

REPORT NO. 208-MGA-2002-004

SAFETY COMPLIANCE SLED TESTING FOR FMVSS 208
OCCUPANT CRASH PROTECTION

DaimlerChrysler Corporation
2002 Chrysler PT Cruiser MPV
NHTSA NO C20305

MGA RESEARCH CORPORATION
5000 WARREN ROAD
BURLINGTON, WI 53105



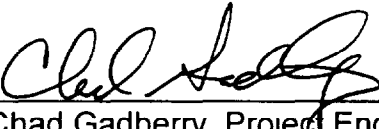
Test Date March 13, 2002

Report Date March 22, 2002

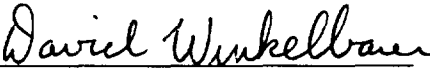
FINAL REPORT

Prepared For
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NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
SAFETY ASSURANCE
OFFICE OF VEHICLE SAFETY COMPLIANCE
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DATE 3/22/02

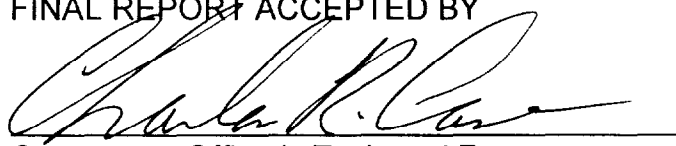
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Contracting Officer's Technical Representative (COTR)
NHTSA, Office of Vehicle Safety Compliance

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TECHNICAL REPORT STANDARD TITLE PAGE

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12 Sponsoring Agency Name and Address U S Department of Transportation National Highway Traffic Safety Administration Office of Vehicle Safety Compliance (Mail Code NSA-30) 400 Seventh St , S W , Room 6115 Washington, D C 20590		13 Type of Report and Period Covered Final Report March 13 - 22, 2002	
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15 Supplementary Notes			
16 Abstract A compliance test (sled test) was conducted on the subject 2002 Chrysler PT Cruiser MPV in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No TP208S-01 for the determination of FMVSS 208 compliance Test failures identified were as follows NONE			
17 Key Words Compliance Testing Safety Engineering FMVSS 208S Sled Test		18 Distribution Statement Copies of this report are available from NHTSA Technical Reference Division, Room 5108, (NAD-40) 400 Seventh Street, S W Washington, D C 20590 Telephone No (202) 366-4946	
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Purpose

This FMVSS 208 compliance sled test is part of the Federal Motor Vehicle Safety Standard (FMVSS) 208 compliance test program conducted for the National Highway Traffic Safety Administration (NHTSA) by MGA Research Corporation (MGA) under Contract No DTNH22-98-D-11055. The purpose of this test was to determine if the subject vehicle, a 2002 Chrysler PT Cruiser MPV, NHTSA No C20305, 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 test vehicle was instrumented with four (4) accelerometers to measure longitudinal axis accelerations.

The test vehicle contained two (2) Part 572 E 50th percentile adult male anthropomorphic test devices (dummies). The dummies were positioned in the front outboard seating positions according to the dummy placement procedures 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 thirty-eight (38) data channels were digitally sampled at 10,000 samples per second and processed per Sections 11.7 through 11.9 of the Laboratory Test Procedure.

The crash event was recorded by 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 MGA Research Corporation on March 13, 2002

The test vehicle, a 2002 Chrysler PT Cruiser MPV, NHTSA No C20305, appeared to comply with the performance requirements of FMVSS 208 in the impact simulation sled test mode as measured by Hybrid III 50th percentile male dummies

	FMVSS 208 Max Allowable Injury Assessment Values	Driver (Serial #401)	Passenger (Serial #403)
HIC	1000	158	238
Chest g	60 g	36.0 g	48.9 g
Chest displacement	3 in	1.2 in	0.4 in
Left Femur	2250 lb	1352 lb	1358 lb
Right Femur	2250 lb	1396 lb	1204 lb
Neck Extension	57 Nm	9.7 Nm	18.7 Nm
Neck Flexion	190 Nm	46.8 Nm	57.7 Nm
Neck Tension	3300 N	1501 N	1219 N
Neck Compression	4000 N	734 N	2293 N
Neck Shear	3100 N	593 N	1289 N

The vehicle 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 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 17.0 g with an integrated velocity change of 29.4 mph. After filtering the acceleration signal to Channel Class 60, the airbag system was triggered 18.9 milliseconds after 0.5 g acceleration.

INCLUDE DISCUSSION OF LOST CHANNELS OR OTHER TEST ISSUES

Sled Test Summary

Vehicle NHTSA No C20305 Test Mode FMVSS 208 SLED TEST

Vehicle Yr/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Test Date March 13, 2002 Time 12 05 p m Temp 71°F

Vehicle Test Weight 3591 lbs

DUMMY INFO.

DRIVER

PASSENGER

Dummy Type

Part 572E

Part 572E

Serial Number

401

403

Restraint System

Frontal airbag

Frontal airbag

No Data Channels

15

15

Number of Cameras

1 Real Time

6 High Speed

Door Opening Data

yes Left Front

yes Right Front

FRONT SEAT(S) DATA

DRIVER

PASSENGER

Seat Track Failure -

0 0 inches shift,

0 0 inches shift

Seat Back Failure -

no

no

VISIBLE DUMMY CONTACT POINTS:

DRIVER

PASSENGER

Head

Airbag/sunvisor/
windshield/windshield
header/roof

Airbag/sunvisor/windshield/
windshield header

Chest

Airbag

Airbag

Left Knee

Knee bolster

Glove box

Right Knee

Knee bolster

Glove box

General Test And Vehicle Parameter DataVehicle Yr/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPVVehicle NHTSA No C20305 VIN 3C4FY48B82T276870 Color Red

Engine Data

No Cylinders 4, CID , Liters 2.4, CCs Placement Longitudinal/Inline , Transverse/Lateral X

Transmission Data

Speeds 5, Manual X, Automatic , Overdrive

Final Drive

Rear Wheel Drive , Front Wheel Drive X, Four Wheel Drive

Major Options

A/C X, Pwr Strg X, Pwr Brakes X, Pwr Windows X,Pwr Dr Locks , Other Tilt wheel, cruise control, rear defoggerDate Received. 2/15/02, Odometer Reading 118 milesSelling Dealer Sunnyside Company, 4810 West Elm Street, McHenry, IL 60050

REMARKS None

General Test And Vehicle Parameter Data (Cont.)

DATA FROM VEHICLE'S CERTIFICATION LABEL

Vehicle Manufactured By DaimlerChrysler CorporationDate of Manufacture 11/01, VIN 3C4FY48B82T276870GVWR 4225 lbs, GAWR Front 2200 lbsGAWR Rear 2025 lbs

DATA FROM TIRE PLACARD

Tire Pressure with Maximum Capacity Vehicle Load

FRONT 34 psi REAR 34 psiRecommended Tire Size P195/65R15 or P205/55R16

Recommended Cold Tire Pressure

FRONT 34 psi REAR 34 psiSize of Tires on Test Vehicle P195/65R15 89TType of Spare Tire T125/70D15 95M, Space Saver X, Standard

Vehicle Capacity Data

Type of Front Seats X Bucket, Bench, Split BenchNumber of Occupants 2 Front, 3 Rear, 3rd Seat, 5 TOTAL

REMARKS None

VEHICLE CAPACITY WEIGHT (VCW) = 865 lbsNo Of Occupants x 150 lbs = 750 lbsRated Cargo/Luggage Weight (RCWL) = 115 lbs (Difference)

General Test And Vehicle Parameter Data (Cont)

WEIGHT OF TEST VEHICLE AS RECEIVED AT LABORATORY (with maximum fluids)

Right Front =	<u>921</u> lbs	Right Rear =	<u>664</u> lbs
Left Front =	<u>922</u> lbs	Left Rear =	<u>625</u> lbs
TOTAL FRONT =	<u>1843</u> lbs	TOTAL REAR =	<u>1289</u> lbs
% Total Weight =	<u>58 8</u> %	% Total Weight =	<u>41 2</u> %

TOTAL DELIVERED WEIGHT = 3132 lbs

WEIGHT OF FULLY LOADED TEST VEHICLE WITH TWO DUMMIES (344 LB) AND 115 POUNDS OF CARGO WEIGHT

Right Front =	<u>1005</u> lbs	Right Rear =	<u>812</u> lbs
Left Front =	<u>992</u> lbs	Left Rear =	<u>782</u> lbs
TOTAL FRONT =	<u>1997</u> lbs	TOTAL REAR =	<u>1594</u> lbs
% Total Weight =	<u>55 6</u> %	% Total Weight =	<u>44 4</u> %

TOTAL WEIGHT = 3591 lbs

TEST VEHICLE ATTITUDE (all measurements in degrees)

AS DELIVERED DOOR SILL ANGLE	<u>2 1° nose down</u>
AS TESTED DOOR SILL ANGLE	<u>2 0° nose down</u>
FULLY LOADED DOOR SILL ANGLE	<u>1 7° nose down</u>

FUEL SYSTEM DATA

Fuel System Capacity From Owner's Manual = 15 0 gallons

Usable Capacity Figure Furnished by COTR = 15 0 gallons

REMARKS None

Post-Impact Data

Test number	HT02031301	
NHTSA number	C20305	
Test date	March 13, 2002	
Test time	12 05 pm	
Test type	FMVSS 208 Compliance Sled Test	
Impact angle	0°	
Ambient Temperature at Impact Area	71°F	
Temperature in Occupant Compartment	71°F	
Impact Velocity		
Integrated velocity from the integration of the entire sled acceleration	29.4 mph	
Specified integrated velocity range	28 to 30 mph	
Sled Carriage Acceleration		
Acceleration	17.0 g	
Specified Acceleration Range	16.0 - 18.2 g	
Sled Carriage Acceleration Duration		
Time from T-0 (-0.5 g) to 0.0 g	124.5 msec	
Specified Acceleration Duration	120.0 to 130.0 msec	
The sled acceleration corridor was achieved		

Seat and Steering Column Positioning Data

Vehicle Yr/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

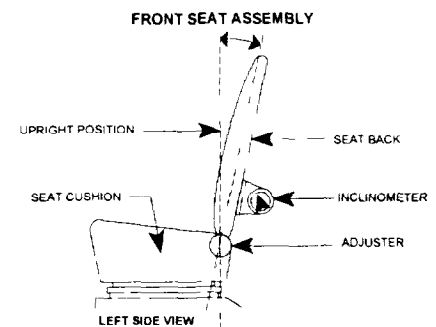
Vehicle NHTSA No C20305 Test Date March 13, 2002

NOMINAL DESIGN RIDING POSITION

Driver Seat Seat Back Angle = 19.8° *

Passenger Seat Seat Back Angle = 19.9° *

* - Measured on seat frame



SEAT FORE AND AFT POSITIONS

Driver Seat The seat track had a total position movement of 20 notches and was positioned 10 notches rearward from the foremost position with the forward most locking position as zero

Passenger Seat The seat track had a total position movement of 20 notches and was positioned 10 notches rearward from the foremost position with the forward most locking position as zero

STEERING COLUMN ADJUSTMENTS

The steering column was placed in the mid position (28.1°) of its continuous angular adjustment (25.1° - 31.1°)

Dummy Positioning Measurement Table

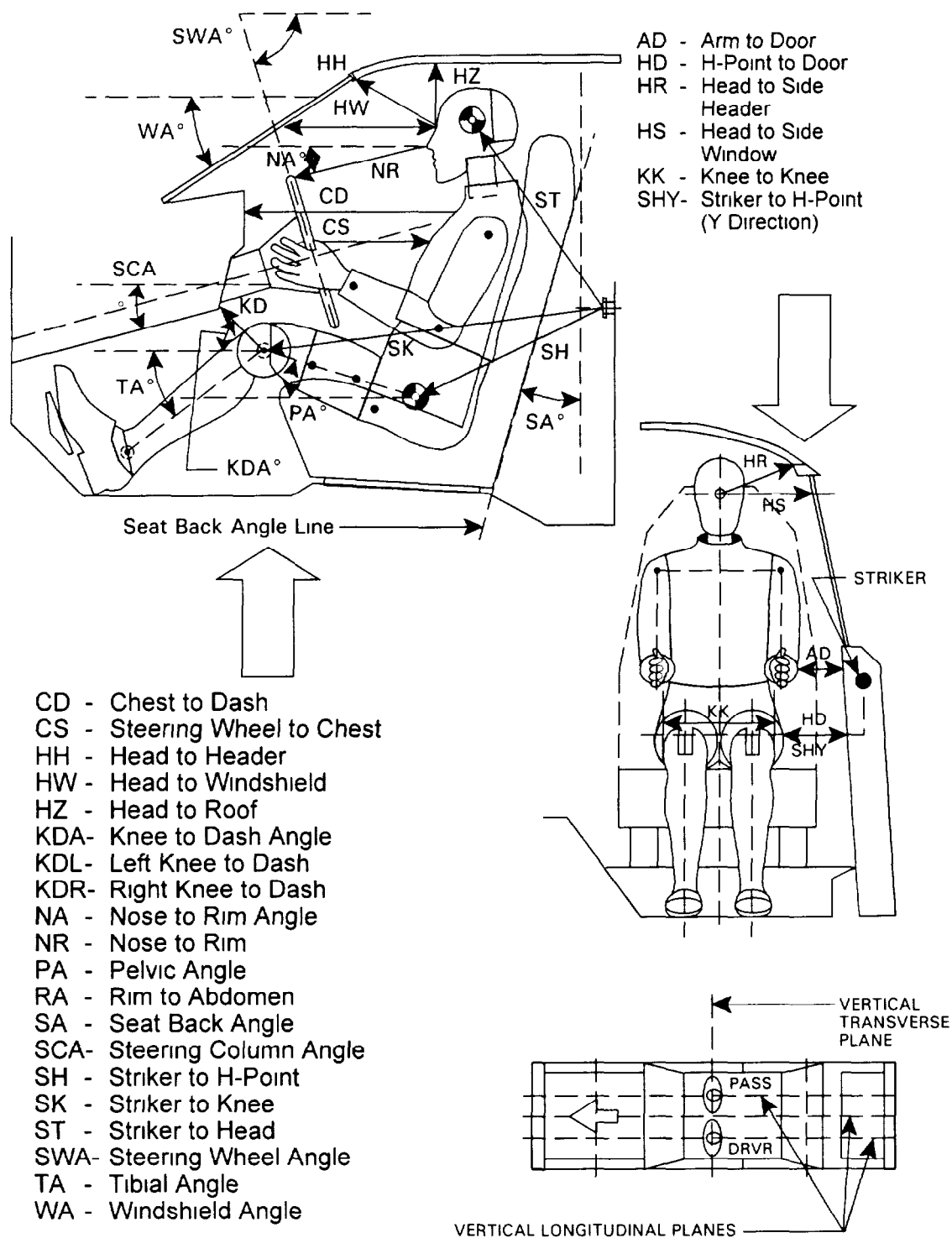
Vehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Vehicle NHTSA No C20305 Test Date March 13, 2002

	DRIVER (Serial #401)	PASSENGER (Serial #403)
WA°	32 3°	
SWA°	28 2°	
SCA°	28 1°	
SA°	19 8°	19 9°
HZ	7 8	7 2
HH	15 6	15 2
HW	22 9	21 5
HR	7 8	7 0
NR	15 7 Angle (NA°) 16 1°	
CD	22 3	21 3
CS	12 2	
RA	7 3	
KDL	8 5 Angle (KDA°) 0 0°	8 3
KDR	8 1	9 1 Angle (KDA°) 0 0°
PA°	23 4°	21 9°
TA°	48 5°	46 2°
KK	11 7	9 0
ST	21 5 Angle 9 3°	22 0 Angle 10 1°
SK	22 8 Angle 93 6°	23 1 Angle 94 3°
SH	8 0 Angle 143 0°	7 7 Angle 142 3°
SHY	9 2	9 2
HS	12 2	11 5
HD	6 6	6 6
AD	3 9	3 5

Dummy Positioning Measurement Locations

DUMMY MEASUREMENT FOR FRONT SEAT PASSENGERS



Description 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 photograph
- 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)
- *¹ 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 photograph

* Measurement used in Data Tape Reference Guide

¹ Only outboard measurement is referenced in Data Tape Reference Guide

Description of Dummy Measurements (Cont)

SH, SK, ST 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 photograph.

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 photograph.
* 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 photograph.
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).

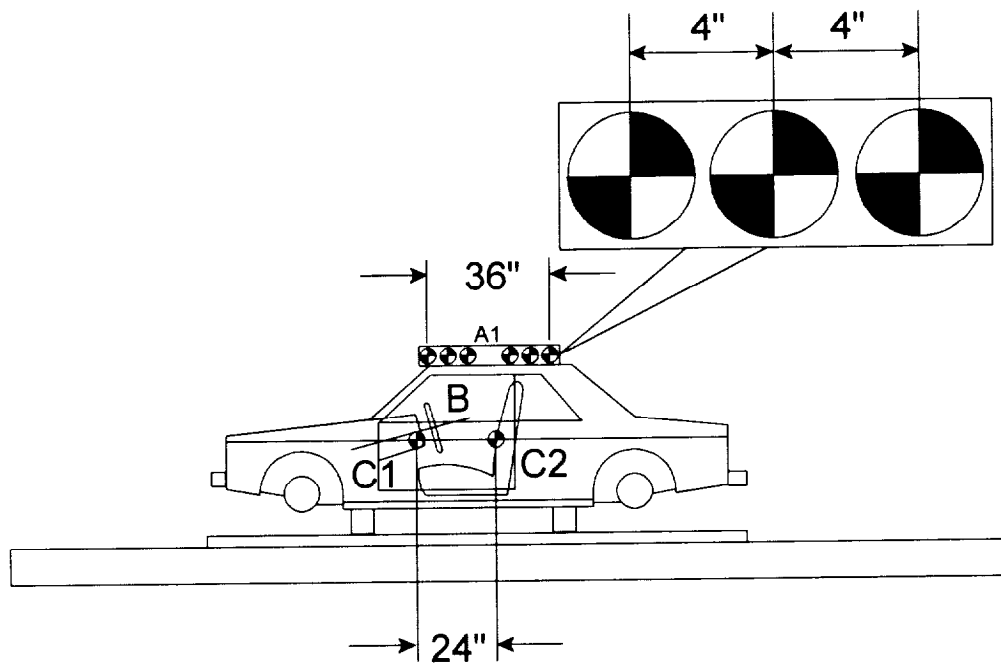
* Measurement used in Data Tape Reference Guide

Description of Dummy Measurements (Cont.)**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
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 photograph
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 Targeting Measurements

REFERENCE PHOTO TARGETS

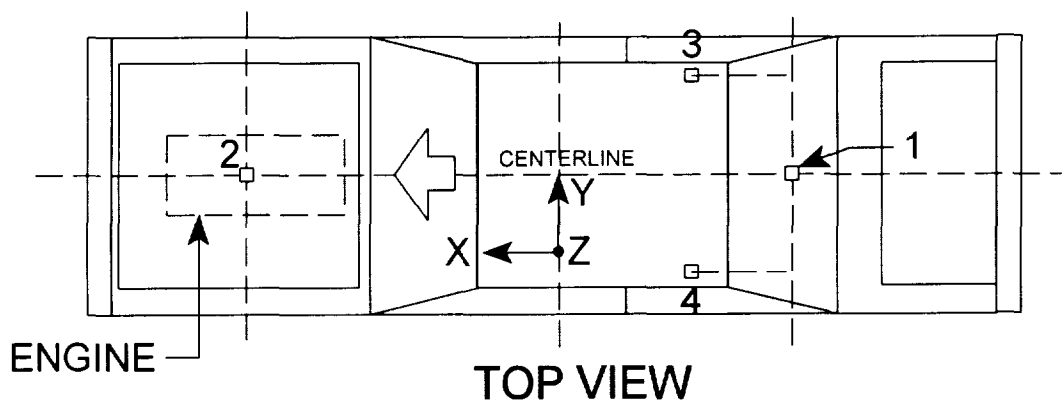


LEFT SIDE VIEW

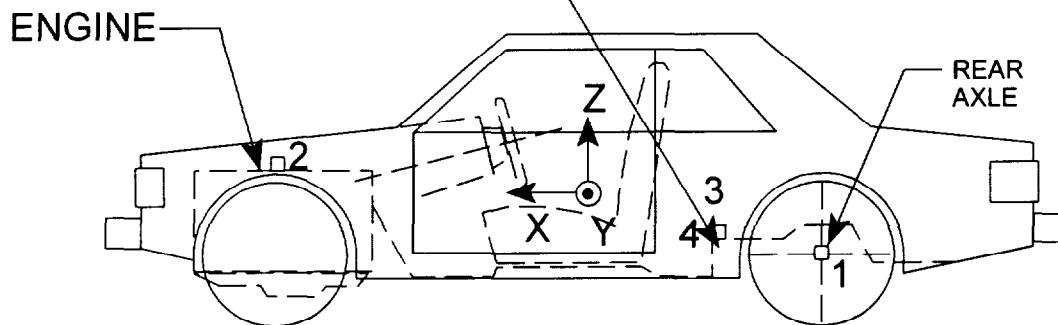
Vehicle Accelerometer Placement and Data Summary

Vehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Vehicle NHTSA No C20305 Test Date March 13, 2002



REAR SEAT CUSHION
ASSY. FRONT ATTACHMENT
BRACKET SUPPORT



LEFT SIDE VIEW

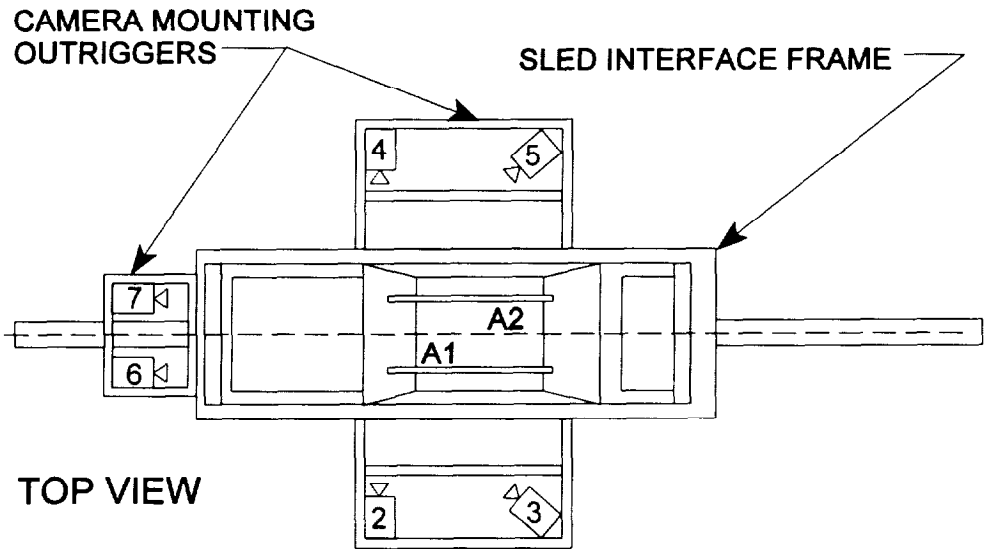
Vehicle Accelerometer Location Measurements and Data Summary

Vehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Vehicle NHTSA No C20305 Test Date March 13, 2002

No	Location	X (in)	Y (in)	Positive Direction		Negative Direction	
				Value	Time (msec)	Value	Time (msec)
	Sled Primary Longitudinal	67.0	0	17 0 g	51	-1 2 g	128
	Sled Redundant Longitudinal	67 0	4 0	17 0 g	51	-1 2 g	128
	Sled Velocity Measured Integrated	67 0	0	29 4 mph	125	--	--
1	Rear Axle Longitudinal	31 0	0	17 3 g	65	-1 9 g	193
2	Top Engine Longitudinal	141 0	0	17 4 g	62	-1 9 g	131
3	Right Rear Seat Member Longitudinal	62 0	15 0	17 6 g	43	-1 7 g	157
4	Left Rear Seat Member Longitudinal	62 0	13 5	17 5 g	55	-1 6 g	156

Camera Positions



TOP VIEW

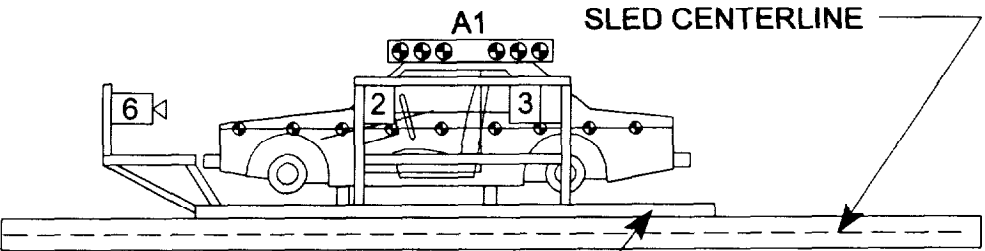
CAMERA FRAME RATES:

#1 = 24 fps

All Others = 1,000 fps



REAL TIME CAMERA



SLED INTERFACE FRAME

LEFT SIDE VIEW

Camera Location Measurements

Camera No	VIEW	Camera Positions (inches)*			Angle (deg)	Film Plane To Head Target	Lens (mm)	Speed (fps)
		X	Y	Z				
1	Real-Time (Pre and Post)						10	24
2	Onboard Driver	70 6	88 6	38 4	90	72 4	13	1000
3	Onboard Driver Angle	150 9	91 1	47 8			13	917
4	Onboard Passenger	71 8	89 6	38 5	90	71 1	13	1010
5	Onboard Passenger Angle	146 7	88 5	47 9			13	1005
6	Onboard Windshield Driver	18 3	14 1	42 9			13	1000
7	Onboard Windshield Passenger	18 3	13 9	42 9			13	952

Reference* X = Front of sled carriage
 Y = Center of sled carriage
 Z = Top of sled carriage

Occupant Injury Data

Vehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Vehicle NHTSA No C20305 Test Date March 13, 2002

MAXIMUM ACCELERATION VALUES (g's)	DRIVER DUMMY #401	PASSENGER DUMMY #403
Head Channel X	-33 3	-60 5
Head Channel Y	24 7	-13 3
Head Channel Z	22 8	34 3
HEAD RESULTANT	40 6	63 0
Chest Channel X	-35 1	-48 0
Chest Channel Y	3 3	-5 7
Chest Channel Z	14 3	19 7
CHEST RESULTANT	37 3	50 1

HEAD INJURY CRITERIA (HIC) VALUES

HIC	158	238
t_1 = (msec)	98 2	92 2
t_2 = (msec)	134 2	114 6

[The maximum time interval from t_1 to t_2 is 36 milliseconds]

CHEST INJURY CRITERIA (CLIP) VALUES (g's)

CLIP	36 0	48 9
t_1 = (msec)	97 1	100 1
t_2 = (msec)	100 1	103 1
CHEST DEFLECTION (in)	1 2	0 4

Occupant Injury Data (Cont.)

MAX COMPRESSIVE FEMUR FORCES	DRIVER DUMMY #401	PASSENGER DUMMY #403
Left Side (lbs)	1352	1358
Right Side (lbs)	1396	1204

NECK INJURY CRITERIA

Peak Flexion Bending Moment about the Occipital Condyle (N-m)	9 7	18 7
Peak Extension Bending Moment about the Occipital Condyle (N-m)	46 8	57 7
Peak Axial Tension (N)	1501	1219
Peak Axial Compression (N)	734	2293
Peak Fore Shear (N)	593	1289
Peak Aft Shear (N)	85	198

Seat Belt Warning System Data

Vehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

NHTSA No C20305, Technician Chad Gadberry, Date February 18, 2002

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 = 7 seconds
(4 to 8 seconds)

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

A 2 S7 3(a)(2)

Time duration of audible warning signal = _____ seconds
(4 to 8 seconds)(see 49 USCS @ 30124)

Time duration of reminder light operation = _____ seconds
(4 to 8 seconds)

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

B 1 S7 3(a)(1)

Time duration of audible warning signal = 0 seconds
(audible warning not required)

Time duration of reminder light operation = 6 seconds
(reminder light not required)

B 2 S7 3(a)(2)

Time duration of audible warning signal = _____ seconds
(audible warning not required)

Time duration of reminder light operation = _____ seconds
(4 to 8 seconds)

C Note wording of visual warning

Fasten seat belt _____

Fasten Belt _____

Symbol 101 X

Readiness IndicatorVehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPVNHTSA No C20305, Technician Chad Gadberry, Date February 18, 2002

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)

- 1 Is the system totally mechanical? ()Yes (X)No
(If YES this Data Sheet is complete.)
- 2 Describe the location of the readiness indicator Left side of instrument panel
- 3 Is the readiness indicator clearly visible to the driver?
(X)Yes-Pass ()No-FAIL
- 4 Is a list of the elements in the occupant restraint system, being monitored by the readiness indicator, provided?
(X)Yes-Pass ()No-FAIL

Air Bag Labels Data

Vehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

NHTSA No C20305, Technician Chad Gadberry, Date February 18, 2002

1 Air bag maintenance label and owner's manual instructions (S4 5 1(a))

1 1 Does the manufacturer recommend periodic maintenance or replacement of the airbag? () Yes, go to 1 2 (X) 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 (Date _____)
 () Schedule on label specifies vehicle mileage (Mileage _____)
 () Schedule on label specifies interval measured from date on certification label (Date _____)

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 inches 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 airbag system in an easily understandable format? (X) Yes-Pass () No-FAIL

2 2 Include a statement that the vehicle is equipped with an airbag and a lap/shoulder belt at the front outboard seating positions? (X) Yes-Pass () No-FAIL

Air Bag Labels Data (Cont)

- 2 3 Include a statement that the air bag is a supplemental restraint at the front outboard seating positions?
(X)Yes-Pass () No-FAIL
- 2 4 Emphasize that all occupants, including the driver, should always wear their seat belts whether or not an airbag is also provided at their seating positions to minimize the risk of severe injury or death in the event of a crash?
(X)Yes-Pass () 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?
(X)Yes-Pass () No-FAIL
- 2 6 Explain that no objects should be placed 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?
(X)Yes-Pass () No-FAIL
- 3 Does the vehicle
- 3 1 Provide an automatic means to ensure that the airbag does not deploy when a child seat or child with a total mass of 30 kg or less is present on the front outboard passenger?
()Yes (X) 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 seats, and unbelted or improperly belted children?
()Yes (X) 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 (X) No

If yes to 3 1, or 3 2, or 3 3, the vehicle is not required to have a sunvisor warning label (S4 5 1(6)), an airbag alert label (S4 5 1(c)) or a label on the dash (S4 5 2(e)) and this check sheet is complete (S4 5 1) If no to 3.1, 3 2, and 3 3, go to 4

4 Sun Visor Warning Label

- 4 1 Is the label permanently affixed (may be permanent marking or molding) to either side of the sunvisor at each front outboard seating position with an airbag?
(S4 5 1(b)(2))
- | | | | |
|------------------|---------|-------------|-------------|
| Driver Side - | | (X)Yes-Pass | () No-FAIL |
| Passenger Side - | () N/A | (X)Yes-Pass | () No-FAIL |

Air Bag Labels Data (Cont)

- 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 either label shown on the next page as appropriate at each front outboard seating position with an air bag? (S4 5 1(b)(2))

4 2 1 **Dual air bags:** ☐ Not Applicable
 Driver Side - ☒ Yes-Pass ☐ **No-FAIL**
 Passenger Side - ☒ Yes-Pass ☐ **No-FAIL**

4 2 2 **Vehicle with driver air bag ONLY - either 4.2.2.1 or 4.2.2.2 is applicable, not both.** (S4 5 1(b)(2)(iv))

4 2 2 1 Does the label conform in content to either label shown on the following page as appropriate?
 ☒ Not Applicable
 Driver Side - ☐ Yes-Pass ☐ **No-FAIL**

4 2 2 2 Does the label conform in content to the first label shown on the following page where the label can be modified to omit the pictogram and the message text 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

☒ Not Applicable
 Driver Side - ☐ Yes-Pass ☐ **No-FAIL**

Air Bag Labels Data (Cont)

SUN VISOR LABEL VISIBLE WHEN VISOR IS IN DOWN POSITION

LABEL OUTLINE VERTICAL AND HORIZONTAL LINE BLACK

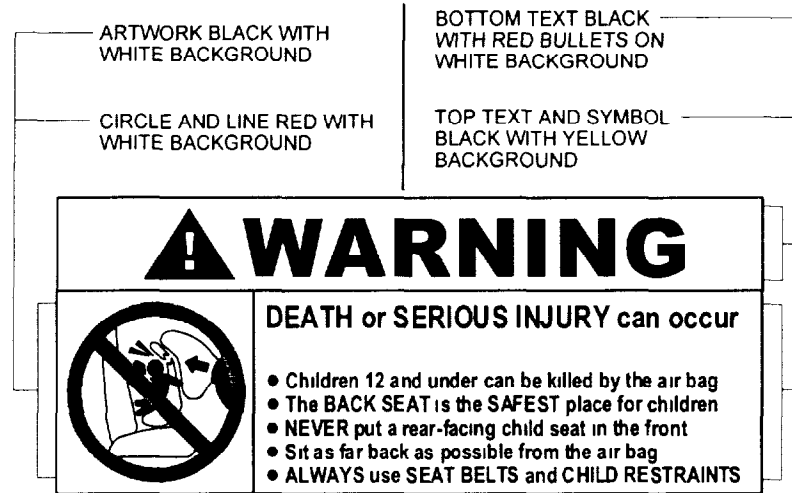


Figure 6a (S4 5 1(b)(2))

SUN VISOR LABEL VISIBLE WHEN VISOR IS IN DOWN POSITION

LABEL OUTLINE, VERTICAL AND HORIZONTAL LINE BLACK

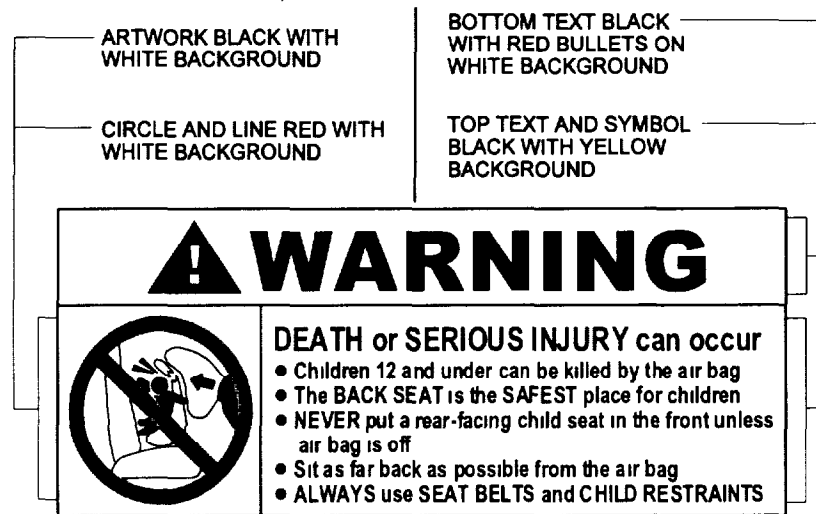


Figure 6b (S4 5 1(b)(2))

- | | | | | |
|-----|---|----------------|-------------|-------------|
| 4 3 | Is the label heading area yellow with the word "warning" and the alert symbol in black? (S4 5 1(b)(2)(i)) | Driver Side - | (X)Yes-Pass | () No-FAIL |
| | Passenger Side - | () No air bag | (X)Yes-Pass | () No-FAIL |
| 4 4 | Is the message white with black text? (S4 5 1(b)(2)(ii)) | Driver Side - | (X)Yes-Pass | () No-FAIL |
| | Passenger Side - | () No air bag | (X)Yes-Pass | () No-FAIL |

Air Bag Labels Data (Cont)

- 4 5 Is the message area at least 30 cm²? (S4 5 1(b)(2)(ii))
 Actual message area 55.9 cm²
 Driver Side - (X)Yes-Pass () **No-FAIL**
 Passenger Side - () No air bag (X)Yes-Pass () **No-FAIL**
- 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 () Not Applicable
 Driver Side - (X)Yes-Pass () **No-FAIL**
 Passenger Side - () No air bag (X)Yes-Pass () **No-FAIL**
- 4 7 Is the pictogram at least 30 mm in diameter? (S4 5 1(b)(2)(iii))
 Actual diameter 30 mm
 For vehicles with driver side air bag ONLY () Not Applicable
 Driver Side - (X)Yes-Pass () **No-FAIL**
 Passenger Side - () No air bag (X)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 - (X)Yes-Pass () **No-FAIL**
 Passenger Side - () No air bag (X)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?
 (S4 5 1(b)(3))
 Driver Side - (X)Yes-Pass () **No-FAIL**
 Passenger Side - () No air bag (X)Yes-Pass () **No-FAIL**
- 5 Air Bag Alert Label
- 5 1 Is the Sun Visor Warning Label visible when the sunvisor is in the stowed
 position?
 Driver Side - (X)Yes, go to 6 () No
 Passenger Side - () No air bag (X)Yes () No
- 5 2 Does the label conform in content to the label shown below? (S4 5 1(c)(2))
 Driver Side - () Yes () **No-FAIL**
 Passenger Side - () No air bag () Yes-Pass () **No-FAIL**
- 5 3 Is the message area black with yellow text? (S4 5 1(c)(2)(i))
 Driver Side - () Yes-Pass () **No-FAIL**
 Passenger Side - () No air bag () Yes-Pass () **No-FAIL**

Air Bag Labels Data (Cont.)

- 5 4 Is the message area at least 20 cm²? (S4 5 1(c)(2)(i))
 Actual message area _____ cm²
 Driver Side - () Yes-Pass () **No-FAIL**
 Passenger Side - () No air bag () 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 () Not Applicable
 () Yes-Pass () **No-FAIL**
- 5 6 Is the pictogram at least 20 mm in diameter? (S4 5 1(c)(2)(ii))
 Actual diameter _____ mm
 For vehicles with driver side air bag ONLY () Not Applicable
 () Yes-Pass () **No-FAIL**

SUN VISOR LABEL VISIBLE WHEN VISOR IS IN UP POSITION

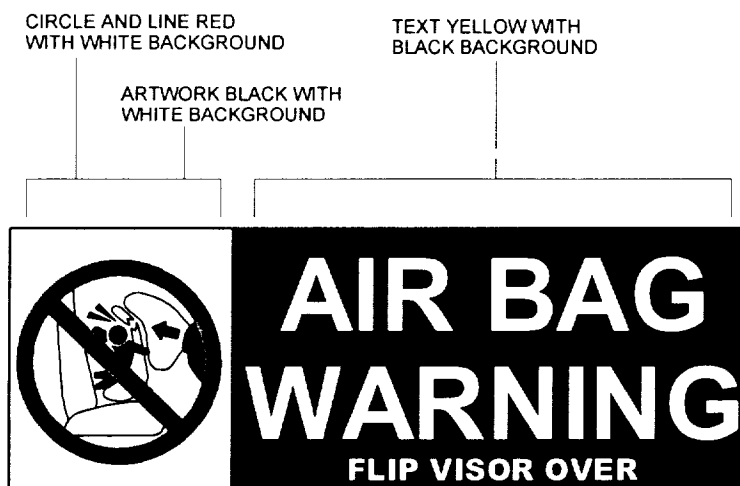


Figure 6c (S4 5 1(c)(2))

6 Label On the Dash

- 6 1 Does the vehicle have a passenger side air bag?
 (X) Yes () No, check sheet is complete
- 6 2 Does the vehicle have a label on the dash or steering wheel hub? (S4 5 1(e))
 (X) 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 below (S4 5 1(e))
 (X) Yes-Pass () **No-FAIL**

Air Bag Labels Data (Cont)

- 6 4 Is the heading area yellow with the word "warning" and the alert symbol in black?
(S4 5 1(e)(i)) (X)Yes-Pass () No-FAIL
- 6 5 Is the message white with black text? (S4 5 1(e)(ii))
(X)Yes-Pass () No-FAIL
- 6 6 Is the message area at least 30 cm²? (S4 5 1(e)(ii))
Actual message area 33 3 cm²
(X)Yes-Pass () No-FAIL

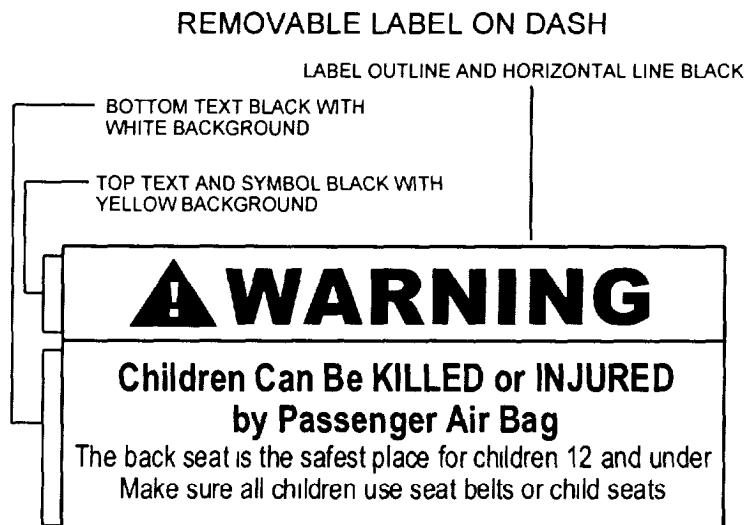


Figure 7 (S4 5 1(e))

Rear Outboard Seating Position Seat Belt DataVehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPVNHTSA No C20305, Technician Chad Gadberry, Date February 18, 2002

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

☒ Yes☐ No

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

Lap Belt Lockability Data

Vehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

NHTSA No C20305, Technician Chad Gadberry, Date February 18, 2002

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 locking retractors (S7 1 1 5(c))

Designated Seating Position (DSP) Right Front

- 1 Record the seating position Fully rearward
(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 of the vehicle (S7 1 1 5(a))

(X)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))

(X)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?

() Yes, go to 6 1 (X) No, go to 7
- 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
- 7 Locate a reference point A on the seat belt buckle (S7 1 1 5(c)(2))

Lap Belt Lockability Data (Cont)

- 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 is 58.8 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. 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))

The measured force application angle = 10 (spec 5-15 degrees)

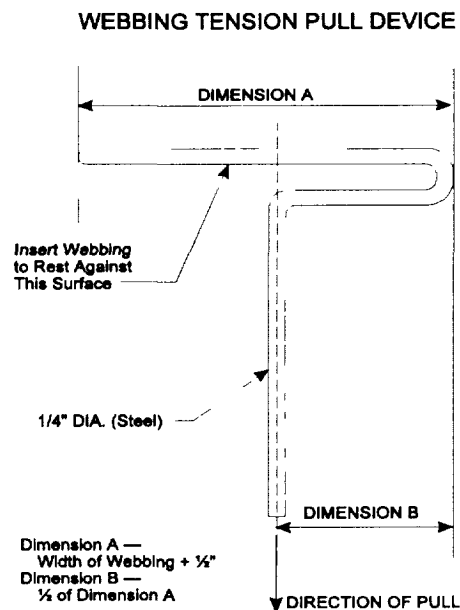


Figure 5 (S7 1 1 5(c)(4))

Lap Belt Lockability Data (Cont)

- 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 is 24 8 inches

- 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 10 lb/sec (Spec 10 to 50 lb/sec)

Measure distance between points A and B 24 8 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 0 inches

(X)Yes-Pass

() No-FAIL

- 16 Subtract the measurement in 14 from the measurement in 10. Is the difference 3 inches or more?

10-14 = 34 0 inches

(X)Yes-Pass

() No-FAIL

REMARKS None

Lap Belt Lockability Data (Cont)

Vehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

NHTSA No C20305, Technician Chad Gadberry, Date February 18, 2002

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 locking retractors (S7 1 1 5(c))

Designated Seating Position (DSP) Left Rear

1 Record the seating position Non-adjustable
(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 of the vehicle (S7 1 1 5(a))

(X)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))

(X)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? () Yes, go to 6 1 (X) No, go to 7

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

7 Locate a reference point A on the seat belt buckle (S7 1 1 5(c)(2))

Lap Belt Lockability Data (Cont)

- 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 is 57 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. 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))

The measured force application angle = 10 (spec 5-15 degrees)

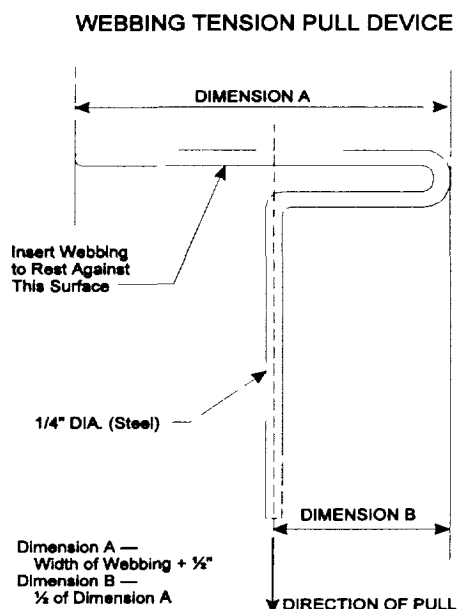


Figure 5 (S7 1 1 5(c)(4))

Lap Belt Lockability Data (Cont)

- 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 is 36 6 inches

- 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 10 lb/sec (Spec 10 to 50 lb/sec)

Measure distance between points A and B 36 8 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 2 inches

(X)Yes-Pass

() No-FAIL

- 16 Subtract the measurement in 14 from the measurement in 10. Is the difference 3 inches or more?

10-14 = 20 6 inches

(X)Yes-Pass

() No-FAIL

REMARKS None

Lap Belt Lockability Data (Cont)

Vehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

NHTSA No C20305, Technician Chad Gadberry, Date February 18, 2002

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 locking retractors (S7 1 1 5(c))

Designated Seating Position (DSP) Center Rear

1 Record the seating position Non-adjustable
(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 of the vehicle (S7 1 1 5(a))

(X)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))

(X)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? (X)Yes, go to 6 1 () No, go to 7

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))

(X)Yes-Pass () No-FAIL

7 Locate a reference point A on the seat belt buckle (S7 1 1 5(c)(2))

Lap Belt Lockability Data (Cont)

- 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 is 63.0 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. 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))

The measured force application angle = 10.0 (spec 5-15 degrees)

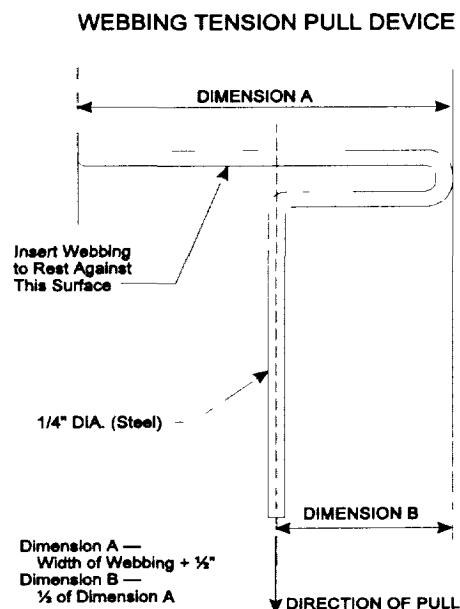


Figure 5 (S7 1 1 5(c)(4))

Lap Belt Lockability Data (Cont.)

- 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 is 22.8 inches

- 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 10 lb/sec (Spec 10 to 50 lb/sec)

Measure distance between points A and B 24.0 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 = 1.2 inches

(X)Yes-Pass

() **No-FAIL**

- 16 Subtract the measurement in 14 from the measurement in 10. Is the difference 3 inches or more?

10-14 = 39.0 inches

(X)Yes-Pass

() **No-FAIL**

REMARKS None

Lap Belt Lockability Data (Cont)

Vehicle Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

NHTSA No C20305, Technician Chad Gadberry, Date February 18, 2002

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 locking retractors (S7 1 1 5(c))

Designated Seating Position (DSP) Right Rear

1 Record the seating position Non-adjustable
(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 of the vehicle (S7 1 1 5(a))

(X)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))

(X)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? () Yes, go to 6 1 (X) No, go to 7

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

7 Locate a reference point A on the seat belt buckle (S7 1 1 5(c)(2))

Lap Belt Lockability Data (Cont)

- 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 is 57.4 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. 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))

The measured force application angle = 10 (spec 5-15 degrees)

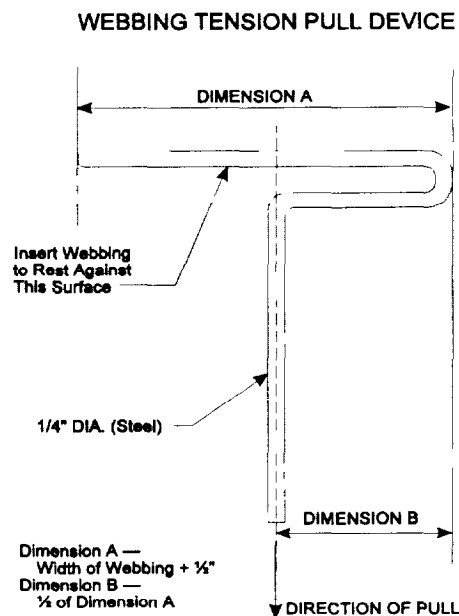


Figure 5 (S7 1.1 5(c)(4))

Lap Belt Lockability Data (Cont)

- 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 is 26 1 inches

- 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 10 lb/sec (Spec 10 to 50 lb/sec)

Measure distance between points A and B 27 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 9 inches

(X)Yes-Pass

() No-FAIL

- 16 Subtract the measurement in 14 from the measurement in 10. Is the difference 3 inches or more?

10-14 = 30 4 inches

(X)Yes-Pass

() No-FAIL

REMARKS None

Seat Belt Comfort and Convenience Data

1 **BELT CONTACT FORCE (S7.4.3)**

Test Vehicle NHTSA No C20305

Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Designated Seating Position Tested Left Front

Date of Comfort/Convenience Check February 18, 2002

Technician Performing Check Chad Gadberry

GVWR 4225 lb

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 1 Does the vehicle incorporate a webbing tension-relieving device?
☐ Yes - go to latchplate access
☒ No - continue with this check sheet
- 1 2 Adjustable seats are in 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
- 1 3 If separately adjustable in a vertical direction, the seats are at the lowest position.
☐ Check
☒ N/A
- 1 4 Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer.
☒ Check
☐ N/A
- 1 5 Place any adjustable anchorages at the manufacturer's nominal design position for a 50th percentile adult male (50M) occupant. This information will be furnished by the COTR.
☒ Check
☐ N/A
- 1 6 Place each adjustable head restraint in its highest adjustment position.
☒ Check
☐ N/A

Seat Belt Comfort and Convenience Data (Cont.)

- 1.7 Adjustable lumbar supports are positioned so that the lumbar support is in its lowest adjustment position (S8 1.3)
☐ Check
☒ N/A
- 1.8 Position the test dummies according to dummy position placement instructions in Appendix B
☒ Check
- 1.9 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 0.5 lb ☒ 0.0 to 0.7 pounds - Pass
☐ greater than 0.7 pounds - FAIL*
- * If the seat belts are voluntarily installed by the manufacturer they do not have to comply

Seat Belt Comfort and Convenience Data (Cont)

1 BELT CONTACT FORCE (S7.4.3)

Test Vehicle NHTSA No C20305

Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Designated Seating Position Tested Right Front

Date of Comfort/Convenience Check February 18, 2002

Technician Performing Check Chad Gadberry

GVWR 4225 lb

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

() Yes - go to latchplate access

(X) No - continue with this check sheet

1 2 Adjustable seats are in 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)

(X) Check

() N/A

1 3 If separately adjustable in a vertical direction, the seats are at the lowest position

() Check

(X) N/A

1 4 Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer

(X) Check

() N/A

1 5 Place any adjustable anchorages at the manufacturer's nominal design position for a 50th percentile adult male (50M) occupant. This information will be furnished by the COTR

(X) Check

() N/A

1 6 Place each adjustable head restraint in its highest adjustment position

(X) Check

() N/A

- _____

Seat Belt Comfort and Convenience Data (Cont.)**1 BELT CONTACT FORCE (S7.4.3)**Test Vehicle NHTSA No C20305Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPVDesignated Seating Position Tested Left RearDate of Comfort/Convenience Check February 18, 2002Technician Performing Check Chad GadberryGVWR 4225 lb

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 1 Does the vehicle incorporate a webbing tension-relieving device?
() Yes - go to latchplate access
(X) No - continue with this check sheet

- 1 2 Adjustable seats are in 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
(X) N/A

- 1 3 If separately adjustable in a vertical direction, the seats are at the lowest position
() Check
(X) N/A

- 1 4 Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer
() Check
(X) N/A

- 1 5 Place any adjustable anchorages at the manufacturer's nominal design position for a 50th percentile adult male (50M) occupant. This information will be furnished by the COTR
() Check
(X) N/A

- 1 6 Place each adjustable head restraint in its highest adjustment position
() Check
(X) N/A

Seat Belt Comfort and Convenience Data (Cont)

- 1 7 Adjustable lumbar supports are positioned so that the lumbar support is in its lowest adjustment position (S8 1 3)
() Check
(X) N/A
- 1 8 Position the test dummies according to dummy position placement instructions in Appendix B
(X) Check
- 1 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 0 7 lb (X) 0 0 to 0 7 pounds - Pass
() greater than 0 7 pounds - FAIL*
- * If the seat belts are voluntarily installed by the manufacturer they do not have to comply

Seat Belt Comfort and Convenience Data (Cont.)**1 BELT CONTACT FORCE (S7.4.3)**Test Vehicle NHTSA No C20305Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPVDesignated Seating Position Tested Center RearDate of Comfort/Convenience Check February 18, 2002Technician Performing Check Chad GadberryGVWR 4225 lb

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 1 Does the vehicle incorporate a webbing tension-relieving device?
() Yes - go to latchplate access
(X) No - continue with this check sheet
- 1 2 Adjustable seats are in 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
(X) N/A
- 1 3 If separately adjustable in a vertical direction, the seats are at the lowest position.
() Check
(X) N/A
- 1 4 Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer.
() Check
(X) N/A
- 1 5 Place any adjustable anchorages at the manufacturer's nominal design position for a 50th percentile adult male (50M) occupant. This information will be furnished by the COTR.
() Check
(X) N/A
- 1 6 Place each adjustable head restraint in its highest adjustment position.
() Check
(X) N/A

Seat Belt Comfort and Convenience Data (Cont.)

- 1 7 Adjustable lumbar supports are positioned so that the lumbar support is in its lowest adjustment position (S8 1 3)
() Check
(X) N/A
- 1 8 Position the test dummies according to dummy position placement instructions in Appendix B
(X) Check
- 1 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 0 4 lb (X) 0 0 to 0 7 pounds - Pass
() greater than 0 7 pounds - FAIL*
- * If the seat belts are voluntarily installed by the manufacturer they do not have to comply

Seat Belt Comfort and Convenience Data (Cont)**1 BELT CONTACT FORCE (S7.4.3)**Test Vehicle NHTSA No C20305Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPVDesignated Seating Position Tested Right RearDate of Comfort/Convenience Check February 18, 2002Technician Performing Check Chad GadberryGVWR 4225 lb

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 1 Does the vehicle incorporate a webbing tension-relieving device?
() Yes - go to latchplate access
(X) No - continue with this check sheet
- 1 2 Adjustable seats are in 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
(X) N/A
- 1 3 If separately adjustable in a vertical direction, the seats are at the lowest position
() Check
(X) N/A
- 1 4 Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer
() Check
(X) N/A
- 1 5 Place any adjustable anchorages at the manufacturer's nominal design position for a 50th percentile adult male (50M) occupant This information will be furnished by the COTR
() Check
(X) N/A
- 1 6 Place each adjustable head restraint in its highest adjustment position
() Check
(X) N/A

- _____

Seat Belt Comfort and Convenience Data (Cont)

2 **LATCHPLATE ACCESS (S7.4.4)**

Test Vehicle NHTSA No C20305

Vehicle Model Year/Make/Model/Body Style. 2002/Chrysler/PT Cruiser/MPV

Designated Seating Position Tested Left Front

Date of Comfort/Convenience Check. February 18, 2002

Technician Performing Check Chad Gadberry

GVWR 4225 lb

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.

- 2 1 Position the seat in its forward most adjustment position
(X) Check
- 2 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)
(X) Check
- 2 3 Position the adjustable seat belt anchorage in the manufacturer's nominal design position for a 50th percentile adult male occupant
(X) Check
- 2 4 Attach the inboard and outboard reach string following the instructions on Figure 1C
(X) Check
- 2 5 Place the latch plate in the stowed position
(X) Check
- 2 6 Extend each line backward and outboard to generate arcs of the reach envelop of the test dummy's arms. Is the latch plate within the reach envelope?
(X)Yes-Pass () **No-FAIL**
- 2 7 Using the clearance test block, specified in Figure 2C, is there sufficient clearance between the vehicle seat and the side of vehicle interior to allow the test block to move unhindered to the latch plate or buckle?
(X)Yes-Pass () **No-FAIL**

Seat Belt Comfort and Convenience Data (Cont.)

2 **LATCHPLATE ACCESS (S7.4.4)**

Test Vehicle NHTSA No C20305

Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Designated Seating Position Tested Right Front

Date of Comfort/Convenience Check: February 18, 2002

Technician Performing Check Chad Gadberry

GVWR 4225 lb

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.

- 2 1 Position the seat in its forward most adjustment position
(X) Check
- 2 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)
(X) Check
- 2 3 Position the adjustable seat belt anchorage in the manufacturer's nominal design position for a 50th percentile adult male occupant
(X) Check
- 2 4 Attach the inboard and outboard reach string following the instructions on Figure 1C
(X) Check
- 2 5 Place the latch plate in the stowed position
(X) Check
- 2 6 Extend each line backward and outboard to generate arcs of the reach envelop of the test dummy's arms. Is the latch plate within the reach envelope?
(X)Yes-Pass () No-FAIL
- 2 7 Using the clearance test block, specified in Figure 2C, is there sufficient clearance between the vehicle seat and the side of vehicle interior to allow the test block to move unhindered to the latch plate or buckle?
(X)Yes-Pass () No-FAIL

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Abstract

Abstract

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Seat Belt Comfort and Convenience Data (Cont.)

- 3 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
(X) Check
- 3 9 Restrain the dummies using the belt systems for the position being tested
(X) Check
- 3 10 Stow outboard armrests which are capable of being stowed
(X) Check
- 3 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 latch plate is released
(X) Pass
- (B) The torso and lap belt webbing of the seat belt system automatically retracts when the seat belt latch plate is released
(X) Pass
- (C) Neither A or B apply
() **FAIL**
- 3 12 With the webbing and hardware in the stowed position are the webbing and hardware prevented from being pinched when the door is closed?
(X) Yes - Pass
() **No - FAIL**
- 3 13 If this test vehicle has an open body (without doors) and has a seat belt system with a tension-relieving device, does the belt system fully retract when the tension-relieving device is deactivated?
(X) N/A
() Yes - Pass
() **No - FAIL**

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Abstract

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Seat Belt Comfort and Convenience Data (Cont.)

- 3 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
(X) Check
- 3 9 Restrain the dummies using the belt systems for the position being tested
(X) Check
- 3 10 Stow outboard armrests which are capable of being stowed
(X) Check
- 3 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 latch plate is released
(X) Pass
- (B) The torso and lap belt webbing of the seat belt system automatically retracts when the seat belt latch plate is released
(X) Pass
- (C) Neither A or B apply.
() **FAIL**
- 3 12 With the webbing and hardware in the stowed position are the webbing and hardware prevented from being pinched when the door is closed?
(X) Yes - Pass
() **No - FAIL**
- 3 13 If this test vehicle has an open body (without doors) and has a seat belt system with a tension-relieving device, does the belt system fully retract when the tension-relieving device is deactivated?
(X) N/A
() Yes - Pass
() **No - FAIL**

Seat Belt Comfort and Convenience Data (Cont)

4 SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle NHTSA No C20305

Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Designated Seating Position Tested Left Front

Date of Comfort/Convenience Check February 18, 2002

Technician Performing Check Chad Gadberry

GVWR 4225 lb

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 which 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

- 4 1 Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back?
 () Yes - Go to 4 2
 (X) No - this form is complete
- 4 2 Does one of the following three parts, the seat belt latch plate, 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**
- 4 3 Are the remaining two seat belt parts accessible under normal conditions?
 () Yes - Pass
 () **No - FAIL**

Seat Belt Comfort and Convenience Data (Cont.)

- 4 4 The buckle and latch plate 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
 - (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**
- 4 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**

Seat Belt Comfort and Convenience Data (Cont.)

4 SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle NHTSA No C20305

Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Designated Seating Position Tested Right Front

Date of Comfort/Convenience Check February 18, 2002

Technician Performing Check Chad Gadberry

GVWR 4225 lb

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 which 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

- 4 1 Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back?

() Yes - Go to 4 2

(X) No - this form is complete

- 4 2 Does one of the following three parts, the seat belt latch plate, 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

- 4 3 Are the remaining two seat belt parts accessible under normal conditions?

() Yes - Pass

() No - FAIL

Seat Belt Comfort and Convenience Data (Cont.)

4 4 The buckle and latch plate 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

(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**

4 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**

Seat Belt Comfort and Convenience Data (Cont.)

4 SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle NHTSA No C20305

Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Designated Seating Position Tested Left Rear - Does not apply (see requirement B)

Date of Comfort/Convenience Check February 18, 2002

Technician Performing Check Chad Gadberry

GVWR 4225 lb

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 which 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

- 4 1 Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back?
 - () Yes - Go to 4 2
 - () No - this form is complete
- 4 2 Does one of the following three parts, the seat belt latch plate, 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**
- 4 3 Are the remaining two seat belt parts accessible under normal conditions?
 - () Yes - Pass
 - () **No - FAIL**

Seat Belt Comfort and Convenience Data (Cont.)

- 4 4 The buckle and latch plate 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
 - (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**
- 4 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**

Seat Belt Comfort and Convenience Data (Cont.)

4 SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle NHTSA No C20305

Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPV

Designated Seating Position Tested Center Rear - Does not apply

(see requirement B)

Date of Comfort/Convenience Check February 18, 2002

Technician Performing Check Chad Gadberry

GVWR 4225 lb.

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 which 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

- 4 1 Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back?

☐ Yes - Go to 4 2

☐ No - this form is complete

- 4 2 Does one of the following three parts, the seat belt latch plate, 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**

- 4 3 Are the remaining two seat belt parts accessible under normal conditions?

☐ Yes - Pass

☐ No - **FAIL**

Seat Belt Comfort and Convenience Data (Cont)

- 4 4 The buckle and latch plate 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
 - (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**
- 4 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**

Seat Belt Comfort and Convenience Data (Cont)**4 SEAT BELT GUIDES AND HARDWARE (S7.4.6)**Test Vehicle NHTSA No C20305Vehicle Model Year/Make/Model/Body Style 2002/Chrysler/PT Cruiser/MPVDesignated Seating Position Tested Right Rear - Does not apply(see requirement B)Date of Comfort/Convenience Check February 18, 2002Technician Performing Check Chad GadberryGVWR 4225 lb

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 which 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

- 4 1 Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back?

() Yes - Go to 4 2

() No - this form is complete

- 4 2 Does one of the following three parts, the seat belt latch plate, 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

- 4 3 Are the remaining two seat belt parts accessible under normal conditions?

() Yes - Pass

() No - FAIL

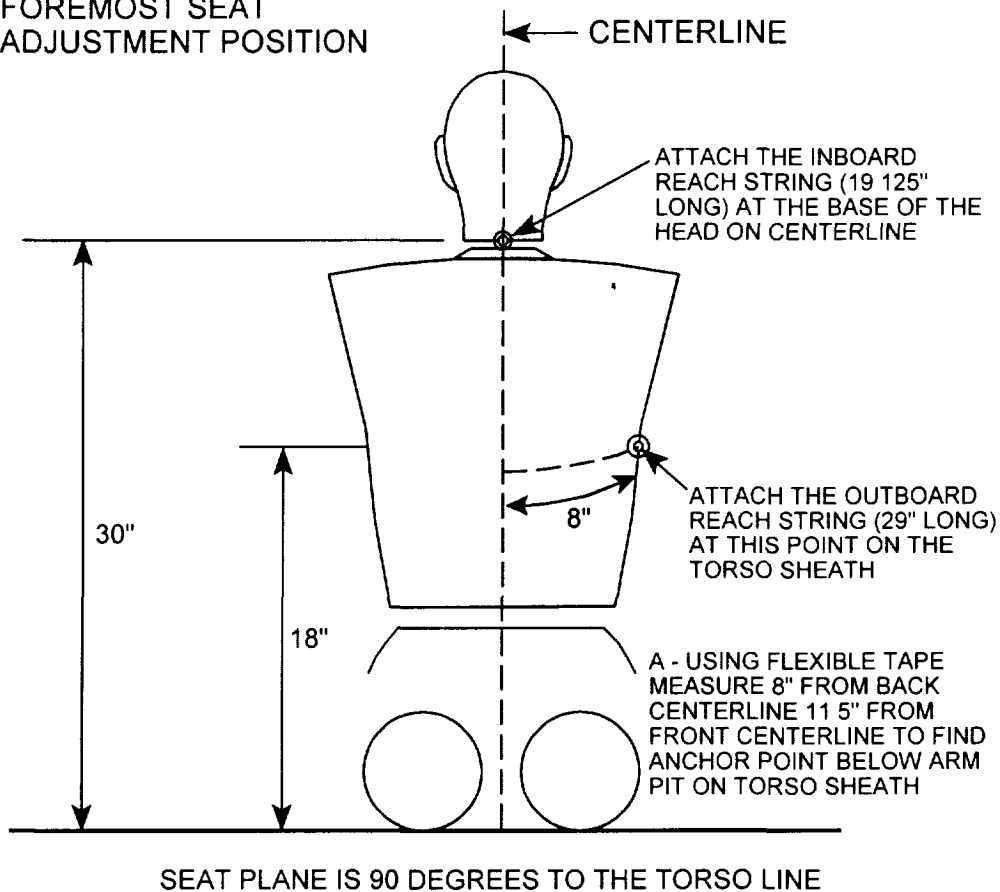
Seat Belt Comfort and Convenience Data (Cont)

- 4 4 The buckle and latch plate 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
 - (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**
- 4 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**

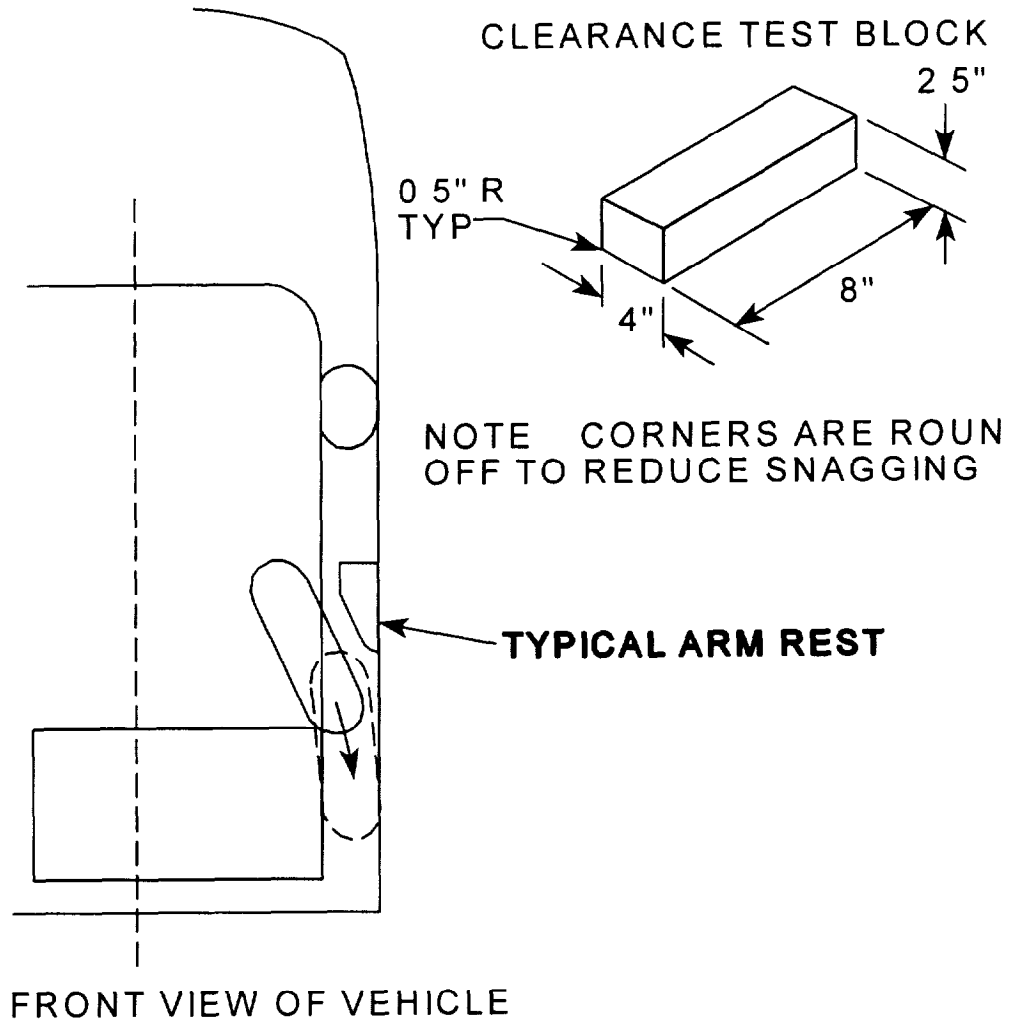
PART 572E DUMMY

50TH PERCENTILE
DUMMY SEATED IN
FOREMOST SEAT
ADJUSTMENT POSITION



REAR VIEW

USE OF CLEARANCE TEST BLOCK TO DETERMINE HAND/ARM ACCESS



APPENDIX A
PHOTOGRAPHS

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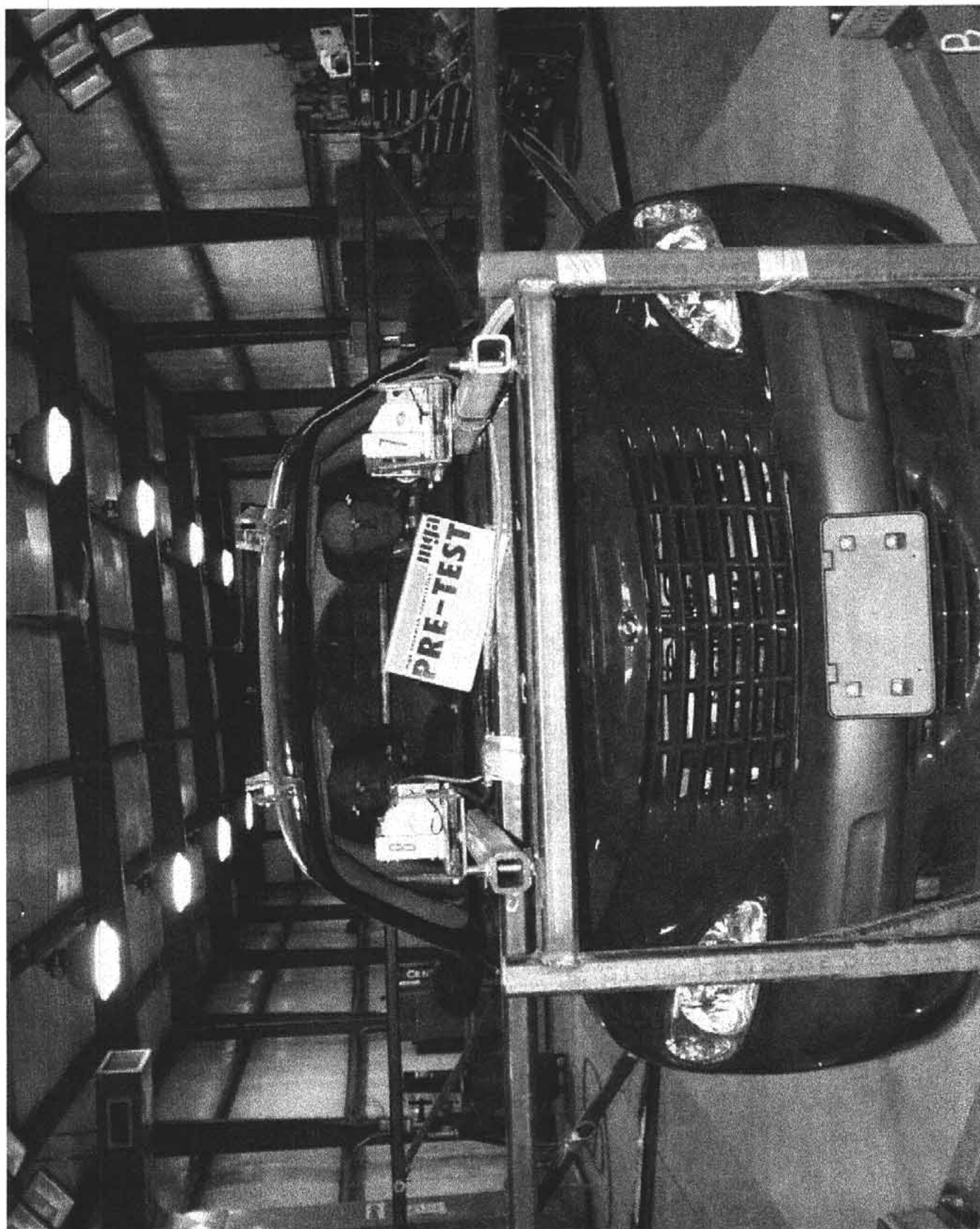


Photo No. A-1 - Pre-Test Frontal View

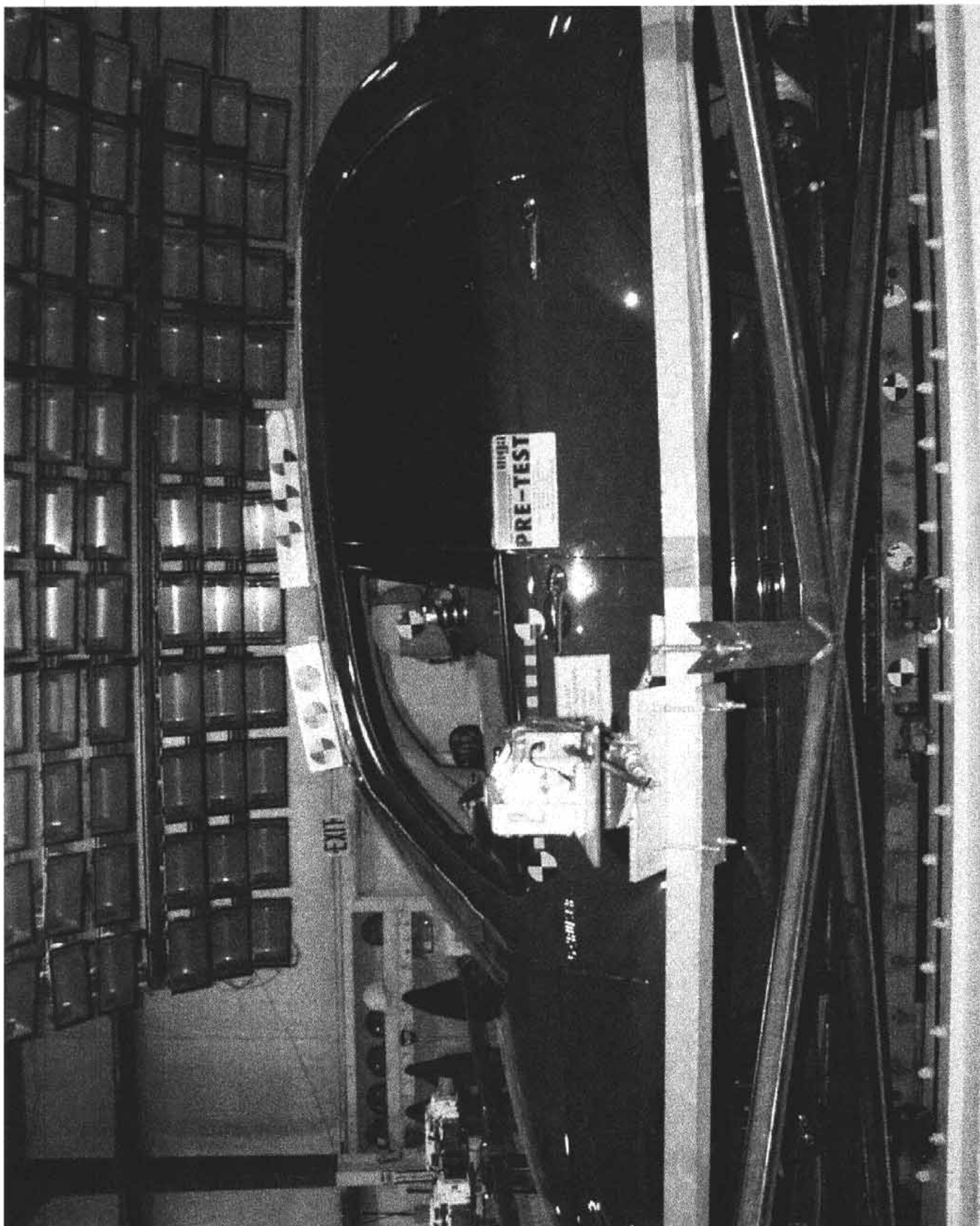


Photo No. A-2 - Pre-Test Left Side View

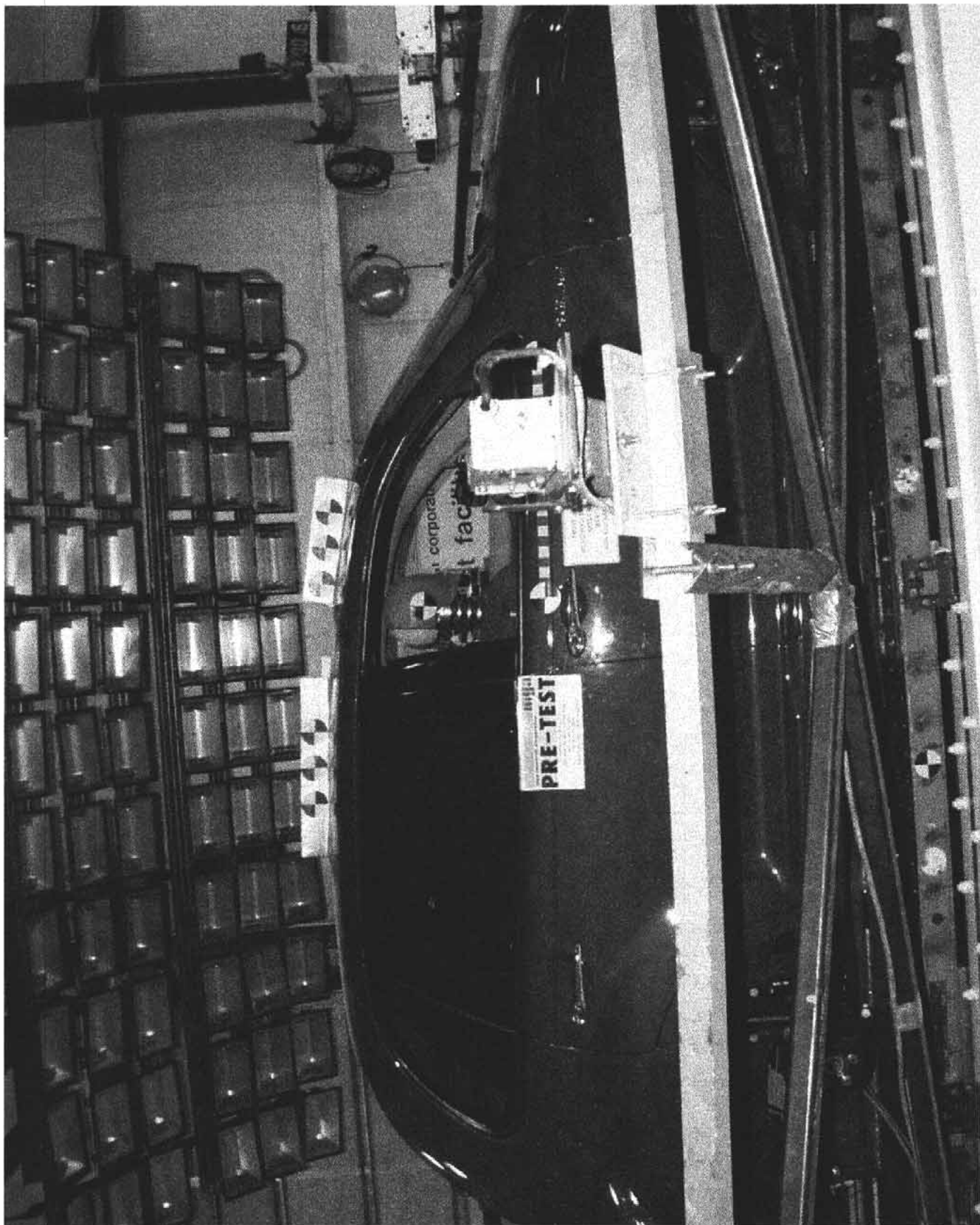


Photo No. A-3 - Pre-Test Right Side View

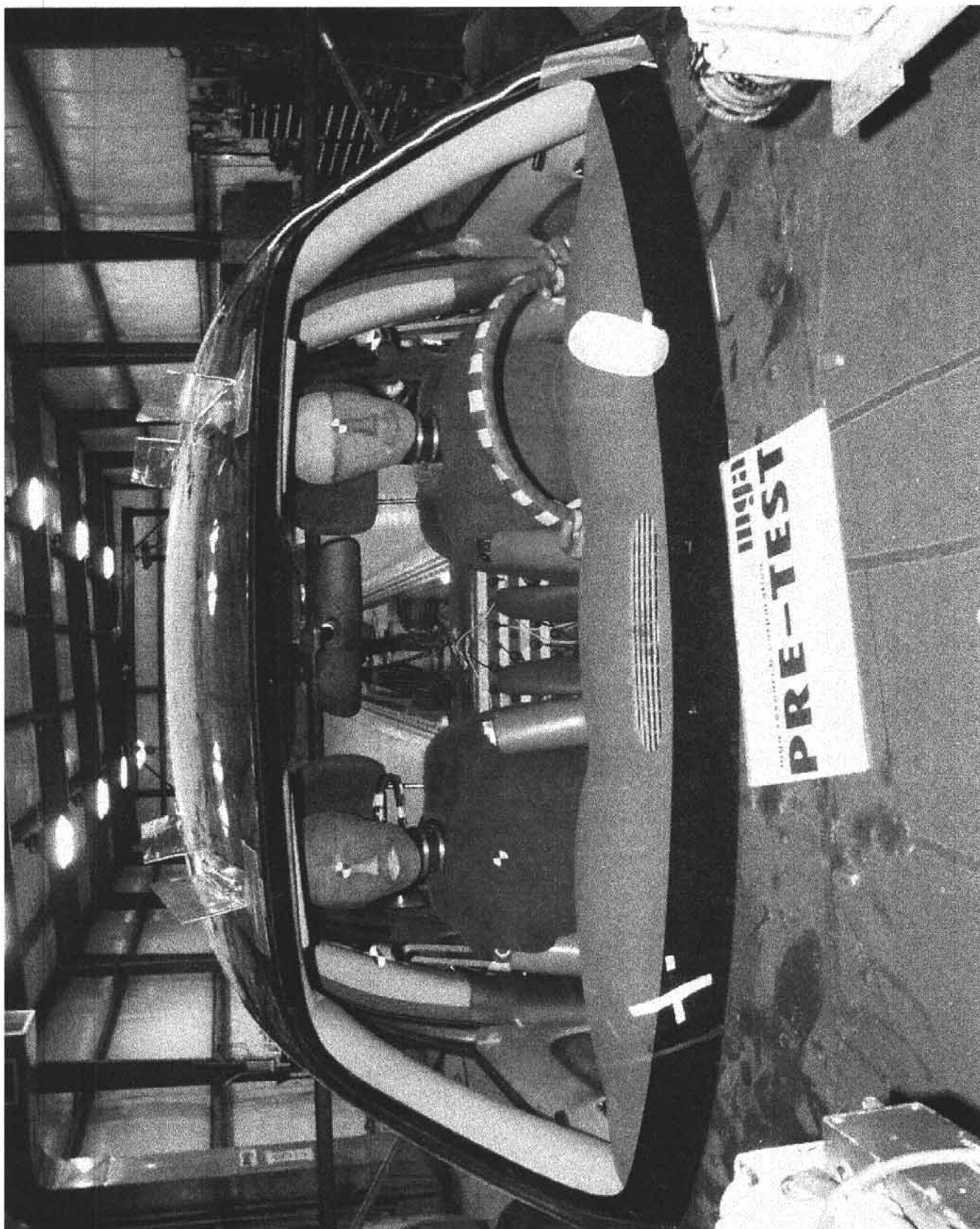


Photo No. A-4 - Pre-Test Windshield View

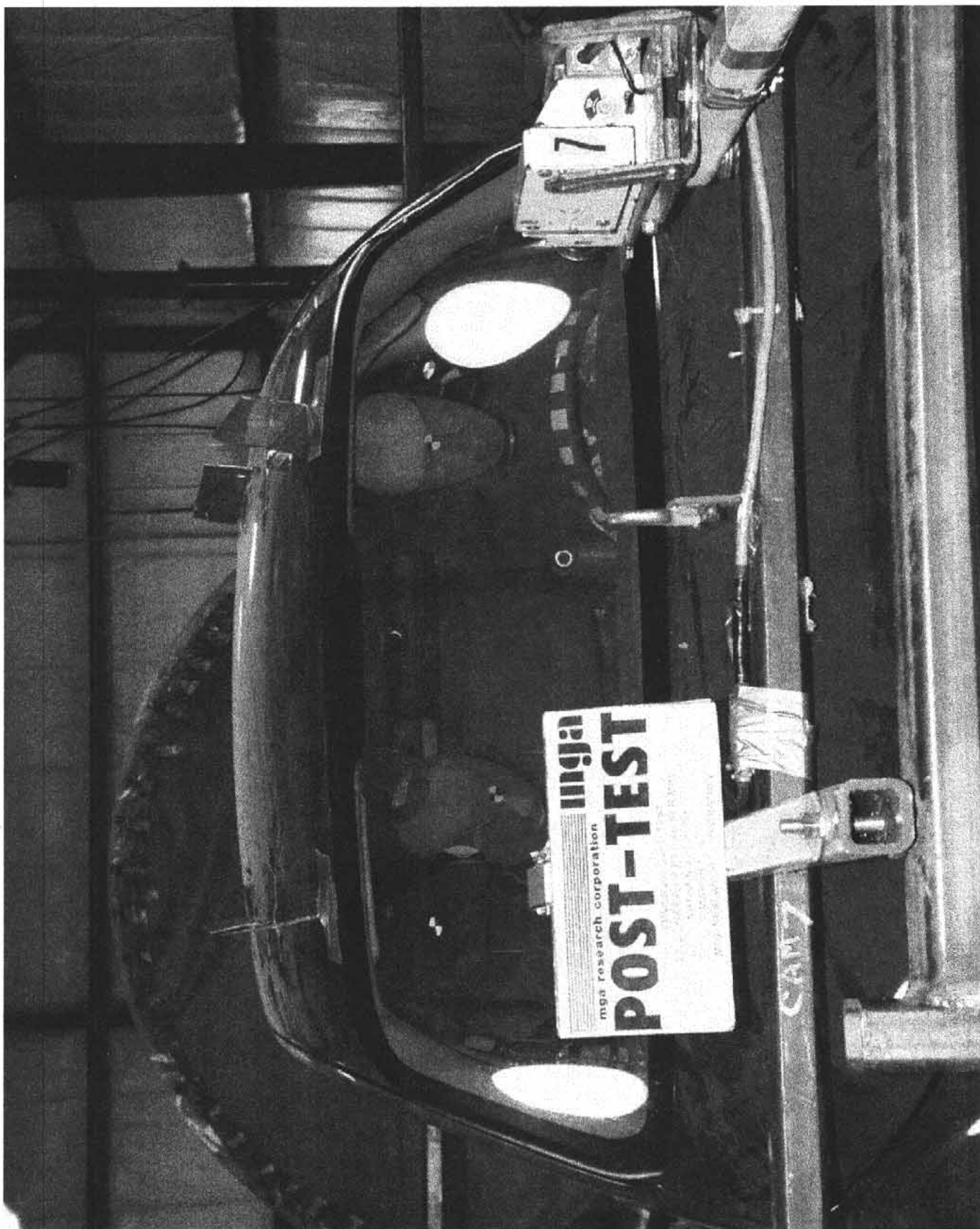


Photo No. A-5 - Post-Test Windshield View

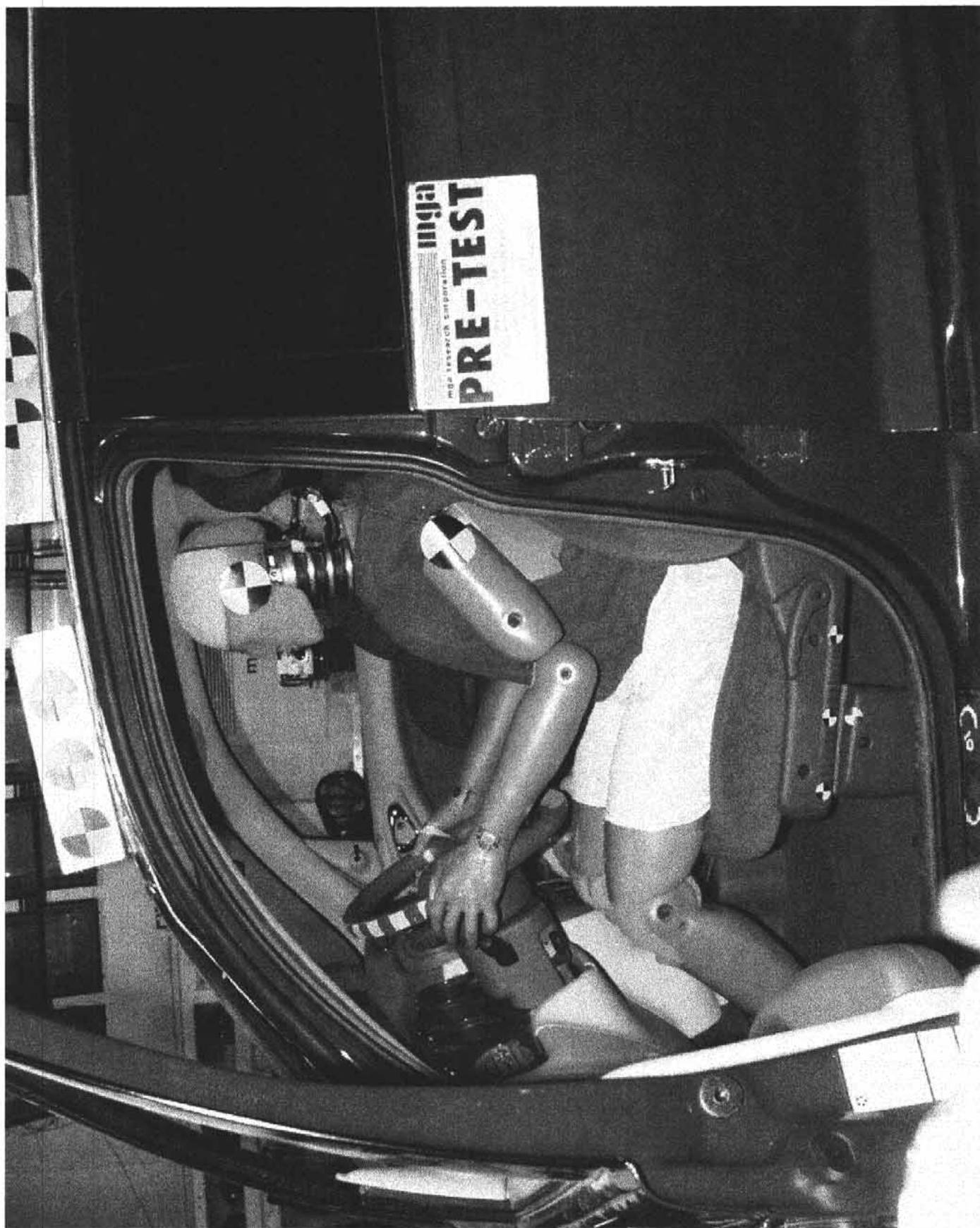


Photo No. A-6 - Pre-Test Driver Dummy Position View (Door Open)



Photo No. A-7 - Post-Test Driver Dummy Position View (Door Open)

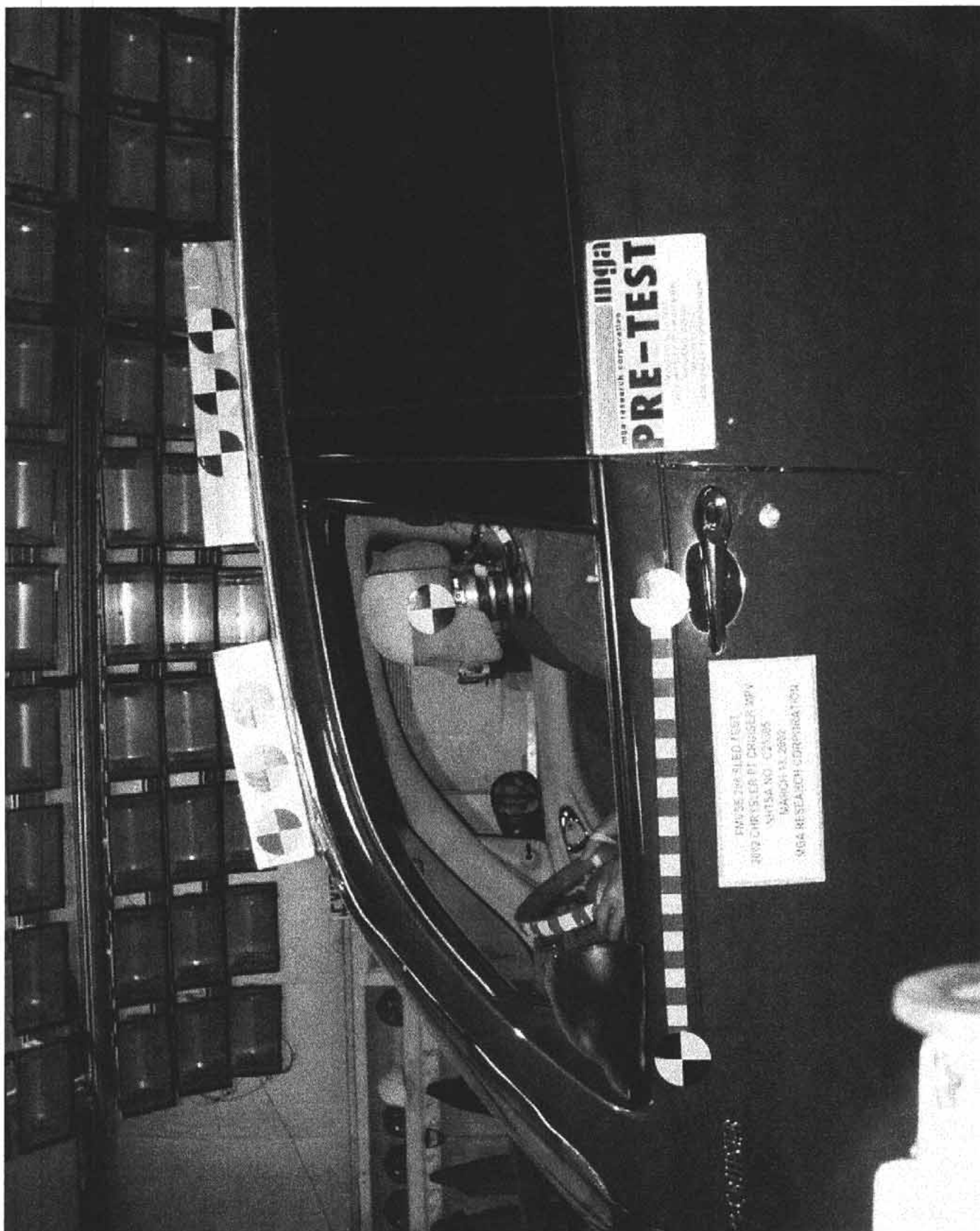


Photo No. A-8 - Pre-Test Driver Dummy Position View



Photo No. A-9 - Post-Test Driver Dummy Position View

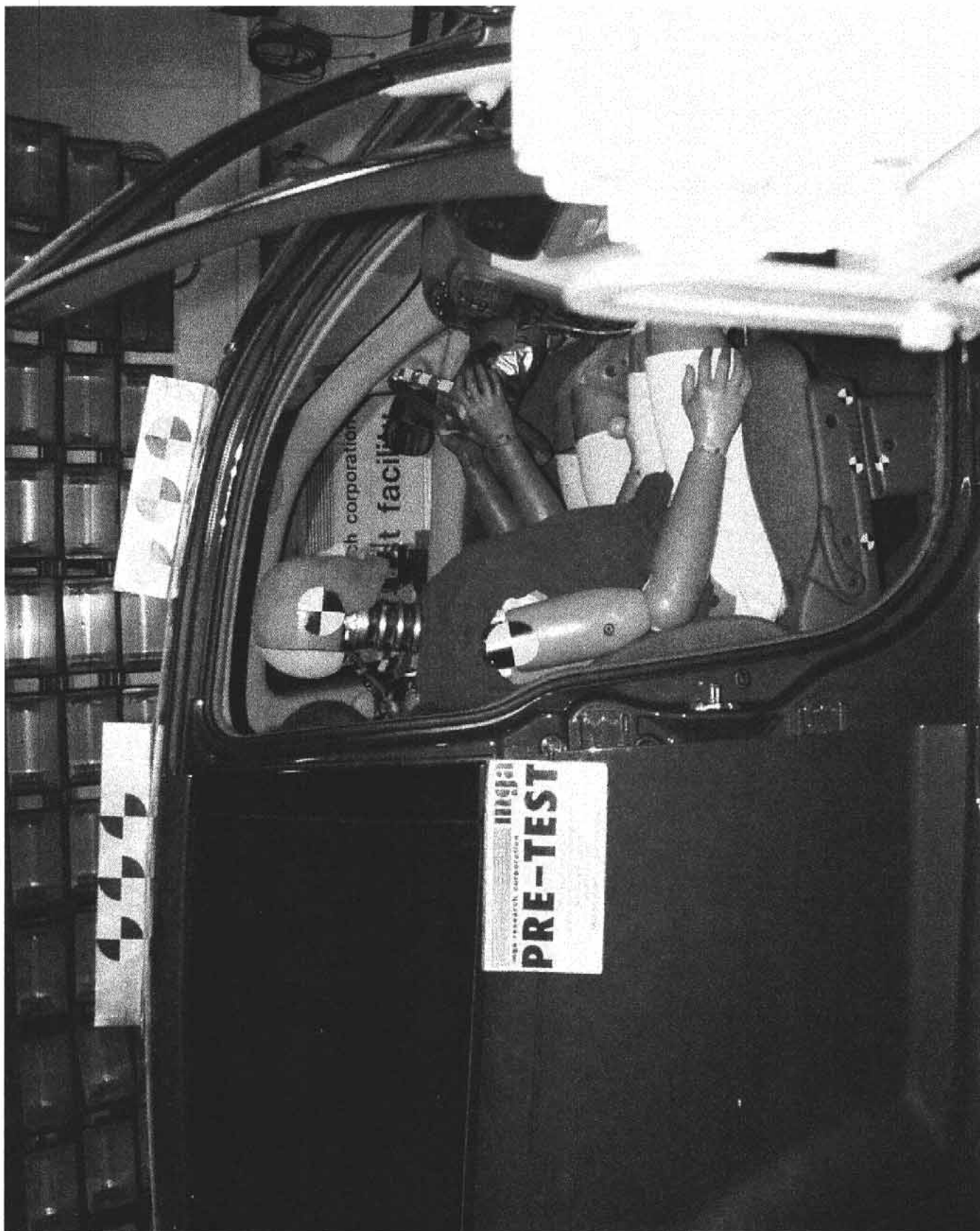


Photo No. A-10 - Pre-Test Passenger Dummy Position View (Door Open)



Photo No. A-11 - Post-Test Passenger Dummy Position View (Door Open)



Photo No. A-12 - Pre-Test Passenger Dummy Position View



Photo No. A-13 - Post-Test Passenger Dummy Position View

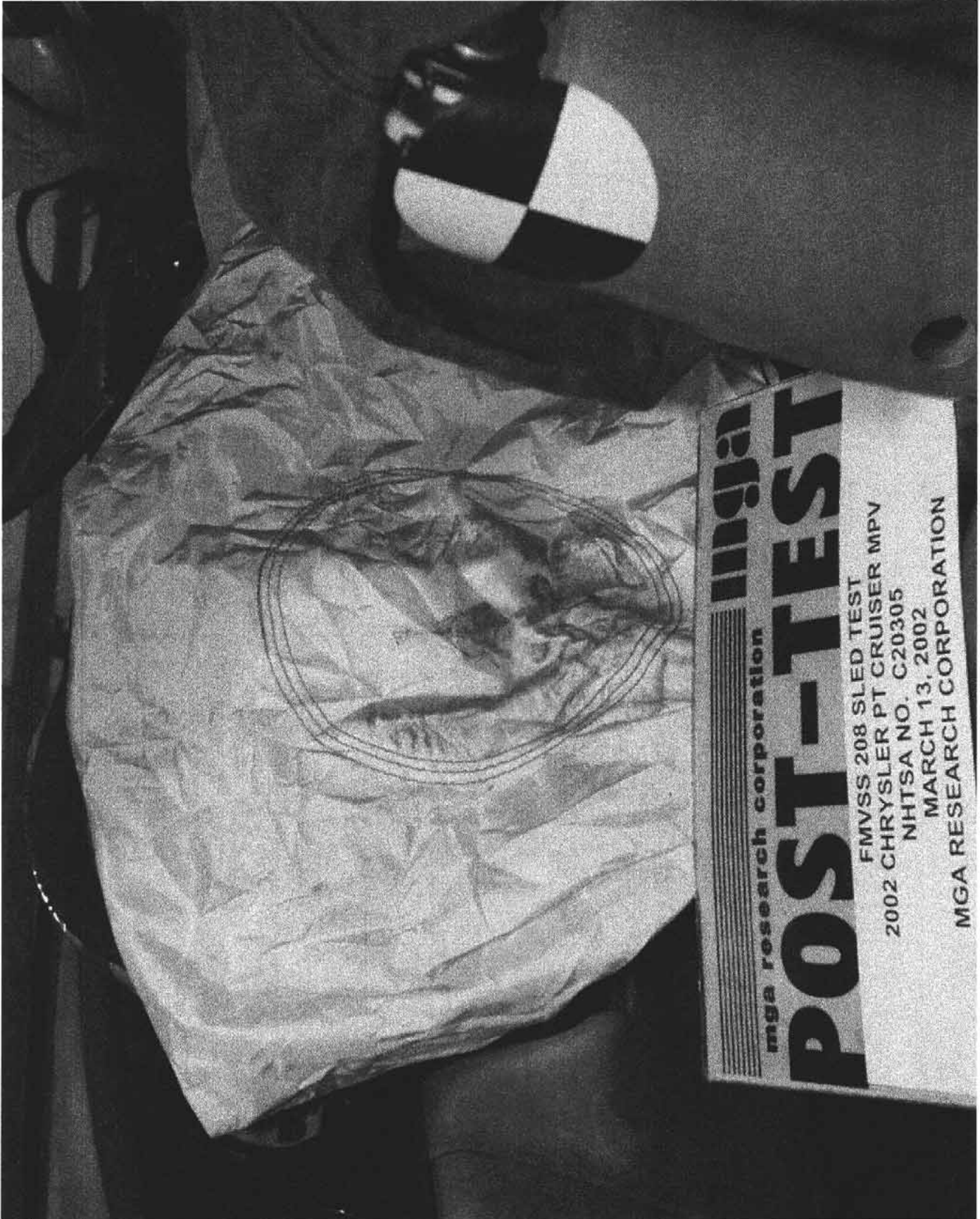


Photo No. A-14 - Post-Test Driver Airbag View



Photo No. A-15 - Post-Test Driver Head Contact View (visor and roof)

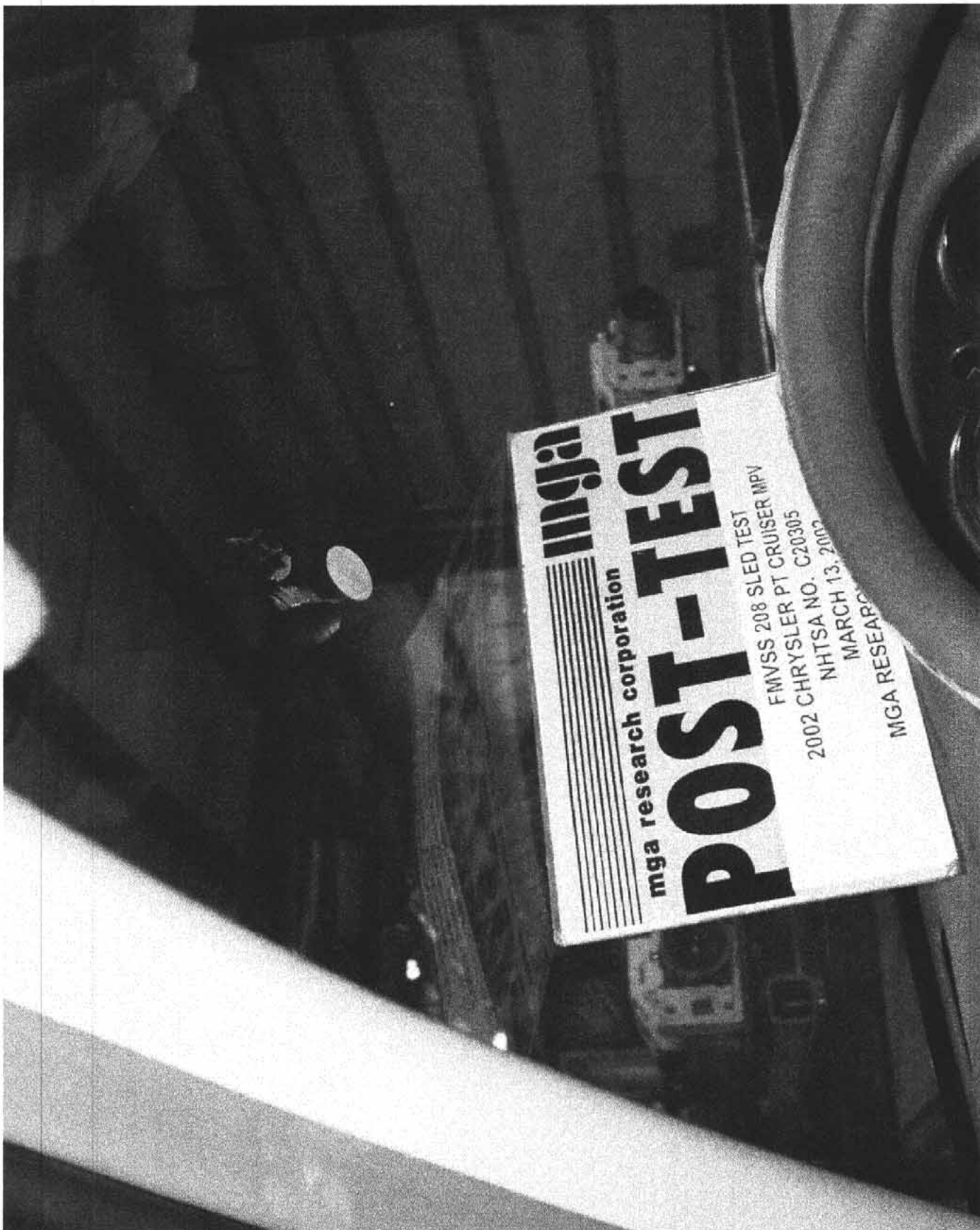


Photo No. A-16 - Post-Test Driver Head Contact View (windshield)



Photo No. A-17 - Post-Test Driver Head Contact View (header)

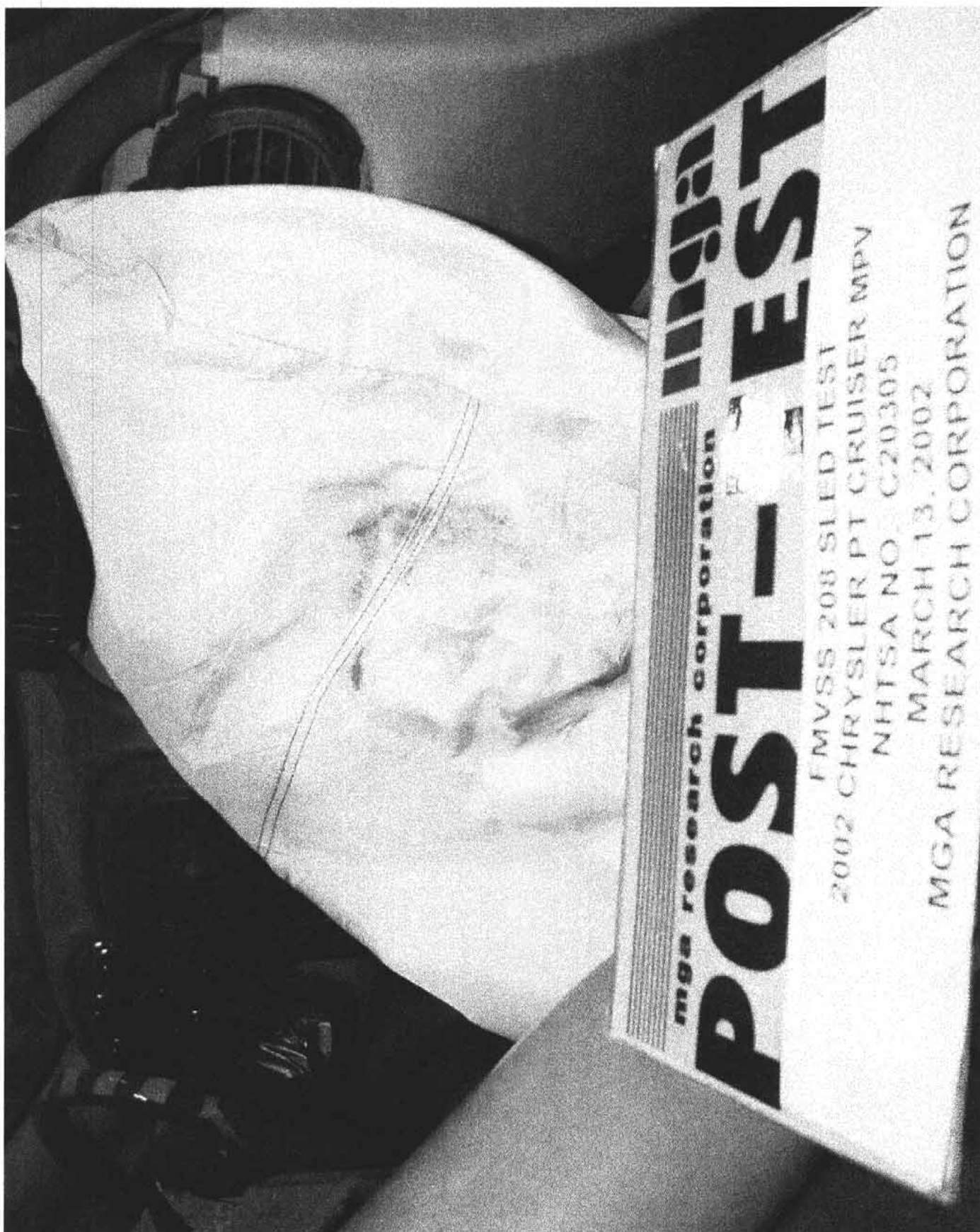


Photo No. A-18 - Post-Test Passenger Dummy Airbag View

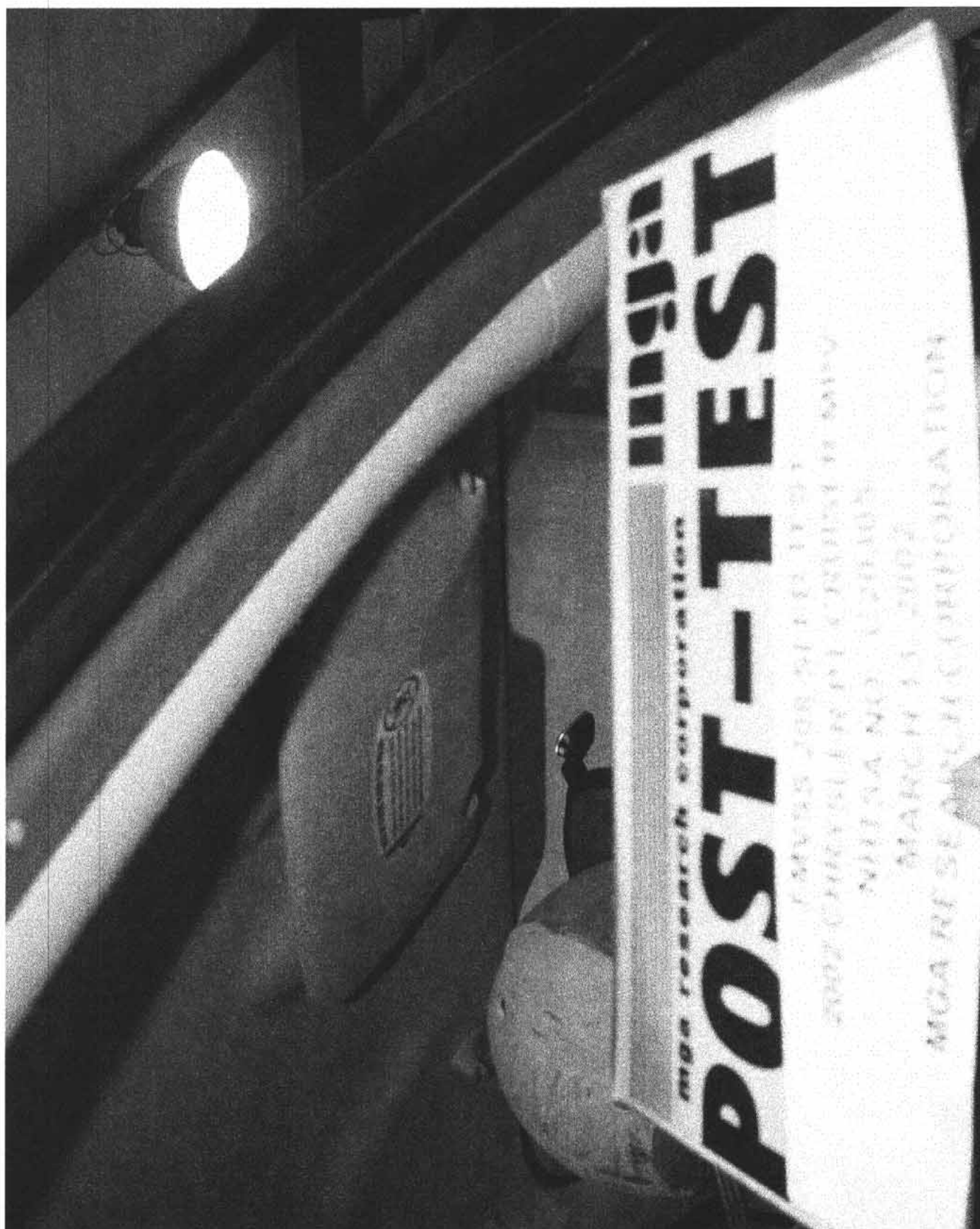


Photo No. A-19 - Post-Test Passenger Dummy Head Contact View (visor)



Photo No. A-20 - Post-Test Passenger Head Contact View (windshield)



Photo No. A-21 - Pre-Test Driver Knee Bolster View



Photo No. A-22 - Post-Test Driver Knee Bolster View



Photo No. A-23 - Pre-Test Passenger Knee Bolster View



Photo No. A-24 - Post-Test Passenger Knee Bolster View



Photo No. A-25 - Pre-Test Driver Seat Position View



Photo No. A-26 - Post-Test Driver Seat Position View

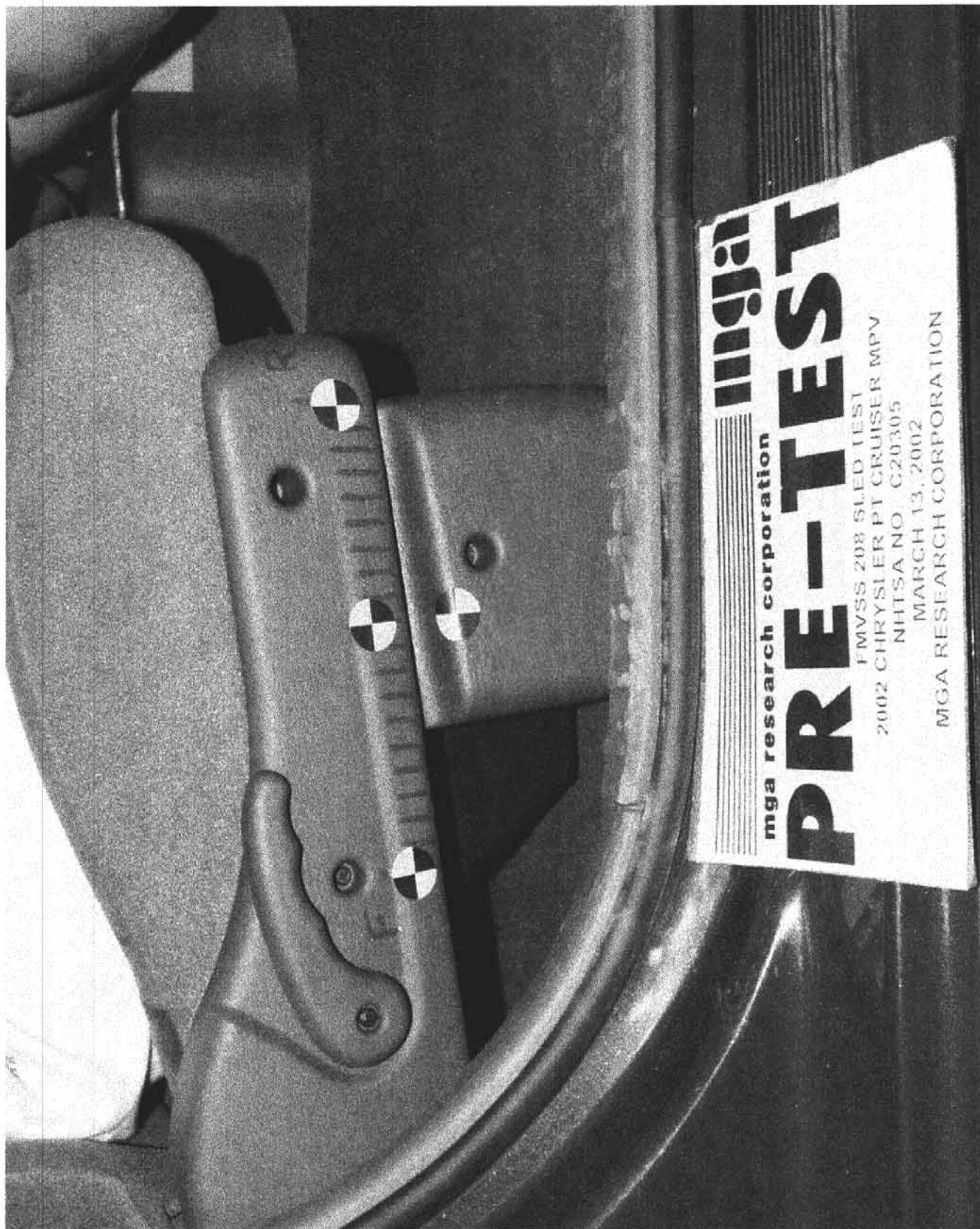


Photo No. A-27 - Pre-Test Passenger Seat Position View

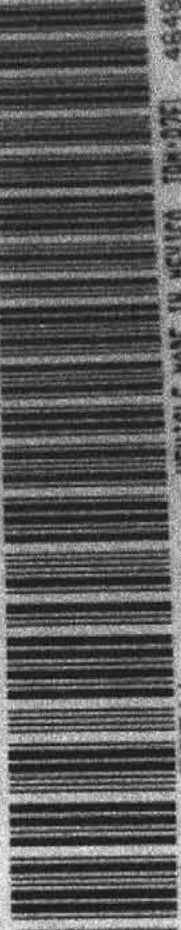


Photo No. A-28 - Post-Test Passenger Seat Position View

MFD BY		DAIMLERCHRYSLER		DATE OF MFR		GAWR	
CORPORATION				11-01		1917 KG(04225 LB)	
GAWR FRONT		WITH TIRES		RIMS AT		COLD	
0998 KG(2200 LB)		P195/65R15 89T		15X6.0		234 KPA(34 PSI)	
GAWR REAR		WITH TIRES		RIMS AT		COLD	
0919 KG(2025 LB)		P195/65R15 89T		15X6.0		234 KPA(34 PSI)	

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

VIN: 3C4FY48B82T276870 TYPE: MPV SINGLE X DUAL



MDH: 110121 557AA PNT:PEL VEHICLE MADE IN MEXICO TM:RFL 4646507

	VEHICLE CAPACITY OR LESS
1st SEAT	2 PASS.
2nd SEAT	3 PASS.
LUGGAGE	115 LBS-52 kg
TOTAL	5 PASS.
TOTAL WEIGHT	865 LBS-392 kg
TIRE PRESSURE COLD	34 PSI 240 kPa
RECOMMENDED TIRE SIZES	
P195/65R15 STANDARD LOAD	
P205/55R16 STANDARD LOAD	
SEE OWNERS MANUAL FOR ADDITIONAL DATA	
PRINTED IN USA	04656 432AC

APPENDIX B
DATA PLOTS

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TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

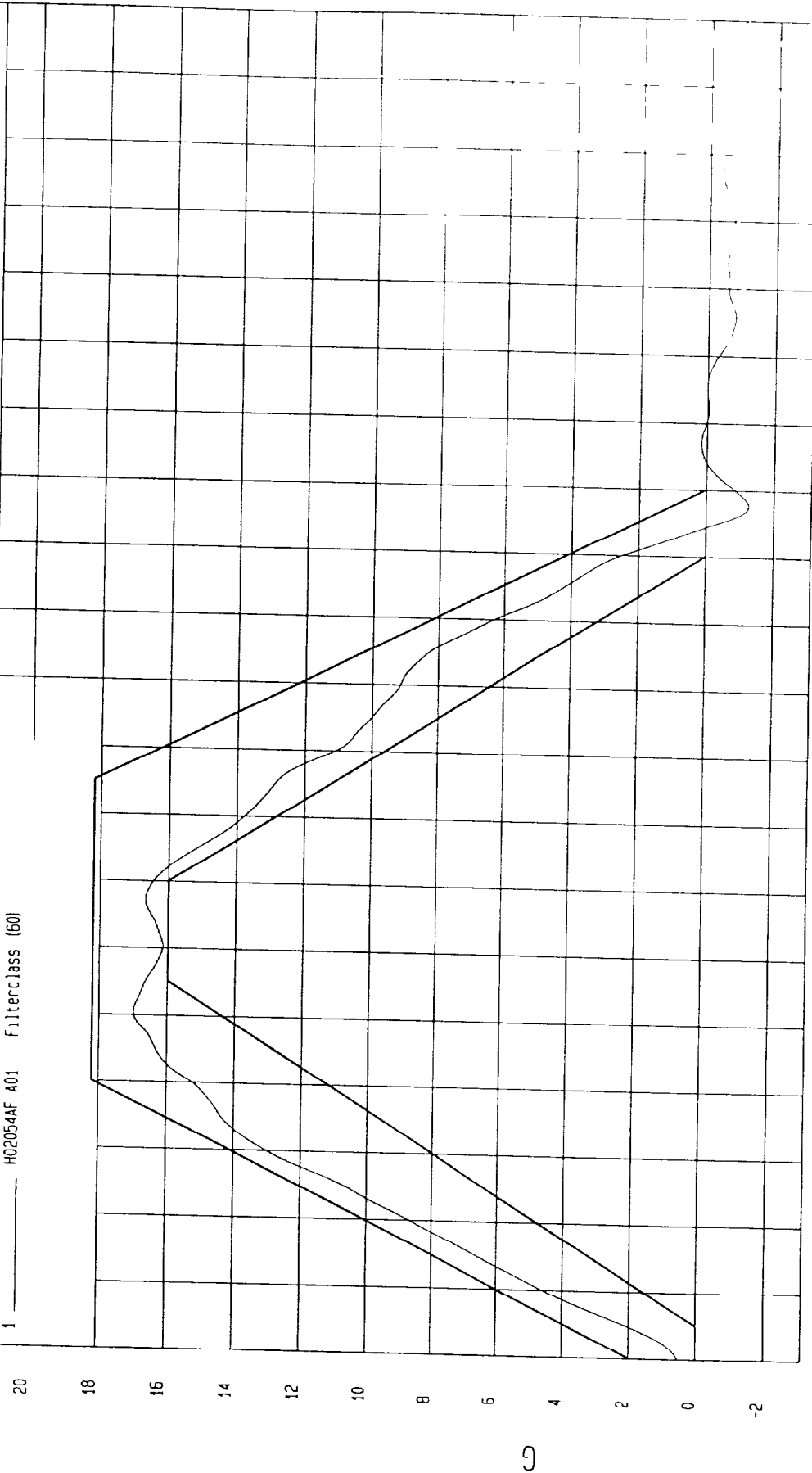
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -1.24 G at 127.7 msec

Maximum = 16.98 G at 50.5 msec

SLED X ACCELERATION

1 ——— H02054AF A01 Filterclass (60)



TIME (SECONDS)

MGA Research
03/13/2002 14:09

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

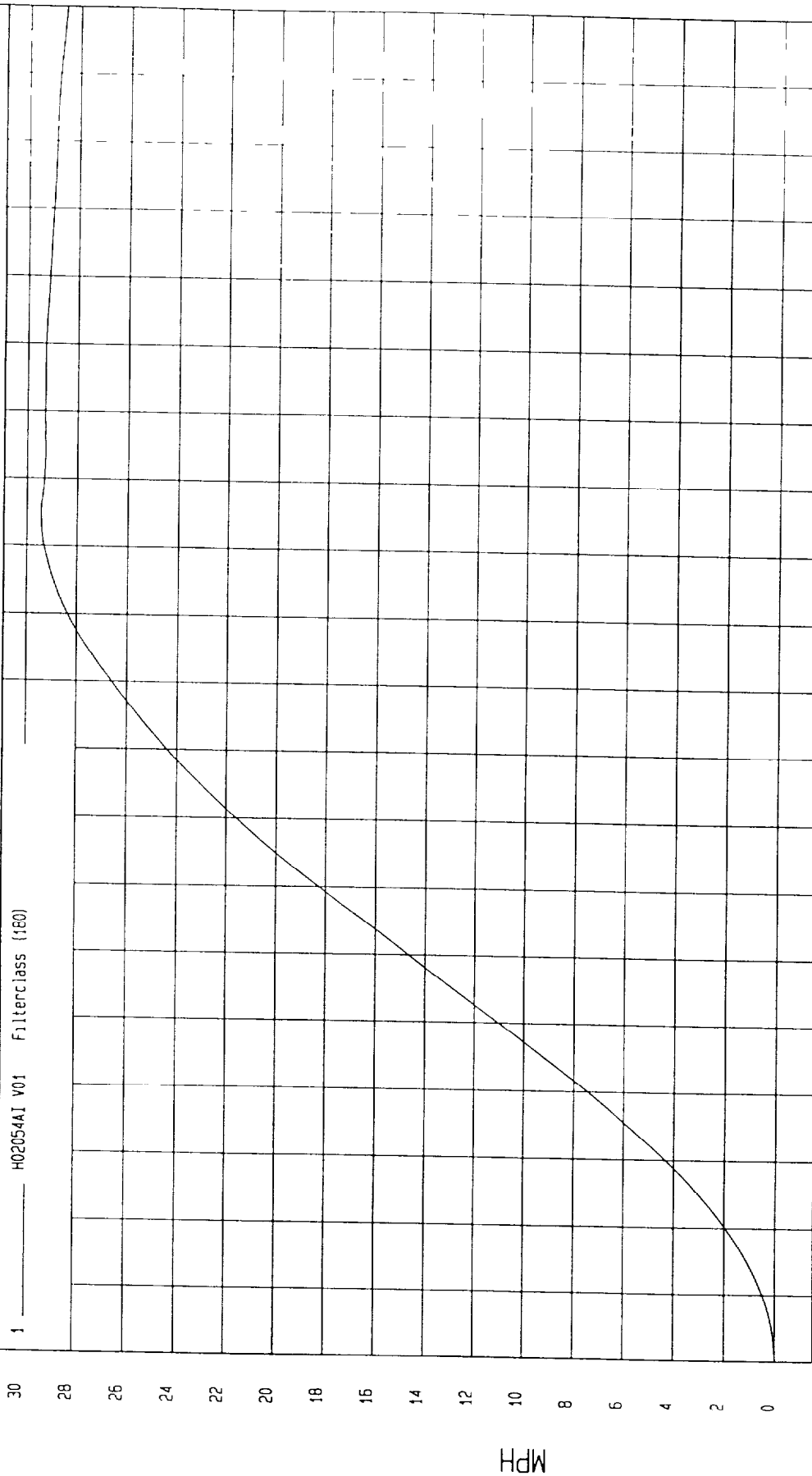
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = 0 MPH at 0 msec

Maximum = 29.44 MPH at 125 msec

SLED X VELOCITY

1 _____ H02054A1 V01 Filterclass (180)



TIME Seconds

MGA Research
03-13-2002 14:09

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

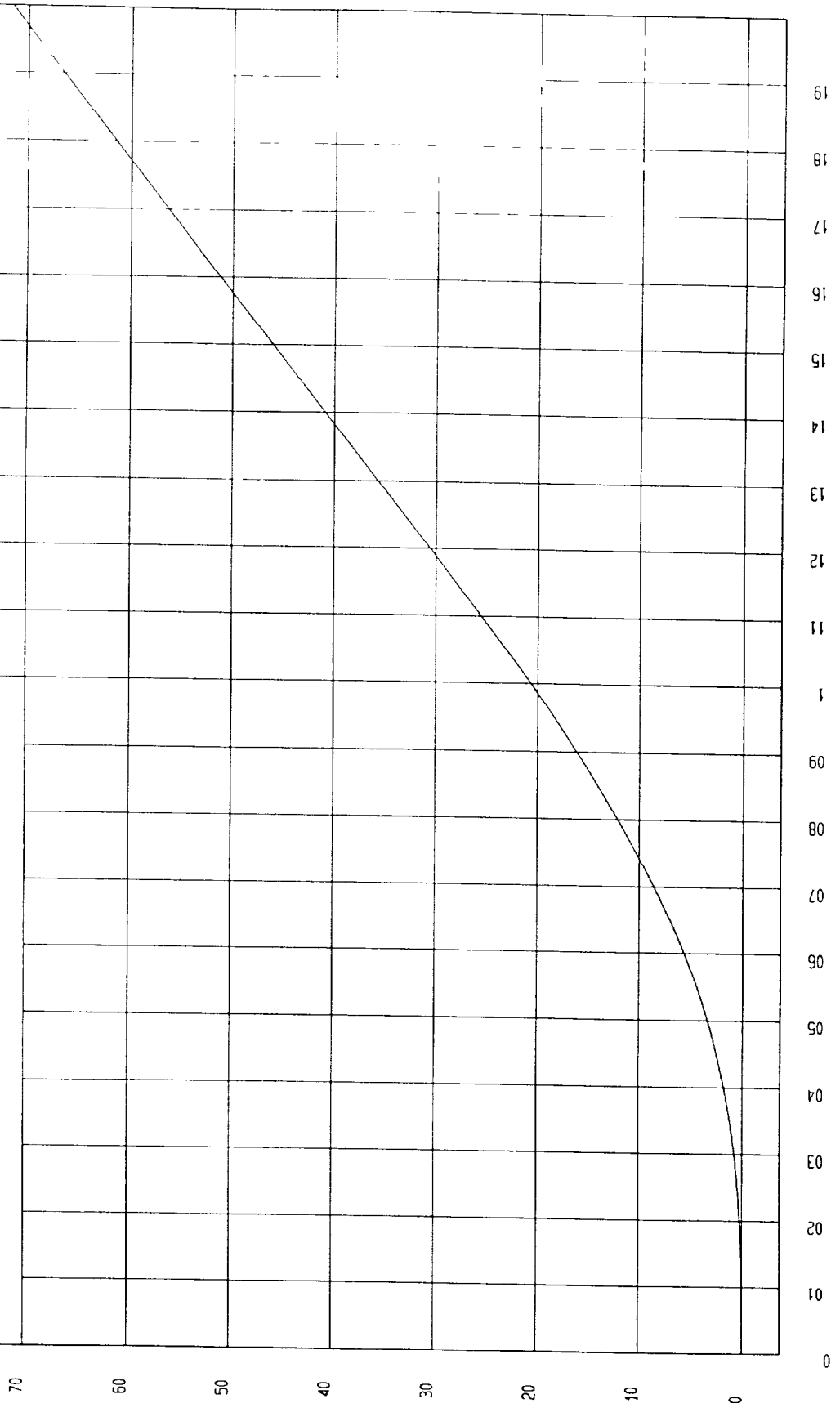
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = 0 IN at 0 msec

Maximum = 71.49 IN at 200 msec

SLED X DISPLACEMENT

1 _____ H02054AI 001 Filterclass (180)



TIME Seconds

TEST FMVSS 208 SLED (H02054)

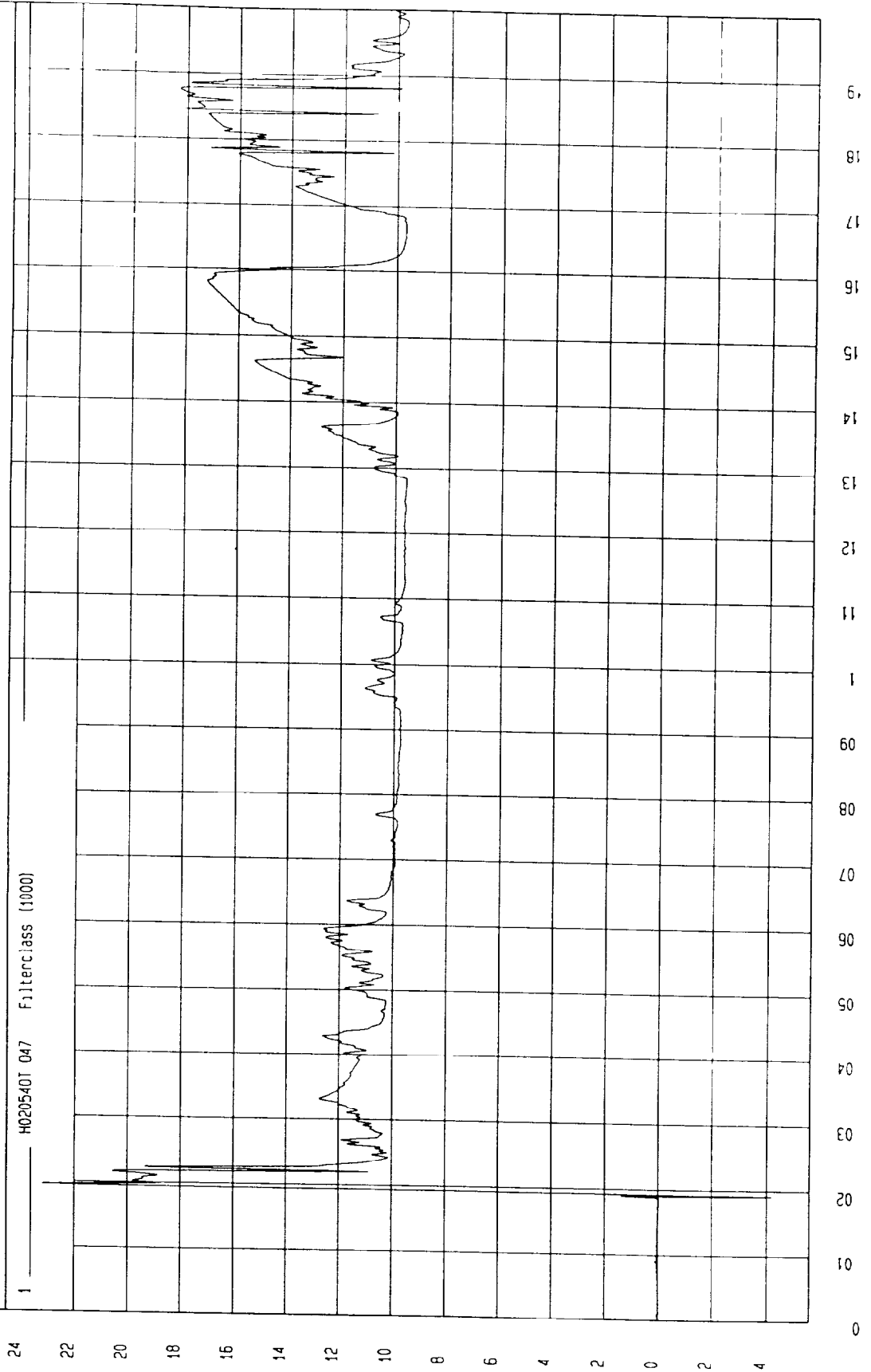
TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -4.2 V at 19 msec

Maximum = 23.2 V at 20 msec

DRIVER AIRBAG VOLTAGE



TIME (SECONDS)

MSA Rep. March
03-13-2002 14:13

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -5.21E-02 V at 1 msec

Maximum = 20.65 V at 188 msec

PASSENGER AIRBAG VOLTAGE

1 H020540T 046 Filterclass (1000)

20

18

16

14

12

10

8

6

4

2

0

V

0

01

02

03

04

05

06

07

08

09

1

11

12

13

14

15

16

17

18

19

TIME (SECONDS)

MGA Research
03-13-2002 14:13

TEST FMVSS 208 SLED (H02054)

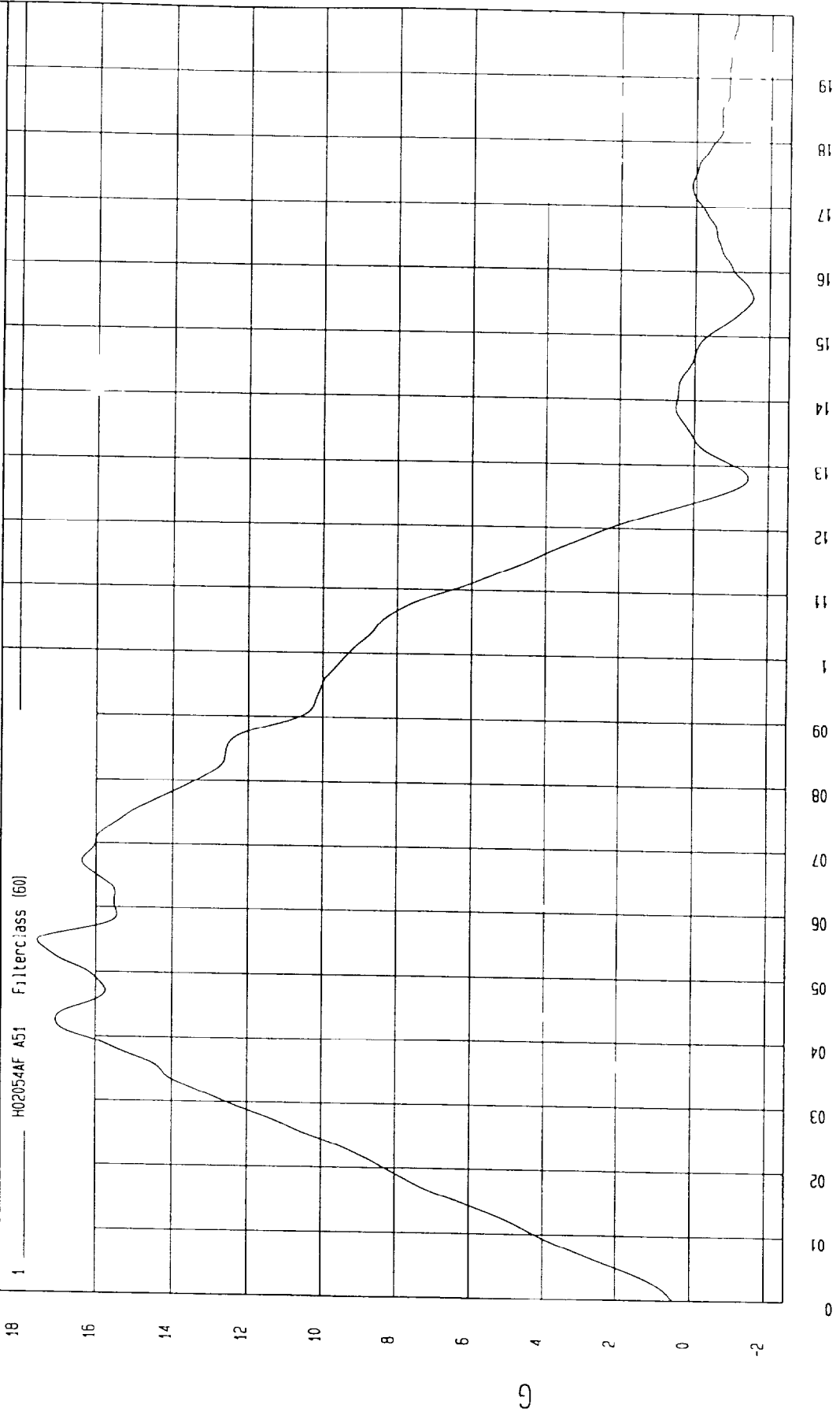
TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -1.56 G at 156 msec

Maximum = 17.53 G at 55 msec

LEFT REAR SEAT CROSSMEMBER X ACCELERATION



TIME (SECONDS)

MGA Research
03/13/2002 12:15

TEST FMVSS 208 SLED (H02054)

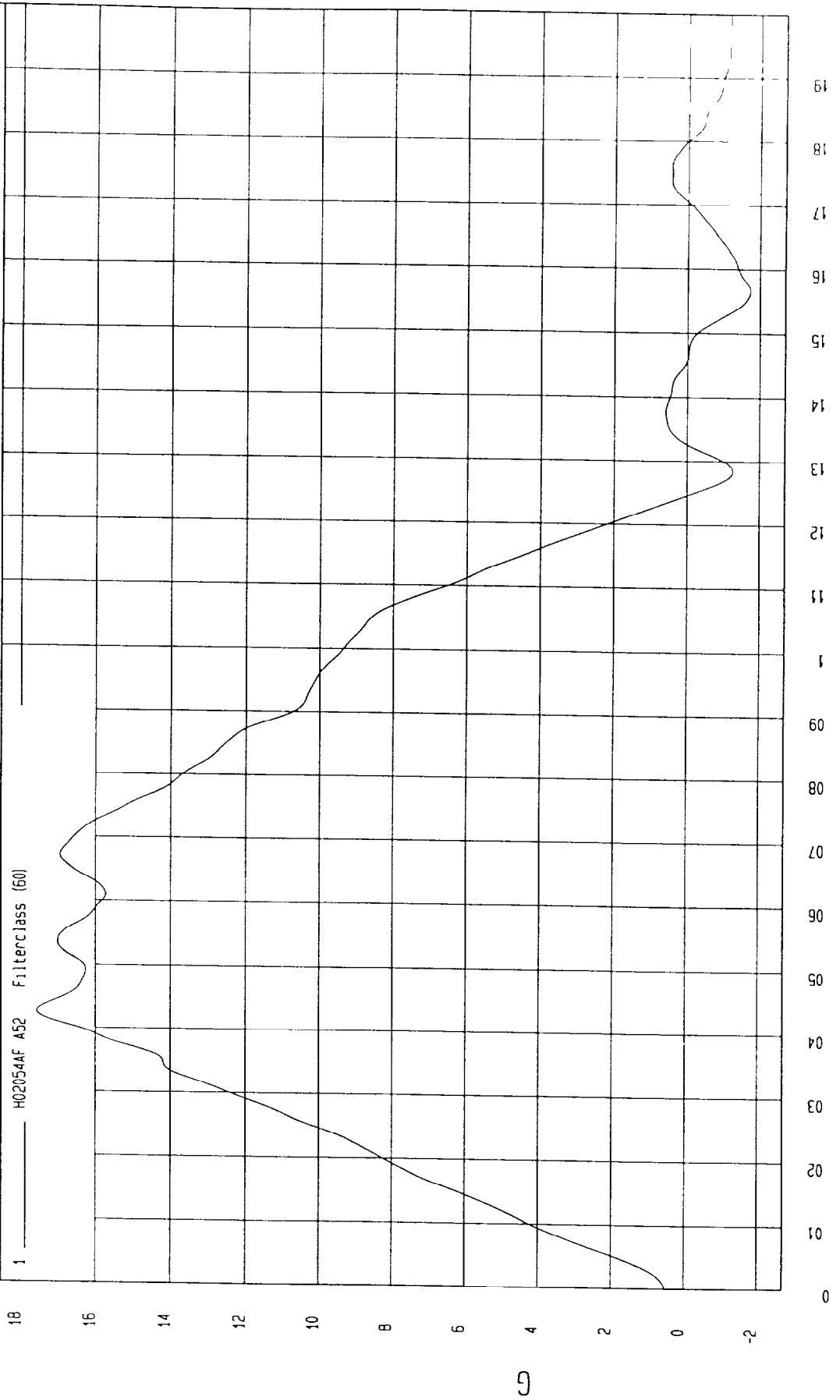
TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum -1.73 G at 157 msec

Maximum = 17.57 G at 43 msec

RIGHT REAR SEAT CROSSMEMBER X ACCELERATION



TIME (SECONDS)

WGA Research
03-13-2002 12:15

TEST FMVSS 208 SLED (H02054)

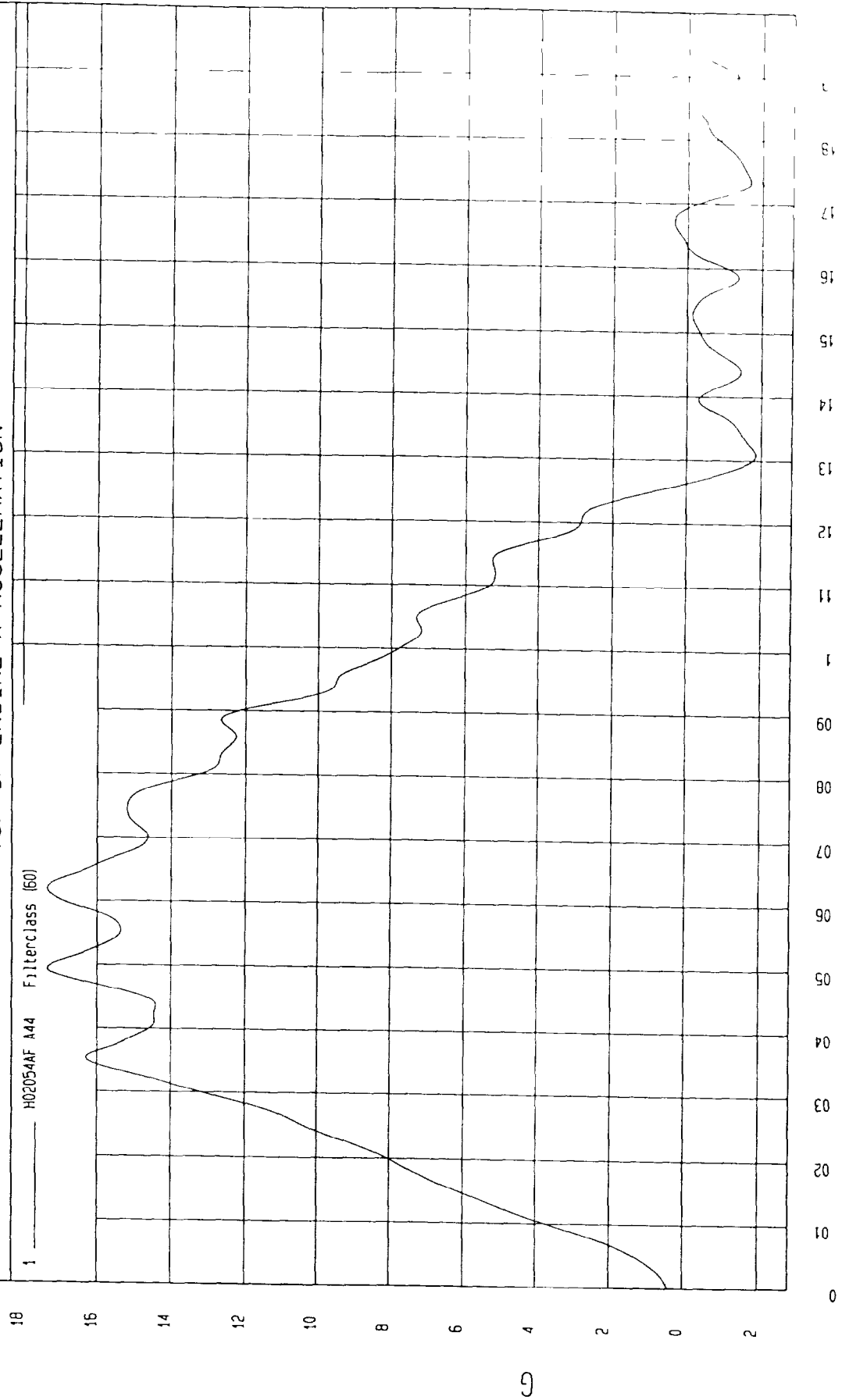
TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum 1.85 G at 131 msec

Maximum = 17.35 G at 62 msec

TOP OF ENGINE X ACCELERATION



TIME (SECONDS)

W054 F1 P1 CH
03 13 2002 12 16

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -1.86 G at 193 msec

Maximum = 17.27 G at 65 msec

REAR AXLE X ACCELERATION

1 — H02054AF A45 Filterclass (60)

18

16

14

12

10

8

6

4

2

0

2

G

0

01

02

03

04

05

06

07

08

09

10

11

12

13

14

15

16

17

18

TIME (SECONDS)

19

TEST FMVSS 208 SLED (H02054)

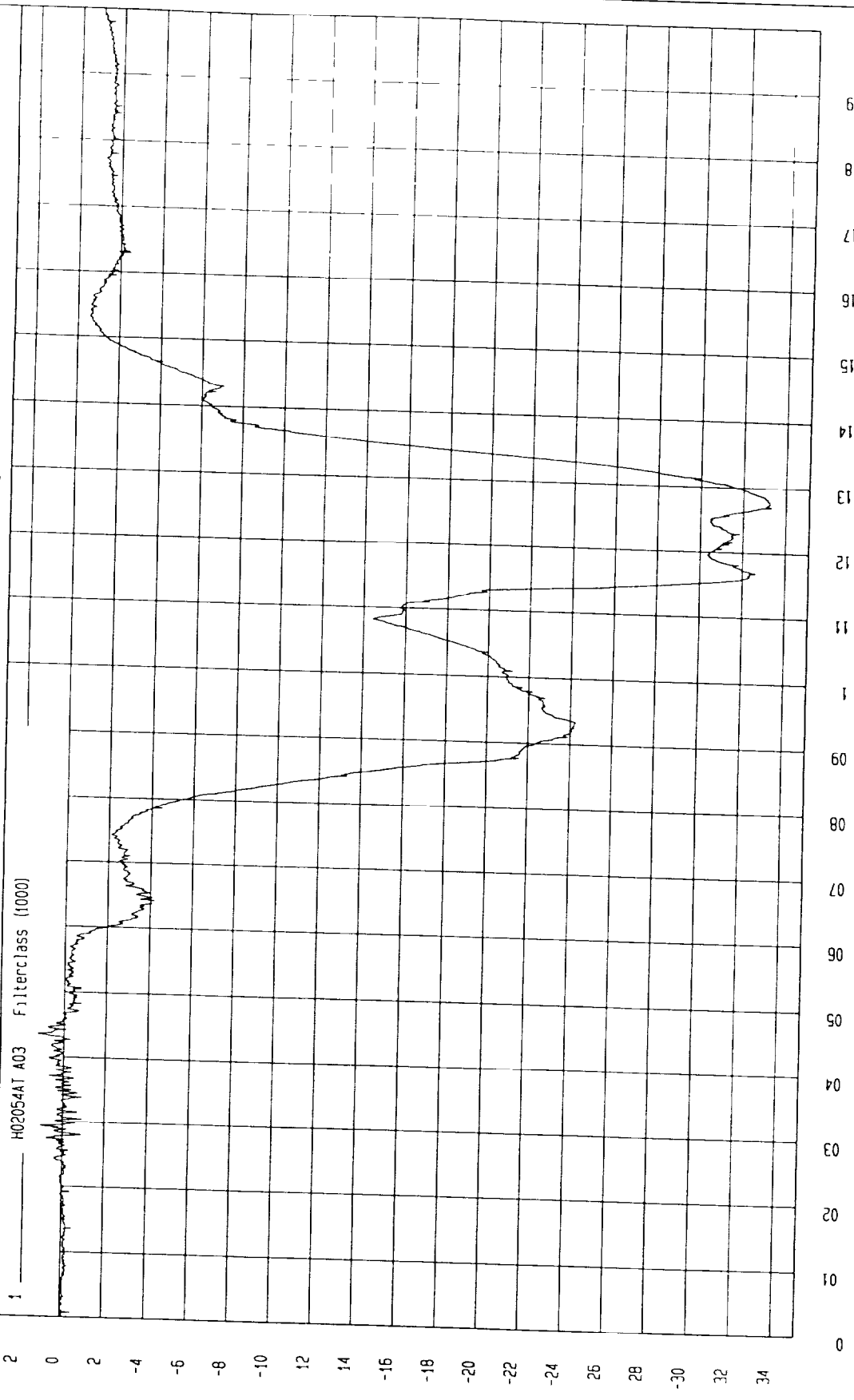
TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -33.34 G at 127 msec

Maximum = 1.28 G at 44 msec

DRIVER HEAD X ACCELERATION



TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

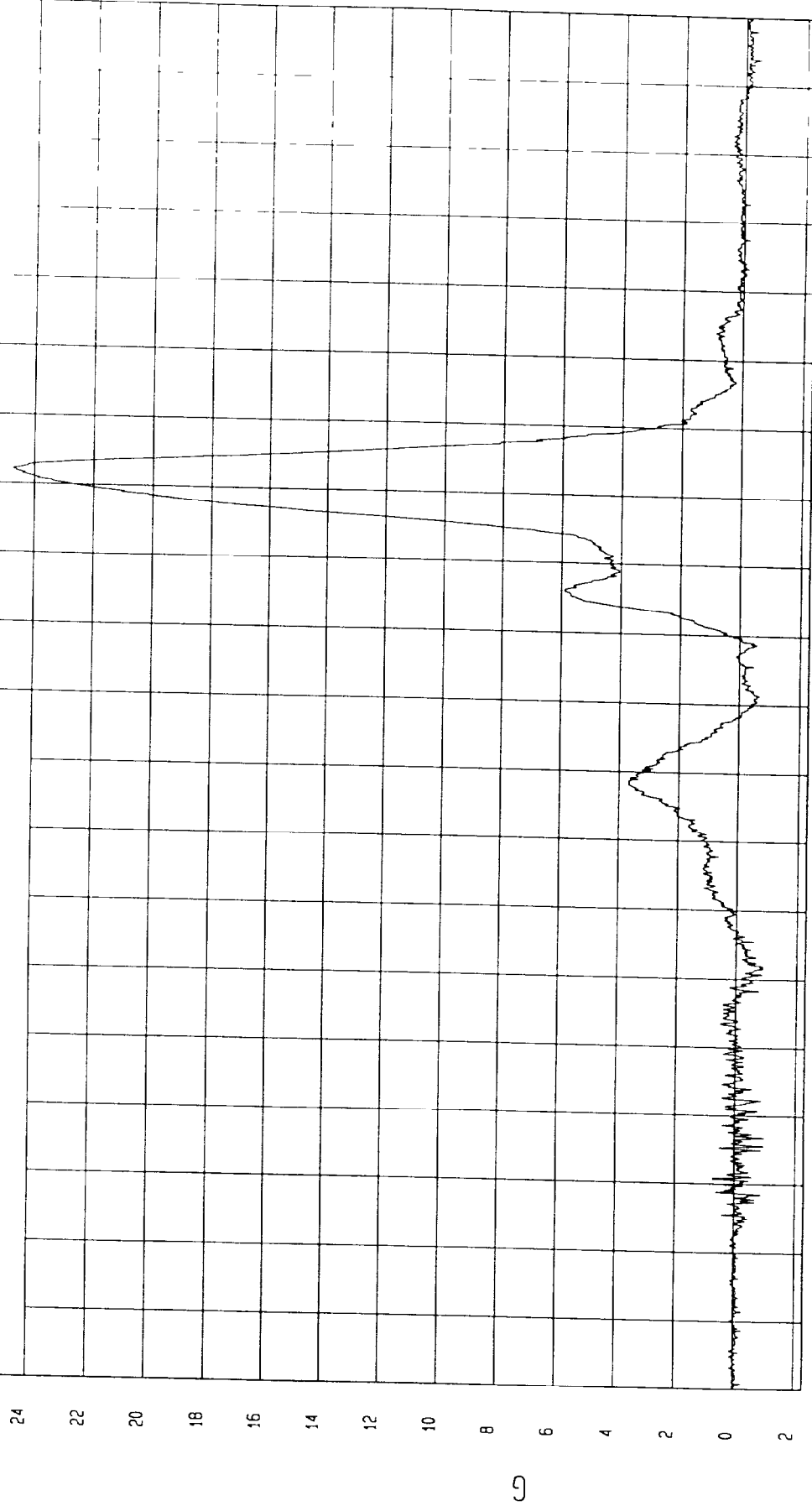
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum - - 99 G at 36 msec

Maximum = 24.71 G at 132 msec

DRIVER HEAD Y ACCELERATION

1 _____ H02054AT A05 Filterclass (1000)



TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum - -4.08 G at 71 msec

Maximum - 22.81 G at 91 msec

DRIVER HEAD Z ACCELERATION

1 ——— H02054AT A06 Filterclass (1000)

24

22

20

18

16

14

12

10

8

6

4

2

0

2

4

G

0

01

02

03

04

05

06

07

08

09

10

11

12

13

14

15

16

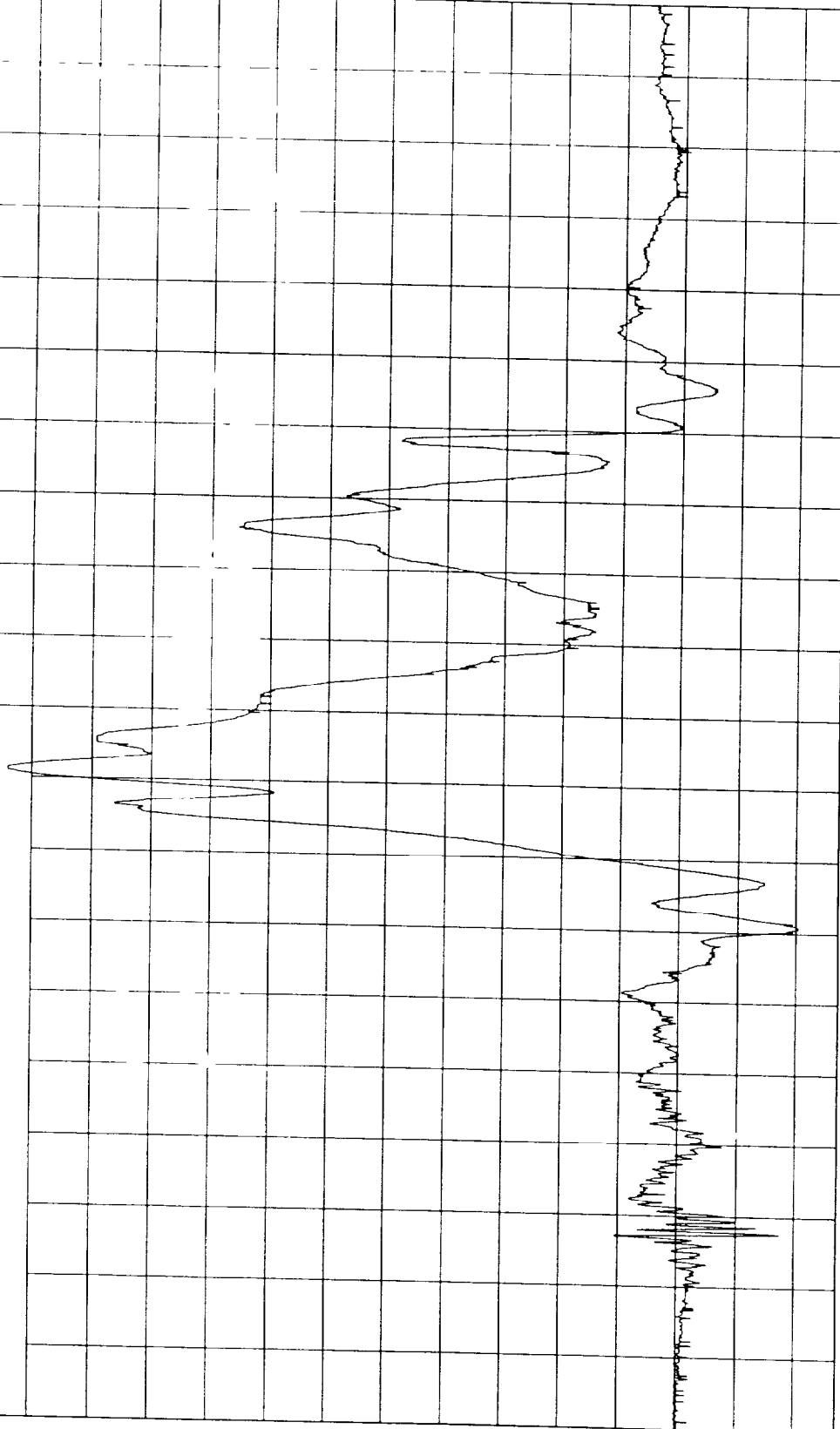
17

18

19

TIME (SECONDS)

MGA Research
03/13/2002 12:14



TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

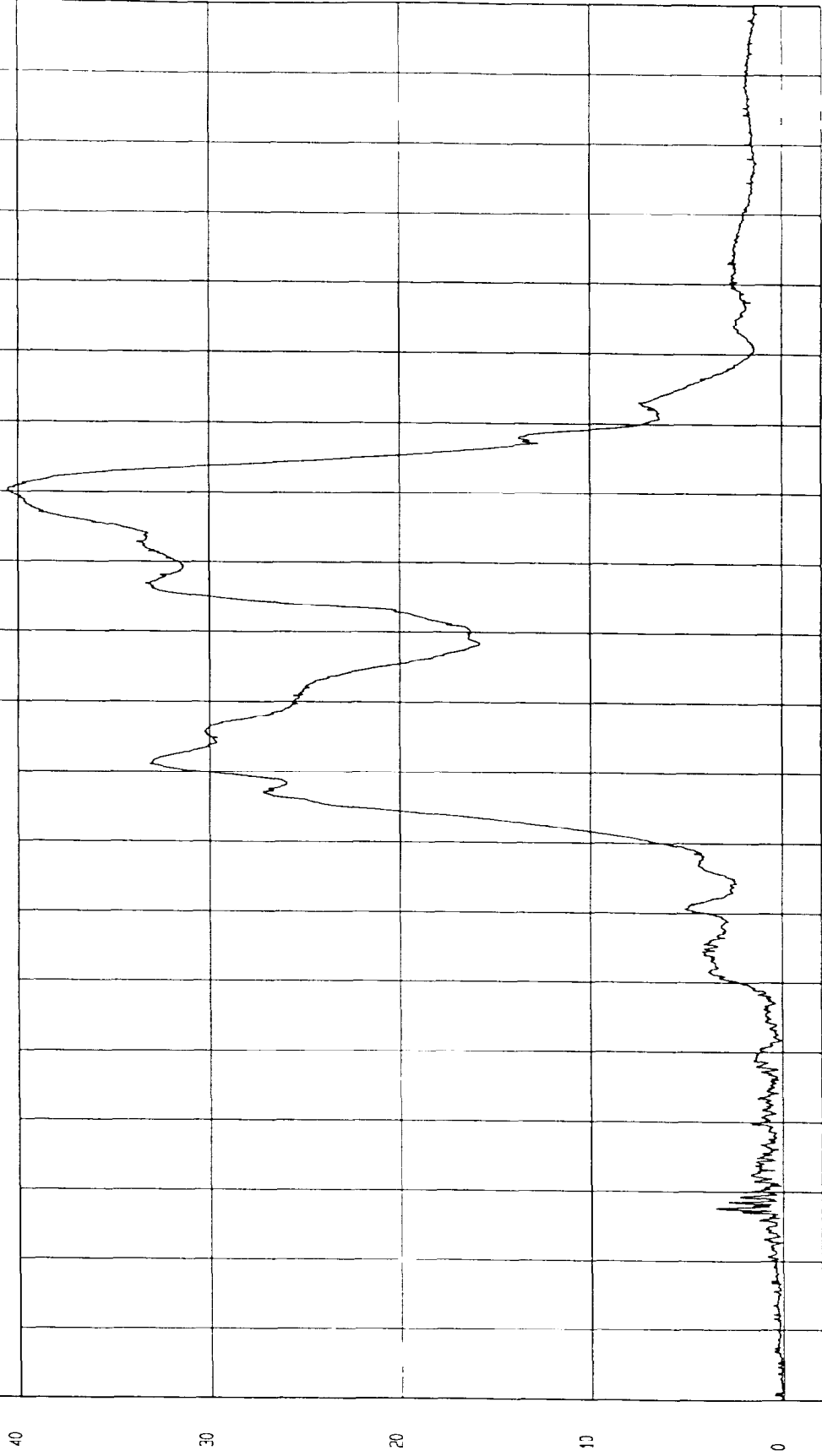
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = 5.21E-02 G at 0 msec

Maximum = 40.59 G at 130 msec

DRIVER HEAD RESULTANT ACCELERATION

1 H02054AV A03 FilterClass (1000)



TIME (SECONDS)

MCA Research
03 13 2002 12 14

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

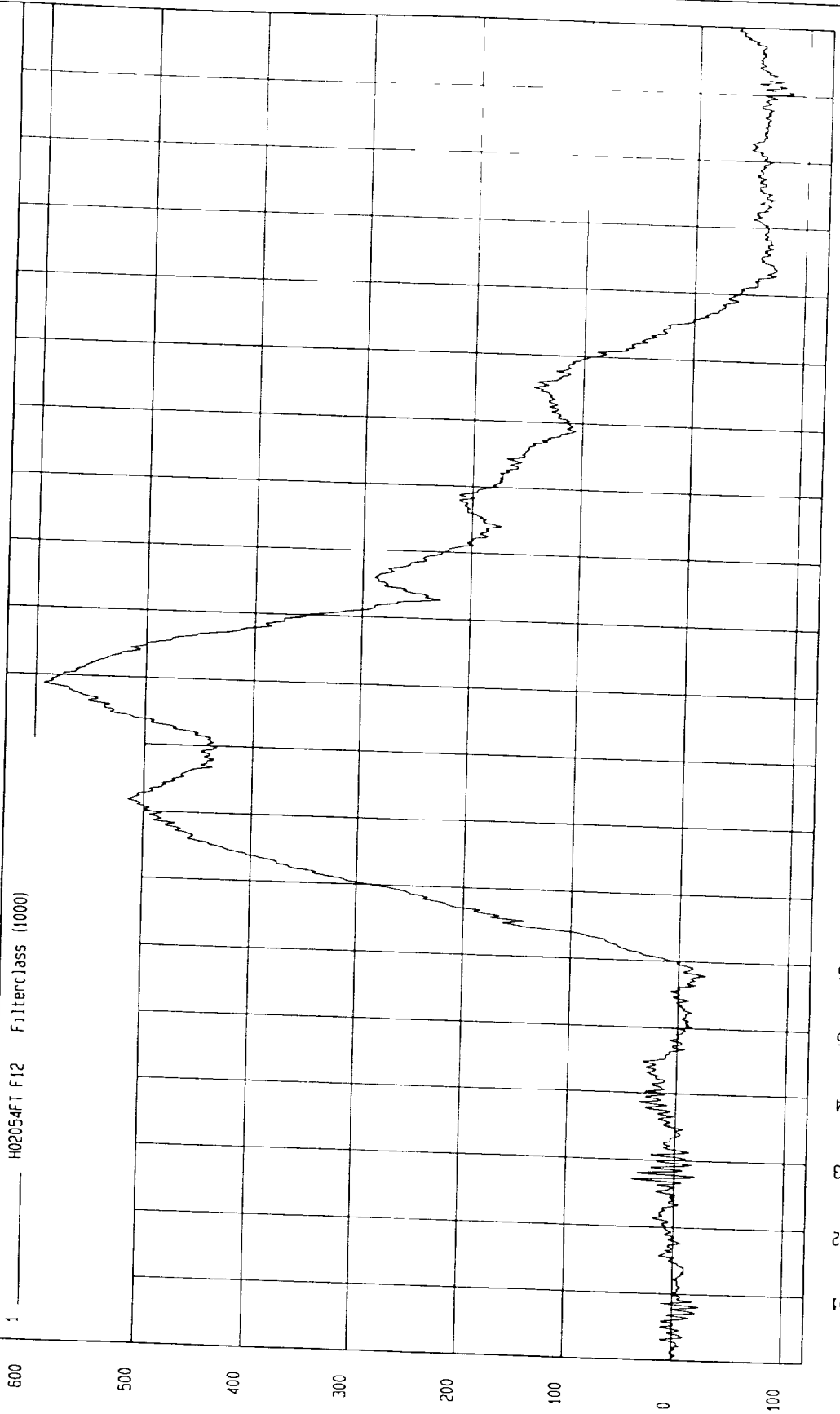
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -85 49 N at 190 msec

Maximum = 593 09 N at 99 msec

DRIVER NECK FORCE X

1 ——— H02054FT F12 Filterclass (1000)



MGA Research
03-13-2002 12:14

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

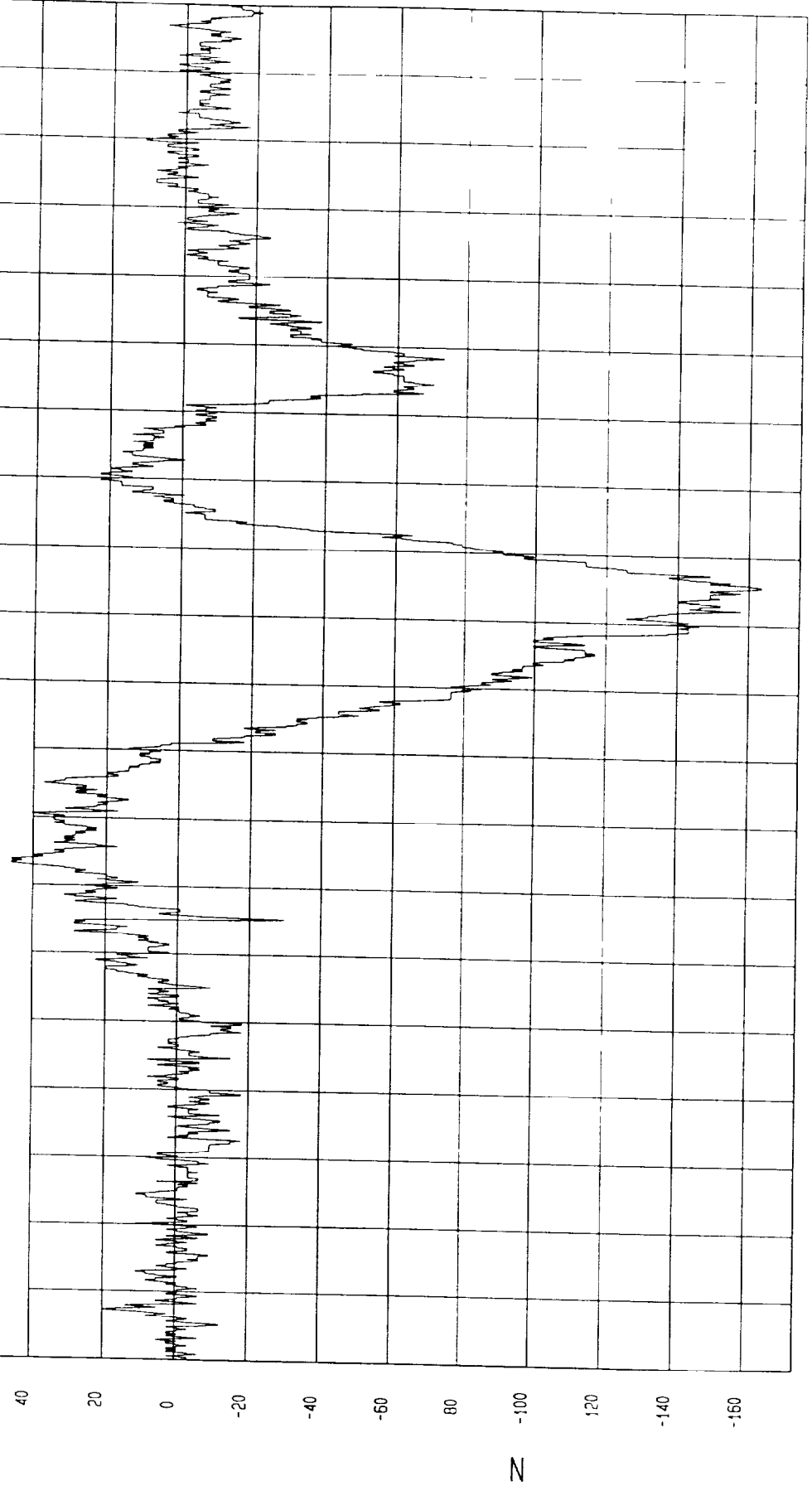
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum 153.5 N at 116 msec

Maximum = 45.94 N at 73 msec

DRIVER NECK FORCE Y

1 H02054FT F13 Filterclass (1000)



TIME (SECONDS)

WGA P or CUT
03/13/02 2.14

TEST FMVSS 208 SLED (H02054) TEST DATE 03-13-2002

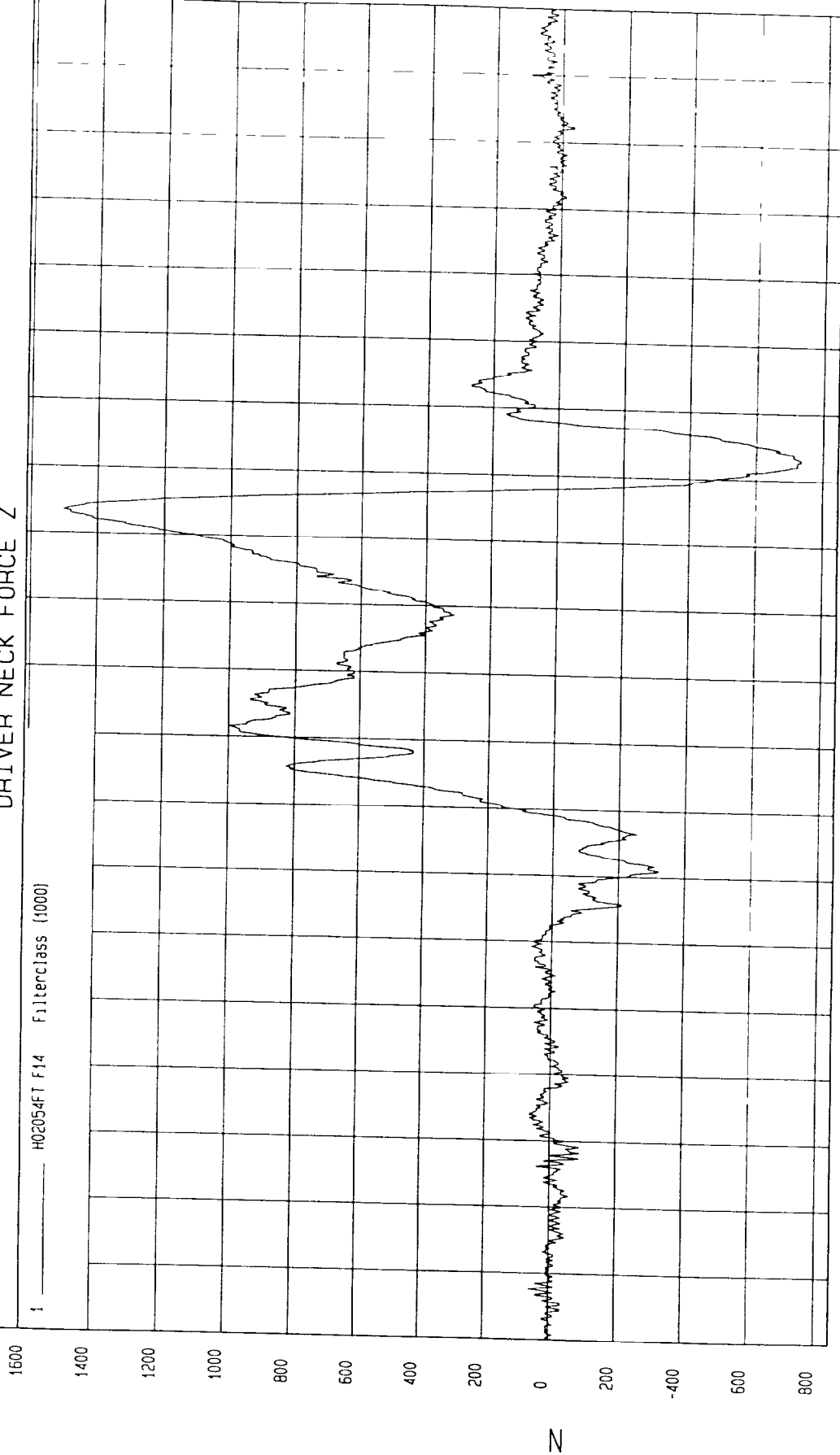
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -733 97 N at 133 msec

Maximum = 1501 46 N at 124 msec

DRIVER NECK FORCE Z

1 H02054T F14 Filterclass (4000)



MGA Research
03-13-2002 12:14

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

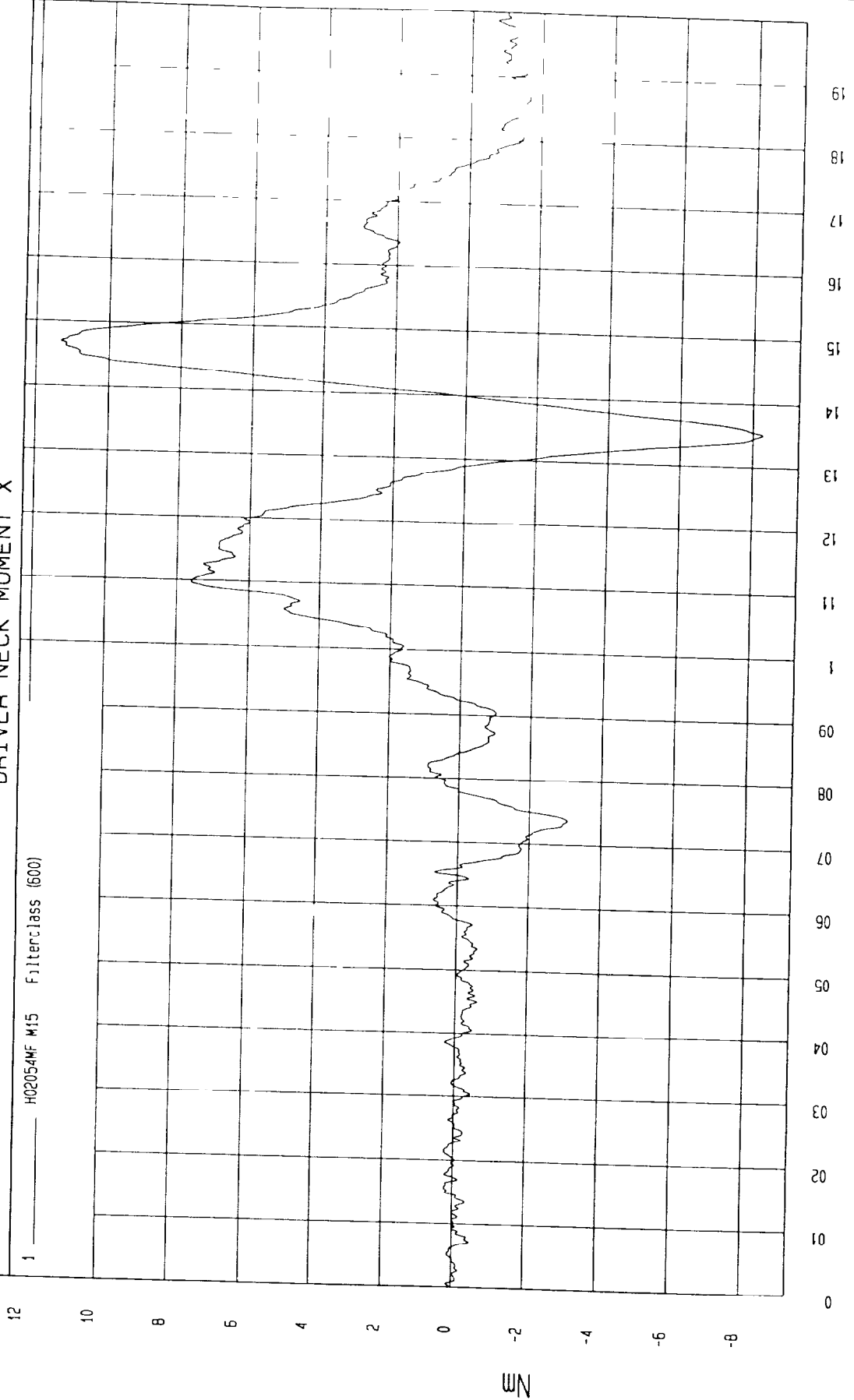
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum - 8.28 Nm at 135 msec

Maximum - 11.31 Nm at 147 msec

DRIVER NECK MOMENT X

1 ——— H02054MF M15 Filterclass (600)



TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

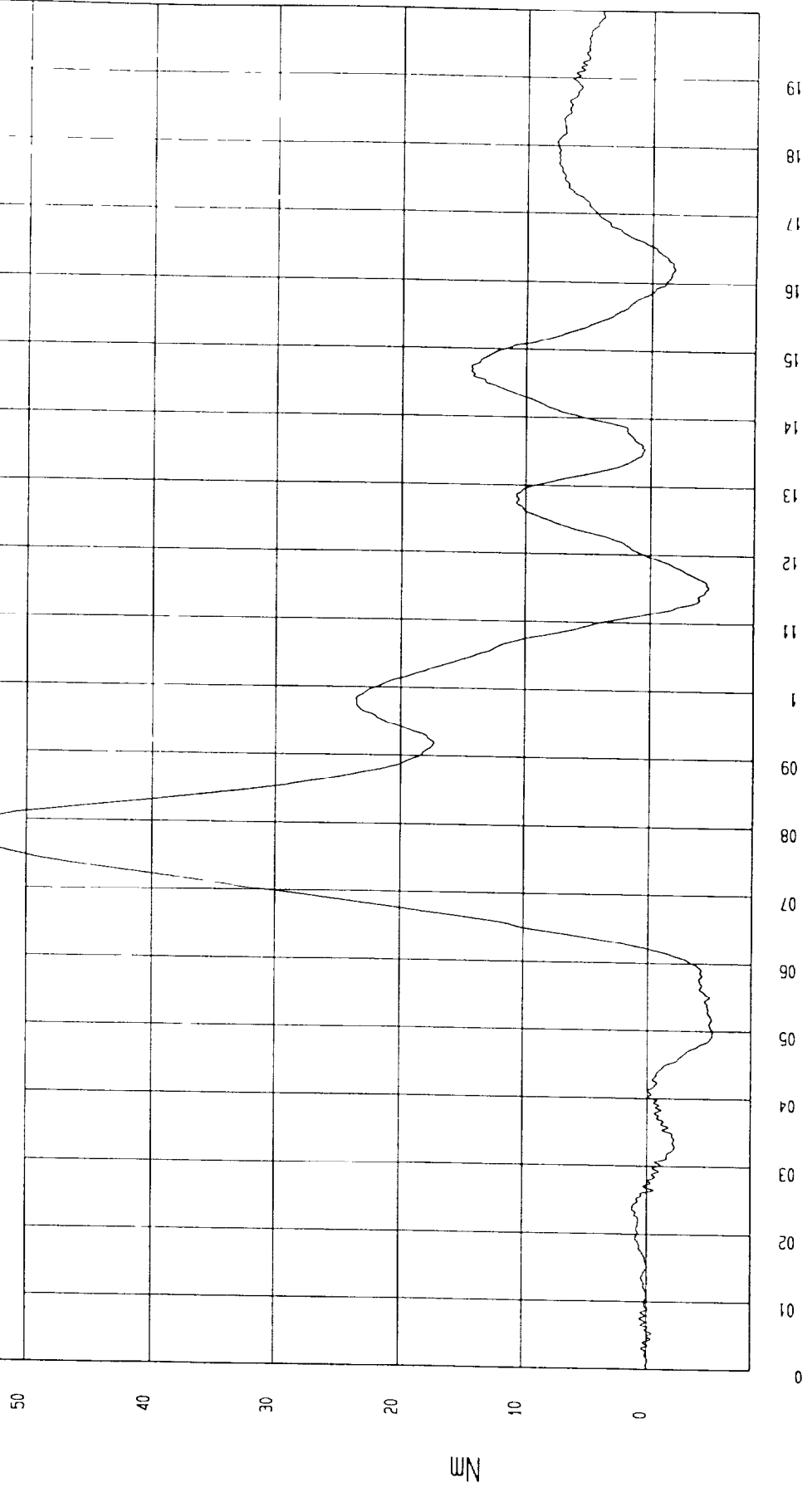
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum - -5.2 Nm at 50 msec

Maximum = 55.27 Nm at 78 msec

DRIVER NECK MOMENT Y

1 ——— HC2054MF M17 Filterclass (600)



TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

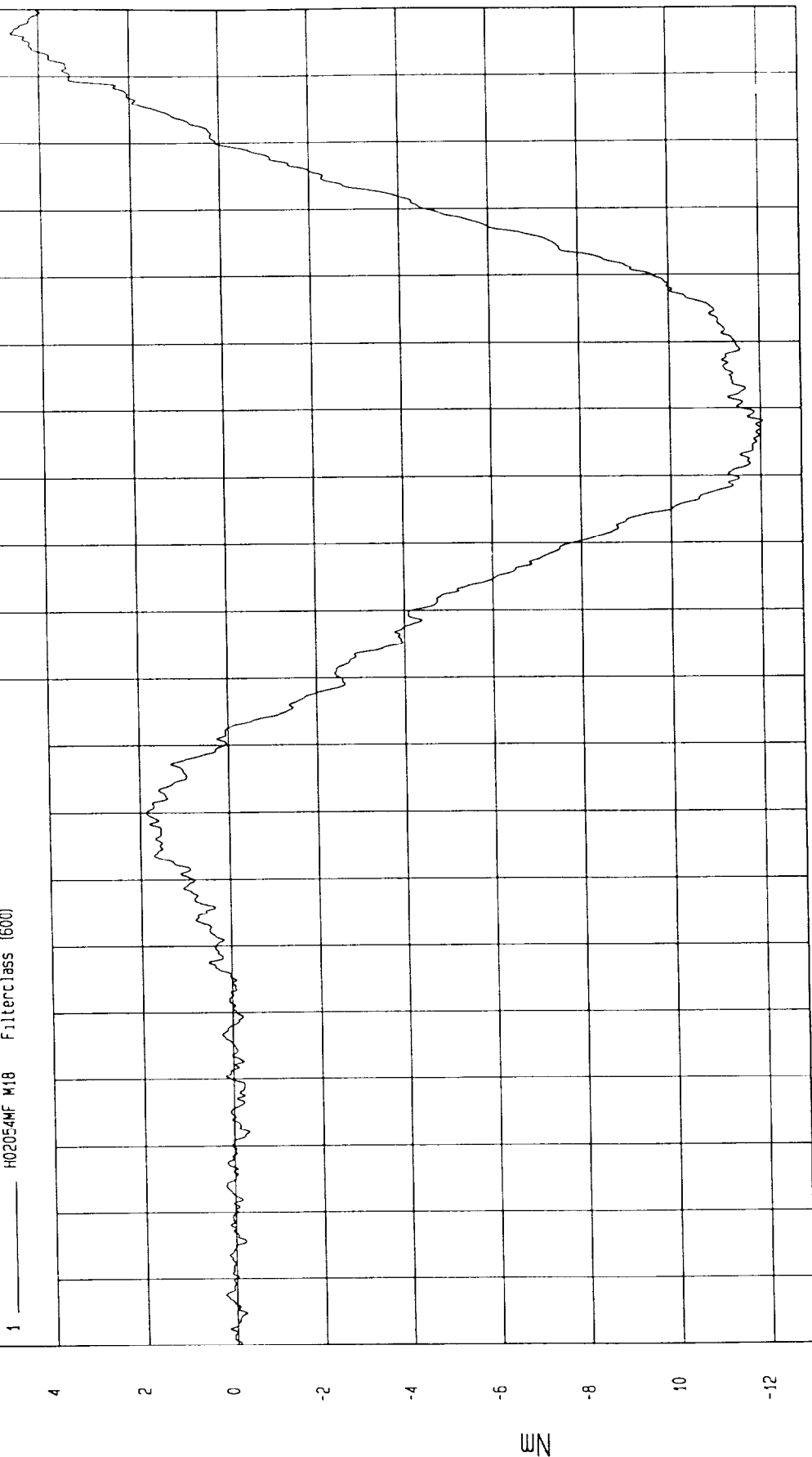
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Maximum = 4.62 Nm at 196 msec

Minimum -12.06 Nm at 138 msec

DRIVER NECK MOMENT Z

1 H02054MF M18 Filterclass (600)



MGA Research
03/13/2002 12:14

TIME (SECONDS)

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

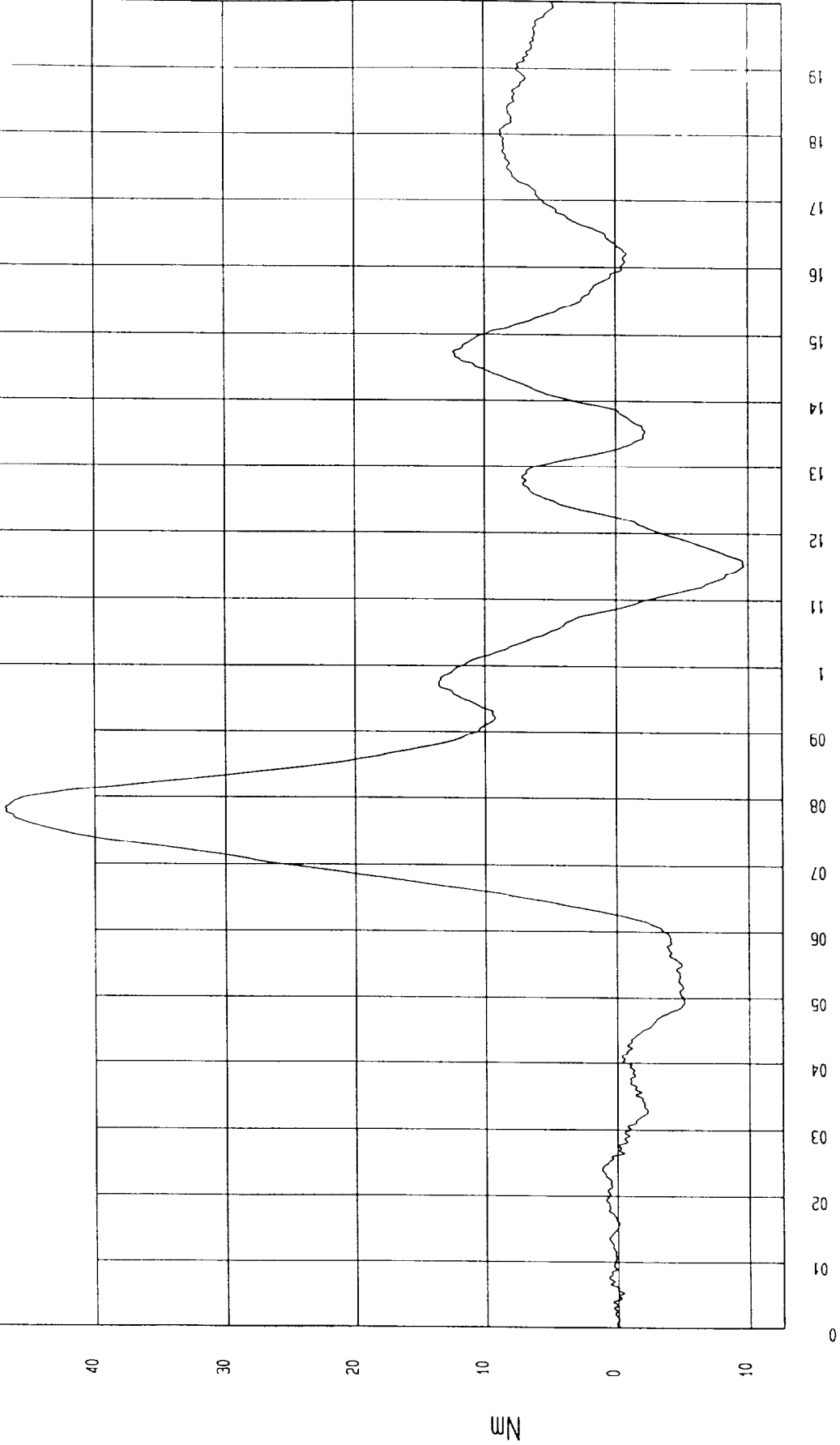
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = 9.68 Nm at 115 msec

Maximum = 46.81 Nm at 78 msec

DRIVER OCCIPITAL CONDYLE MOMENT Y

1 H02054M0 M17 Filterclass (600)



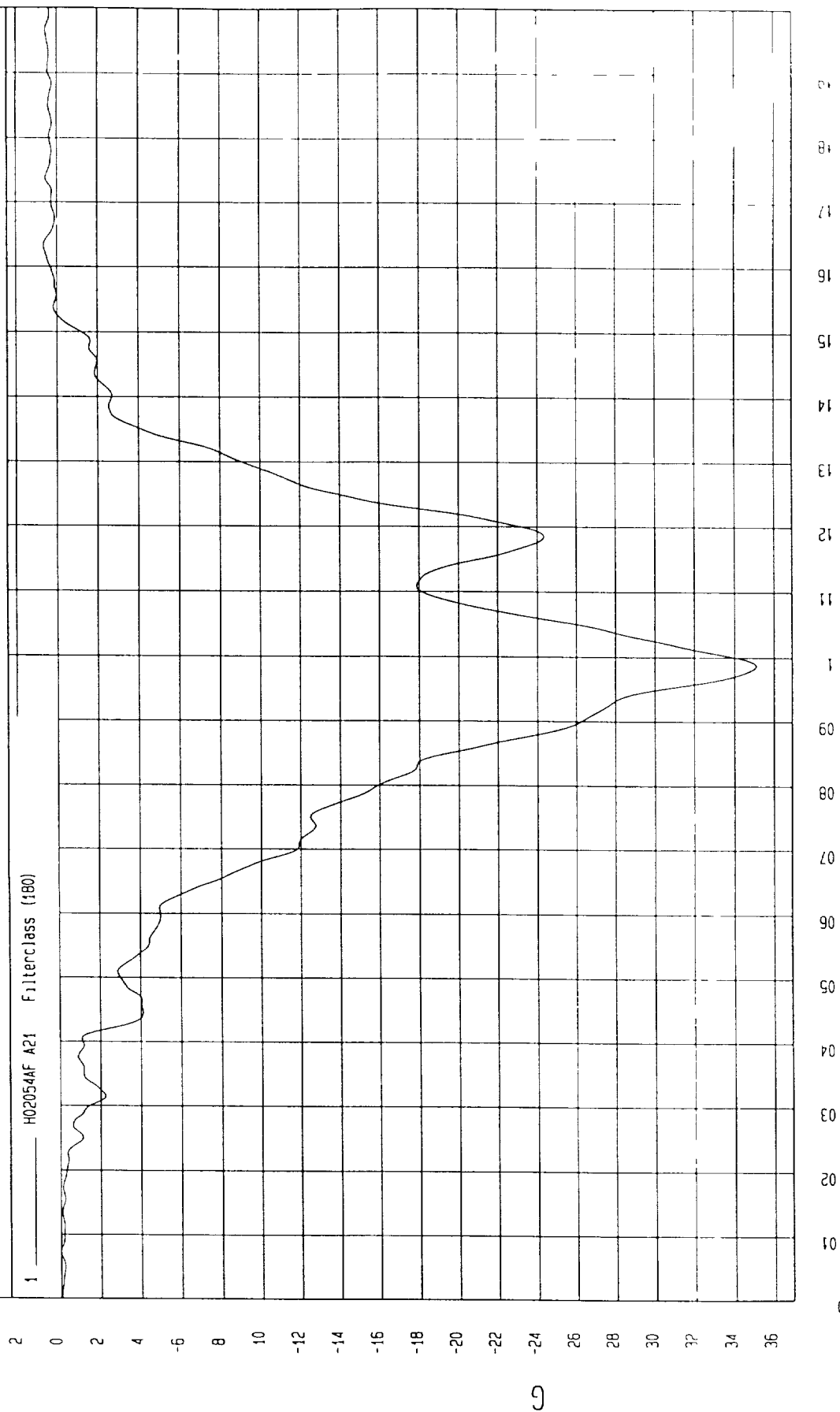
TEST FMVSS 208 SLED (H02054)

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Maximum = 65.6 at 163 msec

Minimum = -35.1 G at 99 msec

DRIVER CHEST X ACCELERATION



TIME (SECONDS)

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

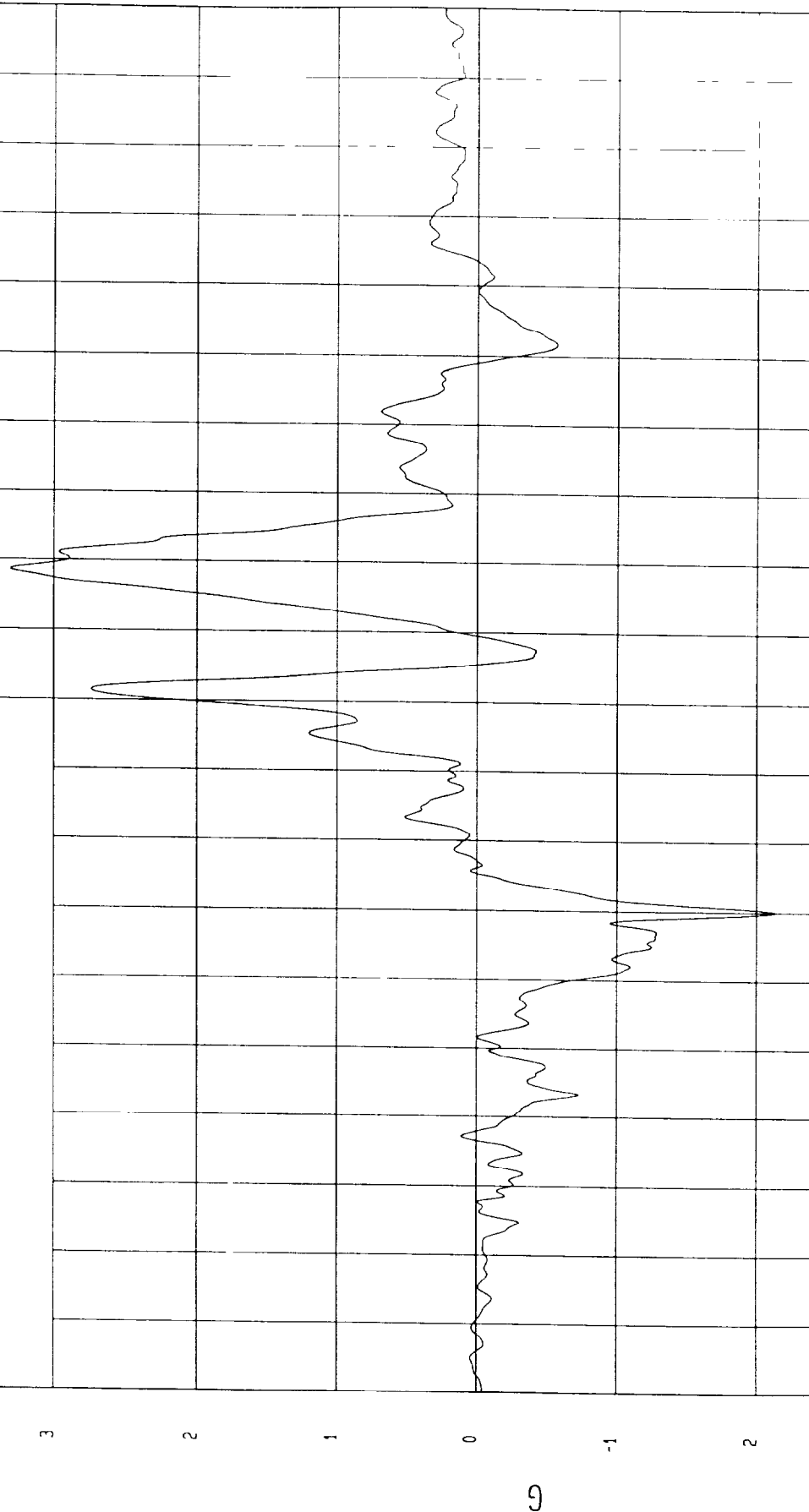
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -2.14 G at 70 msec

Maximum = 3.3 G at 119 msec

DRIVER CHEST Y ACCELERATION

1 — H02054AF A22 Filterclass (180)



TEST FMVSS 208 SLED (H02054)

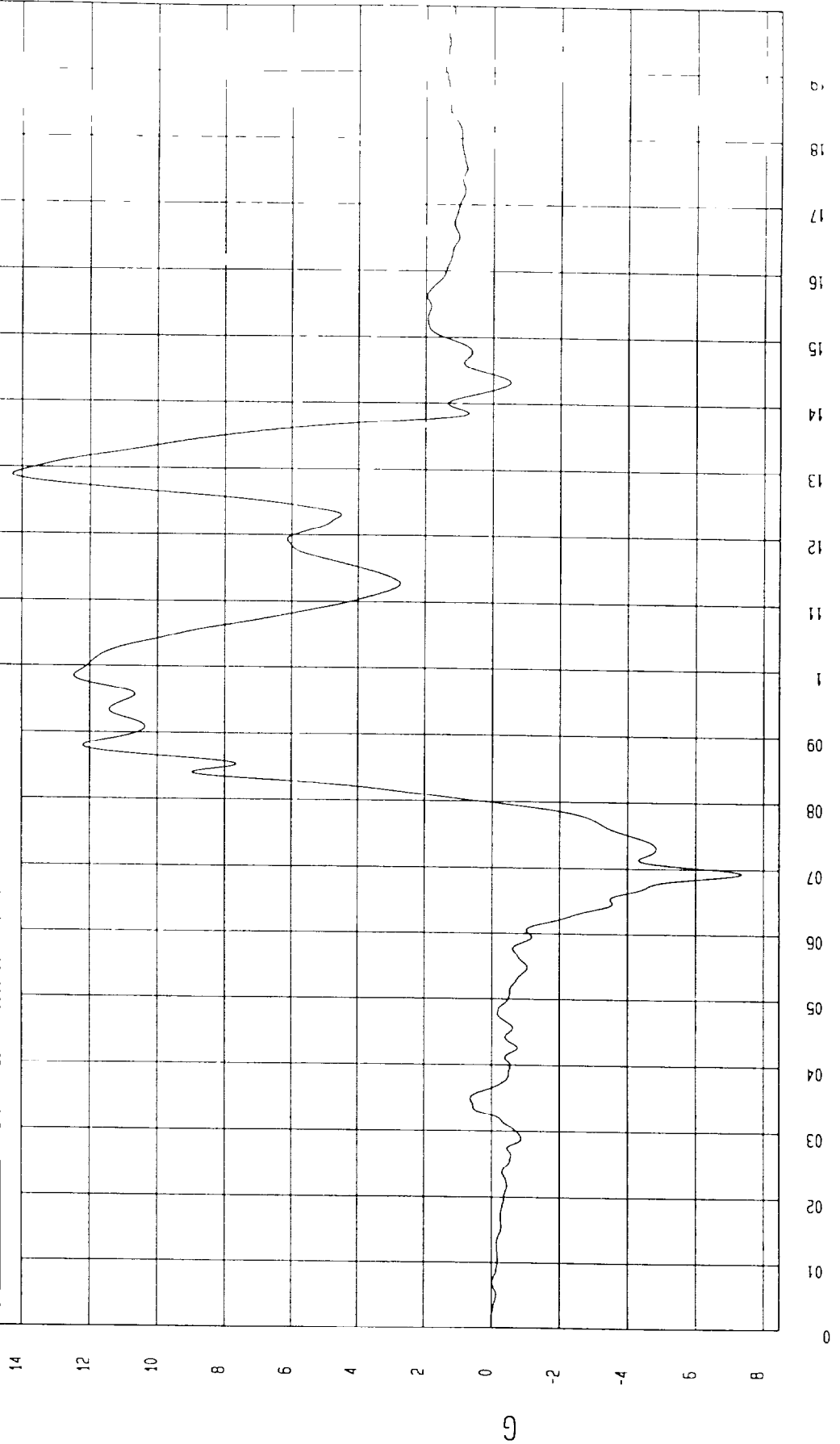
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -7.36 G at 69 msec

Maximum = 14.29 G at 129 msec

DRIVER CHEST Z ACCELERATION

1 H02054AF A23 Filterclass (180)



TIME (SECONDS)

WGA Rep. 11 Ch
03/13/2002

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

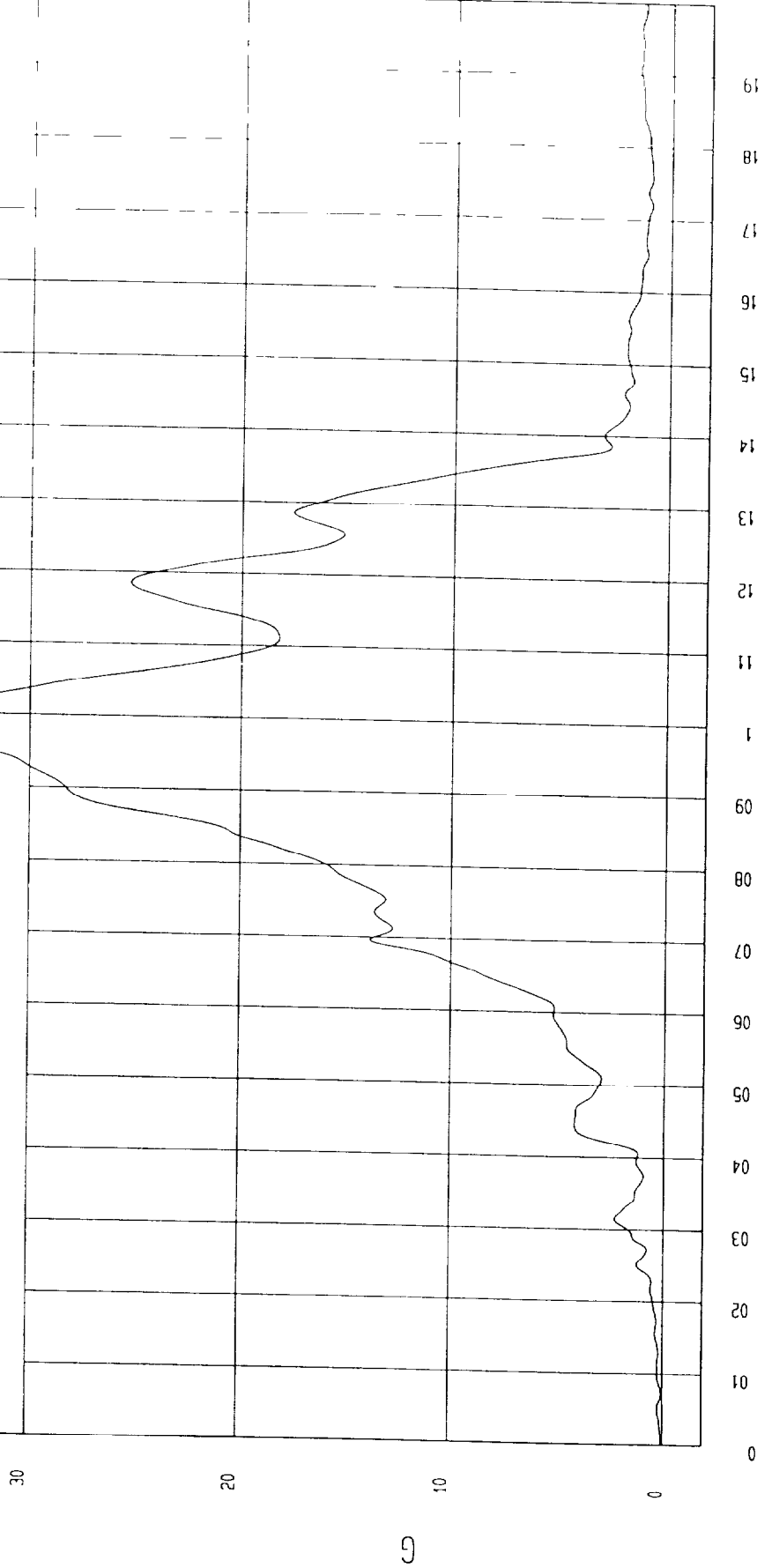
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum 5 1E-02 G at 7 msec

Maximum = 37.26 G at 99 msec

DRIVER CHEST RESULTANT ACCELERATION

1 H02054AV A21 Filterclass (180)



TEST FMVSS 208 SLED (H02054)

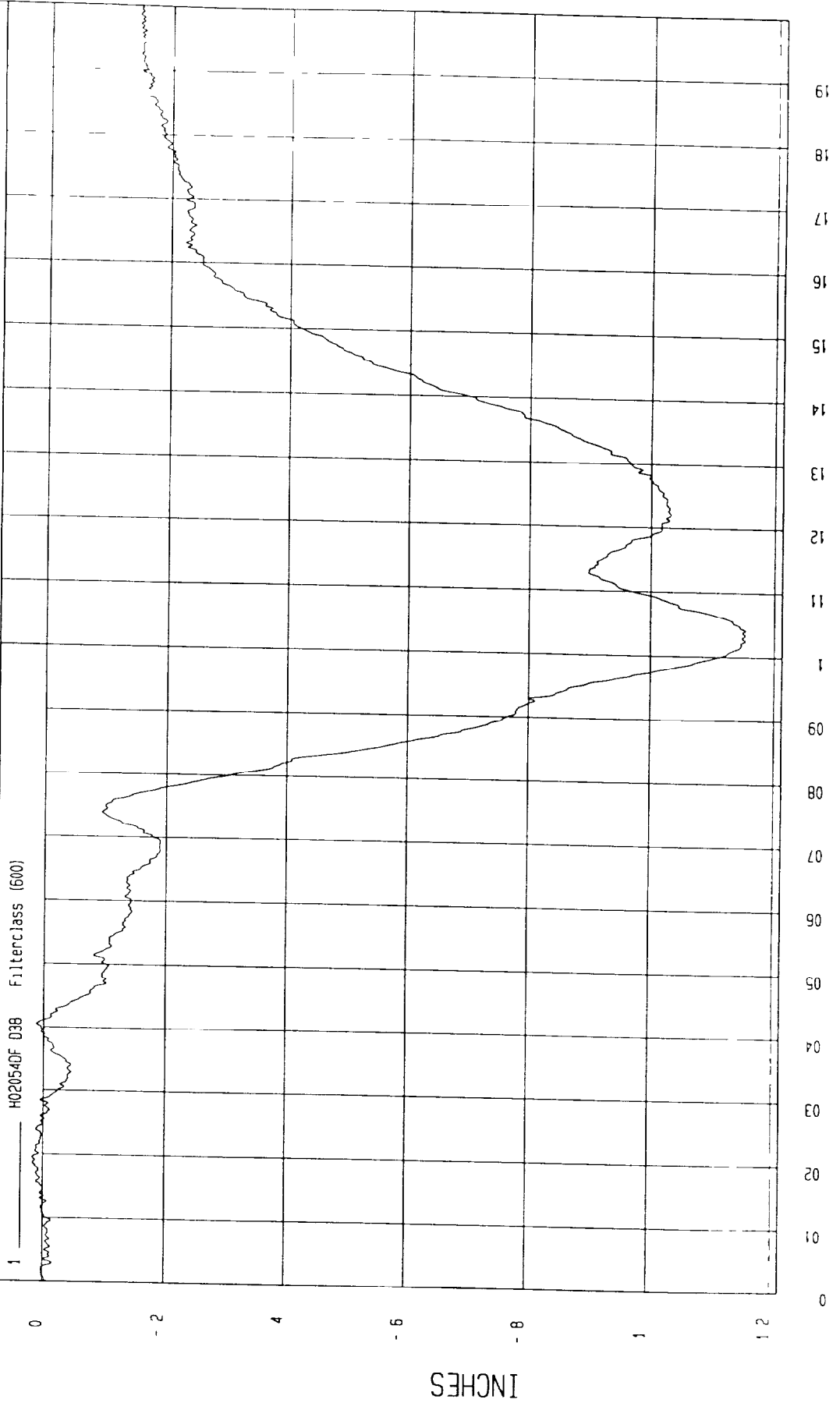
TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = 1.15 INCHES at 104 msec

Maximum = 1.76E 02 INCHES at 20 msec

DRIVER CHEST COMPRESSION



TIME SECONDS

INCHES

MCA Research
03-13-2002 12:15

TIME (SECONDS)

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9

LB

DRIVER LEFT FEMUR FORCE

1 H02054FF F08 Filterclass (500)

Minimum - -1351.99 LB at 78 msec

Maximum - 24.12 LB at 180 msec

TEST FMVSS 208 SLED (H02054)

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

MGA Research
03/13/2002 12:15

TIME (SECONDS)

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9

LB

DRIVER RIGHT FEMUR FORCE

1 H02054FF F09 Filterclass (600)

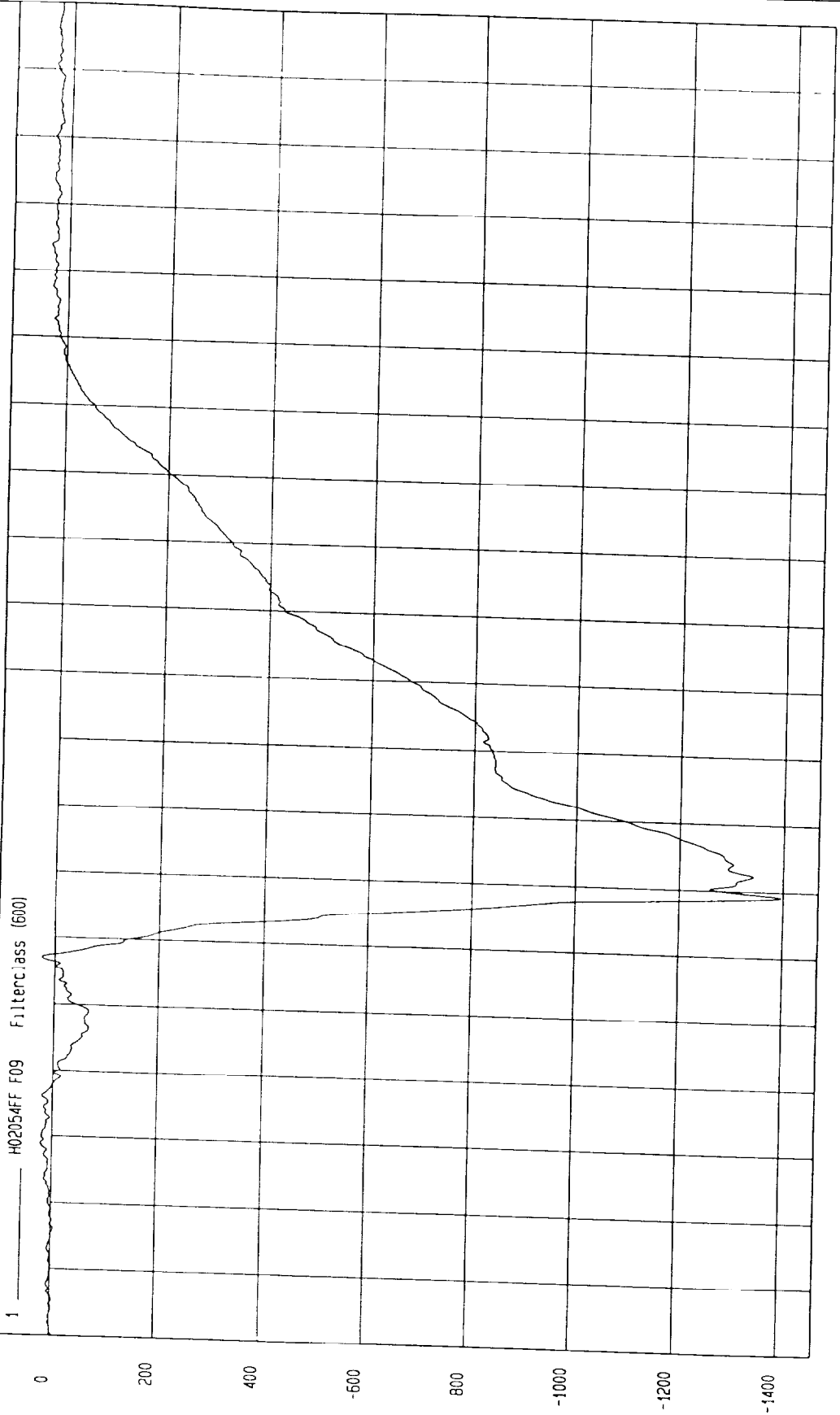
Maximum = 34.07 LB at 164 msec

Minimum = -1395.96 LB at 69 msec

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)



TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

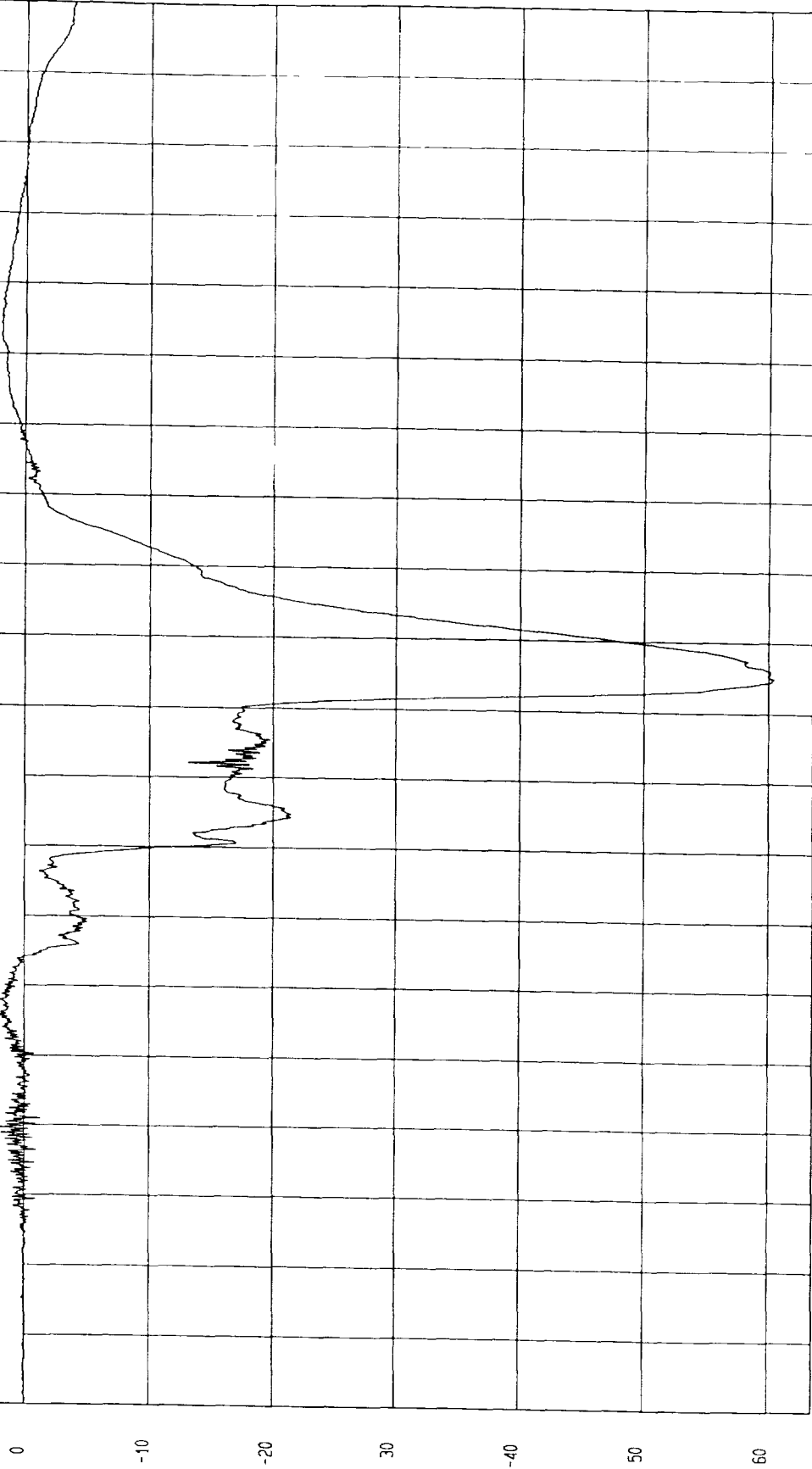
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -60 G at 105 msec

Maximum = 2 G at 40 msec

PASSENGER HEAD X ACCELERATION

1 H02054AT A2: Filterclass (1000)



MGA Research
03-13-2002 14

TIME (SECONDS)

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

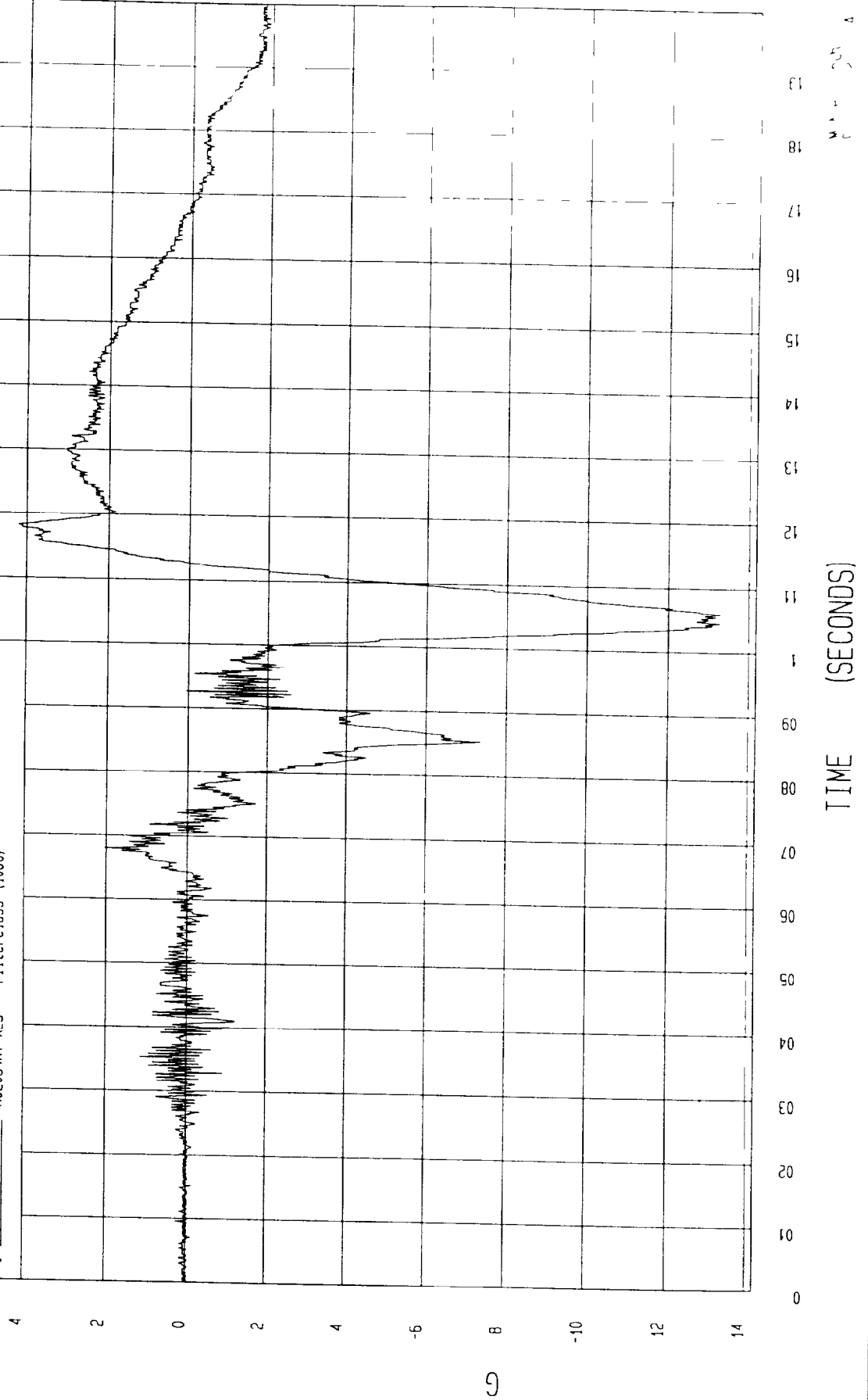
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -13.3 G at 104 msec

Maximum = 4.21 G at 118 msec

PASSENGER HEAD Y ACCELERATION

1 H02054AT A25 Filterclass (1000)



TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

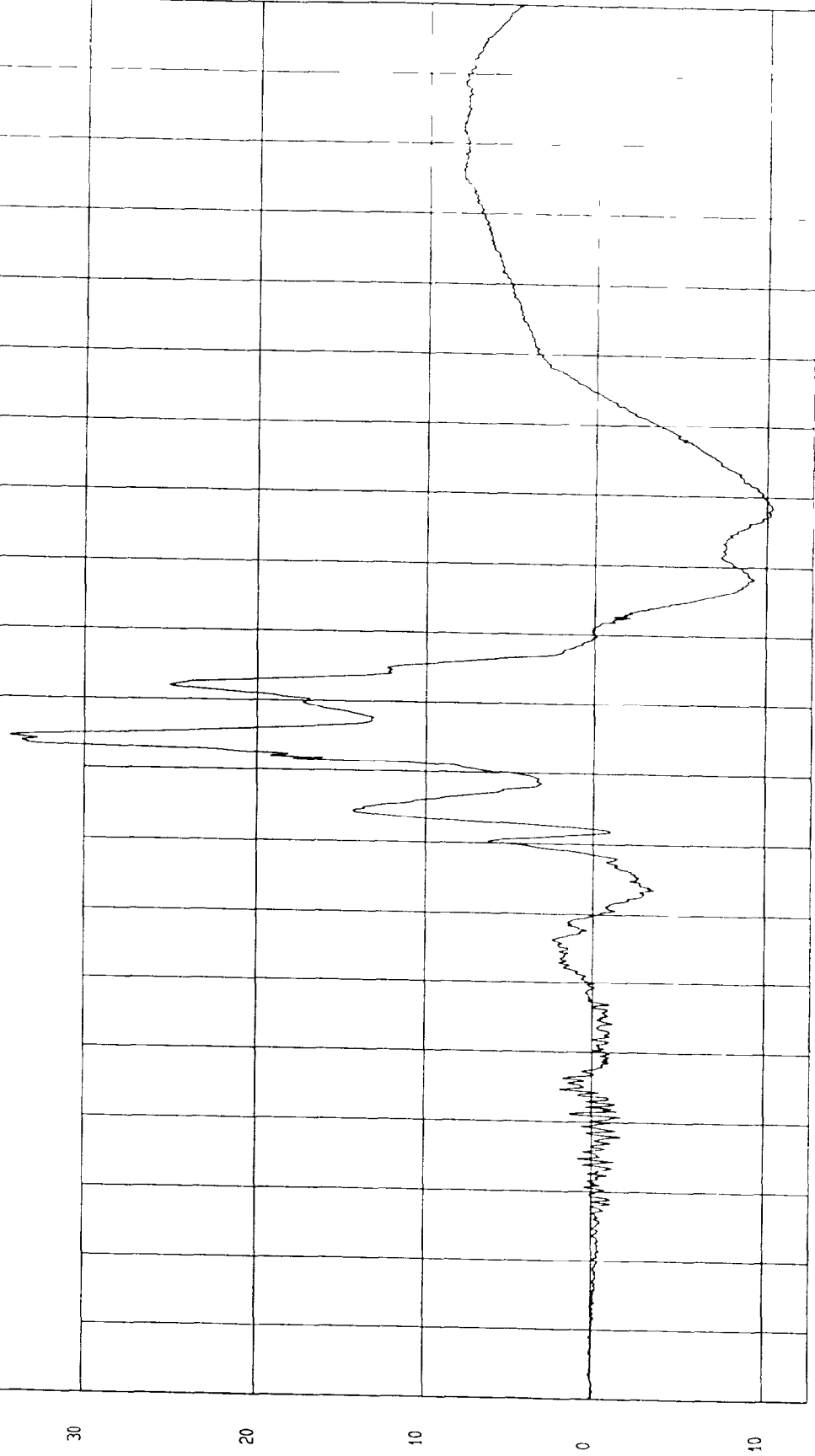
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -10.39 G at 128 msec

Maximum = 34.29 G at 94 msec

PASSENGER HEAD Z ACCELERATION

! _____ H02054AT A26 Filterclass (1000)



TIME (SECONDS)

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

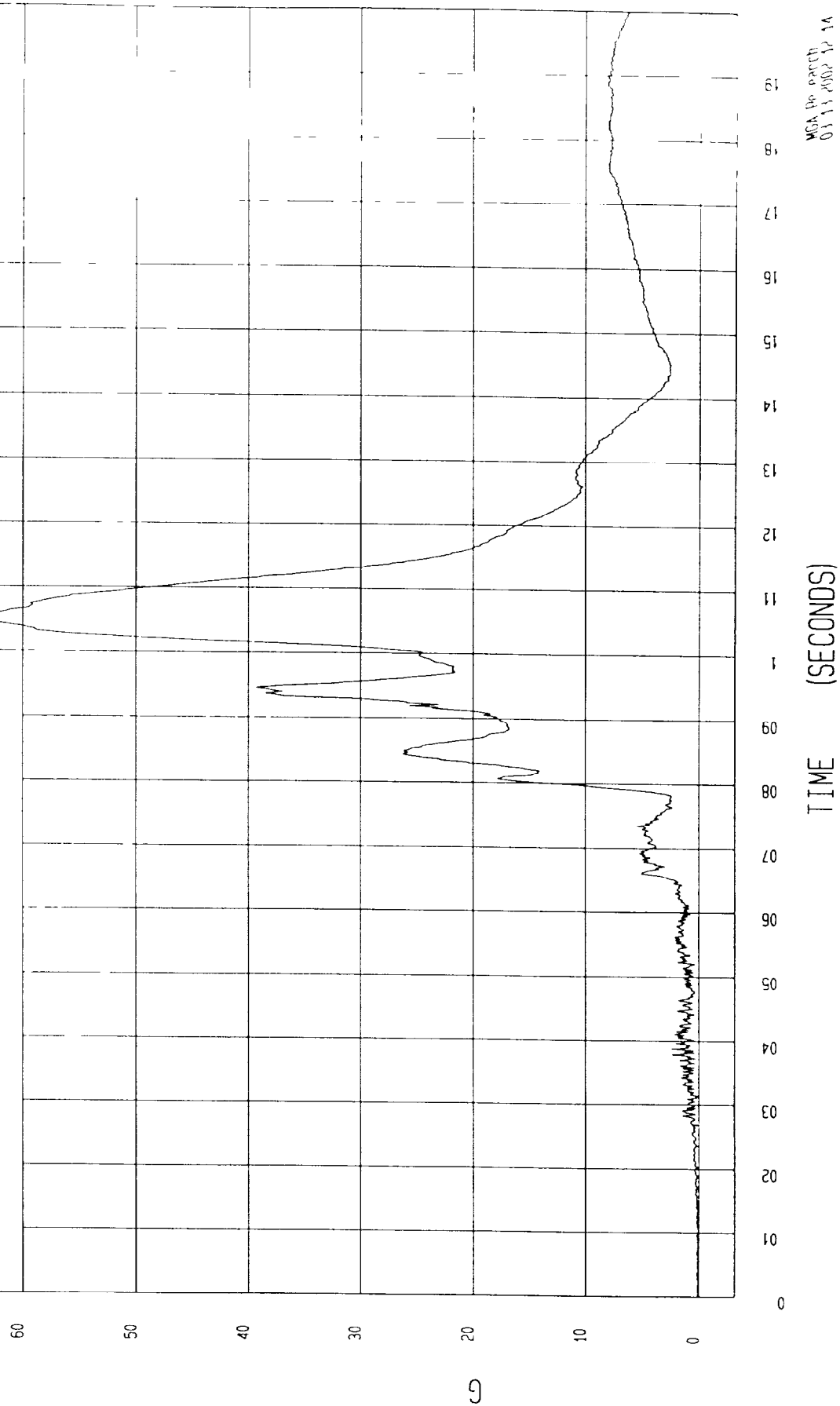
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum 6.36E 02 G at 0 msec

Maximum = 62.99 G at 105 msec

PASSENGER HEAD RESULTANT ACCELERATION

1 ——— H02054V A24 Filterclass (1000)

MSA 4000
03/13/2002 12:14

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -198 43 N at 198 msec

Maximum = 1289 44 N at 107 msec

PASSENGER NECK FORCE X

1 H02054FT F3; Filterclass (1000)

1200

1000

800

600

400

200

0

200

N

0

01

02

03

04

05

06

07

08

09

1

11

12

13

14

15

16

17

18

19

TIME (SECONDS)

MCA Research
03/13/2002 12:15

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

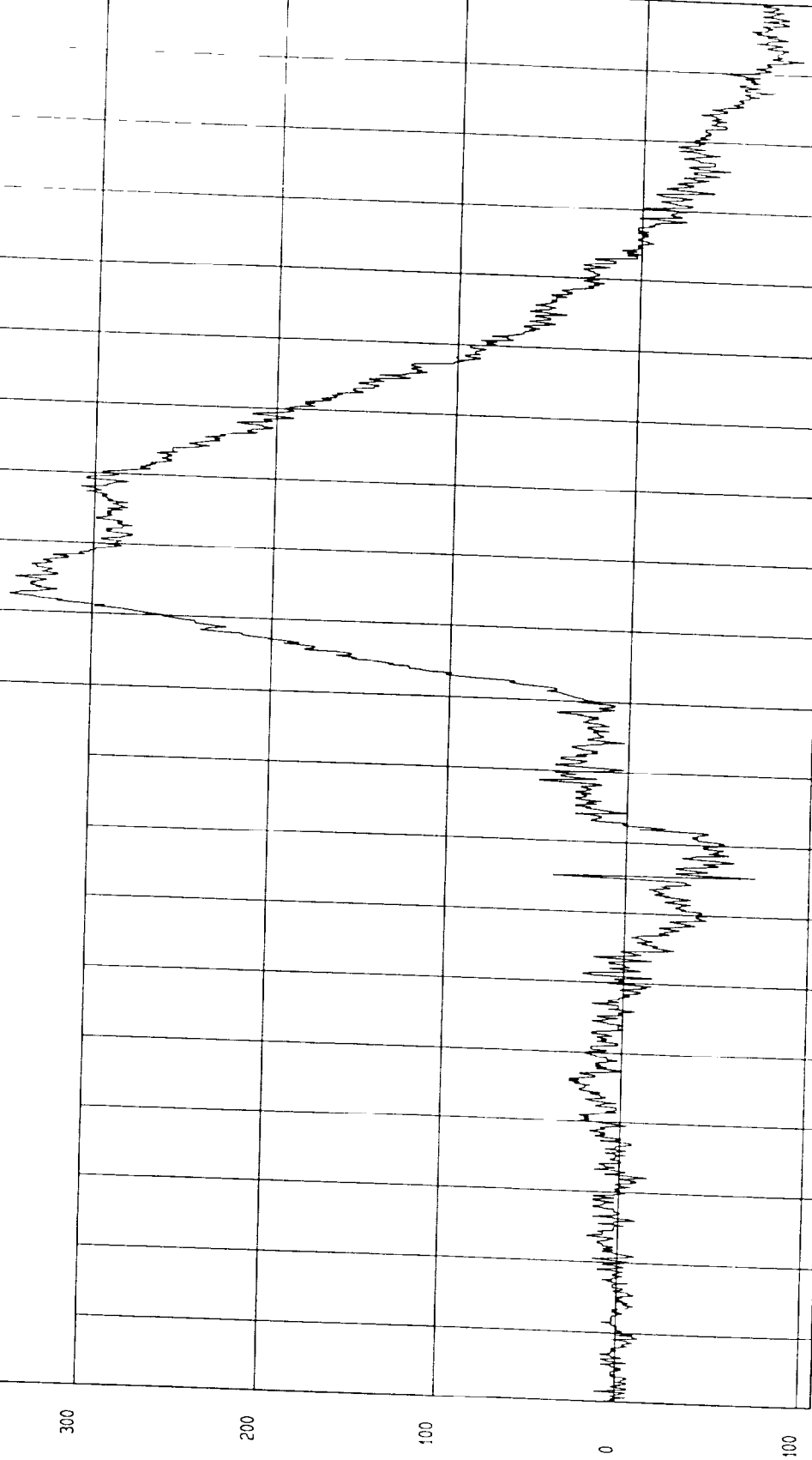
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = 85 g1 N at 192 msec

Maximum = 346 05 N at 112 msec

PASSENGER NECK FORCE Y

1 ——— H02054FT F32 Filterclass (1000)



TEST FMVSS 208 SLED (H02054)

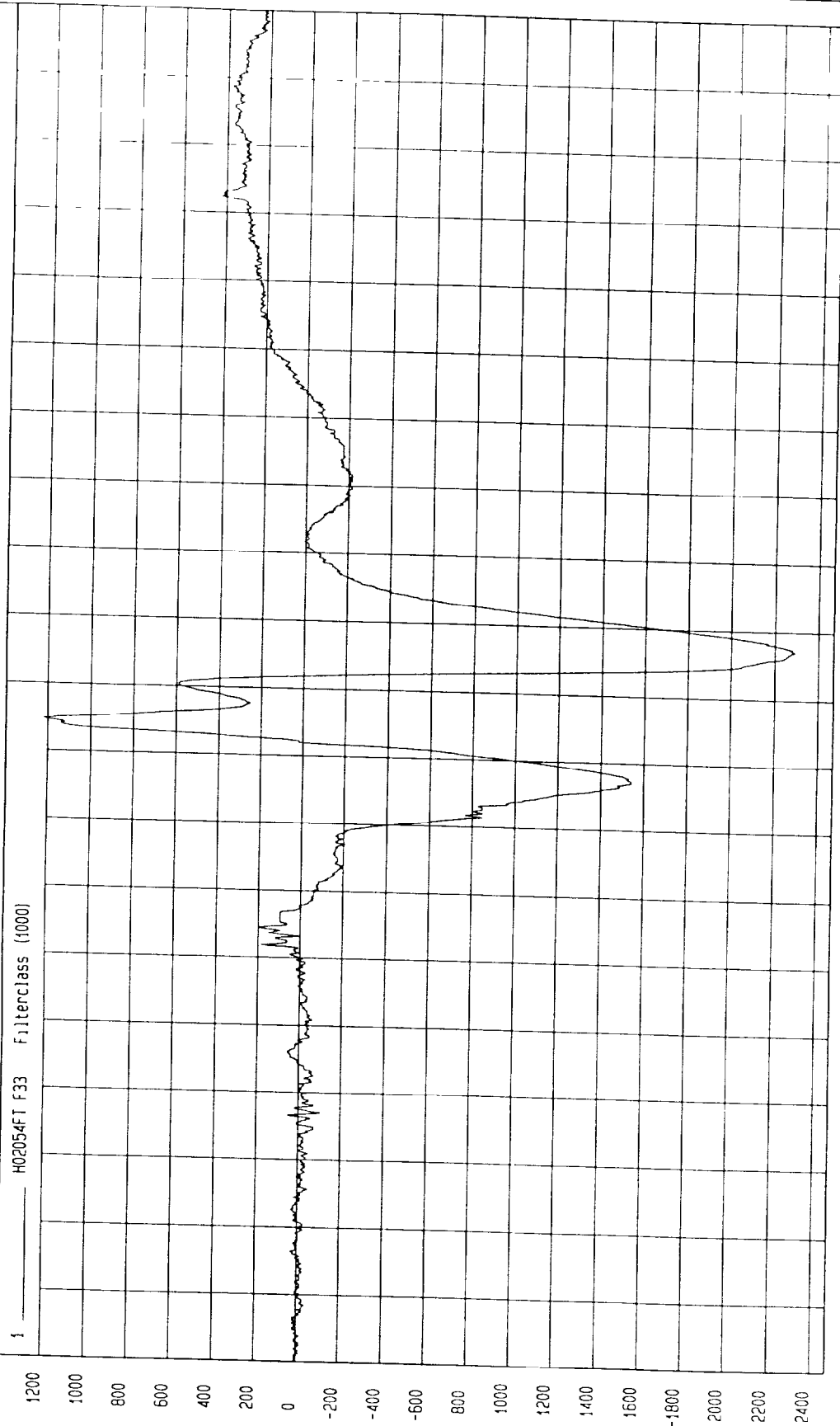
TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -2293 13 N at 107 msec

Maximum = 1218 54 N at 95 msec

PASSENGER NECK FORCE Z



TIME (SECONDS)

MCA Research
03-13-2002 12 15

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

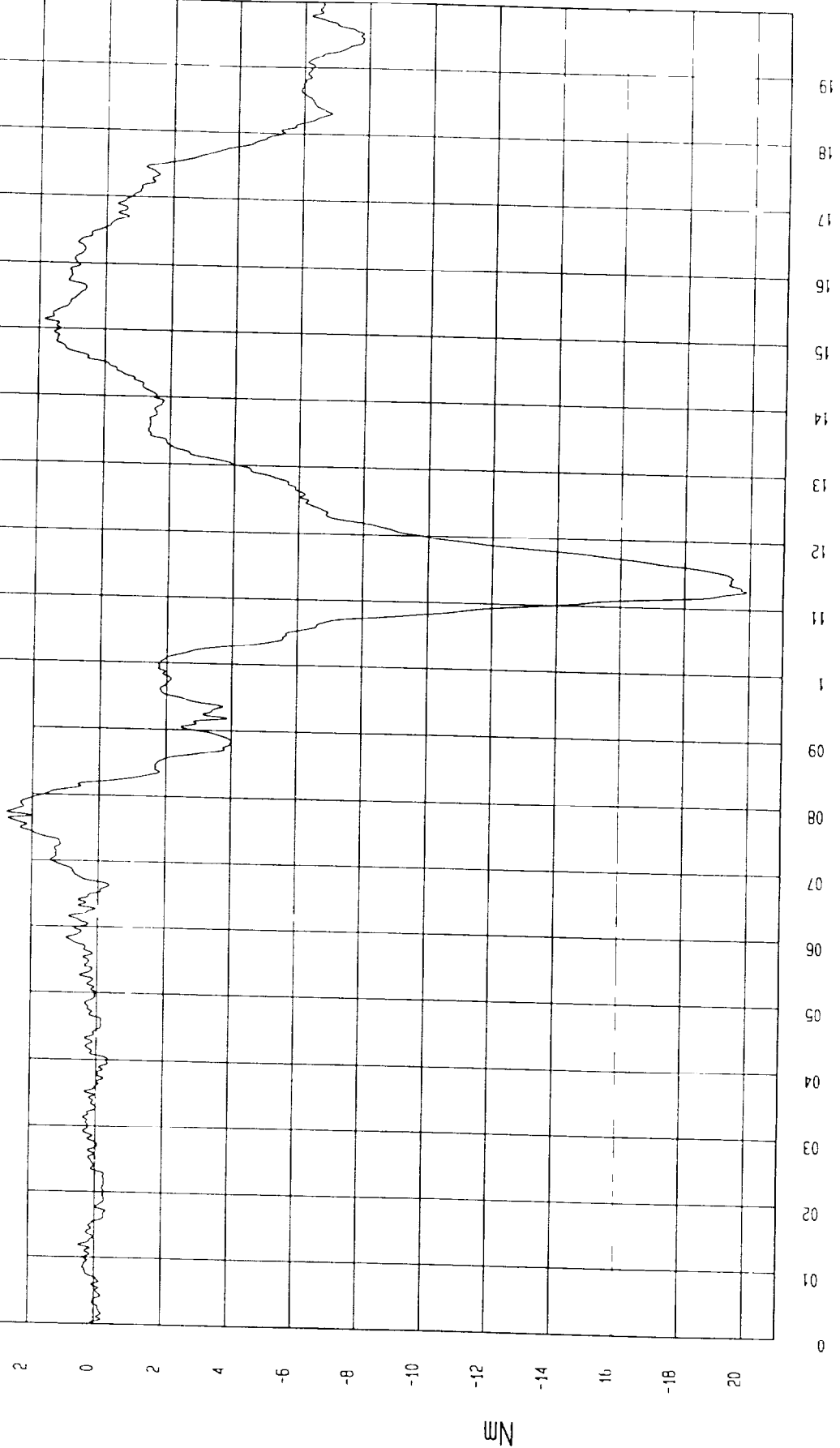
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum - 19.89 Nm at 113 msec

Maximum = 2.76 Nm at 77 msec

PASSENGER NECK MOMENT X

1 — H02054MF M35 Filterclass (600)



MGA Research
03/13/2002 12:15

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

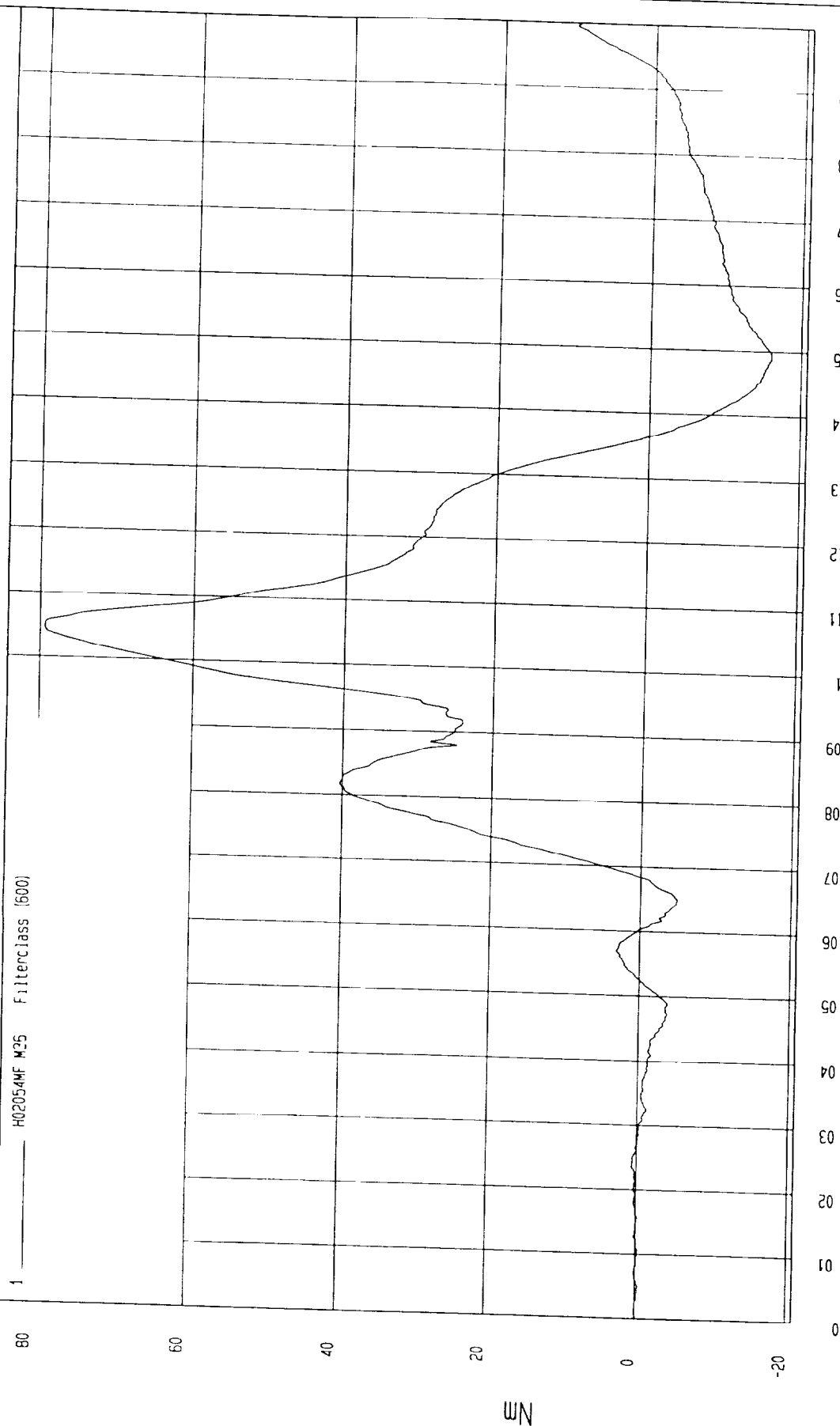
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = 16 Nm at 149 msec

Maximum = 79.41 Nm at 105 msec

PASSENGER NECK MOMENT Y

1 — H02054MF M25 Filterclass (500)



TIME (SECONDS)

MGA Research
03/13/2002 12:15

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

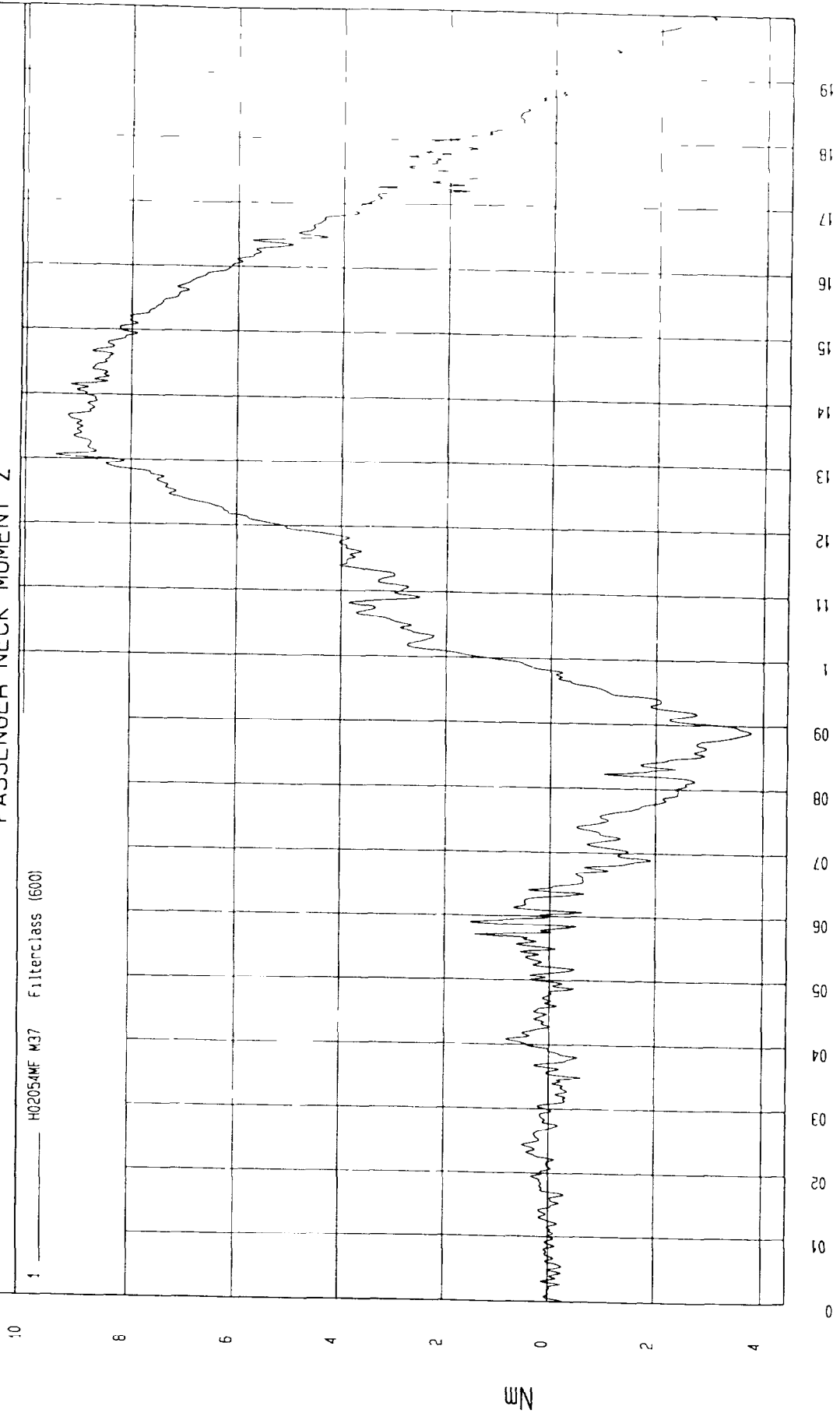
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -3.78 Nm at 89 msec

Maximum = 9.43 Nm at 131 msec

PASSENGER NECK MOMENT Z

1 ——— H02054MF M37 Filterclass (600)



MSA Research
03-13-2002 2:15

U.S. 13 25 12 20

TIME (SECONDS)

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 1.1 1.2 1.3 1.4 1.5 1.6 1.7

Nm
-20
-10
0
10
20
30
40
50
60

PASSENGER OCCIPITAL CONDYLE MOMENT Y

1 H02054M0 W36 Filterclass (600)

Maximum = 57.72 Nm at 104 msec

Minimum = -18.74 Nm at 148 msec

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

MGA Research
03/13/2002 12:15

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

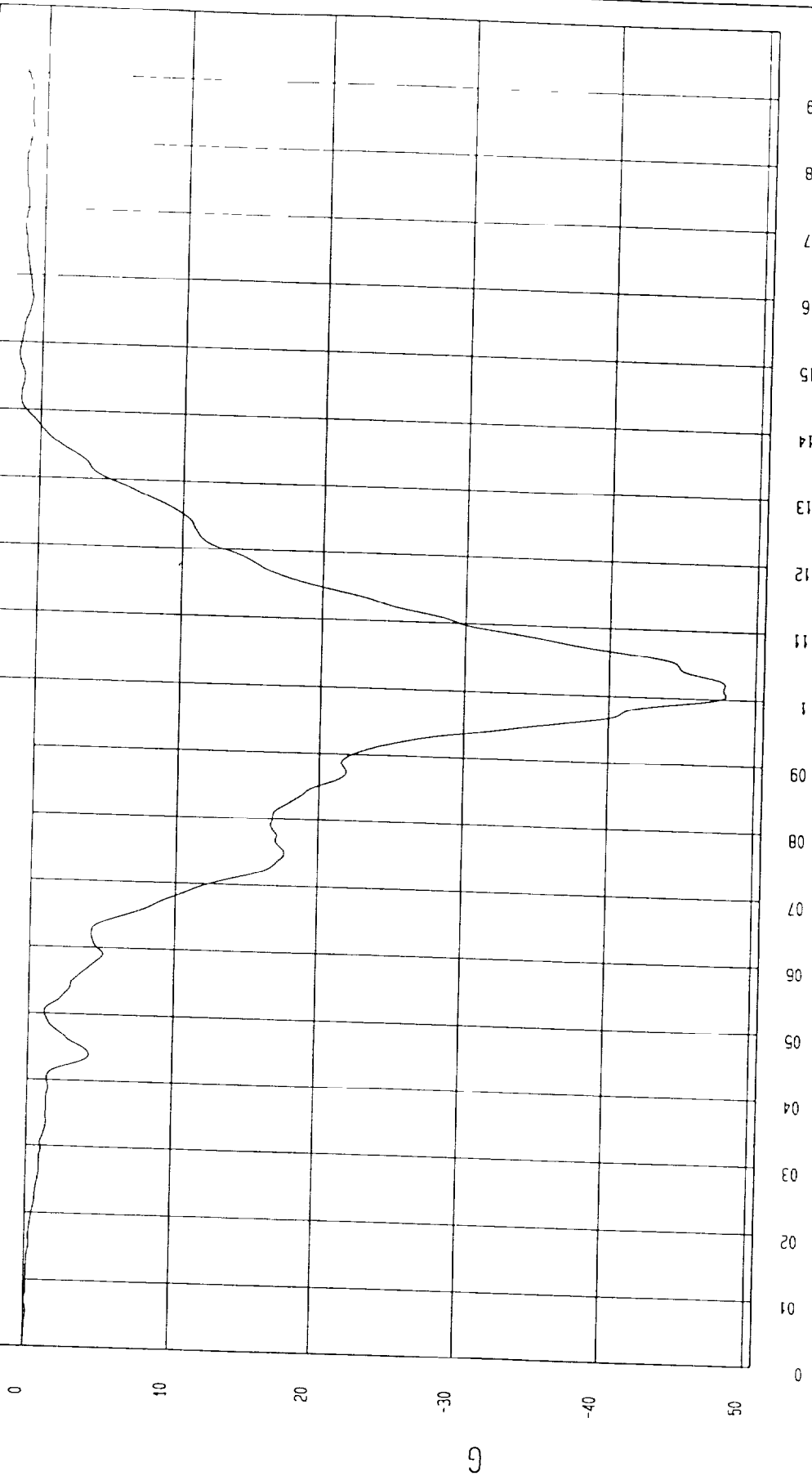
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -47.98 G at 100 msec

Maximum 3.51 G at 199 msec

PASSENGER CHEST X ACCELERATION

1 H02054AF A27 Filterclass (180)



TIME (SECONDS)

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -5.71 G at 104 msec

Maximum = 1.73 G at 77 msec

PASSENGER CHEST Y ACCELERATION

1 — H02054AF A28 Filterclass (180)

2

1

0

1

-2

-3

-4

-5

-6

G

TIME (SECONDS)

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9

0

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

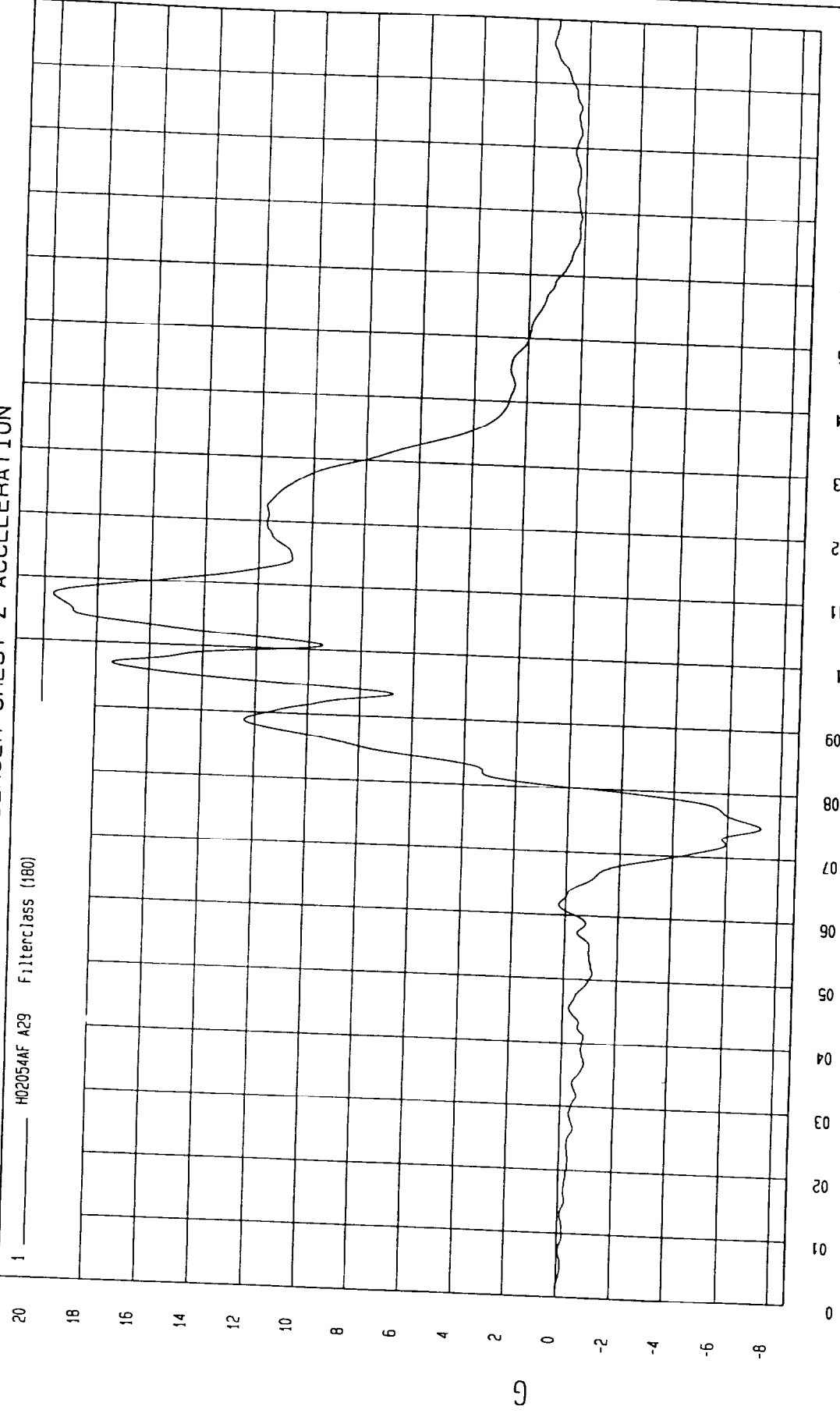
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -7.28 G at 75 msec

Maximum = 19.67 G at 107 msec

PASSENGER CHEST Z ACCELERATION

1 H02054AF A29 Filterclass (180)



TIME (SECONDS)

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

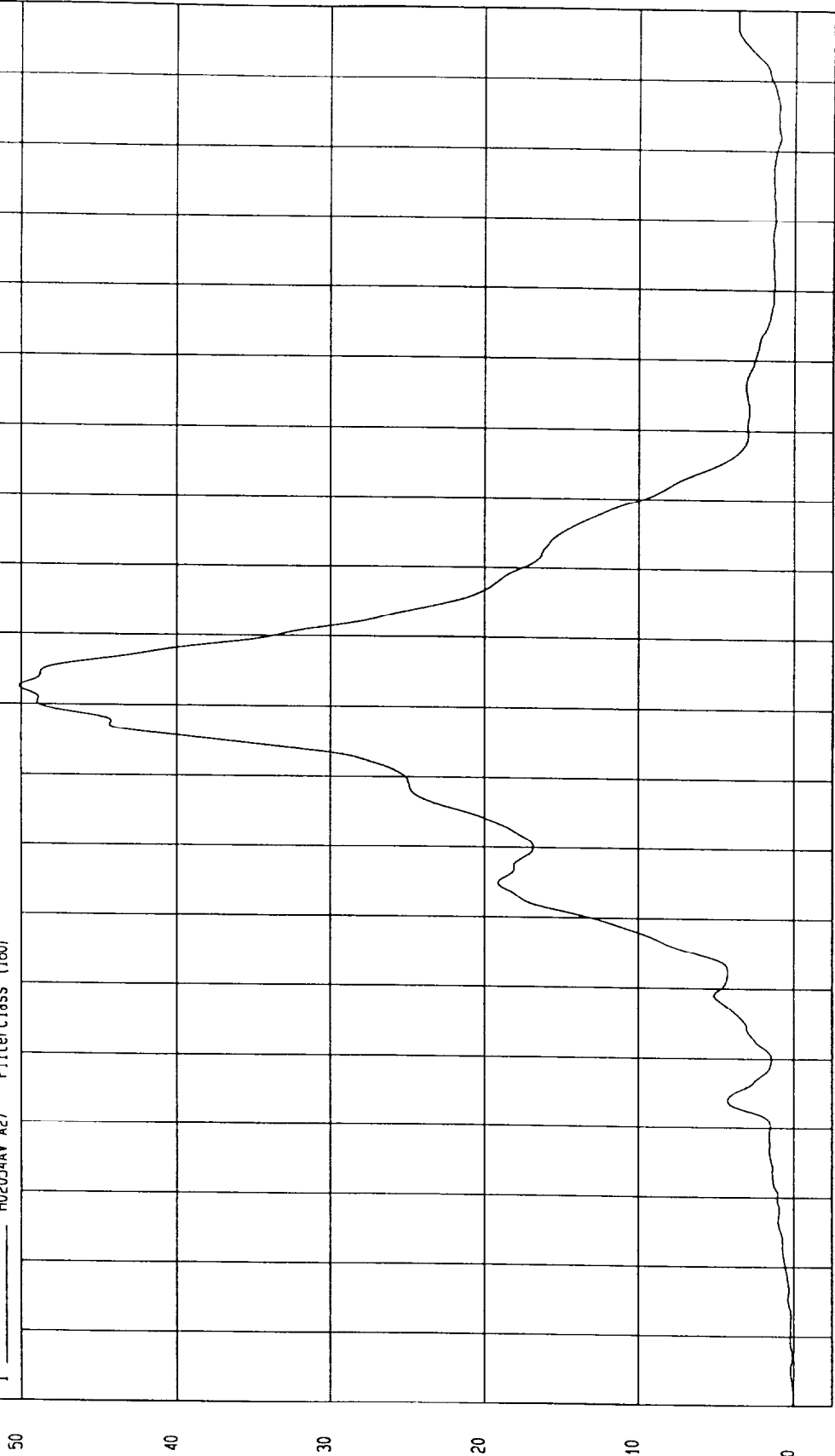
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = 04 G at 1 msec

Maximum = 50 12 G at 103 msec

PASSENGER CHEST RESULTANT ACCELERATION

1 ——— H02054V A27 Filterclass (180)



TIME (SECONDS)

MGA Research
03-13-2002 12 15

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

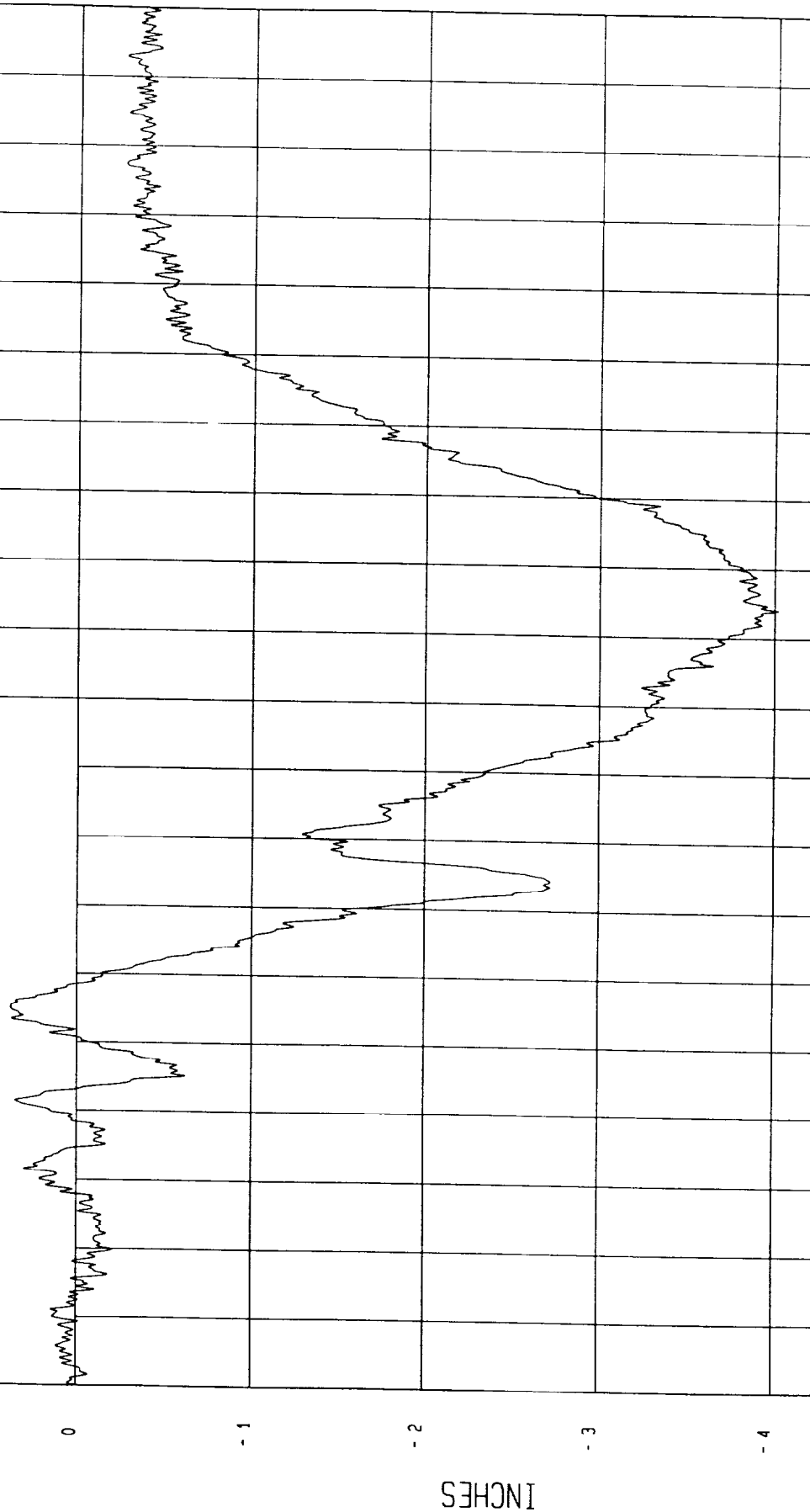
COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = - 4 INCHES at 114 msec

Maximum = 3 76E-02 INCHES at 55 msec

PASSENGER CHEST COMPRESSION

1 ——— H02054DF D39 Filterclass (500)



TIME SECONDS

MGA Research
03-13-2002 12 15

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

Minimum = -1357 52 LB at 81 msec

Maximum = 41 55 LB at 170 msec

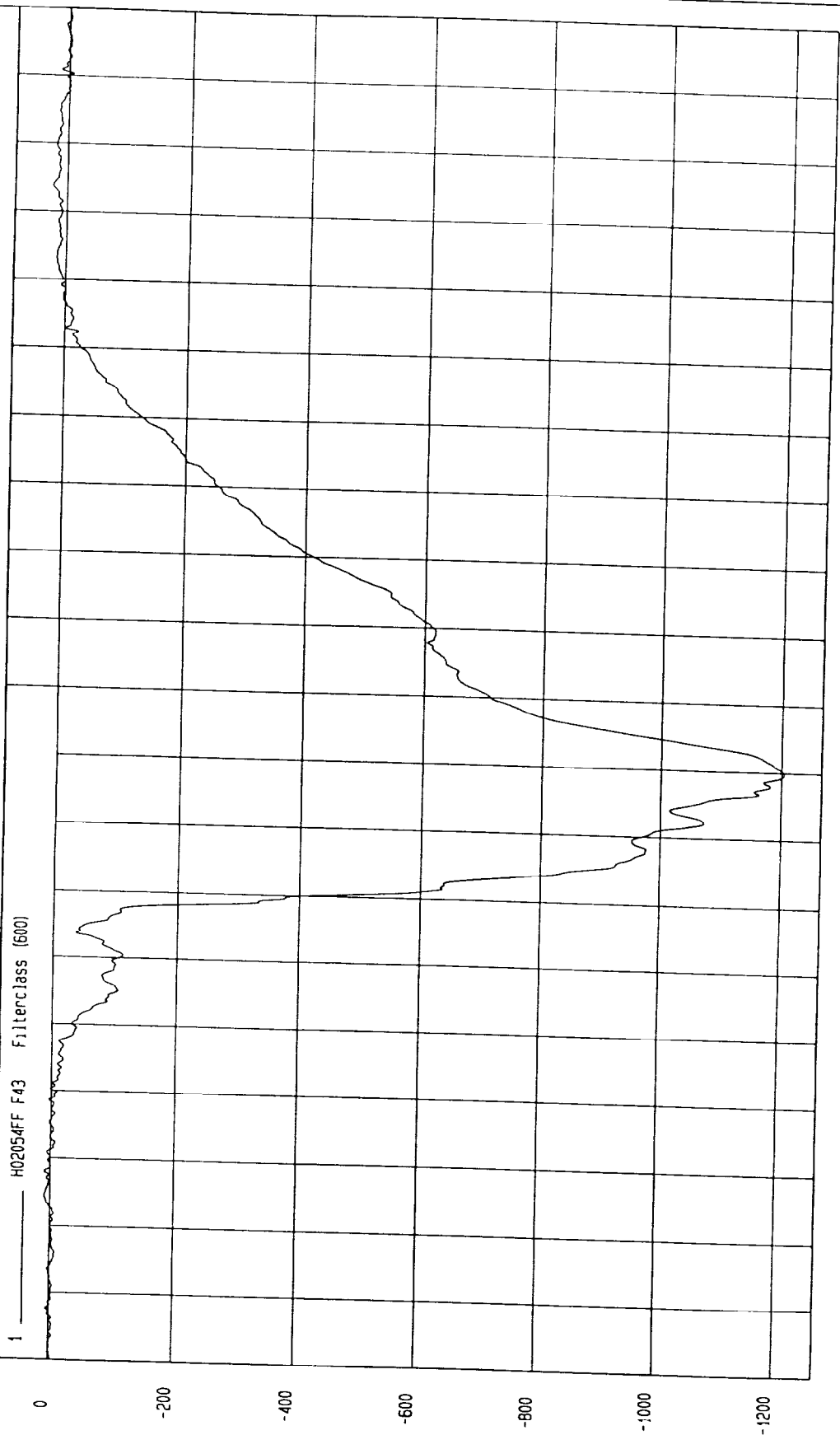
PASSENGER LEFT FEMUR FORCE

1 H02054FF F41 Filterclass (600)



TIME (SECONDS)

19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0



PASSENGER RIGHT FEMUR FORCE

Maximum = 23.73 LB at 174 msec

Minimum = -1204.37 LB at 90 msec

COMPONENT 2002 CHRYSLER PT CRUISER MPV (C20305)

TEST FMVSS 208 SLED (H02054)

TEST DATE 03-13-2002

LB

APPENDIX C
MANUFACTURER'S VEHICLE INFORMATION

Ms Marilynne Jacobs
NSA-31CCa ; OA-208-010924-C
October 24, 2001
Page 2 of 5

Q2. Continued

A2. The 2002 Chrysler PT Cruiser incorporates no new technology from the 2001 V2 running change compliance report approved on 11/02/00 referencing vehicles built after 11/15/00. In addition, there have been no changes implemented with the specific intent of affecting performance in a FMVSS 208 crash test of the performance characteristics of the restraint system with regard to children and out of position occupants. There were changes made to the interior restraint system between 2001 V1 and 2001 V2 as specified in the 2002 compliance report.

Q3. 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.

For air bags with dual stage or multistage inflators describe when the stages are triggered and provide data to show that this is similar to what would occur in a crash of similar severity. See the enclosed interpretation.

A3. Disconnect the battery and wait at least two minutes. Remove the driver air bag module from the steering wheel and unplug the connector; unplug the passenger air bag module pigtail from the vehicle body wiring harness underneath the instrument panel. Once the air bags have been disconnected, cut the wires in the body wiring harness. Use the uncut wires to construct an overlay harness, which will be used to deploy the air bags during the impact simulator test. Using the overlay harness, the air bags are wired in parallel to a 12 volt power supply controlled by an air bag timer delay box which is used to trigger the air bags 20 milliseconds following a 1/2G carriage acceleration event.

The Chrysler PT Cruiser does not have dual stage or multi stage inflators.

Q4. State for any safety belt system in this vehicle whether or not it is equipped with a tension-relieving device. Provide a copy of the information furnished in accordance with S7.4.2 if the tension-relieving device is used.

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October 24, 2001
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Q4. Continued

A4. The Chrysler PT Cruiser safety belt systems are not equipped with tension relieving devices.

Q5 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.

A5. All compliance tests on the Chrysler PT Cruiser were done with the movable windows in the down position.

Q6. Submit dummy placement measurements, including diagrams or photographs which show exactly where each measurement was taken. Enclosed is a diagram of some of OVSC's dummy measurements. Where possible, use each dimension shown in the diagram to provide the individual dummy placement measurements.

A6. Dummy placement measurements, where available, are provided in **Attachment 2.**

Q7. State whether the vehicle has a foot rest for the driver.

A7. The Chrysler PT Cruiser has a footrest for the driver.

Q8. 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

A8. Reference **Attachment 3.**

Q9. If the vehicle is equipped with adjustable seat belt anchorages, provide the manufacturer's nominal design position for a 50th percentile adult male occupant.

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Q9. Continued

A9. The front seat adjustable turning loops are set 2 notches down from the upper most detent position.

Q10. For all certification barrier tests provide the speed at impact, vehicle test weight, and resulting injury criteria (i.e., HIC, chest acceleration, chest compression, femur loads, and where applicable neck moments and forces). For all certification sled tests, provide the resulting injury criteria (i.e., HIC, chest acceleration, chest compression, femur loads, and neck moments and forces).

A10. Reference Attachment 1.

Q11. When vehicle components must be removed to obtain the proper test weight for the barrier test, what components do you recommend for removal and in what priority order do you recommend removal?

A11. If vehicle components must be removed for test weight concerns, this is the recommended order in which parts should be removed:

1. Spare tire and jack assembly.
2. Rear bumper and rear fascia.
3. Tail lamp assemblies.
4. Muffler and tail pipe.
5. Rear seat and carpet.
6. Rear lift gate.

Q12. If the vehicle uses a pressure vessel to inflate the air bag, provide a copy of the test reports or engineering analysis to demonstrate that it meets all the requirements of S9.1.

A12. A pressure vessel is used to inflate the passenger air bag. See Attachment 4 for the requested information.

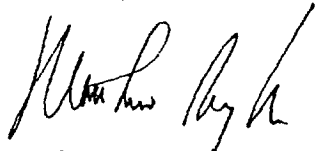
Q13. If the vehicle uses an explosive device to inflate the air bag, provide a copy of the test report or engineering analysis to demonstrate that it meets all the requirements of S9.2.

A13. Pyrotechnic devices are used to inflate the air bags. See Attachment 4 for the requested information.

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October 24, 2001
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If you have any questions regarding the information provided, please contact Mr.
Peter A. Kelber of my staff at (248) 576-7317.

Sincerely,

A handwritten signature in black ink, appearing to read "M. C. Reynolds". The signature is stylized with a large, sweeping "M" and a long, horizontal stroke extending to the right.

M. C. Reynolds

Attachments

FMVSS 208

**2002 CHRYSLER PT CRUISER
2.4L DOHC ENGINE
5-SPEED MANUAL TRANSAXLE
OR
4-SPEED AUTOMATIC TRANSAXLE**

NSA-31CCa ; OA-208-010924-C

ATTACHMENT 2

RESPONSE TO QUESTION #6

**DUMMY PLACEMENT
MEASUREMENT**

2001/2002 PT44 MVSS 208
Dummy Measurement Study

Driver Dummy Measurements (In Inches)						
Test Number	Test Mode	NR	NH	CH	KL	KR
VC8111	Left Angle	15.3	15.6	11.2	6.0	5.9
VC8130	Right Angle	17.2	17.4	12.0	6.1	5.4
VC8872	Frontal	16.3	16.1	11.7	5.5	4.8
IS19817	Sled	18.0	17.2	11.5	5.8	5.4
Average		16.7	16.6	11.6	5.9	5.4

NR = Tip of nose to top rear surface of steering wheel rim

NH = Tip of nose to center of steering wheel hub

CH = Chest 9 inches down from chin to center of steering wheel hub

KL = Left knee clearance from surface of knee to surface of bolster

KR = Right knee clearance from surface of knee to surface of bolster

Passenger Dummy Measurements (In Inches)						
Test Number	Test Mode	A	B	C	KL	KR
VC8059	Frontal	24.0	27.2	19.7	4.3	4.6
VC8108	Left Angle	24.1	27.9	19.8	4.1	4.7
VC8113	Frontal	24.1	27.3	20.3	6.0	5.0
VC8130	Right Angle	24.6	27.6	20.7	5.3	5.4
IS19250	Sled	24.5	27.9	20.9	5.3	5.4
Average		24.3	27.6	20.3	5.0	5.0

A = Bridge of nose horizontal to contact with windshield

B = Center of head CG target horizontal to contact with windshield

C = Chest 9 inches down from chin to closest point on instrument panel

KL = Left knee clearance from surface of knee to surface of bolster

KR = Right knee clearance from surface of knee to surface of bolster

FMVSS 208

**2002 CHRYSLER PT CRUISER
2.4L DOHC ENGINE
5-SPEED MANUAL TRANSAXLE
OR
4-SPEED AUTOMATIC TRANSAXLE**

NSA-31CCa ; OA-208-010924-C

ATTACHMENT 3

RESPONSE TO QUESTION #8

GENERAL SETUP CONDITIONS

TEST VEHICLE INFORMATION

Vehicle Model Year and Make: 2002 Chrysler
Vehicle Model and Body Style: PT Cruiser

1 NOMINAL DESIGN RIDING POSITION –

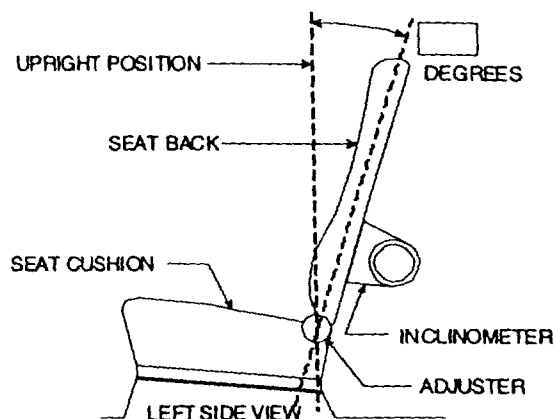
For adjustable driver and passenger seat backs, describe how to position the inclinometer to measure the seat back angle. Include description of the location of the adjustment latch detent if applicable.

Seat back angle for driver's seat = 111.5°.

Measurement Instructions:

Measured from the sill angle. _____

Reference page 3 of this section for detailed measurement instructions.



Seat back angle for passenger's seat = 111.5°.

Measurement Instructions:

Measured from the sill angle.

Reference page 3 of this section for detailed measurement instructions.

2. SEAT FORE AND 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.

Position of the driver's seat:

The fore-aft range for the seats is 228 mm with 19 detents with 12 mm spacing between each one. The seat is set to one notch rearward of mid-track. This position is 10 detents or 120 mm from full forward. Driver side height adjustable seats are tested in full down position.

Position of the passenger's seat (if applicable):

Same as above.

3. FUEL TANK CAPACITY DATA –

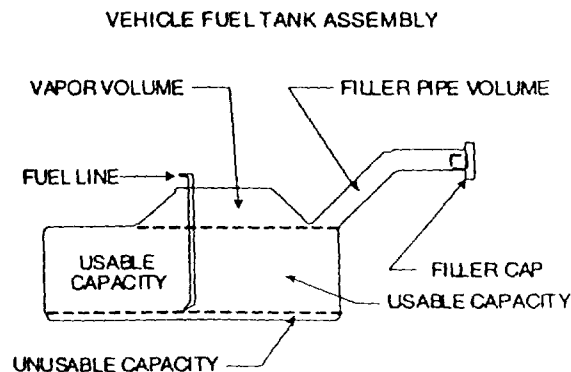
3.1 A. "Usable Capacity" of standard equipment fuel tank = 15 gallons.

B. "Usable Capacity" of optional equipment fuel tank = N.A. gallons.

C. Capacity used when certification testing to requirements of FMVSS 301 =

15 gallons.

Operational Instructions:



3.2 Amount of Stoddard solvent added to vehicle for certification test = 14.3 gallons

3.3 Is vehicle equipped with electric fuel pump? X YES NO

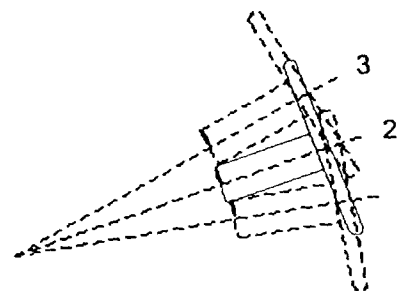
If YES, does pump normally operate when vehicle's electrical system is activated?

X YES NO

4 STEERING COLUMN ADJUSTMENTS –

STEERING COLUMN ASSEMBLY

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



LEFT SIDE VIEW

If the tested vehicle has any of these adjustments, does your company use any specific procedures to determine the geometric center

Operational Instructions

The steering column tilt position is determined by placing a digital level at the extreme of full up and full down pivot positions then taking the mid-point of those two extremes.

5 SEATING REFERENCE POINT (SRP) –

Provide drawing which shows the driver's SRP location

Refer to Form 4B (Page 1 of 3) in this attachment section.

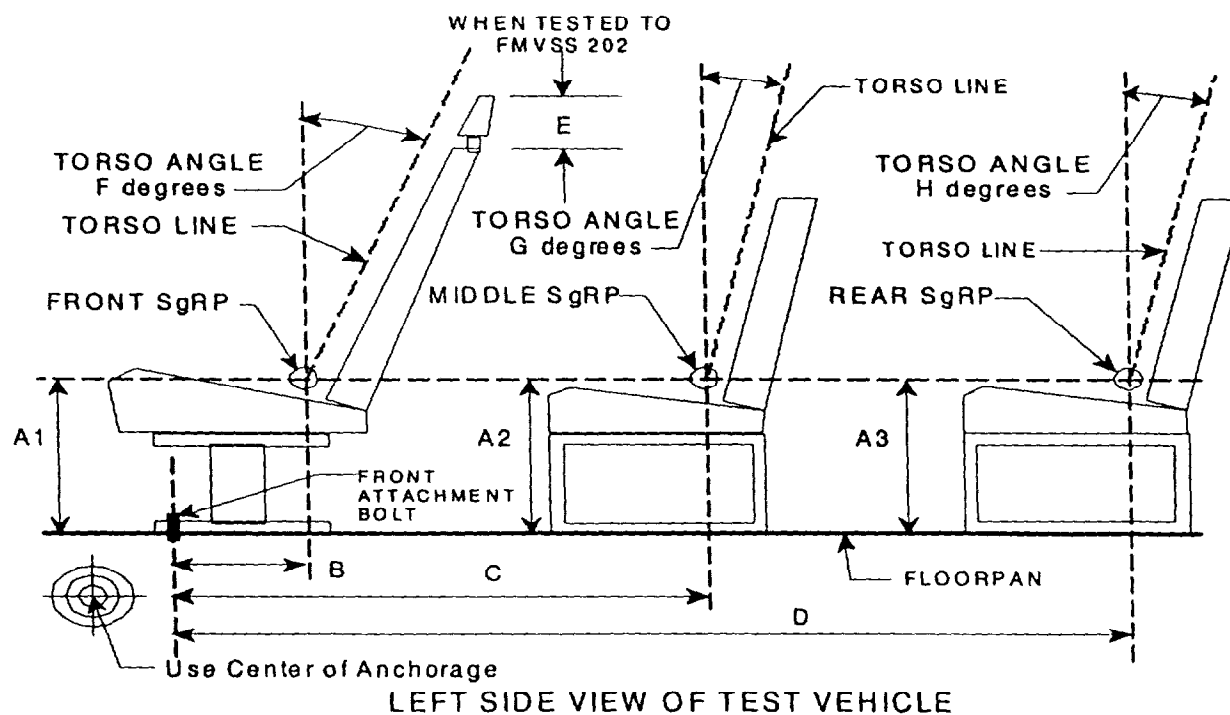
6 FUEL TANK LOCATION –

Provide drawing which shows the undercarriage view of the vehicle

Refer to the bottom view colored drawing dated October 26, 2001 in this attachment section. Please note that the spare tire shown is installed underneath and in the rear of the Chrysler PT Cruiser.

SEATING REFERENCE POINT (SRP) AND TORSO ANGLE DATA FOR FMVSS 201, 202, 203, 207 & 210 (All dimensions in inches)

Model Year: 02; Make: PT Cruiser; Model: PT
Body Style: 44; Seat Style: All



DIMENSION	FRONT, A1	MIDDLE, A2	REAR, A3
A	338mm	189mm	
B	265mm		
C	1104mm		
D	N/A		
E	275mm		
F	20 deg		
G	20 deg		
H			