

REPORT NOS. 208-TRC-94-006

212-TRC-94-006

301-TRC-94-006

VEHICLE SAFETY COMPLIANCE TESTING
FOR OCCUPANT CRASH PROTECTION,
WINDSHIELD MOUNTING, WINDSHIELD ZONE INTRUSION,
AND FUEL SYSTEM INTEGRITY

CHRYSLER CORPORATION
1994 DODGE DAKOTA
PICKUP TRUCK
NHTSA NO. CR0306
TRC TEST NO. 931229

TRANSPORTATION RESEARCH CENTER INC.
10820 STATE ROUTE 347
EAST LIBERTY, OHIO 43319



JANUARY 14, 1994

FINAL REPORT

PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OFFICE OF VEHICLE SAFETY COMPLIANCE (NEF-31)
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16. Abstract A 30 mph flat frontal barrier impact test was conducted on a 1994 Dodge Dakota pickup, NHTSA No. CR0306, at Transportation Research Center Inc. on December 29, 1993. This test was conducted to determine compliance with Federal Motor Vehicle Safety Standards: FMVSS 208, "Occupant Crash Protection"; 212, "Windshield Mounting"; 219 (partial), "Windshield Zone Intrusion"; and 301 "Fuel System Integrity." The barrier impact velocity was 29.3 mph. The vehicle's maximum static crush was 23.4 inches. The ambient temperature was 64° F. The driver's Head Injury Criteria (HIC) was 292. The driver's chest maximum resultant acceleration with three (3) milliseconds minimum duration was 46.7 g. The driver's chest maximum deflection was 1.4 inches. The driver's left and right femur maximum axial forces were 1248 pounds and 1163 pounds, respectively. The passenger's HIC was 430. The passenger's chest maximum resultant acceleration with three (3) milliseconds minimum duration was 32.7 g. The passenger's chest maximum deflection was 1.9 inches. The passenger's left and right femur maximum axial forces were 154 pounds and 456 pounds, respectively. The vehicle appears to comply with the applicable requirements of FMVSS 208, 212, 219 (partial), and 301					
17. Key Words Frontal Impact 30 mph Vehicle Safety Compliance Testing: FMVSS 208, "Occupant Crash Protection" FMVSS 212, "Windshield Mounting" FMVSS 219 (partial), "Windshield Zone Intrusion" FMVSS 301, "Fuel System Integrity"				18. Distribution Statement Available from: NHTSA Technical Reference Division Room 5108, (NAD-52) 400 Seventh Street, S.W. Washington, DC 20590 Attn: Mr. Robert Hornickle	
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METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

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

* 1 in = 2.54 (exactly). For other exact conversions and more detailed tables, see NBS Misc. Publ. 298, Units of Weights and Measures, Price \$2.25, SD Catalog No. C13.10298.

Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.5	miles	mi
AREA				
cm ²	square centimeters	0.16	square inches	in ²
m ²	square meters	1.2	square yards	yd ²
km ²	square kilometers	0.4	square miles	mi ²
ha	hectares (10,000 m ²)	2.5	acres	
MASS (weight)				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
VOLUME				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m ³	cubic meters	35	cubic feet	ft ³
m ³	cubic meters	1.3	cubic yards	yd ³
TEMPERATURE (exact)				
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F

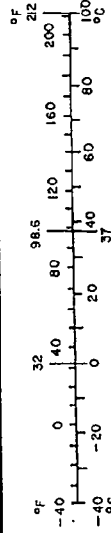


TABLE OF CONTENTS

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1.0	PURPOSE AND TEST PROCEDURE	1-1
2.0	FRONTAL BARRIER IMPACT TEST SUMMARY	2-1
3.0	FMVSS 208, 212, 219 (PARTIAL), AND 301 DATA	3-1
4.0	VEHICLE, OCCUPANT, AND CAMERA MEASUREMENTS	4-1
APPENDIX A	PHOTOGRAPHS	A-1
APPENDIX B	DATA PLOTS	B-1

LIST OF TABLES

<u>NUMBER</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1	CRASH TEST SUMMARY	2-4
2	TEST VEHICLE INFORMATION	2-5
3	POST-IMPACT DATA	2-8
4	VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY	2-12
5	DUMMY INJURY CRITERIA	3-2
6	FMVSS 208 COMFORT AND CONVENIENCE DATA FOR MANUAL SEAT BELTS	3-4
7	FMVSS 208 SEAT BELT WARNING SYSTEM DATA	3-7
8	FMVSS 208 LABELING AND DRIVER'S MANUAL DATA	3-8
9	FMVSS 208 READINESS INDICATOR DATA	3-9
10	FUEL SYSTEM DATA	3-12
11	FMVSS 301 POST-IMPACT TEST DATA	3-13
12	IMPACTED VEHICLE MEASUREMENTS	4-3
13	DUMMY MEASUREMENT DATA FOR FRONT SEAT OCCUPANTS	4-6
14	MOTION PICTURE CAMERA LOCATIONS	4-10

LIST OF FIGURES

<u>NUMBER</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1	IMPACT VELOCITY MEASUREMENT SYSTEM	2-9
2	ACCIDENT INVESTIGATION DIVISION DATA FOR 30 MPH FRONTAL BARRIER IMPACT	2-10
3	VEHICLE ACCELEROMETER PLACEMENT	2-11
4	FMVSS 212 TEST DATA	3-10
5	FMVSS 219 TEST DATA	3-11
6	FMVSS 301 STATIC ROLLOVER TEST DATA	3-14
7	PRE-TEST AND POST-TEST MEASUREMENT POINTS	4-2
8	VEHICLE TARGET LOCATIONS	4-4
9	DUMMY MEASUREMENT LOCATIONS FOR FRONT SEAT OCCUPANTS	4-5
10	SEAT BELT POSITIONING DATA	4-7
11	CAMERA POSITIONS	4-8

LIST OF PHOTOGRAPHS

<u>NUMBER</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
A-1.	PRE-TEST FRONT VIEW	A-2
A-2.	POST-TEST FRONT VIEW	A-3
A-3.	PRE-TEST LEFT SIDE VIEW	A-4
A-4.	POST-TEST LEFT SIDE VIEW	A-5
A-5.	PRE-TEST REAR VIEW	A-6
A-6.	POST-TEST REAR VIEW	A-7
A-7.	PRE-TEST RIGHT SIDE VIEW	A-8
A-8.	POST-TEST RIGHT SIDE VIEW	A-9
A-9.	PRE-TEST RIGHT FRONT THREE-QUARTER VIEW	A-10
A-10.	POST-TEST RIGHT FRONT THREE-QUARTER VIEW	A-11
A-11.	PRE-TEST LEFT REAR THREE-QUARTER VIEW	A-12
A-12.	POST-TEST LEFT REAR THREE-QUARTER VIEW	A-13
A-13.	PRE-TEST WINDSHIELD VIEW	A-14
A-14.	POST-TEST WINDSHIELD VIEW	A-15
A-15.	PRE-TEST ENGINE COMPARTMENT VIEW	A-16
A-16.	POST-TEST ENGINE COMPARTMENT VIEW	A-17
A-17.	PRE-TEST FUEL FILLER CAP VIEW	A-18
A-18.	POST-TEST FUEL FILLER CAP VIEW	A-19
A-19.	PRE-TEST FUEL FILLER NECK VIEW	A-20
A-20.	POST-TEST FUEL FILLER NECK VIEW	A-21
A-21.	PRE-TEST FUEL TANK VIEW	A-22
A-22.	POST-TEST FUEL TANK VIEW	A-23
A-23.	PRE-TEST FRONT UNDERBODY VIEW	A-24
A-24.	POST-TEST FRONT UNDERBODY VIEW	A-25
A-25.	PRE-TEST REAR UNDERBODY VIEW	A-26
A-26.	POST-TEST REAR UNDERBODY VIEW	A-27
A-27.	PRE-TEST DRIVER'S SIDE KNEE BOLSTER VIEW	A-28
A-28.	PRE-TEST PASSENGER'S SIDE KNEE BOLSTER VIEW	A-29
A-29.	PRE-TEST DRIVER DUMMY POSITION - VIEW 1	A-30
A-30.	POST-TEST DRIVER DUMMY POSITION - VIEW 1	A-31
A-31.	PRE-TEST DRIVER DUMMY POSITION - VIEW 2	A-32
A-32.	POST-TEST DRIVER DUMMY POSITION - VIEW 2	A-33

LIST OF PHOTOGRAPHS, CONT'D.

<u>NUMBER</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
A-33.	PRE-TEST PASSENGER DUMMY POSITION - VIEW 1	A-34
A-34.	POST-TEST PASSENGER DUMMY POSITION - VIEW 1	A-35
A-35.	PRE-TEST PASSENGER DUMMY POSITION - VIEW 2	A-36
A-36.	POST-TEST PASSENGER DUMMY POSITION - VIEW 2	A-37
A-37.	PRE-TEST DRIVER DUMMY & VEHICLE INTERIOR - VIEW 1	A-38
A-38.	POST-TEST DRIVER DUMMY & VEHICLE INTERIOR - VIEW 1	A-39
A-39.	PRE-TEST DRIVER DUMMY & VEHICLE INTERIOR - VIEW 2	A-40
A-40.	POST-TEST DRIVER DUMMY & VEHICLE INTERIOR - VIEW 2	A-41
A-41.	PRE-TEST PASSENGER DUMMY & VEHICLE INTERIOR - VIEW 1	A-42
A-42.	POST-TEST PASSENGER DUMMY & VEHICLE INTERIOR - VIEW 1	A-43
A-43.	PRE-TEST PASSENGER DUMMY & VEHICLE INTERIOR - VIEW 2	A-44
A-44.	POST-TEST PASSENGER DUMMY & VEHICLE INTERIOR - VIEW 2	A-45
A-45.	POST-TEST DRIVER DUMMY HEAD CONTACT - VIEW 1	A-46
A-46.	POST-TEST DRIVER DUMMY HEAD CONTACT - VIEW 2	A-47
A-47.	POST-TEST DRIVER DUMMY KNEE CONTACT - VIEW 1	A-48
A-48.	POST-TEST DRIVER DUMMY KNEE CONTACT - VIEW 2	A-49
A-49.	POST-TEST PASSENGER DUMMY HEAD CONTACT VIEW	A-50
A-50.	POST-TEST PASSENGER DUMMY KNEE CONTACT - VIEW 1	A-51
A-51.	POST-TEST PASSENGER DUMMY KNEE CONTACT - VIEW 2	A-52
A-52.	PRE-TEST VEHICLE CERTIFICATION LABEL VIEW AND RECOMMENDED TIRE PRESSURE LABEL VIEW	A-53
A-53.	POST-TEST VEHICLE ON STATIC ROLLOVER MACHINE VIEW	A-54
A-54.	PRE-TEST BALLAST LOCATION VIEW	A-55
A-55.	PRE-TEST STEERING COLUMN SHAFT VIEW	A-56
A-56.	PRE-TEST STEERING COLUMN SHAFT AT FIREWALL VIEW	A-57

SECTION 1.0

PURPOSE & TEST PROCEDURE

PURPOSE

This 30 mph flat frontal barrier impact test is part of the Federal Motor Vehicle Safety Standards (FMVSS) 208, 212, 219 (partial), and 301 compliance test program conducted for the National Highway Traffic Safety Administration (NHTSA) by the Transportation Research Center Inc. (TRC) under Contract No. DTNH22-90-D-22121. The purpose of this test was to determine if the subject vehicle, a 1994 Dodge Dakota pickup, NHTSA No. CR0306, meets the performance requirements of FMVSS 208, "Occupant Crash Protection"; FMVSS 212, "Windshield Mounting"; FMVSS 219 (partial), "Windshield Zone Intrusion"; and FMVSS 301, "Fuel System Integrity," in the flat frontal barrier impact mode.

TEST PROCEDURE

This test was conducted in accordance with NHTSA's Office of Vehicle Safety Compliance (OVSC) Laboratory Test Procedure No. TP-208-08. Data was obtained relative to FMVSS 208, "Occupant Crash Protection"; FMVSS 212, "Windshield Mounting"; FMVSS 219 (partial), "Windshield Zone Intrusion"; and FMVSS 301, "Fuel System Integrity," performance.

The test vehicle was instrumented with seven (7) accelerometers to measure longitudinal axis accelerations and one (1) accelerometer to measure vertical axis acceleration. The vehicle's specified impact velocity range was 28.9 to 29.9 mph. The vehicle impacted a flat frontal barrier.

The test vehicle contained two (2) Part 572 E 50th percentile adult male anthropomorphic test devices (dummies). The dummies were positioned in the front outboard designated seating positions according to the dummy placement procedure specified in Appendix B and Optional Appendix C of the Laboratory Test Procedure.

Both dummies were instrumented with head and chest accelerometers to measure longitudinal, lateral, and vertical accelerations, and with left and right femur load cells to measure axial forces. Each Part 572 E dummy was instrumented with a chest potentiometer to measure longitudinal deflection and neck load cells to measure longitudinal, lateral, and vertical forces and moments.

The thirty-eight (38) data channels were multiplexed and recorded on a 14-track tape drive. The data was digitally sampled at 12,500 samples per second and processed per sections 12.8 and 12.9 of the Laboratory Test Procedure.

The crash event was recorded by one (1) real-time panning motion picture camera and fourteen (14) high-speed motion picture cameras. The pre-test and post-test conditions were recorded by one (1) real-time motion picture camera.

The vehicle and occupant data are summarized in Section 2.0. The FMVSS 208, 212, 219 (partial) and 301 data are presented in Section 3.0. The vehicle, occupant, and camera measurements are presented in Section 4.0. Appendix A contains the still photographic prints. Appendix B contains the dummy and vehicle data plots.

SECTION 2.0

FRONTAL BARRIER IMPACT TEST SUMMARY

TEST RESULTS SUMMARY

This flat frontal barrier test was conducted at TRC on December 29, 1993.

The test vehicle, a 1994 Dodge Dakota pickup, NHTSA No. CR0306, appeared to comply with the performance requirements of FMVSS 208, 212, 219 (partial), and 301 in the flat frontal barrier impact mode. The Head Injury Criteria (HIC) calculations were less than 1000, the chest resultant accelerations did not exceed 60 g's, and the axial forces transmitted through the upper legs did not exceed 2,250 pounds as measured by Part 572 E dummies seated in the front outboard designated seating positions. The vehicle's restraint system met the applicable comfort and convenience requirements. The windshield periphery retention was 100 percent. There was no penetration into any portion of the windshield. No fluid spilled from the vehicle's fuel system following the impact or during the static rollover test.

The test vehicle was equipped with a three-point manual seat belt at both the driver and right front passenger positions. The vehicle's test weight was 3907 pounds. The vehicle's impact speed was 29.3 mph. The vehicle's maximum static crush was 23.4 inches.

The driver's HIC was 292. The driver's chest maximum resultant acceleration with three (3) milliseconds minimum duration was 46.7 g. The driver's chest maximum deflection was 1.4 inches. The driver's left and right femur maximum axial forces were 1248 pounds and 1163 pounds, respectively.

The right front passenger's HIC was 430. The right front passenger's chest maximum resultant acceleration with three (3) milliseconds minimum duration was 32.7 g. The passenger's chest maximum deflection was 1.9 inches. The right front passenger's left and right femur maximum axial forces were 154 pounds and 456 pounds, respectively.

There was no loss of windshield periphery retention.

There was no penetration through the windshield.

Following the impact, no fluid spilled from the vehicle's fuel system prior to the static rollover test or during any portion of the static rollover test.

DATA ACQUISITION EXPLANATIONS

The driver's chest Z-axis accelerometer, CSTZG1, recorded a questionable data spike at 42 milliseconds. The data spike affected the driver's chest resultant acceleration calculation. The data acquisition circuit was checked after the test. No cause for the data spike could be found.

The right front passenger's chest X-axis deflection potentiometer, CSTXD2, recorded questionable data from 60 milliseconds and after. The data acquisition circuit was checked after the test. No cause for the questionable data could be found.

The right front passenger's neck Z-axis axial force load cell, NEKZF2, was not functioning correctly prior to the test. Checking the load cell by isolating it through use of different cables indicated the problem was within the load cell channel or its connector on the load cell body. The load cell has been checked previously by its manufacturer and will be returned again.

TABLE 1 CRASH TEST SUMMARY

NHTSA NO.:	CR0306	
TEST TYPE:	Frontal Barrier Impact	
TEST DATE:	12/29/93	
TEST TIME:	1612	
AMBIENT TEMPERATURE		
AT IMPACT AREA:	64° F	
VEHICLE YEAR/MAKE/		
MODEL/BODY STYLE:	1994/Dodge/Dakota/pickup	
VEHICLE TEST WEIGHT:	3907 lb	
IMPACT ANGLE ¹ :	0°	
IMPACT VELOCITY ² :		
PRIMARY:	29.3 mph	
SECONDARY:	29.3 mph	
MAXIMUM STATIC CRUSH:	23.4 in	
AVERAGE REBOUND:	10.9 in	
NUMBER OF CAMERAS:		
Real-time:	2	
High-speed:	14	
FRONT DOOR OPENING DATA:		
LEFT:	Difficult, required tools	
RIGHT:	Difficult, required tools	
DUMMIES:	<u>Driver #314</u>	<u>Passenger #229</u>
TYPE:	Part 572 E	Part 572 E
LOCATION:	Left front	Right front
RESTRAINT:	Airbag	Three-point unbelt
NUMBER OF DATA CHANNELS:	15	15
FRONT SEAT DATA:		
SEAT TRACK FAILURE:	None	Shifted fully rearward
SEAT BACK FAILURE:	None	None
VISIBLE DUMMY CONTACT POINTS:		
HEAD:	Airbag and head restraint	Chest and head restraint
CHEST:	Airbag	None
ABDOMEN:	None	None
LEFT KNEE:	Instrument panel	Instrument panel
RIGHT KNEE:	Instrument panel	Instrument panel

All distance measurements are in inches.

¹With respect to tow track centerline.

²Speed trap measurement ($\pm$.05 mph accuracy)

TABLE 2 TEST VEHICLE INFORMATION

VEHICLE YEAR/MAKE/
MODEL\BODY STYLE: 1994/Dodge/Dakota/pickup
COLOR: Red
VIN: 1B7FL26XXRS501528
NHTSA NO.: CR0306

ENGINE DATA:
PLACEMENT: X LONGITUDINAL/INLINE TRANSVERSE/LATERAL
CYLINDERS: 6
DISPLACEMENT: 3.9 liters
TRANSMISSION DATA: 5 SPEED, X MANUAL, AUTOMATIC, OVERDRIVE
FINAL DRIVE: FWD, X RWD, 4WD

DATE VEHICLE RECEIVED: 09/30/93
ODOMETER READING: 125
DEALER'S NAME: Arena Dodge
AND ADDRESS: 924 Shiloh Springs Road
Dayton, OH 45415

ACCESSORIES:

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

CERTIFICATION DATA FROM VEHICLE'S LABEL:

VEHICLE MANUFACTURED BY: Chrysler Corporation
DATE OF MANUFACTURE: 08/93
VIN: 1B7FL26XXRS501528
GVWR: 4590 lb
GAWR: FRONT: 2684 lb
REAR: 2684 lb

TABLE 2 TEST VEHICLE INFORMATION, CONT'D.

SIZE OF TIRES ON VEHICLE: P215/75R15
TIRE PRESSURE WITH MAXIMUM
CAPACITY VEHICLE LOAD: FRONT: 44 psi
REAR: 44 psi
SPARE TIRE: _____SPACE SAVER _____X_____STANDARD
TYPE OF SEATS: FRONT: Bench
REAR: NA

TIRE & CAPACITY DATA FROM VEHICLE'S LABEL:

RECOMMENDED TIRE SIZE: P195/75R15
RECOMMENDED COLD TIRE PRESSURE: FRONT: 35 psi; REAR: 35 psi
DESIGNATED SEATING CAPACITY: NA FRONT NA REAR NA TOTAL
VEHICLE CAPACITY WEIGHT: NA lb

LOCATION OF LABEL STATING TIRE & CAPACITY DATA:

The label was located on the driver's B-pillar.

TEST VEHICLE ATTITUDES:

DELIVERED ATTITUDE:	LF: 30.4 in;	RF: 30.9 in;	LR: 33.6 in;	RR: 33.6 in
FULLY LOADED ATTITUDE:	LF: 30.2 in;	RF: 30.8 in;	LR: 31.8 in;	RR: 31.9 in
PRE-TEST ATTITUDE:	LF: 30.2 in;	RF: 30.3 in;	LR: 32.0 in;	RR: 32.0 in
POST-TEST ATTITUDE:	LF: 32.2 in;	RF: 34.3 in;	LR: 26.5 in;	RR: 30.2 in

TABLE 2 TEST VEHICLE INFORMATION, CONT'D.

WEIGHT OF TEST VEHICLE AS RECEIVED (WITH MAXIMUM FLUIDS):

RIGHT FRONT	907	lb	RIGHT REAR	702	lb
LEFT FRONT	1002	lb	LEFT REAR	681	lb
TOTAL FRONT WEIGHT	1909	lb	(58.0% OF TOTAL VEHICLE WEIGHT)		
TOTAL REAR WEIGHT	1383	lb	(42.0% OF TOTAL VEHICLE WEIGHT)		
TOTAL DELIVERED WEIGHT	3292	lb			

CALCULATION OF TEST VEHICLE'S TARGET TEST WEIGHT:

RCLW¹ = RATED CARGO AND LUGGAGE WEIGHT
UDW = UNLOADED DELIVERED WEIGHT (3292 lb)
GVWR = GROSS VEHICLE WEIGHT RATING (4590 lb)
VCW = VEHICLE CAPACITY WEIGHT = GVWR - UDW = 4590 - 3292 = 1298 lb
DSC = DESIGNATED SEATING CAPACITY (3)
RCLW¹ = GVWR - UDW - 150 (DSC) = 4590 - 3292 - 150 (3) = 848 lb
TARGET TEST WEIGHT = UDW + RCLW¹ + (NUMBER OF HYBRID III DUMMIES
X 167 lb PER DUMMY)
TARGET TEST WEIGHT = 3292 + 300 + 334 = 3926 lb

WEIGHT OF TEST VEHICLE WITH REQUIRED DUMMIES AND 281 lb OF CARGO WEIGHT:

RIGHT FRONT	987	lb	RIGHT REAR	934	lb
LEFT FRONT	1074	lb	LEFT REAR	912	lb
TOTAL FRONT WEIGHT	2061	lb	(52.8% OF TOTAL VEHICLE WEIGHT)		
TOTAL REAR WEIGHT	1846	lb	(47.2% OF TOTAL VEHICLE WEIGHT)		
TOTAL TEST WEIGHT	3907	lb	(0.5% UNDER TARGET TEST WEIGHT)		

WEIGHT OF BALLAST SECURED IN VEHICLE CARGO AREA: 100 lb

COMPONENTS REMOVED TO MEET TARGET TEST WEIGHT: None

CG REARWARD OF FRONT WHEEL CENTERLINE: 53.2 in

WHEELBASE: 112.5 in

¹Cargo weight for multi-purpose passenger vehicles, trucks, and buses is the vehicle's calculated cargo and luggage weight or 300 pounds, whichever is less.

TABLE 3 POST-IMPACT DATA

TEST NUMBER: 931229
NHTSA NO.: CR0306
TEST DATE: 12/29/93
TEST TIME: 1612
TEST TYPE: Frontal Barrier Impact
IMPACT ANGLE: 0°
AMBIENT TEMPERATURE
AT IMPACT AREA: 64° F
TEMPERATURE IN
OCCUPANT COMPARTMENT: 71° F
IMPACT VELOCITY:
PRIMARY: 29.3 mph
SECONDARY 29.3 mph
SPECIFIED RANGE: 28.9 TO 29.9 mph

DISTANCE FROM VEHICLE TO BARRIER:

ENTERING VELOCITY TRAP: 15.0 in
EXITING VELOCITY TRAP: 2.0 in

TEST VEHICLE STATIC CRUSH:

OVERALL LENGTH OF TEST VEHICLE:

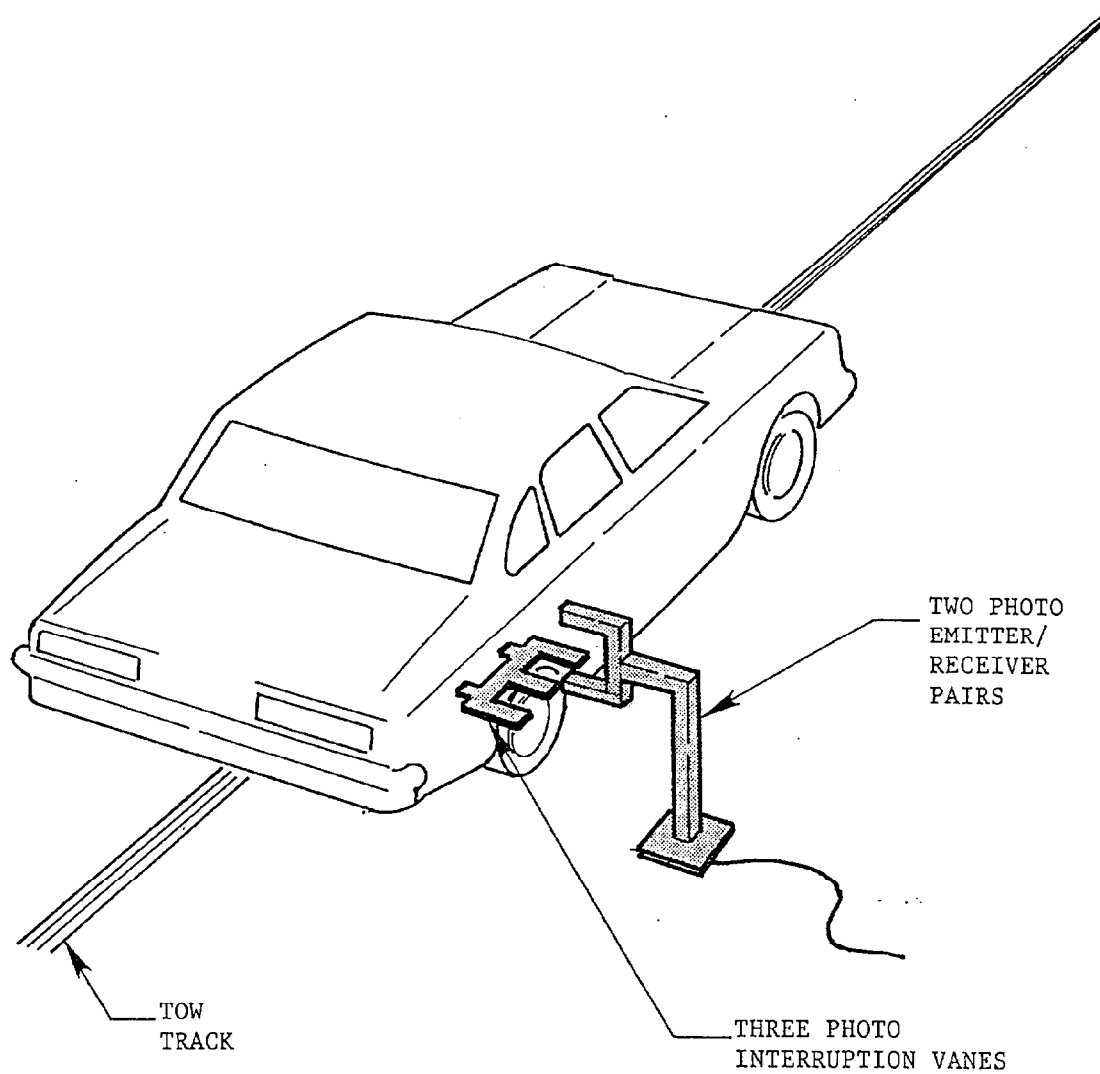
PRE-TEST: L: 189.0 in; C: 194.6 in; R: 189.5 in
POST-TEST: L: 172.1 in; C: 171.2 in; R: 171.6 in
TOTAL CRUSH: L: 16.9 in; C: 23.4 in; R: 17.9 in
AVERAGE CRUSH: 19.4 in

TEST VEHICLE REBOUND FROM FLAT BARRIER:

DISTANCE FROM TEST VEHICLE TO BARRIER:

L: 10.6 in; C: 10.7 in; R: 11.5 in
AVG.: 10.9 in

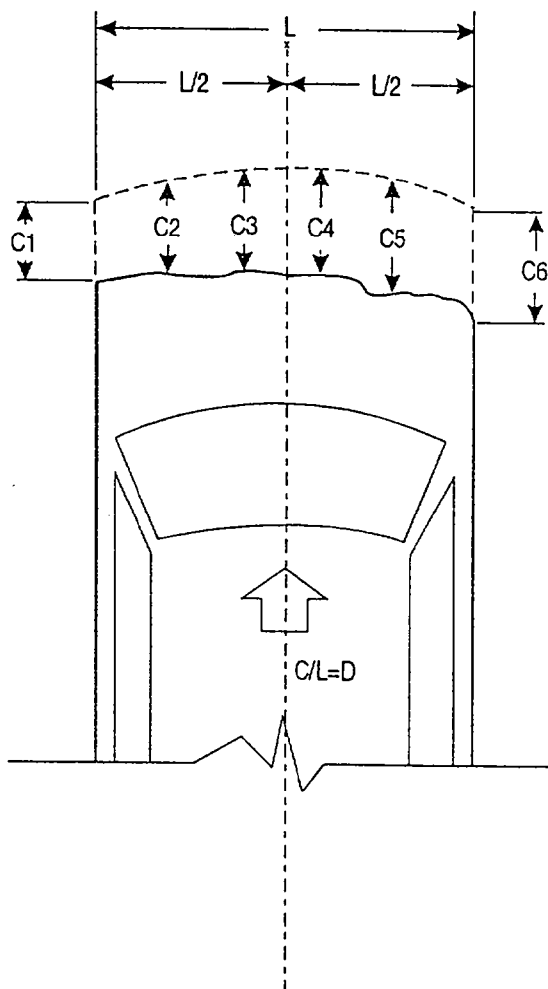
FIGURE 1 IMPACT VELOCITY MEASUREMENT SYSTEM



The final vane clears emitter/receiver two inches before impact.
The vanes have one-foot spacing.

FIGURE 2 ACCIDENT INVESTIGATION DIVISION DATA
FOR 30 MPH FRONTAL BARRIER IMPACT

NHTSA NO.: CR0306
 TEST DATE: 12/29/93
 VEHICLE YEAR/MAKE/
 MODEL/BODY STYLE: 1994/Dodge/Dakota/pickup
 VEHICLE SIZE CATEGORY: Standard pickup
 VIN: 1B7FL26XXRS501528
 BUILD DATE: 08/93
 TEST WEIGHT: 3907 lb
 VEHICLE WHEELBASE: 112.5 in
 MAXIMUM WIDTH: 68.8 in
 FRONT OVERHANG: 34.2 in



COLLISION DEFORMATION

CLASSIFICATION (CDC) CODE: 12FDEW3

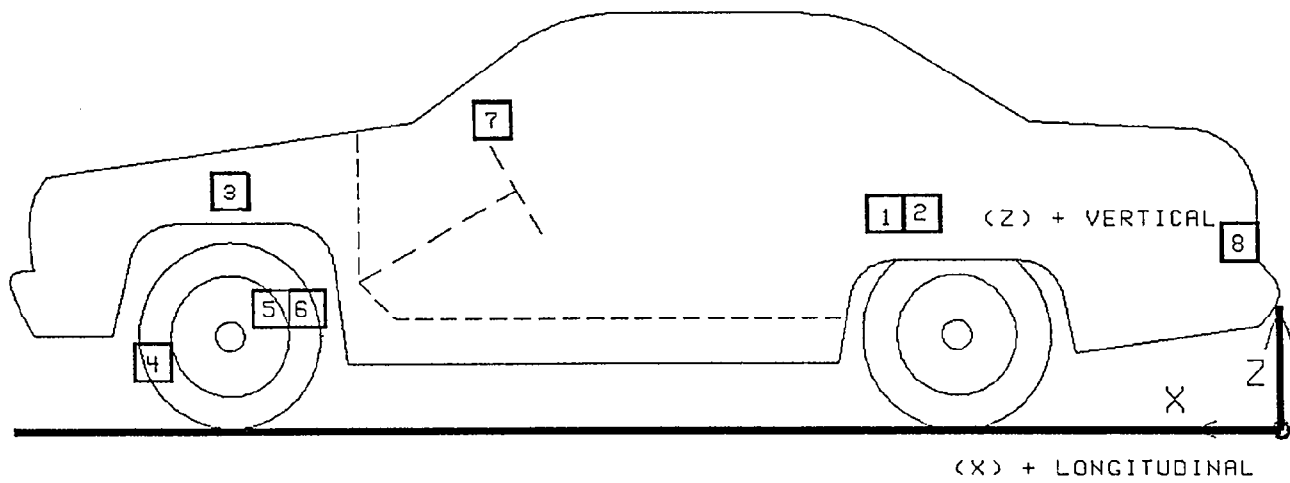
CRUSH DEPTH MEASUREMENTS:

C1:	16.9 in
C2:	20.3 in
C3:	22.4 in
C4:	21.9 in
C5:	21.0 in
C6:	17.9 in

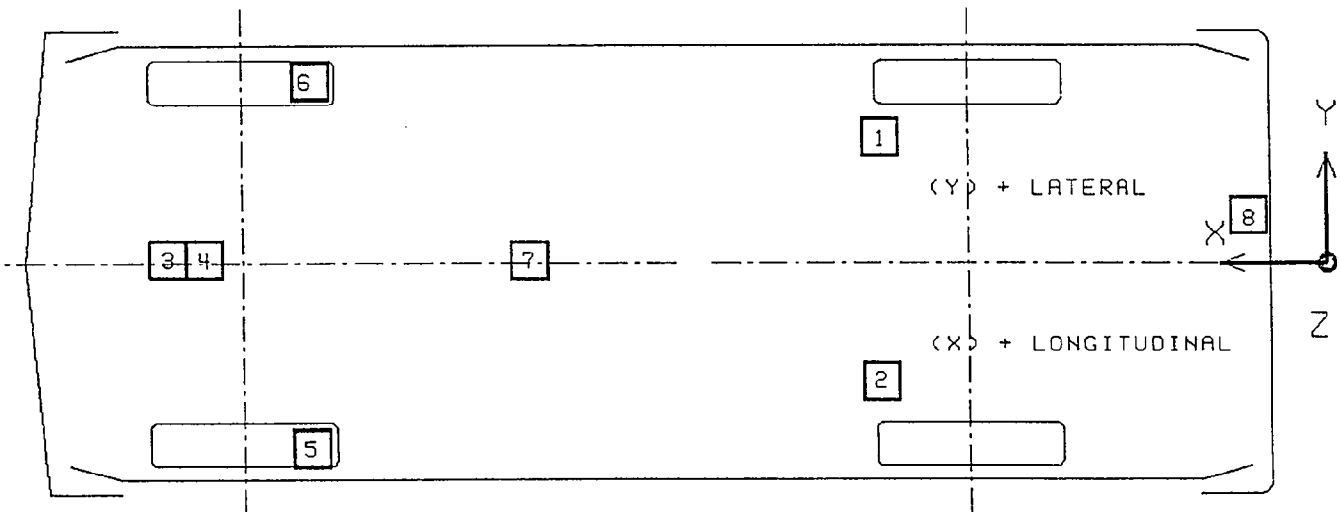
MIDPOINT OF DAMAGE: D: Vehicle Longitudinal Centerline

LENGTH OF DAMAGED REGION: L: 63.0 in

FIGURE 3 VEHICLE ACCELEROMETER PLACEMENT



SIDE VIEW



BOTTOM VIEW

TABLE 4

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

TEST NUMBER 931229

No. LOCATION	X*	Y*	Z*	POSITIVE		NEGATIVE	
				DIRECTION		DIRECTION	
				MAX G MSEC		MAX G MSEC	
1 LEFT REAR SEAT CROSSMEMBER LONGITUDINAL ¹	PRE 94.0	19.5	21.2				
	POST 95.8	19.5	20.1				
				2.7	151.8	44.1	61.2
2 RIGHT REAR SEAT CROSSMEMBER LONGITUDINAL ¹	PRE 94.0	-21.5	21.5				
	POST 94.6	-21.5	19.1				
				5.0	149.7	34.4	56.0
3 ENGINE TOP LONGITUDINAL	PRE 153.9	-11.0	23.2				
	POST 149.0	-11.5	30.5				
				40.3	56.6	116.7	44.7
4 ENGINE BOTTOM LONGITUDINAL	PRE 156.1	-6.0	12.6				
	POST 154.5	-6.0	10.7				
				28.6	53.8	98.6	45.7

TABLE 4

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY CONTINUED

TEST NUMBER 931229

No. LOCATION	X*	Y*	Z*	POSITIVE DIRECTION		NEGATIVE DIRECTION	
				MAX G	MSEC	MAX G	MSEC
5 RIGHT BRAKE CALIPER LONGITUDINAL	PRE 158.0	-24.2	11.4				
	POST 158.0	-24.2	7.6				
			17.1	67.9	68.1	57.7	
6 LEFT BRAKE CALIPER LONGITUDINAL	PRE 158.0	24.2	11.6				
	POST 155.0	24.2	12.5				
			16.4	70.4	56.0	59.7	
7 INSTRUMENT PANEL CENTER LONGITUDINAL	PRE 131.6	0.0	46.9				
	POST 132.0	0.0	46.1				
			32.2	103.0	68.5	107.0	
8 VEHICLE REAR CENTER VERTICAL	PRE 9.8	0.0	27.1				
	POST 11.2	0.0	31.1				
			24.8	62.6	17.7	25.5	

* ALL MEASUREMENTS OF ACCELEROMETER LOCATIONS ARE IN INCHES.

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

¹ See DATA ACQUISITION EXPLANATIONS

REPORT OF VEHICLE CONDITION AT THE COMPLETION OF TESTING

CONTRACT NO.: DTNH22-90-D-22121
FROM: Transportation Research Center Inc.
10820 State Route 347
East Liberty, OH 43319

TO: Mr. Charles Case, COTR
Office of Vehicle Safety Compliance

The following vehicle has been subjected to testing for FMVSS 208. The vehicle was inspected upon arrival at the laboratory for the test and found to contain all of the equipment listed below. All variances have been reported within 2 working days of vehicle arrival, by letter, to the NHTSA Industrial Property Manager/NAD-30, with a carbon copy to the responsible testing office. The vehicle is again inspected, after the above test has been conducted, and all changes are noted below. The final condition of the vehicle is also noted in detail.

NHTSA NO.: CR0306
VEHICLE YEAR/MAKE/
MODEL/BODY STYLE: 1994/Dodge/Dakota/pickup
BODY COLOR: Red
VIN: 1B7FL26XXRS501528
ODOMETER (ARRIVAL): 125 DATE: 09/30/93
ODOMETER (COMPLETION): 126 DATE: 12/29/93
COST: \$11866.50

AIR CONDITIONER	No	CONSOLE	No	BRAKES	POWER
TINTED GLASS	Yes	TACHOMETER	No	FRONT	Disc
POWER STEERING	Yes	SPEED CONTROL	No	REAR	Drum
POWER WINDOWS	No	REAR WINDOW DEF.	No	FRONT SEATS	Manual
POWER DOOR LOCKS	No	SUN/MOON ROOF	No	SEAT TYPE	Front-bench
RADIO	Yes	T-TOP	No		Rear-NA
CLOCK	Yes	TILT STEERING WHEEL	No	NO. OF SEATS	3
ROOF RACK	No	OTHER OPTIONS:	None		

ENGINE: 6 CYLINDERS
LITERS: 3.9
TRANSMISSION: 5-speed manual
DRIVE TYPE: Rear-wheel drive
TIRE SIZE: P215/75R15
GASOLINE TYPE: Unleaded

EQUIPMENT THAT IS NO LONGER ON THE VEHICLE AS NOTED ABOVE: None

EXPLANATION: NA

REPORT OF VEHICLE CONDITION AT THE COMPLETION OF TESTING, CONT'D.

VEHICLE CONDITION: Vehicle was subjected to a 30 mph crash test. There is severe structural damage. Various interior and exterior portions of the vehicle have been painted and have had holes drilled to facilitate attachment of instrumentation. Various trim and body parts have been removed. Stoddard solvent replaced the fuel in the fuel system and engine. THE VEHICLE IS FOR SALVAGE ONLY AND IS NOT TO BE REPAIRED FOR HIGHWAY USE.

SECTION 3.0

FMVSS 208, 212, 219 (partial), AND 301 DATA

TABLE 5 DUMMY INJURY CRITERIA

MAXIMUM ACCELERATION							
	HEAD				CHEST		
	X	Y	Z	R	X	Y	Z
DRIVER ¹	-48.4 g	9.3 g	-21.1 g	49.4 g	-48.1 g	10.5 g	-17.4 g
PASSENGER	-43.8 g	9.6 g	-50.9 g	56.9 g	-30.9 g	-6.5 g	22.6 g

MAXIMUM FEMUR COMPRESSIVE FORCE		
	LEFT FEMUR	RIGHT FEMUR
DRIVER	1248 lbf	1163 lbf
PASSENGER	154 lbf	456 lbf

HEAD INJURY CRITERIA ²			
	HIC	TIME t ₁	TIME t ₂
DRIVER	292	79.4 ms	115.2 ms
PASSENGER	430	88.1 ms	124.1 ms

CHEST MAXIMUM RESULTANT ACCELERATION ³			
	ACCEL.	TIME t ₁	TIME t ₂
DRIVER	46.7 g	102.1 ms	105.1 ms
PASSENGER	32.7 g	73.1 ms	76.1 ms

MAXIMUM CHEST DEFLECTION

DRIVER	1.4 in
PASSENGER ¹	1.9 in

¹See DATA ACQUISITION EXPLANATIONS

²As defined in FMVSS No. 208

³Defined as equal to or exceeding 0.003 sec. duration

DUMMY KINEMATIC SUMMARY

Driver Dummy

Upon impact, the driver dummy translated forward on the seat impacting both knees into the instrument panel as the dummy's head and chest were restrained by the airbag. The dummy then rebounded into the seat back and head restraint. The driver dummy came to rest in the driver's seat.

Right Front Passenger Dummy

Upon impact, the right front passenger dummy translated forward on the seat impacting both knees into the instrument panel. The dummy's head rotated forward and contacted the dummy's chest as the dummy's upper torso was restrained by the three-point unbelt. The dummy's head rotated rearward, impacting the head restraint, as the dummy rebounded into the seat back. The dummy came to rest seated in the right front passenger's seat, restrained by the three-point unbelt.

TABLE 6 FMVSS 208 COMFORT & CONVENIENCE DATA FOR MANUAL SEAT BELTS

MAKE/MODEL/BODY STYLE: Dodge/Dakota/pickup

NHTSA NO.: CR0306

VIN: 1B7FL26XXRS501528

DATE OF MANUFACTURE: 08/93

WEBBING TENSION - RELIEVING DEVICE:

DO OUTBOARD SEATING POSITION SEAT BELTS HAVE WEBBING TENSION - RELIEVING DEVICES?(check one): NO

IF YES:

MAXIMUM SLACK RECOMMENDED IN OWNER'S MANUAL: _____ INCHES

DOES OWNER'S MANUAL WARN THAT INTRODUCING SLACK BEYOND THE AMOUNT SPECIFIED CAN SIGNIFICANTLY REDUCE THE EFFECTIVENESS OF THE SHOULDER BELT? _____ YES _____ NO

IF NO, EXPLAIN:

THE WEBBING TENSION - RELIEVING DEVICE IS CANCELLED WHEN

(check one): _____ The adjacent door is opened.
_____ The latch plate is released from the buckle.
_____ A manual means is activated on a open-body vehicle without doors.

OPEN-BODY VEHICLE (without doors): DOES THE MANUAL-MEANS TO CANCEL THE WEBBING TENSION - RELIEVING DEVICE OPERATE PROPERLY?

_____ YES _____ NO

IF NO, EXPLAIN:

BELT CONTACT FORCE:

BELT CONTACT FORCE ON CHEST OF TEST DUMMY: 0.2 POUNDS

_____ NOT APPLICABLE, THE VEHICLE'S SEAT BELT SYSTEM INCLUDED A WEBBING TENSION - RELIEVING DEVICE.

TABLE 6 FMVSS 208 COMFORT & CONVENIENCE DATA FOR MANUAL SEAT BELTS, CONT'D.

MAKE/MODEL/BODY STYLE: Dodge/Dakota/pickup
NHTSA NO.: CR0306
VIN: 1B7FL26XXRS501528
DATE OF MANUFACTURE: 08/93

LATCHPLATE ACCESS:

ARE THE SEAT BELT LATCHPLATES, IN THEIR NORMAL STOWED POSITION, WITHIN
THE REACH ENVELOPE? YES
DOES THE CLEARANCE TEST BLOCK MOVE UNHINDERED TO THE LATCHPLATE OR
BUCKLE? YES

RETRACTION:

SEAT BELT AUTOMATICALLY RETRACTS WHEN (check one):
 The adjacent vehicle door is open and the seat belt latchplate is
released.
 X The seat belt latchplate is released.

ARE THE STOWED SEAT BELT WEBBING AND HARDWARE PINCHED WHEN THE DOOR IS
CLOSED? NO

OPEN-BODY VEHICLE (without doors): DOES THE SEAT BELT SYSTEM FULLY
RETRACT WHEN THE WEBBING TENSION-RELIEVING DEVICE IS MANUALLY
DEACTIVATED? YES NO

TABLE 6 FMVSS 208 COMFORT & CONVENIENCE DATA FOR MANUAL SEAT BELTS, CONT'D.

MAKE/MODEL/BODY STYLE: Dodge/Dakota/pickup
NHTSA NO.: CR0306
VIN: 1B7FL26XXRS501528
DATE OF MANUFACTURE: 08/93

ACCESSIBILITY:

IS THE SEAT CUSHION REMOVABLE SO THE SEAT BACK SERVES A FUNCTION OTHER THAN SEATING? NO

IS THE SEAT REMOVABLE? NO

IS THE SEAT MOVABLE SO THE SPACE FORMERLY OCCUPIED BY THE SEAT CAN BE USED FOR A SECONDARY FUNCTION? NO

NOTE: IF ANY OF THE ABOVE ANSWERS ARE "YES", THE ACCESSIBILITY REQUIREMENTS DO NOT APPLY.

IF WEBBING IS DESIGNED TO PASS THROUGH THE SEAT CUSHION OR BETWEEN THE CUSHION AND SEAT BACK ARE ONE OF THE FOLLOWING PARTS NORMALLY ON TOP OF OR ABOVE THE SEAT CUSHION: LATCHPLATE, BUCKLE, WEBBING? Yes

ARE THE REMAINING TWO PARTS ACCESSIBLE UNDER NORMAL CONDITIONS? Yes

DO THE LATCHPLATE AND BUCKLE PASS THROUGH THE GUIDES PROVIDED AND FALL BEHIND THE SEAT WHEN THE BELT IS COMPLETELY RETRACTED (OR DETACHED IF NOT RETRACTABLE); THE SEAT IS MOVED TO ANY POSITION; AND THE SEAT BACK, IF FOLDABLE, IS FOLDED FORWARD AS FAR AS POSSIBLE AND THEN MOVED BACKWARD INTO POSITION? No

IS THE INBOARD RECEPTACLE END OF THE OUTBOARD SEATING POSITION'S SEAT BELT ACCESSIBLE WITH THE CENTER ARM REST IN ANY POSITION TO WHICH IT CAN BE ADJUSTED WITHOUT MOVING THE ARM REST FOR ACCESS?

Not applicable, the vehicle does not contain a center arm rest.

TABLE 7 FMVSS 208 SEAT BELT WARNING SYSTEM DATA

WITH OCCUPANT IN DRIVER'S POSITION AND UNIBELT IN STOWED POSITION AND IGNITION SWITCH PLACED IN "START/ON" POSITION:

Duration of audible warning signal = 6 s

Duration of reminder light operation = 6 s

WITH OCCUPANT IN DRIVER'S POSITION AND UNIBELT IN USE AND THE IGNITION SWITCH PLACED IN "START/ON" POSITION:

Duration of audible warning signal = 0 s

(NOTE: audible warning should not operate)

Duration of reminder light operation = 6 s

WORDING OF VISUAL WARNING:

 Fasten Seat Belt

 Fasten Belt

 X Symbol from Table 2 of FMVSS 101

 Other:

TABLE 8 FMVSS 208 LABELING AND DRIVER'S MANUAL DATA

DESCRIBE LOCATION OF LABEL WHICH DESCRIBES MANUFACTURER'S MAINTENANCE OR REPLACEMENT SCHEDULE FOR CRASH-DEPLOYED OCCUPANT PROTECTION SYSTEM.

The label was located on the rear surface of the glove compartment.

THE MANUFACTURER'S RECOMMENDED SCHEDULE IS TO: (check one)

☐ Replace

☐ Repair

☒ Other: No maintenance needed unless airbag light does not
come on momentarily when ignition is turned on or
comes on or flashes while driving.

This system: (check one)

☐ a. by ☐ month, ☐ year

☐ b. by ☐ miles

☐ c. or after a time interval of ☐ months or ☐ years.

☐ d. other:

WERE APPROPRIATE INSTRUCTIONS CONCERNING MAINTENANCE AND/OR REPLACEMENT OF THIS SYSTEM PROVIDED? YES, owner's manual, page 17, and on label on vehicle

WAS A DESCRIPTION OF THE FUNCTIONAL OPERATION OF THE SYSTEM PROVIDED?

YES, owner's manual, page 18

IS THERE A REFERENCE TO THE INSTRUCTIONS AND DESCRIPTION OF THE SYSTEM ON THE LABEL? YES

WAS AN OWNER'S MANUAL PROVIDED? YES

DID THE OWNER'S MANUAL CONTAIN APPROPRIATE INFORMATION CONCERNING MAINTENANCE AND/OR REPLACEMENT AND A DESCRIPTION OF THE FUNCTIONAL OPERATION OF THE SYSTEMS? YES, pages 17 & 18

TABLE 9 FMVSS 208 READINESS INDICATOR DATA

AN OCCUPANT RESTRAINT SYSTEM THAT DEPLOYS IN THE EVENT OF A CRASH SHALL HAVE A MONITORING SYSTEM WITH A READINESS INDICATOR. A TOTALLY MECHANICAL SYSTEM IS EXEMPT FROM THIS REQUIREMENT.

IS THE SYSTEM TOTALLY MECHANICAL? NO

IF NO:

DESCRIBE THE LOCATION OF THE READINESS INDICATOR:

The readiness indicator was located on the left side of the instrument cluster.

IS THE READINESS INDICATOR CLEARLY VISIBLE TO THE DRIVER? YES

IS A LIST OF THE ELEMENTS IN THE OCCUPANT RESTRAINT SYSTEM, BEING MONITORED BY THE READINESS INDICATOR, PROVIDED?

YES, owner's manual, page 18

FIGURE 4 FMVSS 212 TEST DATA

DETAILS OF WINDSHIELD MOUNTING SUCH AS RETENTION METHOD, TRIM TYPE, ETC.:

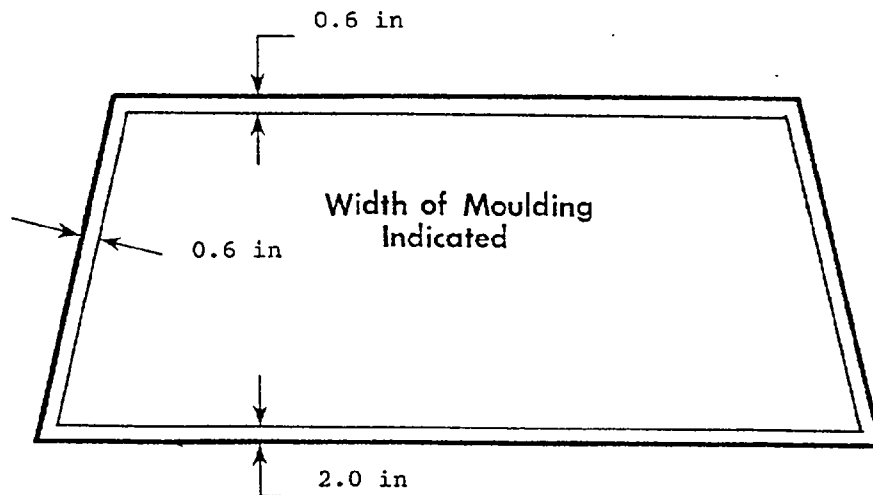
Plastic trim around outer perimeter, adhesive around inner perimeter.

FMVSS 212 REQUIREMENTS: The post-test periphery retention amount must be at least 75% of the pre-test periphery measurement for vehicles NOT equipped with automatic restraints, and 50% for each side of windshield for vehicles equipped with automatic restraint systems for front occupants.

WINDSHIELD PERIPHERY MEASUREMENTS:

	PRE-TEST	POST-TEST	PERCENT RETENTION
RIGHT SIDE	79.0 in	79.0 in	100
LEFT SIDE	79.0 in	79.0 in	100
TOTAL	158.0 in	158.0 in	100

PRE-TEST WINDSHIELD MOUNTING MATERIAL TEMPERATURE: 71° F



FRONT VIEW OF WINDSHIELD¹

LOSS OF WINDSHIELD RETENTION LENGTHS: None

¹Indicate areas of loss of retention, if any, on windshield diagram.

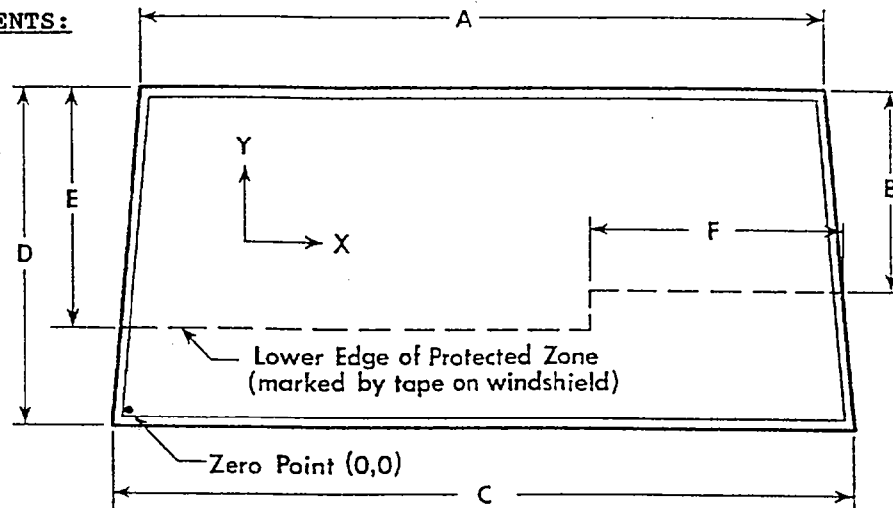
FIGURE 5 FMVSS 219 TEST DATA

PROTECTED ZONE LOWER EDGE REQUIREMENT:

The lower edge of the protected zone is determined by placing a 6.5 inch diameter rigid sphere weighing 15 pounds in a position such that it simultaneously contacts the inner surface of the windshield and the top surface of the instrument panel including padding. Draw the locus of points on the inner surface of the windshield contactable by the sphere across the width of the instrument panel. From the outermost contactable points, extend the locus line horizontally to the edges of the windshield, and then draw a line on the inner surface of the windshield below and 0.5 inch from the locus line. The LOWER EDGE OF THE PROTECTED ZONE is the longitudinal projection onto the outer surface of the windshield of this line.

WINDSHIELD MEASUREMENTS:

A: 48.5 in
 B: 13.5 in
 C: 61.9 in
 D: 26.0 in
 E: 19.5 in
 F: 36.8 in



FRONT VIEW

METHOD OF ADHERING PROTECTED ZONE TEMPLATE TO WINDSHIELD: NA

AREAS OF WINDSHIELD TEMPLATE PENETRATION
GREATER THAN 0.25 in: NA

COORDINATES	
X	Y
1.	
2.	
3.	

AREAS OF WINDSHIELD PENETRATION, BELOW THE PROTECTED ZONE,
THROUGH THE INNER SURFACE OF THE WINDSHIELD: None

1.
2.
3.

All measurements are in inches.

TABLE 10 FUEL SYSTEM DATA

MAKE/MODEL: Dodge/Dakota
NHTSA NO.: CR0306
FUEL SYSTEM CAPACITY: 15.0 gal (FROM OWNER'S MANUAL)
USABLE CAPACITY: 15.0 gal (FURNISHED BY COTR)
TEST VOLUME RANGE: 13.8 gal TO 14.1 gal (92-94% OF USABLE)
ACTUAL TEST VOLUME: 14.0 gal (WITH ENTIRE FUEL SYSTEM FILLED)
TEST FLUID TYPE: STODDARD SOLVENT
SPECIFIC GRAVITY: 0.764
KINEMATIC VISCOSITY: 0.99 centistokes
TEST FLUID COLOR: PURPLE

DETAILS OF FUEL SYSTEM: The fuel tank is located in front of the rear
axle. The fuel filler is on the left side. The fuel lines run along
the left frame rail to the front.

ELECTRIC FUEL PUMP: Yes

FUEL INJECTION: Yes

DOES ELECTRIC FUEL PUMP OPERATE WITH IGNITION SWITCH "ON" AND THE ENGINE NOT
OPERATING? No

TABLE 11 FMVSS 301 POST-IMPACT TEST DATA

NHTSA NO.: CR0306
TEST DATE: 12/29/93
VEHICLE YEAR/MAKE/
MODEL/BODY STYLE: 1994/Dodge/Dakota/pickup

TEST REQUIREMENTS:

Test vehicle fuel tank filled to 92 to 94% of manufacturer's usable capacity and with electric fuel pump operating (if it will operate without engine operation). Part 572 test dummies located at each front designated seating position.

TEST VEHICLE IMPACT TYPE:

 X FRONTAL (30 mph)
 OBLIQUE (30 mph) WITH ° BARRIER FACE
FIRST CONTACTING (DRIVER/PASS.) SIDE.
 REAR MOVING BARRIER (30 mph)
 LATERAL MOVING BARRIER (20 mph)

FUEL SYSTEM FLUID SPILLAGE MEASUREMENTS:

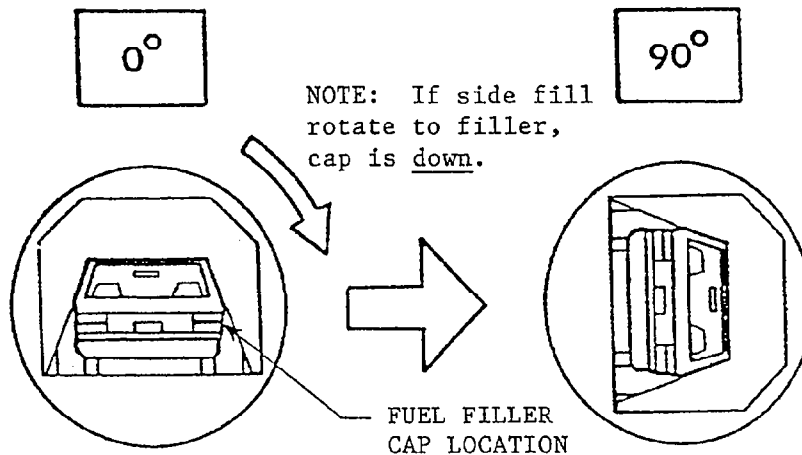
	TEST RESULTS	MAXIMUM ALLOWABLE
1. FROM IMPACT UNTIL VEHICLE MOTION CEASES	0 oz	1 oz
2. 5-MINUTE PERIOD AFTER VEHICLE MOTION CEASES	0 oz	5 oz
3. NEXT 25 MINUTES AFTER 5 MINUTE PERIOD	0 oz	1 oz/1 min

FUEL SYSTEM FLUID SPILLAGE LOCATION(S):

None

FIGURE 6 FMVSS 301 STATIC ROLLOVER TEST DATA

NHTSA NO.: CR0306
TEST PHASE



STATIC ROLLOVER MACHINE ROTATION TIME INFORMATION: (Spec. Range = 1-3 min.)

TIME REQ. FOR MACHINE TO ROTATE 90° = 2 minutes, 00 seconds

FMVSS 301 POSITION HOLD TIME = 5 minutes, 00 seconds

TOTAL - - - - - = 7 minutes, 00 seconds

NEXT WHOLE MINUTE INTERVAL - - - - = 7 minutes

FUEL SYSTEM FLUID SPILLAGE MEASUREMENTS:

<u>0° TO 90° ROTATION (FUEL FILLER CAP DOWN)</u>	<u>TEST RESULTS</u>	<u>MAXIMUM ALLOWABLE</u>
1. FIRST 5 MINUTES FROM ONSET OF ROTATION - - - - -	0 oz	5 oz
2. 6TH MINUTE FROM ONSET OF ROTATION - - - - -	0 oz	1 oz
3. 7TH MINUTE FROM ONSET OF ROTATION - - - - -	0 oz	1 oz

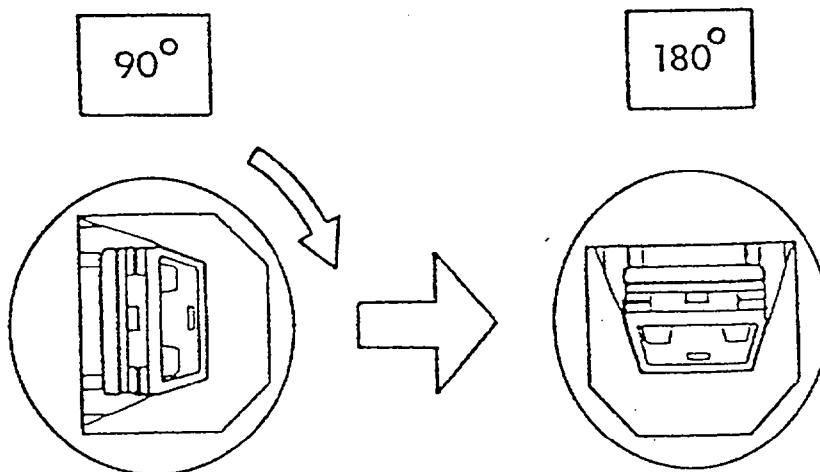
FUEL SYSTEM FLUID SPILLAGE LOCATION(S):

None

FIGURE 6 FMVSS 301 STATIC ROLLOVER TEST DATA, CONT'D.

NHTSA NO.: CR0306

TEST PHASE



STATIC ROLLOVER MACHINE ROTATION TIME INFORMATION: (Spec. Range = 1-3 min.)

TIME REQ. FOR MACHINE TO ROTATE 90° = 2 minutes, 00 seconds

FMVSS 301 POSITION HOLD TIME = 5 minutes, 00 seconds

TOTAL - - - - - = 7 minutes, 00 seconds

NEXT WHOLE MINUTE INTERVAL - - - - = 14 minutes

FUEL SYSTEM FLUID SPILLAGE MEASUREMENTS:

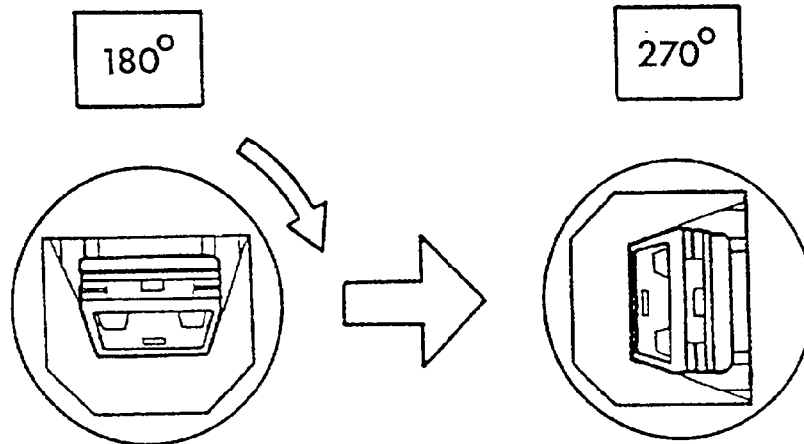
<u>90° TO 180° ROTATION</u>	<u>TEST RESULTS</u>	<u>MAXIMUM ALLOWABLE</u>
1. FIRST 5 MINUTES FROM ONSET OF ROTATION - - - - -	0 oz	5 oz
2. 6TH MINUTE FROM ONSET OF ROTATION - - - - -	0 oz	1 oz
3. 7TH MINUTE FROM ONSET OF ROTATION - - - - -	0 oz	1 oz

FUEL SYSTEM FLUID SPILLAGE LOCATION(S):

None

FIGURE 6 FMVSS 301 STATIC ROLLOVER TEST DATA, CONT'D.

NHTSA NO.: CR0306
TEST PHASE



STATIC ROLLOVER MACHINE ROTATION TIME INFORMATION: (Spec. Range = 1-3 min.)

TIME REQ. FOR MACHINE TO ROTATE 90° = 2 minutes, 00 seconds

FMVSS 301 POSITION HOLD TIME = 5 minutes, 00 seconds

TOTAL - - - - - = 7 minutes, 00 seconds

NEXT WHOLE MINUTE INTERVAL - - - - = 21 minutes

FUEL SYSTEM FLUID SPILLAGE MEASUREMENTS:

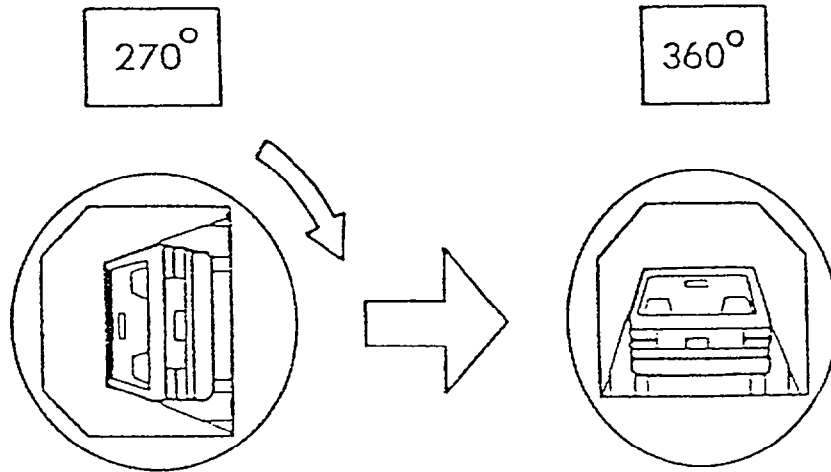
<u>180° TO 270° ROTATION</u>	<u>TEST RESULTS</u>	<u>MAXIMUM ALLOWABLE</u>
1. FIRST 5 MINUTES FROM ONSET OF ROTATION - - - - -	0 oz	5 oz
2. 6TH MINUTE FROM ONSET OF ROTATION - - - - -	0 oz	1 oz
3. 7TH MINUTE FROM ONSET OF ROTATION - - - - -	0 oz	1 oz

FUEL SYSTEM FLUID SPILLAGE LOCATION(S):

None

FIGURE 6 FMVSS 301 STATIC ROLLOVER TEST DATA, CONT'D.

NHTSA NO.: CR0306
TEST PHASE



STATIC ROLLOVER MACHINE ROTATION TIME INFORMATION: (Spec. Range = 1-3 min.)

TIME REQ. FOR MACHINE TO ROTATE 90° = 2 minutes, 00 seconds

FMVSS 301 POSITION HOLD TIME = 5 minutes, 00 seconds

TOTAL - - - - - = 7 minutes, 00 seconds

NEXT WHOLE MINUTE INTERVAL - - - - - = 28 minutes

FUEL SYSTEM FLUID SPILLAGE MEASUREMENTS:

<u>270° TO 360° ROTATION</u>	<u>TEST RESULTS</u>	<u>MAXIMUM ALLOWABLE</u>
1. FIRST 5 MINUTES FROM ONSET OF ROTATION - - - - -	0 oz	5 oz
2. 6TH MINUTE FROM ONSET OF ROTATION - - - - -	0 oz	1 oz
3. 7TH MINUTE FROM ONSET OF ROTATION - - - - -	0 oz	1 oz

FUEL SYSTEM FLUID SPILLAGE LOCATION(S):

None

SECTION 4.0

VEHICLE, OCCUPANT, AND CAMERA MEASUREMENTS

FIGURE 7 PRE-TEST AND POST-TEST MEASUREMENT POINTS

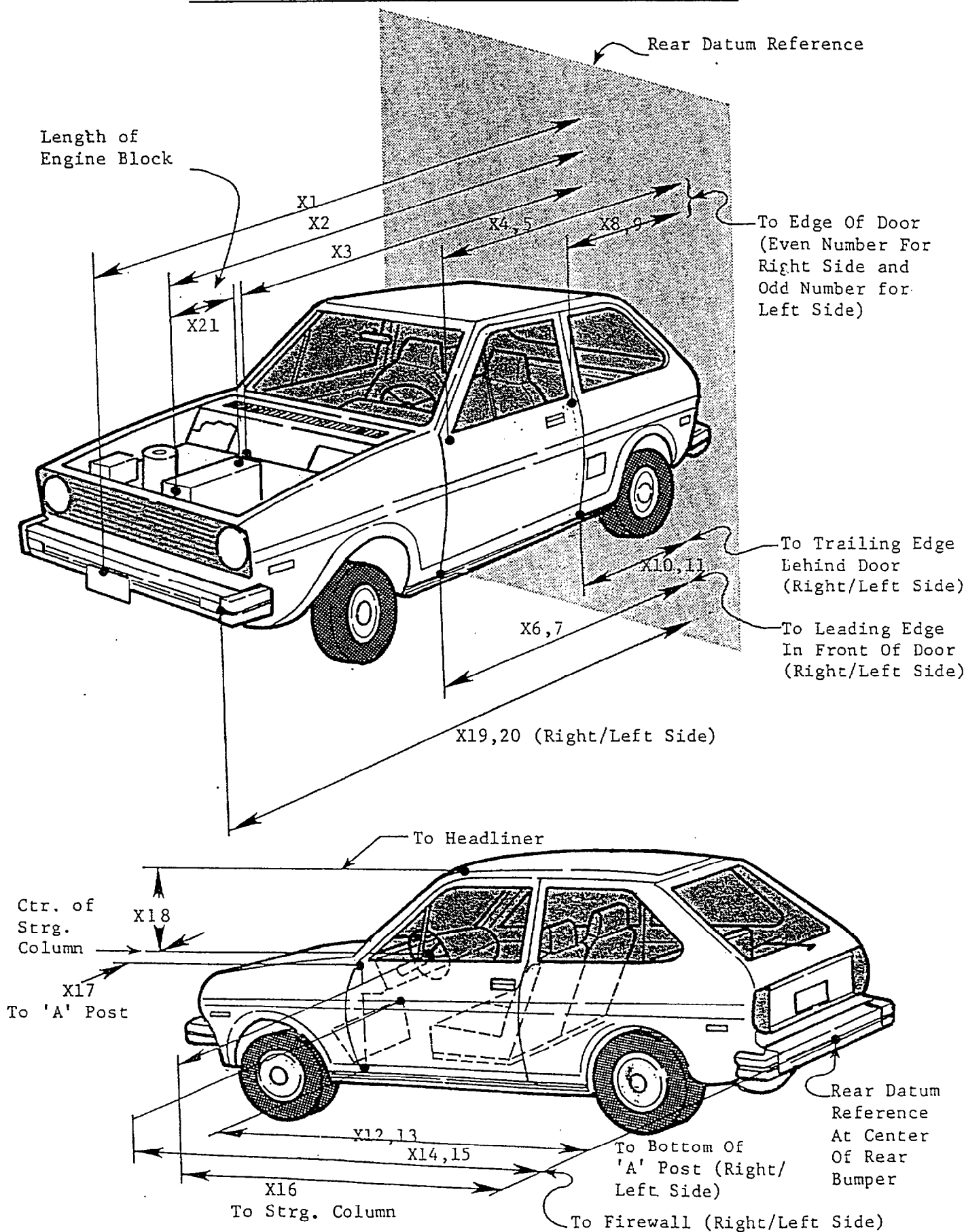
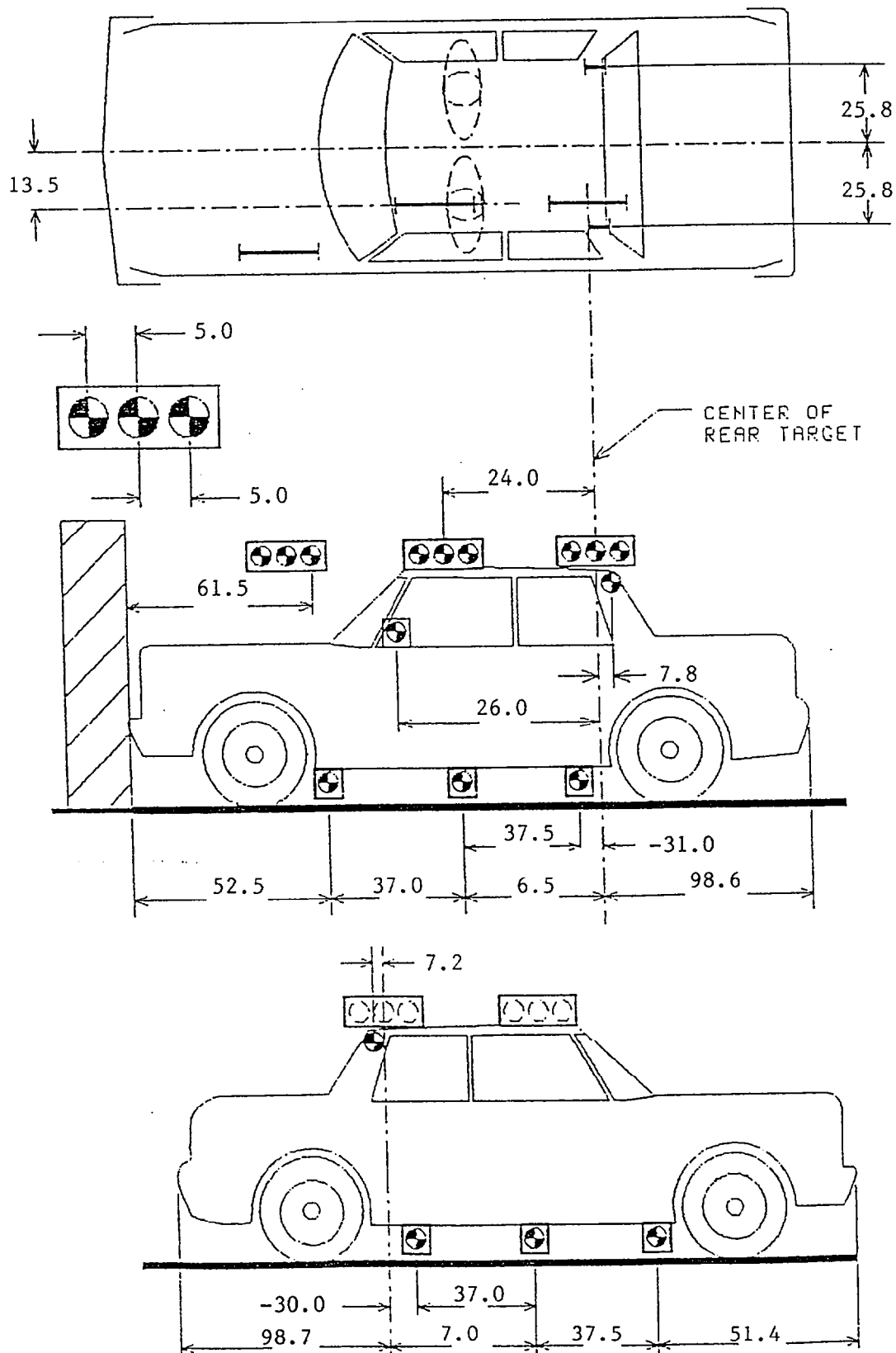


TABLE 12 IMPACTED VEHICLE MEASUREMENTS

VEHICLE MAKE/MODEL: <u>Dodge Dakota</u>		TEST NUMBER: <u>931229</u>		
NO.	TYPE OF MEASUREMENT	PRE-TEST	POST-TEST	DIFFERENCE
X1	TOTAL LENGTH OF VEHICLE AT CENTERLINE	194.6 in	171.2 in	23.4 in
X2	REAR SURFACE OF VEHICLE TO FRONT OF ENGINE BLOCK	165.9 in	159.2 in	6.7 in
X3	REAR SURFACE OF VEHICLE TO FIREWALL	147.9 in	148.5 in	-0.6 in
X4	REAR SURFACE OF VEHICLE TO UPPER LEADING EDGE OF RIGHT DOOR	137.6 in	138.5 in	-0.9 in
X5	REAR SURFACE OF VEHICLE TO UPPER LEADING EDGE OF LEFT DOOR	137.4 in	137.8 in	-0.4 in
X6	REAR SURFACE OF VEHICLE TO LOWER LEADING EDGE OF RIGHT DOOR	136.6 in	136.6 in	0.0 in
X7	REAR SURFACE OF VEHICLE TO LOWER LEADING EDGE OF LEFT DOOR	136.6 in	135.8 in	0.8 in
X8	REAR SURFACE OF VEHICLE TO UPPER TRAILING EDGE OF RIGHT DOOR	93.7 in	94.5 in	-0.8 in
X9	REAR SURFACE OF VEHICLE TO UPPER TRAILING EDGE OF LEFT DOOR	93.2 in	93.9 in	-0.7 in
X10	REAR SURFACE OF VEHICLE TO LOWER TRAILING EDGE OF RIGHT DOOR	93.5 in	93.4 in	0.1 in
X11	REAR SURFACE OF VEHICLE TO LOWER TRAILING EDGE OF LEFT DOOR	93.4 in	92.5 in	0.9 in
X12	REAR SURFACE OF VEHICLE TO BOTTOM OF "A" POST ON RIGHT SIDE	136.8 in	136.4 in	0.4 in
X13	REAR SURFACE OF VEHICLE TO BOTTOM OF "A" POST ON LEFT SIDE	137.0 in	136.9 in	0.1 in
X14	REAR SURFACE OF VEHICLE TO FIREWALL - RIGHT SIDE	168.8 in	151.2 in	17.6 in
X15	REAR SURFACE OF VEHICLE TO FIREWALL - LEFT SIDE	148.5 in	150.8 in	-2.3 in
X16	REAR SURFACE OF VEHICLE TO STEERING WHEEL CENTER	119.5 in	122.5 in	-3.0 in
X17	CENTER OF STEERING COLUMN TO "A" POST	11.6 in	13.0 in	-1.4 in
X18	CENTER OF STEERING COLUMN TO HEADLINER	19.0 in	18.9 in	0.1 in
X19	REAR SURFACE OF VEHICLE TO RIGHT SIDE OF FRONT BUMPER	189.5 in	171.6 in	17.9 in
X20	REAR SURFACE OF VEHICLE TO LEFT SIDE OF FRONT BUMPER	189.0 in	172.1 in	16.9 in
X21	LENGTH OF ENGINE BLOCK	21.0 in	21.0 in	0.0 in

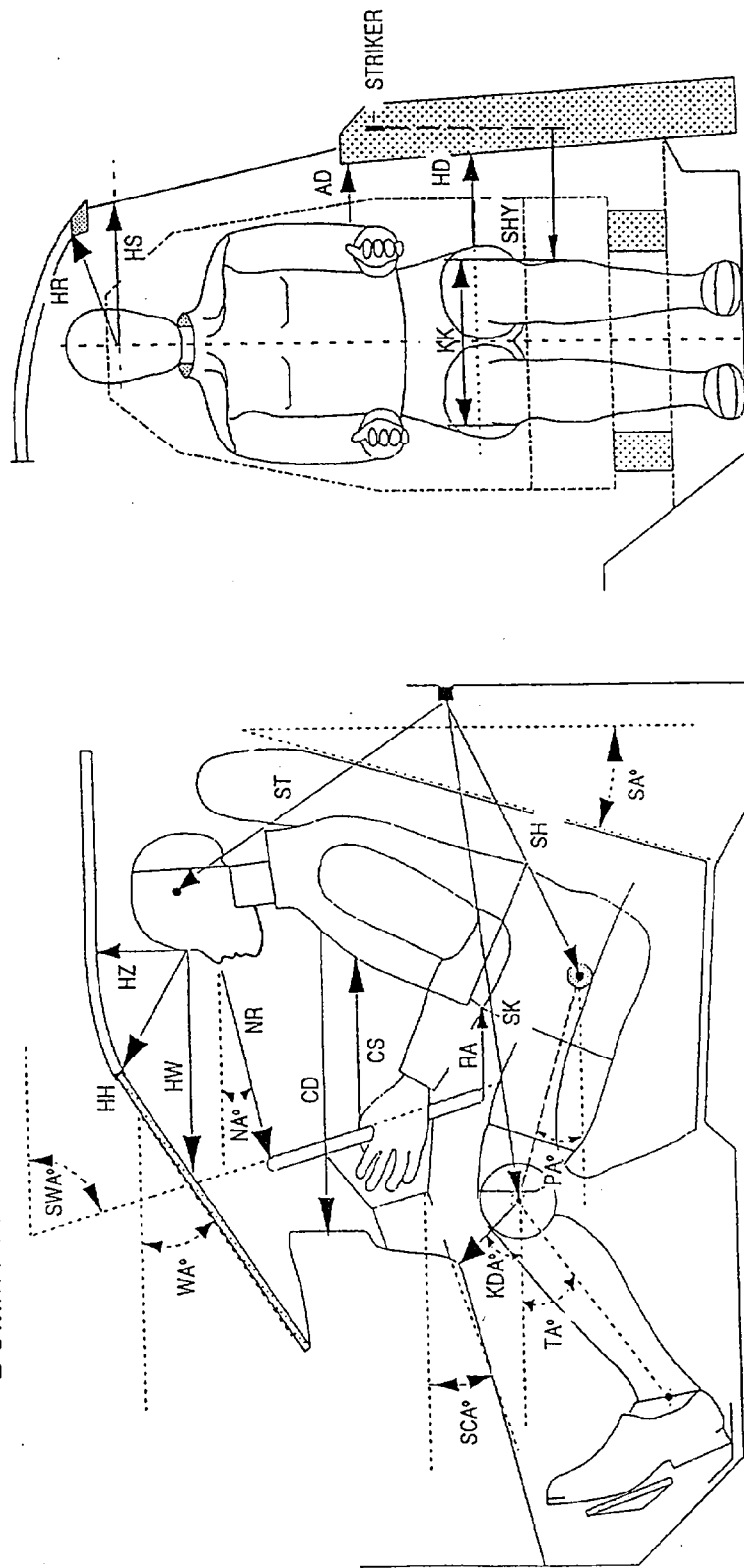
FIGURE 8 VEHICLE TARGET LOCATIONS



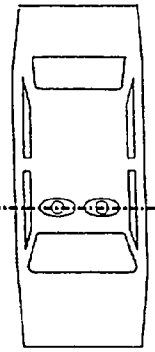
All measurements are in inches.

FIGURE 9

DUMMY MEASUREMENT LOCATIONS FOR FRONT SEAT OCCUPANTS



VERTICAL TRANSVERSE PLANE



VERTICAL LONGITUDINAL PLANE

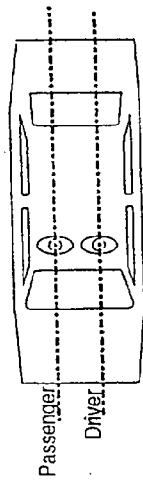
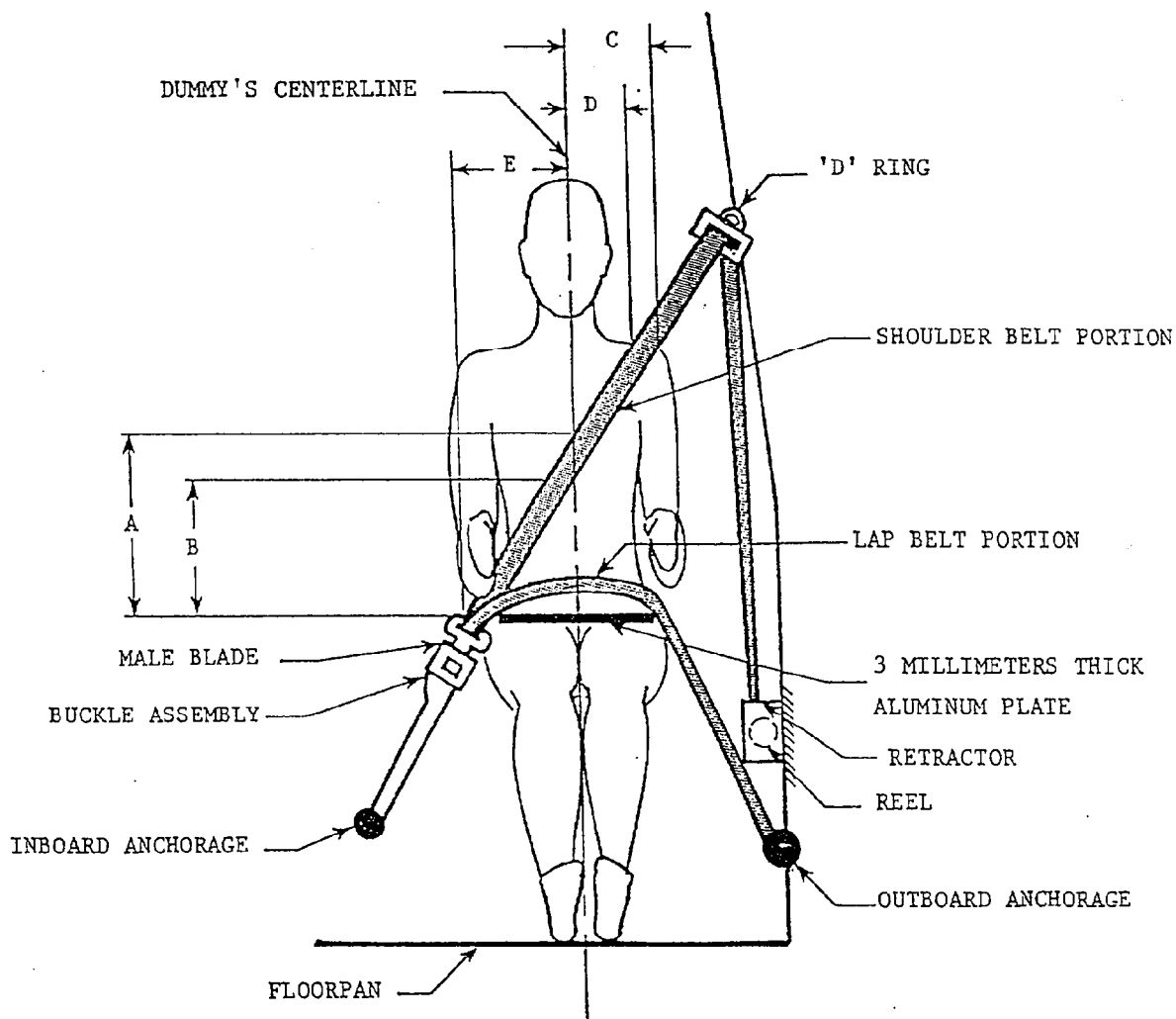


TABLE 13 DUMMY MEASUREMENT DATA FOR FRONT SEAT OCCUPANTS

DESIGNATION	TYPE OF MEASUREMENT	DRIVER (SERIAL #314)	PASSENGER (SERIAL #229)
WA	WINDSHIELD ANGLE	42°	42°
SWA	STEERING WHEEL ANGLE	65°	NA
SCA	STEERING COLUMN ANGLE	25°	NA
SA	SEAT BACK ANGLE	18°	18°
HZ	HEAD TO ROOF	8.7 in	8.7 in
HH	HEAD TO HEADER	15.0 in	15.7 in
HW	HEAD TO WINDSHIELD	20.6 in	22.1 in
HR	HEAD TO SIDE HEADER	10.6 in	10.2 in
NR	NOSE TO RIM	13.3 in	NA
NA	NOSE TO RIM ANGLE	14°	NA
CD	CHEST TO DASH	18.8 in	21.5 in
CS	STEERING WHEEL TO CHEST	10.2 in	NA
RA	RIM TO ABDOMEN	4.8 in	NA
KDL	LEFT KNEE TO DASH	6.6 in	5.8 in
KDR	RIGHT KNEE TO DASH	6.6 in	6.6 in
KDA	OUTBOARD KNEE TO DASH ANGLE	31°	38°
PA	PELVIC ANGLE	24°	25°
TA	TIBIAL ANGLE	43°	45°
KK	KNEE TO KNEE	11.8 in	12.5 in
ST	STRIKER TO HEAD	20.1 in	20.9 in
	STRIKER TO HEAD ANGLE	-70°	-62°
SK	STRIKER TO KNEE	31.2 in	31.1 in
	STRIKER TO KNEE ANGLE	8°	8°
SH	STRIKER TO H-POINT	15.8 in	16.5 in
	STRIKER TO H-POINT ANGLE	33°	26°
SHY	STRIKER TO H-POINT (Y DIR.)	11.8 in	9.5 in
HS	HEAD TO SIDE WINDOW	11.0 in	10.5 in
HD	H-POINT TO DOOR	7.6 in	6.9 in
AD	ARM TO DOOR	5.4 in	5.2 in

The seat back angle (SA°) is measured relative to vertical, all other angles are measured relative to horizontal.

FIGURE 10 SEAT BELT POSITIONING DATA



	DRIVER	PASSENGER
A - TOP SURFACE OF ALUM. PLATE TO BELT UPPER EDGE	NA	13.2 in
B - TOP SURFACE OF ALUM. PLATE TO BELT LOWER EDGE	NA	10.4 in
C - DUMMY CENTERLINE TO OUTER EDGE OF BELT AT CHEST FLESH TOP	NA	4.8 in
D - DUMMY CENTERLINE TO INNER EDGE OF BELT AT CHEST FLESH TOP	NA	2.7 in
E - DUMMY CENTERLINE TO INTERSECTION OF UPPER TORSO BELT AND LAP BELT	NA	9.2 in

FIGURE 10. CAMERA POSITIONS

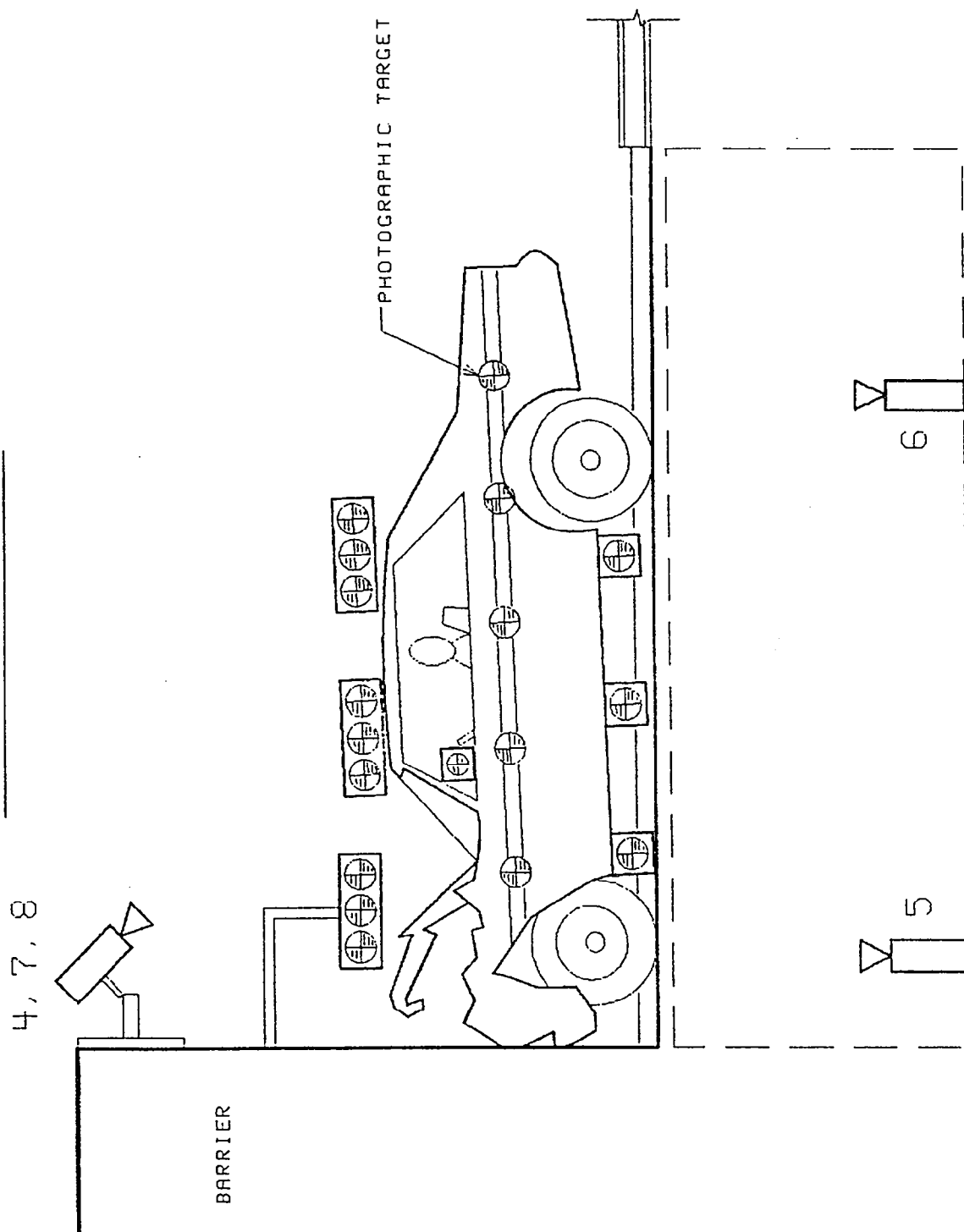


FIGURE 10 CAMERA POSITIONS, CONT'D.

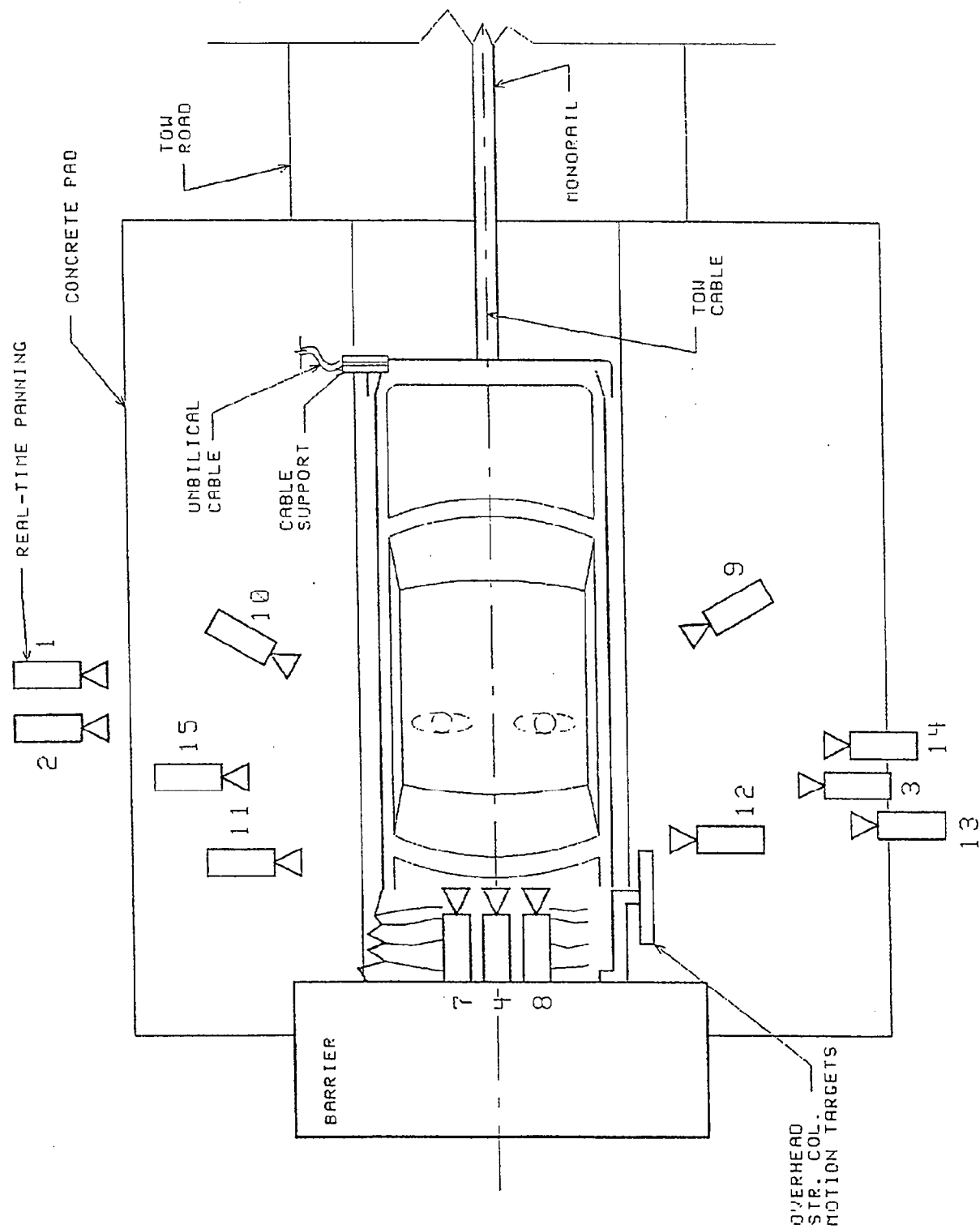


TABLE 14 MOTION PICTURE CAMERA LOCATIONS

TEST NO.: 931229 VEHICLE: 1994 Dodge Dakota pickup

CAMERA NO.	VIEW	CAMERA POSITIONS ¹			Z	ANGLE ²	FILM PLANE TO HEAD		SPEED
		X	Y				TARGET	LENS	
1	Real-time panning	-142.0 in	504.0 in		61.0 in	NA	NA	16 mm	24 frames/s
2	Right overall	-81.3 in	-266.4 in		37.1 in	-2°	NA	13 mm	995 frames/s
3	Left vehicle crush	-41.5 in	295.0 in		44.0 in	-4°	236.0 in	25 mm	998 frames/s
4	Windshield front view	-6.0 in	0.0 in		46.0 in	-40°	NA	13 mm	973 frames/s
5	Pit - front position	-50.5 in	0.0 in		-92.4 in	90°	NA	13 mm	998 frames/s
6	Pit - rear position	-99.3 in	0.0 in		-99.0 in	90°	NA	13 mm	998 frames/s
7	Passenger - front view	-4.5 in	-13.8 in		93.0 in	-50°	NA	17 mm	1005 frames/s
8	Driver - front view	-6.8 in	14.5 in		93.0 in	-50°	NA	17 mm	1000 frames/s
9	Driver kinematics	-157.3 in	116.0 in		87.0 in	-27°	92.0 in	25 mm	995 frames/s
10	Passenger kinematics	-152.1 in	-116.0 in		87.0 in	-26°	86.0 in	25 mm	985 frames/s
11	Right windshield intrusion	-38.1 in	-306.1 in		44.0 in	0°	NA	50 mm	502 frames/s
12	Left windshield intrusion	-53.0 in	309.4 in		42.3 in	0°	NA	50 mm	1005 frames/s
13	Steering column motion	-85.0 in	286.0 in		103.0 in	-14°	NA	25 mm	1002 frames/s
14	Steering column motion	-85.0 in	286.0 in		75.1 in	-9°	NA	25 mm	1008 frames/s
15	Passenger kinematics	-38.8 in	-293.0 in		45.3 in	-4°	215.0 in	25 mm	1000 frames/s
16	Real-time documentation	NA	NA		NA	NA	NA	12-120 mm	24 frames/s

¹ +X: Film plane forward of barrier face

+Y: Film plane to left of monorail centerline

+Z: Film plane above ground level

² +Angle: Film plane angled upward from horizontal plane

APPENDIX A

PHOTOGRAPHS

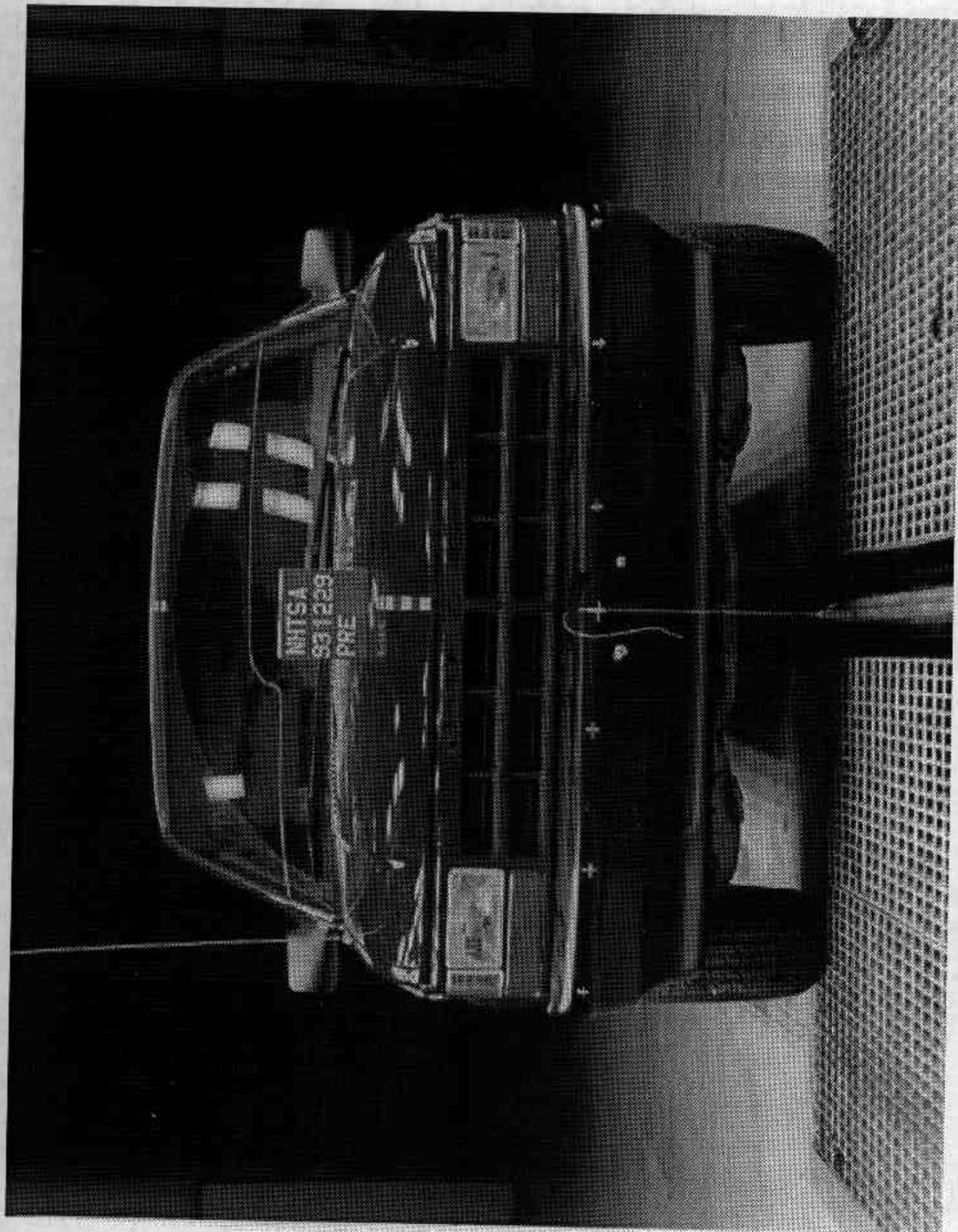


Figure A-1. PRE-TEST FRONT VIEW

A-2

931229

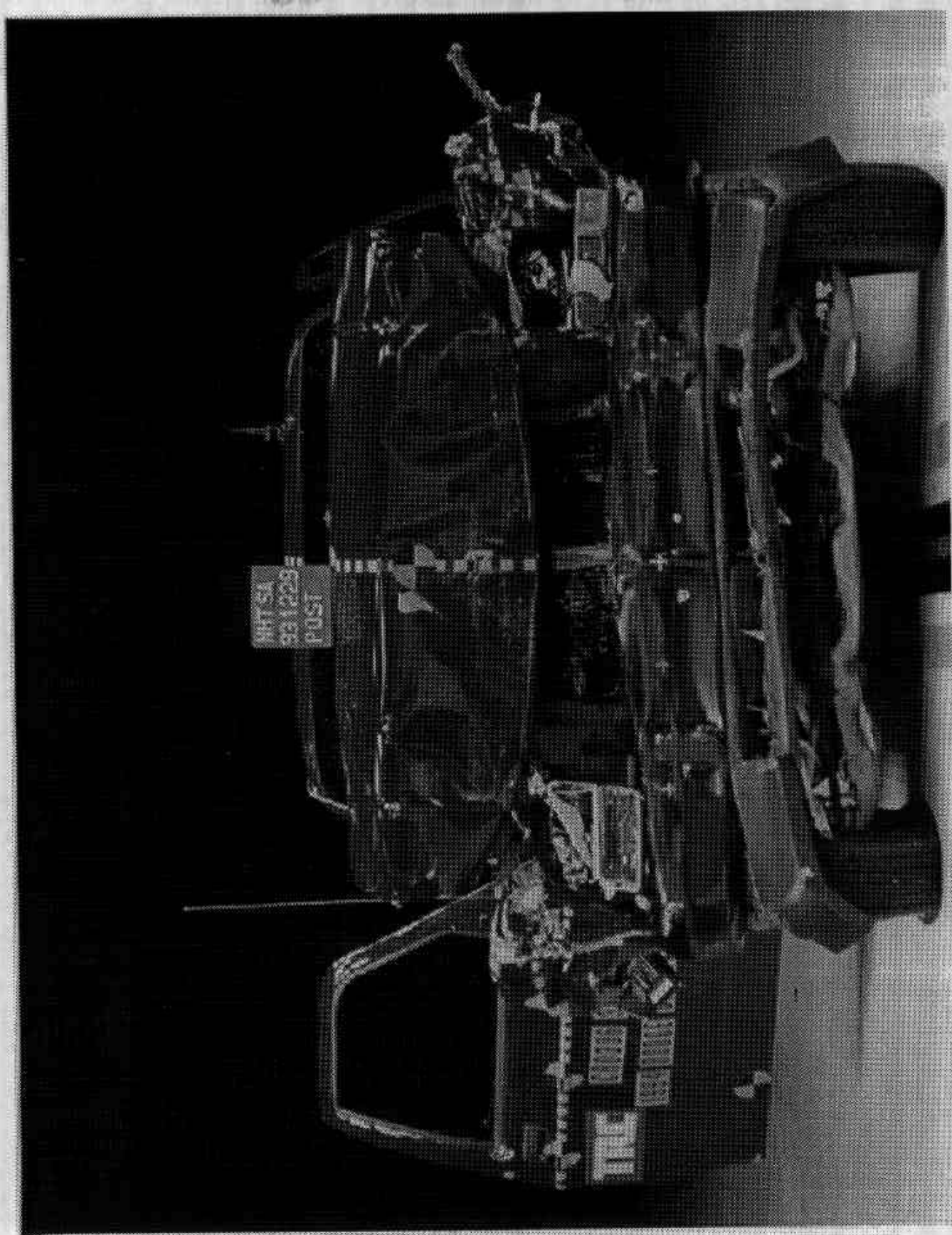


Figure A-2. POST-TEST FRONT VIEW
A-3

931229

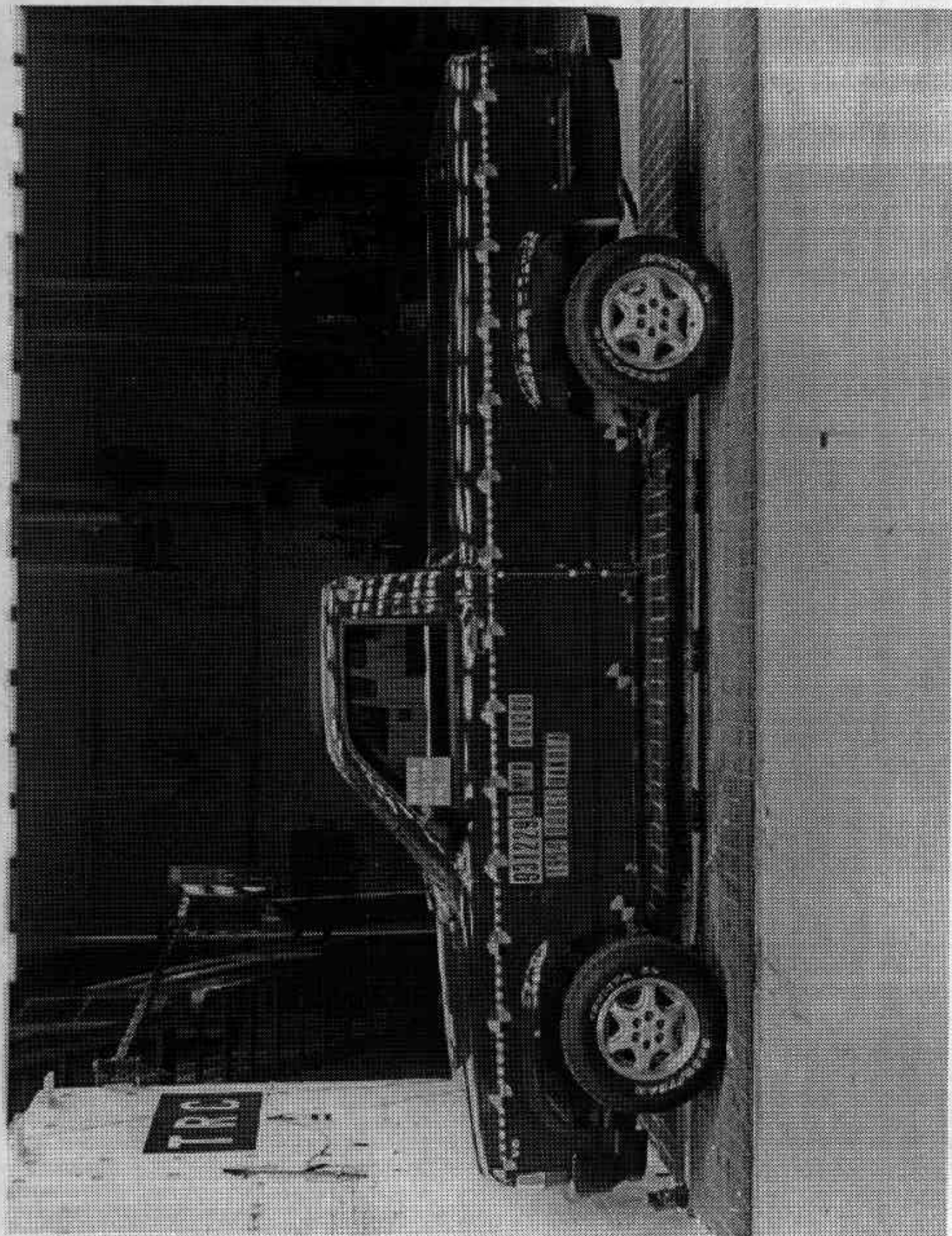


Figure A-3. PRE-TEST LEFT SIDE VIEW

A-4

931229

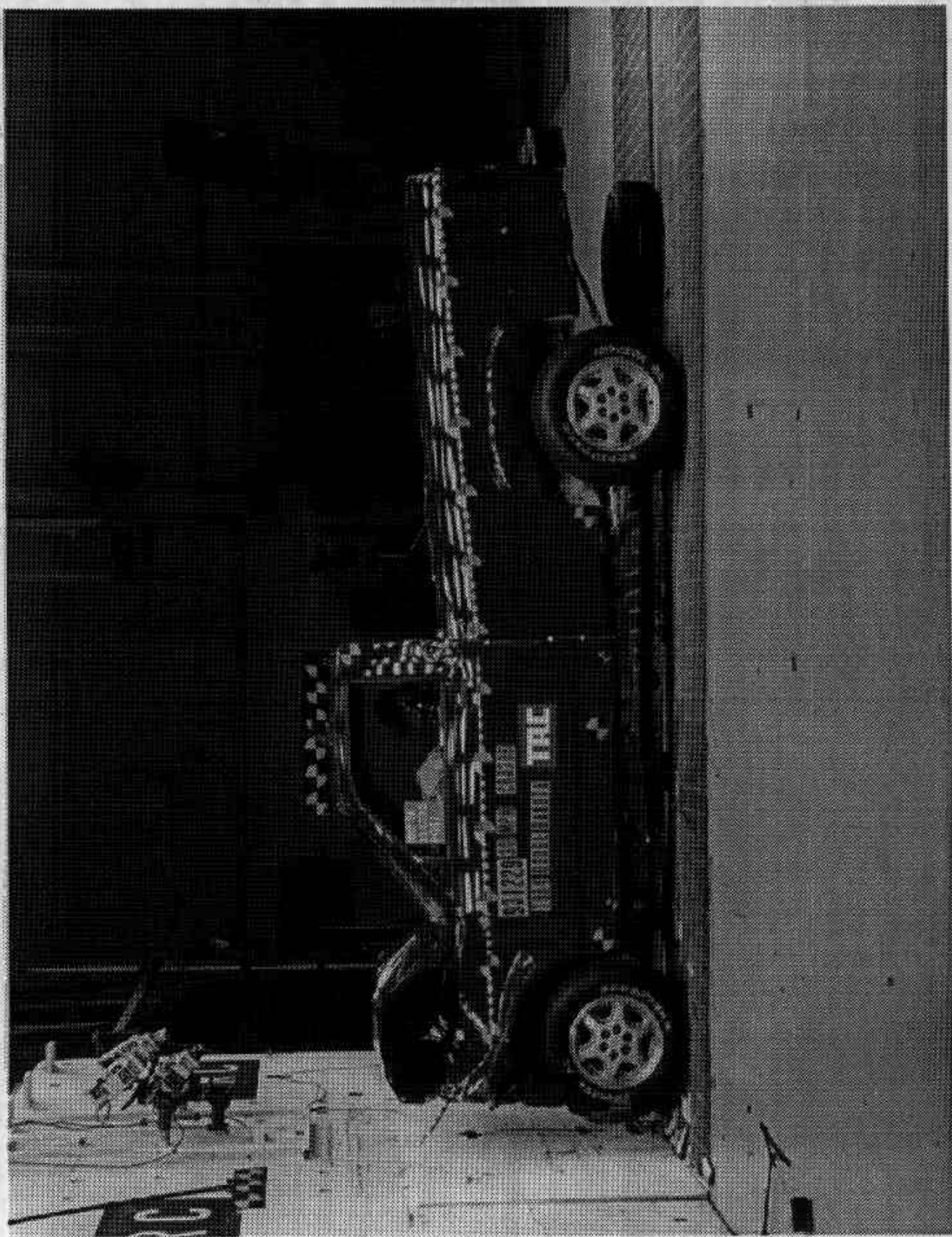


Figure A-4. POST-TEST LEFT SIDE VIEW
A-5

931229

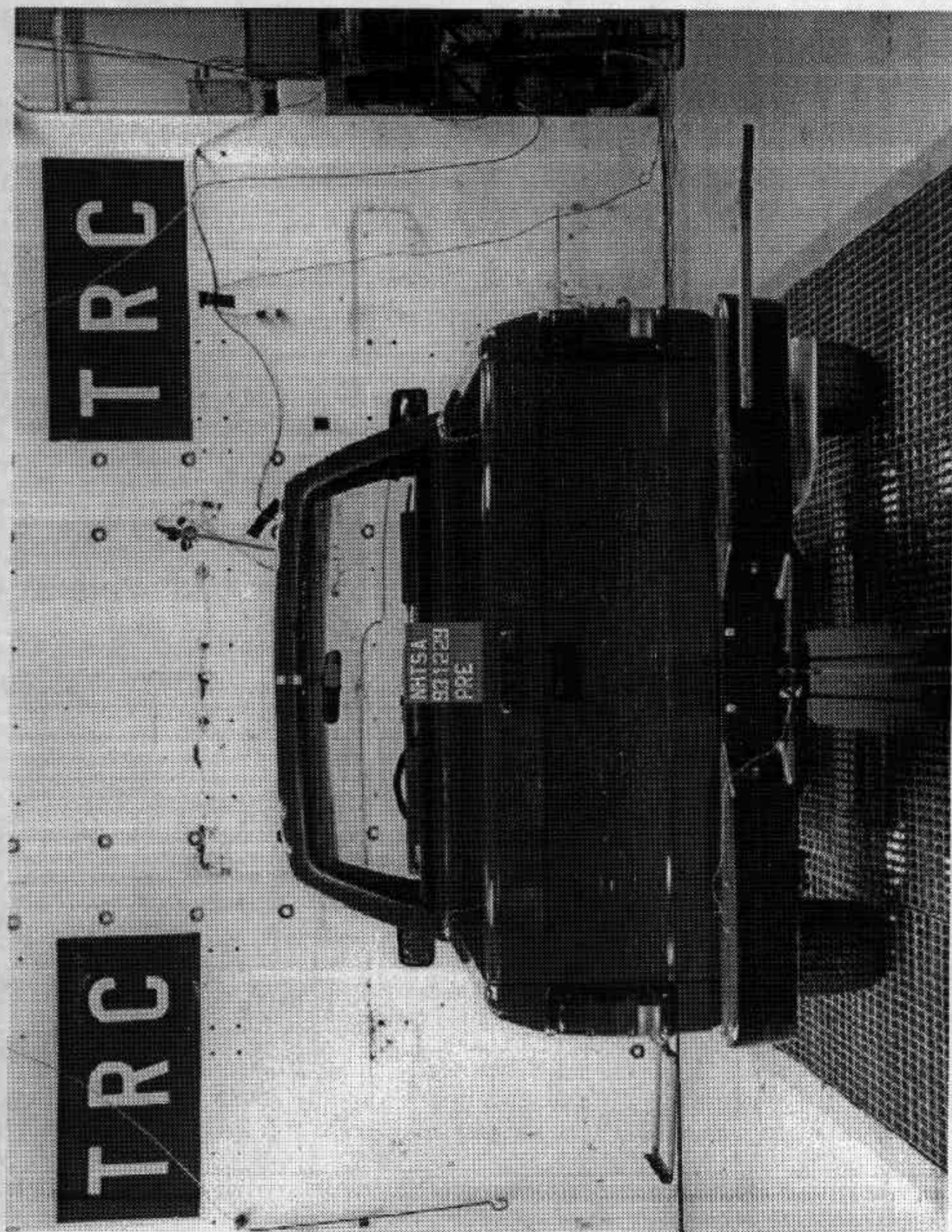


Figure A-5. PRE-TEST REAR VIEW
A-6

931229

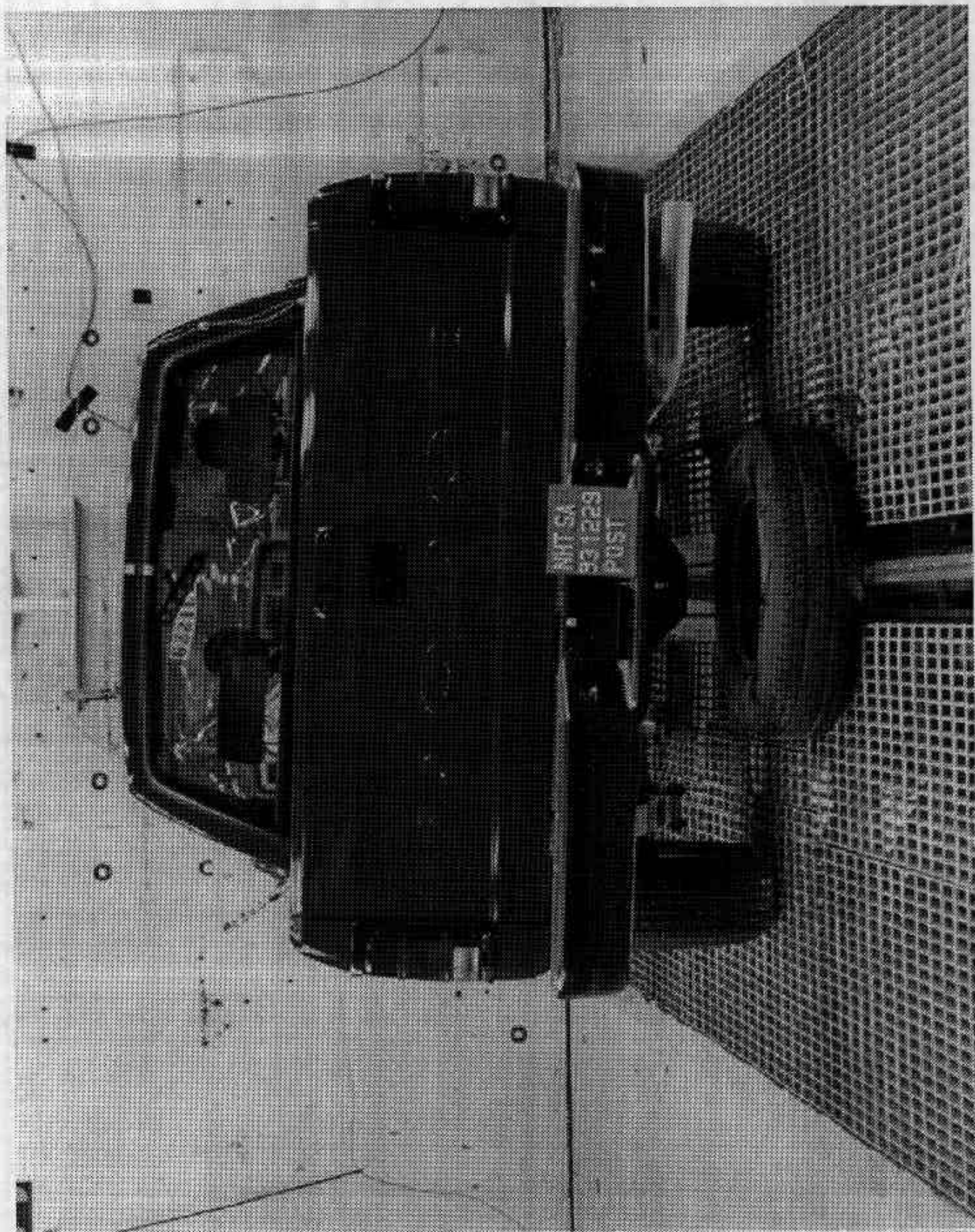


Figure A-6. POST-TEST REAR VIEW
A-7

931229

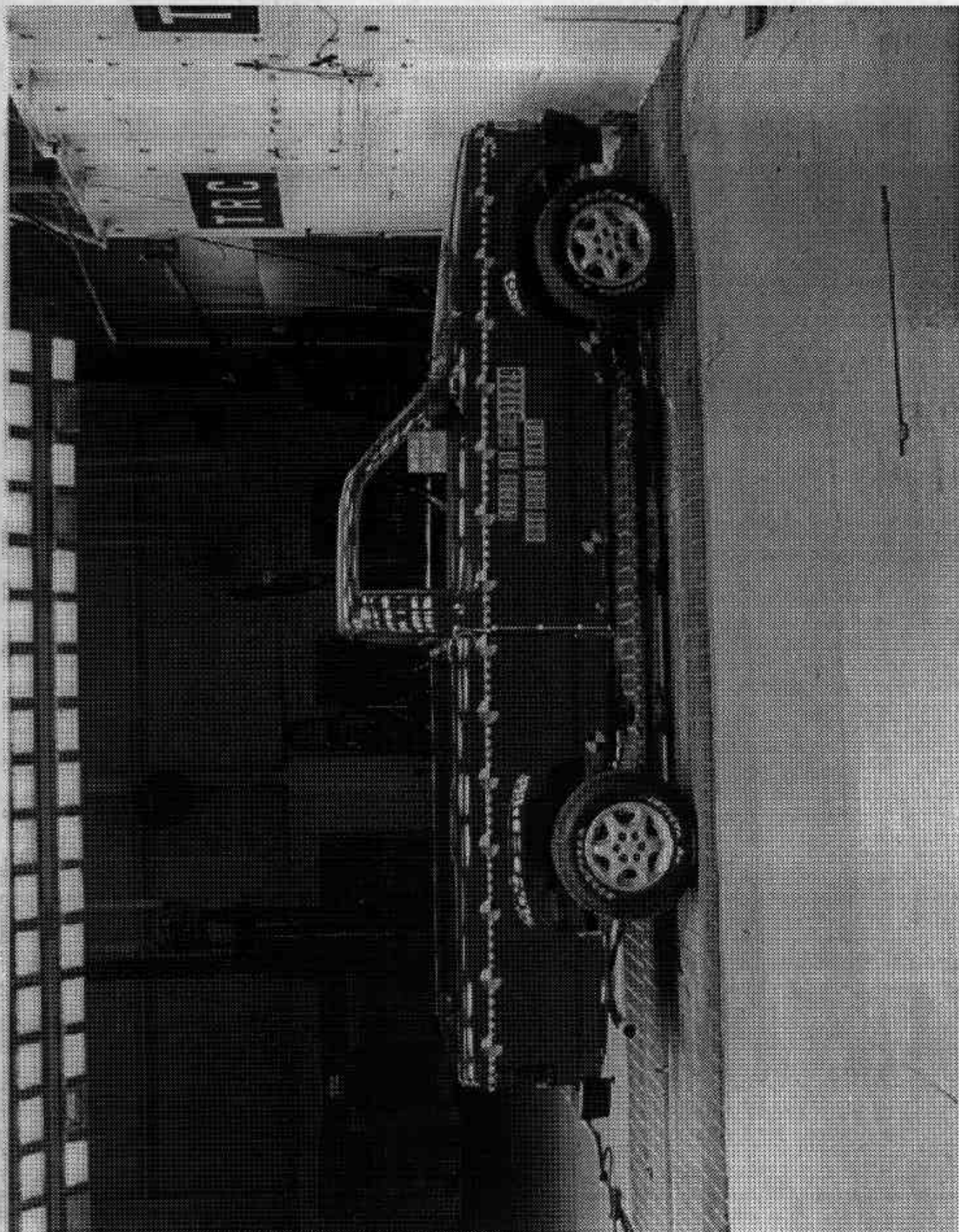


Figure A-7. PRE-TEST RIGHT SIDE VIEW
A-8

931229

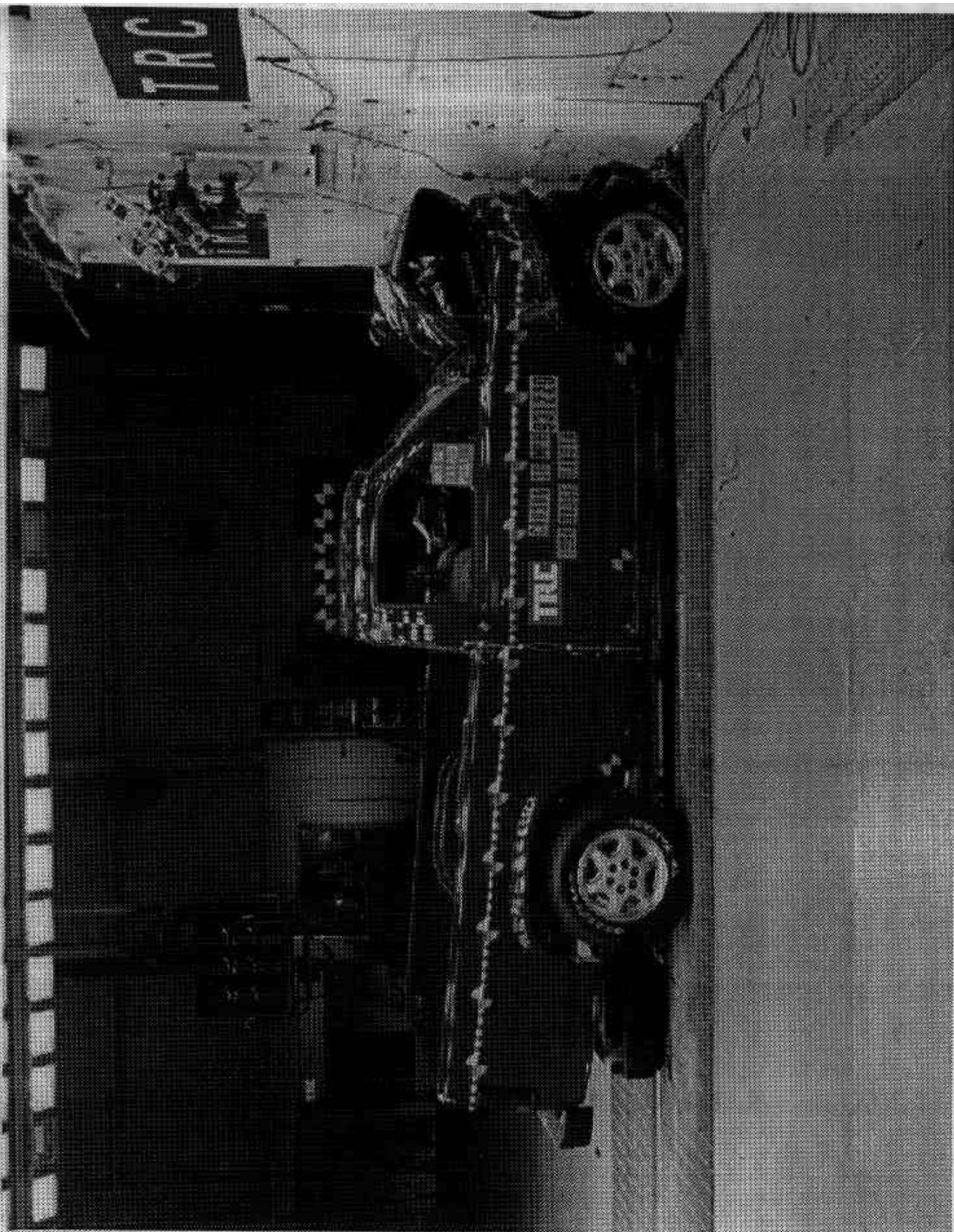


Figure A-8. POST-TEST RIGHT SIDE VIEW

A-9

931229

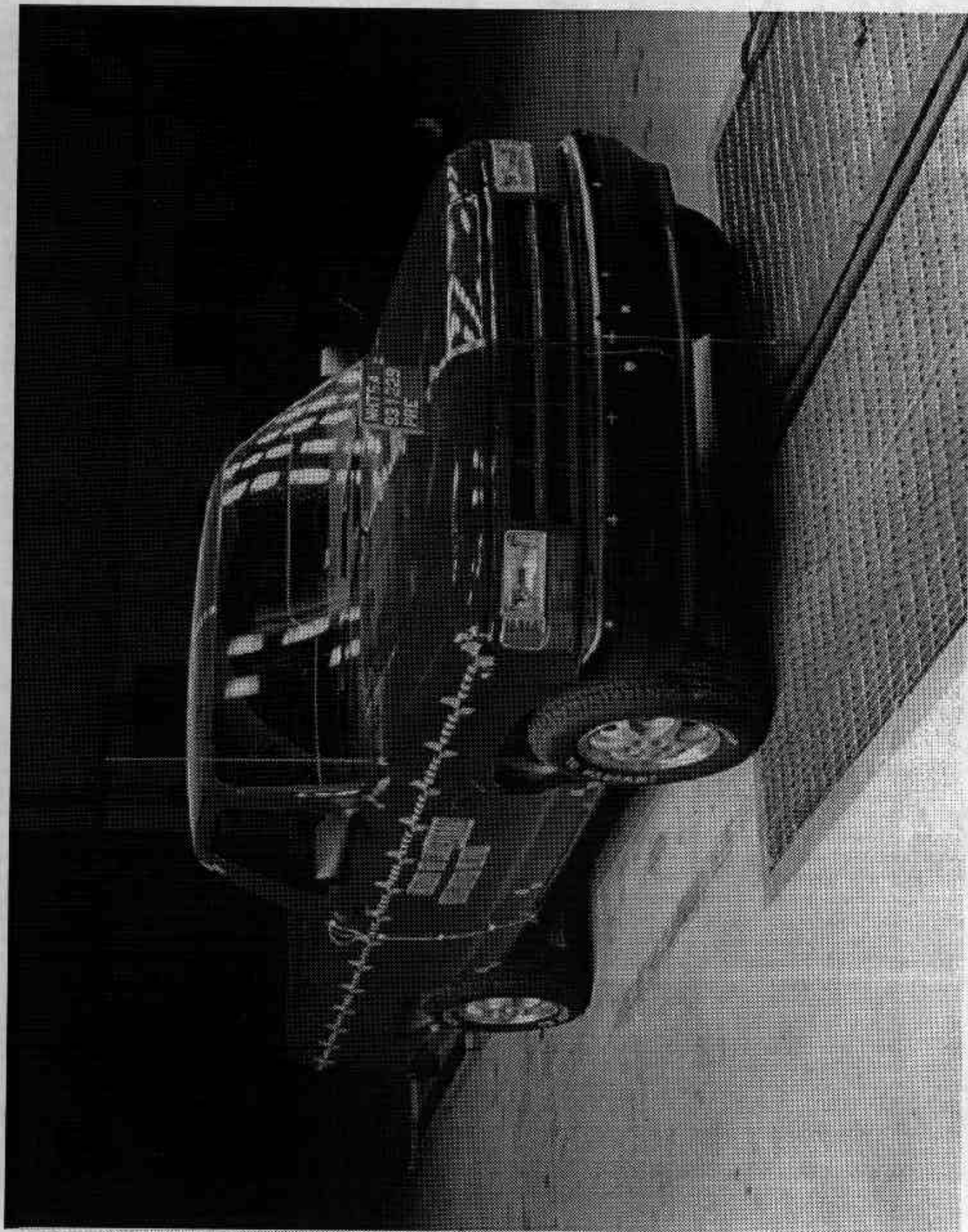


Figure A-9. PRE-TEST RIGHT FRONT THREE-QUARTER VIEW

A-10

931229

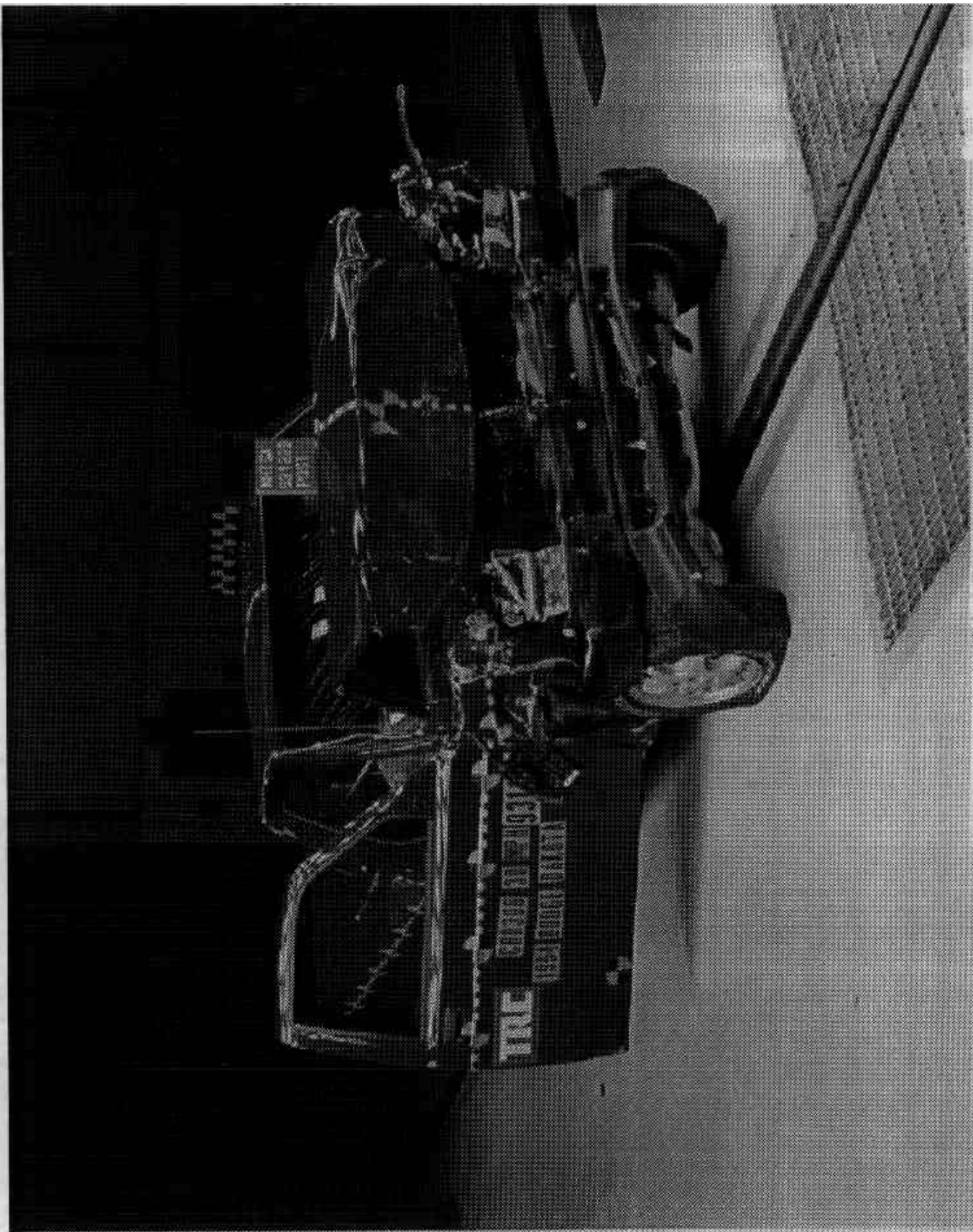


Figure A-10. POST-TEST RIGHT FRONT THREE-QUARTER VIEW

A-11

931229

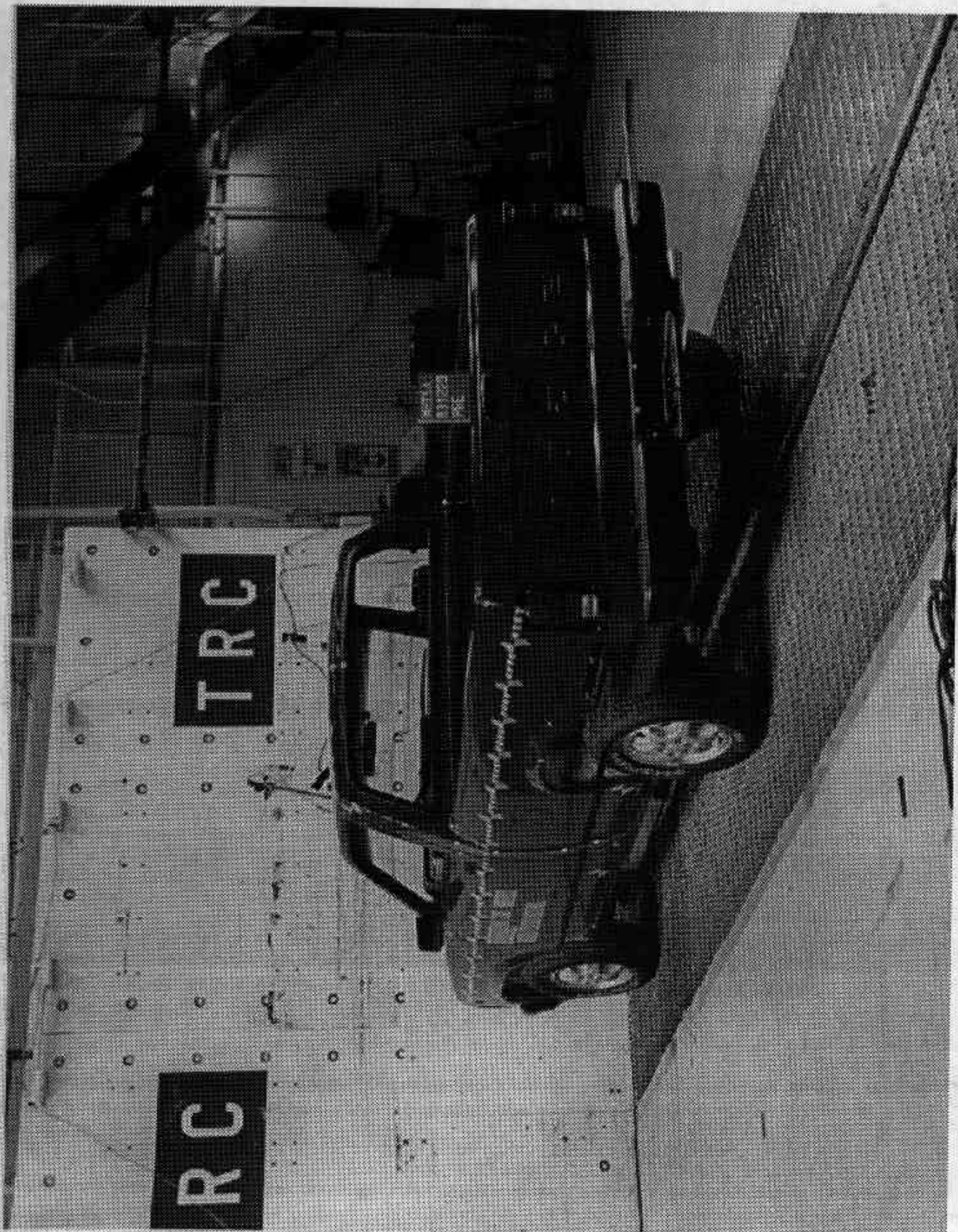


Figure A-11. PRE-TEST LEFT REAR THREE-QUARTER VIEW

A-12

931229

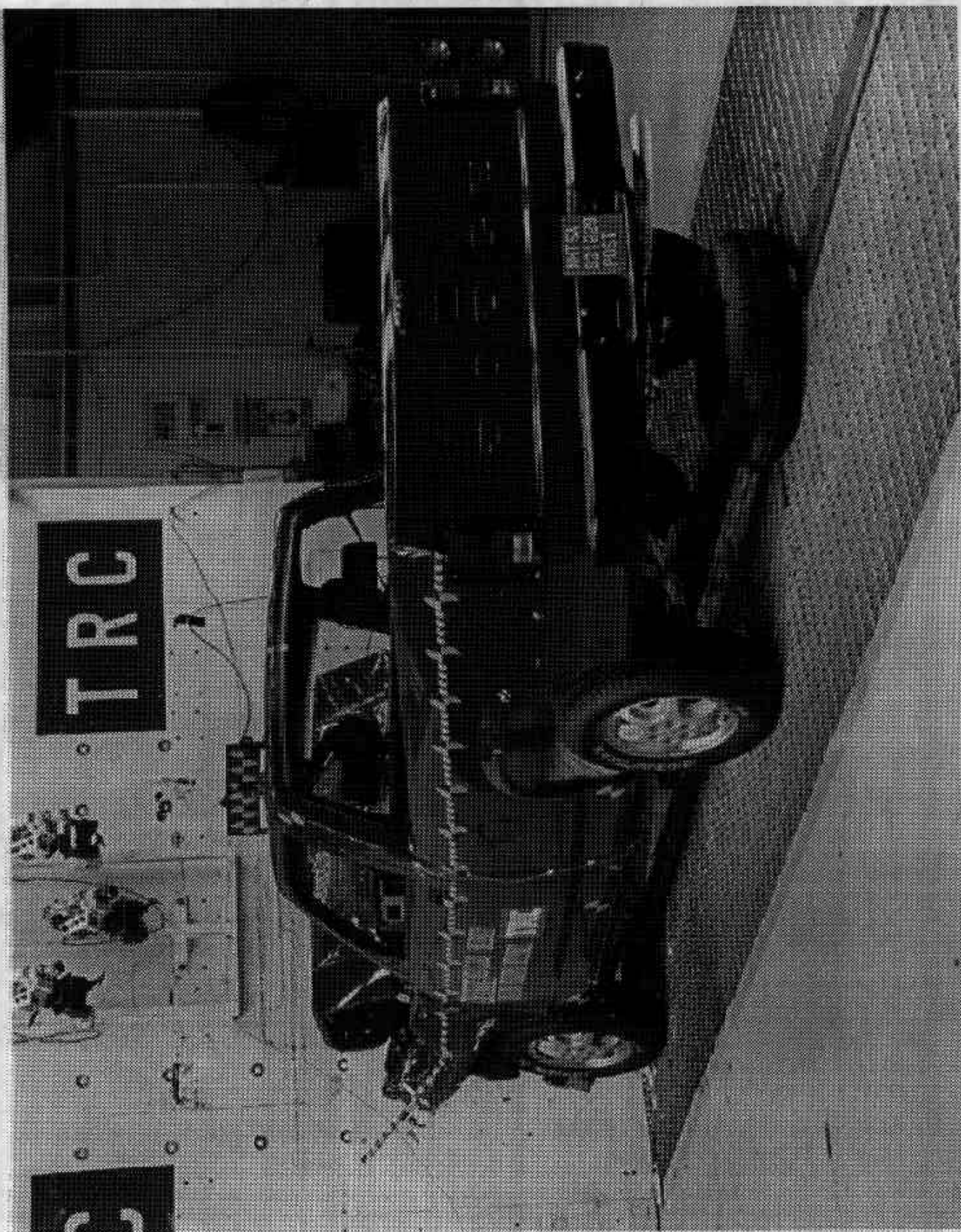


Figure A-12. POST-TEST LEFT REAR THREE-QUARTER VIEW

A-13

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Figure A-13. PRE-TEST WINDSHIELD VIEW

A-14

931229

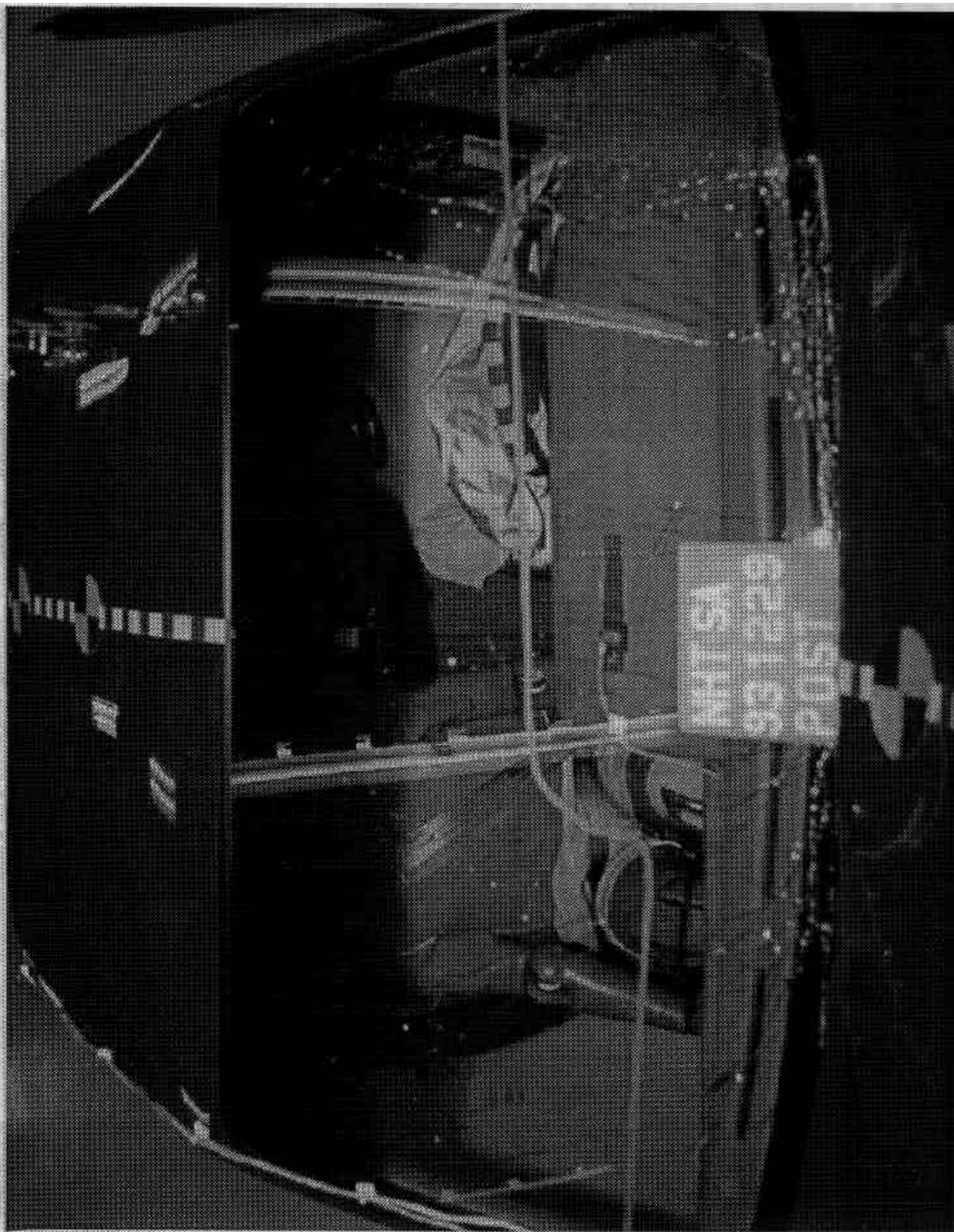


Figure A-14. POST-TEST WINDSHIELD VIEW

A-15

931229

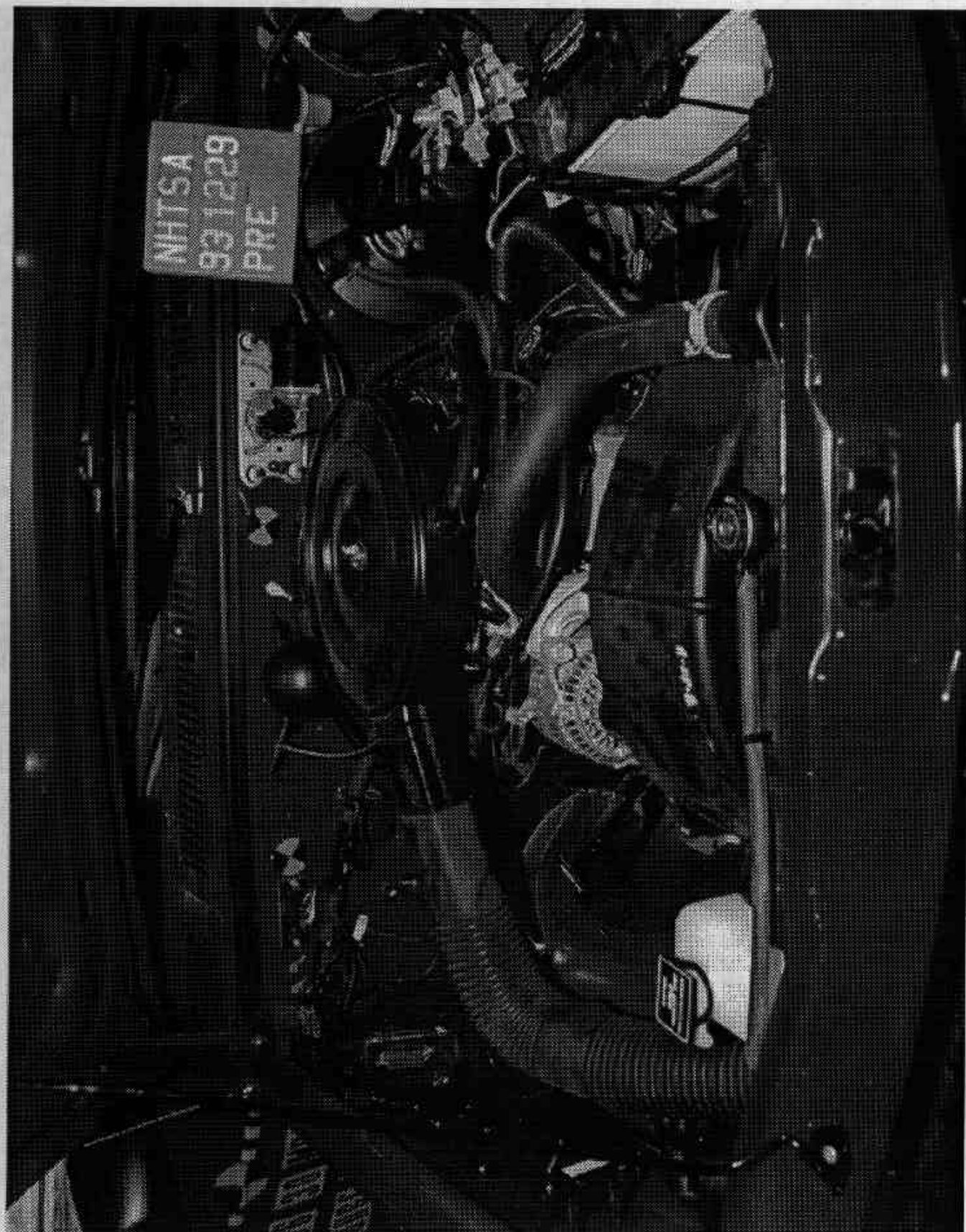


Figure A-15. PRE-TEST ENGINE COMPARTMENT VIEW

A-16

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Figure A-16. POST-TEST ENGINE COMPARTMENT VIEW
A-17

931229

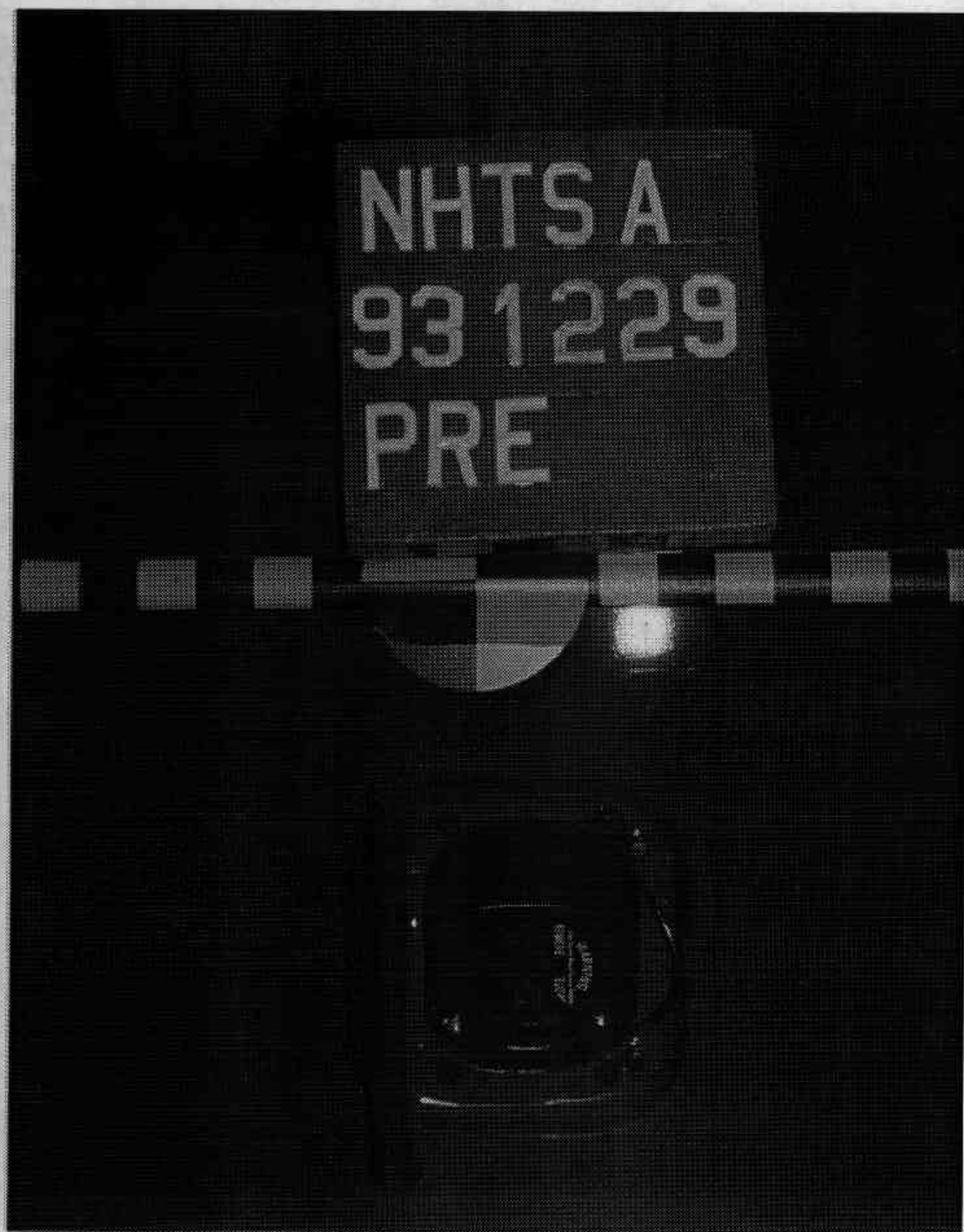


Figure A-17. PRE-TEST FUEL FILLER CAP VIEW
A-18

931229

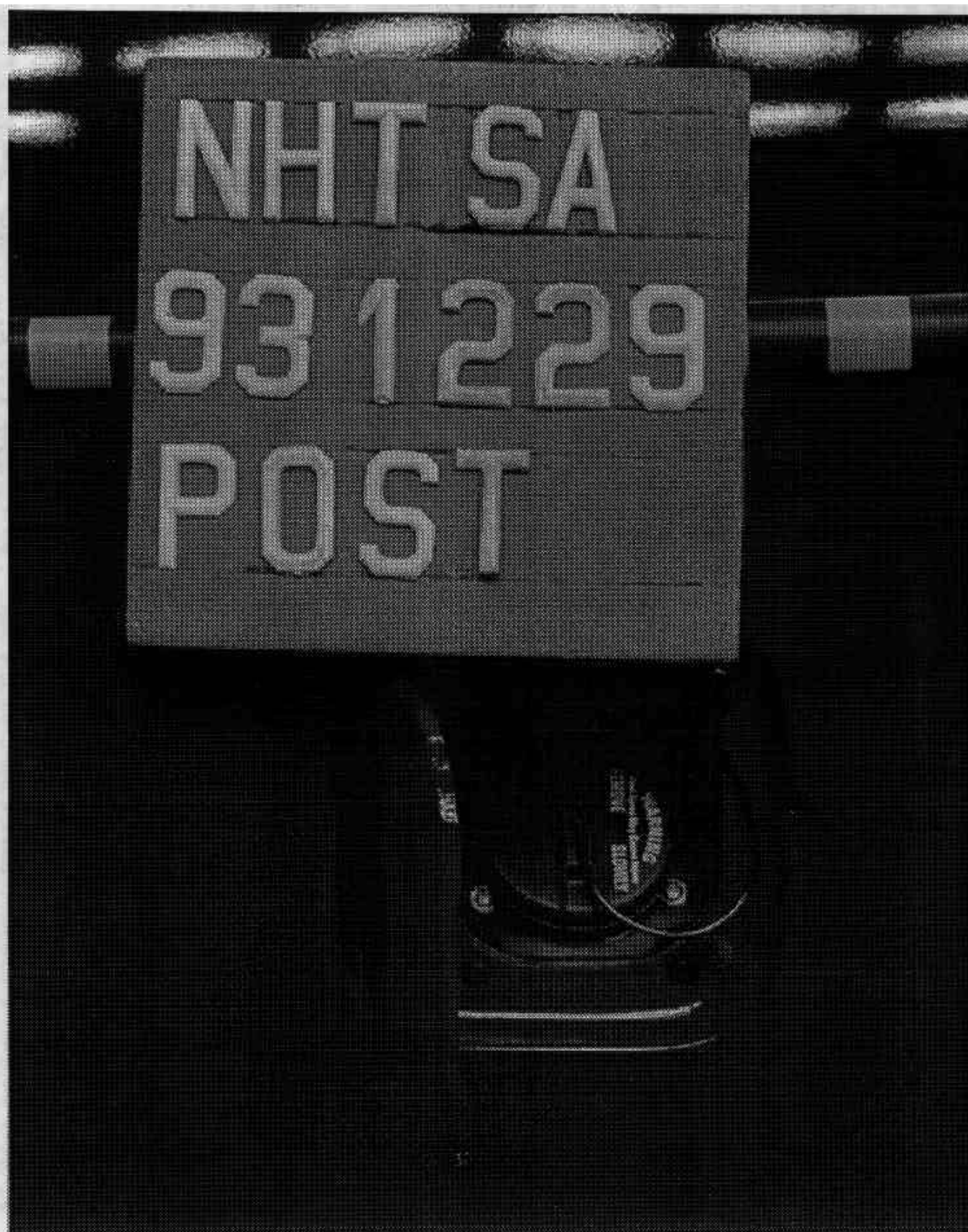


Figure A-18. POST-TEST FUEL FILLER CAP VIEW

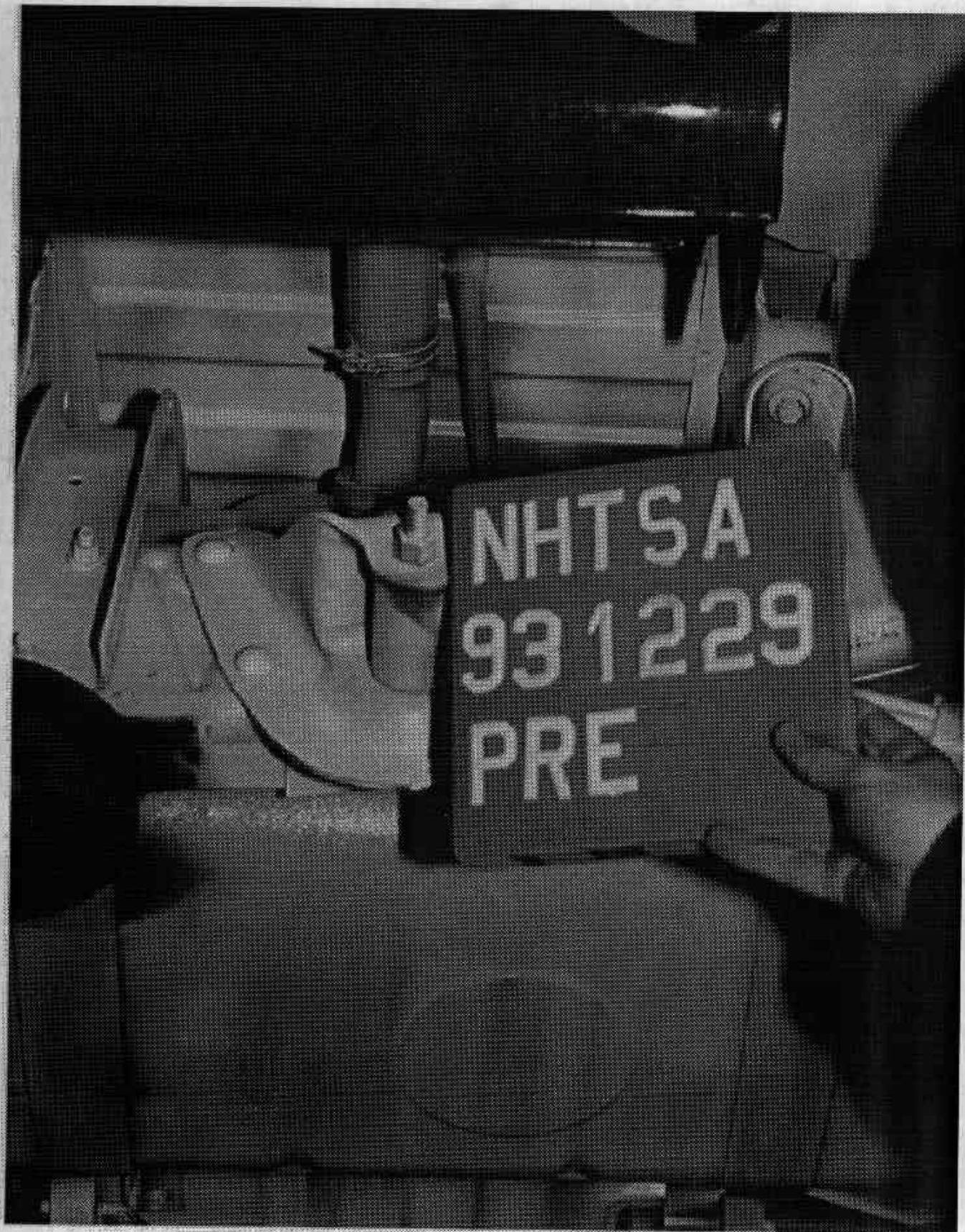


Figure A-19. PRE-TEST FUEL FILLER NECK VIEW

A-20

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Figure A-20. POST-TEST FUEL FILLER NECK VIEW

A-21

931229

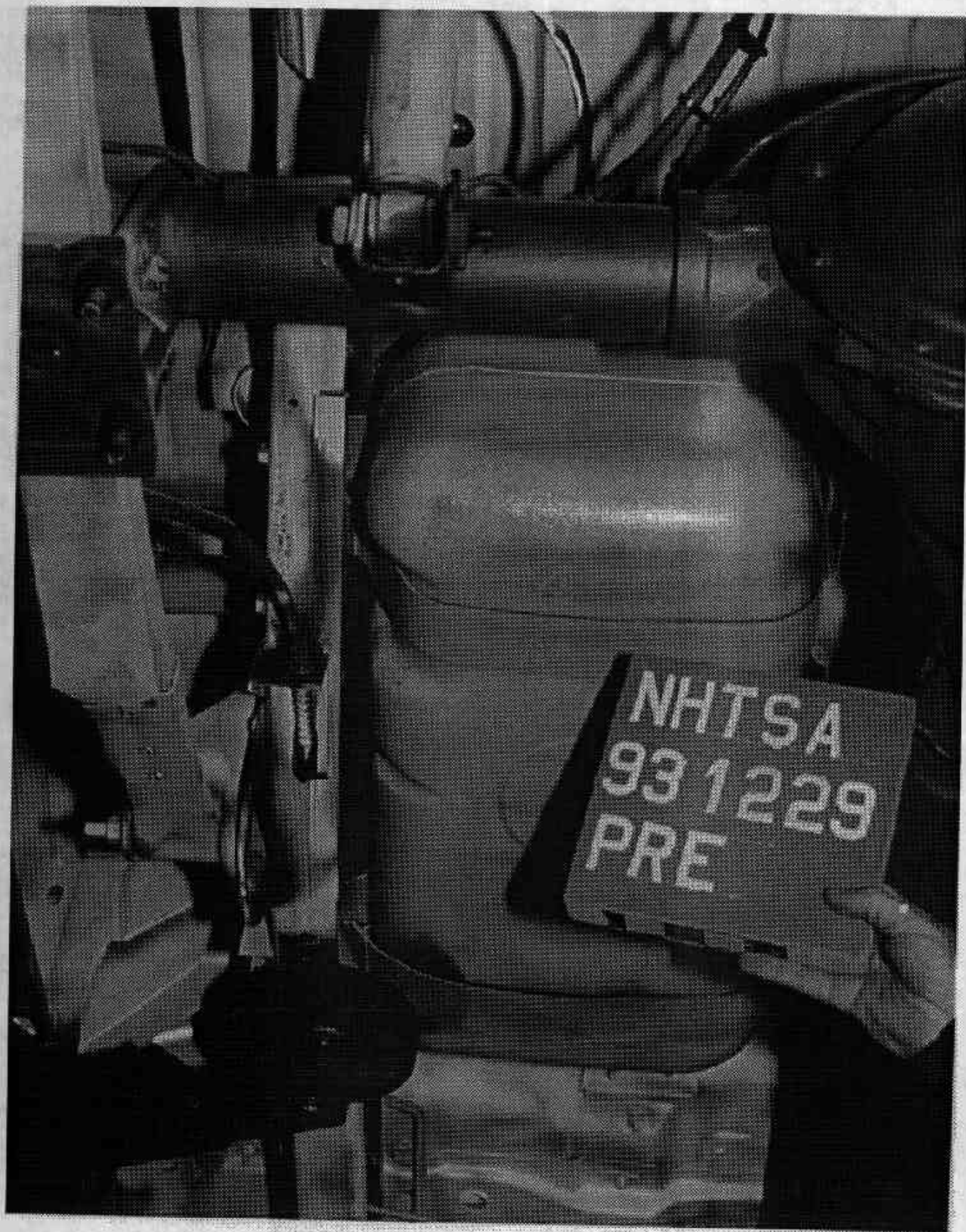


Figure A-21. PRE-TEST FUEL TANK VIEW

A-22

931229

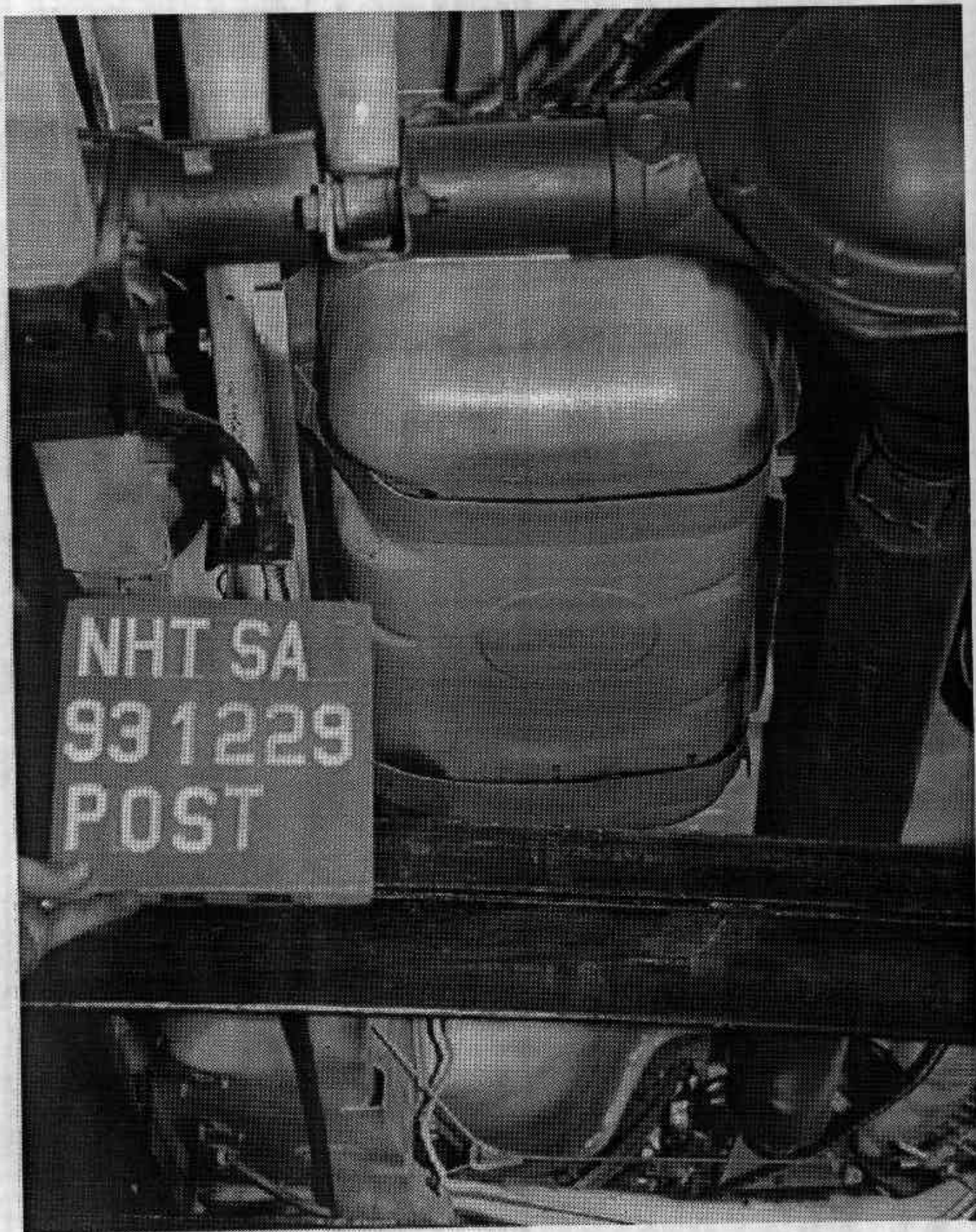


Figure A-22. POST-TEST FUEL TANK VIEW
A-23

931229

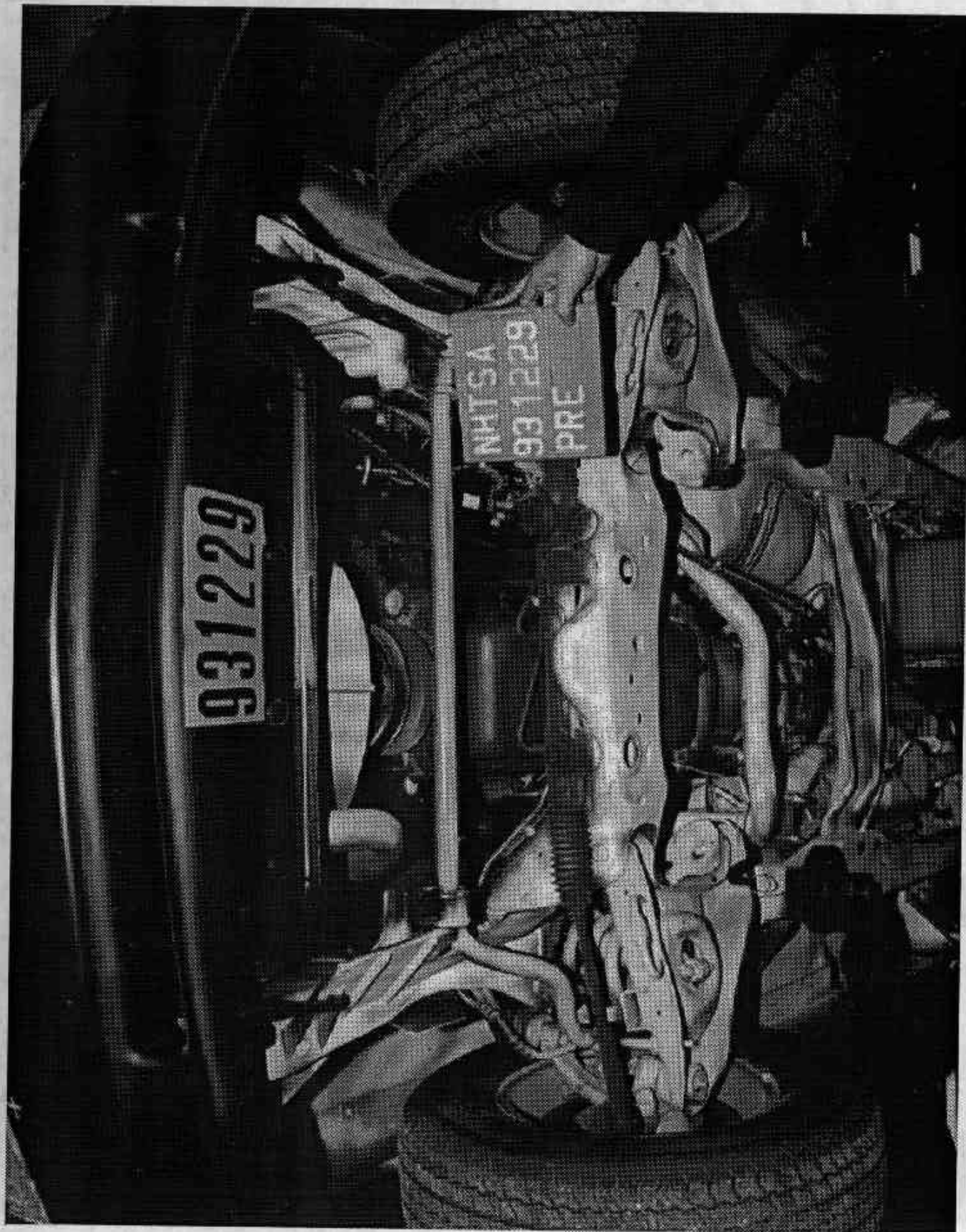


Figure A-23. PRE-TEST FRONT UNDERBODY VIEW

A-24

931229

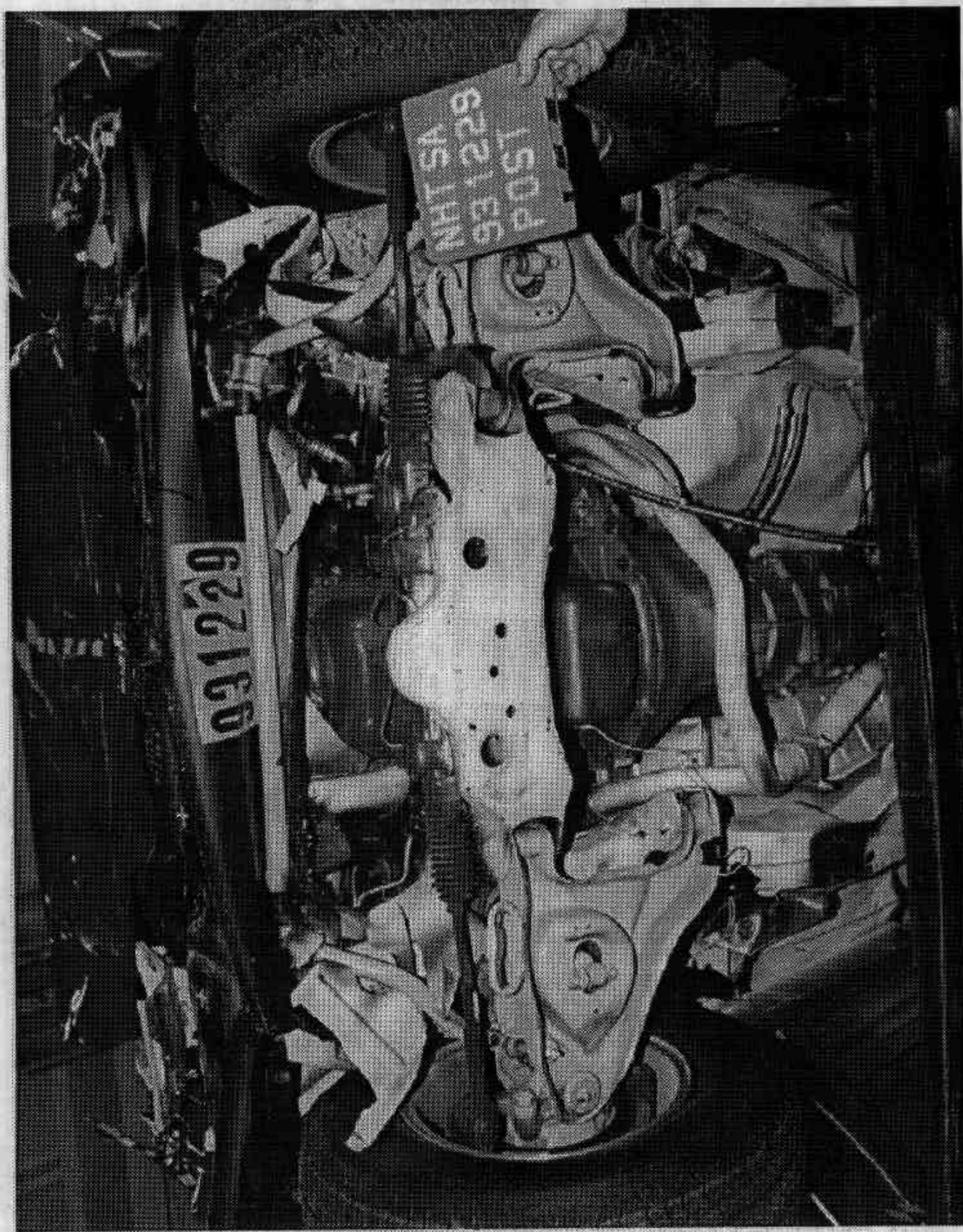


Figure A-24. POST-TEST FRONT UNDERBODY VIEW

A-25

931229

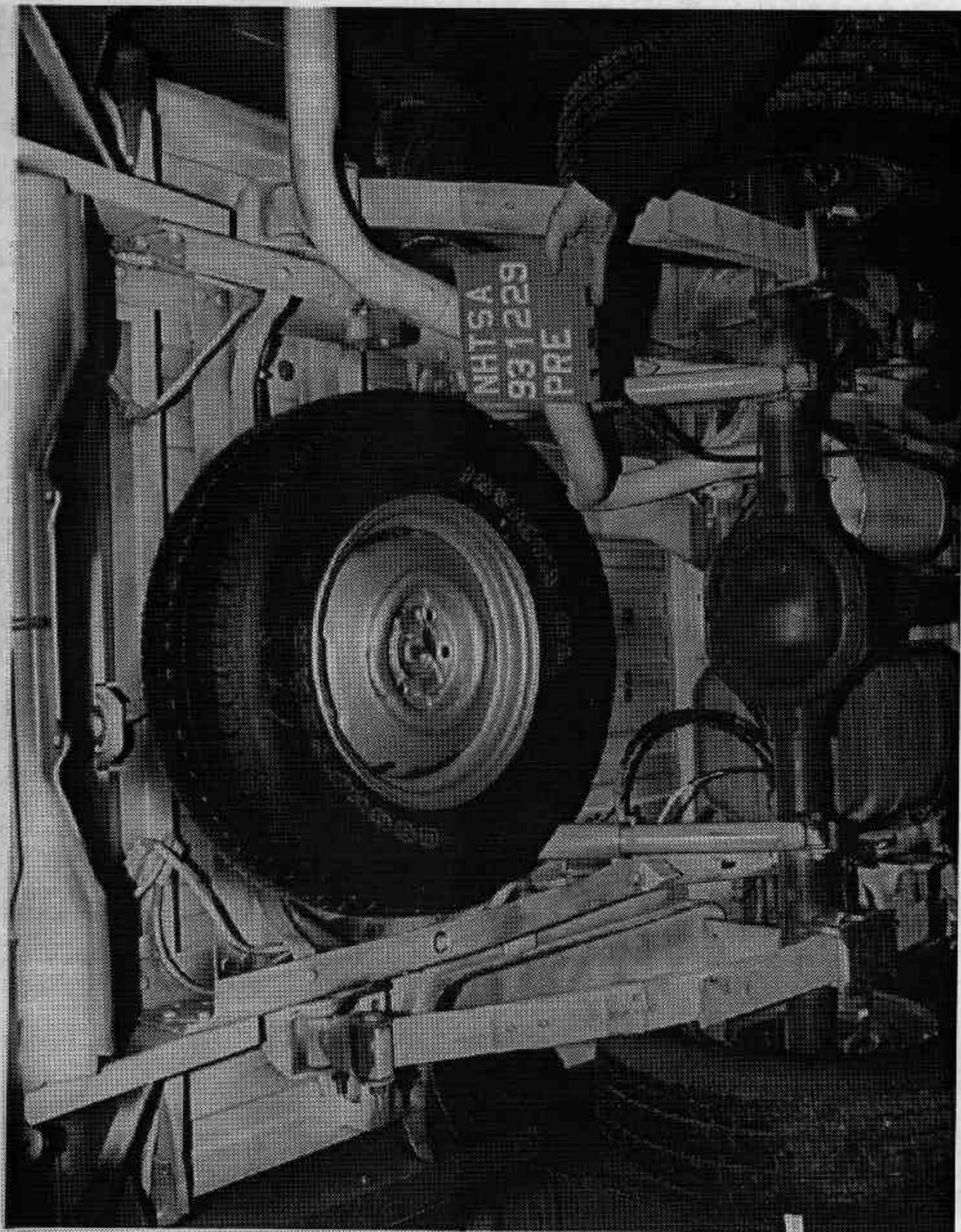


Figure A-25. PRE-TEST REAR UNDERBODY VIEW

A-26

931229

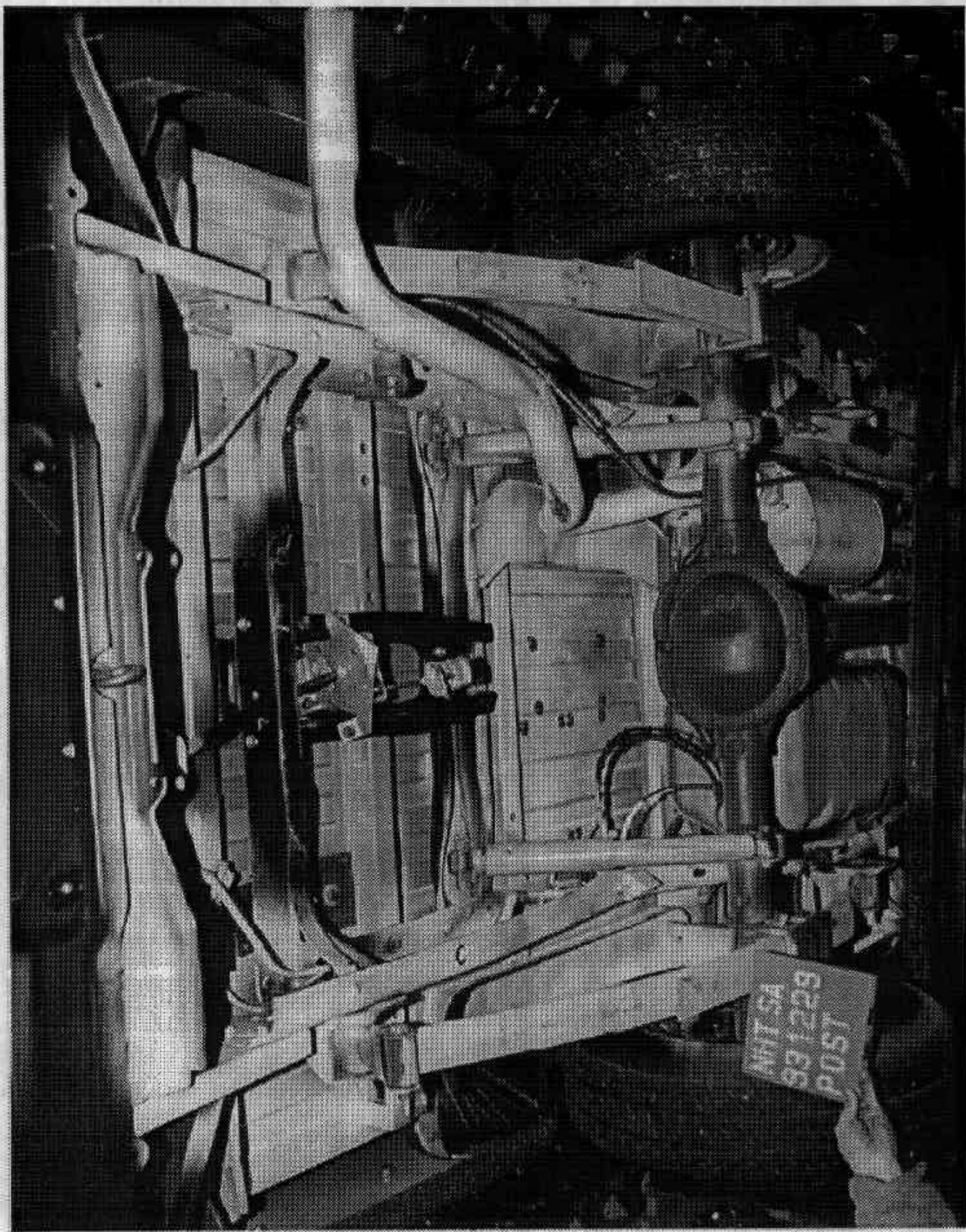


Figure A-26. POST-TEST REAR UNDERBODY VIEW
A-27

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Figure A-27. PRE-TEST DRIVER'S SIDE KNEE BOLSTER VIEW

A-28

931229

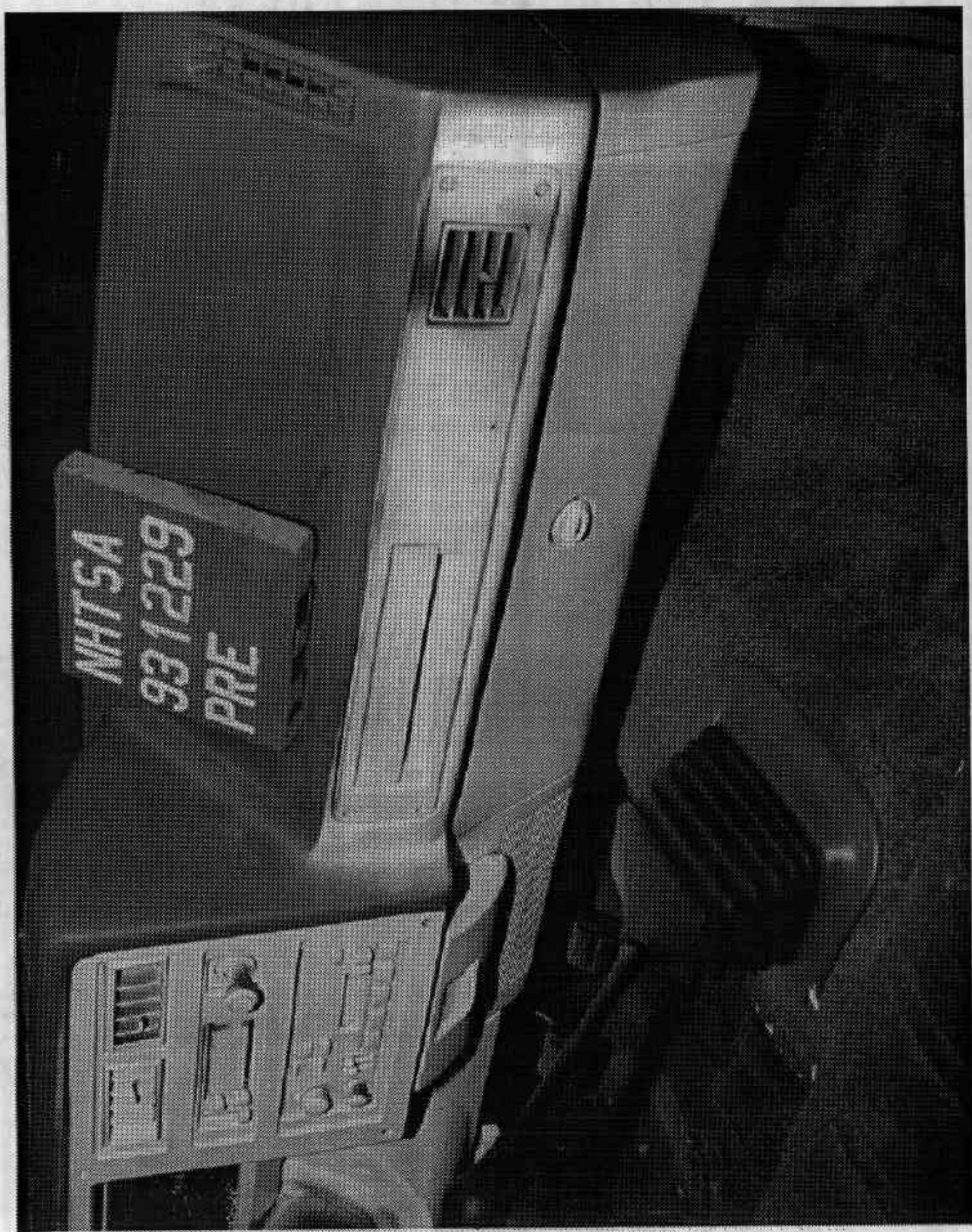


Figure A-28. PRE-TEST PASSENGER'S SIDE KNEE BOLSTER VIEW

A-29

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Figure A-29. PRE-TEST DRIVER DUMMY POSITION - VIEW 1

A-30

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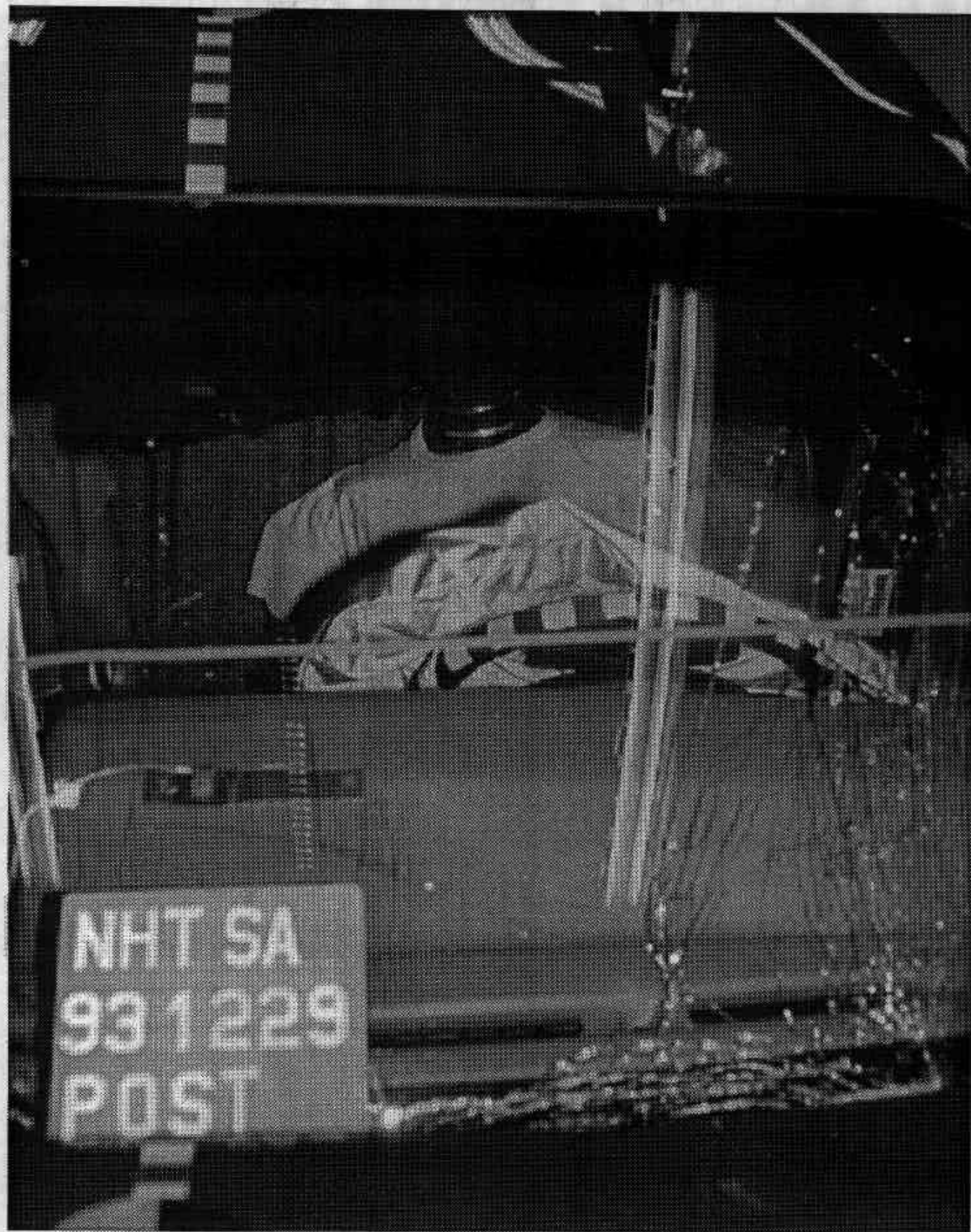


Figure A-30. POST-TEST DRIVER DUMMY POSITION - VIEW 1

A-31

931229

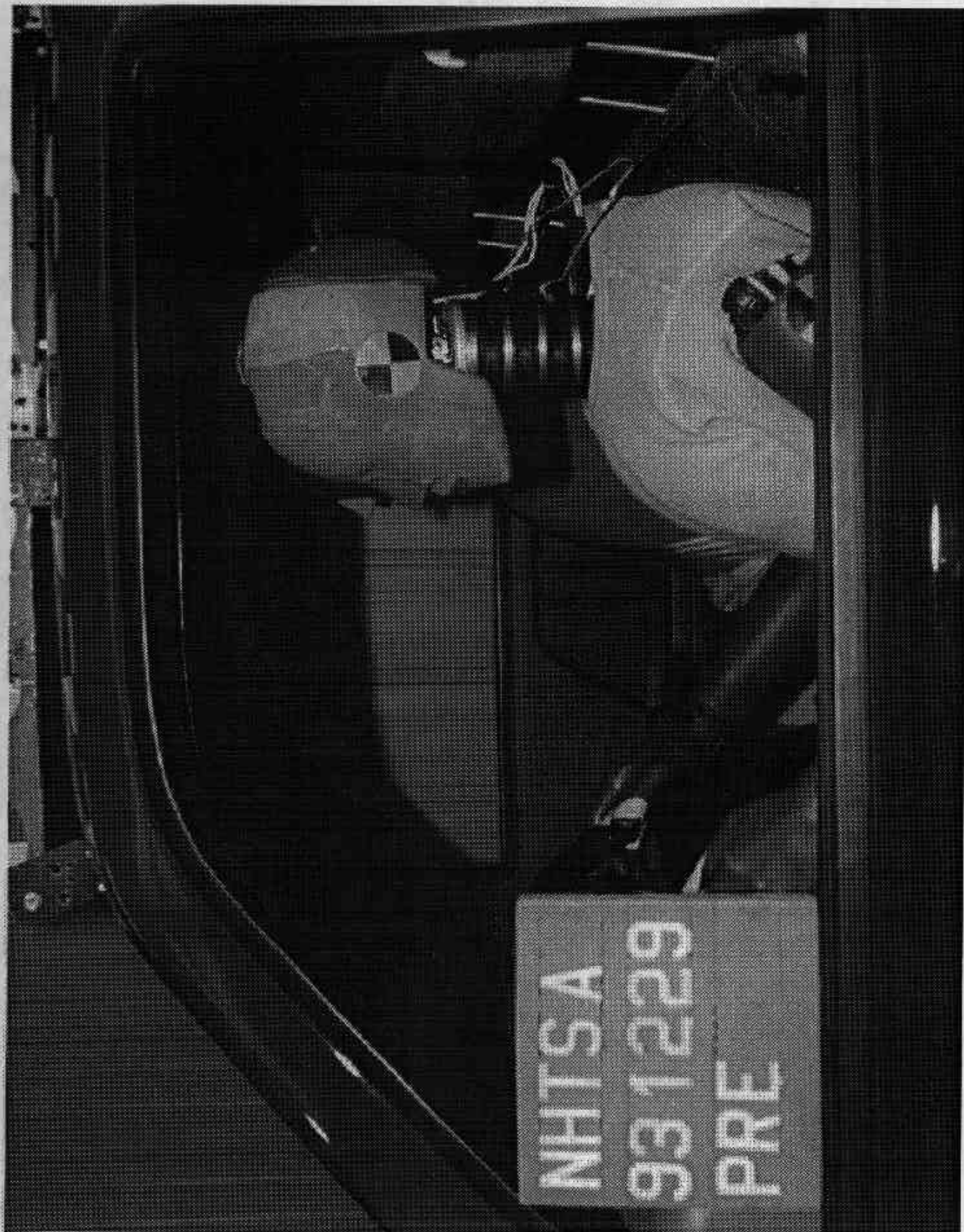


Figure A-31. PRE-TEST DRIVER DUMMY POSITION - VIEW 2

A-32

931229

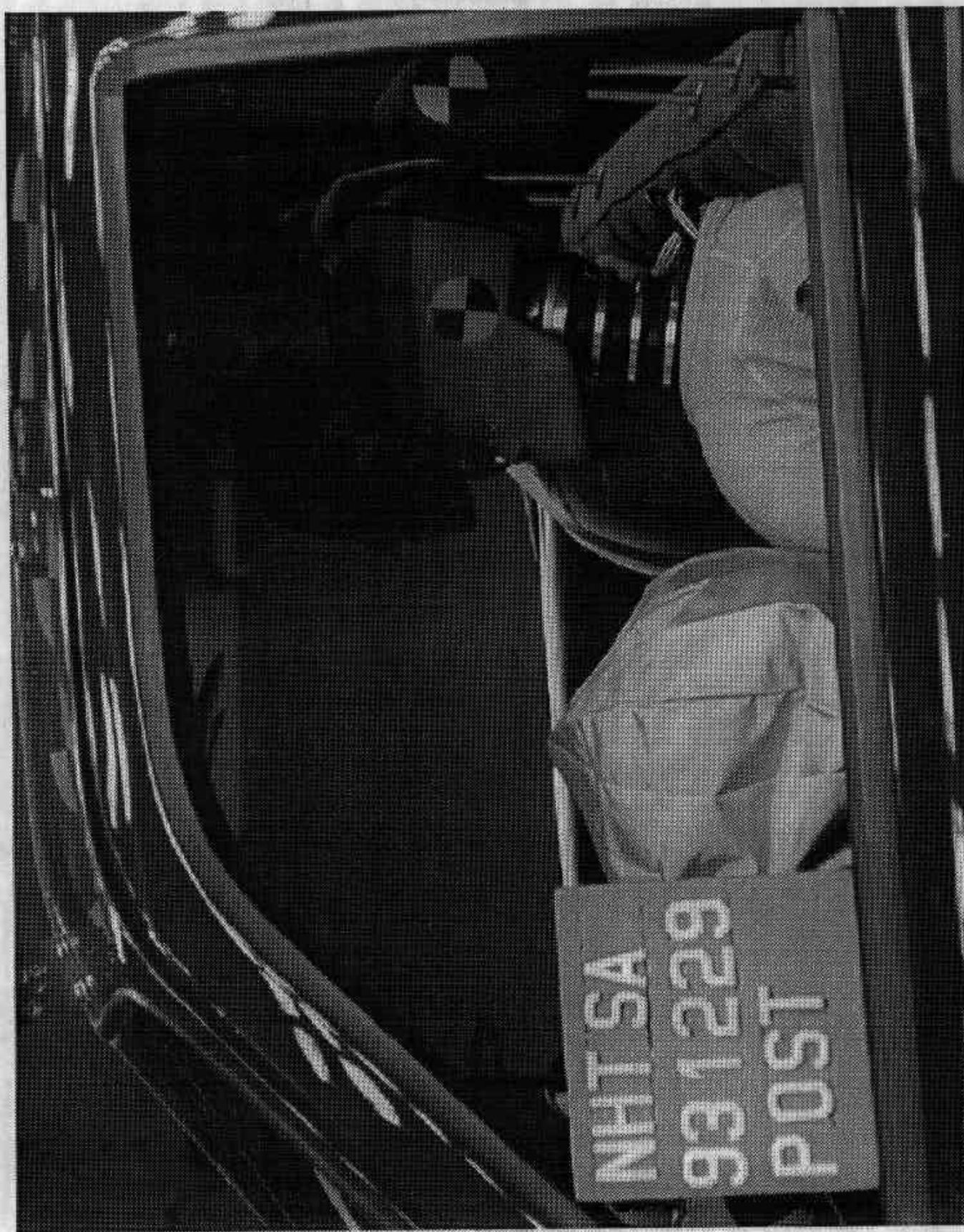


Figure A-32. POST-TEST DRIVER DUMMY POSITION - VIEW 2

A-33

931229

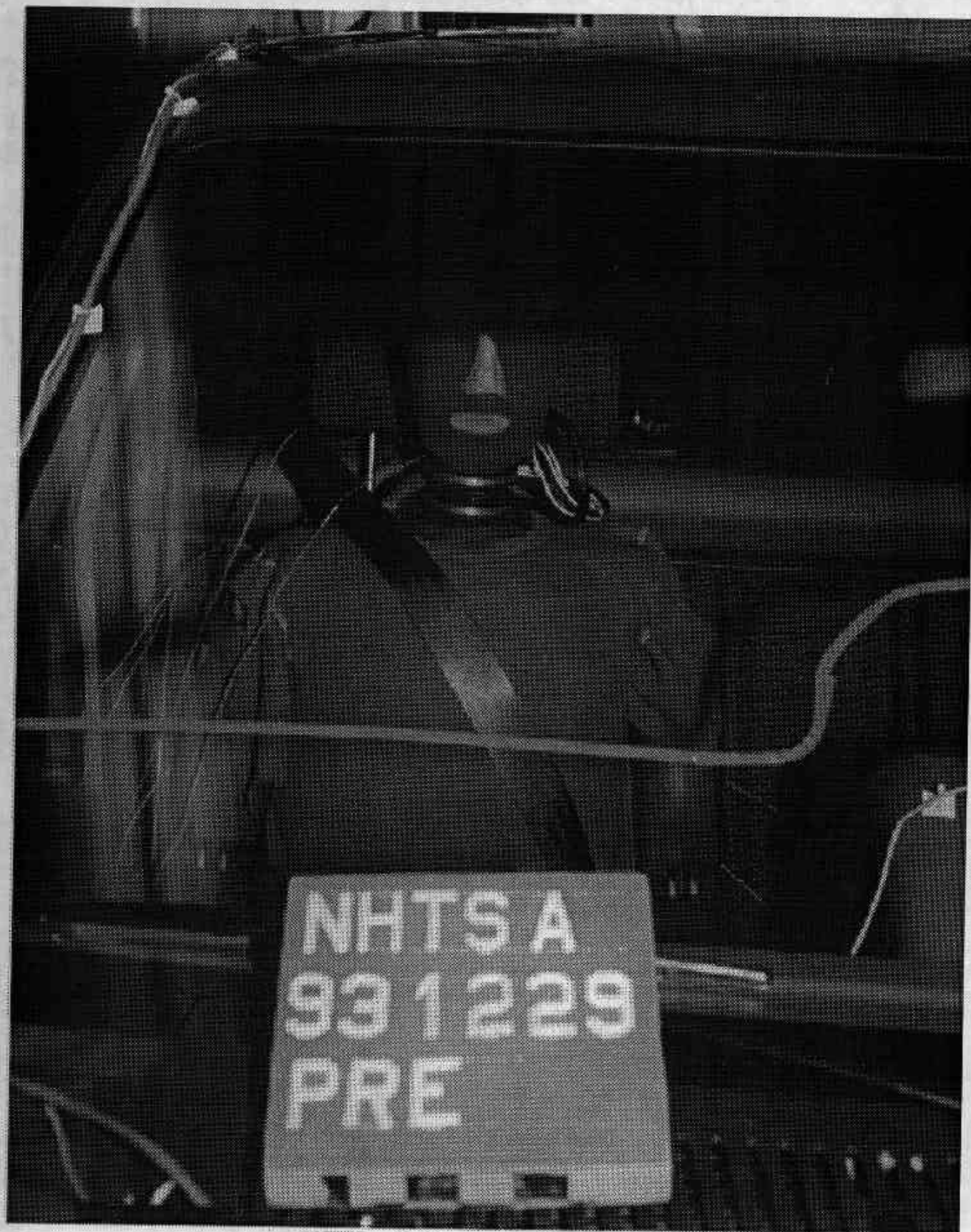


Figure A-33. PRE-TEST PASSENGER DUMMY POSITION - VIEW 1



Figure A-34. POST-TEST PASSENGER DUMMY POSITION - VIEW 1

A-35

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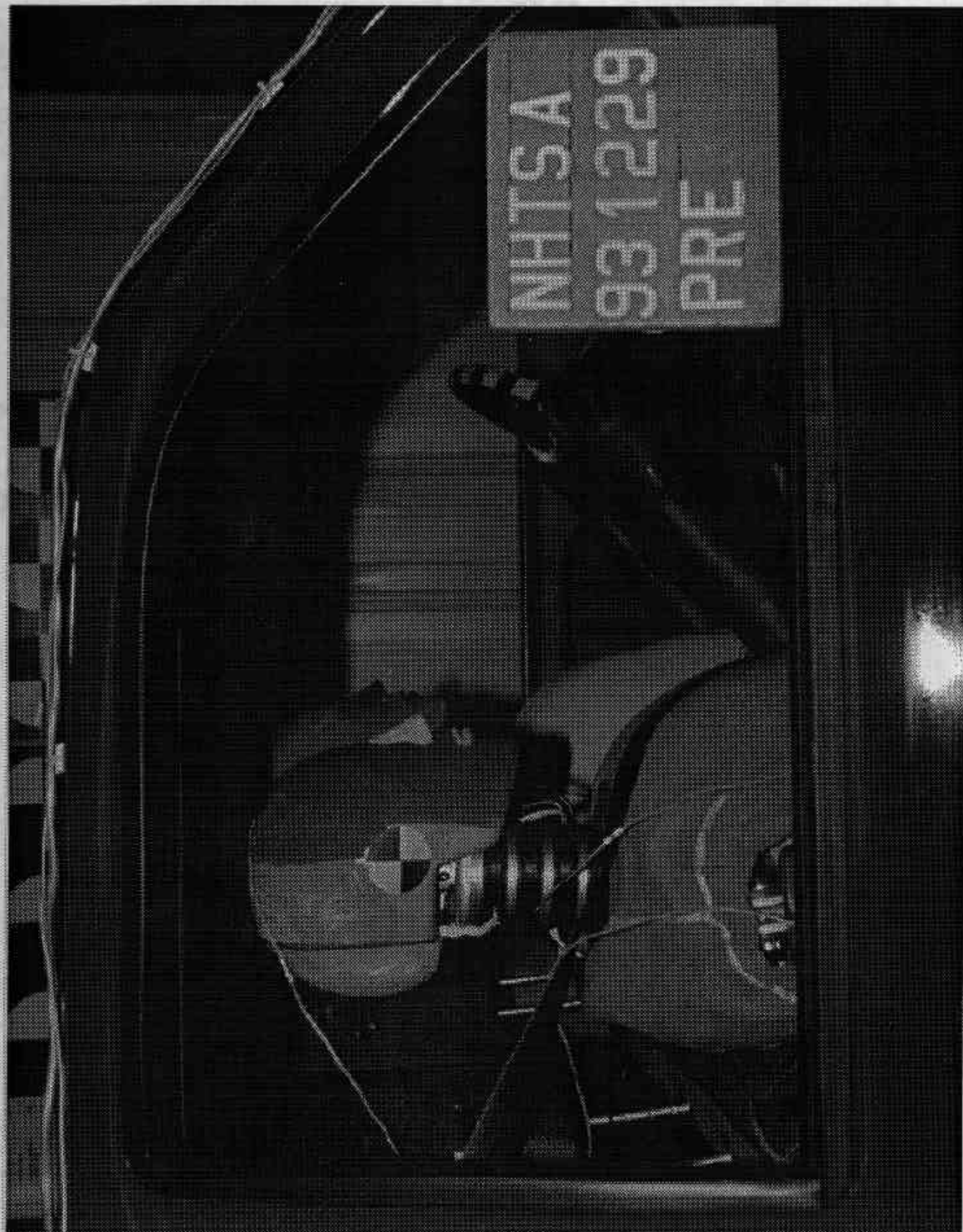


Figure A-35. PRE-TEST PASSENGER DUMMY POSITION - VIEW 2

A-36

931229

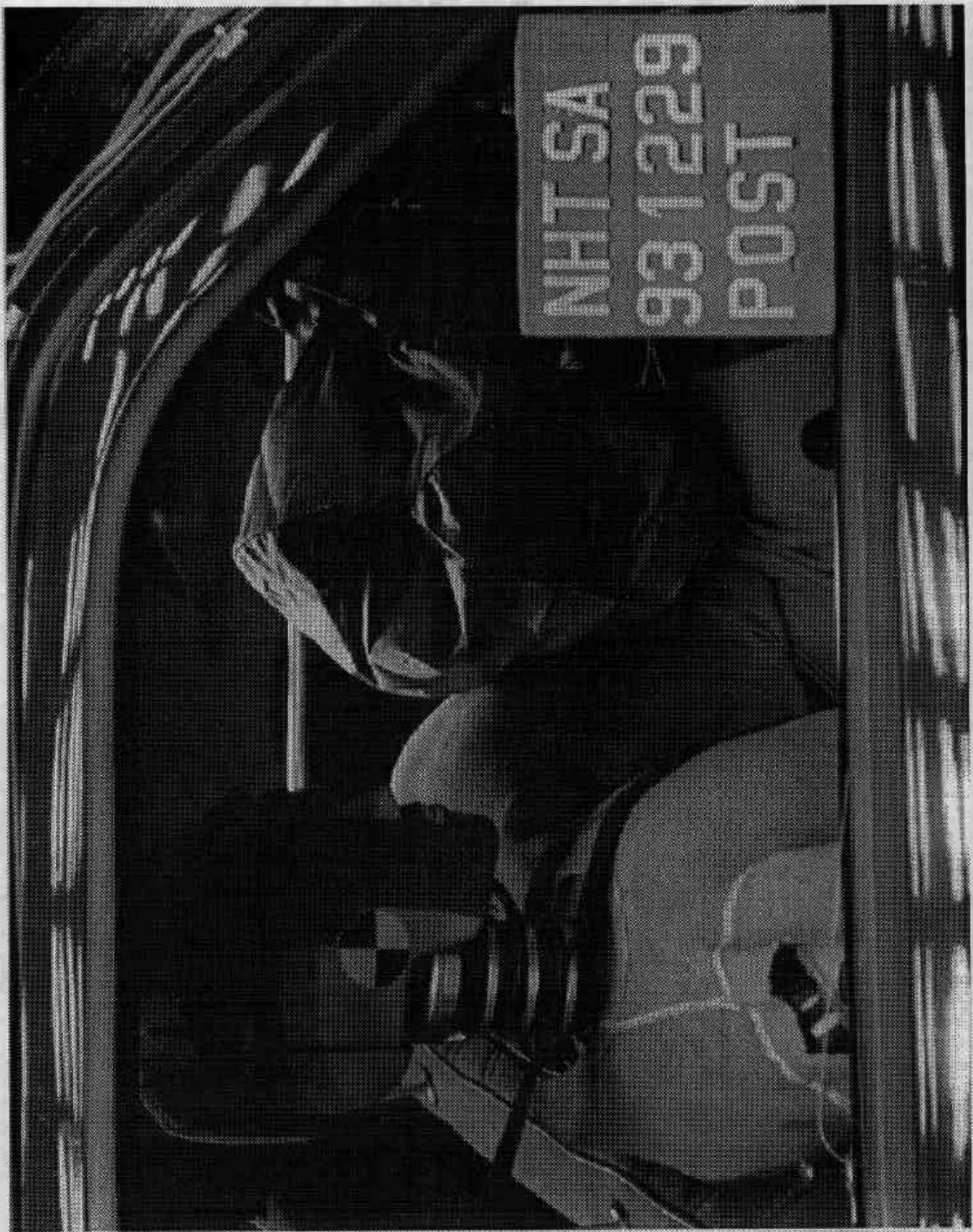


Figure A-36. POST-TEST PASSENGER DUMMY POSITION - VIEW 2

A-37

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Fig. A-37. PRE-TEST DRIVER DUMMY & VEHICLE INTERIOR - VIEW 1

A-38

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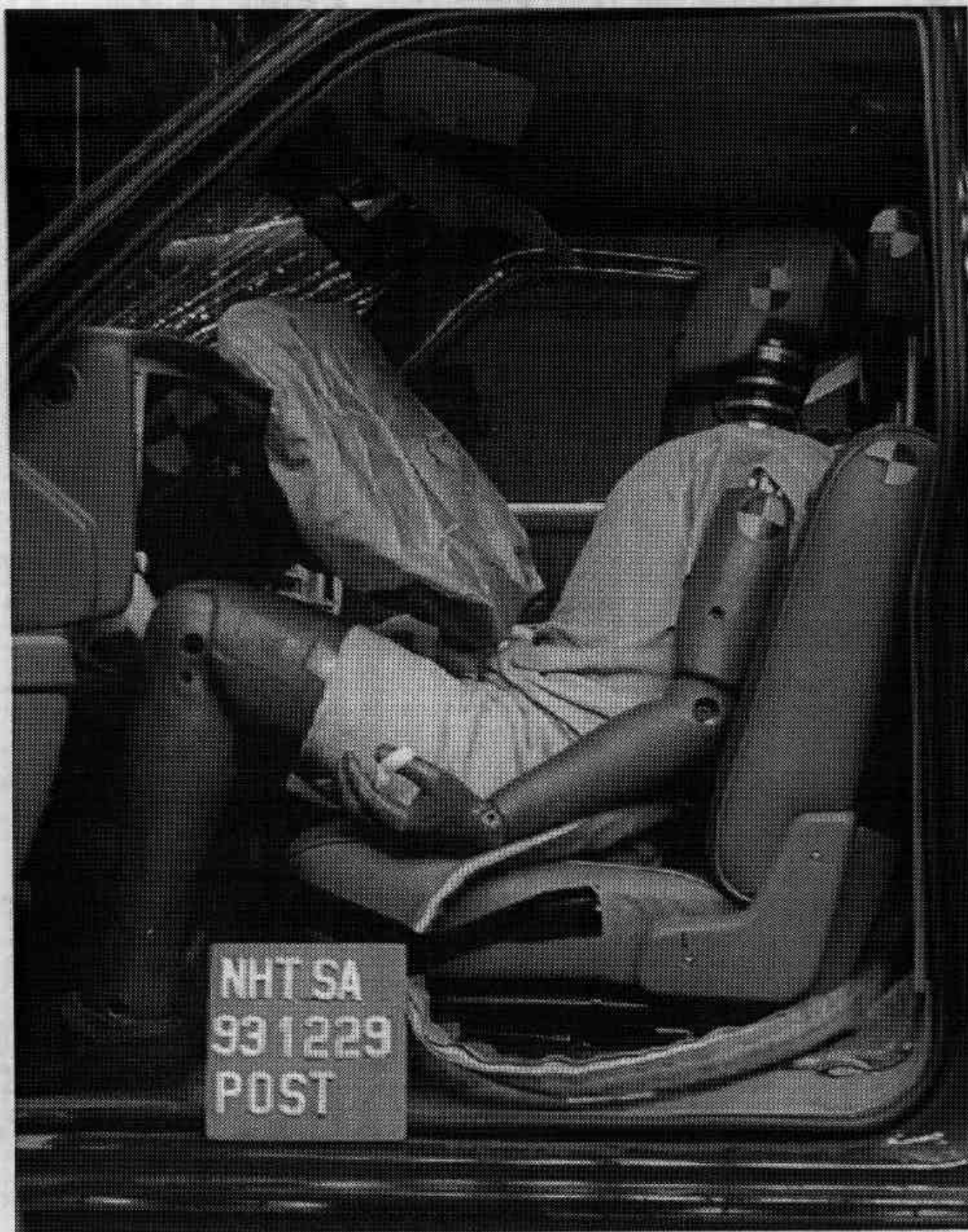


Fig A-38. POST-TEST DRIVER DUMMY & VEHICLE INTERIOR - VIEW 1

A-39

931229

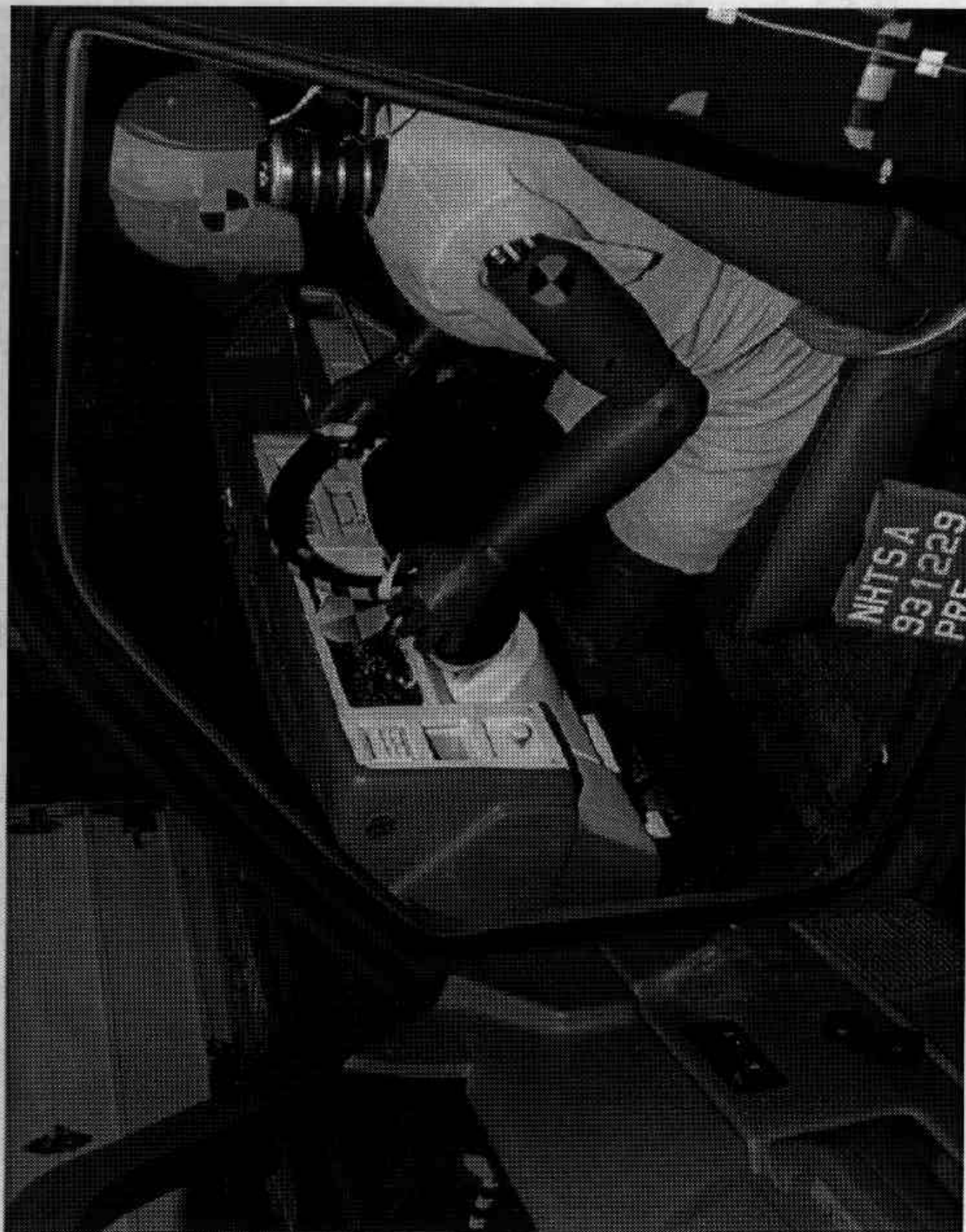


Fig. A-39. PRE-TEST DRIVER DUMMY & VEHICLE INTERIOR - VIEW 2

A-40

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Fig A-40. POST-TEST DRIVER DUMMY & VEHICLE INTERIOR - VIEW 2
A-41 931229

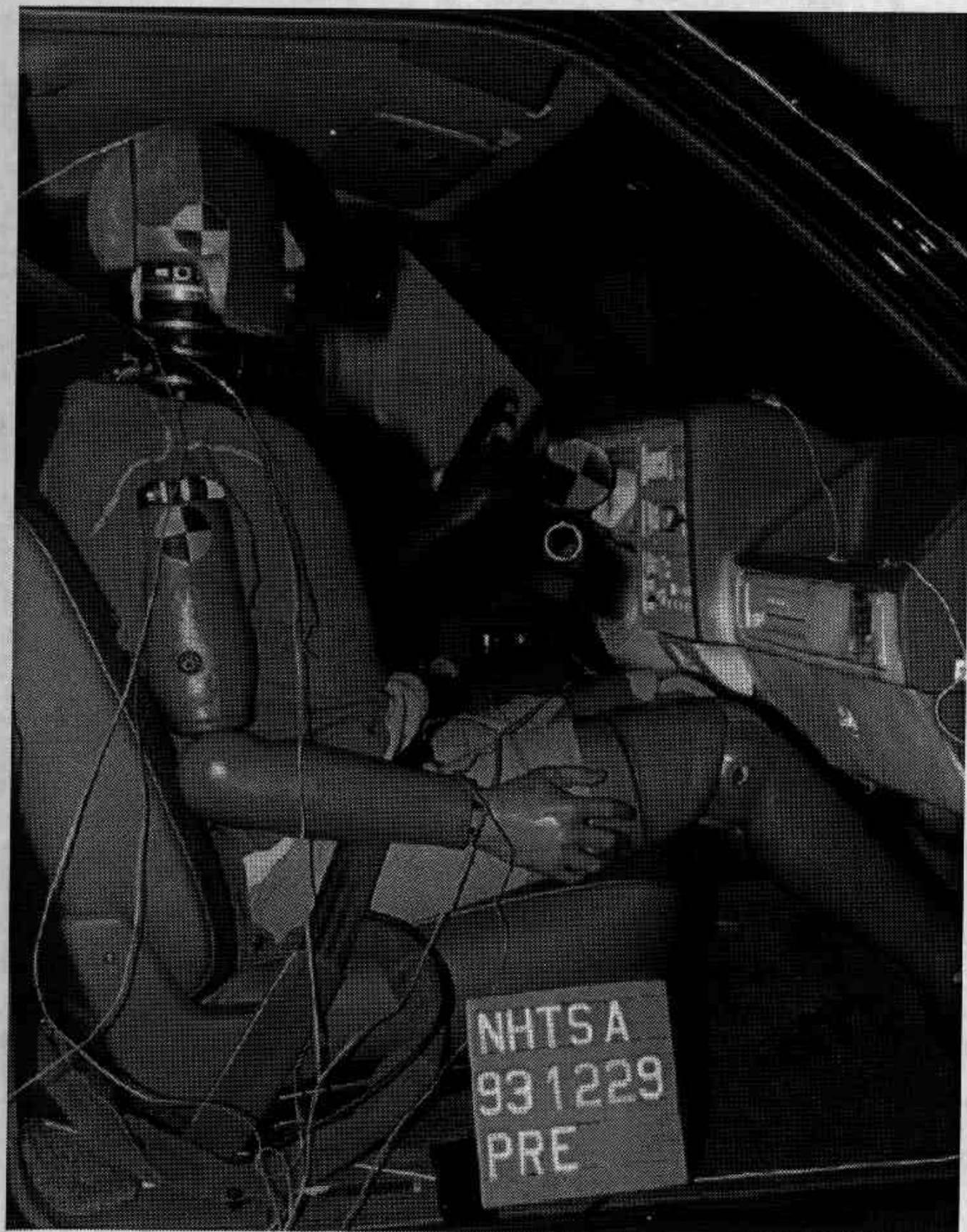


Figure A-41. PRE-TEST PASS. DUMMY & VEHICLE INTERIOR - VIEW 1

A-42

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Fig. A-42. POST-TEST PASS, DUMMY & VEHICLE INTERIOR - VIEW 1

A-43

931229

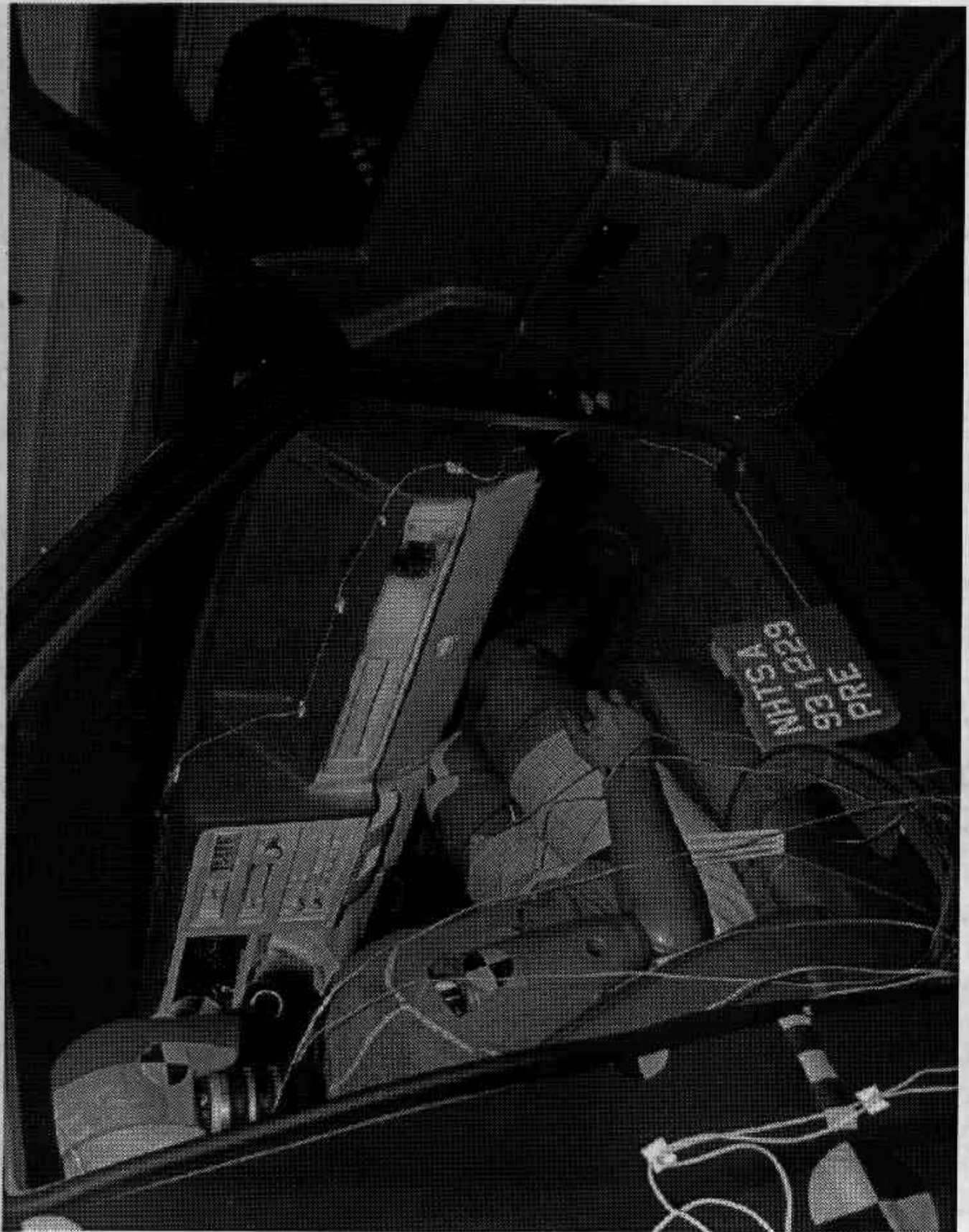


Figure A-43. PRE-TEST PASS. DUMMY & VEHICLE INTERIOR - VIEW 2

A-44

931229

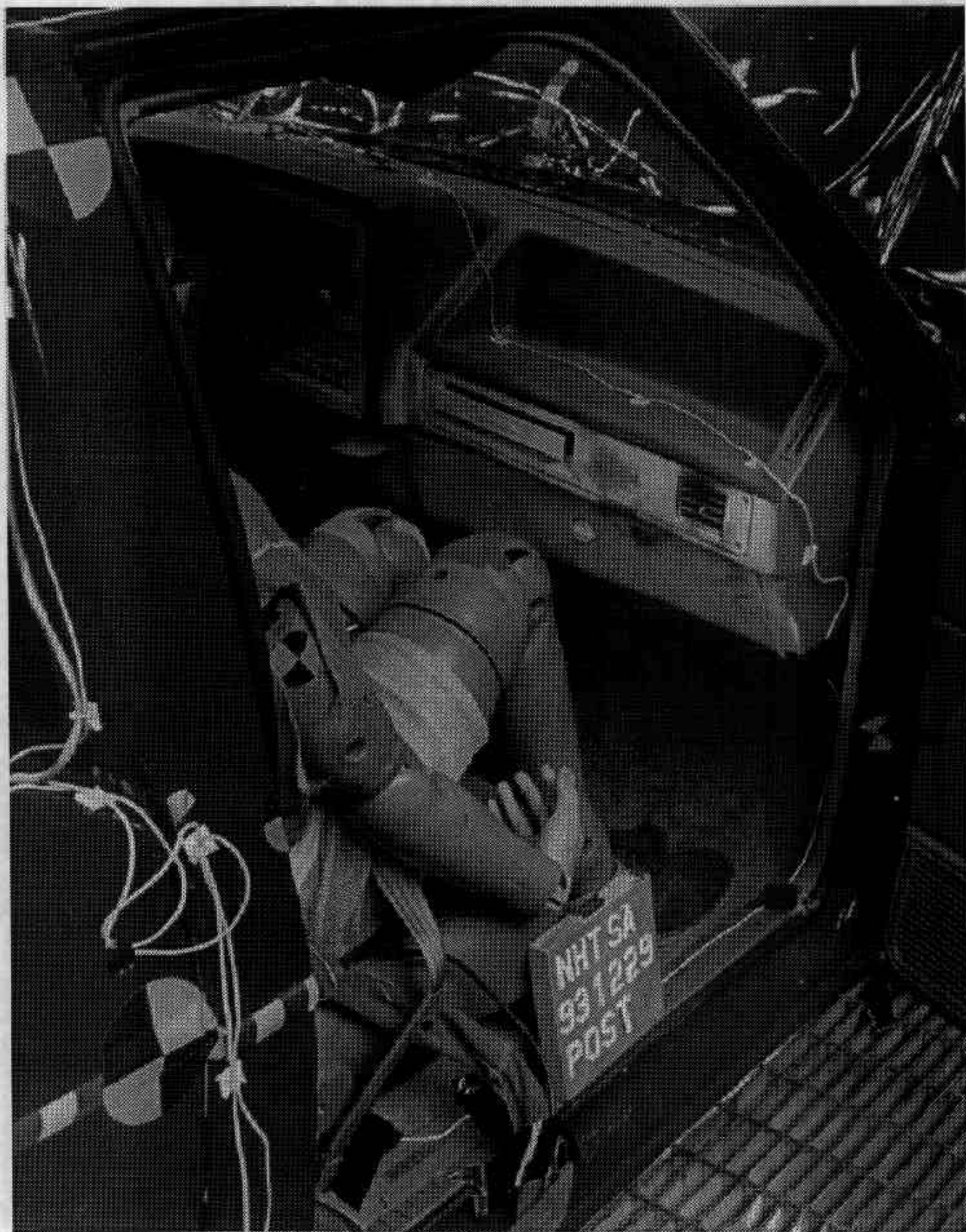


Fig. A-44. POST-TEST PASS. DUMMY & VEHICLE INTERIOR - VIEW 2

A-45

931229

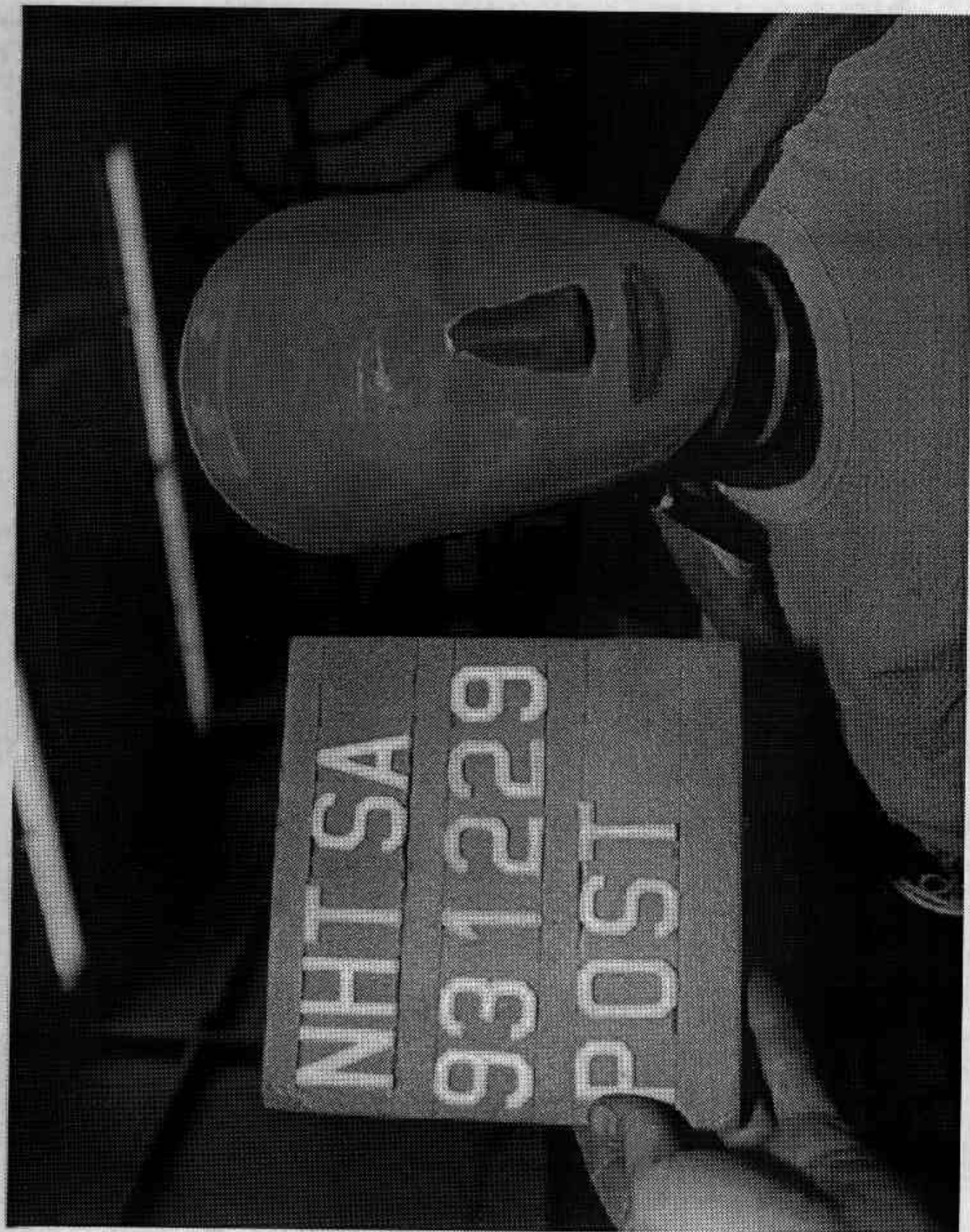


Figure A-45. POST-TEST DRIVER DUMMY HEAD CONTACT - VIEW 1

A-46

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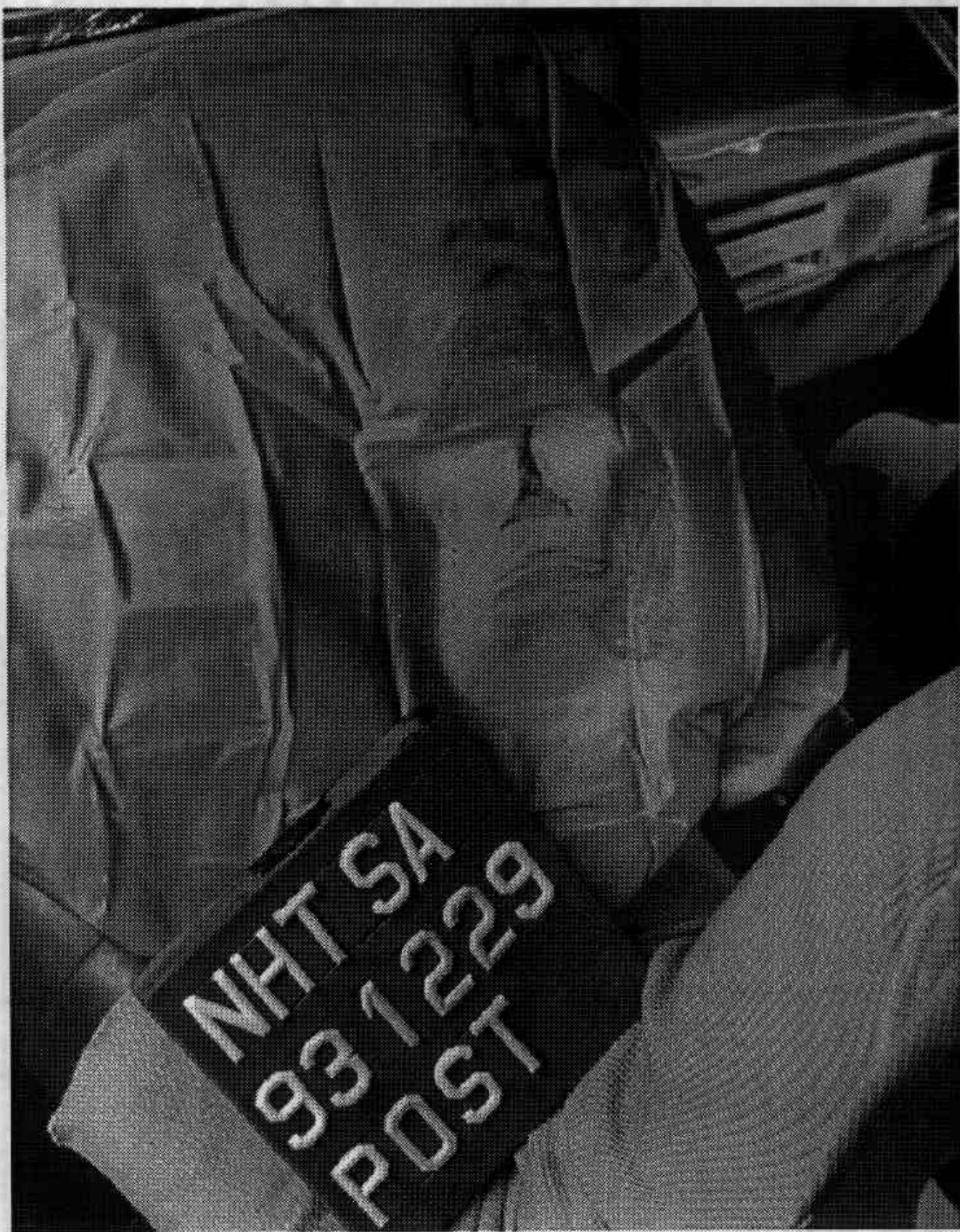


Figure A-46. POST-TEST DRIVER DUMMY HEAD CONTACT - VIEW 2

A-47

931229

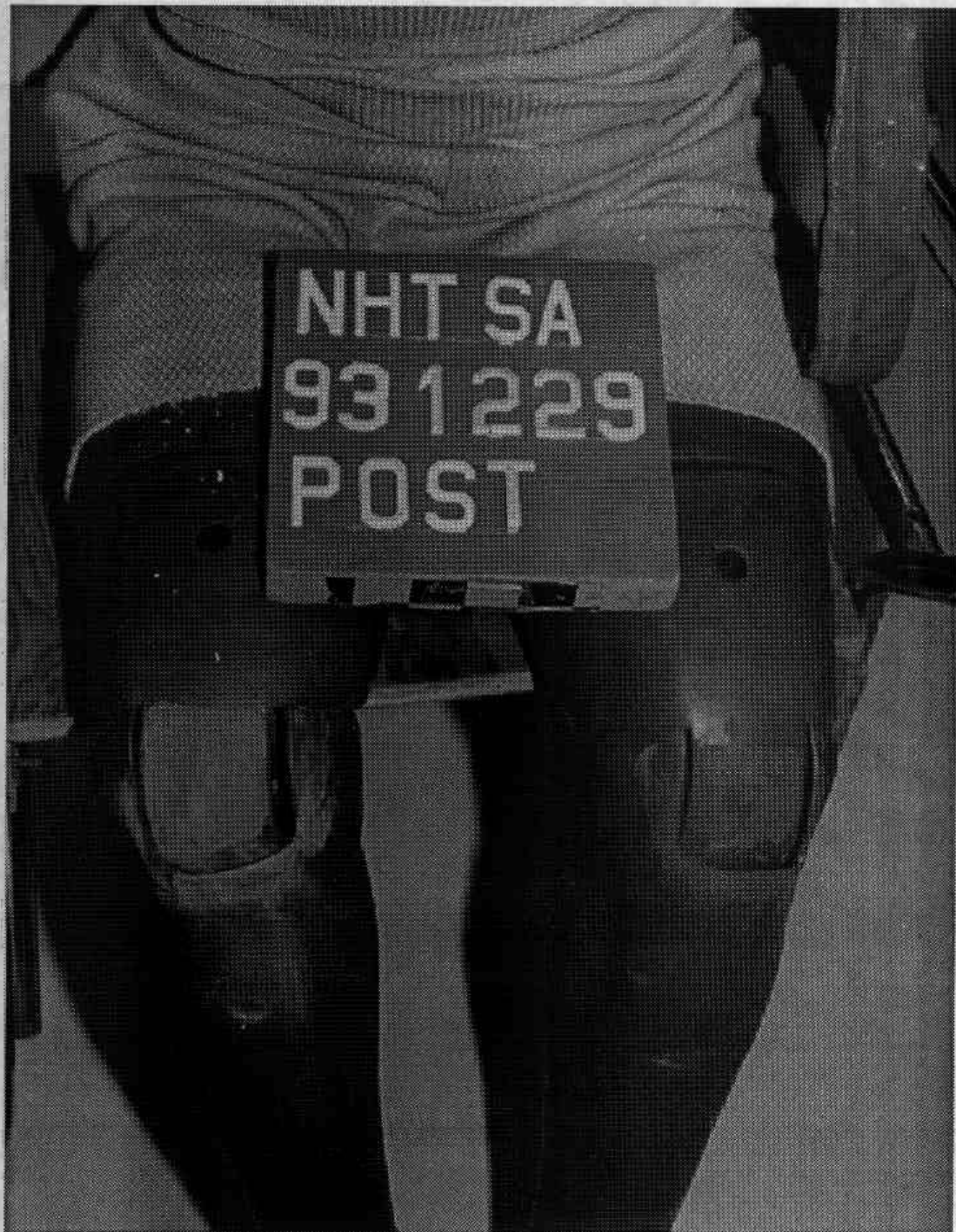


Figure A-47. POST-TEST DRIVER DUMMY KNEE CONTACT - VIEW 1

A-48

931229

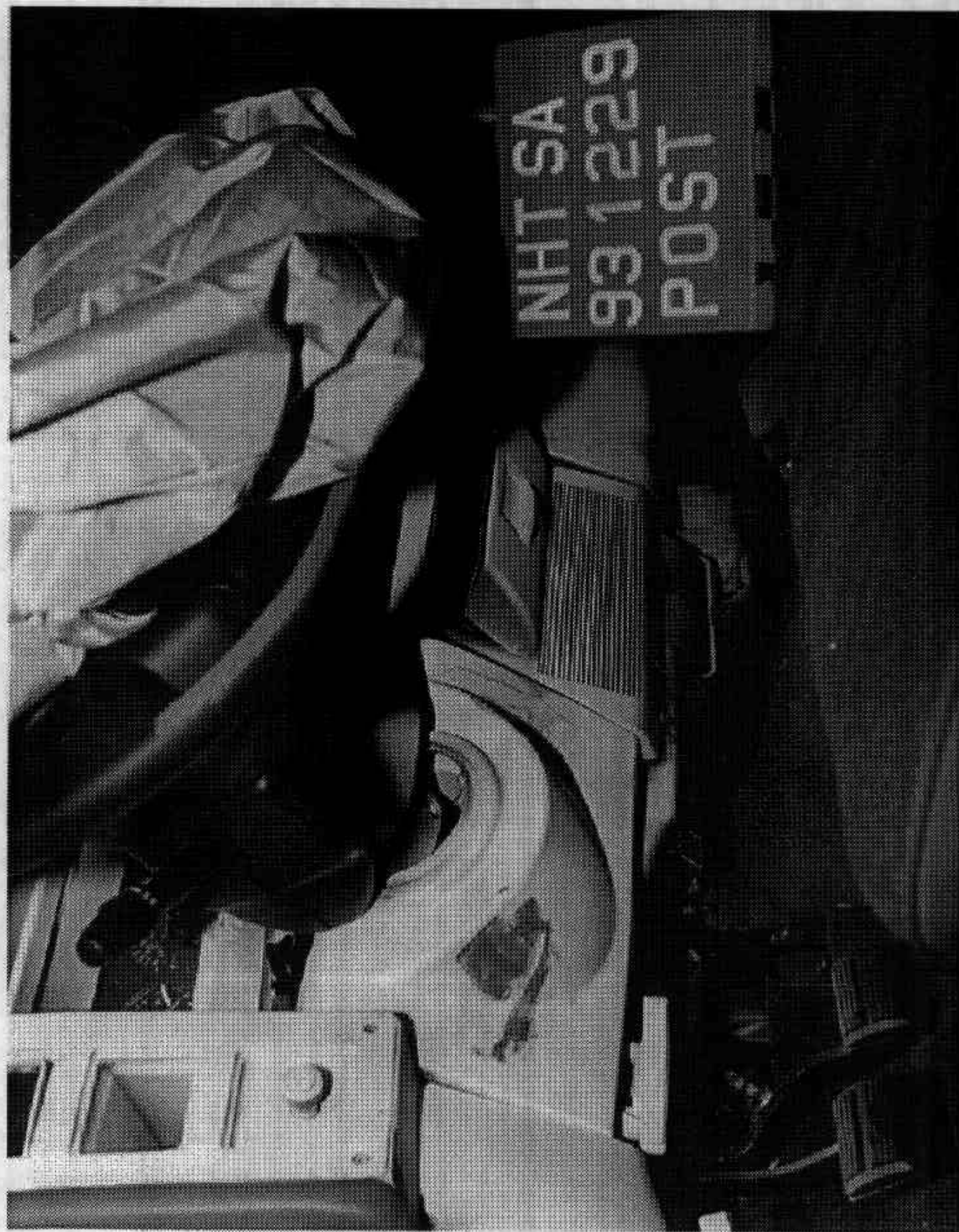


Figure A-48. POST-TEST DRIVER DUMMY KNEE CONTACT - VIEW 2

A-49

931229

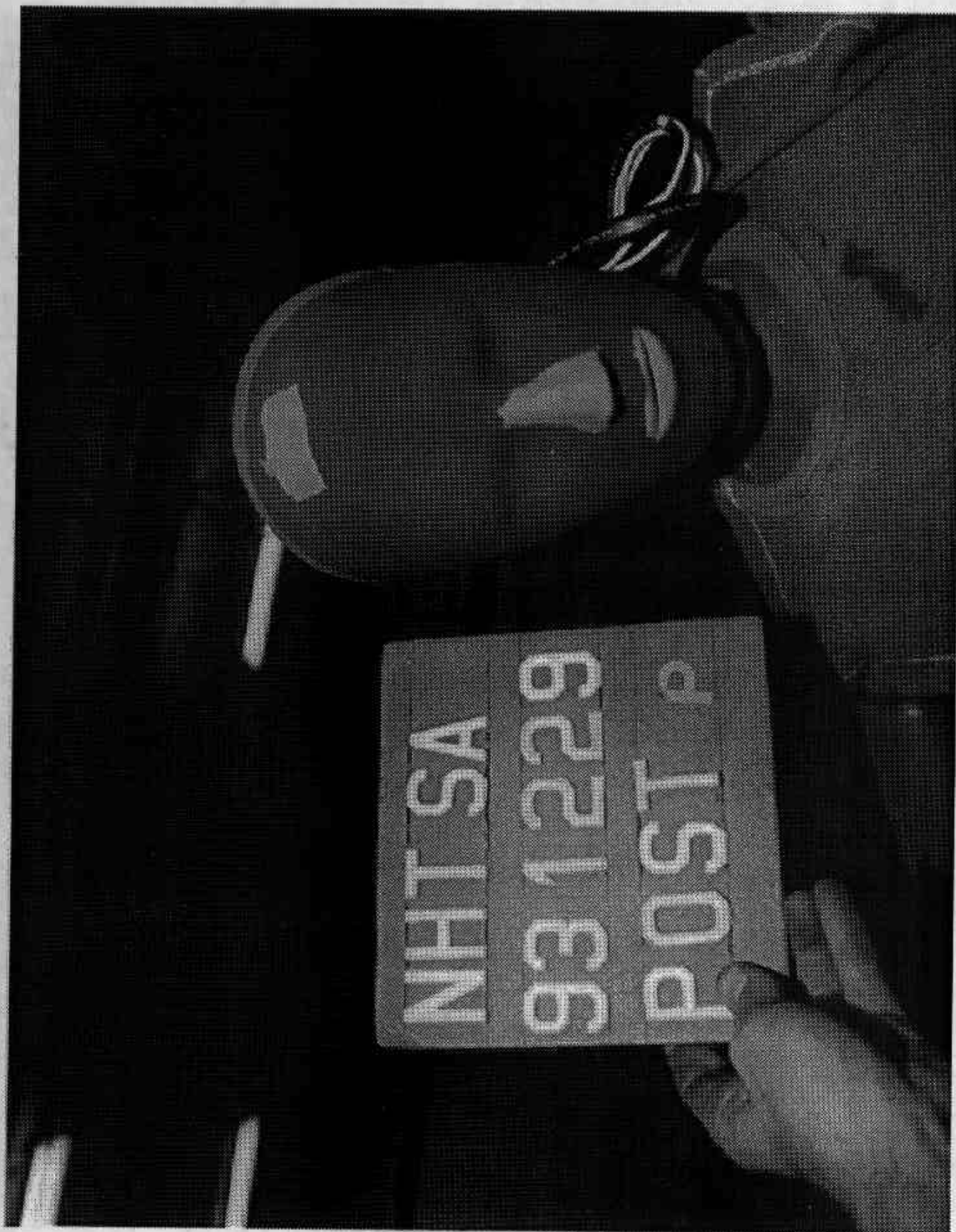


Figure A-49. POST-TEST PASSENGER DUMMY HEAD CONTACT VIEW

A-50

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Fig. A-50. POST-TEST PASSENGER DUMMY KNEE CONTACT - VIEW 1
A-51 931229

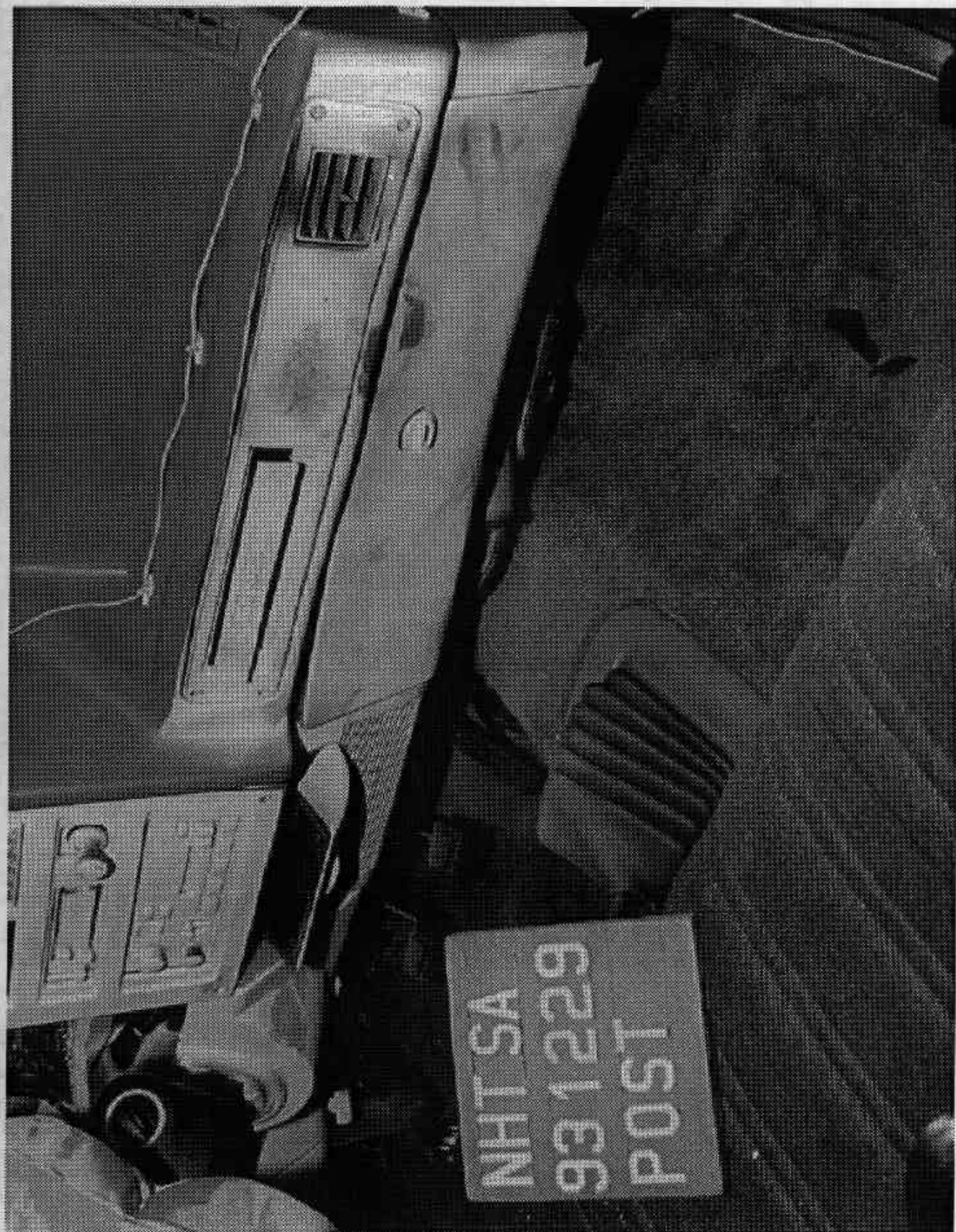


Fig. A-51. POST-TEST PASSENGER DUMMY KNEE CONTACT - VIEW 2

A-52

931229

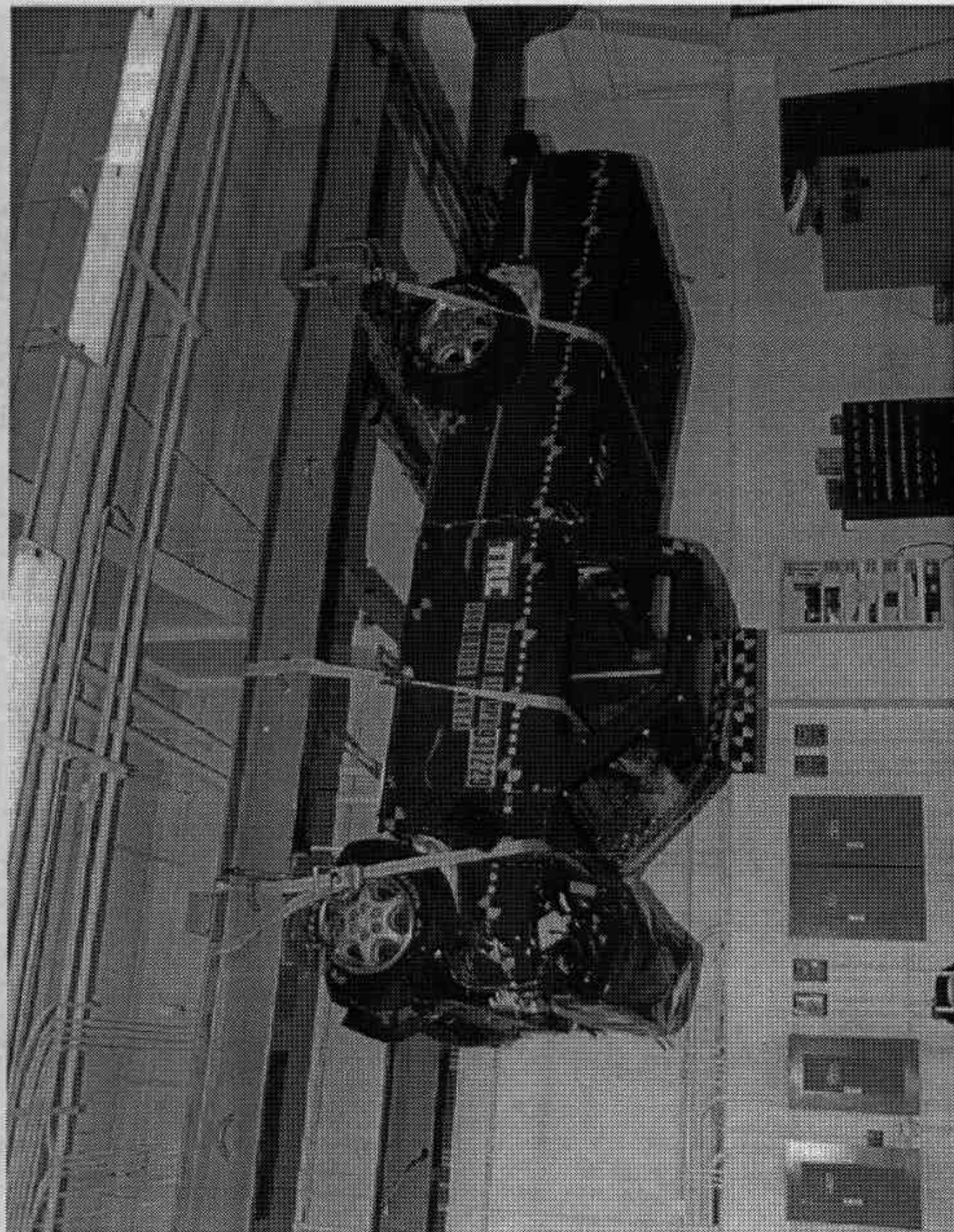


Figure A-53. POST-TEST VEH. ON STATIC ROLLOVER MACHINE VIEW

A-54

931229



Figure A-54. PRE-TEST BALLAST LOCATION VIEW
A-55

931229

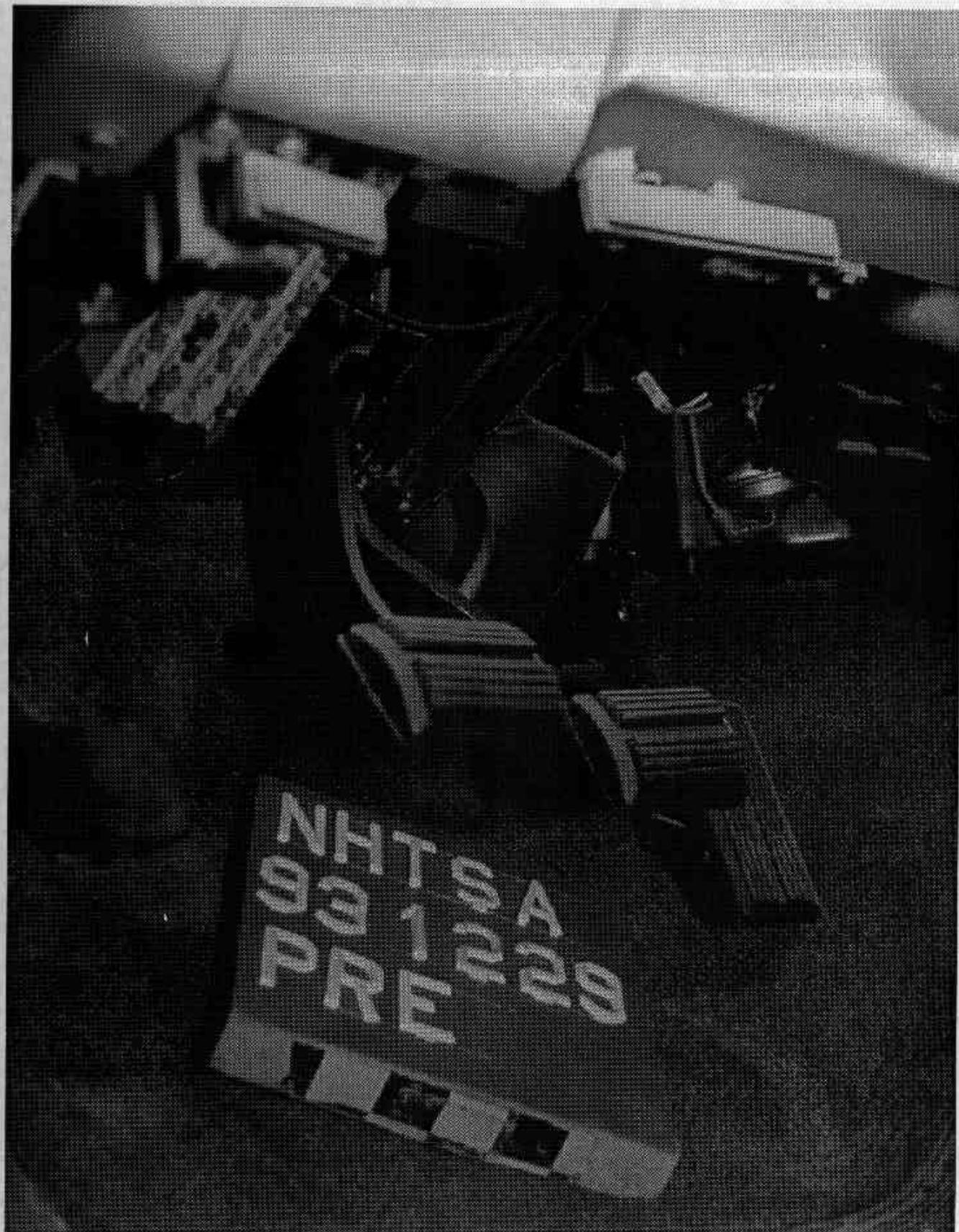


Figure A-55. PRE-TEST STEERING COLUMN SHAFT VIEW

A-56

931229



Figure A-56. PRE-TEST STEERING COLUMN SHAFT AT FIREWALL

A-57

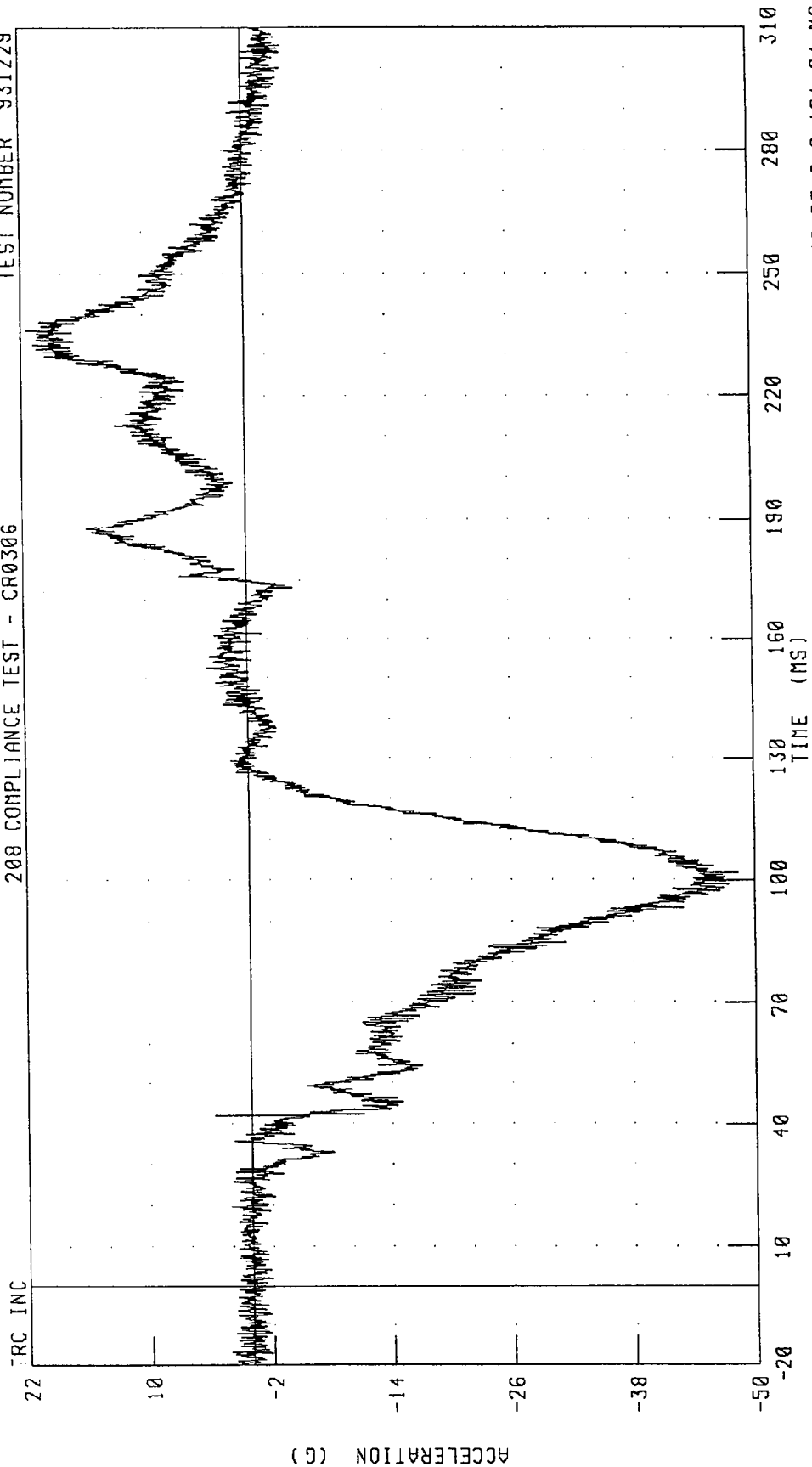
931229

APPENDIX B

DATA PLOTS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER HEAD X-AXIS ACCELERATION
 208 COMPLIANCE TEST - CR0306

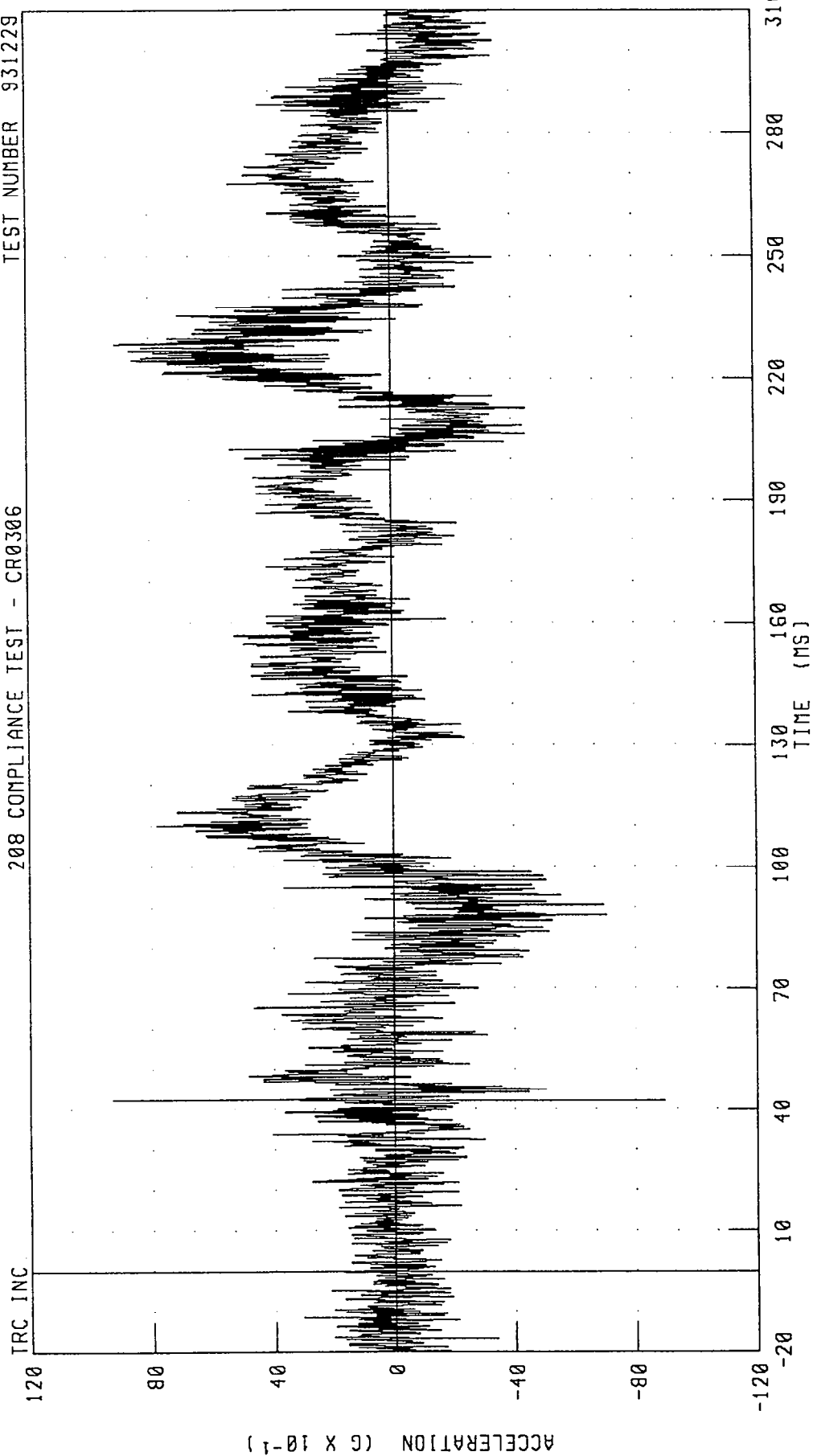
TEST NUMBER 931229



CHANNEL: HEDXG1 FILTER: CH. CLASS 1000

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER HEAD Y-AXIS ACCELERATION
 208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229

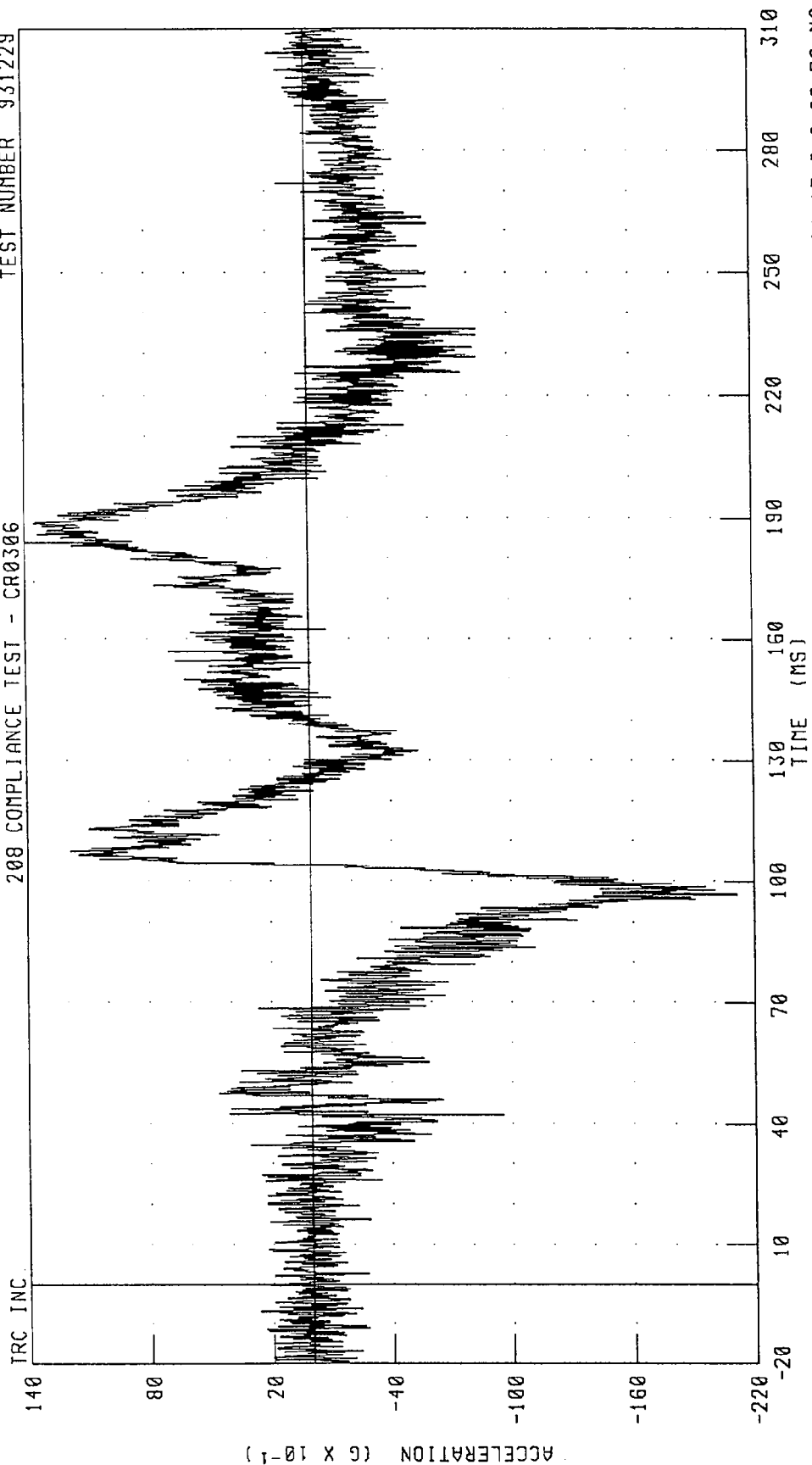


PEAK DATA: 9.32 G @ 42.48 MS; -8.92 G @ 42.32 MS

CHANNEL: HEDYG1 FILTER: CH. CLASS 1000

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER HEAD Z-AXIS ACCELERATION
 200 COMPLIANCE TEST - CR0306

TEST NUMBER 931229

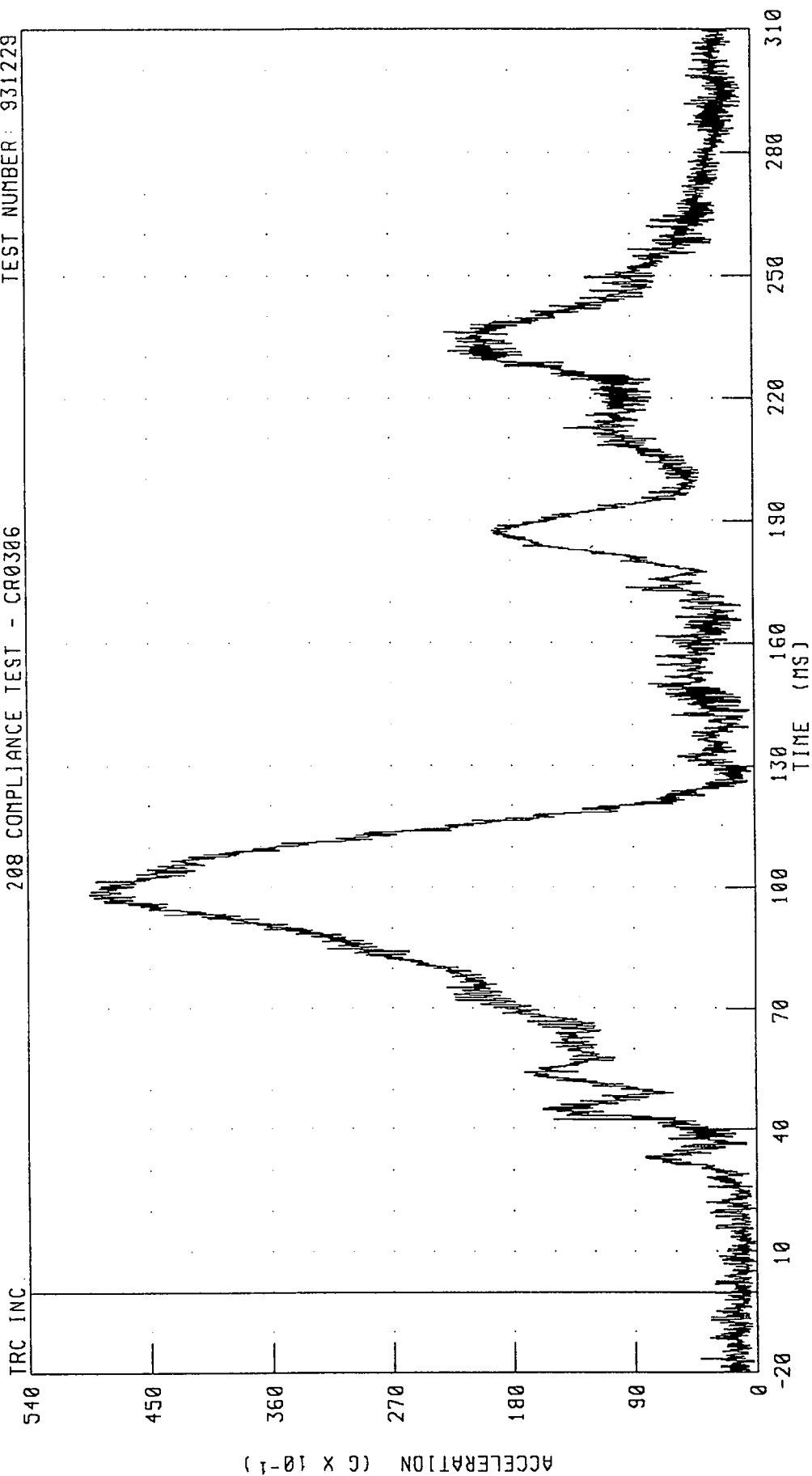


PEAK DATA: 13.93 G @ 183.92 MS; -21.13 G @ 96.72 MS

CHANNEL: HEDZG1 FILTER: CH. CLASS 1000

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
DRIVER HEAD RESULTANT ACCELERATION
208 COMPLIANCE TEST - CR0306

TEST NUMBER: 931229

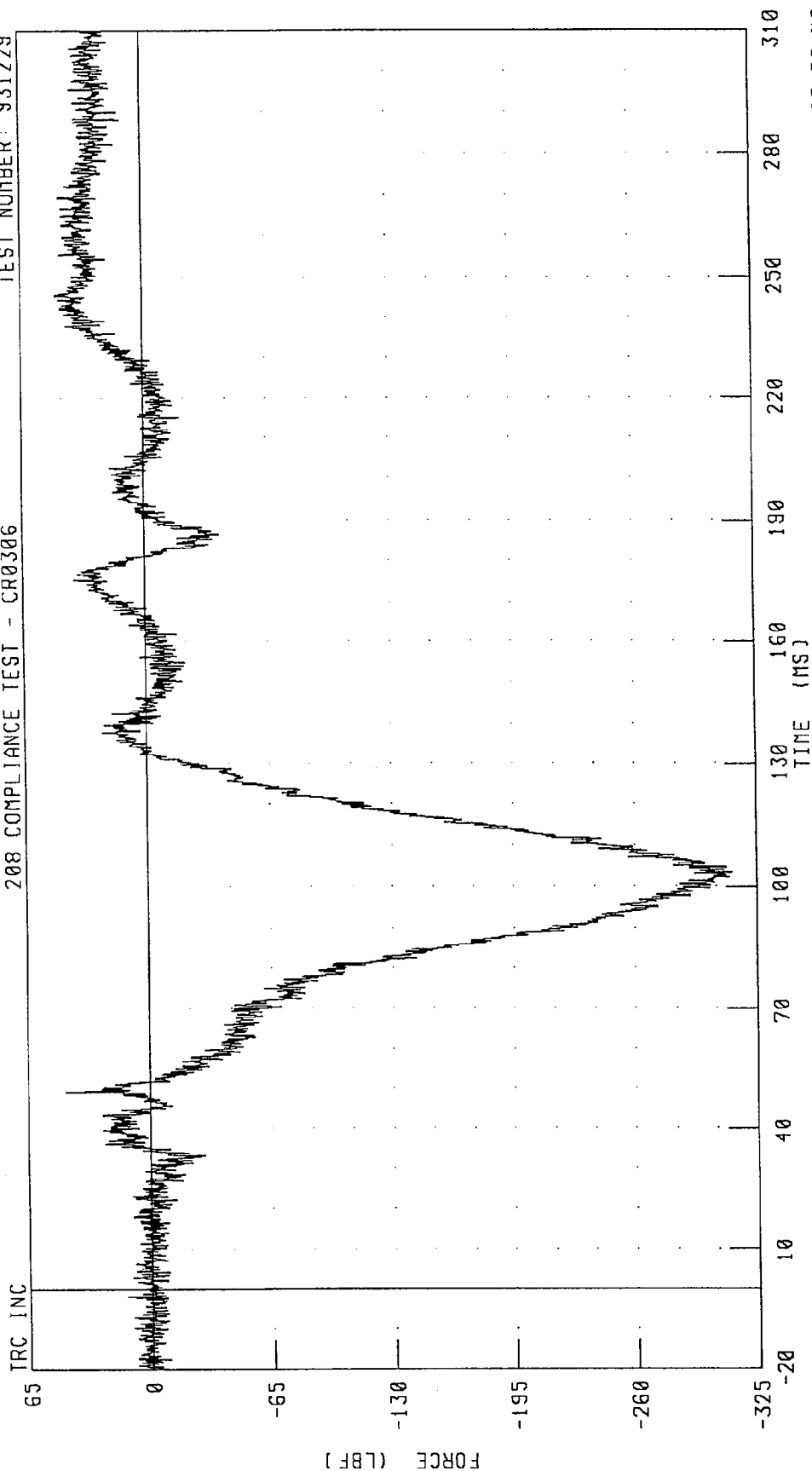


CHANNEL: HEDRG1 FILTER: CH. CLASS 1000

PEAK DATA: 49.44 G @ 98.32 MS; 0.18 G @ 5.28 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER NECK X-AXIS SHEAR FORCE
 208 COMPLIANCE TEST - CR0306

TEST NUMBER: 931229



CHANNEL: NEKXF1 FILTER: CH. CLASS 1000

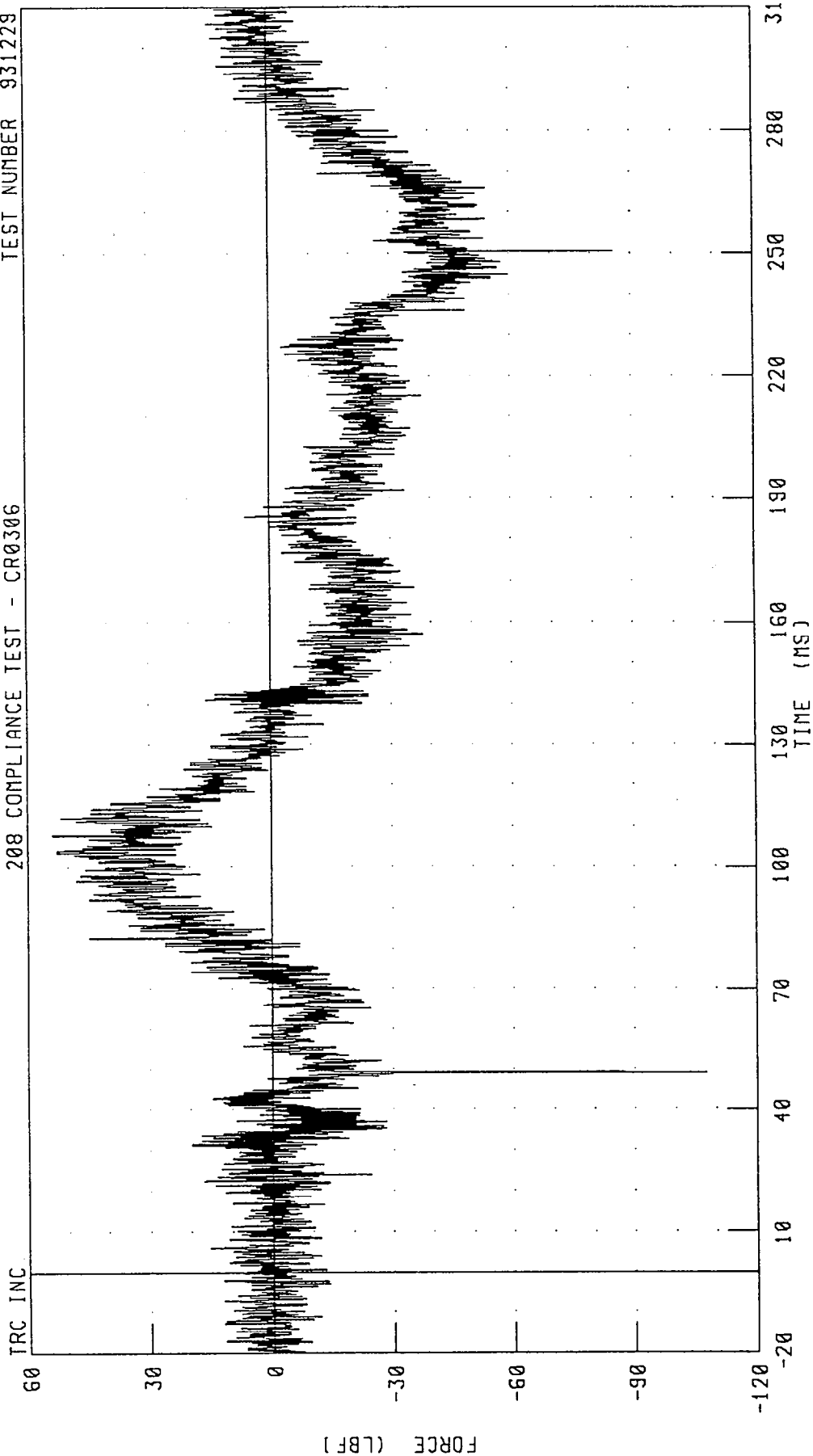
PEAK DATA: 46.94 LBF @ 245.60 MS; -311.70 LBF @ 103.36 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER

DRIVER NECK Y-AXIS SHEAR FORCE

208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229

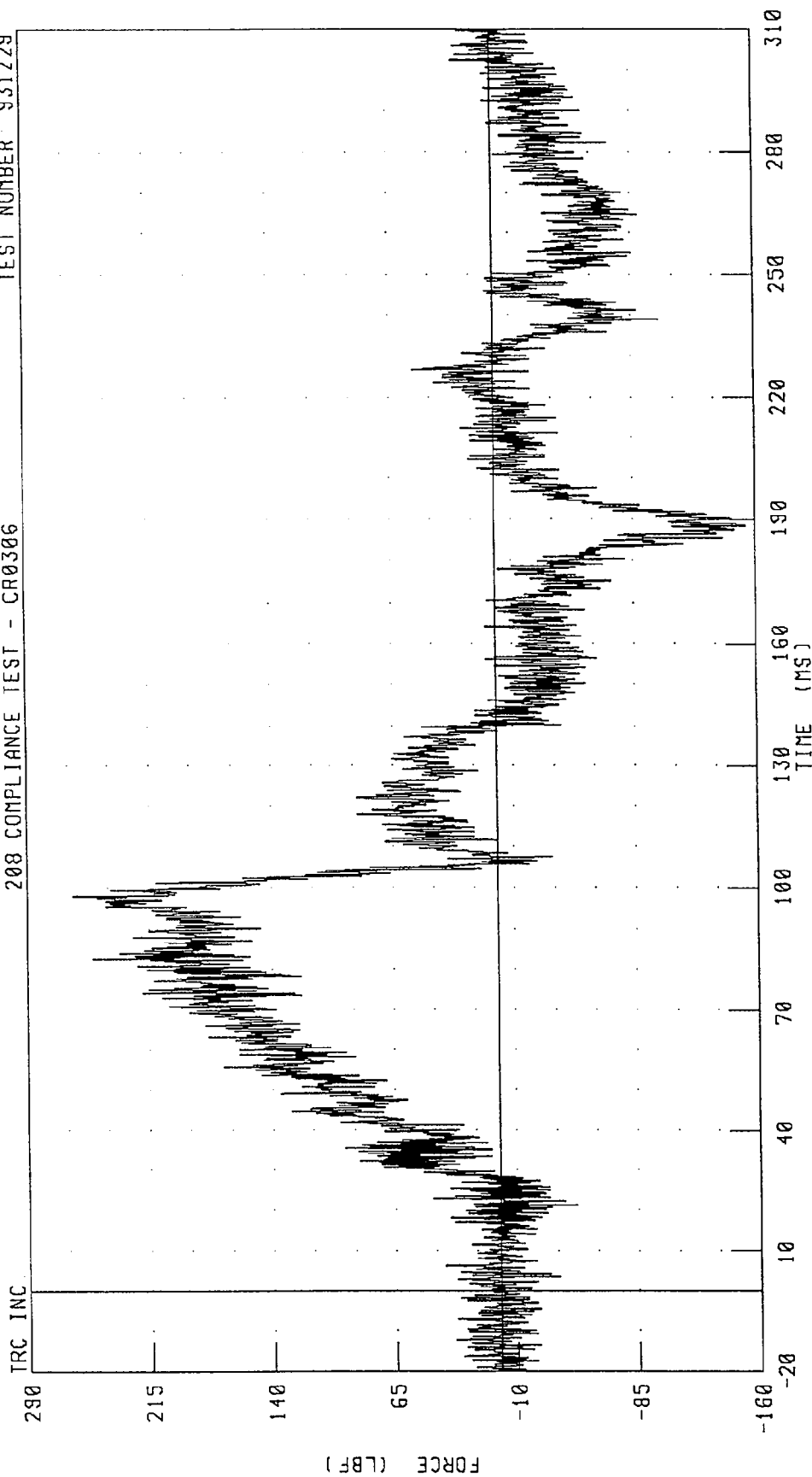


CHANNEL: NEKYF1 FILTER: CH. CLASS 1000

PEAK DATA: 53.94 LBF @ 107.92 MS; -107.43 LBF @ 249.43 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER NECK Z-AXIS AXIAL FORCE
 208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229

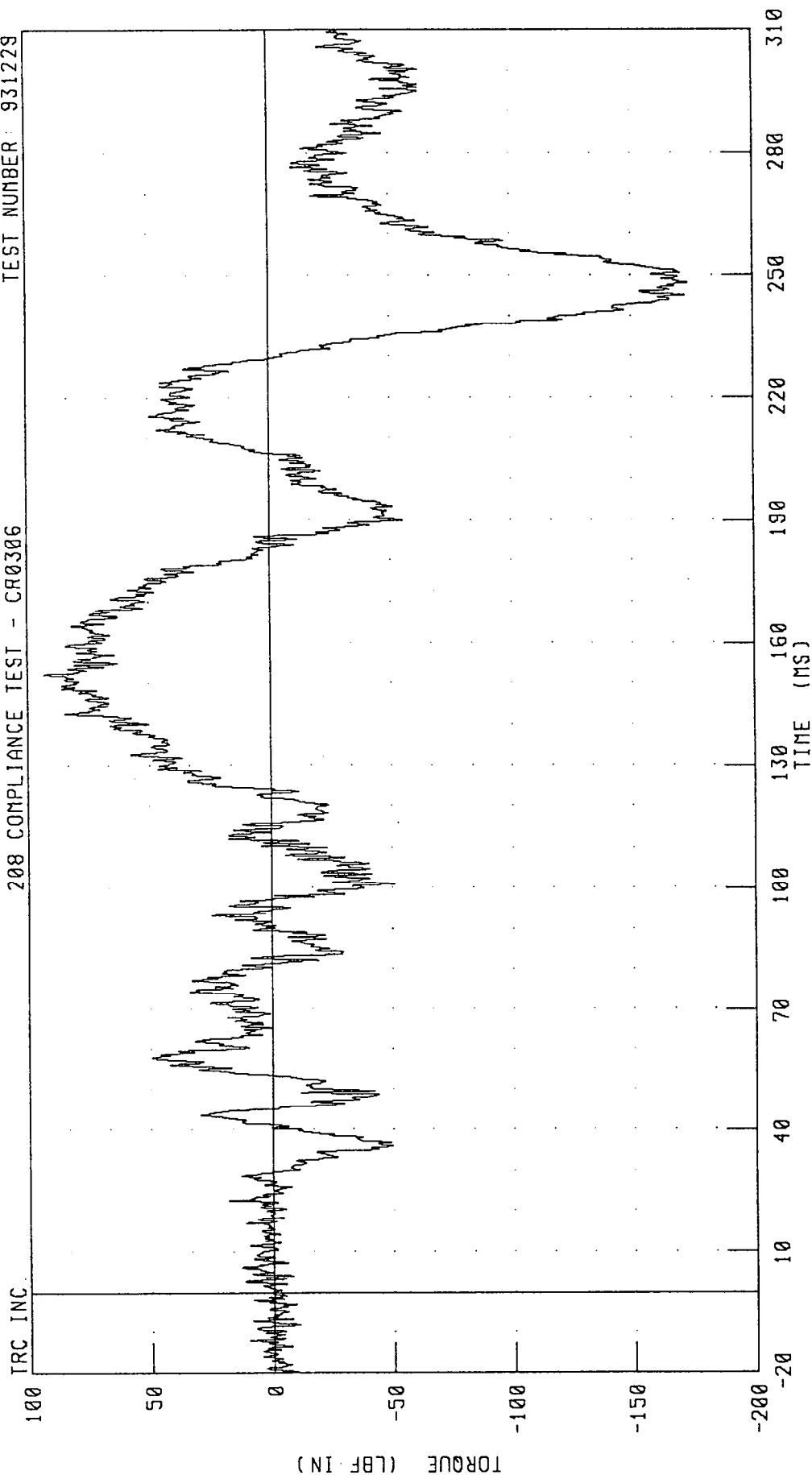


CHANNEL: NEKZF1 FILTER: CH. CLASS 1000

PEAK DATA: 261.76 LBF @ 98.00 MS; -155.20 LBF @ 189.92 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER NECK MOMENT ABOUT X AXIS
 208 COMPLIANCE TEST - CR0306

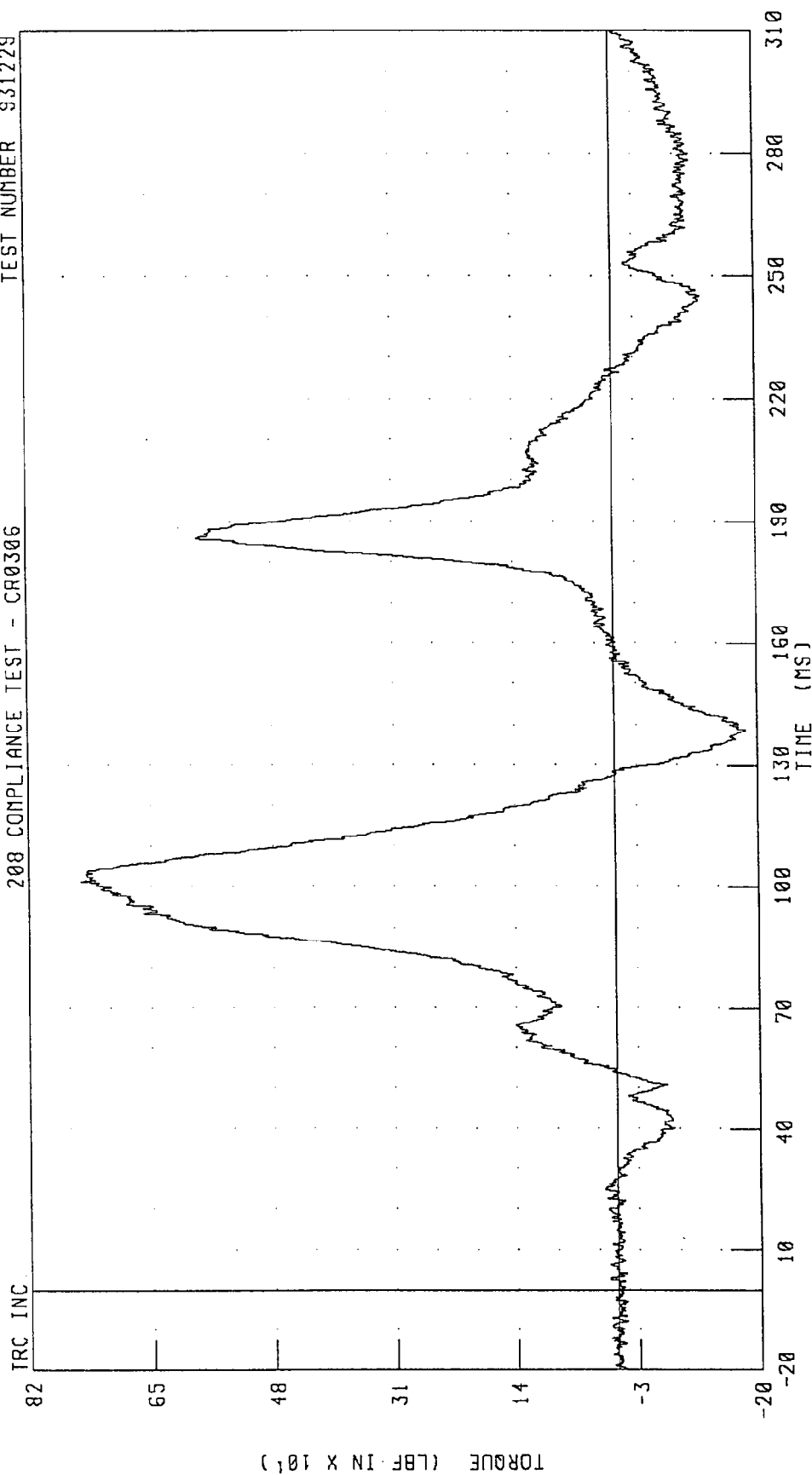
TEST NUMBER: 931229



CHANNEL: NEKXMI FILTER: CH. CLASS 600

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER NECK MOMENT ABOUT Y AXIS
 200 COMPLIANCE TEST - CR0306

TEST NUMBER 931229

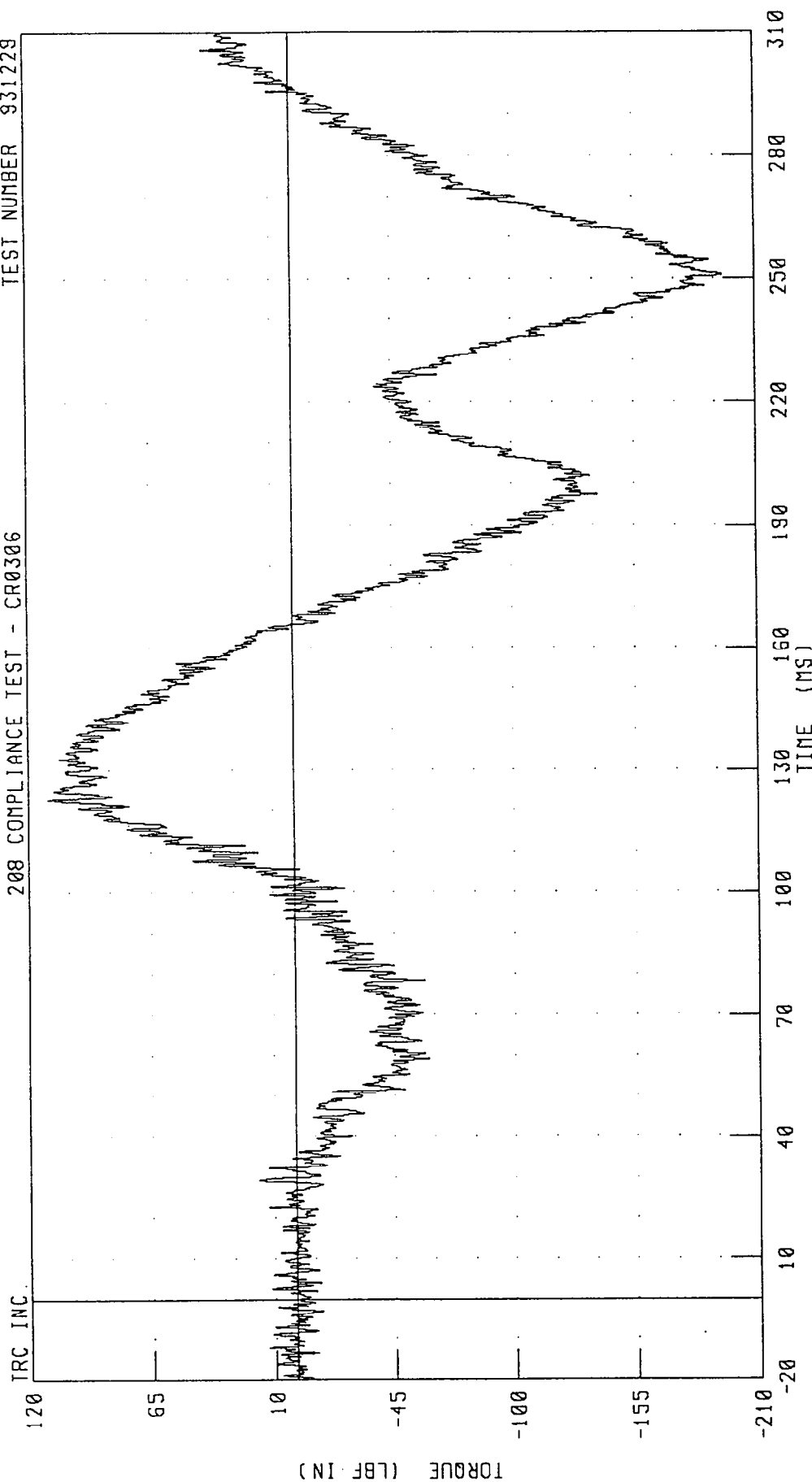


CHANNEL: NEKYM1 FILTER: CH. CLASS 600 PEAK DATA: 747.02 LBF-IN @ 101.28 MS; -183.86 LBF-IN @ 138.56 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
DRIVER NECK MOMENT ABOUT Z AXIS

208 COMPLIANCE TEST - CR0306

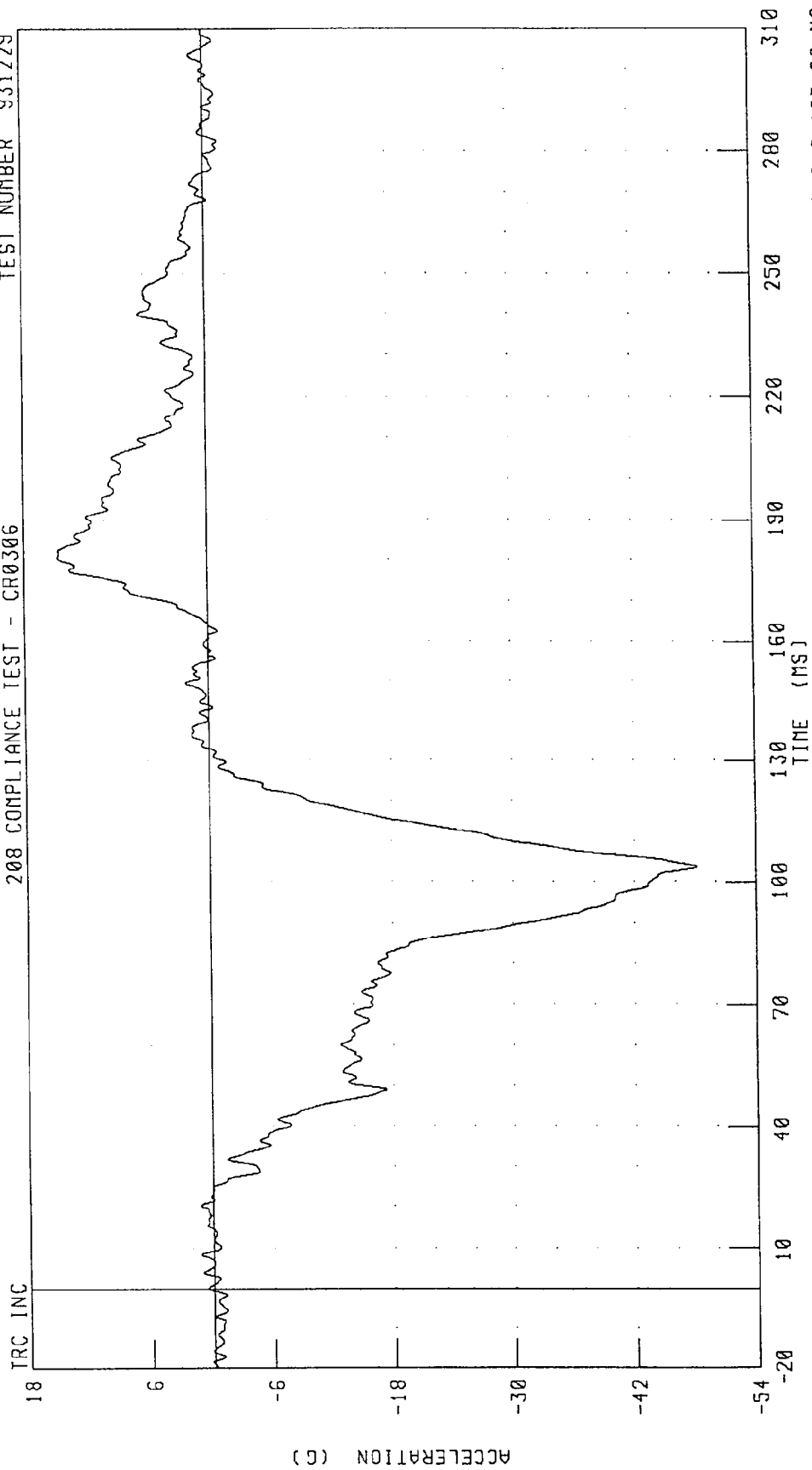
TEST NUMBER 931229



CHANNEL: NEKZM1 FILTER: CH. CLASS 600 PEAK DATA: 110.80 LBF-IN @ 122.80 MS; -195.42 LBF-IN @ 251.04 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER CHEST X-AXIS ACCELERATION
 208 COMPLIANCE TEST - CR0306

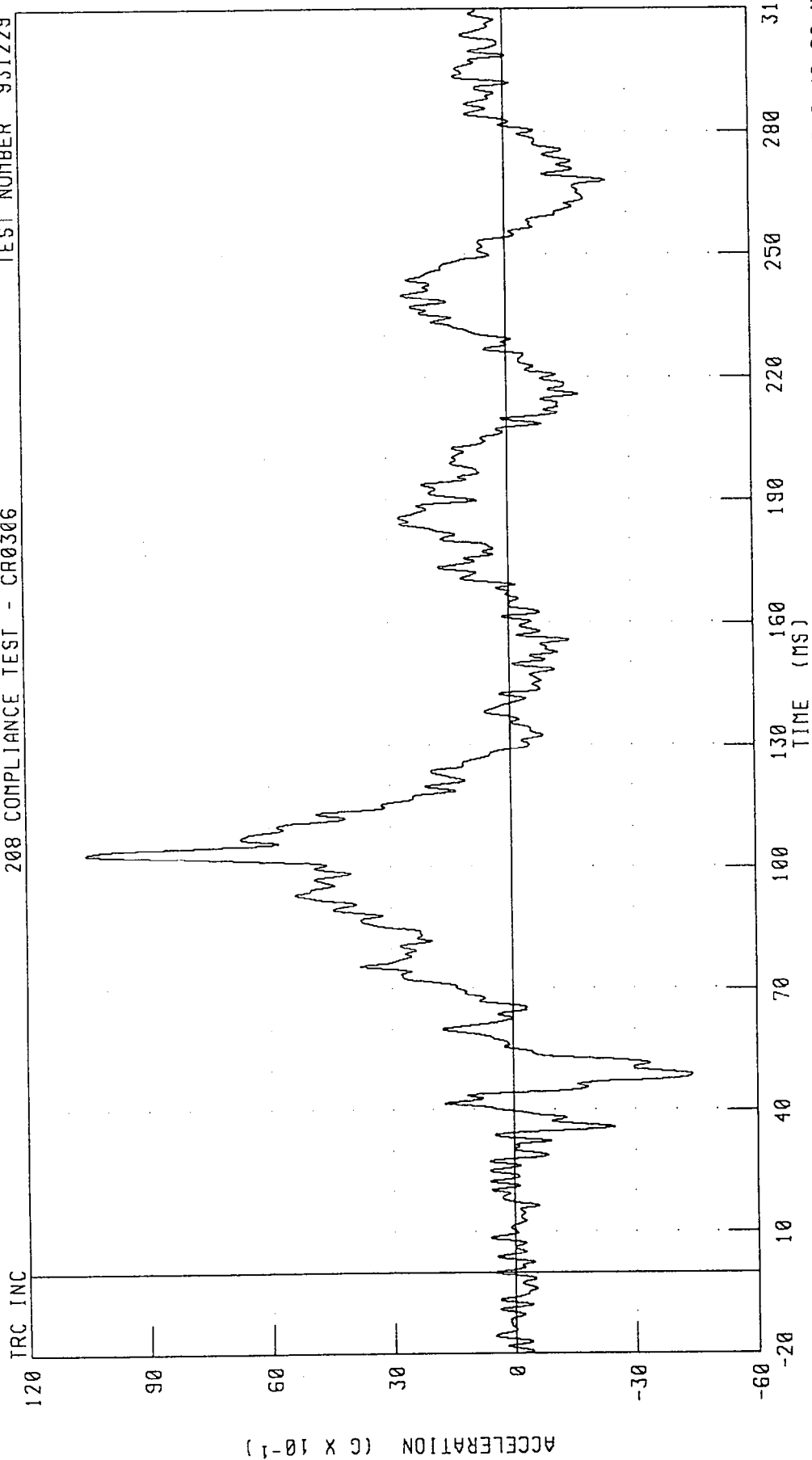
TEST NUMBER 931229



CHANNEL: CSTXG1 FILTER: CH. CLASS 180

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER CHEST Y-AXIS ACCELERATION
 208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229

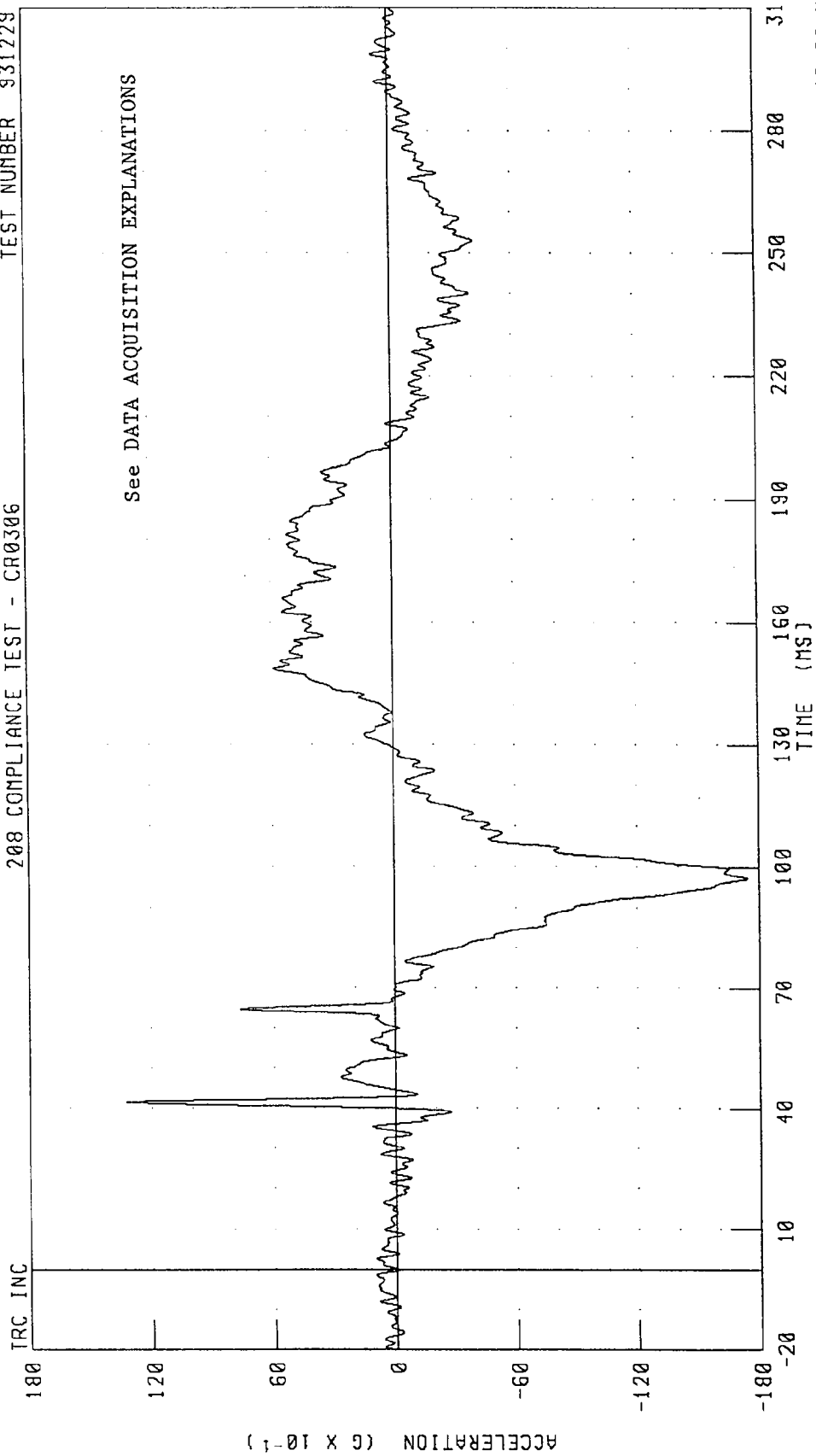


CHANNEL: CSTYGI FILTER: CH CLASS 180

PEAK DATA: 10.53 G @ 103.44 MS, -4.41 G @ 48.88 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER CHEST Z-AXIS ACCELERATION
 208 COMPLIANCE TEST - CR0306

TEST NUMBER 931228

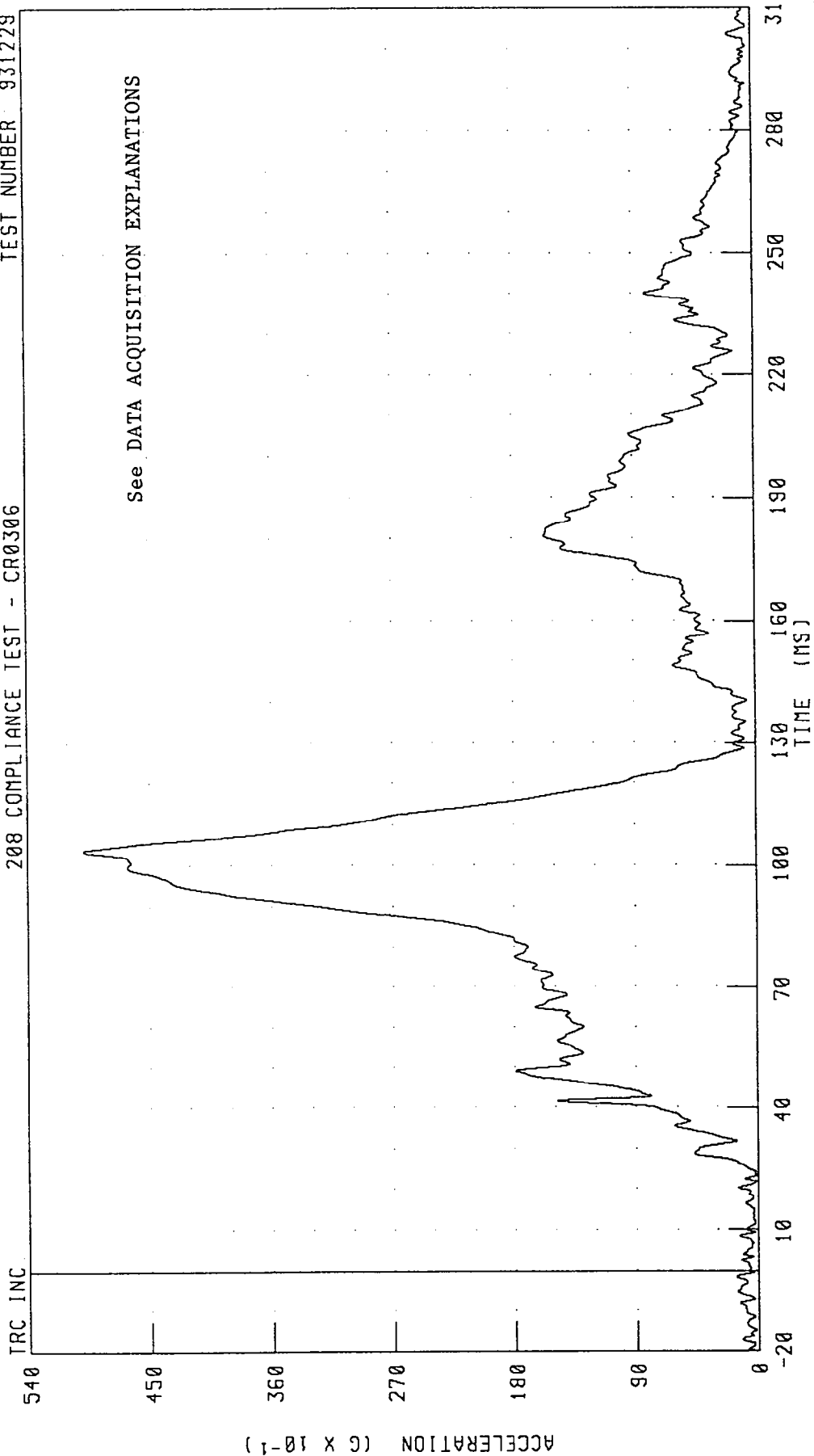


PEAK DATA: 13.25 G @ 41.68 MS; -17.43 G @ 97.20 MS

CHANNEL: CSTZG1 FILTER: CH. CLASS 180

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 DRIVER CHEST RESULTANT ACCELERATION
 208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229



CHANNEL: CSTRG1 FILTER: CH. CLASS 180

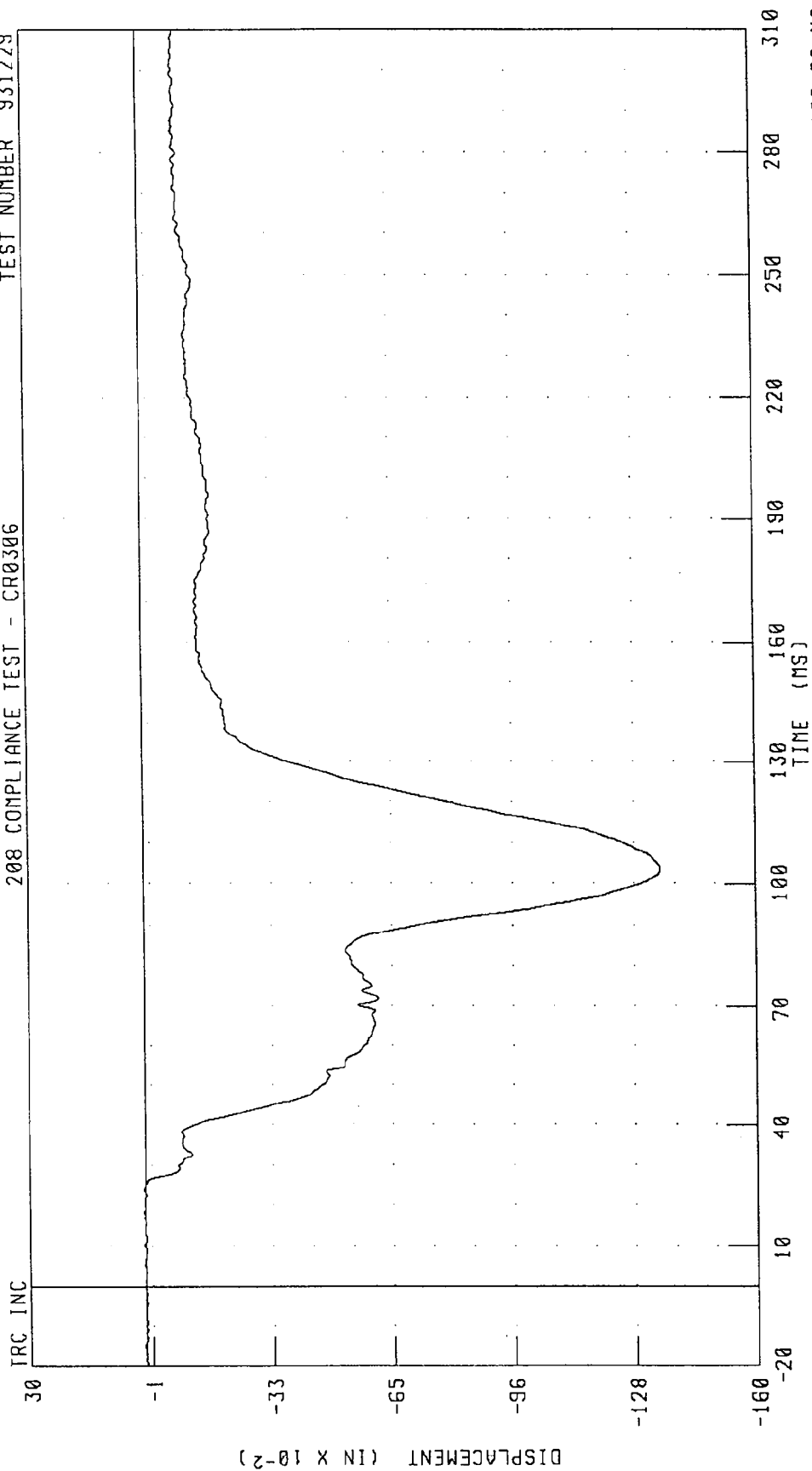
PEAK DATA: 49.89 G @ 103.68 MS; 0.07 G @ -20.00 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER

DRIVER CHEST DEFLECTION

208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229



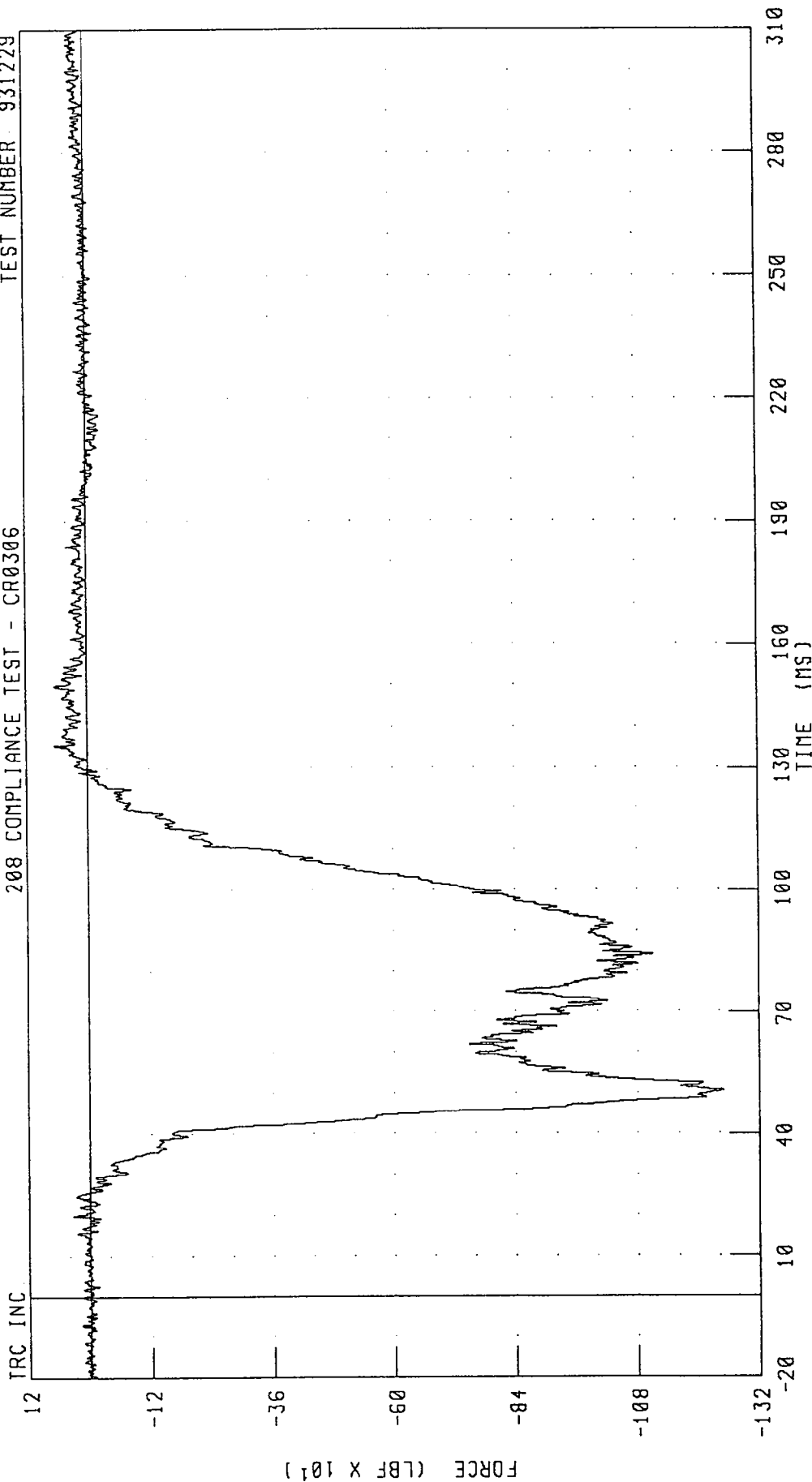
CHANNEL: CSTX01 FILTER: CH. CLASS 180

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER

DRIVER LEFT FEMUR FORCE

208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229



PEAK DATA: 64.92 LBF @ 149.92 MS; -1248.23 LBF @ 50.72 MS

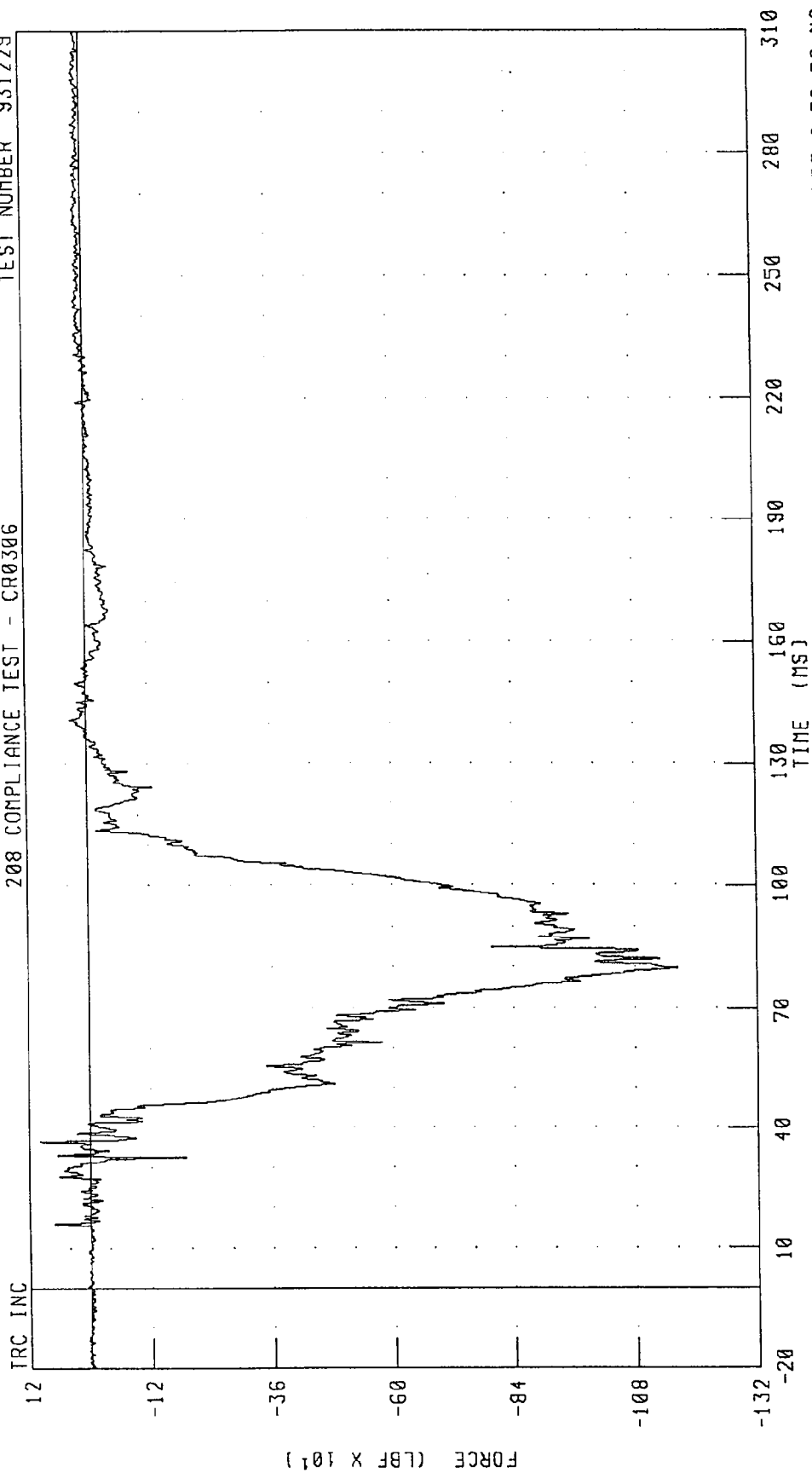
CHANNEL: LFMFI FILTER: CH. CLASS 600

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER

DRIVER RIGHT FEMUR FORCE

208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229

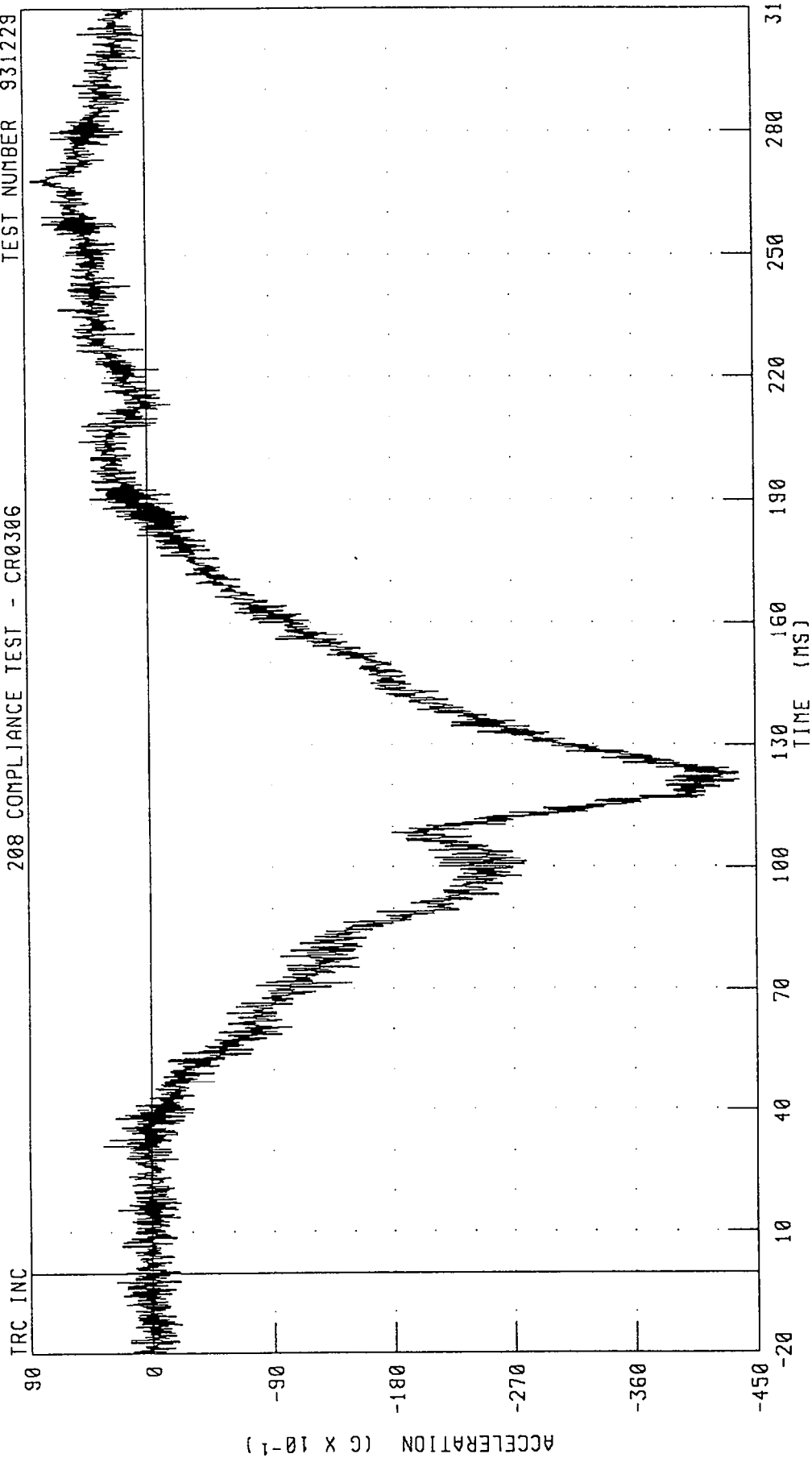


CHANNEL: RFMF1 FILTER: CH. CLASS 600

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER HEAD X-AXIS ACCELERATION

208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229



CHANNEL: HEDXG2 FILTER: CH. CLASS 1000

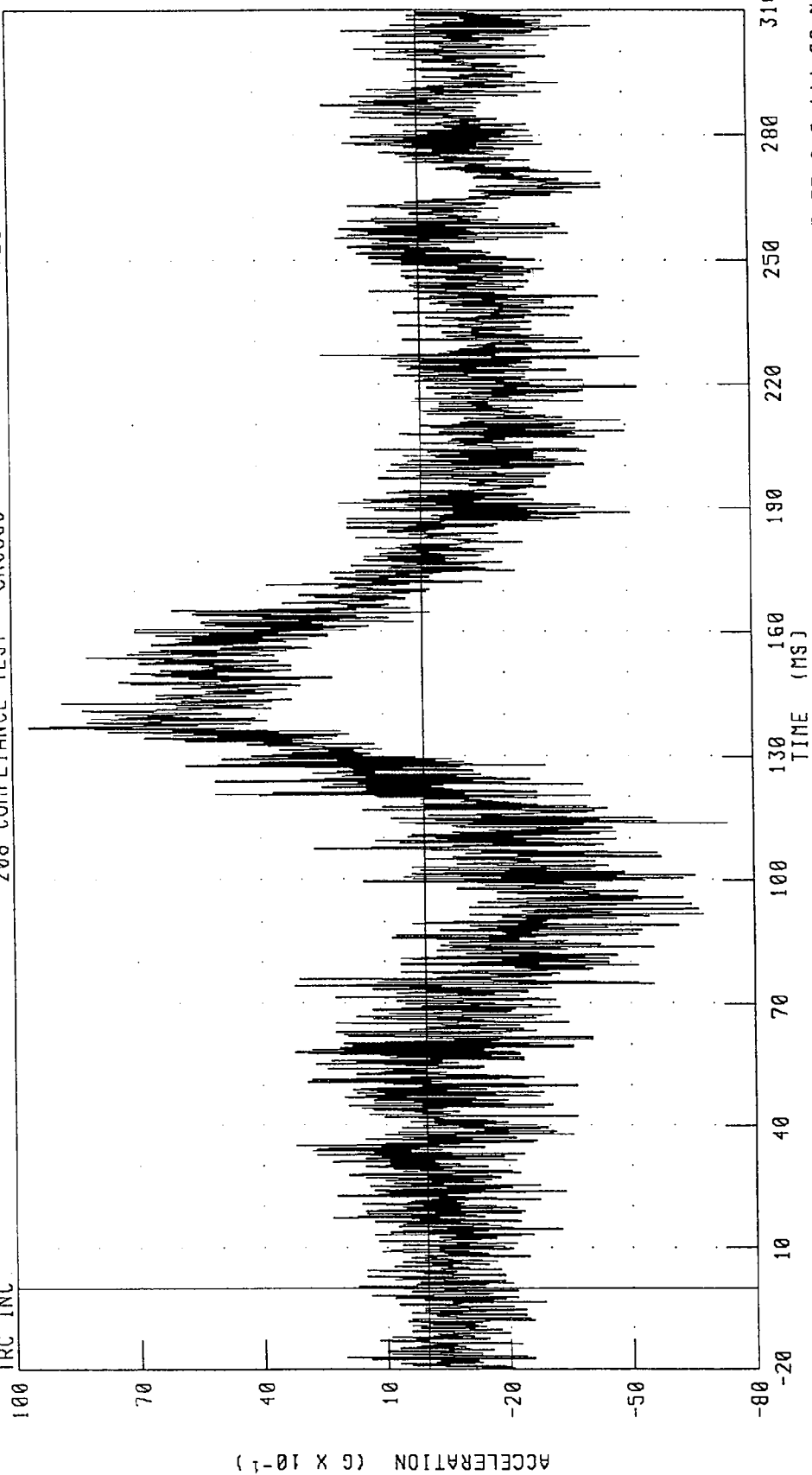
PEAK DATA: 8.47 G @ 268.24 MS; -43.75 G @ 121.28 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER HEAD Y-AXIS ACCELERATION

TEST NUMBER 931229

200 COMPLIANCE TEST - CR0306

TRC INC

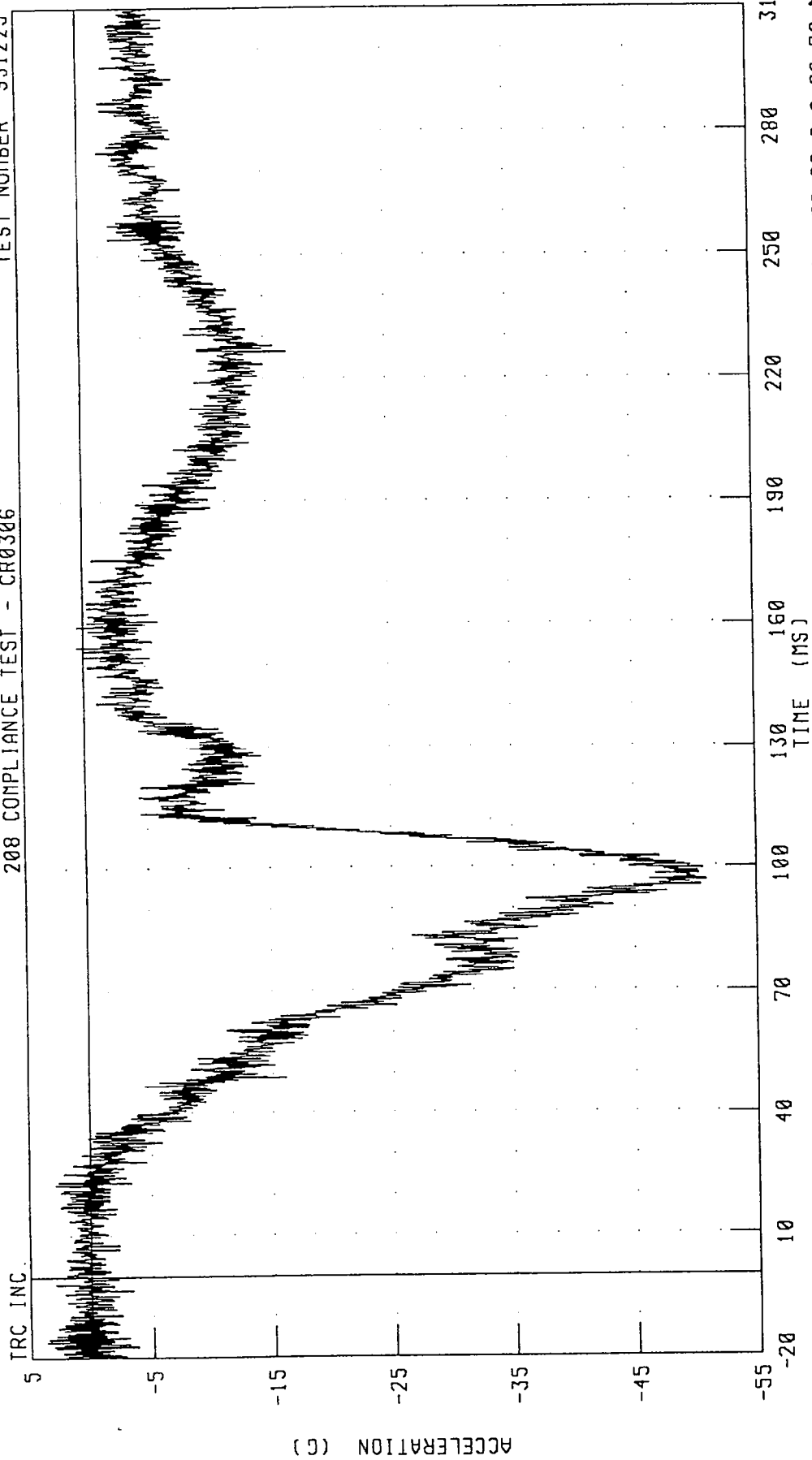


CHANNEL: HEDYG2 FILTER: CH. CLASS 1000

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER HEAD Z-AXIS ACCELERATION

TEST NUMBER: 931229

208 COMPLIANCE TEST - CR0306



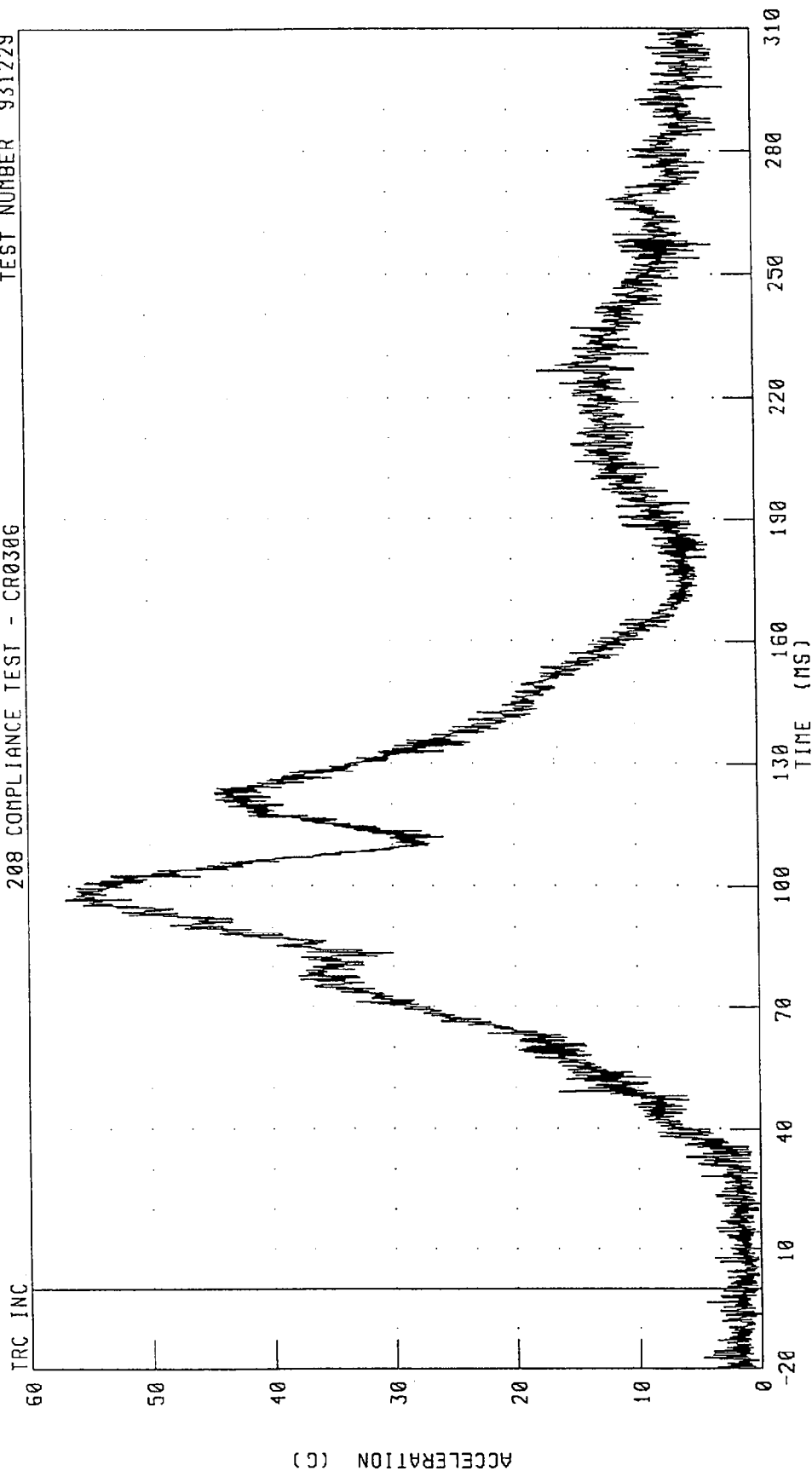
CHANNEL: HEDZG2 FILTER: CH. CLASS 1000

PEAK DATA: 3.74 G @ -16.16 MS; -50.86 G @ 96.72 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER HEAD RESULTANT ACCELERATION

TEST NUMBER 931229

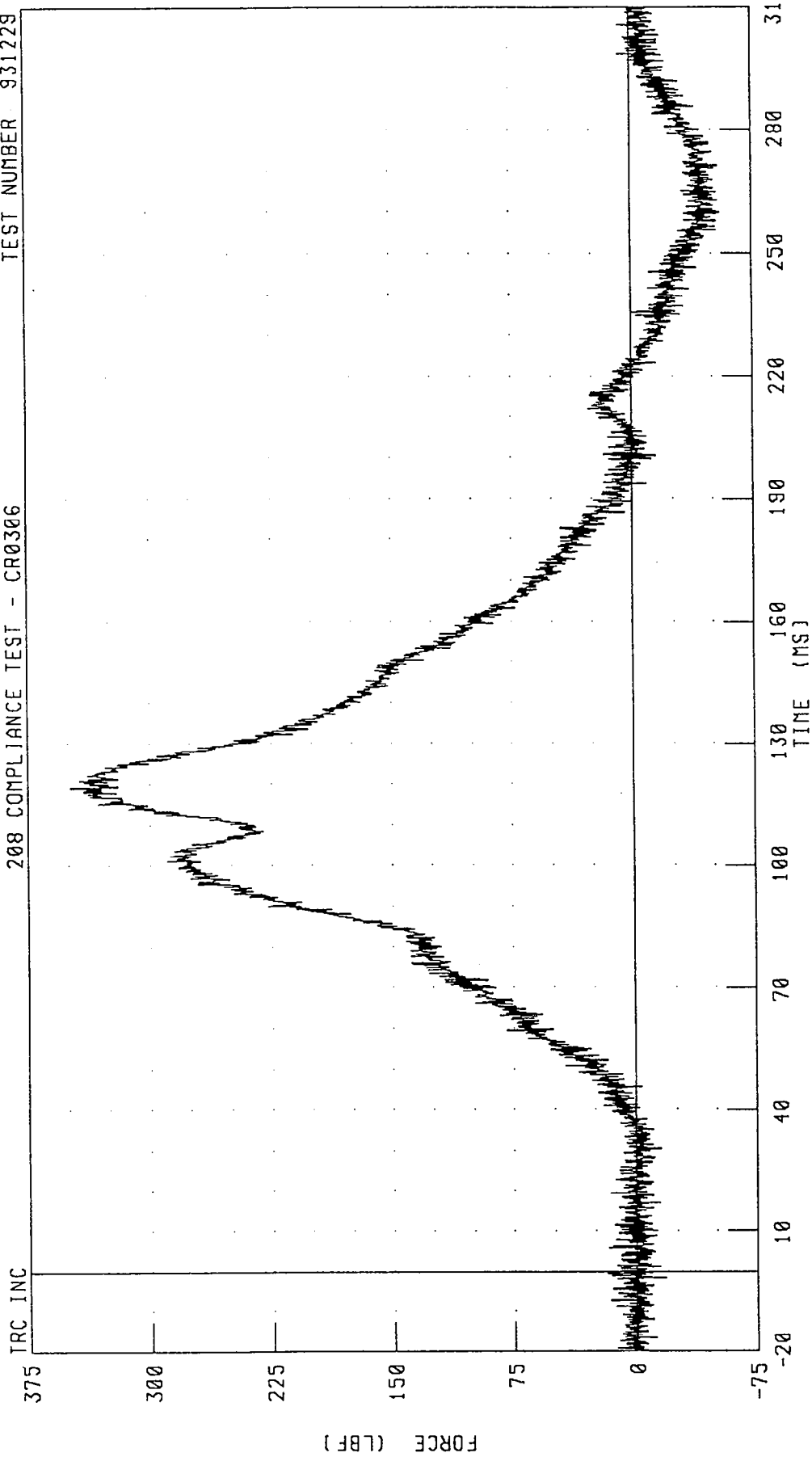
208 COMPLIANCE TEST - CR0306



1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER NECK X-AXIS SHEAR FORCE

TEST NUMBER 931229

208 COMPLIANCE TEST - CR0306

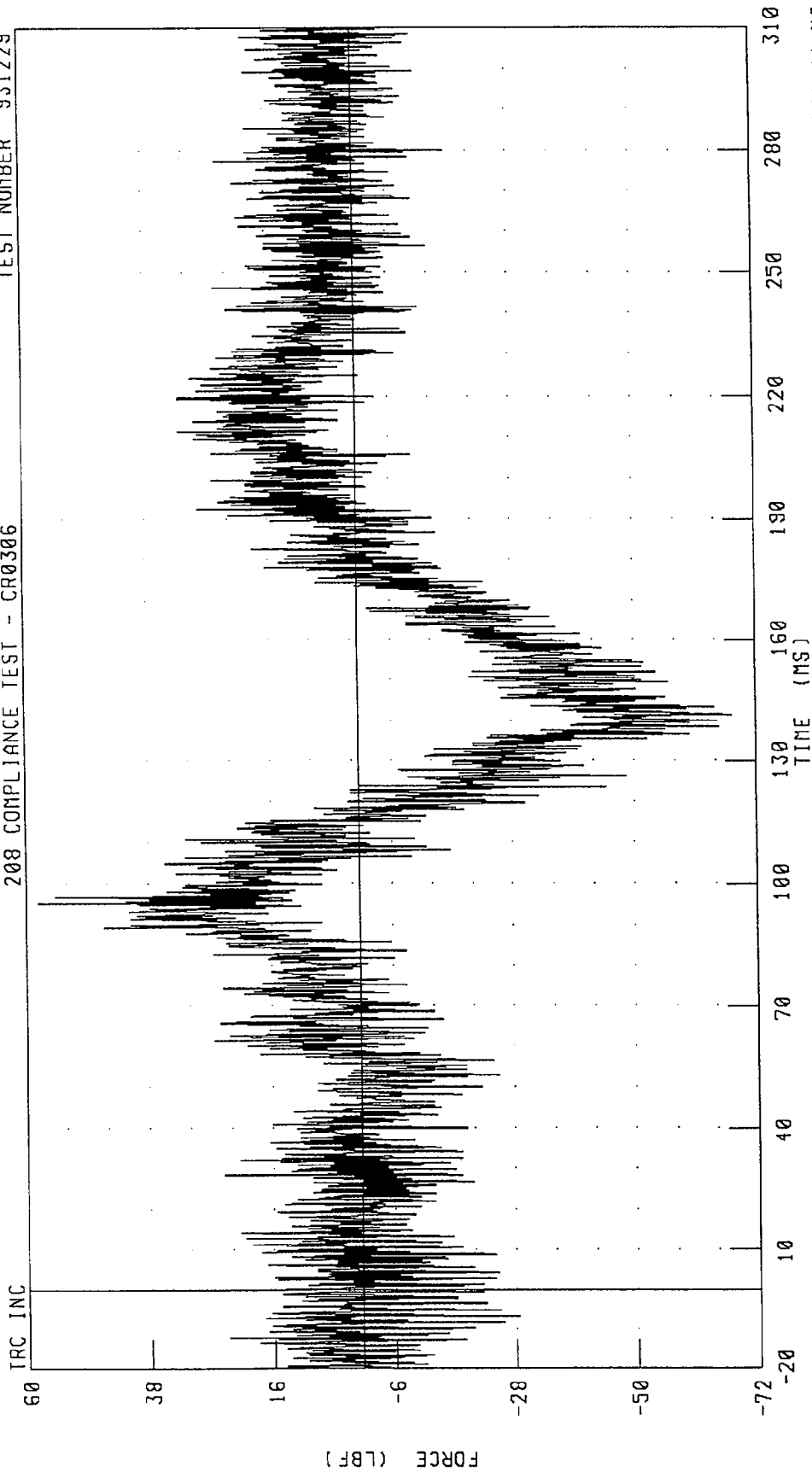


CHANNEL: NEKXF2 FILTER: CH. CLASS 1000

PEAK DATA: 348.96 LBF @ 119.36 MS; -55.07 LBF @ 259.84 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER NECK Y-AXIS SHEAR FORCE

208 COMPLIANCE TEST - CR0306 TEST NUMBER 931229



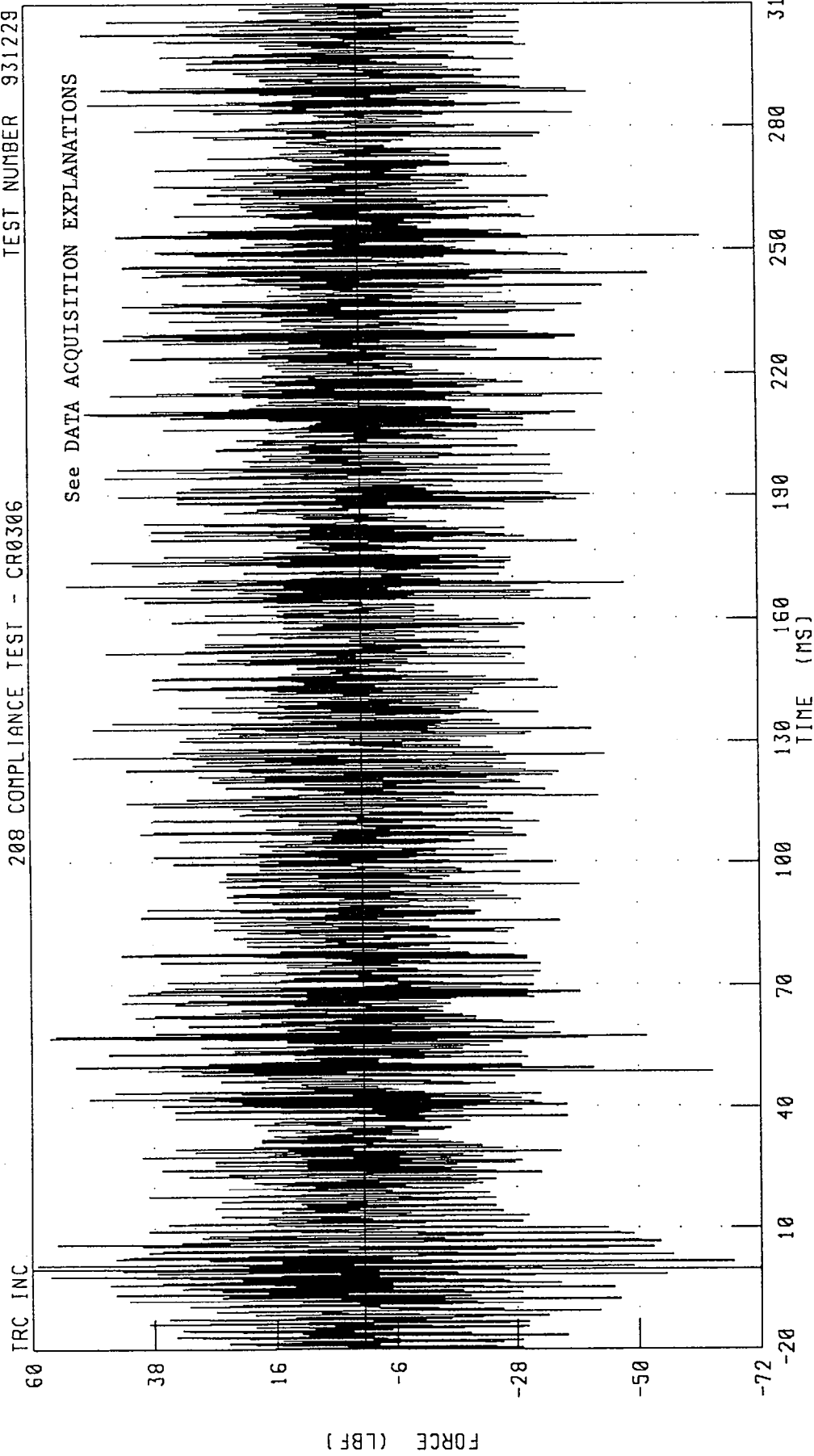
CHANNEL: NEKYF2 FILTER: CH. CLASS 1000

PEAK DATA: 57.91 LBF @ 95.44 MS; -67.66 LBF @ 141.44 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 RIGHT FRONT PASSENGER NECK Z-AXIS AXIAL FORCE

TEST NUMBER 931229

208 COMPLIANCE TEST - CR0306



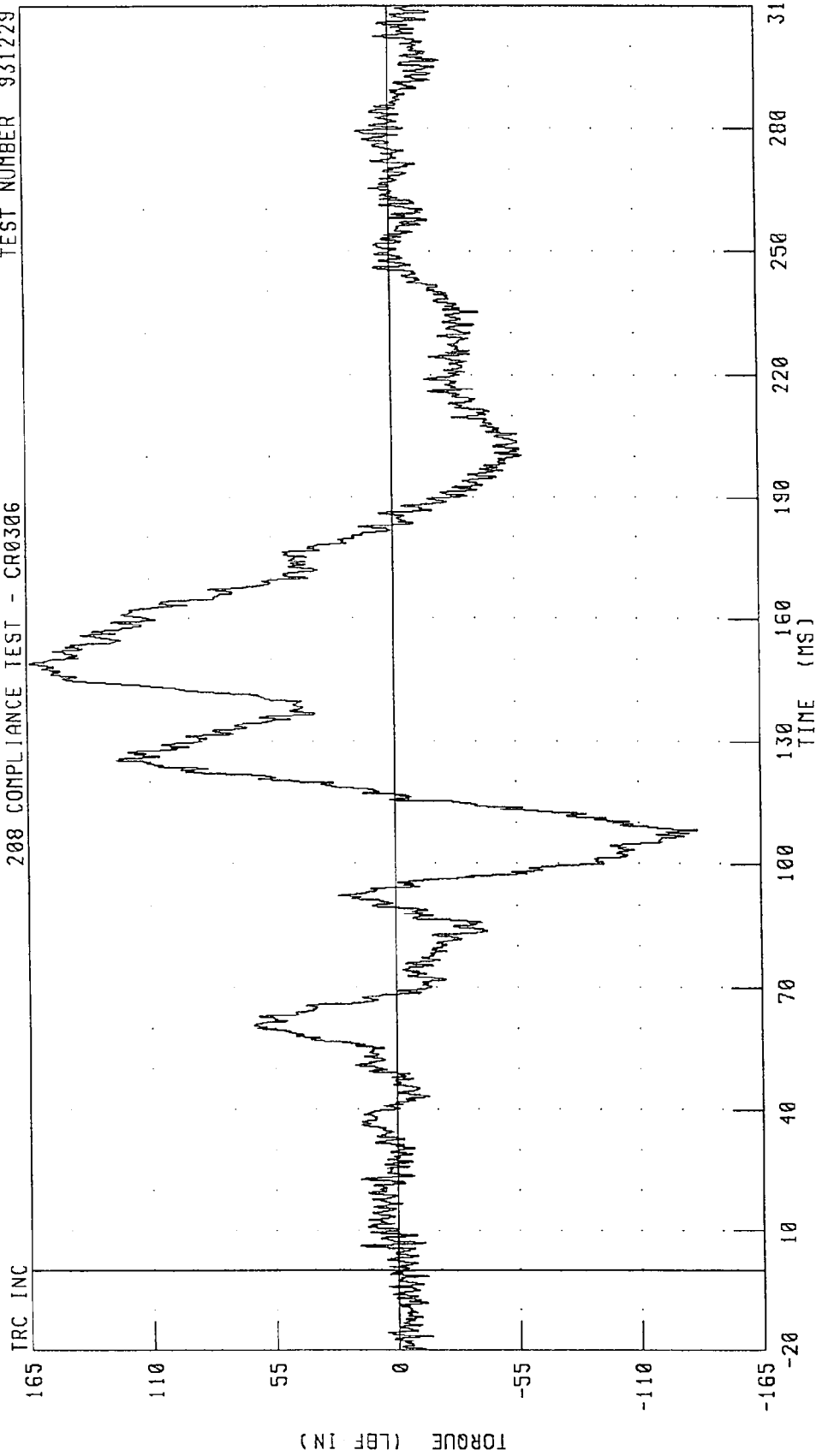
CHANNEL: NEKZF2 FILTER: CH. CLASS 1000

PEAK DATA: 59.05 LBF @ 0.80 MS; -66.86 LBF @ 1.76 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER NECK MOMENT ABOUT X AXIS

TEST NUMBER 931229

208 COMPLIANCE TEST - CR0306

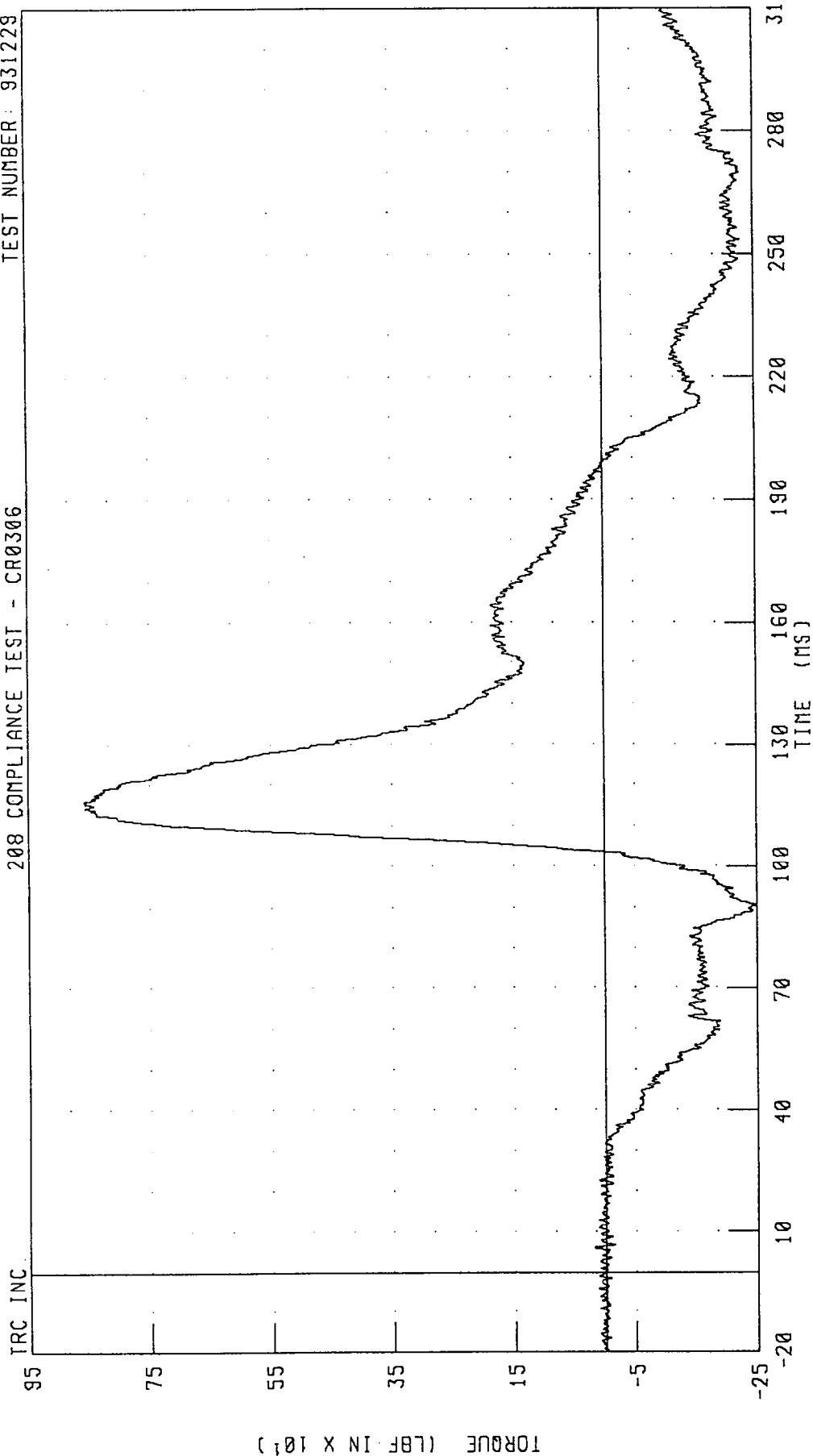


CHANNEL: NEKXM2 FILTER: CH. CLASS 600

PEAK DATA: 163.51 LBF-IN @ 149.20 MS; -136.21 LBF-IN @ 108.16 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 RIGHT FRONT PASSENGER NECK MOMENT ABOUT Y AXIS
 208 COMPLIANCE TEST - CR0306

TEST NUMBER: 931229



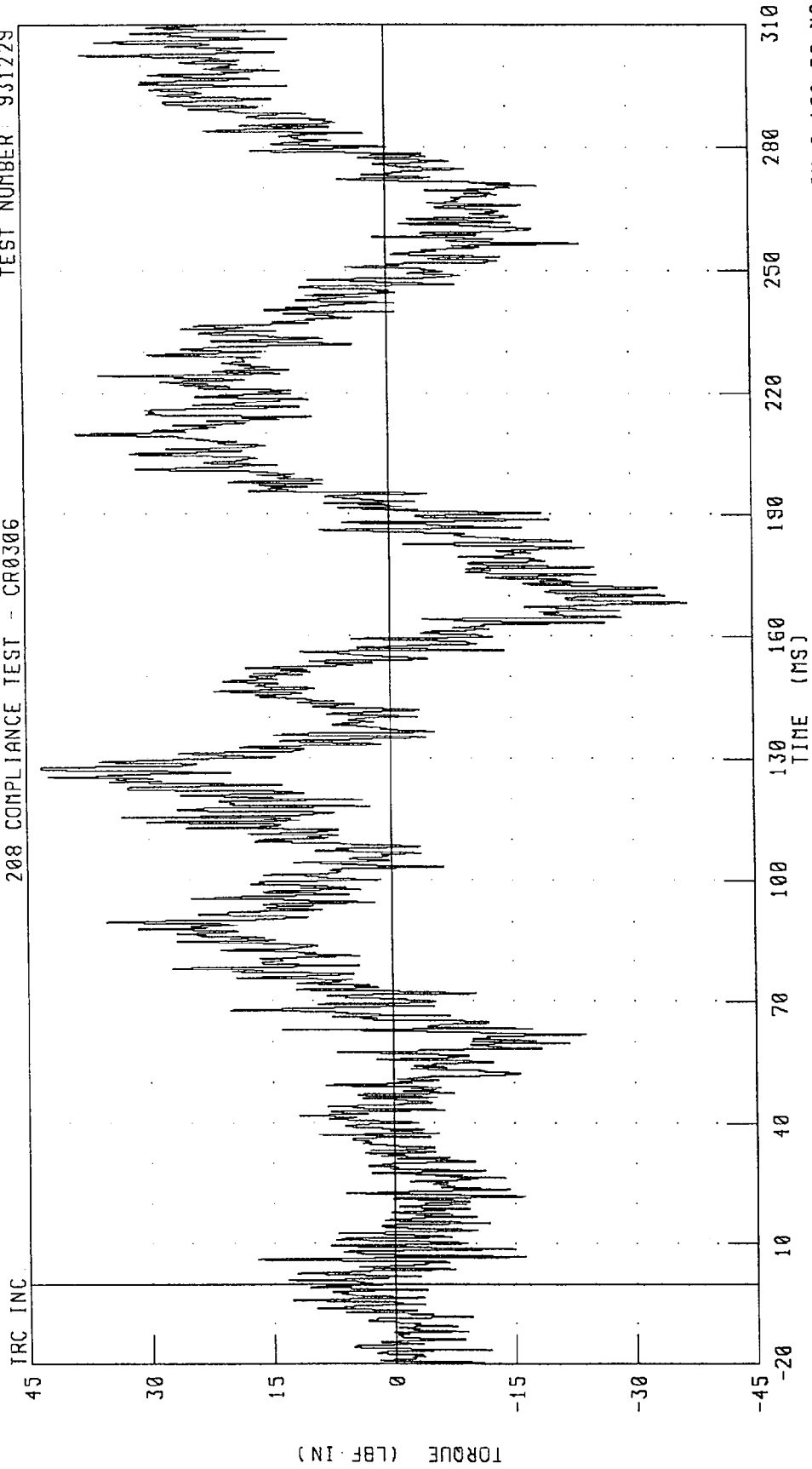
PEAK DATA: 857.98 LBF-IN @ 116.08 MS; -247.26 LBF-IN @ 90.48 MS

CHANNEL: NEYM2 FILTER: CH. CLASS 600

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER NECK MOMENT ABOUT Z AXIS

TEST NUMBER 931229

208 COMPLIANCE TEST - CR0306

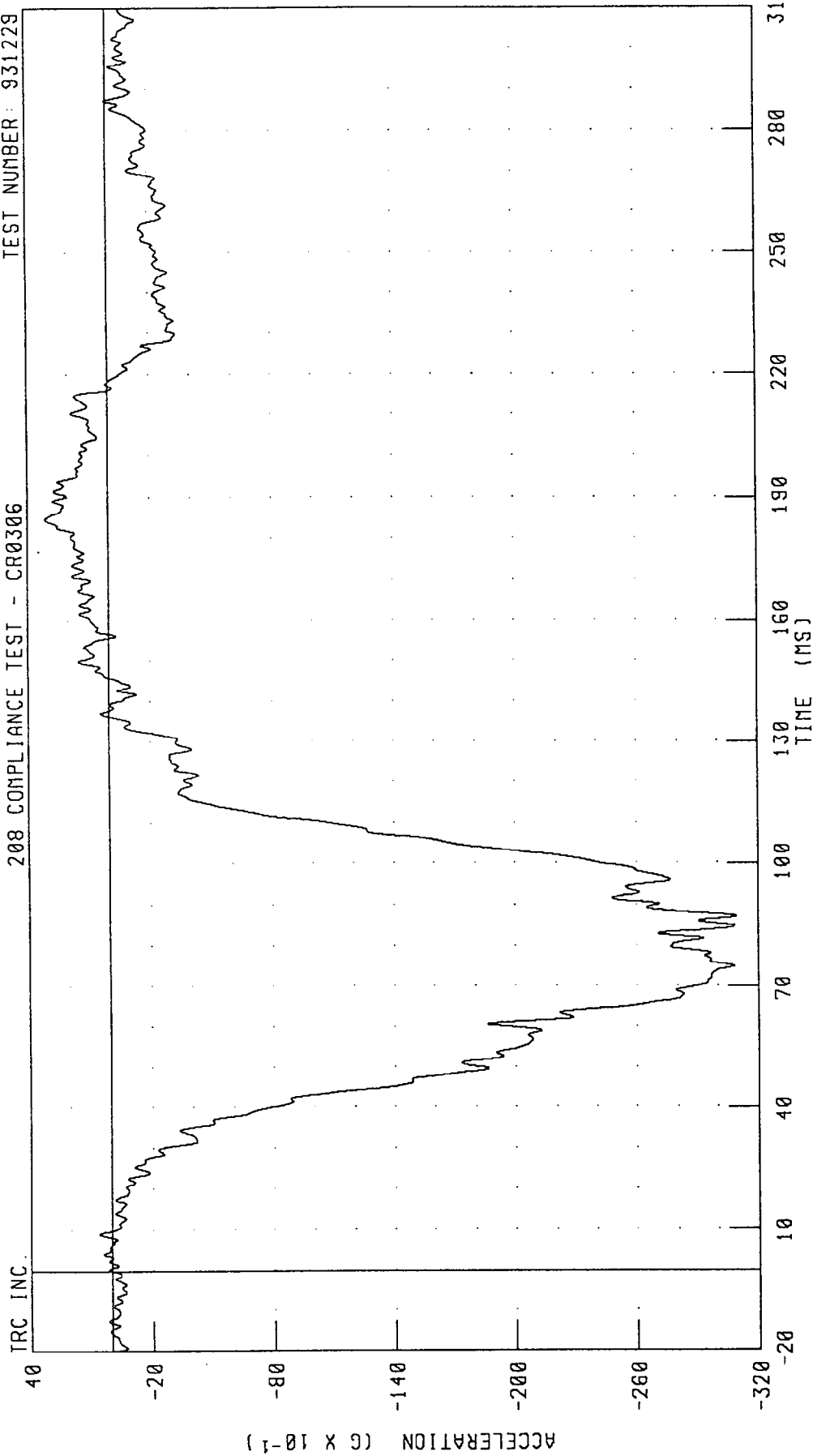


CHANNEL: NEKZM2 FILTER: CH. CLASS 600

PEAK DATA: 43.25 LBF-IN @ 127.68 MS; -36.79 LBF-IN @ 168.32 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 RIGHT FRONT PASSENGER CHEST X-AXIS ACCELERATION
 208 COMPLIANCE TEST - CR0306

TEST NUMBER: 931229

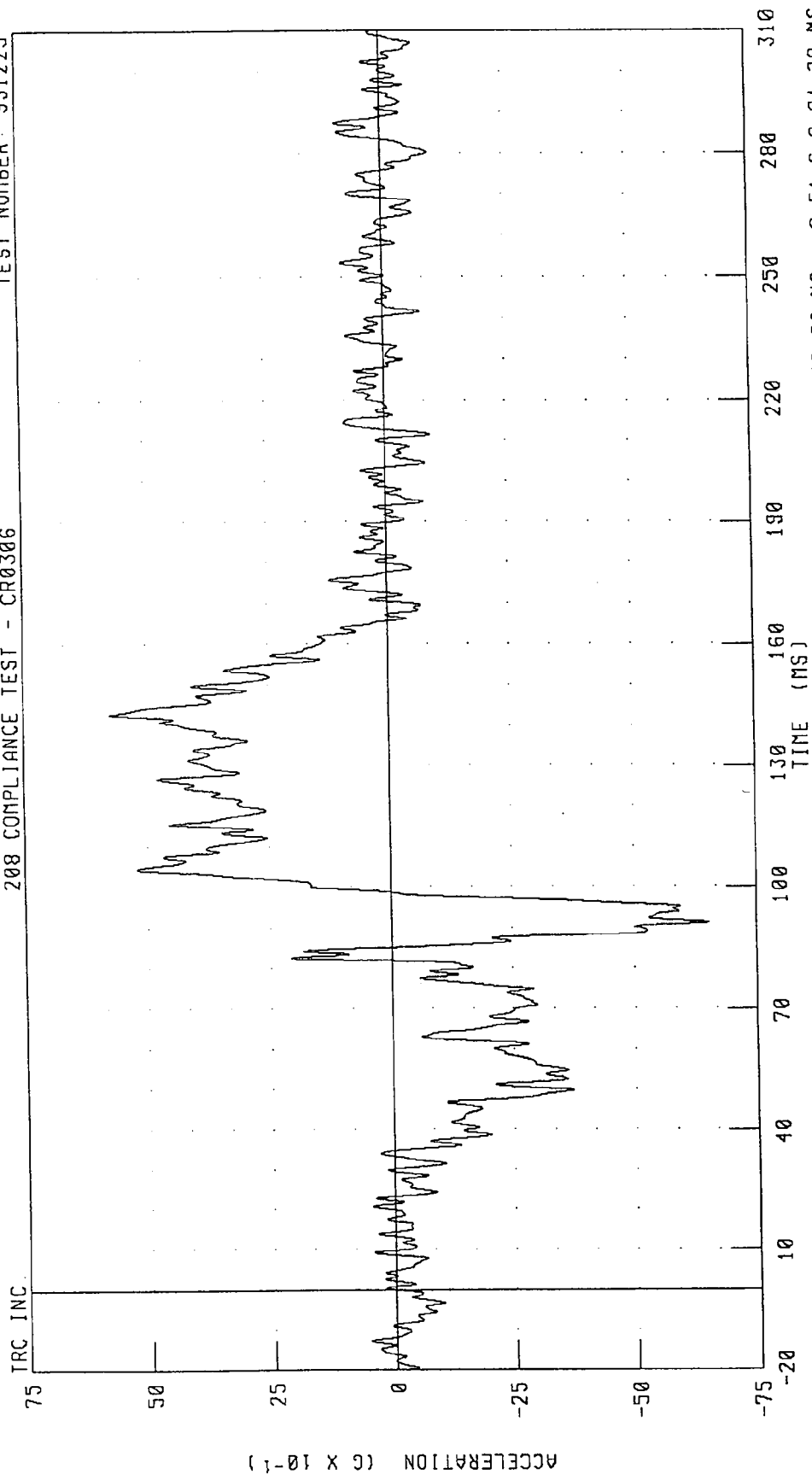


CHANNEL: CSTXG2 FILTER: CH. CLASS 180

PEAK DATA: 3.13 G @ 184.72 MS; -30.91 G @ 87.20 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER CHEST Y-AXIS ACCELERATION
208 COMPLIANCE TEST - CR0306

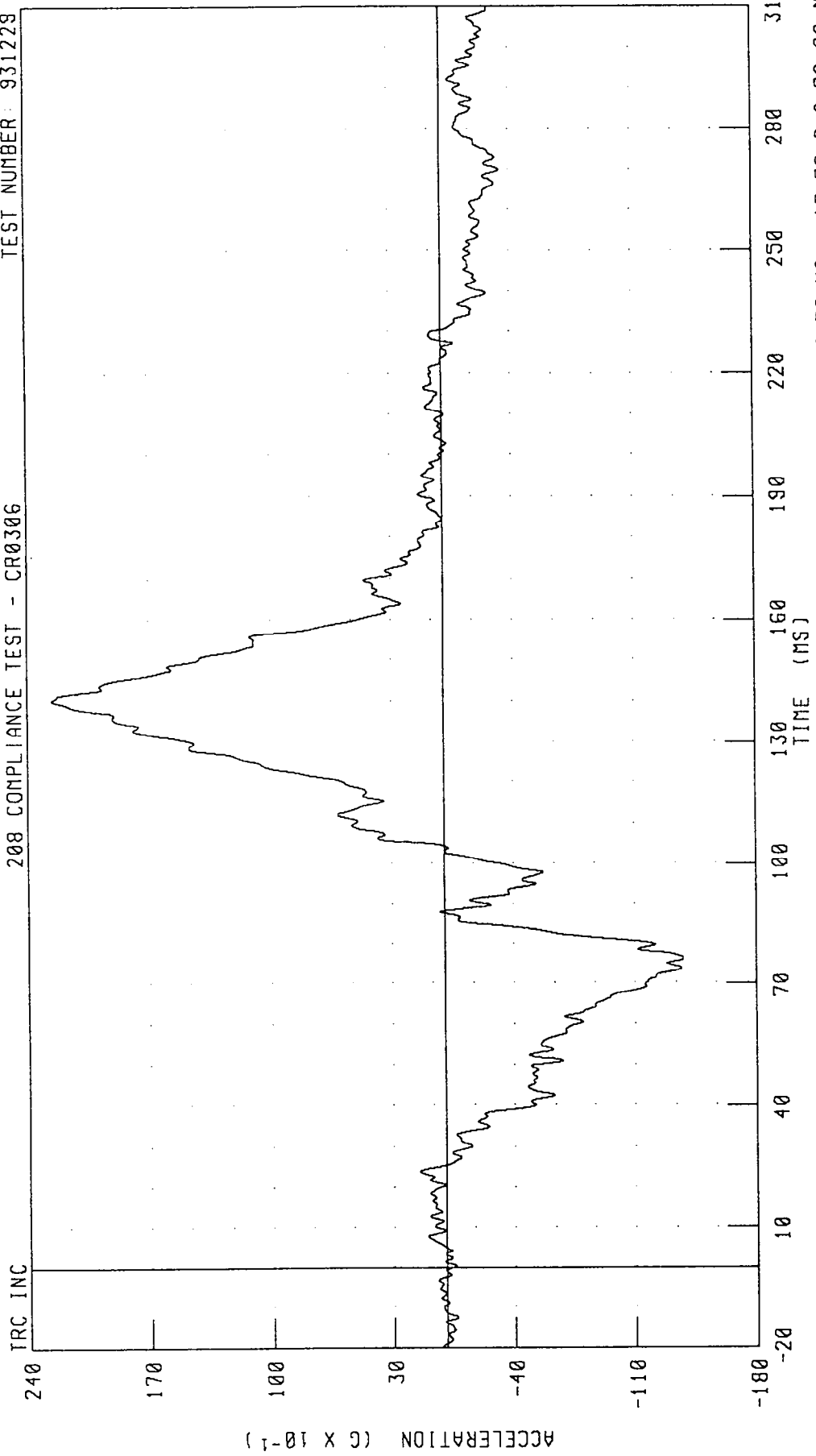
TEST NUMBER: 931229



CHANNEL: CSTYG2 FILTER: CH. CLASS 180

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 RIGHT FRONT PASSENGER CHEST Z-AXIS ACCELERATION
 208 COMPLIANCE TEST - CR0306

TEST NUMBER: 931229



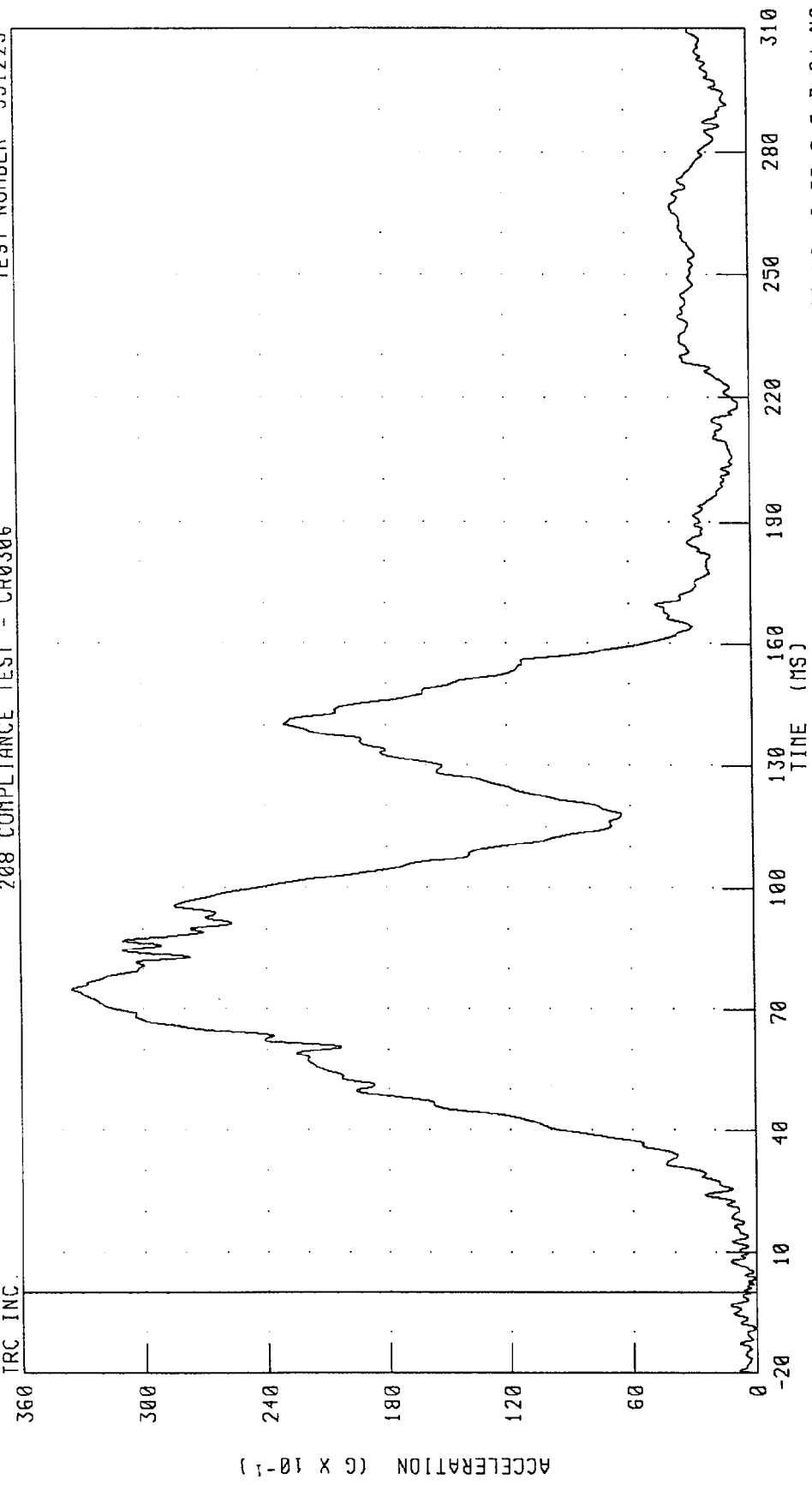
CHANNEL: CSTZG2 FILTER: CH. CLASS 180

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER CHEST RESULTANT ACCELERATION

TEST NUMBER: 931229

208 COMPLIANCE TEST - CR0306

TRC INC.

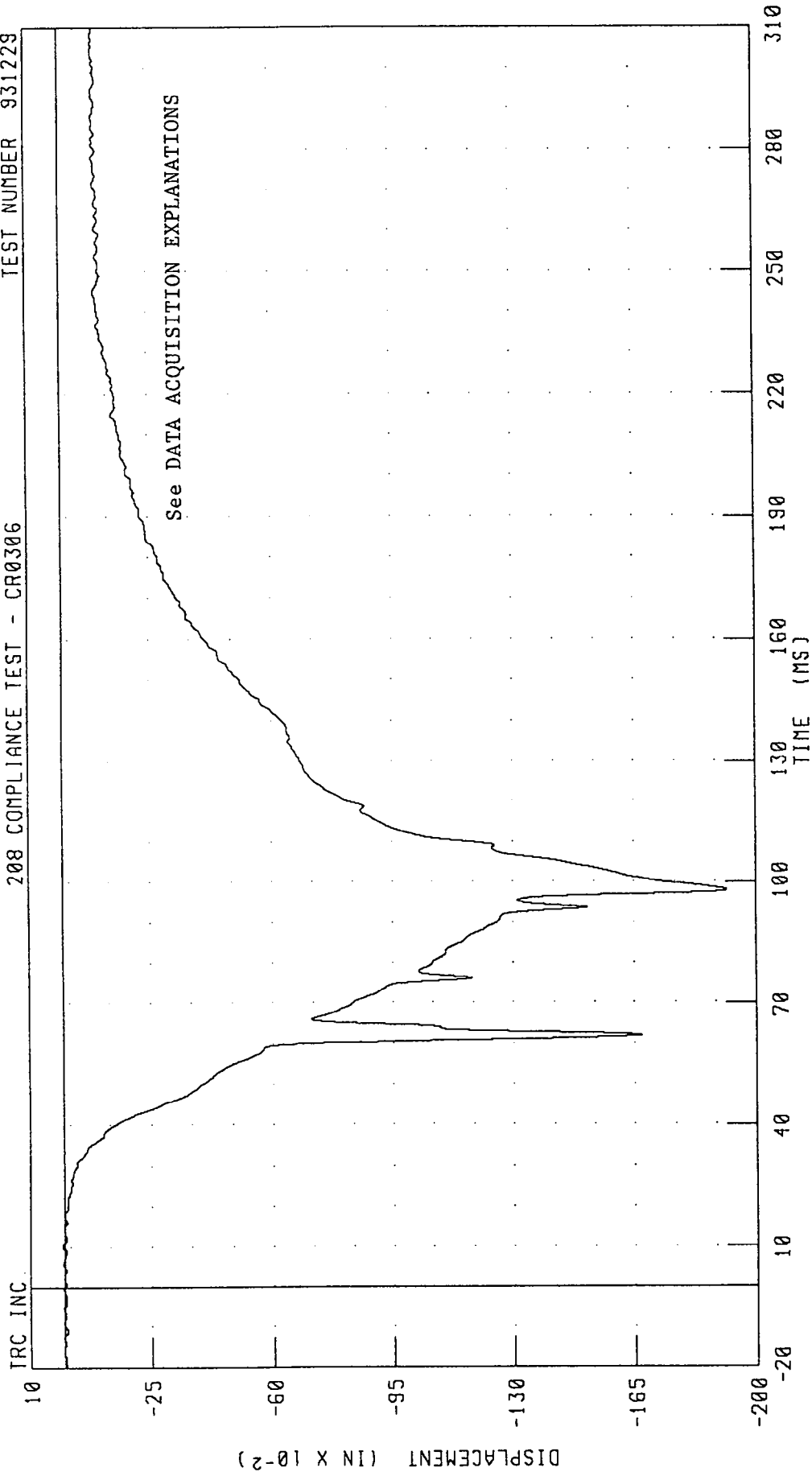


PEAK DATA: 33.50 G @ 74.96 MS; 0.03 G @ 3.04 MS

CHANNEL: CSTRG2 FILTER: CH. CLASS 180

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 RIGHT FRONT PASSENGER CHEST DEFLECTION
 208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229

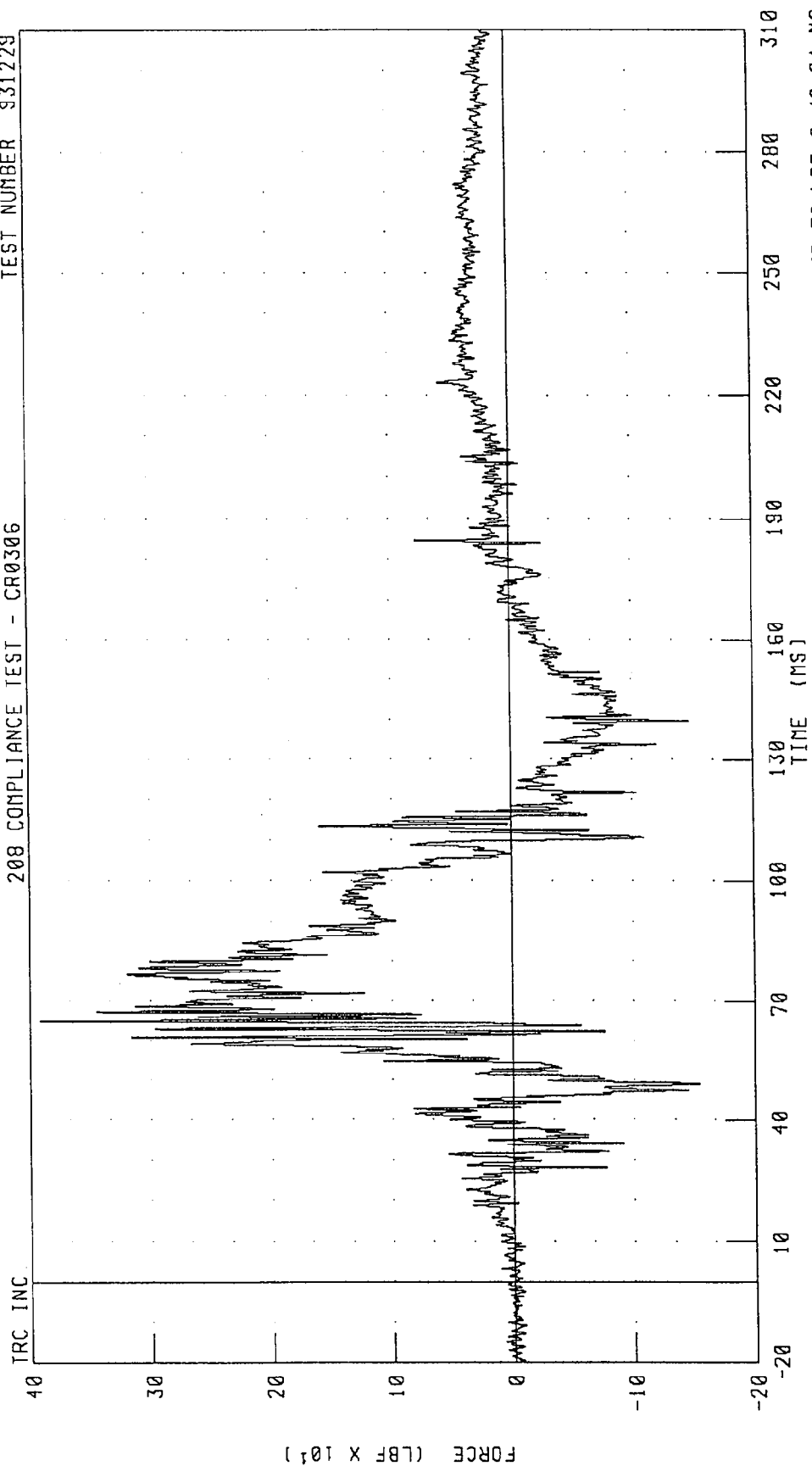


PEAK DATA: 0.01 IN @ 10.16 MS; -1.92 IN @ 97.92 MS

CHANNEL: CSTXD2 FILTER: CH. CLASS 180

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER LEFT FEMUR FORCE

208 COMPLIANCE TEST - CR0306 TEST NUMBER 931229

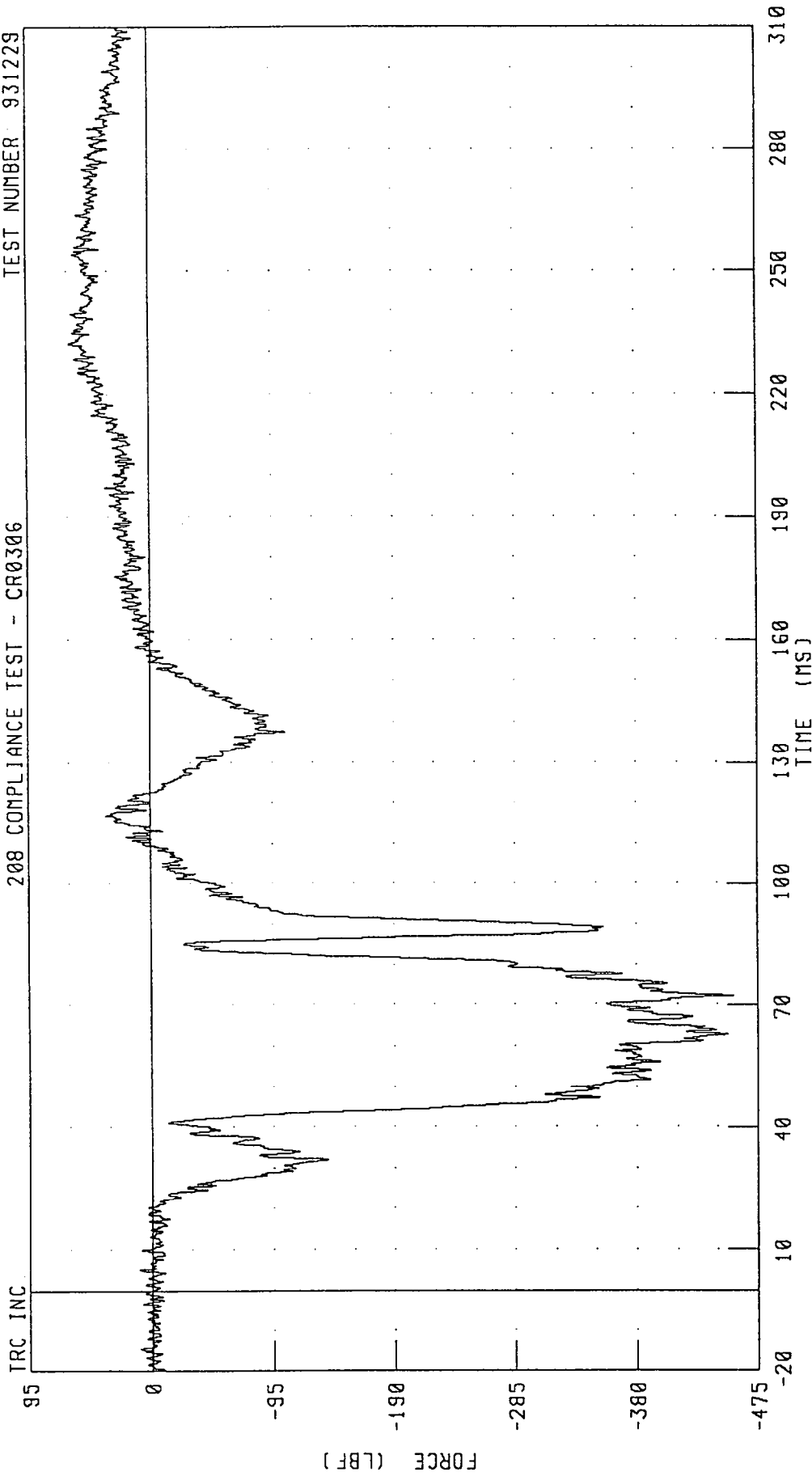


CHANNEL: LFMF2 FILTER: CH. CLASS 600

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT FRONT PASSENGER RIGHT FEMUR FORCE

208 COMPLIANCE TEST - CR0306

TEST NUMBER: 931229

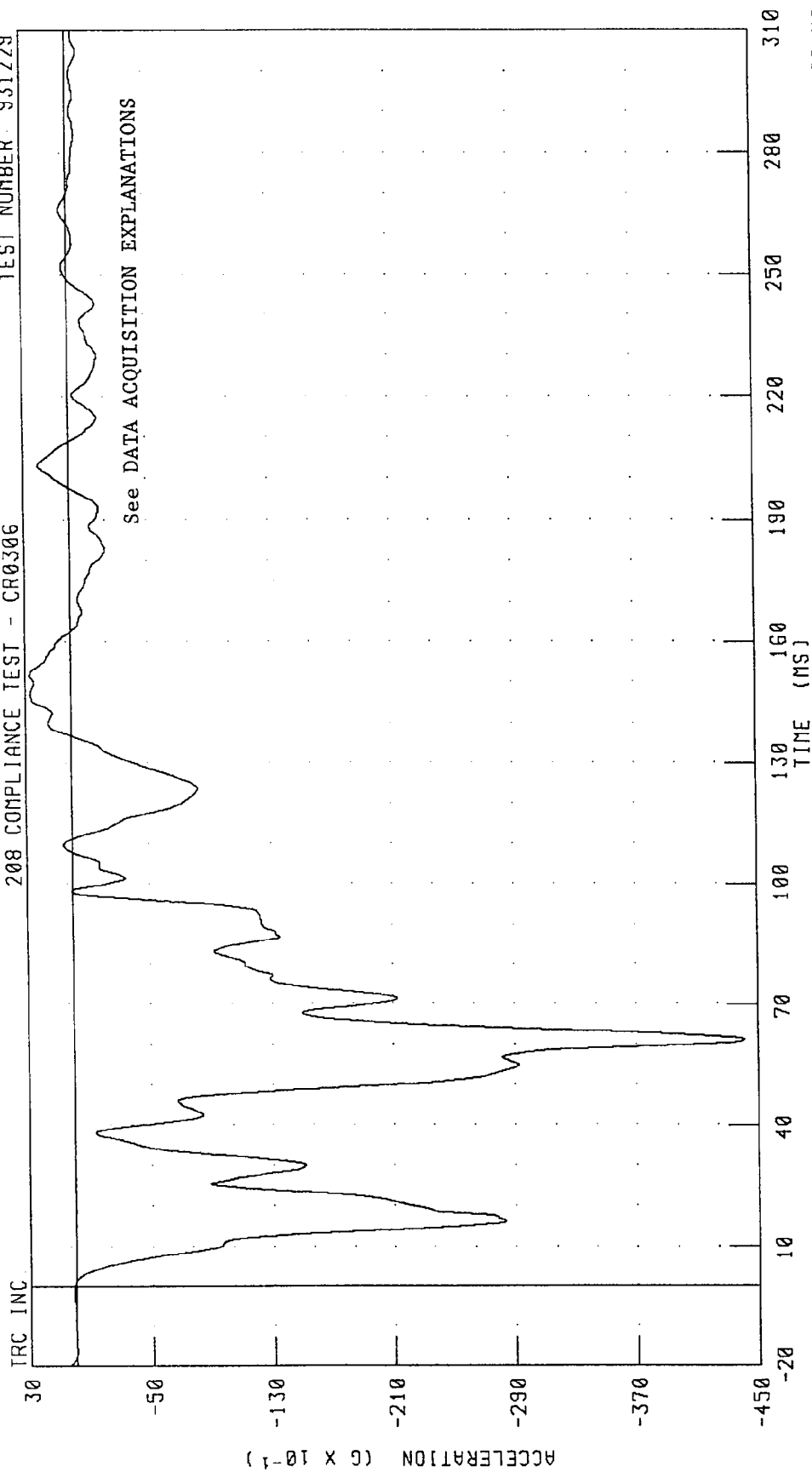


PEAK DATA: 61.85 LBF @ 232.16 MS; -456.14 LBF @ 72.24 MS

CHANNEL: RFMF2 FILTER: CH. CLASS 600

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 LEFT REAR SEAT X-AXIS ACCELERATION
 208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229

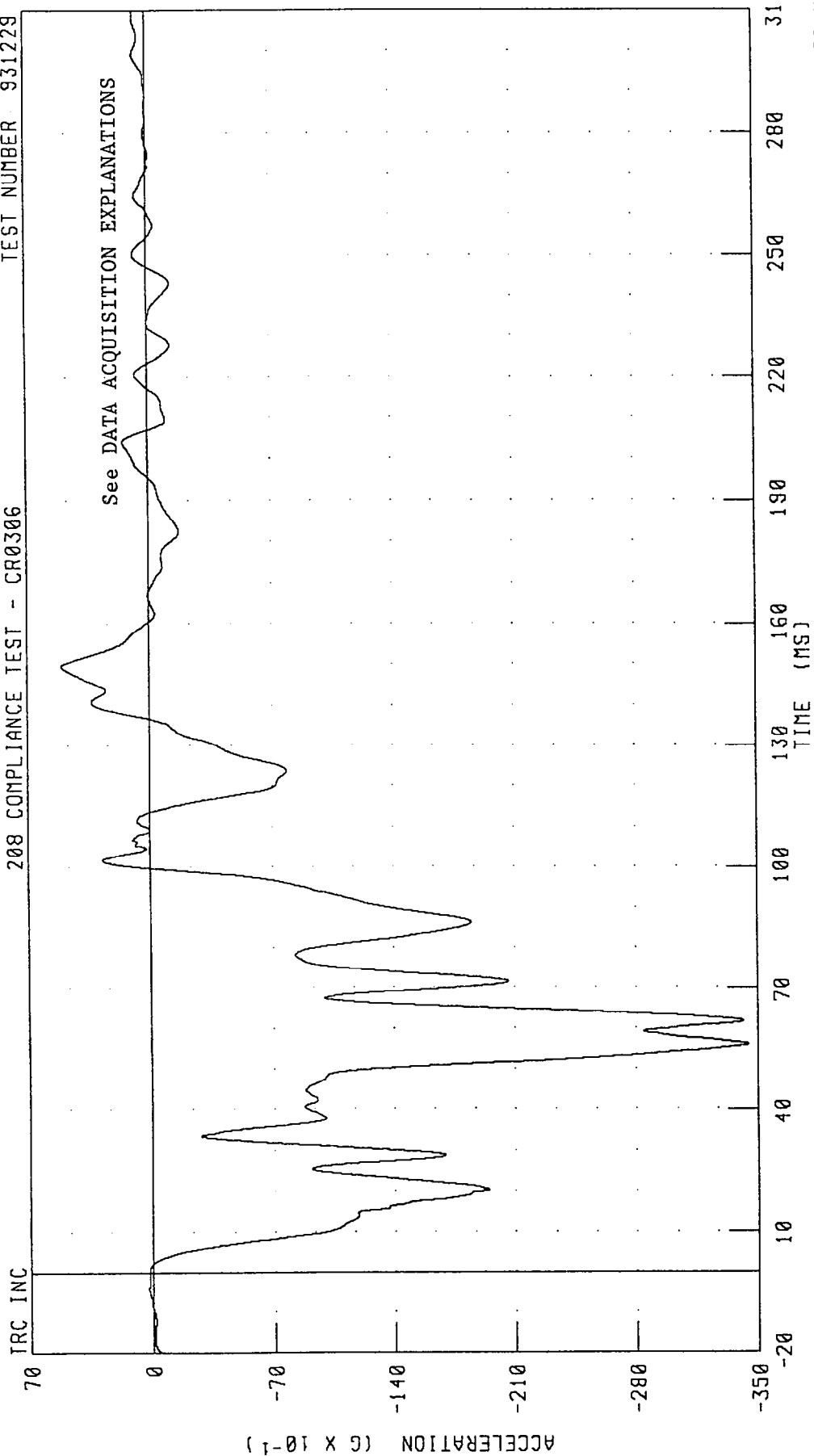


PEAK DATA: 2.70 G @ 151.84 MS; -44.12 G @ 61.20 MS

CHANNEL: TLRXG1 FILTER: CH. CLASS 60

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 RIGHT REAR SEAT X-AXIS ACCELERATION
 208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229

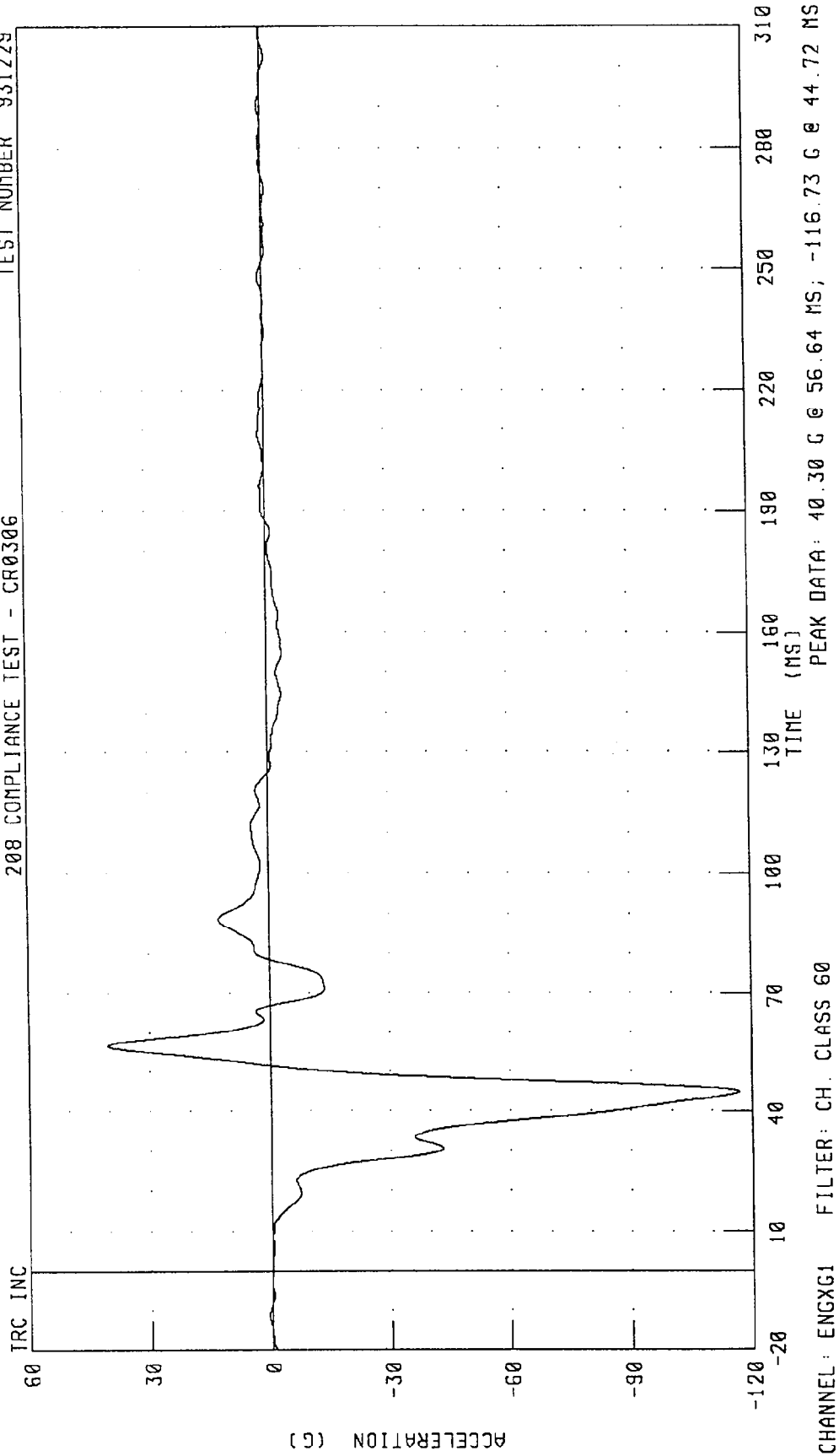


PEAK DATA: 5.01 G @ 149.68 MS; -34.45 G @ 56.00 MS

CHANNEL: TRRXG1 FILTER: CH. CLASS 60

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
ENGINE UPPER BLOCK X-AXIS ACCELERATION
208 COMPLIANCE TEST - CR0306

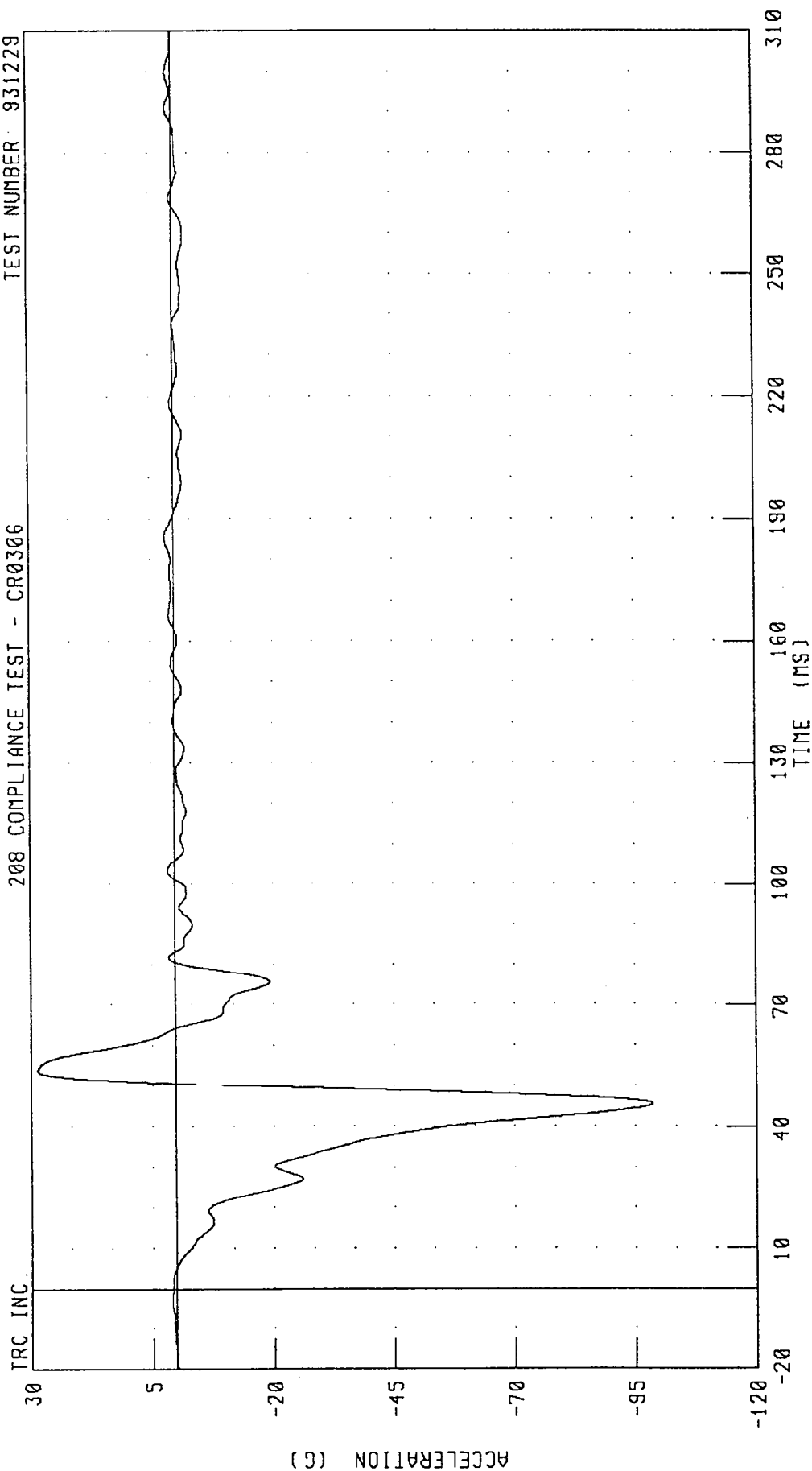
TEST NUMBER 931229



1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
ENGINE BOTTOM BLOCK X-AXIS ACCELERATION

208 COMPLIANCE TEST - CR0306

TEST NUMBER 931229



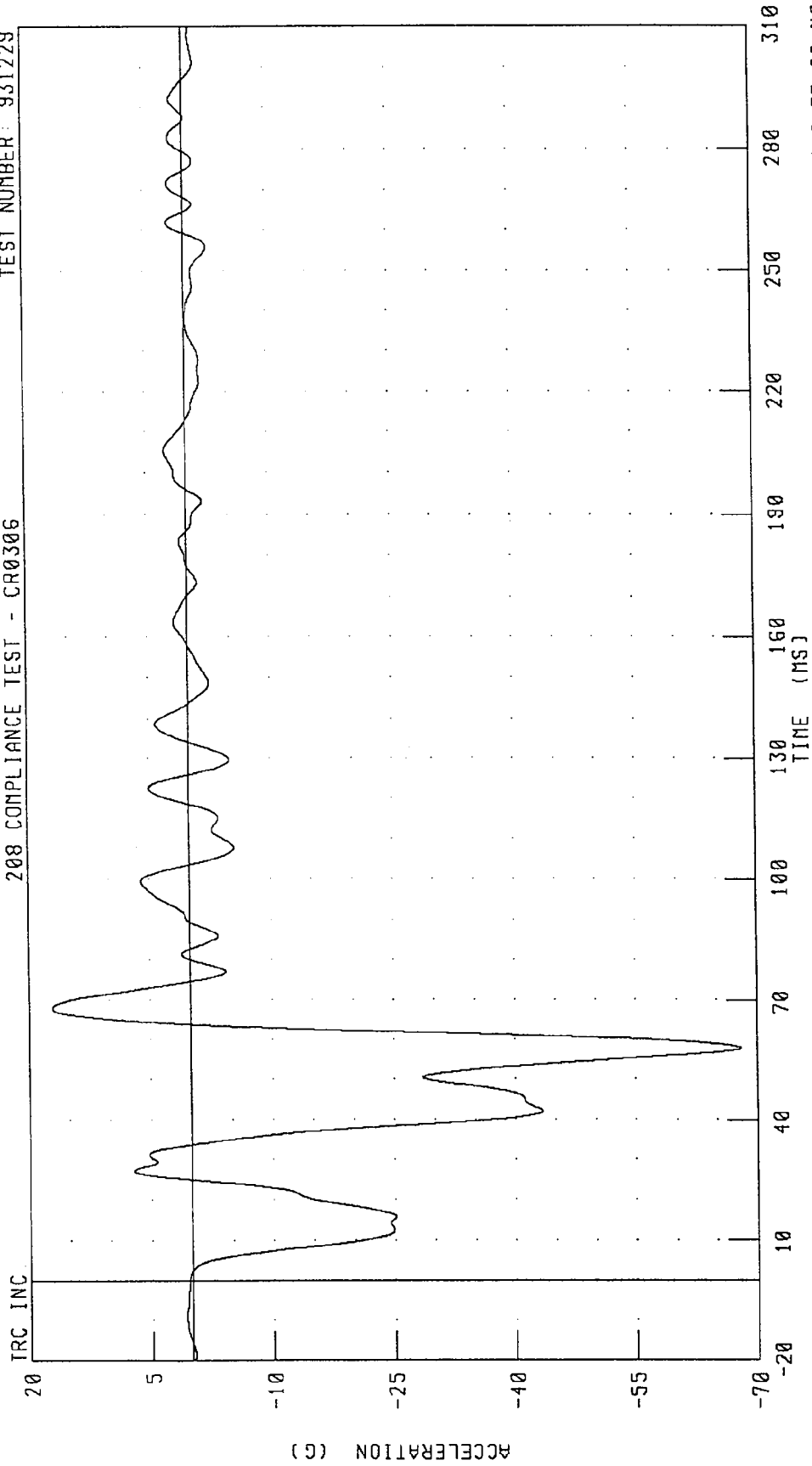
PEAK DATA: 28.59 G @ 53.84 MS; -98.60 G @ 45.68 MS

CHANNEL: ENGXC2 FILTER: CH. CLASS 60

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
RIGHT BRAKE CALIPER X-AXIS ACCELERATION

208 COMPLIANCE TEST - CR0306

TEST NUMBER: 931229

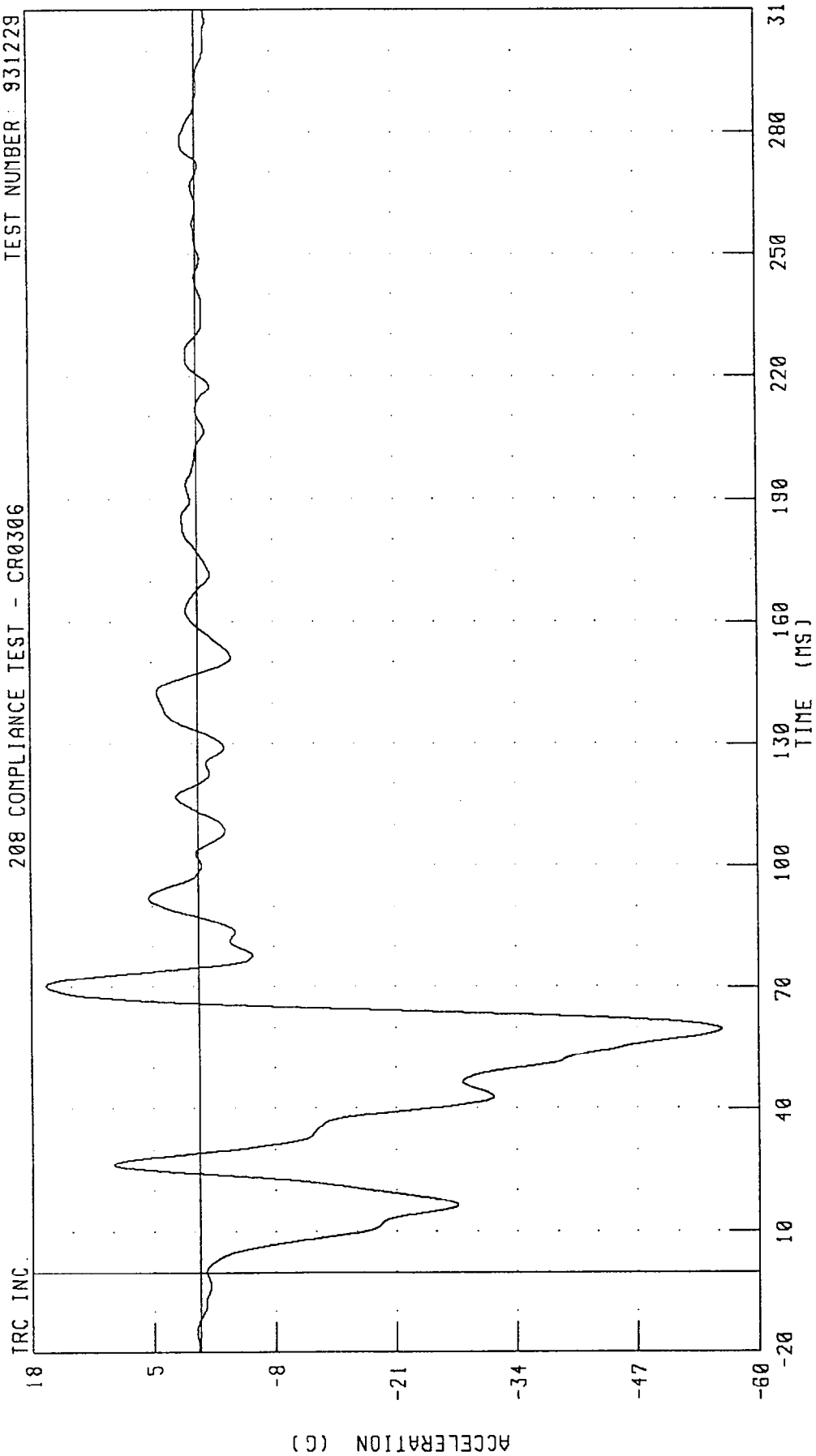


CHANNEL: BCRXG1 FILTER: CH. CLASS 60

PEAK DATA: 17.08 G @ 67.92 MS, -68.06 G @ 57.68 MS

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 LEFT BRAKE CALIPER X-AXIS ACCELERATION
 208 COMPLIANCE TEST - CR0306

TEST NUMBER: 931229

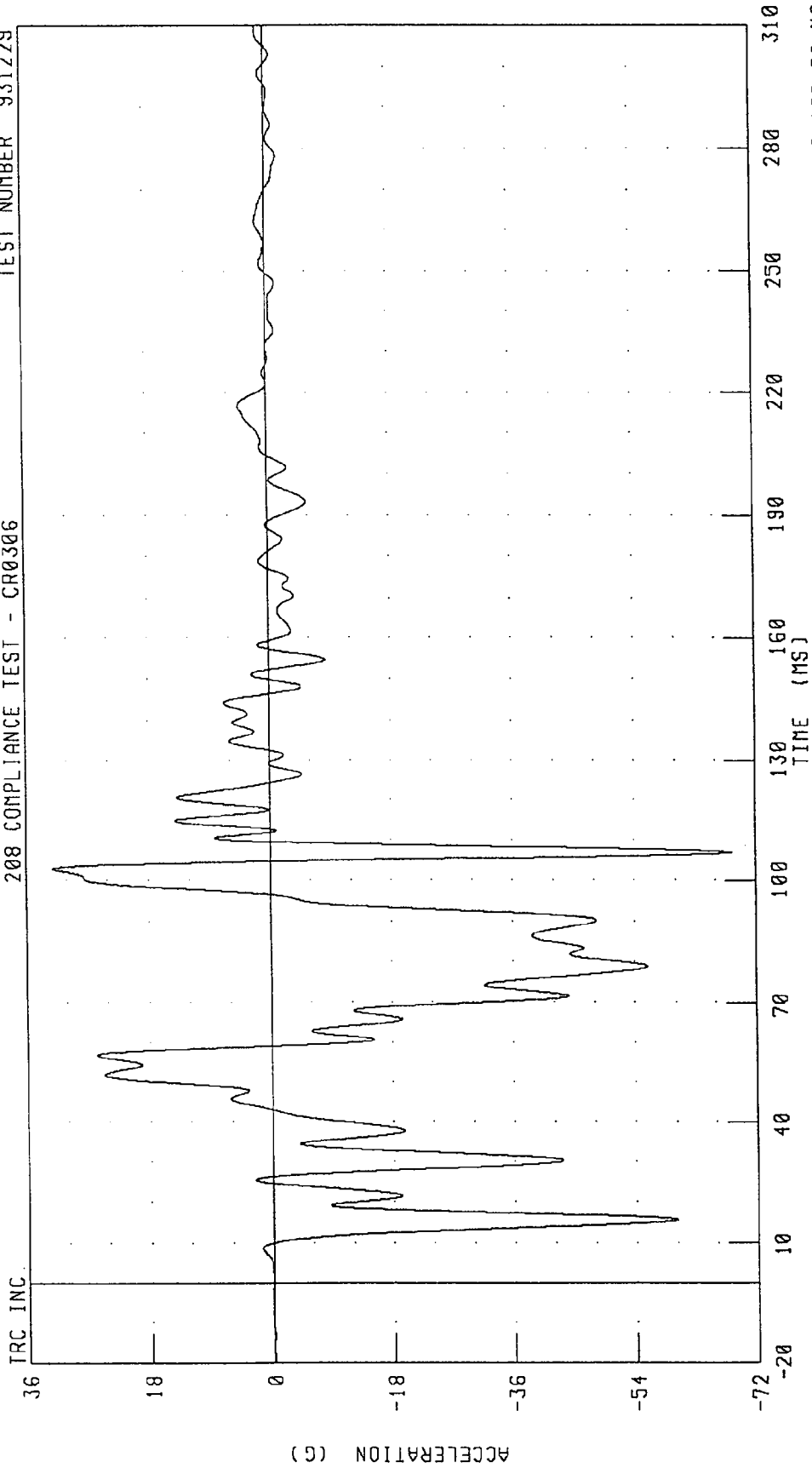


CHANNEL: BCLXG1 FILTER: CH. CLASS 60

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
DASH PANEL CENTER X-AXIS ACCELERATION

TEST NUMBER 931229

208 COMPLIANCE TEST - CR0306

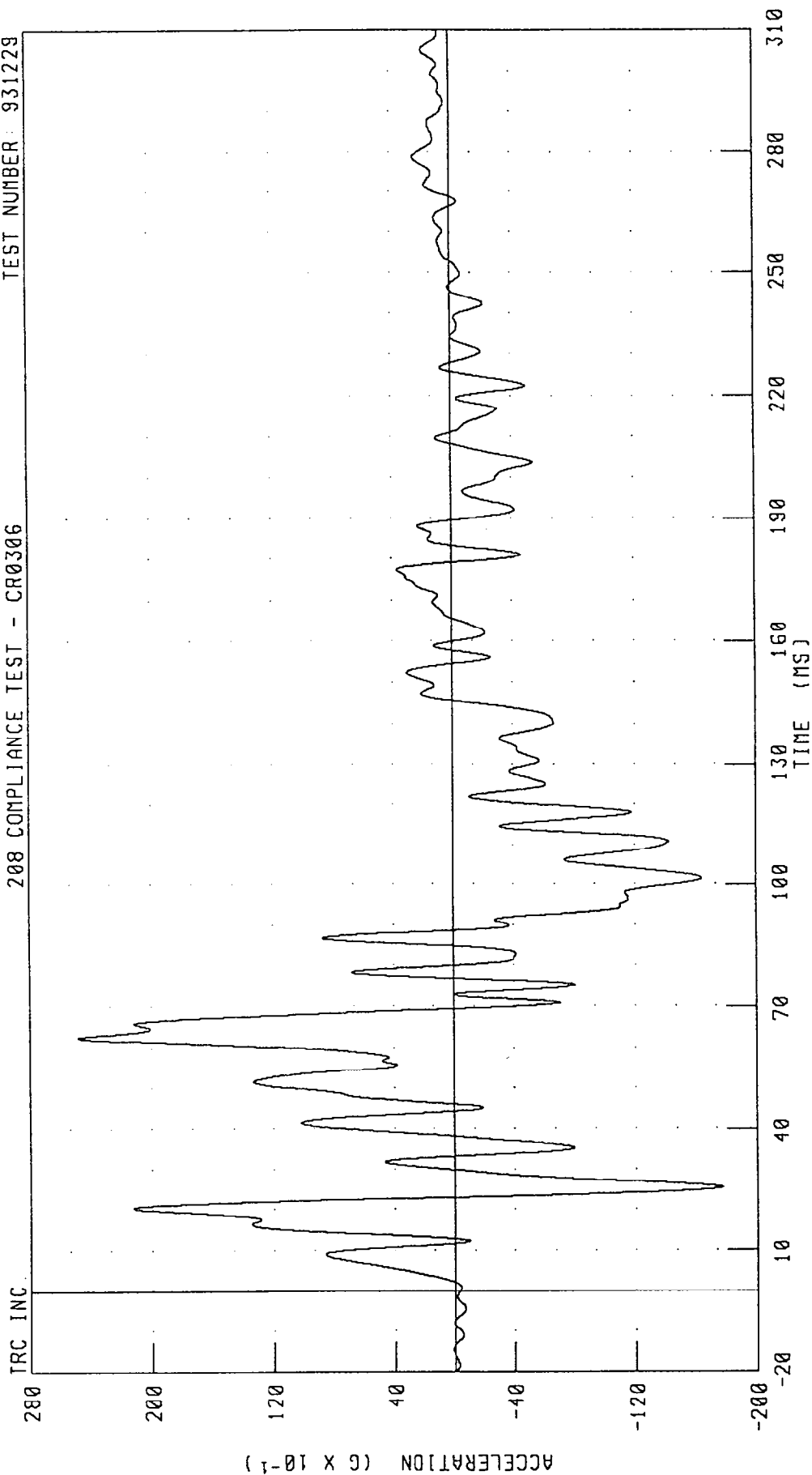


CHANNEL: DPCXG1 FILTER: CH. CLASS 60

1994 DODGE DAKOTA INTO FLAT FRONTAL BARRIER
 VEHICLE REAR CENTER Z-AXIS ACCELERATION

208 COMPLIANCE TEST - CR0306

TEST NUMBER: 931229



PEAK DATA: 24.83 G @ 62.64 MS; -17.72 G @ 25.52 MS

CHANNEL: RDKZG1 FILTER: CH. CLASS 60