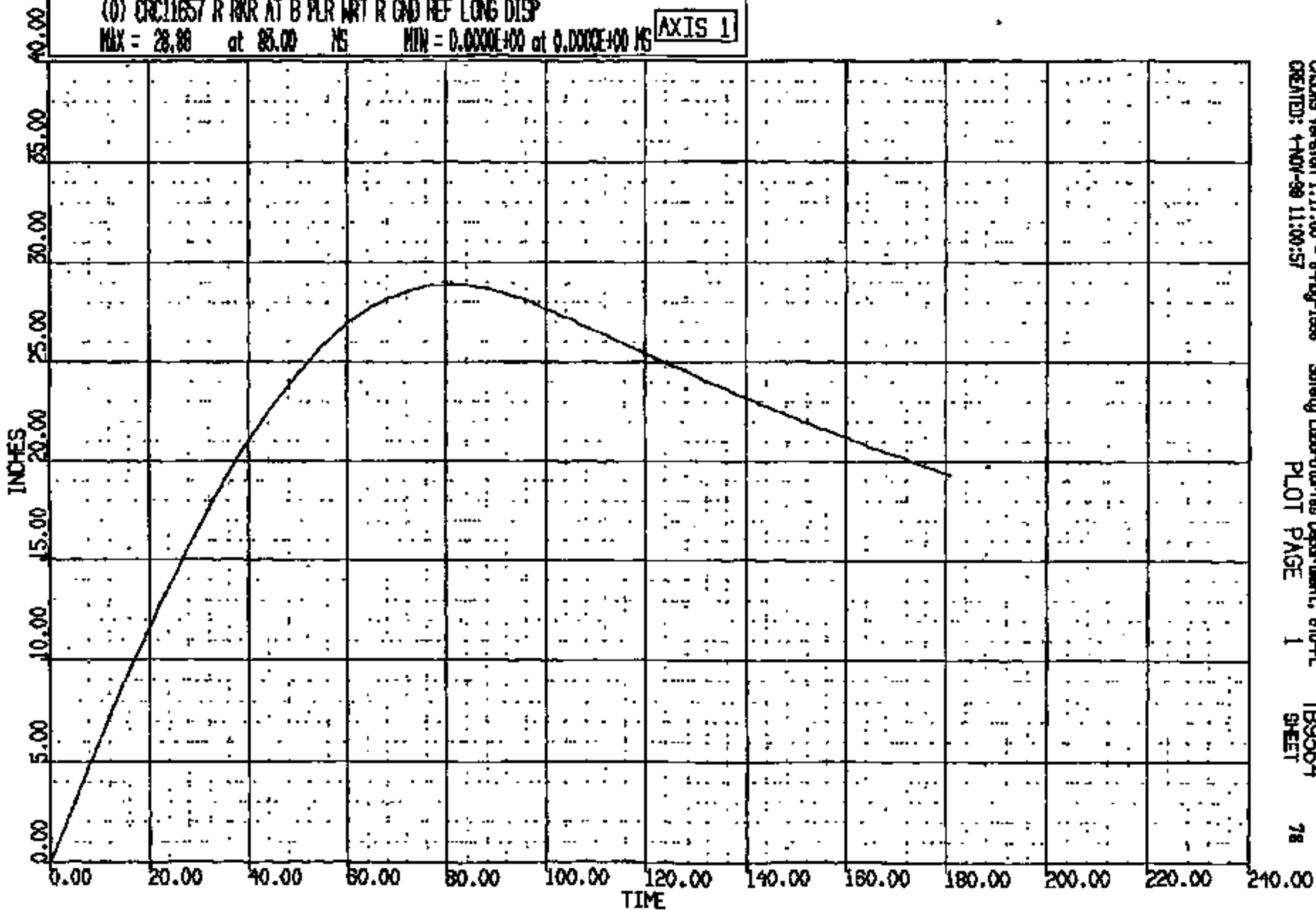
CRIS 0011657

CR R: 11657 TO: TB9364 DATE: 991026 13:26:32
2000 D-186

(0) CR011657 R RKR AT B PLR WRT R GND REF LONG DISP

MAX = 28.88 at 83.00 MS MIN = 0.0000E+00 at 0.0000E+00 MS

AXIS 1



CASINS Version 1.17.00 - 8-May-1998
CREATED: 4-NOV-99 11:00:57

Safety Laboratories Department, STD-PL
PLOT PAGE 1

TB9364
SHEET

78

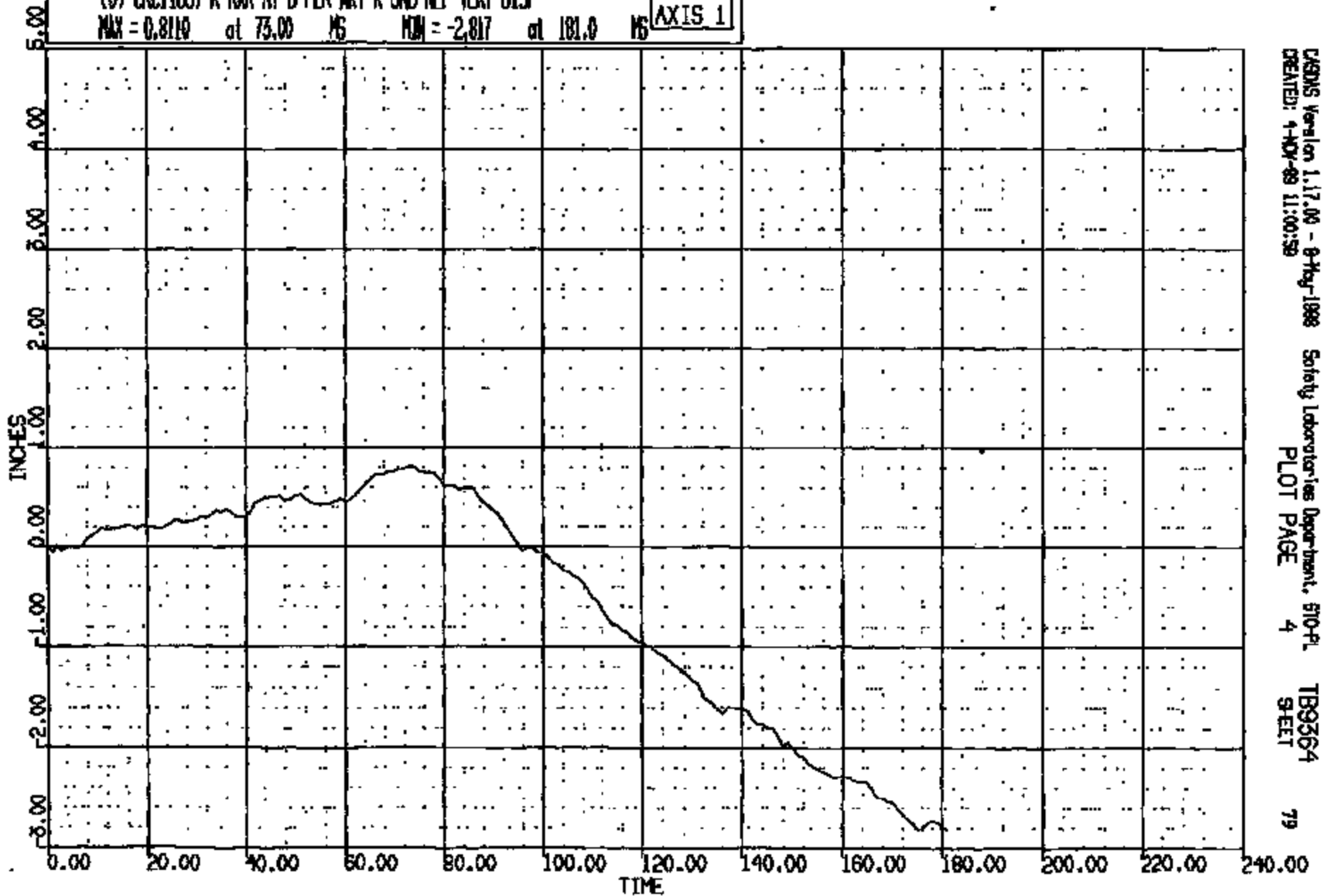
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CR R: 11657 TO: TB9364 DATE: 981026 13:26:32
2000 D-168

(0) CR011657 R ROR AT B PLR WRT R GND REF VERT DISP

MAX = 0.8119 at 73.00 MS MIN = -2.817 at 181.0 MS

AXIS 1



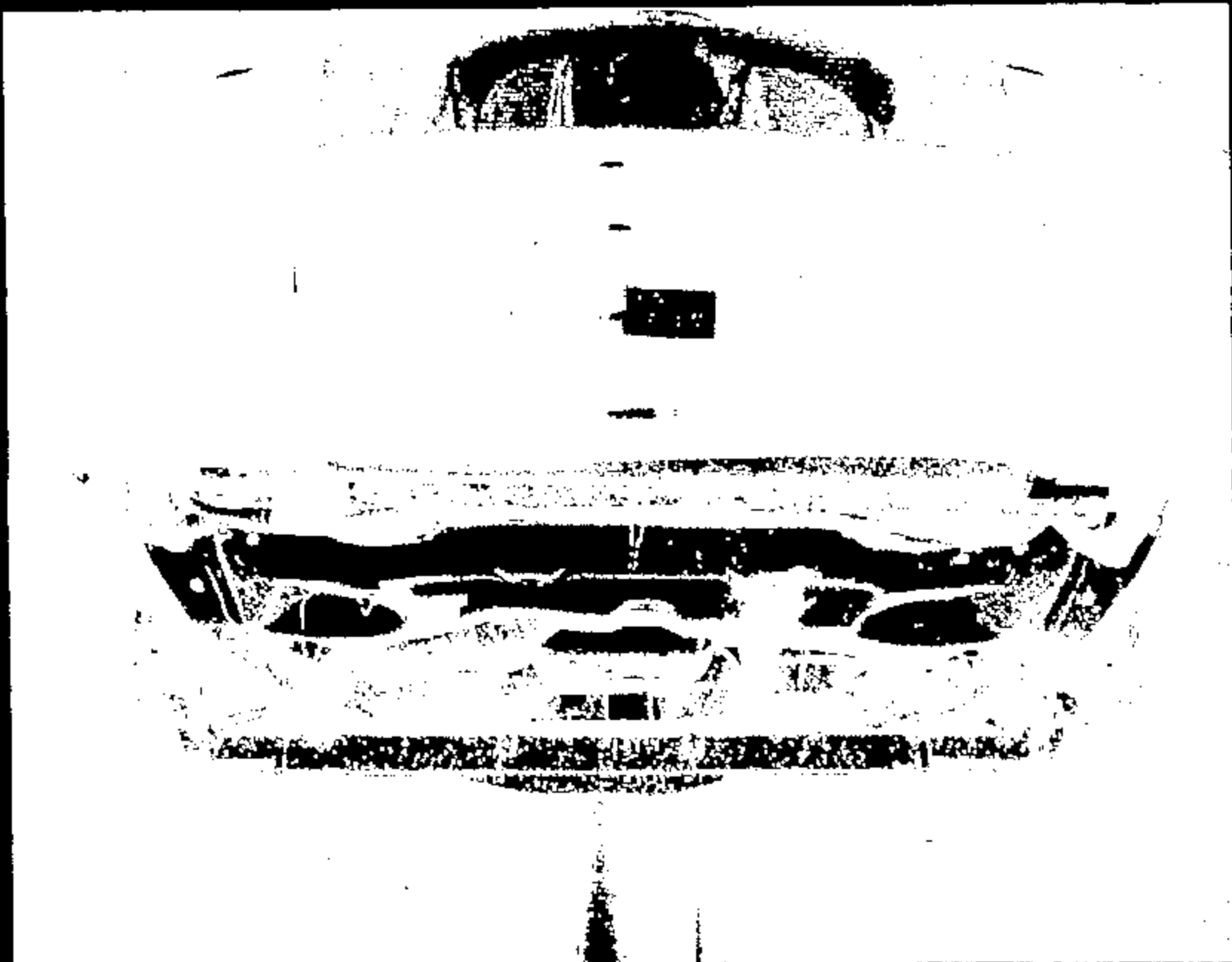
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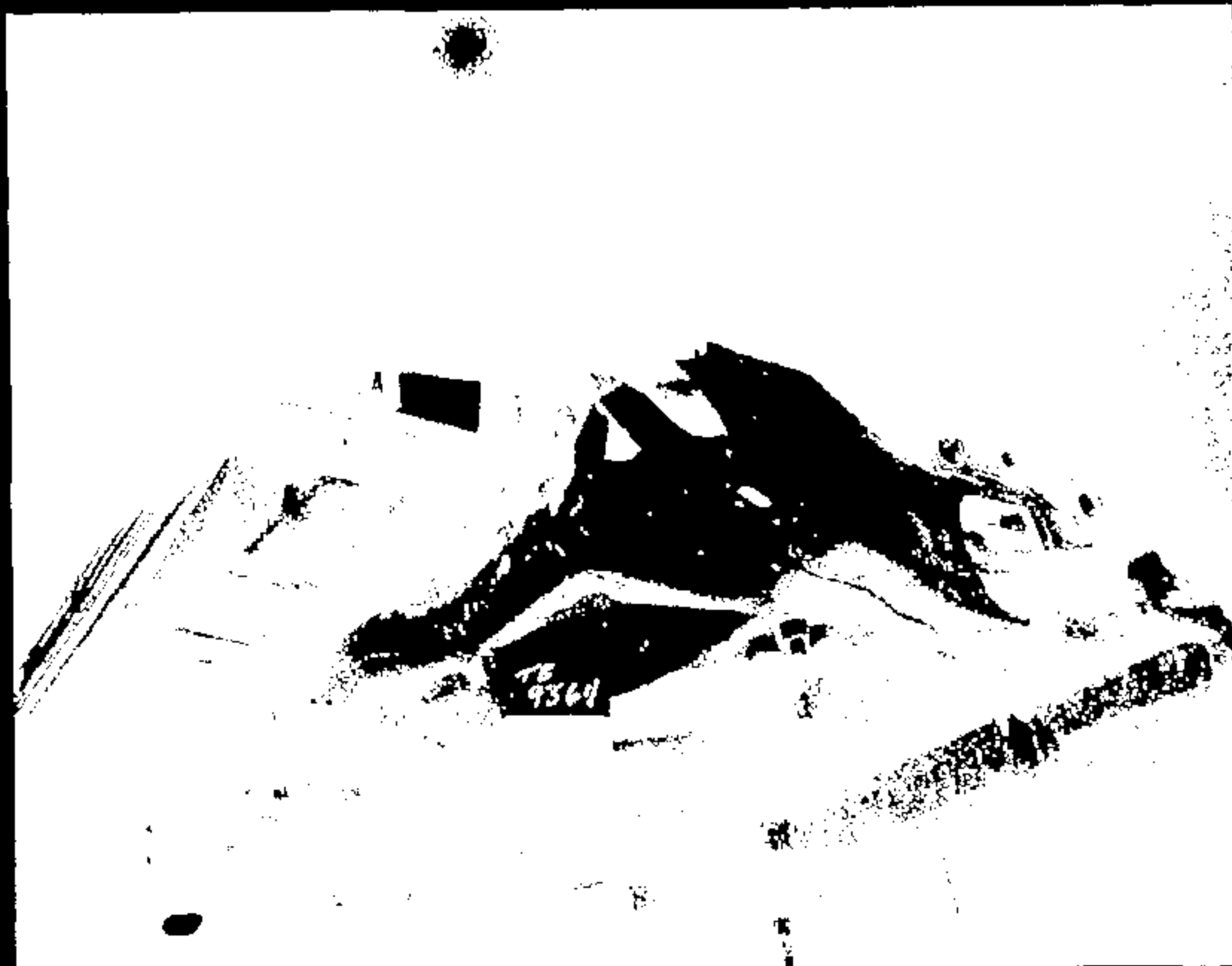
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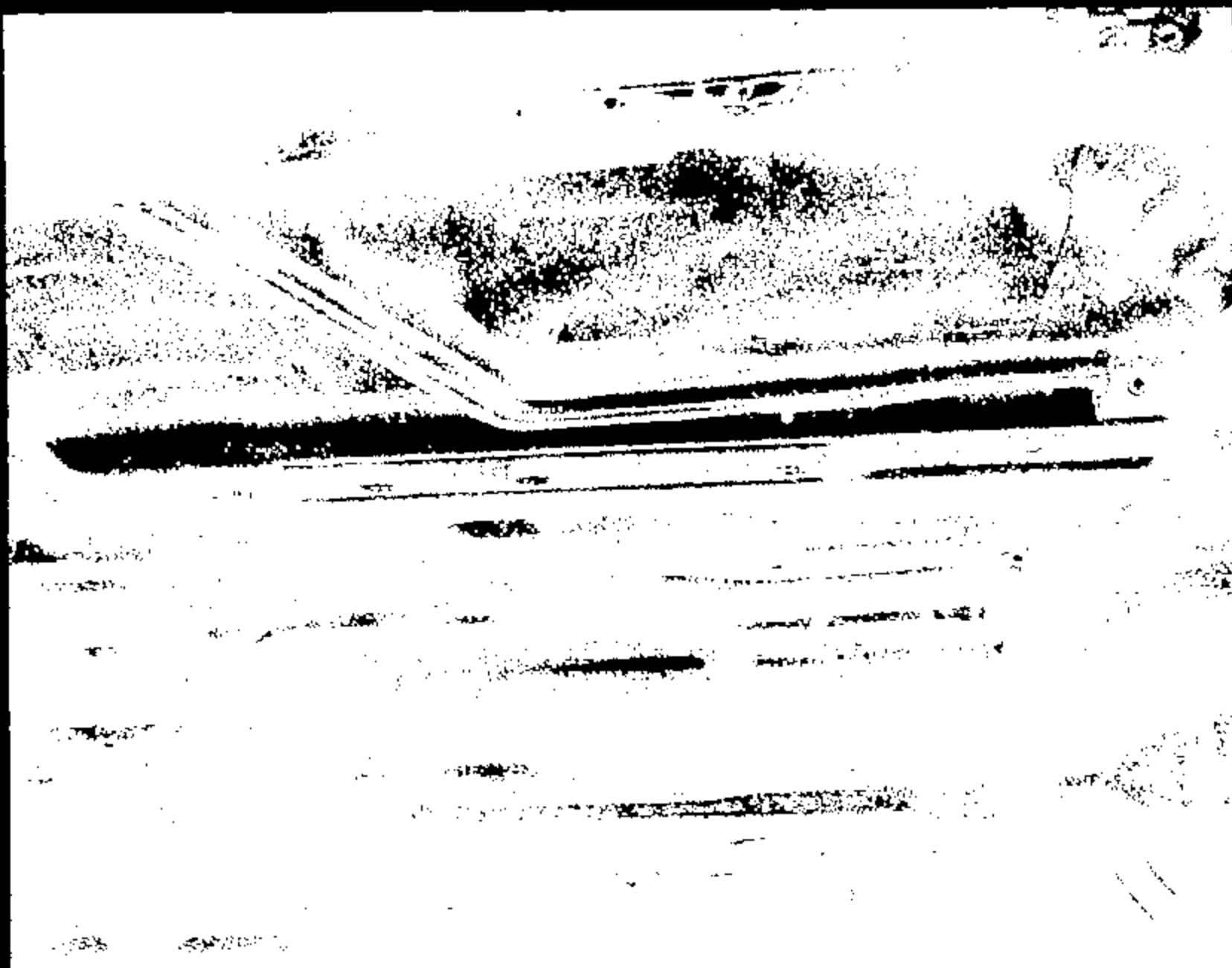
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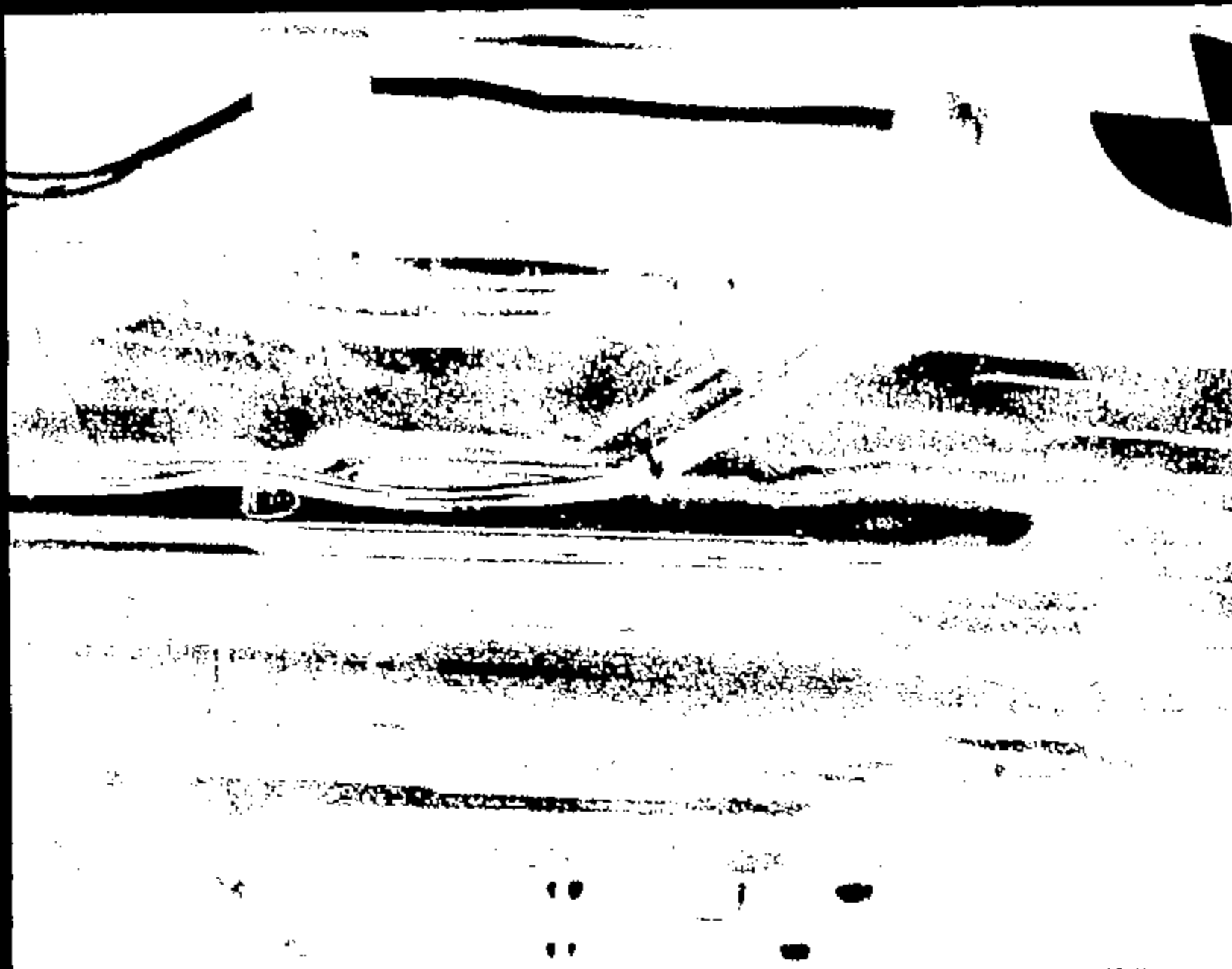


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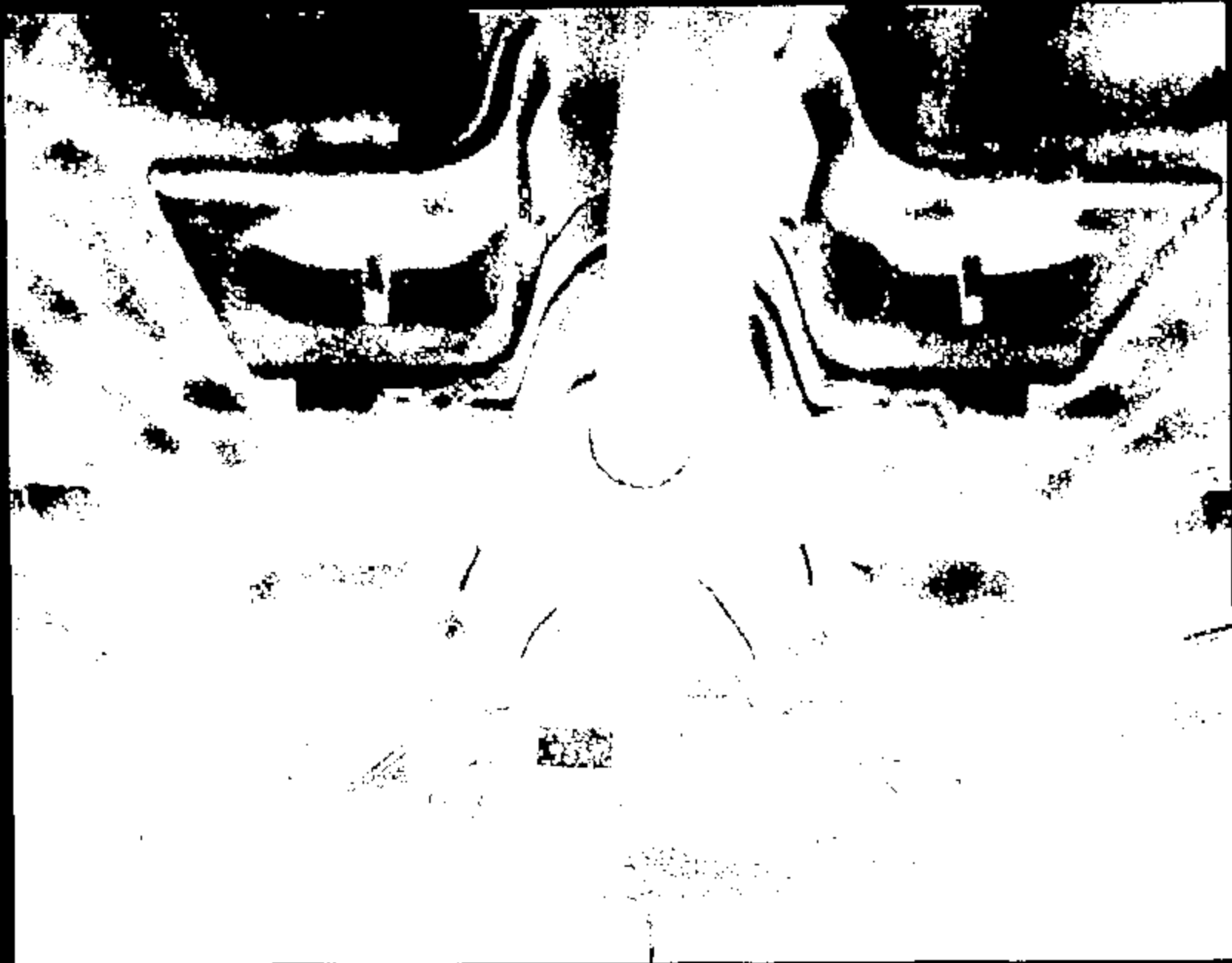
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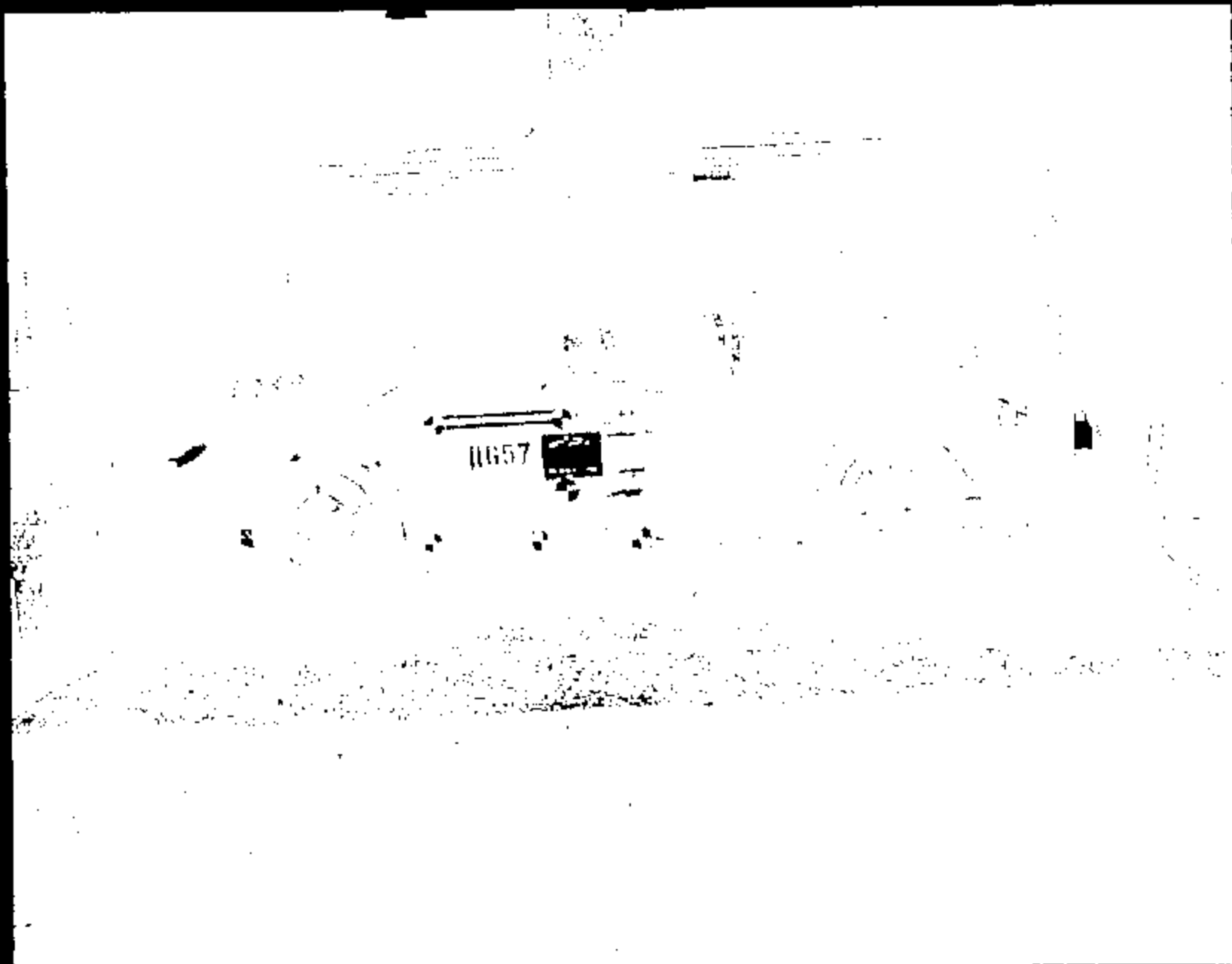
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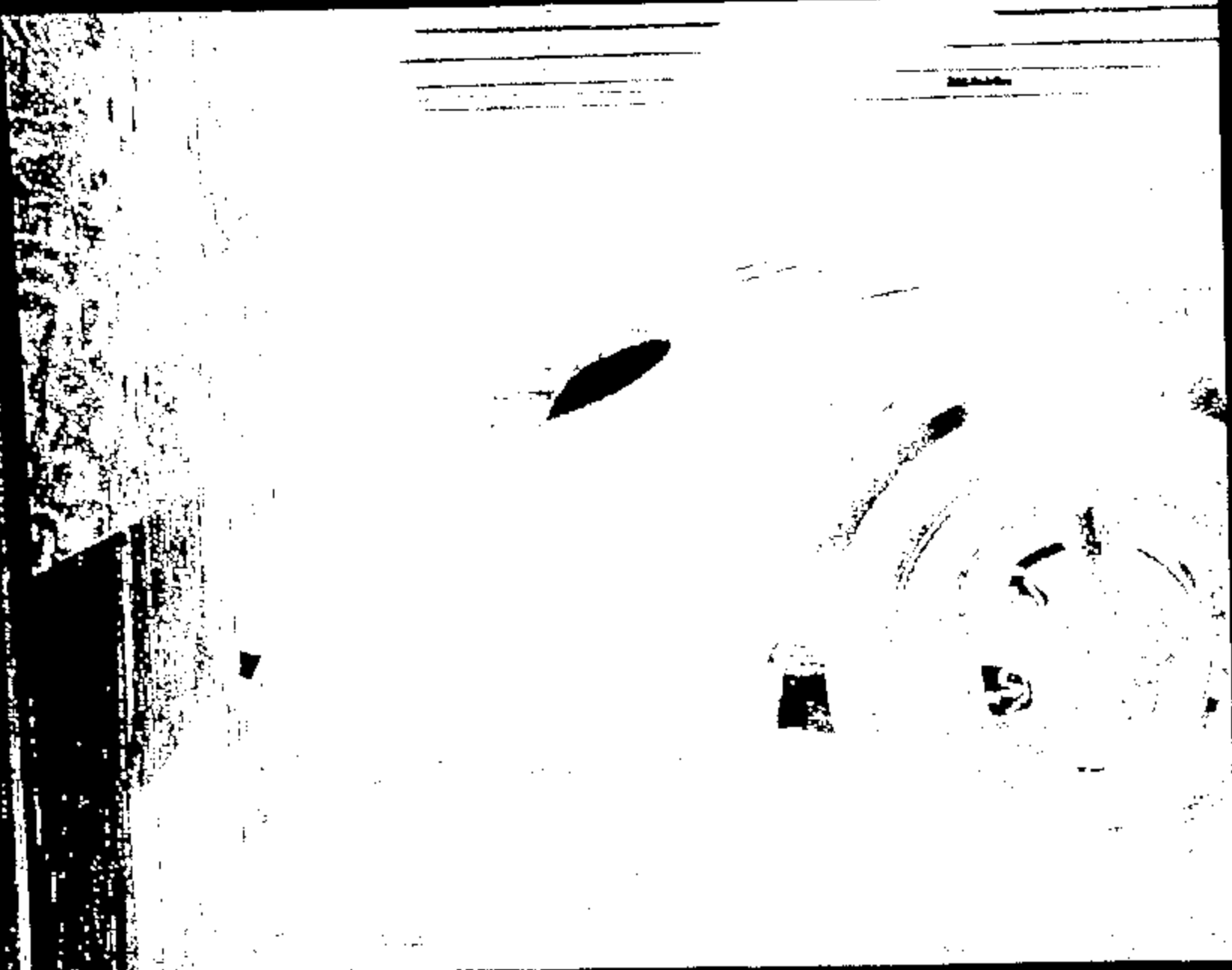


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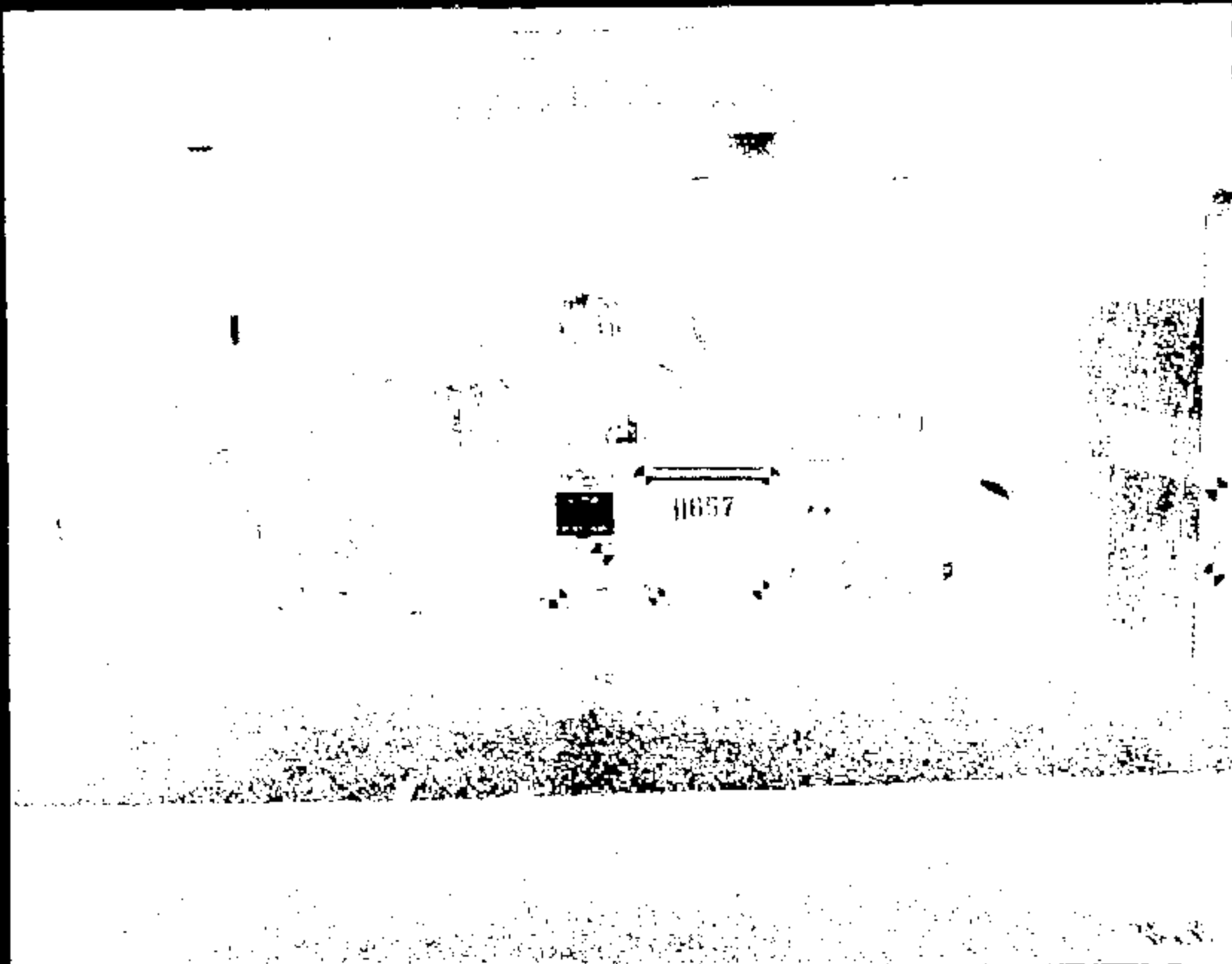
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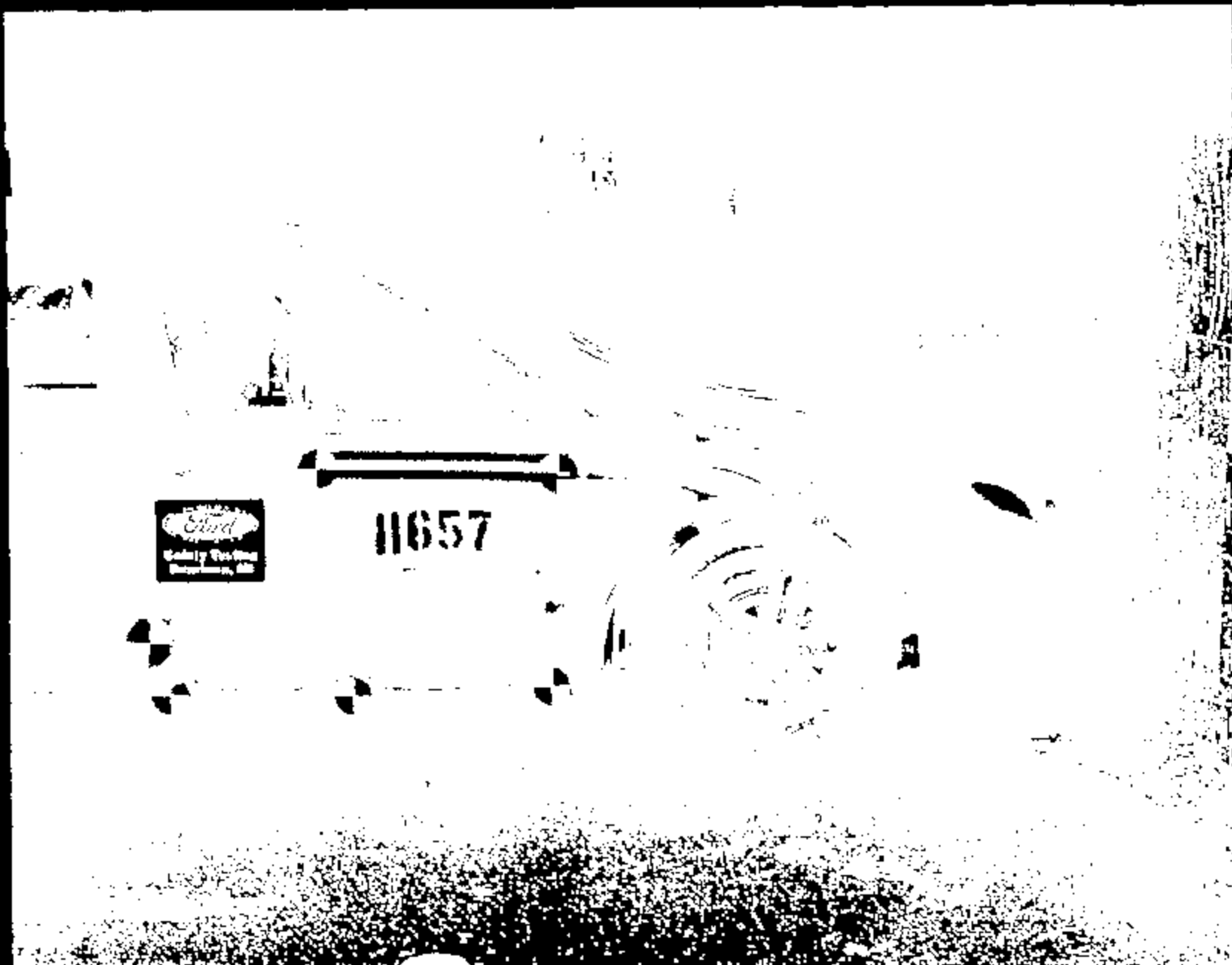
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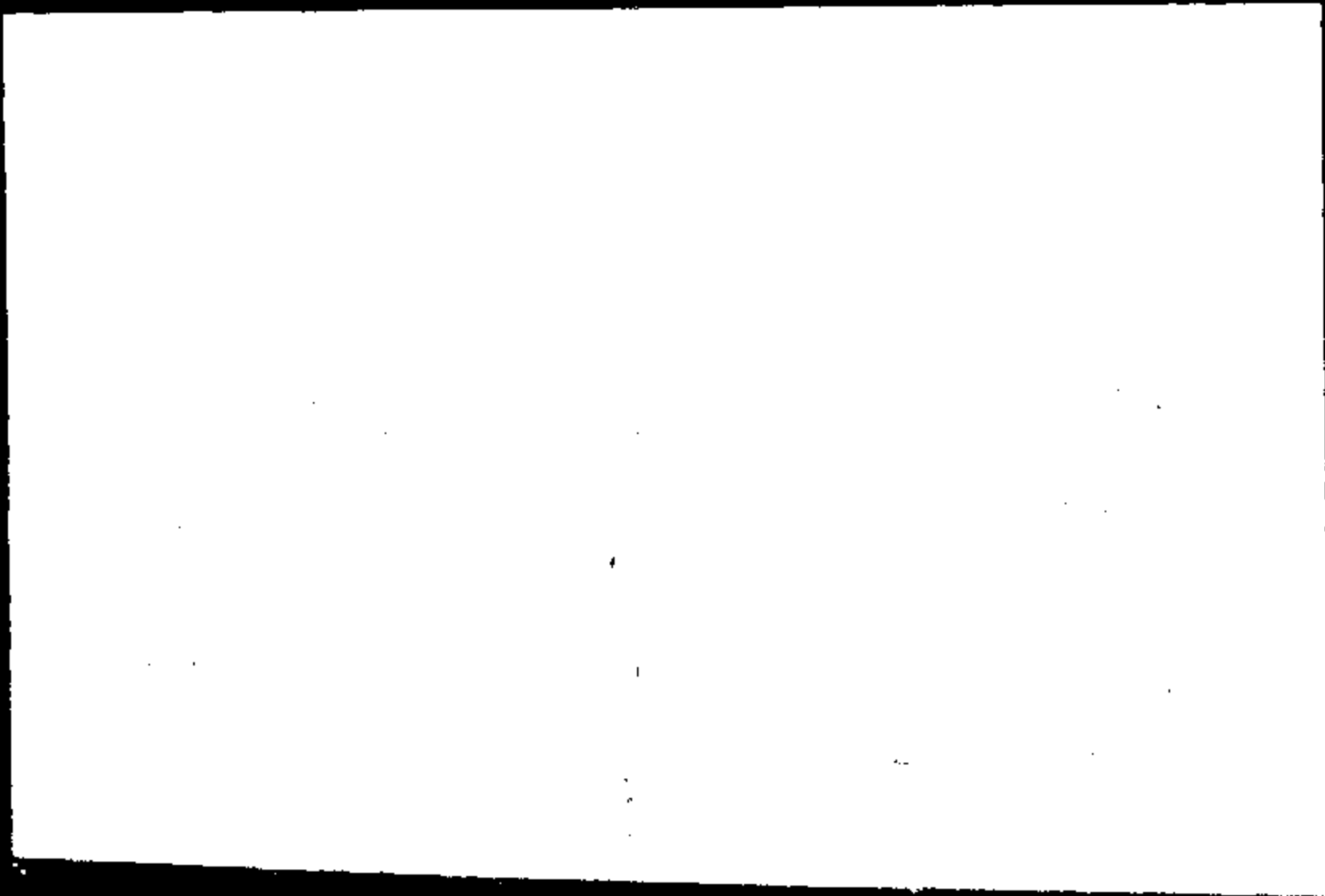


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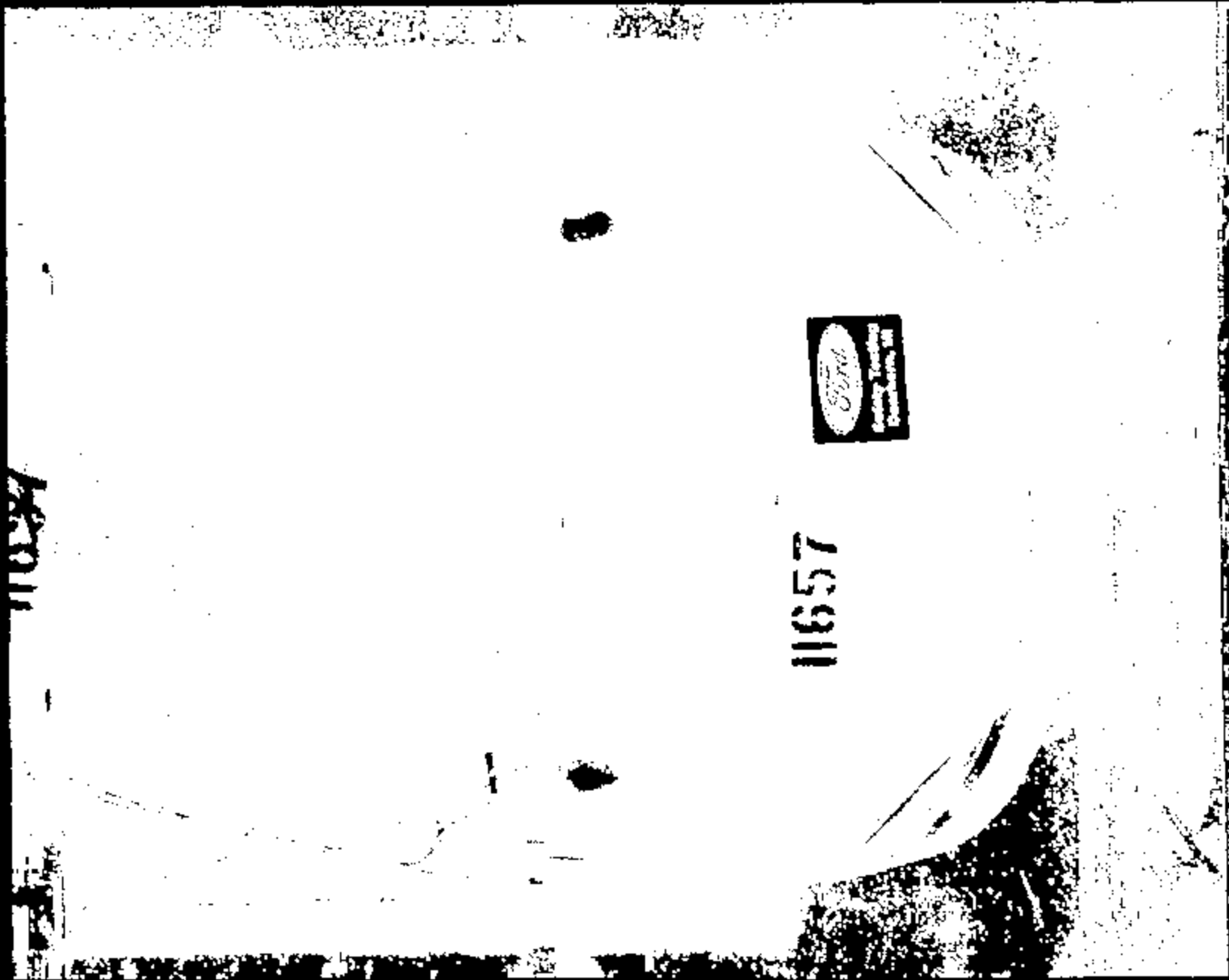
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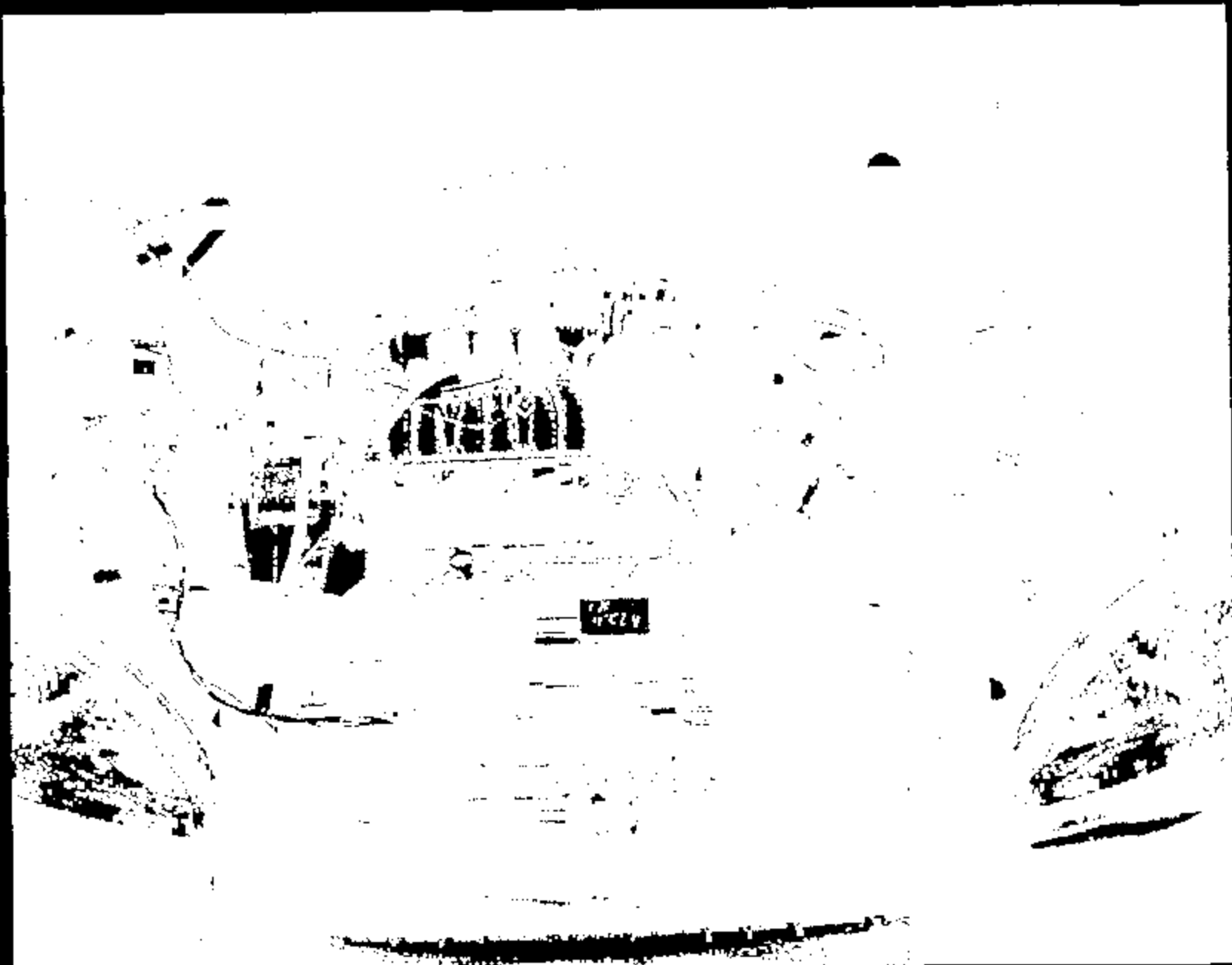
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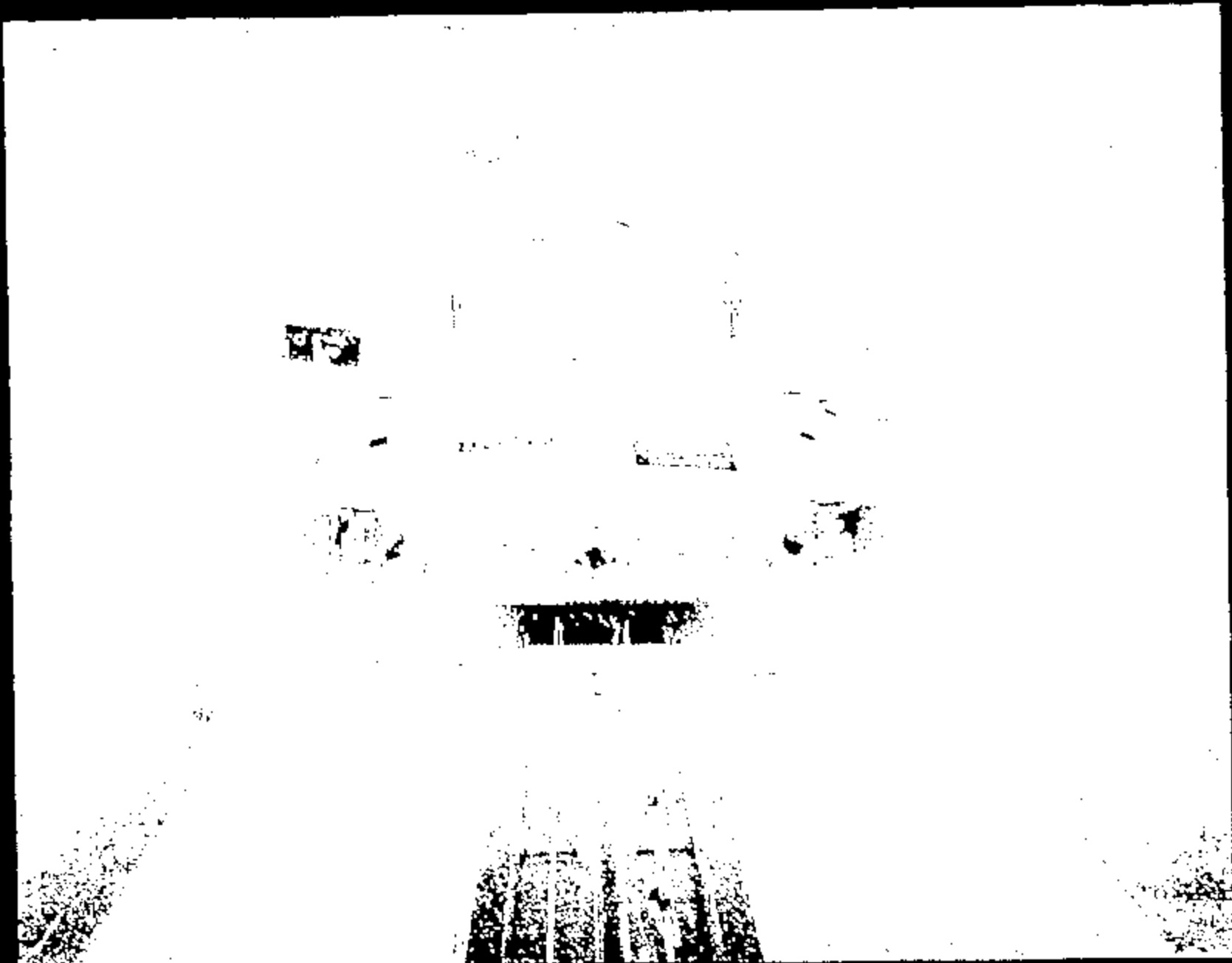
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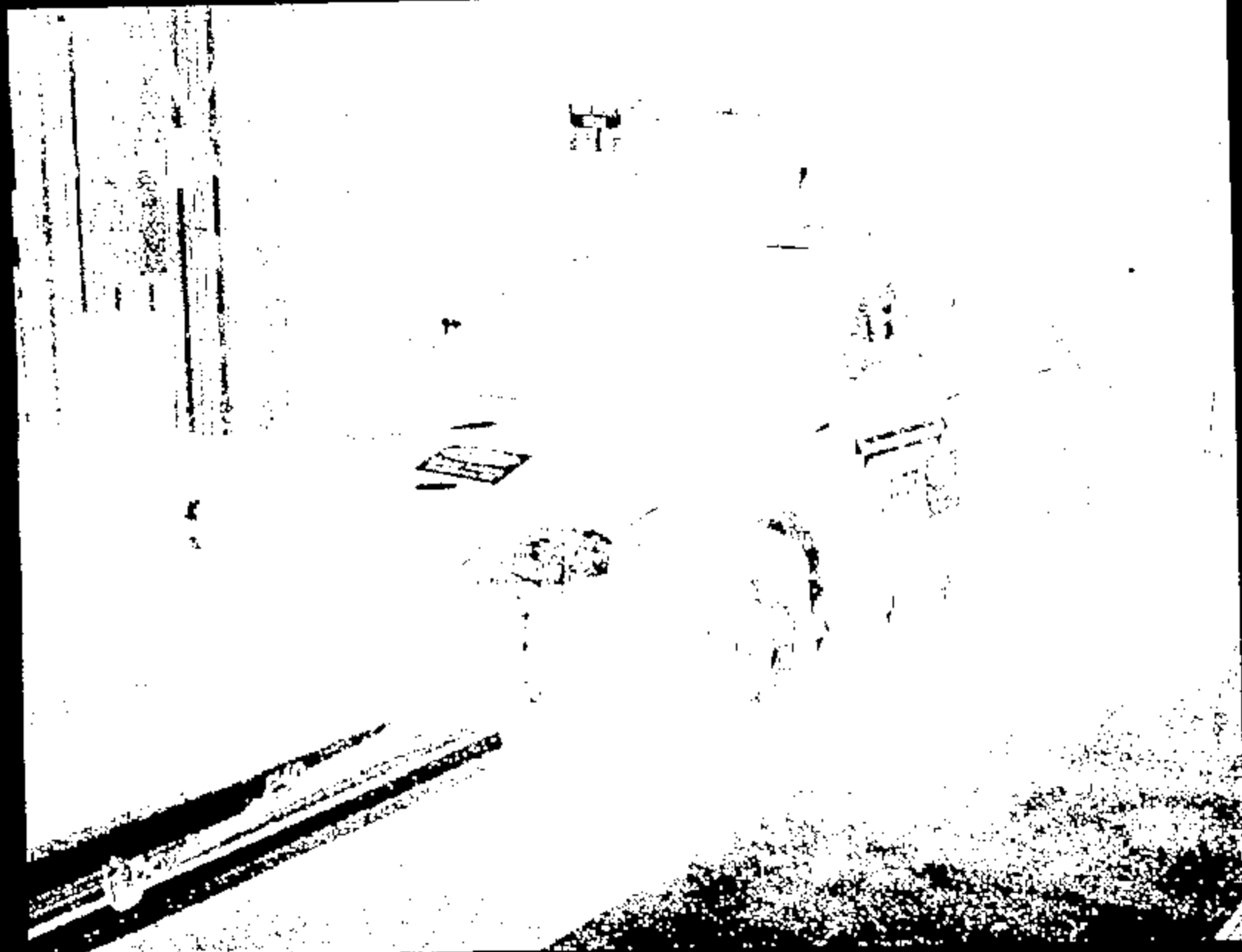
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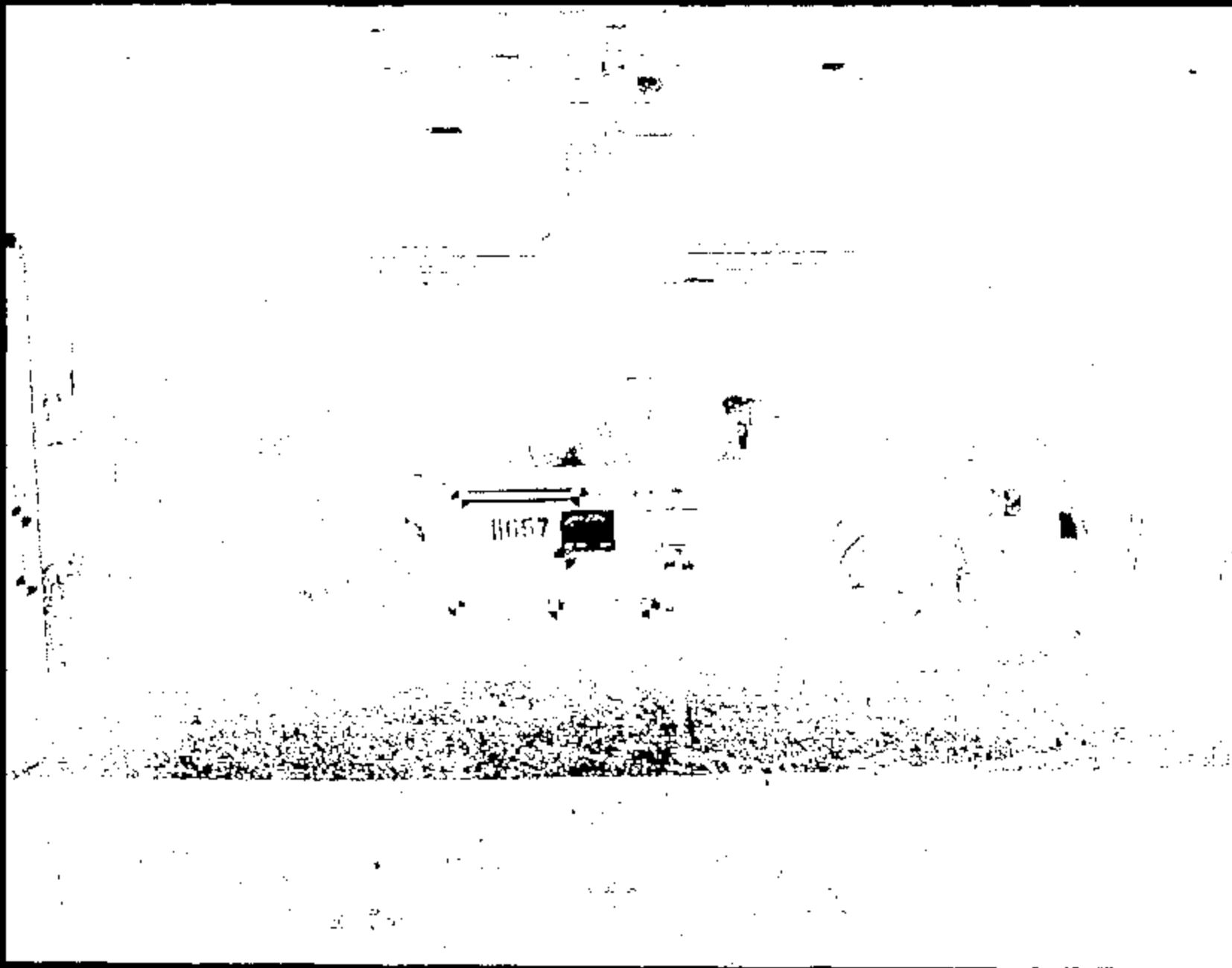
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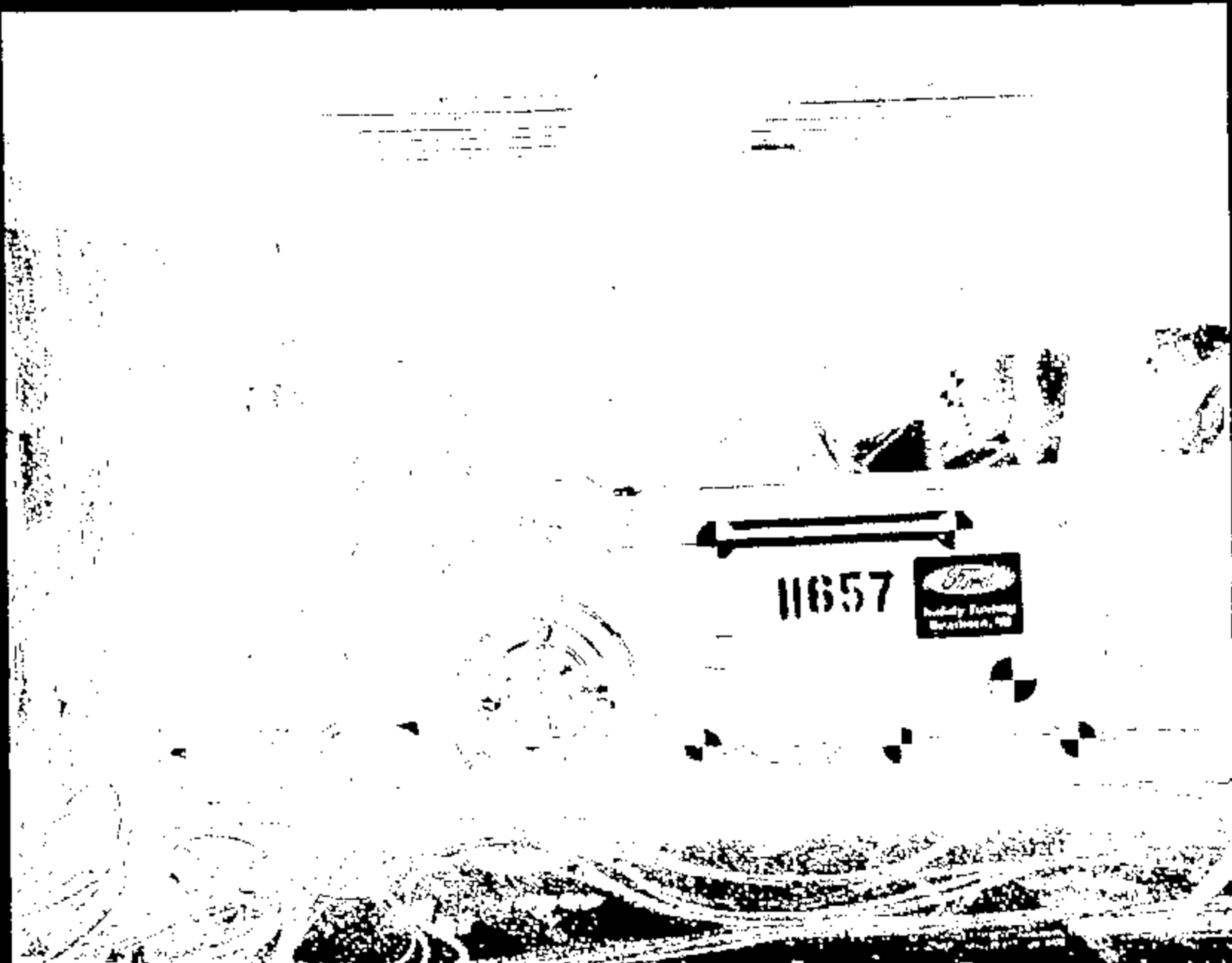
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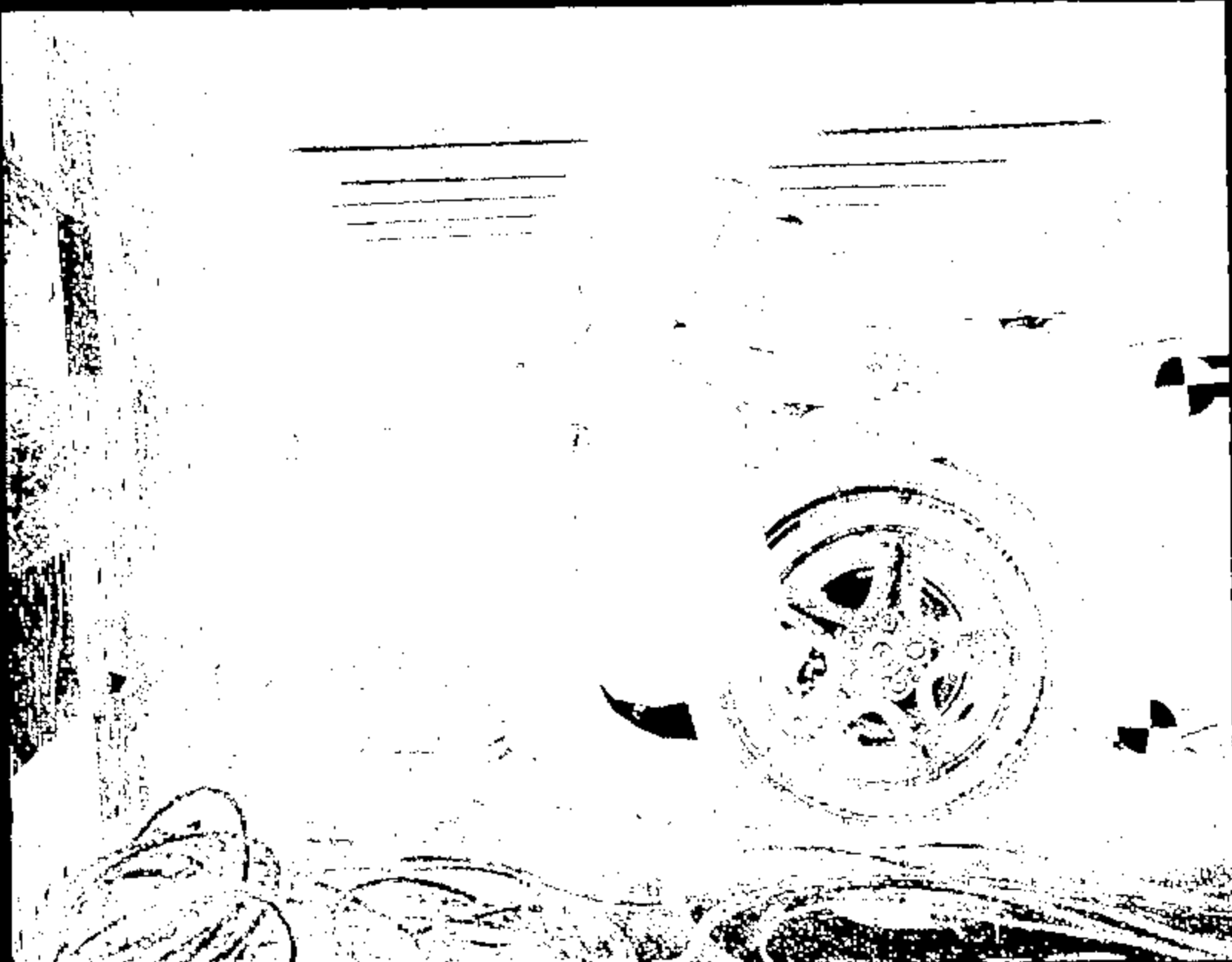


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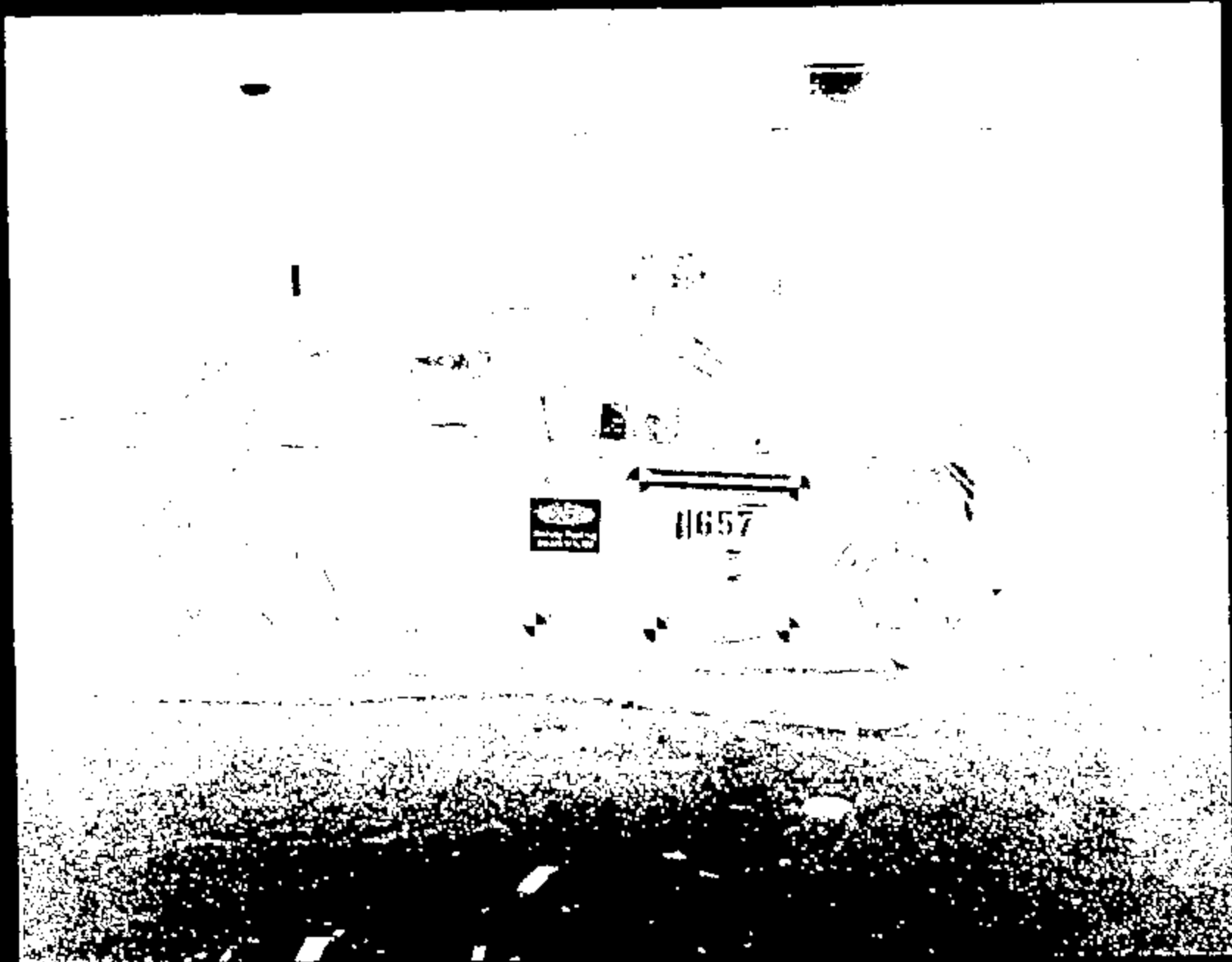
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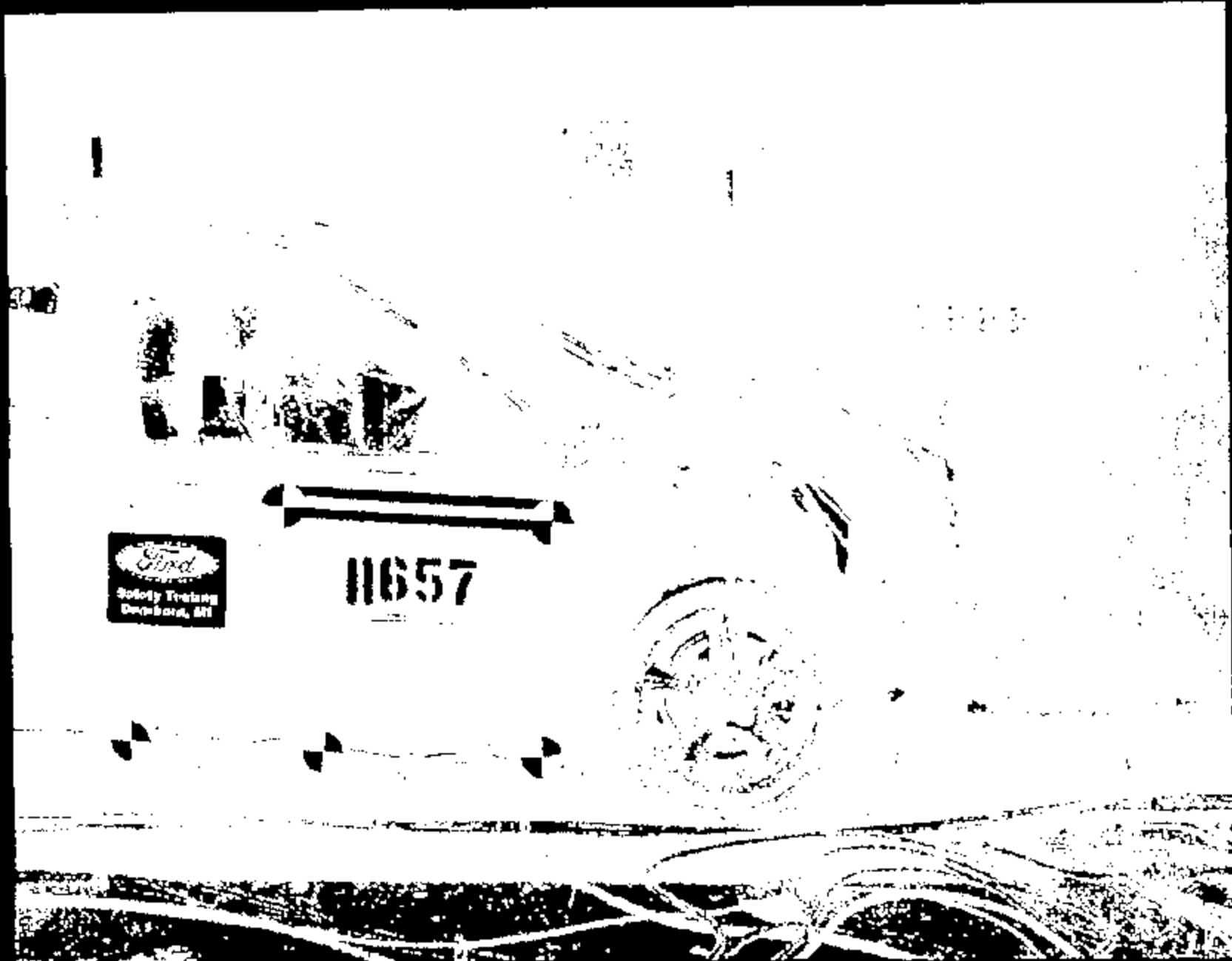
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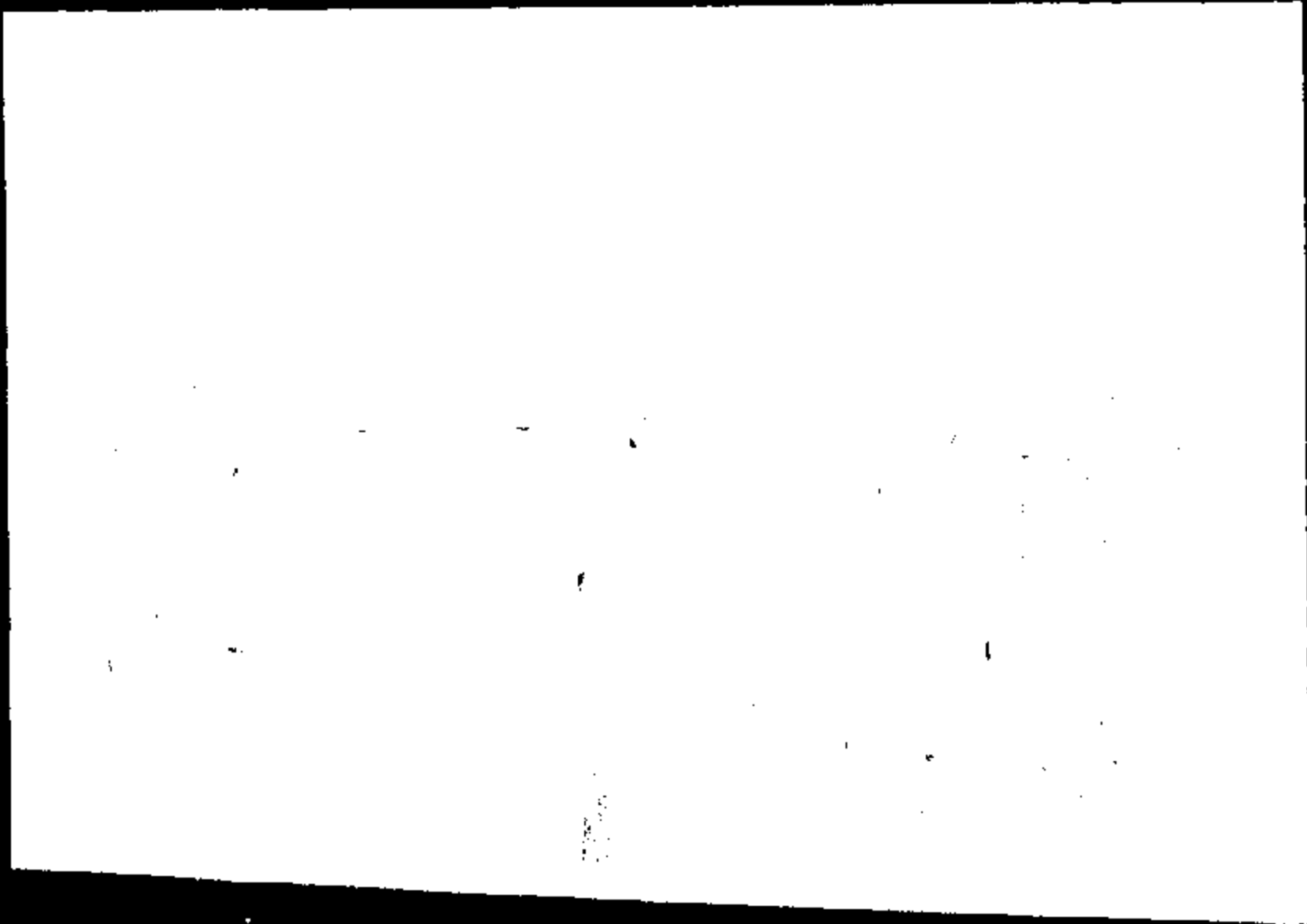
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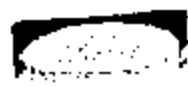
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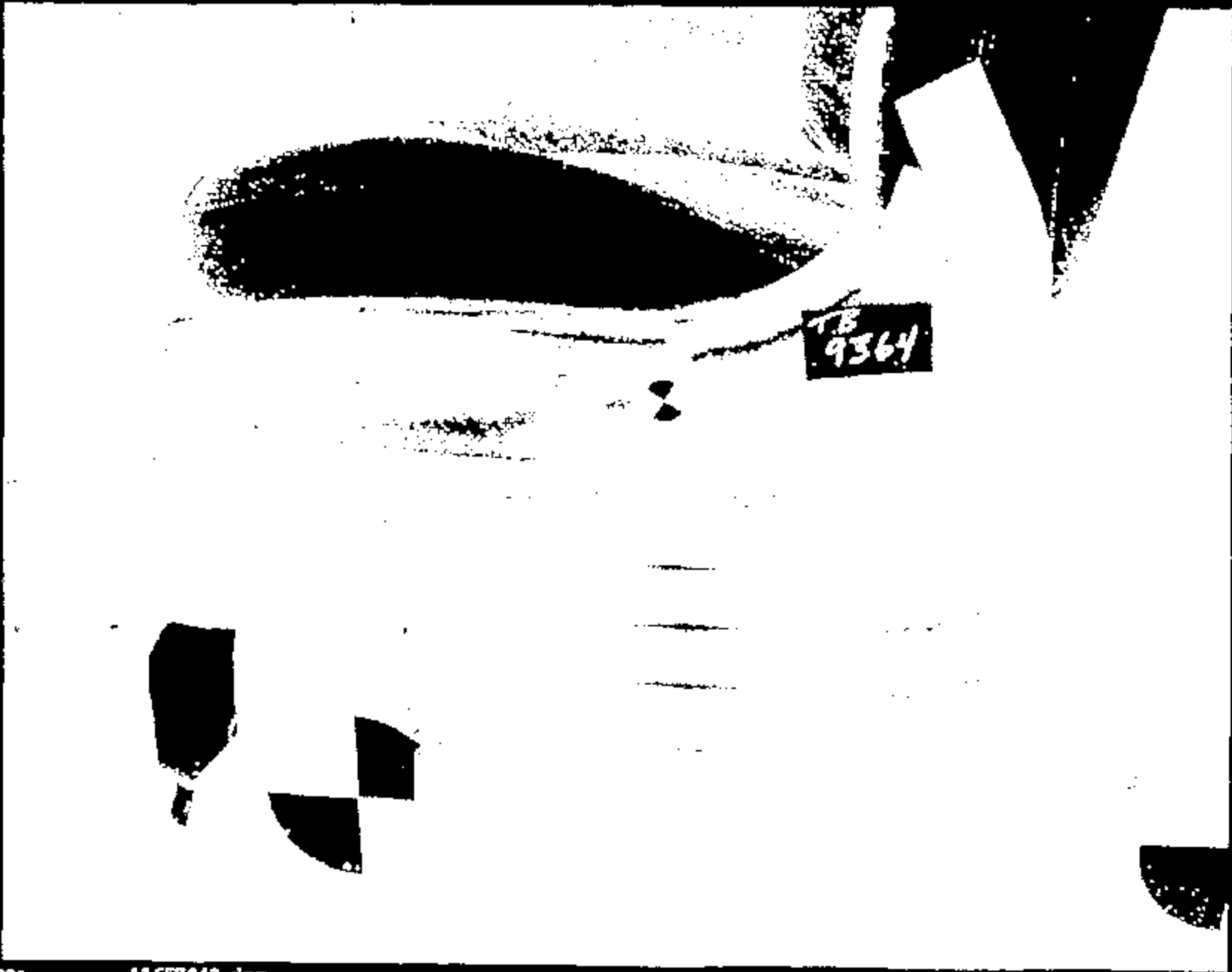
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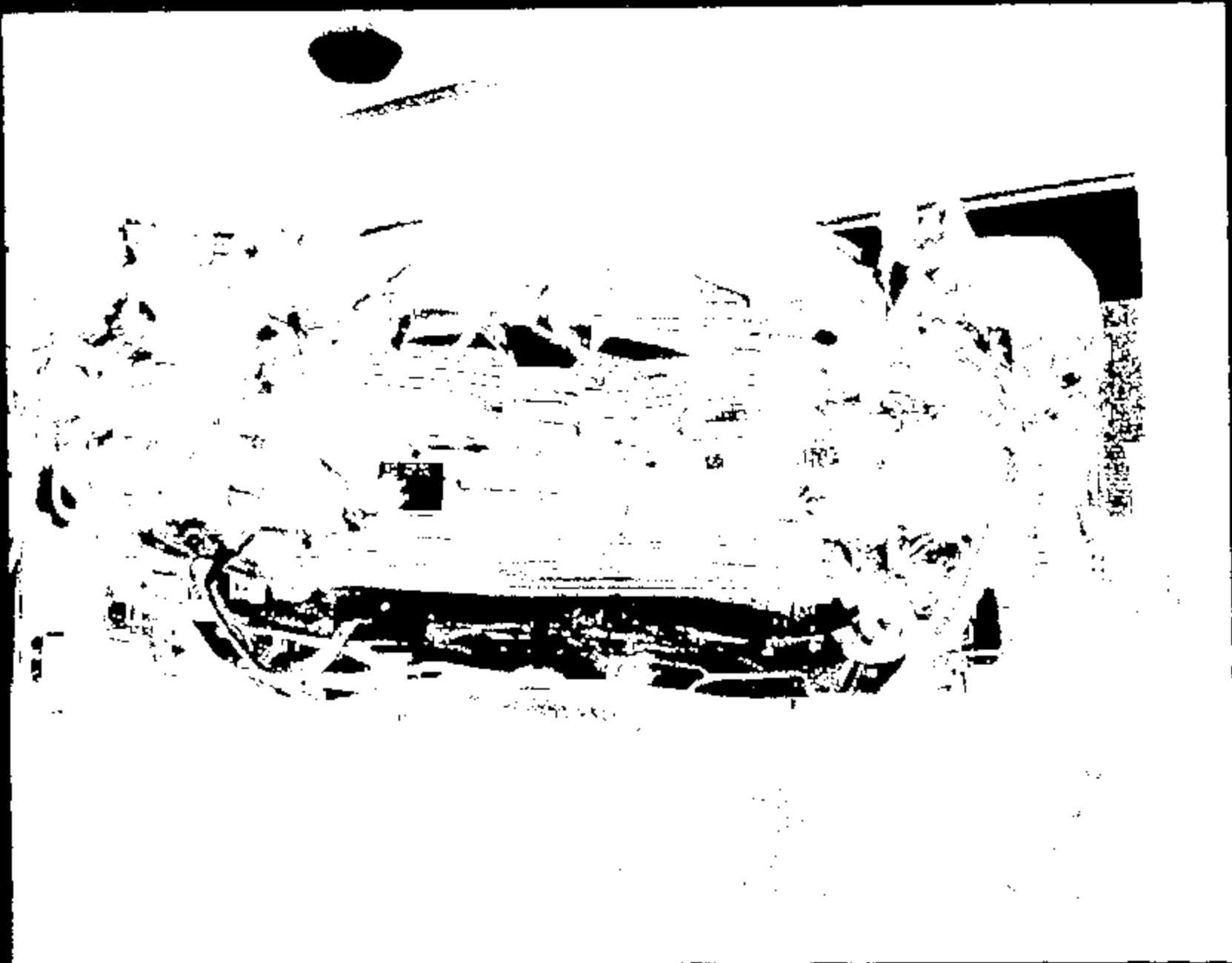


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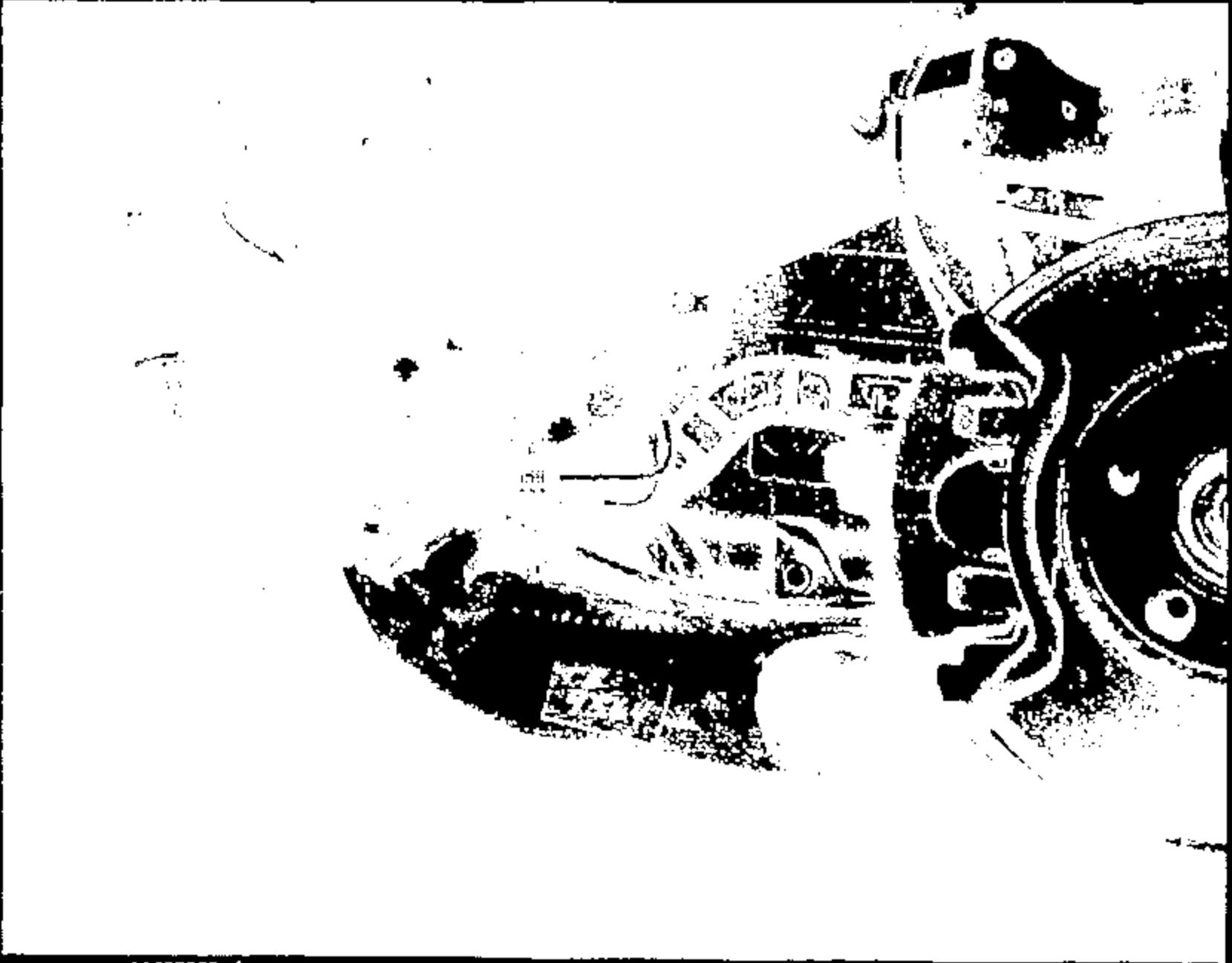
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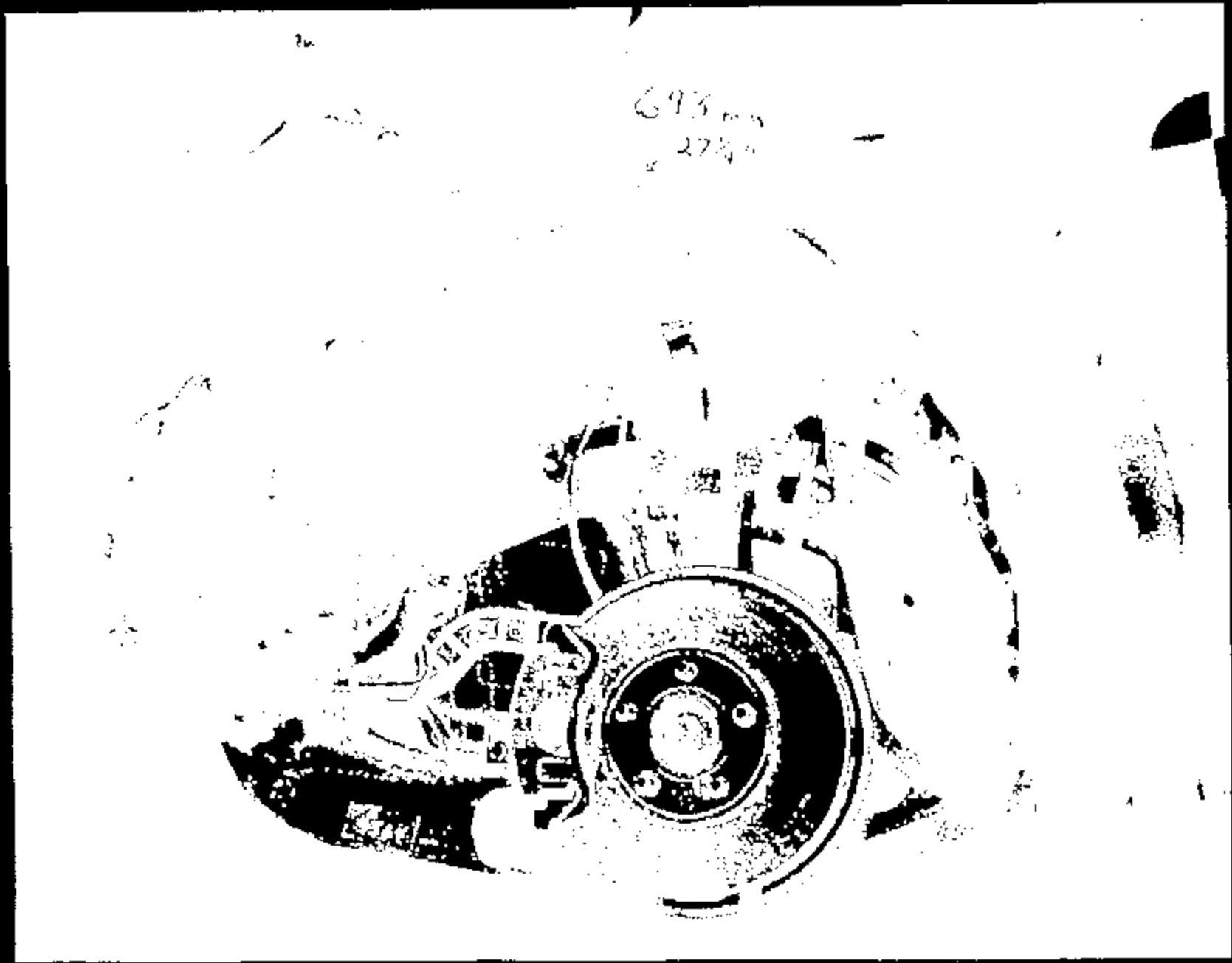
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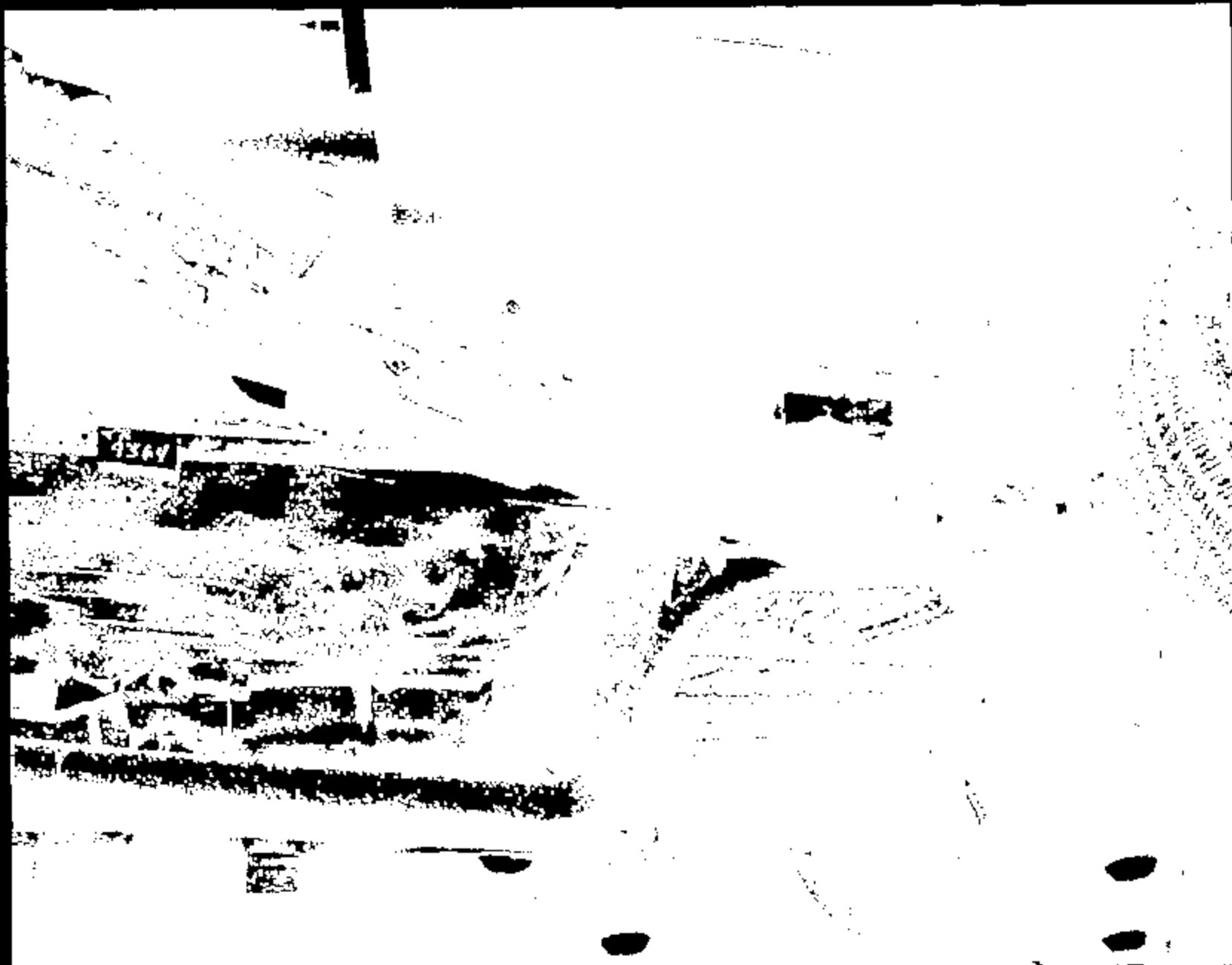
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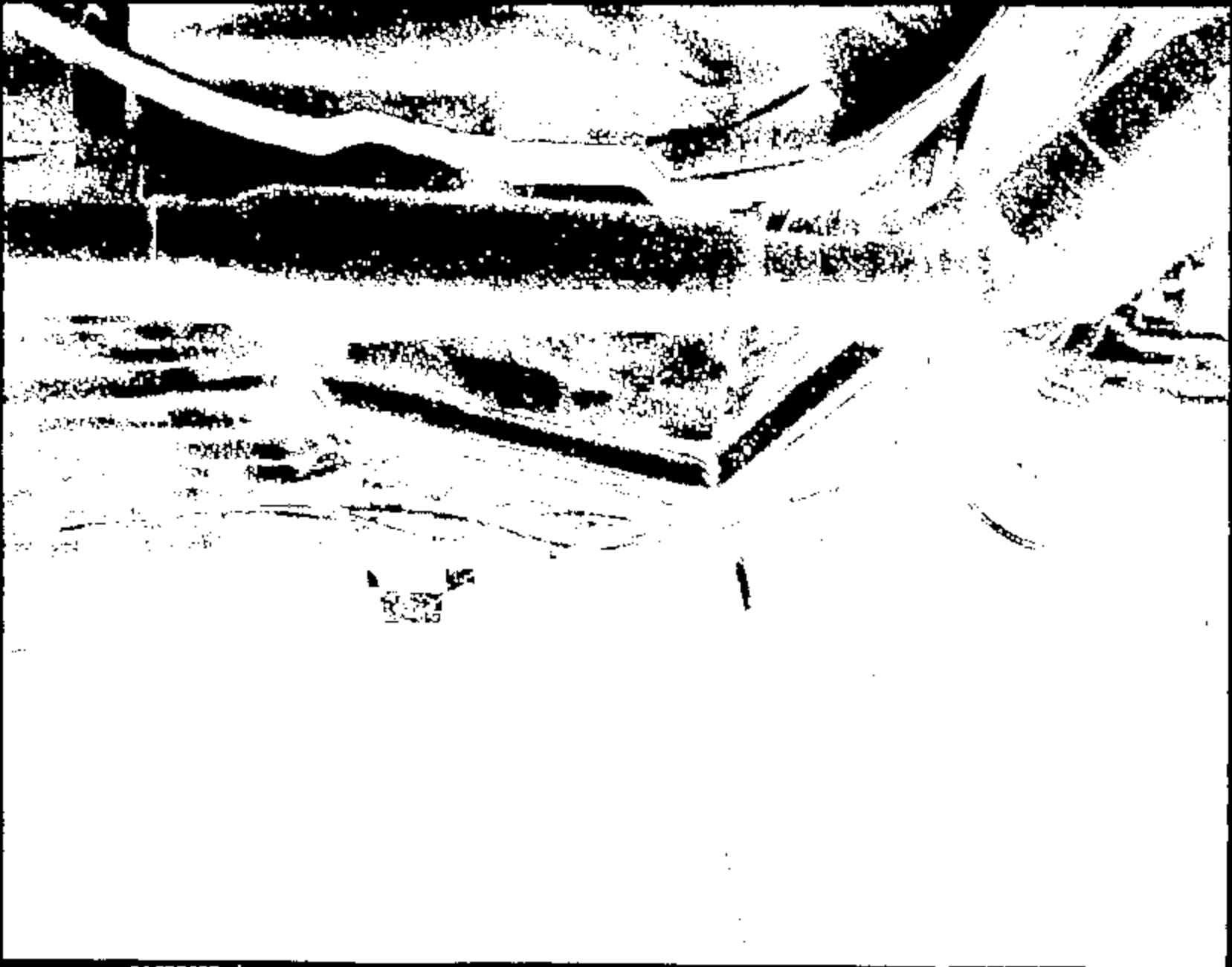
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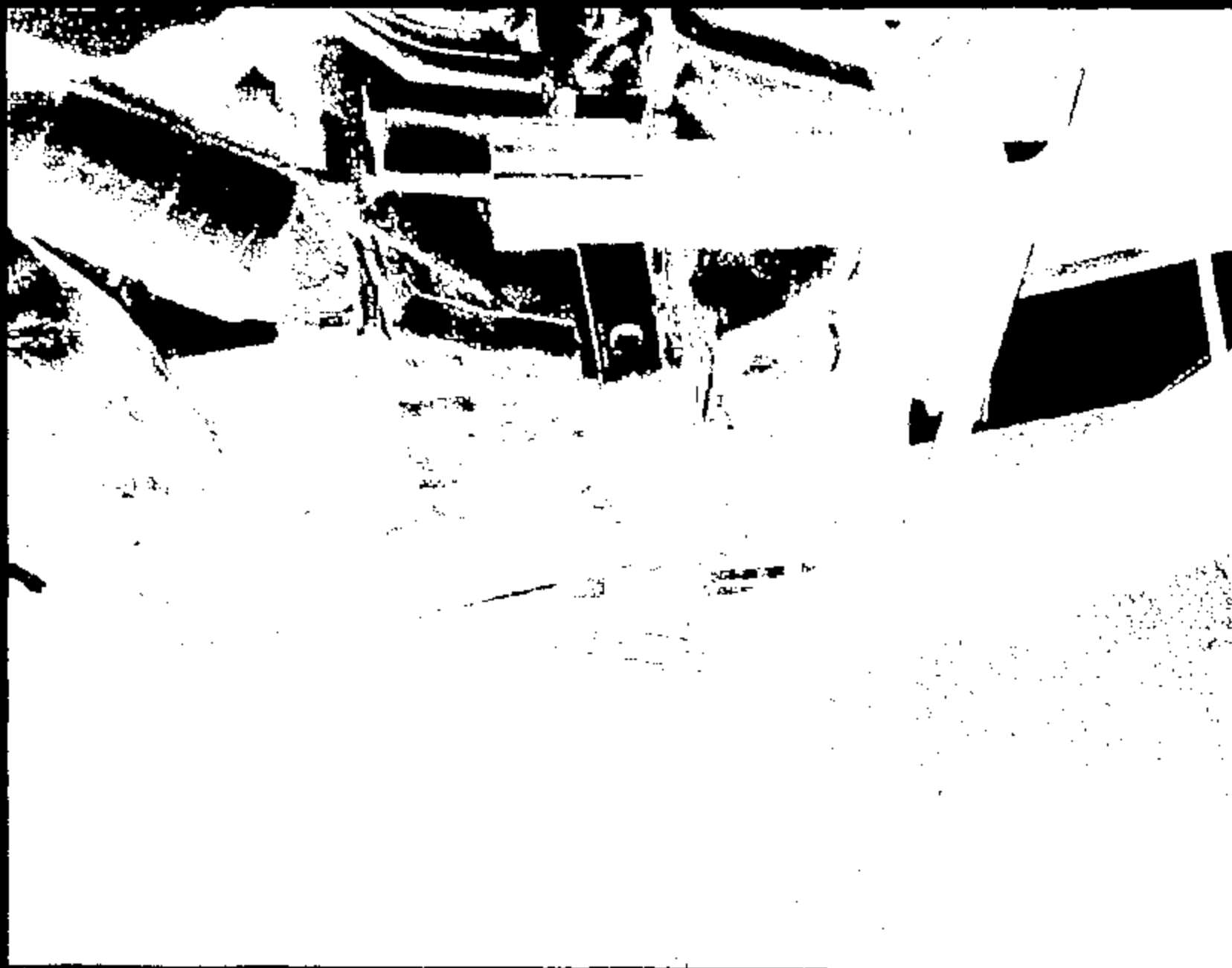
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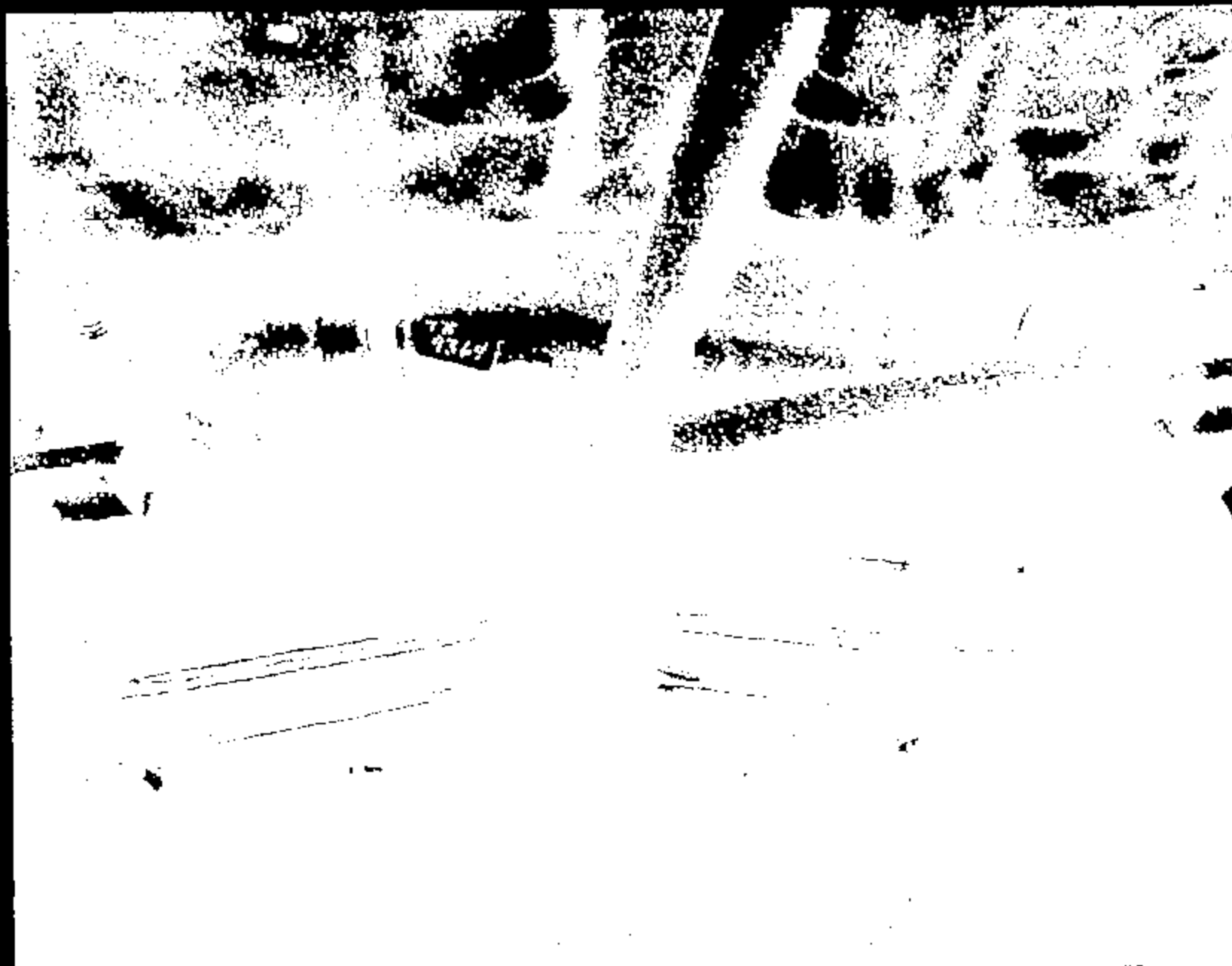
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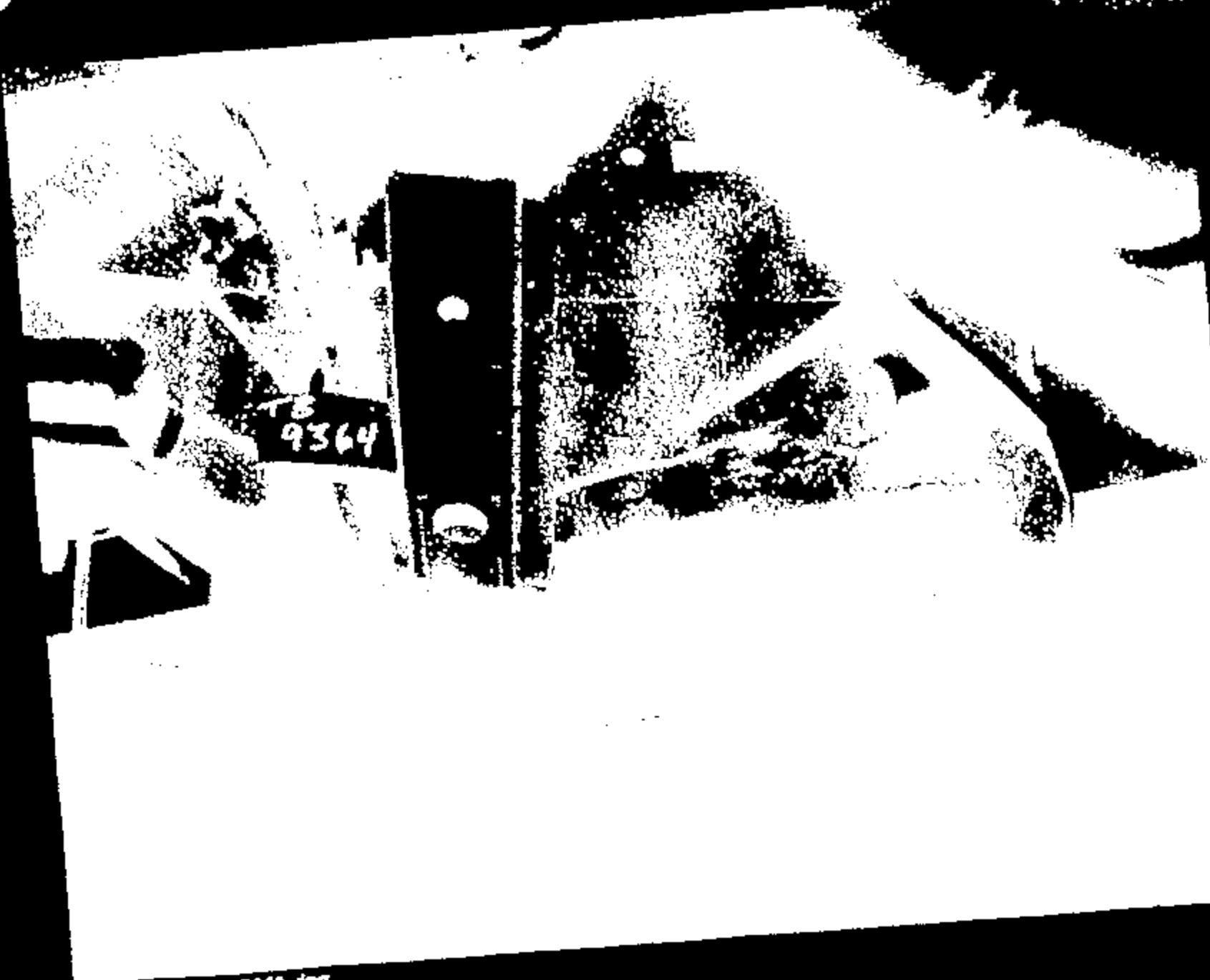
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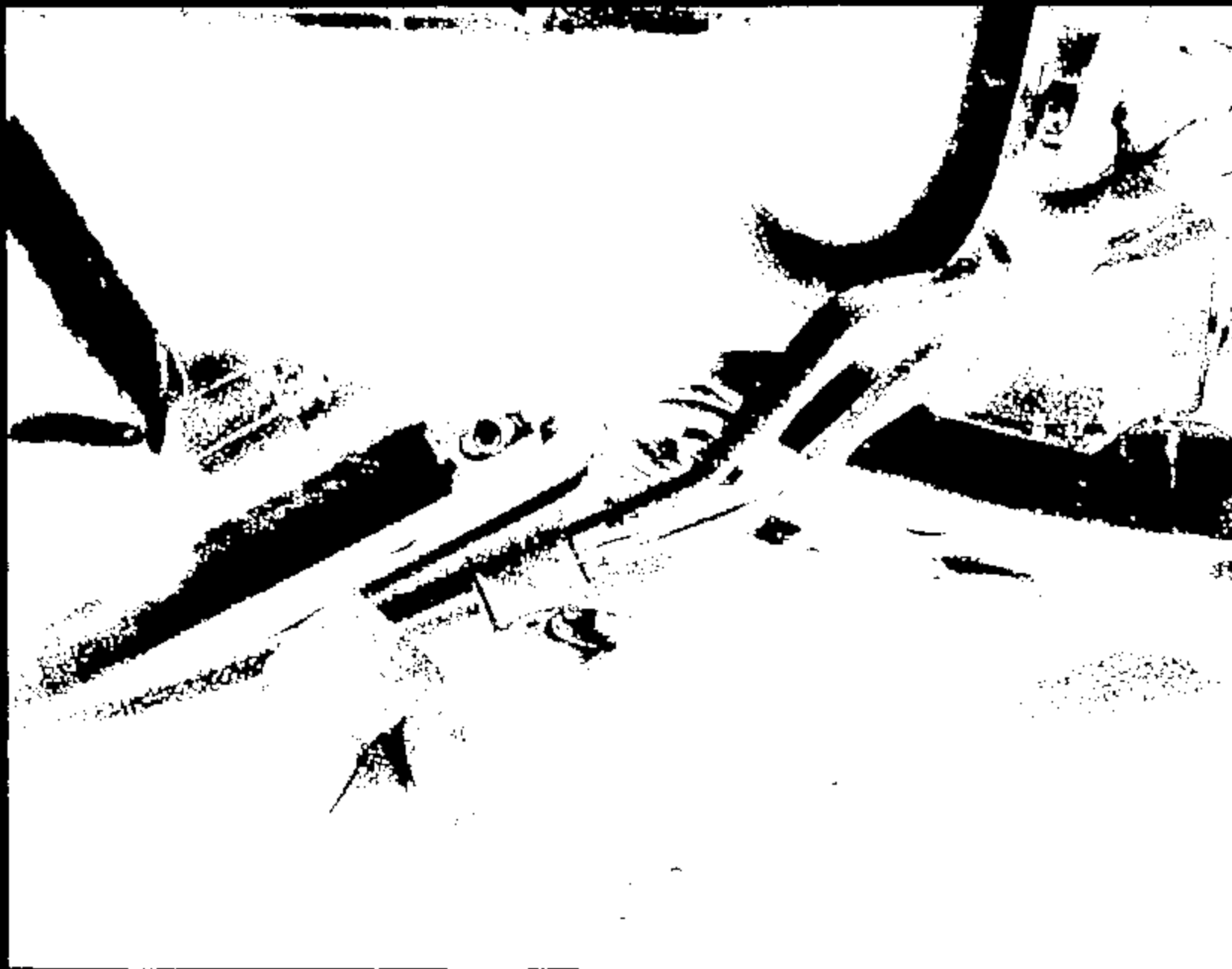
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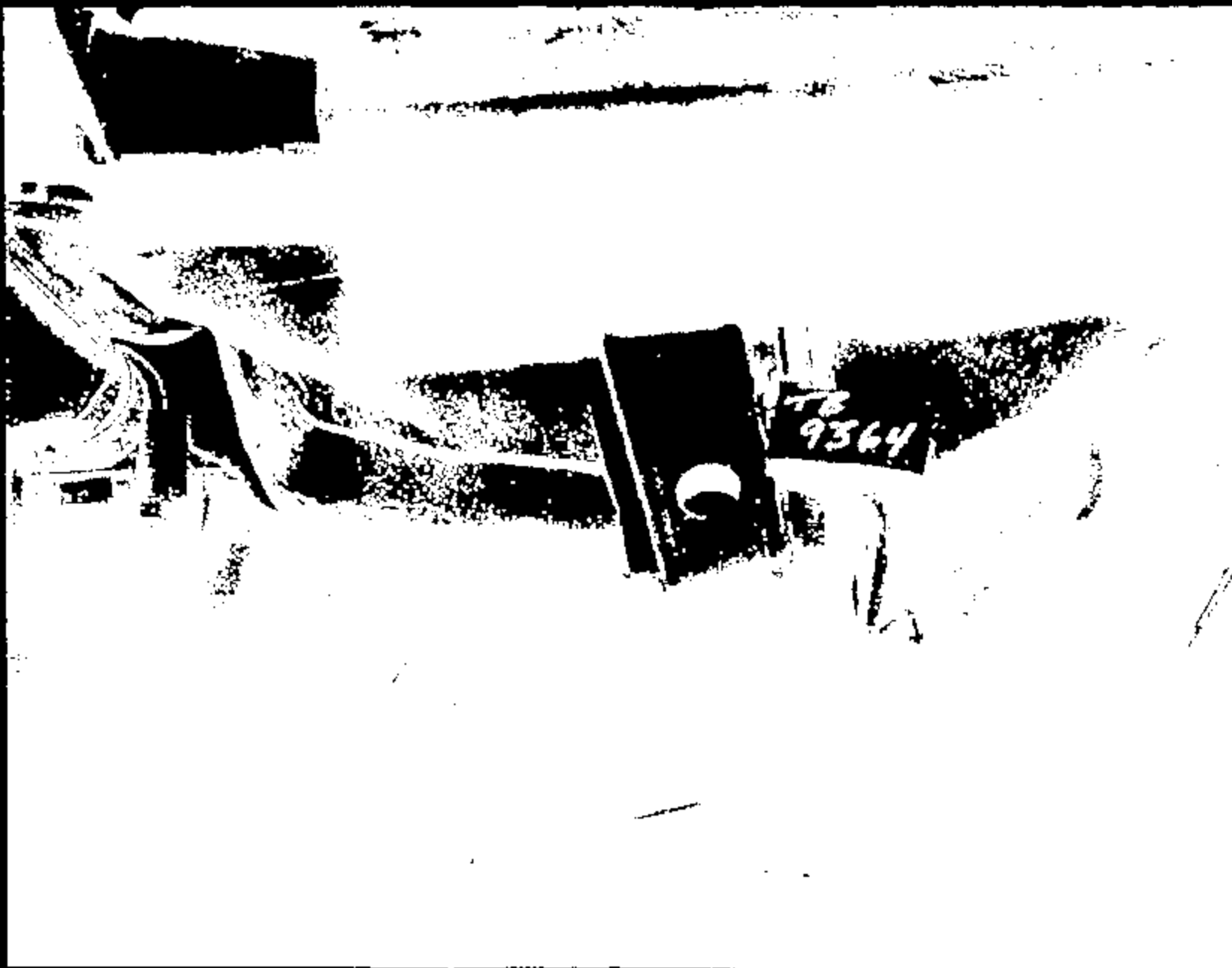
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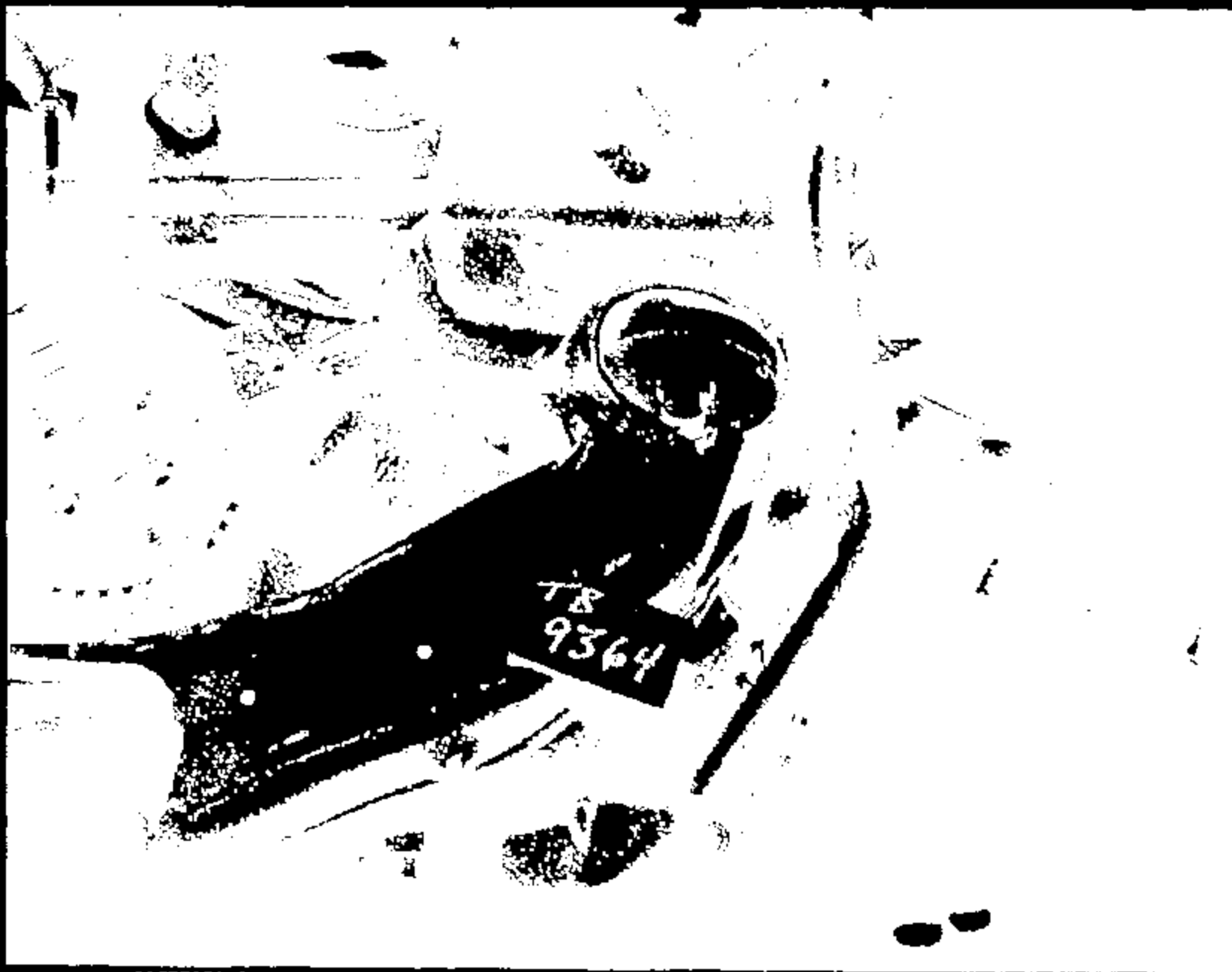
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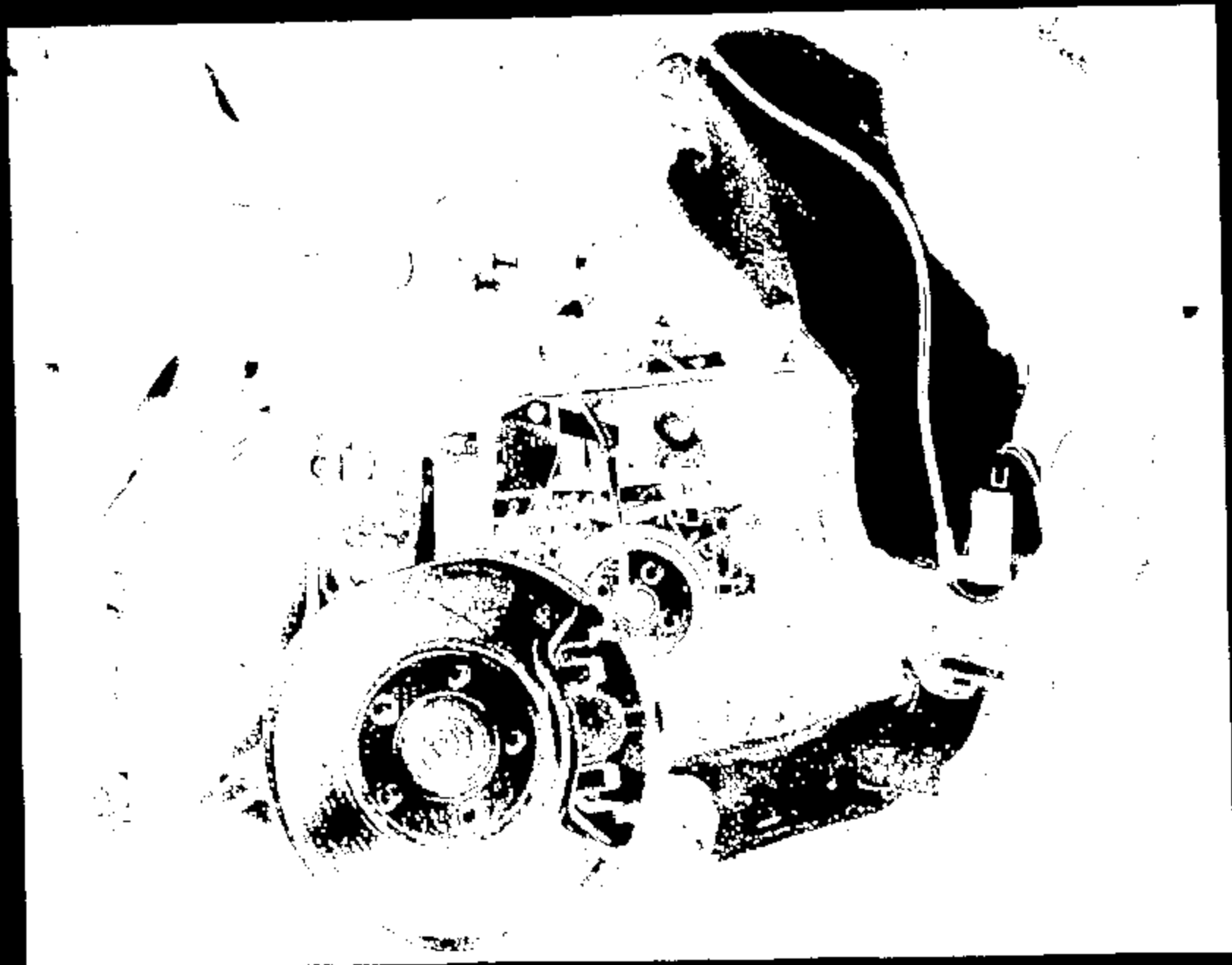
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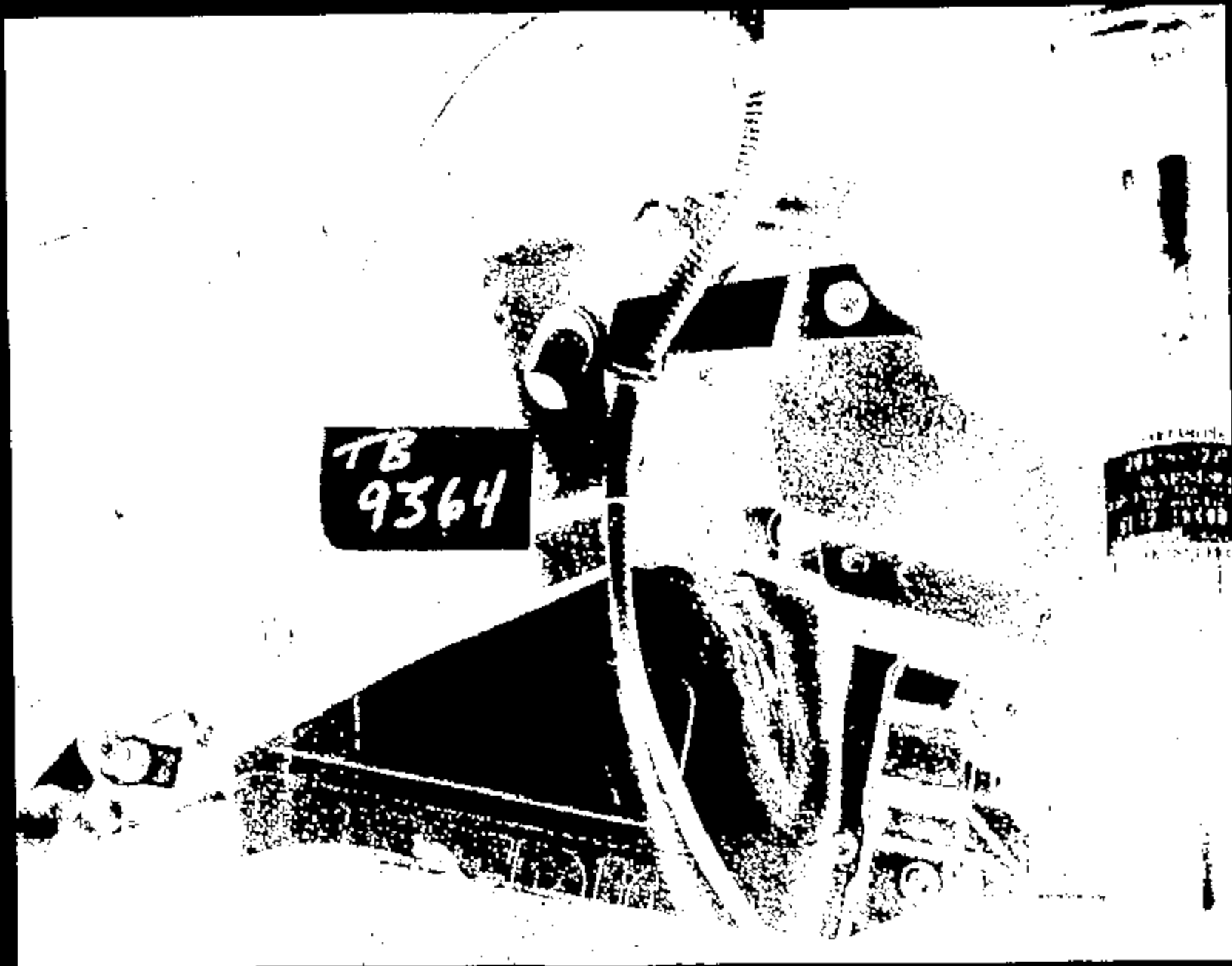
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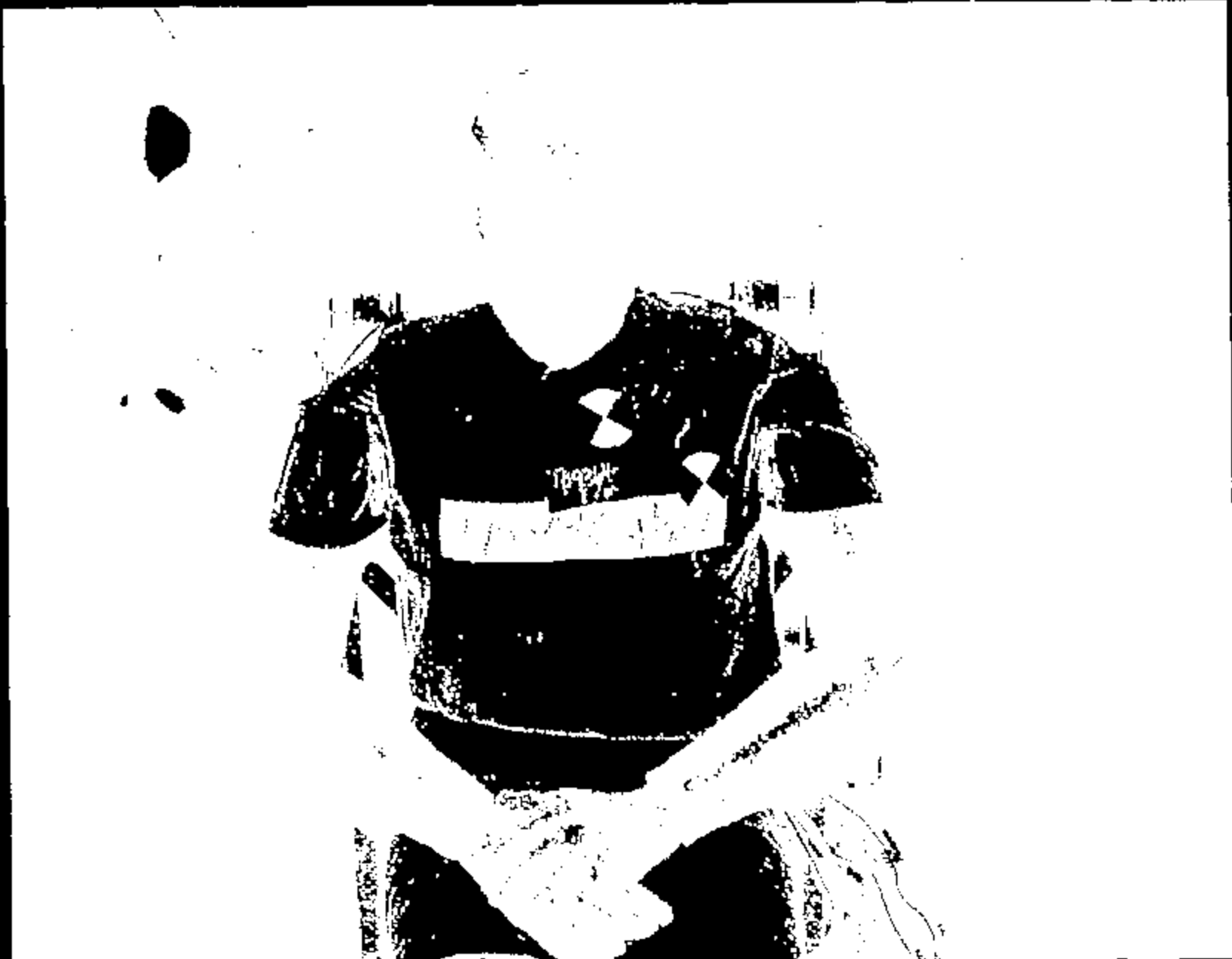
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TEST AUTHORIZATION

TEST AUTHORIZATION NUMBER: **TB9384**

TO: Safety Lab Department	REQUEST DATE: 9/24/99	REQUESTED COMPLETION DATE: 10/25/99
COO: K. Arthur	REQUEST NUMBER: n/a	PROBLEM NUMBER: n/a
REQUESTING ACTIVITY: Vehicle Crash Safety		

TITLE OF TEST: 2000 D188 35 MPH 90 Degree Frontal Barrier		PARTS DUE DATE: n/a	
TYPE OF TEST: <input checked="" type="checkbox"/> VEHICLE <input type="checkbox"/> BENCH <input type="checkbox"/> LABORATORY <input type="checkbox"/> OTHER		VIN # OR ID IDENTIFICATION: N/A - 305W91	VEHICLE MODEL & YEAR: 2000 D188
ENGINE NO. DISPL. GARS: 3.0L/EV V8		TRANS / DRIVETRAIN: AX4N	AXLE RATIO: n/a
TYPE OF FUEL: water if needed		CONVERTER: n/a	IGNITION TIMING: n/a
CRANKCASE OIL AND CAPACITY (L): n/a		TIRE SIZE AND FLY RATING: P215/R18	REPORT CATEGORIES: <input checked="" type="checkbox"/> ENGINEERING <input checked="" type="checkbox"/> DATA <input checked="" type="checkbox"/> RAW DATA
VEHICLE TEST WEIGHT: FRONT 2275 REAR 1587 TOTAL 3865		TIRE PRESSURE (psi): FRONT 30 REAR 30	DISPOSITION OF PARTS: n/a
			PROCUREMENT REQ ? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, GIVE CODE
			MAIL REPORT TO: BLDG: MAIL DROP: ADDRESS:

1. OBJECT OF TEST 2. TEST PROCEDURE 3. ITEMS TO BE TESTED (NAME, NUMBER, QUANTITY)

1) Conduct:	(speed) 35 MPH	(year) 2000	(vehicle) D188	(level) # Production
2) Velocity At Impact:	35 MPH	3) Vehicle Year:	2000	
Remote Fire Time:	N/A	Vehicle Line:	D188	
Positioning procedure:	8T-25	Vehicle Level:	Production	

"SECOND COPY"

Subj. No. 9-7-12

Expir. Unit 2019

Test Requester: **L. Mielke** (name) **24-84280** (phone) **LINE** (pager number)

Build Coordinator: **B. Pagano** **32-30845** **BPAG**

Additional Contacts:

Test Dev. Engineer: *L. Mielke* *B. Pagano*

Estimated test cost = **\$50,000.00**

REQUESTING SECT. NO: TRB	WORK ORDER/WORK TASK: F09	ISSUED/REQUESTED BY: L. Mielke	PHONE: 24-84280	APPROVAL: K. Arthur	TEST TYPE: n/a	RISK: n/a	SIGN OFF DATE: n/a
------------------------------------	-------------------------------------	--	---------------------------	-------------------------------	--------------------------	---------------------	------------------------------

COMPLETE THE FOLLOWING TWO QUESTIONS AS INDICATED:

(Check appropriate boxes)

<p>1 - Rational for not replacing this test by CAE analysis:</p> <ul style="list-style-type: none"> <input type="checkbox"/> No CAE Methodology or process available <input type="checkbox"/> No CAE Correlation <input type="checkbox"/> Insufficient confidence in CAE <input type="checkbox"/> To obtain base data for CAE <input type="checkbox"/> Replacement or improvement of existing Test <input type="checkbox"/> Testing is Critical <input type="checkbox"/> Mandatory or Regulatory <input checked="" type="checkbox"/> Certification <input type="checkbox"/> Develop test for FBS <input type="checkbox"/> Not applicable <input type="checkbox"/> Other 	<p>2 - What is the expected Test Outcome:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Results will meet DVP/PCR requirements <input type="checkbox"/> System Component will not meet Test specification <input type="checkbox"/> Unknown <input type="checkbox"/> Above is Based on CAE? <input type="checkbox"/> Other: _____
--	--

Replaces/Original: L. Mielke
Part#: 101000 Facility: Safety Lab
Safety Plan: 0406

Test Authorization
Page 1 of 7

O.K. Mielke
10-16-99

TB9384-0
Rev 8 04/98 Issued Sept 18, 1999
Author: Cleary/Pagano/Dan

General Request Information

TA#: TE9384

Test Mode

**35 MPH
90 Degree Frontal Barrier**

Test Objectives: Cert (C) Verif (V) Dev (D) Audit (A)

REGULATORY:

- FMVSS 204 - Steering Wheel Displacement
- FMVSS 208 - Frontal Occupant Protection
- FMVSS 212 - Wind Shield Retention
- FMVSS 214 - Side Impact Protection
- FMVSS 219 - Windshield Zone Intrusion
- Film Analysis
- Template
- FMVSS 301 - Fuel System Integrity
- Rollover
- Pressure Check
- FMVSS 303 - NGV Fuel System Integrity
- ECE 12 (74/297/EEC) - Protection of the Driver Against Steering Mechanism
- ECE 32 Rear Impact - Structural Performance
- ECE 33 Frontal Impact - Structural Performance
- ECE 34 Fuel System Integrity
- ECE 84 Step II Frontal Offset - Occupant Performance
- ECE 85 Step II 300mm Barrier Side Impact - Occupant Performance
- 95/78/EC - Frontal Offset
- 95/77/EC - Side Impact

FORD AUTOMOTIVE OPERATIONS SAFETY DESIGN GUIDELINES:

- Front Impact FAO Safety Design Guidelines
- Offset Frontal FAO Safety Design Guidelines
- Side Impact Protection FAO Safety Design Guidelines
- Rear Impact Fuel System Performance FAO Safety Design Guidelines

OTHER:

- Sensor Development
- Other, Specify: _____

Primary Test Vehicle Information

Use (Target/Built):	BULLET
Model Year:	2000
Vehicle Program:	D168
Vehicle Name:	TALPUS
Body / Cab Style:	SEDAN
Build Number:	N/A
Tag Number:	305W251
VIN Number:	1FAPP66L7YA100197
Fuel System Rated Capacity (Gals):	16
Prototype Level:	Production
Drive Side:	LH

**General Specifications
Secondary Vehicle or Cart**

TA#: TB8364

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Special Prep/Build Instructions Primary Vehicle

TAB: TBB304

Special Build Instructions

- Remove Side View Mirrors
- Remove Headrests
- Remove Hood
- Remove Arm rest
- Remove Bottom of Bumper Cover
- Cut Off Brake & Clutch Pedal
- Color Contrast Under Hood Components

Other, Specify:

- May remove trim from B-Pillar rearward, if needed
- Ensure proper flex fuel sensor level
- Add new level Driver Airbag

Pyro Restraints Usage

- Left Front Air Bag
- Right Front Air Bag
- Left Front Side Air Bag
- Right Front Side Air Bag
- Left Rear Side Air Bag
- Right Rear Side Air Bag
- Left Pyro Retractor
- Left Pyro Buckle
- Right Pyro Retractor
- Right Pyro Buckle

Other, Specify:

- Remote Fire Time:
(No fire time listed if sensor fired OR if no pyro restraints are used)
- Remote back-up Fire Time:

Special Pre-Test Preparation

Other, Specify:

- Ensure RCM is updated
- Install new Fuel Inertia Switch (H022408C)

**Occupant / ATD Request
Primary Vehicle**

TAF: TE9884

	Occupant 1	Occupant 2
Type	<u>50th Hill</u>	<u></u>
Instrumentation Level*	<u>CERT</u>	<u></u>
In-Vehicle Location	<u>LF</u>	<u></u>
Verify: Seat Position Long	<u>MID</u>	<u></u>
Seat Position Vert	<u>Full Down</u>	<u></u>
Seat Back Angle	<u>27.2 degrees</u>	<u></u>
Positioning Procedure	<u>BT-25</u>	<u></u>
Use Foot Rest	<u>YES</u>	<u></u>
Take Seat Track Video	<u>YES</u>	<u></u>
Special Positioning Instructions		
Dummy Adjustment (sum angle)	<u></u>	<u></u>
Occupant Belted	<u>YES</u>	<u></u>

*See instrumentation request for detailed instrumentation information.

Test Conditions - Final Prep

T.A#: TE0354

Final Prep Contacts

ONE of these MUST be present during weigh-up & final prep

Test Engineer	Request Engineer	Build Coordinator
Name: _____	L. Melir	B. Pagano
Phone: _____	24-84380	32-90845
Pager: _____	LMS	EPAG

Test Weight

Minimum Option Weight
 33% Option Weight
 Maximum Option Weight

GVWR: _____
 Wheelbase: _____

Tire Pressure

Front: 30. psi Rear: 30. psi

Fuel System

Fuel Tank & System to Contain: water if needed

<u>15.2 gallons</u>	=	<u>95 %</u>	x	<u>16.0 gallons</u>
Fill Level		%		Capacity

Weight Targets

If required weight distribution is UNACHIEVABLE, please note allowable variances.

	Curb Weight	Requested Test Weight	Acceptable Test Weight Variance		Actual Test Weight
			High (+)	Low (-)	
Front:	<u>2,196 lbs</u>	<u>2,275 lbs</u>	<u>19 lbs</u>	<u>0 lbs</u>	Front: <u>2239</u>
Rear:	<u>1,195 lbs</u>	<u>1,887 lbs</u>	<u>13 lbs</u>	<u>0 lbs</u>	Rear: <u>1589</u>
Total:	<u>3,391 lbs</u>	<u>4,162 lbs</u>	<u>32 lbs</u>	<u>0 lbs</u>	Total: <u>3828</u> +2

Rated Luggage Load: 200 lbs

Simulate/Verify at Weigh-Up

Dummy Weight

On Board Camera Count

Weight Addition (Restrictions)

Do NOT place any weight in the following locations:

<input type="checkbox"/> Air Cleaner	<input type="checkbox"/> Engine	<input type="checkbox"/> Doors
<input type="checkbox"/> Battery	<input type="checkbox"/> Fan Base/Shroud	<input type="checkbox"/> Foot Wells - Front
<input type="checkbox"/> Bottle - Coolant	<input type="checkbox"/> Headlamp Orange	<input type="checkbox"/> Foot Wells - Rear
<input type="checkbox"/> Bottle - Washer	<input type="checkbox"/> Radiator	<input type="checkbox"/> Quarter Panels
		<input type="checkbox"/> Trunk Floor

Other: _____

Ride Heights

Measure @ Test Weight

Front: _____

Rear: _____

Measure

Front: ROCKER LEVEL TO GROUND

To: ROCKER LEVEL TO GROUND

Additional Remarks

DO NOT fill tank with stoddard until weigh-up

Dimensional Analysis Request Primary Vehicle

Frontal Impacts

TA# TB0364

74		
81		
106	Control Points (CAR)	Exterior
107		
126	Collapse Distance Points	Exterior
128	Frame/ St. Col/ Eng. for Graphs (CAR)	Exterior
130	Frame Standard Bottom (CAR)	Exterior
132	Unifized Standard Bottom (CAR)	Exterior
134	Drive Shaft Collapse	Exterior
136	Standard Body Relative	Exterior/Interior
138	Windshield (CAR)+R(3)C	Exterior
140	Bill & Pillar	Exterior
142	Shot-Gun	Exterior
146	Header	Interior
150	Steering Wheel Deformation/ Periphery (Just strg whl hub)	Interior
153	Steering Column Mounts	Interior
154	Steering Column Targets	Interior
155		
156	Seat Track to Floor Mounts (LHB from seat only)	Exterior
158	Seat to Track Mounts	Exterior
160	Cowl Rotation	Exterior
162	Floorpan Points	Exterior
164	Knee Bolster	Interior
166	Seat Belt Mounts	Interior
168	Diagonal Strut	Interior
170	Tunnel Hinge Pillar	Exterior
172	Brake Bracket	Interior
174	Instrument Panel Mounts	Exterior
176	T-N-T Targets	Exterior/Interior
177	Top Non-Sided & Body Sided	Exterior/Interior
300		
302		
346		
356		
364		
376		
466	Plot 9 Sectional Profiles	
506	Decoupling Column Collapse	Exterior
507	P.R. Steering Column Collapse	Exterior
508		
640		
641		
642		
647	Footwell Reduction--Geometric center of footrest, brake pedal, accel pedal. Section through floor at center of brake pedal and +/- 150 mm y from there. Vert. Section through IP lower at +/- 150mm y from strg whl hub, plus Hortz. section at 400mm above floor.	

Film Analysis & Photographic Services Request

TA#: TE8364

Front Impact Film Analysis

- Head WRT Vehicle
- Shoulder WRT Vehicle
- Rocker (Both sides) WRT Ground

Other, Specify:

Still Photography

- Copies of Still Photo Proof Sheets Required
- Copies of Still Photos (4X5) Required
- Pre Test Documentation Photographs
- Post Test Documentation Photographs (standard)
- Pre and Post Test close ups of Flex Fuel Sensor

High Speed Photographic Requirements

- 2 Copies of High Speed Film Required
- Copies of High Speed Film Required in VHS Format
- Digitization of Driver/ Passenger Kinematics Format

High Speed Cameras for Front Impact

On-Board Vehicle

- Saints Substar*
10/27/97
- Onboard - LEFT Occupant Over Shoulder
 - Onboard - RIGHT Occupant Over Shoulder [Passenger Air Bag Coverage]
 - Onboard - Driver "D" Ring
 - Onboard - Driver Retractor (Lower)
 - Onboard - Driver Lower Torso to IP Contact, From Rear, Cross Car
 - Onboard - Passenger Lower Torso to IP Contact, From Rear, Cross Car
 - Onboard - Passenger "D" Ring
 - Onboard - Passenger Retractor (Lower)
 - Onboard - Driver Door (Left Knee to Bolster)
 - Onboard - Passenger Door (Knee to IP)
 - Onboard - Photo Sonic (Intermediate Shaft) - From Floor
 - Onboard - Photo Sonic (Intermediate Shaft) - Side View From Tunnel
 - Onboard - LEFT Occupant /bag Interaction from Passenger Door
 - Onboard - Fiber Optics (Intermediate Shaft) - From Floor
 - Onboard - Fiber Optics (Intermediate Shaft) - Side View From Tunnel

Floor Coverage

- Left Occupant Over Shoulder, On tripod, from rear, cross car
- Right Occupant Over Shoulder, On tripod, from rear, cross car
- Left Occupant Over Shoulder, in lights
- Right Occupant Over Shoulder, in lights

<input checked="" type="checkbox"/>	Overall Left
<input checked="" type="checkbox"/>	Left Dummy Kinematics
<input type="checkbox"/>	Dummy Kinematics & Velocity Left
<input checked="" type="checkbox"/>	Overall Right
<input type="checkbox"/>	Right Dummy Kinematics
<input type="checkbox"/>	Dummy Kinematics & Velocity Right
<input checked="" type="checkbox"/>	Top of Barrier - Overall View of Windshield
<input checked="" type="checkbox"/>	Top of Barrier - Driver
<input type="checkbox"/>	Top of Barrier - Passenger
<input type="checkbox"/>	Top of Barrier - Close-up of Flex Fuel Sensor from Right
<input type="checkbox"/>	Top of Barrier - Close-up of Flex Fuel Sensor from Left
<input type="checkbox"/>	Top of Barrier - Close-up of Engine
<input type="checkbox"/>	Left Front Rail Extension Bumper Close-up
<input type="checkbox"/>	Right Front Rail Extension Bumper Close-up

Overhead Coverage

<input checked="" type="checkbox"/>	Overhead - Overall
<input checked="" type="checkbox"/>	Overhead - A-Pillar Forward
<input type="checkbox"/>	Steering Column Displacement
<input type="checkbox"/>	Scale
<input type="checkbox"/>	Resection

Pit Coverage

<input type="checkbox"/>	Pit - Overall
<input checked="" type="checkbox"/>	Pit - A-Pillar Forward
<input type="checkbox"/>	Pit - L/R Frame Horns (Circlescross)
<input type="checkbox"/>	Pit - L/R Front Rails #1 X/M Rearward
<input type="checkbox"/>	Pit - Steering Gear Close-up
<input type="checkbox"/>	Pit - Fuel Tank
<input type="checkbox"/>	Pieces of Plex-Glass to be removed from pit.

All Other High Speed Photography

<input type="checkbox"/>	
<input type="checkbox"/>	

Instrumentation and Data Processing Request

TAG: TB8984

Primary Vehicle Structural Instrumentation - Frontal Impact

ACCELEROMETERS:

Need
Push
@ C1 on
R3

	Long	Vert	Lat
<input checked="" type="checkbox"/> Engine/Trans Upper	<u>X</u>	<u>X</u>	<u>X</u>
Engine/Trans Lower			
<input checked="" type="checkbox"/> Left Rocker at A-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Right Rocker at A-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Left Rocker at B-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Right Rocker at B-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
Left Rocker at C-Pillar			
Right Rocker at C-Pillar			
Left Frame at A-Pillar			
Right Frame at A-Pillar			
Left Frame at B-Pillar			
Right Frame at B-Pillar			
Left A-Pillar Inside			
Right A-Pillar Inside			
<input checked="" type="checkbox"/> Center Floor Pan @ RCM	<u>X</u>	<u>X</u>	<u>X</u>
Centerline Tunnel Middle			
Centerline Tunnel @ Seat Long Centerline			
Left Floor Pan Under Seat			
Left Door Inside Top			
Left Shock Tower			
Right Floor Pan Under Seat			
Right Door Inside Top			
Right Shock Tower			
Rad Support Top - Center			
#1 Crossmember Bottom			
#2 Crossmember Bottom			
Left Front Rail Forward of Sledrunners			
Left Front Rail Forward of Shock Tower			
Right Front Rail Forward of Sledrunners			
Right Front Rail Forward of Shock Tower			
Directly Below D.A. Point # 88			
Directly Below D.A. Point # 84			
Next to Fuel Inertia Switch			
Top of Battery			
Near ACB Bypass Switch			

OTHER STRUCTURAL ACCELS:

	Long	Vert	Lat

Brent performed "bug on" 10/23
CF

Primary Vehicle Systems Instrumentation

TA#: TB9384

SENSOR ACCELS:

See Sensor Map

MONITOR AIR BAG SENSORS:

See Sensor Map
 Monitor Closure of Each Specified Sensor
 Monitor Closures of Single Pt Elect Sensor

MONITOR AIR BAGS STATUS:

- Driver Squib Voltage 1-st stage
- Driver Squib Current 1-st stage
- Driver Bag Pressure
- Driver Squib Voltage 2-nd stage
- Driver Squib Voltage 2-nd stage
- Passenger Squib Voltage
- Passenger Squib Current
- Passenger Bag Pressure
- Passenger Inflator Pressure

STEERING COLUMN:

Stroke Break Wires
 Tilt Mechanism Break Wires
 String Pot (Stroke)
 Load Cell (5 Axis)
 String Pot (Telescope)

RESTRAINT LOADS:

- Left Belt Tongue - Strain Gaged
- Left Pyro-Technic Buckle Squib Voltage
- Left Pyro-Technic Buckle Squib Current
- Right Belt Tongue - Strain Gaged
- Right Pyro-Technic Buckle Squib Voltage
- Right Pyro-Technic Buckle Squib Current
- Left Lap Belt at Anchor Load
- Left Torso Belt at Retractor Load
- Left Torso Belt at D-ring Load
- Right Lap Belt at Anchor Load
- Right Torso Belt at Retractor Load
- Right Torso Belt at D-ring Load
- Lightweight Left Lap Belt at Anchor Load
- Lightweight Left Torso Belt at Retr. Load
- Lightweight Left Torso Belt at D-ring Load
- Lightweight Right Lap Belt at Anchor Load
- Lightweight Right Torso Belt at Retr. Load
- Lightweight Right Torso Belt at D-ring Load
- Lightweight Left Torso Belt at Buckle Load
- Lightweight Right Torso Belt at Buckle Load

SWITCHES:

Engine to Rad Support left
 Engine to Rad Support center
 Engine to Rad Support right
 Brake booster to shock tower
 Other _____

FUEL SYSTEM:

Inertis Fuel System Cut-Off Switch

Need number to go to section C

ANGULAR MOTION SENSORS

VEHICLE STRING POTS

OTHER VEHICLE SYSTEM INSTRUMENTATION

Dummy Instrumentation - Internal

60HS LF

ACCELS:

<input checked="" type="checkbox"/> <u>X</u> Head C.G.	<u>X</u> Long	<u>X</u> Vert	<u>X</u> Lat
<input checked="" type="checkbox"/> <u>X</u> Chest	<u>X</u> Long	<u>X</u> Vert	<u>X</u> Lat
<input checked="" type="checkbox"/> <u>X</u> Pelvis	<u>X</u> Long	<u>X</u> Vert	<u>X</u> Lat

LOAD CELLS:

<input checked="" type="checkbox"/> <u>X</u> Neck Upper Load	<u>X</u> Fx	<u>X</u> Fy	<u>X</u> Fz
<input checked="" type="checkbox"/> <u>X</u> Neck Upper Moment	<u> </u> Mx	<u>X</u> My	<u> </u> Mz
<u> </u> Neck Lower Load	<u> </u> Fx	<u> </u> Fy	<u> </u> Fz
<u> </u> Neck Lower Moment	<u> </u> Mx	<u> </u> My	<u> </u> Mz
<u> </u> Thoracic Load	<u> </u> Fx	<u> </u> Fy	<u> </u> Fz
<u> </u> Thoracic Moment	<u> </u> Mx	<u> </u> My	<u> </u> Mz
<u> </u> Lower Lumbar Load	<u> </u> Fx	<u> </u> Fy	<u> </u> Fz
<u> </u> Lower Lumbar Moment	<u> </u> Mx	<u> </u> My	<u> </u> Mz
<input checked="" type="checkbox"/> <u>X</u> L/Femur Load	<u> </u> Mx	<u> </u> My	<u>X</u> Fz
<input checked="" type="checkbox"/> <u>X</u> L/Femur Moment	<u> </u> Mx	<u>X</u> My	<u> </u> Mz
<input checked="" type="checkbox"/> <u>X</u> R/Femur Load	<u> </u> Mx	<u> </u> My	<u>X</u> Fz
<input checked="" type="checkbox"/> <u>X</u> R/Femur Moment	<u> </u> Mx	<u>X</u> My	<u> </u> Mz
<input checked="" type="checkbox"/> <u>X</u> L/Up/Tibia Load	<u> </u> Fx	<u> </u> Fy	<u>X</u> Fz
<input checked="" type="checkbox"/> <u>X</u> L/Up/Tibia Moment	<u>X</u> Mx	<u>X</u> My	<u> </u> Mz
<input checked="" type="checkbox"/> <u>X</u> R/Up/Tibia Load	<u> </u> Fx	<u> </u> Fy	<u>X</u> Fz
<input checked="" type="checkbox"/> <u>X</u> R/Up/Tibia Moment	<u>X</u> Mx	<u>X</u> My	<u> </u> Mz
<input checked="" type="checkbox"/> <u>X</u> L/Low/Tibia Load	<u> </u> Fx	<u> </u> Fy	<u>X</u> Fz
<input checked="" type="checkbox"/> <u>X</u> L/Low/Tibia Moment	<u>X</u> Mx	<u>X</u> My	<u> </u> Mz
<input checked="" type="checkbox"/> <u>X</u> R/Low/Tibia Load	<u> </u> Fx	<u> </u> Fy	<u>X</u> Fz
<input checked="" type="checkbox"/> <u>X</u> R/Low/Tibia Moment	<u>X</u> Mx	<u>X</u> My	<u> </u> Mz

POTENTIOMETERS:

<input checked="" type="checkbox"/> <u>X</u> Chest Deflection	<u> </u> Ball Bearing	<u> </u> Std	<u> </u> Disp
<u> </u> Left Knee Slider	<u> </u> Ball Bearing	<u> </u> Std	<u> </u> Disp
<u> </u> Right Knee Slider	<u> </u> Ball Bearing	<u> </u> Std	<u> </u> Disp

OTHER INTERNAL DUMMY INSTRUMENTATION:

 L/R Femur Accels Long Vert Lat
 L/R Ankle soft bumper to foot stem

Dummy Instrumentation - External

CONTACT SWITCHES:

 L / Knee Contact
 R / Knee Contact
 Header

STRING POTS:

 Pelvis
 L / Knee
 R / Knee

OTHER EXTERNAL DUMMY INSTRUMENTATION:

 Please color contrast Driver left and right shoes

Regulation/Clipboard LMS/BCN
Printed 10/12/00 Facility: Bader
Delivery Proc. Copies

Request #: 16420-486
Implementation Agreement
Page 10 of 17

Auto TA
Ver: 2.0a1 Issued: Sept 12, 2000
Author: Oleson/Pagman/Koh

CRTS 0011657

List of T Contacts

TA#: TB9984

	Last name	Phone	Pager	Profs
Requestor	L. Miskir	24-84280	LMS	LMSKIR
Approving supervisor	K. Arthurs	99-05158	KART	KARTHURS
Build coordinator	B. Pagano	82-30845	BPAG	BPAGANO
Test engineer				
Sensor Engineer	F. Bologna	31-78288	FBOLOGNA	FBOLOGNA
Other				

	Last name	Phone	Pager	Profs
Seats	M. Jessup	84-51891	MJESSUP1	MJESSUP1
Instrument panel	M. Keranen	99-74146	NONE	MKERANEN
Restraints	N. Desai	99-05145	NDESAI	NDESAI
Air bag (driver)	R. Ruthinowald	82-18878	RRUTHINO	RRUTHINO
Air bag (passenger)	R. Ruthinowald	82-18878	RRUTHINO	RRUTHINO
Steering column				

CRTS 0011657

Requestor/Originator: L. Miskir
 Printed: 10/19/99 FileBy: Buser
 Destroy Prev. Copies

Contact List #/Rev/Status
 Page 14 of 17

TB9984.rtf
 Ver: 2.0/nd Issue: Sept 18, 1999
 Author: Cawley/Pagano/Cole

Revisions List

TAB: TB9384

DATE	AUTHORIZATION	DESCRIPTION	PAGE #'s

VEHICLE SAFETY PACKAGE LAB WORK ORDER

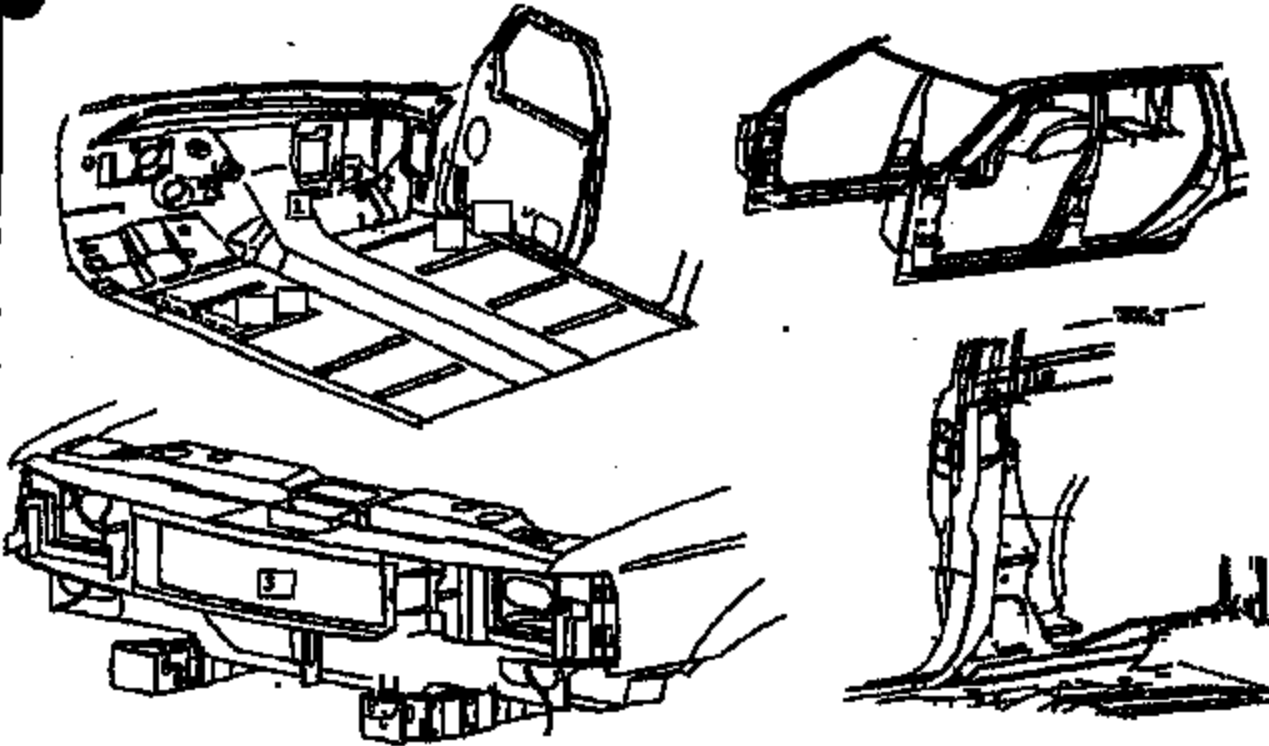
TAG: TB9364

DATE	MODEL	YEAR	GARAGE	WORK CENTER
9/24/99	SEDAN	2000	D186	TB9364
CONTACT NAME		PHONE	EXT	TEST NUMBER
L. Mielke		24-84280	T558	F09
TEST DRIVER		PHONE	TEST MODE	
B. Pagano		32-90845	90 Degree Frontal Barrier	
VIN NUMBER		VEHICLE ID	TAG NUMBER	
IFAFP65U7YA100137		N/A	308W251	
SEAT POSITION				
SGRP		MID PORT		FULL REAR
SEAT POSITION AND SEAT TYPE				
LH FRT		CENTER FRT		RH FRT
LH REAR		CENTER REAR		RH REAR
VEHICLE DELIVERED TO	D/A	BARRIER		BUILD SITE
ANY QUESTIONS CONTACT:				
PETER J. SIMONIE				
PHONE: (313) 59-40809				
PAGER: (313) 708-6853				
DESCRIPTION OF JOB TO BE PERFORMED:				

SENSOR MAP

VIN# 1FAPP8BU7YA100137
Build level: 1PP

Program: D188
Test Mode: 36/90 BARRIER
TA No.: TB9364



Location Name	Supplier	Output	Sensor Channels only		
			Nominal (v)	Max/Min	Serial #
			0	10	
			0	10	
			0	10	
			0	10	
			0	10	
			0	10	
			0	10	
			0	10	
			5	10	
1 C/Y_FLOOR_PAN_R_ACM	accol	TRIM	On approx		NA
2 West to Fuel Inertia Switch	Accol	TRIM			NA
3 C/VAL	VCS	accol	TRIM		NA
					NA

Y zero required; Actuated system power from vehicle wiring and battery - use provided harness

REVISION LOG

DESCRIPTION	DATE	PAGE AFFECT	SIZE

DUMMY POSITIONING MEASUREMENTS

DRG

Test Order No.

TB9384

Crash No.

11657

Target/Bullet

TEST, TARGET

Dummy Type

0 5043

Foot Rest

Yes/No

330

MEASUREMENT DESCRIPTIONS WRT FRONT ROCKER TARGET		DRIVER		PASSENGER	
		RANGE	Actual	RANGE	Actual
Head (Inches)	Long		13.5		
	Vert		37.4		
	Lat		4.4		
Shoulder (Inches)	Long				
	Vert				
	Lat				
H-Point (Inches)	Long	8.7	8.5		
	Vert	12.1	11.7		
	Lat		10.6		
Outboard Knee Bolt (Inches)	Long		-6.2		
	Vert		16.2		
	Lat		11.2		

MEASUREMENT DESCRIPTIONS		DRIVER		PASSENGER	
		RANGE	Actual	RANGE	Actual
Leg to Instrument Panel - Left	(Inches)		4.1		
Leg to Instrument Panel - Right	(Inches)		3.9		
Rocker Target to Ground - Front	(Inches)		7.2		
Rocker Target to Ground - Rear	(Inches)		7.1		
Noes to Steering Wheel	(Inches)		15.5		
Noes to Instrument Panel	(Inches)				
Torso to Instrument Panel	(Inches)				
Torso to Steering Wheel	(Inches)		8.0		
Top of Legs to Steering Wheel	(Inches)		7.6		
Knee Spread	(Inches)		9.9		
Bumper Target to Ground	(Inches)				
Head Angle	(degrees)		0.0		
Pelvic Angle	(degrees)		22.0		
Neck Bracket Angle	(degrees)		0.0		
Rockers Angle	(degrees)		0.3		
Seat Back Angle	(degrees)		27.3		

BARRIER QUALITY ASSURANCE AND TRACKING FORM

DATA ENGINEER: Name not on list **WB REVIEW ENGINEER:** Les
TEST ORDER NUMBER: TR9364 **SITE:** BR
TEST ENGINEER: R-OPQ **TEST DESCRIPTION:** 90 DEG. FRONT FOCED BARRIER
VEHICLE TYPE: D-188 **IMPACT TYPE:** CAR
REQUESTED SPEED: 38 MPH **TEST TYPE:** CT
CRASH DATE: 10/28/99 **OK TO STRIP DATE:** 10/29/99
CRASH TIME: 13:25 **OK TO STRIP TIME:** 10:25
TOTAL CHANNELS: 63 **DUMMY CHANNELS:** 30

TEST DUMMY INFORMATION
 POB NO TYPE A.S. BELTS PYRO OTHER
 LF IN INTR Y Y

11657

CHANNEL IDENTIFICATION			EQUIPMENT				ANOMALIES										DESCRIPTION	RESOLUTION	CAT						
TEST CHANNEL	LOCATION	AXIS	TRANSducer	EXTENSION CABLE	CABLE	ORIG. PACKAGING	ORIG. CHANNELS	NO DATA	INVALID DATA	EMPTY PACK BULK	LEVEL SHIFT	EXCEEDED FULL SCALE	UNUSUAL NOISE	INTERRUPTED	NOISE	SENSOR SCALING	ADJUSTING	DATA ABANDON	DATA DROPOUT	EXCESSIVE FLUCTUATION	LATE TEST BEG	DATA ENGINEER REMARKS	TECHNICIAN REMARKS	CLASS	NUM
18	LF DUMMY REFER. LOAD	HY	45284		BJZ-4	3250	20					X	X									04-08ms	Unresolved	2	1
43	CFLOOR PAN @ RCM #1	VERT	48028		APC-2	3217	10	X				X							X			05-04ms	Cable cut by crash.	2	2
44	CFLOOR PAN @ RCM #1	LAT	48060		APC-3	3217	11					X							X			06-04ms	Cable cut by crash.	2	2
58	WROCKER @ A-PILLAR	VERT	47388		BNJ-2	3217	22					X										07-08ms	Data higher than expected.	2	2

CRTS 0011657



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 File No. 7-7-12
 Packin Unit 2020
 CONFIDENTIAL

FINAL TEST REPORT

**Global Test Operations
 Research and Vehicle Technology**

TO: L. Mialik

Test Order No. T-B9773
 Work Task W. O. No. P09
 Test Date 11/4/99
 Date Reported 1/21/00
 Sheet 1 of 74

SUBJECT: Crash Test 11664 (90° Front Fixed Barrier Impact at 34.9 ± 0.4 mph, 56.2 ± 0.6 km/h) - 2000 Taurus (D186) 4-Door Sedan - 2000 Certification Program

REQUESTED BY: Vehicle Crash Safety Department, Research and Vehicle Technology - L. Mialik

OBJECT: To provide occupant protection data relative to the front barrier impact test requirements of the current FMVSS No. 208 (U.S. CFR Docket No. 98-4358, Canadian Gazette SOR/97-447)

SUMMARY OF TEST RESULTS:

- See Attachment 1 for injury criteria data.
- See Attachment 2 for vehicle observations and non-FMVSS data.

The Test Authorization for this crash indicated that the vehicle is representative of a design level suitable for a certification test. To the best of my knowledge, the crash testing was performed on the same vehicle as identified in the Test Authorization; the results reported herein represent the performance of this specific vehicle, and the testing was performed in accordance with the listed procedures. Any procedure deviations significant to the test objectives above are identified in this report.

R. Oda
 Engineering Technologist

Concur: S. Lesh
 Section Supervisor
 Operations Engineering Section

VEHICLE DATA:

Make and Model 2000 Taurus (D186) 4-Door Sedan (Production Vehicle)

ID Numbers 1FAFP5223YA100123, 206-Y-646

Power Train 3.0L, EPI, Automatic (AX4N) Transaxle

Fuel Tank(s) Usable Capacity: 16.0 gal. (60.6L)
Test Condition: Filled with water for ballast.

Front Seat(s) Type: Bucket
Cover: Cloth
Tracks/Position: LF: 6-Way Power/Mechanical Mid and Down
RF: Manual/Mechanical Mid
Seat Backs/Position: Adjustable/LF: 27.5° Rear of Vertical,
RF: 27.1° Rear of Vertical
Head Restraints/Position: Adjustable/Up

Restraint System LF: 3-Point Continuous Loop Active Belt with
Pyrotechnic Buckle and Steering Wheel Air Bag
RF: 3-Point Continuous Loop Active Belt with
Pyrotechnic Buckle and Instrument Panel Air Bag

Occupants LF: 50th Percentile Male, Hybrid III,
Instrumented No. 315
RF: 50th Percentile Male, Hybrid III,
Uninstrumented No. 305

Test Weight Front: 2275 lb (1032 kg)
Rear: 1595 lb (723 kg)
Total: 3870 lb (1755 kg)
The test weight includes:

- the "as received" unloaded vehicle curb weight
- Minimum production options (simulated)
- 2 occupant(s) (described above)
- 200 lb (90.7 kg) luggage (simulated)

Tires Front: P215/60R16 30 psi (207 kPa)
Rear: P215/60R16 30 psi (207 kPa)
Spare: Removed

Bumpers Front: Fascia/Beam
Rear: Removed

Significant Content or Accessories: Air Conditioning, Power Steering, Power Brakes, Tilt Steering Wheel

GENERAL TEST COMMENTS:**1. Test Procedure**

The test was performed according to the following Corporate test procedure(s):

Occupant Crash Protection, T657-ST-25 dated March 3, 1998.

2. Significant Deviations from T657-ST-25

- Only the left front dummy was used for certification.

The fuel system did not contain stoddard.

- 3. Instrumentation:** The instrumentation equipment set up for this test was completed following approved procedures which require engineering sign-off after each major step. The instrumentation equipment and systems used meet the SAE J211 June 80 series of recommended practices (Instrumentation for Impact Tests J211, J211a, or J211b) and were calibrated using secondary standards that are traceable to the National Institute of Standards and Technology (NIST).

4. Remarks

Crash movies, pre- and post-crash still images of the test vehicle and copies of this report are available through the Operations Engineering Section, Safety Laboratories Department, GTO. The crash still images are stored and archived on CD ROMs. The file names of the still images are listed under crash number and a three digit sequence number which are 11664001 through 11664056.

ATTACHMENT 1

Occupant Injury Data (C/EMVSS 208)

	<u>L. E. Dummy</u>	<u>R. E. Dummy *</u>
Head Injury Criteria (HIC)	334	
Interval	61 ms	
t1	97 ms	
t2		
Chest resultant acceleration level at 9 ms cumulative duration	43 g	
Chest Deflection (Hybrid III)	1.3 in	
Peak axial compression load:		
Left femur	341 lb	
Right femur	465 lb	
Peak axial tension load:		
Left femur	274 lb	
Right femur	249 lb	
Dummy contained within the vehicle during the crash	Yes	

* Uninstrumented Dummy

The dummy temperature, immediately prior to the test, was within the specified test range of 69°F to 72°F.

Time histories of the dummy instrumentation are included in this report.

ATTACHMENT 2

1.0 Vehicle Crash, Film Analysis and/or Instrumentation Data

	Maximum Dynamic Longitudinal Crush	
	in.	(mm)
Left Side	28.0	(711)
Right Side	28.0	(711)

Time histories of the dummy dynamic displacements obtained from Film Analysis are included in this report.

Time histories of the air bag/sensor(s) are included in this report.

Time histories of the vehicle accelerations and other instrumentation are included in this report.

Time histories of vehicle dynamic displacements obtained from Film Analysis are included in this report.

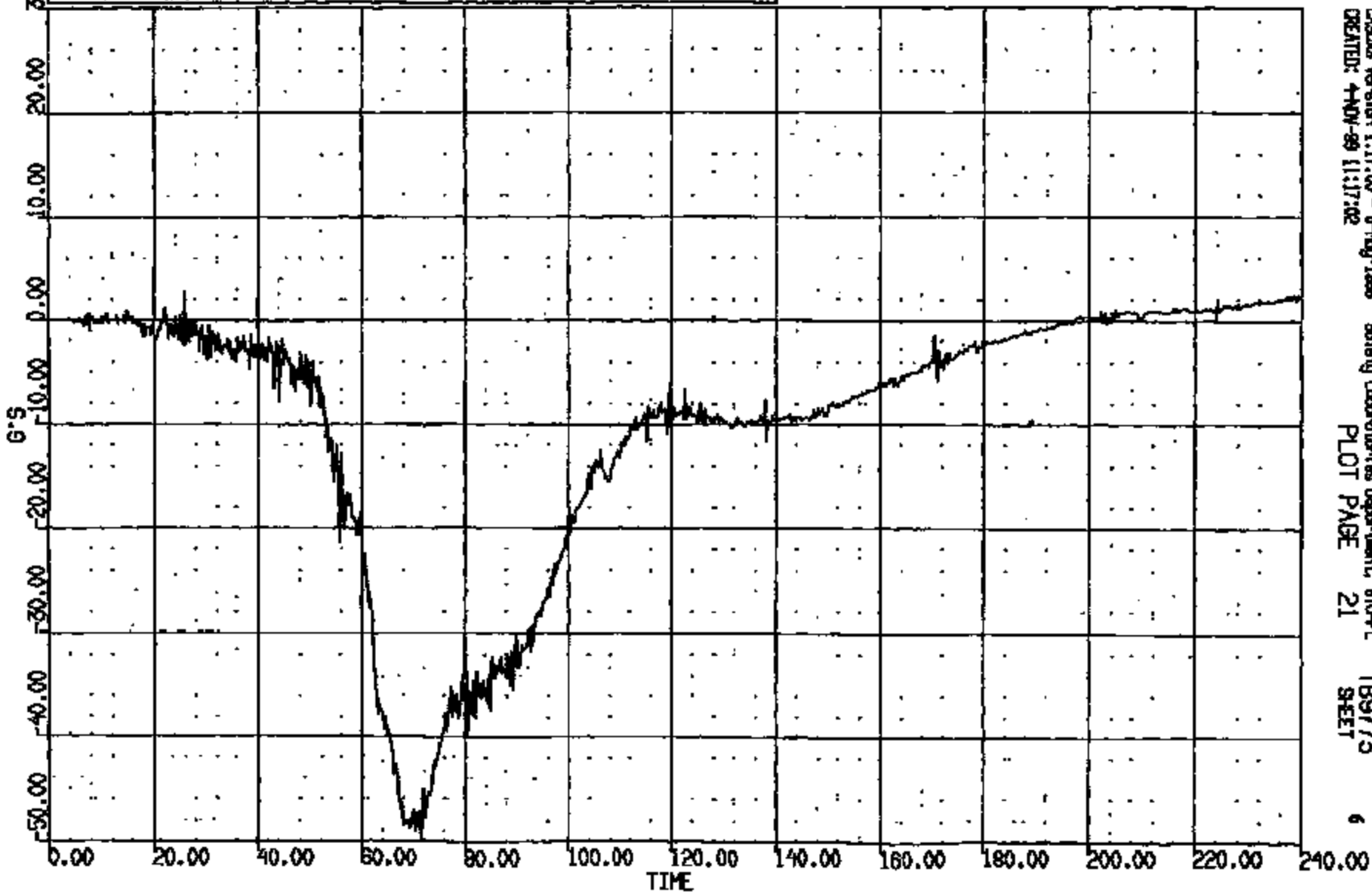
Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.

CR R: 11664 TO: TB9773 DATE: 891104 10:34:17
2000 D-199

(1) CR11664T L/F DUMMY HEAD C.G. LONG 1000C

MAX = 2.692 at 25.91 MS MIN = -49.71 at 71.44 MS

AXIS 1



CRSUS Version 1.17.00 - 8-May-1988
CREATED: 4-NOV-89 11:17:02

Safety Laboratories Department, STD-PL
PLOT PAGE 21

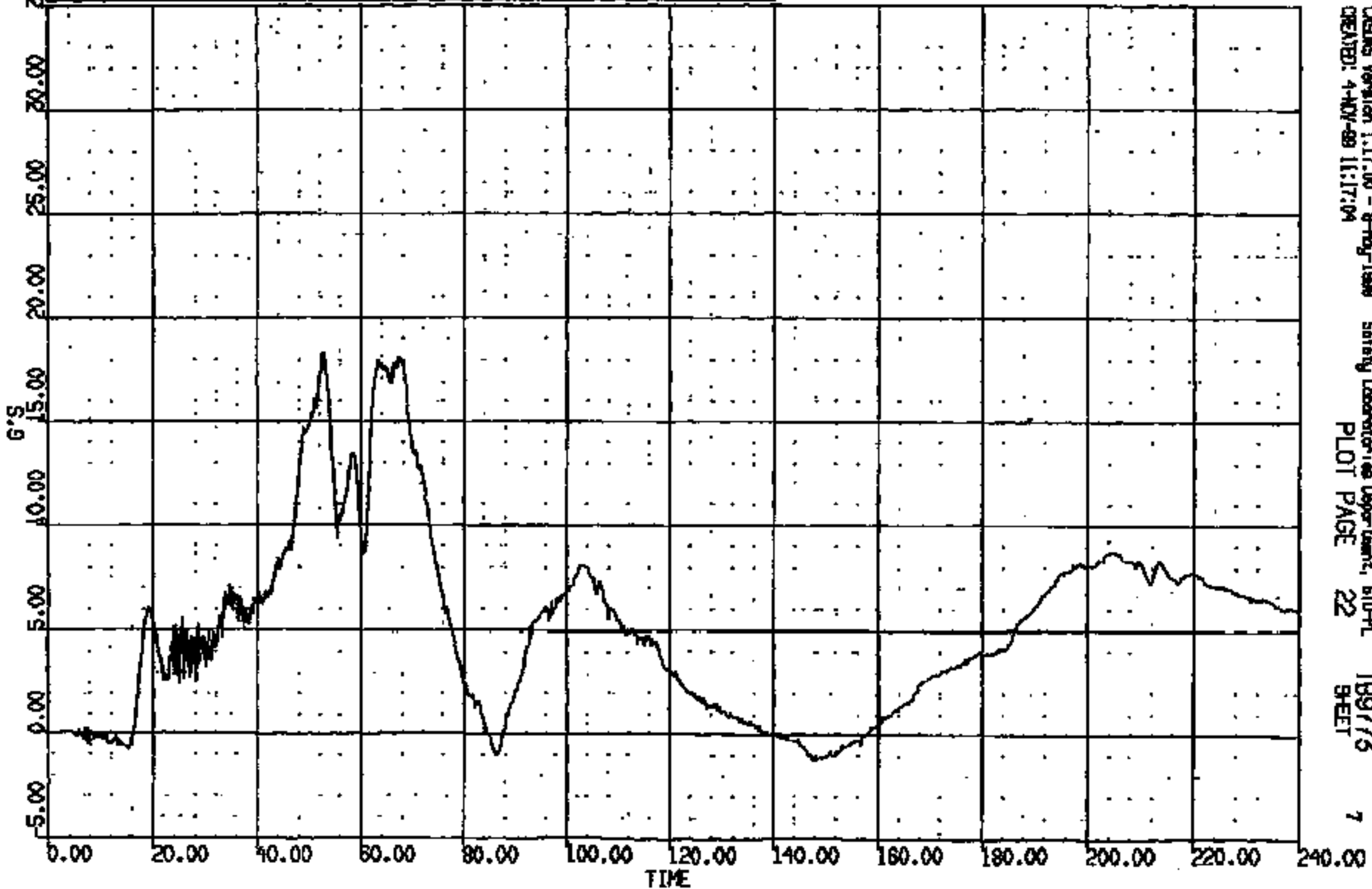
TB9773
SHEET

CR R: 1188 TO: TB9773 DATE: 001104 10:54:17
2000 D-188

(2) CR11664T L/F DUMMY HEAD C.G. VERT 1000C

MAX = 18.31 at 52.88 MG MIN = -1.267 at 118.2 MG

AXIS 1



CRS Version 1.17.00 - 8-May-1998
CREATED: 4-NOV-99 11:17:04

Safety Laboratories Department, BLD-PL
PLOT PAGE 22

TB9773
SHEET

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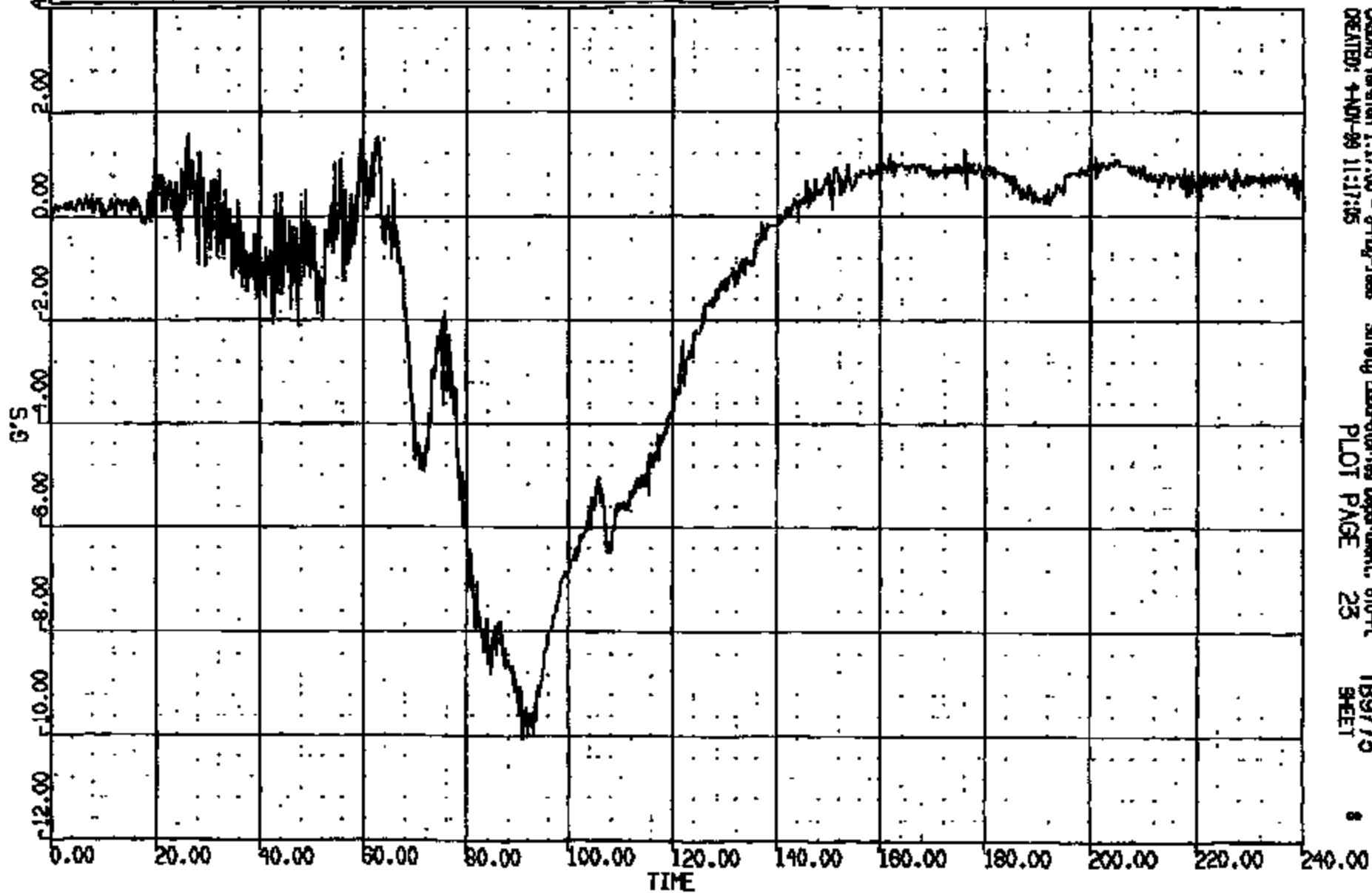
CRIS 0011664

CR R: 11664 TO: TB9775 DATE: 091104 10:34:17
2000 D-188

(3) CR11664 L/F DUMMY HEAD C.G. LAT 1000C

MAX = 1.565 at 26.24 NS MIN = -10.09 at 90.88 NS

AXIS 1



CRAMS Version 1.17.00 - 9-May-1988
CREATED: 4-NOV-99 11:17:05

Safety Laboratories Department, 610-PL
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SHEET

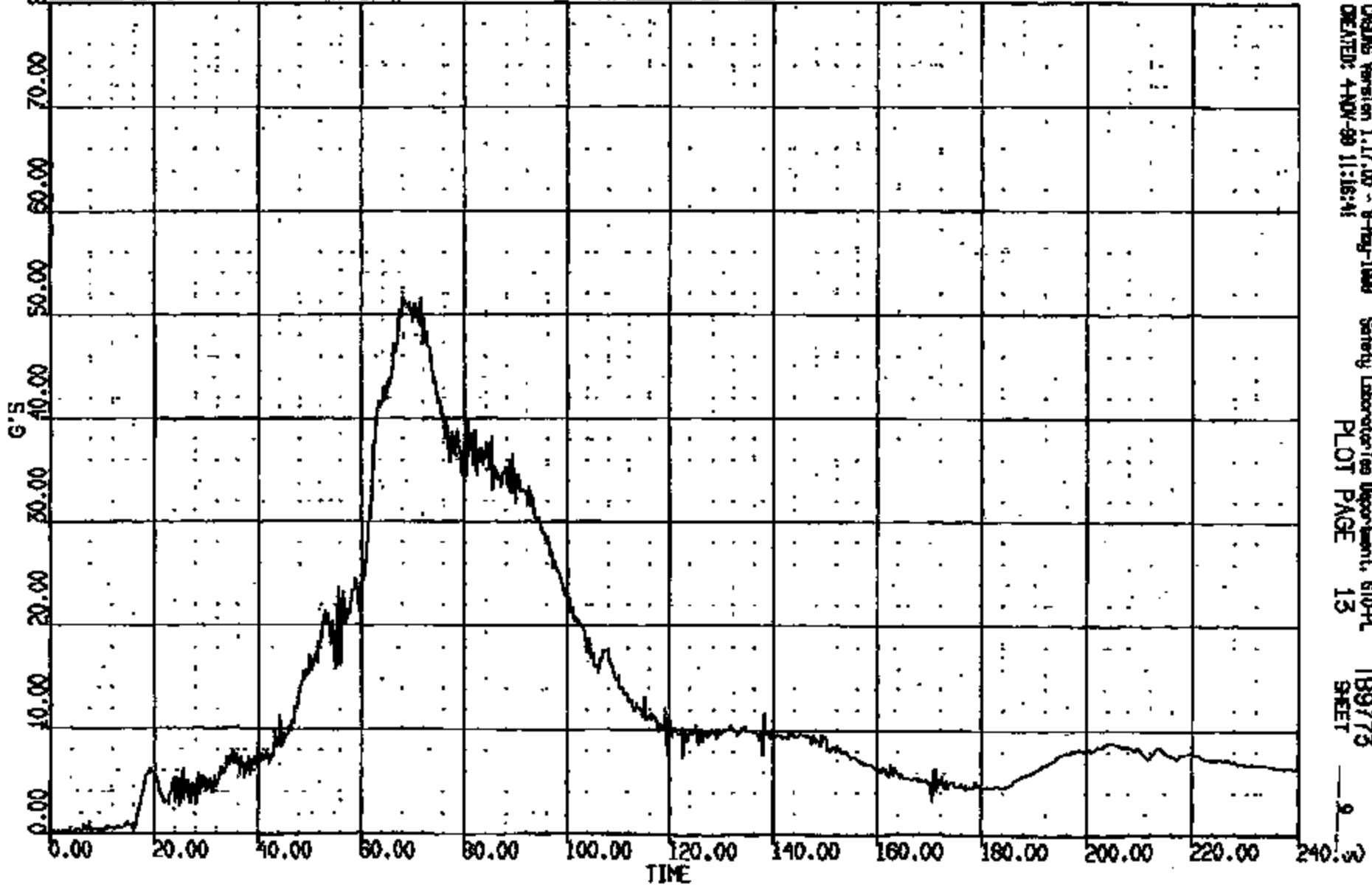
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NO: 11884 TO: T89775 DATE: 881104 10:34:17
 IIR: 0
 IIR: 00000
 IIR: 00000
 IIR: 00000

NO: 11884	DUR: 240.0	T1/T2: 57.0	100.0
NO: 11884	DUR: 38.0	T1/T2: 61.0	97.0
NO: 11884	DUR: 18.0	T1/T2: 68.7	77.7

(1000) CR11664T L/F DUMMY HEAD C.G. RES 1000C
 MAX = 51.60 at 68.16 MS MIN = 0.502E-01 at 0.2400 MS

AXIS 1

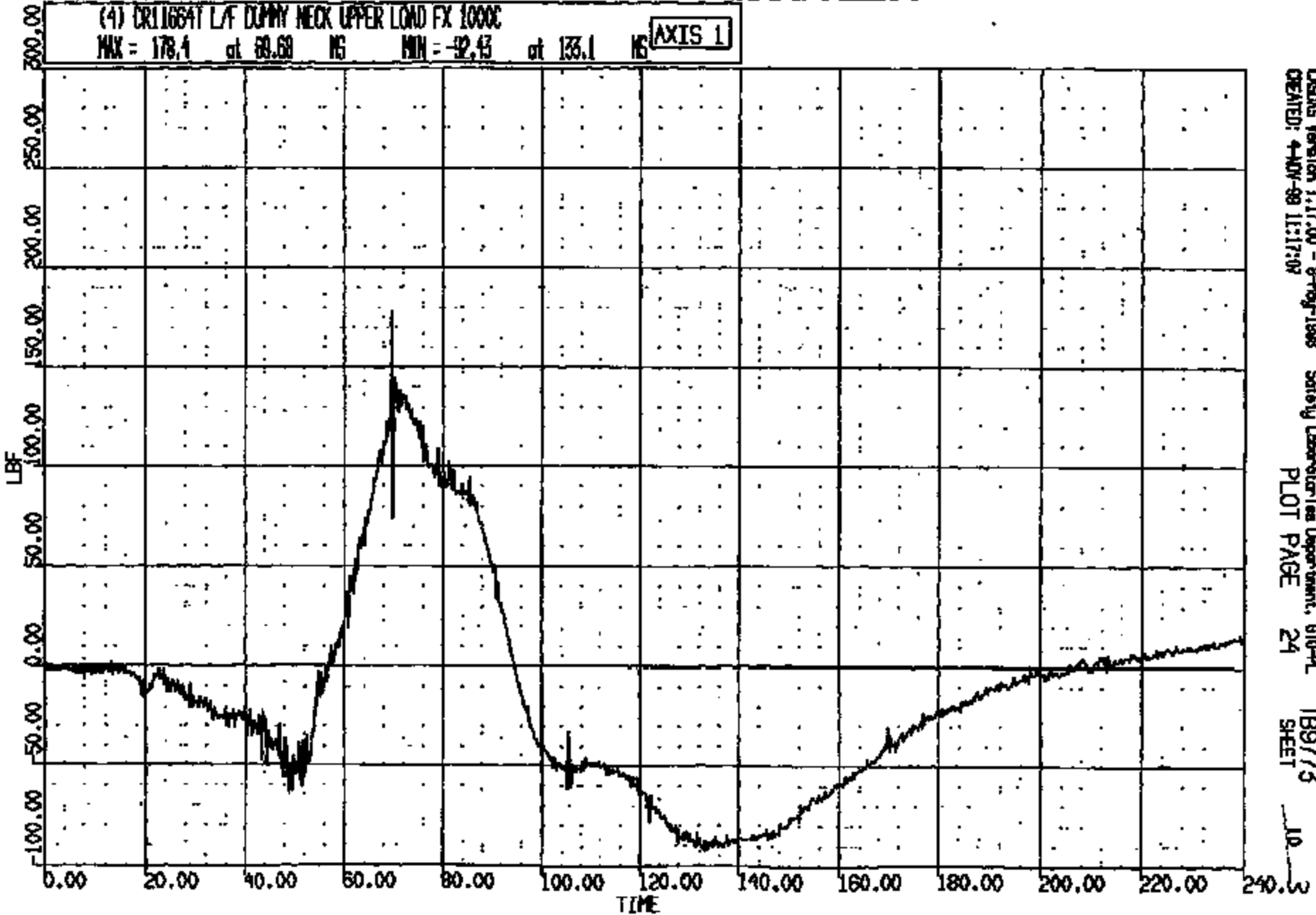


CRAMS Version 1.17.00 - 8-Feb-1988 Safety Laboratories Department, STG-PL
 CREATED: 4-NOV-88 11:16:41 PLOT PAGE 13 T89775 SHEET 9

CRTS 0011664

CR: 11884 TO: TB9773 DATE: 881104 10:34:17
0000 0-188

(4) CR11664T L/F DUMMY NECK UPPER LOAD FX 1000C
MAX = 178.4 at 68.68 NS MIN = -92.43 at 136.1 NS **AXIS 1**



CRSIS Version 1.17.00 - 8-Kty-1888 Safety Laboratories Department, 610-PL TB9773
CREATED: 4-MAY-88 11:17:02 PLOT PAGE 24 SHEET 10

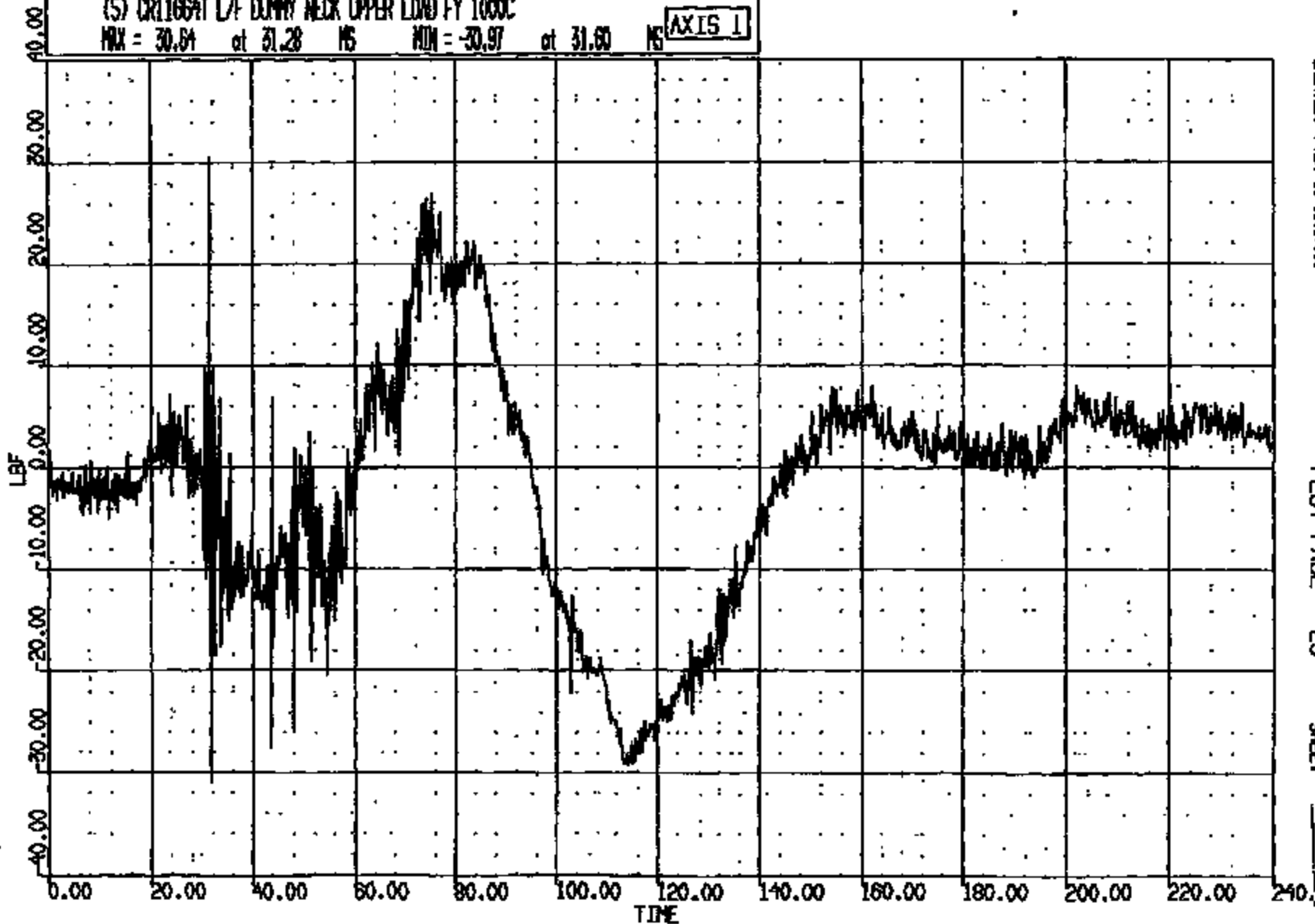
CRIS 0011664

CR R: 11664 TO: TB9773 DATE: 991104 10:34:17
2000 D-180

(5) CR11664T L/F DUNNY NECK UPPER LOAD FY 1000C

MAX = 30.94 at 31.28 MS MIN = -30.97 at 31.60 MS

AXIS 1



CRSIS Version 1.17.00 - 8-May-1998
CREATED: 4-NOV-99 11:17:00

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TB9773
SHEET

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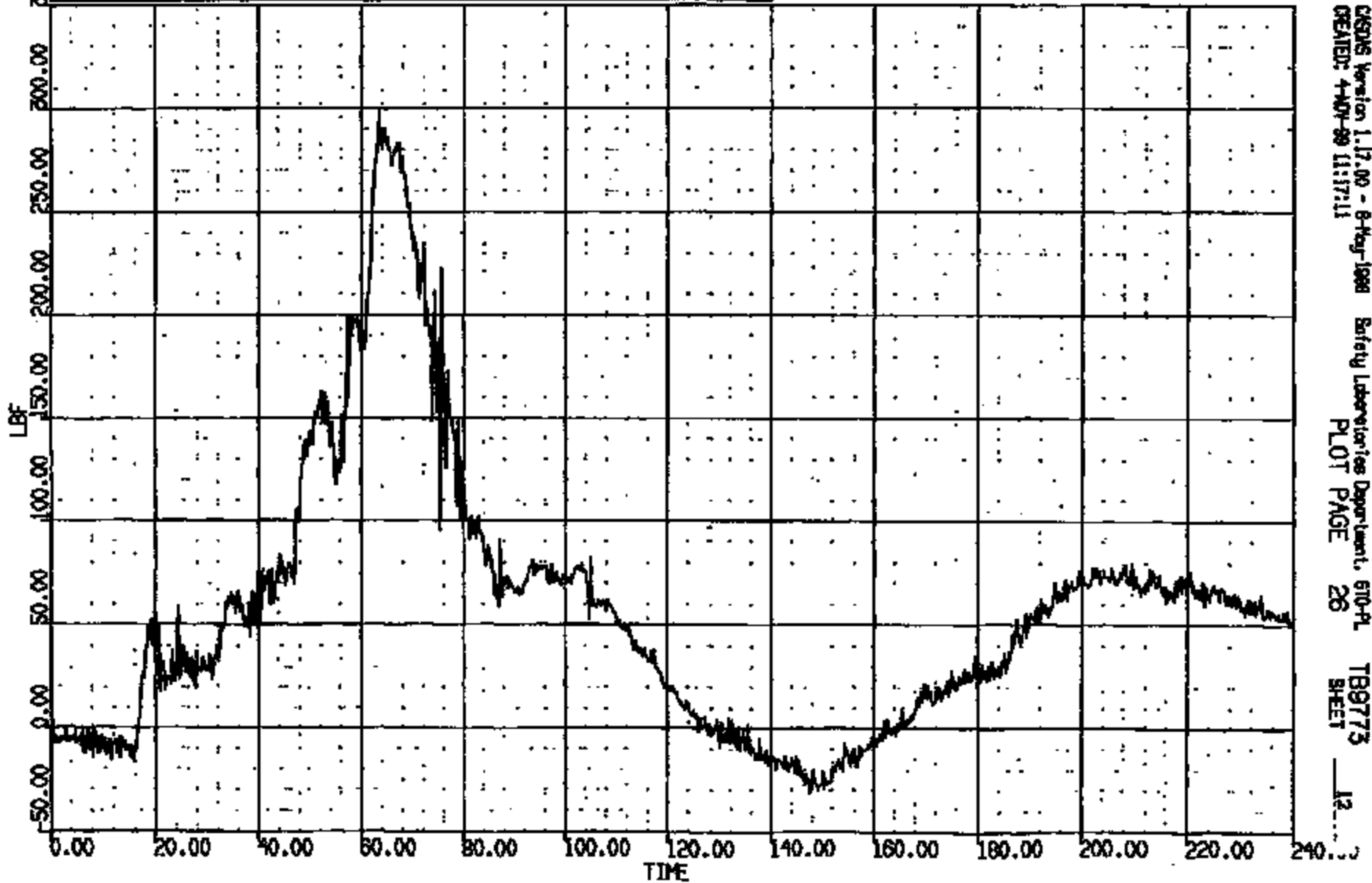
CRIS 0011664

CR R: 11664 TC: TB9773 DATE: 991104 10:34:17
2000 D-186

(G) CR11664T L7 DUMMY NECK UPPER LOAD FZ 1000C

MAX = 299.6 at 63.44 MS MIN = -31.21 at 147.6 MS

AXIS 1



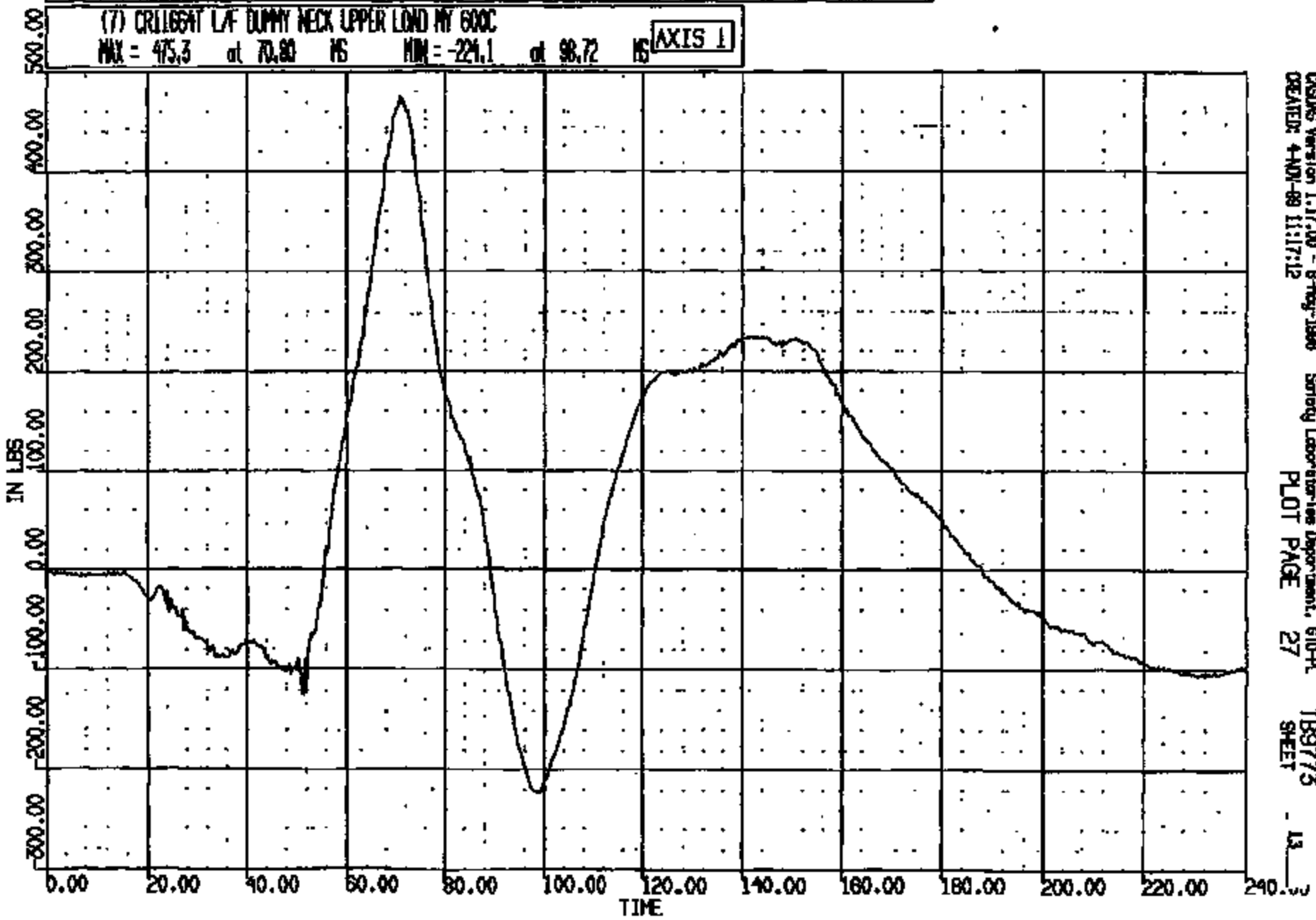
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CREATED: 4-MAY-99 11:17:11

Safety Laboratories Department, 610-PL
PLOT PAGE 26

TB9773
SHEET 12

CRTS 0011664

CR R: 11664 TO: TB9775 DATE: 991104 10:54:17
2000 D-188



CASMS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
CREATED: 4-NOV-99 11:17:12 PLOT PAGE 27 TB9775 SHEET

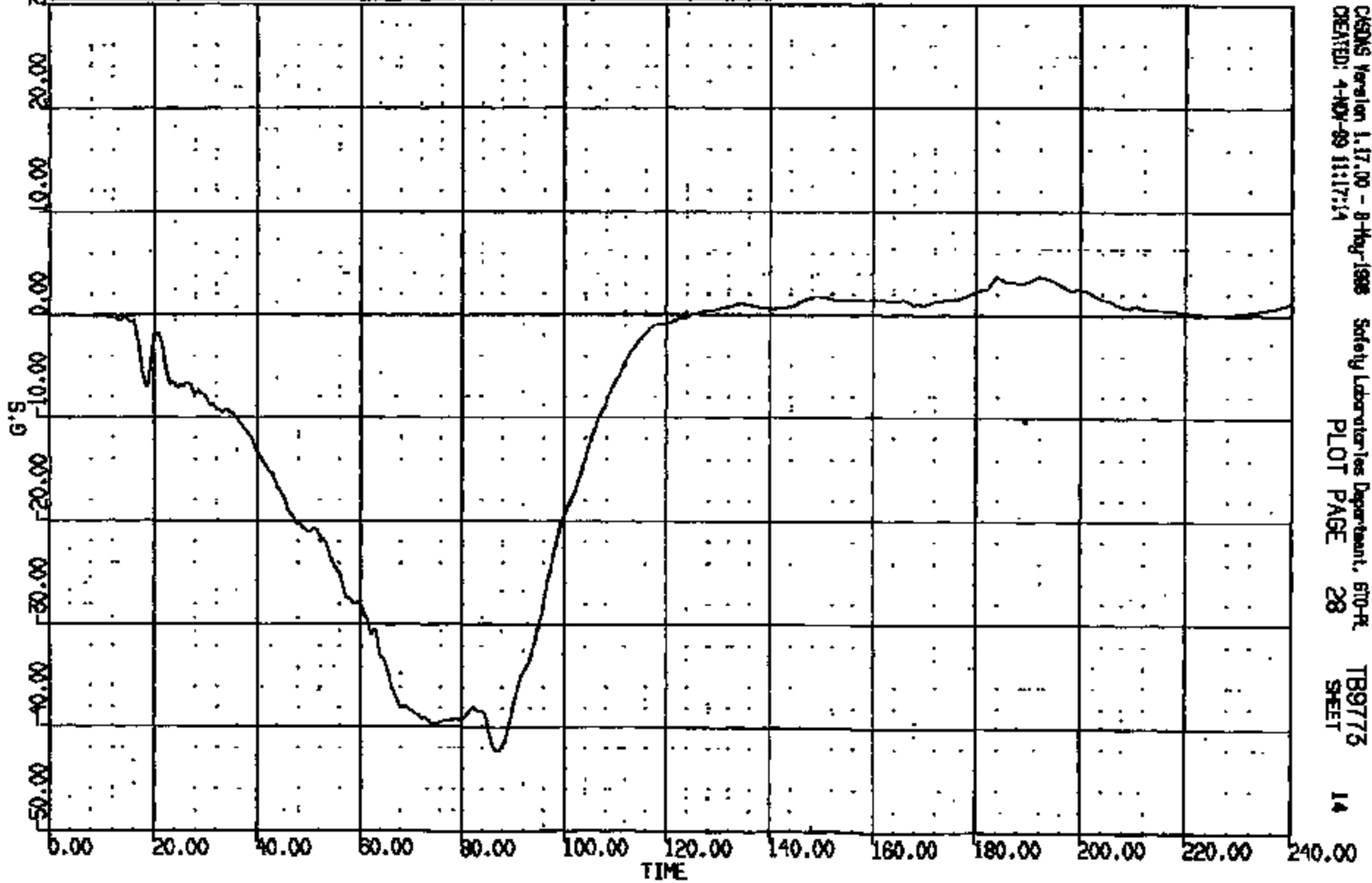
CRTS 0011664

CR R: 11664 TC: TB9775 DATE: 991104 10:34:17
2000 D-188

(8) CR116641 L/F DUMMY CHEST LONG 180C

MAX = 3.728 at 181.0 MS MIN = -2.34 at 86.96 MS

AXIS 1



CRSINS Version 1.17.00 - 8-Aug-1998
CREATED: 4-NOV-99 11:17:14

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SHEET

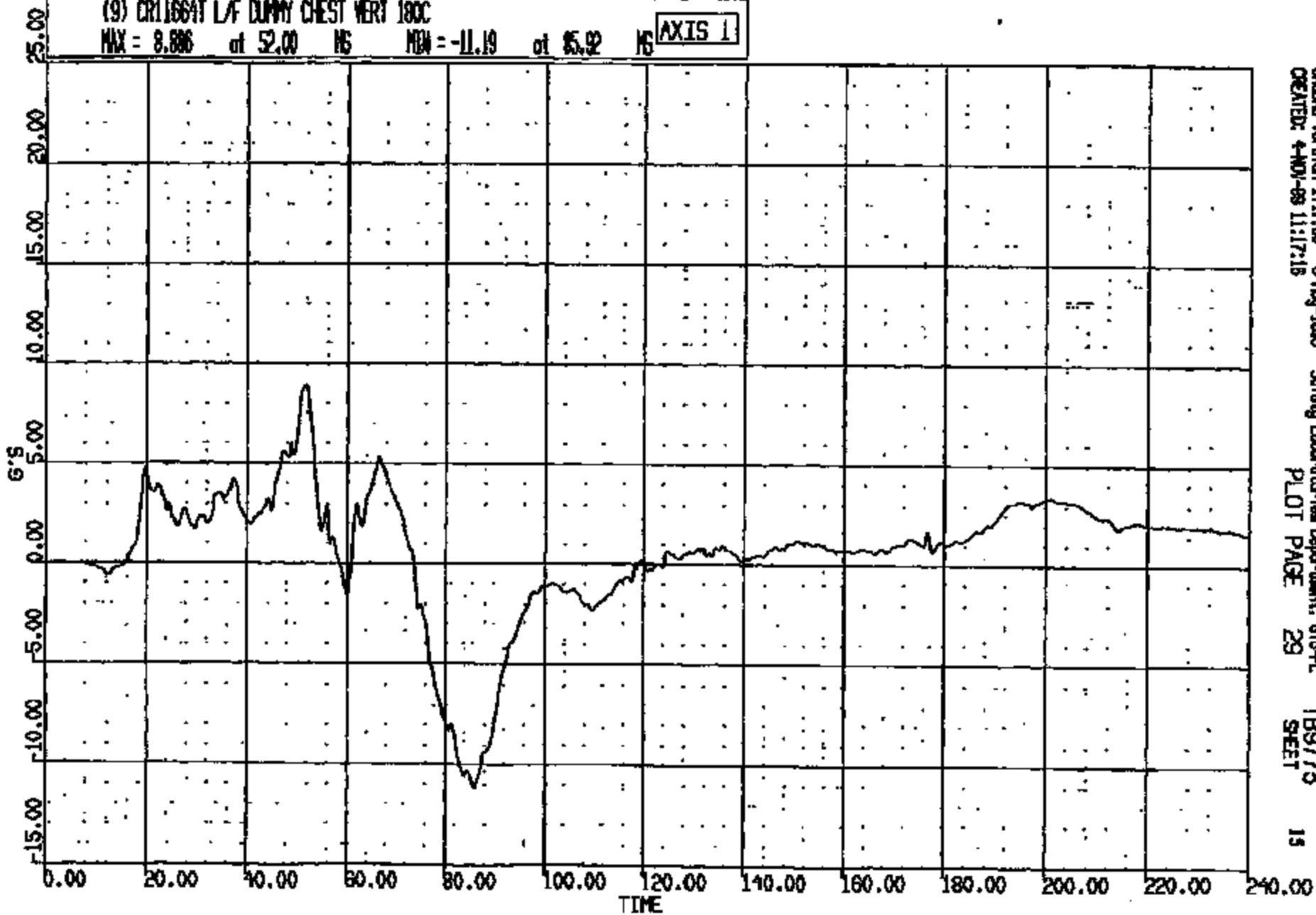
14

CRTS 0011664

CR R: 11864 TO: TB9773 DATE: 081104 10:54:17
2000 D-188

(9) CR11864T LAF DUMMY CHEST VERT 180C

MAX = 8.886 at 52.00 MS MIN = -11.19 at 85.92 MS **AXIS 1**



CRSIS Version 1.17.00 - 9-May-1998
CREATED: 4-MAY-98 11:17:18

Safety Laboratories Department, GD-PL
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TB9773
SHEET

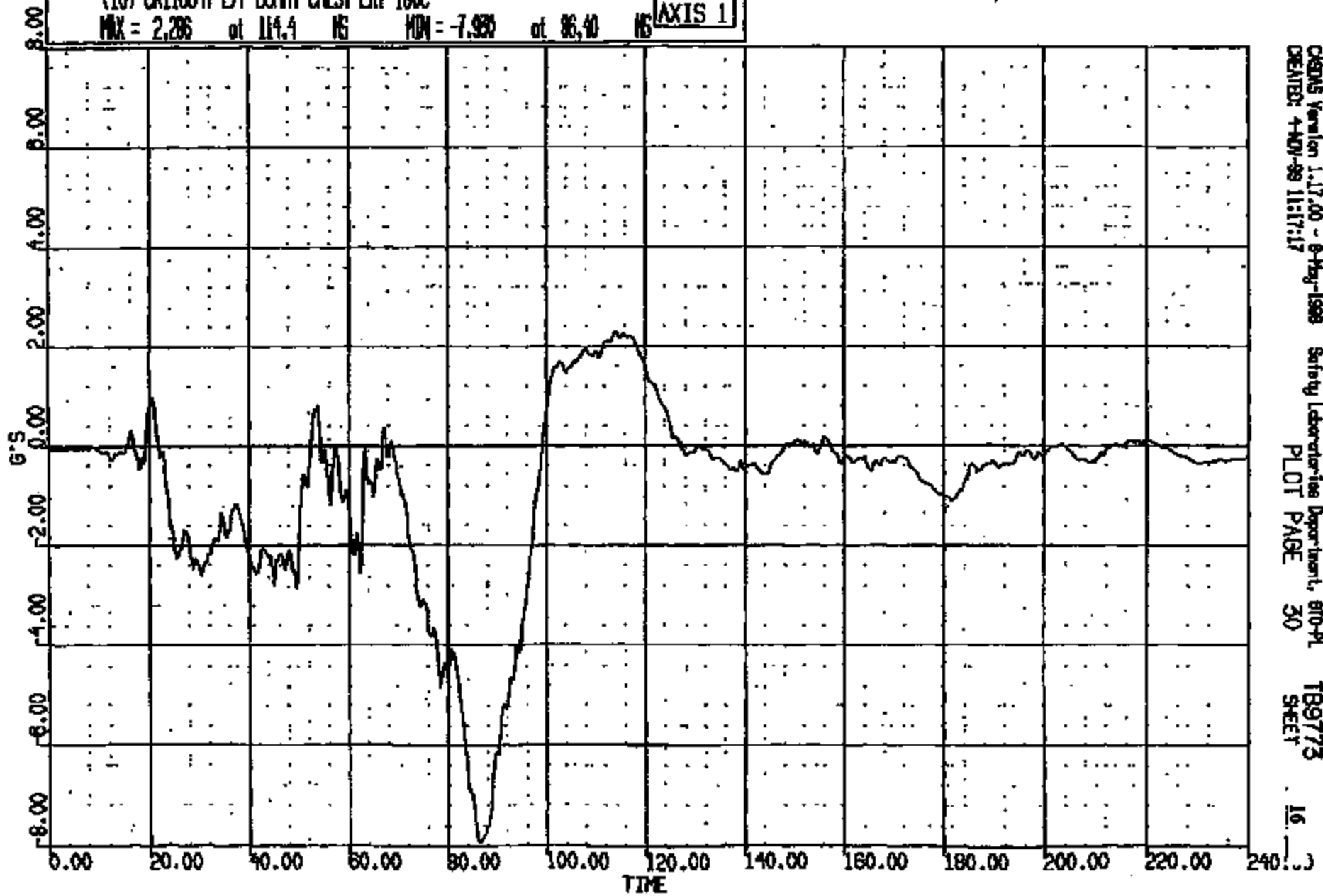
15

CR R: 11664 TO: TB9773 DATE: 991104 10:24:17
2000 D-188

(10) CR11664T L/F DUMMY CHEST LAT 180C

MAX = 2.286 at 114.4 MS MIN = -7.930 at 86.40 MS

AXIS 1



CRSAS Version 1.17.00 - 8-May-1998
CREATED: 4-MAY-99 11:17:17

Safety Laboratories Department, 810-PL
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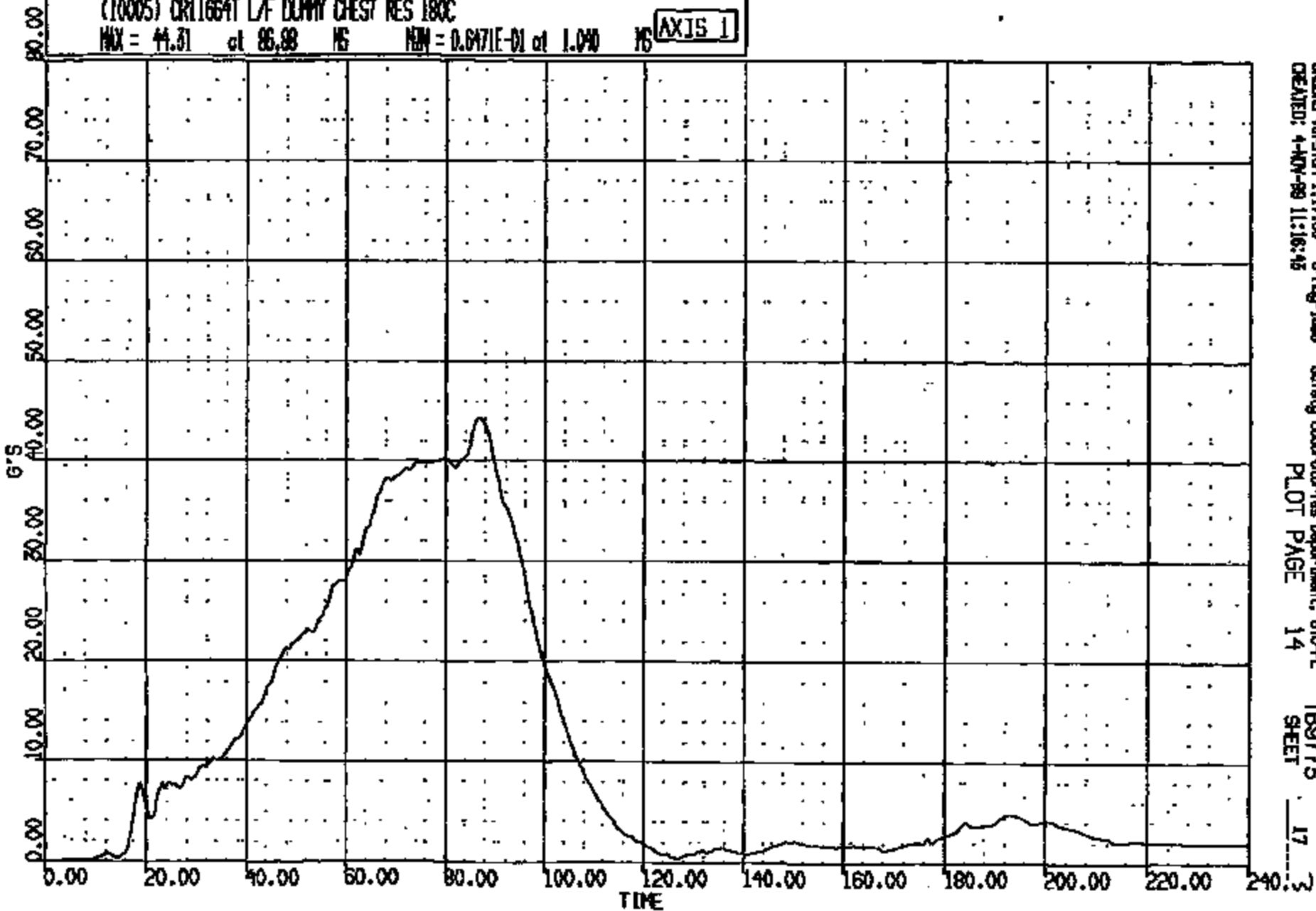
TB9773
SHEET

16

CRIS 0011664

CR R: 11664 TO: TB9775 DATE: 991104 10:24:17
2000 D-186
CUMDUR = 42.912 Duration time = 2.9999

(10005) CR11664T L/F DUMMY CHEST RES 180C
MAX = 44.31 at 86.98 NS MIN = 0.0471E-01 at 1.040 NS **AXIS 1**



CRSIS Version 1.17.00 - 8-May-1998
CREATED: 4-NOV-99 11:16:45

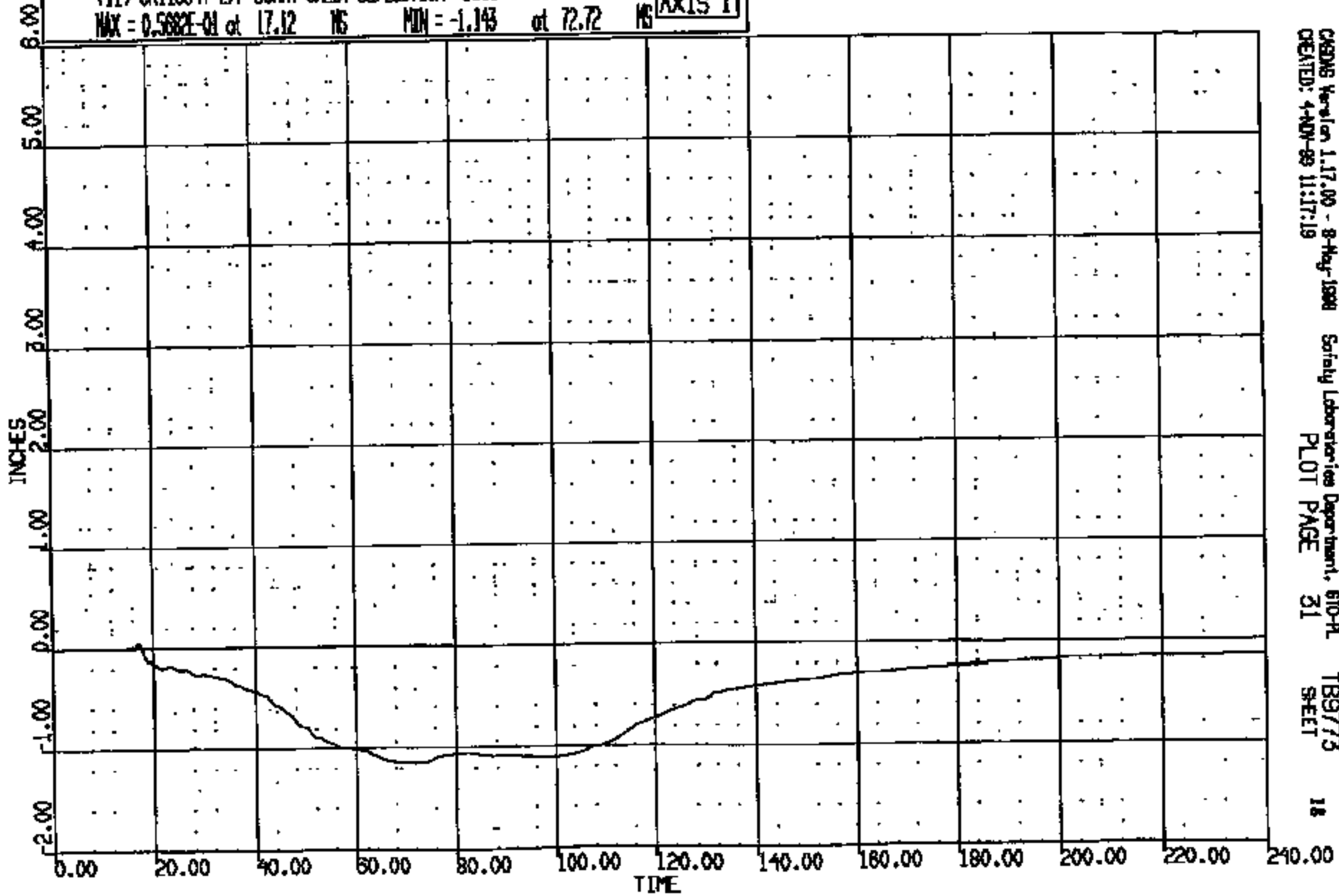
Safety Laboratories Department, 610-PL
PLOT PAGE 14

TB9775
SHEET

17

CR R: 11884 TO: TB9773 DATE: 991104 10:54:17
R000 D-188

(11) CR11664T L/F DUMMY CHEST DEFLECTION 180C
MAX = 0.5682E-01 at 17.12 MS MIN = -1.143 at 72.72 MS **AXIS 1**

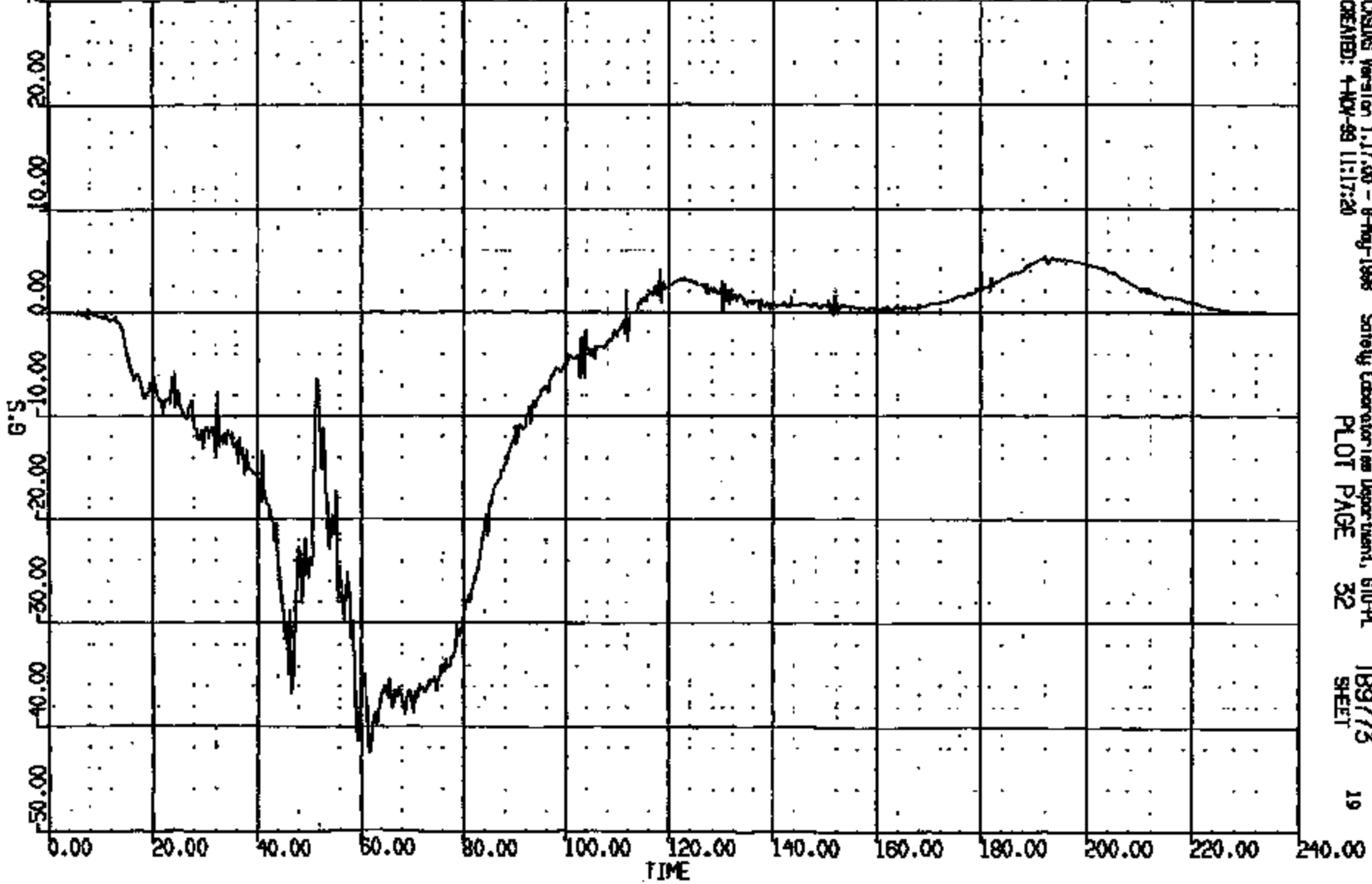


CRSNG Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL TB9773
CREATED: 4-MAY-99 11:17:19 PLOT PAGE 31 SHEET 18

CRIS 0011664

CR R: 11664 TO: TB9773 DATE: 881104 10:24:17
2000 0-166

(12) CR11664T L/F DUMMY PELVIS LONG 1000C
MAX = 5.384 at 192.0 MS MIN = -42.50 at 61.00 MS **AXIS 1**



CSDMS Version 1.17.00 - 8-May-1988 Safety Laboratories Department, 610-PL
CREATED: 4-NOV-88 11:17:20 PLOT PAGE 32 TB9773
SHEET 19

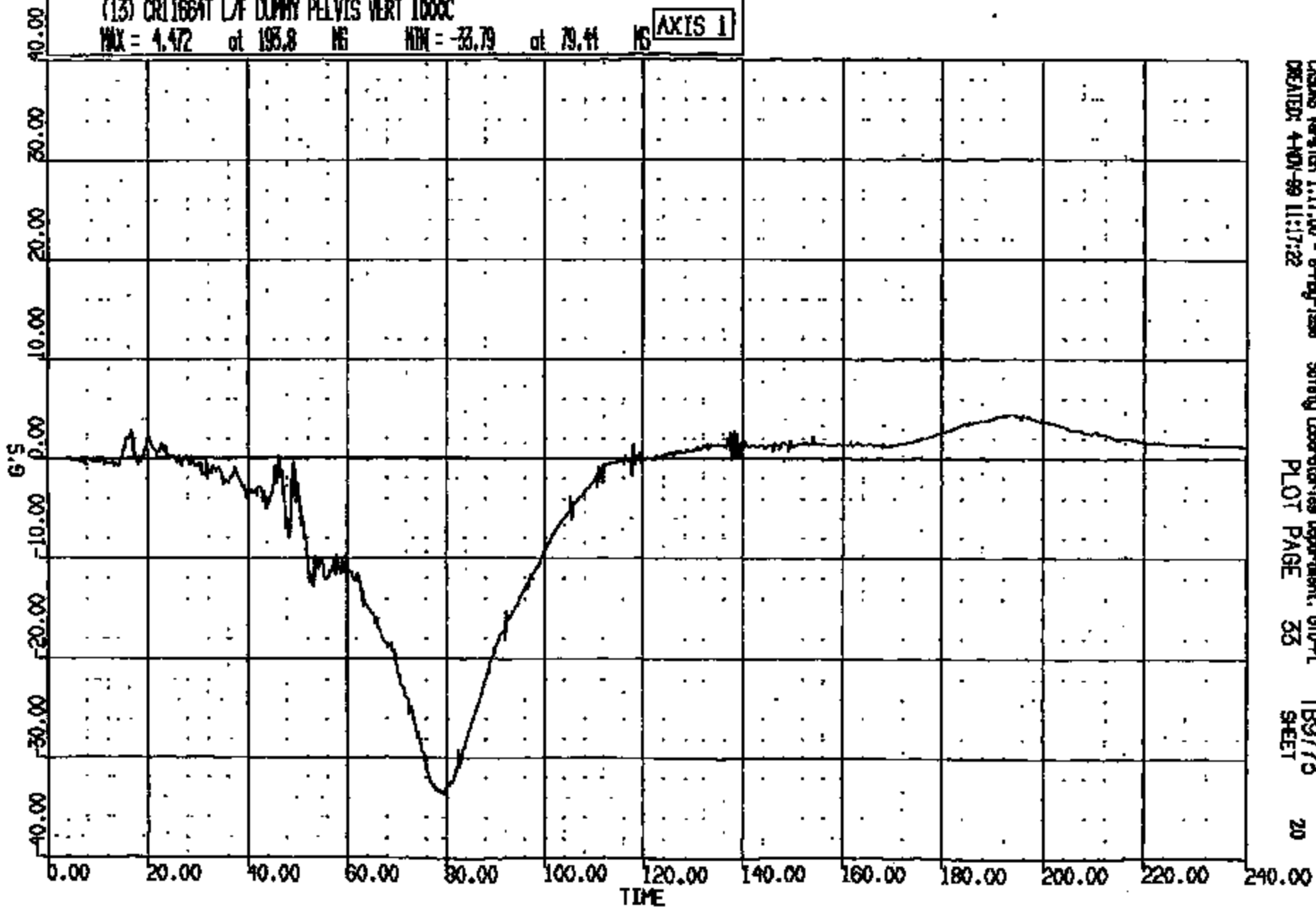
CRTS 0011664

CR R: 11664 TO: T89775 DATE: 991104 10:34:17
2000 D-188

(13) CR11664T L/F DUMMY PELVIS VERT 1000C

MAX = 4.472 at 193.8 MS MIN = -33.79 at 79.44 MS

AXIS 1



CASDS Version 1.17.00 - 8-May-1998
CREATED: 4-NOV-99 11:17:22

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T89775
SHEET

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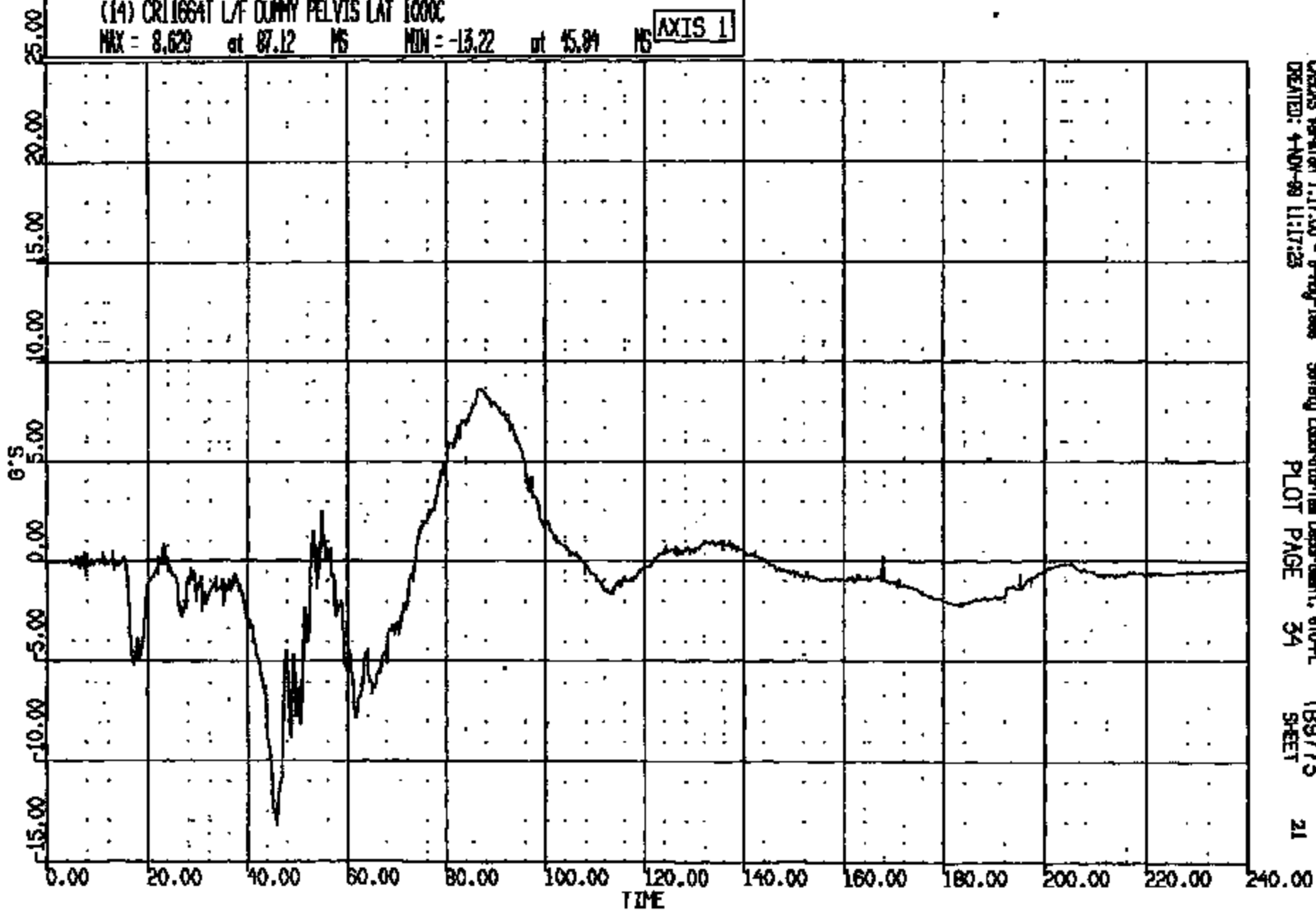
CR1S 0011664

CR R: 11664 TO: TB9775 DATE: 991104 10:34:17
2000 D-160

(14) CR11664T L/F DUMMY PELVIS LAT 1000C

MAX = 8.629 at 87.12 MS MIN = -13.22 at 45.84 MS

AXIS 1



CASAS Version 1.17.00 - 9-May-1999
CREATED: 4-NOV-99 11:17:23

Safety Laboratory Department, 810-PL
PLOT PAGE 34

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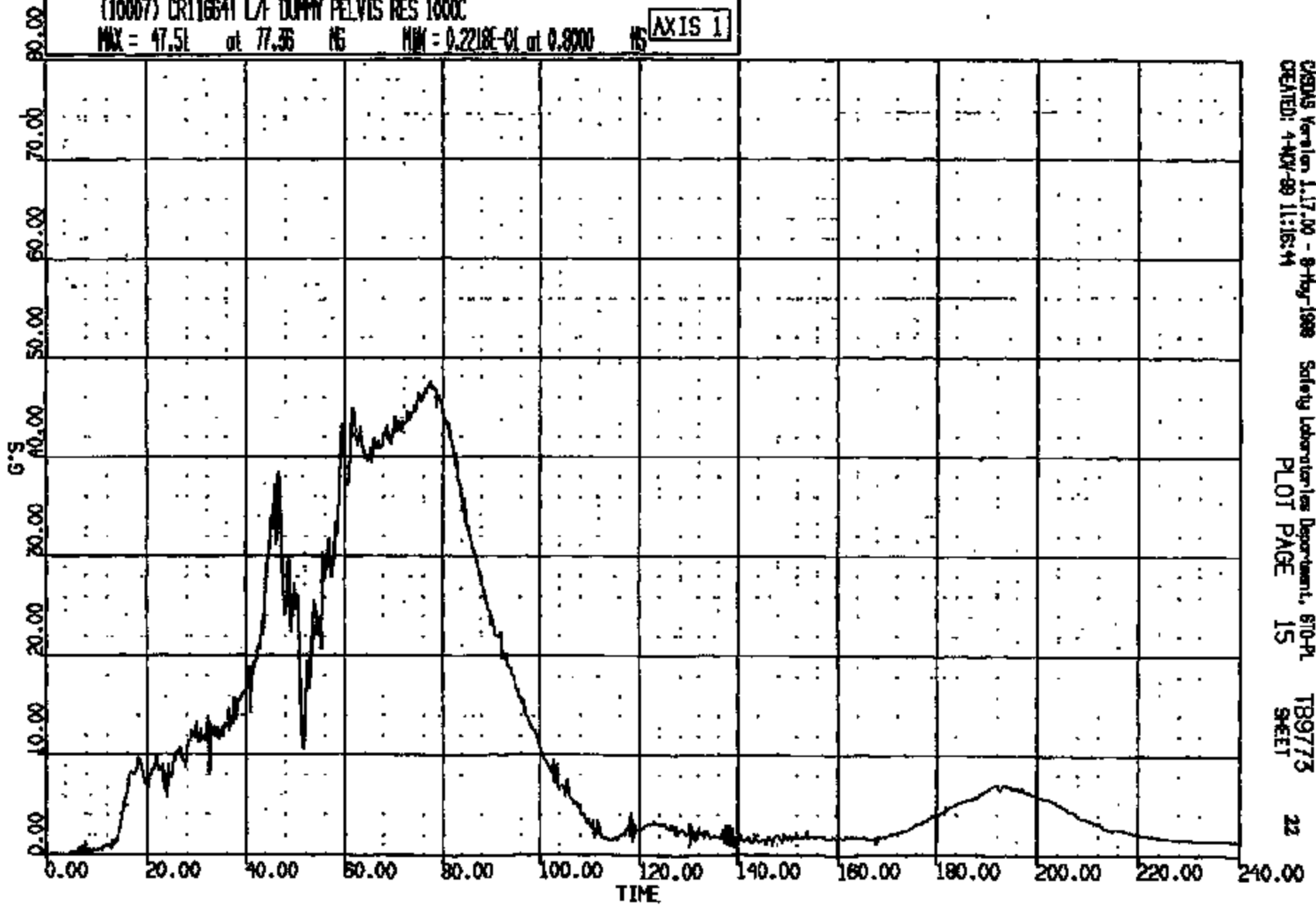
CRTS 0011664

CR R: 11884 TO: TB9773 DATE: 881104 10:24:17
2000 D-188

(10007) CR11664T L/F DUMMY PELVIS RES 1000

MAX = 47.5E at 77.35 MS MIN = 0.2218E-01 at 0.8000 MS

AXIS 1



CRSAS Version 1.17.00 - 8-May-1988
CREATED: 4-NOV-88 11:16:14

Safety Laboratories Department, 610-PL
PLOT PAGE 15

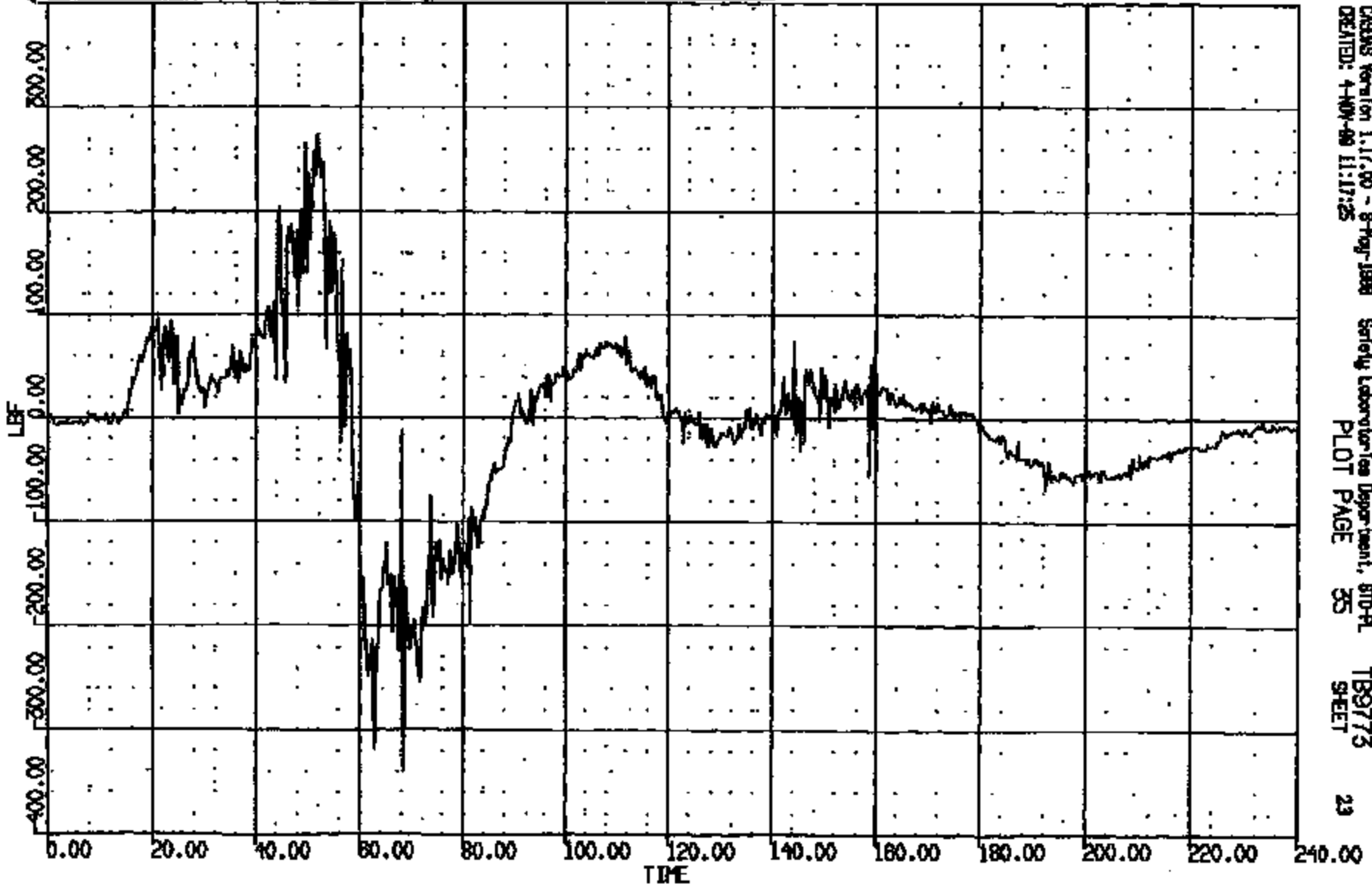
TB9773
SHEET

22

CR11664

CR R: 11664 TO: TB9773 DATE: 991104 10:34:17
2000 D-188

(15) CR11664T L/F DUMMY L/FENR LOAD FZ 600C
MAX = 273.5 at 51.76 MS MIN = -340.7 at 68.40 MS **AXIS 1**



CASAS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, STD-PL
CREATED: 4-NOV-99 11:17:25 PLOT PAGE 35 TB9773 SHEET 23

CRIS 0011664

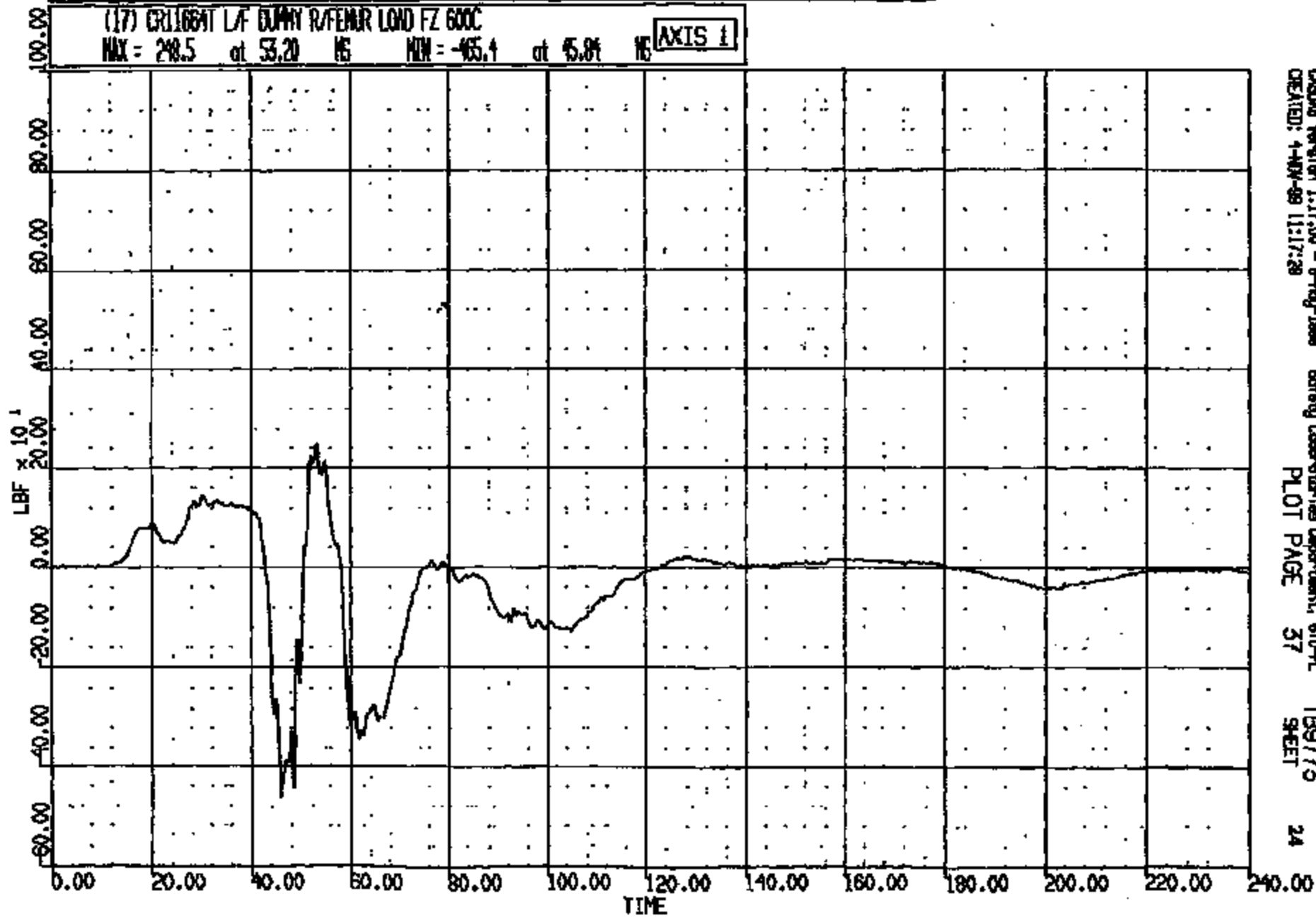
CR R: 11664 TO: TB9773 DATE: 891104 10:34:17

2000 D-188

(17) CR11664T LAF DUMMY REFEROR LOAD FZ 600C

MAX = 298.5 at 53.20 MS MIN = -465.4 at 45.84 MS

AXIS 1



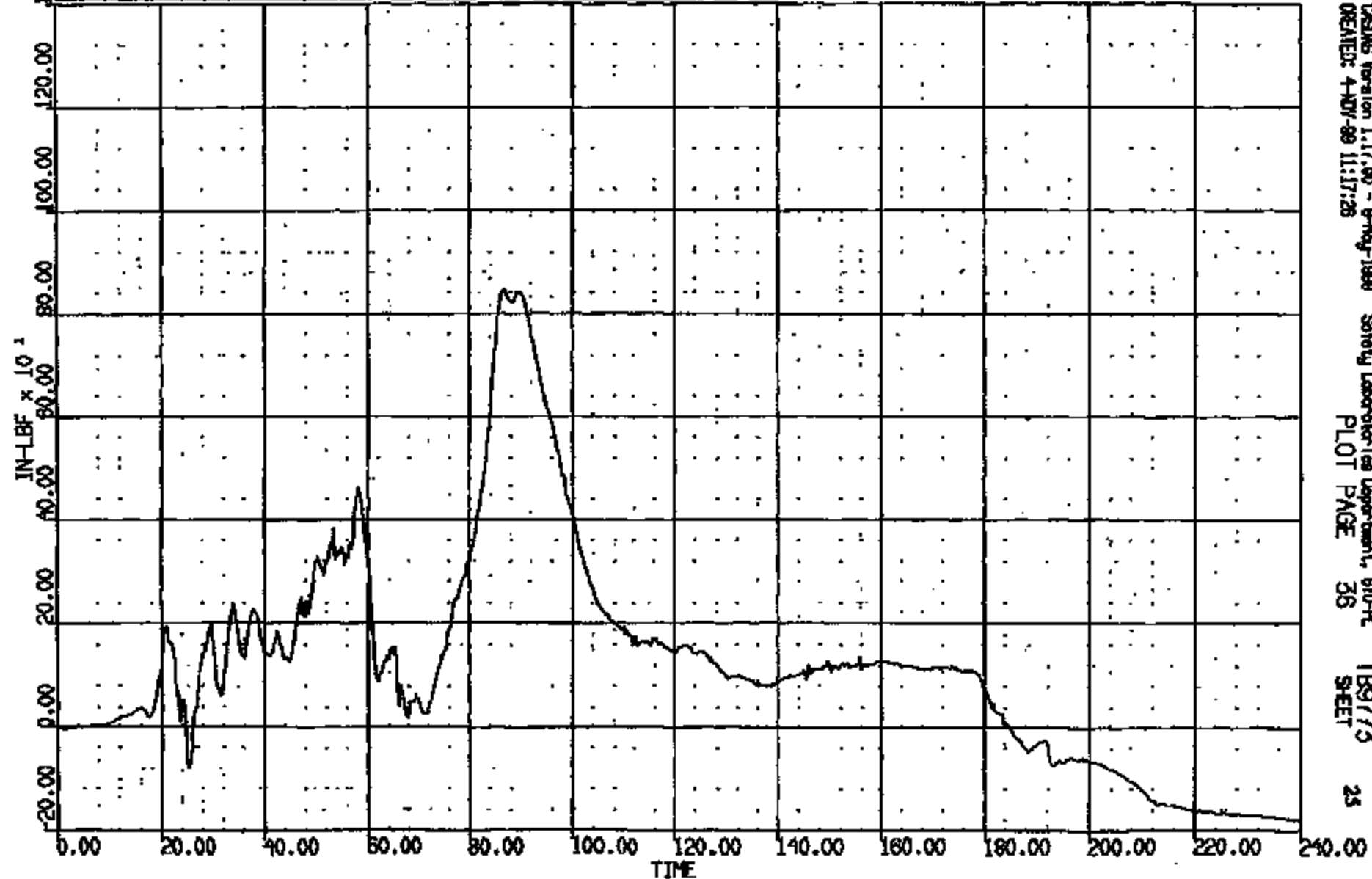
CASUS Version 1.17.00 - 8-May-1988
CREATED: 4-MAY-89 11:17:28

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TB9773
SHEET

CR R: 11884 TD: T88773 DATE: 991104 10:34:17
2000 D-188

(16) CRT1664T L/F DUMMY LATHEUR LOAD NY 600C
MAX = 85.9 at 86.64 NS MIN = -180.2 at 230.5 NS **AXIS 1**



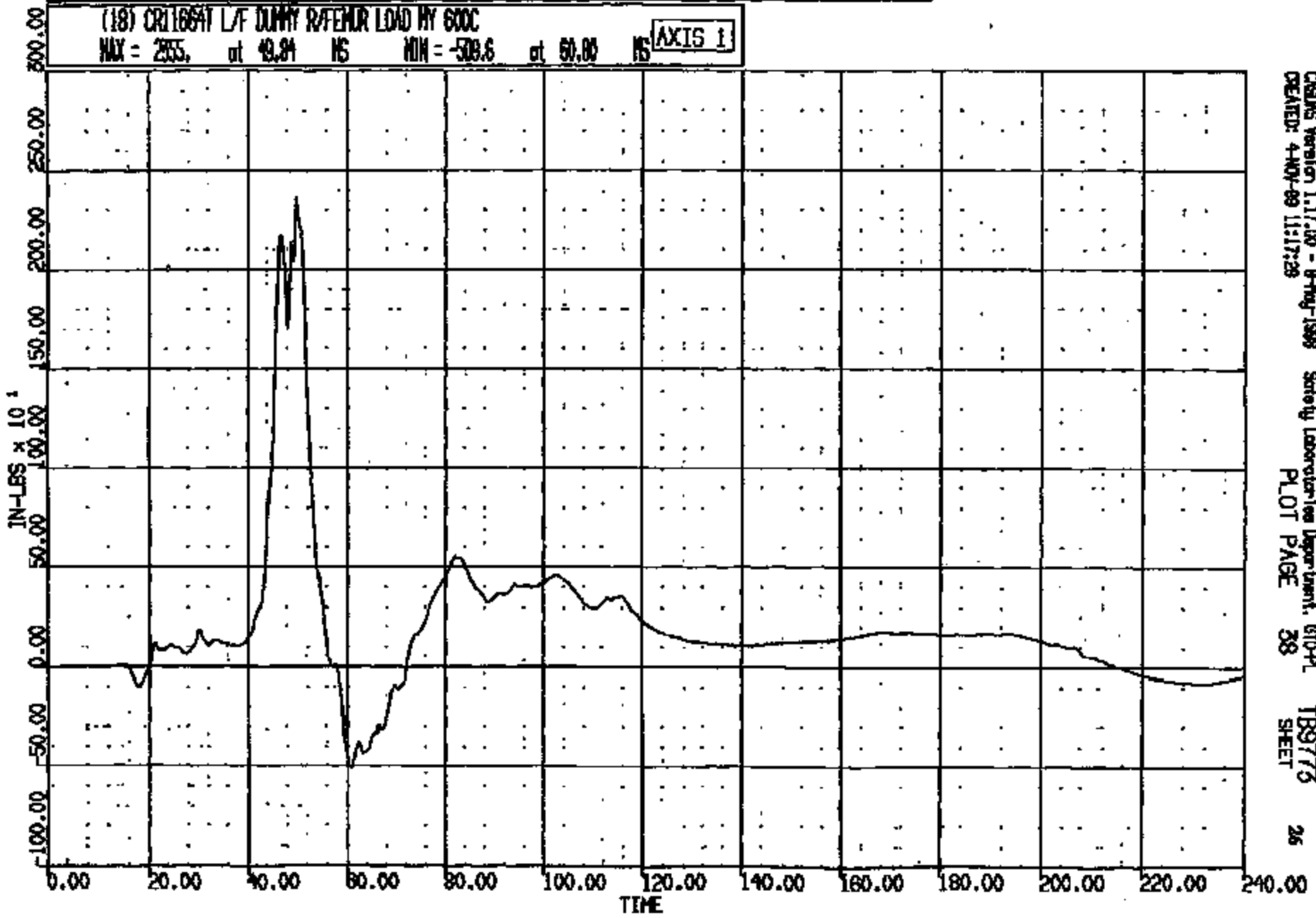
CASMS Version 1.17.00 - 9-May-1999 Safety Laboratories Department, 610-PL
CREATED: 4-NOV-99 11:17:25 PLOT PAGE 38 TB9773
SHEET 25

CRTS 0011664

CR R: 11664 TO: TB9773 DATE: 991104 10:54:17
8000 D-188

(18) CR1664T L/F DUMMY REFEROR LOAD BY 600C
MAX = 285.5 at 49.84 MS MIN = -509.6 at 50.00 MS

AXIS 1



CRS Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 610-PL
CREATED: 4-NOV-99 11:17:26 PLOT PAGE 38 TB9773
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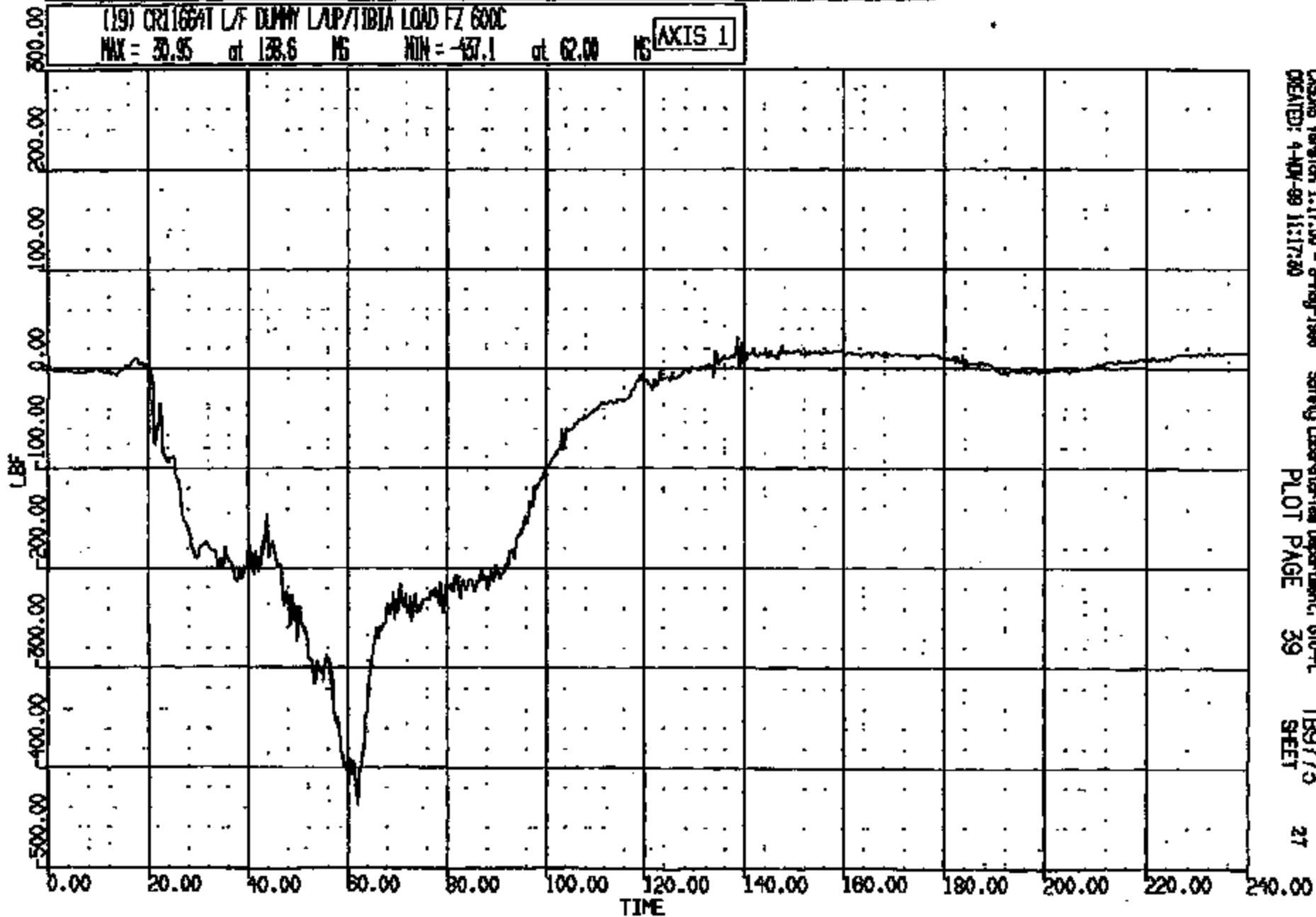
CRTS 0011664

CR R: 11884 TO: TB9773 DATE: 991104 10:34:17
2000 D-188

(19) CR11664T L/F DUMMY LAP/TIBIA LOAD FZ 600C

MAX = 30.95 at 138.6 MS MIN = -437.1 at 62.00 MS

AXIS 1



CASMS Version 1.17.09 - 8-Aug-1999
CREATED: 4-NOV-99 11:17:30

Safety Laboratories Department, 610-PL
PLOT PAGE 39

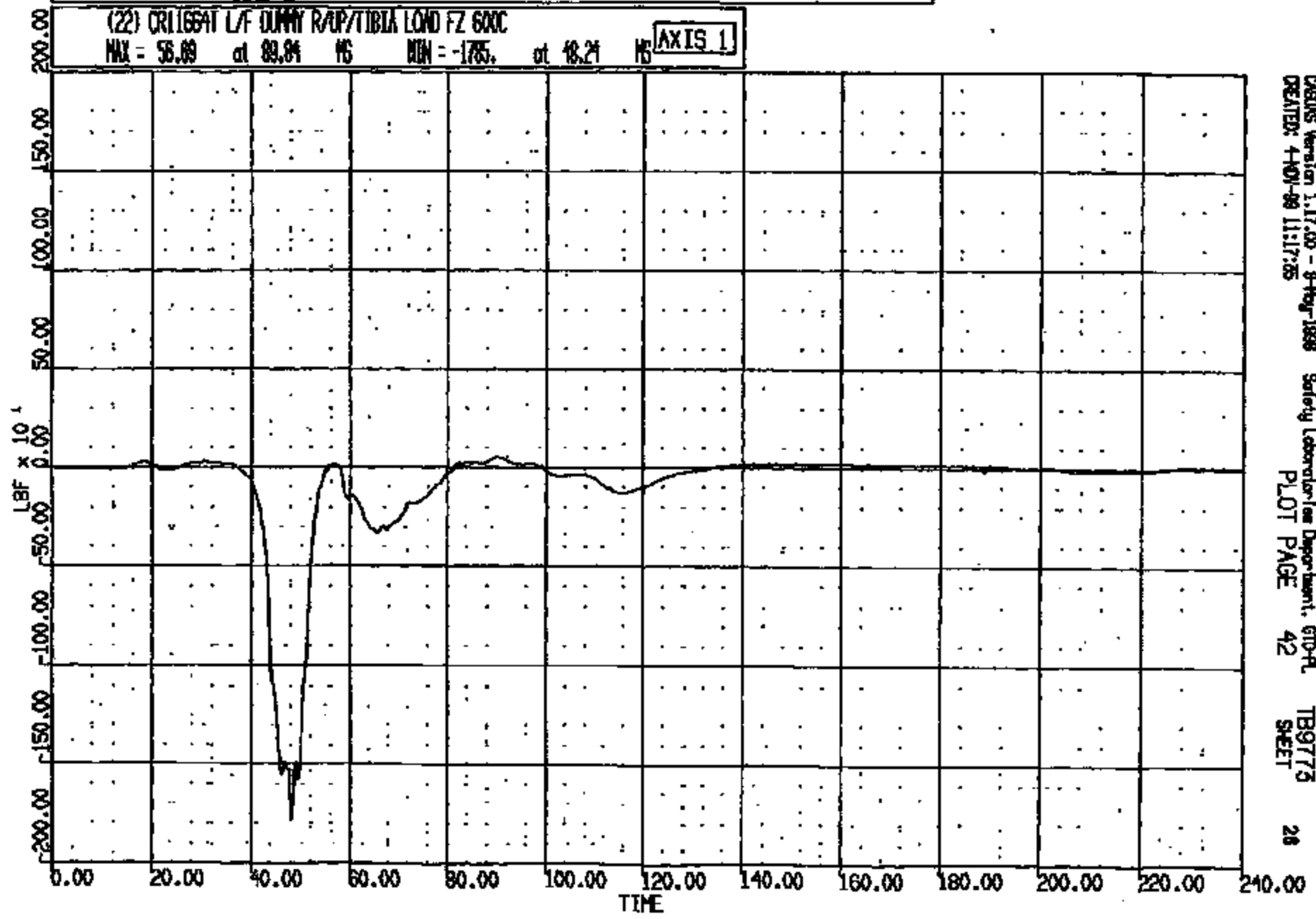
TB9773
SHEET

27

CRTS 0011664

CR R: 11664 TO: T89775 DATE: 991104 10:34:17
2000 D-166

(22) CR1664T L/F DUMMY R/UP/TIBIA LOAD FZ 600C
MAX = 56.09 at 49.84 MS MIN = -175. at 48.24 MS **AXIS 1**



CASUS Version 1.17.00 - 9-May-1998 Safety Laboratories Department, GPO-FL
CREATED: 4-01-99 11:17:25 PLOT PAGE 42 T89775 SHEET 26

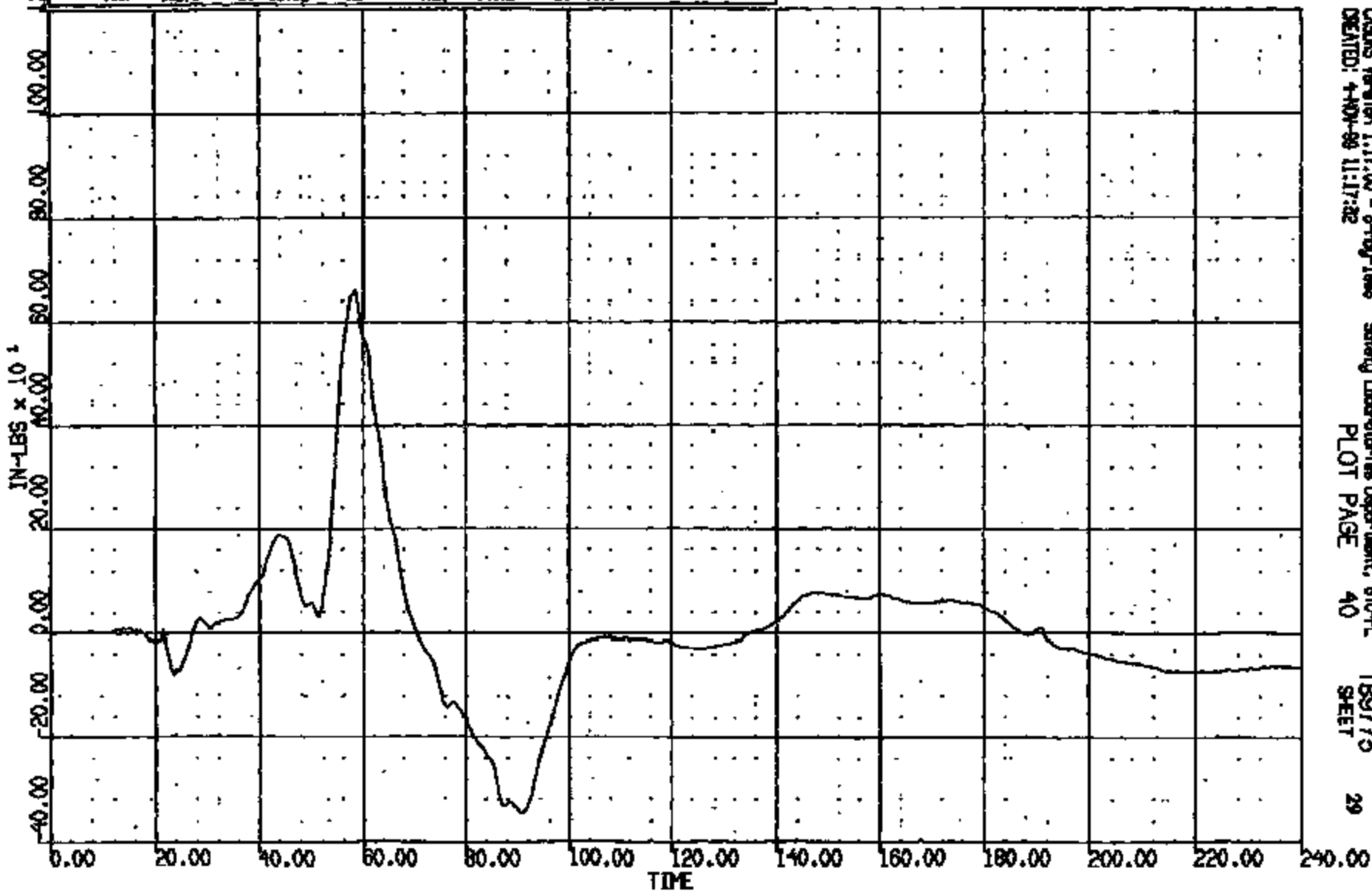
CRIS 0011664

CR R: 11664 TO: T89775 DATE: 881104 10:54:17
2000 D-198

(20) CR11664T L/F DUMMY LAP/TIBIA LOAD PK 600C

MAX = 652.6 at 58.32 MS MIN = -316.2 at 91.04 MS

AXIS 1



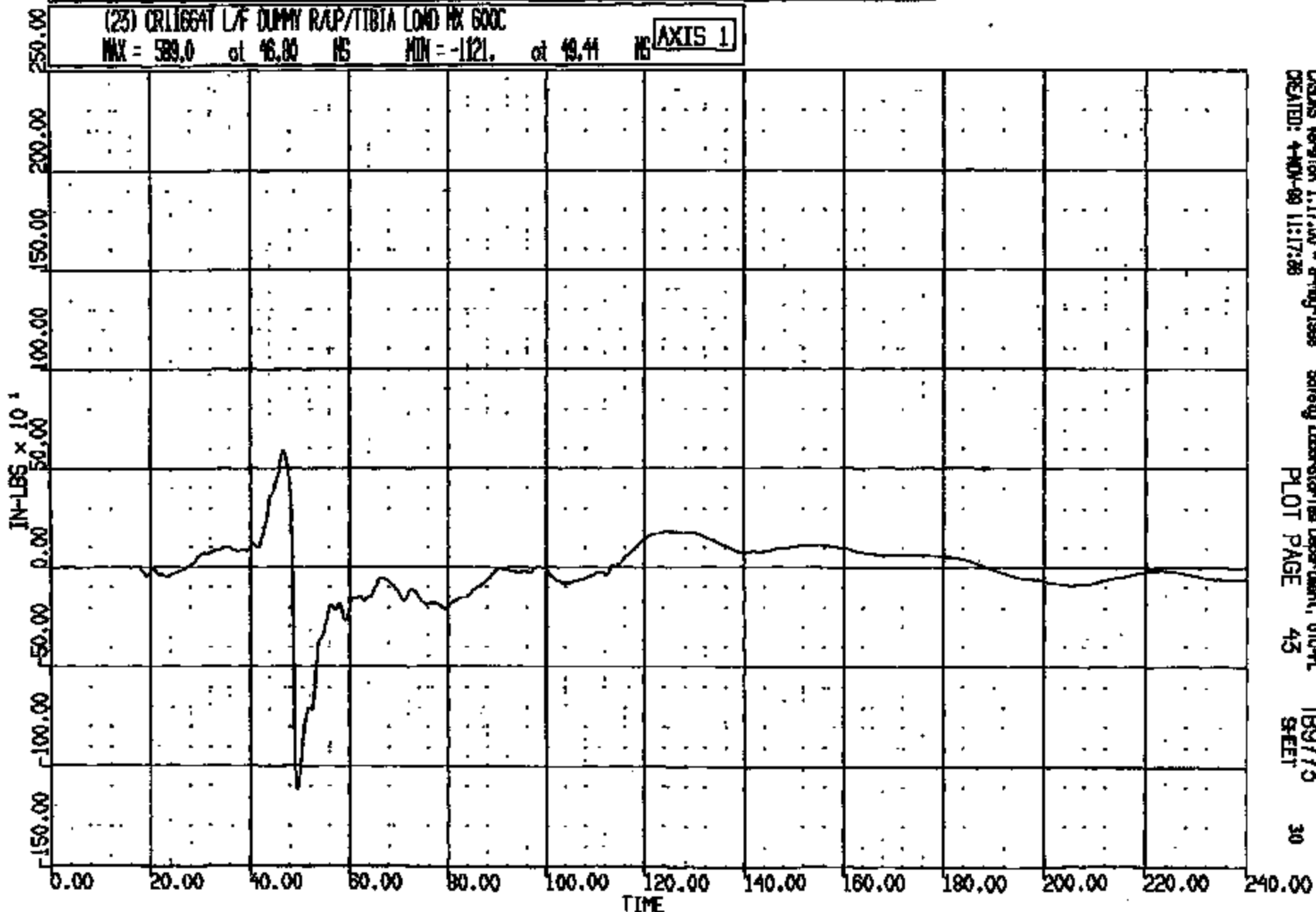
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CREATED: 4-10-88 11:17:32

Safety Laboratories Department, STD-PL
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T89775
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CR R: 11664 TO: TB9773 DATE: 991104 10:34:17
2000 D-198

(23) CR11664T L/F DUMMY RAP/TIBIA LOAD FX 600C
MAX = 589.0 at 46.00 NS MIN = -1121. at 49.44 NS **AXIS 1**

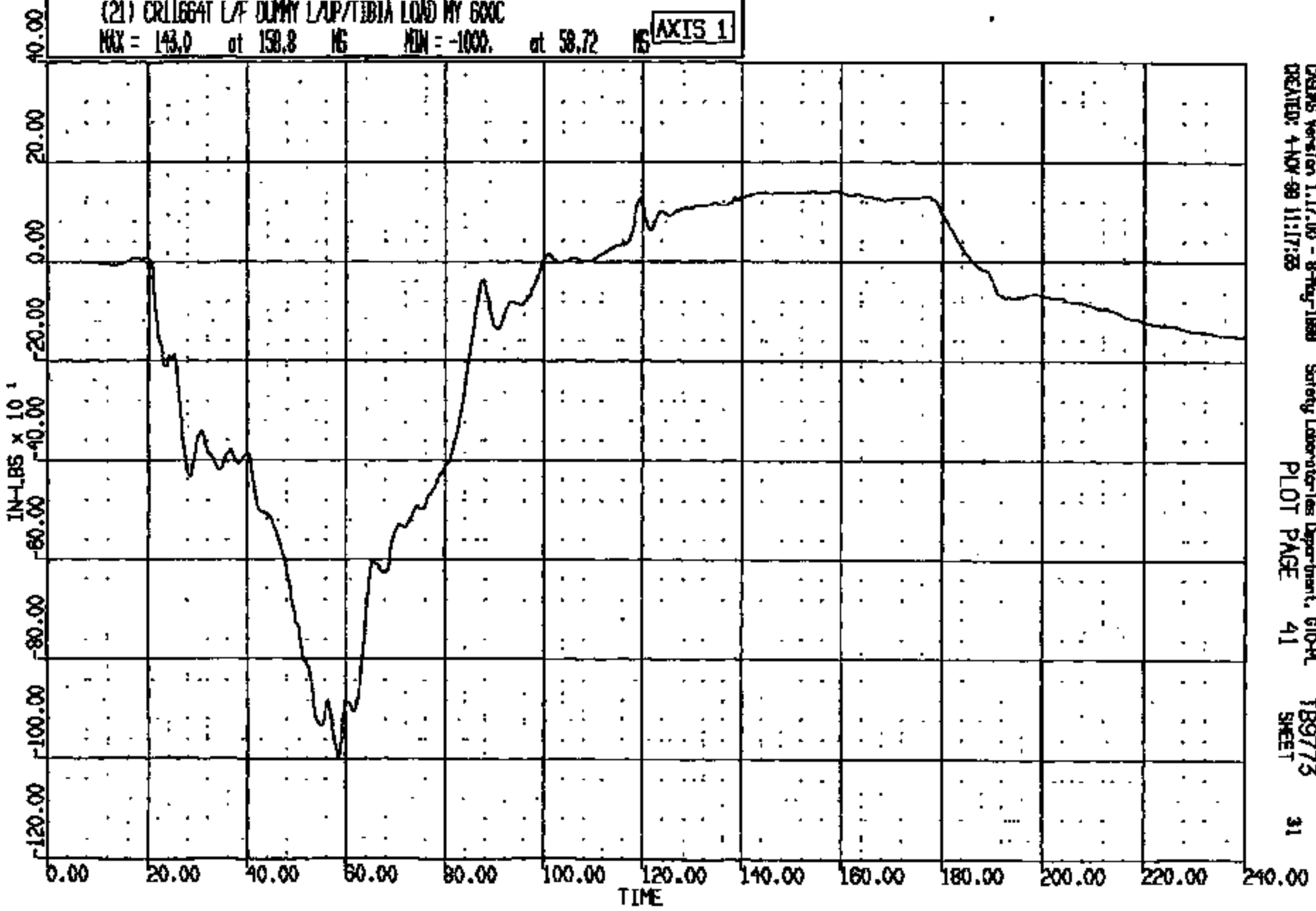


CADDS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
CREATED: 4-MAY-99 11:17:58 PLOT PAGE 43 TB9773
30 SHEET

CR11664

CR R: 11664 TO: TB9773 DATE: 991104 10:54:17
2000 D-196

(21) CR1664T L/F DUMMY L/UP/TIBIA LOAD NY 600C
MAX = 143.0 at 158.8 MS MIN = -100.0 at 58.72 MS **AXIS 1**



ORNL Version 1.17.00 - 8-May-1989 Safety Laboratories Department, ORO-RL
CREATED: 4 NOV 99 11:17:25 PLOT PAGE 41 TB9773 31
SHEET

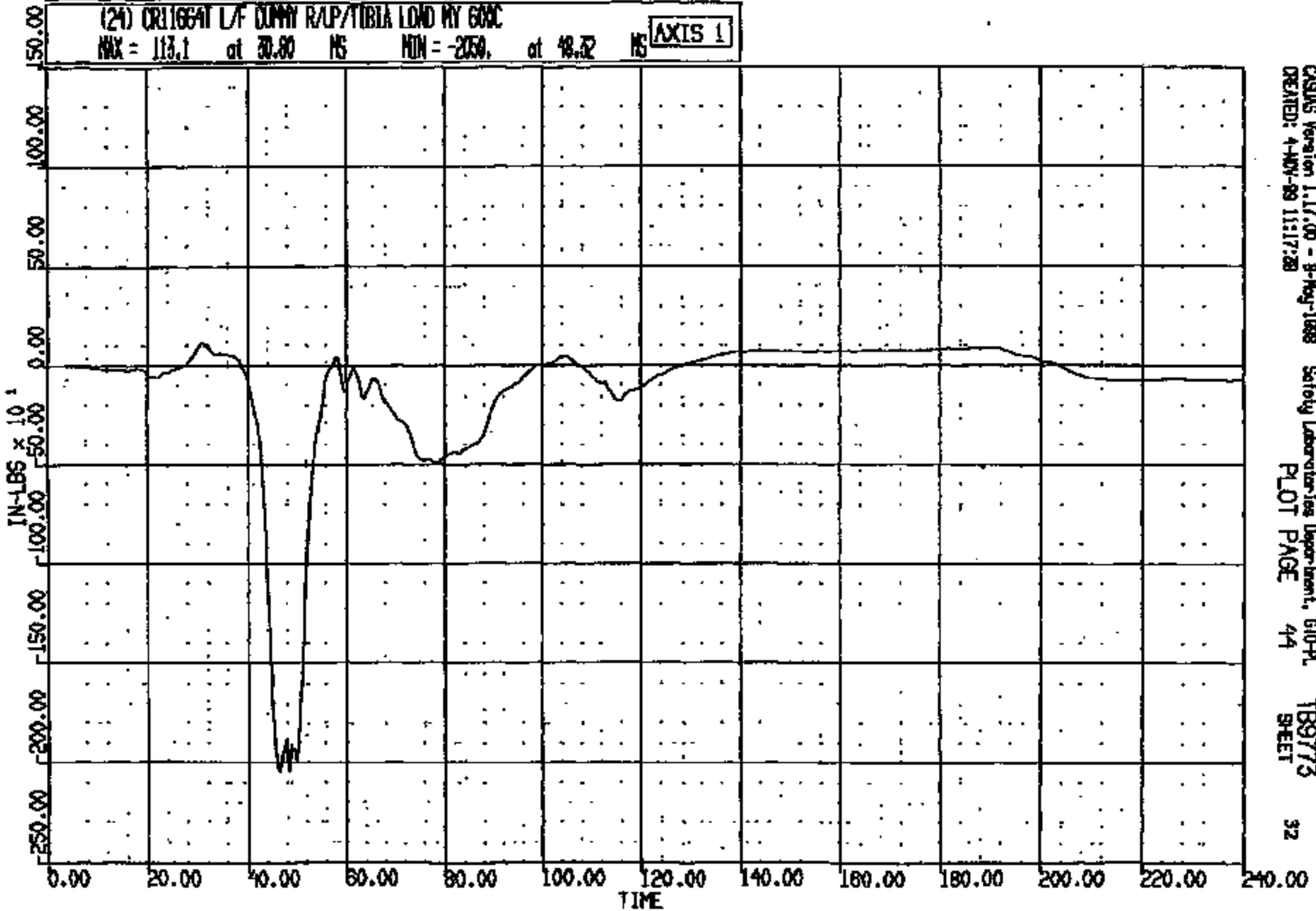
CRTS 0011664

CR R: 11884 TO: T89773 DATE: 991104 10:54:17
2000 0-188

(24) CR11664T L/F DUMMY R/UP/TIBIA LOAD MY 600C

MAX = 113.1 at 30.80 MS MIN = -2050. at 48.32 MS

AXIS 1



CASUS Version 1.17.00 - 8-May-1988
CREATED: 4-NOV-89 11:17:28

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SHEET

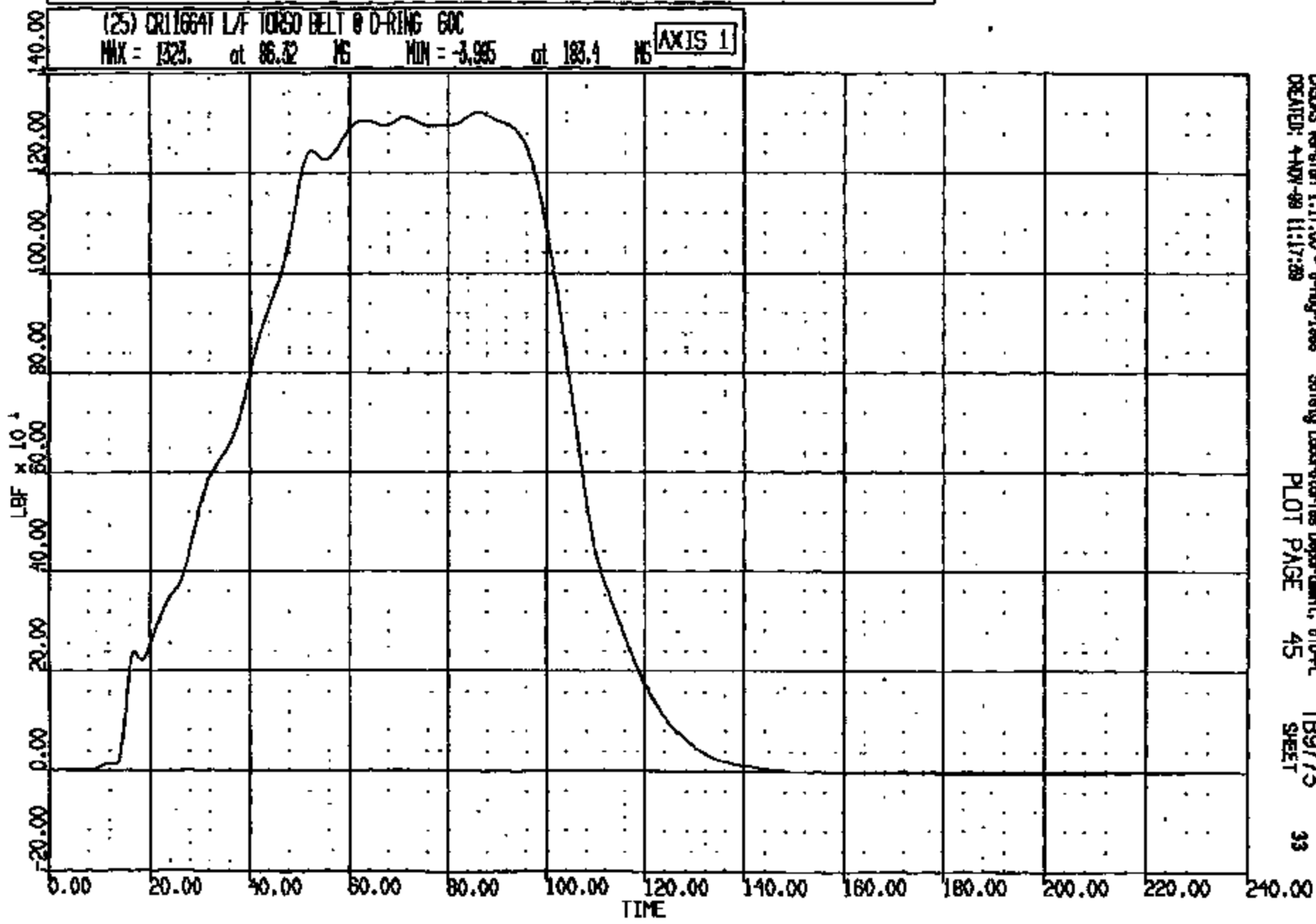
32

CRTS 0011664

CR R: 11664 TO: TB9773 DATE: 991104 10:34:17
2000 D-186

(25) CR116641 L/F TORSO BELT @ D-RING GOC
MAX = 1323. at 86.32 MS MIN = -3.985 at 183.4 MS

AXIS 1



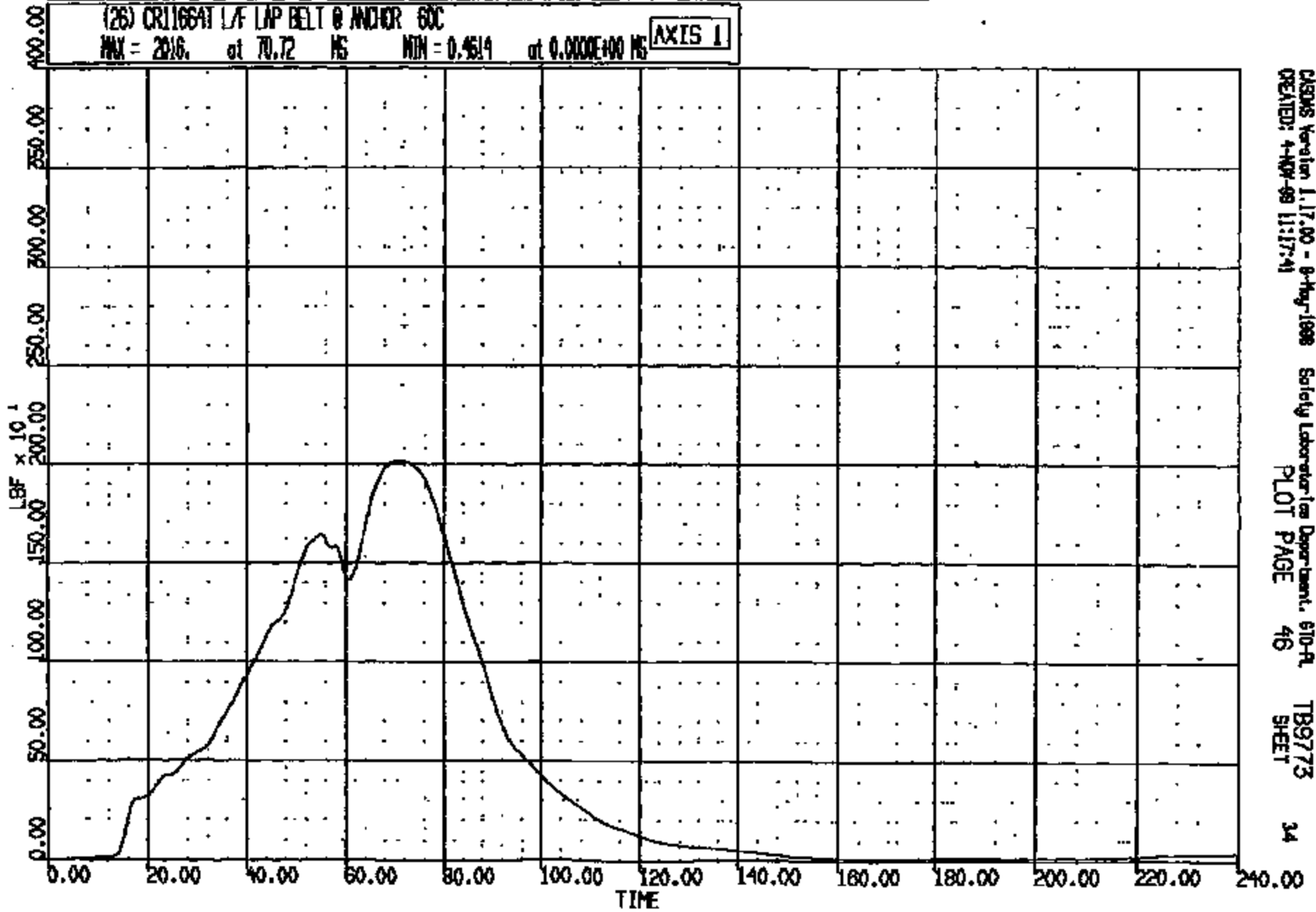
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CREATED: 4-NOV-99 11:17:28 PLOT PAGE 45 TB9773 33
SHEET

CRIS 0011664

CR R: 11664 TO: TB9773 DATE: 991104 10:34:17
2000 D-188

(26) CR1166AT L/F LAP BELT @ ANCHOR 60C
MAX = 2016. at 70.72 MS MIN = 0.4514 at 0.000E+00 MS

AXIS 1



CASIMS Version 1.17.00 - 8-May-1998 Safety Laboratory Department, 610-A
CREATED: 4-NOV-99 11:17:41 PLOT PAGE 46 TB9773 SHEET 34

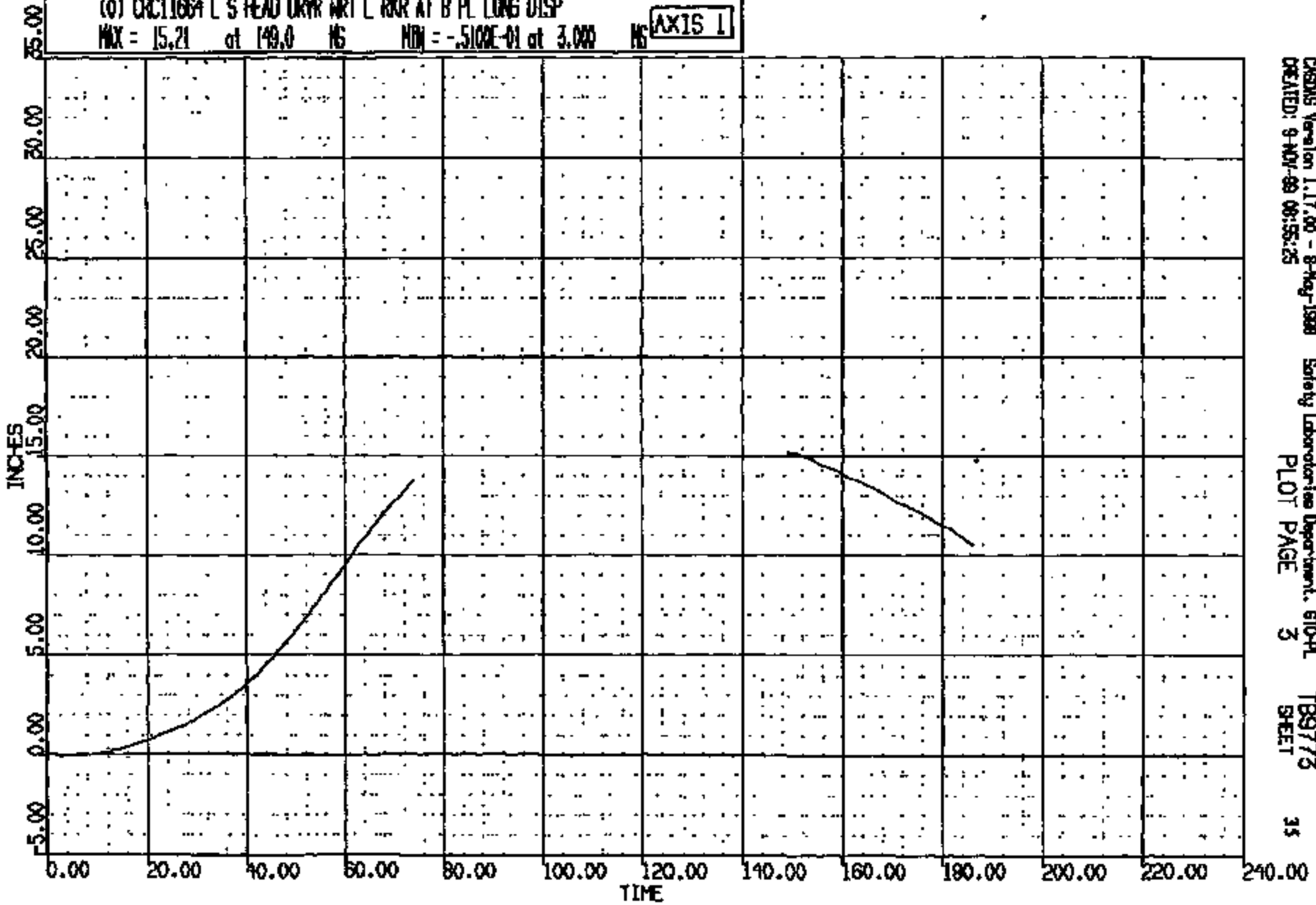
CRTS 0011664

CR R: 11664 TO: T89773 DATE: 891104 10:34:17
R000 D-188

(0) CR11664 L S HEAD DRVN WRT L RKR AT B PL LONG DISP

MAX = 15.21 at 149.0 MS MIN = -.5102E-01 at 3.000 MS

AXIS 1



CRS015 Version 1.17.00 - 8-May-1988
CREATED: 9-MAY-89 08:55:25

Safety Laboratories Department, 610-PL
PLOT PAGE 3

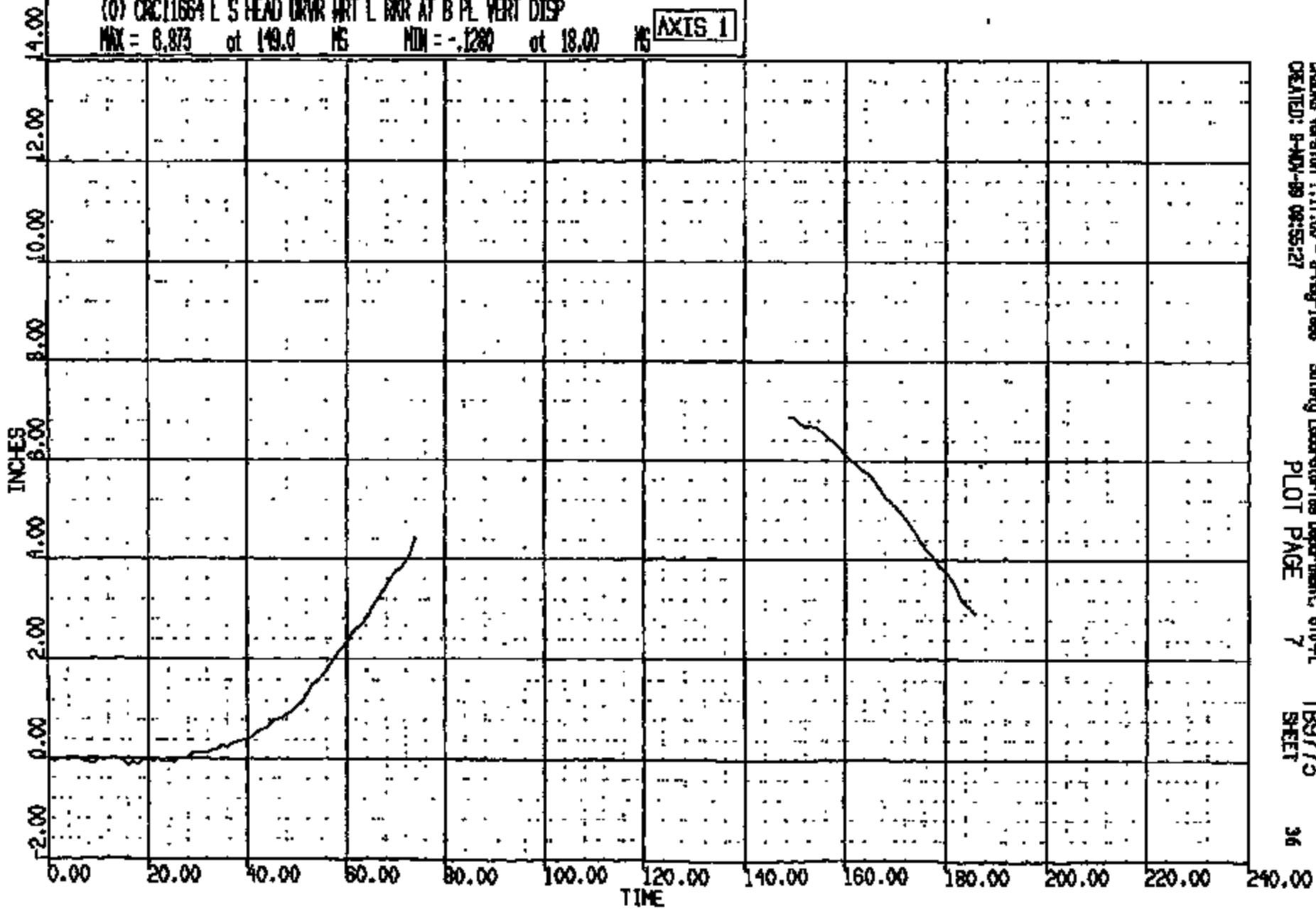
T89773
SHEET

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CRTS 0011664

CR R: 11664 TO: TB9775 DATE: 991104 10:54:17
2000 D-186

(0) CRC11664 L 5 HEAD DRVR ART L RKR AT B PL VERT DISP
MAX = 6.873 at 149.0 MS MIN = -.1280 at 18.00 MS **AXIS 1**



CADDS Version 1.17.00 - 8-May-1998
CREATED: 9-NOV-99 08:55:27

Safety Laboratories Department, 610-PL
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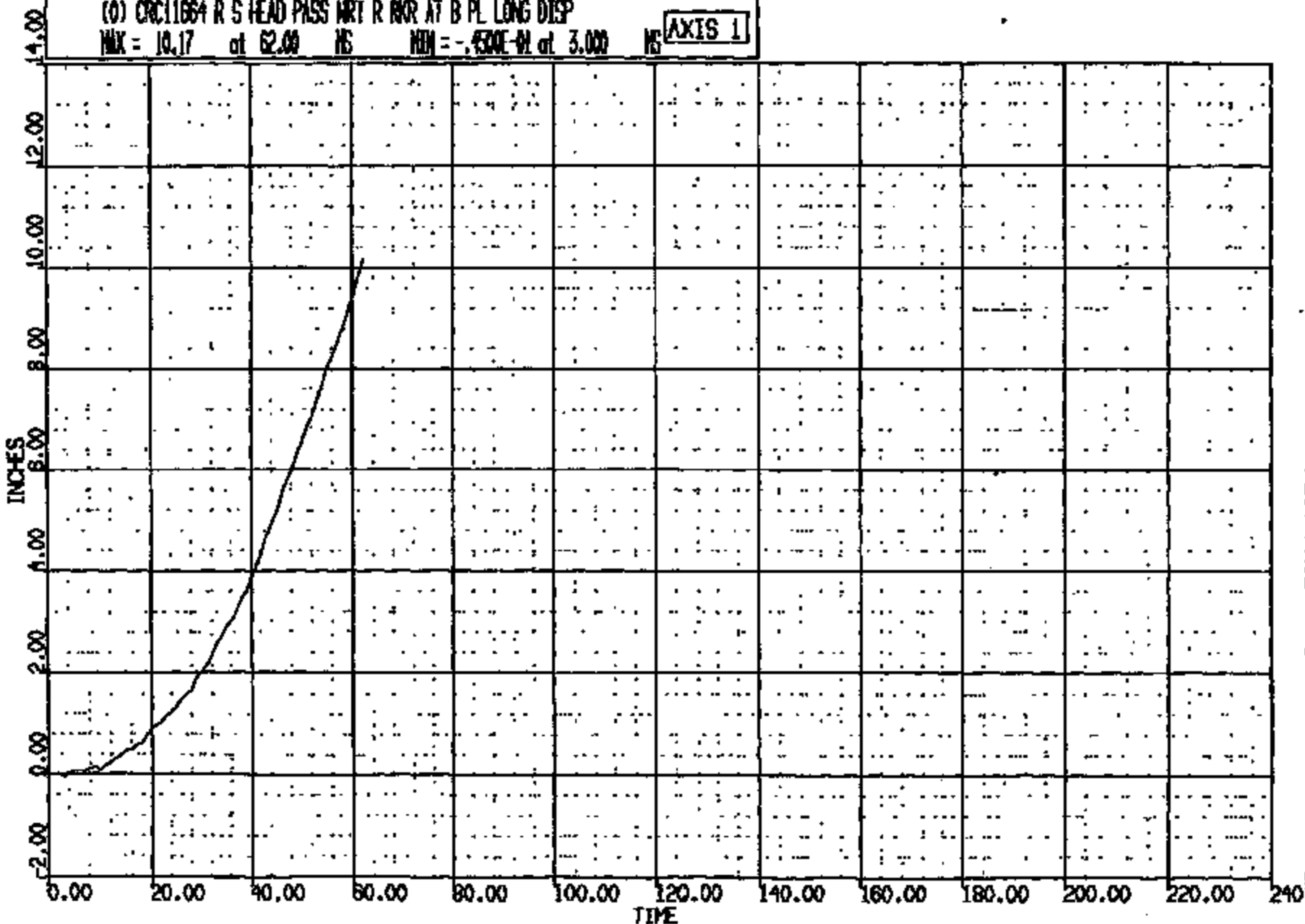
TB9775
SHEET

CR R: 11664 TO: TB9773 DATE: 891104 10:24:17
2000 D-185

(0) CR011664 R S HEAD PASS WRT R ROR AT B PL LONG DISP

MAX = 10.17 at 62.00 NS MIN = -.430E-01 at 3.000 NS

AXIS 1



CRAMS Version 1.17.00 - 8-May-1988
CREATED: 9-NOV-89 08:55:22

Safety Laboratories Department, 610-PL
PLOT PAGE 1

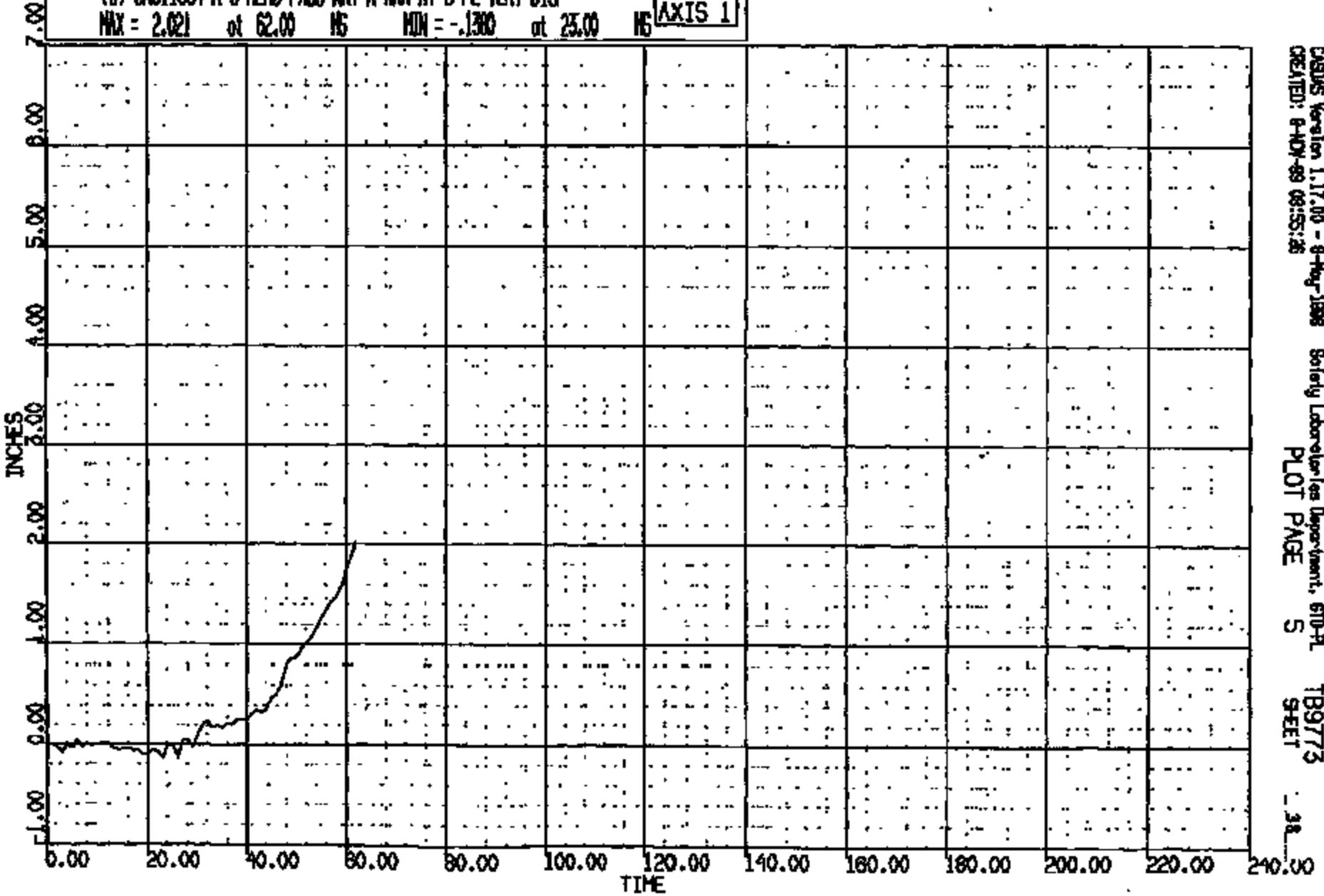
TB9773
SHEET

37

CRIS 0011664

CR R: 11887 TO: TB9778 DATE: 891104 10124117
2000 D-188

(0) CRCL1664 R S HEAD PASS WRT R MWR AT B PL VERT DISP
MAX = 2.021 at 62.00 MS MIN = -.1300 at 23.00 MS **AXIS 1**



CRSUS Version 1.17.00 - 8-Aug-1988
CREATED: 8-NOV-89 09:55:26

Safety Laboratories Department, 610-FL
PLOT PAGE 5

TB9773
SHEET

38

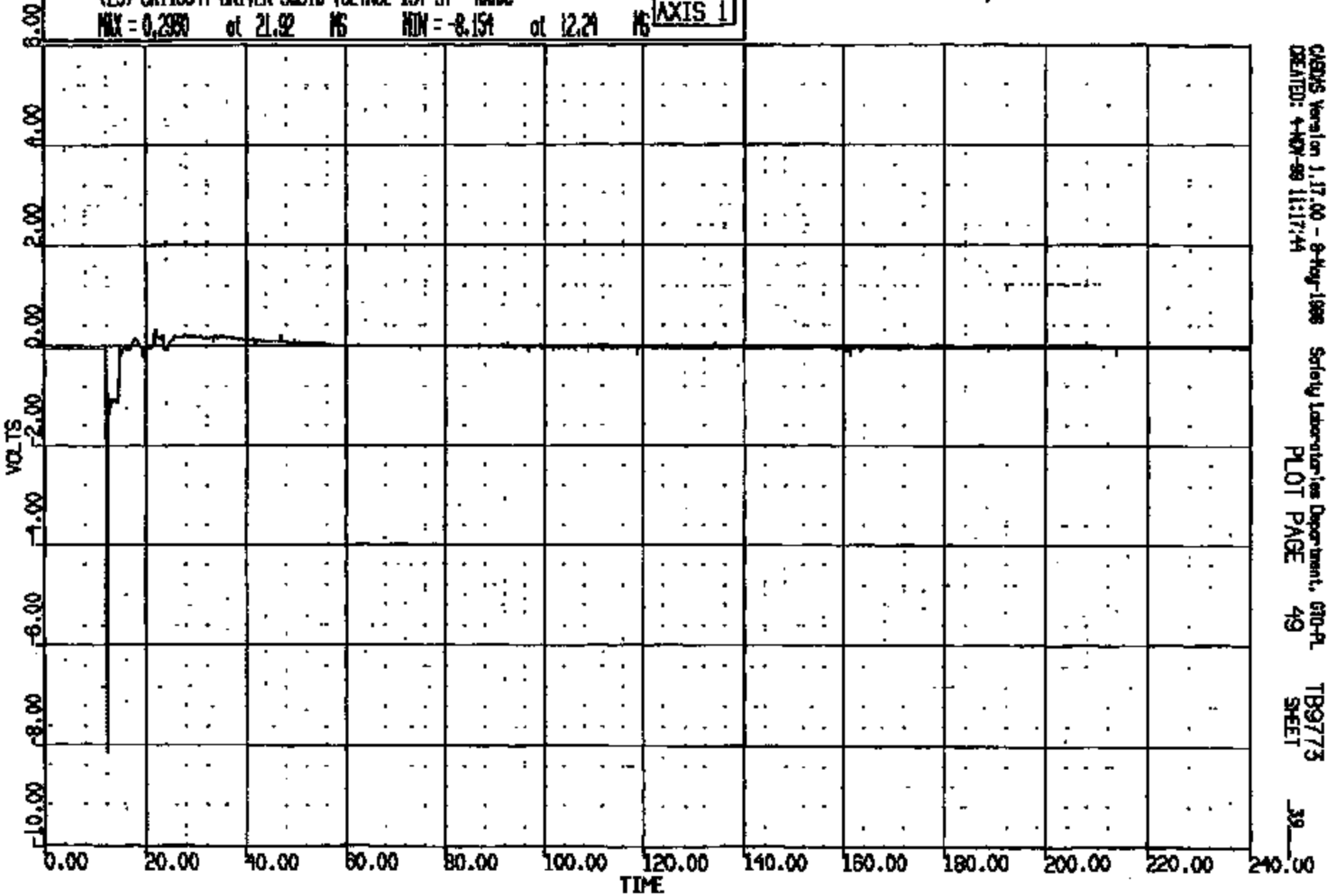
CRIS 0011664

CR R: 11664 TO: T89773 DATE: 891104 10:34:17
2000 D-188

(29) CR11664T DRIVER SOLID VOLTAGE 1ST ST 4000C

MAX = 0.2980 at 21.92 MS MIN = -8.154 at 12.24 MS

AXIS 1



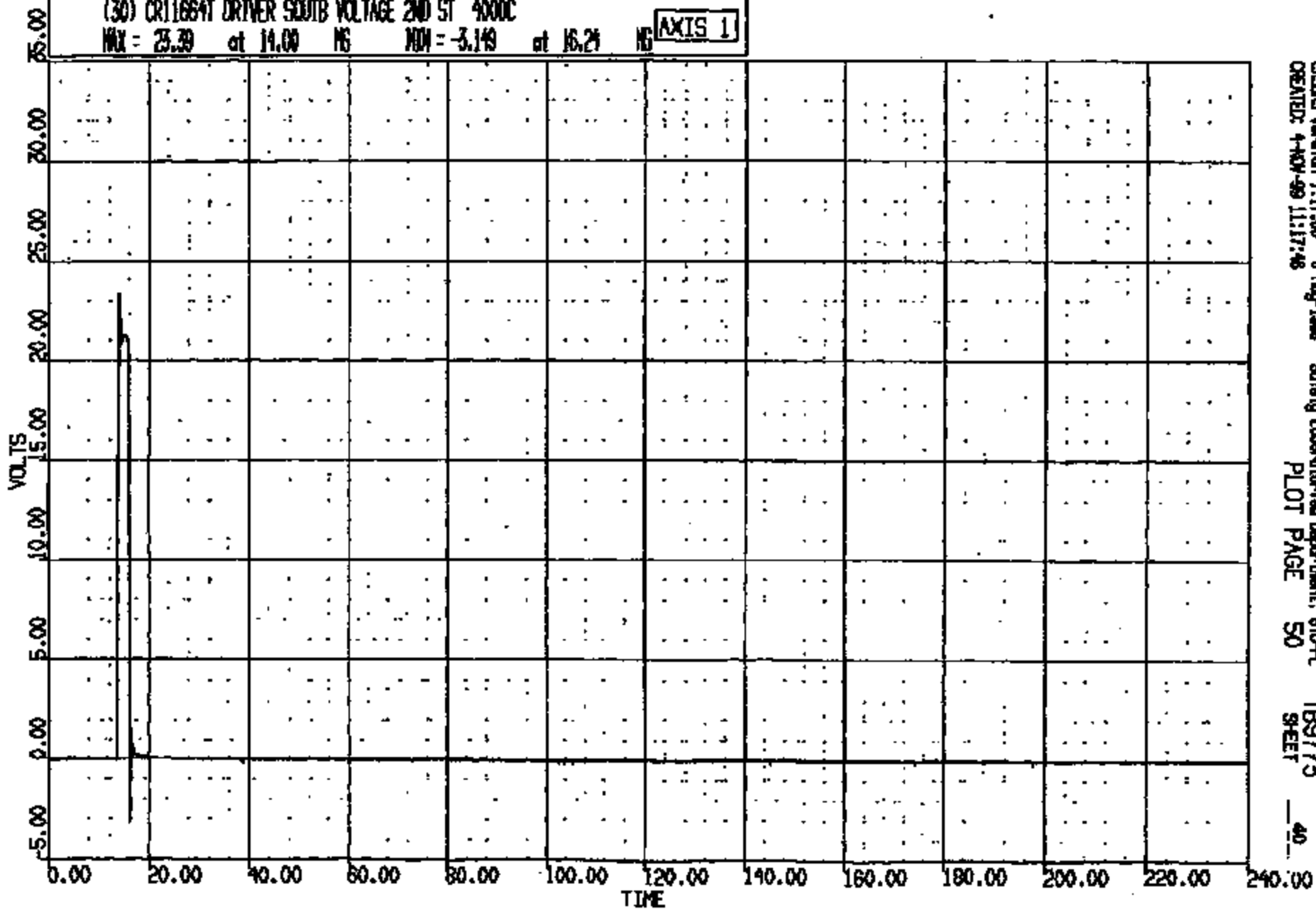
CASYS Version 1.17.00 - 8-May-1988 Safety Laboratories Department, 610-PL
CREATED: 4-NOV-89 11:17:44 PLOT PAGE 49 TB9773
SHEET

CR #: 11664 TO: TB9773 DATE: 991104 10:24:17
8000 D-198

(30) CR11664T DRIVER SOUTH VOLTAGE 2ND ST 4000C

MAX = 23.39 at 14.00 NS MIN = -3.149 at 16.24 NS

AXIS 1



CRSIS Version 1.17.00 - 8-May-1998
CREATED: 4-NOV-99 11:17:46

Safety Laboratories Department, 610-PL
PLOT PAGE 50

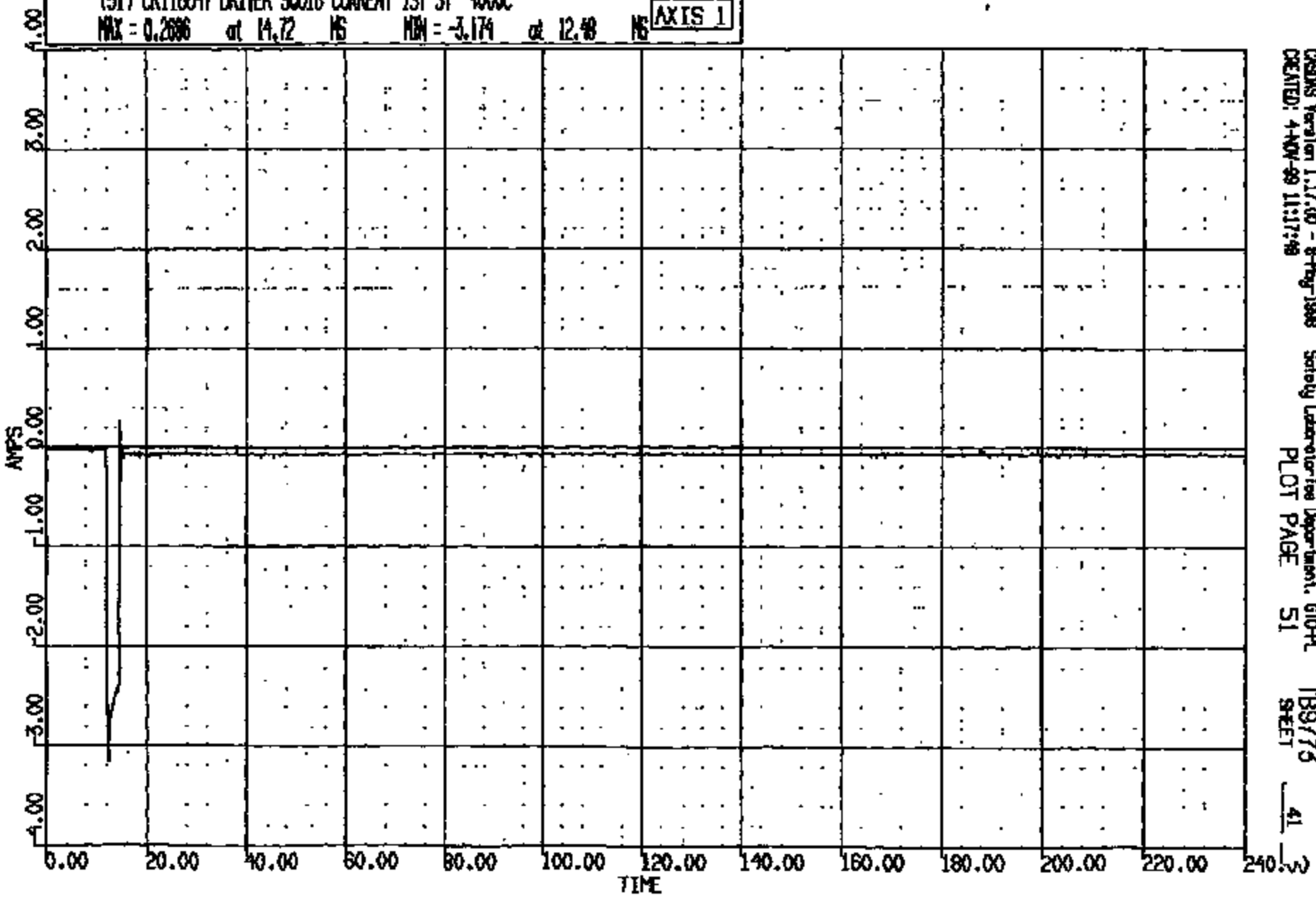
TB9773
SHEET

40

CRIS 0011664

CR R: 11664 TO: TB9773 DATE: 891104 10:34:17
2000 D-186

(31) CR11664T DRIVER SCOUT CURRENT 1ST ST 4000C
MAX = 0.2686 at 14.72 MS MIN = -3.174 at 12.48 MS **AXIS 1**

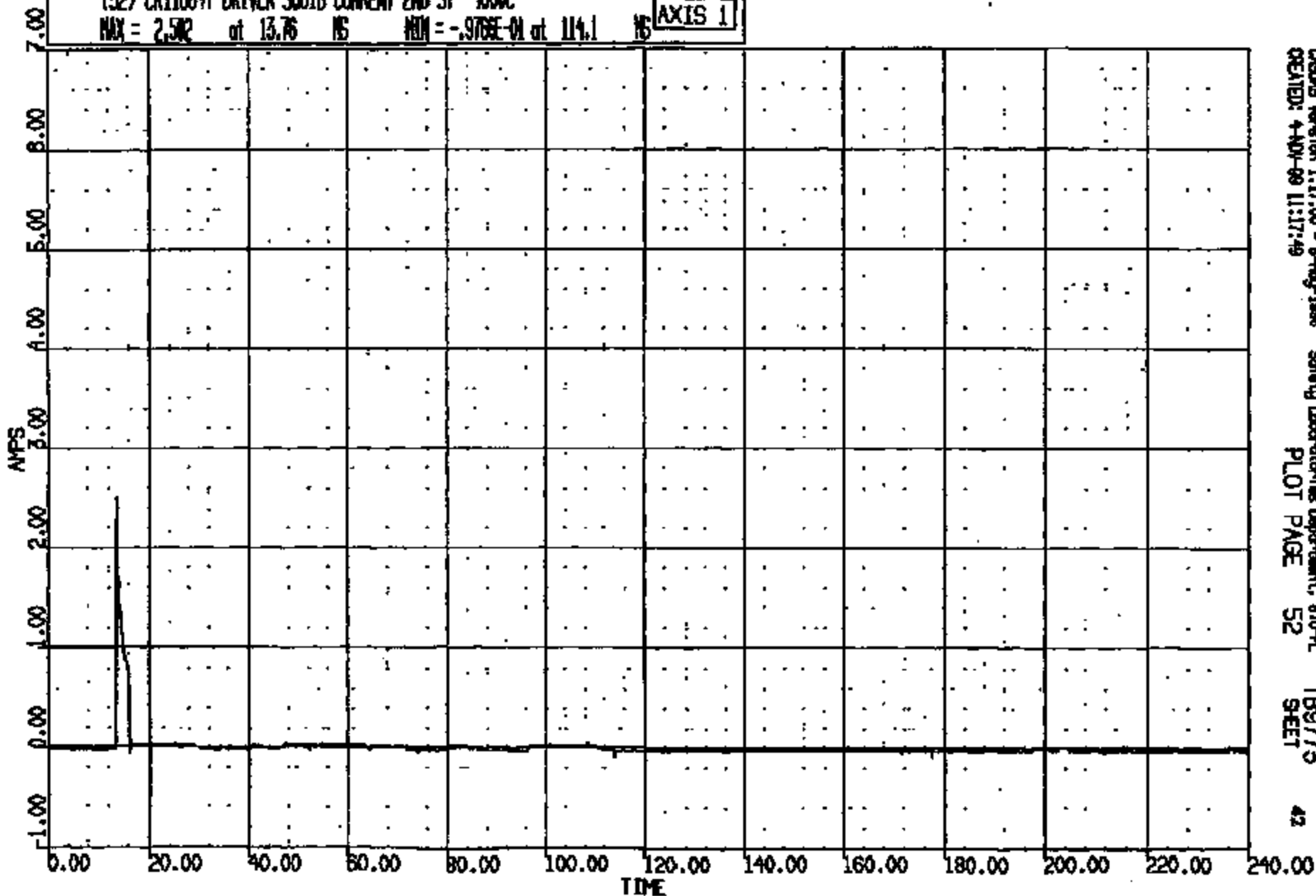


CHSAS Version 1.17.00 - 8-Hug-1988 Safety Laboratories Department, GTO-PL
CREATED: 4-NOV-89 11:17:48 PLOT PAGE 51 TB9773
41

CRIS 0011664

CR R: 11884 TO: TB9773 DATE: 991104 10:34:17
2000 0-188

(32) CR116641 DRIVER SOLID CURRENT 2ND ST 4000C
MAX = 2.502 at 13.76 NS MIN = -.9705E-01 at 114.1 NS **AXIS 1**



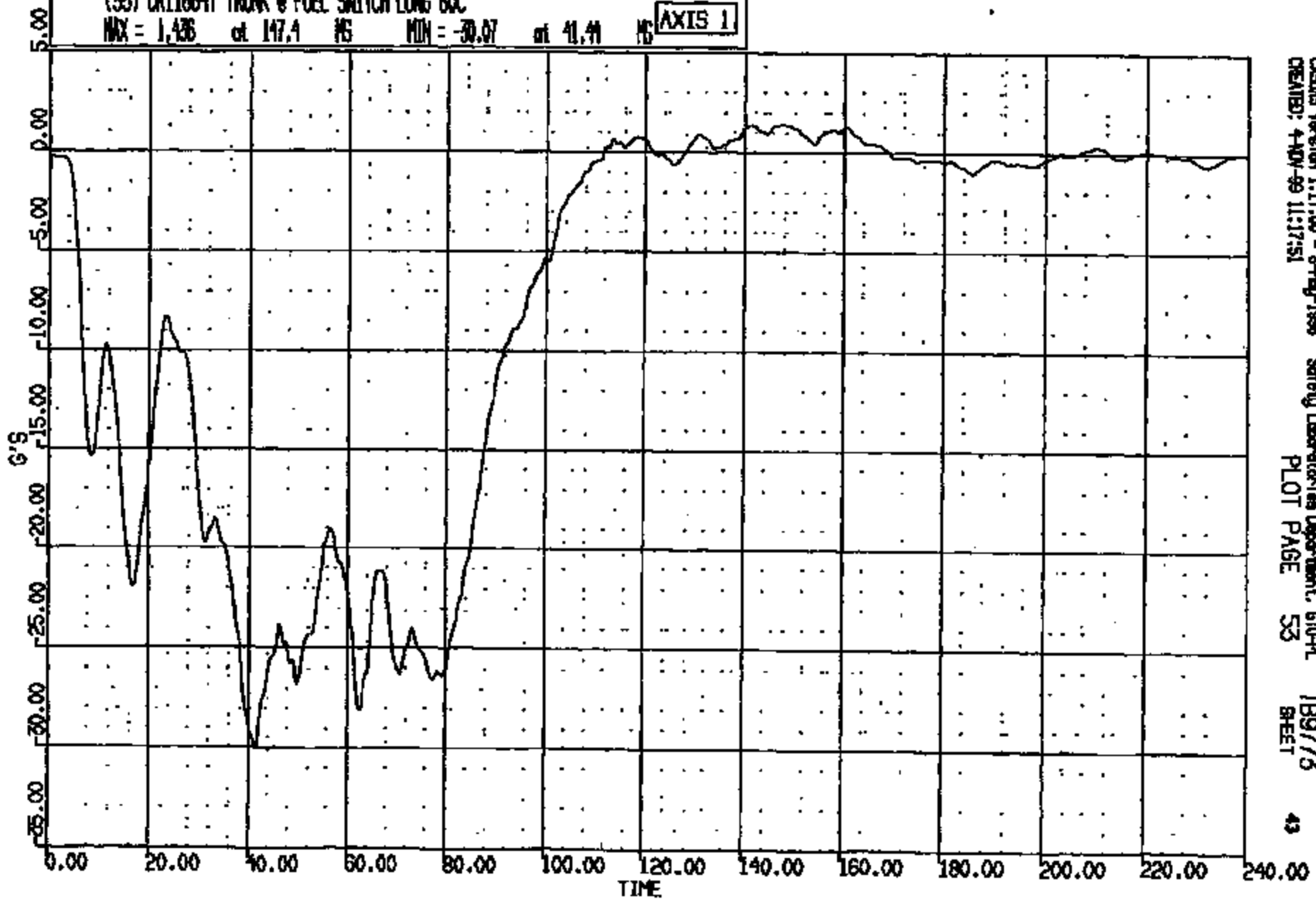
CADDS Version 1.17.00 - 8-Aug-1998 Safety Laboratory/Dept. 510-H
CREATED: 4-NOV-99 11:17:49 PLOT PAGE 52 SHEET TB9773 42

CR11664

CR R: 11664 TO: TB9775 DATE: 991104 10:34:17
2000 D-185

(33) CR11664T TRUNK @ FUEL SWITCH LONG SOC
MAX = 1.436 at 147.4 MS MIN = -30.07 at 41.41 MS

AXIS 1

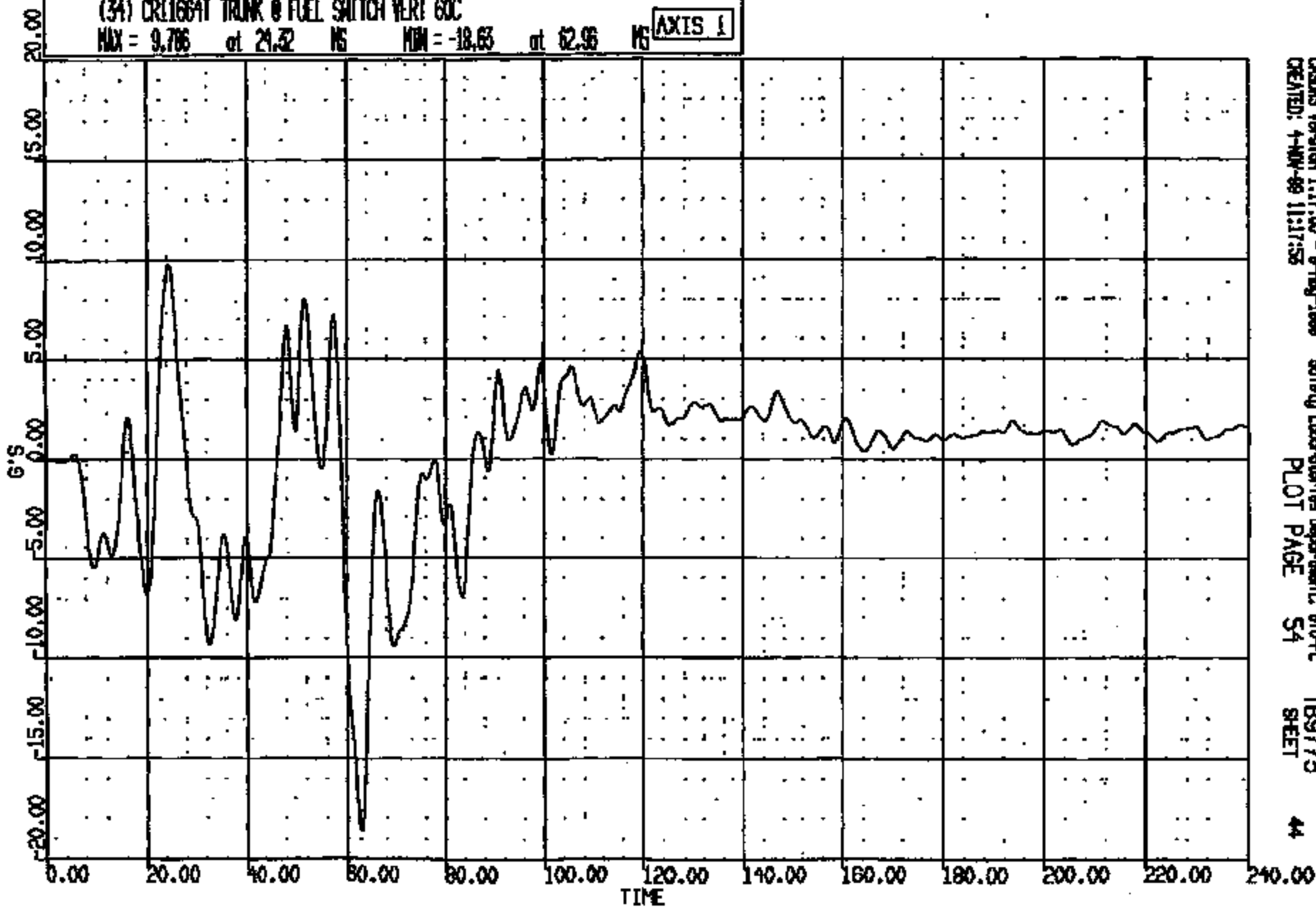


CRSIS Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 610-PL TB9775
CREATED: 4-NOV-99 11:17:51 PLOT PAGE 53 SHEET 43

CRIS 0011664

CR R: 11884 TC: TB9773 DATE: 891104 10:54:17
2000 D-188

(34) CR1664T TRUNK @ FUEL SWITCH VERT 60C
MAX = 9.786 at 21.32 MS MIN = -18.63 at 62.95 MS **AXIS 1**

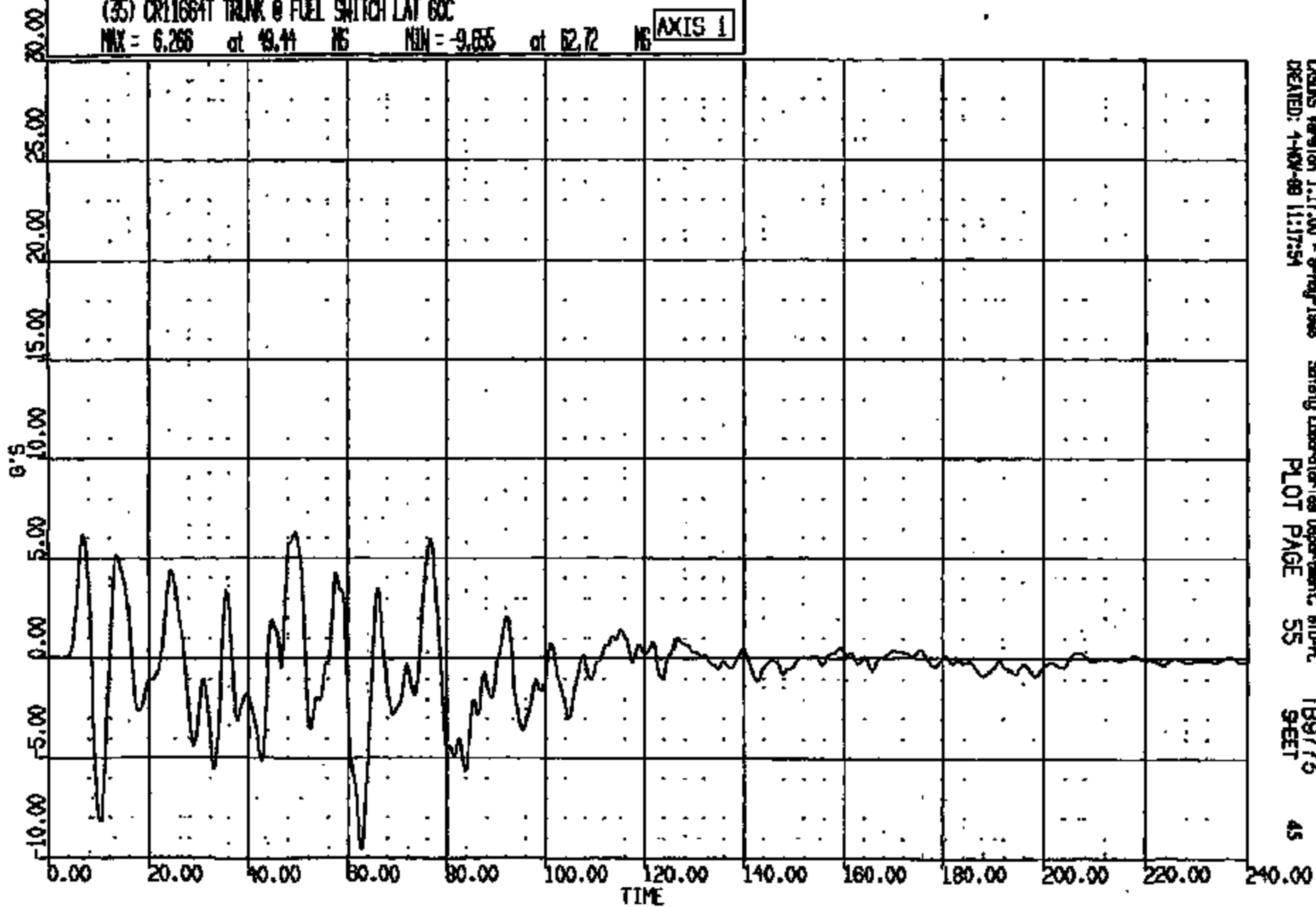


CASDIS Version 1.17.00 - 8-May-1999 Safety Laboratories Department, STD-PL
CREATED: 4-MAY-89 11:17:55 PLOT PAGE 54 TB9773
SHEET 44

CRTS 0011664

CR R: 11664 TO: TB9775 DATE: 891104 10:24:17
2000 D-188

(35) CR11664T TRNK @ FUEL SWITCH LAT 60C
MAX = 6.266 at 49.44 NS MIN = -9.655 at 62.72 NS **AXIS 1**



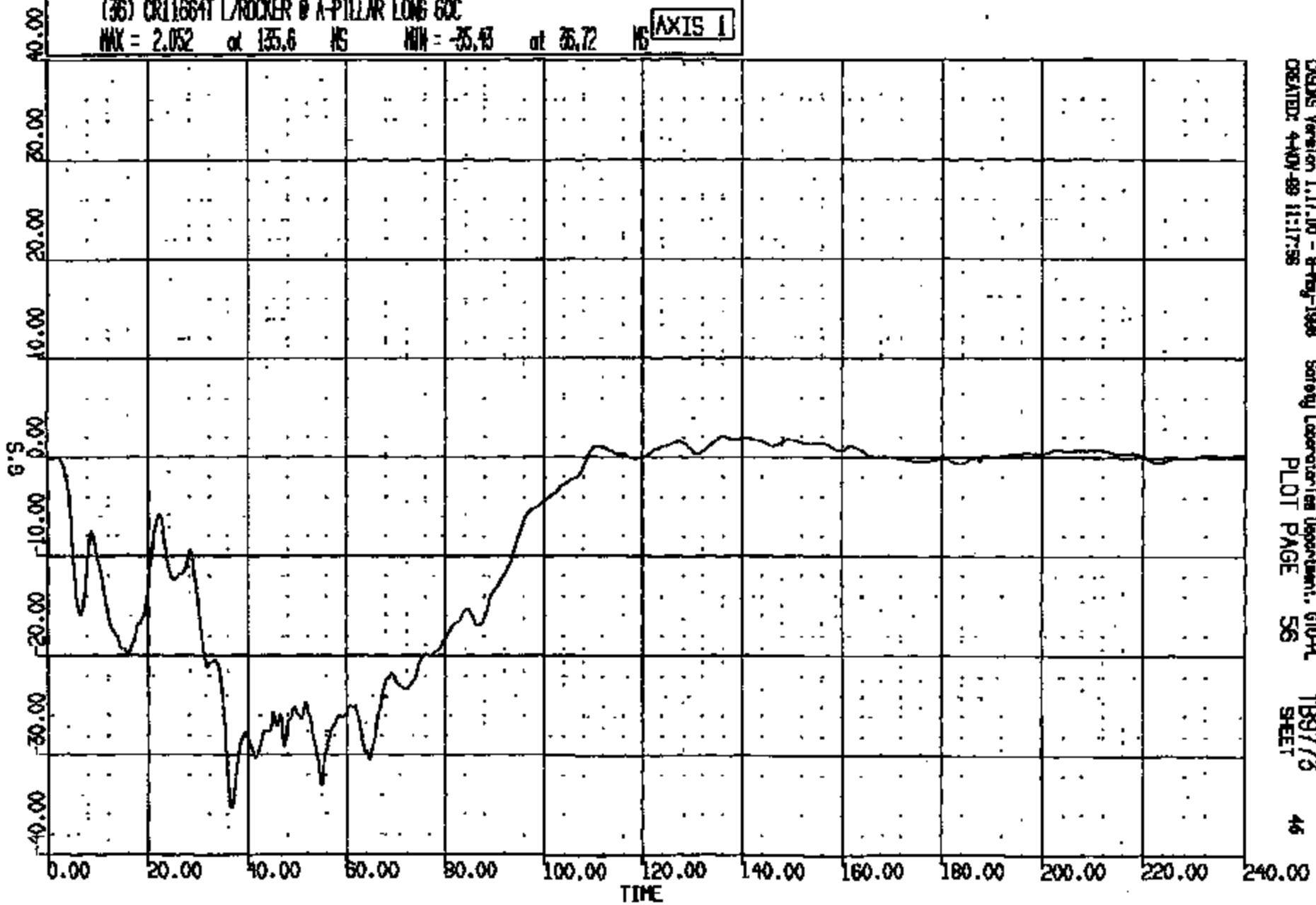
CRSIS Version 1.17.00 - 9-Aug-1988
CREATED: 4-MAY-89 11:17:54

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PLOT PAGE 55

TB9775
SHEET

CR: 11664 TO: TB9773 DATE: 881104 10:34:17
2000 0-198

(36) CR11664T L/ROCKER @ A-PILLAR LONG GDC
MAX = 2.052 at 135.6 MS MIN = -35.43 at 35.72 MS **AXIS 1**



CRS Version 1.17.00 - 8-May-1988
CREATED: 4-MAY-88 11:17:58

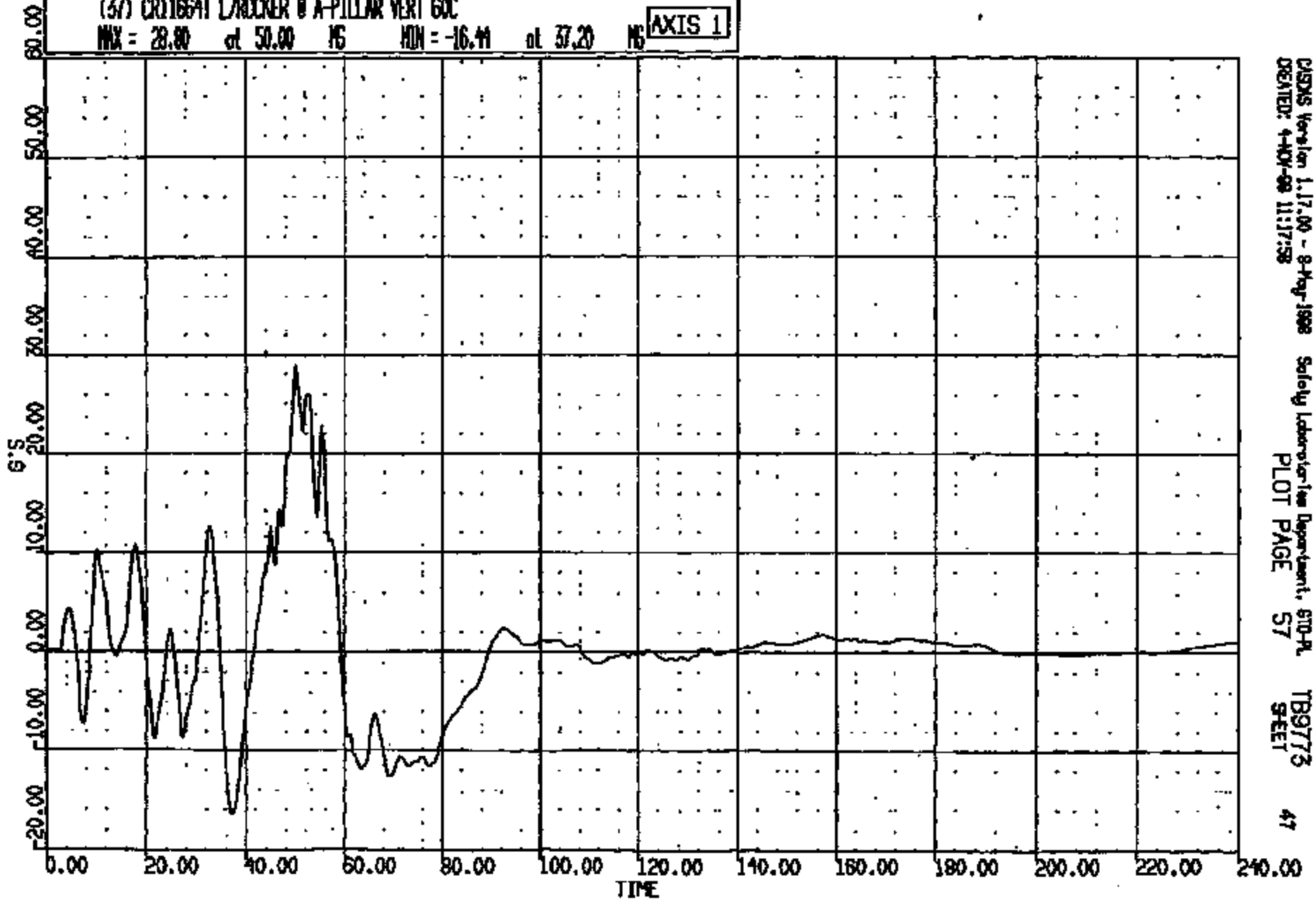
Safety Laboratory/Gen Department: 610-A
PLOT PAGE 56

TB9773
SHEET

CR R: 11664 TO: TB9773 DATE: 991104 10:54:17
2000 D-188

(37) CR11664T L/ROCKER @ A-PILLAR VERT GOC

MAX = 28.80 at 50.00 MS MIN = -16.44 at 37.20 MS AXIS 1



CRS Version 1.17.00 - 8-May-1998
CREATED: 4-NOV-99 11:17:58

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PLOT PAGE 57

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SHEET

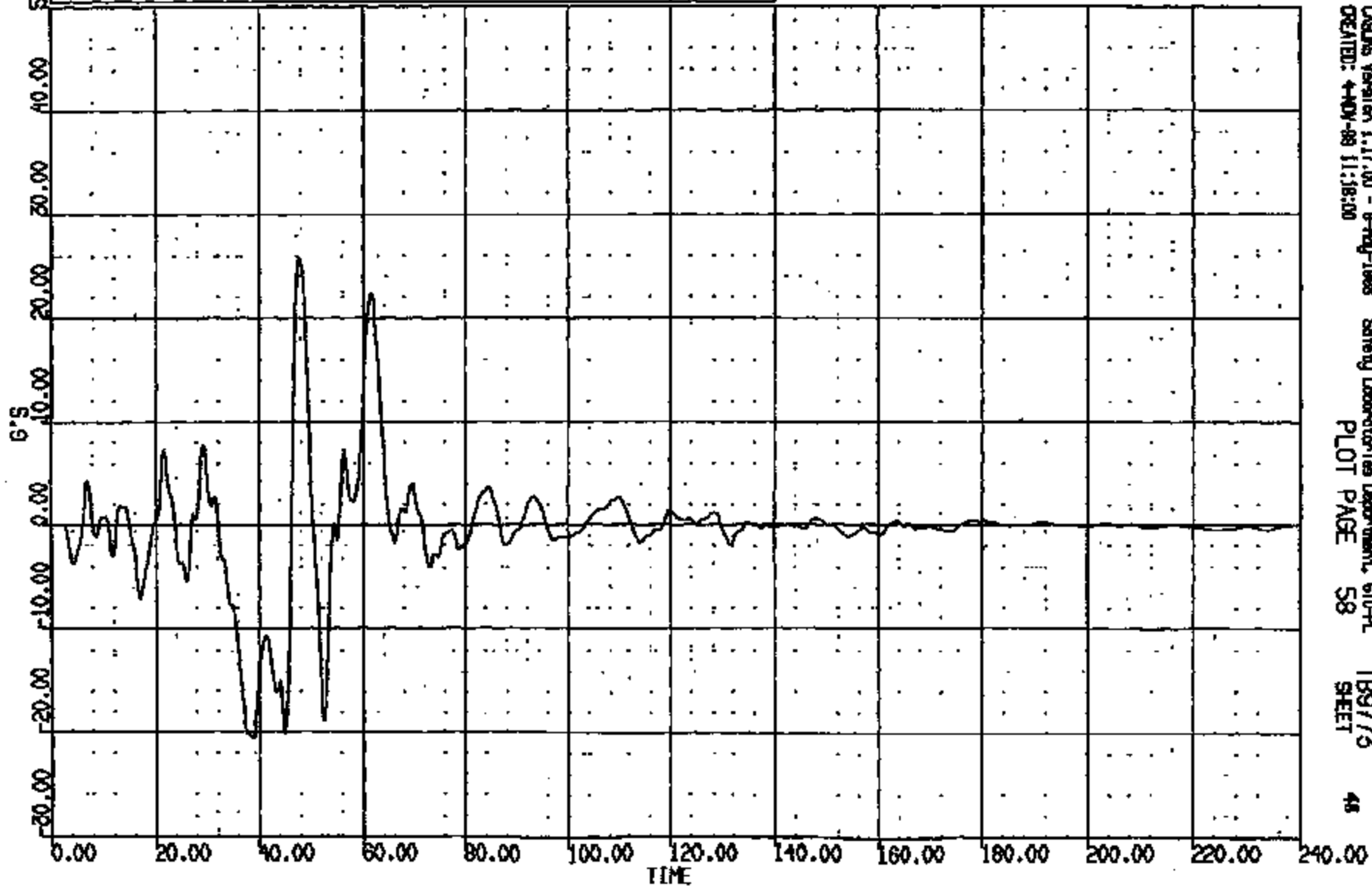
47

CRTS 0011664

CR R: 11664 TO: TB9775 DATE: 881104 10:54:17
2000 D-188

(38) CR11664T L/ROCKER @ A-PILLAR LAT 60C
MAX = 25.86 at 47.80 NS MIN = -20.73 at 38.72 NS

AXIS 1

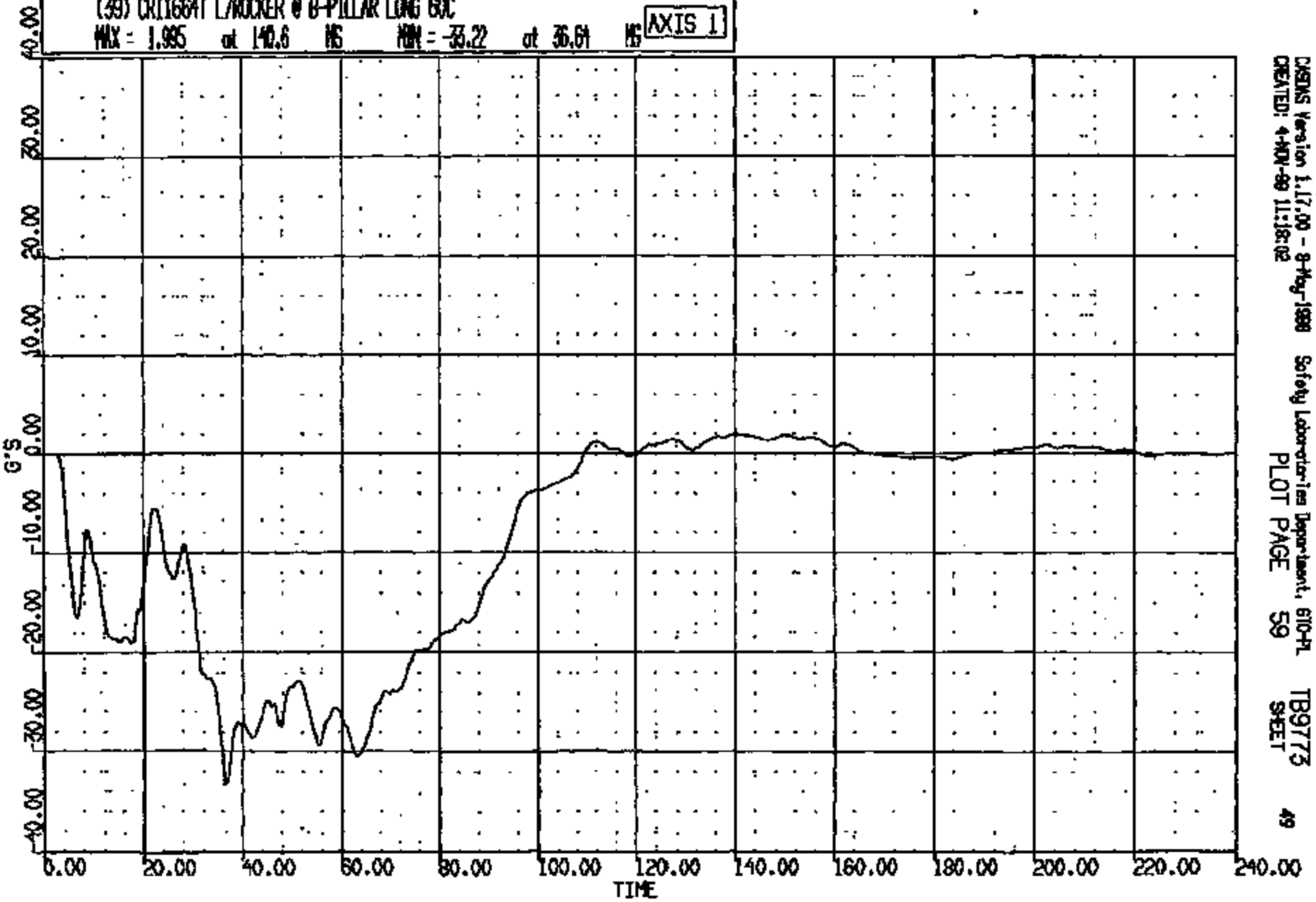


CRSIS Version 1.17.00 - 8-May-1988 Safety Laboratories Department, 610-PL
CREATED: 4-NOV-88 11:18:00 PLOT PAGE 58 TB9775
SHEET 48

CRIS 0011664

CR R: 11664 TO: TB9773 DATE: 991104 10:54:17
2000 D-198

(39) CR11664T L/ROCKER @ B-PILLAR LONG GDC
MAX = 1.985 at 140.6 MS MIN = -33.22 at 36.61 MS **AXIS 1**

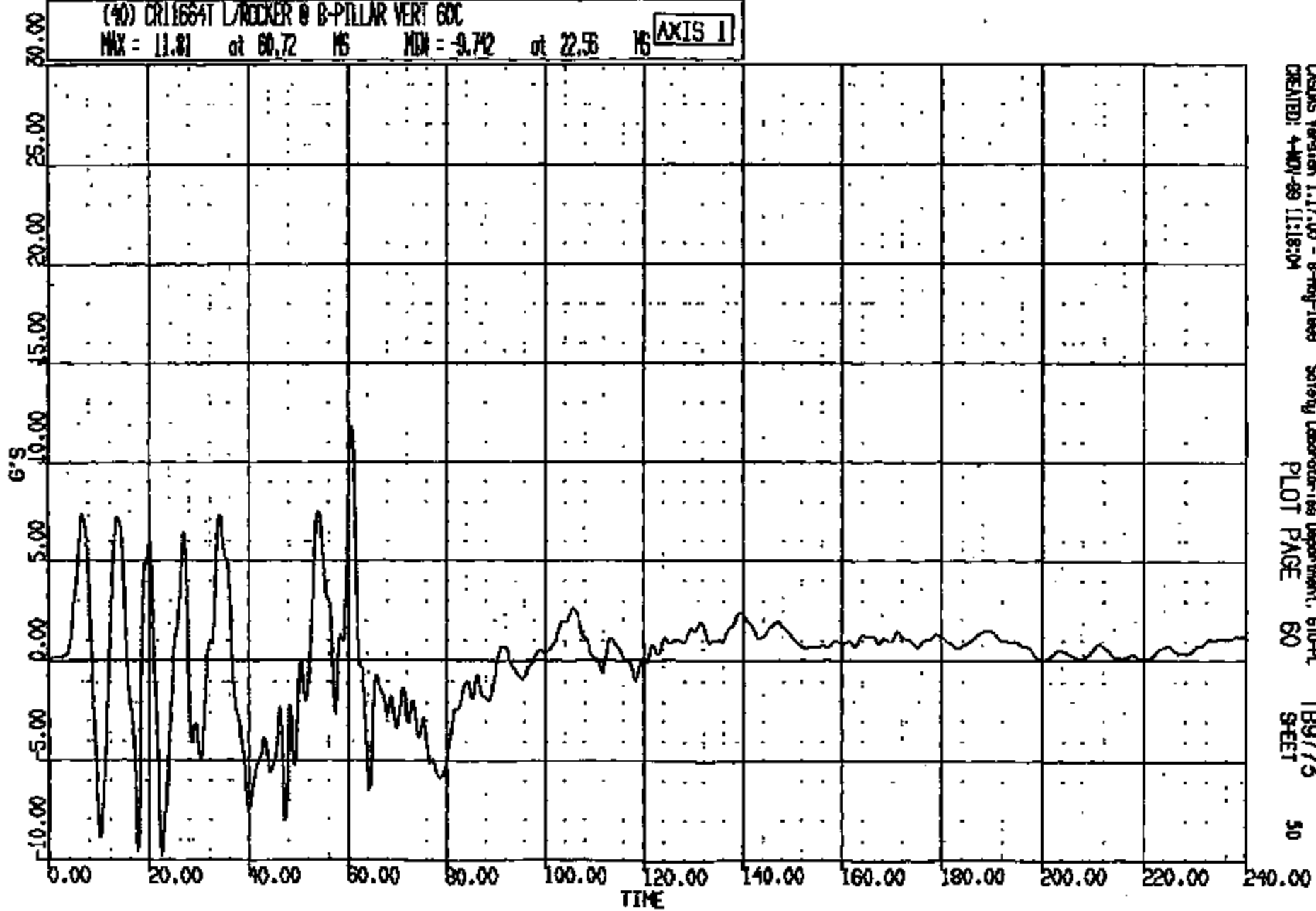


CRS Version 1.17.00 - 9-May-1998 Safety Laboratories Department, 610-PL
CREATED: 4-NOV-99 11:18:02 PLOT PAGE 59 TB9773 49
SHEET

CRTS 0011664

CR R: 11664 TO: TB9773 DATE: 981104 10:54:17
2000 0-189

(40) CR11664T L/ROCKER @ B-PILLAR VERT GDC
MAX = 11.81 at 60.72 MS MIN = -9.72 at 22.56 MS **AXIS 1**



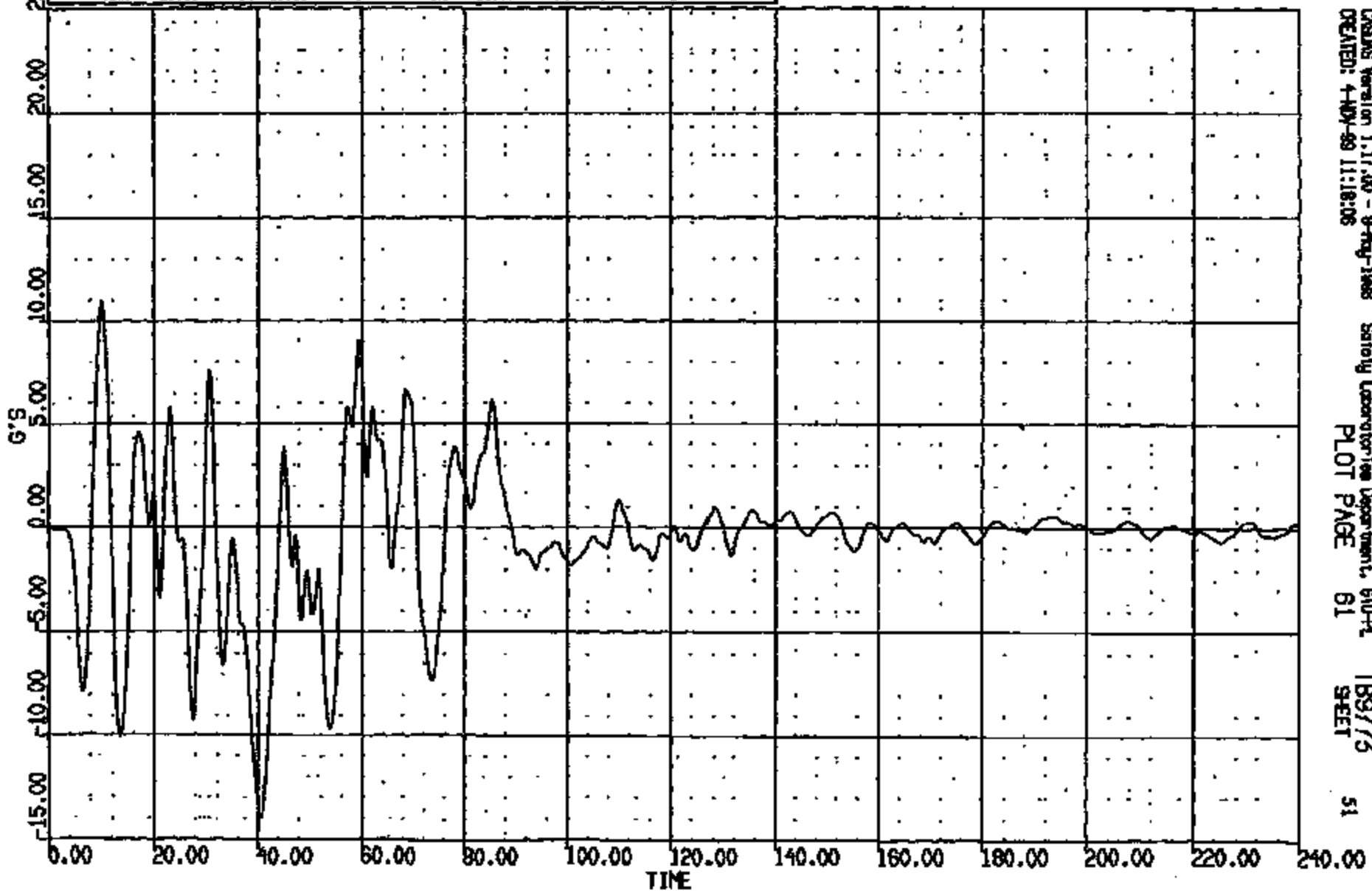
CRSIS Version 1.17.00 - B-Hug-1899 Safety Laboratories Department, 610-PL
CREATED: 4-MAY-99 11:18:04 PLOT PAGE 60 TB9773
50
SHEET

CRTS 0011664

CR R: 11664 TO: T89773 DATE: 991104 10:34:17
2000 D-188

(41) CR11664T L/ROCKER @ B-PILLAR LAT 60C
MAX = 10.96 at 10.00 NS MIN = -13.96 at 40.04 NS

AXIS 1



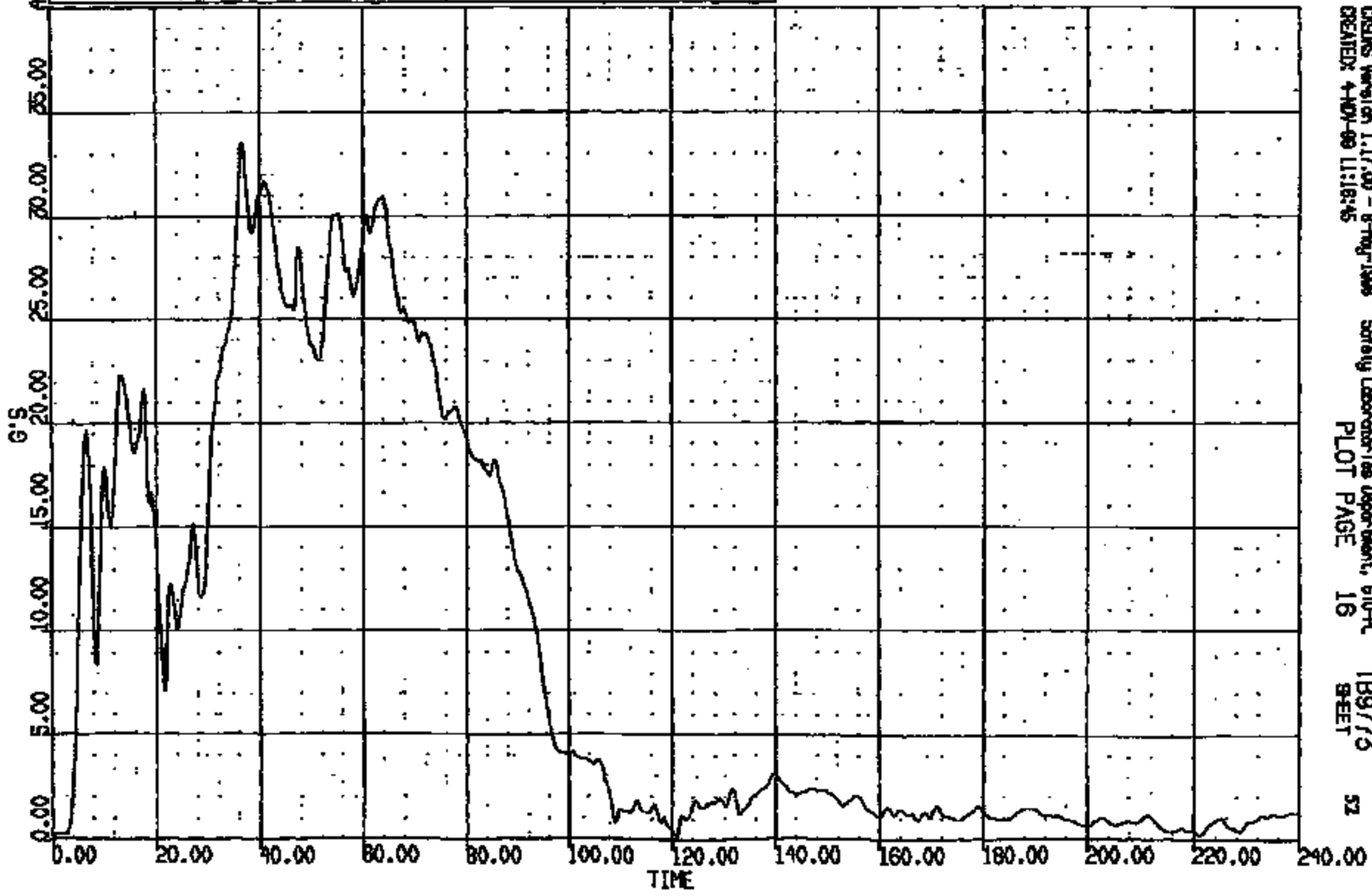
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CREATED: 4-MAY-99 11:18:05 PLOT PAGE 61 TB9773
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CRIS 0011664

CR R: 11664 TO: TB9773 DATE: 981104 10:54:17
2000 D-198

(10008) CR11664T L/ROCKER @ B-PILLAR RES 60C
MAX = 33.54 at 36.61 MS MIN = 0.1092 at 0.000E+00 MS

AXIS 1

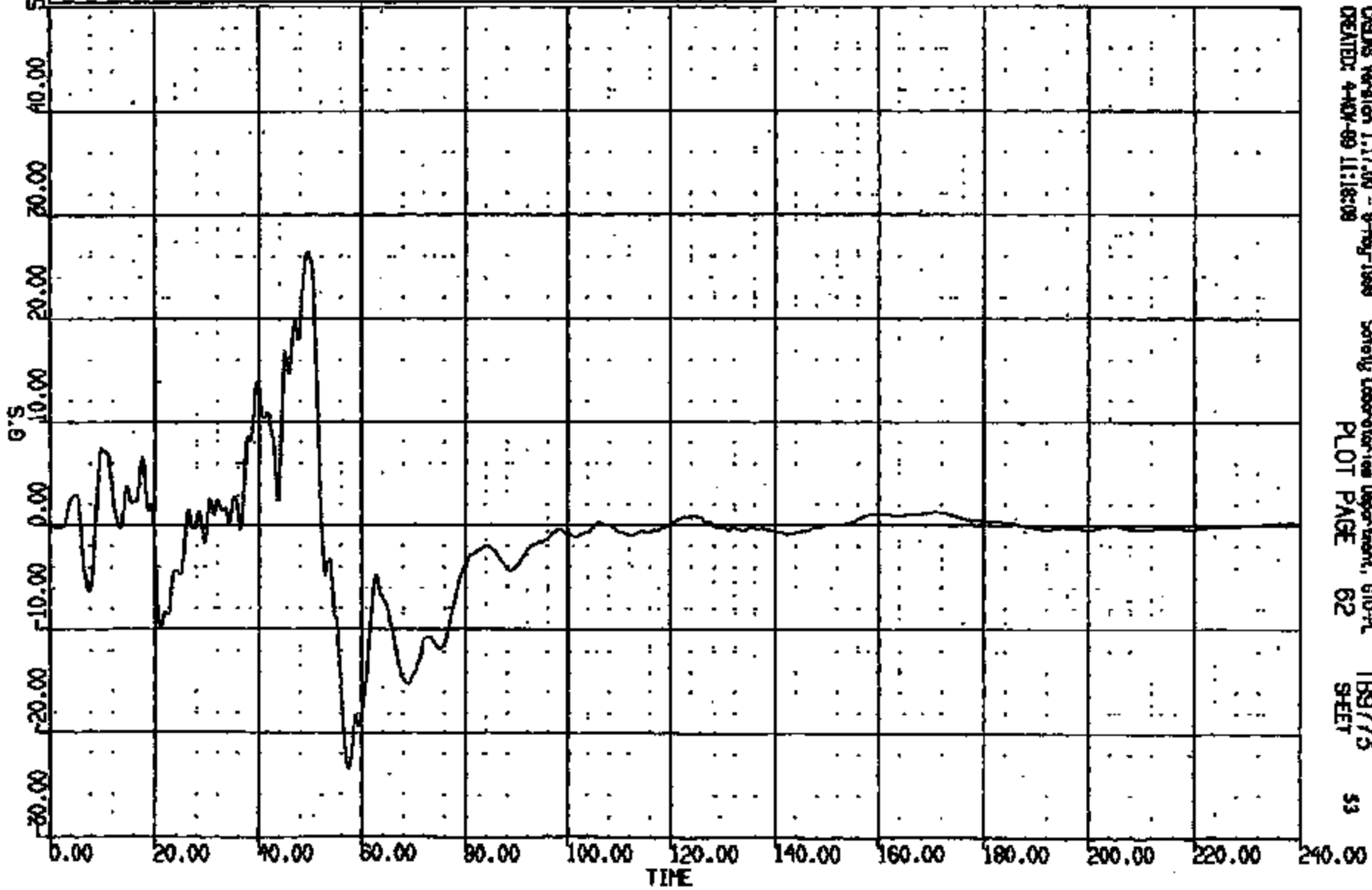


CRS Version 1.17.00 - 8-May-1998 Safety Laboratory Department, 610-PL
CREATED: 4-10-98 11:18:45 PLOT PAGE 16 TB9773
SHEET 52

CRTS 0011664

OR R: 11664 TO: T89773 DATE: 981104 10:34:17
2000 D-199

(42) CR16641 R/ROCKER @ A-PILLAR LONG 60C
MAX = 26.35 at 49.52 MS MIN = -23.49 at 57.52 MS AXIS 1

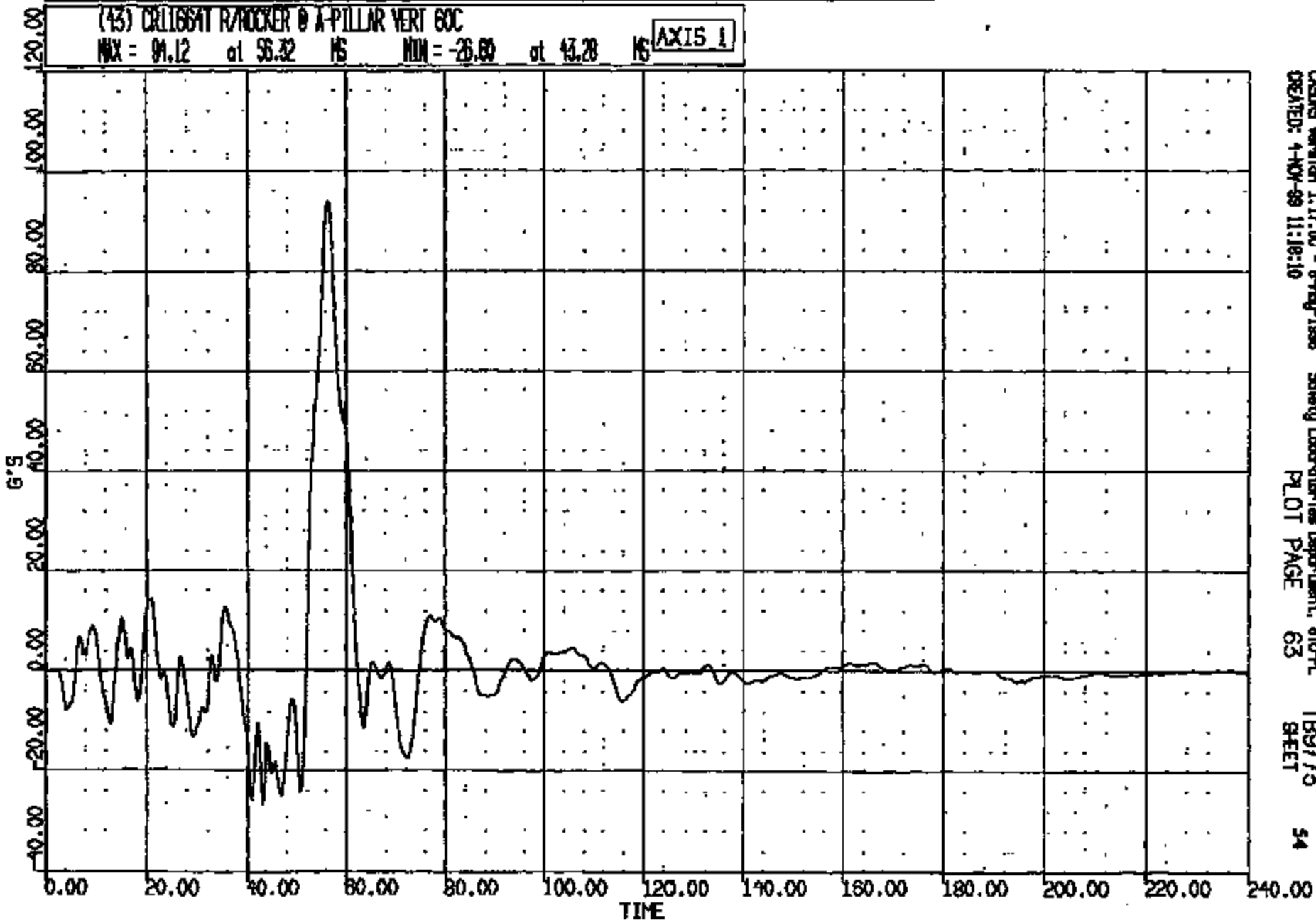


CRDS Version 1.17.00 - 9-May-1999 Safety Laboratory Department, 610-PL TR9773 53
CREATED: 4-NOV-99 11:18:09 PLOT PAGE 62 SHEET

CRTS 0011664

CR R: 11664 TO: T89773 DATE: 991104 10:54:17
2000 0-188

(43) COLLISAT R/ROCKER @ A-PILLAR VERT 60C
MAX = 91.12 at 56.32 MS MIN = -26.60 at 43.28 MS **AXIS 1**



CASINS Version 1.17.00 - 8-Aug-1998
CREATED: 4-NOV-99 11:18:10

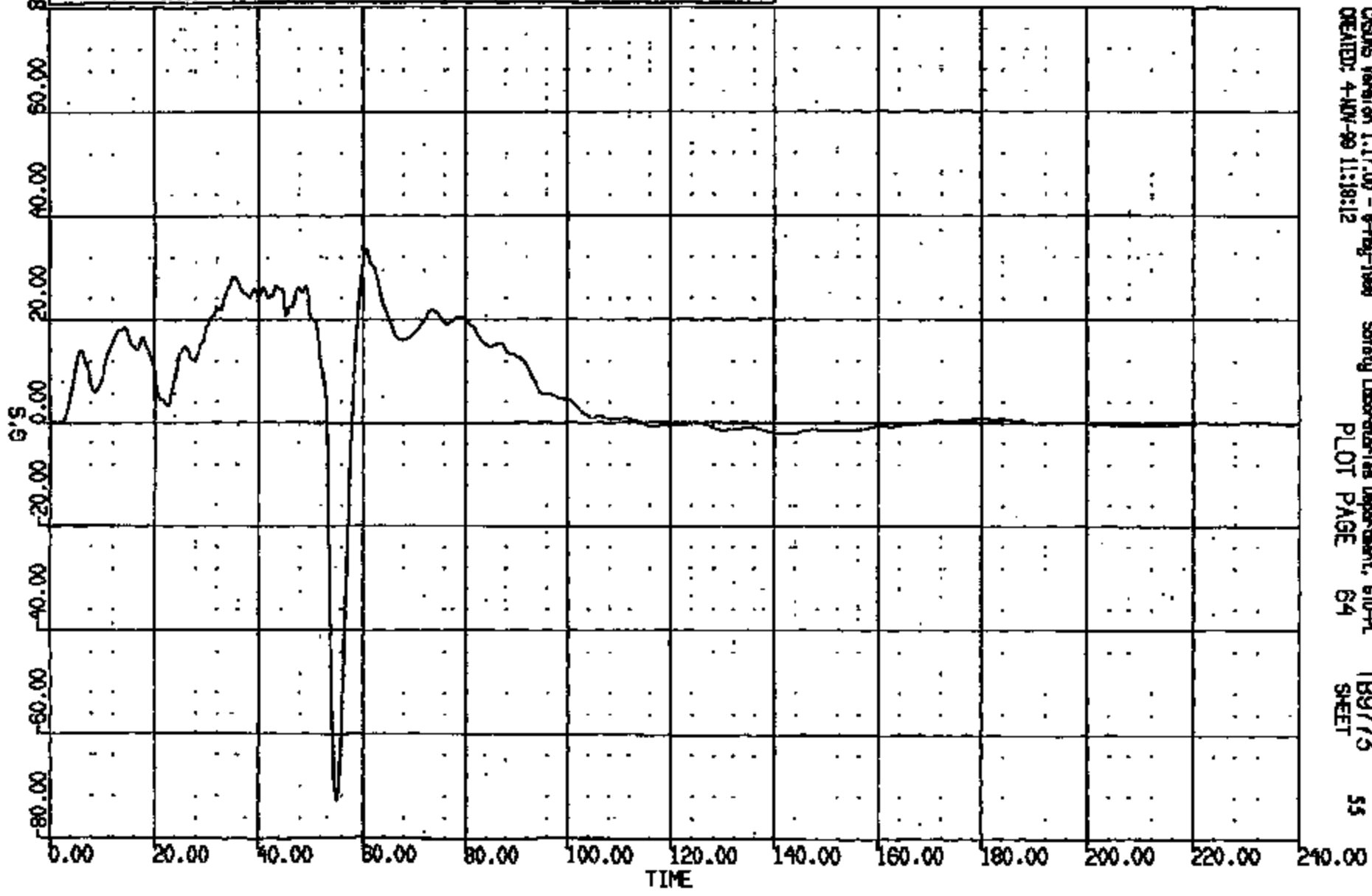
Safety Laboratories Department, STD-PL
PLOT PAGE 63

T89773
SHEET

CR R: 11884 TO: TB9775 DATE: 991104 10:34:17
2000 D-189

(44) CR11664T R/ROCKER @ A-PILLAR LAT 60C
MAX = 33.65 at 60.72 MS MIN = -72.85 at 55.04 MS

AXIS 1



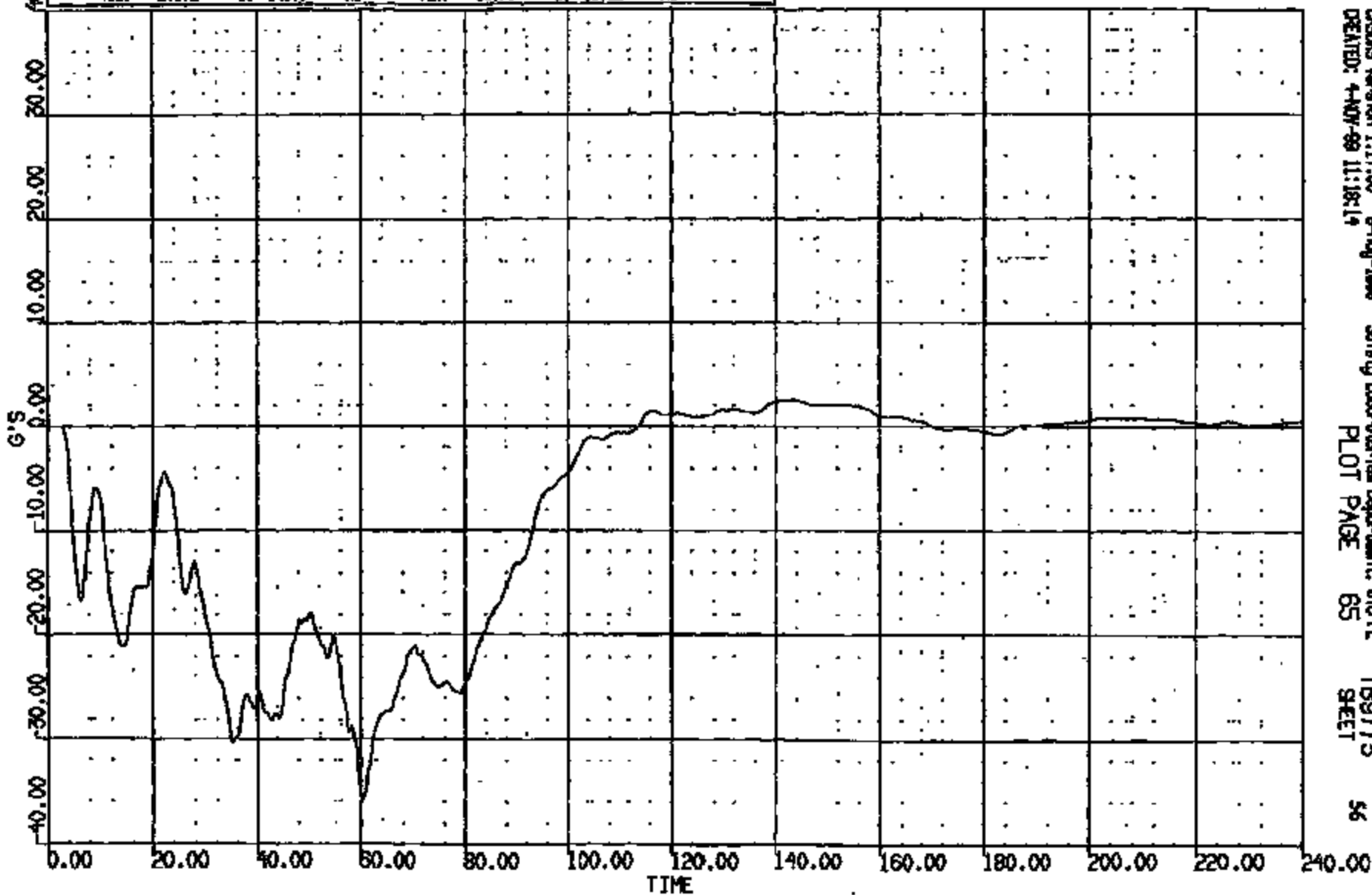
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CREATED: 4-NOV-99 11:18:12 PLOT PAGE 64 TB9775 55
SHEET

CRIS 0011664

CR #: 11884 TO: TB9773 DATE: 821104 10:34:17
2000 D-188

(45) CR11664T R/ROCKER @ B-PILLAR LONG GDC
MAX = 2.572 at 143.5 MS MIN = -35.79 at 60.52 MS

AXIS 1



CRS0NS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
CREATED: 4-NOV-99 11:18:14 PLOT PAGE 65 SHEET 56

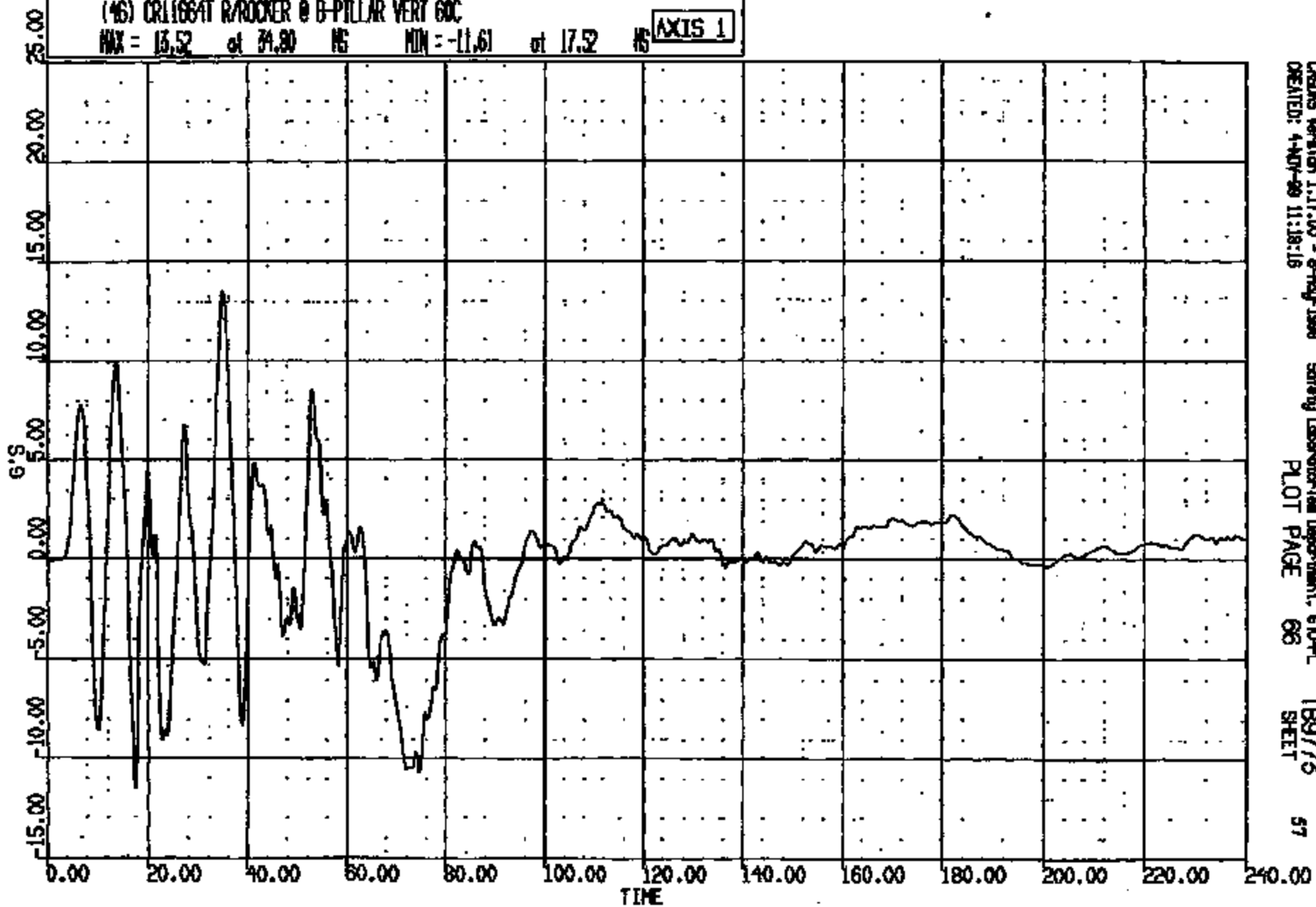
CRTS 0011664

CR R: 11664 TO: TB9773 DATE: 991104 10:54:17
2000 0-198

(46) CRT1664T R/ROCKER @ B-PILLAR VERT 60C

MAX = 13.52 at 24.80 NS MIN = -11.61 at 17.52 NS

AXIS 1



CASMS Version 1.17.00 - 8-May-1990
CREATED: 4-NOV-99 11:18:18

Safety Laboratory Department, 670-PL

PLOT PAGE 66

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SHEET

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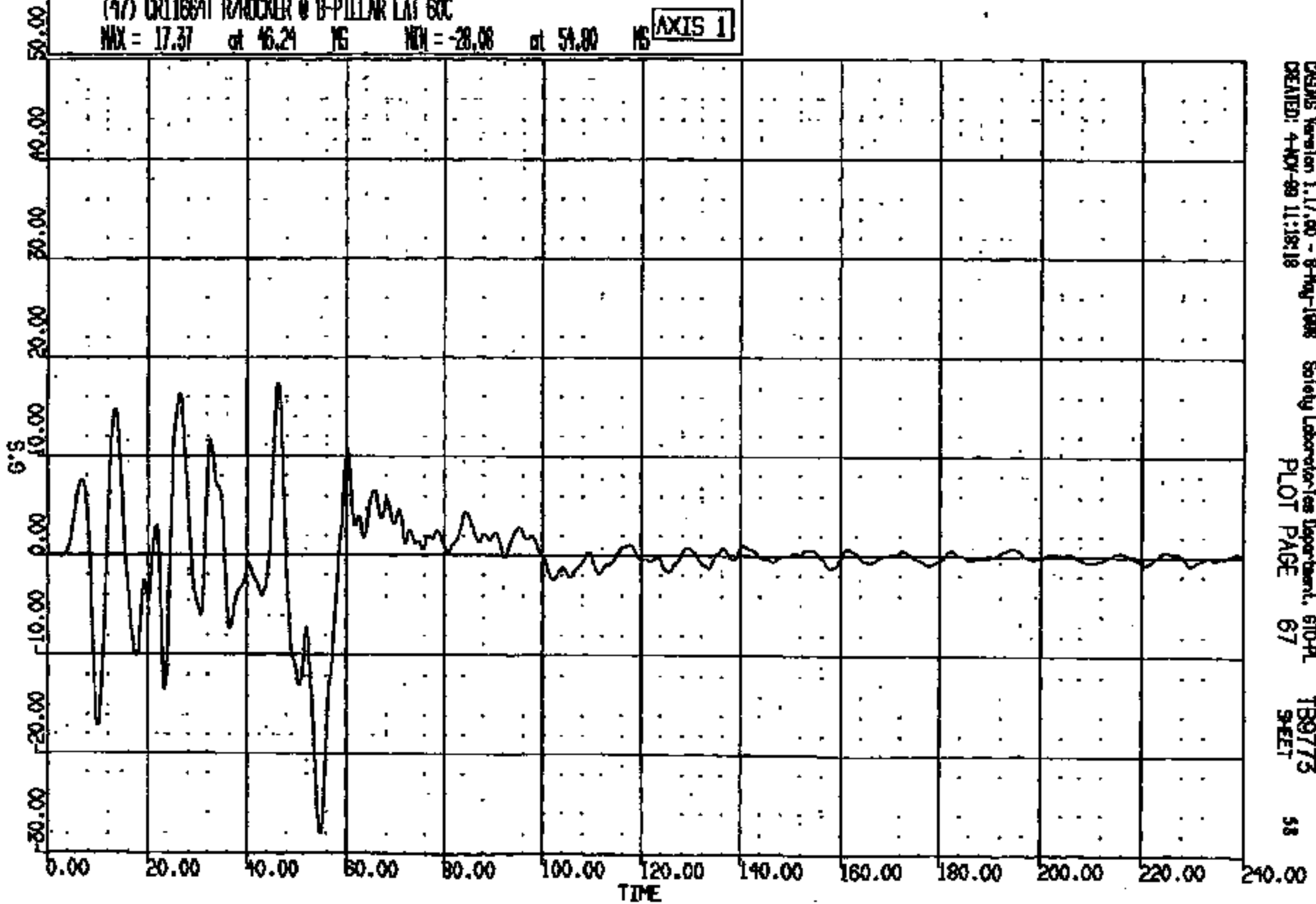
CRTS 0011664

CR R: 11664 TO: T89773 DATE: 991104 10:54:17
2000 D-188

(47) CR11664T R/ROCKER @ B-PILLAR LAT SOC

MAX = 17.37 at 46.24 MS MIN = -28.08 at 54.80 MS

AXIS 1



CASMS Version 1.17.00 - 8-May-1998
CREATED: 4-NOV-99 11:18:18

Safety Laboratory/tes Department, 6104A
PLOT PAGE 67

T89773
SHEET

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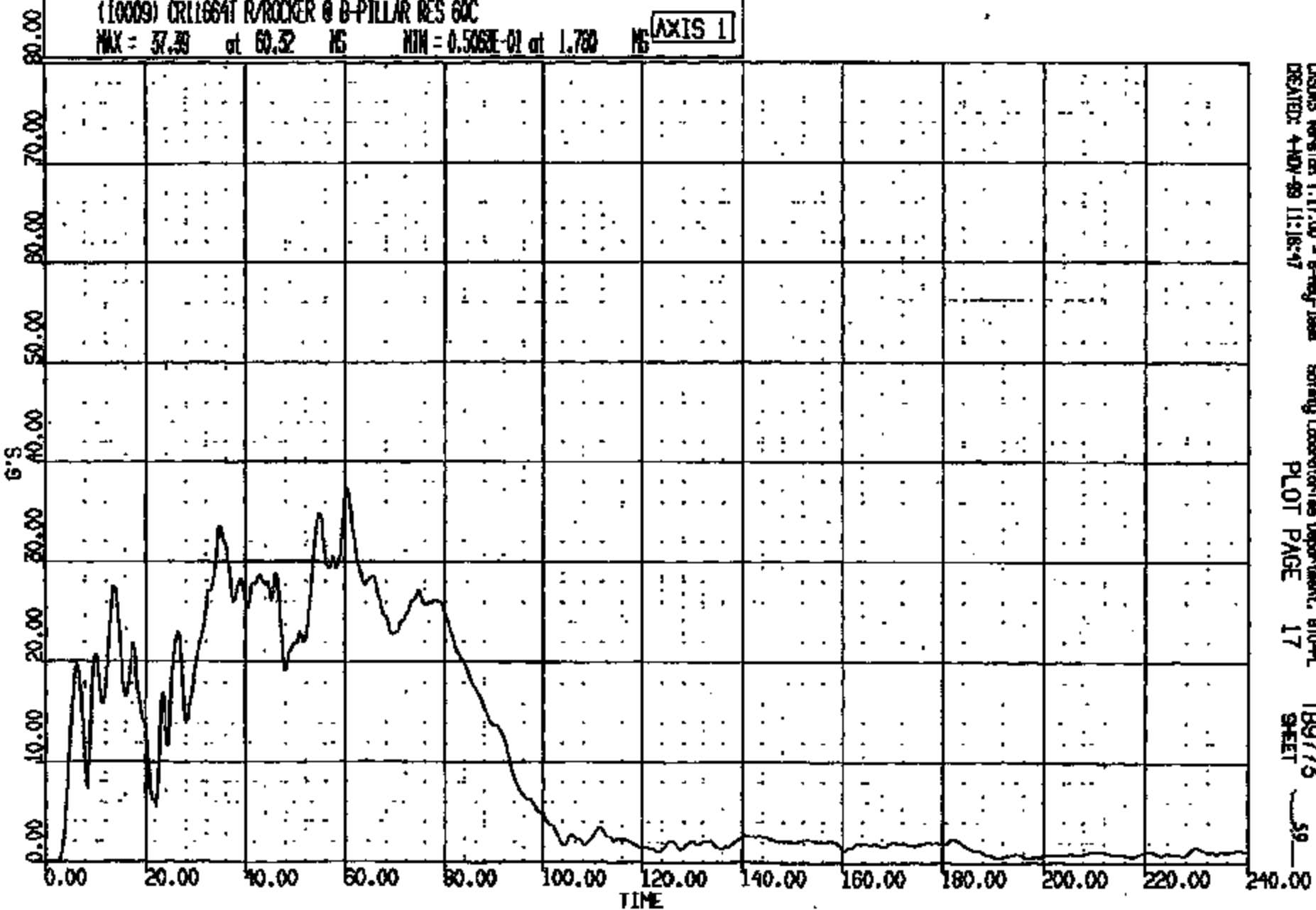
CRTS 0011664

CR R: 11664 TO: TB9773 DATE: 001104 10:34:17
2000 D-189

(10009) CR11664T R/ROCKER @ B-PILLAR RES 60C

MAX = 37.39 at 60.32 MS MIN = 0.506E-01 at 1.780 MS

AXIS 1



USONS Version 1.17.00 - B-May-1998
CREATED: 4-MAY-99 11:18:47

Safety Laboratories Department, 810-PL
PLOT PAGE 17

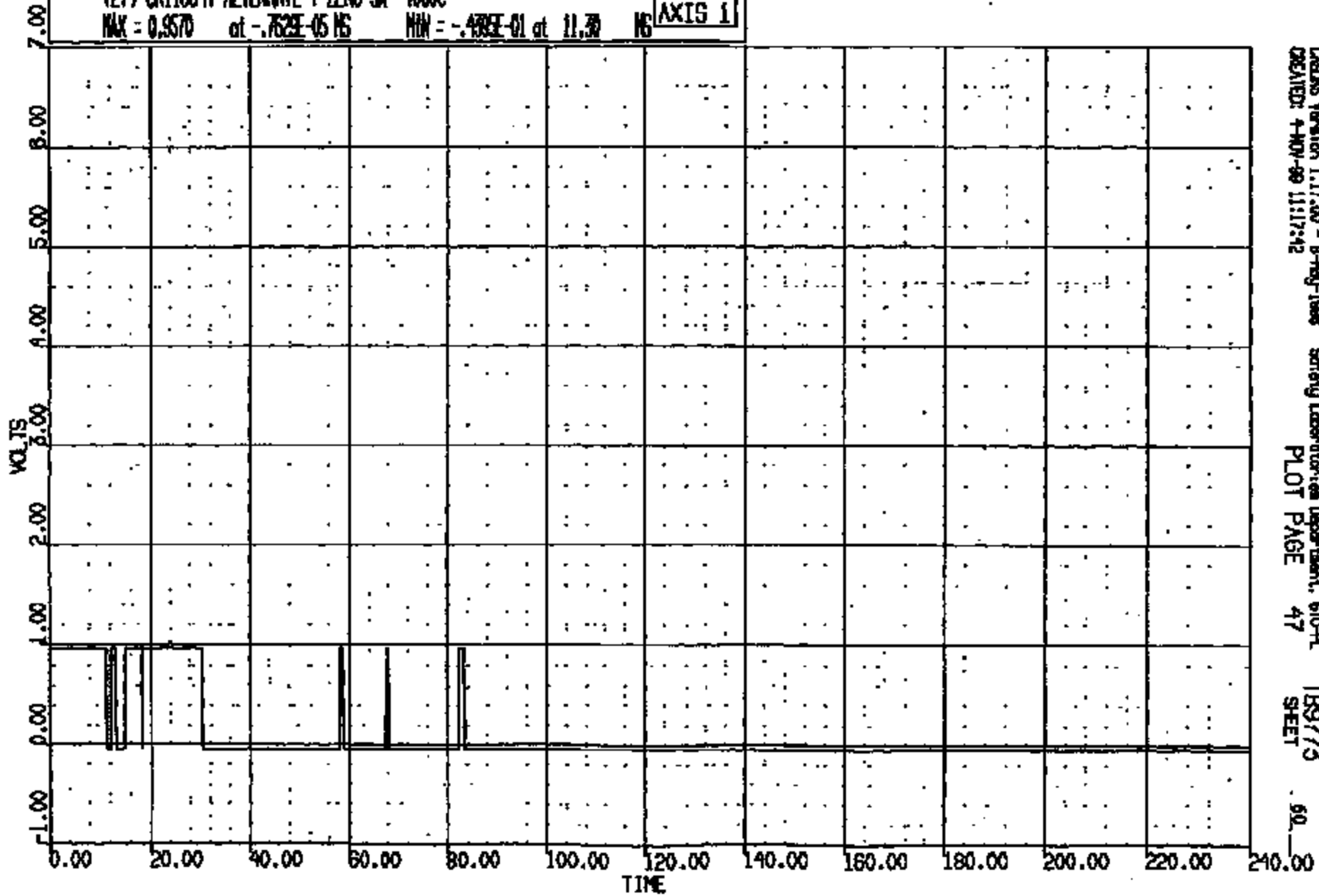
TB9773
SHEET

59

CRIS 0011664

CR R: 11664 TO: TB9775 DATE: 001104 10:34:17
2000 0-180

(27) CR11664T ALTERNATE T-ZERO SW 400C
MAX = 0.9570 at -.752E-05 NS MIN = -.493E-01 at 11.30 NS **AXIS 1**

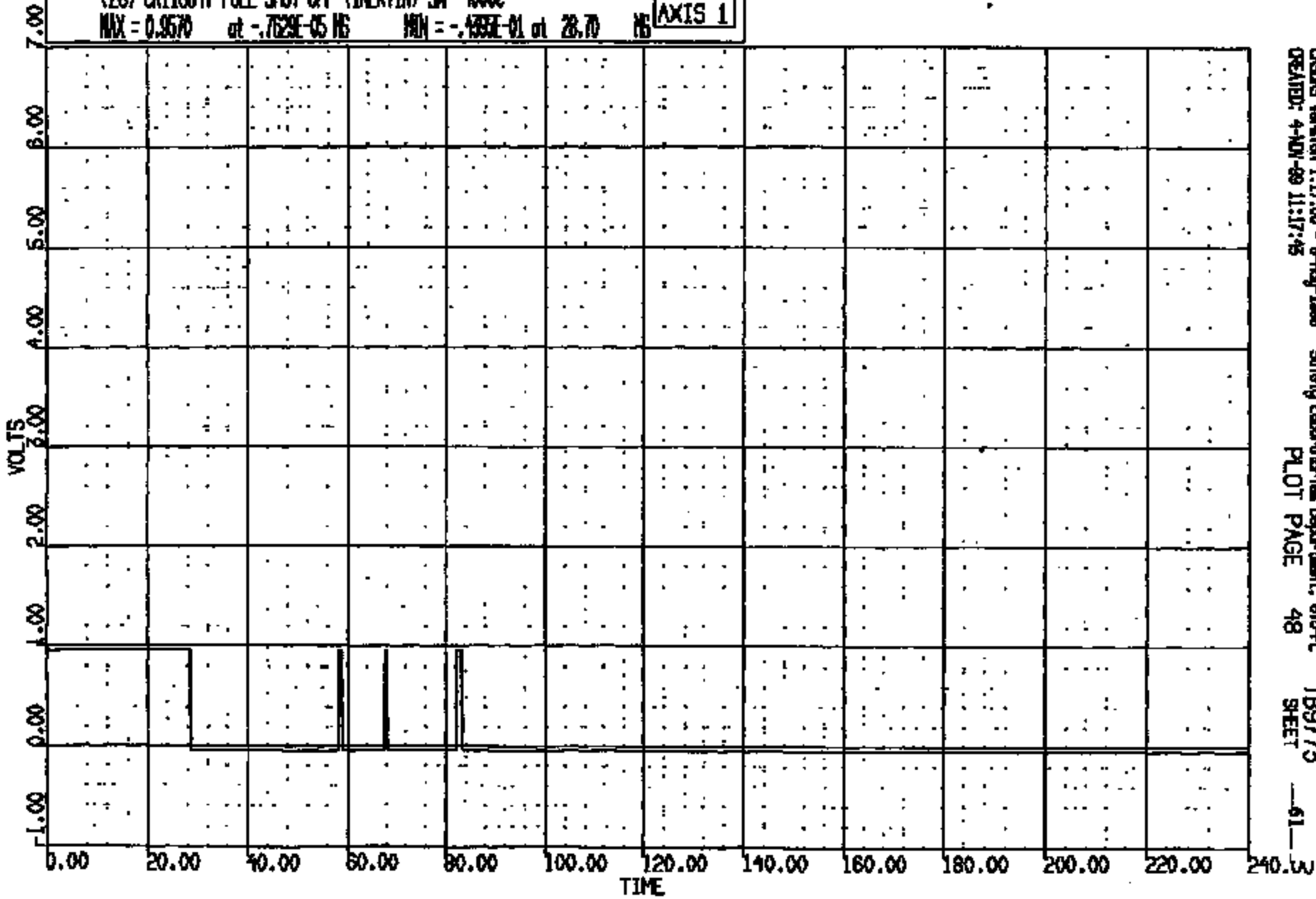


CRS Version 1.17.00 - 8-May-1998 Safety Laboratory Department, 610-PL
CREATED: 4-NOV-99 11:17:42 PLOT PAGE 47 TB9775
SHEET 60

CRTS 0011664

CR R: 11884 TO: T89773 DATE: 991104 10:34:17
2000 D-188

(28) CR116641 FUEL SHUT OFF (INERTIA) SN 4000
MAX = 0.9570 at -.7629E-05 NS MIN = -.1335E-01 at 28.70 NS **AXIS 1**

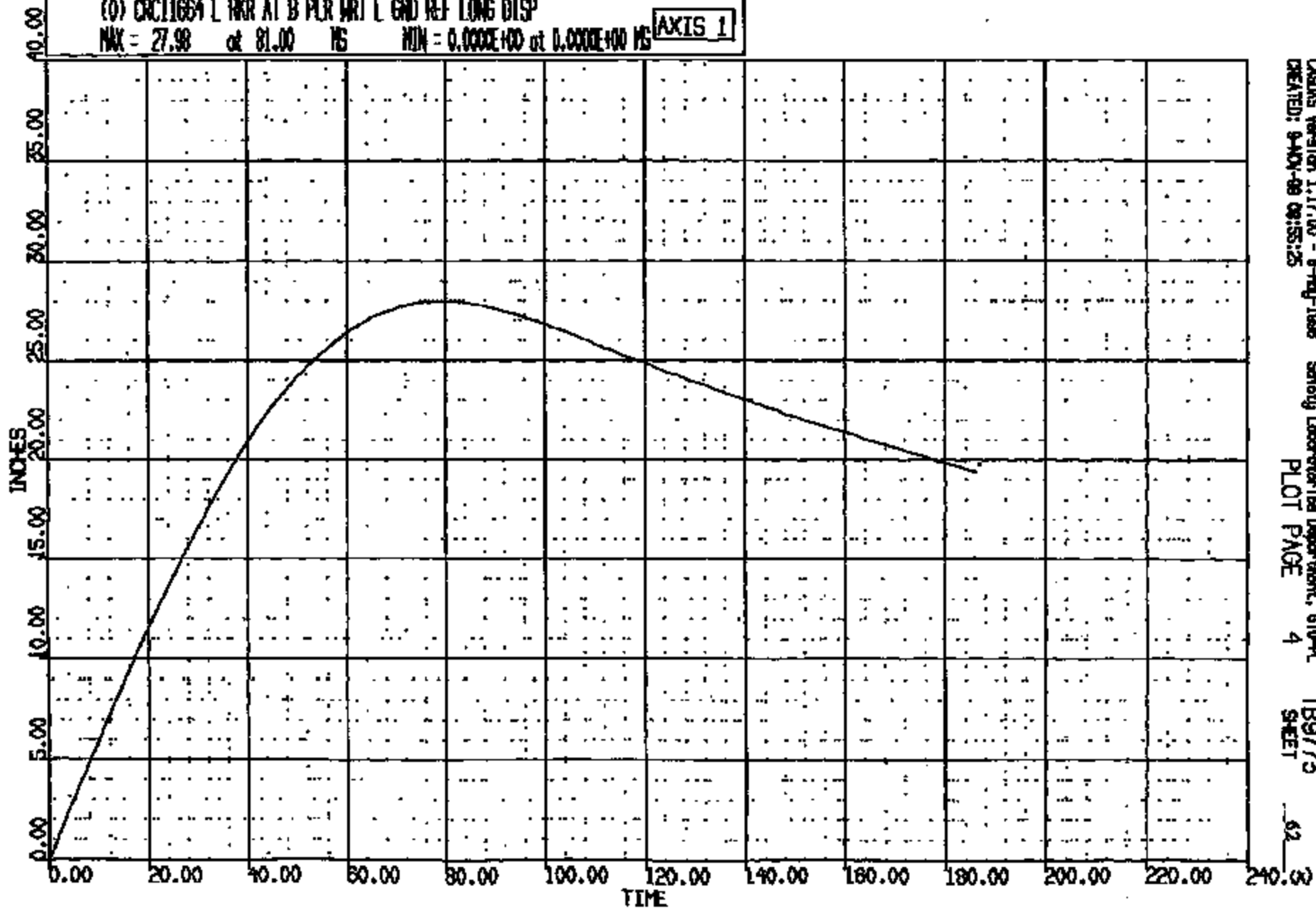


CRSIS Version 1.17.00 - 8-May-1998 Safety Laboratory Department, 610-PL T89773
CREATED: 4-NOV-99 11:17:45 PLOT PAGE 48 SHEET 61

CRIS 0011664

CR R= 11664 TO: TB9773 DATE: 981104 10:54:17
2000 D-188

(0) CR011664 L NKR AT B PLR WRT L END REF LONG DTSP
MAX = 27.98 at 81.00 MS MIN = 0.000E+00 at 0.000E+00 MS **AXIS 1**



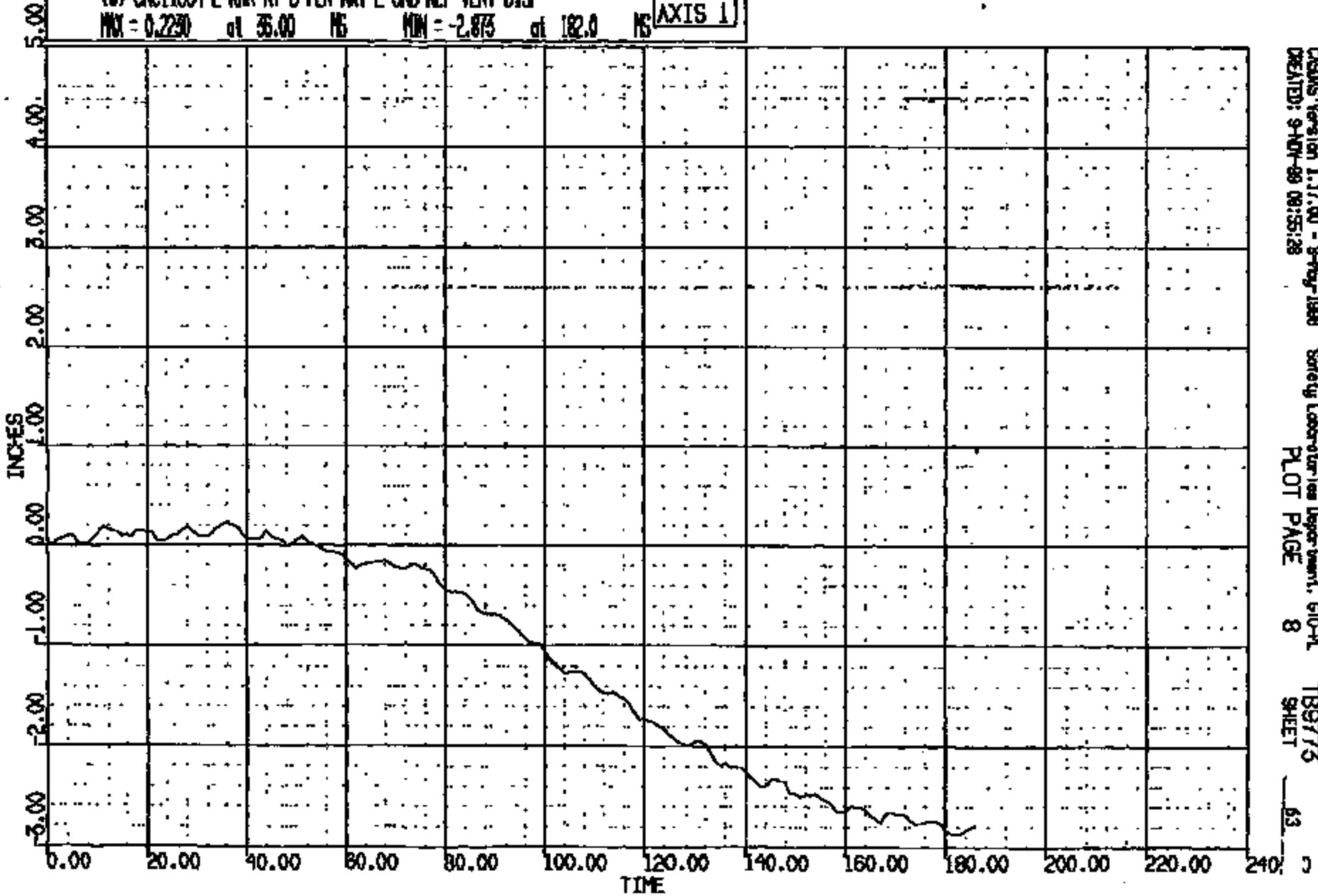
CADWIS Version 1.17.00 - 8-May-1998
CREATED: 9-NOV-98 09:55:25

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PLOT PAGE 4

TB9773
SHEET

CR N: 11664 TO: T89773 DATE: 881104 10:34:17
2000 D-180

(0) CRCL1664 L RNR AT B PLR WRT L END REF VERT DISP
MAX = 0.2230 at 35.00 MS MIN = -2.873 at 182.0 MS **AXIS 1**



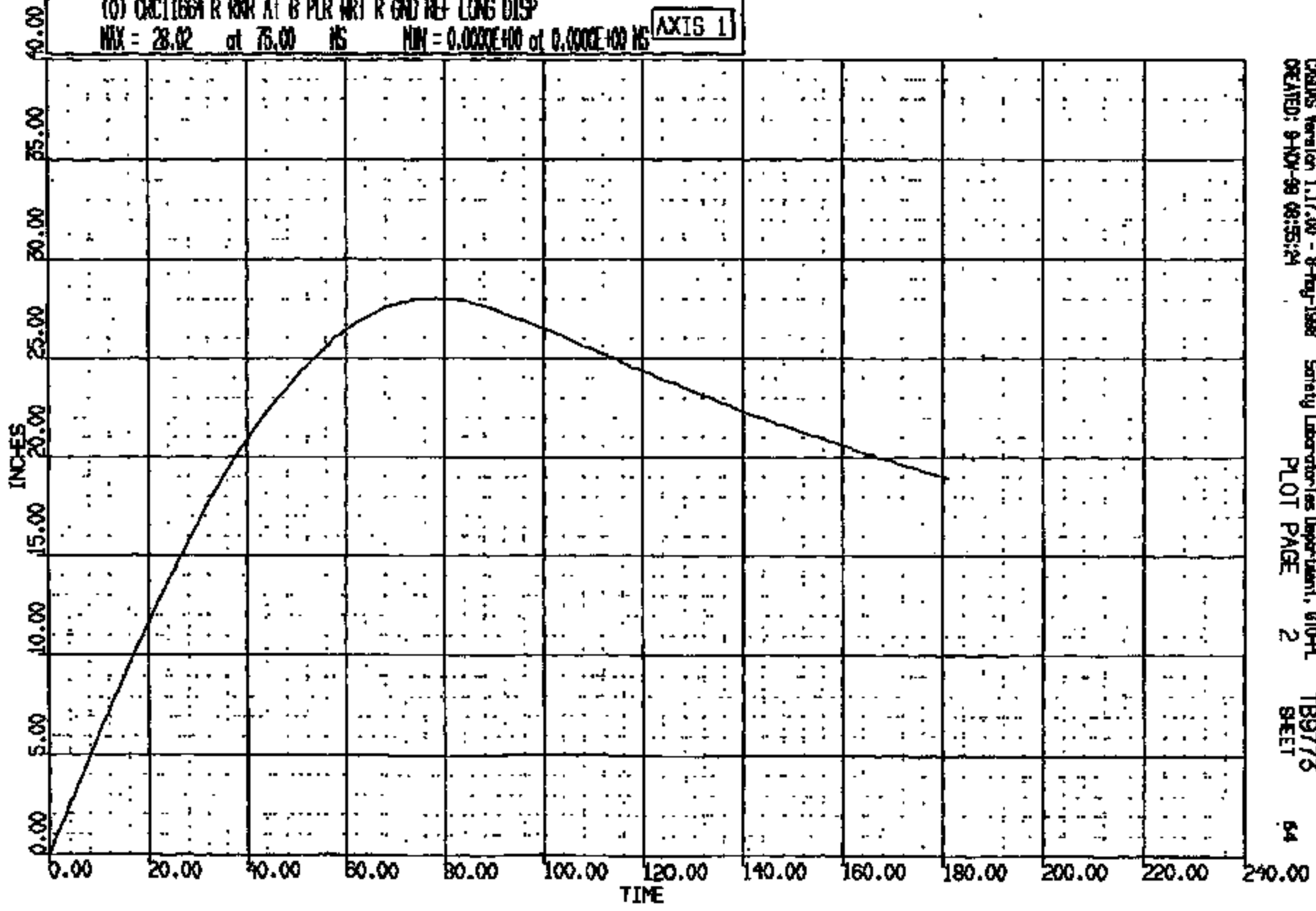
CISMS Version 1.17.00 - 9-Aug-1988 Safety Laboratories Department, 610-PL T89773
CREATED: 9-NOV-88 08:55:28 PLOT PAGE 8 SHEET 63

CRTS 0011664

CR R: 11664 TO: 789775 DATE: 891104 10:54:17
2000 D-188

(1) CRCT1664 R RWR AT 8 PLS WRT R END REF LONG DISP
MAX = 28.02 at 75.00 MS MIN = 0.0000E+00 at 0.0000E+00 MS

AXIS 1

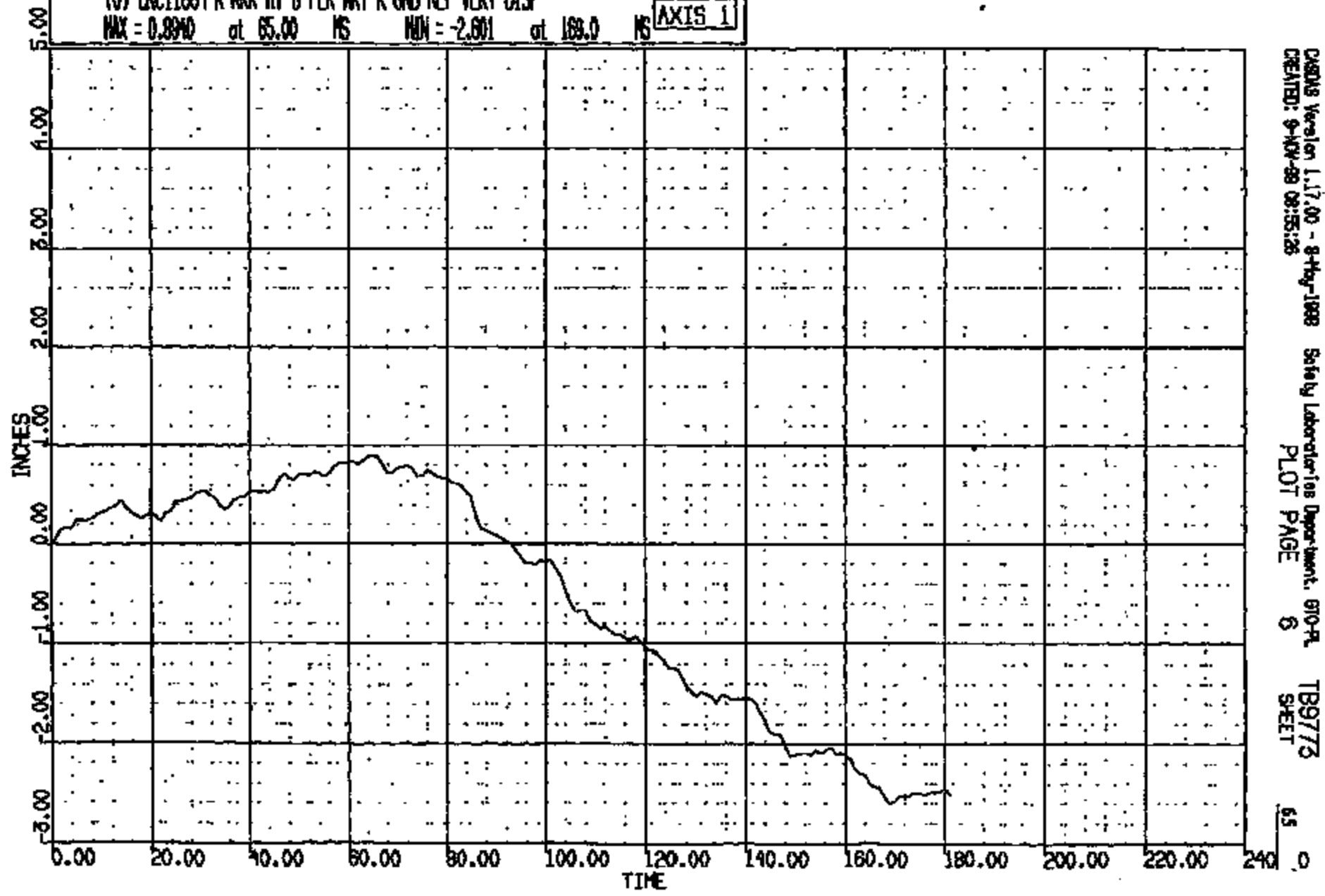


CRSINS Version 1.17.00 - 8-Aug-1988 Safety Laboratories Department, GPO-PL
CREATED: 8-NOV-98 08:55:24
PLOT PAGE 2
TB9775
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CRTS 0011664

CR R: 11864 TO: TB9773 DATE: 991104 10:54:17
2000 D-188

(0) CR011664 R RWR AT B PLR WRT R GND REF VERT DISP
MAX = 0.8940 at 65.00 MS MIN = -2.601 at 169.0 MS **AXIS 1**



CARDAS Version 1.17.00 - 9-May-1998 Safety Laboratories Department, 610-PL
CREATED: 9-NOV-99 08:55:28 PLOT PAGE 8 SHEET 65

CRIS 0011664

ASC TO #: T- 1B9773

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11664

VEHICLE INFORMATION

TEST DESCRIPTION: 90 DEG. FRONT FIXED BARRIER
VEHICLE PROGRAM YEAR: 2000
VEHICLE MODEL NAME: TACUDS
VEHICLE PROGRAM NAME: D-186
VEHICLE ID NUMBER: 206Y646
CERTIFICATION VEHICLE CODE: CT
REQUESTOR NAME: L. MISIKIE
TEST ENGINEER NAME:

TIME AND DATE OF REPORT: 10-NOV-99 09:39:10

CRTS 0011664

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T-29773

** POINT COORDINATES **

LEFT NO	SIDE	REF NO	DESCRIPTION	INCHES			INCHES CHANGED				
				LONG X	LAT Y	VERT Z	X	Y	Z	D	
070			SEE COMMENT SHEET								
		10	LEFT HYBRID IIX "H" FT REL. TO FRT/SILL/TARGET	REF AFT	9.00		12.10				
124			TOP (BODY) FOW SIDED								
		41	STEERING COLUMN MOUNT INBOARD UPPER	REF AFT	92.52 93.84	-9.97 -9.95	34.03 34.73	1.32	0.02	0.54	1.47
		42	STEERING COLUMN MOUNT OUTBOARD UPPER	REF AFT	92.36 93.60	-17.38 -17.26	34.05 34.54	1.24	0.13	0.49	1.34
		43	STEERING COLUMN MOUNT INBOARD LOWER	REF AFT	86.93 88.52	-9.88 -9.63	32.00 32.25	1.59	0.25	0.25	1.63
		44	STEERING COLUMN MOUNT OUTBOARD LOWER	REF AFT	86.78 88.32	-17.19 -16.90	31.95 32.11	1.54	0.29	0.16	1.58
125			TOP (BODY) SIDED								
	L	41	FRONT INBOARD TRACK TO FLOOR	REF AFT	108.00 107.92	-6.85 -7.35	16.85 15.07	-0.08	-0.50	-1.78	1.85
	R	41	FRONT INBOARD TRACK TO FLOOR	REF AFT	108.05 107.62	6.80 7.13	16.87 16.10	-0.43	0.33	-0.77	0.94
	L	42	FRONT OUTBOARD TRACK TO FLOOR	REF AFT	107.82 107.99	-22.21 -22.71	15.88 15.44	0.17	-0.50	-0.44	0.69
	R	42	FRONT OUTBOARD TRACK TO FLOOR	REF AFT	107.82 107.67	22.15 22.51	15.82 16.28	-0.15	0.34	0.36	0.53
	L	43	REAR INBOARD TRACK TO FLOOR	REF AFT	121.22 121.21	-5.19 -5.69	14.80 15.39	-0.01	-0.30	0.59	0.66
	R	43	REAR INBOARD TRACK TO FLOOR	REF AFT	121.32 121.11	5.14 5.59	14.82 15.99	-0.21	0.45	1.17	1.27

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 10-NOV-99 09:39:11

PAGE 1

UNIT NO	SIDE	PWT NO	DESCRIPTION	** POINT COORDINATES **			INCHES CHANGED																																																																																																																							
				LONG X	LAT Y	VERT Z	X	Y	Z	D																																																																																																																				
L	44		REAR OUTBOARD TRACK TO FLOOR	BEF	121.36	-23.15	15.49	0.14	-0.39	0.52	0.66																																																																																																																			
				AFT	121.50	-23.54	14.01					R	44		REAR OUTBOARD TRACK TO FLOOR	BEF	121.40	23.21	15.48	-0.16	0.34	0.86	0.94	AFT	121.24	23.55	16.31	L	90		" B " POINT ON REAR QUARTER PANEL	BEF	209.11	-24.98	45.20					AFT				R	90		" B " POINT ON REAR QUARTER PANEL	BEF	209.10	24.98	45.20					AFT				650			BLANK UNIT POINTS								01	1		SEE COMMENTS PAGE	BEF	94.13	-26.66	13.79	0.09	-0.67	0.00	0.68	AFT	94.28	-27.33	13.79	02	2		SEE COMMENTS PAGE	BEF	152.67	-26.48	14.01	0.01	-0.01	0.00	0.01	AFT	153.68	-26.49	14.01	03	3		SEE COMMENTS PAGE	BEF	92.86	26.72	13.81	0.00	0.00	0.00	0.00	AFT	92.86	26.72	13.81	04	4		SEE COMMENTS PAGE	BEF	154.02	26.47	13.99
R	44		REAR OUTBOARD TRACK TO FLOOR	BEF	121.40	23.21	15.48	-0.16	0.34	0.86	0.94																																																																																																																			
				AFT	121.24	23.55	16.31					L	90		" B " POINT ON REAR QUARTER PANEL	BEF	209.11	-24.98	45.20					AFT				R	90		" B " POINT ON REAR QUARTER PANEL	BEF	209.10	24.98	45.20					AFT				650			BLANK UNIT POINTS								01	1		SEE COMMENTS PAGE	BEF	94.13	-26.66	13.79	0.09	-0.67	0.00	0.68	AFT	94.28	-27.33	13.79	02	2		SEE COMMENTS PAGE	BEF	152.67	-26.48	14.01	0.01	-0.01	0.00	0.01	AFT	153.68	-26.49	14.01	03	3		SEE COMMENTS PAGE	BEF	92.86	26.72	13.81	0.00	0.00	0.00	0.00	AFT	92.86	26.72	13.81	04	4		SEE COMMENTS PAGE	BEF	154.02	26.47	13.99	0.00	0.00	0.00	0.00	AFT	154.02	26.47	13.99								
L	90		" B " POINT ON REAR QUARTER PANEL	BEF	209.11	-24.98	45.20																																																																																																																							
				AFT								R	90		" B " POINT ON REAR QUARTER PANEL	BEF	209.10	24.98	45.20					AFT				650			BLANK UNIT POINTS								01	1		SEE COMMENTS PAGE	BEF	94.13	-26.66	13.79	0.09	-0.67	0.00	0.68	AFT	94.28	-27.33	13.79	02	2		SEE COMMENTS PAGE	BEF	152.67	-26.48	14.01	0.01	-0.01	0.00	0.01	AFT	153.68	-26.49	14.01	03	3		SEE COMMENTS PAGE	BEF	92.86	26.72	13.81	0.00	0.00	0.00	0.00	AFT	92.86	26.72	13.81	04	4		SEE COMMENTS PAGE	BEF	154.02	26.47	13.99	0.00	0.00	0.00	0.00	AFT	154.02	26.47	13.99																								
R	90		" B " POINT ON REAR QUARTER PANEL	BEF	209.10	24.98	45.20																																																																																																																							
				AFT								650			BLANK UNIT POINTS								01	1		SEE COMMENTS PAGE	BEF	94.13	-26.66	13.79	0.09	-0.67	0.00	0.68	AFT	94.28	-27.33	13.79	02	2		SEE COMMENTS PAGE	BEF	152.67	-26.48	14.01	0.01	-0.01	0.00	0.01	AFT	153.68	-26.49	14.01	03	3		SEE COMMENTS PAGE	BEF	92.86	26.72	13.81	0.00	0.00	0.00	0.00	AFT	92.86	26.72	13.81	04	4		SEE COMMENTS PAGE	BEF	154.02	26.47	13.99	0.00	0.00	0.00	0.00	AFT	154.02	26.47	13.99																																								
650			BLANK UNIT POINTS																																																																																																																											
01	1		SEE COMMENTS PAGE	BEF	94.13	-26.66	13.79	0.09	-0.67	0.00	0.68																																																																																																																			
				AFT	94.28	-27.33	13.79					02	2		SEE COMMENTS PAGE	BEF	152.67	-26.48	14.01	0.01	-0.01	0.00	0.01	AFT	153.68	-26.49	14.01	03	3		SEE COMMENTS PAGE	BEF	92.86	26.72	13.81	0.00	0.00	0.00	0.00	AFT	92.86	26.72	13.81	04	4		SEE COMMENTS PAGE	BEF	154.02	26.47	13.99	0.00	0.00	0.00	0.00	AFT	154.02	26.47	13.99																																																																			
02	2		SEE COMMENTS PAGE	BEF	152.67	-26.48	14.01	0.01	-0.01	0.00	0.01																																																																																																																			
				AFT	153.68	-26.49	14.01					03	3		SEE COMMENTS PAGE	BEF	92.86	26.72	13.81	0.00	0.00	0.00	0.00	AFT	92.86	26.72	13.81	04	4		SEE COMMENTS PAGE	BEF	154.02	26.47	13.99	0.00	0.00	0.00	0.00	AFT	154.02	26.47	13.99																																																																																			
03	3		SEE COMMENTS PAGE	BEF	92.86	26.72	13.81	0.00	0.00	0.00	0.00																																																																																																																			
				AFT	92.86	26.72	13.81					04	4		SEE COMMENTS PAGE	BEF	154.02	26.47	13.99	0.00	0.00	0.00	0.00	AFT	154.02	26.47	13.99																																																																																																			
04	4		SEE COMMENTS PAGE	BEF	154.02	26.47	13.99	0.00	0.00	0.00	0.00																																																																																																																			
				AFT	154.02	26.47	13.99																																																																																																																							

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 10-NOV-99 09:39:11

PAGE 2

** SECTIONALS **

UNIT NO	SCEN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	Z
640	51			DRIVER C/L SECTION LOSS			
			1	AFTER	107.20	-17.21	12.94
			2	AFTER	99.97	-17.13	10.60
			3	AFTER	96.11	-17.01	10.24
			4	AFTER	95.06	-16.98	11.59
			5	AFTER	94.74	-16.90	11.06
			6	AFTER	91.34	-15.76	12.93
			7	AFTER	88.95	-15.30	14.54
			8	AFTER	84.70	-14.97	19.25
			9	AFTER	83.23	-14.20	20.85
			10	AFTER	82.27	-14.11	22.58
			11	AFTER	82.59	-14.83	24.60
			12	AFTER	81.67	-14.36	26.76
			13	AFTER	81.45	-14.44	28.37
			14	AFTER	80.94	-14.47	29.48
			15	AFTER	80.78	-14.03	34.17
			16	AFTER	81.28	-14.26	35.25
			17	AFTER	81.23	-14.60	36.87
			18	AFTER	81.85	-14.62	37.30
			19	AFTER	82.31	-14.82	38.16

ASC TO #: T- 1E9773

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11664

** SECTIONS **

UNIT NO	SCIN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			20	AFTER	83.40	-15.11	38.02
			21	AFTER	86.25	-15.31	38.81
			22	AFTER	85.49	-15.25	39.03
			23	AFTER	82.63	-15.54	42.00
			24	AFTER	81.85	-15.48	42.82

TIME AND DATE OF REPORT: 10-NOV-99 09:39.11

PAGE 2

CRTS 0011664

70
5-29773

** COMMENTS **

TO CONVERT TO METRIC DESIGN PRINT VALUES: MULTIPLY BY 25.4.
SUBTRACT 78.74 (2000 MM) FROM THE X VALUE AND SUBTRACT 19.69 (500 MM)
FROM THE Z VALUE.

*** THIS DIMENSION SYSTEM UTILIZES THE RIGHT HAND RULE ***
from Front of Vehicle FACING REARWARD

Paint a stripe on the Windshield in line with the Driver C/L
& the Front Passenger C/L.

[USED FOR DORRY PLACEMENT @ THE BARRIER]

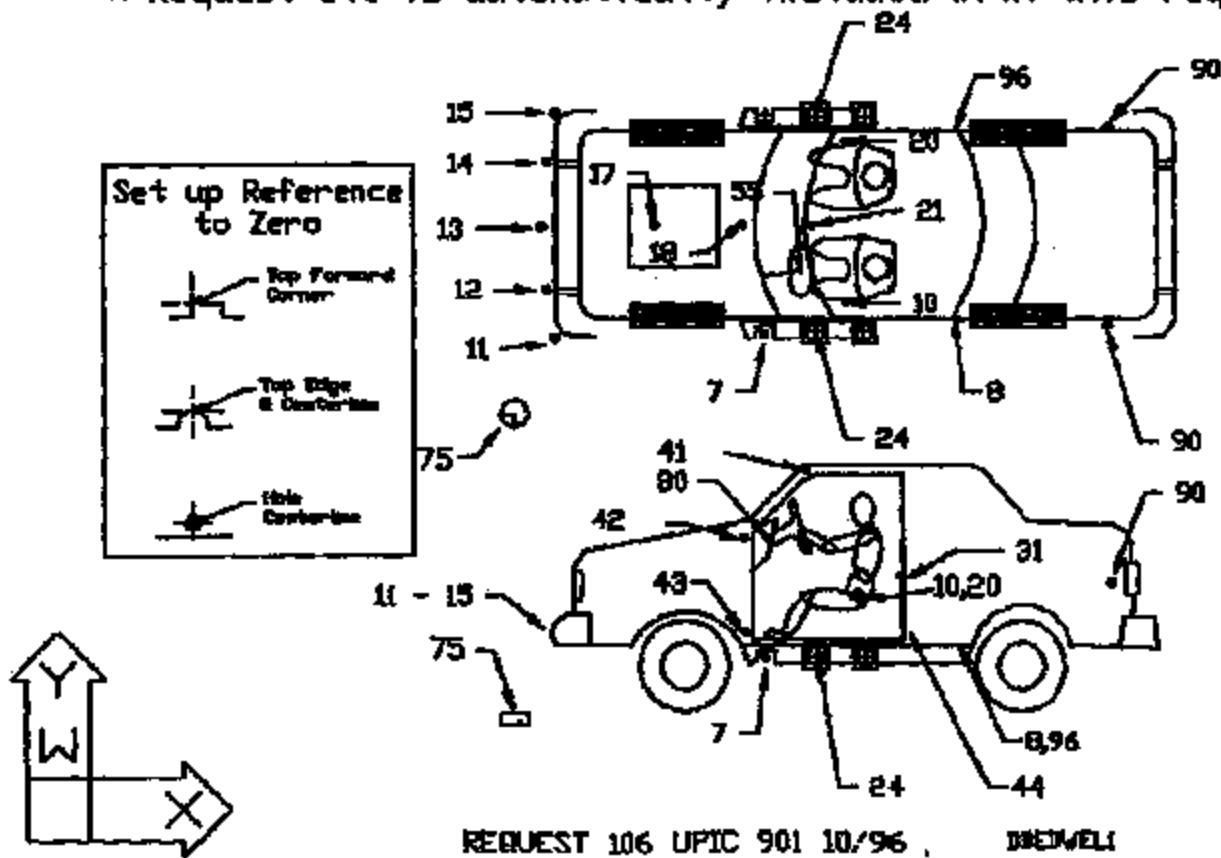
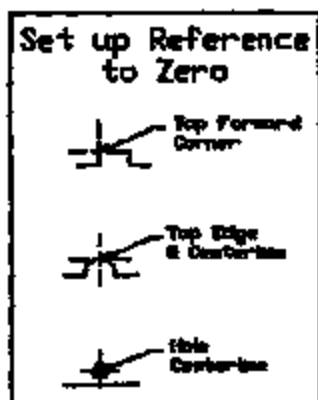
SEE DESIGN SET-UP SHEET: UNIT825..TOW CAR; UNIT829..C/VIC G/MAR
UNIT837..EA77

ANY COMMENTS ENTERED BY OPERATORS APPEAR BELOW THIS LINE:

UNIT 650 POINT DESCRIPTIONS ARE AS FOLLOWS:

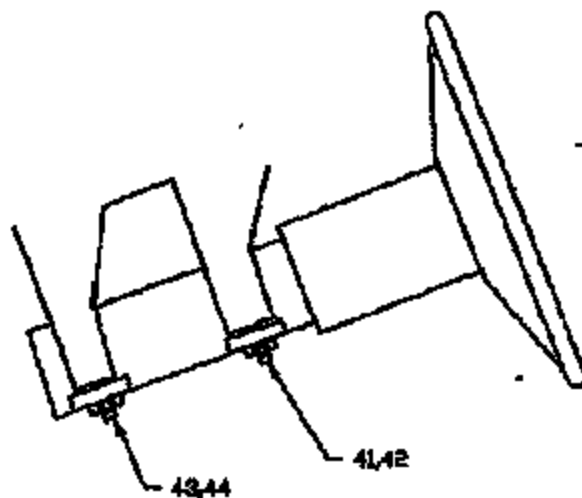
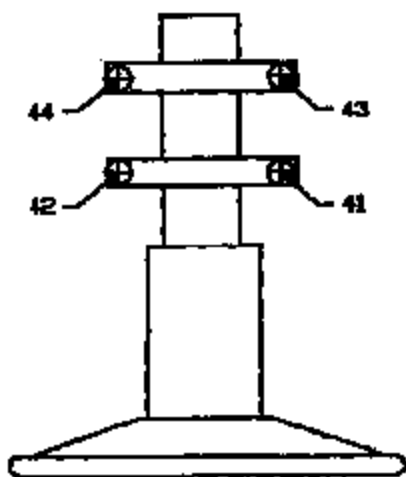
- 01. L/FRONT SILL SETUP POINT.
- 02. L/REAR SILL SETUP POINT.
- 03. R/FRONT SILL SETUP POINT.
- 04. R/REAR SILL SETUP POINT.

SET UP CAR FRONT REQUEST 106
 UNIT 70 POINTS (10,20 PRE CRASH ONLY), 75
 UNIT 71 POINTS 07 LEFT & RIGHT
 UNIT 124 POINTS 8,11-15,17,18,21,55,90,96
 UNIT 125 POINTS 24,31,90 LEFT & RIGHT
 UNIT 75 POINTS 41-44 LEFT & RIGHT, PRE CRASH ONLY
 * Request 140 is automatically included with this request



REQUEST 106 UPIC 901 10/96 , BREWELI

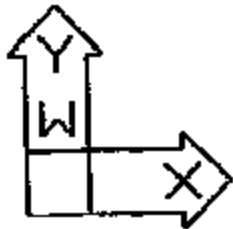
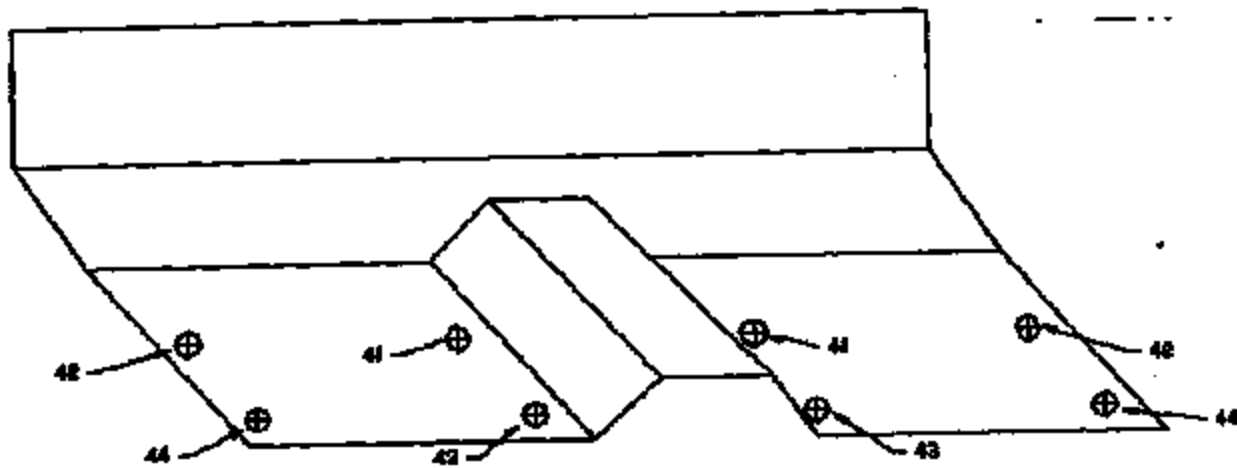
STEERING COLUMN MOUNTS REQUEST 153
UNIT 124 POINTS 41-44



REQUEST 153 UPIC 913 10/96

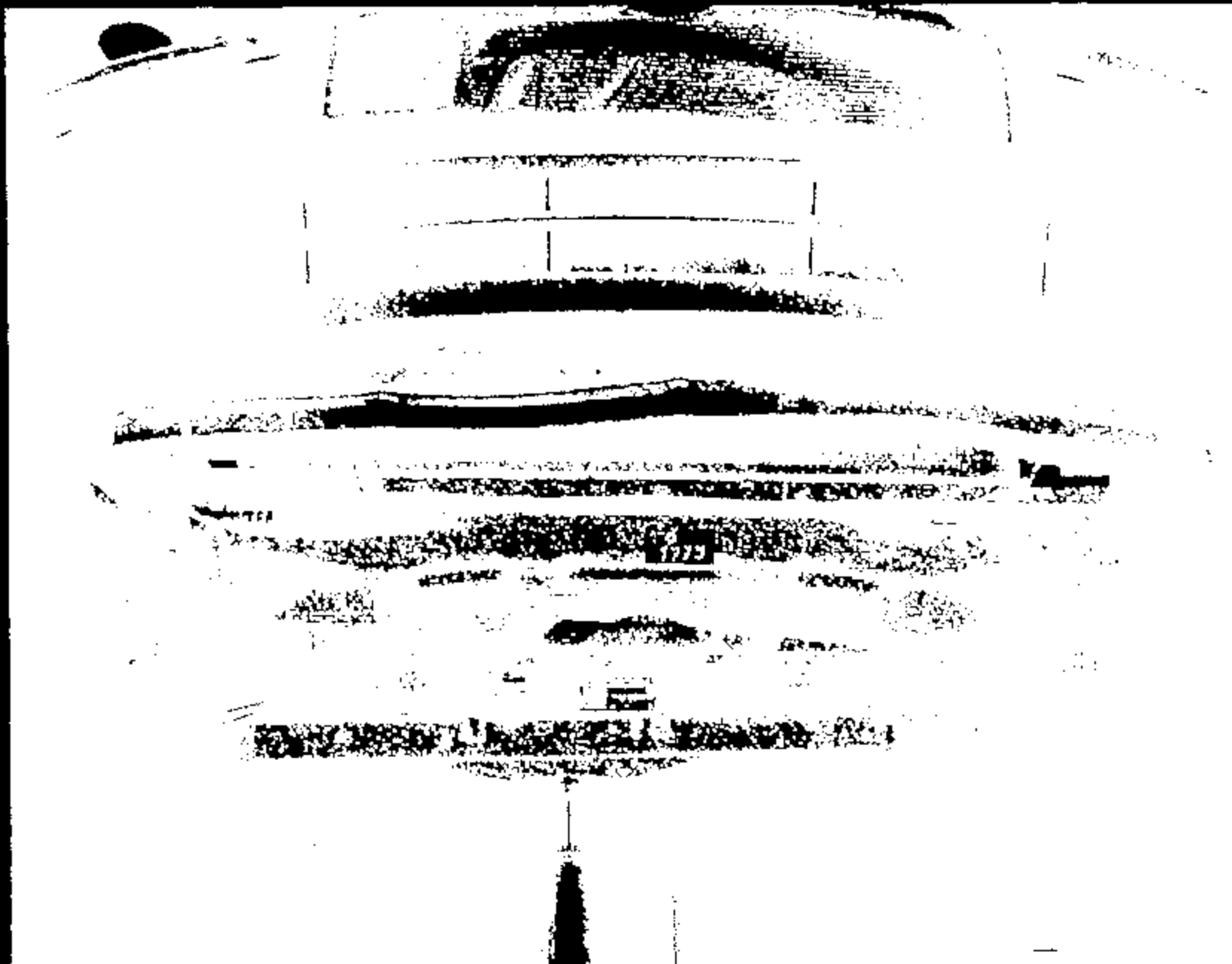
IBEDWEL

SEAT TRACK TO FLOOR MOUNTS REQUEST 156
UNIT 125 POINTS 40-44 LEFT AND RIGHT



REQUEST 156 UPIC 916 10/96

DREOVELL



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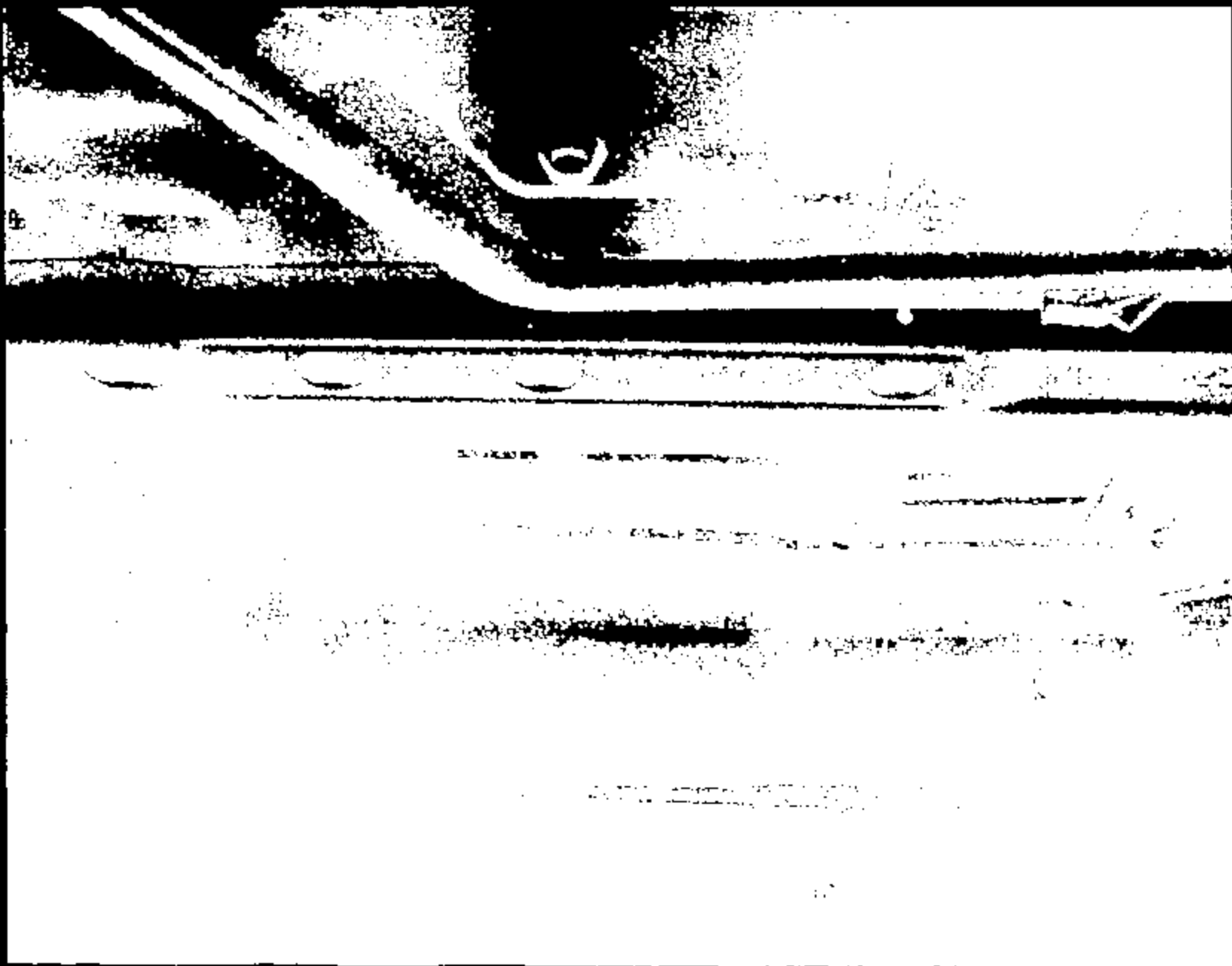


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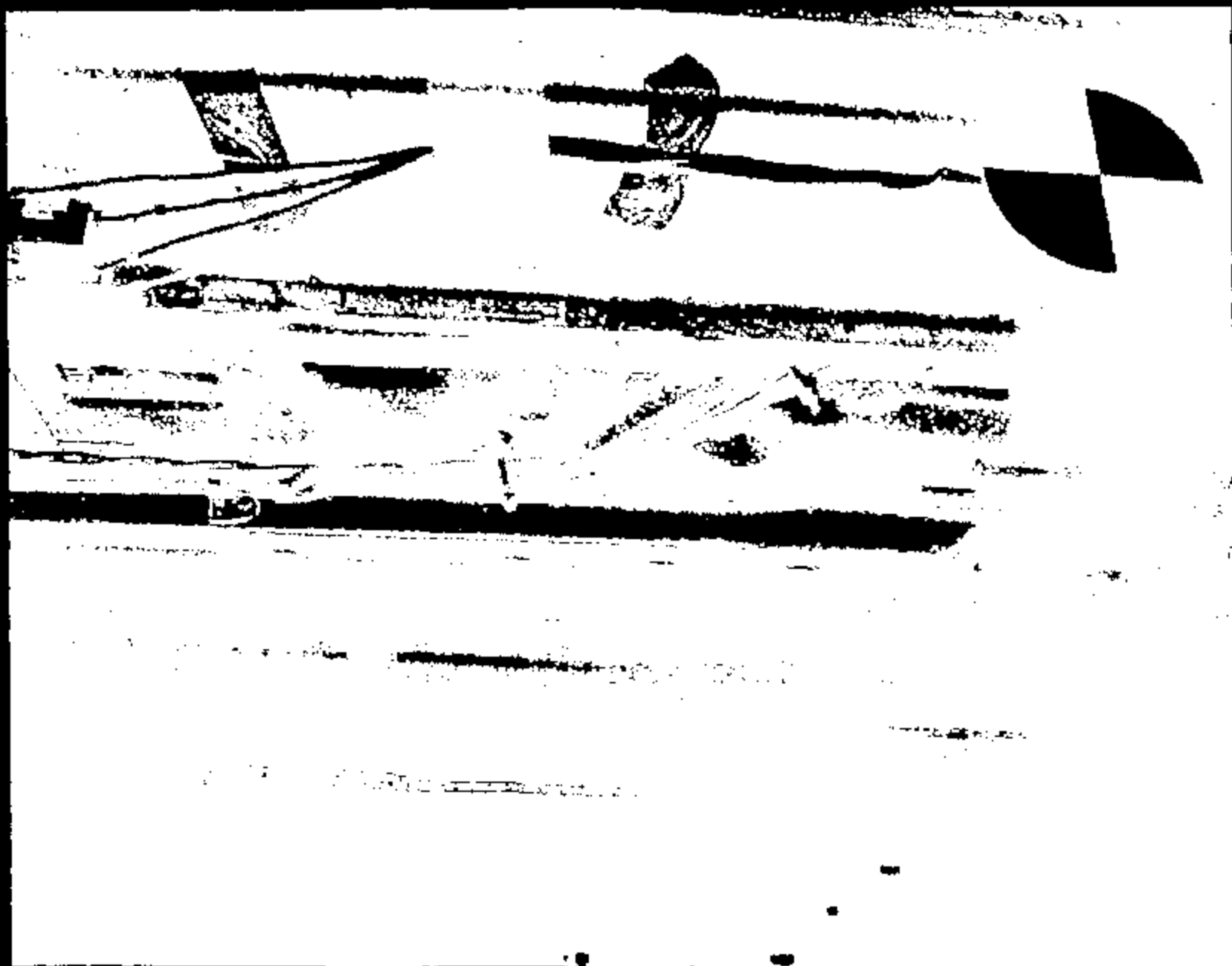


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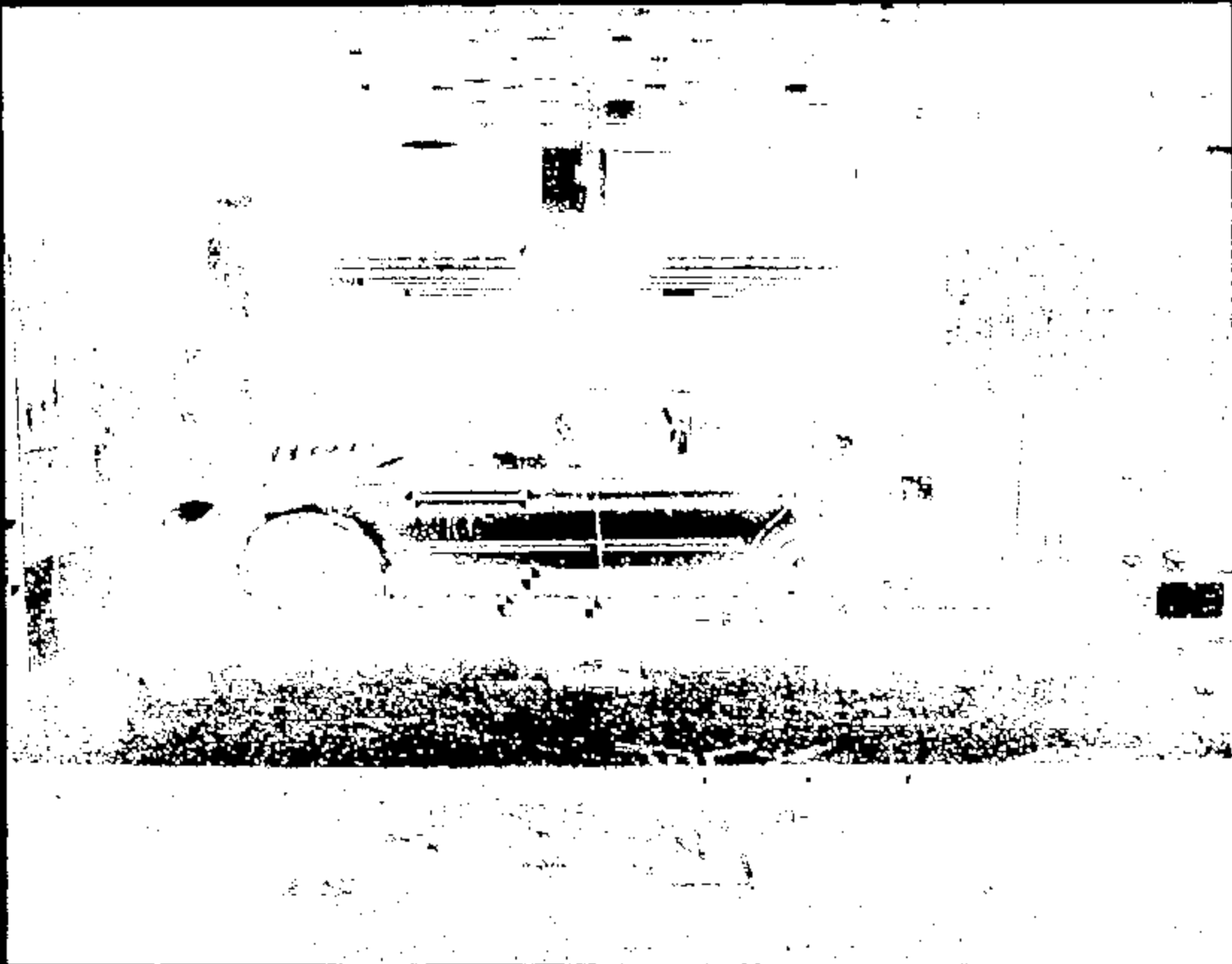
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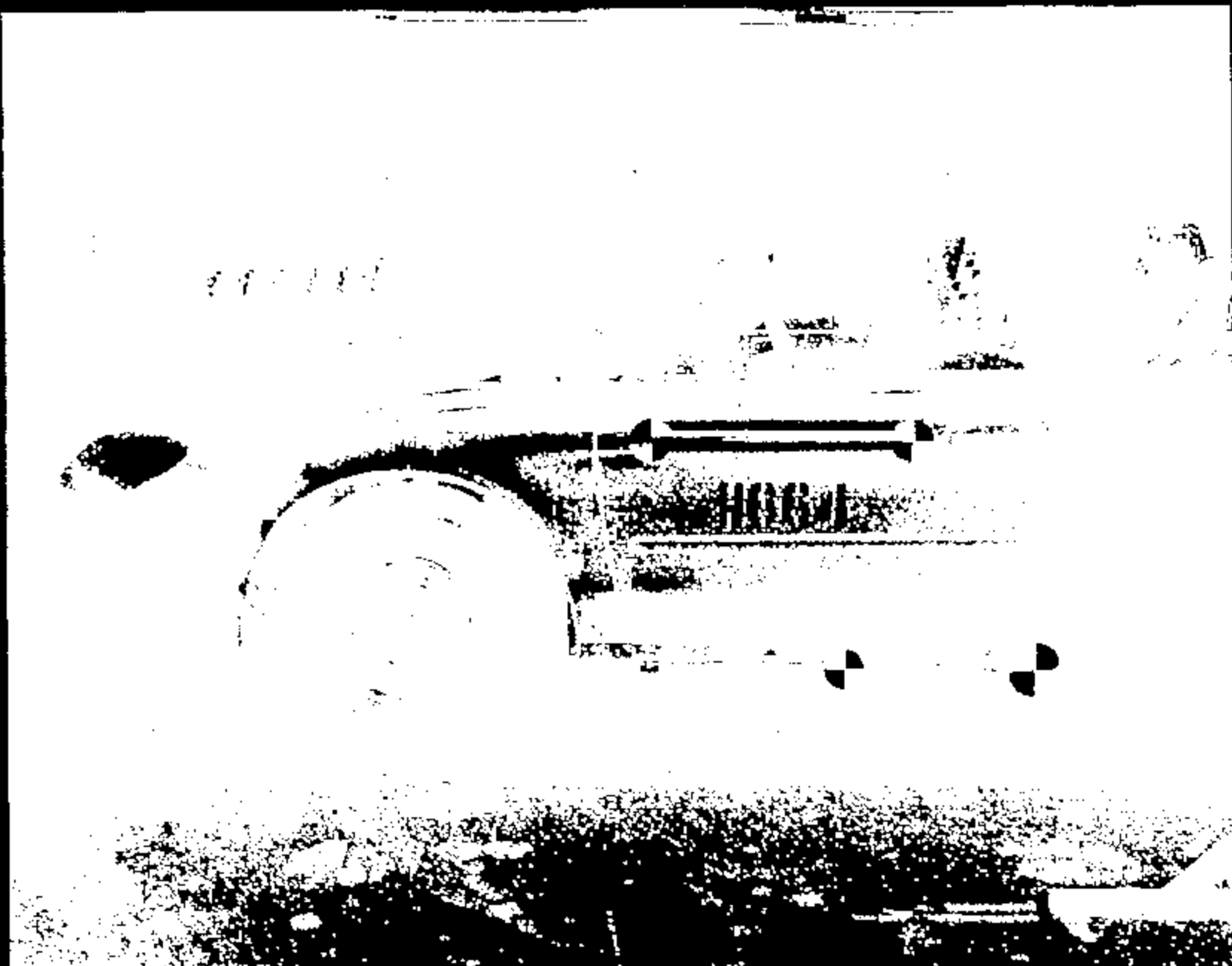
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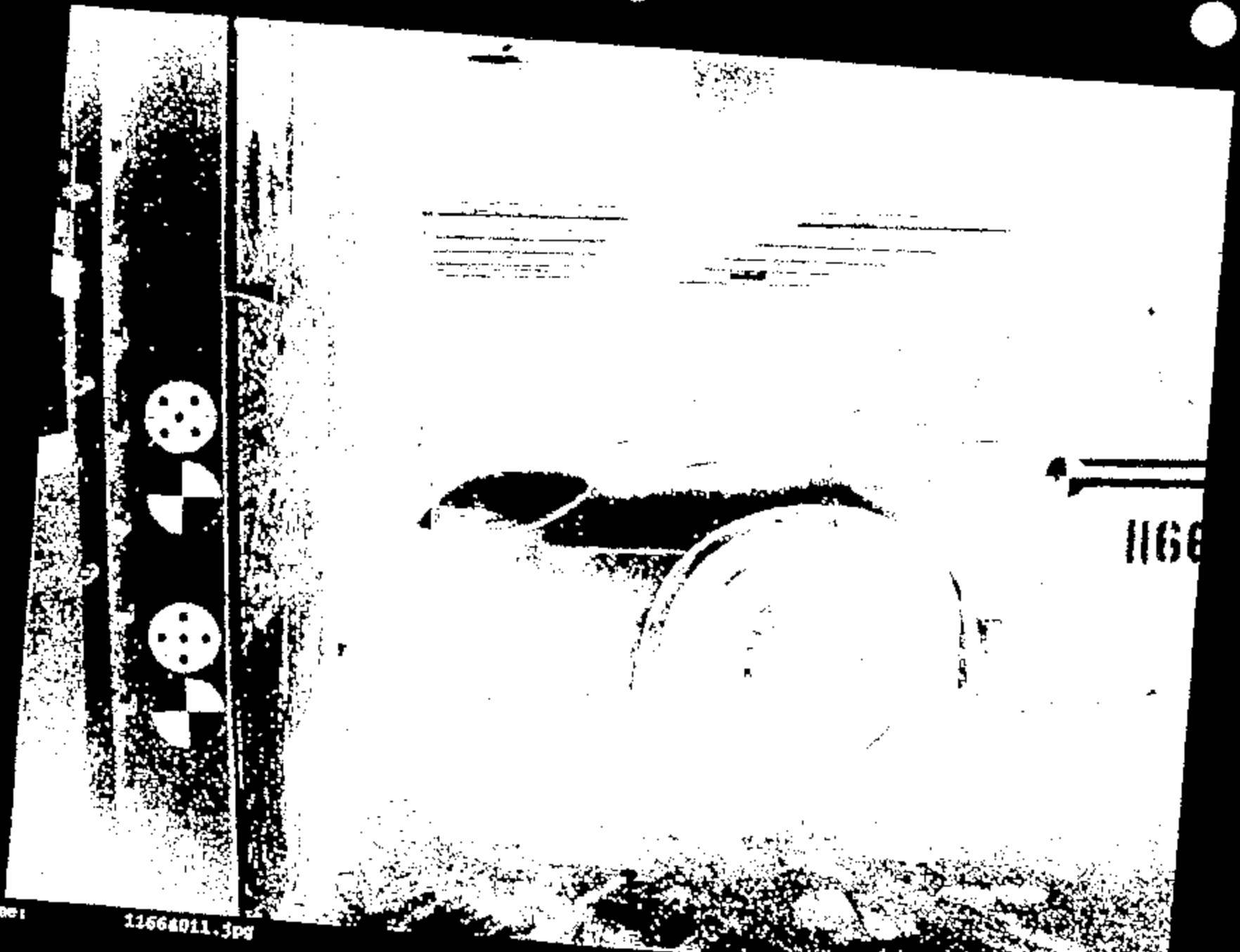
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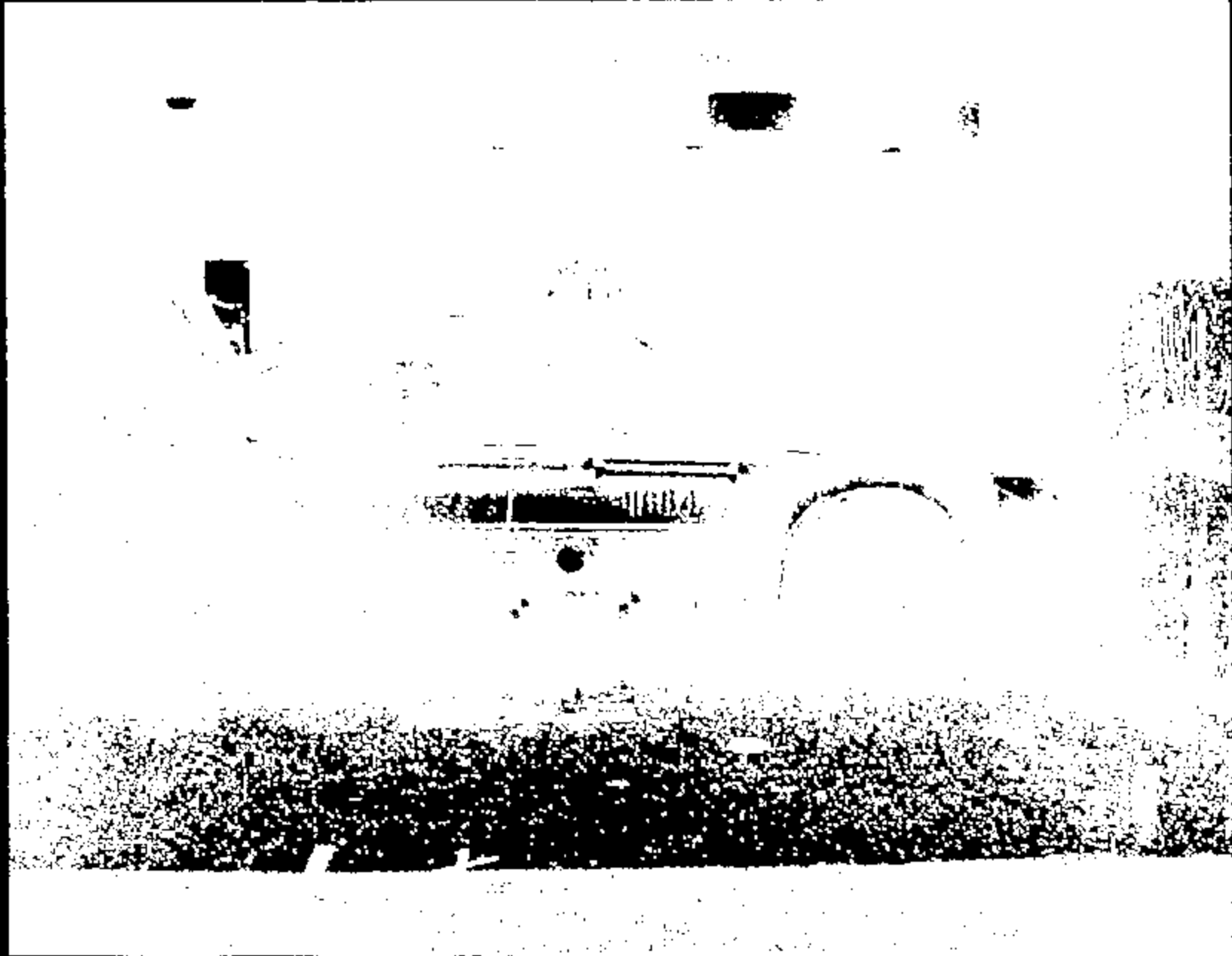
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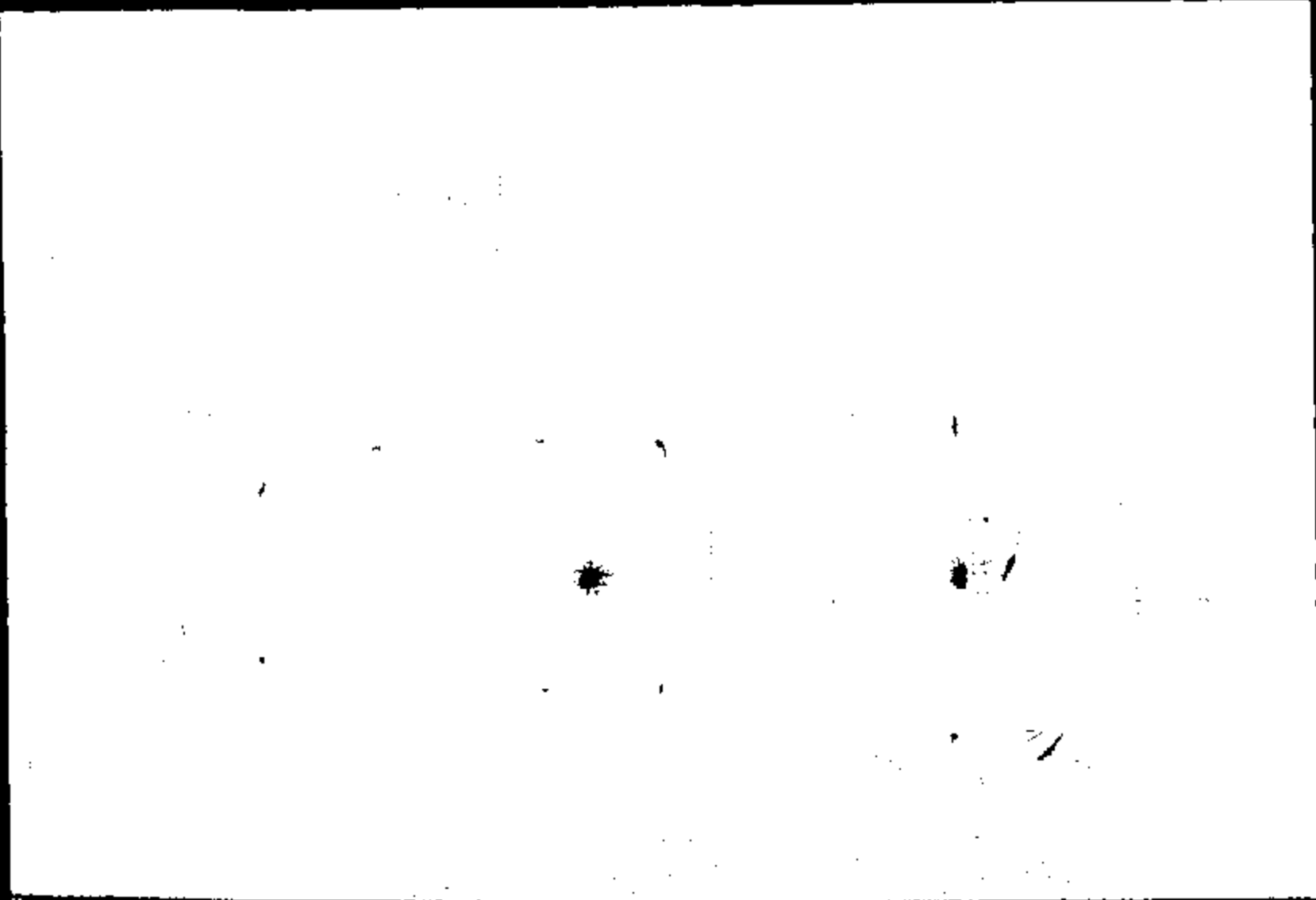


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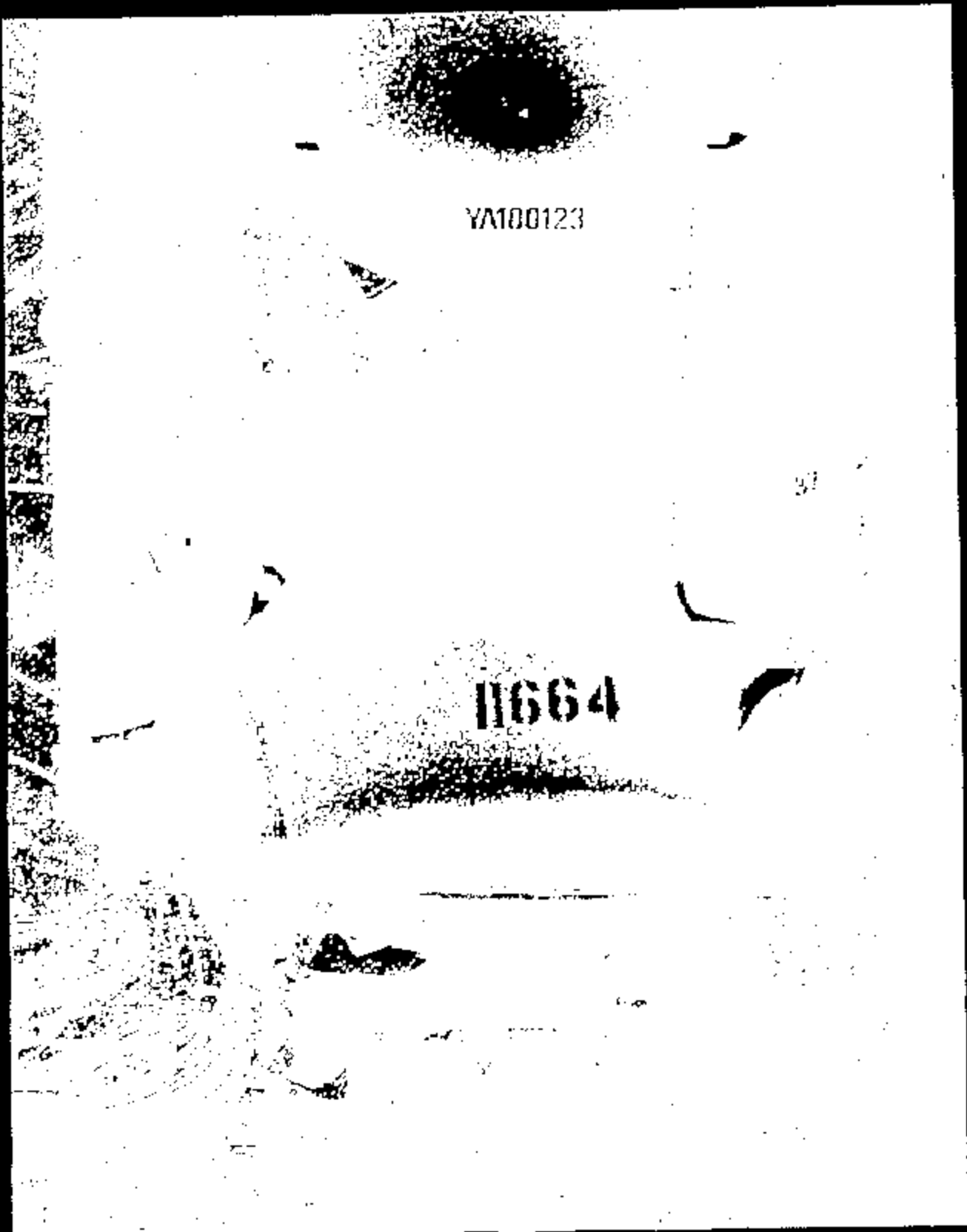
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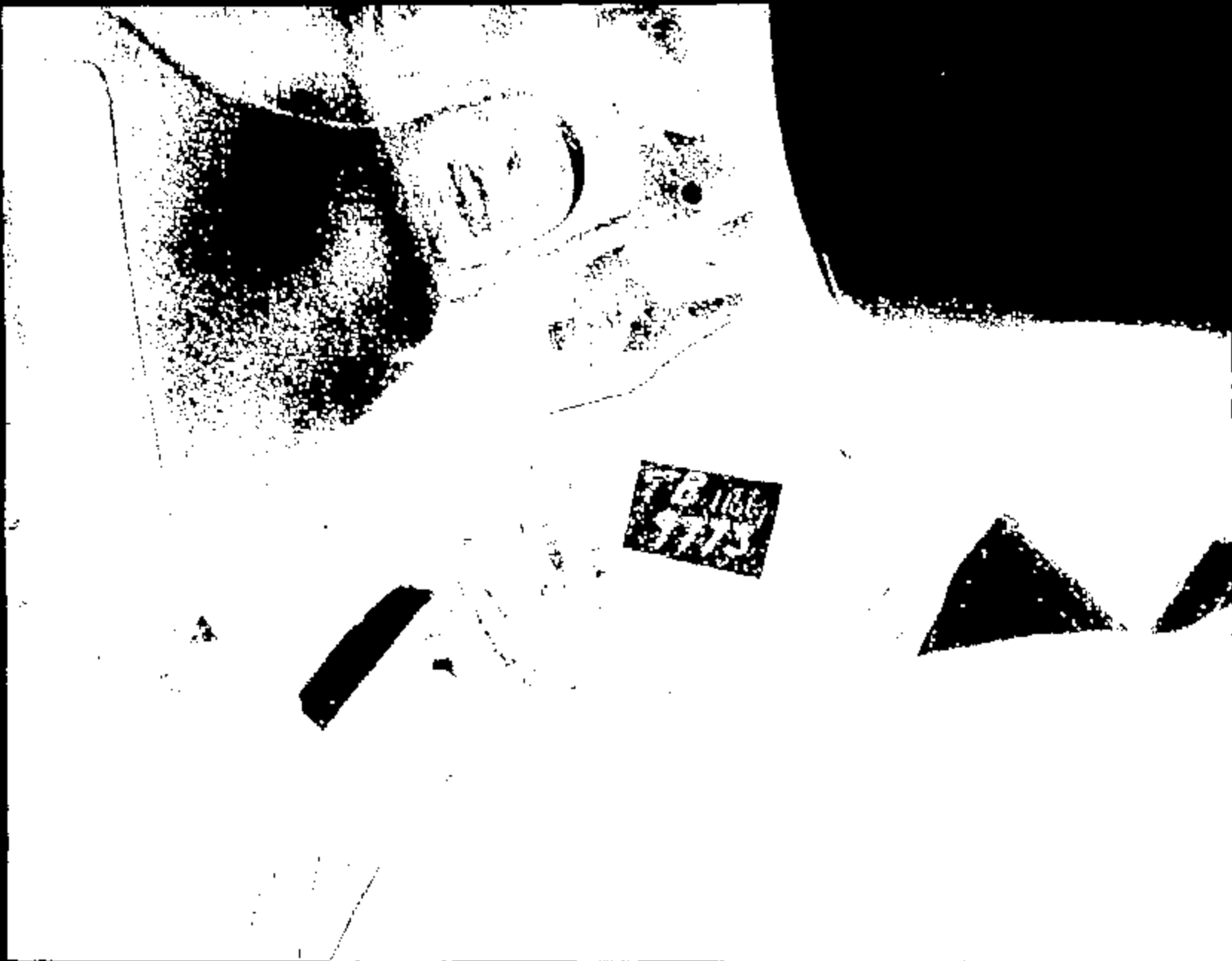




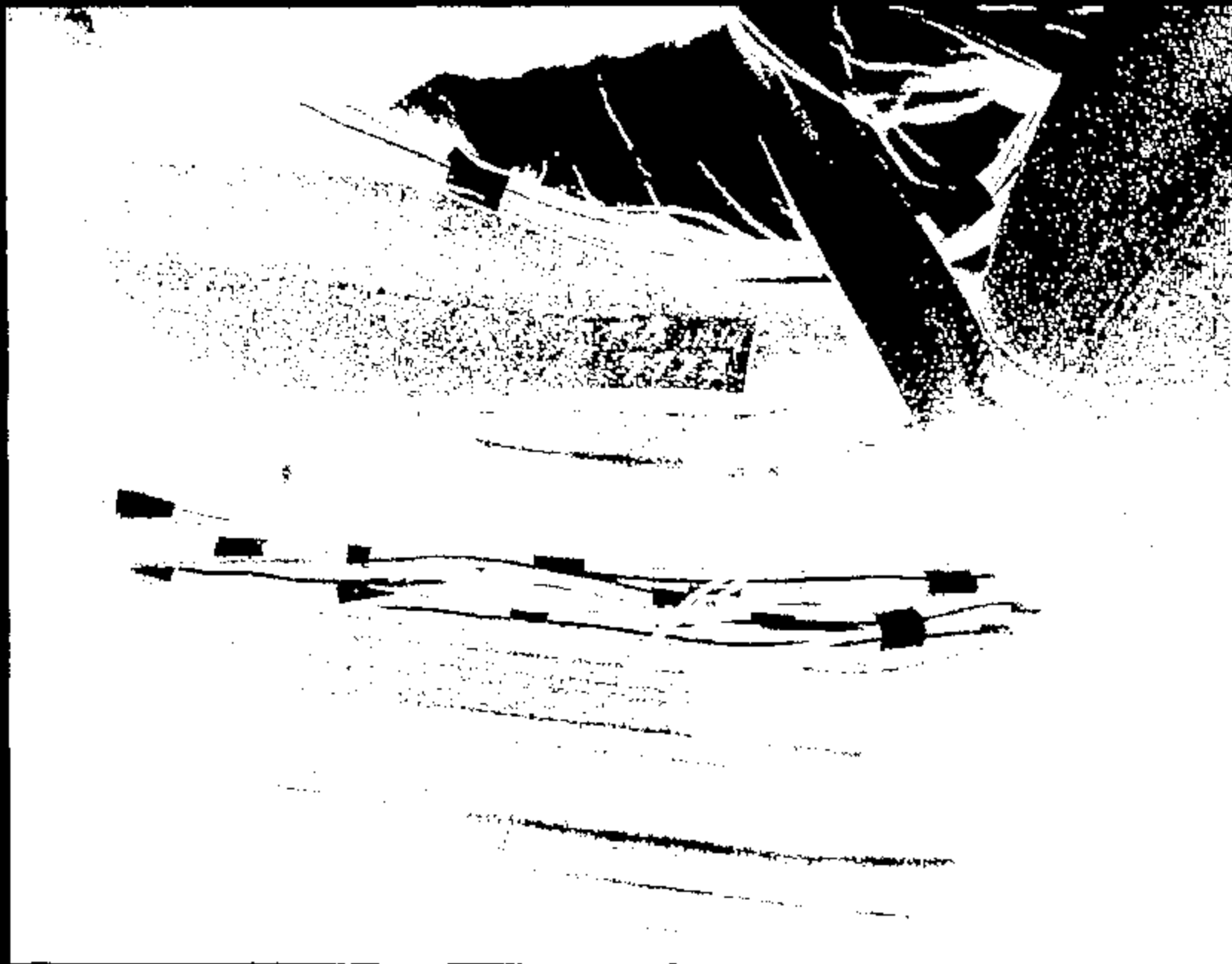
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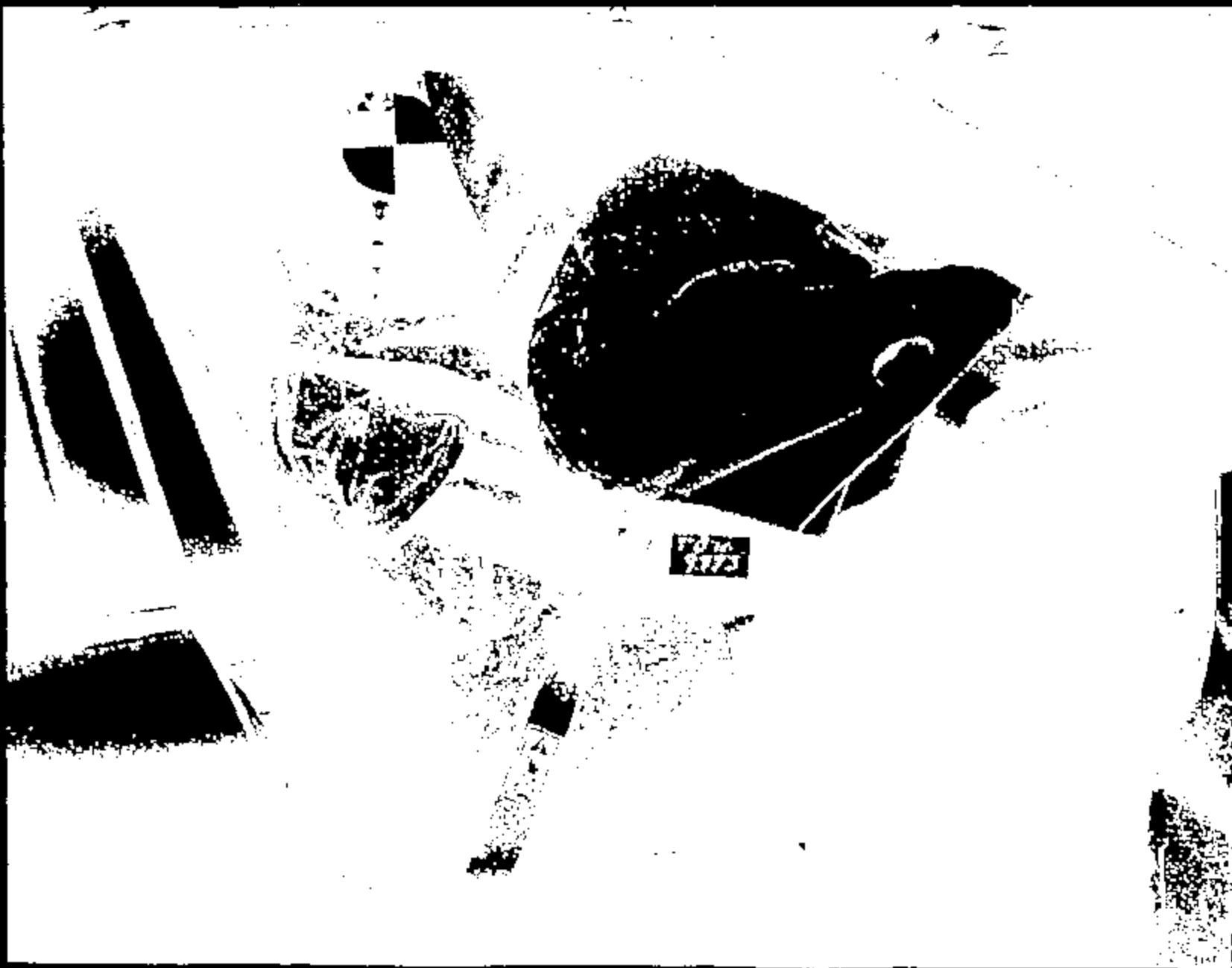


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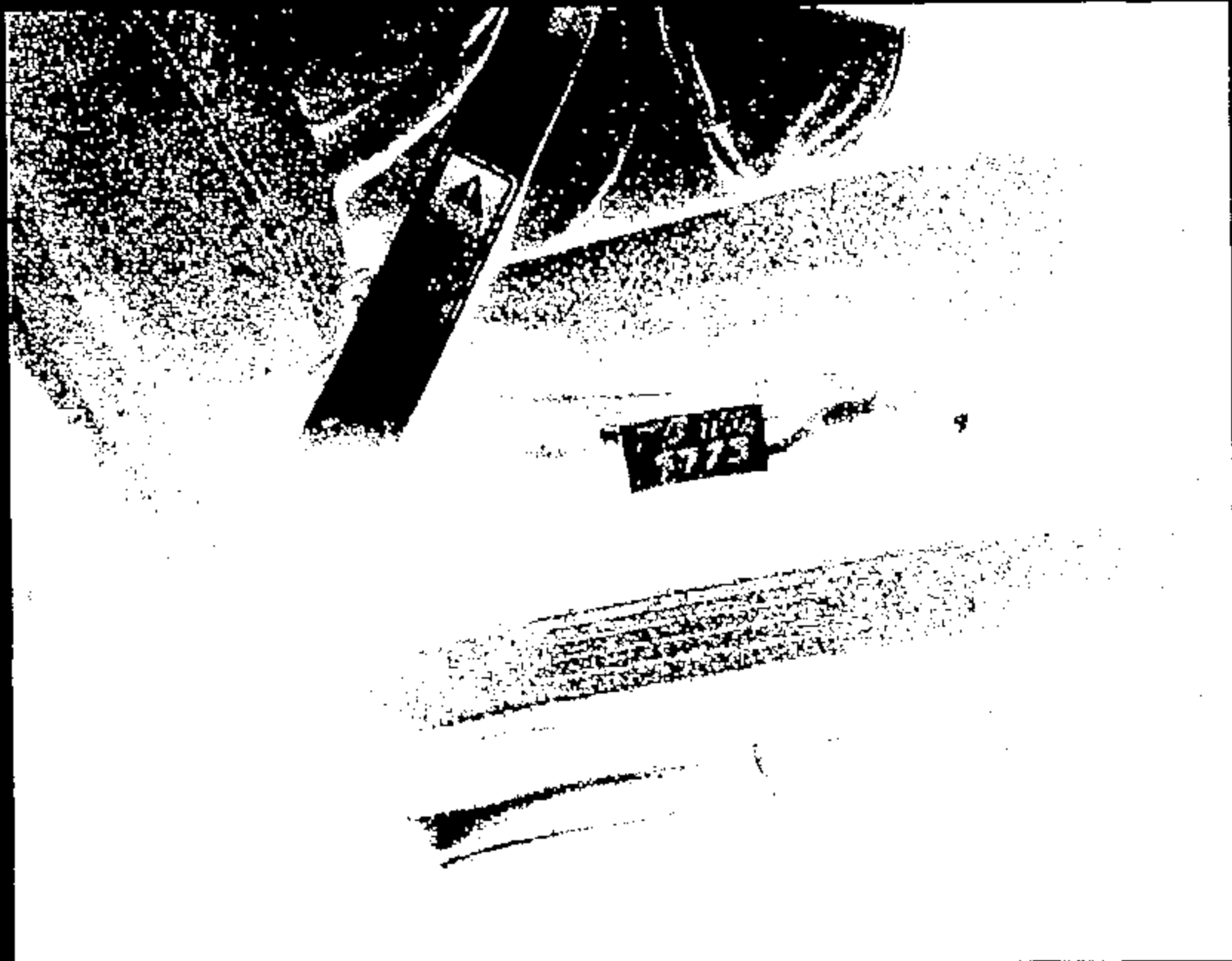
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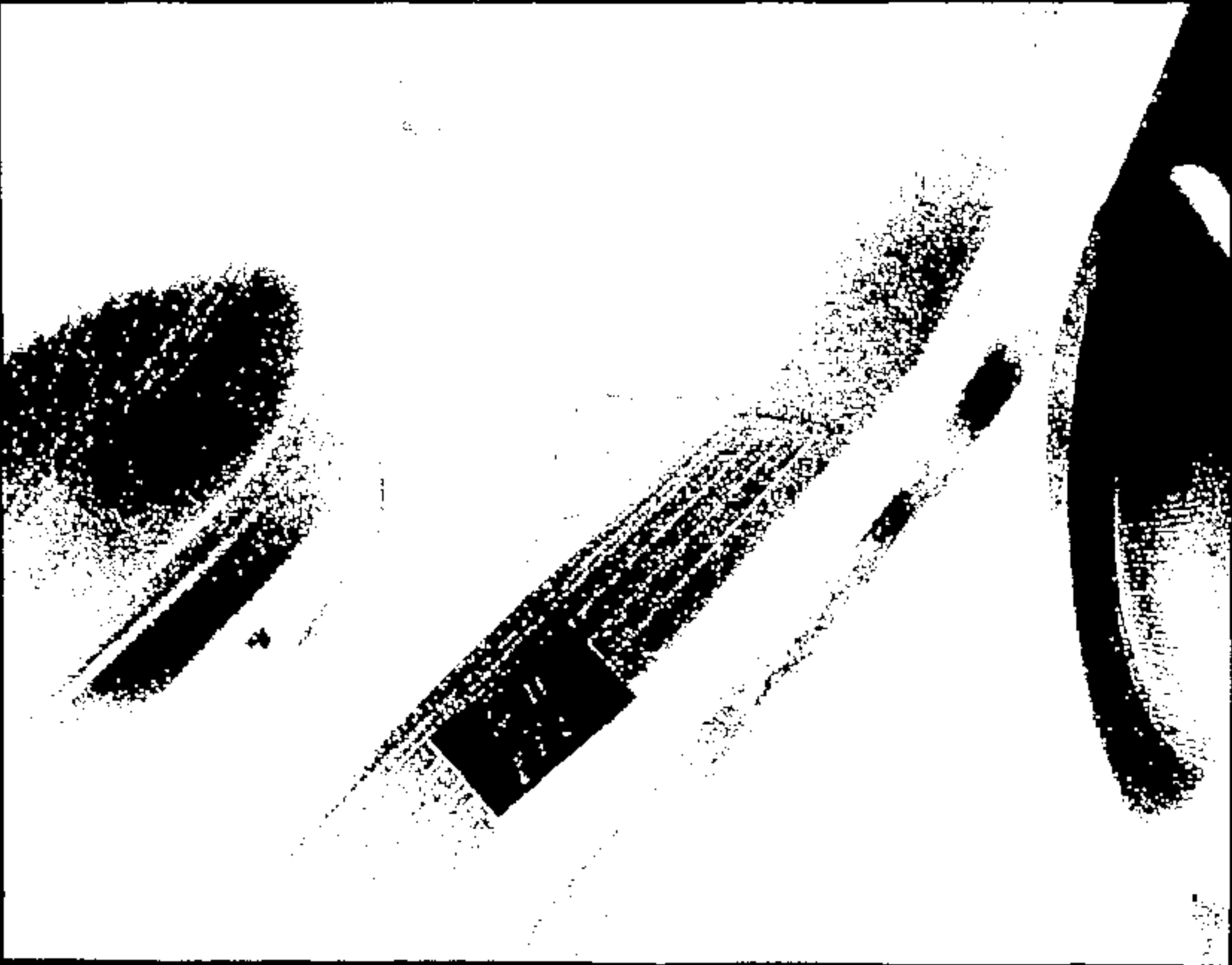


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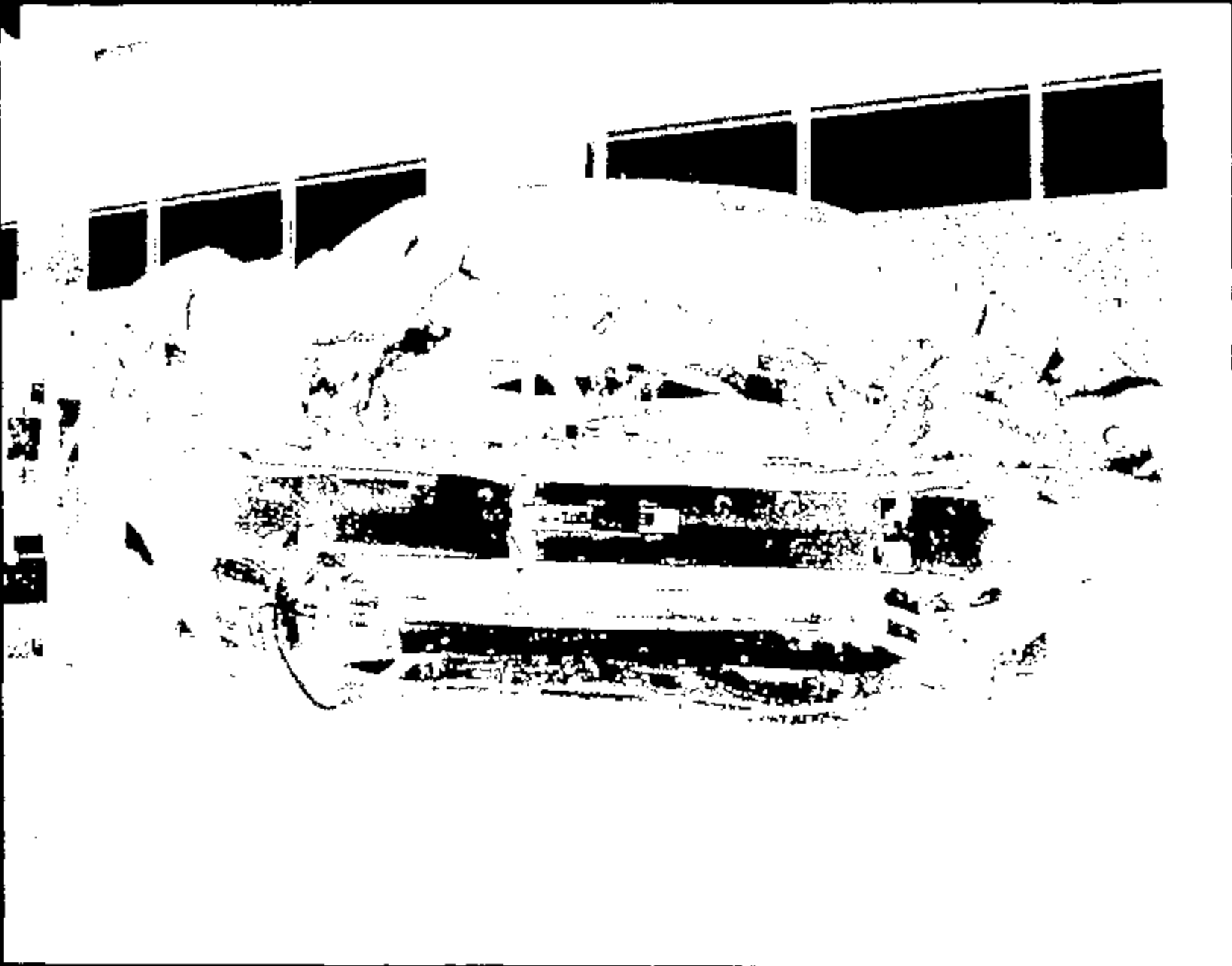


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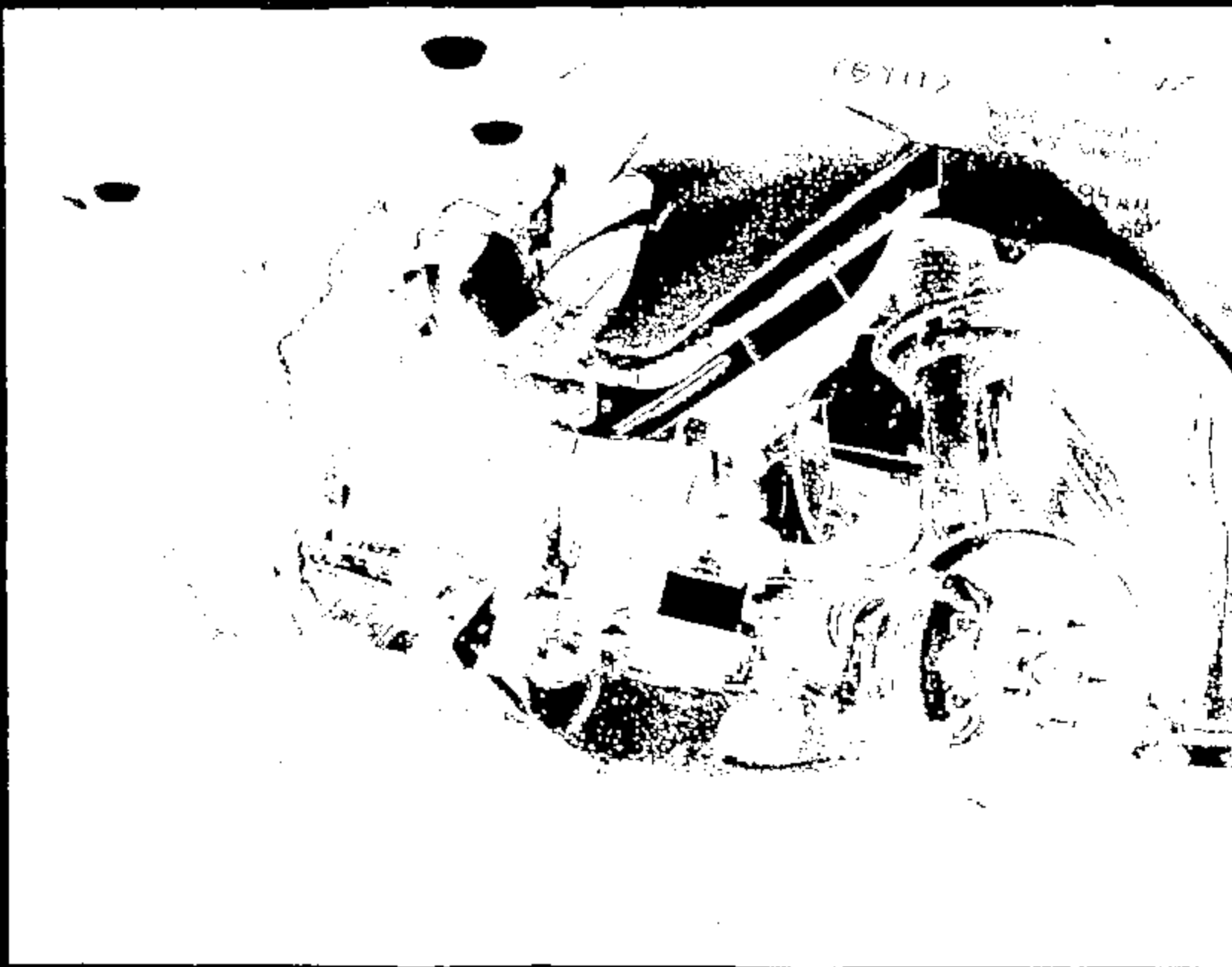
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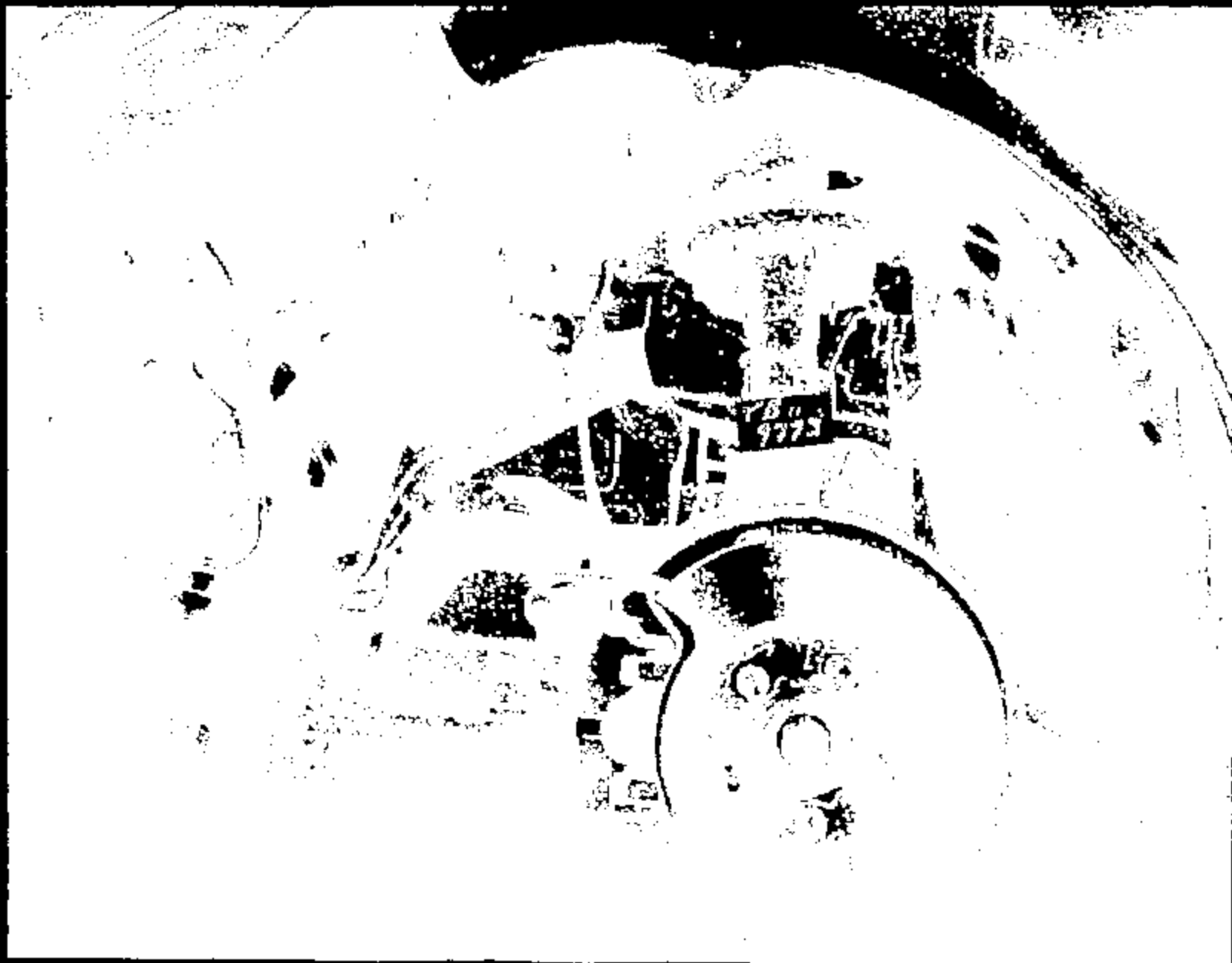
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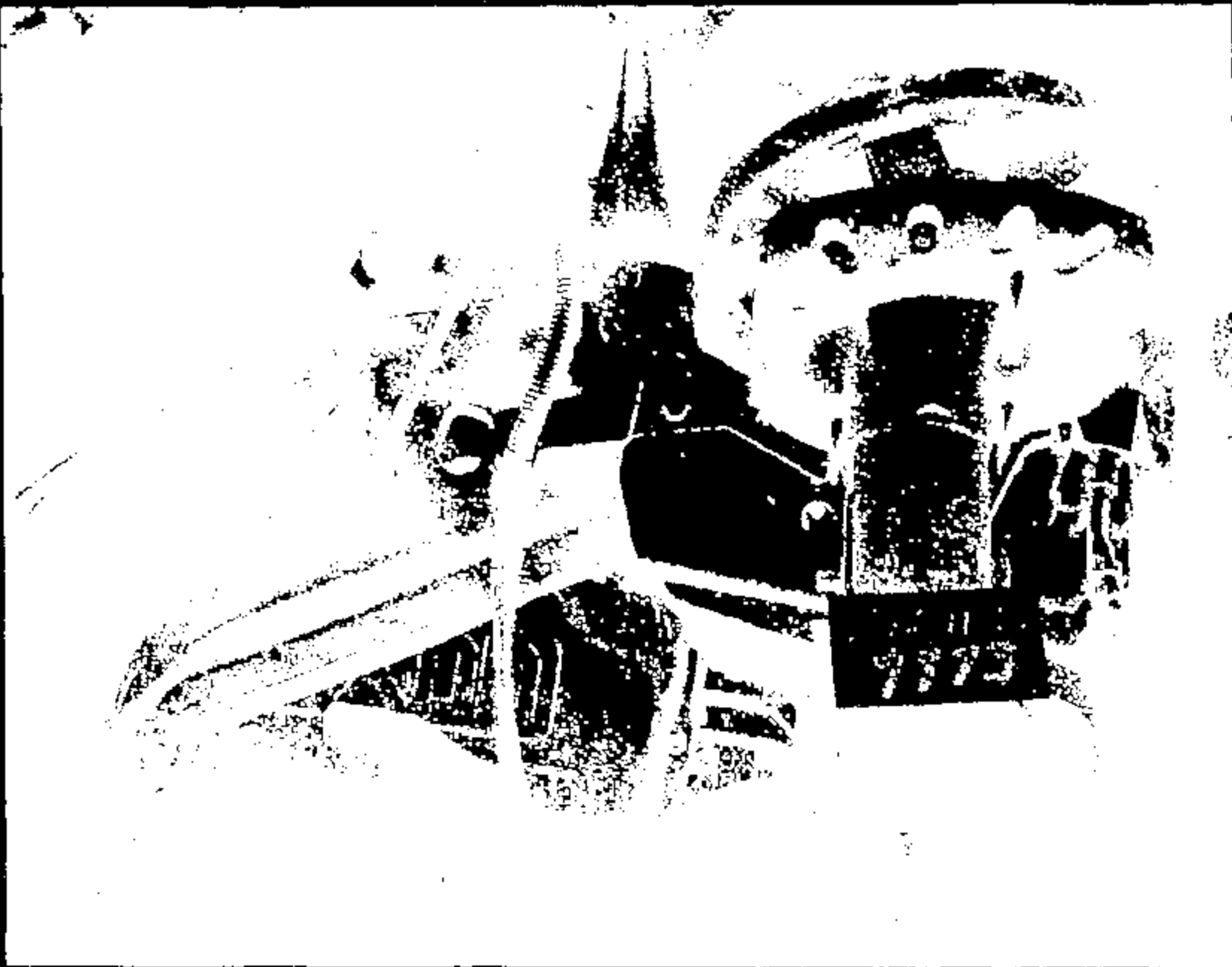
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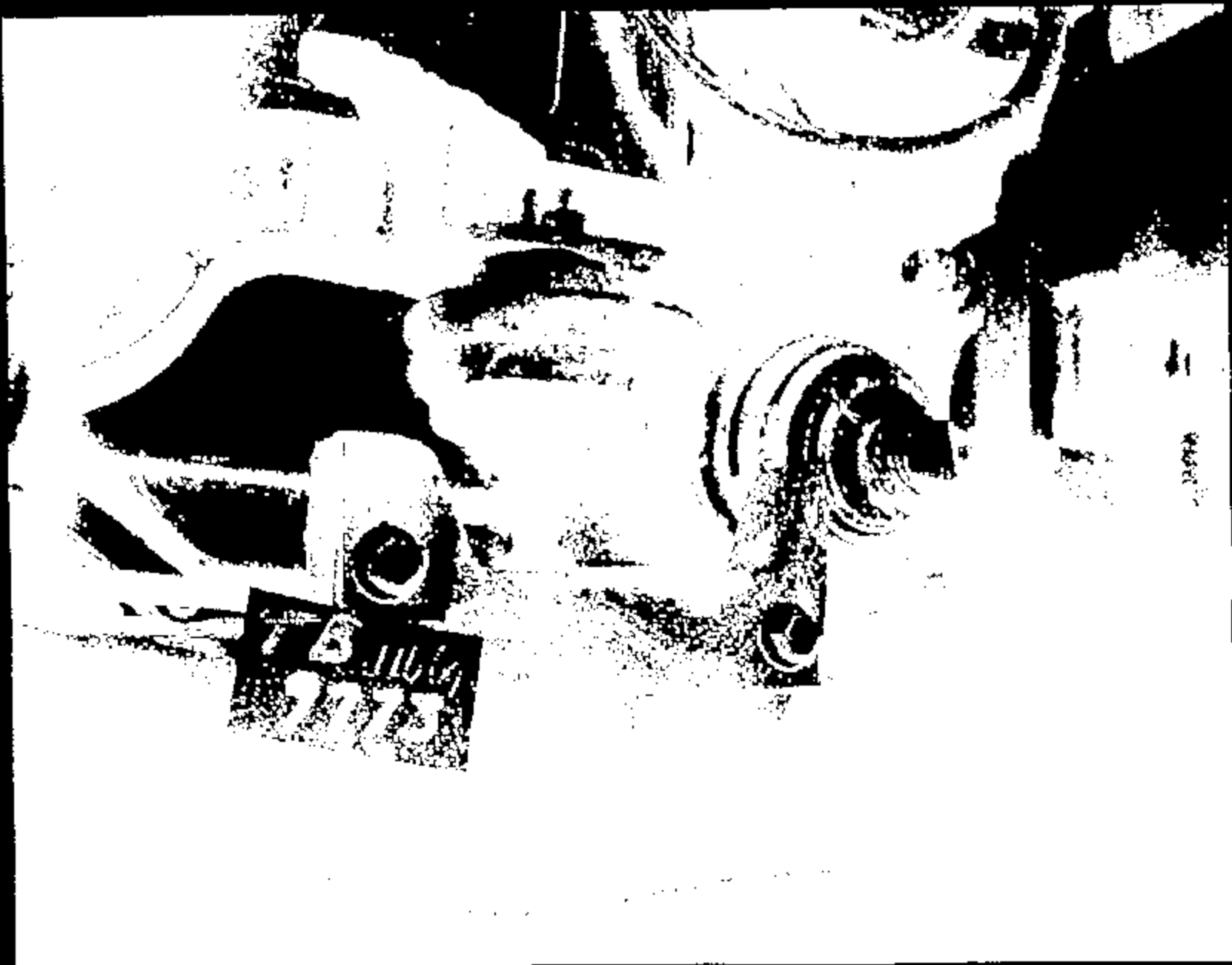
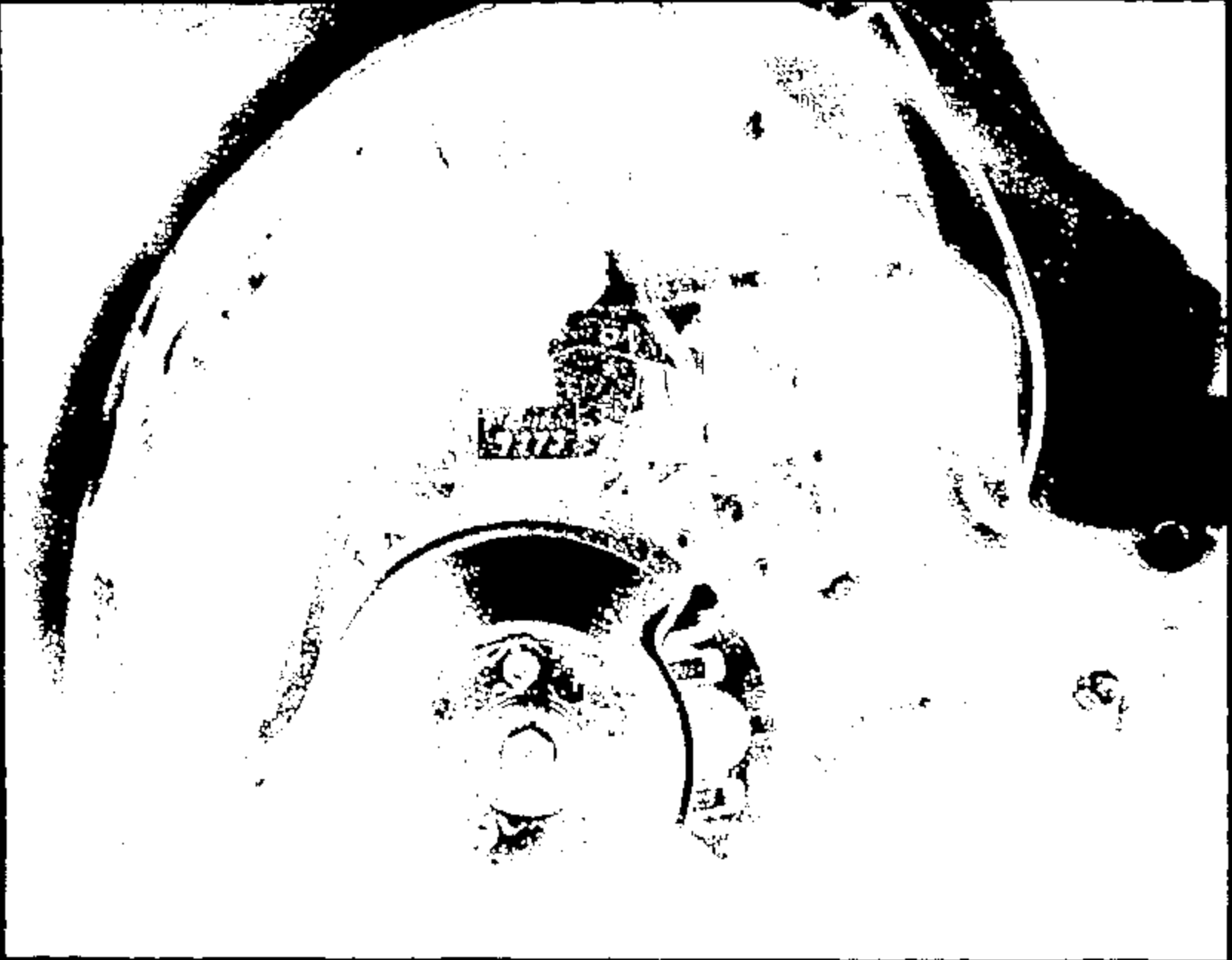


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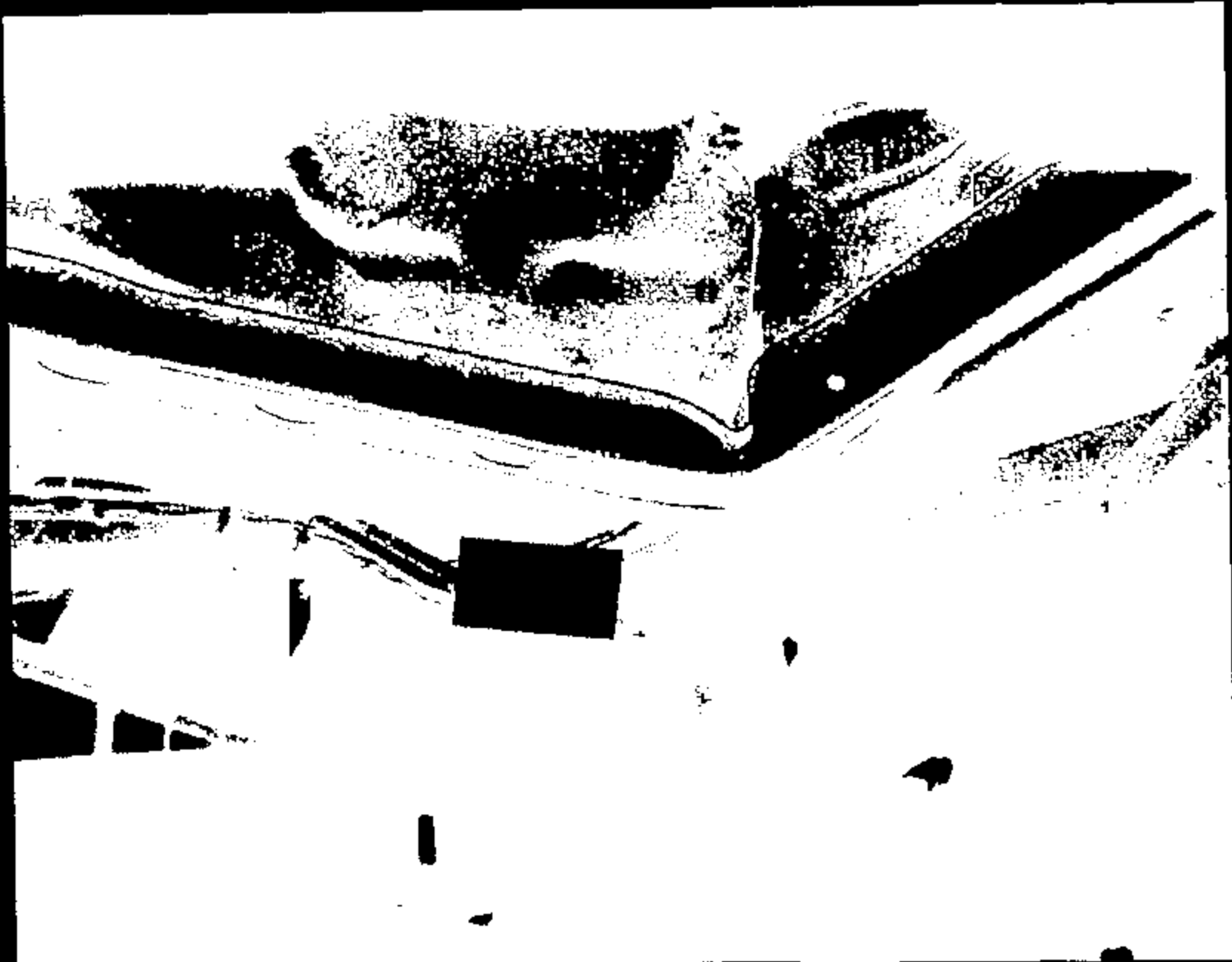
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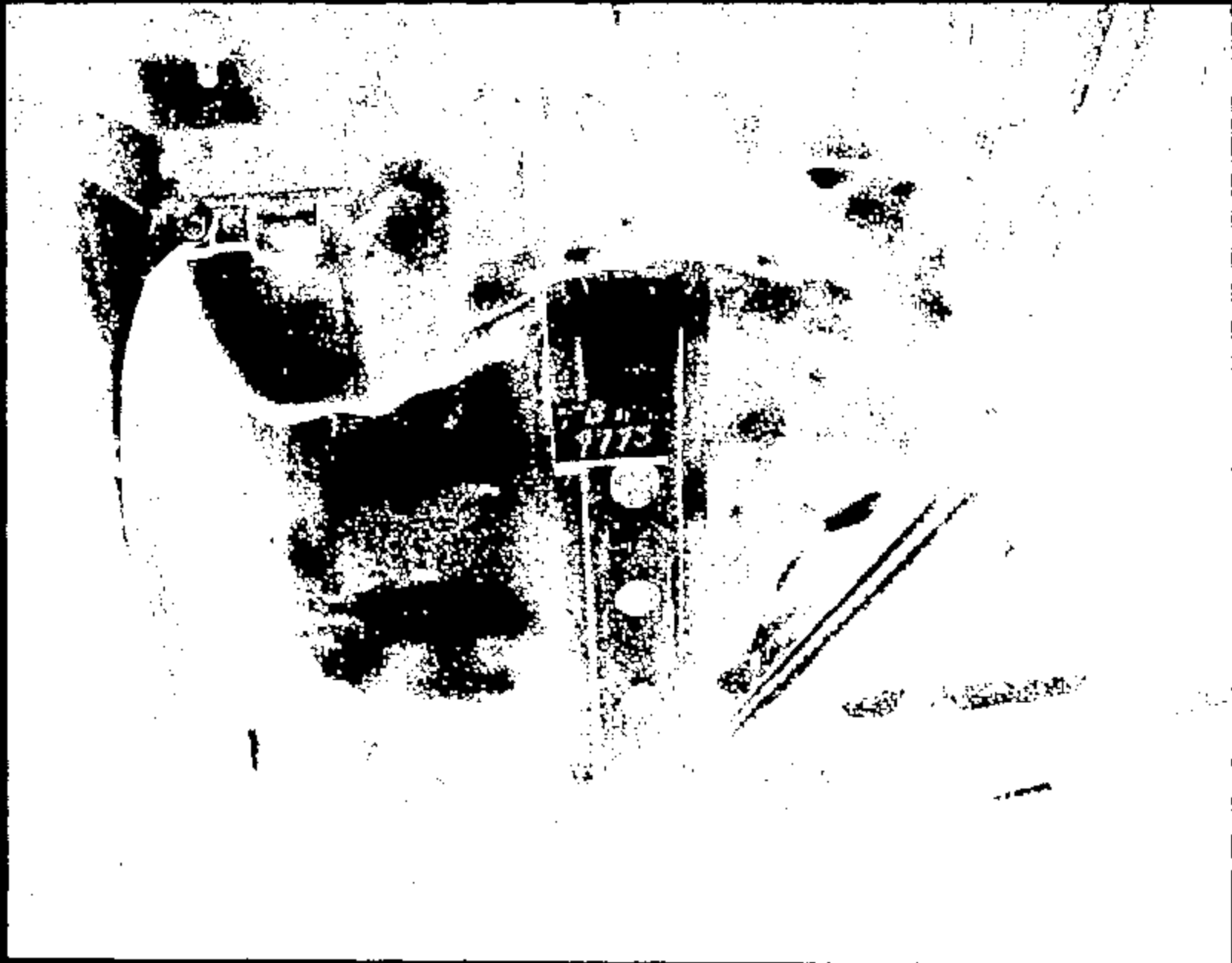
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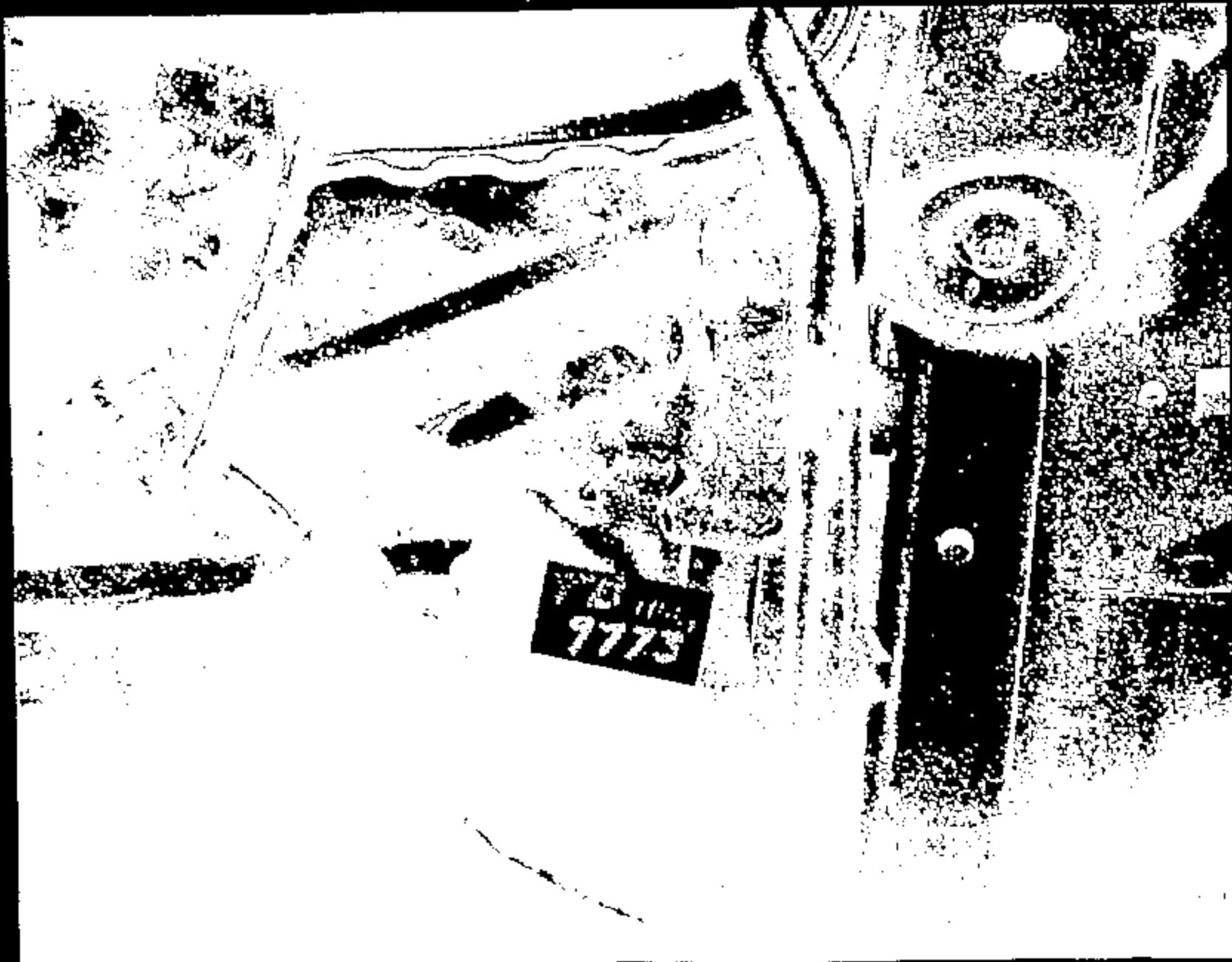
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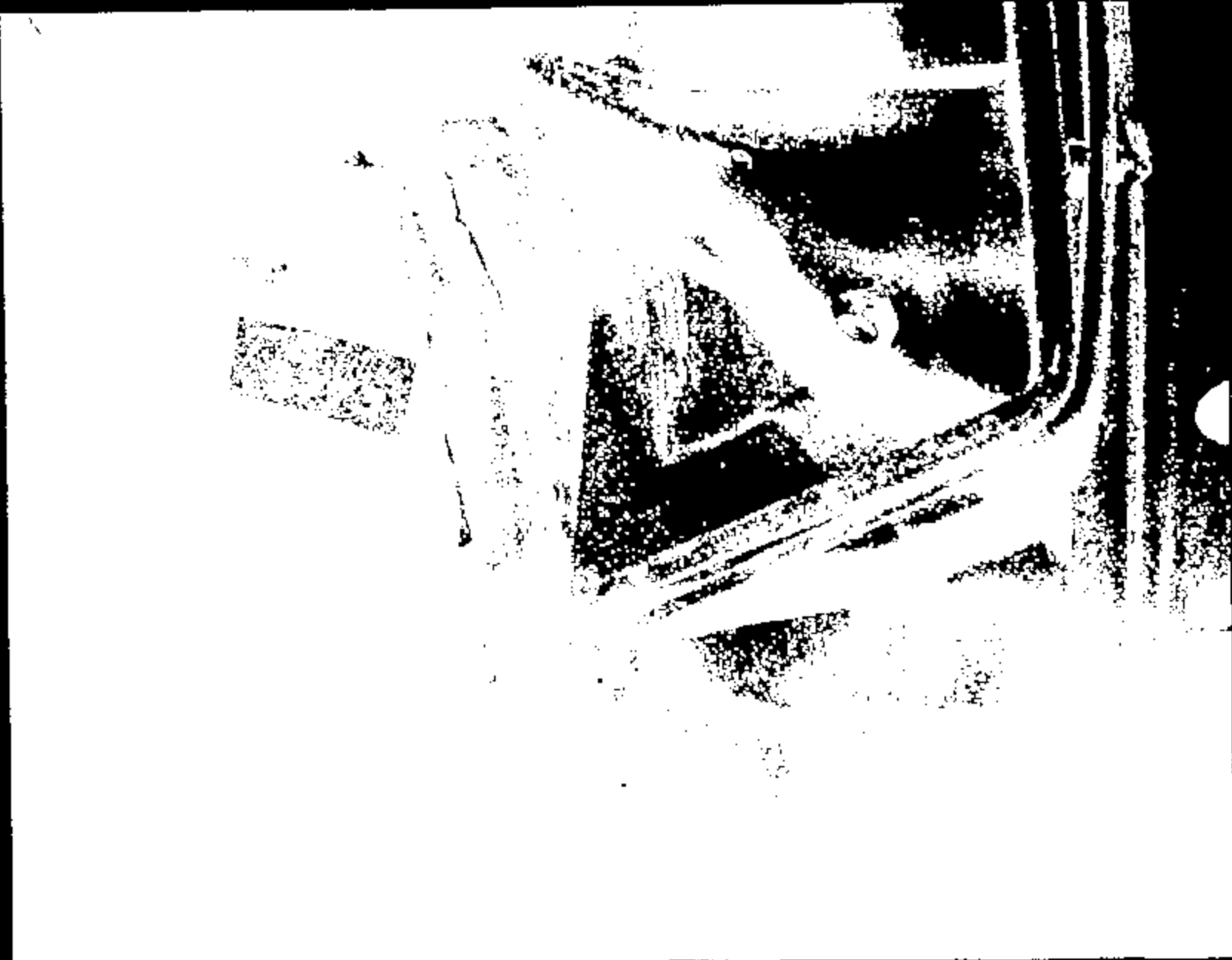


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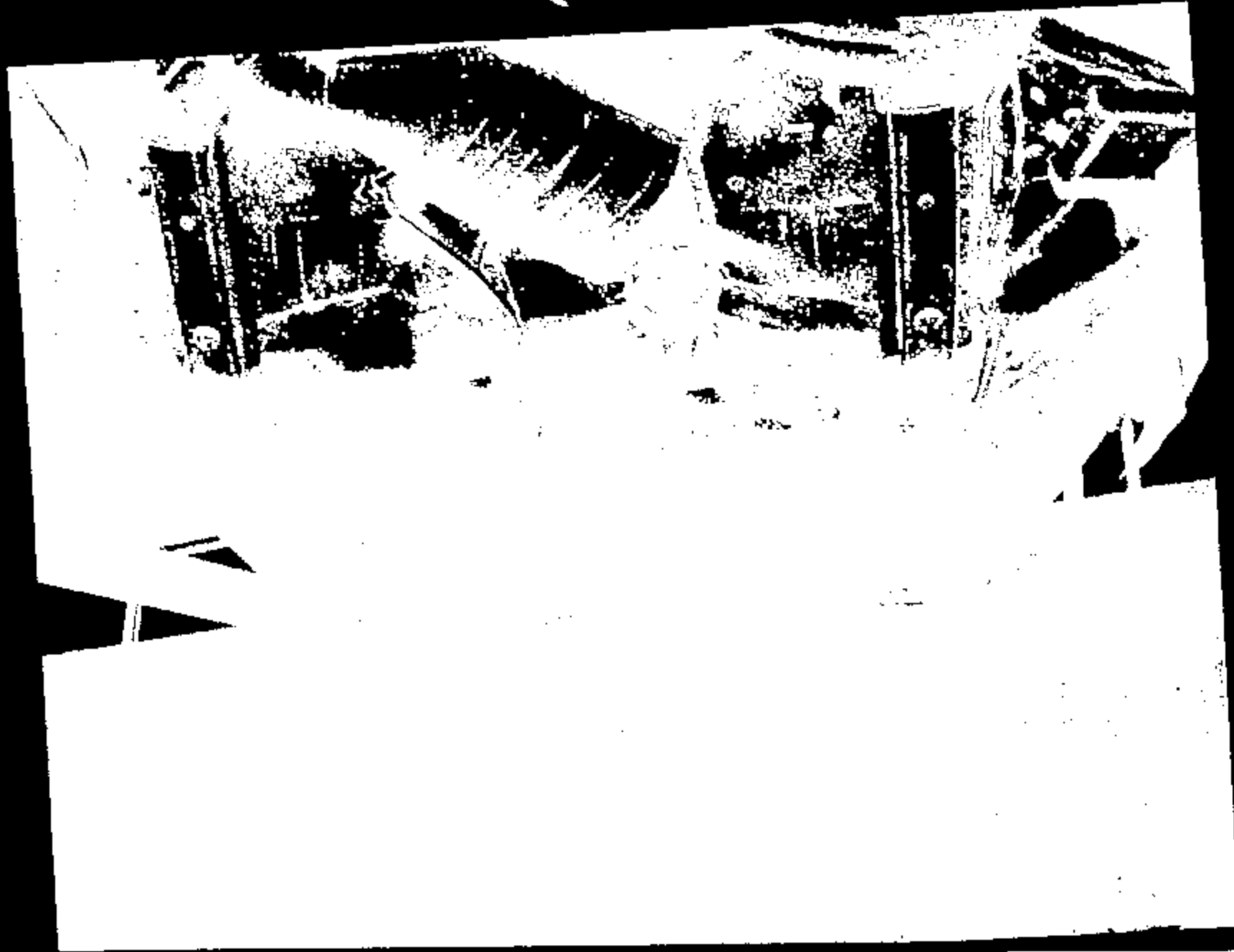
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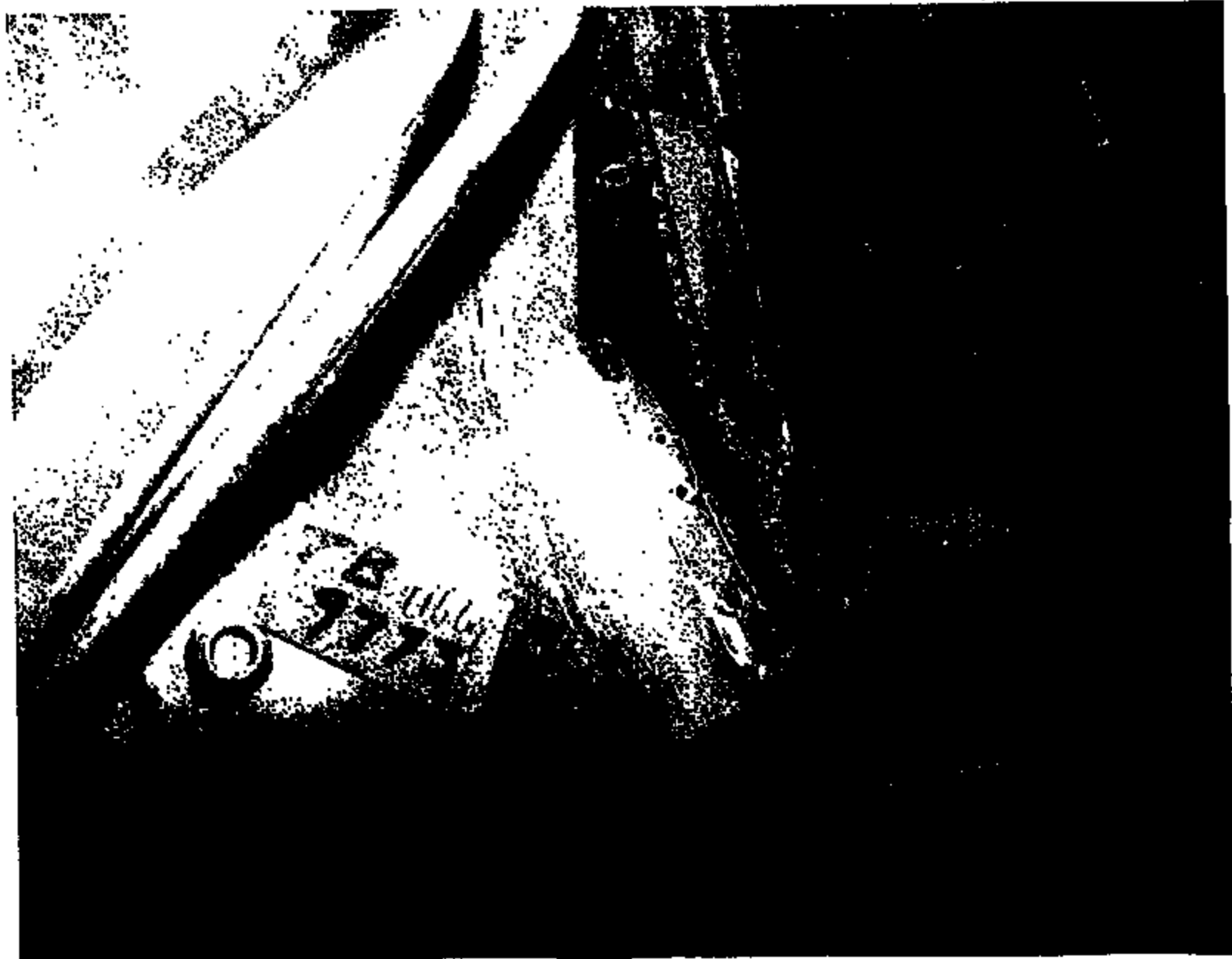




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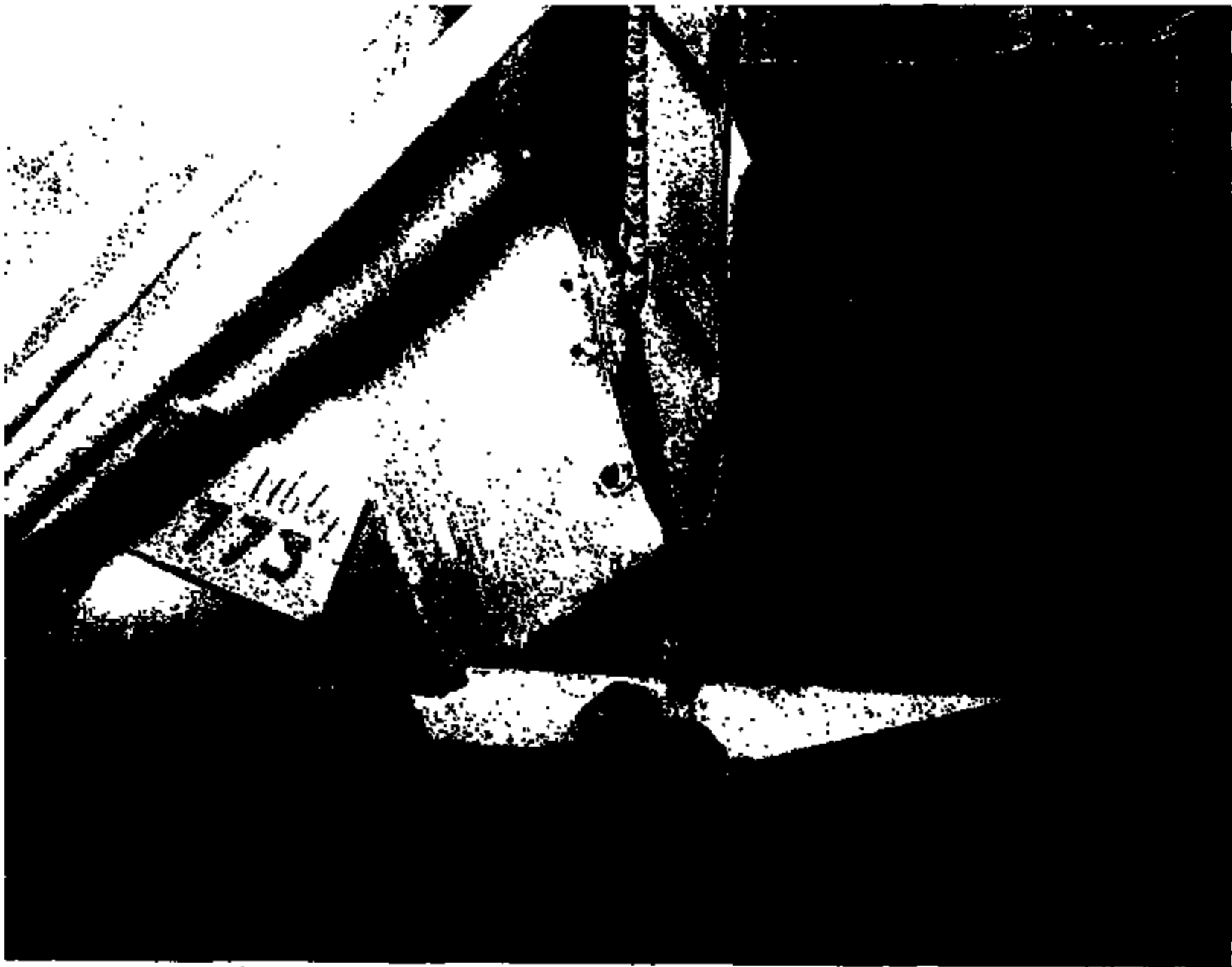
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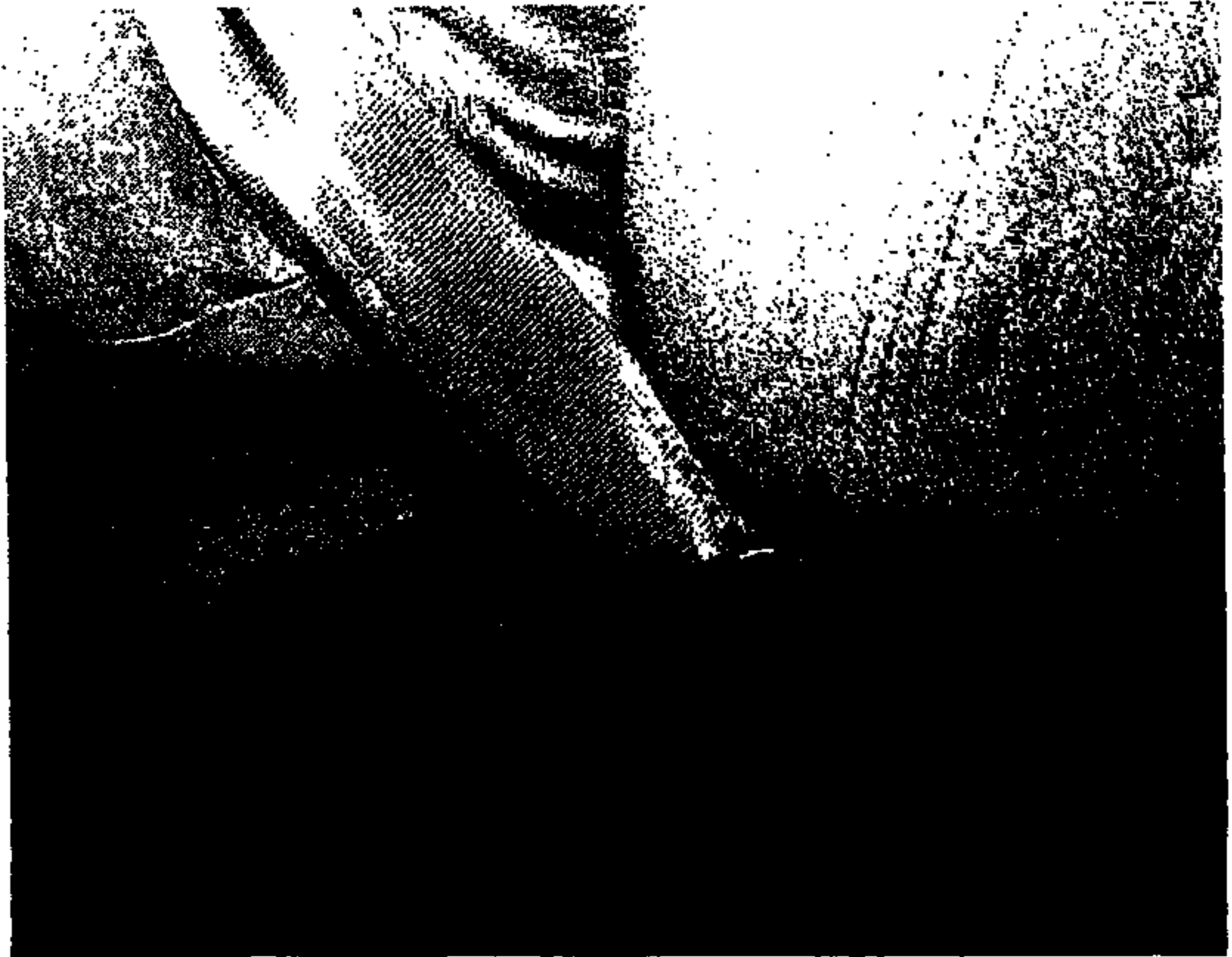
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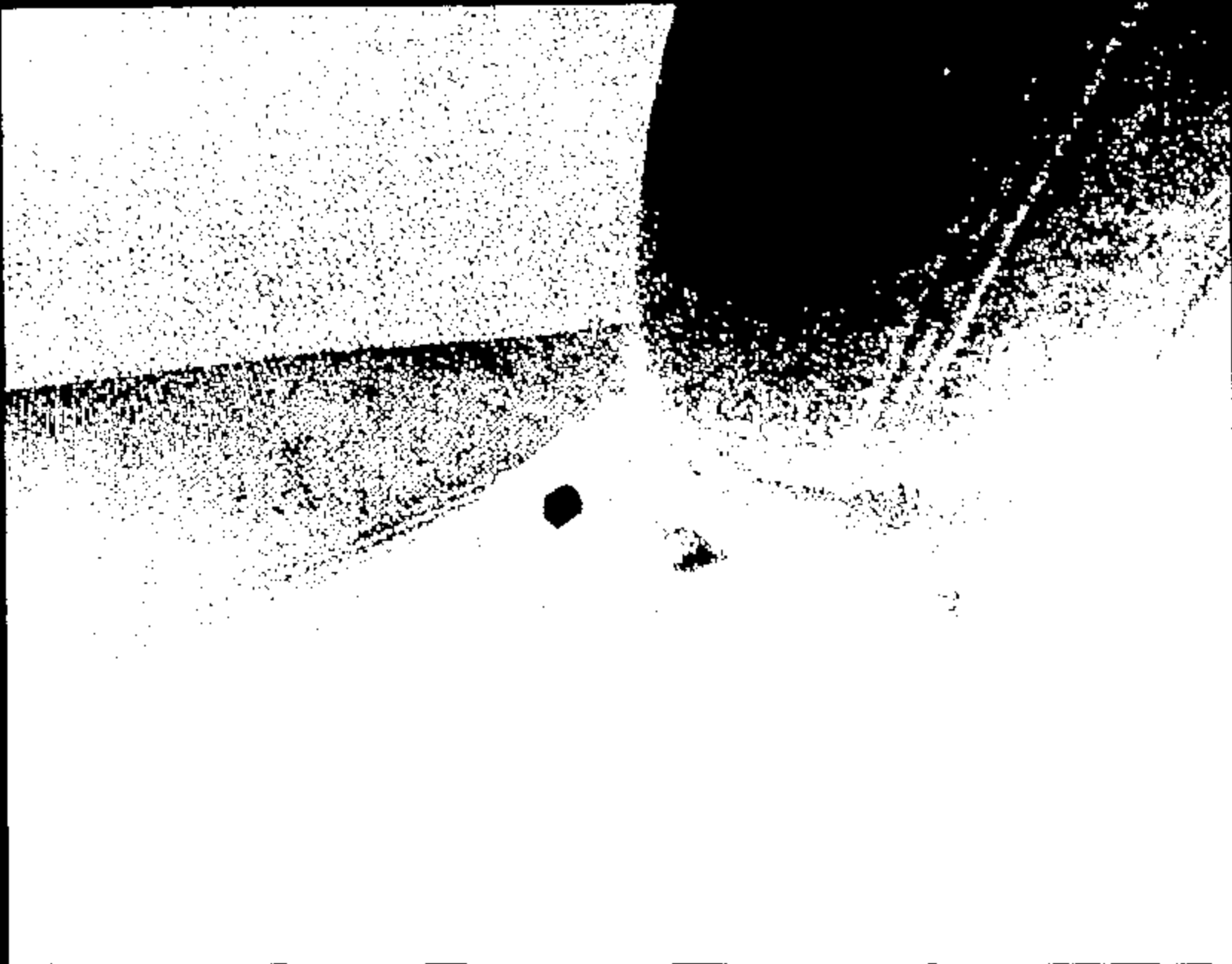
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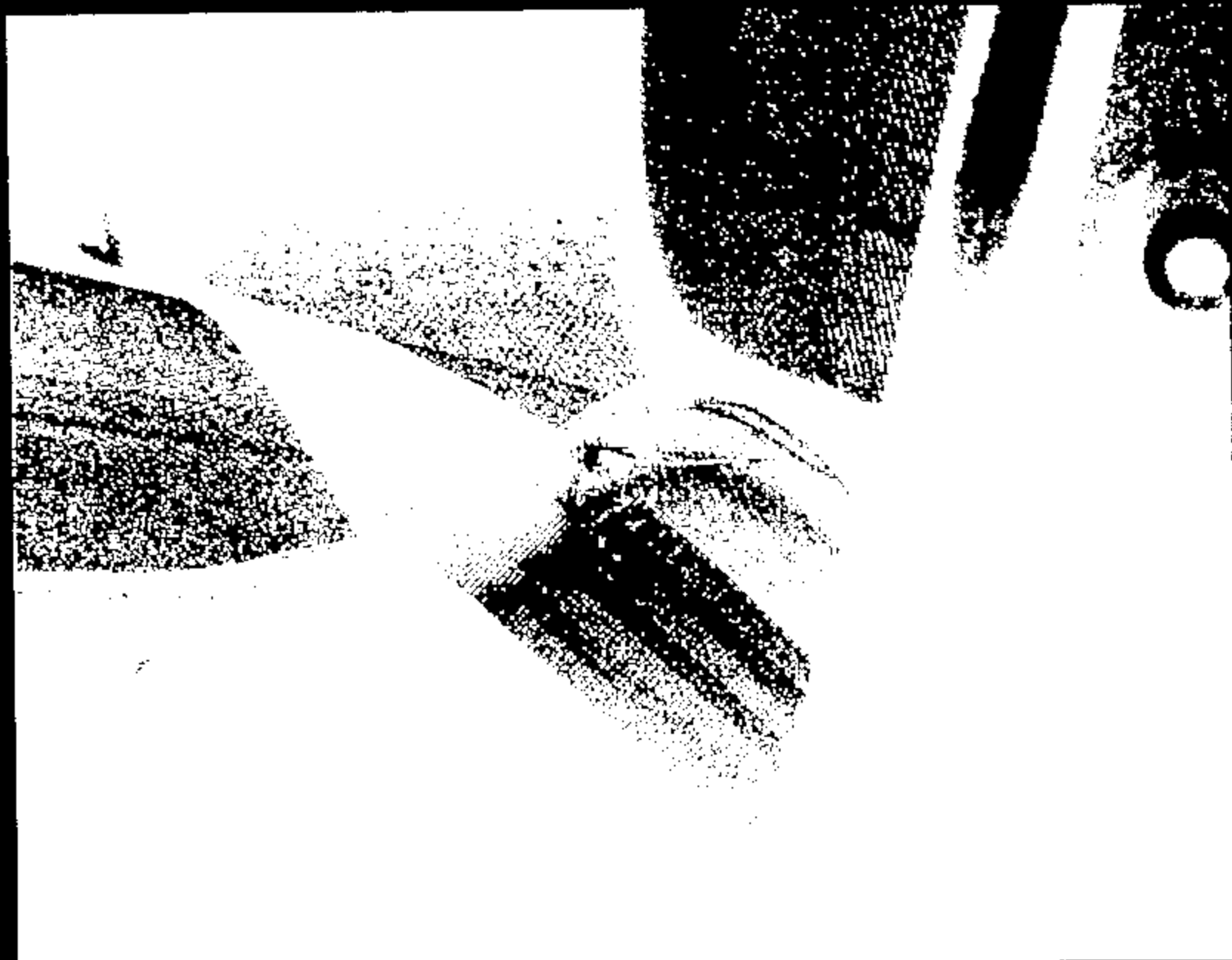
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TEST AUTHORIZATION

TEST AUTHORIZATION NUMBER: **TS0773**

TO: Safety Lab Department	REQUEST DATE:	11/2/09	REQUESTED COMPLETION DATE:	11/5/09	
	CO: K. Arthur	REQUEST NUMBER:	n/a	PROBLEM NUMBER:	n/a
	REQUESTING ACTIVITY:				
Vehicle Crash Safety					

TITLE OF TEST:	(speed)	(test description)	PARTS DUE DATE:	
8000	D186	35 MPH	90 Degree Frontal Barrier	n/a
TYPE OF TEST:		VIN # or IDENTIFICATION	VEHICLE MODEL & YEAR:	
<input checked="" type="checkbox"/> VEHICLE	<input type="checkbox"/> BENCH	- 308Y648	2000 D186	
<input type="checkbox"/> LABORATORY	<input type="checkbox"/> OTHER	VIN #1FAFP223YA100188	PROD. OR ENG. LETTER:	
ENGINE NO. DISPL. CARS:	TRANS / DRIVETRAIN:	AXLE RATIO:	TEST CONDUCTED TO	
3.0L/2V V6	AX4N	n/a	CERTIFY CONTROL ITEM	
TYPE OF FUEL:	CONVERTER:	IGNITION TIMING:	COMPLIANCE WITH	
DIX WATER for	n/a	n/a	GOV. REGULATIONS:	
CRANKCASE OIL AND CAPACITY (L):	TIRE SIZE AND PLY RATING:	REPORT CATEGORIES:	DISPOSITION OF PARTS:	
n/a		<input checked="" type="checkbox"/> ENGINEERING	n/a	
VEHICLE TEST WEIGHT:	TIRE PRESSURE (psi):	<input checked="" type="checkbox"/> DATA	PROCUREMENT REQ ?	
FRONT REAR TOTAL	FRONT REAR	<input checked="" type="checkbox"/> RAWDATA	<input type="checkbox"/> YES <input type="checkbox"/> NO	
2278 1587 3865	30 30		IF YES, GIVE CODE	
			MAIL REPORT TO:	
			BLDG:	
			MAIL DROP:	
			ADDRESS:	

1) OBJECT OF TEST	2) TEST PROCEDURE	3) ITEMS TO BE TESTED (NAME, NUMBER, QUANTITY)
1) Conduct:	(speed) 35 MPH (year) 2000 (mode) 90 Degree Frontal Barrier	(vehicle) D186 (level) # PRODUCTION
2) Velocity At Impact:	35 MPH	3) Vehicle Year: 2000
Reroute Fire Time:	N/A	Vehicle Line: D186
Positioning procedure:	BT-28	Vehicle Level: PRODUCTION
Test Requester:	(name) L. Miskir	(phone) 24-84280
Build Coordinator:	B. Pagano	(paper number) LMIS
Additional Contacts:		BPAG
Test Dev. Engineer		Estimated test cost = \$30,000.00

RECORD COPY
Schedule No. 7-7-10
Retain Until 2019

REQUESTING SECT. NO:	WORK ORDER/WORK TASK:	ISSUED/REQUESTED BY:	PHONE:	APPROVAL:	TEST TYPE:	RISK:	SIGN OFF DATE:
TS01	F08	L. Miskir	24-84280	K. Arthur	n/a	n/a	n/a

COMPLETE THE FOLLOWING TWO QUESTIONS AS INDICATED:

(Check appropriate boxes)

<p>1 - Rational for not replacing this test by CAE analysis:</p> <ul style="list-style-type: none"> <input type="checkbox"/> No CAE Methodology or process available <input type="checkbox"/> No CAE Correlation <input type="checkbox"/> Insufficient confidence in CAE. <input type="checkbox"/> To obtain base data for CAE <input type="checkbox"/> Replacement or improvement of existing Test. <input type="checkbox"/> Testing is Critical. <input type="checkbox"/> Mandatory or Regulatory <input checked="" type="checkbox"/> Certification <input type="checkbox"/> Development test for FBS <input type="checkbox"/> Not applicable. <input type="checkbox"/> Other _____ 	<p>2 - What is the expected Test Outcome:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Results will meet DVP/MOR requirements. <input type="checkbox"/> System Component will not meet Test specification. <input type="checkbox"/> Unknown. <input type="checkbox"/> Above is Based on CAE? <input type="checkbox"/> Other: _____
--	---

General Request Information

TAR: TB6773

Test Mode

35 MPH
90 Degree Frontal Barrier

Test Objectives: Cert (C) Verif (V) Dev (D) Audit (A)

REGULATORY:

- FMVSS 204 - Steering Wheel Displacement
- C FMVSS 208 - Frontal Occupant Protection
- FMVSS 212 - Wind Shield Retention
- FMVSS 214 - Side Impact Protection
- FMVSS 219 - Windshield Zone Intrusion
- Film Analysis
- Template
- FMVSS 301 - Fuel System Integrity
- Rollover
- Pressure Check
- FMVSS 303 - NGV Fuel System Integrity
- ECE 12 (74/297/EEC) - Protection of the Driver Against Steering Mechanism
- ECE 32 Rear Impact - Structural Performance
- ECE 38 Frontal Impact - Structural Performance
- ECE 34 Fuel System Integrity
- ECE 94 Step II Frontal Offset - Occupant Performance
- ECE 65 Step II 300mm Barrier Side Impact - Occupant Performance
- 96/78/EC - Frontal Offset
- 96/27/EC - Side Impact

FORD AUTOMOTIVE OPERATIONS SAFETY DESIGN GUIDELINES:

- Front Impact FAO Safety Design Guidelines
- Offset Frontal FAO Safety Design Guidelines
- Side Impact Protection FAO Safety Design Guidelines
- Rear Impact Fuel System Performance FAO Safety Design Guidelines

OTHER:

- Sensor Development
- Other, Specify: _____

Primary Test Vehicle Information

Use (Target/Bullet):	BULLET
Model Year:	2000
Vehicle Program:	D188
Vehicle Name:	TAURUS
Body / Cab Style:	SEDAN
Build Number:	
Tag Number:	206Y846
VIN Number:	VIN #1FAPP6223YA100123
Fuel System Rated Capacity(Gal):	16
Prototype Level:	PRODUCTION
Drive Side:	LH

General Specifications Secondary Vehicle or Cart

TA#: TB6773

Hardware (Vehicle or Cart)

Use (Target/Bullet):	
Type (Vehicle/Cart):	
Model Year:	
Vehicle Line:	
Model:	
Tag Number:	
VIN Number:	
Prototype Level:	
Drive Side:	

Occupants

	Occupant 1	Occupant 2
Type	_____	_____
In-Vehicle Location	_____	_____
Verify: Seat Position Long	_____	_____
Seat Position Vert	_____	_____
Seat Back Angle	_____	_____
Occupant Belted	_____	_____

Target Conditions

Weight	Target	Acceptable Variance	
		(+)	(-)
Front	_____	_____	_____
Rear	_____	_____	_____
Total	_____	_____	_____

Ride Height @ Test Weight	Measured
Front:	From: _____
Rear:	To: _____

Special Instructions

Special Prep/Build Instructions Primary Vehicle

TAF: TB9773

Special Build Instructions

- Remove Side View Mirrors
- Remove Headrests
- Remove Hood
- Remove Arm rest
- Remove Bottom of Bumper Cover
- Cut Off Brake & Clutch Pedal
- Color Contrast Under Hood Components

Other, Specify:

- May remove trim from B-Pillar rearward, if needed
- Ensure proper flex fuel sensor level
- Add new level Driver Airbag

Pyro Restraints Usage

- Left Front Air Bag
- Right Front Air Bag
- Left Front Side Air Bag
- Right Front Side Air Bag
- Left Rear Side Air Bag
- Right Rear Side Air Bag
- Left Pyro Retractor
- Left Pyro Buckle
- Right Pyro Retractor
- Right Pyro Buckle

Other, Specify:

- N/A Remote Fire Time:
(No fire time listed if sensor fired OR if no pyro restraints are used)
- Remote back-up Fire Time:

Special Pre-Test Preparation

Other, Specify:

- Ensure RCM is updated
- Install new Fuel Inertia Switch

**Occupant / ATD Request
Primary Vehicle**

TAM: TB9773

	Occupant 1	Occupant 2
Type	<u>50th Hill</u>	<u>50th Hill</u>
Instrumentation Level*	<u>CERT</u>	<u>NONE</u>
In-Vehicle Location	<u>LF</u>	<u>RF</u>
Verify: <i>Seat Position Long</i>	<u>MID</u>	<u>MID</u>
<i>Seat Position Vert</i>	<u>FULL DOWN</u>	<u>FULL DOWN</u>
<i>Seat Back Angle</i>	<u>27.2 degree</u>	<u>27.2 degree</u>
Positioning Procedure	<u>ST-25</u>	<u>ST-14</u>
<i>Use Foot Rest</i>	<u>YES</u>	<u>N/A</u>
<i>Take Seat Track Video</i>	<u>NO</u>	<u>NO</u>
<i>Special Positioning Instructions</i>		
Dummy Adjustment (arm angle)	<u></u>	<u></u>
Occupant Belted	<u>YES</u>	<u>YES</u>

*See instrumentation request for detailed instrumentation information.

Test Conditions - Final Prep

TAM: TB9773

Final Prep Contacts

ONE of these **MUST** be present during weigh-up & final prep

	Test Engineer	Request Engineer	Build Coordinator
Name:	_____	<u>L. Mielke</u>	<u>B. Pagano</u>
Phone:	_____	<u>24-84280</u>	<u>32-30645</u>
Pager:	_____	<u>LMB</u>	<u>BPAG</u>

Test Weight

Minimum Option Weight
 33% Option Weight
 Maximum Option Weight

GVWR: _____
 Wheelbase: _____

Tire Pressure

Front: 30 psi Rear: 30 psi

Fuel System

Fuel Tank & System to Contain: Water for ballast
NRX 11-04-99

<u>16.2 gallons</u>	=	<u>95 %</u>	x	<u>15.0 gallons</u>
<u>FIR Level</u>	=	<u>%</u>	x	<u>Capacity</u>

Weight Targets

If required weight distribution is UNACHIEVABLE, please note allowable variances.

	Curb Weight	Requested Test Weight	Acceptable Test Weight Variance		Actual Test Weight
			High (+)	Low (-)	
Front:	<u>2,186 lbs</u>	<u>2,278 lbs</u>	<u>13 lbs</u>	<u>0 lbs</u>	Front: <u>2,275</u>
Rear:	<u>1,195 lbs</u>	<u>1,657 lbs</u>	<u>19 lbs</u>	<u>0 lbs</u>	Rear: <u>1,575</u>
Total:	<u>3,331 lbs</u>	<u>3,935 lbs</u>	<u>28 lbs</u>	<u>0 lbs</u>	Total: <u>3,870 (+8)</u>

Rated Luggage Load: 200 lbs

Simulate/Verify at Weigh-Up

Dummy Weight

On Board Camera Count

Weight Addition (Restrictions)

Do NOT place any weight in the following locations:

<input type="checkbox"/> Air Cleaner	<input type="checkbox"/> Engine	<input type="checkbox"/> Doors
<input type="checkbox"/> Battery	<input type="checkbox"/> Fan Box/Shroud	<input type="checkbox"/> Foot Wells - Front
<input type="checkbox"/> Bottle - Coolant	<input type="checkbox"/> Headlamp Opnge	<input type="checkbox"/> Foot Wells - Rear
<input type="checkbox"/> Bottle - Washer	<input type="checkbox"/> Radiator	<input type="checkbox"/> Quarter Panels
		<input type="checkbox"/> Trunk Floor

Other: _____

Ride Heights

Measure @ Test Weight

Front: _____
 Rear: _____

Measure

Front: ROCKER LEVEL TO GROUND
 To: ROCKER LEVEL TO GROUND

Additional Remarks

DO NOT fill tank with stoddard until weigh-up

Dimensional Analysis Request Primary Vehicle

Frontal Impacts

TA#: TB9773

X	74	General references for Post DA	Interior
	81		
X	106	Control Points (CAR) PRE & POST	Exterior
	107		
	126	Collapse Distance Points	Exterior
	128	Frame/ St. Col/ Eng. for Graphs (CAR)	Exterior
	130	Frame Standard Bottom (CAR)	Exterior
	132	Unfitted Standard Bottom (CAR)	Exterior
	134	Drive Shaft Collapse	Exterior
	136	Standard Body Relative	Exterior/Interior
	136	Windshield (CAR)+R(31)C	Exterior
	140	Bill & Pillar	Exterior
	142	Shot-Guns	Exterior
	146	Header	Interior
	150	Steering Wheel Deformation/ Periphery (Just strg whl hub)	Interior
X	153	Steering Column Mounts POST	Interior
	154	Steering Column Targets	Interior
	155		
X	156	Seat Track to Floor Mounts (LHS front seat only) POST	Exterior
	158	Seat to Track Mounts	Exterior
	160	Cowl Rotation	Exterior
	162	Floorpan Points	Exterior
	164	Knee Bolster	Interior
	166	Seat Belt Mounts	Interior
	168	Diagonal Strut	Interior
	170	Tunnel Hinge Pillar	Exterior
	172	Brake Bracket	Interior
	174	Instrument Panel Mounts	Exterior
	176	T-N-T Targets	Exterior/Interior
	177	Top Non-Sided & Body Sided	Exterior/Interior
	300	Driver Seat mount Inboard	Interior
	302	Driver Seat mount outboard	Interior
	346	Driver Seat mount Centerline	Interior
	358		
	364		
	376		
	485	Plot 9 Sectional Profiles	
	506	Decoupling Column Collapse	Exterior
	507	P.R. Steering Column Collapse	Exterior
	508		
X	640	POST	
	641		
	642		
	647	Footwell Reduction--Geometric center of footrest, brake pedal, accel pedal. Section through floor at center of brake pedal and +/- 150 mm y from there. Vert. Section through IP lower at +/- 150mm y from strg whl hub, plus Horiz. section at 450mm above floor.	Interior

Film Analysis & Photographic Services Request

TAF: TB9773

Front Impact Film Analysis

- Head WRT Vehicle
 Shoulder WRT Vehicle
 Rocker (Both sides) WRT Ground

Other, Specify:

Still Photography

- _____

 Copies of Still Photo Proof Sheets Required
 Copies of Still Photos (4X6) Required
 Pre Test Documentation Photographs
 Post Test Documentation Photographs (standard)
 Pre and Post Test close ups of Flex Fuel Sensor

High Speed Photographic Requirements

- 3 Copies of High Speed Film Required
 Copies of High Speed Film Required in VHS Format
 Digitization of Driver/ Passenger Kinematic
Format

High Speed Cameras for Front Impact

On-Board Vehicle

- Onboard - LEFT Occupant Over Shoulder
 Onboard - RIGHT Occupant Over Shoulder
 Onboard - Driver "D" Ring
 Onboard - Driver Retractor (Lower)
 Onboard - Driver Lower Torso to I/P Contact, From Rear, Cross Car
 Onboard - Passenger Lower Torso to I/P Contact, From Rear, Cross Car
 Onboard - Passenger "D" Ring
 Onboard - Passenger Retractor (Lower)
 Onboard - Driver Door (Left Knee to Bolster)
 Onboard - Passenger Door (Knees to I/P)
 Onboard - Photo Sonix (Intermediate Shaft) - From Floor
 Onboard - Photo Sonix (Intermediate Shaft) - Side View From Tunnel
 Onboard - LEFT Occupant LH side from Driver Door
 Onboard - Fiber Optics (Intermediate Shaft) - From Floor
 Onboard - Fiber Optics (Intermediate Shaft) - Side View From Tunnel

Floor Coverage

- Left Occupant Over Shoulder, On tripod, from rear, cross car
 Right Occupant Over Shoulder, On tripod, from rear, cross car
 Left Occupant Over Shoulder, In lights
 Right Occupant Over Shoulder, In lights

<input checked="" type="checkbox"/>	Overall Left
<input checked="" type="checkbox"/>	Left Dummy Kinematics
<input checked="" type="checkbox"/>	Dummy Kinematics & Velocity Left
<input checked="" type="checkbox"/>	Overall Right
<input type="checkbox"/>	Right Dummy Kinematics
<input type="checkbox"/>	Dummy Kinematics & Velocity Right
<input checked="" type="checkbox"/>	Top of Barrier - Overall View of Windshield
<input checked="" type="checkbox"/>	Top of Barrier - Driver
<input checked="" type="checkbox"/>	Top of Barrier - Passenger
<input type="checkbox"/>	Top of Barrier - Close-up of Flex Fuel Sensor from Right
<input type="checkbox"/>	Top of Barrier - Close-up of Flex Fuel Sensor from Left
<input type="checkbox"/>	Top of Barrier - Close-up of Engine
<input type="checkbox"/>	Left Front Rail Extension Bumper Close-up
<input type="checkbox"/>	Right Front Rail Extension Bumper Close-up

Overhead Coverage

<input checked="" type="checkbox"/>	Overhead - Overall
<input checked="" type="checkbox"/>	Overhead - A-Pillar Forward
<input checked="" type="checkbox"/>	Steering Column Displacement
<input type="checkbox"/>	Scale
<input type="checkbox"/>	Resection

Pit Coverage

<input type="checkbox"/>	Pit - Overall
<input checked="" type="checkbox"/>	Pit - A-Pillar Forward
<input type="checkbox"/>	Pit - L/R Frame Horns (Criscross)
<input type="checkbox"/>	Pit - L/R Front Rails #1 X/M Rearward
<input type="checkbox"/>	Pit - Steering Gear Close-up
<input type="checkbox"/>	Pit - Fuel Tank
<input type="checkbox"/>	Pieces of Plex-Glass to be removed from pit.

All Other High Speed Photography

<input type="checkbox"/>	
<input type="checkbox"/>	

Instrumentation and Data Processing Request

TAR: TB9779

Primary Vehicle Structural Instrumentation - Frontal Impact

ACCELEROMETERS:	Long	Vert	Lat
_____ Engine/Trans Upper	_____	_____	_____
_____ Engine/Trans Lower	_____	_____	_____
<u>X</u> Left Rocker at A-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<u>X</u> Right Rocker at A-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<u>X</u> Left Rocker at B-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<u>X</u> Right Rocker at B-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
_____ Left Rocker at Hinge-Pillar	_____	_____	_____
_____ Right Rocker at Hinge-Pillar	_____	_____	_____
_____ Left Frame at A-Pillar	_____	_____	_____
_____ Right Frame at A-Pillar	_____	_____	_____
_____ Left Frame at B-Pillar	_____	_____	_____
_____ Right Frame at B-Pillar	_____	_____	_____
_____ Left A-Pillar Inside	_____	_____	_____
_____ Right A-Pillar Inside	_____	_____	_____
_____ Centerline Tunnel @ Dash	_____	_____	_____
_____ Centerline Tunnel Middle	_____	_____	_____
_____ Centerline Tunnel @ Seat Long Centerline	_____	_____	_____
_____ Left Floor Pan Under Seat	_____	_____	_____
_____ Left Door Inside Top	_____	_____	_____
_____ Left Shock Tower	_____	_____	_____
_____ Right Floor Pan Under Seat	_____	_____	_____
_____ Right Door Inside Top	_____	_____	_____
_____ Right Shock Tower	_____	_____	_____
_____ Rad Support Top - Center	_____	_____	_____
_____ #1 Crossmember Bottom	_____	_____	_____
_____ #2 Crossmember Bottom	_____	_____	_____
_____ Left Front Rail Forward of Sledrunners.	_____	_____	_____
_____ Left Front Rail Forward of Shock Tower	_____	_____	_____
_____ Right Front Rail Forward of Sledrunners.	_____	_____	_____
_____ Right Front Rail Forward of Shock Tower	_____	_____	_____
_____ Directly Below D.A. Point # 60	_____	_____	_____
_____ Directly Below D.A. Point # 64	_____	_____	_____
<u>X</u> Next to Fuel Inertia Switch	<u>X</u>	<u>X</u>	<u>X</u>
_____ Top of Battery	_____	_____	_____
_____ Near ACS Bypass Switch	_____	_____	_____

OTHER STRUCTURAL ACCELS:	Long	Vert	Lat
_____	_____	_____	_____
_____	_____	_____	_____

Primary Vehicle Systems Instrumentation

TA#: TB9773

SENSOR ACCELS:

See Sensor Map

MONITOR AIR BAG SENSORS:

See Sensor Map
 Monitor Closure of Each Specified Sensor
 Monitor Closures of Single Pt Elect Sensor

MONITOR AIR BAGS STATUS:

Driver Squib Voltage
 Driver Squib Current
 Driver Bag Pressure
 Passenger Squib Voltage
 Passenger Squib Current
 Passenger Bag Pressure
 Passenger Inflator Pressure

STEERING COLUMN:

Stroke Break Wires
 Tilt Mechanism Break Wires
 String Pot (Stroke)
 Load Cell (5 Axis)
 String Pot (Telescope)

RESTRAINT LOADS:

Left Belt Tongue - Strain Gaged
 Left Pyro-Technic Buckle Squib Voltage
 Left Pyro-Technic Buckle Squib Current
 Right Belt Tongue - Strain Gaged
 Right Pyro-Technic Buckle Squib Voltage
 Right Pyro-Technic Buckle Squib Current
 Left Lap Belt at Anchor Load
 Left Torso Belt at Retractor Load
 Left Torso Belt at D-ring Load
 Right Lap Belt at Anchor Load
 Right Torso Belt at Retractor Load
 Right Torso Belt at D-ring Load
 Lightweight Left Lap Belt at Anchor Load
 Lightweight Left Torso Belt at Retr. Load
 Lightweight Left Torso Belt at D-ring Load
 Lightweight Right Lap Belt at Anchor Load
 Lightweight Right Torso Belt at Retr. Load
 Lightweight Right Torso Belt at D-ring Load
 Lightweight Left Torso Belt at Buckle Load
 Lightweight Right Torso Belt at Buckle Load

SWITCHES:

Engine to Red Support left
 Engine to Red Support center
 Engine to Red Support right
 Brake booster to shock tower
 Other

FUEL SYSTEM:

Inertia Fuel System Cut-Off Switch

ANGULAR MOTION SENSORS

VEHICLE STRING POTS

OTHER VEHICLE SYSTEM INSTRUMENTATION

Dummy Instrumentation - Internal

50-H3

L/F

ACCELS:

<input checked="" type="checkbox"/> Head C.G.	<input checked="" type="checkbox"/> Long	<input checked="" type="checkbox"/> Vert	<input checked="" type="checkbox"/> Lat
<input checked="" type="checkbox"/> Chest	<input checked="" type="checkbox"/> Long	<input checked="" type="checkbox"/> Vert	<input checked="" type="checkbox"/> Lat
<input checked="" type="checkbox"/> Pelvis	<input checked="" type="checkbox"/> Long	<input checked="" type="checkbox"/> Vert	<input checked="" type="checkbox"/> Lat

LOAD CELLS:

<input checked="" type="checkbox"/> Neck Upper Load	<input checked="" type="checkbox"/> Fx	<input checked="" type="checkbox"/> Fy	<input checked="" type="checkbox"/> Fz
<input checked="" type="checkbox"/> Neck Upper Moment	<input type="checkbox"/> Mx	<input checked="" type="checkbox"/> My	<input type="checkbox"/> Mz
<input type="checkbox"/> Neck Lower Load	<input type="checkbox"/> Fx	<input type="checkbox"/> Fy	<input type="checkbox"/> Fz
<input type="checkbox"/> Neck Lower Moment	<input type="checkbox"/> Mx	<input type="checkbox"/> My	<input type="checkbox"/> Mz
<input type="checkbox"/> Thoracic Load	<input type="checkbox"/> Fx	<input type="checkbox"/> Fy	<input type="checkbox"/> Fz
<input type="checkbox"/> Thoracic Moment	<input type="checkbox"/> Mx	<input type="checkbox"/> My	<input type="checkbox"/> Mz
<input type="checkbox"/> Lower Lumbar Load	<input type="checkbox"/> Fx	<input type="checkbox"/> Fy	<input type="checkbox"/> Fz
<input type="checkbox"/> Lower Lumbar Moment	<input type="checkbox"/> Mx	<input type="checkbox"/> My	<input type="checkbox"/> Mz
<input checked="" type="checkbox"/> L/Femur Load	<input type="checkbox"/> Mx	<input type="checkbox"/> My	<input checked="" type="checkbox"/> Fz
<input checked="" type="checkbox"/> L/Femur Moment	<input type="checkbox"/> Mx	<input checked="" type="checkbox"/> My	<input type="checkbox"/> Mz
<input checked="" type="checkbox"/> R/Femur Load	<input type="checkbox"/> Mx	<input type="checkbox"/> My	<input checked="" type="checkbox"/> Fz
<input checked="" type="checkbox"/> R/Femur Moment	<input type="checkbox"/> Mx	<input checked="" type="checkbox"/> My	<input type="checkbox"/> Mz
<input checked="" type="checkbox"/> L/Up/Tibia Load	<input type="checkbox"/> Fx	<input type="checkbox"/> Fy	<input checked="" type="checkbox"/> Fz
<input checked="" type="checkbox"/> L/Up/Tibia Moment	<input checked="" type="checkbox"/> Mx	<input checked="" type="checkbox"/> My	<input type="checkbox"/> Mz
<input checked="" type="checkbox"/> R/Up/Tibia Load	<input type="checkbox"/> Fx	<input type="checkbox"/> Fy	<input checked="" type="checkbox"/> Fz
<input checked="" type="checkbox"/> R/Up/Tibia Moment	<input checked="" type="checkbox"/> Mx	<input checked="" type="checkbox"/> My	<input type="checkbox"/> Mz
<input type="checkbox"/> L/Low/Tibia Load	<input type="checkbox"/> Fx	<input type="checkbox"/> Fy	<input type="checkbox"/> Fz
<input type="checkbox"/> L/Low/Tibia Moment	<input type="checkbox"/> Mx	<input type="checkbox"/> My	<input type="checkbox"/> Mz
<input type="checkbox"/> R/Low/Tibia Load	<input type="checkbox"/> Fx	<input type="checkbox"/> Fy	<input type="checkbox"/> Fz
<input type="checkbox"/> R/Low/Tibia Moment	<input type="checkbox"/> Mx	<input type="checkbox"/> My	<input type="checkbox"/> Mz

POTENTIOMETERS:

<input checked="" type="checkbox"/> Chest Deflection	<input type="checkbox"/> Ball Bearing	<input type="checkbox"/> Std	<input type="checkbox"/> Disp
<input type="checkbox"/> Left Knee Slider	<input type="checkbox"/> Ball Bearing	<input type="checkbox"/> Std	<input type="checkbox"/> Disp
<input type="checkbox"/> Right Knee Slider	<input type="checkbox"/> Ball Bearing	<input type="checkbox"/> Std	<input type="checkbox"/> Disp

OTHER INTERNAL DUMMY INSTRUMENTATION:

<input type="checkbox"/> L/R Femur Accels	<input type="checkbox"/> Long	<input type="checkbox"/> Vert	<input type="checkbox"/> Lat
<input type="checkbox"/> L/R Ankle soft bumper to foot stem			

Dummy Instrumentation - External**CONTACT SWITCHES:**

<input type="checkbox"/> L / Knee Contact
<input type="checkbox"/> R / Knee Contact
<input type="checkbox"/> Header

STRING POTS:

<input type="checkbox"/> Pelvis
<input type="checkbox"/> L / Knee
<input type="checkbox"/> R / Knee

OTHER EXTERNAL DUMMY INSTRUMENTATION:

<input type="checkbox"/> Please color contrast Driver left and right shoes
--

Requester/Originator: DPMO/NSD
Product: IAWB/ Policy: Member
Destiny Print Copies

Request #: 10-028-448
Implementation/Assignment
Page 10 of 17

AWB TA
Ver 3.0a/ Issued: Sept 13, 1999
Author: Glenn/Hg/Priglan/Ode

CRTS 0011664

List of T / Contacts

TAF: TB9773

	Last name	Phone	Pager	Profs
Requestor	L. Misdr	24-64280	LMS	LMSIKIF
Approving supervisor	K. Arthurs	89-05186	KART	KARTHURS
Build coordinator	B. Pagano	82-30345	BPAG	BPAGANO
Test engineer				
Senior Engineer	F. Bologna	31-70288	FBOLOGNA	FBOLOGNA
Other				

	Last name	Phone	Pager	Profs
Seats	M. Jessup	84-51891	MJESSUP1	MJESSUP1
Instrument panel	M. Keranen	33-74148	NONE	MIKERANEN
Restraints	N. Desai	33-05145	NDESAI	NDESAI
Air bag (driver)	R. Ruthinowald	62-16978	RRUTHINO	RRUTHINO
Air bag (passenger)	R. Ruthinowald	62-16978	RRUTHINO	RRUTHINO
Steering column				

CRTS 0011664

Revisions List

TAF: TB9778

DATE	AUTHORIZATION	DESCRIPTION	PAGE #'s

CRTS 0011664

VEHICLE SAFETY PACKAGE LAB WORK ORDER

TAG: TB9773

DATE	MODEL	YEAR	CARLINE	WORK ORDER NO.
11/2/99	SEDAN	2000	D186	TB9773
ENGINEER		PHONE		WORK TASK
L. Misikr		24-84280		F09
CORPORATION				TEST MODE
B. Pagano		32-30645		90 Degree Frontal Barrier
VIN NUMBER		VEHICLE NO.		TAG NUMBER
VIN #1FAPP5223YA100123				206Y648
TYPE OF SEAT		TA NUMBER		DATE CLOSED
SEAT POSITION				
BGRP		MID POINT		FULL REAR
SEATS TO BE CHECKED				
LH FRT		CENTER FRT		RH FRT
LH REAR		CENTER REAR		RH REAR
VEHICLE DELIVERED TO		DVA	BARRIER	BUILD SITE

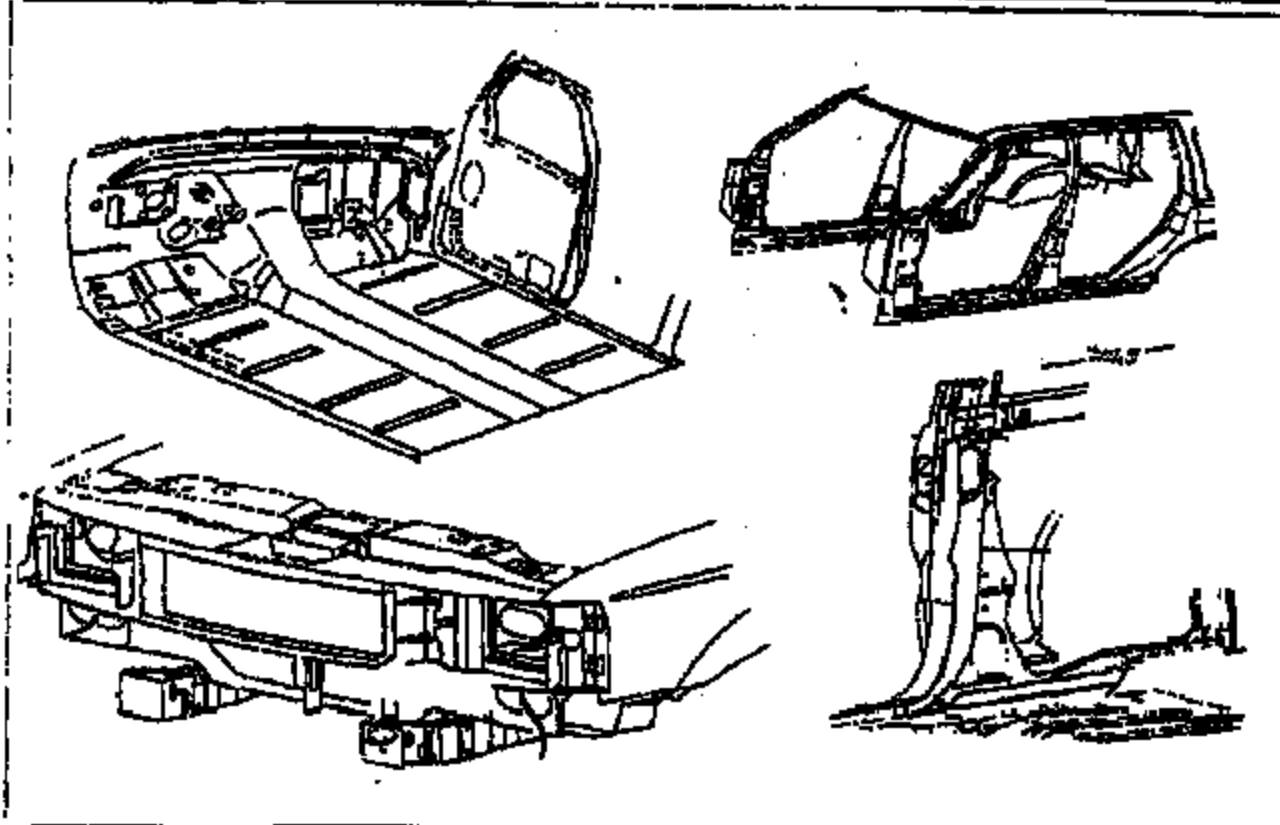
ANY QUESTIONS CONTACT:
PETER J. SHAWNE
PHONE: (313) 69-46809
PAGER: (313) 705-8953

DESCRIPTION OF JOB TO BE PERFORMED:

SENSOR MAP

Veh. ID:
 1FAP5223YA100123
 Build level: PRODUCTION

Program: D186
 Test Mode: 35/90 BARRIER
 TA No.: TB9773



Location Name	Supplier	Output	Nominal (+/-)	Sensor Channels only	
				Max/Min	Se
				10	

Y pins required; Assumed system power from vehicle wiring and battery - use provided harness

REVISION LOG

DESCRIPTION	DATE	PAGE AFFECT?	AUTH

BARRIER QUALITY ASSURANCE AND TRACKING FORM

DATA ENGINEER: Nares act on Int. **WB REVIEW ENGINEER:** Lee
TEST ORDER NUMBER: TB9773 **SITE:** SB
TEST ENGINEER: R. ADY **TEST DESCRIPTION:** 90 DEG. FRONT FREQ BARRIER
VEHICLE TYPE: D-180 **IMPACT TYPE:** CAR
REQUESTED SPEED: 35 MPH **TEST TYPE:** CT
CRASH DATE: 11/04/89 **OK TO STRIP DATE:** 11/04/89
CRASH TIME: 10:34 **OK TO STRIP TIME:** 12:30
TOTAL CHANNELS: 47 **DUMMY CHANNELS:** 24

TEST DUMMY INFORMATION
 POS NO. TYPE AS BELTS PYRO OTHER
 LP 35 SYMM Y Y
 AP 35 SYMM Y Y

11664

CHANNEL IDENTIFICATION			EQUIPMENT				ANOMALIES										DESCRIPTION	RESOLUTION	CAT						
TEST CHANNEL	LOCATION	AZIM	TRANSDUCER	EXTENSION CABLE	CABLE	CABLE PACKAGE	CDS CHANNEL	POWER	EXCITED DATA	CURRENT PROTECTED	EXCIT. BUSH	EXCITED FULL SCALE	UNUSUAL SIGNAL	INTERMITTENT	NOISE	IMPULS SIGNAL	RECORD	DATA REDUCT	DATA DISRUPT	IMPROM. PEAKING	LATE TRIGGER	DATA ENGINEER REMARKS	TECHNICIAN REMARKS	CLASS	REQ
42	ROCKER @ A-PILLAR	LONG	48059		BJM-1	3214	21											X				File was 48048 vel	Wrong location.	1	2
43	ROCKER @ A-PILLAR	VERT	44848		BJM-2	3214	22											X	X			File was 48155 Int	Wrong location.	1	2
44	ROCKER @ A-PILLAR	LAT	46153		BJM-3	3214	23											X	X			File was 48256 long	Wrong location.	1	2

DUMMY MEASUREMENT REPORT
CRASH BARRIER

TEST NUMBER 11664
TEST ORDER NUMBER TB9773

DUMMY POSITION LEFT
DUMMY ABBREV 50H3

FRONT

ABSOLUTE MEASUREMENTS (INCH)	MEASUREMENT
LEG (HYB II) / KNEE (HYB III) TO INST PANEL LEFT	4.60
LEG (HYB II) / KNEE (HYB III) TO INST PANEL RIGHT	4.50
ROCKER TARGETS TO GROUND FRONT	7.20
ROCKER TARGETS TO GROUND REAR	6.40
NOSE TO STEERING WHEEL	16.60
NOSE TO INSTRUMENT PANEL	
INSTRUMENT PANEL TO TORSO	
STEERING WHEEL TO TORSO	8.30
STEERING WHEEL TOP LEGS	1.70
KNEE SPREAD OS-OS (HYB II) / CL-CL (HYB III)	9.40
SEAT BACK ANGLE	27.50
PELVIC ANGLE	22.50
HEAD ANGLE	0.10
ROCKER ANGLE	0.40
NECK BRACKET ANGLE	0.00
BUMPER TARGET TO GROUND	

RELATIVE MEASUREMENTS (INCH)	WRT FRT RKR TGT
HEAD LAT	15.00
HEAD VERT	37.00
HEAD LONG	14.70

SHOULDER LAT
SHOULDER VERT
SHOULDER LONG

H-POINT LAT	10.50
H-POINT VERT	12.00
H-POINT LONG	8.70

O/S KNEE BOLT LAT	11.70
O/S KNEE BOLT VERT	15.60
O/S KNEE BOLT LONG	-5.80



RECORD COPY
 Vehicle No. 7-7-12
 Sheet 2020

FINAL TEST REPORT

CONFIDENTIAL

**Global Test Operations
 Research and Vehicle Technology**

TO:	L. Miskir	Test Order No.	T-B8855
		Work Task W. O. No.	FC9
		Test Date	12/21/99
		Date Reported	2/4/00
		Sheet	1 of 185

SUBJECT: Crash Test 11713 (90° Front 40% Offset Driver Side Barrier with a Deformable Barrier Face Impact at 64.4 km/h ± 1%) - 2000 Taurus (D186) 4-Door Sedan

REQUESTED BY: Vehicle Crash Safety Department, Research and Vehicle Technology - L. Miskir

OBJECT: To obtain development data relative to FMVSS 212, 219 and 96/79/EC - Frontal Impact of Motor Vehicles.

SUMMARY OF TEST RESULTS:

- See Section 1.0 for injury criteria data.
- See Section 2.0 for windshield mounting retention data.
- See Section 3.0 for windshield protected zone intrusion and windshield penetration data.
- See Section 4.0 for fuel spillage data.
- See Section 5.0 for door operability, seat functionality and restraint system release data.

J. Schemanick
 Product Test Engineer

CONCUR: S. Lesh
 Section Supervisor
 Operations Engineering Section

VEHICLE DATA:

Make and Model	2000 Taurus (D186) 4-Door Sedan (Production Vehicle)	
ID Numbers	1FAPP33LXYA118361, 311-W-922	
Power Train	3.0L, EFI, Automatic (AX4N) Transaxle	
Drive Hand	Left Hand Drive	
Fuel Tank(s)	Usable Capacity: 61l Test Condition: The "run dry" tank was filled with red-dye Stoddard solvent to 95% of its rated usable capacity.	
Front Seat(s)	Type: Bucket Cover: Cloth Tracks/Position: 6-Way Power/Mechanical Mid and Down Seat Backs/Position: Adjustable/27.3 ° Rear of Vertical	
Rear Seat(s)	Tracks/Position: Removed	
Adjustable Steering Controls	Telescoping Position: Non-Adjustable Tilt Position: Mid	
Pedals	Position: Non-Adjustable	
Restraint System	LP: 3-Point Continuous Loop Active Belt with Pyrotechnic Buckle and Steering Wheel Air Bag	
Occupants	LP: 50 th Percentile Male, Hybrid III, Instrumented	
Test Weight	1038 kg 726 kg 1764 kg	
Tires	Front: P215/60R16 Rear: P215/60R16 Spare: Removed	207 kPa 207 kPa
Significant Content or Accessories:	Air Conditioning, Power Steering, Power Brakes, Tilt Steering Wheel	

The movable glazing of the vehicle was in the open position.

The front armrests were in the lowered position.

GENERAL TEST COMMENTS:**1. Test Procedure**

The test was performed according to the 96/79/EC Directive and the following Corporate test procedure(s):

Fixed Barrier Collision, T657-ST-14 dated July 17, 1996.

1.1 Vehicle Alignment

A fixture was attached to the normal barrier face and aligned to overlap 40% of the front of the test vehicle on the driver side. A deformable barrier face was mounted to the fixture so that the deformable bumper's lower edge was 200 mm above and parallel to the ground.

1.2 Deviations

Only the left front dummy was used for this test.

2. Remarks

Crash movies, pre- and post- crash still images of the test vehicle and copies of this report are available through the Operations Engineering Section, Safety Laboratories Department, GTO. The crash still images are stored and archived on CD ROMs. The file names of the still images are listed under crash number and a three digit sequence number which are 11713001 through 11713069.

TEST RESULTS:**1.0 Occupant Injury Data (S6/T9/RC)**

	<u>L.E. Dummy</u>
Head Performance Criteria (HPC)	318
Interval t1	91 ms
t2	127 ms
Head Resultant Acceleration Level at 3 ms Cumulative Duration	57 g
Neck Bending Moment	51.9 Nm
Thoracic Compression Index (THCC)	22.35 mm
V+C	.0599 m/s
Tibia Compression Criterion (TCPC)	
Left tibia - top	1.534 kn
Left tibia - bottom	1.823 kn
Right tibia - top	2.201 kn
Right tibia - bottom	2.822 kn
Tibia Index (TI)	
Left tibia - top	.4478
Left tibia - bottom	1.270
Right tibia - top	.6689
Right tibia - bottom	.9011
Knee Sliding Joints	
Left knee	0.56 mm
Right knee	1.39 mm

Time histories of the dummy Neck Injury Criteria (NIC) and Femur Force Criteria (FFC) are included in this report.

Time histories of the dummy instrumentation are included in this report.

Time histories of the dummy dynamic displacements obtained from Film Analysis are included in this report.

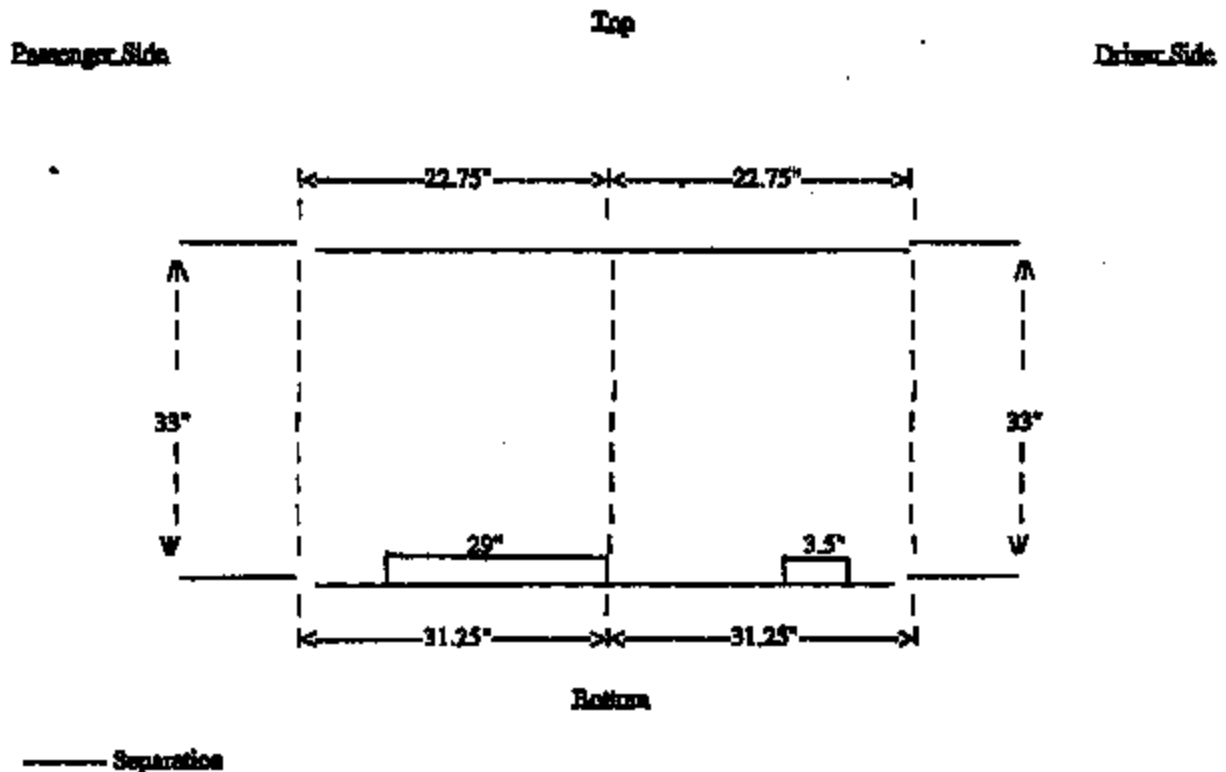
Time histories of the air bag/sensor(s) are included in this report.

Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.

TEST RESULTS: (Cont'd.)**2.0 Windshield Mounting Retention (FMVSS 212)**

The driver side windshield mounting retention at ambient room temperature was 96%.

The passenger side windshield mounting retention at ambient room temperature was 67%.

**3.0 Windshield Zone Intrusion (FMVSS 219)**

Based on a review of the crash movie and post-crash observations it was judged that neither the windshield intrusion zone nor the windshield below the intrusion zone was penetrated by any part of the vehicle during the crash. No intrusion zone template was used.

4.0 Fuel System Integrity (36/29/BC)

- There was fuel system spillage from the rollover valve during impact estimated to be approximately 1 ounce.
- The post-test pressure check of the fuel system maintained pressure.

TEST RESULTS: (Cont'd.)**5.0 Door Operability, Seat Functionality and Restraint System Release**

During the test, the left and right front and left and right rear doors remained closed.

During the test, no locking of the left and right front and left and right rear doors occurred.

After impact, without the use of tools, except those to support the weight of the dummy:

The left and right front and the left and right rear doors could be opened.

The left front occupant could be removed without adjustment of the seat.

The force measured on the center of the release control of the left front restraint system was 41 Newtons.

6.0 Vehicle Crash, Film Analysis and/or Instrumentation Data

Time histories of the vehicle accelerations and other instrumentation are included in this report.

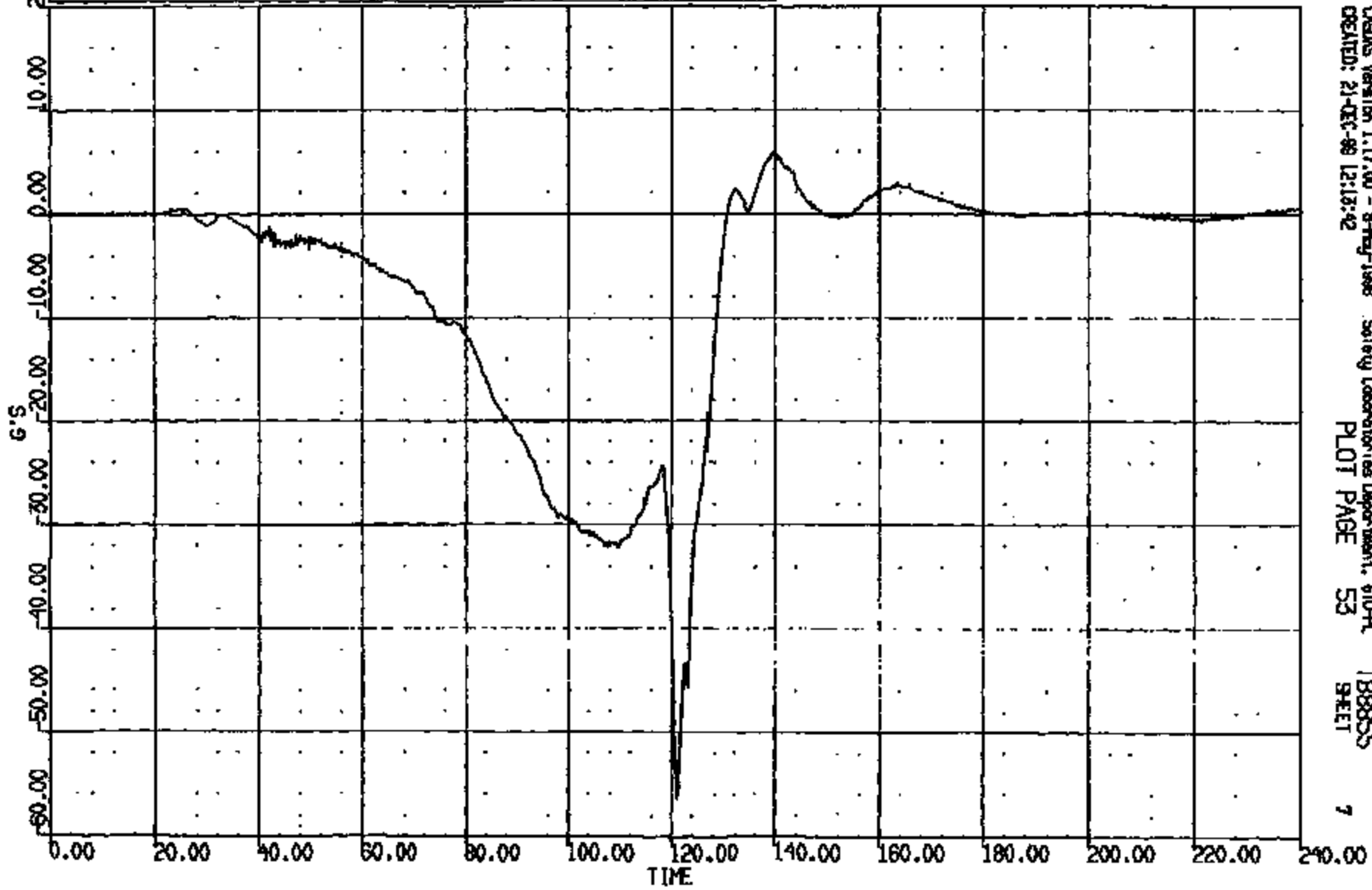
Time histories of vehicle dynamic displacements obtained from Film Analysis are included in this report.

Static displacements of various body points obtained by Dimensional Analysis are included in this report.

Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.

CR R: 11713 TO: TB8855 DATE: 991221 10:58:05
2000 D-188

(1) CR11713T L/F DUMMY HEAD C.G. LONG 1000C
MAX = 5.880 at 139.6 NS MIN = -56.49 at 121.1 NS **AXIS 1**

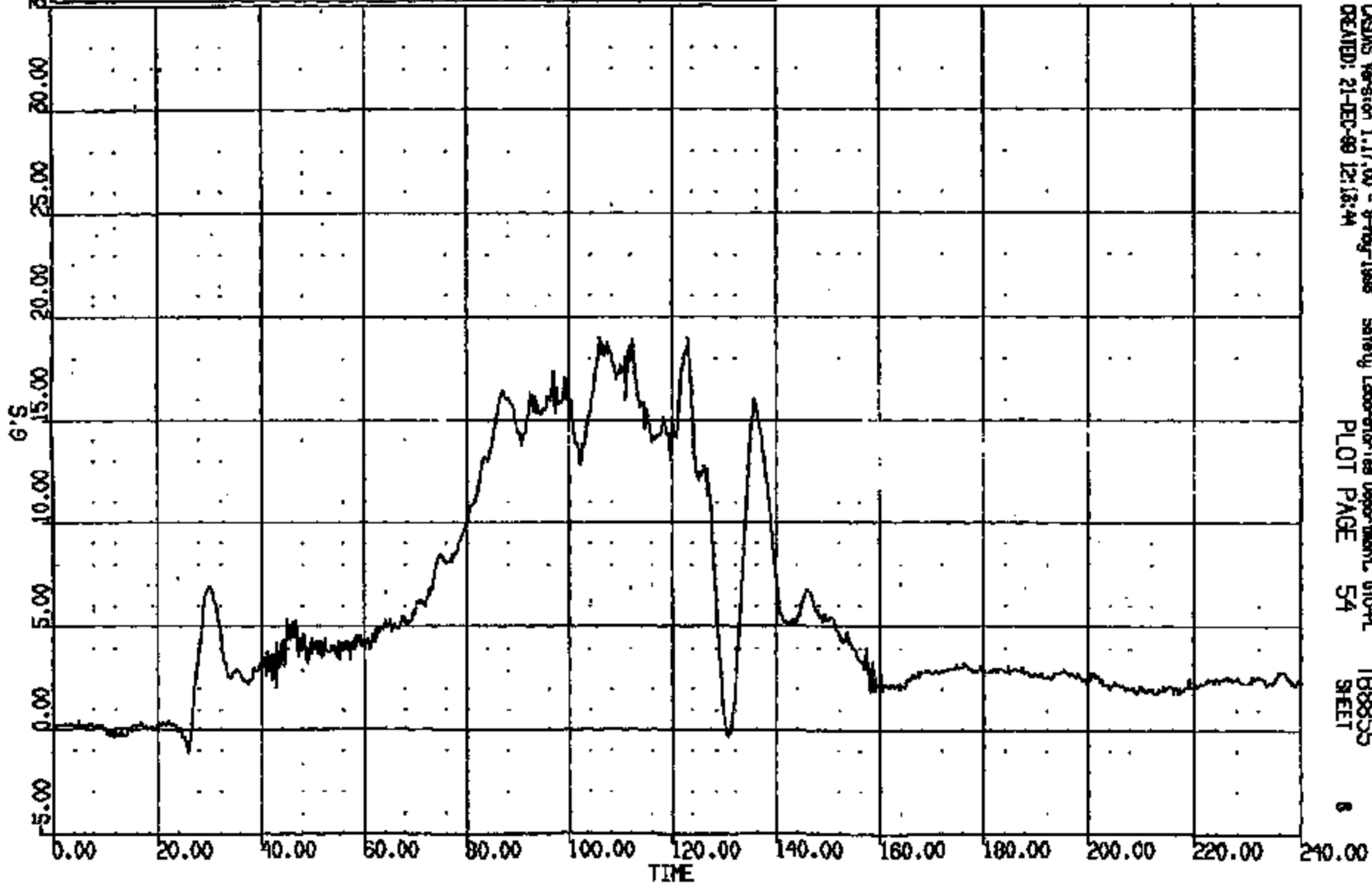


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CRTS 0011713

CR R: 11713 TO: T88855 DATE: 991221 10:58:05
2000 D-188

(2) CR11713T L/F DUMMY HEAD C.G. VERT 1000C
MAX = 18.97 at 105.8 MS MIN = -1.160 at 25.01 MS **AXIS 1**

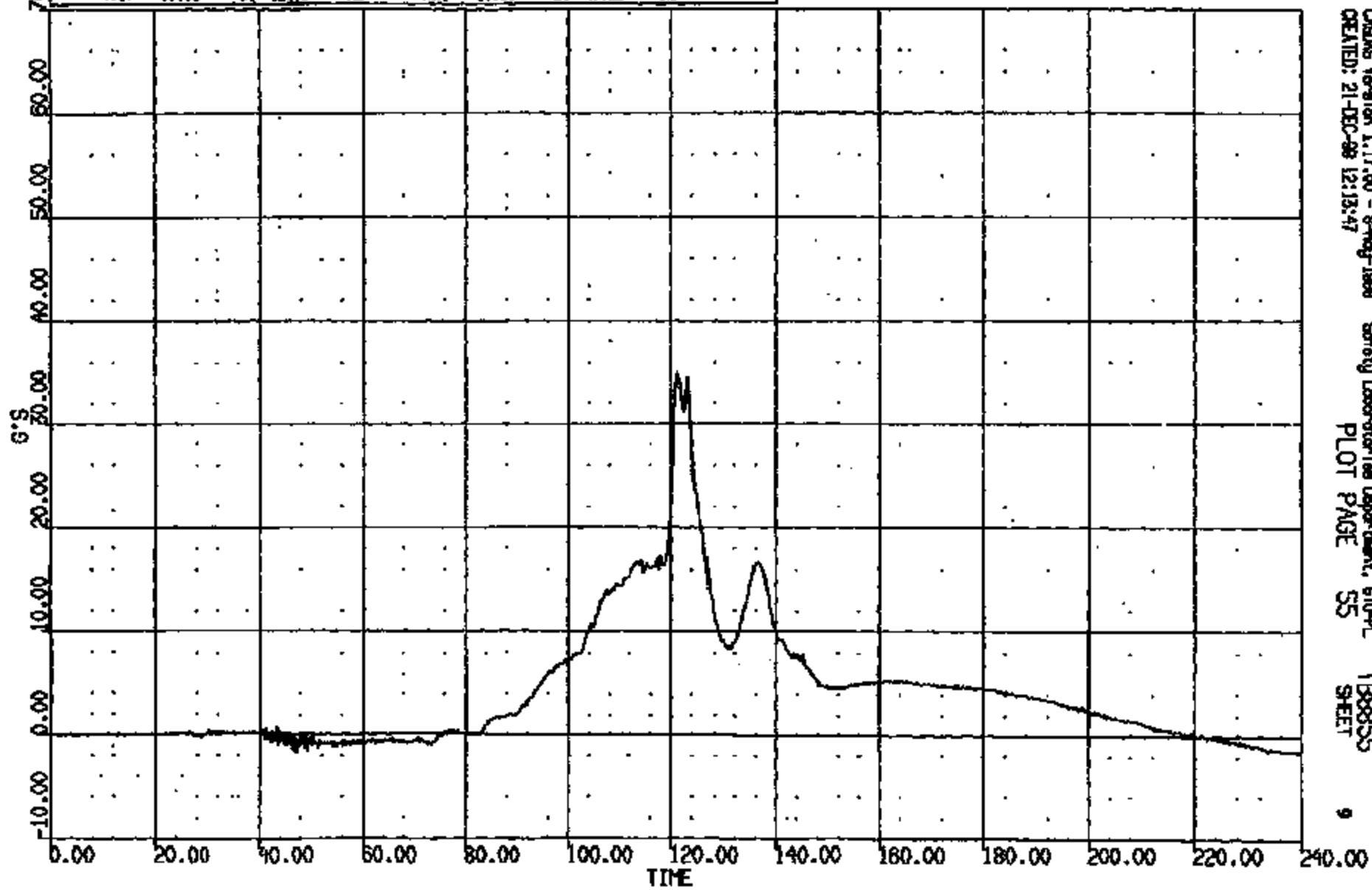


CASMS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL T88855
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CRTS 0011713

CR R: 11713 TO: T88855 DATE: 991221 10:38:03
2000 D-188

(3) CR11713T L/F DUMPY HEAD C.G. LAT 1000C
MAX = 35.03 at 121.3 MS MIN = -1.75 at 47.52 MS **AXIS 1**

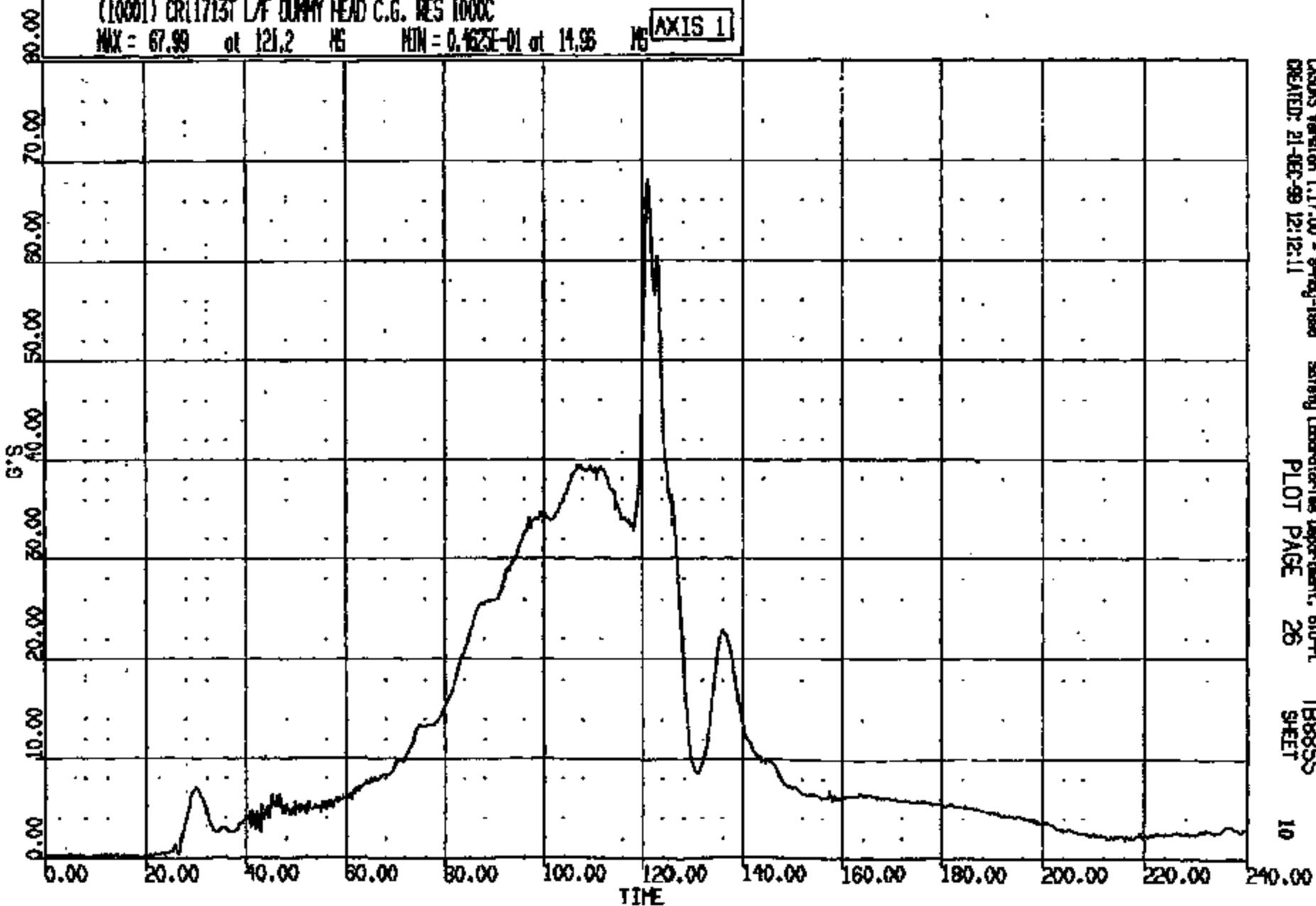


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SHEET 9

CR11713

IIRND: 11715 TO: T88855 DATE: 881221 10:58:05
 IIRHO: 0-186
 IIRCO: 850. DUR: 840.0 T1/TR: 81. 186.
 IIRCO: 181. DUR: 180.0 T1/TR: 110. 186.

(1000) CR11715T L/F DUMMY HEAD C.G. RES 1000C
 MAX = 67.99 at 121.2 MS MIN = 0.1623E-01 at 14.96 MS AXIS 1



CRAMS Version 1.17.00 - 8-May-1989
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Safety Laboratories Department, 610-PL
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T88855
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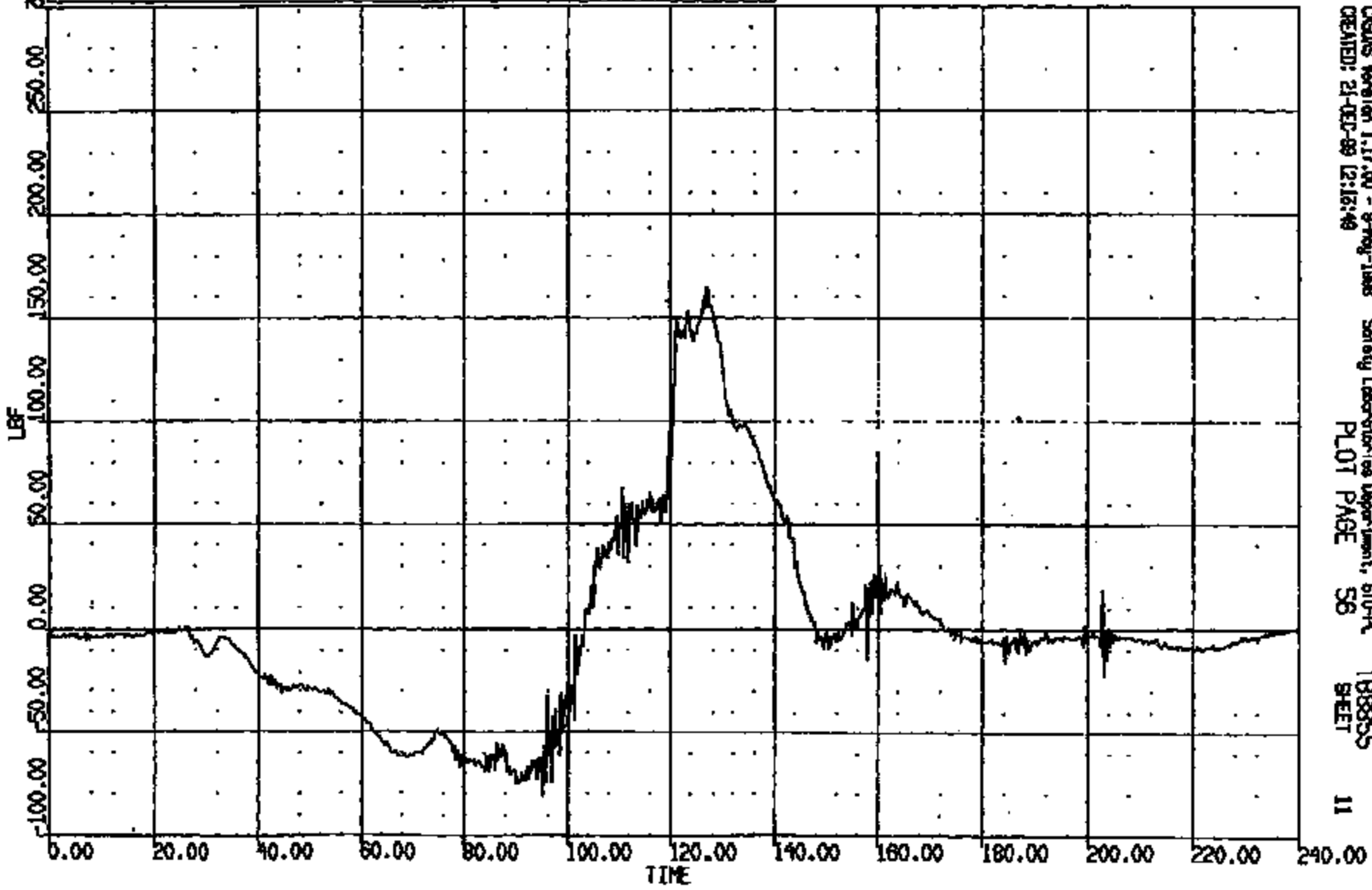
10

CRIS 0011713

CR R: 11713 TO: T88855 DATE: 991221 10:38:03
2000 D-198

(4) CRTS011713 L/F DUMMY NECK UPPER LOWD FX 1000C
MAX = 161.0 at 127.0 MS MIN = -81.22 at 95.12 MS

AXIS 1



CREAS Version 1.17.00 - 9-May-1988 Safety Laboratories Department, 670-R
CREATED: 21-DEC-89 12:15:49 PLOT PAGE 56 T88855 SHEET 11

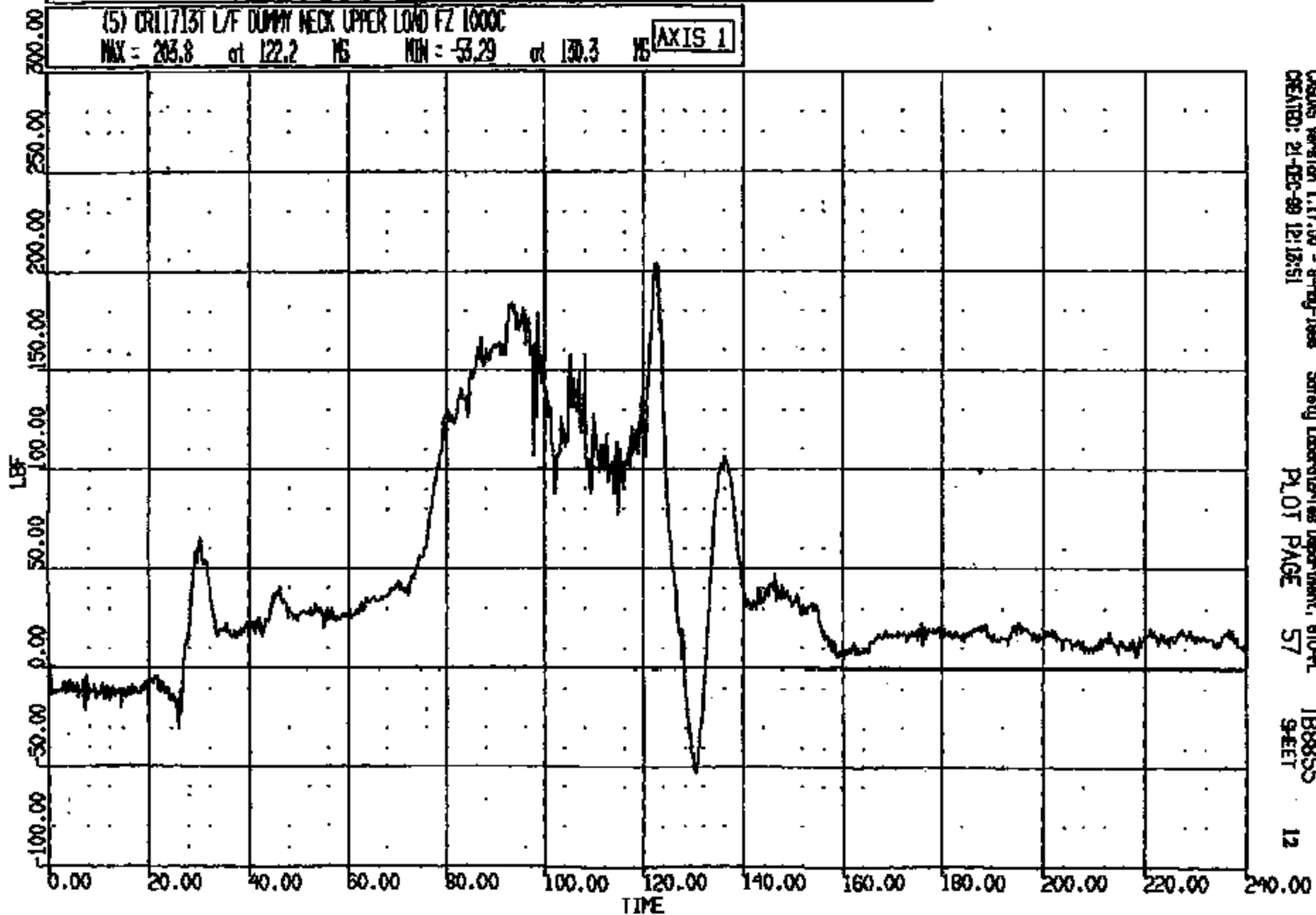
CRTS 0011713

CR R: 11713 TO: T8855 DATE: 881221 10:38:08
2000 D-188

(5) CR117131 L/F DUMMY NECK UPPER LOAD FZ 1000C

MAX = 203.8 at 122.2 MS MIN = -53.29 at 130.3 MS

AXIS 1



CASDS Version 1.17.00 - 8-May-1988
CREATED: 21-DEC-88 12:12:51

Safety Laboratories Department, 810-PL
PLOT PAGE 57

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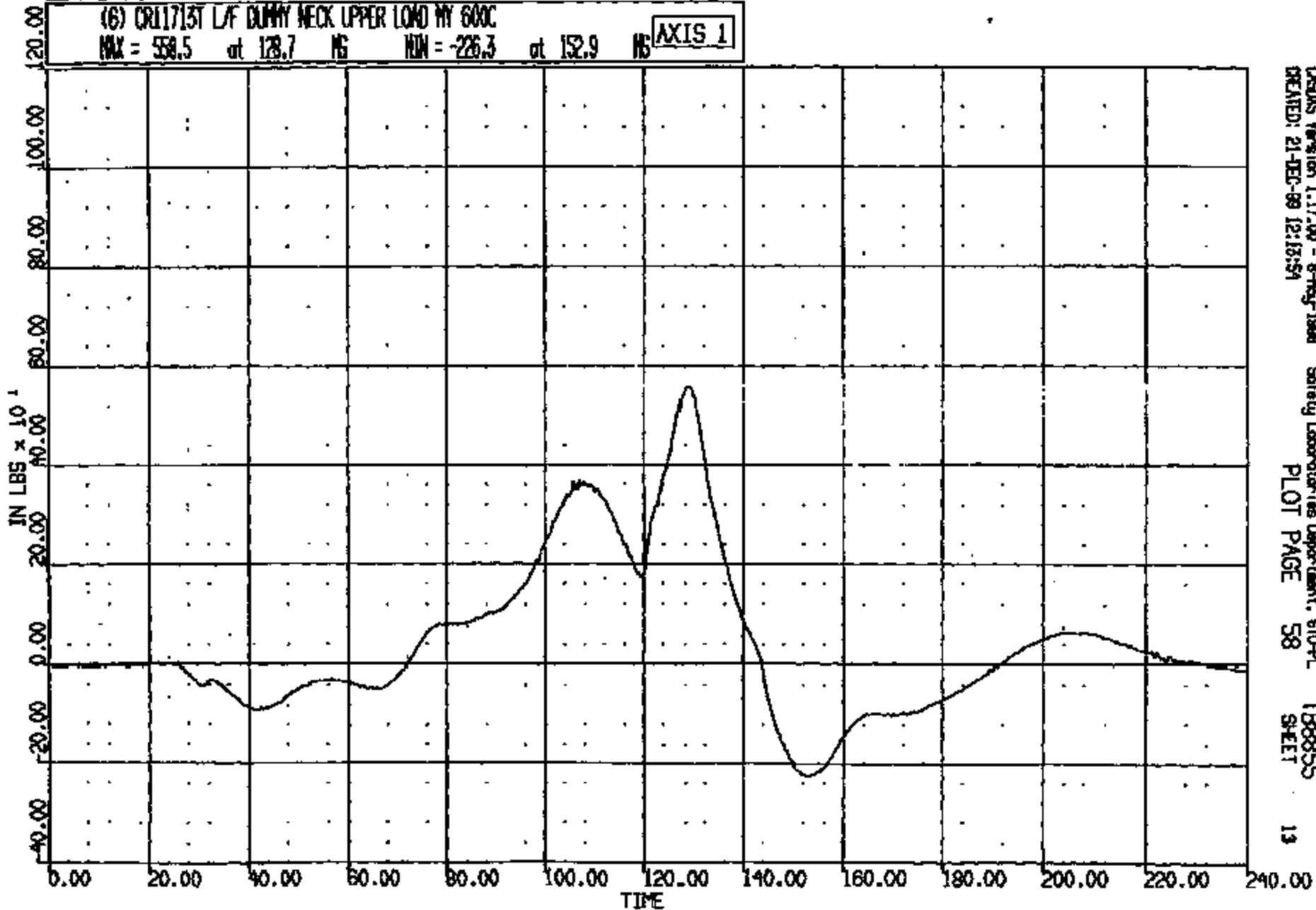
CRTS 0011713

CR R: 11713 TO: TB8855 DATE: 881221 10:58:03
2000 D-188

(6) CR11713T L/F DUMMY NECK UPPER LOAD MY 600C

MAX = 558.5 at 128.7 MS MIN = -226.3 at 152.9 MS

AXIS 1



CASUS Version 1.17.00 - 8-May-1988
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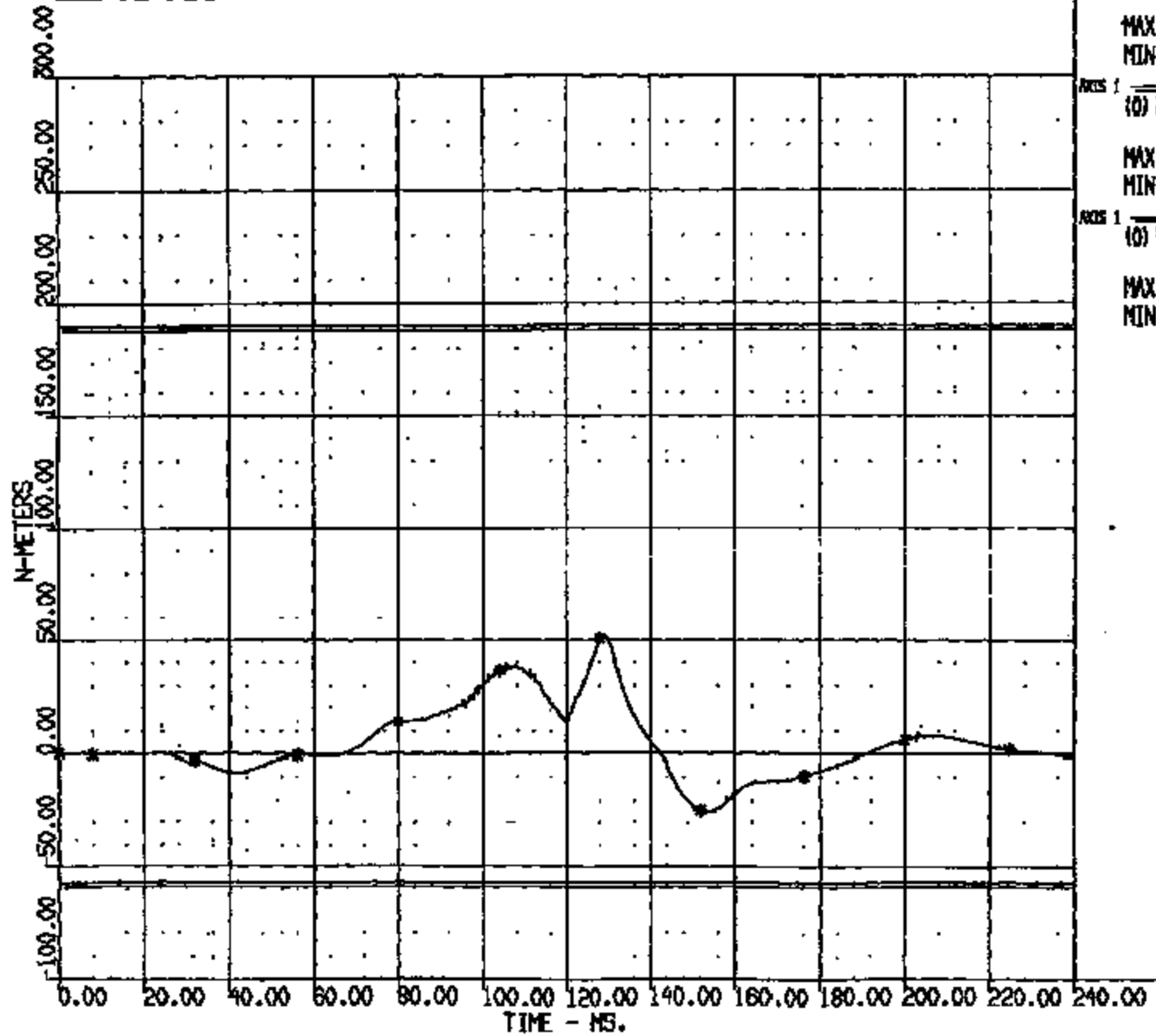
Safety Laboratories Department, 610-PL
PLOT PAGE 58

TB8855
SHEET

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CRTS 0011713

NECK BENDING MOMENT: FLEX & EXT
 OBJECT ORG: 011718T L/F DUMMY-NECK UPPER LOAD MY -800
 ORG: 011718T L/F DUMMY-NECK UPPER LOAD FX -100
 TO: T8885 DATE: 881221 10:58:08
 HYBRID III CRITERIA PLOT - BOTH X DUMMY

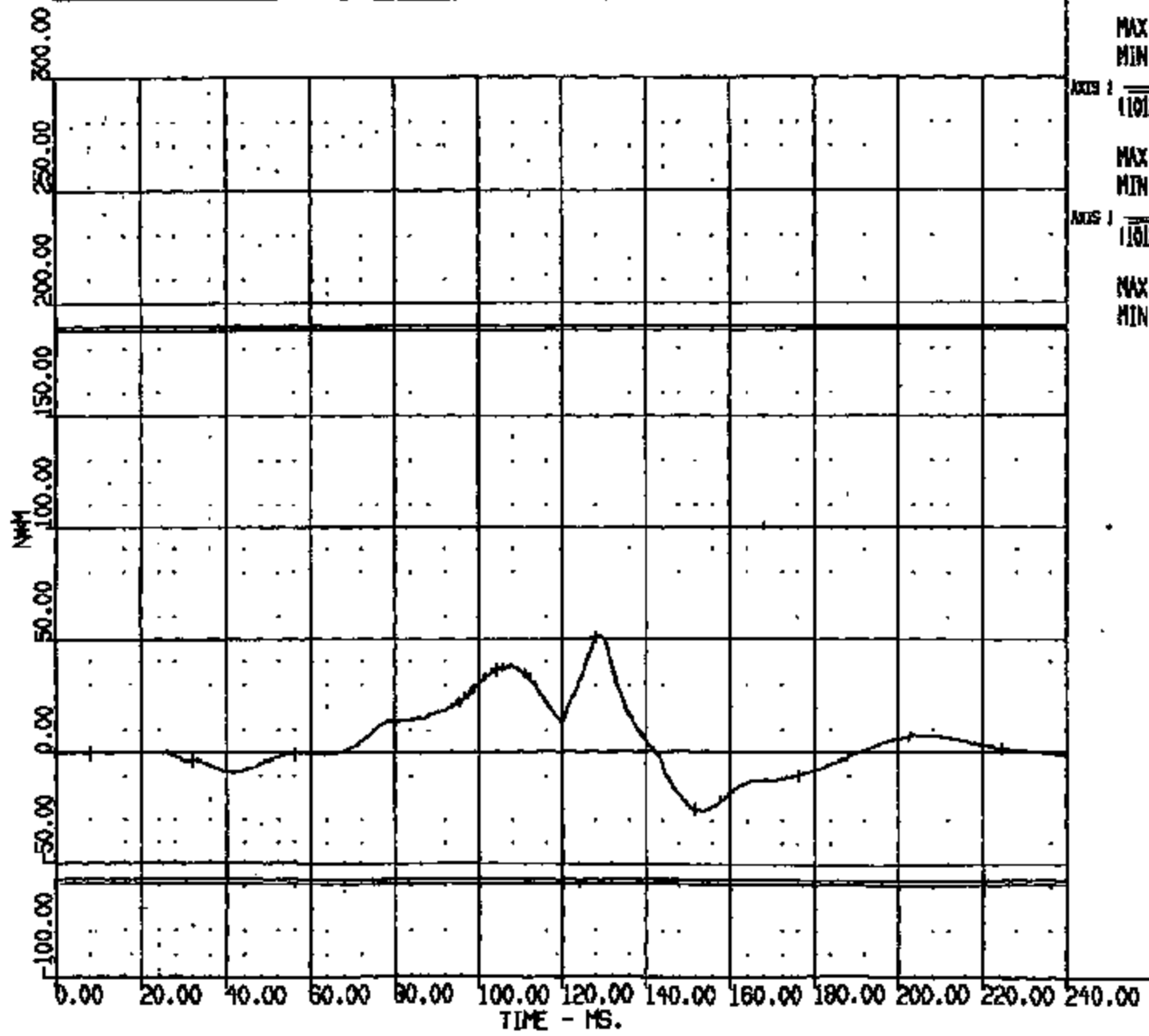


PKS 1	(10010) CORRECTED NECK MOMENT
	MAX = 51.91 at 129.2 MS
	MIN = -25.32 at 153.0 MS
PKS 1	(10) MAXIMUM NECK EXTENSION
	MAX = -57.00 at 0.0000E+00 MS
	MIN = -57.00 at 0.0000E+00 MS
PKS 1	(10) MAXIMUM NECK FLEXION
	MAX = 190.0 at 0.0000E+00 MS
	MIN = 190.0 at 0.0000E+00 MS

CASMS Version 1.17.00 - 8-May-1988 Safety Laboratories Department, 610-PL
 CREATED: 21-DEC-89 12:12:23 PLOT PAGE 31 T88855 SHEET 14

NECK BENDING MOMENT: FLEXION & EXTENSION
 OUTPUT CR11718T.L/F/DUMMY-NECK-UPPER-LOAD.MY,0000
 CR 78: 11718 TO: T00055 DATE: 881221 10:28:08
 HYBRID III CRITERIA PLOT - BOTH X DUMMY

FOREIGN

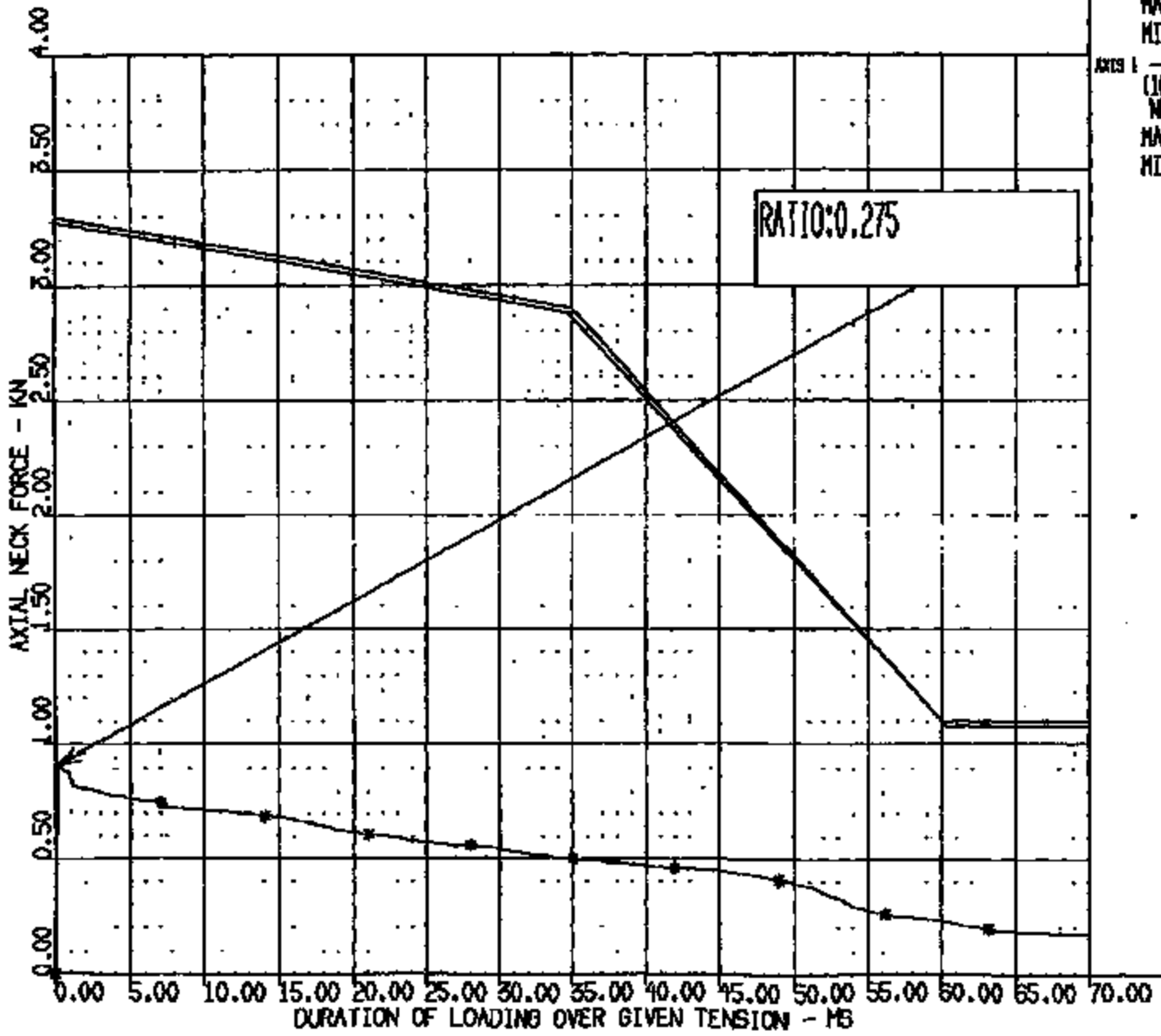


AXIS 1	(10124) CORRECTED NECK MOMENT NY
MAX = 51.91	at 129.2 MS
MIN = -25.32	at 153.0 MS
AXIS 2	(10126) MAXIMUM NECK EXTENSION
MAX = -57.00	at 0.000E+00 MS
MIN = -57.00	at 140.0 MS
AXIS 3	(10127) MAXIMUM NECK FLEXION
MAX = 190.0	at 0.000E+00 MS
MIN = 190.0	at 0.000E+00 MS

CASAS Version 1.17.00 - 8-Aug-1988 Safety Laboratories Department, 610-PL T88855
 CREATED: 21-DEC-88 12:12:46 PLOT PAGE 35 SHEET 15

AXIAL NECK TENSION LOADING
 CR R: 11713 TO: T89855 DATE: 991221 10:38:03
 HYBRID III CRITERIA PLOT - BOTH X DUMMY
 DURATION CURVES MAY INCLUDE MULTIPLE PEAKS

FOREIGN



AXIS 1
 (10120) CRITERIA LINE FOR AXIAL
 NECK TENSION LOADING
 MAX = 3.200 at 0.0000E+00 MS
 MIN = 1.100 at 60.00 MS

AXIS 2
 (10129) DURATION CRITERIA L/F DUMMY
 NECK UPPER LOAD FZ 100
 MAX = 0.9064 at 0.7998E-01 MS
 MIN = 0.0000E+00 at 0.0000E+00 MS

CASMS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, ST0-RL T89855
 CREATED: 21-DEC-99 12:12:45 PLOT PAGE 36 SHEET 16

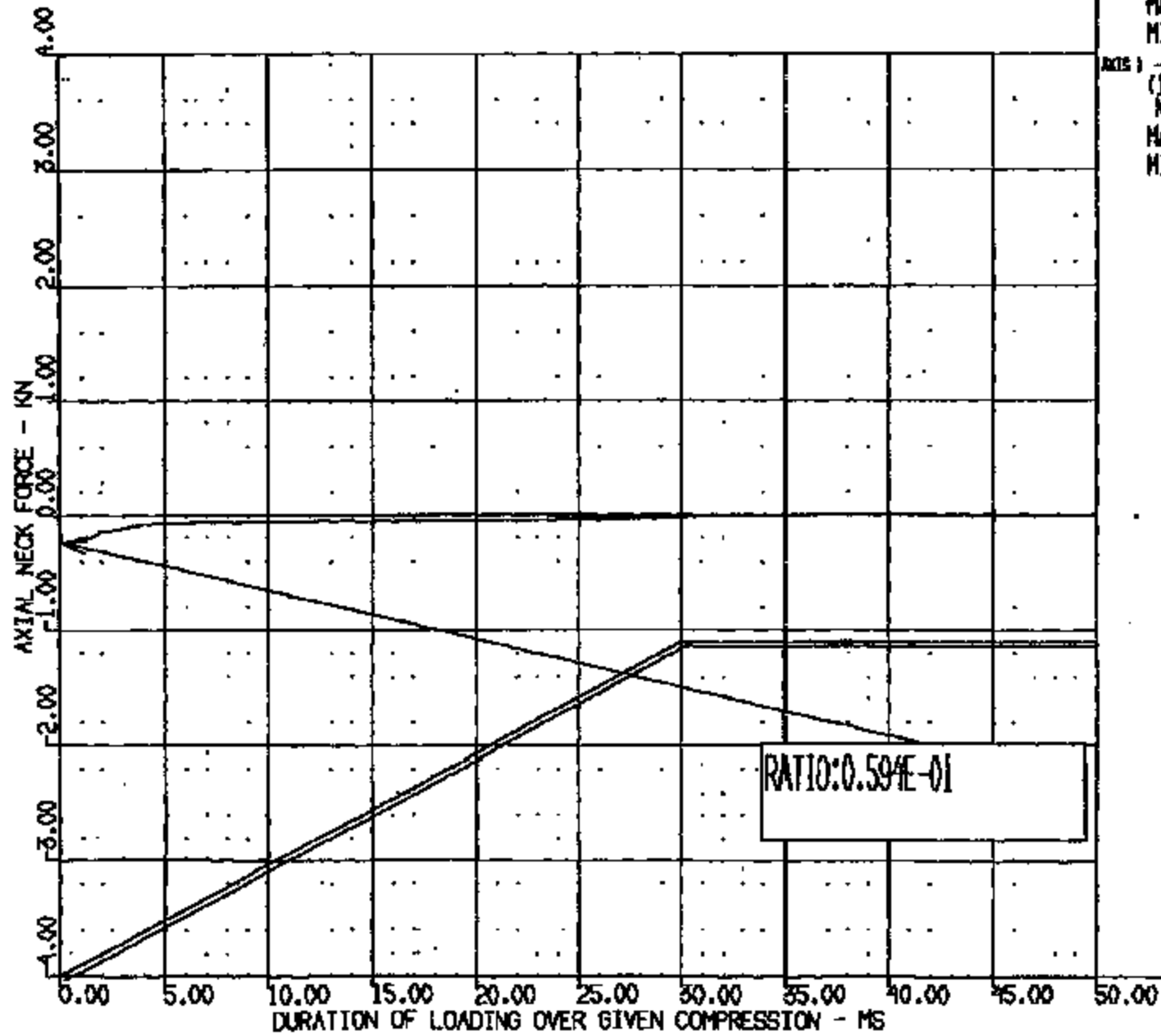
CRTS 0011713

AXIAL NECK COMPRESSION LOADING
 CR R: 11713 TO: T88855 DATE: 991221 10:58:05
 HYBRID III CRITERIA PLOT - BOTH X DUMMY
 DURATION CURVES MAY INCLUDE MULTIPLE PEAKS

FOREIGN

PKTS I
 (10137) CRITERIA LINE FOR AXIAL
 NECK COMPRESSION LOADING
 MAX = -1.100 at 30.00 MS
 MIN = -4.000 at 0.0000E+00 MS

PKTS J
 (10138) DURATION CRITERIA L/F DUMMY
 NECK UPPER LOAD FZ 100
 MAX = 0.0000E+00 at 0.0000E+00 MS
 MIN = -.2370 at 0.7999E-01 MS



CAGS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, G10-PL T88855
 CREATED: 21-DEC-99 12:12:47 PLOT PAGE 37 SHEET 17

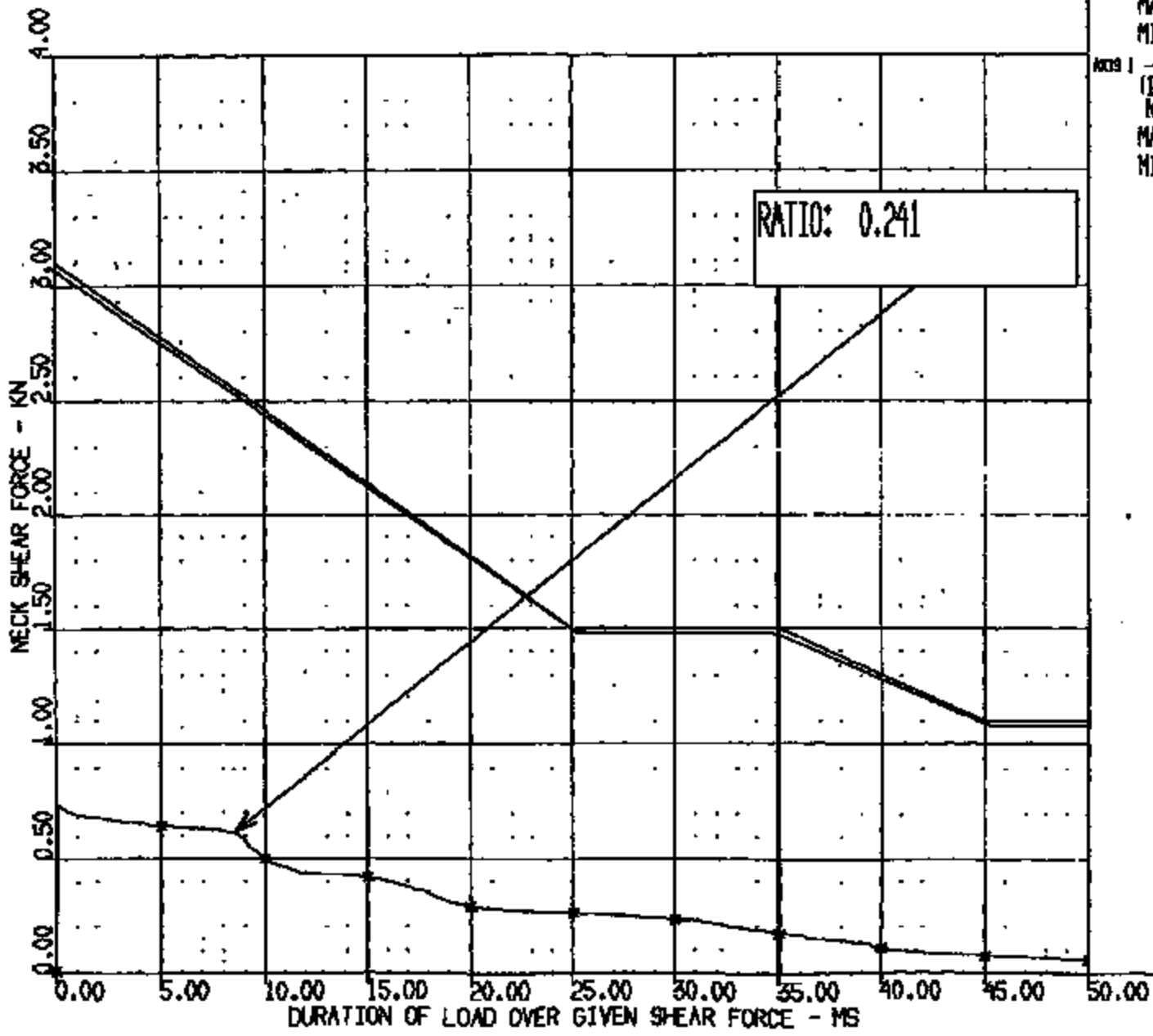
CRIS 0011713

FORE NECK WRT HEAD SHEAR FORCE
 CR R: 11713 TO: TB8855 DATE: 991221 10:38:05
 HYBRID III CRITERIA PLOT - 50TH % DUMMY
 DURATION CURVES MAY INCLUDE MULTIPLE PEAKS

FOREIGN

NO5 |
 (10144) CRITERIA LINE FOR FORE
 NECK WRT HEAD SHEAR FORCE
 MAX = 3.100 at 0.0000E+00 MS
 MIN = 1.100 at 45.00 MS

NO9 |
 (10145) DURATION CRITERIA L/F DUMMY
 NECK UPPER LOAD FX 100
 MAX = -0.7295 at 0.7899E-01 MS
 MIN = -0.0000E+00 at 0.0000E+00 MS



OASIS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL TB8855
 CREATED: 21-DEC-99 12:12:48 PLOT PAGE 38 SHEET 18

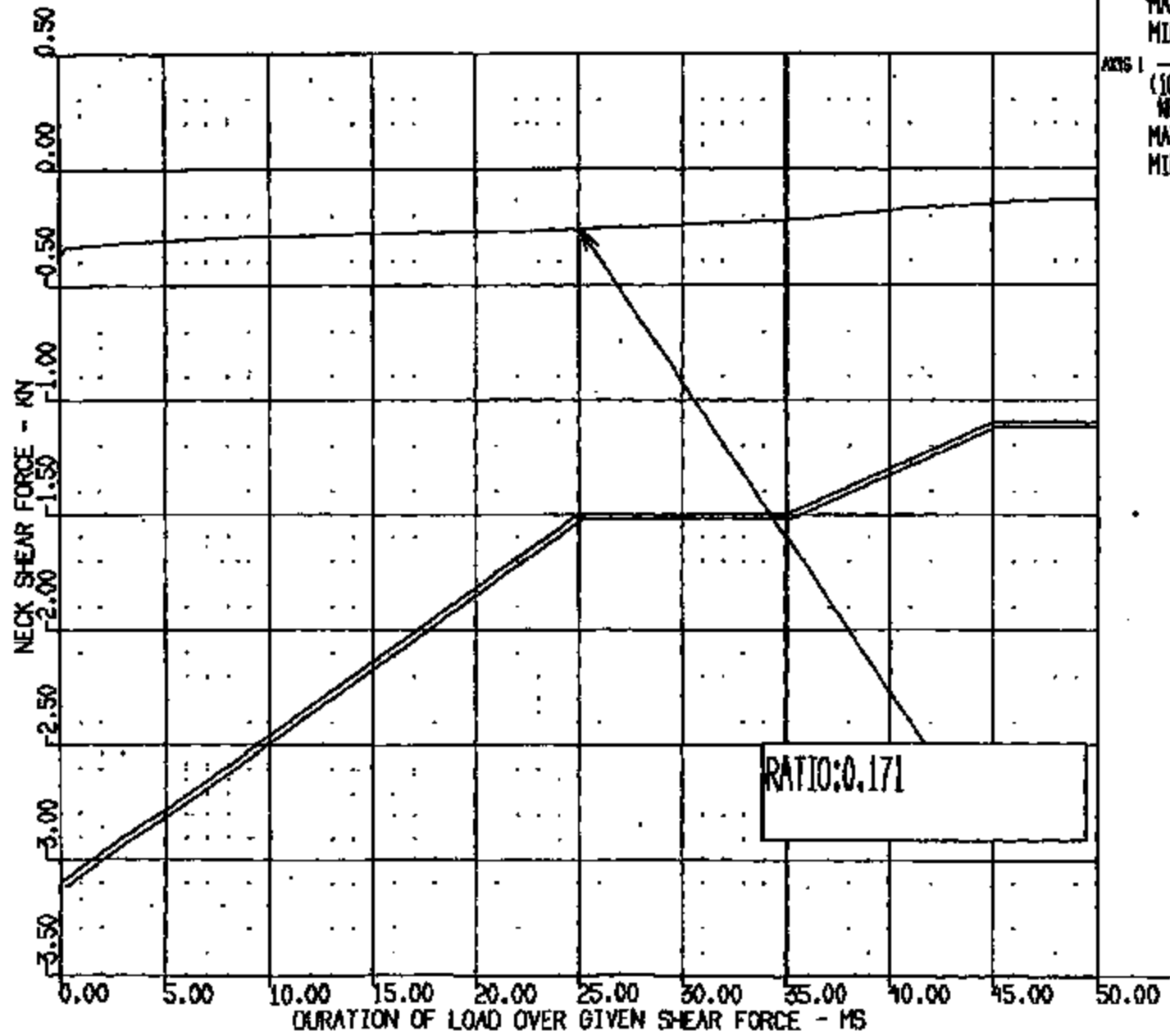
CRIS 0011713

AFT NECK WRT HEAD SHEAR FORCE
 CR R: 11713 TO: TB8855 DATE: 091221 10:38:03
 HYBRID III CRITERIA PLOT - 50TH X DUMMY
 DURATION CURVES MAY INCLUDE MULTIPLE PEAKS

FOREIGN

AXIS 1
 (30PS) CRITERIA LINE FOR AFT NECK
 WRT HEAD SHEAR FORCE
 MAX =-1.00 at 45.00 MS
 MIN =-3.100 at 0.0000E+00 MS

AXIS 2
 (10150) DURATION CR11713T L/F DUMMY
 NECK UPPER LOAD FX 100
 MAX =0.0000E+00 at 0.0000E+00 MS
 MIN =-.3613 at 0.7999E-01 MS



DCSMS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, STD-FL TB8855
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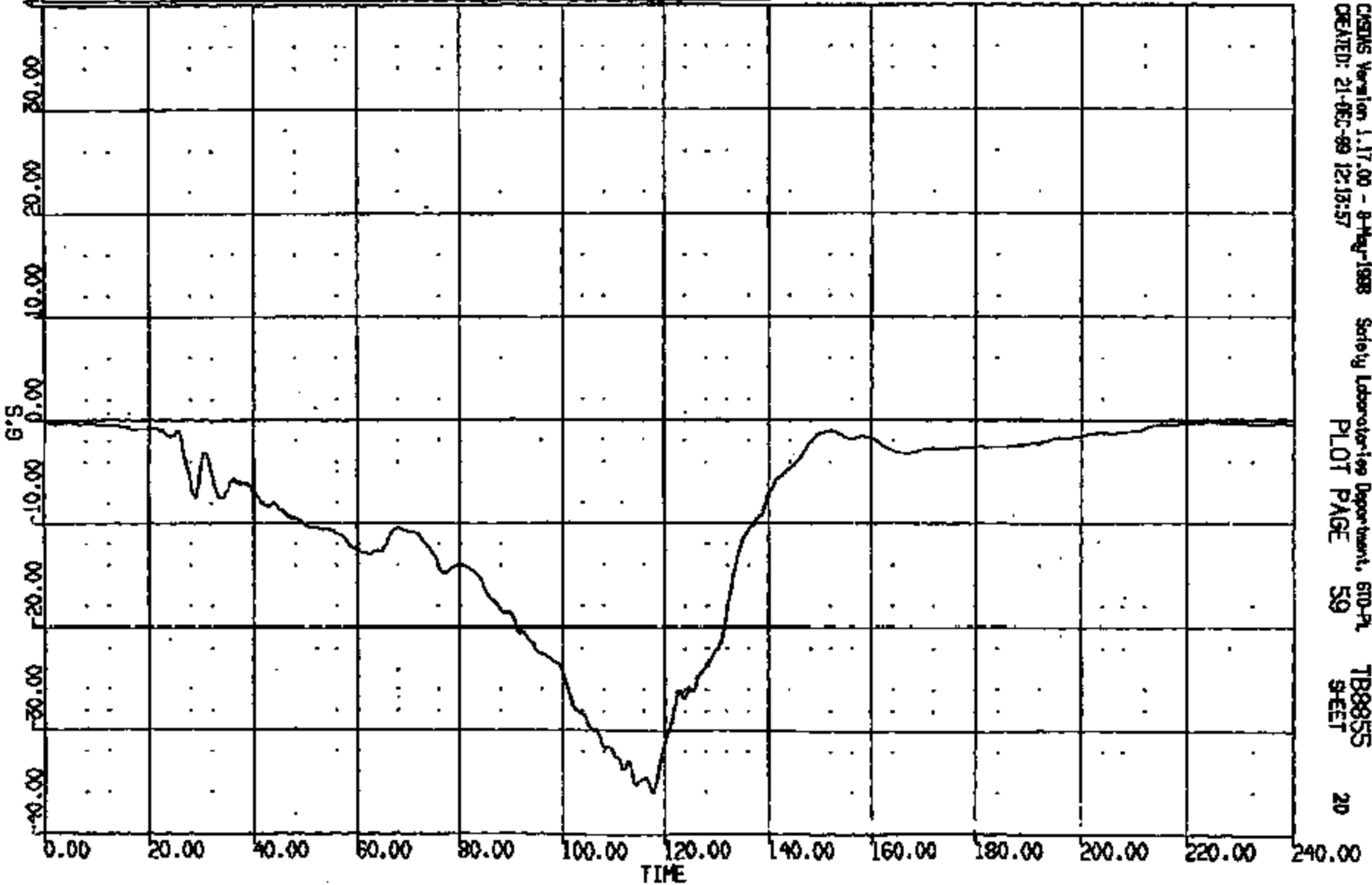
CRIS 0011713

CR R: 11715 TO: TB8855 DATE: 881221 10:38:05
2000 D-198

(?) CR11715T L/F DUMMY CHEST LONG 180C

MAX = -.317E-01 at 221.3 MS MIN = -35.04 at 117.7 MS

AXIS 1



CRIMS Version 1.17.00 - 8-May-1988
CREATED: 21-DEC-89 12:13:57

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PLOT PAGE 59

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SHEET

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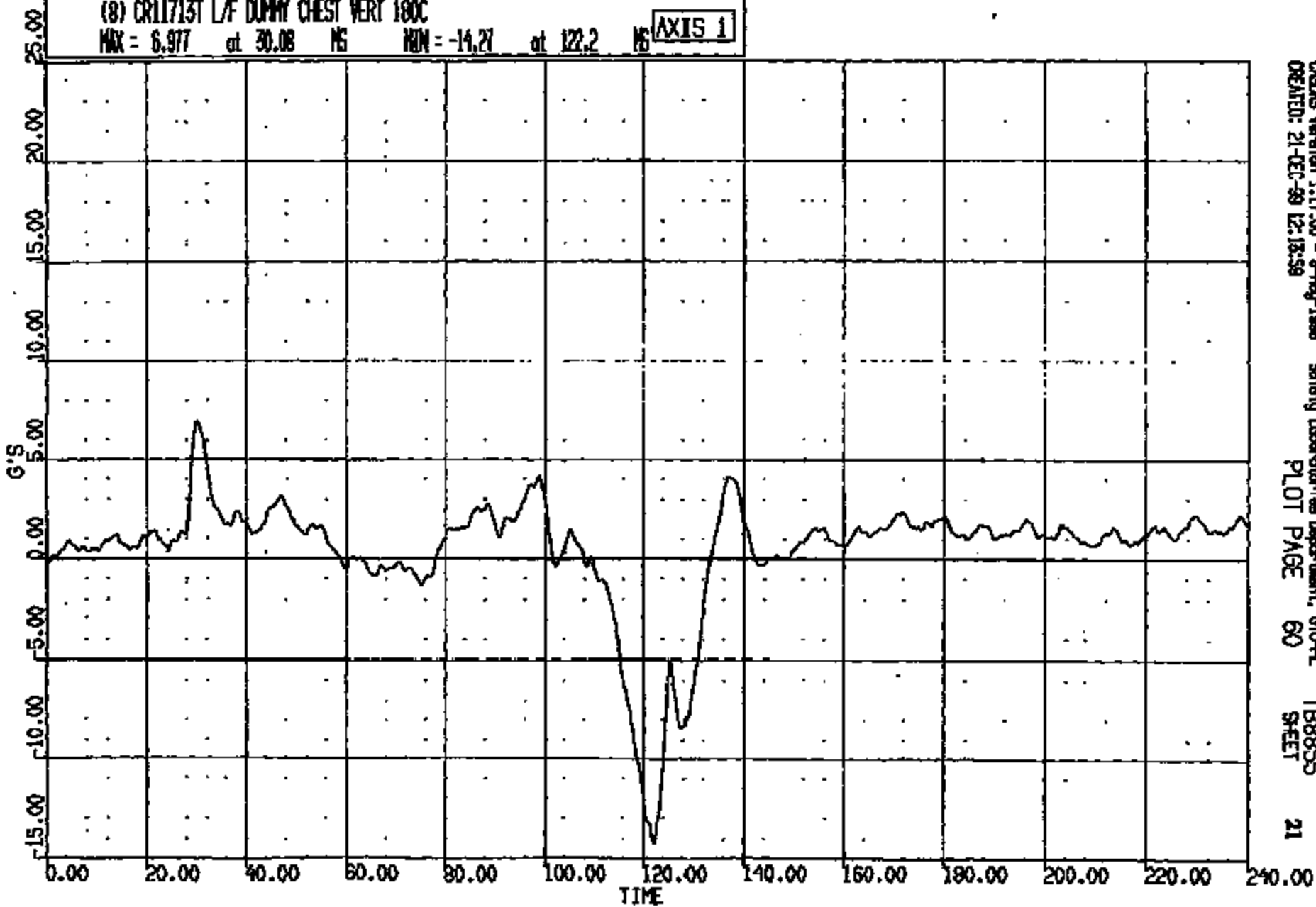
CRIS 0011713

CR R: 11713 TO: TB8858 DATE: 991221 10:36:03
2000 0-188

(8) CR11713T L/F DUMMY CHEST VERT 180C

MAX = 6.977 at 30.08 MS MIN = -14.21 at 122.2 MS

AXIS 1



CRAMS Version 1.17.00 - 9-May-1998
CREATED: 21-DEC-99 12:18:59

Safety Laboratory Department, G10-PL
PLOT PAGE 60

TB8855
SHEET

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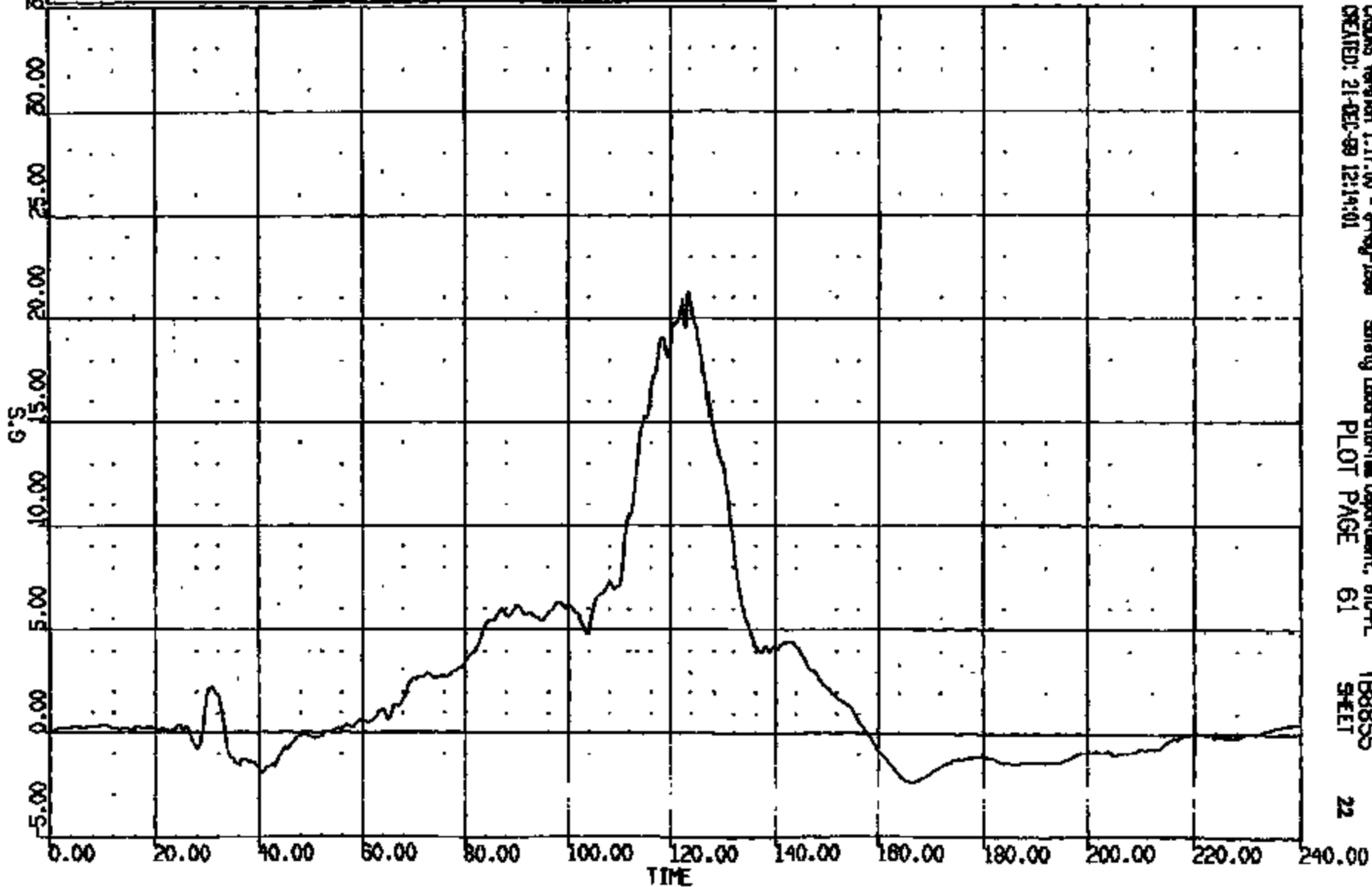
CR11713

CR R: 11713 TO: TB8855 DATE: 991221 10:38:08
2000 D-188

(9) CR11713T L/F DUMMY CEST LAT 180C

MAX = 21.27 at 123.6 MS MIN = -2.374 at 166.6 MS

AXIS 1



CASAS Version 1.17.00 - 9-May-1999
CREATED: 21-DEC-99 12:14:01

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PLOT PAGE 61

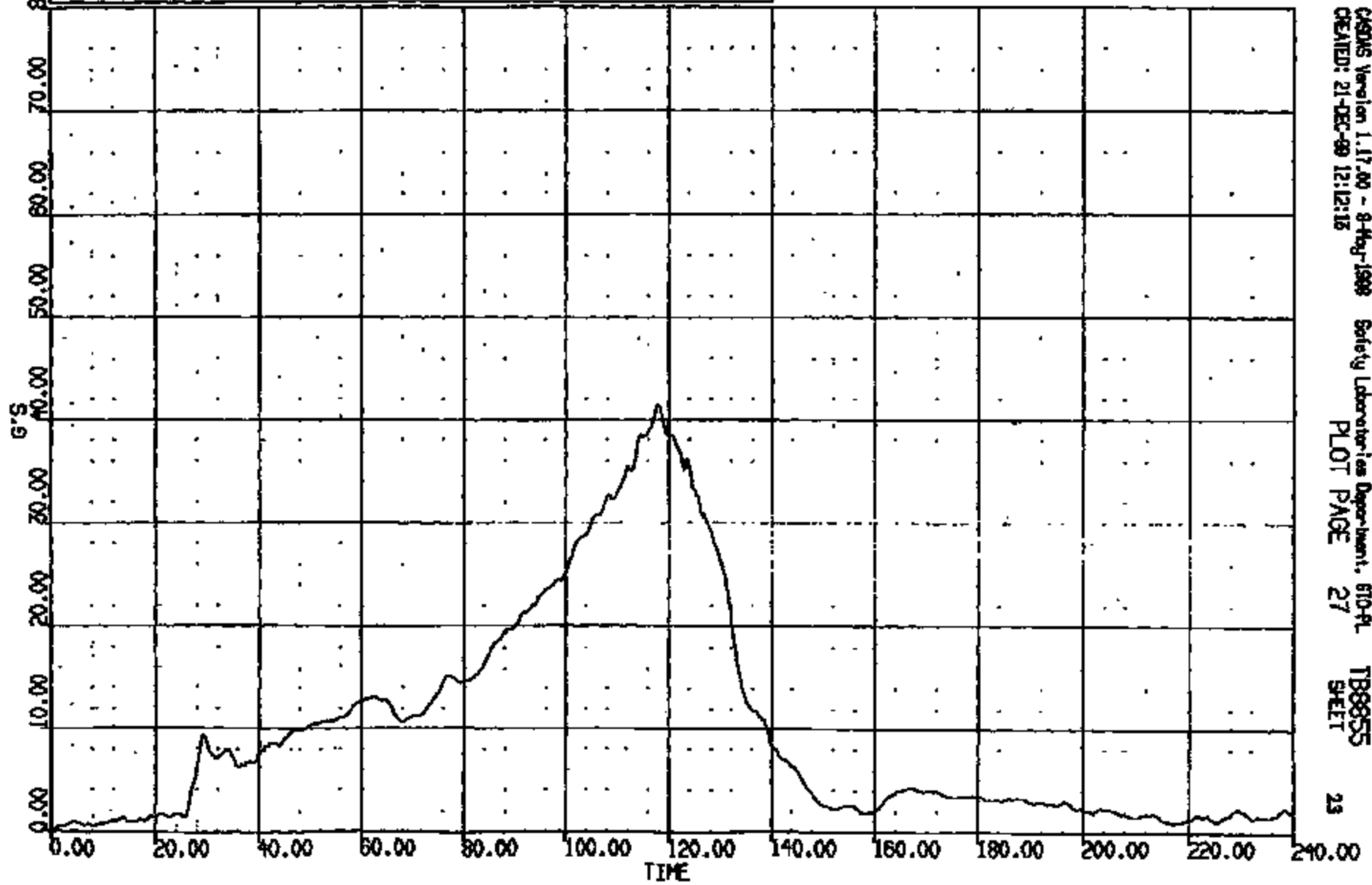
TB8855
SHEET

22

CR11713

CR R: 11715 TO: T8855 DATE: 991221 10:50:05
2000 D-126
CUMDUR = 39.057 Duration time = 2.9989

(10005) CR11715T L/F DUMMY CHEST RES 180C
MAX = 41.46 at 118.0 NS MIN = 0.2067 at 0.6400 NS **AXIS 1**

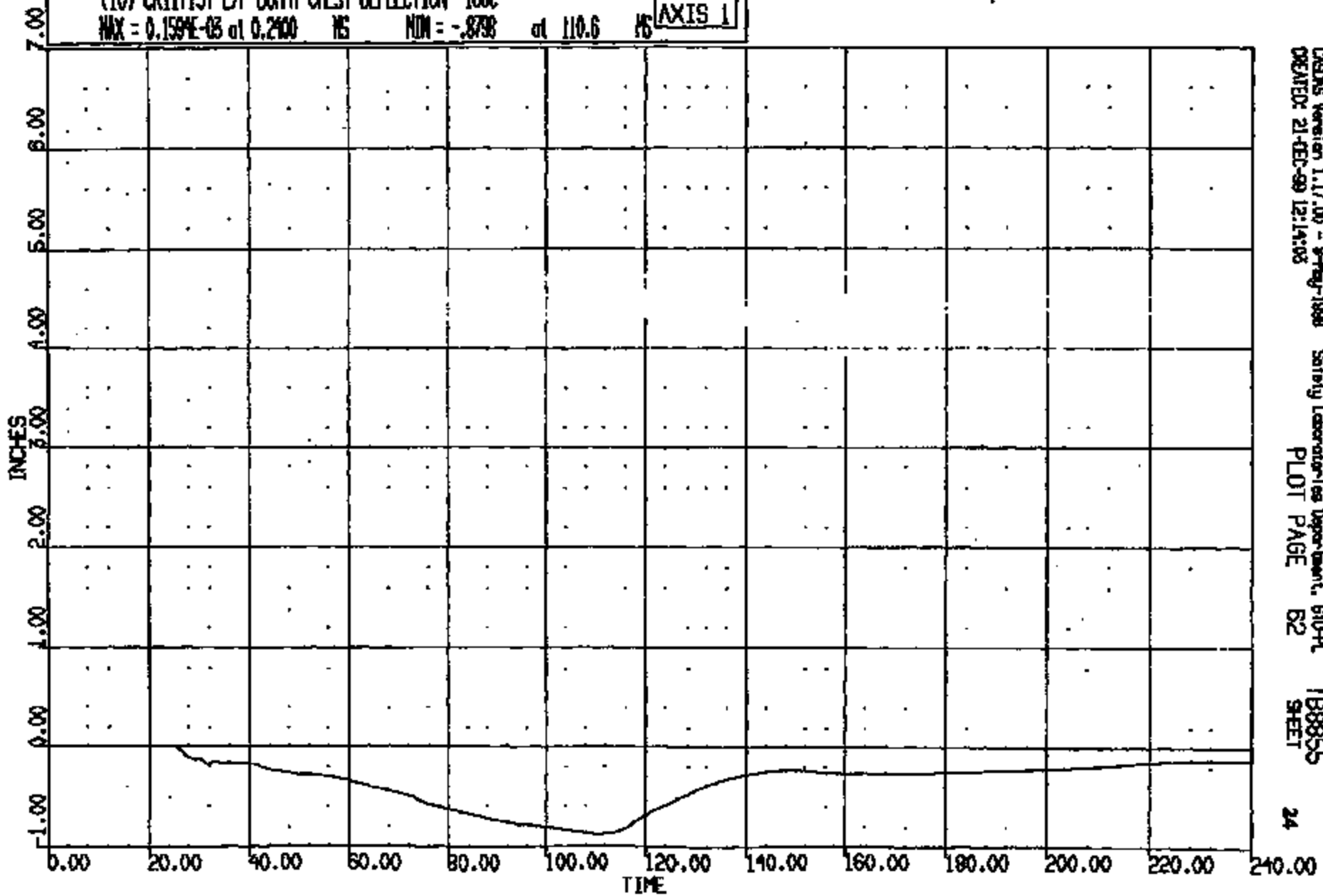


CASAS Version 1.17.00 - 8-Feb-1998 Safety Laboratories Department, 610-PL
CREATED: 21-DEC-99 12:12:15 PLOT PAGE 27 SHEET 23

CRTS 0011713

CR R: 11713 TO: T8855 DATE: 091221 10:58:03
2000 D-188

(10) CR11713T L/F DUMMY CHEST DEFLECTION 180C
MAX = 0.1584E-03 at 0.2400 MS MIN = -.8738 at 110.6 MS **AXIS 1**



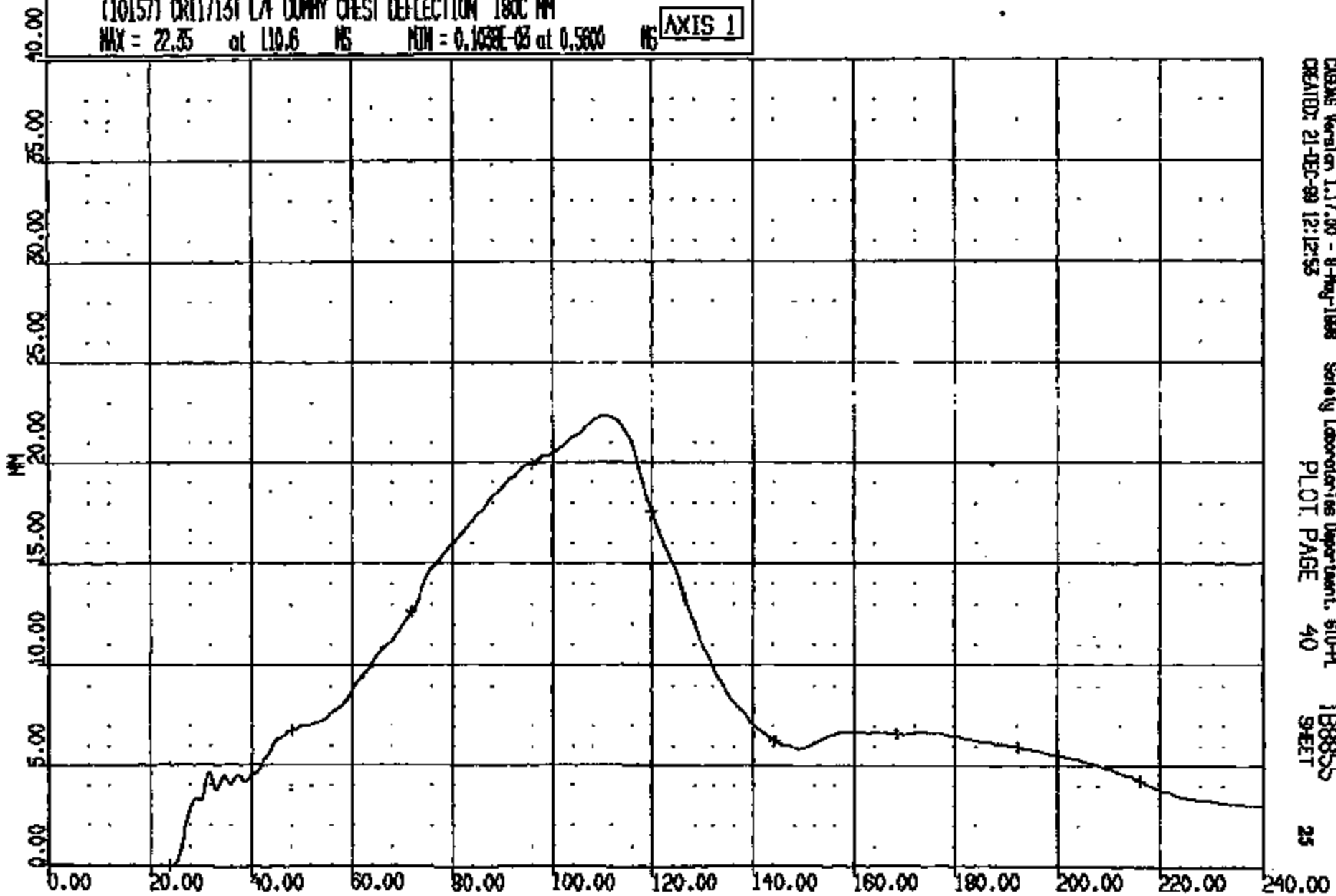
CRS Version 1.17.00 - 9-May-1998 Safety Laboratories Department, 610-PL T8855
CREATED: 21-DEC-99 12:14:38 PLOT PAGE 62 SHEET

THORAX COMPRESSION CRITERION

(10157) CR11713T L/F DUMMY CHEST DEFLECTION 180C MM

MAX = 22.35 at 110.6 MS MIN = 0.1639E-03 at 0.5600 MS

AXIS 1



CADDS Version 1.17.00 - 8-Aug-1998
CREATED: 21-DEC-99 12:12:53

Safety Laboratories Department, 610-PL
PLOT PAGE 40

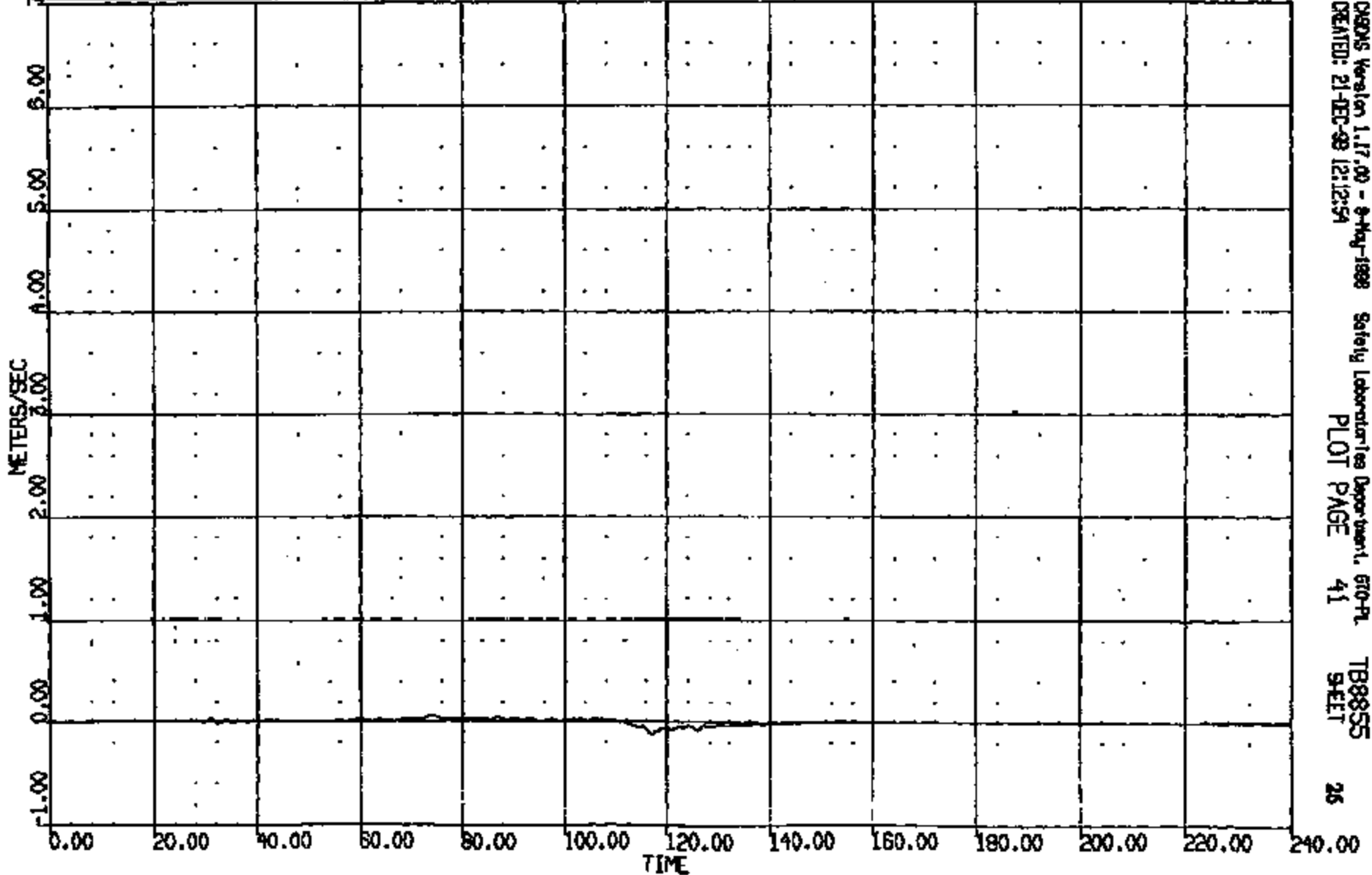
TB8855
SHEET

CR R: 11715 TO: TB8855 DATE: 991221 10:38:03
2000 D-198

EXPERIMENTAL

(10158) CR11715T L/F DRY CHEST DEFLECTION (80C VMC/E) M/S
MAX = 0.5308E-01 at 74.08 MS MIN = -.1200 at 117.2 MS

AXIS 1



CRSIS Version 1.17.00 - 9-May-1998
CREATED: 21-DEC-98 12:12:54

Safety Laboratories Department, 670-PL
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SHEET

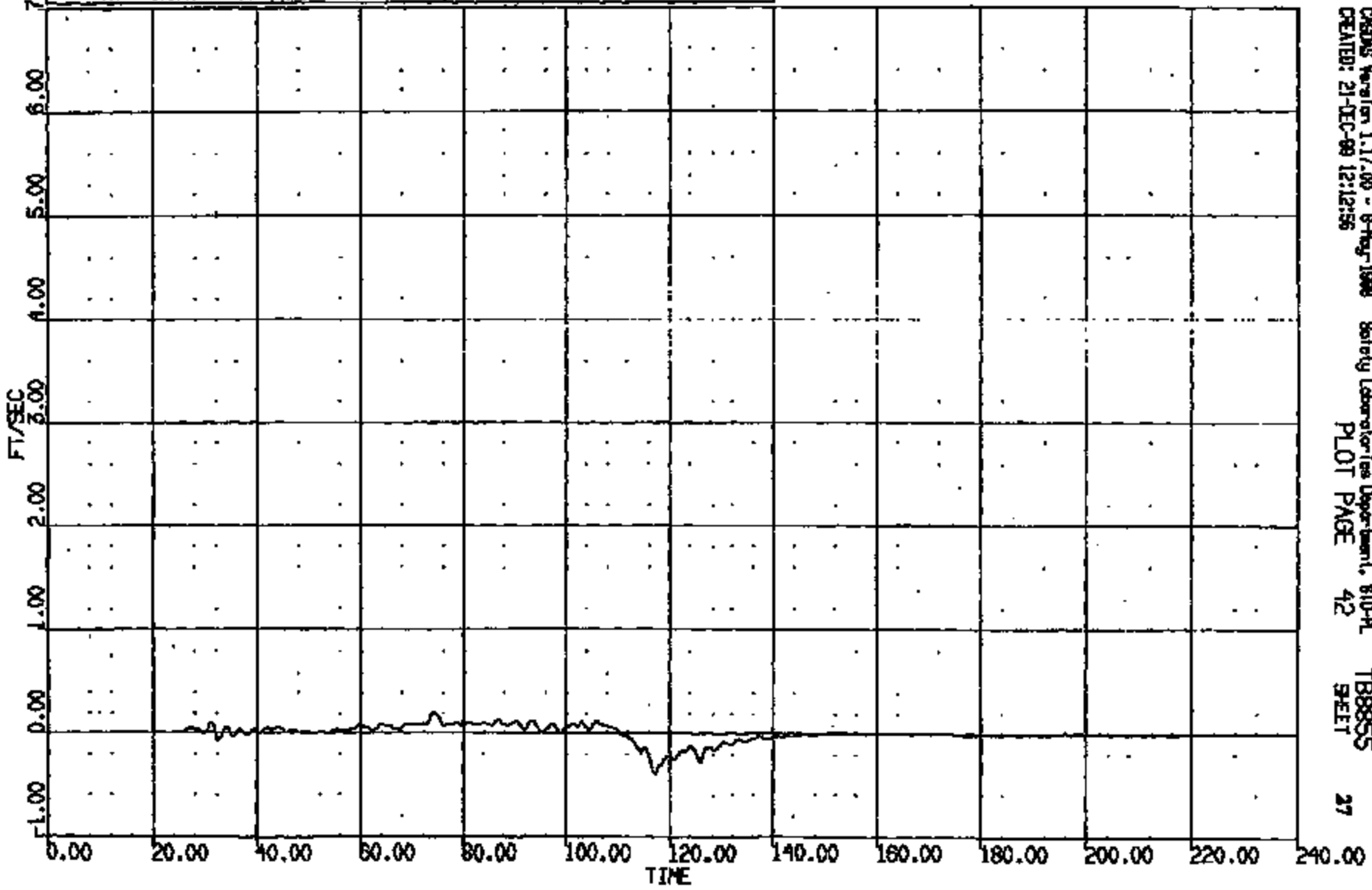
26

CR R: 11713 TO: TB8855 DATE: 991221 10:38:03
2000 D-198

EXPERIMENTAL

(10159) CR11713T L/F DWY CHEST DEFLECTION 180C V/CIE) F/S
MAX = 0.1965 at 74.08 MS MIN = -.3935 at 117.2 MS

AXIS 1

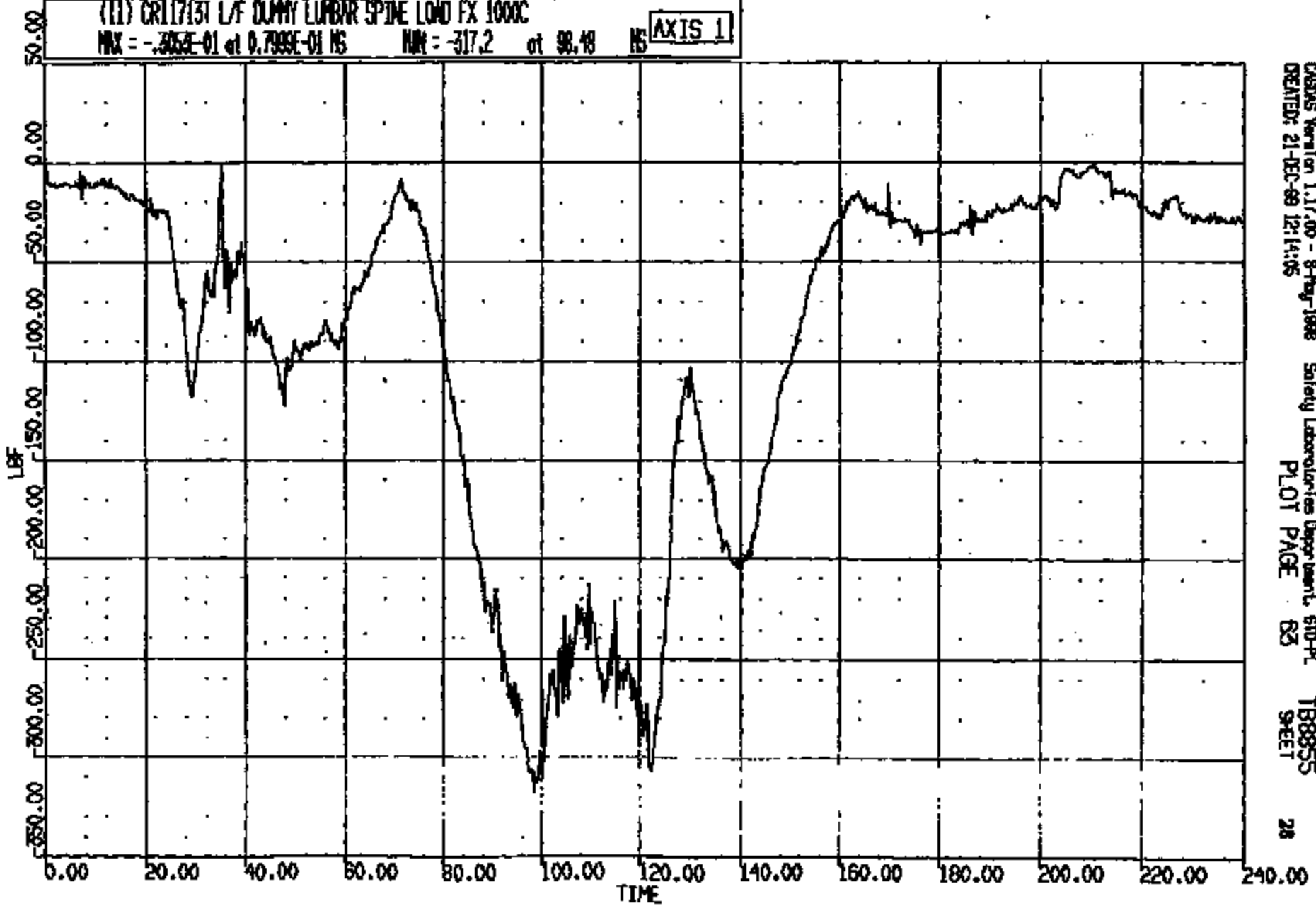


CRS05 Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 810-A
CREATED: 21-DEC-99 12:12:55 PLOT PAGE 42 TB8855 SHEET 27

CRTS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:56:05
2000 D-198

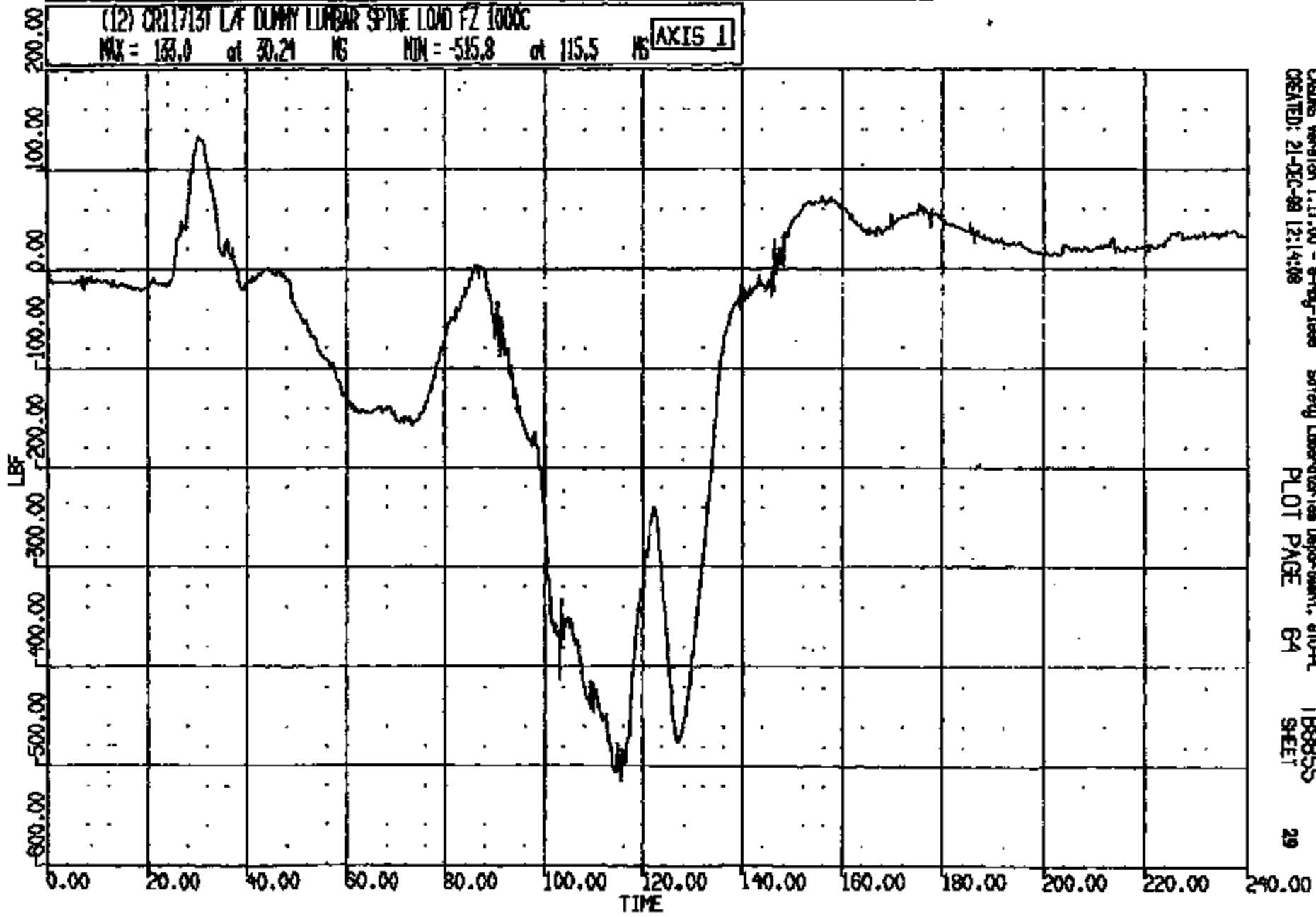
(11) CR117131 L/F DUMMY LUMBAR SPINE LOAD FX 1000C
MAX = -.305E-01 at 0.799E-01 NS MIN = -317.2 at 98.48 NS **AXIS 1**



CASAS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
CREATED: 21-DEC-99 12:14:05
PLOT PAGE 63 SHEET 28

CR11713

CR R: 11713 TO: TB8855 DATE: 891221 10:56:05
2000 D-186

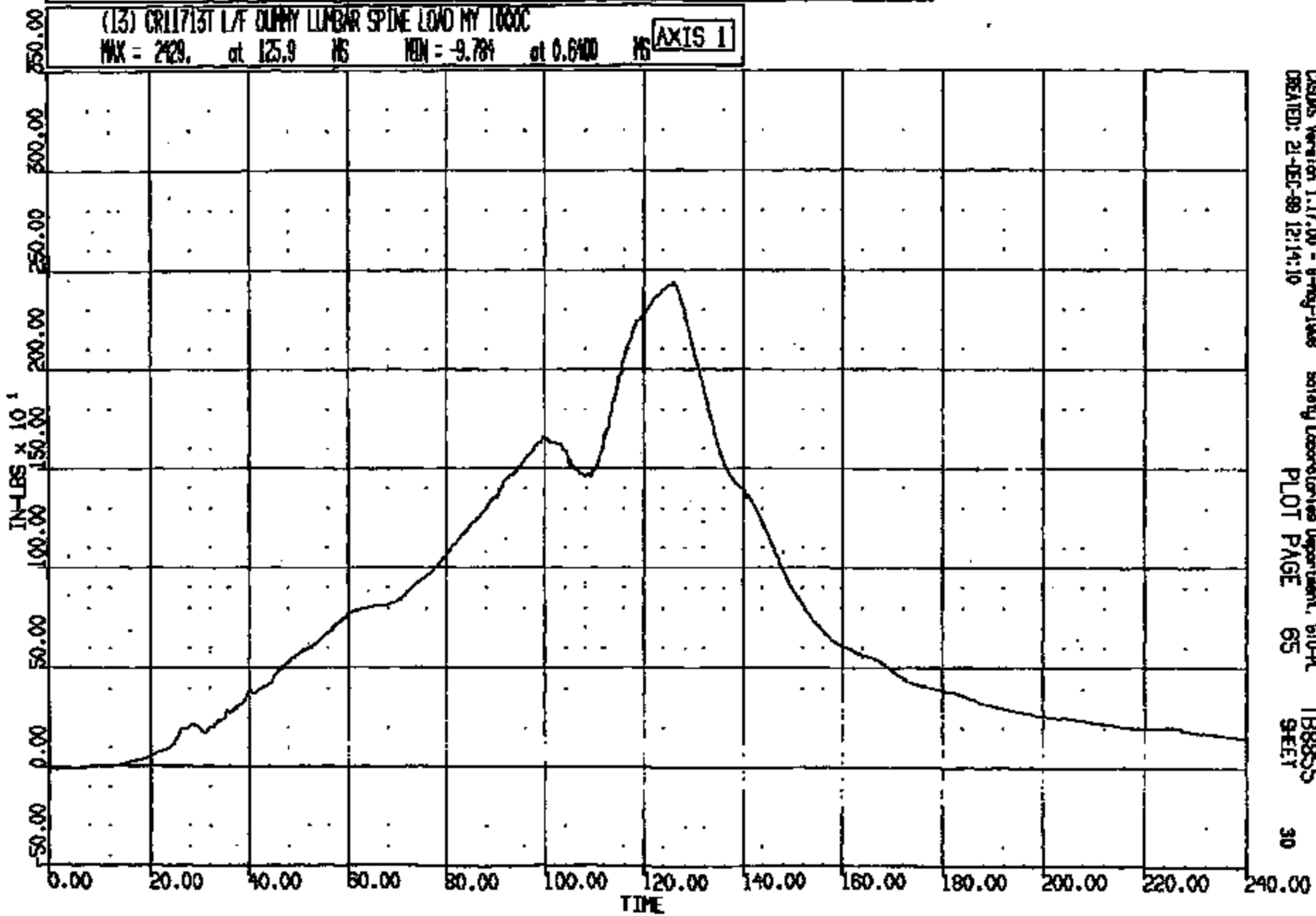


CASING Version 1.17.00 - 8-May-1989 Safety Laboratories Department, 810-A
CREATED: 21-DEC-89 12:14:08 PLOT PAGE 64 TB8855
SHEET 29

CR15 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:36:03
2000 D-188

(13) CR11713T L/F DUMMY LUMBAR SPINE LOAD MY 1000C
MAX = 2429. at 125.9 MS MIN = -9.784 at 0.6400 MS **AXIS 1**



CRSUS Version 1.17.00 - 8-Aug-1988 Safety Laboratories Department, 610-A
CREATED: 21-DEC-89 12:14:10 PLOT PAGE 65 TB8855 SHEET 30

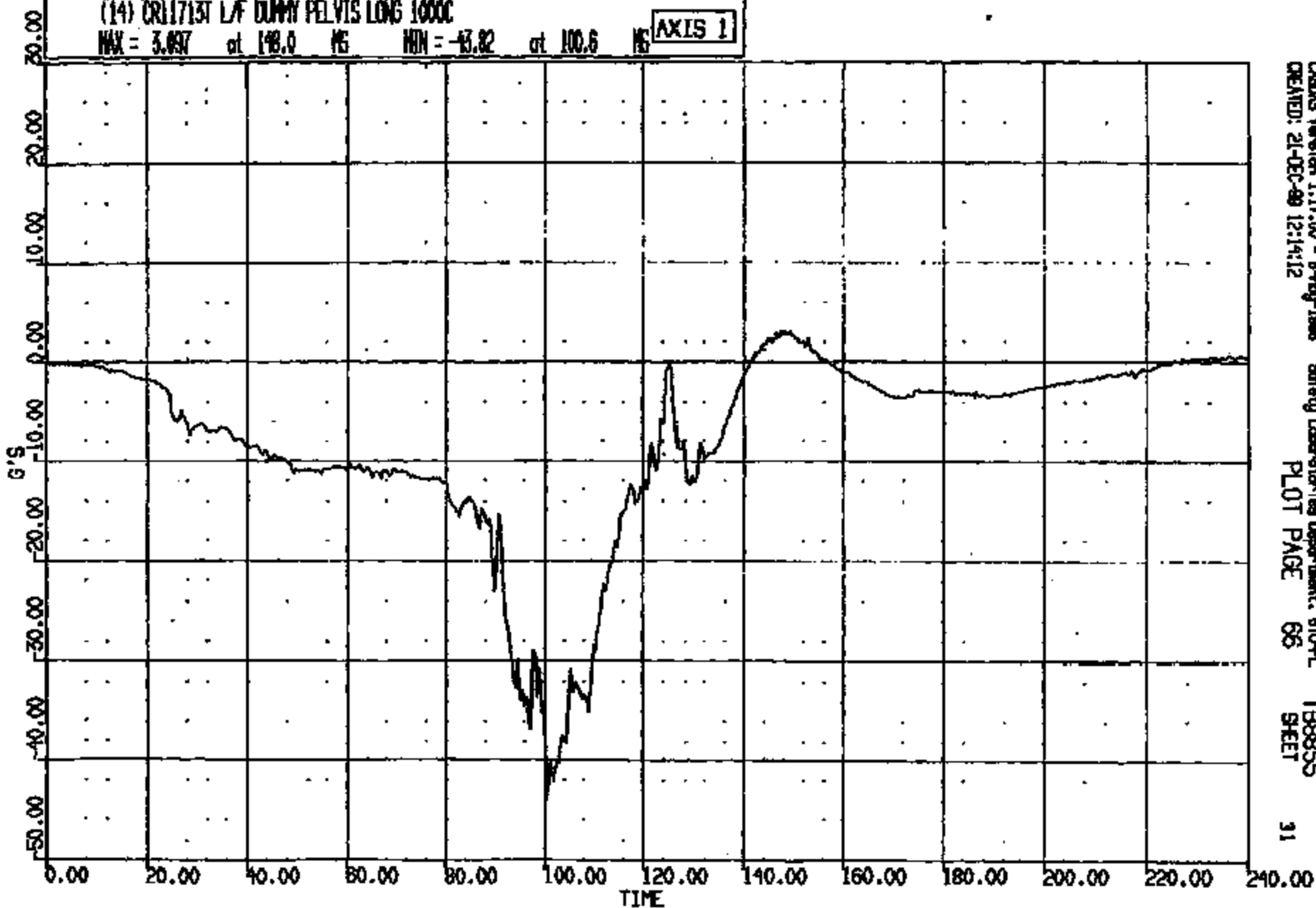
CRIS 0011713

CR # : 11713 TO: T88855 DATE: 891221 10:55:03
R000 0-188

(14) CR11713T LAF DUMMY PELVIS LONG 1000C

MAX = 3.037 at 148.0 MS MIN = -43.82 at 100.6 MS

AXIS 1



CASRS Version 1.17.00 - 8-Feb-1988
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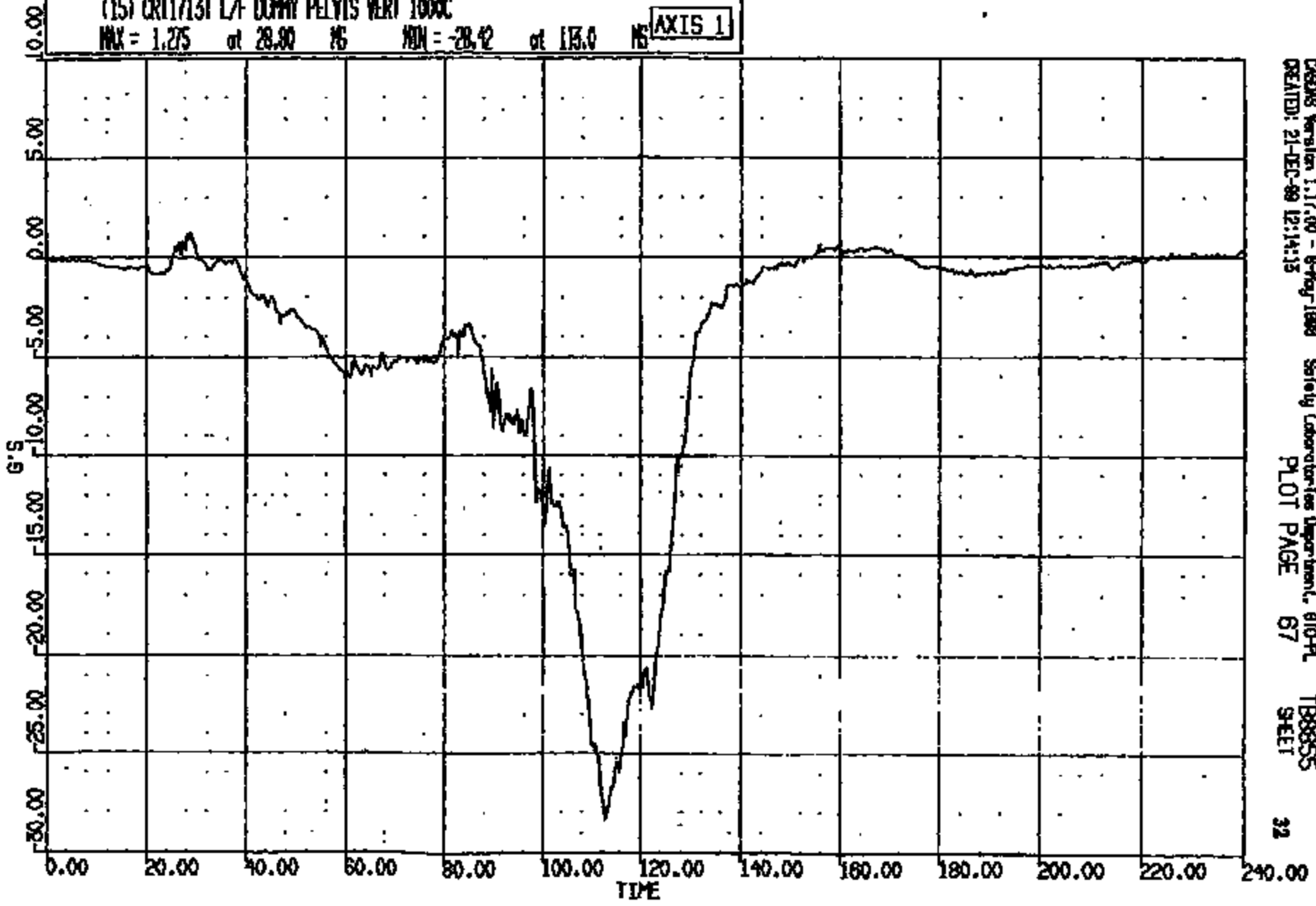
T88855
SHEET

91

CRIS 0011713

CR R: 11713 TO: T8885 DATE: 991221 10:56:08
2000 D-188

(15) CR11713T L/F DUMMY PELVIS VERT 1000C
MAX = 1.275 at 28.90 MS MIN = -28.42 at 113.0 MS **AXIS 1**

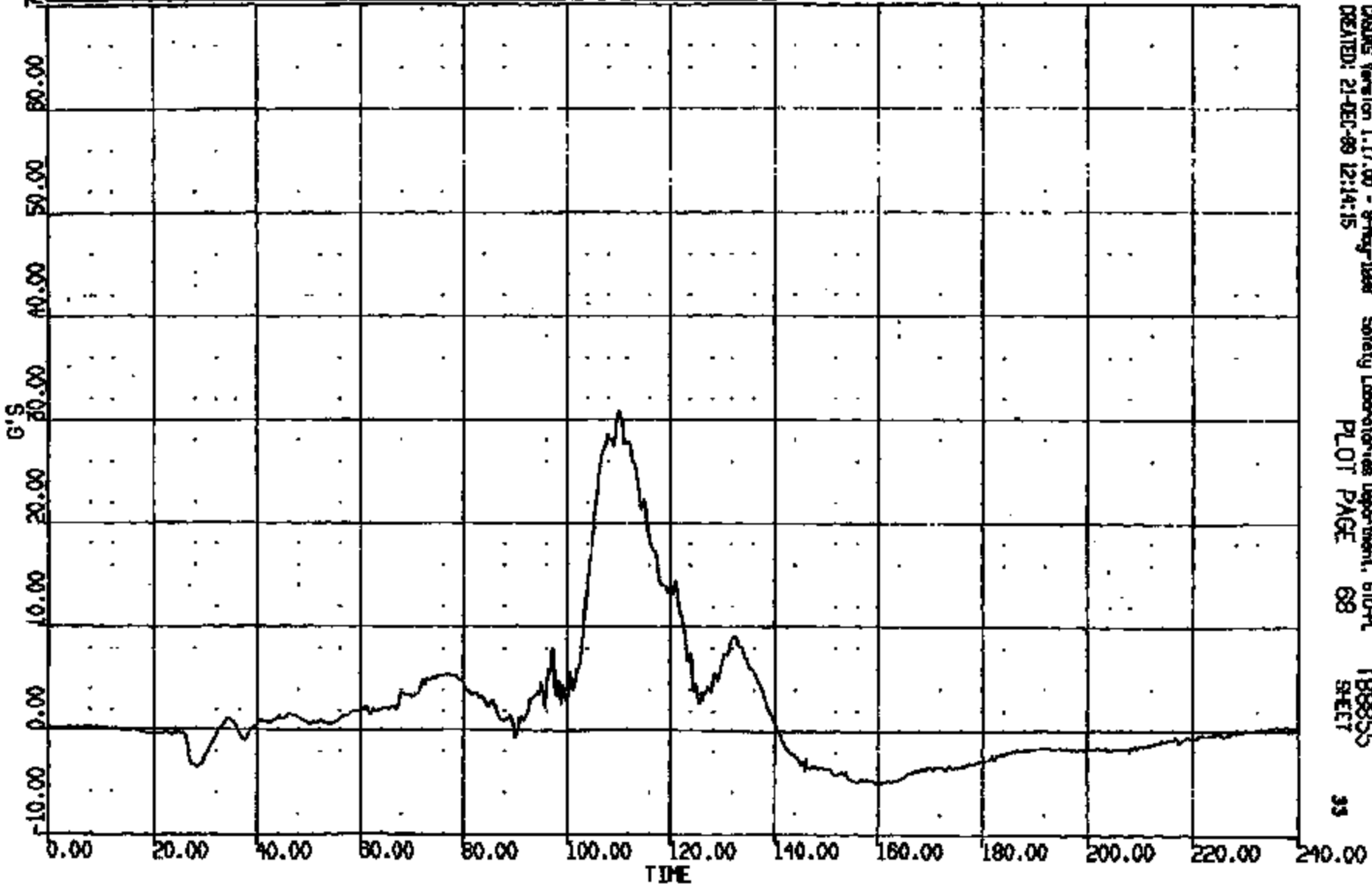


CASAB Version 1.17.00 - 6-Aug-1999 Safety Laboratories Department, 610-PL
CREATED: 21-DEC-99 12:14:15
PLOT PAGE 67
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SHEET
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CR15 0011713

CR R: 11713 TO: T8855 DATE: 881221 10:58:05
2000 D-186

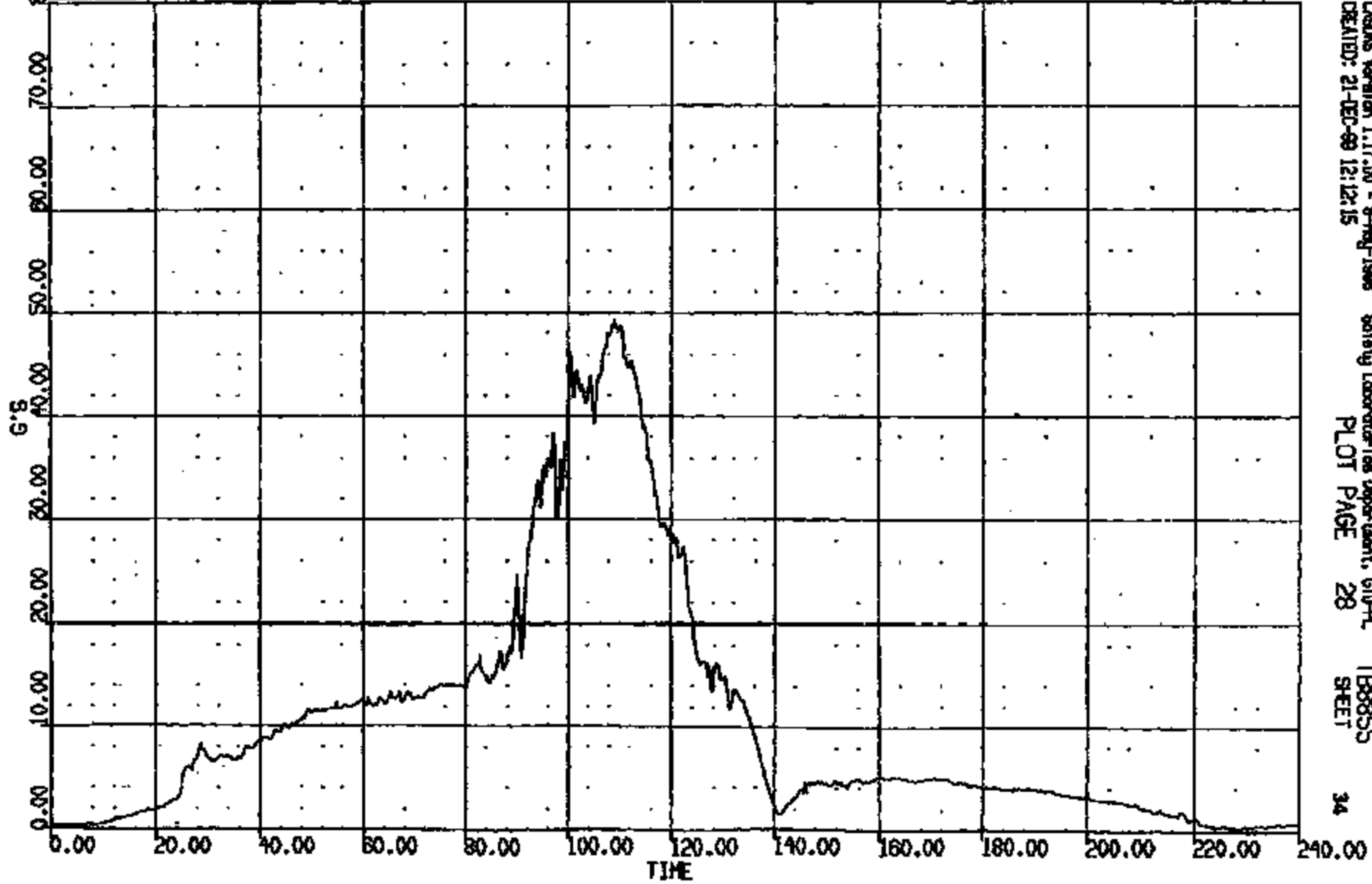
(16) CR117131 LF DUMMY PELVIS LAT 1000C
MAX = 30.78 at 110.1 MS MIN = -5.046 at 139.8 MS **AXIS 1**



CASMG Version 1.17.00 - 9-May-1988 Safety Laboratories Department, 610-PL T88855
CREATED: 21-DEC-88 12:14:15 PLOT PAGE 68 SHEET 33

CR R: 11713 TO: T88855 DATE: 891221 10:38:05
2000 D-100

(10007) CR11713T L/F DUMMY PELVIS RES 1000C
MAX = 49.25 at 103.0 MS MIN = 0.1616 at 228.0 MS **AXIS 1**

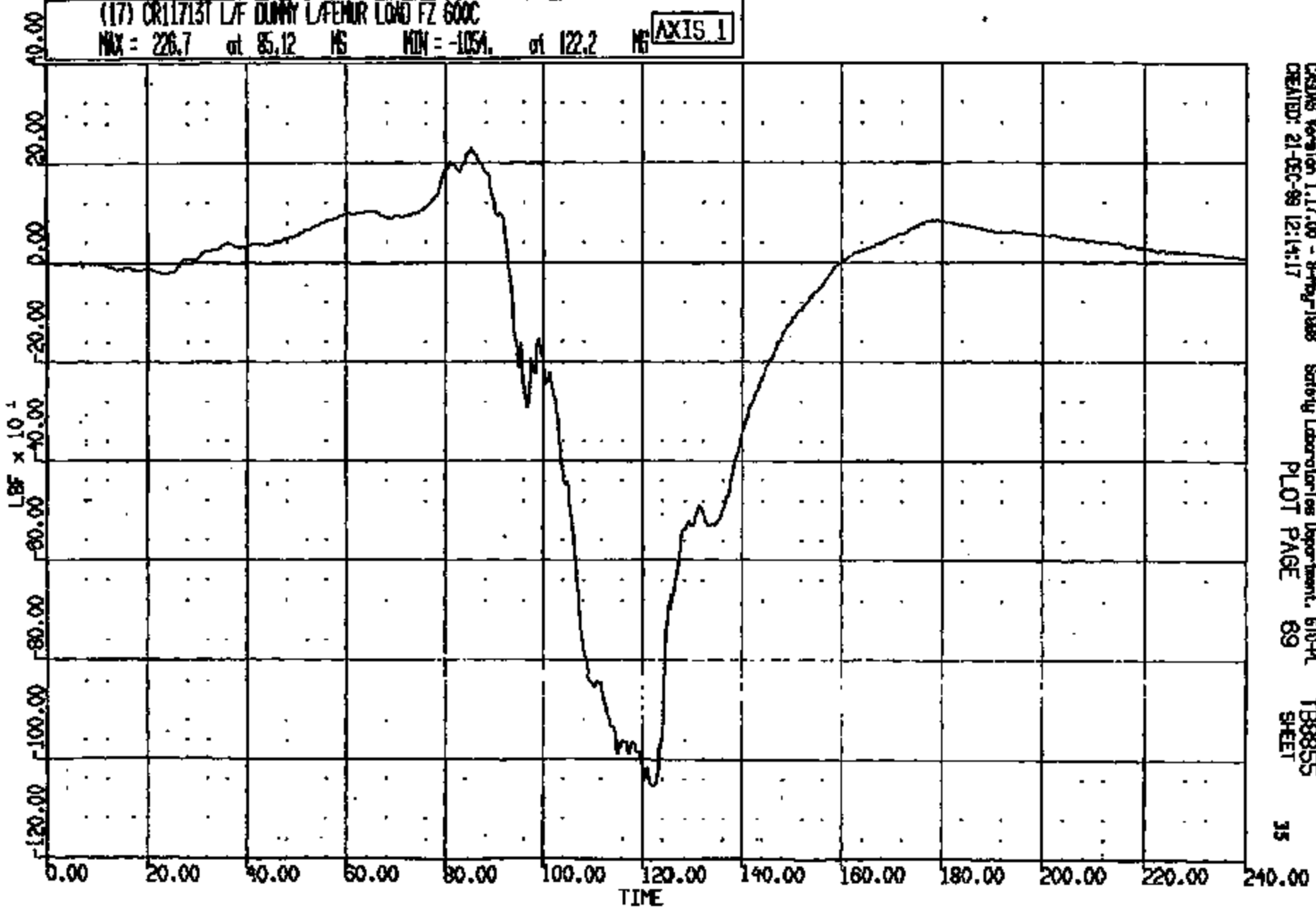


CRONUS Version 1.17.00 - 8-May-1988 Safety Laboratories Department, 610-PL
CREATED: 21-DEC-89 12:12:15 PLOT PAGE 28 SHEET 34

CRIS 0011713

OR R: 11713 TO: T88858 DATE: 891221 10:56:05
2000 D-188

(17) CR11713T L/F DUMMY L/FEMUR LOAD FZ 600C
MAX = 226.7 at 85.12 MS MIN = -1054. at 122.2 MS **AXIS 1**



CRS Version 1.17.00 - 8-4-89-1888 Safety Laboratories Department, 610-PL T88855
CREATED: 21-DEC-89 12:14:17 PLOT PAGE 69 SHEET 35

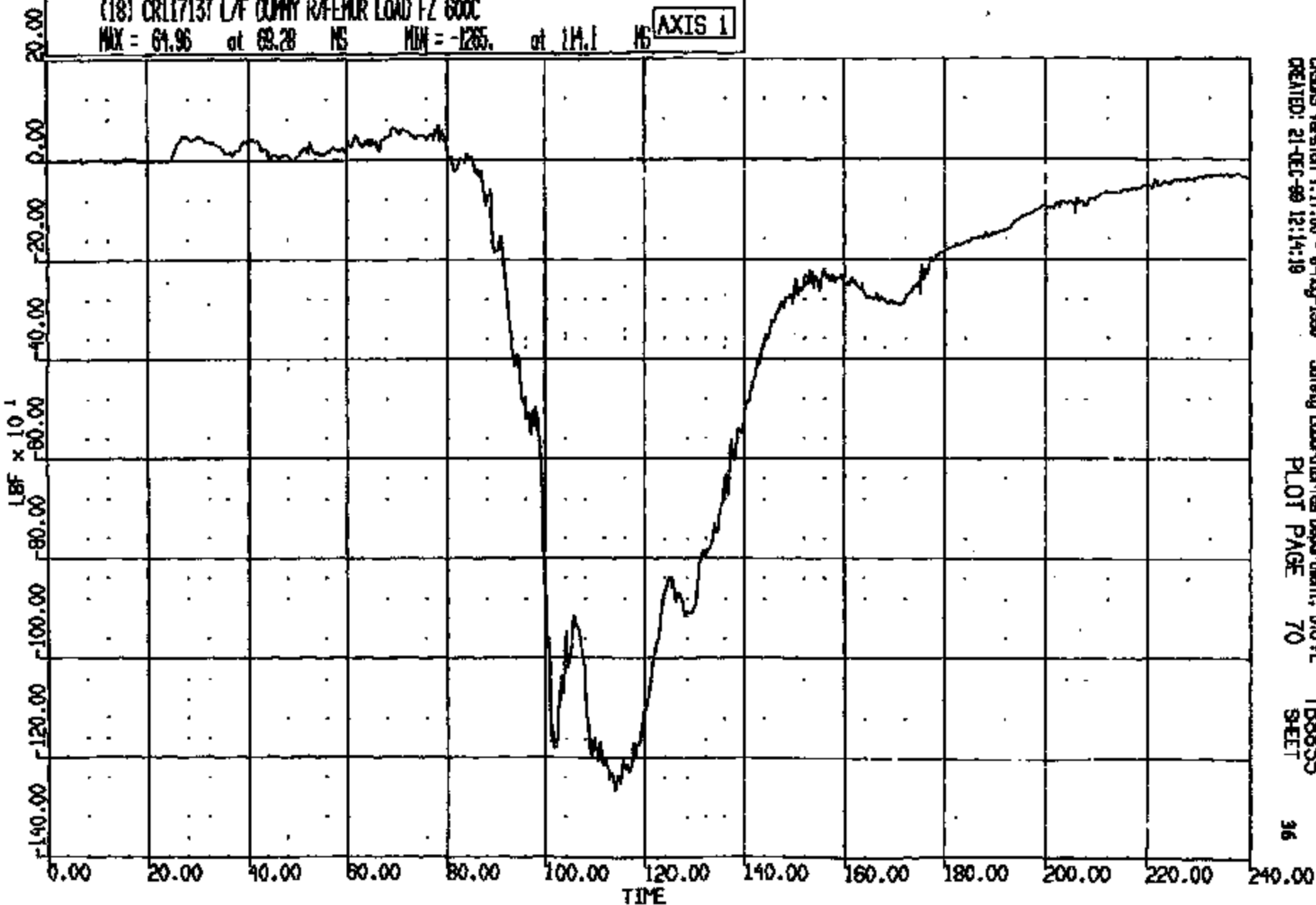
CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 891221 10:58:03
R000 D-189

(18) CR117137 L/F DUMMY REFER LOAD FZ 600C

MAX = 64.96 at 69.28 MS MIN = -1265. at 114.1 MS

AXIS 1



CRS Version 1.17.00 - 8-Aug-1999
CREATED: 21-DEC-89 12:14:19

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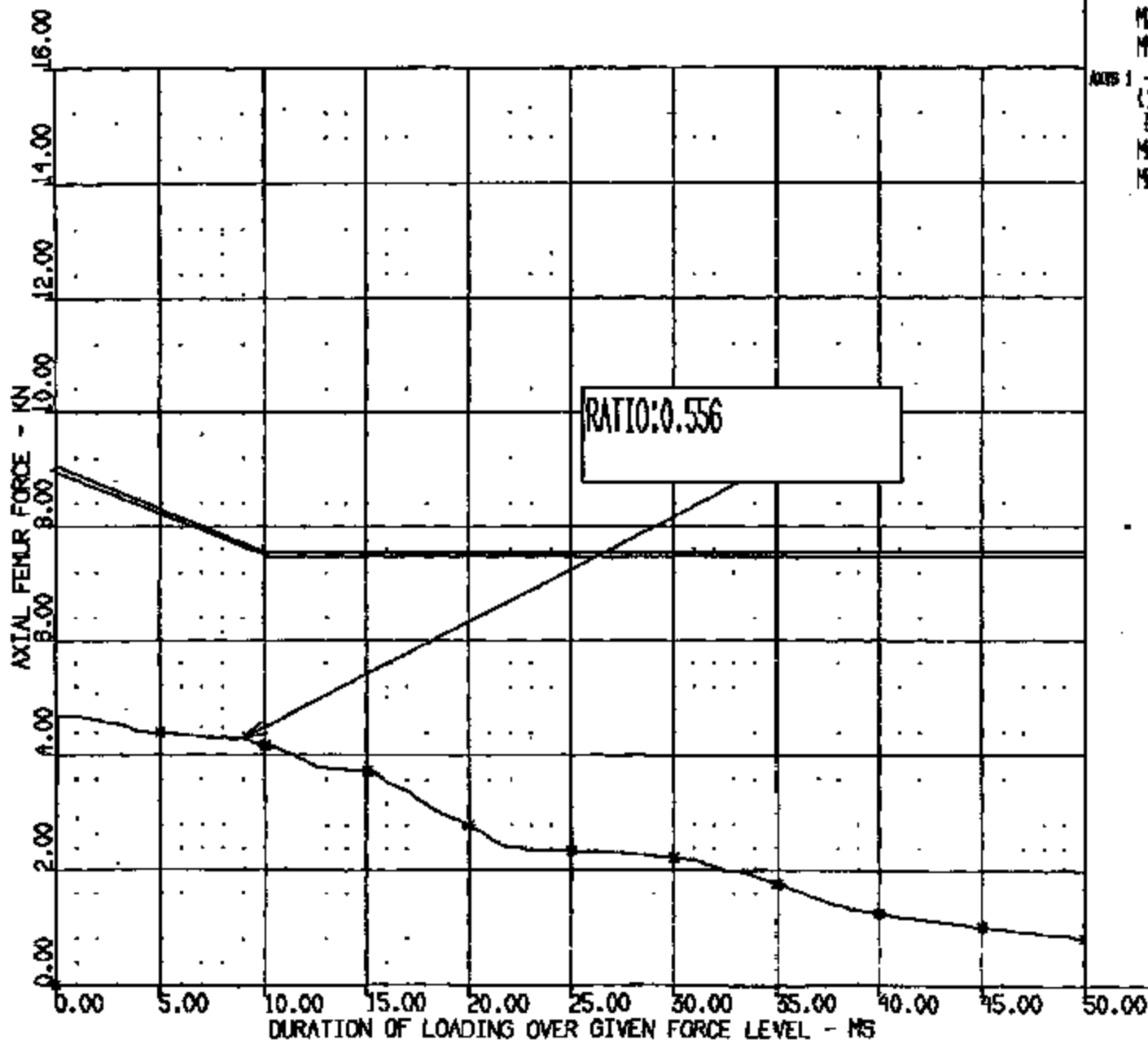
CRTS 0011713

AXIAL FEMUR FORCE
 CR R: 11713 TO: T88855 DATE: 991221 10:36:03
 HYBRID III CRITERIA PLOT - 50TH % DUMMY
 DURATION CURVES MAY INCLUDE MULTIPLE PEAKS

FOREIGN

AXIS 1
 (10184) CRITERIA LINE FOR AXIAL FEMUR FORCE
 MAX = 9.070 at 0.0000E+00 MS
 MIN = 7.560 at 10.00 MS

AXIS 1
 (10163) DURATION CR11713T L/F DUMMY L/FEMUR LGD FZ 890C
 MAX = 4.689 at 0.7999E-01 MS
 MIN = 0.0000E+00 at 0.0000E+00 MS



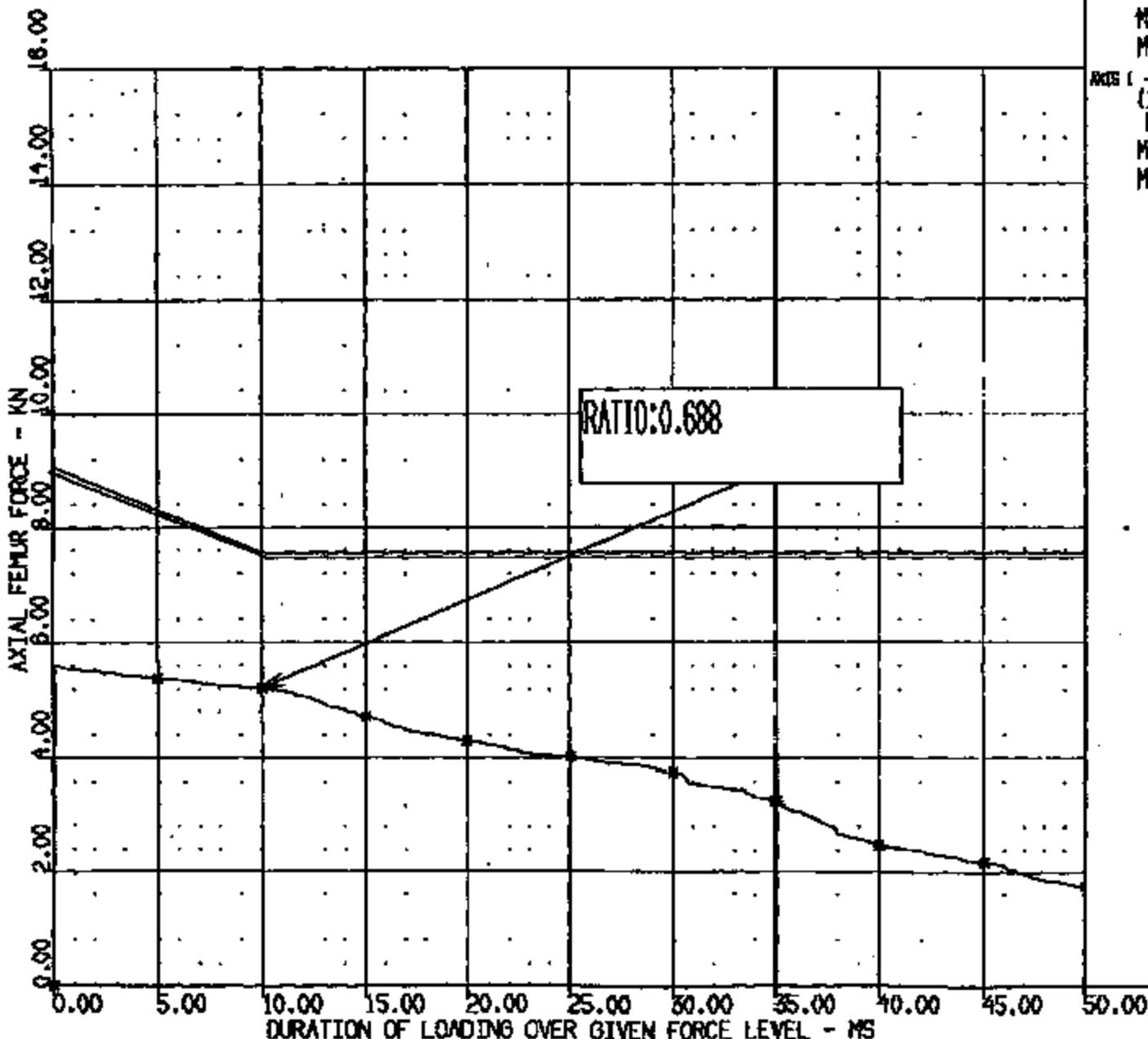
CREAMS Version 1.17.00 - 8-Aug-1988 Safety Laboratory Department, STORL T88855
 CREATED: 21-DEC-99 12:12:58 PLOT PAGE 43 SHEET 37

AXIAL FEMUR FORCE
 CR R: 11713 TO: T88855 DATE: 991221 10:58:03
 HYBRID III CRITERIA PLOT - 50TH % DUMMY
 DURATION CURVES MAY INCLUDE MULTIPLE PEAKS

FOREIGN

AKB I
 (10173) CRITERIA LINE FOR AXIAL
 FEMUR FORCE
 MAX = 9.070 at 0.0000E+00 MS
 MIN = 7.560 at 10.00 MS

AKB I
 (10172) DURATION CR11713T L/F DUMMY
 R/FEMUR LOAD FZ 600C
 MAX = 5.625 at 0.7989E-01 MS
 MIN = 0.0000E+00 at 0.0000E+00 MS



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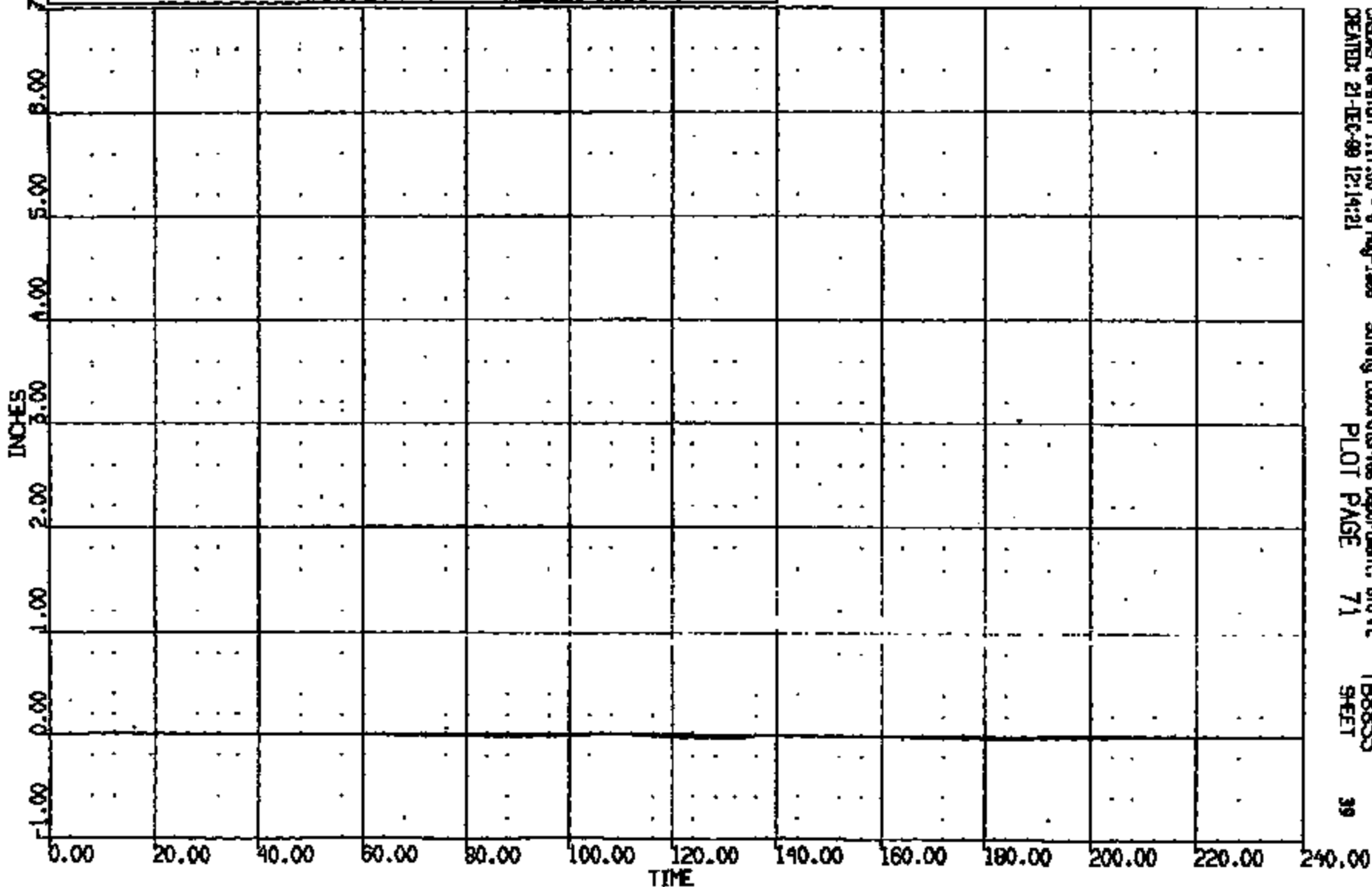
T88855
 9-LET

DCR R: 11718 TO: TB8855 DATE: 991221 10:38:08
R000 D-188

(19) CR11713T L/F DUMMY L/KNEE SLIDER (B.B.) 180C

MAX = 0.5862E-02 at 107.7 MS MIN = -.2192E-01 at 126.6 MS

AXIS 1



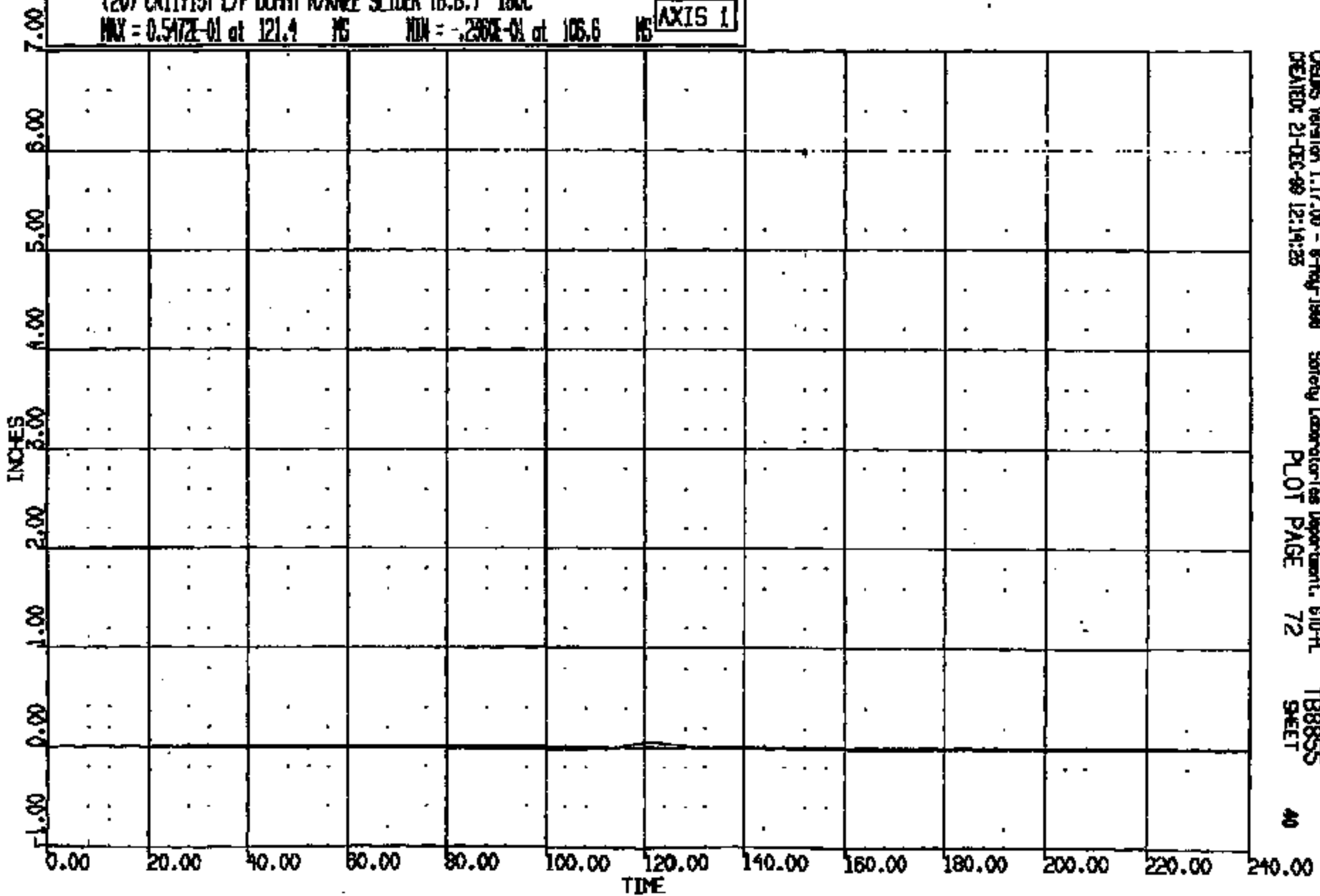
CRDS Version 1.17.00 - 8-May-1988
CREATED: 21-DEC-89 12:14:21

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CR R: 11713 TO: TB8855 DATE: 991221 10:38:03
3000 D-188

(20) CR11713T L/F DUMMY RANGE SLIDER (B.B.) 180C
MAX = 0.5472E-01 at 121.4 MS MIN = -.2362E-01 at 106.6 MS **AXIS 1**



CRS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, STD-FL
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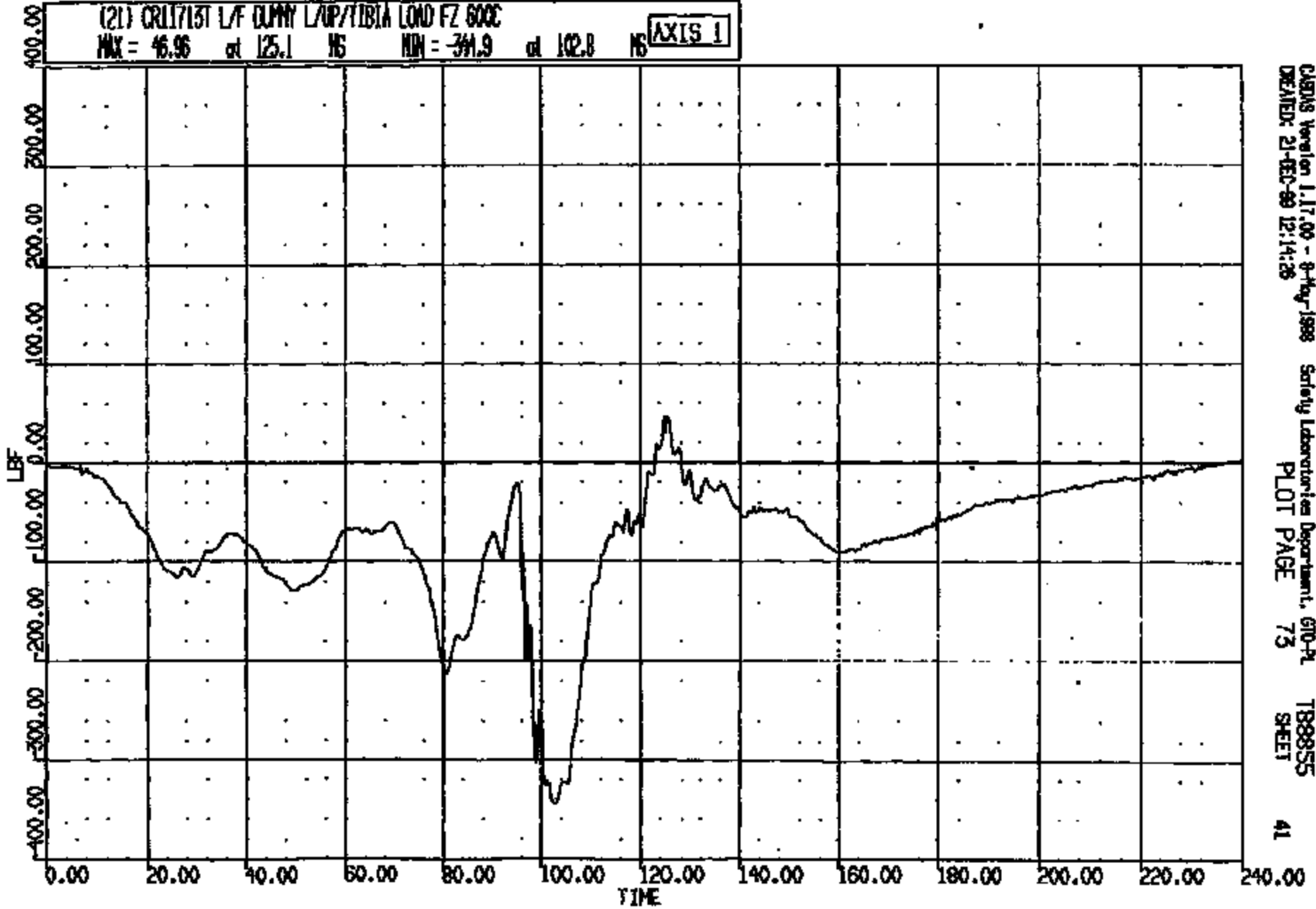
CR11713

CR R: 11715 TO: TB8855 DATE: 881221 10:58:05
2000 D-188

(21) CRTS 0011715 L/F DUMMY L/UP/TIBIA LOAD FZ 600C

MAX = 46.96 at 125.1 MS MIN = -344.9 at 102.8 MS

AXIS 1

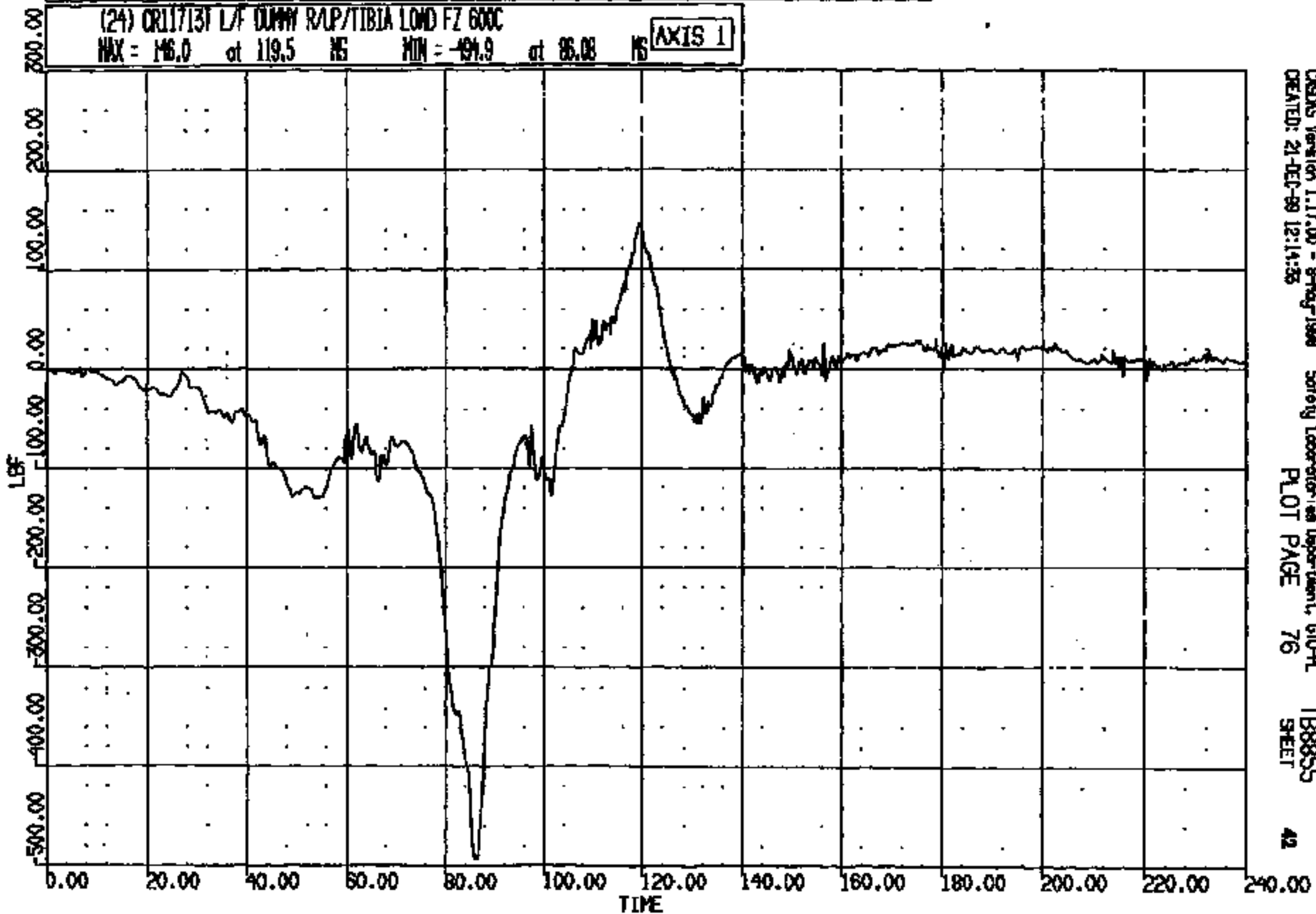


CARDIS Version 1.17.00 - 8-May-1988 Safety Laboratories Department, 610-PL
DRAWN: 21-DEC-88 12:14:28 PLOT PAGE 73 SHEET 41

CRTS 0011715

CR R: 11713 TO: T8855 DATE: 981221 10:35:03
2000 D-188

(24) CR11713 L/F DUMMY R/LP/TIBIA LOAD FZ 600C
MAX = 146.0 at 119.5 MS MIN = -494.9 at 86.08 MS **AXIS 1**



CRSAS Version 1.17.00 - 8-May-1998
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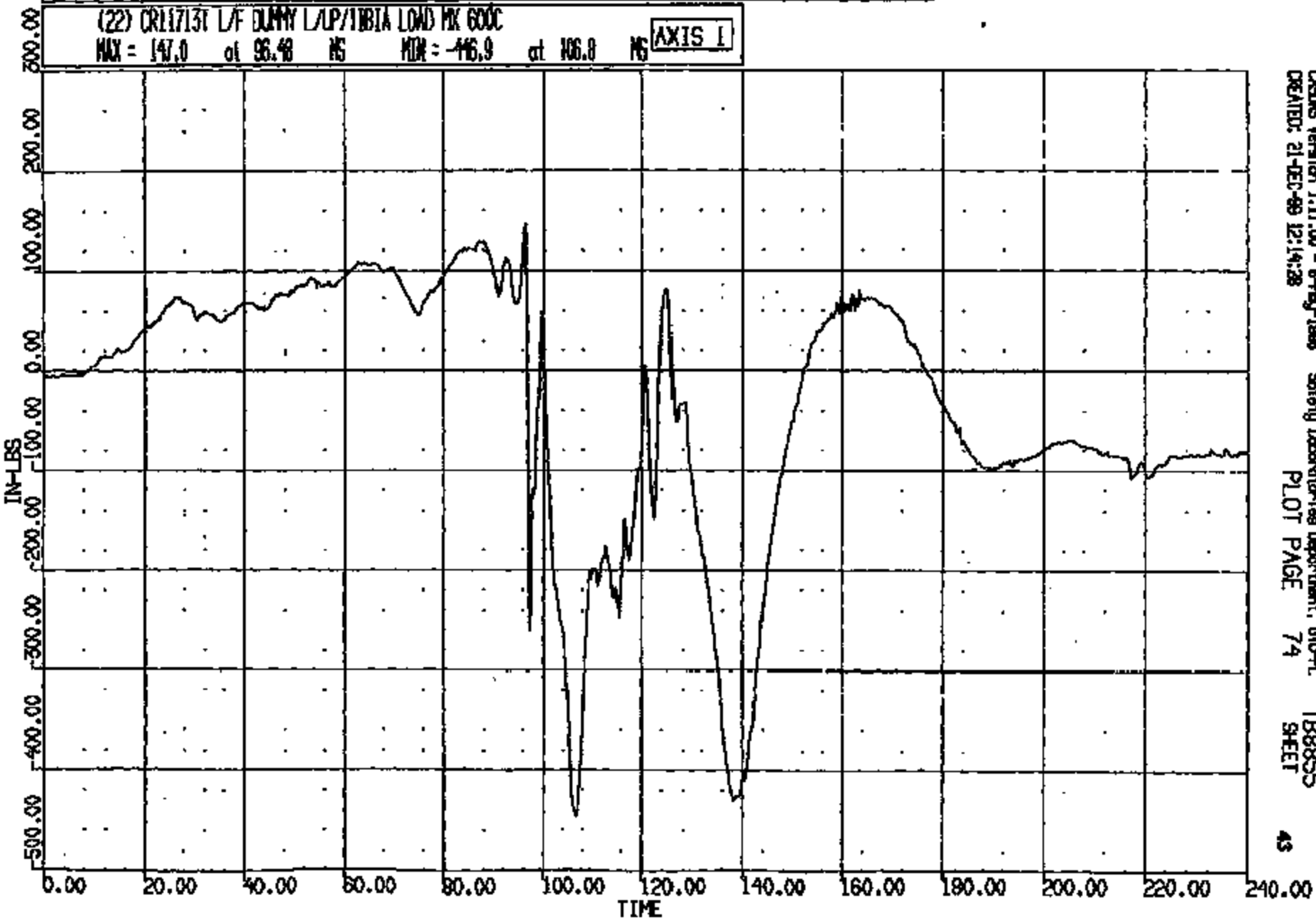
T8855
SHEET

DR R: 11713 TO: TB8855 DATE: 991221 10:38:03
2000 D-186

(22) CR117131 L/F DUMMY L/UP/TIBIA LOAD PK 600C

MAX = 147.0 at 96.48 NS MIN = -416.9 at 106.8 NS

AXIS 1



CRS06 Version 1.17.00 - 8-May-1998
CREATED: 21-DEC-99 12:14:28

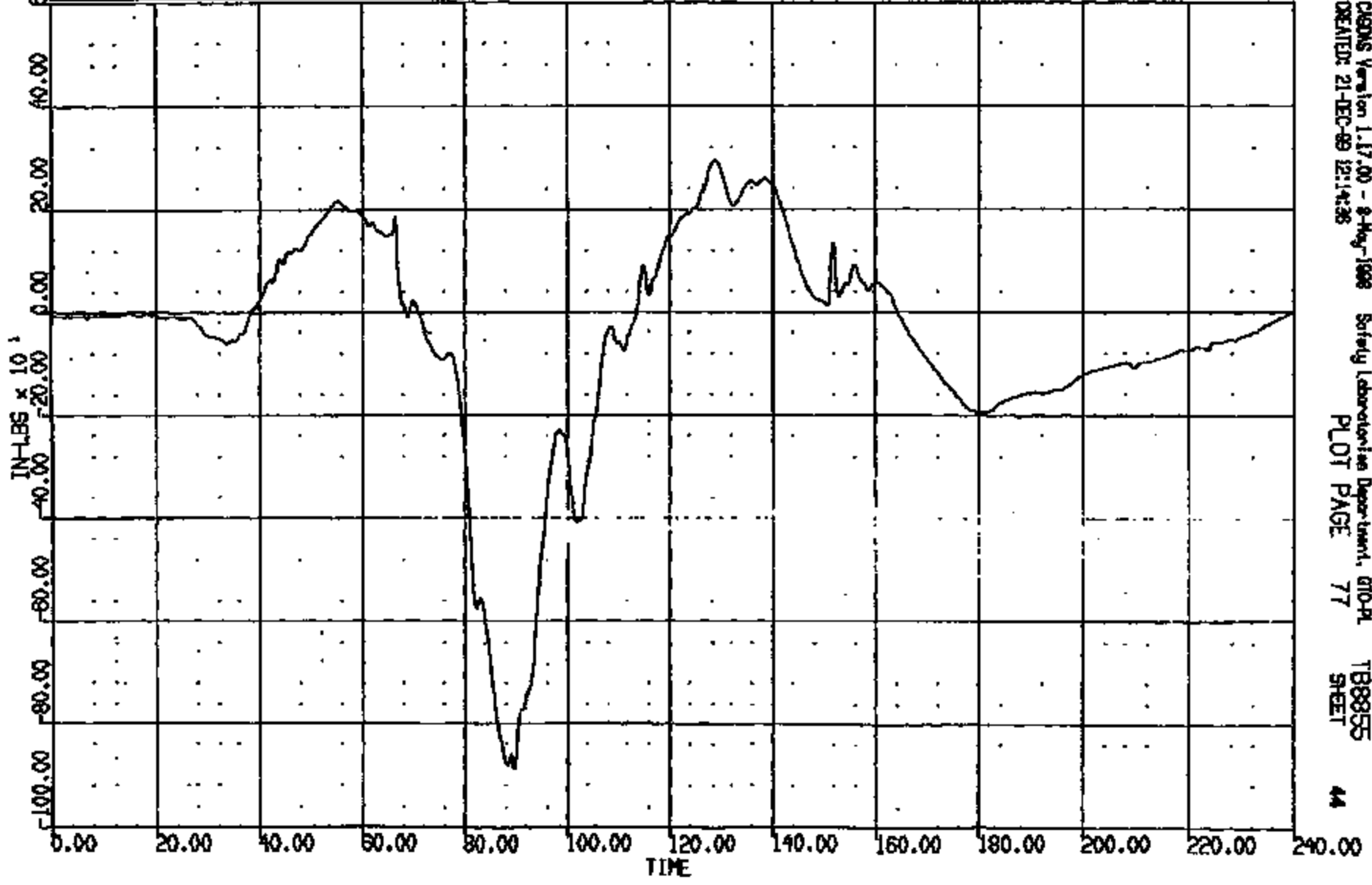
Safety Laboratories Department, 610-PL
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CR R: 11713 TO: T88855 DATE: 891221 10:38:08
2000 D-188

(25) CRL1713T L/F DUMMY RAMP/TIBIA LOAD IN SOCC
MAX = 235.4 at 128.7 MS MIN = -889.5 at 89.68 MS **AXIS 1**

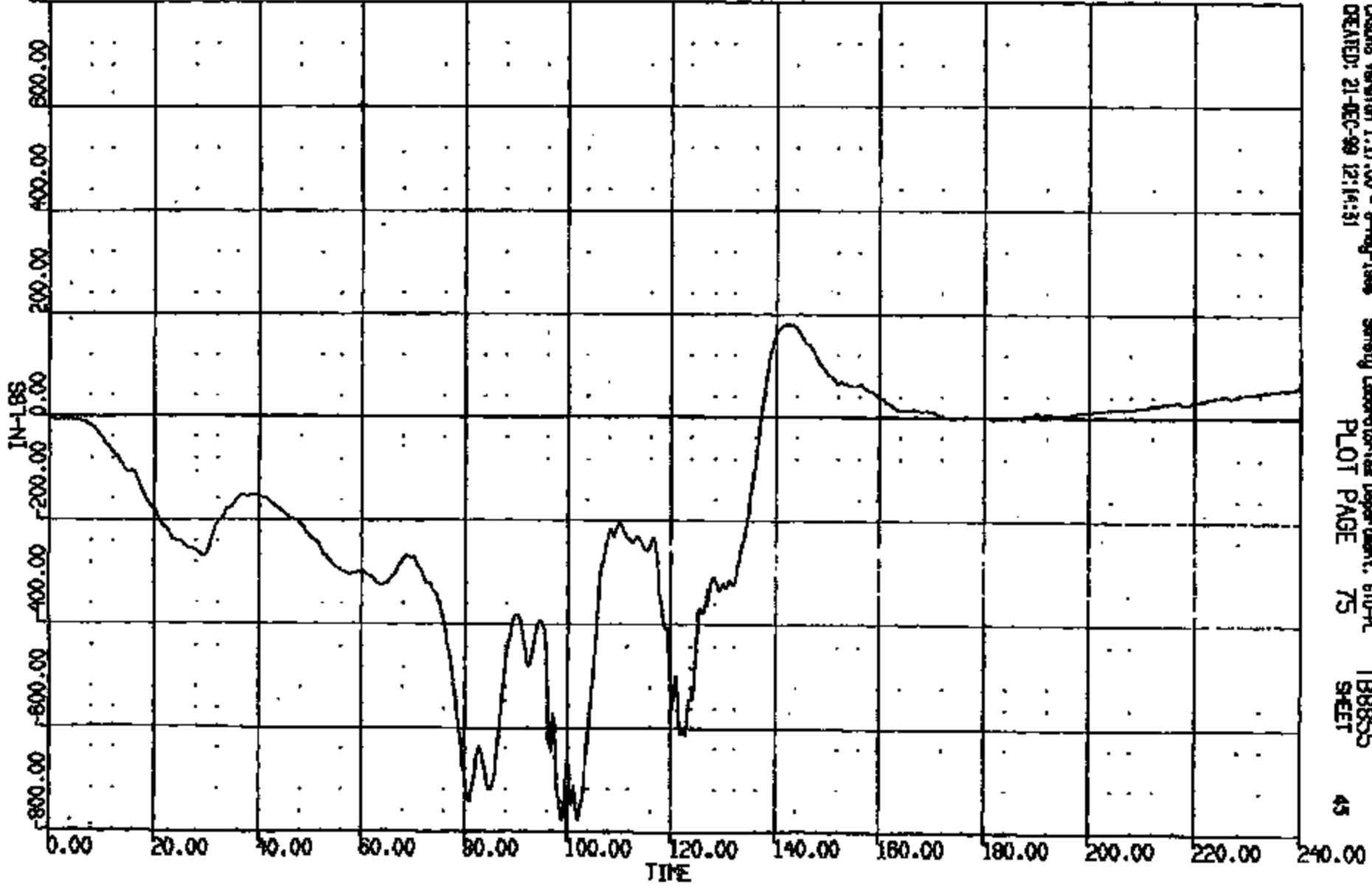


CRONUS Version 1.17.00 - 8-May-1988 Safety Laboratories Department, DTIC-PL
CREATED: 21-DEC-89 12:14:28 PLOT PAGE 77 T88855 SHEET 44

CRTS 0011713

CR R: 11713 TO: T8885 DATE: 991221 10:56:05
2000 D-186

(25) CR117131 L/F DUMMY LAP/TIBIA LOAD NY 600C
MAX = 100.8 at 142.6 MS MIN = -780.0 at 102.2 MS **AXIS 1**

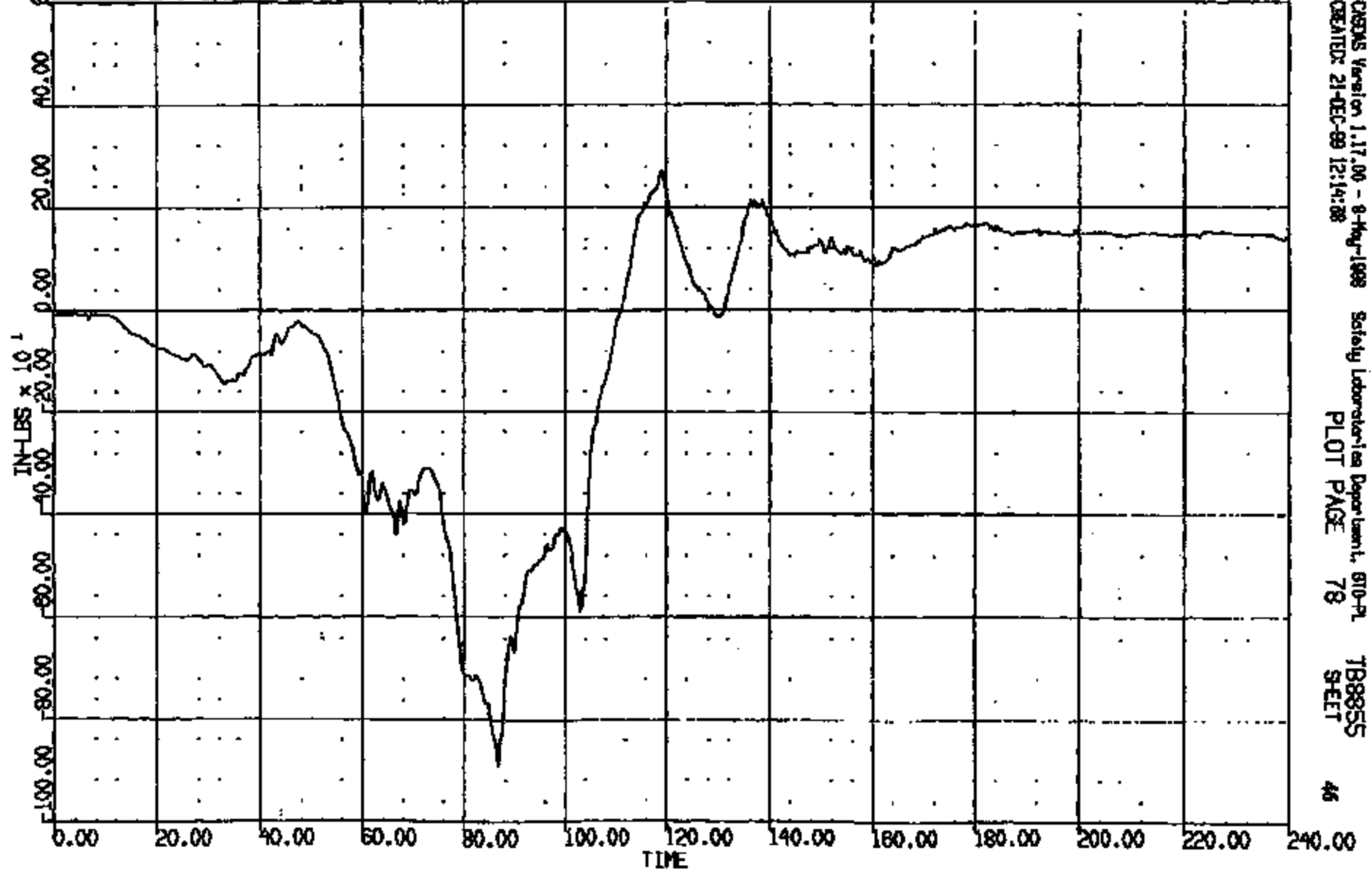


CADDS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
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CRTS 0011713

OFF R: 11713 TO: T88855 DATE: 891231 10:38:08
2000 0-185

(26) CR117131 L/F DUMMY RAMP/TIBIA LOAD MY 600C
MAX = 270.2 at 119.1 MS MIN = -890.3 at 86.72 MS **AXIS 1**

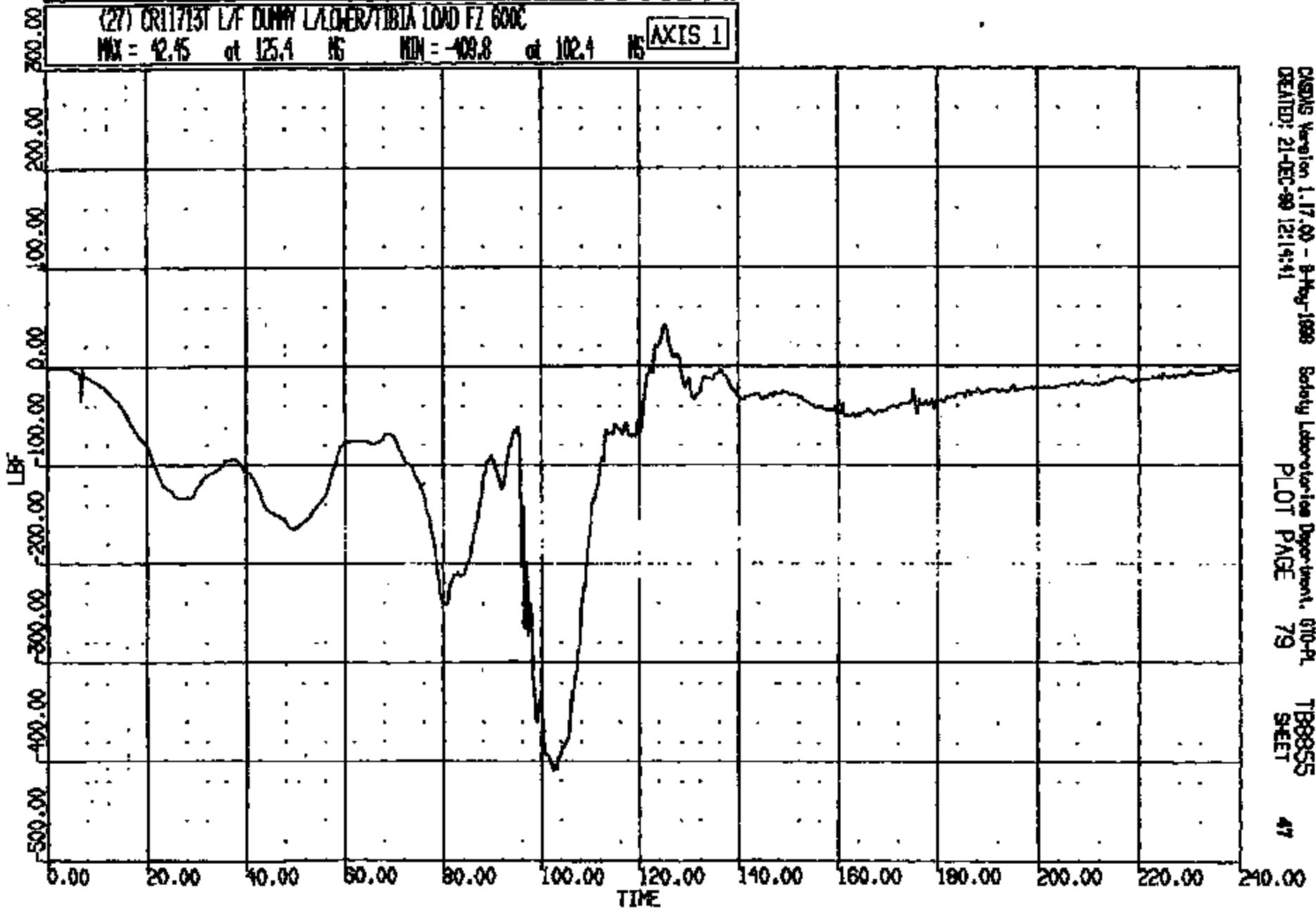


ORDS Version 1.17.00 - 8-May-1989 Safety Laboratories Department, 610-PL
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CRTS 0011713

CR R: 11713 TO: T98855 DATE: 991221 10:28:03
8000 D-188

(27) CR11713T L/F DUMMY L/LOWER/TIBIA LOAD FZ 600C
MAX = 42.45 at 125.4 MS MIN = -409.8 at 102.4 MS **AXIS 1**



CASIMS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
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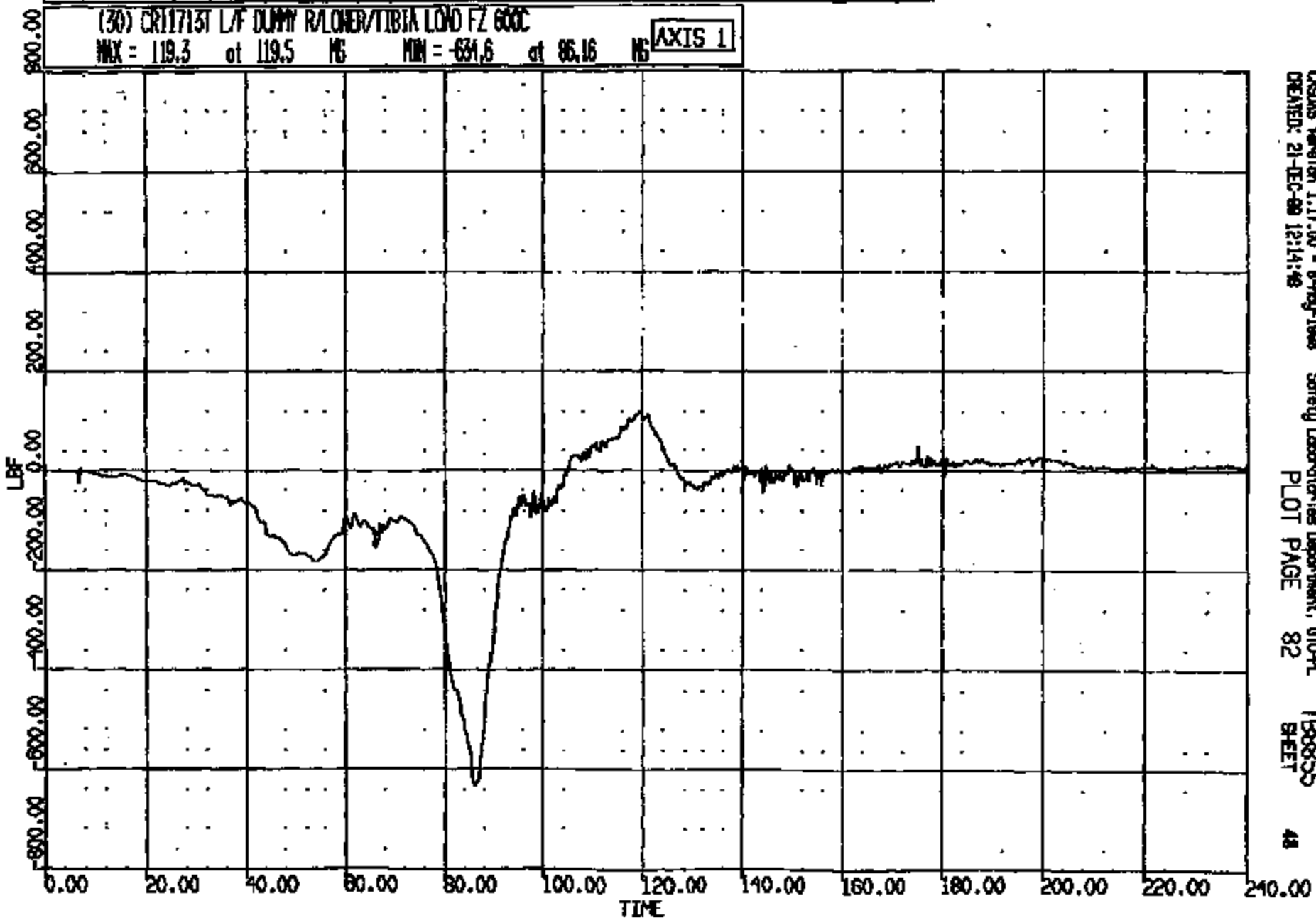
CRTS 0011713

CR 11713 TO: TB8855 DATE: 991221 10:38:03
2000 D-188

(30) CR11713T L/F DUMP R/LNER/TIBIA LOAD FZ 600C

MAX = 119.3 at 119.5 MS MIN = -634.6 at 86.16 MS

AXIS 1



CRISIS Version 1.17.00 - B-Pkg-1998
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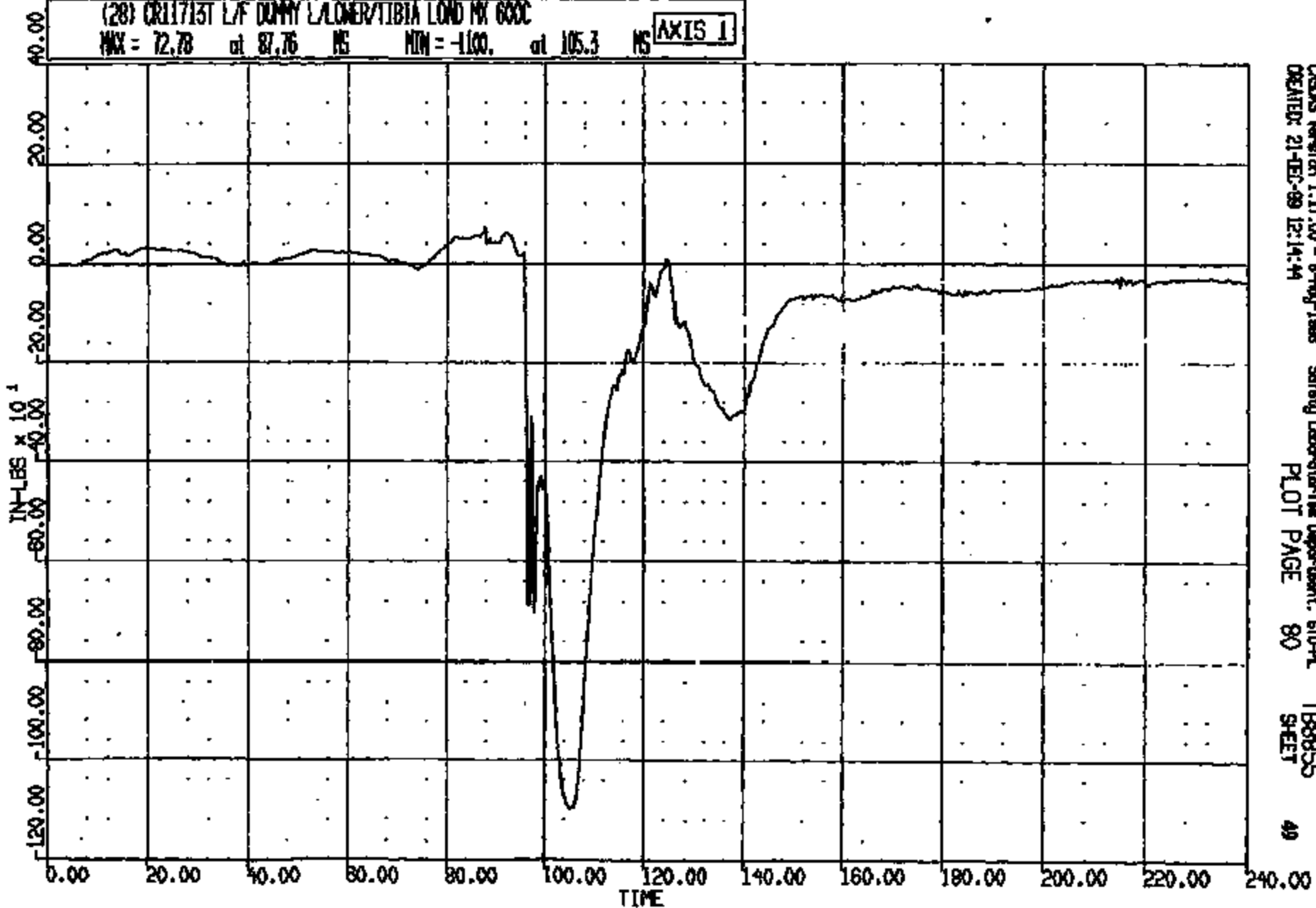
CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 891221 10:36:05
2000 0-198

(28) CR11713T L/F DUMMY L/LOWER/TIBIA LOAD NX 600C

MAX = 72.78 at 87.76 MS MIN = -110.0 at 105.3 MS

AXIS 1



CRSIS Version 1.17.00 - 8-Aug-1988
CREATED: 21-DEC-89 12:14:44

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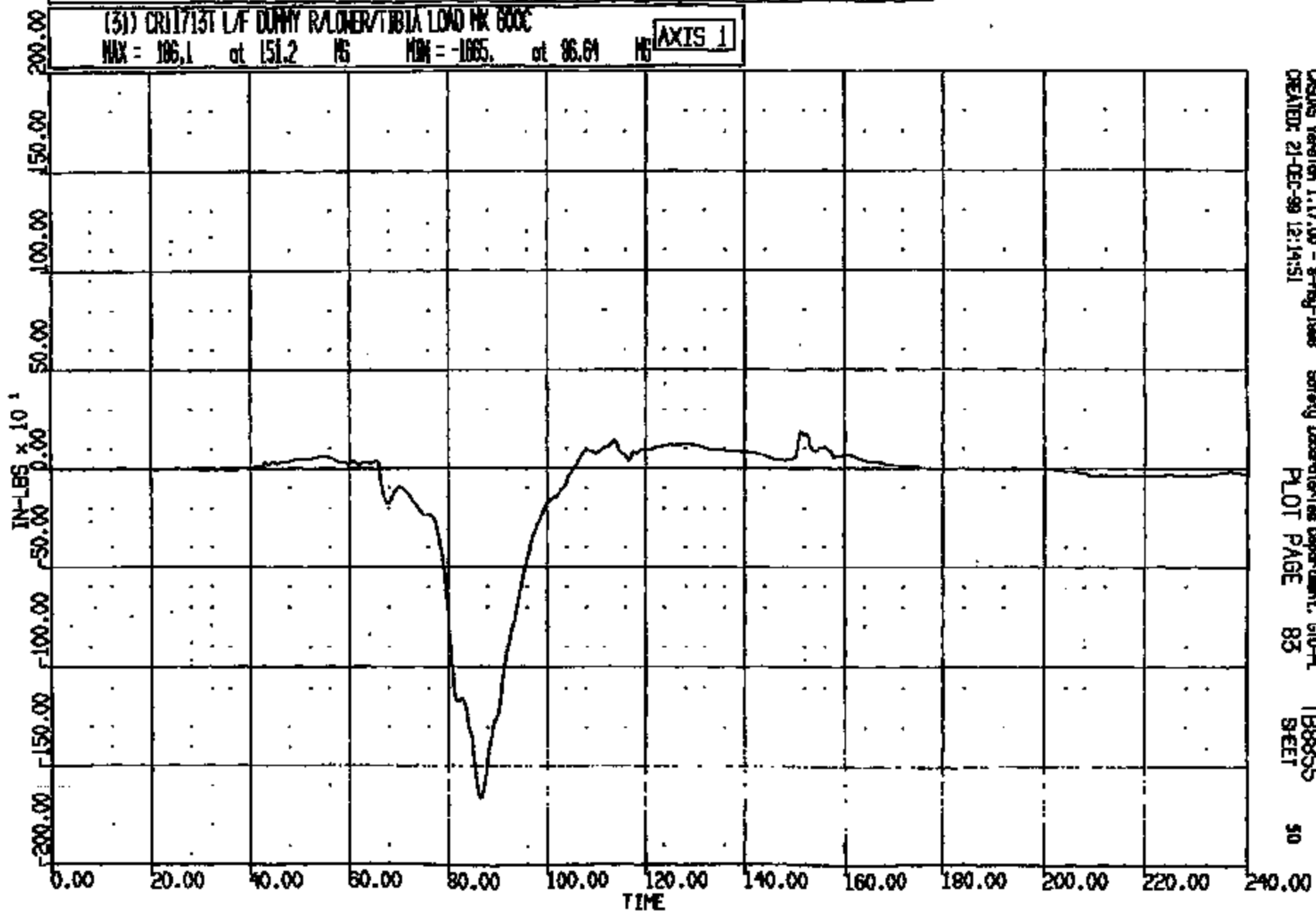
CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:28:05
2000 D-188

(3) CR11713T L/F DUMMY R/L OMER/TIBIA LOAD PK 600C

MAX = 106.1 at 151.2 MS MIN = -166.5 at 86.64 MS

AXIS 1



CASUS Version 1.17.00 - 8-May-1998
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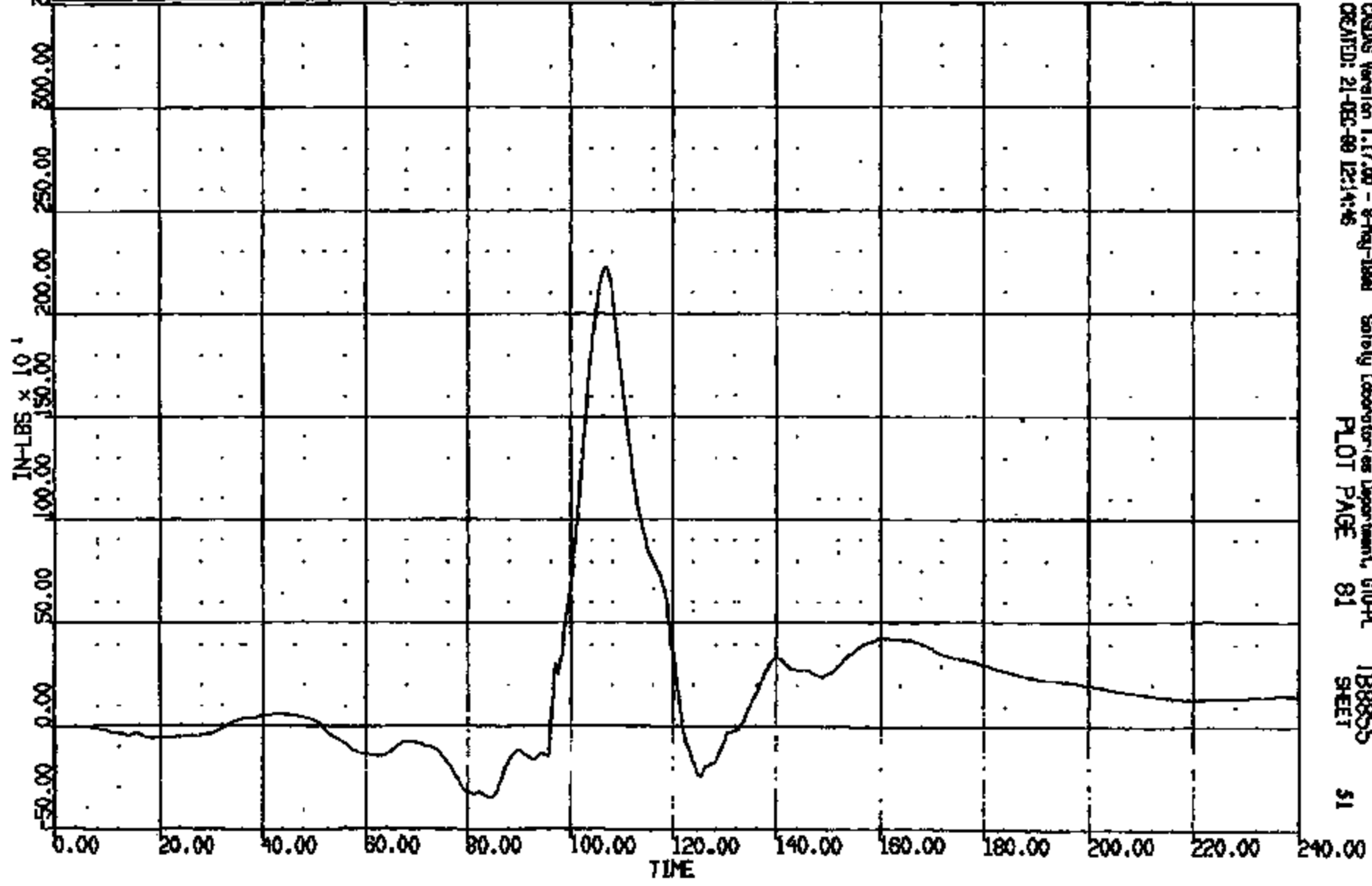
TB8855
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CR11713

CR R: 11713 TO: TB8855 DATE: 991221 10:35:03
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(29) CR11713T L/F DUMMY L/LOWER/TIBIA LOAD BY 600C
MAX = 225. at 106.8 MS MIN = -345.4 at 84.24 MS **AXIS 1**



CASAS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, GTO-PL
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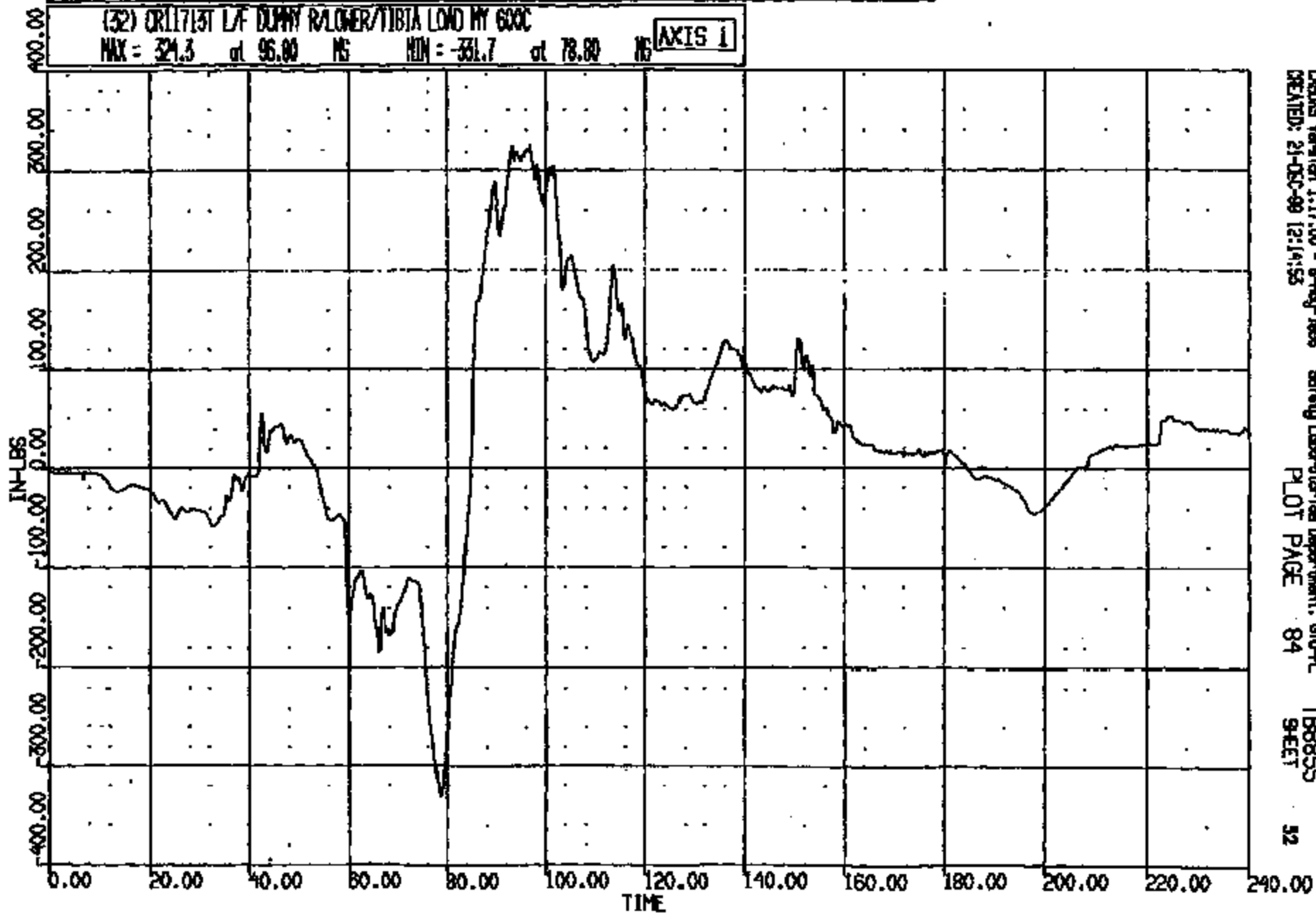
CRTS 0011713

CR R: 11713 TO: T88855 DATE: 091221 10:38:03
5000 D-188

(32) CR11713T L/F DUMMY R/LOWER/TIBIA LOAD BY 600C

MAX = 324.3 at 96.00 MS MIN = -361.7 at 78.00 MS

AXIS 1



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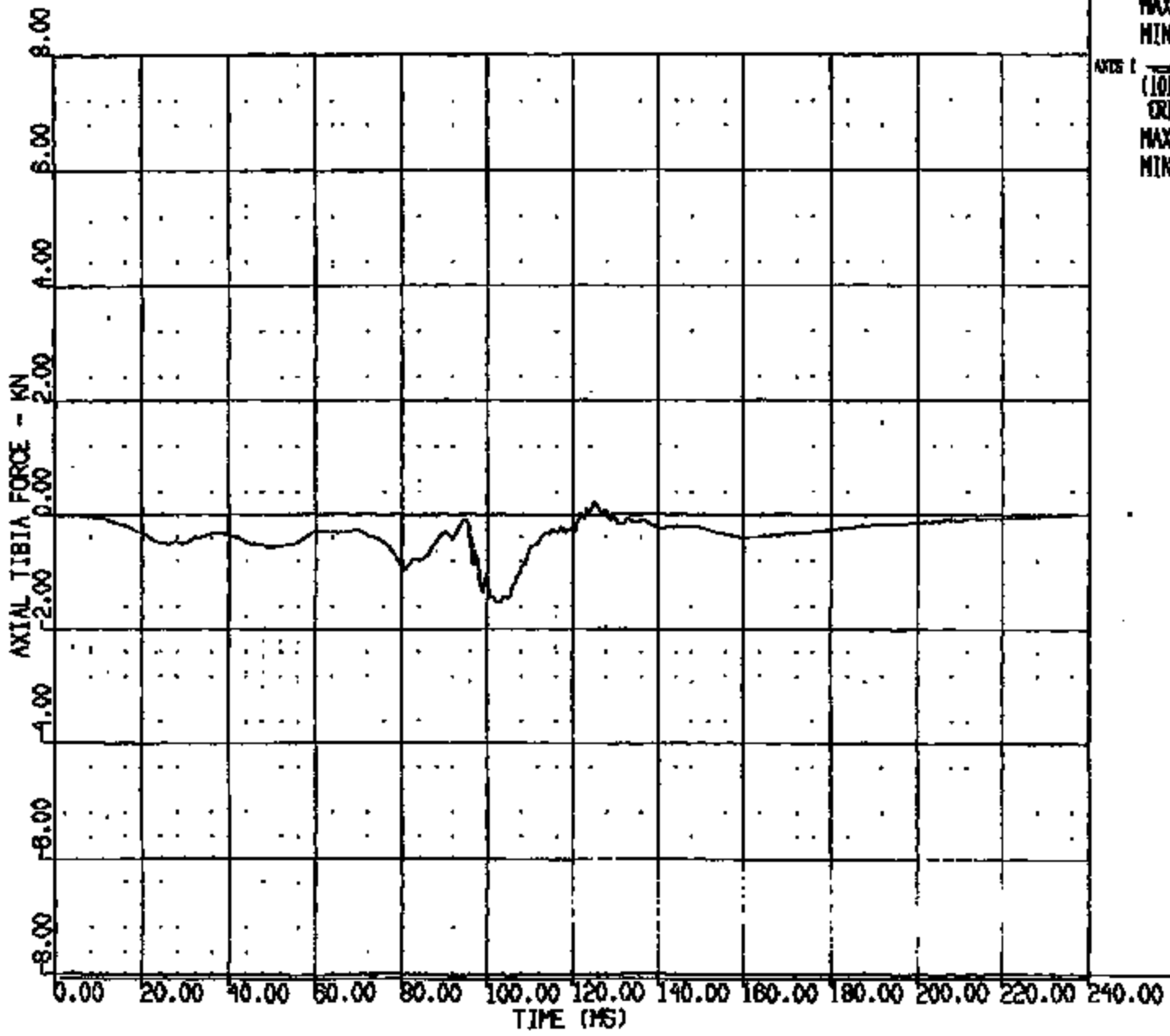
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CRIS 0011713

TIBIA COMPRESSIVE FORCE CRITERION
 CR R: 11713 TO: T88855 DATE: 991221 10:58:03

FOREIGN



ANS 1
 (10178) CRIT:1ST LF DUMMY LAP/TIBIA
 LOAD FZ 600
 MAX =0.2089 at 125.1 MS
 MIN =-1.534 at 102.8 MS

ANS 1
 (10178) MAXIMUM COMPRESSIVE FORCE
 CRITERIA LINE
 MAX =-8.000 at 0.0000E+00 MS
 MIN =-8.000 at 90.00 MS

CRASH Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 610-PL T88855
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CRTS 0011713

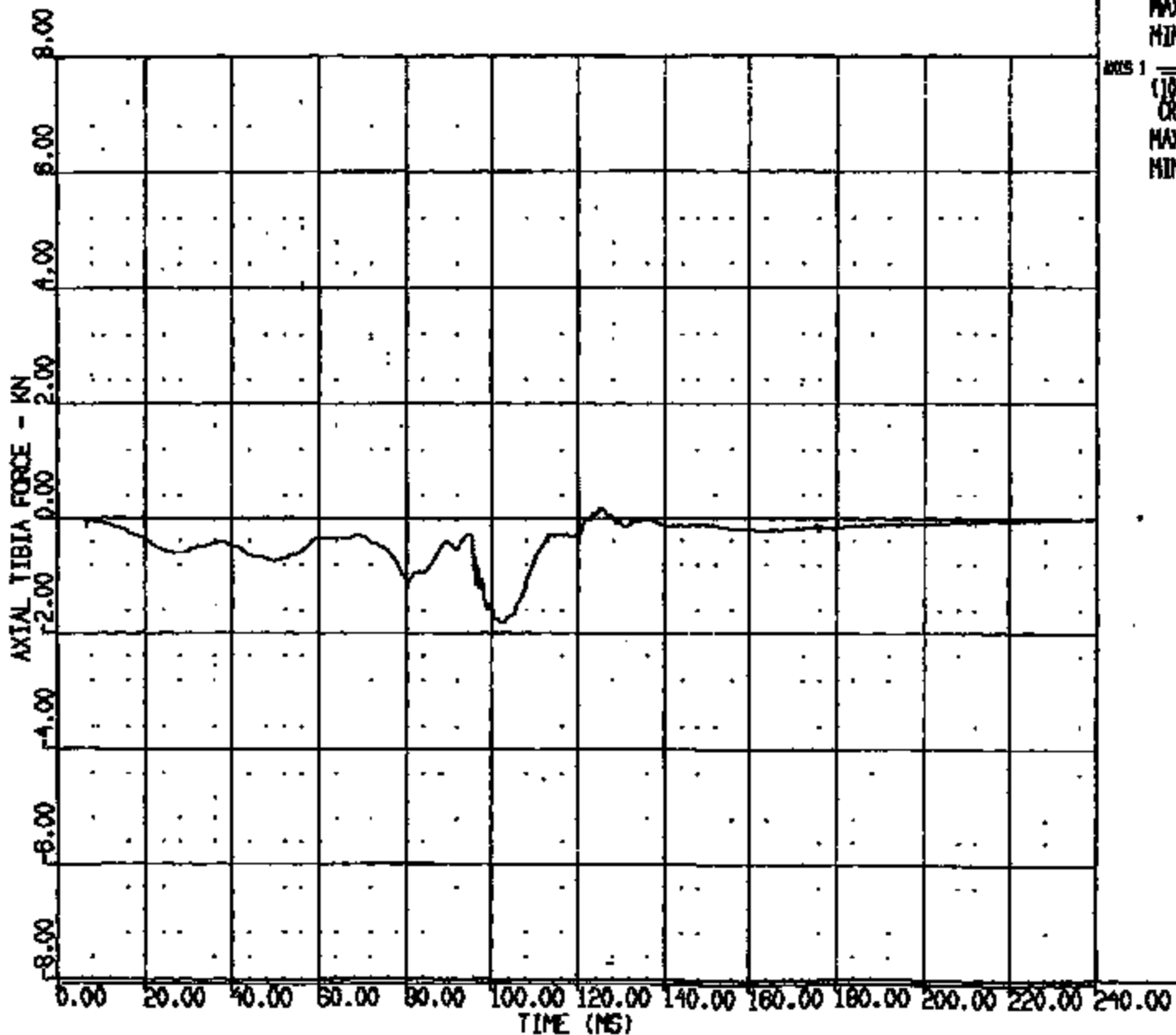
TIBIA COMPRESSIVE FORCE CRITERION

CR R: 11713 TO: TB8855 DATE: 991221 10:56:05

FOREIGN

MS 1
 (10182) CR11713T LAF DUMP LADDER/TIBIA
 LOAD FZ 600C
 MAX =-0.1888 at 125.4 MS
 MIN =-1.823 at 102.4 MS

MS 1
 (10181) MAXIMUM COMPRESSIVE FORCE
 CRITERIA LINE
 MAX =-8.000 at 0.0000E+00 MS
 MIN =-8.000 at 90.00 MS



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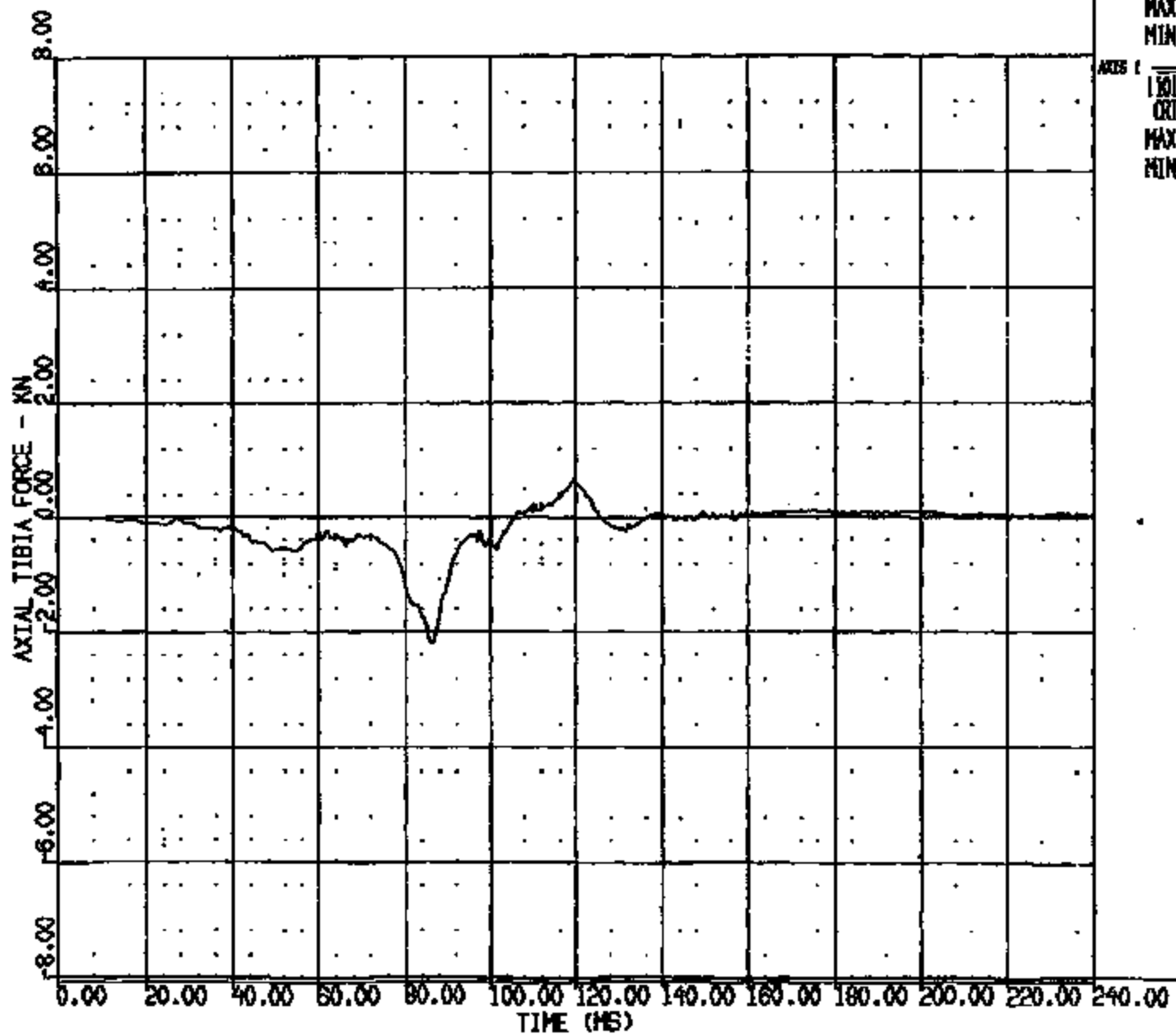
TIBIA COMPRESSIVE FORCE CRITERION

CR R: 11713 TO: TB8855 DATE: 991221 10:58:05

FOREIGN

ARIS 1
 ((10180) CR1715T LF DMM RAP/TIBIA
 LOAD FZ 600C
 MAX =-0.6495 at 119.5 MS
 MIN =-2.201 at 88.08 MS

ARIS 1
 110181 MAXIMUM COMPRESSIVE FORCE
 CRITERIA LINE
 MAX =-8.000 at 0.0000E+00 MS
 MIN =-8.000 at 90.00 MS



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CRIS 0011713

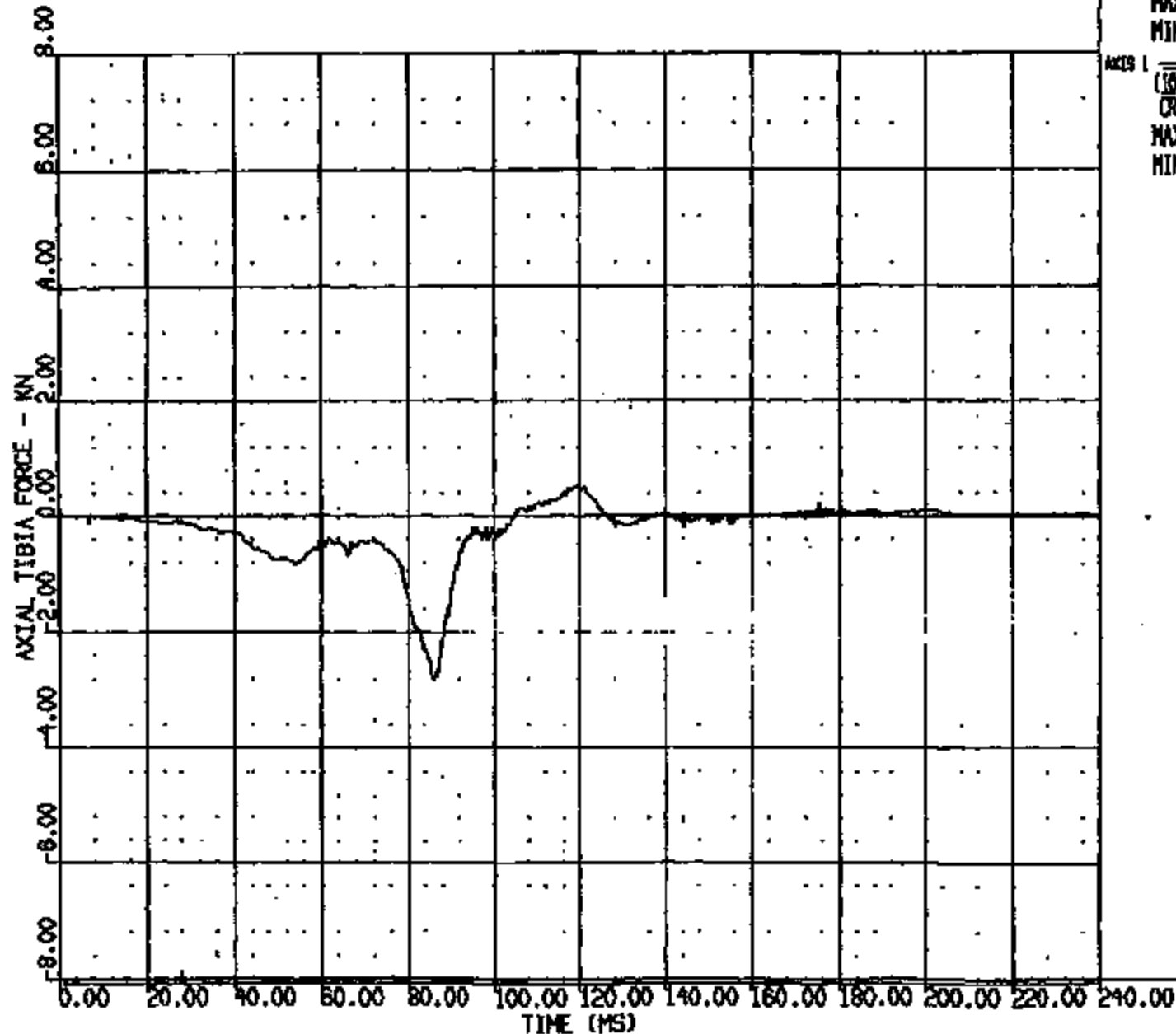
TIBIA COMPRESSIVE FORCE CRITERION

CR R: 11713 TO: T8885 DATE: 991221 10:58:05

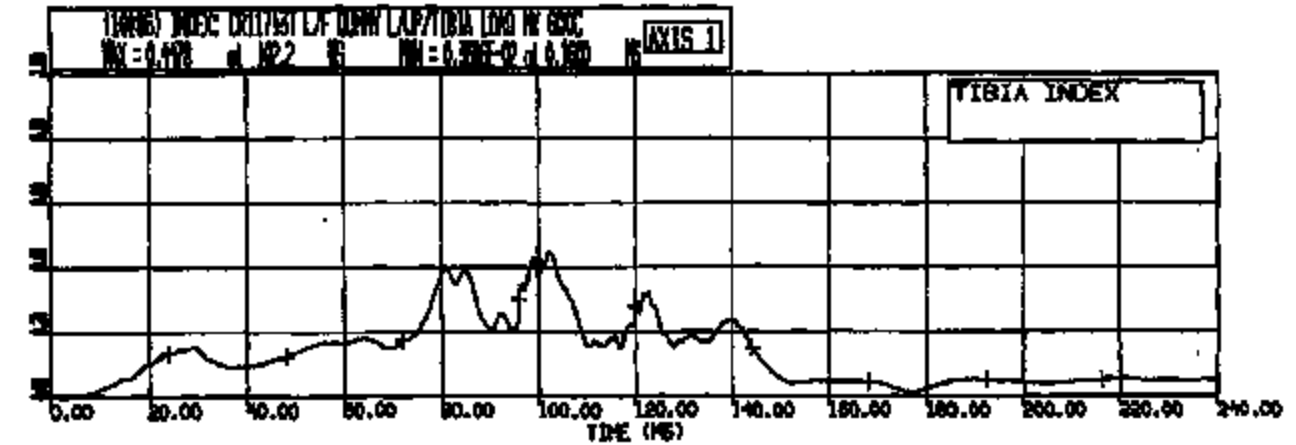
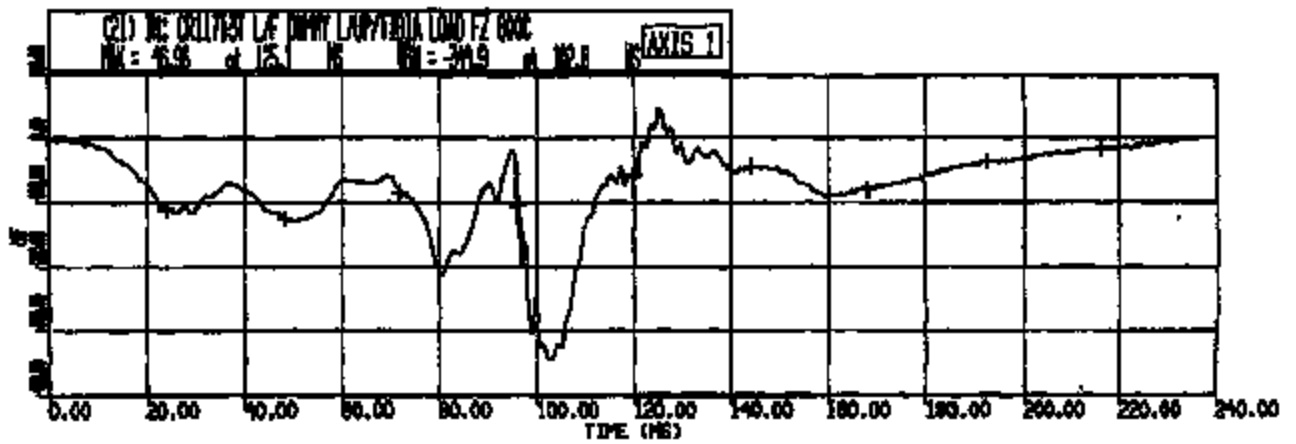
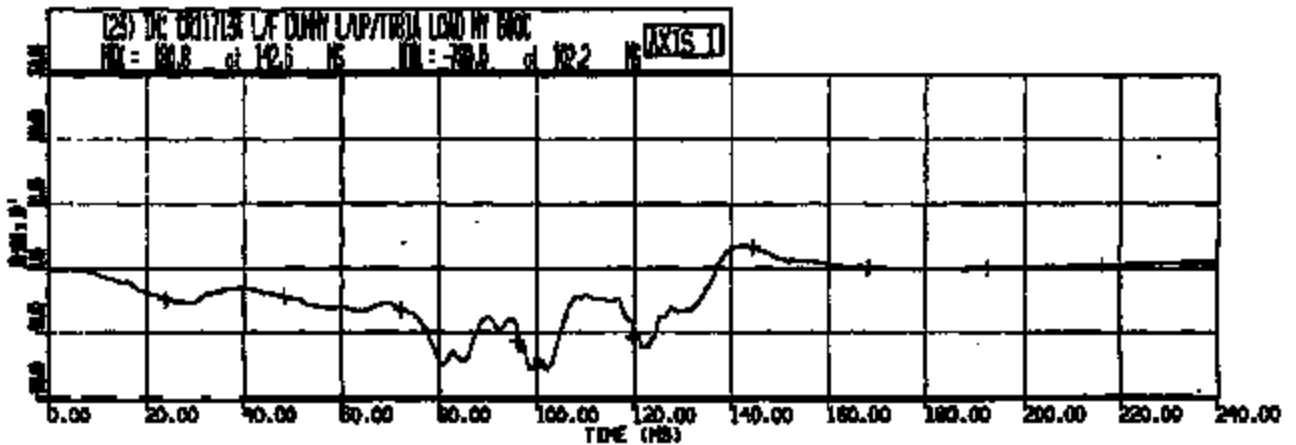
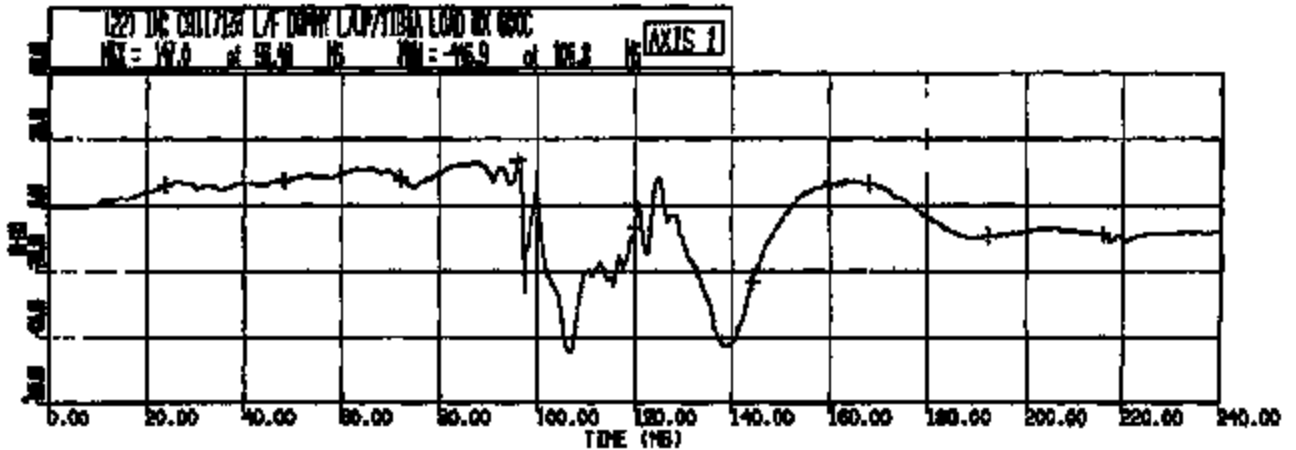
FOREIGN

AXIS 1
 (10194) CR11713T L/F DUMMY PALMER/TIBIA
 LOAD FZ 600C
 MAX =-0.5307 at 119.5 MS
 MIN =-2.822 at 86.16 MS

AXIS 1
 (10185) MAXIMUM COMPRESSIVE FORCE
 CRITERIA LINE
 MAX =-8.000 at 0.000E+00 MS
 MIN =-8.000 at 80.00 MS

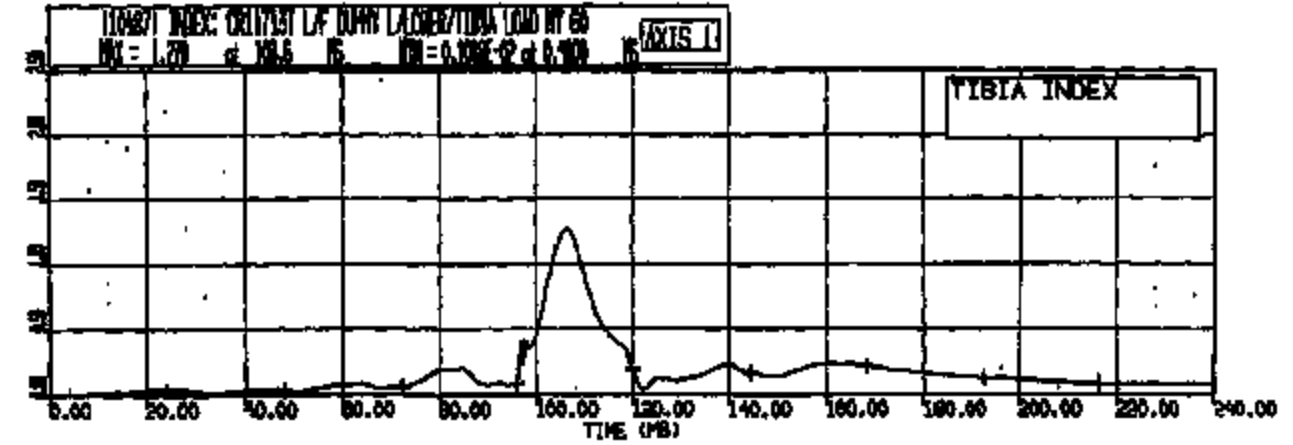
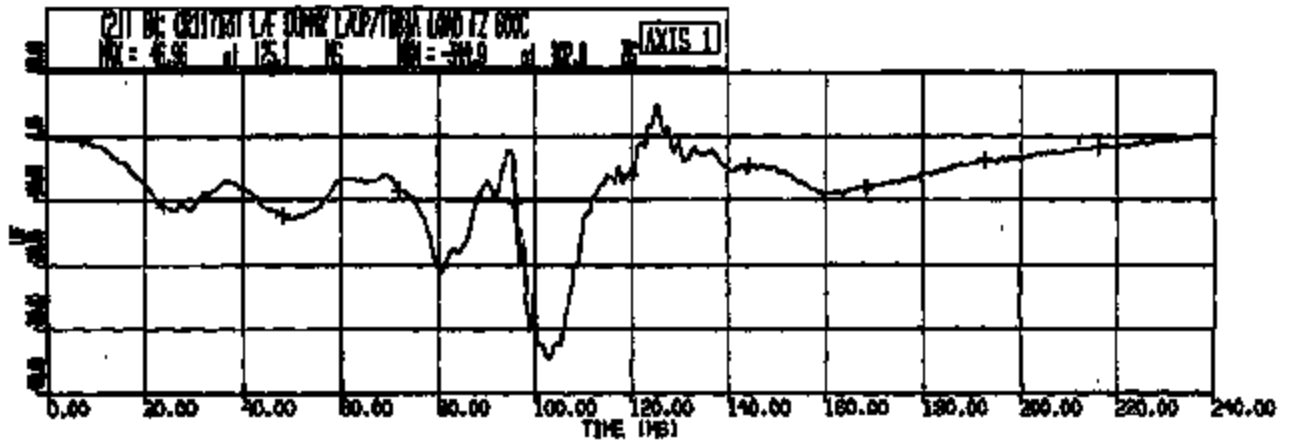
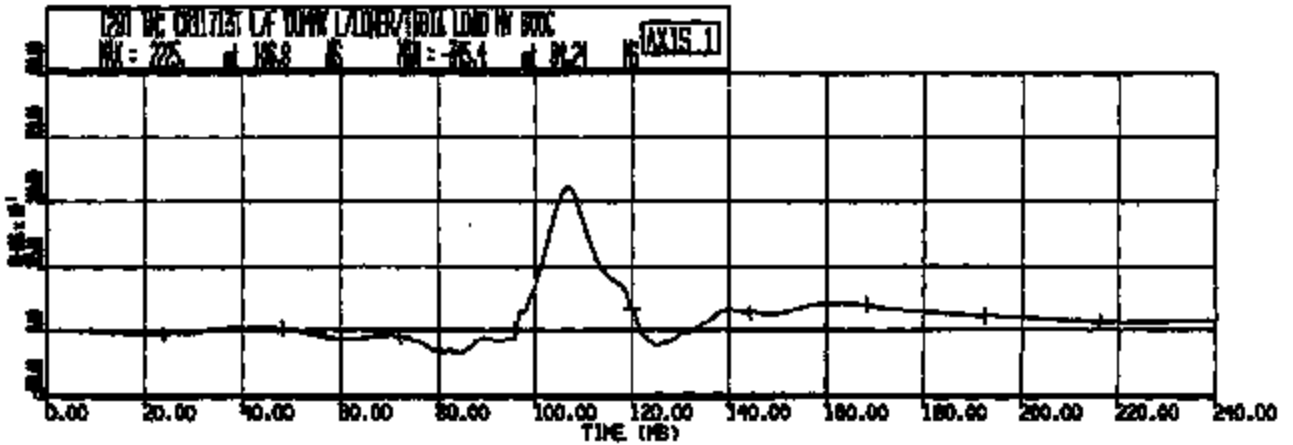
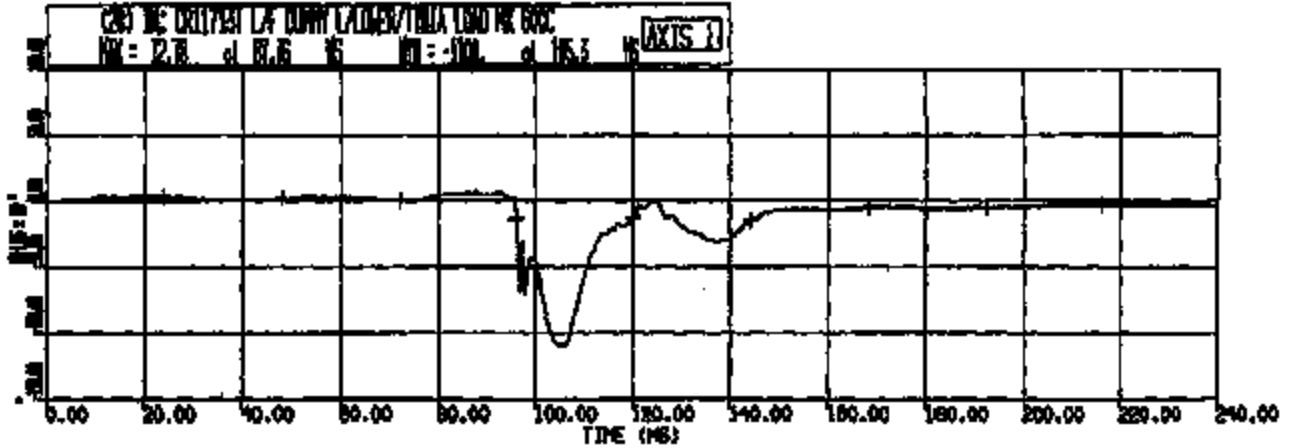


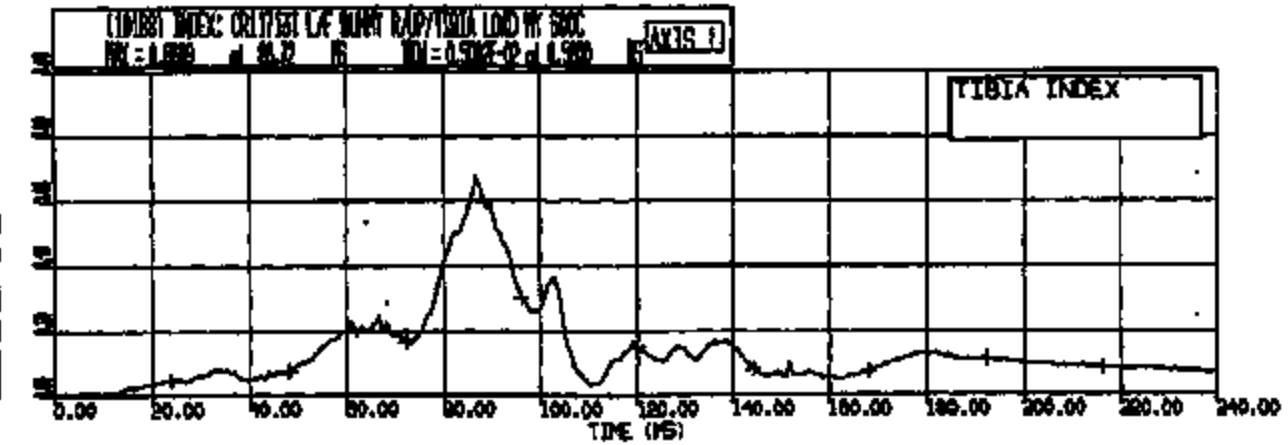
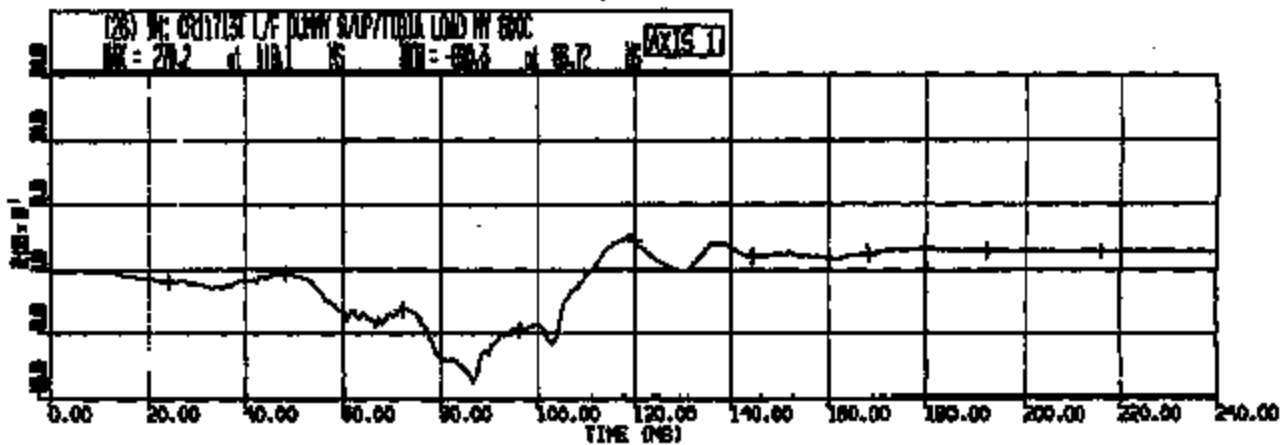
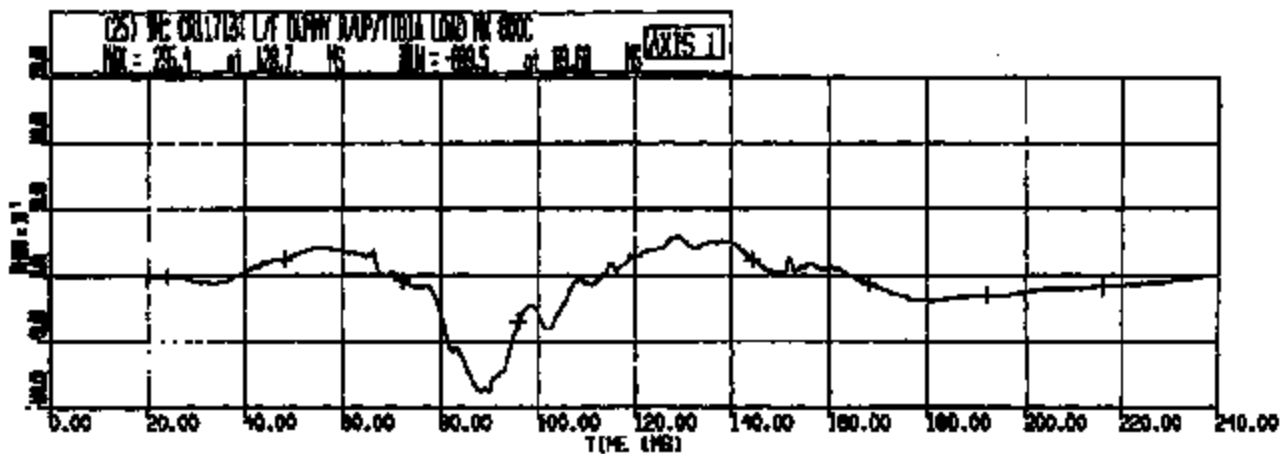
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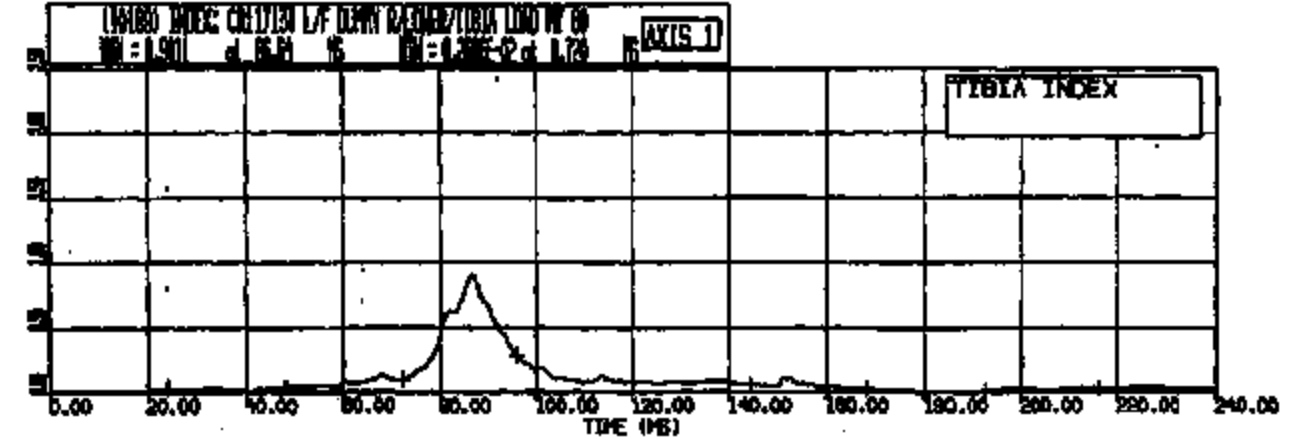
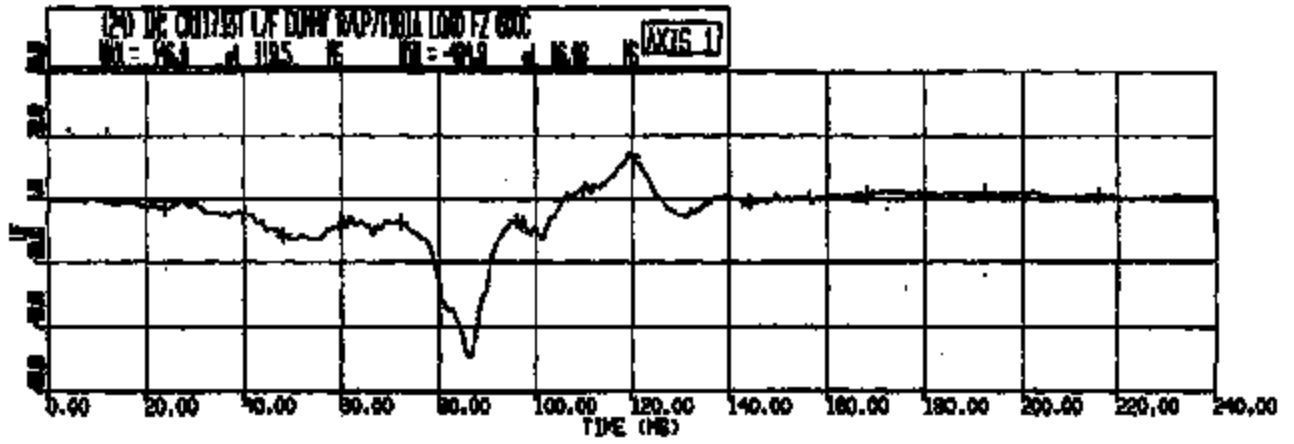
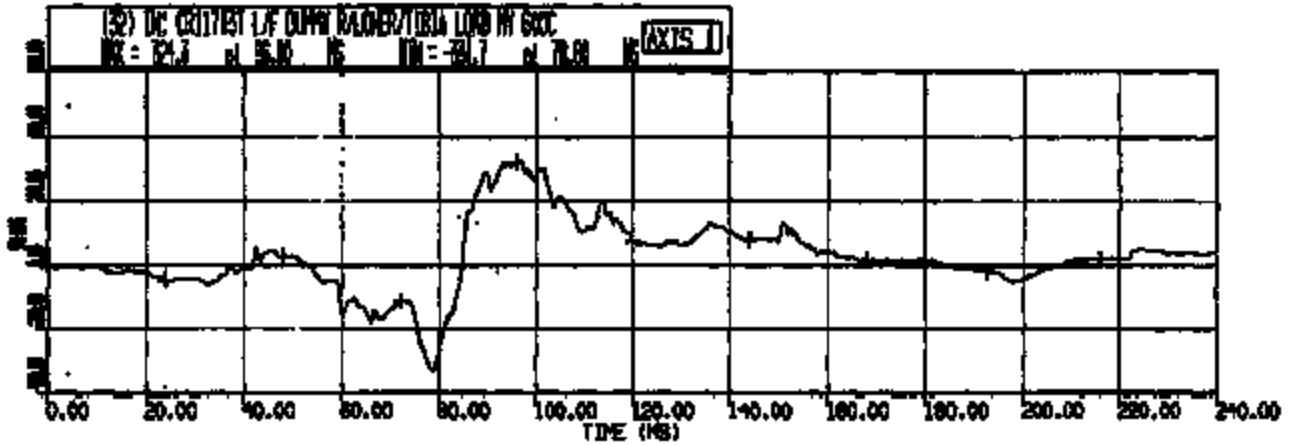
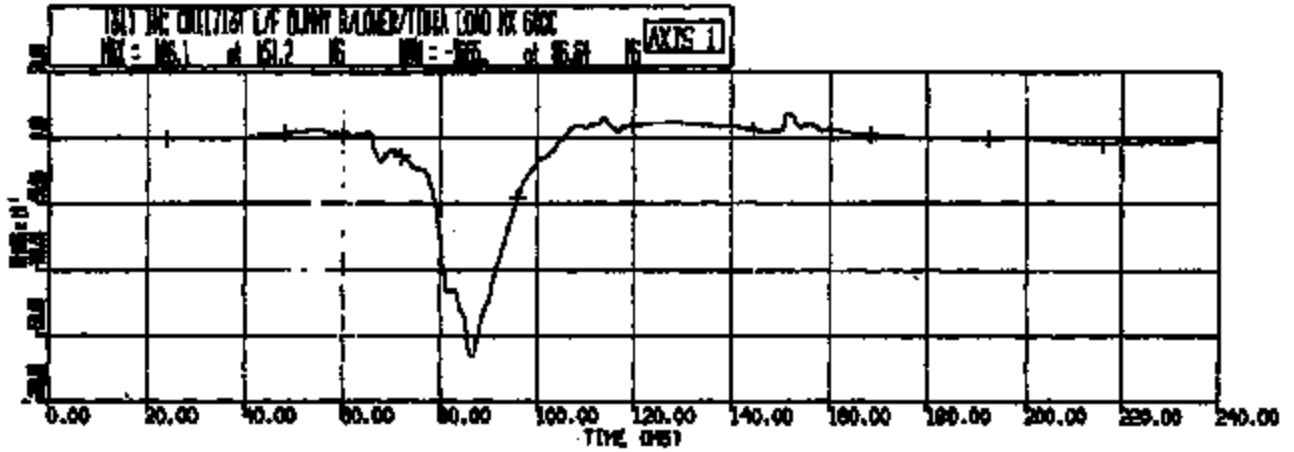
TIBIA INDEX

TIBIA INDEX





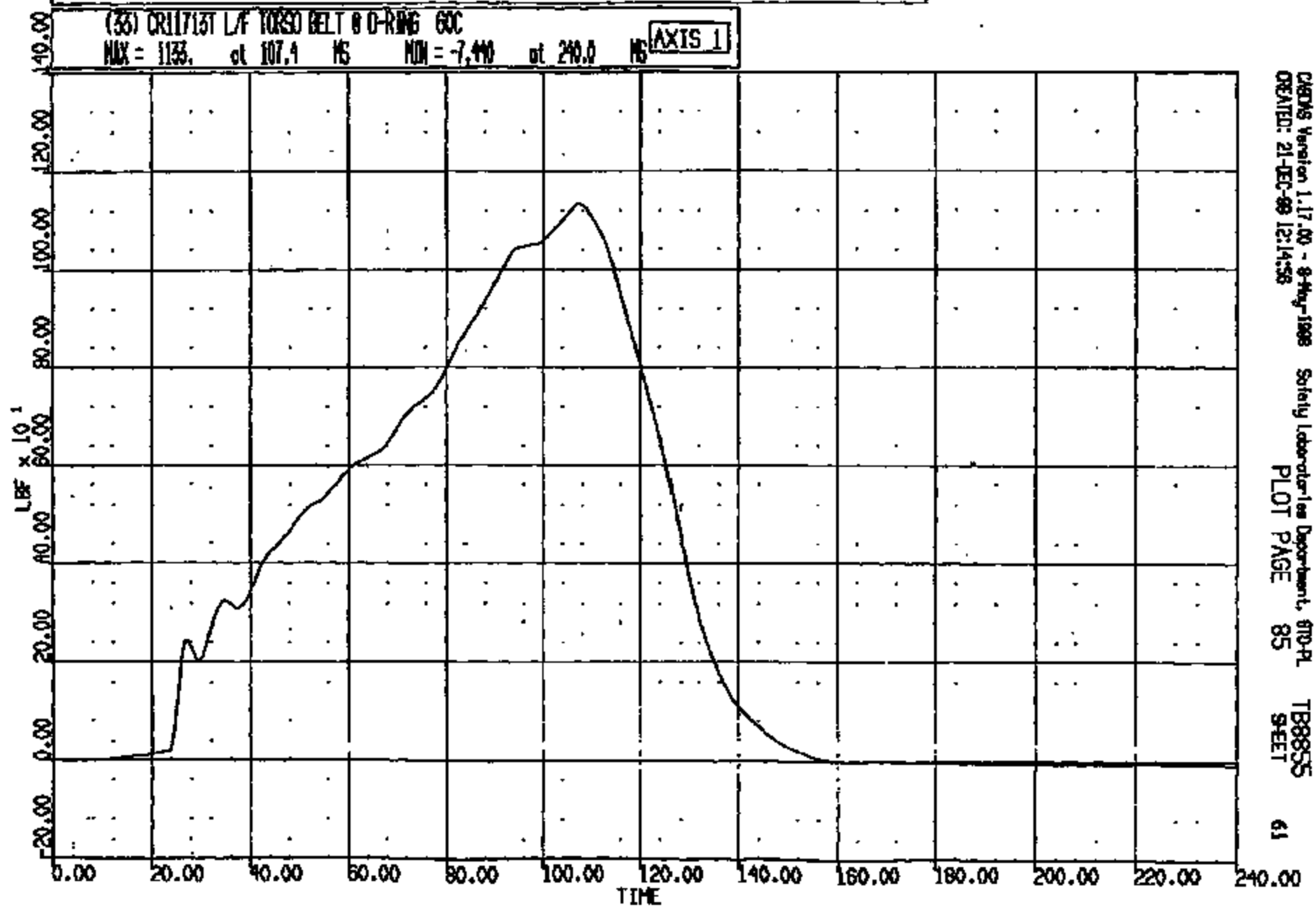
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TIBIA INDEX

CR R: 11713 TO: TB8855 DATE: 991221 10:28:05
2000 D-188

(33) CR11713T L/F TORSO BELT @ D-RING GOC
MAX = 1133. at 107.4 MS MIN = -7.440 at 240.0 MS **AXIS 1**

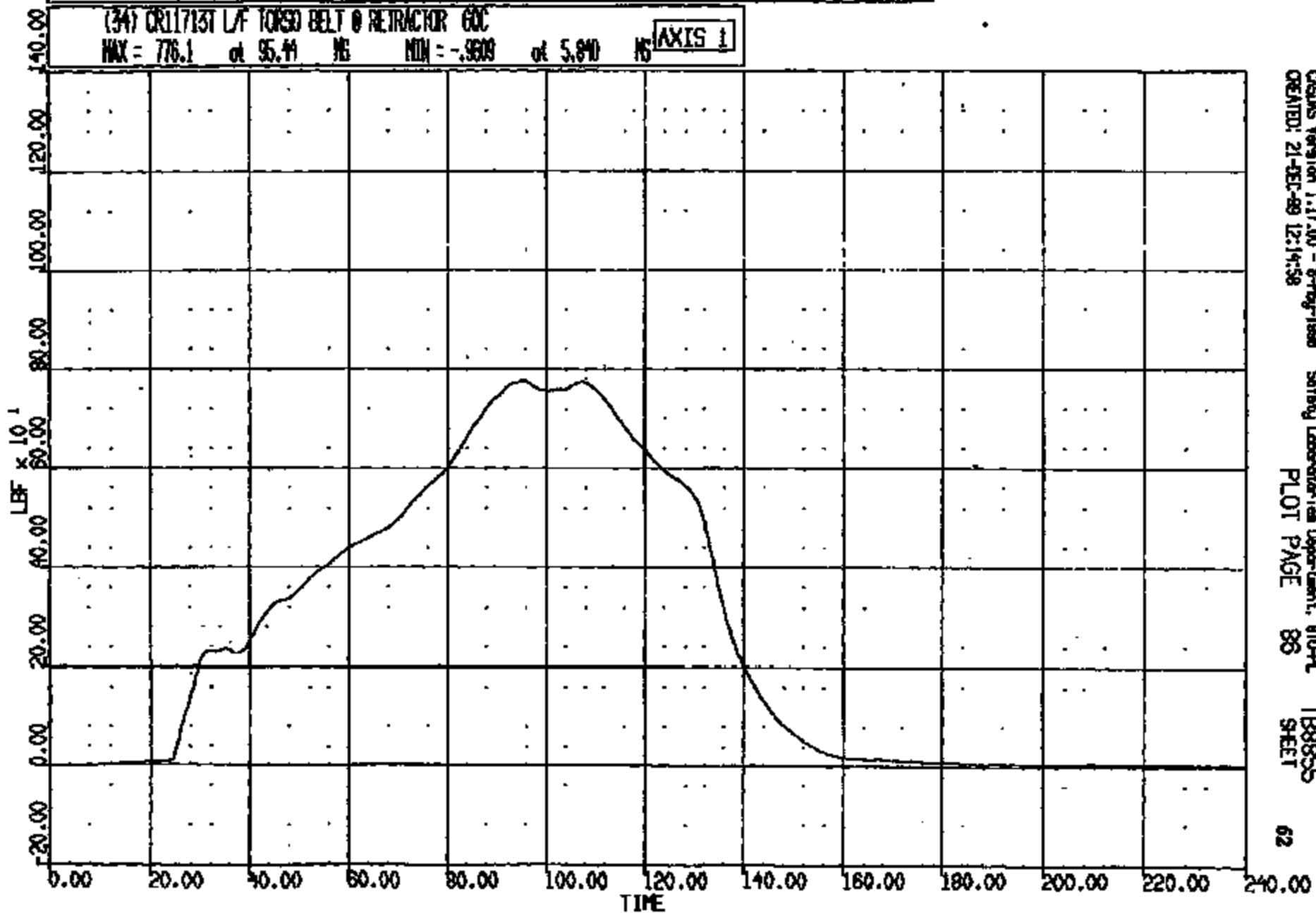


CRS Version 1.17.00 - 9-May-1998 Safety Laboratory Department, BTP-PL TB8855
CREATED: 21-DEC-99 12:14:58 PLOT PAGE 85 SHEET 61

CRTS 0011713

CR R: 11713 TO: TB9855 DATE: 891221 10:58:03
2000 D-189

(34) CR11713T L/F TORSO BELT @ RETRACTOR GDC
MAX = 776.1 of 95.44 MS MIN = -.9609 of 5.840 MS **AXIS 1**



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CRIS 0011713

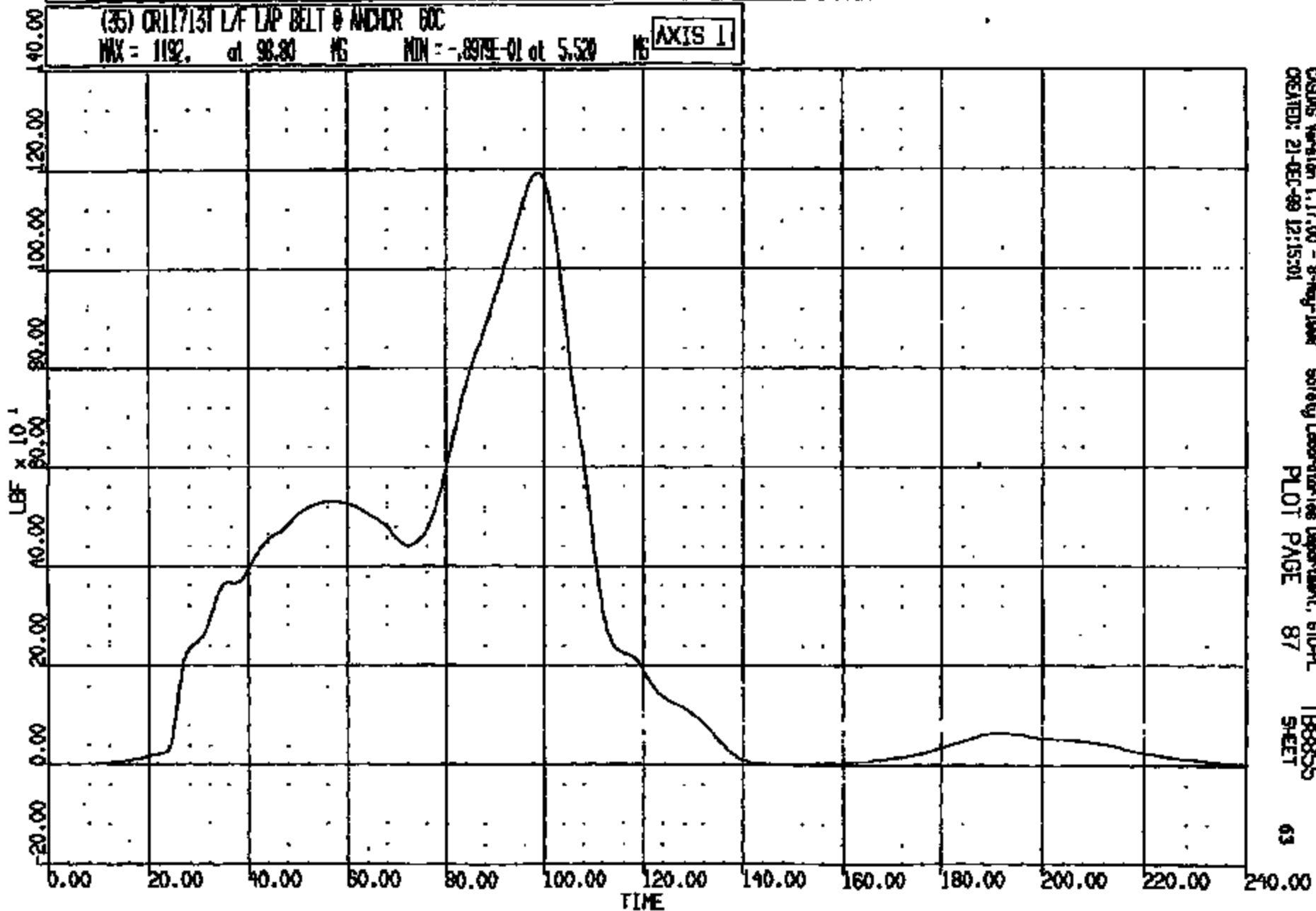
CR R: 11713 TO: T88855 DATE: 991221 10:38:05

2000 D-168

(35) CR117131 LAF LAP BELT & ANCHOR 60C

MAX = 1192. at 98.80 MS MIN = -.8979E-01 at 5.520 MS

AXIS 1



CASDAQ Version 1.17.00 - 8-Aug-1998
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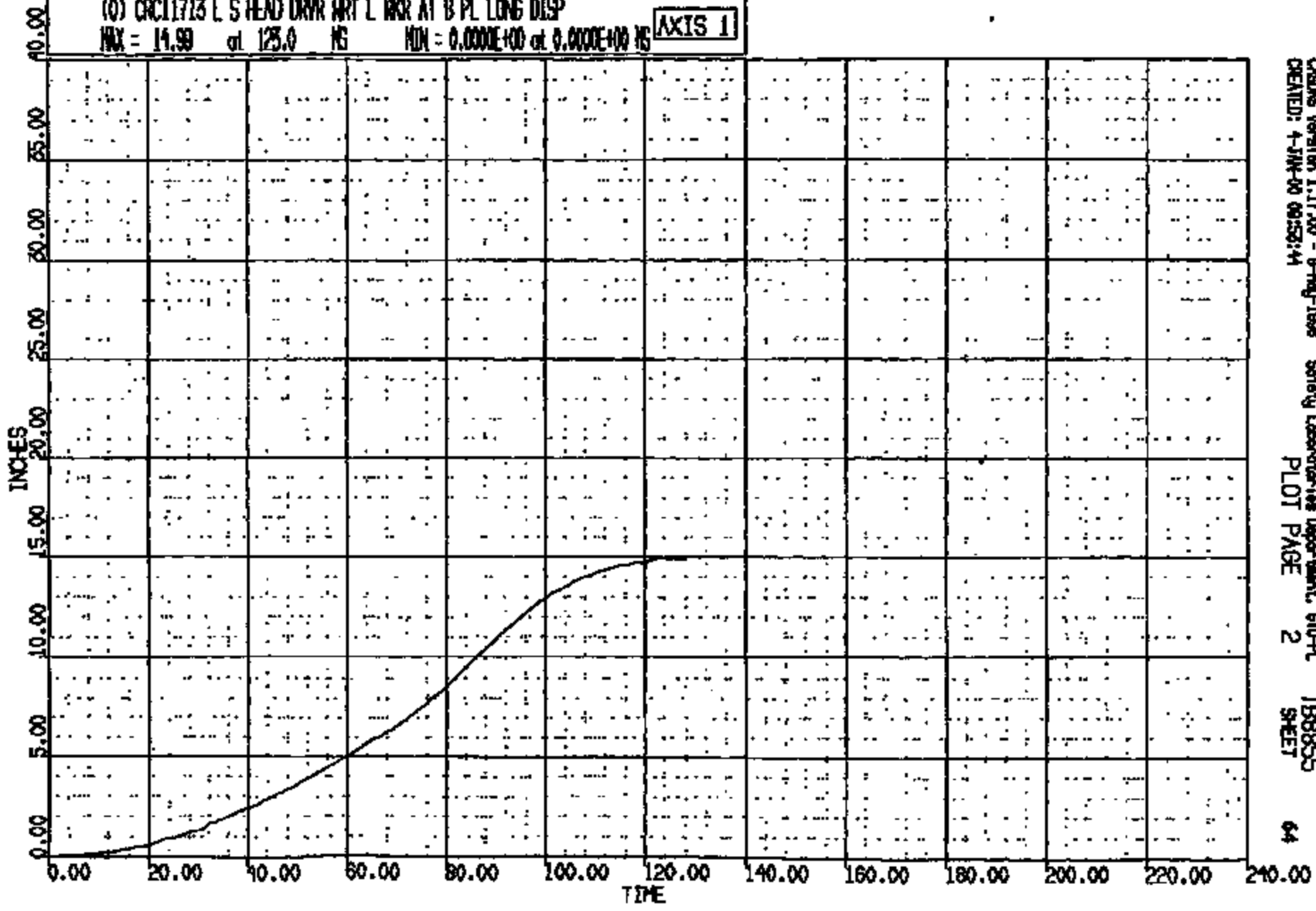
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CRIS 0011713

CR # : 11713 TO: T88855 DATE: 001221 10:56:03
2000 D-190

(0) CR011713 L S HEAD DRYR WRT L WCR AT B PL LONG DISP
MAX = 14.90 at 125.0 MS MIN = 0.000E+00 at 0.000E+00 MS

AXIS 1

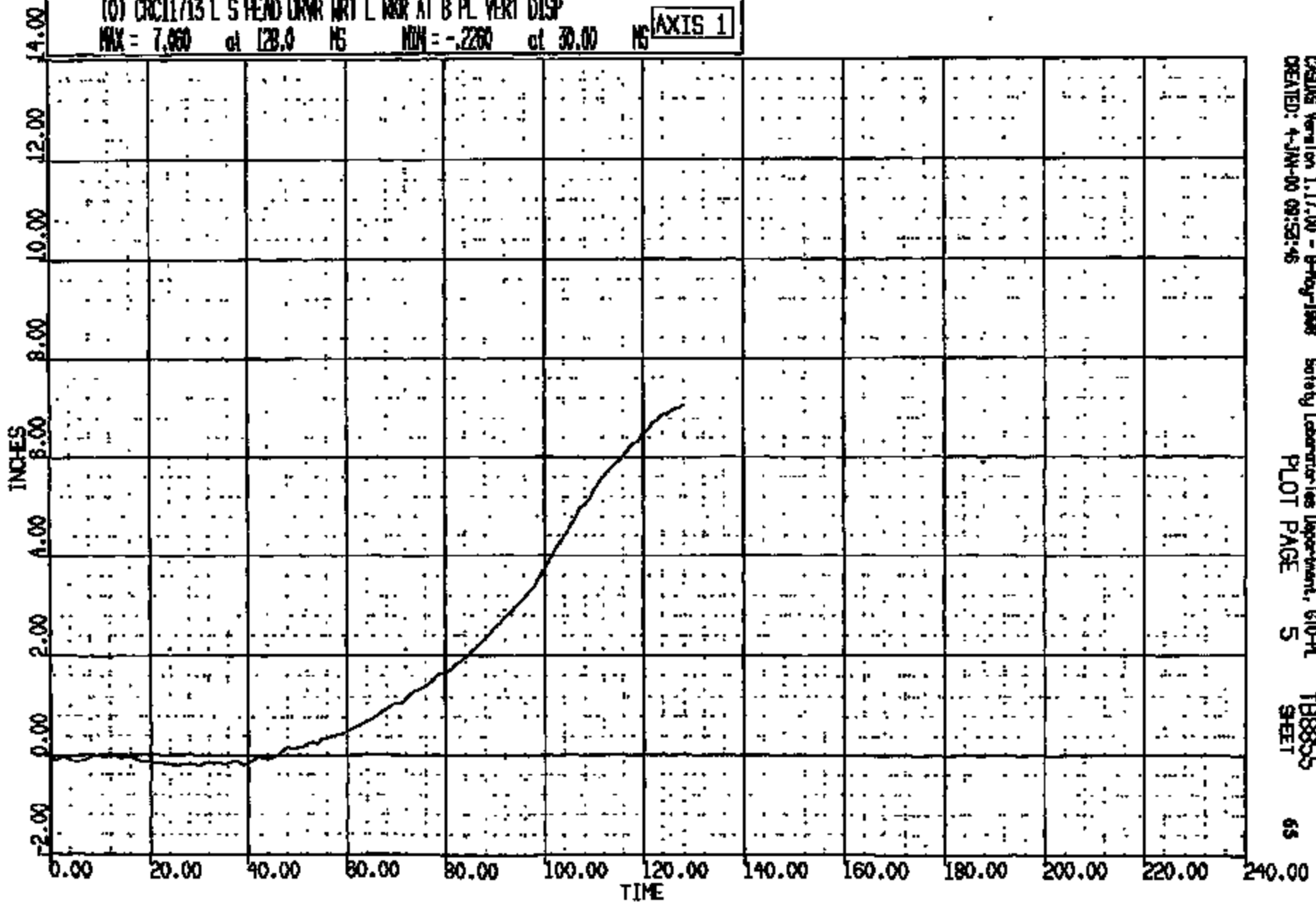


CRSNG Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL T88855
CREATED: 4-JUN-00 09:53:44 PLOT PAGE 2 SHEET 64

CRIS 0011713

CR #: 11713 TO: TB8855 DATE: 991221 10:36:05
2000 D-198

(0) CR011713 L S HEAD DRNR WRT L RGR AT B PL VERT DISP
MAX = 7.060 at 128.0 MS MIN = -.2260 at 30.00 MS **AXIS 1**

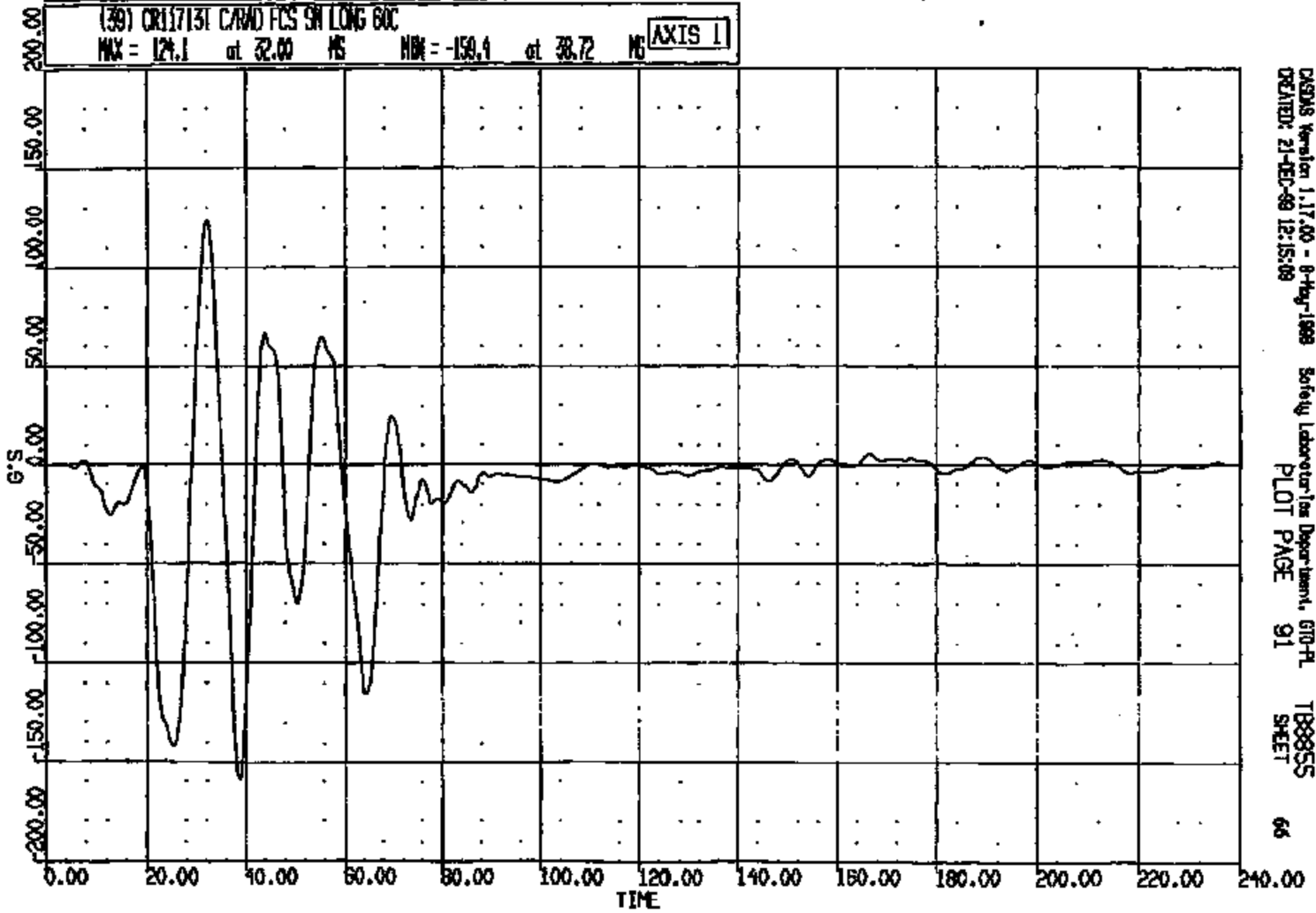


CASUS Version 1.17.00 - 9-May-1998 Safety Laboratories Department, 610-A
CREATED: 4-JAN-00 09:52:46 PLOT PAGE 5 TB8855
SHEET 65

CRTS 0011713

CR R: 11715 TO: T8855 DATE: 991221 10:38:05
2000 D-188

(39) CR11715I C/RAD FCS SN LONG 60C
MAX = 124.1 at 32.00 MS MIN = -150.1 at 38.72 MS **AXIS 1**

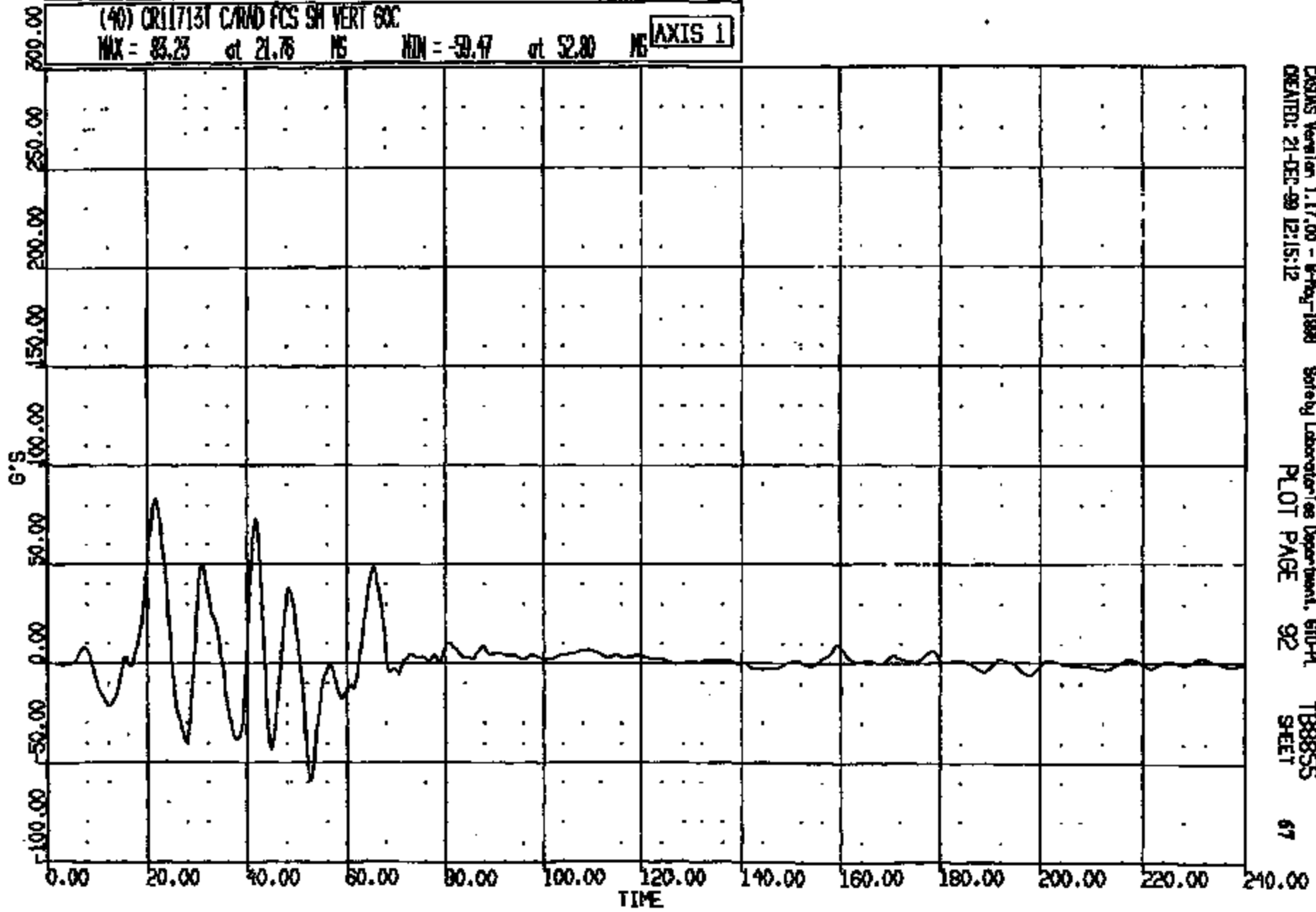


CRSIS Version 1.17.00 - 8-May-1998 Safety Laboratory/Ins Department, GTO-PL T88855
CREATED: 21-DEC-99 12:15:09 PLOT PAGE 91 SHEET 66

CRIS 0011713

CR R: 11715 TO: T8855 DATE: 991221 10:58:03
2000 0-188

(40) CR11713T C/RND FCS SH VERT 60C
MAX = 83.23 at 21.75 MS MIN = -59.47 at 52.80 MS **AXIS 1**

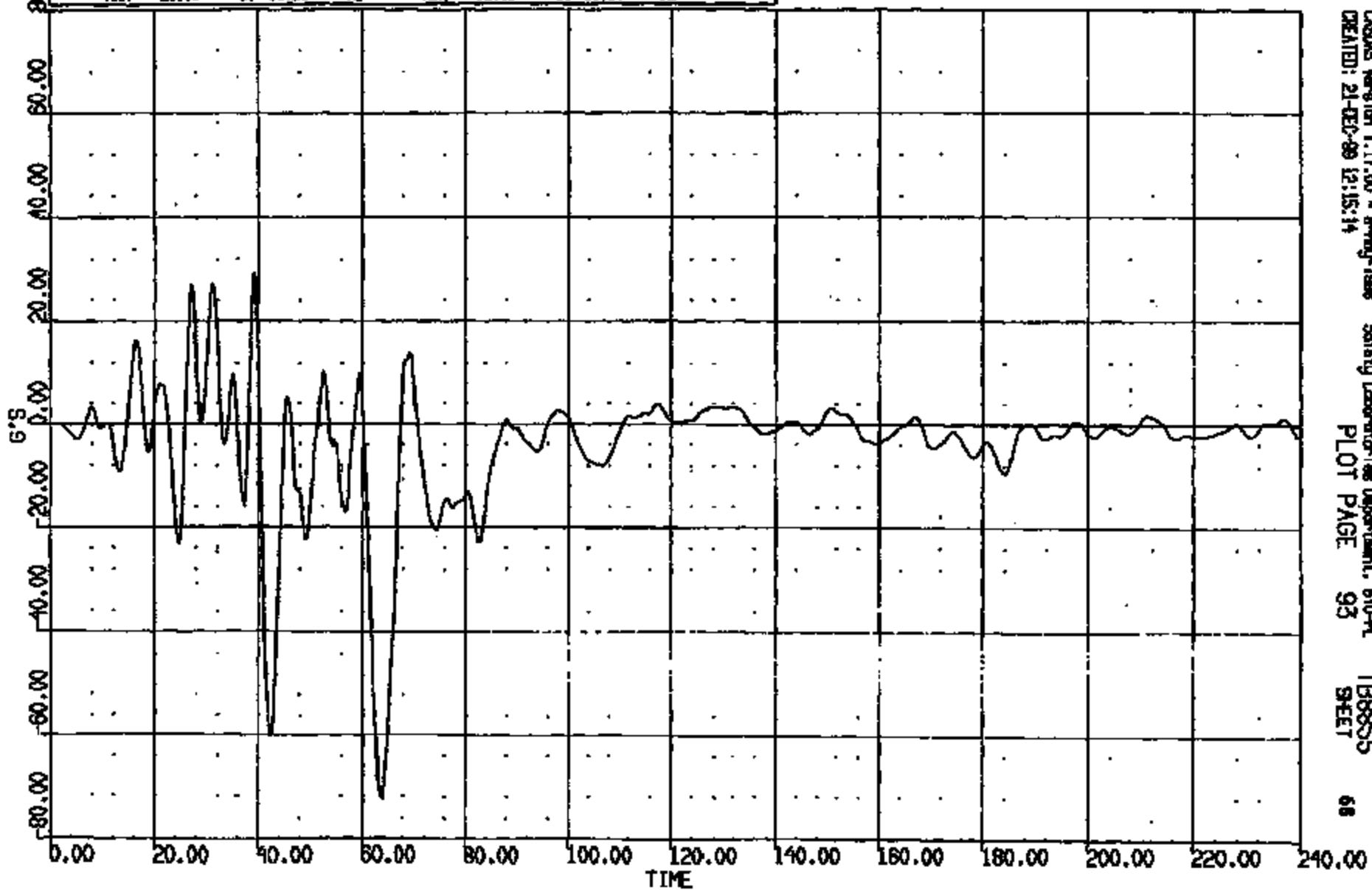


CADDS Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 610-PL T8855
CREATED: 21-DEC-99 12:15:12 PLOT PAGE 92 SHEET 67

CRTS 0011713

CR R: 11713 TO: T8855 DATE: 991221 10:38:03
2000 D-188

(41) CR11713T C/RAD FCS SN LAT GOC
MAX = 29.18 at 39.28 NS MIN = -72.61 at 63.84 NS **AXIS 1**



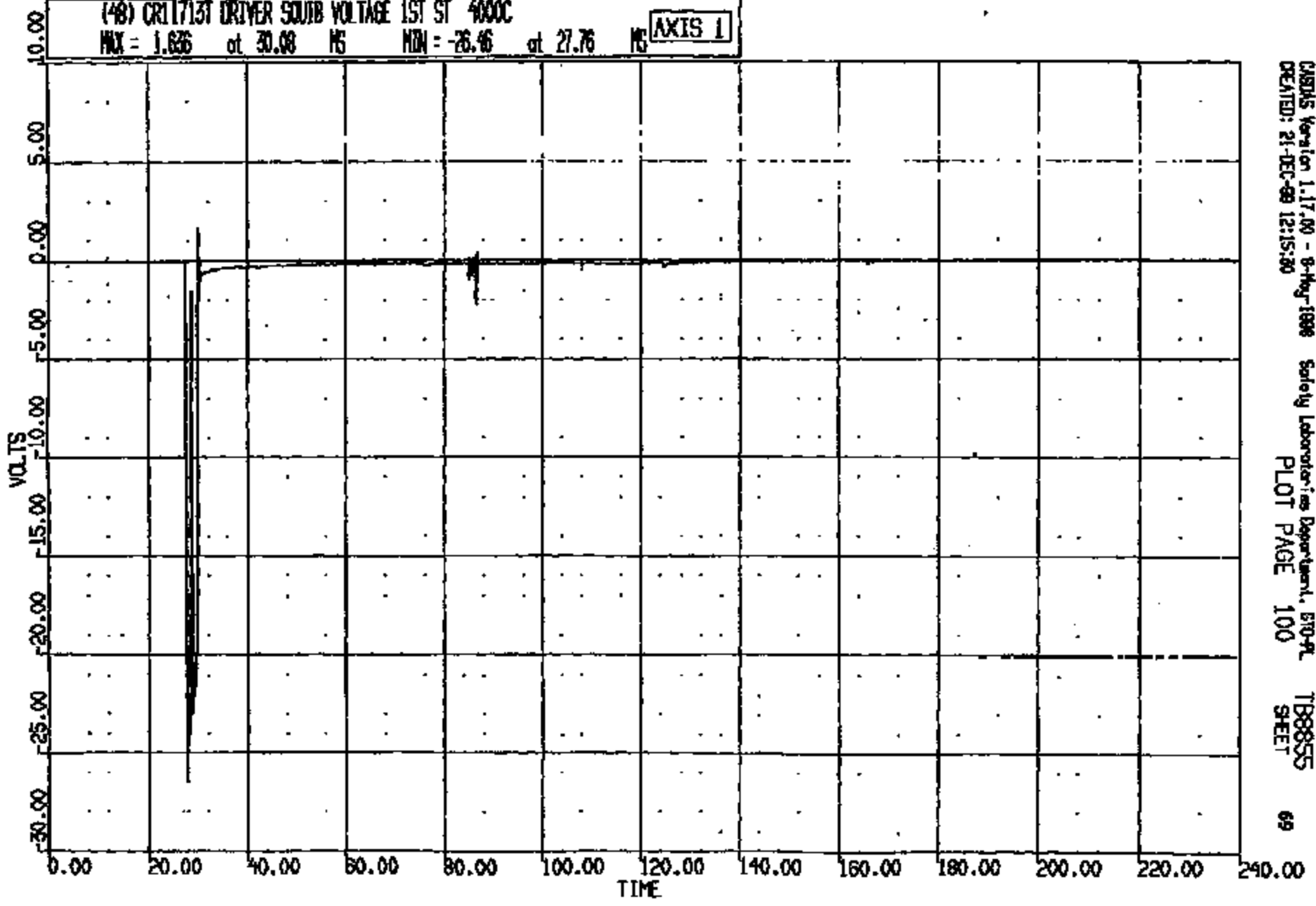
CASUS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 870-PL
CREATED: 21-DEC-99 12:15:14 PLOT PAGE 93 SHEET 68

CRTS 0011713

CR R: 11713 TO: T8855 DATE: 991221 10:58:03
N000 D-188

(48) CR11713 DRIVER SOLID VOLTAGE 1ST ST 4000C
MAX = 1.626 at 30.08 MS MIN = -26.46 at 27.76 MS

AXIS 1

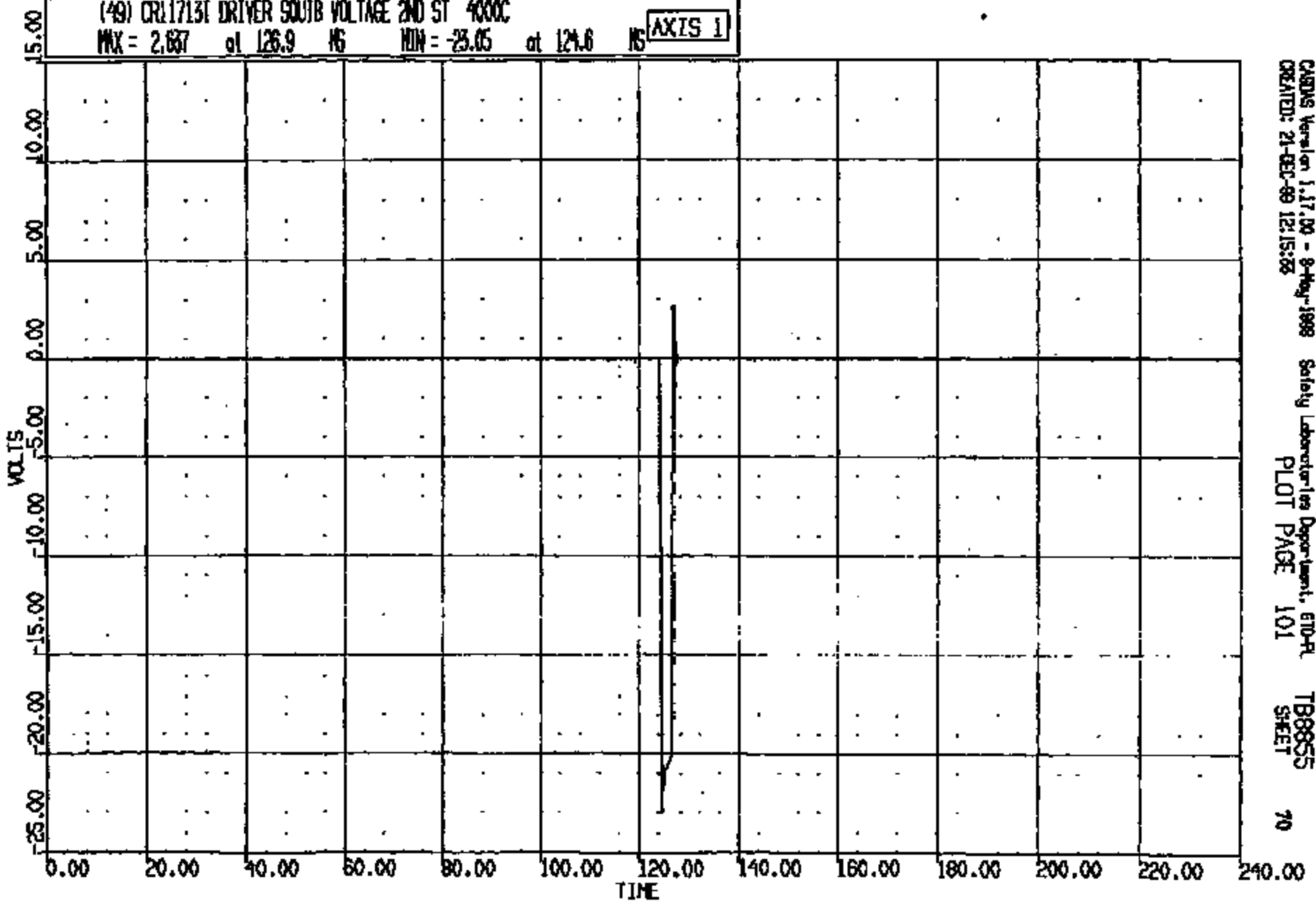


CARDAS Version 1.17.00 - 8-Aug-1998 Safety Laboratories Department, ETO-PL
CREATED: 21-DEC-99 12:15:20 PLOT PAGE 100 T88555 SHEET 69

CR1S 0011713

CR R: 11713 TO: T8855 DATE: 991221 10:36:05
2000 D-186

(49) CR117131 DRIVER SOUTB VOLTAGE 2ND ST 4000C
MAX = 2.837 at 126.9 MS MIN = -23.05 at 124.6 MS AXIS 1

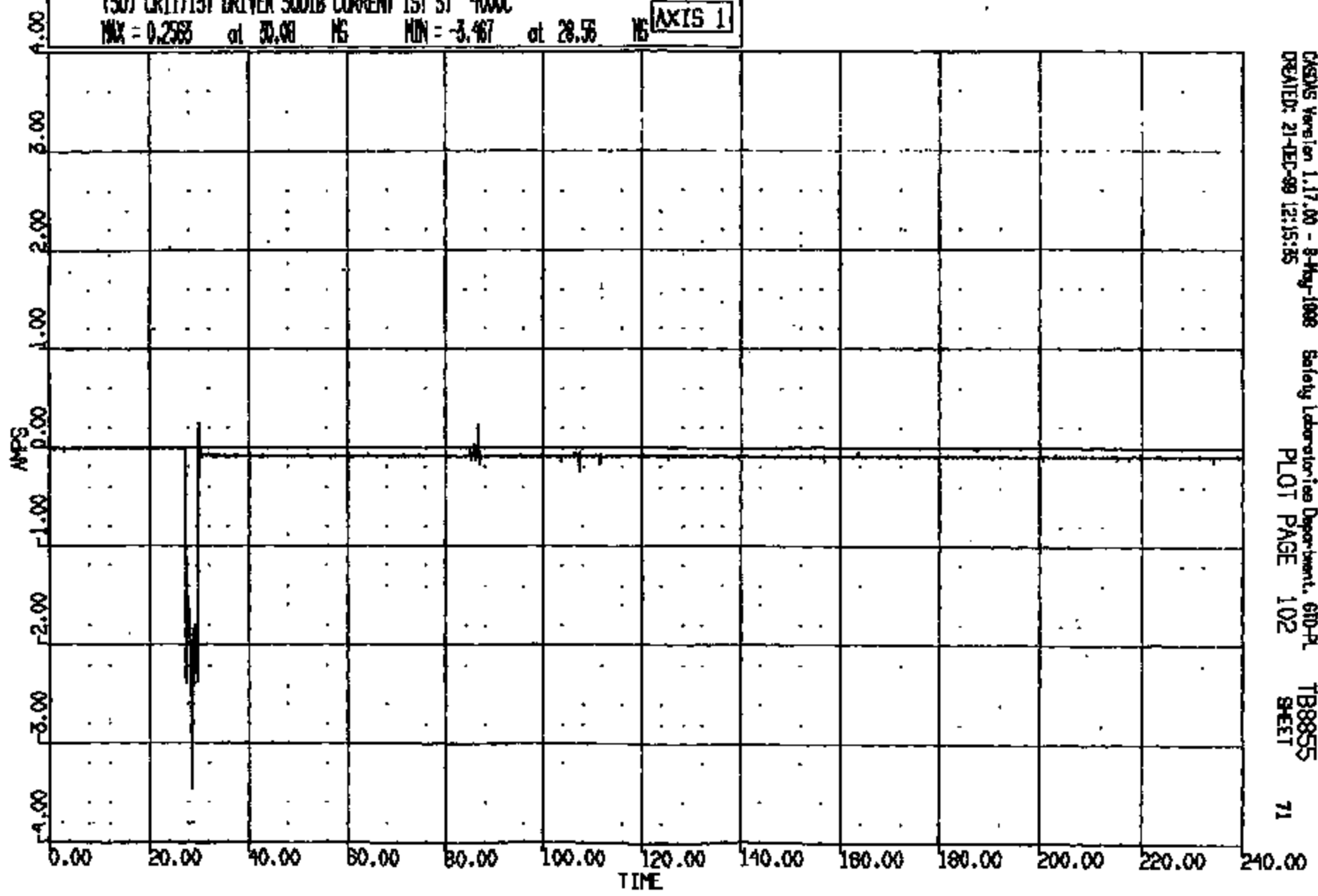


CARDIG Version 1.17.00 - 8-May-1998 Safety Laboratories Department, ETO-RL T8855
CREATED: 21-DEC-99 12:15:08 PLOT PAGE 101 SHEET 70

CRTS 0011713

CR R: 11713 TO: T8855 DATE: 991221 10:35:03
2000 D-100

(50) CR117131 DRIVER SOUTH CURRENT 1ST ST 4000C
MAX = 0.2583 at 20.00 MS MIN = -3.467 at 28.56 MS AXIS 1



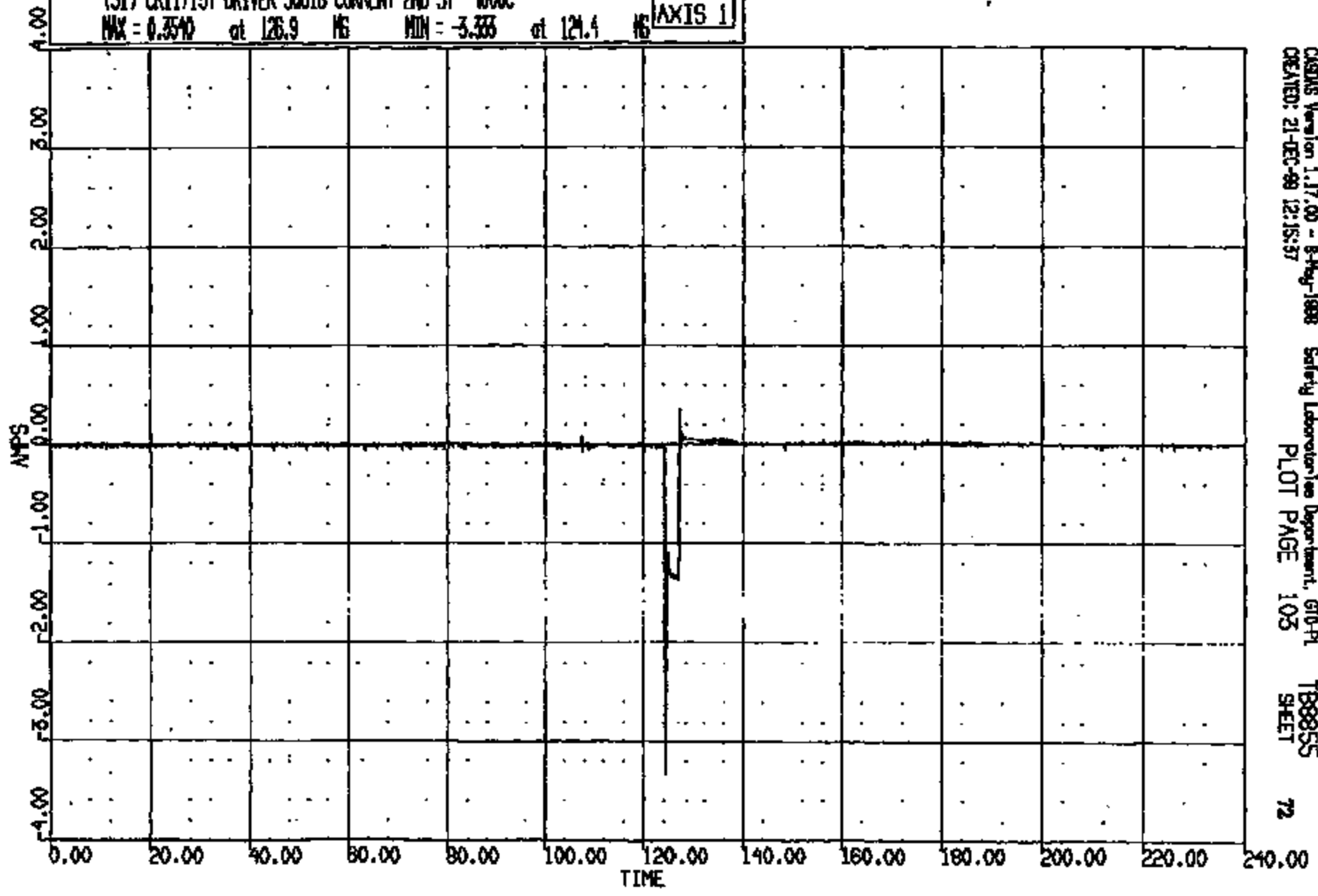
CRS015 Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-A T8855
PRINTED: 21-DEC-99 12:15:35 PLOT PAGE 102 SHEET 71

CRTS 0011713

CR R: 11713 TO: T88858 DATE: 891221 10:38:03
2000 C-188

(51) CR117131 DRIVER SOUTH CURRENT 2ND ST 400C
MAX = 0.3540 at 126.9 MS MIN = -3.333 at 121.4 MS

AXIS 1

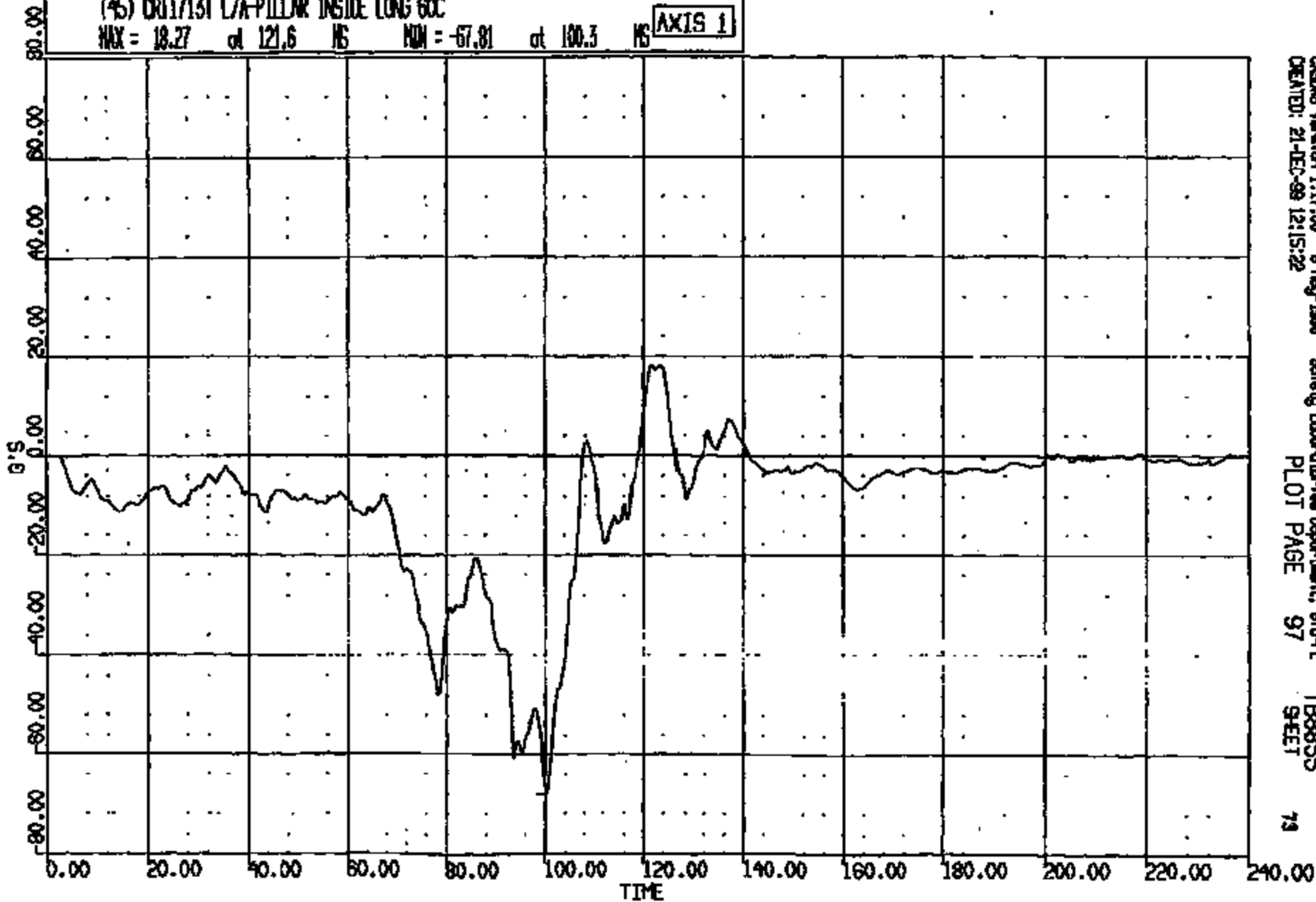


CRAMS Version 1.17.00 - 8-May-1988 Safety Laboratory Department, G10-Pl T88855
CREATED: 21-DEC-89 12:15:37 PLOT PAGE 105 SHEET 72

CRTS 0011713

CR R: 11713 TO: T8885 DATE: 991221 10:38:03
2000 D-198

(45) CR117131 L/A-PILLAR INSIDE LONG 60C
MAX = 18.27 at 121.6 MS NOM = -67.81 at 100.3 MS **AXIS 1**



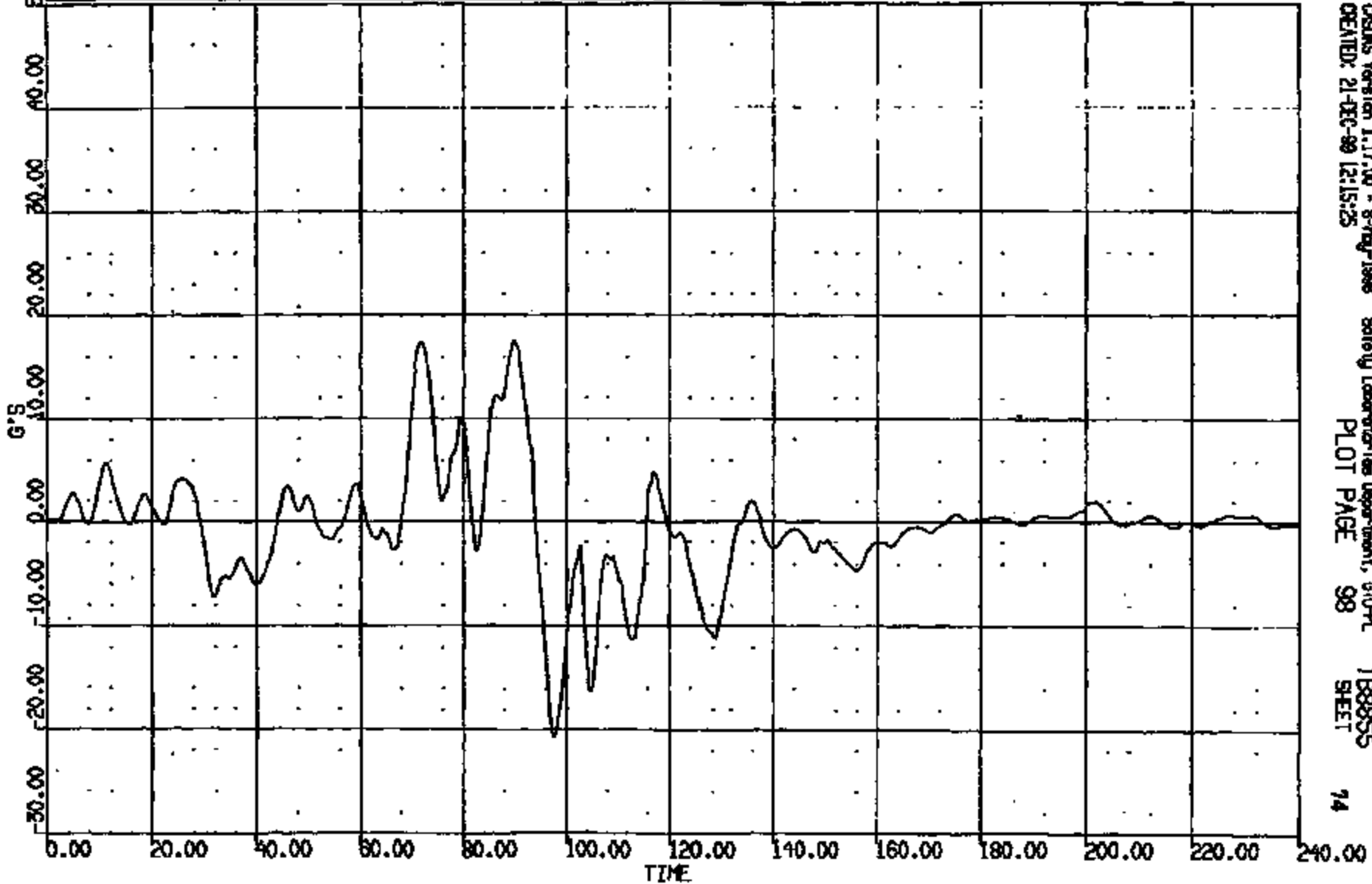
CRSNG Version 1.17.00 - 8-May-1998
CREATED: 21-DEC-99 12:15:22

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CR R: 11713 TO: TB8855 DATE: 881221 10:38:08
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(46) CR11713T L/A-PILLAR INSIDE VERT GOC
MAX = 17.49 at 89.92 MS MIN = -20.82 at 97.92 MS **AXIS 1**

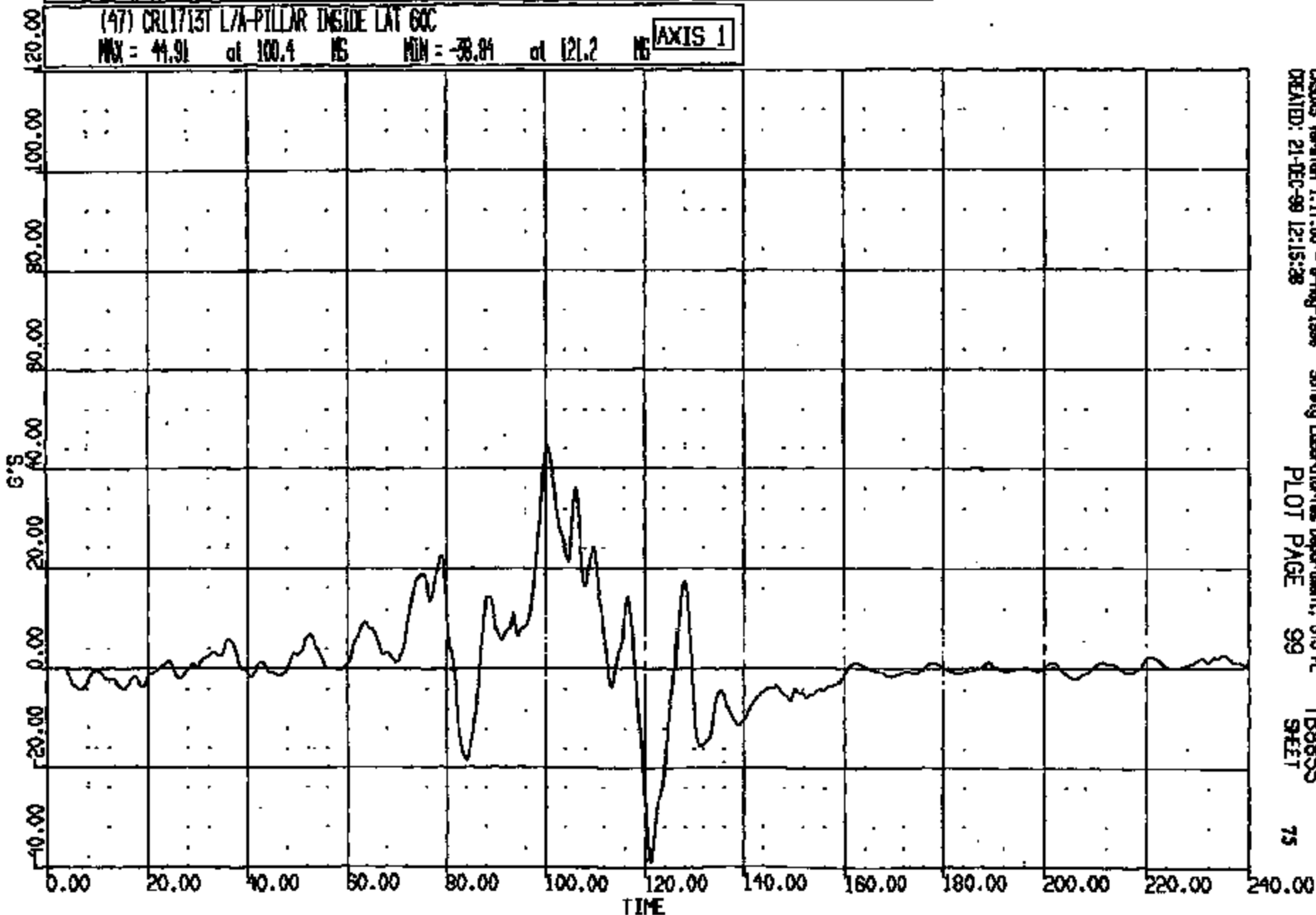


CGSMS Version 1.17.00 - 8-Aug-1988 Safety Laboratories Department, 610-P
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CR R: 11713 TO: T88855 DATE: 991221 10:36:05
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(47) CRL1713T L/A-PILLAR INSIDE LAT 60C
MAX = 44.91 at 100.4 MS MIN = -38.84 at 121.2 MS **AXIS 1**

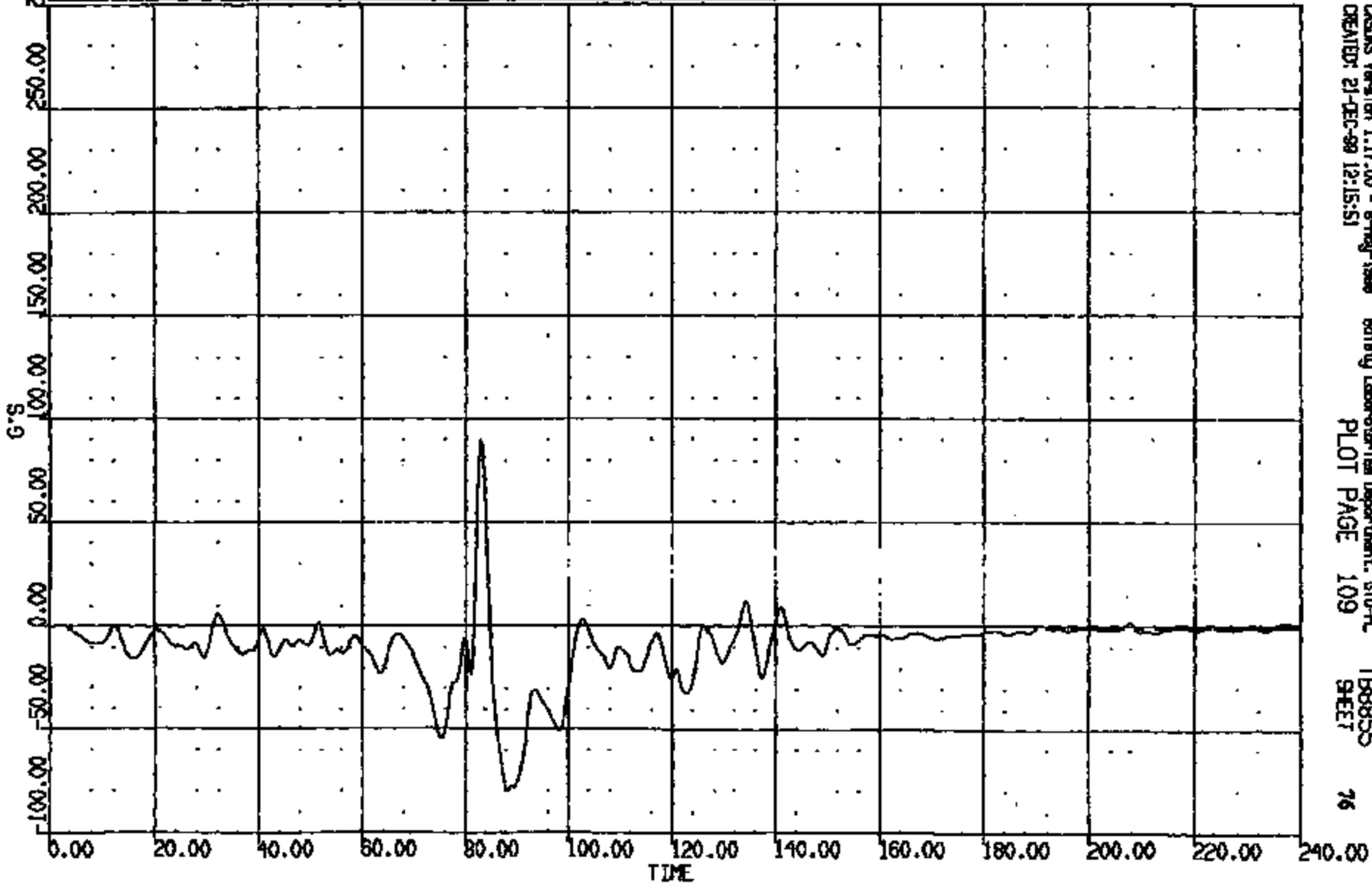


CASUS Version 1.17.00 - 8-Aug-1998 Safety Laboratories Department, 610-PL
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CRTS 0011713

CR R: 11715 TO: TB8855 DATE: 991221 10:36:05
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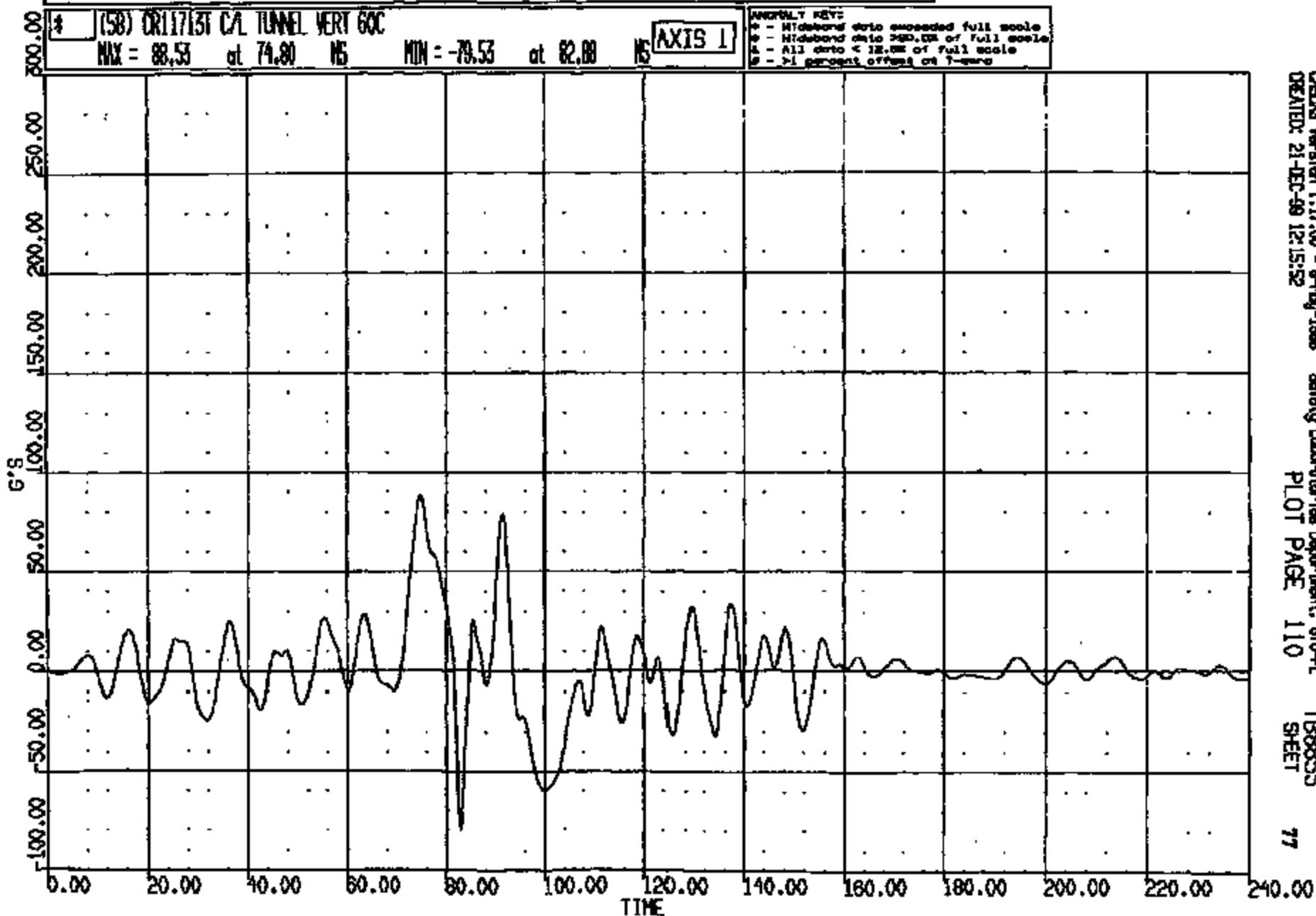
(57) CR11713T CAL TUNNEL LONG 80C
MAX = 89.69 at 83.12 MS MIN = -79.74 at 88.24 MS **AXIS 1**



CASAS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 810-A
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CRTS 0011713

CR R: 11713 TO: TB9855 DATE: 991221 10:56:03
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CRS05 Version 1.17.00 - 8-May-1998
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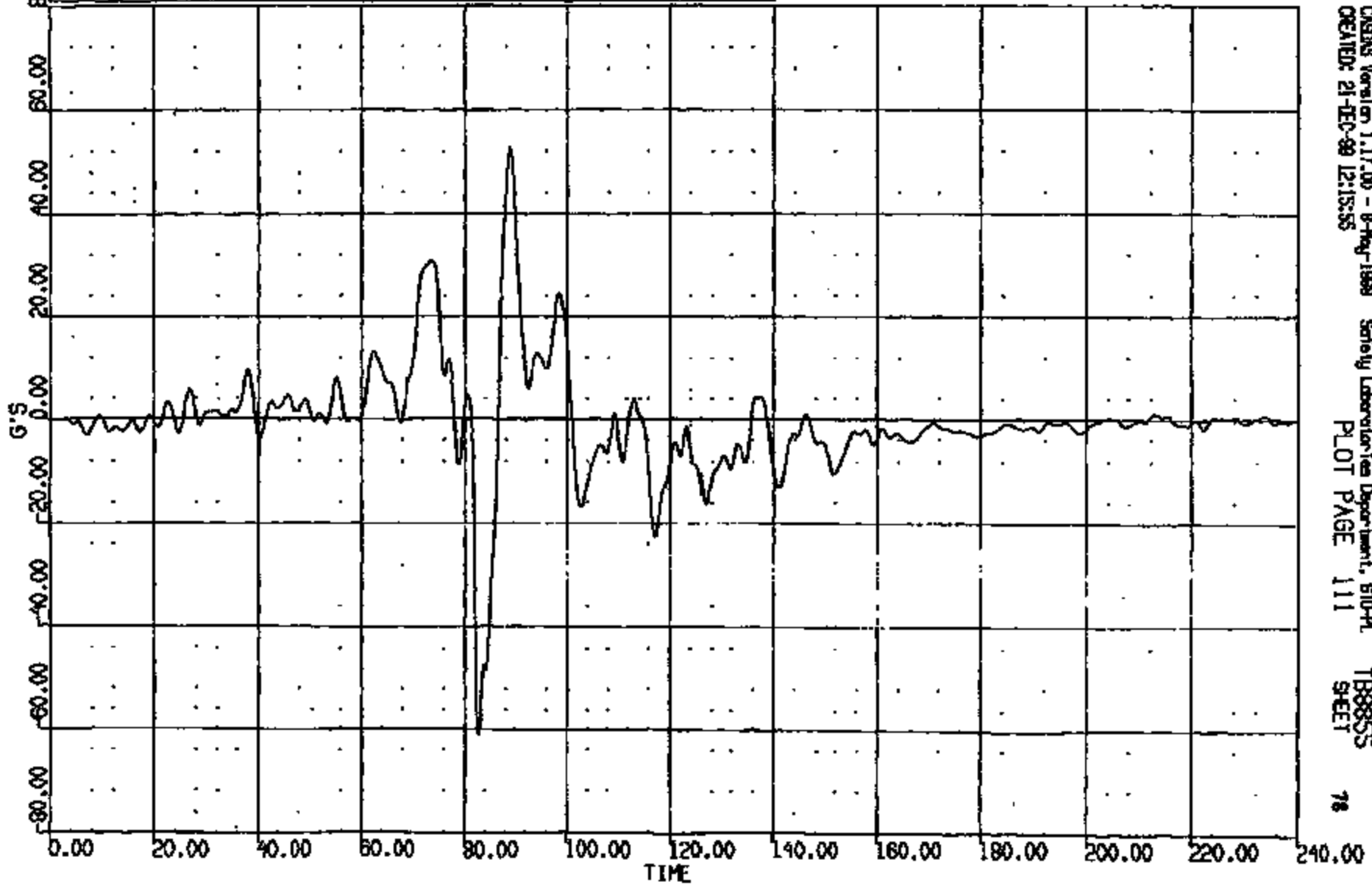
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CRIS 0011713

CR R: 11713 TO: T88855 DATE: 991221 10:58:03
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(59) CR11713T CA TUNNEL LAT 60C
MAX = 52.70 at 88.88 MS MIN = -61.08 at 82.72 MS **AXIS 1**



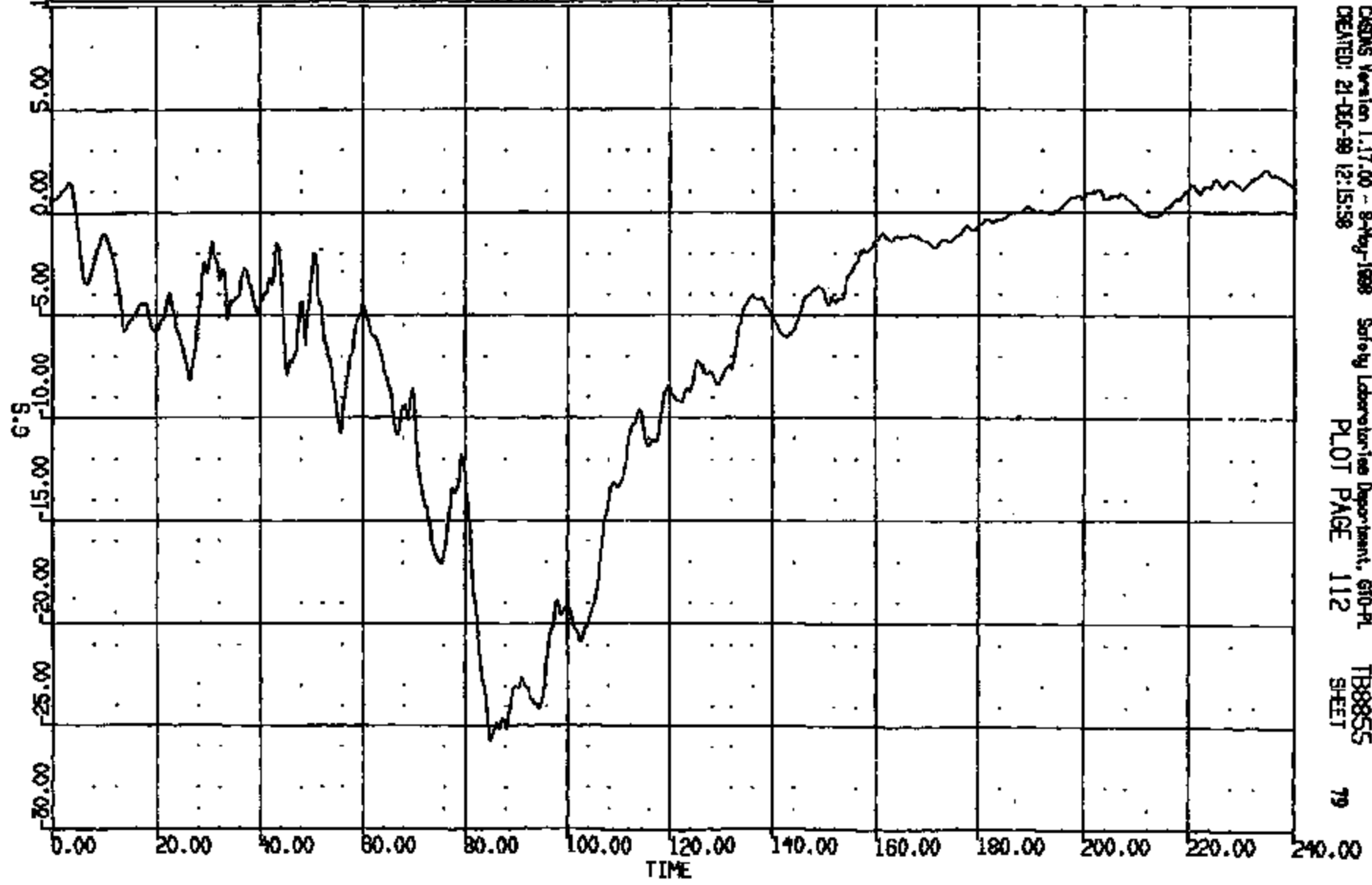
CRTS Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 510-PL
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CRTS 0011713

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(60) CR11713I R/A-PILLAR INSIDE LONG 60C
MAX = 2.022 at 239.6 NS MIN = -25.79 at 85.04 NS

AXIS 1

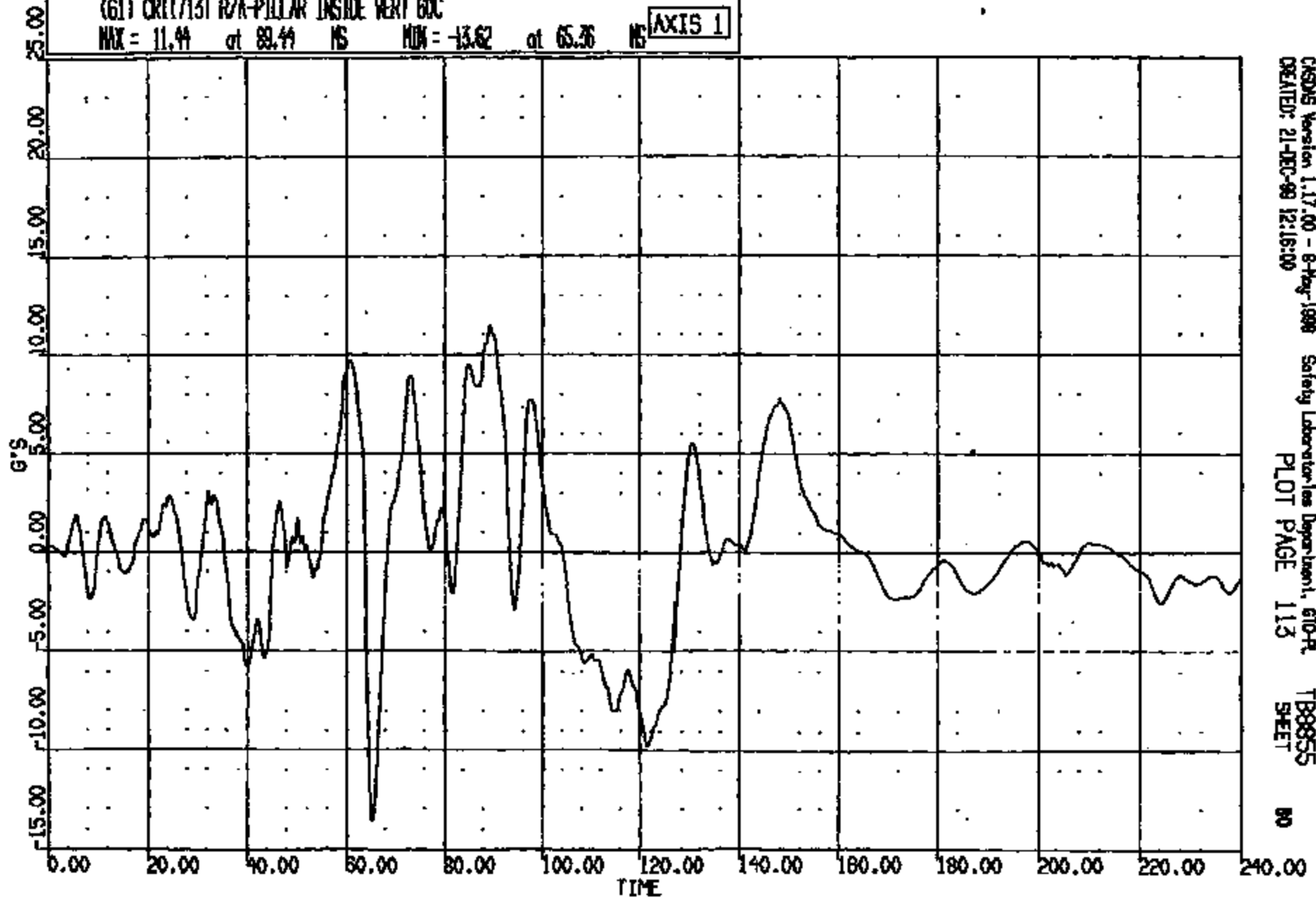


CRS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
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CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:38:03
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(G1) CR11713T R/A-PILLAR INSIDE VERT 60C
MAX = 11.44 at 89.44 MS MIN = -13.62 at 65.36 MS **AXIS 1**

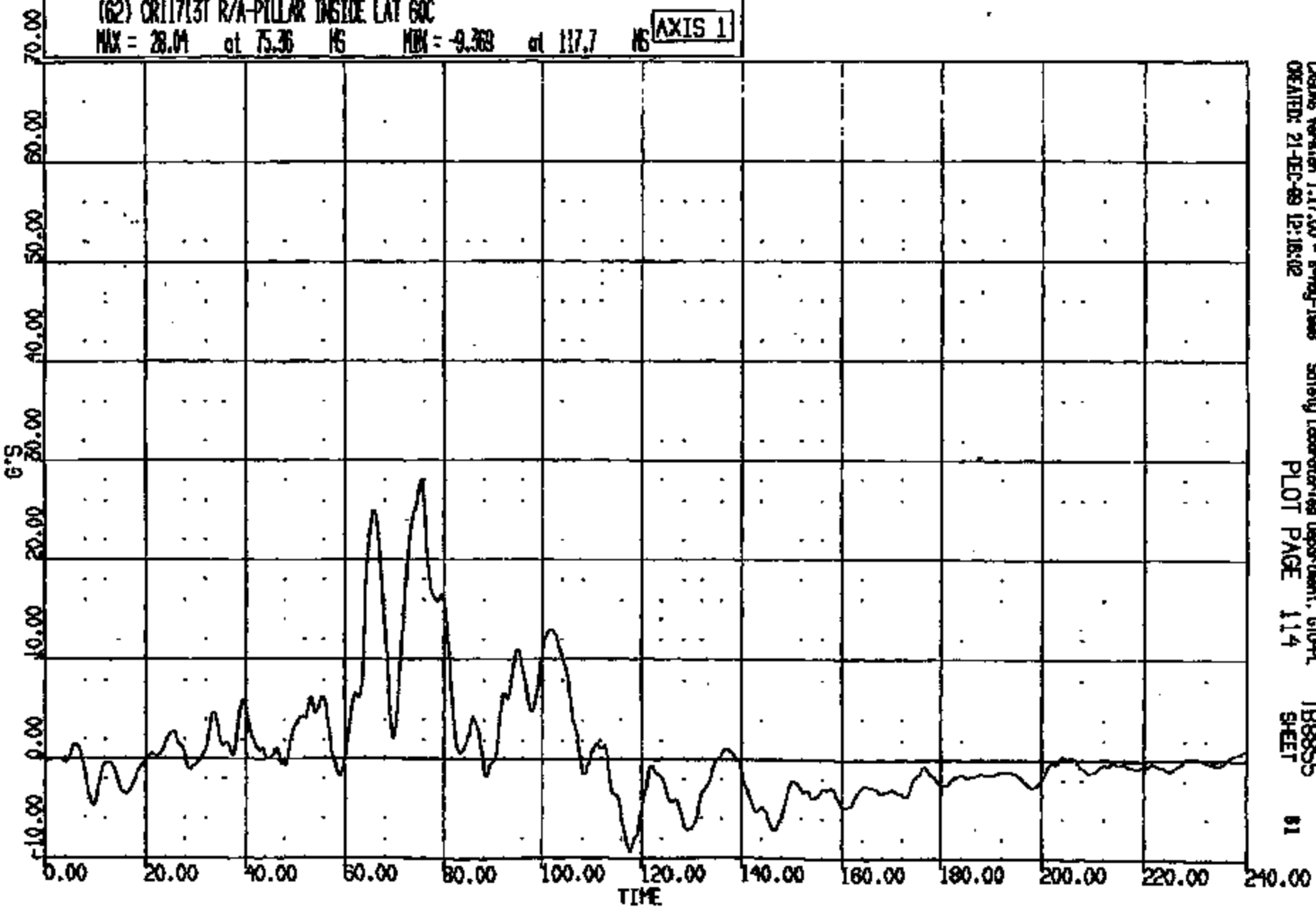


CRSDS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-R
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CRTS 0011713

CR R: 11713 TO: T8885 DATE: 001221 10:36:03
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(62) CR117131 R/A-PILLAR INSIDE LAT 60C
MAX = 28.01 at 75.36 NS MIN = -9.363 at 117.7 NS **AXIS 1**

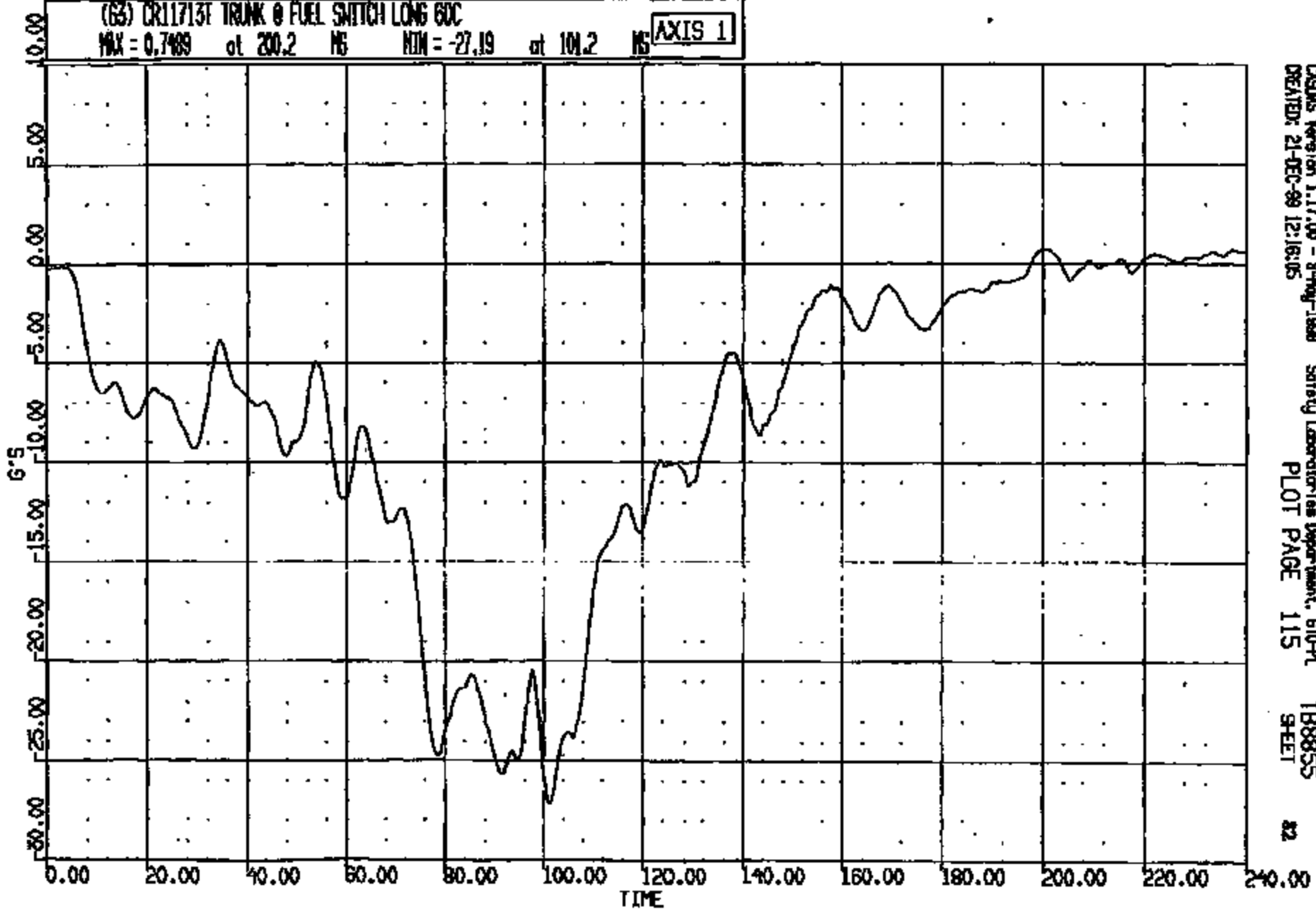


CRS06 Version 1.17.00 - 8-May-1998 Safety Laboratories Department, G10-PL
CREATED: 21-DEC-89 12:18:02 PLOT PAGE 114 T88855 SHEET 01

CRIS 0011713

CR R: 11713 TO: T8885 DATE: 991221 10:38:03
R000 D-168

(63) CR11713F TRUNK @ FUEL SWITCH LONG 60C
MAX = 0.7489 at 200.2 MS MIN = -27.19 at 104.2 MS **AXIS 1**

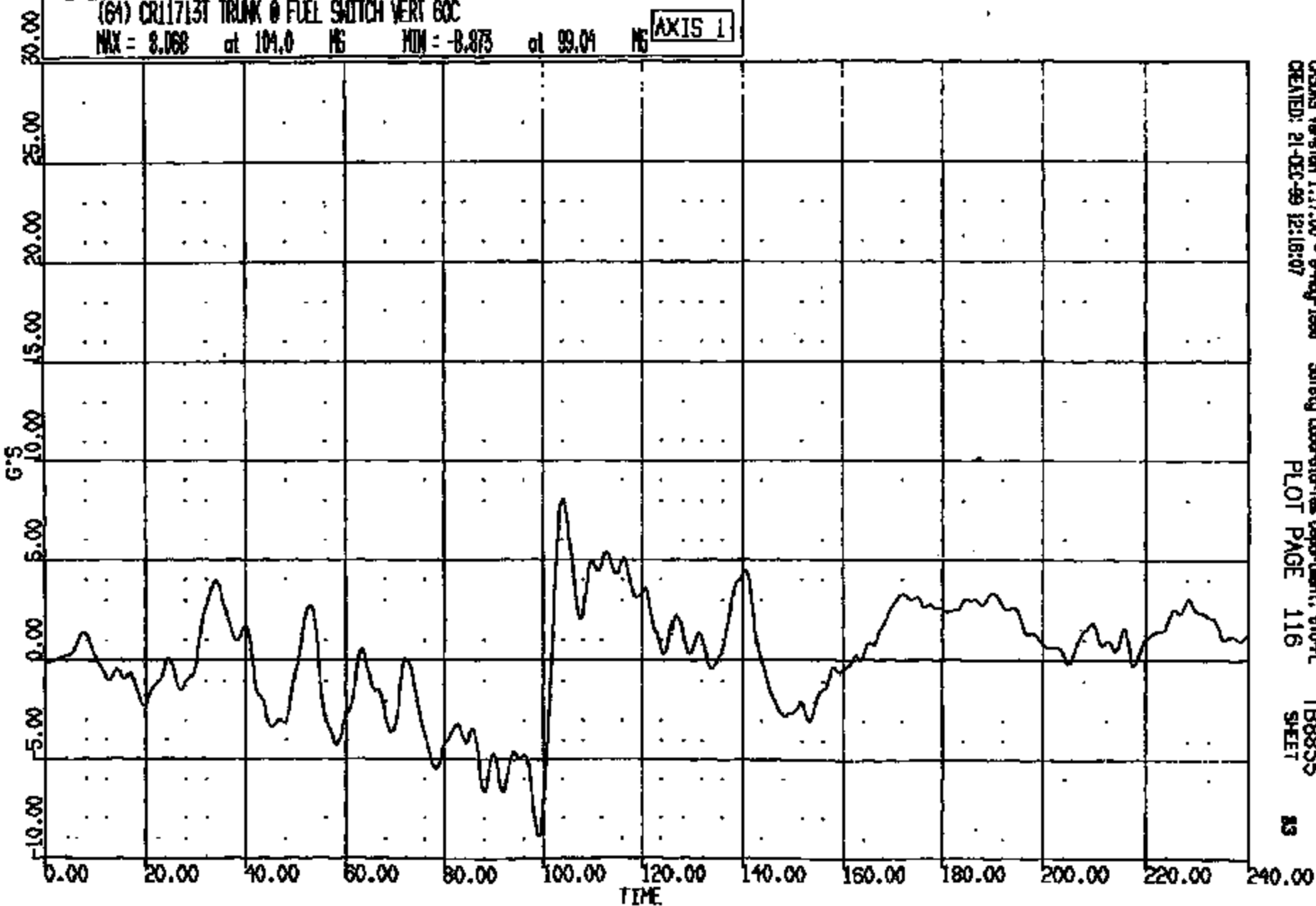


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CRTS 0011713

CR R: 11715 TO: TB8855 DATE: 881221 10:36:03
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(64) CR117131 TRUNK @ FUEL SWITCH VERT GOC
MAX = 8.068 at 104.0 MG MIN = -8.873 at 99.04 MG **AXIS 1**



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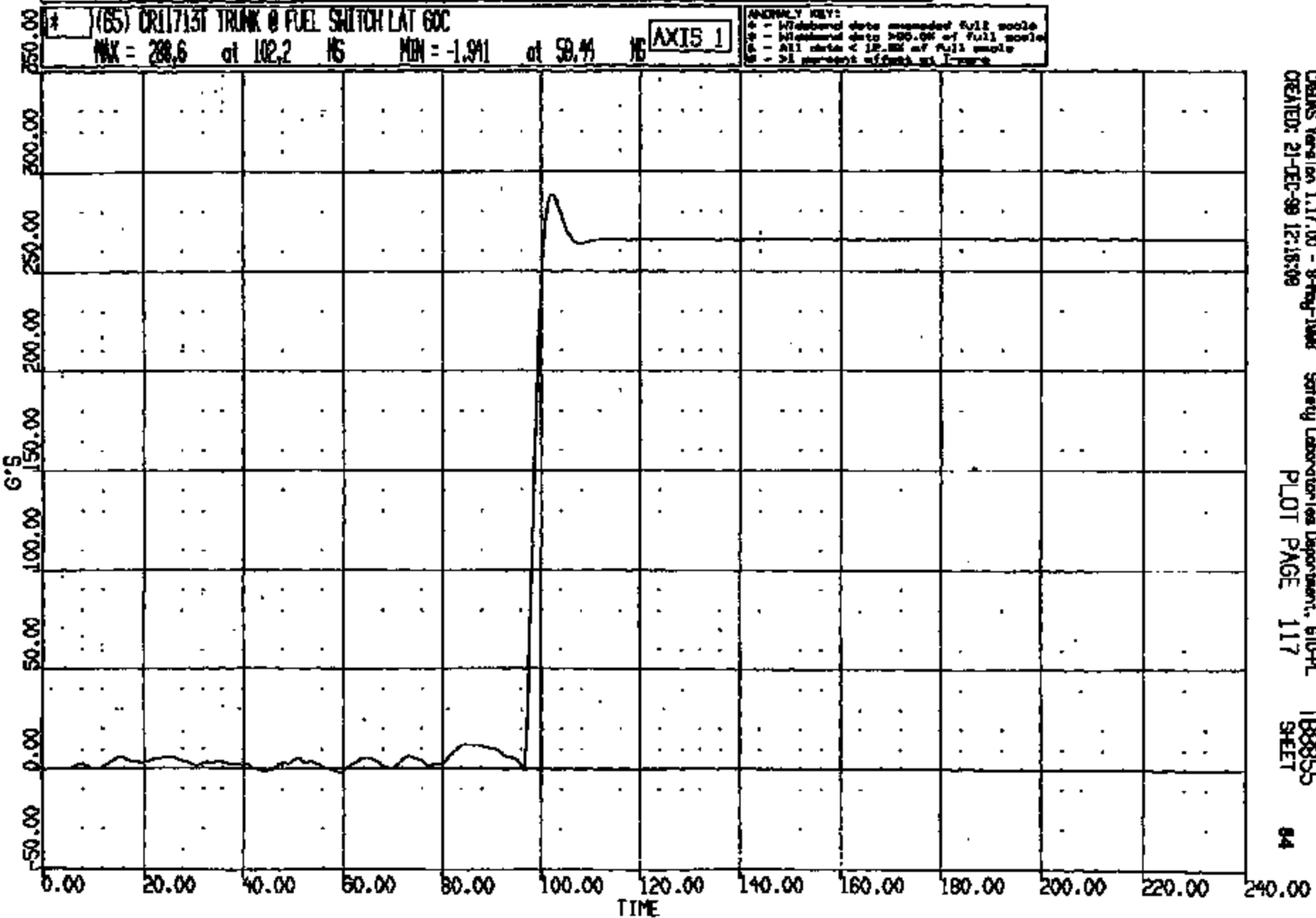
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CRIS 0011713

CR #: 11713 TO: TB8855 DATE: 991221 10:58:03
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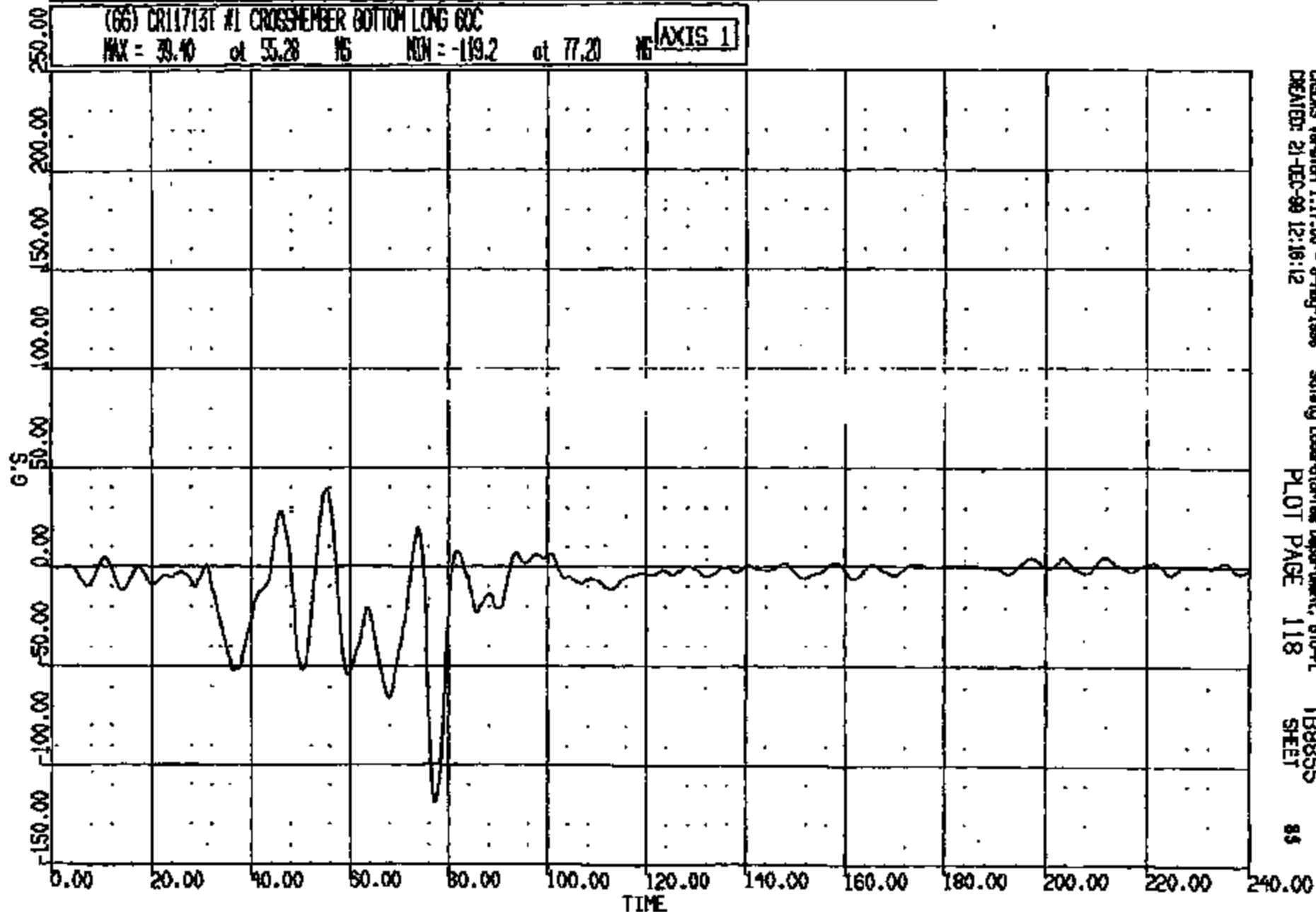
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CRTS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:38:03
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(66) CR11713I #1 CROSSMEMBER BOTTOM LONG GOC
MAX = 39.40 at 55.28 NS MIN = -119.2 at 77.20 NS **AXIS 1**



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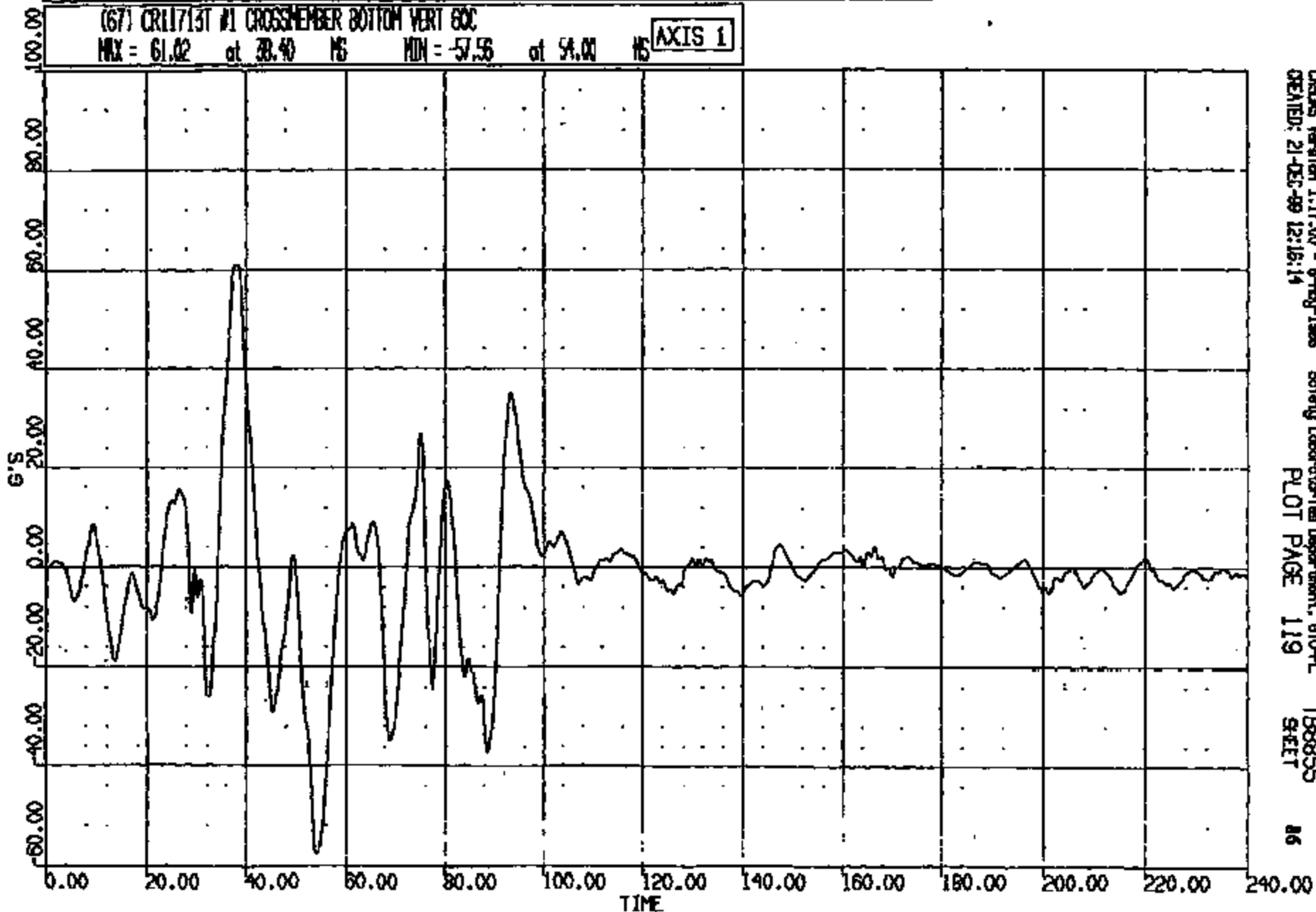
CRIS 0011713

CR R: 11713 TO: T88855 DATE: 981221 10:36:03
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(67) CR11713T #1 CROSSMEMBER BOTTOM VERT 60C

MAX = 61.02 at 33.40 MS MIN = -57.56 at 54.00 MS

AXIS 1



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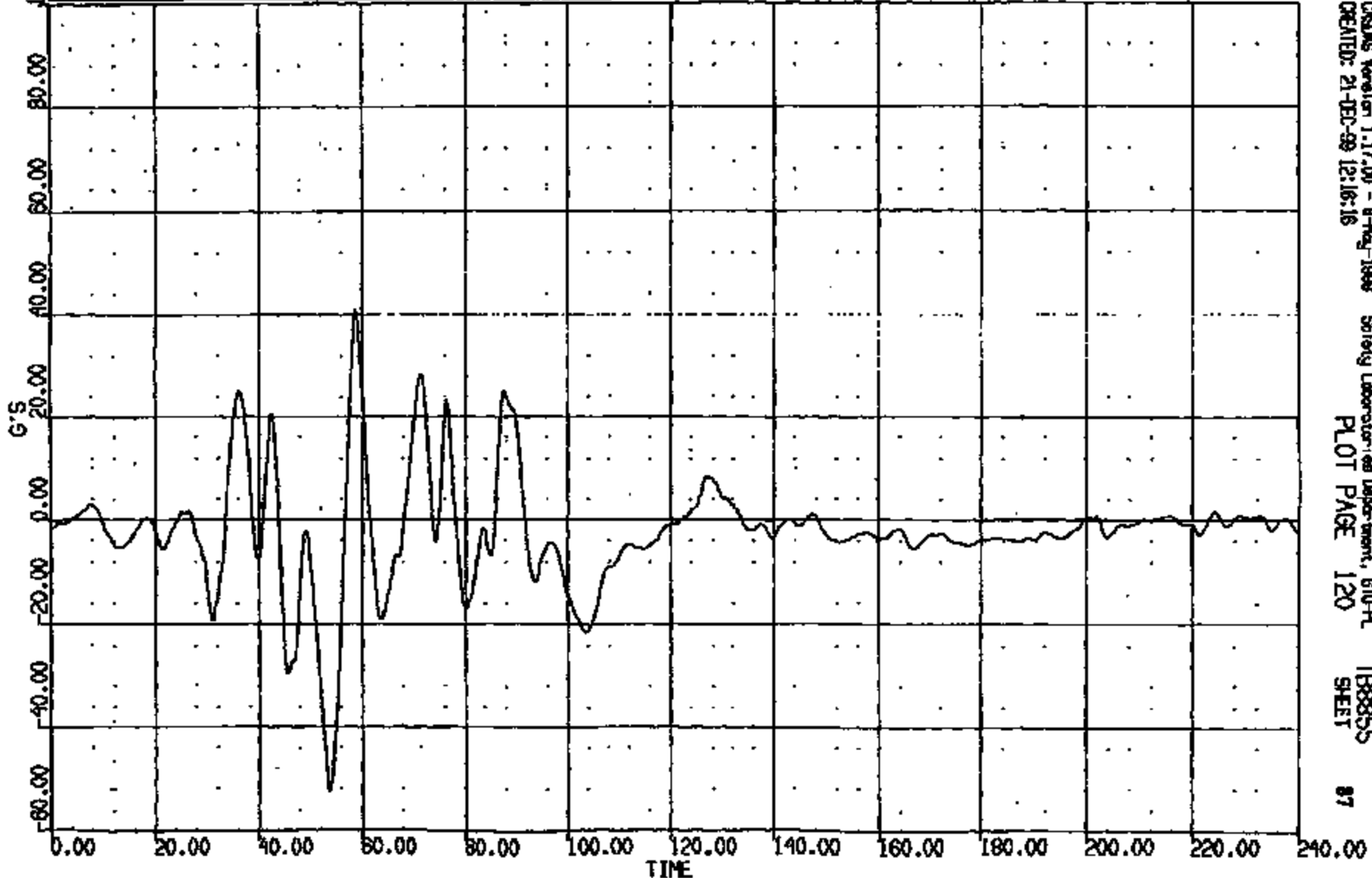
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CR R: 11713 TO: TB8855 DATE: 991221 10:38:03
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(68) CR11713T #1 CROSSMEMBER BOTTOM LAT 60C
MAX = 40.88 at 58.72 MS MIN = -52.69 at 53.76 MS

AXIS 1

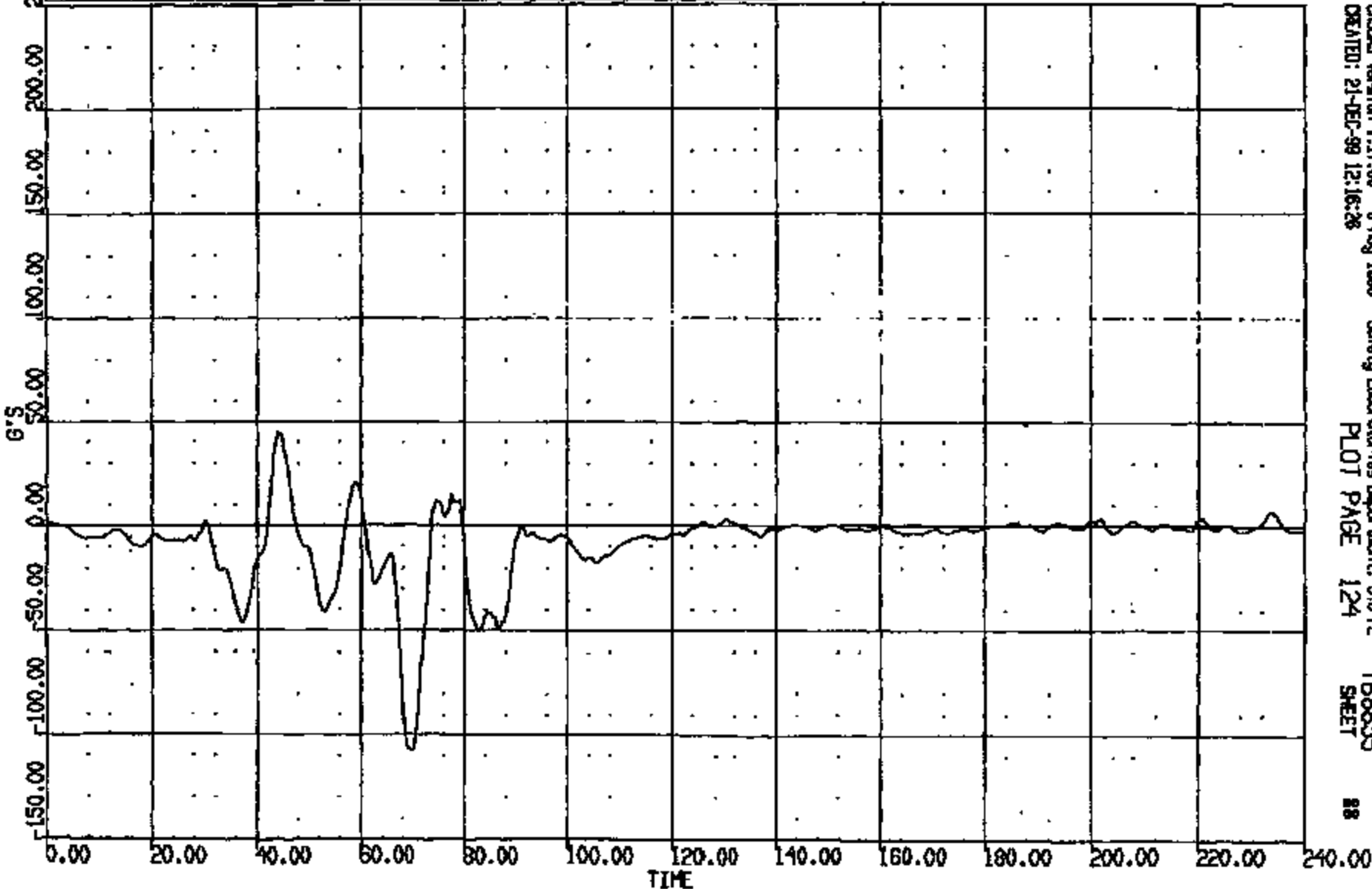


CNSDAS Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 610 PL
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CRTS 0011713

CR R: 11713 TO: T88855 DATE: 991221 10:56:05
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(72) CR117131 #2 CROSSMEMBER BOTTOM LONG 60C
MAX = 44.66 at 44.24 MS MIN = -108.2 at 69.76 MS **AXIS 1**

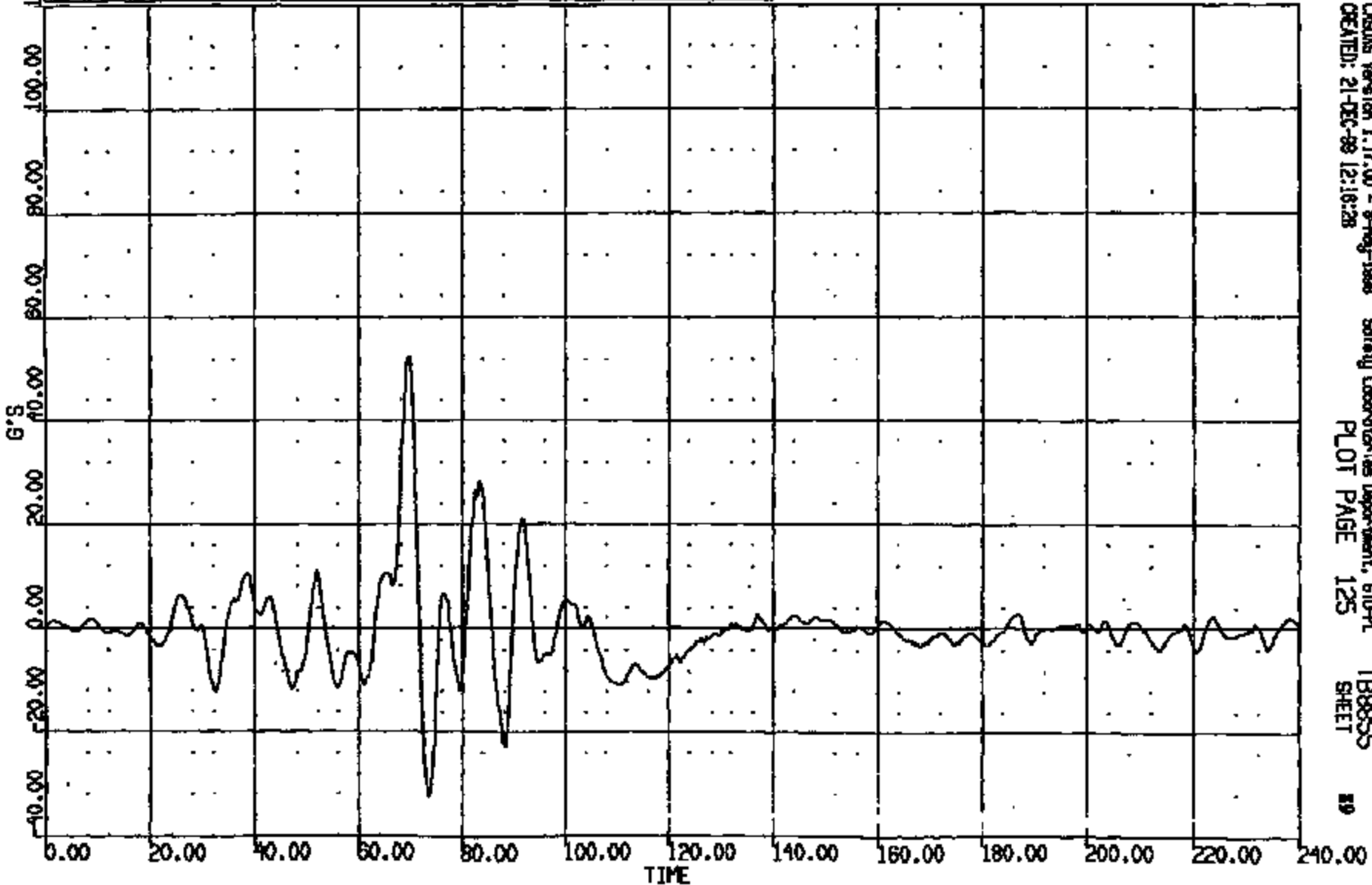


DASDAQ Version 1.17.00 - 8-May-1998 Safety Laboratories Department, STD-PL T88855
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CR R: 11713 TO: TB8855 DATE: 001221 10:36:03
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(73) CR117131 #2 CROSSMEMBER BOTTOM VERT 60C
MAX = 52.46 of 69.60 MS MIN = -32.72 of 73.20 MS **AXIS 1**

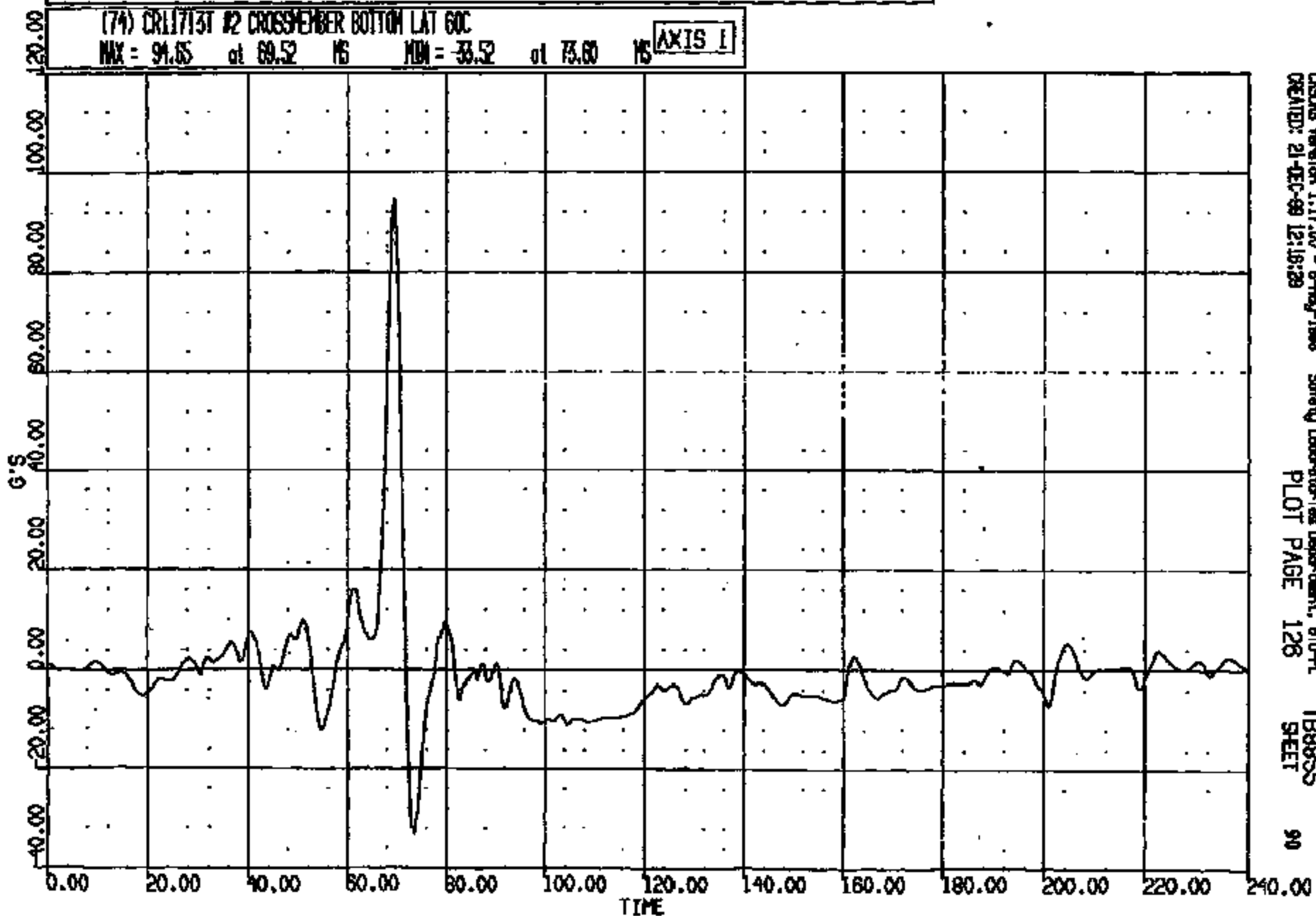


CRSUS Version 1.17.00 - 9-May-1999 Safety Laboratories Department, 610-PL
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CRTS 0011713

CR #: 11713 TO: TB8855 DATE: 991221 10:38:03
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(74) CRL1713T #2 CROSSMEMBER BOTTOM LAT 60C
MAX = 91.85 at 69.52 MS MIN = -33.52 at 73.60 MS **AXIS 1**



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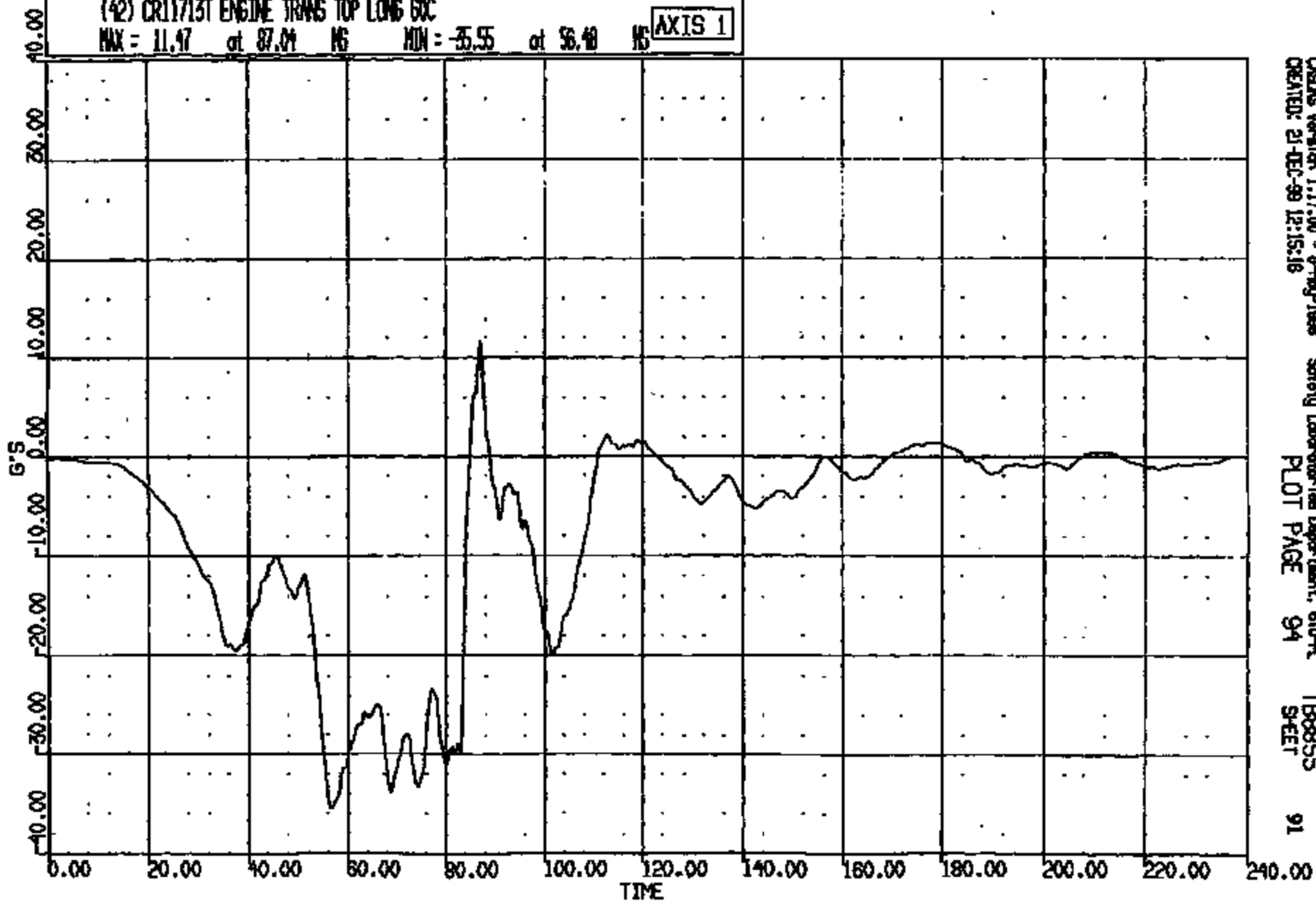
CRTS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:35:03
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(42) CR11713T ENGINE TRNS TOP LONG GOC

MAX = 11.97 at 87.04 MS MIN = -35.55 at 56.40 MS

AXIS 1



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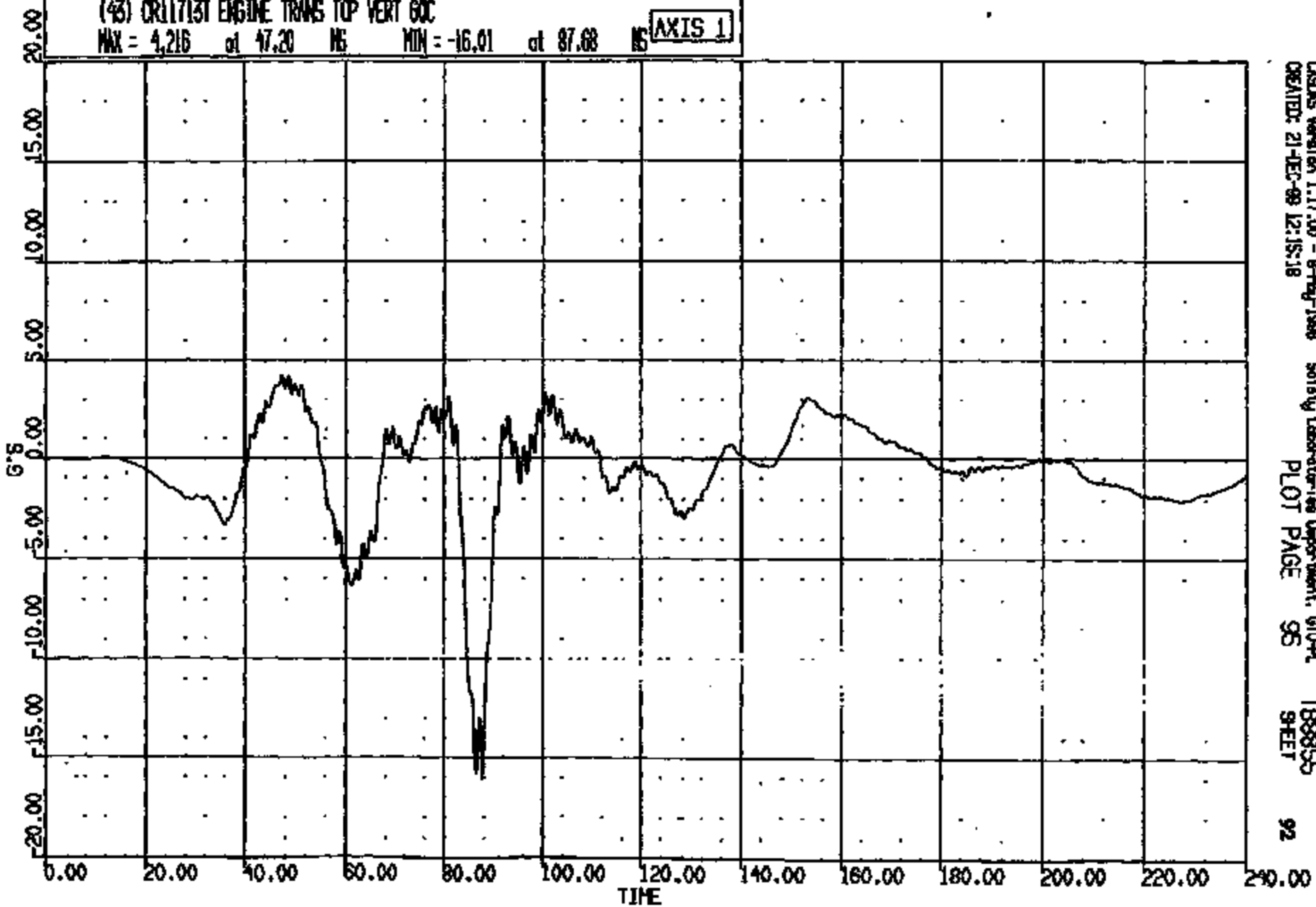
CR11713

CR R: 11713 TO: T88856 DATE: 991221 10:38:03
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(43) CR11713T ENGINE TRNS TOP VERT GDC

MAX = 4.216 at 47.20 NS MIN = -16.01 at 87.68 NS

AXIS 1



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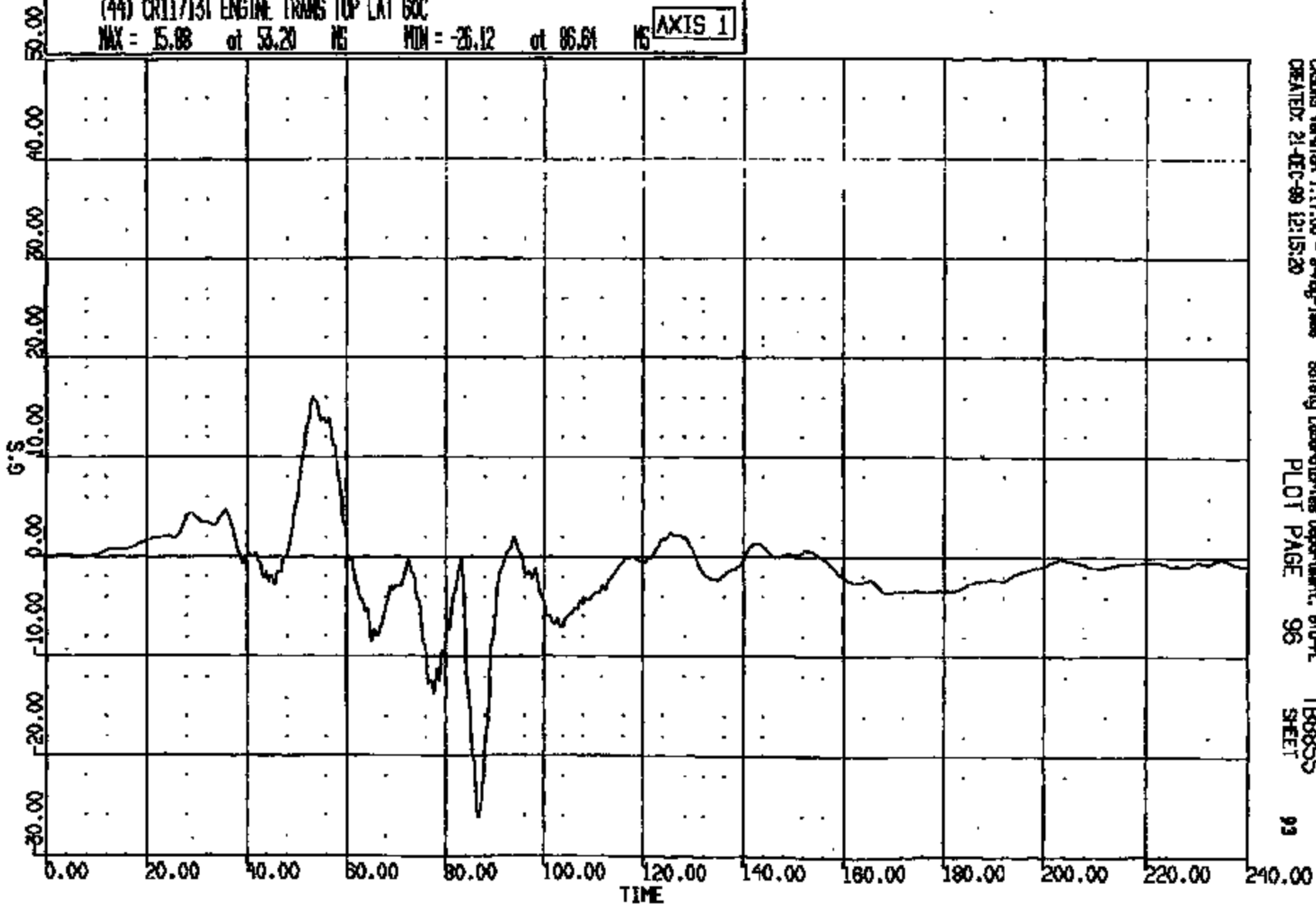
CRTS 0011713

CR R: 11713 TO: TB8855 DATE: 921221 10:38:03
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(44) CR11713I ENGINE TRANS TOP LAT 60C

MAX = 15.88 at 53.20 MS MIN = -26.12 at 85.64 MS

AXIS 1



CAEANS Version 1.17.00 - 8-Aug-1998
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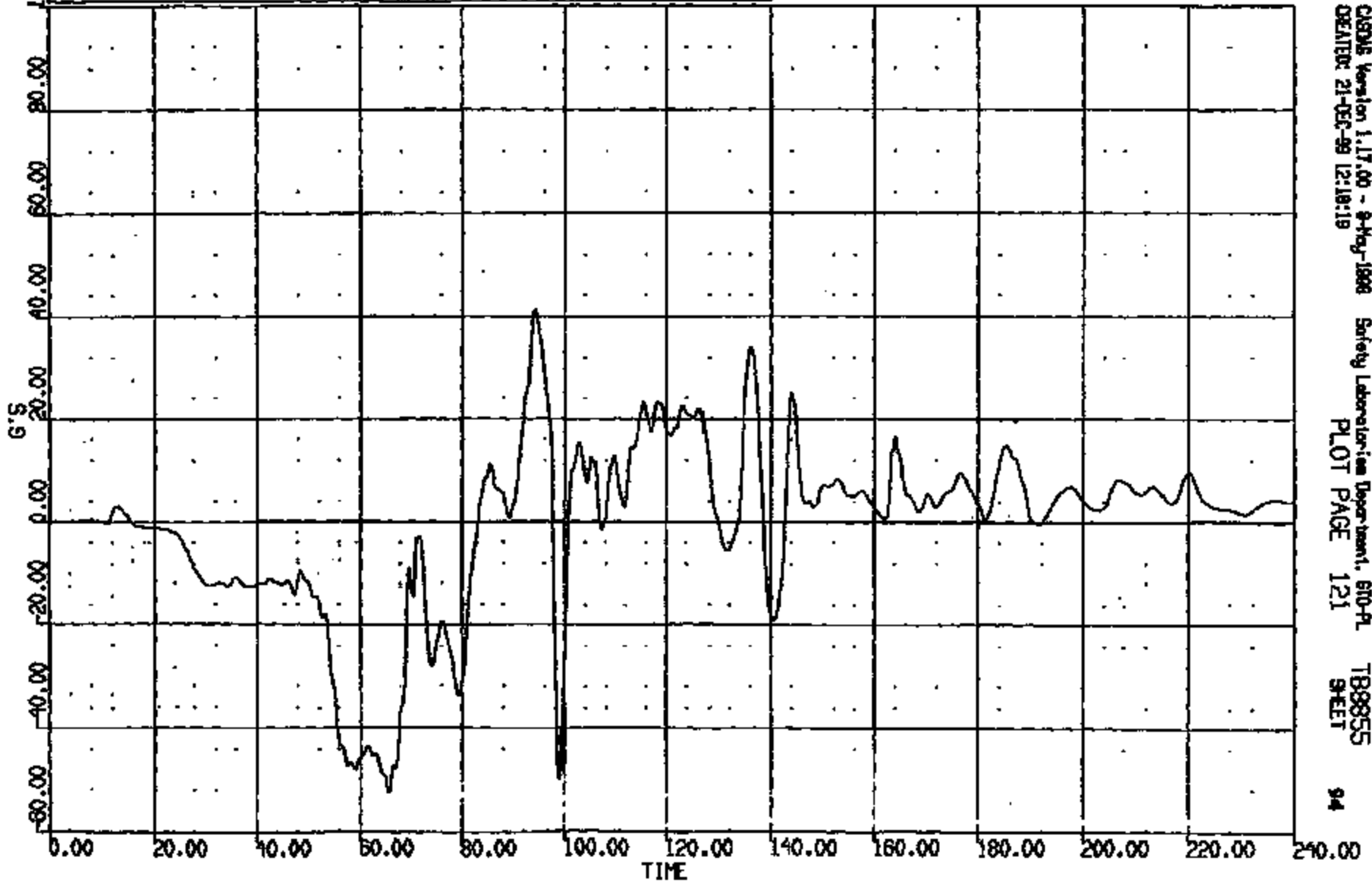
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CRTS 0011713

CR R: 11713 TO: TB8855 DATE: 901221 10:28:02
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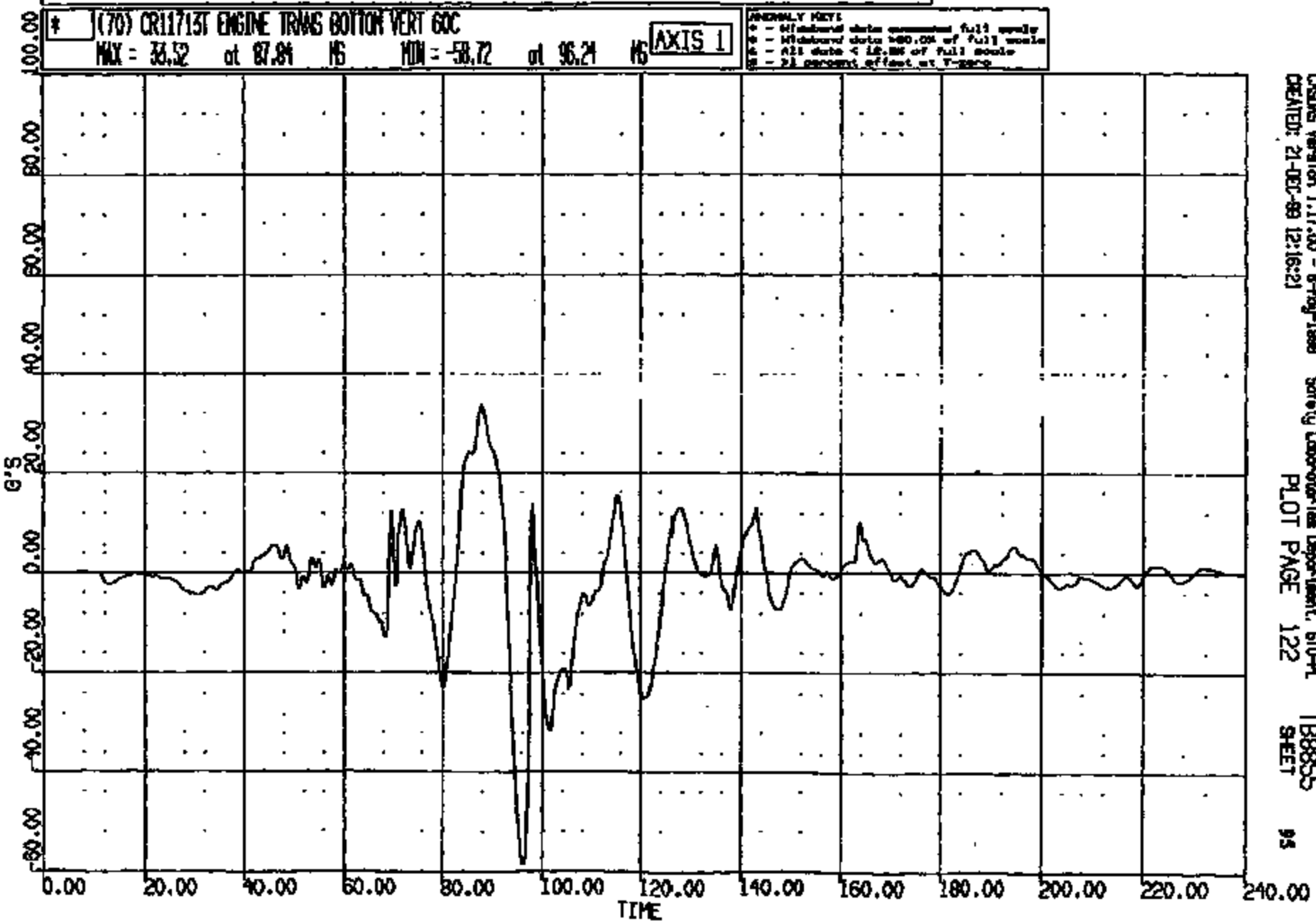
(89) CR11713T ENGINE TRANS BOTTOM LONG 60C
MAX = 41.29 at 94.16 MS MIN = -52.85 at 65.88 MS **AXIS 1**



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CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 891221 10:26:03
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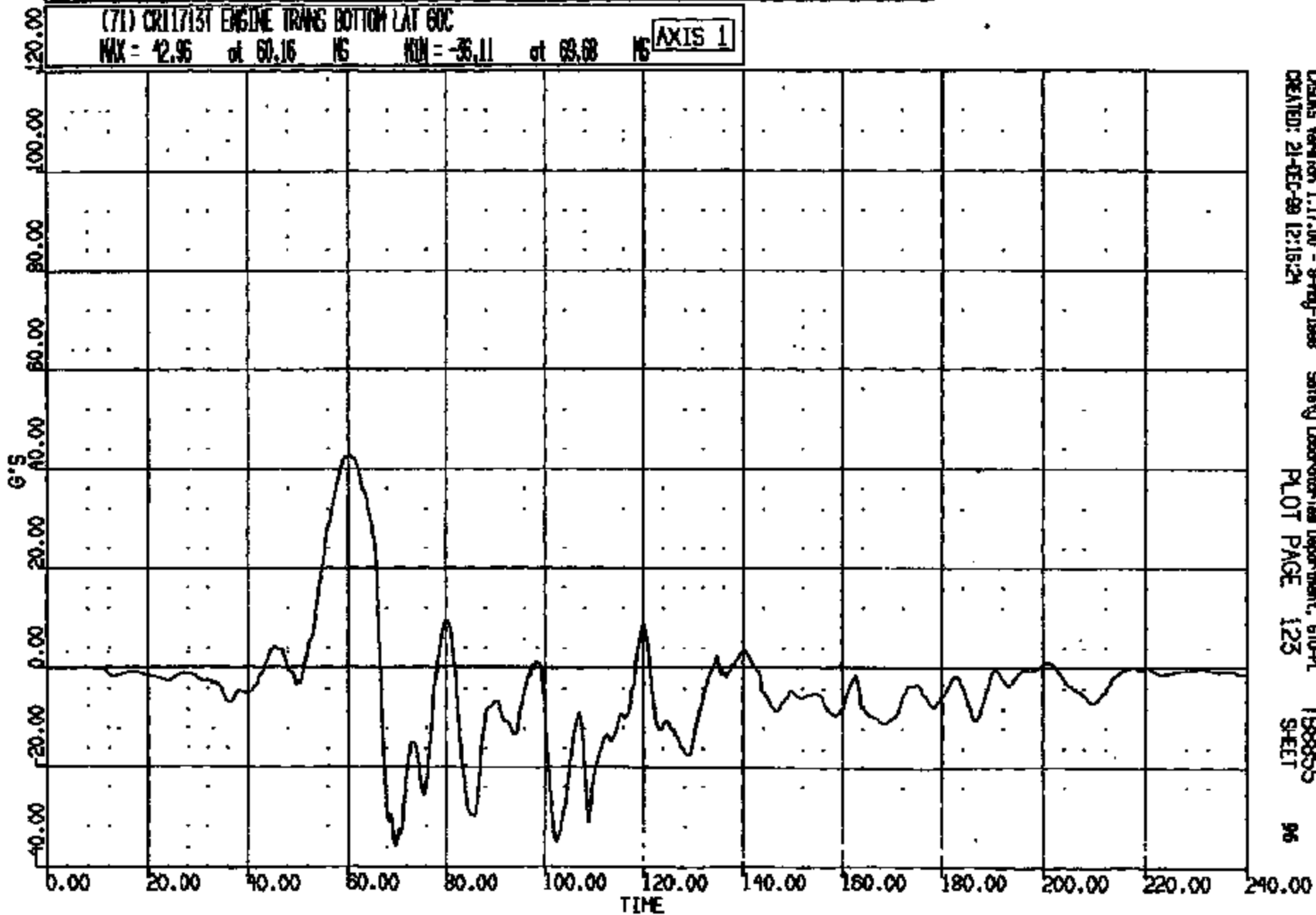
CRSNG Version 1.17.00 - 8-May-1989 Safety Laboratories Department, STD-PL
CREATED: 21-DEC-89 12:16:21 PLOT PAGE 122 TB8855 SHEET 95

CRIS 0011713

UNIT: 11713 TO: TB8855 DATE: 991221 10:58:03
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(71) CR11713T ENGINE TRIMS BOTTOM LAT 60C
MAX = 42.95 at 60.16 NS MIN = -35.11 at 69.68 NS

AXIS 1



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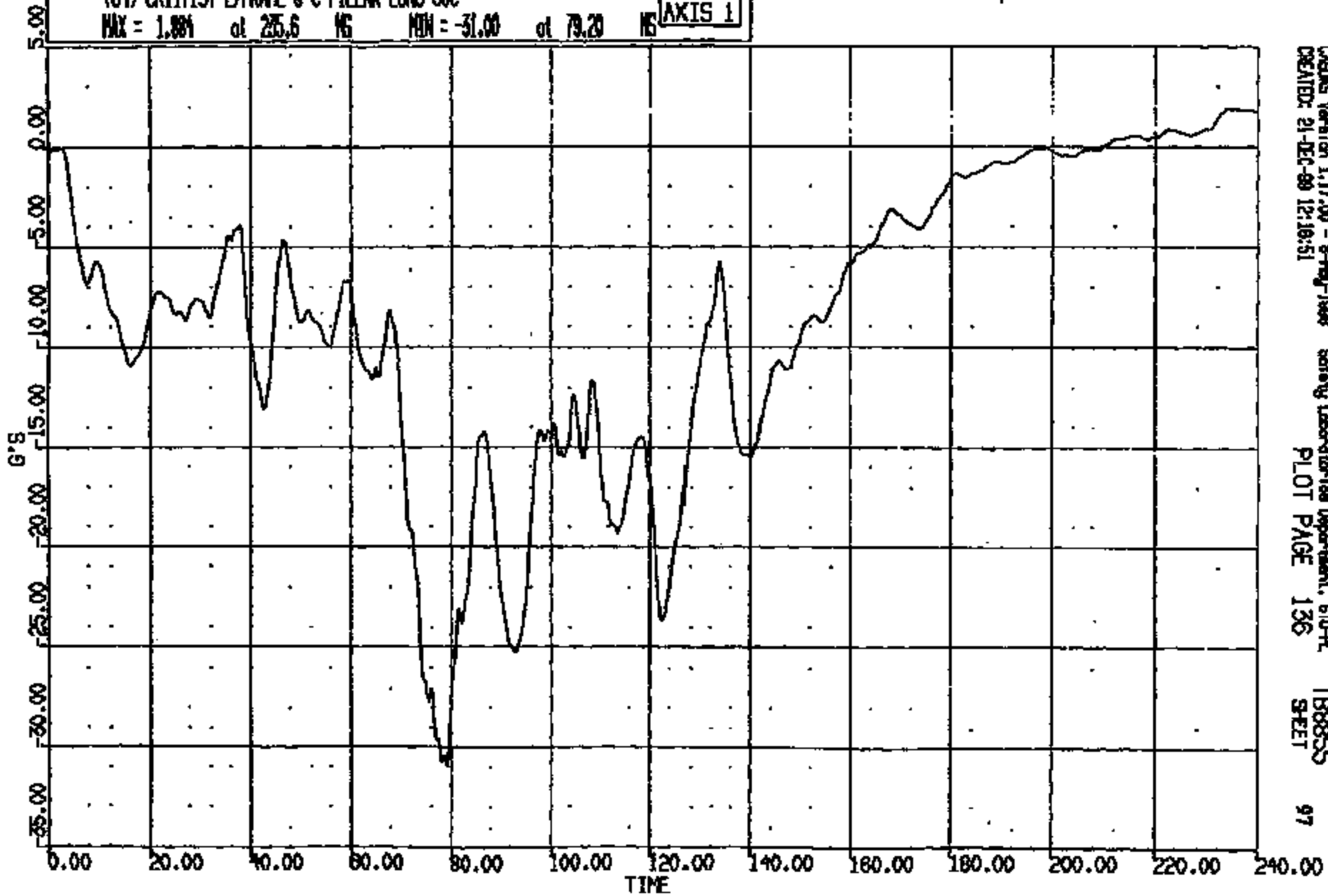
TB8855
SHEET

96

CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:36:03
2000 D-188

(84) CR11713T L/FRAME @ C-PILLAR LONG 60C
MAX = 1.884 at 255.6 MS MIN = -31.00 at 79.20 MS **AXIS 1**

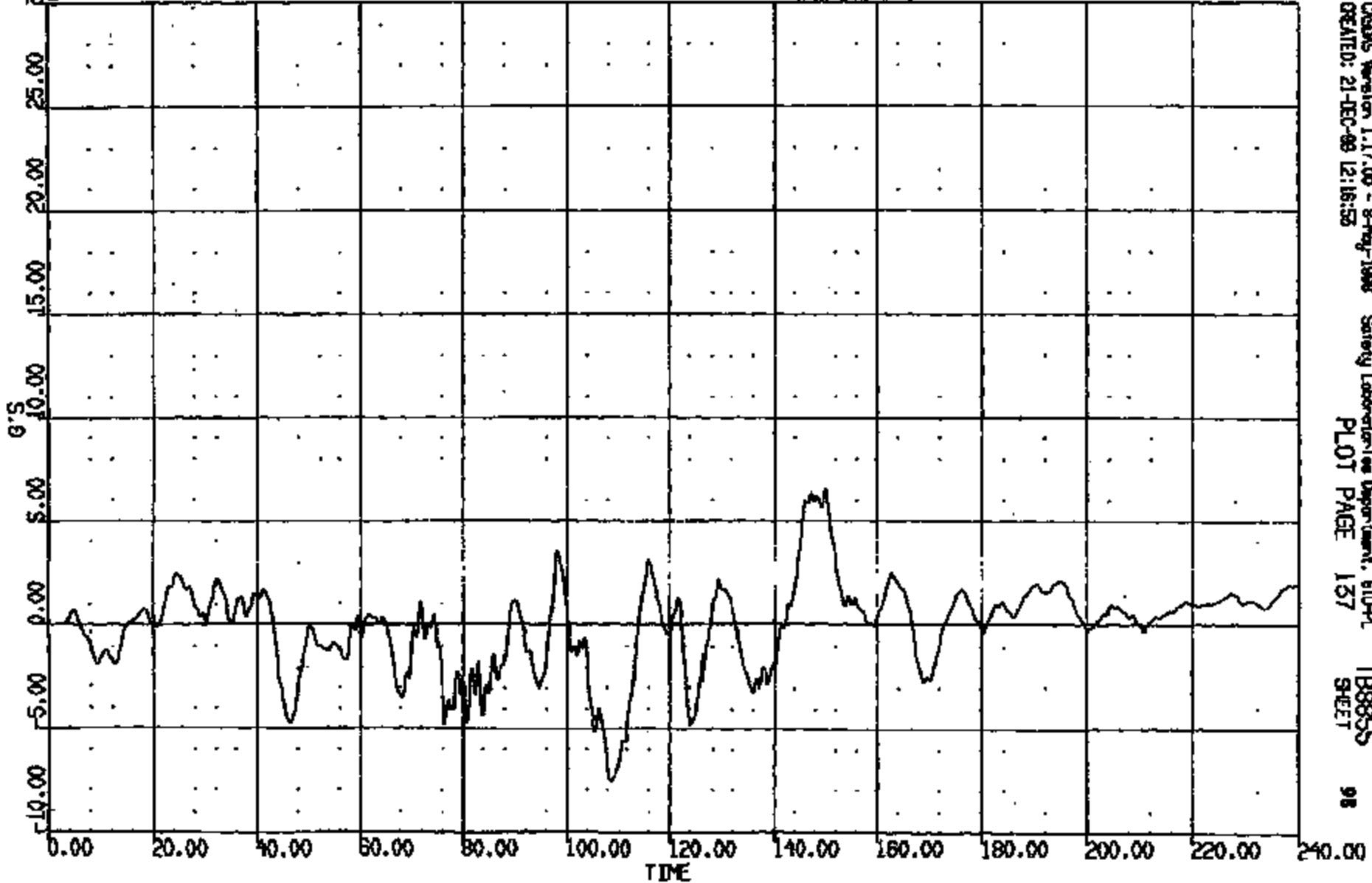


CADDS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-A
CREATED: 21-DEC-99 12:18:51 PLOT PAGE 136 SHEET 97

CR11713

CR R: 11713 TO: T8855 DATE: 991221 10:58:08
2000 D-188

(85) CR11713T L/FRAME @ C-PILLAR VERT 60C
MAX = 6.523 at 150.1 MS MIN = -7.604 at 108.6 MS **AXIS 1**

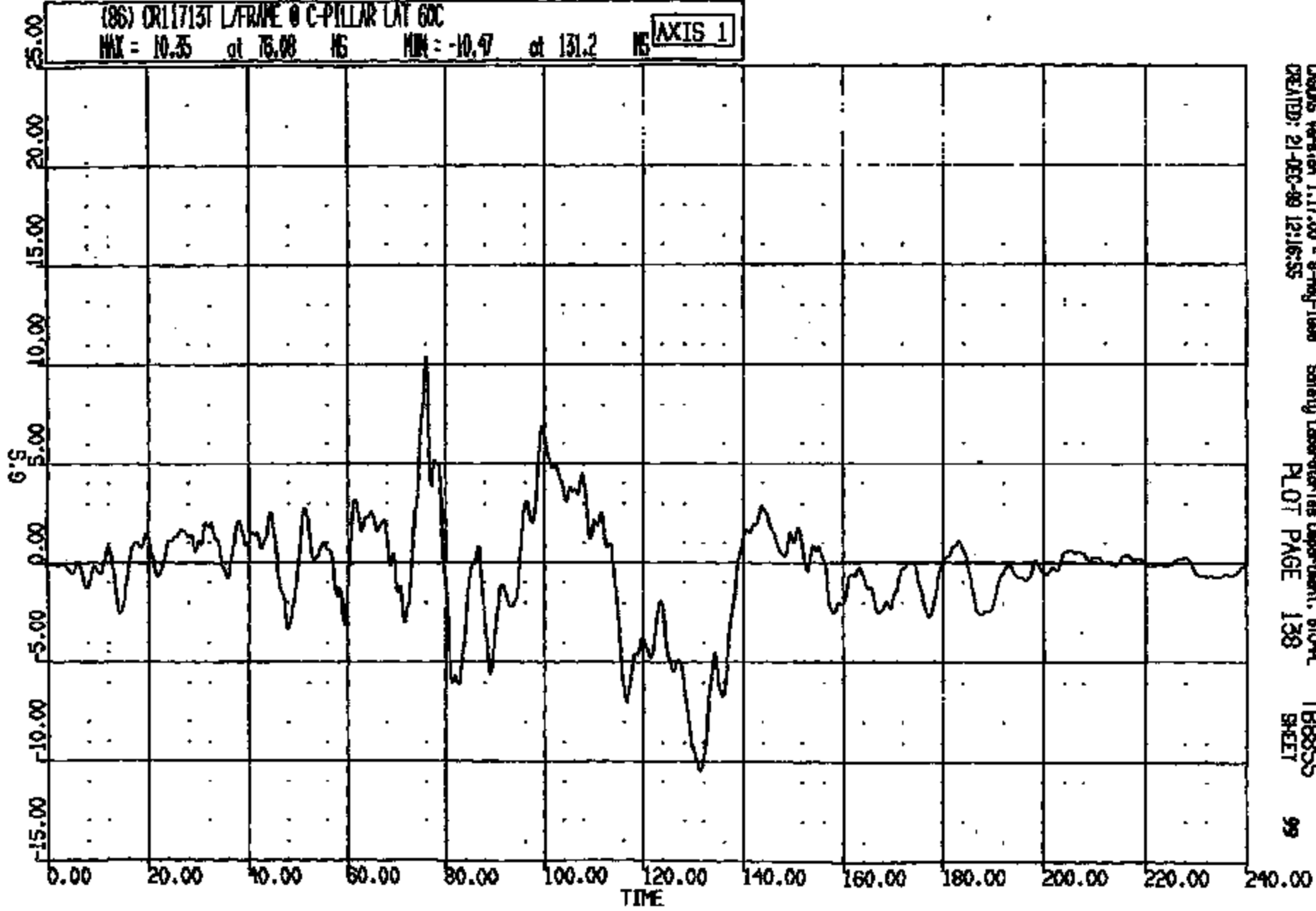


CRSIS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, STD-PL T8855
CREATED: 21-DEC-99 12:18:55 PLOT PAGE 137 SHEET 98

CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 001221 10:30:03
2000 D-186

(86) DR11713T L-FRAME @ C-PILLAR LAT 60C
MAX = 10.35 at 76.00 MS MIN = -10.47 at 131.2 MS **AXIS 1**

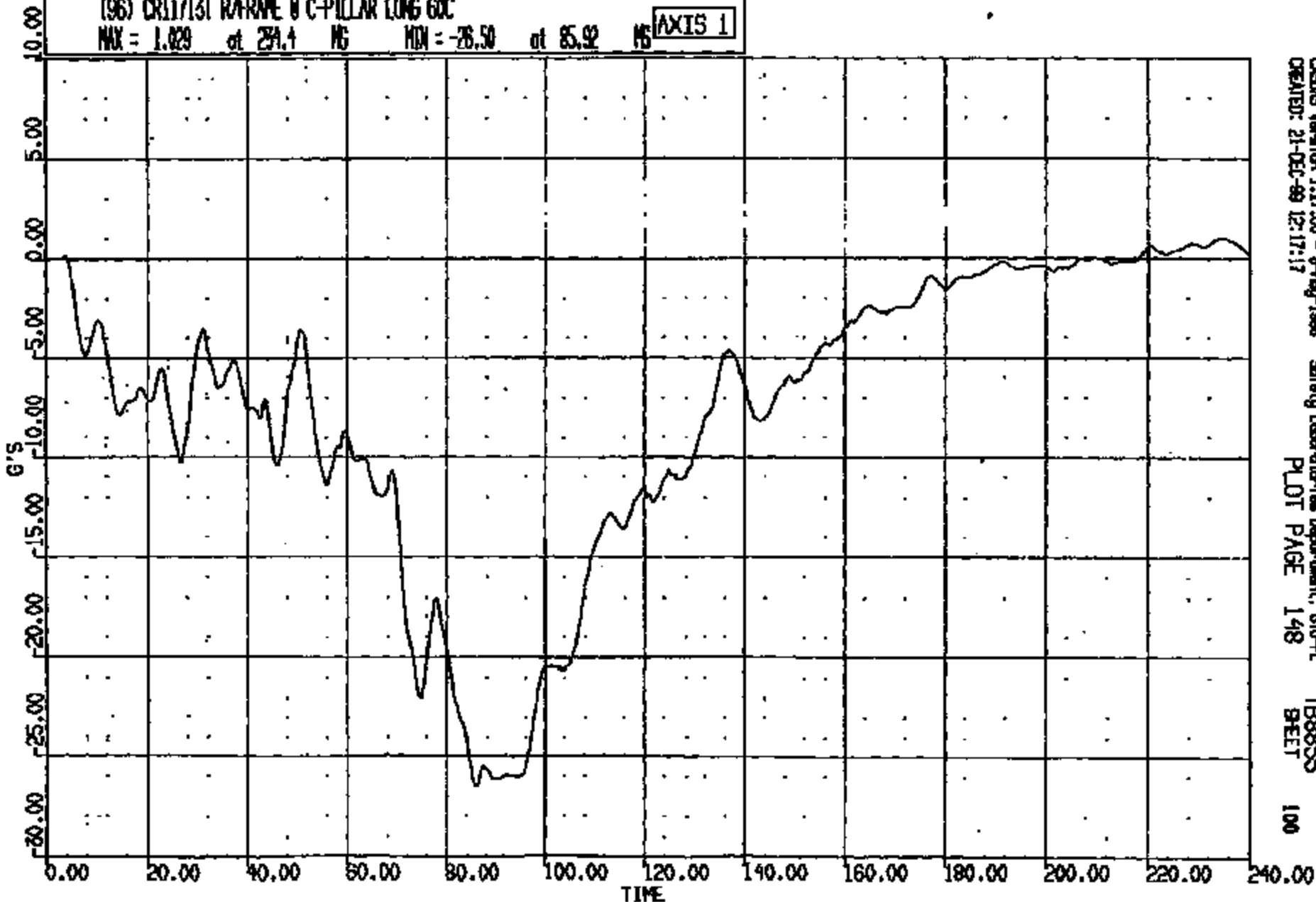


CASIMS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 670-42
CREATED: 21-DEC-99 12:16:55 PLOT PAGE 138 TB8855
99 SHEET

CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:26:03
2000 D-198

(96) CR11713T R/FRAME 0 C-PILLAR LONG 60C
MAX = 1.029 at 291.1 MS MIN = -28.50 at 85.92 MS **AXIS 1**

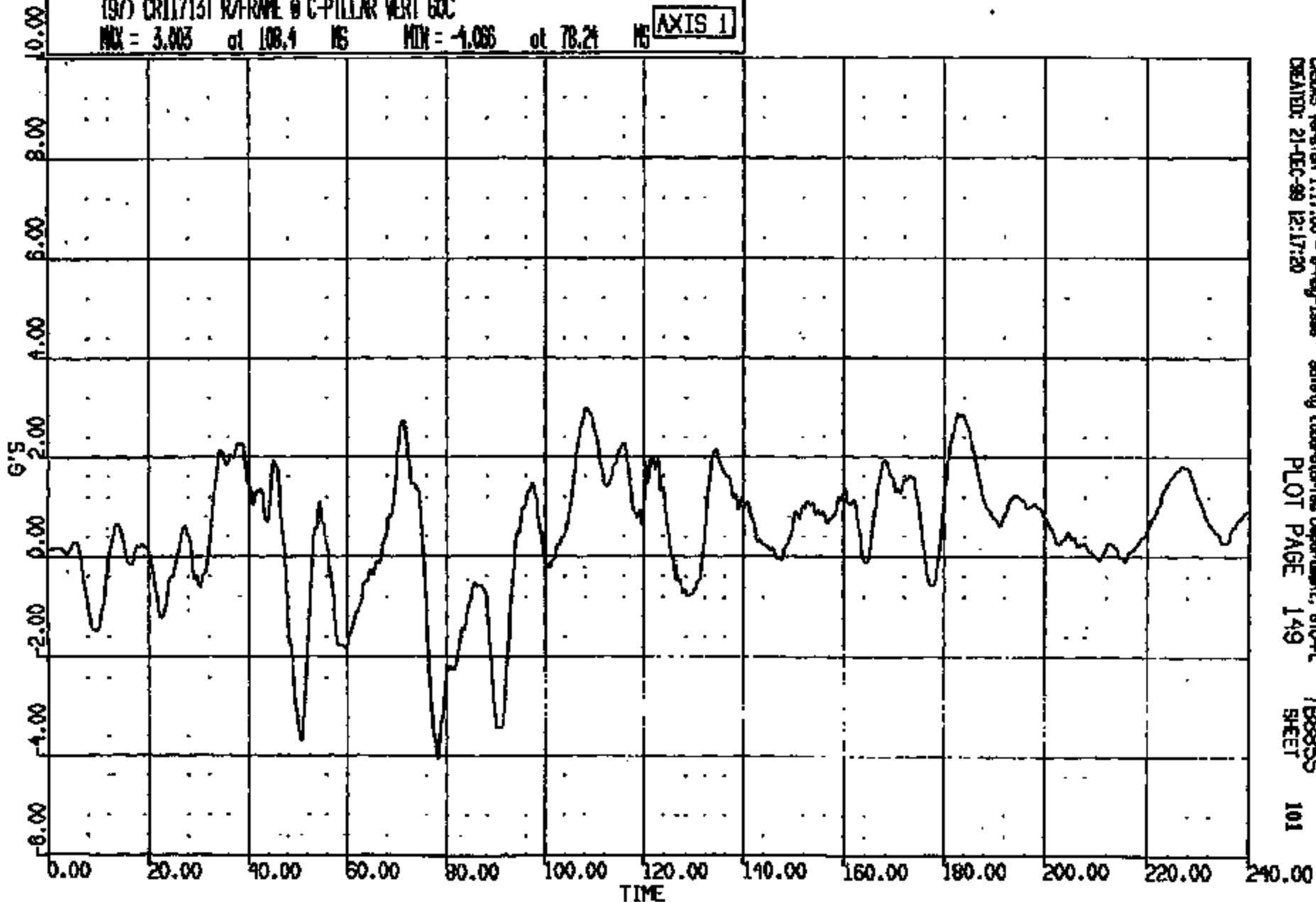


CRSIS Version 1.17.00 - 8-May-1998 Safety Laboratory Department, 610-PL
CREATED: 21-DEC-99 12:17:17 PLOT PAGE 148 TB8855
BELT 100

CRIS 0011713

CR R: 11713 TO: T88855 DATE: 991221 10:38:03
2000 D-198

197) CR11713T R/FRAME @ C-PILLAR VERT 60C
MAX = 3.003 at 108.4 MS MIN = -4.066 at 78.24 MS **AXIS 1**

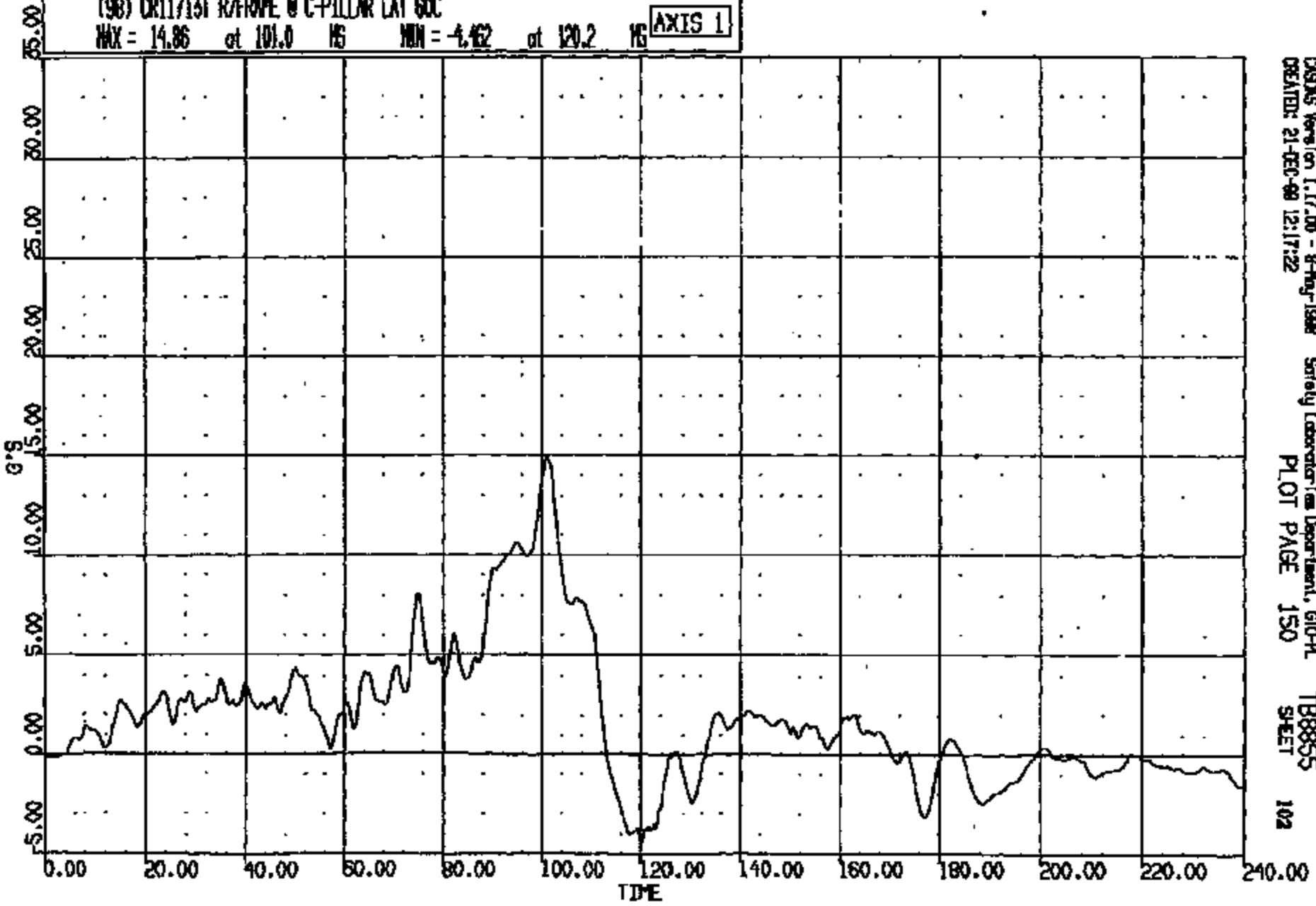


CADDS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
CREATED: 21-DEC-99 12:17:20 PLOT PAGE 149 T88855 SHEET 101

CR11713

CR R: 11713 TO: TB8855 DATE: 001221 10:36:03
2000 D-198

(98) CR11713T R/FRAPE @ C-PILLAR LAT 60C
MAX = 14.86 at 101.0 HS MIN = -4.462 at 120.2 HS **AXIS 1**



CRSINS Version 1.17.00 - 8-Aug-1998 Safety Laboratories Department, 610-PL
CREATED: 21-DEC-98 12:17:22 PLOT PAGE 150 TB8855 SHEET 102

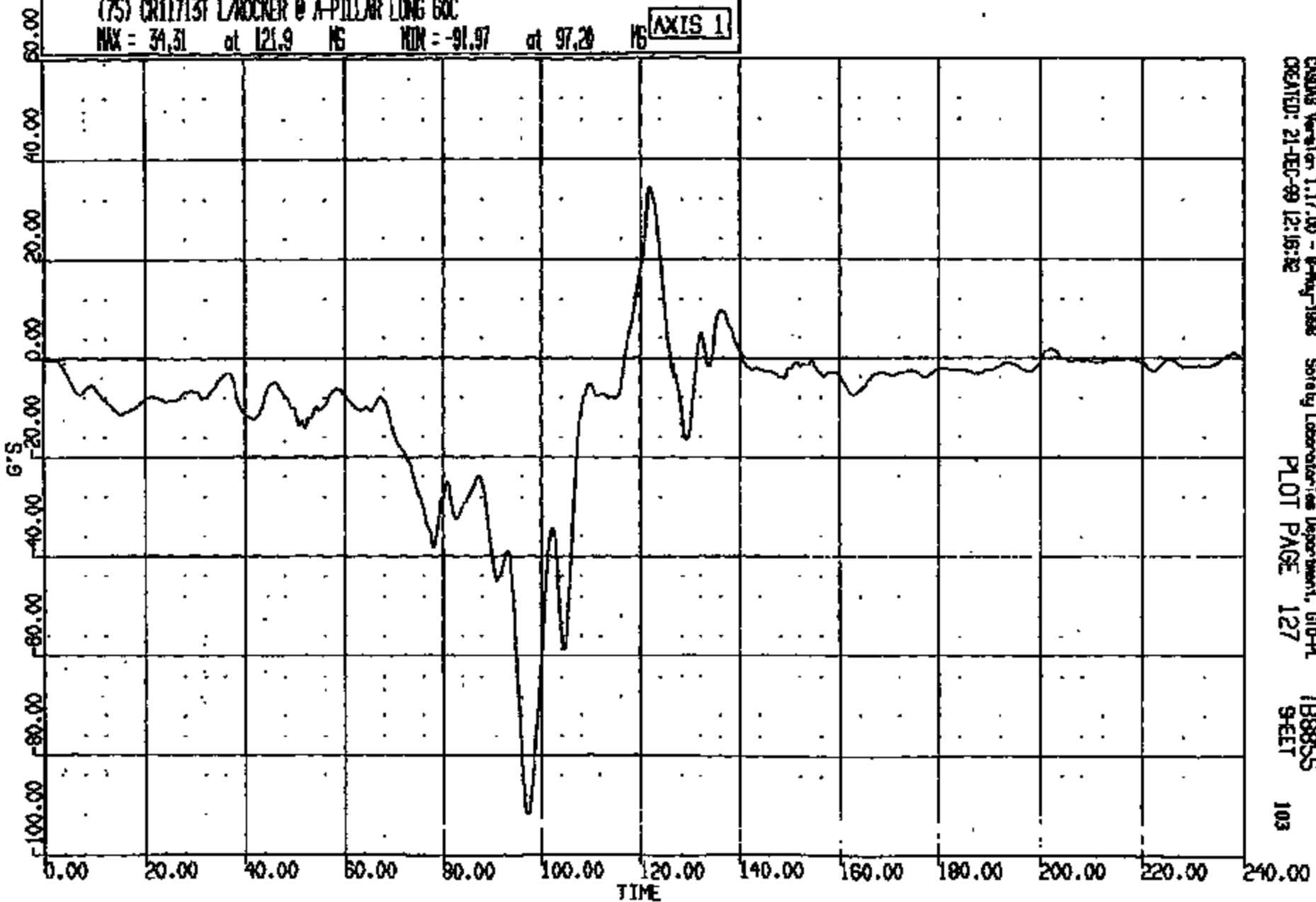
CRIS 0011713

CR R: 11713 TO: T88855 DATE: 991221 10:56:03
2000 D-188

(75) CR11713T L/ROCKER @ A-PILLAR LONG GOC

MAX = 34.31 at 121.9 MS MIN = -91.97 at 97.28 MS

AXIS 1



CADWIS Version 1.17.00 - 8-May-1998
CREATED: 21-DEC-99 12:19:12

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PLOT PAGE 127

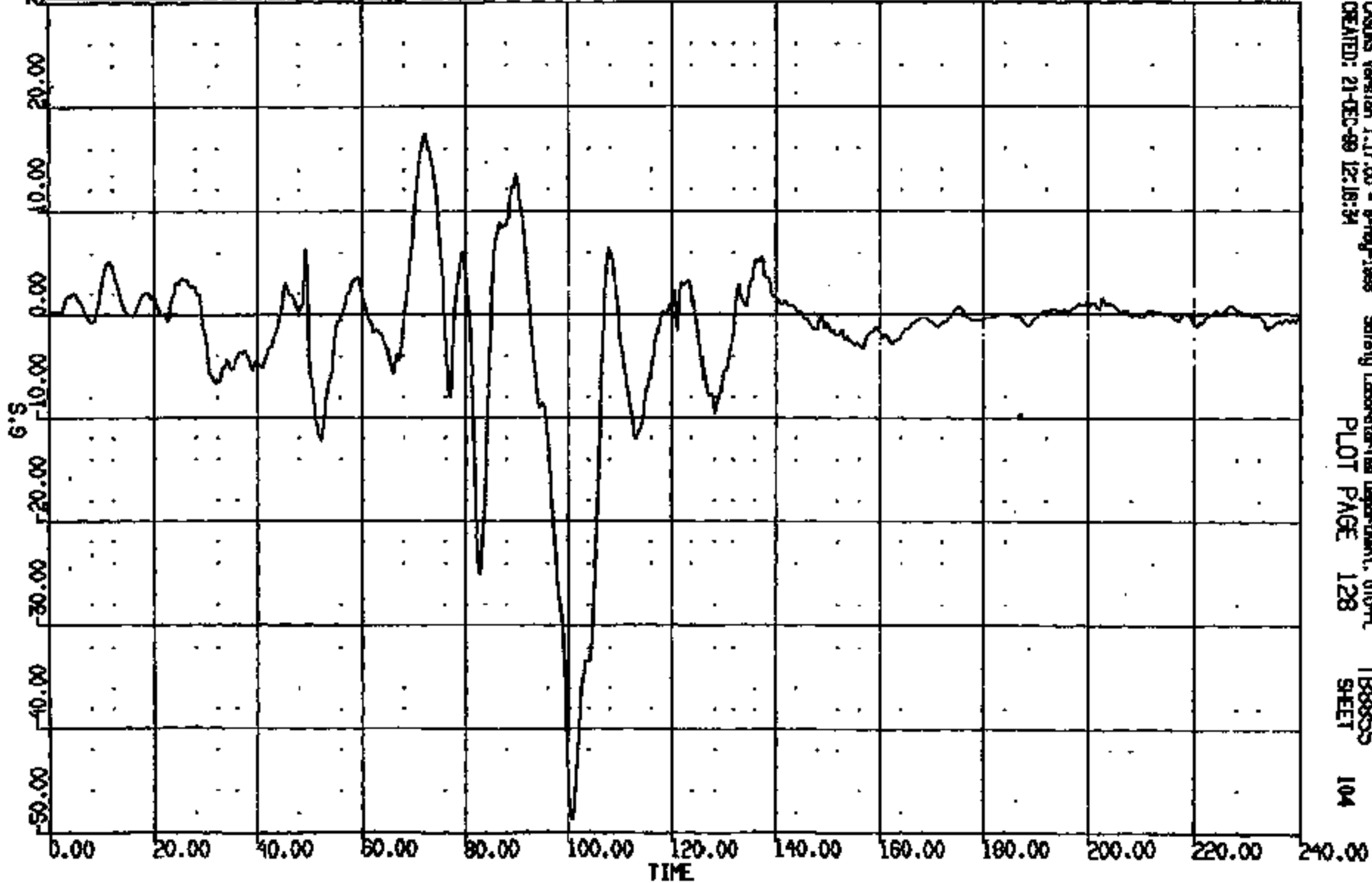
T88855
9-LET

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CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:38:05
2000 D-185

(76) CR11713T L/ROCKER @ A-PILLAR VERT 6DC
MAX = 17.42 at 72.00 MS MIN = -48.83 at 100.8 MS **AXIS 1**



CRONUS Version 1.17.00 - 9-May-1999
CREATED: 21-DEC-99 12:18:34

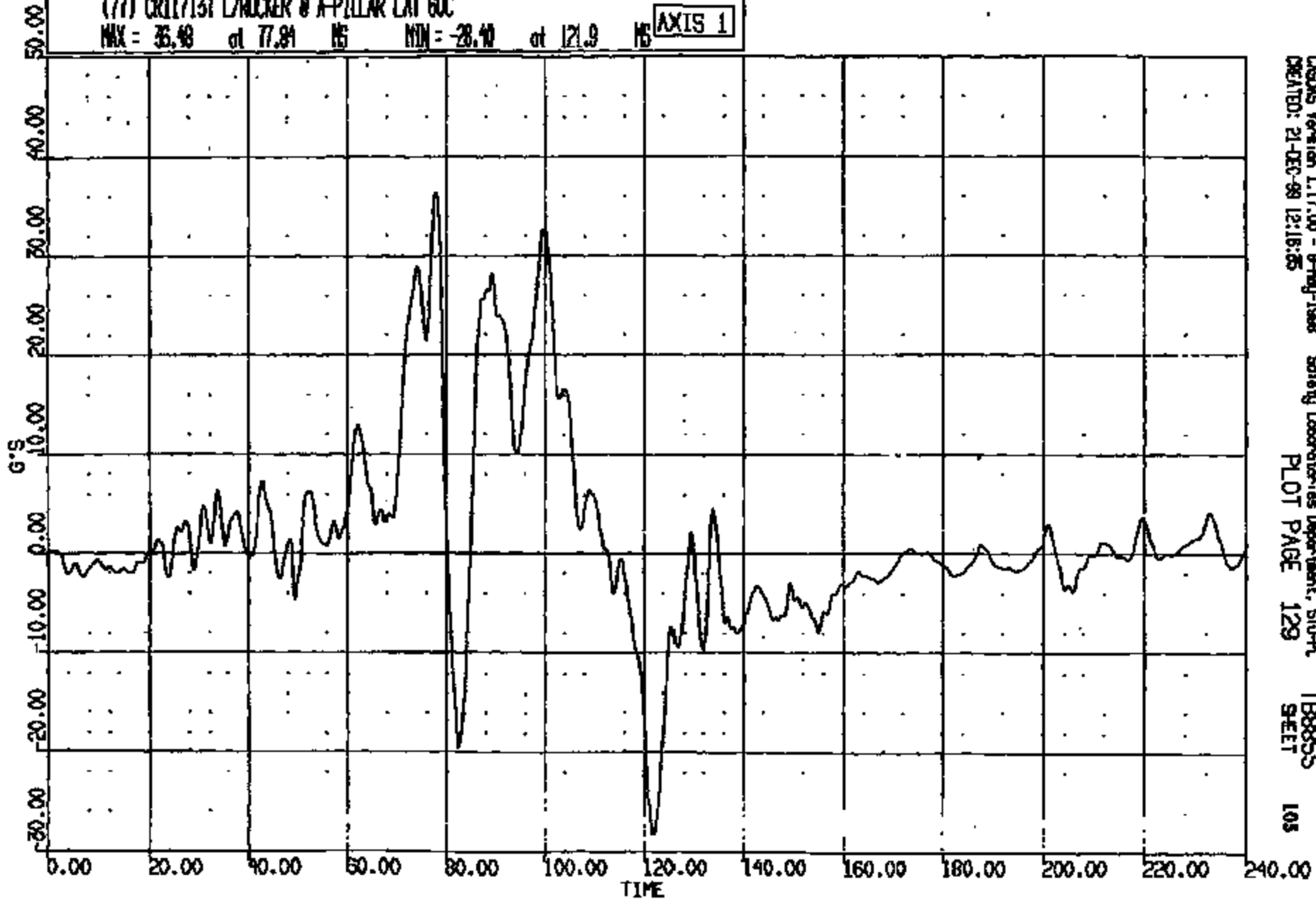
Safety Laboratories Department, 010-PL
PLOT PAGE 128

TB8855
SHEET

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CR R: 11713 TO: T88855 DATE: 991221 10:38:05
8000 D-188

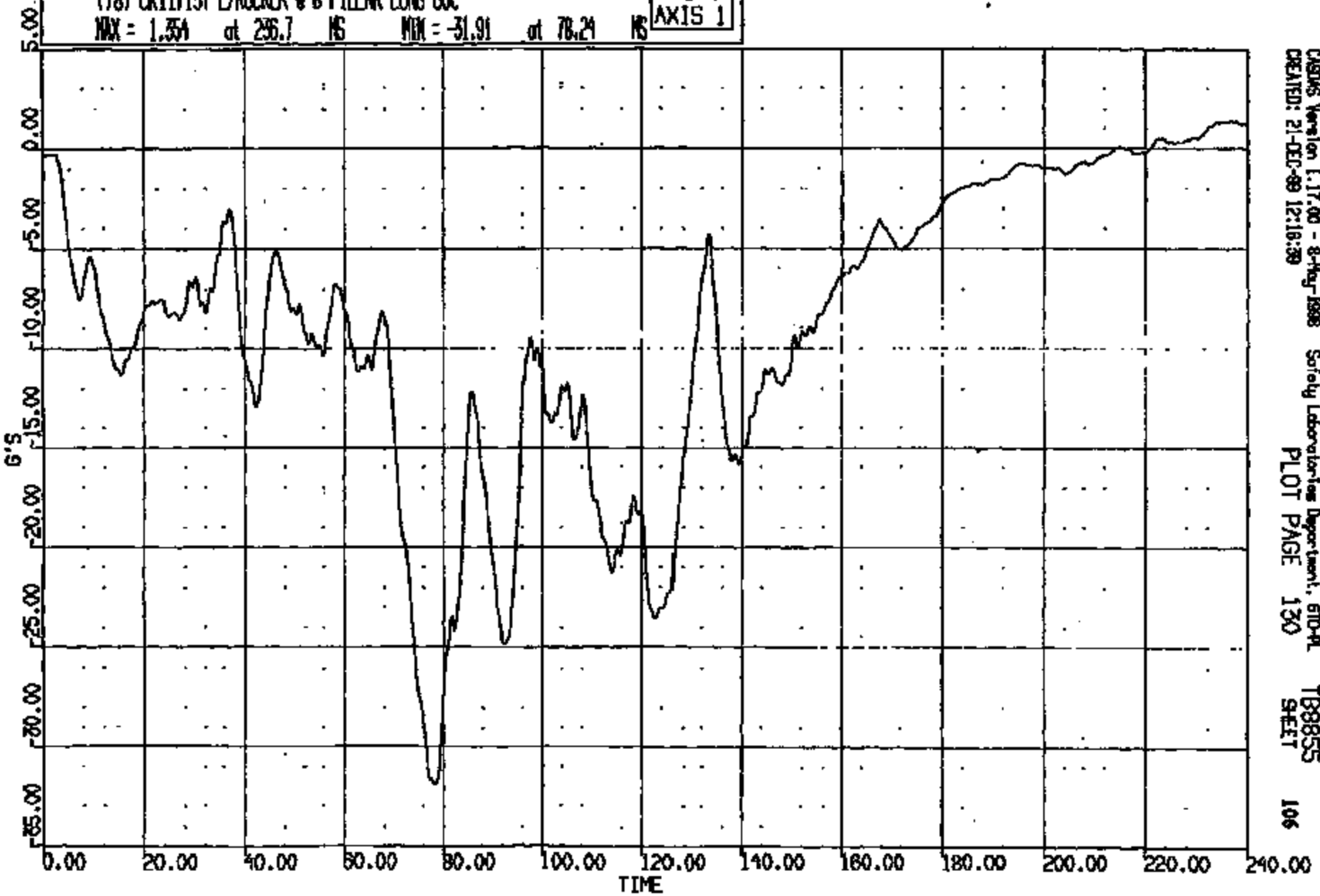
(77) CR117131 L/ROCKER @ A-PILLAR LAT 60C
MAX = 35.48 at 77.84 MS MIN = -28.40 at 121.9 MS **AXIS 1**



CADWAS Version 1.17.00 - 8-May-1988 Safety Laboratories Department, STOR, T88855
CREATED: 21-DEC-99 12:18:25 PLOT PAGE 129 SHEET 105

CR 7: 11713 TO: T88855 DATE: 991221 10:38:03
8000 D-188

(78) CR11713T L/ROCKER @ B-PILLAR LONG 60C
MAX = 1.354 at 236.7 NS MIN = -31.91 at 78.24 NS **AXIS 1**

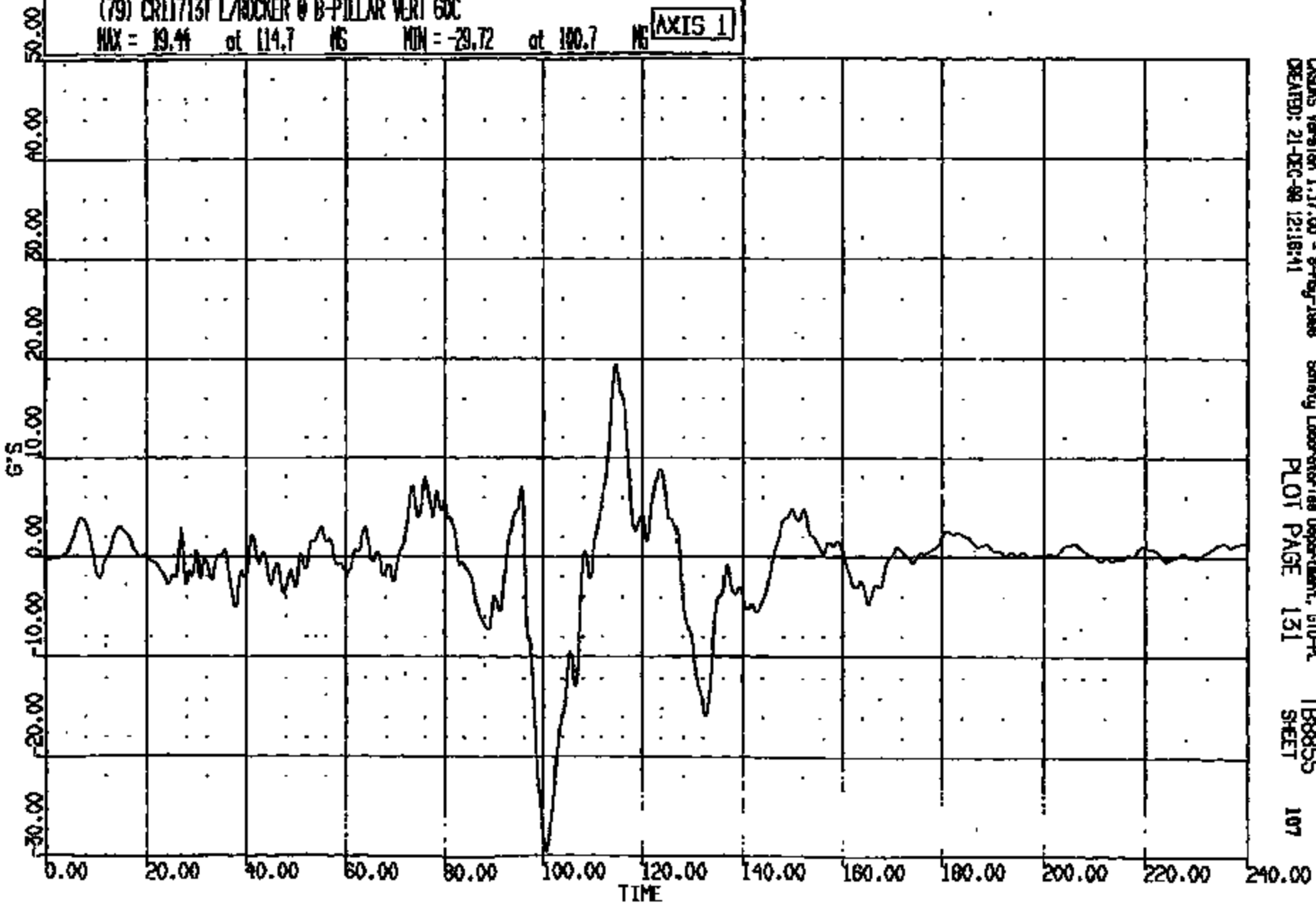


CASIMS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-91
CREATED: 21-DEC-99 12:16:39 PLOT PAGE 130 TB8855 SHEET 106

CRIS 0011713

CR R: 11713 TO: T88855 DATE: 991221 10:56:03
2000 0-198

(79) CR117131 L/ROCKER @ B-PILLAR VERT GOC
MAX = 19.44 at 114.7 MS MIN = -29.72 at 100.7 MS **AXIS 1**



CASAS Version 1.17.00 - 9-4-99-1998
CREATED: 21-DEC-99 12:18:41

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SHEET

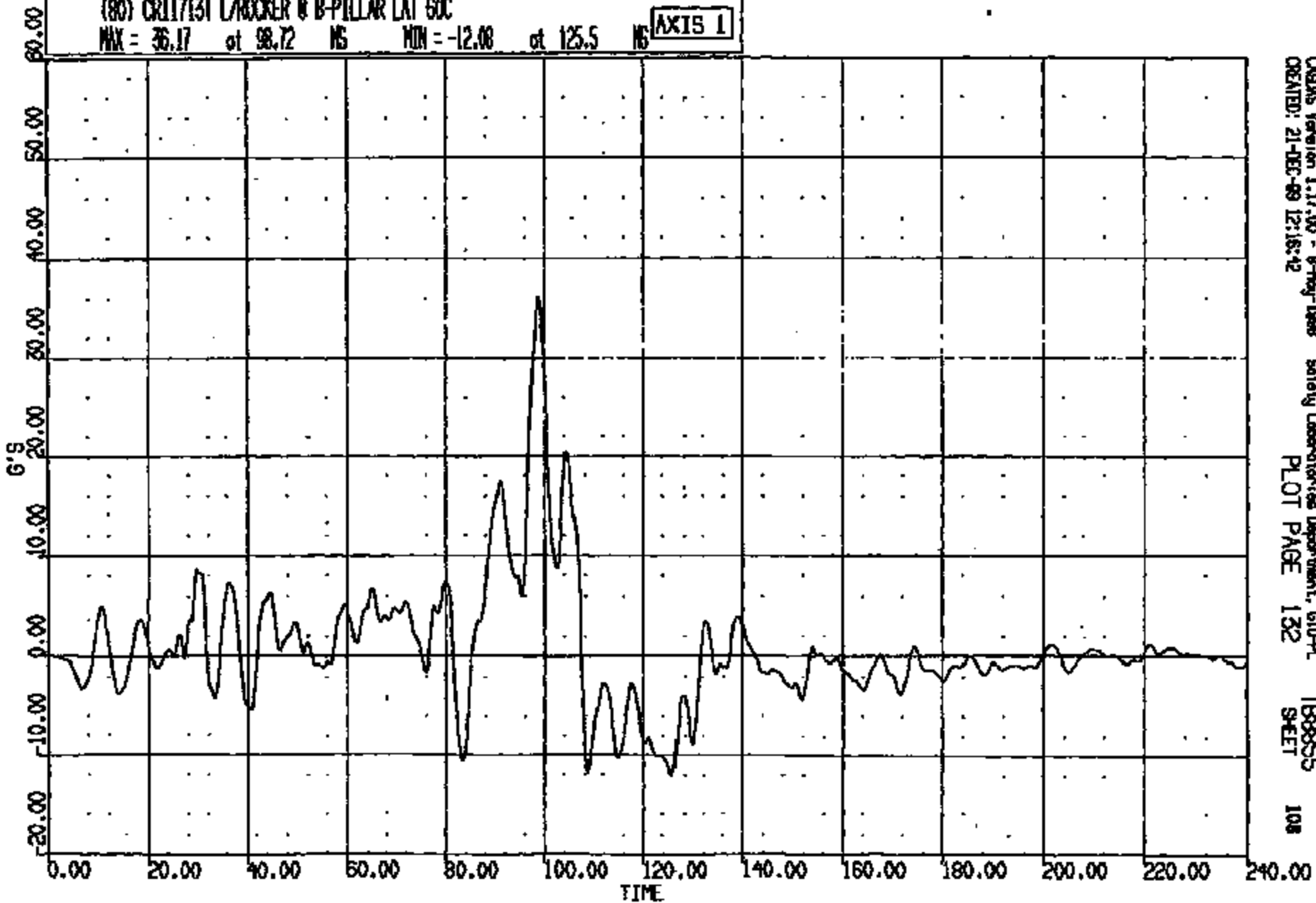
107

CRTS 0011713

CR R: 11713 TO: T88855 DATE: 981221 10:58:05
2000 D-188

(80) CR117131 L/ROCKER @ B-PILLAR LAT 60C
MAX = 36.17 at 98.72 NS MIN = -12.08 at 125.5 NS

AXIS 1



CADDS Version 1.17.00 - 8-May-1988
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SHEET

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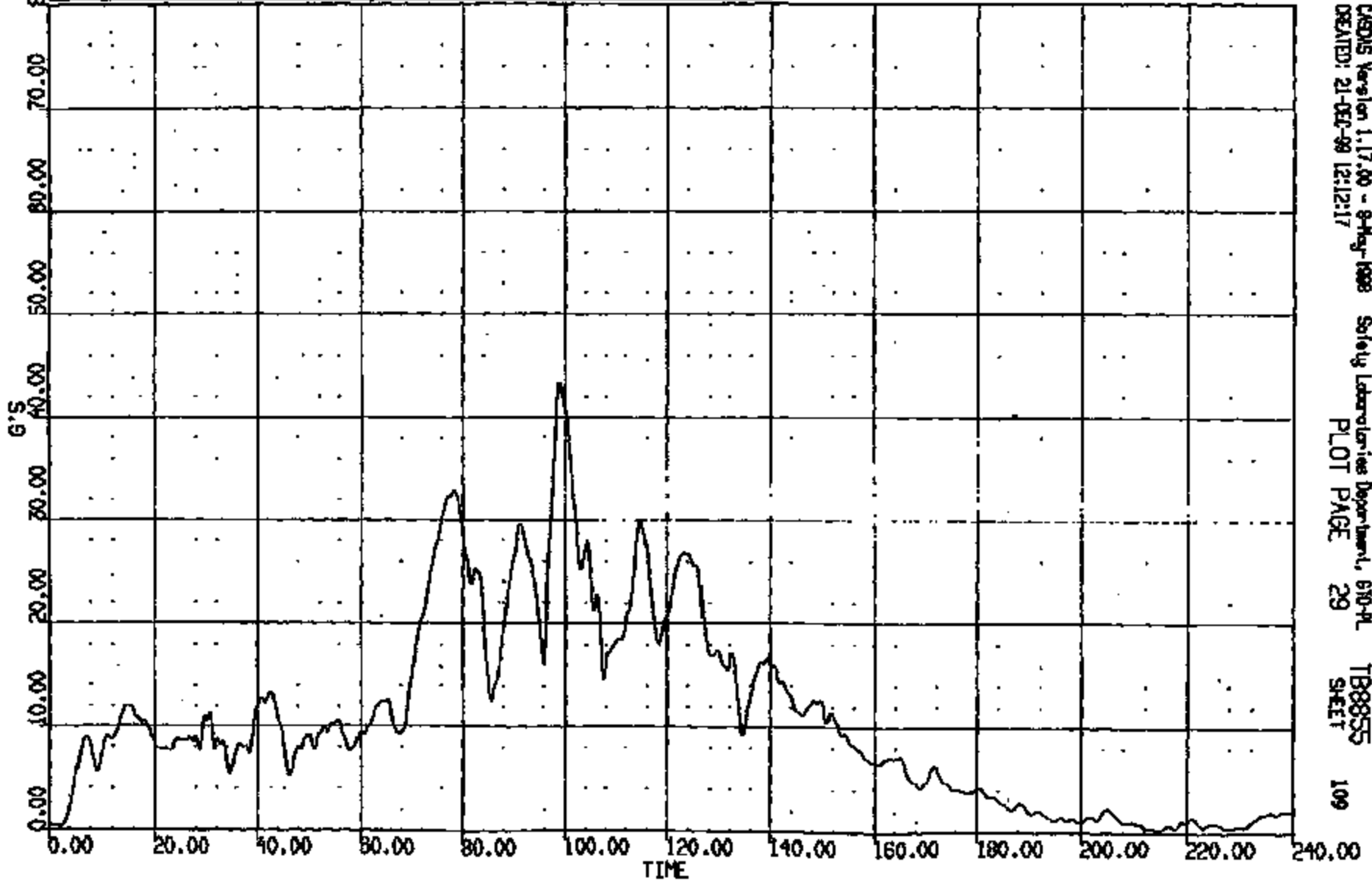
CR11713

CR R: 11713 TO: TB8855 DATE: 991221 10:38:03
R000 D-188

(10008) CR11713T (/ROCKER @ B-PILLAR RES 60C

MAX = 43.28 at 98.96 MS MIN = 0.1767 at 214.5 MS

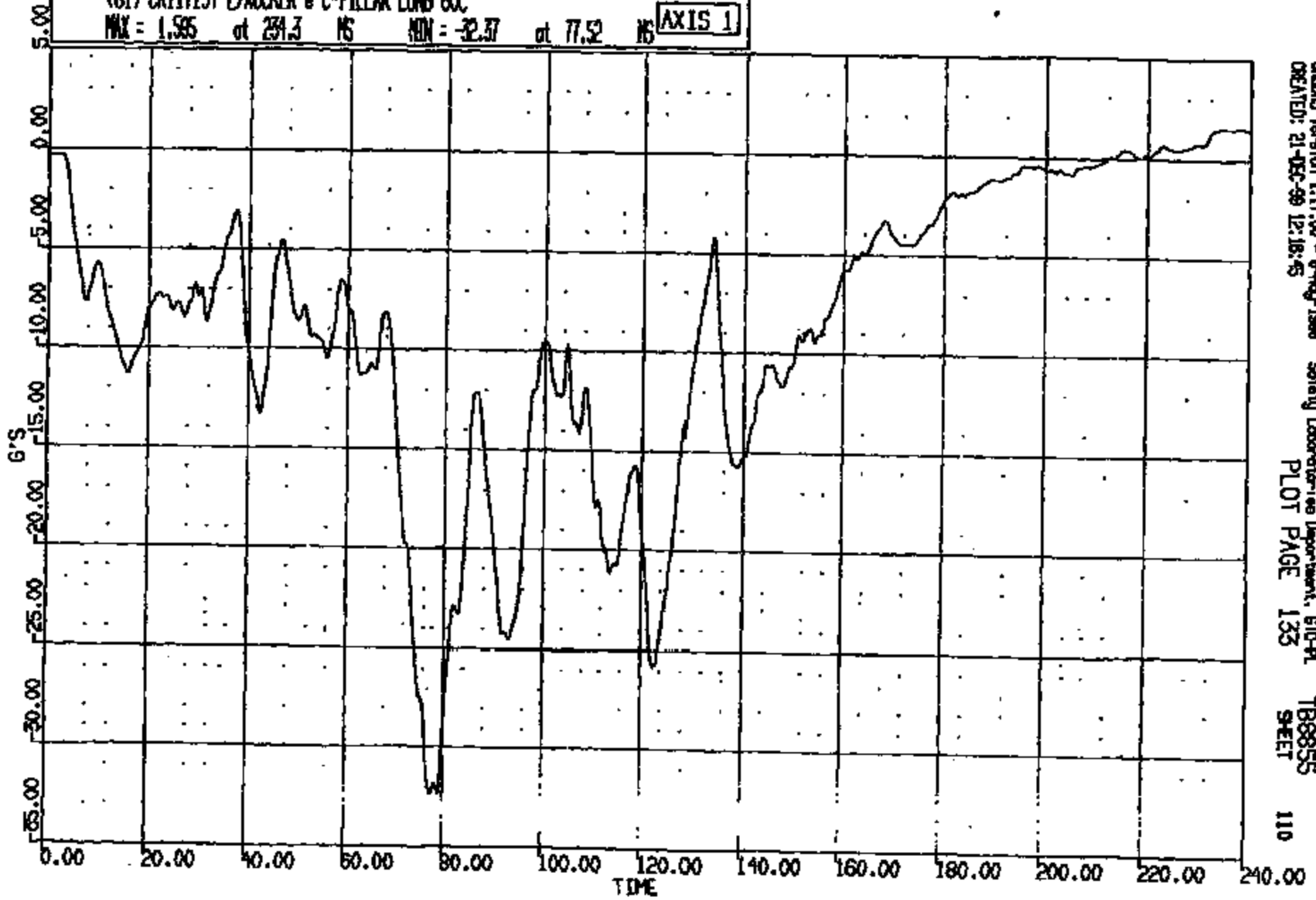
AXIS 1



CASDIS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
CREATED: 21-DEC-99 12:12:17 PLOT PAGE 29 TB8855 SHEET 109

CR R: 11713 TO: T88855 DATE: 991221 10:38:03
2000 D-186

(81) CR11713T L/ROCKER @ C-PILLAR LONG 60C
MAX = 1.595 at 234.3 MS MIN = -32.37 at 77.52 MS **AXIS 1**

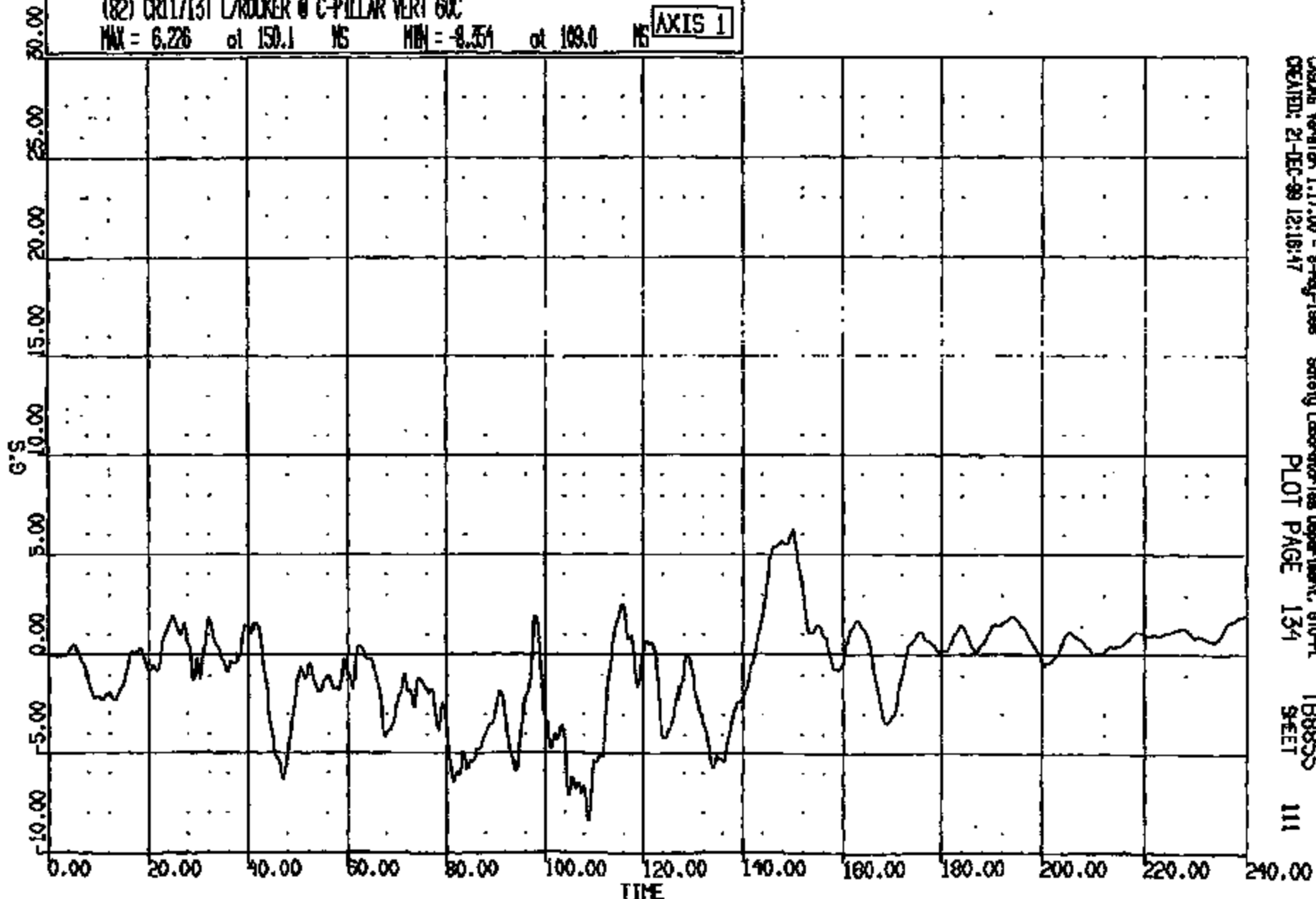


CASMS Version 1.17.00 - 8-May-1999 Safety Laboratories Department, 610-PL
CREATED: 21-DEC-99 12:18:45 PLOT PAGE 133 T88855 SHEET 110

CRTS 0011713

CR R: 11713 TO: T88855 DATE: 991221 10:28:03
2000 D-188

(82) CR11713T L/ROCKER @ C-PILLAR VERT 60C
MAX = 6.226 at 150.1 MS MIN = -8.351 at 109.0 MS **AXIS 1**



CADRE Version 1.17.00 - 8-Aug-1998 Safety Laboratories Department, 610-PL
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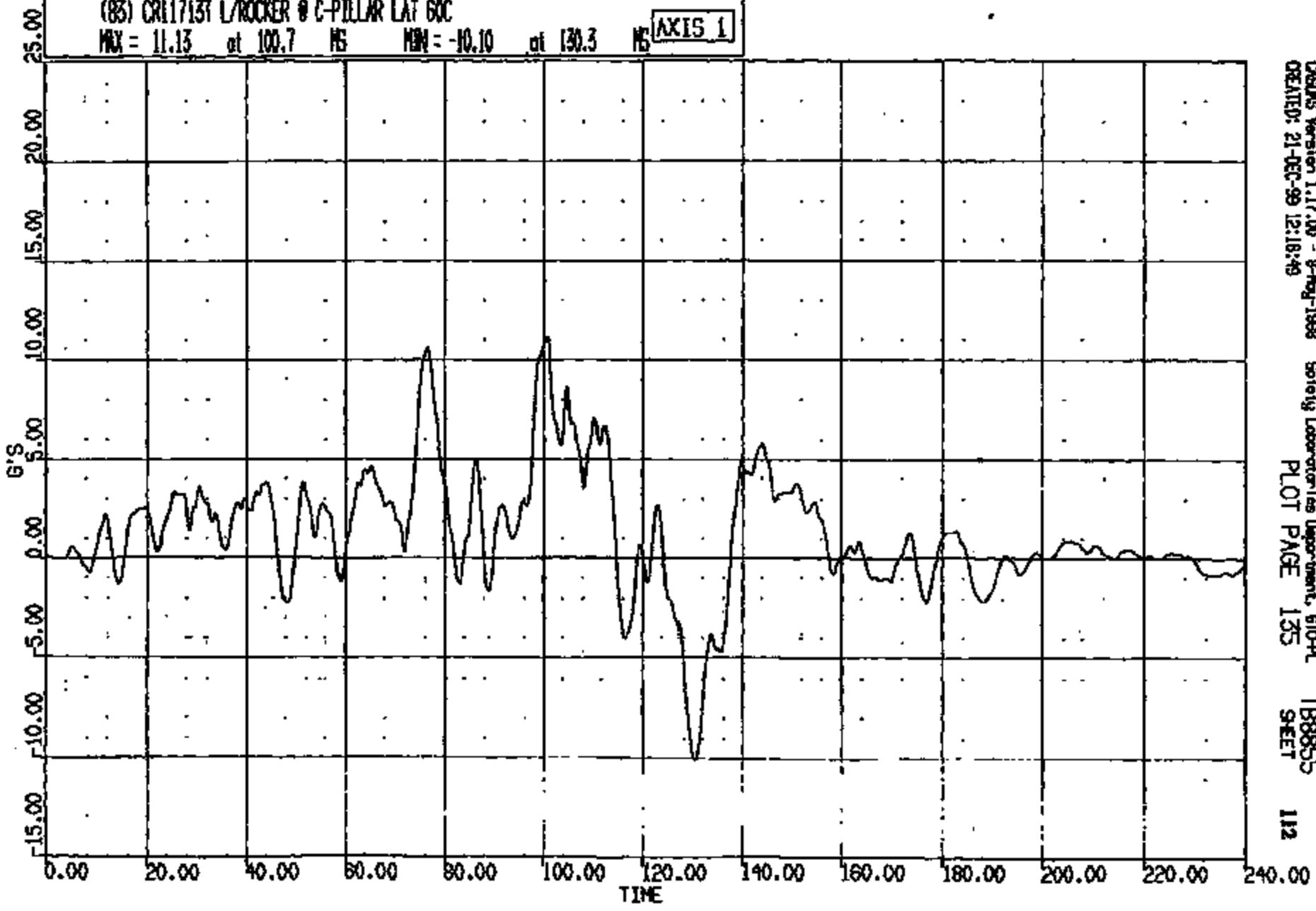
CRTS 0011713

CR R = 11713 TO: T8855 DATE: 991221 10:38:08
2000 P-188

(83) CR117131 L/ROCKER @ C-PILLAR LAT 60C

MAX = 11.13 at 100.7 MS MIN = -10.10 at 130.3 MS

AXIS 1

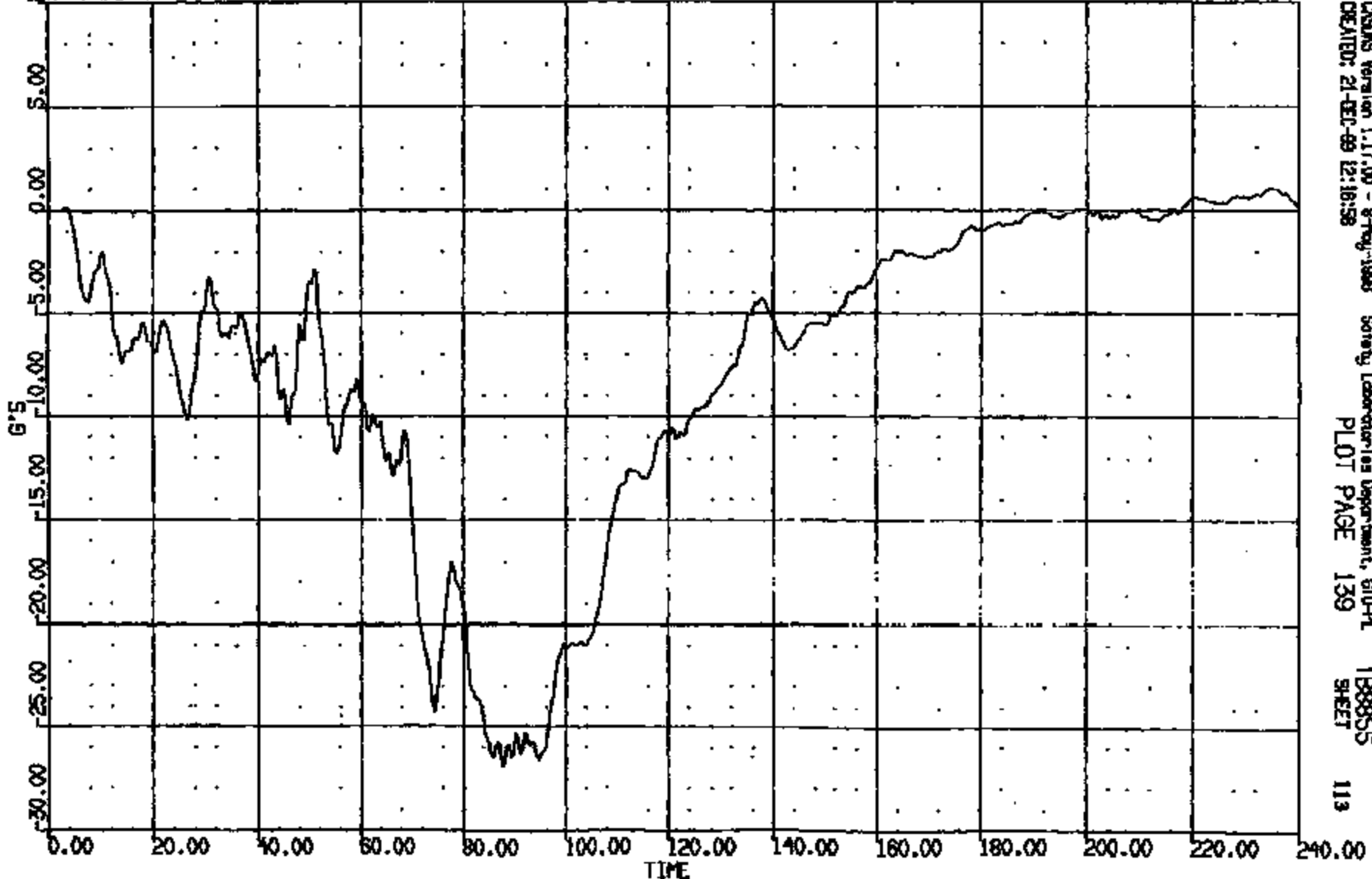


CADMS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-A
CREATED: 21-DEC-99 12:18:49 PLOT PAGE 135 T8855 SHEET 112

CRTS 0011713

CR #: 11713 TD: T88855 DATE: 991221 10:36:03
2000 D-188

(87) CR11713T R/ROCKER @ A-PILLAR LONG 60C
MAX = 1.025 at 29.7 MS MIN = -26.92 at 87.08 MS **AXIS 1**



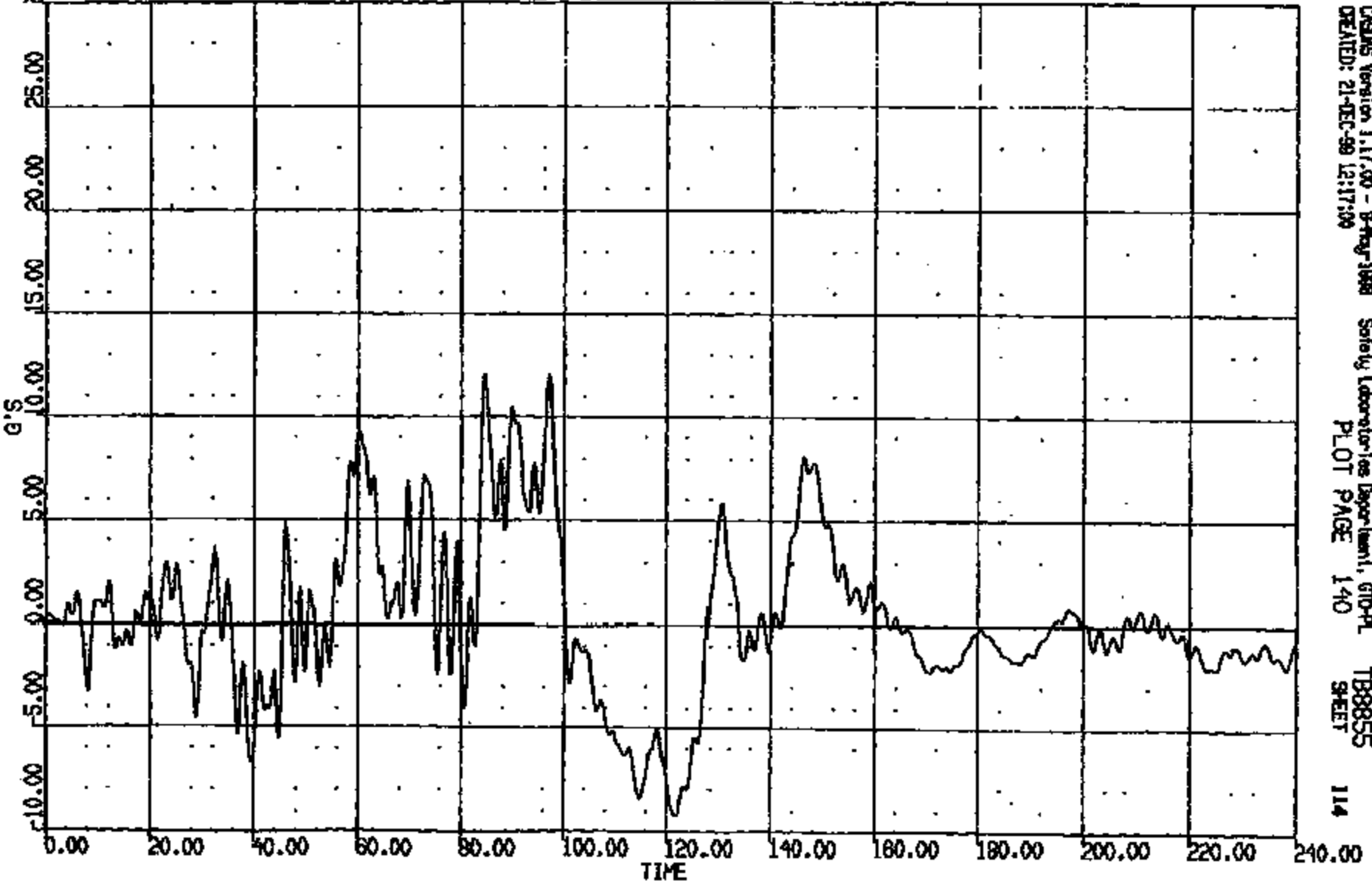
CADDS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-PL
CREATED: 21-DEC-99 12:16:58 PLOT PAGE 139 SHEET 113

CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 891221 10:35:08
8000 D-185

(88) CR117131 R/ROCKER @ A-PILLAR VERT GOC
MAX = 12.08 at 84.48 MS MIN = -9.248 at 121.9 MS

AXIS 1

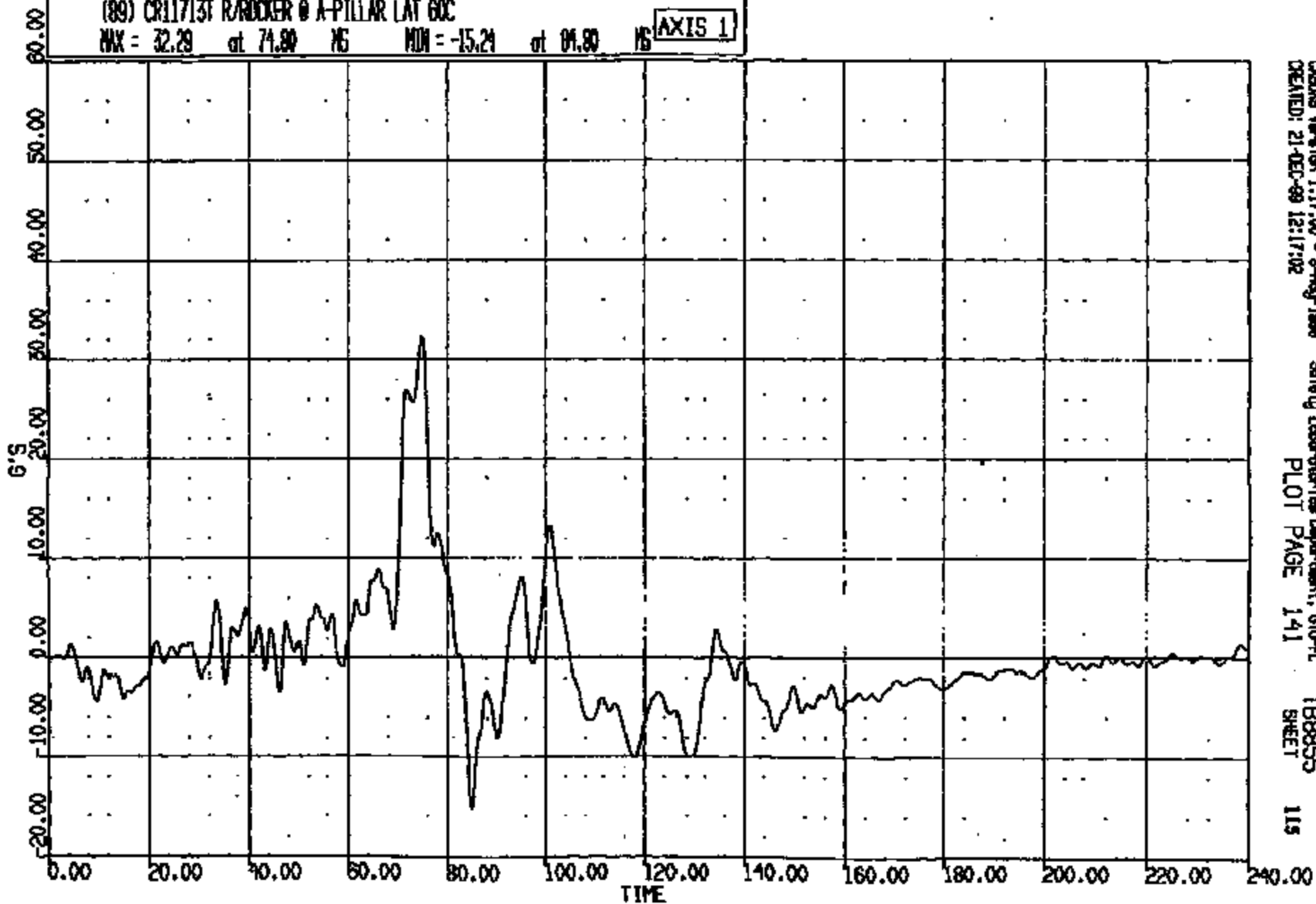


CAEWS Version 1.17.00 - 8-May-1988 Safety Laboratories Department, GPO-PL
CREATED: 21-DEC-88 12:17:00 PLOT PAGE 140 TB8855 SHEET 114

CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 891221 10:58:05
2000 D-198

(89) CR11713F R/ROCKER @ A-PILLAR LAT 60C
MAX = 32.29 at 71.80 MS MIN = -15.24 at 04.80 MS **AXIS 1**



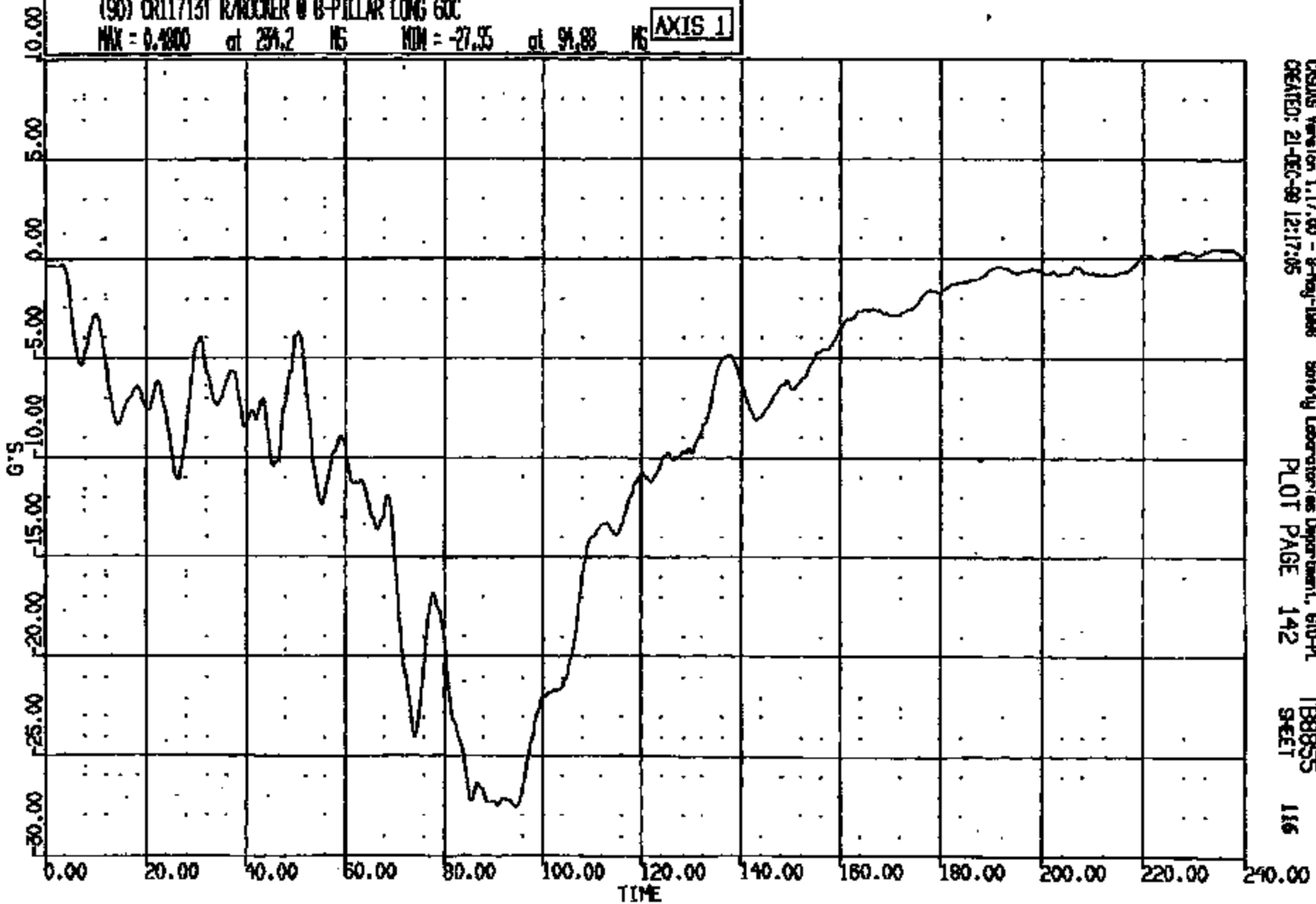
CASINS Version 1.17.00 - 8-Aug-1988 Safety Laboratories Department, 610-PL
CREATED: 21-DEC-89 12:17:02 PLOT PAGE 141 TB8855 SHEET 115

CR R: 11713 TO: TB8855 DATE: 991221 10:38:03
8000 D-198

(90) CR11713T R/WOCKER @ B-PILLAR LONG 60C

MAX = 0.4800 at 234.2 MS NOM = -27.35 at 94.88 MS

AXIS 1



CASUS Version 1.17.00 - 8-May-1998
CREATED: 21-DEC-99 12:17:05

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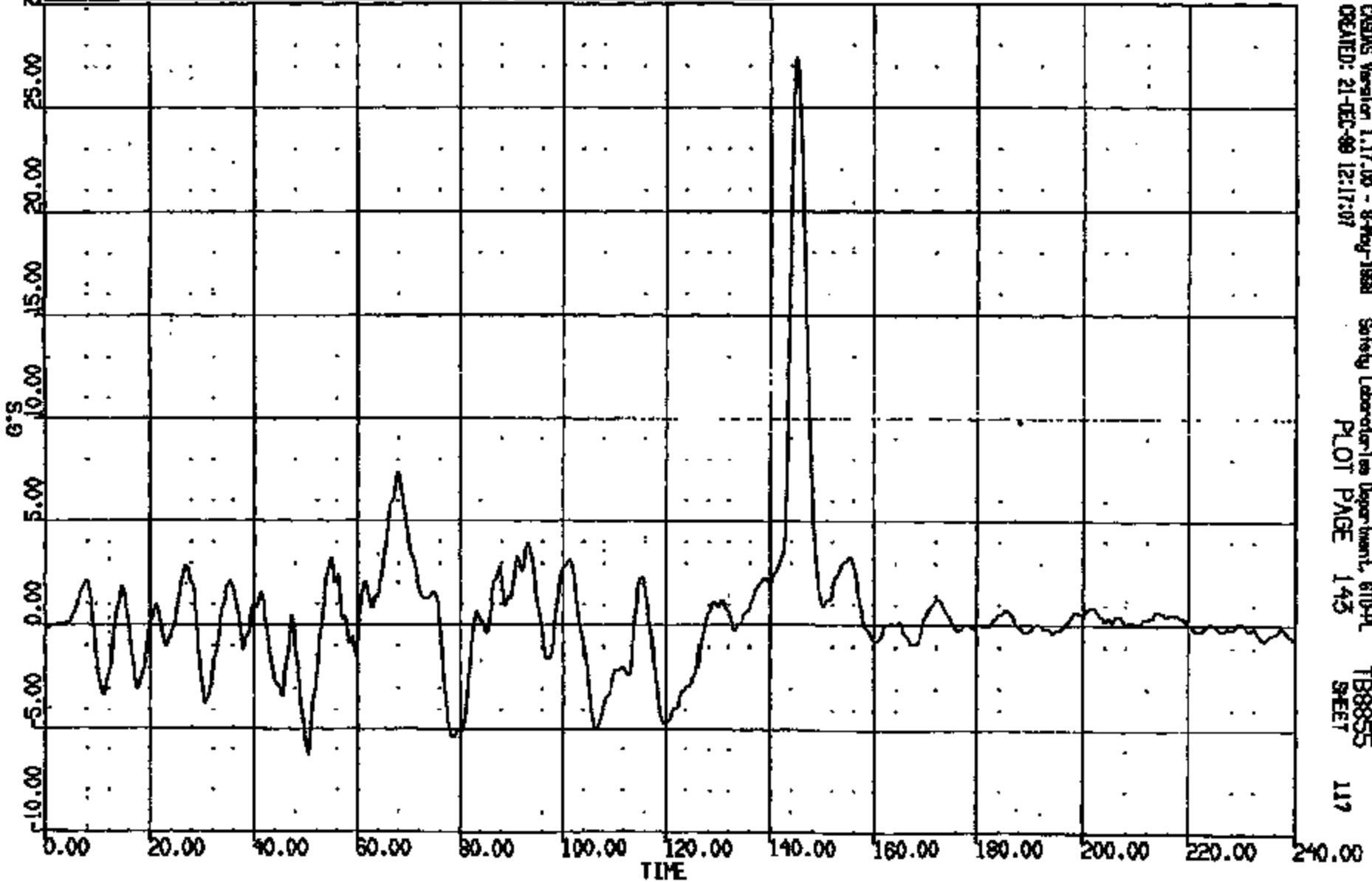
CRTS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:28:03
2000 D-186

(91) CR11713T R/ROCKER @ B-PILLAR VERT 60C

MAX = 27.42 of 145.0 NS MIN = -6.227 of 50.40 NS

AXIS 1



CADWIS Version 1.17.00 - 8-May-1998
CREATED: 21-DEC-99 12:17:07

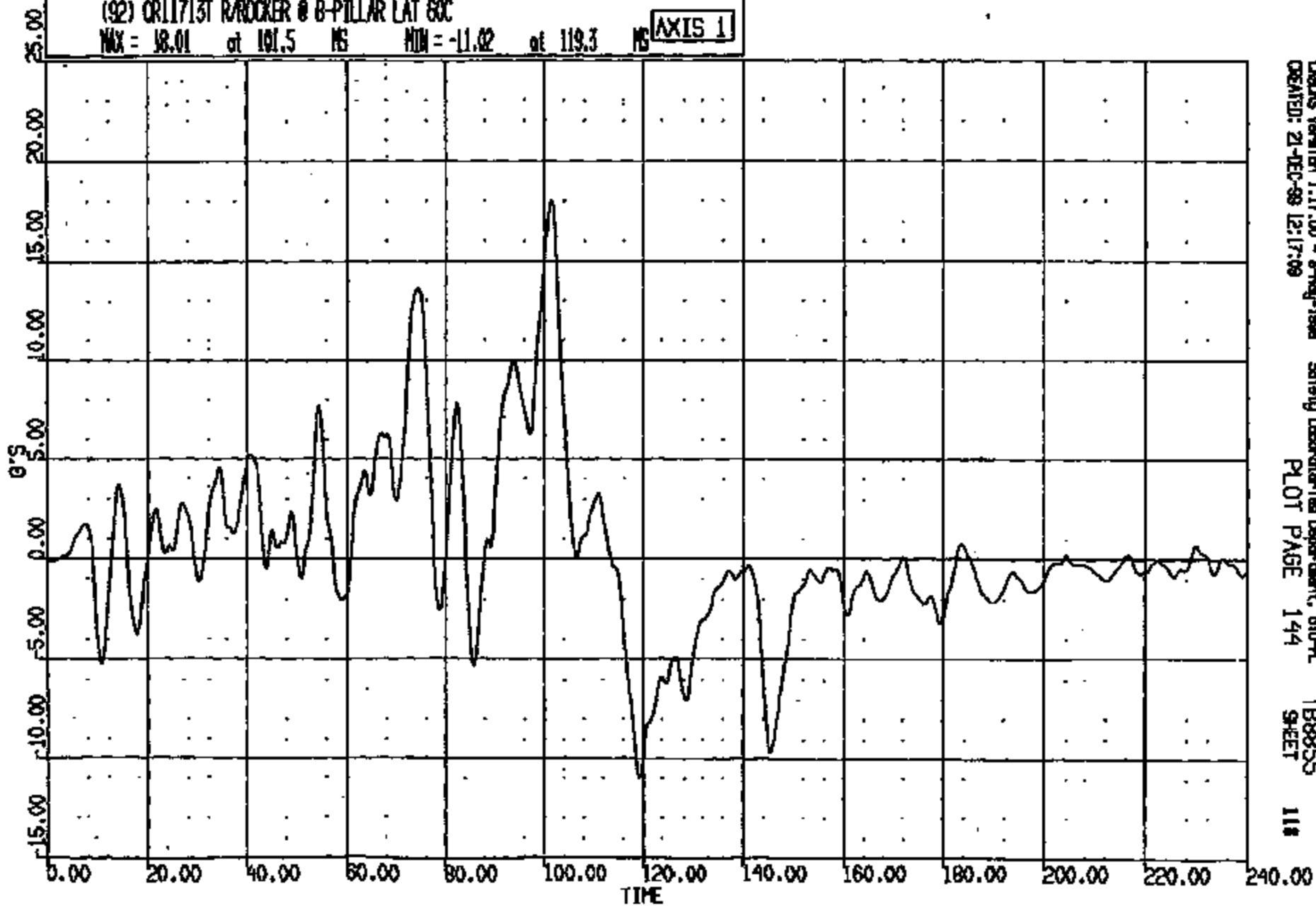
Safety Laboratories Department, 610-PL
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CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 801221 10:28:08
2000 0-186

(92) CR11713T R/ROCKER @ B-PILLAR LAT 60C
MAX = 18.01 at 101.5 MS MIN = -11.02 at 119.3 MS **AXIS 1**



CRSIS Version 1.17.00 - 8-May-1998
CREATED: 21-DEC-98 12:17:09

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PLOT PAGE 144

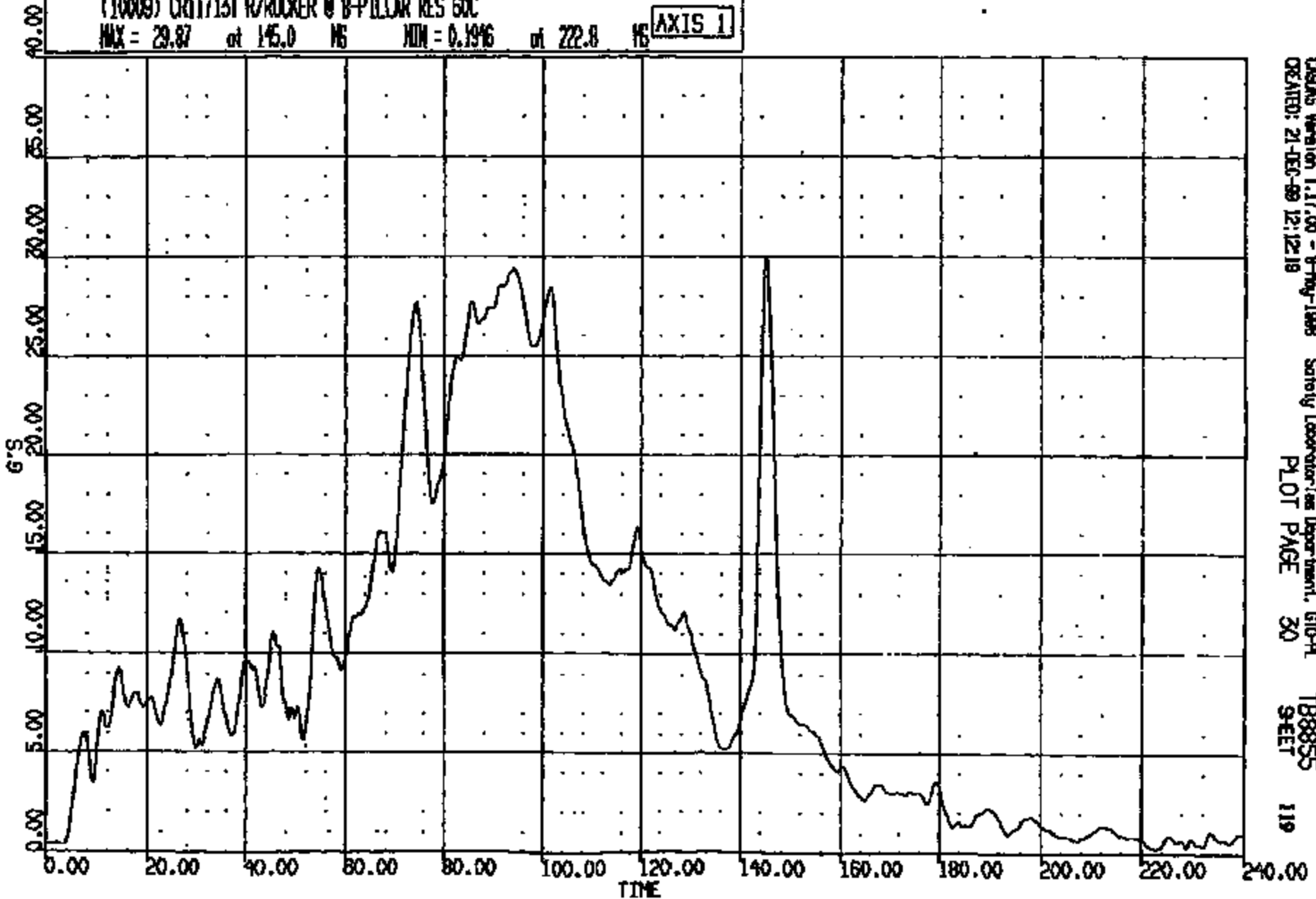
TB8855
SHEET

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CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:56:03
R000 D-188

(10009) CR11713T R/ROCKER @ B-PILLAR RES 50C
MAX = 29.87 at 145.0 MS MIN = 0.1946 at 222.8 MS **AXIS 1**



CADDS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, G10-PL
CREATED: 21-DEC-99 12:12:18 PLOT PAGE 30 TB8855 SHEET 119

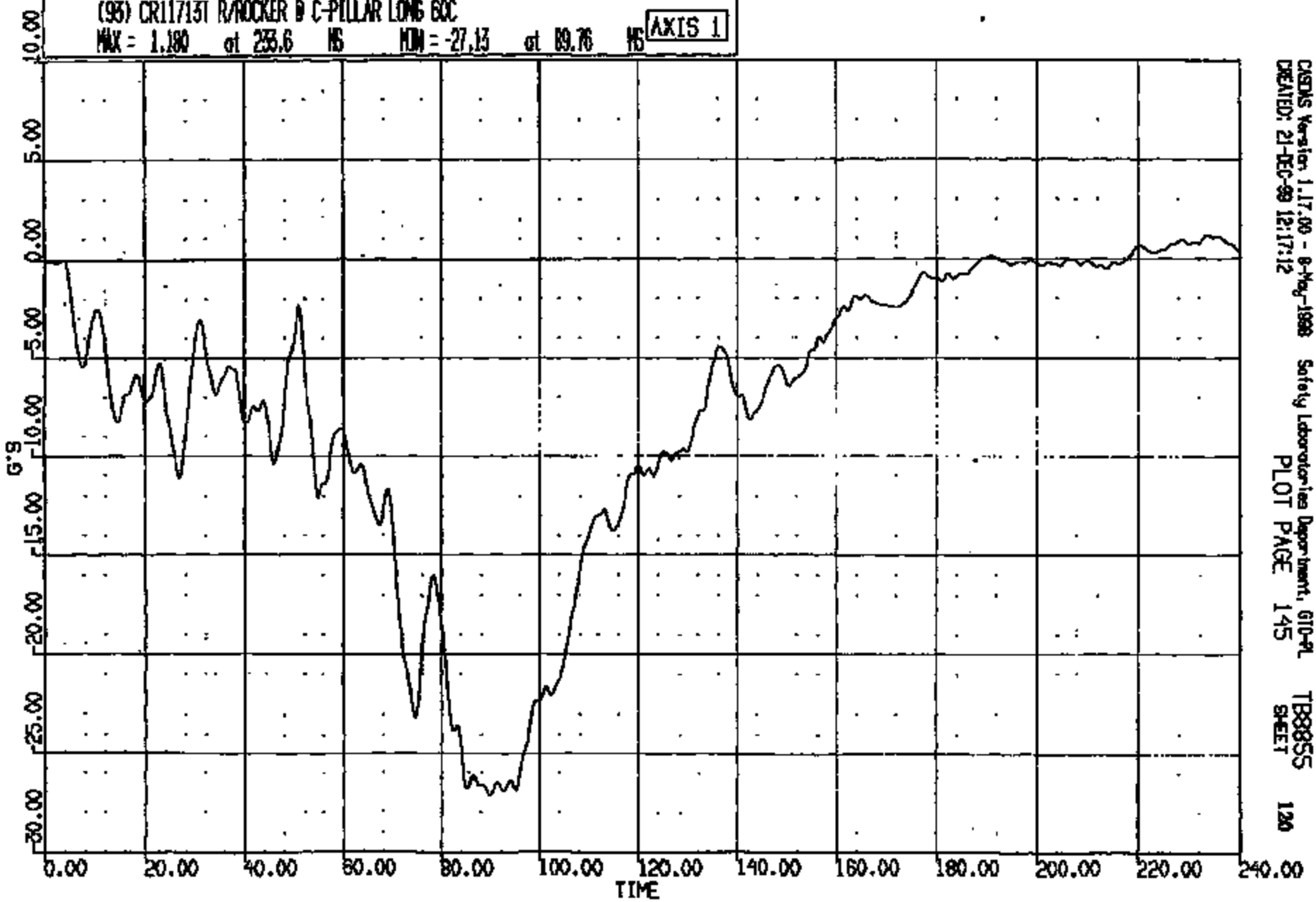
CR11713

CR R: 11713 TO: TB8855 DATE: 991221 10:58:08
2000 D-198

(95) CR11713T R/ROCKER B C-PILLAR LONG 60C

MAX = 1.180 at 233.6 MS MIN = -27.13 at 89.76 MS

AXIS 1

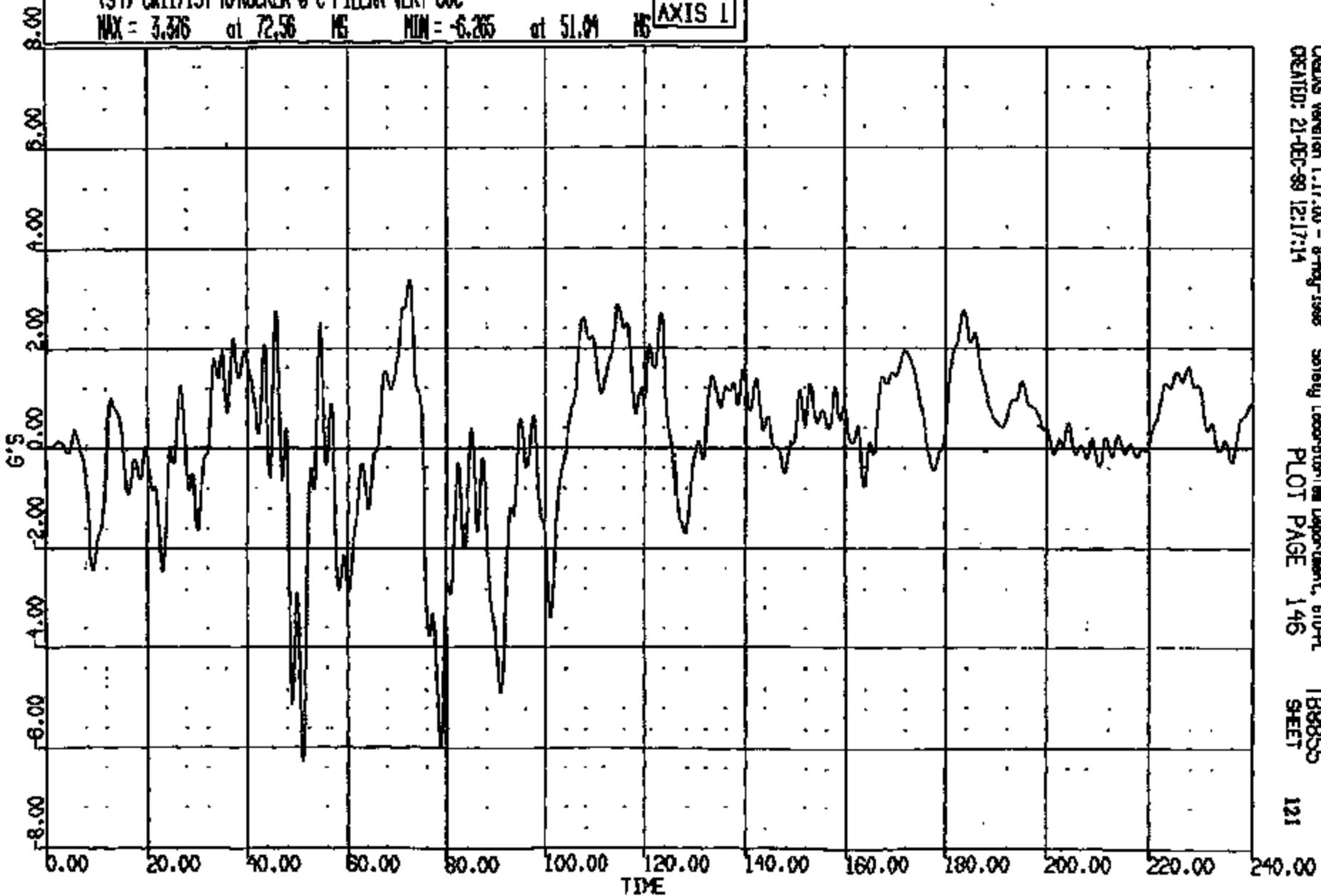


CRS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, 610-9L TB8855 120
DATED: 21-DEC-99 12:17:12 PLOT PAGE 145 SHEET

CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:58:05
2000 0-188

(94) CR11713T R/ROCKER @ C-PILLAR VERT 60C
MAX = 3.376 at 72.56 MS MIN = -6.265 at 51.04 MS **AXIS 1**

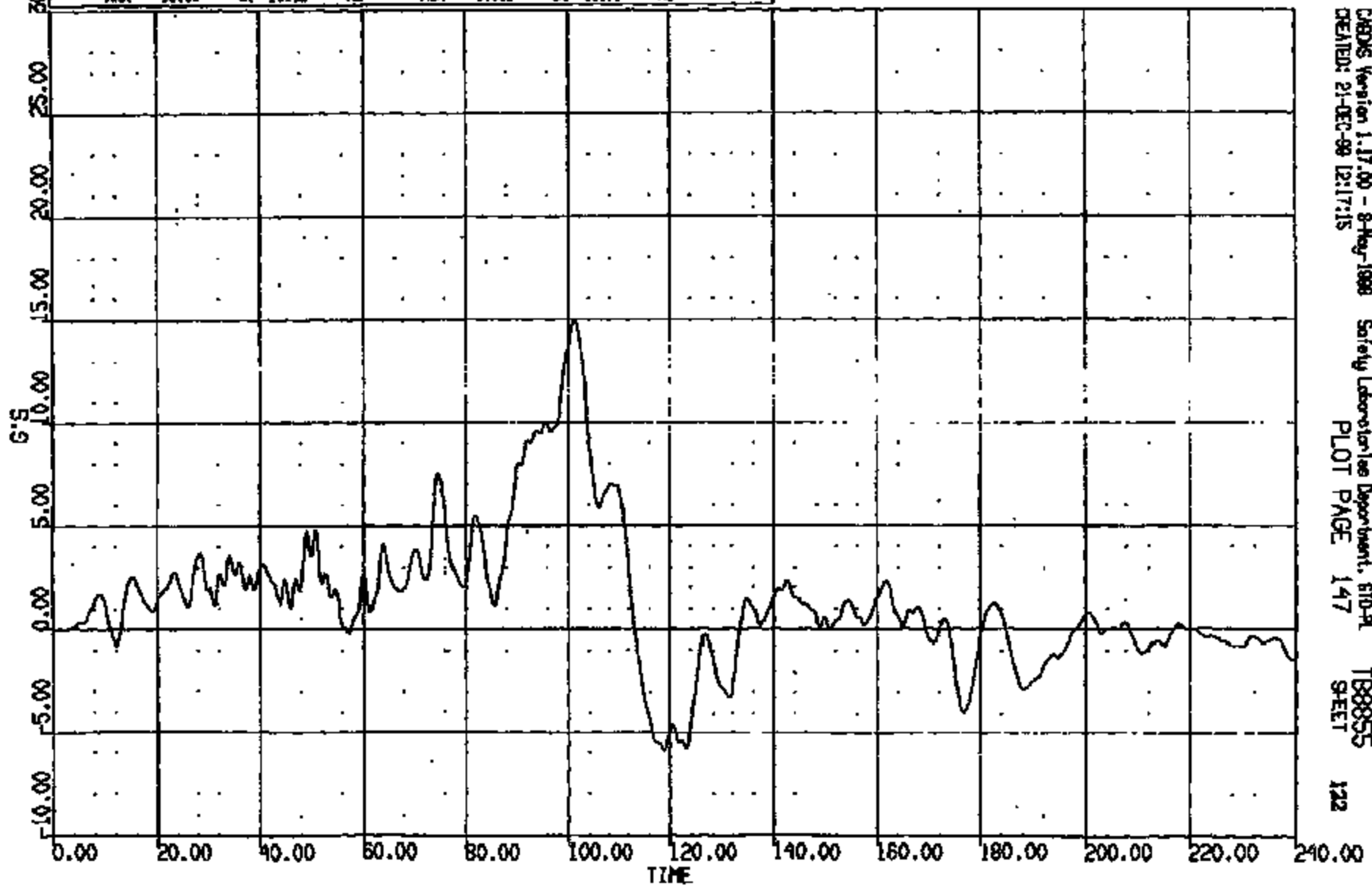


CRSIS Version 1.17.00 - 8-May-1998 Safety Laboratory Department, ETO-PL
CREATED: 21-DEC-99 12:17:14 TB8855
PLOT PAGE 146 SHEET 121

CRIS 0011713

CR R: 11713 TO: T8885 DATE: 881221 10:38:05
R000 D-188

(95) CR1713T R/ROCKER @ C-PILLAR LAT 60C
MAX = 15.00 at 101.2 MS MIN = -5.881 at 119.0 MS **AXIS 1**

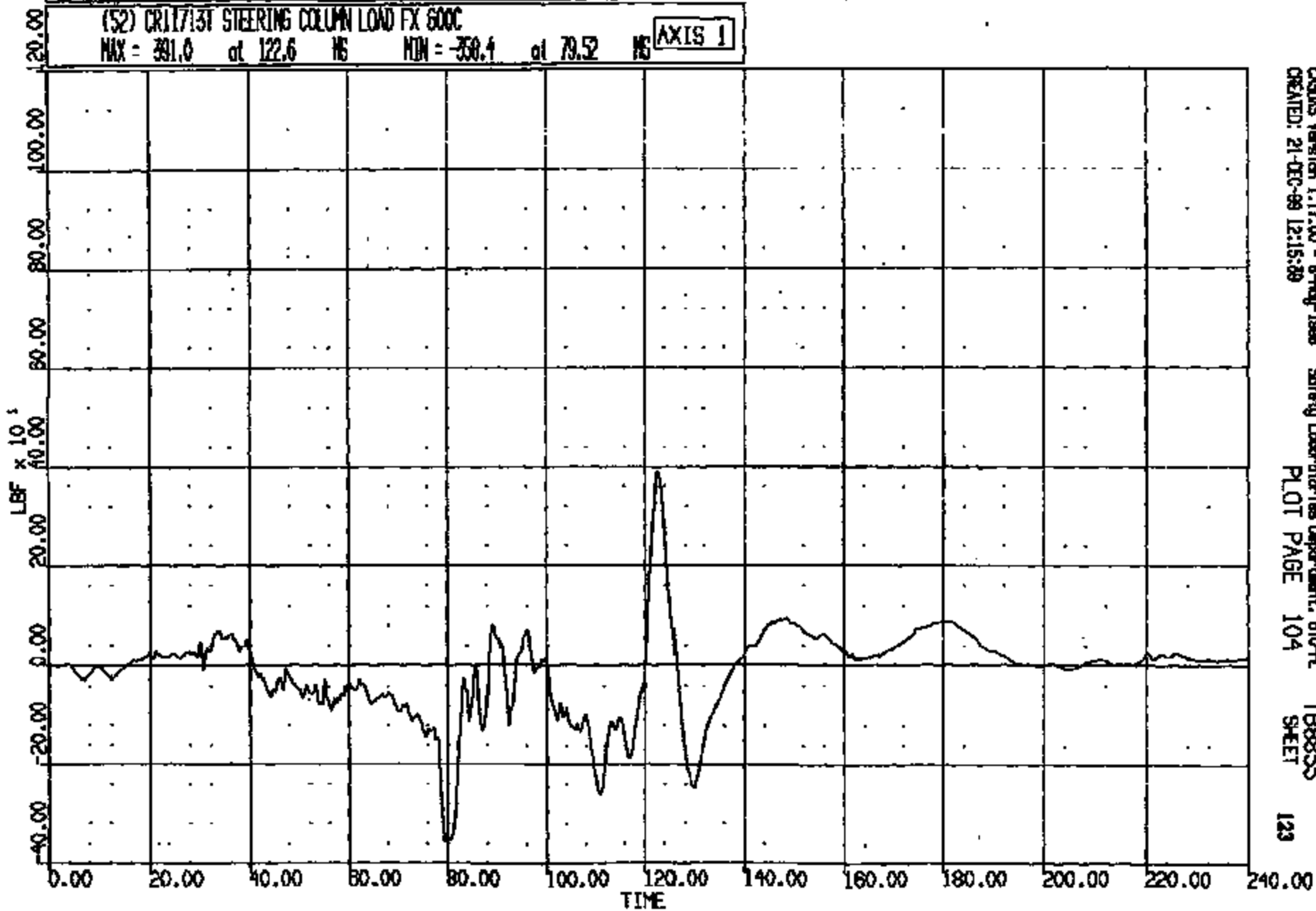


CRS Version 1.17.00 - 8-May-1988 Safety Laboratory Department, STD-91
CREATED: 21-DEC-88 12:17:15 PLOT PAGE 147 SHEET 122

CRTS 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:58:03
2000 D-198

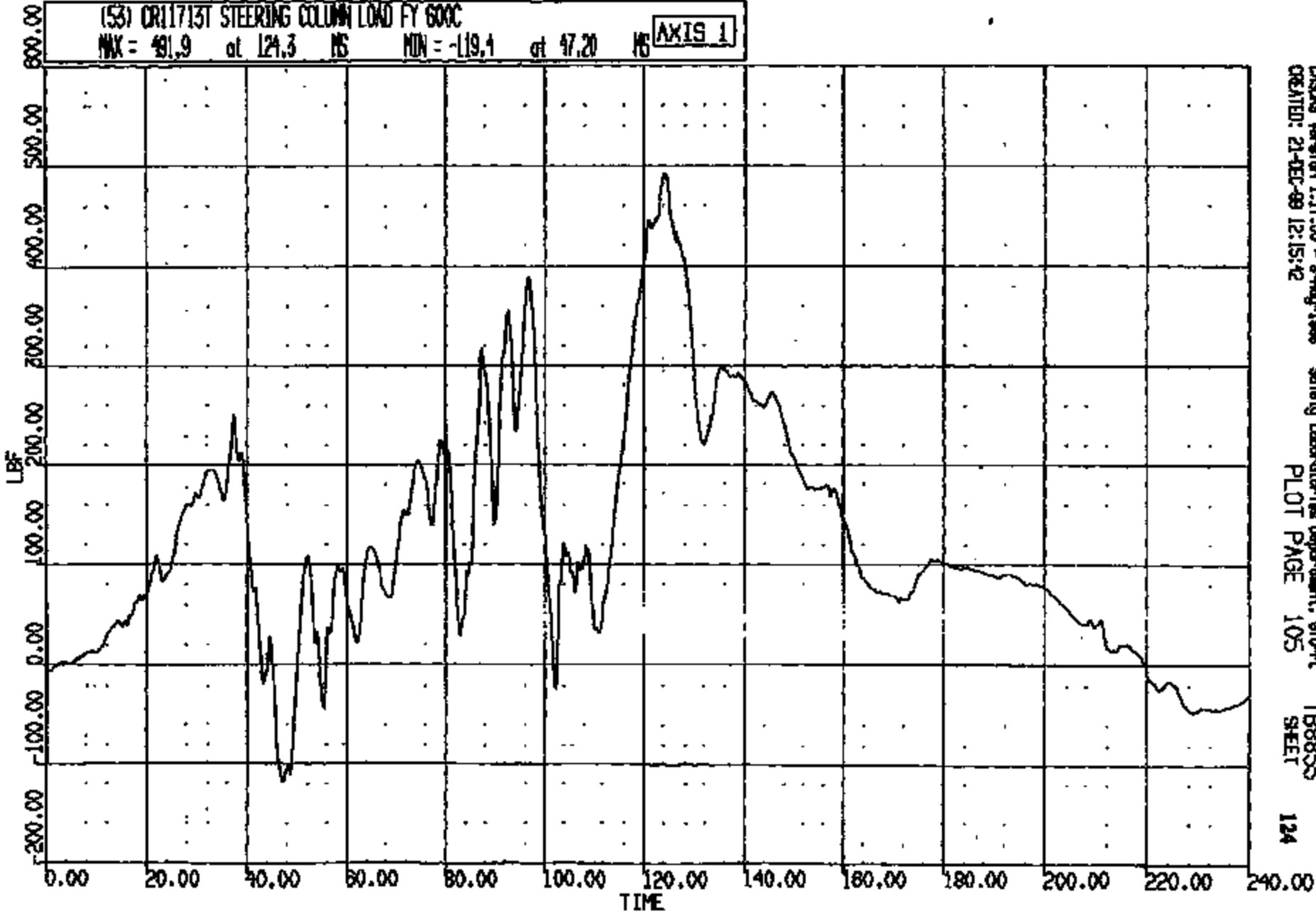
(52) CR11713T STEERING COLUMN LOAD FX 600C
MAX = 391.0 at 122.6 MS MIN = -350.4 at 79.52 MS **AXIS 1**



CR R: 11713 TO: TB8855 DATE: 991221 10:36:03
2000 D-188

(53) CR11713T STEERING COLUMN LOAD FY 600C

MAX = 491.9 at 124.3 MS MIN = -119.1 at 47.20 MS **AXIS 1**



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CREATED: 21-DEC-99 12:15:42

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PLOT PAGE 105

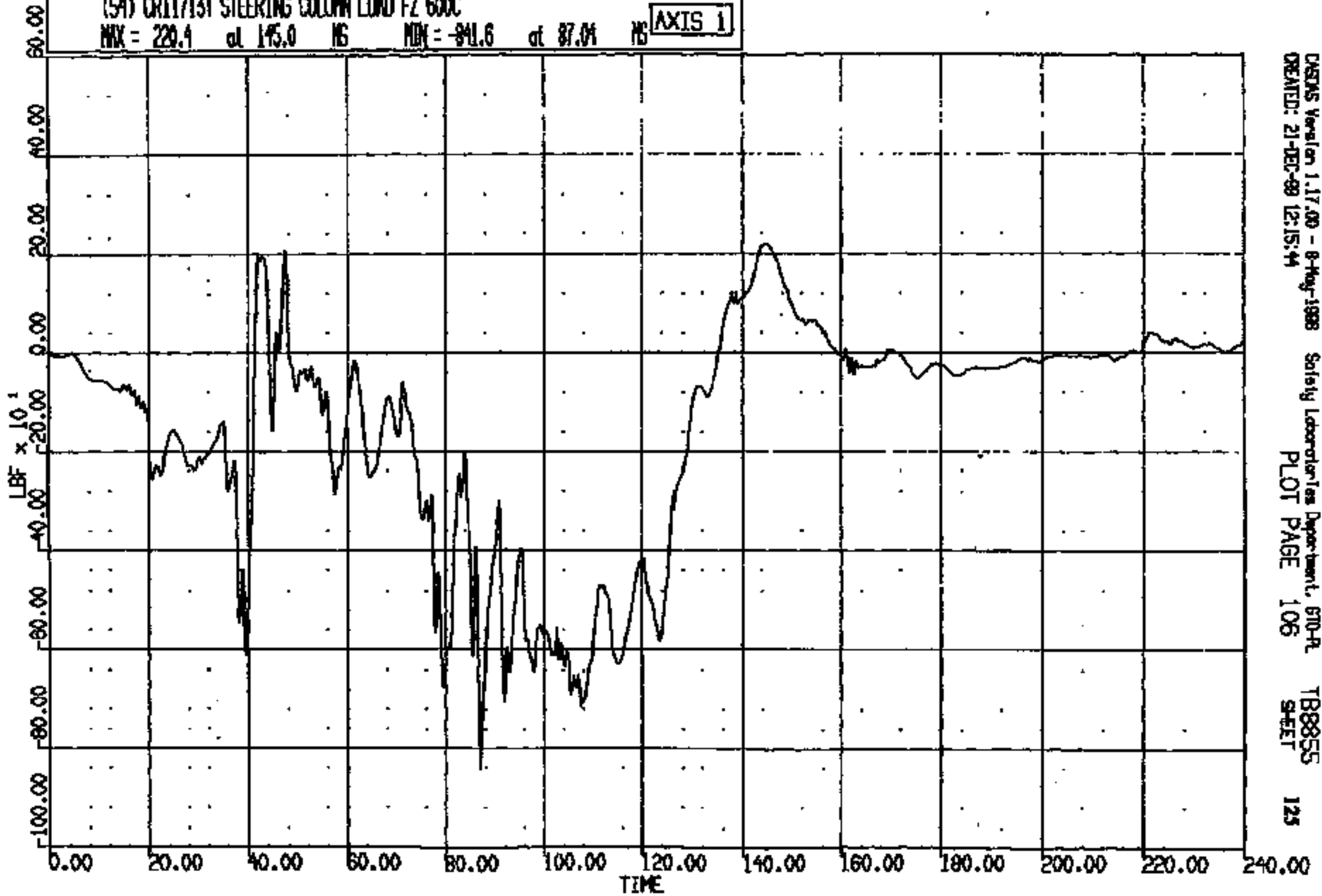
TB8855
SHEET

CR R: 11715 TO: TB8855 DATE: 991221 10:36:03
2000 D-188

(5A) CR11713T STEERING COLUMN LIND FZ 600C

MAX = 220.4 at 145.0 MS MIN = -841.6 at 87.04 MS

AXIS 1



CRSAS Version 1.17.00 - 8-May-1998
CREATED: 21-DEC-99 12:15:44

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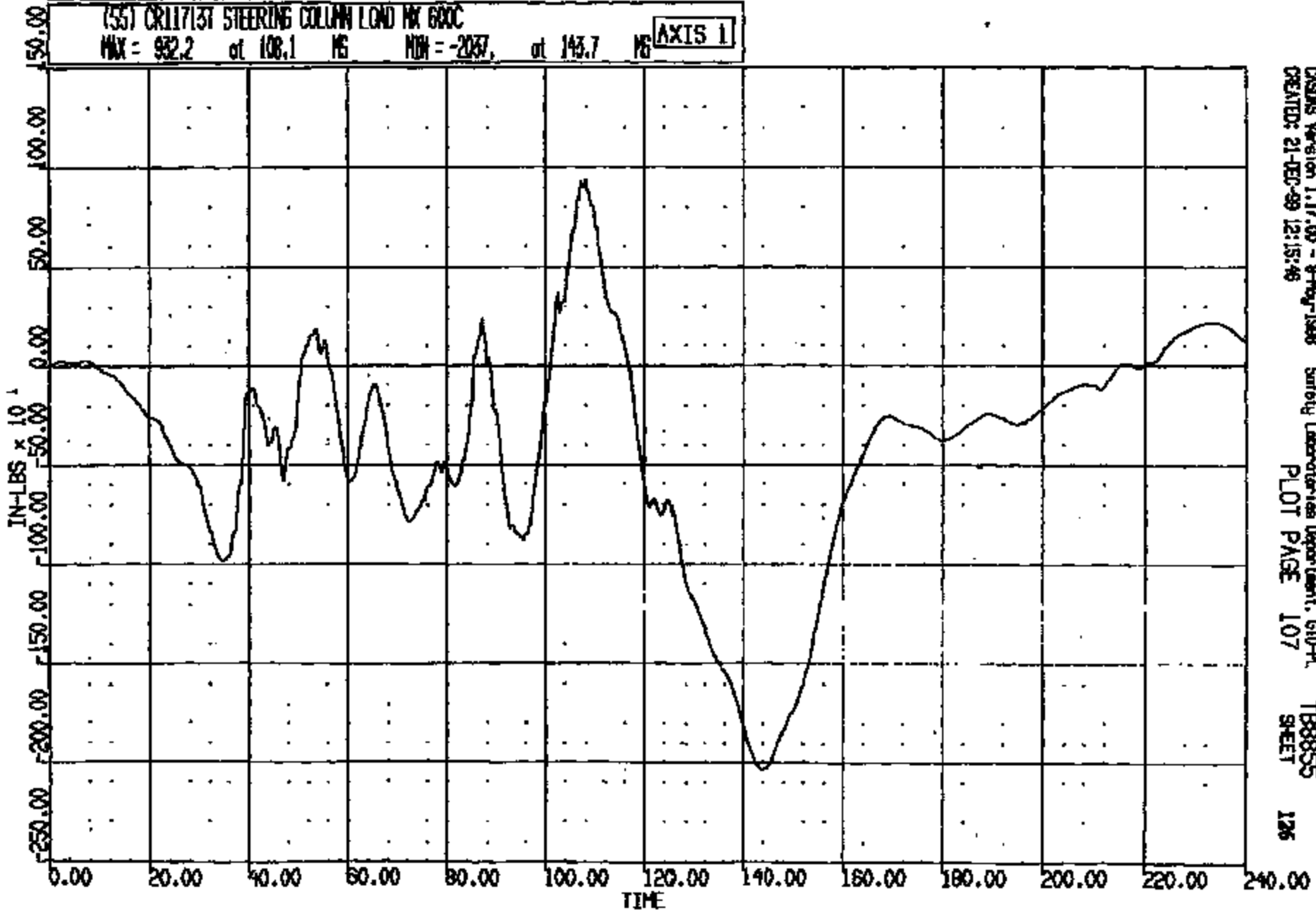
TB8855
SHEET

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CR15 0011713

CR R: 11713 TO: TB8855 DATE: 991221 10:56:05
2000 D-198

(55) CR117131 STEERING COLUMN LOAD MK 600C
MAX = 932.2 at 108.1 MS MIN = -2037. at 143.7 MS **AXIS 1**

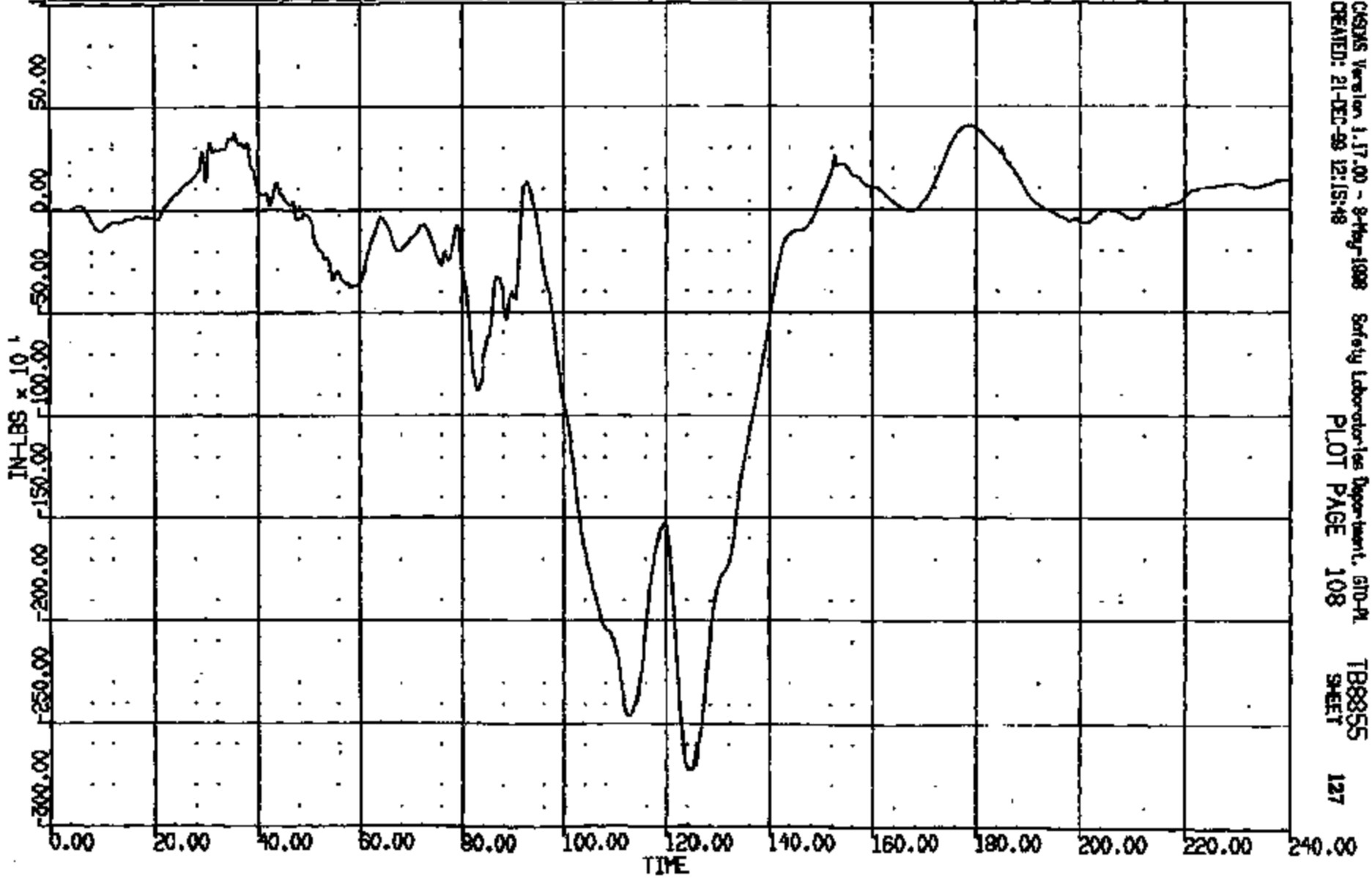


DISOS Version 1.17.00 - 9-May-1998 Surflog Laboratories Department, GPO-PL
CREATED: 21-DEC-99 12:15:46 TB8855
PLOT PAGE 107 SHEET 126

CRIS 0011713

CR R: 11715 TO: TB8835 DATE: 891221 10:58:03
2000 0-188

(56) CR11715F STEERING COLUMN LOAD MY 600C
MAX = 406.8 at 178.8 MS MIN = -272.6 at 124.3 MS **AXIS 1**

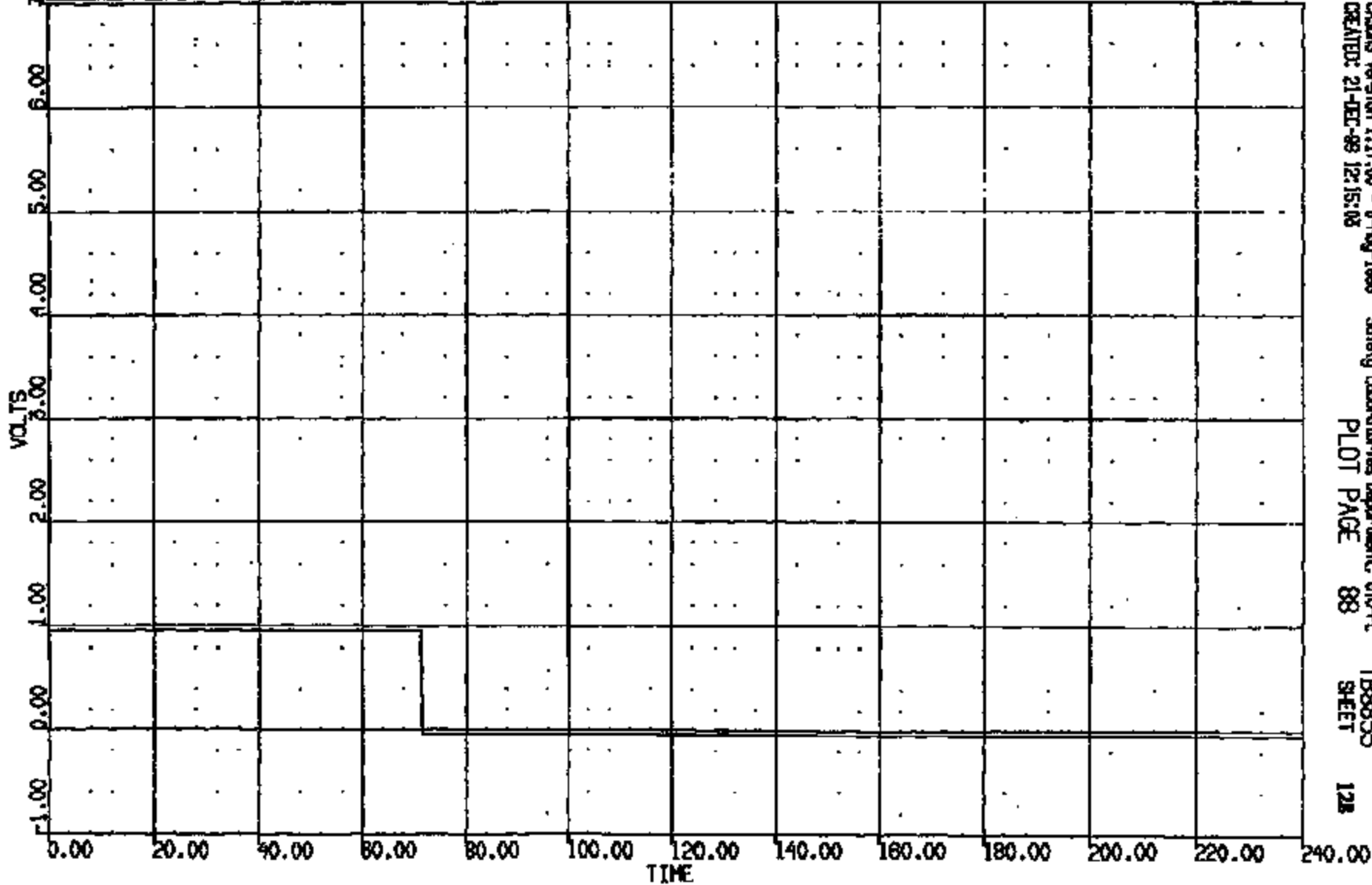


CRSAS Version 1.17.00 - 9-May-1988 Safety Laboratories Department, GM-PL
CREATED: 21-DEC-98 12:15:48 PLOT PAGE 108 TB8835 SHEET 127

CRTS 0011713

CR R: 11713 TO: T88855 DATE: 891221 10:38:03
2000 D-188

(36) CR117131 ALTERNATE T-ZERO SN 4000C
MAX = 0.9570 at -.7625E-05 MS MIN = -.4895E-01 at 71.00 MS **AXIS 1**



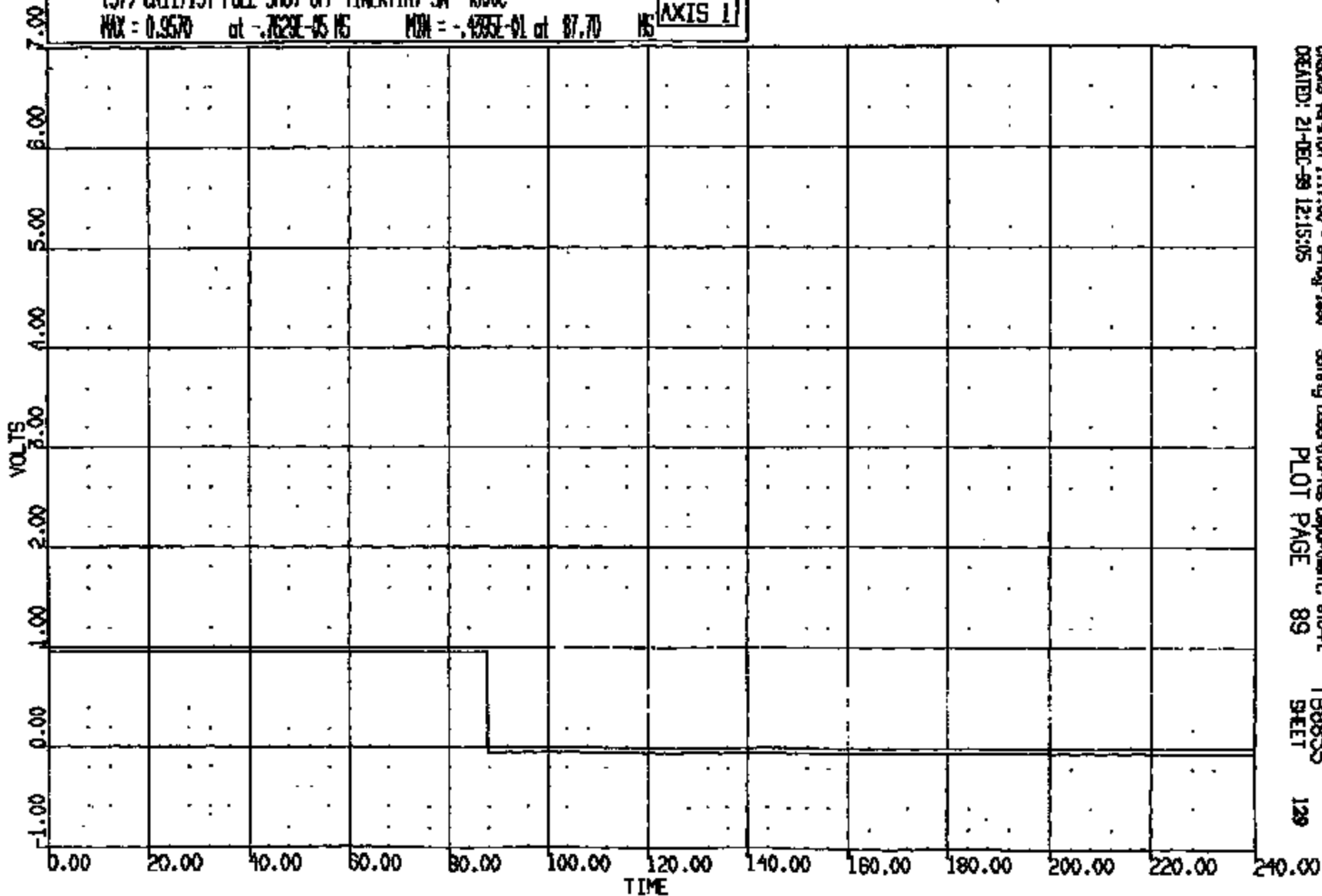
CHROM Version 1.17.00 - 8-May-1989 Safety Laboratories Department, B10-PL T88855
CREATED: 21-DEC-88 12:15:18 PLOT PAGE 88 SHEET 12B

CRIS 0011713

CR R: 11713 TO: T8855 DATE: 981221 10:56:03
2000 D-128

(37) CR117131 FUEL SHUT OFF (INERTIA) SW 4000C
MAX = 0.9570 at -.7623E-05 NS MIN = -.4395E-01 at 87.70 NS

AXIS 1



CASDAS Version 1.17.00 - 8-May-1999
CREATED: 21-DEC-99 12:15:05

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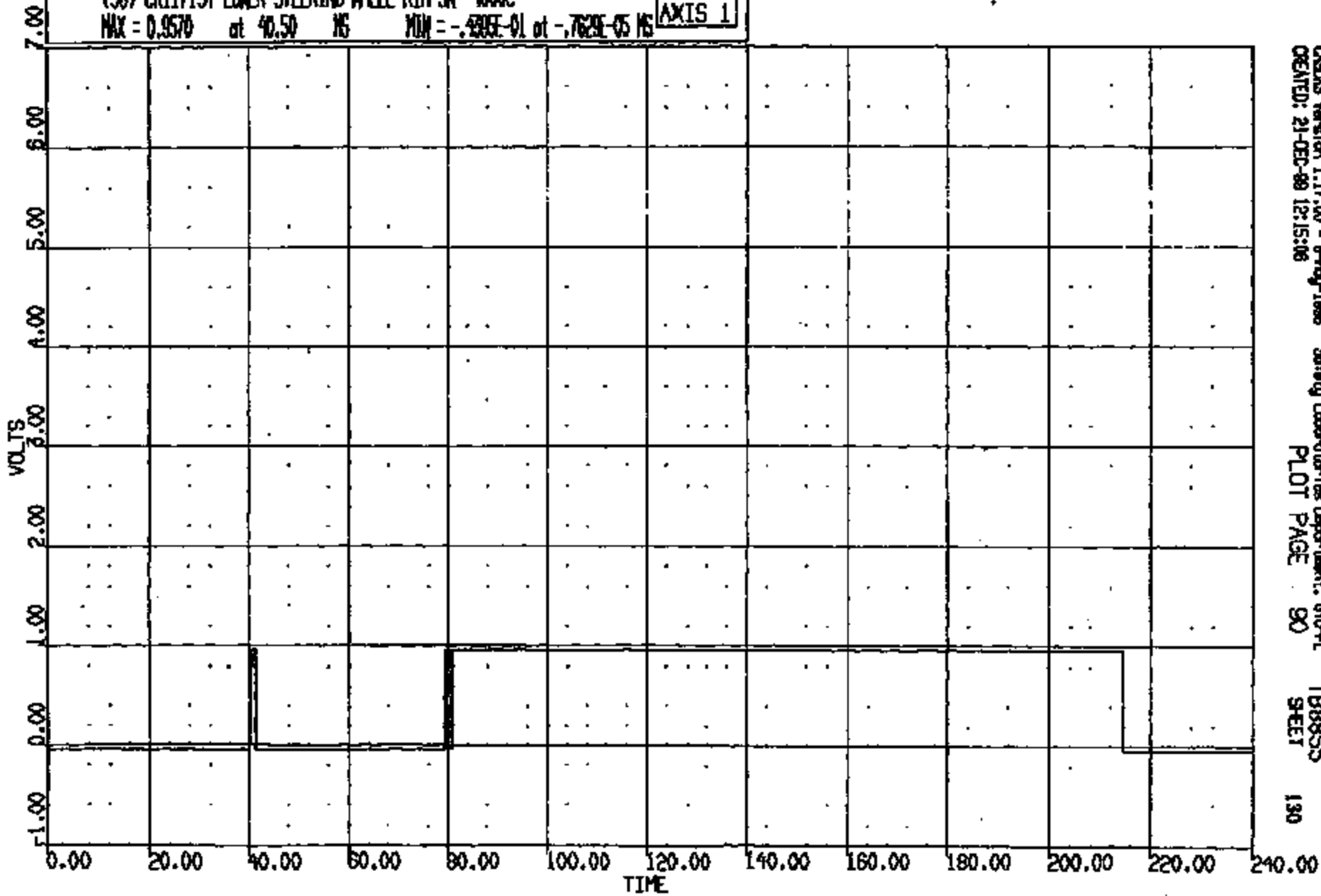
129

CR11713

CR R: 11715 TO: TB8855 DATE: 991221 10:58:03
2000 D-188

(38) CR11713T LOWER STEERING WHEEL RIN SN 4000C
MAX = 0.9570 at 40.50 MS MIN = -.7629E-01 at -.7629E-05 MS

AXIS 1

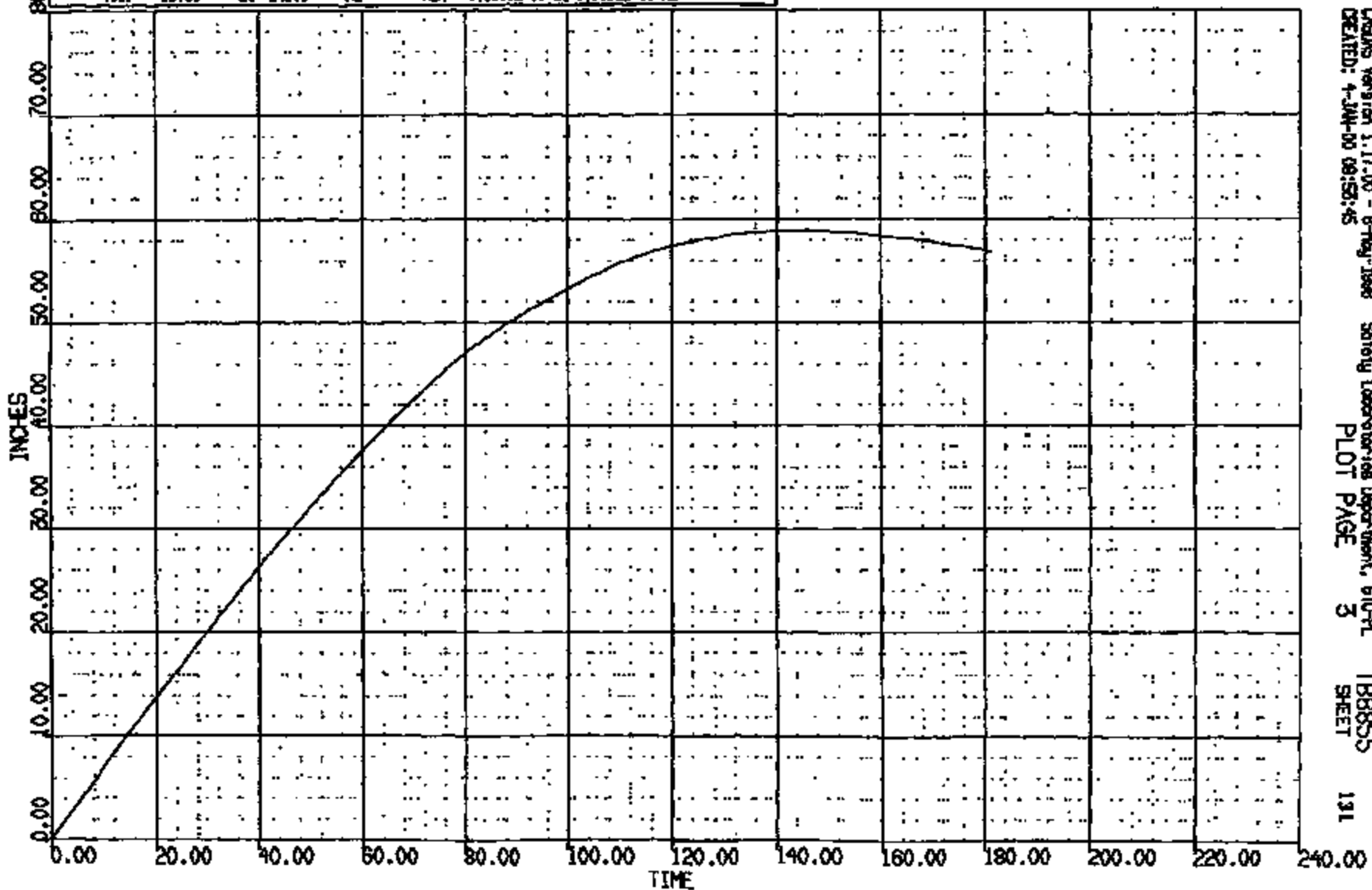


CRSIS Version 1.17.00 - 8-May-1998 Safety Laboratories Department, GTO-PL TB8855
CREATED: 21-DEC-99 12:15:06 PLOT PAGE 90 SHEET 130

CRIS 0011713

CR R: 11713 TO: T8855 DATE: 88122, 10:58:03
2000 D-188

(0) CRCL1713 L RGR AT B PLR WRT L END REF LONG DISP
MAX = 58.89 at 146.0 MS MIN = 0.000E+00 at 0.000E+00 MS **AXIS 1**



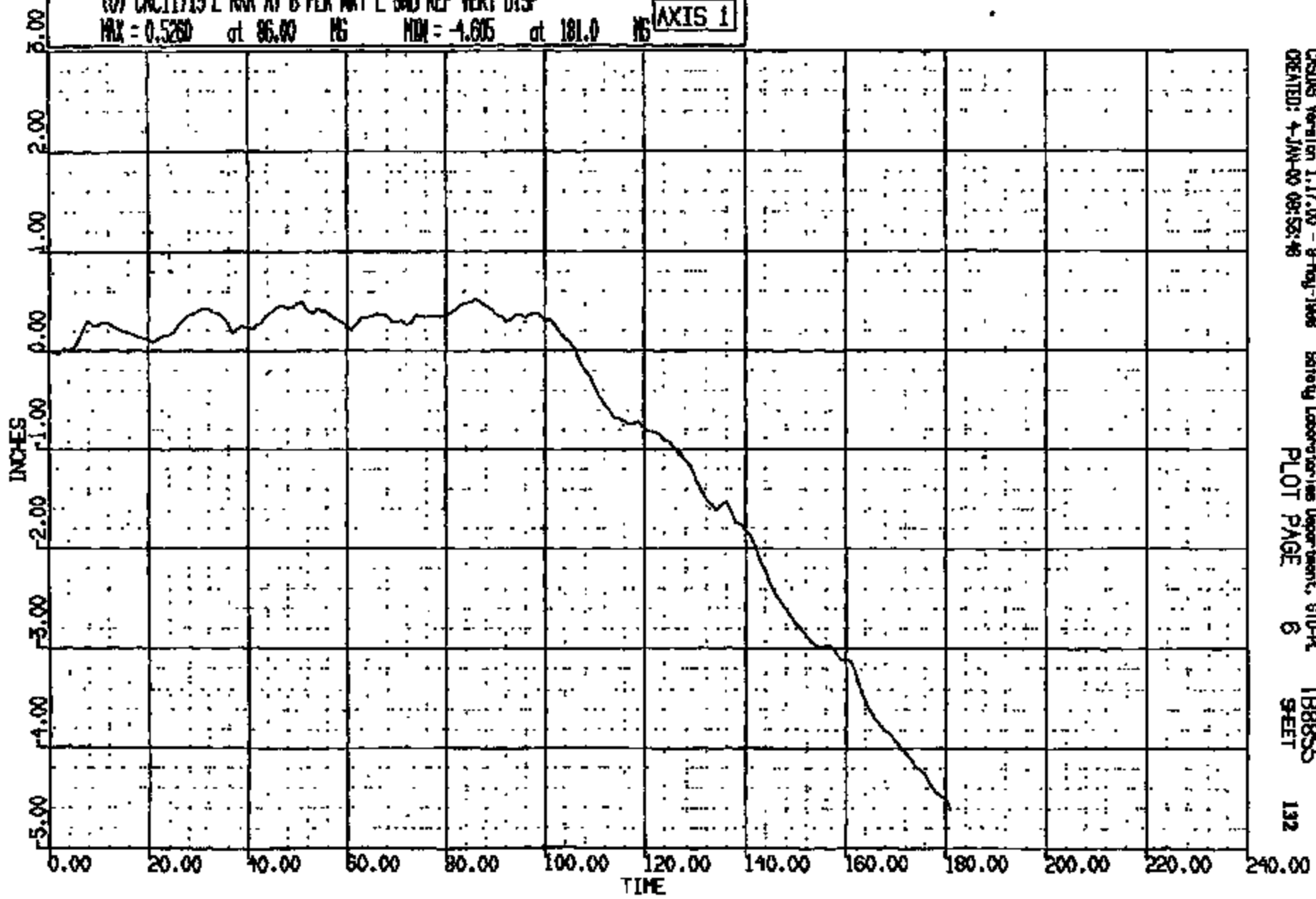
CADDS Version 1.17.00 - 8-May-1988 Safety Laboratories Department, 610-PL
CREATED: 4-JUN-00 09:53:45 PLOT PAGE 3 SHEET 191

CRTS 0011713

CR #: 11713 TO: TB8855 DATE: 981227 10:58:03
2000 D-188

(0) CR011713 L RR AT B PLR WRT L GND REF VERT DISP
MAX = 0.5260 at 86.00 MG MIN = -4.605 at 181.0 MG

AXIS 1

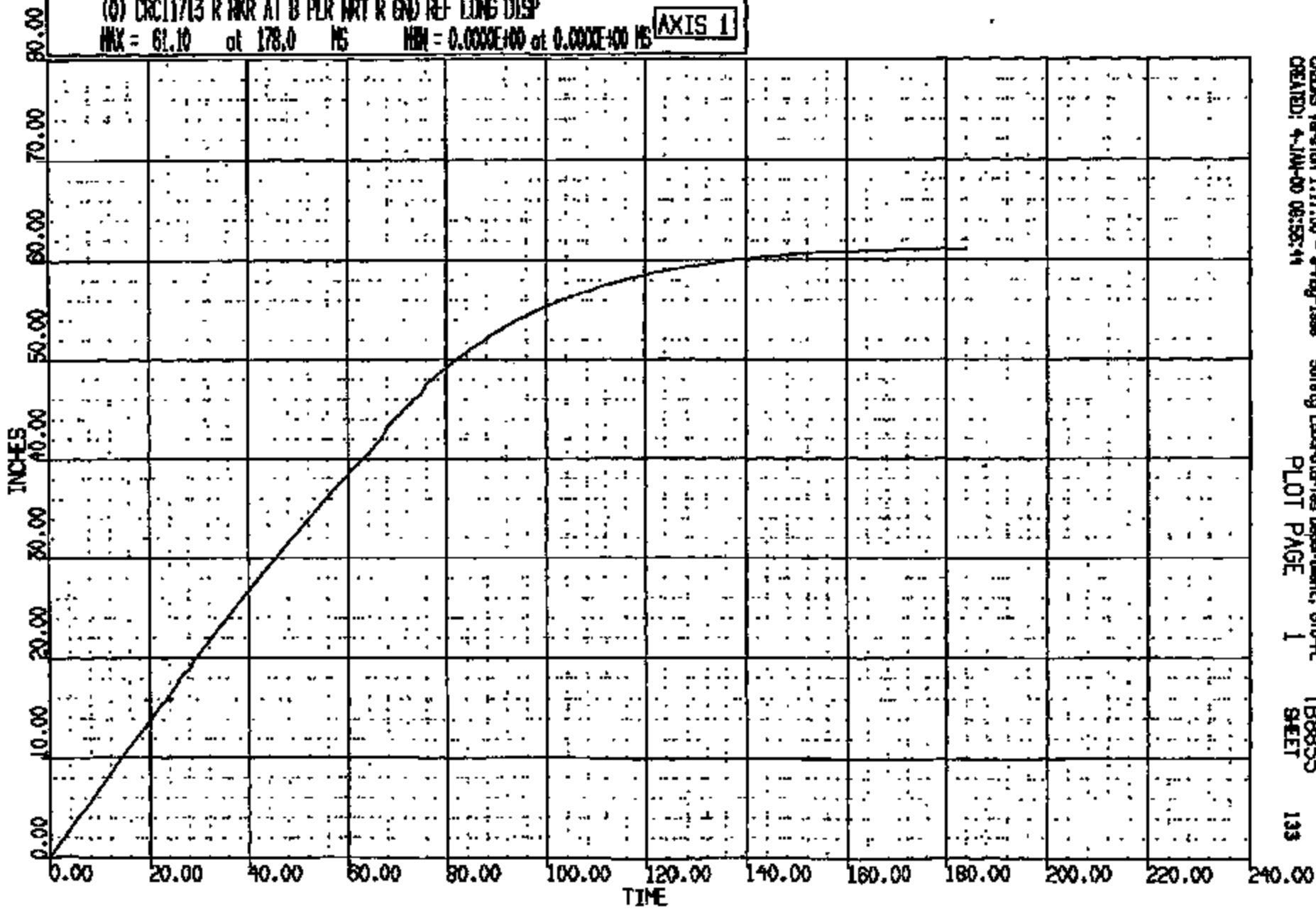


CASUS Version 1.17.00 - 9 May 1998 Safety Laboratories Department, 610-A
CREATED: 4 JAN 00 09:52:46 PLOT PAGE 6 SHEET 132

CRIS 0011713

DR: R: 11713 TO: TB8855 DATE: 99122. 10:26:03
2000 D-198

(0) CR011713 R RWR AT B PLR WRT R END REF LONG DISP
MAX = 61.10 at 178.0 MS MIN = 0.000E+00 at 0.000E+00 MS **AXIS 1**



CRSAS Version 1.17.00 - 9-May-1998 Safety Laboratories Department, STD-PL
CREATED: 4-JAN-00 08:52:44 PLOT PAGE 1 TB8855 SHEET 133

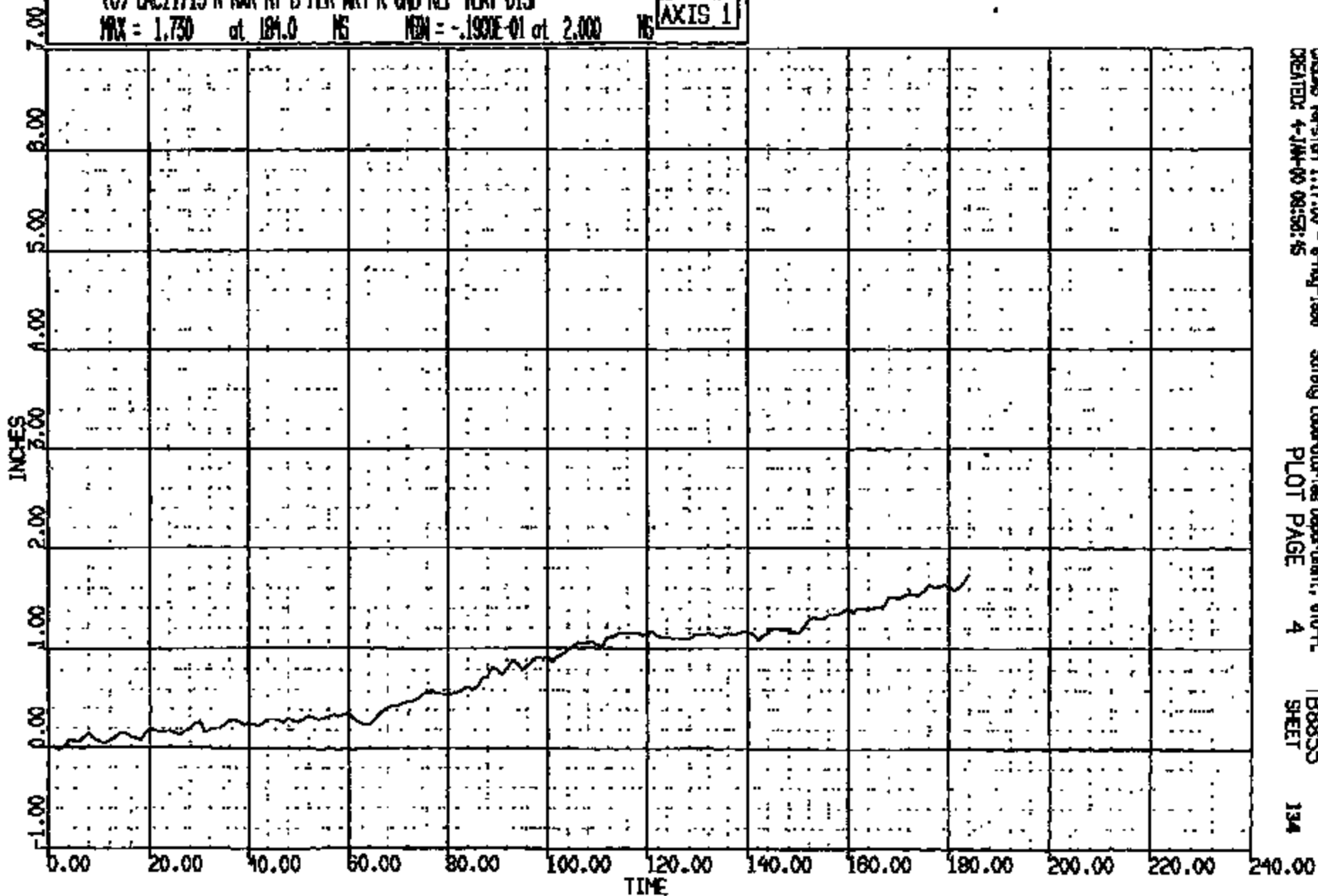
CRIS 0011713

CR R: 11713 TO: TB8855 DATE: 001221 10:58:05
2000 D-188

(0) CRCL1713 R ROR AT B PLR WRT R GND REF VERT DISP

MAX = 1.750 at 184.0 MS MIN = -.1900E-01 at 2.000 MS

AXIS 1



CASME Version 1.17.00 - 8-May-1999
CREATED: 4-JAN-00 08:58:45

Safety Laboratories Department, 610-PL
PLOT PAGE 4

TB8855
SHEET

134

CRIS 0011713

ASC TO #: T- T88855

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11713

VEHICLE INFORMATION

TEST DESCRIPTION: 90 DEG FRONT 40% OFF FIELD DEF BARRIER
VEHICLE PROGRAM YEAR: 2000
VEHICLE MODEL NAME: TAIBUS
VEHICLE PROGRAM NAME: D-186
VEHICLE ID NUMBER: 311W922
CERTIFICATION VEHICLE CODE: DV
REQUESTOR NAME: L. MISIKIR
TEST ENGINEER NAME: J. SCHWARTZ

TIME AND DATE OF REPORT: 6-JAN-00 09:59:23

CRTS 0011713

135
T-88855

** POINT COORDINATES **

UNIT NO	SIDE	PNT NO	DESCRIPTION		INCHES			INCHES CHANGED					
					LONG X	LAT Y	VERT Z	X	Y	Z	D		
070			SEE COMMENT SHEET										
		10	LEFT HYBRID III "H" FT REL. TO WET/GILL/TARGET	BEF AFT	0.90		12.10						
075			CHM POSITIONING / SIDED										
	L	43	CHM FRONT DOOR OPENING* A FILLAR(& ST66)@ROCKER	BEF AFT	93.70	-30.87	17.14						
	R	43	CHM FRONT DOOR OPENING* A FILLAR(& ST66)@ROCKER	BEF AFT	93.73	31.06	17.03						
	L	44	CHM FRONT DOOR OPENING ROCKER @B FILLAR	BEF AFT	110.29	-31.26	16.71						
	R	44	CHM FRONT DOOR OPENING ROCKER @B FILLAR	BEF AFT	117.79	31.43	16.68						
124			TOP (BODY) NON SIDED										
		03	STEERING RACK OR GEAR BOX @ INPUT SHAFT	BEF AFT	75.65 84.89	-8.16 -6.23	24.26 23.62	9.24	1.93	-0.64	9.46		
		04	BOTTOM JNT. OF ST.SHAFT (U OR RIG) @ INPUT SHAFT	BEF AFT	76.26 85.55	-8.27 -7.00	26.49 24.84	9.29	1.27	-1.65	9.52		
		08	CONTROL POINT LEFT REAR GILL	BEF AFT	158.88 158.88	-31.72 -31.72	14.69 14.69	0.00	0.00	0.00	0.00		
		11	BUMPER @ LEFT CURVE FRONT	BEF AFT	33.37 66.76	-26.19 -29.71	24.97 27.19	33.39	-3.52	2.22	33.65		
		12	BUMPER @ LEFT MOUNTING FRONT	BEF AFT	31.10 62.86	-20.79 -25.57	24.87 26.65	31.66	-4.78	1.78	32.07		
		13	BUMPER @ CENTERLINE FRONT	BEF AFT	28.87 50.47	-0.03 -10.16	25.23 27.31	21.60	-10.13	2.08	23.95		

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 6-JAN-00 09:59:28

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** POINT COORDINATES **

PNT NO	SIDE	PNT NO	DESCRIPTION		INCHES			INCHES CHANGED			
					LONG X	LAT Y	VERT Z	X	Y	Z	D
14			BUMPER @ RIGHT MOUNTING FRONT	BEF AFT	31.25 34.92	21.04 4.13	24.95 27.72	3.67	-16.91	2.77	17.52
15			BUMPER @ RIGHT CURVE FRONT	BEF AFT	33.49 32.06	26.11 8.67	24.91 28.77	-1.43	-17.44	3.86	17.92
17			ENGINE POINT (RELATIVE)	BEF AFT	59.38 60.27	1.06 0.22	38.88 40.72	8.89	-0.84	1.84	9.12
18			COYL POINT (RELATIVE)	BEF AFT	74.47	3.65	36.15				
21			ROOF @ C/L OF VEHICLE (RELATIVE) & (W/S)	BEF AFT	108.42 108.67	0.06 -0.46	59.32 61.35	0.25	-0.52	2.03	2.11
22			RIGHT "A" PILLAR @ ROOFRAIL (W/S)	BEF AFT	110.22 110.05	23.03 22.56	57.05 57.16	-0.17	-0.47	0.11	0.51
23			RIGHT "A" PILLAR @ BELTLINE (W/S)	BEF AFT	83.97 83.68	31.19 30.76	42.29 42.34	-0.29	-0.43	0.05	0.52
25			COYL RIGHT @ OCCUPANT CENTERLINE (W/S)	BEF AFT	72.92 75.50	15.06 13.40	41.99 40.89	2.58	-1.66	-1.10	3.26
26			COYL @ C/L OF VEHICLE (W/S)	BEF AFT	72.45 78.77	-0.39 -1.43	42.55 41.58	6.32	-1.04	-0.97	6.48
27			COYL LEFT @ OCCUPANT CENTERLINE (W/S)	BEF AFT	73.74 79.08	-17.71 -16.14	41.91 39.57	5.34	1.57	-2.34	6.04
29			LEFT "A" PILLAR @ BELTLINE (W/S)	BEF AFT	83.39 89.72	-31.46 -32.15	42.03 39.93	6.33	-0.69	-2.08	6.70
30			LEFT "A" PILLAR @ ROOF RAIL (W/S)	BEF AFT	110.44 111.68	-22.45 -22.59	57.57 61.29	1.24	-0.14	3.72	3.92
32			HEADER @ LEFT FRONT OCCUPANT	BEF AFT	107.94 108.78	-12.81 -12.87	57.86 60.92	0.84	-0.06	3.06	3.17
34			HEADER @ RIGHT FRONT OCCUPANT	BEF AFT	108.26 108.48	13.79 13.40	57.84 58.27	0.22	-0.39	0.43	0.62

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 6-JAN-00 09:59:29

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** POINT COORDINATES **

UBT NO	SIDE	PNT NO	DESCRIPTION	REF	INCHES			INCHES CHANGED			
					LONG I	LAT Y	VERT Z	X	Y	Z	D
41			STEERING COLUMN MOUNT INBOARD UPPER	REF AFT	92.60 97.72	-10.06 -9.29	34.28 33.96	5.12	0.77	-0.32	5.19
42			STEERING COLUMN MOUNT OUTBOARD UPPER	REF AFT	92.38 98.60	-17.37 -16.61	34.18 33.93	6.22	0.76	-0.25	6.27
43			STEERING COLUMN MOUNT INBOARD LOWER	REF AFT	87.08 92.58	-9.88 -9.81	32.13 31.11	5.50	0.07	-1.02	5.59
44			STEERING COLUMN MOUNT OUTBOARD LOWER	REF AFT	86.81 93.17	-17.21 -16.69	32.10 30.95	6.36	0.82	-1.15	6.48
46			TOP INBOARD BRAKE BRACKET	REF AFT	76.42 87.42	-13.28 -11.19	32.70 32.43	11.00	1.09	-0.27	11.06
47			TOP REAR BRAKE BRACKET	REF AFT	81.78 90.65	-13.82 -13.81	34.00 33.85	8.87	0.01	-0.15	8.87
48			BOTTOM INBOARD BRAKE BRACKET	REF AFT	76.23 86.59	-12.85 -11.76	28.15 28.04	10.36	1.09	-0.11	10.42
49			TOP JOINT ON INTERN. STEERING SHAFT	REF AFT	84.63 90.94	-14.33 -14.29	31.83 30.38	6.31	0.04	-1.45	6.47
51	TOP/1		STEERING WHEEL PERIPHERY	REF AFT	102.91 106.75	-13.64 -11.45	47.16 48.00	3.84	2.19	0.84	4.50
52	RIGHT/2		STEERING WHEEL PERIPHERY	REF AFT	105.47 110.03	-7.38 -5.71	40.64 41.39	4.56	1.67	0.75	4.91
53	BOTTOM/3		STEERING WHEEL PERIPHERY	REF AFT	107.77 113.25	-14.62 -13.40	34.06 35.64	5.48	1.22	1.58	5.83
54	LEFT/4		STEERING WHEEL PERIPHERY	REF AFT	105.08 109.68	-21.57 -19.64	40.93 42.97	4.60	1.93	2.04	5.39
55			STEERING WHEEL HUB NUT @ C/L	REF AFT	100.43 105.20	-14.14 -12.88	38.56 39.11	4.77	1.26	0.55	4.96
61			STEERING COLUMN OPENING LEFT MIDDLE #61 (F/P)	REF AFT	76.23 86.25	-11.98 -10.79	26.63 26.40	10.02	1.19	-0.23	10.09

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 6-JAN-00 09:59:30

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** POINT COORDINATES **

UNIT NO	SIDE	ENT NO	DESCRIPTION		INCHES			INCHES CHANGED																																																																																																																																																																																																											
					LONG X	LAT Y	VERT Z	X	Y	Z	D																																																																																																																																																																																																								
62			STEERING COLUMN OPENING BOTTOM #62 (F/P)	REF	76.81	-8.53	22.66	9.17	1.17	-0.30	9.25																																																																																																																																																																																																								
				AFT	85.98	-7.36	22.36					63			STEERING COLUMN OPENING RIGHT MIDDLE #63 (F/P)	REF	76.27	-6.29	26.67	9.83	0.99	-0.30	9.88	AFT	86.10	-5.30	26.37	64			DASH PANEL POINT #64 DRIVER/S LOWER MID (F/P)	REF	76.08	-14.81	26.49	10.34	1.16	-0.20	10.41	AFT	86.42	-13.65	26.29	65			TOP BOARD POINT #65 DRIVER SIDE @ MID (F/P)	REF	79.65	-14.98	18.50	7.88	1.04	-0.97	8.01	AFT	87.53	-13.94	17.53	66			TUNNEL POINT #66 DRIVER/S @ FRONT (F/P)	REF	79.08	-3.22	19.43	6.61	1.00	-1.55	6.86	AFT	85.69	-2.22	17.88	67			TUNNEL POINT #67 DRIVER/S @ REAR (F/P)	REF	106.98	-3.07	18.32	-0.62	0.18	-2.33	2.42	AFT	106.36	-2.89	15.99	69			DASH PANEL POINT #69 PASS/S LOWER MID (F/P)	REF	75.03	15.89	29.18	2.33	-1.10	-0.12	2.58	AFT	77.36	14.79	29.06	70			TOP BOARD POINT # 70 PASS/S @ MIDDLE (F/P)	REF	79.30	15.63	19.16	1.18	-0.15	-0.89	1.49	AFT	80.48	15.48	18.27	71			TUNNEL POINT # 71 PASS/S @ FRONT (F/P)	REF	79.43	3.58	19.33	5.67	0.81	-0.37	5.74	AFT	85.10	4.39	18.96	72			TUNNEL POINT # 72 PASS/S @ REAR (F/P)	REF	107.37	3.09	18.22	-0.76	0.31	-2.40	2.54	AFT	106.61	3.40	15.82	75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67	AFT	94.69	-28.19	37.61	76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37
63			STEERING COLUMN OPENING RIGHT MIDDLE #63 (F/P)	REF	76.27	-6.29	26.67	9.83	0.99	-0.30	9.88																																																																																																																																																																																																								
				AFT	86.10	-5.30	26.37					64			DASH PANEL POINT #64 DRIVER/S LOWER MID (F/P)	REF	76.08	-14.81	26.49	10.34	1.16	-0.20	10.41	AFT	86.42	-13.65	26.29	65			TOP BOARD POINT #65 DRIVER SIDE @ MID (F/P)	REF	79.65	-14.98	18.50	7.88	1.04	-0.97	8.01	AFT	87.53	-13.94	17.53	66			TUNNEL POINT #66 DRIVER/S @ FRONT (F/P)	REF	79.08	-3.22	19.43	6.61	1.00	-1.55	6.86	AFT	85.69	-2.22	17.88	67			TUNNEL POINT #67 DRIVER/S @ REAR (F/P)	REF	106.98	-3.07	18.32	-0.62	0.18	-2.33	2.42	AFT	106.36	-2.89	15.99	69			DASH PANEL POINT #69 PASS/S LOWER MID (F/P)	REF	75.03	15.89	29.18	2.33	-1.10	-0.12	2.58	AFT	77.36	14.79	29.06	70			TOP BOARD POINT # 70 PASS/S @ MIDDLE (F/P)	REF	79.30	15.63	19.16	1.18	-0.15	-0.89	1.49	AFT	80.48	15.48	18.27	71			TUNNEL POINT # 71 PASS/S @ FRONT (F/P)	REF	79.43	3.58	19.33	5.67	0.81	-0.37	5.74	AFT	85.10	4.39	18.96	72			TUNNEL POINT # 72 PASS/S @ REAR (F/P)	REF	107.37	3.09	18.22	-0.76	0.31	-2.40	2.54	AFT	106.61	3.40	15.82	75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67	AFT	94.69	-28.19	37.61	76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26								
64			DASH PANEL POINT #64 DRIVER/S LOWER MID (F/P)	REF	76.08	-14.81	26.49	10.34	1.16	-0.20	10.41																																																																																																																																																																																																								
				AFT	86.42	-13.65	26.29					65			TOP BOARD POINT #65 DRIVER SIDE @ MID (F/P)	REF	79.65	-14.98	18.50	7.88	1.04	-0.97	8.01	AFT	87.53	-13.94	17.53	66			TUNNEL POINT #66 DRIVER/S @ FRONT (F/P)	REF	79.08	-3.22	19.43	6.61	1.00	-1.55	6.86	AFT	85.69	-2.22	17.88	67			TUNNEL POINT #67 DRIVER/S @ REAR (F/P)	REF	106.98	-3.07	18.32	-0.62	0.18	-2.33	2.42	AFT	106.36	-2.89	15.99	69			DASH PANEL POINT #69 PASS/S LOWER MID (F/P)	REF	75.03	15.89	29.18	2.33	-1.10	-0.12	2.58	AFT	77.36	14.79	29.06	70			TOP BOARD POINT # 70 PASS/S @ MIDDLE (F/P)	REF	79.30	15.63	19.16	1.18	-0.15	-0.89	1.49	AFT	80.48	15.48	18.27	71			TUNNEL POINT # 71 PASS/S @ FRONT (F/P)	REF	79.43	3.58	19.33	5.67	0.81	-0.37	5.74	AFT	85.10	4.39	18.96	72			TUNNEL POINT # 72 PASS/S @ REAR (F/P)	REF	107.37	3.09	18.22	-0.76	0.31	-2.40	2.54	AFT	106.61	3.40	15.82	75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67	AFT	94.69	-28.19	37.61	76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																								
65			TOP BOARD POINT #65 DRIVER SIDE @ MID (F/P)	REF	79.65	-14.98	18.50	7.88	1.04	-0.97	8.01																																																																																																																																																																																																								
				AFT	87.53	-13.94	17.53					66			TUNNEL POINT #66 DRIVER/S @ FRONT (F/P)	REF	79.08	-3.22	19.43	6.61	1.00	-1.55	6.86	AFT	85.69	-2.22	17.88	67			TUNNEL POINT #67 DRIVER/S @ REAR (F/P)	REF	106.98	-3.07	18.32	-0.62	0.18	-2.33	2.42	AFT	106.36	-2.89	15.99	69			DASH PANEL POINT #69 PASS/S LOWER MID (F/P)	REF	75.03	15.89	29.18	2.33	-1.10	-0.12	2.58	AFT	77.36	14.79	29.06	70			TOP BOARD POINT # 70 PASS/S @ MIDDLE (F/P)	REF	79.30	15.63	19.16	1.18	-0.15	-0.89	1.49	AFT	80.48	15.48	18.27	71			TUNNEL POINT # 71 PASS/S @ FRONT (F/P)	REF	79.43	3.58	19.33	5.67	0.81	-0.37	5.74	AFT	85.10	4.39	18.96	72			TUNNEL POINT # 72 PASS/S @ REAR (F/P)	REF	107.37	3.09	18.22	-0.76	0.31	-2.40	2.54	AFT	106.61	3.40	15.82	75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67	AFT	94.69	-28.19	37.61	76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																																								
66			TUNNEL POINT #66 DRIVER/S @ FRONT (F/P)	REF	79.08	-3.22	19.43	6.61	1.00	-1.55	6.86																																																																																																																																																																																																								
				AFT	85.69	-2.22	17.88					67			TUNNEL POINT #67 DRIVER/S @ REAR (F/P)	REF	106.98	-3.07	18.32	-0.62	0.18	-2.33	2.42	AFT	106.36	-2.89	15.99	69			DASH PANEL POINT #69 PASS/S LOWER MID (F/P)	REF	75.03	15.89	29.18	2.33	-1.10	-0.12	2.58	AFT	77.36	14.79	29.06	70			TOP BOARD POINT # 70 PASS/S @ MIDDLE (F/P)	REF	79.30	15.63	19.16	1.18	-0.15	-0.89	1.49	AFT	80.48	15.48	18.27	71			TUNNEL POINT # 71 PASS/S @ FRONT (F/P)	REF	79.43	3.58	19.33	5.67	0.81	-0.37	5.74	AFT	85.10	4.39	18.96	72			TUNNEL POINT # 72 PASS/S @ REAR (F/P)	REF	107.37	3.09	18.22	-0.76	0.31	-2.40	2.54	AFT	106.61	3.40	15.82	75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67	AFT	94.69	-28.19	37.61	76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																																																								
67			TUNNEL POINT #67 DRIVER/S @ REAR (F/P)	REF	106.98	-3.07	18.32	-0.62	0.18	-2.33	2.42																																																																																																																																																																																																								
				AFT	106.36	-2.89	15.99					69			DASH PANEL POINT #69 PASS/S LOWER MID (F/P)	REF	75.03	15.89	29.18	2.33	-1.10	-0.12	2.58	AFT	77.36	14.79	29.06	70			TOP BOARD POINT # 70 PASS/S @ MIDDLE (F/P)	REF	79.30	15.63	19.16	1.18	-0.15	-0.89	1.49	AFT	80.48	15.48	18.27	71			TUNNEL POINT # 71 PASS/S @ FRONT (F/P)	REF	79.43	3.58	19.33	5.67	0.81	-0.37	5.74	AFT	85.10	4.39	18.96	72			TUNNEL POINT # 72 PASS/S @ REAR (F/P)	REF	107.37	3.09	18.22	-0.76	0.31	-2.40	2.54	AFT	106.61	3.40	15.82	75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67	AFT	94.69	-28.19	37.61	76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																																																																								
69			DASH PANEL POINT #69 PASS/S LOWER MID (F/P)	REF	75.03	15.89	29.18	2.33	-1.10	-0.12	2.58																																																																																																																																																																																																								
				AFT	77.36	14.79	29.06					70			TOP BOARD POINT # 70 PASS/S @ MIDDLE (F/P)	REF	79.30	15.63	19.16	1.18	-0.15	-0.89	1.49	AFT	80.48	15.48	18.27	71			TUNNEL POINT # 71 PASS/S @ FRONT (F/P)	REF	79.43	3.58	19.33	5.67	0.81	-0.37	5.74	AFT	85.10	4.39	18.96	72			TUNNEL POINT # 72 PASS/S @ REAR (F/P)	REF	107.37	3.09	18.22	-0.76	0.31	-2.40	2.54	AFT	106.61	3.40	15.82	75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67	AFT	94.69	-28.19	37.61	76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																																																																																								
70			TOP BOARD POINT # 70 PASS/S @ MIDDLE (F/P)	REF	79.30	15.63	19.16	1.18	-0.15	-0.89	1.49																																																																																																																																																																																																								
				AFT	80.48	15.48	18.27					71			TUNNEL POINT # 71 PASS/S @ FRONT (F/P)	REF	79.43	3.58	19.33	5.67	0.81	-0.37	5.74	AFT	85.10	4.39	18.96	72			TUNNEL POINT # 72 PASS/S @ REAR (F/P)	REF	107.37	3.09	18.22	-0.76	0.31	-2.40	2.54	AFT	106.61	3.40	15.82	75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67	AFT	94.69	-28.19	37.61	76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																																																																																																								
71			TUNNEL POINT # 71 PASS/S @ FRONT (F/P)	REF	79.43	3.58	19.33	5.67	0.81	-0.37	5.74																																																																																																																																																																																																								
				AFT	85.10	4.39	18.96					72			TUNNEL POINT # 72 PASS/S @ REAR (F/P)	REF	107.37	3.09	18.22	-0.76	0.31	-2.40	2.54	AFT	106.61	3.40	15.82	75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67	AFT	94.69	-28.19	37.61	76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																																																																																																																								
72			TUNNEL POINT # 72 PASS/S @ REAR (F/P)	REF	107.37	3.09	18.22	-0.76	0.31	-2.40	2.54																																																																																																																																																																																																								
				AFT	106.61	3.40	15.82					75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67	AFT	94.69	-28.19	37.61	76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																																																																																																																																								
75			INSTRUMENT PANEL MOUNT @ LEFT TOP	REF	88.43	-28.04	39.25	6.46	-0.15	-1.64	6.67																																																																																																																																																																																																								
				AFT	94.69	-28.19	37.61					76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77	AFT	95.97	-27.90	30.89	77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																																																																																																																																																								
76			INSTRUMENT PANEL MOUNT @ LEFT BOTTOM	REF	88.36	-28.22	32.43	7.61	0.32	-1.54	7.77																																																																																																																																																																																																								
				AFT	95.97	-27.90	30.89					77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38	AFT	88.31	27.68	39.07	78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																																																																																																																																																																								
77			INSTRUMENT PANEL MOUNT @ RIGHT TOP	REF	88.56	27.84	39.30	-0.25	-0.16	-0.23	0.38																																																																																																																																																																																																								
				AFT	88.31	27.68	39.07					78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17	AFT	88.31	28.13	32.26																																																																																																																																																																																								
78			INSTRUMENT PANEL MOUNT @ RIGHT BOTTOM	REF	88.44	28.12	32.37	-0.13	0.01	-0.11	0.17																																																																																																																																																																																																								
				AFT	88.31	28.13	32.26																																																																																																																																																																																																												

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 6-JAN-00 09:59:31

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** POINT COORDINATES **

UPT NO	SIDE	PNT NO	DESCRIPTION	INCHES			INCHES CHANGED				
				LONG X	LAT Y	VERT Z	X	Y	Z	D	
		80	INSTRUMENT PANEL (REL.)	BEF AFT	99.85 106.59	-26.31 -24.82	36.46 36.60	6.73	1.79	0.14	6.97
		81	UPPER COWL POINT # 81 LEFTMOST SIDE	BEF AFT	85.36 91.83	-26.93 -27.45	40.94 38.83	6.17	-0.52	-2.11	6.54
		82	UPPER COWL POINT # 82 LEFT SIDE	BEF AFT	79.56 86.02	-14.94 -14.83	42.39 40.88	6.46	-0.49	-1.51	6.65
		83	UPPER COWL POINT # 83 CENTERLINE	BEF AFT	77.82 82.47	1.31 0.48	42.76 42.10	4.93	-0.93	-0.66	5.06
		84	UPPER COWL POINT # 84 RIGHT SIDE	BEF AFT	79.79 82.10	15.94 15.33	42.23 42.23	2.31	-0.61	-0.10	2.39
		85	UPPER COWL POINT # 85 RIGHTMOST SIDE	BEF AFT	85.49 85.37	27.00 26.60	40.76 40.58	-0.12	-0.40	-0.18	0.45
		91	LOWER COWL POINT # 91 LEFTMOST SIDE	BEF AFT	85.31 92.11	-26.95 -27.23	37.72 35.66	6.80	-0.28	-2.06	7.11
		92	LOWER COWL POINT # 92 LEFT SIDE	BEF AFT	82.13 89.80	-14.73 -14.58	38.09 37.62	7.67	0.15	-0.47	7.69
		93	LOWER COWL POINT # 93 CENTERLINE	BEF AFT	79.52 84.91	1.34 0.98	39.11 38.84	5.99	-0.36	-0.27	5.41
		94	LOWER COWL POINT # 94 RIGHT SIDE	BEF AFT	81.53 84.07	15.58 15.36	39.13 39.18	2.54	-0.22	0.03	2.85
		95	LOWER COWL POINT # 95 RIGHTMOST SIDE	BEF AFT	85.42 85.29	26.85 26.60	37.73 37.60	-0.13	-0.25	-0.13	0.31
		96	CONTROL POINT RIGHT NEAR SKID	BEF AFT	158.97 158.58	31.68 31.91	14.58 14.17	-0.39	0.23	-0.41	0.61
125			TOP (BODY) SIDED								
L		11	SHOT GUN POINT # 11 FRONT OF FENDER	BEF AFT	48.70 67.65	-26.83 -28.11	35.75 40.71	18.95	-1.28	4.96	19.63

* VALUE WAS TRANSLATED

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** POINT COORDINATES **

UNIT NO	SIDE	PRT NO	DESCRIPTION		INCHES			INCHES CHANGED																																																																																																																																																																																																											
					LONG X	LAT Y	VERT Z	X	Y	Z	D																																																																																																																																																																																																								
R	11		SHOT GUN POINT # 11 FRONT OF FENDER	BEF	48.86	26.69	35.63	1.18	-6.81	2.14	7.24																																																																																																																																																																																																								
				AFT	50.05	19.88	37.77					L	12		SHOT_GUN POINT # 12	BEF	56.45	-27.62	37.55	12.73	4.20	6.90	15.08	AFT	69.18	-23.42	44.45	R	12		SHOT_GUN POINT # 12	BEF	56.94	27.51	37.60	8.83	-4.90	1.94	5.15	AFT	57.77	23.61	38.94	L	13		SHOT_GUN POINT # 13	BEF	63.27	-28.10	38.54	12.29	2.91	4.67	13.47	AFT	75.56	-25.19	43.21	R	13		SHOT_GUN POINT # 13	BEF	63.43	27.95	38.65	8.62	-3.53	0.93	3.70	AFT	64.05	24.42	39.58	L	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.37	-28.04	39.49	11.34	1.73	-0.10	11.47	AFT	82.71	-26.31	39.39	R	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.18	27.83	39.44	8.50	-2.16	0.48	2.27	AFT	71.68	25.67	39.92	L	16		ENGINE ROCKER COVER (FRONT)	BEF	49.29	-2.96	35.60	10.84	-3.95	3.22	11.98	AFT	60.13	-6.91	38.83	R	16		ENGINE ROCKER COVER (FRONT)	BEF	49.72	9.81	34.43	6.24	-4.78	2.22	8.17	AFT	55.96	5.03	36.65	L	17		ENGINE ROCKER COVER (REAR)	BEF	63.45	-5.19	39.85					AFT				R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89					AFT				L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00
L	12		SHOT_GUN POINT # 12	BEF	56.45	-27.62	37.55	12.73	4.20	6.90	15.08																																																																																																																																																																																																								
				AFT	69.18	-23.42	44.45					R	12		SHOT_GUN POINT # 12	BEF	56.94	27.51	37.60	8.83	-4.90	1.94	5.15	AFT	57.77	23.61	38.94	L	13		SHOT_GUN POINT # 13	BEF	63.27	-28.10	38.54	12.29	2.91	4.67	13.47	AFT	75.56	-25.19	43.21	R	13		SHOT_GUN POINT # 13	BEF	63.43	27.95	38.65	8.62	-3.53	0.93	3.70	AFT	64.05	24.42	39.58	L	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.37	-28.04	39.49	11.34	1.73	-0.10	11.47	AFT	82.71	-26.31	39.39	R	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.18	27.83	39.44	8.50	-2.16	0.48	2.27	AFT	71.68	25.67	39.92	L	16		ENGINE ROCKER COVER (FRONT)	BEF	49.29	-2.96	35.60	10.84	-3.95	3.22	11.98	AFT	60.13	-6.91	38.83	R	16		ENGINE ROCKER COVER (FRONT)	BEF	49.72	9.81	34.43	6.24	-4.78	2.22	8.17	AFT	55.96	5.03	36.65	L	17		ENGINE ROCKER COVER (REAR)	BEF	63.45	-5.19	39.85					AFT				R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89					AFT				L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70								
R	12		SHOT_GUN POINT # 12	BEF	56.94	27.51	37.60	8.83	-4.90	1.94	5.15																																																																																																																																																																																																								
				AFT	57.77	23.61	38.94					L	13		SHOT_GUN POINT # 13	BEF	63.27	-28.10	38.54	12.29	2.91	4.67	13.47	AFT	75.56	-25.19	43.21	R	13		SHOT_GUN POINT # 13	BEF	63.43	27.95	38.65	8.62	-3.53	0.93	3.70	AFT	64.05	24.42	39.58	L	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.37	-28.04	39.49	11.34	1.73	-0.10	11.47	AFT	82.71	-26.31	39.39	R	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.18	27.83	39.44	8.50	-2.16	0.48	2.27	AFT	71.68	25.67	39.92	L	16		ENGINE ROCKER COVER (FRONT)	BEF	49.29	-2.96	35.60	10.84	-3.95	3.22	11.98	AFT	60.13	-6.91	38.83	R	16		ENGINE ROCKER COVER (FRONT)	BEF	49.72	9.81	34.43	6.24	-4.78	2.22	8.17	AFT	55.96	5.03	36.65	L	17		ENGINE ROCKER COVER (REAR)	BEF	63.45	-5.19	39.85					AFT				R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89					AFT				L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																								
L	13		SHOT_GUN POINT # 13	BEF	63.27	-28.10	38.54	12.29	2.91	4.67	13.47																																																																																																																																																																																																								
				AFT	75.56	-25.19	43.21					R	13		SHOT_GUN POINT # 13	BEF	63.43	27.95	38.65	8.62	-3.53	0.93	3.70	AFT	64.05	24.42	39.58	L	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.37	-28.04	39.49	11.34	1.73	-0.10	11.47	AFT	82.71	-26.31	39.39	R	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.18	27.83	39.44	8.50	-2.16	0.48	2.27	AFT	71.68	25.67	39.92	L	16		ENGINE ROCKER COVER (FRONT)	BEF	49.29	-2.96	35.60	10.84	-3.95	3.22	11.98	AFT	60.13	-6.91	38.83	R	16		ENGINE ROCKER COVER (FRONT)	BEF	49.72	9.81	34.43	6.24	-4.78	2.22	8.17	AFT	55.96	5.03	36.65	L	17		ENGINE ROCKER COVER (REAR)	BEF	63.45	-5.19	39.85					AFT				R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89					AFT				L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																																								
R	13		SHOT_GUN POINT # 13	BEF	63.43	27.95	38.65	8.62	-3.53	0.93	3.70																																																																																																																																																																																																								
				AFT	64.05	24.42	39.58					L	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.37	-28.04	39.49	11.34	1.73	-0.10	11.47	AFT	82.71	-26.31	39.39	R	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.18	27.83	39.44	8.50	-2.16	0.48	2.27	AFT	71.68	25.67	39.92	L	16		ENGINE ROCKER COVER (FRONT)	BEF	49.29	-2.96	35.60	10.84	-3.95	3.22	11.98	AFT	60.13	-6.91	38.83	R	16		ENGINE ROCKER COVER (FRONT)	BEF	49.72	9.81	34.43	6.24	-4.78	2.22	8.17	AFT	55.96	5.03	36.65	L	17		ENGINE ROCKER COVER (REAR)	BEF	63.45	-5.19	39.85					AFT				R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89					AFT				L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																																																								
L	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.37	-28.04	39.49	11.34	1.73	-0.10	11.47																																																																																																																																																																																																								
				AFT	82.71	-26.31	39.39					R	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.18	27.83	39.44	8.50	-2.16	0.48	2.27	AFT	71.68	25.67	39.92	L	16		ENGINE ROCKER COVER (FRONT)	BEF	49.29	-2.96	35.60	10.84	-3.95	3.22	11.98	AFT	60.13	-6.91	38.83	R	16		ENGINE ROCKER COVER (FRONT)	BEF	49.72	9.81	34.43	6.24	-4.78	2.22	8.17	AFT	55.96	5.03	36.65	L	17		ENGINE ROCKER COVER (REAR)	BEF	63.45	-5.19	39.85					AFT				R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89					AFT				L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																																																																								
R	14		SHOT_GUN POINT # 14 REAR OF FENDER	BEF	71.18	27.83	39.44	8.50	-2.16	0.48	2.27																																																																																																																																																																																																								
				AFT	71.68	25.67	39.92					L	16		ENGINE ROCKER COVER (FRONT)	BEF	49.29	-2.96	35.60	10.84	-3.95	3.22	11.98	AFT	60.13	-6.91	38.83	R	16		ENGINE ROCKER COVER (FRONT)	BEF	49.72	9.81	34.43	6.24	-4.78	2.22	8.17	AFT	55.96	5.03	36.65	L	17		ENGINE ROCKER COVER (REAR)	BEF	63.45	-5.19	39.85					AFT				R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89					AFT				L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																																																																																								
L	16		ENGINE ROCKER COVER (FRONT)	BEF	49.29	-2.96	35.60	10.84	-3.95	3.22	11.98																																																																																																																																																																																																								
				AFT	60.13	-6.91	38.83					R	16		ENGINE ROCKER COVER (FRONT)	BEF	49.72	9.81	34.43	6.24	-4.78	2.22	8.17	AFT	55.96	5.03	36.65	L	17		ENGINE ROCKER COVER (REAR)	BEF	63.45	-5.19	39.85					AFT				R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89					AFT				L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																																																																																																								
R	16		ENGINE ROCKER COVER (FRONT)	BEF	49.72	9.81	34.43	6.24	-4.78	2.22	8.17																																																																																																																																																																																																								
				AFT	55.96	5.03	36.65					L	17		ENGINE ROCKER COVER (REAR)	BEF	63.45	-5.19	39.85					AFT				R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89					AFT				L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																																																																																																																								
L	17		ENGINE ROCKER COVER (REAR)	BEF	63.45	-5.19	39.85																																																																																																																																																																																																												
				AFT								R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89					AFT				L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																																																																																																																																								
R	17		ENGINE ROCKER COVER (REAR)	BEF	64.73	9.68	39.89																																																																																																																																																																																																												
				AFT								L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63					AFT				R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																																																																																																																																																								
L	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.27	-31.96	13.63																																																																																																																																																																																																												
				AFT								R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53					AFT				L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																																																																																																																																																																								
R	24		FRONT ROCKER SILL, TOT. RELATED TO C/W HOLE	BEF	108.22	31.94	13.53																																																																																																																																																																																																												
				AFT								L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29	AFT	127.74	-30.05	41.70																																																																																																																																																																																								
L	27		" B " FILLER POINT & BELT	BEF	127.62	-31.30	42.00	0.12	1.25	-0.38	1.29																																																																																																																																																																																																								
				AFT	127.74	-30.05	41.70																																																																																																																																																																																																												

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 6-JUN-00 09:59:32

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** POINT COORDINATES **

UNIT NO	SIDE	PNT NO	DESCRIPTION	INCHES			INCHES CHANGED				
				LONG X	LAT Y	VERT Z	X	Y	Z	D	
R	27	"	B * FILLER POINT @ BELT	BEF	127.33	31.46	41.04				
				AFT	127.03	31.60	40.79	-0.30	0.14	-0.25	0.41
L	28	"	WET * POINT ON ROCKER @ " B * PILLAR	BEF	118.28	-31.24	16.68				
				AFT	118.31	-30.93	16.34	0.03	0.31	-0.34	0.46
R	28	"	WET * POINT ON ROCKER @ " B * PILLAR	BEF	123.27	31.53	18.27				
				AFT	122.93	31.86	18.05	-0.34	0.33	-0.22	0.52
L	31	"	LATCH/STRIKER BOLT @C/L OR U-BOLT/TOP @B PILLAR	BEF	125.27	-31.31	30.61				
				AFT	125.36	-30.71	30.31	0.09	0.60	-0.30	0.68
R	31	"	LATCH/STRIKER BOLT @C/L OR U-BOLT/TOP @B PILLAR	BEF	125.34	31.46	30.60				
				AFT	125.08	31.67	30.37	-0.26	0.21	-0.23	0.41
L	41	"	FRONT INBOARD TRACK TO FLOOR	BEF	108.02	-6.92	16.86				
				AFT	107.65	-7.06	15.75	-0.37	-0.14	-1.11	1.18
R	41	"	FRONT INBOARD TRACK TO FLOOR	BEF	107.98	6.98	16.83				
				AFT	107.30	7.53	14.98	-0.68	0.55	-1.85	2.05
L	42	"	FRONT OUTBOARD TRACK TO FLOOR	BEF	107.86	-22.23	15.81				
				AFT	108.04	-22.03	14.67	0.18	0.20	-1.14	1.17
R	42	"	FRONT OUTBOARD TRACK TO FLOOR	BEF	107.90	22.27	15.92				
				AFT	107.46	22.88	15.13	-0.44	0.61	-0.79	1.09
L	43	"	REAR INBOARD TRACK TO FLOOR	BEF	121.62	-5.15	16.10				
				AFT	121.08	-5.08	15.60	-0.54	0.07	-0.50	0.74
R	43	"	REAR INBOARD TRACK TO FLOOR	BEF	121.76	5.26	16.06				
				AFT	121.04	5.73	14.97	-0.71	0.45	-1.09	1.38
L	44	"	REAR OUTBOARD TRACK TO FLOOR	BEF	121.51	-23.25	16.30				
				AFT	121.42	-23.35	15.79	-0.09	-0.10	-0.51	0.53
R	44	"	REAR OUTBOARD TRACK TO FLOOR	BEF	121.55	23.33	16.33				
				AFT	121.17	23.70	16.05	-0.38	0.37	-0.28	0.60
L	90	"	" B * POINT ON REAR QUARTER PANEL	BEF	203.00	-32.26	37.55				
				AFT	202.85	-31.98	37.24	-0.15	0.28	-0.31	0.44

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 6-JAN-00 09:59:33

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** POINT COORDINATES **

UNIT NO	SIDE	PNT NO	DESCRIPTION	INCHES			INCHES CHANGED																																																																																																																																																																																																							
				LONG X	LAT Y	VERT Z	X	Y	Z	D																																																																																																																																																																																																				
R	90	"	B" POINT ON REAR QUARTER PANEL	BEF	202.00	32.01	37.44	-0.16	0.49	-0.88	0.78																																																																																																																																																																																																			
				AFT	202.84	32.50	36.86					141			BOTTOM (UNITIZED) SIDED								L	10		FOREMOST POINT ON FRAME	BEF	34.91	-23.39	22.52	32.01	-1.89	2.09	32.13	AFT	66.92	-25.28	24.61	R	10		FOREMOST POINT ON FRAME	BEF	34.72	23.22	22.46	1.78	-13.34	4.20	14.10	AFT	36.50	9.68	26.66	L	20		RAIL MID-POINT OF #10 & #30	BEF	47.21	-22.66	21.72	22.01	3.81	8.40	23.86	AFT	69.22	-18.85	30.12	R	20		RAIL MID-POINT OF #10 & #30	BEF	47.27	22.43	21.68	0.79	-8.18	2.74	8.66	AFT	48.86	14.25	24.42	L	30		FORWARD OF SPRING POCKET	BEF	60.98	-19.97	24.08	11.65	0.41	5.04	12.70	AFT	72.63	-19.56	29.12	R	30		FORWARD OF SPRING POCKET	BEF	61.38	19.49	24.05	0.95	-2.51	1.10	2.90	AFT	62.23	16.98	25.15	L	40		POINT AFT OF SPRING POCKET	BEF	72.17	-19.65	23.74	10.73	1.31	1.63	10.93	AFT	82.90	-18.34	28.37	R	40		POINT AFT OF SPRING POCKET	BEF	72.92	19.35	23.38	0.76	-0.71	0.17	1.05	AFT	73.68	18.64	23.55	L	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	88.03	-20.77	14.57	6.70	1.47	-3.13	7.54	AFT	94.73	-19.30	11.44	R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85	AFT	87.58	22.29	13.22	L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03
141			BOTTOM (UNITIZED) SIDED																																																																																																																																																																																																											
L	10		FOREMOST POINT ON FRAME	BEF	34.91	-23.39	22.52	32.01	-1.89	2.09	32.13																																																																																																																																																																																																			
				AFT	66.92	-25.28	24.61					R	10		FOREMOST POINT ON FRAME	BEF	34.72	23.22	22.46	1.78	-13.34	4.20	14.10	AFT	36.50	9.68	26.66	L	20		RAIL MID-POINT OF #10 & #30	BEF	47.21	-22.66	21.72	22.01	3.81	8.40	23.86	AFT	69.22	-18.85	30.12	R	20		RAIL MID-POINT OF #10 & #30	BEF	47.27	22.43	21.68	0.79	-8.18	2.74	8.66	AFT	48.86	14.25	24.42	L	30		FORWARD OF SPRING POCKET	BEF	60.98	-19.97	24.08	11.65	0.41	5.04	12.70	AFT	72.63	-19.56	29.12	R	30		FORWARD OF SPRING POCKET	BEF	61.38	19.49	24.05	0.95	-2.51	1.10	2.90	AFT	62.23	16.98	25.15	L	40		POINT AFT OF SPRING POCKET	BEF	72.17	-19.65	23.74	10.73	1.31	1.63	10.93	AFT	82.90	-18.34	28.37	R	40		POINT AFT OF SPRING POCKET	BEF	72.92	19.35	23.38	0.76	-0.71	0.17	1.05	AFT	73.68	18.64	23.55	L	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	88.03	-20.77	14.57	6.70	1.47	-3.13	7.54	AFT	94.73	-19.30	11.44	R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85	AFT	87.58	22.29	13.22	L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																			
R	10		FOREMOST POINT ON FRAME	BEF	34.72	23.22	22.46	1.78	-13.34	4.20	14.10																																																																																																																																																																																																			
				AFT	36.50	9.68	26.66					L	20		RAIL MID-POINT OF #10 & #30	BEF	47.21	-22.66	21.72	22.01	3.81	8.40	23.86	AFT	69.22	-18.85	30.12	R	20		RAIL MID-POINT OF #10 & #30	BEF	47.27	22.43	21.68	0.79	-8.18	2.74	8.66	AFT	48.86	14.25	24.42	L	30		FORWARD OF SPRING POCKET	BEF	60.98	-19.97	24.08	11.65	0.41	5.04	12.70	AFT	72.63	-19.56	29.12	R	30		FORWARD OF SPRING POCKET	BEF	61.38	19.49	24.05	0.95	-2.51	1.10	2.90	AFT	62.23	16.98	25.15	L	40		POINT AFT OF SPRING POCKET	BEF	72.17	-19.65	23.74	10.73	1.31	1.63	10.93	AFT	82.90	-18.34	28.37	R	40		POINT AFT OF SPRING POCKET	BEF	72.92	19.35	23.38	0.76	-0.71	0.17	1.05	AFT	73.68	18.64	23.55	L	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	88.03	-20.77	14.57	6.70	1.47	-3.13	7.54	AFT	94.73	-19.30	11.44	R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85	AFT	87.58	22.29	13.22	L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																																			
L	20		RAIL MID-POINT OF #10 & #30	BEF	47.21	-22.66	21.72	22.01	3.81	8.40	23.86																																																																																																																																																																																																			
				AFT	69.22	-18.85	30.12					R	20		RAIL MID-POINT OF #10 & #30	BEF	47.27	22.43	21.68	0.79	-8.18	2.74	8.66	AFT	48.86	14.25	24.42	L	30		FORWARD OF SPRING POCKET	BEF	60.98	-19.97	24.08	11.65	0.41	5.04	12.70	AFT	72.63	-19.56	29.12	R	30		FORWARD OF SPRING POCKET	BEF	61.38	19.49	24.05	0.95	-2.51	1.10	2.90	AFT	62.23	16.98	25.15	L	40		POINT AFT OF SPRING POCKET	BEF	72.17	-19.65	23.74	10.73	1.31	1.63	10.93	AFT	82.90	-18.34	28.37	R	40		POINT AFT OF SPRING POCKET	BEF	72.92	19.35	23.38	0.76	-0.71	0.17	1.05	AFT	73.68	18.64	23.55	L	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	88.03	-20.77	14.57	6.70	1.47	-3.13	7.54	AFT	94.73	-19.30	11.44	R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85	AFT	87.58	22.29	13.22	L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																																																			
R	20		RAIL MID-POINT OF #10 & #30	BEF	47.27	22.43	21.68	0.79	-8.18	2.74	8.66																																																																																																																																																																																																			
				AFT	48.86	14.25	24.42					L	30		FORWARD OF SPRING POCKET	BEF	60.98	-19.97	24.08	11.65	0.41	5.04	12.70	AFT	72.63	-19.56	29.12	R	30		FORWARD OF SPRING POCKET	BEF	61.38	19.49	24.05	0.95	-2.51	1.10	2.90	AFT	62.23	16.98	25.15	L	40		POINT AFT OF SPRING POCKET	BEF	72.17	-19.65	23.74	10.73	1.31	1.63	10.93	AFT	82.90	-18.34	28.37	R	40		POINT AFT OF SPRING POCKET	BEF	72.92	19.35	23.38	0.76	-0.71	0.17	1.05	AFT	73.68	18.64	23.55	L	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	88.03	-20.77	14.57	6.70	1.47	-3.13	7.54	AFT	94.73	-19.30	11.44	R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85	AFT	87.58	22.29	13.22	L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																																																																			
L	30		FORWARD OF SPRING POCKET	BEF	60.98	-19.97	24.08	11.65	0.41	5.04	12.70																																																																																																																																																																																																			
				AFT	72.63	-19.56	29.12					R	30		FORWARD OF SPRING POCKET	BEF	61.38	19.49	24.05	0.95	-2.51	1.10	2.90	AFT	62.23	16.98	25.15	L	40		POINT AFT OF SPRING POCKET	BEF	72.17	-19.65	23.74	10.73	1.31	1.63	10.93	AFT	82.90	-18.34	28.37	R	40		POINT AFT OF SPRING POCKET	BEF	72.92	19.35	23.38	0.76	-0.71	0.17	1.05	AFT	73.68	18.64	23.55	L	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	88.03	-20.77	14.57	6.70	1.47	-3.13	7.54	AFT	94.73	-19.30	11.44	R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85	AFT	87.58	22.29	13.22	L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																																																																																			
R	30		FORWARD OF SPRING POCKET	BEF	61.38	19.49	24.05	0.95	-2.51	1.10	2.90																																																																																																																																																																																																			
				AFT	62.23	16.98	25.15					L	40		POINT AFT OF SPRING POCKET	BEF	72.17	-19.65	23.74	10.73	1.31	1.63	10.93	AFT	82.90	-18.34	28.37	R	40		POINT AFT OF SPRING POCKET	BEF	72.92	19.35	23.38	0.76	-0.71	0.17	1.05	AFT	73.68	18.64	23.55	L	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	88.03	-20.77	14.57	6.70	1.47	-3.13	7.54	AFT	94.73	-19.30	11.44	R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85	AFT	87.58	22.29	13.22	L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																																																																																																			
L	40		POINT AFT OF SPRING POCKET	BEF	72.17	-19.65	23.74	10.73	1.31	1.63	10.93																																																																																																																																																																																																			
				AFT	82.90	-18.34	28.37					R	40		POINT AFT OF SPRING POCKET	BEF	72.92	19.35	23.38	0.76	-0.71	0.17	1.05	AFT	73.68	18.64	23.55	L	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	88.03	-20.77	14.57	6.70	1.47	-3.13	7.54	AFT	94.73	-19.30	11.44	R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85	AFT	87.58	22.29	13.22	L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																																																																																																																			
R	40		POINT AFT OF SPRING POCKET	BEF	72.92	19.35	23.38	0.76	-0.71	0.17	1.05																																																																																																																																																																																																			
				AFT	73.68	18.64	23.55					L	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	88.03	-20.77	14.57	6.70	1.47	-3.13	7.54	AFT	94.73	-19.30	11.44	R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85	AFT	87.58	22.29	13.22	L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																																																																																																																																			
L	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	88.03	-20.77	14.57	6.70	1.47	-3.13	7.54																																																																																																																																																																																																			
				AFT	94.73	-19.30	11.44					R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85	AFT	87.58	22.29	13.22	L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																																																																																																																																																			
R	50		FLOOR PAN OUTBOARD OF RAIL/FRONT	BEF	87.79	21.34	14.43	-0.21	0.95	-1.21	1.85																																																																																																																																																																																																			
				AFT	87.58	22.29	13.22					L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19	AFT	89.24	-15.79	12.84	R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																																																																																																																																																																			
L	60		MID POINT OF #40 & #70	BEF	83.27	-16.37	13.08	6.07	0.50	-1.04	6.19																																																																																																																																																																																																			
				AFT	89.24	-15.79	12.84					R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76	AFT	83.25	17.19	11.58																																																																																																																																																																																			
R	60		MID POINT OF #40 & #70	BEF	83.41	16.20	13.03	-0.16	0.99	-1.45	1.76																																																																																																																																																																																																			
				AFT	83.25	17.19	11.58																																																																																																																																																																																																							

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 6-JAN-00 09:59:33

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** POINT COORDINATES **

UNIT NO	SIDE	PNT NO	DESCRIPTION		INCHES			INCHES CHANGED																																																																																																																																																																																						
					LONG X	LAT Y	VERT Z	X	Y	Z	D																																																																																																																																																																																			
L	70	AFT END OF RAIL		BEF	109.77	-16.21	13.21	2.22	0.00	0.85	2.28																																																																																																																																																																																			
				AFT	111.89	-16.21	14.06					R	70	AFT END OF RAIL		BEF	109.96	15.88	13.11	0.02	0.94	-0.78	1.22	AFT	109.98	15.82	12.33	L	80	FLOOR PAN OUTBOARD OF AFT END OF RAIL		BEF	110.85	-20.30	13.99	0.60	0.46	0.66	1.00	AFT	111.46	-19.84	14.65	R	80	FLOOR PAN OUTBOARD OF AFT END OF RAIL		BEF	109.20	20.32	13.85	-0.30	0.74	-0.95	1.24	AFT	108.90	21.06	12.90	336			TOP (BODY) SIDED								L	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.28	-26.63	16.35	-0.03	-0.17	-0.59	0.61	AFT	126.25	-26.80	15.74	R	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.18	26.59	16.29	-0.30	0.61	-0.30	0.74	AFT	125.88	27.20	15.99	L	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.16	-28.45	20.69	-0.03	0.29	-0.58	0.61	AFT	127.13	-28.26	20.11	R	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.23	28.48	20.51	-0.34	0.53	-0.37	0.73	AFT	126.89	29.01	20.14	L	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.10	-24.16	48.81	0.01	1.94	0.10	1.94	AFT	131.11	-22.22	48.91	R	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.61	23.55	49.83	-0.09	0.04	0.12	0.16	AFT	131.53	23.89	49.95	L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36	AFT	118.46	-4.96	19.46	R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95
R	70	AFT END OF RAIL		BEF	109.96	15.88	13.11	0.02	0.94	-0.78	1.22																																																																																																																																																																																			
				AFT	109.98	15.82	12.33					L	80	FLOOR PAN OUTBOARD OF AFT END OF RAIL		BEF	110.85	-20.30	13.99	0.60	0.46	0.66	1.00	AFT	111.46	-19.84	14.65	R	80	FLOOR PAN OUTBOARD OF AFT END OF RAIL		BEF	109.20	20.32	13.85	-0.30	0.74	-0.95	1.24	AFT	108.90	21.06	12.90	336			TOP (BODY) SIDED								L	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.28	-26.63	16.35	-0.03	-0.17	-0.59	0.61	AFT	126.25	-26.80	15.74	R	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.18	26.59	16.29	-0.30	0.61	-0.30	0.74	AFT	125.88	27.20	15.99	L	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.16	-28.45	20.69	-0.03	0.29	-0.58	0.61	AFT	127.13	-28.26	20.11	R	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.23	28.48	20.51	-0.34	0.53	-0.37	0.73	AFT	126.89	29.01	20.14	L	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.10	-24.16	48.81	0.01	1.94	0.10	1.94	AFT	131.11	-22.22	48.91	R	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.61	23.55	49.83	-0.09	0.04	0.12	0.16	AFT	131.53	23.89	49.95	L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36	AFT	118.46	-4.96	19.46	R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76	AFT	123.16	5.00	17.45								
L	80	FLOOR PAN OUTBOARD OF AFT END OF RAIL		BEF	110.85	-20.30	13.99	0.60	0.46	0.66	1.00																																																																																																																																																																																			
				AFT	111.46	-19.84	14.65					R	80	FLOOR PAN OUTBOARD OF AFT END OF RAIL		BEF	109.20	20.32	13.85	-0.30	0.74	-0.95	1.24	AFT	108.90	21.06	12.90	336			TOP (BODY) SIDED								L	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.28	-26.63	16.35	-0.03	-0.17	-0.59	0.61	AFT	126.25	-26.80	15.74	R	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.18	26.59	16.29	-0.30	0.61	-0.30	0.74	AFT	125.88	27.20	15.99	L	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.16	-28.45	20.69	-0.03	0.29	-0.58	0.61	AFT	127.13	-28.26	20.11	R	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.23	28.48	20.51	-0.34	0.53	-0.37	0.73	AFT	126.89	29.01	20.14	L	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.10	-24.16	48.81	0.01	1.94	0.10	1.94	AFT	131.11	-22.22	48.91	R	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.61	23.55	49.83	-0.09	0.04	0.12	0.16	AFT	131.53	23.89	49.95	L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36	AFT	118.46	-4.96	19.46	R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76	AFT	123.16	5.00	17.45																								
R	80	FLOOR PAN OUTBOARD OF AFT END OF RAIL		BEF	109.20	20.32	13.85	-0.30	0.74	-0.95	1.24																																																																																																																																																																																			
				AFT	108.90	21.06	12.90					336			TOP (BODY) SIDED								L	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.28	-26.63	16.35	-0.03	-0.17	-0.59	0.61	AFT	126.25	-26.80	15.74	R	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.18	26.59	16.29	-0.30	0.61	-0.30	0.74	AFT	125.88	27.20	15.99	L	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.16	-28.45	20.69	-0.03	0.29	-0.58	0.61	AFT	127.13	-28.26	20.11	R	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.23	28.48	20.51	-0.34	0.53	-0.37	0.73	AFT	126.89	29.01	20.14	L	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.10	-24.16	48.81	0.01	1.94	0.10	1.94	AFT	131.11	-22.22	48.91	R	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.61	23.55	49.83	-0.09	0.04	0.12	0.16	AFT	131.53	23.89	49.95	L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36	AFT	118.46	-4.96	19.46	R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76	AFT	123.16	5.00	17.45																																								
336			TOP (BODY) SIDED																																																																																																																																																																																											
L	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.28	-26.63	16.35	-0.03	-0.17	-0.59	0.61																																																																																																																																																																																			
				AFT	126.25	-26.80	15.74					R	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.18	26.59	16.29	-0.30	0.61	-0.30	0.74	AFT	125.88	27.20	15.99	L	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.16	-28.45	20.69	-0.03	0.29	-0.58	0.61	AFT	127.13	-28.26	20.11	R	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.23	28.48	20.51	-0.34	0.53	-0.37	0.73	AFT	126.89	29.01	20.14	L	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.10	-24.16	48.81	0.01	1.94	0.10	1.94	AFT	131.11	-22.22	48.91	R	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.61	23.55	49.83	-0.09	0.04	0.12	0.16	AFT	131.53	23.89	49.95	L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36	AFT	118.46	-4.96	19.46	R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76	AFT	123.16	5.00	17.45																																																																			
R	57	"B" PILLAR @ LOWER BELT (SEAT BELT MOUNT)		BEF	126.18	26.59	16.29	-0.30	0.61	-0.30	0.74																																																																																																																																																																																			
				AFT	125.88	27.20	15.99					L	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.16	-28.45	20.69	-0.03	0.29	-0.58	0.61	AFT	127.13	-28.26	20.11	R	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.23	28.48	20.51	-0.34	0.53	-0.37	0.73	AFT	126.89	29.01	20.14	L	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.10	-24.16	48.81	0.01	1.94	0.10	1.94	AFT	131.11	-22.22	48.91	R	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.61	23.55	49.83	-0.09	0.04	0.12	0.16	AFT	131.53	23.89	49.95	L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36	AFT	118.46	-4.96	19.46	R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76	AFT	123.16	5.00	17.45																																																																																			
L	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.16	-28.45	20.69	-0.03	0.29	-0.58	0.61																																																																																																																																																																																			
				AFT	127.13	-28.26	20.11					R	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.23	28.48	20.51	-0.34	0.53	-0.37	0.73	AFT	126.89	29.01	20.14	L	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.10	-24.16	48.81	0.01	1.94	0.10	1.94	AFT	131.11	-22.22	48.91	R	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.61	23.55	49.83	-0.09	0.04	0.12	0.16	AFT	131.53	23.89	49.95	L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36	AFT	118.46	-4.96	19.46	R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76	AFT	123.16	5.00	17.45																																																																																																			
R	58	"B" PILLAR @ RETRACTOR (SEAT BELT MOUNT)		BEF	127.23	28.48	20.51	-0.34	0.53	-0.37	0.73																																																																																																																																																																																			
				AFT	126.89	29.01	20.14					L	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.10	-24.16	48.81	0.01	1.94	0.10	1.94	AFT	131.11	-22.22	48.91	R	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.61	23.55	49.83	-0.09	0.04	0.12	0.16	AFT	131.53	23.89	49.95	L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36	AFT	118.46	-4.96	19.46	R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76	AFT	123.16	5.00	17.45																																																																																																																			
L	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.10	-24.16	48.81	0.01	1.94	0.10	1.94																																																																																																																																																																																			
				AFT	131.11	-22.22	48.91					R	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.61	23.55	49.83	-0.09	0.04	0.12	0.16	AFT	131.53	23.89	49.95	L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36	AFT	118.46	-4.96	19.46	R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76	AFT	123.16	5.00	17.45																																																																																																																																			
R	59	"D" RING @ "B" PILLAR (SEAT BELT MOUNT)		BEF	131.61	23.55	49.83	-0.09	0.04	0.12	0.16																																																																																																																																																																																			
				AFT	131.53	23.89	49.95					L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36	AFT	118.46	-4.96	19.46	R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76	AFT	123.16	5.00	17.45																																																																																																																																																			
L	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	119.75	-4.61	19.19	-1.29	-0.35	0.27	1.36																																																																																																																																																																																			
				AFT	118.46	-4.96	19.46					R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76	AFT	123.16	5.00	17.45																																																																																																																																																																			
R	60	REAR I/B BELT TRACK MT. (SEAT BELT MOUNT)		BEF	124.84	4.75	18.95	-0.88	0.25	-1.50	1.76																																																																																																																																																																																			
				AFT	123.16	5.00	17.45																																																																																																																																																																																							

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** POINT COORDINATES **

UNIT NO	SIDE	PNT NO	DESCRIPTION	INCHES			INCHES CHANGED					
				LONG X	LAT Y	VERT Z	X	Y	Z	D		
		01	INBOARD SHEAR MODULE (SCALAR DISTANCE)	BEF AFT	0.00 0.00				0.00			
		02	OUTBOARD SHEAR MODULE (SCALAR DISTANCE)	BEF AFT	0.00 0.25				0.25			
		08	SCALAR DISTANCE BETWEEN POINTS #4 & #49 (U-124)	BEF AFT	11.63 10.63				-1.00			
650			BLANK UNIT POINTS									
		01	1 SEE COMMENTS PAGE	BEF AFT	93.75 -26.72	14.09						
		02	2 SEE COMMENTS PAGE	BEF AFT	146.97 146.89	-26.48 -26.53	13.31 13.02	-0.08	-0.06	-0.30	0.31	
		03	3 SEE COMMENTS PAGE	BEF AFT	93.90 93.47	26.63 27.24	14.06 13.77	-0.43	0.62	-0.29	0.80	
		04	4 SEE COMMENTS PAGE	BEF AFT	149.49 149.09	26.49 26.76	13.38 13.09	-0.40	0.27	-0.29	0.56	
		05	5 SEE COMMENTS PAGE	BEF AFT	85.38 98.74	-12.69 -13.72	22.96 22.80	10.36	-1.03	-0.16	10.41	
		07	7 SEE COMMENTS PAGE	BEF AFT	83.74 91.94	-22.64 -21.15	18.55 17.21	8.20	1.49	-2.34	8.44	
		08	8 SEE COMMENTS PAGE	BEF AFT	93.85 -21.34	19.49						
		09	9 SEE COMMENTS PAGE	BEF AFT	80.09 89.99	-20.57 -19.42	22.96 22.07	9.91	1.15	-0.89	10.02	
		10	10 SEE COMMENTS PAGE	BEF AFT	78.28 88.41	-18.59 -17.35	22.96 22.51	10.13	1.34	-0.45	10.23	
		11	11 SEE COMMENTS PAGE	BEF AFT	76.73 86.41	-12.69 -11.44	22.96 22.66	9.68	1.25	-0.30	9.76	

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** POINT COORDINATES **

UNIT NO	SIDE	PNT NO	DESCRIPTION	INCHES			INCHES CHANGED				
				LONG X	LAT Y	VERT Z	X	Y	Z	D	
		12	SEE COMMENTS PAGE	BHP	76.91	-6.79	22.96				
				AFT	85.96	-5.56	22.43	9.05	1.23	-0.53	9.15
		13	SEE COMMENTS PAGE	BHP	76.80	-4.82	22.98				
				AFT	85.76	-3.66	22.31	8.96	1.16	-0.67	9.06
		14	SEE COMMENTS PAGE	BHP	82.04	-6.77	16.63				
				AFT	86.09	-5.77	14.46	6.05	1.00	-2.17	6.50
		15	SEE COMMENTS PAGE	BHP	95.36	-20.05	32.12				
				AFT	100.72	-19.52	32.61	5.36	0.53	0.49	5.41
		16	SEE COMMENTS PAGE	BHP	96.14	-8.23	32.07				
				AFT	100.66	-7.73	31.78	4.52	0.50	-0.29	4.56
		17	SEE COMMENTS PAGE	BHP							
				AFT	105.23	-12.91	39.14				
		18	SEE COMMENTS PAGE	BHP	109.87	-24.76	56.38				
				AFT	111.48	-24.91	60.07	1.58	-0.15	3.69	4.02
		19	SEE COMMENTS PAGE	BHP	89.13	-29.52	40.72				
				AFT	95.49	-29.55	39.32	6.36	-0.03	-1.40	6.51
		20	SEE COMMENTS PAGE	BHP	89.46	-30.31	20.77				
				AFT	96.25	-30.27	19.25	6.79	0.04	-1.52	6.96
		21	SEE COMMENTS PAGE	BHP	88.76	-29.84	36.70				
				AFT	95.53	-29.98	35.26	6.77	-0.04	-1.44	6.92
		22	SEE COMMENTS PAGE	BHP	132.21	-23.89	56.38				
				AFT	132.12	-21.86	55.85	-0.09	2.03	-0.53	2.10
		23	SEE COMMENTS PAGE	BHP	129.39	-31.58	40.72				
				AFT	129.43	-30.25	40.50	0.04	1.33	-0.22	1.35
		24	SEE COMMENTS PAGE	BHP	122.60	-30.86	20.77				
				AFT	122.50	-29.69	20.20	-0.10	0.37	-0.57	0.69
		25	SEE COMMENTS PAGE	BHP	126.30	-30.13	36.70				
				AFT	126.23	-29.05	36.43	-0.07	1.00	-0.28	1.12

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** POINT COORDINATES **

UNIT NO	SIDE	PNT NO	DESCRIPTION	INCHES			INCHES CHANGED				
				LONG X	LAT Y	VERT Z	X	Y	Z	D	
		26	SEE COMMENTS PAGE	BEF AFT	122.52 122.23	30.08 30.42	20.62 20.41	-0.29	0.34	-0.21	0.49
		27	SEE COMMENTS PAGE	BEF AFT	126.29 125.99	30.20 30.26	37.00 36.79	-0.30	0.06	-0.21	0.37
		28	SEE COMMENTS PAGE	BEF AFT	89.27 88.98	30.34 30.87	20.78 20.74	-0.29	0.53	-0.04	0.61
		29	SEE COMMENTS PAGE	BEF AFT	89.21 88.69	29.24 29.20	36.70 37.67	-0.32	-0.04	0.97	1.02
		30	SEE COMMENTS PAGE	BEF AFT	96.72 100.61	-28.41 -26.57	49.96 50.10	3.89	-0.16	0.14	3.90
		31	SEE COMMENTS PAGE	BEF AFT	97.49 98.04	27.78 27.23	50.77 50.64	0.55	-0.47	0.07	0.73
		32	SEE COMMENTS PAGE	BEF AFT	85.69	-28.75	14.11				
		33	SEE COMMENTS PAGE	BEF AFT	155.59	-27.49	13.09				
		34	SEE COMMENTS PAGE	BEF AFT	70.81	-1.48	13.02				
		35	SEE COMMENTS PAGE	BEF AFT	56.11	6.85	38.92				
		36	SEE COMMENTS PAGE	BEF AFT	85.81	28.15	14.04				
		37	SEE COMMENTS PAGE	BEF AFT	127.36	28.49	13.50				
		38	SEE COMMENTS PAGE	BEF AFT	155.06	27.74	13.14				
		39	SEE COMMENTS PAGE	BEF AFT	47.38	-0.26	14.55				

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** POINT COORDINATES **

UNIT NO	SIDE	PWT NO	DESCRIPTION	INCHES			INCHES CHANGED				
				LONG X	LAT Y	VERT Z	X	Y	Z	D	
40	40		SEE COMMENTS PAGE	BEF AFT	74.80	1.38	17.09				
41	41		SEE COMMENTS PAGE	BEF AFT	28.86 50.52	-0.02 -10.19	25.21 27.31	21.66	-10.17	2.10	24.02
42	42		SEE COMMENTS PAGE	BEF AFT	28.90 53.05	-3.09 -11.88	25.15 27.19	24.15	-8.79	2.04	25.78
43	43		SEE COMMENTS PAGE	BEF AFT	30.16 56.23	-5.74 -11.89	24.91 26.98	26.07	-6.15	2.07	26.87
44	44		SEE COMMENTS PAGE	BEF AFT	30.26 57.99	-8.79 -14.04	25.00 27.29	27.73	-5.31	2.29	28.33
45	45		SEE COMMENTS PAGE	BEF AFT	30.42 59.55	-11.75 -16.53	24.97 27.32	29.13	-4.78	2.35	29.61
46	46		SEE COMMENTS PAGE	BEF AFT	30.62 61.21	-14.81 -19.18	24.90 27.64	30.69	-4.27	2.74	31.12
47	47		SEE COMMENTS PAGE	BEF AFT	30.88 61.61	-17.78 -22.98	24.88 27.05	30.73	-5.20	2.17	31.24
48	48		SEE COMMENTS PAGE	BEF AFT	31.18 62.89	-20.78 -25.58	24.88 26.60	31.71	-4.80	1.72	32.12
49	49		SEE COMMENTS PAGE	BEF AFT	31.92 64.69	-23.62 -28.01	24.89 26.43	32.71	-4.39	1.56	33.04
50	50		SEE COMMENTS PAGE	BEF AFT	33.38 67.10	-26.21 -29.49	24.89 27.06	33.72	-3.28	2.17	33.95
51	51		SEE COMMENTS PAGE	BEF AFT	33.48 68.15	26.10 8.82	24.93 28.54	-1.33	-17.28	3.61	17.70
52	52		SEE COMMENTS PAGE	BEF AFT	97.90	-0.06	18.77				
53	53		SEE COMMENTS PAGE	BEF AFT	89.25	-28.70	24.55				

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** POINT COORDINATES **

UNIT NO	SIDE	PNT NO	DESCRIPTION	REF APT	INCHES			INCHES CHANGED			
					LONG X	LAT Y	VERT Z	X	Y	Z	D
54	54		SEE COMMENTS PAGE	REF APT	89.31	28.58	24.40				
55	55		SEE COMMENTS PAGE	REF APT	127.95	-28.76	13.60				

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** SECTIONALS **

UNIT NO	SCEN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	Z
640	81			DRIVER C/L SECTION LONG			
			1	BEFORE	106.53	-14.57	14.36
			1	AFTER	108.09	-14.36	12.66
			2	BEFORE	92.07	-14.57	14.32
			2	AFTER	103.70	-13.74	9.90
			3	BEFORE	84.89	-14.57	14.65
			3	AFTER	101.04	-13.48	8.32
			4	BEFORE	78.18	-14.57	19.91
			4	AFTER	98.95	-13.26	7.22
			5	BEFORE	76.82	-14.57	21.51
			5	AFTER	98.91	-13.22	8.04
			6	BEFORE	76.01	-14.57	27.33
			6	AFTER	98.74	-13.11	8.38
			7	BEFORE	75.47	-14.57	27.84
			7	AFTER	97.08	-13.00	8.43
			8	BEFORE	75.43	-14.57	31.68
			8	AFTER	93.99	-13.18	10.38
			9	BEFORE	75.47	-14.57	32.94
			9	AFTER	91.48	-13.19	12.29
			10	BEFORE	76.17	-14.57	33.86
			10	AFTER	87.66	-13.52	17.41
			11	BEFORE	76.29	-14.57	36.13
			11	AFTER	86.96	-13.54	18.95
			12	BEFORE	82.26	-14.57	37.98
			12	AFTER	86.87	-13.71	19.77
			13	BEFORE	79.53	-14.57	42.56
			13	AFTER	86.22	-13.31	21.02

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** SECTIONS **

UNIT NO	SECTN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			14	AFTER	87.02	-13.30	23.84
			15	AFTER	86.41	-13.31	26.09
			16	AFTER	86.38	-13.21	26.94
			17	AFTER	85.90	-13.31	27.71
			18	AFTER	86.50	-13.44	31.70
			19	AFTER	86.69	-13.59	32.82
			20	AFTER	87.50	-13.54	33.54
			21	AFTER	87.35	-13.48	35.63
			22	AFTER	89.54	-14.36	37.80
			23	AFTER	86.05	-14.89	40.92

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VEHICLE C/L SECTION LOW

1	BEFORE	107.69	0.00	18.38
1	AFTER	106.83	0.30	16.18
2	BEFORE	103.88	0.00	18.27
2	AFTER	105.11	0.38	15.74
3	BEFORE	99.45	0.80	13.48
3	AFTER	104.10	0.30	14.38
4	BEFORE	91.43	0.00	19.04
4	AFTER	99.30	0.01	12.32
5	BEFORE	85.21	0.00	19.61
5	AFTER	96.44	-0.27	11.79
6	BEFORE	77.99	0.00	20.39
6	AFTER	96.33	-0.10	12.69

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** SECTIONALS **

UNIT NO	SCIN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			7	BEFORE	76.57	0.00	24.55
			7	AFTER	93.39	0.04	13.61
			8	BEFORE	75.19	0.00	25.39
			8	AFTER	90.71	2.15	16.04
			9	BEFORE	74.75	0.00	31.34
			9	AFTER	84.38	0.97	19.32
			10	BEFORE	75.01	0.00	37.15
			10	AFTER	84.25	0.95	21.34
			11	BEFORE	79.62	0.00	38.99
			11	AFTER	84.01	0.47	23.79
			12	BEFORE	77.58	0.00	42.75
			12	AFTER	82.16	-0.09	25.52
			13	AFTER	80.74	-1.27	35.83
			14	AFTER	80.87	-1.31	36.86
			15	AFTER	85.15	-0.20	38.89
			16	AFTER	82.72	-0.70	42.04

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PASSENGER C/L SECT/LONG

			1	BEFORE	106.51	14.62	14.31
			1	AFTER	106.14	15.28	12.82
			2	BEFORE	92.65	14.82	14.36
			2	AFTER	96.63	15.78	12.60
			3	BEFORE	85.69	14.62	14.61
			3	AFTER	94.90	15.64	11.55
			4	BEFORE	76.87	14.62	21.17
			4	AFTER	93.07	15.76	12.04

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** SECTIONALS **

UNIT NO	SECTN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			5	BEFORE	76.75	14.62	23.53
			5	AFTER	90.03	15.54	11.65
			6	BEFORE	75.31	14.62	24.82
			6	AFTER	87.57	15.45	12.16
			7	BEFORE	75.11	14.62	29.03
			7	AFTER	86.00	15.49	12.51
			8	BEFORE	74.89	14.62	34.16
			8	AFTER	80.92	14.85	17.78
			9	BEFORE	74.98	14.62	27.93
			9	AFTER	80.05	14.46	19.09
			10	BEFORE	81.28	14.62	39.20
			10	AFTER	79.53	14.30	28.98
			11	BEFORE	79.63	14.62	42.70
			11	AFTER	79.03	14.31	21.41
			12	AFTER	78.89	14.17	33.59
			13	AFTER	77.56	13.68	24.84
			14	AFTER	77.92	13.51	32.30
			15	AFTER	77.99	13.26	37.71
			16	AFTER	84.00	14.44	39.72
			17	AFTER	82.28	13.99	42.30

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BRAKE SUPPORT BRACKET

			1	BEFORE	106.51	-22.64	14.26
			1	AFTER	107.70	-22.50	13.00
			2	BEFORE	103.91	-22.64	14.77
			2	AFTER	108.46	-22.02	12.29

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** SECTIONALS **

UNIT NO	SCHE NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			3	BEFORE	101.18	-22.64	14.47
			3	AFTER	103.70	-22.39	10.25
			4	BEFORE	98.30	-22.64	14.31
			4	AFTER	102.71	-21.36	7.83
			5	BEFORE	95.66	-22.64	14.38
			5	AFTER	100.25	-20.83	8.64
			6	BEFORE	93.25	-22.64	14.44
			6	AFTER	98.86	-21.36	10.11
			7	BEFORE	89.95	-22.64	14.56
			7	AFTER	96.36	-21.14	10.89
			8	BEFORE	87.21	-22.64	14.93
			8	AFTER	94.23	-21.25	12.37
			9	BEFORE	85.11	-22.64	15.94
			9	AFTER	92.78	-21.27	14.23
			10	BEFORE	84.08	-22.64	17.88
			10	AFTER	92.06	-21.39	16.62
			11	BEFORE	82.56	-22.64	20.81
			11	AFTER	91.26	-21.78	19.55
			12	BEFORE	81.21	-22.64	22.43
			12	AFTER	90.84	-21.67	21.29
			13	BEFORE	81.03	-22.64	24.40
			13	AFTER	91.20	-21.57	23.21
			14	BEFORE	79.89	-22.64	26.98
			14	AFTER	90.33	-21.45	25.55
			15	BEFORE	78.38	-22.64	28.63
			15	AFTER	89.11	-21.14	27.88
			16	BEFORE	77.62	-22.64	31.92
			16	AFTER	87.90	-21.26	31.16

** SECTIONS **

INT NO	SCIN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			17	BEFORE	77.96	-22.64	33.96
			17	AFTER	88.07	-21.58	33.14
			18	BEFORE	78.06	-22.64	35.88
			18	AFTER	87.92	-21.86	34.16
			19	BEFORE	84.34	-22.64	37.36
			19	AFTER	92.12	-22.64	36.34
			20	BEFORE	82.96	-22.64	41.69
			20	AFTER	89.89	-22.98	40.13

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BRAKE SUPPORT BRACKET

			1	BEFORE	106.63	-6.76	15.03
			1	AFTER	107.63	-7.03	13.76
			2	BEFORE	104.04	-6.76	15.13
			2	AFTER	105.29	-7.33	13.57
			3	BEFORE	101.54	-6.76	15.23
			3	AFTER	102.81	-7.37	14.06
			4	BEFORE	97.14	-6.76	15.28
			4	AFTER	98.71	-7.51	12.44
			5	BEFORE	94.38	-6.76	14.60
			5	AFTER	97.71	-6.02	10.10
			6	BEFORE	90.54	-6.76	14.76
			6	AFTER	95.87	-6.62	11.68
			7	BEFORE	88.09	-6.76	14.71
			7	AFTER	93.35	-6.20	11.51
			8	BEFORE	86.48	-6.76	14.67
			8	AFTER	92.16	-5.73	11.99
			9	BEFORE	84.54	-6.76	15.00
			9	AFTER	90.51	-5.69	12.61

** SECTIONALS **

UNIT NO	SECTN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	INCHES		
					X	Y	Z
			10	BEFORE	82.19	-6.76	16.50
			10	AFTER	88.25	-5.71	14.28
			11	BEFORE	80.16	-6.76	18.06
			11	AFTER	86.95	-5.61	16.45
			12	BEFORE	78.81	-6.76	19.79
			12	AFTER	86.09	-5.79	18.94
			13	BEFORE	76.87	-6.76	21.32
			13	AFTER	85.48	-5.81	20.85
			14	BEFORE	76.70	-6.76	24.22
			14	AFTER	86.14	-5.01	24.67
			15	BEFORE	76.13	-6.76	27.84
			15	AFTER	86.90	-5.77	27.50
			16	BEFORE	75.84	-6.76	29.94
			16	AFTER	85.50	-6.10	29.64
			17	BEFORE	75.53	-6.76	32.07
			17	AFTER	85.84	-6.21	31.55
			18	BEFORE	74.59	-6.76	34.13
			18	AFTER	83.94	-6.73	33.26
			19	BEFORE	74.64	-6.76	36.96
			19	AFTER	82.93	-7.45	35.64
			20	BEFORE	80.33	-6.76	38.48
			20	AFTER	87.08	-6.92	38.21
			21	BEFORE	78.31	-6.76	42.61
			21	AFTER	84.11	-7.59	41.49
				BRAKE SUPPORT BRACKET			
			1	BEFORE	106.60	10.60	13.00
			1	AFTER	106.36	11.47	13.24

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** SECTIONALS **

UNIT NO	SCIN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	INCHES		
					X	Y	Z
			2	BEFORE	102.03	10.60	14.97
			2	AFTER	101.61	11.55	12.86
			3	BEFORE	97.07	10.60	14.25
			3	AFTER	96.78	11.68	11.77
			4	BEFORE	93.50	10.60	14.33
			4	AFTER	93.38	11.63	11.53
			5	BEFORE	89.94	10.60	14.82
			5	AFTER	90.12	11.81	11.07
			6	BEFORE	86.02	10.60	14.57
			6	AFTER	86.56	11.87	11.99
			7	BEFORE	83.79	10.60	15.61
			7	AFTER	84.62	11.34	14.00
			8	BEFORE	80.51	10.60	18.20
			8	AFTER	82.67	11.03	17.24
			9	BEFORE	76.96	10.60	21.09
			9	AFTER	80.69	10.54	21.00
			10	BEFORE	76.70	10.60	22.34
			10	AFTER	80.11	10.29	21.92
			11	BEFORE	75.14	10.60	23.14
			11	AFTER	78.63	10.08	22.73
			12	BEFORE	75.17	10.60	26.95
			12	AFTER	78.49	9.98	26.62
			13	BEFORE	75.15	10.60	31.02
			13	AFTER	78.52	9.85	30.29
			14	BEFORE	75.13	10.60	32.85
			14	AFTER	78.63	9.72	32.55
			15	BEFORE	75.10	10.60	34.56
			15	AFTER	78.66	9.50	34.07

** SECTIONS **

UNT NO	SECTN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			16	BEFORE	75.01	10.60	37.87
			16	AFTER	78.76	9.37	37.61
			17	BEFORE	80.36	10.60	39.30
			17	AFTER	83.93	10.22	39.20
			18	BEFORE	79.81	10.60	40.57
			18	AFTER	83.21	10.24	40.36
			19	BEFORE	79.31	10.60	41.60
			19	AFTER	82.67	10.01	41.36
			20	BEFORE	78.80	10.60	42.68
			20	AFTER	82.05	10.06	42.37

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BRAKE SUPPORT BRACKET

			1	BEFORE	106.89	18.69	14.27
			1	AFTER	106.40	19.24	13.12
			2	BEFORE	101.98	18.69	14.12
			2	AFTER	101.87	19.53	13.04
			3	BEFORE	99.10	18.69	14.33
			3	AFTER	98.94	19.40	12.99
			4	BEFORE	94.97	18.69	14.28
			4	AFTER	94.91	19.47	12.49
			5	BEFORE	91.92	18.69	14.29
			5	AFTER	91.83	19.78	12.13
			6	BEFORE	89.13	18.69	14.41
			6	AFTER	89.04	19.74	12.30
			7	BEFORE	85.43	18.69	14.73
			7	AFTER	85.35	19.45	13.44
			8	BEFORE	82.60	18.69	16.52
			8	AFTER	83.46	18.99	15.96

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** SECTIONALS **

INT NO	SCIN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	INCHES		
					X	Y	Z
			9	BEFORE	79.72	18.69	19.05
			9	AFTER	81.23	18.22	19.27
			10	BEFORE	78.95	18.69	21.97
			10	AFTER	80.41	18.32	21.89
			11	BEFORE	78.09	18.69	24.85
			11	AFTER	79.28	18.45	24.76
			12	BEFORE	76.87	18.69	26.32
			12	AFTER	77.63	18.21	26.22
			13	BEFORE	75.30	18.69	27.70
			13	AFTER	76.78	17.77	27.73
			14	BEFORE	75.03	18.69	30.36
			14	AFTER	76.63	17.65	30.47
			15	BEFORE	75.05	18.69	32.38
			15	AFTER	76.64	17.59	33.02
			16	BEFORE	75.02	18.69	35.22
			16	AFTER	76.86	17.46	35.09
			17	BEFORE	75.05	18.69	37.57
			17	AFTER	77.19	17.64	37.47
			18	BEFORE	82.68	18.69	38.73
			18	AFTER	84.60	18.77	38.89
			19	BEFORE	81.93	18.69	40.68
			19	AFTER	83.72	18.55	40.86
			20	BEFORE	80.75	18.69	42.51
			20	AFTER	82.44	18.60	42.34

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BRAKE SUPPORT BRACKET

			1	BEFORE	83.05	-26.22	22.96
			1	AFTER	92.12	-25.32	21.36

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** SECTIONALS **

UNIT NO	SECTN NO	SIDE	REQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
	2			BEFORE	80.26	-21.67	22.96
	2			AFTER	90.27	-20.43	22.00
	3			BEFORE	79.72	-19.89	22.96
	3			AFTER	89.78	-18.36	22.76
	4			BEFORE	76.77	-17.01	22.96
	4			AFTER	87.17	-15.67	22.98
	5			BEFORE	76.63	-14.01	22.96
	5			AFTER	86.50	-12.83	22.58
	6			BEFORE	76.64	-11.66	22.96
	6			AFTER	86.25	-10.48	22.47
	7			BEFORE	76.77	-6.14	22.96
	7			AFTER	85.82	-5.07	22.32
	8			BEFORE	76.78	-3.27	22.96
	8			AFTER	85.53	-2.09	22.16
	9			BEFORE	76.76	-1.55	22.96
	9			AFTER	84.92	-0.61	22.19
	10			BEFORE	76.44	0.23	22.96
	10			AFTER	83.82	1.03	22.22
	11			BEFORE	76.76	1.34	22.96
	11			AFTER	82.86	4.15	22.29
	12			BEFORE	76.71	6.42	22.96
	12			AFTER	81.32	6.66	22.19
	13			BEFORE	75.70	9.78	22.96
	13			AFTER	79.51	9.45	22.39
	14			BEFORE	76.44	12.36	22.96
	14			AFTER	79.36	12.94	22.61
	15			BEFORE	76.73	15.97	22.96
	15			AFTER	78.41	15.55	22.69

ASC TO # : T- T88855

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11713

** SECTIONALS **

UNIT NO	SCEN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			16	BEFORE	77.06	19.00	22.96
			16	AFTER	78.46	17.66	22.68
			17	BEFORE	79.67	19.48	22.96
			17	AFTER	80.75	19.34	23.09
			18	BEFORE	80.39	21.69	22.96
			18	AFTER	80.98	21.69	22.86
			19	BEFORE	81.91	23.77	22.96
			19	AFTER	82.30	23.96	22.70
			20	BEFORE	83.25	27.15	23.96
			20	AFTER	83.14	27.40	22.80

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T-88855

** COMMENTS **

ANY AUTOMATICALLY GENERATED COMMENTS APPEAR IN THIS BOX:

THIS VEHICLE IS SET UP TO DESIGN ATTITUDE AND WHILE REPORTED IN ENGLISH UNITS, USES A METRIC PRINT ZERO. SUSPENSION COMPONENTS ARE NOT IN DESIGN POSITION. COORDINATES CAN BE CONVERTED TO DESIGN PRINT VALUES BY USING THE FOLLOWING: asking for a metric print-out or

TO CONVERT TO METRIC DESIGN PRINT VALUES: MULTIPLY BY 25.4.
TO CONVERT TO ENGLISH DESIGN PRINT VALUES: (for most DOMESTIC VEHICLES)
SUBTRACT 78.74 (2000 MM) FROM THE X VALUE AND SUBTRACT 19.69 (500 MM) FROM THE Z VALUE.

*** THIS DIMENSION SYSTEM UTILIZES THE RIGHT HAND RULE ***
From Front of Vehicle FACING REARWARD
+ = Rearward, Up, & Left (AMERICAN PASSENGER SIDE)
[Lateral Zero is Centerline of Vehicle]

**** THE " D " DIMENSION UNDER " INCHES CHANGED X Y Z " ****
*** IS THE SCALAR (TRUE VALUE) DISTANCE CHANGE OF THE POINT ***

Paint a stripe on the windshield in line with the Driver C/L & the Front Passenger C/L.

MARK LATERAL DUMMY LOCATION CENTERLINES ON THE SEAT CUSHION & BACK, HEAD RESTRAINT & WINDSHIELD FOR THE DRIVER & PASSENGER.
(MAKE SOME LINES ARE CLEARLY VISIBLE)

Print FRONT ROCKER SILL TARGET "X" & "Z" coordinates ON THE SILL ADJACENT TO THE TARGET
[USED FOR DUMMY PLACEMENT @ THE BARRIER]

FOR SCRIBE TARGET EXCEPTIONS:
SEE DESIGN SET-UP SHEET: UNIT825..TOW CAR; UNIT829..C/VIC G/MAR
UNIT837..EA77

NOTE: PLEASE POSITION " D " RING @ " B " PILLAR RANGERSAS OF 7/28/94 SET @ 3rd NOTCH from TOP!
ALL OTHER TRUCKS[mid position]
ALL CARS if adjustable.....[mid position]

NOTE: PLEASE POSITION " D " RING @ " B " PILLAR RANGERSAS OF 7/28/94 SET @ 3rd NOTCH from TOP!
ALL OTHER TRUCKS[mid position]
ALL CARS if adjustable.....[mid position]

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** COMMENTS **

Mark & Label a 40% offset line on the front bumper. (Side of impact)
 40% offset is determined by Multiplying the overall vehicle width by
 .40 and Subtracting that value from the outside edge of side of impact

 ANY COMMENTS ENTERED BY OPERATORS APPEAR BELOW THIS LINE:

UNIT 650 POINT DESCRIPTIONS ARE AS FOLLOWS:

01. L/FRONT SILL SETUP POINT.
02. L/REAR SILL SETUP POINT.
03. R/FRONT SILL SETUP POINT.
04. R/REAR SILL SETUP POINT.
05. BRAKE PEDAL PAD C/L.
06. N/A
07. FOOTREST C/L ON TREADS.
08. FOOTREST C/L ON CARPET.
09. TOEPAN POINT 200MM LEFT OF BRAKE PEDAL PAD C/L.
10. TOEPAN POINT 150MM LEFT OF BRAKE PEDAL PAD C/L.
11. TOEPAN INLINE WITH BRAKE PEDAL PAD C/L.
12. TOEPAN POINT 150MM TO RIGHT OF BRAKE PEDAL PAD C/L.
13. TOEPAN POINT 200MM TO RIGHT OF BRAKE PEDAL PAD C/L.
14. TOEPAN POINT INLINE WITH ACCELERATOR PAD C/L.
15. POINT ON LOWER I/P 150MM TO LEFT OF HUBNOT C/L, 450MM ABOVE FLOORPAN.
16. POINT ON LOWER I/P 150MM TO RIGHT OF HUBNOT C/L, 450MM ABOVE FLOORPAN.
17. STEERING WHEEL HUBNOT.
18. DRIVER A-PILLAR UPPER AT ROOF.
19. DRIVER A-PILLAR AT BELTLINE.
20. DRIVER A-PILLAR 100MM ABOVE ROCKER.
21. DRIVER A-PILLAR 100MM BELOW WINDOW.
22. DRIVER B-PILLAR UPPER AT SAME HEIGHT AS PT. 18. (CENTER OF PILLAR)
23. DRIVER B-PILLAR LOWER AT SAME HEIGHT AS PT. 19. (CENTER OF PILLAR)
24. DRIVER B-PILLAR 100MM ABOVE ROCKER.
25. DRIVER B-PILLAR 100MM BELOW WINDOW.
26. PASSENGER B-PILLAR 100MM ABOVE ROCKER.
27. PASSENGER B-PILLAR 100MM BELOW WINDOW.
28. PASSENGER A-PILLAR 100MM ABOVE ROCKER.
29. PASSENGER A-PILLAR 100MM BELOW WINDOW.
30. POINT ON L/SIDE A-PILLAR MIDWAY BETWEEN PTS. 29 & 30.
31. POINT ON R/SIDE A-PILLAR MIDWAY BETWEEN PTS. 22 & 23.
32. ACCEL L/SIDE ROCKER @ A-PILLAR.
33. ACCEL L/SIDE ROCKER @ C-PILLAR.
34. ACCEL ON TRANS.
35. ACCEL ON ENGINE.

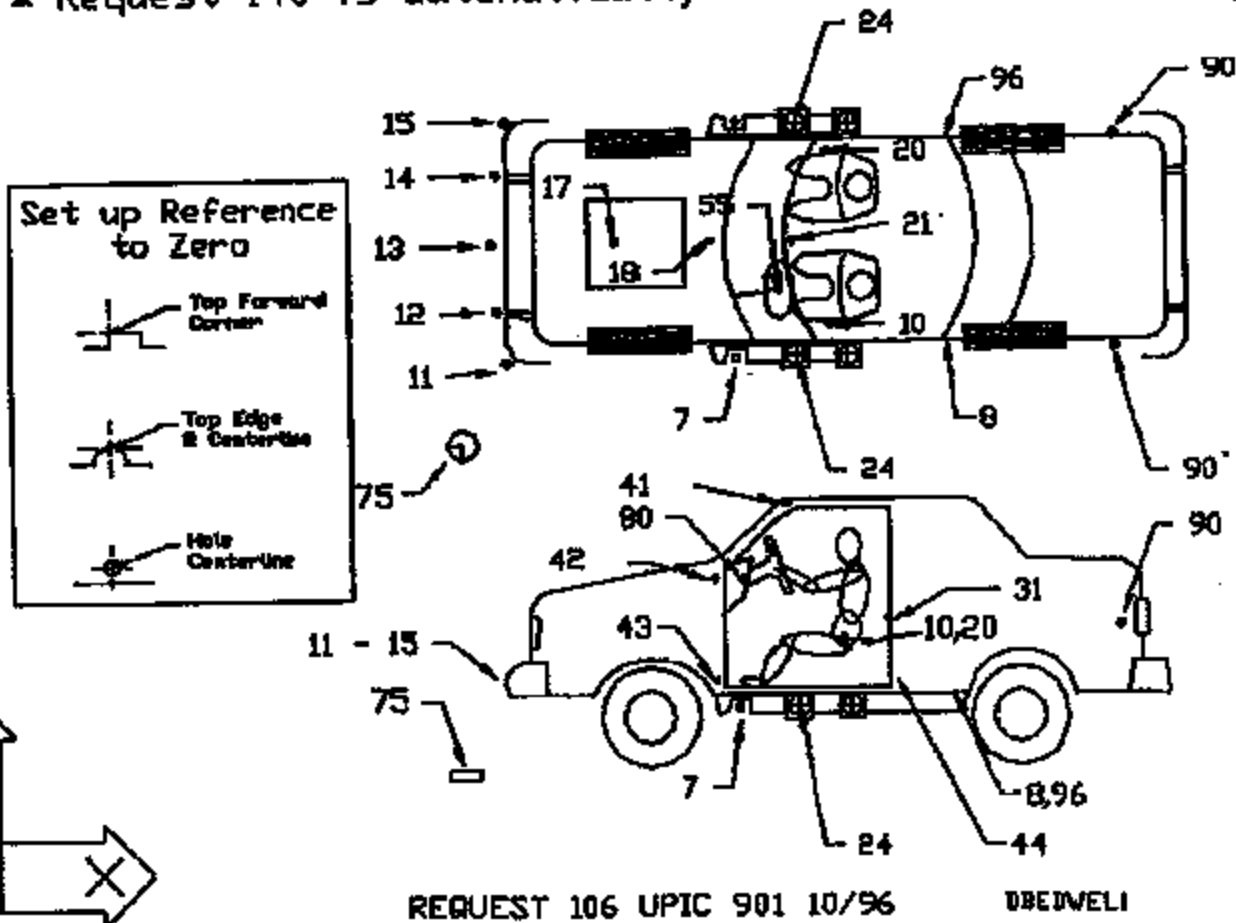
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** COMMENTS **

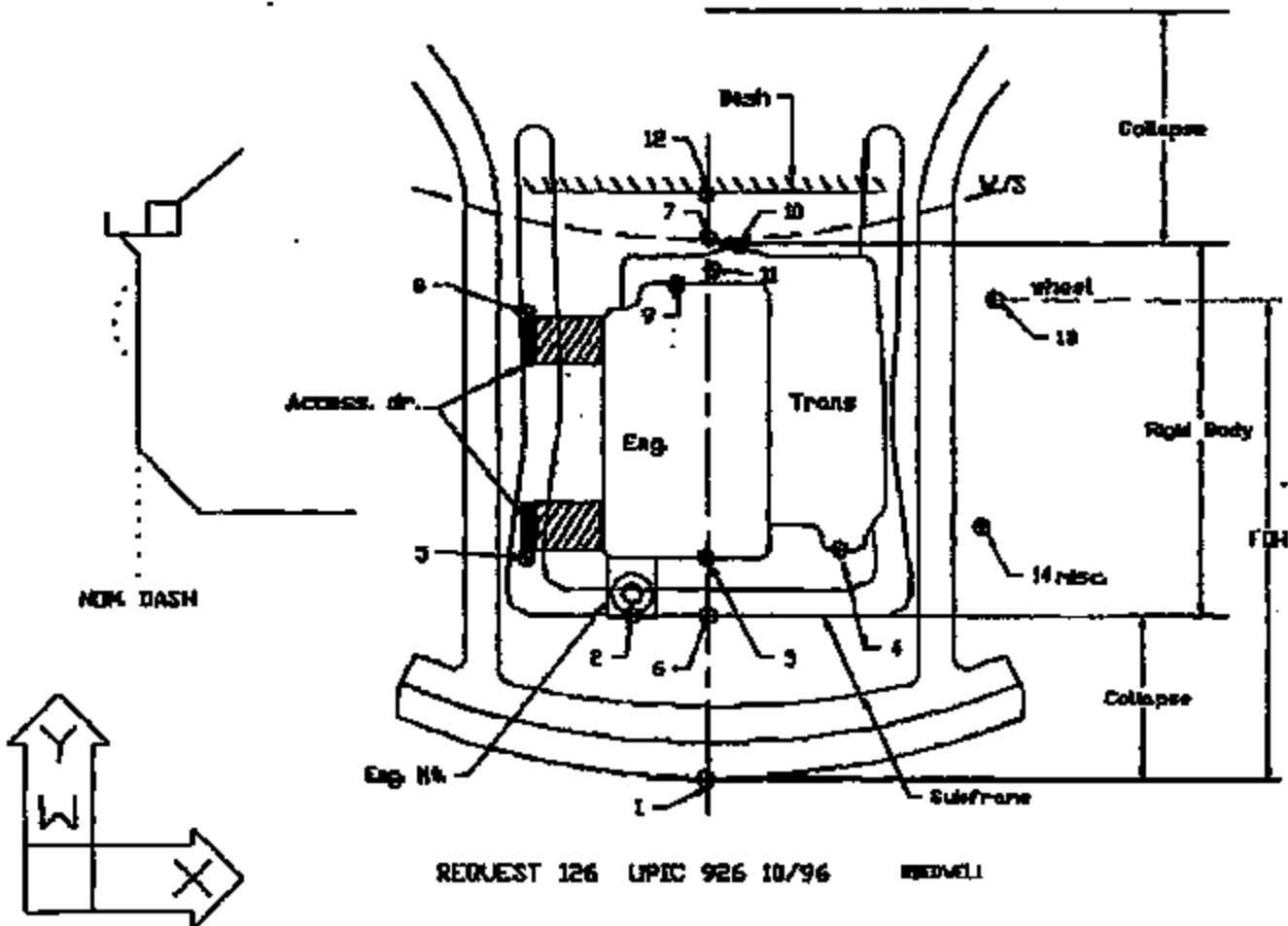
36. ACCEL R/SIDE ROCKER @ A-PILLAR.
37. ACCEL R/SIDE ROCKER @ B-PILLAR.
38. ACCEL R/SIDE ROCKER @ C-PILLAR.
39. ACCEL SUB FRAME FRONT C/L.
40. ACCEL SUB FRAME REAR C/L.
41. BUMPER CRUSH PROFILE POINT.
42. BUMPER CRUSH PROFILE POINT.
43. BUMPER CRUSH PROFILE POINT.
44. BUMPER CRUSH PROFILE POINT.
45. BUMPER CRUSH PROFILE POINT.
46. BUMPER CRUSH PROFILE POINT.
47. BUMPER CRUSH PROFILE POINT.
48. BUMPER CRUSH PROFILE POINT.
49. BUMPER CRUSH PROFILE POINT.
50. BUMPER CRUSH PROFILE POINT.
51. BUMPER CRUSH PROFILE POINT.
52. ACCEL ON TUNNEL BETWEEN SEATS.
53. ACCEL LEFT A-PILLAR INTERIOR.
54. ACCEL RIGHT A-PILLAR INTERIOR.
55. ACCEL L/SIDE ROCKER @ B-PILLAR.

SET UP CAR FRONT REQUEST 106
 UNIT 70 POINTS (10,20 PRE CRASH ONLY), 75
 UNIT 71 POINTS 07 LEFT & RIGHT
 UNIT 124 POINTS 8,11-15,17,18,21,55,80,96
 UNIT 125 POINTS 24,31,90 LEFT & RIGHT
 UNIT 75 POINTS 41-44 LEFT & RIGHT, PRE CRASH ONLY
 * Request 140 is automatically included with this request



CRIS 0011713

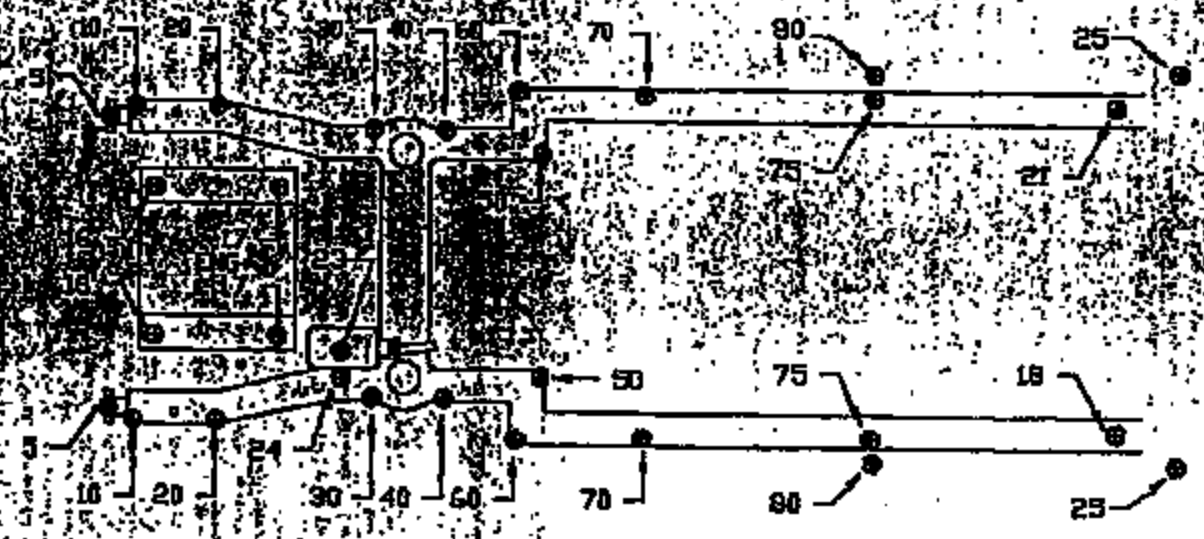
COLLAPSE DISTANCE POINTS FOR COMPETITOR VEHICLES REQUEST 126
UNIT 156 POINTS 1-14 PRE CRASH ONLY



REQUEST 126 UPIC 926 10/96 REVD1

CRIS 0011713

FRAME/ST. COL/ENG FOR PLD'S CAR FRONTAL REQUEST 128
 UNIT 095 POINTS 18,21
 UNIT 125 POINTS 18,17,25 LEFT & RIGHT
 UNIT 129 POINTS 23,24
 UNIT 145 POINTS 5,10,11,12,13,21,24,40,41,50,60,70,80,75,80 LEFT & RIGHT
 SPECIAL GRAPH POINTS NOT SHOWN ON DRAWING ARE PLACED AT BENDS ON FRAME BETWEEN MAJOR POINTS

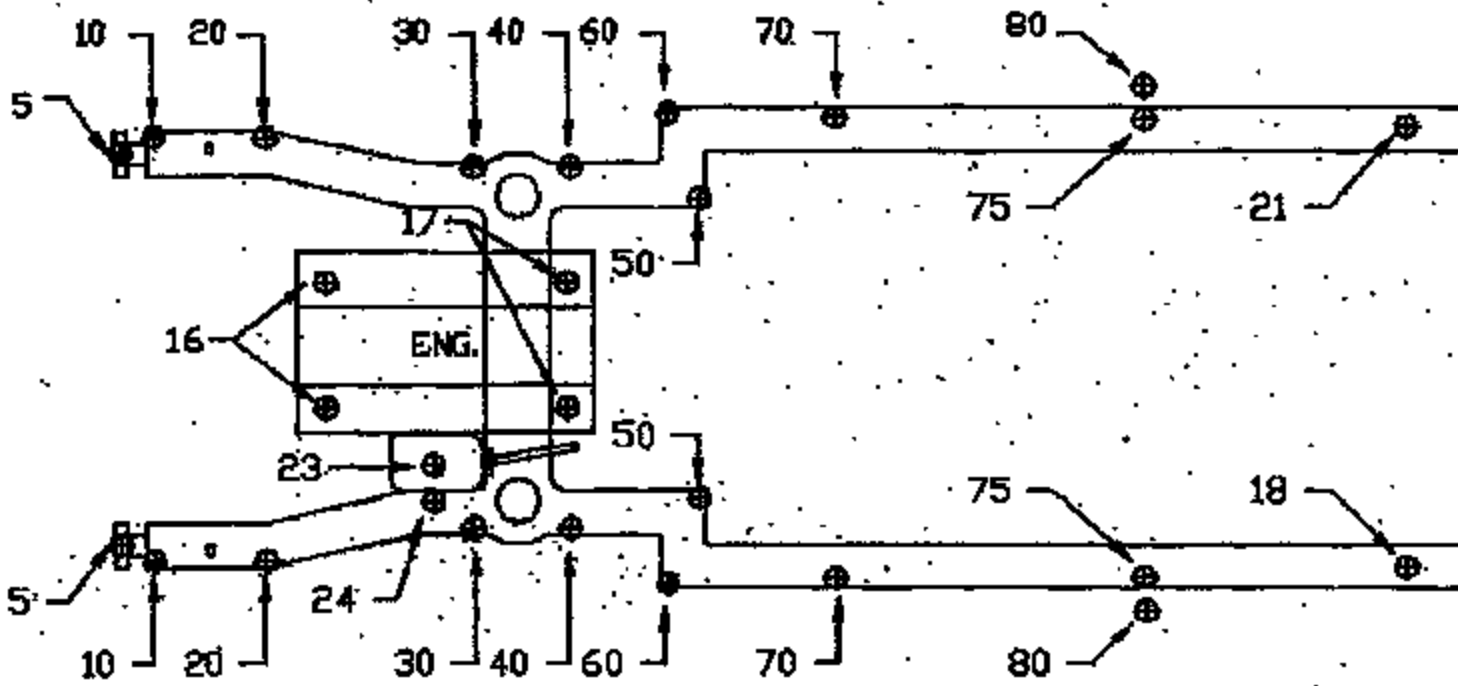


REQUEST 128 UPIC 902 10/96 DBE(DVEL)

CRIS 0011713

167
T-38855
13099

FRAME STANDARD BOTTOM CAR. REQUEST 130
 UNIT 095 POINTS 18,21
 UNIT 125 POINTS 16,17 LEFT & RIGHT
 UNIT 129 POINTS 23,24
 UNIT 145 POINTS 5,10,20,30,40,50,60,70,80 LEFT & RIGHT

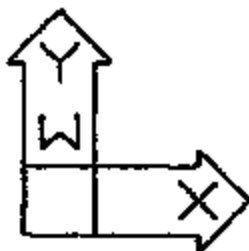


REQUEST 130 UPIC 903 10/96 DBEDWEL1

CRTS 0011713

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DRIVE SHAFT COLLAPSE REQUEST 134
UNIT 129 POINTS 37,39,40,42

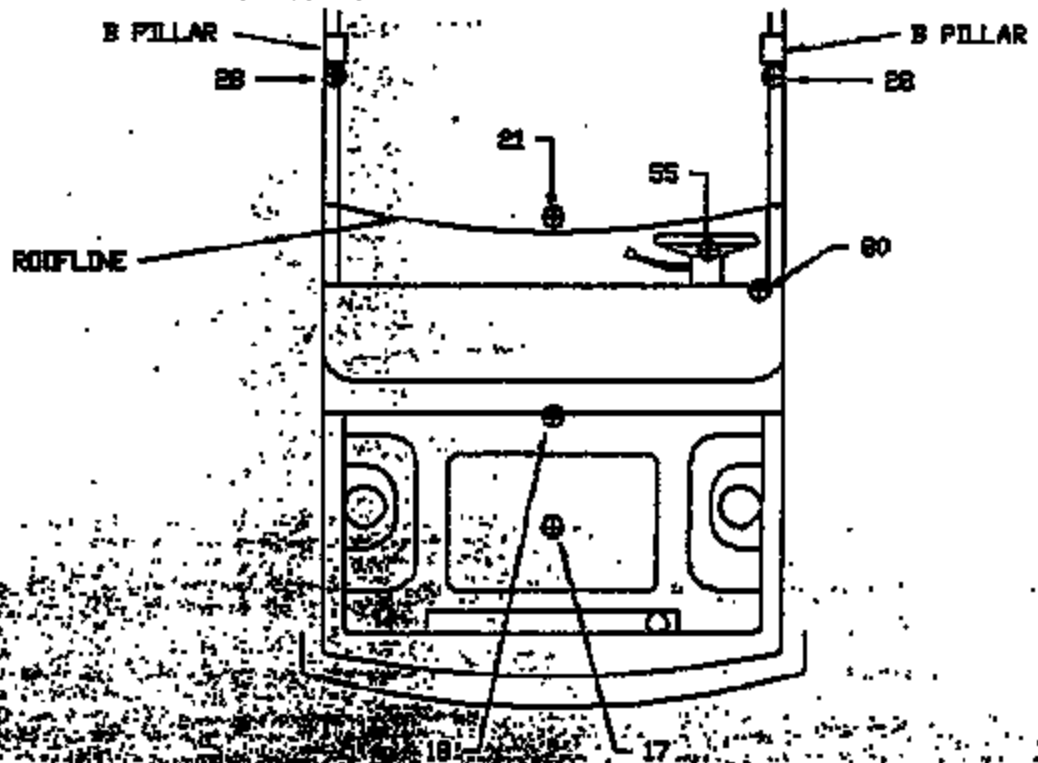


REQUEST 134 UPIC 905 10/96

DBEDVEL1

CRIS 0011713

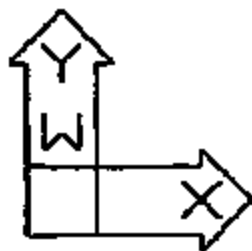
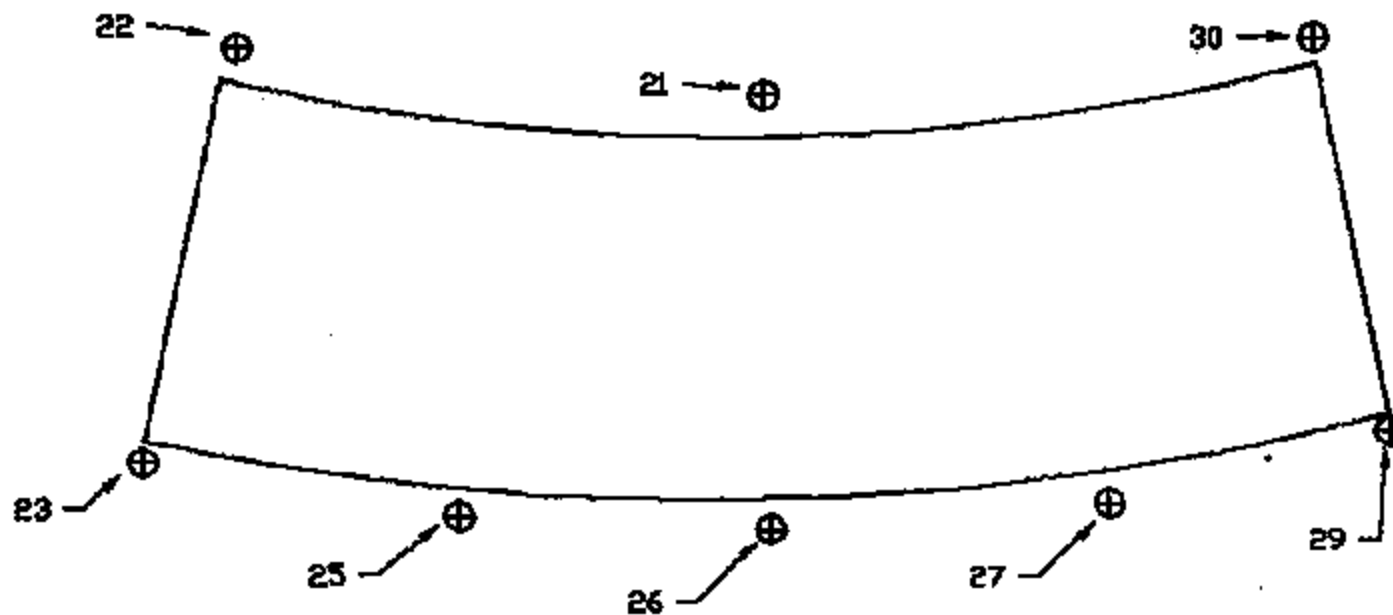
STANDARD BODY RELATIVE REQUEST 136
UNIT 124 POINTS 17,18,21,55,60
UNIT 125 POINTS 28 LEFT & RIGHT



REQUEST 136-UPIC 986 10/96

EBEDV

WINDSHIELD (CAR) REQUEST 138
UNIT 124 POINTS 21-23,25-27,29,30



REQUEST 138 LPIC 907 10/96

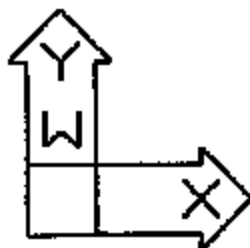
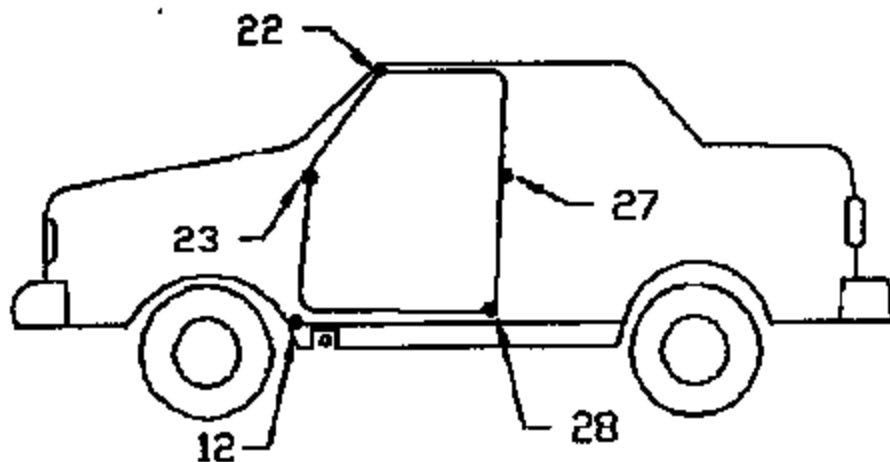
DBEDWELL

CRTS 0011713

171

7-888557

SILL & PILLAR REQUEST 140
UNIT 71 POINTS 12 LEFT & RIGHT
UNIT 125 POINTS 22,23,27,28 LEFT & RIGHT



REQUEST 140 UPIC 908 10/96

DBEDWEL1

CRIS 0011713

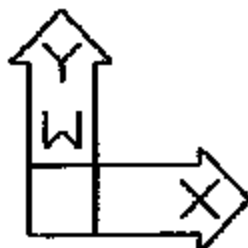
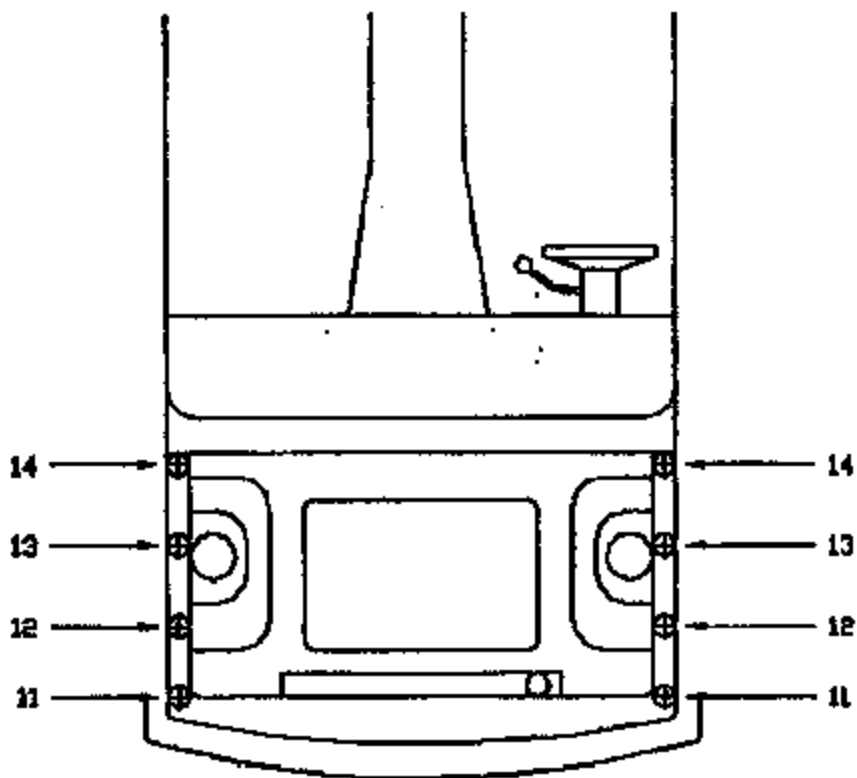
151

172

F-28855

12/27/97 7:45 AM

SHOT-GUNS REQUEST 142
UNIT 125 POINTS 11-14 LEFT & RIGHT

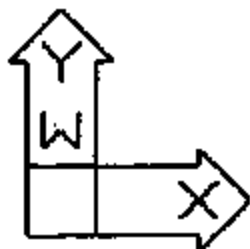
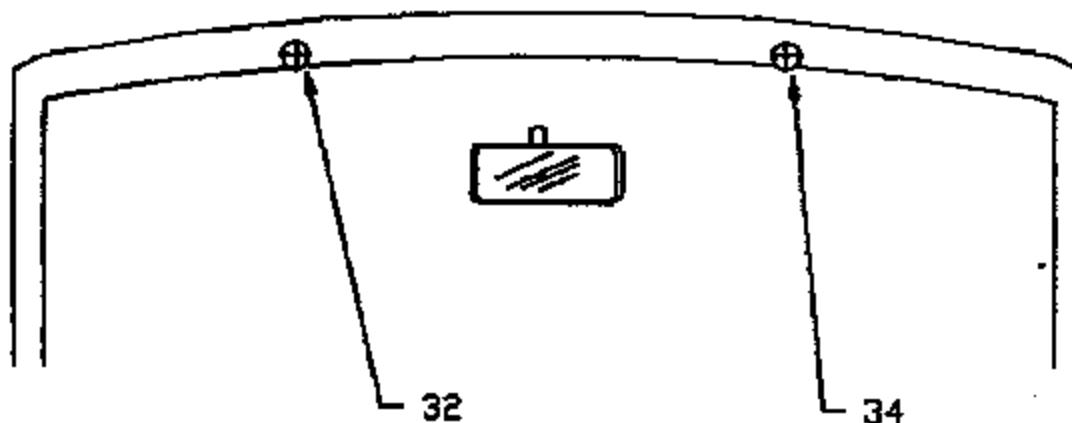


REQUEST 142 UPIC 909 10/96

DBEDWELI

CRTS 0011713

HEADER REQUEST 146
UNIT 124 POINTS 32,34



REQUEST 146 UPIC 910 10/96

DBEDWEL1

CRTS 0011713

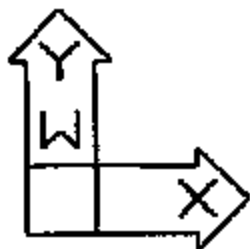
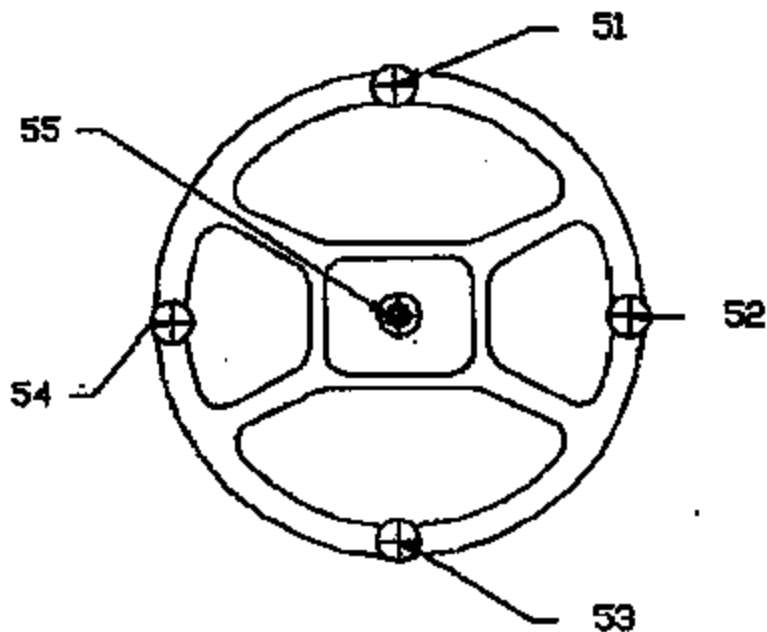
1 of 1

174

7-288888

12/2000 10:07 AM

STEERING WHEEL PERIPHERY REQUEST 130
UNIT 124 POINTS 51-55



REQUEST 130 UPIC 912 10/96

DBEDWEL1

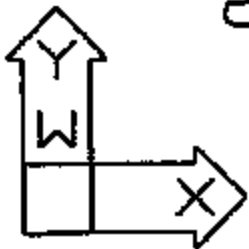
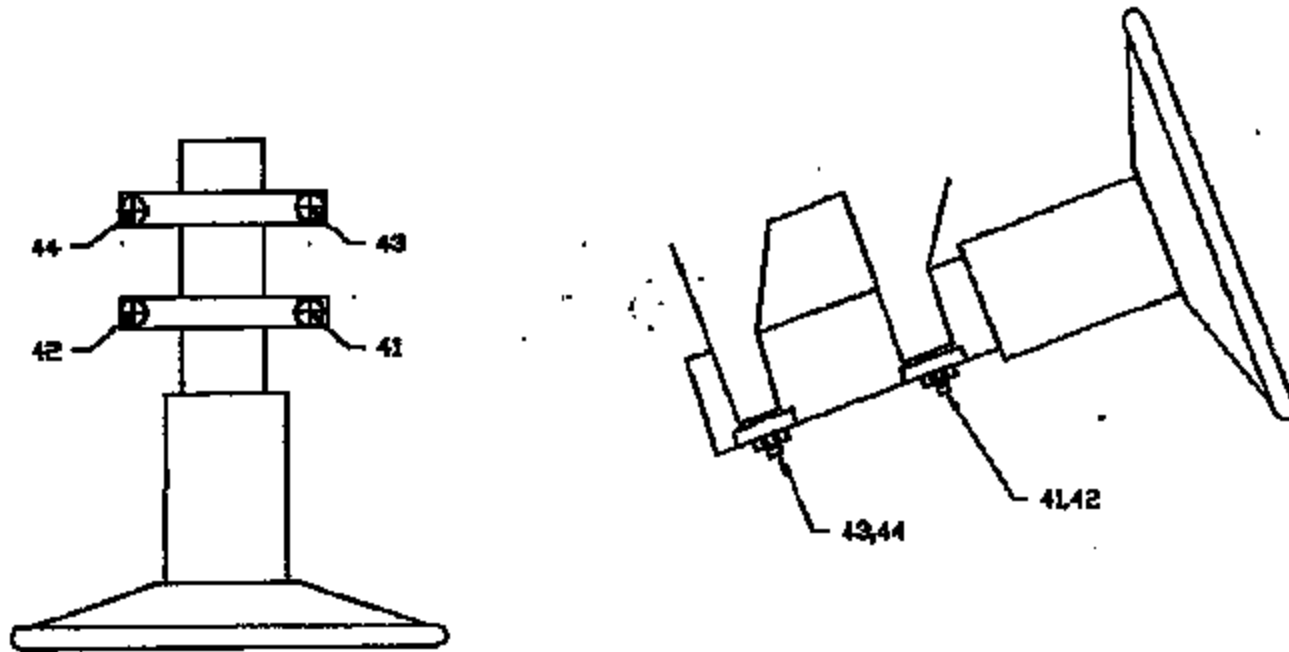
CRTS 0011713

173

F-2000

13/00 7 AM

STEERING COLUMN MOUNTS REQUEST 153
UNIT 124 POINTS 41-44

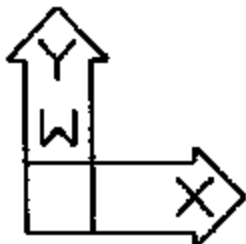
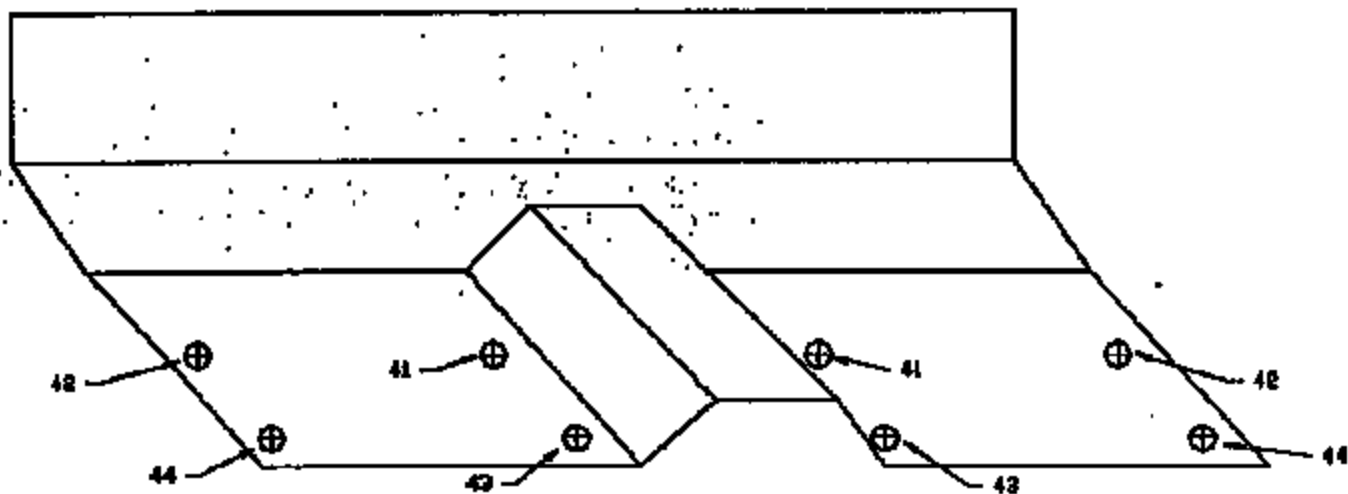


REQUEST 153 UPIC 913 10/96

DBEDWEL1

CRTS 0011713

SEAT TRACK TO FLOOR MOUNTS REQUEST 156
UNIT 125 POINTS 41-44 LEFT AND RIGHT



REQUEST 156 UPIC 916 10/96

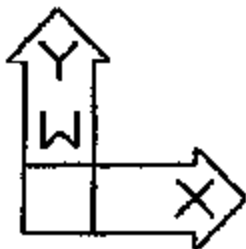
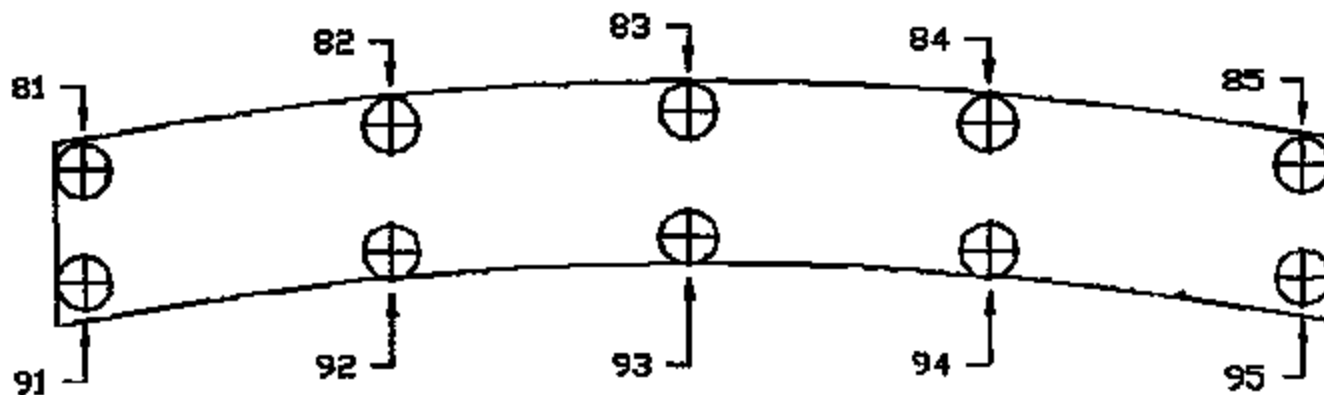
DBEDWEL1

CRIS 0011713

177

T-08855

COWL ROTATION REQUEST 160 UNIT 124 POINTS 81-85,91-95



REQUEST 160 UPIC 918 10/96

DBEDWEL1

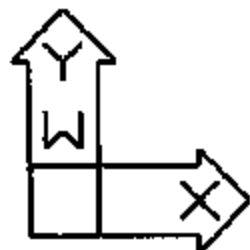
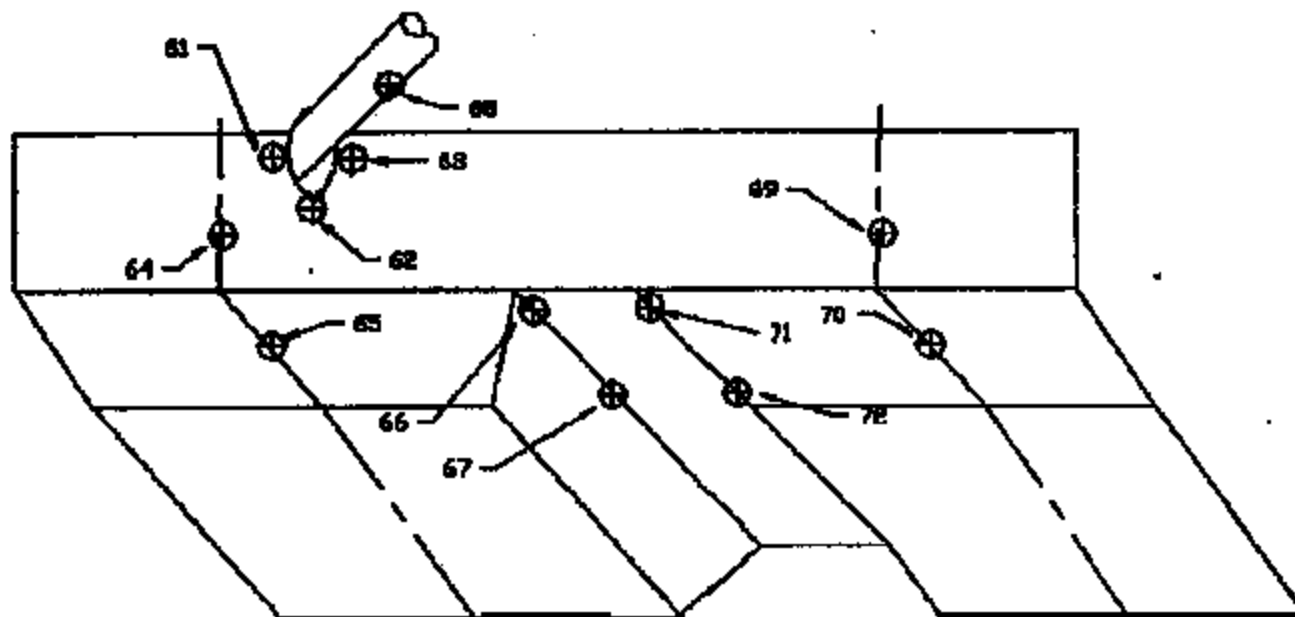
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178

7-298553

INVERTED IMAGE

FLOORPAN POINTS REQUEST 162
UNIT 124 POINTS 61-72

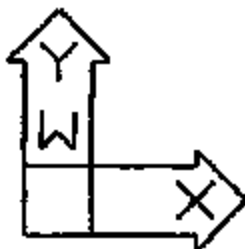
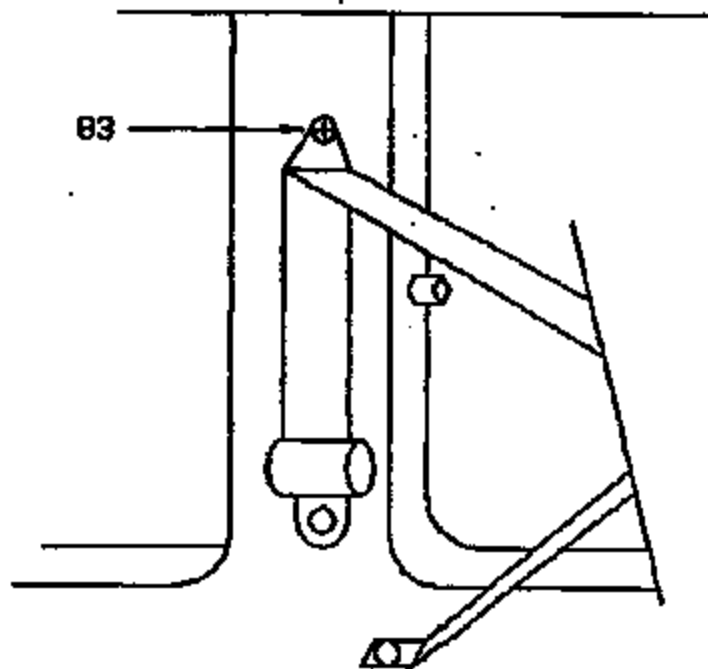


REQUEST 162 UPIC 919 10/96

DBEDVEL1

CRTS 0011713

SEAT BELT MOUNTS REQUEST 166
UNIT 125 POINTS 83 LEFT & RIGHT

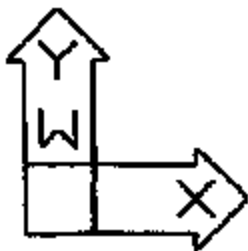
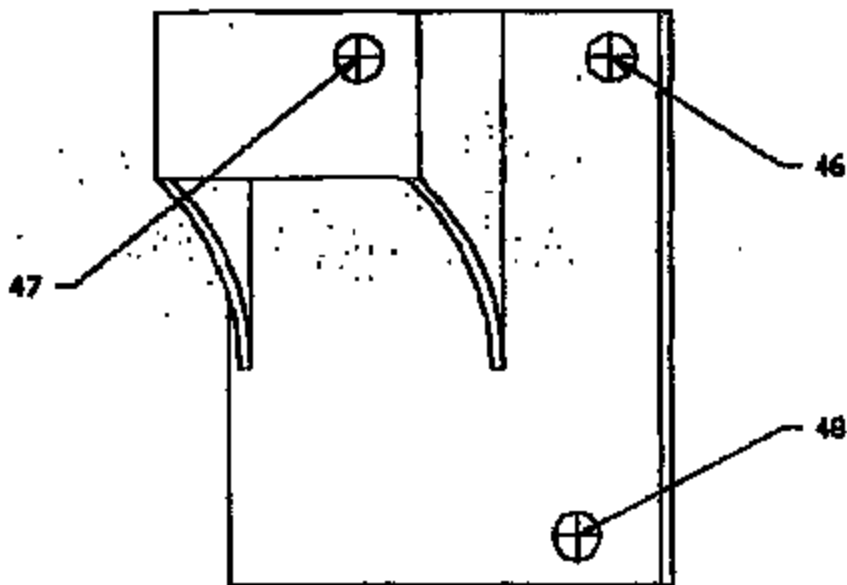


REQUEST 166 UPIC 921 10/96

DBEIDWEL1

CRIS 0011713

BRAKE BRACKET REQUEST 172
UNIT 124 POINTS 46-48

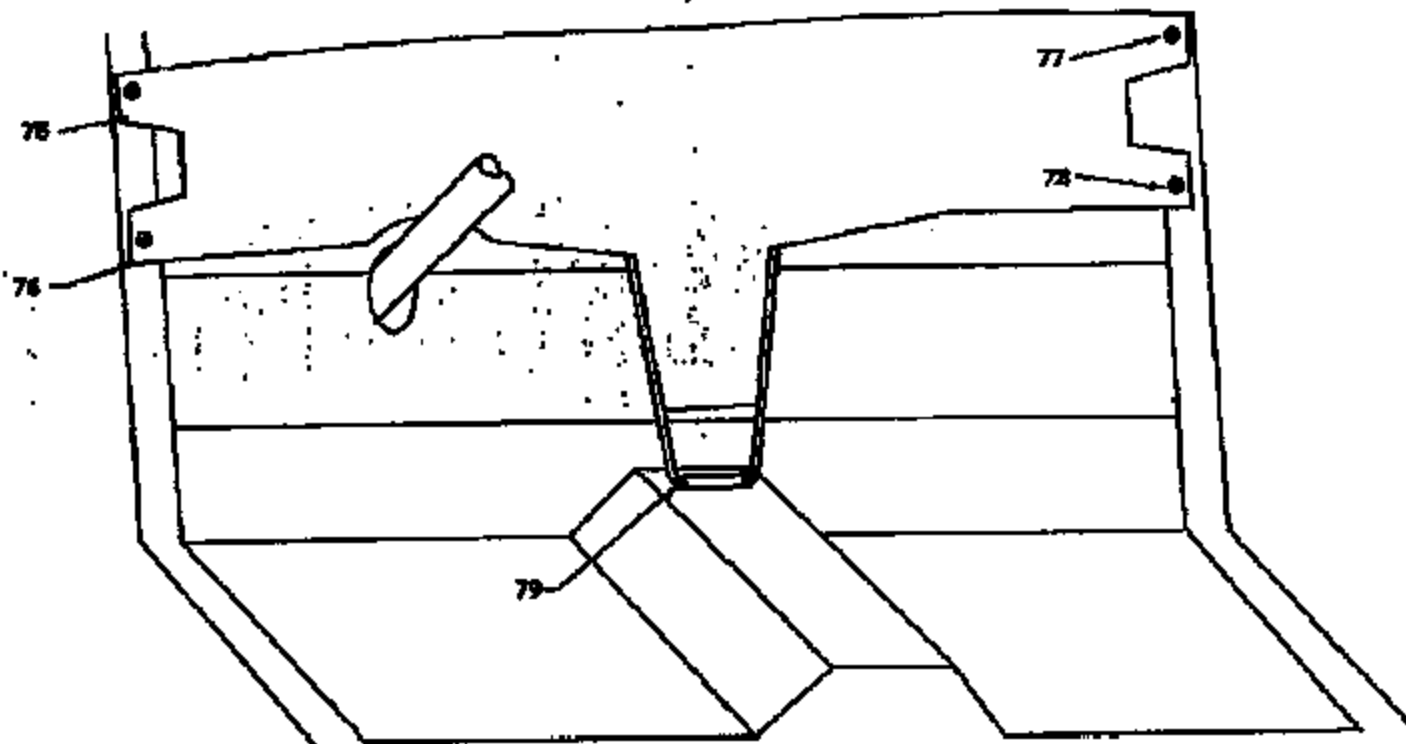


REQUEST 172 UPIC 924 10/96 DBEDVEL1

CRFS 0011713

181
7-28885

INSTRUMENT PANEL MOUNTS REQUEST 174
UNIT 124 POINTS 75-79

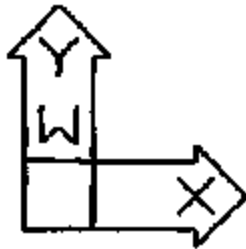
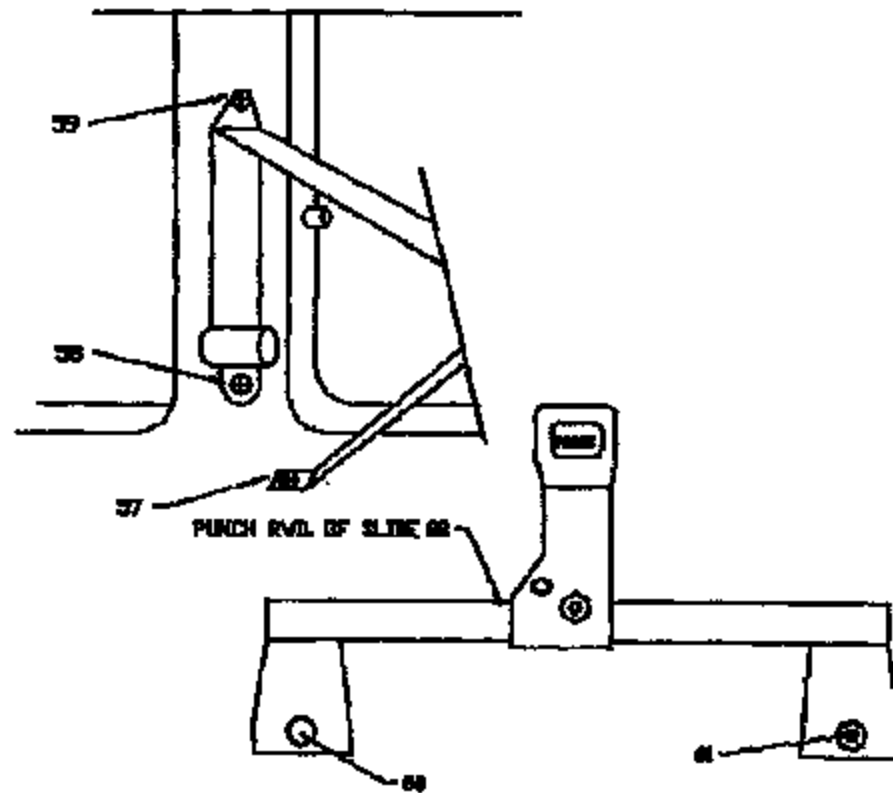


REQUEST 174 UPIC 923 10/96

DBEDVELJ

CRTS 0011713

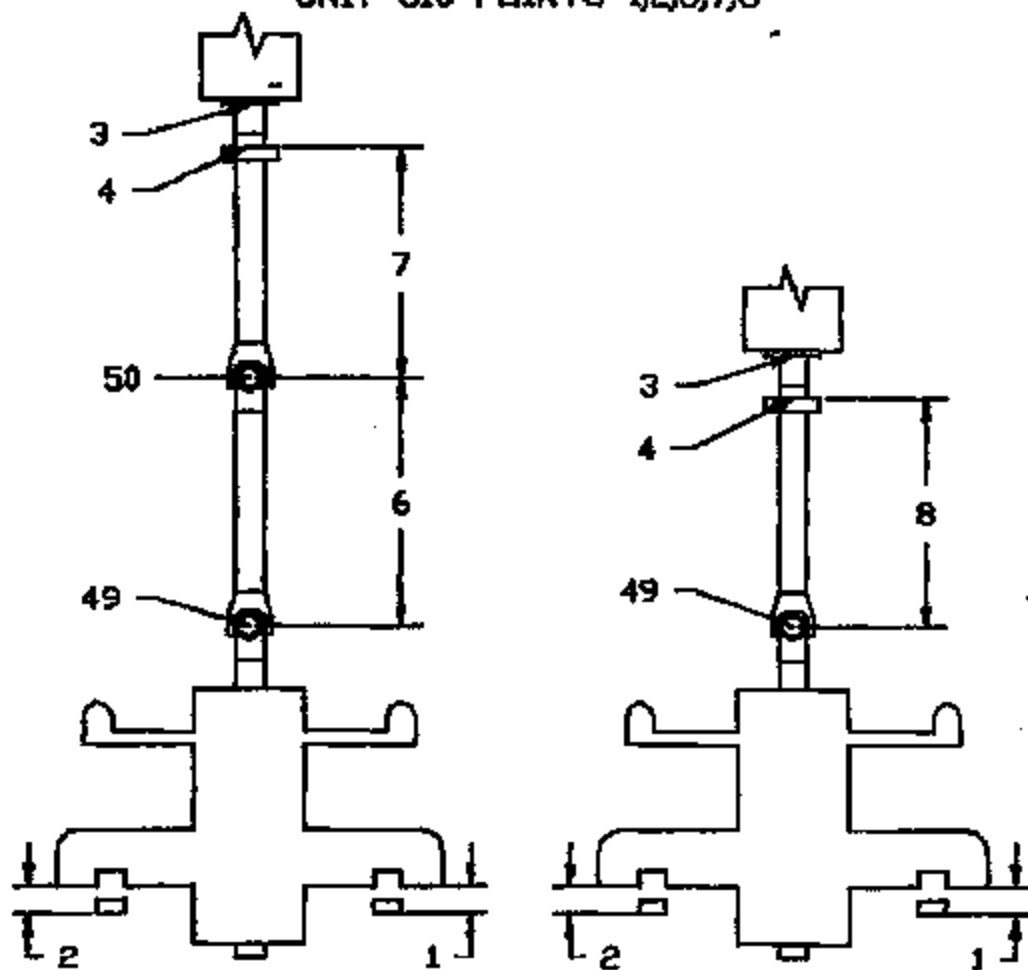
10" RING & BELT SLIDE TRUCK REQUEST 376
UNIT 336 POINTS 57-62 LEFT & RIGHT



REQUEST 376 LPIC 959 10/96 DBEDWELL

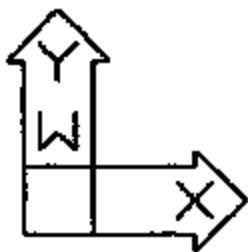
CRIS 0011713

P.R. STEERING COLUMN COLLAPSE REQUEST 507
UNIT 124 POINTS 3,4,49,50
UNIT 510 POINTS 1,2,6,7,8



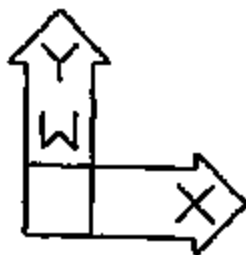
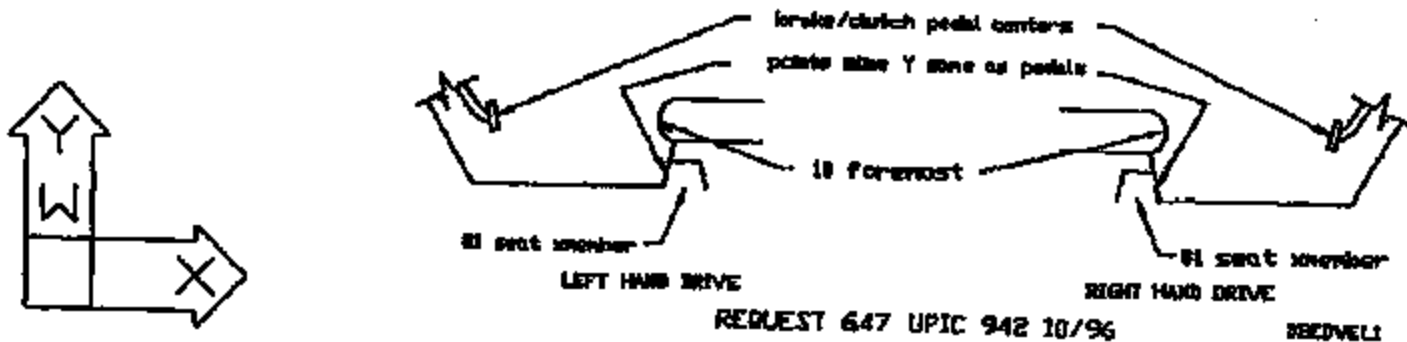
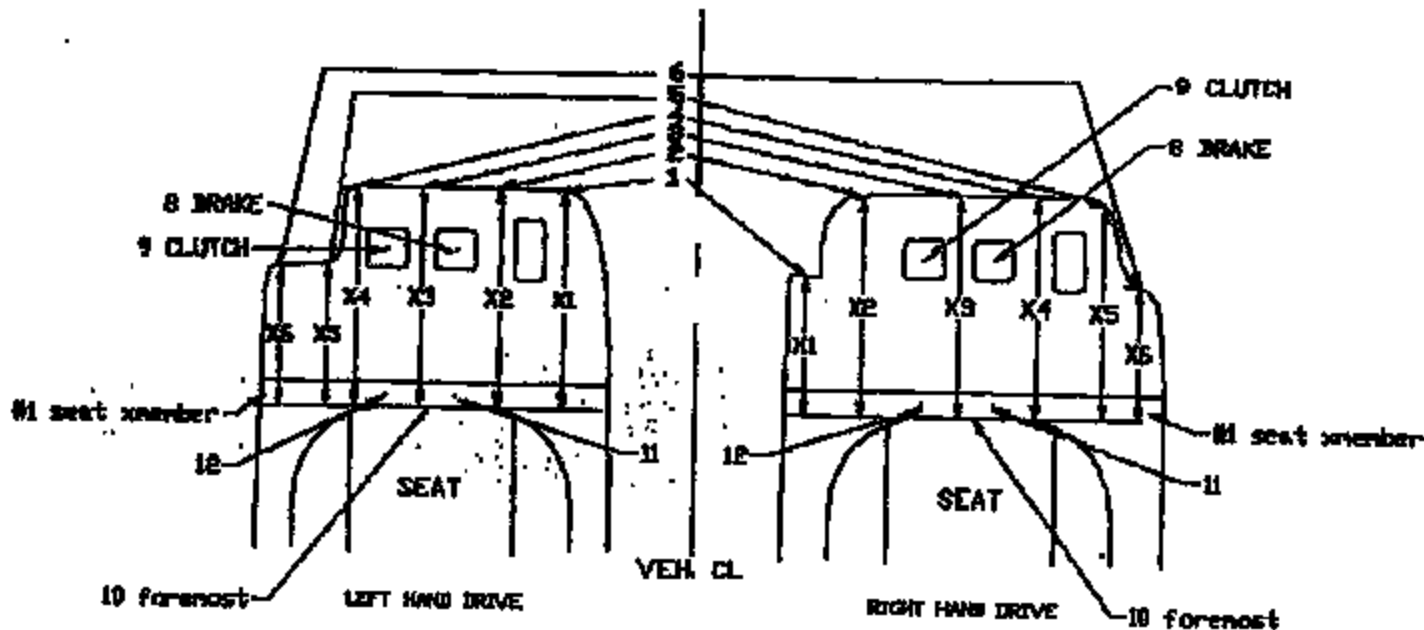
POINTS 1 & 2 ARE SHEAR MODULES

REQUEST 507 UPIC 967 10/96 DBEDWEL1

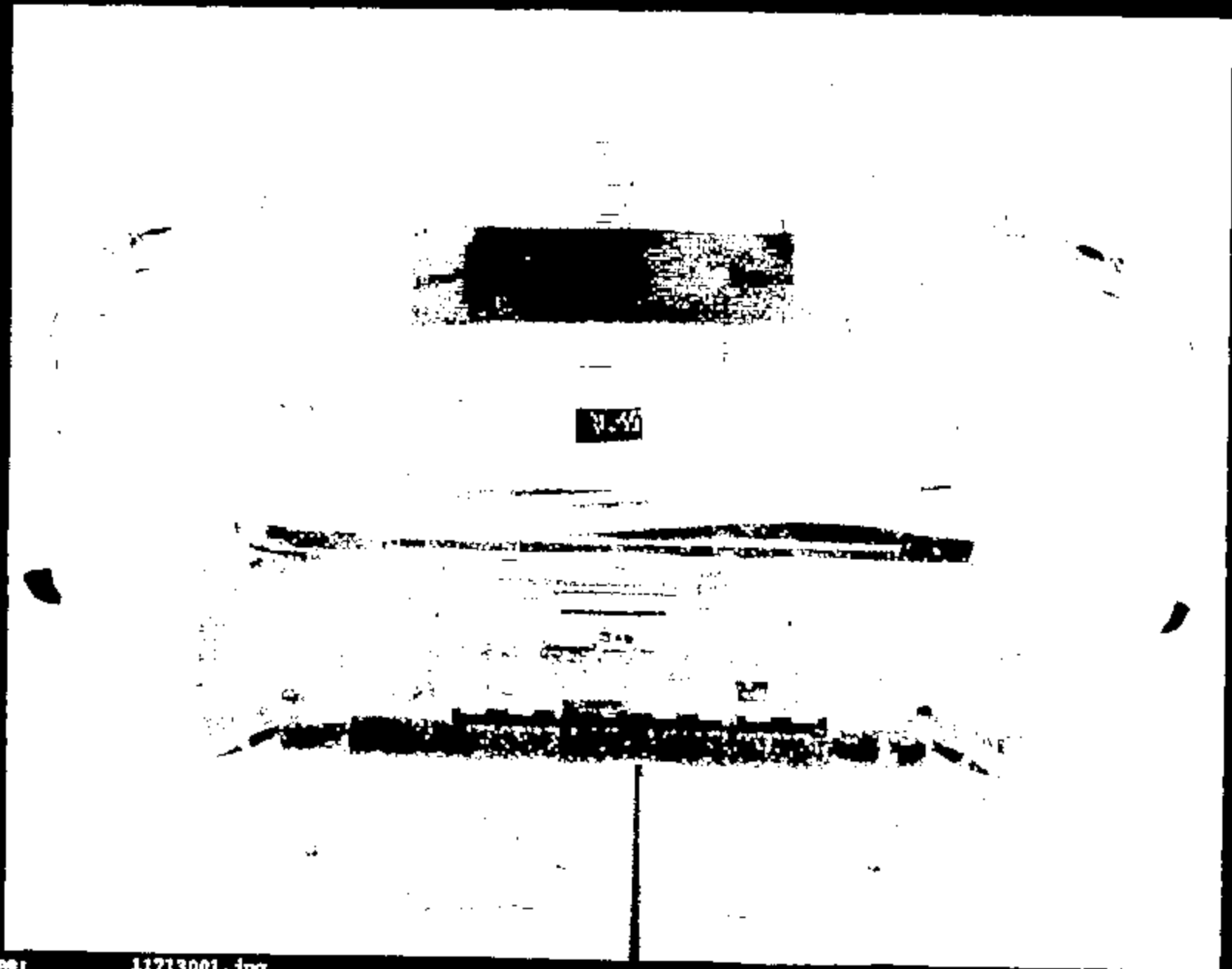


CRTS 0011713

FOOTVELL REDUCTION REQUEST 647
UNIT 646 POINTS 1-6 8-12
UNIT 647 S1-S6 POINT 12 POINT



CRTS 0011713



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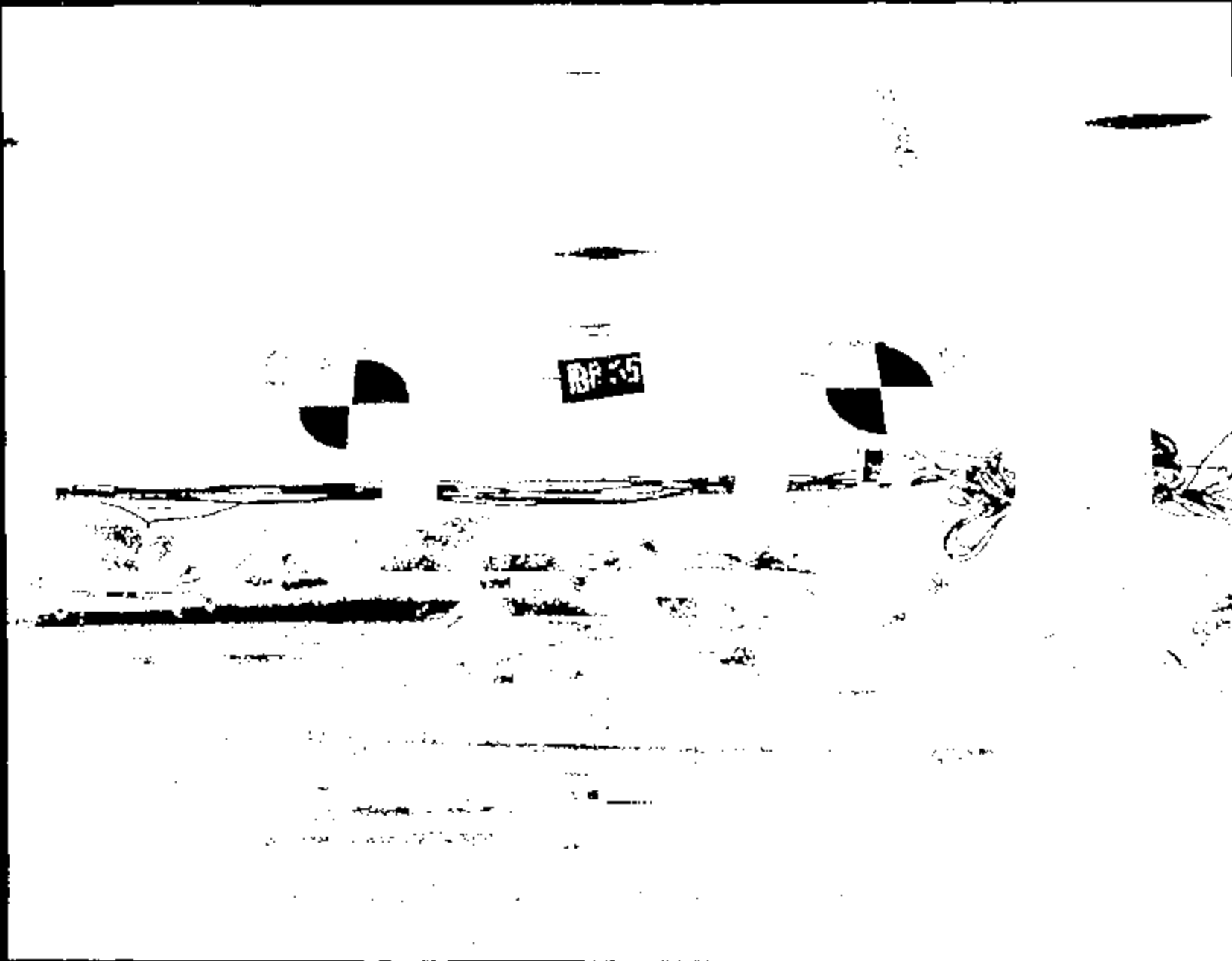
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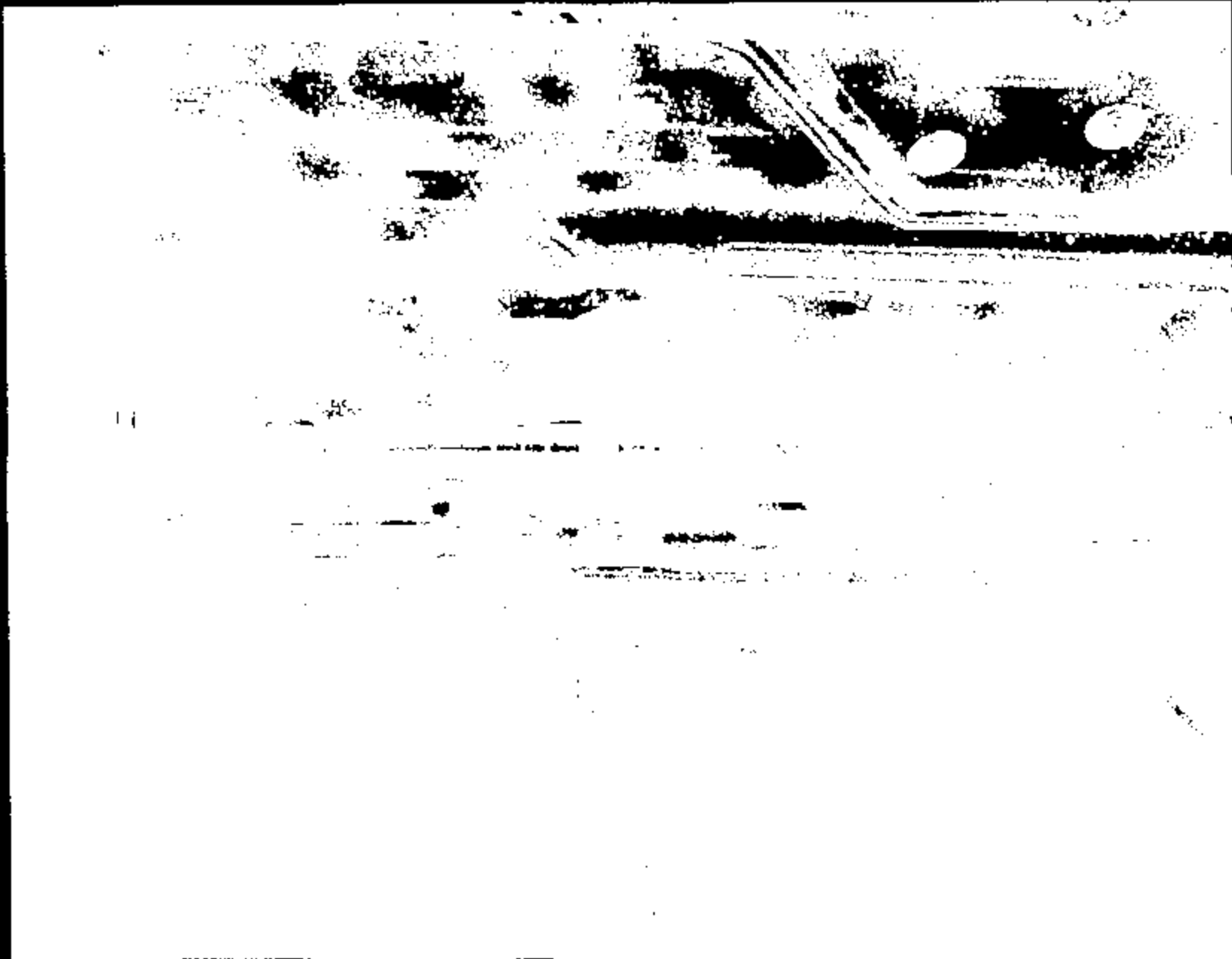
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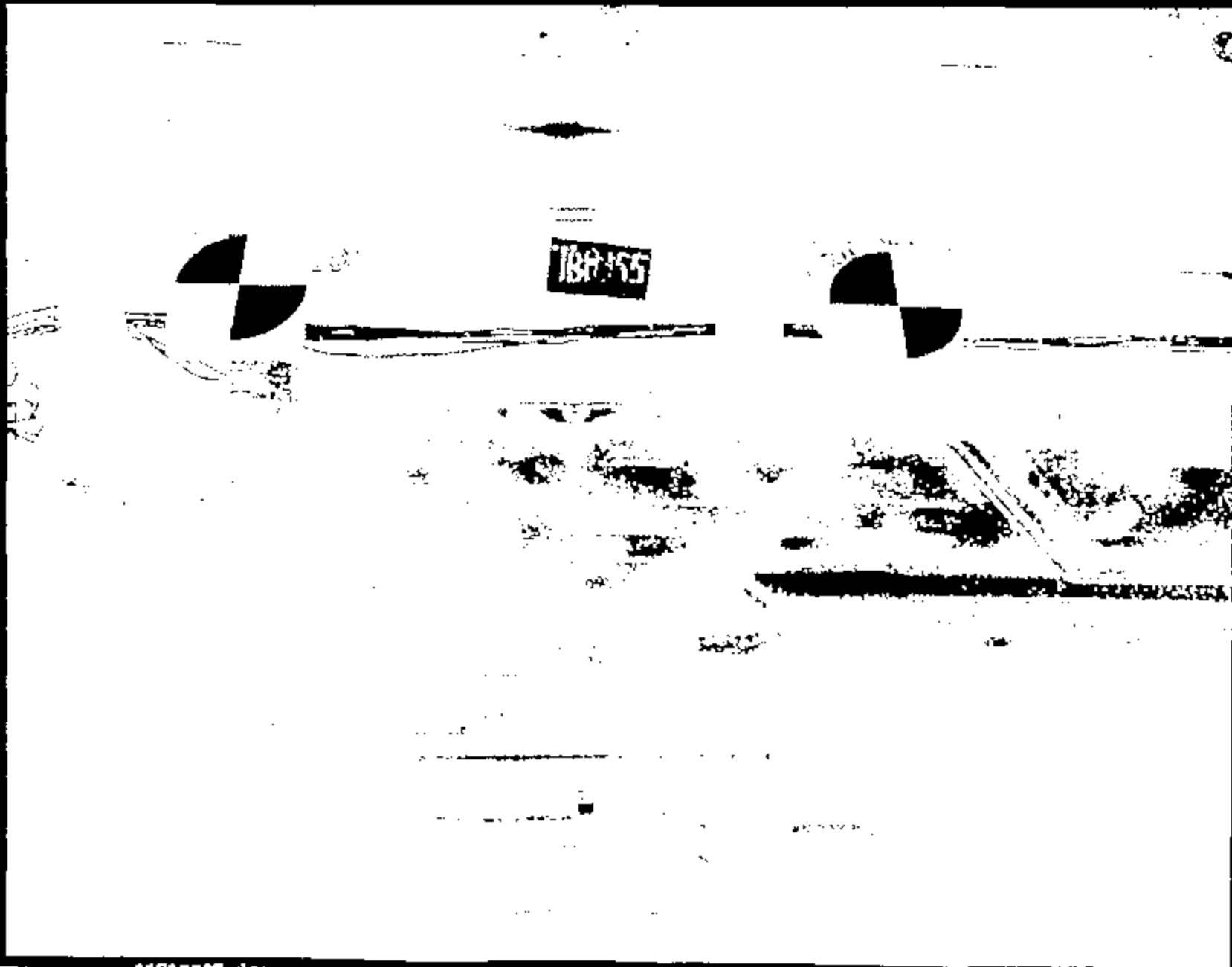
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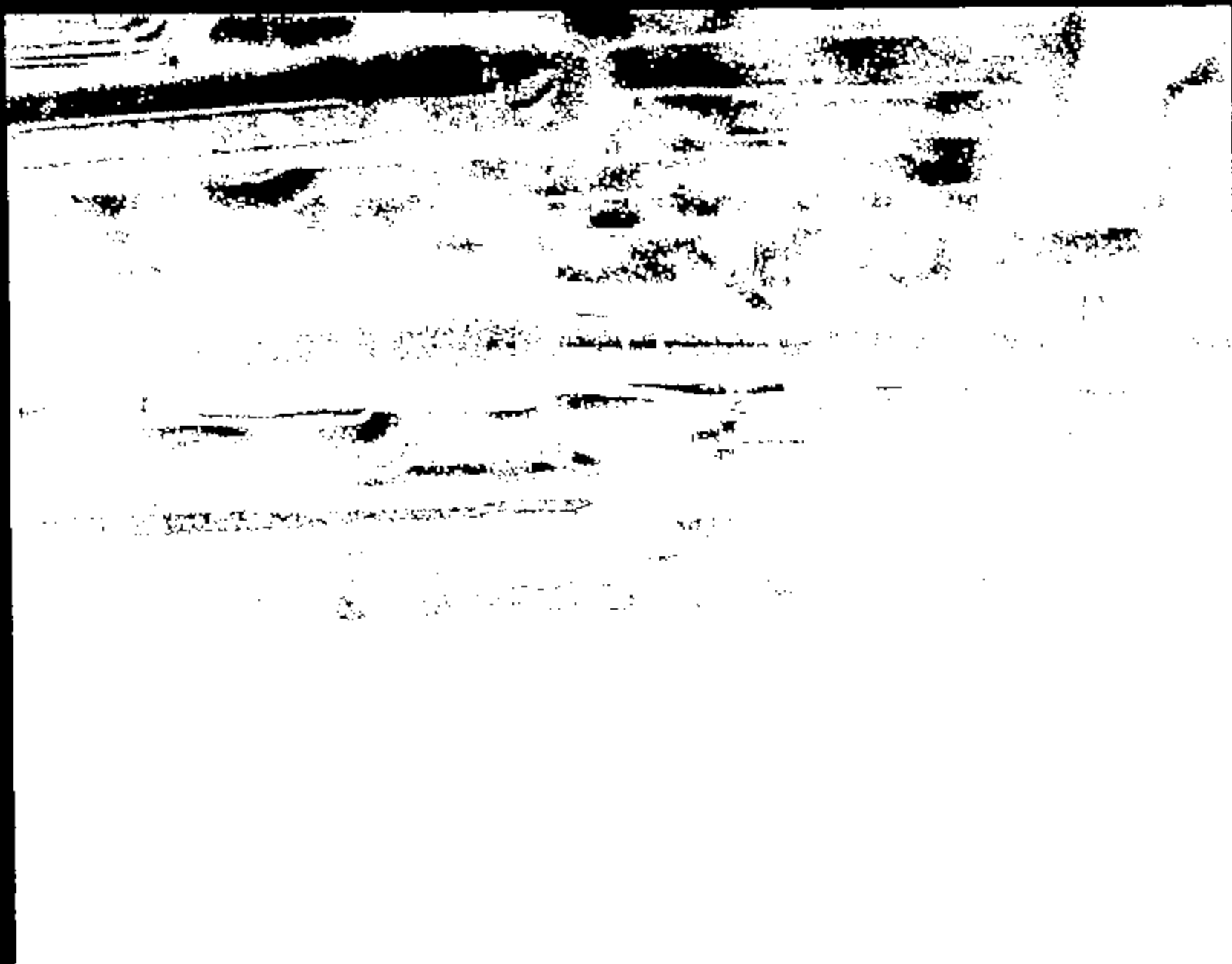
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CRTS 0011713



Image 1

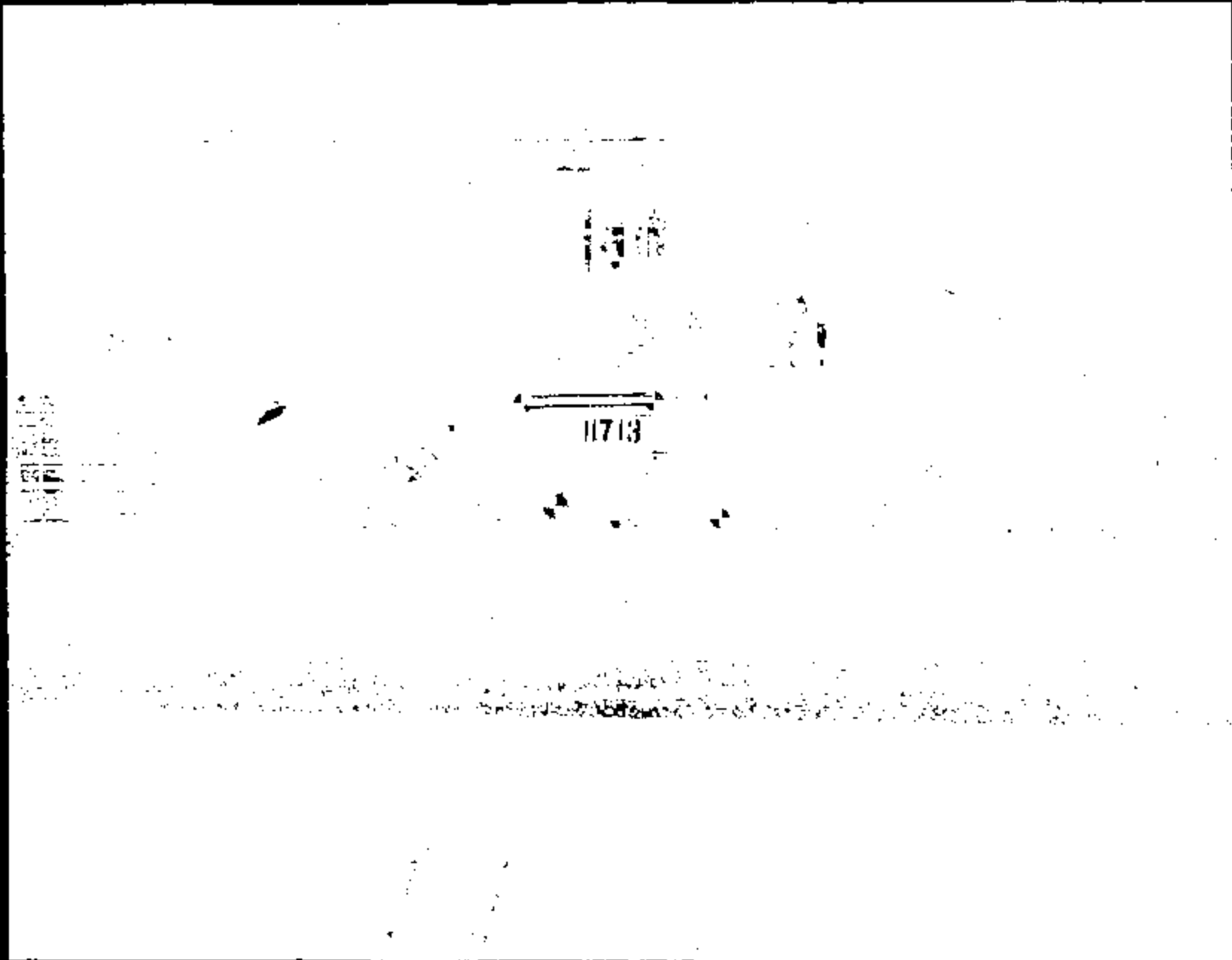
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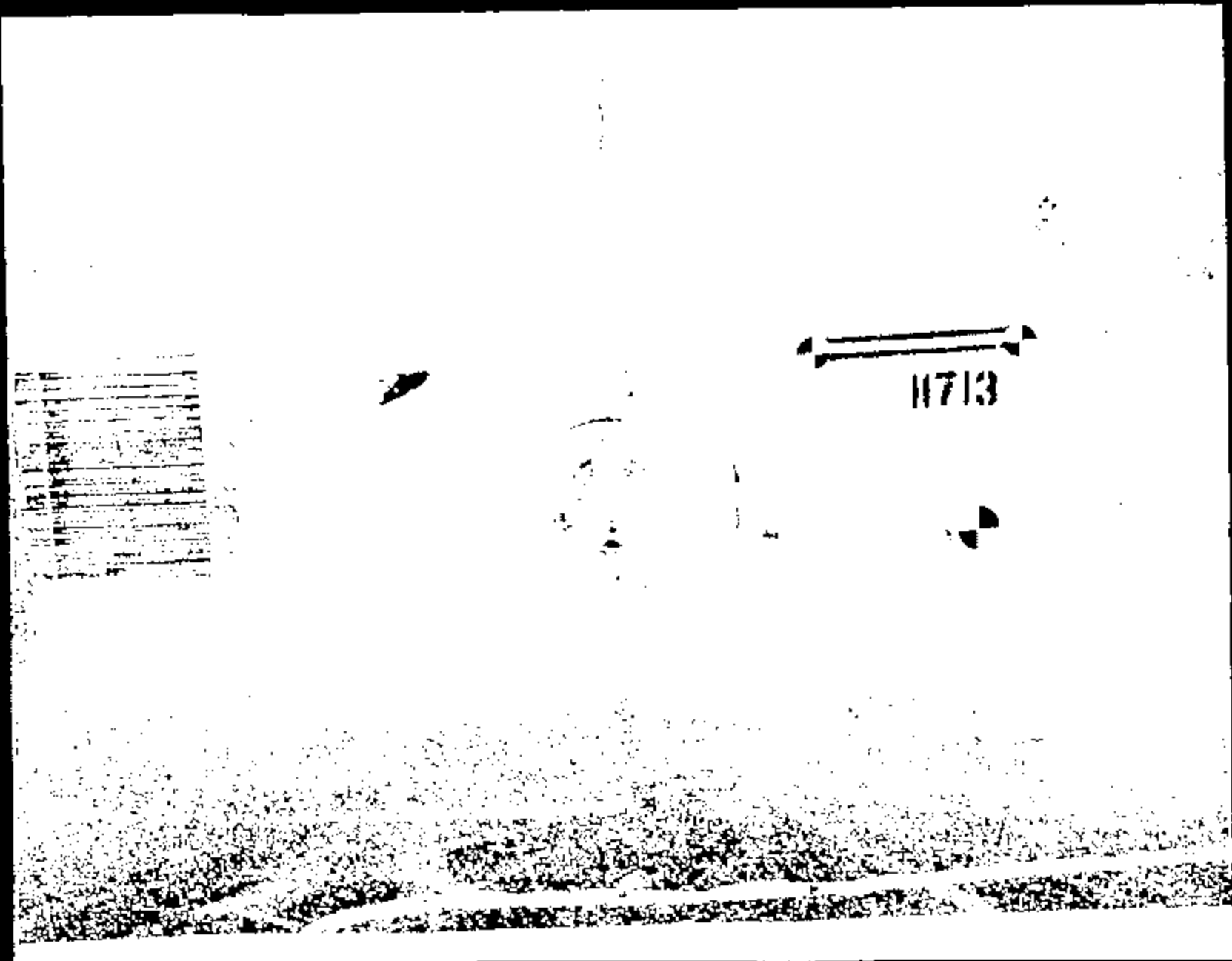
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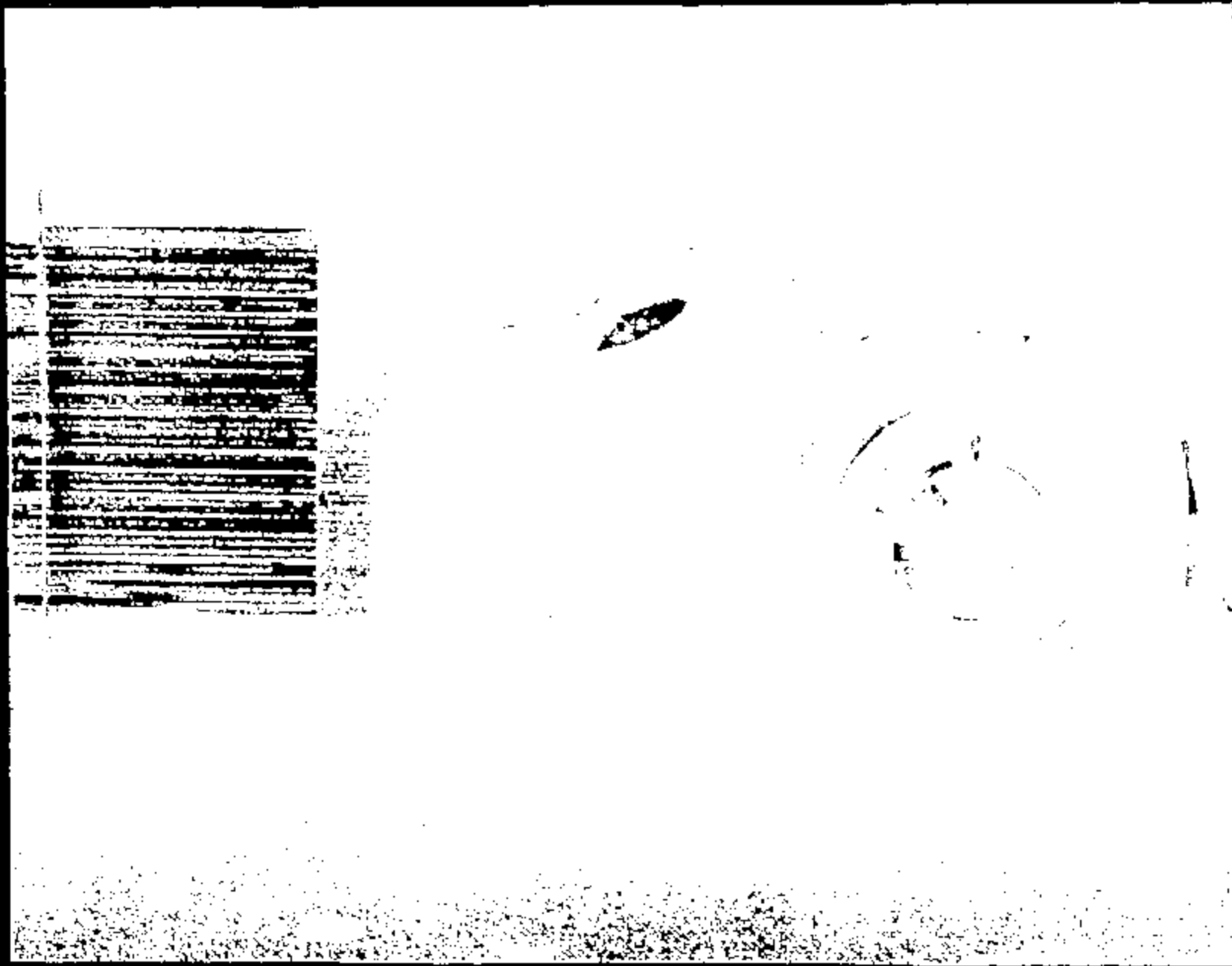
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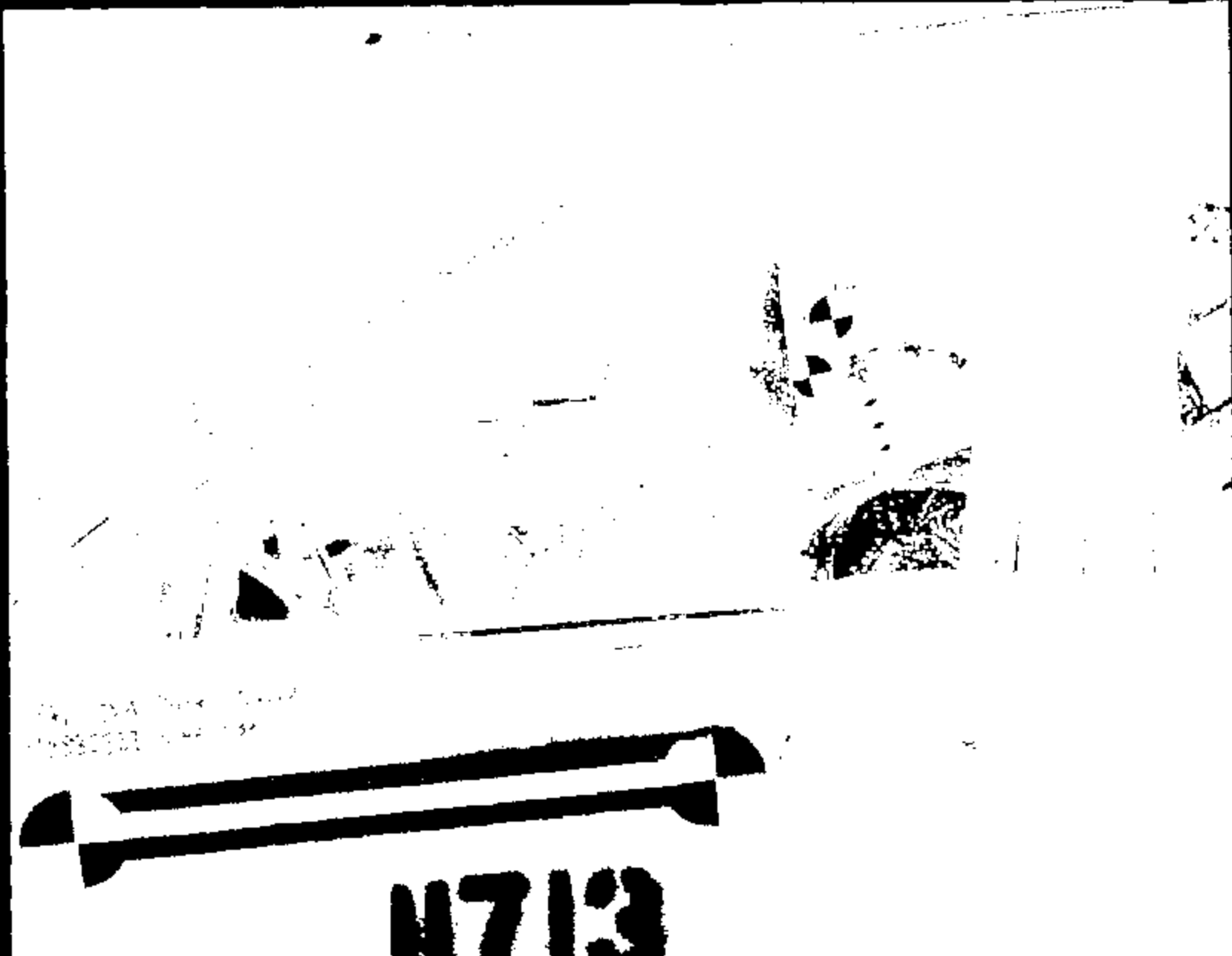
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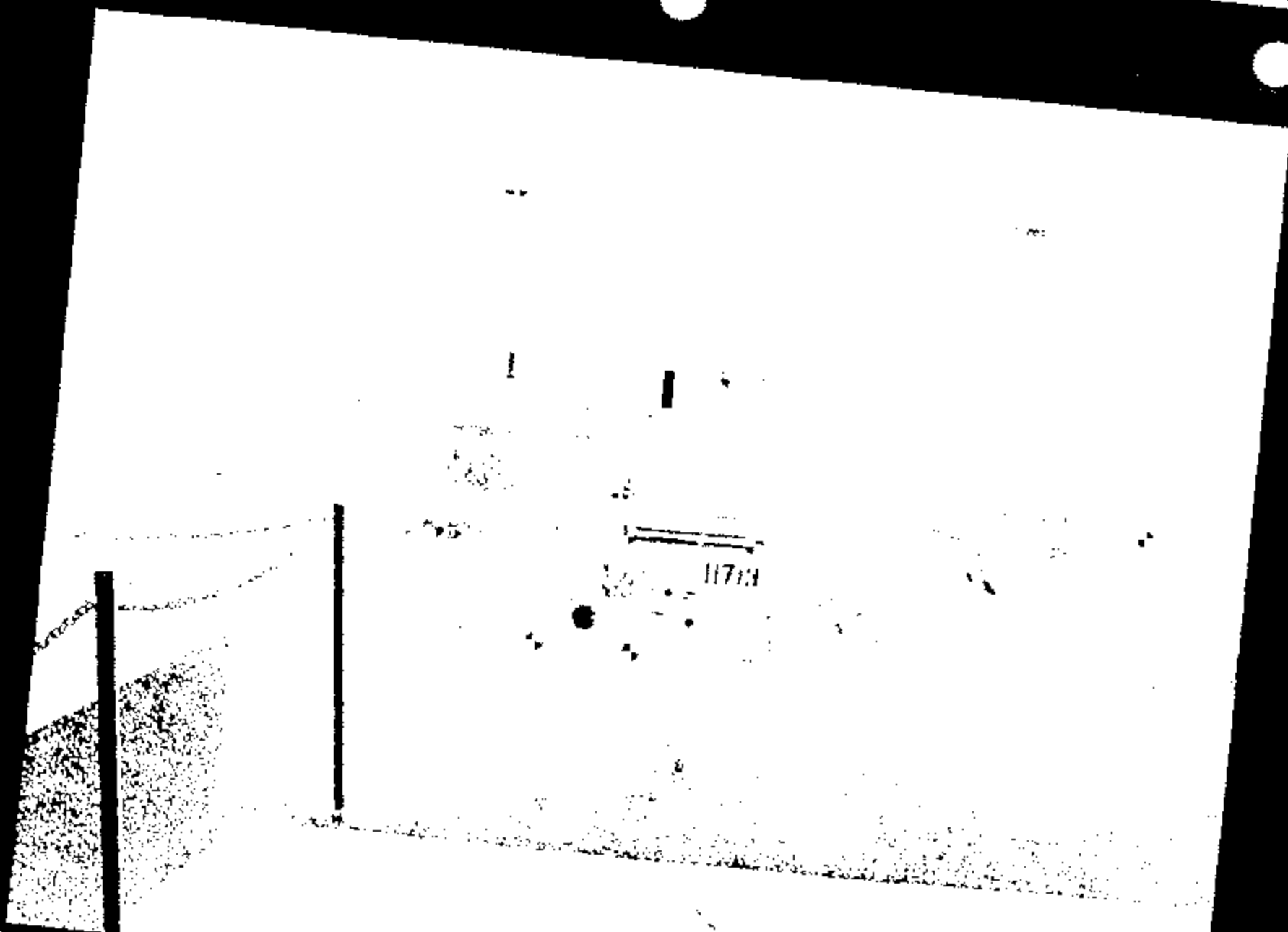


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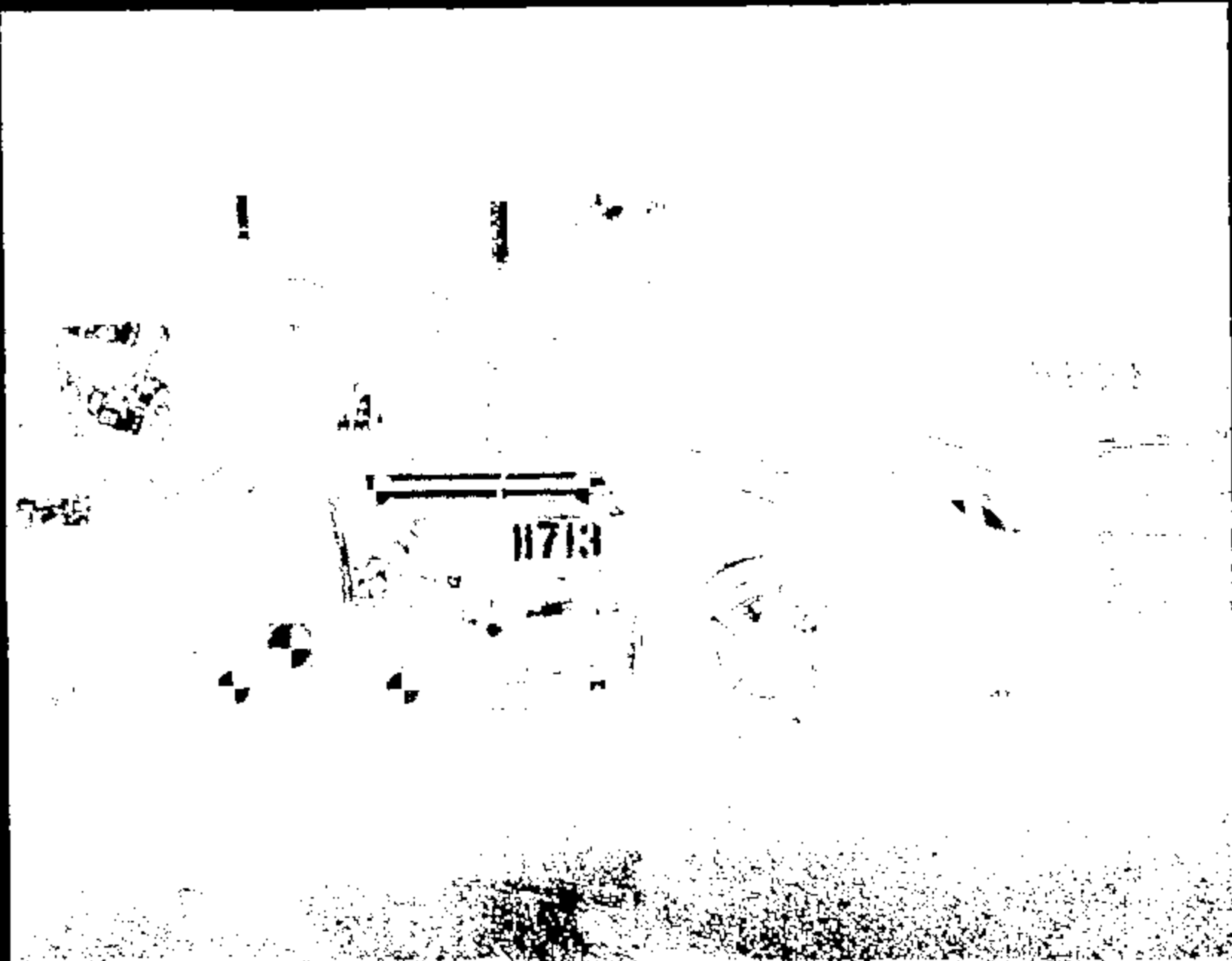
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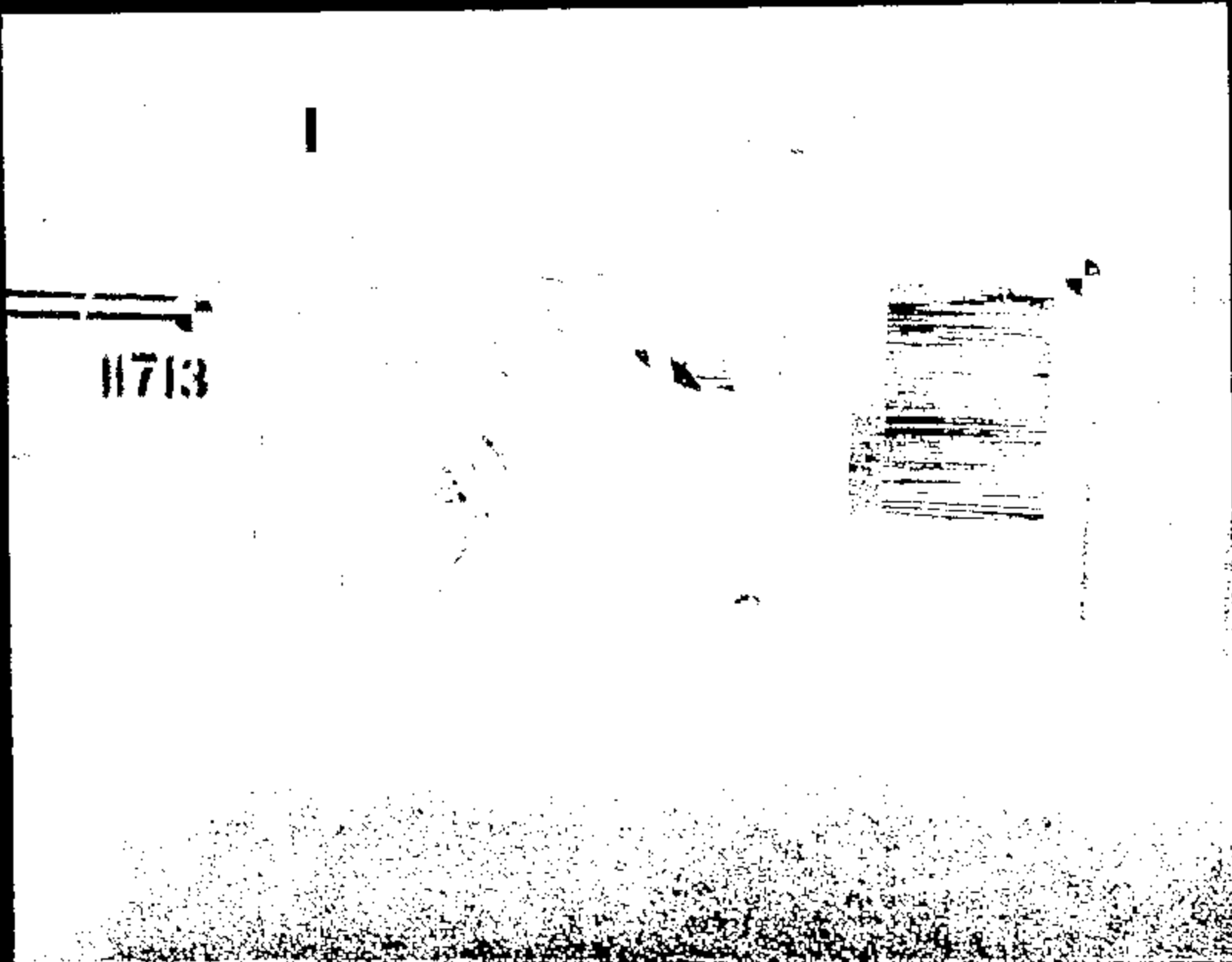


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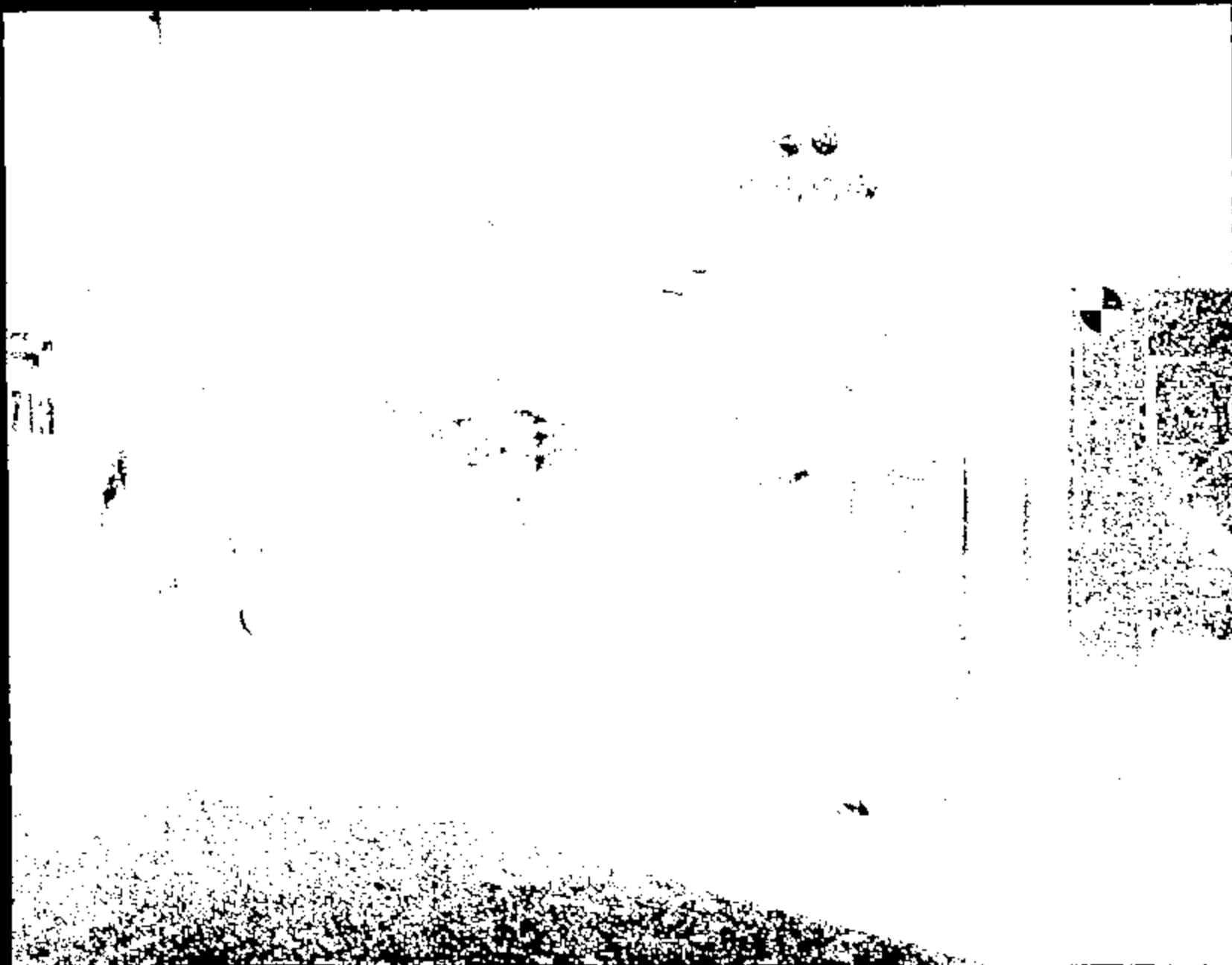


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11713

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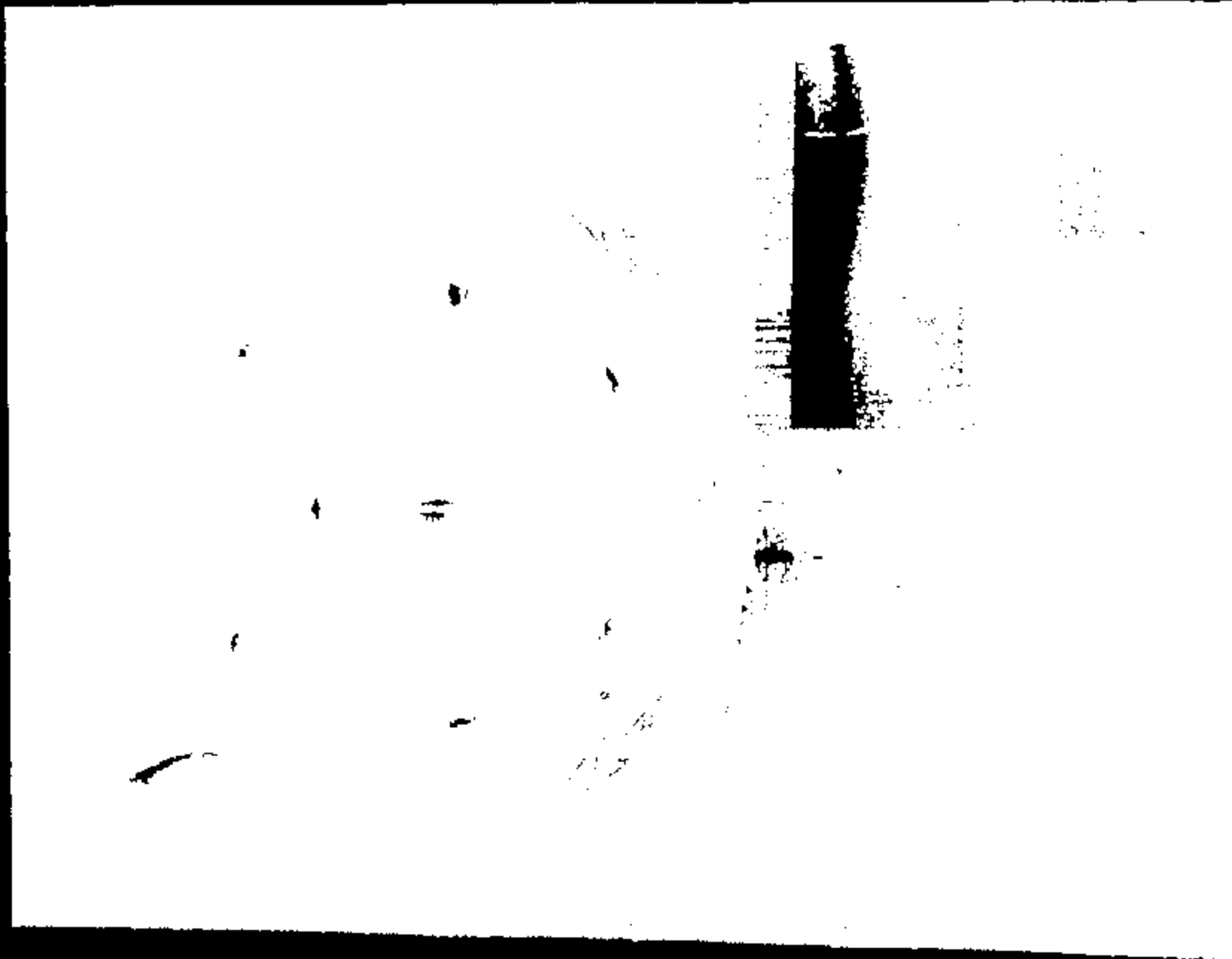
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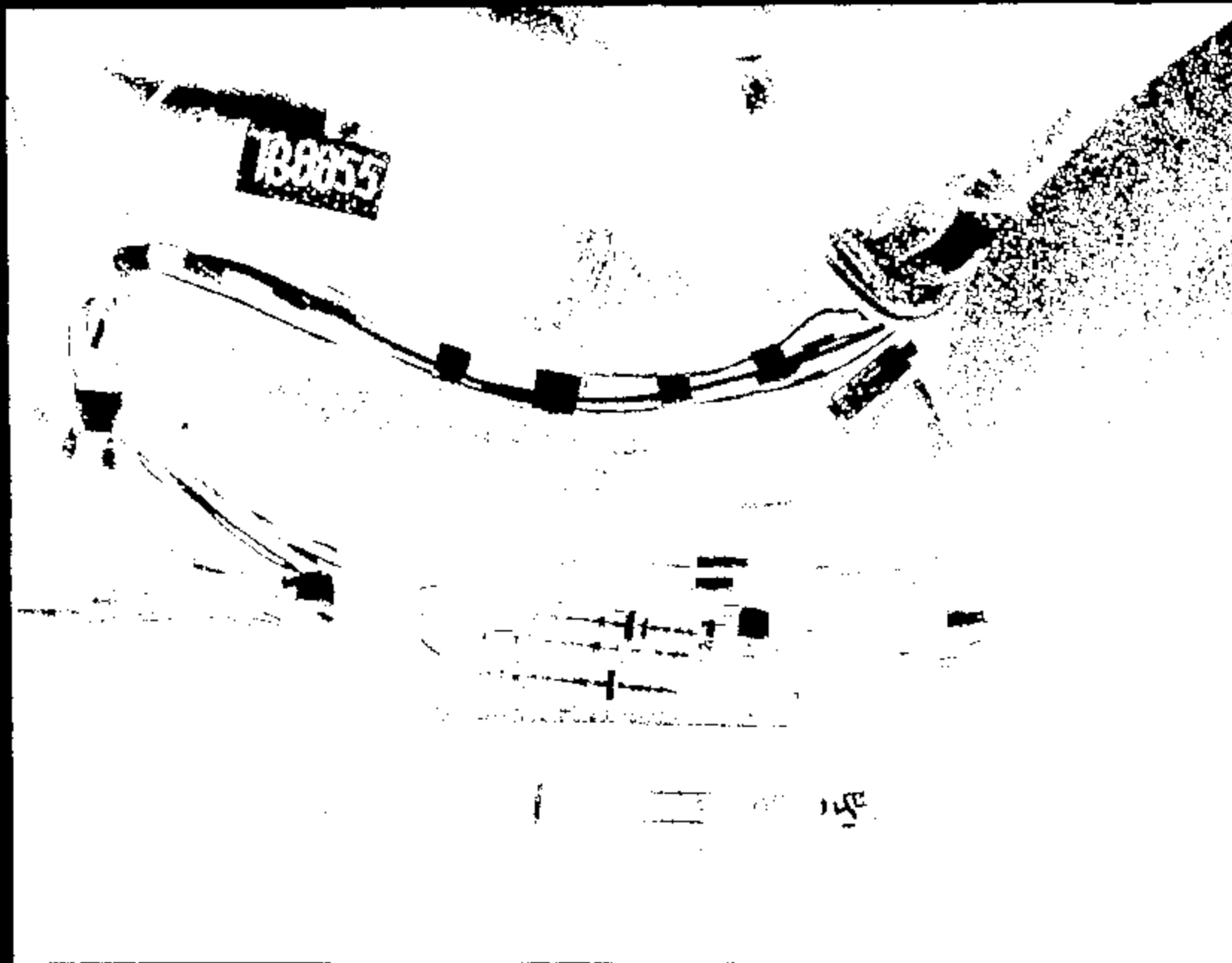
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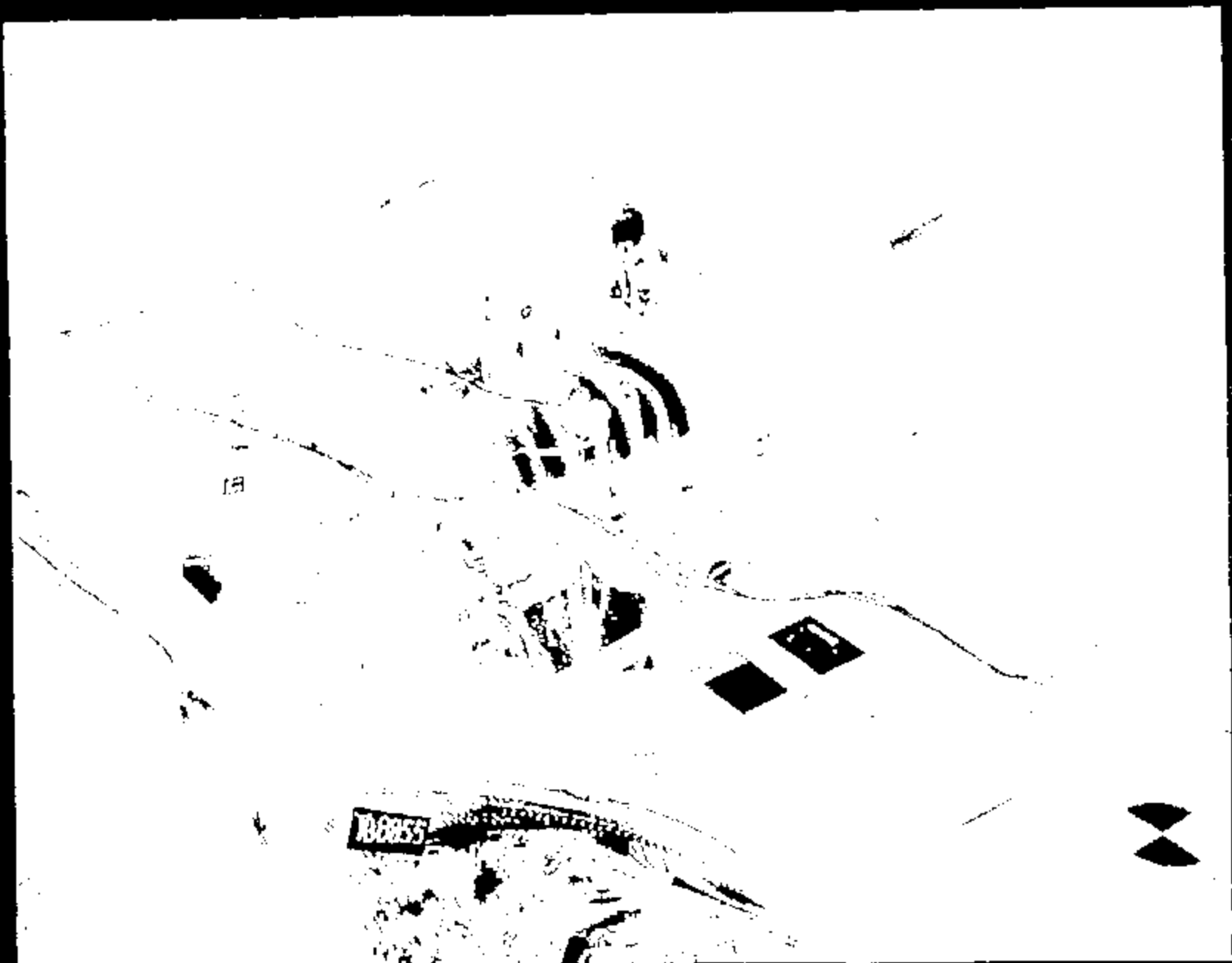
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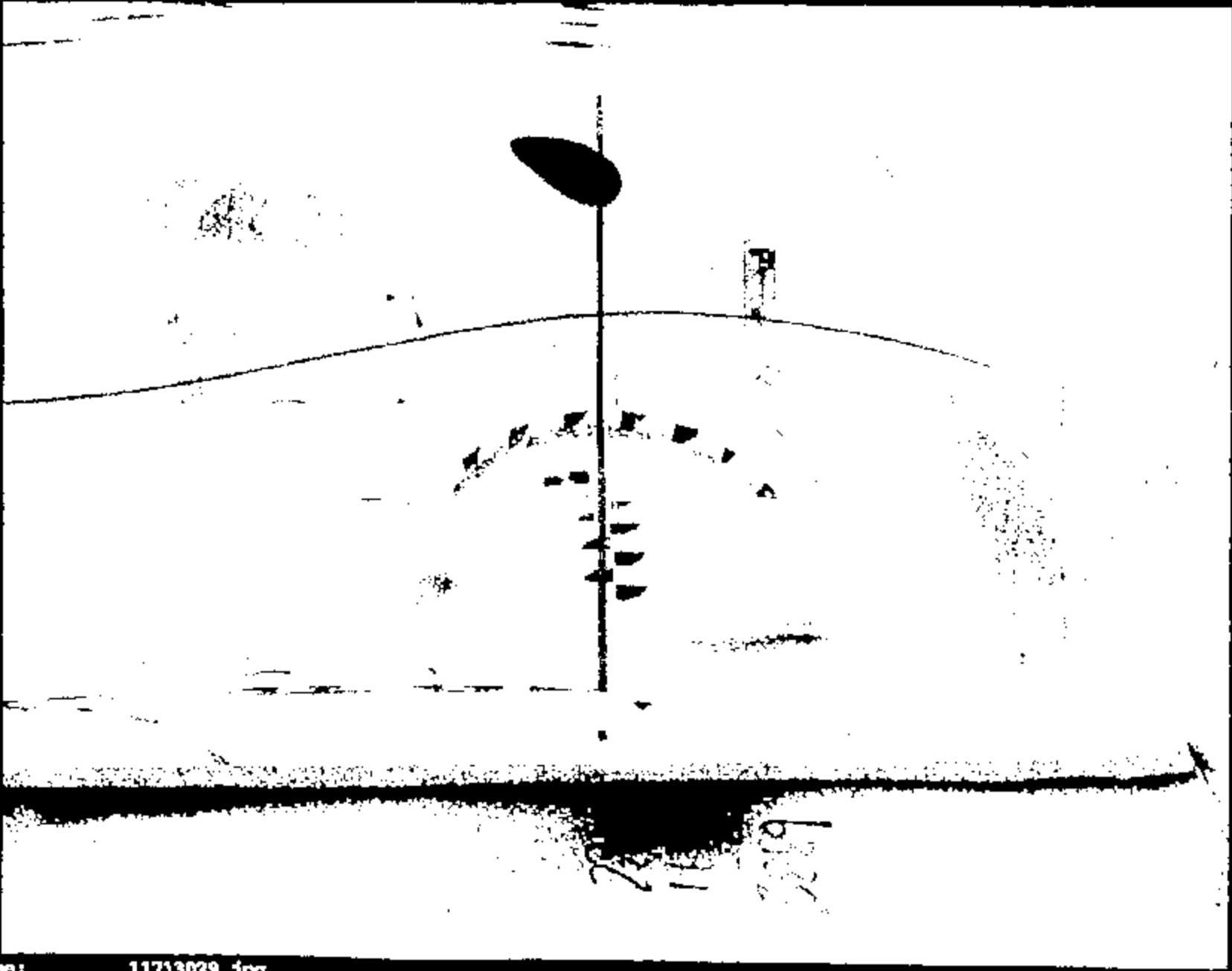


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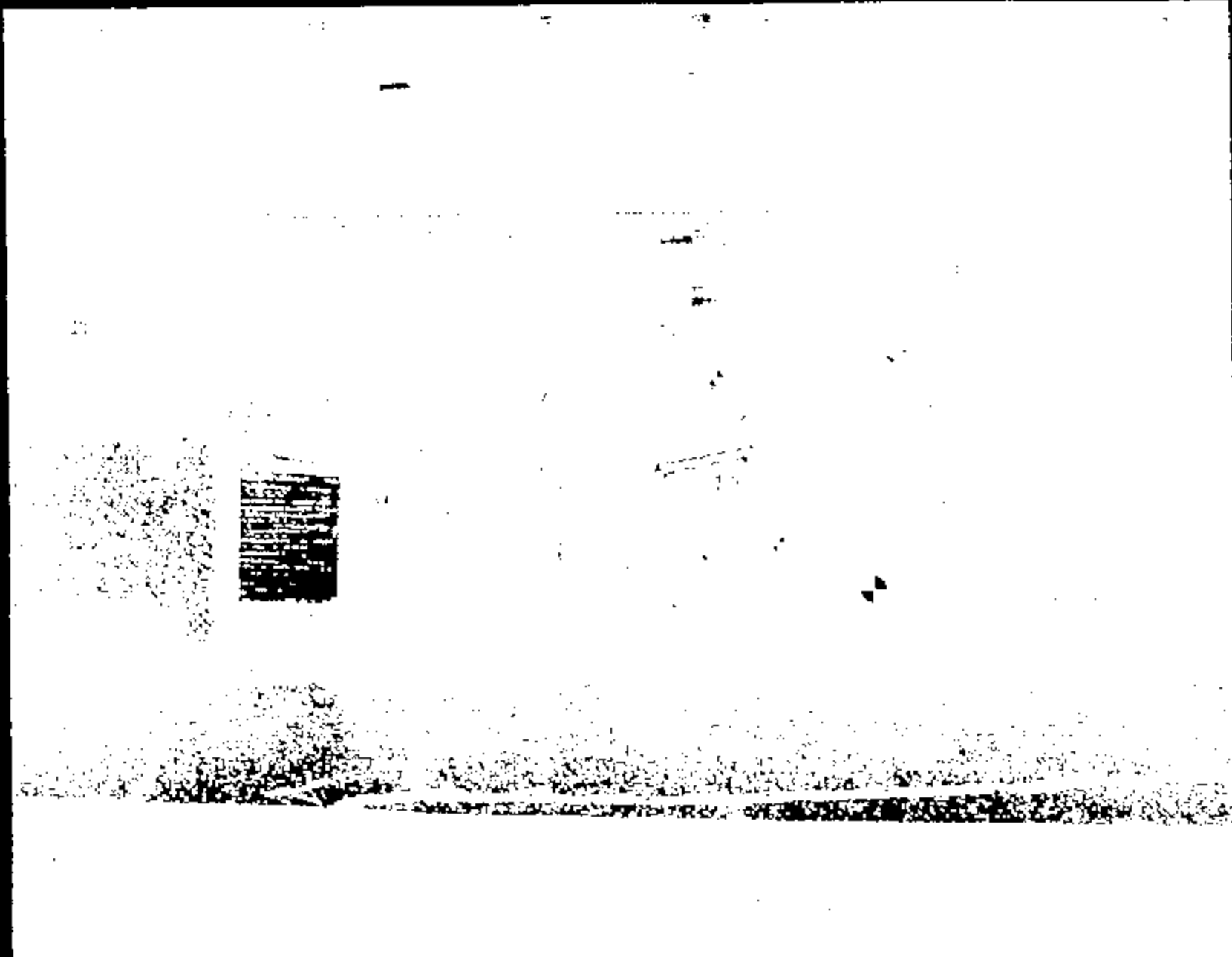
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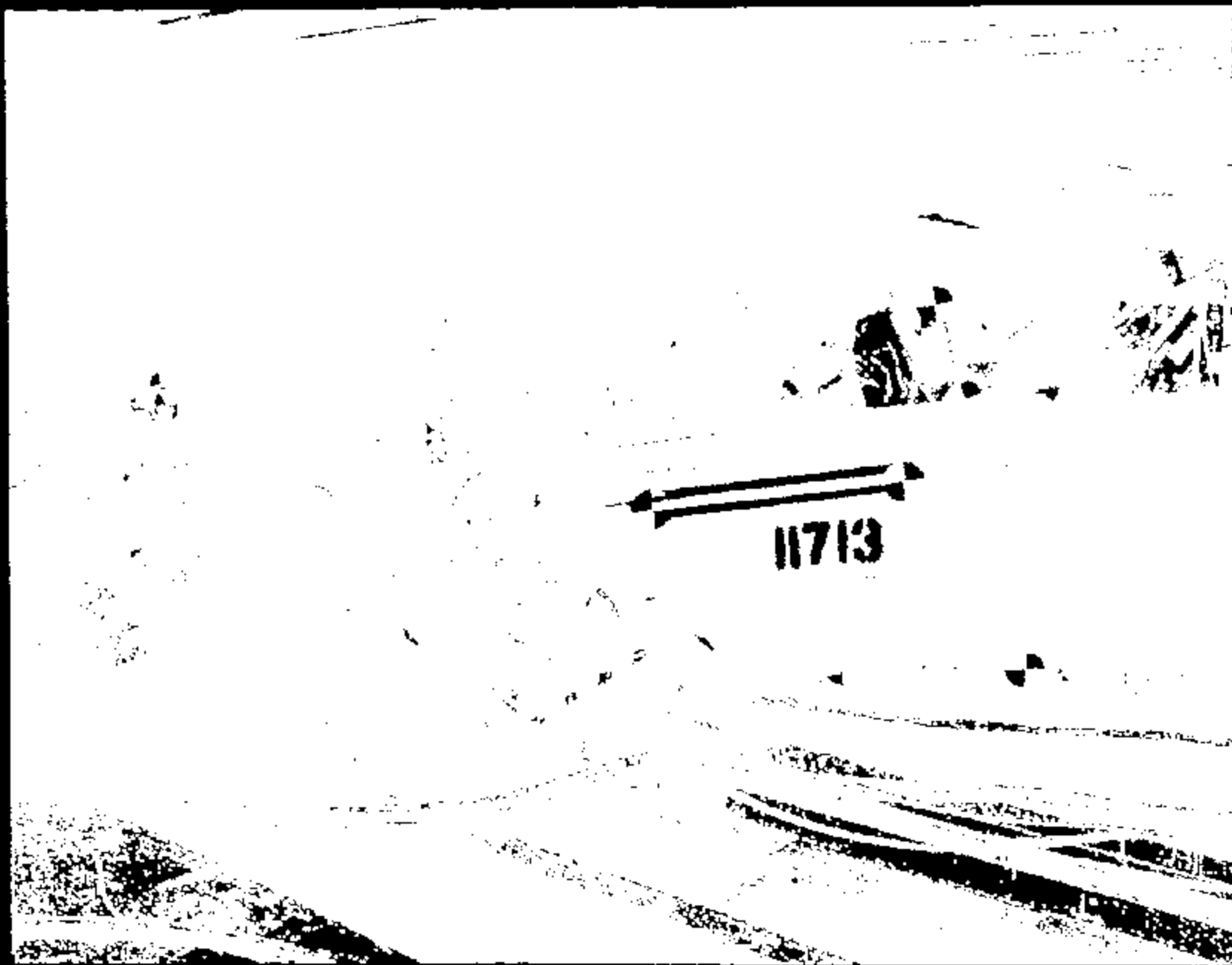
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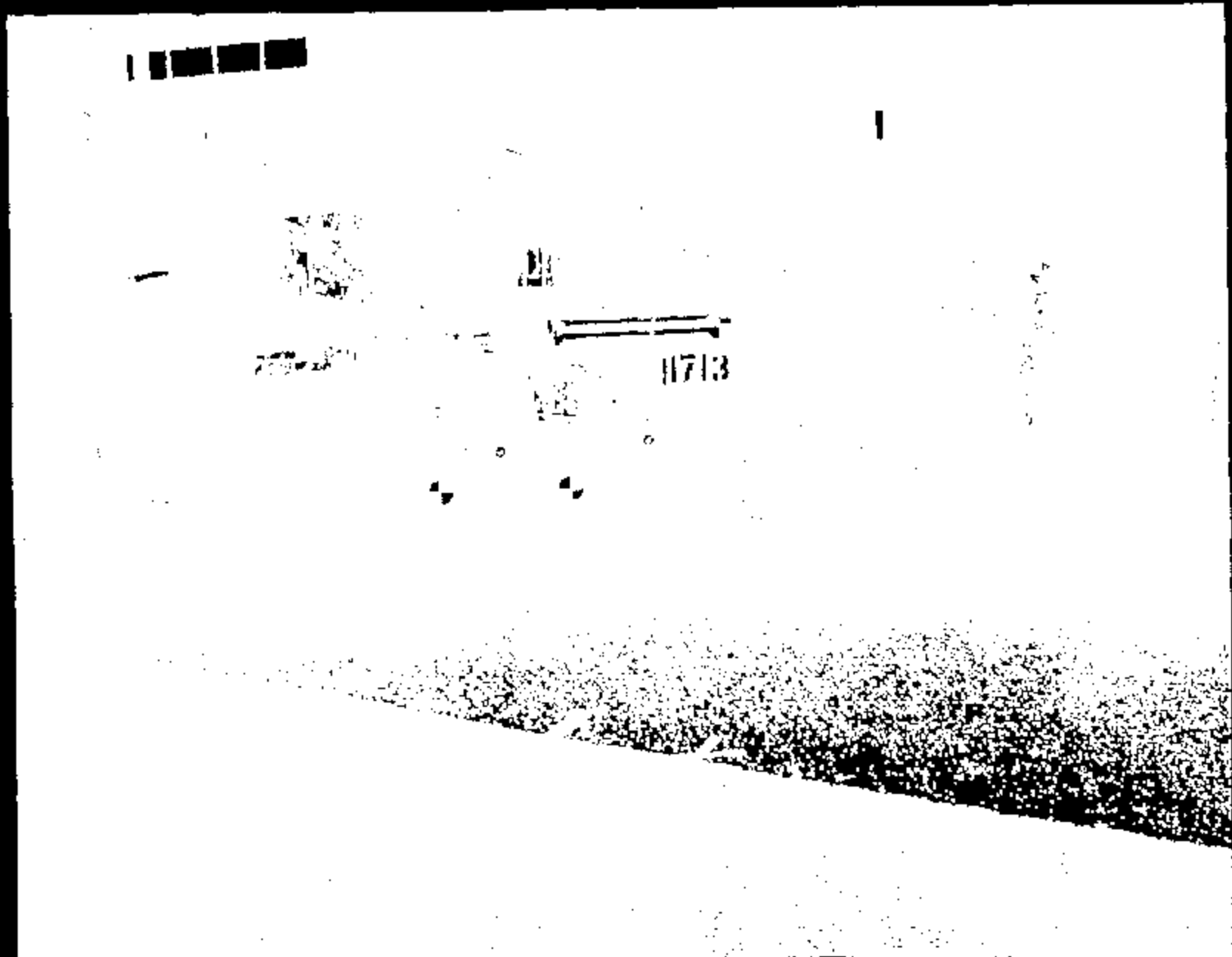
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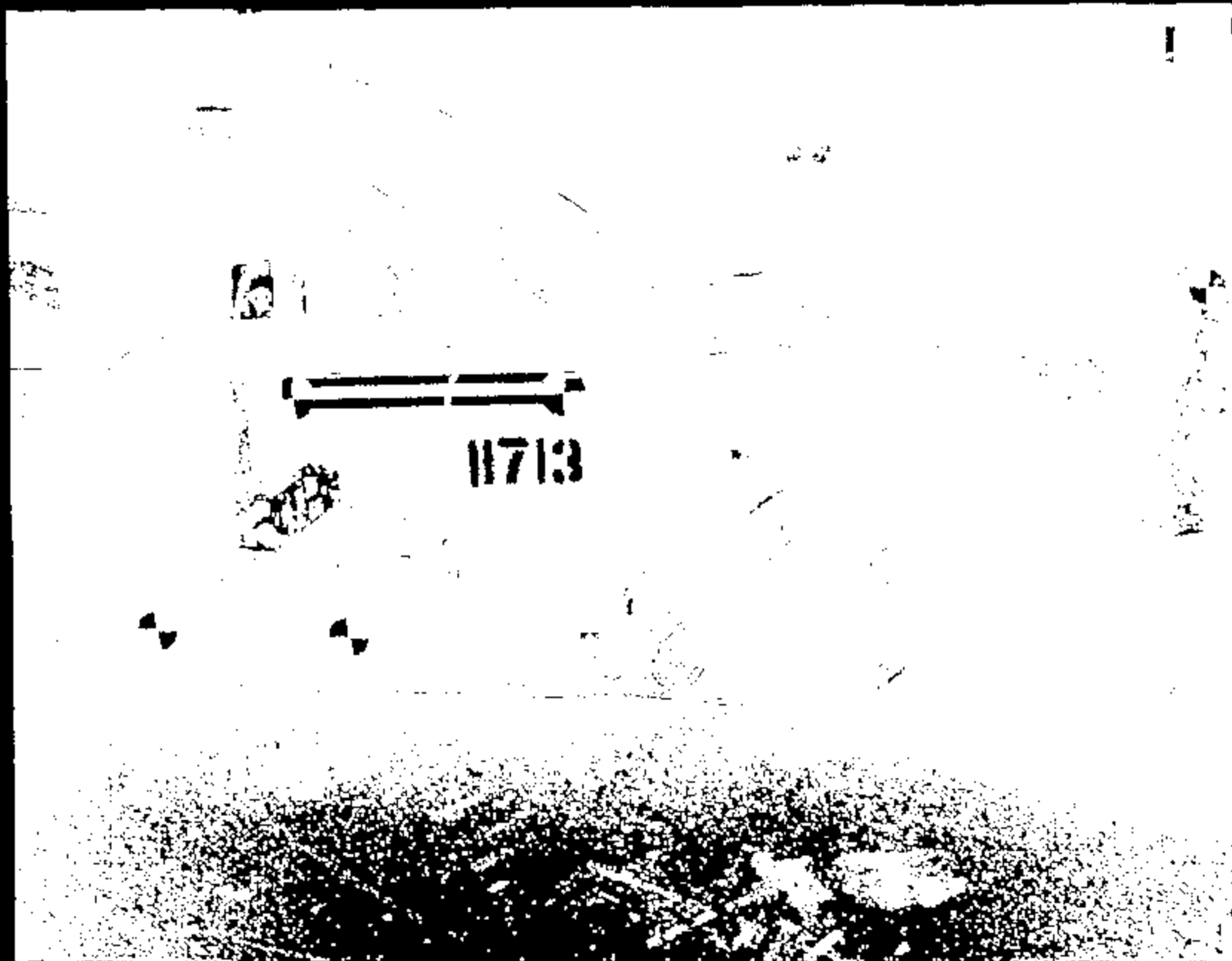
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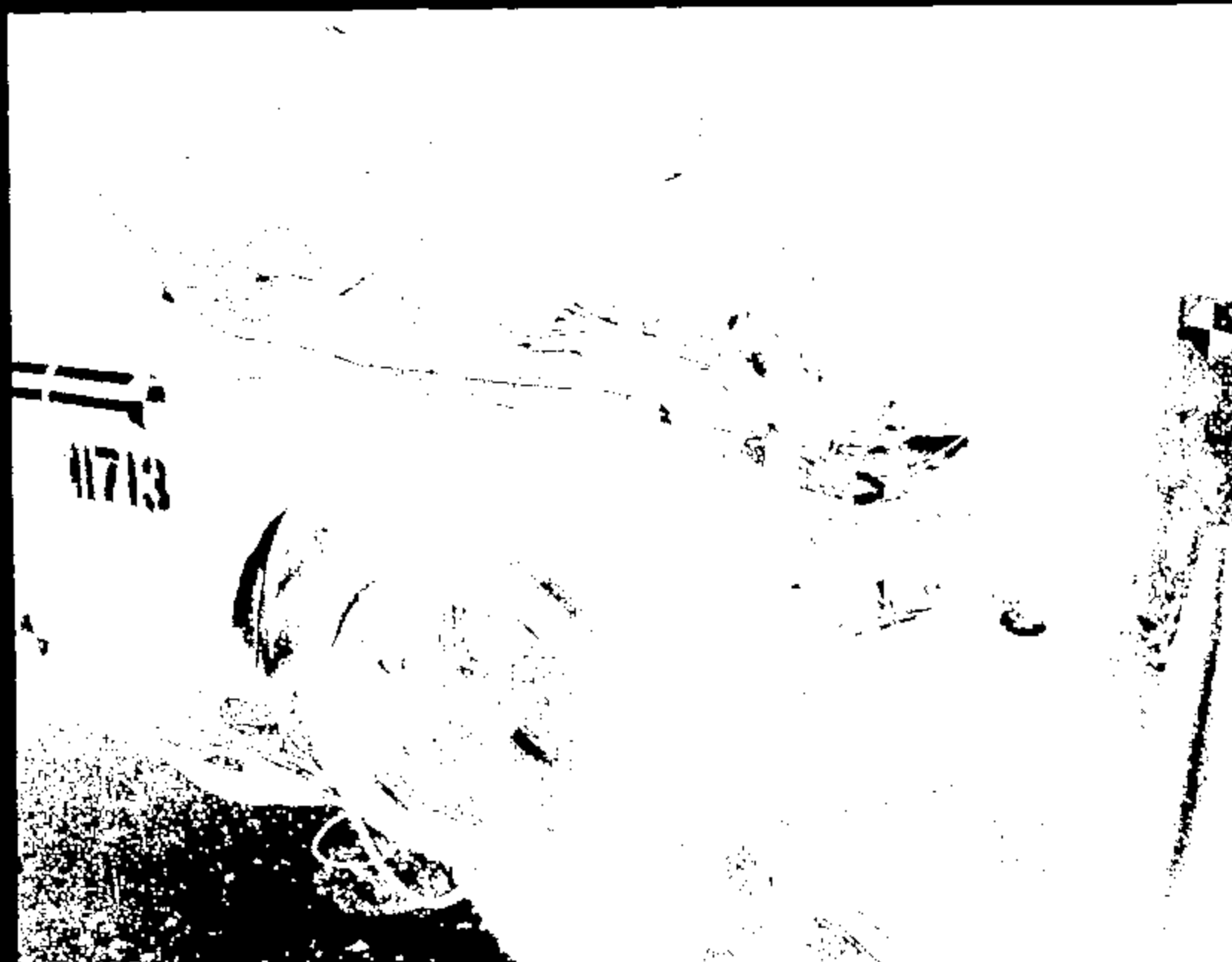
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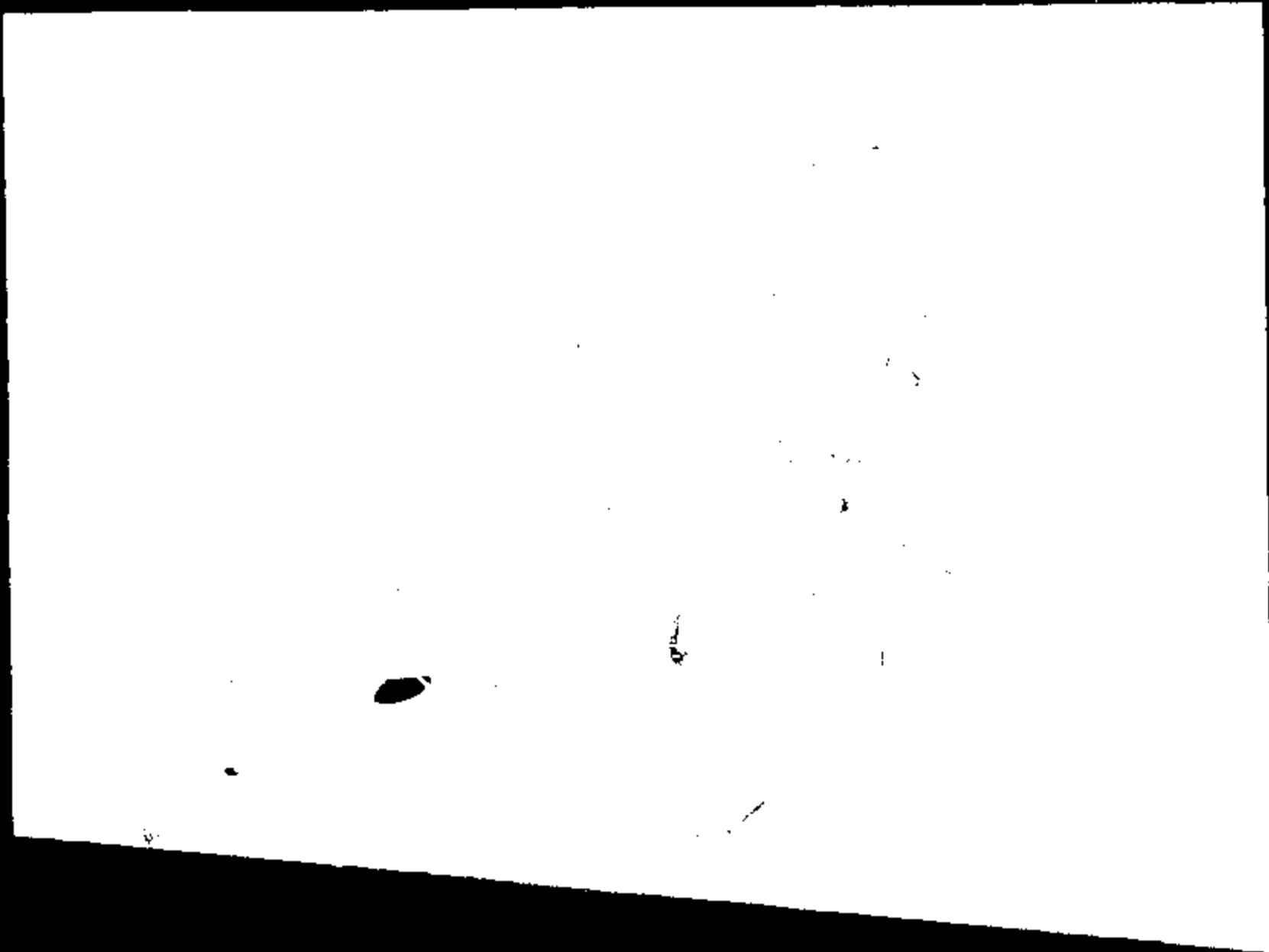
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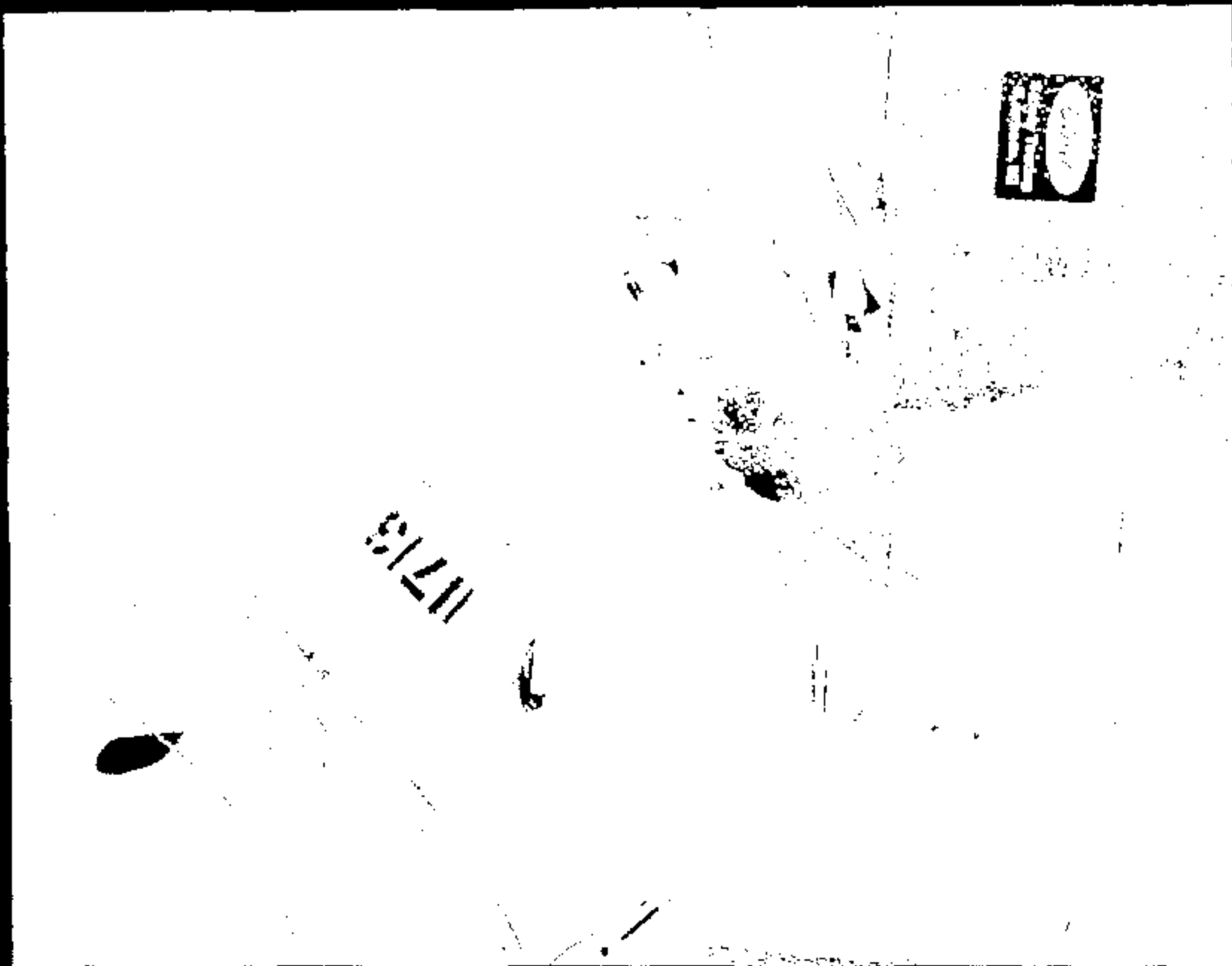
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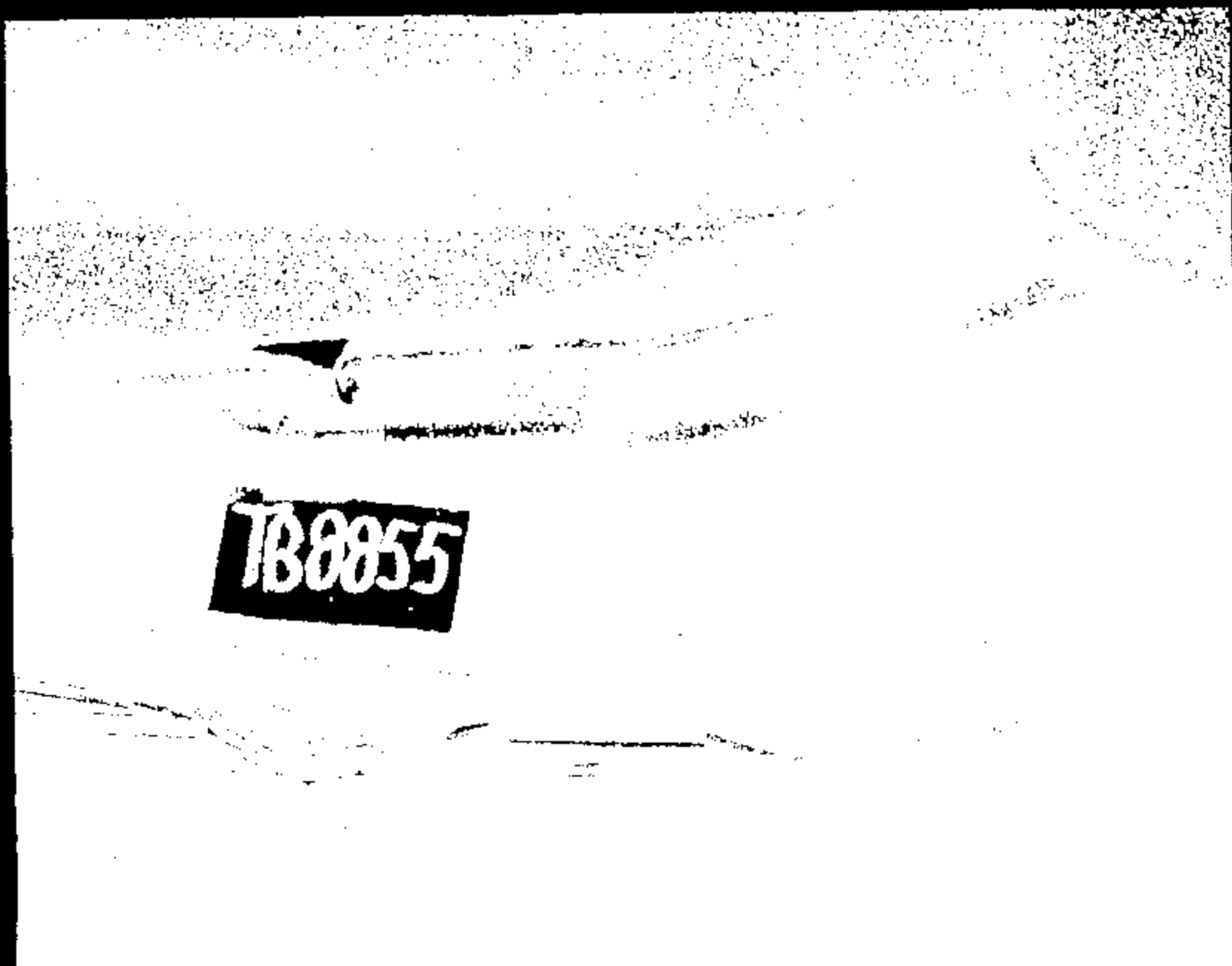
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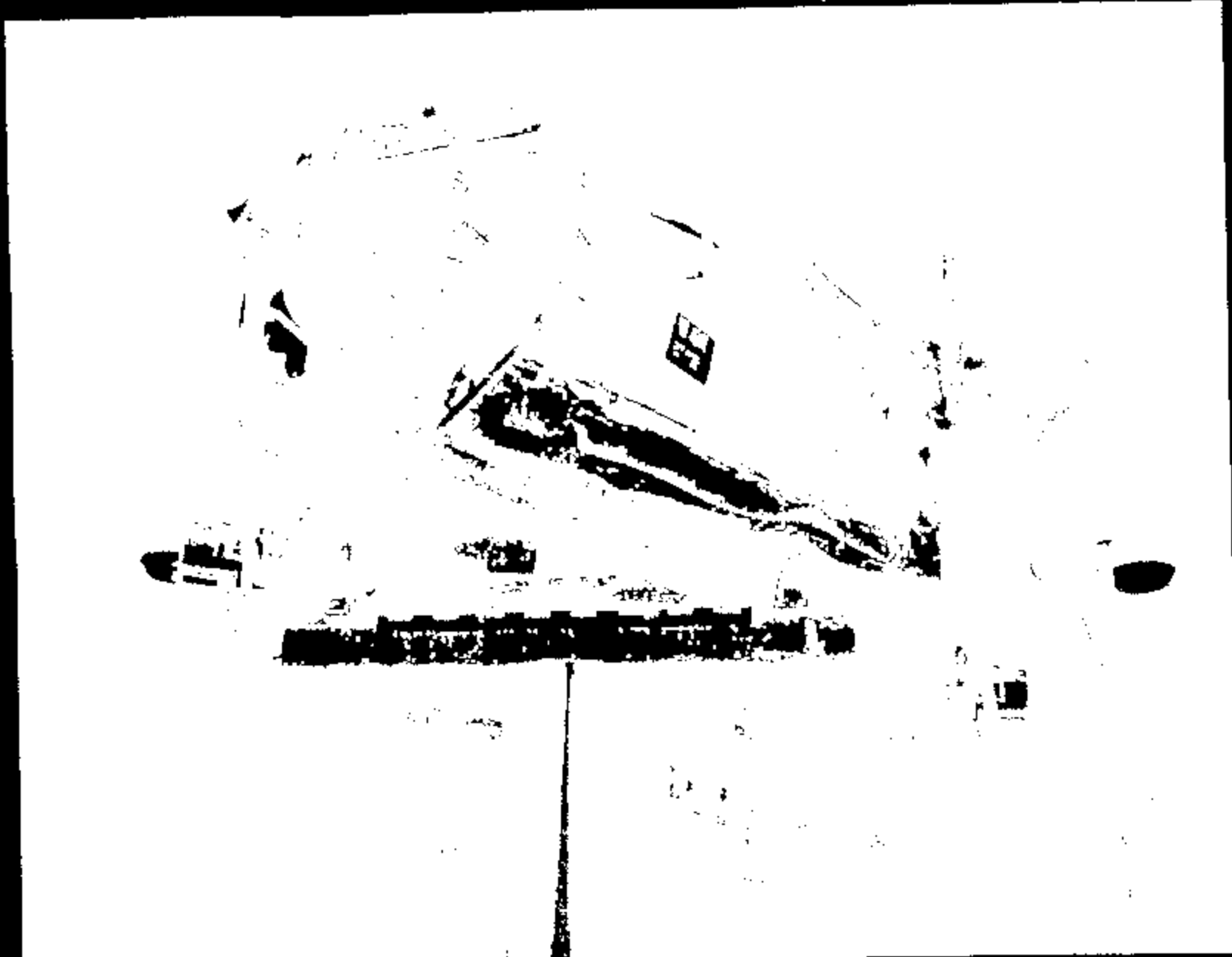
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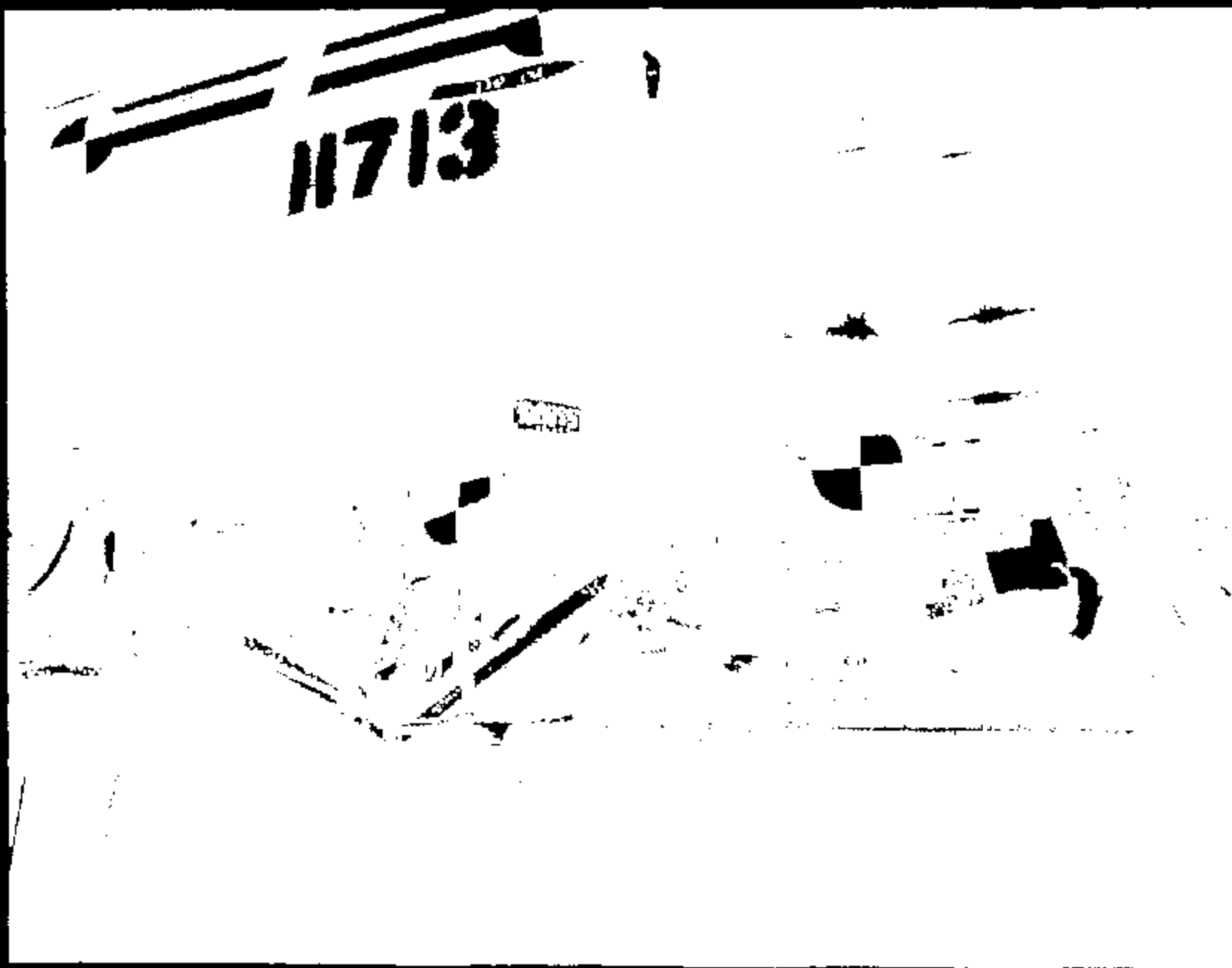
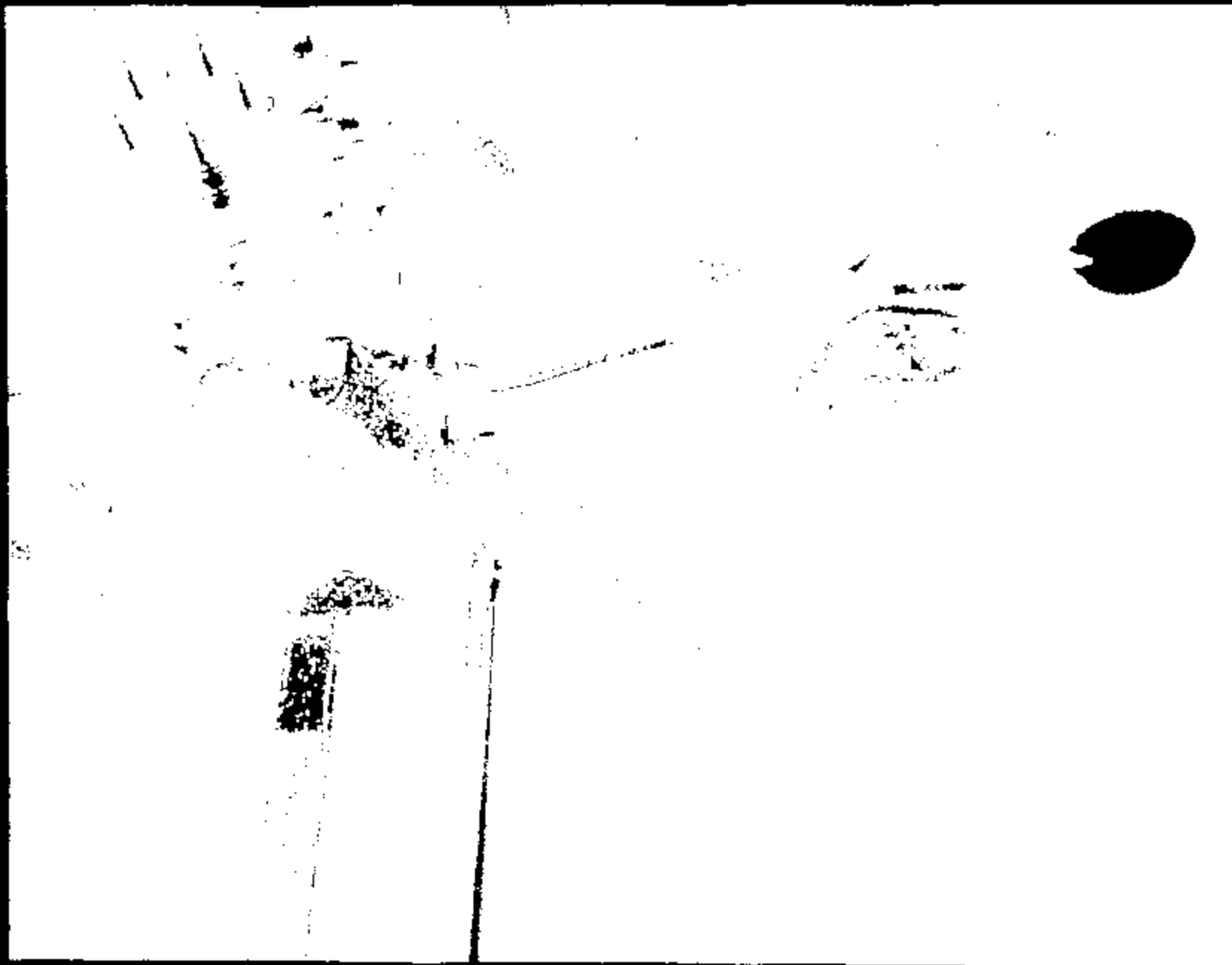


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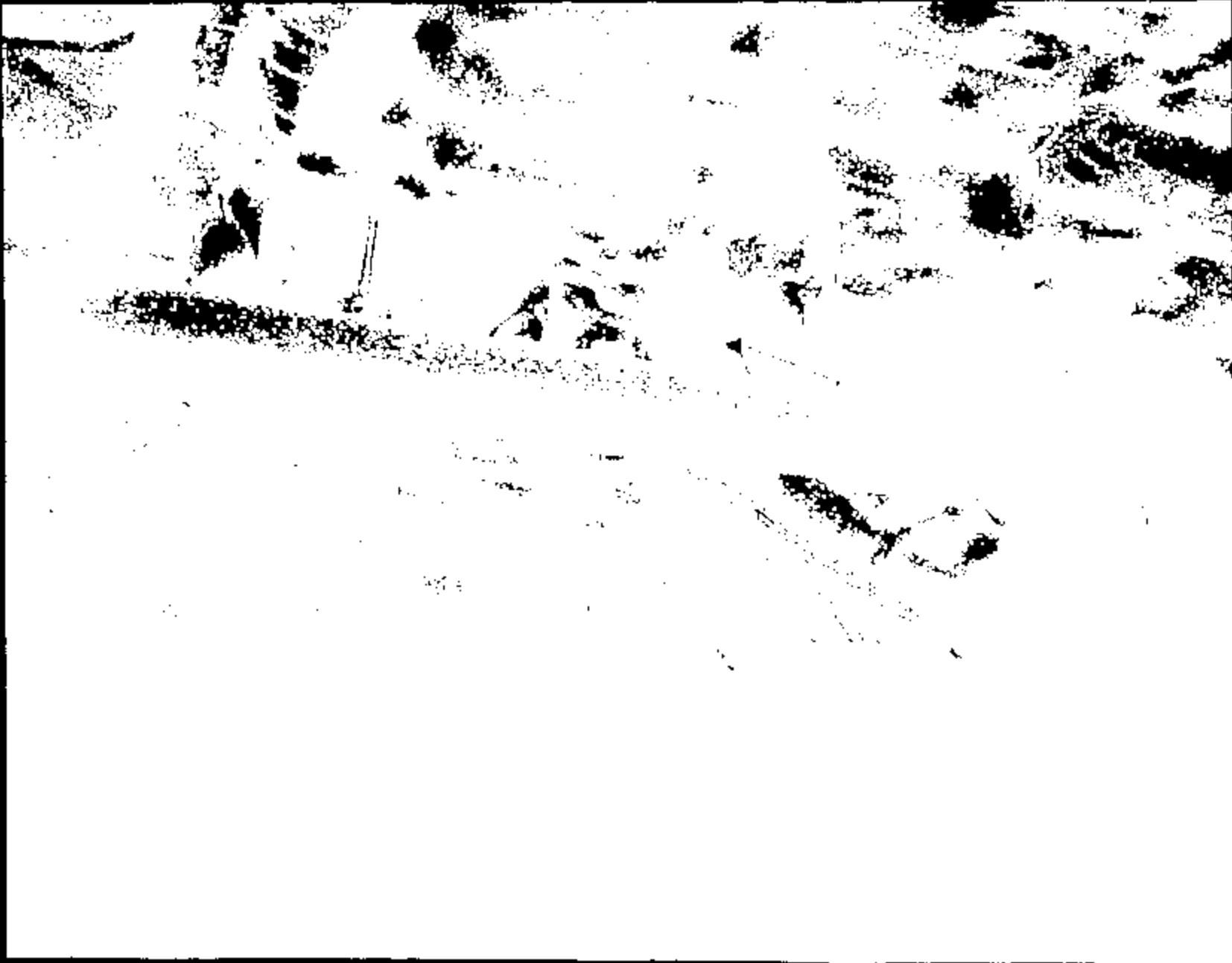
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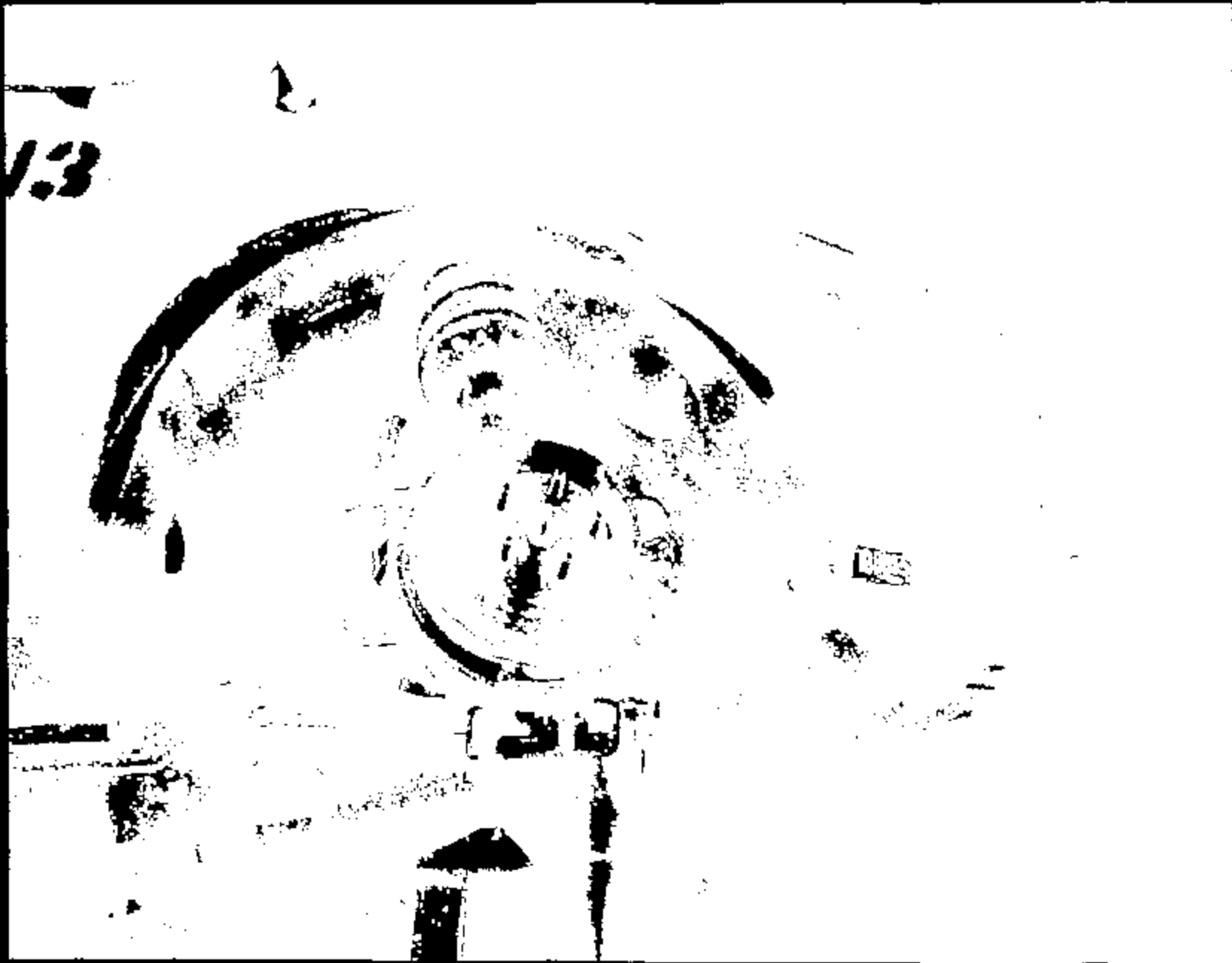
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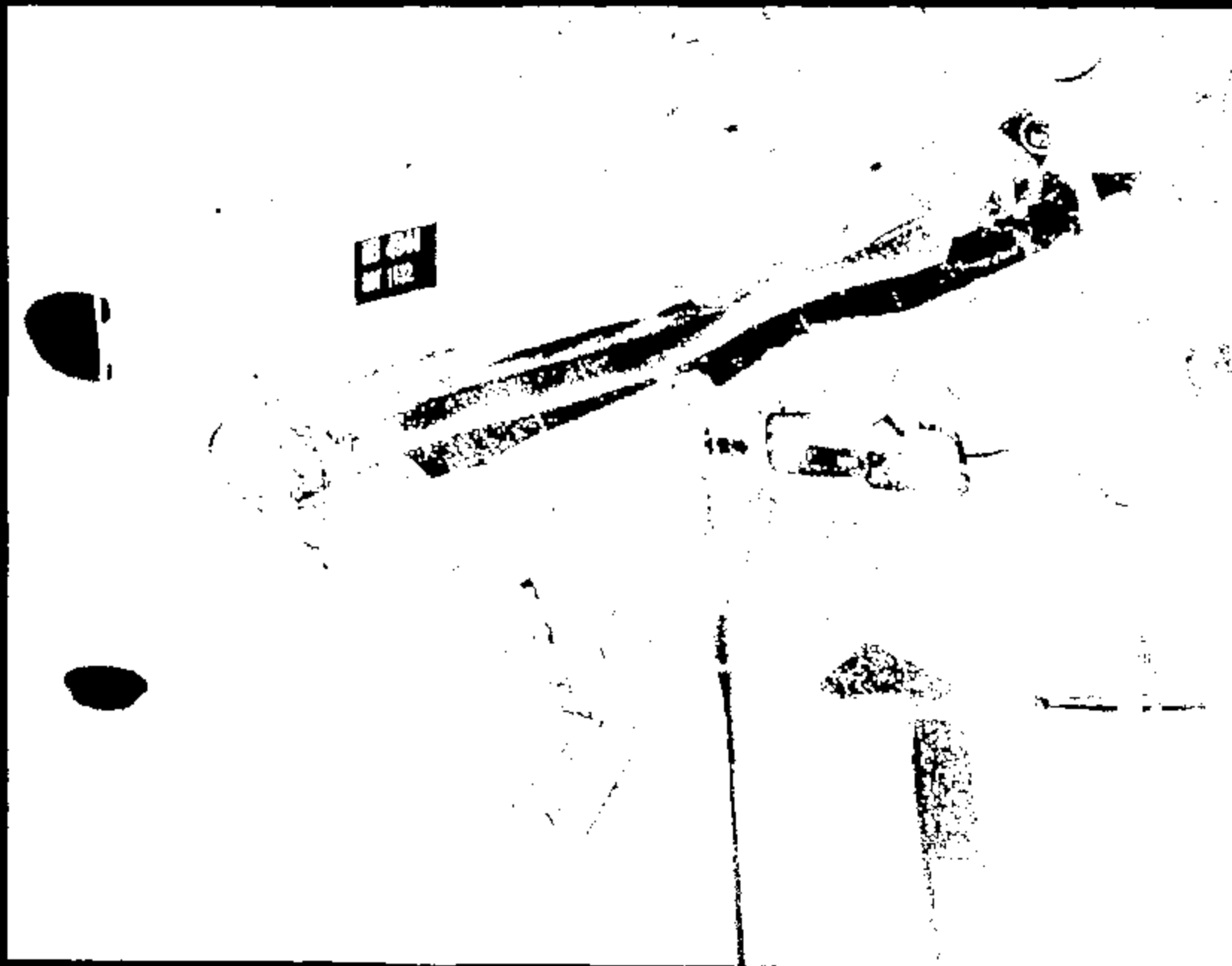
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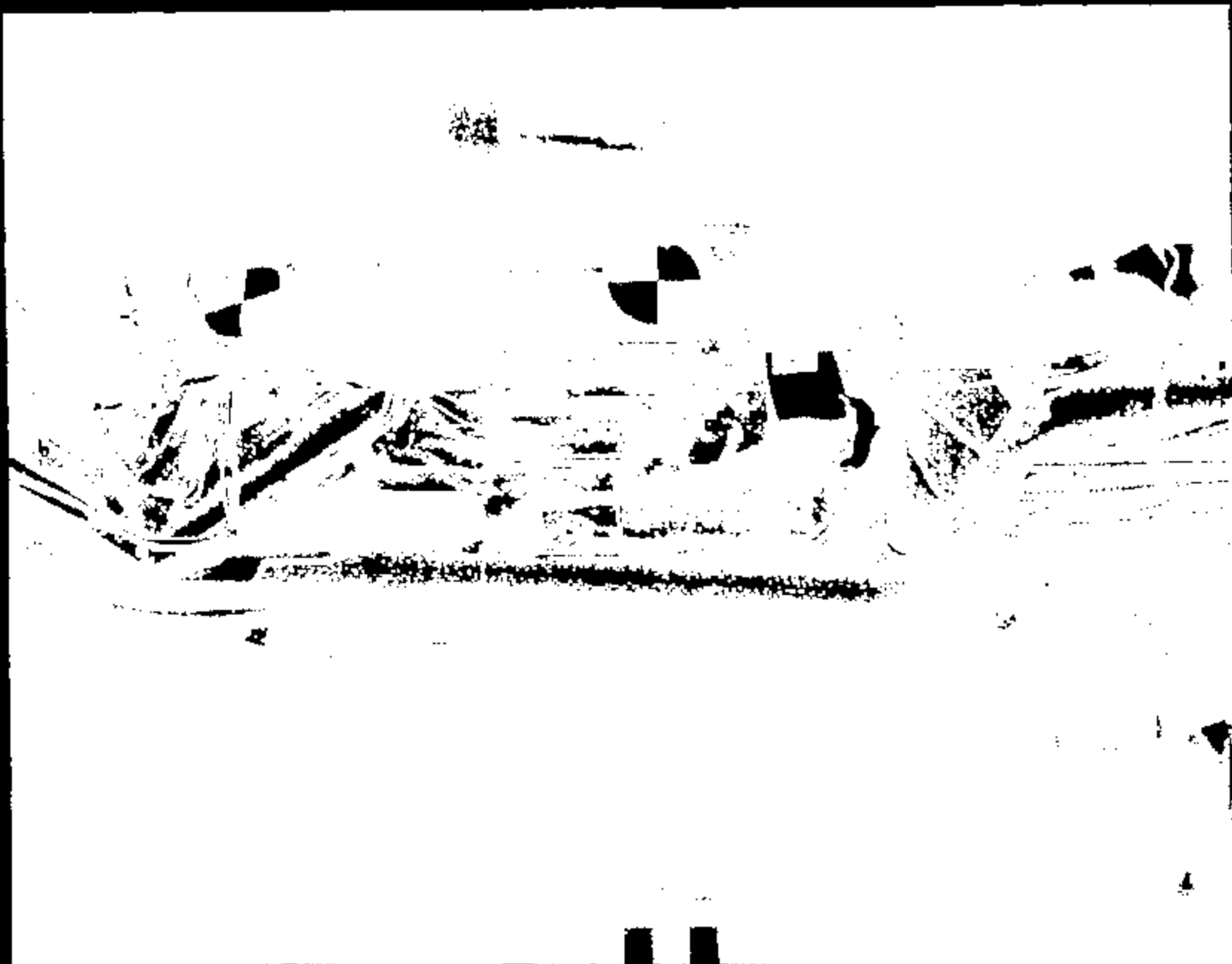
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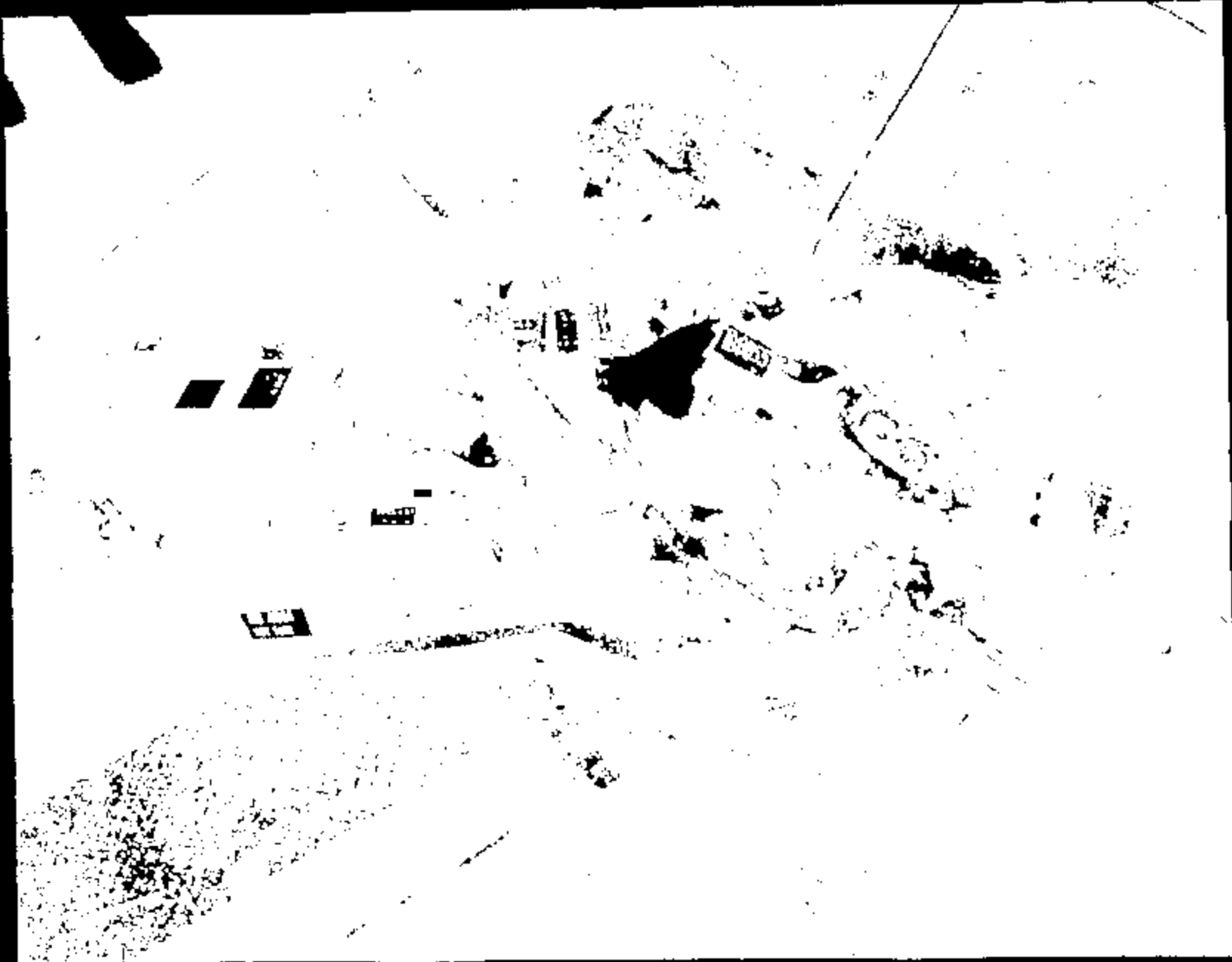
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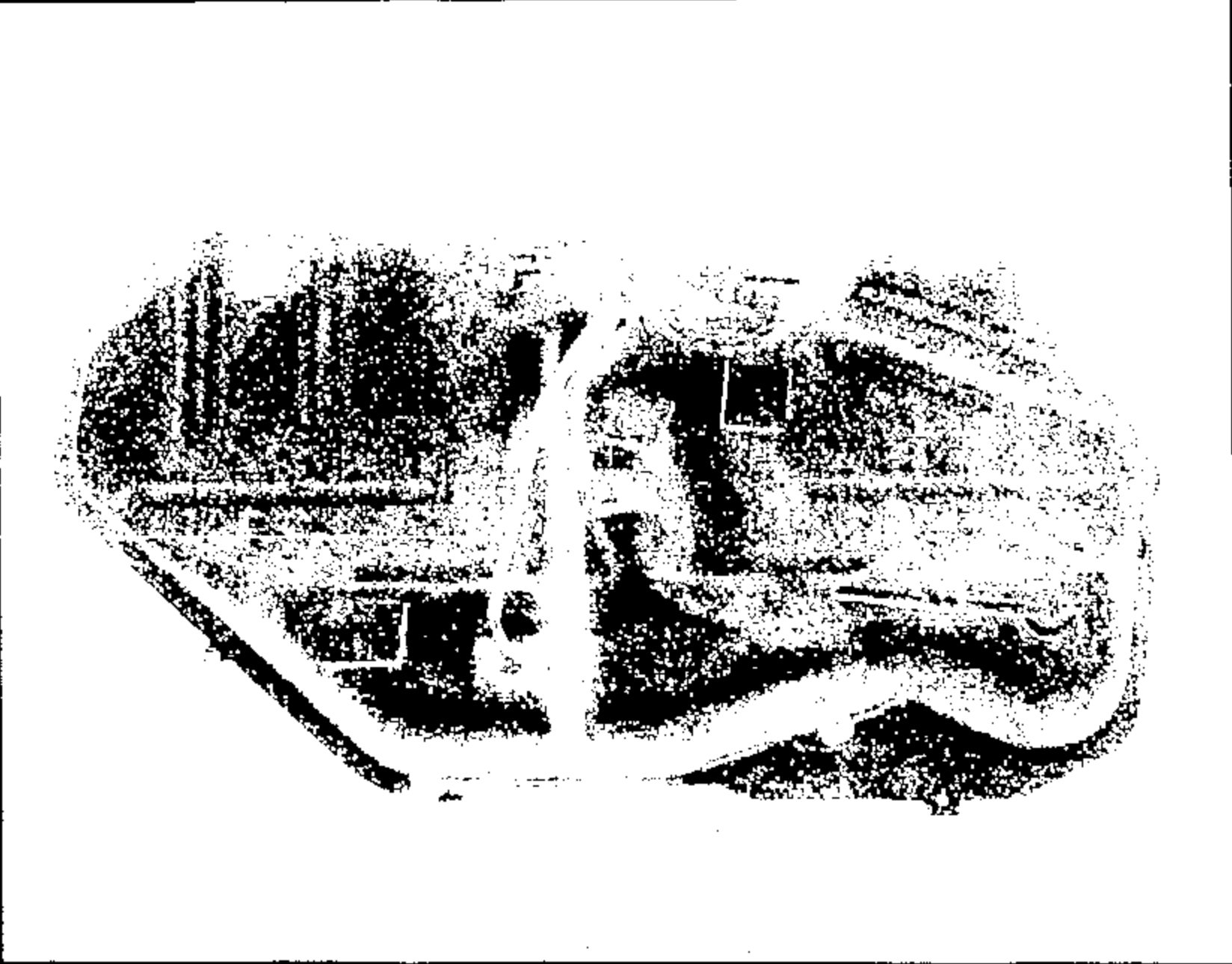
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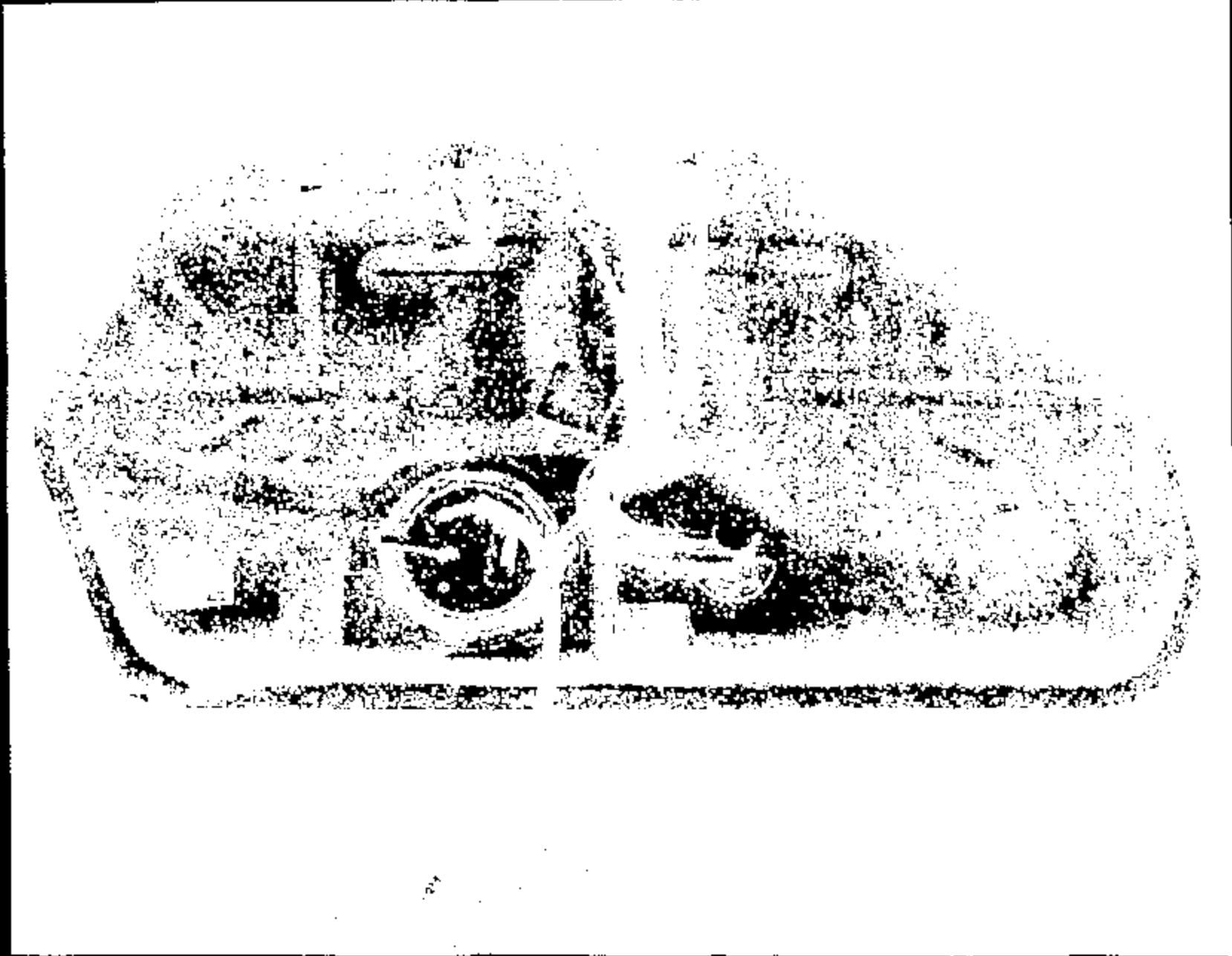
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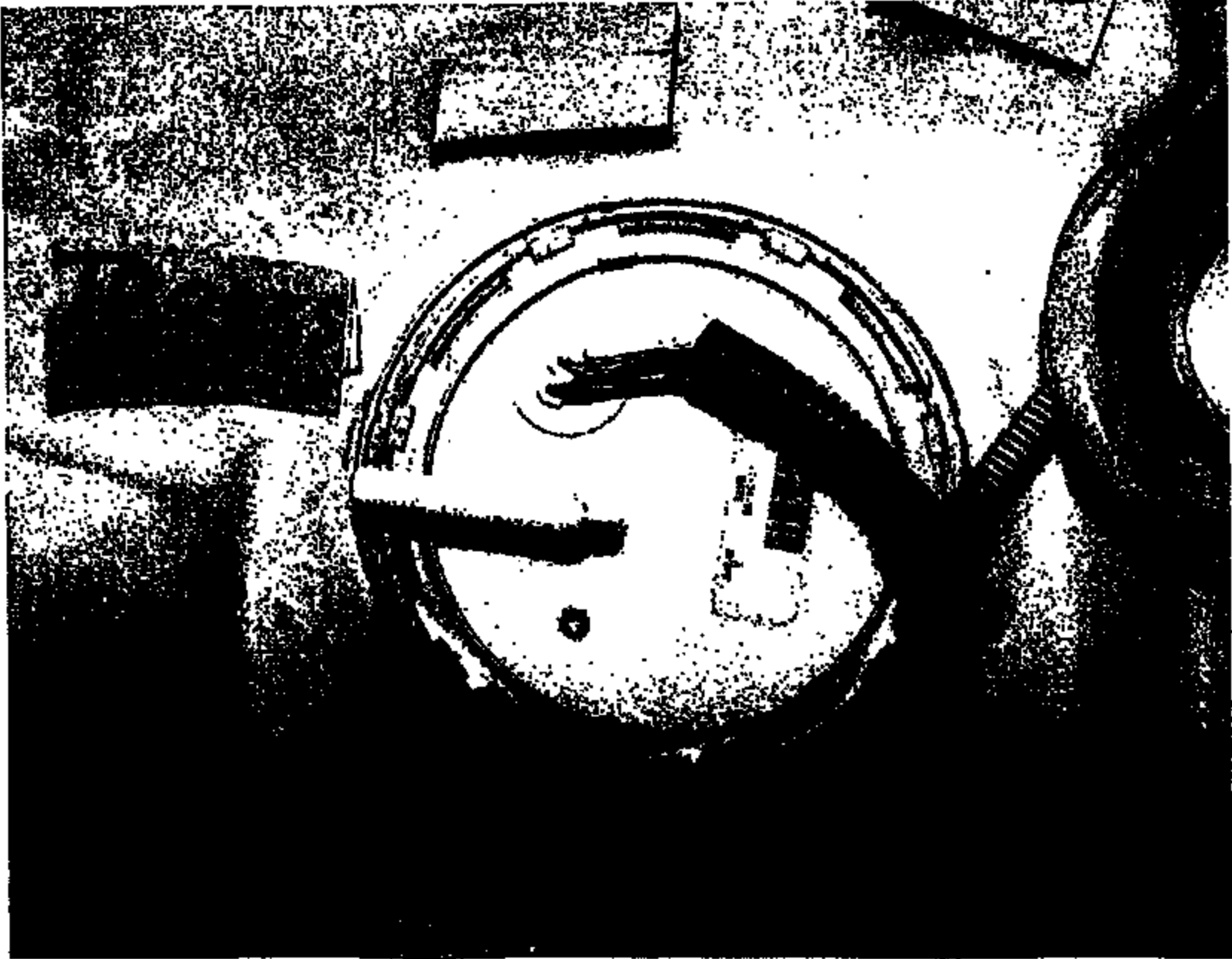
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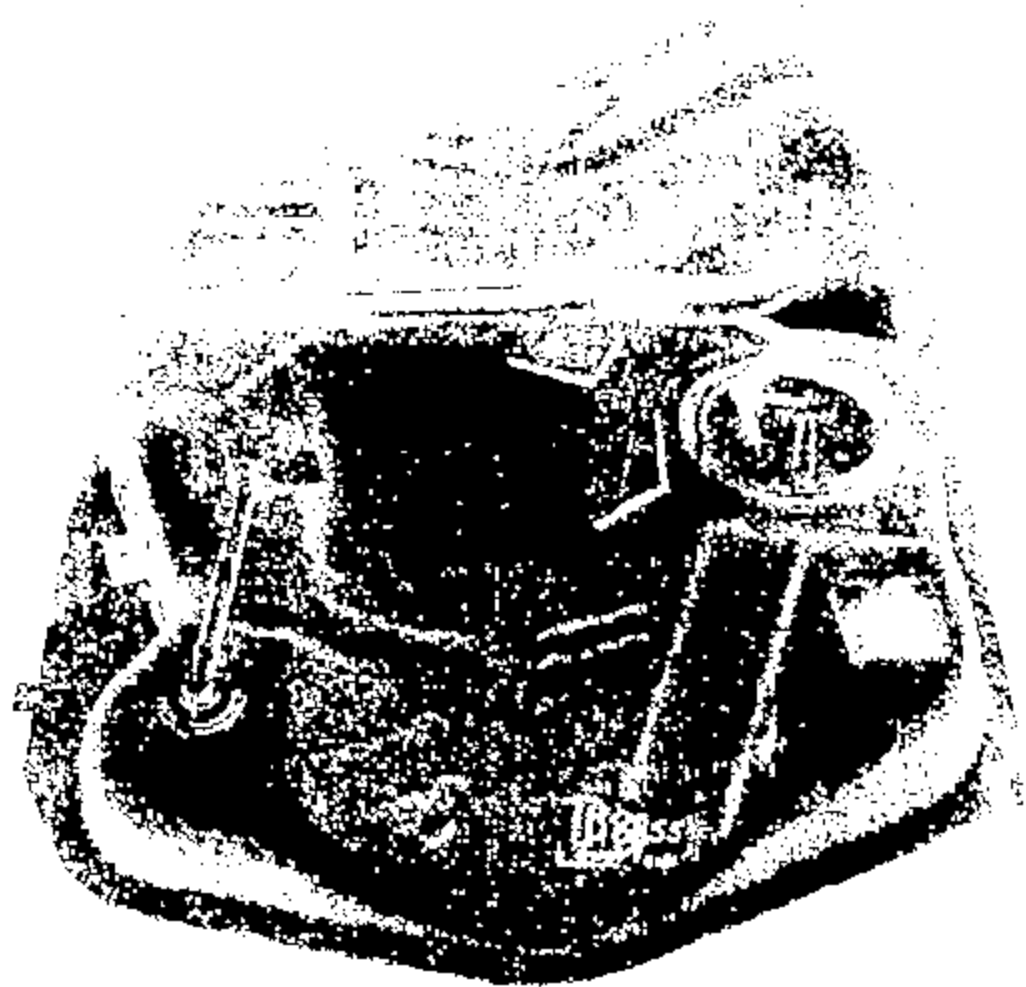
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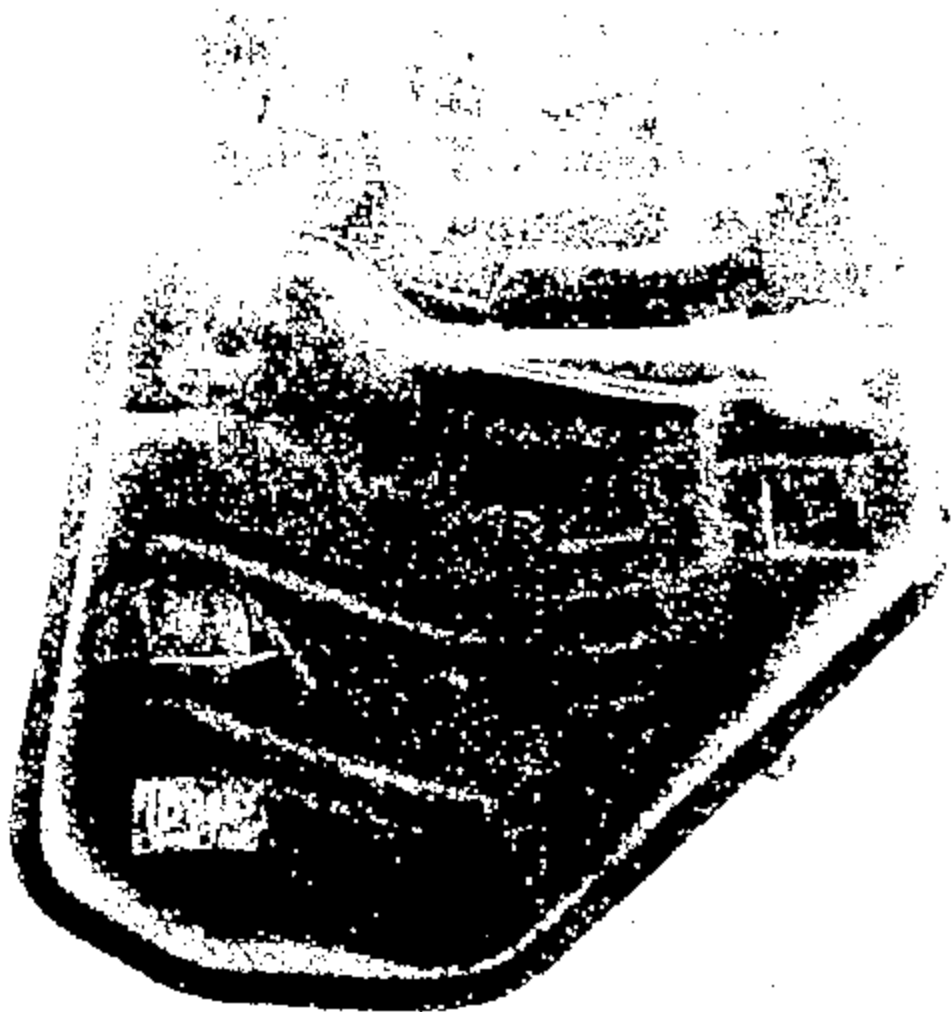
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11713068.jpg

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11713069.jpg

CRTS 0011713

TEST AUTHORIZATION

TEST AUTHORIZATION NUMBER: **TB8885**

TO: Safety Lab Department

CC: K. Arfano

REQUEST DATE: 11/18/99	REQUESTED COMPLETION DATE: 11/30/99
REQUEST NUMBER: n/a	PROBLEM NUMBER: n/a
REQUESTING ACTIVITY: Vehicle Crash Safety	

TITLE OF TEST: (speed) (test description) 3000 D186 48 MPH 90 Degree Frontal, LH, 40% Offset		PARTS DUE DATE: n/a
TYPE OF TEST: <input checked="" type="checkbox"/> VEHICLE () BENCH <input type="checkbox"/> LABORATORY () OTHER		VEHICLE MODEL & YEAR: 2000 D186
VIN #, TAG NO, BUILD NO N/A - 31100 P25 4/2000		PROD. OR ENG. LETTER: n/a
ENGINE NO. DISPL. CARB: 5L 2V		DISPOSITION OF PARTS: n/a
TRANS / DRIVETRAIN: AX4N		PROCUREMENT REQ ? <input type="checkbox"/> YES <input type="checkbox"/> NO
TYPE OF FUEL: Stoddard		IF YES, GIVE CODE
CONVERTER: n/a		MAIL REPORT TO:
IGNITION TIMING: n/a		BLDG: 2
CRANKCASE OIL AND CAPACITY (L): n/a		MAIL DROP: 1225
TIRE SIZE AND PLY RATING: P215/60R16		ADDRESS: 325B4
VEHICLE TEST WEIGHT:		REPORT CATEGORIES:
FRONT BEAR TOTAL 2278 1887 3865		<input checked="" type="checkbox"/> ENGINEERING
TIRE PRESSURE (psi):		<input checked="" type="checkbox"/> DATA
FRONT BEAR 30 30		<input checked="" type="checkbox"/> RAW DATA

1. OBJECT OF TEST	2. TEST PROCEDURE	3. ITEMS TO BE TESTED (NAME, NUMBER, QUANTITY)
1) Conduct	(speed) (year) (vehicle) (level) 40 MPH 2000 D186 # PRODUCTION	90 Degree Frontal, LH, 40% Offset
2) Velocity At Impact: Remote Fire Time: Positioning procedure:	40 MPH N/A ST-25	3) Vehicle Year: Vehicle Line: Vehicle Level: 2000 D186 PRODUCTION
Test Requester: Build Coordinator: Additional Contacts:	(name) (phone) L. MISIKR 24-94250 B. PAGANO 32-30545	(paper number) Estimated test cost = LMB8 BPAG \$30,000.00
Test Dev. Engineer:	<i>L. Misikr</i>	<i>B. Pagano</i>

SECOND COPY
Schedule No. 17-7-12
Retain Until 2019

REQUESTING SECT. NO:	WORK ORDER/WORK TASK:	ISSUED/REQUESTED BY:	PHONE:	APPROVAL:	TEST TYPE:	FISC:	SIGN OFF DATE:
T881	F08	L. MISIKR	24-94250	K. Arfano	n/a	n/a	n/a

COMPLETE THE FOLLOWING TWO QUESTIONS AS INDICATED:
(Check appropriate boxes)

<p>1 - Rational for not replacing this test by CAE analysis:</p> <ul style="list-style-type: none"> <input type="checkbox"/> No CAE Methodology or process available <input type="checkbox"/> No CAE Correlation <input type="checkbox"/> Insufficient confidence in CAE <input type="checkbox"/> To obtain basic data for CAE <input type="checkbox"/> Replacement or improvement of existing Test. <input type="checkbox"/> Testing is Critical. <input type="checkbox"/> Mandatory or Regulatory Certification <input type="checkbox"/> Development test for F08 <input type="checkbox"/> Not applicable. <input checked="" type="checkbox"/> Other <u>IHB EQUIVILINT</u> 	<p>2 - What is the expected Test Outcome:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Results will meet DVP/PCR requirements. <input type="checkbox"/> System Component will not meet Test specification. <input type="checkbox"/> Unknown. <input type="checkbox"/> Above is Based on DAET <input type="checkbox"/> Other: _____
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O.K. m 11-22-99

General Request Information

Test Mode

TAC: TE8858

**40 MPH
90 Degree Frontal, LH, 40% Offset**

Test Objectives: Cert (C) Verif (V) Dev (D) Audit (A)

REGULATORY:

- FMVSS 204 - Steering Wheel Displacement
- FMVSS 208 - Frontal Occupant Protection
- FMVSS 212 - Wind Shield Retention
- FMVSS 214 - Side Impact Protection
- FMVSS 219 - Windshield Zone Intrusion
 - Film Analysis
 - Template
- FMVSS 301 - Fuel System Integrity
 - Rollover
 - Pressure Check
- FMVSS 303 - NGV Fuel System Integrity
- ECE 12 (74/287/EEC) - Protection of the Driver Against Steering Mechanism
- ECE 32 Rear Impact - Structural Performance
- ECE 38 Frontal Impact - Structural Performance
- ECE 34 Fuel System Integrity
- ECE 64 Step II Frontal Offset - Occupant Performance
- ECE 65 Step II 300mm Barrier Side Impact - Occupant Performance
- 98/79/EC - Frontal Offset
- 98/27/EC - Side Impact
- EURO-NCAP

FORD AUTOMOTIVE OPERATIONS SAFETY DESIGN GUIDELINES:

- Front Impact FAO Safety Design Guidelines
- Offset Frontal FAO Safety Design Guidelines
- Side Impact Protection FAO Safety Design Guidelines
- Rear Impact Fuel System Performance FAO Safety Design Guidelines

OTHER:

- Sensor Development
- Other, Specify: _____

Primary Test Vehicle Information

Use (Target/Built):	BULLET
Model Year:	2000
Vehicle Program:	D185
Vehicle Name:	TAURUS
Body / Cab Style:	SEDAN
Build Number:	N/A
Tag Number:	44N175E-040746-110471 6P
VIN Number:	VIN # 1FAFP68UX YA118861
Fuel System Rated Capacity (Gals):	18
Prototype Level:	PRODUCTION
Drive Side:	LH

**Special Prep/Buld Instructions
Primary Vehicle**

Special Buld Instructions

TAR: TB9855

- Remove Side View Mirrors
- Remove Headrests
- Remove Hood
- Remove Arm rest
- Remove Bottom of Bumper Cover
- Cut Off Brake & Clutch Pedal
- Color Contrast Under Hood Components/Front underbody/structural components
- Stripe the Intermediate shaft
- Cut Off Corner of Left Side of Fascia so PGM's bumper lifting barrier can be seen

Other, Specify:

- Drop the tank post crash
- Install driver dual stage airbag
- Install driver pyro retractor
- Paint vehicle white

Pyro Restraints Usage

- Left Front Air Bag
- Right Front Air Bag
- Left Side Air Bag
- Right Side Air Bag
- Left Pyro Retractor
- Left Pyro Buckle
- Right Pyro Retractor
- Right Pyro Buckle

Other, Specify:

- Remote Fire Time for 1st stage is 35 ms; 30 ms remote fire time for pretensioners
135 ms for second stage
(No fire time listed if no/acc fired OR if no pyro restraints are used)
- Remote back-up Fire Time:

Special Pre-Test Preparation

Other, Specify:

<--- END OF SHEET --->

**Occupant / ATD Request
Primary Vehicle**

TAM: TE8805

		Occupant 1	Occupant 2
Type		50% Hybrid 3	None
Instrumentation Level*		Development Instrumented	N/A
In-Vehicle Location		LF	N/A
Verify:	Seat Position Long	Mid track travel	N/A
	Seat Position Vert	FULL DOWN	N/A
	Seat Back Angle	90 degrees	N/A
Positioning Procedure		ST-25	N/A
	Use Foot Rest	Yes	N/A
	Take Seat Track Video	Yes	N/A
	Special Positioning Instructions		
Dummy Adjustment	(arm angle)	N/A	N/A
Occupant Belled		Yes	N/A

Am. 10/21/11

Am. 12/12/11

*See instrumentation request for detailed instrumentation information.

*** END OF SHEET ***

Test Conditions - Final Prep

TA#: TS6655

Final Prep Contacts

ONE of these MUST be present during weigh-up & final prep

Name: <u>J. Schwaner</u>	Request Engineer <u>L. MISKIF</u>	Build Coordinator <u>B. PAGANO</u>
Phone: <u>68661</u>	<u>24-84280</u>	<u>32-30845</u>
Pager: <u>jschwaner</u>	<u>LMIS</u>	<u>BPAG</u>

Test Weight

Minimum Option Weight _____ GVWR: _____
 85% Option Weight _____ Wheelbase: _____
 Maximum Option Weight _____

Tire Pressure

Front: 30. psi Rear: 30. psi

Fuel System

Fuel Tank & System to Contain: Stoddard

*low
right*

5.0 gallons = 0 % x 18.0 gallons
 Fill Level = % x Capacity

Weight Targets

If required weight distribution is UNACHIEVABLE, please note allowable variances.

Curb Weight	Requested Test Weight	Acceptable Test Weight Variance		Actual Test Weight
		High (+)	Low (-)	
Front: <u>2,257 lbs</u>	<u>2,278 lbs</u>	Front: <u>13 lbs</u>	<u>0 lbs</u>	Front: <u>2,277</u>
Rear: <u>1,840 lbs</u>	<u>1,887 lbs</u>	Rear: <u>13 lbs</u>	<u>0 lbs</u>	Rear: <u>1,601</u>
Total: <u>4,097 lbs</u>	<u>4,165 lbs</u>	Total: <u>26 lbs</u>	<u>0 lbs</u>	Total: <u>3,878</u>

Note: weight is according to IHS test procedure

Rated Luggage Load: 0 lb

Simulate/Verify at Weigh-Up

Dummy Weight _____

On Board Drivers Count _____

Weight Addition (Restrictions)

Do NOT place any weight in the following locations:

<input checked="" type="checkbox"/> Air Cleaner	<input checked="" type="checkbox"/> Engine	_____ Doors
<input checked="" type="checkbox"/> Battery	<input checked="" type="checkbox"/> Fan Box/Blroud	<input checked="" type="checkbox"/> Foot Walls - Front
<input checked="" type="checkbox"/> Bottle - Coolant	<input checked="" type="checkbox"/> Headlamp Opnrg	<input checked="" type="checkbox"/> Foot Walls - Rear
<input checked="" type="checkbox"/> Bottle - Washer	<input checked="" type="checkbox"/> Radiator	_____ Quarter Panels
		_____ Trunk Floor

Other: _____

Ride Heights

Measure @ Test Weight

Front: _____

Rear: _____

Measure

Front: _____

To: _____

Additional Remarks

DO NOT fill tank with stoddard until weigh-up

**Dimensional Analysis Request
Primary Vehicle**

TAR: T88385

Frontal Aspects All points to be taken PRIE and POST test

	74		
	81		
X	106	Control Point (CAP)	Exterior
	107		
X	108	Collaps Distance Point	Exterior
X	109	Frame/ B1 Col/ Req. for Grabs (CAR)	Exterior
X	110	Frame Mounted Bolts (CAR)	Exterior
	111	Unified Standard Bolts (CAR)	Exterior
X	114	Drive Shaft Collapse	Exterior
X	118	Standard Body Panels	Exterior/Interior
X	119	Windshield (CAR-REQ'ED)	Exterior
X	140	B1 & P101 - Please take point midway between points B1 and B3 on A-pillar - Please take point where B-pillar intersects roof	Exterior
X	142	Shot-Guns	Exterior
X	145	Header	Exterior
X	152	Steering Wheel Deformation/Pathway	Interior
X	153	Steering Column Mounts	Interior
	154	Steering Column Tube	Interior
X	155	Steering column Link	Interior
X	158	Seat Track to Floor Mounts	Exterior
	159	Seat to Track Mounts	Exterior
X	160	Seat Rotation	Exterior
X	161	Flower Pot	Exterior
X	164	Knee Bolter	Interior
X	168	Seat Belt Mounts	Interior
	169	Diagonal Bolt	Interior
X	170	Torsion Hinge Filler	Exterior
X	172	Roof Bracket ONLY if you can reach it	Interior
X	174	Instrument Panel Mounts	Exterior
	175	T-N-T Tapes	Exterior/Interior
	177	Top Non-Steel & Body Steel	Exterior/Interior
	205	Rear Door Assistance Reduction	
	200		
	202		
	248		
	258		
	264		
X	270	Driving and belt seats	
	488	Flt & Structural Profiles	
	503	Roofing Column Collapse	Exterior
X	507	P.B. Steered Column Collapse	Exterior
	508		
	509	(Tr Steered Column Collapse & Intermediate Bolt)	Interior
X	540	Dash Profile @ Driver Centerline	Interior
X	541	Dash Profile @ Vehicle Centerline	Interior
X	542	Dash Profile @ Passenger Centerline	Interior
X	547	Footwell Reduction B1 - through driver footrest - please ensure geometric center of footrest is taken B2 - through accelerator pedal *118 footwell points - measure X, Y, Z displacement of all 8 points	Interior
X	550	1) Driver/Passenger - A & B-Pillar points 100mm above the sill and 100mm below the window aperture. (NOTE: all points should be as close as possible to the rubber sealing strip around the door aperture) 2) Dash Panel Point which is longitudinally in line with the center of the brake pedal 3) B118 dimensional analysis - see attached sheet 4) Take X,Y,Z coordinates of all accelerometers	

BHS Dimensional Analysis

Lower Instrument Panel (2 points)

The left and right lower instrument panel lateral coordinates are defined by adding 15 cm to and subtracting 15 cm from the steering column reference lateral coordinate, respectively. The vertical coordinate is the same for both left and right references and is defined as 48 cm above the height of the floor (w/o mats), measured plumb.

Brake Pedal (1 point)

Geometric center of the brake pedal pad (top surface)

Toepan (4 points)

The vertical coordinate for all toeapan measurement locations is the vertical coordinate of the brake pedal reference. The lateral coordinate of the left, center, and right toeapan locations are obtained by adding 15 cm to, adding 0 cm to, and subtracting 15 cm from the brake pedal reference lateral coordinate, respectively. The longitudinal coordinate is measured and a mark is placed at the locations on the toeapan. A utility knife is used to ascertain the depth of the carpet and associated padding. The carpet and padding depths are added to the longitudinal coordinate. The accelerator pedal toeapan mark is the point on the toeapan with the same lateral and vertical coordinates as the geometric center of the accelerator pedal.

Bumper Crush Profile (11 points)

The reference for these measurements is tangent to the undeformed bumper and perpendicular to the vehicle's longitudinal centerline. Take eleven measurements equally spaced along the reference line. In addition, the position of the right end of the bumper, relative to the undeformed centerline is to be recorded. All measurements are made to the nearest one-half centimeter.

Film Analysis & Photographic Services Request

Front Impact Film Analysis

TA#: TB8855

- Head WRT Vehicle
- Shoulder WRT Vehicle
- Rocker WRT Ground

Other, Specify:

Still Photography

- _____ Copies of Still Photo Proof Sheets Required
- _____ Copies of Still Photos (4X5) Required
- Pre Test Documentation Photographs
- Post Test Documentation Photographs

High Speed Photographic Requirements

- 2 Copies of High Speed Film Required
- _____ Copies of High Speed Film Required in VHS Format
- _____ Digitization of Driver/ Passenger Kinematics Format
- 1 Digitization of film

High Speed Cameras for Front Impact

On-Board Vehicle

- Onboard - LEFT Occupant Over Shoulder
- _____ Onboard - RIGHT Occupant Over Shoulder
- Onboard - Driver "D" Ring
- Onboard - Driver Retractor (Lower)
- Onboard - Driver Lower Torso to I/P Contact, From Rear, Cross Car
- Onboard - Passenger Lower Torso to I/P Contact, From Rear, Cross Car
- _____ Onboard - Passenger "D" Ring
- _____ Onboard - Passenger Retractor (Lower)
- _____ Onboard - Provide view of Left Knee to Bolster
- Onboard - Left Occupant Provide view of knees to I/P
- Onboard - Left Occupant Kinematics from Passenger side
- _____ Onboard - Photo Sonic (Intermediate Shaft) - From Floor
- _____ Onboard - Photo Sonic (Intermediate Shaft) - Side View From Tunnel
- Onboard - Fiber Optics (Intermediate Shaft) - From Floor
- _____ Onboard - Fiber Optics (Intermediate Shaft) - Side View From Tunnel
- Onboard - Driver Lower Torso Kinematics - provide view of driver's knees to I/P

Instrumentation and Data Processing Request

TA#: TB8855

Primary Vehicle Structural Instrumentation - Frontal Impact

ACCELEROMETERS:

	Long	Vert	Lat
<input checked="" type="checkbox"/> Engine/Trans Upper	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Engine/Trans Lower	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Left Rocker at A-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Right Rocker at A-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Left Rocker at B-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Right Rocker at B-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Left Rocker at C-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Right Rocker at C-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Left Frame at A-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Right Frame at A-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Left Frame at B-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Right Frame at B-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Left A-Pillar Inside	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Right A-Pillar Inside	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Centerline Tunnel	<u>X</u>	<u>X</u>	<u>X</u>
Centerline Tunnel Middle	_____	_____	_____
Centerline Tunnel @ Seat Long Centerline	_____	_____	_____
Left Floor Pan Under Seat	_____	_____	_____
Left Door Inside Top	_____	_____	_____
Left Shock Tower	_____	_____	_____
Right Floor Pan Under Seat	_____	_____	_____
Right Door Inside Top	_____	_____	_____
Right Shock Tower	_____	_____	_____
Rad Support Top - Center	_____	_____	_____
<input checked="" type="checkbox"/> #1 Crossmember Bottom	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> #2 Crossmember Bottom	<u>X</u>	<u>X</u>	<u>X</u>
Left Front Rail Forward of Sledrunners.	_____	_____	_____
<input checked="" type="checkbox"/> Left Front Rail Close to #2 CALL REQUESTOR	<u>X</u>	<u>X</u>	<u>X</u>
Right Front Rail Forward of Sledrunners.	_____	_____	_____
<input checked="" type="checkbox"/> Right Front Rail Close to #2 CALL REQUESTOR	<u>X</u>	<u>X</u>	<u>X</u>
Directly Below D.A. Point # 59	_____	_____	_____
Directly Below D.A. Point # 64	_____	_____	_____
<input checked="" type="checkbox"/> Next to Fuel Inertia Switch	<u>X</u>	<u>X</u>	<u>X</u>
Top of Battery	_____	_____	_____
<input checked="" type="checkbox"/> Next To FCB	<u>X</u>	<u>X</u>	<u>X</u>
_____	_____	_____	_____

OTHER STRUCTURAL ACCELS:

	Long	Vert	Lat
<input checked="" type="checkbox"/> Left Frame at C-Pillar	<u>X</u>	<u>X</u>	<u>X</u>
<input checked="" type="checkbox"/> Right Frame at C-Pillar	<u>X</u>	<u>X</u>	<u>X</u>

*300 info/ok
20076
12/1/99
Jude*

Primary Vehicle Systems Instrumentation

TA#: TE8855

SENSOR ACCELS:

See Sensor Map (Attachment)

MONITOR AIR BAG SENSORS:

See Sensor Map
 Monitor Closure of Each Specified Sensor
 Monitor Closures of Single Pt Elect Sensor

MONITOR AIR BAGS STATUS:

Driver Squib Voltage - 1st stage
 Driver Squib Voltage - 2nd stage
 Driver Squib Current - 1st stage
 Driver Squib Current - 2nd stage
 Driver Bag Pressure
 Passenger Squib Voltage - 1st stage
 Passenger Squib Voltage - 2nd stage
 Passenger Squib Current - 1st stage
 Passenger Squib Current - 2nd stage
 Passenger Bag Pressure
 Passenger Inflator Pressure

RESTRAINT LOADS:

Left Belt Tongue - Strain Gaged
 Left Pyro-Technic Inertial Squib Voltage
 Left Pyro-Technic Inertial Squib Current
 Right Belt Tongue - Strain Gaged
 Right Pyro-Technic Retractor Squib Volt
 Right Pyro-Technic Retractor Squib Current
 Left Lap Belt at Anchor Load
 Left Torso Belt at Retractor Load
 Left Torso Belt at D-ring Load
 Right Lap Belt at Anchor Load
 Right Torso Belt at Retractor Load
 Right Torso Belt at D-ring Load
 Lightweight Left Lap Belt at Anchor Load
 Lightweight Left Torso Belt at Retr. Load
 Lightweight Left Torso Belt at D-ring Load
 Lightweight Right Lap Belt at Anchor Load
 Lightweight Right Torso Belt at Retr. Load
 Lightweight Right Torso Belt at D-ring Load

STEERING COLUMN:

Stroke Break Wires
 Tilt Mechanism Break Wires
 String Pot
 Load Cell (5 Axis)

SWITCHES:

e/c lower edge to dummy (Apply load sensitive pressure pads)
 e/c lower edge to dummy (Apply load sensitive pressure pads)
 Engine to Red Support right
 Brake booster to shock tower
 Other

Lower STR. wheel Rim
CJM
12/17/94

FUEL SYSTEM:

Inertia Fuel System Cut-Off Switch

ANGULAR MOTION SENSORS:

VEHICLE STRING POTS:

Dummy Instrumentation - Internal

ACCELS:

Head C.G.
 Chest
 Pelvis

Long Vert Lat
 Long Vert Lat
 Long Vert Lat

LOAD CELLS:

Neck Upper Load
 Neck Upper Moment
 Neck Lower Load
 Neck Lower Moment
 Thoracic Load
 Thoracic Moment
 Lower Lumbar Load
 Lower Lumbar Moment
 L/Femur Load
 L/Femur Moment
 R/Femur Load
 R/Femur Moment
 L/Up/Tibia Load
 L/Up/Tibia Moment
 R/Up/Tibia Load
 R/Up/Tibia Moment
 L/Low/Tibia Load
 L/Low/Tibia Moment
 R/Low/Tibia Load
 R/Low/Tibia Moment

Fx Fy Fz
 Mx My Mz
 Fx Fy Fz
 Mx My Mz
 Fx Fy Fz
 Mx My Mz
 Fx Fy Fz
 Mx My Mz
 Mx My Fz
 Mx My Fz
 Fx Fy Fz
 Mx My Mz
 Fx Fy Fz
 Mx My Mz
 Fx Fy Fz
 Mx My Mz

POTENTIOMETERS:

Chest Deflection
 Left Knee Slider
 Right Knee Slider
 Ball Bearing ^{17mm}
 Ball Bearing ^{1245/44}
 Diap
 Diap
 Diap
 Std
 Std

OTHER INTERNAL DUMMY INSTRUMENTATION:

L/R Femur Accels
 L/R Ankle soft bumper to foot stem
 Long Vert Lat

Dummy Instrumentation - External

CONTACT SWITCHES:

L / Knee Contact
 R / Knee Contact
 Header

STRING POTS:

Pelvis
 L / Knee

R / Knee

OTHER EXTERNAL DUMMY INSTRUMENTATION:

 X Please color contrast Driver left and right lower torso

List of Test Contacts

TA#: TB8855

	Last name	Phone	Pager	Profs
Acquisitor	L. MISKIR	24-84260	LMIS	CJACK824
Proving supervisor	K. Arthurs	39-05159	KART	KARTHURS
Build coordinator	B. PAGANO	32-80845	BPAG	EMEIER
Test engineer				
Sensor Engineer	F. BOLOGNA	X78288	FBOLOGNA	FBOLOGNA
Other				

	Last name	Phone	Pager	Profs
Seats	M. JESSUP	84-81691	MJESSUP1	MJESSUP1
Instrument panel	M. KERANEN	33-7418	N/A	MKERANEN
Restraints	N. DEBSI	39-05145	NDEBSI	NDEBSI
Air bag (driver)	P. Tuomiato	24-82183	ptoo	Ptuomiato
Air bag (passenger)				
Steering column				

DATE	MODEL	YEAR	CARMAKE	VEHICLE IDENTIFICATION	
11/16/99	SEDAN	2000	D188	TB8855	
EXAMINER		PHONE	DATE	JOB NUMBER	
L. MISKIR		24-84280	T551	F09	
EXAMINER		PHONE	ANGLE		
B. PAGANO		32-90645	90 Degree Frontal, LH, 40% Offset		
VIN NUMBER		VEHICLE NO.	TYPE/VEHICLE		
1LNFM82W6WY603829			production vehicle		
EXAMINER		NUMBER	DESCRIPTION		
CRASH POSITION					
SGRP		MID POINT	XX	FULL REAR	
CRASH POSITION - CHASSIS DAMAGE					
LH FRT	XX	CENTER FRT		RH FRT	
LH REAR		CENTER REAR		RH REAR	
VEHICLE DELIVERED TO		D/A	BARRIER	BUILD SITE	
ANY QUESTIONS CONTACT:					
PETER J. SIMONIE					
PHONE: (313) 89-6800					
PAGER: (313) 705-6663					
DESCRIPTION OF JOB TO BE PERFORMED:					

VEHICLE SAFETY AND CAE TECHNOLOGY PACKAGE LABORATORY QUALITY REPORT IN VEHICLE

YEAR	CARLINE	MODEL	SUPPLIER	TEST MODE		COMP DATE	MECH MID-POINT LH - X		2932	
2000	DM6	SEDAN T	BEAR	FRONTAL 45° OFFSET		12/04/1999	MECH MID-POINT RH - X		0	
FULL TRACK TRAVEL LH		261	FULL REAR LH - X	3067	FULL REAR - Z	4624	MECH MID-POINT LH - Z		47.6	
FULL TRACK TRAVEL RH		0	FULL REAR RH - X	0	FULL REAR - Z	0	MECH MID-POINT RH - Z		0	
STEERING WHEEL DESIGN		DESIGN - X	2736	ACTUAL - X	2733.5	DIFF	-2.5			
STEERING WHEEL DESIGN		DESIGN - Z	850	ACTUAL - Z	850	DIFF	0			
TARGET COORDINATE		X	2760	Z	343					
H-POINT INFORMATION										
VEHICLE NO.		SEAT TYPE	H-POINT DESIGN	HORIZ. ACTUAL	DIFF	VERT. DESIGN	VERT. ACTUAL	DIFF	MAJOR ANGLE (DEG)	STRUCTURE ANGLE
311W922		LH PWR BUCKET	2965	2976	-9.0	645	651.4	6.4	22.5°	22.5°
6		0	0		0.0	0		0.0	0.0°	0.0°

LH ACTUAL H-POINT W.R.T. TARGET "X"
 LH ACTUAL H-POINT W.R.T. TARGET "Z"
 RH ACTUAL H-POINT W.R.T. TARGET "X"
 RH ACTUAL H-POINT W.R.T. TARGET "Z"

226	mm
308.4	mm
0	mm
0	mm

8.9	INCHES
12.1	INCHES
0.0	INCHES
0.0	INCHES

STABILIZED COLUMN ANGLE 20.5°

CRIS 0011713

DUMMY POSITIONING MEASUREMENTS

Test Order No. TE8865
 Crash No. 11713
 Target/Bullet TARGET
 Dummy Type 50% Hill
 Foot Rest Yes

MEASUREMENT DESCRIPTIONS WRT FRONT ROCKER TARGET		DRIVER		PASSENGER	
		RANGE	Actual	RANGE	Actual
Head (inches)	Long		14.3		
	Vert		37.6		
	Lat		14.7		
Shoulder (inches)	Long		—		
	Vert		—		
	Lat		—		
H-Point (inches)	Long	8.9	8.5		
	Vert	12.1	11.7		
	Lat		10.5		
Outboard Knee Bolt (inches)	Long		-6.3		
	Vert		16.4		
	Lat		10.8		

MEASUREMENT DESCRIPTIONS		DRIVER		PASSENGER	
		RANGE	Actual	RANGE	Actual
Leg to Instrument Panel - Left	(inches)		4.2		
Leg to Instrument Panel - Right	(inches)		4.3		
Rocker Target to Ground - Front	(inches)		7.7		
Rocker Target to Ground - Rear	(inches)		8.5		
Nose to Steering Wheel	(inches)		15.9		
Nose to Instrument Panel	(inches)				
Torso to Instrument Panel	(inches)				
Torso to Steering Wheel	(inches)		7.6		
Top of Legs to Steering Wheel	(inches)		1.8		
Knee Spread	(inches)		10.0		
Bumper Target to Ground	(inches)		—		
Head Angle	(degree)	0	0		
Pelvis Angle	(degree)	22.5	22.5		
Neck Bracket Angle	(degree)		0		
Rocker Angle	(degree)		0.3		
Seat Back Angle	(degree)	27.0	27.3		

DUMMY MEASUREMENT REPORT
CRASH BARRIER

TEST NUMBER 11713
TEST ORDER NUMBER TB8855

DUMMY POSITION LEFT
DUMMY ABBREV 50H3

FRONT

ABSOLUTE MEASUREMENTS (INCH)	MEASUREMENT
LEG (HYB II)/KNEE (HYB III) TO INST PANEL LEFT	4.20
LEG (HYB II)/KNEE (HYB III) TO INST PANEL RIGHT	4.30
ROCKER TARGETS TO GROUND FRONT	7.70
ROCKER TARGETS TO GROUND REAR	8.50
NOSE TO STEERING WHEEL	15.90
NOSE TO INSTRUMENT PANEL	
INSTRUMENT PANEL TO TORSO	
STEERING WHEEL TO TORSO	7.60
STEERING WHEEL TOP LEGS	1.80
KNEE SPREAD OS-OS (HYB II)/CL-CL (HYB III)	10.00
SEAT BACK ANGLE	27.30
PELVIC ANGLE	22.50
HEAD ANGLE	0.00
ROCKER ANGLE	0.30
NECK BRACKET ANGLE	0.00
BUMPER TARGET TO GROUND	

RELATIVE MEASUREMENTS (INCH)	WRT FRT RKR TGT
HEAD LAT	14.70
AD VERT	37.60
AD LONG	14.30

SHOULDER LAT
SHOULDER VERT
SHOULDER LONG

H-POINT LAT	10.50
H-POINT VERT	11.70
H-POINT LONG	8.50

O/S KNEE BOLT LAT	10.80
O/S KNEE BOLT VERT	16.40
O/S KNEE BOLT LONG	-6.30