

V3495

**Report Number: 208S-TRC-01-001**

**Vehicle Safety Compliance Testing for FMVSS 208**  
**for Occupant Crash Protection**  
**Sled Test**

**Auto Alliance International, Inc.**

**2001 Mazda 626**

**NHTSA Number: C15400**

**TRC Inc. Test Number: S001129**

**Transportation Research Center Inc.**

**10820 State Route 347**

**East Liberty, OH 43319**



**Test Date: November 29, 2000**

**Report Date: December 19, 2000**

**Final Report**

**Prepared For:**

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

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2000-12-20

10/1/01

## METRIC CONVERSION FACTORS

### Approximate Conversions to Metric Measures

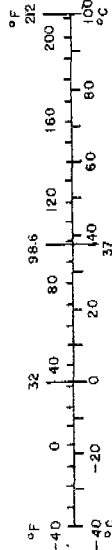
Symbol	When You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
in	inches	*2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
<b>AREA</b>				
in <sup>2</sup>	square inches	6.5	square centimeters	cm <sup>2</sup>
ft <sup>2</sup>	square feet	0.09	square meters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

#### TEMPERATURE (exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	°C	Celsius temperature
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### Approximate Conversions from Metric Measures

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



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

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16. Abstract  An FMVSS 208 Section 13 compliance sled test was conducted on a 2001 Mazda 626 4-door sedan, NHTSA No.C15400, in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP208S-01 for the determination of FMVSS 208 compliance. Possible test failures identified were as follows: None.			
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### Purpose

This Federal Motor Vehicle safety Standard (FMVSS) 208 compliance sled test is part of the FMVSS compliance test program conducted for the National Highway Traffic Safety Administration (NHTSA) by the Transportation Research Center Inc. (TRC) under Contract No. DTNH22-98-D-01055. The purpose of this test was to determine if the subject vehicle, a 2001 Mazda 626 4-door sedan, NHTSA No.C15400, meets the performance requirements of FMVSS 208, "Occupant Crash Protection," in the impact simulation sled test mode.

## Test Procedure

This test was conducted in accordance with NHTSA's Office of Vehicle Safety Compliance (OVSC) Laboratory Test Procedure No. TP-208S-01, dated January 15, 1998. Data was obtained relative to FMVSS 208, "Occupant Crash Protection," performance.

The Hyge sled was instrumented with two (2) accelerometers to measure longitudinal accelerations and one (1) light trap velocity channel. The sled test vehicle was instrumented with six (6) accelerometers to measure longitudinal axis accelerations and two (2) airbag event channels to monitor driver and passenger airbag triggers.

The sled 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 of the Laboratory Test Procedure. The dummies were not restrained by seat belts.

Both dummies were instrumented with head and chest accelerometers to measure longitudinal, lateral, and vertical accelerations; chest deflection potentiometers; left and right femur load cells to measure axial forces; and upper neck load cells to measure longitudinal, lateral, and vertical forces and moments.

The forty-one (41) data channels were digitally sampled at 12,500 samples per second and processed per Sections 11.7 through 11.9 of the Laboratory Test Procedure.

The sled test event was recorded by one (1) real-time motion picture camera and six (6) high-speed motion picture cameras. The pre-test and post-test conditions were recorded by one (1) real-time motion picture camera.

### Test Results Summary

This FMVSS 208 compliance sled test was conducted at TRC on November 29, 2000.

The test vehicle, a 2001 Mazda 626 4-door sedan, NHTSA No.C15400, appears to comply with the performance requirements of FMVSS 208 in the impact simulation sled test mode as measured by Hybrid III 50<sup>th</sup> percentile male dummies.

	FMVSS 208 Max. Allowable Injury Assessment Values	Driver	Passenger
HIC	1000	142	84
Chest g	60 g	28.8	32.9
Chest Displacement	3 inches	0.9	0.2
Left Femur	2250 lb	1608	1082
Right Femur	2250 lb	735	1025
Neck Extension	57 Nm	7.1	21.1
Neck Flexion	190 Nm	37.5	20.3
Neck Tension	3300 N	619	864
Neck Compression	4000 N	1948	575
Neck Shear	3100 N	656	783

The subject vehicle, a 2001 Mazda 626, NHTSA No. C15400, also appears to meet the other FMVSS 208 requirements for which it was tested. These results are shown in the data sheets that are included in this report.

The sled test vehicle was equipped with air bags at the driver and passenger seating positions. The dummies were not restrained by seat belts. The sled carriage was accelerated to 16.9 g with an integrated velocity change of 28.7 mph. The air bags were triggered at 20.2 milliseconds after 0.5 g acceleration was measured by the firing circuit. Following subsequent digital data processing and filtering the acceleration signal to Channel Class 60, the air bag event trigger signal was 21.0 ms after the 0.5 g acceleration level was indicated.

Sled Test Summary

NHTSA number: C15400  
Test type: FMVSS Alternate 208 Sled Test  
Test date: 11/29/00  
Test time: 1515  
Ambient temperature at impact area: 70 °F  
Vehicle year/make/ model/body style: 2001/Mazda /626 /4-door sedan

Dummy Info:

	Driver # 230	Front Passenger # 339
Type:	Part 572 E	Part 572 E
Location:	Left front	Right front
Restraint:	Airbag 2nd generation	Airbag 2nd generation
Number of data channels:	15	15

Number of Cameras:

Real-time:	1
High-speed:	6

Door Opening Data:

Left Front:	Normal
Right Front:	Normal

Front Seat Data:

Seat track failure:	None
Seat back failure	None

Visible Dummy Contact Points:

Head:	Airbag, windshield, sun visor	Airbag, windshield, headliner, sun visor
Chest:	Airbag	Airbag
Left knee:	Instrument panel	Glove box door
Right knee:	Instrument panel	Glove box door

General Test and Vehicle Parameter Data for the Sled Test Vehicle

Test Vehicle Information:

Vehicle year/make/  
model/body style: 2001/Mazda /626 /4-door sedan  
Color: Driftwood  
VIN: 1YVGF22C915201149  
NHTSA number: C15400  
Engine data:  
Placement: Transverse  
Cylinders: 4  
Displacement: 2  
Transmission data: 5 speed, X manual,    automatic,    X overdrive  
Final drive:    X fwd,    rwd,    4wd  
Date vehicle received: 10/25/2000  
Odometer reading: 65  
Dealer's name  
and address: Ricart Mazda  
4255 S. Hamilton Road  
Groveport, OH 43125

Major Options:

Power steering Yes Other: Floor mats, keyless entry, front side  
Power brakes Yes airbags, rear child seat anchors  
Power windows Yes  
Air conditioning Yes  
Power door locks Yes

Remarks: None

General Test and Vehicle Parameter Data for the Sled Test Vehicle, Cont'd.

Data from Vehicle's Certification Label:

Vehicle manufactured by: Auto Alliance International, Inc.  
Date of manufacture: August 11, 2000  
VIN: 1YVGF22C915201149  
GVWR: 3904 lbs  
GAWR: Front: 2114 lbs  
Rear: 1790 lbs

Size of tires on vehicle: 205/60R15

Tire pressure with maximum capacity vehicle load:

Front: 44 psi

Rear: 44 psi

Load range:

Spare tire: T125/70R15 95M

Type of front seats: Bucket

Data from Vehicle's Tire Placard:

Recommended tire size: P185/70R14, P205/60R15

Recommended cold tire pressure:

Front: 32 psi

Rear: 26 psi

Vehicle capacity data:

Number of occupants:

Front 2

Rear 3

Total 5

Vehicle capacity weight 385 kg (850 lbs)

Remarks: None

General Test and Vehicle Parameter Data for the Sled Test Vehicle, Cont'd.

Weight of test vehicle as received (with maximum fluids):

Right front	850.0 lbs	Right rear	540.0 lbs
Left front	880.0 lbs	Left rear	580.0 lbs
Total front weight	1730.0 lbs	(60.1% of total vehicle weight)	
Total rear weight	1120.0 lbs	(39.9% of total vehicle weight)	
Total delivered weight	2850.0 lbs		

Calculation of test vehicle's target test weight:

RCLW = Rated Cargo and Luggage Weight

UDW = Unloaded Delivered Weight (2850 lbs)

DSC = Designated Seating Capacity (5)

RCLW = 100 lbs

Target test weight = UDW + RCLW + (Number of Hybrid III dummies x 167 lbs per dummy)

Target test weight = 2850 + 100 + 334 = 3284 lbs

Weight of test vehicle with two dummies and 298 lbs of cargo weight:<sup>1</sup>

Right front	924.0 lbs	Right rear	802.0 lbs
Left front	952.0 lbs	Left rear	804.0 lbs
Total front weight	1876.0 lbs	(53.9% of total vehicle weight)	
Total rear weight	1606.0 lbs	(46.1% of total vehicle weight)	
Total test weight	3482.0 lbs		

Remarks:

Weight of ballast secured in vehicle cargo area: None

Components removed to meet target test weight: None

<sup>1</sup> The total test weight is high because the target weight had originally been incorrectly calculated by using the NHTSA formula for vehicles with no vehicle capacity weight on the label.

General Test and Vehicle Parameter Data for the Sled Test Vehicle, Cont'd.

Test Vehicle Attitude:

As delivered door sill angle: 1° Nose down  
As tested door sill angle: 0.5° Nose down  
Fully loaded door sill angle: 0° Nose level  
Vehicle Wheelbase: 105.1 inches

Fuel System Data:

Fuel system capacity from owner's manual: 16.9 gallons  
Useable capacity figure furnished by COTR: 16.9 gallons

Remarks: The roll angle measurement was within 1 inch. The left and right side measurements were each 30.3 inches.

Post-Impact Data

Test number: S001129  
NHTSA number: C15400  
Test date: 11/29/00  
Test time: 1515  
Test type: FMVSS Alternate 208 Sled Test  
Impact angle: 0°  
Ambient temperature  
at impact area: 70° F  
Temperature in  
occupant compartment: 70° F

Sled carriage velocity:

Integrated velocity from the integration of the entire sled acceleration:	28.7 mph
Measured velocity from the light trap device attached to the sled (backup):	28.2 mph
Specified integrated velocity range:	28 to 30 mph

Sled carriage acceleration:

Acceleration:	16.9 g
Specified acceleration range:	16.0 g - 18.2 g

Sled carriage acceleration duration:

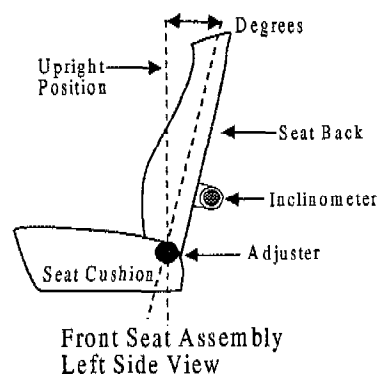
Time from T-0(-0.5 g) to 0.0 g:	124.9 msec
Specified acceleration duration:	120.0 - 130.0 msec

The sled acceleration curve was within the specified corridor.

## Seat and Steering Column Positioning Data

Vehicle: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400



### Nominal Design Riding Position:

Driver Seat:            Seat Back Angle = 19°

Passenger Seat:        Seat Back Angle = 21°

Seat backs were set by adjusting the seats to the specified angles as measured on the head restraint guide posts.

Mazda representatives at this test stated the seat back angle should be set using the head restraint posts. This was done after consultation with the COTR. Subsequent information provided to the COTR by Mazda stated that for the 2000 and 2001 model year Mazda 626 the correct seat back angle is set with the head restraint post at 13 degrees for the driver and the head restraint post at 15 degrees for the passenger. Therefore, this test was performed with the driver and passenger seat backs reclined an additional 6 degrees from the manufacturer's nominal design riding position. The dummy positioning measurements from Mazda's certification test (1999 model year) are similar to those measured in this test. Thus the effect of the increased seat back angle on the test results is considered negligible.

### Seat Fore and Aft Positions:

Driver Seat:            The seat track was positioned 12 notches rearward from the forwardmost position with the forwardmost position as one.

Passenger:             The seat track was positioned 13 notches rearward from the forwardmost position with forwardmost position as one.

### Steering Column Adjustments:

The steering column was not adjustable.

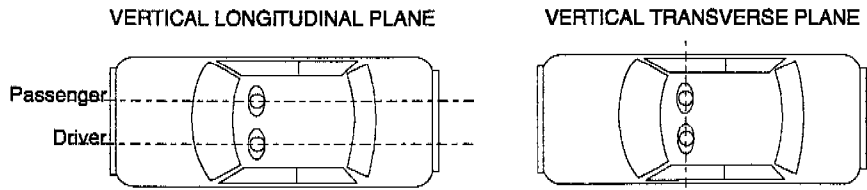
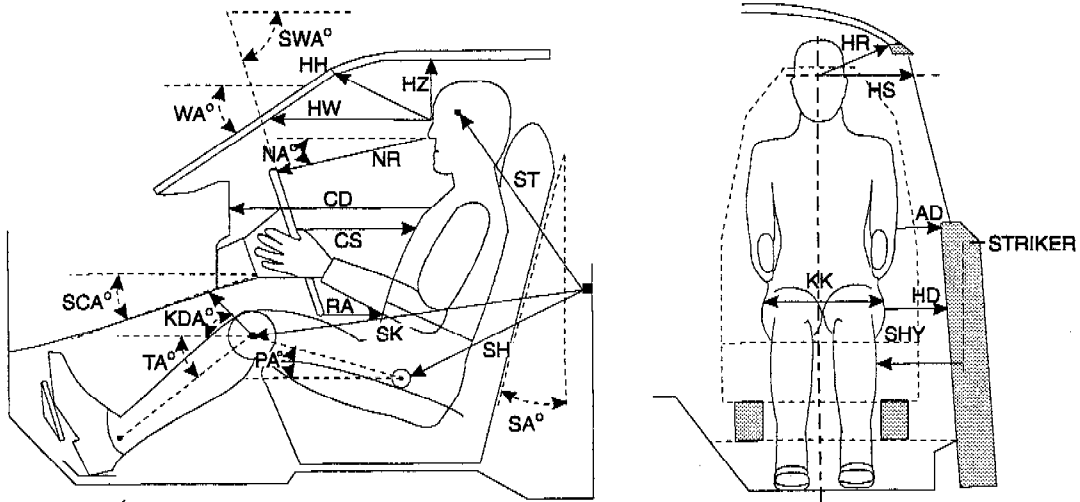
Dummy Measurement Data for Front Seat Occupants

Designation	Type of Measurement	Driver (Serial #230)	Passenger (Serial #339)
WA	Windshield angle	30.7°	N/A
SWA	Steering wheel angle	70°	N/A
SCA	Steering column angle	30.0°	N/A
SA	Seat back angle (Measured on head restraint post)	19°	21°
HZ	Head to roof	7.8 in	7.2 in
HH	Head to header	14.9 in	15.2 in
HW	Head to windshield	23.1 in	22.1 in
HR	Head to side header	8.8 in	8.0 in
NR	Nose to rim	15.3 in	N/A
NA	Nose to rim angle	14°	N/A
CD	Chest to dash	21.4 in	21.7 in
CS	Steering wheel to chest	12.4 in	N/A
RA	Rim to abdomen	7.4 in	N/A
KDL	Left knee to dash	6.3 in	6.2 in
KDR	Right knee to dash	6.4 in	6.2 in
KDA	Outboard knee to dash angle	30°	31°
PA	Pelvic angle	25°	23.2°
TA	Tibial angle	37.4°	34.3°
KK	Knee to knee	14.2 in	10.6 in
ST <sup>1</sup>	Striker to head	20.1 in	20.8 in
	Striker to head angle	81.7°	88.5°
SK <sup>1</sup>	Striker to knee	21.6 in	23.4 in
	Striker to knee angle	-0.1°	-3.1°
SH <sup>1</sup>	Striker to H-point	9.0 in	8.5 in
	Striker to H-point angle	-30.7°	-31.5°
SHY	Striker to H-point (Y dir.)	9.9 in	9.6 in
HS	Head to side window	12.7 in	11.2 in
HD	H-point to door	5.8 in	5.5 in
AD	Arm to door	5.3 in	3.9 in

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

<sup>1</sup> A negative angle indicates the measurement point was located below the striker.

## Dummy Measurement Locations for Front Seat Occupants



## Descriptions of Dummy Measurements

When a level is to be used, it is to ensure that the line containing the two points described is either parallel or perpendicular to the ground. If a measurement to be made is less than 10 inches ignore the directions to use a level and approximate a level measurement. Also, when a measurement is to be taken to or from the center of a bolt on the dummy, take the measurement from the center of the bolt hole if the bolt is recessed.

**The following measurements are to be made within a vertical longitudinal plane.**

- \* HH Head to Header, taken from the point where the dummy's nose meets his forehead (between his eyes) to the furthest point forward on the header.
- \* HW Head to Windshield, taken from the point where the dummy's nose meets his forehead (between his eyes) to a point on the windshield. Use a level.
- HZ Head to Roof, taken from the point where the dummy's nose meets his forehead (between his eyes) to the point on the roof directly above it. Use a level.
- \* CS Steering Wheel to Chest, taken from the center of the steering wheel hub to the dummy's chest. Use a level.
- \* CD Chest to Dash, place a tape measure on the tip of the dummy's chin and rotate five inches of it downward toward the dummy to the point of contact on the transverse center of the dummy's chest. Then measure from this point to the closest point on the dashboard either between the upper part of the steering wheel between the hub and the rim, or measure to the dashboard placing the tape measure above the rim, whichever is a shorter measurement. See diagram.
- RA Steering Wheel Rim to Abdomen, taken from the bottommost point of the steering wheel rim horizontally rearward to the dummy. Use a level.
- NR Nose to Rim, taken from the tip of the dummy's nose to the closest point on the top of the steering wheel rim. Also indicate the angle this line makes with respect to the horizontal (NA).
- \*<sup>1</sup> KDL, KDR Left and Right Knees to Dashboard, taken from the center of the knee pivot bolt's outer surface to the closest point forward acquired by swinging the tape measure in continually larger arcs until it contacts the dashboard. Also reference the angle of this measurement with respect to the horizontal for the outboard knee (KDA). See diagram.

\* Measurement used in Data Tape Reference Guide

<sup>1</sup> Only outboard measurement is referenced in Data Tape Reference Guide

## Descriptions of Dummy Measurements, Cont'd.

SH, Striker to Hip, Knee, and Head, these measurements are to be taken in the X-Z plane measured from the forward most center point on the striker to the center of the H-point, outer knee bolt, and head target. When taking this measurement a firm device that can be rigidly connected to the striker should be used. Use a level. The angles of these measurements with respect to the horizontal should also be recorded. The measurement in the Y (transverse) direction from the striker to the H-point should also be taken (SHY). See diagram.

**The following measurements are to be made within a vertical transverse plane.**

- HS Head to Side Window, taken from the point where the dummy's nose meets his forehead (between his eyes) to the outside of the side window. In order to make this measurement, roll the window down to the exact height which allows a level measurement. Use a level. See diagram.
- \* AD Arm to Door, taken from the outer surface of the elbow pivot bolt on a Hybrid II dummy to the first point it hits on the door. In the case of a Hybrid III dummy, measure from the bolt on the outer biceps. When a SID is used make the measurement from the center of the bottom of the arm segment where it meets the dummy's torso.
- \* HD H-point to Door, taken from the H-point on the dummy to the closest point on the door. Use a level.
- \* HR Head to Side Header, measure the shortest distance from the point where the dummy's nose meets his forehead (between his eyes) to the side edge of the header just above the window frame, directly adjacent to the dummy.
- SHY Striker to H-point, taken from a rod rigidly connected to the forward most center point on the striker to the H-point. Use a level. See diagram.
- KK Knee to Knee, for Hybrid II dummies measure the distance between knee pivot bolt head outer surfaces. For Hybrid III dummies measure the distance between the outboard knee clevis flange surfaces. (This measurement may not be exactly transverse.)

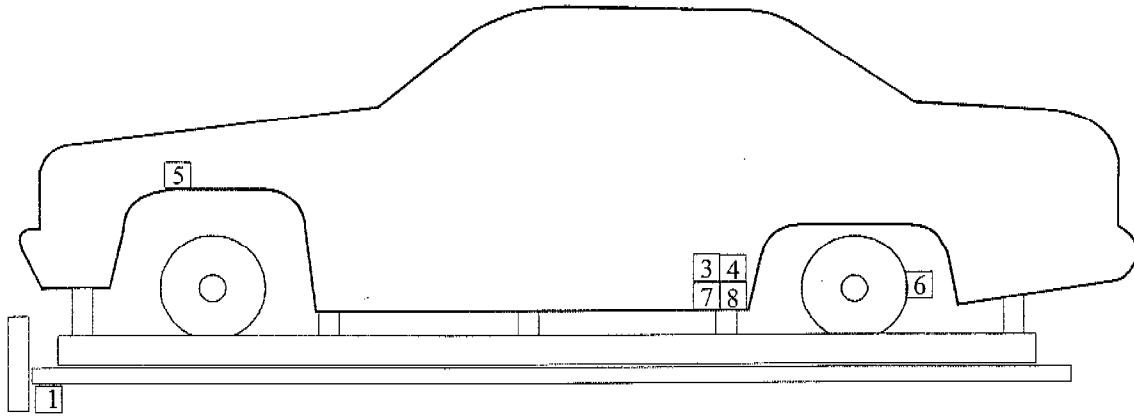
### **Angles**

SA Seat Back Angle, find this angle using the instructions provided by the manufacturer. If the manufacturer doesn't provide clear instructions contact the COTR.

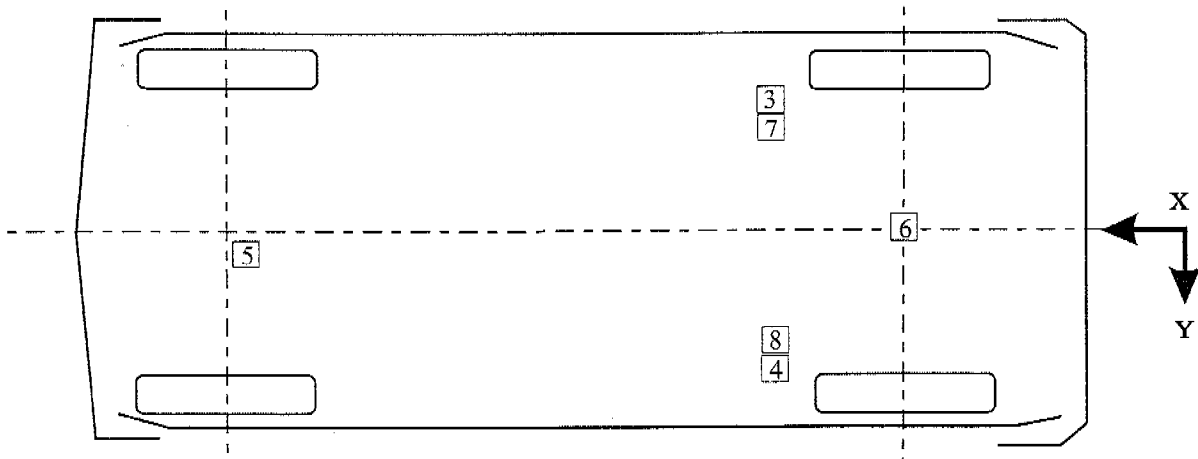
Descriptions of Dummy Measurements, Cont'd.

- PA Pelvic or Femur Angle, taken by inserting the pelvic angle gauge into the H-point gauging hole on the SID or the Hybrid III dummies and taking this angle with respect to the horizontal. Measure the angle of the line connecting the H-point hole and the outer knee pivot bolt hole on a Hybrid II dummy with respect to the horizontal, to find the femur angle.
- SWA Steering Wheel Angle, find this by placing a straight edge against the steering wheel rim along the longitudinal plane. Then measure the acute angle of the straight edge with respect to the horizontal.
- SCA Steering Column Angle, measured with respect to the horizontal by placing an inclinometer on the center of the underside of the steering column.
- NA Measure the angle made when taking the measurement NR with respect to the horizontal.
- KDA Knee to Dash Angle, the angle that the measurement KD is taken at with respect to the horizontal. Only get this angle for the outboard knee. See diagram.
- WA Windshield Angle, place an inclinometer along the transverse center of the windshield exterior (measurement is made with respect to horizontal).
- TA Tibial Angle, use a straight edge to connect the dummy's knee and ankle bolts. Then place an inclinometer on the straight edge and measure the angle with respect to the horizontal.

Vehicle Accelerometer Placement



**Side View**



**Bottom View**



Vehicle Data Summary and Accelerometer Locations, Cont'd.

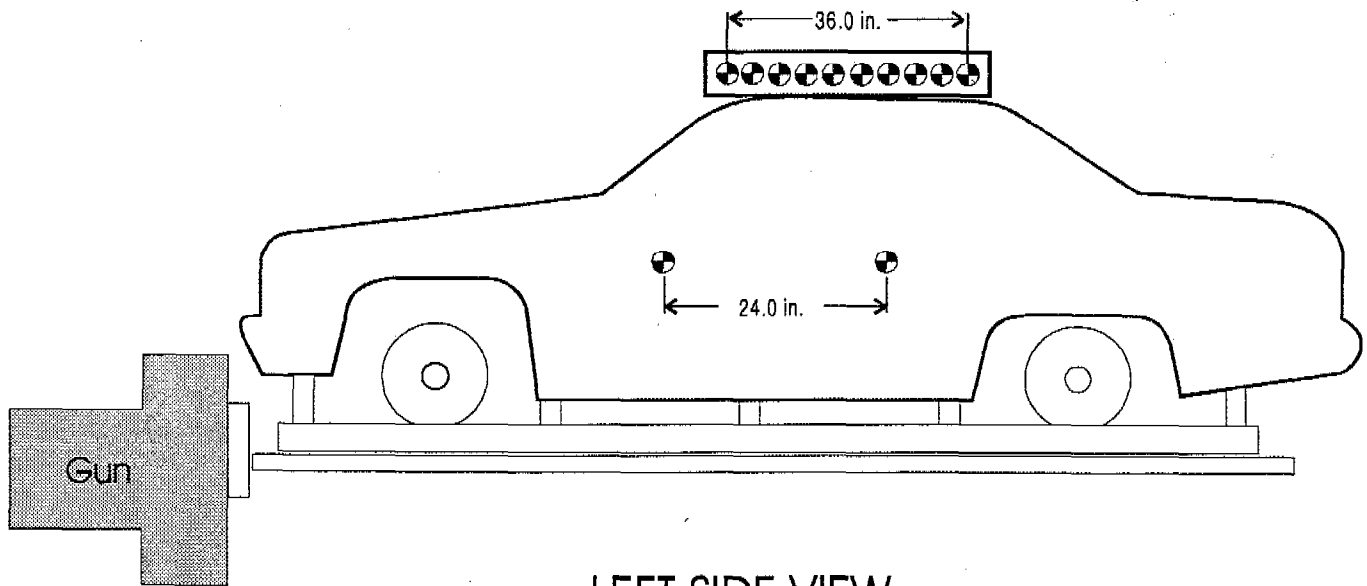
TEST NUMBER: No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
8 SILL - RIGHT REAR LONGITUDINAL	59.6 in	23.5 in		1.5 g @ 129.6 ms	17.4 g @ 59.3 ms
9 DRIVER AIRBAG EVENT				1.0 volt @ 21.0 ms	
10 PASSENGER AIRBAG EVENT				1.0 volt @ 21.0 ms	

REFERENCE: X: + FORWARD FROM VEHICLE REAR SURFACE  
Y: + RIGHTWARD FROM SLED CARRIAGE CENTERLINE

Sign Convention per J211, MAR 1995

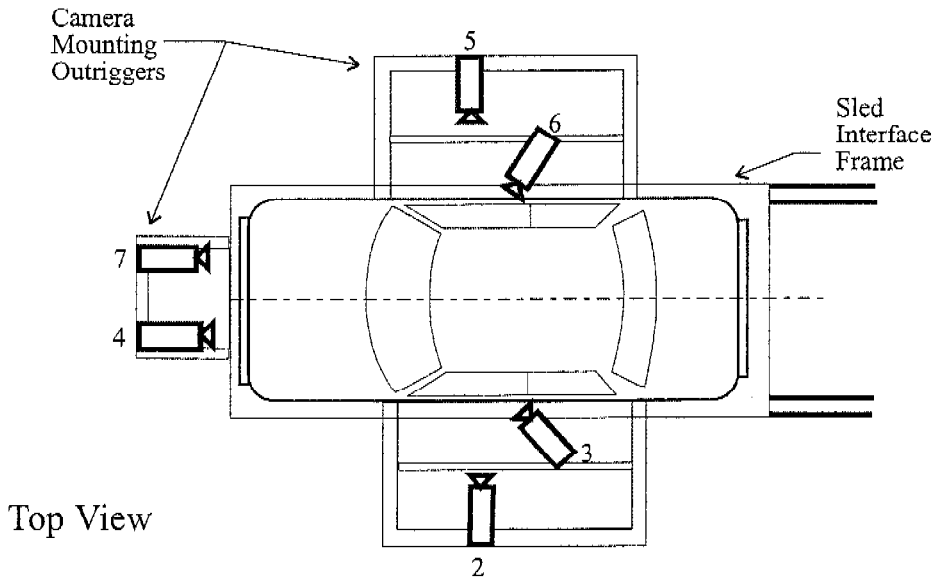
Vehicle Targeting Measurements

REFERENCE PHOTO TARGETS

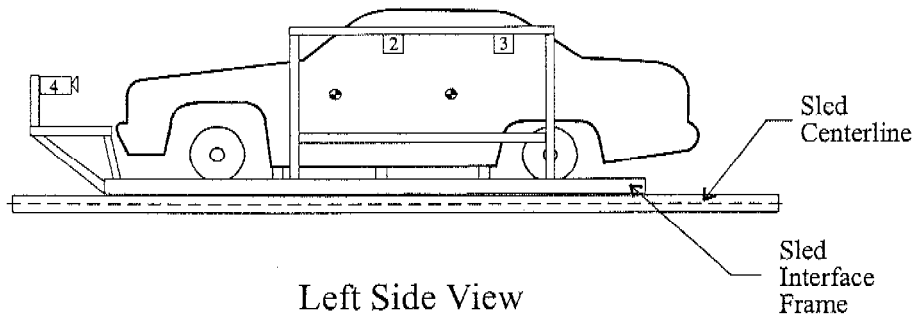


LEFT SIDE VIEW

# Camera Positions



Camera Frame Rates:  
#1 = 24 fps  
All Others = 1,000 fps



Motion Picture Camera Locations

Vehicle year/make/model/body style: 2001/Maxda/626/4-door sedan

NHTSA No. C15400

Test Number: S001129

Camera Number	View	Camera Positions <sup>1</sup>			Camera to Head Target	Camera Angle <sup>2</sup>	Camera Lens	Film Speed
		X	Y	Z				
1	Left side view offboard	93.0 in	306.9 in	55.0 in	294.8 in	0°	10 mm	24 frames/s
2	Left side view wide	70.6 in	72.8 in	50.1 in	57.3 in	6.8°	8 mm	997 frames/s
3	Left side view over shoulder	98.4 in	50.4 in	57.2 in	37.5 in	13.5°	8 mm	1010 frames/s
4	Front view - driver	27.4 in	12.5 in	49.7 in	55.5 in	6.1°	8 mm	1007 frames/s
5	Right side view wide	77.9 in	92.6 in	51.1 in	73.4 in	4.2°	13 mm	1005 frames/s
6	Right side view over shoulder	100.2 in	48.9 in	55.5 in	35.0 in	11.7°	8 mm	990 frames/s
7	Front view - passenger	27.3 in	12.9 in	49.6 in	55.8 in	7.0°	8 mm	1000 frames/s

<sup>1</sup> X: Film plane to front of sled

Y: Film plane to sled centerline

Z: Film plane to top of sled

<sup>2</sup> Angle: Film plane of camera downward from horizontal plane

FMVSS 208 Occupant Injury Data

Vehicle: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Date: 11/29/00

Maximum Acceleration Values: (g's) <sup>1</sup>	Driver Dummy #230	Passenger Dummy #339
Head Channel X	-41.9	-19.8
Head Channel Y	6.8	-35.5
Head Channel Z	19.7	19.6
HEAD RESULTANT	43.5	37.0
Chest Channel X	-27.8	-31.2
Chest Channel Y	-2.7	3.1
Chest Channel Z	11.6	13.8
CHEST RESULTANT	29.5	33.3

Head Injury Criteria (HIC) Values:

HIC	142	84
t <sub>1</sub> = (msec)	101.600	152.240
t <sub>2</sub> = (msec)	137.600	169.920

[The maximum time interval from t<sub>1</sub> to t<sub>2</sub> is 36 milliseconds.]

Chest Injury Criteria (Clip) Values: (g's)

CLIP	28.8	32.9
t <sup>1</sup> = (msec)	102.240	96.960
t <sup>2</sup> = (msec)	103.280	100.000
Chest Deflection (in)	0.9	0.2

<sup>1</sup> Sign Convention per SAE J211, March 1995.

FMVSS 208 Occupant Injury Data, Cont'd.

Vehicle: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Date: 11/29/00

Units (lbs)

Max. Compressive Femur Forces:	Driver Dummy #230	Passenger Dummy #339
Left Side (lbs)	1608	1082
Right Side (lbs)	735	1025

Neck Injury Criteria:	Driver Dummy #230	Passenger Dummy #339
Peak Flexion Bending Moment (N-m)	37.5	20.3
Peak Extension Bending Moment (N-m)	7.1	21.1
Peak Axial Tension (N)	619	864
Peak Axial Compression (N)	1948	575
Peak Positive X-Axis Shear (N)	656	783
Peak Negative X-Axis Shear (N)	182	346

**FMVSS 208 SEAT BELT WARNING SYSTEM CHECK**

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

Complete the following to determine which seat belt warning system option (S7.3(a)(1)) or (S7.3(a)(2)) is used. (Manufacturers may use either option.)

A. With occupant in driver's position and lap belt in stowed position and ignition switch placed in "Start/On" position:

A.1 S7.3(a)(1)  
Time duration of audible warning signal = 6 seconds  
(4 to 8 seconds)

Time duration of reminder light operation = stays on  
(no less than 60 seconds)

A.2 S7.3(a)(2)  
Time duration of audible warning signal = N/A seconds  
(4 to 8 seconds) (see 49 USCS @ 30124)

Time duration of reminder light operation = N/A seconds  
(4 to 8 seconds)

B. With occupant in driver's position and lap belt in use and the ignition switch placed in "Start/On" position:

B.1 S7.3(a)(1)  
Time duration of audible warning signal = 0 seconds  
(audible warning should not operate)

Time duration of reminder light operation = 0 seconds  
(reminder light does not operate)

B.2 S7.3(a)(2)  
Time duration of audible warning signal = N/A seconds  
(audible warning should not operate)

Time duration of reminder light operation = N/A seconds  
(4 to 8 seconds)

C. Note wording of visual warning:

Fasten Seat Belt

Fasten Belt

Symbol 101

**FMVSS 208 READINESS INDICATOR**

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

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.

(11/8/94 legal interpretation)

Is the system totally mechanical?

Yes-; No-

Describe the location of the readiness indicator: right side of instrument cluster

Is the readiness indicator clearly visible to the driver?

Yes-; No-

Is a list of the elements in the occupant restraint system, being monitored by the readiness indicator, provided?

Yes-; No-

**FMVSS 208 Air Bag Labels**

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

1. Air Bag Maintenance Label and Owner's Manual Instructions:
  - 1.1 Does the manufacturer recommend periodic maintenance or replacement of the air bag?  
 Yes (Go to 1.2)  
 No (Go to 2)
  - 1.2 Does the Vehicle have a maintenance or replacement label?  
 Yes-Pass  No-Fail
  - 1.3 Does the label contain one of the following?  Yes-Pass  No-Fail  
 Schedule on label specifies month and year  
 Schedule on label specifies vehicle mileage  
 Schedule on label specifies interval measured from date on certification label
  - 1.4 Is the label permanently affixed within the passenger compartment?  
 Yes-Pass  No-Fail
  - 1.5 Is the label lettered in English?  
 Yes-Pass  No-Fail
  - 1.6 Is the label in block capitals and numerals?  
 Yes-Pass  No-Fail
  - 1.7 Are the letters and numerals at least 3/32 inch high?  
 Yes-Pass  No-Fail
  - 1.8 Does the owner's manual set forth the recommended schedule for maintenance or replacement?  
 Yes-Pass  No-Fail
2. Does the owner's manual: (S4.5.1 (f))
  - 2.1 Include a description of the vehicle's air bag system in an easily understandable format?  
 Yes  No-Fail
  - 2.2 Include a statement that the vehicle is equipped with an air bag and a lap/shoulder belt at the front outboard seating positions?  
 Yes  No-Fail

**Air Bag Labels, Cont'd.**

- 2.3 Include a statement that the air bag is a supplemental restraint at the front outboard seating positions? Yes No-Fail
- 2.4 Emphasize that all occupants, including the driver, should always wear their seat belts whether or not an air bag is also provided at their seating positions to minimize the risk of severe injury or death in the event of a crash? Yes No-Fail
- 2.5 Provide any necessary precautions regarding the proper positioning of occupants, including children, at seating positions equipped with air bags to insure maximum safety protection for those occupants? Yes No-Fail
- 2.6 Explain that no objects should be place over or near the air bag on the steering wheel or on the instrument panel, because any such objects could cause harm if the vehicle is in a crash severe enough to cause the air bag to inflate? Yes No-Fail

3. Does the Vehicle:

- 3.1 Provide an automatic means to ensure that the air bag does not deploy when a child seat or child with a total mass of 30 kg or less is present on the front outboard seat? Yes No
- 3.2 Incorporate sensors, other than or in addition to weight sensors, which automatically prevent the passenger air bag from deploying in situations in which it might have an adverse effect on infants in rear-facing child seat, and unbelted or improperly belted children? Yes No
- 3.3 Have a passenger air bag designed to deploy in a manner that does not create a risk of serious injury to infants in rear-facing child seats, and unbelted or improperly belted children? Yes No

**If yes to 3.1, or 3.2, or 3.3, the vehicle is not required to have a Sun Visor Warning Label (S4.5.1(b)), an air bag alert label (S4.5.1(c)) or a label on the dash (S4.5.1(e)) and this check sheet is complete. (S4.5.1) If no to 3.1, 3.2, and 3.3, go to 4.**

**Air Bag Labels, Cont'd.**

4. Sun Visor Warning Label

4.1 Is the label permanently affixed (may be permanent marking or molding) to either side of the sun visor at each front outboard seating position with an air bag?

Driver side  Yes-Pass  No-Fail  
Passenger side  Yes-Pass  No-Fail

4.2 Does the label conform in content (**vehicles without back seats may omit the statement: "The BACK SEAT is the SAFEST place for children."**) (S4.5.1(b)(2)(v)) to the label shown in either Figure 6a or 6b as appropriate at each front outboard seating position with an air bag? (S4.5.1(b)(2))

4.2.1 Dual air bags

Driver side  Yes-Pass  No-Fail  
Passenger side  Yes-Pass  No-Fail

4.2.2 Vehicles with driver air bag ONLY - either 4.2.1 or 4.2.2 is applicable, not both. (S4.5.1(b)(2)(iv))

4.2.2.1 Does the label conform on content to the label shown in either Figure 6a or 6b as appropriate?

Driver side  Yes-Pass  N/A  
 No-Fail

4.2.2.2 Does the label conform in content to the label shown in Figure 6a where the label can be modified to omit the pictogram and the message may read:

DEATH or SERIOUS INJURY can occur.

- Sit as far back as possible from the air bag.
- ALWAYS use SEAT BELTS and CHILD RESTRAINTS.
- The BACK SEAT is the SAFEST place for children.

Driver side  Yes-Pass  N/A  
 No-Fail

Air Bag Labels, Cont'd.

**SUN VISOR LABEL VISIBLE WHEN VISOR IS IN DOWN POSITION**  
**LABEL OUTLINE, VERTICAL AND HORIZONTAL LINE BLACK**

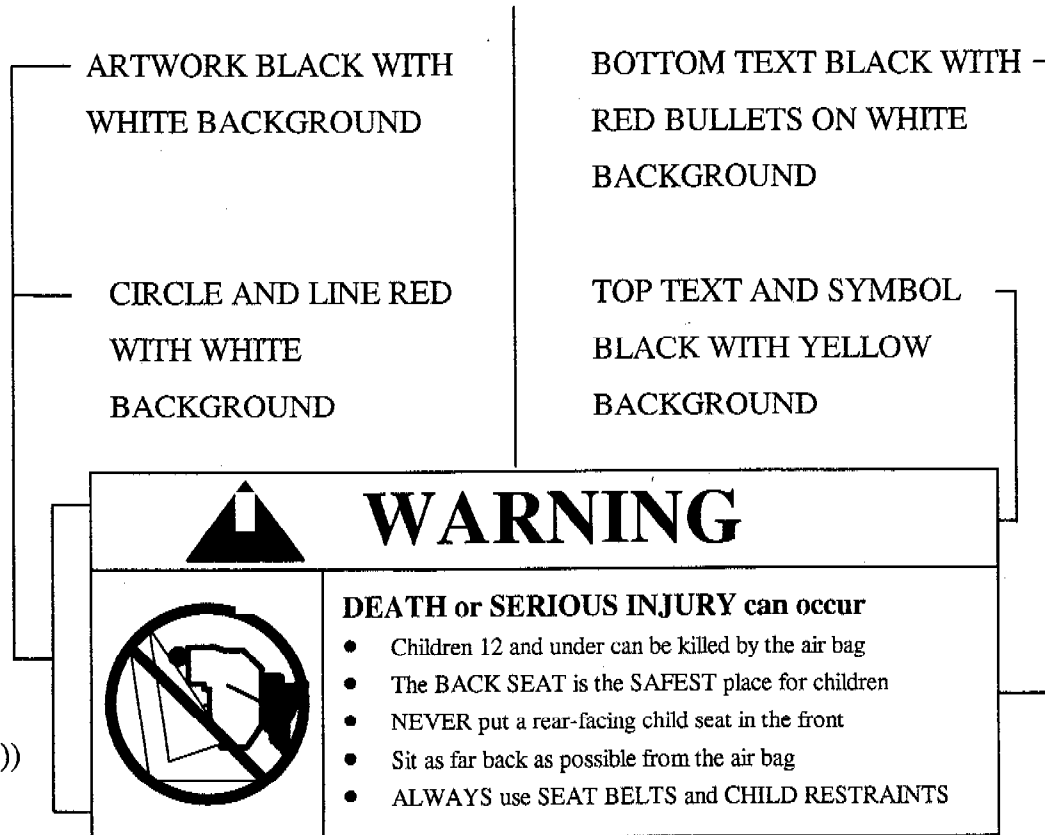


Figure 6a  
(S4.5.1(b)(2))

Air Bag Labels, Cont'd.

**SUN VISOR LABEL VISIBLE WHEN VISOR IS IN DOWN POSITION**

LABEL OUTLINE, VERTICAL AND HORIZONTAL LINE BLACK

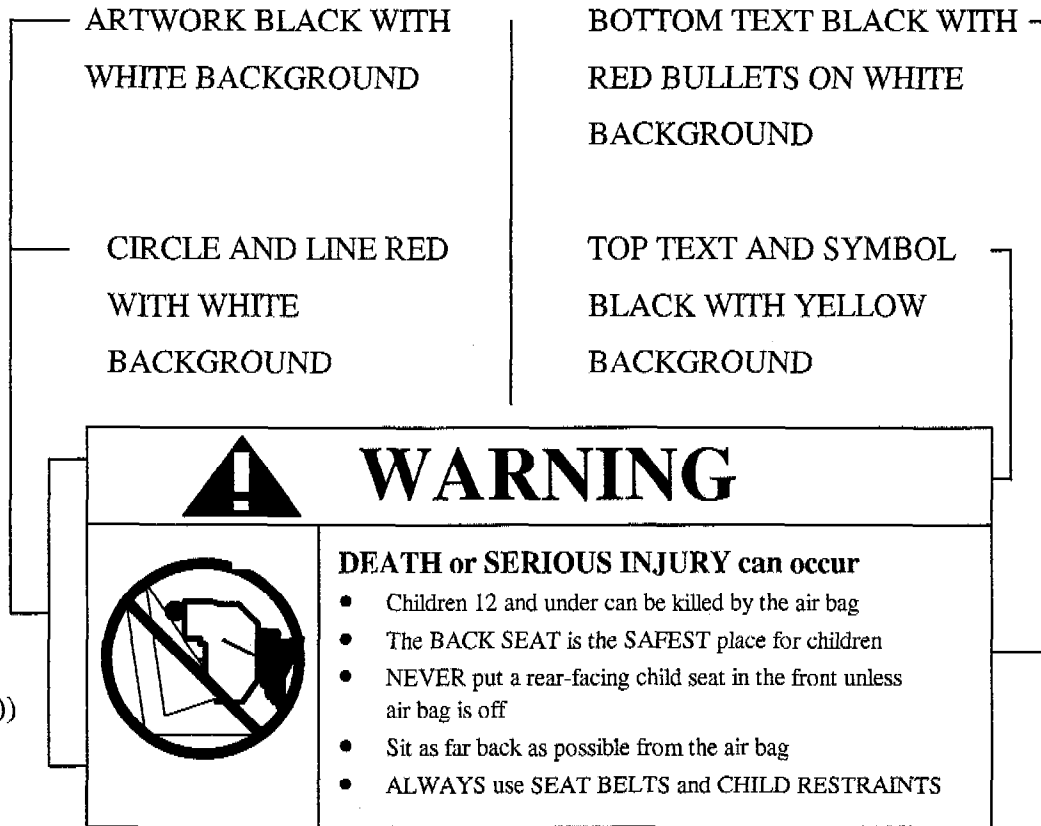


Figure 6b  
(S4.5.1(b)(2))

4.3 Is the driver side label heading area yellow with the word "warning" and the alert symbol in black? (S4.5.1(b)(2)(i))

Driver side  Yes-Pass  No-Fail

Passenger side  Yes-Pass  No-Fail

4.4 Is the message white with black text? (S4.5.1 (b)(2)(ii))

Driver side  Yes-Pass  No-Fail

Passenger side  No air bag  Yes-Pass  No-Fail

4.5 Is the message area at least 30 cm<sup>2</sup>? (S4.5.1(b)(2)(ii))

Actual message area, driver side 32 cm<sup>2</sup>

Actual message area, passenger side 32 cm<sup>2</sup>

Driver side  Yes-Pass  No-Fail

Passenger side  No air bag  Yes-Pass  No-Fail

**Air Bag Labels, Cont'd.**

4.6 Is the pictogram black with a red circle and slash on a white background?

(S4.5.1(b)(2)(iii)) & (S4.5.1(b)(2)(iv))

For vehicles with driver side air bag ONLY  N/A

Driver side  Yes-Pass  No-Fail

Passenger side  No air bag  Yes-Pass  No-Fail

4.7 Is the pictogram at least 30 mm in diameter? (S4.5.1(b)(2)(iii))

Actual diameter, driver side 30 mm

Actual diameter, passenger side 30 mm

For vehicles with driver side air bag ONLY  N/A

Driver side  Yes-Pass  No-Fail

Passenger side  No air bag  Yes-Pass  No-Fail

4.8 Is the same side of the sun visor to which the sun visor label is affixed free of other information with the exception of an air bag maintenance label?

(S4.5.1(b)(3))

Driver side  Yes-Pass  No-Fail

Passenger side  No air bag  Yes-Pass  No-Fail

4.9 Is the sun visor free of other information about air bags or the need to wear seat belts with the exception of the air bag alert label or the utility vehicle label?

Driver side  Yes-Pass  No-Fail

Passenger side  No air bag  Yes-Pass  No-Fail

5. Air Bag Alert Label

5.1 Is the Sun Visor Warning Label visible when the sun visor is in the stowed position?

Driver  Yes  No      Passenger  Yes  No      **If yes, go to 6**

5.2 Does the label conform in content to the label shown in Figure 6c?

(S4.5.1(c)(2))

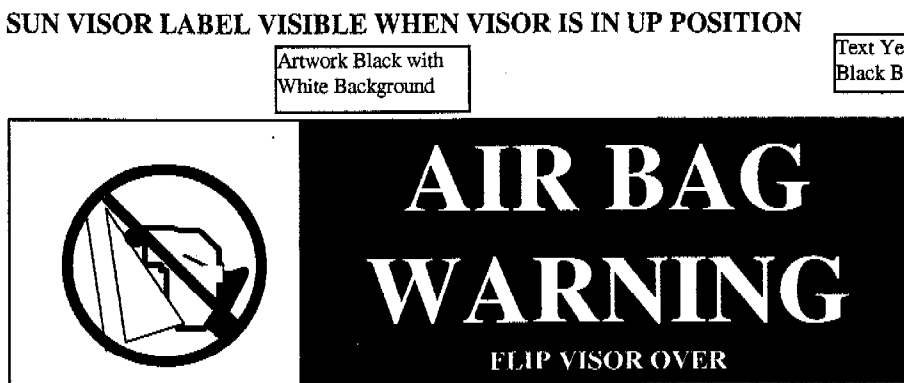
Yes-Pass     No-Fail

Circle and Line Red with White Background

Artwork Black with White Background

Text Yellow with Black Background

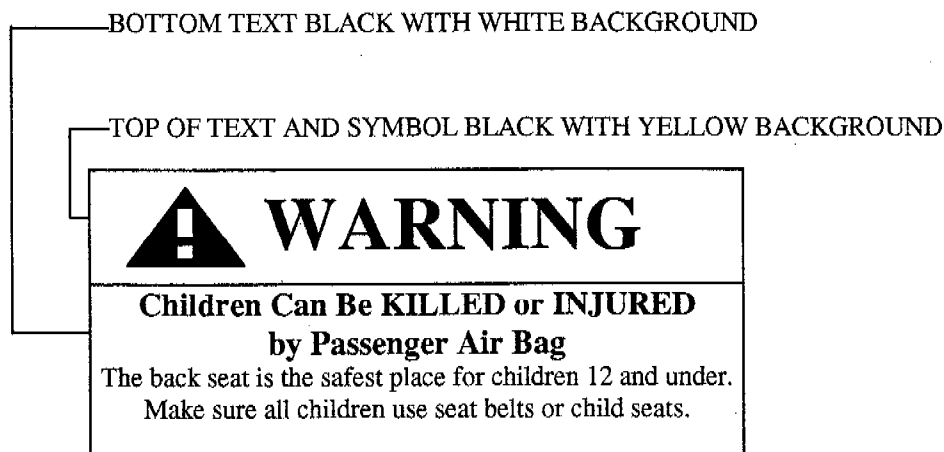
**Figure 6c**  
(S4.5.1(c)(2))



**Air Bag Labels, Cont'd.**

- 5.3 Is the message area black with yellow text? (S4.5.1(c)(2)(i))  
 Yes-Pass  No-Fail
- 5.4 Is the message area at least 20 cm<sup>2</sup>? (S4.5.1(c)(2)(i))  
Actual message area \_\_\_\_ cm<sup>2</sup>  Yes-Pass  No-Fail
- 5.5 Is the pictogram black with a red circle and slash on a white background?  
(S4.5.1(c)(2)(ii))  
For vehicles with driver side air bag ONLY  N/A  
 Yes-Pass  No-Fail
- 5.6 Is the pictogram at least 20 mm in diameter? (S4.5.1(c)(2)(ii))  
Actual diameter is \_\_\_\_ mm  
For vehicles with driver side air bag ONLY  N/A  
 Yes-Pass  No-Fail
6. Label On the Dash
- 6.1 Does the vehicle have a passenger air bag?  
 Yes  No
- If no, this check list is complete.**
- 6.2 Does the vehicle have a label on the dash or steering wheel hub? (S4.5.1(e))  
 Yes-Pass  No-Fail
- 6.3 Does the label conform in content (vehicles without back seats may omit the statement: "The back seat is the safest place for children 12 and under." (S4.5.1(e)(iii)) to the label shown in Figure 7? (S4.5.1(e))  
 Yes-Pass  No-Fail

**Figure 7**  
(S4.5.1(e))



**Air Bag Labels, Cont'd.**

- 6.4 Is the heading area yellow with the word "warning" and the alert symbol in black? (S4.5.1(e)(i))  Yes-Pass  No-Fail
- 6.5 Is the message white with black text? (S4.5.1(e)(ii))  Yes-Pass  No-Fail
- 6.6 Is the message area at least 30 cm<sup>2</sup>? (S4.5.1(e)(ii))  
Actual message area 40 cm<sup>2</sup>  Yes-Pass  No-Fail

**FMVSS 208 REAR OUTBOARD SEATING POSITION SEAT BELTS**

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

Do all rear outboard seating positions have type 2 seat belts?

Yes-; No-; N/A  (No Back Seat)

If NO, describe the seat belt installed, the seat location, and any other information about the seat that would explain why a type 2 belt was not installed.

**FMVSS 208 Lap Belt Lockability**

Passenger cars, trucks, buses, and multipurpose passenger vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

Complete one of these forms for **each** designated seating position with forward-facing seats, other than the driver's seat, or seats that can be adjusted to forward-facing **and** that has seat belt retractors that are not automatic retractors. (S7.1.1.5(c))

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Right front passenger

- 1. Record test seat position. Mid  
(S7.1.1.5(c)(1)) (Any position is acceptable.)
- 2. Buckle the seat belt. (S7.1.1.5(c)(1))
- 3. Complete any procedures recommended in the vehicle owner's manual to activate any locking feature. (S7.1.1.5(c)(1))
- 4. Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part to the vehicle?  
(S7.1.1.5(a))  Yes-Pass  No-Fail
- 5. Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT require inverting, twisting or deforming of the belt webbing? (S7.1.1.5(a))  Yes-Pass  No-Fail
- 6. Does the vehicle user need to take some action to activate the locking feature on the lap belt portion of the seat belt in any forward-facing seat or seat that can be adjusted to forward-facing?  
If yes, go to 6.1. If no, go to 7.  Yes  No
- 6.1 Does the vehicle owner's manual include a description in words and/or diagrams describing how to activate the locking feature so that the seat belt assembly can tightly secure a child restraint system and how to deactivate the locking feature to remove the child restraint system. (S7.1.1.5(b))  Yes-Pass  No-Fail

**FMVSS 208 Lap Belt Lockability, Cont'd.**

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Right front passenger

- 7. Locate a reference point a on the seat belt buckle. (S7.1.1.5(c)(2))
- 8. Locate a reference point B on the attachment hardware or retractor assembly at the other end of the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
- 9. Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2))
- 10. Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2)) Measured distance between A and B 65.8 inches.
- 11. Readjust the belt system so that the webbing between points A and B is at any length that is 5 inches or more shorter than the maximum length of the webbing. (S7.1.1.5(c)(3))
- 12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4)) Measured force application angle 10 degrees. (Spec. 5~15 degrees)
- 13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4)) Measured distance between A and B 31.7 inches.

**FMVSS 208 Lap Belt Lockability, Cont'd.**

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Front right passenger

14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))

Record onset rate 25 lbs/sec (spec. 10 ~50 lb/sec)

The measured distance between A and B is 32.0 inches (S7.1.1.5(c)(6))

15. Subtract the measurement in 13 from the measurement in 14. Is the difference 2 inches or less? (S7.1.1.5 (c)(7))

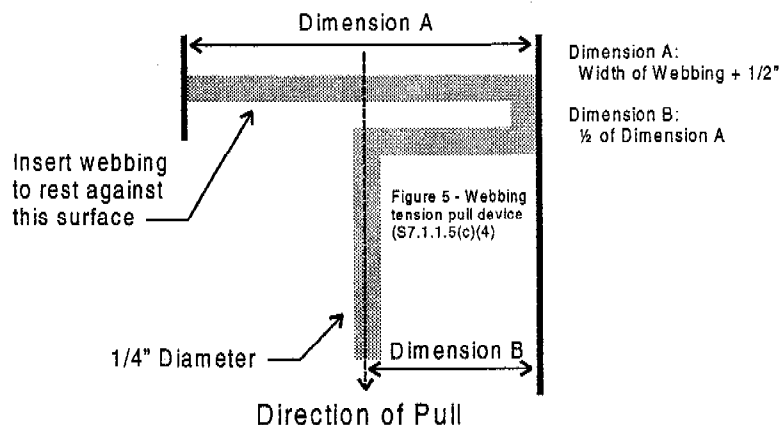
14-13= 0.3 inches

Yes-Pass     No-Fail

16. Subtract the measurement in 14 from the measurement in 10. Is the difference 3 inches or more? (S7.1.1.5(c)(8))

10-14= 33.8 inches.

Yes-Pass     No-Fail



**FMVSS 208 Lap Belt Lockability**

Passenger cars, trucks, buses, and multipurpose passenger vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

Complete one of these forms for **each** designated seating position with forward-facing seats, other than the driver's seat, or seats that can be adjusted to forward-facing **and** that has seat belt retractors that are not automatic retractors. (S7.1.1.5(c))

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Right rear passenger

- 1. Record test seat position. N/A  
(S7.1.1.5(c)(1)) (Any position is acceptable.)
- 2. Buckle the seat belt. (S7.1.1.5(c)(1))
- 3. Complete any procedures recommended in the vehicle owner's manual to activate any locking feature. (S7.1.1.5(c)(1))
- 4. Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part to the vehicle?  
(S7.1.1.5(a)) Yes-Pass No-Fail
- 5. Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT require inverting, twisting or deforming of the belt webbing? (S7.1.1.5(a)) Yes-Pass No-Fail
- 6. Does the vehicle user need to take some action to activate the locking feature on the lap belt portion of the seat belt in any forward-facing seat or seat that can be adjusted to forward-facing?  
If yes, go to 6.1. If no, go to 7. Yes No
- 6.1 Does the vehicle owner's manual include a description in words and/or diagrams describing how to activate the locking feature so that the seat belt assembly can tightly secure a child restraint system and how to deactivate the locking feature to remove the child restraint system. (S7.1.1.5(b)) Yes-Pass No-Fail

FMVSS 208 Lap Belt Lockability, Cont'd.

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Right rear passenger

- 7. Locate a reference point a on the seat belt buckle. (S7.1.1.5(c)(2))
- 8. Locate a reference point B on the attachment hardware or retractor assembly at the other end of the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
- 9. Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2))
- 10. Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2)) Measured distance between A and B **61.4** inches.
- 11. Readjust the belt system so that the webbing between points A and B is at any length that is 5 inches or more shorter than the maximum length of the webbing. (S7.1.1.5(c)(3))
- 12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4)) Measured force application angle **10** degrees. (Spec. 5~15 degrees)
- 13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4)) Measured distance between A and B **27.0** inches.

**FMVSS 208 Lap Belt Lockability, Cont'd.**

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Right rear passenger

14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))

Record onset rate 25 lbs/sec (spec. 10 ~50 lb/sec)

The measured distance between A and B is 27.9 inches (S7.1.1.5(c)(6))

15. Subtract the measurement in 13 from the measurement in 14. Is the difference 2 inches or less? (S7.1.1.5 (c)(7))

14-13= 0.9 inches

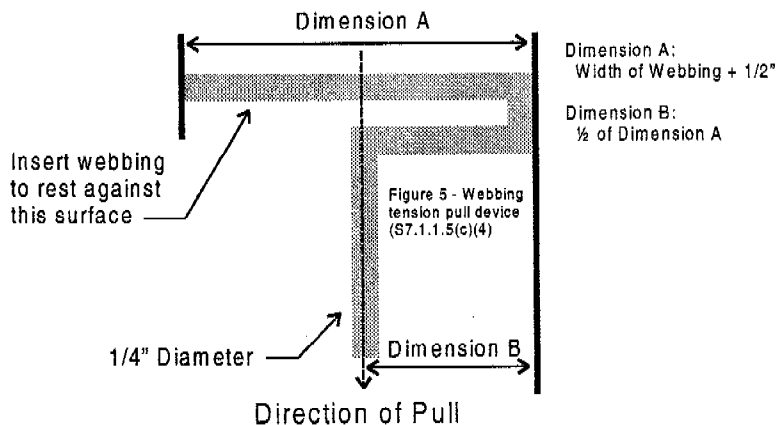
Yes-Pass     No-Fail

16. Subtract the measurement in 14 from the measurement in 10. Is the difference 3 inches or more? (S7.1.1.5(c)(8))

10-14= 33.5

inches.

Yes-Pass     No-Fail



**FMVSS 208 Lap Belt Lockability**

Passenger cars, trucks, buses, and multipurpose passenger vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

Complete one of these forms for **each** designated seating position with forward-facing seats, other than the driver's seat, or seats that can be adjusted to forward-facing **and** that has seat belt retractors that are not automatic retractors. (S7.1.1.5(c))

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Middle rear passenger

- 1. Record test seat position. N/A  
(S7.1.1.5(c)(1)) (Any position is acceptable.)
- 2. Buckle the seat belt. (S7.1.1.5(c)(1))
- 3. Complete any procedures recommended in the vehicle owner's manual to activate any locking feature. (S7.1.1.5(c)(1))
- 4. Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part to the vehicle?  
(S7.1.1.5(a))  Yes-Pass  No-Fail
- 5. Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT require inverting, twisting or deforming of the belt webbing? (S7.1.1.5(a))  Yes-Pass  No-Fail
- 6. Does the vehicle user need to take some action to activate the locking feature on the lap belt portion of the seat belt in any forward-facing seat or seat that can be adjusted to forward-facing?  
If yes, go to 6.1. If no, go to 7.  Yes  No
  - 6.1 Does the vehicle owner's manual include a description in words and/or diagrams describing how to activate the locking feature so that the seat belt assembly can tightly secure a child restraint system and how to deactivate the locking feature to remove the child restraint system. (S7.1.1.5(b))  Yes-Pass  No-Fail

FMVSS 208 Lap Belt Lockability, Cont'd.

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Middle rear passenger

- 7. Locate a reference point a on the seat belt buckle. (S7.1.1.5(c)(2))
- 8. Locate a reference point B on the attachment hardware or retractor assembly at the other end of the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
- 9. Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2))
- 10. Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2)) Measured distance between A and B 56.0 inches.
- 11. Readjust the belt system so that the webbing between points A and B is at any length that is 5 inches or more shorter than the maximum length of the webbing. (S7.1.1.5(c)(3))
- 12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4)) Measured force application angle 10 degrees. (Spec. 5~15 degrees)
- 13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4)) Measured distance between A and B 19.4 inches.

**FMVSS 208 Lap Belt Lockability, Cont'd.**

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Middle rear passenger

14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))

Record onset rate 25 lbs/sec (spec. 10 ~50 lb/sec)

The measured distance between A and B is 21.3 inches (S7.1.1.5(c)(6))

15. Subtract the measurement in 13 from the measurement in 14. Is the difference 2 inches or less? (S7.1.1.5 (c)(7))

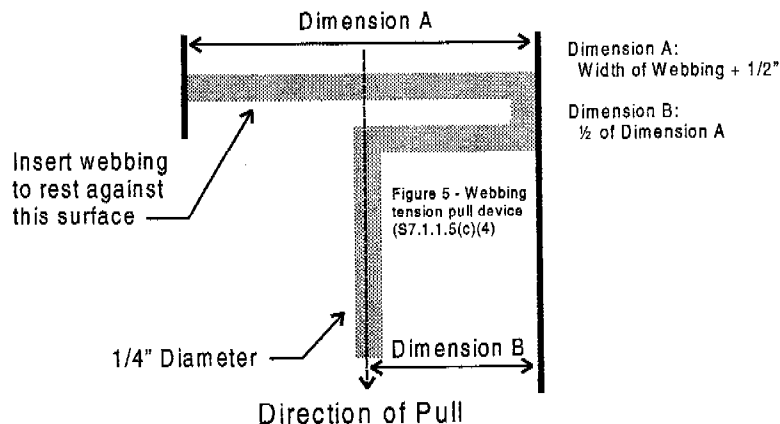
14-13= 1.9 inches

Yes-Pass     No-Fail

16. Subtract the measurement in 14 from the measurement in 10. Is the difference 3 inches or more? (S7.1.1.5(c)(8))

10-14= 34.7 inches.

Yes-Pass     No-Fail



**FMVSS 208 Lap Belt Lockability**

Passenger cars, trucks, buses, and multipurpose passenger vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

Complete one of these forms for **each** designated seating position with forward-facing seats, other than the driver's seat, or seats that can be adjusted to forward-facing **and** that has seat belt retractors that are not automatic retractors. (S7.1.1.5(c))

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Left rear passenger

- 1. Record test seat position. N/A  
(S7.1.1.5(c)(1)) (Any position is acceptable.)
- 2. Buckle the seat belt. (S7.1.1.5(c)(1))
- 3. Complete any procedures recommended in the vehicle owner's manual to activate any locking feature. (S7.1.1.5(c)(1))
- 4. Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part to the vehicle?  
(S7.1.1.5(a)) Yes-Pass No-Fail
- 5. Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT require inverting, twisting or deforming of the belt webbing? (S7.1.1.5(a)) Yes-Pass No-Fail
- 6. Does the vehicle user need to take some action to activate the locking feature on the lap belt portion of the seat belt in any forward-facing seat or seat that can be adjusted to forward-facing?  
If yes, go to 6.1. If no, go to 7. Yes No
- 6.1 Does the vehicle owner's manual include a description in words and/or diagrams describing how to activate the locking feature so that the seat belt assembly can tightly secure a child restraint system and how to deactivate the locking feature to remove the child restraint system. (S7.1.1.5(b)) Yes-Pass No-Fail

FMVSS 208 Lap Belt Lockability, Cont'd.

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Left rear passenger

- 7. Locate a reference point a on the seat belt buckle. (S7.1.1.5(c)(2))
- 8. Locate a reference point B on the attachment hardware or retractor assembly at the other end of the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
- 9. Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2))
- 10. Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2)) Measured distance between A and B 61.2 inches.
- 11. Readjust the belt system so that the webbing between points A and B is at any length that is 5 inches or more shorter than the maximum length of the webbing. (S7.1.1.5(c)(3))
- 12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4)) Measured force application angle 10 degrees. (Spec. 5~15 degrees)
- 13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4)) Measured distance between A and B 20.1 inches.

**FMVSS 208 Lap Belt Lockability, Cont'd.**

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda /626 /4-door sedan

NHTSA No.: C15400

Technician: R. Stoner

Date: 11/27/00

DESIGNATED SEATING POSITION: Left rear passenger

14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))

Record onset rate 25 lbs/sec (spec. 10 ~50 lb/sec)

The measured distance between A and B is 22.1 inches (S7.1.1.5(c)(6))

15. Subtract the measurement in 13 from the measurement in 14. Is the difference 2 inches or less? (S7.1.1.5 (c)(7))

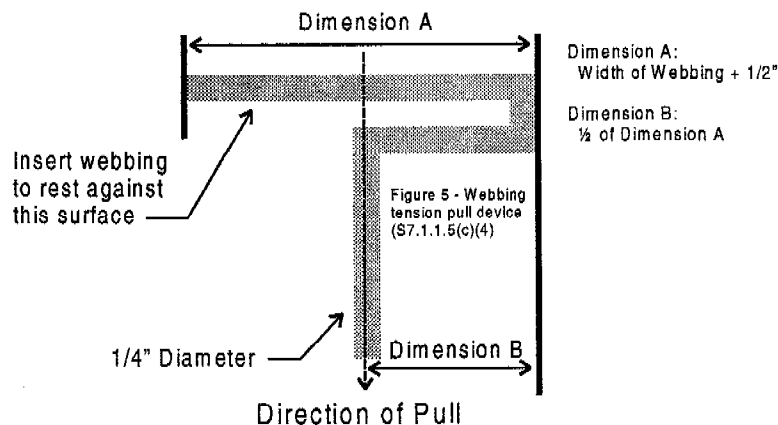
14-13= 2.0 inches

Yes-Pass  No-Fail

16. Subtract the measurement in 14 from the measurement in 10. Is the difference 3 inches or more? (S7.1.1.5(c)(8))

10-14= 39.1 inches.

Yes-Pass  No-Fail



**FMVSS 208 Seat Belt Comfort And Convenience Test**  
**Belt Contact Force (S7.4.3)**

Test Vehicle NHTSA No.: C15400

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda/626/4-door sedan

Designated Seating Position Tested: Left rear passenger

Date of Comfort and Convenience Check: 11/27/00

Technician Performing Check: Brian Baustch, Ron Stoner

GVWR: 3904 pounds

Test all Type 2 seat belts other than those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

1. Does the vehicle incorporate a webbing tension-relieving device?

Yes-go to latchplate access  
 No-continue with this check sheet

2. Adjustable seats are in the adjustment position midway between the forward most and rearmost positions. If an adjustment position does not exist midway between the forward most and rearmost positions, the next closest adjustment position to the rear of the midpoint is used. (S8.1.2)

Check  
 N/A

3. If separately adjustable in a vertical direction, the seats are at the lowest position.

Check  
 N/A

4. Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer.

Check  
 N/A

5. Place any adjustable anchorages at the manufacturer's nominal design position for a 50<sup>th</sup> percentile adult male (50M) occupant. This information will be furnished by the COTR.

Check  
 N/A

**FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.**  
**Belt Contact Force (S7.4.3)**

6. Place each adjustable head restraint in its highest adjustment position.

Check  
 N/A

7. Adjustable lumbar supports are positioned so that the lumbar support is in its lowest adjustment position. (S8.1.3)

Check  
 N/A

8. Position the test dummies according to dummy position placement instructions in Appendix B.

Check

9. Fasten the seat belt latch. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest. (S10.8) Measure the contact force exerted by the belt webbing on the dummy's chest. Contact the COTR if the contact force exceeds 0.7 pounds. Contact force is 0.55 pounds.

0.0 to 0.7 pounds - Pass  
 greater than 0.7 pounds - FAIL\*

**FMVSS 208 Seat Belt Comfort And Convenience Test**  
**Belt Contact Force (S7.4.3)**

Test Vehicle NHTSA No.: C15400

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda/626/4-door sedan

Designated Seating Position Tested: Middle rear passenger

Date of Comfort and Convenience Check: 11/27/00

Technician Performing Check: Brian Baustch, Ron Stoner

GVWR: 3904 pounds

Test all Type 2 seat belts other than those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

1. Does the vehicle incorporate a webbing tension-relieving device?

Yes-go to latchplate access  
 No-continue with this check sheet

2. Adjustable seats are in the adjustment position midway between the forward most and rearmost positions. If an adjustment position does not exist midway between the forward most and rearmost positions, the next closest adjustment position to the rear of the midpoint is used. (S8.1.2)

Check  
 N/A

3. If separately adjustable in a vertical direction, the seats are at the lowest position.

Check  
 N/A

4. Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer.

Check  
 N/A

5. Place any adjustable anchorages at the manufacturer's nominal design position for a 50<sup>th</sup> percentile adult male (50M) occupant. This information will be furnished by the COTR.

Check  
 N/A

**FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.**  
**Belt Contact Force (S7.4.3)**

6. Place each adjustable head restraint in its highest adjustment position.

Check  
 N/A

7. Adjustable lumbar supports are positioned so that the lumbar support is in its lowest adjustment position. (S8.1.3)

Check  
 N/A

8. Position the test dummies according to dummy position placement instructions in Appendix B.

Check

9. Fasten the seat belt latch. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest. (S10.8) Measure the contact force exerted by the belt webbing on the dummy's chest. Contact the COTR if the contact force exceeds 0.7 pounds. Contact force is 0.57 pounds.

0.0 to 0.7 pounds - Pass  
 greater than 0.7 pounds - FAIL\*

**FMVSS 208 Seat Belt Comfort And Convenience Test**  
**Belt Contact Force (S7.4.3)**

Test Vehicle NHTSA No.: C15400

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda/626/4-door sedan

Designated Seating Position Tested: Right rear passenger

Date of Comfort and Convenience Check: 11/27/00

Technician Performing Check: Brian Baustch, Ron Stoner

GVWR: 3904 pounds

Test all Type 2 seat belts other than those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

1. Does the vehicle incorporate a webbing tension-relieving device?

Yes-go to latchplate access  
 No-continue with this check sheet

2. Adjustable seats are in the adjustment position midway between the forward most and rearmost positions. If an adjustment position does not exist midway between the forward most and rearmost positions, the next closest adjustment position to the rear of the midpoint is used. (S8.1.2)

Check  
 N/A

3. If separately adjustable in a vertical direction, the seats are at the lowest position.

Check  
 N/A

4. Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer.

Check  
 N/A

5. Place any adjustable anchorages at the manufacturer's nominal design position for a 50<sup>th</sup> percentile adult male (50M) occupant. This information will be furnished by the COTR.

Check  
 N/A

FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.  
Belt Contact Force (S7.4.3)

6. Place each adjustable head restraint in its highest adjustment position.

Check  
 N/A

7. Adjustable lumbar supports are positioned so that the lumbar support is in its lowest adjustment position. (S8.1.3)

Check  
 N/A

8. Position the test dummies according to dummy position placement instructions in Appendix B.

Check

9. Fasten the seat belt latch. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest. (S10.8) Measure the contact force exerted by the belt webbing on the dummy's chest. Contact the COTR if the contact force exceeds 0.7 pounds. Contact force is 0.61 pounds.

0.0 to 0.7 pounds - Pass  
 greater than 0.7 pounds - FAIL\*

FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.  
Latchplate Access (S7.4.4)

Test Vehicle NHTSA No.: C15400

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda/626/4-door sedan

Designated Seating Position Tested: N/A

Date of Comfort and Convenience Check: 11/27/00

Technician Performing Check: Brian Baustch, Ron Stoner

GVWR: 3904 pounds

Test all front outboard seat belts other than those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

1. Position the seat in its forward most adjustment position.  Check
  
2. Position the test dummy using the procedures in Appendix B. (Some modifications to the positioning procedure may need to be made because the seat is in its forward most position.)  Check
  
3. Position the adjustable seat belt anchorage in the manufacturer's nominal design position for a 50<sup>th</sup> percentile adult male occupant.  Check
  
4. Attach the inboard and outboard reach string following the instructions on Figure 1C.  Check
  
5. Place the latch plate in the stowed position.  Check
  
6. Extend each line backward and outboard to generate arcs of the reach envelope of the test dummy's arms. Is the latchplate within the reach envelope?  
Yes-  Pass; No-  Fail
  
7. Using the clearance test block, specified in Figure 2C of the test procedure, determine if there is sufficient clearance between the vehicle seat and the side of vehicle to allow the test block to move unhindered to the latchplate or buckle.  
Yes-  Pass; No-  Fail

**FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.**  
**Retraction (S7.4.5)**

Test Vehicle NHTSA No.: C15400

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda/626/4-door sedan

Designated Seating Position Tested: N/A

Date of Comfort and Convenience Check: 11/27/00

Technician Performing Check: Brian Baustch, Ron Stoner

GVWR: 3904 pounds

Test all front outboard seat belts other than those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

1. Is the vehicle a passenger car or walk-in van-type vehicle?  Yes  
 No  
If yes, go to seat belt guides and hardware.
2. Adjustable seats are in the adjustment position midway between the forward most and rearmost positions. If an adjustment position does not exist midway between the forward most and rearmost positions, the next closest adjustment position to the rear of the midpoint is used. (S8.1.2)  Check
3. If separately adjustable in a vertical direction, the seats are at the lowest position.  Check
4. Place any adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer.  Check
5. Place any adjustable anchorages at the manufacturer's nominal design position for a 50<sup>th</sup> percentile adult male (50M) occupant. This information will be furnished by the COTR.  Check
6. Place each adjustable head restraint in its highest adjustment position.  Check
7. Adjustable lumbar supports are positioned so that the lumbar support is in its lowest adjustment position. (S8.1.3)  Check
8. Use anthropomorphic test dummies whose arms have been removed and position the dummies in the front outboard designated seating positions according to instructions in Appendix B.  Check

FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.  
Retraction (S7.4.5)

9. Restrain the dummies using the belt systems for the position being tested.  Check
10. Stow outboard armrests that are capable of being stowed.  Check
11. Check the statement that applies to this test vehicle:
- (A) The torso and lap belt webbing of the seat belt system automatically retracts to a stowed position when the adjacent vehicle door is in an open position and the seat belt latchplate is released.  Pass
- (B) The torso and lap belt webbing of the seat belt system automatically retracts when the seat belt latchplate is released.  Pass
- (C) Neither A or B apply.  **FAIL**
12. With the webbing and hardware in the stowed position are the webbing and hardware prevented from being pinched when the door is closed?  
Yes-  Pass; No-  **Fail**
13. If this test vehicle has an open body (without doors) and has a belt system with a tension-relieving device, does the belt system fully retract when the tension-relieving device is deactivated?  N/A  
Yes-  Pass; No-  **Fail**

**FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.**  
**Seat Belt Guides And Hardware (S7.4.6)**

Test Vehicle NHTSA No.: C15400

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda/626/4-door sedan

Designated Seating Position Tested: Left rear passenger

Date of Comfort and Convenience Check: 11/27/00

Technician Performing Check: Brian Baustch, Ron Stoner

GVWR: 3904 pounds

Test seat belts except those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

The requirements for accessibility **DO NOT APPLY** to:

- A. Seats whose seat cushions are movable so that the seat back serves a function other than seating (S7.4.6.1(b)).
- B. Seats which are removable.
- C. Seats that are movable so that the space formerly occupied by the seat can be used for a secondary function.

If the seats in this vehicle are different than the criteria above, determine the following:

1. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back?  
 Yes: go to 2.  
 No: this form is complete.
2. Does one of the following three parts, the seat belt latchplate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)?  
Yes- Pass; No-  Fail
3. Are the remaining two seat belt parts accessible under normal conditions?  
Yes- Pass; No-  Fail
4. The buckle and latchplate do not pass through the guides or conduits provided and fall behind the seat when the following events occur in order:
  - (A) The belt is completely retracted or, if the belt is nonretractable, the belt is unlatched.  
 Check

**FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.**  
**Seat Belt Guides And Hardware (S7.4.6)**

- (B) The seat is moved to any position to which it is designed to be adjusted.  Check
- (C) The seat back, if foldable, is folded forward as far as possible and then moved backward into position.  Check  
Yes-  Pass; No-  Fail
5. Is the inboard receptacle end of the seat belt assembly, installed in the outboard designated seating position, accessible with the center arm rest in any position to which it can be adjusted (without moving the armrest)? Yes-  Pass; No-  Fail

**FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.**  
**Seat Belt Guides And Hardware (S7.4.6)**

Test Vehicle NHTSA No.: C15400

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda/626/4-door sedan

Designated Seating Position Tested: Middle rear passenger

Date of Comfort and Convenience Check: 11/27/00

Technician Performing Check: Brian Baustch, Ron Stoner

GVWR: 3904 pounds

Test seat belts except those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

The requirements for accessibility **DO NOT APPLY** to:

- A. Seats whose seat cushions are movable so that the seat back serves a function other than seating (S7.4.6.1(b)).
- B. Seats which are removable.
- C. Seats that are movable so that the space formerly occupied by the seat can be used for a secondary function.

If the seats in this vehicle are different than the criteria above, determine the following:

1. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back?  
 Yes: go to 2.  
 No: this form is complete.
2. Does one of the following three parts, the seat belt latchplate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)?  
Yes- Pass; No-  Fail
3. Are the remaining two seat belt parts accessible under normal conditions?  
Yes- Pass; No-  Fail
4. The buckle and latchplate do not pass through the guides or conduits provided and fall behind the seat when the following events occur in order:
  - (A) The belt is completely retracted or, if the belt is nonretractable, the belt is unlatched.  
 Check

FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.  
Seat Belt Guides And Hardware (S7.4.6)

(B) The seat is moved to any position to which it is designed to be adjusted.  Check

(C) The seat back, if foldable, is folded forward as far as possible and then moved backward into position.  Check

Yes- Pass; No-  Fail

5. Is the inboard receptacle end of the seat belt assembly, installed in the outboard designated seating position, accessible with the center arm rest in any position to which it can be adjusted (without moving the armrest)? Yes- Pass; No-  Fail

**FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.**  
**Seat Belt Guides And Hardware (S7.4.6)**

Test Vehicle NHTSA No.: C15400

Vehicle Model Year/Make/Model/Body Style: 2001/Mazda/626/4-door sedan

Designated Seating Position Tested: Right rear passenger

Date of Comfort and Convenience Check: 11/27/00

Technician Performing Check: Brian Baustch, Ron Stoner

GVWR: 3904 pounds

Test seat belts except those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

The requirements for accessibility **DO NOT APPLY** to:

- A. Seats whose seat cushions are movable so that the seat back serves a function other than seating (S7.4.6.1(b)).
- B. Seats which are removable.
- C. Seats that are movable so that the space formerly occupied by the seat can be used for a secondary function.

If the seats in this vehicle are different than the criteria above, determine the following:

1. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back?  
 Yes: go to 2.  
 No: this form is complete.
2. Does one of the following three parts, the seat belt latchplate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)?  
Yes-  Pass; No-  Fail
3. Are the remaining two seat belt parts accessible under normal conditions?  
Yes-  Pass; No-  Fail
4. The buckle and latchplate do not pass through the guides or conduits provided and fall behind the seat when the following events occur in order:
  - (A) The belt is completely retracted or, if the belt is nonretractable, the belt is unlatched.  
 Check

**FMVSS 208 Seat Belt Comfort And Convenience Test Summary, Cont'd.**  
**Seat Belt Guides And Hardware (S7.4.6)**

(B) The seat is moved to any position to which it is designed to be adjusted.  Check

(C) The seat back, if foldable, is folded forward as far as possible and then moved backward into position.  Check

Yes- Pass; No-  Fail

5. Is the inboard receptacle end of the seat belt assembly, installed in the outboard designated seating position, accessible with the center arm rest in any position to which it can be adjusted (without moving the armrest)? Yes- Pass; No-  Fail

# LOCATION OF ANCHORING POINTS FOR LATCHPLATE REACH LIMITING CHAINS OR STRINGS TO TEST FOR LATCHPLATE ACCESSIBILITY

## PART 572E DUMMY

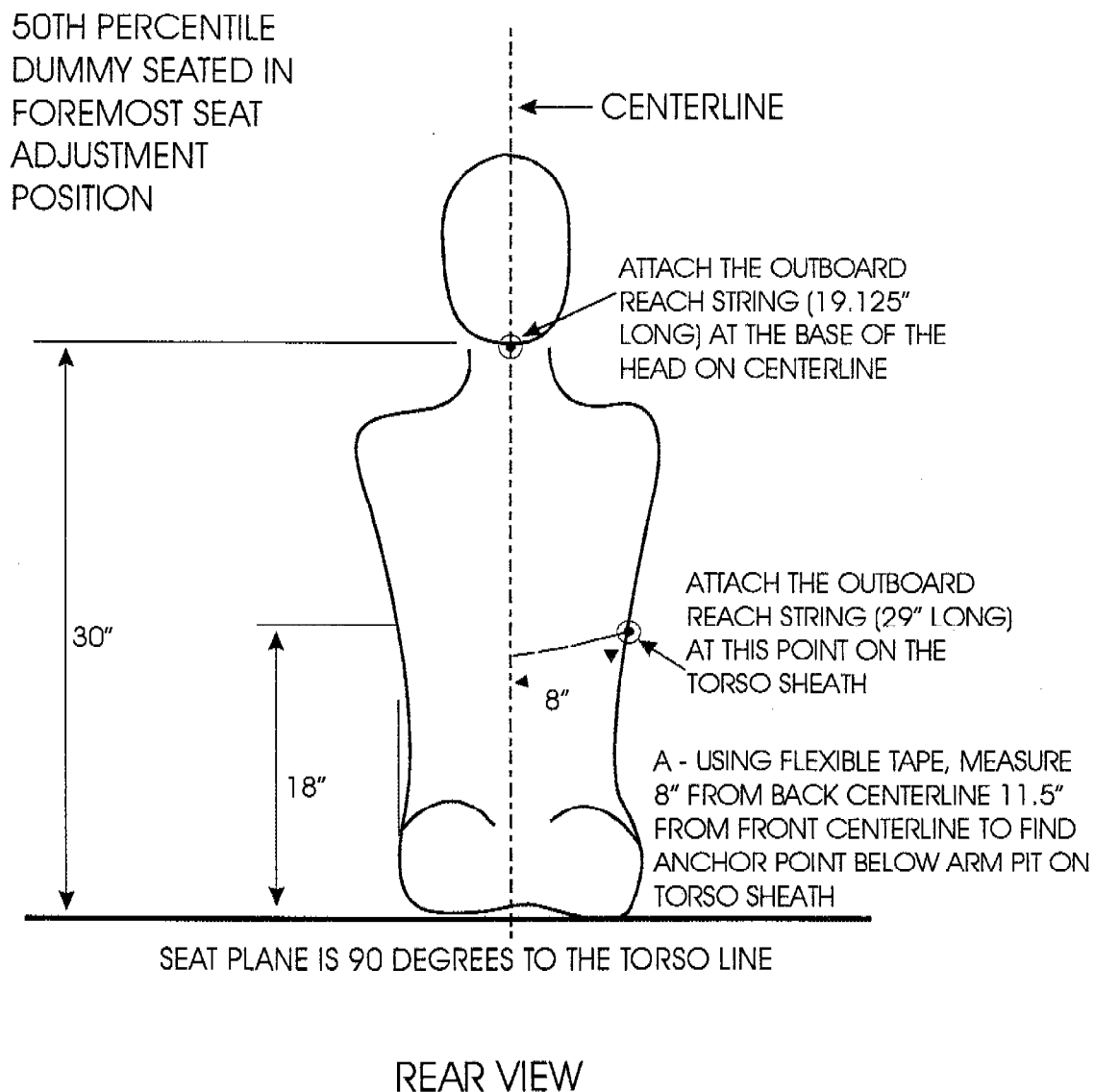


Figure 1C

# USE OF CLEARANCE TEST BLOCK TO DETERMINE HAND/ARM ACCESS

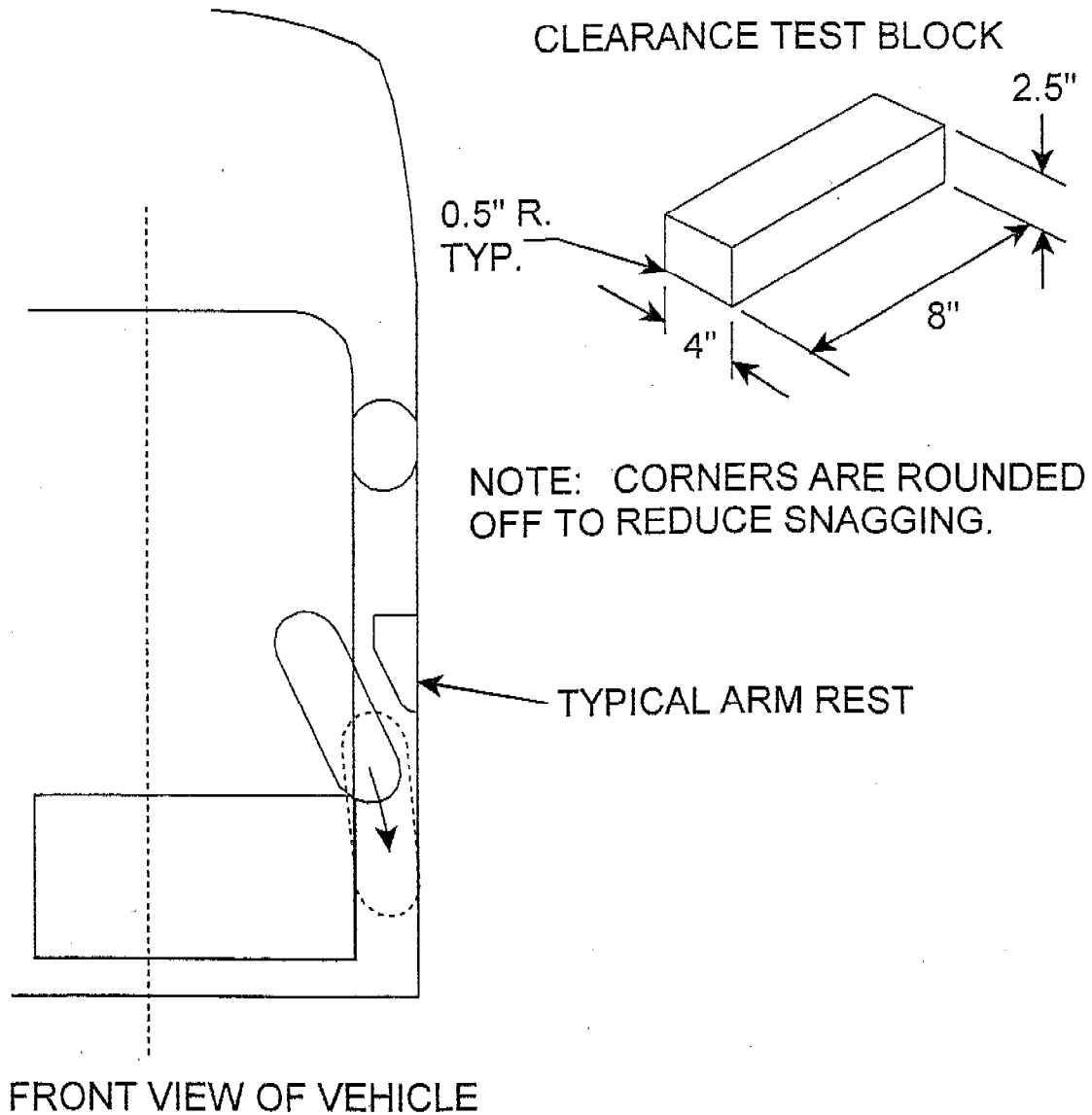


Figure 2C

Appendix A

Photographs

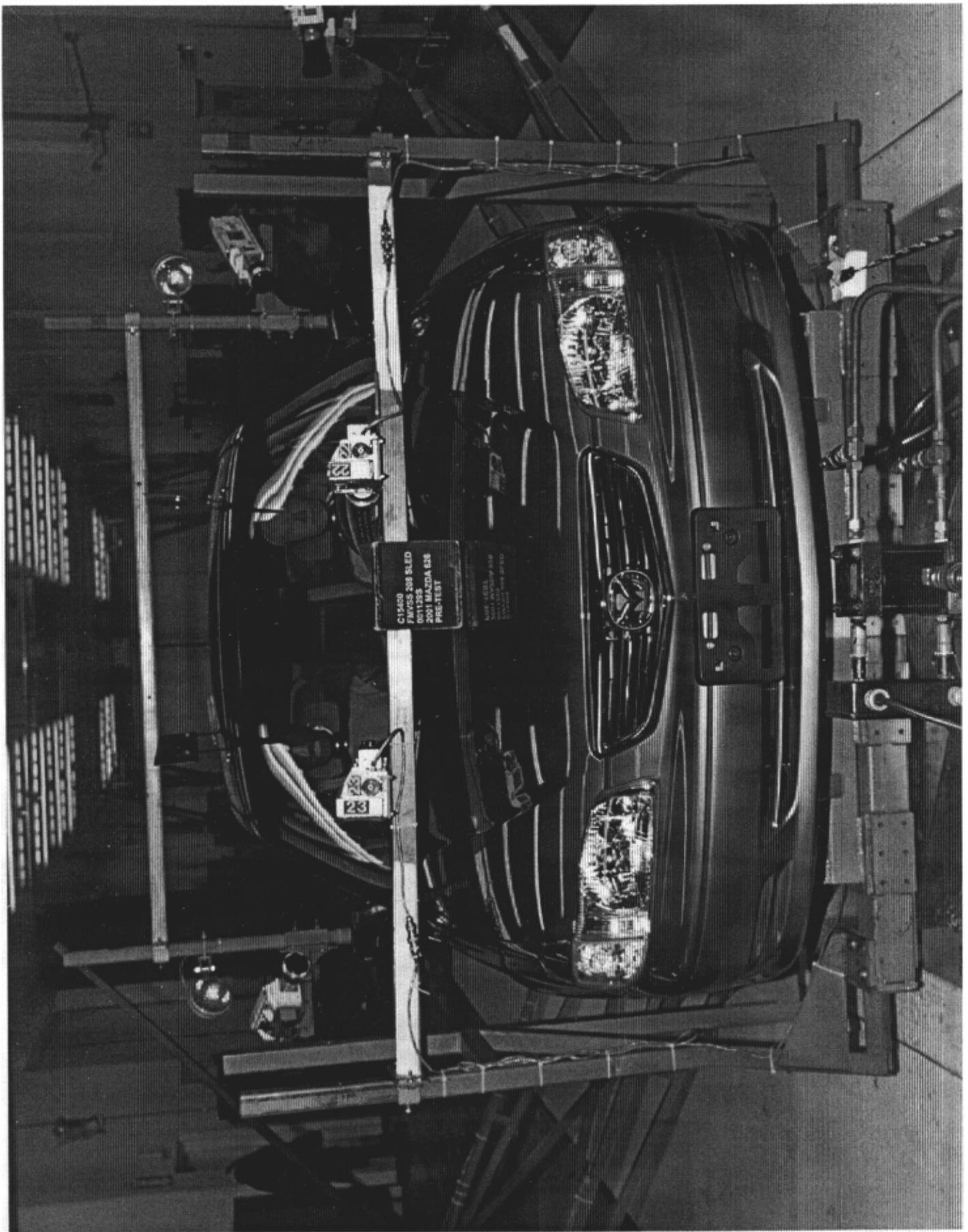


Figure A-1 Pre-Test Front View of Test Vehicle Mounted to Sled

A-2

S001129

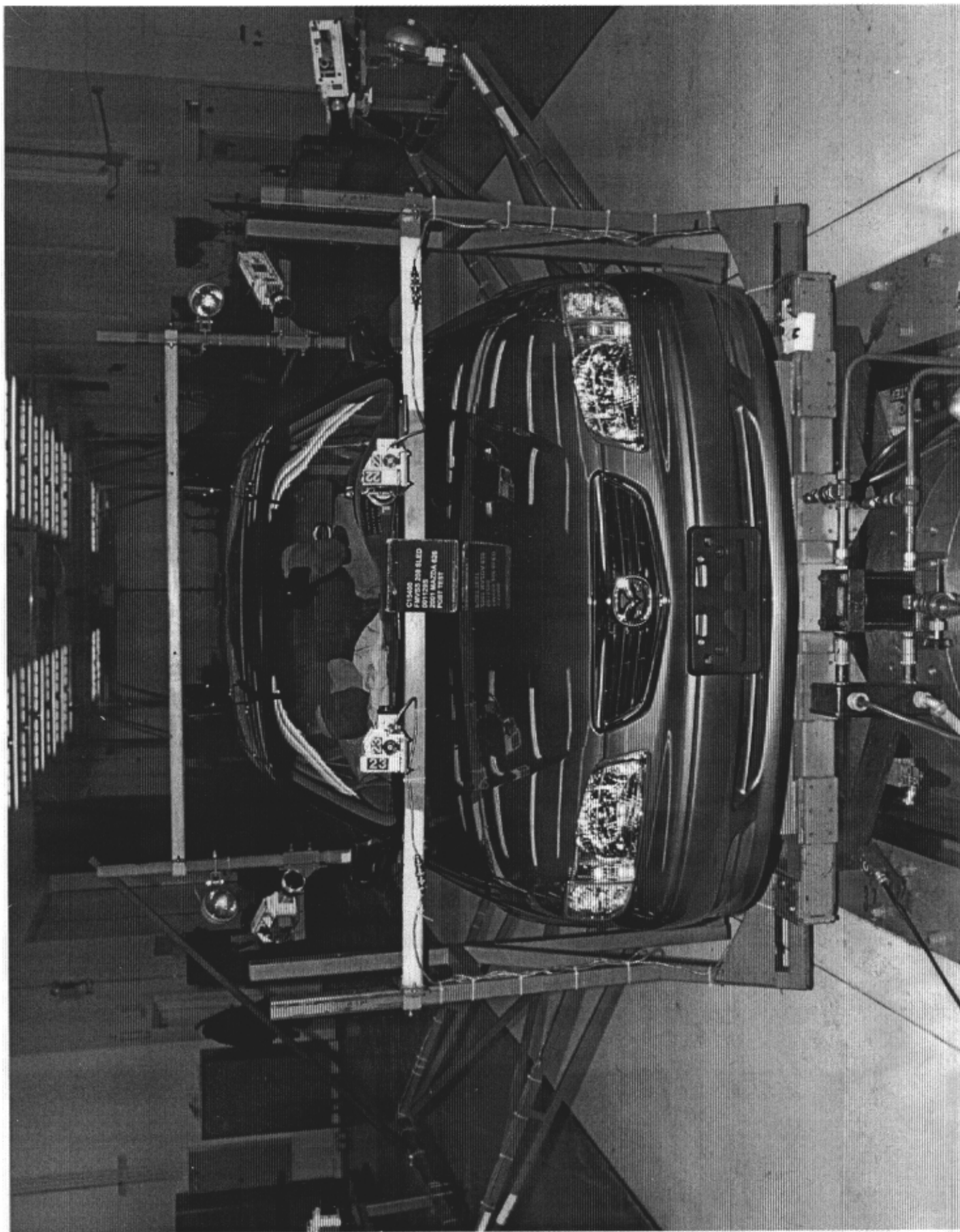


Figure A-2 Post-Test Front View of Test Vehicle Mounted to Sled

A-3

S001129

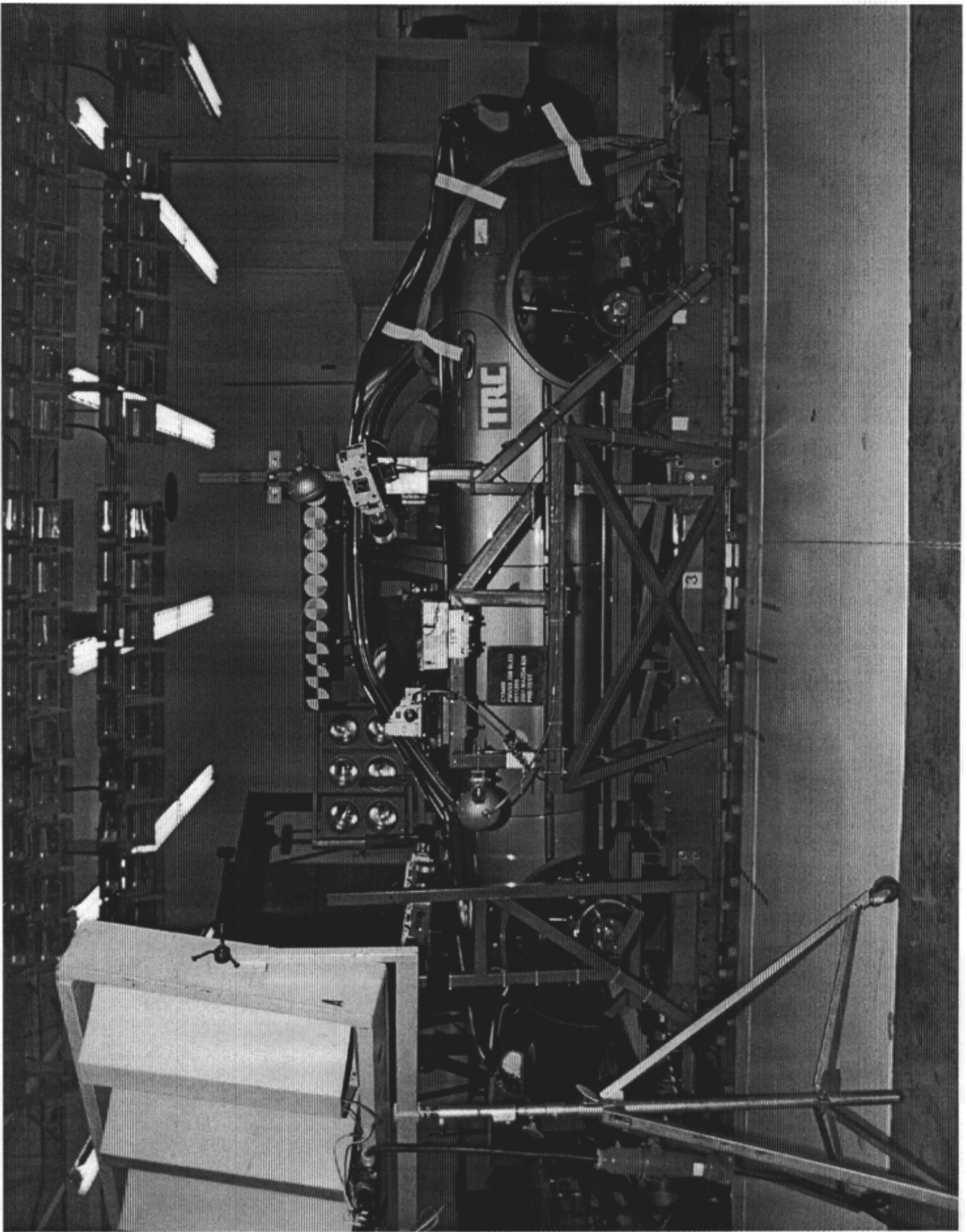


Figure A-3 Pre-Test Left Side View of Test Vehicle Mounted to Sled

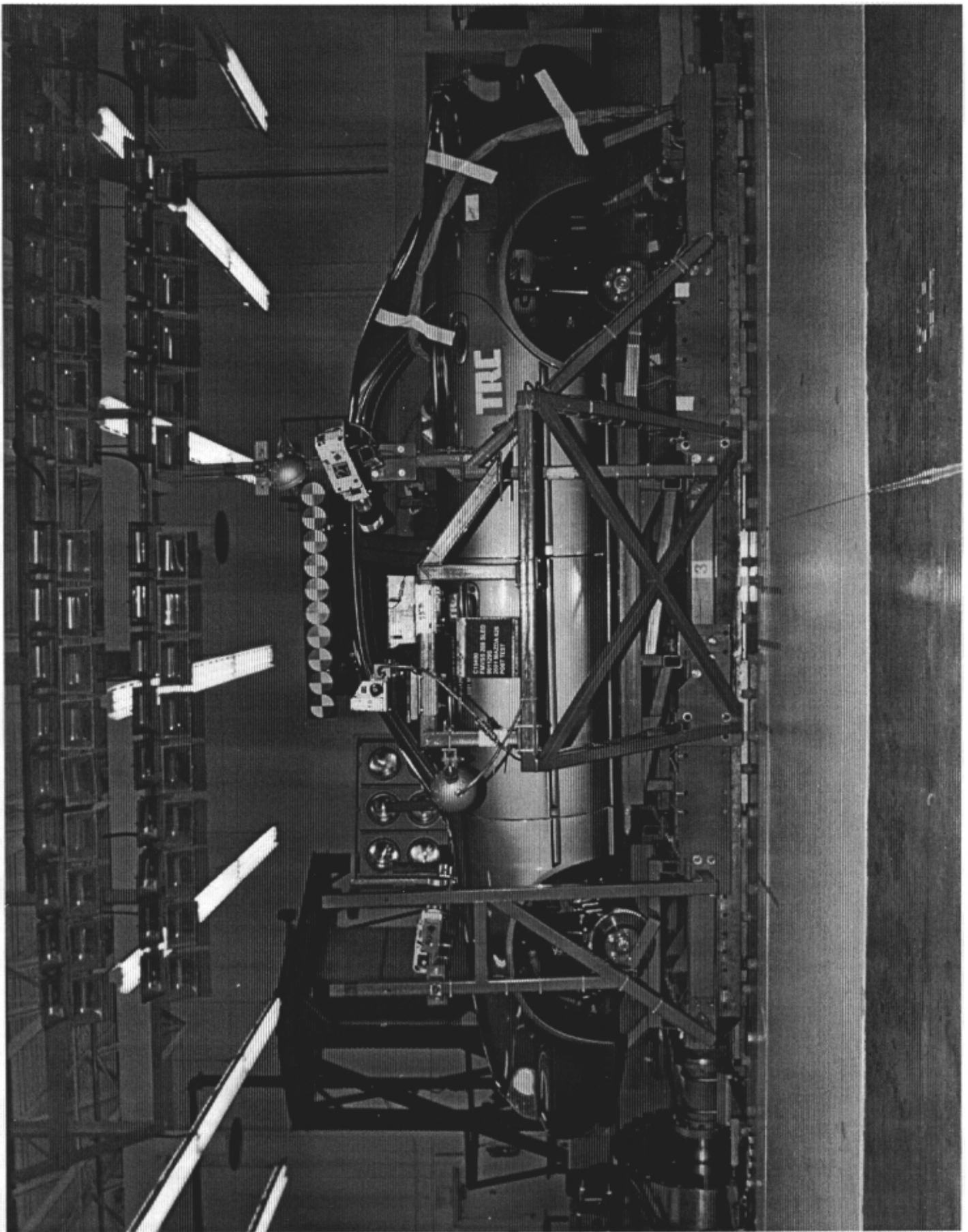


Figure A-4 Post-Test Left Side View of Test Vehicle Mounted to Sled

A-5

S001129



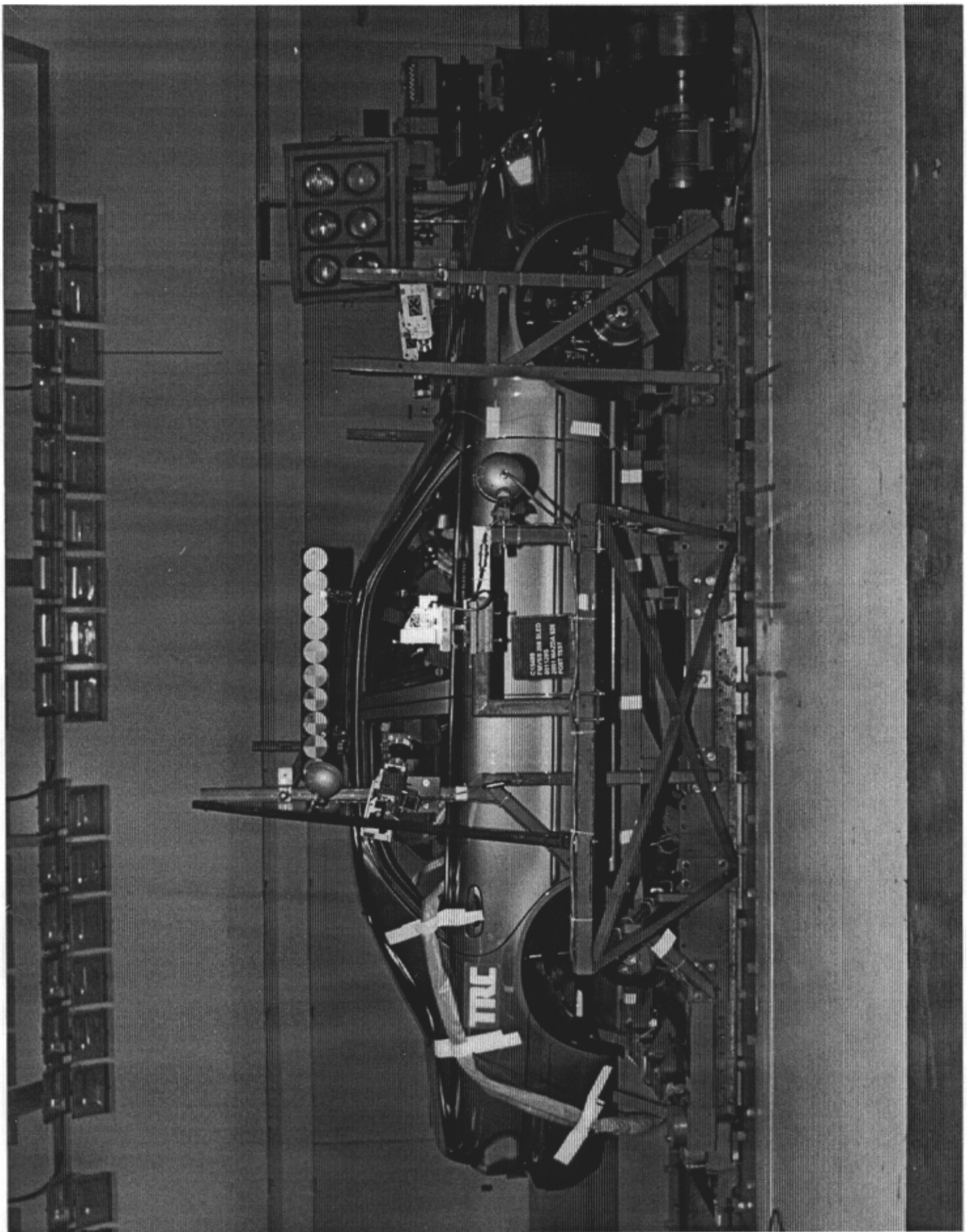


Figure A-6 Post-Test Right Side View of Test Vehicle Mounted to Sled

A-7

S001129



Figure A-7 Pre-Test Windshield View  
A-8

S001129

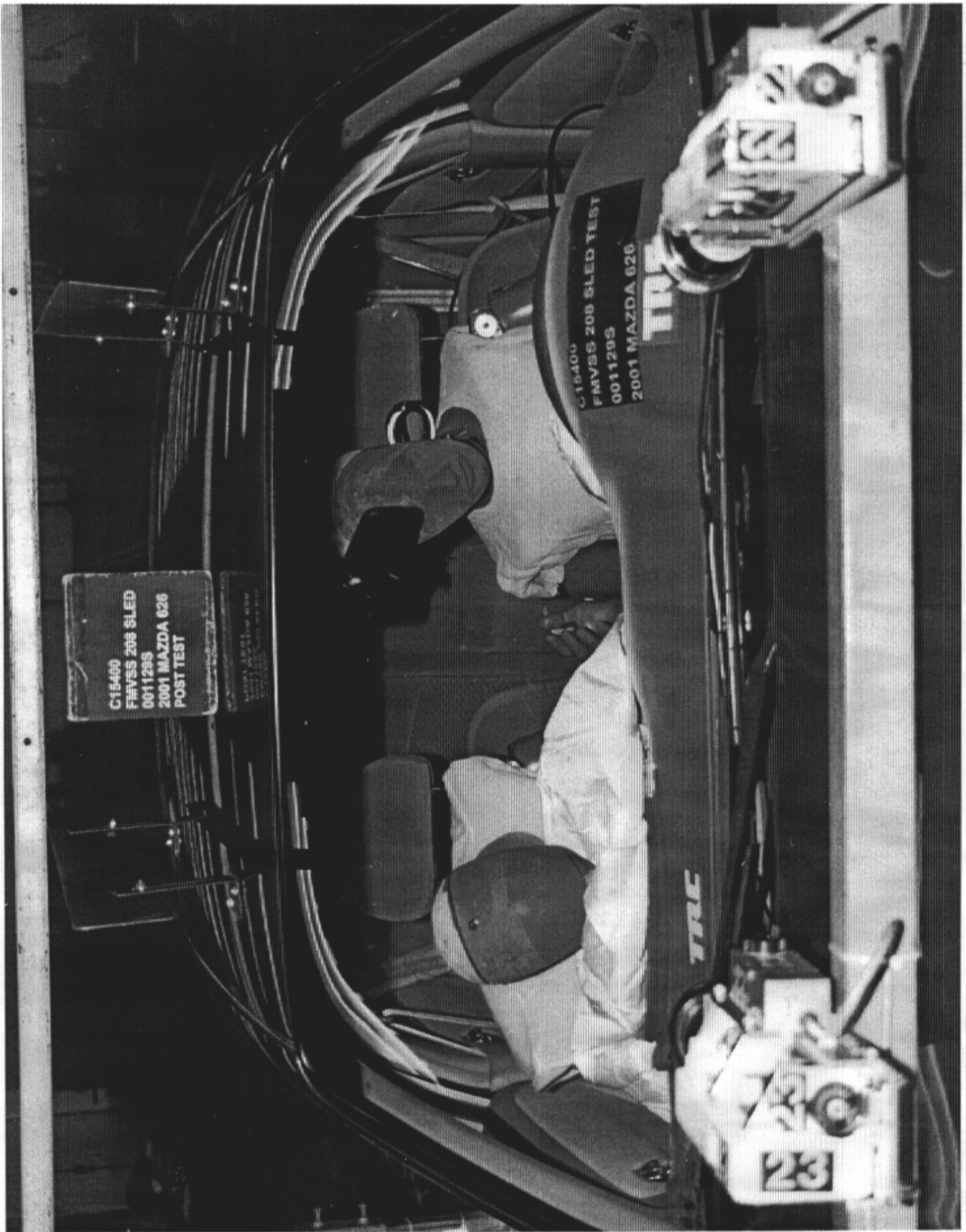


Figure A-8 Post-Test Windshield View  
A-9

S001129



Figure A-9 Pre-Test Windshield View - Driver and Passenger Dummies



Figure A-10 Post-Test Windshield View - Driver and Passenger Dummies

A-11

S001129

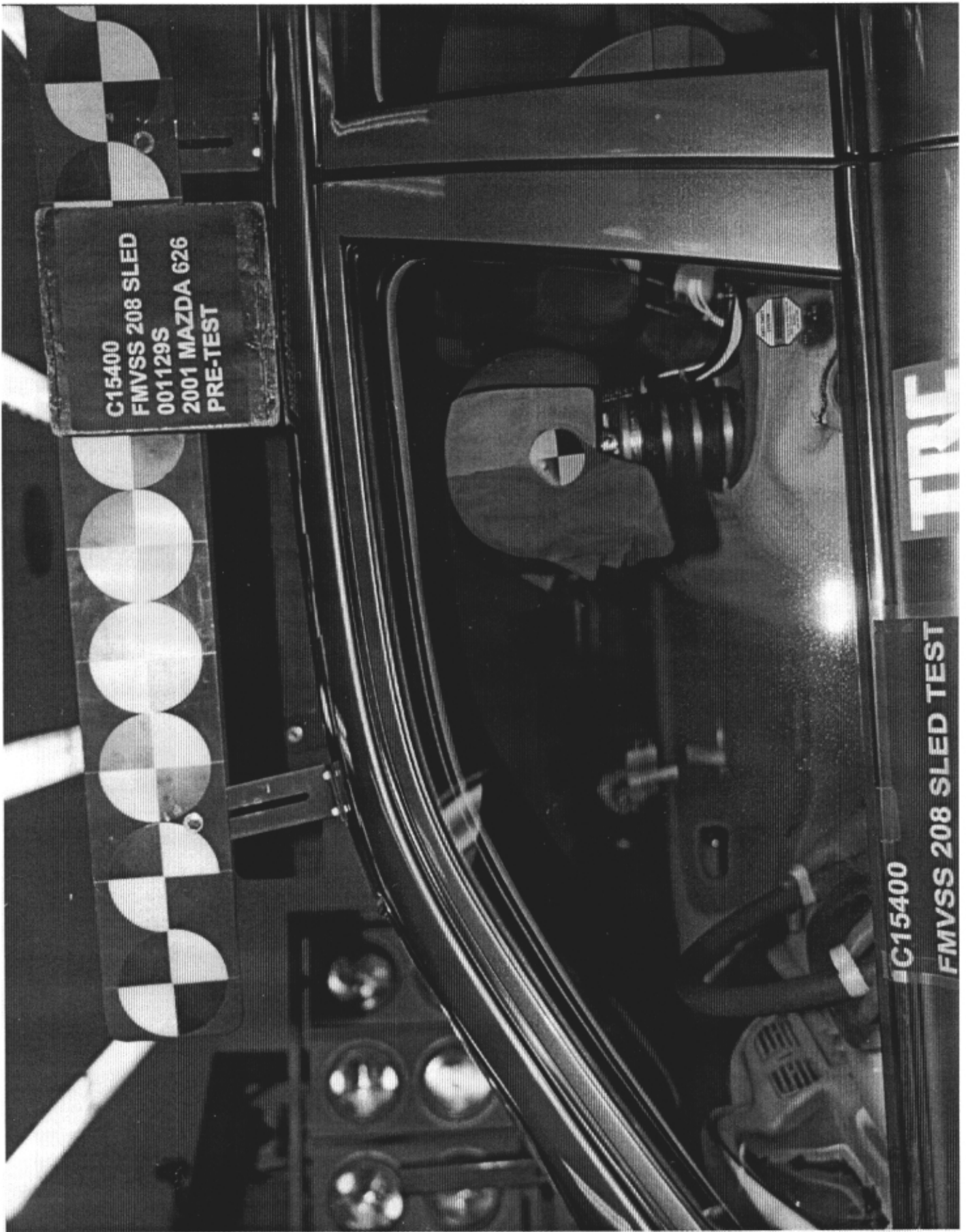


Figure A-11 Pre-Test Driver Dummy Position View with Door Closed

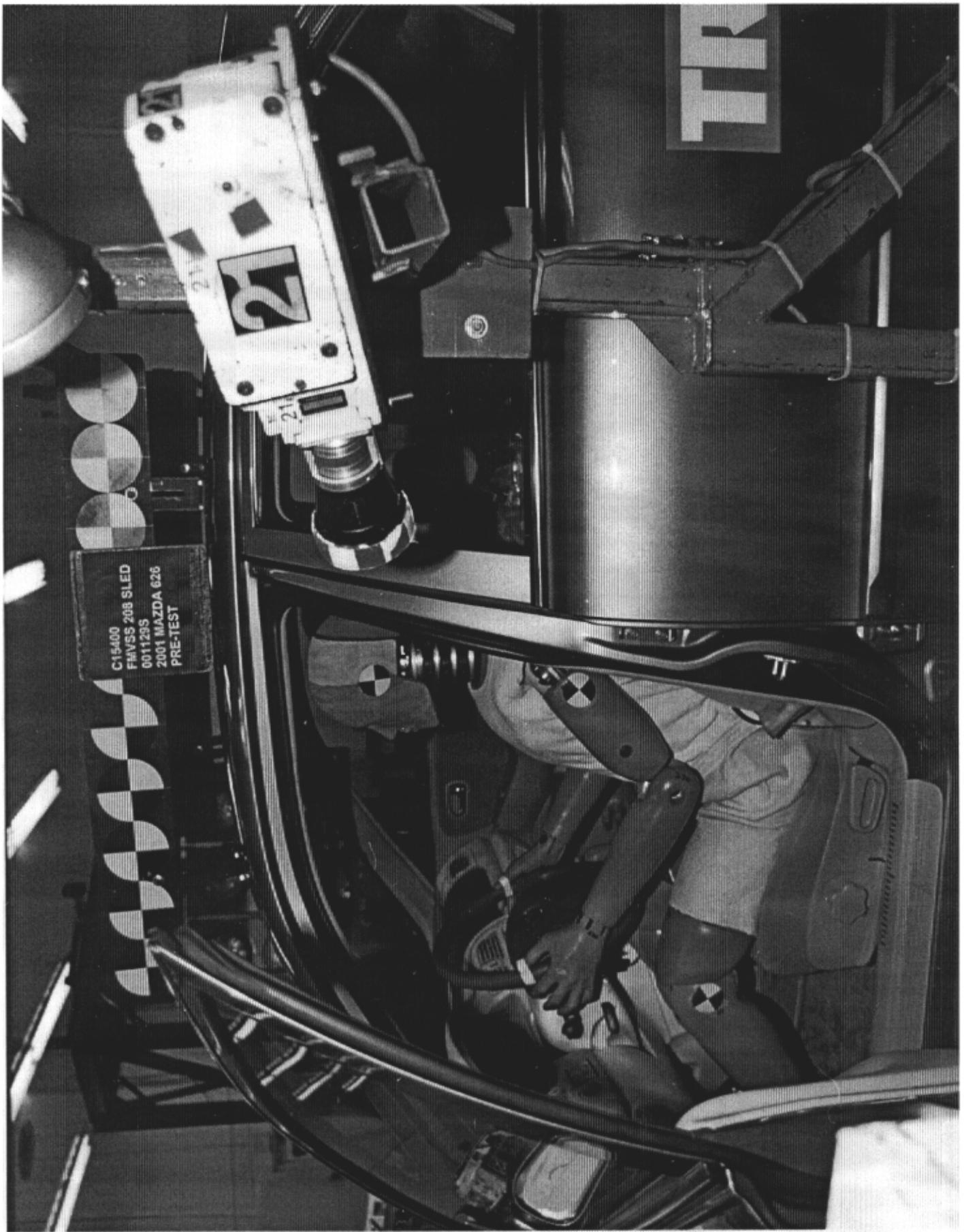


Figure A-12 Pre-Test Driver Dummy Position View with Door Open

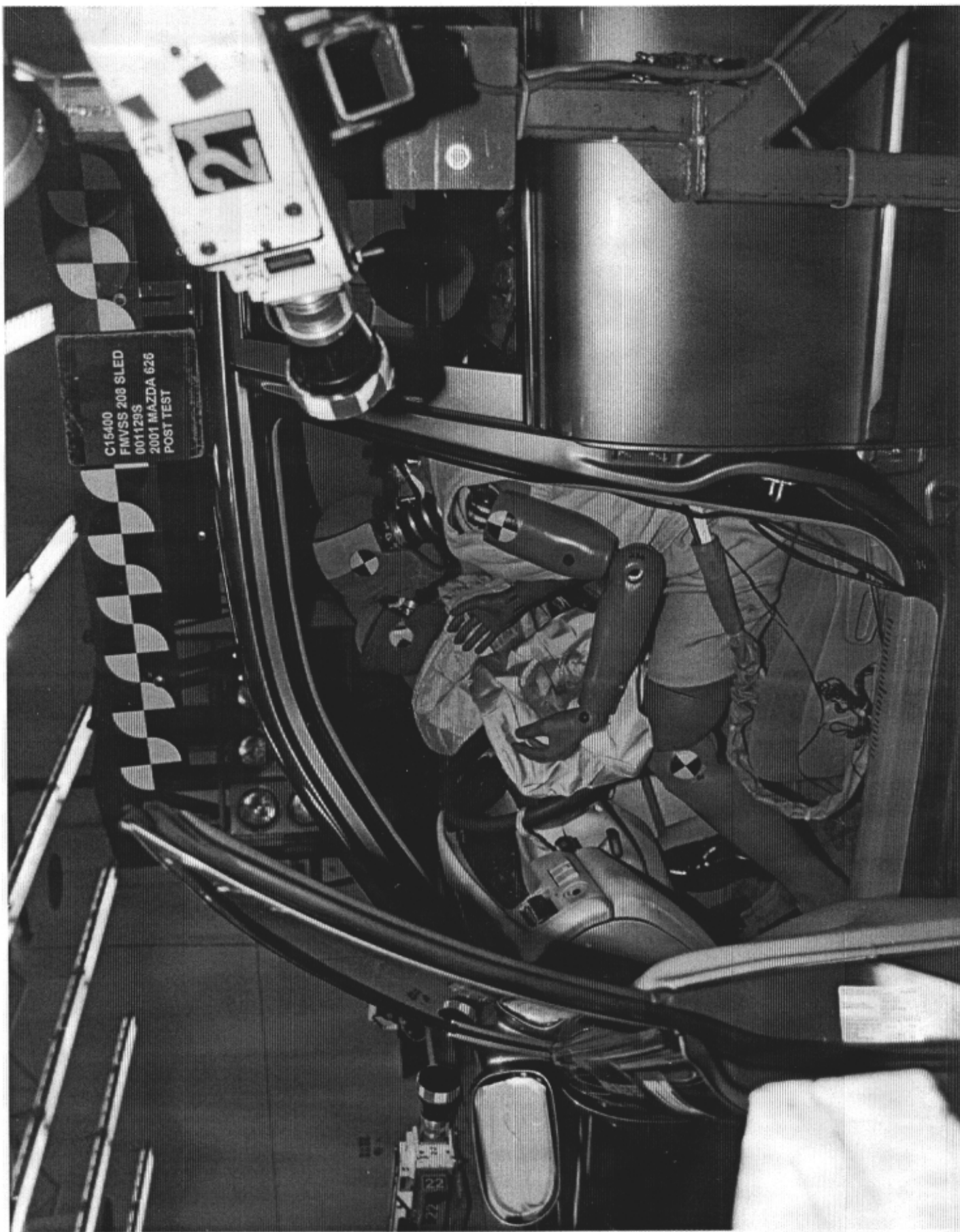


Figure A-13 Post-Test Driver Dummy Position View with Door Open

A-14

S001129



Figure A-14 Pre-Test Driver Seat Track Position View  
A-15

S001129



Figure A-15 Post-Test Driver Seat Track Position View  
A-16

S001129

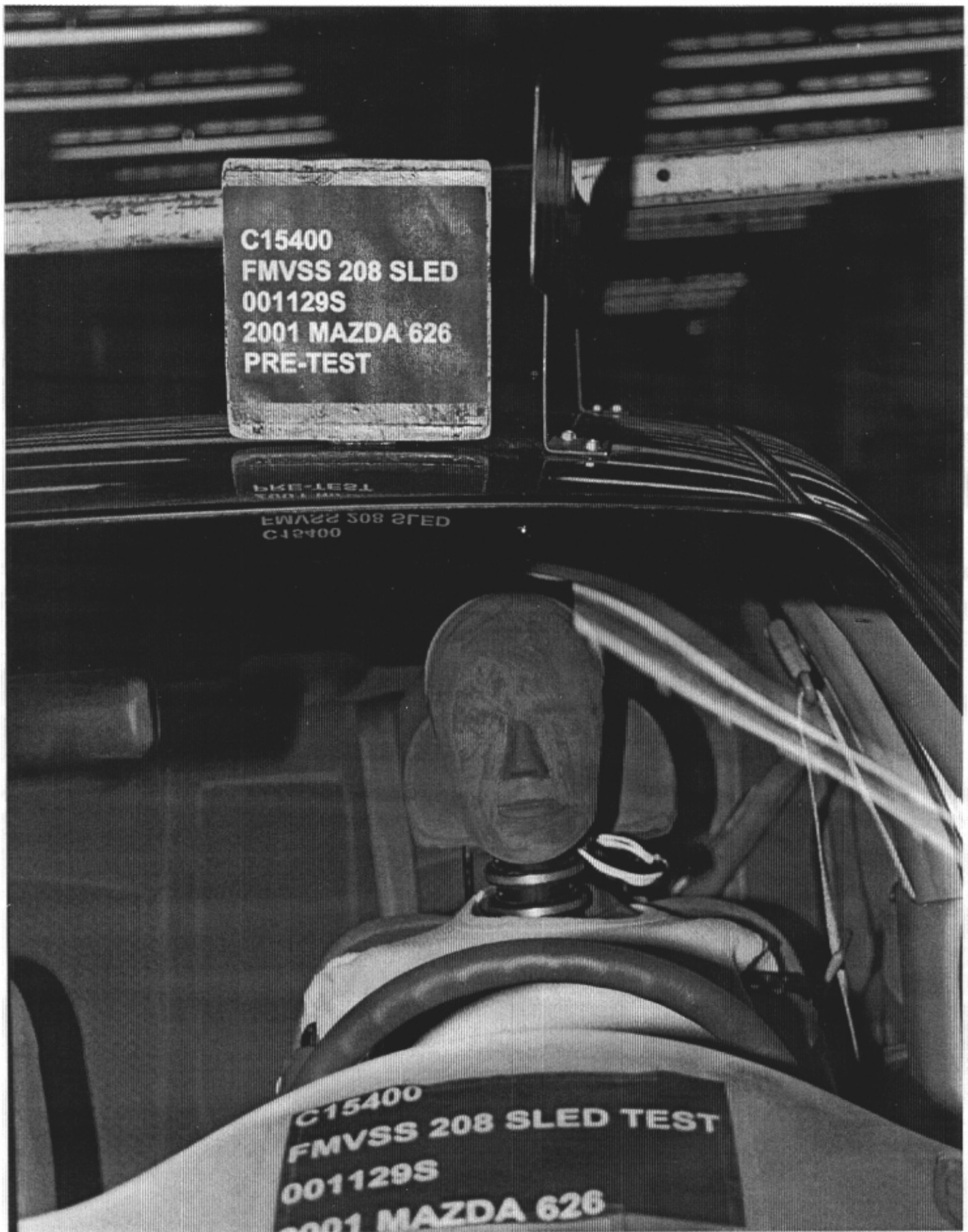


Figure A-16 Pre-Test Driver Dummy Position Front View

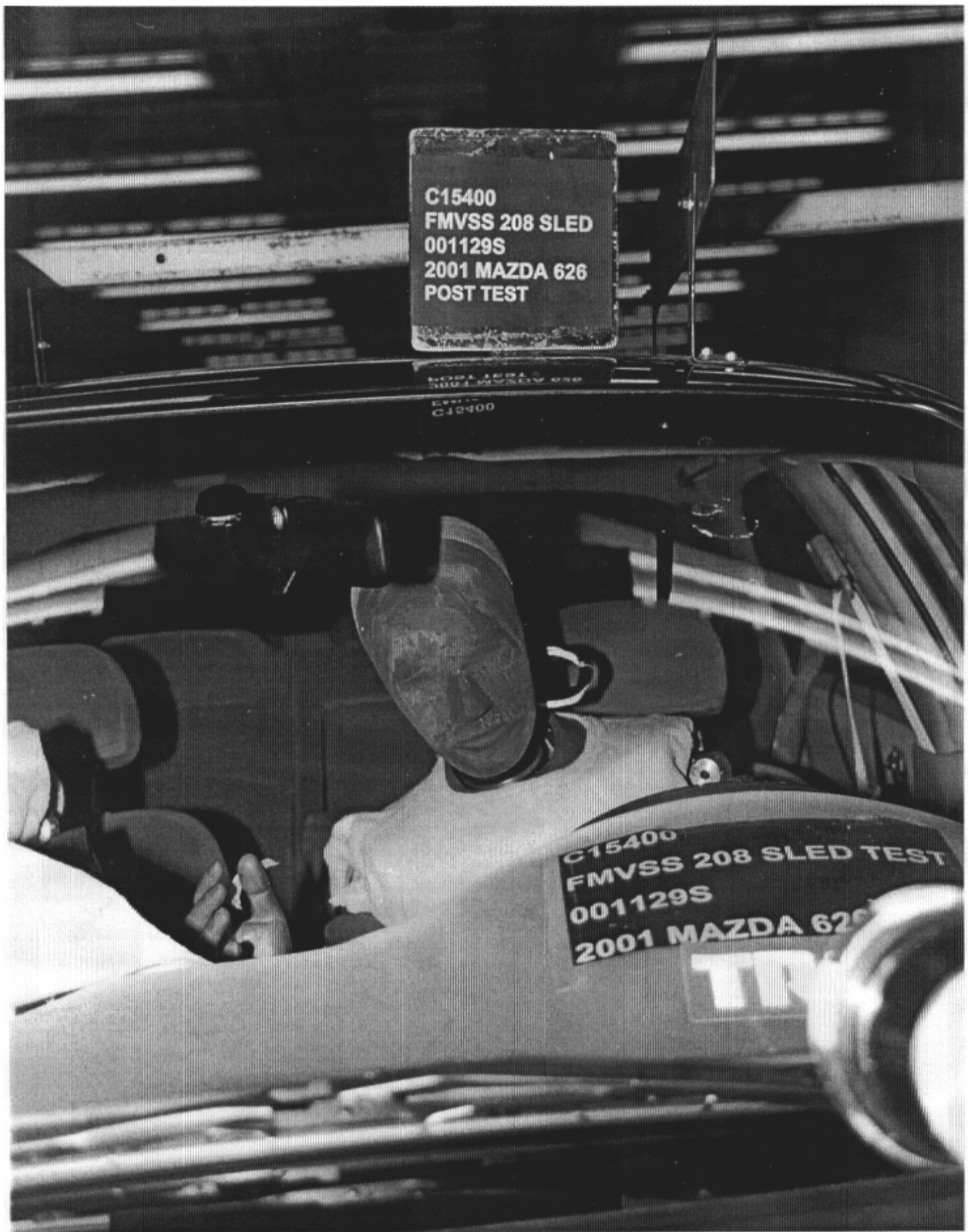


Figure A-17 Post-Test Driver Dummy Position Front View



Figure A-18 Pre-Test Passenger Dummy Position View with Door Open

A-19

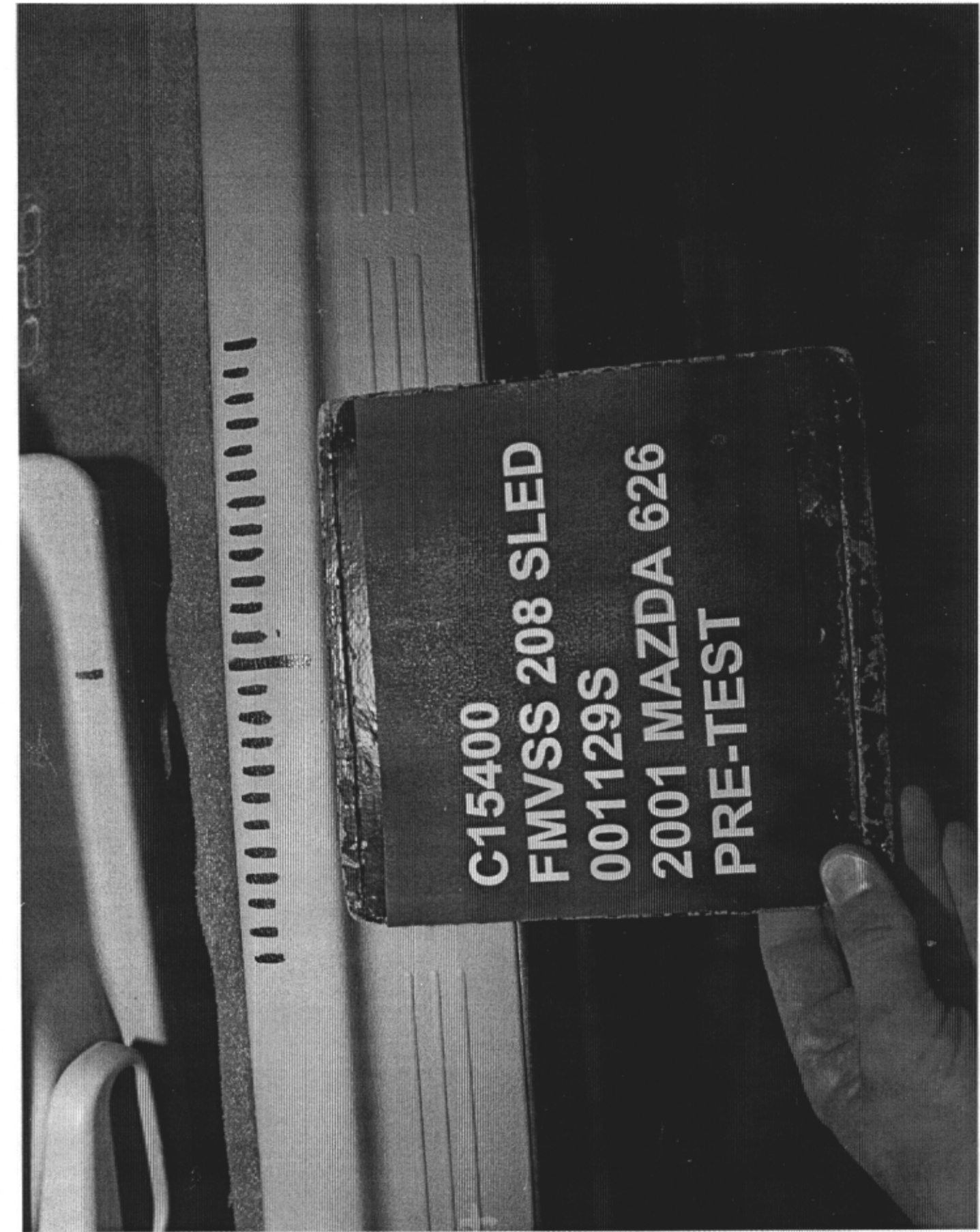
S001129



Figure A-19 Post-Test Passenger Dummy Position View with Door Open

A-20

S001129



**C15400**  
**FMVSS 208 SLED**  
**001129S**  
**2001 MAZDA 626**  
**PRE-TEST**

Figure A-20 Pre-Test Passenger Seat Track Position View

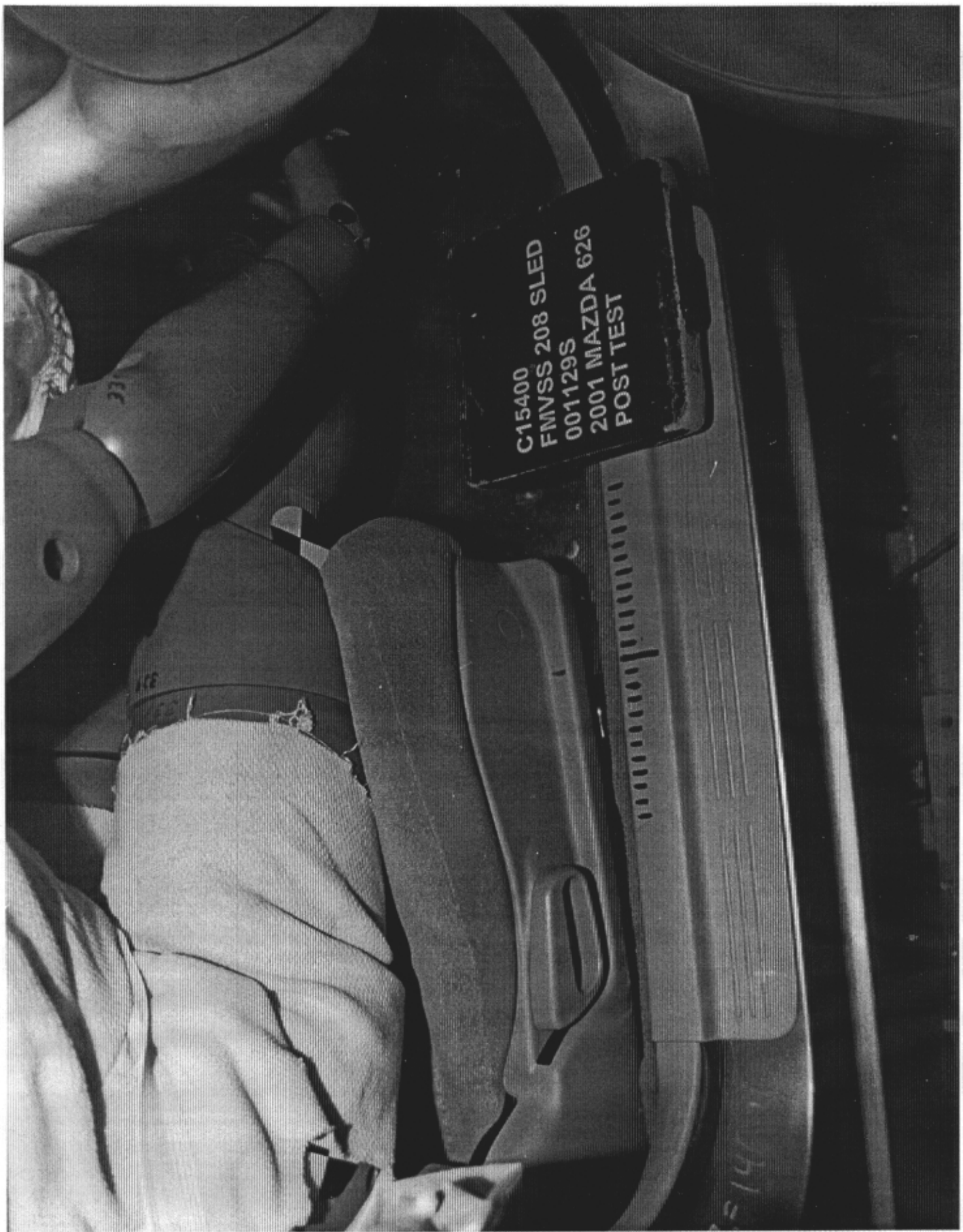


Figure A-21 Post-Test Passenger Seat Track Position View

A-22

S001129

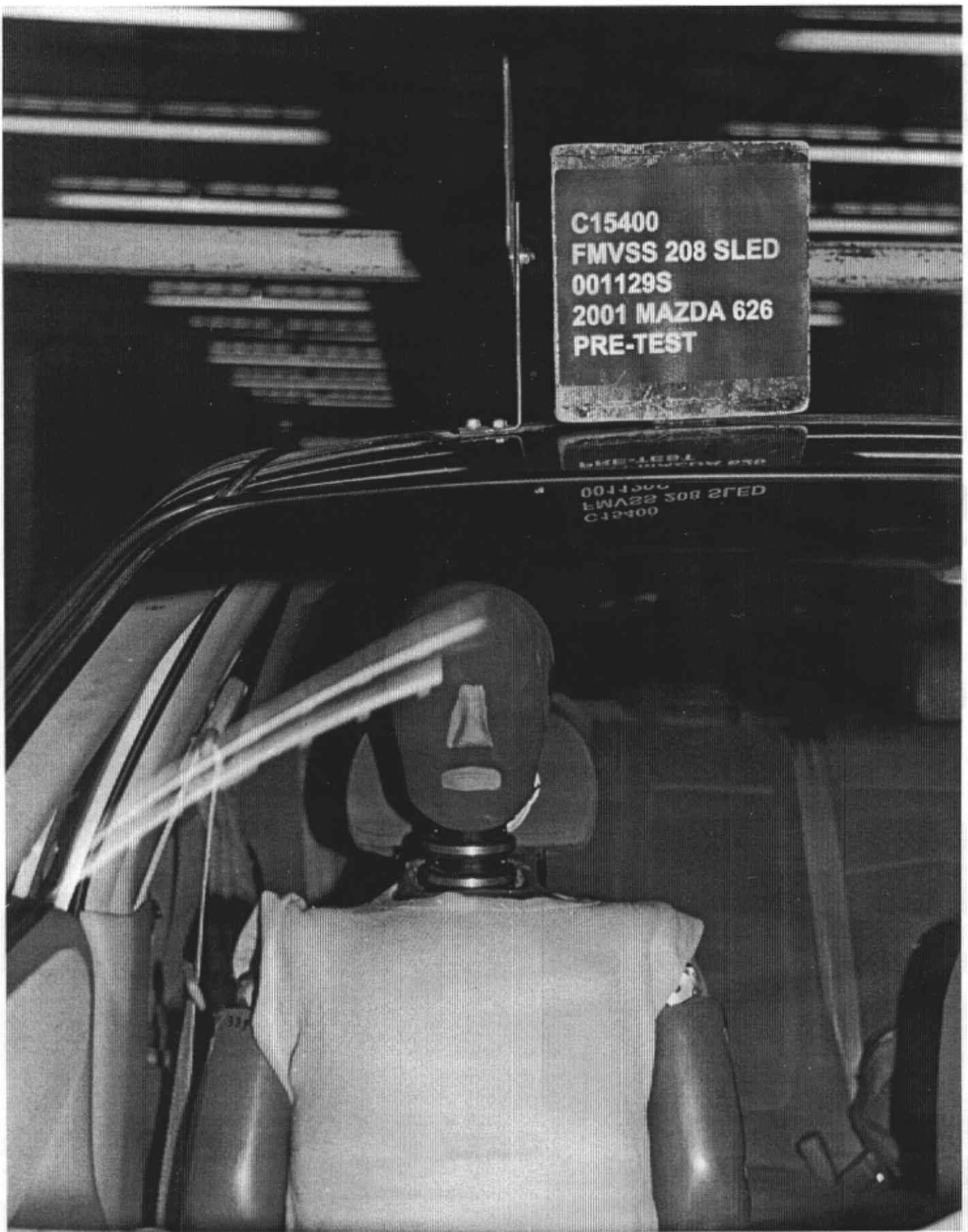


Figure A-22 Pre-Test Passenger Dummy Position Front View



Figure A-23 Post-Test Passenger Dummy Position Front View

A-24

S001129



Figure A-24 Post-Test Driver Airbag - View 1  
A-25

S001129

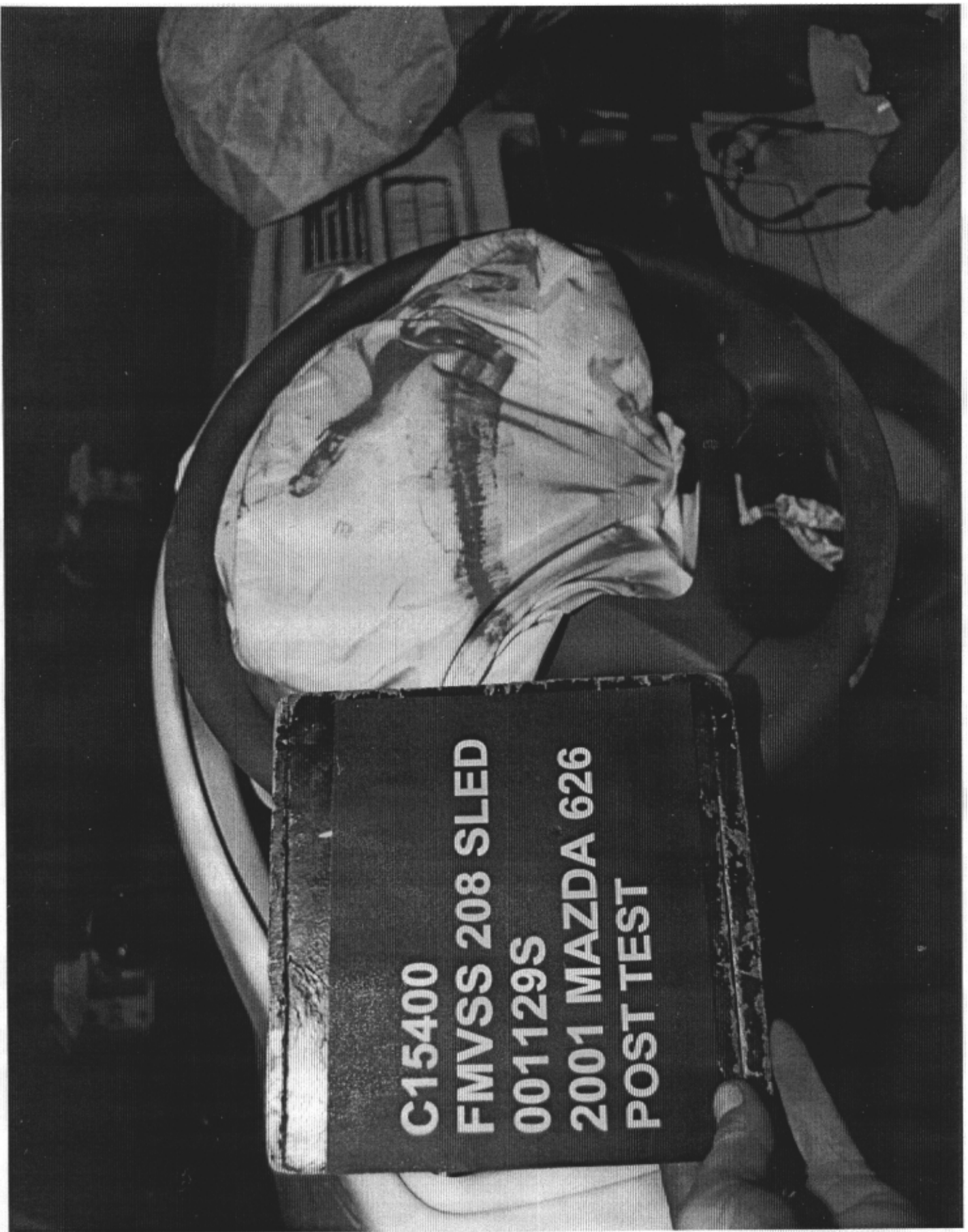


Figure A-25 Post-Test Driver Airbag - View 2  
A-26

S001129

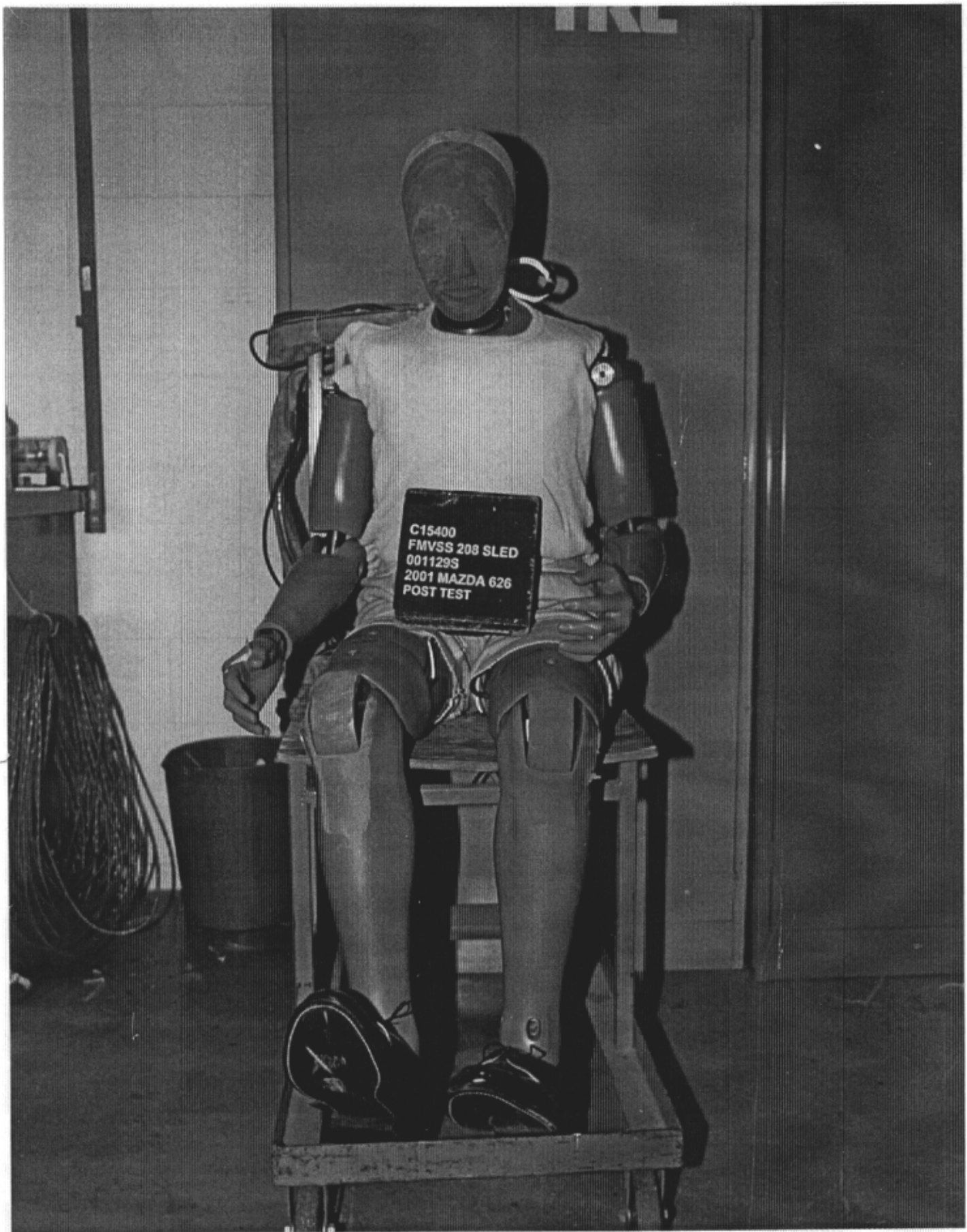


Figure A-26 Post-Test Driver Dummy Removed from Vehicle Overall View

A-27

S001129




Figure A-27 Post-Test Driver Head Contact - View 1  
A-28

S001129

**WARNING**

DEATH or SERIOUS INJURY can occur

- Children 12 and under can be killed by the air bag
- The BACK SEAT is the SAFEST place for children
- NEVER put a rear-facing child seat in the front
- Sit as far back as possible from the air bag
- ALWAYS use SEAT BELTS and CHILD RESTRAINTS



**C15400  
FMVSS 208 SLED  
001129S  
2001 MAZDA 626  
POST TEST**

Figure A-28 Post-Test Driver Head Contact - View 2

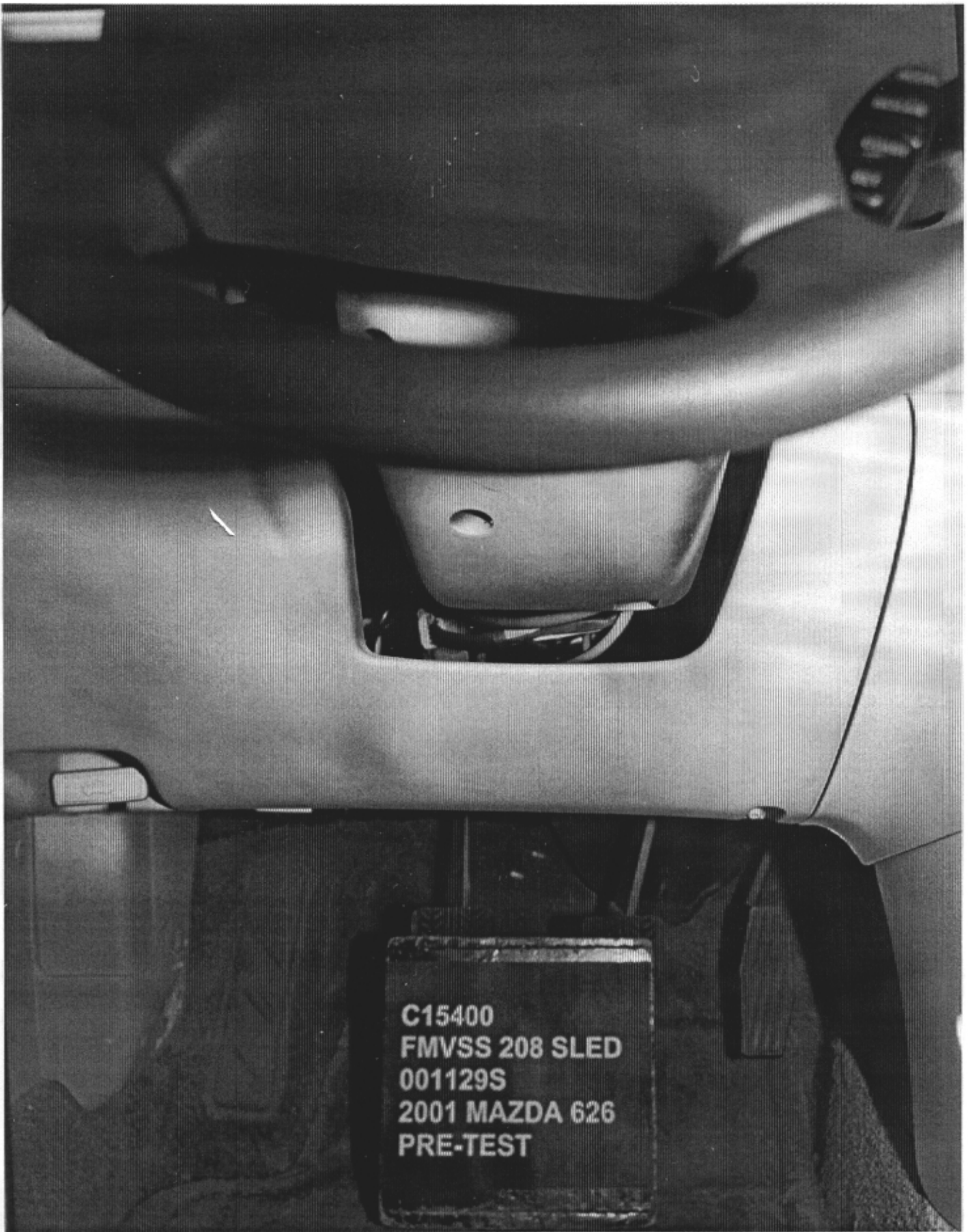


Figure A-29 Pre-Test Driver Knee Bolster View  
A-30

S001129

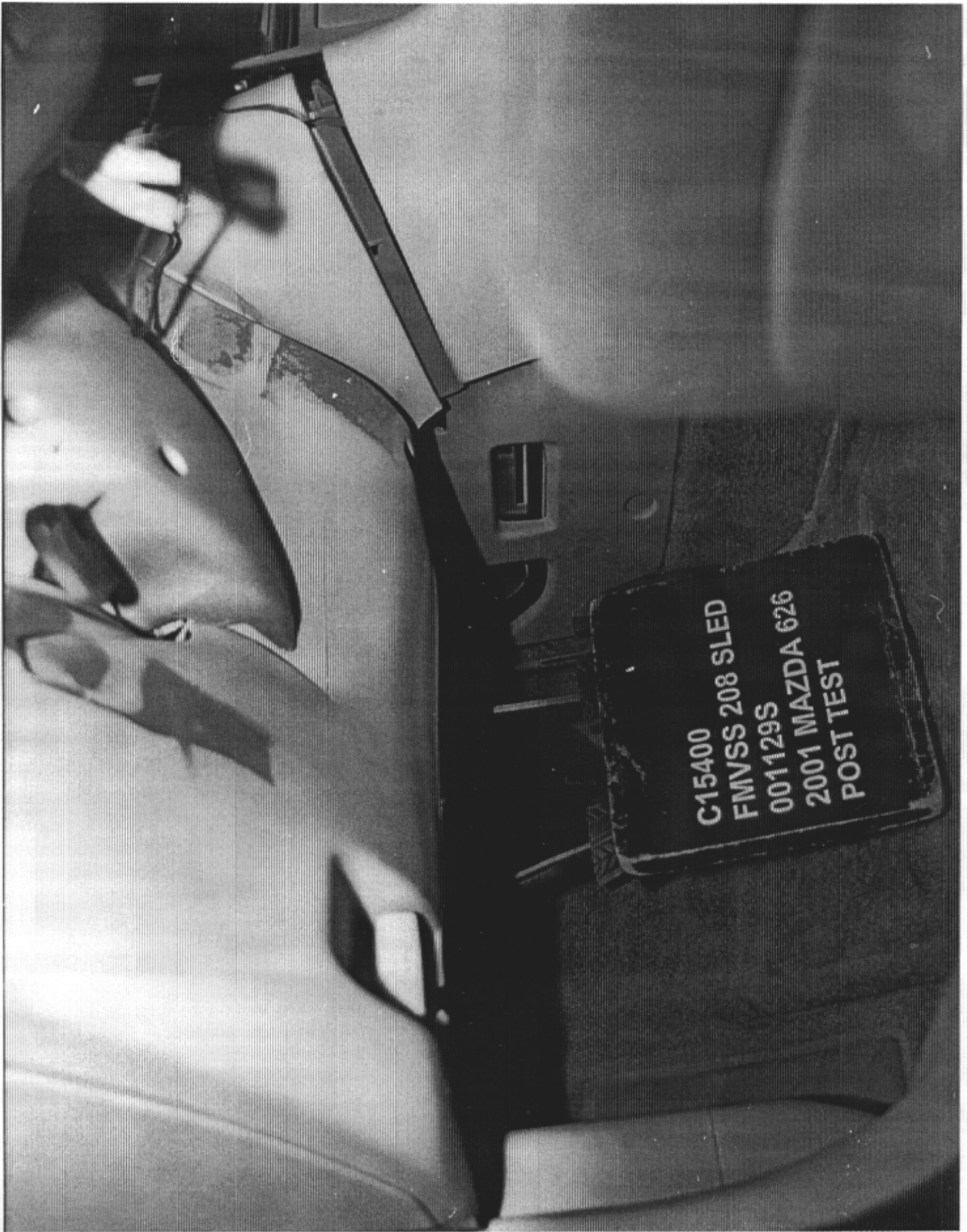


Figure A-30 Post-Test Driver Knee Bolster View  
A-31

S001129

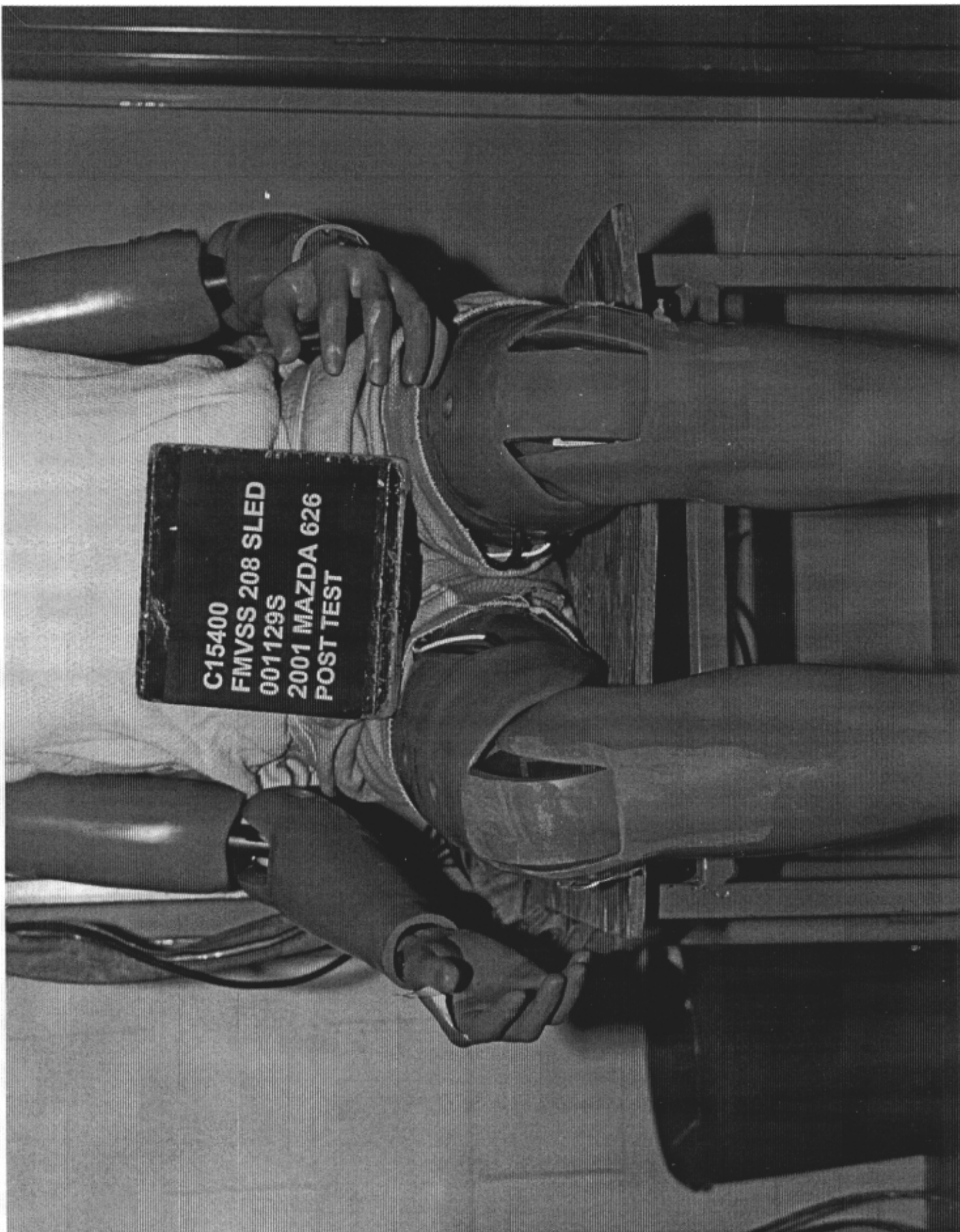


Figure A-31 Post-Test Driver Knee Contact View

A-32

S001129



C15400  
FMVSS 208 SLED  
001129S  
2001 MAZDA 626  
POST TEST

Figure A-32 Post-Test Passenger Airbag View

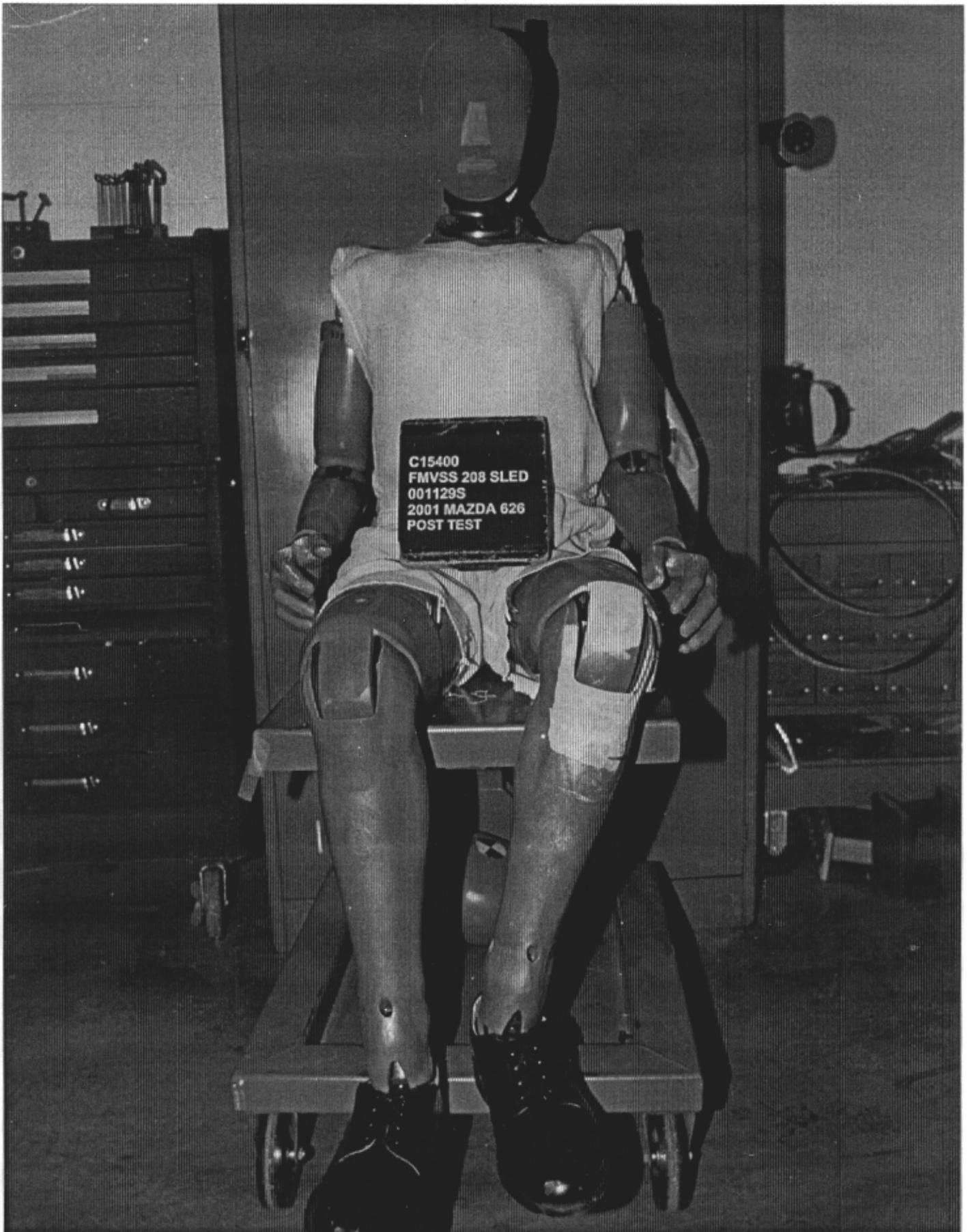


Figure A-33 Post-Test Passenger Dummy Removed from Vehicle Overall View

A-34

S001129

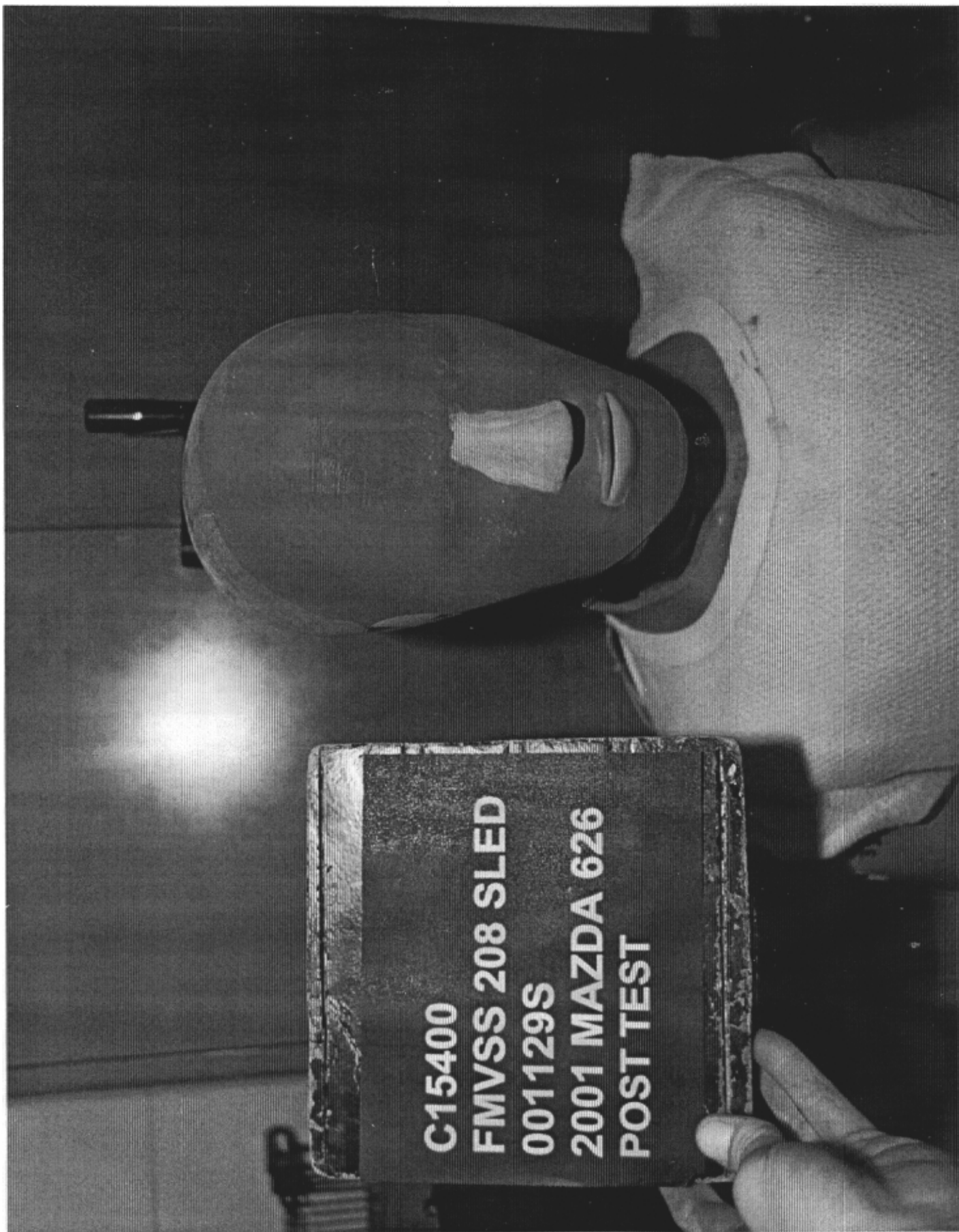


Figure A-34 Post-Test Passenger Head Contact - View 1  
A-35

S001129

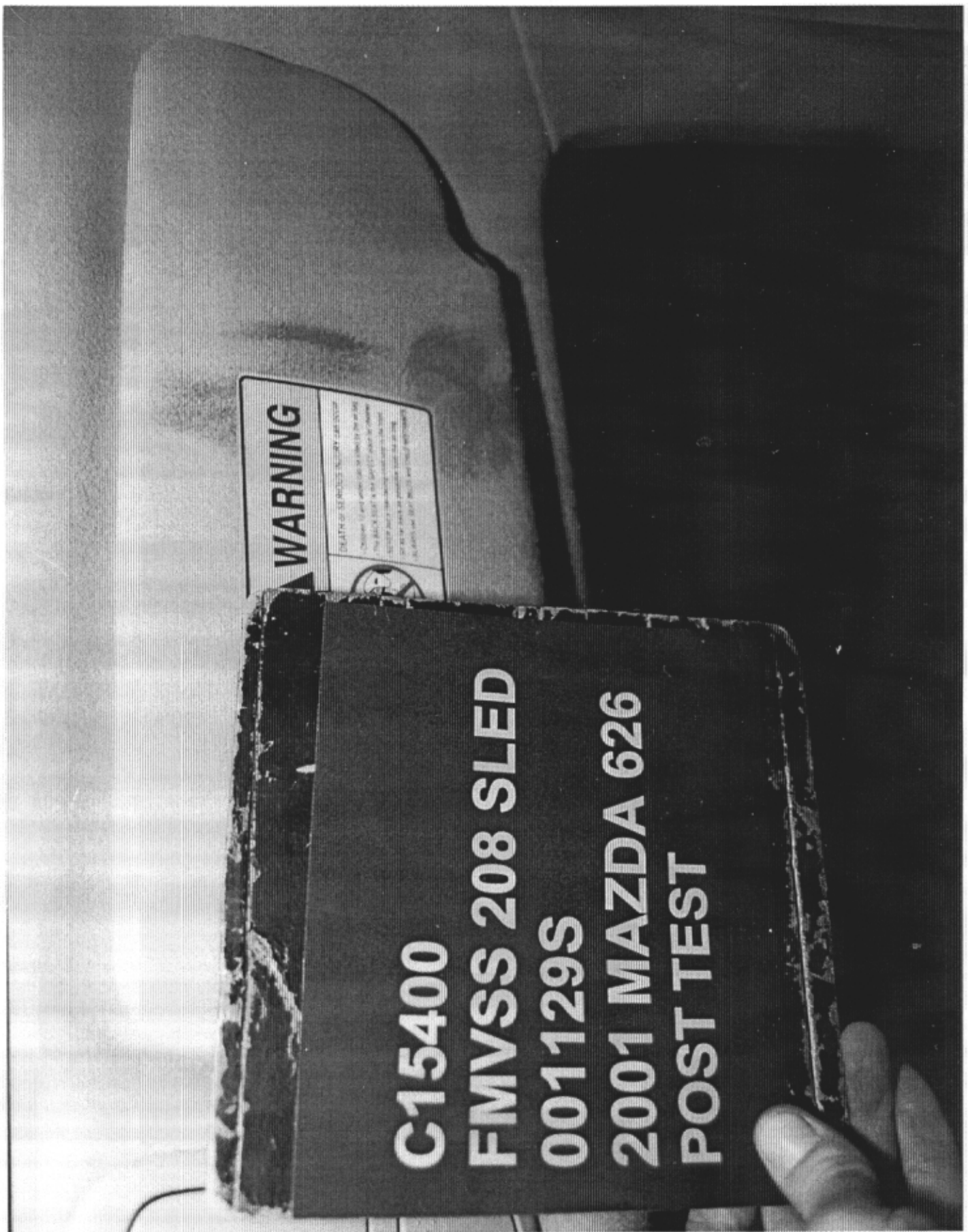


Figure A-35 Post-Test Passenger Head Contact - View 2

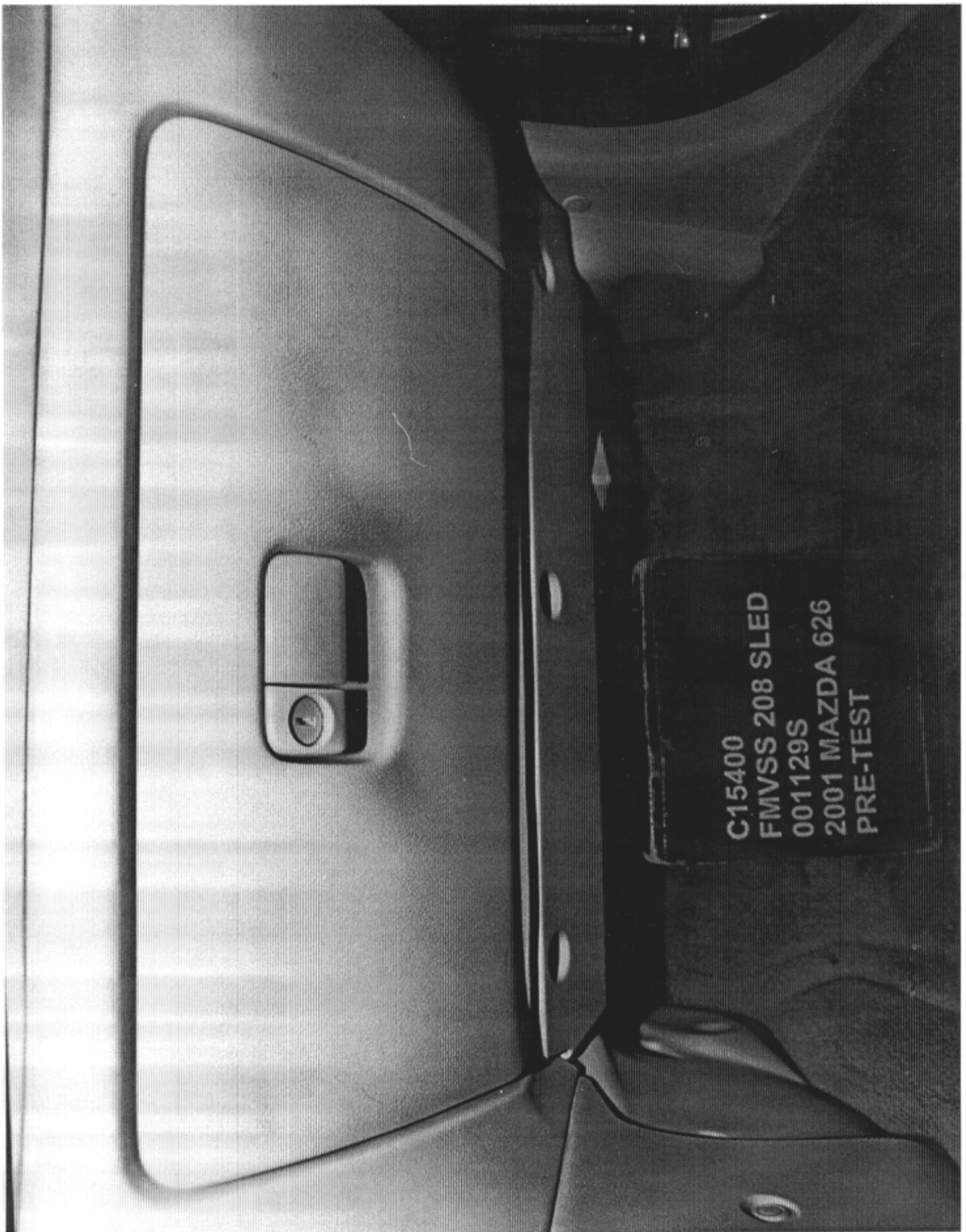


Figure A-36 Pre-Test Passenger Glove Box View  
A-37

S001129



Figure A-37 Post-Test Passenger Glove Box View  
A-38

S001129

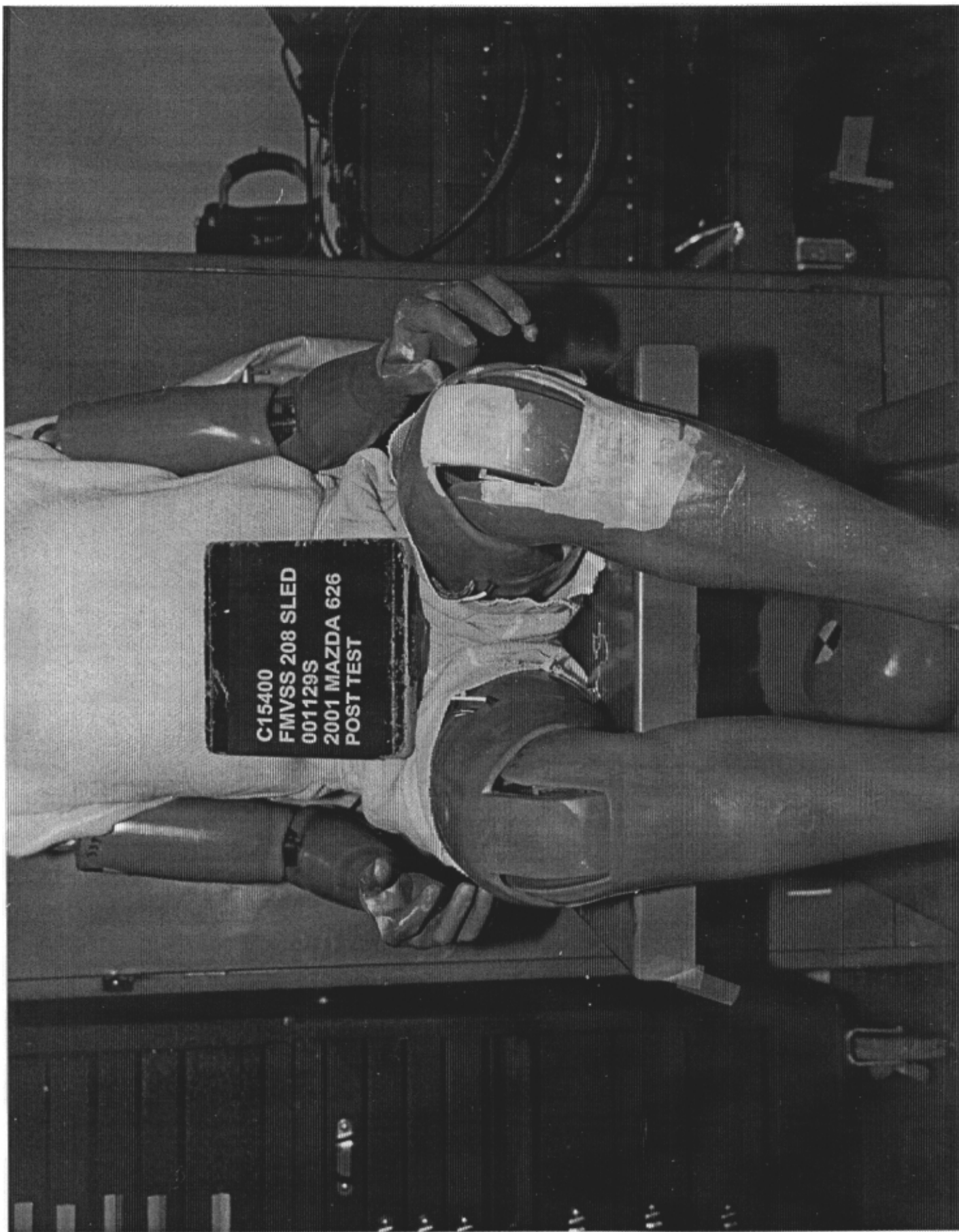


Figure A-38 Post-Test Passenger Knee Contact View  
A-39

S001129

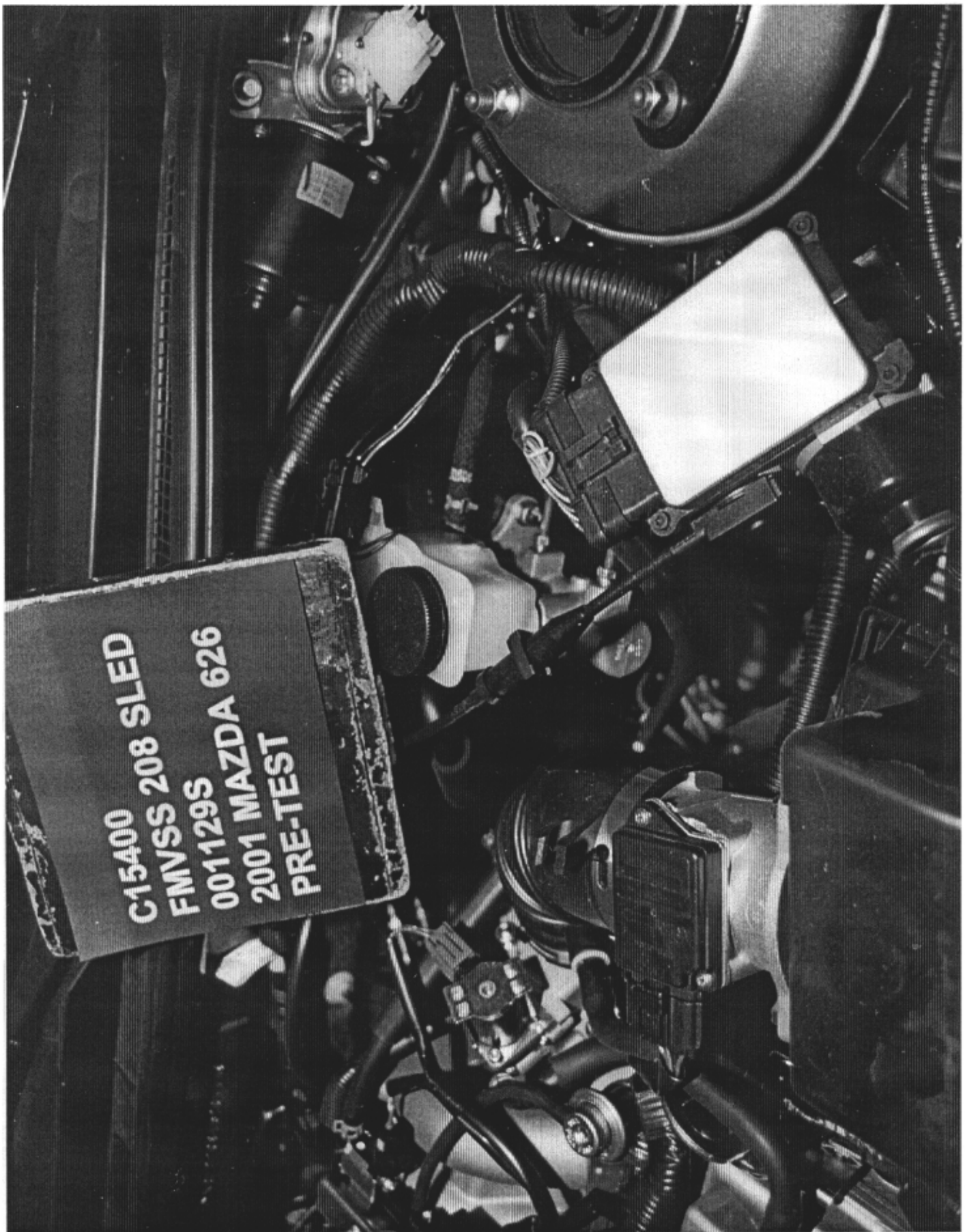


Figure A-39 Pre-Test Steering Column Linkage in Engine Compartment View

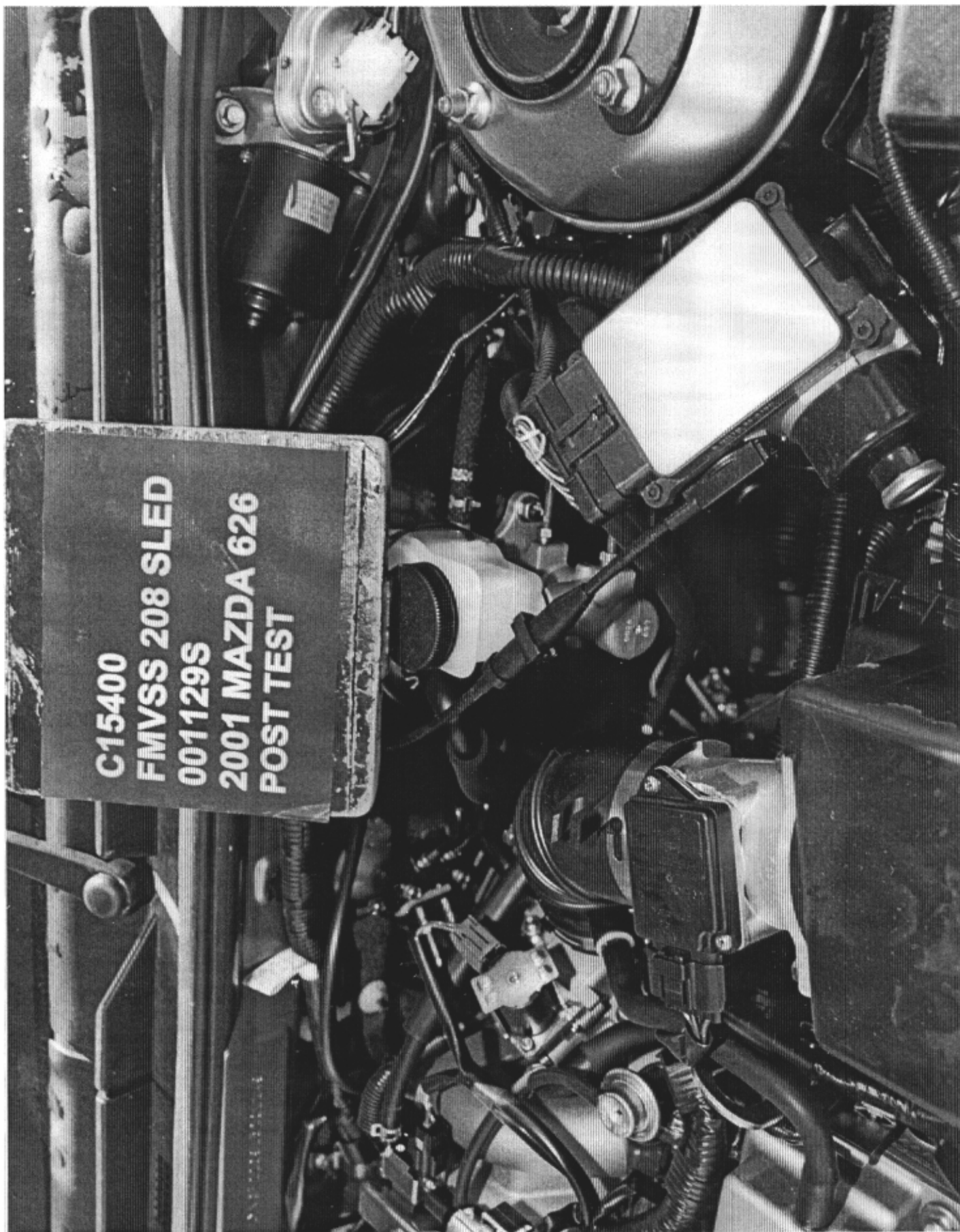


Figure A-40 Post-Test Steering Column Linkage in Engine Compartment View

MED. BY AUTOALLIANCE  
 INTERNATIONAL, INC.  
 GAWR/PNBE RR  
 1790 LB  
 GAWR/PNSE FRT  
 2114 LB  
 812 KG  
 959 KG  
 DATE 08/11/00  
 3904 LB  
 1771 KG

THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY  
 BUMPER AND THEFT PREVENTION  
 STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE

1YYGF22C915201149 TYPE PASSENGER



BODY COLOR CODE; 11B

MADE IN U.S.A.

Figure A-41 Pre-Test Vehicle Certification Label View

(GDTA)  
 VEHICLE CAPACITY WEIGHT 385kg(850 lbs)  
 CAPACITÉ PORTEUSE DU VEHICULE  
 FRONT SEAT .....2  
 SIÈGE AVANT  
 REAR SEAT .....3  
 SIÈGE ARRIÈRE  
 TOTAL .....5

TIRE INFLATION PRESSURE PRESSION DE GONFLAGE DES PNEUS Kgf/cm <sup>2</sup> (P.S.I., lb/PO <sup>2</sup> )	FRONT/AV.	REAR/AR.
	2.2(32)	1.8(26)

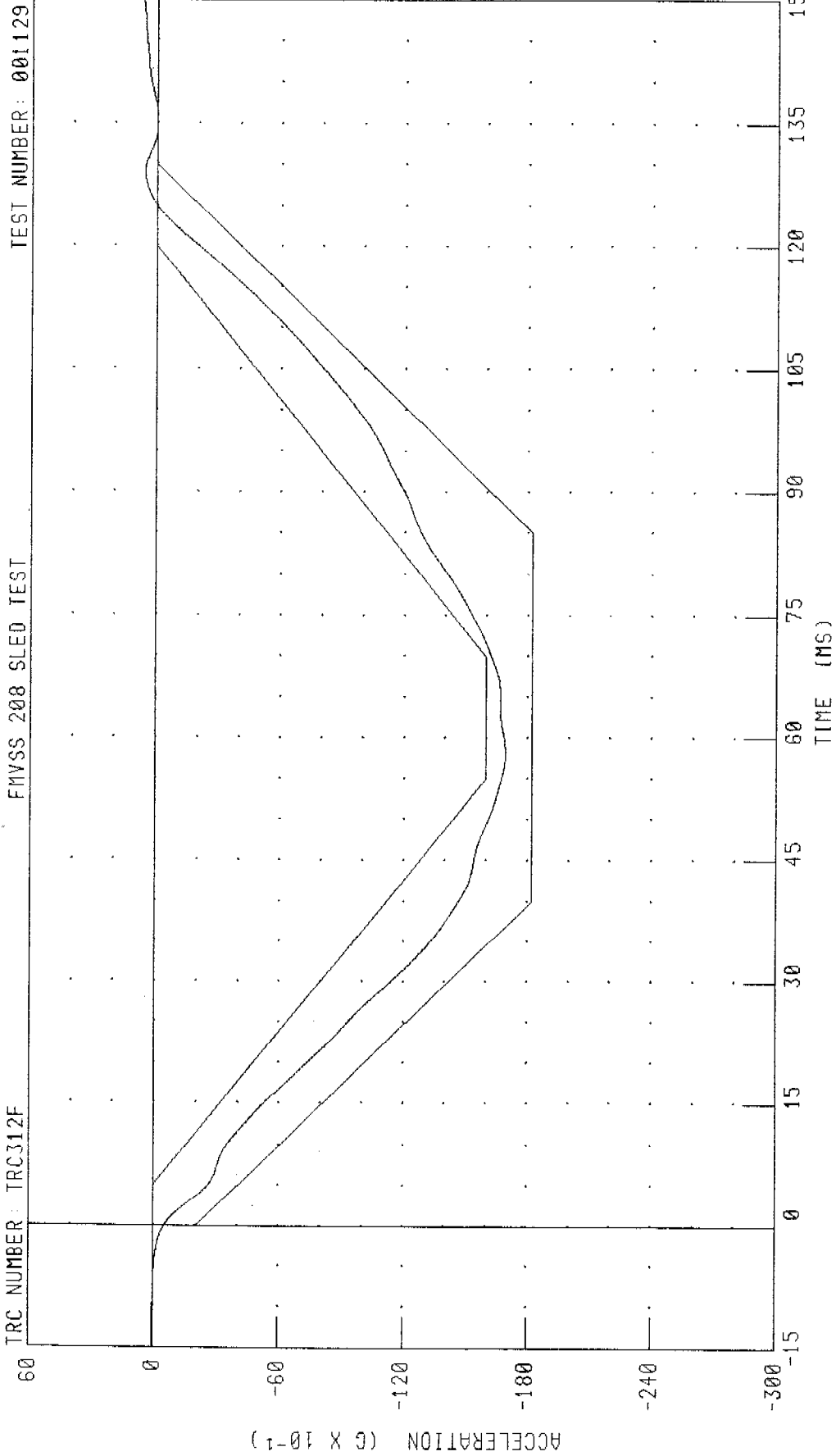
TIRE SIZE P185/70R14 87S  
 TAILLE DES PNEUS P205/60R15 90H

Figure A-42 Pre-Test Tire Load Label View

Appendix B

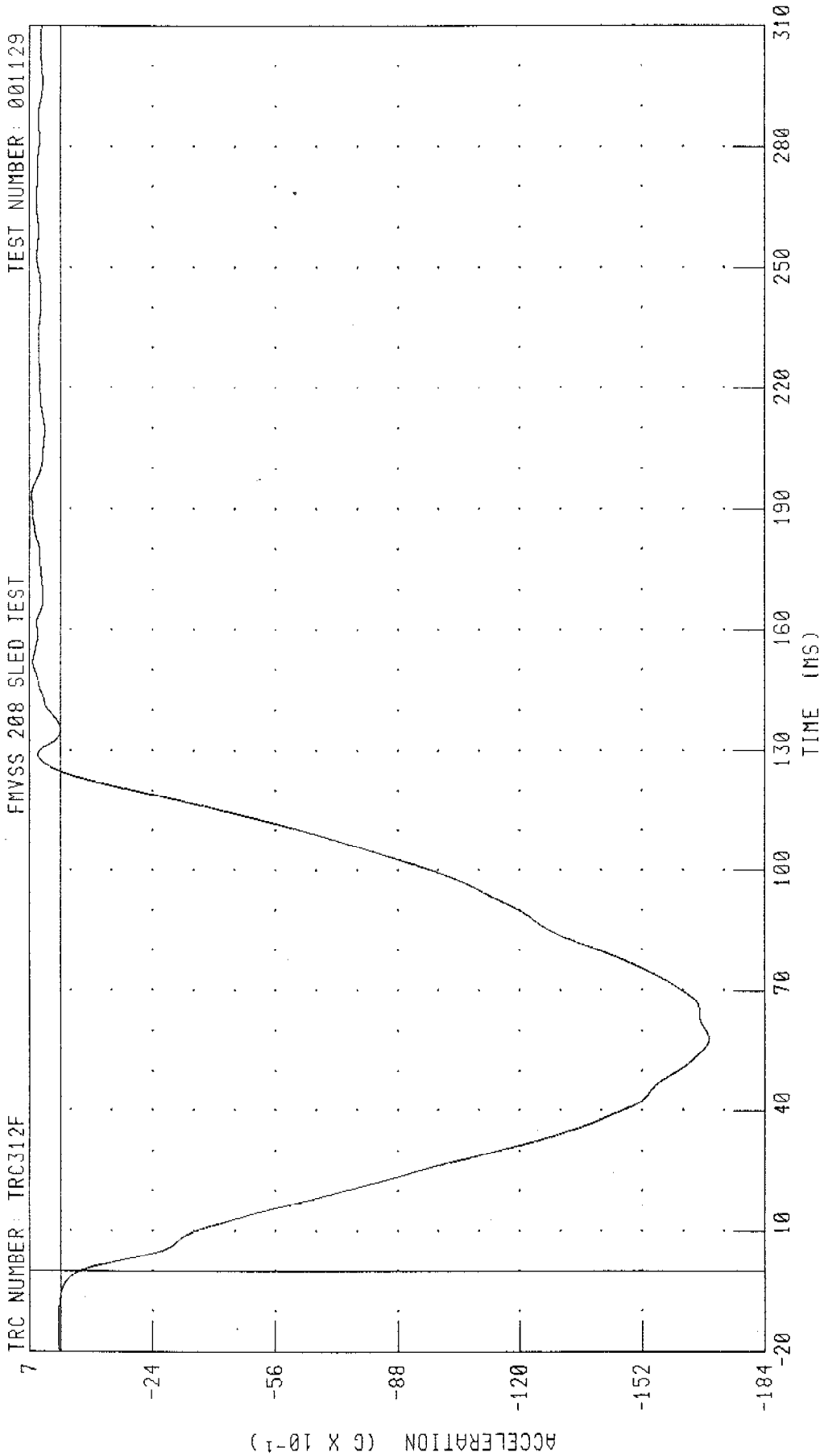
Data Plots

C15400 / 2001 MAZDA 626  
SLED ACCELERATION  
FMVSS 208 SLED TEST



CHANNEL: SLDXG FILTER: CH. CLASS 60  
PEAK DATA: 0.67 G @ 150.00 MS; -16.94 G @ 58.00 MS

C15400 / 2001 MAZDA 626  
SLED ACCELERATION  
FMVSS 208 SLED TEST



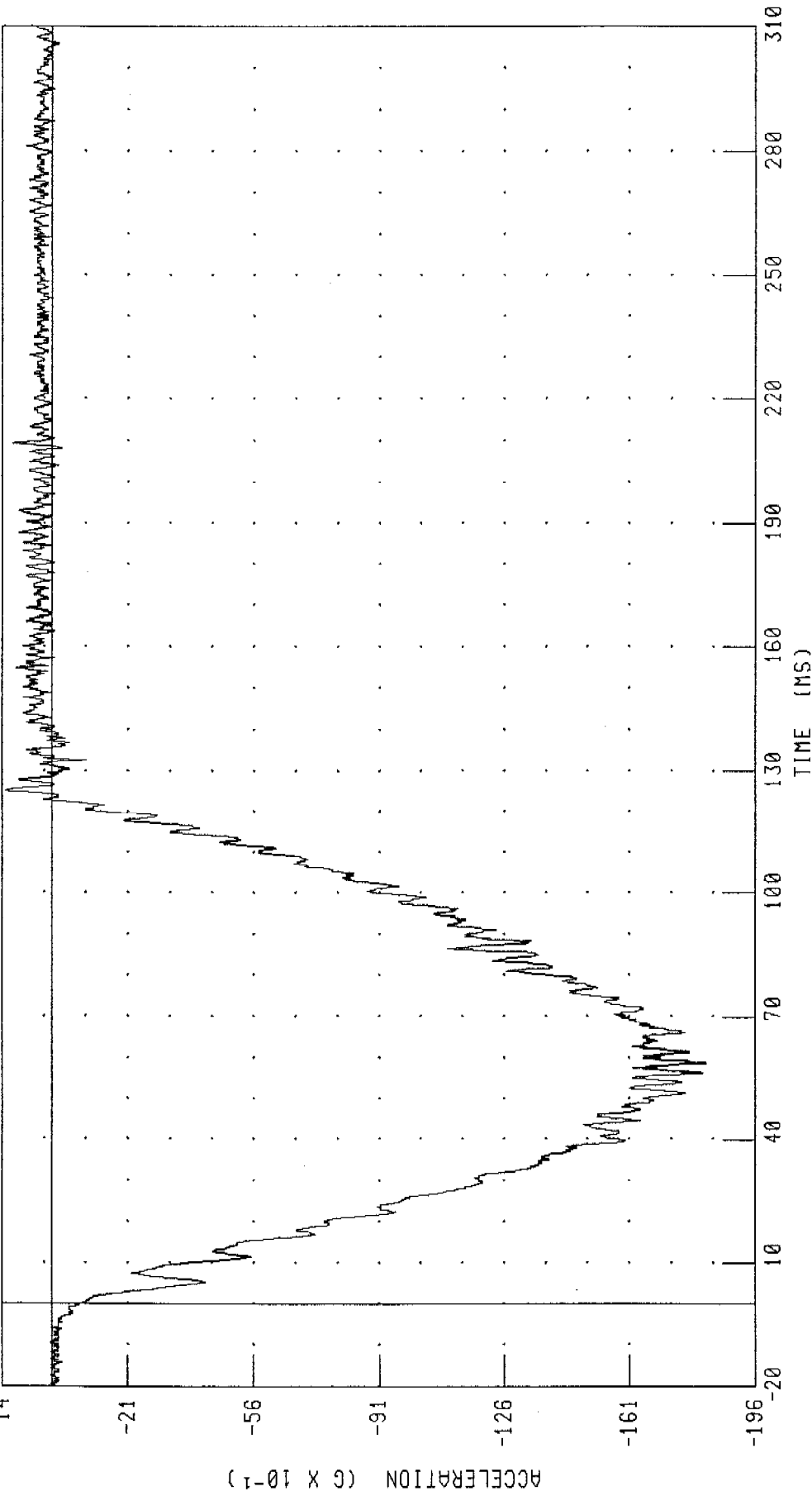
CHANNEL: SLDXG FILTER: CH. CLASS 60

PEAK DATA: 0.74 G @ 193.44 MS, -16.94 G @ 58.00 MS

C15400 / 2001 MAZDA 626  
SLED ACCELERATION PRE-FILTERED AT 200 HZ TO DETERMINE HALF G  
FRVSS 208 SLED TEST

TRC NUMBER: TRC312Z

TEST NUMBER: 001129

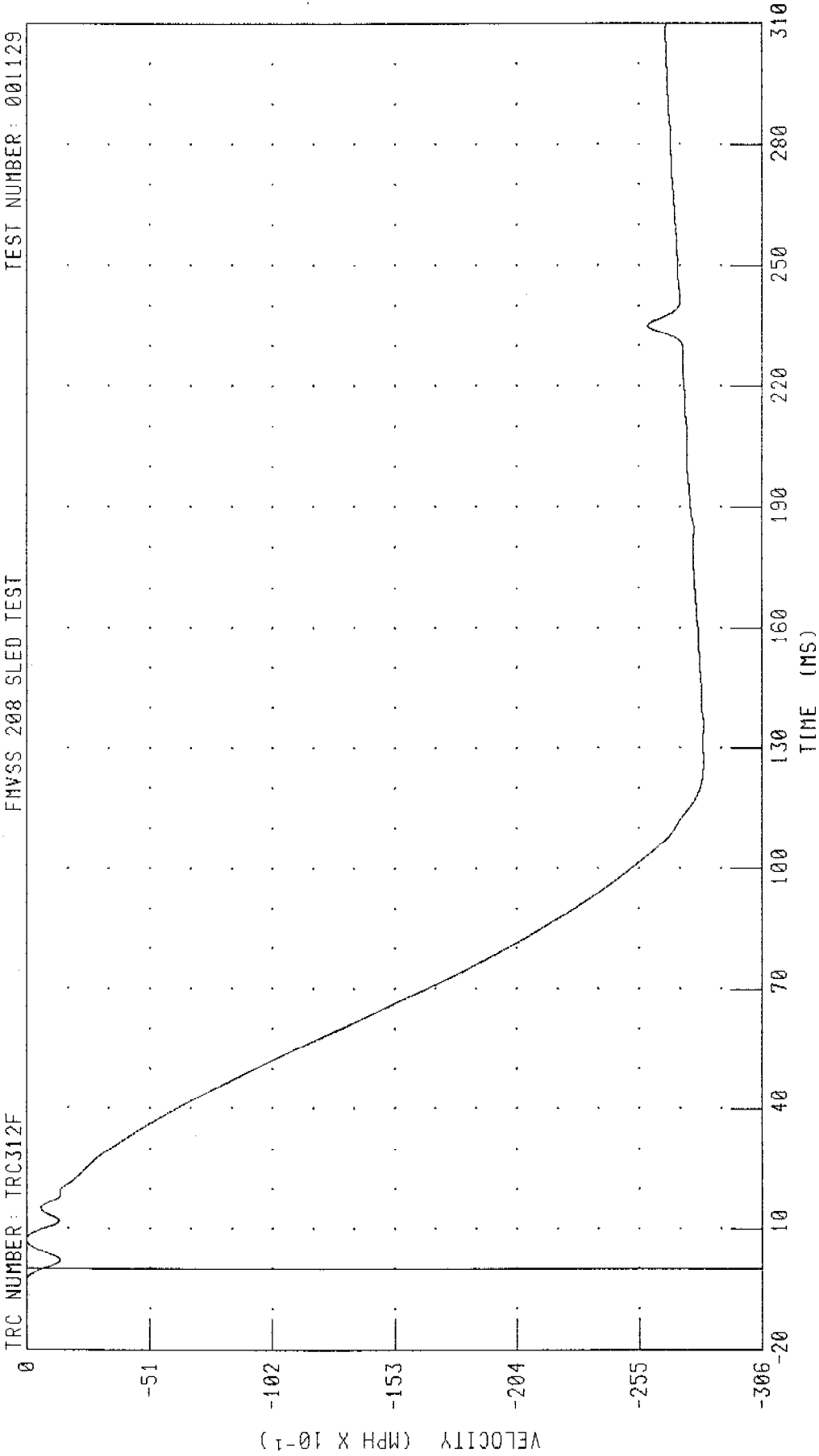


CHANNEL: SLDXGA FILTER: CH. CLASS 1000 PEAK DATA: 1.31 G @ 125.28 MS; -18.25 G @ 58.80 MS

C15400 / 2001 MAZDA 626  
MEASURED VELOCITY TRAP  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



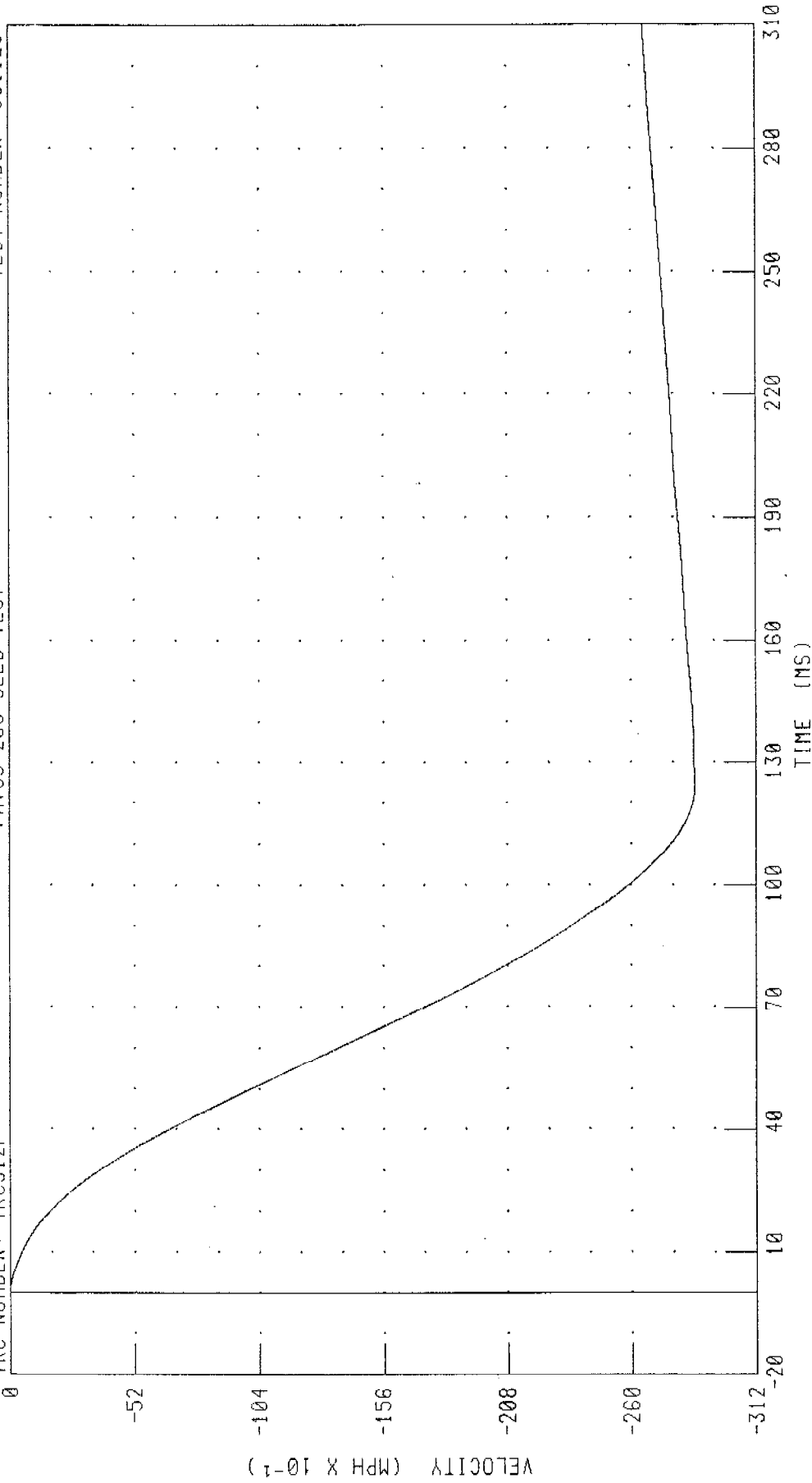
PEAK DATA: 0.06 MPH @ -3.76 MS; -28.20 MPH @ 135.92 MS

CHANNEL: SLDXV FILTER: CH. CLASS 60

C15400 / 2001 MAZDA 626  
SLED VELOCITY (INTEGRATED)  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F

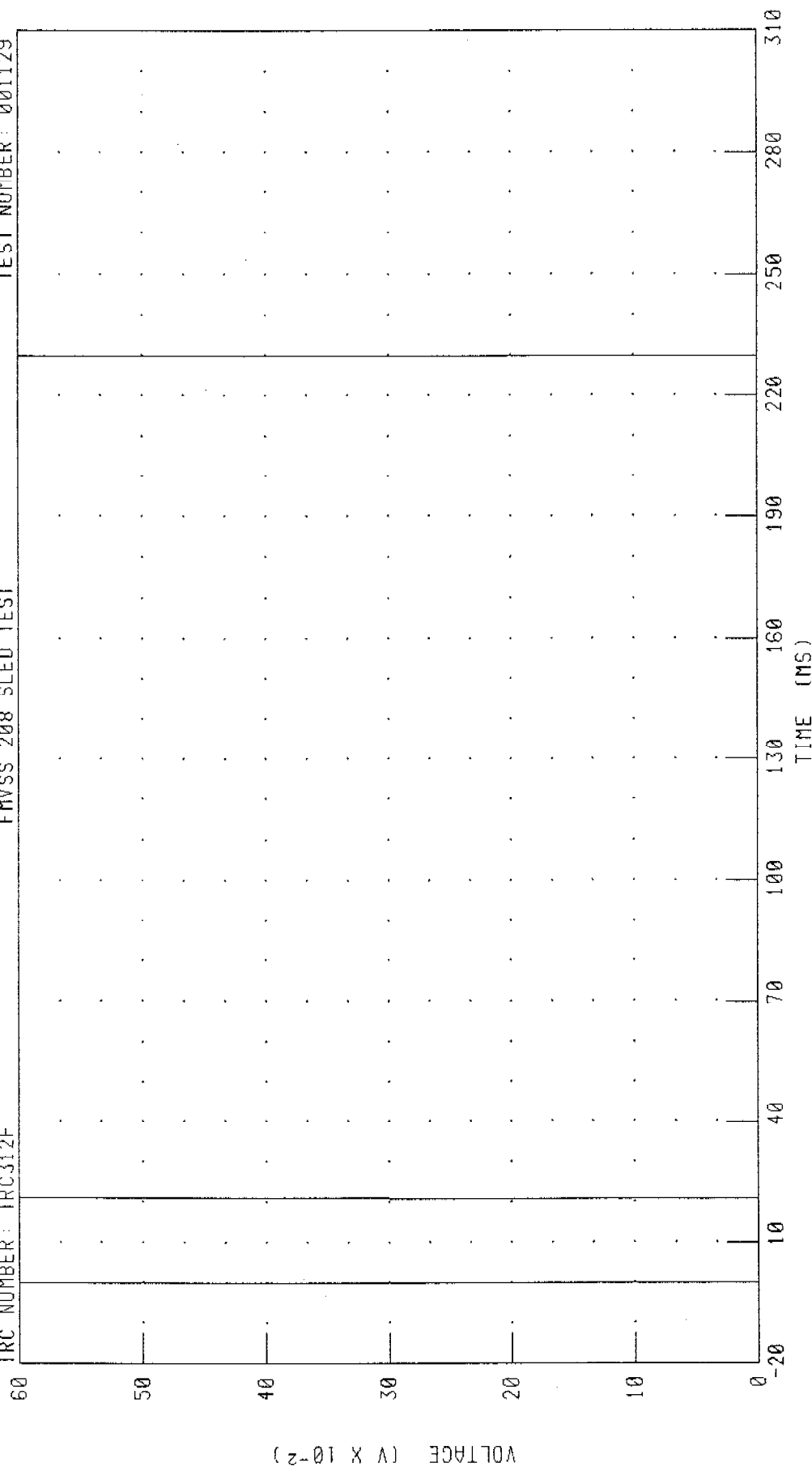


CHANNEL: SLDXVI FILTER: CH. CLASS 180 PEAK DATA: 0.04 MPH @ -6.88 MS; -28.66 MPH @ 124.72 MS

C15400 / 2001 MAZDA 626  
DRIVER AIRBAG EVENT  
FMVSS 208 SLED TEST

TRC NUMBER: TRC312F

TEST NUMBER: 001129



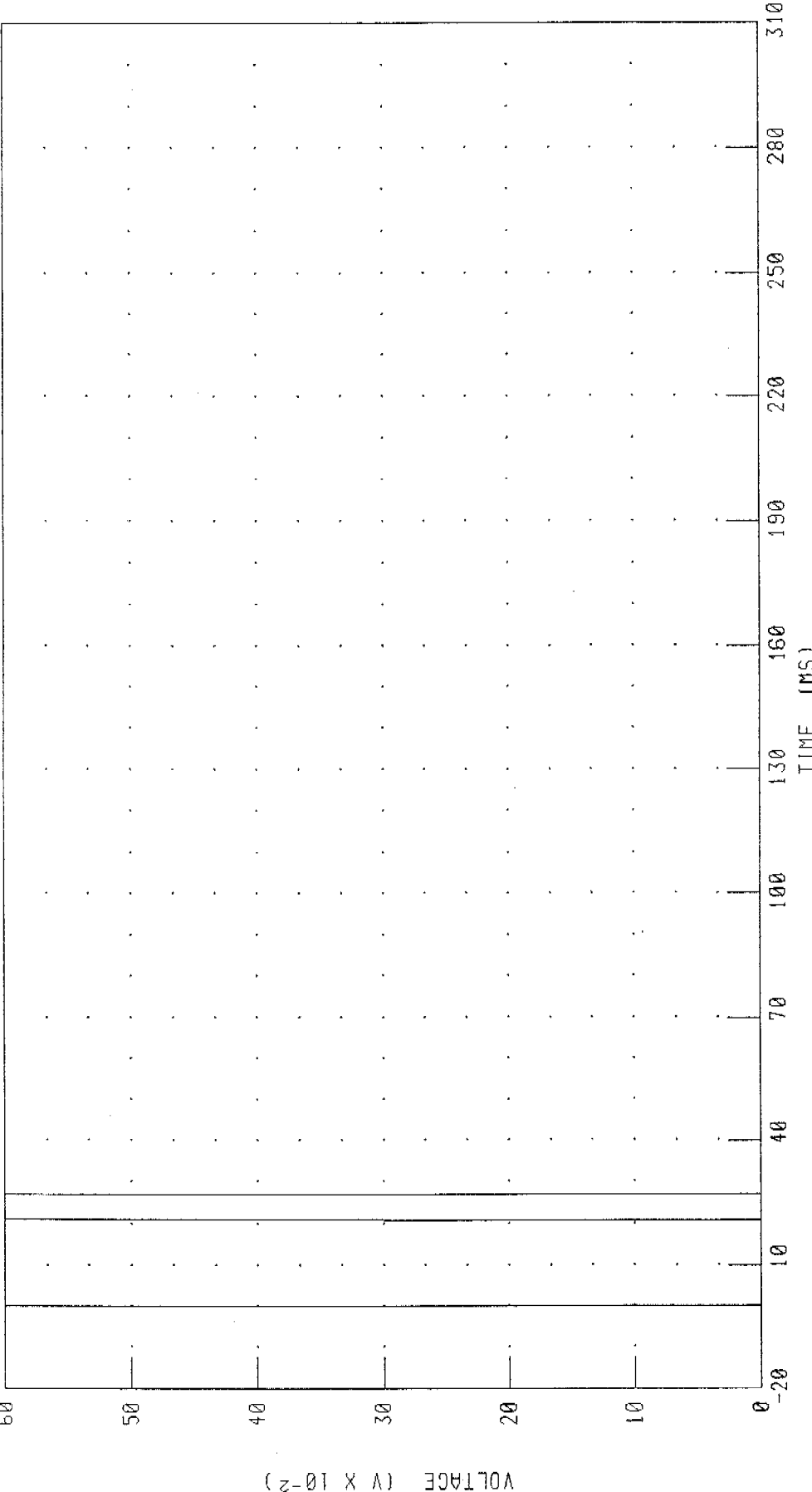
CHANNEL: ABEVT1 FILTER: CH. CLASS 1000

PEAK DATA: 1.00 V @ 21.04 MS, 0.00 V @ -20.00 MS

C15400 / 2001 MAZDA 626  
PASSENGER AIRBAG EVENT  
FMVSS 208 BLEED TEST

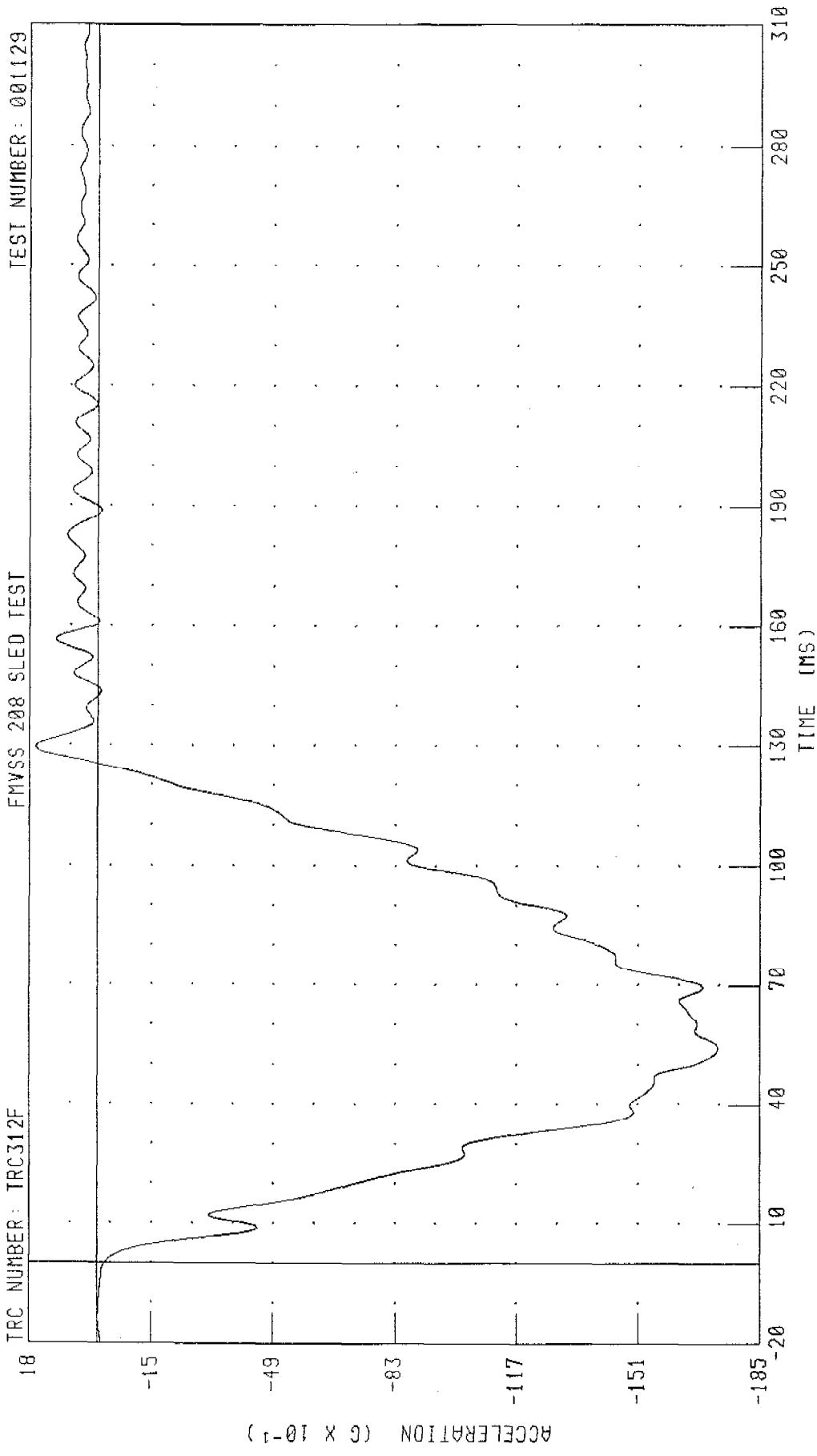
TEST NUMBER: 001129

TRC NUMBER: TRC312F



CHANNEL: ABEVT2 FILTER: CH1 CLASS 1000 PEAK DATA: 1.00 V @ 21.04 MS; 0.00 V @ -20.00 MS

C15400 / 2001 MAZDA 626  
REAR AXLE X-AXIS ACCELERATION  
FMVSS 208 SLED TEST

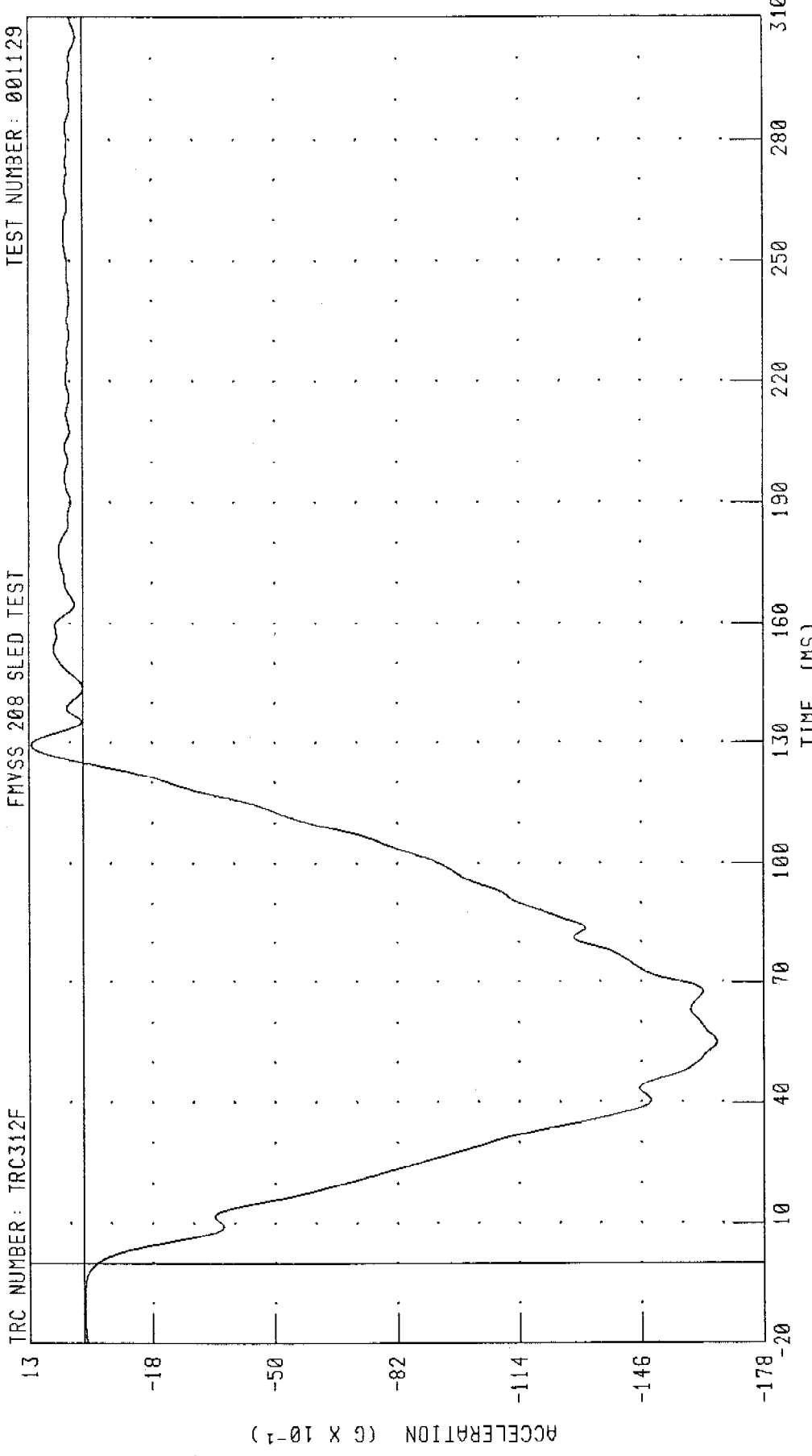


CHANNEL: RAXG FILTER: CH. CLASS 60  
PEAK DATA: 1.73 G @ 129.52 MS; -17.32 G @ 54.24 MS

C15400 / 2001 MAZDA 626  
LEFT BODY X-AXIS ACCELERATION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



PEAK DATA: 1.34 G @ 129.44 MS, -16.58 G @ 55.04 MS

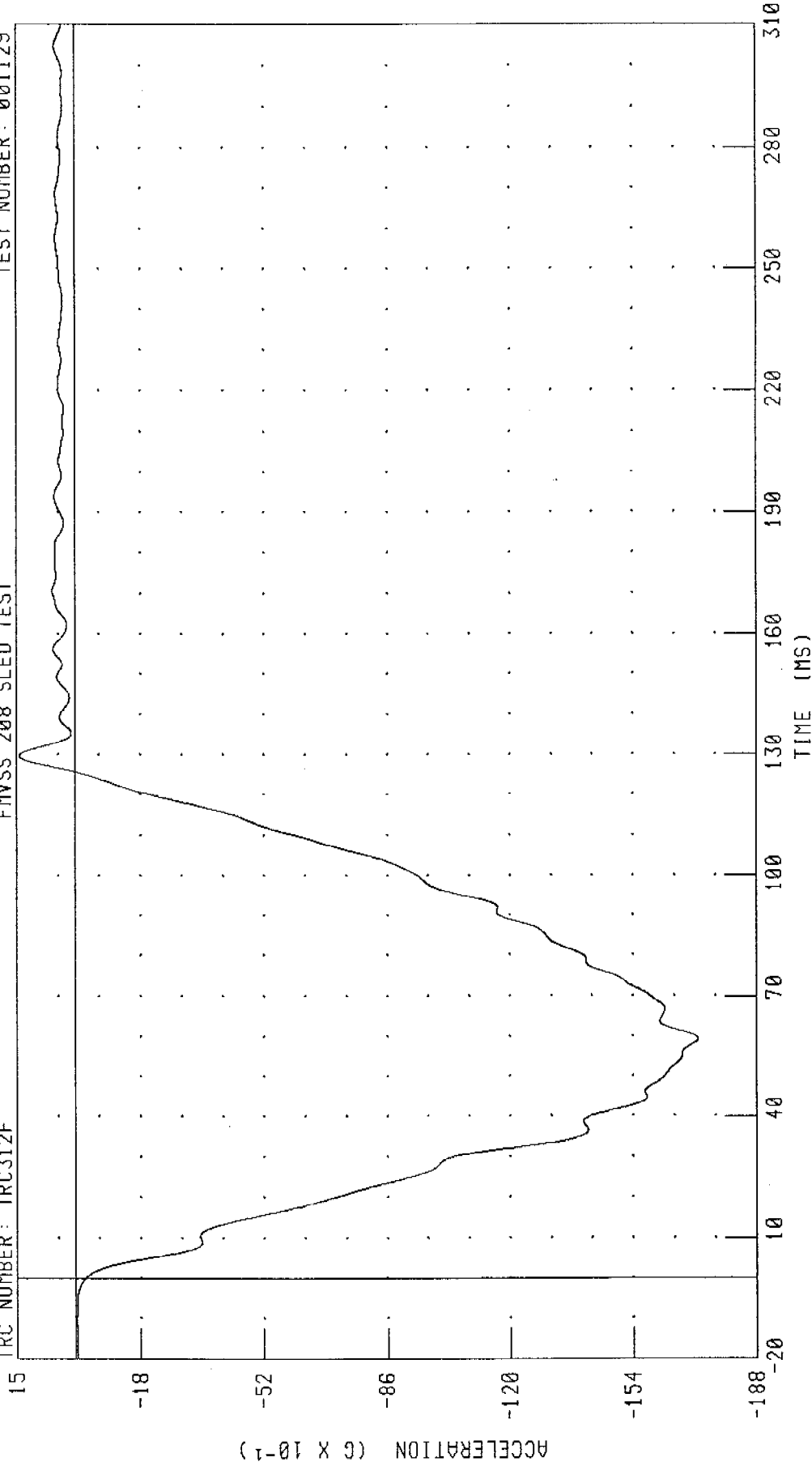
FILTER: CH. CLASS 60

CHANNEL: LBXC

C15400 / 2001 MAZDA 626  
RIGHT BODY X-AXIS ACCELERATION  
FMVSS 208 SLED TEST

TRC NUMBER: TRC312F

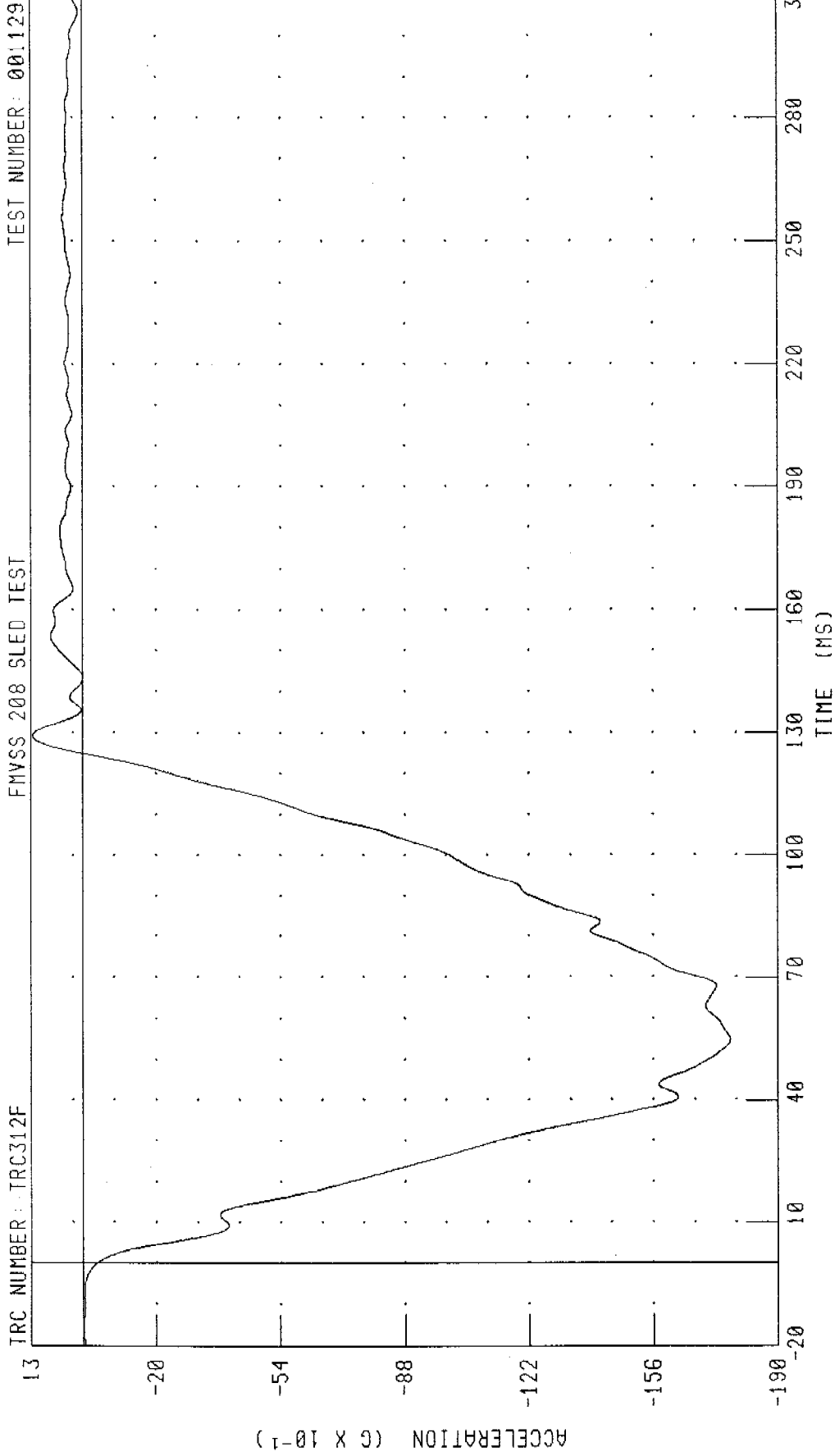
TEST NUMBER: 001129



CHANNEL: RBXC FILTER: CH. CLASS 60

PEAK DATA: 1.53 G @ 129.68 MS; -17.20 G @ 59.36 MS

C15400 / 2001 MAZDA 626  
SILL - LEFT REAR X-AXIS ACCELERATION  
FHYSS 208 SLED TEST



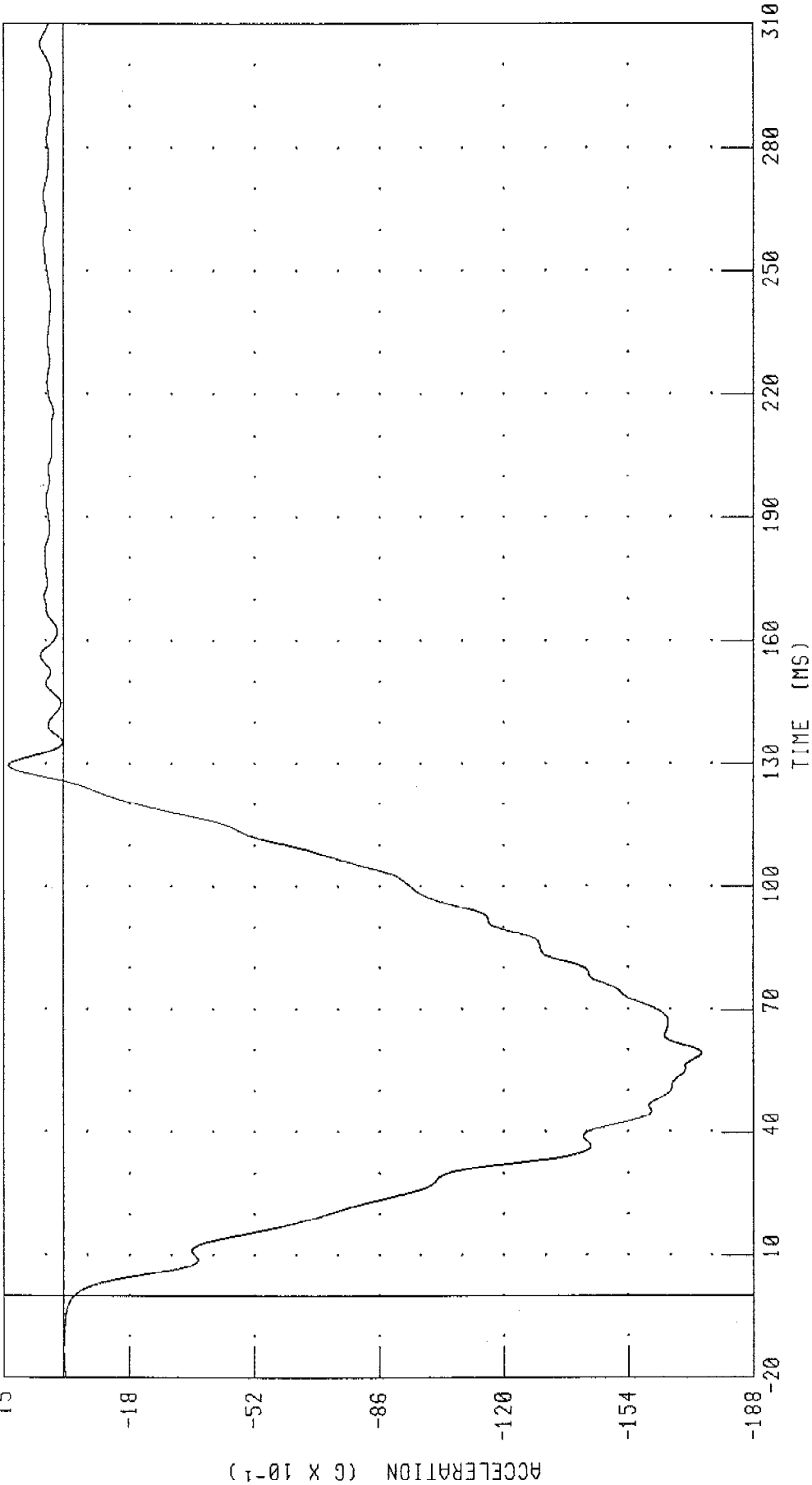
CHANNEL: LFXG FILTER: CH. CLASS 60

PEAK DATA: 1.36 G @ 129.28 MS, -17.72 G @ 54.80 MS

C15400 / 2001 MAZDA 626  
SILL - RIGHT REAR X-AXIS ACCELERATION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F

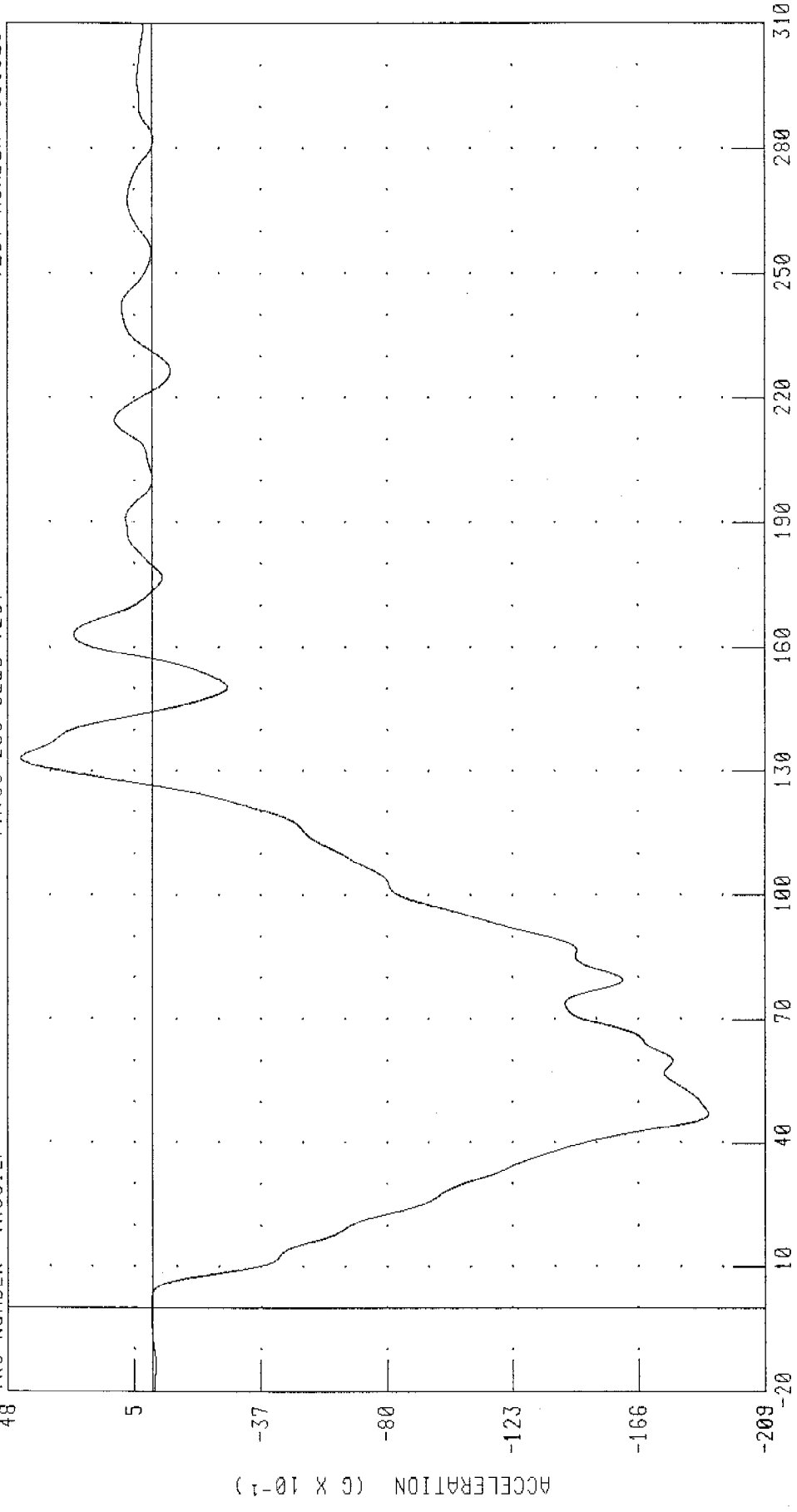


CHANNEL: RFXC FILTER: CH. CLASS 60 PEAK DATA: 1.48 G @ 129.60 MS; -17.40 G @ 59.28 MS

C15400 / 2001 MAZDA 626  
TOP ENGINE X-AXIS ACCELERATION  
FMVSS 208 SLED TEST

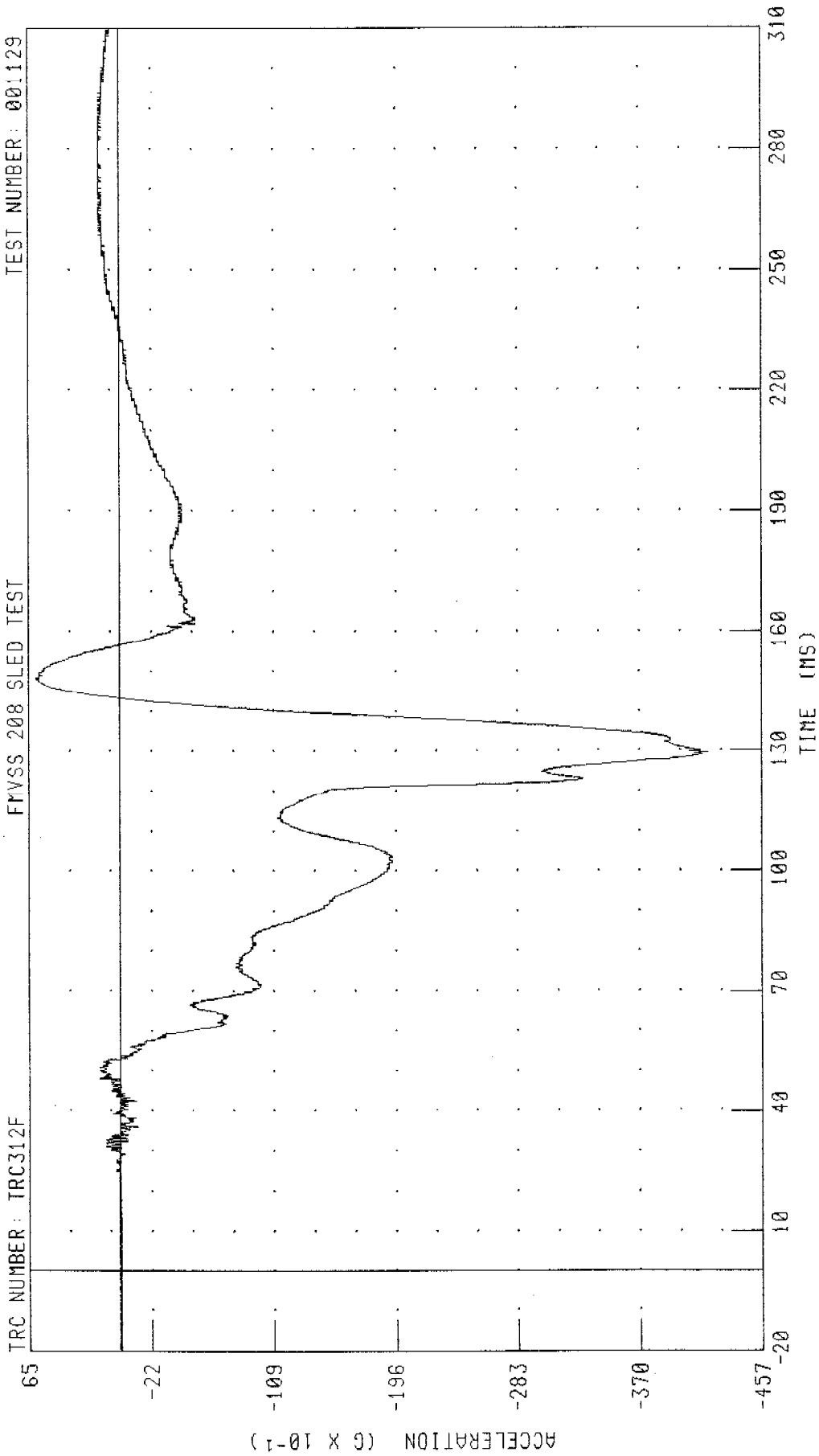
TRC NUMBER: TRC312F

TEST NUMBER: 001129



CHANNEL: TEXTG FILTER: CH. CLASS 60 PEAK DATA: 4.48 G @ 133.28 MS) -18.98 G @ 47.36 MS

C15400 / 2001 MAZDA 626  
DRIVER HEAD X-AXIS ACCELERATION  
FMVSS 208 SLED TEST



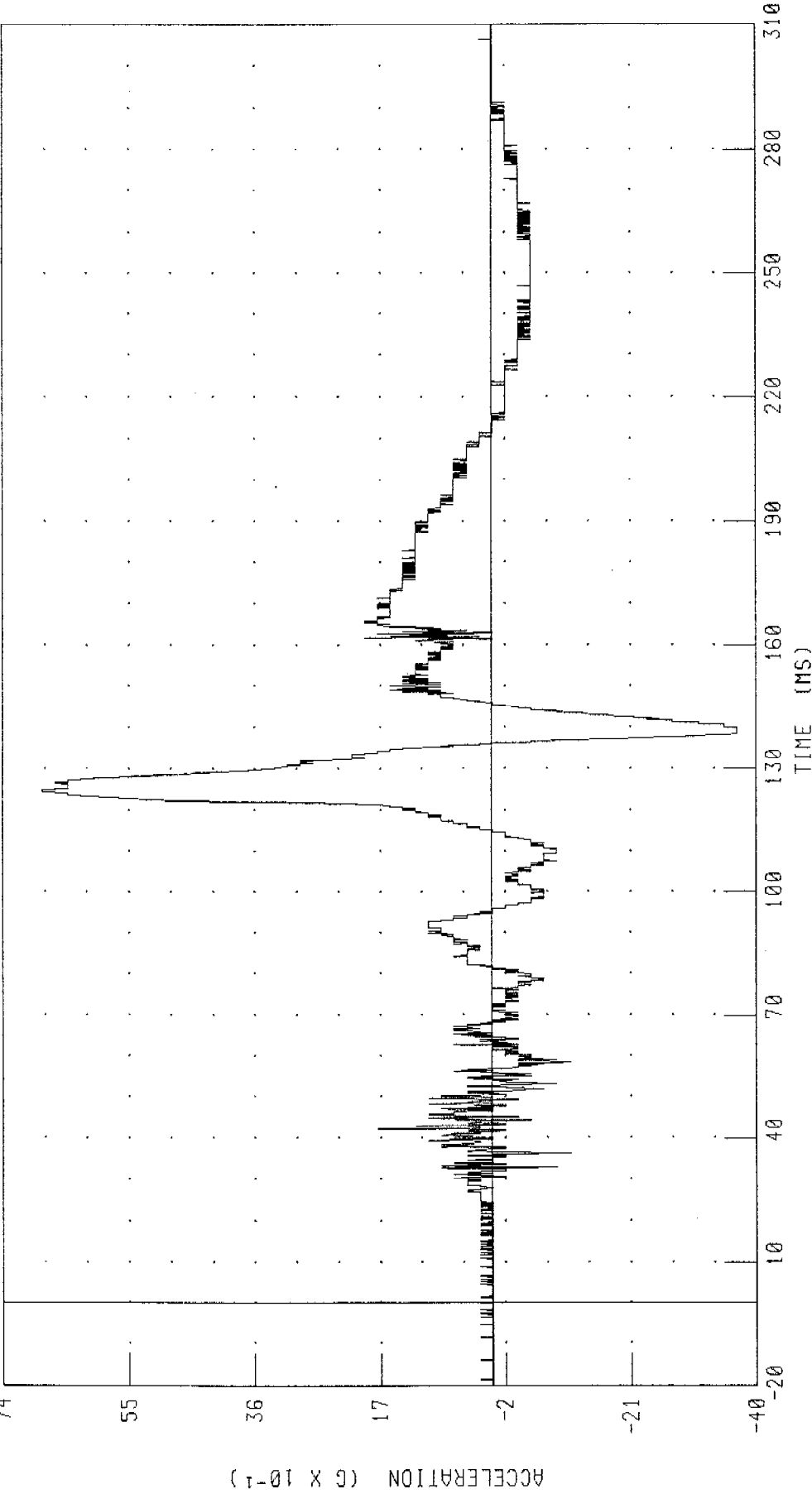
CHANNEL: HE0XG1 FILTER: CH. CLASS 1000

PEAK DATA: 5.97 G @ 148.00 MS, -41.91 G @ 129.60 MS

C15400 / 2001 MAZDA 626  
DRIVER HEAD Y-AXIS ACCELERATION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



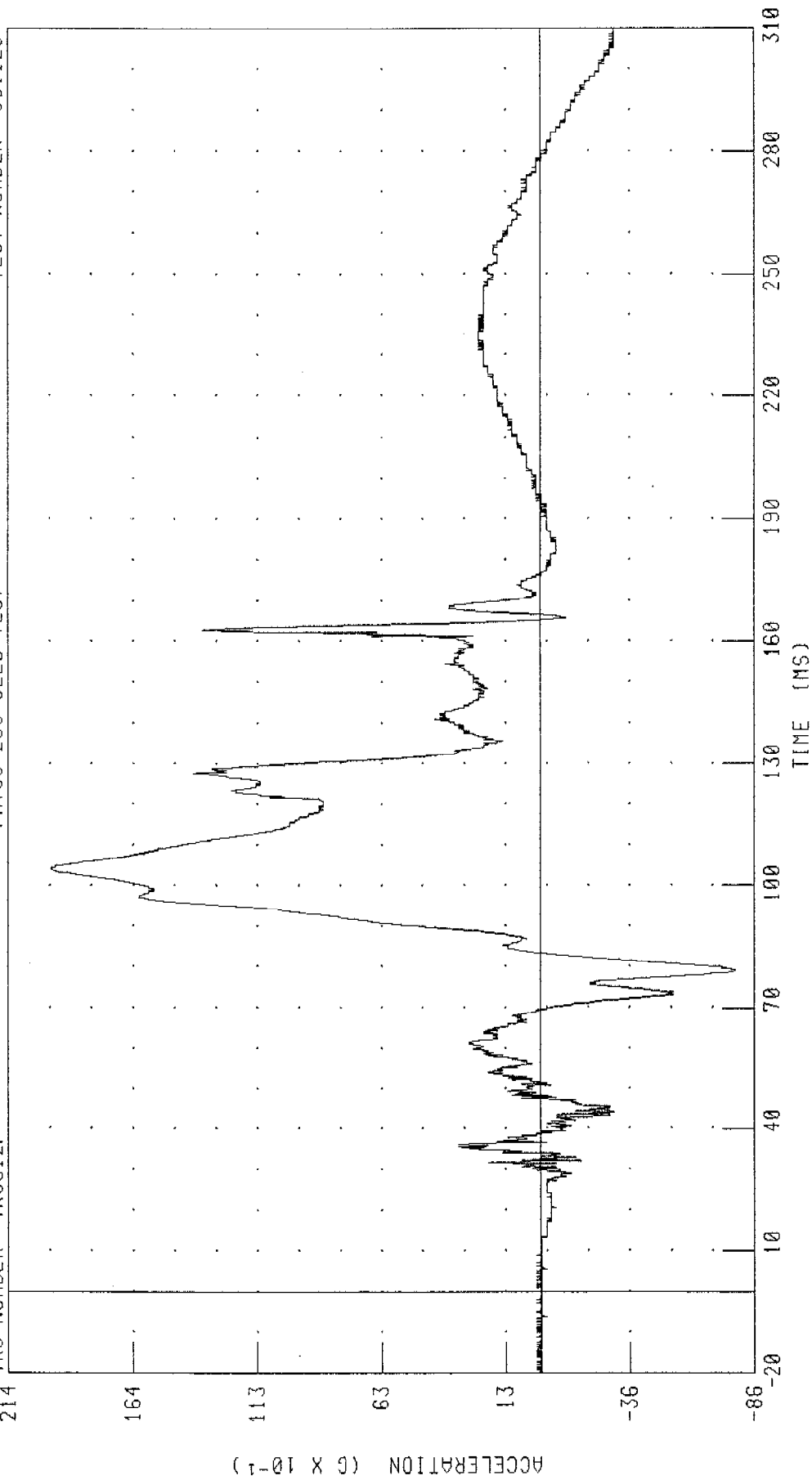
CHANNEL: HEDYG1 FILTER: CH. CLASS 1000

PEAK DATA: 6.81 G @ 124.48 MS; -3.71 G @ 138.40 MS

C15400 / 2001 MAZDA 626  
DRIVER HEAD Z-AXIS ACCELERATION  
FMVSS 208 SLED TEST

TRC NUMBER: TRC312F

TEST NUMBER: 001129



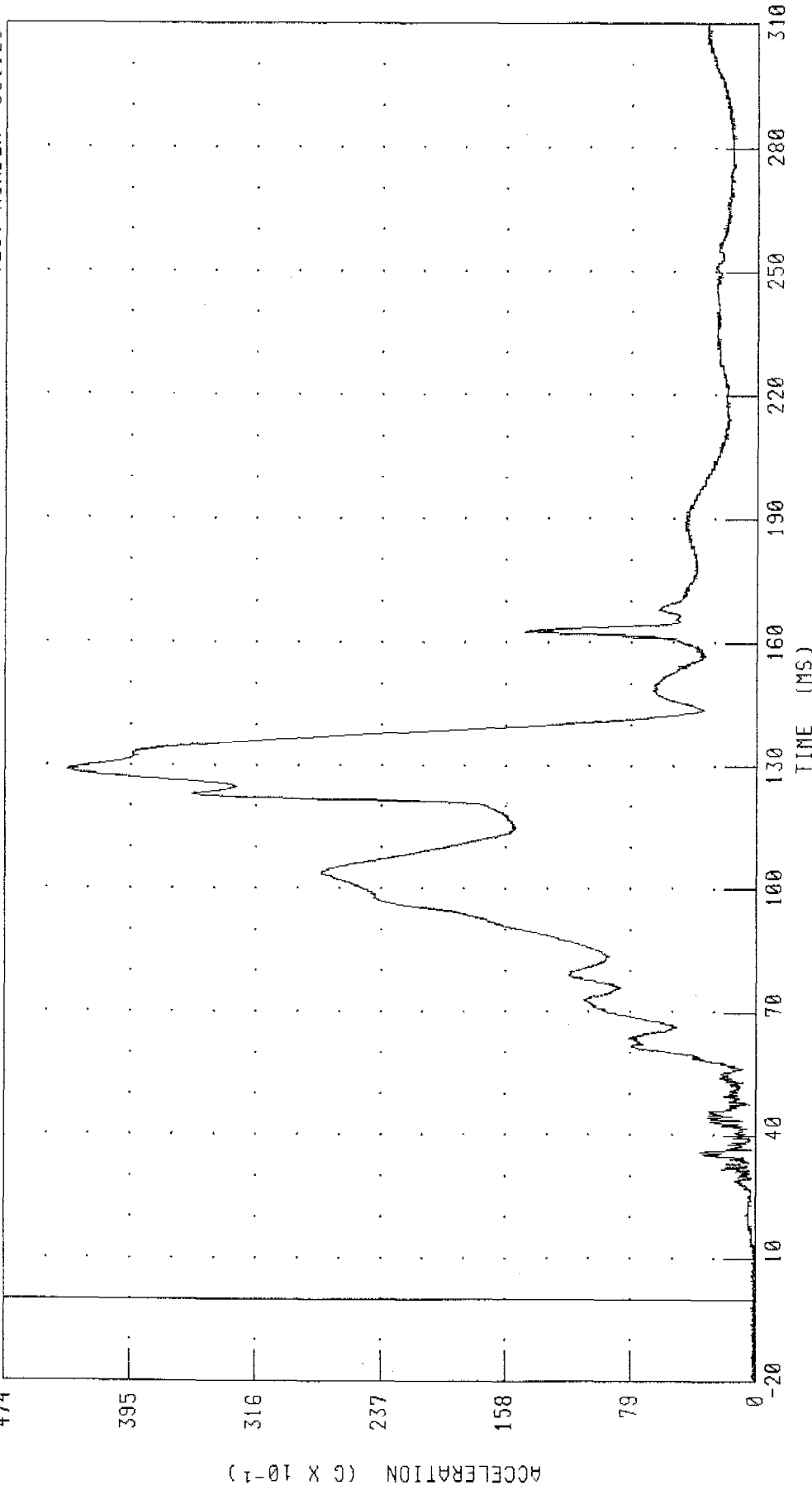
CHANNEL: HEDZG1 FILTER: CH. CLASS 1000

PEAK DATA: 19.68 G @ 103.84 MS; -7.86 G @ 78.96 MS

C15400 / 2001 MAZDA 626  
DRIVER HEAD RESULTANT ACCELERATION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



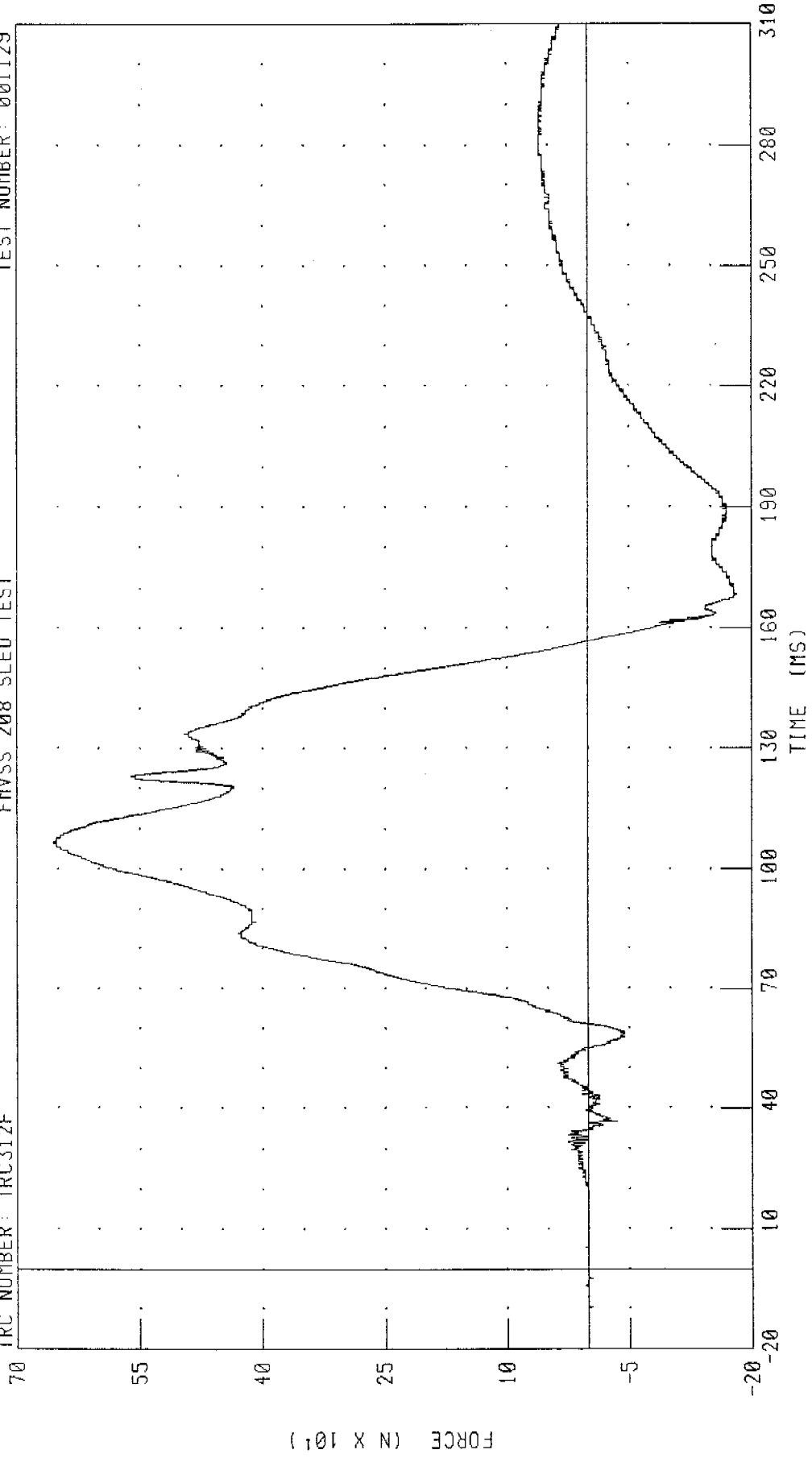
CHANNEL: HEDRG1 FILTER: CH. CLASS 1000

PEAK DATA: 43.51 G @ 129.12 MS, 0.08 G @ -19.84 MS

C15400 / 2001 MAZDA 626  
DRIVER NECK X-AXIS SHEAR FORCE  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



CHANNEL: NEKXF1 FILTER: CH. CLASS 1000

PEAK DATA: 656.02 N @ 106.48 MS; -182.47 N @ 168.32 MS

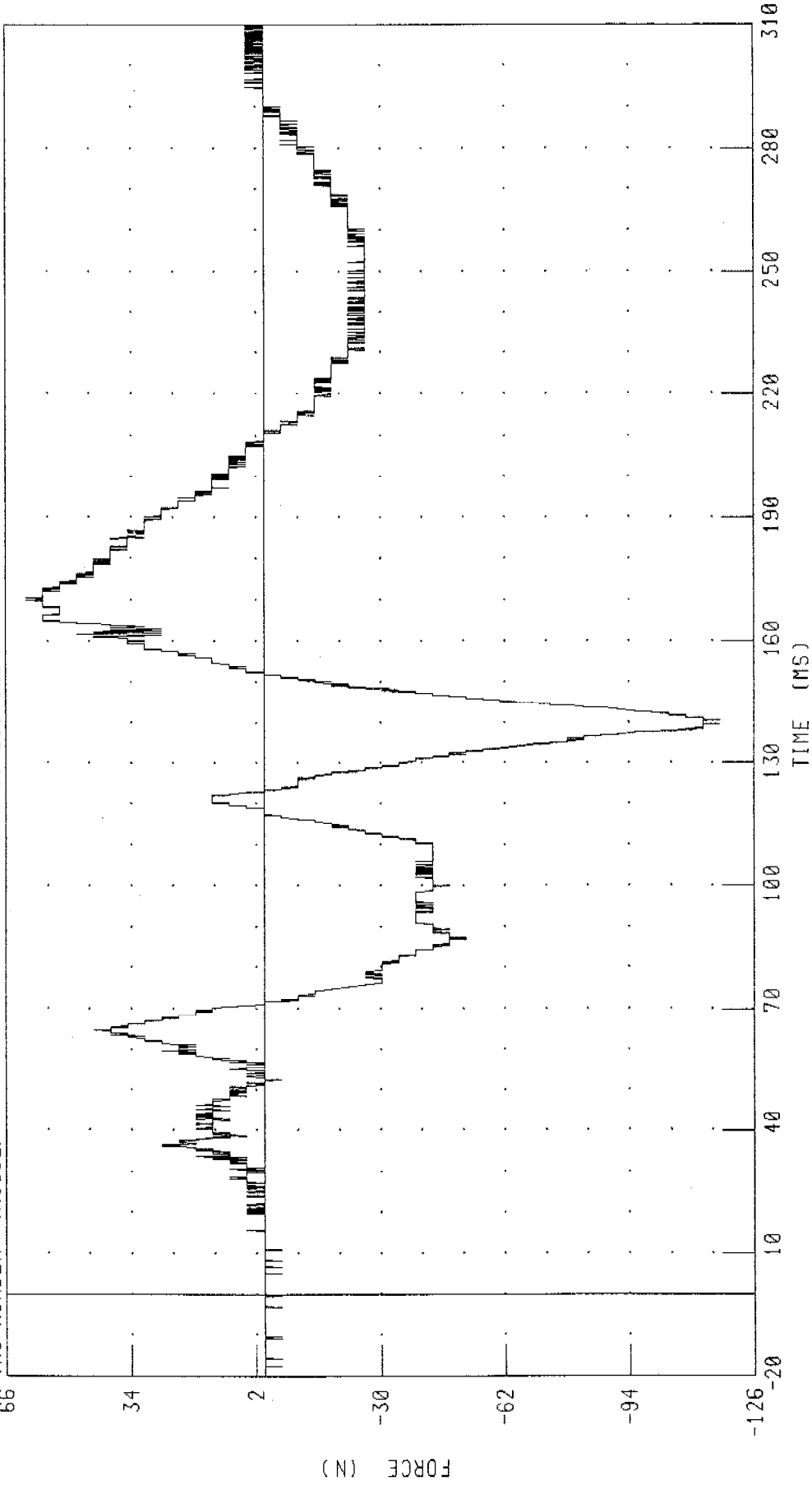
FORCE (N X 10<sup>1</sup>)

TIME (MS)

C15400 / 2001 MAZDA 626  
DRIVER NECK Y-AXIS SHEAR FORCE  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



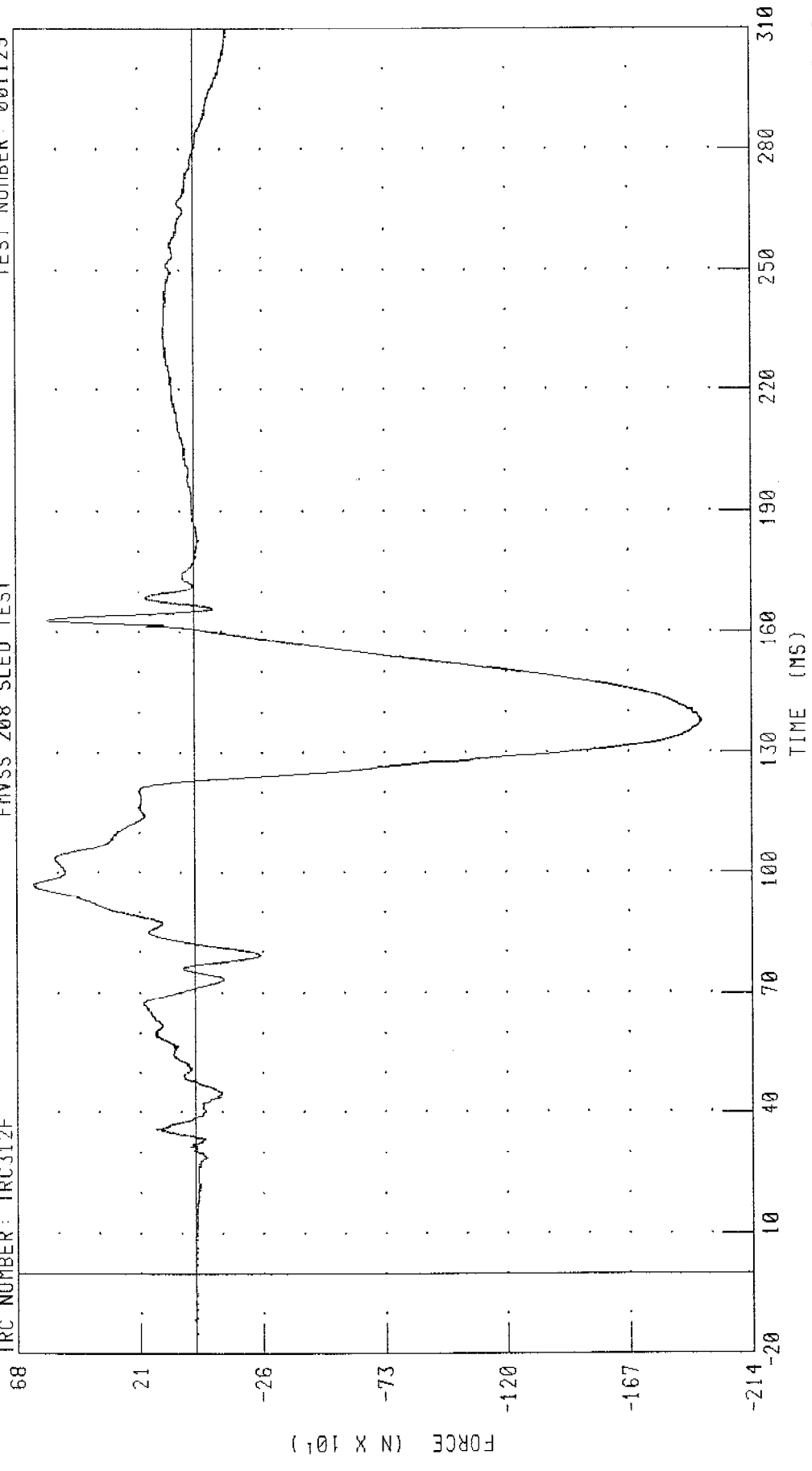
CHANNEL: NEKYF1 FILTER: CH. CLASS 1000

PEAK DATA: 60.91 N @ 169.84 MS, -117.23 N @ 139.76 MS

C15400 / 2001 MAZDA 626  
DRIVER NECK Z-AXIS AXIAL FORCE  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



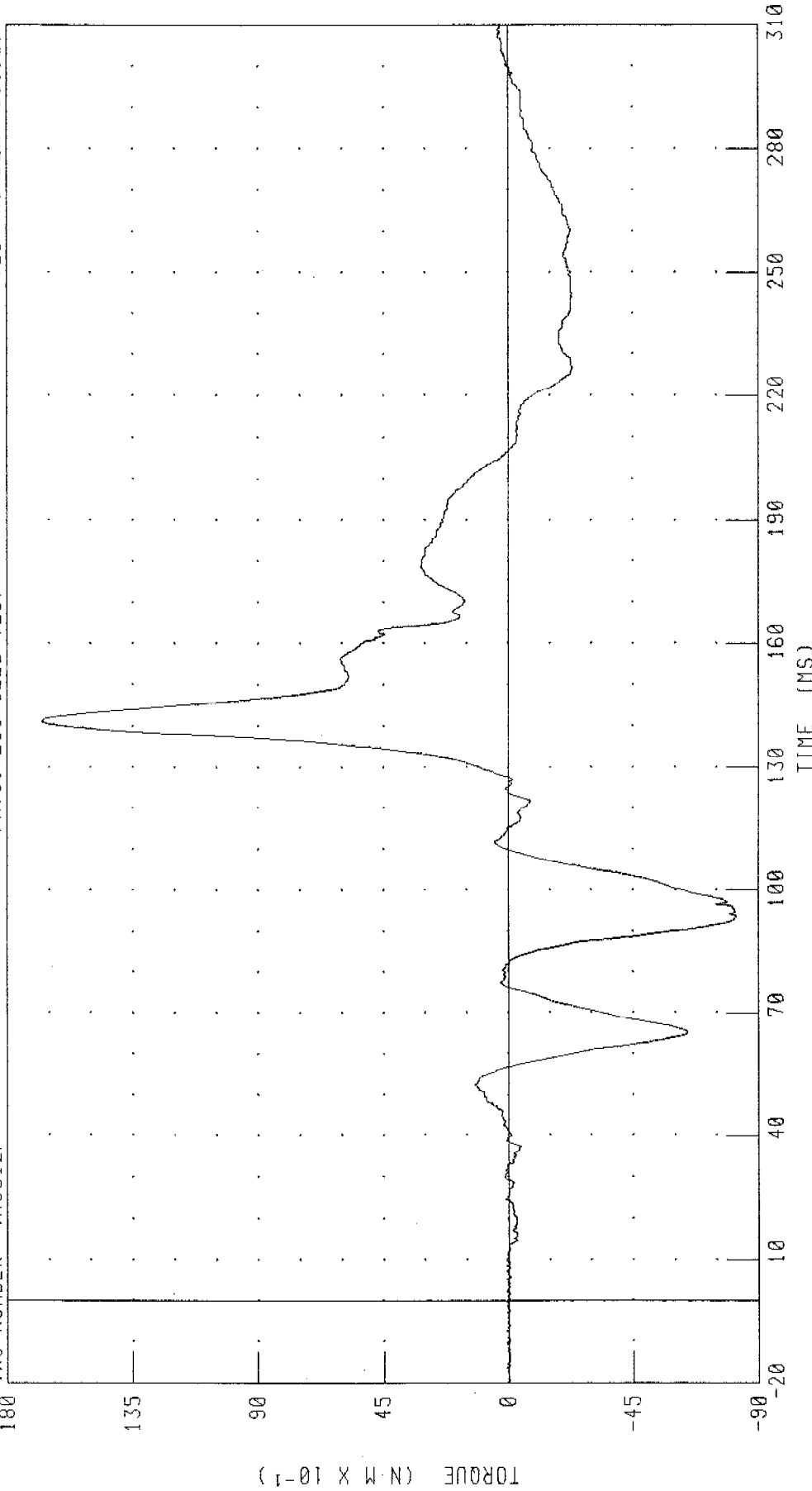
PEAK DATA: 618.82 N @ 96.96 MS; -1947.70 N @ 137.60 MS

CHANNEL: NEKZF1 FILTER: CH. CLASS 1000

C15400 / 2001 MAZDA 626  
DRIVER NECK MOMENT ABOUT X AXIS  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: IRC312F



PEAK DATA: 16.74 N M @ 141.20 MS; -8.22 N M @ 93.60 MS

CHANNEL: NEKXM1 FILTER: CH. CLASS 600

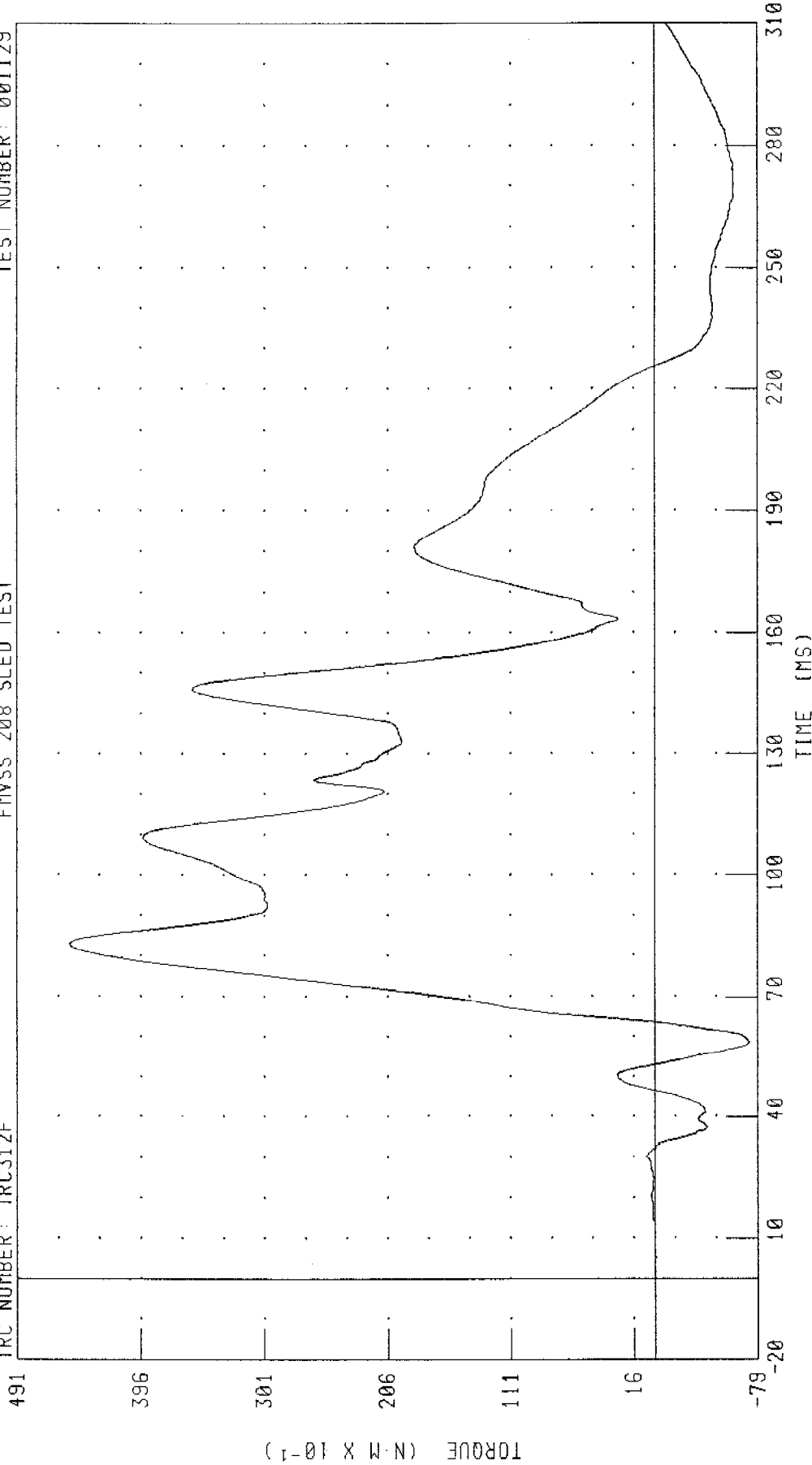
TORQUE (N-M X 10<sup>-1</sup>)

TIME (MS)

C15400 / 2001 MAZDA 626  
DRIVER NECK MOMENT ABOUT Y AXIS  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



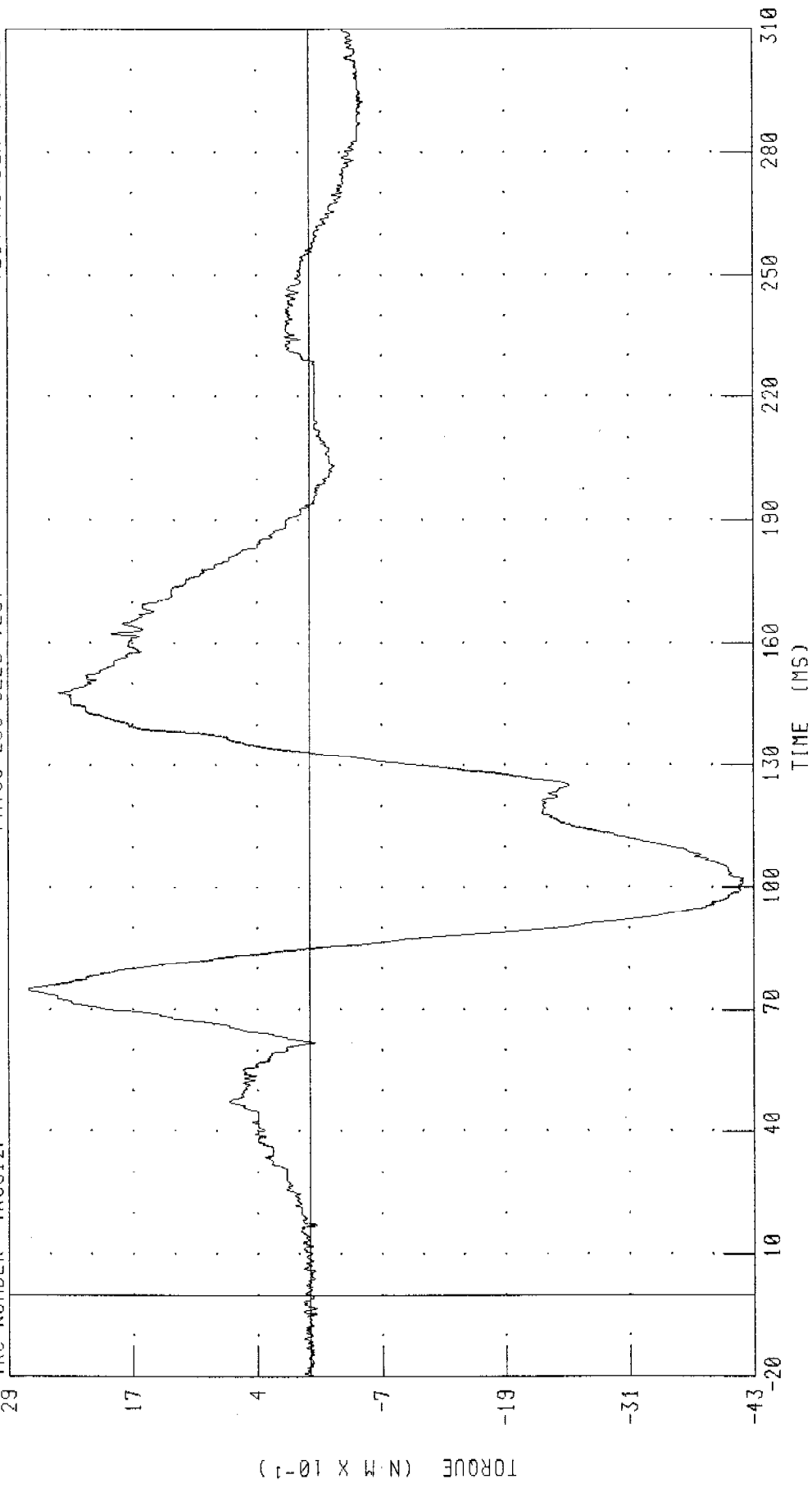
CHANNEL: NEKYM1 FILTER: CH. CLASS 600

PEAK DATA: 45.08 N·M @ 83.12 MS, -7.26 N·M @ 58.56 MS

C15400 / 2001 MAZDA 626  
DRIVER NECK MOMENT ABOUT Z AXIS  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: IRC312F

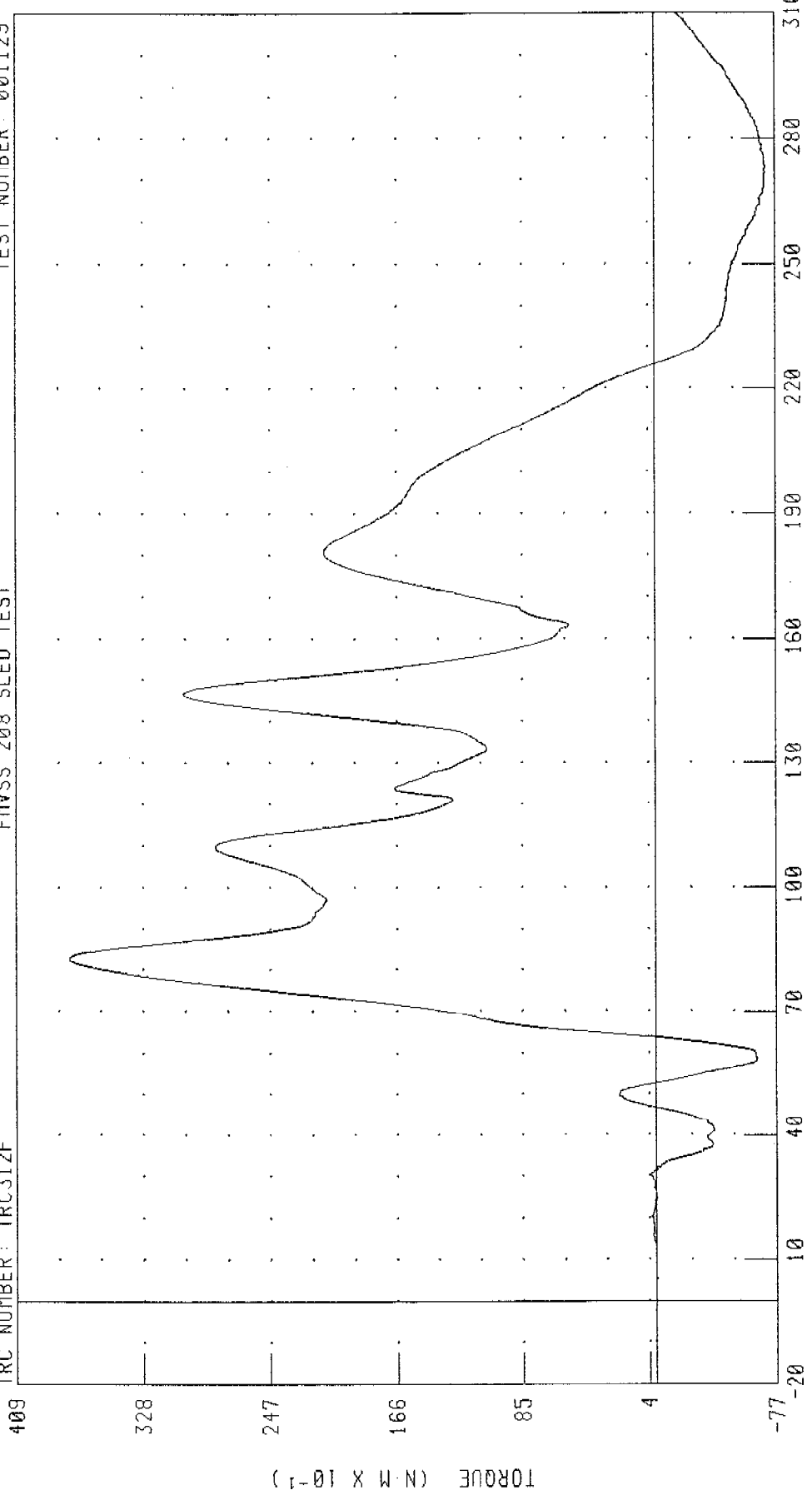


CHANNEL: NEKZM1 FILTER: CH. CLASS 600  
PEAK DATA: 2.71 N·M @ 74.88 MS; -4.20 N·M @ 101.28 MS

C15400 / 2001 MAZDA 626  
DRIVER NECK MOMENT ABOUT Y AXIS OCCIPITAL CONDYLE  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

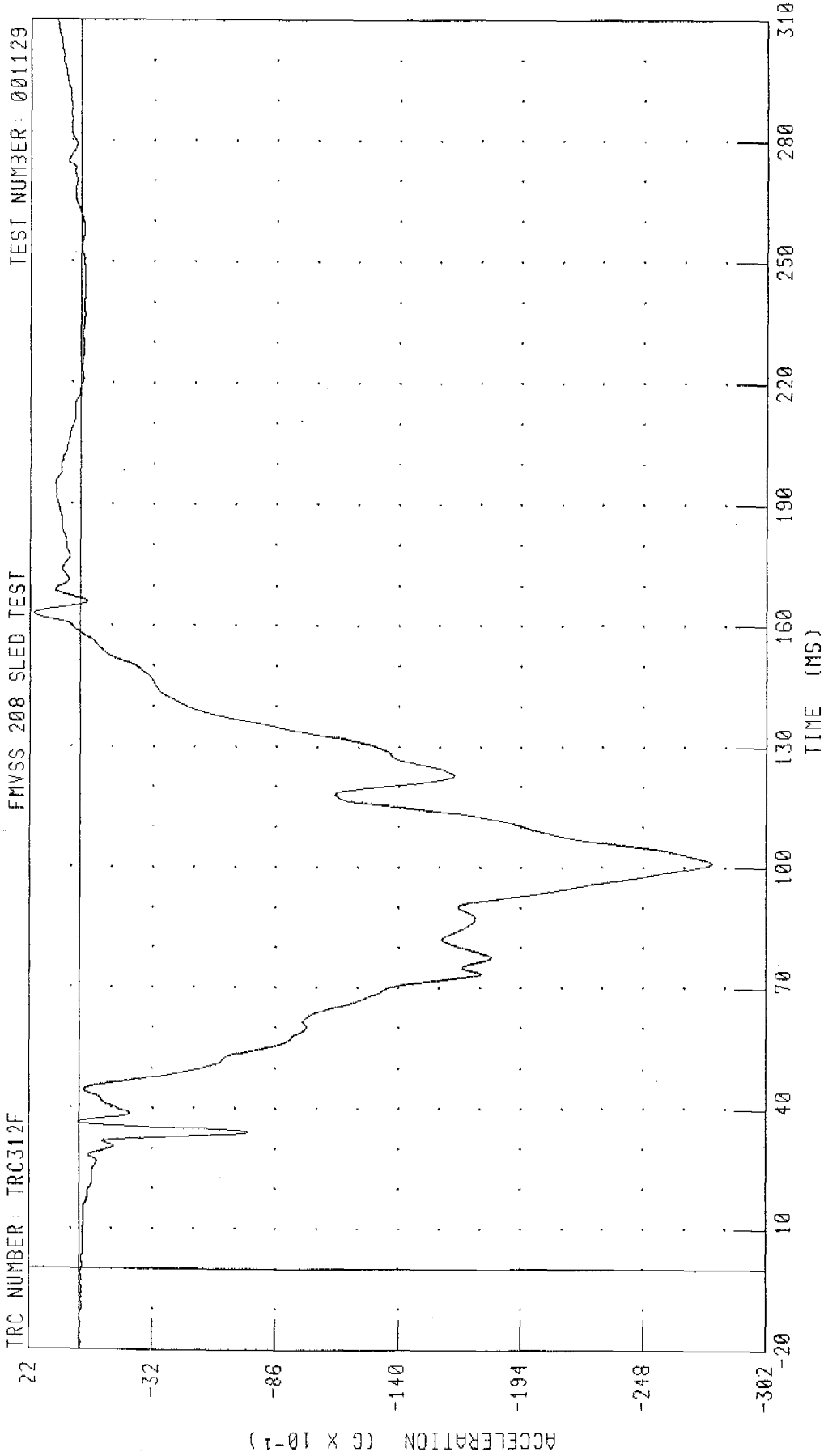
TRC NUMBER: TRC312F



PEAK DATA: 37.50 N·m @ 83.12 MS; -7.07 N·m @ 271.76 MS

CHANNEL: NEKOM1 FILTER: CH. CLASS 600

C15400 / 2001 MAZDA 626  
DRIVER CHEST X-AXIS ACCELERATION  
FMVSS 208 SLED TEST

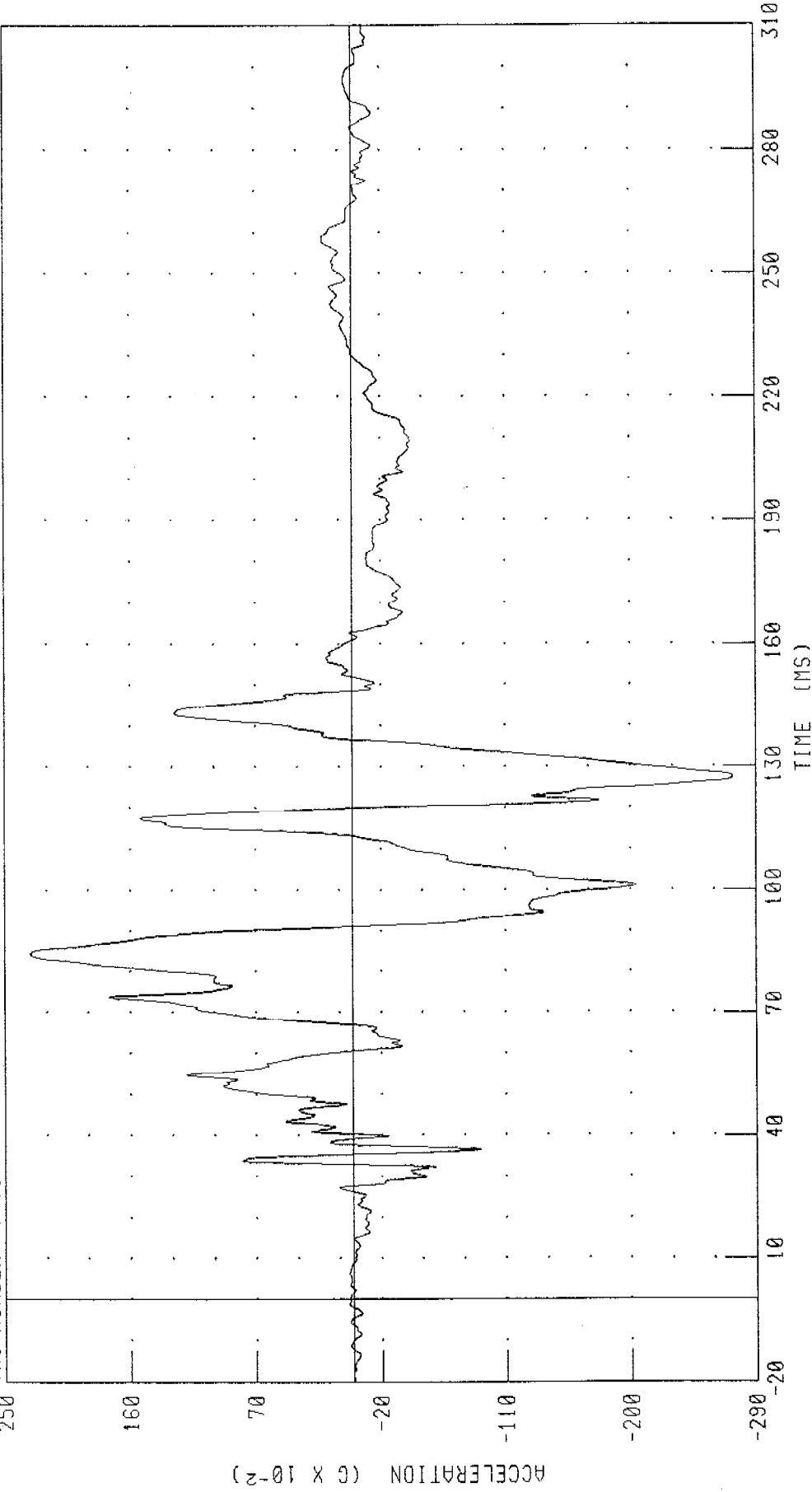


CHANNEL: CSTXG1 FILTER: CH. CLASS 180  
PEAK DATA: 2.03 G @ 163.20 MS; -27.81 G @ 101.28 MS

C15400 / 2001 MAZDA 626  
DRIVER CHEST Y-AXIS ACCELERATION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



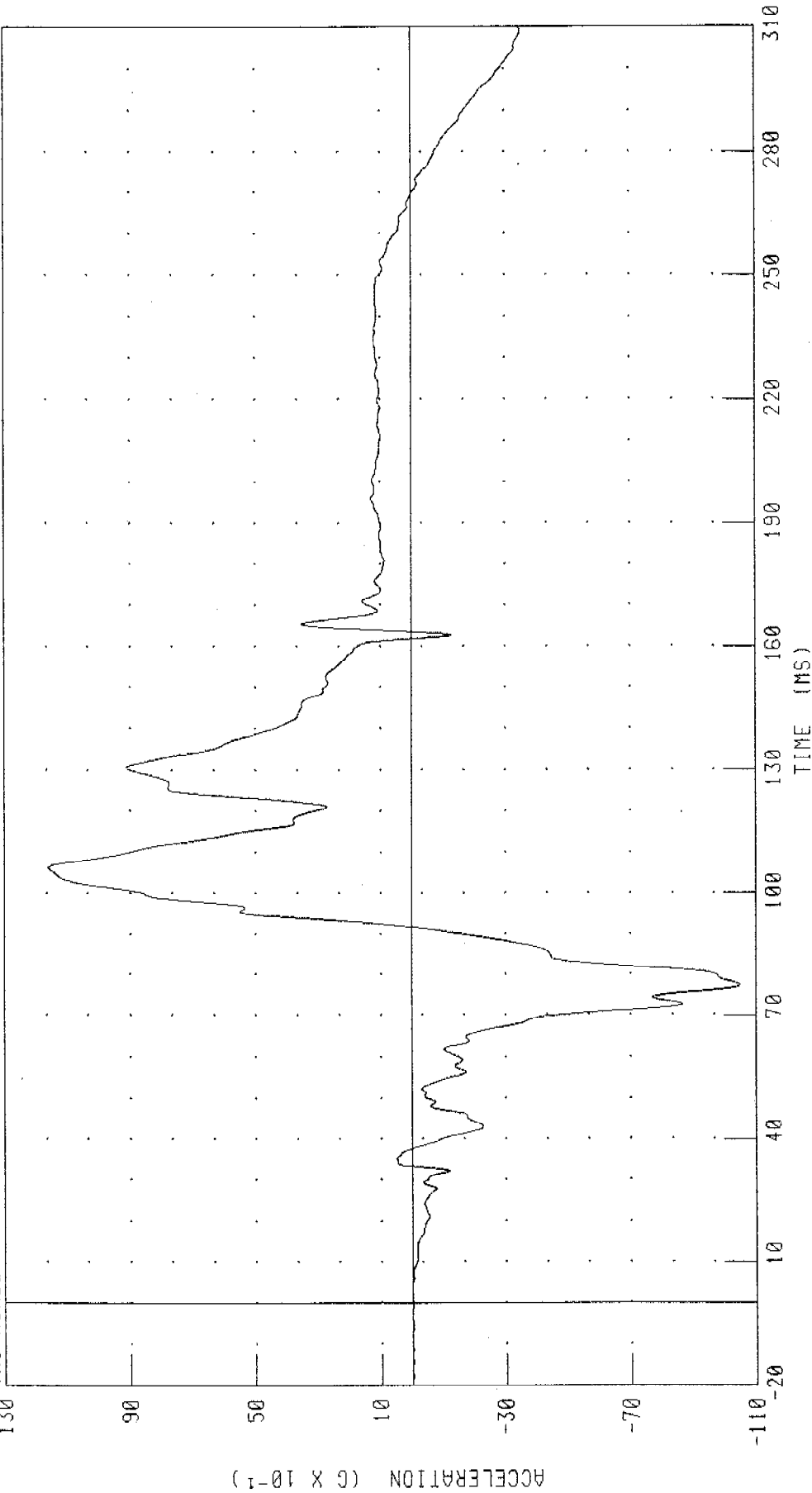
PEAK DATA: 2.32 G @ 84.48 MS; -2.73 G @ 127.84 MS

CHANNEL: CSTYG1 FILTER: CH. CLASS 180

C15400 / 2001 MAZDA 626  
DRIVER CHEST Z-AXIS ACCELERATION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



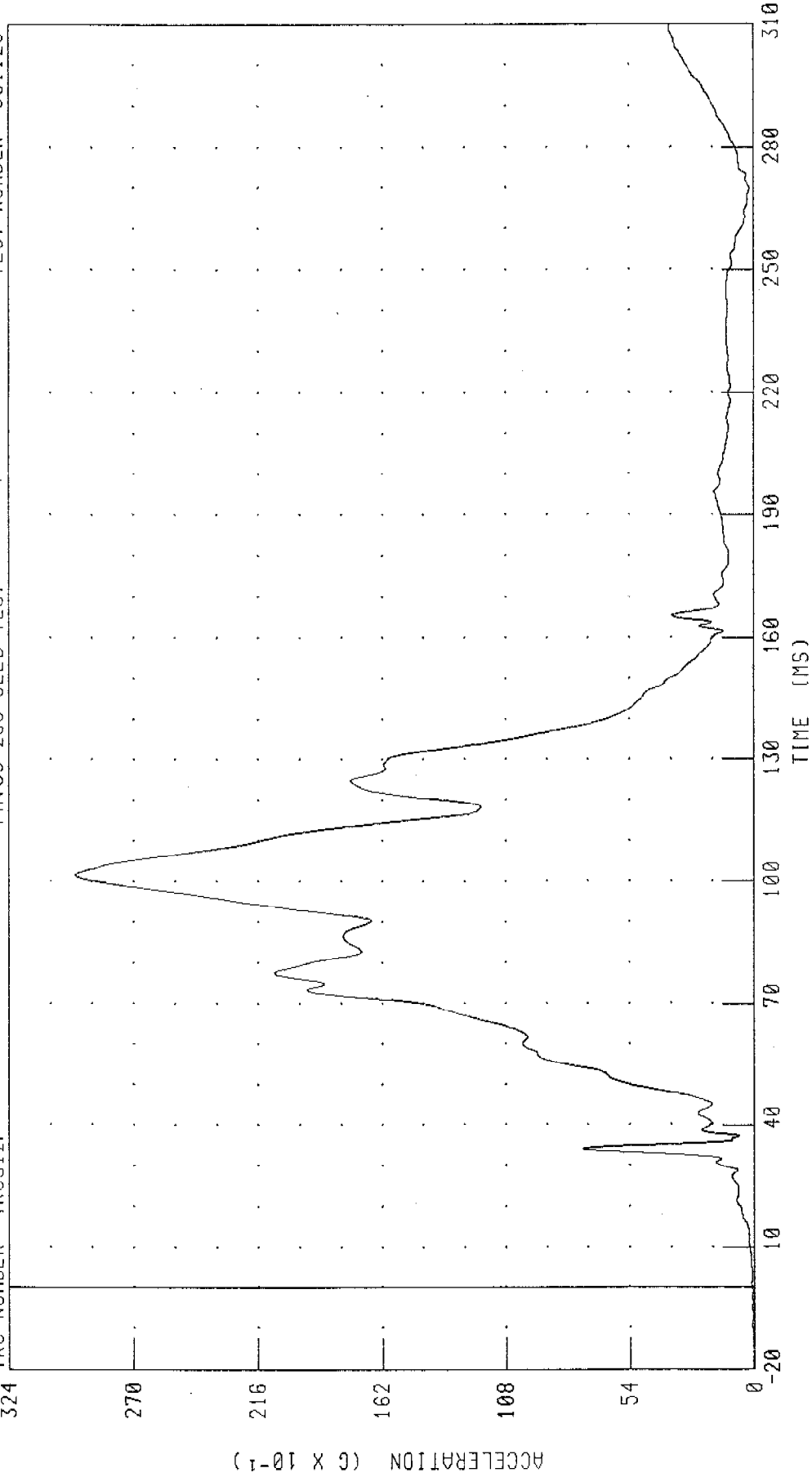
CHANNEL: CSTZG1 FILTER: CH. CLASS 180

PEAK DATA: 11.62 G @ 106.40 MS; -10.49 G @ 77.28 MS

C15400 / 2001 MAZDA 626  
DRIVER CHEST RESULTANT ACCELERATION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



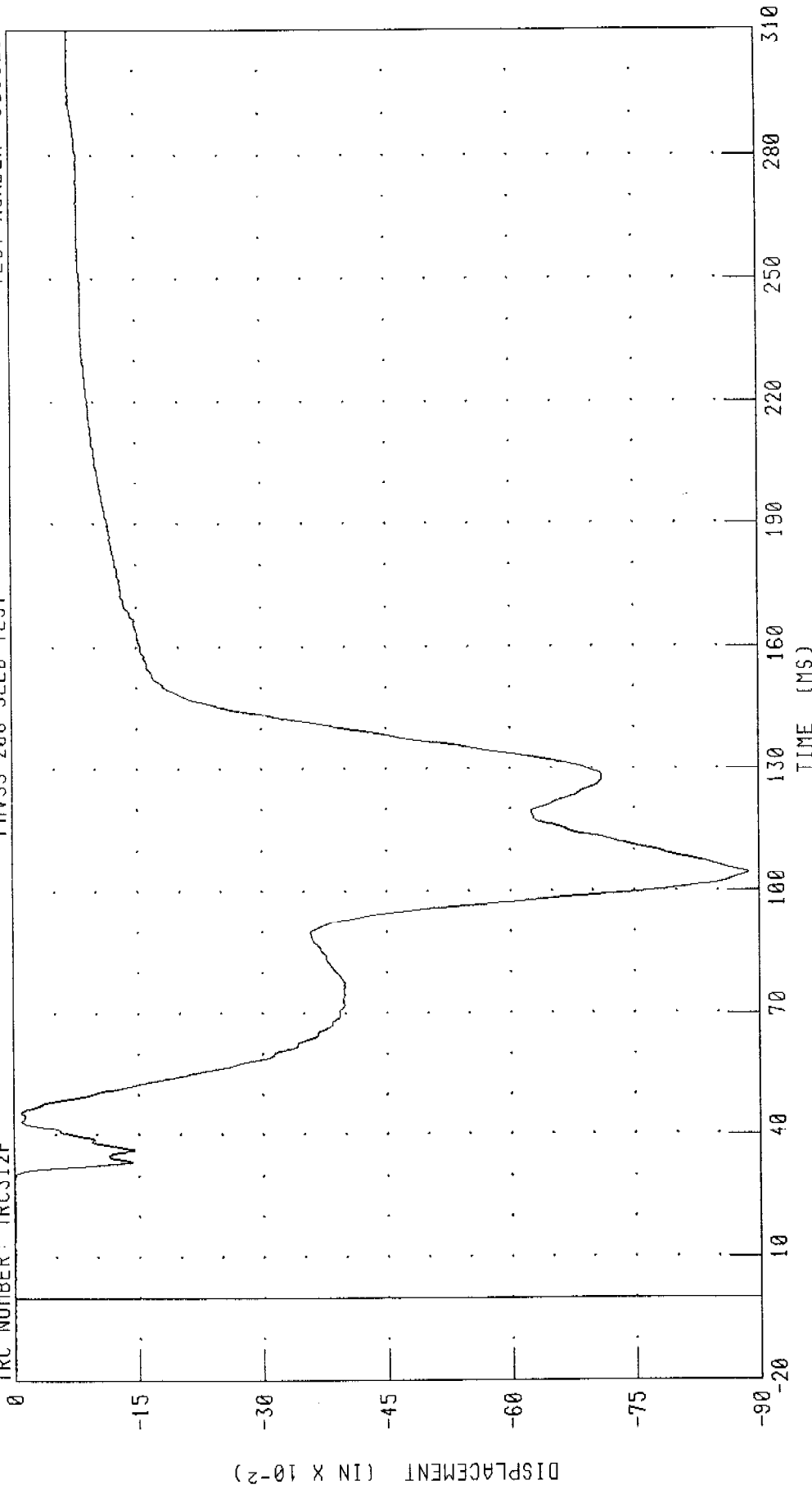
PEAK DATA: 29.52 G @ 101.68 MS; 0.01 G @ -16.48 MS

CHANNEL: CSTRG1 FILTER: CH. CLASS 180

C15400 / 2001 MAZDA 626  
DRIVER CHEST DEFLECTION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

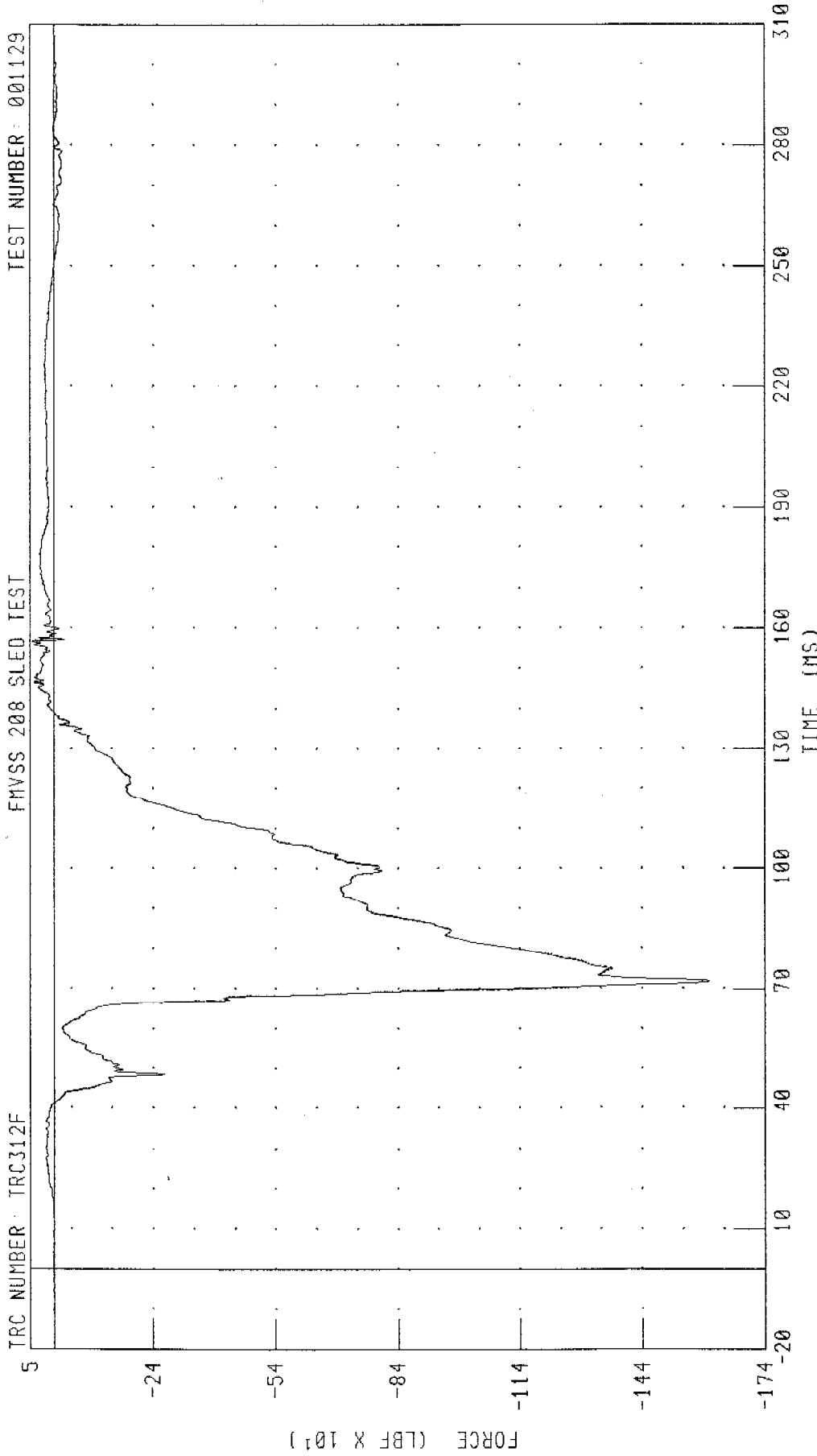
TRC NUMBER: TRC312F



PEAK DATA: 0.00 IN @ -13.76 MS; -0.89 IN @ 104.64 MS

CHANNEL: CSTXD1 FILTER: CH. CLASS 600

C15400 / 2001 MAZDA 626  
DRIVER LEFT FEMUR FORCE  
FMVSS 208 SLED TEST

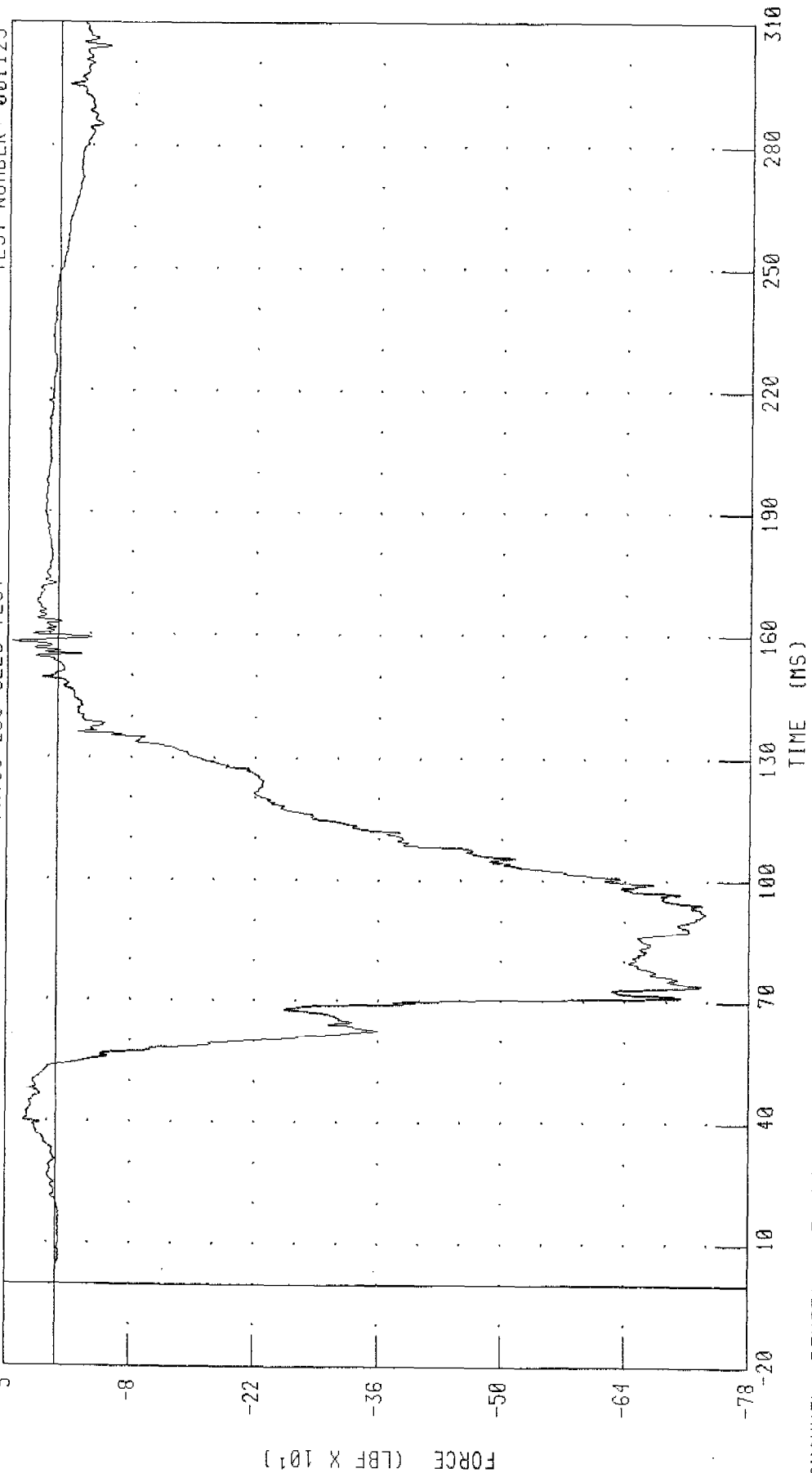


CHANNEL: LFMZF1 FILTER: CH. CLASS 600 PEAK DATA: 52.36 LBF @ 158.72 MS, -1607.64 LBF @ 71.92 MS

C15400 / 2001 MAZDA 626  
DRIVER RIGHT FEMUR FORCE  
FMVSS 208 SLED TEST

5 TRC NUMBER: TRC312F

TEST NUMBER: 001129



CHANNEL: RFMZFI FILTER: CH. CLASS 600  
PEAK DATA: 51.86 LBF @ 158.24 MS; -734.85 LBF @ 91.92 MS

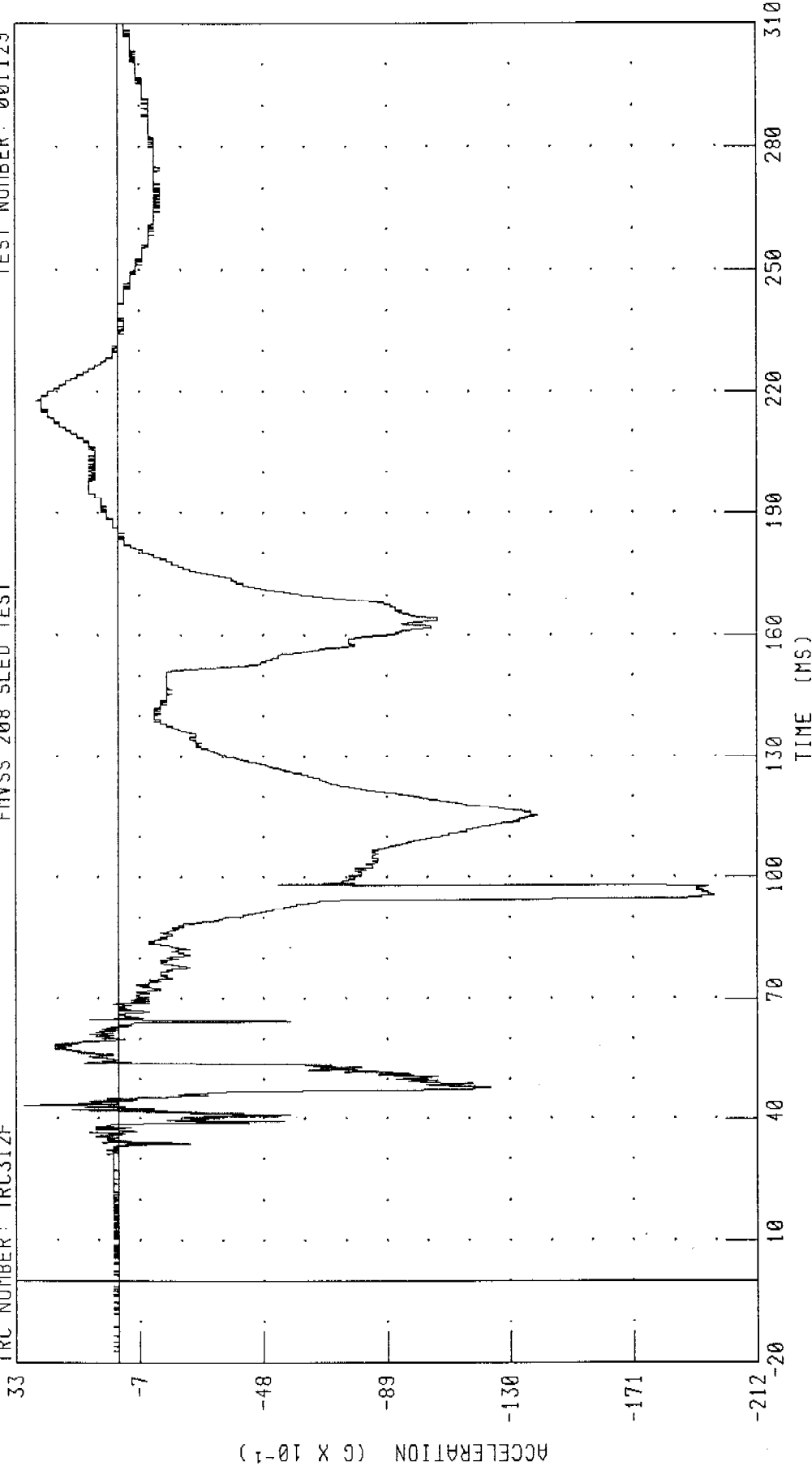
C15400 / 2001 MAZDA 626

RIGHT FRONT PASSENGER HEAD X-AXIS ACCELERATION

FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



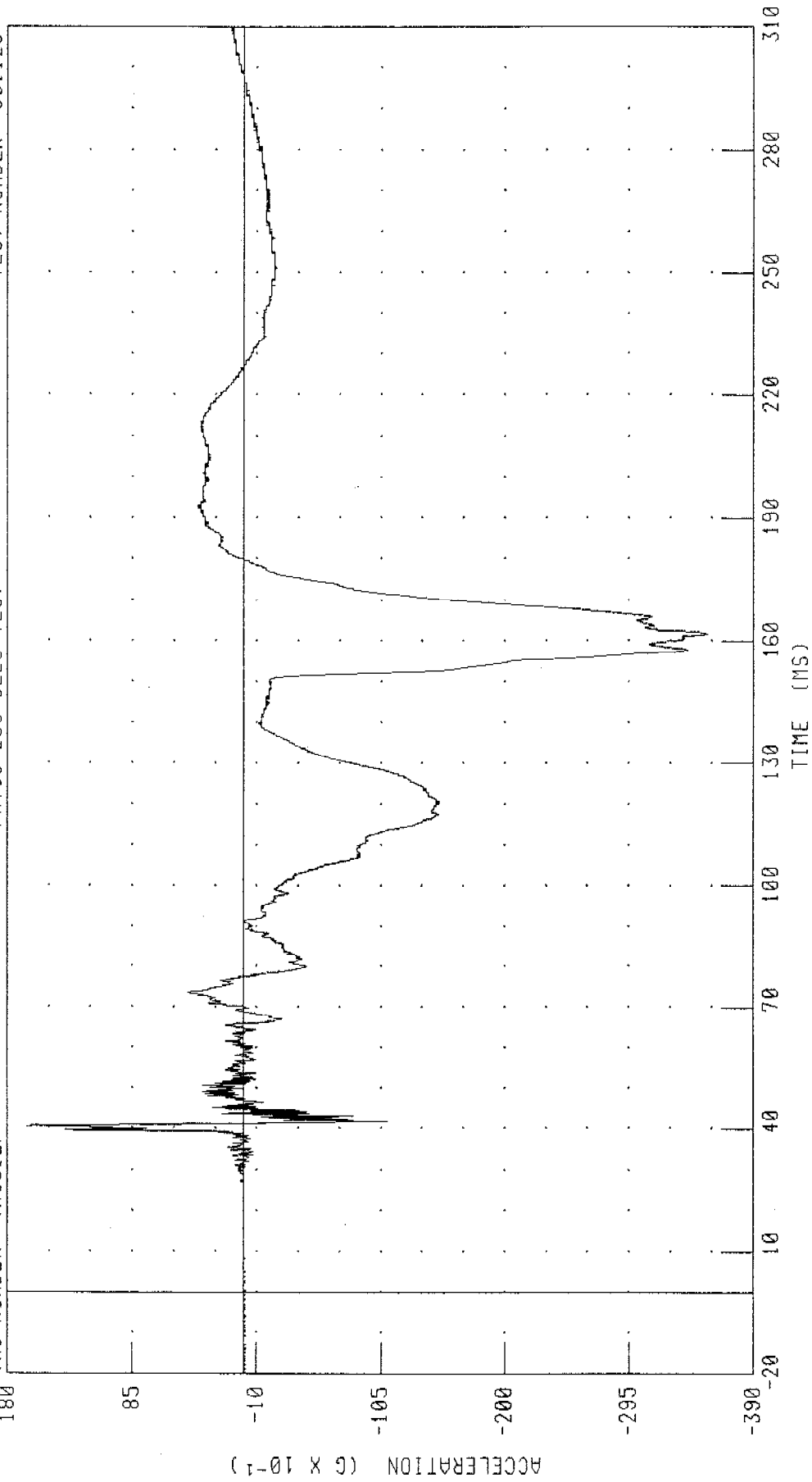
CHANNEL: HEDXC2 FILTER: CH. CLASS 1000

PEAK DATA: 3.12 G @ 43.52 MS; -19.77 G @ 95.60 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER HEAD Y-AXIS ACCELERATION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F

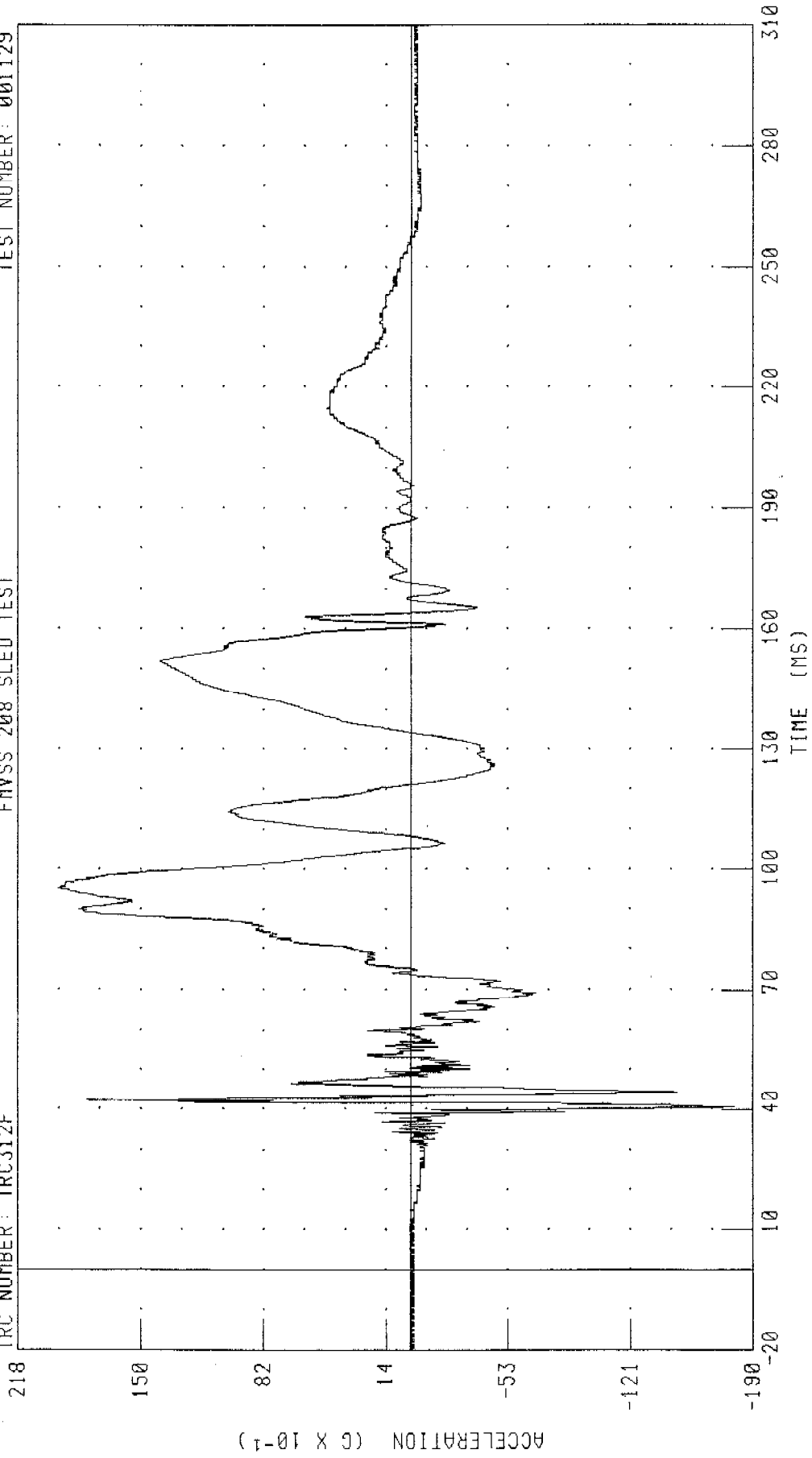


CHANNEL: HEDYC2 FILTER: CH. CLASS 1000  
PEAK DATA: 16.55 G @ 40.48 MS; -35.54 G @ 161.84 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER HEAD Z-AXIS ACCELERATION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



CHANNEL: HEDZG2 FILTER: CH. CLASS 1000 PEAK DATA: 19.58 G @ 95.28 MS; -17.94 G @ 40.56 MS

C15400 / 2001 MAZDA 626

RIGHT FRONT PASSENGER HEAD RESULTANT ACCELERATION

TEST NUMBER: 001129

FMVSS 208 SLED TEST

TRC NUMBER: TRC312F

402

335

268

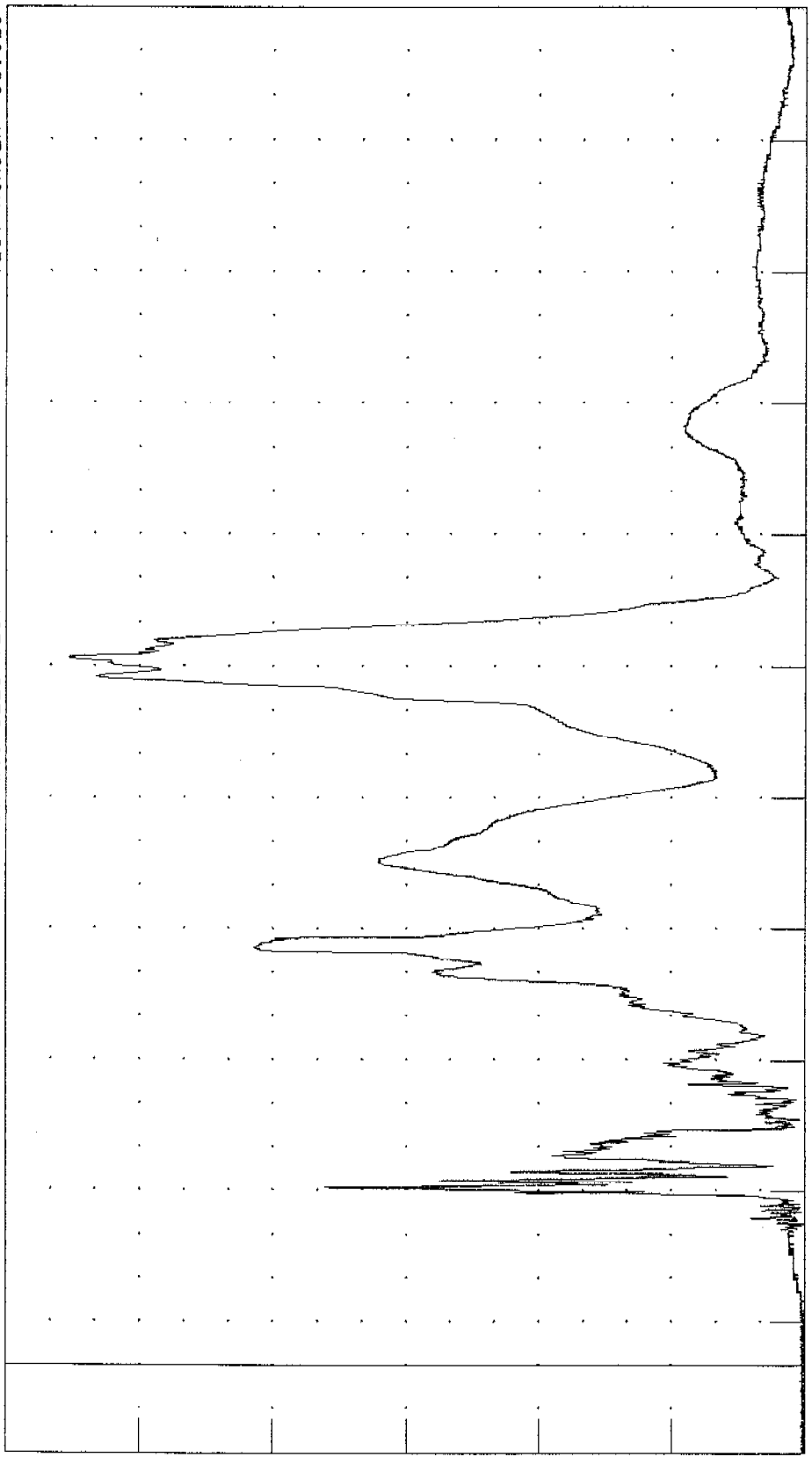
201

134

67

0

ACCELERATION (G X 10<sup>-1</sup>)



TIME (MS)

PEAK DATA: 37.05 G @ 161.84 MS; 0.05 G @ -19.76 MS

CHANNEL: HEDRC2 FILTER: CH. CLASS 1000

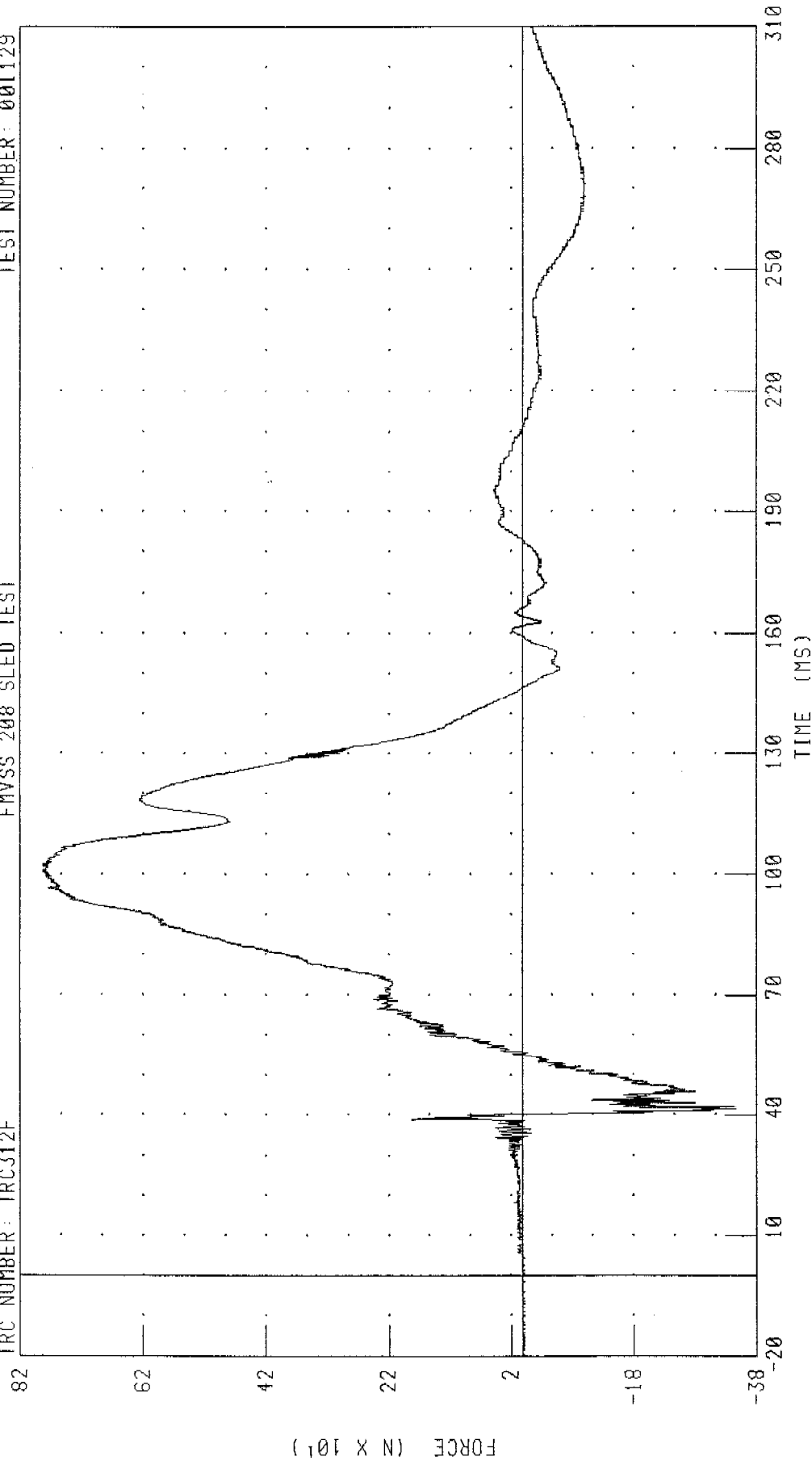
C15400 / 2001 MAZDA 626

RIGHT FRONT PASSENGER NECK X-AXIS SHEAR FORCE

TRC NUMBER: TRC312F

FMVSS 208 SLED TEST

TEST NUMBER: 001129



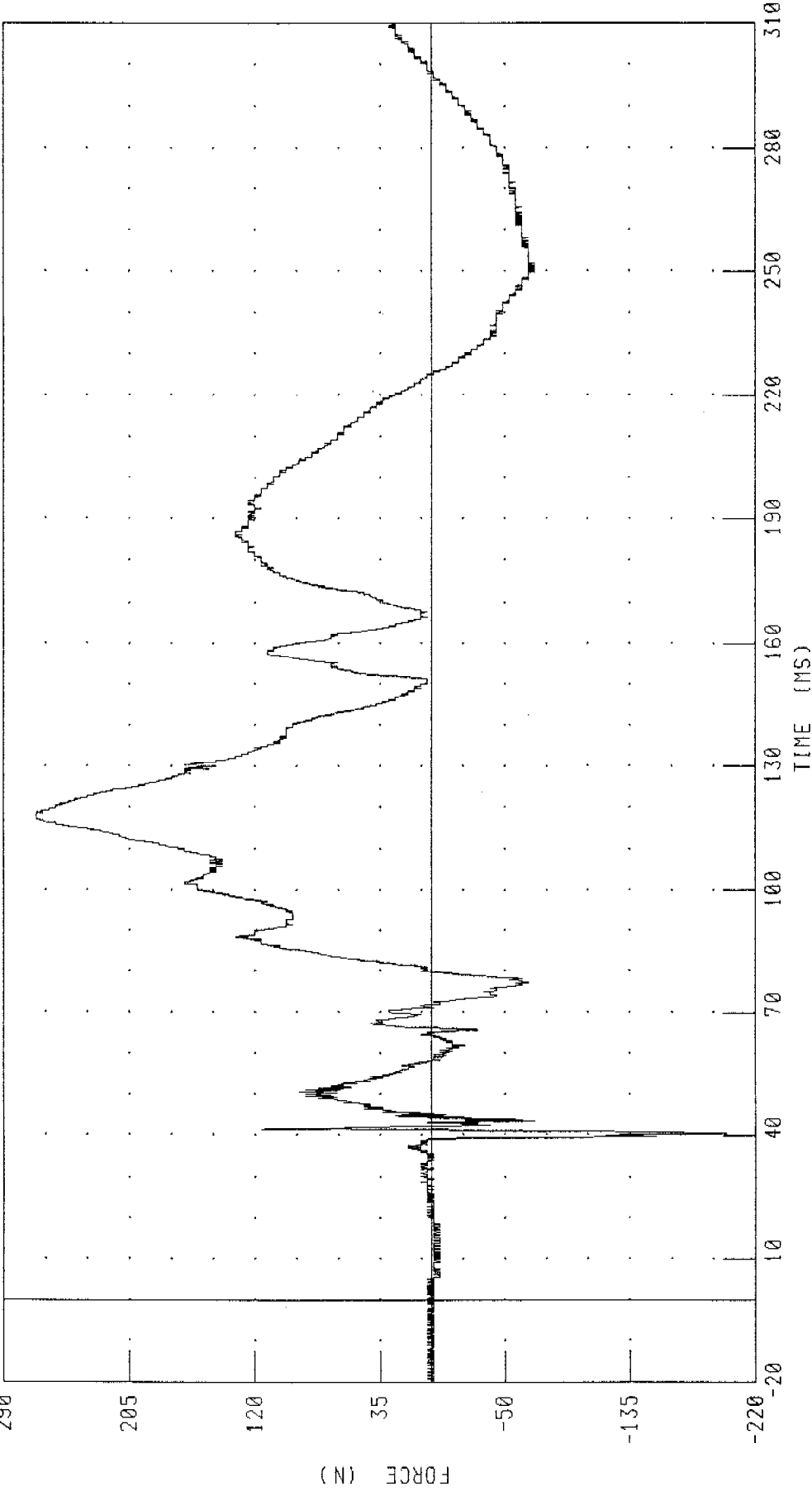
CHANNEL: NEKXF2 FILTER: CH. CLASS 1000

PEAK DATA: 782.57 N @ 100.56 MS, -346.24 N @ 41.52 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER NECK Y-AXIS SHEAR FORCE  
FMVSS 208 SLED TEST

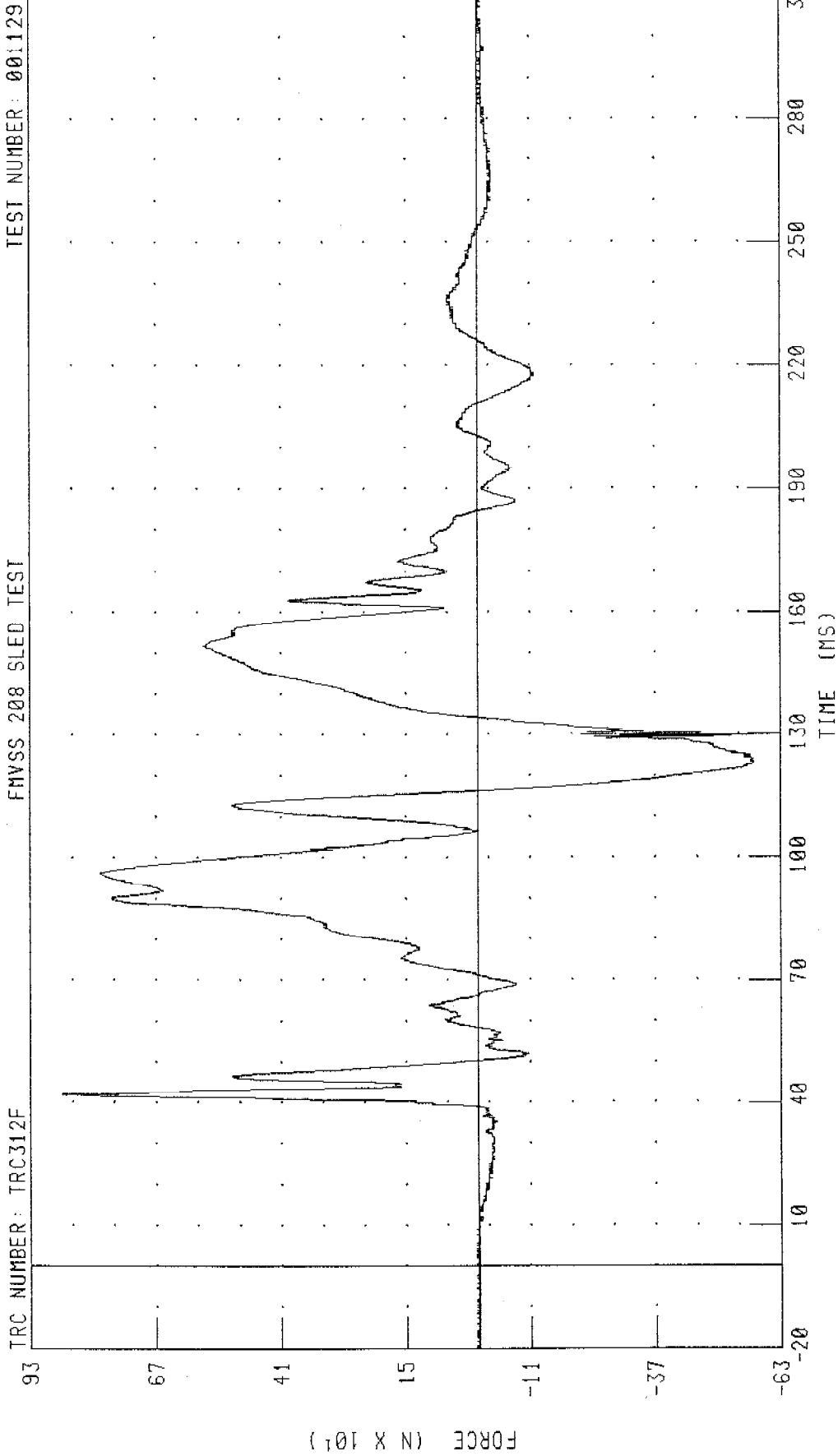
TEST NUMBER: 001129

TRC NUMBER: TRC312F



CHANNEL: NEKYF2 FILTER: CH. CLASS 1000  
PEAK DATA: 267.88 N @ 117.04 MS; -200.90 N @ 40.32 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER NECK Z-AXIS AXIAL FORCE  
FMVSS 208 SLED TEST

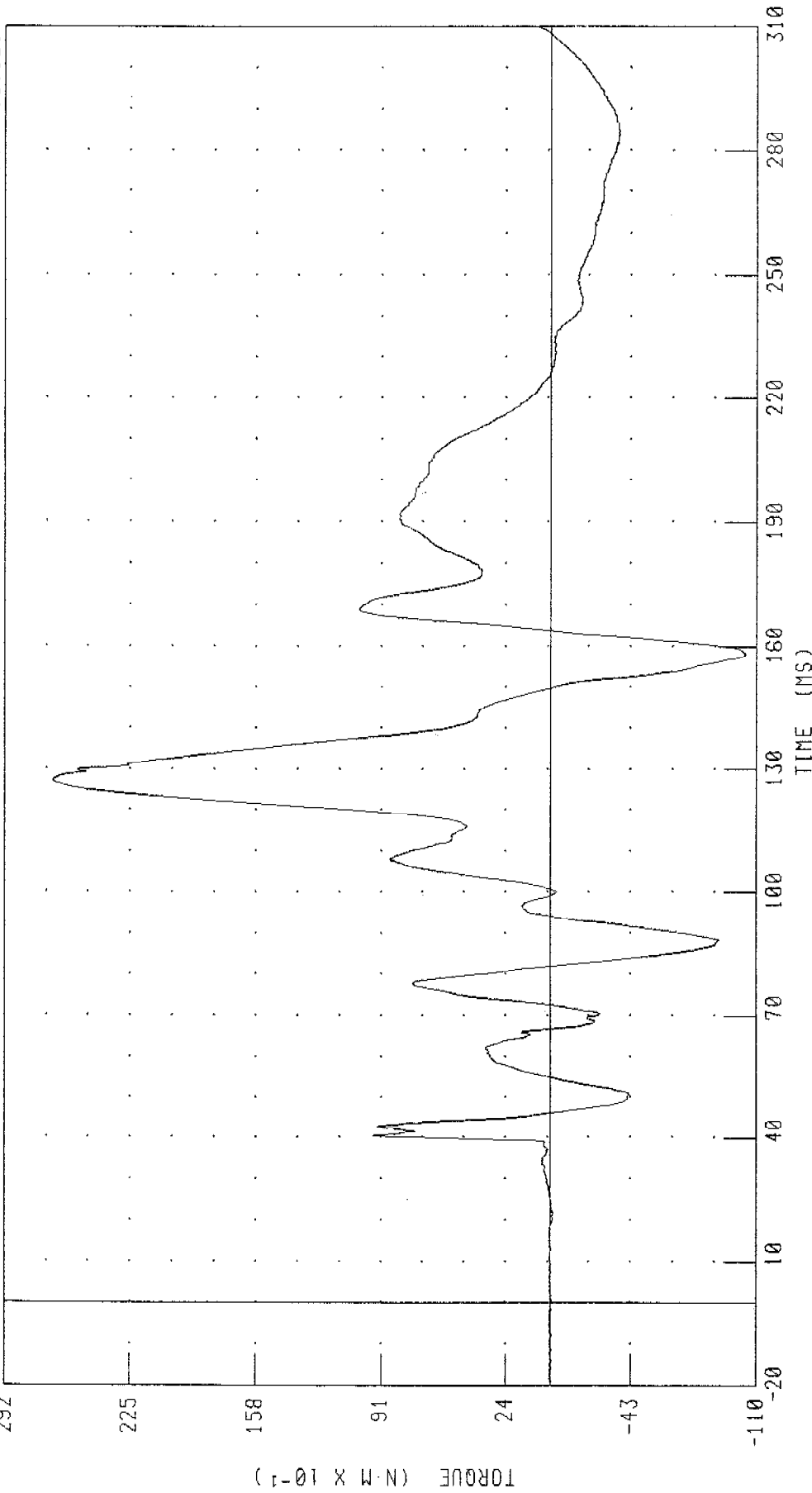


CHANNEL: NEKZF2 FILTER: CH. CLASS 1000 PEAK DATA: 864.27 N @ 42.00 MS; -575.36 N @ 122.88 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER NECK MOMENT ABOUT X AXIS  
FMVSS 208 SLED TEST

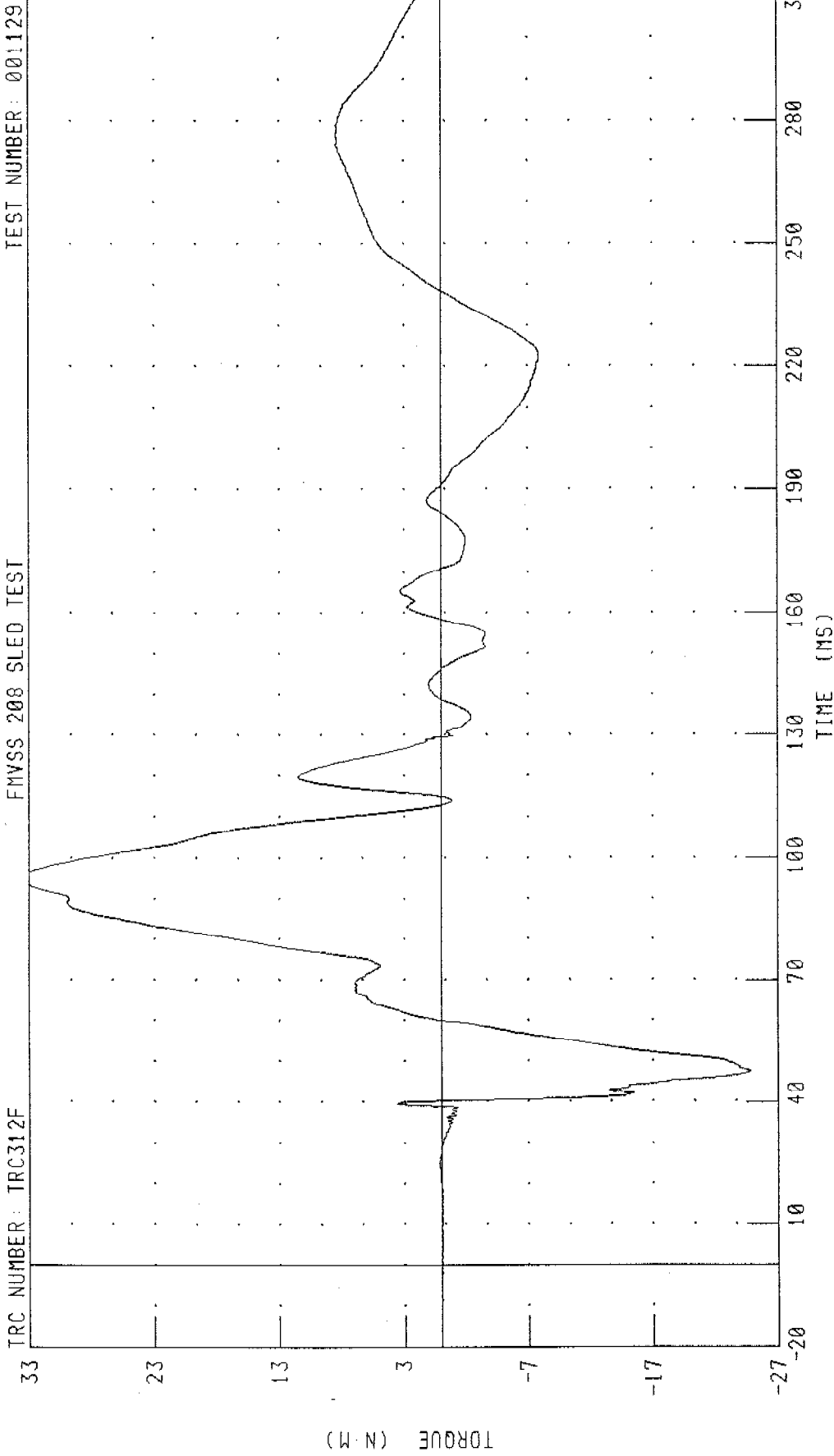
TEST NUMBER: 001129

TRC NUMBER: TRC312F



CHANNEL: NEKXN2 FILTER: CH. CLASS 600 PEAK DATA: 26.59 N·M @ 127.12 MS; -10.43 N·M @ 158.16 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER NECK MOMENT ABOUT Y AXIS  
FMVSS 208 SLED TEST

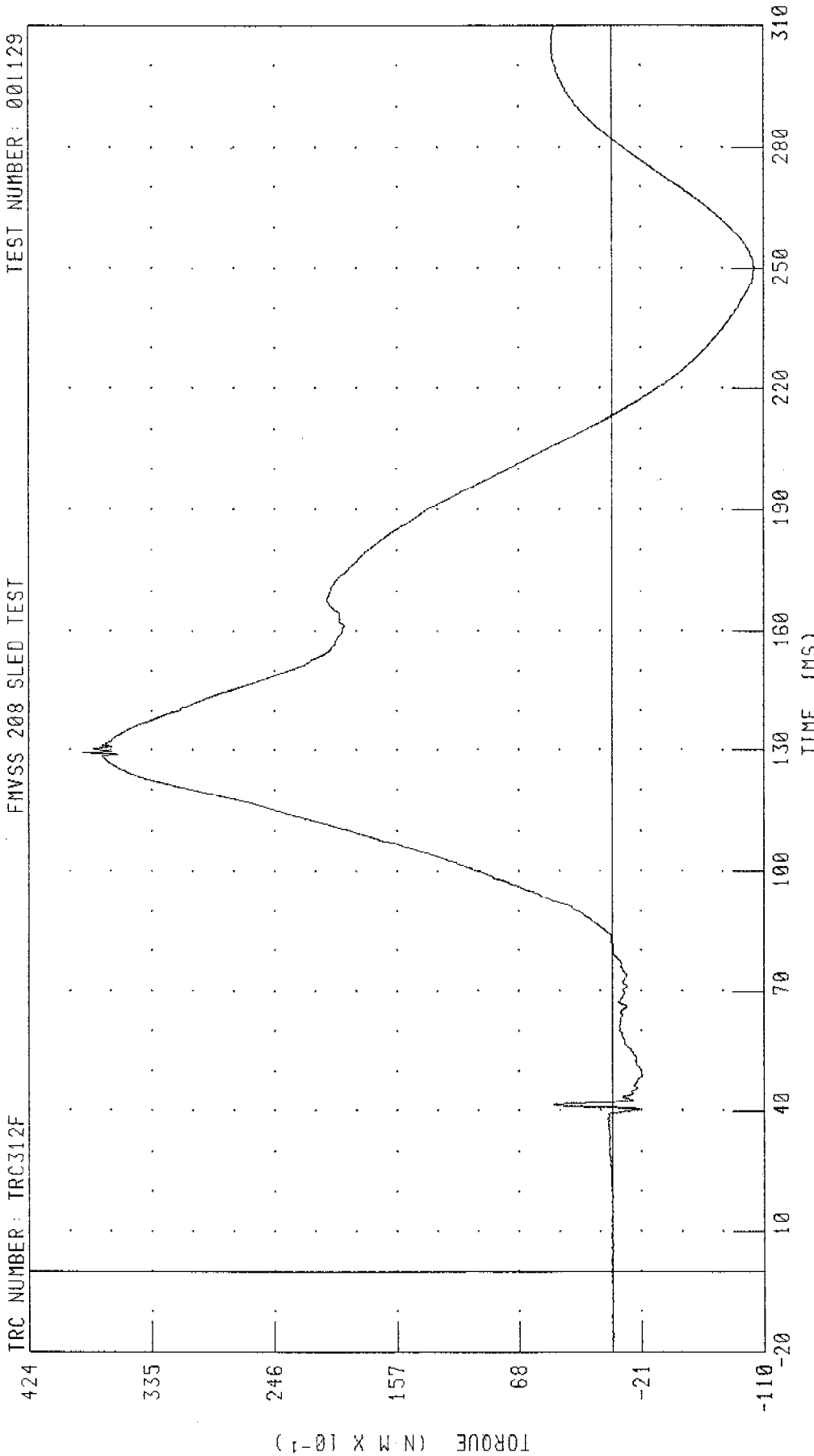


CHANNEL: NEKYM2 FILTER: CH. CLASS 600 PEAK DATA: 33.38 N.M @ 94.24 MS; -24.80 N.M @ 130 MS; 33.38 N.M @ 160 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER NECK MOMENT ABOUT Z AXIS  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



PEAK DATA: 38.48 N·M @ 129.28 MS; -10.34 N·M @ 249.76 MS

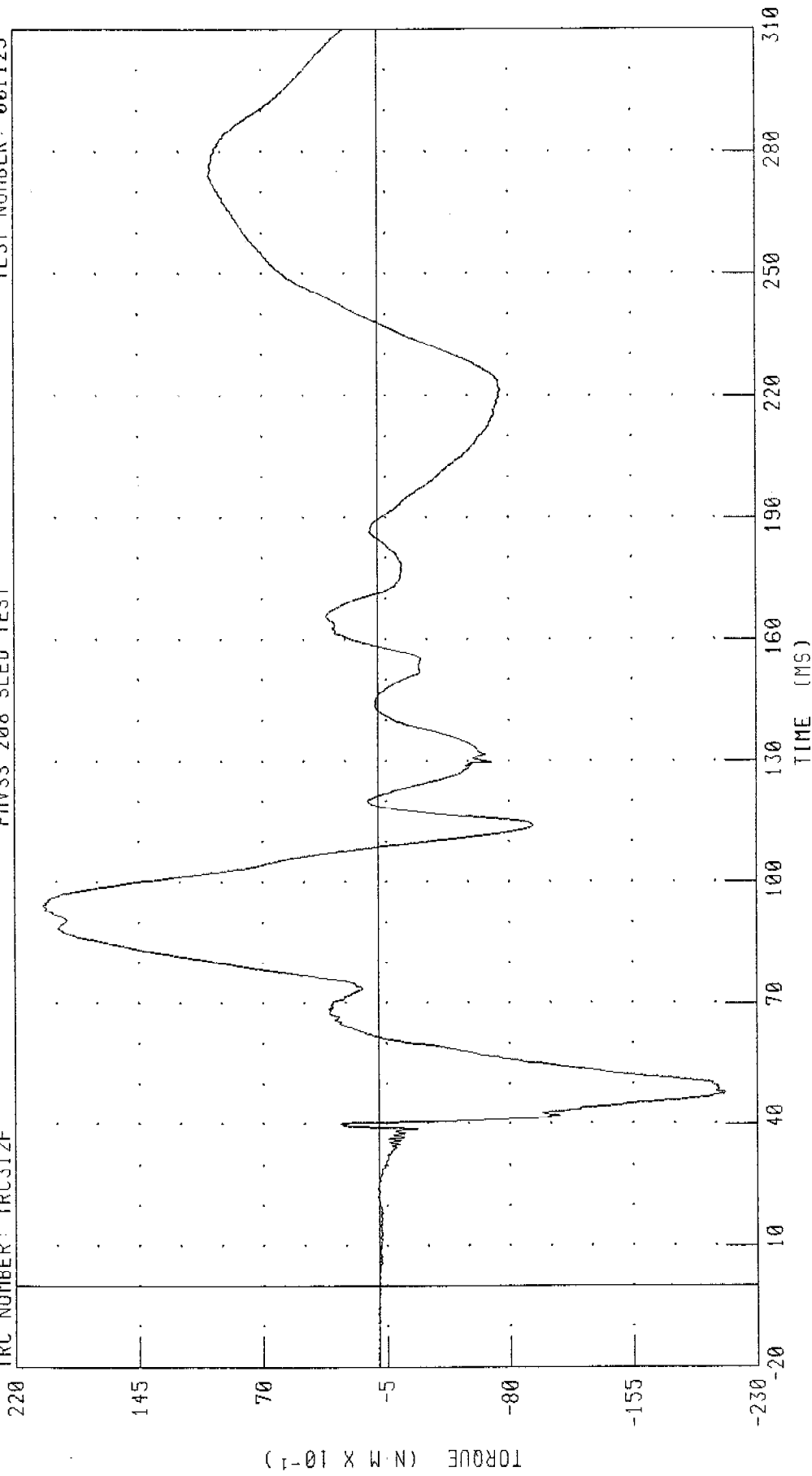
CHANNEL: NEKZM2 FILTER: CH. CLASS 600

C15400 / 2001 MAZDA 626

RIGHT FRONT PASSENGER NECK MOMENT ABOUT Y AXIS OCCIPITAL CONDYLE

TEST NUMBER: 001129

TRC NUMBER: TRC312F



PEAK DATA: 20.31 N·M @ 94.24 MS; -21.12 N·M @ 47.76 MS

CHANNEL: NEKOM2 FILTER: CH. CLASS 600

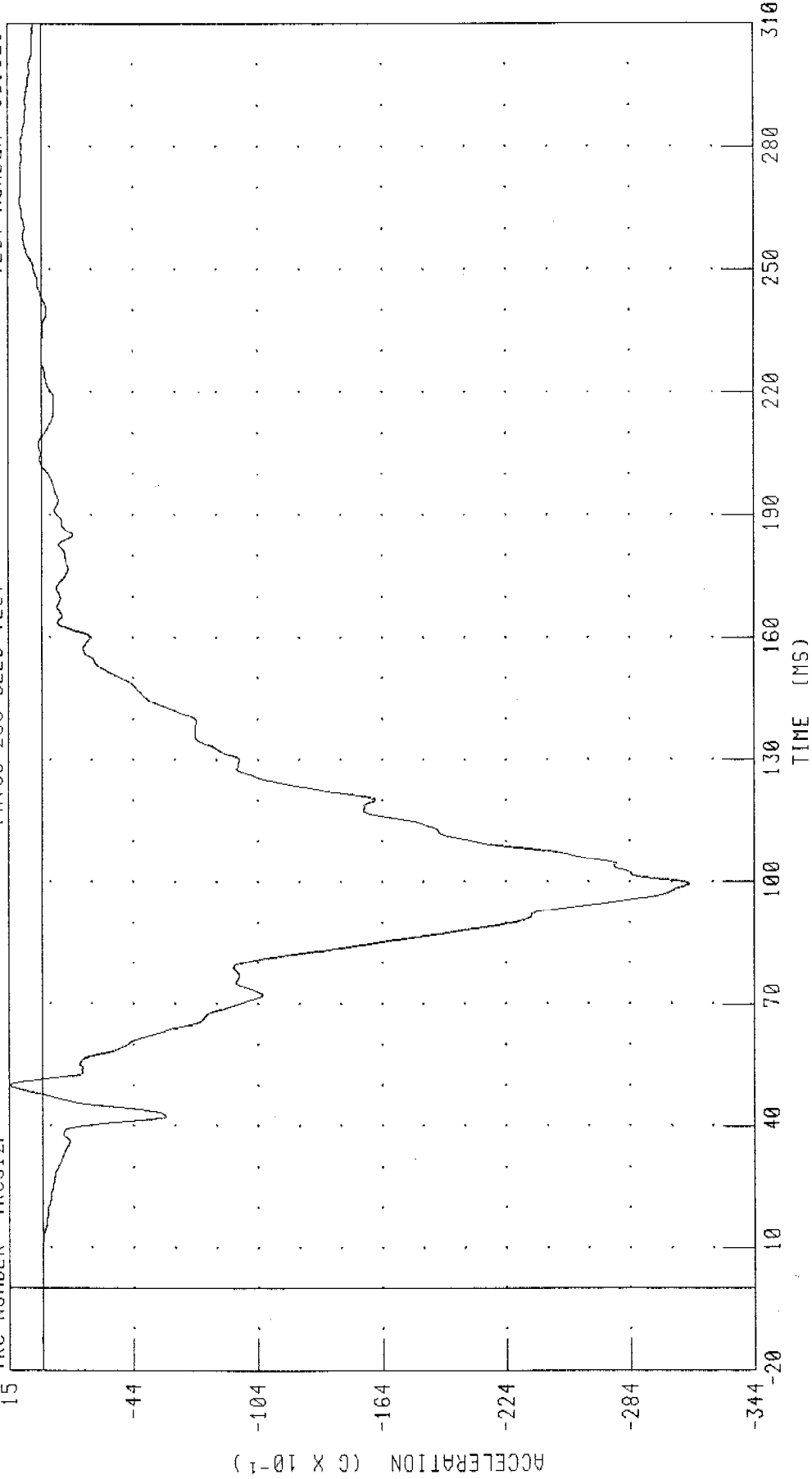
C15400 / 2001 MAZDA 626

RIGHT FRONT PASSENGER CHEST X-AXIS ACCELERATION

FVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



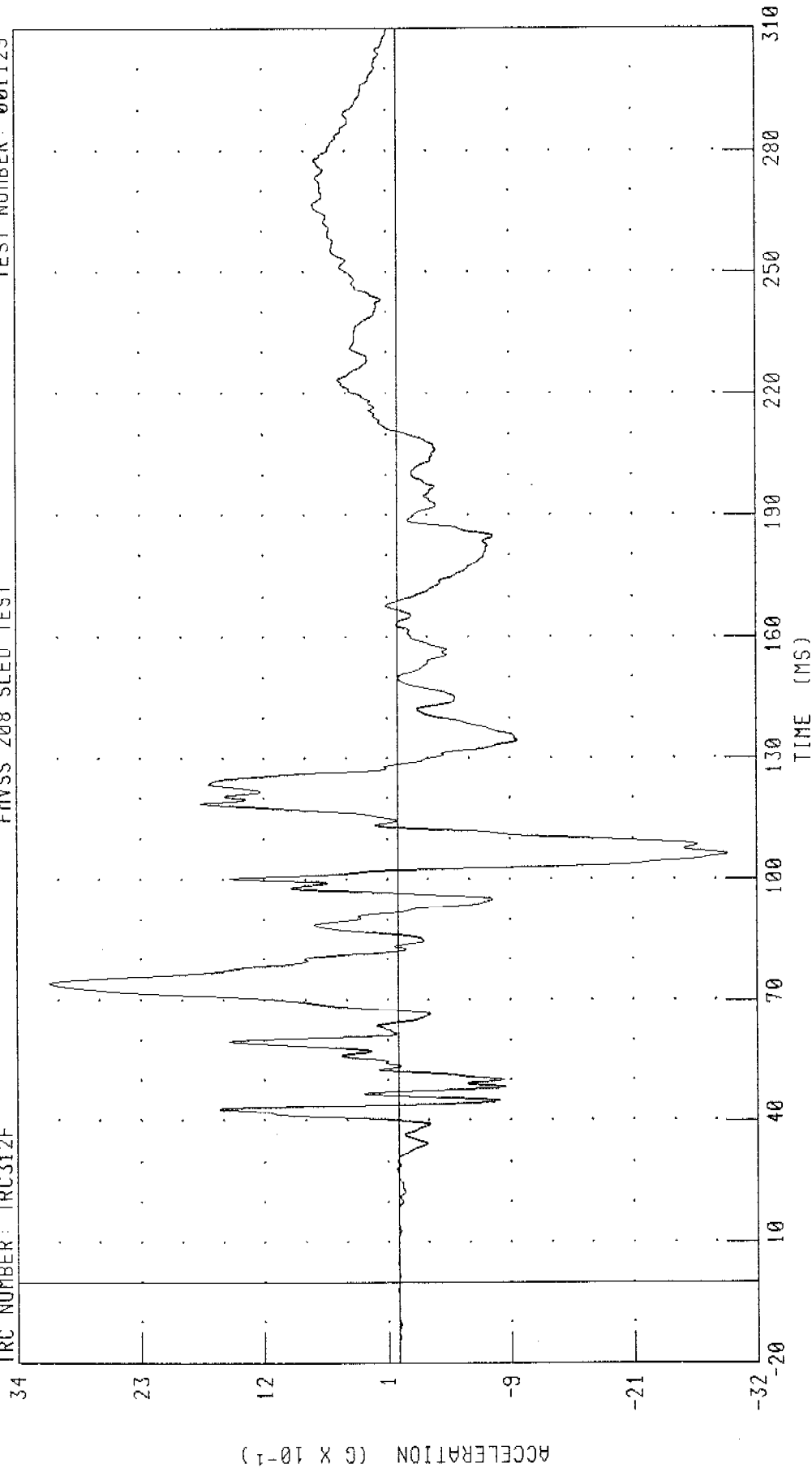
CHANNEL: CSTXG2 FILTER: CH. CLASS 180

PEAK DATA: 1.54 C @ 50.08 MS; -31.25 C @ 99.60 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER CHEST Y-AXIS ACCELERATION  
FHVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



CHANNEL: CSTYG2 FILTER: CH. CLASS 180

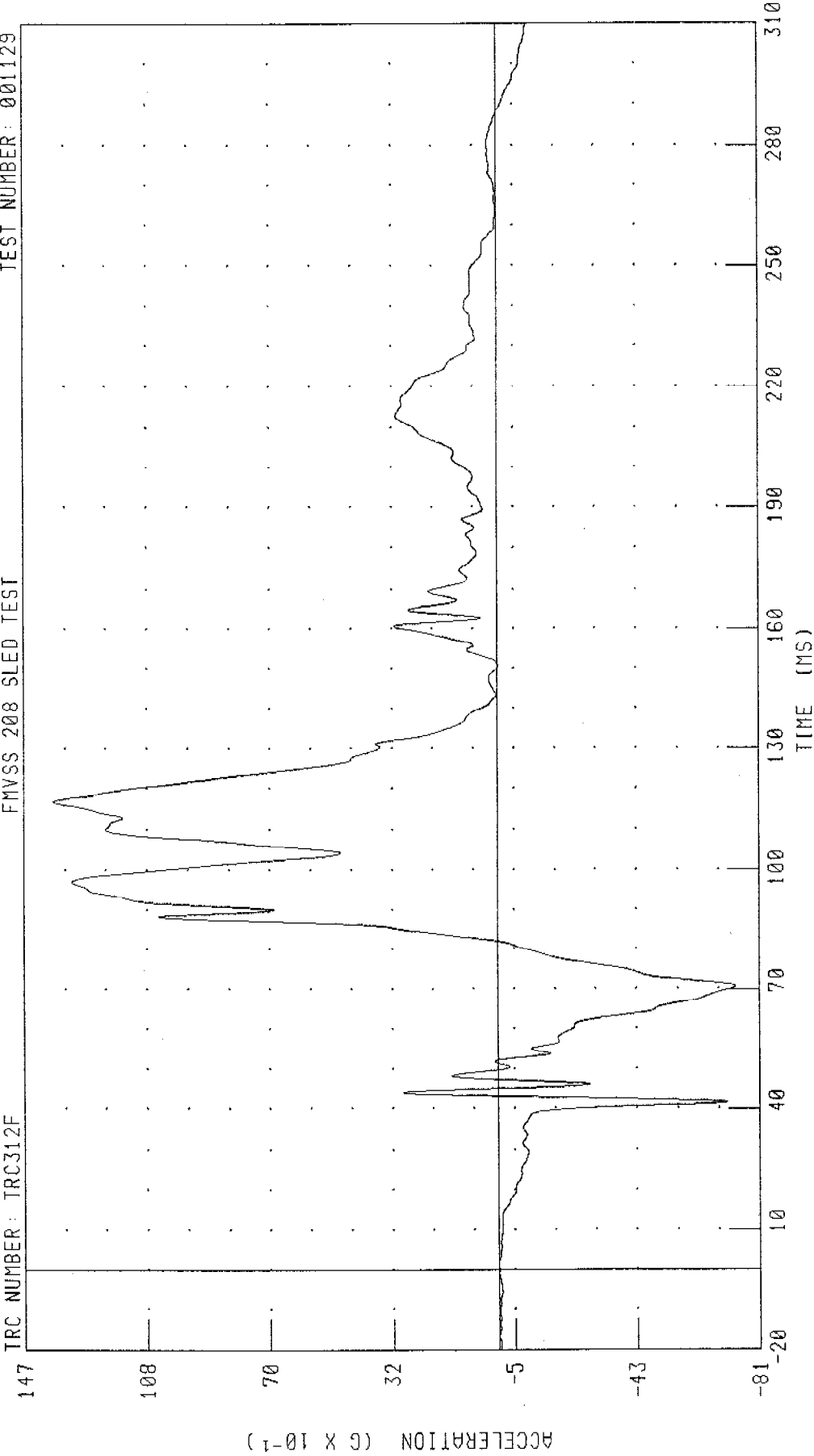
PEAK DATA: 3.11 G @ 74.16 MS; -2.94 G @ 106.40 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER CHEST Z-AXIS ACCELERATION

TEST NUMBER: 001129

FMVSS 208 SLED TEST

TRC NUMBER: TRC312F



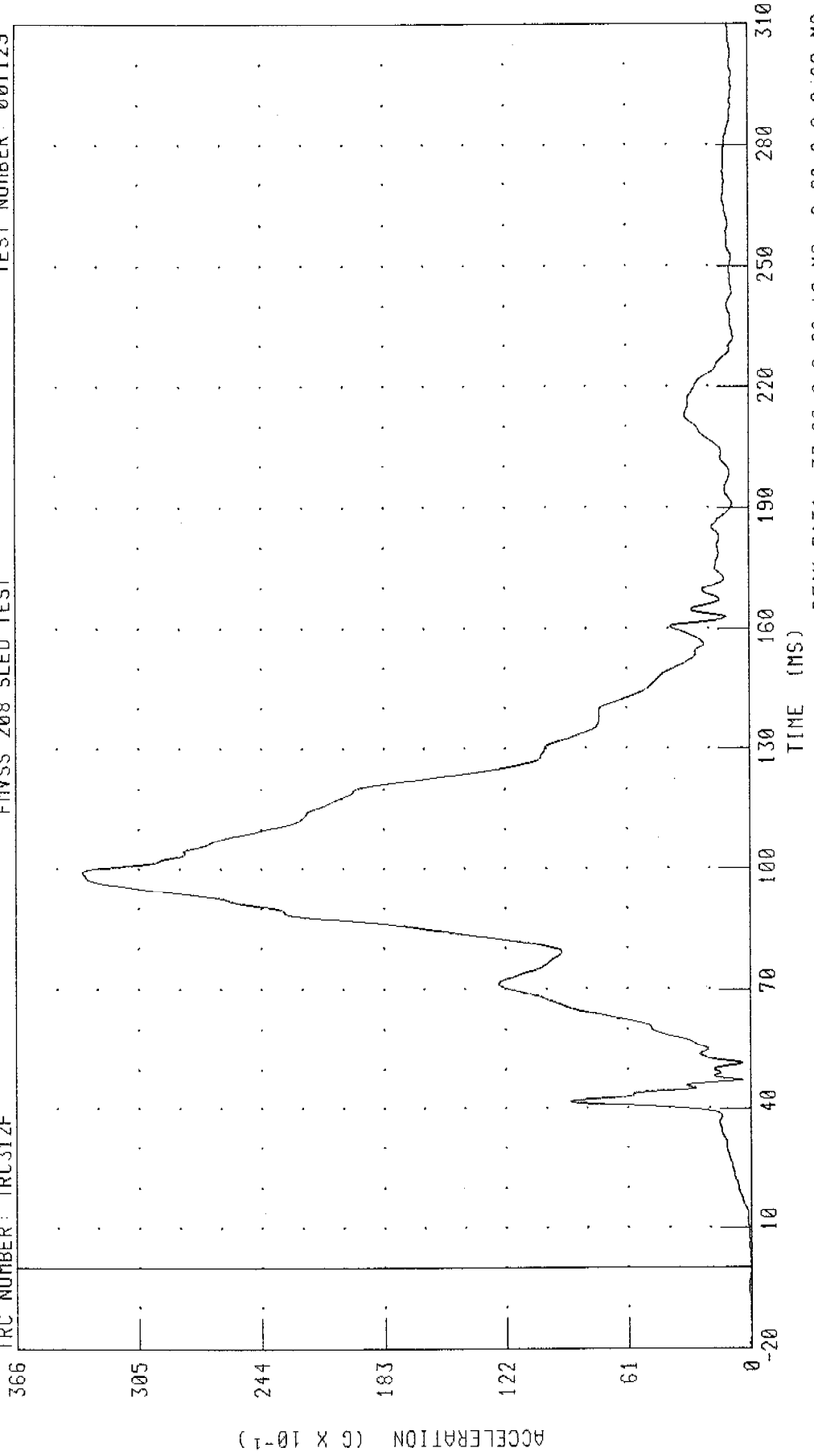
PEAK DATA: 13.79 G @ 116.80 MS; -7.37 G @ 70.64 MS

CHANNEL: CSTZG2 FILTER: CH CLASS 180

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER CHEST RESULTANT ACCELERATION  
FIYSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



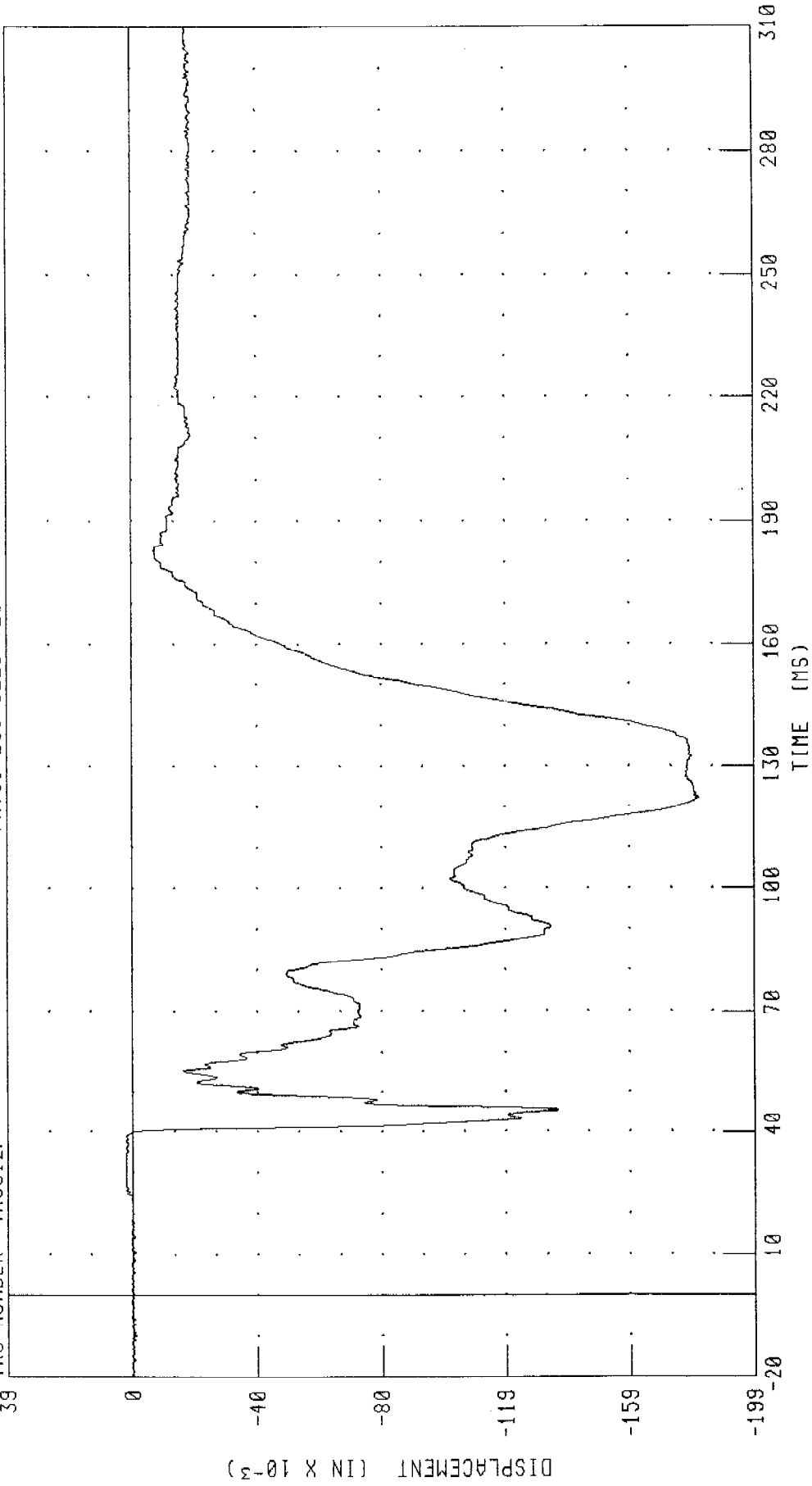
PEAK DATA: 33.29 G @ 99.12 MS; 0.02 G @ 2.00 MS

CHANNEL: CSTRG2 FILTER: CH. CLASS 180

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER CHEST DEFLECTION  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



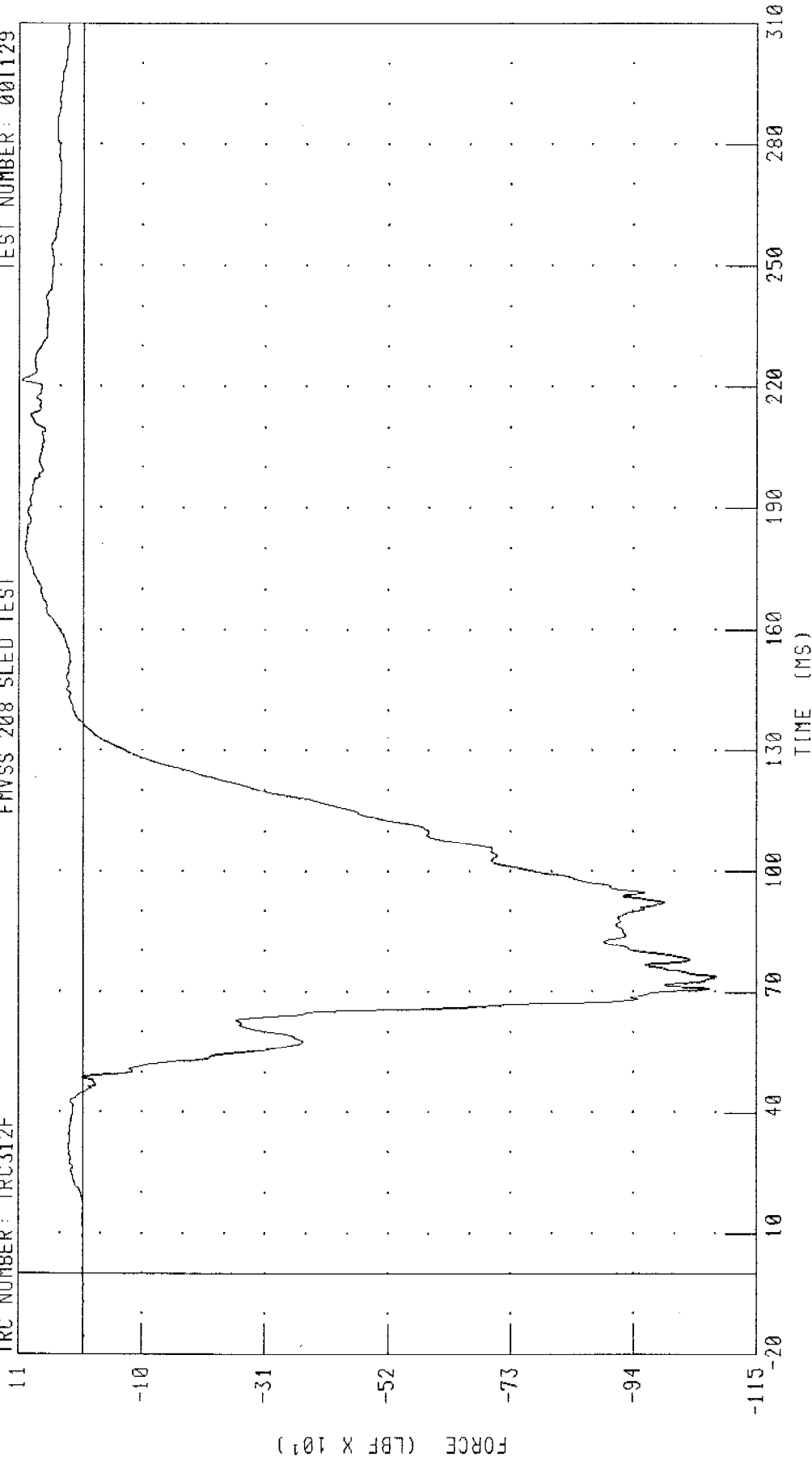
CHANNEL: CSTXD2 FILTER: CH. CLASS 600

PEAK DATA: 0.00 IN @ 37.84 MS; -0.18 IN @ 122.48 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER LEFT FEMUR FORCE  
FHVSS 208 SLED TEST

TRC NUMBER: TRC312F

TEST NUMBER: 001129



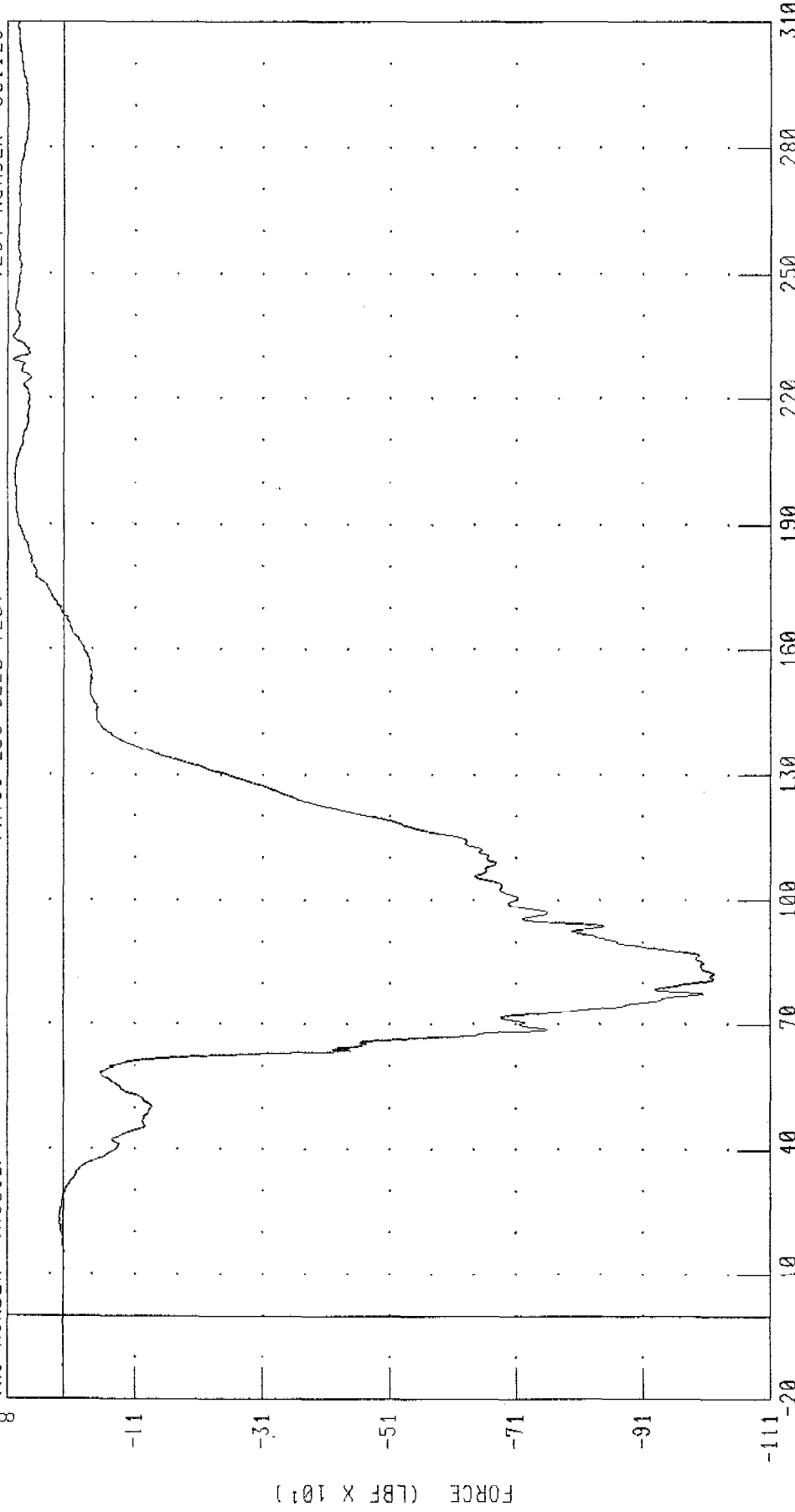
CHANNEL: LFMZF2 FILTER: CH. CLASS 600

PEAK DATA: 105.08 LBF @ 221.68 MS; -1081.99 LBF @ 73.68 MS

C15400 / 2001 MAZDA 626  
RIGHT FRONT PASSENGER RIGHT FEMUR FORCE  
FMVSS 208 SLED TEST

TEST NUMBER: 001129

TRC NUMBER: TRC312F



TIME (MS)

PEAK DATA: 79.66 LBF @ 229.28 MS, -1025.05 LBF @ 82.40 MS

CHANNEL: RFMZF2 FILTER: CH. CLASS 600

Appendix C

Manufacturer's Vehicle Information

## Essential Safety Equipment

### Seat Belt System

Seat belts help to decrease the possibility of severe injury during accidents and sudden stops. Mazda recommends that the driver and all passengers always wear seat belts.

All of the seat belt retractors are designed to keep the lap/shoulder belts out of the way when not in use.

The driver's seat belt has no provisions for child-restraint systems and has only an emergency locking mode. The driver may wear it comfortably, and it will lock during a collision.

However, the front passenger's seat and rear lap/shoulder belt retractors

operate in two modes, emergency locking mode and for child-restraint systems, automatic locking mode.

#### Emergency locking mode

If the belt has fully retracted, it will always be in the emergency locking mode until you move it into automatic locking mode by pulling the belt all the way out to its full length. In the emergency locking mode, the belt remains comfortable on the occupant and the retractor will lock in position during a collision.

If the belt feels tight and hinders comfortable movement while the vehicle is stopped or in motion, you

may be in the automatic locking mode because you have pulled the belt too far out. To return to the more comfortable emergency locking mode, wait until you can stop the vehicle in a safe area, retract the belt fully to convert it back to emergency locking mode and then again extend it around you.

#### Automatic locking mode

Always use the automatic locking mode to keep the child-restraint system from shifting to an unsafe position in the event of an accident. To get the seat belt into the automatic locking mode, pull it all the way out and connect it as instructed on the

2-14

## Essential Safety Equipment

child-restraint system. It will retract down to the child-restraint system and stay locked on it. See the section on child restraint (page 2-26).

### **WARNING**

**Not Wearing Seat Belts:**  
*Not wearing a seat belt is extremely dangerous. During a collision, occupants not wearing seat belts could hit someone or things inside the vehicle or even be thrown out of the vehicle. They could be seriously injured or even killed. In the same collision, occupants wearing seat belts would be much safer. Always wear your seat belt and make sure all occupants are properly restrained.*

### **WARNING**

**Seat Belt Damaged During an Accident:**  
*Using a damaged seat belt is dangerous. An accident could damage the belt webbing of the seat belt in use. A damaged seat belt cannot provide adequate protection in a collision. Have an Authorized Mazda Dealer inspect all seat belt systems in use during an accident before they are used again.*

2-15

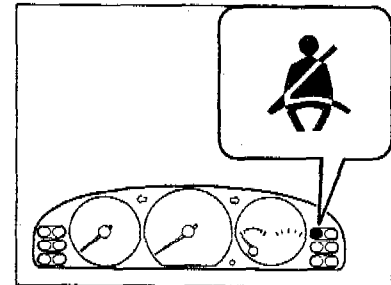
## Essential Safety Equipment

### **WARNING**

***Twisted Seat Belts:***  
Twisted seat belts can cause injury. In a collision, the full width of the belt isn't available to absorb the impact. This puts more force on the bones beneath the belt, which could break them or cause other serious injury or death. Don't wear twisted seat belts.

### **WARNING**

***One Belt, One Passenger:***  
Using one seat belt for more than one person at a time is dangerous. A seat belt used in this way can't spread the impact forces properly and the two passengers could be crushed together and seriously injured or even killed. Never use one belt for more than one person at a time.



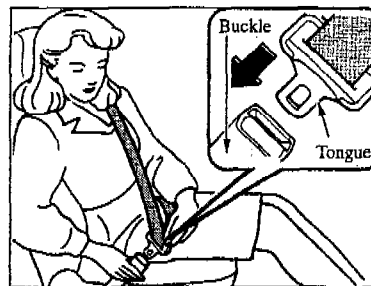
#### ■ Seat Belt Warning Light/Beep

If the driver's seat belt is not fastened when the ignition switch is turned to the ON position, a beep will sound for about 6 seconds and the seat belt warning light will remain on until the belt is fastened.

2-16

## Essential Safety Equipment

If the system does not operate correctly, consult an Authorized Mazda Dealer.



#### ■ Front Seat Belts

To fasten:

1. Grasp the buckle and tongue.
2. Slowly pull out the lap/shoulder belt.

3. Insert the tongue into the buckle until you hear a click.
4. Make sure the shoulder belt is snugly fitted against your body.

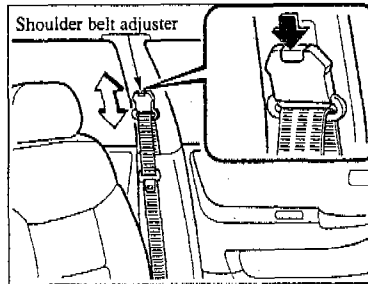
2-17

## Essential Safety Equipment

### **WARNING**

#### ***Positioning the Shoulder Portion of the Seat Belt:***

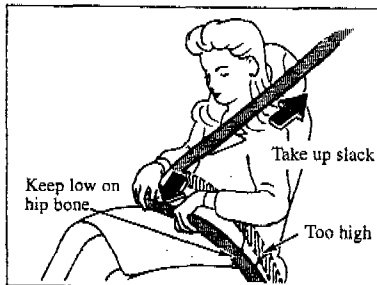
*Improper positioning of the shoulder portion of the seat belt is dangerous. An improperly positioned belt will provide little or no protection in a collision. Always make sure the shoulder portion of the seat belt is positioned across your shoulder and near your neck, but never under your arm, on your neck, or on your upper arm.*



This adjusts the shoulder belt angle for a more comfortable fit. Simply push the button, move it to the desired position, and then release it. Make sure the adjuster is locked.

2-18

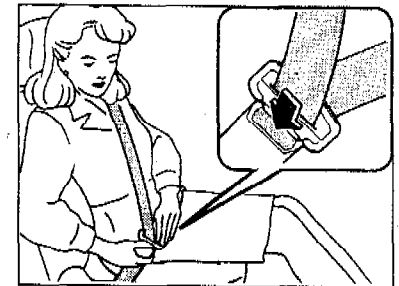
## Essential Safety Equipment



### **WARNING**

#### ***Positioning the Lap Portion of the Seat Belt:***

*The lap portion of the seat belt worn too high can be dangerous. In a collision, this would concentrate the impact force directly on the abdominal area, causing serious injury. Wear the lap portion of the belt snugly and as low as possible.*



To unfasten:

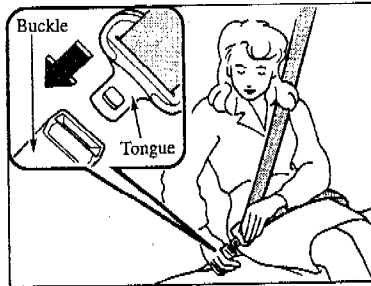
Depress the button on the buckle.

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## Essential Safety Equipment

### NOTE

If a belt does not fully retract, inspect it for kinks and twists.



2. Insert this tongue into the buckle until you hear a click.
3. Make sure the shoulder belt is snugly fitted against your body.

The retractor will take up excess belt and maintain tension.

### ■ Rear Seat Belts

To fasten:

1. Grasp the tongue and pull it to the desired length.

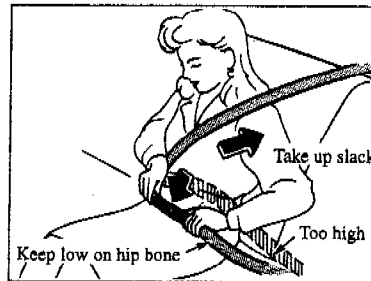
2-20

## Essential Safety Equipment

### ⚠ WARNING

#### Positioning the Shoulder Portion of the Seat Belt:

*Improper positioning of the shoulder portion of the seat belt is dangerous. An improperly positioned belt will provide little or no protection in a collision. Always make sure the shoulder portion of the seat belt is positioned across your shoulder and near your neck, but never under your arm, on your neck, or on your upper arm.*



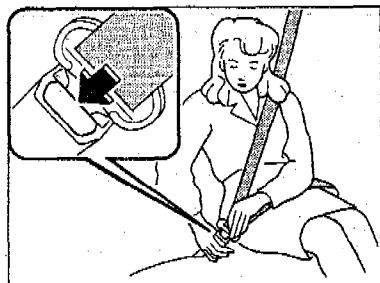
### ⚠ WARNING

#### Positioning the Lap Portion of the Seat Belt:

*The lap portion of the seat belt worn too high can be dangerous. In a collision, this would concentrate the impact force directly on the abdominal area, causing serious injury. Wear the lap portion of the belt snugly and as low as possible.*

2-21

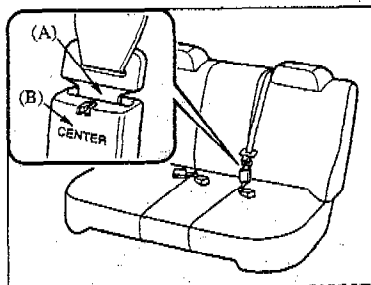
## Essential Safety Equipment



To unfasten:  
Depress the button on the buckle.

### NOTE

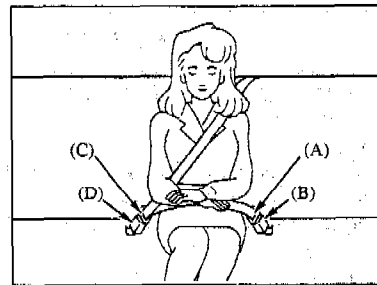
If a belt does not fully retract, inspect it for kinks and twists.



### ▼ Rear-center belt

To use the rear-center belt:

Before using the rear-center lap/shoulder belt make sure tongue (A) and anchor buckle (B) are fastened.



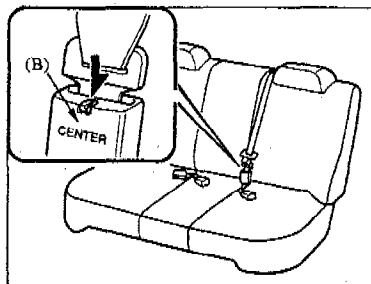
This portion will serve as the lap belt portion of the lap/shoulder belt when tongue (C) and buckle (D) are fastened.

2-22

## Essential Safety Equipment

### ⚠ WARNING

***Fastening the Rear-Center Seat Belt Only with one Buckle:***  
*Fastening the rear-center seat belt only with one buckle could be dangerous. If only one pair of seat belt tongue and buckle, either tongue (A) and buckle (B) or tongue (C) and buckle (D), is fastened, the seat belt cannot provide full protection. In a sudden stop or collision, the user could slide under the belt and suffer serious injuries. Always make sure that both pair of seat belt tongues and buckles are fastened properly.*



To unfasten the lap belt portion:

Insert a small object in the anchor buckle (B) slot, such as a key.

### NOTE

Always unfasten the lap portion of the belt before folding the rear-left seatback. Leaving the lap portion of the belt fastened could cause damage to the seatback.

2-23

## Essential Safety Equipment

To fasten the lap belt portion:

Grasp tongue (A) and insert it into the anchor buckle (B) until you hear a click. It is now secure for passenger use.

### NOTE

After returning the rear-left seatback to its upright position, fasten the lap portion of the belt.

### ■ Seat Belt Extender

If your seat belt is not long enough, even when fully extended, a seat belt extender may be available to you at no charge from your Authorized Mazda Dealer. This extender will be only for you and for the particular vehicle and seat. Even if it plugs into other seat belts, it may not hold in the critical moment of a crash. When ordering an extender, only order one that provides the necessary additional length to fasten the seat belt properly. Please contact your Authorized Mazda Dealer for more information.

### **WARNING**

***Unnecessary Use of an Extender:***  
*Using a seat belt extender when not necessary is dangerous. The seat belt will be too long and not fit properly. In an accident, the seat belt will not provide adequate protection and you could be seriously injured. Only use the extender when it is required to fasten the seat belt properly.*

2-24

## Essential Safety Equipment

### **WARNING**

***Using an Improper Extender:***  
*Using a seat belt extender that is for another person or a different vehicle or seat is dangerous. The seat belt will not provide adequate protection and the user could be seriously injured in an accident. Only use the extender provided for you and for the particular vehicle and seat. NEVER use the extender in a different vehicle or seat.*

### **WARNING**

***Using an Extender That is Too Long:***  
*Using an extender that is too long is dangerous. The seat belt will not fit properly. In an accident, the seat belt will not provide adequate protection and you could be seriously injured. Don't use the extender or choose one shorter in length if the distance between the extender's buckle and the center of the user's body is less than 15 cm (6 in).*

### ■ Pregnant Women and Persons with Serious Medical Conditions

Pregnant women should wear seat belts. Ask your doctor for specific recommendations. The lap belt should be worn **SNUGLY AND AS LOW AS POSSIBLE OVER THE HIPS.**

Persons with serious medical conditions also should wear seat belts. Check with your doctor for any special instructions regarding specific medical conditions.

2-25

## Essential Safety Equipment

### Child Restraint

#### ■ Child Restraint Precautions

Statistics confirm that the rear seat is the best place for all children up to 12 years of age—the more so with a supplemental restraint system (air bags).

#### **WARNING**

##### *Holding a Child While the Vehicle is Moving:*

*Holding a child in your arms while the vehicle is moving is extremely dangerous. No matter how strong the person may be, he or she cannot hold onto a child in a sudden stop or collision and could result in serious injury or death to the child or other occupants. Always secure a child in a proper child-restraint system.*

#### **WARNING**

##### *One Belt, One Passenger:*

*Using one seat belt for more than one person at a time is dangerous. A seat belt used in this way can't spread the impact forces properly and the two passengers could be crushed together and seriously injured or even killed. Never use one belt for more than one person at a time.*

2-26

## Essential Safety Equipment

#### **WARNING**

##### *Proper Size of Child-Restraint System:*

*For effective protection in vehicle accidents and sudden stops, a child must be properly restrained using a seat belt or child-restraint system depending on age and size. If not, the child could be seriously injured or even killed in an accident.*

#### **CAUTION**

A seat belt or child-restraint system can become very hot in a closed vehicle during warm weather. To avoid burning yourself or a child, inspect either before using.

#### ▼ Small children

You are required by law to use child-restraint system for children in the U.S. and Canada. Small children, generally those who are four years old or younger and who weigh under 18 kg (40 lb.), riding in your vehicle must be protected by child-restraint systems made especially for children. Check your local and state or provincial laws for specific requirements regarding the safety of children riding in your vehicle.

2-27

▼ Older children

A child who has outgrown child-restraint systems should sit in the rear and use seat belts, both lap and shoulder. If the shoulder belt crosses the neck or face, move the child closer to the center.

■ Child-Restraint Systems

Whatever child-restraint system you consider, please pick the appropriate one for the age and size of the child, obey state law and follow the instructions that come with the individual child-restraint system.

A rear-facing child-restraint system should never be used in the front seat because it would be too close to the air bag. The front passenger's seat is also the least preferred seat for other child-restraint systems.

**⚠ WARNING**

*Follow the Manufacturer's Instructions and Always Keep the Child-Restraint System Buckled Down:*

*An unsecured child-restraint system is dangerous. In a sudden stop or a collision it could move causing serious injury or death to the child or other occupants. Make sure the child-restraint system is properly secured in place according to the manufacturer's instructions. When not in use, remove it from the vehicle, put it in the trunk or fasten it with a seat belt.*

2-28

**⚠ WARNING**

*Rear-Facing Child-Restraint System:*

*Rear-facing child-restraint systems on the front seat are particularly dangerous. The child-restraint system can be hit by a deploying air bag and moved violently backward resulting in serious injury or death to the child. Never use a rear-facing child-restraint system in the front seat with an air bag that could deploy.*

■ Installing Child-Restraint Systems

Accident statistics reveal that a child is safer in the rear seat. The front passenger's seat is clearly the worst choice for any child under 12, and with rear-facing child-restraint systems it is clearly unsafe due to air bags.

Some child-restraint systems now come with tethers and therefore must be installed on the seats that take tethers to be effective. In your Mazda, tethered child-restraint systems can only be accommodated in the three positions on the rear seat.

**⚠ WARNING**

*Tethered Child-Restraint Systems Work Only on Rear Seat:*

*Installation of a tether equipped child-restraint system in the front passenger's seat defeats the safety design of the system and will result in an increased chance of serious injury if the seat goes forward without benefit of being tethered. Place tether equipped child-restraint systems where there are tether anchors.*

2-29

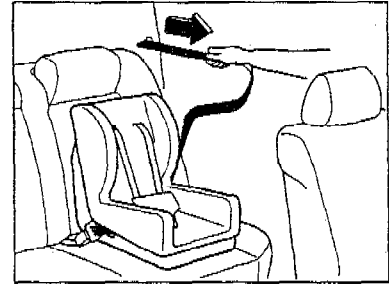
## Essential Safety Equipment

### **WARNING**

#### ***Seating Position with Side Air Bag:***

*Allowing a child to lean over or against the front door is dangerous. If the vehicle is equipped with side air bags, the impact of an inflating side air bag could cause serious injury or death to the child. Children are more likely to sleep in the vehicle, when they do, they are more at risk in the front passenger's seat that has an optional side air bag because they may slump over into the path of the seatback-mounted air bag. If a child can't be seated*  
(Continued)

*in the rear seat, do not allow the child to lean over or against the front door, even if the child is seated in a child-restraint system.*



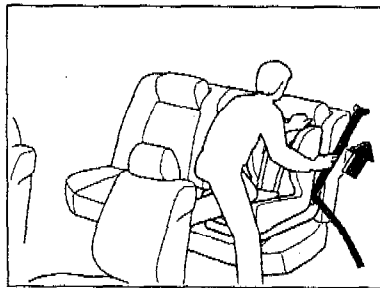
#### ▼ Rear seat child-restraint system installation (Lap/shoulder belt)

Follow these instructions when using a child-restraint system.

1. Secure the child-restraint system with the lap portion of the

2-30

## Essential Safety Equipment

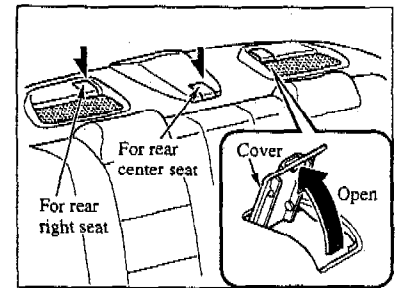


lap/shoulder belt. See the instructions on the child-restraint system for belt routing instructions.

2. To get the retractor into the automatic locking mode, pull the shoulder belt portion of the seat belt until the entire length of the

belt is out of the retractor. Position the belt correctly, push the child-restraint system firmly into the vehicle seat and be sure the belt retracts as snugly as possible. Clicking from the retractor will be heard during retraction if the system is in the automatic locking mode. If the belt does not lock the seat down tight, repeat this step.

3. Inspect this function before each use of the child-restraint system. You should not be able to pull the shoulder belt out of the retractor while the system is in the automatic locking mode. When you remove the child-restraint system, be sure the belt fully retracts to return the

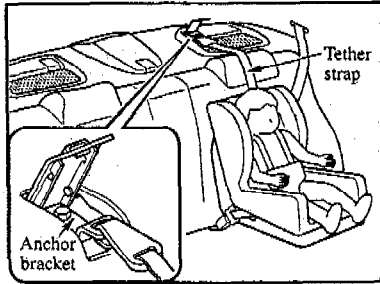


system to emergency locking mode before occupants use the seat belts.

4. If your child-restraint system requires the use of a tether strap, hook the tether strap by following the manufacturer's instructions.

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## Essential Safety Equipment



### ▼ If you must use the front seat for children

If you cannot put all children in the rear seat, at least put the smallest in the rear seat and be sure the largest child up front uses the shoulder belt over the shoulder. Do not put rear-facing child-restraint systems on the front passenger's seat. This seat is also not set up for tethered child-restraint systems, put them in one of the three rear seat positions set up with tether anchors. Don't allow anyone to sleep against the right front door if you have an optional side air bag, it could cause serious injuries to an out of position occupant. As children more often sleep in cars, it is

better to put them in the rear seat. If installing the child-restraint system on the front seat is unavoidable, follow these instructions when using a front-facing child-restraint system in the front passenger's seat. To check if your Mazda front seats have side air bags-every Mazda side air bag will have a "SRS-Air Bag" label on the outboard shoulder of the front seats.

2-32

## Essential Safety Equipment

### ⚠ WARNING

***Front Passenger's Seat Position:***  
As your vehicle has front air bags and doubly so if your vehicle has optional side air bags, a front-facing child-restraint system should be put on the front seat only when it is unavoidable. Always move the seat as far back as possible, because the force of a deploying air bag could cause serious injury or death to the child.

### ⚠ WARNING

***Rear-Facing Child-Restraint System:***  
Rear-facing child-restraint systems on the front seat are particularly dangerous. The child-restraint system can be hit by a deploying air bag and moved violently backward resulting in serious injury or death to the child. Never use a rear-facing child-restraint system in the front seat with an air bag that could deploy.

### ⚠ WARNING

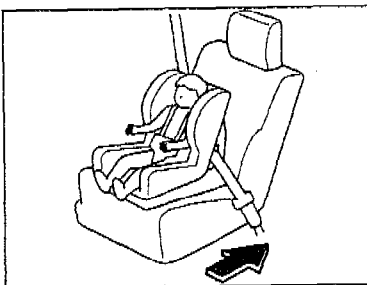
***Seating Position with Side Air Bag:***  
Allowing a child to lean over or against the front door is dangerous. If the vehicle is equipped with side air bags, the impact of an inflating side air bag could cause serious injury or death to the child. Children are more likely to sleep in the vehicle, when they do, they are more at risk in the front passenger's seat that has an optional side air bag because they may slump over into the path of the seatback-mounted air bag. If a child can't be seated

(Continued)

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## Essential Safety Equipment

*in the rear seat, do not allow the child to lean over or against the front door, even if the child is seated in a child-restraint system.*



### ▼ Front passenger's seat child-restraint system installation (Lap/shoulder belt)

1. Slide the seat as far back as possible.
2. Secure the child-restraint system with the lap portion of the lap/shoulder belt. See the instructions on the child-restraint system for belt routing instructions.
3. To get the retractor into the automatic locking mode, pull the shoulder belt portion of the seat belt until the entire length of the belt is out of the retractor. Position the belt correctly, push the child-restraint system firmly into the vehicle seat and be sure the belt retracts as snugly as possible. Clicking from the retractor will be heard during retraction if the system is in automatic locking mode. If the belt does not lock the seat down tight,

2-34

## Essential Safety Equipment

### Supplemental Restraint Systems

repeat this step.

4. Inspect this function before each use of the child-restraint system. You should not be able to pull the shoulder belt out of the retractor while the system is in the automatic locking mode. When you remove the child-restraint system, be sure the belt fully retracts to return the system to emergency locking mode before occupants use the seat belts.

#### ■ The front and side\* supplemental restraint systems include 4 air bags. They are located in:

- The steering wheel
- The passenger side dashboard
- The outboard sides of the front seatbacks

These systems operate independently depending on the type of accident encountered; both side air bags are not likely to deploy in the same accident because a vehicle is not often hit from both sides. The front and side air bag systems will not normally deploy during the same type of accident unless a combination of frontal and side impacts occur.

In a front-end or side impact, the air bag supplemental restraint systems are designed to provide only supplemental protection for the driver and front seat passenger. Seat belts must still be worn.

Without seat belt usage, the air bags cannot provide adequate protection during an accident. Seat belt usage is necessary to:

- Keep the passenger away from an inflating air bag.
- Reduce the possibility of injuries during an accident that is not designed for air bag inflation, such as roll-over or rear impact.

\*Some models. 2-35

## Essential Safety Equipment

- Reduce the possibility of injuries in frontal or side collisions that are not severe enough to activate the air bag.
- Reduce the possibility of being thrown from your vehicle.
- Reduce the possibility of injuries to lower body and legs during an accident because the air bag allows no protection to these parts.
- Hold the driver in a position which allows better control of the vehicle.

### **WARNING**

***Air Bags without Seat Belts:***  
*Depending only on the air bags for protection during an accident is dangerous. Alone, air bags may not prevent serious injuries. The appropriate air bags can be expected to inflate only during a frontal, side or near-frontal collision of at least moderate force. Vehicle occupants should always wear seat belts.*

Small children, those under 18 kg (40 lb.), should be protected by a child-restraint system (page 2-26).

### **WARNING**

***Child in the Front Seat:***  
*Placing a child, 12 years or under, in the front seat is dangerous. The child could be hit by a deploying air bag and be seriously injured or even killed. A sleeping child is more likely to lean against the door and be hit by the side air bag in a moderate, right-side collision. Whenever possible, always secure a child 12 years and under in the rear seat with an appropriate child-restraint system for the child's age and size.*

*Never use a rear-facing*

*(Continued)*

2-36

## Essential Safety Equipment

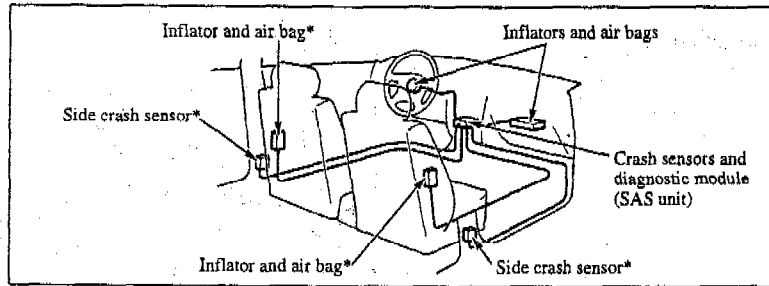
*child-restraint system on the front seat with an air bag that could deploy.*

### **WARNING**

***Child-Restraint System Positioning:***  
*Rear-facing child-restraint systems on the front seat are particularly dangerous. The child-restraint system can be hit by a deploying air bag and moved violently backward resulting in serious injury or death to the child. Never use a rear-facing child-restraint system in the front seat with an air bag that could deploy.*

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## Essential Safety Equipment



The air bags are mounted in the following locations: the center of the steering wheel, the passenger-side of the dashboard, and in the outboard sides of the front seatbacks. They are out of sight until activated.

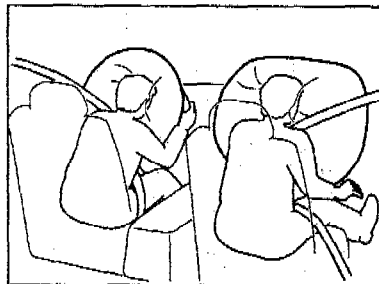
### ■ System Description

The supplemental restraint systems have two basic subsystems:

- The air bag system with inflators and air bags.
- The electric system with crash sensors and diagnostic module.

2-38 \*Some models.

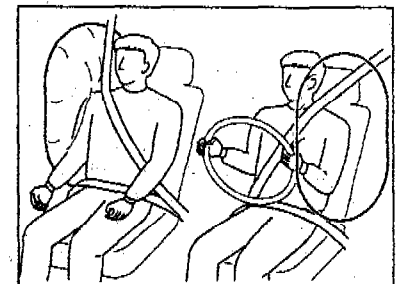
## Essential Safety Equipment



bags quickly deflate.

### ■ How the Air Bags Work

When air bag crash sensors detect a frontal or side impact of greater than moderate force, an electrical current is sent to the inflators. Nitrogen and argon gases are produced to inflate the air bags. After the inflation, the air



The air bags will function only once. After that, the air bags will not work again and must be replaced.

Only an Authorized Mazda Dealer can replace the systems.

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Essential Safety Equipment

**⚠ WARNING**

**Seating Position with Front Air Bags:**

*Sitting too close to the air bag storage compartments or placing hands or feet on them is extremely dangerous. Front air bags inflate with great force and speed.*

*Serious injuries could occur if someone is too close. The driver should always hold onto only the rim of the steering wheel. The front seat passenger should keep both feet on the floor. Front seat occupants should adjust their seats as far back as possible and*

*(Continued)*

*always sit upright against the seatbacks with seat belts worn properly.*

**⚠ WARNING**

**Seating Position with Side Air Bags:**

*Sitting too close to the side air bag storage compartments or placing hands on them is extremely dangerous. A side air bag inflates with great force and speed directly out of the outboard shoulder of the front seat and expands along the front door on the side the car is hit.*

*Serious injury could occur if someone is sitting too close to the door or leaning against a window in the front seats or if rear seat occupants grab the sides of the*

*(Continued)*

2-40

Essential Safety Equipment

*front seatbacks. Furthermore, sleeping up against the door or hanging out the driver's-side window while driving could block the side air bag and eliminate the advantages of supplemental protection.*

*Give the side air-bags room to work by sitting in the center of the seat while the vehicle is moving with seat belts worn properly.*

**NOTE**

*When an air bag deploys, a loud inflation noise can be heard and some smoke will be released. Neither is likely to cause injury.*

**⚠ WARNING**

**Hot Air Bag Inflators:**

*Hot air bag inflators are dangerous. Immediately after inflation, the inflators in the steering wheel, dashboard or the seatbacks are very hot. You could get burned. Don't touch the internal components of the air bag storage areas after the bags have inflated.*

**⚠ WARNING**

**Modification of the Supplemental Restraint System:**

*Modifying the components or wiring of the supplemental restraint system is dangerous. You could accidentally activate it or make it inoperable. Don't make any modifications to the supplemental restraint system. This includes installing trim, badges, or anything else over the air bag storage areas. It also includes installing extra electric equipment on or near system components or wiring.*

*An Authorized Mazda Dealer can*  
*(Continued)*

2-41

provide the special care needed in the removal and installation of front seats. It is important to protect the side air bag wiring and connections to assure that the bags do not accidentally deploy and that the seats retain an undamaged air bag connection.

**⚠ WARNING**

**Installation of Front-End Equipment:**  
Installation of front-end equipment, such as a frontal protection bar (kangaroo bar, bull bar, push bar, etc.), snowplow, or winches, is dangerous. The air bag crash sensor system could be affected. This could cause air bags to inflate unexpectedly, or it could prevent the air bags from inflating during an accident. Front occupants could be seriously injured. Never install any front-end equipment to your vehicle.

**⚠ WARNING**

**Front Air Bag Storage Areas:**  
Attaching an object to a front air bag storage area or placing something in front of it is dangerous. In an accident, the object could interfere with front air bag inflation and injure the occupants.  
Always keep the front air bag storage areas free of objects.

**⚠ WARNING**

**Side Air Bag Storage Areas:**  
Attaching things to the seat in such a way as to cover the outboard side of the seat in any way is dangerous. In an accident the object could interfere with the side air bag, which inflates from the outboard side of the front seats, impeding the added protection of the side air bag system or redirecting the air bag in a way that is dangerous. Furthermore, the bag could be cut open spewing exhaust. Do not hang net bags, map pouches or back pads with side

(Continued)

straps on the front seats. Always keep the side air bag storage areas in your front seats free to deploy in the event of a side collision.

**⚠ WARNING**

**Using Seat Covers:**  
Using a seat cover on the front seats could be dangerous. In a severe side collision, the seat covers could interfere with the side air bag inflation and serious injuries could result. Never use seat covers on the front seats.

**⚠ WARNING**

**Damaged Air Bag Sensors:**  
Driving with damaged air bag sensors is dangerous. A collision, even one not strong enough to inflate the air bags, could damage the sensors. If there was a subsequent collision, a damaged sensor would not inflate the air bags. Always have an Authorized Mazda Dealer inspect the supplemental restraint systems after a collision.

## Essential Safety Equipment

### **WARNING**

***Suspension Adjustment:***  
*Adjusting the vehicle suspension is dangerous. If the vehicle's height or the suspension's damping is changed, the vehicle will be unable to accurately detect a collision resulting in incorrect or unexpected air bag deployment and the possibility of serious injuries.*

### **CAUTION**

To prevent damage to the side air bag wiring, don't place luggage or other objects under the front seats.

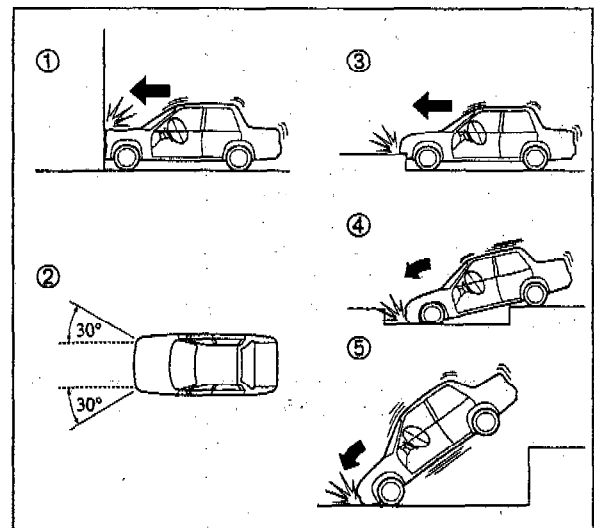
2-44

## Essential Safety Equipment

### ■ Front Air Bag Activation

A greater than moderate impact will cause the front air bags to inflate in the following cases:

- ① Hitting a solid wall straight on at greater than about 22 km/h (14 mph).
- ② Frontal impact within about a 30 degree range from head on to the vehicle.
- ③ Hitting a curb, pavement edge or hard object.
- ④ Driving into a big hole or hitting the far side of a hole.
- ⑤ Landing hard or the vehicle falling.



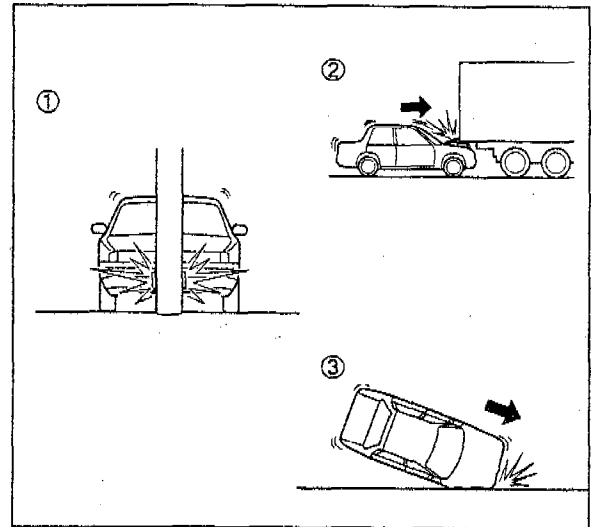
2-45

## Essential Safety Equipment

### ■ Limitations to Front Air Bag Activation

Depending of the severity of impact, the front air bags may not inflate in the following cases:

- ① Impacts involving trees or poles cause severe cosmetic damage but may not have enough impact to activate the air bag.
- ② Rear-ending or running under a truck's tail gate may not provide the stopping force necessary for air bag deployment.
- ③ Frontal offset impact to the vehicle may not provide the stopping force necessary for air bag deployment.



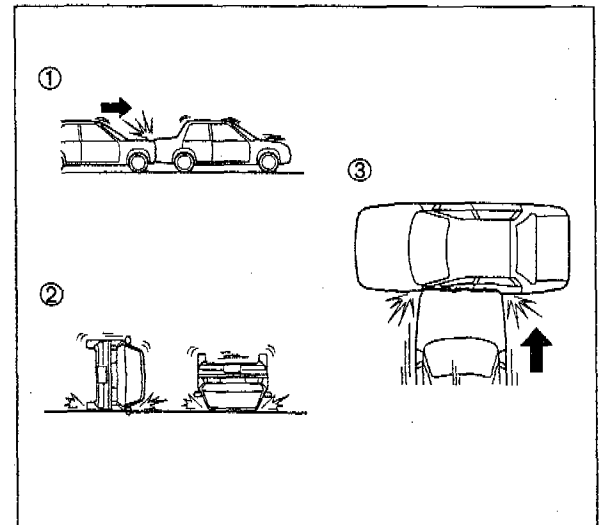
2-46

## Essential Safety Equipment

### ■ Non-Activation of Front Air Bags

Front air bags will not normally inflate in the following cases:

- ① Collision from the rear.
- ② Vehicle roll-over, may deploy the side air bag(s) but not the front air bags.
- ③ Impact to the side, but it may deploy a side air bag.

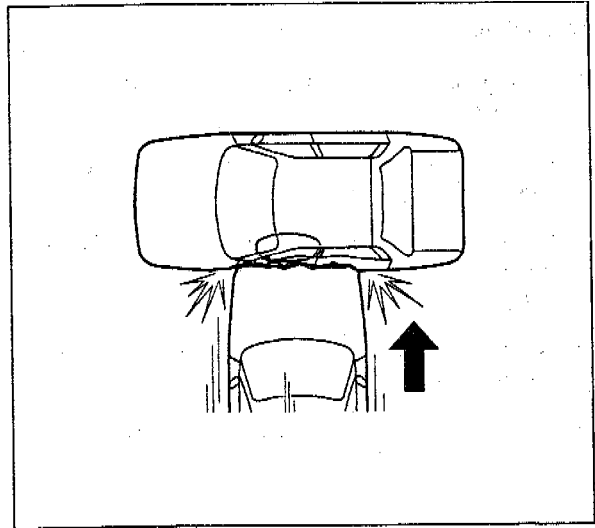


2-47

## Essential Safety Equipment

### ■ Side Air Bag Activation

Greater than moderate impact to one side of the vehicle (driver or passenger side areas) will cause a side air bag\* to inflate, but it will not normally deploy the front air bags.



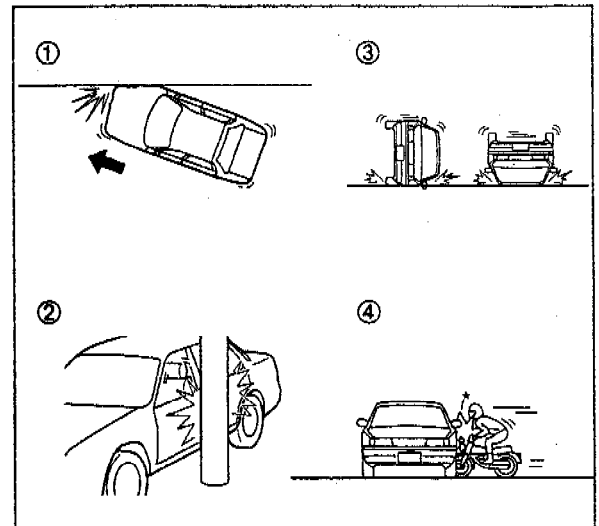
2-48 \*Some models.

## Essential Safety Equipment

### ■ Limitations to Side Air Bag Activation

Depending on the severity of impact, a side air bag\* may not inflate in the following cases:

- ① Frontal offset impact may not provide enough side impact to deploy a side air bag.
- ② Side impacts involving trees or poles can cause severe cosmetic damage but may have enough impact force to activate a air bag.
- ③ Vehicle roll-over may not provide enough side force to deploy the side air bags.
- ④ Side impacts with two-wheeled vehicles may not provide enough force to deploy a side air bag.



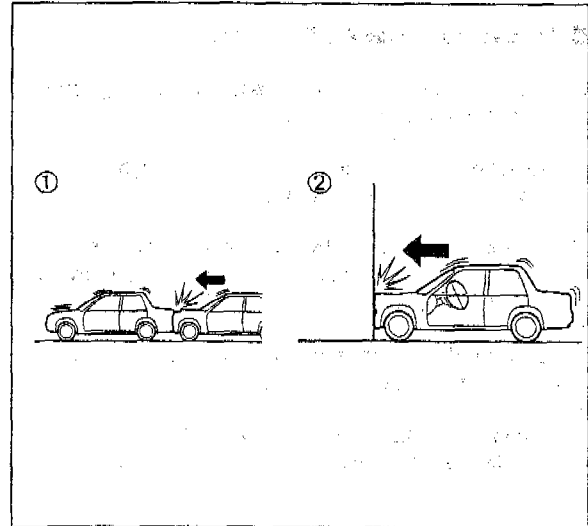
\*Some models. 2-49

## Essential Safety Equipment

### ■ Non-Activation of Side Air Bags

A side air bag\* will not normally inflate in the following cases:

- ① Collision from the rear.
- ② Collision from the front, but it may deploy the front air bags.



2-50 \*Some models.

## Essential Safety Equipment

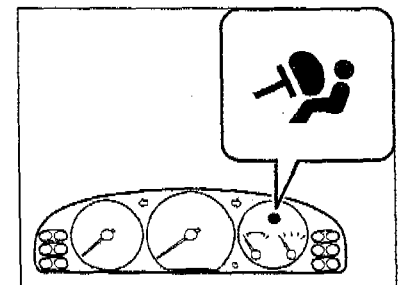
### ■ Constant Monitoring

driven.

The following components of the supplement restraint systems are monitored by a diagnostic system:

- SAS unit
- Air bag modules
- Side air bag crash sensors\*
- Related wiring

A diagnostic module continuously monitors the system's readiness. This begins when the ignition switch is turned to the "ON" position and continues while the vehicle is being



### ▼ Supplemental restraint system warning light

If the supplemental restraint system is OK, the SRS warning light comes on when the ignition switch is turned to the ON position or after the engine is cranked. After about 6 seconds it goes

\*Some models. 2-51

## Essential Safety Equipment

out.

A system malfunction is indicated when the SRS warning light constantly flashes, stays on or doesn't come on at all. If any of these occur, consult an Authorized Mazda Dealer as soon as possible. The system may not work in an accident.

### **WARNING**

***Self-Servicing the Supplemental Restraint Systems:***  
*Self-servicing or tampering with the supplemental restraint systems is dangerous. An air bag could accidentally activate or become disabled. This could cause serious injuries. Never tamper with the supplemental restraint systems and always have an Authorized Mazda Dealer perform all servicing and repairs.*

### **WARNING**

***Removing Interior Parts:***  
*Removing the front seat, front dashboard, the steering wheel or parts containing air bag sensors is dangerous. These parts contain essential air bag parts. The air bag could accidentally activate and cause serious injuries. Always have an Authorized Mazda Dealer remove these parts.*

2-52

## Essential Safety Equipment

### **WARNING**

***Air Bag Disposal:***  
*Improper disposal of an air bag or a vehicle with live air bags in it can be extremely dangerous. Unless all safety procedures are followed, injury can result. Ask an Authorized Mazda Dealer how to safely dispose of an air bag or how to scrap an air bag equipped vehicle.*

#### ■ Maintenance

The supplemental restraint system is maintenance-free. But if any of the following occurs, take your vehicle to an Authorized Mazda Dealer as soon as possible:

- The supplemental restraint system warning light flashes.
- The supplemental restraint system warning light stays on.
- The supplemental restraint system warning light stays off when the ignition switch is turned to the ON position.

- Air bags inflate

### **NOTE**

Should you sell your Mazda, we urge you to tell the new owner of its supplemental restraint systems and that familiarization with all instructions about them, from the Owner's Manual, is important.

2-53

Appendix D

Miscellaneous Test Information

TEST VEHICLE INFORMATION

Vehicle Model Year & Make : 2000 Mazda 628  
 Vehicle Model & Body Style : 4 Door Sedan

1. NOMINAL DESIGN RIDING POSITION --

For adjustable driver and passenger seat backs.  
 Please describe how to position the inclinometer to measure the seat back angle. Include description of the location of the adjustment latch/detent if applicable.

Seat back angle for driver's seat = 19 degrees.

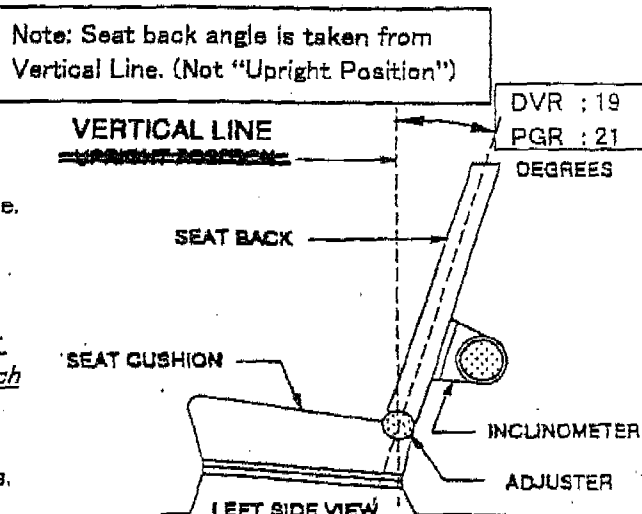
Measurement Instructions:

Seat back angle is measured along rear edge of outer seat back frame. Adjust the seat back to the 5th latch from the first detent (0).

Seat back angle for passenger's seat = 21 degrees.

Measurement Instructions:

Seat back angle is measured along rear edge of outer seat back frame. Adjust the seat back to the 6th latch from the first detent (0).



2. SEAT FORE & AFT POSITIONS --

Provide instructions for positioning the driver and front outboard passenger seat(s) in the center of fore and aft. Travel. For example, provide information to locate the detent in which the seat track is to be locked.

Positioning of the driver's seat:

Power Seat: Adjust the seat slider to the 11th latch position from the most forward position (0).

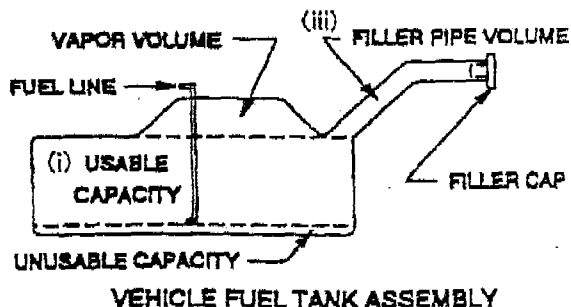
Manual Seat: Adjust the seat slider 110 mm (mid position) from the most forward position.

Positioning the passenger's seat. (if applicable)

Adjust the seat slider to the 12th latch position from the most forward position (0).

3. FUEL TANK CAPACITY DATA --

- 3.1 A. "Usable Capacity" of standard equipment fuel tank = 64 liters (\*).
- B. "Usable Capacity" of optional equipment fuel tank = NA gallons.
- C. Capacity used when certification testing to requirements of FMVSS 301 = 64 liters.



(\*) Note: This is "Fuel Tank Capacity" defined by Mazda.  
 "Fuel Tank Capacity" = (i) + (ii) + (iii)

3.2 Amount of Stoddard solvent added to vehicle for certification test = 60.8 liters.

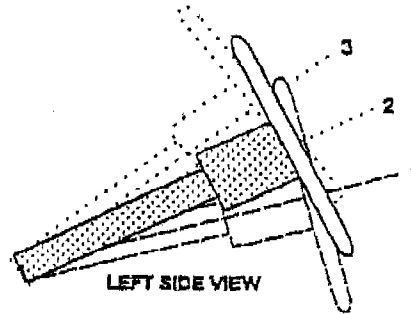
3.3 Is vehicle equipped with electric fuel pump?  Yes  No  
If YES, does pump normally operate when vehicle's electrical system is activated?  
 Yes  No

The fuel pump operates when starter or engine is activated.

4. STEERING COLUMN ADJUSTMENTS --

Steering wheel and column adjustments are made so that the steering wheel hub is at the geometric center of the locus it describes when it is moved through its full range of driving positions. If the tested vehicle has any of these adjustments, does your company use any specific procedures to determine the geometric center.

Operational Instructions:  
No specific procedure.



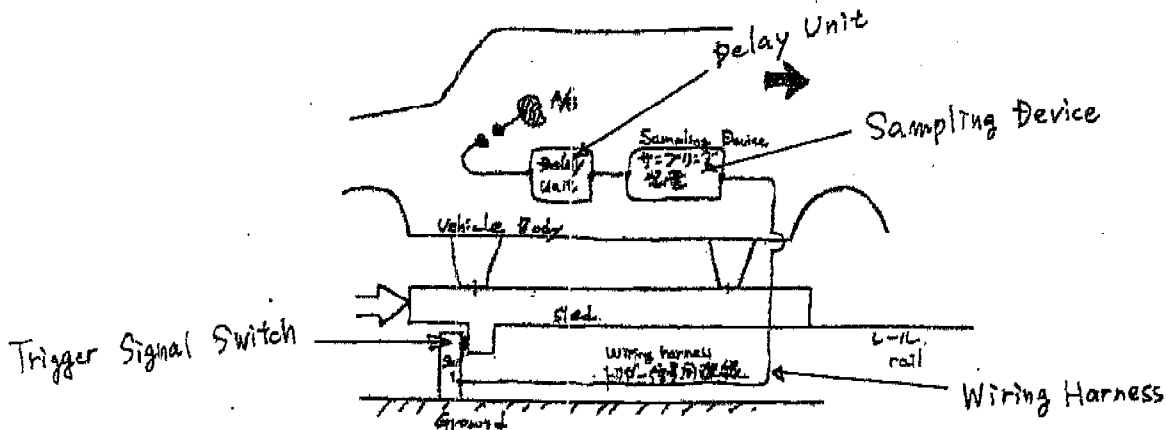
LEFT SIDE VIEW  
STEERING COLUMN ASSEMBLY

5. Adjustable Seat Belt Anchorage Position.

Driver's seat : Highest position  
Passenger's seat : Highest position

NSA-31CGa / 2001 MY Mazda 628  
 INFORMATION on 2001 MY Mazda 628

3. If the vehicle was certified with unrestrained dummies to meet the requirements of S13, describe how to disconnect the air bags from the vehicle sensors and connect them to the triggering mechanism used in the sled test. Describe the method used in certification to determine when to trigger the air bag and the system used to trigger the air bag.
- I. Disconnect the battery terminal
  - II. Disconnect the coupler connected to the airbag inflator
  - III. Connect the inflator to the system described below
  - IV. Air bag is triggered 20.7 ms after vehicle acceleration reaches 0.5G

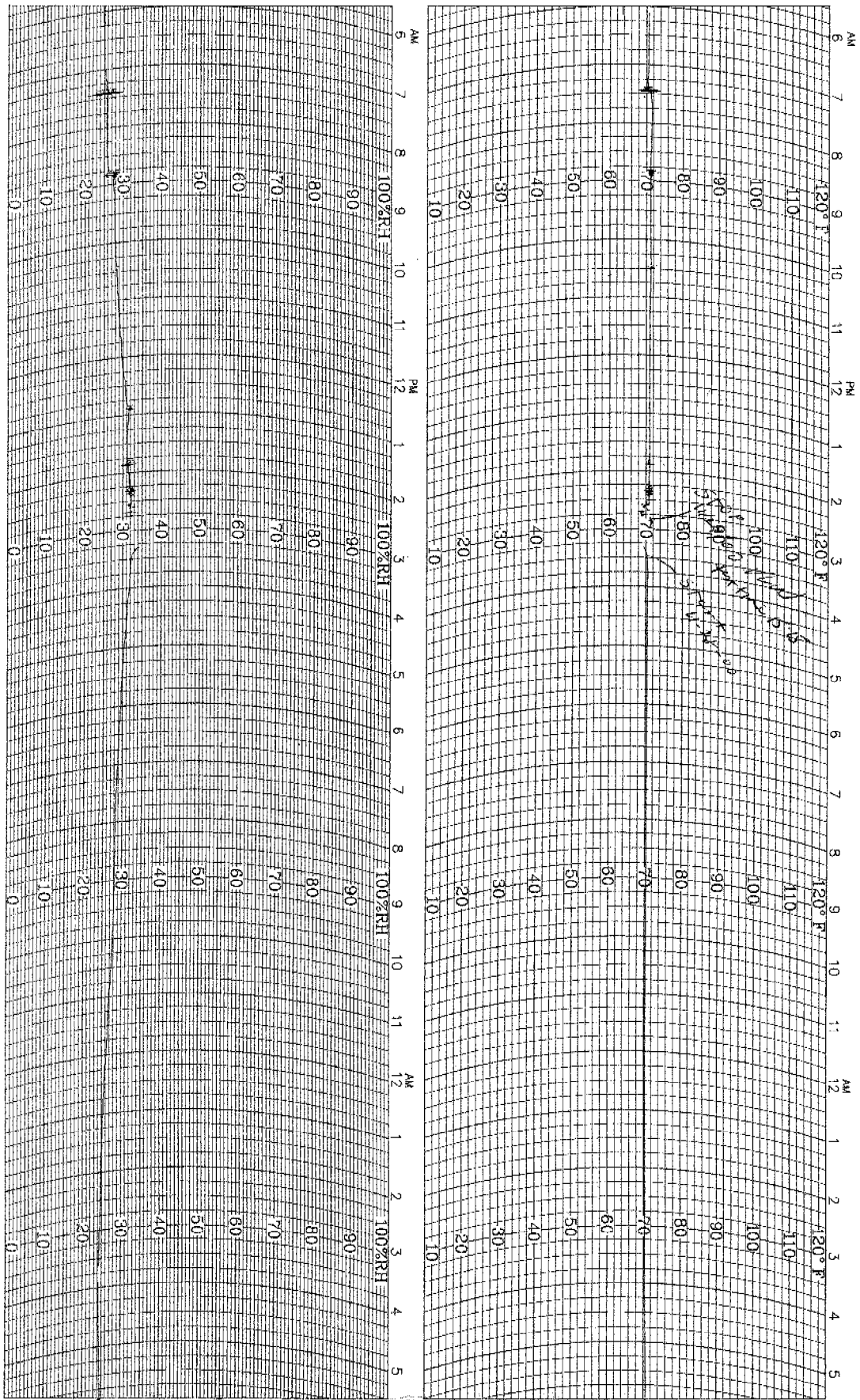


5. FMVSS No. 208, S8.1.5 allows the manufacturer the option of having movable vehicle windows and vents placed in the closed position. State whether the vehicle's movable windows and vents were opened or closed for the certification tests.

*Windows and vents were closed for the certification tests.*

7. Provide the seat positioning, steering column positioning, and fuel tank data on the enclosed form. If more than one front seating, steering column or fuel tank configuration are available on this vehicle, provide separate information for each. In addition, provide the seating reference point for each seat for the lockable seat belt requirement in S7.1.1.5.

*Please see below.*



**Weathermeasure** P.O. BOX 41039 CHART NO. M699123  
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 6-9-87

STATION D.C.H. Panel 10 DATE ON 11-21-80 DATE OFF 11-29-80