

REPORT NO. 208-MGA-2002-002

SAFETY COMPLIANCE SLED TESTING FOR FMVSS 208
OCCUPANT CRASH PROTECTION

American Honda Motor Co , Inc
2002 Honda Odyssey MPV
NHTSA NO C25302

MGA RESEARCH CORPORATION
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BURLINGTON, WI 53105



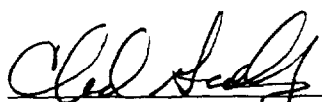
Test Date February 14, 2002

Report Date February 22, 2002

FINAL REPORT

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OFFICE OF VEHICLE SAFETY COMPLIANCE
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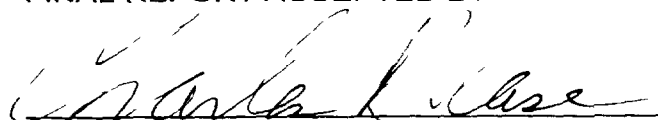
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15 Supplementary Notes			
16 Abstract A compliance test (sled test) was conducted on the subject 2002 Honda Odyssey MPV in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No TP208S-01 for the determination of FMVSS 208 compliance Test failures identified were as follows NONE			
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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 Honda Odyssey MPV, NHTSA No C25302, 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 February 14, 2002

The test vehicle, a 2002 Honda Odyssey MPV, NHTSA No C25302, 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 #340)	Passenger (Serial #312)
HIC	1000	167	155
Chest g	60 g	34.4 g	29.6 g
Chest displacement	3 in	2.0 in.	0.3 in
Left Femur	2250 lb	850 lb	961 lb
Right Femur	2250 lb	1019 lb	923 lb
Neck Extension	57 Nm	23.5 Nm	12.1 Nm
Neck Flexion	190 Nm	37.8 Nm	35.3 Nm
Neck Tension	3300 N	1734 N	698 N
Neck Compression	4000 N	122 N	232 N
Neck Shear	3100 N	471 N	1034 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 17.4 g with an integrated velocity change of 30.0 mph. After filtering the acceleration signal to Channel Class 60, the first and second stage inflators of the airbag system were triggered 19.5 milliseconds after 0.5 g acceleration.

INCLUDE DISCUSSION OF LOST CHANNELS OR OTHER TEST ISSUES

The data from the Top of Engine X Acceleration channel is questionable

Sled Test Summary

Vehicle NHTSA No C25302 Test Mode FMVSS 208 SLED TEST

Vehicle Yr/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Test Date February 14, 2002 Time 12 00 p m Temp 71°F

Vehicle Test Weight 4887 lbs

DUMMY INFO.

DRIVER

PASSENGER

Dummy Type

Part 572E

Part 572E

Serial Number

340

312

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 inch shift,

0 0 inch shift

Seat Back Failure -

no

no

VISIBLE DUMMY CONTACT POINTS:

DRIVER

PASSENGER

Head

Airbag/sunvisor

Airbag/windshield/A-pillar

Chest

Airbag/steering wheel rim

Airbag

Left Knee

Knee bolster

Glove box/dashpanel

Right Knee

Knee bolster/steering
column cover

Glove box/dashpanel

General Test And Vehicle Parameter DataVehicle Yr/Make/Model/Body Style 2002/Honda/Odyssey/MPVVehicle NHTSA No C25302 VIN 2HKRL185X2H525318 Color Silver

Engine Data

No Cylinders 6, CID ____; Liters 3.5, CCs ____Placement Longitudinal/Inline ____, Transverse/Lateral X

Transmission Data

Speeds 4, Manual ____, Automatic X, Overdrive X

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 XPwr Dr Locks X, Other Tilt wheel, cruise control, rear defoggerDate Received 11/19/01; Odometer Reading 39 milesSelling Dealer Wilde Honda Cars, 1710 Highway 164, Waukesha, WI 53186

REMARKS None

General Test And Vehicle Parameter Data (Cont.)

DATA FROM VEHICLE'S CERTIFICATION LABEL

Vehicle Manufactured By American Honda Motor Co., Inc.

Date of Manufacture 10/01, VIN 2HKRL185X2H525318

GVWR 5665 lbs, GAWR Front 2833 lbs

GAWR Rear 2845 lbs

DATA FROM TIRE PLACARD

Tire Pressure with Maximum Capacity Vehicle Load

FRONT 36 psi REAR 36 psi

Recommended Tire Size P225/60R16 98T

Recommended Cold Tire Pressure

FRONT 36 psi REAR 36 psi

Size of Tires on Test Vehicle P225/60R16 98T

Type of Spare Tire T135/80D16 101M, Space Saver X, Standard

Vehicle Capacity Data

Type of Front Seats X Bucket, Bench, Split Bench

Number of Occupants 2 Front, 2 Rear, 3 3rd Seat, 7 TOTAL

REMARKS None

VEHICLE CAPACITY WEIGHT (VCW) = 1267 lbs (shown in owner's manual)

No. Of Occupants x 150 lbs = 1050 lbs

Rated Cargo/Luggage Weight (RCWL) = 217 lbs (Difference)

General Test And Vehicle Parameter Data (Cont)

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

Right Front =	<u>1218</u> lbs	Right Rear =	<u>921</u> lbs
Left Front =	<u>1282</u> lbs	Left Rear =	<u>905</u> lbs
TOTAL FRONT =	<u>2500</u> lbs	TOTAL REAR =	<u>1826</u> lbs
% Total Weight =	<u>57.8</u> %	% Total Weight =	<u>42.2</u> %
TOTAL DELIVERED WEIGHT = <u>4326</u> lbs			

WEIGHT OF FULLY LOADED TEST VEHICLE WITH TWO DUMMIES (344 LB) AND 217
POUNDS OF CARGO WEIGHT

Right Front =	<u>1293</u> lbs	Right Rear =	<u>1126</u> lbs
Left Front =	<u>1363</u> lbs	Left Rear =	<u>1105</u> lbs
TOTAL FRONT =	<u>2656</u> lbs	TOTAL REAR =	<u>2231</u> lbs
% Total Weight =	<u>54.3</u> %	% Total Weight =	<u>45.7</u> %
TOTAL WEIGHT = <u>4887</u> lbs			

TEST VEHICLE ATTITUDE (all measurements in degrees)

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

FUEL SYSTEM DATA

Fuel System Capacity From Owner's Manual = 20.0 gallons
Usable Capacity Figure Furnished by COTR = 20.0 gallons

REMARKS None

Post-Impact Data

Test number	HT02021401	
NHTSA number	C25302	
Test date	February 14, 2002	
Test time	12 00 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	30 0 mph	
Specified integrated velocity range	28 to 30 mph	
Sled Carriage Acceleration		
Acceleration	17 4 g	
Specified Acceleration Range	16 0 - 18 2 g	
Sled Carriage Acceleration Duration		
Time from T-0 (-0 5 g) to 0 0 g	123 7 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/Honda/Odyssey/MPV

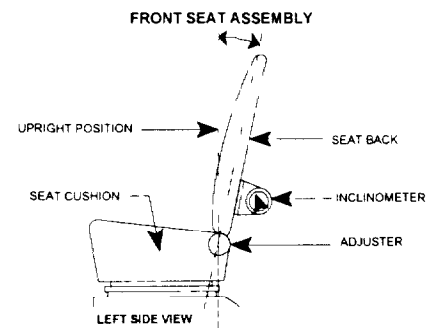
Vehicle NHTSA No C25302 Test Date February 14, 2002

NOMINAL DESIGN RIDING POSITION

Driver Seat Seat Back Angle = 13.9° *

Passenger Seat Seat Back Angle = 13.7° *

* - Measured at headrest post (5 notches from fully upright)



SEAT FORE AND AFT POSITIONS

Driver Seat The seat track had a total position movement of 25 notches and was positioned 12 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 25 notches and was positioned 12 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 (30.6°) of its continuous angular adjustment (28.7° - 32.4°)

Dummy Positioning Measurement Table

Vehicle Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

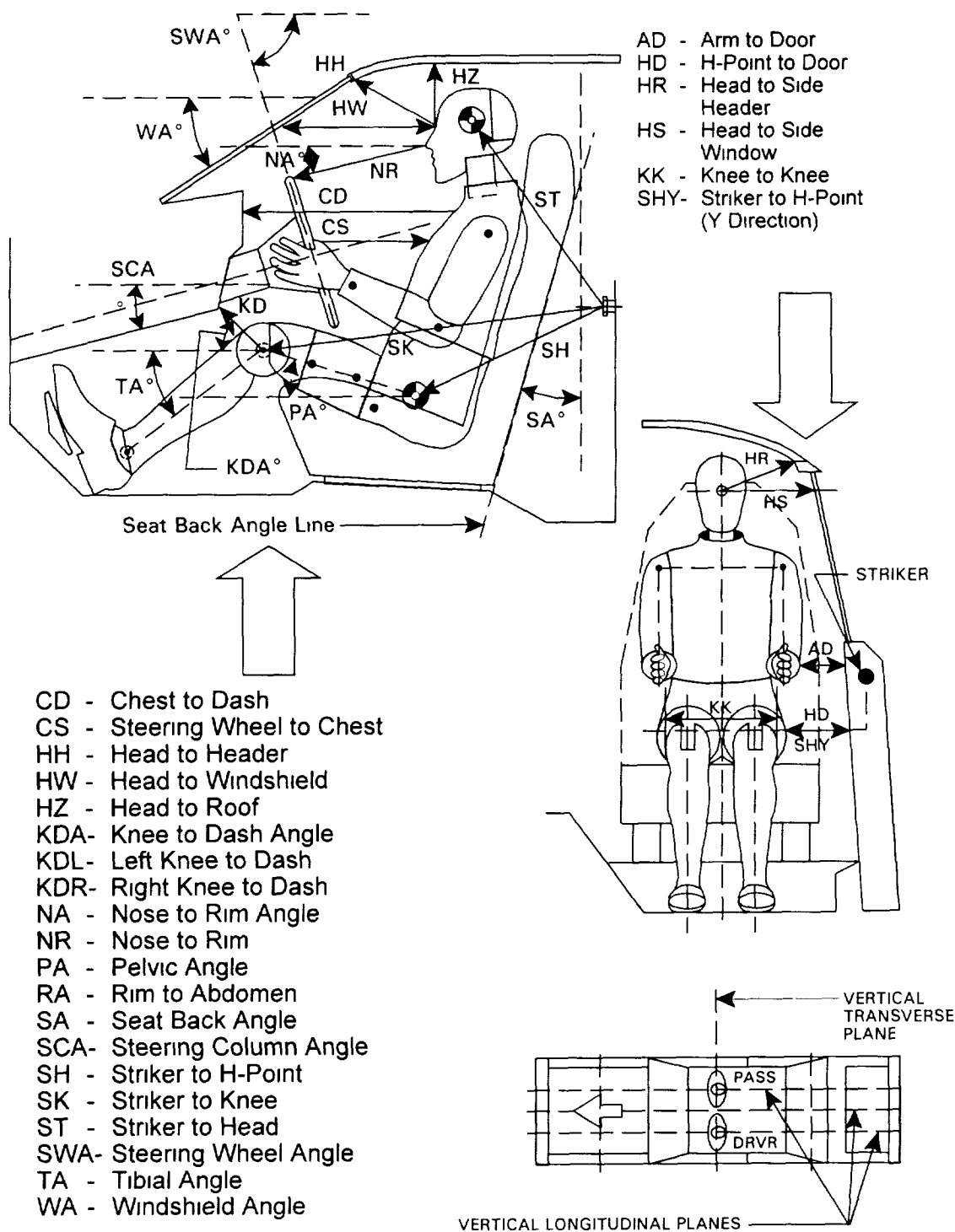
Vehicle NHTSA No C25302 Test Date February 14, 2002

	DRIVER (Serial #340)	PASSENGER (Serial #312)
WA°	31 0°	
SWA°	30 6°	
SCA°	29 5°	
SA°*	13.9°	13 7°
HZ	9 1	8 7
HH	15 6	15 6
HW	26 7	26 4
HR	9 4	9 1
NR	16 4 Angle (NA°) 13 3°	
CD	22 0	23 1
CS	12 4	
RA	6 6	
KDL	5 0 Angle (KDA°) 0 0°	8 6
KDR	5 4	8 9 Angle (KDA°) 0 0°
PA°	24 4°	23 4°
TA°	48 7°	49 9°
KK	11.1	11 4
ST	23 7 Angle 15 8°	23 6 Angle 14 4°
SK	26 4 Angle 86 8°	26 5 Angle 88 4°
SH	11 6 Angle 105 0°	11 3 Angle 103 3°
SHY	11 3	10 7
HS	13 3	12 8
HD	6 2	5 2
AD	5 3	5 2

* - Measured at headrest post

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).

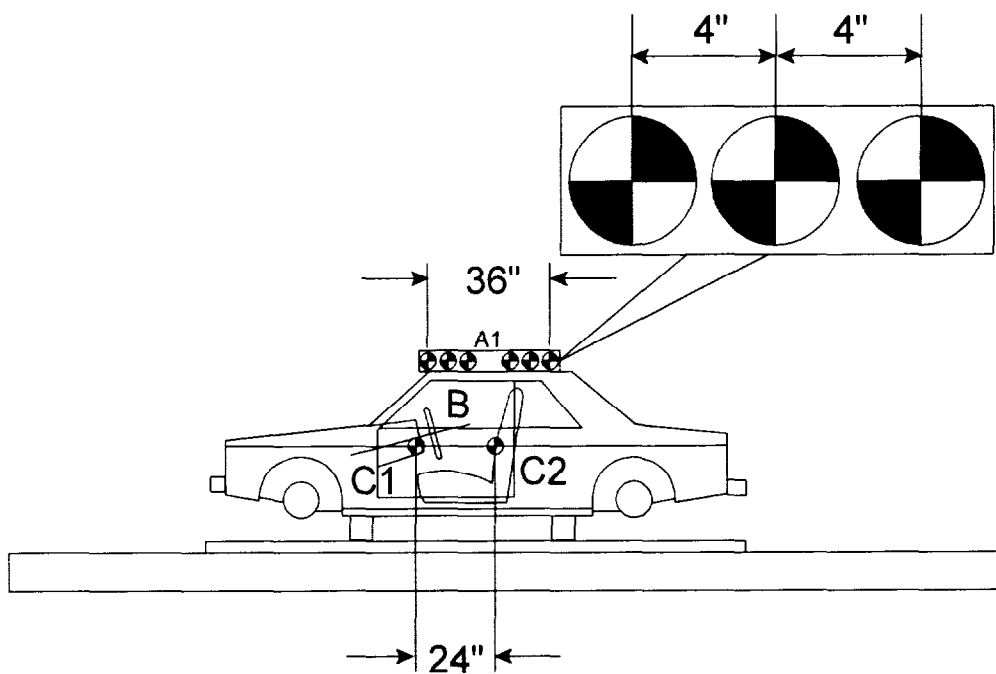
* Measurement used in Data Tape Reference Guide

Description of Dummy Measurements (Cont)**Angles**

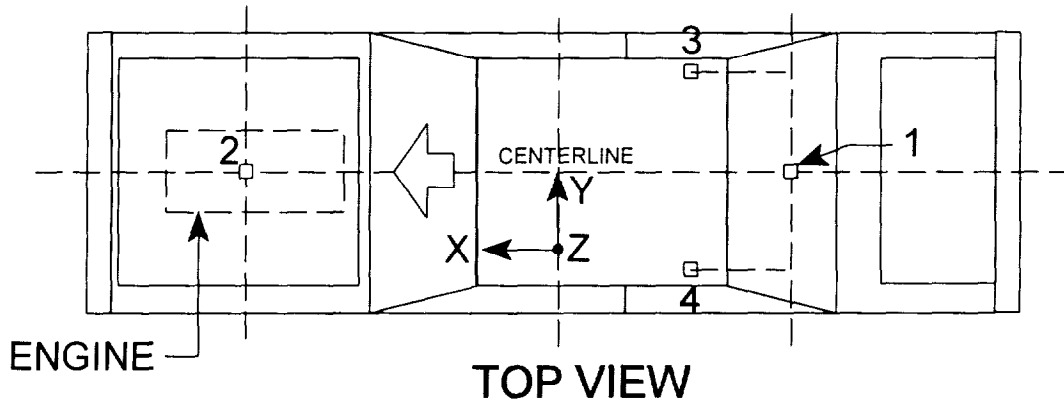
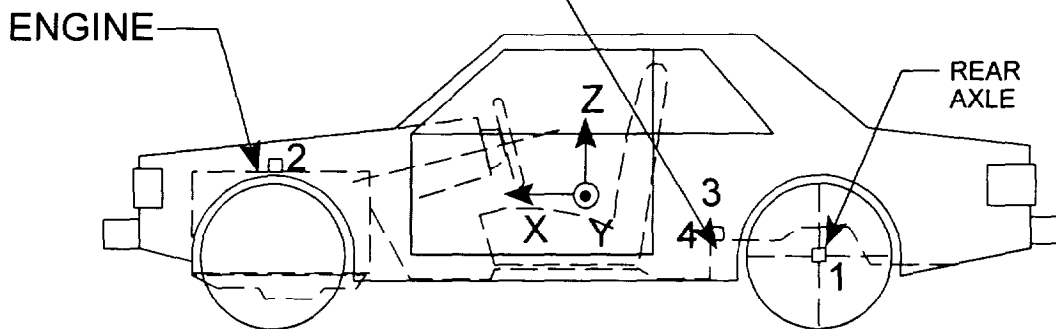
SA	Seat Back Angle, find this angle using the instructions provided by the manufacturer. If the manufacturer doesn't provide clear instructions contact the COTR
PA	Pelvic or Femur Angle, taken by inserting the pelvic angle gauge into the H-point gauging hole on the SID or the Hybrid III dummies and taking 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 SummaryVehicle Year/Make/Model/Body Style 2002/Honda/Odyssey/MPVVehicle NHTSA No C25302 Test Date February 14, 2002REAR SEAT CUSHION
ASSY. FRONT ATTACHMENT
BRACKET SUPPORT

LEFT SIDE VIEW

Vehicle Accelerometer Location Measurements and Data Summary

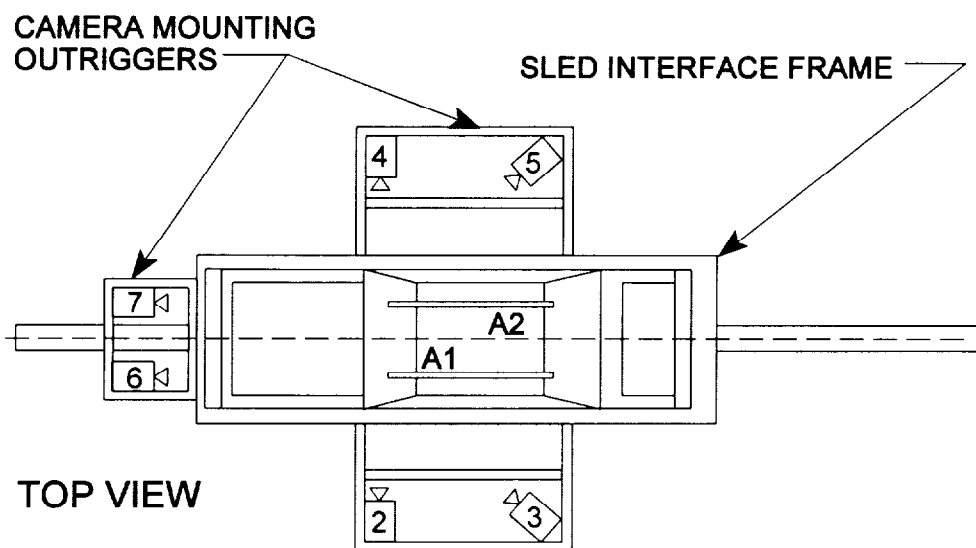
Vehicle Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Vehicle NHTSA No C25302 Test Date February 14, 2002

No	Location	X (in)	Y (in)	Positive Direction		Negative Direction	
				Value	Time (msec)	Value	Time (msec)
	Sled Primary Longitudinal	67 0	0	17 4 g	52	-1 0 g	127
	Sled Redundant Longitudinal	67 0	4 0	17 5 g	52	-1 0 g	127
	Sled Velocity Measured Integrated	67 0	0	30 0 mph	124	--	--
1	Rear Axle Longitudinal	38 0	0	17 8 g	52	-1 5 g	127
2	Top Engine Longitudinal	171 0	0	17 9 g*	33*	-10 4 g*	138*
3	Right Rear Seat Member Longitudinal	84 0	22 0	16 2 g	39	-1 3 g	151
4	Left Rear Seat Member Longitudinal	84 0	22 0	16 9 g	52	-1 4 g	149

* - Questionable data

Camera Positions



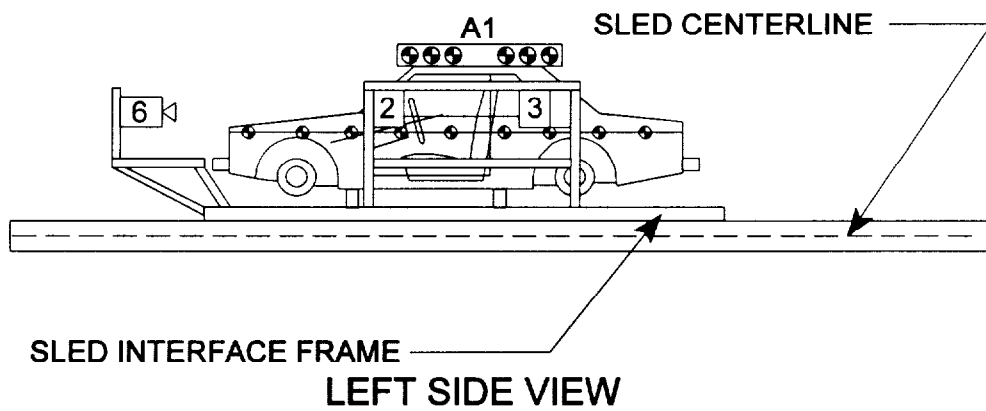
CAMERA FRAME RATES:

#1 = 24 fps

All Others = 1,000 fps



REAL TIME CAMERA



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	952
3	Onboard Driver Angle	150 9	91 1	47 8			13	1005
4	Onboard Passenger	71 8	89 6	38 5	90	71 1	13	1031
5	Onboard Passenger Angle	146 7	88 5	47 9			13	1000
6	Onboard Windshield Driver	18 3	14 1	42 9			13	568
7	Onboard Windshield Passenger	18 3	13 9	42 9			13	873

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/Honda/Odyssey/MPV

Vehicle NHTSA No C25302 Test Date February 14, 2002

MAXIMUM ACCELERATION VALUES (g's)	DRIVER DUMMY #340	PASSENGER DUMMY #312
Head Channel X	-36 5	-26 9
Head Channel Y	3 0	-12 8
Head Channel Z	16 9	24 5
HEAD RESULTANT	38 8	34 6
Chest Channel X	-36 0	-30 1
Chest Channel Y	5 2	2 3
Chest Channel Z	12 4	17 3
CHEST RESULTANT	37 0	31 1

HEAD INJURY CRITERIA (HIC) VALUES

HIC	167	155
t_1 = (msec)	96.3	97 1
t_2 = (msec)	132 3	133 1

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

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

CLIP	34 4	29 6
t_1 = (msec)	108 5	92 3
t_2 = (msec)	111 5	95 3
CHEST DEFLECTION (in)	2 0	0 3

Occupant Injury Data (Cont)

MAX COMPRESSIVE FEMUR FORCES	DRIVER DUMMY #340	PASSENGER DUMMY #312
Left Side (lbs)	850	961
Right Side (lbs)	1019	923

NECK INJURY CRITERIA

Peak Flexion Bending Moment about the Occipital Condyle (N-m)	37 8	35 3
Peak Extension Bending Moment about the Occipital Condyle (N-m)	23 5	12 1
Peak Axial Tension (N)	1734	698
Peak Axial Compression (N)	122	232
Peak Fore Shear (N)	378	1034
Peak Aft Shear (N)	471	78

Seat Belt Warning System Data

Vehicle Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

NHTSA No C25302, Technician Chad Gadberry, Date January 14, 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 = 5 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 = 0 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/Honda/Odyssey/MPVNHTSA No C25302, Technician Chad Gadberry, Date January 14, 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 ☒ No
(If YES this Data Sheet is complete.)
- 2 Describe the location of the readiness indicator upper-right of instrument panel
- 3 Is the readiness indicator clearly visible to the driver?
☒ Yes-Pass ☐ No-FAIL
- 4 Is a list of the elements in the occupant restraint system, being monitored by the readiness indicator, provided?
☒ Yes-Pass ☐ No-FAIL

Air Bag Labels Data

Vehicle Year/Make/Model/Body Style: 2002/Honda/Odyssey/MPV

NHTSA No C25302, Technician Chad Gadberry, Date January 14, 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 - (X)Yes-Pass () **No-FAIL**
 Passenger Side - (X)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?
 (X) 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

(X) Not Applicable
 Driver Side - ()Yes-Pass () **No-FAIL**

Air Bag Labels Data (Cont)

SUN VISOR LABEL VISIBLE WHEN VISOR IS IN DOWN POSITION

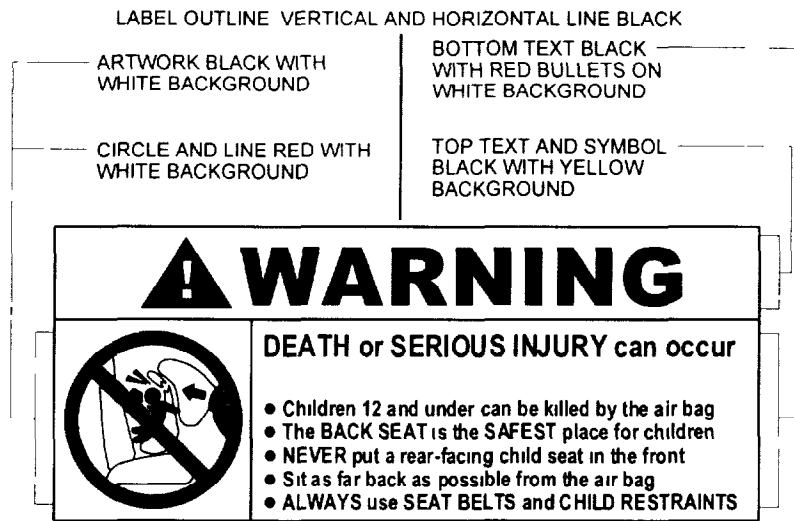


Figure 6a (S4 5 1(b)(2))

SUN VISOR LABEL VISIBLE WHEN VISOR IS IN DOWN POSITION

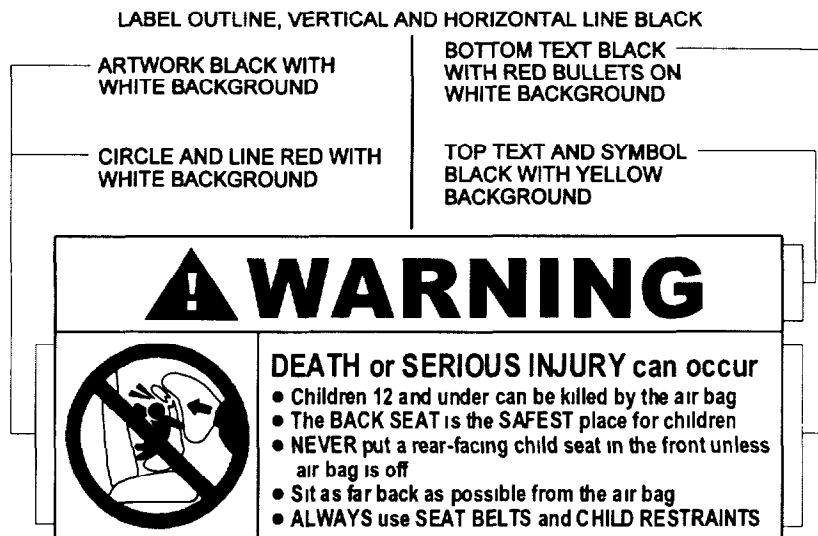


Figure 6b (S4 5 1(b)(2))

- 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 30 0 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 33 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 - ()Yes, go to 6 (X) No
 Passenger Side - ()No air bag ()Yes (X) No
- 5 2 Does the label conform in content to the label shown below? (S4 5 1(c)(2))
 Driver Side - (X)Yes-Pass () **No-FAIL**
 Passenger Side - ()No air bag (X)Yes-Pass () **No-FAIL**
- 5.3 Is the message area black with yellow text? (S4 5 1(c)(2)(i))
 Driver Side - (X)Yes-Pass () **No-FAIL**
 Passenger Side - ()No air bag (X)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 210 cm²
 Driver Side - (X)Yes-Pass () No-FAIL
 Passenger Side - () No air bag (X)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
 (X)Yes-Pass () No-FAIL
- 5 6 Is the pictogram at least 20 mm in diameter? (S4 5 1(c)(2)(ii))
 Actual diameter 20 mm
 For vehicles with driver side air bag ONLY () Not Applicable
 (X)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 54.6 cm²
(X)Yes-Pass () No-FAIL

REMOVABLE LABEL ON DASH

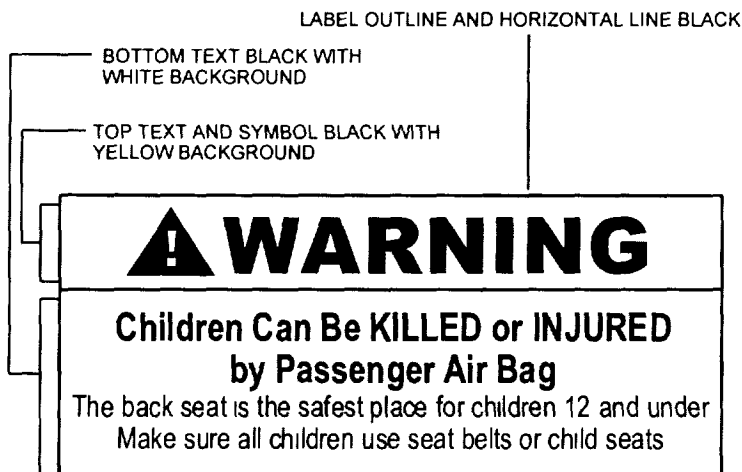


Figure 7 (S4 5 1(e))

Rear Outboard Seating Position Seat Belt DataVehicle Year/Make/Model/Body Style 2002/Honda/Odyssey/MPVNHTSA No C25302, Technician Chad Gadberry, Date January 14, 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/Honda/Odyssey/MPV

NHTSA No C25302, Technician Chad Gadberry, Date January 14, 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? (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 69.7 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)

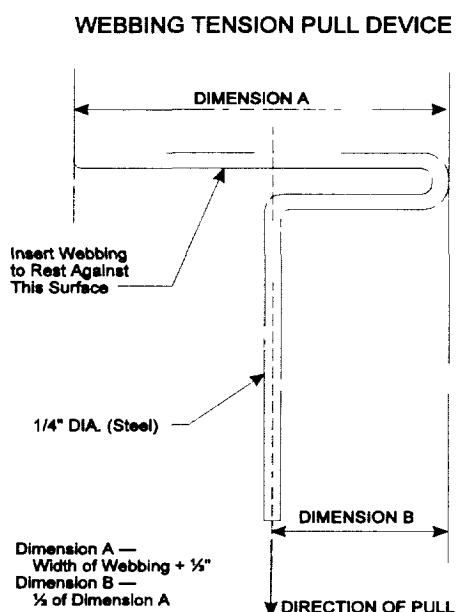


Figure 5 (S7 1 1 5(c)(4))

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 29 7 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 30 5 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 8 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 2 inches

(X)Yes-Pass

() No-FAIL

REMARKS None

Lap Belt Lockability Data (Cont)

Vehicle Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

NHTSA No C25302, Technician Chad Gadberry, Date January 14, 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 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?

(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 75 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 (spec 5-15 degrees)

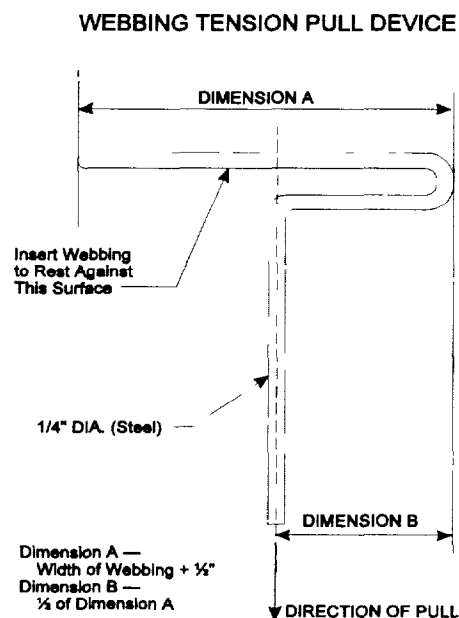


Figure 5 (S7 1 1 5(c)(4))

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 26.5 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 = 0.5 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 = 48.0 inches

(X)Yes-Pass

() No-FAIL

REMARKS: None

Lap Belt Lockability Data (Cont)

Vehicle Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

NHTSA No C25302, Technician Chad Gadberry, Date January 14, 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 Fully rearward and outboard
(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 83.3 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)

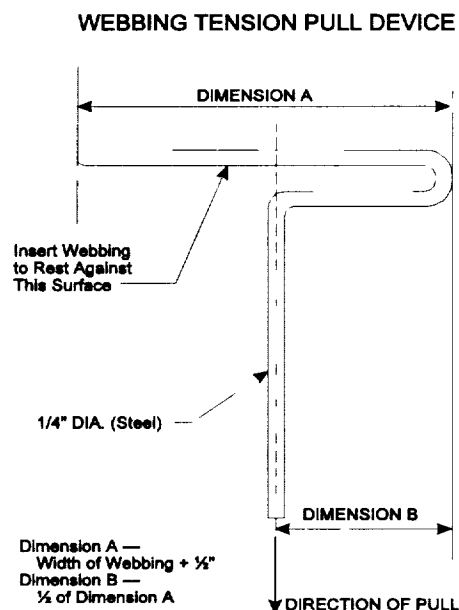


Figure 5 (S7 1 1 5(c)(4))

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 35 0 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 4 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 4 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 = 46 9 inches

(X)Yes-Pass

() No-FAIL

REMARKS None

Lap Belt Lockability Data (Cont)

Vehicle Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

NHTSA No. C25302, Technician Chad Gadberry, Date January 14, 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 3rd row

1 Record the seating position Non-adjustable
(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 64.2 inches
- 11 Readjust the belt system so that the webbing between points A and B is at any length that is 5 inches or more shorter than the maximum length of the webbing (S7 1 1 5(c)(3))
 12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device. 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)

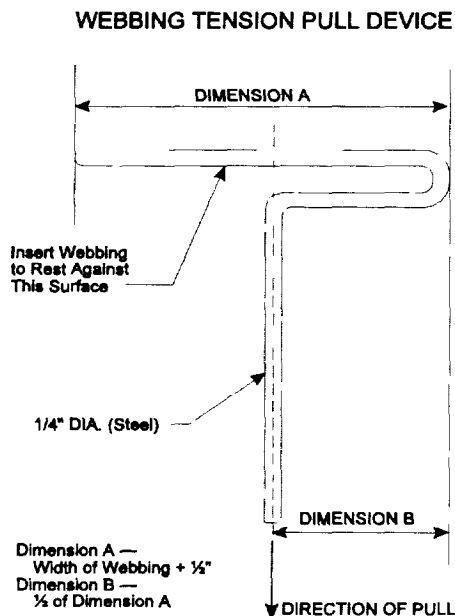


Figure 5 (S7 1.1 5(c)(4))

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 37.5 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 38.2 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 = 0.7 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 = 26.0 inches

(X)Yes-Pass

() No-FAIL

REMARKS None

Lap Belt Lockability Data (Cont.)

Vehicle Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

NHTSA No C25302, Technician Chad Gadberry, Date January 14, 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 3rd row

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 63.4 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)

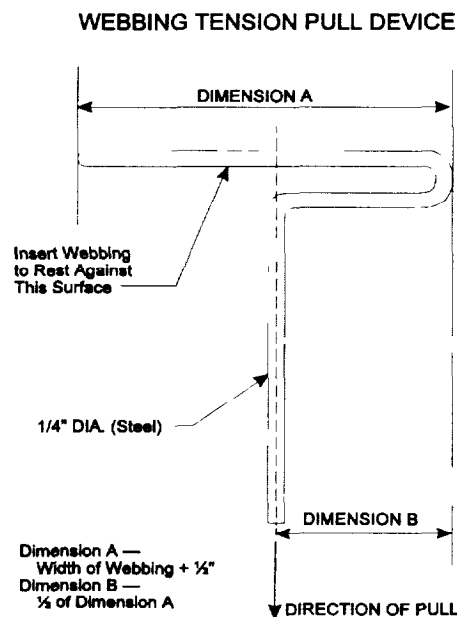


Figure 5 (S7 1 1 5(c)(4))

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 30.3 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 30.5 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 = 32.9 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 C25302Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPVDesignated Seating Position Tested Left FrontDate of Comfort/Convenience Check January 14, 2002Technician Performing Check Chad GadberryGVWR 5665 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
(X) Check
() 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

- _____

[illegible]

☐ 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

- 16 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 C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Left Rear

Date of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR 5665 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)

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Seat Belt Comfort and Convenience Data (Cont.)

1 BELT CONTACT FORCE (S7.4.3)

Test Vehicle NHTSA No C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Right Rear

Date of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR 5665 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 C25302Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPVDesignated Seating Position Tested Left 3rd rowDate of Comfort/Convenience Check January 14, 2002Technician Performing Check Chad GadberryGVWR 5665 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
(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
() Check
(X) 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 C25302Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPVDesignated Seating Position Tested Right 3rd rowDate of Comfort/Convenience Check January 14, 2002Technician Performing Check Chad GadberryGVWR 5665 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
(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
() Check
(X) N/A
- 1 6 Place each adjustable head restraint in its highest adjustment position
(X) Check
() N/A

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Seat Belt Comfort and Convenience Data (Cont.)

2 LATCHPLATE ACCESS (S7.4.4)

Test Vehicle NHTSA No C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Left Front

Date of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR 5665 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 envelope 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 C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Right Front

Date of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR 5665 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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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)

3 RETRACTION (S7.4.5)

Test Vehicle NHTSA No C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Right FrontDate of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR 5665 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.

- 3 1 Is the vehicle a passenger car or walk-in van-type vehicle?
() Yes If yes, go to seat belt guides and hardware
(X) No
- 3 2 Adjustable seats are in the adjustment position midway between the forward most and rearmost positions If an adjustment position does not exist midway between the forward most and rearmost positions, the next closest adjustment position to the rear of the midpoint is used (S8 1 2)
(X) Check
- 3 3 If separately adjustable in a vertical direction, the seats are at the lowest position
(X) Check
- 3 4 Place adjustable seat backs in the manufacturer's nominal design riding position in the manner specified by the manufacturer
(X) Check
- 3 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
- 3 6 Place each adjustable head restraint in its highest adjustment position
(X) Check
- 3 7 Adjustable lumbar supports are positioned so that the lumbar support is in its lowest adjustment position (S8 1 3)
(X) Check

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 C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Left Front

Date of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR 5665 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 C25302Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPVDesignated Seating Position Tested. Right FrontDate of Comfort/Convenience Check January 14, 2002Technician Performing Check Chad GadberryGVWR 5665 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 C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Left Rear - DOES NOT APPLY (Requirement B)

Date of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR 5665 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 C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Right Rear- DOES NOT APPLY (Requirement B)

Date of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR: 5665 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 C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Left 3rd row - DOES NOT APPLY

(Requirement C)

Date of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR 5665 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 C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Center 3rd row - DOES NOT APPLY

(Requirement C)

Date of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR 5665 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 C25302

Vehicle Model Year/Make/Model/Body Style 2002/Honda/Odyssey/MPV

Designated Seating Position Tested Right 3rd row - DOES NOT APPLY

(Requirement C)

Date of Comfort/Convenience Check January 14, 2002

Technician Performing Check Chad Gadberry

GVWR. 5665 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**

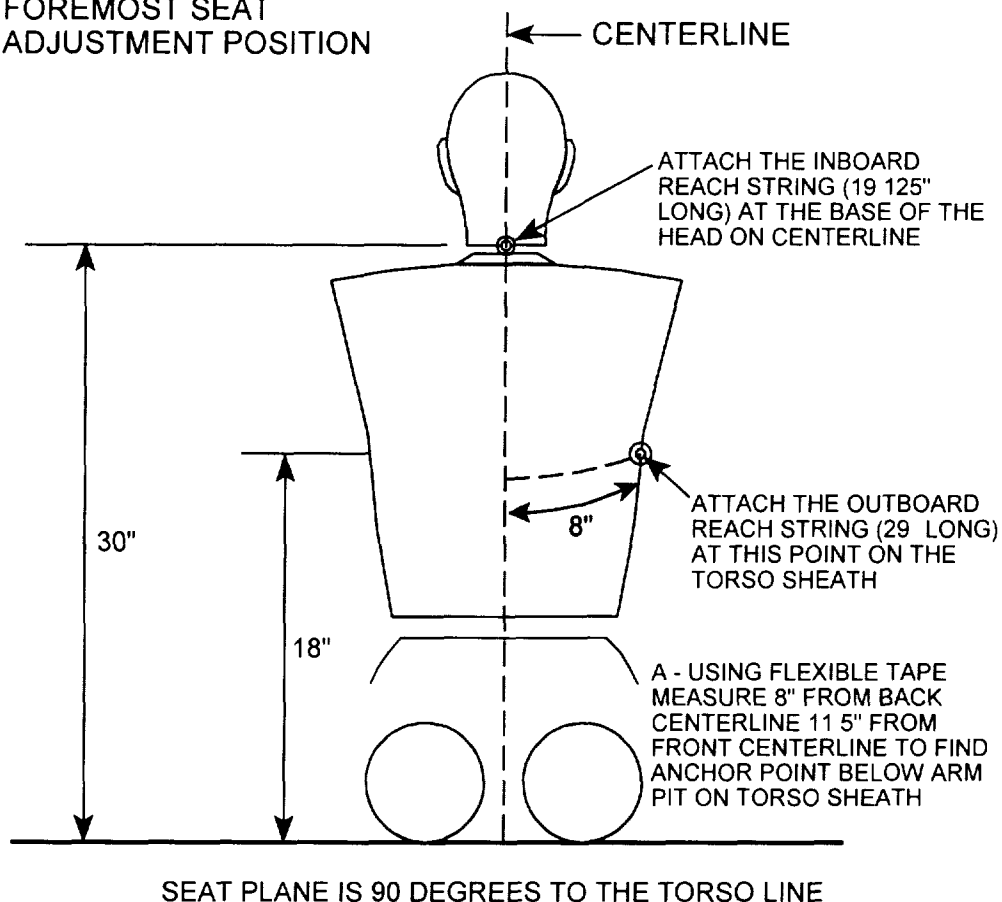
Seat Belt Comfort and Convenience Data (Cont)

- 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**

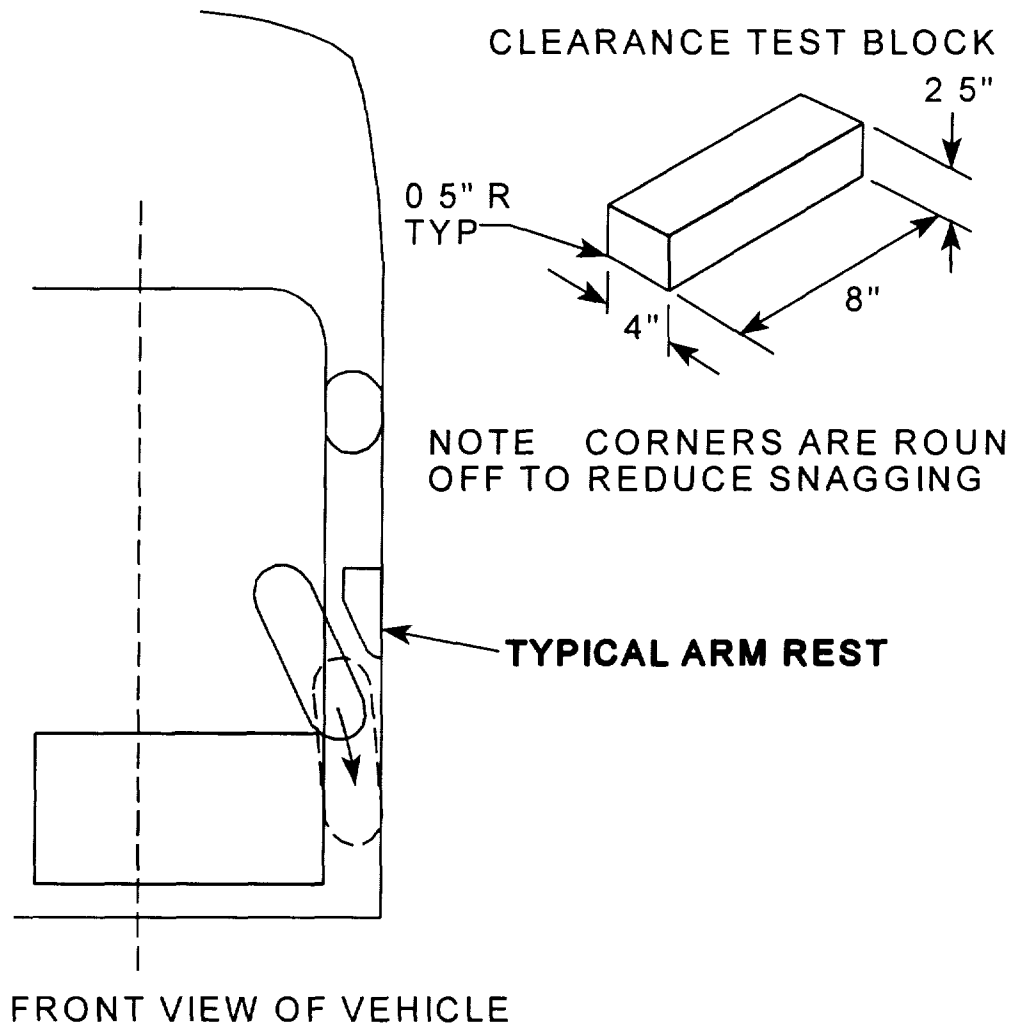
PART 572E DUMMY

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-25 - Post-Test Passenger Seat Position View	A-25
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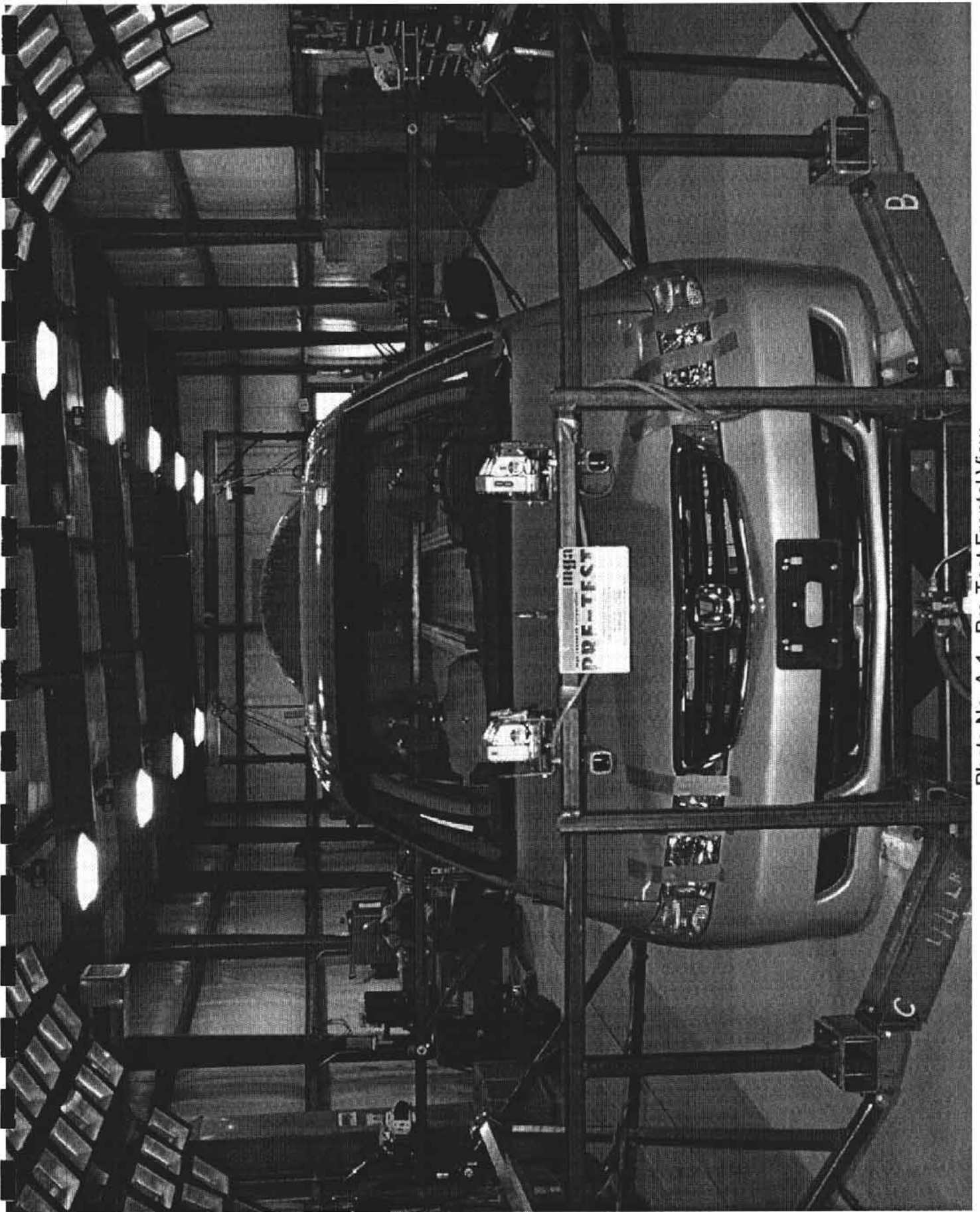


Photo No. A-1 - Pre-Test Frontal View

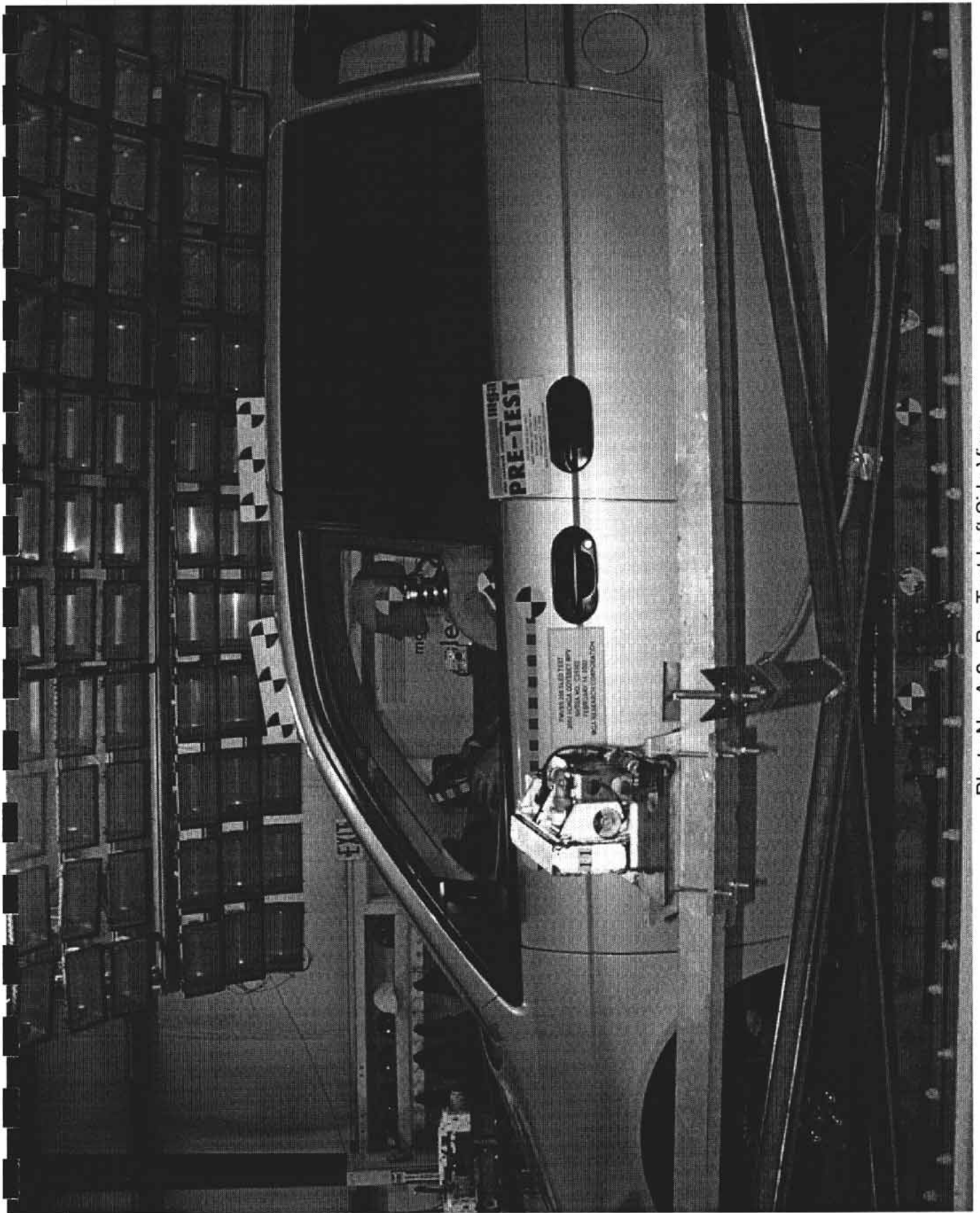


Photo No. A-2 - Pre-Test Left Side View

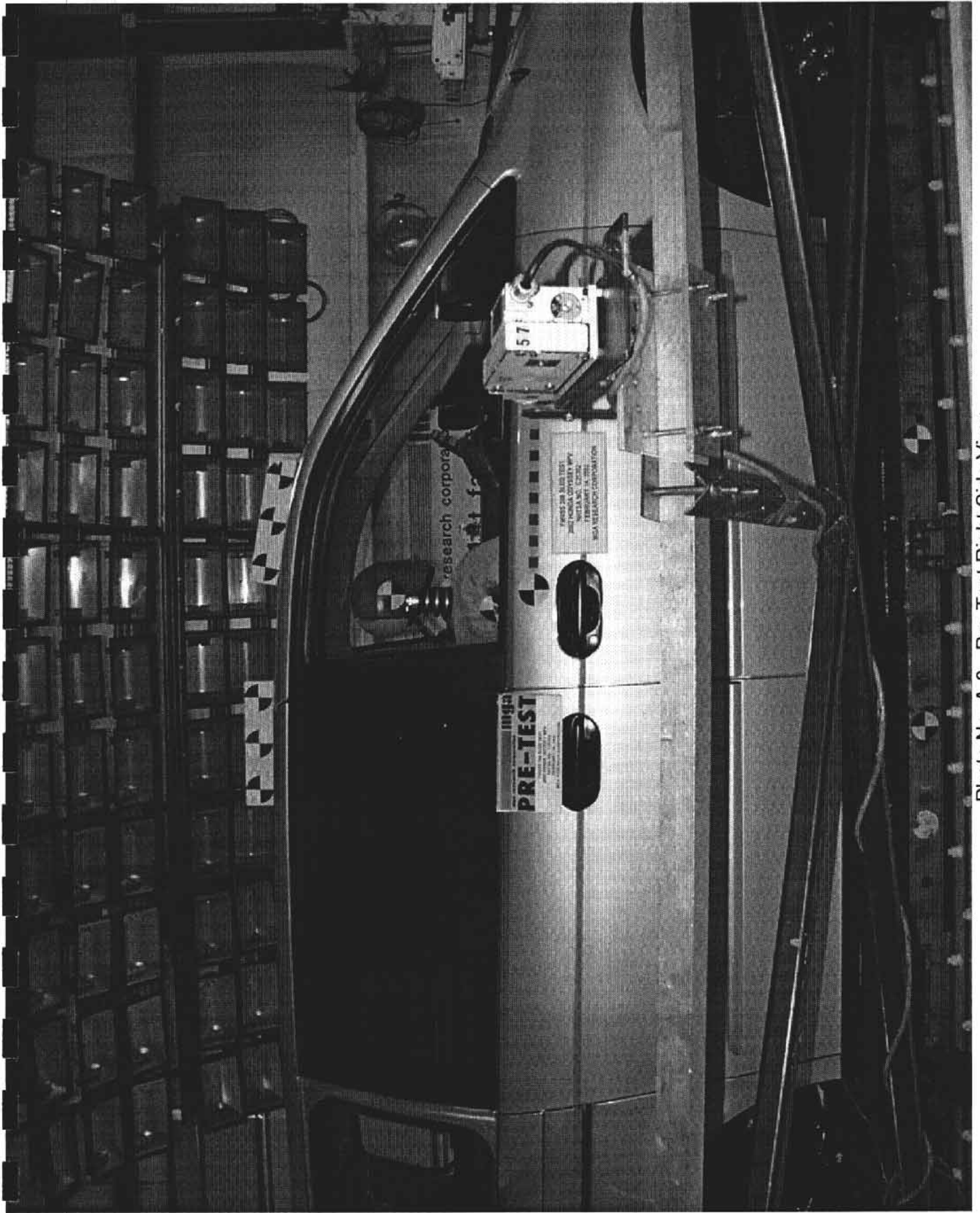


Photo No. A-3 - Pre-Test Right Side View



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



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

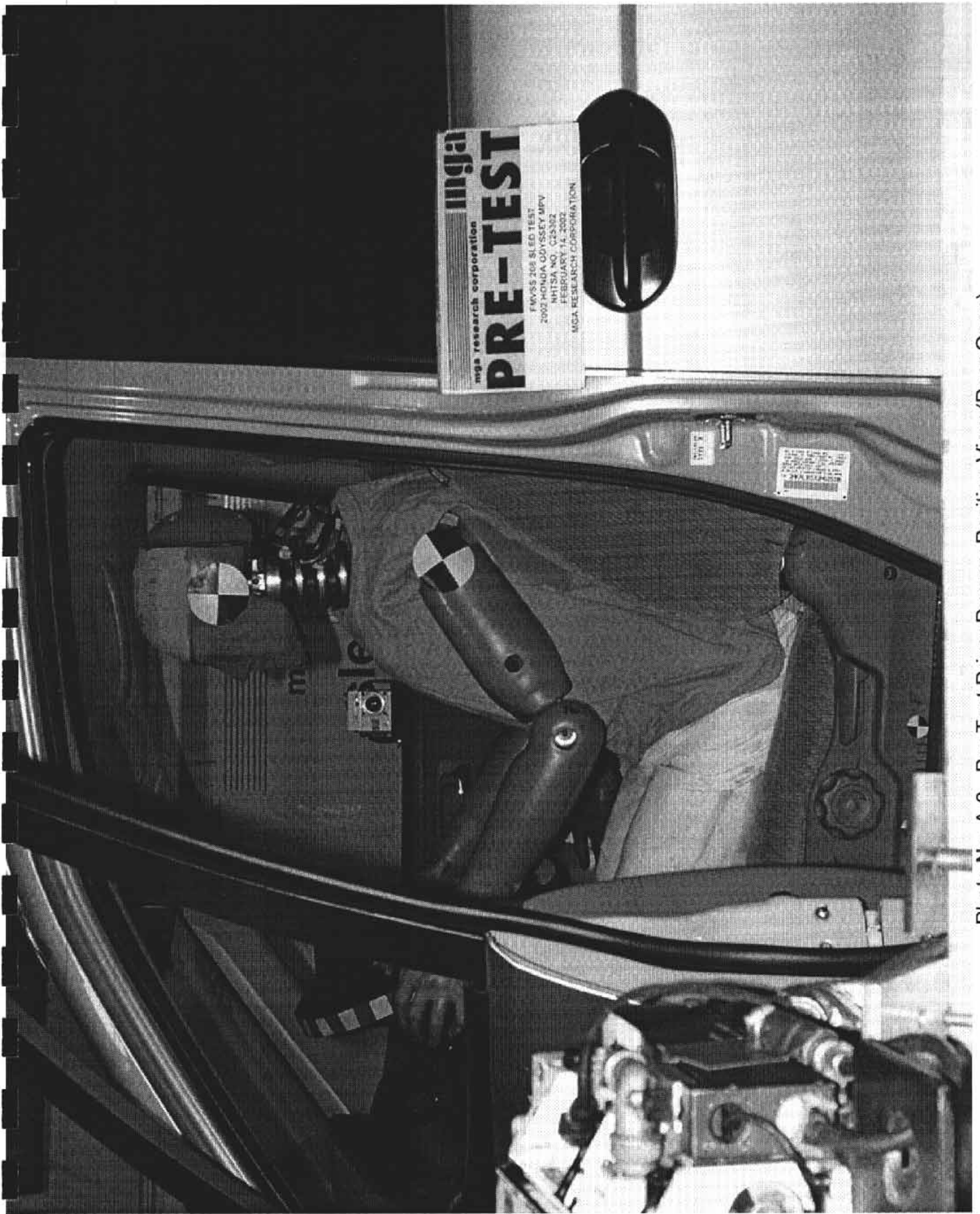


Photo No. A-6 - Pre-Test Driver Dummy Position View (Door Open)



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

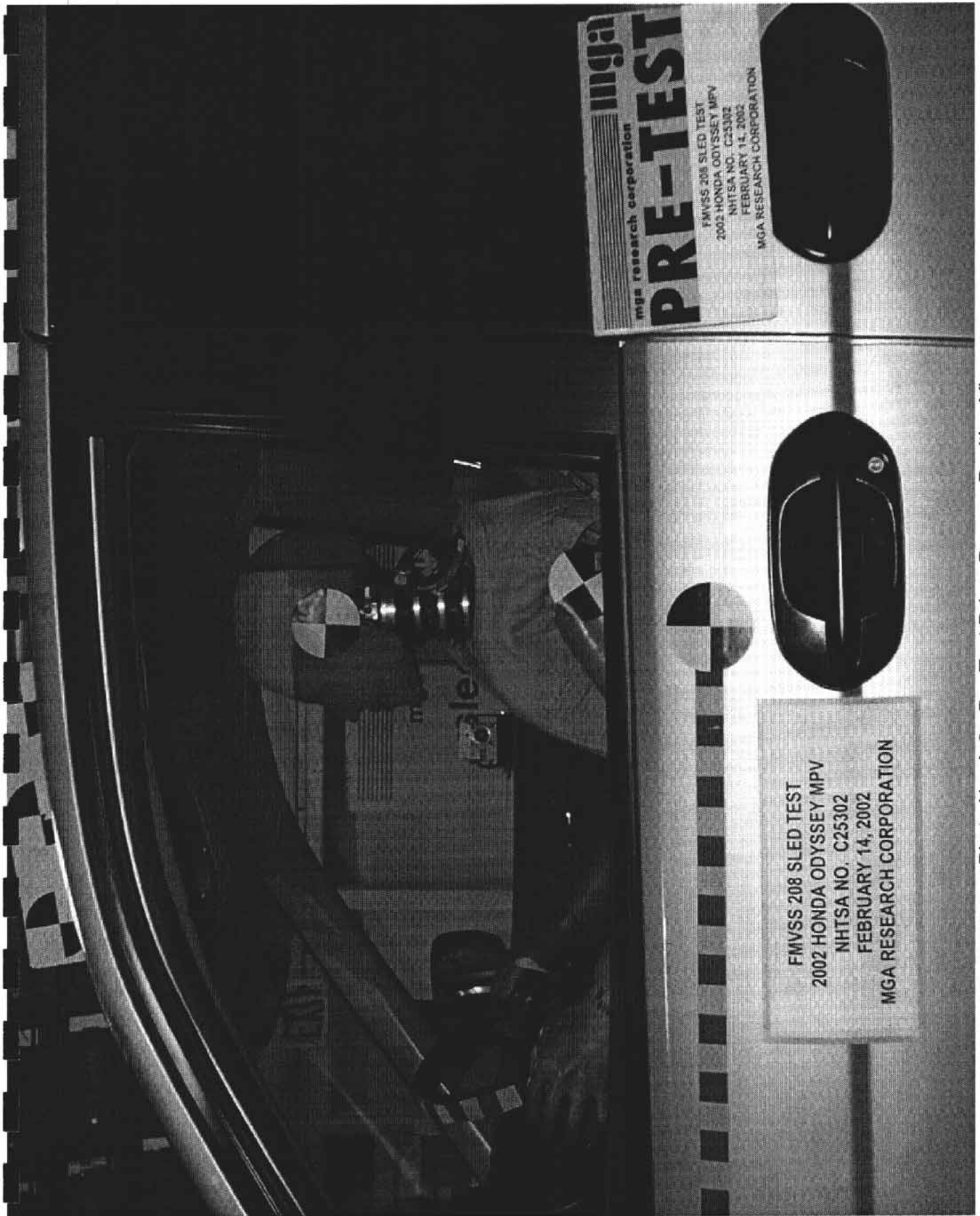


Photo No. A-8 - Pre-Test Driver Dummy Position View

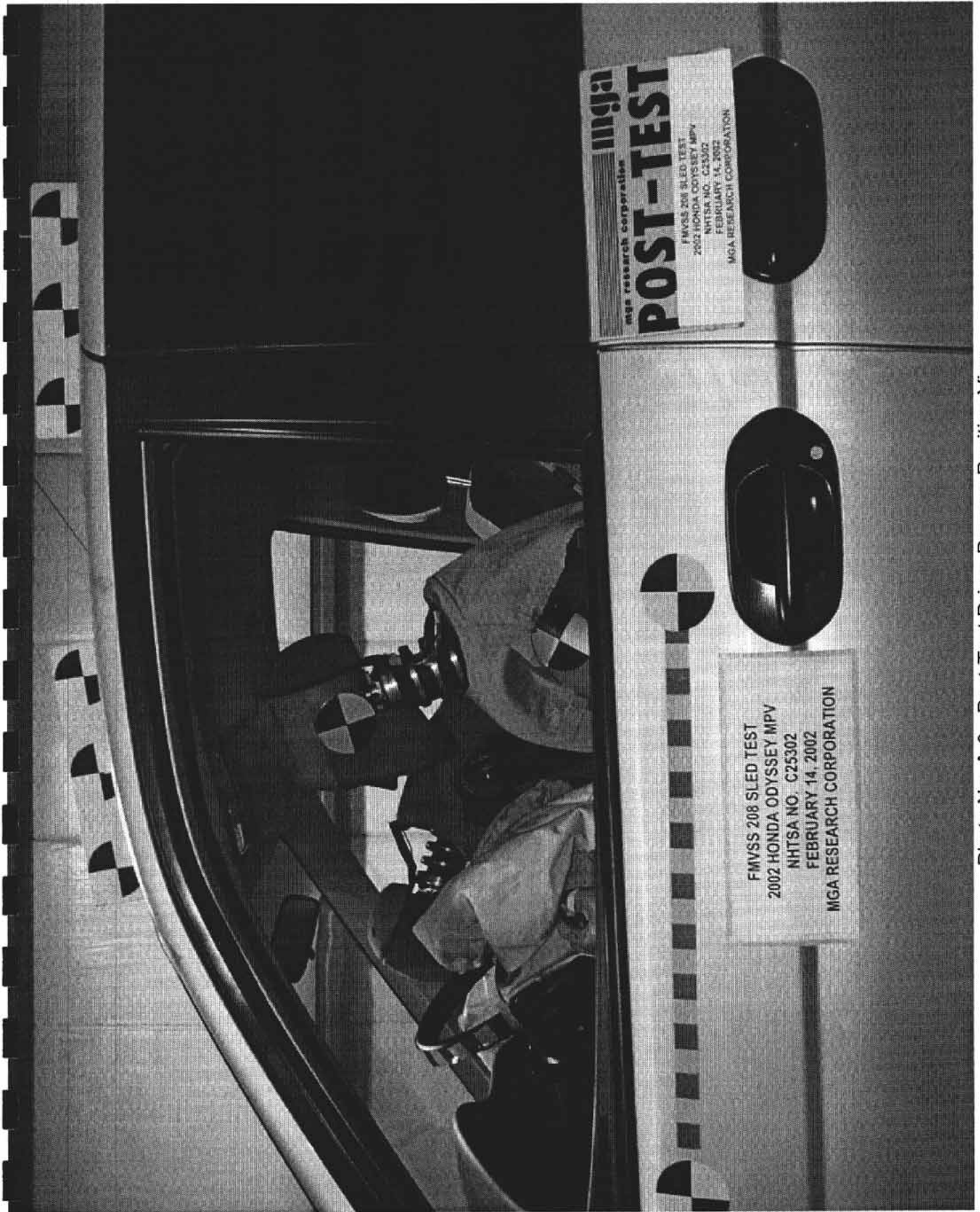


Photo No. A-9 - Post-Test Driver Dummy Position View



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

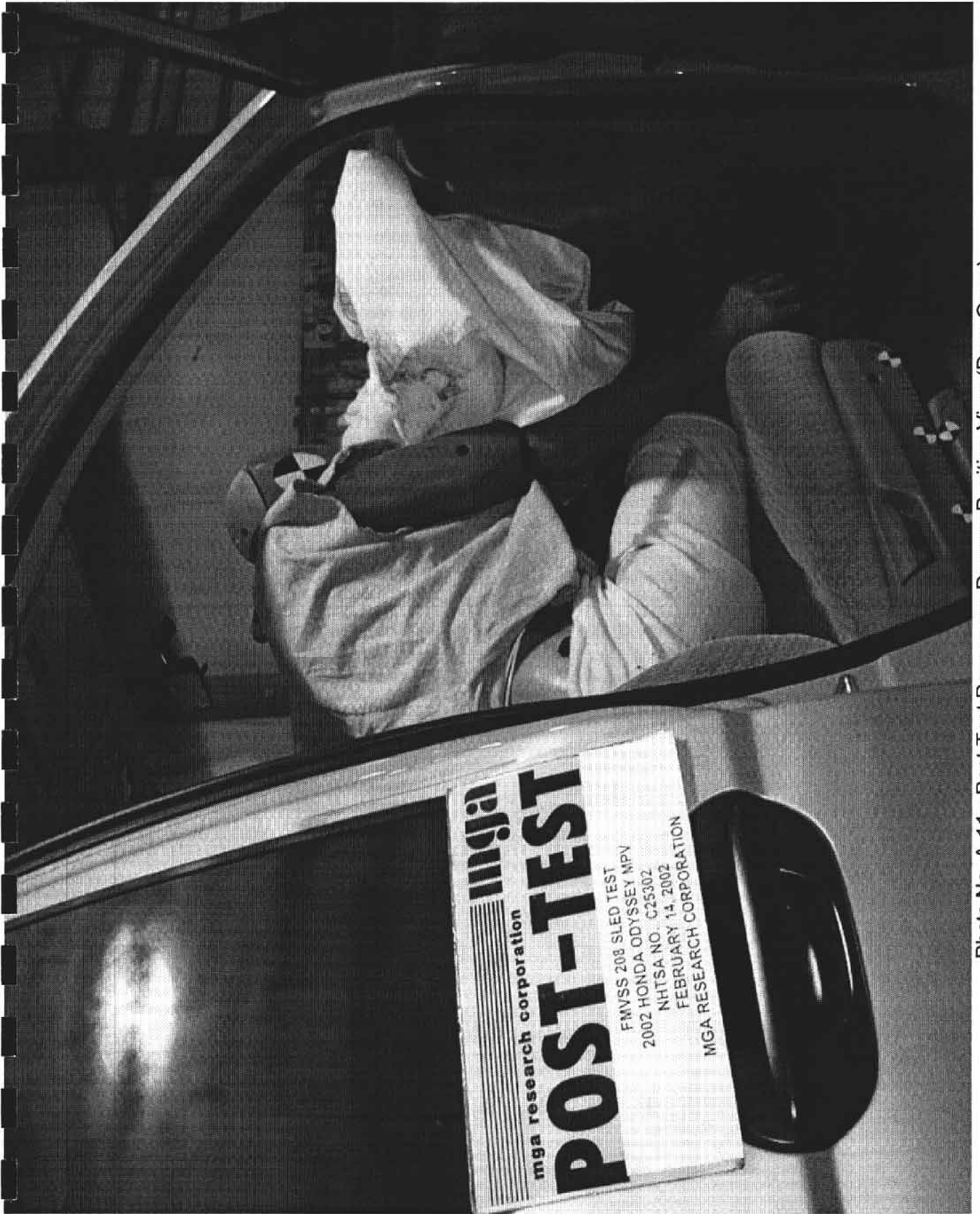


Photo No. A-11 - Post-Test Passenger Dummy Position View (Door Open)

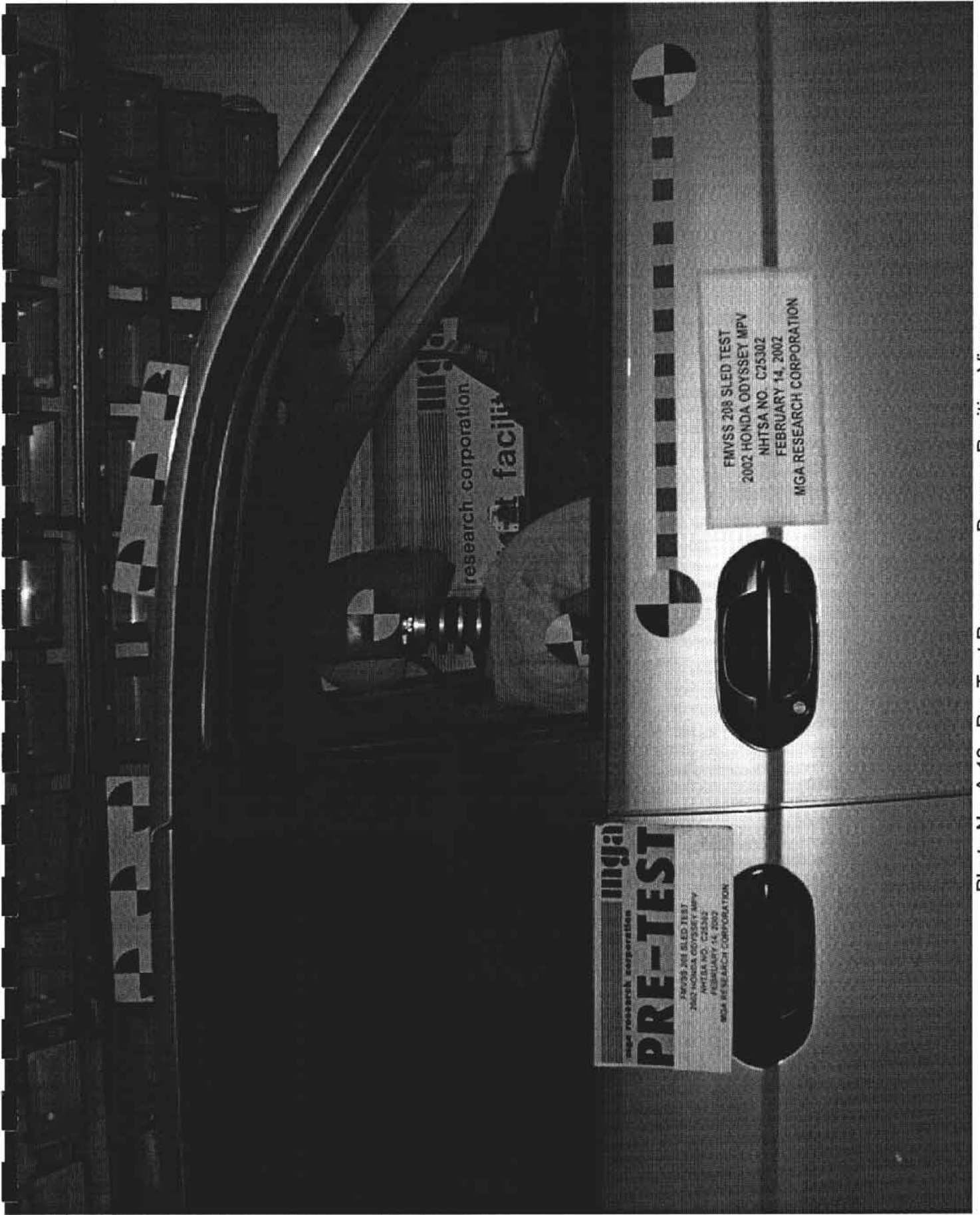
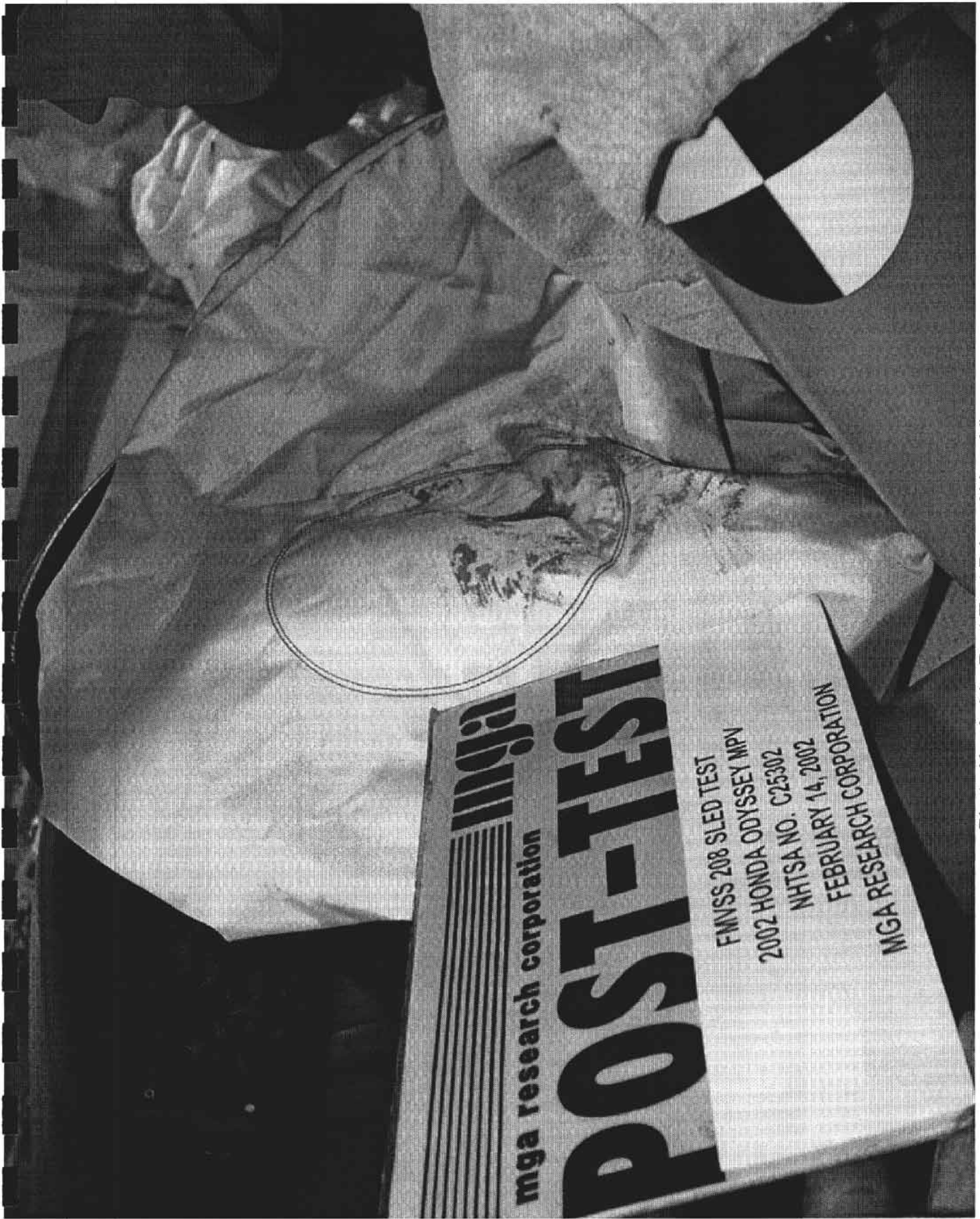


Photo No. A-12 - Pre-Test Passenger Dummy Position View



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



mga
mga research corporation

POST-TEST

FMVSS 208 SLED TEST
2002 HONDA ODYSSEY MPV
NHTSA NO. C25302
FEBRUARY 14, 2002
MGA RESEARCH CORPORATION

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

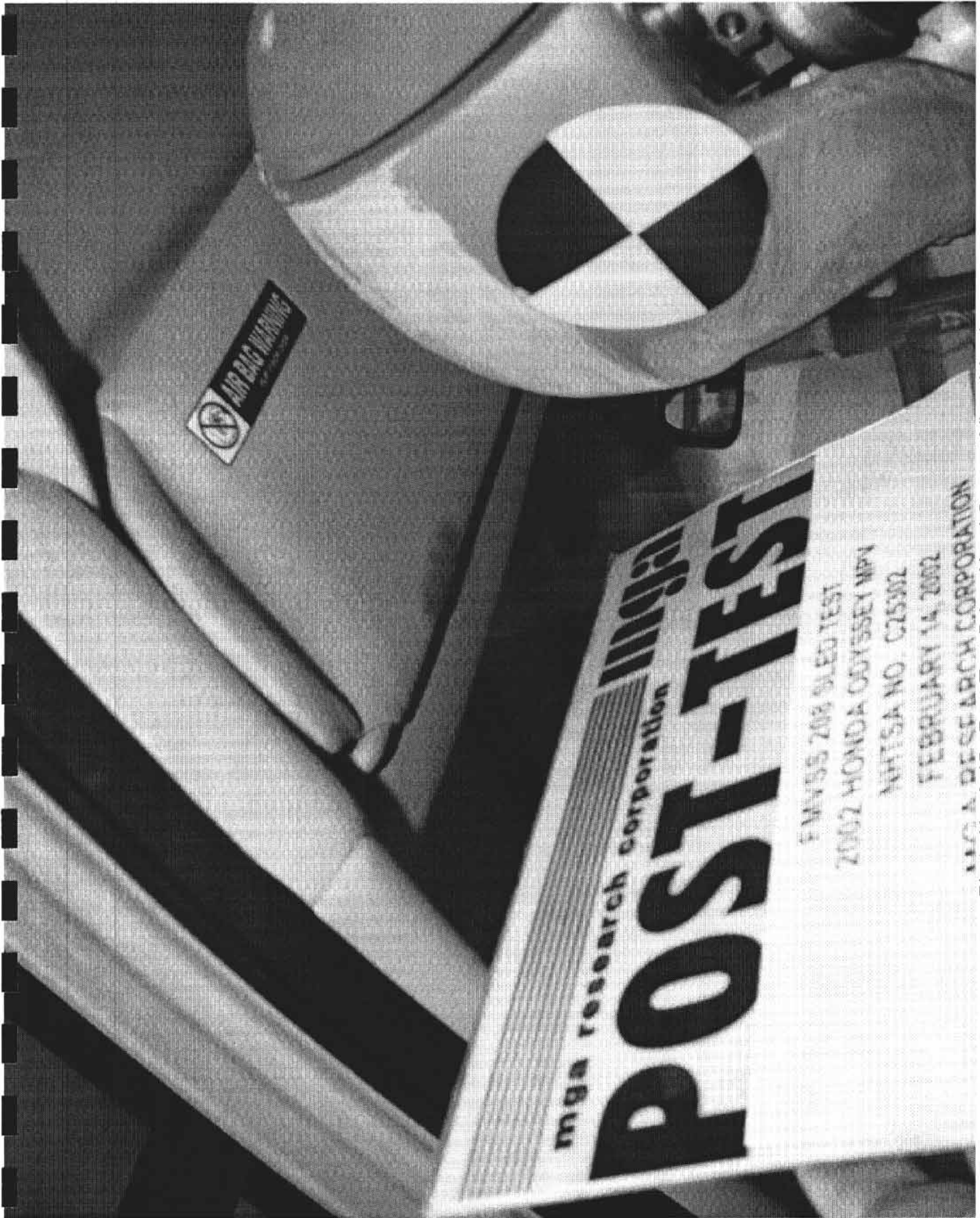


Photo No. A-15 - Post-Test Driver Head Contact View (visor)

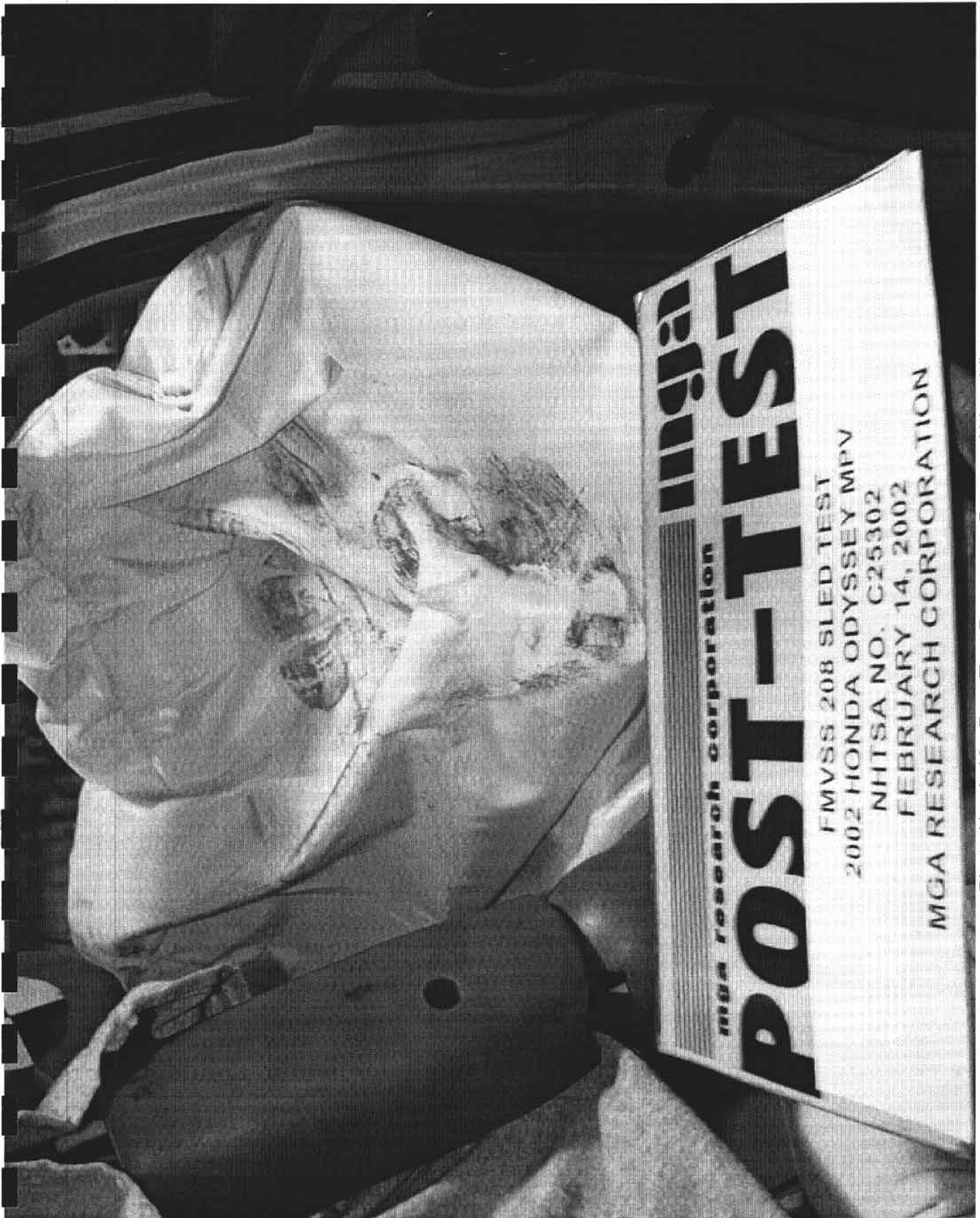


Photo No. A-16 - Post-Test Passenger Dummy Airbag View

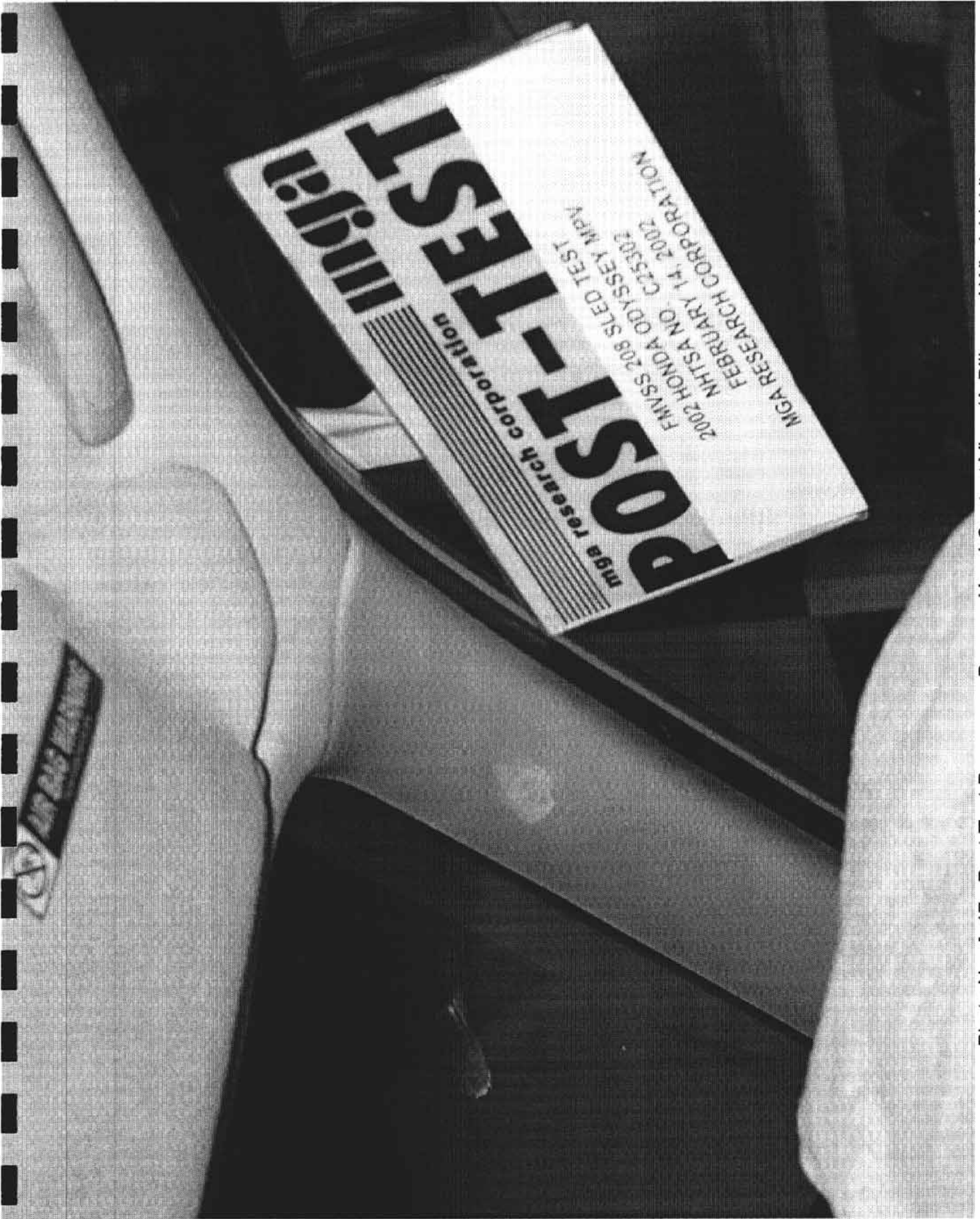


Photo No. A-17 - Post-Test Passenger Dummy Head Contact View (A-Pillar and Windshield)





Photo No. A-19 - Post-Test Driver Knee Bolster View



Photo No. A-20 - Pre-Test Passenger Knee Bolster View



Photo No. A-21 - Post-Test Passenger Knee Bolster View

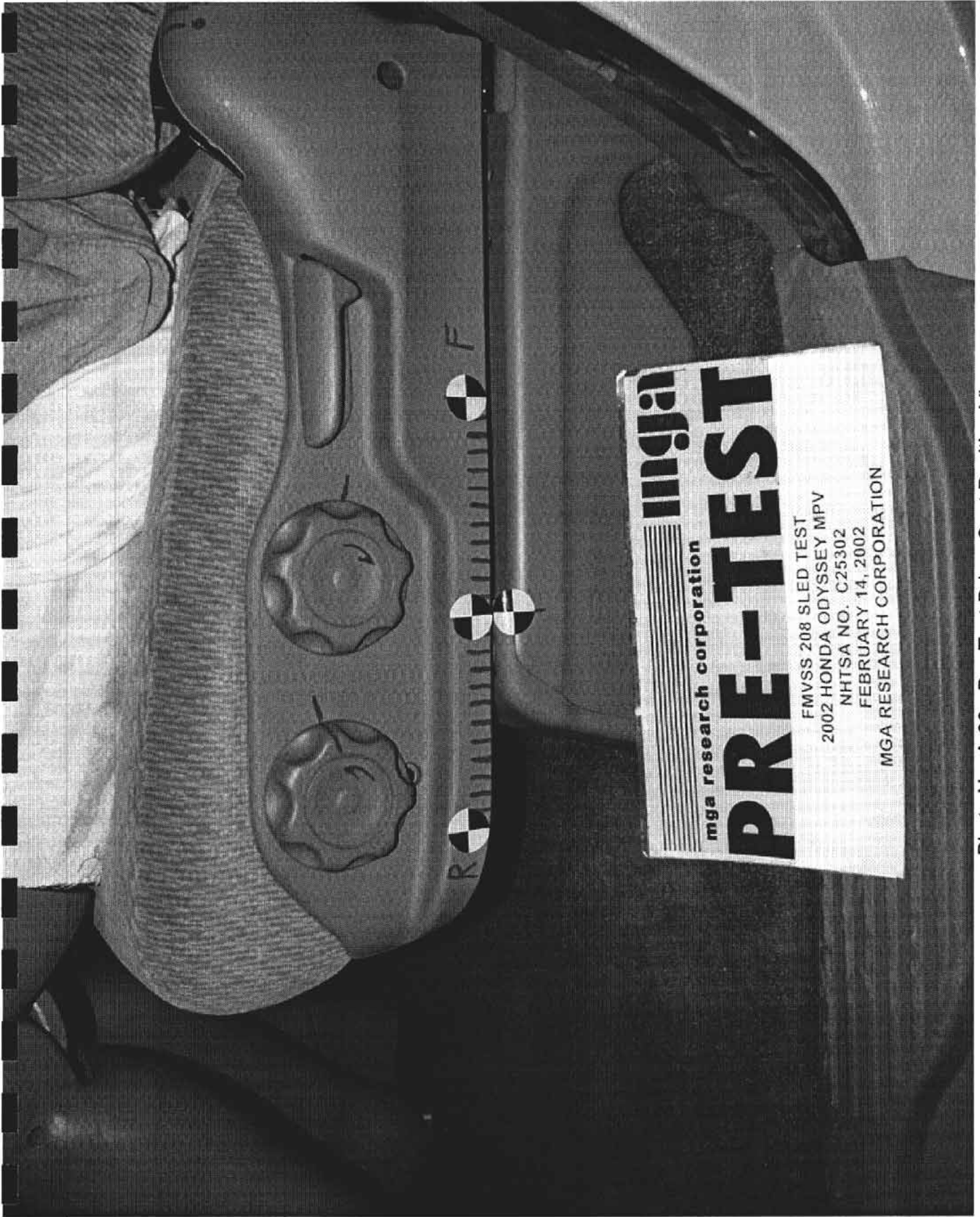


Photo No. A-22 - Pre-Test Driver Seat Position View

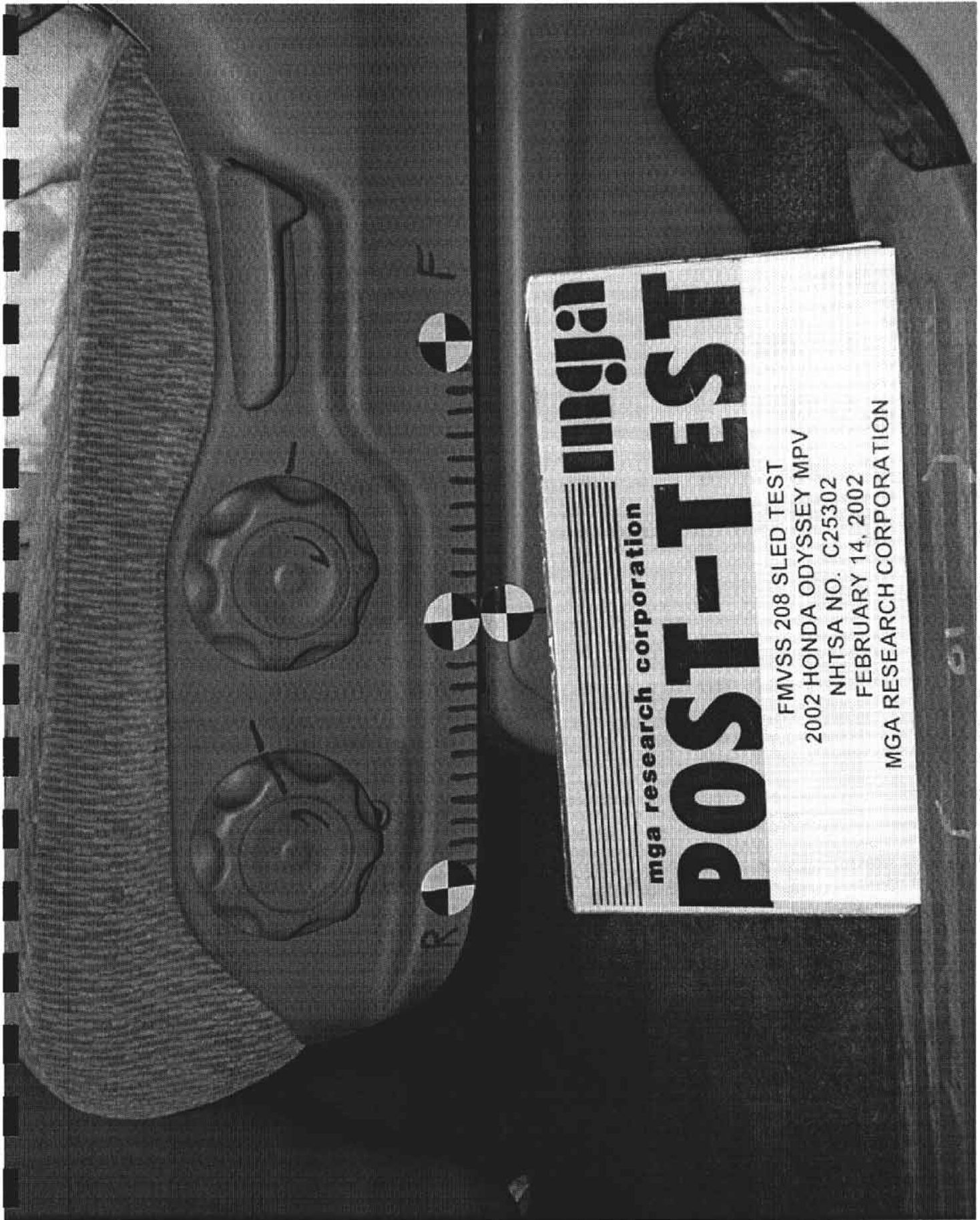


Photo No. A-23 - Post-Test Driver Seat Position View

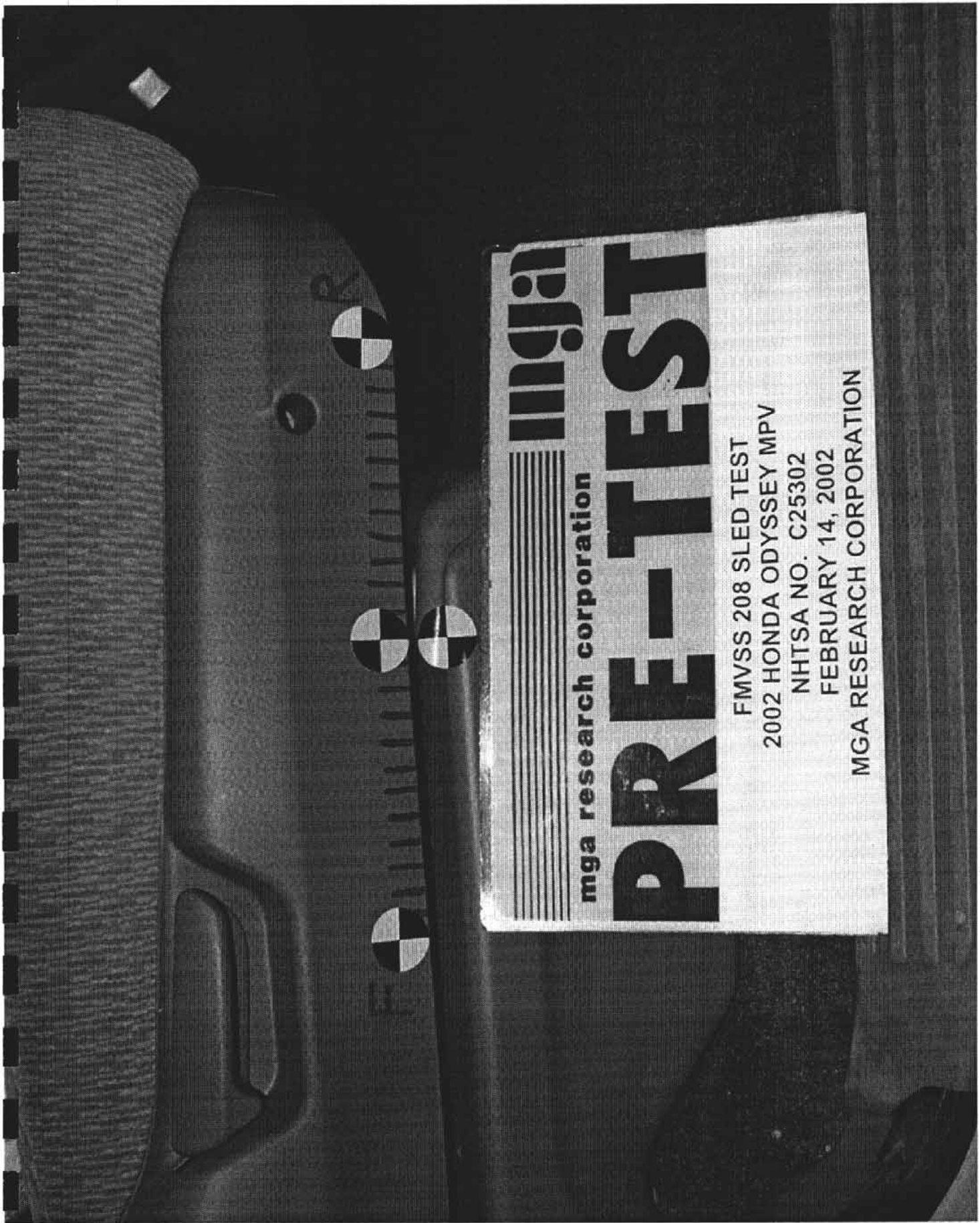


Photo No. A-24 - Pre-Test Passenger Seat Position View

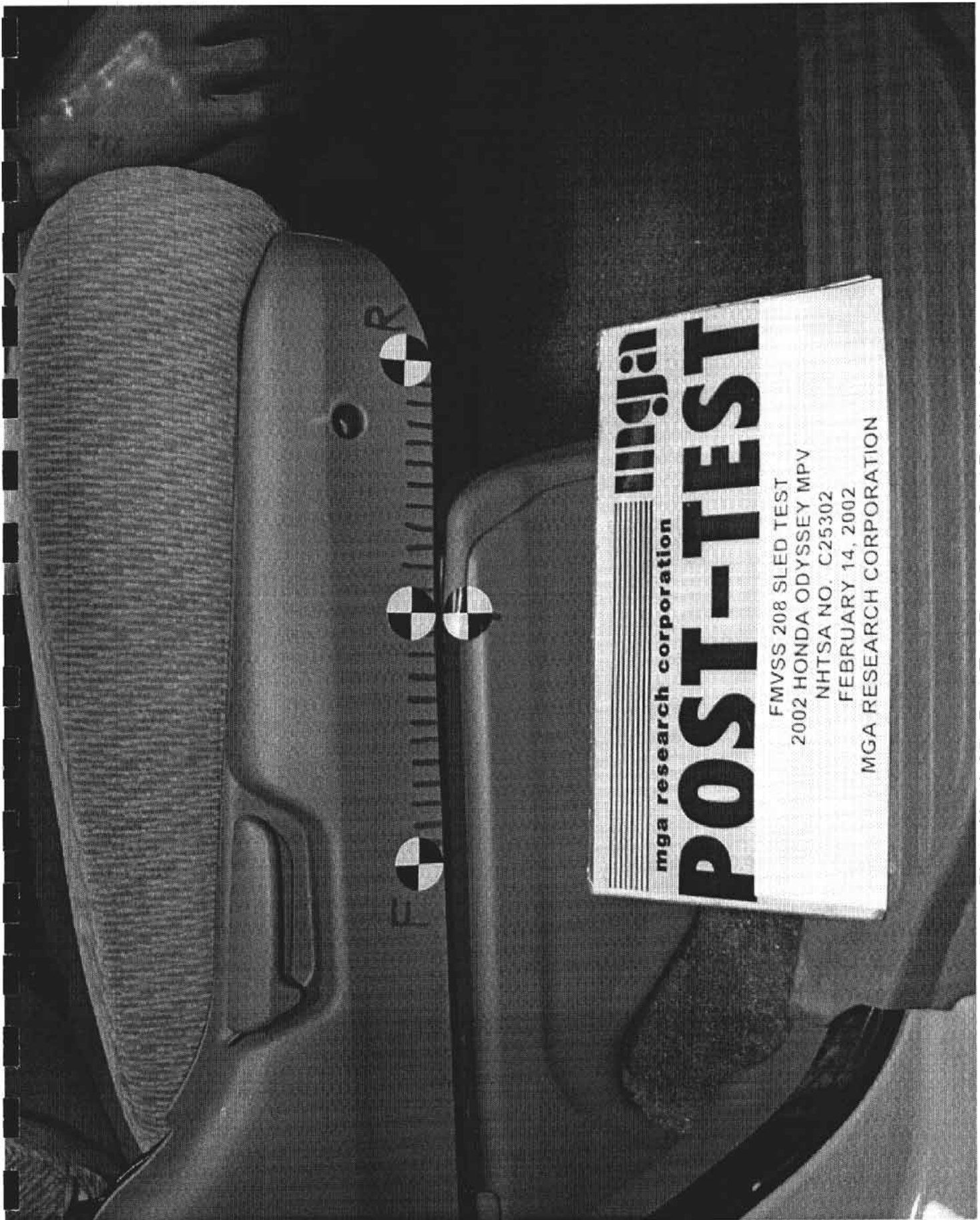


Photo No. A-25 - Post-Test Passenger Seat Position View

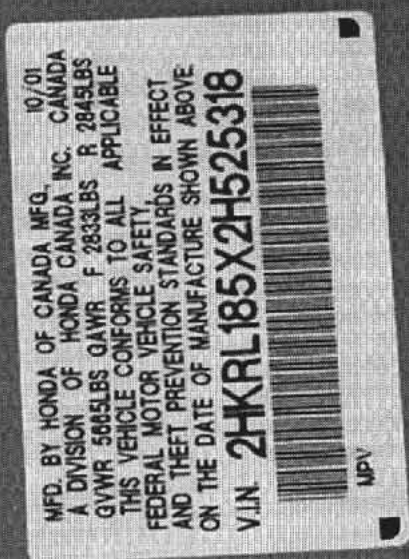


Photo No. A-26 - Vehicle Certification Label

**TIRE
INFORMATION**

SOX-A020

GVWR	5665lbs	
GAWR	FRONT	REAR
	2833lbs	2845lbs
TIRE SIZE	225/60R16 98T	
RIM SIZE	16x6 1/2 JJ	
COLD TIRE INFLATION PRESSURE	250kPa, 36psi	
	UP TO VEHICLE CAPACITY WEIGHT	
CONTRACT TIRE SIZE	T135/80D16 101M	
INFLATION PRESSURE	420kPa, 60psi	
●SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION.		

SIDE AIRBAG (AB)

- This car is equipped with side airbags in the driver's and passenger's seat.
- Do not lean against the door.
- See owner's manual for more information.

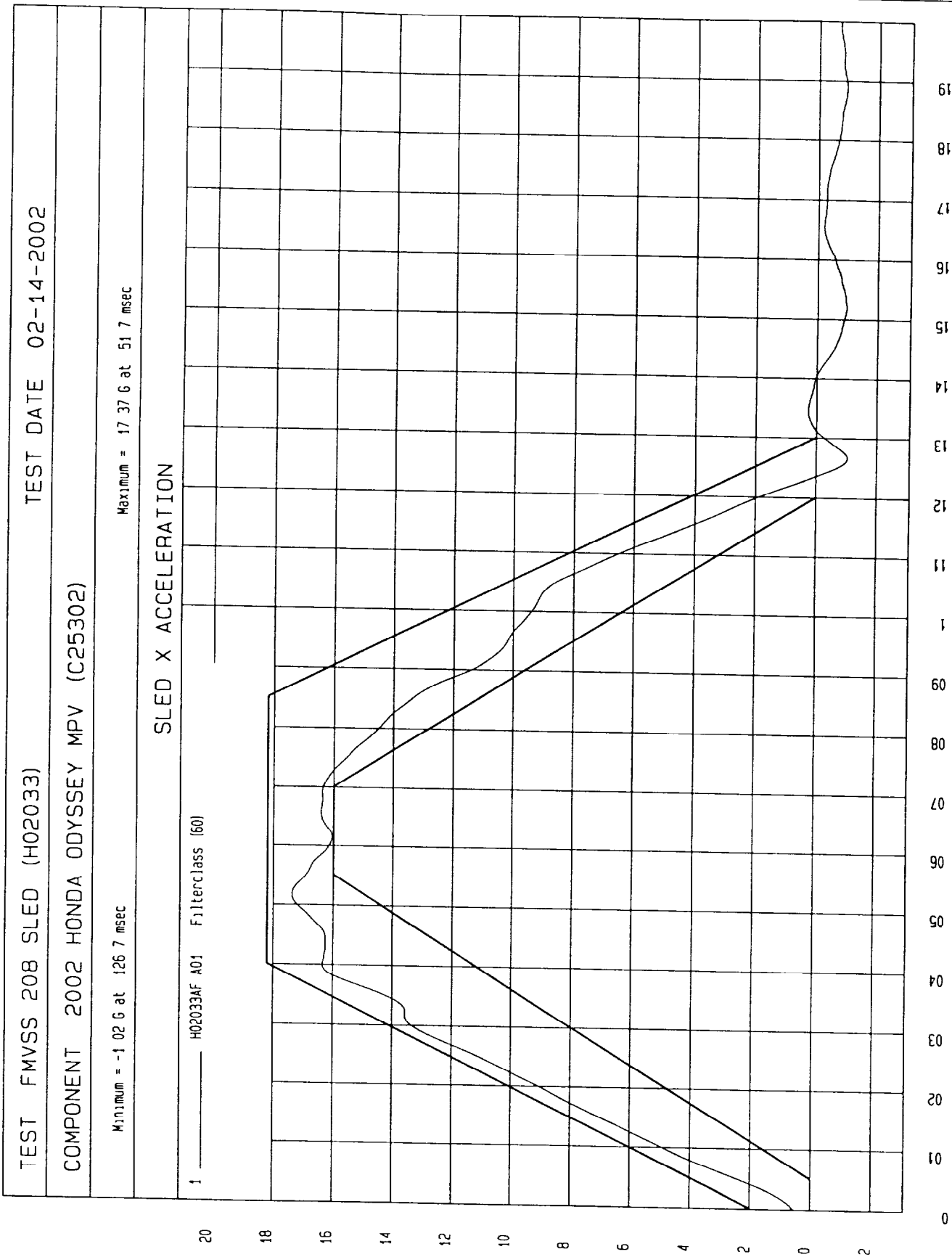
APPENDIX B
DATA PLOTS

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Figure B-7 - Right Rear Seat Crossmember X Acceleration vs Time	B-7
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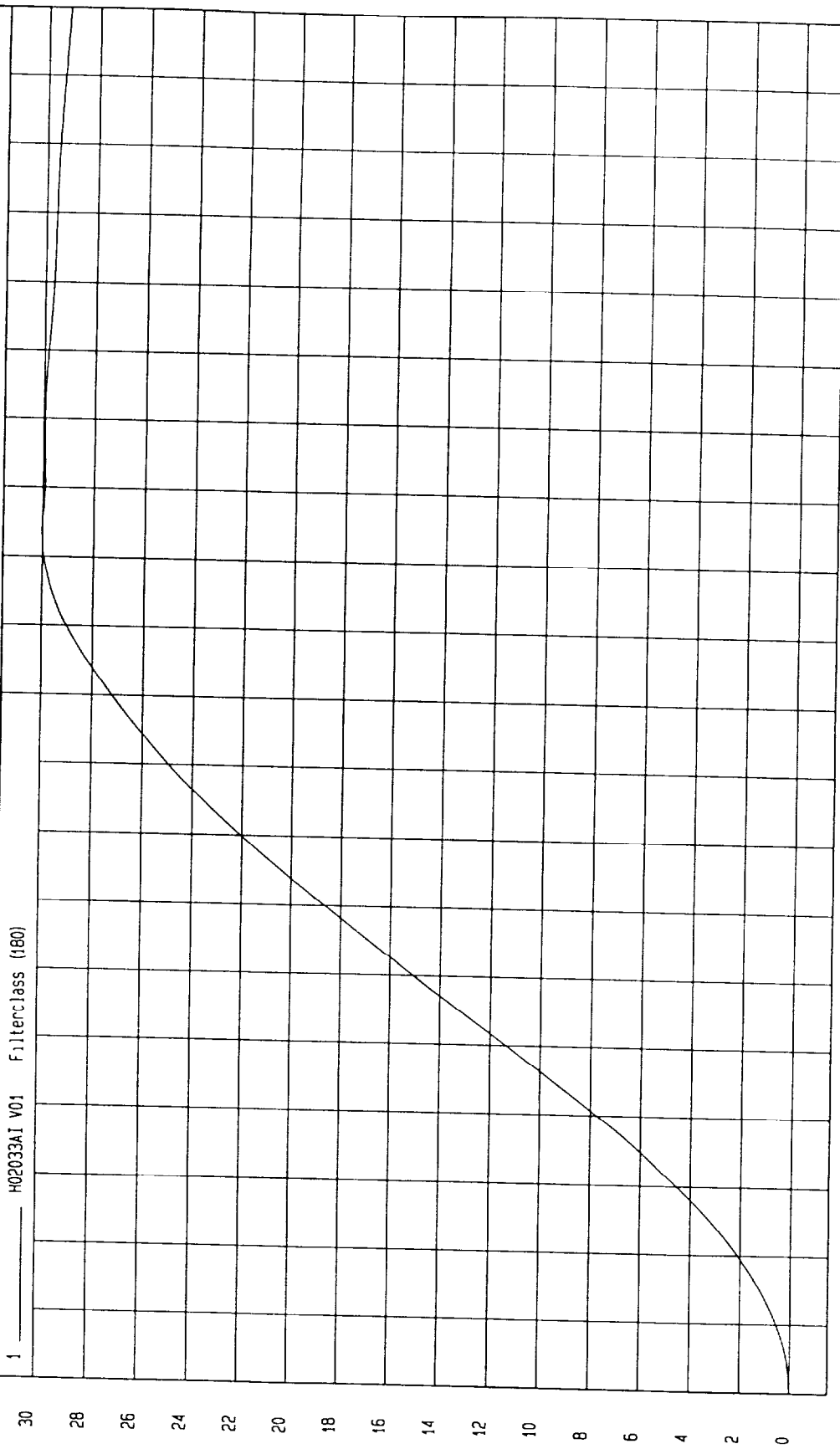
TABLE OF DATA PLOTS (Cont.)

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Figure B-33 - Passenger Neck Force Y vs Time	B-33
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Figure B-43 - Passenger Chest Compression vs Time	B-43
Figure B-44 - Passenger Left Femur Force vs Time	B-44
Figure B-45 - Passenger Right Femur Force vs Time	B-45



TIME Seconds

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



SLED X VELOCITY

1 H02033AI V01 Filterclass (180)

Maximum = 30 02 MPH at 124 msec

Minimum 0 MPH at 0 msec

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

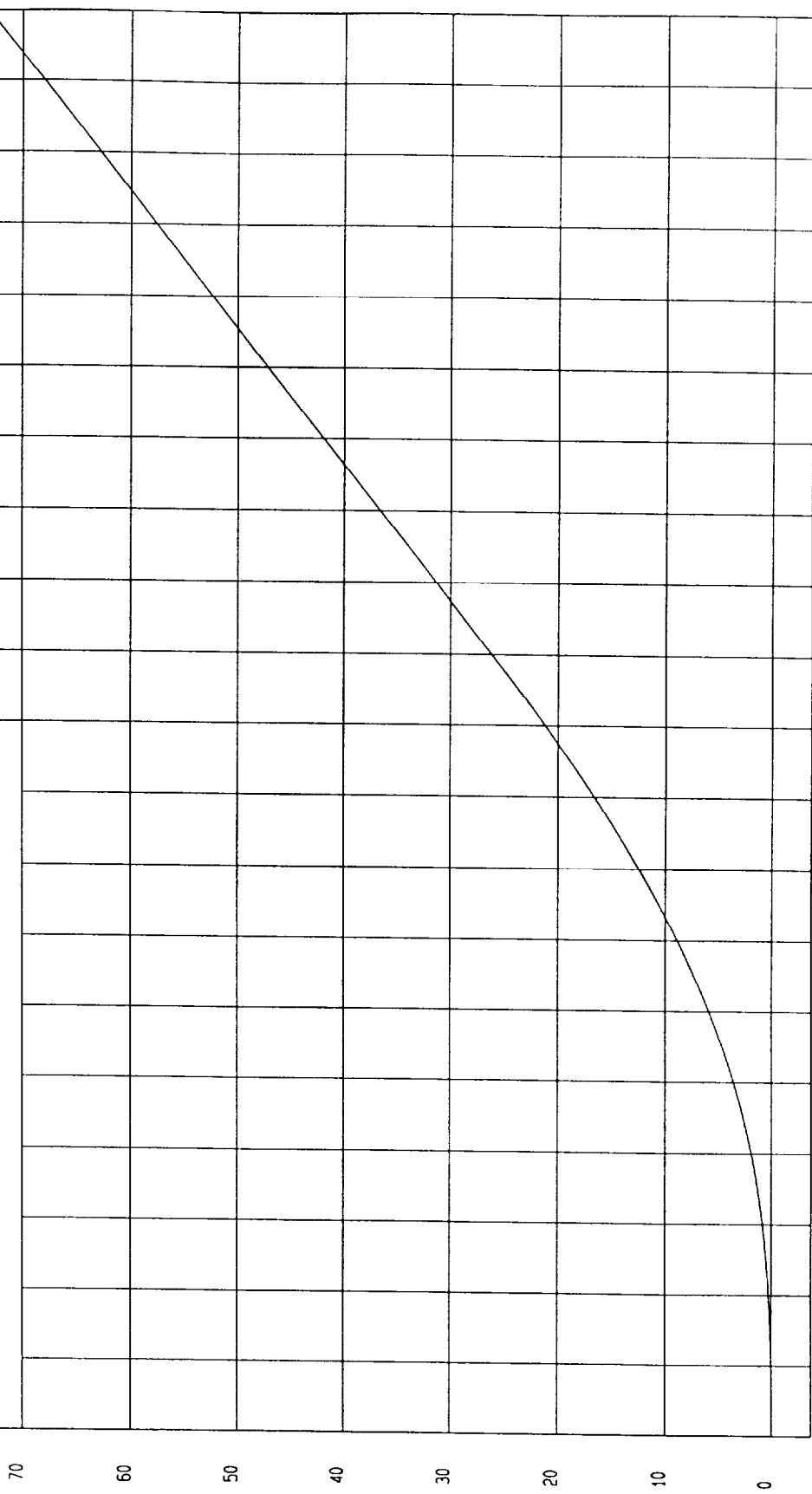
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = 0 IN at 0 msec

Maximum = 73.1 IN at 200 msec

SLED X DISPLACEMENT

1 _____ H02033A1 001 Filterclass (180)



TIME Seconds

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Maximum = 34.42 V at 22 msec

Minimum = -0.7 V at 6 msec

FIRST STAGE AIRBAG VOLTAGE

36

34

32

30

28

26

24

22

20

18

16

14

12

10

8

6

4

2

0

1 H020330T 046 Filterclass (1000)

19

18

17

16

15

14

13

12

11

10

09

08

07

06

05

04

03

02

01

0

TIME (SECONDS)

MCA Research
02-14-2002 13 48

V

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

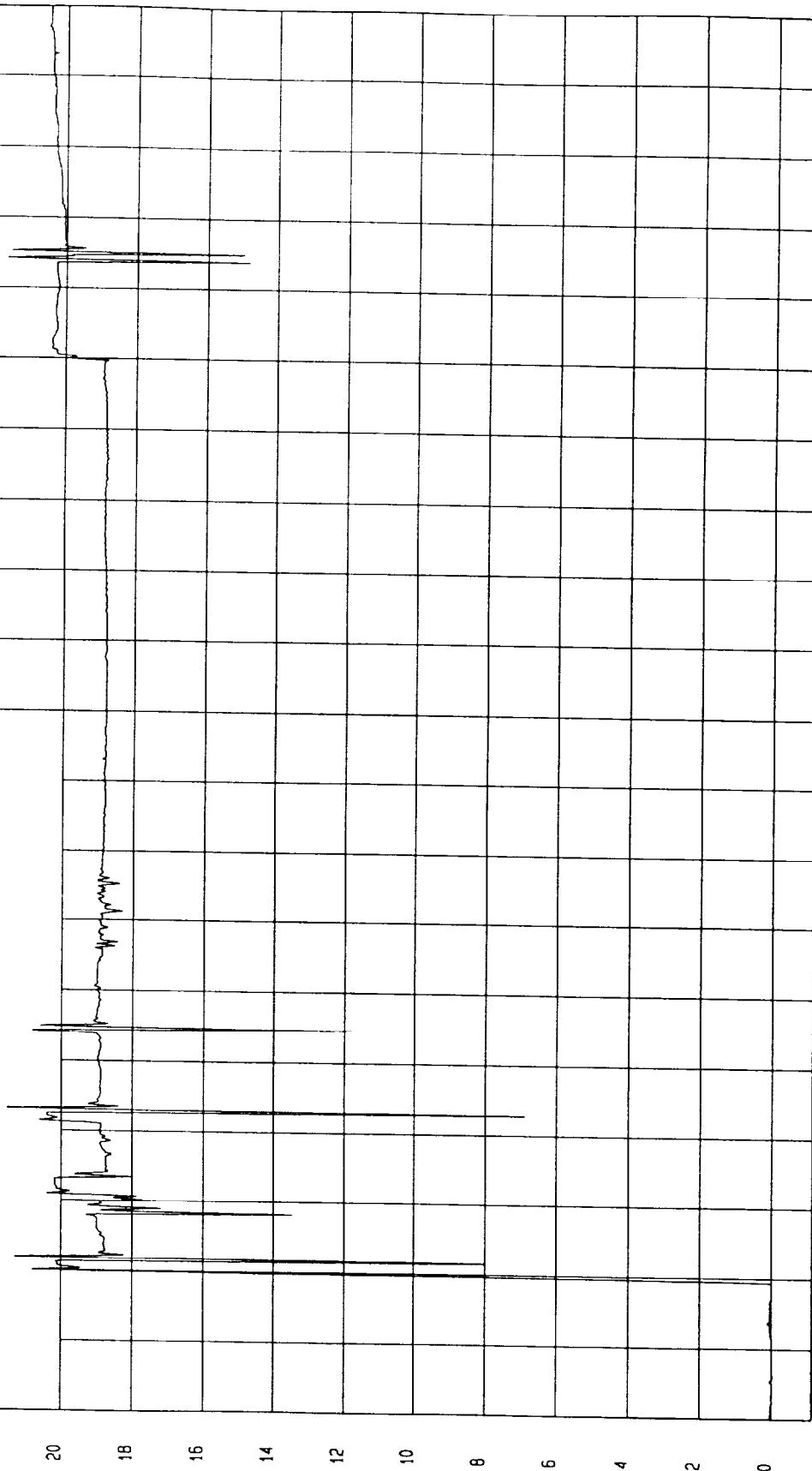
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -3.09E-02 V at 5 msec

Maximum = 21.65 V at 164 msec

SECOND STAGE AIRBAG VOLTAGE

1 H0203301 047 Filterclass (1000)



TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

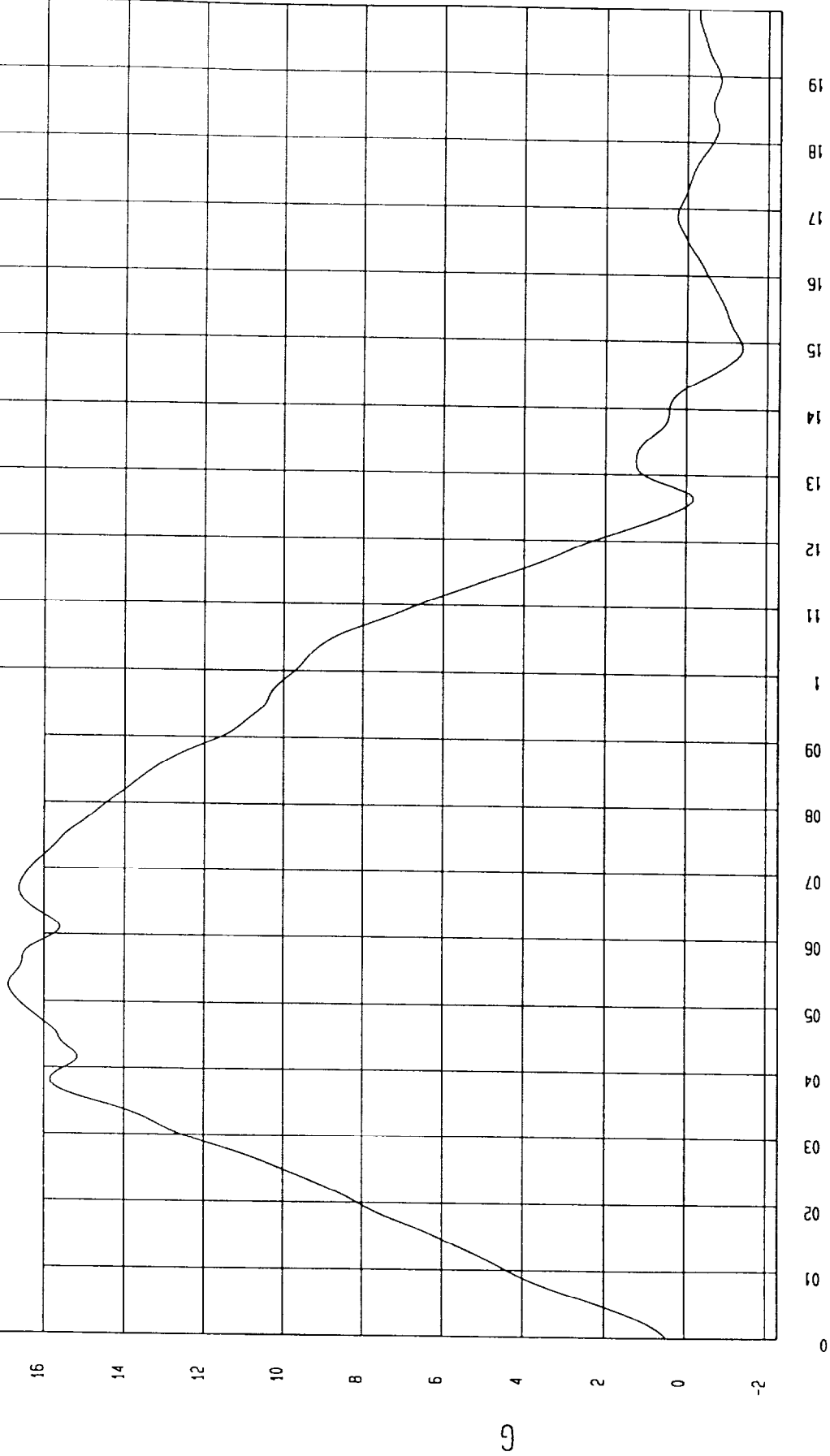
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -1.39 G at 149 msec

Maximum = 16.87 G at 52 msec

LEFT REAR SEAT CROSSMEMBER X ACCELERATION

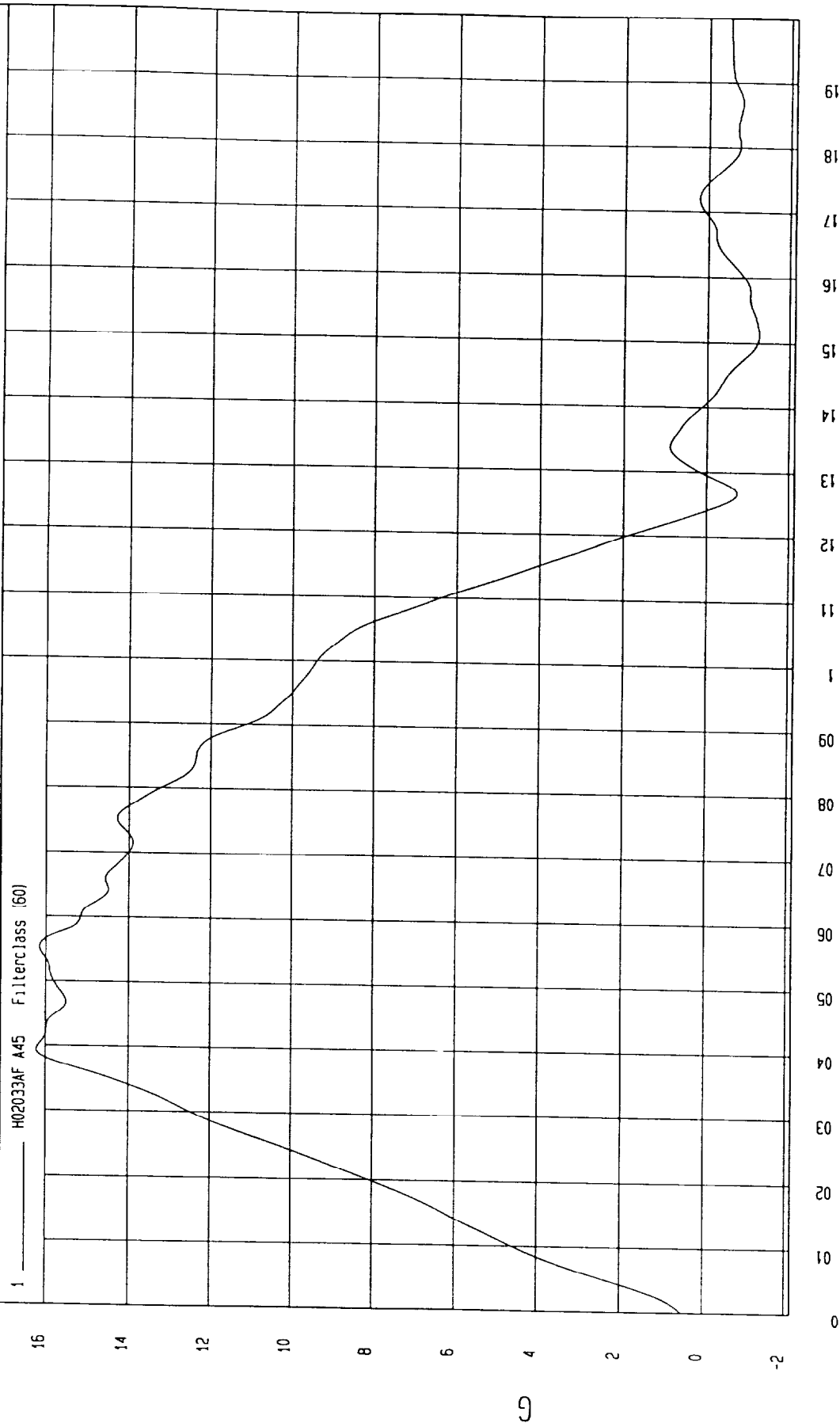
1 ——— H02033AF A44 Filter: class (60)



TIME (SECONDS)

MGA Research
02-14-2002 12 26

TIME (SECONDS)



1 — H02033AF A45 Filterclass (60)

RIGHT REAR SEAT CROSSMEMBER X ACCELERATION

Maximum = 16.22 G at 39 msec

Minimum = -1.26 G at 151 msec

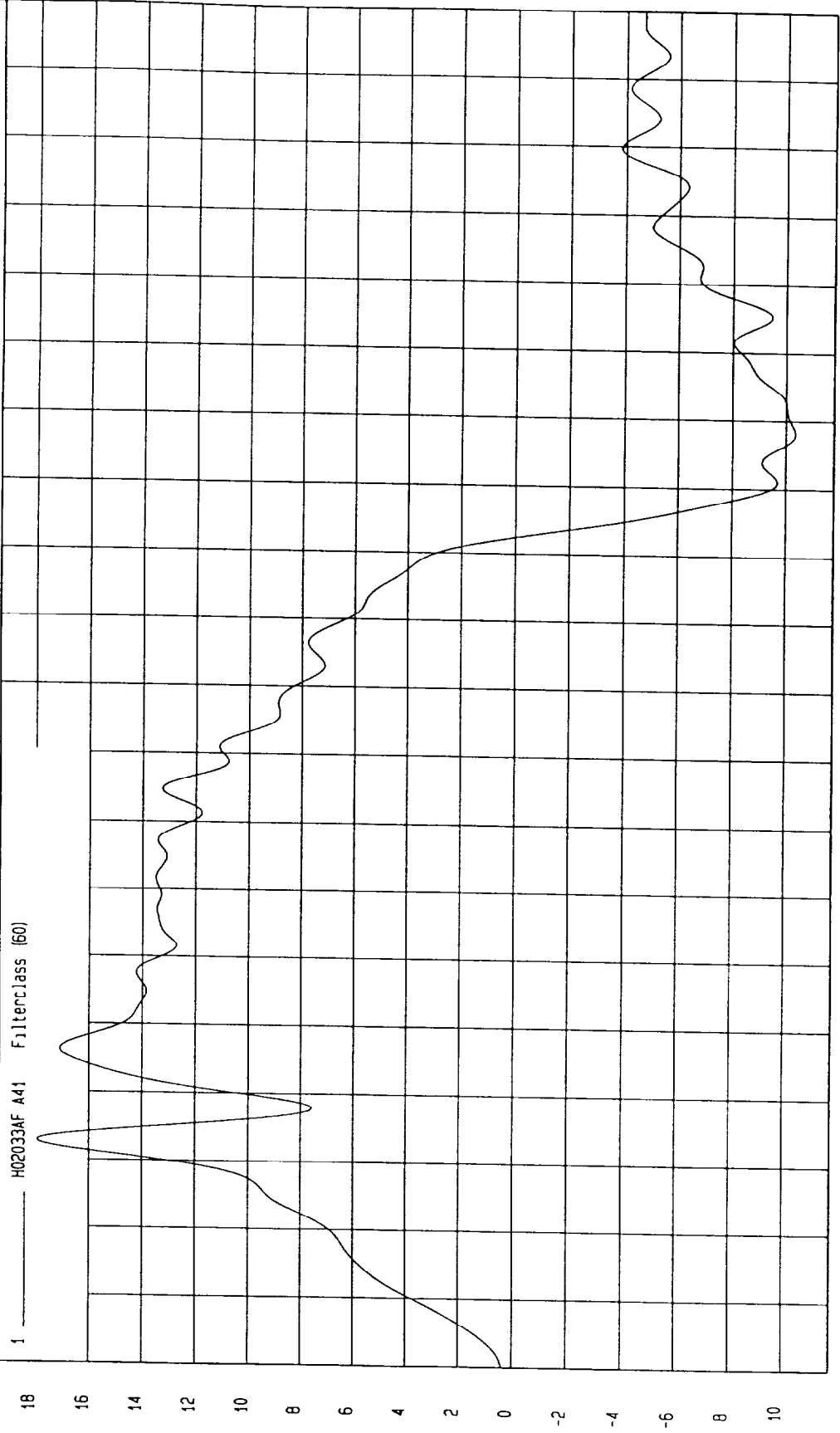
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

TIME (SECONDS)

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



TOP OF ENGINE X ACCELERATION

Maximum = 17.93 G at 0.33 msec

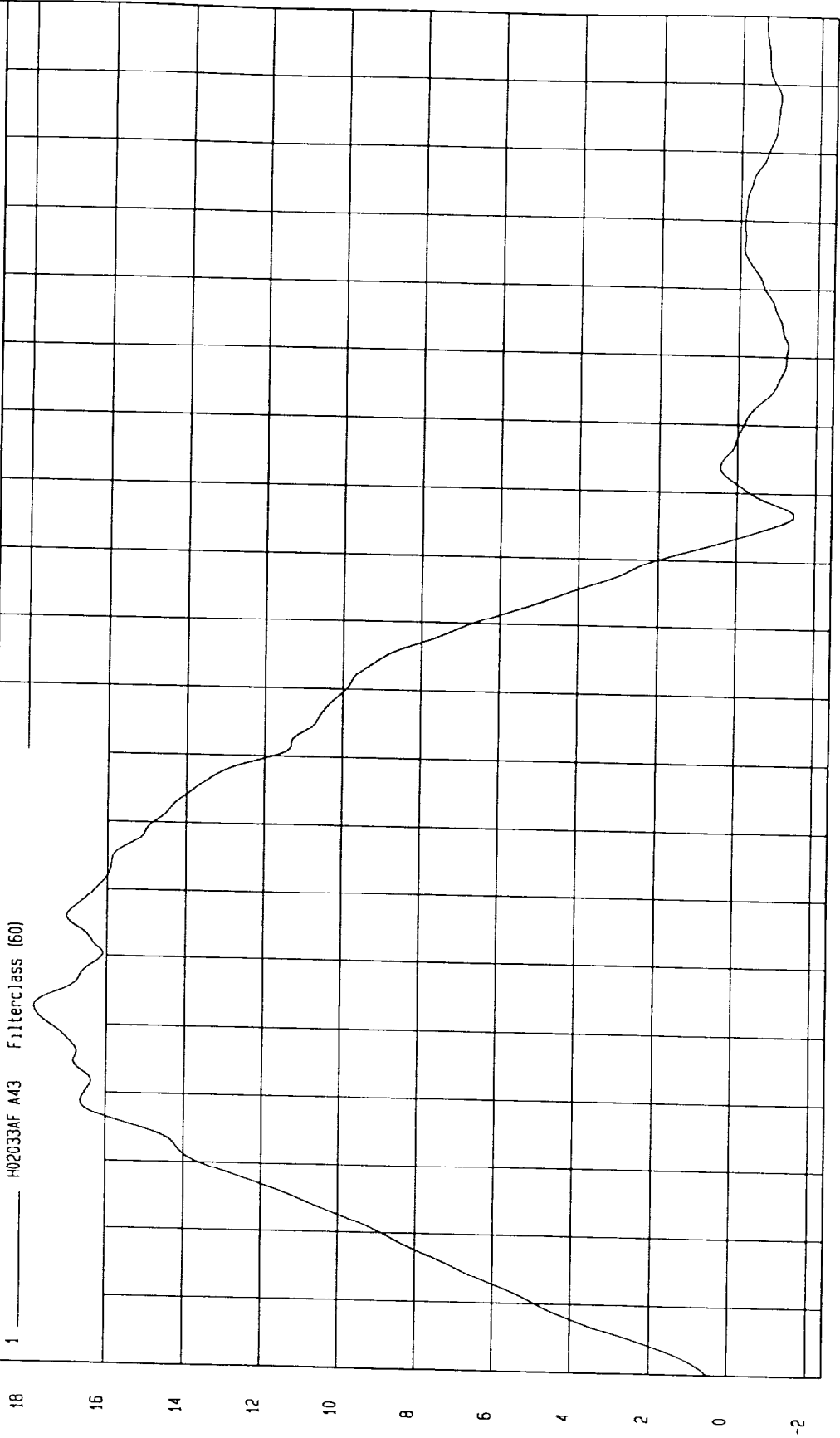
Minimum = -10.35 G at 1.38 msec

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033) TEST DATE 02-14-2002

TIME (SECONDS)

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



REAR AXLE X ACCELERATION

Maximum = 17.82 G at 52 msec

Minimum = -1.45 G at 127 msec

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033)

TEST DATE: 02-14-2002

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

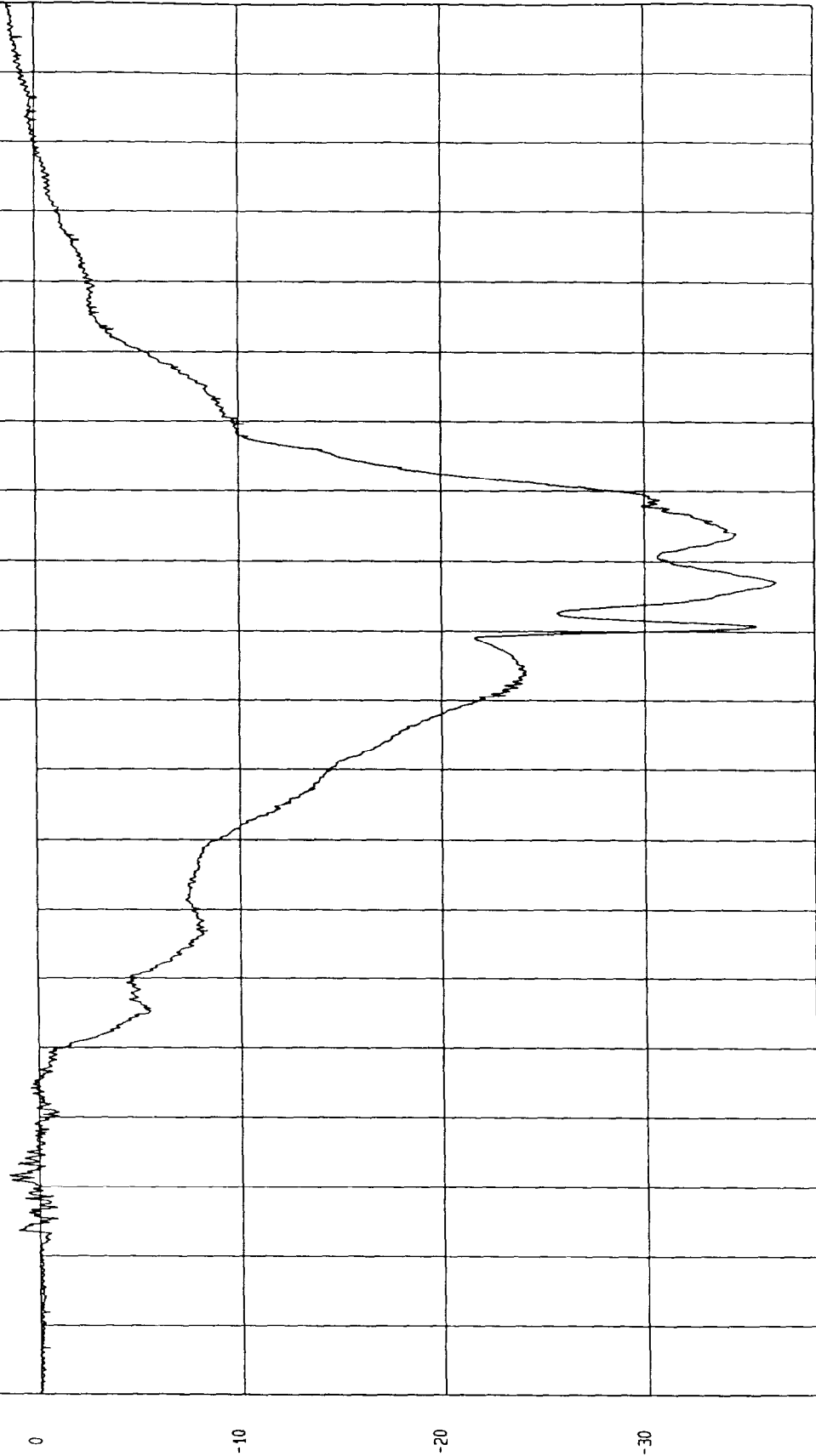
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -36.54 G at 117 msec

Maximum = 1.46 G at 32 msec

DRIVER HEAD X ACCELERATION

1 H02033AT A03 Filterclass (1000)



TIME (SECONDS)

MCA Research
02-14-2002 12:24

TEST FMVSS 208 SLED (H02033)

TEST DATE: 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -2.21 G at 26 msec

Maximum = 2.97 G at 136 msec

DRIVER HEAD Y ACCELERATION

1 ——— H02033AT A05 Filterclass (1000)

3

2

1

0

-1

-2

G

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

TIME (SECONDS)

MSA Research
02-14-2002 12 24

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -7.07 G at 111 msec

Maximum = 16.85 G at 122 msec

DRIVER HEAD Z ACCELERATION

1 ——— H02033AT A06 Filterclass (1000)

18

16

14

12

10

8

6

4

2

G

0

-2

-4

-6

-8

01

02

03

04

05

06

07

08

09

10

11

12

13

14

15

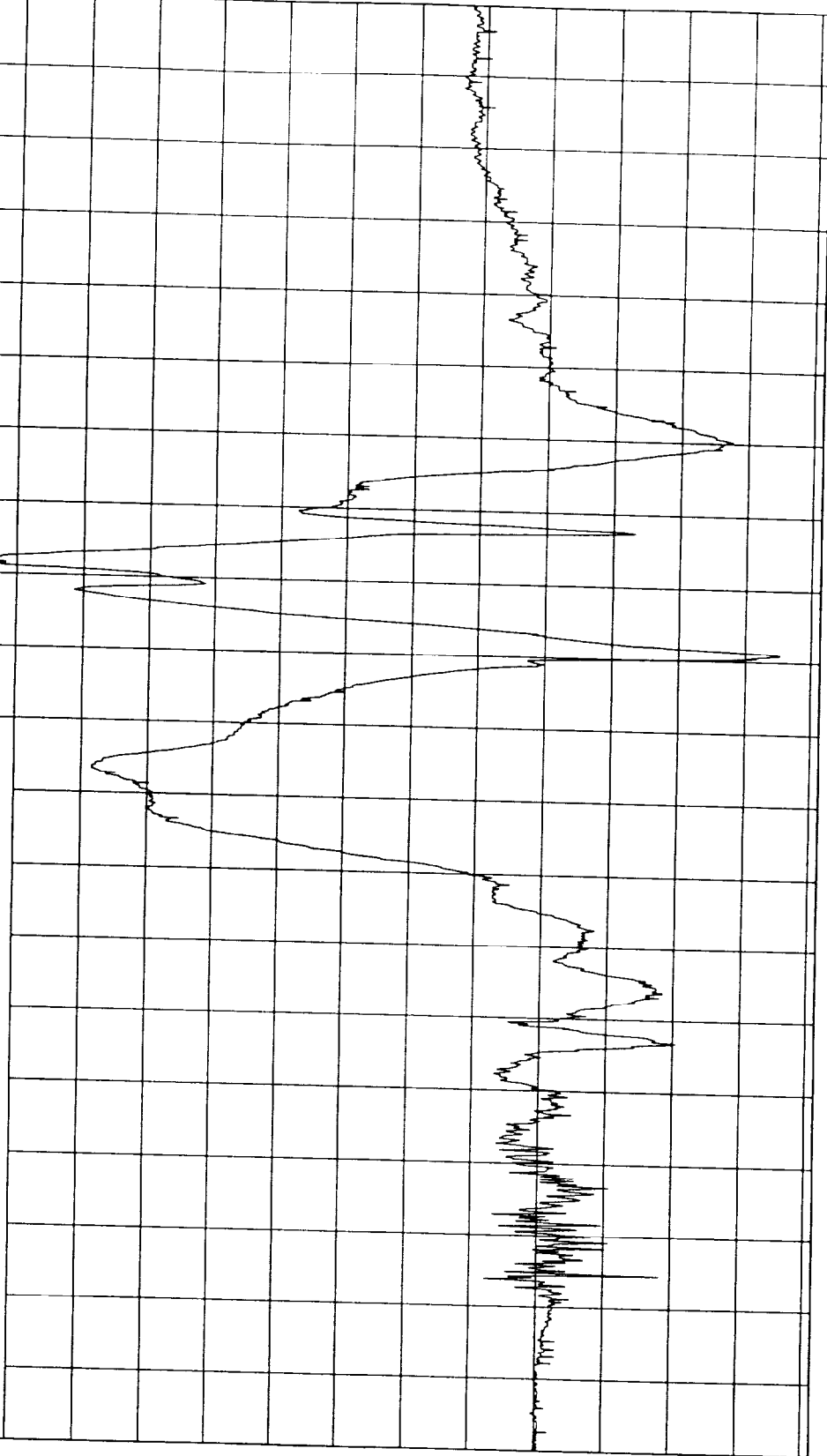
16

17

18

19

TIME (SECONDS)



TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

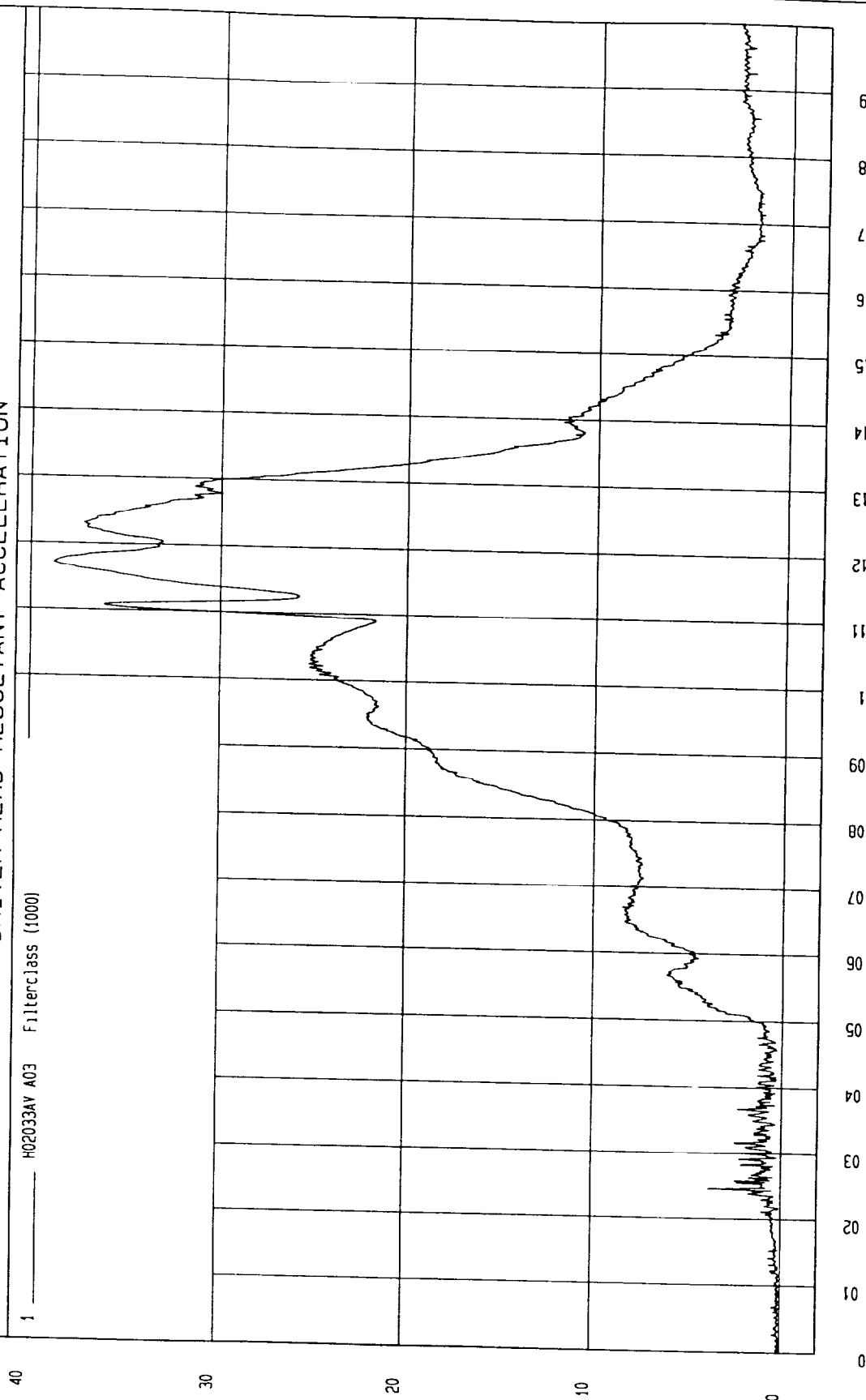
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = 4.58E-02 G at 0 msec

Maximum = 38.81 G at 117 msec

DRIVER HEAD RESULTANT ACCELERATION

1 H02033AV A03 Filterclass (1000)

MGA Research
02-14-2002 12:24

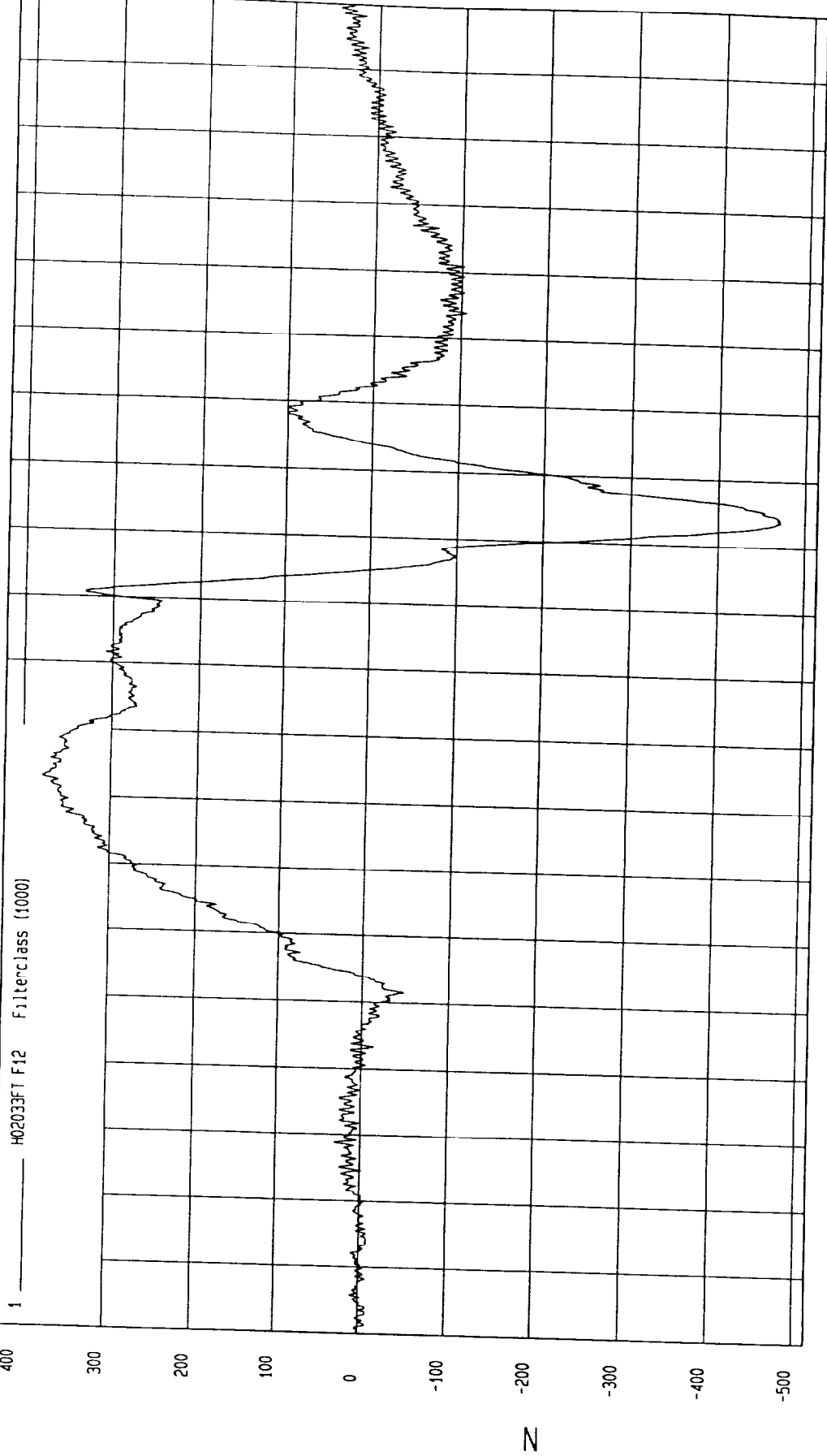
TEST FMVSS 208 SLED (H02033) TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -471.45 N at 124 msec

Maximum = 378.22 N at 83 msec

DRIVER NECK FORCE X



MGA Research
02-14-2002 12:24

TIME (SECONDS)

TEST FMVSS 208 SLED (H02033)

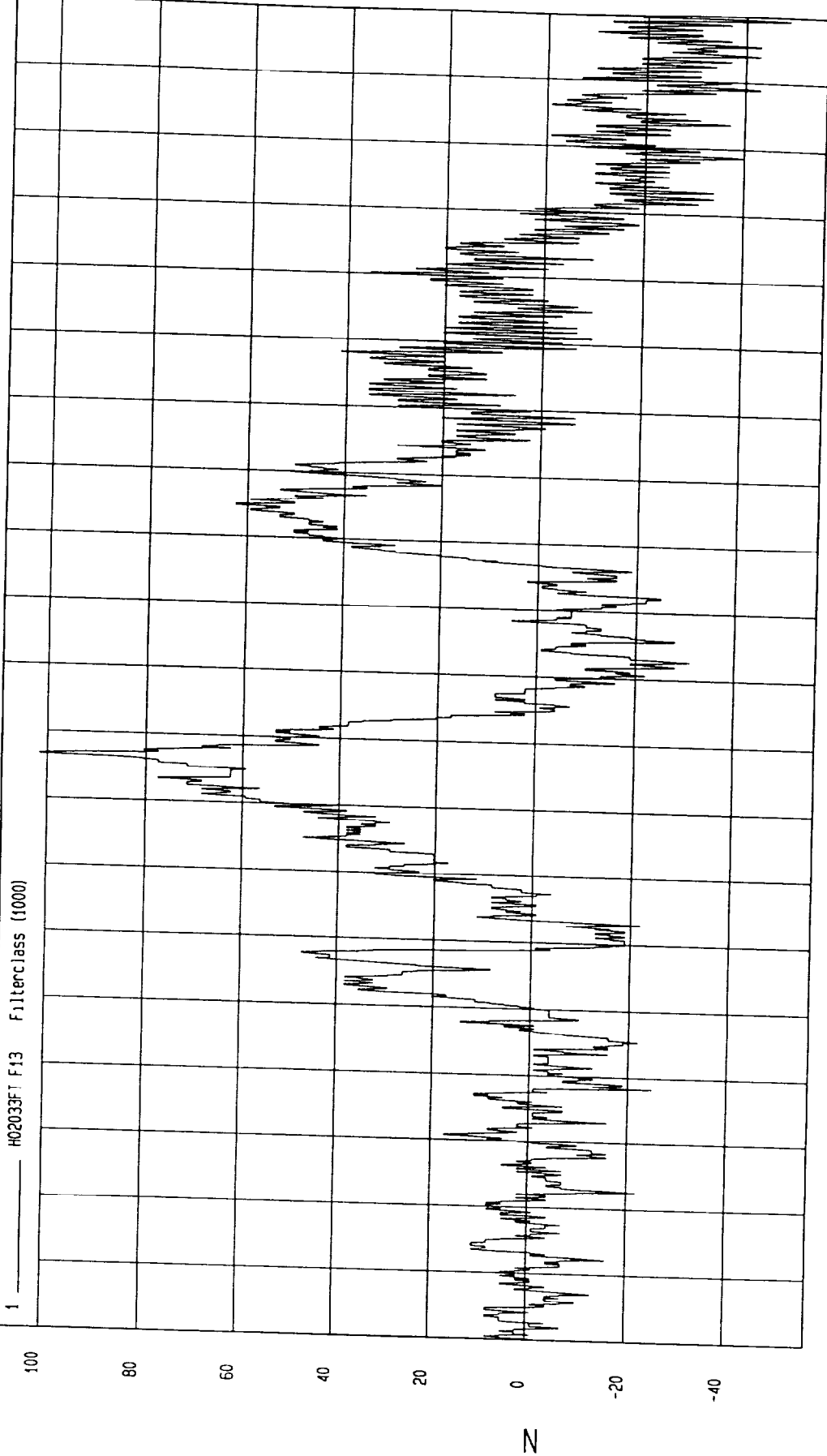
TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -49.04 N at 199 msec

Maximum = 101.64 N at 87 msec

DRIVER NECK FORCE Y



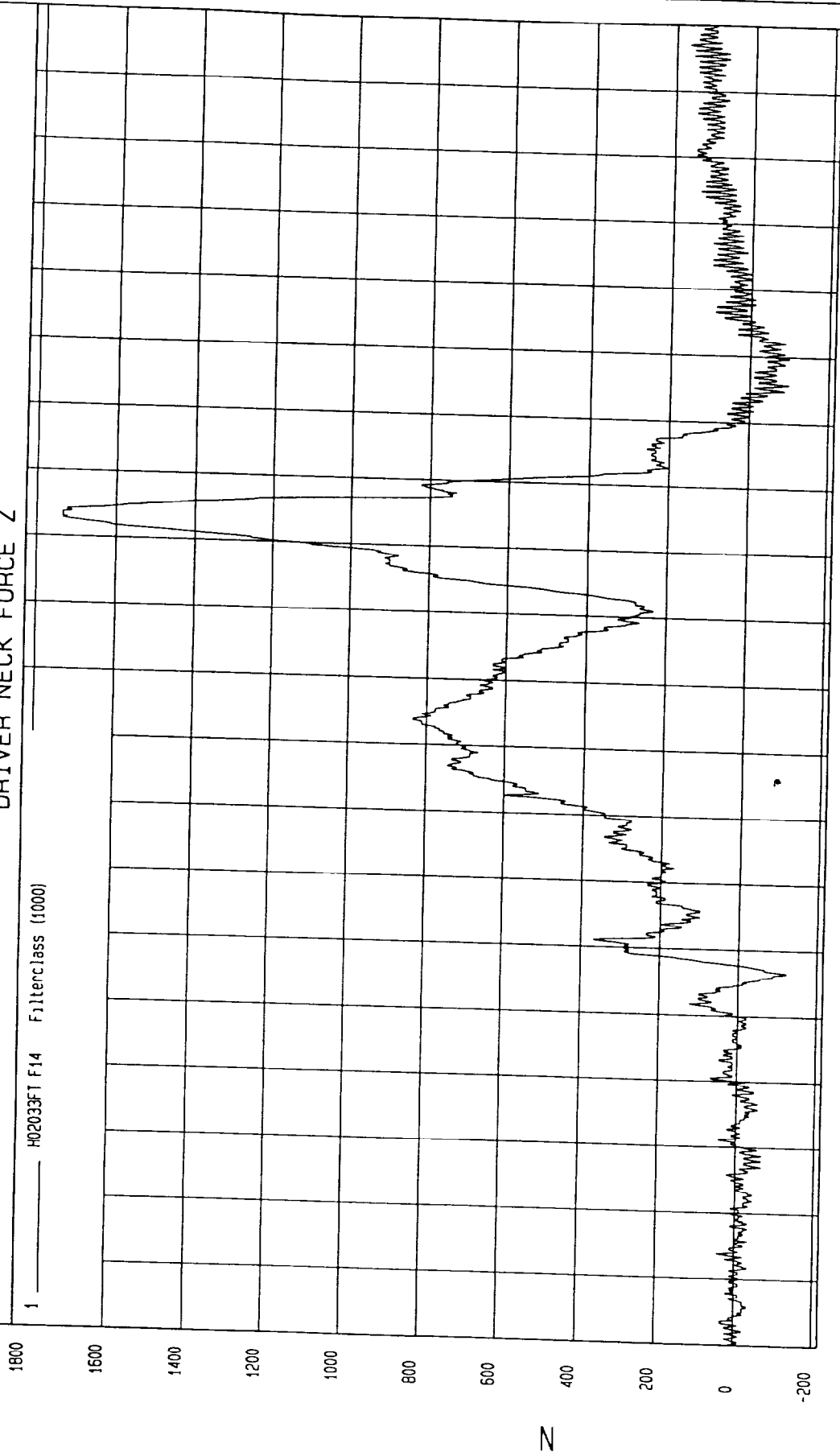
TEST FMVSS 208 SLED (H02033) TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -121.71 N at 56 msec

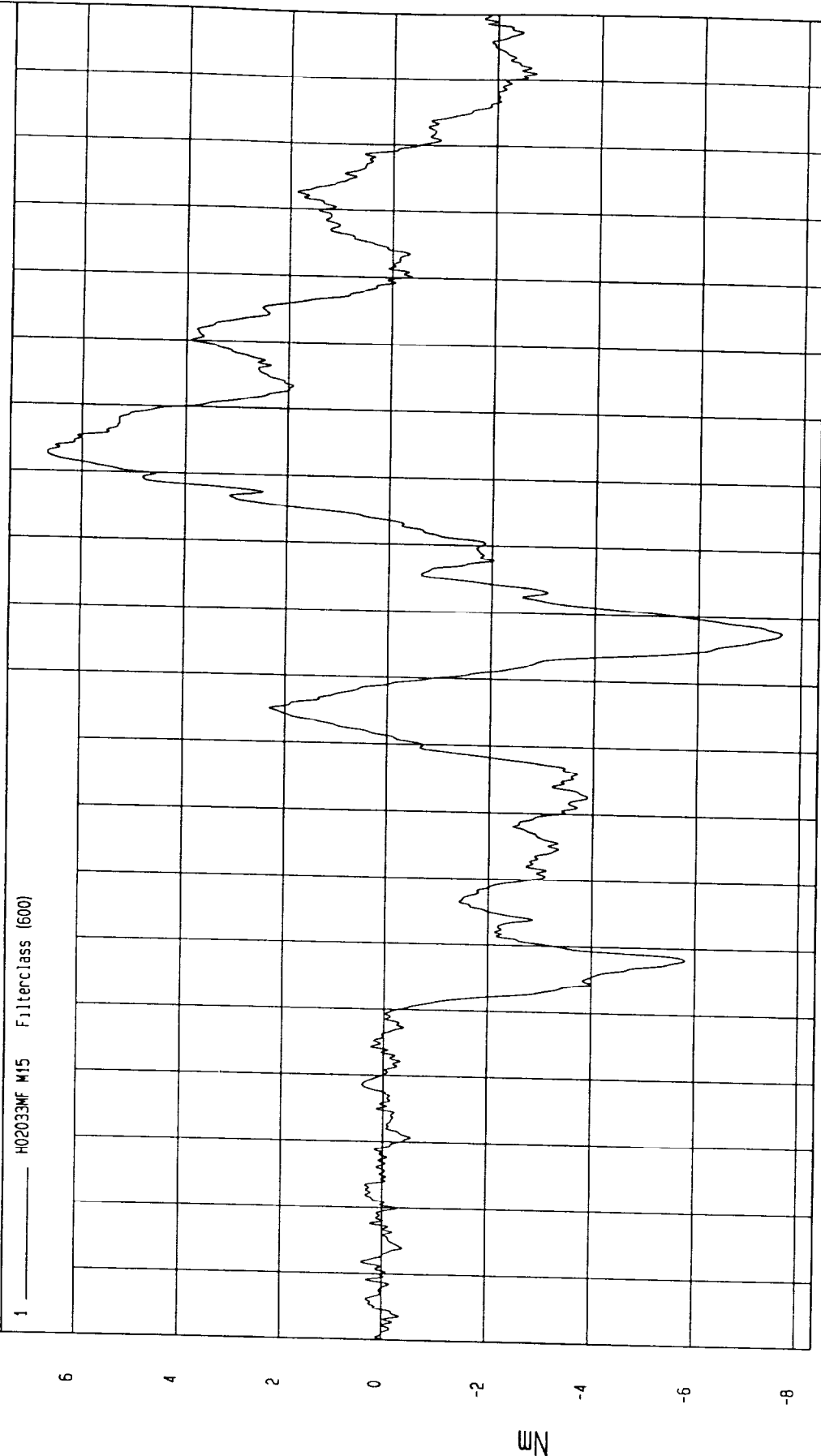
Maximum = 1734 N at 123 msec

DRIVER NECK FORCE Z



TIME (SECONDS)

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



1 H02033MF M15 Filterclass (600)

DRIVER NECK MOMENT X

Minimum = -7.62 Nm at 108 msec Maximum = 6.65 Nm at 133 msec

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033) TEST DATE 02-14-2002

TEST FMVSS 208 SLED (H02033)

TEST DATE. 02-14-2002

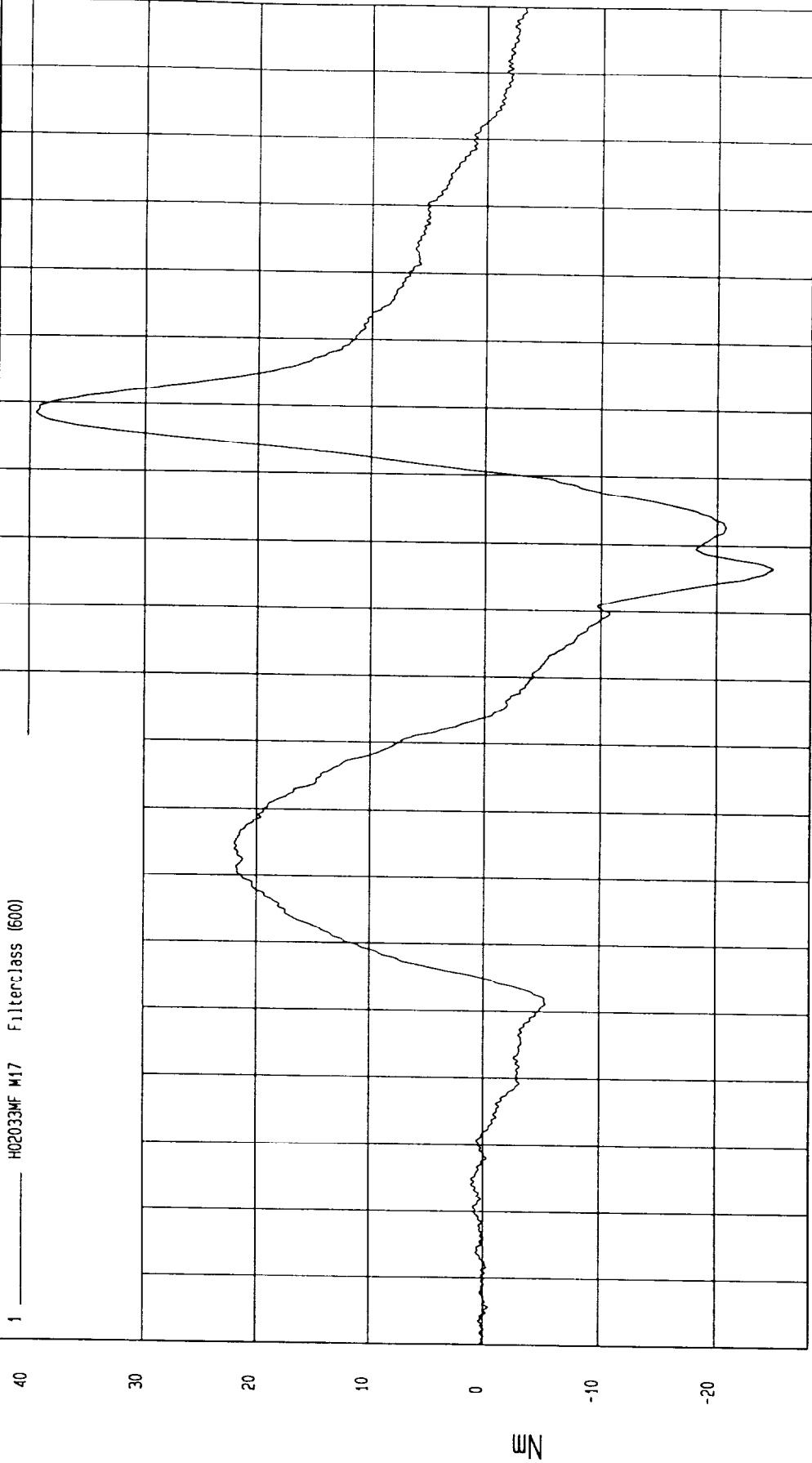
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -24 98 Nm at 117 msec

Maximum = 39 46 Nm at 138 msec

DRIVER NECK MOMENT Y

1 H02033MF M17 Filterclass (600)



40
30
20
10
0
-10
-20

0 01 02 03 04 05 06 07 08 09 1 11 12 13 14 15 16 17 18 19

TIME (SECONDS)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

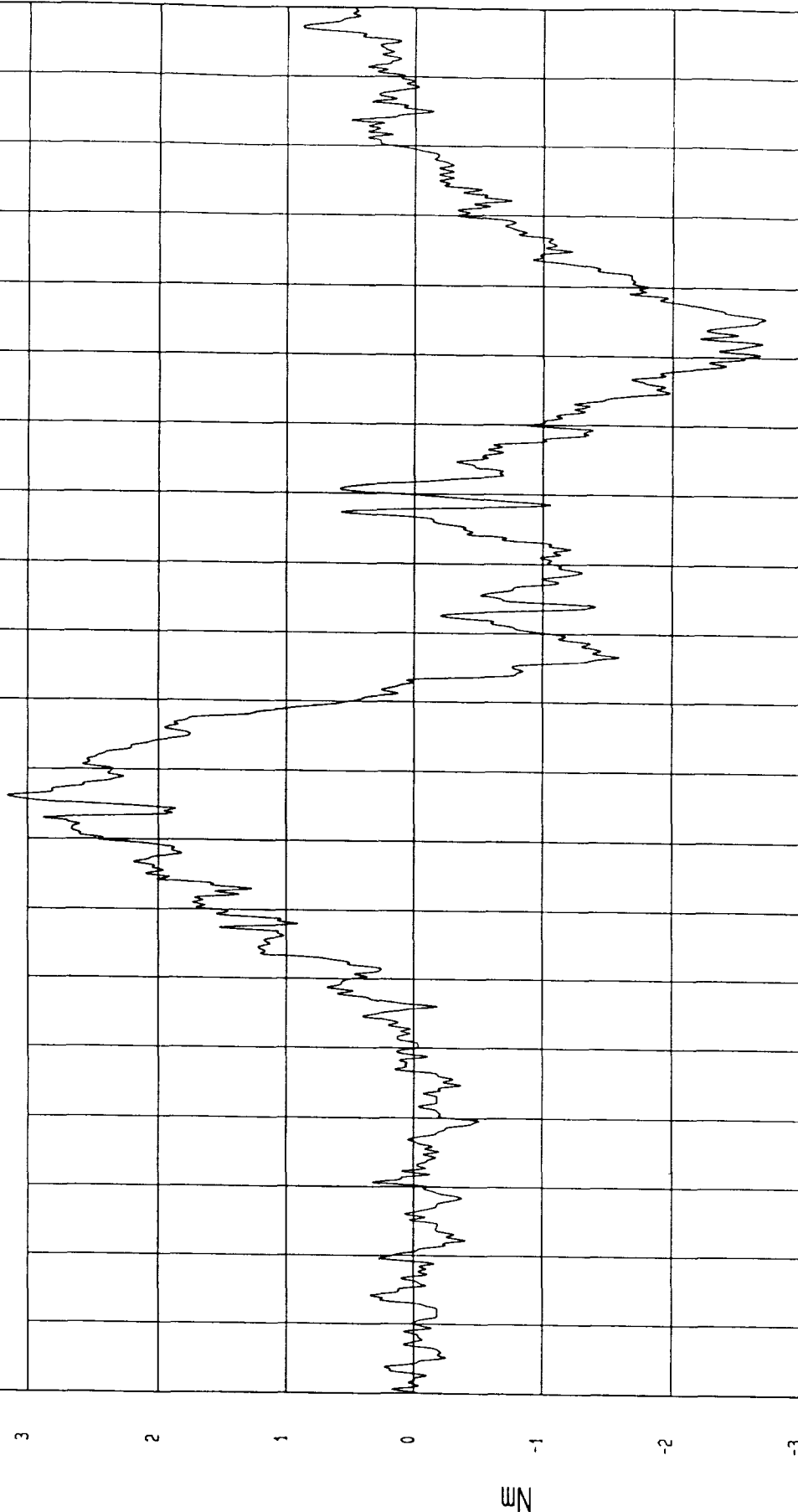
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -2.71 Nm at 156 msec

Maximum = 3.15 Nm at 86 msec

DRIVER NECK MOMENT Z

1 H02033MF M18 Filterclass (600)



MGA Research
02-14-2002 12:25

MGA Research
02-14-2002 12:35

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

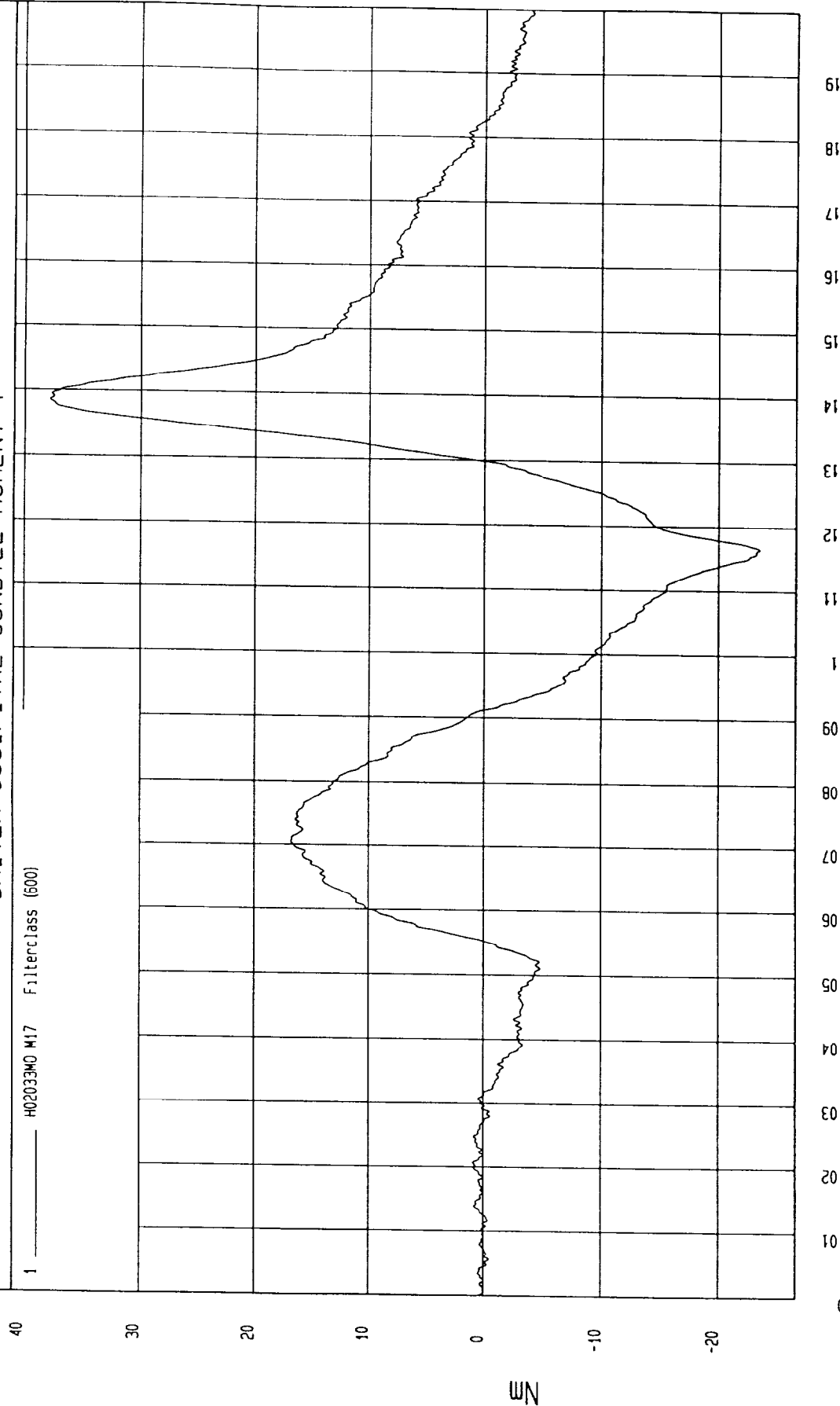
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -23.53 Nm at 116 msec

Maximum = 37.82 Nm at 138 msec

DRIVER OCCIPITAL CONDYLE MOMENT Y

1 H02033M0 M17 Filterclass (500)



TIME (SECONDS)

Nm

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

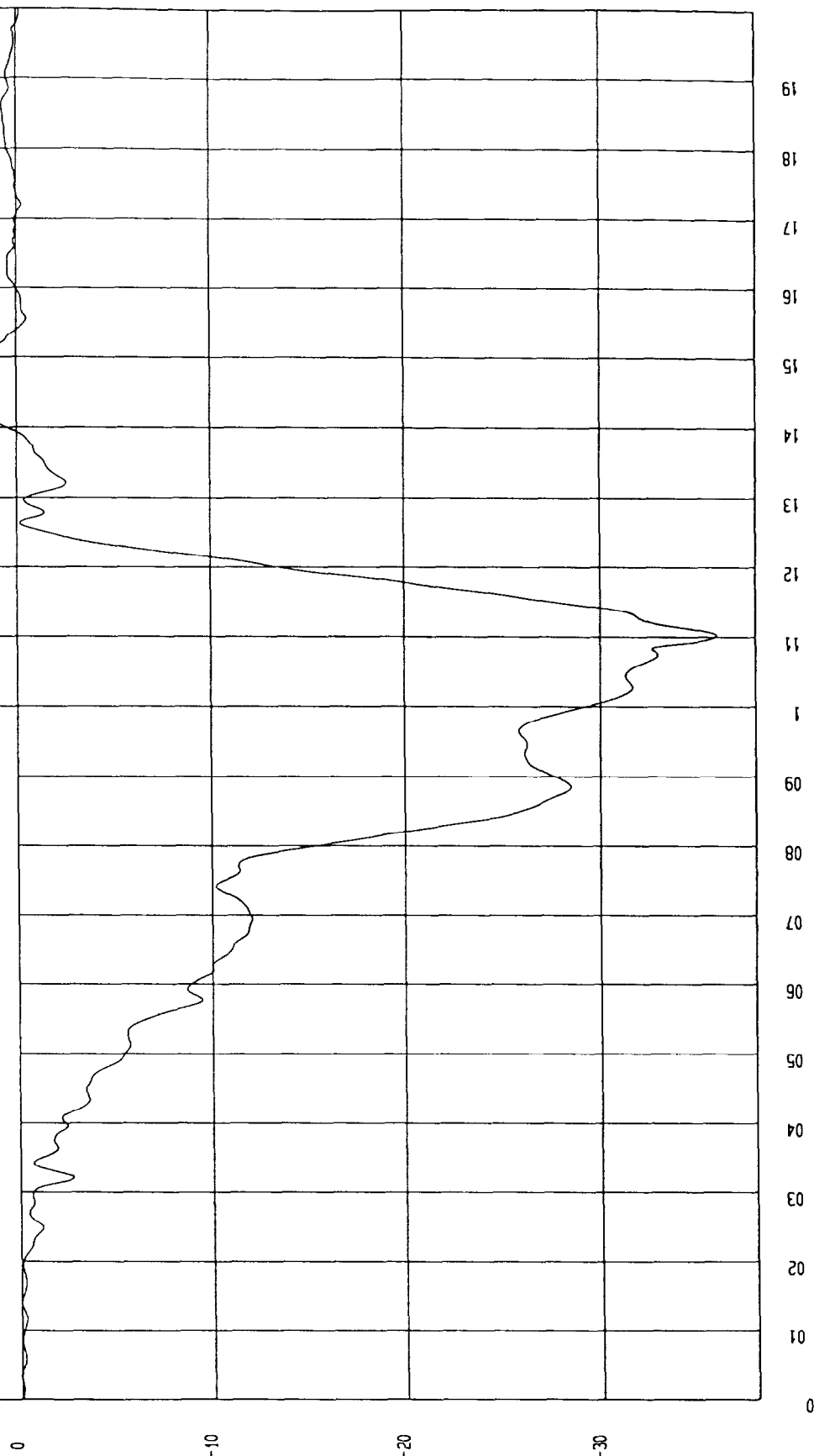
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -35.97 G at 110 msec

Maximum = 3.15 G at 147 msec

DRIVER CHEST X ACCELERATION

1 H02033AF A21 Filterclass (180)

MGA Research
02-14-2002 12:25

TIME (SECONDS)

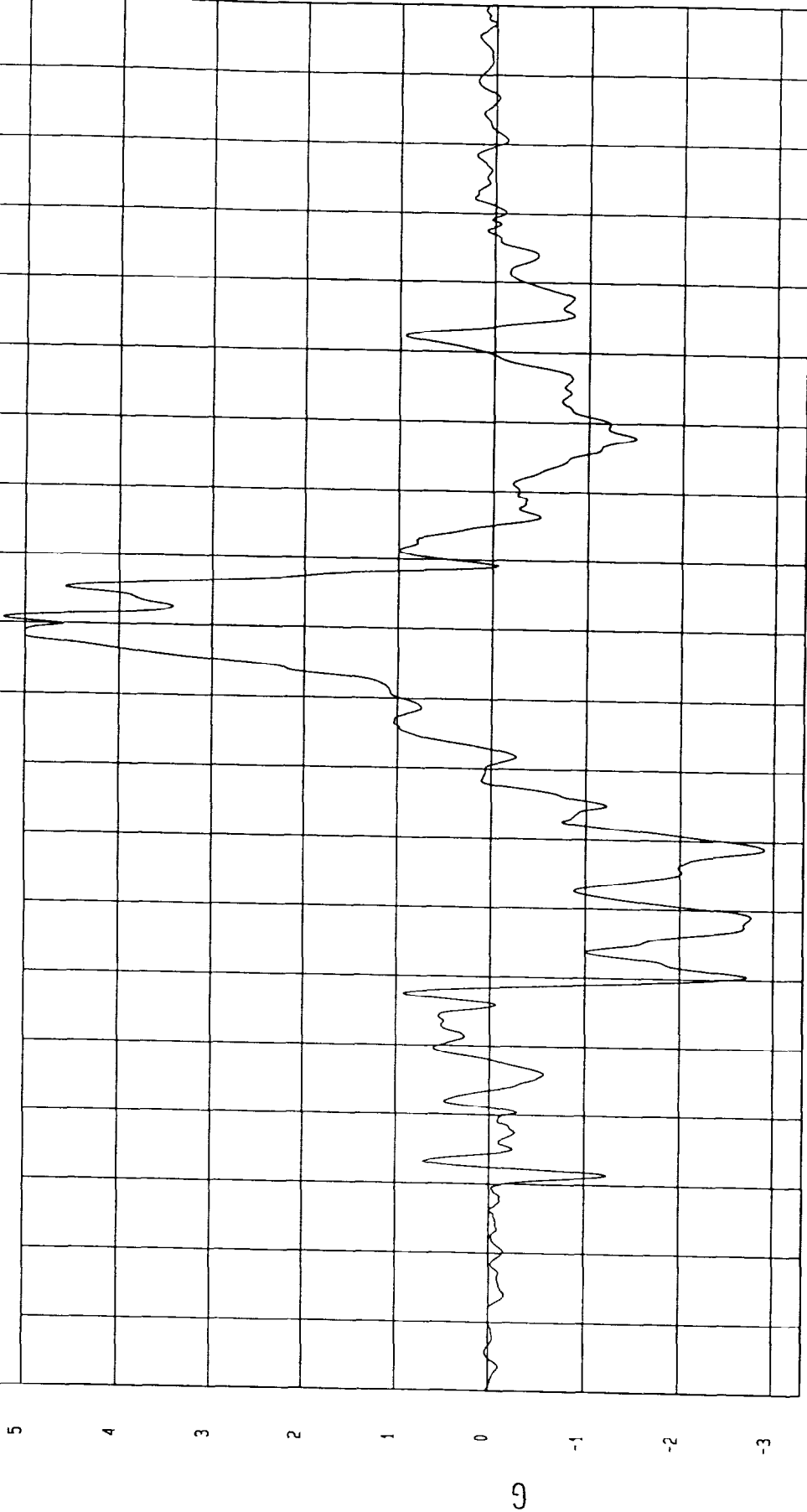
TEST FMVSS 208 SLED (H02033) TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -2.9 G at 79 msec Maximum = 5.23 G at 111 msec

DRIVER CHEST Y ACCELERATION

1 ——— H02033AF A22 Filterclass (180)



TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

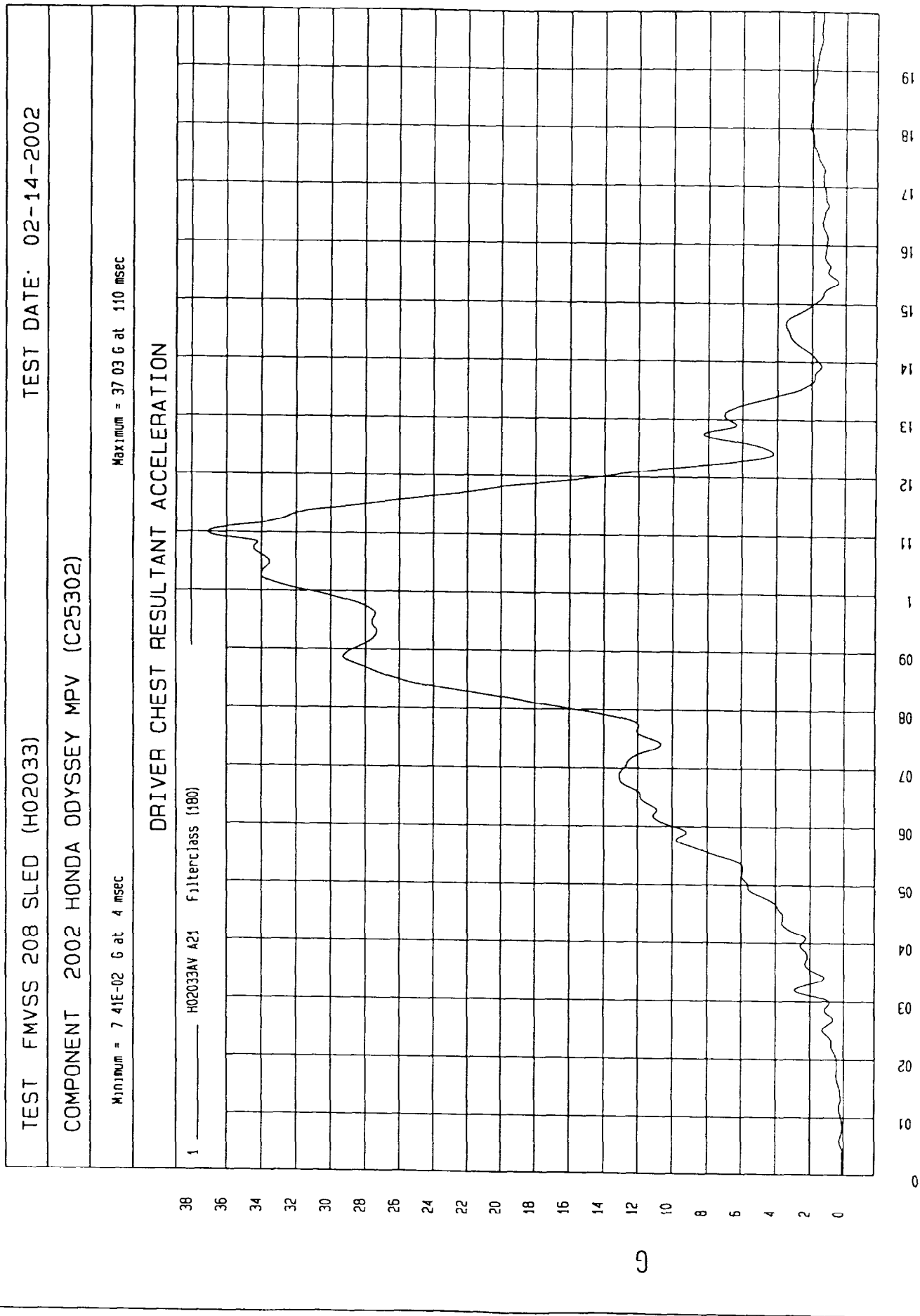
Minimum = -4.65 G at 68 msec

Maximum = 12.4 G at 102 msec

DRIVER CHEST Z ACCELERATION

1 ——— H02033AF A23 Filterclass (180)



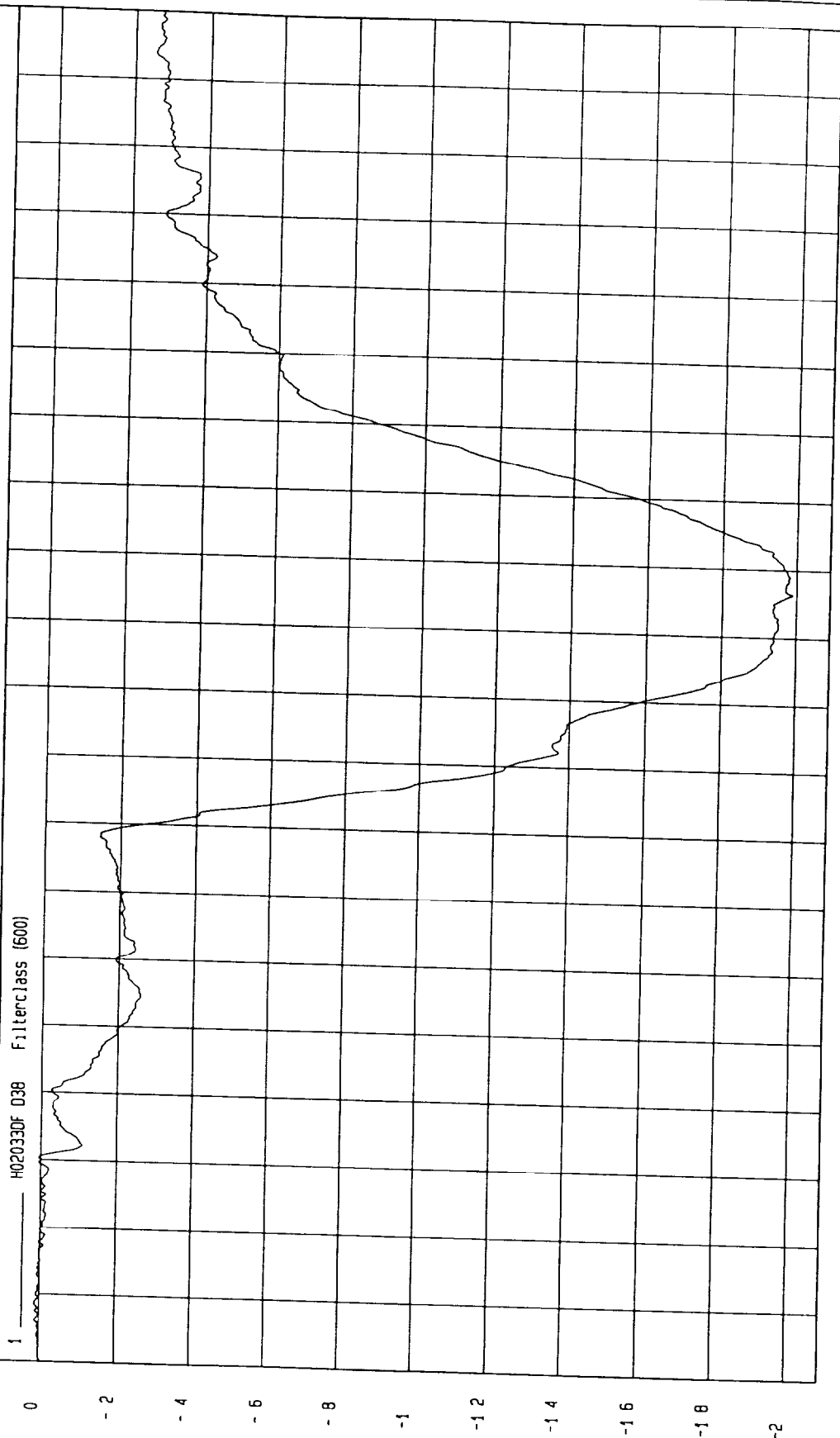


WCA Research
02-15-2002 11:06

TIME SECONDS

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

INCHES



1 H020330F 038 Filterclass (600)

DRIVER CHEST COMPRESSION

Minimum = -1.99 INCHES at 116 msec

Maximum = 1.31E-02 INCHES at 9 msec

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

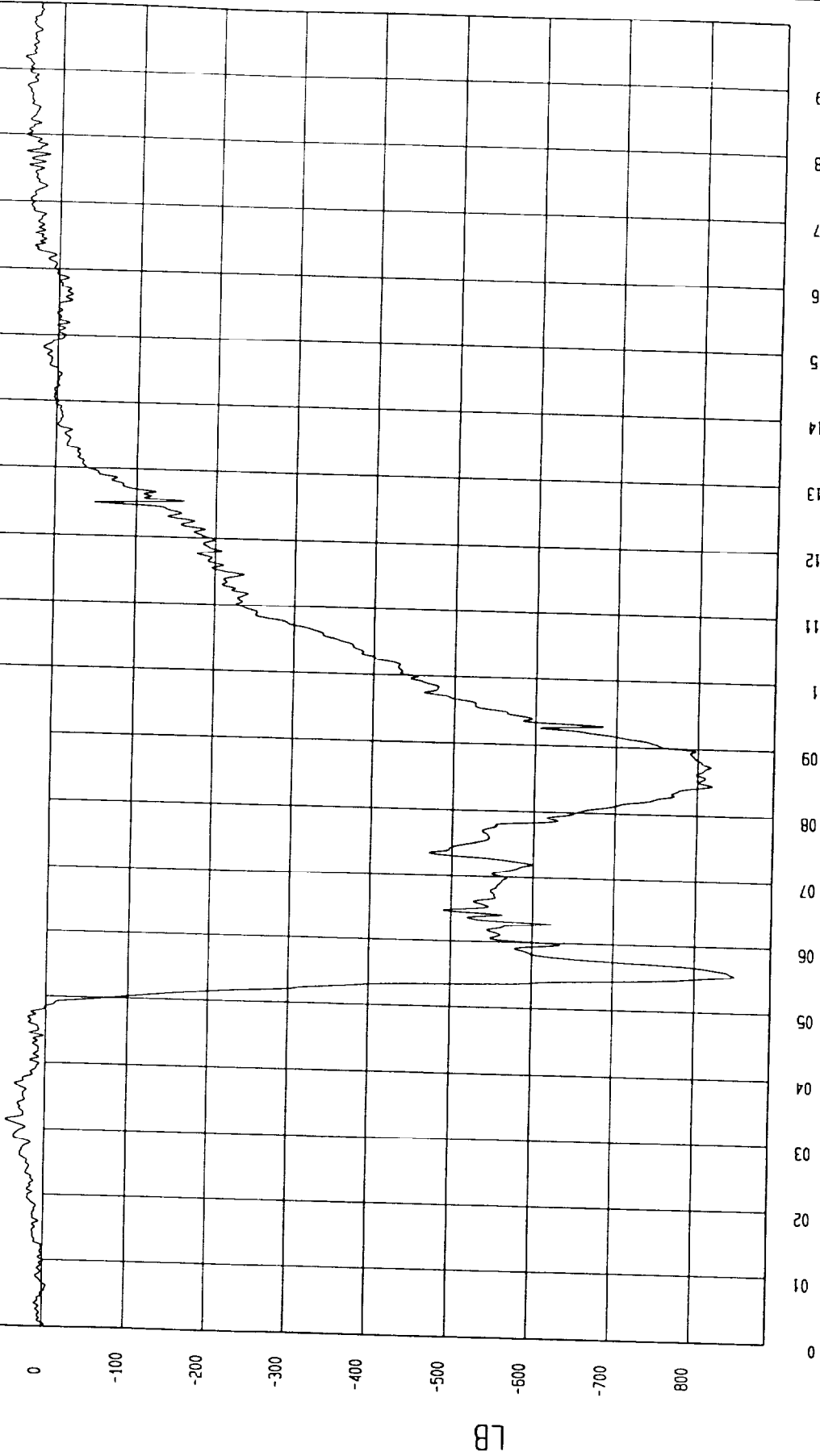
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -850 42 LB at 56 msec

Maximum = 48 29 LB at 31 msec

DRIVER LEFT FEMUR FORCE

1 H02033FF F08 Filterclass (600)



MCA Research
02-14-2002 12 25

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

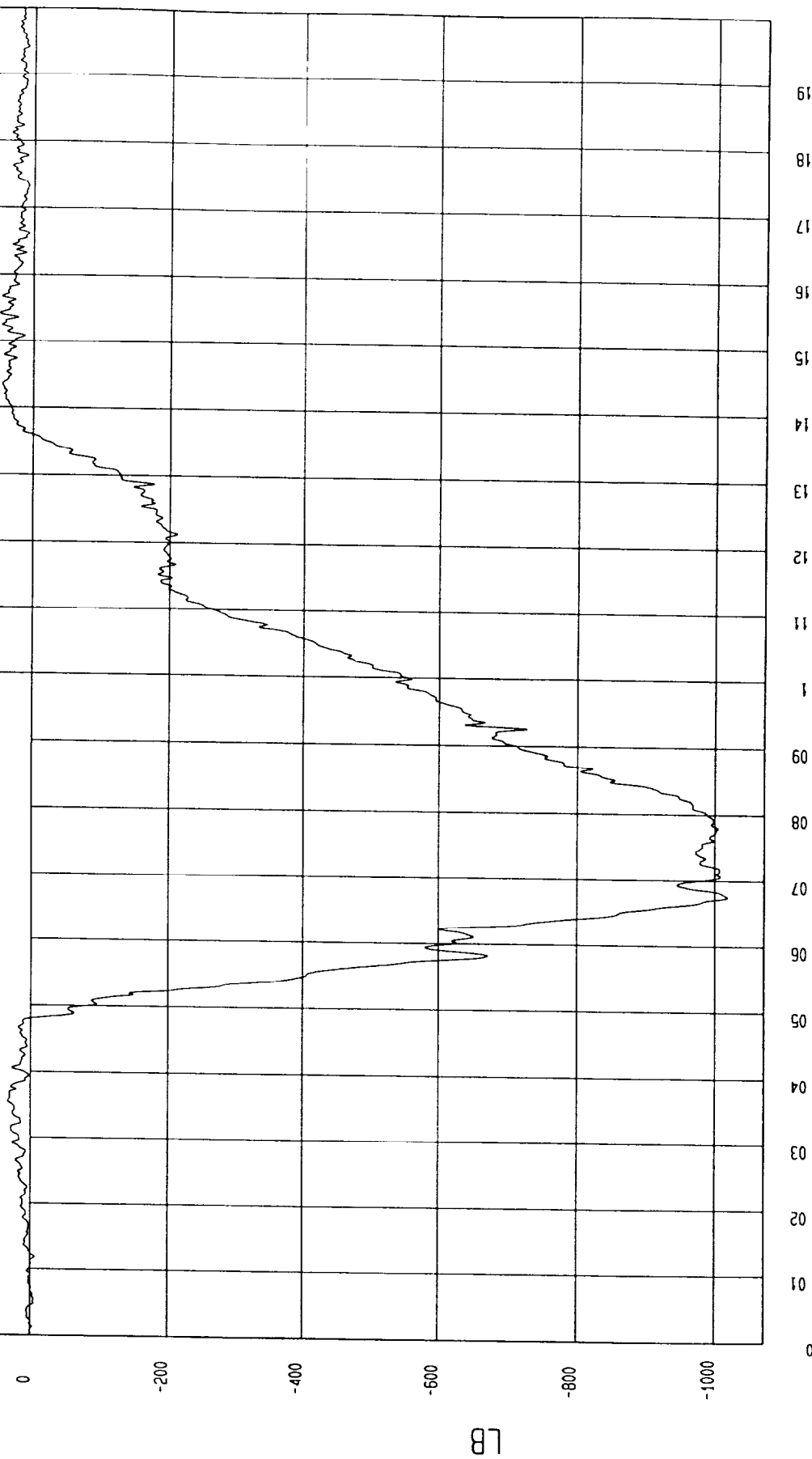
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -1018.86 LB at 68 msec

Maximum = 48.88 LB at 154 msec

DRIVER RIGHT FEMUR FORCE

1 ——— HC2033FF F09 Filterclass (600)

MGA Research
02-14-2002 12 25

TEST FMVSS 208 SLED (H02033)

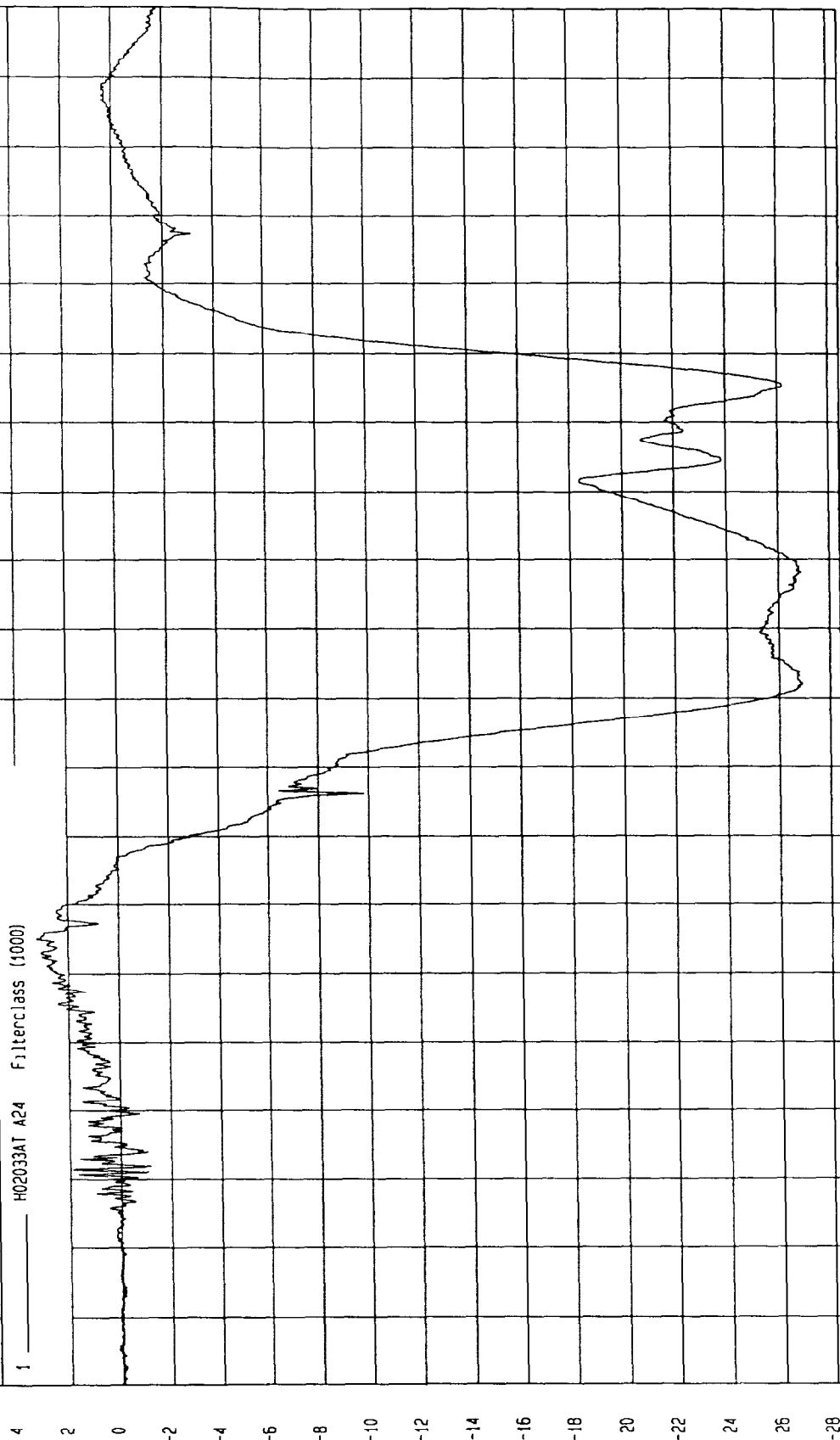
TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Maximum = 3.25 G at 65 msec

Minimum = -26.92 G at 102 msec

PASSENGER HEAD X ACCELERATION



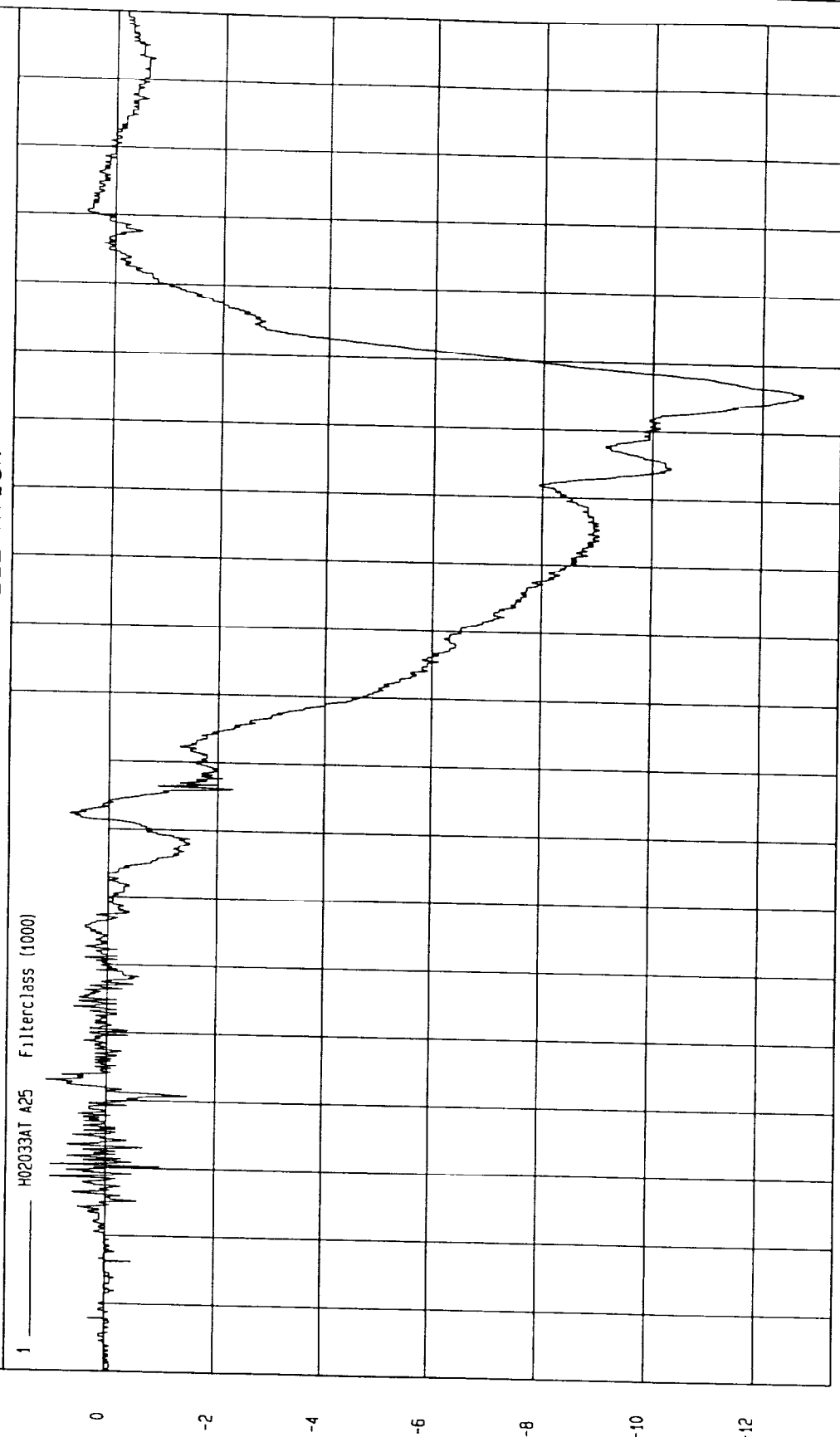
MCA Research
02-14-2002 12 24

TIME (SECONDS)

MCA Research
02-14-2002 12 24

TIME (SECONDS)

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



PASSENGER HEAD Y ACCELERATION

Maximum = 1.12 G at 43 msec

Minimum = -12.75 G at 146 msec

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

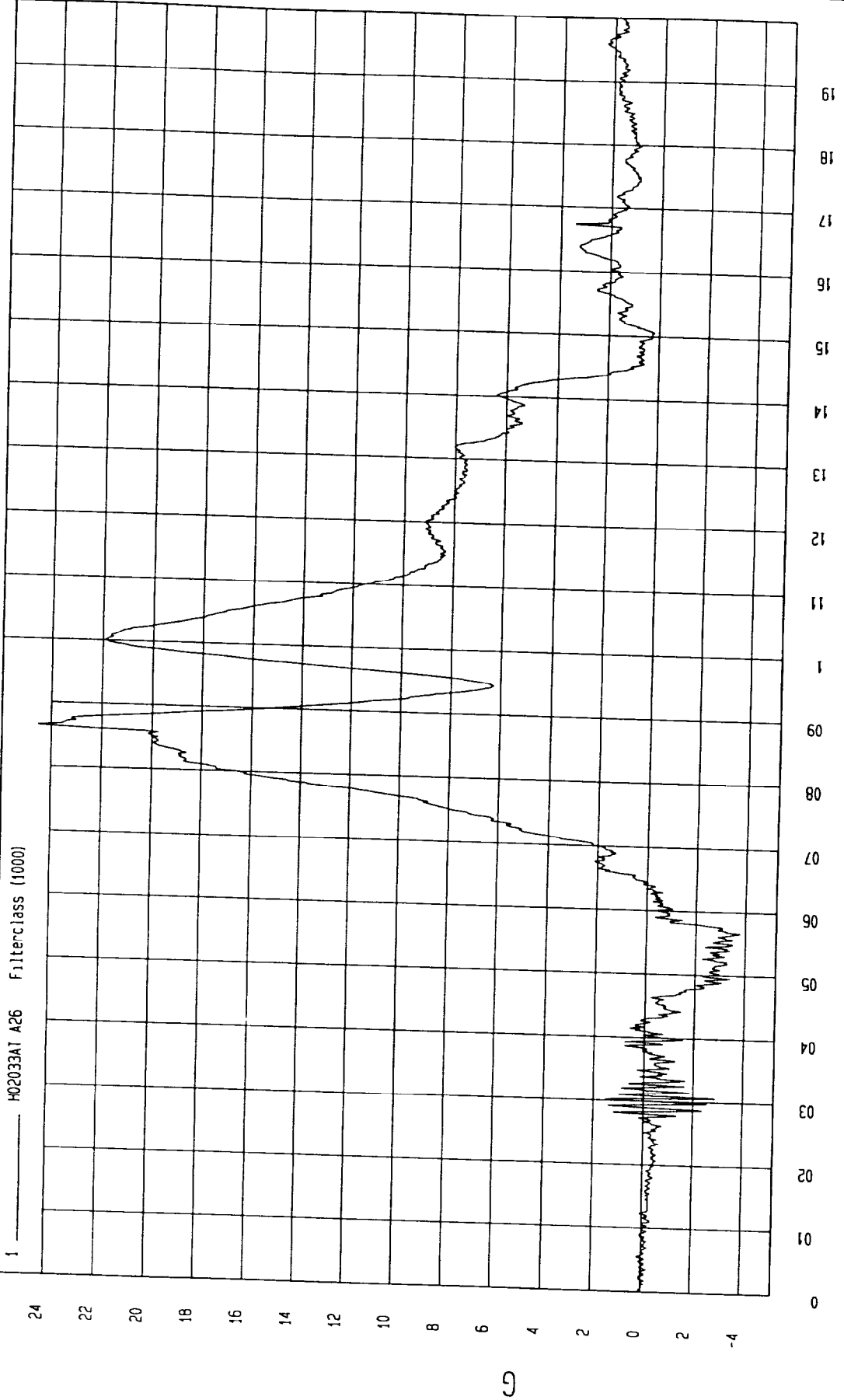
TEST FMVSS 208 SLED (H020333) TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -3.79 G at 57 msec

Maximum = 24.53 G at 87 msec

PASSENGER HEAD Z ACCELERATION



TEST FMVSS 208 SLED (H02033) TEST DATE 02-14-2002

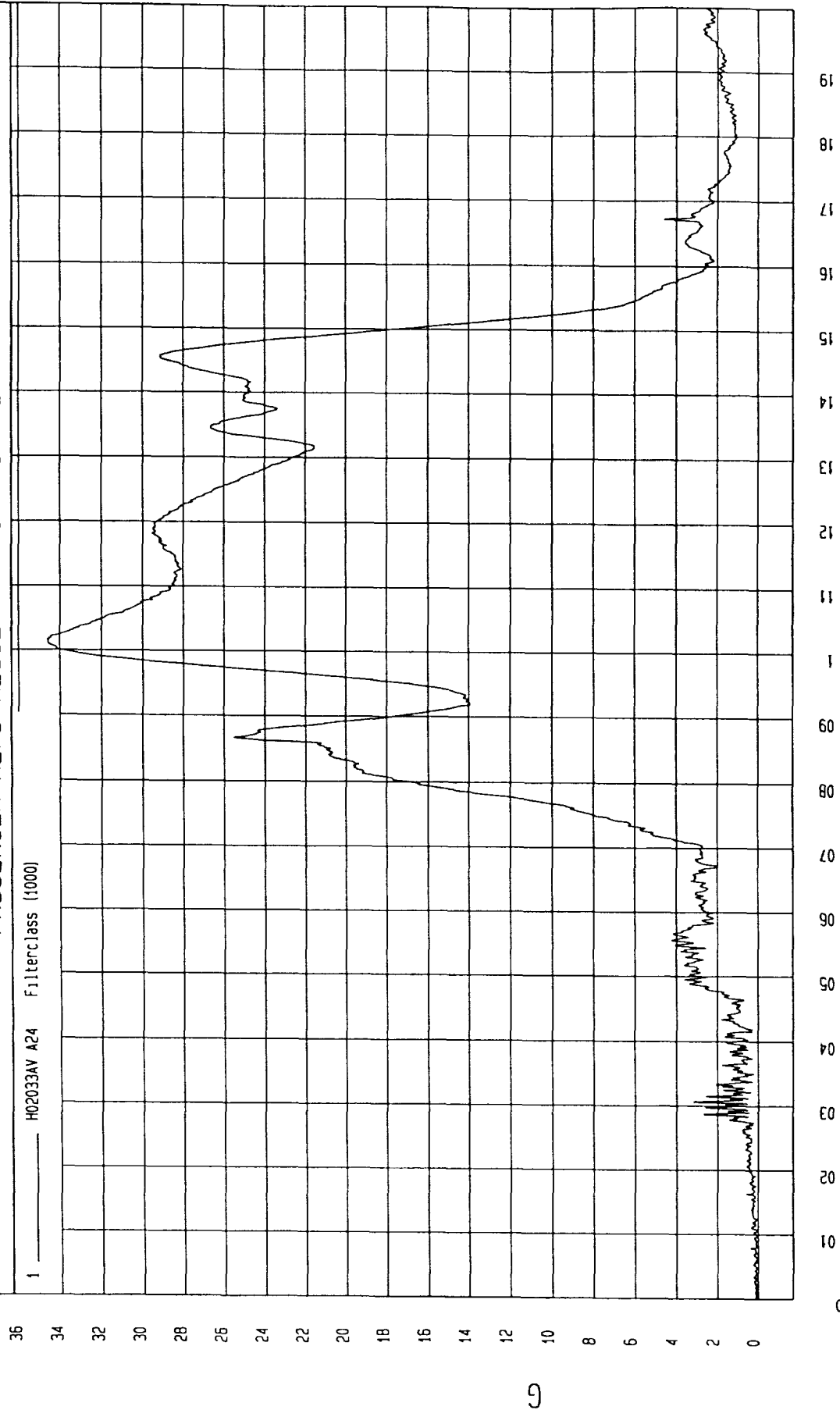
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = 5.31E-02 g at 2 msec

Maximum = 34.61 g at 102 msec

PASSENGER HEAD RESULTANT ACCELERATION

1 H02033AV A24 Filterclass (1000)



TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -77 81 N at 199 msec

Maximum = 1034 06 N at 110 msec

PASSENGER NECK FORCE X

1 H02033FT F31 FilterClass (1000)

1000

800

600

400

200

0

N

0

01

02

03

04

05

06

07

08

09

1

11

12

13

14

15

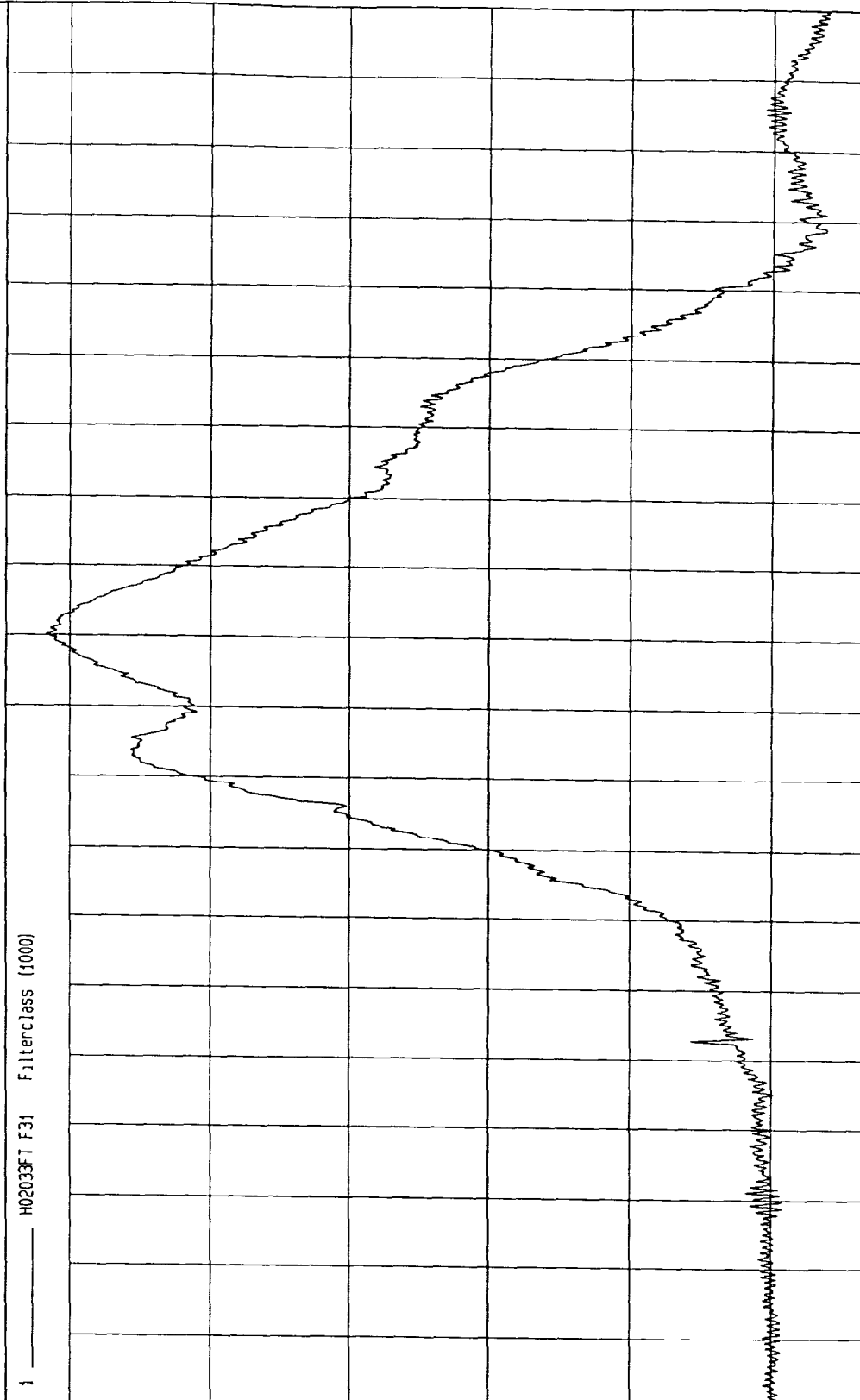
16

17

18

19

TIME (SECONDS)

MGA Research
02-14-2002 12 25

TEST FMVSS 208 SLED (H02033) TEST DATE 02-14-2002

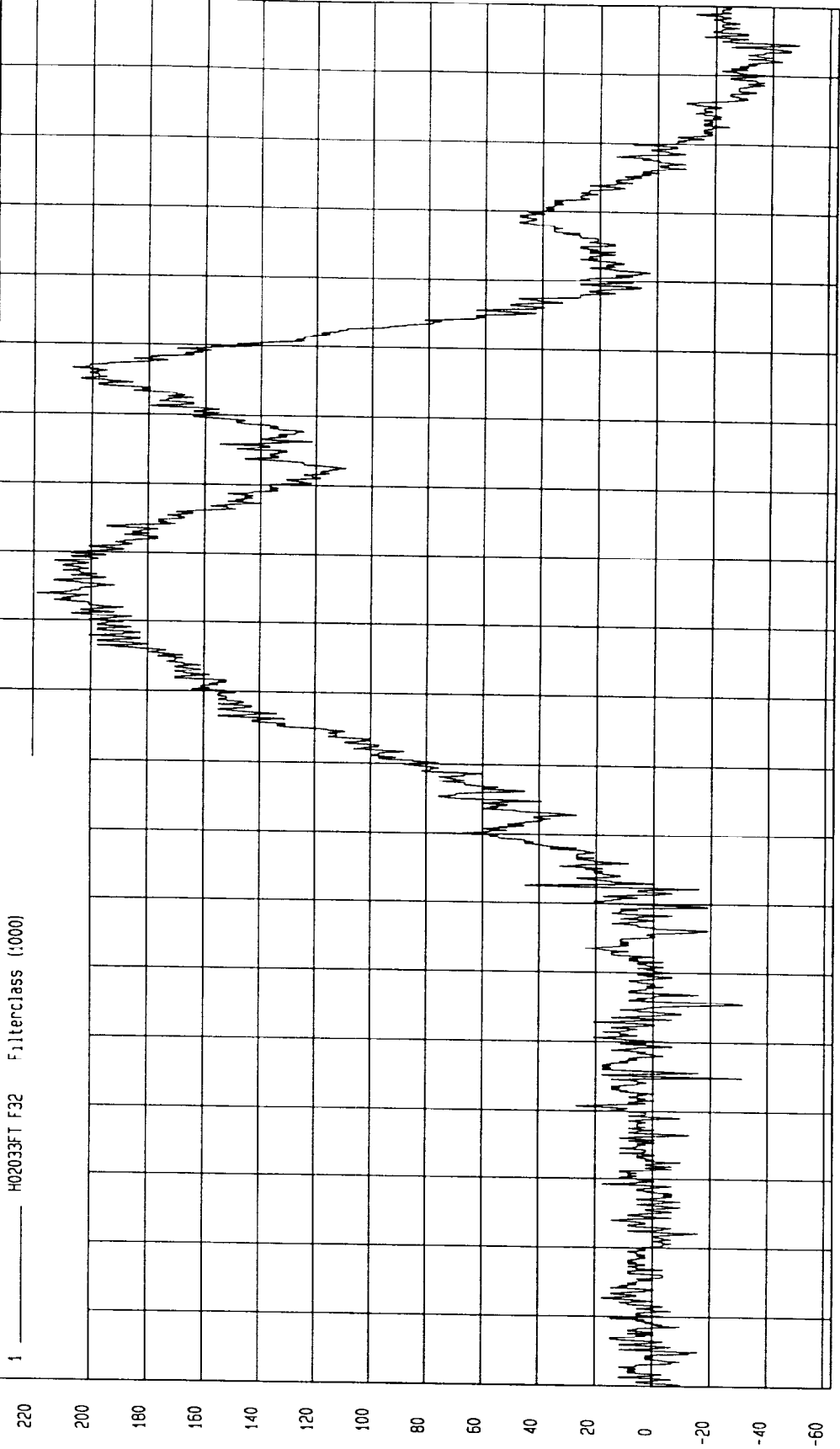
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -49 49 N at 195 msec

Maximum = 219 17 N at 114 msec

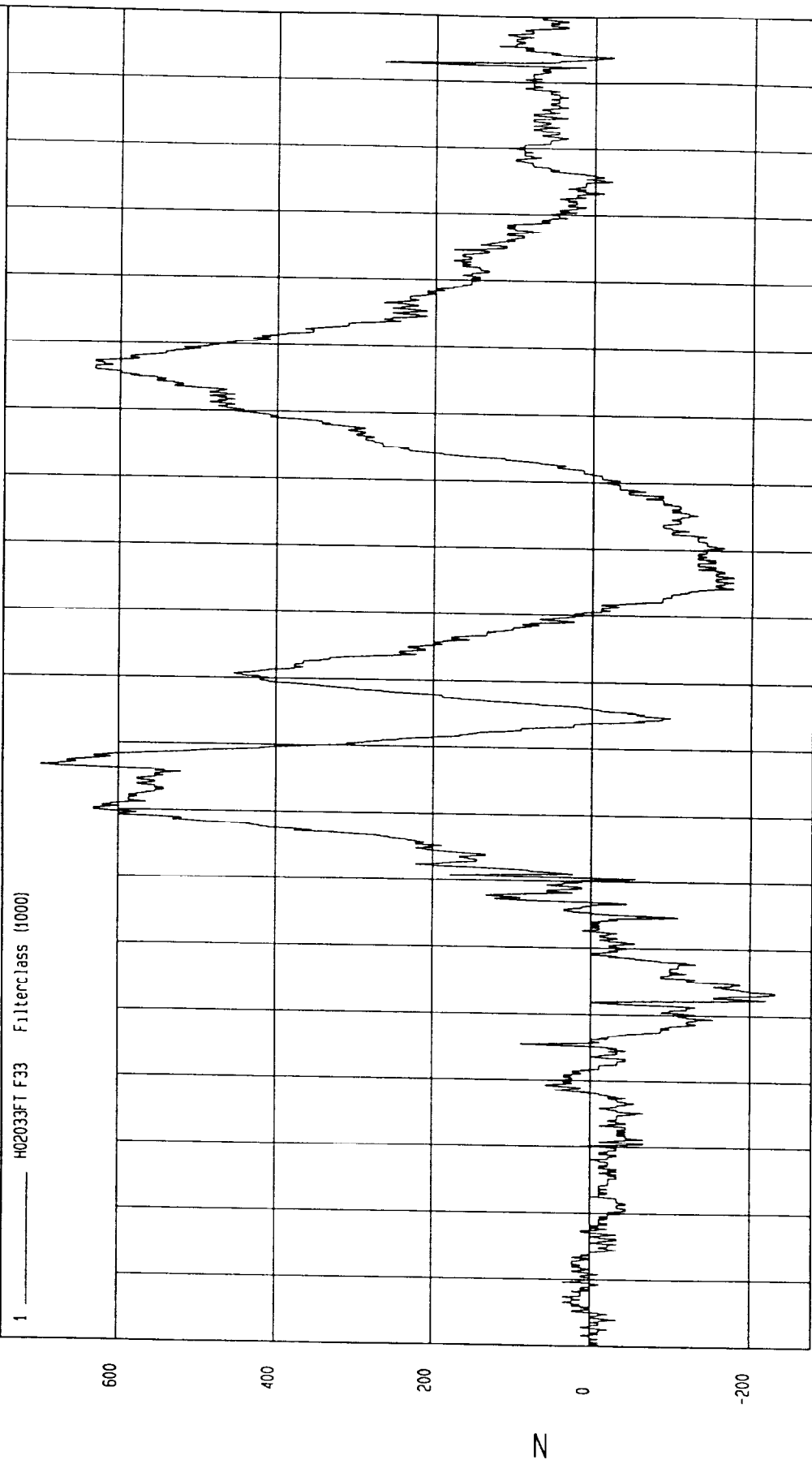
PASSENGER NECK FORCE Y

1 H02033FT F32 Filterclass (:000)



TIME (SECONDS)

0 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19



PASSENGER NECK FORCE Z

1 ——— H02033FT F33 Filterclass (1000)

Minimum = -232 18 N at 53 msec

Maximum = 697 98 N at 87 msec

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

TEST FMVSS 208 SLED (H02033) TEST DATE 02-14-2002

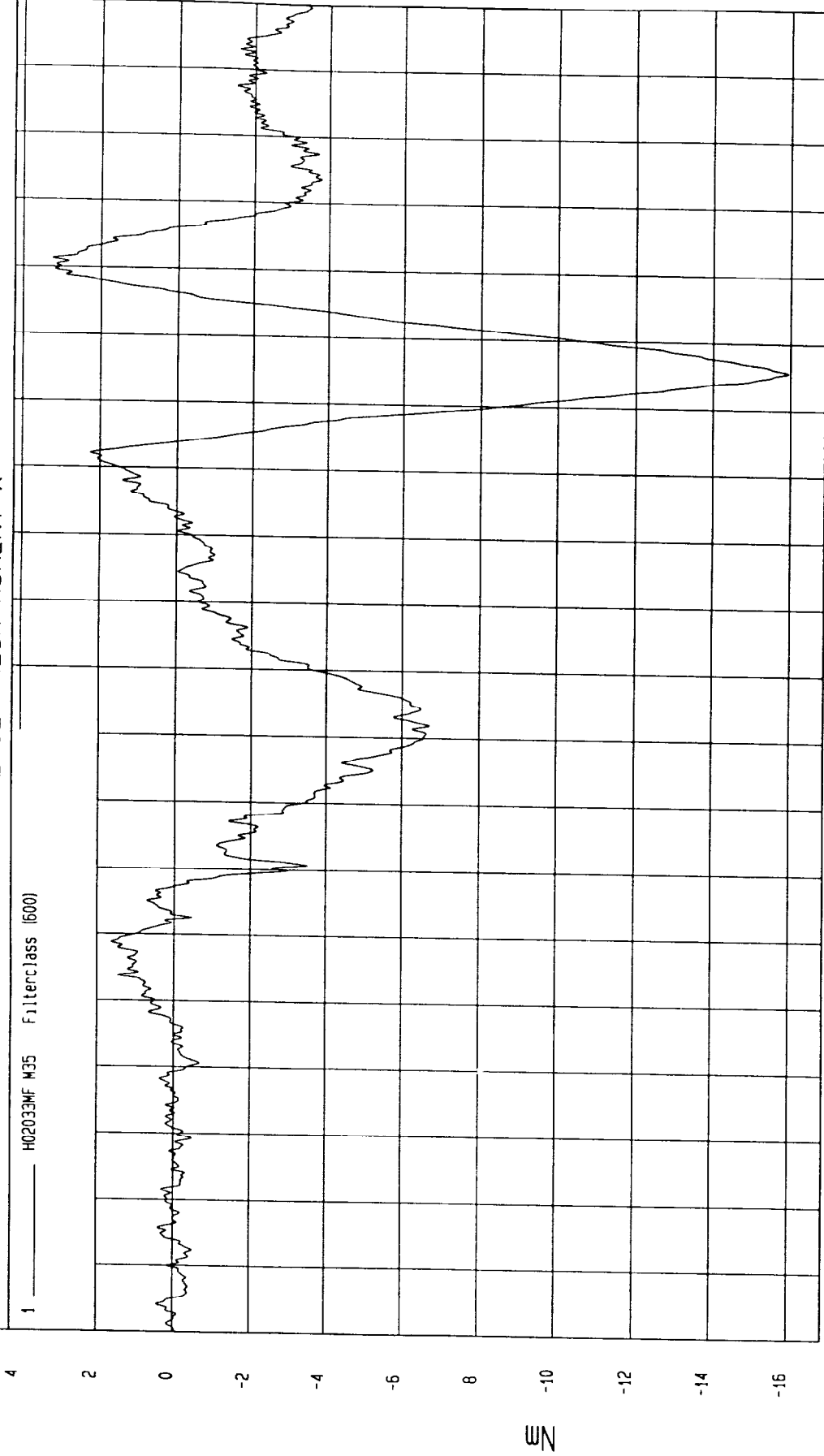
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -15.95 Nm at 146 msec

Maximum = 3.26 Nm at 161 msec

PASSENGER NECK MOMENT X

1 H02033MF M35 Filterclass (500)

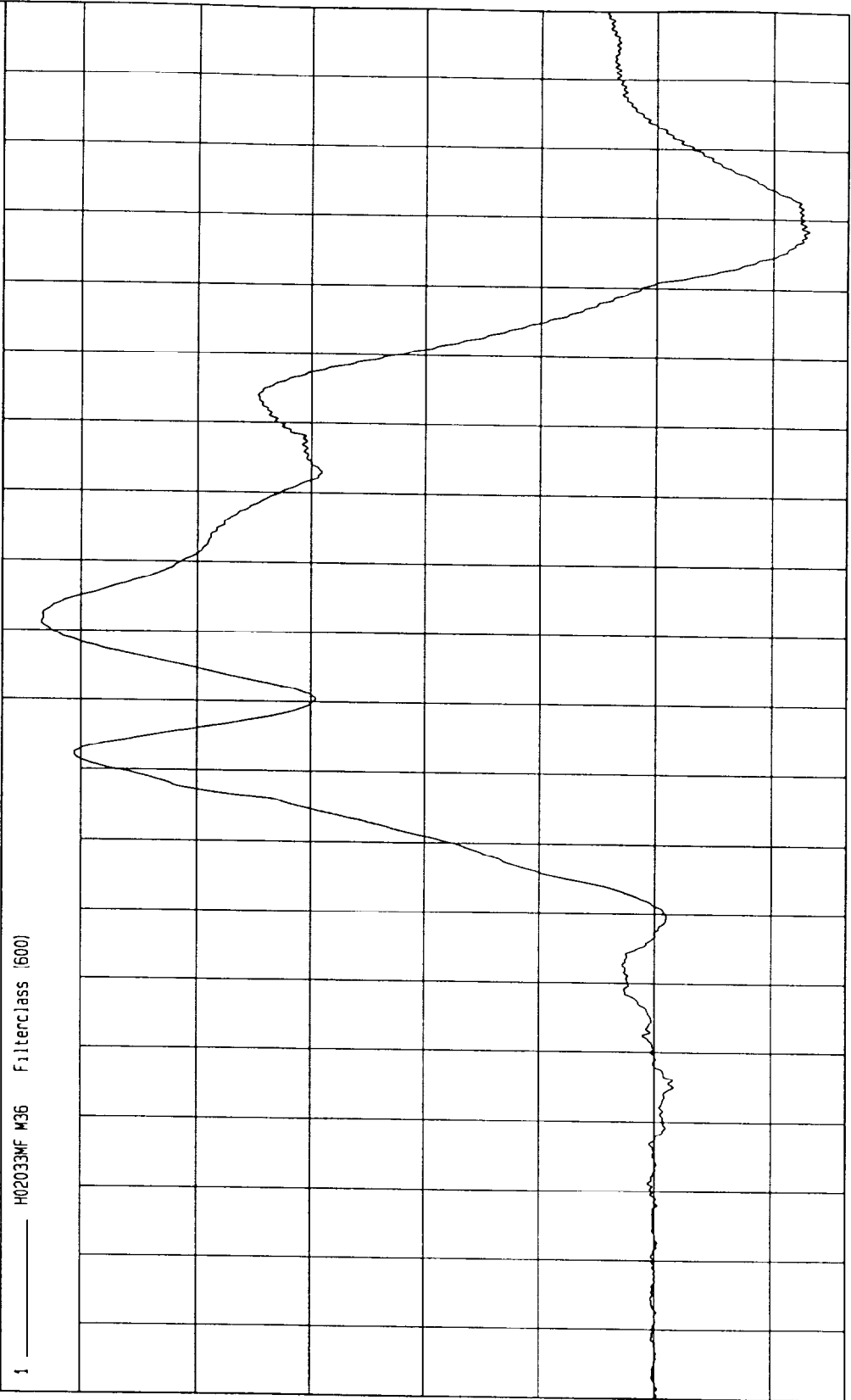


4 2 0 -2 -4 -6 -8 -10 -12 -14 -16 0 01 02 03 04 05 06 07 08 09 1 11 12 13 14 15 16 17 18 19

TIME (SECONDS)

TIME (SECONDS)

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



PASSENGER NECK MOMENT Y

Maximum = 53.41 Nm at 111 msec

Minimum = 13.14 Nm at 168 msec

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

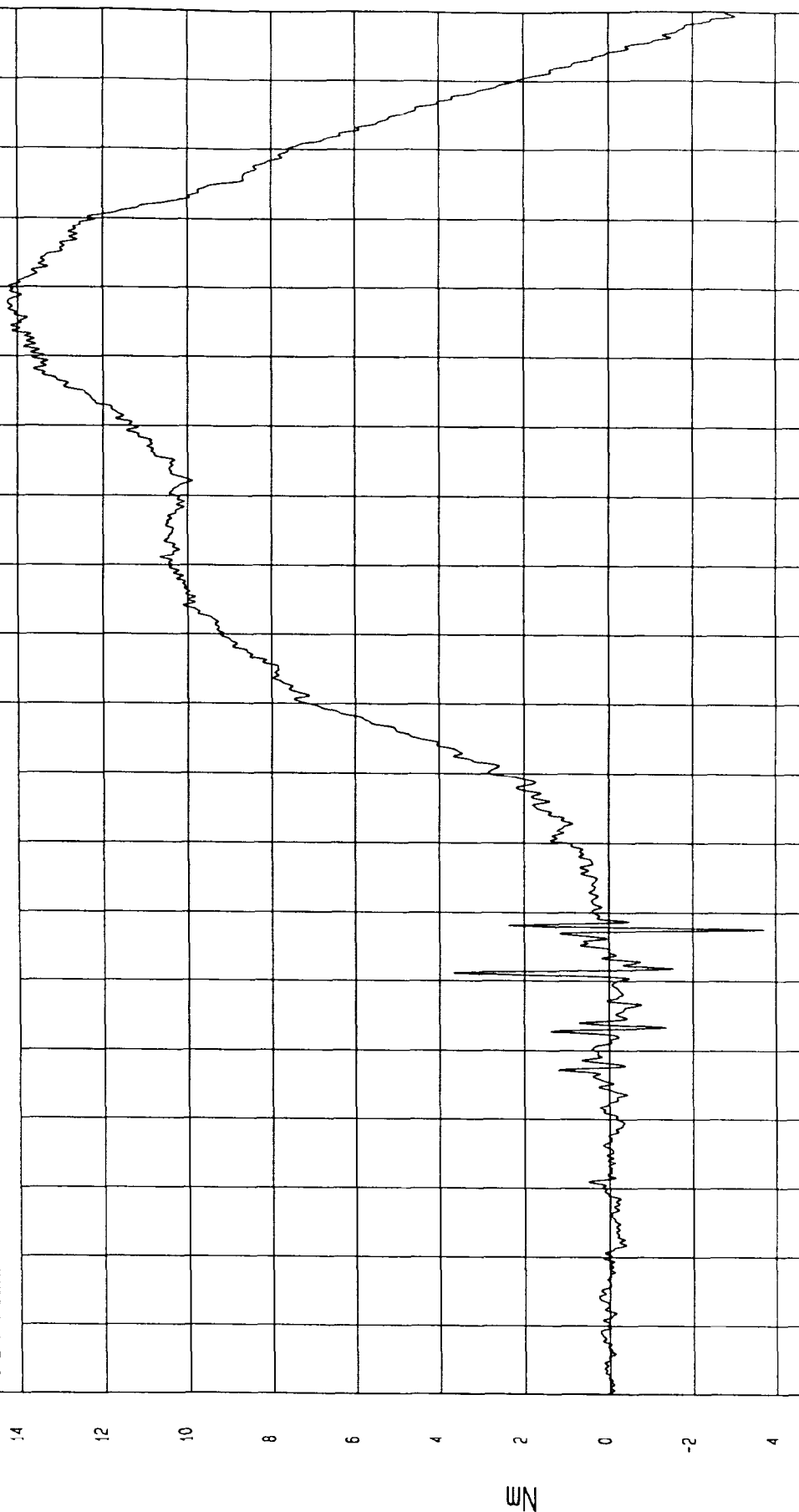
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -3.73 Nm at 68 msec

Maximum = 14.23 Nm at 158 msec

PASSENGER NECK MOMENT Z

1 H02033MF M37 Filterclass (600)

MGA Research
02-14-2002 12:25

TIME (SECONDS)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

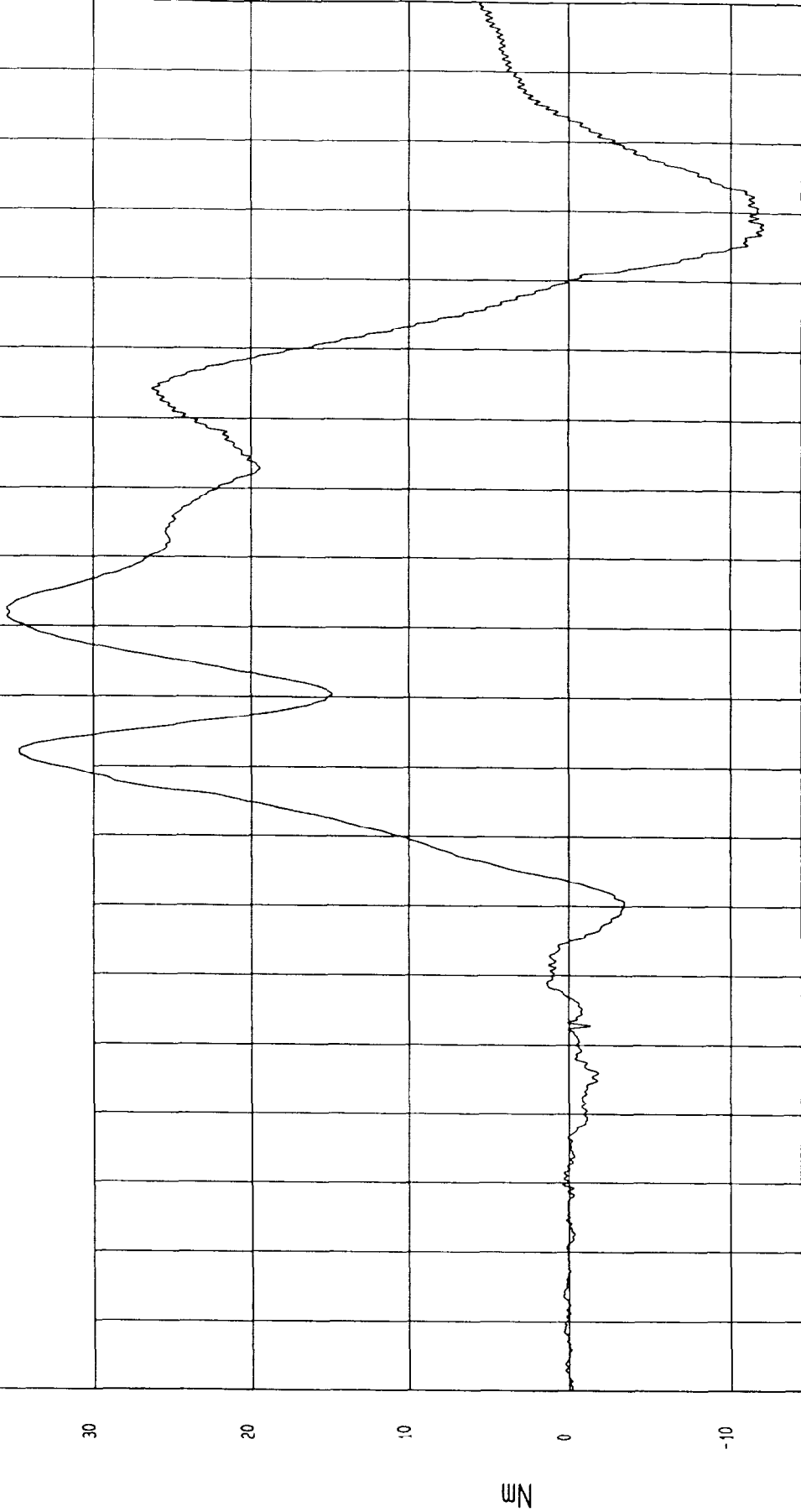
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -12.09 Nm at 168 msec

Maximum = 35.33 Nm at 111 msec

PASSENGER OCCIPITAL CONDYLE MOMENT Y

1 H02033MO M36 Filterclass (600)



MGA Research
02-14-2002 12:35

TIME (SECONDS)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

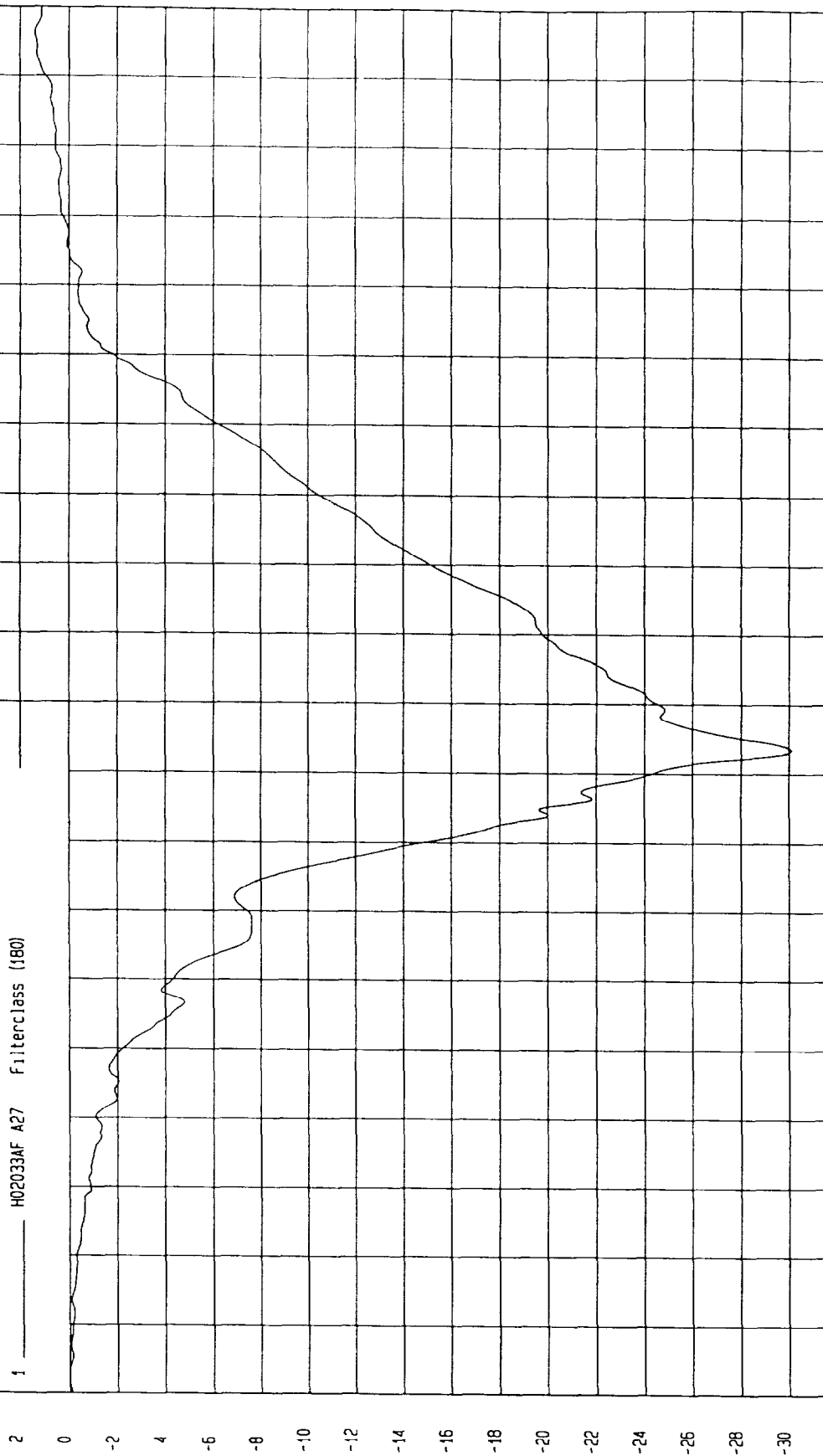
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = -30.11 G at 93 msec

Maximum = 1.39 G at 196 msec

PASSENGER CHEST X ACCELERATION

1 H02033AF A27 Filterclass (180)



TIME (SECONDS)

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

2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
-2
-4
-6
-8
-10
-12

1 H02033AF A28 Filterclass (180)

PASSENGER CHEST Y ACCELERATION

Maximum = 2.34 G at 108 msec

Minimum = -1.17 G at 59 msec

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

G

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

18
16
14
12
10
8
6
4
2
0
-2
-4

G

1

H02033AF A29 Filterclass (180)

PASSENGER CHEST Z ACCELERATION

Minimum = -4.42 G at 56 msec

Maximum = 17.33 G at 103 msec

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

TEST FMVSS 208 SLED (H02033)

TEST DATE 02-14-2002

TEST FMVSS 208 SLED (H02033) TEST DATE 02-14-2002

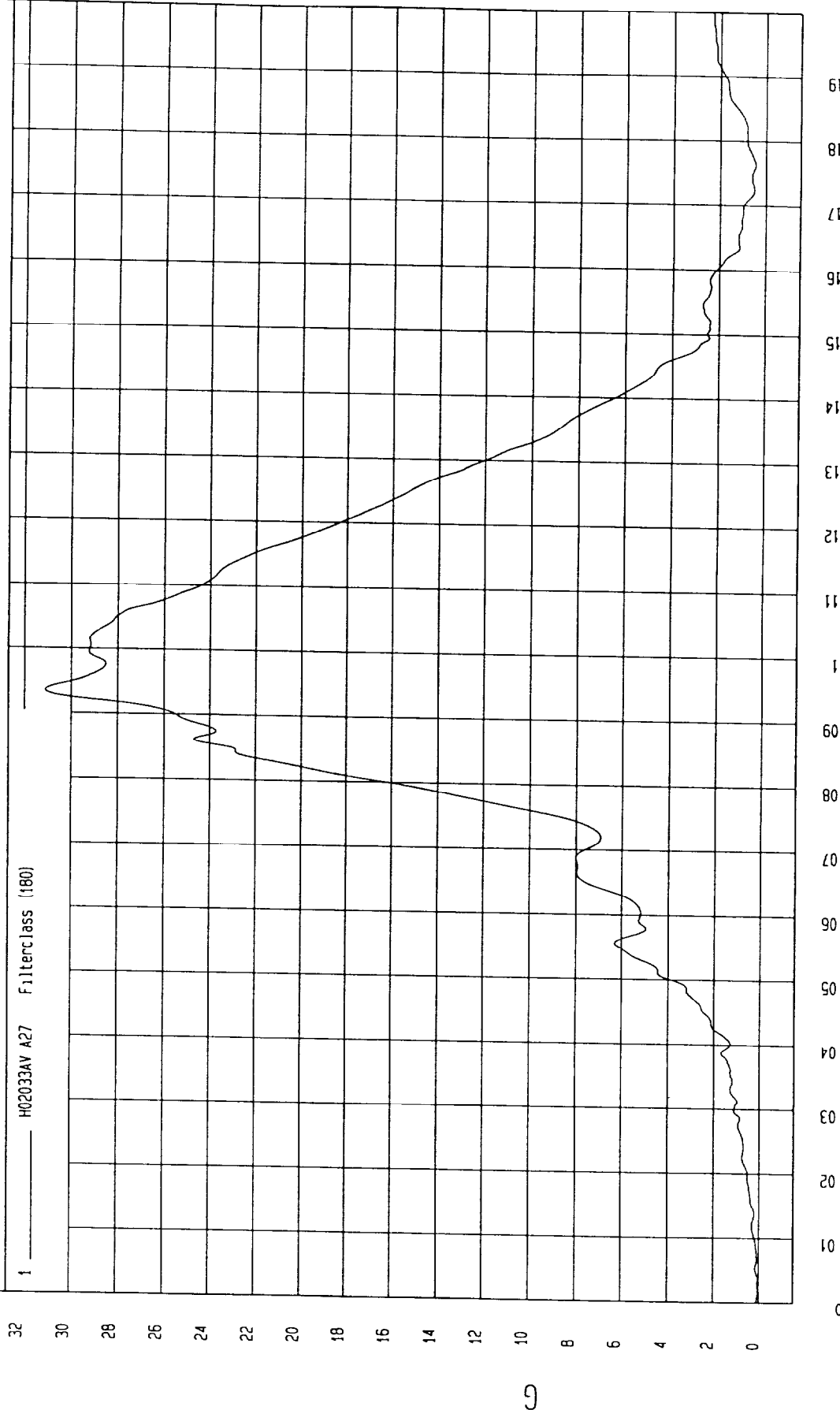
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = 4.34E-02 G at 4 msec

Maximum = 31.12 G at 94 msec

PASSENGER CHEST RESULTANT ACCELERATION

1 H02033AV A27 Filterclass (180)



MGA Research
02/14/2002 12:25

TEST FMVSS 208 SLED (H02033)

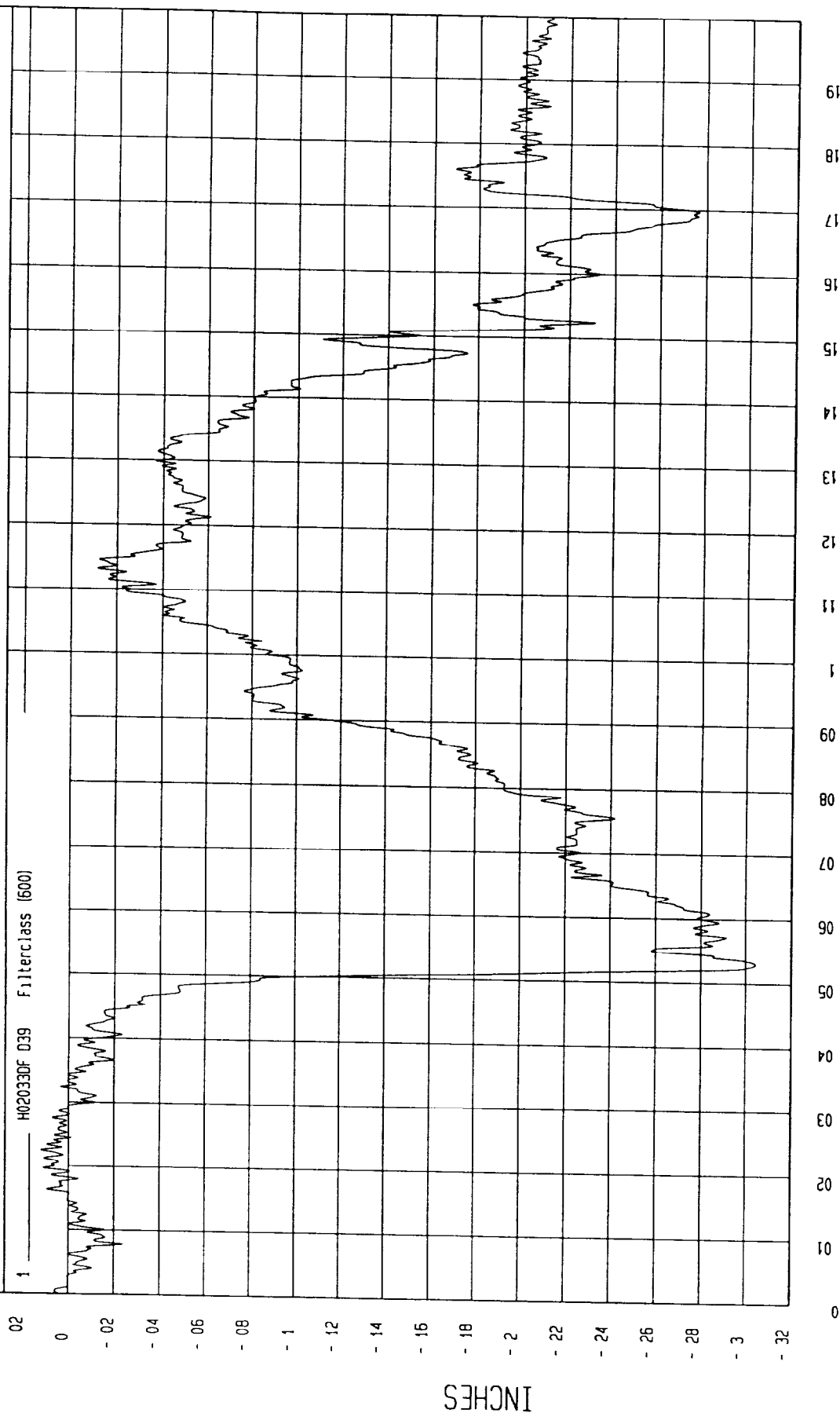
TEST DATE 02-14-2002

COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Minimum = - 3 INCHES at 53 msec

Maximum = 1 19E-02 INCHES at 22 msec

PASSENGER CHEST COMPRESSION



TIME SECONDS

INCHES

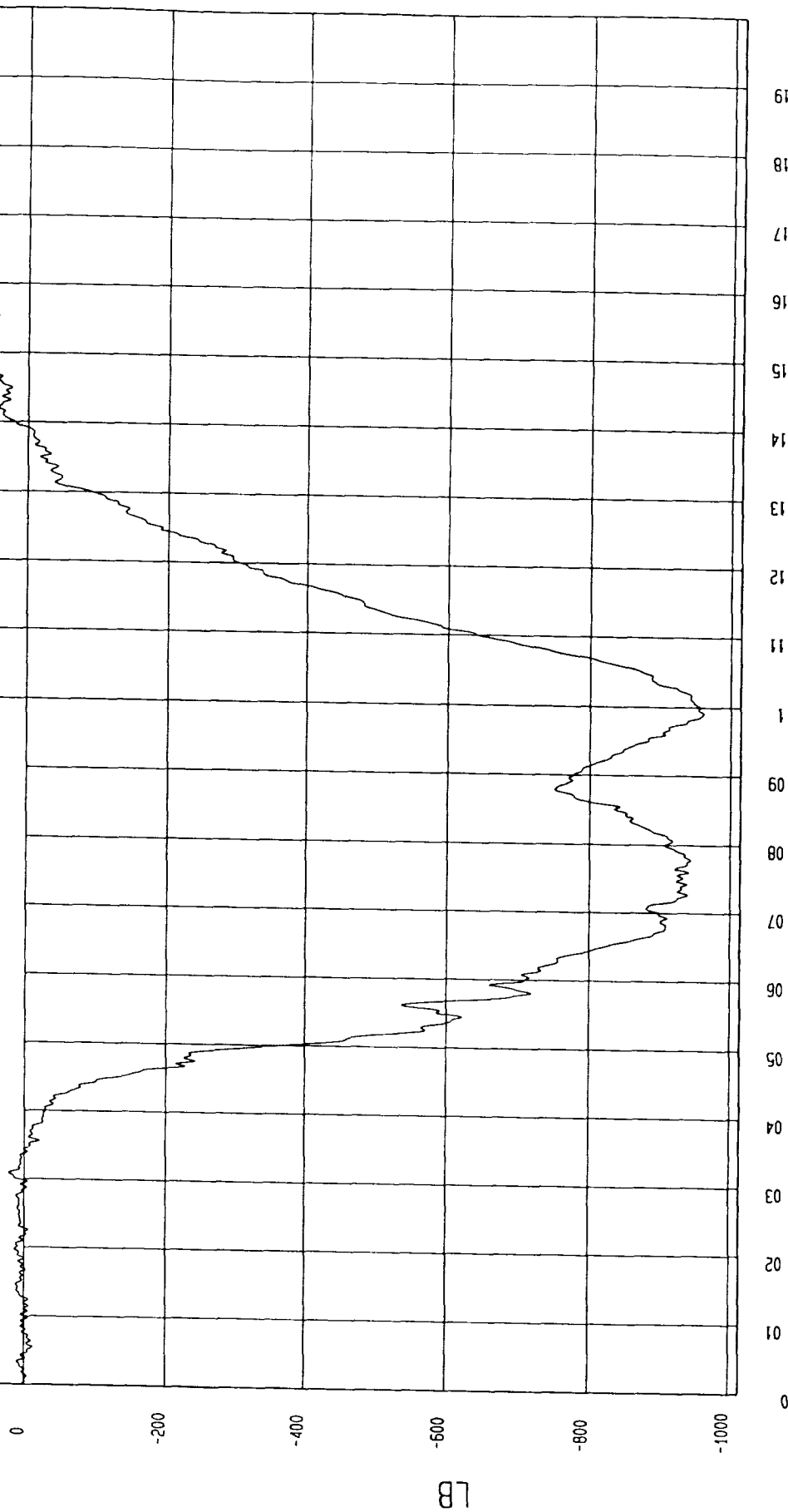
TEST FMVSS 208 SLED (H02033)

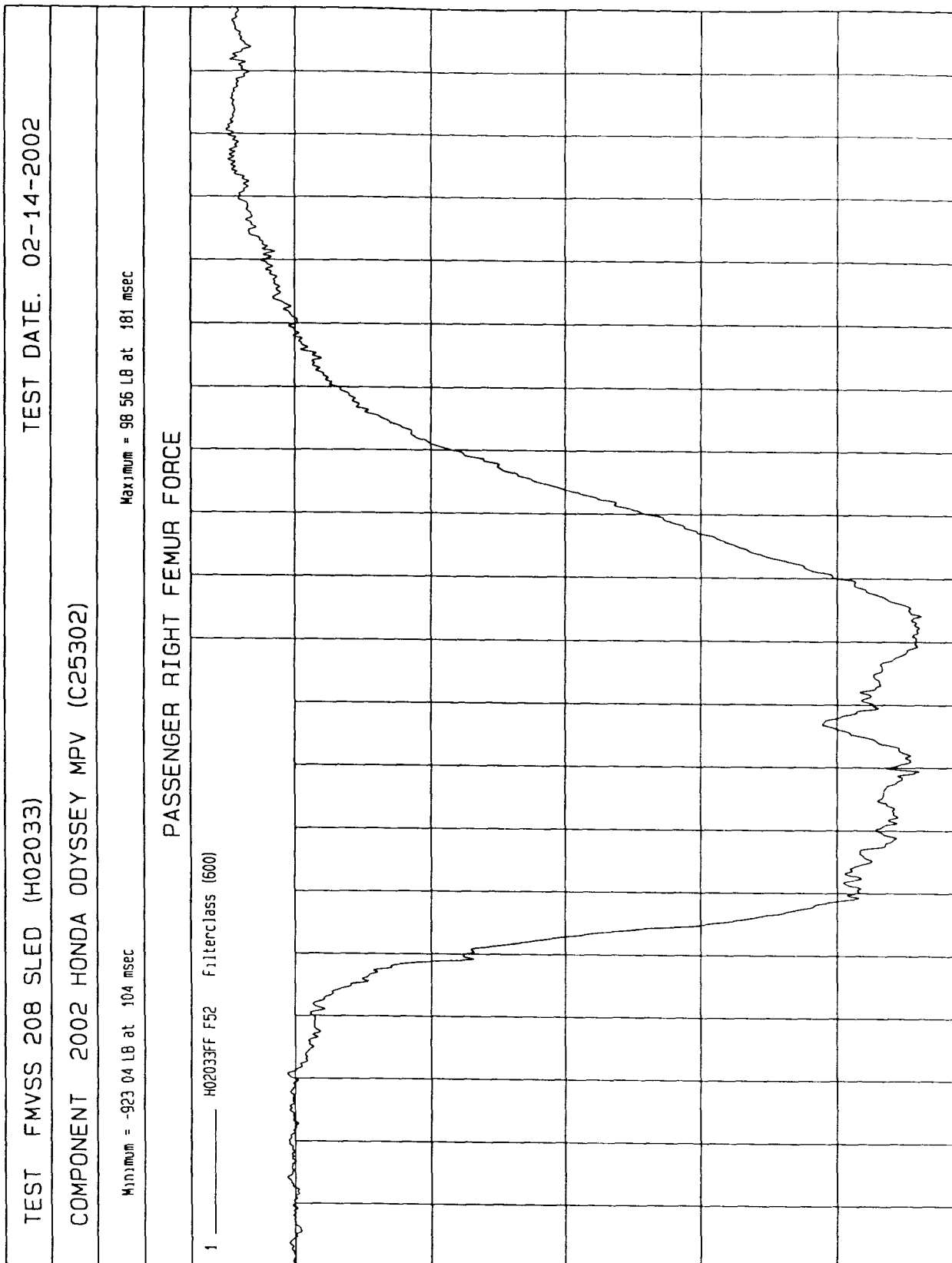
COMPONENT 2002 HONDA ODYSSEY MPV (C25302)

Maximum = 102 48 LB at 187 msec

PASSENGER LEFT FEMUR FORCE

1	H02033FF	F51	Filterclass (500)
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MCA Research
02-14-2002 12:26

APPENDIX C
MANUFACTURER'S VEHICLE INFORMATION

THE INFORMATION FOR 2002M
FMVSS No. 208 TEST ON HONDA VEHICLES

TEST VEHICLE : 2002 HONDA ODYSSEY

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1. THE ANSWER FOR QUESTION	
NO 1 - 5	1
NO 6 - 13	2
2. THE COMPLIANCE REPORTS OF FMVSS NO. 208 TESTS	Attachment 1
3. TEST VEHICLE INFORMATION FOR SLED	Attachment 2
4. DUMMY MEASUREMENTS FOR FRONT SEAT PASSENGER	Attachment 3
5. TEST VEHICLE INFORMATION	Attachment 4
6. FMVSS No. 208 TEST RESULTS	Attachment 5
7. THE COMPLIANCE REPORTS OF FMVSS NO 208 INFLATORS	Attachment 6

TEST VEHICLE INFORMATION / SPECIFICATIONS FMVSS NO. 208

MODEL YEAR 2002
 MODEL NAME HONDA ODYSSEY

- 1 Please inform OVSC to which sections of FMVSS No 208 the subject vehicle is certified with respect to dynamic tests in which seat belts are fastened and seat belts are unfastened. Provide a copy of the certification test reports for all the applicable impact tests and sled tests with respect to these sections.

Response Certified to meet the requirements of S13

- 2 Provide the following: (1) describe the difference between the MY2002 air bag system and the MY2001 air bag system, (2) explain what other restraint changes have been made, (3) explain what other vehicle changes have been made that might have affected FMVSS No 208 performance, and (4) describe any features that might effect performance with respect to children and out of position occupants.

Response

(1) In 2002 models, Driver side air bag inflator has been dual stage type such as Passenger side.

(2) Pre-tensioner and mechanical EA system have been added to front seatbelts

And the knee bolster has been changed and been added absorbing pads on Driver's side

(3) There is no other change effect FMVSS 208 performance.

(4) Not Applicable

- 3 If the vehicle was certified with unrestrained dummies to meet the requirements of S13, describe how to disconnect the air bags from the vehicle sensors and connect them to the triggering mechanism used in the sled test. Describe the method used in certification to determine when to trigger the air bag and the system used to trigger the air bag.

Response Refer to Attachment 2

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.

Response The dual stage Airbag is equipped on each Driver and Assistant side,

Each Airbag has two inflators as primary and secondary. In lower speed crash,
the primary inflator explodes and later secondary inflator explodes.

Vehicle deceleration like Full lap 30mph crash, SRS unit judges to explode two inflators simultaneously

We make sure the airbags have simultaneous explosion by checking up SRS unit history record
and high-speed films of the tests.

- 4 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.

Response Not Applicable

- 5 FMVSS 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.

Response Frontal barrier test : Opened (Front windows only)

Angular barrier test : Closed (All windows)

- 6 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.

Response Part 572 (E) test dummy was used, Refer to Attachment 3.

- 7 State whether the vehicle has a foot rest for the driver.

Response The vehicle has a foot rest for the driver.

- 8 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.

Response : Refer to Attachment 4

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

Response : Highest Position

- 10 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.)

Response : Refer to Attachment 5

- 11 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?

Response : To obtain the proper test weight, components recommended to remove is as follows
You can remove any of them optionally to adjust the weight.

Removable Components

Compact spare tire / Jack & tool kit / Tail lights / Rr bumper / Rr bumper beam / All kinds of trims,
garnishes and linings in trunk

- 12 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.

Response Not Applicable

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

Response Refer to Attachment 6

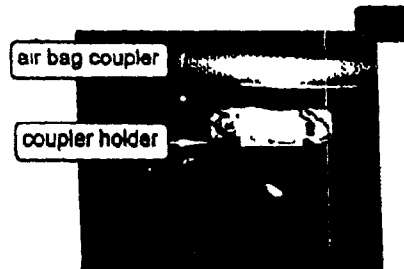
ATTACHMENT 2-1

disconnect the air bag

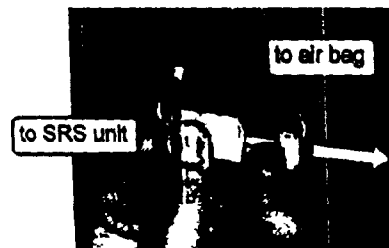
Remove the battery terminal in the engine room.

**Driver side
remove**

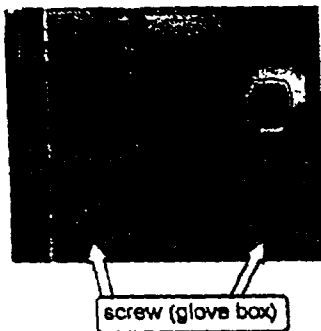
- : the lid of steering wheel lower side (fig 1)
- : the yellow coupler from holder. (fig 2)

**take off the coupler.**

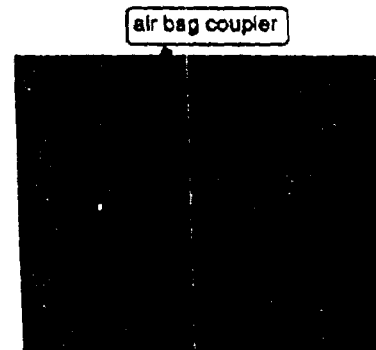
catch the widest part of the coupler
and pull out toward the air bag. (fig 3)

**Passenger side**

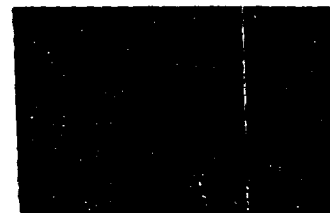
- remove the bolts right below the glove box. (fig 4)
- remove the glove box. (fig 5)

**take off the coupler.**

catch the widest part of the coupler
and pull out toward the air bag

**connect to triggering mechanism**

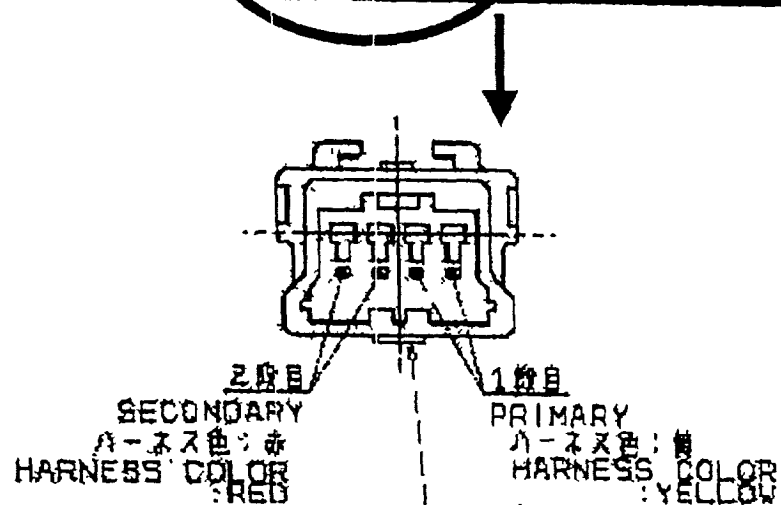
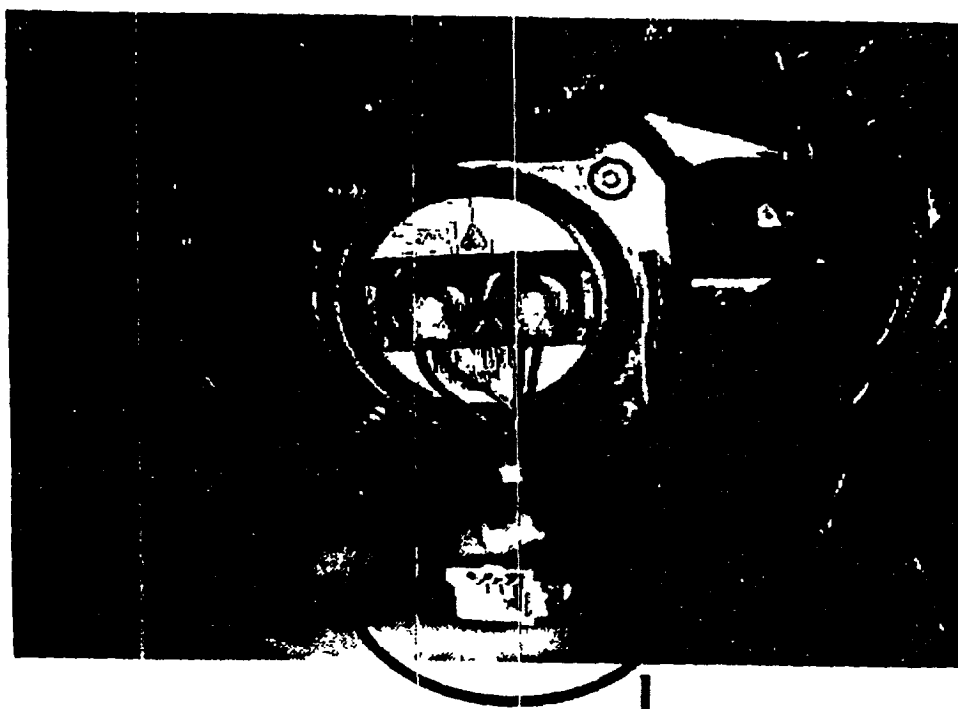
cut the SRS cable to the body side,
(both driver and passenger side)
and make an extension cables connecting to
triggering mechanism.



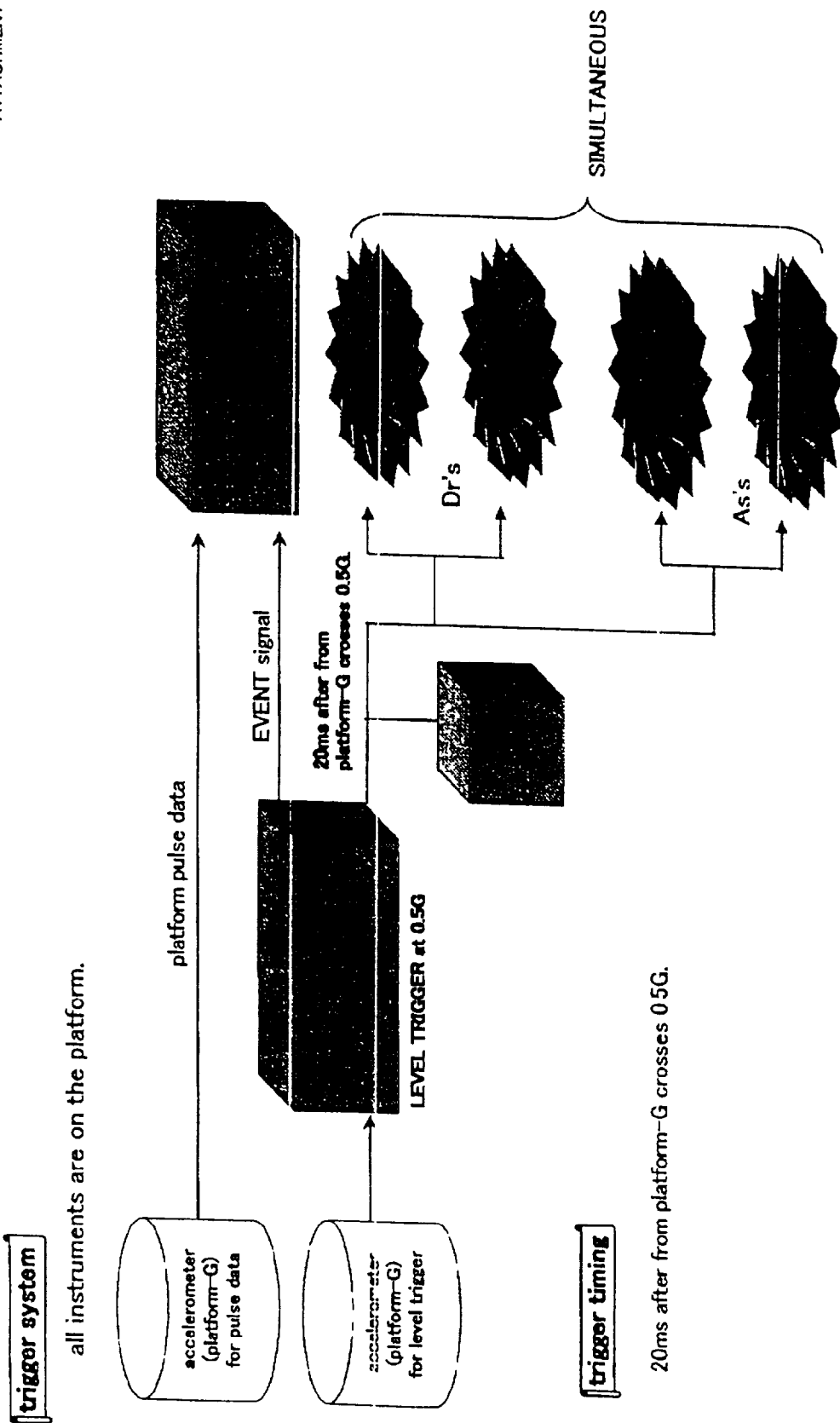
Restore the all parts (except steering lower lid)

ATTACHMENT 2-2

How to connect dual inflator

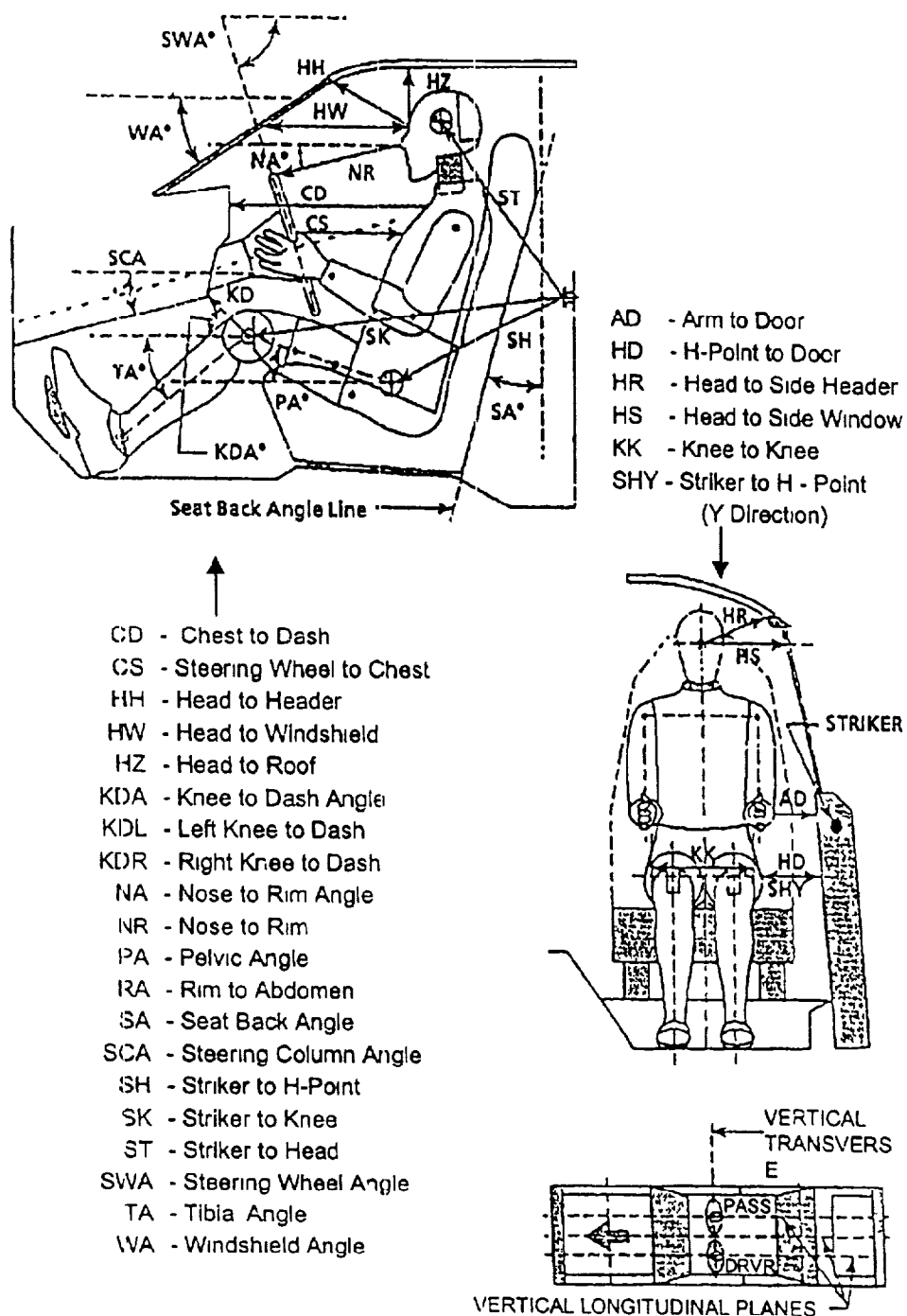


Connector of Driver & Passenger is same



ATTACHMENT 3-1

DUMMY POSITIONING IN VEHICLE



ATTACHMENT 3-2

DUMMY POSITIONING IN VEHICLE FRONT SEAT MEASUREMENT TABLE

2002 HONDA ODYSSEY

Unit : mm (Inch)

	DRIVER	PASSENGER
WA°	31°	
SWA°	62°	
SCA°	42°	
SA°	N.D.	N.D.
HZ	249 (9.8)	246 (9.7)
HH	422 (16.6)	427 (16.8)
HW	704 (27.7)	704 (27.7)
HR	254 (10.0)	254 (10.0)
NR / NA	434 (17.1) / 7°	N.A.
CD	564 (22.2)	615 (24.2)
CS	323 (12.7)	N.A.
RA	191 (7.5)	N.A.
KDL	122 (4.8) / KDA 24°	122 (4.8)
KDR	147 (5.8)	125 (4.9) / KDA 18°
PA°	25°	24°
TA°	62°	45°
KK	333 (13.1)	269 (10.6)
ST	546 (21.5) / 75°	574 (22.6) / 74°
SK	650 (25.6) / 5°	663 (26.1) / 1°
SH	292 (11.5) / 22°	307 (12.1) / 18°
SHY	249 (9.8)	249 (9.8)
HS	366 (14.4)	366 (14.4)
HD	137 (5.4)	137 (5.4)
AD	125 (4.9)	41 (1.6)

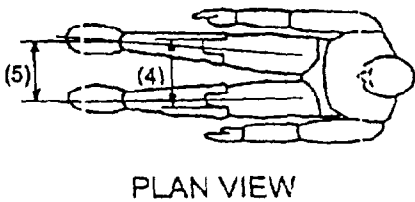
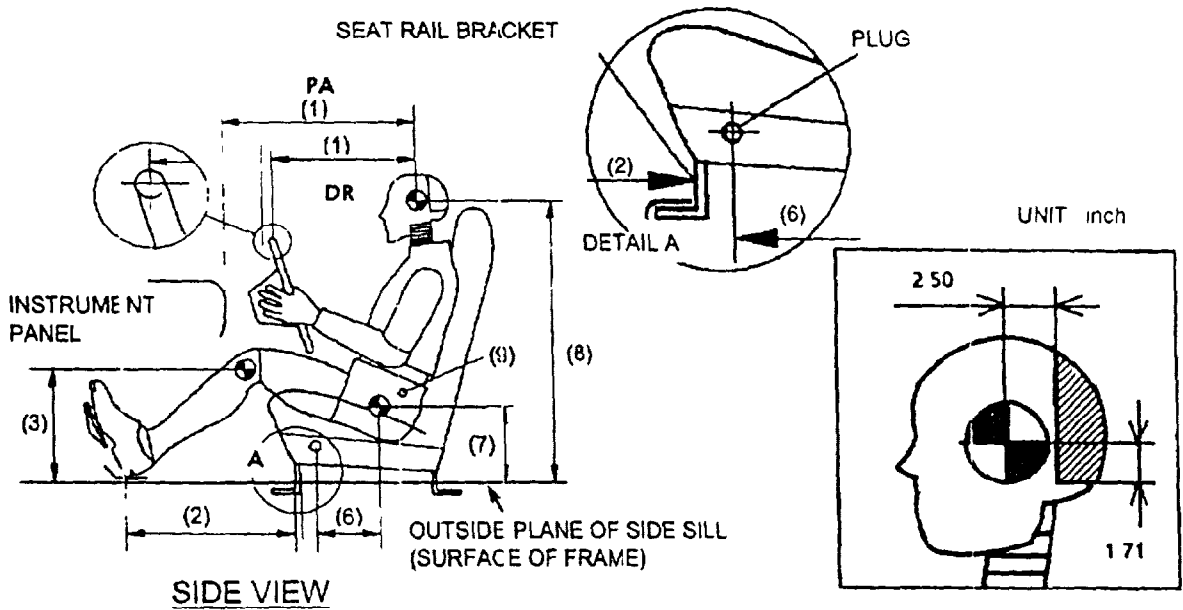
ATTACHMENT 3-3

HONDA RECOMMENDED DUMMY POSITIONING INFORMATION

Vehicle Model Year & Make
Vehicle Model & Body style

2002 HONDA
ODYSSEY 5DR M P V

(1) DUMMY POSITIONING DATA

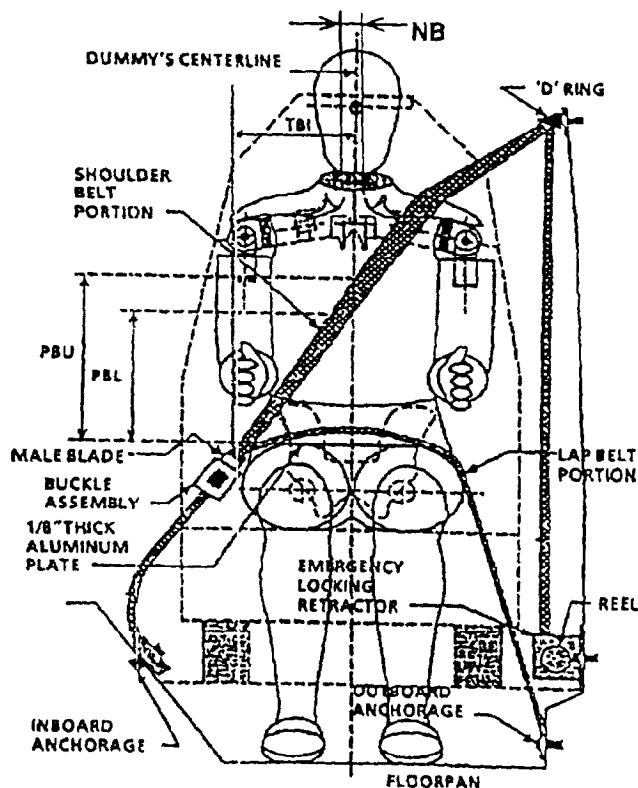


UNIT mm			
No.	ITEMS	DRIVER	PASS
(1)	HEAD TO STEERING WHEEL (DR) OR INSTRUMENT PANEL (PA)	575	616
(2)	HEEL TO SEAT BRACKET COVER	L 300	R 510
(3)	KNEE TO SIDE SILL (VERTICAL)	L 520	R 441
(4)	KNEE TO KNEE	365	269
(5)	ANKLE TO ANKLE	320	200
(6)	REAR OF HIPPOINT TO PLUG (3DM DATA)	234 (236*)	230 (234*)
(7)	HEIGHT OF HIPPOINT TO SIDE SILL (3DM DATA)	102 (91*)	102 (90*)
(8)	HEIGHT OF HEAD TO SIDE SILL	1037	1037
(9)	PELVIC ANGLE (deg)	22 5°	23°

* Average of 3 measurements in accordance with SAE J826

ATTACHMENT 3-4

Pre-Test SEAT BELT POSITIONING DATA



FRONT VIEW OF DRIVER DUMMY
(Sample belt configuration)

Unit: mm (inch)

	DRIVER DUMMY	PASSENGER DUMMY
PBU - Top surface of aluminum plate to belt upper edge	366 (14.4)	366 (14.4)
PBL - Top surface of aluminum plate to belt lower edge	274 (10.8)	274 (10.8)
LAP BELT TENSION	N.D.	N.D.
SHOULDER BELT TENSION	N.D.	N.D.
NB-Edge of neck to edge of belt	51 (2.0)	51 (2.0)

ATTACHMENT 4-1

TEST VEHICLE INFORMATION

Vehicle Model Year and Make 2002 HONDA
 Vehicle Model and Body Style ODYSSEY 5DR M P V.

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

1-1 Manual adjustment seat

Seat back angle for driver's seat = degrees
 Measurement instructions

5 steps from the first locking position.

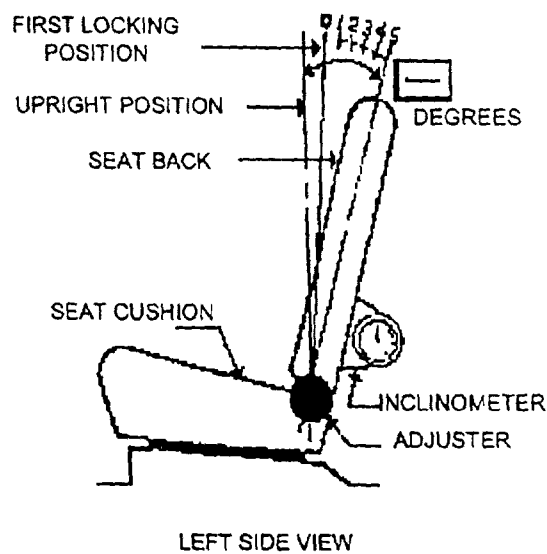
Seat back angle for passenger's seat = degrees
 Measurement instructions :

Same as the driver's seat.

1-2 Electric power adjustment seat

Seat back angle for driver's seat = degrees
 Measurement instructions :
See Attachment 4-3.

Seat back angle for passenger's seat = degrees
 Measurement instructions
Same as the driver's seat.



2 SEAT FORE & AFT POSITIONS

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

2-1 Manual adjustment seat

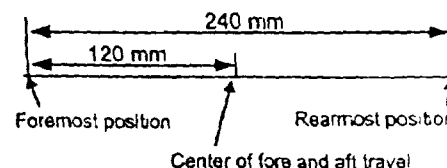
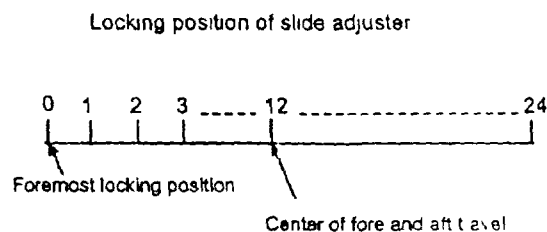
Position of the driver's seat
12 steps from the Foremost locking position

Position of the passenger's seat (if applicable)
Same as the driver's seat.

2-2 Electric power adjustment seat

Position of the driver's seat
The middle position between the foremost and rearmost position.

Position of the passenger's seat (if applicable)
Same as the driver's seat.



ATTACHMENT 4-2

TEST VEHICLE INFORMATION

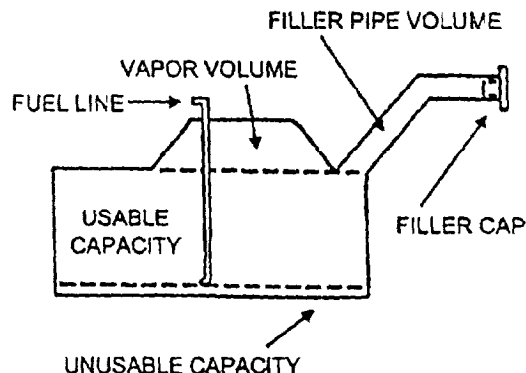
3 FUEL TANK CAPACITY DATA

- 3.1 A 'Usable Capacity' of standard equipment fuel tank = 20.0 US gallons
- B 'Usable Capacity' of optional equipment fuel tank = — US gallons
- C 'Usable Capacity' of vehicle used for certification testing to requirements of FMVSS 301 = 20.2 US gallons

Operational Instructions

N/A

VEHICLE FUEL TANK ASSEMBLY



3.2 Amount of Stoddard solvent added to vehicle used for certification test = 18.4 US gallons

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

If YES, explain the vehicle operating conditions under which the fuel pump will pump fuel

X YES — NO

When you turn the Ignition key from LOCK(0) to ON(II) position, the fuel pump will fill up and keep the pressure after 2 - seconds working.

4 STEERING COLUMN ADJUSTMENTS

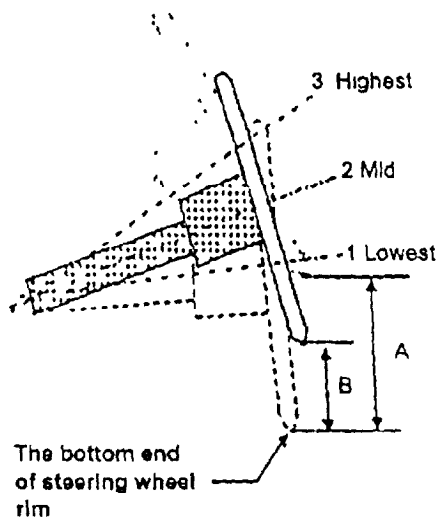
Steering wheel and column adjustments are made so that the steering wheel hub is at the geometric center of the locus. It describes when it is moved through its full range of driving positions.

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

Operational Instructions

A = 1.37 inch (3: Highest position)

B = 0.69 inch (2: Mid position)



LEFT SIDE VIEW

STEERING COLUMN ASSEMBLY

SEAT BACK ADJUSTMENT for ELECTRIC POWERED SEAT

